4. Release B Requirements

4.1 Release B Capabilities

This section summarizes the content of Release B as described in the Release Plan Content Description for the ECS Project (222-TP-003-007).

4.1.1 Mission Support/Ground System Testing

Landsat-7 is currently scheduled for late-1998 launch and relies on ECS for support. Per the EOS Ground System Integration Plan, ECS full function capabilities must be available for ground system testing by launch time. The following capabilities must be operational and include all data handling and processing support such as all the communication, system security, network and monitoring services must be operational. Others include ingest, search, data access, client, data server management functions which must all be operational for ground system testing.

EOS AM-1 is currently schedul1ed for June 1998 launch and relies on ECS for support. Driven by the launch date, ECS capabilities must be operational in order for the Flight Operations Segment (FOS) to support ground system testing of the EOS AM-1 platform. The testing includes data analysis, telemetry and command data processing, command management, mission data processing, OBC data management, scheduling/planning support, telemetry tracking, AM-1 launch site readiness, and ground data system tests.

The following missions will also be supported in Release B for data handling and processing support functions:

- SAGE III - August 1998
- ADEOS II - February 1999
- ALT RADAR - August 1998
- ACRIMSAT - August 1998

4.1.2 Major Enhancements in Release B

This section lists the major enhancements in release B:

- Two way interoperability with NOAA; Increased access capability to GCMD and GCDIS.
- More robust multi-DAAC planning and scheduling, including support for inter-DAAC resource conflict resolution via access to common planning data; support to Targets of Opportunity (TOOs).
- Greatly increased (by at least an order of magnitude) maximal network data rates, data processing and required data product storage, especially for AM-1 mission support.

- Replacement of V0 client capability with Version 1 ECS client.
- System & Network Management to include additional security features and DAACs interfaces (especially the ASTER GDS support).
- SMC integrated with LSM. SMC capabilities for the security management, fault management and performance management are automated.
- Completion (by end of Release B operations) of data migration from V0; increased capability to translate data to HDF and other standard formats.
- Increased automated data accounting and handling of Data Availability Notices (DANs) from EDOS and from the ASTER GDS.
- Enhanced Local Information Manager (LIM) capabilities and implementation of Distributed Information Manager (DIM) capabilities; enhanced management reporting capabilities.
- More complex data searches, including multiple dataset coincident search capability. Enhanced processing on demand versus simply storage and retrieval from archive.
- Robotic control of file servers; enhanced attached storage capability; APIs for scientists to gain access to data storage and retrieval services. Enhanced metadata capabilities - expandable metadata attributes and geographic metadata search, including World Reference System parameter.
- Continued full TRMM support plus support for LANDSAT-7, AM-1, ADEOS II, SAGE III, ALT RADAR, and ACRIMSAT. Support for ERS and JERS. Support for DAO at GSFC.
- Mode Management.
- Enhanced DCE services, including OO support.
- DAO data assimilation processing.

4.1.3 V0/ADC Interoperability

ECS will provide two-way interoperability with V0 and migration and/or access of Version 0 data archives. Two-way interoperability with National Oceanic and Atmospheric Administration (NOAA) and the Consortium for International Earth Science Information Network (CIESIN) will also be provided.

4.1.4 Science Software Support

If new hardware is required for Version 1 algorithms, the hardware installations for a site must be in place several months in advance of an algorithm's Version 1 integration at that site.

In addition, to support full end-to-end testing of the algorithms, ECS infrastructure software (aucillary/auxiliary data ingest and preparation, DAAC-to-DAAC data transfers, level 0 data validation, algorithm delivery, and algorithm product QA services) must be in place at the end of

Version 1 I&T for each instrument. Version 1 I&T for EOS AM-1 instruments MODIS(GSFC), CERES (LaRC), MISR (LaRC), MOPITT (LaRC), and MODIS (NSIDC) is scheduled for mid-1997. The tested Version 1 algorithms will be integrated with other ECS components at that time. SDP toolkit deliveries must be made twelve months prior to the Beta reviews for each AM-1 algorithm.

4.1.5 Core Functionality

This section presents areas where Release B will provide functionality based on the user community interaction.

ECS capabilities will provide capabilities such as generation handling and tracking of DARs for ASTER, enhanced DCE object services (including automated SMC reporting and inter-DAAC configuration management), accounts payable/receivable management, credit tracking, price estimation for data, invoicing and billing functions, and support periods of unstaffed DAAC operation.

Other ECS functions will include: conditional product generation activation based upon metadata analysis, support to geo- and mathematical data transformations, unstaffed DAAC operations support, data size reduction before distribution to the client via subsetting and subsampling, subscriptions for distribution and processing, DAO processing capability, accommodation of heterogeneous storage components, and On-Demand production. Application programming interfaces (APIs) will be supported for update, query, and data base administration utilities. Storage system resource management, tracking of specific data granules, and automated authentication for data distribution will be enhanced. In addition, full functionality and performance of information management archive functions, science processing, networks, and system management.

Full functionality and performance, launch ready for EOS AM-1, LANDSAT 7, COLOR, and ADEOS II. All V0 data migrated to ECS archive, information management services to ORNL, support migration of V0 data to archive sites, and data distribution/access.

4.1.6 New Externals

All of the new externals supported in release B are

- DARs for ASTER
- FOS Operational for Launch
- ADEOS II, SAGE III, COLOR, LANDSAT 7, AM-1, ALT RADAR, ACRIMSAT
- Added/enhanced ingest interfaces: FDF, IPs, EDOS. ASTER GDS.
- New DAAC sites have been added: NSIDC, ORNL and JPL.

4.2 Release B Level 4 Matrix

The requirements in Table 4-1 are necessary to fulfil Release B Level 4 capabilities. This query was done against the July 31, 1996 baseline of the RTM.

Table 4-1. Release B Level 4 Matrix (1 of 153)

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-01230	The CSS Security Service shall provide security delegation to allow an intermediary server to operate on behalf of an initiating client while preserving both client's and server's identities and access control attributes across chained operations.	test	B221.02.02 T221-30.02.03
C-CSS-01240	The CSS DOF Service shall provide a daemon process service that enables secure remote administration of DCE services and enables control of service configuration parameters.	test	T211-91.01.01
C-CSS-01250	The CSS DOF Service shall provide cell namespace aliasing for the directory service to permit administrative ease of changes.	test	T211-92.01.01
C-CSS-01260	The CSS DOF Service shall provide a hierarchical cell namespace structure.	test	T211-92.01.01
C-CSS-01270	The CSS Security Service shall provide for distributed file service delegation that permits a file to be passed with its corresponding directory service namespace structure.	test	B221.02.01 B221.02.02 T221-30.02.03
C-CSS-01280	The CSS Security Service shall provide for a security service ACL manager library.	test	B210.01.02 T221-30.02.03
C-CSS-02000	The CSS-DCHW CI Enterprise Communications Server shall be physically and functionally identical to the Enterprise Monitoring Server in supporting the CSMS requirements.	test	T250-10.02.01
C-CSS-02010	The CSS-DCHW CI Enterprise Communications Server shall share data with the Local Communications Server in supporting the CSMS requirements.	test	T250-10.02.01
C-CSS-02020	The CSS-DCHW CI Enterprise Communications Server shall preserve DAAC autonomy of operations.	test	T250-10.02.01
C-CSS-02030	The CSS-DCHW CI Enterprise Communications Server shall host the CSS software configuration items to create, with the Enterprise Monitoring Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.	test	T250-10.02.01
C-CSS-02100	The CSS-DCHW CI Enterprise Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.	test	T250-10.02.01
C-CSS-02110	The CSS-DCHW CI Enterprise Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.	test	T250-10.02.01
C-CSS-02120	The CSS-DCHW CI Enterprise Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.	test	T250-10.02.01
C-CSS-02130	The CSS-DCHW CI Enterprise Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.01
C-CSS-02140	The CSS-DCHW CI Enterprise Communications Server processor terminal shall be compatible with the Management Workstation display device.	test	T250-10.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-02200	The CSS-DCHW CI Enterprise Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.	test	B260.02.01 T250-10.02.01
C-CSS-02210	The CSS-DCHW CI Enterprise Communications Server data storage shall be compatible with the Communications Server short-term data storage.	test	T250-10.02.01
C-CSS-02220	The CSS-DCHW CI Enterprise Communications Server data storage shall support RAID level-5: striping with interleaved parity.	test	B260.02.01 T250-10.02.01
C-CSS-02230	The CSS-DCHW CI Enterprise Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers	test	B260.02.01 T250-10.02.01
C-CSS-02240	The CSS-DCHW CI Enterprise Communications Server data storage shall be cross-strapped with the Enterprise Monitoring Server data storage in supporting the CSMS requirements.	test	T250-10.02.01
C-CSS-02250	The CSS-DCHW CI Enterprise Communications Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.	test	T250-10.02.01
C-CSS-02260	The CSS-DCHW CI Enterprise Communications Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.	test	T250-10.02.01
C-CSS-02300	The CSS-DCHW CI Enterprise Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Enterprise Communications server data storage and data archive.	test	T250-10.02.01
C-CSS-02400	The CSS-DCHW CI Enterprise Communications Server peripherals shall support at least one tape drive.	test	T250-10.02.01
C-CSS-02410	The CSS-DCHW CI Enterprise Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)	test	T250-10.02.01
C-CSS-02420	The CSS-DCHW CI Enterprise Communications Server shall provide a peripheral tape drive.	test	T250-10.02.01
C-CSS-02430	The CSS-DCHW CI Enterprise Communications Server tape drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.01
C-CSS-02500	The CSS-DCHW CI Enterprise Communications Server peripherals shall support at least one CD-ROM drive.	test	T250-10.02.01
C-CSS-02510	The CSS-DCHW CI Enterprise Communications Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk	test	T250-10.02.01
C-CSS-02520	The CSS-DCHW CI Enterprise Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.01
C-CSS-02600	The CSS-DCHW CI Local Communications Server shall be physically and functionally identical to the Local Management Server in supporting the CSMS requirements.	test	T250-10.02.02
C-CSS-02610	The CSS-DCHW CI Local Communications Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.	test	T250-10.02.02
C-CSS-02620	The Local Communications Server shall be configurable according to local DAAC user authentication/authorization policy and preserve other DAAC autonomy of operations.	test	T250-10.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-02630	The CSS-DCHW CI Local Communications Server shall host the CSS software configuration items to create, with the Local Management Server and Management Workstations, a local system management center for each ECS DAAC.	test	T250-10.02.02
C-CSS-02700	The CSS-DCHW CI Local Communications Server processor shall include a dedicated terminal to be used as a local systems operations console.	test	T250-10.02.02
C-CSS-02710	The CSS-DCHW CI Local Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.	test	T250-10.02.02
C-CSS-02720	The CSS-DCHW CI Local Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.	test	T250-10.02.02
C-CSS-02730	The CSS-DCHW CI Local Communications Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.02
C-CSS-02740	The CSS-DCHW CI Local Communications Server processor terminal shall be compatible with the Management Workstation display device.	test	T250-10.02.02
C-CSS-02800	The CSS-DCHW CI Local Communications Server data storage shall be compatible with POSIX compliant operating systems from several vendors.	test	T250-10.02.02
C-CSS-02810	The CSS-DCHW CI Local Communications Server short-term data storage shall be compatible with the Enterprise Communications Server intermediate-term data storage.	test	T250-10.02.02
C-CSS-02820	The CSS-DCHW CI Local Communications Server data storage shall support RAID level-5: striping with interleaved parity.	test	T250-10.02.02
C-CSS-02830	The CSS-DCHW CI Local Communications Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers	test	T250-10.02.02
C-CSS-02840	The CSS-DCHW CI Local Communications Server data storage shall be cross-strapped with the Local Management Server short-term data storage in supporting the CSMS requirements.	test	T250-10.02.02
C-CSS-02850	The CSS-DCHW CI Local Communications Server data storage shall be capable of archiving data to the ECS Data Server archive.	test	T250-10.02.02
C-CSS-02860	The CSS-DCHW CI Local Communications Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.	test	T250-10.02.02
C-CSS-02900	The CSS-DCHW CI Local Communications Server peripheral disk drives shall be capable of retrieving data stored from both the Local Communications server data storage and data archive.	test	T250-10.02.02
C-CSS-03000	The CSS-DCHW CI Local Communications Server peripherals shall support at least one tape drive.	test	T250-10.02.02
C-CSS-03010	The CSS-DCHW CI Local Communications Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e., DDS-90)	test	T250-10.02.02
C-CSS-03020	The CSS-DCHW CI Local Communications Server shall provide a peripheral tape drive.	test	T250-10.02.02
C-CSS-03030	The CSS-DCHW CI Local Communications Server tape drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-03100	The CSS-DCHW CI Local Communications Server peripherals shall support at least one CD-ROM drive.	test	T250-10.02.02
C-CSS-03110	The CSS-DCHW CI Local Communications Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk	test	T250-10.02.02
C-CSS-03120	The CSS-DCHW CI Local Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.02
C-CSS-03200	The CSS-DCHW CI Bulletin Board Server shall share data with the Enterprise Communications Server in supporting the CSMS requirements.	test	T250-10.02.03
C-CSS-03210	The CSS-DCHW CI Bulletin Board Server shall preserve DAAC autonomy of operations and aggregate all ECS DAAC authentication/authorization policies by user type and DAAC, to provide a integrated view of ECS for user registration, account administration, and authentication/authorization to ECS services.	test	T250-10.02.03
C-CSS-03220	The CSS-DCHW CI Bulletin Board Server shall host the CSS software configuration items to create a single, secure unified access to all ECS services.	test	T250-10.02.03
C-CSS-03230	The CSS-DCHW CI Bulletin Board Server shall host ECS client software and toolkits for ECS-external distribution.	test	T250-10.02.03
C-CSS-03300	The CSS-DCHW CI Bulletin Board Server processor shall include a dedicated terminal to be used as a local systems operations console.	test	T250-10.02.03
C-CSS-03310	The CSS-DCHW CI Bulletin Board Server processor shall be upgradeable/expandable with additional quantities and types of peripherals.	test	T250-10.02.03
C-CSS-03320	The CSS-DCHW CI Bulletin Board Server processor shall be upgradeable/replaceable within the same product family without the need for any perturbation of any software or replacement of any peripheral or attached component.	test	T250-10.02.03
C-CSS-03330	The CSS-DCHW CI Bulletin Board Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.03
C-CSS-03340	The CSS-DCHW CI Bulletin Board Server processor terminal shall be compatible with the Management Workstation display device.	test	T250-10.02.03
C-CSS-03400	The CSS-DCHW CI Bulletin Board Server data storage shall be compatible with POSIX compliant operating systems from several vendors.	test	T250-10.02.03
C-CSS-03410	The CSS-DCHW CI Bulletin Board Server data storage shall be capable of archiving data to the ECS data server archive for long-term storage and software/toolkit safestore.	test	T250-10.02.03
C-CSS-03420	The CSS-DCHW CI Bulletin Board Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.	test	T250-10.02.03
C-CSS-03500	The CSS-DCHW CI Bulletin Board Server peripherals shall support at least one tape drive.	test	T250-10.02.03
C-CSS-03510	The CSS-DCHW CI Bulletin Board Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e., DDS-90)	test	T250-10.02.03
C-CSS-03520	The CSS-DCHW CI Bulletin Board Server shall provide a peripheral tape drive.	test	T250-10.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-03530	The CSS-DCHW CI Bulletin Board Server tape drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.03
C-CSS-03600	The CSS-DCHW CI Bulletin Board Server peripherals shall support at least one CD-ROM drive.	test	T250-10.02.03
C-CSS-03610	The CSS-DCHW CI Bulletin Board Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk	test	T250-10.02.03
C-CSS-03620	The CSS-DCHW CI Bulletin Board Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.03
C-CSS-03700	The CSS-DCHW CI Enterprise Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.	test	T250-10.02.01
C-CSS-03710	The CSS-DCHW CI Enterprise Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.	test	T250-10.02.01
C-CSS-03720	The CSS-DCHW CI Local Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.	test	T250-10.02.02
C-CSS-03730	The CSS-DCHW CI Local Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.	test	T250-10.02.02
C-CSS-03740	The CSS-DCHW CI Enterprise Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.	test	T250-10.02.01
C-CSS-03750	The CSS-DCHW CI Local Communications Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.	test	T250-10.02.02
C-CSS-03760	The CSS-DCHW CI Bulletin Board Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.	test	T250-10.02.03
C-CSS-03800	The CSS-DCHW CI hardware selection criteria shall meet overall ECS security policies and system requirements.	test	T250-10.02.01 T250-10.02.02 T250-10.02.03
C-CSS-03810	The CSS-DCHW CI Bulletin Board Server shall provide a security perimeter for ECS.	test	T250-10.02.03
C-CSS-03820	The CSS-DCHW CI Enterprise and Local Communications Servers shall be configured to provide autonomous DAAC security perimeters, FOS isolation, and an Iso-cell ECS security perimeter.	test	T250-10.02.01 T250-10.02.02
C-CSS-03900	The CSS-DCHW CI Enterprise Communications Server shall maintain one backup of all software and key data items in a separate physical location.	test	T250-10.02.01
C-CSS-03910	The CSS-DCHW CI Local Communications Server shall maintain one backup of all software and key data items in a separate physical location.	test	T250-10.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-03940	The CSS-DCHW CI Enterprise Communications Server at the SMC shall be configured to support the SMC function of Gathering and Disseminating System Management Information's Availability requirement of 0.998 and an Mean Down Time of 20 minutes during times of staffed operation.	test	T250-10.02.01
C-CSS-10500	The CSS DCCI shall accept virtual terminal service request from the User.	test	B211.01.05 B221.02.08
C-CSS-10510	The CSS DCCI shall accept email service request from the User.	test	B211.01.04 B221.02.08
C-CSS-10520	The CSS DCCI shall accept remote file access service request from the User.	test	B210.01.05 B211.01.05 B221.02.08
C-CSS-10530	The CSS DCCI shall accept bulletin board service request from the User.	test	B221.02.08
C-CSS-10540	The CSS DCCI shall provide virtual terminal service to the User.	test	B211.01.05 B221.02.08
C-CSS-10550	The CSS DCCI shall provide email service to the User.	test	B211.01.04 B221.02.08
C-CSS-10560	The CSS DCCI shall provide remote file access service to the User.	test	B210.01.05 B221.02.08
C-CSS-10570	The CSS DCCI shall provide bulletin board to the User.	test	B221.02.08
C-CSS-10580	The CSS DCCI shall accept system administration information request from the Operator.	test	B210.01.02 B221.02.08
C-CSS-10590	The CSS DCCI shall provide system administration information to the Operator .	test	B210.01.02 B221.02.08
C-CSS-10600	The CSS DCCI shall accept User authentication request from CLS.	test	B220.02.01 B221.02.09
C-CSS-10610	The CSS DCCI shall accept Common facilities request from CLS	test	B220.02.01 B221.02.09
C-CSS-10620	The CSS DCCI shall provide User authentication response to CLS .	test	B220.02.01 B221.02.09
C-CSS-10630	The CSS DCCI shall provide Common facilities to CLS.	test	B220.02.01 B221.02.09
C-CSS-10640	The CSS DCCI shall accept User authorization request from IOS.	test	B221.02.09
C-CSS-10650	The CSS DCCI shall accept Common facilities request from IOS.	test	B221.02.09
C-CSS-10660	The CSS DCCI shall provide User authorization response to IOS .	test	B221.02.09
C-CSS-10670	The CSS DCCI shall provide Common facilities to IOS.	test	B221.02.09
C-CSS-10680	The CSS DCCI shall accept User authorization request from DMS.	test	B221.02.09
C-CSS-10690	The CSS DCCI shall accept Common facilities request from DMS.	test	B221.02.09
C-CSS-10700	The CSS DCCI shall provide User authorization response to DMS.	test	B221.02.09
C-CSS-10710	The CSS DCCI shall provide Common facilities to DMS.	test	B221.02.09
C-CSS-10720	The CSS DCCI shall accept Common facilities request from DSS.	test	B221.02.09
C-CSS-10730	The CSS DCCI shall provide Common facilities to DSS.	test	B221.02.09
C-CSS-10740	The CSS DCCI shall accept Common facilities request from INS.	test	B221.02.09
C-CSS-10750	The CSS DCCI shall provide Common facilities to INS.	test	B221.02.09
C-CSS-10760	The CSS DCCI shall accept Common facilities request from DPS.	test	B221.02.09
C-CSS-10770	The CSS DCCI shall provide Common facilities to DPS.	test	B221.02.09
C-CSS-10780	The CSS DCCI shall accept Common facilities request from PLS.	test	B221.02.09
C-CSS-10790	The CSS DCCI shall provide Common facilities to PLS.	test	B221.02.09

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-10800	The CSS DCCI shall accept Common facilities request from MSS.	test	B221.02.09
C-CSS-10810	The CSS DCCI shall accept lifecycle commands request from MSS.	test	B221.02.06 B221.02.09
C-CSS-10820	The CSS DCCI shall accept mode request from MSS.	test	B211.01.04
C-CSS-10830	The CSS DCCI shall provide Common facilities to MSS.	test	B221.02.09
C-CSS-10840	The CSS DCCI shall have the capability to send processing status to MSS.	test	B221.02.09
C-CSS-10850	The CSS DCCI shall have the capability to send current mode to MSS.	test	B221.02.09
C-CSS-10860	The CSS DCCI shall have the capability to send detected hardware and software fault information to MSS.	test	B221.02.09
C-CSS-10870	The CSS DCCI shall have the capability to send event notification to MSS.	test	B221.02.09
C-CSS-10880	The CSS DCCI shall have the capability to send resource utilization data to MSS.	test	B221.02.09
C-CSS-20140	The CSS name service shall provide independent directories, based on the mode identifier, for each mode.	inspection /test	T211-92.01.02
C-CSS-21220	The CSS Security Service shall provide a mechanism to authenticate client/server applications using the socket protocol for inter-process communications.	test	B210.01.02 B211.01.01 B211.01.02 B211.01.03 B211.01.04 B221.02.02 B260.02.06 T211-70.01.01 T221-30.02.03
C-CSS-22080	The CSS Message Service shall provide an API for the receiver to register interest in receiving messages from a certain sender.	test	B221.02.04 T211-92.01.03
C-CSS-22180	The CSS Message Service shall provide an API that will allow thread processes to be scheduled.	test	T211-92.01.04
C-CSS-22190	In deferred synchronous mode, the CSS Message Service shall provide an API that will allow a user to retrieve the results of the execution of a thread.	test	T211-92.01.04
C-CSS-22200	The CSS Message Service shall provide an API that will supply the status of a thread process.	test	T211-92.01.04
C-CSS-22210	The CSS Message Service shall provide an API that will inform the user when a thread process has finished executing.	test	T211-92.01.04
C-CSS-24010	The CSS Lifecycle Service shall provide a generic instantiation capability that creates a new object for a client.	test	T221-60.02.01
C-CSS-24020	The CSS Lifecycle Service shall provide an API that accepts state initialization information.	test	T221-60.02.01
C-CSS-24040	The CSS Lifecycle Service shall provide an API that returns an object invocation handle.	test	T221-60.02.01
C-CSS-24060	The CSS Lifecycle Service shall act as an intermediary during the client server connection phase.	test	T221-60.02.01
C-CSS-25150	The CSS Time Service shall be interoperable with the time service provided within DCE environment	test	T211-91.01.02
C-CSS-25160	The CSS Time Service shall support remote time access	test	T211-91.01.02
C-CSS-25170	The CSS time service shall accept delta time value and be capable of returning a simulated time value.	test	T211-91.01.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-CSS-30130	The Process Framework shall provide interfaces to the Server Request Framework.	test	T211-80.01.01
C-CSS-30160	The Process Framework shall interface with the Management Agent framework to suspend an application	test	B221.02.05 T211-80.01.01 B221.02.06
C-CSS-30170	The Process Framework shall interface with the Management Agent framework to resume an application	test	B221.02.06 T211-80.01.01
C-CSS-40040	The Subscription Service shall validate Subscription Requests for time interval events. Time intervals will be limited to daily, weekly, or monthly.	test	T221-40.02.01
C-CSS-40120	The Subscription Service shall provide the capability to notify a user that a new version of the data has been archived.	test	T221-40.02.04
C-CSS-40150	The Subscription Service shall provide the capability to bundle notification of discrete events into a single notice to the sbuscriber.	test	T221-40.02.03
C-CSS-40170	The Subscription Service shall accept Subscription Update Requests to update stored Subscriptions by changing the event or the action.	test	T221-40.02.04
C-CSS-40190	The Subscription Service shall provide the capability for operations staff to update the stored Subscriptions by changing the event and/or action.	test	T221-40.02.04
C-CSS-40200	The Subscription Service shall provide the capability for a user client to update their stored Subscriptions by changing the action and/or event.	test	T221-40.02.04
C-CSS-40230	The Subscription Service shall validate that Subscription Update Requests specify a valid Subscription Identifier and a valid replacement Subscription.	test	T221-40.02.02
C-CSS-40260	The Subscription Service shall periodically report on new events for timer-based Subscriptions.	test	T221-40.02.02
C-CSS-60330	The CSS File Access Service shall provide uninterrupted file access in the event of single failure of the server.	test	B211.01.06 T221-50.02.01
C-CSS-60340	The CSS File Access Service shall guarantee the accessed file to be in its most recent version.	test	B211.01.06 T221-50.02.01
C-CSS-60350	The CSS File Access Service shall provide capability to change directory (cd) on the remote host.	test	T221-50.02.01
C-CSS-61070	The CSS Electronic Mail Service shall support the Post Office Protocol (POP).	test	B210.01.01 B211.01.04 T211-60.01.01
C-CSS-61397	The CSS Electronic Mail Service shall provide on-line help functionality.	test	T211-60.01.01
C-CSS-62314	The CSS Bulletin Board Service shall allow the user to withdraw a message from bulletin board after posting.	test	B210.01.01 T211-60.01.02
C-CSS-62317	The CSS Bulletin Board Service shall provide on-line help functionality.	test	T211-60.01.02
C-CSS-64000	The CSS Dial-Up Access Service shall provide remote Internet access.	test	T221-50.02.02
C-ISS-02100	The ISS-INHW CI shall use physical devices and Medium Access Control protocols compatible with the following standards: a. IEEE 802.2 (Logical Link Control) b. IEEE 802.3 (MAC for Ethernet) c. IEEE 802.6 (MAC for SMDS) d. ANSI X3T9.5 (MAC for FDDI).	test	T250-10.02.04
C-ISS-02110	The ISS-INHW CI physical components, and services shall have the capability to be monitored via SNMP agents.	test	T250-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-ISS-02200	The ISS-INHW CI LAN Analysis Equipment shall provide protocol analysis through the transport layer for all ISS LAN protocols and interconnection protocols to MANs/WANs.	test	T250-10.02.04
C-ISS-02210	The ISS-INHW CI LAN Analysis Equipment shall include a Communications line monitor.	test	T250-10.02.04
C-ISS-02220	The ISS-INHW CI communications line monitor shall store and display up to 10,000 bytes of data sent and received over any of the communications lines at rates of 10Mbits/sec to 100Mbits/sec.	test	T250-10.02.05
C-ISS-02230	The ISS-INHW CI communications line monitor shall support the protocols used within and interconnecting the ECS.	test	T250-10.02.04
C-ISS-02250	The ISS-INHW CI LAN Analysis Equipment shall include Local Area Network analyzers.	test	T250-10.02.04
C-ISS-02300	The ISS-INHW CI EOC LAN loop delay contribution shall not exceed more than 500 msec (goal 250 msec) seconds of the total ECS delay of 2.5 seconds for emergency real-time commands.	test	T250-10.02.05
C-ISS-02310	The ISS-INHW CI EOC Operational LAN backbone shall be able to support a peak traffic rate of 24 Mbps.	test	T250-10.02.05
C-ISS-02320	The ISS-INHW CI shall provide wide area bandwidth necessary to support data transfer in accordance with requirements specified in "Communications Requirements for the ECS Project", 194-220-SE3-001.	test	T250-10.02.05
C-ISS-02330	The ISS-INHW CI shall provide sufficient local area network bandwidth at the LaRC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-02340	The ISS-INHW CI shall provide sufficient local area network bandwidth at the MSFC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-02350	The ISS-INHW CI shall provide sufficient local area network bandwidth at the GSFC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-02360	The ISS-INHW CI shall provide sufficient local area network bandwidth at the EDC DAAC to support data transfer between and among physical nodes provided by SDPS, MSS and CSS in accordance with the Release B network sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-02370	The ISS-INHW CI shall reuse the existing V0 DAAC LAN at EDC for Release A.	test	T250-10.02.05
C-ISS-02380	The ISS-INHW CI LANs at the GSFC, MSFC and LaRC DAAC sites shall be capable of supporting twice the R-A network traffic load estimates without redesign.	test	T250-10.02.05
C-ISS-02390	The ISS-INHW CI LANs at the DAAC sites shall be designed in a manner that allows a. Nodes to be added to any given LAN segment. b. Additional LAN segments to be added to the LAN.	test	T250-10.02.06
C-ISS-02400	The ISS-INHW CI EOC Operational LAN shall be able to support 230 network devices without redesign.	test	T250-10.02.05
C-ISS-02410	The ISS-INHW CI EOC Operational LAN shall be able to support peak data rates of up to 48 Mbps without redesign.	test	T250-10.02.05

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-ISS-02500	The ISS-INHW CI networks shall support the use of network and transport layer filtering to control access from internal and external interfaces.	test	T250-10.02.06
C-ISS-02600	The ISS-INHW CI DAAC LANs shall provide transparent portability across heterogeneous site LAN architectures.	test	T250-10.02.04
C-ISS-02610	The ISS-INHW CI DAAC LANs shall enable expansion to GByte networks including the ability to provide increased volume of data distribution and access.	test	T250-10.02.04
C-ISS-04102	The portion of the EDC DAAC LAN supporting the SDPS function of Data Acquisition Request (DAR) Submittal including TOOs shall contribute to the function's operational availability of 0.993 at a minimum and mean down time of two (2) hours or less during times of staffed operation.	test	T250-10.02.05
C-ISS-11020	The ISS shall interface with NSI at GSFC, MSFC, LaRC, EDC, JPL, NSIDC, ORNL, and ASF to provide DAAC access to science users in accordance with the following documents: a. DID 220, "Communications Requirements for the ECS Project" 194-220-SE3-001 b. Interface Requirements Document between EOSDIS Core System (ECS) and the NASA Science Internet (NSI), 194-219-SE1-001	test	T250-10.02.04
C-ISS-11090	The ISS shall provide for local or metro area connectivity to V0 network nodes at the GSFC, LaRC, MSFC, JPL, ASF, and NSIDC DAAC sites in order to provide interoperability between ECS and V0.	test	T250-10.02.04
C-ISS-11170	The ISS shall provide for connectivity between the EOC and EBnet.	test	T250-10.02.04
C-ISS-11180	The ISS shall provide for connectivity between the EOC and NSI for EOC/IST communications.	test	T250-10.02.04
C-ISS-11195	The ISS shall provide for connectivity with EBnet at the following ECS sites: a. GSFC DAAC b. GSFC EOC c. GSFC SMC d. LaRC DAAC e. MSF DAAC f. JPL DAAC g.ASF DAAC h. NSIDC DAAC i. EDC DAAC	test	T250-10.02.04
C-ISS-11220	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the GSFC DAAC.	test	T250-10.02.04
C-ISS-11230	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the LaRC DAAC.	test	T250-10.02.04
C-ISS-11240	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the EDC DAAC.	test	T250-10.02.04
C-ISS-11250	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the MSFC DAAC.	test	T250-10.02.04
C-ISS-11260	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services between components at the SMC.	test	T250-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-ISS-20000	The ISS shall provide LANs at the following Release B sites: a. GSFC DAAC; b. GSFC EOC; c. EDC DAAC; d. LaRC DAAC; e. MSFC DAAC; f. GSFC SMC; g. JPL DAAC; h. ASF DAAC; i. ORNL DAAC; j. NSIDC DAAC	test	T250-10.02.04
C-ISS-20050	The ISS shall provide sufficient local area network bandwidth at the JPL DAAC to support data transfer between and among physical nodes provided in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-20060	The ISS shall provide sufficient local area network bandwidth at the ASF DAAC to support data transfer between and among physical nodes in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-20070	The ISS shall provide sufficient local area network bandwidth at the ORNL DAAC to support data transfer between and among physical nodes in accordance with the Release B network I/O sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-20080	The ISS shall provide sufficient local area network bandwidth at the NSIDC DAAC to support data transfer between and among physical nodes in accordance with the Release B network sizing listed in Appendix A of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-20090	The ISS LANs at the Release B sites shall be capable of supporting twice the R-B network traffic load estimates without redesign.	test	T250-10.02.05
C-ISS-20100	The ISS LANs shall be designed in a manner that allows a. Nodes to be added to any given LAN segment.; b. Additional LAN segments to be added to the LAN.	test	T250-10.02.04 T250-10.02.06
C-ISS-20110	The ISS shall provide for connectivity to the ASF campus network to enable transfer of data between the ASF DAAC and the ASF production systems associated with ERS-1/2, JERS-1, and RADARSAT.	test	T250-10.02.04
C-ISS-20120	The ISS shall provide for connectivity between the EOC and EBnet for AM-1 instrument flight operations.	test	T250-10.02.04
C-ISS-20130	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the JPL DAAC.	test	T250-10.02.04
C-ISS-20140	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the ASF DAAC.	test	T250-10.02.04
C-ISS-20150	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the ORNL DAAC.	test	T250-10.02.04
C-ISS-20160	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the NSIDC DAAC.	test	T250-10.02.04
C-ISS-20170	The ISS shall provide LAN connectivity and OSI Layer 1 through 4 (i.e., from the physical to the transport layer) services at the GSFC EOC.	test	T250-10.02.04
C-ISS-20180	The ISS shall receive diagnostic test requests from the MSS.	test	T250-10.02.04
C-ISS-20190	The ISS-INHW CI shall contribute to the response time and performance requirements specified in Appendix E (Section E.7 Table E-8) of the current version of 304-CD-005.	test	T250-10.02.05
C-ISS-20200	The ISS shall send diagnostic test requests to the MSS.	test	T250-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-ISS-21010	The ISS-INHW CI shall provide LANs at the following sites: a. GSFC DAAC LAN b. GSFC EOC LAN c. EDC DAAC LAN d. LaRC DAAC LAN e. MSFC DAAC LAN f. GSFC SMC LAN	test	T250-10.02.04
C-MSS-00500	The MSS shall have the capability to send EOS Long Term Science Plans to ASTER GDS.	test	T252-50.02.01
C-MSS-00510	The MSS shall have the capability to send EOS Long Term Instrument Plans to ASTER GDS.	test	T252-50.02.01
C-MSS-00520	The MSS shall have the capability to send schedule adjudication data to ASTER GDS.	test	T252-50.02.01
C-MSS-00530	The MSS shall have the capability to receive schedule adjudication data from ASTER GDS.	test	T252-50.02.01
C-MSS-00540	To the maximum extent, the MSS Human Machine Interface (HMI) shall be compatible with the ECS User Interface Style Guide (Version 5.1).	test	T252-50.02.01
C-MSS-02000	The MSS-MHW CI Enterprise Monitoring Server shall be physically and functionally identical to the Enterprise Communications Server in supporting the CSMS requirements.	test	T250-10.02.07
C-MSS-02010	The MSS-MHW CI Enterprise Monitoring Server shall share data with the Local System Management Server in supporting the CSMS requirements.	test	T250-10.02.07
C-MSS-02020	The MSS-MHW CI Enterprise Monitoring Server shall preserve DAAC autonomy of operations.	test	T250-10.02.07
C-MSS-02030	The MSS-MHW CI Enterprise Monitoring Server shall host the MSS software configuration items to create, with the Enterprise Communications Server and Management Workstations, an enterprise monitoring and coordination center for the ECS.	test	T250-10.02.07
C-MSS-02100	The MSS-MHW CI Enterprise Monitoring Server processor shall include a dedicated terminal to be used as a local systems operations console.	test	T250-10.02.07
C-MSS-02110	The MSS-MHW CI Enterprise Monitoring Server processor shall be capable of expansion with additional quantities and types of peripherals.	test	T250-10.02.07
C-MSS-02120	The MSS-MHW CI Enterprise Monitoring Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.	test	T250-10.02.07
C-MSS-02130	The MSS-MHW CI Enterprise Monitoring Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.07
C-MSS-02140	The MSS-MHW CI Enterprise Monitoring Server processor terminal shall be compatible with the Management Workstation display device.	test	T250-10.02.07
C-MSS-02200	The MSS-MHW CI Enterprise Monitoring Server data storage shall be compatible with POSIX compliant operating systems from several vendors.	test	T250-10.02.07
C-MSS-02210	The MSS-MHW CI Enterprise Monitoring Server data storage shall be compatible with the Local System Management Server short-term data storage.	test	T250-10.02.07
C-MSS-02220	The MSS-MHW CI Enterprise Monitoring Server data storage shall support RAID level-5: striping with interleaved parity.	test	T250-10.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-02230	The MSS-MHW CI Enterprise Monitoring Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers	test	T250-10.02.07
C-MSS-02240	The MSS-MHW CI Enterprise Monitoring Server data storage shall be cross-strapped with the Enterprise Communications Server data storage in supporting the CSMS requirements.	test	T250-10.02.07
C-MSS-02250	The MSS-MHW CI Enterprise Monitoring Server data storage shall be capable of archiving data to the ECS data server archive for data archive.	test	T250-10.02.07
C-MSS-02260	The MSS-MHW CI Enterprise Monitoring Server data archive shall adhere to ECS data server archival requirements for data storage and retrieval.	test	T250-10.02.07
C-MSS-02300	The MSS-MHW CI Enterprise Monitoring Server peripheral disk drives shall be capable of retrieving data stored from both the enterprise monitoring server data storage and data archive.	test	T250-10.02.07
C-MSS-02400	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one tape drive.	test	T250-10.02.07
C-MSS-02410	The MSS-MHW CI Enterprise Monitoring Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e., DDS-90)	test	T250-10.02.07
C-MSS-02420	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one tape drive.	test	T250-10.02.07
C-MSS-02430	The MSS-MHW CI Enterprise Monitoring Server tape drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.07
C-MSS-02500	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one CD-ROM drive.	test	T250-10.02.07
C-MSS-02510	The MSS-MHW CI Enterprise Monitoring Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk	test	T250-10.02.07
C-MSS-02520	The MSS-MHW CI Enterprise Monitoring Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.07
C-MSS-02600	The MSS-MHW CI Local Management Server shall be physically and functionally identical to the Local Communications Server in supporting the CSMS requirements.	test	T250-10.02.08
C-MSS-02610	The MSS-MHW CI Local Management Server shall share data with the Enterprise Monitoring Server in supporting the CSMS requirements.	test	T250-10.02.08
C-MSS-02620	The MSS-MHW CI Local Management Server shall manage only the local DAAC and preserve other DAAC autonomy of operations.	test	T250-10.02.08
C-MSS-02630	The MSS-MHW CI Local Management Server shall host the MSS software configuration items to create, with the Local Communications Server and Management Workstations, a local system management center for each ECS DAAC.	test	T250-10.02.08
C-MSS-02700	The MSS-MHW CI Local Management Server processor shall include a dedicated terminal to be used as a local systems operations console.	test	T250-10.02.08
C-MSS-02710	The MSS-MHW CI Local Management Server processor shall be capable of expansion with additional quantities and types of peripherals.	test	T250-10.02.08

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-02720	The MSS-MHW CI Local Management Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.	test	T250-10.02.08
C-MSS-02730	The MSS-MHW CI Local Management Server processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.08
C-MSS-02740	The MSS-MHW CI Local Management Server processor terminal shall be compatible with the Management Workstation display device.	test	T250-10.02.08
C-MSS-02800	The MSS-MHW CI Local Management Server data storage shall be compatible with POSIX compliant operating systems from several vendors.	test	T250-10.02.08
C-MSS-02810	The MSS-MHW CI Local Management Server data storage shall be compatible with the Enterprise Monitoring Server intermediate-term data storage.	test	T250-10.02.08
C-MSS-02820	The MSS-MHW CI Local Management Server data storage shall support RAID level-5: striping with interleaved parity.	test	T250-10.02.08
C-MSS-02830	The MSS-MHW CI Local Management Server data storage shall have the following hot swappable components: a. Disks b. Power Supplies c. Fans d. Disk-array controllers	test	T250-10.02.08
C-MSS-02840	The MSS-MHW CI Local Management Server data storage shall be cross-strapped with the Local Communications Server short-term data storage in supporting the CSMS requirements.	test	T250-10.02.08
C-MSS-02850	The MSS-MHW CI Local Management Server data storage shall be capable of archiving data to the ECS Data Server archive for data archive.	test	T250-10.02.08
C-MSS-02860	The MSS-MHW CI Local Management Server data archive shall adhere to ECS Data Server archival requirements for data storage and retrieval.	test	T250-10.02.08
C-MSS-02900	The MSS-MHW CI Local Management Server peripheral disk drives shall be capable of retrieving data stored from both the Local Management server data storage data archive.	test	T250-10.02.08
C-MSS-03000	The MSS-MHW CI Local Management Server peripherals shall support at least one tape drive.	test	T250-10.02.08
C-MSS-03010	The MSS-MHW CI Local Management Server peripheral tape drive shall have the following characteristics: a. 4mm Digital Audio Tape format b. Accept industry standard magnetic 4mm DAT (i.e. DDS-90)	test	T250-10.02.08
C-MSS-03020	The MSS-MHW CI Local Management Server peripheral tape drive shall have a data transfer rate of 200KB/sec.	test	T250-10.02.08
C-MSS-03030	The MSS-MHW CI Local Management Server tape drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.08
C-MSS-03100	The MSS-MHW CI Local Management Server peripherals shall support at least one CD-ROM drive.	test	T250-10.02.08
C-MSS-03110	The MSS-MHW CI Local Management Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk	test	T250-10.02.08
C-MSS-03120	The MSS-MHW CI Local Management Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.	test	T250-10.02.08

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-03200	All MSS-MHW CI Management Workstations and processors shall be capable of operating simultaneously and independently of other workstations and management/communications servers.	test	T250-10.02.09
C-MSS-03300	At a minimum, each MSS-MHW CI processor shall have the capability to support a POSIX compliant IEEE 1003.1 operating system (UNIX).	test	T250-10.02.09
C-MSS-03310	Each MSS-MHW CI Management Workstation shall provide one QWERTY keyboard.	test	T250-10.02.09
C-MSS-03320	Each Management Workstation keyboard shall be detachable and cabled for movement on a desk-top style workstation area.	test	T250-10.02.09
C-MSS-03330	Each Management Workstation keyboard shall provide a minimum of 12 programmable function keys.	test	T250-10.02.09
C-MSS-03340	Each MSS-MHW CI Management Workstation shall provide one color text and graphics display device.	test	T250-10.02.09
C-MSS-03350	The MSS-MHW CI display driver device shall display the complete ASCII character set.	test	T250-10.02.09
C-MSS-03360	The MSS-MHW CI display driver device shall provide a minimum of 1024 pixel x 864 lines resolution display.	test	T250-10.02.09
C-MSS-03370	The MSS-MHW CI display driver device shall display a minimum of 16 colors.	test	T250-10.02.09
C-MSS-03380	The MSS-MHW CI display driver device shall display pages 24 lines by 80 characters wide.	test	T250-10.02.09
C-MSS-03390	The MSS-MHW CI display driver device shall display a minimum of four screen display pages.	test	T250-10.02.09
C-MSS-03400	The MSS-MHW CI display driver device shall display pages readable from any location along the width of the workstation and up to a distance of 6 feet from the screen.	test	T250-10.02.09
C-MSS-03410	The MSS-MHW CI display driver device shall provide a minimum of 19 inches diagonal non-glare screen.	test	T250-10.02.09
C-MSS-03420	The MSS-MHW CI display driver device shall provide RGB video output for hard copy.	test	T250-10.02.09
C-MSS-03430	The MSS-MHW CI display driver device shall provide feature an integral swivel/tilt base.	test	T250-10.02.09
C-MSS-03440	The MSS-MHW CI display driver device shall provide brightness, contrast and power controls within easy reach.	test	T250-10.02.09
C-MSS-03450	The MSS-MHW CI display driver device shall display the complete ASCII character set.	test	T250-10.02.09
C-MSS-03460	The MSS-MHW CI Management Workstation shall provide one cursor pointing device (mouse).	test	T250-10.02.09
C-MSS-03470	The MSS-MHW CI Management Workstation shall be upgradeable/replaceable within the same product family.	test	T250-10.02.09
C-MSS-03500	The MSS-MHW CI Management Workstation data storage shall be capable of retrieving data from the data storage function of both the Enterprise Monitoring Server and the Local Management Server.	test	T250-10.02.09
C-MSS-03600	All MSS-MHW CI Management Workstation disk drives serving a specific function (e.g. local management, enterprise monitoring) shall be identical and will have equal capacity.	test	T250-10.02.09
C-MSS-03700	Each MSS-MHW CI Printer shall be physically and functionally identical in supporting the CSMS printing requirements.	test	T250-10.02.09

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-03800	The MSS-MHW CI Enterprise Monitoring Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.	test	T250-10.02.07
C-MSS-03810	The MSS-MHW CI Enterprise Monitoring Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.	test	T250-10.02.07
C-MSS-03820	The MSS-MHW CI Local Management Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.	test	T250-10.02.08
C-MSS-03830	The MSS-MHW CI Local Management Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrades to software.	test	T250-10.02.08
C-MSS-03840	The MSS-MHW CI Enterprise Monitoring Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.	test	T250-10.02.07
C-MSS-03850	The MSS-MHW CI Local Management Server shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005 for all DAAC configurations.	test	T250-10.02.08
C-MSS-03860	The MSS-MHW CI Management Workstation shall be capable of meeting the capacity and performance characteristics of Appendix A of the current version of 304-CD-005.	test	T250-10.02.09
C-MSS-03900	The MSS-MHW CI hardware selection criteria shall meet overall ECS security policies and system requirements.	test	T250-10.02.08 T250-10.02.09
C-MSS-04000	The MSS-MHW CI Enterprise Monitoring Server shall maintain one backup of all software and key data items in a separate physical location.	test	T250-10.02.07
C-MSS-04010	The MSS-MHW CI Local Management Server shall maintain one backup of all software and key data items in a separate physical location.	test	T250-10.02.08
C-MSS-04020	The MSS-MHW CI functional string between the Enterprise Monitoring Server and the Local Management Server shall provide a function Ao (operational availability) of 0.998 and an MDT of 20 minutes.	test	T250-10.02.10
C-MSS-04030	The MSS-MHW CI functional string between the Local Management Server and ECS managed objects shall provide a function Ao of 0.998 and an MDT of 20 minutes.	test	T250-10.02.10
C-MSS-05200	The GSFC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.11
C-MSS-05210	The GSFC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.11
C-MSS-05220	The GSFC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.11
C-MSS-05230	The GSFC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.11
C-MSS-05240	The GSFC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.11

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-05250	The GSFC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.11
C-MSS-05260	The GSFC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any GSFC LSM function.	test	T250-10.02.11
C-MSS-05270	The GSFC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.11
C-MSS-05280	The GSFC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.11
C-MSS-05290	The GSFC infrastructure shall provide a GSFC MSS-MHW CI LAN.	test	T250-10.02.11
C-MSS-05300	The GSFC EMC shall provide an MSS-MHW CI enterprise monitoring server, enterprise communications server, four (4) Management Workstations, one (1) printer, and bulletin board server transferred from the IR-1 EDF.	test	T250-10.02.11
C-MSS-05310	The GSFC EMC shall provide, via the ECS data server, MSS-MHW CI Enterprise Monitoring Server long-term data storage capability.	test	T250-10.02.11
C-MSS-05320	The GSFC EMC shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.11
C-MSS-05400	The EOC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.12
C-MSS-05410	The EOC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.12
C-MSS-05420	The EOC LSM MSS-MHW CI Local Management Servershall provide storage that is cross-strapped with the Local Communications Server.	test	T250-10.02.12
C-MSS-05430	The EOC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.12
C-MSS-05440	The EOC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.12
C-MSS-05450	The EOC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.12
C-MSS-05460	The EOC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.12
C-MSS-05470	The EOC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.	test	T250-10.02.12
C-MSS-05480	The EOC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.12
C-MSS-05490	The EOC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.12
C-MSS-05500	The EOC infrastructure shall provide one EOC MSS-MHW CI LAN.	test	T250-10.02.12
C-MSS-05600	The MSFC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.27
C-MSS-05610	The MSFC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.27
C-MSS-05620	The MSFC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.27
C-MSS-05630	The MSFC LSM MSS-MHW CI Local Communications Servershall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.27

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-05640	The MSFC LSM MSS-MHW CI Local Communications Servershall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.27
C-MSS-05650	The MSFC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.27
C-MSS-05660	The MSFC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any MSFC LSM function.	test	T250-10.02.27
C-MSS-05670	The MSFC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.27
C-MSS-05680	The MSFC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.27
C-MSS-05690	The MSFC infrastructure shall provide one MSFC MSS-MHW CI LAN.	test	T250-10.02.27
C-MSS-05800	The LaRC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.13
C-MSS-05810	The LaRC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.13
C-MSS-05820	The LaRC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.13
C-MSS-05830	The LaRC LSM MSS-MHW CI Local Communications Servershall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.13
C-MSS-05840	The LaRC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.13
C-MSS-05850	The LaRC LSM shall provide one MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.13
C-MSS-05860	The LaRC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any LaRC LSM function.	test	T250-10.02.13
C-MSS-05870	The LaRC LSM shall provide 1 MSS-MHW CI system printer.	test	T250-10.02.13
C-MSS-05880	The LaRC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.13
C-MSS-05890	The LaRC infrastructure shall provide a LaRC MSS-MHW CI LAN.	test	T250-10.02.13
C-MSS-06000	The EDC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.14
C-MSS-06010	The EDC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.14
C-MSS-06020	The EDC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.14
C-MSS-06030	The EDC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.14
C-MSS-06040	The EDC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.14
C-MSS-06050	The EDC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.14
C-MSS-06060	The EDC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EDC LSM function.	test	T250-10.02.14

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-06070	The EDC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.14
C-MSS-06080	The EDC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.14
C-MSS-06090	The EDC infrastructure shall provide an EDC MSS-MHW CI LAN.	test	T250-10.02.14
C-MSS-06200	The JPL LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.15
C-MSS-06210	The JPL LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.15
C-MSS-06220	The JPL LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.15
C-MSS-06230	The JPL LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.15
C-MSS-06240	The JPL LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.15
C-MSS-06250	The JPL LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.15
C-MSS-06260	The JPL LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.	test	T250-10.02.15
C-MSS-06270	The JPL LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.15
C-MSS-06280	The JPL LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.15
C-MSS-06290	The JPL infrastructure shall provide a JPL MSS-MHW CI LAN.	test	T250-10.02.15
C-MSS-06400	The SMC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.16
C-MSS-06410	The SMC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.16
C-MSS-06420	The SMC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.16
C-MSS-06430	The SMC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.16
C-MSS-06440	The SMC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.16
C-MSS-06450	The SMC LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.16
C-MSS-06460	The SMC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.	test	T250-10.02.16
C-MSS-06470	The SMC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.16
C-MSS-06480	The SMC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.16
C-MSS-06490	The SMC EMC shall provide an MSS-MHW CI enterprise monitoring server, enterprise communications server, accounting and billing server, four (4) Management Workstations, printer, dot-matrix printer, and bulletin board server.	test	T250-10.02.16
C-MSS-06500	The SMC EMC shall provide, via the ECS data server, a MSS-MHW CI Enterprise Monitoring Server long-term data storage capability.	test	T250-10.02.16

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-06510	The SMC EMC shall provide, via the ECS data server, an MSS-MHW CI accounting and billing server long-term data storage capability.	test	T250-10.02.16
C-MSS-06600	The NSIDC LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.17
C-MSS-06610	The NSIDC LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.17
C-MSS-06620	The NSIDC LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.17
C-MSS-06630	The NSIDC LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.17
C-MSS-06640	The NSIDC LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.17
C-MSS-06650	The NSIDC LSM shall provide one MSS-MHW CI local management and local communications server.	test	T250-10.02.17
C-MSS-06660	The NSIDC LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.	test	T250-10.02.17
C-MSS-06670	The NSIDC LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.17
C-MSS-06680	The NSIDC LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.17
C-MSS-06690	The NSIDC infrastructure shall provide a NSIDC MSS-MHW CI LAN.	test	T250-10.02.17
C-MSS-06800	The ASF LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.18
C-MSS-06810	The ASF LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.18
C-MSS-06820	The ASF LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.18
C-MSS-06830	The ASF LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.18
C-MSS-06840	The ASF LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.18
C-MSS-06850	The ASF LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.18
C-MSS-06860	The ASF LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any LSM function.	test	T250-10.02.18
C-MSS-06870	The ASF LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.18
C-MSS-06880	The ASF LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.18
C-MSS-06890	The ASF infrastructure shall provide a ASF MSS-MHW CI LAN.	test	T250-10.02.18
C-MSS-07000	The ORNL LSM shall provide a MSS-MHW CI Local Management Server.	test	T250-10.02.19
C-MSS-07010	The ORNL LSM MSS-MHW CI Local Management Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.19
C-MSS-07020	The ORNL LSM shall provide a MSS-MHW CI Local Communications Server.	test	T250-10.02.19

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-07030	The ORNL LSM MSS-MHW CI Local Communications Server shall be configured with fixed disk, tape drive, and CD-ROM drive storage devices.	test	T250-10.02.19
C-MSS-07040	The ORNL LSM MSS-MHW CI Local Communications Server shall provide storage that is cross-strapped with the Local Management Server.	test	T250-10.02.19
C-MSS-07050	The ORNL LSM shall provide a MSS-MHW CI Data Storage Unit supporting RAID level 5 cross strapped between the local management and local communications servers.	test	T250-10.02.19
C-MSS-07060	The ORNL LSM shall provide two (2) MSS-MHW CI Management Workstations, which can perform any EOC LSM function.	test	T250-10.02.19
C-MSS-07070	The ORNL LSM shall provide a MSS-MHW CI system printer.	test	T250-10.02.19
C-MSS-07080	The ORNL LSM shall provide a MSS-MHW CI dot-matrix printer.	test	T250-10.02.19
C-MSS-07090	The ORNL infrastructure shall provide an ORNL MSS-MHW CI LAN.	test	T250-10.02.19
C-MSS-18042	The MSS MDA shall have the capability to distinguish MSS log file records according to mode identifier.	test	T252-60.02.05
C-MSS-18044	The MSS MDA shall support a separate management database for each active mode.	test	T252-60.02.05
C-MSS-18046	The MSS MDA shall transfer MSS log file records to the appropriate management database based on the event's mode.	test	B210.01.04 T252-60.02.05
C-MSS-18048	The MSS MDA shall transfer non-mode specific MSS log file records to all mode specific management databases.	test	T252-60.02.05
C-MSS-18072	The MSS Management Data Access Service shall have the capability to chain management events to their ancestor management events.	test	T252-10.02.03
C-MSS-18074	The MSS Management Data Access Service event chaining tool shall provide user access via the MDA user interface.	test	T252-10.02.03
C-MSS-18360	The MSS Management Data Access Service shall provide the capability for the M&O staff to load log files into the management database at the site.	test	T252-10.02.03
C-MSS-36012	The MSS Management MACI shall have the capability to obtain the mode identifier of managed application.	test	T252-60.02.03
C-MSS-36014	The MSS MACI shall incorporate the mode identifier into all metrics collected.	test	T252-60.02.03
C-MSS-36016	The MSS MACI shall be able to distinguish managed applications based on mode.	test	T252-60.02.03
C-MSS-36215	The Management Agent Service shall have the capability to receive event notification from the CLS.	test	B252.02.01 B252.02.03 T252-10.02.03
C-MSS-36300	The Management Agent Service shall have the capability to receive processing status from the IOS.	test	T252-10.02.01
C-MSS-36305	The Management Agent Service shall have the capability to receive current mode from the IOS.	test	T211-10.01.01
C-MSS-36310	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the IOS.	test	T252-10.02.02
C-MSS-36320	The Management Agent Service shall have the capability to receive event notification from the IOS.	test	B252.02.01 B252.02.03 T252-10.02.03
C-MSS-36325	The Management Agent Service shall have the capability to receive resource utilization data from the IOS.	test	T252-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-36330	The Management Agent Service shall have the capability to send life cycle commands to the IOS.	test	T252-10.02.05
C-MSS-36335	The Management Agent Service shall have the capability to send mode requests to the IOS.	test	T211-10.01.02
C-MSS-36350	The Management Agent Service shall have the capability to receive processing status from the DMS.	test	T252-10.02.01
C-MSS-36355	The Management Agent Service shall have the capability to receive current mode from the DMS.	test	T211-10.01.01
C-MSS-36360	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DMS.	test	B252.02.05 T252-10.02.02
C-MSS-36365	The Management Agent Service shall have the capability to receive event notification from the DMS.	test	B252.02.01 B252.02.03 T252-10.02.03
C-MSS-36370	The Management Agent Service shall have the capability to receive resource utilization data from the DMS.	test	T252-10.02.04
C-MSS-36375	The Management Agent Service shall have the capability to send life cycle commands to the DMS.	test	T252-10.02.05
C-MSS-36380	The Management Agent Service shall have the capability to send mode requests to the DMS.	test	T211-10.01.02
C-MSS-36400	The Management Agent Service shall have the capability to receive processing status from the PLS.	test	T252-10.02.01
C-MSS-36405	The Management Agent Service shall have the capability to receive current mode from the PLS.	test	T211-10.01.01
C-MSS-36410	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the PLS.	test	B252.02.05 T252-10.02.02
C-MSS-36415	The Management Agent Service shall have the capability to receive event notification from the PLS.	test	B252.02.02 B252.02.04 T252-10.02.03
C-MSS-36420	The Management Agent Service shall have the capability to receive resource utilization data from the PLS.	test	T252-10.02.04
C-MSS-36435	The Management Agent Service shall have the capability to send life cycle commands to the PLS.	test	T252-10.02.05
C-MSS-36440	The Management Agent Service shall have the capability to send mode requests to the PLS.	test	T211-10.01.02
C-MSS-36450	The Management Agent Service shall have the capability to receive processing status from the DPS.	test	T252-10.02.01
C-MSS-36455	The Management Agent Service shall have the capability to receive current mode from the DPS.	test	T211-10.01.01
C-MSS-36460	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DPS.	test	B252.02.05 T252-10.02.02
C-MSS-36465	The Management Agent Service shall have the capability to receive accounting/resource accountability data from the DPS.	test	T252-10.02.03
C-MSS-36470	The Management Agent Service shall have the capability to receive resource utilization data from the DPS.	test	T252-10.02.04
C-MSS-36480	The Management Agent Service shall have the capability to send life cycle commands to the DPS.	test	T252-10.02.05
C-MSS-36485	The Management Agent Service shall have the capability to send mode requests to the DPS.	test	T211-10.01.02
C-MSS-36490	The Management Agent Service shall have the capability to send resource availability information to the DPS.	test	T252-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-36500	The Management Agent Service shall have the capability to receive processing status from the INS.	test	T252-10.02.01
C-MSS-36505	The Management Agent Service shall have the capability to receive current mode from the INS.	test	T211-10.01.01
C-MSS-36510	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the INS.	test	B252.02.05 T252-10.02.02
C-MSS-36515	The Management Agent Service shall have the capability to receive event notification from the INS.	test	B252.02.02 B252.02.04 T252-10.02.03
C-MSS-36520	The Management Agent Service shall have the capability to receive resource utilization data from the INS.	test	T252-10.02.04
C-MSS-36540	The Management Agent Service shall have the capability to send life cycle commands to the INS.	test	T252-10.02.05
C-MSS-36545	The Management Agent Service shall have the capability to send mode requests to the INS.	test	T211-10.01.02
C-MSS-36550	The Management Agent Service shall have the capability to receive processing status from the DSS.	test	T252-10.02.01
C-MSS-36555	The Management Agent Service shall have the capability to receive current mode from the DSS.	test	T211-10.01.01
C-MSS-36560	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DSS.	test	B252.02.05 T252-10.02.02
C-MSS-36565	The Management Agent Service shall have the capability to receive event notification from the DSS.	test	B252.02.02 B252.02.04 T252-10.02.03
C-MSS-36570	The Management Agent Service shall have the capability to receive resource utilization data from the DSS.	test	T252-10.02.04
C-MSS-36575	The Management Agent Service shall have the capability to receive status of data distribution from the DSS.	test	T252-10.02.01
C-MSS-36600	The Management Agent Service shall have the capability to send life cycle commands to the DSS.	test	T252-10.02.05
C-MSS-36605	The Management Agent Service shall have the capability to send mode requests to the DSS.	test	T211-10.01.02
C-MSS-36700	The Management Agent Service shall have the capability to receive processing status from the CSS.	test	T252-10.02.01
C-MSS-36705	The Management Agent Service shall have the capability to receive current mode from the CSS.	test	T211-10.01.01
C-MSS-36710	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the CSS.	test	B252.02.05 T252-10.02.02
C-MSS-36715	The Management Agent Service shall have the capability to receive event notification from the CSS.	test	T252-10.02.03
C-MSS-36720	The Management Agent Service shall have the capability to receive resource utilization data from the CSS.	test	T252-10.02.04
C-MSS-36750	The Management Agent Service shall have the capability to send life cycle commands to the CSS.	test	T252-10.02.05
C-MSS-36755	The Management Agent Service shall have the capability to send mode requests to the CSS.	test	T211-10.01.02
C-MSS-36800	The Management Agent Service shall have the capability to receive from the ASF, statistical and accounting information in ECS's standard API format.	test	T252-10.02.04
C-MSS-42000	The MSS Software Distribution Service shall use version-controlled repositories for software packages.	test	T211-40.01.01 T221-10.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-42010	The MSS Software Distribution Service shall have the capability to retrieve the contents for each repository from the MSS Baseline Manager Service.	test	B210.01.04 T211-40.01.01 T221-10.02.01
C-MSS-42020	The MSS Software Distribution Service shall provide via the CSS Bulletin Board Service access to the toolkit repository/information.	test	B210.01.04 T211-40.01.01 T221-10.02.01
C-MSS-42030	The MSS Software Distribution Service shall package software, databases, and documentation for delivery to destinations at both ECS and ECS-connected sites.	test	T211-40.01.01 T221-10.02.01
C-MSS-42035	The MSS Software Distribution Service shall receive version-controlled software packages from the Baseline Manager Service for distribution.	test	T211-40.01.01 T221-10.02.01
C-MSS-42050	The MSS Software Distribution Service shall make toolkit sofware and documentation available for automated downloading.	test	T211-40.01.01 T221-10.02.01
C-MSS-42070	The MSS Software Distribution Service shall determine destinations from stored lists as well as via interactive input.	test	B210.01.04 T211-40.01.01 T221-10.02.01
C-MSS-42080	The MSS Software Distribution Service shall have the capability to push software packages from a central distribution point/depot to remote target platforms (servers and workstations).	test	B210.01.04 T211-40.01.01 T221-10.02.01
C-MSS-42090	The MSS Software Distribution Service at the site shall have the capability to pull distribution packages from central distribution points/depots onto individual target destinations.	test	B210.01.04 T211-40.01.01 T221-10.02.01
C-MSS-42100	The MSS Software Distribution Service shall initiate electronic transfer of distribution packages either automatically according to schedule or upon direct command.	test	T211-40.01.01 T221-10.02.01
C-MSS-42110	The MSS Software Distribution Service shall maintain a record of successful package transfers as well as of each target that fails to receive a package intended for it.	test	T211-40.01.01 T221-10.02.01
C-MSS-42200	The MSS License Management Service shall maintain information on product identification, licensing provisions, numbers and types of users	test	T211-50.01.01
C-MSS-42230	The MSS License Management Service shall distribute software license provisions system-wide.	test	T211-50.01.01
C-MSS-42240	The MSS License Management Service shall create, install, modify, and reinstall software licenses on ECS servers.	test	T211-50.01.01
C-MSS-42250	The MSS License Management Service shall meter use of software licenses	test	T211-50.01.01
C-MSS-42270	The MSS License Management Service shall have the capability to notify the M&O staff when license metering events occur.	test	T211-50.01.01
C-MSS-42280	The MSS License Management Service shall log license management events	test	T211-50.01.01
C-MSS-42290	The MSS License Management Service shall compile license utilization statistics.	test	T211-50.01.01
C-MSS-42300	The MSS License Management Service shall report license utilization statistics.	test	T211-50.01.01
C-MSS-45010	The MSS Inventory/Logistics Management Service at the SMC shall maintain an on-line, system-wide catalog of non-expendable and consumable ECS resources.	test	T211-50.01.01 T221-21.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-45020	The MSS Inventory/Logistics Management Service at the SMC shall provide consolidated, system-wide views of ECS sites' inventory data.	test	T211-50.01.01 T221-21.02.01
C-MSS-45030	The MSS Inventory/Logistics Management at the SMC shall track excess resources designated for reutilization or disposal.	test	T211-50.01.01 T221-21.02.01
C-MSS-45040	The MSS Inventory/Logistics Management Service at the SMC shall generate site and multi-site inventory reports for printout and display.	test	T211-50.01.01 T221-21.02.01
C-MSS-45050	The MSS Inventory/Logistics Management Service shall maintain inventory records of individual non-expendable and consumable ECS resources.	test	T221-21.02.02
C-MSS-45060	The MSS Inventory/Logistics Management Service shall have the capability to update and track ECS resources status.	test	T221-21.02.02
C-MSS-45070	The MSS Inventory/Logistics Management Service shall record attributes of inventoried resources.	test	T211-50.01.01 T221-21.02.01 T221-21.02.02
C-MSS-45080	The MSS Inventory/Logistics Management Service shall distinguish between ECS resources and non-ECS resources in the inventory.	test	T211-50.01.01 T221-21.02.01 T221-21.02.02
C-MSS-45090	The MSS Inventory/Logistics Management Service shall generate site inventory reports for printout and display.	test	T211-50.01.01 T221-21.02.01 T221-21.02.02
C-MSS-45200	The MSS Logistics Management Service shall provide the capability to input, store, update and view/print specified site's spare inventory information.	test	T221-21.02.02
C-MSS-45210	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to produce individual site or consolidated sites spare related reports based on operator entered criteria.	test	T211-50.01.01 T221-21.02.01
C-MSS-45220	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print information concerning site spare parts order information.	test	T211-50.01.01 T221-21.02.01
C-MSS-45230	The MSS Inventory/Logistics Management Service shall provide the capability to keep track of spares on-hand quantities, and quantity used.	test	T221-21.02.02
C-MSS-45240	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare related reports.	test	T221-21.02.02
C-MSS-45245	The MSS Inventory/Logistics Management Service shall provide the capability to generate order information for resupply of spare parts.	test	T221-21.02.02
C-MSS-45250	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print site spare parts (orders) information.	test	T221-21.02.02
C-MSS-45260	The MSS Inventory/Logistics Management Service shall have the capability to identify those items whose on-hand quantity has reached the established reorder point.	test	T221-21.02.02
C-MSS-45270	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare parts related reports based on operator entered criteria.	test	T221-21.02.02
C-MSS-45280	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to generate individual site or consolidated sites consumable items reports based on operator entered criteria.	test	T211-50.01.01 T221-21.02.01
C-MSS-45290	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print site consumable item information.	test	T221-21.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-45300	The MSS Inventory/Logistics Management Service shall provide the capability to generate site consumable items related reports based on operator entered criteria.	test	T221-21.02.02
C-MSS-45310	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print sites' consumable items orders information.	test	T221-21.02.02
C-MSS-45320	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to generate individual site or consolidated sites consumable items on-order reports based on operator entered criteria.	test	T211-50.01.01 T221-21.02.01
C-MSS-50000	The MSS Maintenance Management Service shall provide the capability to view specified site's PM information .	test	B221.02.06 T221-21.02.03
C-MSS-50010	The MSS Maintenance Management Service shall provide the capability to view specified site's corrective maintenance information.	test	T221-21.02.04
C-MSS-50020	The MSS Maintenance Management Service shall provide the M&O staff the capability to produce PM and corrective maintenance reports based on operator entered criteria.	test	T221-21.02.03 T221-21.02.04
C-MSS-50030	The MSS Maintenance Management Service at the SMC shall have the capability to receive specified site maintenance data for use in maintenance trends analysis.	test	T221-21.02.05
C-MSS-50040	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print Preventive Maintenance (PM) information for site equipment.	test	T221-21.02.03
C-MSS-50050	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print key information concerning PM performed.	test	T221-21.02.03
C-MSS-50060	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print corrective maintenance performed (CMP) information.	test	T221-21.02.04
C-MSS-50070	The MSS Maintenance Management Service shall have the capability, via M&O Staff entered criteria, to retrieve and display information relevant to PM and corrective maintenance services previously performed.	test	T221-21.02.03 T221-21.02.04
C-MSS-50090	The MSS Maintenance Management Service shall have the capability to replaced/modified equipment information maintained in the MSS Baseline Manager Service database.	test	T221-21.02.05
C-MSS-50100	The MSS Maintenance Management Service shall log the following information for operations performed and detected errors: operation type, userid of initiator, date time stamp; and host name	test	T221-21.02.05
C-MSS-50110	The MSS Maintenance Management Service shall generate chronological reports of logged events associated with user selectable: time frames; operation types; userids; and hosts.	test	T221-21.02.05
C-MSS-50120	The MSS Maintenance Management Service shall provide the capability to maintain sites' off-site maintenance information.	test	T221-21.02.06
C-MSS-50130	The MSS Maintenance Management Service shall provide off-site maintenance reports based on operator entered criteria.	test	T221-21.02.06
C-MSS-50140	The MSS Maintenance Management Service shall record off-site maintenance information: identification of component; description of problem; and corrective action taken.	test	T221-21.02.06
C-MSS-50160	The MSS Maintenance Management Service shall provide the capability to input off-site corrective hardware and software information.	test	T221-21.02.06

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-50170	The MSS Maintenance Management Service shall provide the capability to store off-site corrective hardware and software information.	test	T221-21.02.06
C-MSS-50180	The MSS Maintenance Management Service shall provide the capability to update off-site corrective hardware and software information.	test	T221-21.02.06
C-MSS-50190	The MSS Maintenance Management Service shall provide the capability to view off-site corrective hardware and software information.	test	T221-21.02.06
C-MSS-50200	The MSS Maintenance Management Service shall provide the capability to generate off-site maintenance reports based on operator entered criteria.	test	T221-21.02.06
C-MSS-50210	The MSS Maintenance Management Service shall provide the capability to access a specified site's off-site maintenance repair information.	test	T221-21.02.06
C-MSS-50230	The MSS Maintenance Management Service shall provide the capability to produce maintenance status reports.	test	T221-21.02.05
C-MSS-50235	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.	test	T221-21.02.05
C-MSS-51010	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training information.	test	B211.01.05 B221.02.07
C-MSS-51020	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training records information.	test	B211.01.05
C-MSS-51030	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print site training requirements.	test	B211.01.05
C-MSS-51060	The MSS Training Management Application Service at the SMC shall provide the capability to prepare, update, store, and view/print, training course information.	test	B211.01.05 B221.02.07
C-MSS-51070	The MSS Training Management Service shall provide the capability to retrieve and view/print training courses and schedules information from a SMC training information repository.	test	B211.01.05 B221.02.07
C-MSS-51080	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store, and view/print a list of self study, supervisory, and testing requirements for each of the OJT designated ECS positions.	test	B211.01.05
C-MSS-51090	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store copy of, and view/print training material.	test	B211.01.05
C-MSS-51100	The MSS Training Management Service at the SMC shall provide the capability to capture and make available suggestions/ recommendations concerning the use of training material for applicable courses.	test	B211.01.05
C-MSS-51110	The MSS Training Management Service at the SMC shall provide the capability to capture, summarize, and make available course critique.	test	B211.01.05
C-MSS-51115	The MSS Training Management Application Service shall make available to the MSS Inventory Management Service, any necessary information about training materials, for the purposes of maintaining these materials as inventory items.	test	B211.01.05
C-MSS-51120	The MSS Training Management Service shall have the capability to schedule training events.	test	B211.01.05

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-52010	The MSS Policy and Procedures Management Service at the SMC shall provide the capability to prepare, store, maintain, and make available for distribution ECS policies and procedures.	test	T221-22.02.01
C-MSS-52020	The MSS Policy and Procedures Management Service shall provide the capability to access, select, and display/print ECS policies and procedures.	test	T221-22.02.01
C-MSS-52030	The MSS Policy and Procedures Management Service shall provide the capability to input, store, maintain, and view/print site specific policies and procedures.	test	T221-22.02.01
C-MSS-56010	The MSS Mode Management Service shall support a operational mode capability	test	B210.01.03 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56020	The MSS Mode Management Service shall support a test mode capability	test	B210.01.03 T210-10.01.01 T252-60.02.01
C-MSS-56030	The MSS Mode Management Service shall support a training mode capability	test	T210-10.01.02 T252-60.02.02
C-MSS-56040	The MSS Mode Management Service shall have the capability to monitor each independently executing mode for performance statistics.	test	T252-60.02.01
C-MSS-56050	The MSS Mode Management Service shall provide fault detection and isolation capabilities for each independently executing mode.	test	T252-60.02.02
C-MSS-56060	The MSS Mode Management Service shall maintain a collection of management statistics for each mode supported.	test	T252-60.02.01 T252-60.02.02
C-MSS-56070	The MSS Mode Management Service shall be capable of executing a test mode simultaneously with the production mode.	test	B210.01.03 T210-10.01.01 T252-60.02.01 T252-60.02.02
C-MSS-56080	The MSS Mode Management Service shall be capable of executing a training mode simultaneously with the production mode.	test	T210-10.01.02
C-MSS-56082	The MSS Mode Management Service shall provide the capability to initiate a new mode of execution.	test	B210.01.03 B210.01.04 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56084	The MSS Mode Management Service shall provide the capability to control life cycle activities within each given mode.	test	B210.01.03 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56086	The MSS Mode Management Service shall have the capability to provide a mode identifier to initialize ECS applications.	test	B210.01.03 B210.01.04 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-56088	The MSS Mode Management Service shall provide a GUI for mode initiation.	test	B210.01.03 B210.01.04 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56090	The MSS Mode Management Service shall have the capability to identify components which have been taken off-line for maintenance	test	T210-10.01.01 T210-10.01.02
C-MSS-56092	The MSS Mode Management Service shall provide provide a GUI for mode monitoring.	test	B210.01.03 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56094	The MSS Mode Management Service shall provide a GUI for mode control.	test	B210.01.03 T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56096	The MSS Mode Management Service shall support concurrently executing non-production modes.	test	T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56098	The MSS Mode Management Service shall support no more than one production mode.	test	T210-10.01.01 T210-10.01.02 T252-60.02.04
C-MSS-56100	The MSS Mode Management Service shall have the capability to provide a simulated time value.	test	T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02
C-MSS-56102	The MSS Management Framework shall provide a mode specific view of ECS applications for any active mode.	test	T252-60.02.04
C-MSS-60012	The MSS Fault Management Service shall provide fault detection and isolation capabilities for each mode.	test	T252-60.02.02
C-MSS-60014	The MSS Fault Management Service shall provide the capability to distinguish faults between different modes.	test	T252-60.02.02
C-MSS-60016	The MSS Fault Management Service shall maintain fault statistics for each mode.	test	T252-60.02.02
C-MSS-60161	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from: a. Site fault management applications b. EBnet c. ASTER d. NOAA (SAA) e. Landsat(MMO) f. NSI g. NOLAN	test	B252.02.01 B252.02.02 B260.02.05 B260.02.07 T252-30.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-60171	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN	test	B252.02.01 B260.02.05 T252-30.02.02
C-MSS-60181	The MSS EMC Fault Management Application Service shall be capable of receiving summarized fault notification and performance degradation data from: a. Site fault management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN	test	B260.02.05 B260.02.07 T252-30.02.03
C-MSS-60240	The MSS Fault Management Application Service shall have the capability to send ECS system management information to ASTER GDS.	test	B252.02.02 T252-50.02.02
C-MSS-60242	The MSS Fault Management Application Service shall have the capability to receive ASTER GDS system management information from ASTER GDS.	test	B252.02.02 T252-50.02.02
C-MSS-60244	The MSS Fault Management Application Service shall have the capability to send ECS network management information to ASTER GDS.	test	T252-50.02.02
C-MSS-60246	The MSS Fault Management Application Service shall have the capability to receive ASTER GDS network management information from ASTER GDS.	test	T252-50.02.02
C-MSS-60248	The MSS Fault Management Application Service shall have the capability to send requests for ASTER GDS network management information to ASTER GDS.	test	T252-50.02.02
C-MSS-60250	The MSS Fault Management Application Service shall have the capability to receive requests for ECS network management information from ASTER GDS.	test	T252-50.02.02
C-MSS-60252	The MSS Fault Management Application Service shall have the capability to send Network Management information to the SAAs.	test	T252-50.02.03
C-MSS-60254	The MSS Fault Management Application Service shall have the capability to receive Network Management information from the SAAs.	test	T252-50.02.03
C-MSS-60260	The MSS Fault Management Application Service shall have the capability to send System Management status to the MMO.	test	B252.02.05 T252-50.02.04
C-MSS-60262	The MSS Fault Management Application Service shall have the capability to receive System Management status from the MMO.	test	T252-50.02.04
C-MSS-60264	The MSS Fault Management Application Service shall have the capability to receive notification from NSI of faults in NSI's network that may affect the quality of NSI services between ECS and its users.	test	T252-50.02.05

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-60266	The MSS Fault Management Application Service shall have the capability to query from NSI information regarding the following which may affect the quality of NSI services between ECS and it users: a. fault status b. estimated time to repair c. fault resolution	test	T252-50.02.05
C-MSS-60268	The MSS Fault Management Application Service shall have the capability to query from NSI periodic summary information about faults that may have affected the quality of NSI services between ECS and its users.	test	T252-50.02.05
C-MSS-60278	The MSS Fault Management Application Service shall have the capability to receive, from NOLAN, notification of faults in the NOLAN network that may affect the quality of NOLAN services between ECS and its users.	test	T252-50.02.06
C-MSS-60280	The MSS Fault Management Application Service shall have the capability to receive, from NOLAN, information regarding fault status and estimated time to repair or resolve NOLAN faults that may affect the quality of NOLAN services between ECS and its users.	test	T252-50.02.06
C-MSS-60282	The MSS Fault Management Application Service shall have the capability to receive, from NOLAN, periodic summary information about faults that may have affected the quality of NOLAN services between ECS and its users.	test	T252-50.02.06
C-MSS-60301	The MSS Fault Management Application Service shall provide the capability to identify routes between selected pairs of hosts on the EBnet.	test	T252-30.02.04
C-MSS-60303	The Fault Management Application Service shall have the capability to send diagnostic test requests to the ISS.	test	T252-30.02.05
C-MSS-60305	The Fault Management Application Service shall have the capability to receive diagnostic test results from the ISS.	test	T252-30.02.05
C-MSS-60371	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. Site Fault Management Applications b. EBnet c. ASTER b. NOAA(SAA) e. Landsat (MMO) f. NSI g. NOLAN.	test	B252.02.01 B252.02.02 T252-30.02.06
C-MSS-66001	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components a. network components 1. routers 2. links 3. bridges 4. gateways b. hosts c. operating systems d. peripherals e. data f. ECS applications.	test	B260.02.07 T252-20.02.01 T253-10.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-66002	The MSS Performance Management Applications Service shall have the capability to monitor each mode for performance statistics.	test	T252-60.02.01
C-MSS-66004	The MSS Performance Management Application Service shall provide the capability to distinguish performance metrics between different modes.	test	T252-60.02.01
C-MSS-66006	The MSS Performance Management Application Service shall maintain performance statistics for a given mode.	test	T252-60.02.01
C-MSS-66121	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode d. In maintenance, e. in simulation mode.	test	B260.02.07 T252-20.02.02 T253-10.02.02
C-MSS-66123	The MSS Performance Management Application Service shall generate requests for performance testing that identify the required resources, purpose, requested priority, required environment, operations impacts and expected results.	test	B260.02.07 T252-20.02.03 T253-10.02.03
C-MSS-66141	The MSS EMC Performance Management Application Service shall have the capability to request performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.	test	B252.02.03 B252.02.04 B260.02.07 T252-20.02.04 T253-10.02.04
C-MSS-66151	The MSS EMC Performance Management Application Service shall be capable of receiving performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.	test	B252.02.03 B252.02.04 B260.02.07 T252-20.02.05 T253-10.02.05
C-MSS-66161	The MSS EMC Performance Management Application Service shall be capable of receiving summarized performance data from: a. Site performance management applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN.	test	B260.02.07 T252-20.02.06 T253-10.02.06
C-MSS-66171	The MSS performance management application service shall log ECS performance data pertaining to ECS network components, ECS applications and operating system resources.	test	B260.02.07 T252-20.02.07
C-MSS-66181	The MSS Performance Management Application Service shall have the capability to capture and save histories of system errors and events for system analysis and trending.	test	B253.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-66182	The MSS Performance Management Application Service shall have the capability to capture and save histories of operational status, performance of resources and maintenance activities for system analysis and trending.	test	B211.01.05
C-MSS-66183	The MSS Performance Management Application Service shall have the capability to monitor the performance of ECS relational and object oriented database servers.	test	T252-20.02.01
C-MSS-66500	The MSS Performance Management Application Service shall have the capability to send ECS system management information to ASTER GDS.	test	T252-50.02.07
C-MSS-66505	The MSS Performance Management Application Service shall have the capability to receive ASTER GDS system management information from ASTER GDS.	test	T252-50.02.07
C-MSS-66510	The MSS Performance Management Application Service shall have the capability to send ECS network management information to ASTER GDS.	test	T252-50.02.07
C-MSS-66515	The MSS Performance Management Application Service shall have the capability to receive ASTER GDS network management information from ASTER GDS.	test	T252-50.02.07
C-MSS-66520	The MSS Performance Management Application Service shall have the capability to send requests for ASTER GDS network management information to ASTER GDS.	test	T252-50.02.07
C-MSS-66525	The MSS Performance Management Application Service shall have the capability to receive requests for ECS network management information from ASTER GDS.	test	T252-50.02.07
C-MSS-66530	The MSS Performance Management Application Service shall have the capability to send Network Management information to the SAAs.	test	T252-50.02.08
C-MSS-66535	The MSS Performance Management Application service shall have the capability to receive Network Management information from the SAAs.	test	T252-50.02.08
C-MSS-66550	The MSS Performance Management Application Service shall have the capability to send System Management status to the MMO.	test	T252-50.02.09
C-MSS-66555	The MSS Performance Management Application Service shall have the capability to receive System Management status from the MMO.	test	T252-50.02.09
C-MSS-66560	The MSS Performance Management Application Service shall have the capability to query from NSI periodic reports of link utilization and transmission errors, reflecting or summarizing NSI performance measurements over various time intervals.	test	T252-50.02.10
C-MSS-66585	The MSS Performance Management Application Service shall have the capability to receive, from NOLAN, periodic information regarding NOLAN network performance and link utilization.	test	T252-50.02.10
C-MSS-69100	The MSS Performance Trending Service shall have the capability to save and retrieve data from the management database for long and short term trending.	test	B250.02.08
C-MSS-69105	The MSS Performance Trending Service shall have the capability to generate the following types of trend analysis: a. time series analysis b. analysis of variance including multiple analysis of variance c. correlation analysis d. regression analysis including non-linear and multiple regression	test	B250.02.09
C-MSS-69110	The MSS Performance Trending Service shall provide the capability to select parameters for trend analysis.	test	B253.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-69120	The MSS Performance Trending Service shall have the capability to output trend data in textual and graphical formats.	test	B253.02.02
C-MSS-69150	The MSS Performance Trending Service shall have the capability to perform short and long term trending by system, site and element.	test	B250.02.08
C-MSS-70470	The MSS Security Management Application Service shall have the capability to send ECS system management information to ASTER GDS.	test	T252-50.02.11
C-MSS-70472	The MSS Security Management Application Service shall have the capability to receive ASTER GDS system management information from ASTER GDS.	test	T252-50.02.11
C-MSS-70474	The MSS Security Management Application Service shall have the capability to send System Management status to the MMO.	test	T252-50.02.12
C-MSS-70476	The MSS Security Management Application Service shall have the capability to receive System Management status from the MMO.	test	T252-50.02.12
C-MSS-70478	The MSS Security Management Application Service shall have the capability to send to NSI, notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.	test	T252-50.02.13
C-MSS-70480	The MSS Security Management Application Service shall have the capability to receive from NSI, notification of security breaches at NSI sites or within the NSI network that could potentially affect ECS sites.	test	T252-50.02.13
C-MSS-70482	The MSS Security Management Application Service shall have the capability to send to NOLAN, notifications of security breaches at ECS facilities that could affect NOLAN and other EOSDIS sites.	test	T252-50.02.14
C-MSS-70484	The MSS Security Management Application Service shall have the capability to receive, from NOLAN, notifications of security breaches at NOLAN sites or within the NOLAN network that could potentially affect ECS sites.	test	T252-50.02.14
C-MSS-70515	The MSS Security Management Application Service shall have the capability to manage encrypted information, including keys.	test	T221-30.02.02
C-MSS-70600	The EMC Security Management Application Service shall maintain security policies and procedures to include physical security, password management, operational security, data security, privileges, network security and compromise mitigation.	test	T221-30.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-75001	The MSS accountability management service shall provide the capability to maintain a user profile database that stores the following information for each registered user: a. Name b. User ID c. Password information 1. password 2. password expiration date d. Assigned privileges e. Mailing address f. Telephone number g. Product shipping address h. E-mail address i. Organization (optional) j. Project affiliation(s) (optional) 1. project name 2. project principal investigator k. User group l. Account information 1. creation date 2. expiration date m. Restrictions 1. time of day 2. location 3. type of service n. Billing address o. Payment method	test	B210.01.02 B251.02.01 B260.02.06 T211-30.01.01
C-MSS-75015	The MSS accountability management service shall provide the capability for M&O Staff to modifying and delete user profile records.	test	B210.01.02 B251.02.01 B260.02.06 T211-30.01.01
C-MSS-75060	The MSS accountability management service shall provide the capability to maintain a system profile inventory database of ECS software and non product data.	test	T211-30.01.02
C-MSS-75070	The system profile inventory database shall store the following information for each inventory entry: Data ID, Data purpose, Data location, Data classification and Data priority.	test	T211-30.01.02
C-MSS-75080	The MSS accountability management service shall be capable of receiving new system profile inventory records entered by M&O Staff.	test	T211-30.01.02
C-MSS-75090	The MSS accountability management service shall provide the capability for M&O Staff to modify and delete system profile inventory records .	test	T211-30.01.02
C-MSS-75100	The MSS Accountability Management Service shall have the capability to send user registration data to the MMO.	test	B220.02.01 B251.02.01 B260.02.06 T211-30.01.01
C-MSS-75102	The Accountability Service shall have the capability to receive an account balance status request from the CLS.	test	B260.02.01 T211-30.01.03 T252-40.02.01
C-MSS-75105	The Accountability Service shall have the capability to receive user registration requests from the CLS.	test	B220.02.01 T211-30.01.03
C-MSS-75110	The MSS Accountability Management Service shall have the capability to receive user registration information from the MMO.	test	B220.02.01 B251.02.01 B260.02.06 T211-30.01.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-75112	The Accountability Service shall have the capability to receive user comment information from the CLS.	test	T211-30.01.03
C-MSS-75115	The Accountability Service shall have the capability to receive requests for user profile updates from the CLS.	test	B220.02.02 B260.02.01 T211-30.01.03
C-MSS-75120	The Accountability Service shall have the capability to receive user registration status requests from the CLS.	test	T211-30.01.03 T252-40.02.02
C-MSS-75125	The Accountability Service shall have the capability to receive user comment survey requests from the CLS.	test	B220.02.03 T211-30.01.03
C-MSS-75130	The Accountability Service shall have the capability to send user registration information to the CLS.	test	B220.02.01 B260.02.01 T211-30.01.03
C-MSS-75135	The Accountability Service shall have the capability to send user registration status to the CLS.	test	T211-30.01.03
C-MSS-75140	The Accountability Service shall have the capability to send user profile information to the CLS.	test	B220.02.01 B260.02.01 T211-30.01.03
C-MSS-75145	The Accountability Service shall have the capability to send account status to the CLS.	test	T211-30.01.03
C-MSS-75150	The Accountability Service shall have the capability to send user comment surveys to the CLS.	test	B220.02.03 T211-30.01.03
C-MSS-75155	The Accountability Service shall have the capability to receive data delivery records from the INS.	test	T211-30.01.04
C-MSS-75160	The Accountability Service shall have the capability to receive data delivery notices from the INS.	test	T211-30.01.04
C-MSS-75165	The Accountability Service shall have the capability to receive TDRSS schedule requests from the DSS.	test	T211-30.01.04
C-MSS-78010	The MSS Billing/Accounting Application Service (BAAS) functional requirements shall be consistent with the functional requirements defined by the Federal Financial Management System Requirements issued by the Joint Financial Management Improvement Program (JFIMP)	test	B260.02.06 T211-20.01.01
C-MSS-78030	The MSS BAAS shall provide the following major functions: billing & invoicing, accounts receivable, accounts payable, collections, general ledger, cost accounting, and reporting.	test	B260.02.06 T211-20.01.01
C-MSS-78100	The MSS BAAS Billing & Invoicing function shall generate user account billing statements as well as billing invoices.	test	B210.01.06 B211.01.04 B260.02.06 T211-20.01.02
C-MSS-78110	The MSS BAAS Billing & Invoicing function shall generate user account billing statements and billing invoices on paper as well as electronic formats.	test	B260.02.06 T211-20.01.02
C-MSS-78120	The MSS BAAS Billing & Invoicing function shall price user activity records using standardized pricing tables.	test	B260.02.06 T211-20.01.02
C-MSS-78130	The MSS BAAS Billing & Invoicing function shall apply credits and adjustments given to a user account over a billing period.	test	B260.02.06 T211-20.01.02
C-MSS-78140	The MSS BAAS Billing & Invoicing function shall apply any "pre-paid" amounts already existing in an account to current user account charges.	test	B260.02.06 T251-10.02.03
C-MSS-78150	The MSS BAAS Billing & Invoicing function shall accept special rates for specific users/groups.	test	B260.02.06 T211-20.01.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-78160	The MSS BAAS Billing & Invoicing function shall apply any past due amounts to an invoice.	test	B260.02.06 T211-20.01.02
C-MSS-78180	The MSS BAAS Billing & Invoicing function shall provide the capability to consolidate multiple user accounts into a single group account, due from one paying location.	test	B260.02.06 T211-20.01.02
C-MSS-78190	The MSS BAAS Billing & Invoicing function shall generate statement and billing invoice reprints upon request.	test	B210.01.06 B211.01.04 B260.02.06 T211-20.01.02
C-MSS-78200	The MSS BAAS Billing & Invoicing function shall be capable of accessing account activity information from the ECS Management Database to price billable ECS data product request.	test	T211-20.01.03
C-MSS-78220	The MSS BAAS Billing & Invoicing function shall have access to account billing information from the ECS Management Database (e.g. billing address, bill cycle, payment option).	test	B210.01.06 B251.02.02
C-MSS-78240	The MSS BAAS Billing & Invoicing function shall collect science user activity information from the ECS Management Database daily.	test	T211-20.01.03
C-MSS-78260	The MSS BAAS Billing & Invoicing function shall provide the capability to generate bill invoices in multiple billing cycles.	test	T211-20.01.03
C-MSS-78270	The MSS BAAS Billing and Invoicing function shall make available to the DSS, pricing algorithms it maintains in standard pricing tables, for the purposes of price estimation.	test	T251-10.02.09
C-MSS-78300	The MSS BAAS Accounts Receivable (AR) function shall maintain current updated individual and summary user account balances.	test	T251-10.02.01
C-MSS-78310	The MSS BAAS Accounts Receivable (AR) function shall have the capability to reference all update transactions to the appropriate supporting documents or resources (e.g., billing invoice number).	test	T251-10.02.01
C-MSS-78320	The MSS BAAS Accounts Receivable (AR) function shall allow transactions to be entered in batches.	test	T251-10.02.02
C-MSS-78330	The MSS BAAS Accounts Receivable (AR) function shall accept manual entry of adjustments and transactions, bypassing batch requirements.	test	T251-10.02.01
C-MSS-78340	The MSS BAAS Accounts Receivable (AR) function shall record complete and partial receipts of payments.	test	T251-10.02.01 T251-10.02.02
C-MSS-78350	The MSS BAAS Accounts Receivable (AR) function shall provide the ability to apply receipts to more than one receivable.	test	T251-10.02.01
C-MSS-78360	The MSS BAAS Accounts Receivable (AR) shall post credit balances and adjustments to user accounts.	test	T251-10.02.03
C-MSS-78370	The MSS BAAS Accounts Receivable (AR) function shall accept "pre-paid accounts."	test	T251-10.02.03
C-MSS-78380	The MSS BAAS Accounts Receivable (AR) function shall deduct amounts due from "pre-paid" accounts and show balance remaining.	test	T251-10.02.03
C-MSS-78390	The MSS BAAS Accounts Receivable (AR) function shall provide the ability to flag "pre-paid" accounts with no balance remaining.	test	T251-10.02.03
C-MSS-78400	The MSS BAAS Accounts Receivable (AR) function shall accept purchase orders from users as form of payment.	test	T251-10.02.07
C-MSS-78410	The MSS BAAS Accounts Receivable (AR) function shall process refunds for deposits taken on service.	test	T251-10.02.04
C-MSS-78420	The MSS BAAS Accounts Receivable (AR) function shall process refunds for overpayments on user charges.	test	T251-10.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-78425	The MSS BAAS Accounts Receivable (AR) function shall process refunds for data purchases returned by the user.	test	T251-10.02.04
C-MSS-78430	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to apply refunds to outstanding balances or to credit an account for future amounts due if users request it.	test	T251-10.02.04
C-MSS-78440	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to re-establish a receivable for checks returned due to insufficient funds.	test	T251-10.02.05
C-MSS-78450	The MSS BAAS Accounts Receivable (AR) function shall support automatic balancing of the accounts receivable master file.	test	T251-10.02.03 T251-10.02.04 T251-10.02.05
C-MSS-78460	The MSS BASS Accounts Receivable (AR) shall monitor the aging of individual account receivables.	test	T251-10.02.06
C-MSS-78480	The MSS BAAS Accounts receivable (AR) function shall maintain a history for each account.	test	T251-10.02.06
C-MSS-78490	The MSS BAAS Accounts Receivable (AR) function shall identify each transaction via reference numbers.	test	T251-10.02.06
C-MSS-78500	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to purge accounts, removing closed accounts to a history file.	test	T251-10.02.06
C-MSS-78510	The MSS BAAS Accounts Receivable (AR) function shall have the capability to receive accounts receivable data for sales conducted over-the-counter at a site.	test	T251-10.02.07
C-MSS-78520	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to communicate revenue information to a NASA accounting system for reporting and deposit.	test	T251-10.02.08
C-MSS-78530	The MSS BAAS Accounts Receivable (AR) function shall submit user refund requests to a NASA accounting system.	test	T251-10.02.04
C-MSS-78540	The MSS BAAS Accounts Receivable (AR) function shall make account balance information available to science users upon a CLS request.	test	T251-10.02.08
C-MSS-78550	The MSS BAAS Accounts Receivable (AR) function shall produce an end-of-period "trial balances" showing an account's opening balance, period activity, and closing balance.	test	T251-10.02.08
C-MSS-78560	The MSS BAAS Accounts Receivable (AR) function shall provide reports indicating summary of accounts receivable activity for a specific period.	test	T251-10.02.08
C-MSS-78570	The MSS BAAS Accounts Receivable (AR) function shall provide an exception report listing all accounts with credit balances.	test	T251-10.02.08
C-MSS-78580	The MSS BAAS Accounts Receivable (AR) function shall identify receivables which have been reduced by means other than cash collections (e.g., adjustments),	test	T251-10.02.03 T251-10.02.04 T251-10.02.05
C-MSS-78590	The MSS BAAS Accounts Receivable (AR) function shall produce an account receivable aging report.	test	T251-10.02.08
C-MSS-78600	The MSS BAAS Accounts Receivable (AR) function shall provide upon request a batch listing of all activity and items in a particular batch.	test	T251-10.02.02
C-MSS-78610	The MSS BAAS Accounts Receivable (AR) function shall provide upon request an account payment profile.	test	T251-10.02.03 T251-10.02.04 T251-10.02.05

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-79100	The MSS BAAS Collections function shall identify delinquent accounts; those accounts which have violated ECS-determined account aging parameters.	test	T251-10.02.11
C-MSS-79110	The MSS BAAS Collections function shall provide the capability to allow ECS-defined collections parameters.	test	T251-10.02.10
C-MSS-79120	The MSS BAAS Collections function shall provide the capability to override specific accounts from the collections process.	test	T251-10.02.10
C-MSS-79140	The MSS BAAS Collections function shall generate custom and form dunning letters to delinquent accounts.	test	T251-10.02.11
C-MSS-79150	The MSS BAAS Collections function shall keep log of contacts and contact attempts with users in delinquent accounts.	test	T251-10.02.11
C-MSS-79160	The MSS BAAS Collections function shall record payment arrangements made with users.	test	T251-10.02.13
C-MSS-79170	The MSS BAAS Collections function shall initiate service suspension, cancellation, and restoration as appropriate.	test	T251-10.02.13
C-MSS-79180	The MSS BAAS Collections function shall calculate amounts declared non-collectible (write-offs).	test	T251-10.02.12
C-MSS-79190	The MSS BAAS Collections function shall record write-off amounts.	test	T251-10.02.12
C-MSS-79200	The MSS BAAS Collections function shall save all collections history information on particular accounts.	test	T251-10.02.13
C-MSS-79500	The MSS BAAS General Ledger (GL) function shall set up a chart of accounts.	test	T251-10.02.14
C-MSS-79510	The MSS BAAS General Ledger (GL) function shall accept entries via balanced batches.	test	T251-10.02.14
C-MSS-79520	The MSS BAAS General Ledger (GL) function shall accept direct entries by-passing the batches.	test	T251-10.02.14
C-MSS-79530	The MSS BAAS General Ledger (GL) function shall update and edit each account on-line.	test	T251-10.02.14
C-MSS-79540	The MSS BAAS General Ledger (GL) function shall provide on-line inquiry capability into account balances.	test	T251-10.02.14
C-MSS-79550	The MSS BAAS General Ledger (GL) function shall provide the capability for M&O staff to establish standardized transactions.	test	T251-10.02.15
C-MSS-79560	The MSS BAAS General Ledger (GL) function shall provide the capability for M&O staff to modify standardized transactions.	test	T251-10.02.15
C-MSS-79570	The MSS BAAS General Ledger (GL) function shall accommodate future period transaction entries.	test	T251-10.02.16
C-MSS-79580	The MSS BAAS General Ledger (GL) function shall accommodate prior period transaction entries for all periods that are open to posting.	test	T251-10.02.16
C-MSS-79590	The MSS BAAS General Ledger (GL) function shall provide the capability to automatically create new accounts.	test	T251-10.02.16
C-MSS-79600	The MSS BAAS General Ledger (GL) function shall perform end-of-period process (trial balances), accruals, and consolidation processes under the control of authorized staff.	test	T251-10.02.17
C-MSS-79610	The MSS BAAS General Ledger (GL) function shall provide the capability for multiple preliminary end-of-period closings before final closing.	test	T251-10.02.17
C-MSS-79620	The MSS BAAS General Ledger (GL) function shall provide the capability to post current period data during preliminary end-of-period closings.	test	T251-10.02.17

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-79630	The MSS BAAS General Ledger (GL) function shall use standardized transactions identified by reference codes to control transaction editing, posting, and updating of information.	test	T251-10.02.17
C-MSS-79640	The MSS BAAS General Ledger (GL) function shall maintain a documented trail of any changes conducted by authorized staff on out-of-balance accounts.	test	T251-10.02.17
C-MSS-79650	The MSS BAAS General Ledger (GL) function shall provide the capability to move accounts to a history file.	test	T251-10.02.17
C-MSS-79660	The MSS BAAS General Ledger (GL) function shall provide the capability to re-open closed accounts when required.	test	T251-10.02.18
C-MSS-79670	The MSS BAAS General Ledger (GL) function shall provide the capability to archive data needed for comparative analysis and presentation of historical information.	test	T251-10.02.18
C-MSS-79690	The MSS BAAS General Ledger (GL) function shall provide end-of-period reports (e.g., end-of-month, end-of-quarter, end-of-year).	test	T251-10.02.17
C-MSS-79700	The MSS BAAS Cost Accounting function shall have the capability to receive product cost information from the MMO.	test	T251-10.02.19
C-MSS-79760	The MSS BAAS Cost Accounting function shall provide a trail to assign identifiable sources to all resource unit costs.	test	T251-10.02.19
C-MSS-79780	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to processes using authorized cost algorithms.	test	T251-10.02.19
C-MSS-79790	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to ECS products using authorized cost algorithms.	test	T251-10.02.19
C-MSS-79800	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to serve different users.	test	T251-10.02.19
C-MSS-79810	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts of resource unit costs assigned to individual users.	test	T251-10.02.19
C-MSS-79820	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts of resource unit costs assigned to user groups.	test	T251-10.02.19
C-MSS-79830	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts to track the resource unit costs assigned to different processes.	test	T251-10.02.19
C-MSS-79850	The MSS BAAS Cost Accounting function shall have the capability to access resource unit cost information from the ECS Management Database to determine costs consumed to serve different users.	test	B251.02.04 T251-10.02.20
C-MSS-79860	The MSS BAAS Cost Accounting function shall have the capability to access resource unit cost from the ECS Management Database to enable ECS to allocate costs to different processes and products.	test	B251.02.03 B251.02.04 T251-10.02.20
C-MSS-79880	The MSS BAAS Cost Accounting function shall provide reports assigning resource unit costs to identifiable processes.	test	T251-10.02.19
C-MSS-79890	The MSS BAAS Cost Accounting function shall provide reports identifying resource unit costs traceable to particular science users/groups.	test	T251-10.02.19
C-MSS-79900	The MSS BAAS Reporting function shall provide standard automated financial statements and summary reports.	test	T251-10.02.21
C-MSS-79915	The MSS BAAS Cost Accounting function shall be able to collect resource unit costs by mode.	test	T252-60.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-79930	The MSS BAAS Reporting function shall report data in accordance with accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by the Director of OMB.	test	T251-10.02.21
C-MSS-79940	The MSS BAAS Reporting function shall support the following report formats a. hard copy b. on-line inquiries c. extract data files d. disk	test	T251-10.02.21
C-MSS-79960	The MSS BAAS Reporting function shall maintain prior periods reporting data for future consultation and comparative analysis.	test	T251-10.02.21
C-MSS-79970	The MSS BAAS Reporting function shall provide the capability for the reformatting of reports to tailor a report to a user's specific needs.	test	T251-10.02.21
C-MSS-79980	The MSS BAAS Reporting function shall allow the transfer of information to other applications outside of the Billing/Accounting Application Service (BAAS).	test	B251.02.01 B251.02.02 B251.02.03 B251.02.04 T251-10.02.22
C-MSS-92010	The MSS Report Generation Service shall be capable of generating standard and ad-hoc reports and queries on all or portions of the management and related data maintained in the management database.	test	T251-21.02.01
C-MSS-92015	The MSS Report Generation Service shall be able to create mode specific reports.	test	T252-60.02.04
C-MSS-92020	The MSS Report Generation Service shall provide a Motif based GUI workbench for use by database specialist M&O staff in generating standard and ad-hoc reports and queries.	test	T251-21.02.01
C-MSS-92030	The MSS Report Generation Service shall provide an HTML based user interface for use by non-database specialists on the M&O staff in requesting standard reports.	test	T251-22.02.01
C-MSS-92040	The MSS Report Generation Service shall be capable of outputting generated reports to the user's console, a file, or a printer	test	T251-21.02.01
C-MSS-92050	The MSS Report Generation Service shall be capable of outputting report query results to a file in a tabular format which can be imported by analysis tools such as spreadsheets	test	T251-21.02.01
C-MSS-92060	The MSS Report Generation Service shall be capable of outputting reports to a file in an HTML compatible format.	test	T251-22.02.01
C-MSS-92070	The MSS Report Generation Service shall be capable of generating an Enhancement Proposal Status Report containing the status of proposed enhancements including: a. name b. description c. rationale d. impacts e. cost to implement f. implementation milestone schedule	test	B251.02.03 T251-21.02.01
C-MSS-92080	The MSS Report Generation Service shall be capable of generating a Routine Data Production Performance Detail Report itemizing scheduled vs actual times for data collection, processing, retrieval and delivery along with: a. reason for schedule variance b. data quality c. user feedback	test	B260.02.06 T251-22.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-92090	The MSS Report Generation Service shall be capable of generating a Routine Data Production Performance Summary Report containing statistical rollups of scheduled vs actual deviations, data quality, and user feedback for data collection, processing, retrieval, and delivery of routine production data.	test	B260.02.06 T251-22.02.02
C-MSS-92100	The MSS Report Generation Service shall be capable of generating a User Requested Data Production Performance Detail Report containing scheduled vs actual times for data collection, processing, retrieval and delivery along with: a. reason for schedule variance b. data quality c. user feedback	test	T251-22.02.02
C-MSS-92110	The MSS Report Generation Service shall be capable of generating a User Requested Data Production Performance Summary Report containing statistical rollups of scheduled vs actual deviations, data quality, and user feedback for data collection, processing, retrieval, and delivery of routine production data	test	T251-22.02.02
C-MSS-92120	The MSS Report Generation Service shall be capable of generating a Ground Operations Activity Performance Detail Report containing scheduled vs actual times for ground events such as maintenance, training, reconfiguration. The report shall detail: a. reason for schedule variance b. user feedback	test	B260.02.06 T251-22.02.02
C-MSS-92130	The MSS Report Generation Service shall be capable of generating a Ground Operations Event Performance Summary Report containing statistical rollups of scheduled vs actual deviations for ground events such as maintenance, testing, reconfiguration.	test	T251-22.02.02
C-MSS-92140	The MSS Report Generation Service shall be capable of generating a Product Generation Status Detail Report containing the status of all product processing/reprocessing and storage.	test	T251-22.02.03
C-MSS-92150	The MSS Report Generation Service shall be capable of generating a Product Generation Status Summary Report containing the percent distribution of product generation work within each processing state.	test	T251-22.02.03
C-MSS-92160	The MSS Report Generation Service shall be capable of generating a Resource Performance Report containing: a. Availability b. Reason for downtime c. Utilization d. Indication of compliance with performance criteria. e. Short and long term trend analysis and capacity planning results	test	B251.02.04 B260.02.06 T251-22.02.02
C-MSS-92170	The MSS Report Generation Service shall be capable of generating a CPU Load Report graphically depicting the average number of jobs in the run queue over the last 1, 5, and 15 minute period for each selected node.	test	T252-20.02.08
C-MSS-92180	The MSS Report Generation Service shall be capable of generating an Interface Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).	test	T252-20.02.09
C-MSS-92190	The MSS Report Generation Service shall be capable of generating an Ethernet Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).	test	T252-20.02.09
C-MSS-92200	The MSS Report Generation Service shall be capable of generating an SNMP Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).	test	T252-20.02.09

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-92210	The MSS Report Generation Service shall be capable of generating an SNMP Operations Report graphically plotting the number of selected SNMP operations/sec requested to be performed by the SNMP agent on the selected node(s).	test	T252-20.02.10
C-MSS-92220	The MSS Report Generation Service shall be capable of generating a Site Host Resource Utilization Report indicating minimum/average/maximum measured percent usage of host CPU and memory resources and disk reads and writes over the report interval.	test	T252-20.02.11
C-MSS-92230	The MSS Report Generation Service shall be capable of generating a SMC Host Resource Utilization Report indicating minimum/average/maximum measured percent usage of SMC host CPU and memory resources and disk reads and writes over the report interval.	test	T252-20.02.12
C-MSS-92240	The MSS Report Generation Service shall be capable of generating a Disk Space Report which lists the file system space available on a selected managed host node.	test	T252-20.02.13
C-MSS-92250	The MSS Report Generation Service shall be capable of generating a User Service Performance Report containing summary and detailed analysis of user feedback including: a. User information b. Type of transaction c. Satisfaction statistics d. User recommendations e. SMC recommendations	test	T251-22.02.02
C-MSS-92260	The MSS Report Generation Service shall be capable of generating a Data Distribution Performance Report listing time a request received, assigned, processed, verified, and delivered and variances from nominal.	test	B251.02.04 T251-22.02.02
C-MSS-92270	The MSS Report Generation Service shall be capable of generating a Media Distribution Profile Report containing the statistical distribution of routine and user-requested products by electronic means and physical media type over the reporting period.	test	T251-22.02.02
C-MSS-92280	The MSS Report Generation Service shall be capable of generating a Data Orders Tracking Summary Report containing summary statistics on product order request dispositions over the reporting period.	test	T251-22.02.04
C-MSS-92290	The MSS Report Generation Service shall be capable of generating a Data Products Tracking Summary Report containing statistics on distribution of dataset orders by dataset type.	test	T251-22.02.04
C-MSS-92300	The MSS Report Generation Service shall be capable of generating a Returned Product Summary Report containing summary list of product returns with reason, cost, site action, and current status.	test	T251-22.02.04
C-MSS-92310	The MSS Report Generation Service shall be capable of generating a Fault Management Report containing summary and detailed information on fault management of ground resources including: a. Fault type and description b. Time of fault occurrence c. Effect of fault on system d. Status of fault resolution e. Fault statistics	test	B251.02.04 T251-22.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-92320	The MSS Report Generation Service shall be capable of generating a Trouble Status Report containing statistics on the number of trouble tickets opened, closed, and in work at a site and the average time to close a trouble ticket over the reporting period.	test	T251-22.02.07
C-MSS-92330	The MSS Report Generation Service shall be capable of generating an Ethernet Errors Report graphically depicting Ethernet error statistics for a selected node in real-time.	test	T252-20.02.14
C-MSS-92340	The MSS Report Generation Service shall be capable of generating an SNMP Errors report graphically depicting SNMP error statistics in real-time for the selected network nodes.	test	T252-20.02.14
C-MSS-92350	The MSS Report Generation Service shall be capable of generating an SNMP Authentication Failures Report listing the management systems that caused an authentication failure on the operator selected node(s).	test	T252-20.02.15
C-MSS-92360	The MSS Report Generation Service shall be capable of generating an SNMP Event Log Report containing a chronological list of SNMP events which occurred over the report interval for the selected node(s).	test	T252-20.02.16
C-MSS-92370	The MSS Report Generation Service shall be capable of generating a Site Host Errors Report containing a statistical summary of the types of errors logged at each host at a site over the reporting period.	test	T252-20.02.17
C-MSS-92380	The MSS Report Generation Service shall be capable of generating an EMC Host Errors Report containing a statistical summary of the types of errors logged at each site over the reporting period.	test	T252-20.02.18
C-MSS-92390	The MSS Report Generation Service shall be capable of generating a Ground Resource Availability Audit Report itemizing the occurrence of each resource outage, the reason for the outage, the duration, and the availability over the report interval.	test	T251-22.02.05
C-MSS-92400	The MSS Report Generation Service shall be capable of generating a Data Accountability Audit Report tracing a data item's status changes/ accesses over the reporting interval.	test	T251-22.02.05
C-MSS-92410	The MSS Report Generation Service shall be capable of generating a Pending Service Request Audit Report tracing processing events for requests currently in-progress.	test	T251-22.02.05
C-MSS-92420	The MSS Report Generation Service shall be capable of generating a User Activity Audit Report tracing a user's activity during a logon including products requested and files accessed.	test	T251-22.02.05
C-MSS-92430	The MSS Report Generation Service shall be capable of generating a Security Audit Report.	test	T251-22.02.05
C-MSS-92440	The MSS Report Generation Service shall be capable of generating a User Characterization Report containing user statistical summary information on number of new/ repeat accesses and summary information by product interest, mode of access, and affiliation.	test	T251-22.02.05
C-MSS-92450	The MSS Report Generation Service shall be capable of generating a System Access Profile Report containing statistics on distribution of user accesses by system service type over the selected reporting interval.	test	T251-22.02.05
C-MSS-92460	The MSS Report Generation Service shall be capable of generating a Utilization of User Services Personnel Summary Report depicting the distribution of user services requests by request type and method of contact over the report interval.	test	B260.02.06 T251-22.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-92470	The MSS Report Generation Service shall be capable of generating a Storage Management Activity Report containing a list of storage management events for the selected start/stop time, intermediate operation, request ID, and staging resource.	test	B260.02.06 T251-22.02.06
C-MSS-92480	The MSS Report Generation Service shall be capable of generating a Storage Management Inventory Update Report containing the log of storage management inventory update events for the selected reporting period.	test	T251-22.02.06
C-MSS-92490	The MSS Report Generation Service shall be capable of generating an Ingest History Report containing the log of ingest events selected by start/stop time, external data provider, data type identifier, and request status.	test	T251-22.02.06
C-MSS-92500	The MSS Report Generation Service shall be capable of generating an Ingest Error Report containing the log of ingest error events for the reporting period.	test	T251-22.02.06
C-MSS-92510	The MSS Report Generation Service shall be capable of generating a Processing Log Report containing the log of product processing events selected by start/stop time, data type identifier, and processing status.	test	T251-22.02.06
C-MSS-92520	The MSS Report Generation Service shall be capable of generating a Production and Data Processing Request Status Report containing the list of pending production and user-requested product data processing requests.	test	T251-22.02.06
C-MSS-92530	The MSS Report Generation Service shall be capable of generating a Planning Workload and Processing Turn-Around Report.	test	T251-22.02.08
C-MSS-92540	The MSS Report Generation Service shall be capable of generating a Planning Management Report.	test	T251-22.02.08
C-MSS-92550	The MSS Report Generation Service shall be capable of generating an Account Authorization Report containing authorized resource usage and current balance by user/ group.	test	B251.02.01 T251-22.02.08
C-MSS-92560	The MSS Report Generation Service shall be capable of generating a Service Cost Schedule Report containing resource usage cost by service offered.	test	T251-22.02.09
C-MSS-92570	The MSS Report Generation Service shall be capable of generating a Standard Product Cost Schedule Report containing end to end cost accounting information by standard product.	test	T251-22.02.09
C-MSS-92600	The MSS Report Generation Service shall be capable of generating a Functional Allocation Report containing current assignment of: a. standard product generation/ storage responsibility to a segment/ element b. assignment of science instrument support to an ICC	test	T251-22.02.08
C-MSS-92610	The MSS Report Generation Service shall be capable of generating a Configuration Status Report noting the operational status of all H/W, system S/W and science S/W with a reason why an item is not currently operational	test	T252-20.02.19
C-MSS-92620	The MSS Report Generation Service shall be capable of generating a System Information Report for a selected managed object containing name, description, contact person, location, and system object identification.	test	T252-20.02.20
C-MSS-92630	The MSS Report Generation Service shall be capable of generating an SNMP Event Notification report identifying the IP address(es) of the management system(s) to which the selected node is configured to send SNMP events.	test	T252-20.02.16

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
C-MSS-92640	The MSS Report Generation Service shall be capable of generating an Indentured Level of Assembly List Report for all managed configuration items (CIs).	test	T252-20.02.21
C-MSS-92650	The MSS Report Generation Service shall be capable of generating a Document Configuration Status Report containing the identity and status of documents associated with ECS resources.	test	T252-20.02.22
C-MSS-92660	The MSS report generation service shall be capable of generating a System Configuration Tracking Report noting the migration of upgrades into the operational environment.	test	T252-20.02.23
C-MSS-92670	The MSS Report Generation Service shall be capable of generating a Maintenance Schedule Report on H/W, system S/W and science S/W indicating the type of maintenance (i.e, routine, non-routine and upgrade)	test	T252-20.02.24
C-MSS-92680	The MSS Report Generation Service shall be capable of generating a Training Program Report containing a. Training programs b. Training schedules c. Training course contents d. Training course locations e. Training attendees	test	T251-22.02.10
C-MSS-92690	The MSS Report Generation Service shall be capable of generating an Inventory Status Report containing summary and detailed status information on H/W, system S/W and science S/W and listing spares and consumables status at sites.	test	T252-20.02.25
C-MSS-92700	The MSS Report Generation Service shall be capable of generating a Security Compromise Report listing occurrences of login failures, unauthorized accesses, breakins, viruses and worms indicating time, cause, impact, resolution status, and results of security compromise risk analysis.	test	B251.02.01 B251.02.02 T251-22.02.11
C-MSS-92710	The MSS Report Generation Service shall be capable of generating a Security Compromise Statistics Report containing cumulative frequency of violation occurrence statistics by type, site, day of week, and successful/failure.	test	B251.02.01 B251.02.02 T251-22.02.11
C-MSS-92720	The MSS Report Generation Service shall be capable of generating a Virus Detection Report containing statistics on detected viruses/worms in the selected network nodes and actions taken.	test	T251-22.02.11
F-ANA-01025	The FOS shall be able to access all system generated statistics data files for analysis.	test	ANA-1040B
F-ANA-01030	The FOS shall allow the user to access a previously saved dataset for analysis.	test	ANA-1010B
F-ANA-01040	The FOS shall be able to access FDF supplied data for analysis.	test	TLM-1130B
F-ANA-01050	The FOS shall be able to access NCC User Performance Data (UPD) for analysis.	test	ANA-2060B
F-ANA-01060	The FOS shall be able to access EDOS Customer Operations and Data Accounting (CODA) messages for analysis.	test	ANA-1040B
F-ANA-02030	The FOS shall have the capability to utilize more than one valid data base if the time interval requested for data analysis spans an interval during which more than one database was utilized for operations.	test	ANA-1040B ANA-1050B
F-ANA-02040	The FOS shall, by default, only use a data base for processing analysis requests during the time interval in which the database was being used operationally.	test	ANA-1000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-02050	The FOS shall provide the capability to override the automatic data base selection by the system and process an analysis request using a data base specified by the user.	test	TLM-1130B
F-ANA-03125	The FOS shall provide the capability process a request for telemetry MMM data at orbit day resolution for any time span greater than or equal to one orbit and up to the lifetime of the mission.	analysis	ANA-2060B
F-ANA-03140	The FOS shall check for the existence of all specified mnemonics whenever a new telemetry data base, (start of the request or data base crossover), is encountered during the processing of the data analysis request.	analysis	ANA-1040B ANA-2070B
F-ANA-03150	The FOS shall log a message to the history log if a specified mnemonic is no longer valid after a data base crossover.	demo	ANA-1040B ANA-2070B
F-ANA-03160	The FOS shall check for the validity of a requested EU conversion (existence of a defined conversion) whenever a new telemetry data base, (start of the request or data base crossover), is encountered during the processing of a data analysis request.	analysis	ANA-1040B ANA-2070B
F-ANA-03170	The FOS shall provide notification if a specified mnemonic no longer has a data base defined EU conversion after a data base crossover.	demo	ANA-1040B ANA-2070B
F-ANA-03180	The FOS shall provide the capability to process a request for discrete parameter state change statistics data at daily resolution for any time span greater than or equal to one day and up to the lifetime of the mission.	analysis	ANA-2080B
F-ANA-03190	The FOS shall provide the capability to process a request for discrete parameter state change statistics data at monthly resolution for any time span greater than or equal to one month and up to the lifetime of the mission.	analysis	ANA-1060B
F-ANA-03200	The FOS shall provide the capability to process a request for out of limits statistics data at daily resolution for any time span greater than or equal to one day and up to the lifetime of the mission.	analysis	ANA-2080B
F-ANA-03210	The FOS shall provide the capability to process a request for out of limits statistics data at monthly resolution for any time span greater than or equal to one month and up to the lifetime of the mission.	analysis	ANA-2080B
F-ANA-04020	The FOS shall be able to generate datasets from the following S/C telemetry: a. Stored real-time housekeeping telemetry data b. S/C recorder housekeeping data c. Engineering data	analysis	ANA-1060B ANA-2000A ANA-2020B ANA-2090B
F-ANA-04025	The FOS shall be able to generate datasets from statistical data.	analysis	ANA-2020A

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-04030	The FOS shall be able to generate datasets from the following FDF data: a. Star Density profile b. Star Interference c. Earth Sensor Assembly (ESA) Sun/Moon Interference d. Fine Sun Sensor (FSS) Visibility Prediction e. TDRSS State Vectors f. TDRSS Availability Times g. Filter Tuning Parameters h. Omni to TDRSS Viewing Times i. HGA to TDRSS Viewing Times j. Omni to Ground Station Viewing Times k. HGA Gimbal Angles l. Predicted Ephemeris m. Mass and Center of Mass Location Estimates n. Oscillator Frequency data o. EOS Brouwer-Lyddane Elements	analysis	ANA-1010B
F-ANA-04050	The FOS shall provide the capability to generate a dataset from the results of a user supplied algorithm. See section 8.6 for a description of user supplied algorithms.	analysis	ANA-2020B
F-ANA-04120	The FOS shall provide the capability to generate datasets in the carryout format as specified in the FOS Design Specification and FOS Database Design and Database Schema Specifications Document.	analysis	ANA-2000A ANA-2020B
F-ANA-04200	The FOS shall provide the capability to determine the state of each of the S/C subsystems and instruments, based on values of valid telemetry parameters.	analysis	ANA-1000B ANA-2080B ANA-2100B
F-ANA-04210	The FOS shall provide the capability to determine the status of each of the S/C subsystems and instruments, based on values of valid telemetry parameters.	analysis	ANA-1000B ANA-2080B ANA-2100B
F-ANA-04220	The FOS shall provide the capability to determine the configuration of each of the S/C subsystems and instruments, based on values of valid telemetry parameters.	analysis	ANA-1000B ANA-2080B ANA-2100B
F-ANA-04310	The FOS shall provide the capability to build ASCII reports from the system generated telemetry MMM statistics data.	analysis	ANA-2100B
F-ANA-04350	The FOS shall provide the capability to generate a Time Ordered Downlink Report for a user specified mission.	analysis	ANA-2100B
F-ANA-04360	The FOS shall produce a Time Ordered Downlink Report for the time interval requested by the user.	analysis	ANA-2100B
F-ANA-04370	The time interval of a Time Ordered Downlink Report shall be greater than or equal to 1 second and less than or equal to the length of a major frame.	analysis	ANA-2100B
F-ANA-04375	Each Time Ordered Downlink Report shall contain the following header information: a. The date and time of the report b. The starting spacecraft time of the data c. The ending spacecraft time of the data	analysis	ANA-2100B
F-ANA-04380	The FOS shall provide all data base defined telemetry mnemonics and their respective values for the time interval requested in the Time Ordered Downlink Report. If a telemetry mnemonic has a data base defined EU conversion, the EU value will be supplied, otherwise the raw value will be supplied.	analysis	ANA-2100B
F-ANA-04390	The FOS shall provide the spacecraft time for each telemetry mnemonic listed in the Time Ordered Downlink Report.	analysis	ANA-2100B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-04400	The FOS shall order the telemetry parameters in a Time Ordered Downlink Report according to a unique spacecraft time tag associated with each parameter.	analysis	ANA-2100B
F-ANA-04410	The FOS shall provide the capability to generate a Parameter Out-of-limits Report for a user specified mission.	analysis	ANA-2080B
F-ANA-04415	Each of the out of limits report shall contain the following header information: a. The date and time of the report b. The starting spacecraft time of the data c. The ending spacecraft time of the data d. A list of parameters which are out of limits at the start time of the report	analysis	ANA-2080B
F-ANA-04420	The FOS shall provide for each parameter specified in a request for a Parameter Out-of-limits Report, the following information: a. Spacecraft time for start of every limit violation b. Duration of every limit violation which began within the time span of the report. c. Sum of durations of all limit violations within the duration of the report. d. The type of the limit violation. Violations covered are red-high, red-low, yellow-high, yellow-low, and rail.	analysis	ANA-2080B
F-ANA-04430	The FOS shall generate the Parameter Out-of-limits Report for the time interval specified.	analysis	ANA-2080B
F-ANA-05100	The FOS shall compute the total number of state changes for each discrete telemetry parameter on a daily basis.	analysis	ANA-1010B
F-ANA-05110	The FOS shall compute the total number of state changes for each discrete telemetry parameter on a monthly basis.	analysis	ANA-1010B
F-ANA-05120	The FOS shall compute the total number of state changes for each discrete telemetry parameter for the life of the mission.	analysis	ANA-1010B
F-ANA-05130	The FOS shall compute the total elapsed time spent in each state for each discrete telemetry parameter on a daily basis.	analysis	ANA-2000B
F-ANA-05140	The FOS shall compute the total elapsed time spent in each state for each discrete telemetry parameter on a monthly basis.	analysis	ANA-1010B
F-ANA-05150	The FOS shall compute the total elapsed time spent in each state for each discrete telemetry parameter for the life of the mission.	analysis	ANA-2000B
F-ANA-05160	The FOS shall generate and store statistics for the following FDF supplied data: a. EOS Brouwer-Lyddane Elements b. Oscillator Frequency Report c. Mass and Center of Mass Location Estimates	analysis	ANA-1010B
F-ANA-05170	The FOS shall compute the following statistics for the FDF supplied data: a. Minimum value b. Time for the minimum value c. Maximum value d. Time for the maximum value e. Mean f. Standard Deviation g. Number of samples	analysis	ANA-1010B
F-ANA-05180	The FOS shall compute statistics for the FDF data upon receipt of the data.	analysis	ANA-1010B
F-ANA-05190	The FOS shall compute statistics for the FDF data for the mission to-date.	analysis	ANA-1010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-06020	The FOS shall provide the capability to curve-fit a parameter to a polynomial of user specified order, up to order 9.	analysis	ANA-2000B
F-ANA-06021	The FOS shall provide the capability to apply a Fast Fourier Transform (FFT) to a parameter.	analysis	ANA-2000B
F-ANA-06022	The FOS shall provide the capability to smooth a parameter by a user specified factor. Smoothing means that every N data points, where N is the user specified factor, are averaged to yield a single data point.	analysis	ANA-2000B
F-ANA-06023	The FOS shall provide the capability to compute the Root Mean Square (RMS) of a parameter.	analysis	ANA-2000B
F-ANA-06030	The FOS shall provide algorithms for monitoring and evaluating spacecraft functions, resources, and performance including: a. stored command processing b. spacecraft recorders c. safe mode processes d. electrical power subsystem e. propulsion subsystem f. guidance and navigation g. C&DH h. communication	analysis	ANA-2000B
F-ANA-06040	The FOS shall provide the capability to apply a user supplied algorithm to data maintained in the telemetry archive.	analysis	ANA-2000B
F-ANA-06045	The FOS shall provide the capability of allowing up to 20 input parameters and 20 output parameters for a user supplied algorithm.	analysis	ANA-2000B
F-ANA-06050	The FOS shall provide the capability to utilize data contained within a dataset as input into a user supplied algorithm.	analysis	ANA-2000B
F-ANA-07010	The FOS shall provide the capability to perform MMM statistics on EDOS and NCC data received during real time.	analysis	ANA-2080B
F-ANA-07020	The interval for NCC/EDOS statistics shall be equal to the duration of the real time pass during which the statistics are performed.	analysis	ANA-2080B
F-ANA-07030	The FOS shall provide the capability to process a request for EDOS/NCC statistics for any time span greater than one second and less than three (3) months.	analysis	ANA-2080B
F-ANA-07040	The FOS shall provide the capability for the user to specify time criteria for notification of predicted limit violations.	analysis	ANA-2080B
F-ANA-07050	The FOS shall generate an event message when a limit violation will occur within the specified time criteria.	analysis	ANA-2080B
F-ANA-07110	The FOS shall provide the capability to calculate the spacecraft clock error by use of the RDD algorithm.	analysis	ANA-2040B
F-ANA-07120	The FOS shall use predicated spacecraft data as input to the RDD algorithm.	analysis	ANA-2040B
F-ANA-07130	The FOS shall interpolate or extrapolate to the nearest millisecond the predicted spacecraft range data.	analysis	ANA-2040B
F-ANA-07140	The FOS shall use the Return Channel Time Delay (RCTD) measurement as input to the RDD algorithm.	analysis	ANA-2040B
F-ANA-07150	The FOS shall collect a maximum of 99 data samples for the RDD algorithm.	analysis	ANA-2040B
F-ANA-07160	The FOS shall provide notification once per minute indicating the average clock delta value for the RDD method.	analysis	ANA-2040B
F-ANA-07180	The FOS shall provide the capability control RDD clock correlation operations.	analysis	ANA-2040B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-07210	The FOS shall provide the capability to calculate the spacecraft clock error by use of the USCCS method.	analysis	ANA-2050B
F-ANA-07215	The EOC shall provide the capability to maintain the spacecraft clock error to an accuracy of 100 microseconds.	analysis	ANA-2040B ANA-2050B
F-ANA-07220	The EOC shall collect Time Transfer Messages (TTM) for use by the USCCS method.	analysis	ANA-2040B ANA-2050B
F-ANA-07230	The EOC shall, for the USCCS method, collect a maximum of 1275 data samples.	analysis	ANA-2040B ANA-2050B
F-ANA-07240	The EOC shall provide telemetry data filtering capabilities for use with the USCCS method.	analysis	ANA-2040B ANA-2050B
F-ANA-07250	The EOC shall perform USCCS calculations following the receipt of all tracking service Time Transfer Messages and the termination of the SN coherent two-way tracking service.	analysis	ANA-2040B ANA-2050B
F-ANA-07260	The EOC shall provide a notification that identifies the clock error for the USCCS method.	analysis	ANA-2040B ANA-2050B
F-ANA-07280	The EOC shall provide the capability to control USCCS clock correlation operations.	analysis	ANA-2040B ANA-2050B
F-ANA-07300	The EOC shall provide the capability to generate a clock correlation report for each real-time pass during which clock correlation is performed.	analysis	ANA-2040B ANA-2050B
F-ANA-07310	The EOC shall provide the following header information in the clock correlation report: a. The start and stop times of the pass during which the correlation was performed. b. The Spacecraft ID. c. The type of calculation used. (USCCS or RDD)	analysis	ANA-2040B ANA-2050B
F-ANA-07320	The EOC shall include in the clock correlation report the results from the clock correlation calculation, and the spacecraft time associated with the results.	analysis	ANA-2040B ANA-2050B
F-ANA-07330	The EOC shall compute the S/C master oscillator frequency a bias and drift rate from the result of the clock correlation, and include these values in the report.	analysis	ANA-2040B ANA-2050B
F-ANA-07400	The EOC shall monitor housekeeping telemetry and provide notification if parts of the spacecraft activity log are not visible to the FOT via the housekeeping telemetry stream.	analysis	SEG-2010B
F-ANA-07410	The EOC shall, in the event parts of the spacecraft activity log are not visible in telemetry, generate a command request for downlink of the spacecraft activity log.	analysis	SEG-2010B
F-ANA-08060	The FOS shall provide the capability to selectively decommutate only those parameters which are required to fulfill the analysis request.	analysis	ANA-1060B
F-ANA-08070	The FOS shall provide the capability to process a routine request for analysis at 12 time the real time telemetry rate.	test	ANA-2110B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-09010	The EOC shall define an EASE to contain up to 15 comparisons of the following type, all resulting in a value of TRUE or FALSE: a. Spacecraft or ground telemetry value (Greater Than, Less Than, Greater Than or Equal To, Less Than or Equal To, Equal To, Not Equal To) Constant. Example. BattVolt1 > 20.0 b. Spacecraft or ground telemetry value (Greater Than, Less Than, Greater Than or Equal To, Less Than or Equal To, Equal To, Not Equal To) spacecraft or ground telemetry value. Example. BattVolt1 > BattVolt2 c. The return value of a function taking a ground or spacecraft telemetry value as an argument (Greater Than, Less Than, Equal Greater Than or Equal To, Less Than or Equal To, To, Not Equal To) Constant. Example. AverageDelta Value (BattVolt1) == 0.0 d. The value of another EASE (Equal To) TRUE/FALSE. Example. BatteryEASE == TRUE	analysis	TLM-2080B
F-ANA-09020	The EOC shall compute the value of the EASE by operating on the TRUE/FALSE results of each comparison contained within the EASE, using AND or OR boolean operators. Examples: (Batt1Volts > 20.0) AND (Battery1EASE == FALSE) (Batt1Volts > Batt2Volts) OR (Batt2Volts > Batt3Volts)	analysis	TLM-2080B
F-ANA-09030	The EOC shall evaluate the boolean AND/OR operators in order, unless parentheses are included to indicate order of operation.	analysis	TLM-2080B
F-ANA-09040	The EOC shall provide the capability to define an EASE.	analysis	TLM-2080B
F-ANA-09050	The EOC shall provide the capability to delete an EASE.	analysis	TLM-2080B
F-ANA-09060	The EOC shall provide the capability to edit an EASE.	analysis	TLM-2080B
F-ANA-09070	The EOC shall provide the capability to define, for each EASE, a text description of the EASE.	analysis	TLM-2080B
F-ANA-09080	The FOS shall, when an EASE evaluation result is TRUE, display the text description (if defined) of the EASE.	analysis	TLM-2080B
F-ANA-09090	The EOC shall provide the capability to define, for each EASE, a text description of recommended procedures to follow when the EASE evaluation result is TRUE.	analysis	TLM-2080B
F-ANA-09100	The EOC shall when an EASE evaluation result is TRUE, display the text description of the recommended procedures (if defined) associated with the EASE.	analysis	TLM-2080B
F-ANA-09110	The EOC shall provide the capability to associate a command request with an EASE.	analysis	TLM-2080B
F-ANA-09120	The EOC shall generate the associated command request (if defined) when an EASE evaluation result is TRUE.	analysis	TLM-2080B
F-ANA-09130	The EOC shall provide the capability to associate a real time procedure with an EASE.	analysis	TLM-2080B
F-ANA-09140	The EOC shall initiate the associated real time procedure (if defined) when an EASE evaluation result is TRUE.	analysis	TLM-2080B
F-ANA-09150	The EOC shall provide the capability to evaluate up to 50 EASEs during real time.	analysis	TLM-2080B
F-ANA-09160	The EOC shall provide the capability to evaluate up to 50 EASEs during a replay.	analysis	TLM-2080B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-ANA-17010	The FOS shall provide the capability to monitor the AM-1 Solid State Recorder buffers in real-time.	analysis	TLM-1120B
F-ANA-17020	The FOS shall provide the capability to detect RF failures which impact SSR playbacks.	analysis	TLM-1120B
F-ANA-17030	The FOS shall provide the capability to report the state of the SSR playback at the time of an RF failure.	analysis	TLM-1120B
F-ANA-17040	The FOS shall provide the capability to report the status of the SSR buffers at the end of a contact.	analysis	TLM-1120B
F-ANA-17050	The FOS shall provide the capability to recommend recovery procedures to correct for playback data loss.	analysis	TLM-1120B
F-ANA-17060	The FOS shall provide the capability to recommend recovery procedures to correct RF link faults.	analysis	TLM-1120B
F-CMD-01125	The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the GN (Ground Network) in contingency or emergency operations.	demo	CMD-1020B
F-CMD-01130	The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the DSN (Deep Space Network) in contingency or emergency operations.	demo	CMD-1020B
F-CMD-01135	The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the WOTS (Wallops Orbital Tracking System) in contingency or emergency operations.	demo	CMD-1020B
F-CMD-01165	The EOC shall be capable of transmitting commands to the spacecraft simulator.	demo	CMD-1020B
F-CMD-01230	The EOC shall provide the capability to uplink commands at a rate selected by the user from a set of valid rates.	demo	CMD-1020B
F-CMD-01250	The EOC shall implement command spacing (metering) to maintain the required real time uplink rate.	demo	CMD-1020B
F-CMD-01320	The EOC shall merge spacecraft and instrument commands, and spacecraft and instrument memory loads into one uplink stream.	demo	CMD-1020B
F-CMD-01325	The EOC shall be capable of transmitting predefined Absolute Time Command (ATC) loads.	demo	CMD-1020B
F-CMD-01330	The EOC shall be capable of transmitting predefined Relative Time Sequence (RTS) loads.	demo	CMD-1020B
F-CMD-01335	The EOC shall be capable of transmitting flight software loads.	demo	CMD-1020B
F-CMD-01340	The EOC shall be capable of transmitting table loads.	demo	CMD-1020B
F-CMD-01345	The EOC shall be capable of transmitting instrument microprocessor loads.	demo	CMD-1020B
F-CMD-02120	The EOC shall encase packets within a command link transmission unit (CLTU).	test	CMD-1010B
F-CMD-02125	The EOC shall monitor command link control words (CLCWs) from the spacecraft to ascertain status of the command link.	test	CMD-1010B
F-CMD-03220	The EOC shall require a user to enter a single authorization (allow or cancel) prior to uplinking a stored command load containing critical commands.	test	CMD-2050B
F-CMD-03310	The EOC shall verify existence of the load upon receipt of a load uplink request.	test	CMD-1010B
F-CMD-03315	The EOC shall check load data by verifying pertinent load parameters to ensure proper load identification.	test	CMD-1010B
F-CMD-03320	The FOS shall notify the user of load validation failures.	demo	CMD-1010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMD-04110	The EOC shall process and output to ECOM a single real-time emergency command request within 500 milliseconds of receiving the request from an EOC operator.	test	CMD-2080B
F-CMD-04130	The FOS shall notify the user when a load is transmitted.	demo	CMD-2080B
F-CMD-04210	The EOC shall provide for the automatic retransmission of CLTUs once it has been determined that command(s) have been lost.	test	CMD-2080B CMD-2090B
F-CMD-04215	The EOC shall implement retransmission such that all commands transmitted since the last command known to be received and accepted at the spacecraft shall be retransmitted in the same order as originally transmitted.	test	CMD-2080B CMD-2090B
F-CMD-04220	The EOC shall provide a predefined, operator overridable retransmission count to limit the number of retransmissions attempted.	test	CMD-2000B
F-CMD-04225	The EOC shall permit the operator to disable command retransmission.	test	CMD-2000B
F-CMD-04230	The EOC shall provide the capability to set the next expected ground frame sequence number to a user specified value.	test	CMD-2000B
F-CMD-05110	The EOC shall provide the capability to verify via COP-1 the successful receipt of real time commands by the spacecraft.	test	CMD-1000B
F-CMD-05115	The EOC shall notify the operator of the status of each command uplinked, as success or fail.	test	CMD-1000B
F-CMD-05220	The EOC shall provide the capability to verify via telemetry the successful execution of spacecraft commands by checking in real time the status of a single telemetry point.	test	CMD-2020B
F-CMD-05225	The FOS shall notify the operator of spacecraft command telemetry verification status.	test	CMD-2020B
F-CMD-05230	The EOC shall provide the capability to verify via telemetry the successful execution of instrument commands.	test	CMD-2020B
F-CMD-05235	The FOS shall notify the operator of instrument command telemetry verification status.	test	CMD-2020B
F-CMD-05245	The EOC shall allow a pre-defined duration time after receipt verification before determining that a command has failed telemetry verification.	test	CMD-2020B
F-CMD-05247	The EOC shall check telemetry values for all outstanding commands needing telemetry verification at intervals of no more than a pre-defined number of seconds.	test	CMD-2020B
F-CMD-05250	The EOC shall provide the capability to verify via telemetry the successful receipt of a load.	demo	CMD-2060B
F-CMD-05255	The FOS shall notify the operator of load telemetry verification status.	demo	CMD-2060B
F-CMD-05310	The EOC shall provide the IP-ICC with a final instrument uplink status, with a failure status to indicate the point of failure.	demo	CMD-2020B
F-CMD-05410	The EOC shall provide an IP-ICC with instrument command notification messages, when emergency or contingency instrument commands are issued by other than the IP-ICC.	demo	CMD-2030B
F-CMD-05510	Stored commands shall be telemetry verified as they execute on board the spacecraft during a real time contact.	test	CMD-2020B CMD-2030B
F-CMD-11211	The EOC shall uplink at a rate of 125 bits per second (bps) when the control center is configured for transmission utilizing SN SSA service and the AM1 Omni antenna.	demo	CMD-1000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMD-11212	The EOC shall uplink at a rate of 1 kilobits per second (kbps) when the control center is configured for transmission utilizing SN SMA service and the AM1 High Gain antenna.	demo	CMD-2020B
F-CMD-11215	The EOC shall uplink at a rate of 2 kbps when the EOC is configured for transmission utilizing the GN service and the AM1 Omni antenna.	demo	CMD-2020B
F-CMD-11220	The EOC shall uplink at a rate of 2 kbps when the EOC is configured for transmission utilizing the DSN service and the AM1 Omni antenna.	demo	SCH-1040B
F-CMD-11225	The EOC shall uplink at a rate of 2 kbps when the EOC is configured for transmission utilizing the WOTS service and the AM1 Omni antenna.	demo	CMD-2020B
F-CMD-12240	The EOC shall accept user supplied binary (hex) formatted commands.	test	SCH-1040B
F-CMD-13230	The EOC shall treat commands entered in binary (hex) format as critical commands.	test	CMD-2050B
F-CMD-14315	The EOC shall provide the user with the capability to select either of the two CTIUs as the active CTIU.	test	CMD-2020B
F-CMD-15245	The EOC shall allow a pre-defined duration time of up to one minute after receipt verification before determining that a command has failed telemetry verification.	test	CMD-1000B
F-CMD-15515	The EOC shall provide the capability to verify via telemetry the successful dispatch of absolute time stored commands.	test	CMD-2020B
F-CMD-15520	The EOC shall provide the capability to verify via telemetry the successful dispatch of relative time stored commands.	test	CMD-2020B
F-CMS-00115	The EOC shall provide the capability to check the absolute time commands in the ATC load against command-level constraints	test	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00118	The EOC shall check the number of commands in the ATC load having the same time tag against the maximum allowable number.	test	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00120	The EOC shall provide notification of command-level constraint violations in ATC load contents.	demo	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00125	The EOC shall provide the capability to allow "soft" command-level constraint violations to remain in the ATC load.	test	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00130	The EOC shall provide the capability to prohibit "hard" command-level constraint violations remaining in the ATC load.	test	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00140	For each absolute time command generated, the EOC shall provide the capability to verify that the spacecraft memory resources needed by the command will be available on the spacecraft at the time the command executes.	analysis	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00205	The EOC shall provide the capability to generate an ATC load from a list of absolute time commands that covers the same operational period as the DAS.	test	SCH-2070B
F-CMS-00230	The EOC shall format the ATC load to conform to the ATC processing scheme on board the spacecraft.	analysis	SCH-2080B
F-CMS-00235	In support of a late change that occurs after the ATC load for that period has been uplinked, the EOC shall provide the capability to generate a partial ATC load for the late change.	test	SCH-2070B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-00243	The EOC shall provide the capability to add a sequence of absolute time commands to the end of every ATC or ATC partial load.	test	SCH-2050B SCH-2070B SCH-2080B
F-CMS-00245	The EOC shall have the capability to generate an ATC load report whenever an ATC or ATC partial load is generated.	test	SCH-2030B SCH-2050B SCH-2070B SCH-2080B
F-CMS-00250	The EOC shall provide the capability to include in the ATC load report: a. the load name b. Load type c. Valid uplink period d. Uplink date and time e. Load size in bytes f. Starting and ending ATC buffer locations g. Execution times of the first and last commands h. Number of commands i. Number of critical commands j. List of control commands k. A listing of all absolute time commands in the load, including for each command: 1. the command's memory location 2. execution time 3. command mnemonic 4. submnemonics and their values, if applicable 5. command bit pattern 6. criticality indicator	demo	SCH-2030B SCH-2050B SCH-2070B SCH-2080B
F-CMS-00305	The EOC shall determine an uplink window for each ATC load.	test	SCH-2030B
F-CMS-00405	The EOC shall provide the capability to determine a break point (or points) for partitioning an ATC load to meet uplink criteria for the spacecraft.	analysis	SCH-2030B SCH-2050B
F-CMS-00510	The EOC shall maintain an ATC command-to-memory map consisting of the contents of each location in the ATC buffer.	test	SCH-2030B SCH-2050B
F-CMS-00530	The EOC shall update the ATC command-to-memory map when the ATC load has been successfully uplinked.	test	CMD-1030B
F-CMS-00550	The FOS shall provide the capability to generate a Memory Map Report listing the memory location (offset in ATC buffer) and contents of each location in the ATC buffer.	demo	SCH-2030B SCH-2050B
F-CMS-00620	The EOC shall provide the capability to check the ground directives in the ground script against ground schedule constraints.	analysis	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00625	The EOC shall provide notification of ground schedule constraint violations.	demo	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00630	The EOC shall provide the capability to allow "soft" ground constraint violations to remain in the ground script.	test	SCH-1040B SCH-1050B SCH-1190B
F-CMS-00635	The EOC shall provide the capability to prohibit "hard" ground constraint violations remaining in the ground script.	test	SCH-1040B SCH-1050B SCH-1190B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-00660	For each request to schedule a load uplink activity, the EOC shall provide the capability to verify that the applicable load is available and ready for uplink.	test	SCH-1040B SCH-1050B SCH-1180B SCH-1190B SCH-2090B
F-CMS-00670	The EOC shall provide the capability to generate a ground script from a list of ground directives that covers the same operational period as the DAS.	analysis	SCH-1190B
F-CMS-00675	The EOC shall provide the capability to initiate generation of the ground script which corresponds to a DAS upon request.	demo	SCH-2090B
F-CMS-00710	The FOS shall provide the capability to specify the content of an RTS load.	demo	SCH-2160B
F-CMS-00720	The FOS shall provide the capability to specify the content of an RTS load based on the contents of a previously defined RTS load.	demo	SCH-2160B
F-CMS-00725	The FOS shall provide the capability to accept an RTS load content imported from the Science Computing Facility (SCF).	demo	SCH-1190B
F-CMS-00728	The FOS shall provide the capability to accept an RTS load content imported from the Software Development and Validation Facility (SDVF).	demo	SCH-2090B
F-CMS-00729	The EOC shall validate the source and destination of RTS load content generated externally to the FOS.	demo	SCH-2170B
F-CMS-00730	The FOS shall provide the capability to validate RTS contents.	analysis	SCH-1230B SCH-2160B
F-CMS-00735	The FOS shall provide the capability to validate the mnemonics specified in an RTS load contents.	test	SCH-1230B SCH-2160B
F-CMS-00740	The FOS shall provide the capability to check the relative time commands in the RTS load content against command-level constraints.	test	SCH-1230B SCH-2160B
F-CMS-00745	The FOS shall provide notification of command-level constraint violations in RTS load contents.	demo	SCH-1230B SCH-2160B
F-CMS-00750	The FOS shall provide the capability to allow "soft" command-level constraint violations to remain in the RTS load.	test	SCH-1230B SCH-2160B
F-CMS-00755	The FOS shall provide the capability to prohibit "hard" command-level constraint violations remaining in the RTS load.	test	SCH-1230B SCH-2160B
F-CMS-00810	The EOC shall provide the capability to generate an RTS load from an RTS load content which has been validated.	demo	SCH-1230B
F-CMS-00850	The EOC shall generate an RTS load report whenever an RTS load is generated.	demo	SCH-2120B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-00860	The EOC shall provide the capability to include in the RTS load report the following items, where applicable: a. Load name b. Load type c. Valid uplink period d. Uplink date and time e. Load size in bytes f. RTS buffer number g. Starting and ending memory locations in the RTS table h. Number of commands i. Number of critical commands j. A listing of all RTS commands in the load, including for each command in the load: 1. the command's memory location 2. offset time, if applicable 3. command mnemonic 4. submnemonics and their values, if applicable 5. command bit pattern 6. criticality indicator	test	SCH-2120B
F-CMS-00910	The EOC shall maintain a catalog of RTS loads existing in the EOC.	test	SCH-1240B
F-CMS-00915	The EOC shall provide the capability to generate an RTS Catalog Report listing load content name associated with each RTS load available for uplink in the EOC.	demo	SCH-2120B
F-CMS-00920	The EOC shall provide the capability to include in the RTS Catalog Report the RTS buffer identifier for which the load is valid, the load content source, and the valid load uplink window.	test	SCH-2120B
F-CMS-00925	The EOC shall maintain an RTS map specifying the name of the RTS load content that is currently loaded into each RTS buffer.	test	SCH-1240B
F-CMS-00930	The EOC shall provide the capability to generate an RTS Map Report listing the name of the load content that is currently loaded into each RTS buffer.	demo	SCH-2120B
F-CMS-00935	The EOC shall maintain an RTS command-to-memory map specifying the contents of each location in each RTS buffer.	test	SCH-1240B
F-CMS-00940	The EOC shall update the RTS command-to-memory map when the RTS load has been successfully uplinked.	test	SCH-1240B
F-CMS-00950	The FOS shall provide the capability to generate a Memory Map Report listing the memory location (offset within an RTS) and contents of each location in an RTS buffer.	demo	SCH-2120B
F-CMS-01140	The EOC shall provide the capability to generate table loads from data received from FDF.	test	SCH-2100B SCH-2110B
F-CMS-01160	The EOC shall provide the capability to include in the table load report: a. Load name b. Load type c. Valid uplink period d. Uplink time e. Load size in bytes f. Starting and ending memory location g. Contents of the load in hex, and where applicable in decimal	test	SCH-2120B
F-CMS-01210	The EOC shall maintain a catalog of table loads existing in the EOC.	test	SCH-1260B
F-CMS-01215	The EOC shall provide the capability to generate a Table Catalog Report listing load content name and valid uplink window associated with each table load available for uplink in the EOC.	test	SCH-2120B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-01220	The EOC shall maintain a table load map specifying the ownership of each table that is defined in the table data base and the name of the table load content that is currently loaded into it.	test	SCH-1260B
F-CMS-01225	The EOC shall provide the capability to generate a Table Map Report listing the name of the load content that is currently loaded into each table.	test	SCH-2120B
F-CMS-01340	The EOC shall include in the microprocessor load report: a. Load name b. Load type c. Valid uplink period d. Uplink time e. Load size in bytes f. Starting and ending memory location g. Contents of the load in hex.	test	SCH-2120B
F-CMS-01350	The EOC shall maintain a catalog of microprocessor loads available in the EOC.	test	SCH-1180B
F-CMS-01360	The EOC shall provide the capability to generate a Microprocessor Catalog Report listing load content name and valid uplink window associated with each microprocessor load available for uplink in the EOC.	test	SCH-2120B
F-CMS-01405	The FOS shall provide the capability to accept a flight software load content imported from the Software Development and Validation Facility (SDVF).	demo	SCH-1190B
F-CMS-01410	The EOC shall validate the source and destination of binary format flight software load content generated externally to the FOS.	analysis	SCH-1200B
F-CMS-01420	The EOC shall generate a flight software load from a flight software load content.	test	SCH-1210B SCH-1270B
F-CMS-01425	The EOC shall generate and append to the flight software load all necessary load control commands.	test	SCH-1210B SCH-1270B
F-CMS-01430	The EOC shall generate a flight software load report whenever a flight software load is generated.	demo	SCH-2120B
F-CMS-01440	The EOC shall include in the flight software load report: a. Load name b. Load type c. Valid uplink period d. Uplink time e. Load size in bytes f. Starting and ending memory location g. Contents of the load in hex.	test	SCH-1270B
F-CMS-01450	The EOC shall maintain a catalog of flight software loads available in the EOC.	test	SCH-1220B SCH-1230B
F-CMS-01460	The EOC shall provide the capability to generate a Flight Software Catalog Report listing load content name and valid uplink window associated with each flight software load available for uplink in the EOC.	demo	SCH-2120B
F-CMS-01505	The EOC shall provide the capability to produce an integrated report which includes the following information in chronological order: a. Absolute time commands to be executed b. Relative time commands to be executed c. Scheduled spacecraft contacts d. Real-time commands to be uplinked e. Loads to be uplinked f. Expected orbital events	demo	SCH-2040B SCH-2090B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-01512	The FOS shall be able to produce the planned state of the spacecraft for discrete telemetry parameters and the location of the stored command pointer upon request.	test	SCH-2040B
F-CMS-01610	The EOC shall process all loads associated with a DAS in less than 1 hour. The processing of loads associated with a DAS shall include: a. Generating an ATC load based on the expanded DAS activities b. Verifying the current contents of RTS buffers referenced by the ATC load. c. Generating a ground script based on the expanded DAS activities d. Verifying the existence in the EOC table load catalog of the table loads that have uplink references in the DAS e. Verifying the existence in the EOC flight software load catalog of the flight software loads that have uplink references in the DAS f. Verifying the existence in the EOC microprocessor load catalog of the microprocessor loads that have uplink references in the DAS g. Verifying the existence in the EOC RTS load catalog of the RTS loads that have uplink references in the DAS	test	SCH-2040B SCH-2090B
F-CMS-01630	In support of a late change, the EOC shall process all loads associated with the change in less than 1 hour after receiving the updated DAS. The processing of loads associated with the change shall include: a. Generating an ATC load or ATC partial load based on the expanded DAS activities b. Verifying the current contents of RTS buffers referenced by the ATC load c. Generating a ground script based on the expanded DAS activities d. Verifying the existence in the EOC table load catalog of the table loads that have uplink references in the DAS e. Verifying the existence in the EOC flight software load catalog of the flight software loads that have uplink references in the DAS f. Verifying the existence in the EOC microprocessor load catalog of the microprocessor loads that have uplink references in the DAS g. Verifying the existence in the EOC RTS load catalog of the RTS loads that have uplink references in the DAS	test	SCH-2040B SCH-2090B
F-CMS-01710	The EOC shall maintain a ground reference image of spacecraft memory.	test	CMD-1030B
F-CMS-01715	The EOC shall update the ground reference image by overwriting the appropriate portion of the ground reference image with a load image when the load has been successfully uplinked.	test	CMD-1030B
F-CMS-01720	The EOC shall provide the capability to create a memory dump image from collected dump telemetry data.	demo	CMD-1030B
F-CMS-01725	The FOS shall provide the capability to export instrument memory dump images to the SCF.	demo	CMD-1030B
F-CMS-01730	The FOS shall provide the capability to export memory dump images to the SDVF.	demo	CMD-1030B
F-CMS-01735	The EOC shall provide the capability to overlay a portion of the ground reference image with a memory dump image or load image at user request.	demo	CMD-1030B
F-CMS-01740	The FOS shall provide the capability to compare a memory image to another memory image.	demo	CMD-1040B
F-CMS-01743	The EOC shall provide the capability to use a mask to exclude certain areas of memory from comparison.	test	CMD-1040B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-01745	The EOC shall notify the user via an event message of the status of the memory dump comparison.	demo	CMD-1040B
F-CMS-01750	The EOC shall provide the capability to generate a report listing all discrepancies found during a memory dump comparison.	test	CMD-1040B
F-CMS-01760	The EOC shall provide the capability to generate a Memory Image Report listing the memory location (address) and contents of a user specified area of spacecraft memory.	demo	CMD-1040B
F-CMS-01765	The EOC shall provide the capability to generate a report of table contents based on a dump image of a table.	test	CMD-1030B
F-CMS-01770	The EOC shall provide the capability to compare contents of a table dump image to predefined default values for the table.	test	CMD-1030B
F-CMS-01775	The EOC shall provide the capability to generate a table load content based on a dump image of a table.	test	CMD-1040B
F-CMS-01820	The FOS shall validate each field of each real-time command in a procedure.	test	SCH-1050B
F-CMS-01825	The FOS shall provide the capability to check the real-time commands in a procedure against command-level constraints.	test	SCH-1050B
F-CMS-01830	The FOS shall provide notification of command-level constraint violations in command procedures.	demo	SCH-1050B
F-CMS-01835	The FOS shall provide the capability to allow "soft" command-level constraint violations to remain in a command procedure.	test	SCH-1050B
F-CMS-01840	The FOS shall provide the capability to prohibit "hard" command-level constraint violations remaining in a command procedure.	test	SCH-1050B
F-CMS-10210	The EOC shall generate a SCC stored command table load that maps all absolute time commands into the SCC stored command table in a manner that is consistent with the format and processing of the SCC stored command table as described in SD-110a.	test	SCH-1050B
F-CMS-10220	The EOC shall direct the placement of the ATC load such that the first command of the load is inserted into the SCC stored command table at the location immediately following the last meaningful command of the previous ATC load.	analysis	SCH-1050B
F-CMS-10240	The EOC shall direct the placement of an ATC patch load such that the load may overwrite unexecuted commands in the SCC stored command table.	test	SCH-2030B SCH-2050B
F-CMS-10410	If the size of the ATC load is greater than the available space in the SCC stored command table, the EOC shall provide the capability to partition the load.	test	SCH-2030B SCH-2050B
F-CMS-10420	If the size of the ATC load is greater than 4K bytes, the EOC shall provide the capability to partition the load.	test	SCH-2030B SCH-2050B
F-CMS-10510	The EOC shall provide the capability to send the ATC Load Report to the ASTER ICC.	test	SCH-2120B
F-CMS-10720	The EOC shall verify that the time tags associated with SCC relative time commands in an SCC RTCS load have a resolution of 1 second.	test	SCH-1230B SCH-2160B
F-CMS-10750	The EOC shall provide the capability to send the RTS Load Report to the ASTER ICC.	test	SCH-2120B
F-CMS-11410	The EOC shall format flight software loads for uplink according to the CCSDS Telecommand packet protocols as specified in ICD-106.	test	SCH-1210B SCH-1270B
F-CMS-11420	The EOC shall append a load initiate command to the flight software load.	test	SCH-1270B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-CMS-11510	The EOC shall provide the capability to send the Integrated Report to the ASTER ICC.	test	SCH-2120B
F-CMS-11720	The EOC shall provide the capability to generate a report of intermediate SUROM results based on a memory dump.	test	CMD-1040B
F-DMS-00180	The constraint definitions shall contain the following information: a. spacecraft constraint definitions b. instrument constraint definitions c. operational mode transition definitions d. command timing and sequencing constraints	inspection	SCH-1270B
F-DMS-00205	The EOC shall provide authorized users the capability to add telemetry definitions to the PDB.	demo	SCH-1270B
F-DMS-00210	The EOC shall provide authorized users the capability to delete telemetry definitions maintained in the PDB.	demo	SCH-2120B
F-DMS-00215	The EOC shall provide authorized users the capability to modify telemetry definitions maintained in the PDB.	demo	CMD-1040B
F-DMS-00220	The EOC shall provide authorized users the capability to add command definitions to the PDB.	demo	SCH-1270B
F-DMS-00225	The EOC shall provide authorized users the capability to delete command definitions maintained in the PDB.	demo	SCH-1270B
F-DMS-00230	The EOC shall provide authorized users the capability to modify command definitions maintained in the PDB.	demo	SCH-2120B
F-DMS-00250	The EOC shall provide authorized users the capability to add constraint definitions to the PDB.	demo	CMD-1040B
F-DMS-00255	The EOC shall provide authorized users the capability to delete constraint definitions maintained in the PDB.	demo	SCH-1270B
F-DMS-00260	The EOC shall provide authorized users the capability to modify constraint definitions maintained in the PDB.	demo	SCH-1270B
F-DMS-00265	The EOC shall provide a PDB edit log presenting edits made to the PDB.	inspection	SCH-2120B
F-DMS-00270	The EOC PDB log shall include the following information: a. Time stamp b. PDB version number c. File name d. User ID e. Changes made to the PDB since the last update	inspection	CMD-1040B
F-DMS-00410	The FOS shall provide for authorized users the capability to report information maintained in the PDB.	inspection	SCH-1270B
F-DMS-00420	The FOS shall provide the capability to access PDB information for reporting purposes by the following: a. PDB type (telemetry, command, activity, constraint) b. mnemonic	inspection	SCH-1270B
F-DMS-00510	The EOC shall maintain all versions of the operational PDB.	inspection	SCH-2120B
F-DMS-00520	The EOC shall maintain the following information for each version of the PDB: a. PDB version number b. effective date	inspection	CMD-1040B
F-DMS-00530	The EOC shall provide the capability to backup the operational PDB.	demo	SCH-1270B
F-DMS-00540	The EOC shall provide the capability to restore the operational PDB.	inspection	SCH-1270B
F-DMS-00550	The EOC shall provide the capability to compare two versions of the validated PDB.	inspection	SCH-2120B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-DMS-00640	The EOC shall provide for operational use of the constraint PDB definitions.	demo	CMD-1040B
F-DMS-00650	The operational data shall contain a version number and date of generation.	inspection	SCH-1270B
F-DMS-00720	The EOC shall maintain the telemetry data on-line for a minimum of 7 days.	inspection	SCH-1270B
F-DMS-00730	The EOC shall archive telemetry in chronological order.	inspection	SCH-2120B
F-DMS-00740	The EOC shall merge new telemetry packets with existing packets to create a seamless archive.	inspection	CMD-1040B
F-DMS-00760	The EOC shall replace existing poor quality telemetry packets with good quality telemetry packets.	demo	SCH-2120B
F-DMS-00780	The FOS shall provide the capability to replay archived telemetry at user selectable rates.	demo	ANA-1040B ANA-1050B ANA-2000B TLM-2050B
F-DMS-00810	The EOC shall archive all ground-telemetry data.	inspection	COM-2000B
F-DMS-00820	The EOC shall maintain the ground-telemetry data on-line for a minimum of 7 days.	inspection	FMG-2000B
F-DMS-00830	The EOC shall archive ground-telemetry in chronological order.	demo	RCM-2020A
F-DMS-00840	The FOS shall provide the capability to retrieve archived ground-telemetry by specifying the following: a. Spacecraft start time b. Spacecraft stop time c. Data source (NCC,EDOS) d. Data type e. Spacecraft Identifier (if applicable)	demo	FMG-2000B
F-DMS-00920	The EOC shall maintain events data on-line for a minimum of 7 days.	inspection	EVT-2000A
F-DMS-01110	The EOC shall provide the capability to send archived data to a designated SDPS.	demo	COM-2000B FMG-2000B RCM-2020A
F-DMS-01120	The EOC shall accept storage status, indicating the success or failure of the storage of the archived data, from the SDPS.	demo	FMG-2000B
F-DMS-01130	The EOC shall maintain the archived data until the SDPS has notified the EOC of successful storage.	demo	FMG-2000B
F-DMS-01140	The EOC shall provide the capability to retrieve FOS archive data from the SDPS.	demo	FMG-2000B
F-DMS-01150	The EOC shall provide 2 days of storage for staging long-term telemetry data.	demo	FMG-2000B
F-DMS-01475	The EOC shall obtain the Long Term Science Plan (LTSP) from the ECS SMC element.	demo	FMG-2000B
F-DMS-01480	The EOC shall obtain the Long Term Instrument Plan (LTIP) from the ECS SMC element.	demo	TLM-1120B
F-DMS-01485	The FOS shall send predicted orbit data and planning aids from the FDF to the ASTER ICC as specified in the ASTER ICC ICD.	demo	TLM-2040B
F-DMS-01490	The FOS shall provide predicted orbital information to the ASTER ICC.	demo	TLM-1120B
F-DMS-10110	The FOS shall provide the capability to exclude processing of duplicate CERES data.	inspection	TLM-2040B
F-DMS-10710	The EOC shall archive trash buffer data received from EDOS.	test	TLM-1120B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-DMS-10720	The EOC shall produce an event message stating that it has received trash buffer data from EDOS.	test	TLM-1120B
F-DMS-11010	The EOC shall be capable of providing a listing of the trash buffer data files received from EDOS.	test	TLM-1120B
F-FOS-00010	The EOC shall use and support the Space Network (SN), via the EDOS/Ecom interface, to obtain the forward and return link data communications needed to achieve full FOS functionality.	test	TLM-2040B
F-FOS-00015	The EOC shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/ Ecom/Nascom interface, as backup of the SN, to obtain forward and return link data communications.	test	TLM-2040B
F-FOS-00035	The EOC shall provide a test mode of operation that does not interfere with ongoing operations, and which supports independent FOS and subsystem tests, end-to-end tests, and integration and verification activities occurring during at a minimum: a. Spacecraft and instrument integration and test b. Pre-launch c. Upgrades and enhancements	demo	SYS-2060B
F-FOS-00040	The EOC shall have the capability to schedule its systems and communications interfaces that are used for multiple spacecraft and instrument operations and for other activities, including maintenance, upgrade, sustaining engineering, testing, and training.	demo	SYS-2060B
F-FOS-00045	The EOC shall participate in the scheduling of interface and end-to-end tests with the external elements involved, including the IP-ICCs, the spacecraft simulator(s), the SMC for other EOS elements, and EDOS for MO&DSD data delivery systems.	test	CMD-2080B CMD-2090B CMD-2100B SCH-1000B SCH-1010B SCH-1050B SCH-1190B SCH-2150B SCH-2200B
F-FOS-00070	The EOC shall manage initialization and shutdown of EOC functions.	demo	SYS-2010B SYS-2020B SYS-2030B SYS-2040B SYS-2060B
F-FOS-00075	The EOC shall provide tests for validating, verifying, and checking functional capabilities and performance for EOC functions after the EOC has been repaired or upgraded.	demo	SYS-2010B SYS-2020B SYS-2030B SYS-2040B
F-FOS-00080	The EOC shall provide standard test data sets to be used in the validation of EOC function.	inspection	OPN-0000B
F-FOS-00085	The EOC shall support instrument integration activities associated with the spacecraft prior to launch.	test	SYS-2030B
F-FOS-00090	The EOC shall use simulations and test functions of the spacecraft simulator(s) to check out the EOC functions.	demo	OPN-0000B
F-FOS-00095	The EOC shall support spacecraft and instrument tests at the integration site and at the launch site.	test	OPN-0000B
F-FOS-00098	The EOC shall provide the capabilities: a. To test both nominal operations and failure paths b. To log test activities and test configuration c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results	demo	OPN-0000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FOS-00110	The EOC shall be capable of simultaneously supporting the Independent Verification and Validation (IV&V) activities and ECS development activities, both before and after flight operations begin.	demo	OPN-0000B
F-FOS-00115	The EOC shall provide the following to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.	inspection	OPN-0000B
F-FOS-00120	The EOC shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.	inspection	OPN-0000B
F-FOS-00125	The EOC shall be able to validate at any time during the life-time of the ECS that the EOC primary functional performance is consistent with pre-defined operational benchmark tests.	demo	OPN-0000B
F-FOS-00130	The EOC shall be capable of verifying the fidelity of the EOC interface to: a. Other ECS components at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS	test	OPN-0000B
F-FOS-00140	The EOC shall provide a set of real or simulated functions which interfaces with both ECS internal and external entities for use in the following types of test: a. FOS Subsystems b. EOC c. ECS System (integration of ECS components) d. EOSDIS System (Integration of EOSDIS components)	demo	OPN-0000B
F-FOS-00145	The EOC shall support end-to-end EOS system testing and fault isolation.	test	OPN-0000B
F-FOS-00155	The EOC shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.	test	OPN-0000B
F-FOS-00160	The EOC shall generate the following: a. EOC security audit log b. EOC resource utilization report c. EOC anomaly report d. EOC maintenance report e. EOC hardware/software configuration history	analysis	OPN-0000B
F-FOS-00165	The EOC shall prepare a compliance report with the LTSP and LTIP.	demo	OPN-0000B
F-FOS-00170	The EOC shall provide the SMC with access to EOC reports, including at a minimum the following: a. Plans and schedules b. Security actions c. Maintenance information	demo	OPN-0000B
F-FOS-00175	The EOC shall administer the allocation of IST connections to the EOC.	demo	OPN-0000B
F-FOS-00180	The EOC shall monitor IST connections for changes in status.	demo	OPN-0000B
F-FOS-00200	The ECS shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of six (6) seconds for emergency real-time commands, not including the time needed for command execution.	test	OPN-0000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FOS-00220	The EOC shall support the following simultaneous activities: a. Performing mission coordination, planning, scheduling, monitoring, and commanding of the U.S. spacecraft and instruments as listed in Appendix D of the ECS Functional and Performance Specification. b. At least two of the following: mission test activities, EOC system upgrades, training, and/or maintenance.	demo	OPN-0000B
F-FOS-00225	The EOC computer hardware shall be able to grow without redesign to twice the processing, storage, and network communications capacities estimated for full system operation.	analysis	OPN-0000B
F-FOS-00230	The EOC computer processing, storage, and network communications capacity utilization shall be less than 50 percent at turnover for operations.	analysis	OPN-0000B
F-FOS-00245	The EOC shall provide time accuracy of 500 milliseconds.	analysis	OPN-0000B
F-FOS-00300	The EOC shall interface with the EOS Project Scientist for resolution of conflicts between instrument activities of equal priority.	demo	OPN-0000B
F-FOS-00305	The EOC shall interface with the EOS spacecraft and with the EOS instruments in order to perform mission operations, including planning, scheduling, commanding, and monitoring functions.	test	OPN-0000B
F-FOS-00310	The EOC shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators.	test	OPN-0000B
F-FOS-00315	The EOC shall provide commands to the EOS spacecraft simulators.	test	OPN-0000B
F-FOS-00317	The EOC shall receive flight software loads from the Software Development and Validation Facility (SDVF).	test	OPN-0000B
F-FOS-00318	The EOC shall send flight software dumps to the Software Development and Validation Facility (SDVF).	test	OPN-0000B
F-FOS-00320	The EOC shall use Ecom for data communications for the following types of data: a. Real-time telemetry data, rate-buffered telemetry data b. Command data c. TDRSS schedule requests and TDRSS schedules d. Data exchange with the FDF, NCC and EDOS	test	TLM-1020B TLM-1120B TLM-2090B
F-FOS-00325	The EOC shall receive EOS planning aids from the FDF.	test	OPN-0000B
F-FOS-00330	The EOC shall provide the FDF with subsets of spacecraft housekeeping data.	test	TLM-1150B
F-FOS-00335	The EOC shall receive TDRSS schedules and User Performance Data (UPD) from the Network Control Center (NCC).	test	TLM-1150B
F-FOS-00345	The EOC shall receive status data from EDOS.	test	TLM-1020B
F-FOS-00425	The EOC shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus	demo	FUI-1000B
F-FOS-00430	The FOS shall require a unique user identification and password for each individual user.	test	OPN-0000B
F-FOS-00435	The EOC shall report detected security violations to the SMC.	test	OPN-0000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FOS-00445	The EOC shall report all detected computer viruses and actions taken to the SMC.	test	OPN-0000B
F-FOS-00465	The IST toolkit shall provide data integrity services for remote IST users communicating with the EOC.	test	OPN-0000B
F-FOS-00470	The FOS shall provide the capability to authenticate users without sending passwords in the clear across networks.	test	OPN-0000B
F-FOS-00475	The FOS shall provide the capability to limit access of EOC files to authenticated IST users.	test	OPN-0000B
F-FOS-00480	The FOS shall provide authentication, authorization, and data integrity services that can be used by ISTs located inside and outside the United States.	test	OPN-0000B
F-FOS-00490	The EOC shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup. Ao = _f(MTBM, MTBM + MDT+ST) MTBM : Mean Time Between Maintenance (defined in the glossary) MDT: Mean Down Time (defined in the glossary) ST: Standby Time (or switchover time - defined in the glossary)	demo	OPN-0000B
F-FOS-00500	FOS functions shall have an operational availability of 0.96 at a minimum (.998 design goal) and an MDT of four (4) hours or less (1.5 hour design goal), unless otherwise specified.	analysis	OPN-0000B
F-FOS-00505	The FOS shall have an operational availability of 0.9998 at a minimum (.99997 design goal) and an MDT of one (1) minute or less (0.5 minute design goal) for critical real-time functions that support: a. Launch b. Early orbit checkout c. Orbit adjustment d. Anomaly investigation e. Recovery from safe mode f. Routine real-time commanding and associated monitoring for spacecraft and instrument health and safety	analysis	OPN-0000B
F-FOS-00510	The EOC shall have no single point of failure for functions associated with real-time operations of the spacecraft and instruments.	analysis	OPN-0000B
F-FOS-00515	The FOS shall have an operational availability of 0.99925 at a minimum (.99997 design goal) and an MDT of five (5) minutes or less (0.5 minute design goal) for non-critical real-time functions.	analysis	OPN-0000B
F-FOS-00520	The FOS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity.	analysis	OPN-0000B
F-FOS-00605	The FOS shall enable the existence of additional ISTs if required by the PI/TL to accommodate instrument team members, who may be at geographically separate locations.	analysis	OPN-0000B
F-FOS-10200	The EOC shall utilize no more than 50 percent of each of its primary resources such as central processing units (CPUs), disk storage devices, and network communications capacities during any 20-minute period of AM-1 operational load conditions.	analysis	OPN-0000B
F-FOS-10205	The EOC shall utilize no more than 50 percent of its primary resources during any 20-minute period of peak load AM-1 operational conditions.	analysis	OPN-0000B
F-FOS-10210	The FOS shall support up to 15 operational ISTs for the AM-1 mission that are connected to the EOC at any one time.	analysis	OPN-0000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FOS-10215	The FOS shall provide ten dedicated, simultaneous IST connections at the following locations: a. CERES: 2 in building 1250, LaRC, 2 in building TBD b. MODIS: 2 at GSFC c. MOPITT: 1 at University of Toronto; 1 at NCAR in Boulder d. MISR: 2 at JPL	analysis	OPN-0000B
F-FOS-10220	The FOS shall provide six (6) additional, non-dedicated IST connections at the following locations: a. CERES: 4 [1 at SAIC, 1 at building 1300, LaRC; 1 each at 2 other buildings TBD, LaRC b. MODIS: 1 at GSFC c. MISR: 1 at JPL	analysis	OPN-0000B
F-FUI-01125	The FOS shall allow a room to consist of 0 to 12 windows, with their respective sizes and positions in their default, tiled and user modified states.	test	FUI-2080A
F-FUI-01150	The FOS shall provide the capability to define the tiled position and size of each of the windows in a room.	test	FUI-2080A
F-FUI-01170	The FOS shall provide the capability to dynamically reposition windows in a room.	demo	FUI-2000B
F-FUI-01175	The FOS shall provide the capability to dynamically resize windows in a room.	demo	FUI-2000B
F-FUI-01180	The FOS shall provide the capability for a user to dynamically switch between room states.	test	FUI-2080A
F-FUI-01185	The FOS shall provide the capability to specify the border colors for windows displaying real-time, playback, simulated, event history and multiple source data for all users.	test	FUI-2080A
F-FUI-01200	The FOS shall provide the capability to specify the default printer.	demo	FUI-2000B
F-FUI-01205	The FOS shall provide the capability to specify the default data directories within the system.	demo	FUI-2000B
F-FUI-01210	The FOS shall provide the capability to specify the default type of screen snap to perform, which includes: a. snap a printer b. snap to a file	demo	FUI-2000B
F-FUI-01215	The FOS shall provide the capability to specify the default color intensities for the real-time windows.	demo	FUI-2000B
F-FUI-01220	The FOS shall provide the capability to specify the default colors for non real-time windows.	demo	FUI-2000B
F-FUI-01225	The FOS shall provide the capability to select the default font styles to be used from a predefined selection.	demo	FUI-2000B
F-FUI-01230	The FOS shall provide the capability to modify the quick access room selections in the control window.	demo	FUI-2000B
F-FUI-01235	The FOS shall, upon user login, load the following default settings: a. default printer b. default data directories c. default screen snap d. default real-time color intensities e. default window colors f. default font styles g. default room selections	demo	FUI-2000B
F-FUI-01340	The FOS shall allow the user to initiate functions using function keys.	demo	FUI-2000B
F-FUI-01400	The FOS shall provide a login screen that allows a user to enter a user name and password.	test	FUI-1000B SYS-2070B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-01405	The FOS shall allow a user to specify a user type (e.g., CAC, OLE, PI/TL, etc.) for the current login session.	test	FUI-1000B
F-FUI-01410	The FOS shall allow a user to have one or more user types.	test	FUI-1000B
F-FUI-01415	The FOS shall allow a user to switch to an alternate user type during a session.	test	FUI-1000B
F-FUI-01420	The IST shall provide the capability for a PI/TL to enter a list of authorized IST users.	test	FUI-1000B
F-FUI-01425	The EOC shall provide the capability for an EOC Manager to enter a list of authorized EOC users.	test	FUI-1000B
F-FUI-01430	The IST shall provide the capability for a PI/TL to delete IST users from the system.	test	FUI-1000B
F-FUI-01435	The EOC shall provide the capability for an EOC Manager to delete EOC users from the system.	test	FUI-1000B
F-FUI-01440	The IST shall provide the capability for a PI/TL to change the user types for IST users in the system.	test	FUI-1000B
F-FUI-01445	The EOC shall provide the capability for an EOC Manager to change the user types for EOC users in the system.	test	FUI-1000B
F-FUI-01565	The FOS shall allow procedures to invoke other procedures.	test	FUI-1000B
F-FUI-01580	The FOS shall provide a directive that allows a user to execute a standard UNIX shell command.	test	FUI-2005A
F-FUI-01600	The FOS shall provide the capability to specify the type of screen snap to perform, which includes: a. snap to a printer b. snap to a file	demo	EVT-2000B
F-FUI-01605	The FOS shall provide the capability to snap a window.	demo	EVT-2000B
F-FUI-01610	The FOS shall provide the capability to specify the color intensities for the real-time windows.	demo	EVT-2000B
F-FUI-01615	The FOS shall provide the capability to specify the colors for non real-time windows.	demo	EVT-2000B
F-FUI-01620	The FOS shall provide the capability to select the font styles to be used from a predefined selection.	demo	EVT-2000B
F-FUI-02100	The FOS shall allow a quick message to contain a maximum of 240 characters.	demo	EVT-2000B
F-FUI-02110	The FOS shall visually delineate emergency quick messages from information and warning quick messages.	demo	EVT-2000B
F-FUI-02115	The FOS shall provide the following message types: a. emergency b. warning c. information	demo	EVT-2000B
F-FUI-02200	The FOS shall allow the user to send files from a user station or server.	test	FMG-2010B
F-FUI-02202	The FOS shall allow users to delete files from their local storage area.	test	FMG-2010B
F-FUI-02205	The FOS shall allow the user to request files to be sent from other FOS user station or server.	demo	FMG-2010B
F-FUI-02210	The FOS shall allow the user to select files from available categories.	demo	FMG-2010B
F-FUI-02215	The FOS shall provide a find capability for selecting files.	demo	FMG-2010B
F-FUI-02220	The FOS shall provide a method to select multiple files to be sent to multiple destinations.	demo	FMG-2010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-02225	The FOS shall provide a view of selected files to be sent.	demo	FMG-2010B
F-FUI-02230	The FOS shall provide a list of candidate destinations from which to select the destinations for the file transfer.	demo	FMG-2010B
F-FUI-02235	The FOS shall allow the user to deselect files that were selected.	demo	FMG-2010B
F-FUI-02240	The FOS shall provide a notification to the user that: a. a file transfer is in progress b. a file transfer has been completed c. a file transfer error has occurred	demo	FMG-2010B
F-FUI-02300	The FOS shall provide the user the capability to select a time range for the telemetry data to play, including: a. start time b. stop time c. begin time	demo	TLM-1130B
F-FUI-02305	The FOS shall provide the user the capability to select the replay rate.	test	TLM-2050B
F-FUI-02310	The FOS shall provide the means of stepping forward through the telemetry data by specifying the amount of time in seconds.	test	TLM-1130B
F-FUI-02315	The FOS shall allow the user to pause the replay of the telemetry data sequence.	demo	TLM-1130B
F-FUI-02320	The FOS shall allow the user to resume the paused replay of the telemetry data sequence.	demo	TLM-1130B
F-FUI-02325	The FOS shall provide the user the capability to reset the begin time when the replay is in pause mode.	test	TLM-1130B
F-FUI-02330	The FOS shall provide a visual indication of the location of the replay data. This display will include: a. start time b. stop time c. position of current time	demo	TLM-1130B
F-FUI-02335	The FOS shall provide the user a reset capability that will reset the replay time to the last established begin time.	test	TLM-2050B
F-FUI-02400	The FOS shall allow the user to browse on-line technical documentation.	demo	FUI-2010B
F-FUI-02410	The FOS shall provide a document reader with a search capability.	demo	FUI-2010B
F-FUI-02415	The document reader shall provide the following navigational schemes: a. hypertext forward b. hypertext trace back c. page forward d. page backward e. jump to home page (table of contents) f. search/find on a keyword	demo	FUI-2010B
F-FUI-02420	The FOS shall provide the user with the capability to cancel document retrieval requests.	demo	FUI-2010B
F-FUI-02425	The FOS shall provide the user with the capability to open one or more document reader windows.	demo	FUI-2010B
F-FUI-02430	The FOS shall provide a history trace window that will keep track of where the user has been throughout a document viewing session.	demo	FUI-2010B
F-FUI-02435	The FOS shall provide the user with the capability to clear the document reader history trace window.	demo	FUI-2010B
F-FUI-02440	The FOS shall provide the capability to input a document.	test	FUI-2010B
F-FUI-02445	The FOS shall provide the capability to update a document.	test	FUI-2010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-02450	The FOS shall provide the capability to delete a document.	test	FUI-2010B
F-FUI-02500	The FOS shall provide an electronic mail (e-mail) capability.	demo	FUI-2020B
F-FUI-02505	The FOS shall allow the user to send an e-mail message to multiple destinations.	test	FUI-2020B
F-FUI-02510	The FOS shall allow a destination to be designated either: a. a user b. a position c. a site	demo	FUI-2020B
F-FUI-02515	The FOS shall allow the user to attach a file to an e-mail message.	test	FUI-2020B
F-FUI-02520	The FOS shall provide the user a simple editor for composing an e-mail message.	demo	FUI-2020B
F-FUI-02525	The FOS shall provide the user the following e-mail editing capabilities: a. cut b. copy c. paste d. delete e. undo	demo	FUI-2020B
F-FUI-02530	The FOS shall provide the user a method for replying to an e-mail message that was sent.	demo	FUI-2020B
F-FUI-02535	The FOS shall allow the user to list all received messages.	demo	FUI-2020B
F-FUI-02540	The FOS shall allow the user to save an e-mail message.	demo	FUI-2020B
F-FUI-02545	The FOS shall allow the user to delete an e-mail message.	demo	FUI-2020B
F-FUI-02550	The FOS shall provide the user the following e-mail viewing capabilities: a. view previous message b. view next message c. find a message by: 1. date/time 2. author 3. subject keyword search	demo	FUI-2020B
F-FUI-02600	The FOS shall provide the user a palette of available widgets from which the user may dynamically build a real-time display.	demo	FUI-2060A
F-FUI-02605	The FOS shall allow the user to drag widgets via the pointing device from the palette and drop them into the display.	demo	FUI-2060A
F-FUI-02610	The FOS shall provide a palette that shall include: a. label b. field c. (deleted) d. (deleted) e. (deleted) f. graph g. table h. deleted) i. (deleted) j. (deleted) k. data source l. (deleted) m. (deleted) n. horizontal separator o. vertical separator p. schematic graphic items (point, line, icon, circle, rectangle, ellipse, and polygon)	demo	FUI-1010B FUI-2040B FUI-2050B FUI-2060A

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-02635	The FOS shall allow the user to modify an existing real-time display definition.	test	FUI-2060A
F-FUI-02700	The FOS shall allow the user to browse on-line help documentation.	demo	FUI-2030B
F-FUI-02830	The FOS shall verify that the procedure directives are consistent with the procedure type, except for user-defined procedures, when a save operation is attempted.	test	FUI-1020B
F-FUI-02835	The FOS shall provide an authorized user the capability to delete existing procedures.	test	FUI-1020B
F-FUI-02840	The FOS shall provide a user the capability to print existing procedures.	demo	FUI-2010A
F-FUI-02860	The FOS shall provide a user the capability to request validation of procedures.	demo	FUI-2010A
F-FUI-02920	The FOS shall provide the capability to create a custom report template composed of the following information: a. ASCII files b. off-line analysis products c. screen snaps d. blocks of descriptive text e. other routine reports	test	FUI-1020B
F-FUI-02925	The FOS shall provide the following routine report templates: a. statistical reports b. power performance c. propulsion performance d. instrument performance e. anomaly reports f. memory comparison report g. memory image report h. memory map report i. event history report j. down link ordered report k. parameter out-of-limits report	demo	EVT-2010B FUI-1020B
F-FUI-02950	The FOS shall provide the capability to save a report template.	test	FUI-1020B
F-FUI-02955	The FOS shall provide the capability to modify an existing report template.	demo	FUI-1020B
F-FUI-02960	The FOS shall provide the capability to delete a report template.	demo	FUI-1020B
F-FUI-02961	The FOS shall provide the capability to specify the report margins.	demo	FUI-1020B
F-FUI-02962	The FOS shall provide the capability to specify the report fonts.	demo	FUI-1020B
F-FUI-02963	The FOS shall provide the capability to specify the report title.	demo	FUI-1020B
F-FUI-02964	The FOS shall provide the capability to specify a default destination for the completed report (file, printer, browser/editor).	demo	FUI-1020B
F-FUI-02965	The FOS shall provide the capability to specify report author name.	demo	FUI-1020B
F-FUI-02967	The FOS shall provide the capability to create a report from a custom or routine report template.	test	FUI-1020B
F-FUI-02970	The FOS shall provide the capability to accept report generation requests.	demo	FUI-1020B
F-FUI-02975	The FOS shall provide the capability to insert a specified file into a report.	test	FUI-1020B
F-FUI-02980	The FOS shall provide the capability to insert a specified off-line analysis product into a report.	test	FUI-1020B
F-FUI-02985	The FOS shall provide the capability to insert a specified screen snap into a report.	test	FUI-1020B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-02990	The FOS shall provide the capability to insert predefined blocks of text into a report.	test	FUI-1020B
F-FUI-02991	The FOS shall provide the capability to insert routine reports into a report.	test	FUI-1020B
F-FUI-02995	The FOS shall provide the capability to save a completed report.	test	FUI-1020B
F-FUI-03000	The FOS shall provide the capability to initiate the printing of a completed report.	demo	FUI-1020B
F-FUI-03005	The FOS shall provide the capability to initiate the report browser/editor with a completed report.	demo	FUI-1020B
F-FUI-03010	The FOS shall provide the capability to cancel the processing of a report generation request.	test	FUI-1020B
F-FUI-03025	The FOS shall provide the capability to display a list of existing report templates.	demo	ANA-2010B
F-FUI-03030	The FOS shall provide the capability to display a list of existing reports.	demo	ANA-2010B
F-FUI-03035	The FOS shall provide the capability to initiate the report template builder with a template selected from the template list for browsing or editing.	demo	ANA-2010B
F-FUI-03040	The FOS shall provide the capability to initiate the report generator with a template selected from the template list.	demo	ANA-2010B
F-FUI-03045	The FOS shall provide the capability to select a report from the report list for browsing or editing.	demo	ANA-2010B
F-FUI-03050	The FOS shall provide the capability to display an existing report.	demo	ANA-2010B
F-FUI-03055	The FOS shall provide the capability to print an existing report.	demo	ANA-2010B
F-FUI-03060	The FOS shall provide the capability to edit an existing report.	test	ANA-2010B
F-FUI-03061	The FOS shall provide the capability to save an existing report.	demo	ANA-2010B
F-FUI-04050	The FOS shall provide the capability to specify mission schedule access permissions on a timeline display.	test	SCH-2200B
F-FUI-04090	The FOS shall provide the capability to display the start and end times of the Detailed Activity Schedule on the timeline display.	test	SCH-2200B
F-FUI-04100	The FOS shall provide the capability to highlight activities that violate hard and soft constraints on the timeline display.	test	SCH-2200B
F-FUI-04130	The FOS shall provide the capability to display the time period that a load is valid for uplink on the timeline display.	test	SCH-1150B
F-FUI-04140	The FOS shall provide the capability to display detailed information about activities and events selected from the timeline display.	test	SCH-2200B
F-FUI-04280	The FOS shall provide the capability to display the limit of orbit data from the FDF on the timeline.	test	SCH-1010B
F-FUI-05105	The FOS shall provide an authorized user the capability to enter table data into a template using the data from an existing table load.	test	SCH-2200A
F-FUI-05200	The FOS shall allow an authorized user to enter RTS data that will be used to generate an RTS load.	test	SCH-2200B
F-FUI-05205	The FOS shall provide an authorized user the capability to request the generation of an RTS load.	test	SCH-2200B
F-FUI-05210	The FOS shall display any validation errors detected in the RTS data.	demo	ANA-2010B
F-FUI-05215	The FOS shall notify the requester when an RTS load has been successfully generated.	demo	ANA-2010B
F-FUI-05220	The FOS shall display any errors encountered during the RTS load generation process.	demo	ANA-2010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-05300	The FOS shall provide the capability to display the ground scripts corresponding to a user - specified portion of the continuous ground schedule.	demo	SCH-2040B
F-FUI-05315	The FOS shall provide a user the capability to display the contents of a ground script with expanded procedures.	demo	SCH-2040B
F-FUI-05335	The FOS shall provide a user the capability to print a ground script.	demo	SCH-2040B
F-FUI-05340	The FOS shall provide a user the capability to print a ground script with expanded procedures.	analysis	SCH-2040B
F-FUI-05400	The FOS shall provide a user the capability to display the command-to-memory map of an ATC buffer.	demo	SCH-1270B
F-FUI-05405	The FOS shall provide a user the capability to highlight the contents of the ATC buffer according to one or more of the following criteria: a. executed commands b. commands awaiting execution c. commands associated with a specified command inhibit group d. ATC pseudo-ops e. critical commands f. (reserved) g. empty areas (no-ops) h. commands associated with a specific instrument, and i. commands associated with a specific spacecraft subsystem.	demo	SCH-1270B
F-FUI-05500	The FOS shall provide a user the capability to display the map of the RTS buffers.	demo	SCH-1270B
F-FUI-05505	The FOS shall provide a user the capability to highlight the RTS buffers according to one or more of the following criteria: a. critical commands b. (reserved) c. commands associated with a specific instrument d. commands associated with a specific spacecraft subsystem e. RTS ownership f. undefined RTS	demo	SCH-1270B
F-FUI-05510	The FOS shall provide a user the capability to display RTS linkages.	demo	SCH-1270B
F-FUI-05515	The FOS shall provide a user the capability to display the command-to-memory map of an RTS buffer.	demo	SCH-1270B
F-FUI-05600	The FOS shall provide a user the capability to display catalog information for each load uplinked or generated during the last seven days, at a minimum. Note: Catalog information includes: a load name b. load type c. valid load times d. load source e. load destination	demo	SCH-1240B
F-FUI-05605	The FOS shall provide a CAC the capability to generate a load uplink directive for a selected load.	test	SCH-1240B
F-FUI-06200	The FOS shall provide an authorized user the capability to generate a command request that contains: a. a procedure to execute b. any instructions that the FOT should follow.	test	CMD-2040B
F-FUI-06205	The FOS shall provide an authorized user the capability to send a command request to the Ops Controller.	test	CMD-2040B
F-FUI-06210	The EOC shall notify the Ops Controller of pending command requests.	demo	CMD-2040B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-06215	The FOS shall display the status of the pending and accepted command requests. The status display shall contain: a. request Id b. request summary c. status (i.e., accepted, pending) d. originator e. date/time received f. date/time acted upon (accepted or rejected). g. instrument Id h. spacecraft Id	demo	CMD-2040B
F-FUI-06220	The FOS shall allow a user to display the contents of a command request.	demo	CMD-2040B
F-FUI-06225	The FOS shall notify the originator when a command request is accepted.	test	CMD-2040B
F-FUI-06230	The FOS shall notify the originator when a command request is rejected. This notification shall contain the reason for the rejection.	test	CMD-2040B
F-FUI-06235	The EOC shall provide the CAC the capability to merge the command request procedure with the current executing ground script directives.	demo	CMD-2040B
F-FUI-06240	The EOC shall indicate to the CAC the syntax check status of the procedure referenced in the command request.	demo	CMD-2040B
F-FUI-06245	The EOC shall indicate to the CAC the validation status of all procedures referenced in the command request.	demo	CMD-2040B
F-FUI-06310	The FOS shall display a count-down timer for the next three directives in the current ground script.	demo	CMD-2090B CMD-2110B SCH-2040B
F-FUI-06330	The FOS shall display the following verification status for command directives depending upon whether the corresponding verification mode is enabled: a. prerequisite state check pass/fail b. receipt of command at the spacecraft/instrument pass/fail (command verification) c. execution of the command by the spacecraft/instrument pass/fail (telemetry verification)	test	CMD-2010A CMD-2120B
F-FUI-06340	The FOS shall suspend ground script execution if any of the enabled verification checks fail.	demo	CMD-2010B
F-FUI-06345	The EOC shall provide the CAC the capability to set (on/off) prerequisite state checking.	demo	CMD-2010B CMD-2015A
F-FUI-06350	The EOC shall provide the CAC the capability to set (on/off) command verification checking.	demo	CMD-1000B
F-FUI-06355	The EOC shall provide the CAC the capability to set (on/off) telemetry verification checking.	demo	CMD-2020B
F-FUI-06380	The EOC shall provide the CAC the capability to apply a bias time to directives in the ground script.	test	CMD-2005A CMD-2120B
F-FUI-06465	The EOC shall save the "as-used" ground script and make it available for future analysis.	test	CMD-2120B
F-FUI-06470	The FOS shall display all commands manually input.	demo	CMD-2020B
F-FUI-07100	The FOS shall allow the user to select an update rate from 1 to 60 seconds.	test	CMD-2005A
F-FUI-07120	The FOS shall allow the user to invoke quick analysis on the selected telemetry parameters.	demo	CMD-2020B
F-FUI-07125	The FOS shall allow the user to pause the display.	demo	CMD-2020B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-07130	The FOS shall allow the user to resume the display.	demo	CMD-2020B
F-FUI-07200	The FOS shall provide alphanumeric displays that are capable of displaying the following: a. the descriptor or mnemonic of a telemetry parameter b. the current state of a discrete telemetry parameter c. the current value of an analog telemetry parameter d. the current state of an analog telemetry parameter based on a range of predefined values e. whether data associated with a telemetry parameter is suspect (bad quality) f. whether data associated with a telemetry parameter is static g. whether an analog telemetry value has violated a range limit h. whether an analog telemetry value has violated a delta limit i. descriptive labels j. static descriptive text k. horizontal and vertical separator lines l. Universal Time Coordinated (UTC) m. spacecraft time n. current orbit number o. data source (real-time, replay, simulated) p. current major/minor frame counts q. current telemetry format r. current telemetry rate s. spacecraft Id	test	FUI-2060A
F-FUI-07215	The FOS shall allow the user to change a telemetry parameter's label from descriptor to mnemonic.	demo	CMD-2020B
F-FUI-07220	The FOS shall allow the user to change a telemetry parameter's label from mnemonic to descriptor.	demo	CMD-2020B
F-FUI-07245	The FOS shall allow the user to change the display of selected telemetry values to any of the following formats: a. converted b. decoded c. raw	demo	CMD-2020B
F-FUI-07250	The FOS shall allow the user to change the display representation of selected telemetry values to one of the following: a. formatted b. octal c. hex d. binary	demo	CMD-2020B
F-FUI-07255	The FOS shall prevent a change in the displayed telemetry format when a non-supported format for a particular parameter is requested (i.e., when a decoded format is requested for a ground telemetry parameter).	demo	CMD-2020B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-07300	The FOS shall provide graphs that are capable of displaying the following: a. up to six telemetry values vs. time, or b. up to six telemetry values vs. a telemetry value c. the high and low, red and yellow limits of the telemetry parameters as lines(dotted, dashed or solid) d. telemetry values as a symbol(optional) e. lines between telemetry parameters (optional) shall be displayed as dotted, dashed or solid f. axis lines (displayed or not) g. axis labels h. axis scales i. axis scale labels j. optional grid lines (dotted, dashed or solid) k. title l. current range of time displayed m. total range of time available	test	TLM-2040A
F-FUI-07305	The FOS shall allow the user to select up to six telemetry parameters to graph.	demo	CMD-2020B
F-FUI-07310	The FOS shall allow the user to plot data from different times and/or different data sources on a. a two dimensional graph b. a three dimensional graph	analysis	TLM-2040A
F-FUI-07315	The FOS shall display the minimum, current and maximum values of a selected telemetry parameter within the current visible area of the graph.	demo	CMD-2020B
F-FUI-07320	The FOS shall allow the user to select a telemetry parameter from the graph utilizing a pointing device.	demo	CMD-2020B
F-FUI-07325	The FOS shall allow the user to select a range of times or X values, from the total range of time or X values available, in which to view the data.	demo	CMD-2020B
F-FUI-07330	The FOS shall have the capability to capture all occurrences of a parameter between screen updates, and then display the captured data at the next update.	analysis	CMD-2020B
F-FUI-07345	The FOS shall allow the user to select a line style with which a telemetry parameter is displayed.	demo	CMD-2020B
F-FUI-07360	The FOS shall allow the user to specify the grid line style (dotted, dashed or solid).	demo	CMD-2020B
F-FUI-07365	The FOS shall allow the user to specify the grid granularity.	demo	CMD-2020B
F-FUI-07370	The FOS shall allow the user to specify which high and low, red and yellow limit lines to display.	demo	CMD-2020B
F-FUI-07375	The FOS shall allow the user to specify limit line style (dotted, dashed, or solid).	demo	CMD-2020B
F-FUI-07388	The FOS shall allow the user to specify the axis labels.	demo	CMD-2020B
F-FUI-07394	The FOS shall print graphs in either landscape or portrait orientation.	demo	CMD-2020B
F-FUI-07396	The FOS shall allow the user to print up to 4 graphs per page.	demo	CMD-2020B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-07400	The FOS shall provide tables that are capable of displaying the following: a. up to 50 discrete and analog real-time telemetry values over a specified time interval b. the associated time at each interval c. the descriptor or mnemonic of each telemetry value d. title e. current range of time displayed	test	TLM-2050A
F-FUI-07415	The FOS shall provide the user with the capability to specify whether the telemetry value is represented by its mnemonic or descriptor.	demo	TLM-2050A
F-FUI-07425	The FOS shall provide the user with the capability to capture all occurrences of a telemetry value between screen updates, and then display the captured data at the next screen update.	analysis	TLM-2050A
F-FUI-07500	The FOS shall provide a display of two-dimensional schematic drawings.	demo	TLM-1070B
F-FUI-07505	The FOS schematic drawings shall contain: a. points b. lines c. icons d. text e. circles f. rectangles g. ellipses h. polygons	test	TLM-1080B
F-FUI-07510	The FOS shall color code schematic components, changing colors according to the telemetry parameter limits.	test	TLM-1080B
F-FUI-07515	The FOS shall drive the color coded schematic components with telemetry values.	test	TLM-1080B
F-FUI-07520	The FOS shall provide the user the capability to save a snapshot of the schematic.	demo	TLM-1080B
F-FUI-07525	The FOS shall provide the user the capability to print a snapshot of the schematic.	demo	TLM-1080B
F-FUI-07600	The FOS shall display the following PDB information about discrete and analog telemetry parameters: a. the descriptor b. the mnemonic c. the valid states of a discrete telemetry value d. the conversion polynomial of an analog telemetry value e. the delta limits for a telemetry value f. the high and low, red and yellow limits for a telemetry value g. the cycles from which the telemetry value is extracted h. the telemetry values on which a derived telemetry value is based i. parameter Id j. spacecraft Id	analysis	TLM-2050A
F-FUI-07710	The FOS shall provide a count down clock. The count down clock will first count down to the acquisition of signal time (AOS). After AOS, it will count down to the loss of signal time (LOS).	test	TLM-2050A
F-FUI-07720	The FOS shall provide one status window for each logical string connection.	demo	TLM-2050A
F-FUI-08105	The FOS shall provide a user the capability to display ground system equipment status.	test	SYS-1000B
F-FUI-08110	The FOS shall provide a user the capability to display ground system parameter values.	test	SYS-1000B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-08115	The FOS shall provide a user the capability to display user workstation configuration data.	test	SYS-1000B
F-FUI-09112	The FOS shall provide the capability to specify a parameter for input to an algorithm when building an analysis request for historical data analysis. Algorithms can be one of the following: a. user-defined b. system supplied	demo	TLM-2050A
F-FUI-09115	The FOS shall provide the capability for an analysis request to be submitted using the standing order process.	test	SYS-1000B
F-FUI-09140	The FOS shall provide the capability to display a request queue of up to 10 submitted analysis requests.	demo	TLM-2050A
F-FUI-09145	The FOS shall provide the capability to assign priority to a pending request in the request queue.	demo	TLM-2050A
F-FUI-09150	The FOS shall provide the capability to delete a request from the request queue display.	demo	TLM-2050A
F-FUI-09160	The FOS shall provide the capability to select output products for a completed request from the request queue display.	test	SYS-1000B
F-FUI-09200	The FOS shall provide the capability to display off-line analysis results in the following output views: a. graph (see 9.1.7.3 for graph requirements) b. table (see 9.1.7.4 for table requirements) c. analysis report (see section 9.1.2.9 for report requirements)	test	ANA-1000B ANA-2090B
F-FUI-09205	The FOS shall provide the capability to save analysis results.	demo	ANA-2000A
F-FUI-09210	The FOS shall provide the capability to print analysis results.	demo	ANA-1000B
F-FUI-09215	The FOS shall provide the capability to save analysis output view formats.	demo	ANA-1000B
F-FUI-09220	The FOS shall provide the capability to modify analysis output view formats. Format options include the following: a. engineering units b. raw values c. time	test	ANA-1000B
F-FUI-09225	The FOS shall provide the capability to use existing data sets as input for analysis requests.	test	ANA-1000B
F-FUI-09300	The FOS shall accept and process analysis requests containing at a minimum: a. date/time to start processing the request b. date/time to stop processing the request c. request interval (every n passes, every n orbits, every n hours, every n days, every n weeks, every n months) d. telemetry analysis requests e. report templates f. request name g. name of the person who submitted the request	test	ANA-1070B
F-FUI-09305	The FOS shall generate telemetry analysis requests and/or report requests at the specified request interval from the start date to the stop date.	test	ANA-1070B
F-FUI-09310	The FOS shall receive the associated telemetry analysis data sets, at each request interval, and will initiate the generation of the output products based on the telemetry analysis and/or report requests.	test	ANA-1070B ANA-2090B
F-FUI-09315	The FOS shall produce status for executing standing orders.	test	ANA-1070B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-09350	The FOS standing order browser shall provide information on standing orders including, at a minimum: a. request name b. next interval start time c. standing order status (i.e. active, halted, processing, completed) d. name of person who submitted the request	demo	ANA-1070B ANA-2090B
F-FUI-09355	The FOS standing order browser shall provide the capability to sort the standing orders by the following criteria including at a minimum: a. request name b. next interval start time c. standing order status d. name of person who submitted request	demo	ANA-1070B
F-FUI-09360	The FOS shall allow the user to view the results of a completed standing order analysis request using the Analysis Product Selector and/or the Report Browser/Editor.	demo	ANA-1070B
F-FUI-09363	The FOS shall allow an authorized user to modify the standing order's interval.	demo	ANA-1070B
F-FUI-09365	The FOS shall enable an authorized user to suspend a standing order.	test	ANA-1070B
F-FUI-09370	The FOS shall enable an authorized user to resume a standing order.	test	ANA-1070B
F-FUI-09375	The FOS shall enable an authorized user to delete a standing order.	test	ANA-1070B
F-FUI-09410	The FOS shall provide the following output views for real-time analysis requests: a. alphanumeric telemetry b. real-time graph c. real-time table d. info window	test	ANA-1070B
F-FUI-09415	The FOS shall provide the capability to build an analysis request on real-time data that contain the following: a. spacecraft Id b. spacecraft subsystem/instrument c. telemetry parameters d. real-time output views e. output view formats	test	ANA-1070B
F-FUI-09500	The FOS shall provide the capability to register an algorithm that contains the following: a. algorithm name b. algorithm object file name c. output parameter name d. input parameters	test	ANA-2000B
F-FUI-09510	The FOS shall provide the capability to select a registered algorithm per selected parameters when building an analysis request.	test	ANA-2000B
F-FUI-09515	The FOS shall provide the capability to select valid discrete and analog values to be used per algorithm.	test	ANA-2000B
F-FUI-09640	The FOS shall provide the results of an event history request in the event history display.	test	EVT-2010B
F-FUI-09645	The FOS shall visually alert a user that an event has occurred.	test	EVT-2010B
F-FUI-09650	The FOS shall allow the user to activate and deactivate the generation of auditory alarms associated with the occurrence of events.	demo	EVT-2010B
F-FUI-09700	The FOS shall provide the user with the capability to request event history data.	test	EVT-2010B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-FUI-09705	The event history request shall include filtering of events by: a. time period b. spacecraft Id c. instrument d. spacecraft subsystem e. event message type	test	EVT-2010B
F-FUI-11200	The FOS shall allow a user to transfer AM-1 Solid State Recorder (SSR) trash buffer files to the Software Development and Validation Facility (SDVF).	test	SCH-1190B
F-FUI-12310	The FOS shall allow a user to select a replay rate from 1 kilobit per second up to 150 kilobits per second.	demo	TLM-2050B
F-FUI-12800	The FOS shall provide the capability to import and convert OASIS procedures. Any OASIS directives that are not directly convertible to ECL directives will be flagged as "UNCONVERTED".	analysis	SCH-1190B
F-FUI-17265	The FOS shall provide the capability to display the inhibit flags.	test	TLM-2050B
F-FUI-17270	The FOS shall provide the capability to display the spacecraft activity log.	test	TLM-1120B
F-FUI-17800	The FOS shall provide a SSR analysis window that contains: a. buffer pointers b. buffer status c. playback state d. RF failures	test	TLM-1120B
F-FUI-17810	The FOS shall display recommended playback data loss recovery procedures.	test	TLM-1120B
F-FUI-17820	The FOS shall display recommended RF fault link correction procedures.	test	SCH-2020A
F-PAS-00020	The EOC shall provide the capability for an authorized user to create a long term spacecraft operations plan.	test	TLM-1120B
F-PAS-00025	The EOC shall provide the capability for an authorized user to maintain a long term spacecraft operations plan.	test	SCH-2020A
F-PAS-00030	The EOC shall provide the capability for an authorized user to update a long term spacecraft operations plan.	test	TLM-1120B
F-PAS-00035	The EOC shall provide the capability for an authorized user to view a long term spacecraft operations plan.	test	SCH-2020A
F-PAS-00100	The FOS shall provide the capability for an authorized user to view any portion of the mission schedule.	test	SCH-2020A
F-PAS-00103	The FOS shall provide the capability for an authorized user to restrict user privileges for updating portions of the mission schedule.	test	TLM-1120B
F-PAS-00105	The FOS shall provide the capability for an authorized user to make updates to a mission schedule for a specific spacecraft.	test	TLM-1120B
F-PAS-00115	The FOS shall provide the capability for an authorized user to create a mission schedule for a specific spacecraft.	test	TLM-1120B
F-PAS-00120	The FOS shall provide the capability for an authorized user to delete a mission schedule for a specific spacecraft.	test	SCH-2020A
F-PAS-00135	The FOS shall provide the capability for an authorized user to update portions of a mission schedule for a specific spacecraft.	test	SCH-2020A
F-PAS-00137	The FOS shall accept predicted orbit data and planning aids for EOS spacecraft from the FDF.	demo	TLM-1120B
F-PAS-00138	The FOS shall make predicted orbit data and planning aids for a specific spacecraft available to authorized users.	test	SCH-2020A

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-PAS-00140	The FOS shall provide the capability to notify the user when he attempts to schedule an activity beyond the limit of the predicted orbit data provided by the FDF.	test	TLM-1120B
F-PAS-00145	The FOS shall provide the capability for an authorized user to receive updated spacecraft orbit data from the FDF.	demo	TLM-1120B
F-PAS-00150	The FOS shall provide the capability for an authorized user to incorporate updated orbit data from the FDF into the mission schedule for a specific spacecraft.	test	SCH-2020A
F-PAS-00153	The FOS shall notify the user when an activity in a mission schedule is affected by updated orbit data from FDF.	test	TLM-1120B
F-PAS-00155	The FOS shall provide FDF orbit data to the ECS SDPS.	demo	SCH-2020A
F-PAS-00160	The FOS shall provide the capability for an authorized user to make 'what-if' changes without affecting the mission schedule for a specific spacecraft.	test	SCH-2020A SCH-2210B
F-PAS-00165	The FOS shall provide the capability for an authorized user to discard 'what-if' changes without affecting the mission schedule for a specific spacecraft.	test	SCH-2015B SCH-2210B
F-PAS-00170	The FOS shall provide the capability for an authorized user to save 'what-if' changes to the mission schedule without affecting the mission schedule for a specific spacecraft.	test	SCH-2210B
F-PAS-00175	The FOS shall provide the capability for an authorized user to retrieve previously saved 'what-if' changes without affecting the mission schedule for a specific spacecraft.	test	SCH-2210B
F-PAS-00180	The FOS shall provide the capability for an authorized user to delete previously saved 'what-if' changes without affecting the mission schedule for a specific spacecraft.	test	SCH-2210B
F-PAS-00185	The FOS shall provide the capability for an authorized user to incorporate 'what-if' changes to the mission schedule for a specific spacecraft.	test	SCH-2210B
F-PAS-00195	The FOS shall prevent a user from inputting 'what-if' requests to any portion of a mission schedule that he does not have update access for.	test	SCH-2210B
F-PAS-00335	The FOS shall provide the capability for an authorized user to delete an activity from the mission schedule.	test	SCH-2210B
F-PAS-00340	The FOS shall provide the capability for an authorized user to search for and find an activity on the mission schedule by: its name; or its identifier; or the time.	test	SCH-2015B SCH-2200B
F-PAS-00355	The FOS shall provide the capability for an authorized user to identify activities on the mission schedule that prevent the scheduling of a specific activity.	test	SCH-2015B
F-PAS-00360	The FOS shall provide the capability for an authorized user to delete activities that prevent the scheduling of a specific activity.	test	SCH-1060B SCH-1070B SCH-1080B SCH-1160B SCH-2015B SCH-2210B
F-PAS-00365	The FOS shall provide the capability for an authorized user to collect deleted activities in an activity list.	test	SCH-1060B SCH-1070B SCH-1080B SCH-1160B SCH-2210B
F-PAS-00410	The FOS shall provide the capability for an authorized user to modify optional parameters for an activity that is already scheduled .	test	SCH-1060B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-PAS-00420	The FOS shall provide read-only access to non-modifiable parameters for an activity that is scheduled .	test	SCH-1060B
F-PAS-00425	The FOS shall provide the capability for an authorized user to create an association between multiple activities or mission events.	test	SCH-1060B SCH-1070B SCH-1080B SCH-1160B SCH-2000A SCH-2210B
F-PAS-00510	The FOS shall provide the capability for an authorized user to schedule activities between a start and end time based on a Baseline Activity Profiles (BAP).	test	SCH-1020B SCH-1030B SCH-2210B SCH-2230B SCH-2240B
F-PAS-00700	The FOS shall provide the capability for an authorized user to plan spacecraft communication contacts.	test	SCH-1030B
F-PAS-00705	The FOS shall provide the capability for an authorized user to include direct downlink activities on the mission schedule.	test	SCH-2210B
F-PAS-00800	The FOS shall provide the capability for an authorized user to define the start and end times for the Detailed Activity Schedule.	test	SCH-2230B
F-PAS-00805	The FOS shall identify all disallowed activities that are between the start and end times for the Detailed Activity Schedule.	test	SCH-2240B
F-PAS-00810	The FOS shall provide the capability for an authorized user to remove disallowed activities from the Detailed Activity Schedule.	test	SCH-1030B
F-PAS-00815	The FOS shall provide the capability for an authorized user to specify the users who can create a Detailed Activity Schedule.	test	SCH-2210B
F-PAS-00835	The FOS shall ensure that activities in the Detailed Activity Schedule are within predefined resource limits .	test	SCH-2230B
F-PAS-00840	The FOS shall ensure that no activities cause hard constraint violations in the Detailed Activity Schedule.	test	SCH-2240B
F-PAS-00900	The FOS shall provide the capability to identify any activity in the mission schedule that causes a soft constraint violation.	test	SCH-1030B SCH-1040B SCH-1160B SCH-1180B SCH-2015B
F-PAS-00905	The FOS shall provide the capability to identify any activity in the mission schedule that causes a hard constraint violation.	test	SCH-2015B
F-PAS-00910	The FOS shall provide the capability to determine the constraints that an activity is violating.	test	SCH-1040B SCH-2015B
F-PAS-00915	The FOS shall model the spacecraft power subsystem.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B SCH-2015B
F-PAS-00920	The FOS shall model spacecraft data volume.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B SCH-2015B
F-PAS-00925	The FOS shall be able to determine when the sun is in the field of view limits of an instrument.	analysis	SCH-1040B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-PAS-00930	The FOS shall be able to model a nominal spacecraft attitude.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-00935	The FOS shall be able to model spacecraft attitude offsets.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-00940	The FOS shall be able to model state and mode changes in an instrument.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B SCH-2020A
F-PAS-00945	The FOS shall be able to determine when an activity violates an 'order' constraint.	test	SCH-1030B SCH-1040B SCH-1160B SCH-1180B SCH-2015B
F-PAS-00950	The FOS shall be able to determine when an activity violates a time spacing constraint.	test	SCH-1040B SCH-2015B
F-PAS-01035	The FOS shall be able to release a Detailed Activity Schedule (DAS) containing 1000 activities in less than 10 minutes. The process of releasing a DAS includes: a. Generate a schedule boundary that defines the DAS b. Identify activities in the DAS that violate hard and soft constraints c. Change the protections on activities in the DAS to restrict schedule modifications to TOOs and Late Changes	test	SCH-2250B
F-PAS-01040	The FOS shall be able to schedule TDRSS contact requests for a one week time period in less than 1 hour after all appropriate inputs have been received.	demo	SCH-2015B
F-PAS-01120	The FOS shall include the beginning and ending of scheduled communications contact activities as mission events.	test	SCH-2015B
F-PAS-01125	The FOS shall provide the capability for an authorized user to include orbital events as mission events.	test	SCH-1010B
F-PAS-01200	The FOS shall provide the capability to accept a user request specifying an uplink window for a load.	test	SCH-2015B
F-PAS-01205	The FOS shall verify the existence of a load specified in the uplink request.	test	SCH-2015B
F-PAS-01210	The FOS shall verify a load is valid over the time period specified in the uplink request.	test	SCH-2015B
F-PAS-01215	The FOS shall use an uplink window request to schedule the uplink of a load.	test	SCH-2015B
F-PAS-01300	The FOS shall provide the capability for an authorized user to generate a graphical timeline plot of a mission schedule.	test	SCH-2015B
F-PAS-01305	The FOS shall provide the capability for an authorized user to generate a text hardcopy of the scheduling constraint event messages.	test	SCH-1030B
F-PAS-01310	The FOS shall provide the capability for an authorized user to generate a text hardcopy that summarizes a mission schedule.	test	SCH-2015B
F-PAS-10009	The FOS shall notify the ASTER ICC when an ASTER activity in a mission schedule is affected by updated orbit data from FDF.	demo	SCH-1020B
F-PAS-10010	The EOC shall provide a list of ASTER activities that could not be included in the AM-1 mission schedule to the ASTER ICC.	test	SCH-2200B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-PAS-10105	The FOS shall provide the capability for an authorized user to determine whether an activity is associated with an ASTER DAR.	test	SCH-2270B
F-PAS-10110	The FOS shall provide the capability to determine the observation number for an activity that is associated with an ASTER DAR.	test	SCH-2270B
F-PAS-10305	The EOC shall provide the AM-1 mission schedule to the ASTER ICC as specified in the ASTER ICC ICD.	demo	SCH-2270B
F-PAS-10310	The FOS shall provide the capability to change the AM-1 Solid State Recorder (SSR) buffer data volume limits.	test	SCH-2200B
F-PAS-10312	The FOS shall provide AM-1 resource allocations to the ASTER ICC.	demo	SCH-2200B
F-PAS-10400	The EOC shall provide the capability to schedule communication contacts with TDRSS through the NCC.	demo	SCH-2200B
F-PAS-10405	The EOC shall provide the capability to receive TDRSS contact times from the NCC.	demo	SCH-2270B
F-PAS-10410	The EOC shall provide the capability to schedule DSN communication contacts through the NCC.	demo	SCH-2270B
F-PAS-10415	The EOC shall provide the capability to receive DSN contact times from the NCC.	demo	SCH-2200B
F-PAS-10420	The EOC shall provide the capability to schedule communication contacts through the NCC.	demo	SCH-2270B
F-PAS-10425	The EOC shall provide the capability to receive GN contact times from the NCC.	demo	SCH-2270B
F-PAS-10430	The EOC shall provide the capability to schedule communication contacts through the NCC.	demo	SCH-2270B
F-PAS-10435	The EOC shall provide the capability to receive WOTS contact times from the NCC.	demo	SCH-2270B
F-PAS-10445	The EOC shall provide the capability to include AM-1 direct access system events on the AM-1 mission schedule.	test	SCH-2270B
F-PAS-10450	The EOC shall provide the Detailed Activity Schedule start and end times to the ASTER ICC.	demo	SCH-2270B
F-PAS-10455	The EOC shall accept an ASTER activity list that is within the boundaries of the Detailed Activity Schedule and process the list as a Late Change Request.	test	SCH-2270B
F-PAS-10500	The EOC shall provide the capability to model the AM-1 high gain antenna (HGA) pointing angles.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-10505	The EOC shall provide the capability to identify activities that cause the AM-1 high gain antenna (HGA) to exceed its pointing limits as defined in the database.	test	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-10510	The EOC shall provide the capability to model AM-1 high gain antenna (HGA) slew times.	analysis	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-10515	The EOC shall provide the capability to identify activities that would require the high gain antenna (HGA) to slew faster than the maximum slew rate as defined in the database.	test	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-10530	The FOS shall provide the capability to change the buffer playback order of instrument science data for the Solid State Recorder (SSR).	test	SCH-2200B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-PAS-10535	The FOS shall provide the capability to model the modes for the AM-1 spacecraft and instruments as defined in the PDB.	test	SCH-2010A SCH-2210B
F-PAS-10560	The FOS shall notify the ASTER ICC of any activities that they submitted that violate constraints.	demo	SCH-1030B SCH-1040B SCH-1160B
F-PAS-10565	The FOS shall notify the ASTER ICC of the specific constraint that was violated for ASTER activities that violate constraints.	demo	SCH-1030B SCH-1040B SCH-1160B SCH-1180B
F-PAS-10570	The EOC shall be able to schedule a list of 200 ASTER activities within 30 minutes after being submitted by the ASTER ICC.	test	SCH-2270B
F-PAS-10575	The EOC shall be able to return feedback of activities that could not be scheduled or that violate constraints within 40 minutes after being submitted by the ASTER ICC.	test	SCH-2270B
F-PAS-10605	The FOS shall provide the capability to determine the number of CERES scans between sunrise and sunset events for a given satellite orbit.	test	SCH-2240B
F-PAS-10623	The FOS shall provide the capability for an authorized user to generate MISR Local Mode visibility mission events.	test	SCH-1180B
F-PAS-10625	The FOS shall provide the capability to determine MISR access to local mode targets.	analysis	SCH-2240B
F-PAS-10700	The FOS shall provide the capability to identify valid uplink windows for MISR microprocessor loads.	demo	SCH-1180B
F-PAS-10705	The FOS shall display the valid uplink window for the MISR microprocessor load	test	SCH-1180B
F-RMS-00030	The EOC shall be capable of accepting EOC operator requests to configure the EOC.	test	RCM-2000A
F-RMS-00080	The EOC shall provide an EOC operator access to replay data.	test	SCH-1180B
F-RMS-00090	The EOC shall provide an EOC operator access to simulated data.	test	SCH-1180B
F-RMS-00100	The EOC shall provide multiple EOC operators access to the same data stream.	demo	RCM-2000A
F-RMS-00110	The EOC shall provide a single EOC operator access to multiple data streams.	test	RCM-2000A
F-RMS-00140	The EOC shall provide an IST operator access to replay data.	test	SYS-2010B SYS-2060B
F-RMS-00150	The EOC shall provide an IST operator access to simulated data.	test	SYS-2010B SYS-2060B
F-RMS-00160	The EOC shall provide multiple IST operators access to the same data streams.	demo	RCM-2000A
F-RMS-00170	The EOC shall provide a single IST operator access to multiple data streams.	test	RCM-2000A
F-RMS-01060	The EOC shall provide the capability to authorize an EOC operator to modify the ground system configuration.	test	SCH-1180B
F-RMS-01070	The EOC shall allow only one authorized EOC operator, at any given time, the privilege to modify the ground system configuration.	demo	RCM-2010A
F-RMS-02010	The EOC shall process an EOC operator request to initiate the transfer of spacecraft control from one set of hardware and software components to another in order to work around a fault or anomaly.	test	SYS-2000B SYS-2010B SYS-2020B SYS-2030B SYS-2040B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-RMS-02020	The EOC shall correct a failure condition with a redundant component within one minute of operator request.	inspection	SYS-2000B SYS-2020B SYS-2030B SYS-2040B
F-RMS-03010	The EOC shall monitor EOC hardware components for changes in status.	demo	SYS-1000B
F-RMS-03030	The EOC shall monitor software components for change in status.	test	SYS-2000B
F-RMS-03040	The EOC shall maintain changes to the ground configuration and hardware and software component statuses.	test	RCM-2010A SYS-2010B SYS-2060B
F-RMS-03050	The EOC shall make ground configuration and component statuses available for display to the EOC operators.	test	RCM-2010A SYS-2010B SYS-2060B
F-RMS-03060	The EOC shall make ground configuration and component statuses available for display to the IST operators.	test	RCM-2010A SYS-2010B SYS-2060B
F-RMS-03070	The EOC shall notify the operator of changes in the ground configuration and component statuses.	test	SYS-2010B
F-RMS-03080	The EOC shall log changes in the ground configuration and component statuses.	demo	SYS-2020B
F-RMS-03090	The EOC shall provide the MSS with changes in EOC component statuses.	demo	SYS-2030B
F-RMS-03240	The EOC shall make performance monitoring and fault management information obtained from the MSS available to the EOC operator.	test	SYS-2040B SYS-2050B
F-RMS-04010	The EOC shall provide the capability to send User Performance Data Request messages to the NCC.	demo	TLM-1090B
F-RMS-04080	The EOC shall provide the capability to receive and process Return Channel Time Delay Measurement messages from the NCC.	demo	ANA-2040B
F-RMS-04085	The EOC shall provide the capability to receive and process Time Transfer messages from the NCC.	demo	ANA-2050B
F-RMS-04090	The EOC shall provide the capability to receive and process Acquisition Failure Notification messages from the NCC.	demo	TLM-2090B
F-RMS-04120	The EOC shall provide the capability to exchange Communication Test and Acknowledgment messages to determine prepass operational readiness.	demo	TLM-2090B
F-TLM-00115	The EOC shall be capable of receiving EOS spacecraft simulator telemetry.	demo	TLM-1090B
F-TLM-00120	The EOC shall be capable of receiving historical EOS spacecraft and instrument telemetry.	demo	ANA-2040B
F-TLM-00310	The FOS shall base the quality of a packet on the quality indicator received in the EDU header.	demo	ANA-2050B
F-TLM-00315	The FOS shall mark all parameters decommutated from a packet containing an error as having questionable quality.	demo	TLM-2090B
F-TLM-00535	The FOS shall be capable of continuously decommutating real-time spacecraft housekeeping telemetry at rates up to 50 Kbps per spacecraft.	test	TLM-2090B
F-TLM-00540	The FOS shall be capable of continuously decommutating real-time instrument housekeeping telemetry at rates up to 50 Kbps per spacecraft.	test	TLM-1090B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-TLM-00810	The FOS shall provide decommutation of a given location of a given packet to be associated with any one of various parameter mnemonics, depending on the value of a discrete telemetry context switch parameter.	test	ANA-2040B
F-TLM-00815	The FOS shall support up to sixteen (16) distinct, predefined ranges for each context switch parameter.	test	ANA-2050B
F-TLM-00820	The FOS shall only decommutate a context-dependent parameter when the context switch is of good quality and has been marked active.	test	TLM-2090B
F-TLM-00915	The FOS shall allow for the selection from up to four (4) EU conversion algorithms for each parameter.	test	TLM-2090B
F-TLM-00920	The FOS shall provide the capability to select an EU conversion algorithm based upon the value of an associated predefined discrete telemetry point.	test	TLM-1090B
F-TLM-00925	The FOS shall provide the capability for the user to select a predefined EU conversion algorithm.	test	ANA-2040B
F-TLM-00970	The FOS shall provide the capability for the user to adjust the predefined EU conversion algorithm coefficient values.	test	ANA-2050B
F-TLM-01020	The FOS shall allow for the selection of a single boundary limit group from a limit set containing up to four groups of boundary limits per parameter.	demo	TLM-2090B
F-TLM-01025	The FOS shall provide the capability to select a boundary limit group based upon the value of an associated predefined discrete telemetry parameter.	demo	TLM-2090B
F-TLM-01030	The FOS shall provide the capability for the user to select a predefined boundary limit group.	demo	TLM-2090B
F-TLM-01035	The FOS shall use high and low limit values in raw or EU counts as specified for decommutated and derived parameters when limits have been defined.	demo	TLM-2027A
F-TLM-01045	The FOS shall compare the change of successive raw parameter values with the predefined delta value.	test	ANA-2040B
F-TLM-01050	The FOS shall perform limit checking only on good quality data.	test	ANA-2050B
F-TLM-01120	The FOS shall notify the user when a parameter incurs a delta limit violation.	test	TLM-2090B
F-TLM-01130	The FOS limit notification shall be reported when a telemetry point exceeds a limit, when the point comes back in limits, and every Nth occurrence (based upon the limit sense interval).	test	TLM-2090B
F-TLM-01145	The FOS shall be capable of reporting limit violations based upon a predefined limit sense interval for each normal and derived parameter that has defined limits.	demo	ANA-2040B
F-TLM-01150	The FOS shall provide notification of any out-of-limits status every Nth sample occurrence, where N is defined as the limit sense interval for that parameter.	test	ANA-2050B
F-TLM-01155	The FOS shall provide the capability of disabling (suppressing) or enabling notification messages concerning limits for all parameters.	test	TLM-2090B
F-TLM-01160	The FOS shall provide the capability of disabling or enabling notification messages concerning limits at the parameter level.	demo	TLM-2090B
F-TLM-01165	The FOS shall provide the capability of disabling or enabling notification messages concerning limits at the spacecraft subsystem/instrument level.	demo	ANA-2040B
F-TLM-01210	The FOS shall provide the user the capability of changing limit values, delta limit values, and limit sense intervals.	demo	ANA-2050B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-TLM-01215	The FOS shall provide the user the capability to access current limit values and delta limit values in both raw and engineering units.	demo	TLM-2090B
F-TLM-01220	The FOS shall allow adjustment of limit values only for those telemetry parameters that have predefined limit values.	demo	TLM-2090B
F-TLM-01225	The FOS shall be able to modify boundary limit values, delta limit values, and limit sense intervals at the parameter level.	demo	TLM-2060B
F-TLM-01230	The FOS shall provide the capability to specify limit adjustments in raw counts or engineering units.	test	TLM-2000B
F-TLM-01235	The FOS shall allow for adjusting the limit values of any boundary limit group for parameters having multiple boundary limit groups defined.	test	TLM-2000B
F-TLM-01310	The FOS shall evaluate derived parameters based on specified, predefined equations.	demo	TLM-2000B TLM-2060B
F-TLM-01315	The FOS shall use analog telemetry values, discrete telemetry values, constants, or other derived parameters to build new derived parameters.	demo	TLM-2000B
F-TLM-01320	The FOS shall be capable of using either decoded or converted values when evaluating derived telemetry parameters.	demo	TLM-2000B TLM-2060B
F-TLM-01325	The FOS shall support the use of basic arithmetic operators when building the derived parameters. The allowable arithmetic operators shall include: + Addition - Subtraction - Negation * Multiplication / Division SIN Sine ASIN Arcsine COS Cosine ACOS Arccosine TAN Tangent ATAN Arctangent	demo	TLM-2000B TLM-2060B
F-TLM-01330	The FOS shall support the use of basic logical operators when building the derived parameters. The allowable logical operators shall include: = Equal to != Not equal to < Less than <= Less than or equal to > Greater than >= Greater than or equal to AND Logical AND OR Logical OR NOT Logical NOT	test	TLM-2000B TLM-2050B TLM-2060B
F-TLM-01335	The FOS shall mark a derived parameter as having questionable quality whenever any of the input parameters are marked as questionable.	test	TLM-2000B TLM-2050B TLM-2060B
F-TLM-01345	The FOS shall flag the derived parameter as static if any of the input parameters are static.	test	TLM-2000B TLM-2060B
F-TLM-01350	The FOS shall evaluate derived parameters in the specified order.	test	TLM-2000B TLM-2060B
F-TLM-01355	The FOS shall allow individual derived parameter evaluations to be enabled or disabled.	test	TLM-2000B TLM-2060B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-TLM-01360	The FOS shall provide the capability to adjust individual derived parameter re-evaluation rates based on a user specified interval.	test	TLM-2000B TLM-2060B
F-TLM-01365	The FOS shall support a derived parameter evaluation interval of no less than one (1) spacecraft clock second.	test	TLM-2000B TLM-2060B
F-TLM-01415	The FOS shall make available the status for every predefined telemetry parameter.	demo	TLM-2060B
F-TLM-01425	The FOS shall make available, on a per-parameter basis, the following: a. last decommutated raw value b. associated converted value (if applicable) c. limit range values (if applicable) d. limit sense interval e. no data available indicator f. static/active indicator g. quality status indicator h. out-of-limits low indicators (if applicable) i. out-of-limits high indicators (if applicable) j. delta limit error indicator k. conversion error indicator	demo	TLM-2000A TLM-2010A TLM-2020A TLM-2030A
F-TLM-01510	The EOC shall store telemetry data as received from EDOS.	demo	TLM-2080A
F-TLM-01515	The EOC shall be capable of receiving and storing real-time housekeeping telemetry at rates up to 50 Kbps for each EOC controlled spacecraft.	test	TLM-2060B
F-TLM-01520	The EOC shall be capable of receiving and storing spacecraft recorder playback housekeeping telemetry at rates up to 1.544 Mbps for each EOC controlled spacecraft.	test	TLM-1120B
F-TLM-01540	The FOS shall notify the user when the completion of a spacecraft recorder playback collection is recognized.	test	TLM-1120B
F-TLM-01610	The FOS shall replay telemetry data based upon a user specified time period.	test	TLM-1130B TLM-2050B
F-TLM-01625	The FOS shall process all telemetry packets for the requested period, during the replay operation.	test	TLM-1130B
F-TLM-01630	The FOS shall be capable of processing stored housekeeping and engineering telemetry for analysis at twelve (12) times the real-time rate.	test	ANA-1020B ANA-2100B
F-TLM-01635	The FOS shall be capable of processing stored housekeeping and engineering telemetry for display at rates up 150 Kbps.	test	TLM-1130B
F-TLM-01640	The FOS shall be able to replay and process the telemetry data at the real-time or at a user specified rate.	test	TLM-2050B
F-TLM-01710	The EOC shall be capable of accepting and storing the downlinked spacecraft or instrument computer memory dump.	test	CMD-1040B
F-TLM-01715	The EOC shall detect the start of a computer memory dump and collect the dumped memory data (including fill).	test	CMD-1040B
F-TLM-01720	The EOC shall store each computer memory dump collection separately.	test	CMD-1040B
F-TLM-01725	The FOS shall notify the user when the start of a computer memory dump collection is recognized.	demo	CMD-1040B
F-TLM-01730	The FOS shall notify the user when the completion of a computer memory dump collection is recognized.	demo	CMD-1040B
F-TLM-01825	The EOC shall provide the capability to decommutate and provide data to the FDF as the parameters are being extracted from telemetry.	test	TLM-1150B

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-TLM-01830	The EOC shall provide the capability to format and store data as the parameters are being extracted from telemetry.	test	TLM-1150B
F-TLM-02110	The EOC shall compare expected values of specified parameters with the actual values received in the telemetry stream.	demo	ANA-2030B
F-TLM-02115	The EOC shall perform spacecraft state checking only on good quality telemetry data.	test	ANA-2030B
F-TLM-02120	The EOC shall perform spacecraft state checks for discrete telemetry values that can be changed via spacecraft command and that can be verified through housekeeping telemetry.	demo	ANA-2030B
F-TLM-02125	The EOC spacecraft state check shall reveal any deviations between the current state and expected state.	test	ANA-2030B
F-TLM-02130	The EOC shall report the differences between the expected and actual spacecraft states.	test	ANA-2030B
F-TLM-02135	The EOC shall provide the capability for the user to invoke spacecraft state checking.	test	ANA-2030B
F-TLM-02140	The EOC shall provide the capability to baseline the expected spacecraft state values with current downlink telemetry.	test	ANA-2030B
F-TLM-02210	The EOC shall be capable of receiving and processing EDOS TDRSS Service Session (TSS) summary reports following the completion of the TSS.	test	TLM-2040B
F-TLM-02215	The EOC shall be capable of receiving and processing EDOS real-time Customer Operations Data Accounting (CODA) service reports periodically during a TSS.	test	TLM-1020B
F-TLM-02220	The EOC shall be capable of receiving and processing EDOS rate buffered delivery records.	test	TLM-2040B
F-TLM-02235	The EOS shall be capable of receiving and processing status information from the DSN.	test	TLM-2040B
F-TLM-02240	The EOC shall be capable of receiving and processing status information, as available, from the GN.	test	TLM-2040B
F-TLM-02245	The EOC shall be capable of receiving and processing status information, as available, from the WOTS.	test	TLM-2040B
F-TLM-02250	The EOC shall be capable of storing non-telemetry messages as they are being received.	test	TLM-2040B
F-TLM-10125	The EOC shall be capable of receiving AM-1 housekeeping and AM-1 diagnostic telemetry data from both the I-channel and Q-channel simultaneously.	demo	TLM-2022A TLM-2080A
F-TLM-10420	The FOS shall accept AM-1 1664 octet diagnostic telemetry packets.	demo	TLM-2010A
F-TLM-10430	The FOS shall accept AM-1 208 octet diagnostic telemetry packets.	demo	TLM-2010A
F-TLM-10460	The FOS shall be capable of extracting the 1649 octet telemetry information from the 16 Kbps AM-1 diagnostic packet application data field .	demo	TLM-2010A TLM-2020A
F-TLM-10470	The FOS shall be capable of extracting the 193 octet telemetry information from the 1 Kbps AM-1 diagnostic packet application data field.	demo	TLM-2010A
F-TLM-10535	The FOS shall be capable of continuously decommutating real-time spacecraft housekeeping telemetry at a rate of 16 Kbps.	test	TLM-2080A
F-TLM-10540	The FOS shall be capable of continuously decommutating real-time instrument housekeeping telemetry at a rate of 16 Kbps.	test	TLM-2010A
F-TLM-10550	The FOS shall be capable of decommutating real-time spacecraft diagnostic telemetry at a rate of 16 Kbps.	test	TLM-2010A

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
F-TLM-10555	The FOS shall be capable of decommutating real-time instrument diagnostic telemetry at a rate of 16 Kbps.	test	TLM-2010A
F-TLM-10560	The FOS shall be capable of continuously decommutating real-time spacecraft health and safety telemetry at a rate of 1 Kbps.	test	TLM-2020A
F-TLM-10570	The FOS shall be capable of decommutating real-time spacecraft diagnostic telemetry at a rate of 1 Kbps.	test	TLM-2010A
F-TLM-10575	The FOS shall be capable of decommutating real-time instrument diagnostic telemetry at a rate of 1 Kbps.	test	TLM-2010A
F-TLM-10580	The FOS shall be capable of decommutating real-time spacecraft standby CTIU telemetry at a rate of 1 Kbps.	test	TLM-2020A
F-TLM-10810	FOS shall provide decommutation of a given location of a given major cycle to be associated with any one of various parameter mnemonics, depending on the value of a discrete telemetry context switch parameter.	demo	TLM-2010A
F-TLM-11515	The EOC shall be capable of receiving and storing AM-1 real-time housekeeping telemetry at rates up to 16 Kbps.	test	TLM-1110B TLM-2020A TLM-2080A
F-TLM-11520	The EOC shall be capable of receiving and storing AM-1 spacecraft recorder playback housekeeping telemetry from EDOS as a rate buffered file.	test	TLM-1110B
S-CLS-00140	The DESKT CI shall provide a standard widget set for building a user interface.	demo	T222-40.02.04
S-CLS-00220	The DESKT CI shall provide users the capability to copy the reference to objects for a desktop object.	test	B222.02.02 T222-40.02.04
S-CLS-00240	The DESKT CI shall provide users the capability to deep copy a desktop object.	test	B222.02.02 T222-40.02.04
S-CLS-00260	The DESKT CI shall provide users the capability to obtain desktop object data associated with desktop objects.	test	B222.02.02 T222-40.02.04
S-CLS-00270	The DESKT CI shall provide users the capability to update desktop object data associated with desktop objects.	test	B222.02.02 T222-40.02.04
S-CLS-00280	The DESKT CI shall provide users the capability to list the available services associated with any desktop object.	test	T222-40.02.05
S-CLS-00295	The DESKT CI shall provide users the capability to unbind a service from a desktop object.	test	T222-40.02.05
S-CLS-00310	The DESKT CI shall provide users the capability to generate an exchangeable (i.e., file based) form for desktop objects.	test	T222-40.02.07
S-CLS-00320	The DESKT CI shall provide users the capability to generate a desktop object from an externalized (i.e., file-based) format.	test	T222-40.02.07
S-CLS-00350	The DESKT CI shall provide users the capability to iteratively apply operations to each of the objects in a desktop container.	test	B222.02.02
S-CLS-00360	The DESKT CI shall provide users the capability to search container objects for objects which satisfy a user specified Search Criteria.	test	T222-40.02.01
S-CLS-00410	The DESKT CI shall provide the users the capability to list object types supported by a specific application or service class.	test	T222-40.02.02
S-CLS-00420	The DESKT CI shall provide the users the capability to list applications or service classes supported by a specific object type.	test	T222-40.02.02
S-CLS-00430	The DESKT CI shall provide the users the capability to add applications or services supported by a specific object type.	test	T222-40.02.02
S-CLS-00440	The DESKT CI shall provide the users the capability to remove applications or services supported by a specific object type.	test	T222-40.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-00450	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).	test	T222-40.02.06
S-CLS-00460	The DESKT CI shall provide users the capability to remove an application interface.	test	T222-40.02.06
S-CLS-00470	The DESKT CI shall provide users the capability to obtain the attributes associated with an application interface.	test	T222-40.02.06
S-CLS-00490	The DESKT CI shall provide users the capability to modify the attributes associated with an application interface.	test	T222-40.02.06
S-CLS-00640	The DESKT CI shall provide users the capability to obtain a description of the interaction between the Workbench and specified tools.	test	T222-40.02.03
S-CLS-00790	The DESKT CI shall provide users the capability to transition from the user session currently active on the desktop to another user session, by means of a single mouse click.	test	B220.02.04 T222-10.02.02
S-CLS-01360	The DESKT CI shall provide users the capability to mail desktop objects	test	T222-40.02.07
S-CLS-01450	Desktop objects shall utilize a <TBD> external format.	test	T222-40.02.01
S-CLS-01460	Desktop object references shall be in <TBD> format.	test	T222-40.02.01
S-CLS-01492	The DESKT CI executables shall run on the following hosts: a. DEC Digital Unix 4.0 b. HP UX 10.01 c. SGI IRIX 6.2 (64 bit) d. IBM RS/6000 AIX 4.1	demo	B230.02.19
S-CLS-01550	The DESKT CI shall provide the user the capability to copy ECS services onto his desktop, iconize them, and save them as desktop objects.	test	B222.02.02 T222-40.02.04
S-CLS-01555	The DESKT CI shall have capability to prompt user for confirmation when a user attempts addition, modification or deletion of an object.	test	B222.02.02 T222-40.02.04
S-CLS-01560	The DESKT CI shall provide the user the capability to access a service via the previously saved desktop object representing that service.	test	B222.02.02 T222-40.02.04
S-CLS-01620	The DESKT CI shall provide users the ability to directly manipulate icon positioning and to save the icon positioning.	demo	T222-40.02.04
S-CLS-01700	The DESKT CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.26 B260.02.07
S-CLS-01710	The DESKT CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.26 B260.02.07
S-CLS-01740	The DESKT CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.26 B260.02.07
S-CLS-01750	The DESKT CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.26 B260.02.07
S-CLS-01760	DESKT CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.26 B260.02.07
S-CLS-01770	DESKT CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.26 B260.02.07
S-CLS-01780	The DESKT CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.26 B260.02.07
S-CLS-01790	DESKT CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.26 B260.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-10010	The WKBCH CI shall provide the capability for users to compose Search Requests based on product specific and core metadata attributes.	test	B232.01.01 T232-10.01.01
S-CLS-10070	The WKBCH CI shall support point-and-radius criteria for query of geographic Metadata by text and graphical input.	test	B232.01.02 T232-20.01.01
S-CLS-10075	The WKBCH CI shall support point criteria for query of geographic Metadata by text and graphical input.	test	B232.01.02 T232-20.01.01
S-CLS-10080	The WKBCH CI shall support polygonal coordinate criteria for query of geographic Metadata by graphical input.	test	B232.01.02 T232-20.01.02
S-CLS-10090	The WKBCH CI shall support query of geographic Metadata by geographic name by text input.	test	B232.01.02 T232-20.01.03
S-CLS-10130	The WKBCH CI shall provide users the capability to use boolean operators to relate query parameters for geographic and non-geographic Metadata.	test	B232.01.01 T232-10.01.02
S-CLS-10140	The WKBCH CI shall support wildcard construct (prefix, embedded, suffix) matching criteria for query of alpha-numeric non-geographic Metadata.	test	B232.01.01 T232-10.01.03
S-CLS-10150	The WKBCH CI shall support character range matching criteria for query of alpha-numeric non-geographic Metadata.	test	B232.01.01 T232-10.01.04
S-CLS-10160	The WKBCH CI shall support logical and boolean operators matching criteria for query of alpha-numeric non-geographic Metadata.	test	B232.01.01 T232-10.01.02
S-CLS-10170	The WKBCH CI shall support min/max range Search Criteria for query of numerical non-geographic Metadata.	test	B232.01.01 T232-10.01.05
S-CLS-10175	The WKBCH CI shall support SQL syntax for queries on Advertising.	test	B232.02.01 T232-10.02.04
S-CLS-10180	The WKBCH CI shall support any combination of exact word match, exact phrase match, character set, wildcard, character range, logical and boolean operator, and min/max range Search Criteria for query of non-geographic Metadata.	test	B232.01.01 T232-10.01.05
S-CLS-10190	The WKBCH CI shall provide the capability for users to compose searches across multiple data sets for coincident occurrences of data in space, time, or any other searchable core Metadata attribute(s).	test	B232.02.01 T232-10.02.01
S-CLS-10200	The WKBCH CI shall provide users the capability to search and view a products processing history.	test	B230.02.01 B230.02.05 B232.02.01 B260.02.04 T232-10.02.02
S-CLS-10210	The WKBCH CI shall provide users the capability to search for Science Processing Library holdings	test	B232.02.01 T232-10.02.02
S-CLS-10220	The WKBCH CI shall allow users to formulate a Product Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.	test	B232.02.02
S-CLS-10230	The WKBCH CI shall provide the capability for users to preview billing costs for non-EOSDIS Data Products prior to Product Request submission.	test	B230.02.13 B260.02.03
S-CLS-10240	The WKBCH CI shall provide the capability for users to request subsetted, subsampled, and summary products.	test	B232.02.02
S-CLS-10250	The WKBCH CI shall automatically provide the user an estimate of how long it will take before products are ready for delivery.	test	B230.02.14 B260.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-10260	The WKBCH CI shall provide the capability for authorized users to issue Product Requests for Data Products that are generated on demand.	test	B232.02.02
S-CLS-10280	The WKBCH CI shall provide users the capability to create, cancel, renew, update and list the contents of Subscriptions, including standing requests.	test	B231.01.04 T231-10.01.07
S-CLS-10300	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.	demo	T222-20.02.04
S-CLS-10310	The WKBCH CI shall provide users the capability of positioning the cursor by entering an image X,Y coordinate.	test	T222-20.02.07
S-CLS-10320	The WKBCH CI shall provide users the option to display Latitude/Longitude pairs as symbols, displayed in their proper geolocation on all visualizations produced by the WKBCH CI.	test	T222-20.02.07
S-CLS-10460	The WKBCH CI shall provide users Lat/Long lists for the production of built-in vector overlays as part of the application.	test	T222-20.02.04
S-CLS-10470	The WKBCH CI shall provide users the capability to display browse information in vector graphic format.	test	T222-20.02.09
S-CLS-10480	The WKBCH CI shall provide the capability of displaying ECS supported visualization data as a series of lineplots.	test	B220.02.07 T222-20.02.06
S-CLS-10490	The WKBCH CI shall provide the capability of displaying a horizontal or vertical profile through a pseudocolor image.	test	B220.02.07 T222-20.02.03
S-CLS-10500	The WKBCH CI shall provide the capability of displaying multi-dimensional arrays of data as a series of two-dimensional pseudocolor images.	test	B220.02.07 T222-20.02.03
S-CLS-10510	The WKBCH CI shall provide the capability of importing color palettes.	test	T222-20.02.01
S-CLS-10520	The WKBCH CI shall provide the capability for modifying the color palette.	test	T222-20.02.01
S-CLS-10530	The WKBCH CI shall provide the capability of modifying the pseudocolor mapping by changing the data min/max values.	test	B220.02.07 T222-20.02.02
S-CLS-10540	The WKBCH CI shall provide the capability of modifying the pseudocolor mapping by adaptive equalization.	test	B220.02.07 T222-20.02.02
S-CLS-10550	The WKBCH CI shall provide users the capability of calculating summarizing statistics of multi-dimensional arrays of EOS data.	test	T222-20.02.08
S-CLS-10560	The WKBCH CI shall provide the capability of calculating summarizing statistics of user-selected columns from tables of values of EOS data.	test	T222-20.02.08
S-CLS-10600	The WKBCH CI shall display the Latitude and Longitude coordinates of the cursor, when the cursor is inside an EOS Grid array.	test	T222-20.02.07
S-CLS-10610	The WKBCH CI shall provide users the capability of positioning the cursor by entering a Latitude/Longitude value.	test	T222-20.02.07
S-CLS-10615	The WKBCH CI shall provide users the capability of positioning the cursor by entering instrument scan line.	test	T222-20.02.07
S-CLS-10630	The system shall provide users a Training Option	test	T222-10.02.04
S-CLS-10640	The Training option shall consist of simulated user sessions for identifying, searching for and obtaining data and services.	test	T222-10.02.04
S-CLS-10730	The WKBCH CI shall provide users the capability to search data dictionary information to obtain the precise definitions of terms used within ECS.	test	B230.02.07 B232.02.01 T232-10.02.03
S-CLS-10860	The WKBCH CI shall provide users the capability to display processing schedules.	test	B230.02.14 B260.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-10870	The WKBCH CI shall provide users the capability to display data acquisition plans and schedules.	test	B230.02.10 B232.02.02 B260.02.03
S-CLS-10880	The WKBCH CI shall provide users the capability to display documentation on data formats and Metadata standards.	test	T222-31.01.06
S-CLS-10882	The WKBCH CI shall provide users the capability to display climatology information.	test	T222-20.02.06
S-CLS-10884	The WKBCH CI shall provide users the capability to display geographic reference aids.	test	T222-20.02.07
S-CLS-10890	The WKBCH CI shall provide users the capability to display ESDIS Project Policies and Procedures.	test	T222-31.01.07
S-CLS-10930	The WKBCH CI shall provide users the capability to search inventory based on any combination of the inventory core metadata attributes and inventory product specific metadata attributes.	test	B230.02.01 B232.01.02 B260.02.04 T232-20.01.04
S-CLS-10950	The WKBCH CI shall provide the capability for users to submit Subscription Requests for periodic delivery of data described by Advertisements.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-10970	The WKBCH CI shall provide the capability for the user to request standard product software and associated documentation to be distributed on-line.	test	B230.02.13 B260.02.03
S-CLS-10980	The WKBCH CI shall provide the capability for the user to request standard product software and associated documentation to be distributed off-line (i.e. media).	test	B230.02.13 B260.02.03
S-CLS-11000	The WKBCH CI shall provide the capability to submit Subscription Requests for on-demand processing of ECS data by pre-existing processes.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-11010	The WKBCH CI shall automatically provide the capability to confirm or reject a Data Request.	test	B230.02.14 B260.02.03
S-CLS-11020	The WKBCH CI shall provide users Data Request Status at the conclusion of the processing of a Data Requests.	test	B230.02.14 B260.02.01 B260.02.03
S-CLS-11030	The WKBCH CI shall provide the capability for users to determine reprocessing status of products which are being reprocessed.	test	B230.02.14 B260.02.03
S-CLS-11040	The WKBCH CI shall provide users the capability to obtain data processing Status during the processing of a request initiated by the user.	test	B230.02.14 B260.02.03
S-CLS-11050	The WKBCH CI shall provide users the capability to obtain and review User Session Logs for their own sessions.	test	B220.02.05 B222.02.03 T222-10.02.01
S-CLS-11060	The WKBCH CI shall provide science users the capability to obtain Distribution Request Status for user-initiated Distribution Requests.	test	B232.02.02
S-CLS-11080	The WKBCH CI shall provide the capability for users to request and receive their current account balance.	test	T222-31.01.02
S-CLS-11090	The WKBCH CI shall provide users the capability to display their account history.	test	T222-31.01.02
S-CLS-11100	The WKBCH CI shall accept from the users user feedback information, on product data quality assessment and output it to the DAAC originating the data.	test	B220.02.03 T222-31.01.01
S-CLS-11110	The WKBCH CI shall accept from the users user feedback information, on schedule performance assessment and output it to the SMC.	test	B220.02.03 T222-31.01.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-11120	The WKBCH CI shall accept from the users user feedback information, on ECS service quality evaluation and output it to the SMC.	test	B220.02.03 T222-31.01.01
S-CLS-11140	The WKBCH CI shall provide the capability for users to update Distribution Requests prior to the shipment of Data.	test	B230.02.13 B260.02.03
S-CLS-11150	The WKBCH CI shall provide product delay notification to users to notify them when products will not be distributed within the estimated time.	test	B230.02.13 B260.02.03
S-CLS-11160	The WKBCH CI shall provide authorized users the capability to request priority processing of Product Requests for on-demand products.	test	B230.02.14 B260.02.03
S-CLS-11170	The WKBCH CI shall display to users a processing status message to confirm or reject a Production Request.	test	B230.02.13 B230.02.14 B260.02.03
S-CLS-11190	The WKBCH CI shall provide the capability for users to submit a Conflict Adjudication Request to the SMC, in the event a processing conflict cannot be resolved between the SDSRV CI, the science user, and the Data Processing Subsystem.	test	B230.02.18
S-CLS-11200	The WKBCH CI shall provide users a Conflict Adjudication Response from the SMC after submitting a Conflict Adjudication Request.	test	B230.02.18
S-CLS-11210	The WKBCH CI shall provide users a Notification when requests for data processing will not be completed within the estimated time.	test	B230.02.14 B260.02.03
S-CLS-11220	The WKBCH CI shall provide the capability for users to issue Product Requests for the ad-hoc processing of subsetted, subsampled, and summary products based on geographical location (x, y, z - spatial with rectangular boundaries).	test	B230.02.15
S-CLS-11230	The WKBCH CI shall provide the capability for users to issue Product Requests for the ad-hoc processing of subsetted, subsampled, and summary products based on spectral band.	test	B230.02.15
S-CLS-11240	The WKBCH CI shall provide the capability for users to issue Product Requests for the ad-hoc processing of subsetted, subsampled, and summary products based on time.	test	B230.02.15
S-CLS-11250	The WKBCH CI shall provide a capability to submit Subscription Requests for the distribution of ECS data.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-11260	The WKBCH CI shall provide the capability for users to update Subscriptions for the distribution of ECS data.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-11270	The WKBCH CI shall provide users the capability to terminate their Subscriptions for on demand processing.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-11280	The WKBCH CI shall provide users the capability to modify their Subscriptions for on demand processing.	test	B230.02.22 B231.01.04 T231-10.01.07
S-CLS-11285	The WKBCH CI shall provide users the capability to create documents in HTML format.	test	B230.02.21
S-CLS-11290	The WKBCH CI shall provide a capability to translate user input Search Criteria into ECS internal query language.	test	B232.02.01 T232-10.02.04
S-CLS-12070	The WKBCH CI shall provide a GUI interface with capability to save and restore the contents of data search and order forms.	test	B222.02.01 T222-31.01.08

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-12110	The WKBCH CI shall provide a GUI interface with a command language.	test	T222-31.01.09
S-CLS-12480	The WKBCH CI shall provide the capability to request any of the services available for the individual items in the output of a Metadata search.	test	B232.02.02
S-CLS-12500	The WKBCH CI shall provide users an interface to APIs for use in non-interactive remote user sessions.	test	B232.02.02
S-CLS-12530	The WKBCH CI shall provide users the capability to simultaneously view Search Results and Product Requests.	test	B232.02.02
S-CLS-12540	The WKBCH CI shall support multiple concurrent user sessions.	test	B220.02.04 B222.02.03 B260.02.01 T222-10.02.02
S-CLS-12550	The WKBCH CI shall support multiple concurrent Service Requests.	test	T222-30.02.05
S-CLS-12570	The WKBCH CI shall provide users interactive user sessions.	test	B220.02.04 B260.02.01 T222-10.02.02
S-CLS-12580	The WKBCH CI shall provide a user session management capability to transition between user sessions.	test	B220.02.04 B260.02.01 T222-10.02.02
S-CLS-12670	The WKBCH CI shall provide users the capability to enable the logging of Service Requests, Service Request Status, and Notifications to the User Session Log.	test	B220.02.05 B222.02.03 B230.02.20 B260.02.01 T222-10.02.01
S-CLS-12680	The WKBCH CI shall provide users the capability to disable logging to the User Session Log.	test	B220.02.05 B222.02.03 B260.02.01 T222-10.02.01
S-CLS-12690	The WKBCH CI shall provide users the capability to replay the User Session Log.	test	B220.02.05 B222.02.03 B260.02.01 T222-10.02.01
S-CLS-12700	The WKBCH CI shall provide users the capability to obtain information about all their user sessions.	test	B220.02.04 B260.02.01 T222-10.02.02
S-CLS-12720	The WKBCH CI shall provide users the capability to rebuild a user session context.	test	T222-10.02.03
S-CLS-12730	The WKBCH CI shall be able to accept Notifications of events associated with Service Requests or sessions	test	T222-30.02.06
S-CLS-12740	The WKBCH CI shall be able to display such event Notifications to the user and accept input from the user where these events require instructions from the user, e.g., when a request exceeds a client specified threshold, and provide such feedback to the service which sent the event..	test	T222-30.02.06
S-CLS-12750	The WKBCH CI shall provide users the capability to define default instructions for such events, by type of event and session..	demo	T222-30.02.06
S-CLS-12760	The WKBCH CI shall provide users the capability to suppress the display of event Notifications if the Notifications do not require user input or if the user has defined default instructions, by type of event and session..	test	T222-30.02.06

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-12770	The WKBCH CI shall provide users the capability to modify and remove default instructions and rescind the directive to suppress event Notification, by type of event and session..	demo	T222-30.02.06
S-CLS-12780	The WKBCH CI shall provide the default instructions defined by the user in response to an event if the the user has requested that the event Notification be suppressed.	demo	T222-30.02.06
S-CLS-12800	The WKBCH CI shall provide a capability to interactively display interrupt messages.	test	T222-30.02.06
S-CLS-12810	The WKBCH CI shall provide a dumb terminal interface with minimal and consistent use of non-standard keys.	test	T222-31.01.03
S-CLS-12820	The WKBCH CI shall provide a dumb terminal interface with capability to save and restore the contents of a menu or form.	test	B222.02.01 T222-31.01.03
S-CLS-12830	The WKBCH CI shall provide a dumb terminal interface with standardized use of commands and terminology across screens.	test	T222-31.01.03
S-CLS-12840	The WKBCH CI shall provide a dumb terminal interface with self-explanatory, meaningful error messages.	test	T222-31.01.05
S-CLS-12850	The WKBCH CI shall provide a dumb terminal interface with availability of a menu tree diagram.	test	T222-31.01.03
S-CLS-12860	The WKBCH CI shall provide a dumb terminal interface with a command language.	test	T222-31.01.03
S-CLS-12870	The WKBCH CI shall support a dumb terminal interface that provides users system access from local and remote dumb terminals.	test	B222.02.01 T222-31.01.03
S-CLS-12908	The WKBCH CI shall provide users a capability to submit documents to the guide.	test	T222-31.01.06
S-CLS-12920	The WKBCH CI shall provide an option for Expert level of user interaction.	demo	T222-30.02.07
S-CLS-12930	The Expert level of interaction shall provide direct information input with no automatically supplied help.	demo	T222-30.02.07
S-CLS-12940	The WKBCH CI shall provide an option for Intermediate level of user interaction.	demo	T222-30.02.07
S-CLS-12950	The Intermediate level of interaction shall provide prompting and automatically supplied help.	demo	T222-30.02.07
S-CLS-12960	The WKBCH CI shall provide a Novice level of user interaction.	demo	T222-30.02.07
S-CLS-12970	The Novice level of interaction shall provide prompting and automatic help facilities for user initiated actions.	test	T222-30.02.07
S-CLS-13010	The WKBCH CI shall provide application program interfaces that will support development of extensions for support of data visualization utilities for DAAC-specific products.	test	T222-30.02.08
S-CLS-13040	The WKBCH CI shall provide application program interfaces that will support development of a local user interface client accessing DAAC-unique Metadata searching services.	test	T222-32.01.01
S-CLS-13050	The WKBCH CI shall provide application program interfaces that will be capable of supporting the development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique Metadata searching services.	test	T222-32.01.01
S-CLS-13060	The WKBCH CI shall provide the user the capability to view the service availability status of all ECS services.	test	B230.02.24
S-CLS-13090	The WKBCH CI shall perform registration of new users from user supplied and default information.	test	B220.02.01 T222-30.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-13115	The WKBCH CI shall provide registered users with the capability to request changes to their user account priorities and authorized user services.	test	B220.02.02 B260.02.01 T222-30.02.04
S-CLS-13160	The WKBCH CI shall provide users the capability to terminate user sessions with service providers.	test	B220.02.04 B230.02.25 B260.02.01 T222-10.02.02
S-CLS-13170	The WKBCH CI shall provide users the capability to initiate user sessions with service providers.	test	B220.02.04 B230.02.25 B260.02.01 T222-10.02.02
S-CLS-13200	The WKBCH CI shall provide users the capability to obtain the status information about user sessions with service providers.	test	B220.02.04 B222.02.03 B230.02.25 B260.02.01 T222-10.02.02
S-CLS-13210	The WKBCH CI shall provide users the capability to connect to an existing user session.	test	B220.02.04 T222-10.02.02
S-CLS-13220	The WKBCH CI shall provide users the capability to issue Service Requests within the context of a user session.	test	T222-10.02.03
S-CLS-13230	The WKBCH CI shall provide users the capability to cancel any time-intensive Service Requests by issuing a Cancellation Request.	test	T222-30.02.05
S-CLS-13240	The WKBCH CI shall provide users the capability to individually suspend and restore the Service Requests within a user session after interruption.	test	B230.02.25 B260.02.01 T222-30.02.05
S-CLS-13250	The WKBCH CI shall provide users the capability to view DAR generation information during the DAR planning and submittal process.	test	B230.02.10 B232.02.02 B260.02.03
S-CLS-13260	The WKBCH CI shall provide a dumb terminal interface with Valid Value lists for all attributes.	demo	T222-32.01.03
S-CLS-13265	The WKBCH CI Subsystem shall provide ChUI terminal support conforming to VT-100 standards.	demo	T222-31.01.04
S-CLS-13300	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.	demo	T222-31.01.03
S-CLS-13352	The WKBCH CI shall provide access to USENET newsgroups.	test	B220.02.06 T222-30.02.03
S-CLS-13380	The WKBCH CI shall send User Authentication Requests to the SMC.	test	B220.02.01 B260.02.01 T222-30.02.01
S-CLS-13390	The WKBCH CI shall allow or deny the user system access based on User Validation Status returned from the SMC.	test	B220.02.01 B260.02.01 T222-30.02.01
S-CLS-13400	The WKBCH CI shall obtain user authentication information from the user.	test	B220.02.01 B260.02.01 T222-30.02.01
S-CLS-13460	The WKBCH CI shall provide users the capability to create a Session Profile for each user session. The Session Profile shall be able to contain any of the parameters which are in the User Profile and which may apply as defaults to ECS Service Requests.	test	B220.02.04 B220.02.06 B260.02.01 T222-10.02.02
S-CLS-13470	The user interface shall employ the defaults specified in the Session Profile to assist the user in the formulation of a new request in the context of a user session (e.g., by displaying them as default values in the respective input fields).	test	B220.02.04 B222.02.03 B260.02.01 T222-10.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-13500	Users shall be able to save the results of Search Requests.	test	B232.02.02
S-CLS-13510	Users shall be able to retrieve saved Search Results, delete items from the Search Result, and save the modified result.	test	B232.02.02
S-CLS-13520	Users shall be able to save selected portions of a Search Result.	test	B232.02.02
S-CLS-13530	Users shall be able to combine Search Results.	test	B232.02.02
S-CLS-13540	Users shall be able to select Data Granules from multiple saved Search Results and submit a single Product Request for these Data Granules.	test	B232.01.02 T232-20.01.05
S-CLS-13550	The WKBCH CI shall provide users the capability to search Production History on any combination of Production History Metadata attributes.	test	B230.02.05 B260.02.04
S-CLS-13560	The WKBCH CI shall allow users to search the holdings of ECS using Phenomenological Search Criteria for attributes supported by Data Server Schema.	test	B232.01.02 T232-20.01.06
S-CLS-13580	The WKBCH CI shall provide users the capability to graphically represent data availability for products(s) vs. time.	test	B232.02.02
S-CLS-13590	The WKBCH CI shall provide users the capability to graphically view the temporal extent of Data Granules.	test	B232.02.02
S-CLS-13600	The WKBCH CI shall display the cost estimates for Data specified in Product Requests prior to the submission of the Product Request.	test	B230.02.13 B260.02.03
S-CLS-13610	When users submit a Product Request, they shall be given an opportunity to review the total amount that will be billed for the order and affirm, cancel or modify the Product Request.	test	B230.02.13 B260.02.03
S-CLS-13620	The WKBCH CI shall provide the capability to visualize Data Products as continuous forward animation.	test	B220.02.07 T222-20.02.05
S-CLS-13630	The WKBCH CI shall provide the capability to visualize Data Products as single step forward animation.	test	B220.02.07 T222-20.02.05
S-CLS-13640	The WKBCH CI shall provide the capability to visualize Data Products as single step backward animation.	test	B220.02.07 T222-20.02.05
S-CLS-13650	The WKBCH CI shall provide the capability to visualize Data Products as oscillating animation (i.e., continuous forward then continuous backward, alternating throughout the loop until user-directed termination).	test	B220.02.07 T222-20.02.05
S-CLS-13660	The WKBCH CI shall provide users the capability to change the minimum/maximum values of the color tables for visualization of Data Products.	test	T222-20.02.01
S-CLS-13670	The WKBCH CI shall provide users the capability to modify color palettes for visualization of Data Products.	test	T222-20.02.01
S-CLS-13680	The WKBCH CI shall allow users to access the Data Dictionary Service.	test	T222-20.02.01
S-CLS-13700	Overlays provided for display to users shall be continuous over the entire display area, regardless of any gaps in the science data, for data following HDF-EOS geolocation conventions.	test	B220.02.07 T222-20.02.04
S-CLS-13730	Users shall be able to request an update of the status of a previously submitted Search Request.	test	B230.02.04 B260.02.04
S-CLS-13740	Users shall be able to request that the workbench poll the status of a Search Request at a user selectable time interval.	test	B230.02.04 B260.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-13750	The WKBCH CI shall provide users the capability to submit Subscription Requests which request a periodic search for new documents meeting user specified search conditions. All search conditions supported by the document search user interface shall be allowed in this context.	test	B230.02.13 B260.02.03
S-CLS-13760	The WKBCH CI shall provide users the capability to issue a Subscription Request for revisions of a given document.	test	B230.02.13 B260.02.03
S-CLS-13770	The WKBCH CI shall provide users the capability to issue a Subscription Request for new documents, based on topical keywords.	test	B230.02.13 B260.02.03
S-CLS-13780	When submitting Distribution Requests, users shall be able to request inclusion of Universal References to the appropriate documentation for this data, the tools needed to read this data, and an ASCII file describing each of these references.	test	B230.02.13 B260.02.03
S-CLS-13790	The WKBCH CI shall provide users the capability to parameterize ASTER DARS with ASTER DAR Parameters.	test	B230.02.08 B260.02.03
S-CLS-13800	The WKBCH CI shall provide the capability for users to construct a Subscription Request associated with a Data Acquisition Request.	test	B230.02.11 B260.02.03
S-CLS-13810	The WKBCH CI shall accept user requests for Subscriptions for data and metadata.	test	B230.02.22
S-CLS-13820	The WKBCH CI shall accept Service Requests for changes to existing DARs from the science user.	test	B230.02.11 B260.02.03
S-CLS-13830	The WKBCH CI shall make ASTER data acquisition schedules and plans accessible to authorized users on request.	test	B230.02.10 B260.02.03
S-CLS-13840	The WKBCH CI shall display data acquisition schedules as timelines.	test	B230.02.10 B232.02.02 B260.02.03
S-CLS-13850	The WKBCH CI shall provide users the capability to access the Guide during DAR formulation and submittal.	test	B230.02.10 B260.02.03
S-CLS-13860	The WKBCH CI shall provide EOS-AM spacecraft location projections as a reference aid to the creation of ASTER Data Acquisition Requests	test	B230.02.10 B260.02.03
S-CLS-13870	The WKBCH CI shall provide visualizations of ASTER instrument nominal view swaths and non-nominal view swaths based on user supplied angle as a reference aid to the creation of ASTER DARs.	test	B230.02.10 B260.02.03
S-CLS-13880	The WKBCH CI shall provide instrument specific default settings for DAR instrument configurable parameters.	test	B230.02.08 B260.02.03
S-CLS-13890	The WKBCH CI shall provide users the capability to view Valid Values for DAR Parameters.	test	B230.02.08 B260.02.03
S-CLS-13900	The WKBCH CI shall constraint check and validate DAR Parameters.	test	B230.02.08 B260.02.03
S-CLS-13920	The WKBCH CI shall provide DAR Disposition in response to the submittal of a DAR. This may be e-mail notification.	test	B230.02.08 B260.02.03
S-CLS-13930	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.	test	B230.02.08 B260.02.03
S-CLS-13940	The WKBCH CI shall display DAR status when requested by users.	test	B230.02.11 B260.02.03
S-CLS-13950	The WKBCH CI shall provide the user the capability to view the Data Requests recorded in the User Session Log.	test	B232.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-13960	The WKBCH CI shall provide the user the capability to view the DARs recorded in the User Session Log.	test	B230.02.11 B260.02.03
S-CLS-13980	The WKBCH CI shall provide a legend describing the display of a Data Product, in each window in which a Data Product is displayed.	test	B220.02.07 T222-20.02.06
S-CLS-13990	The WKBCH CI shall provide users the capability to view resulting selection area on a map when a lat/lon selection is typed in for a search.	test	B232.01.02 T232-20.01.07
S-CLS-14000	The WKBCH CI shall provide a user interface that indicates changes in status of an iconified window (e.g., additional results inserted into window).	test	T222-40.02.01
S-CLS-14010	The WKBCH CI shall prompt the user to save his/her edits when the user quits the editing of workbench objects (e.g., a Result Set or a Guide document), if there are any unsaved edits.	test	B222.02.02 T222-40.02.04
S-CLS-14030	The WKBCH CI shall provide users the capability to retrieve any previously saved Product Request parameters into a new Product Request, edit the parameters, save the modified parameters, and/or submit the new Product Request.	test	B232.02.02
S-CLS-14200	The WKBCH CI shall provide the capability to retrieve User Comments based on author, subject and date/time.	test	B220.02.03 T222-31.01.01
S-CLS-14230	The DESKT CI shall provide the capability for a user to issue a Distribution Status Request for a previously submitted Distribution Request and receive Distribution Request Status as a result.	test	B232.02.02
S-CLS-14240	The DESKT CI shall issue periodic Distribution Status Requests for a user-specified Distribution Request, at time intervals specified by the user.	test	B230.02.22
S-CLS-14250	The WKBCH CI shall provide users the capability to issue a Status Request to determine the status of any active Service Request.	test	T222-30.02.05
S-CLS-14400	Time-related data for DARs shall be synchronized so that selection of a time range on a DAR timeline tool will be translated into date/time ranges in a DAR submission window.	test	B230.02.09 B260.02.03
S-CLS-14410	Time-related data for DARs shall be synchronized so that typing a date/time range in a DAR submission window will be graphically display as a blocked out time range on a DAR timeline window.	test	B230.02.09 B260.02.03
S-CLS-14420	Geographic selection criteria for DARs shall be synchronized so that selection of an area on a DAR map display will be translated into lat/lon coordinates in a DAR submissions window.	test	B230.02.09 B260.02.03
S-CLS-14430	Geographic selection criteria for DARs shall be synchronized so that typing lat/lon coordinates in a DAR submission window will be graphically displayed as a blocked out area on a DAR map display.	test	B230.02.09 B260.02.03
S-CLS-14440	The WKBCH CI shall provide users the capability to retrieve any previously saved DAR parameters into a new DAR, edit the parameters, save the modified parameters, and/or submit the new DAR.	test	B230.02.08 B260.02.03
S-CLS-14450	The WKBCH CI shall provide the capability for users to construct a Product Request associated with a DAR.	test	B230.02.11 B260.02.03
S-CLS-14460	The WKBCH CI shall make spacecraft schedules accessible to authorized users on request.	test	B230.02.17
S-CLS-14470	The WKBCH CI shall display spacecraft schedules as timelines.	test	B230.02.17
S-CLS-14480	Time-related data for a Search Request shall be synchronized so that selection of a time range on a Search Request timeline tool will be translated into date/time ranges in a Search Request submission window.	test	B230.02.16

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-14490	Time-related data for a Search Request shall be synchronized so that a date/time range typed in a Search Request window will be graphically display as a blocked out time range on a Search Request timeline window.	test	B230.02.16
S-CLS-14500	Geographic selection criteria for a Search Request shall be synchronized so that selection of an area on a Search Request map display will be translated into lat/lon coordinates in a Search Request submissions window.	test	B230.02.16
S-CLS-14510	Geographic selection criteria for a Search shall be synchronized so that typed lat/lon coordinates in a Search Request submission window will be graphically displayed as a blocked out area on a Search Request map display.	test	B230.02.16
S-CLS-14520	For WKBCH CI screens requiring user input, optional fields shall be distinguished from mandatory fields.	test	T222-30.02.05 T222-40.02.01
S-CLS-14530	The WKBCH CI shall provide users access to Data Definitions of the following information at a minimum : a._Earth Science Data Types and services descriptions b._core metadata attribute definitions c._valid values d._synonyms for valid values e._product specific metadata	test	B230.02.07
S-CLS-14540	Standard Product related Metadata accesible to users shall include keywords and glossary from investigators.	test	B232.02.02
S-CLS-14550	Standard Product related Metadata accessible to users shall include of keywords, synonyms, and glossary for cross-product and cross-directory referencing.	test	B232.02.02
S-CLS-14570	The WKBCH CI shall provide users the capability to relate Phenomenological Search Criteria to Search Criteria containing values for searchable attributes supported in the Data Server Schema.	test	B232.01.02 T232-20.01.06
S-CLS-14580	The WKBCH CI shall provide users a consistent view of data dictionary entries based on the value given for an attribute.	test	B231.01.03 T231-52.01.02
S-CLS-14590	The WKBCH CI shall have the capability to send to the Data Dictionary CI, data dictionary information requests, consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, Product Specific Metadata.	test	B230.02.07
S-CLS-14600	The WKBCH CI shall have the capability to receive from the Data Dictionary CI	test	B230.02.07
S-CLS-15660	The WKBCH CI shall be capable of receiving data products electronically.	test	B230.02.13 B260.02.03
S-CLS-15682	The WKBCH CI executables shall run on the following hosts: a. DEC Digital Unix 4.0 b. HP UX 10.01 c. SGI IRIX 6.2 (64 bit) d. IBM RS/6000 AIX 4.1	demo	B230.02.19
S-CLS-15760	The WKBCH CI shall restrict users' access to data and services for which the users lack sufficient priviledges.	test	B220.02.01 B260.02.01 T222-30.02.01
S-CLS-15770	The WKBCH CI shall provide the user the predicted time for resumption of ECS services which are temporarily unavailable.	test	T222-30.02.05
S-CLS-15810	The DESKT CI shall provide a menu tree diagram	test	B222.02.02 T222-40.02.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-15820	The WKBCH CI shall provide users the amount of data expected to be returned as the result of a product request.	test	B230.02.14 B260.02.03
S-CLS-15830	Data Distribution Instructions for Product Requests shall contain requester identification, data type, data set identifier, data formats, distribution and media instructions, request priority, suggested earliest start time,and suggested latest completion time.	test	B230.02.14 B232.02.02
S-CLS-15850	The WKBCH CI shall display conflict resolution information from the SMC.	test	B230.02.18
S-CLS-15860	Conflict resolution information for Product Requests shall contain request identification, data type, priority modifications, account balance modifications, information on when request will be serviced, and SMC contact point.	test	B230.02.18
S-CLS-15870	The WKBCH CI shall provide applications program interfaces to provide support of DAAC specific data analysis utilities.	test	T222-32.01.02
S-CLS-15880	The WKBCH CI shall provide applications program interfaces to support development of DAAC unique metadata search and access services that will operate independent of the delivered ECS services.	test	T222-32.01.01
S-CLS-15890	The WKBCH CI map displays shall provide the following types of geographic data sets for background reference: land/oceans, major lakes, major rivers, mountain ranges, volcanoes, major highways and railroads, urban and built-up areas, and political boundaries.	test	B230.02.28
S-CLS-15900	The WKBCH CI shall support multiple addresses for product requests, which include mailing address, billing address and shipping address.	test	B230.02.14 B260.02.03
S-CLS-15910	The DESKT CI shall have the capability to prompt the user for confirmation when a user attempts addition, modification or deletion of an object.	test	T222-40.02.04
S-CLS-15920	The Client Visualization Tool shall support display of multiple images.	test	T222-20.02.06
S-CLS-15940	The WKBCH CI shall provide users the capability to search for global granules.	test	B232.01.02 T232-20.01.05
S-CLS-15950	The WKBCH CI shall provide users the capability to set thresholds for the number of results returned from a query.	test	B231.01.04 T231-10.01.06
S-CLS-15970	The WKBCH CI shall be able to accept and display Notifications of events associated with subscriptions.	test	T222-30.02.06
S-CLS-15980	The WKBCH CI shall provide a capability for users to submit software and related documents.	test	T222-31.01.06
S-CLS-15990	The WKBCH CI shall send DARs for ASTER observational sequences to the ASTER GDS.	test	B230.02.11 B260.02.03
S-CLS-16000	The WKBCH CI shall provide a capability for users to request status of ASTER DARs.	test	B230.02.11 B260.02.03
S-CLS-16010	The WKBCH CI shall be capable of displaying the status of ASTER DARs to the user.	test	B230.02.11 B260.02.03
S-CLS-17100	WKBCH CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.26
S-CLS-17110	The WKBCH CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.26 B260.02.07
S-CLS-17140	WKBCH CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.26 B260.02.07
S-CLS-17150	WKBCH CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.26 B260.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-CLS-17160	WKBCH CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.26 B260.02.07
S-CLS-17170	WKBCH CI client applications shall incorporate a mode-identifier for CSS name service lookups.	test	B230.02.26 B260.02.07
S-CLS-17180	The WKBCH CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.26 B260.02.07
S-CLS-17190	WKBCH CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.26 B260.02.07
S-DMS-00010	The LIMGR CI shall provide capabilities to search and obtain data by science discipline.	test	B231.01.01 T231-31.01.03
S-DMS-00020	The LIMGR CI shall accept Search Requests in a format compatible with the Earth Science Query Language.	test	B231.01.01 T231-32.01.02
S-DMS-00030	The LIMGR CI shall create an integrated schema from the exported schematas of the Data Servers.	test	B231.01.01 T231-31.01.01
S-DMS-00040	The LIMGR CI shall determine which Data Servers are required in order to perform a Search Request and build a Site Query Plan as a result.	test	B231.01.01 T231-32.01.02
S-DMS-00050	The LIMGR CI shall initiate data provider data access and manipulation operations.	test	B231.01.01 T231-32.01.02
S-DMS-00060	The LIMGR CI shall provide the capability to establish a session as the context for a series of Service Requests.	test	B231.02.01 T231-31.02.03
S-DMS-00070	The LIMGR CI shall provide the capability to suspend an ongoing t session-.	test	B231.02.01 T231-31.02.03
S-DMS-00080	The LIMGR CI shall provide the capability to resume a suspended session.	test	B231.02.01 T231-31.02.03
S-DMS-00090	The LIMGR CI shall provide the capability to terminate an established client session.	test	B231.02.01 T231-31.02.03
S-DMS-00100	The LIMGR CI shall accept search results from a Data Server, and provide capability, to integrate Search Results from a previous Search Request .	test	B231.01.01 T231-32.01.03
S-DMS-00110	The LIMGR CI shall provide the capability to save the result of a Service Request for later reuse.	test	B231.01.01 T231-32.01.05
S-DMS-00115	The LIMGR CI shall support search requests against result sets from previous searches within the same session.	test	B231.01.01 T231-32.01.03
S-DMS-00120	The LIMGR CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.	test	B231.02.01 T231-32.01.03
S-DMS-00130	The LIMGR CI shall provide the capability, to terminate processing of an active or suspended Service Request.	test	B231.01.01 T231-32.01.05
S-DMS-00140	The LIMGR CI shall provide the capability, to suspend processing of an active Service Request.	test	B231.01.01 T231-32.01.05
S-DMS-00150	The LIMGR CI shall provide the capability, to resume processing of a previously suspended Service Request.	test	B231.01.01 T231-32.01.05
S-DMS-00160	The LIMGR CI shall provide the capability, to estimate the resources required to execute a pending Service Request.	test	B231.01.01 T231-32.01.06
S-DMS-00180	The LIMGR CI shall support interactive information management capabilities for administrators to retrieve information.	test	B231.01.01 T231-31.01.01
S-DMS-00190	The LIMGR CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.	test	B231.02.01 T231-32.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-00200	The LIMGR CI shall forward the identification of the user on whose behalf a Service Request is issued to Data Servers for Service Requests issued on the behalf of the user.	test	B231.02.01 T231-32.02.02
S-DMS-00210	The LIMGR CI internal data base management shall be expressed in a <TBD> standard query language	test	B231.01.01 T231-32.01.01
S-DMS-00220	The LIMGR CI shall store, maintain and provide data management services for ECS local Schema.	test	B231.01.01 T231-31.01.01
S-DMS-00230	The LIMGR CI shall provide the capability to integrate partial results within those Data Servers represented in its local Schema.	test	B231.01.01 T231-31.01.02
S-DMS-00240	In the case of processing failures, upon restart the LIMGR CI shall complete all incomplete transactions without loss of data.	test	B231.02.01 T231-31.02.02
S-DMS-00250	The LIMGR CI shall maintain query log files.	test	B231.02.01 T231-32.02.01
S-DMS-00260	The LIMGR CI shall provide a capability to report status of Service Requests submitted to it.	test	B231.01.01 T231-32.01.05
S-DMS-00270	The LIMGR CI shall support revisions of its local Schema following Schema changes in the Data Servers represented in the LIMs local Schema.	test	B231.01.01 T231-31.01.01
S-DMS-00280	The LIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding individual Schema.	test	B231.01.01 T231-31.01.01
S-DMS-00290	The LIMGR CI shall accept Service Requests, and provide capability, to find and retrieve a Schema entry from an integrated Schema.	test	B231.01.01 T231-31.01.01
S-DMS-00300	The LIMGR CI shall provide the capability to search for Data Granules of EOSDIS data stored for all Data Servers represented in their local Schema.	test	B231.01.01 T231-31.01.03
S-DMS-00470	The LIMGR CI shall support the interruption of any database administrative or maintenance activity and its restart without loss of information.	test	B231.02.01 T231-31.02.02
S-DMS-00480	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, for a single instrument inventory search consisting of multiple keyword attributes with time range check.	test	B231.02.01 T231-32.02.04
S-DMS-00490	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, for a multiple instrument inventory search consisting of multiple keyword attributes with time range check.	test	B231.02.01 T231-32.02.04
S-DMS-00500	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from Data Servers a single instrument inventory result set consisting of multiple keyword attributes with special range check, integrating the results, and providing a complete result set.	test	B231.02.01 T231-32.02.04
S-DMS-00510	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from Data Servers a multiple instrument inventory result set consisting of multiple keyword attributes with time range check, integrating the results, and providing a complete result set.	test	B231.02.01 T231-32.02.04
S-DMS-00520	The LIMGR CI shall send detected hardware and software fault information to MSS.	test	B231.02.01 T231-32.02.07
S-DMS-00530	The LIMGR CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.	test	B231.02.01 T231-32.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-00540	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.	test	B231.02.01 T231-32.02.02
S-DMS-00550	The LIMGR CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.	test	B231.01.01 T231-32.01.03
S-DMS-00560	The LIMGR CI shall provide the capability to manually abort any time-intensive operations.	test	B231.02.01 T231-31.02.02
S-DMS-00565	The LIMGR CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.	test	B231.02.02 T231-42.02.04
S-DMS-00570	The LIMGR CI shall provide integration, testing, and simulation status to the SMC.	test	B231.02.01 T231-32.02.05
S-DMS-00580	The LIMGR CI shall provide maintenance status to the SMC.	test	B231.02.01 T231-32.02.05
S-DMS-00590	The LIMGR CI shall provide logistics status to the SMC.	test	B231.02.01 T231-32.02.05
S-DMS-00600	The LIMGR CI shall provide training information to the SMC.	test	B231.02.01 T231-32.02.05
S-DMS-00605	The LIMGR CI shall provide operations staff with the capability to generate daily LIMGR operations summary reports.	test	B231.02.01 T231-31.02.01
S-DMS-00606	The LIMGR CI shall provide operations staff with the capability to generate LIMGR performance summary reports.	test	B231.02.01 T231-31.02.01
S-DMS-00610	The LIMGR CI operations staff shall have the capability to receive maintenance directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00620	The LIMGR CI operations staff shall have the capability to receive directives for integration, testing, and simulation from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00630	The LIMGR CI operations staff shall have the capability to receive configuration management directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00640	The LIMGR CI operations staff shall have the capability to receive logistics management directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00650	The LIMGR CI operations staff shall have the capability to receive fault management directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00660	The LIMGR CI operations staff shall have the capability to receive security directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00670	The LIMGR CI operations staff shall have the capability to receive training management directives from the SMC.	test	B231.02.01 T231-32.02.06
S-DMS-00690	The LIMGR CI shall provide configuration management data such as software versions to MSS through the use of managed process framework.	test	B231.02.01 T231-32.02.07
S-DMS-00700	The LIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.	test	B231.02.01 T231-32.02.07
S-DMS-00705	The LIMGR CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.	test	B231.02.01 T231-31.02.01
S-DMS-00706	The LIMGR CI shall provide operations staff the capability to distribute utilization reports electronically, in hard copy, or on electronic media.	test	B231.02.01 T231-31.02.01
S-DMS-00710	The LIMGR CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.	test	B231.02.01 T231-32.02.07
S-DMS-00720	The LIMGR CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.	test	B231.02.01 T231-32.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-00730	The LIMGR CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).	test	B231.02.01 T231-32.02.07
S-DMS-00740	PThe LIMGR CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.	test	B231.01.01 T231-31.01.02
S-DMS-00750	The LIMGR CI shall have the capability of creating, editing and deleting advertisements about itself and submitting them to the Advertising Service.	test	B230.02.23 B231.02.04 T231-20.02.01
S-DMS-00860	The LIMGR CI shall provide a capability to report the status of sessions established by it.	test	B231.02.01
S-DMS-00890	The LIMGR CI shall support multiple concurrent sessions.	test	B231.02.01 T231-31.02.04
S-DMS-00895	The LIMGR CI shall support multiple service requests within a session.	test	B231.01.01 T231-31.02.04
S-DMS-00900	The LIMGR CI shall provide an application program interface for the submission of Service Requests.	test	B231.01.04 T231-10.01.08
S-DMS-00910	The LIMGR CI shall provide an application program interface for the submission of requests for administrative services.	test	B231.01.04 T231-10.01.09
S-DMS-00912	The LIMGR CI shall log the startup of the LIMGR servers to MSS.	test	B231.02.01 T231-32.02.01
S-DMS-00913	The LIMGR CI shall log the shutdown of the LIMGR servers to MSS.	test	B231.02.01 T231-32.02.01
S-DMS-00915	The LIMGR CI shall log the initiation of a session.	test	B231.02.01 T231-32.02.01
S-DMS-00920	The LIMGR CI shall log the termination of a session.	test	B231.02.01 T231-32.02.01
S-DMS-00930	The LIMGR CI shall log the suspension of a session.	test	B231.02.01 T231-32.02.01
S-DMS-00940	The LIMGR CI shall log the resumption of previously suspended sessions.	test	B231.02.01 T231-32.02.01
S-DMS-00960	The LIMGR CI shall provide the capability for the operations staff to suspend all active sessions.	test	B231.02.01 T231-31.02.04
S-DMS-00970	The LIMGR CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.	test	B231.02.01 T231-31.02.04
S-DMS-00980	The LIMGR CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.	test	B231.02.01 T231-31.02.04
S-DMS-00990	The LIMGR CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.	test	B231.01.01 T231-31.02.04
S-DMS-01000	The LIMGR CI shall provide the capability to restore a session after interruption.	test	B231.02.01 T231-31.02.04
S-DMS-01010	The LIMGR CI shall log to MSS all Service requests initiated during a session.	test	B231.02.01 T231-32.02.01
S-DMS-01011	The LIMGR CI shall log to MSS when a service request is activated from the queue.	test	B231.02.01 T231-32.02.01
S-DMS-01012	The LIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.	test	B231.02.01 T231-32.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-01013	The LIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. GTWAY, SDSRV).	test	B231.02.01 T231-32.02.01
S-DMS-01014	The LIMGR CI shall log to MSS when the request to the external entity (e.g. GTWAY, SDSRV) has been successfully returned.	test	B231.02.01 T231-32.02.01
S-DMS-01015	The LIMGR CI shall log to MSS when the results of the external requests have been integrated and status is about to be sent to the client program.	test	B231.02.01 T231-32.02.01
S-DMS-01016	The LIMGR CI shall log to MSS when an external connection (i.e. to GTWAY or SDSRV) has been established.	test	B231.02.01 T231-32.02.01
S-DMS-01017	The LIMGR CI shall log the successfull completion of each service request to MSS.	test	B231.02.01 T231-32.02.01
S-DMS-01020	The LIMGR CI shall log the suspension of processing of Service requests.	test	B231.02.01 T231-32.02.01
S-DMS-01030	The LIMGR CI shall log the resumption of previously suspended Service requests.	test	B231.02.01 T231-32.02.01
S-DMS-01040	The LIMGR CI shall log the termination of service requests.	test	B231.02.01 T231-32.02.01
S-DMS-01050	The LIMGR CI shall ensure that databases which are distributed and replicated provide synchronized data.	test	B231.01.01 T231-32.02.01
S-DMS-01060	The LIMGR CI shall forward commands to terminate a session to all servers which are a part of that session.	test	B231.02.01 T231-31.02.03
S-DMS-01070	The LIMGR CI shall accept Subscriptions for LIM data.	test	B231.01.02 T231-40.01.01
S-DMS-01075	The LIMGR CI shall accept and process lifecycle commands from the MSS.	test	T250-10.02.21
S-DMS-01080	The LIMGR CI shall provide a capability to display SMC directives to operator personnel.	test	B231.02.01 T231-32.02.06
S-DMS-01090	LIMGR CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.27 B260.02.07
S-DMS-01091	The LIMGR CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.27 B260.02.07
S-DMS-01094	LIMGR CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.27 B260.02.07
S-DMS-01095	LIMGR CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.27 B260.02.07
S-DMS-01096	LIMGR CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.27 B260.02.07
S-DMS-01097	LIMGR CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.27 B260.02.07
S-DMS-01098	The LIMGR CI be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.27 B260.02.07
S-DMS-01099	LIMGR CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.27 B260.02.07
S-DMS-10010	The DIMGR CI shall provide capabilities to search and obtain data across DAACs.	test	B231.01.02 T231-40.01.03
S-DMS-10020	The DIMGR CI shall accept and execute Search Requests which require searching across DAACs.	test	B231.01.02 T231-40.01.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-10030	The DIMGR CI shall compare received Search Requests to its federated Schema to determine to which LIMs or Data Servers the Search Request must be forwarded and generate a Distributed Query Plan.	test	B231.01.02 T231-40.01.04
S-DMS-10040	Upon determining which LIMs are required to complete a Search Request, the DIMGR CI shall send to the requisite LIMs the portions of the original Search Request which apply to them.	test	B231.01.02 T231-40.01.04
S-DMS-10050	The DIMGR CI shall monitor the progress of the Distributed Query Plan.	test	B231.01.02 T231-40.01.04
S-DMS-10060	The DIMGR CI shall compile and manage the results of the Distributed Query Plan for the client which initiated it.	test	B231.02.02 T231-40.01.04
S-DMS-10070	The DIMGR CI shall execute, monitor, and compile plan results without continuous connection with the client this capability shall allow the client to disconnect from and later reconnect to the DIM to retrieve the results.	test	B231.02.02 T231-40.01.04
S-DMS-10090	The DIMGR CI shall store, maintain and provide data management services for ECS federated Schema.	test	B231.02.02 T231-41.02.01
S-DMS-10100	The DIMGR CI shall provide the capability to abort any time-intensive operations.	test	B231.01.02 T231-40.01.05
S-DMS-10110	The DIMGR CI shall provide the capability to integrate partial results from those LIMs represented in its federated Schema into a complete Result Set.	test	B231.01.02 T231-40.01.02
S-DMS-10115	The DIMGR CI shall support search requests against result sets from previous searches within the same session.	test	B231.01.02 T231-40.01.02
S-DMS-10120	In the case of processing failures, upon restart the DIMGR CI shall complete all incomplete transactions without loss of data.	test	B231.01.02 T231-40.01.05
S-DMS-10130	The DIMGR CI shall maintain query log files.	test	B231.02.02 T231-41.02.03
S-DMS-10140	The DIMGR CI shall provide a capability to report status of Search Requests submitted to it.	test	B231.02.02 T231-42.02.03
S-DMS-10150	The DIMGR CI shall support revisions of its federated Schema following Schema changes in the LIMs represented in the DIM's federated Schema.	test	B231.02.02 T231-41.02.02
S-DMS-10160	The DIMGR CI shall be able to receive the local Schema of LIMs in its federation from the LIM service.	test	B231.02.02 T231-41.02.02
S-DMS-10170	The DIMGR CI shall create a union of the Schemata it receives from LIMs in its federation. This union is a federated Schema.	test	B231.02.02 T231-41.02.02
S-DMS-10180	The DIMGR CI shall not alter the Schemata it receives from any LIM in creating the federated Schema.	test	B231.02.02 T231-41.02.02
S-DMS-10190	The DIMGR CI shall subscribe to the LIMs for any changes in LIM Schemata.	test	B231.01.02 T231-40.01.01
S-DMS-10200	The DIMGR CI shall subscribe to the Advertising service for any additions or deletions of LIMs from its federation.	test	B231.01.02 T231-40.01.01
S-DMS-10210	The DIMGR CI shall be able to add a LIM to its federation based on the subscription notifications it receives from the Adsvertising service.	test	B231.01.02 T231-40.01.01
S-DMS-10220	The DIMGR CI shall provide an interface whereby a LIM may be deleted from the federation based on the subscription notifications it receives from the Adsvertising service..	test	B231.01.02 T231-40.01.01
S-DMS-10240	The DIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding an individual Schema.	test	B231.02.02 T231-41.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-10250	The distributed Schema administrator shall maintain the federated Schema in the DIM.	test	B231.02.02 T231-41.02.02
S-DMS-10260	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be added to the federation.	test	B231.01.02 T231-40.01.01
S-DMS-10270	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be deleted from the federation.	test	B231.01.02 T231-40.01.01
S-DMS-10280	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be replaced in the federation.	test	B231.01.02 T231-40.01.01
S-DMS-10290	The DIMGR CI shall provide an interface to the DIM administrator client whereby LIM information may be retrieved from the federation.	test	B231.01.02 T231-40.01.01
S-DMS-10300	The DIMGR CI shall provide the capability to find and retrieve a Schema entry from an distributed Schema.	test	B231.02.02 T231-41.02.05
S-DMS-10310	The DIMGR CI shall provide the capability to search for Data Granules of EOSDIS data stored across DAACs for specific science disciplines.	test	B231.01.02 T231-40.01.03
S-DMS-10320	The DIMGR CI shall provide Service Request Status in response to Status Requests.	test	B231.02.02 T231-42.02.03
S-DMS-10330	The DIMGR CI shall use the User Identifier for the user on whose behalf a Service Request is issued as the basis for access control decisions.	test	B231.02.02 T231-42.02.03
S-DMS-10340	The DIMGR CI shall forward the user's User Identifer in any Service Requests that it sends to the LIMGR CI on behalf of that user..	test	B231.02.02 T231-42.02.03
S-DMS-10345	The DIMGR CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.	test	B231.02.02 T231-42.02.06
S-DMS-10350	The DIMGR CI shall provide integration, testing, and simulation status to the SMC.	test	B231.02.02 T231-42.02.07
S-DMS-10360	The DIMGR CI shall provide maintenance status to the SMC.	test	B231.02.02 T231-42.02.07
S-DMS-10370	The DIMGR CI shall provide logistics status to the SMC.	test	B231.02.02 T231-42.02.07
S-DMS-10380	The DIMGR CI shall provide training information to the SMC.	test	B231.02.02 T231-42.02.07
S-DMS-10385	The DIMGR CI shall provide operations staff with the capability to generate daily DIMGR operations summary reports.	test	B231.01.02 T231-40.01.06
S-DMS-10386	The DIMGR CI shall provide operations staff with the capability to generate DIMGR performance summary reports.	test	B231.01.02 T231-40.01.06
S-DMS-10390	The DIMGR CI shall provide the capability to receive maintenance directives from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10400	The DIMGR CI shall provide the capability to receive, directives for integration, testing, and simulation from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10410	The DIMGR CI shall provide the capability to receive, configuration management directives from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10420	The DIMGR CI shall provide the capability to receive logistics management directives from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10430	The DIMGR CI shall provide the capability to receive fault management directives from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10440	The DIMGR CI shall provide the capability to receive security directives from the SMC.	test	B231.02.02 T231-42.02.08
S-DMS-10450	The DIMGR CI shall provide the capability to receive training management directives from the SMC.	test	B231.02.02 T231-42.02.08

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-10460	The DIMGR CI shall support the interruption of a database administrative or maintenance activity and its restart without loss of information.	test	B231.01.02 T231-40.01.05
S-DMS-10470	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting processing, and distributing to the LIMs multiple DAAC, single instrument inventory search consisting of multiple keyword attributes with special range check.	test	B231.01.02 T231-40.01.07
S-DMS-10480	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting, processing, and distributing to LIMs a multiple DAAC, multiple instrument inventory search consisting of multiple keyword attributes with time range check.	test	B231.01.02 T231-40.01.07
S-DMS-10490	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from LIMs a multiple DAAC, single instrument Inventory result set consisting of multiple keyword attributes with spacial range check , integrate the results, and providing a complete result set.	test	B231.01.02 T231-40.01.07
S-DMS-10500	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from LIMs multiple DAAC, multiple instrument Inventory result set consisting of multiple keyword attributes with time range check , integrate the results, and providing a complete result set.	test	B231.01.02 T231-40.01.07
S-DMS-10530	The DIMGR CI shall send detected hardware and software fault information to MSS.	test	B231.02.02 T231-42.02.09
S-DMS-10540	The DIMGR CI shall provide configuration management data such as software versions to MSS through managed process framework.	test	B231.02.02 T231-42.02.09
S-DMS-10550	The DIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.	test	B231.02.02 T231-42.02.09
S-DMS-10555	The DIMGR CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.	test	B231.01.02 T231-40.01.06
S-DMS-10556	The DIMGR CI shall provide operations staff with the capability to distribute DIMGR CI utilization reports eletronically or in hard copy or on electronic media.	test	B231.01.02 T231-40.01.06
S-DMS-10560	The DIMGR CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.	test	B231.02.02 T231-42.02.09
S-DMS-10570	The DIMGR CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.	test	B231.02.02 T231-42.02.09
S-DMS-10580	The DIMGR CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.	test	B231.02.02 T231-42.02.09
S-DMS-10590	The DIMGR CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).	test	B231.02.02 T231-42.02.09
S-DMS-10595	The DIMGR CI shall log the startup of the DIMGR servers to MSS.	test	B231.02.02 T231-41.02.03
S-DMS-10596	The DIMGR CI shall log the shutdown of the DIMGR servers to MSS.	test	B231.02.02 T231-41.02.03
S-DMS-10600	The DIMGR CI data accesses shall be subject to read access control based on user privileges.	test	B231.02.03 T231-52.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-10610	The DIMGR CI internal data base management Queries shall be expressed in a <TBD> query language	test	B231.01.01 T231-32.01.01
S-DMS-10650	The DIMGR CI shall initiate distributed data access and manipulation operations.	test	B231.02.02 T231-41.02.01
S-DMS-10660	The DIMGR CI shall provide the capability establish a session as the context for a series of Service Requests.	test	B231.02.02 T231-41.02.06
S-DMS-10670	The DIMGR CI shall provide the capability to suspend an ongoing session.	test	B231.02.02 T231-41.02.06
S-DMS-10680	The DIMGR CI shall provide the capability to resume a suspended session.	test	B231.02.02 T231-41.02.06
S-DMS-10690	The DIMGR CI shall provide the capability to terminate an established client session.	test	B231.02.02 T231-41.02.06
S-DMS-10700	The DIMGR CI shall provide the capability to save the result of a Service Request for later reuse.	test	B231.02.02 T231-42.02.03
S-DMS-10710	The DIMGR CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.	test	B231.02.02 T231-42.02.04
S-DMS-10720	The DIMGR CI shall provide the capability, to terminate processing of an active or suspended Service Request.	test	B231.02.02 T231-42.02.02
S-DMS-10730	The DIMGR CI shall provide the capability, to suspend processing of an active Service Request.	test	B231.02.02 T231-42.02.02
S-DMS-10740	The DIMGR CI shall provide the capability, to resume processing of a previously suspended Service Request.	test	B231.02.02 T231-42.02.02
S-DMS-10750	The DIMGR CI shall provide the capability to estimate resources required to execute a pending Service Request.	test	B231.02.02 T231-42.02.05
S-DMS-10760	The DIMGR CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.	test	B231.01.02 T231-40.01.02
S-DMS-10765	The DIMGR CI shall accept searches in the Earth Science Query Language.	test	B231.02.02 T231-41.02.07
S-DMS-10770	The Earth Science Query Language shall support the specification of search conditions using search expressions in combination with boolean and relational operators.	test	B231.02.02 T231-41.02.07
S-DMS-10771	The Earth Science Query Language shall support the specification of search expressions using the attribute names and exact word matches for string attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07
S-DMS-10772	The Earth Science Query Language shall support the specification of search expressions using the attribute names and phrase matches for string attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07
S-DMS-10773	The Earth Science Query Language shall support the specification of search expressions using the attribute names and character sets for string attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07
S-DMS-10774	The Earth Science Query Language shall support the specification of search expressions using the attribute names and wildcard constructs for string attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07
S-DMS-10775	The Earth Science Query Language shall support the specification of search expressions using the attribute names and character ranges for string attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-10776	The Earth Science Query Language shall support the specification of search expressions using the attribute names and minimum and maximum range for numeric and date/time attributes associated with non-geographic metadata.	test	B231.02.02 T231-41.02.07
S-DMS-10860	The DIMGR CI shall provide a capability to report the status of sessions established by it.	test	B231.02.02 T231-41.02.10
S-DMS-10890	The DIMGR CI shall support multiple concurrent sessions.	test	B231.02.02 T231-41.02.08
S-DMS-10895	The DIMGR CI shall support multiple service requests within a session.	test	B231.02.02 T231-42.02.01
S-DMS-10900	The DIMGR CI shall provide an application program interface for the submission of Service Requests.	test	B231.01.04 T231-10.01.08
S-DMS-10910	The DIMGR CI shall provide an application program interface for the submission of requests for administrative services.	test	B231.01.04 T231-10.01.09
S-DMS-10915	The DIMGR CI shall log the initiation of a session.	test	B231.02.02 T231-41.02.03
S-DMS-10920	The DIMGR CI shall log the termination of a session.	test	B231.02.02 T231-41.02.03
S-DMS-10930	The DIMGR CI shall log the suspension of a session.	test	B231.02.02 T231-41.02.03
S-DMS-10940	The DIMGR CI shall log the resumption of previously suspended sessions.	test	B231.02.02 T231-41.02.03
S-DMS-10960	The DIMGR CI shall provide the capability for the operations staff to suspend all active sessions.	test	B231.02.02 T231-41.02.08
S-DMS-10970	The DIMGR CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.	test	B231.02.02 T231-41.02.08
S-DMS-10980	The DIMGR CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.	test	B231.02.02
S-DMS-10990	The DIMGR CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.	test	B231.02.02 T231-42.02.02
S-DMS-11000	The DIMGR CI shall provide the capability to restore a session after interruption.	test	B231.02.02 T231-41.02.09
S-DMS-11010	The DIMGR CI shall log to MSS all Service requests initiated during a session.	test	B231.02.02 T231-41.02.03
S-DMS-11011	The DIMGR CI shall log the successful completion of each service request to MSS.	test	B231.02.02 T231-41.02.03
S-DMS-11012	The DIMGR CI shall log to MSS when a service request is activated from the queue.	test	B231.02.02 T231-41.02.03
S-DMS-11013	The DIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.	test	B231.02.02 T231-41.02.03
S-DMS-11014	The DIMGR CI shall log to MSS when an external connection (i.e. to LIMGR, GTWAY or SDSRV) has been established.	test	B231.02.02 T231-41.02.03
S-DMS-11015	The DIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. LIMGR, GTWAY, SDSRV).	test	B231.02.02 T231-41.02.03
S-DMS-11016	The DIMGR CI shall log to MSS when the request to the external entity (e.g. LIMGR, GTWAY, SDSRV) has been successfully returned.	test	B231.02.02 T231-41.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-11017	The DIMGR CI shall log to MSS when the results of the external requests have been integrated and status is about to be sent to the client program.	test	B231.02.02 T231-41.02.03
S-DMS-11020	The DIMGR CI shall log the suspension of processing of Service requests.	test	B231.02.02 T231-41.02.03
S-DMS-11030	The DIMGR CI shall log the resumption of previously suspended Service requests.	test	B231.02.02 T231-41.02.03
S-DMS-11040	The DIMGR CI shall log the termination of service requests.	test	B231.02.02 T231-41.02.03
S-DMS-11050	The DIMGR CI shall ensure that databases which are distributed and replicated provide synchronized data.	test	B231.01.01 T231-32.01.01
S-DMS-11060	The DIMGR CI shall forward commands to terminate a session to all servers which are a part of that session.	test	B231.02.02 T231-41.02.06
S-DMS-11070	The DIMGR CI shall accept Subscriptions for DIM data.	test	B231.01.02 T231-40.01.01
S-DMS-11080	DIMGR CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.27 B260.02.07
S-DMS-11081	The DIMGR CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.27 B260.02.07
S-DMS-11084	DIMGR CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.27 B260.02.07
S-DMS-11085	DIMGR CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.27 B260.02.07
S-DMS-11086	DIMGR CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.27 B260.02.07
S-DMS-11087	DIMGR CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.27 B260.02.07
S-DMS-11088	The DIMGR CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.27 B260.02.07
S-DMS-11089	DIMGR CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.27 B260.02.07
S-DMS-20005	The DDICT CI shall provide access to Data Definitions of the following information at a minimum : a._Earth Science Data Types and services descriptions b._core metadata attribute definitions c._valid values d._synonyms for valid values e._product specific metadata	test	B231.02.03 T231-52.02.01
S-DMS-20006	The DDICT CI shall store a mapping of geophysical parameters to the appropriate instruments and collections.	test	B231.01.03 T231-52.02.01
S-DMS-20007	The DDICT CI shall provide the capability to search a mapping of geophysical parameters to the appropriate instruments and collections.	test	B231.01.03 T231-52.02.01
S-DMS-20008	The DDICT CI shall store descriptive information about keywords associated with a collection, including at a minimum instruments and geophysical parameters.	test	B231.01.03 T231-52.02.01
S-DMS-20009	The DDICT CI shall provide the capability to search descriptive information about keywords associated with a collection, including at a minimum instruments and geophysical parameters.	test	B231.01.03 T231-52.01.01
S-DMS-20010	The DDICT CI shall store a conceptual schema of the data held in the SDSRV, LIMGR, and DIMGR to hide the underlying database structure from the end user.	test	B231.01.03 T231-52.01.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-20030	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the Data Server.	test	B231.01.03 T231-52.01.02
S-DMS-20040	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the LIM	test	B231.01.03 T231-52.01.02
S-DMS-20050	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the DIM.	test	B231.01.03 T231-52.01.02
S-DMS-20060	The DDICT CI shall provide the capability to define a global view of data dictionary entries based on the Earth Science Data Types accessible by the ECS	test	B231.01.03 T231-52.01.03
S-DMS-20070	The data dictionary support variations within data dictionary entries shall be based on data context and instrument.	test	B231.01.03 T231-52.01.03
S-DMS-20080	The DDICT CI shall provide consistent view of data dictionary entries based on the value given for an attribute.	test	B231.01.03 T231-52.01.03
S-DMS-20090	The DDICT CI shall provide the capability to define data dictionary contexts based on science disciplines, site, and instrument.	test	B231.01.03 T231-52.01.03
S-DMS-20110	The DDICT CI shall provide the capability to define a global data dictionary context.	test	B231.01.03 T231-52.01.03
S-DMS-20120	The DDICT CI shall maintain information describing the relationships between Earth Science Data Types.	test	B231.01.03 T231-52.01.02
S-DMS-20130	The DDICT CI shall have the capability to accept from the Workbench CI data dictionary search requests consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, and Product Specific Metadata in a format compatible with the Earth Science Query Language.	test	B231.01.03 T231-51.01.01
S-DMS-20140	The DDICT CI shall have the capability to send to the Workbench CI: a._Earth Science data type descriptions b._core metadata attribute definitions, domains and synonyms c._product specific metadata attribute definitions, domains and synonyms.	test	B231.01.03 T231-51.01.01
S-DMS-20160	The DDICT CI shall have the capability to accept from the SDSRV CI Data Server, Export Files, for the purposes of defining new or updated data dictionary entries	test	B231.01.04 T231-10.01.03
S-DMS-20170	The DDICT CI shall have the capability to accept from the LIM CI, Export Files, for the purposes of defining new or updated data dictionary entries	test	B231.01.04 T231-10.01.03
S-DMS-20180	The DDICT CI shall have the capability to accept from the DIM CI, Export Files, for the purposes of defining new or updated data dictionary entries	test	B231.01.04 T231-10.01.03
S-DMS-20190	The DDICT CI shall maintain consistency of semantic relationships between its data dictionary entries and data server Schema information from which they were derived.	test	B231.02.03 T231-51.02.06
S-DMS-20200	The DDICT CI shall support additions, deletions and modifications to DDICT CI Schema.	test	B231.02.03 T231-51.02.06
S-DMS-20210	The DDICT CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.	test	B231.02.03 T231-52.02.01
S-DMS-20220	The DDICT CI data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.	test	B231.02.03 T231-52.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-20230	The DDICT CI shall ensure that databases which are distributed and replicated provide synchronized data.	test	B231.02.03 T231-51.02.06
S-DMS-20240	The DDICT CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.	test	B231.01.03 T231-51.01.02
S-DMS-20250	The DDICT CI shall store, maintain and provide data management services for ECS data dictionary entries.	test	B231.02.03 T231-51.02.06
S-DMS-20260	The DDICT CI shall support an administration utility for performance monitoring of system disk, memory, CPU and Input/Output.	test	B231.01.04 T231-10.01.05
S-DMS-20270	The DDICT CI shall support an administration utility for performance monitoring of Service Requests processing.	test	B231.01.04 T231-10.01.05
S-DMS-20280	The DDICT CI shall support an administration utility for performance tuning.	test	B231.01.04 T231-10.01.05
S-DMS-20290	The DDICT CI shall support an administration utility for administration of access control.	test	B231.01.04 T231-10.01.05
S-DMS-20300	The DDICT CI shall support an administration utility for on-line full backup of Data Dictionary service data.	test	B231.01.04 T231-10.01.01
S-DMS-20310	The DDICT CI shall support an administration utility for on-line incremental backup of Data Dictionary service data.	test	B231.01.04 T231-10.01.01
S-DMS-20320	The DDICT CI shall support an administration utility for manual recovery of Data Dictionary data from system and media failures.	test	B231.01.04 T231-10.01.02
S-DMS-20330	The DDICT CI shall support an administration utility for automatic recovery of DDICT CI data from system failures.	test	B231.01.04 T231-10.01.02
S-DMS-20340	The DDICT CI shall support a data administration utility for data import.	test	B231.01.04 T231-10.01.03
S-DMS-20350	The DDICT CI shall support a data administration utility for data export.	test	B231.01.04 T231-10.01.03
S-DMS-20355	The DDICT CI shall provide operations staff with the capability to generate daily DDICT operations summary reports.	test	B231.02.03 T231-52.02.03
S-DMS-20356	The DDICT CI shall provide operations staff with the capability to generate DDICT performance summary reports.	test	B231.02.03 T231-52.02.03
S-DMS-20360	The DDICT CI shall provide documents conforming to HTML3 standards.	test	B230.02.21 B231.02.03 T231-51.02.05
S-DMS-20530	The DDICT CI shall support batch information management capabilities to add data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20540	The DDICT CI shall support batch information management capabilities to update data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20550	The DDICT CI shall support batch information management capabilities to delete data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20560	The DDICT CI shall support batch information management capabilities to retrieve data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20570	The DDICT CI shall support interactive information management capabilities to add data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20580	The DDICT CI shall support interactive information management capabilities to update data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20590	The DDICT CI shall support interactive information management capabilities to delete data dictionary entries.	test	B231.02.03 T231-51.02.01
S-DMS-20600	The DDICT CI shall support interactive information management capabilities to retrieve data dictionary entries.	test	B231.02.03 T231-51.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-20610	The DDICT CI shall maintain a log of all insertions, updates and deletions of data dictionary entries	test	B231.02.03 T231-52.02.01
S-DMS-20620	Standard Product related Metadata at the DDICT CI shall include keywords and glossary from investigators.	test	B231.02.03 T231-51.02.07
S-DMS-20630	Standard Product related Metadata at the DDICT CI shall include of keywords, synonyms, and glossary for cross-product and cross-directory referencing.	test	B231.02.03 T231-51.02.07
S-DMS-20640	The DDICT CI shall support the restart of database administration and maintenance activities which are unintentionally interrupted through system software or hardware failure, without loss of information.	test	B231.01.04 T231-10.01.02
S-DMS-20660	The DDICT CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.	test	B231.02.03 T231-51.02.02
S-DMS-20670	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.	test	B231.02.03 T231-52.02.01
S-DMS-20680	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data ownership.	test	B231.02.03 T231-52.02.01
S-DMS-20690	The DDICT CI shall provide the capability to add, delete, or modify dictionary entries to authorized users.	test	B231.02.03 T231-52.02.01
S-DMS-20695	The DDICT CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.	test	B231.02.02 T231-42.02.06
S-DMS-20700	The DDICT CI shall provide integration, testing, and simulation status to the SMC.	test	B231.02.03 T231-51.02.03
S-DMS-20710	The DDICT CI shall provide maintenance status to the SMC.	test	B231.02.03 T231-51.02.03
S-DMS-20720	The DDICT CI shall provide logistics status to the SMC.	test	B231.02.03 T231-51.02.03
S-DMS-20730	The DDICT CI shall provide training information to the SMC.	test	B231.02.03 T231-51.02.03
S-DMS-20735	The DDICT CI shall provide the capability to receive maintenance directives from the SMC.	test	B231.02.03
S-DMS-20740	The DDICT CI shall provide the capability to receive directives for integration, testing, and simulation from the SMC.	test	B231.02.03
S-DMS-20750	The DDICT CI shall provide the capability to receive configuration management directives from the SMC.	test	B231.02.03
S-DMS-20760	The DDICT CI shall provide the capability to receive logistics management directives from the SMC.	test	B231.02.03
S-DMS-20770	The DDICT CI shall provide the capability to receive fault management directives from the SMC.	test	B231.02.03
S-DMS-20780	The DDICT CI shall provide the capability to receive security directives from the SMC.	test	B231.02.03
S-DMS-20790	The DDICT CI shall provide the capability to receive training management directives from the SMC.	test	B231.02.03
S-DMS-20795	The DDICT CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.	test	B231.02.03 T231-52.02.03
S-DMS-20796	The DDICT CI shall provide operations staff with the capability to distribute DDICT CI utilization reports electronically or in hard copy or on electronic media.	test	B231.02.03 T231-52.02.03
S-DMS-20820	The DDICT CI shall provide detected hardware and software fault information to MSS.	test	B231.02.03 T231-51.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-20830	The DDICT CI shall provide configuration management data such as software versions to the MSS using the managed process framework.	test	B231.02.03 T231-51.02.02
S-DMS-20835	The DDICT CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.	test	B231.02.03 T231-51.02.02
S-DMS-20840	The DDICT CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.	test	B231.02.03 T231-51.02.02
S-DMS-20850	The DDICT CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.	test	B231.02.03 T231-51.02.02
S-DMS-20860	The DDICT CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).	test	B231.02.03 T231-51.02.02
S-DMS-20865	The DDICT CI shall log to MSS the initiation of all Service requests.	test	B231.02.03 T231-52.02.02
S-DMS-20866	The DDICT CI shall log the startup of the DDICT servers to MSS.	test	B231.02.03 T231-52.02.02
S-DMS-20867	The DDICT CI shall log the shutdown of the DDICT servers to MSS.	test	B231.02.03 T231-52.02.02
S-DMS-20868	The DDICT CI shall log to MSS when a service request is activated from the queue.	test	B231.02.03 T231-52.02.02
S-DMS-20869	The DDICT CI shall log to MSS when a request has been successfully completed and the status is about to be returned to the client.	test	B231.02.03 T231-52.02.02
S-DMS-20870	The DDICT CI shall log to MSS the initiation of a session.	test	B231.02.03 T231-52.02.02
S-DMS-20871	The DDICT CI shall log to MSS the suspension of a session.	test	B231.02.03 T231-52.02.02
S-DMS-20872	The DDICT CI shall log to MSS the resumption of a previously suspended session.	test	B231.02.03 T231-52.02.02
S-DMS-20873	The DDICT CI shall log to MSS the termination of a session.	test	B231.02.03 T231-52.02.02
S-DMS-20880	The DDICT CI shall have the capability to recieve from the Data Administrator, Data Administration Requests	test	B231.01.03 T231-51.01.02
S-DMS-20890	The DDICT CI shall provide maintaine Valid Values for data elements, where the data element has an enumerated set of values as a constraint.	test	B231.01.03 T231-51.01.03
S-DMS-20910	The DDICT CI shall provide access to the lists of the Valid Values for data elements, where the data element has an enumerated set of values as a constraint	test	B231.01.03 T231-51.01.03
S-DMS-20920	The DDICT CI shall provide the capability to relate Phenomenological Search Criteria to Search Criteria containing values for searchable attributes supported in the Data Server Schema.	demo	B232.01.02 T232-20.01.06
S-DMS-20930	The DDICT CI shall have the capability to export Dependent Valids Values to the ESDIS IMS.	test	B231.01.04 T231-10.01.03
S-DMS-21000	The DDICT CI shall provide an application program interface for the submission of Service Requests.	test	B231.01.04 T231-10.01.08
S-DMS-21010	The DDICT CI shall provide an application program interface for the submission of requests for administrative services.	test	B231.01.04 T231-10.01.09

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-21020	The DDICT CI shall contain a thesarus of data dictionary entries.	test	B231.01.04 T231-10.01.04
S-DMS-23920	DDICT CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.27 B260.02.07
S-DMS-23921	The DDICT CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.27 B260.02.07
S-DMS-23924	DDICT CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.27 B260.02.07
S-DMS-23925	DDICT CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.27 B260.02.07
S-DMS-23926	DDICT CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.27 B260.02.07
S-DMS-23927	DDICT CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.27 B260.02.07
S-DMS-23928	The DDICT CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.27 B260.02.07
S-DMS-23929	DDICT CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.27 B260.02.07
S-DMS-30060	The GTWAY CI shall provide the capability to establish sessions as the contxt for a series of service requests.	test	B231.02.05 T231-60.02.01
S-DMS-30070	The GTWAY CI shall provide the capability to suspend an on-going session.	test	B231.02.05 T231-60.02.01
S-DMS-30080	The GTWAY CI shall provide the capability to resume a previously suspended session.	test	B231.02.05 T231-60.02.01
S-DMS-30090	The GTWAY CI shall provide the capability to terminate an established session.	test	B231.02.05 T231-60.02.01
S-DMS-30110	The GTWAY CI shall provide the capability to save the result of a Service Request for later reuse.	test	B231.02.05 T231-60.02.06
S-DMS-30120	The GTWAY CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.	test	B231.02.05 T231-60.02.06
S-DMS-30130	The GTWAY CI shall provide the capability to terminate processing of active or suspended service requests.	test	B231.02.05 T231-60.02.06
S-DMS-30140	The GTWAY CI shall provide the capability to suspend processing of active service requests.	test	B231.02.05 T231-60.02.06
S-DMS-30150	The GTWAY CI shall provide the capability to resume processing of a previously suspended service request.	test	B231.02.05 T231-60.02.06
S-DMS-30160	The GTWAY CI shall provide a capability to estimate the resources required to execute a pending Service request.	test	B231.01.05 T231-61.01.04
S-DMS-30260	The GTWAY CI shall provide a capability to report the status of service requests submitted to it.	test	B231.02.05 T231-60.02.06
S-DMS-30310	The GTWAY CI shall have the capability to send Inventory Search Requests to the Version 0 IMS using Version 0 system protocols.	test	B230.02.02 B231.01.05 B260.02.04 T231-61.01.01
S-DMS-30320	The GTWAY CI shall have the capability to receive Inventory Search Results from the Version 0 IMS using Version 0 system protocols.	test	B230.02.02 B231.01.05 B260.02.04 T231-61.01.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-30340	The GTWAY CI shall have the capability to send Browse Requests to the Version 0 IMS using Version 0 system protocols.	test	B230.02.03 B231.01.05 B260.02.04 T231-61.01.02
S-DMS-30345	The GTWAY CI shall have the capability to receive Browse Results from the V0 IMS using Version 0 protocols.	test	B230.02.03 B231.01.05 B260.02.04 T231-61.01.02
S-DMS-30350	The GTWAY CI shall have the capability to send Product Requests to the Version 0 IMS using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30550	The GTWAY CI shall provide the capability to translate ECS system protocols into Version 0 system protocol.	test	B230.02.02 B230.02.03 B230.02.06 B231.01.05 B260.02.04 T231-61.01.01
S-DMS-30560	The GTWAY CI shall support two-way Level 2 or 3 catalog interoperability, as defined by the CEOS, for the interface between the ECS and the NOAA SAAs.	test	B231.01.05 T231-61.01.01
S-DMS-30570	The GTWAY CI shall support two-way Level 3 catalog interoperability, as defined by the CEOS, for the interface between the ECS and V0.	test	B231.01.05 T231-61.01.01
S-DMS-30600	The GTWAY CI shall have the capability to send User Authentication Requests to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.04
S-DMS-30610	The GTWAY CI shall have the capability to receive User Authentication Information from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.04
S-DMS-30620	The GTWAY CI shall have the capability to receive User Authentication Requests from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.04
S-DMS-30630	The GTWAY CI shall have the capability to send User Authentication Information to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.04
S-DMS-30640	The GTWAY CI shall have the capability to receive Inventory Search Requests from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.01
S-DMS-30650	The GTWAY CI shall have the capability to send Inventory Search Results to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.01
S-DMS-30660	The GTWAY CI shall have the capability to send Inventory Search Requests to the NOAA SAAs using Version 0 system protocols.	test	B230.02.02 B231.01.05 B260.02.04 T231-61.01.01
S-DMS-30670	The GTWAY CI shall have the capability to receive Inventory Search Results from the NOAA SAAs using Version 0 system protocols.	test	B230.02.02 B231.01.05 B260.02.04 T231-61.01.01
S-DMS-30680	The GTWAY CI shall have the capability to receive Browse Requests from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.02
S-DMS-30690	The GTWAY CI shall have the capability to send Browse Requests to the NOAA SAAs using Version 0 system protocols.	test	B230.02.03 B231.01.05 B260.02.04 T231-61.01.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-30695	The GTWAY CI shall have the capability to receive Browse Results from the NOAA SAAs using Version 0 system protocols.	test	B230.02.03 B231.01.05 B260.02.04 T231-61.01.02
S-DMS-30700	The GTWAY CI shall have the capability to send Product Requests to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30710	The GTWAY CI shall have the capability to receive Product Delivery Status from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30720	The GTWAY CI shall have the capability to send Product Delivery Status Requests to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30730	The GTWAY CI shall have the capability to receive Product Requests from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30740	The GTWAY CI shall have the capability to send Product Delivery Status to the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30750	The GTWAY CI shall have the capability to receive Product Delivery Status Requests from the NOAA SAAs using Version 0 system protocols.	test	B231.01.05 T231-61.01.03
S-DMS-30760	The GTWAY CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.	test	B231.01.05 T231-61.01.01
S-DMS-30800	The GTWAY CI shall be able to provide notification of events associated with sessions which require additional instructions, e.g., when requests exceed a specified threshold.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30805	The GTWAY CI shall be able to provide notification of events associated with Service requests which require additional instructions, e.g., when resources for a request exceed a specified threshold.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30810	The GTWAY CI shall provide an entry point to be used to respond to notifications of events which require instructions to be returned to the LIM CI.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30820	The GTWAY CI shall provide the capability to accept and utilize the entry point to be used for asynchronous notification in asynchronous Service Requests.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30830	The GTWAY CI shall provide the capability to disable asynchronous notifications, and provide default instructions for such notification events.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30840	The GTWAY CI shall be able to accept notifications of events associated with sessions it has with other services.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30845	The GTWAY CI shall be able to accept notifications of events associated with Service requests it issued to other services.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30850	The GTWAY CI shall provide a capability to accept instructions associated with responses to notifications of events.	test	B230.02.20 B231.01.05 T231-62.01.03
S-DMS-30860	The GTWAY CI shall provide a capability to report the status of sessions established by it.	test	B231.02.05 T231-60.02.01
S-DMS-30870	The GTWAY CI shall automatically suspend sessions that have been inactive for a specified time.	test	B231.02.05 T231-60.02.02
S-DMS-30890	The GTWAY CI shall support multiple concurrent sessions.	test	B231.02.05 T231-60.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-30900	The GTWAY CI shall support multiple service requests within a session.	test	B231.02.05 T231-60.02.02
S-DMS-30910	The GTWAY CI shall log the initiation of a session.	test	B231.01.05 T231-62.01.02
S-DMS-30920	The GTWAY CI shall log the termination of a session.	test	B231.01.05 T231-62.01.02
S-DMS-30930	The GTWAY CI shall log the suspension of a session.	test	B231.01.05 T231-62.01.02
S-DMS-30940	The GTWAY CI shall log the resumption of previously suspended	test	B231.01.05 T231-62.01.02
S-DMS-30950	The GTWAY CI shall provide the capability for the operations staff to specify a "time-out" period for inactive sessions.	test	B231.02.05 T231-60.02.03
S-DMS-30960	The GTWAY CI shall provide the capability for the operations staff to suspend all active sessions.	test	B231.02.05 T231-60.02.02
S-DMS-30970	The GTWAY CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.	test	B231.02.05 T231-60.02.02
S-DMS-30980	The GTWAY CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.	test	B231.02.05 T231-60.02.02
S-DMS-30990	The GTWAY CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.	test	B231.02.05 T231-60.02.04
S-DMS-31000	The GTWAY CI shall provide the capability to restore a session after interruption.	test	B231.02.05 T231-60.02.05
S-DMS-31011	The GTWAY CI shall log the startup of the GTWAY servers to MSS.	test	B231.01.05 T231-62.01.02
S-DMS-31012	The GTWAY CI shall log the shutdown of the GTWAY servers to MSS.	test	B231.01.05 T231-62.01.02
S-DMS-31013	The GTWAY CI shall log to MSS when a service request is activated from the queue.	test	B231.01.05 T231-62.01.02
S-DMS-31014	The GTWAY CI shall log to MSS when a service request has been successfully decomposed into its component requests.	test	B231.01.05 T231-62.01.02
S-DMS-31015	The GTWAY CI shall log to MSS when an external connection to the V0 IMS server has been established.	test	B231.01.05 T231-62.01.02
S-DMS-31016	The GTWAY CI shall log to MSS when the component service request has been submitted to the V0 IMS server.	test	B231.01.05 T231-62.01.02
S-DMS-31017	The GTWAY CI shall log to MSS when the request to the V0 IMS server has been successfully returned.	test	B231.01.05 T231-62.01.02
S-DMS-31018	The GTWAY CI shall log to MSS when the results of the request has been integrated and status is about to be sent to the client program.	test	B231.01.05 T231-62.01.02
S-DMS-31020	The GTWAY CI shall log the suspension of processing of Service requests.	test	B231.01.05 T231-62.01.02
S-DMS-31030	The GTWAY CI shall log the resumption of previously suspended Service requests.	test	B231.01.05 T231-62.01.02
S-DMS-31050	The GTWAY CI shall ensure that databases which are distributed and replicated provide synchronized data.	test	B231.01.05 T231-62.01.05
S-DMS-31051	The GTWAY CI shall send detected hardware and software fault information to MSS.	test	B231.01.05 T231-62.01.04
S-DMS-31052	The GTWAY CI shall provide configuration management data such as software versions to MSS using managed process framework.	test	231.01.05 T231-62.01.04

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-31053	The GTWAY CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.	test	B231.01.05 T231-62.01.
S-DMS-31054	The GTWAY CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.	test	B231.01.05 T231-62.01.05
S-DMS-31055	The GTWAY CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.	test	B231.01.05 T231-62.01.05
S-DMS-31056	The GTWAY CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.	test	B231.01.05 T231-62.01.05
S-DMS-31057	The GTWAY CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).	test	B231.01.05 T231-62.01.04
S-DMS-31058	The GTWAY CI shall provide integration, testing, and simulation status to the MSS.	test	B231.01.05 T231-62.01.04
S-DMS-31059	The GTWAY CI shall provide maintenance status to the MSS.	test	B231.01.05 T231-62.01.04
S-DMS-31060	The GTWAY CI shall have the capability to send Cost Estimate Requests to the NOAA SAAs using Version 0 protocols.	test	B231.01.05 T231-61.01.04
S-DMS-31061	The GTWAY CI shall provide training information to the SMC.	test	B231.01.05 T231-62.01.04
S-DMS-31062	The GTWAY CI shall provide logistics status to the SMC.	test	B231.01.05 T231-62.01.04
S-DMS-31090	The GTWAY CI shall have the capability to receive Cost Estimate Requests from the NOAA SAAs using Version 0 protocols.	test	B231.01.05 T231-61.01.04
S-DMS-31100	The GTWAY CI shall have the capability to send Guide queries to the NOAA SAAs using Version 0 protocols.	test	B231.01.05 T231-61.01.05
S-DMS-31120	The GTWAY CI shall have the capability to send Guide query results to the NOAA SAAs using Version 0 protocols.	test	B231.01.05 T231-61.01.05
S-DMS-31140	The GTWAY CI shall have the capability to send Ancillary Data Requests to the NOAA NMC using Version 0 protocols.	test	B231.01.05 T231-61.01.04
S-DMS-31150	The GTWAY CI shall have the capability to send Product Availability Queries to the NOAA NMC using Version 0 protocols.	test	B231.01.05 T231-61.01.03
S-DMS-31160	The GTWAY CI shall have the capability to send Guide Search Requests to the V0 IMS using Version 0 protocols.	test	B231.01.05 T231-61.01.05
S-DMS-31190	The GTWAY CI shall have the capability to receive Guide Search Results from the V0 IMS using Version 0 protocols.	test	B231.01.05 T231-61.01.05
S-DMS-32000	The GTWAY CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.	test	B231.01.05 T231-62.01.06
S-DMS-32001	The GTWAY CI shall provide operations staff with the capability to distribute GTWAY CI utilization reports electronically or in hard copy or on electronic media.	test	B231.01.05 T231-62.01.06
S-DMS-32010	The GTWAY CI shall provide operations staff with the capability to generate daily GTWAY operations summary reports.	test	B231.01.05 T231-62.01.06
S-DMS-32011	The GTWAY CI shall provide operations staff with the capability to generate GTWAY performance summary reports.	test	B231.01.05 T231-62.01.06
S-DMS-32020	GTWAY CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.27
S-DMS-32021	The GTWAY CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.27

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DMS-32024	GTWAY CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.27
S-DMS-32025	GTWAY CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B230.02.27
S-DMS-32026	GTWAY CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.27
S-DMS-32027	GTWAY CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.27
S-DMS-32028	The GTWAY CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.27
S-DMS-32029	GTWAY CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.27
S-DMS-60200	The DMGHW CI shall provide local storage as defined in Appendix E (Section E.8, Table E-9) of the current version of 304-CD-005.	test	T250-10.02.20
S-DPS-20020	The PRONG CI shall have the capability to incorporate DAAC-developed software required to support discipline specific needs.	test	T233-11.01.01
S-DPS-20030	The PRONG CI shall be capable of operating in a 24-hour a day, 7-day week mode.	test	T233-11.01.04
S-DPS-20150	The PRONG CI shall provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	test	B260.02.06
S-DPS-20691	The PRONG CI shall base the staging of input data on the predicted PGE execution start time and the estimated staging time.	test	B240.02.05 B240.02.07 B260.02.03
S-DPS-20694	The PRONG CI shall cancel input data staging if the DPR that initiated the input data staging is canceled.	test	B240.02.05 B260.02.03
S-DPS-20695	The PRONG CI shall delete the staged input data for a DPR if that DPR is canceled and no other DPR needs it.	test	B233.02.03 B240.02.05 B260.02.03
S-DPS-20696	The PRONG CI shall complete the process of staging the input data and defer the execution of the PGE if the suspend command is received while the data is being staged.	test	B240.02.05 B260.02.03
S-DPS-21124	The PRONG CI shall receive advertisements from the IOS.	test	B240.02.10
S-DPS-21126	The PRONG CI shall send advertisement subscriptions to the IOS.	test	B240.02.10
S-DPS-21730	The operations staff shall have the capability to suspend the processing of a Data Processing Request.	test	T233-11.02.01
S-DPS-21740	The operations staff shall have the capability to resume suspended processing of a Data Processing Request.	test	T233-11.02.01
S-DPS-21855	The PRONG CI GUI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.	test	T233-12.02.01
S-DPS-21856	To the extent possible, the PRONG CI COTS GUI shall be configured to conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.	test	T233-12.02.01
S-DPS-21860	The PRONG CI HMI Functions shall be accessible via an API (Application Program Interface).	test	T233-11.01.02
S-DPS-22560	The PRONG CI shall update the Processing State to suspend when the Operation Command specifies suspension.	test	T233-11.02.01
S-DPS-22590	The PRONG CI shall not perform any further processing on a Data Processing Request which is suspended.	test	T233-11.02.01
S-DPS-22600	The PRONG CI shall reject the Operation Command which specified a resume if the Data Processing Request was not suspended.	test	T233-11.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DPS-22611	When the resume Operation Command is used to resume processing for a Data Processing Request, the PRONG CI shall update the Processing State to the previous Processing State before the suspension.	test	T233-11.02.01
S-DPS-24000	The PRONG CI shall notify the operations staff when the size of a granule input to a Data Processing Request is not within a pre-assigned range.	test	B233.02.04 B240.02.12 B260.02.07 T233-12.01.02
S-DPS-24010	The PRONG CI shall notify the operations staff when the size of a granule output by Data Processing Request is not within a pre-assigned range.	test	B233.02.04 B240.02.12 B260.02.07 T233-12.01.02
S-DPS-24020	The PRONG CI shall be capable of checking core metadata values of output data granules against a predefined list of values.	test	T233-12.01.05
S-DPS-24030	The PRONG CI shall be capable of checking core metadata values of output data granules against a predefined range of values.	test	T233-12.01.05
S-DPS-24040	The PRONG CI shall be capable of checking product specific metadata values of output data granules against a predefined list of values.	test	B240.02.12 B260.02.07 T233-12.01.06
S-DPS-24050	The PRONG CI shall be capable of checking product specific metadata values of output data granules against a predefined range of values.	test	B240.02.12 B260.02.07 T233-12.01.06
S-DPS-24060	PRONG CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B240.02.12 B260.02.07
S-DPS-24070	PRONG CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B240.02.12 B260.02.07
S-DPS-24080	The PRONG CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	test	B240.02.12 B260.02.07
S-DPS-24090	PRONG CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B240.02.12 B260.02.07
S-DPS-30300	The PRONG CI shall process the EOS-AM spacecraft ancillary data to assess the quality of onboard orbit data to detect and note in metadata the following conditions: a. missing data b. erroneous data (i.e. if distance from origin deviates greatly from a neighboring set of points or if magnitude of velocity deviates greatly from the neighboring set of velocities) excluding data that reflects orbit adjust maneuvers	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03
S-DPS-30320	The PRONG CI shall generate reports on the quality of onboard orbit data, noting: a) the number of missing data are more than a specified limit value over a specified time interval b) the number of contiguous missing data are more than a specified value	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03
S-DPS-30600	The PRONG CI shall process the EOS-AM spacecraft ancillary data to assess the quality of onboard attitude data contained in the EOS-AM spacecraft ancillary data to detect and note in metadata the folloowing conditions: a) missing data b) erroneous data (i.e. invalid Euler angle, invalid Euler angle rate).	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DPS-30710	The PRONG CI shall provide to the SDP Toolkit, at a minimum, the following metadata with the ephemeris data files for EOS-AM processing: a) time range b) orbit number range c) platform	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-30750	The PRONG CI shall provide to the SDP Toolkit orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate data, in the native format of the host hardware for EOS-AM processing.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-30770	The PRONG CI shall provide to the SDP Toolkit orbit and attitude data, including platform position and velocity vectors and platform attitude/attitude rate data, in HDF-EOS format for EOS-AM processing.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-30900	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 PDS as header and quality parameters all contained in the same physical file as the L0 telemetry packets.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-30910	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 PDS containing header information as specified in the EDOS-ECS ICD.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-30920	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 PDS containing quality information as specified in the EDOS-ECS ICD.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-31010	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 header in the native format of the host hardware.	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-31030	The PRONG CI shall provide, at a minimum, the following metadata information to the SDP Toolkit with EDOS-generated L0 data: a. Actual start time of staged L0 data b. Actual end time of staged L0 data c. Number of physical L0 data files staged d. Start time of L0 data as requested by EOS investigators through the planning/processing system e. End time of L0 data as requested by EOS investigators through the planning/processing system f. APID of each L0 data file g. Orbit number or orbit number range of the staged L0 data file	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04
S-DPS-40835	The AITTL CI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.	test	T233-12.01.01
S-DPS-41100	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a list of Science Software Archive Packages in the Data Server.	test	B240.02.03
S-DPS-41110	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display the metadata for a specific Science Software Archive Package.	test	B240.02.03
S-DPS-41120	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a list of the files that comprise a specific Science Software Archive Package.	test	B240.02.04 B260.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DPS-41130	The AITTL CI shall provide to the operations staff, via a GUI, the capability to retrieve a copy of a specified file belonging to a specific Science Software Archive Package.	test	B240.02.04 B260.02.02
S-DPS-41140	The AITTL CI shall provide to the operations staff, via a GUI, the capability to add a new Science Software Archive Package to the Data Server.	test	B240.02.03 B260.02.02
S-DPS-41150	The AITTL CI shall provide to the operations staff, via a GUI, the capability to add or remove a file to or from the set of files comprising a specific Science Software Archive Package.	test	B240.02.04 B260.02.02
S-DPS-41160	The AITTL CI shall provide to the operations staff, via a GUI, the capability to edit the metadata for a specific Science Software Archive Package.	test	B240.02.03 B260.02.02
S-DPS-41170	The AITTL CI shall provide to the operations staff, via a GUI, the capability to remove a specific Science Software Archive Package from the Data Server.	test	B240.02.03 B260.02.02
S-DPS-41190	The AITTL CI SSAP GUI for adding an Science Software Archive Package to the Data Server shall have the capability of accepting its inputs from a file.	test	B240.02.03 B260.02.02
S-DPS-41200	The AITTL CI shall provide the operations staff with the ability (a) to restrict update access to the Data Server to authorized personnel and (b) to maintain a record of updates made.	test	B240.02.03 B240.02.04 B260.02.02
S-DPS-41355	The AITTL CI shall provide the operations staff with the ability (a) to restrict update access to the PGE Database to authorized personnel and (b) to maintain a record of updates made.	test	B233.02.05
S-DPS-41360	The AITTL CI shall be capable of accepting PGE information updates for the PDPS Database from a file.	test	B233.02.05
S-DPS-42365	The operations staff shall have the capability to use MSS profiling capabilities to determine the computing resources utilized by the execution of a chain of PGEs.	test	T233-11.01.03
S-DPS-60241	The SPRHW CI processing time shall not exceed the overall end-to-end turnaround time of 24 hours minus the processing time of other subsystems involved in instrument product processing.	test	T250-10.02.22
S-DPS-60242	The SPRHW CI processing shall be sized in accordance with processing requirements derived from Appendix E (Section E.2 Table E-2) of the current version of 304-CD-005.	test	T250-10.02.23
S-DPS-60251	The SPRHW CI storage capacity shall be sized in accordance with the volume requirement derived from Appendix E (Section E.2 Table E-2) of the current version of 304-CD-005.	test	T250-10.02.23
S-DPS-60260	The SPRHW CI processing shall be sized in accordance with DAO processing requirements derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.	test	T250-10.02.23
S-DPS-60270	The SPRHW CI storage capacity shall be sized in accordance with the DAO data volume requirement derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.	test	T250-10.02.23
S-DPS-60351	The SPRHW CI shall contribute to the generation of Level 1 Standard Products within 24 hours after processing is initiated.	test	T250-10.02.24
S-DPS-60361	The SPRHW CI shall contribute to the generation of Level 2 Standard Products within 24 hours after processing is initiated.	test	T250-10.02.24
S-DPS-60371	The SPRHW CI shall contribute to the generation of Level 3 Standard Products within 24 hours after processing is initiated.	test	T250-10.02.24
S-DPS-60410	The SPRHW CI shall be capable of operating in a 24 hour per day, 7 days a week mode.	test	T250-10.02.25

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DPS-61125	The SPRHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm, gtar, and gmake.	test	T250-10.02.26
S-DSS-00070	The SDSRV CI shall accept Service Requests from the Data Processing subsystem and, as a result, provide access to Data for the purpose of reprocessing.	test	T209-22.02.03
S-DSS-00115	The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated for that Search Request.	test	B230.02.04 B260.02.04 T209-32.02.02
S-DSS-00116	The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated since the last Search Status Request for that Search Request.	test	B230.02.04 B260.02.04 T209-32.02.02
S-DSS-00180	The SDSRV CI shall accept and process Data Requests for Data Products that are produced on demand using the resources available to the Data Server.	test	T209-32.02.07
S-DSS-00200	The SDSRV CI shall provide the capability for a user to delete their own queued Data Request.	test	B230.02.12 B260.02.03 T209-32.02.05
S-DSS-00210	The SDSRV CI shall provide operations staff the capability to update the Priority Information for a queued Service Request.	test	T209-12.02.01
S-DSS-00215	The SDSRV CI shall provide operations staff the capability to modify any field in a queued Service request.	test	T209-12.02.02
S-DSS-00230	The SDSRV CI shall provide users the capability to cancel their own Service Requests.	test	T209-12.02.03
S-DSS-00240	The SDSRV CI shall determine which Data Requests require post-retrieval processing.	test	T209-32.02.06
S-DSS-00250	The SDSRV CI shall provide an application program interface for the submission of Service Requests.	test	T209-12.02.04
S-DSS-00260	The SDSRV CI shall provide an application program interface for the submission of requests for administrative services.	test	T209-12.02.05
S-DSS-00264	The SDSRV CI shall provide an application program interface which permits DAAC operations staff to link special subsetting capabilities into a Science Data Server.	test	T209-12.02.06
S-DSS-00270	The SDSRV CI shall accept and process Data Requests for Repaired Orbit Data.	test	B230.02.12 B260.02.03 T209-32.02.03
S-DSS-00280	The SDSRV CI shall accept and process Data Requests for Attitude Data.	test	B230.02.12 B260.02.03 T209-32.02.03
S-DSS-00310	The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.	test	T209-12.02.07
S-DSS-00320	The SDSRV CI shall notify clients that issue Cancellation Requests that the associated Service Request has been canceled or the associated Service Request was completed.	test	T209-12.02.03
S-DSS-00330	The SDSRV CI shall record Request Identifiers to be used for accounting purposes.	test	T209-81.02.05
S-DSS-00331	The SDSRV CI shall record the User Identifier of the science investigator associated with a Service Request, to be used for accounting purposes.	test	T209-81.02.05
S-DSS-00332	The SDSRV CI shall record the amount of user storage associated with a science user, to be used for accounting purposes.	test	T209-81.02.05

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-00333	The SDSRV CI shall record the amount of connect time associated with a science user, to be used for accounting purposes.	test	T209-81.02.05
S-DSS-00340	The SDSRV CI shall record the level of CPU utilization for each Service Request to be used for accounting.	test	T209-81.02.05
S-DSS-00350	The SDSRV CI shall record the level of I/O utilization for each Service Request to be used for accounting.	test	T209-81.02.05
S-DSS-00360	The SDSRV CI shall record, for accounting purposes, a fixed personnel cost for Service Requests requiring interaction with operations staff.	test	T209-81.02.11
S-DSS-00370	The SDSRV CI shall record a archival storage cost based on the number of bytes stored, to be used for accounting.	test	T209-81.02.11
S-DSS-00375	The SDSRV CI shall associate User Accounting Information with client sessions.	test	T209-81.02.02
S-DSS-00376	The SDSRV CI shall provide User Accounting Information to the System Management Subsystem, using MSS application program interfaces.	test	T209-81.02.07
S-DSS-00378	Operations staff shall be able to distribute SDSRV utilization reports eletronically or in hard copy or on eletronic media.	test	T209-81.02.08
S-DSS-00400	The SDSRV CI shall accept pricing information, based on disk, CPU and media utilization, from CSMS.	test	T209-81.02.03
S-DSS-00410	The SDSRV CI shall provide actual cost information by the completion of a Service Request.	test	T209-81.02.06
S-DSS-00420	The SDSRV CI shall record the amount of media utilized for a Distribution Request.	test	T209-81.02.10
S-DSS-00430	The SDSRV CI shall accept the amount of media utilized from the distribution services.	test	T209-81.02.04
S-DSS-00440	The SDSRV CI shall be capable of providing estimated Service Request Cost.	test	T209-81.02.05
S-DSS-00730	The SDSRV CI shall provide the capability to store Metadata problem reports.	test	T209-22.02.02
S-DSS-00732	The SDSRV CI shall provide the capability for one Data Server to accept Data Availability Schedules from another Data Server.	test	T209-30.01.04
S-DSS-00740	The SDSRV CI shall notify operations staff of the receipt of Metadata problem reports.	test	T209-22.02.02
S-DSS-00750	The SDSRV CI shall provide Metadata problem reports to operations staff upon request.	test	T209-22.02.02
S-DSS-00760	The SDSRV CI shall provide application program interfaces to all the operator functions.	test	T209-12.02.04
S-DSS-00790	The STMGT CI shall provide tools to analyze the performance of the storage system when such tools are supplied by the FSMS vendor.	test	B253.02.09 T209-72.02.03
S-DSS-00800	The SDSRV CI shall provide tools to monitor and tune database performance when such tools are supplied by the database vendor.	test	B253.02.07 T209-72.02.01
S-DSS-00822	The SDSRV CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	test	B260.02.06 B260.02.07 T209-62.02.01
S-DSS-00823	The SDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	test	B260.02.06 B260.02.07 T209-62.02.01
S-DSS-00824	The SDSRV CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	test	B260.02.06 B260.02.07 T209-62.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-00825	The SDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	test	B260.02.06 B260.02.07 T209-62.02.01
S-DSS-00826	The SDSRV CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	test	B260.02.06 B260.02.07 T209-62.02.01
S-DSS-00827	The SDSRV CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	test	B260.02.06 B260.02.07 T209-62.02.01
S-DSS-00829	The STMGT CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	test	B260.02.06 T209-62.02.02
S-DSS-00830	The SDSRV CI shall collect Fault Management Data, such as, device failures, Service Request failures, transmission failures and general failures. This information shall be sent to the SMC for fault isolation.	test	B260.02.07 T209-51.02.11
S-DSS-00835	The STMGT CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	test	B260.02.06 T209-62.02.02
S-DSS-00836	The STMGT CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	test	B260.02.06 T209-62.02.02
S-DSS-00837	The STMGT CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	test	B260.02.07 T209-62.02.02
S-DSS-00838	The STMGT CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	test	B260.02.06 T209-62.02.02
S-DSS-00839	The STMGT CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	test	T209-62.02.02
S-DSS-00840	The SDSRV CI shall inform the collocated elements of ECS if resource availability falls below nominal operating parameters. This applies to staging resources and peripheral resources.	test	T209-51.02.08
S-DSS-00842	The DDIST CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	test	B260.02.06 T209-62.02.03
S-DSS-00843	The DDIST CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	test	B260.02.06 T209-62.02.03
S-DSS-00844	The DDIST CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	test	B260.02.06 T209-62.02.03
S-DSS-00845	The DDIST CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	test	B260.02.07 T209-62.02.03
S-DSS-00846	The DDIST CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	test	B260.02.06 T209-62.02.03
S-DSS-00847	The DDIST CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	test	T209-62.02.03
S-DSS-00848	The DDIST CI shall collect and provide Distribution Management data to the MSS using a MSS provided Distribution Management API.	test	T209-62.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-00851	The DDSRV CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	test	B260.02.06 T209-62.02.04
S-DSS-00852	The DDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	test	B260.02.06 T209-62.02.04
S-DSS-00853	The DDSRV CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	test	B260.02.06 T209-62.02.04
S-DSS-00854	The DDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	test	B260.02.07 T209-62.02.04
S-DSS-00855	The DDSRV CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	test	B260.02.06 T209-62.02.04
S-DSS-00856	The DDSRV CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	test	T209-62.02.04
S-DSS-00920	The SDSRV CI shall provide Logistics Status to the SMC.	test	T209-51.02.07
S-DSS-00930	The SDSRV CI shall provide training information to the SMC.	test	T209-51.02.07
S-DSS-00980	The SDSRV CI operations staff shall have the capability to receive from the SMC, management directives.	test	T209-51.02.07
S-DSS-00990	The SDSRV CI operations staff shall have the capability to receive from the SMC, directives for integration, testing, and simulation.	test	T209-51.02.07
S-DSS-01000	The SDSRV CI operations staff shall have the capability to receive from the SMC, configuration management directives.	test	T209-51.02.07
S-DSS-01010	The SDSRV CI operations staff shall have the capability to receive from the SMC, logistics management directives.	test	T209-51.02.07
S-DSS-01020	The SDSRV CI operations staff shall have the capability to receive from the SMC fault management directives.	test	T209-51.02.07
S-DSS-01030	The SDSRV CI operations staff shall have the capability to receive from the SMC security directives.	test	T209-51.02.07
S-DSS-01035	The SDSRV CI operations staff shall have the capability to receive from the SMC scheduling directives, and scheduling adjudication directives.	test	T209-51.02.07
S-DSS-01040	The SDSRV CI operations staff shall provide integration, testing, and simulation status to the SMC.	test	T209-51.02.07
S-DSS-01050	The SDSRV CI operations staff shall have the capability to receive training management directives from the SMC.	test	T209-51.02.07
S-DSS-01080	The SDSRV CI shall notify operations staff in the event that data required for an on-demand data production is not accessible.	test	B240.02.07 B260.02.03 T209-32.02.07
S-DSS-01170	The SDSRV CI shall provide the capability to monitor resource utilization on a client basis.	test	B253.02.07 T209-72.02.01
S-DSS-01200	The SDSRV CI shall notify the requester in the event that an on-demand data production cannot be completed.	test	B240.02.07 B260.02.03 T209-32.02.07
S-DSS-01212	The SDSRV CI shall provide Data Request Status to a client, concerning pending Data Requests, as specified in Appendix K of the current version of 304-CD-005 for Release B.	demo	B240.02.07 B260.02.03 T209-32.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-01220	The SDSRV CI shall process Suspend Requests and, as a result, suspend the processing of a specified user session.	test	B230.02.25 B260.02.01 T209-31.02.04
S-DSS-01290	The SDSRV CI shall provide the capability for the operations staff to suspend all active client sessions.	test	T209-31.02.01
S-DSS-01300	The SDSRV CI shall provide the capability for the operations staff to resume any or all client sessions, previously suspended by operations staff or clients.	test	T209-31.02.02
S-DSS-01310	The SDSRV CI shall process Resume Requests and, as a result, resume the processing of a specified user session that was previously suspended.	test	B230.02.25 T209-31.02.05
S-DSS-01320	The SDSRV CI shall provide the capability for the operations staff to terminate any or all active or suspended client sessions.	test	T209-31.02.03
S-DSS-01330	The SDSRV CI shall provide the capability for the client to terminate any or all active or suspended client sessions that were previously initiated by the client.	test	B230.02.25 B260.02.01 T209-31.02.06
S-DSS-01360	The SDSRV CI shall, in the event of a restart after a processing failure, recover the state of all Service Requests, including the rollback of all incomplete Data Base Transactions, and the recovery of all complete Data Base Transactions.	test	T209-51.02.09
S-DSS-01410	The SDSRV CI shall log the suspension of the processing of a Service Request or the suspension of a client session.	test	T209-31.02.01
S-DSS-01420	The SDSRV CI shall log the resumption of a previously suspended Service Request or client session.	test	T209-31.02.02
S-DSS-01440	The SDSRV CI shall provide client Session Status Information to the requester.	test	B230.02.25 B260.02.01 T209-31.02.04 T209-31.02.05 T209-31.02.06
S-DSS-01450	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.	test	T209-12.02.08
S-DSS-01474	The SDSRV CI shall process Subscription Requests, where the requested Subscription is for one or more actions to be performed at daily, weekly, or monthly intervals.	test	T209-91.02.01
S-DSS-01790	The SDSRV CI shall provide access to compound data type services.	test	B230.02.12 B260.02.03 T209-32.02.04
S-DSS-02901	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Geographic location for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.	test	B230.02.15 T209-32.02.01
S-DSS-02902	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Spectral band for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.	test	B230.02.15 T209-32.02.01
S-DSS-02903	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Time for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.	test	B230.02.15 T209-32.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-02904	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on WRS for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.	test	B230.02.15 T209-32.02.01
S-DSS-03002	The SDSRV CI shall be capable of receiving L0 - L4 Data.	test	B212.01.01 B240.02.02 B244.02.02 B244.02.03 B244.02.04 B260.02.02 T209-42.02.01
S-DSS-03004	The SDSRV CI shall be capable of receiving Ancillary Data.	test	B240.02.02 B244.02.01 B244.02.02 B260.02.02 T209-42.02.01
S-DSS-03006	The SDSRV CI shall be capable of receiving Metadata associated with Ancillary Data.	test	B240.02.02 B244.02.01 B244.02.02 T209-42.02.01
S-DSS-03050	The SDSRV CI shall be capable of receiving FDF Orbit Data for AM-1 instruments.	test	B240.02.02 B244.02.01 B244.02.02 T209-42.02.01
S-DSS-03060	The SDSRV CI shall be capable of receiving FDF Attitude Data for AM-1 instruments.	test	B240.02.02 B244.02.01 B244.02.02 T209-42.02.01
S-DSS-03100	The SDSRV CI shall be capable of receiving FDF Metadata for Orbit and Attitude data for AM-1 instruments.	test	B240.02.02 B244.02.01 B244.02.02 T209-42.02.01
S-DSS-03122	The SDSRV CI shall be capable of receiving real EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.01
S-DSS-03124	The SDSRV CI shall be capable of receiving simulated EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.01
S-DSS-03190	The SDSRV CI shall be capable of receiving Orbit/Attitude data.	test	B244.02.01 B244.02.02 B260.02.02 T209-42.02.01
S-DSS-03200	The SDSRV CI shall be capable of receiving Metadata associated with Orbit/Attitude data.	test	B244.02.01 B244.02.02 B260.02.02 T209-42.02.01
S-DSS-03290	The SDSRV CI shall be capable of receiving Spacecraft Historical Data.	test	T209-42.02.01
S-DSS-03330	The SDSRV CI shall be capable of receiving Special Data Products.	test	B260.02.02 T209-42.02.01
S-DSS-03340	The SDSRV CI shall be capable of receiving Metadata associated with Special Data Products.	test	T209-42.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-03361	The SDSRV CI shall be capable of receiving NMC data.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03362	The SDSRV CI shall be capable of receiving First Look Products from the DAO.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03363	The SDSRV CI shall be capable of receiving Reanalysis Products from the DAO.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03364	The SDSRV CI shall be capable of receiving Final Analysis Products from the DAO.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03410	The SDSRV CI shall verify compliance of scientist provided Metadata with EOSDIS defined standards for Metadata content and structure (not scientific content).	test	T209-42.02.02
S-DSS-03460	The SDSRV CI shall interface with the STMGT CI to provide storage for FDF Orbit Data for AM-1 instruments.	test	B240.02.02 B244.02.01 B244.02.02 B260.02.02 T209-42.02.03
S-DSS-03470	The SDSRV CI's MD Component shall provide storage for Metadata associated with FDF Orbit and Attitude Data for AM-1 instruments.	test	B240.02.02 B244.02.01 B244.02.02 B260.02.02 T209-42.02.03
S-DSS-03492	The SDSRV CI shall interface with the STMGT CI to provide storage for real EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-03494	The SDSRV CI shall interface with the STMGT CI to provide storage for simulated EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-03600	The SDSRV CI shall interface with the STMGT CI to provide storage for production plans.	test	T209-42.02.01
S-DSS-03660	The SDSRV CI shall interface with the STMGT CI to provide storage for spacecraft historical data.	test	T209-42.02.03
S-DSS-03700	The SDSRV CI shall interface with the STMGT CI to provide storage for special Data Products.	test	B260.02.02 T209-42.02.01
S-DSS-03710	The SDSRV CI shall provide storage for Metadata associated with special Data Products.	test	T209-42.02.03
S-DSS-03741	The SDSRV CI shall interface with the STMGT CI to provide storage for NMC data.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03742	The SDSRV CI shall interface with the STMGT CI to provide storage for First Look Products.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03743	The SDSRV CI shall interface with the STMGT CI to provide storage for Reanalysis Products.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03744	The SDSRV CI shall interface with the STMGT CI to provide storage for Final Analysis Products.	test	B244.02.01 B244.02.02 T209-42.02.05
S-DSS-03940	The SDSRV CI shall be capable of receiving estimated disk utilization from the PLANG CI.	test	T209-22.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-03950	The SDSRV CI shall be capable of receiving estimated CPU utilization from the PLANG CI.	test	T209-22.02.01
S-DSS-03960	The SDSRV CI shall be capable of receiving estimated disk utilization from the STMGT CI.	test	T209-81.02.09
S-DSS-03990	The SDSRV CI shall be capable of receiving actual disk utilization from the PLANG CI.	test	T209-22.02.01
S-DSS-04000	The SDSRV CI shall be capable of receiving actual CPU utilization from the PLANG CI.	test	T209-22.02.01
S-DSS-04010	The SDSRV CI shall be capable of receiving actual disk utilization from the STMGT CI.	test	T209-81.02.09
S-DSS-04038	The SDSRV CI shall supply L0 - L4 Data to the DDIST CI.	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01
S-DSS-04080	The SDSRV CI shall supply FDF orbit data for AM-1 instruments packages to the DDIST CI.	test	T209-30.01.01
S-DSS-04082	The SDSRV CI shall supply FDF attitude data for AM-1 instruments packages to the DDIST CI.	test	T209-30.01.01
S-DSS-04112	The SDSRV CI shall be capable of supplying real EOS instrument data to support pre-launch checkout of the ground system to the DDIST CI.	test	T209-30.01.01
S-DSS-04114	The SDSRV CI shall be capable of supplying simulated EOS instrument data to support pre-launch checkout of the ground system to the DDIST CI.	test	T209-30.01.01
S-DSS-04180	The SDSRV CI shall supply Orbit/Attitude Data to the DDIST CI.	test	T209-30.01.01
S-DSS-04190	The SDSRV CI's MD Component shall supply Metadata associated with Orbit/Attitude Data to the DDIST CI.	test	T209-30.01.01
S-DSS-04320	The SDSRV CI shall supply special Data Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04330	The SDSRV CI shall supply Metadata associated with special Data Products to the DDIST CI.	test	B260.02.02 T209-30.01.01
S-DSS-04332	The SDSRV CI shall supply Research results (articles, algorithms, data sets, software) to the DDIST CI.	test	B210.01.06 T209-30.01.01
S-DSS-04340	The SDSRV CI shall supply V0 migration Data Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04350	The SDSRV CI shall supply Metadata associated with V0 migration Data Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04351	The SDSRV CI shall supply NMC data to the DDIST CI.	test	T209-30.01.01
S-DSS-04352	The SDSRV CI shall supply First Look Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04353	The SDSRV CI shall supply Reanalysis Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04354	The SDSRV CI shall supply Final Analysis Products to the DDIST CI.	test	T209-30.01.01
S-DSS-04410	The SDSRV CI's MD Component shall have the ability to store references to Orbit/Attitude Data as Metadata for science data.	test	T209-42.02.03
S-DSS-04500	The SDSRV CI's MD Component shall have the ability to indicate the need for on-demand product generation as Metadata for science data.	test	T209-32.02.07
S-DSS-04620	The SDSRV CI shall update the Metadata for a data item that has been purged from the system.	test	B260.02.02 T209-21.02.02
S-DSS-04630	The SDSRV CI shall update the Metadata whenever a data item is relocated to another site.	test	T209-21.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-04695	The SDSRV CI shall provide the capability to perform searches that identify the source instrument for a specified data product.	test	T209-21.02.05
S-DSS-04745	The SDSRV CI shall provide operations staff with the ability to display and list outstanding DARs that are accessible by the Data Server.	test	B230.02.11 B260.02.03 T209-52.02.03
S-DSS-04760	The SDSRV CI shall accept Subscription Requests from the client linked to a specified, existing DAR.	test	B230.02.11 B260.02.03 T209-52.02.02
S-DSS-04800	SDSRV CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B260.02.07 T209-82.02.01
S-DSS-04810	SDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B260.02.07 T209-82.02.01
S-DSS-04820	SDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B260.02.07 T209-82.02.01
S-DSS-04830	The SDSRV CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	test	B260.02.07 T209-82.02.01
S-DSS-04840	SDSRV CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B260.02.07 T209-82.02.01
S-DSS-04850	SDSRV CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B260.02.07 T209-82.02.01
S-DSS-04860	SDSRV CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B260.02.07 T209-82.02.01
S-DSS-04870	The SDSRV CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B260.02.07 T209-82.02.01
S-DSS-10020	The DDSRV CI shall accept Subscriptions for metadata from the client.	test	T209-42.02.03 T209-91.02.01
S-DSS-10055	The DDSRV CI shall provide, to qualified users, access to all documents and data types held in the server's collection.	test	B244.02.03 B244.02.04 T209-10.01.02
S-DSS-10202	The DDSRV CI shall provide the capability to ingest documentation in Microsoft WORD format.	test	B244.02.03 B244.02.04 T209-10.01.01
S-DSS-10206	The DDSRV CI shall provide the capability to ingest documentation in Interleaf format.	test	B244.02.03 B244.02.04 T209-10.01.01
S-DSS-10208	The DDSRV CI shall provide the capability to ingest documentation in WordPerfect format.	test	B244.02.03 B244.02.04 T209-10.01.01
S-DSS-10230	The DDSRV CI shall provide application programming interfaces that support addition of documents for use as Guide data for DAAC-specific Data Products.	test	T209-10.01.03
S-DSS-10231	The DDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.	test	T209-11.02.05
S-DSS-10232	The DDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.	test	T209-11.02.05
S-DSS-10233	The DDSRV CI shall collect Fault Management Data, such as, device failures, Service Request failures, transmission failures and general failures. This information shall be sent to the SDSRV CI for forwarding to the SMC for fault isolation.	test	B260.02.07 T209-51.02.06
S-DSS-10260	The DDSRV CI shall provide application programming interfaces that support development of extensions for addition of documents for use as Guide data for DAAC-specific Data Products.	test	T209-10.01.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-10300	The Document Data Server shall complete a search for a guide document by a single keyword in not exceeding 8 seconds.	test	T209-11.02.01
S-DSS-10305	The Document Data Server shall complete a directory search using a single keyword in a period not to exceed 8 seconds.	test	T209-11.02.02
S-DSS-10306	The Document Data Server shall complete a directory search using multiple keywords in a period not to exceed 13 seconds.	test	T209-11.02.03
S-DSS-10310	The Document Data Server shall complete a keyword search on a 1000 page document of not exceeding 3 seconds.	test	T209-11.02.04
S-DSS-10400	DDSRV CI mode-specific applications shall access data only for the mode in which the application is configured.	test	T209-82.02.02
S-DSS-10410	The DDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	T209-82.02.02
S-DSS-10420	DDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	T209-82.02.02
S-DSS-10430	The DDSRV CI shall be capable of using simulated time values, supplied by CSS, when executing in a non-production mode.	test	T209-82.02.02
S-DSS-10440	DDSRV CI server applications shall register within their mode-associated namespace in the CSS name service.	test	T209-82.02.02
S-DSS-10450	DDSRV CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	T209-82.02.02
S-DSS-10460	DDSRV CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	T209-82.02.02
S-DSS-10465	The DDSRV CI shall provide the capability to store and retrieve test plans and test procedures.	test	T209-82.02.02
S-DSS-10470	DDSRV CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	T209-82.02.02
S-DSS-20162	The STMGT CI shall provide the capability to mount on-line backup media via automated means.	inspection	T209-61.02.03
S-DSS-20171	The STGMT CI shall provide operations personnel with the capability to screen the archive holdings for lost volumes.	test	T209-61.02.03
S-DSS-20210	For any EOS Level 0 or L1A (if L0 is not available) data item that can not be located or is inaccessible and can not be re-created, the STMGT CI shall notify the operator which data item is missing and the operator shall request the data item be re-ingested from EDOS.	test	T209-61.02.03
S-DSS-20260	For each piece of archive media, the STMGT CI shall provide the capability to display the length of time to store data on the media before deletion.	test	T209-21.02.03
S-DSS-20270	The STMGT CI shall provide the capability to change the length of time to store data on archive media before deletion of the data.	test	T209-21.02.03
S-DSS-20280	The SDSRV CI shall provide the capability to directly notify active users when Data Products will be deleted.	test	T209-21.02.03
S-DSS-20290	The SDSRV CI shall provide the capability to indirectly notify users when Data Products will be deleted via a bulletin board type mechanism.	test	T209-21.02.03
S-DSS-20450	The STMGT CI shall provide the capability to archive real EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-20455	The STMGT CI shall provide the capability to retrieve real EOS instrument data to support pre-launch check out of ground systems.	test	T209-61.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-20457	The SDSRV CI shall interface with the STMGT CI to provide storage for real EOS instrument data to support pre-launch instrument checkout.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-20460	The STMGT CI shall provide the capability to archive simulated EOS instrument data to support pre-launch checkout of the ground system.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-20462	The STMGT CI shall provide the capability to retrieve simulated EOS instrument data to support pre-launch checkout of the ground system.	test	T209-61.02.01
S-DSS-20465	The SDSRV CI shall interface with the STMGT CI to provide storage for simulated EOS instrument data to support pre-launch instrument checkout.	test	B240.02.02 B260.02.02 T209-42.02.03
S-DSS-20550	The STMGT CI shall provide operations staff a mechanism to display/view storage system operating parameters which affect storage system performance.	test	T209-51.02.01
S-DSS-20560	The STMGT CI shall provide operations staff a mechanism to display/view storage system operating parameters which affect storage system scheduling.	test	T209-51.02.01
S-DSS-20570	The STMGT CI shall provide operations staff the capability to change storage system operating parameters which affect storage system performance.	test	T209-51.02.01
S-DSS-20580	The STMGT CI shall provide operations staff the capability to change storage system operating parameters which affect storage system scheduling.	test	T209-51.02.01
S-DSS-20610	The STMGT CI shall provide the capability to archive multiple versions of Data Granules.	test	T209-21.02.04
S-DSS-20624	The STMGT CI shall provide a mechanism to statistically monitor the checksum error rate of archive media.	test	T209-51.02.04
S-DSS-20625	The STMGT CI shall allow the operator to manually specify archive media to be recopied/refreshed.	test	T209-21.02.03
S-DSS-20650	The STMGT CI shall provide operations staff the capability to generate a backup of all data holdings.	test	T209-21.02.03
S-DSS-20660	The STMGT CI shall provide operations staff the capability to restore backups of specified data holdings.	test	T209-21.02.03
S-DSS-20720	The STMGT CI shall provide a mechanism to mark data for deletion. The mechanism shall be based on selection of max time to store data before it's deleted from storage. It shall also mark earlier versions when multiple versions have been archived.	test	T209-21.02.03
S-DSS-20730	The STMGT CI shall provide a mechanism to automatically delete archived data which has been marked for deletion.	test	T209-21.02.03
S-DSS-20750	For data retrieval requests for L0 data from EDOS, STMGT CI shall satisfy such requests with appropriate L0 or L1A data. Note: These instruments provide L0 data, CERES, LIS, ASTER, MISR, MODIS, MOPPIT; these provide L1A data, LIS, PR, TMI, VIRS.	test	B244.02.03 B244.02.04 T209-61.02.01
S-DSS-20800	The STMGT CI shall use operator selectable criteria to determine the physical storage device that data types will be stored in. This criteria shall consider: current store and retrieval activity, number of storage devices, type of data to be stored.	test	T209-51.02.10
S-DSS-20810	The STMGT CI shall provide operations staff the capability to manually alter the criteria that determines the physical storage device that data sets will be stored in.	test	T209-51.02.10

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-20820	The STMGT CI shall provide operations staff the capability to alter the criteria that determines removal of archive media from storage devices to allow insertion of new or different archive media in the storage device.	test	T209-51.02.02
S-DSS-20830	In determining the archive media to be removed, the STMGT CI shall ensure that the criteria consider the media's capacity for storing additional data, the last time data was accessed on the media and whether the media is currently in use to store or retrieve data.	test	T209-51.02.02
S-DSS-20840	The STMGT CI shall report information on the storage system. Information reported shall include file access time, file accesses per hour, size of files stored onto archive media, size of files retrieved from archive media, amount of storage allocated.	test	T209-51.02.03
S-DSS-20850	The STMGT CI shall collect information on the storage system, i.e. avg access time, avg number of accesses per hour, mean request inter-arrival time, avg file size stored, avg file size retrieved and avg file residency time on disk.	test	T209-51.02.03
S-DSS-20860	The STMGT CI shall provide a mechanism to monitor the performance of the ECS archival storage system.	test	T209-51.02.04
S-DSS-20870	The STMGT CI shall provide operations staff the capability to view/display performance information on the storage system.	test	T209-51.02.04
S-DSS-21130	The STMGT CI shall provide estimates of staging device time delays for subsetted Data Requests.	test	T209-61.02.02
S-DSS-21140	The STMGT CI shall provide estimates of staging device time delays for subsampled Data Requests.	test	T209-61.02.02
S-DSS-21150	The STMGT CI shall provide estimates of staging device time delays for summary Data Requests.	test	T209-61.02.02
S-DSS-21240	The STMGT CI shall provide operations staff a mechanism to display/view storage system utilization by ECS element.	test	T209-51.02.05
S-DSS-21250	The STMGT CI shall provide operations staff a mechanism to display/view storage system performance by ECS element.	test	T209-51.02.05
S-DSS-21260	The STMGT CI shall provide operations staff a mechanism to display/view storage system cost by ECS element.	test	T209-81.02.12
S-DSS-21280	The SDSRV CI shall provide application programming interfaces (APIs) to support Insert Requests.	test	T209-42.02.04
S-DSS-21290	The STMGT CI shall provide application programming interfaces (APIs) to support Retrieval Requests.	test	T209-61.02.04
S-DSS-21300	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Insert Requests.	test	T209-42.02.04
S-DSS-21310	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Retrieval Requests.	test	T209-61.02.04
S-DSS-21320	The STMGT CI shall provide the capability to estimate time delays for data retrievals due to contention for hardware resources.	test	T209-61.02.02
S-DSS-21340	The STMGT CI shall provide data to support administrative requests for Accounting Management Data.	test	T209-81.02.01
S-DSS-21350	The STMGT CI shall collect Accounting Management Data as defined in Appendix K of the current version of 304-CD-005.	test	T209-81.02.01
S-DSS-21430	The STMGT CI shall provide operations staff a mechanism to delete records from the File Directory.	test	B260.02.02 T209-21.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-21610	The MSFC DAAC Science Management within the Data Server shall make TSDIS original standard products (Level 1B-3) eligible for deletion after 6 months	test	T209-21.02.03
S-DSS-22000	The STMGT CI shall include capabilities which make it possible to ensure that data written by applications executing in different modes will not be mixed on the same tape.	test	T209-82.02.03
S-DSS-22010	STMGT CI mode-specific applications shall access data only for the mode in which the application is configured.	test	T209-82.02.03
S-DSS-22020	STMGT CI shall include the mode identifier in activity log record entries for the cost and accounting data.	test	T209-82.02.03
S-DSS-22050	The STMGT CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	T209-82.02.03
S-DSS-22060	The STMGT CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	T209-82.02.03
S-DSS-22070	STMGT CI server applications shall register within their mode-associated namespace in the CSS name service.	test	T209-82.02.03
S-DSS-22080	STMGT CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	T209-82.02.03
S-DSS-22090	The STMGT CI shall be capable of using simulated time values when executing in a non-production mode.	test	T209-82.02.03
S-DSS-22100	STMGT CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	T209-82.02.03
S-DSS-30190	The DDIST CI shall record the cost of the shipping and handling of the media associated with each Media Distribution request.	test	T209-71.02.01
S-DSS-30200	The DDIST CI shall record the network cost of data transmission, the User Identifier and the Request Identifier.	test	T209-71.02.02
S-DSS-30210	The DDIST CI shall record the cost of CPU intensive operations performed on data to be distributed. Such operations include compression/decompression and reformatting.	test	T209-71.02.03
S-DSS-30220	The DDIST CI shall record the cost of archive storage for data to be distributed based on distribution size.	test	T209-71.02.04
S-DSS-30230	The DDIST CI shall provide the capability to report the estimated media utilization to the SDSRV CI.	test	T209-81.02.04
S-DSS-30240	The DDIST CI shall provide the capability to report the actual media utilization to the SDSRV CI.	test	T209-81.02.04
S-DSS-30245	The DDIST CI shall provide the capability to report accounting data to the SDSRV CI.	test	T209-81.02.06
S-DSS-30296	The DDIST CI shall alert SMC when electronic transmission problems are encountered.	test	T209-71.02.05
S-DSS-30460	The DDIST CI shall provide the capability to distribute on 3480/3490 tape.	test	T209-20.01.01
S-DSS-30482	The DDIST CI shall provide the capability to support additional data distribution formats and conversion software.	test	T209-30.01.03
S-DSS-30500	If the number of correctable errors exceed a system threshold for a piece of media, the DDIST CI shall abort the operation and automatically request a new piece of media from operations staff.	test	T209-41.02.02
S-DSS-30510	Operations staff shall have the capability to specify a threshold of correctable errors for each type of distribution media.	test	T209-41.02.02
S-DSS-30620	The DDIST CI shall provide the capability to distribute documents electronically via FAX transmissions.	test	T209-41.02.03

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-DSS-30690	For physical media distributions, the DDIST CI shall generate a physical "media label" that operations staff can apply to the media, and shall associate the individual piece of media with any other media in the distribution.	test	T209-20.01.02
S-DSS-30700	For physical media distributions, the DDIST CI shall generate a physical "shipping label" that operations staff can affix to the shipping container and indicates the destination of the media.	test	T209-20.01.03
S-DSS-30770	The DDIST CI shall provide an applications program interface to submit Distribution Requests, obtain Request Status for Distribution Requests, and retrieve a list of Distribution Requests submitted.	test	T209-30.01.02
S-DSS-30795	For physical media distributions, the DDIST CI shall record the cost of the media to be used for accounting.	test	T209-41.02.04
S-DSS-31100	The DDIST CI shall include capabilities which make it possible to ensure that data written by applications executing in different modes will not be mixed on the same item of distribution media.	test	T209-82.02.04
S-DSS-31110	DDIST CI mode-specific applications shall access data only for the mode in which the application is configured.	test	T209-82.02.04
S-DSS-31120	DDIST CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	T209-82.02.04
S-DSS-31150	The DDIST CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	T209-82.02.04
S-DSS-31160	The DDIST CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	T209-82.02.04
S-DSS-31170	DDIST CI server applications shall register within their mode-associated namespace in the CSS name service.	test	T209-82.02.04
S-DSS-31180	DDIST CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	T209-82.02.04
S-DSS-31190	The DDIST CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	test	T209-82.02.04
S-DSS-31200	DDIST CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	T209-82.02.04
S-INS-00083	The INGST CI shall determine the data type for expedited data provided by EDOS.	test	T212-20.01.05
S-INS-00187	The INGST CI shall access the Advertising service to determine the availability of a Network Ingest Request service for a given Data Type Identifier.	test	T244-10.02.01
S-INS-00234	The INGST CI shall access the Advertising service to determine the availability of a Document Ingest Request service for a given Data Type Identifier.	test	T244-10.02.01
S-INS-00321	The INGST CI shall advertise available Interactive Network Ingest services.	test	T244-10.02.02
S-INS-00355	The INGST CI shall accept an ingest Suspension Request from authorized operations staff to suspend ongoing ingest request processing for a specified ingest Request Identifier, to suspend all ongoing ingest request processing from a specified External Data Provider, or to suspend all ongoing ingest request processing.	test	B212.01.02 T212-10.01.01
S-INS-00357	The INGST CI shall accept an ingest Resumption Request from authorized operations staff to resume ongoing ingest request processing for a specified ingest Request Identifier, to resume all ongoing ingest request processing from a specified External Data Provider, or to resume all ongoing ingest request processing.	test	B244.02.02 T244-60.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-00363	The INGST CI shall authenticate the User Identifier of operations staff submitting an ingest Suspension Request or ingest Resumption Request.	test	B212.01.02 T212-10.01.01
S-INS-00365	The INGST CI shall accept an ingest Suspension Request from authorized applications to suspend ongoing ingest request processing for a specified Request Identifier, to suspend all ongoing ingest request processing from a specified External Data Provider, or to suspend all ongoing ingest request processing.	test	T212-10.01.02
S-INS-00367	The INGST CI shall accept an ingest Resumption Request from authorized applications to resume ongoing ingest request processing for a specified Request Identifier, to resume all ongoing ingest request processing from a specified External Data Provider, or to resume all ongoing ingest request processing.	test	T244-60.02.02
S-INS-00370	The INGST CI shall authenticate the User Identifier of an application submitting an ingest Suspension Request or ingest Resumption Request.	test	T212-10.01.02
S-INS-00393	The INGST CI shall report status on ingest Suspension Requests to the requesting operations staff and to the Error Log for the following: a._Unauthorized requester b._Invalid ingest Request Identifier c._Unable to suspend specified Ingest Request(s)	test	B212.01.02 T212-10.01.01
S-INS-00394	The INGST CI shall report status on ingest Resumption Requests to the requesting operations staff and to the Error Log for the following: a. Unauthorized requester b. Invalid ingest Request Identifier	test	B244.02.02 T244-60.02.01
S-INS-00397	The INGST CI shall report status on ingest Suspension Requests to the requesting application and to the Error Log for the following: a._Unauthorized requester b._Invalid ingest Request Identifier c._Unable to suspend specified Ingest Request(s)	test	T212-10.01.02
S-INS-00398	The INGST CI shall report status on ingest Resumption Requests to the requesting application and to the Error Log for the following: a._Unauthorized requester b._Invalid ingest Request Identifier	test	T244-60.02.02
S-INS-00401	The INGST CI shall convert ingested data into a form accepted by the SDSRV CI/DDSRV CI.	test	B244.02.03 B260.02.02 T244-40.02.01 T244-40.02.02
S-INS-00402	The INGST CI shall reformat ingested data into a form accepted by the SDSRV CI/DDSRV CI, as needed.	test	B244.02.04 B260.02.02 T244-40.02.05 T244-40.02.06
S-INS-00600	The INGST CI shall ingest Data, provided by the EDOS, from physical media at the GSFC DAAC as a backup transfer mechanism.	test	B212.01.01 B240.02.01 T212-20.01.02
S-INS-00610	The INGST CI shall ingest Data, provided by the EDOS, from physical media at the LaRC DAAC as a backup transfer mechanism.	test	B240.02.01
S-INS-00645	The INGST CI shall ingest Data, provided by the NMC, from the LAN into the GSFC DAAC using a file transfer protocol.	test	B244.02.01 T244-10.02.01
S-INS-00650	The INGST CI shall ingest data, provided by the DAO, from the ESN into the EDC DAAC using a file transfer protocol.	test	B244.02.01 T244-10.02.08
S-INS-00682	The INGST CI shall ingest Data, provided by an SCF, from the LAN into the GSFC DAAC using a file transfer protocol.	test	B244.02.01 T244-10.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-00684	The INGST CI shall ingest Data, provided by an SCF, from the LAN into the JPL DAAC using a file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00730	The INGST CI shall ingest data, provided by the FDF, from the ESN into the GSFC DAAC using a file transfer protocol.	test	B244.02.01 T244-10.02.09
S-INS-00785	The INGST CI shall ingest Data, provided by the Landsat 7 Image Assessment System (IAS), from the LAN into the EDC DAAC using a file transfer protocol.	test	B210.01.05 B212.01.01 B240.02.01 T212-20.01.01
S-INS-00787	The INGST CI shall ingest Data, provided by the Landsat 7 International Ground Stations (IGSs), into the EDC DAAC on 8 mm cartridge tape.	test	B212.01.01 B240.02.01 T212-20.01.04
S-INS-00790	The INGST CI shall ingest data, received on physical media from the ASTER GDS, into the EDC DAAC.	test	B212.01.01 B240.02.01 T212-20.01.03
S-INS-00840	The INGST CI shall ingest data provided by ADEOS II/SeaWinds into the JPL DAAC.	test	B244.02.01 T244-10.02.10
S-INS-00841	The INGST CI shall ingest data, provided by RADARSAT Geophysical Processing System (RGPS), into the ASF DAAC via file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00843	The INGST CI shall ingest data, provided by the Acquisition Planning System (APS), into the ASF DAAC via file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00845	The INGST CI shall ingest data, provided by the Product Verification System (PVS), into the ASF DAAC via file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00847	The INGST CI shall ingest data, provided by the Production Planning System (PPS), into the ASF DAAC via file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00849	The INGST CI shall ingest data, provided by the Flight Agency Interface (FAIF), into the ASF DAAC via file transfer protocol.	test	B244.02.01 T244-10.02.03
S-INS-00850	The INGST CI shall ingest Data, provided by SAGE III, into the LaRC DAAC.	test	B244.02.01 T244-10.02.04
S-INS-00852	The INGST CI shall ingest Data, provided by ACRIM, into the LaRC DAAC.	test	B244.02.01 T244-10.02.05
S-INS-00854	The INGST CI shall ingest Data, provided by the ASF Receiving Ground Station (RGS) via a network interface using a file transfer protocol.	test	B244.02.01 T244-10.02.06
S-INS-00856	The INGST CI shall ingest Data, provided by the ASF SAR Processing System (SPS) via a network interface using a file transfer protocol.	test	T244-10.02.07
S-INS-00900	The INGST CI at the GSFC DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00910	The INGST CI at the LaRC DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00920	The INGST CI at the MSFC DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00925	The INGST CI at the EDC DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00927	The INGST CI at the NSIDC DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00929	The INGST CI at the ASF DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12
S-INS-00930	The INGST CI at the JPL DAAC shall be capable of 200 percent expansion in throughput without architecture or design change.	test	T244-50.02.12

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-01035	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data, by network data transfer from NESDIS, at the nominal daily rate specified in Tables E-3a and E-3b of appendix E of the current version of 304-CD-005 for Release B.	demo	T244-50.02.04
S-INS-01137	The ICLHW CI at the GSFC DAAC shall be capable of ingesting data from the NMC at the nominal daily rate specified in Tables E-3a and E-3b of Appendix E of the current version of 304-CD-005 for Release B.	demo	T244-50.02.01
S-INS-01140	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data from the NMC at the nominal daily rate specified in Tables E-3a and E-3b of Appendix E of the current version of 304-CD-005 for Release B.	demo	T244-50.02.01
S-INS-02000	The INGST CI shall interactively accept Document Scanning/Digitizing Requests from authorized operations staff for hard copy media to be ingested.	test	T244-30.02.01
S-INS-02010	The INGST CI shall authenticate that the Document Scanning/Digitizing Request is input by operations staff authorized to ingest hard copy media.	test	T244-30.02.01
S-INS-02020	The INGST CI shall verify that the External Data Provider specified in a Document Scanning/Digitizing Request is an authorized provider of hard copy media to be ingested.	test	T244-30.02.01
S-INS-02030	The INGST CI shall automatically determine the data volume for each scanned or digitized file resulting from an interactively entered Document Scanning/Digitizing Request.	test	T244-30.02.01
S-INS-02040	The INGST CI shall report to the Error Log an unauthorized attempt to interactively request ingest of hard copy media.	test	T244-30.02.02
S-INS-02050	The INGST CI shall report Document Scanning/Digitizing Request status to the submitting operations staff for the following: a._Hard copy scanning/digitizing failure b._Invalid Data Type Identifier c._Missing required metadata d._Metadata parameters out of range e._Failure to archive data f._Unauthorized hard copy media provider g._Unauthorized operations staff h._Successful archive of data	test	B244.02.01 T244-30.02.01 T244-30.02.02
S-INS-03103	"The INGST CI shall extract metadata from ingested data into a form accepted by the Science Data Server/Document Data Server, as needed, for the following categories of data:" a. Metadata parameters stored in a data-set-specific format	test	B244.02.03 B244.02.04 T244-40.02.03 T244-40.02.04
S-INS-03200	The INGST CI shall be capable of operating in an off-line (test) mode.	test	B212.01.02 T212-30.01.01
S-INS-03210	The INGST CI shall be capable of accessing test data sets when operating in off-line (test) mode.	test	B212.01.02 T212-30.01.01
S-INS-03300	INGST CI mode-specific applications shall access data only for the mode in which the application is configured.	test	T212-30.01.01
S-INS-03310	The INGST CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	T212-30.01.01
S-INS-03320	INGST CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	T212-30.01.01
S-INS-03330	INGST CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	T212-30.01.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-03340	INGST CI server applications shall register within their mode-associated namespace in the CSS name service.	test	T212-30.01.01
S-INS-03350	INGST CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	T212-30.01.01
S-INS-03360	INGST CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	T212-30.01.01
S-INS-60660	The ICLHW CI shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.	test	T212-30.01.02
S-INS-60733	The ICLHW CI shall contain the storage and interface resources to support the ingest functions for the Landsat 7 Processing System interface at EDC.	test	T244-50.02.10
S-INS-60736	The ICLHW CI at the GSFC DAAC shall be sized to store and maintain the volume of EDOS data for a 1 year period of time as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.08
S-INS-60741	The ICLHW CI at the LaRC DAAC shall be sized to store and maintain the volume of EDOS data for a 1-year period of time as specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.09
S-INS-60746	The ICLHW CI at the JPL DAAC shall be sized to store and maintain the volume of ADEOS II data for a 1-year period of time as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	demo	T244-50.02.06
S-INS-60748	The ICLHW CI at the JPL DAAC shall be sized to store and maintain the volume of ALT-RADAR data for a 1-year period of time as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	demo	T244-50.02.05
S-INS-60751	The ICLHW CI at the GSFC DAAC shall be sized to temporarily store the volume of EDOS data as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.08
S-INS-60756	The ICLHW CI at the LaRC DAAC shall be sized to temporarily store the volume of EDOS data as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.09
S-INS-60770	The ICLHW CI at the EDC DAAC shall be sized to temporarily store the volume of Landsat 7 data as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.11
S-INS-60771	The ICLHW CI at the JPL DAAC shall be sized to temporarily store the volume of ALT-RADAR data as specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.05
S-INS-60772	The ICLHW CI at the JPL DAAC shall be sized to temporarily store the volume of ADEOS II data as specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.06

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-60900	The INGST CI shall provide the necessary hardware/software to perform scanning and/or digitizing of hardcopy documents for the purpose of imputting document request from authorized users.	test	B244.02.01 T244-30.02.01 T244-30.02.02
S-INS-61000	The ICLHW CI at the GSFC DAAC shall be capable of ingesting data from the EDOS at the nominal daily rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.01
S-INS-61010	The ICLHW CI at the GSFC DAAC shall be capable of ingesting data from the EDOS at a maximum daily rate that is three times the nominal rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.02
S-INS-61020	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data from the EDOS at the nominal daily rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.01
S-INS-61025	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data from the EDOS at a maximum daily rate that is three times the nominal rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.02
S-INS-61030	The ICLHW CI at the EDC DAAC shall be capable of ingesting data from the Landsat 7 Processing System (LPS) at the nominal rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.03
S-INS-61040	The ICLHW CI at the EDC DAAC shall be capable of ingesting data from the Landsat 7 IAS at the nominal daily rate specified in Appendix E (Section E.1, Table E-1 Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.01
S-INS-61050	The ICLHW CI at the EDC DAAC shall be capable of ingesting data from the Landsat 7 IGSs at the nominal daily rate specified in Appendix E (Section E.1, Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.01
S-INS-61080	The ICLHW CI at the GSFC DAAC shall be capable of ingesting data from the NMC at the nominal daily rate specified in Appendix E (Section E.1, Table E-1 and Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b of the current version of 304-CD-005.	test	T244-50.02.01
S-INS-61110	The ICLHW CI at the JPL DAAC shall be capable of ingesting data from RADAR-ALT at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.05
S-INS-61115	The ICLHW CI at the JPL DAAC shall be capable of ingesting data from ADEOS II at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.06
S-INS-61140	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data from SAGE III at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-INS-61150	The ICLHW CI at the ASF DAAC shall be capable of ingesting data from the ASF RGS at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.07
S-INS-61160	The ICLHW CI at the ASF DAAC shall be capable of ingesting data from the ASF SPS at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.07
S-INS-61170	The ICLHW CI at the LaRC DAAC shall be capable of ingesting data from ACRIM at the nominal daily rate specified in Appendix E (Section E.1 Table E-1, Section E.2 Table E-2, and Section E.3 Tables E-3a and E-3b) of the current version of 304-CD-005.	test	T244-50.02.07
S-IOS-00516	The ADSRV CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.	test	B231.02.04 T231-20.02.02
S-IOS-00590	The ADSRV CI shall provide Advertisements that describe Science Processing Library holdings.	test	B231.02.04 T231-20.02.02
S-IOS-00640	The ADSRV CI shall support interactive information management capabilities for users to add a Subscription to be informed of changes in the Advertisements.	demo	B231.02.04 T231-20.02.03
S-IOS-00670	The ADSRV CI shall register the subscribable events with the subscription server.	demo	B231.02.04 T231-20.02.03
S-IOS-00680	The ADSRV CI shall provide to the subscription service the universal references of the inserted, modified, or deleted advertisement, so that the user can use this to retrieve the affected advertisement.	demo	B231.02.04 T231-20.02.03
S-IOS-00855	The ADSRV CI shall maintain ASTER DAR parameters and DAR parameter constraints as specified in the service advertisement for the DAR services.	test	B231.01.05 T231-62.01.01
S-IOS-00940	The ADSRV CI shall provide its current mode to MSS on request.	test	B231.02.04 T231-20.02.02
S-IOS-00950	The ADSRV CI shall provide a capability for logistics and maintenance status to be provided to the SMC.	test	B231.02.04 T231-20.02.02
S-IOS-00960	The ADSRV CI shall provide a capability to display SMC directives to operator personnel.	test	B231.02.04 T231-20.02.02
S-IOS-60360	The ADSHW CI shall accept and process lifecycle commands from the MSS.	test	T250-10.02.21
S-IOS-60370	ADSRV CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B230.02.27 B260.02.07
S-IOS-60371	The ADSRV CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B230.02.27 B260.02.07
S-IOS-60374	ADSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B230.02.27 B260.02.07
S-IOS-60375	ADSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on different machine.	test	B230.02.27 B260.02.07
S-IOS-60376	ADSRV CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B230.02.27 B260.02.07
S-IOS-60377	ADSRV CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B230.02.27 B260.02.07
S-IOS-60378	The ADSRV CI shall be capable of using simulated time values supplied by CSS when executing in a non-production mode.	test	B230.02.27 B260.02.07
S-IOS-60379	ADSRV CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B230.02.27 B260.02.07

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-PLS-00070	The PLANG CI shall accept Production Requests for reprocessing of Data Products from currently available input data.	test	B233.02.02 T233-31.02.02
S-PLS-00100	The PLANG CI shall accept Production Requests for On-Demand Data Products.	test	B233.01.01 B240.02.07 B260.02.03 T233-20.01.02
S-PLS-00130	The PLANG CI shall send a response message to the Data Server confirming the acceptance status of the received Production Request for On-Demand Data Products (" accepted", "rejected", "deferred") and reason for rejection of a request (if applicable).	test	B240.02.07 B260.02.03
S-PLS-00140	Upon acceptance of a Production Request for an On-Demand Data Product, the PLANG CI shall immediately forward its corresponding Data Processing Requests to the PRONG CI if predefined resource thresholds are not exceeded and if the input data is available.	test	B240.02.07 B260.02.03
S-PLS-00150	The PLANG CI shall defer On-Demand Production Requests for future plan generation consideration when these On-Demand Production Requests are estimated to exceed a predefined resource threshold.	test	B233.01.01 B240.02.07 B260.02.03 T233-20.01.02
S-PLS-00160	If a Production Request for an On-Demand Data Product exceeds a predefined resource usage threshold, the PLANG CI shall notify the operations staff that the Production Request has been deferred.	test	B233.01.01 B240.02.07 B260.02.03 T233-20.01.02
S-PLS-00165	The PLANG CI shall allow the operator to specify the resource usage thresholds used to accept or defer On-Demand Production Requests.	test	T233-20.01.02
S-PLS-00170	The PLANG CI shall accept updates (modifications/ cancellations) to Production Requests for On-Demand Data Products.	test	B240.02.07 B260.02.03 T233-20.01.02
S-PLS-00190	The PLANG CI shall forward a response message to the Data Server indicating acceptance / rejection status of the updates to the Production Request for On-Demand Data Products .	test	B240.02.07 B260.02.03
S-PLS-00306	The PLANG CI shall provide the capability to display a site resources plan covering an operator specified time interval, in text report and timeline display format, to a resolution of one minute which describes the shared allocation of planned site resources to default activities and ground events.	demo	T233-32.02.01
S-PLS-00322	The PLANG CI shall provide the capable of setting up dependencies between services and hardware resources.	demo	T233-22.02.03
S-PLS-00355	The PLANG CI shall provide the capability to generate reports providing a comparison of planned vs. actual resource usage.	test	B240.02.13 T233-32.02.03
S-PLS-00360	The PLANG CI shall be able to provide site resource plans to PLANG CI's at other sites.	test	B240.02.06
S-PLS-00365	The PLANG CI shall be able to import saved site resource plans.	test	T233-32.02.01
S-PLS-00370	The PLANG CI shall be able to save site resource plans to a file.	test	T233-32.02.01
S-PLS-00375	The PLANG CI shall provide the capability to initiate a site ground event script associated with a resource request in the resource plan at the planned for time.	test	T233-32.02.02
S-PLS-00380	The PLANG CI shall log the start time of ground events it executes.	test	T233-32.02.02
S-PLS-00385	The PLANG CI shall log the end time of ground events it executes.	test/ analysis	T233-32.02.02

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-PLS-00405	The PLANG CI shall allow the conditions for execution of Product Generation Executives (PGEs) to include the values of metadata fields of input data.	test	B233.02.01
S-PLS-00407	The PLANG CI shall maintain Product Generation Executives (PGEs) information necessary to support the production of tile or spatial-based output Granules.	test	T233-31.02.01
S-PLS-00445	The PLANG CI shall maintain multiple Production Strategies defined by sets of Production Rules to be used when preparing a Production Plan.	test	T233-20.01.03 T233-22.02.05
S-PLS-00455	The PLANG CI shall support the capability that allows the operations staff to update (enter/ modify/ delete) the Production Strategies (via GUI).	test	T232-20.01.03
S-PLS-00457	The PLANG CI GUI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.	test	T233-32.01.01
S-PLS-00458	To the extent possible, the PLANG CI COTS GUI shall be configured to conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.	test	T233-32.01.01
S-PLS-00604	The PLANG CI shall receive advertisements from the IOS.	test	B240.02.11
S-PLS-00631	The PLANG CI shall receive Data Availability Schedule Notices indicating arrival of Data Availability Schedules (DAS) for any remote ECS site, any IP, and any ODC that makes a Data Availability Schedules available.	test	B240.02.06 T233-21.02.01
S-PLS-00635	The PLANG CI shall receive Data Availability Schedule Notices indicating arrival of FOS plans and schedules	test	B240.02.06
S-PLS-00651	The PLANG CI shall accept Data Availability Schedules (DAS), for remote ECS sites, IPs, and ODCs, based on the Data Availability Schedule Notices received.	test	B240.02.06
S-PLS-00652	The PLANG CI shall support the capability to retrieve FOS plans and schedules from the Data Server.	test	B240.02.06
S-PLS-00654	The PLANG CI shall create a Data Availability Schedule (DAS) for EDOS based on FOS plans and schedules.	test	B240.02.06 T233-21.02.01
S-PLS-00656	The PLANG CI shall send a response message to Data Server upon receiving FOS plan and schedule, confirming the receiving of the data	test	B240.02.06
S-PLS-00665	The PLANG CI shall notify the operations staff (via GUI), about the arrival of any Data Availability Schedule Notice corresponding to a DAS.	test	B240.02.06 T233-21.02.01
S-PLS-00700	The PLANG CI shall create a Candidate Plan specifying a timeline for PGE execution that will satisfy Production Requests for Reprocessing and On-Demand Data Products consistent with available and allocated processing resources.	test	B233.02.06 T233-20.01.01
S-PLS-00715	The PLANG CI shall be able to provide a high-level, aggregate view of production plans.	test	T233-22.02.02
S-PLS-00720	The PLANG CI shall create a Candidate Plan based on the data availability schedules for remote ECS sites, EDOS, the IPs, and ODCs, as needed.	test	B233.02.06 T233-20.01.01
S-PLS-00741	The PLANG CI shall be capable separating AI&T activities from the operational production environment.	test	B240.02.12 B260.02.07
S-PLS-00811	The PLANG CI shall reconcile any outstanding Data Processing Requests in the current Active Plan with the Data Processing Requests in the Candidate Plan to be activated.	test	B233.02.06 T233-20.01.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-PLS-00825	The PLANG CI shall have the capability to identify all available input data (as specified in the Active Plan) that is currently awaiting quality assurance information.	demo	T233-31.01.01
S-PLS-00827	The PLANG CI shall update the quality assurance status of input data (if applicable) to reflect an expired QA timeout period if its quality assurance information has not been received within specified time periods.	demo	T233-31.01.01
S-PLS-00845	The PLANG CI shall support the capability to retrieve stored plans and their corresponding metadata from the Data Server based on specific queries.	test	B240.02.06
S-PLS-00850	The PLANG CI shall have the capability to generate data availability schedules (and the corresponding metadata) that reflect the Data Products expected to be generated in the Production Plan.	test	B240.02.06 T233-21.02.02
S-PLS-00860	The PLANG CI shall send the data availability schedules and the corresponding metadata to the designated Data Server.	test	T233-21.02.02
S-PLS-01040	The PLANG CI shall send the current processing status of Production Requests (for On-Demand Data Products) to the originating Data Server.	demo	T233-32.01.02
S-PLS-01210	The PLANG CI shall provide the operations staff with the capability to perform the following on-line functions, via GUI: a. Entry/query/update/ cancellation of Production Requests for Reprocessing, b. Query/update/cancellation of Production Requests for On-Demand Data Products.	test	B233.02.02 B240.02.07 B260.02.03 T233-31.02.02 T233-31.02.03
S-PLS-01230	The PLANG CI shall support the display (via GUI) of warning messages to the operations staff indicating revised completion times if processing will not complete per original schedule.	test	B233.01.03 B240.02.08 B260.02.03 T233-22.02.04
S-PLS-01460	The PLANG CI shall collect Accounting Management Data and provide it to the MSS.	test	B260.02.06
S-PLS-02000	The PLANG CI shall be able to accept scheduling information on external events which affect processing resources and operations	test	T233-22.02.05
S-PLS-02010	The PLANG CI shall be able to identify scheduling conflicts in site production plans.	test	T233-22.02.05
S-PLS-02020	The PLANG CI shall be able to provide operations personnel priorities and planned execution times of jobs causing scheduling conflicts within and between DAACs.	test	T233-22.02.05
S-PLS-02030	The PLANG CI shall identify conflicts in site production plans caused by cross-DAAC data dependencies.	test	T233-22.02.05
S-PLS-02040	The PLANG CI shall be able to display (via GUI) cross-DAAC data dependencies in production plans.	test	T233-22.02.05
S-PLS-02050	The PLANG CI shall be able to provide plans to PLANG CIs at other sites.	test	B240.02.06 T233-22.02.05
S-PLS-02060	The PLANG CI shall be able to account for cross-DAAC data dependencies in the site production plans it generates.	test	T233-22.02.05
S-PLS-02070	The PLANG CI shall be able to concurrently display information from multiple DAAC site production plans.	test	T233-22.02.05
S-PLS-02200	The PLANG CI shall have the capability to extract temporal subsets from a production or resource plan and save them to a file.	test	T233-22.02.01
S-PLS-02210	The PLANG CI shall have the capability to extract subsets of a production plan based on user selected Production Requests and save them to file.	test	T233-22.02.01

Table 4-1. Release B Level 4 Matrix

L4 Req. Source ID	Requirement Text	Verif. Method	Release I&T/FOS Text ID
S-PLS-02400	The PLANG CI shall provide a list of replan events which will cause the user to be notified and given the option to replan.	inspection	B233.01.01 T233-22.02.04
S-PLS-02410	The PLANG CI shall consider the creation of a new resource plan to be a replan event if it changes the availability of hardware resources within a configurable amount of time in the future.	test	T233-22.02.04
S-PLS-02420	The PLANG CI shall consider the arrival of a new Predicted Data Availability Schedule to be a replan event if it indicates a delay in the predicted arrival of data by more than a configurable (for that particular data type) amount of time.	test	B240.02.08 B260.02.03 T233-22.02.04
S-PLS-02430	The PLANG CI shall consider the submission of an On-Demand Production Request to be a replan event if the resource requirements exceed predefined thresholds.	test	B233.01.01 B240.02.08 B260.02.03 T233-22.02.04
S-PLS-02440	The PLANG CI shall have the capability of providing an estimate of the resource usage for a production request prior to the inclusion of that request in a production plan.	test	T233-21.02.03
S-PLS-03000	PLANG CI mode-specific applications shall access data only for the mode in which the application is configured.	test	B260.02.07
S-PLS-03010	The PLANG CI shall include the mode identifier in activity log record entries for cost and accounting data.	test	B260.02.07
S-PLS-03040	PLANG CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	test	B260.02.07
S-PLS-03050	PLANG CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	test	B260.02.07
S-PLS-03060	PLANG CI server applications shall register within their mode-associated namespace in the CSS name service.	test	B260.02.07
S-PLS-03070	PLANG CI client applications shall incorporate a mode identifier for CSS name service lookups.	test	B260.02.07
S-PLS-03080	The PLANG CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	test	B260.02.07
S-PLS-03090	PLANG CI mode-specific executables and scripts shall accept a specific mode only at startup.	test	B260.02.07

4.3 Release B RBR Matrix

The requirements in Table 4-2 are necessary to fulfil Release B RBR capabilities. This query was done against the July 31, 1996 baseline of the RTM.

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
AM1-0020#B	The EOC shall have the capability to send (via EDOS/EBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106).	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.050
AM1-0030#B	The EOC shall have the capability to send (via EDOS/EBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive instrument commands in CCSDS CLTUs (as defined in AM-1 ICD 106).	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.050
AM1-0050#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, GN, DSN, or WOTS interfaces.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0070#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, GN, DSN, or WOTS interfaces.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0090#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, GN, DSN, or WOTS interfaces.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040 B120220.020
AM1-0120#B	The EOC shall have the capability to send and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106) via pre-launch test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
AM1-0125#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 housekeeping telemetry packets (as defined in AM-1 ICD 106) via pre-launch test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0130-#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) recorded AM-1 housekeeping telemetry packets (as defined in AM-1 ICD 106) via pre-launch test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0135-#B	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry packets (as defined in AM-1 ICD 106) via pre-launch test configurations which include the AM-1 Spacecraft Checkout Station, Ecom, and EDOS or ETS.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0140#B	The SCS shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) AM-1 spacecraft telemetry data (as defined in AM-1 ICD-106) during spacecraft launch via launch configurations which include EDOS and Ecom.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0150#B	The EOC shall have the capability to send and the SSIM shall have the capability to receive AM-1 spacecraft and instrument commands in CCSDS CLTU format (as defined in AM-1 ICD-106).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
AM1-0160#B	The SSIM shall have the capability to send and the EOC shall have the capability to receive simulated real time AM-1 spacecraft and instrument housekeeping telemetry packets and Command Link Control Words (as defined in AM-1 ICD-106).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
AM1-0170#B	The SSIM shall have the capability to send and the EOC shall have the capability to receive simulated recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD-106).	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0200#B	The SSIM shall have the capability to send and the EOC shall have the capability to receive simulated AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry (as defined in AM-1 ICD-106).	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110210.040
AM1-0215#B	The AM-1 spacecraft vendor shall have the capability to provide and the EOC shall have the capability to receive, AM-1 project data base information containing both spacecraft and instrument parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020 B120210.010
AM1-0220#B	The ECS shall have the capability to provide and the MISR, MOPITT, MODIS, and CERES PIs/TLs shall have the capability to receive IST toolkit software, IST toolkit software upgrades, and IST toolkit documentation.	mission critical	test	T250-10.02.05	B080410.010
AM1-0225-#B	The AM-1 spacecraft vendor shall have the capability to provide and ECS shall have the capability to receive spacecraft analysis tools for implementation and integration into the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080410.010
AM1-0230#B	The IST toolkit shall have the capability to accept data from a science computing facility that supports PI/TL operations, which include the following data (at a minimum): a. instrument microprocessor memory loads. b. changes in the instrument parameters	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020
AM1-0240#B	The IST toolkit shall have the capability to provide data to a science computing facility that supports PI/TL instrument operations, which include the following data (at a minimum): a. Microprocessor memory dumps b. Instrument analysis results	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B110310.030
AM1-0270#B	The AM-1 SDVF shall have the capability to send and ECS shall have the capability to receive AM-1 SCC flight software updates.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020
AM1-0280#B	ECS shall have the capability to send and the AM-1 SDVF shall have the capability to receive AM-1 SCC flight software dumps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020
AM1-0310#B	The ECS contractor shall provide and the AM-1 spacecraft vendor shall receive training on operations of the FOS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080450.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
AM1-0315#B	The ECS contractor shall provide and the AM-1 instrument teams shall receive training on operations of the IST toolkit.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080450.020
AM1-0320#B	The AM-1 spacecraft vendor shall provide and the ECS contractor shall receive AM-1 spacecraft operations training.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080450.020
AM1-0330#B	The AM-1 instrument teams shall provide and the ECS contractor shall receive AM-1 instrument operations training.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080450.020
AM1-0340#B	The AM-1 project shall have the capability to provide and ECS shall have the capability to accept and store AM-1 spacecraft and instrument hardware and software technical documentation.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080410.010 B110110.010
AM1-1000#B	ECS functions shall have an operational availability (computed as defined in the Functional and Performance Requirements Specification for the ECS) of 0.96 at a minimum and a mean down time (MDT) of four (4) hours or less, unless otherwise specified.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B080510.020
AM1-1010#B	The ECS FOS shall have an operational availability of 0.9998 at a minimum and a MDT of one (1) minute or less for critical real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
AM1-1020#B	The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for non-critical real time functions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
AM1-1050#B	The EOC shall support several uplink rates to the spacecraft, which include at a minimum the following: a. 10 kilobits per second (kbps) (SSA uplink) b. 1 kbps (S-band MA uplink) c. 125 bits per second (bps) (SSA uplink during contingency operations) d. 2 kbps (emergency operations via S-band DSN link)	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B110320.020
AM1-1060#B	The EOC shall be capable of simultaneously receiving all AM-1 telemetry data types.	mission critical	test	T250-10.02.04 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120230.020
AM1-1070#B	The EOC shall provide the capability to receive and process real-time data received as two 16 kbps data streams.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
AM1-1080-#B	The EOC shall provide the capability to receive and record spacecraft recorder data at rates up to 1.544 Mbps.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
AM1-1090#B	The EOC shall be capable of providing CLTUs to the SSIM at the following data rates: a. 125 bps b. 1 kbps c. 2 kbps d. 10 kbps	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
AM1-1100#B	The EOC shall be capable of receiving two housekeeping telemetry packet streams of 16 kbps from the SSIM.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
AM1-1110#B	The EOC shall be capable of receiving a health and safety telemetry packet stream from the SSIM at 1 kbps.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
AM1-1120#B	The EOC shall be capable of receiving a diagnostic telemetry/memory dump packet stream from the SSIM at 16 kbps.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
AM1-1130#B	The EOC shall be capable of receiving a spacecraft recorder housekeeping telemetry packet stream from the SSIM at 256 kbps or 512 kbps.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B110320.020
AM1-1150#B	ECS shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real-time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a Tracking and Data Relay Satellite System (TDRSS) link is available for contact to the spacecraft.	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B120820.020
ASTER-0010#B	ECS and ASTER GDS shall conform to the IRD Between EOSDIS Core System and Science Computing Facilities with regard to the passing of data production software and calibration coefficients between the two systems in support of data production software development for standard ASTER data products.	mission critical	test	B232.02.02 B260.02.03 T233-30.02.03	B090480.010
ASTER-0020#B	ASTER GDS shall have the capability to send and ECS (EDC DAAC) shall have the capability to receive all algorithms, source code, and documentation used by the ASTER GDS to process ASTER Level 0 data to Level 1 and higher level standard products.	mission critical	test	T209-52.02.01	B090420.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0030#B	ECS (EDC DAAC) shall have the capability to send and ASTER GDS shall have the capability to receive all algorithms, source code, and documentation used by ECS to process ASTER Level 1 data to higher level products.	mission critical	test	T209-52.02.01	B090420.020
ASTER-0040#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive EOS Long Term Science Plans.	mission critical	test	T252-50.02.01	B110120.010 B120210.010
ASTER-0045#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive EOS Long Term Instrument Plans.	mission critical	test	T252-50.02.01	B110120.010 B120210.010
ASTER-0050#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for updates to the ASTER operations data base.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080150.020
ASTER-0060#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive an updated EOC operations data base, containing at a minimum, spacecraft and instrument telemetry formats, limits, and associated information and ASTER instrument command formats andassociated information.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080150.020
ASTER-0100#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive information on ASTER instrument operations and constraints that may be applicable to DAR specification. The ASTER instrument constraint information shall include (at a minimum): a. descriptive information for the ASTER instrument b. default settings for instrument configurable parameters c. range of values for instrument configurable parameters d. instrument constraint information	mission critical	test	T250-10.02.05 (Testcase link to RBR for FOS not in RTM)	B090460.010 B120310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0110#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive DARs for the ASTER instrument. DARs shall contain the following information, at a minimum: a. Observation number b. Experimenter identification c. Experimenter address d. Investigation identification e. Scientific discipline f. Observation repetition period g. Tolerance in observation time h. User priority i. Scheduling priority and target of opportunity flag j. Descriptive text k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates l. Earliest start time m. Latest stop time n. Minimum coverage required o. Maximum coverage desired p. Associated product generation request and product distribution request q. Pointing angle r. Calibration requirements s. Coordination requirements t. Data transmission requirements u. Illumination requirements (day/night) v. Specific time of observation w. Sun angle x. Direct downlink option	mission critical	test	B230.02.10 B230.02.11 B260.02.03	B090460.010 B090460.010 B120310.050
ASTER-0120#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive DAR status, when requested by ECS. DAR status shall include such information as confirmation or rejection of the DAR, and notification of DAR scheduling and completion, to include at a minimum: a. Date and time b. Instrument ID c. DAR ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection.	mission critical	test	B230.02.11 B260.02.03	B090460.030 B120320.020
ASTER-0130#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive queries for the current status of ASTER DARs which were previously submitted to the ASTER GDS by ECS.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120320.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0200#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive planning aids (e.g., predicted orbit data, and spacecraft maneuver information).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120210.010
ASTER-0210#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument resource profiles and instrument resource deviation lists (when a resource profile exists).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B110120.030 B120320.010
ASTER-0220#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when ASTER instrument resource profile information cannot be integrated into the preliminary resource schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B110120.030 B120320.010
ASTER-0230#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a preliminary resource schedule. The preliminary resource schedule shall include, at a minimum, the following: a. Activity and DAR identifiers b. Resource availability and usage requirements c. Time constraints d. TDRSS schedule	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B090460.020 B110120.010 B110120.030 B120320.010
ASTER-0240#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive instrument activity lists and instrument activity deviation lists (when an activity list exists) and any updates thereto.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B120320.010
ASTER-0250#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when the ASTER instrument activities cannot be integrated into the detailed activity schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B110130.030 B110130.040 B120320.020
ASTER-0260#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive detailed activity schedules and any updates. The detailed activity schedule shall include, at a minimum, the following: a. Instrument activities b. Spacecraft activities necessary to support all instrument activities c. All spacecraft activities necessary for spacecraft subsystem maintenance d. Spacecraft resource requirements for each activity e. Traceability of instrument activities to DARs	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090395.010 B110130.040 B090460.020 B120320.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0300#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive, both electronically and by voice, information to facilitate, at a minimum, the following: a. Planning of coordinated operations b. Resolution of conflicts c. Exchange of instrument status	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.060 B110210.090
ASTER-0310#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive, both electronically and by voice, information to facilitate, at a minimum, the following: a. Planning of coordinated operations b. Resolution of conflicts c. Exchange of instrument status	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030 B110210.060 B110210.090
ASTER-0340#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive "What-If" planning and scheduling inputs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.090 B120320.020
ASTER-0350#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive "What-If" planning and scheduling results.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.090 B120320.020
ASTER-0410#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive command load generation status information, including at a minimum, the following: a. Spacecraft Control Computer (SCC)-stored command load report b. Integrated report having orbital events, command execution times, and TDRSS contacts with candidate loads	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120320.030
ASTER-0520#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive real time command groups.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ASTER-0530#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive instrument command uplink status. Instrument command uplink status shall include (at a minimum): a. receipt of the command group at the EOC b. validation status at the EOC c. receipt of the command at the AM-1 spacecraft	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120320.030 B120220.030
ASTER-0540#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive pre-planned command groups.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110210.050 B120210.020
ASTER-0550#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive instrument command notification when ECS issues emergency/contingency ASTER command groups.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080170.020 B120220.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0570#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument status data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090420.020 B120230.010 B120230.020
ASTER-0580#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive AM-1 spacecraft status data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090420.020 B120230.010 B120230.020
ASTER-0590#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive mission status reports.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B090420.020
ASTER-0700#B	ASTER GDS shall have the capability to send and ECS (EDC DAAC) shall have the capability to receive Level 1a data products, including associated ancillary data, metadata, and browse.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.020 B120330.020
ASTER-0730#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive orbit data anomaly notifications.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100250.030 B120330.040
ASTER-0740#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive repaired orbit data provided to ECS by the GSFC Flight Dynamics Facility.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120330.040
ASTER-0760#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive data availability schedules for ASTER GDS data products which were requested by ECS.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.010 B120330.020
ASTER-0770#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive data availability schedules for ECS data products which were requested by ASTER GDS.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.010
ASTER-0800#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive dependent valids information related to ECS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090460.020
ASTER-0805#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive dependent valids information related to ASTER GDS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090460.020
ASTER-0810#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive directory metadata related to ECS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.070 B090440.050
ASTER-0815#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive directory metadata related to ASTER GDS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.070 B090440.050
ASTER-0820#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive inventory search requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0825#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive guide search requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030
ASTER-0830#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive browse requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030
ASTER-0835#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive inventory data search results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030
ASTER-0840#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive guide search results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030
ASTER-0845#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive browse results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.030
ASTER-0850#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive inventory search requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0855#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive guide search requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0860#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive browse requests.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0865#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive inventory search results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0870#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive guide search results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0875#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive browse results.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.050
ASTER-0880#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive user authentication requests for ASTER GDS privileges of EOSDIS users.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100250.030
ASTER-0885#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive user authentication information specifying ASTER GDS privileges for EOSDIS users.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100250.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0890#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive user authentication requests for ECS privileges of ASTER GDS users.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100250.030
ASTER-0895#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive user authentication information specifying ECS privileges for ASTER GDS users.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100250.030
ASTER-0900#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product requests for ASTER GDS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.040
ASTER-0905#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product generation requests for ASTER GDS data products. Product generation requests will include an associated product distribution request.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120310.050
ASTER-0910#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product delivery status information. Product delivery status information contains the following information, at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than the latest completion time specified by the user, adjusted start and stop times.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.040
ASTER-0915#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive requests for product delivery status.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.040
ASTER-0920#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product requests for ECS data products.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.060
ASTER-0925#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product generation requests for ECS data products. Product generation requests will include an associated product distribution request.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120720.010 B120720.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-0930#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product delivery status information. Product delivery status information contains the following information, at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than the latest completion time specified by the user, adjusted start and stop times.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.060
ASTER-0935#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for product delivery status.	mission critical	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120340.060
ASTER-0940#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive Level 0 - Level 4 data products, including associated ancillary, metadata, and browse.	mission essential	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.020
ASTER-0945#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive Level 1b - Level 4 ASTER data products, including associated ancillary, metadata, and browse.	mission essential	test	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.020 B120330.050
ASTER-0950#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive ancillary data, including associated metadata.	mission critical	test	T252-50.02.02 T252-50.02.07 T252-50.02.11	B090420.020
ASTER-0955#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive correlative data, including associated metadata.	mission critical	test	T252-50.02.02 T252-50.02.07 T252-50.02.11	B090420.020
ASTER-0960#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ancillary data, including associated metadata.	mission critical	test	T252-50.02.02 T252-50.02.07 T252-50.02.11	B090420.020
ASTER-0965#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive correlative data, including associated metadata.	mission critical	test	T252-50.02.02 T252-50.02.07 T252-50.02.11	B090420.020
ASTER-1000#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive ECS system and network management information.	mission critical	test	B252.02.02 T252-50.02.02 T252-50.02.07 T252-50.02.11	B080610.010
ASTER-1005#B	ECS shall have the capability to send and ASTER GDS shall have the capability to receive requests for ASTER GDS network management information.	mission critical	test	T252-50.02.02 T252-50.02.07	B080610.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-1010#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER GDS system and network management information.	mission critical	test	T252-50.02.02 T252-50.02.07 T252-50.02.11	B080610.010
ASTER-1015#B	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for ECS system management information.	mission critical	test	T252-50.02.02 T252-50.02.07	B080610.010
ASTER-1060#B	ECS shall provide support for Transport Control Protocol/Internet Protocol (TCP/IP) communications protocols to the U.S. Gateway for ASTER GDS communications.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080170.010
ASTER-1080#B	The interface between ECS and ASTER GDS shall be compliant with the interface guidelines identified in the ECS Security Plan.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080170.010
ASTER-2000#B	ECS functions shall have an operational availability (computed as defined in the Functional and Performance Requirements Specification for the EOSDIS Core System) of 0.96 at a minimum and a Mean Down Time (MDT) of four (4) hours or less, unless otherwise specified.	mission critical	test	T250-10.02.01 (Testcase link to RBR for FOS not in RTM)	B080510.020
ASTER-2030#B	The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
ASTER-2040#B	The ECS FOS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity (TOOs).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
ASTER-2060#B	The ECS SDPS function of receiving science data shall have an operational availability of 0.999 at a minimum and an MDT of two (2) hours or less.	mission critical	test	T250-10.02.01	B080510.020
ASTER-2080#B	The ECS function for gathering and disseminating management information shall have an operational availability of .998 at a minimum and an MDT of 20 minutes or less, for critical services.	mission critical	test	T250-10.02.01	B080510.020
ASTER-5000#B	The estimated volume of ASTER Level 1a data sent from the ASTER GDS to ECS is 131.472 GB/day.	mission critical	test	T250-10.02.01	B120820.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ASTER-5010#B	The estimated volume of ASTER Level 1b data sent from the ASTER GDS to ECS is the data volume that results when at least 40% of the ASTER Level 1a data is processed to Level 1b.	mission critical	test	T250-10.02.01	B120820.010
DADS0010#B	Each DADS shall receive updated metadata for products that have been QA'd.	mission essential	test	T250-10.02.01	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040
DADS0020#B	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.	mission essential	demo	B244.02.01 T244-30.02.01 T244-30.02.02	B090140.040 B120710.020 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040
DADS0070#B	Each DADS shall provide the capability of scanning or digitizing hardcopy input for the purpose of archiving documents.	mission fulfillment	test	B244.02.01 T244-30.02.01 T244-30.02.02	B090110.030 B090120.060 B090130.050 B090140.040 B090210.030 B090220.060 B090230.050 B090240.040 B090250.050 B090310.030 B090320.060 B090330.060 B090340.050 B090350.040 B090360.050 B090420.060 B090430.050 B090440.040 B090510.030 B090520.050 B090530.040 B090610.060 B090620.050 B090630.040 B090710.040 B090720.050 B090810.050
DADS0100#B	Each DADS shall receive management directives from the SMC.	mission essential	test	T209-51.02.07 T212-10.01.02 T244-60.02.02	B080730.010 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0110#B	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	mission essential	test	B244.02.01 T244-30.02.01 T244-30.02.02	B090140.030 B090240.020 B090350.020 B090440.020 B090530.020 B090630.020 B120310.040 B120340.020 B120340.040 B120410.050 B120420.030 B120430.050 B120440.070 B120450.040 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.030 B120640.040 B120640.060 B120650.030 B120720.010 B120720.020 B120730.010
DADS0120#B	Each DADS shall receive from the PGS, at a minimum, the following: a. L1-4 products b. (DELETED) c. Metadata d. Calibration e. Algorithms f. Schedule g. Status	mission essential	test	B212.01.01 B240.02.02 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B260.02.02 T209-42.02.01	B090110.020 B090110.030 B090210.020 B090210.030 B090310.020 B090310.030 B090410.020 B090510.020 B090510.030 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120450.030 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040 B120720.010 B120720.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0130#B	Each DADS shall receive from the EDOS and SDPF, at a minimum, the following: a. Production data (L0) b. Expedited data	mission essential	test	B212.01.01 B240.02.01 B240.02.02 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B260.02.02 T209-42.02.01 T212-20.01.02	B090110.010 B090210.020 B090310.010 B120410.020 B120430.020 B120440.020 B120510.020
DADS0140#B	Each DADS shall receive from other DAACs, at a minimum, the following for the purpose of product generation: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	mission essential	test	B212.01.01 B233.01.02 B240.02.02 B240.02.09 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B260.02.02 B260.02.03 T209-10.01.01 T209-42.02.01 T233-12.01.04	B090110.020 B090310.020 B090510.020 B120330.030 B120430.030 B120440.030 B120450.020 B120450.050 B120450.060 B120510.030 B120620.030 B120630.030
DADS0145#B	Each DADS shall be capable of receiving from the ADCs, at a minimum, the following for the purpose of product generation: a. L0-L4 equivalent data sets b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	mission essential	test	B212.01.01 B240.02.02 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B253.02.05 B260.02.02 T209-42.02.01 T244-10.02.01 T244-10.02.08 T244-50.02.01 T244-50.02.04	B090120.020 B090330.020 B100140.020 B100320.030 B120330.030 B120410.030 B120420.010 B120440.030 B120450.020 B120510.030 B120620.030 B120630.030 B120720.010 B120720.020 B120730.040 B120730.050
DADS0150#B	Designated DADS shall receive from the ICC, at a minimum, the following: a. Instrument history log (or subset of history log) b. Associated Metadata	mission essential	test	T209-42.02.01 T209-42.02.03	B110310.020
DADS0160#B	A designated DADS shall receive from the EOC, at a minimum, the following: a. Spacecraft history log (or subset of history log) b. Associated Metadata	mission essential	test	T209-42.02.01 T209-42.02.03	B110310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0170#B	Each DADS shall be capable of receiving from designated EPDSs and ODCs, at a minimum, the following: a. L0-L4 data sets b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	mission essential	test	B210.01.05 B212.01.01 B240.02.01 B240.02.02 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B260.02.02 T209-42.02.01 T212-20.01.01 T212-20.01.04 T244-50.02.01	B090170.010 B090220.020 B090220.030 B090320.020 B090320.030 B090390.010 B090420.020 B090420.030 B090480.010 B090560.010 B090610.020 B090610.030 B090660.010 B090710.020 B090710.030 B120410.020 B120420.020 B120420.050 B120430.020 B120650.010 B120650.020 B120710.010
DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum: a. Orbit data b. Attitude data c. Metadata	mission essential	test	B230.02.12 B240.02.02 B244.02.01 B244.02.02 B260.02.02 B260.02.03 T209-30.01.01 T209-32.02.03 T209-42.02.01 T209-42.02.03 T244-10.02.09	B090310.010 B120330.040
DADS0180#B	Each DADS shall receive from the users, at a minimum, the following: a. Metadata b. Correlative data c. Documents d. New derived data sets	mission essential	test	B244.02.01 B244.02.02 T209-30.01.01 T209-42.02.05	B100110.090 B100410.040 B100430.010
DADS0190#B	Each DADS shall receive from the SCF, at a minimum, the following: a. Special products (L1-L4) b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	mission essential	test	B212.01.01 B240.02.02 B244.02.01 B244.02.02 B244.02.03 B244.02.04 B260.02.02 T209-42.02.01 T244-10.02.02 T244-10.02.03	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B120710.010 B120710.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0200#B	Each DADS shall receive from the IPs at a minimum, the following: a. L0-L4 data products b. Orbit/attitude data c. Metadata associated with data sets d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms	mission essential	test	B212.01.01 B240.02.01 B244.02.01 B244.02.02 B260.02.02 T209-42.02.01 T212-20.01.03 T244-10.02.03 T244-10.02.04 T244-10.02.05 T244-10.02.06 T244-10.02.07 T244-50.02.05 T244-50.02.07	B090420.020 B090460.030 B090470.010 B120330.020 B120330.050 B120620.030 B120640.050
DADS0210#B	Each DADS shall be capable of receiving, at a minimum, the following types of EOS instrument data in support of pre-launch checkout of the ground system: a. Real EOS instrument data b. Simulated EOS instrument data	mission essential	test	B240.02.02 B260.02.02 T209-42.02.01	B090110.010 B090120.020 B090210.010 B090220.020 B090310.010 B090320.020 B090410.010 B090420.020 B090510.010 B090610.020
DADS0220#B	Each DADS shall accept, at a minimum, the following data types in support of development of initial calibration: a. Instrument calibration data b. Scientific calibration	mission essential	test	B244.02.01 T244-30.02.01 T244-30.02.02	B090110.010 B090210.010 B090310.010 B090410.010 B090510.010
DADS0240#B	Each DADS shall accept from the SMC, at a minimum, detailed science plans.	mission essential	test	B244.02.01 T244-30.02.01 T244-30.02.02	B080330.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0250#B	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media	mission essential	test	B244.02.01 T244-30.02.01 T244-30.02.02	B080160.010 B090120.020 B090130.010 B090220.020 B090220.030 B090230.010 B090320.020 B090320.030 B090330.020 B090340.010 B090420.020 B090420.030 B090430.010 B090520.010 B090610.020 B090610.030 B090620.010 B090710.020 B090710.030 B090720.010 B090810.010 B120330.020 B120410.020 B120420.020 B120420.050 B120430.020 B120440.020 B120510.020
DADS0260#B	Each DADS shall receive non-EOS correlative and ancillary digital data.	mission essential	test	B240.02.02 B244.02.01 B244.02.02 B260.02.02 T209-42.02.01 T244-10.02.08	B090110.010 B090210.010 B090310.010 B090410.010 B090510.010 B120330.030 B120410.030 B120420.010 B120430.030 B120440.030 B120450.020 B120510.030 B120620.030 B120630.030
DADS0281#B	Each DADS shall be capable of ingesting and storing data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information	mission essential	test	B212.01.02 B240.02.02 B260.02.02 T209-42.02.03 T212-30.01.01	B090170.010 B090390.010 B090560.010 B090660.010 B120650.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0282#B	Each DADS shall be capable of storage and retrieval of real and simulated EOS instrument data in support of pre-launch checkout of the ground system.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01 B260.02.02 T209-30.01.01 T209-42.02.01 T209-42.02.03 T209-61.02.01	B100120.010
DADS0290#B	Each DADS shall check all metadata and data it receives. For each type of data described by the metadata, the data shall be checked for the presence of required fields, error-free input, correctness of the data set granule size, and other checks as required.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B090120.040 B090130.030 B090220.040 B090230.030 B090320.040 B090330.040 B090340.030 B090420.040 B090430.030 B090460.030 B090520.030 B090520.040 B090610.040 B090620.030 B090720.030 B090810.030
DADS0300#B	Each DADS shall generate status indicating the success or failure of metadata and data consistency checks.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B090120.040 B090130.030 B090220.040 B090230.030 B090320.040 B090330.040 B090340.030 B090420.040 B090430.030 B090460.030 B090520.030 B090520.040 B090610.040 B090620.030 B090720.030 B090810.030
DADS0310#B	Each DADS shall verify that data received came from an approved/authorized source.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B090120.040 B090130.030 B090220.040 B090230.030 B090320.040 B090330.040 B090340.030 B090420.040 B090430.030 B090460.030 B090520.030 B090520.040 B090610.040 B090620.030 B090720.030 B090810.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0320#B	Each DADS shall verify compliance of scientist provided data with EOSDIS defined standards for metadata and file content (not scientific content).	mission essential	test	B244.02.03 B244.02.04 B260.02.02 T209-42.02.02 T244-40.02.01 T244-40.02.02 T244-40.02.03 T244-40.02.04 T244-40.02.05 T244-40.02.06	B090120.040 B090130.030 B090220.040 B090230.030 B090320.040 B090330.040 B090340.030 B090420.040 B090430.030 B090520.030 B090610.040 B090620.030 B090720.030 B090810.030
DADS0350#B	Each DADS shall generate the following metadata items, at a minimum: a. Unique Granule Id for L0 b. Date and time of storage c. Physical location d. Data check status e. Unique format identifiers	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B090120.060 B090130.050 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090720.050 B090810.050
DADS0360#B	Each DADS shall augment PGS-generated metadata with DADS-generated metadata.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B090130.040 B090230.040 B090340.040 B090430.040 B090460.030 B090620.040 B090720.040 B090810.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.	mission essential	test	B240.02.02 B260.02.02 T209-32.02.07 T209-42.02.03	B090120.060 B090130.050 B090140.050 B090220.060 B090220.070 B090230.050 B090240.050 B090320.060 B090320.070 B090330.060 B090340.050 B090350.050 B090420.060 B090430.050 B090440.050 B090460.030 B090520.050 B090530.050 B090610.060 B090620.050 B090630.050 B090720.050 B090810.050
DADS0405#B	Each DADS shall provide the capability to archive multiple versions of selected archive data.	mission essential	test	T209-21.02.04	B090120.060 B090130.050 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050
DADS0410#B	Each DADS shall archive the current version of a product, making the preceding version of a product eligible for deletion.	mission essential	test	T209-21.02.03	B090120.060 B090130.050 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0412#B	Each DADS shall notify users when a product becomes eligible for deletionvia direct notification and via the ECS bulletin board. The product eligible for deletion shall be deleted after six months unless the DADS is directed otherwise by appropriate authority.	mission essential	test	T209-21.02.03 T209-91.02.02 T221-40.02.04	B080160.020 B090120.070 B090130.060 B090220.070 B090230.060 B090320.070 B090330.070 B090340.060 B090420.070 B090430.060 B090520.060 B090610.070 B090620.060 B090710.050 B090720.060 B090810.060
DADS0425#B	Archive and backup media at each DADS shall have a rated shelf life of at least 10 years as determined by the National Archives and Records Administration (NARA), National Institute for Standards and Technology (NIST), NASA, or a professional or industry organization such as ANSI, the Society of Motion Picture and Television Engineers (SMPTE) or the National Association of Broadcasters (NAB).	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B080160.020
DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.	mission essential	test	T209-51.02.10	B080130.020
DADS0435#B	At each DADS operations personnel shall be able to add new physical volumes and eject physical volumes from the archive for off-line or off-site permanent storage.	mission essential	test	T209-51.02.02	B080160.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0440#B	Each DADS shall provide storage, at a minimum, for the following EOS data: a. Standard Products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms h. Format descriptions (e.g., HDF spec.)	mission essential	test	B240.02.02 B244.02.01 B244.02.02 B260.02.02 T209-30.01.01 T209-42.02.01 T209-42.02.03	B090130.050 B090220.060 B090320.060 B090340.050 B090430.050 B090460.030 B090520.050 B090620.050 B090710.040 B090720.050 B090810.050 B120330.040 B120330.060 B120410.040 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120510.040 B120510.060 B120520.030 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120630.040 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0450#B	Each DADS shall provide storage, at a minimum, for the following scientist provided data: a. Special data products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Research results (articles, algorithms, data sets, software) f. Instrument characterization data sets g. Associated Metadata	mission essential	test	B240.02.02 B260.02.02 T209-42.02.01 T209-42.02.03	B090110.030 B090120.060 B090130.050 B090140.040 B090160.010 B090160.020 B090160.030 B090170.030 B090210.030 B090220.060 B090230.050 B090240.040 B090250.050 B090270.010 B090270.020 B090280.030 B090310.030 B090320.060 B090330.060 B090340.050 B090350.040 B090360.050 B090380.010 B090380.020 B090380.030 B090390.030 B090410.020 B090420.060 B090430.050 B090440.040 B090470.010 B090470.020 B090470.030 B090480.030 B090510.030 B090520.050 B090530.040 B090550.010 B090550.020 B090550.030 B090560.030 B090610.060 B090620.050 B090630.040 B090650.010 B090650.020 B090660.030 B090710.040 B090720.050 B120450.060
DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.	mission essential	test	B240.02.02 B260.02.02 T209-30.01.01 T209-42.02.01	B080160.020 B090120.060 B090330.060 B090420.060 B090610.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0465#B	The DADS shall provide storage for the following Version 0 data: a. Standard products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms.	mission essential	test	T209-30.01.01	B090130.050 B090230.050 B090340.050 B090430.050 B090520.050 B090620.050 B090720.050 B090810.050 B120330.030 B120410.030 B120420.010 B120430.030 B120440.030 B120450.020
DADS0470#B	The EDC DADS shall provide storage for the following Landsat 7 data: a. Level OR data b. Associated metadata and browse c. IGS metadata and browse d. Associated calibration and metadata e. Calibration updates and metadata f. Documents g. Algorithms h. Activity Calendar	mission essential	test	T209-30.01.01	B090410.020 B090420.060 B090440.040 B090480.030 B120650.010 B120650.020
DADS0475#B	The DADS shall provide storage for the following TRMM data: a. L1A-L4 equivalent data products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms.	mission essential	test	T209-30.01.01	B090120.060 B090220.060 B090250.050 B090320.060 B090330.060 B090360.050 B120410.020 B120410.030 B120420.020 B120420.050 B120430.020
DADS0487#B	Each DADS shall be capable of storing EDOS production data sets (Level 0) for at least one year from the date they are ingested.	mission critical	inspection	T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120430.020 B120440.020 B120510.020 B120810.010
DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.	mission essential	test	T244-50.02.05	B090110.030 B090310.030 B090410.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.	mission essential	test	T244-50.02.05	B090130.050 B090230.050 B090340.050 B090430.050 B090460.030 B090520.050 B090620.050 B090720.050 B090810.050 B120330.040 B120330.060 B120410.040 B120410.060 B120420.020 B120420.050 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120450.030 B120450.050 B120510.040 B120510.060 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120620.040 B120620.060 B120630.040 B120630.060 B120640.030 B120640.060
DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.	mission essential	test	T209-32.02.07 T209-91.02.01 T221-40.02.01	B100120.060 B100410.040 B100420.030 B100430.010
DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.	mission essential	test	T209-91.02.03 T209-91.02.04 T221-40.02.04	B100120.060 B100410.040 B100420.030 B100430.010
DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.	mission essential	test	T209-32.02.07	B090110.020 B090210.020 B090310.020 B090510.020
DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.	mission essential	test	B230.02.12 B260.02.03 T209-12.02.01 T209-12.02.02 T209-12.02.03 T209-32.02.05	B100120.050 B100120.060 B100420.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.	mission essential	test	T209-12.02.02	B090120.020 B090330.020
DADS0550#B	Each DADS shall notify the PGS of the receipt of EOS data sets required for Standard Product production (e.g., data received from non-collocated DADS).	mission essential	test	B230.02.15 T209-32.02.01	B090110.010 B090210.010 B090310.010 B090410.010 B090510.010
DADS0570#B	Each DADS shall verify product orders from the IMS.	mission essential	test	B230.02.15 T209-32.02.01	B100120.050 B100120.060 B100420.030 B120310.050
DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.	mission essential	test	B230.02.15 T209-32.02.01	B100120.040 B100420.030
DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.	mission essential	test	B230.02.15 T209-32.02.01	B100120.050 B100410.030 B100410.050 B100430.040 B120340.020 B120410.050 B120420.030 B120430.050 B120440.070 B120450.040 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.040 B120650.030
DADS0610#B	Each DADS shall support reprocessing.	mission essential	test	T209-22.02.03	B090140.030 B090240.030 B090250.050 B090350.050 B090360.050 B090440.030 B090530.030 B090630.030 B120330.060 B120410.060 B120420.040 B120430.060 B120440.080 B120450.050 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0660#B	Each DADS shall maintain a database of orders which shall include at a minimum: priorities, distribution directions, and all other details necessary to process orders including standing and multi-DADS orders.	mission essential	test	B230.02.15 T209-32.02.01	B100120.050 B100120.060
DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.	mission essential	test	B230.02.15 T209-32.02.01	B080210.020 B100120.100 B120830.010
DADS0690#B	Each DADS shall support the prioritized retrieval and delivery of data based on the priority information specified in the data retrieval request.	mission essential	test	B230.02.15 T209-32.02.01	B100120.050 B100120.060
DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.	mission essential	test	B212.01.02 B230.02.25 B244.02.02 B260.02.01 T209-12.02.02 T209-12.02.03 T209-31.02.04 T209-31.02.05 T212-10.01.01 T212-10.01.02 T244-60.02.01 T244-60.02.02	B090120.020 B090130.010 B090220.020 B090230.010 B090320.020 B090330.020 B090340.010 B090420.020 B090430.010 B090520.010 B090610.020 B090620.010 B090710.020 B090720.010 B090810.010
DADS0740#B	Each DADS shall provide the capability to subset, subsample, or average data within a granule based on defined criteria to include: a. Geographic location (x, y, z) (spatial with rectangular boundaries) b. Spectral band c. Timed. WRS	mission essential	test	B230.02.15 T209-12.02.06 T209-32.02.01	B100120.040
DADS0760#B	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)	mission essential	test	B230.02.15 T209-12.02.06 T209-32.02.01	B100120.050 B100120.060 B100410.030 B100410.050 B100430.040
DADS0770#B	The DADS shall reformat data sets in one of the approved standard formats including HDF.	mission essential	test	B233.01.02 B240.02.09 B244.02.03 B244.02.04 B260.02.02 B260.02.03 T222-30.02.01 T233-12.01.04 T244-40.02.01 T244-40.02.02 T244-40.02.05 T244-40.02.06	B090120.040 B090130.050 B090230.050 B090320.060 B090420.040 B090430.050 B090460.030 B090520.050 B090610.040 B090620.050 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0780#B	Each DADS shall have the capability to incorporate additional ingest and data distribution formats and conversion software.	mission fulfillment	test	B233.01.02 B240.02.09 B244.02.03 B260.02.02 B260.02.03 T209-30.01.03 T222-30.02.01 T233-12.01.04 T244-40.02.01 T244-40.02.02	B080160.010 B090160.010 B090160.020 B090160.030 B090270.010 B090270.020 B090330.040 B090340.050 B090380.010 B090380.020 B090380.030 B090470.010 B090470.020 B090470.030 B090550.010 B090550.020 B090550.030 B090650.010 B090650.020
DADS0800#B	Each DADS shall provide the capability to translate input data to the internal ECS format including HDF.	mission essential	test	B233.01.02 B240.02.09 B244.02.03 B260.02.02 B260.02.03 T222-30.02.01 T233-12.01.04 T244-40.02.01 T244-40.02.02	B090110.010 B090120.020 B090130.010 B090140.030 B090210.010 B090220.020 B090230.010 B090240.030 B090310.010 B090320.020 B090330.020 B090340.010 B090350.030 B090410.010 B090420.020 B090430.010 B090440.030 B090510.010 B090520.010 B090530.030 B090610.020 B090620.010 B090630.030 B090710.020 B090720.010 B090810.010
DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.	mission essential	test	T209-41.02.04 T209-71.02.01 T209-71.02.02 T209-71.02.03 T209-71.02.04 T209-81.02.04 T209-81.02.06	B080710.020 B120330.050 B120340.060 B120420.030 B120640.030 B120640.040 B120640.060 B120650.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0890#B	Each DADS shall generate resource utilization statistics (accounting data) as input to the billing process. The statistics include at a minimum: a. Standing order/data distribution request number b. Media cost c. CPU utilization d. I/O utilization e. Personnel costs f. Shipping/handling g. Networking cost h. Archival storage cost	mission essential	test	T209-22.02.01 T209-41.02.04 T209-71.02.01 T209-71.02.02 T209-71.02.03 T209-71.02.04 T209-81.02.01 T209-81.02.03 T209-81.02.04 T209-81.02.05 T209-81.02.06 T209-81.02.09 T209-81.02.10 T209-81.02.11	B080710.020 B120330.050 B120340.060
DADS0901#B	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management c. Accounting Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management	mission essential	test	B212.01.02 B244.02.02 B260.02.06 B260.02.07 T209-41.02.04 T209-51.02.03 T209-51.02.04 T209-51.02.11 T209-62.02.01 T209-62.02.02 T209-62.02.03 T209-62.02.04 T209-71.02.01 T209-71.02.02 T209-71.02.04 T209-81.02.01 T209-81.02.04 T212-10.01.01 T212-10.01.02 T244-60.02.01 T244-60.02.02	B080160.010 B080310.010 B080410.020 B080530.010 B080620.010 B080710.020 B080730.010
DADS0910#B	Each DADS shall notify the SMC and IMS in the event that data required in connection with an on-demand request does not arrive.	mission essential	test	B240.02.07 B260.02.03 T209-32.02.07 T252-10.02.01	B080620.010
DADS0925#B	Each DADS shall, in the event of noncompliance (e.g., non-arrival of scheduled data) forward a description of noncompliance to the SMC.	mission essential	test	B260.02.07 T209-51.02.11	B080620.010 B090120.020 B090130.010 B090220.020 B090230.010 B090320.020 B090330.020 B090340.010 B090420.020 B090430.010 B090520.010 B090610.020 B090620.010 B090710.020 B090720.010 B090810.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS0927#B	Each DADS shall generate and send to SMC reports of the status of the distribution of data.	mission essential	test	T209-61.02.02	B080720.020 B090110.020 B090210.020 B090310.020 B090510.020
DADS0930#B	Each DADS shall provide the IMS an estimate of the staging delay before subsetted, subsampled, or summary data sets are available.	mission fulfillment	test	T209-61.02.02	B090120.070 B090130.060 B090220.070 B090230.060 B090320.070 B090330.070 B090340.060 B090420.070 B090430.060 B090520.060 B090610.070 B090620.060 B090710.050 B090720.060 B090810.060
DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.	mission essential	test	T209-61.02.02	B100120.060 B100410.030 B100410.050 B100430.040
DADS0960#B	Each DADS shall automatically send data distribution status to the IMS upon completion of the distribution process.	mission essential	test	T209-61.02.02	B100120.060 B100410.030 B100410.050 B100430.040
DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.	mission essential	test	T209-61.02.02	B090110.020 B090140.040 B090210.020 B090220.050 B090240.040 B090310.020 B090320.050 B090350.040 B090440.040 B090510.020 B090530.040 B090630.040
DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.	mission essential	test	B230.02.12 B260.02.03 B260.02.03 T209-12.02.05 T209-32.02.03	B100120.060 B100410.020 B100430.020
DADS1020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).	mission essential	test	B230.02.12 B260.02.03	B100120.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.	mission essential	test	B230.02.12 B260.02.03	B100120.060
DADS1070#B	The DADS shall send data check and storage status to the provider of ingest data.	mission essential	test	B230.02.12 B260.02.03	B090120.040 B090120.060 B090130.030 B090130.050 B090140.040 B090170.010 B090170.030 B090220.040 B090220.060 B090230.030 B090230.050 B090240.040 B090320.040 B090320.060 B090330.040 B090330.060 B090340.030 B090340.050 B090350.040 B090390.010 B090390.030 B090420.040 B090420.060 B090430.030 B090430.050 B090440.040 B090460.030 B090480.010 B090480.030 B090520.030 B090520.040 B090520.050 B090530.040 B090560.010 B090560.030 B090610.040 B090610.060 B090620.030 B090620.050 B090630.040 B090660.010 B090660.030 B090710.040 B090720.030 B090720.050 B090810.030 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1080#B	Each DADS shall maintain a data receipt log.	mission essential	test	B230.02.12 B260.02.03	B090120.020 B090130.010 B090130.020 B090140.030 B090170.010 B090220.020 B090220.030 B090230.010 B090230.020 B090240.030 B090320.020 B090320.030 B090330.020 B090340.010 B090340.020 B090350.030 B090390.010 B090420.020 B090420.030 B090430.010 B090430.020 B090440.030 B090480.010 B090520.010 B090520.020 B090530.030 B090560.010 B090610.040 B090610.060 B090620.010 B090620.020 B090630.030 B090660.010 B090710.020 B090710.030 B090720.010 B090720.020 B090810.010 B090810.020 B120330.020 B120330.030 B120410.020 B120410.030 B120420.010 B120420.020 B120420.050 B120430.020 B120430.030 B120440.020 B120440.030 B120450.020 B120450.050 B120450.060 B120510.020 B120510.030 B120520.020 B120530.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B120610.020 B120620.020 B120620.030 B120630.020 B120630.030 B120640.010 B120640.020 B120640.030 B120640.050 B120640.060 B120650.010 B120650.020
DADS1085#B	Each DADS shall maintain a data access log.	mission essential	test	B230.02.12 B260.02.03	B100120.010 B100120.100 B120340.010 B120340.050 B120420.030 B120450.060 B120640.040
DADS1100#B	Each DADS shall maintain a log of all updates to the local inventory. The log shall be used to generate status reports and, in conjunction with the inventory backup, recreate the local inventory in the event of catastrophic failure.	mission essential	test	B230.02.12 B260.02.03	B090110.020 B090120.070 B090130.060 B090140.050 B090210.020 B090220.070 B090230.060 B090240.050 B090310.020 B090320.070 B090330.070 B090340.060 B090350.050 B090420.070 B090430.060 B090440.050 B090460.030 B090510.020 B090530.050 B090610.070 B090620.060 B090630.050 B090710.050 B090720.060 B090810.060 B120330.020 B120330.040 B120410.020 B120410.040 B120420.020 B120420.050 B120430.020 B120430.040 B120440.020 B120440.040 B120440.050 B120440.060 B120450.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B120450.050 B120510.020 B120510.040 B120520.020 B120520.030 B120530.020 B120530.030 B120610.020 B120610.030 B120620.020 B120620.030 B120620.040 B120630.020 B120630.030 B120630.040 B120640.030 B120640.060 B120650.010 B120650.020
DADS1110#B	Each DADS shall maintain a data distribution log.	mission essential	test	B230.02.12 B260.02.03	B100120.060 B120330.050 B120340.020 B120340.060 B120410.050 B120420.010 B120420.030 B120420.040 B120430.050 B120440.070 B120450.040 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.020 B120640.030 B120640.040 B120640.050 B120640.060 B120650.030
DADS1114#B	Each DADS shall maintain a log of staging activity.	mission essential	test	B260.02.02	B080160.010
DADS1160#B	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected lossd. Updates	mission essential	test	B260.02.02 T209-21.02.02	B090140.050 B090240.050 B090350.050 B090440.050 B090530.050 B090630.050 B120710.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.	mission essential	test	B260.02.02	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040
DADS1210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020
DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.	mission essential	test	B260.02.02	B090110.020 B090110.030 B090210.020 B090210.030 B090310.020 B090310.030 B090410.020 B090510.020 B090510.030
DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).	mission essential	test	T209-21.02.03	B120410.020 B120430.020
DADS1300#B	Each DADS shall display all faults to the system operators.	mission essential	test	B260.02.07	B080620.010
DADS1310#B	Each DADS shall track and report to the SMC problems such as missing or corrupted files requiring restoration or regeneration of data.	mission essential	test	B260.02.07	B080620.010
DADS1320#B	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.	mission essential	test	B260.02.07 T209-51.02.06 T209-51.02.11	B080620.010
DADS1330#B	Each DADS shall provide information to support fault isolation between the DADS and other ECS-unique elements and external interfaces to the LSM.	mission essential	test	B260.02.07 T209-51.02.06 T209-51.02.11	B080620.010
DADS1340#B	Each DADS shall use tools to analyze system performance.	mission essential	test	B253.02.07 B253.02.09 T209-11.02.05 T209-51.02.04 T209-72.02.01 T209-72.02.03	B080520.010
DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.	mission essential	test	T209-51.02.05 T209-81.02.05 T209-81.02.12	B080530.010
DADS1370#B	Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.	mission essential	test	T209-51.02.04	B080510.010
DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.	mission essential	test	T209-21.02.03	B080160.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1380#B	Each DADS shall monitor data transfer between external (non-ECS) elements and the DADS.	mission essential	test	T209-21.02.03	B090110.010 B090210.010 B090310.010 B090410.010 B090510.010
DADS1390#B	Each DADS shall monitor data transfer between elements of the ECS and the DADS.	mission essential	test	T209-21.02.03	B090110.010 B090210.010 B090310.010 B090410.010 B090510.010
DADS1400#B	Each DADS shall notify the originating source of the need to retransmit data in the event of transmission difficulties.	mission essential	test	T209-21.02.03	B090120.020 B090120.030 B090130.010 B090130.020 B090220.020 B090230.010 B090320.020 B090330.020 B090330.030 B090340.010 B090340.020 B090420.020 B090430.010 B090430.020 B090520.010 B090520.020 B090610.020 B090620.010 B090620.020 B090710.020 B090720.010 B090720.020 B090810.010 B090810.020
DADS1450#B	Each DADS shall be capable of screening its archive holdings of Level 1A or Level 0 data, and if a product(s) is found to be lost or unreadable, generate a request for a replacement product from EDOS, dispatch the request, and ingest the replacement product.	mission critical	test	T209-61.02.03	B090110.030 B090310.030
DADS1470#B	Each DADS shall manage element resource utilization.	mission essential	demo	T209-51.02.05 T209-81.02.12	B080530.010 B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030
DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.	mission critical	demo	T209-51.02.01	B080320.030 B080510.010 B120110.020 B120810.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1475#B	Each DADS shall provide tools to the users to perform: a. Format conversion of EOS data b. Subsetting c. Compression (lossy, lossless) d. Data transformation e. Subsampling	mission fulfillment	demo	B230.02.15 T209-32.02.01	B100120.100
DADS1510#B	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.	mission essential	demo	T209-32.02.01	B090110.020 B090110.030 B090120.060 B090130.050 B090210.020 B090210.030 B090220.060 B090230.050 B090310.020 B090310.030 B090320.060 B090330.060 B090340.050 B090410.020 B090420.060 B090430.050 B090460.030 B090510.020 B090510.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050
DADS1520#B	Each DADS shall provide an FSMS. Storage shall be based on a hierarchy of devices and media, with location-transparent access to the files.	mission essential	demo	T209-32.02.01	B090110.030 B090120.060 B090130.050 B090210.030 B090220.060 B090230.050 B090310.030 B090330.060 B090410.020 B090420.060 B090510.030 B090610.060
DADS1530#B	Each DADS shall maintain a file directory of all files under its control.	mission essential	demo	T209-32.02.01	B080130.020
DADS1540#B	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.	mission essential	demo	T209-32.02.01	B080140.020
DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.	mission essential	demo	B260.02.02 T209-21.02.01	B080130.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1610#B	The FSMS shall provide for continued performance, albeit in a degraded mode, when a device (e.g., disk or cartridge drive, operator's console) fails.	mission essential	demo	T209-32.02.01	B080620.010
DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.	mission essential	demo	T209-51.02.01	B080150.010
DADS1630#B	At each DADS tools shall be provided for recovery of data from failed media and devices.	mission essential	demo	T209-32.02.01	B080140.040
DADS1640#B	The DADS shall support the number of files derivable from Appendix C, with the ability to expand to match growth.	mission essential	demo	T209-51.02.01	B120830.010
DADS1700#B	Where appropriate, the DADS shall comply with the evolving guidelines and standards emerging from the IEEE-CS MSS Reference Model.	mission fulfillment	demo	T209-51.02.01	B080210.020 B090110.030 B090120.060 B090130.050 B090140.040 B090210.030 B090220.060 B090230.050 B090240.040 B090310.030 B090320.060 B090330.060 B090340.050 B090350.040 B090410.020 B090420.060 B090430.050 B090440.040 B090460.030 B090510.030 B090520.050 B090530.040 B090610.060 B090620.050 B090630.040 B090710.040 B090720.050 B090810.050
DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.	mission fulfillment	demo	T209-51.02.04	B080210.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1720#B	The FSMS at each DADS shall be based on published and open architectures which fully describe the physical organization and structures of files.	mission essential	demo	T209-51.02.04	B080210.020 B090110.030 B090120.060 B090130.050 B090140.040 B090210.030 B090220.060 B090230.050 B090310.030 B090320.060 B090330.060 B090340.050 B090410.020 B090420.060 B090430.050 B090460.030 B090510.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050
DADS1730#B	The DADS shall be developed using file storage management systems that have configuration-controlled application programming interfaces (APIs) that will allow the development of DAAC-unique file storage management services operated independently of the delivered ECS DADS services.	mission essential	demo	T209-42.02.04 T209-61.02.04	B080210.020 B090110.030 B090120.060 B090130.050 B090140.040 B090210.030 B090220.060 B090230.050 B090310.030 B090320.060 B090330.060 B090340.050 B090410.020 B090420.060 B090430.050 B090460.030 B090510.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1780#B	Each DADS shall provide the capability to store as a single entity logically grouped sets of data.	mission essential	demo	T209-51.02.04	B090110.030 B090120.060 B090130.050 B090140.040 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050
DADS1790#B	Each DADS shall periodically verify that all data sets are present and accounted for.	mission essential	demo	T209-51.02.04	B080160.030
DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.	mission essential	demo	T209-51.02.02	B090110.030 B090120.060 B090130.050 B090140.040 B090210.030 B090220.060 B090230.050 B090240.040 B090310.030 B090320.060 B090330.060 B090340.050 B090350.040 B090410.020 B090420.060 B090430.050 B090440.040 B090460.030 B090510.030 B090520.050 B090530.040 B090610.060 B090620.050 B090630.040 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1795#B	Each DADS shall update internal file directories with the unique Data set ID.	mission essential	demo	T209-51.02.04	B090130.060 B090140.050 B090230.060 B090240.050 B090340.060 B090350.050 B090430.060 B090440.050 B090460.030 B090530.050 B090620.060 B090630.050 B090720.060 B090810.060
DADS1800#B	Each DADS shall maintain data storage inventories defining the physical location of files.	mission essential	demo	T209-51.02.04	B090110.030 B090120.060 B090130.050 B090140.050 B090210.030 B090220.060 B090230.050 B090240.050 B090310.030 B090320.060 B090330.060 B090340.050 B090350.050 B090410.020 B090420.060 B090430.050 B090440.050 B090460.030 B090510.030 B090520.050 B090530.050 B090610.060 B090620.050 B090630.050 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1805#B	The DADS shall provide an inventory system capable, at a minimum, of the following: a. Accepting the number of new inventory entries, one per granule, for the number of granules per day as specified in Appendix C b. Uniquely identifying each data granule c. Tracking the physical location of each data granule.	mission essential	demo	T209-51.02.04	B090110.030 B090120.060 B090130.050 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050
DADS1806#B	Each DADS shall provide the capability of retrieving any data granule stored in the archives.	mission essential	demo	T209-51.02.04	B100120.050 B100120.060
DADS1850#B	Each DADS shall utilize the configuration management toolkit provided by the SMC.	mission essential	demo	T209-51.02.04	B080410.010 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.	mission essential	demo	T209-51.02.04	B080410.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS1950#B	Each DADS shall access, via the system database at the SMC, the allocation of ground event functions and capabilities to each site/element.	mission essential	demo	T209-51.02.04	B080330.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS1960#B	Each DADS shall access, from the SMC via the system database, the priorities used in scheduling ground events.	mission essential	demo	T209-51.02.04	B080330.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS1970#B	Each DADS shall access from the SMC, via the system database, the product thread information for each standard product generated by EOSDIS.	mission essential	demo	T209-51.02.04	B080160.010 B080160.030 B120330.010 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010
DADS1980#B	Each DADS shall receive from the SMC scheduling directives for system level, site/element-to-site/element, testing, and simulation activities.	mission essential	demo	T209-51.02.07 T212-10.01.02 T244-60.02.02	B080310.020
DADS2000#B	Each DADS shall receive from the SMC scheduling directives in response to emergency situations.	mission critical	demo	T209-51.02.07 T212-10.01.02 T244-60.02.02	B080310.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS2010#B	Each DADS shall receive from the SMC schedule adjudication directives.	mission essential	demo	T209-51.02.07	B080320.010 B080320.020 B080320.030 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS2020#B	Each DADS shall have the capability to receive data availability schedules at a minimum, from: a. b. Ips c. ADCs d. ODCs e. Other DADS f. TRMM (SDPF)	mission essential	demo	B240.02.06 T209-30.01.04 T233-21.02.01	B090110.010 B090120.010 B090210.010 B090330.010 B090610.010 B090710.010 B120330.010 B120410.010 B120420.010 B120430.010 B120440.010 B120450.010 B120510.010 B120620.010 B120630.010
DADS2030#B	Each DADS shall maintain a list/schedule of data to be received from EDOS.	mission critical	demo	B240.02.06	B090110.010 B090310.010 B090410.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2040#B	Each DADS shall insure that data sent by EDOS and SDPF has been received and validated.	mission essential	demo	B240.02.06	B090110.010 B090210.010 B090310.010 B090410.010
DADS2065#B	The DADS shall receive production and expedited science and engineering data from EDOS in a data driven mode.	mission essential	demo	B240.02.06	B090110.010 B090310.010 B120430.020 B120440.020 B120510.020
DADS2070#B	Each DADS shall interact with EDOS, SDPF, and SMC to resolve schedule conflicts.	mission critical	demo	B240.02.06	B080320.010 B080320.020 B080320.030 B090180.010 B090290.010 B090395.020 B090490.010
DADS2090#B	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.	mission essential	demo	B240.02.06	B080330.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
DADS2100#B	Each DADS shall receive time windows and priorities requested by the user for incorporation into and modification of its schedule.	mission essential	demo	B240.02.06	B080310.010 B100110.050
DADS2110#B	The DADS shall provide scheduling information to the SMC.	mission essential	demo	B240.02.06	B080330.010 B080330.020 B120330.010 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010
DADS2120#B	The DADS shall have access to the system wide scheduling information. Such information includes, at a minimum, ESDIS Policies and Procedures regarding instrument and ground event scheduling, other element plans and schedules, element allocations of ground event functions and capabilities, product thread information, and scheduling directives for testing, maintenance, and emergency situations.	mission essential	demo	B240.02.06	B080330.020 B120330.010 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2160#B	Each DADS shall maintain a list/schedule of standing orders.	mission essential	demo	B240.02.06	B100120.060
DADS2170#B	Each DADS shall maintain a list/schedule of retrospective orders.	mission essential	demo	B240.02.06	B100120.060
DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.	mission essential	demo	B240.02.02 B260.02.02 T209-42.02.01	B090140.050 B090240.050 B090350.050 B090440.050 B090530.050 B090630.050 B120330.060 B120410.060 B120430.060 B120440.080 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060
DADS2190#B	Each DADS shall maintain a list of products which could not be delivered electronically (e.g., workstation off-line).	mission essential	demo	B240.02.06	B080160.010
DADS2200#B	Each DADS shall maintain a list of data which requires some form of data manipulation such as subsetting.	mission essential	demo	T209-32.02.06	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040
DADS2210#B	Each DADS shall provide tools for the creation and manipulation of its plans/schedules.	mission essential	demo	B212.01.02 B244.02.02 T209-12.02.01 T212-10.01.01 T244-60.02.01	B080310.010
DADS2220#B	Each DADS shall provide tools for manually overriding any of its schedules with other elements.	mission essential	demo	B212.01.02 B244.02.02 T212-10.01.01 T212-10.01.02 T244-60.02.01 T244-60.02.02	B080310.010
DADS2230#B	Each DADS shall inform the collocated PGS of any anticipated resource availability conflicts.	mission essential	demo	B210.01.06 T209-51.02.08	B080320.010 B080320.020 B080320.030 B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2270#B	Each DADS shall provide, on a scheduled basis, an off-site backup copy of all EOS data whichwould be impossible or difficult to recover in case of loss (e.g., ancillary data, metadata, command history, algorithms, engineering data, calibration data, systems and applications software, selected data products, depending on need).	mission critical	demo	B210.01.06	B080160.020
DADS2276#B	Each DADS shall have the capability to restore its archive by storing a backup copy of EOS data or backup copy of information required to regenerate the data.	mission critical	demo	B210.01.06	B080140.040
DADS2300#B	Each DADS shall provide a capability for local and offsite backup/restore of system files.	mission critical	demo	B210.01.06	B080160.020
DADS2302#B	Offsite and local backup media shall be based on published, open, and non-proprietary formats which fully describe the physical organization and structure of files.	mission essential	demo	B210.01.06	B080160.020
DADS2307#B	DADS shall fulfill requests for L0 data from EDOS with L0 or L1A data, as available.	mission critical	demo	B244.02.03 B244.02.04 T209-61.02.01	B090110.030 B090310.030 B090410.020
DADS2315#B	Each DADS shall be capable of providing access to data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information.	mission critical	demo	B244.02.03	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog	mission essential	demo	B244.02.03	B100110.060 B100110.070 B100110.100 B100310.030 B100310.040 B100410.020 B100430.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2330#B	Each DADS shall send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs	mission essential	demo	B244.02.03 B244.02.04 B260.02.02 T209-30.01.01	B090110.020 B090210.020 B090310.020 B090510.020 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120450.030 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
DADS2340#B	Each DADS shall send to remote DAACs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms h. Spacecraft and instrument logs	mission essential	demo	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B120110.010 B120330.030 B120330.050 B120410.030 B120410.050 B120430.030 B120430.050 B120440.030 B120440.070 B120450.020 B120510.030 B120620.030 B120630.030 B120730.010
DADS2345#B	Each DADS shall send to ADCs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms h. Spacecraft and instrument logs	mission essential	demo	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090120.060 B090160.030 B090330.060 B090380.030 B090470.030 B090550.030 B100410.020 B100430.020 B120120.020
DADS2360#B	Each DADS shall send to the ODCs, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms	mission essential	demo	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B100140.010 B100320.010 B100410.020 B100430.020 B120120.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2370#B	Each DADS shall send to the user, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms i. Planning and scheduling information	mission essential	demo	B210.01.06 B230.02.13 B244.02.03 B244.02.04 B260.02.03 T209-30.01.01	B100120.050 B100410.020 B100430.020 B120330.050 B120340.020 B120410.050 B120420.030 B120430.050 B120440.070 B120450.040 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.030 B120640.040 B120640.060 B120650.020 B120650.030
DADS2380#B	Each DADS shall send to the SCF, at a minimum, the following: a. L0-L4 b. Expedited data c. Special products (L1-L4) d. Metadata e. Ancillary data f. Calibration data g. Correlative data h. Documents i. Algorithms	mission essential	demo	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090140.040 B090160.020 B090240.040 B090270.020 B090350.040 B090380.020 B090440.040 B090470.020 B090530.040 B090550.020 B090630.040 B090650.020 B100210.010 B100210.030 B100220.010 B100220.030 B100230.010 B100230.030 B100240.010 B100240.030 B100250.010 B100250.030
DADS2390#B	Each DADS shall send to the IPs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents	mission essential	demo	B210.01.06 B244.02.03 B244.02.04 T209-30.01.01	B090420.060 B120330.040
DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.	mission essential	demo	B244.02.03	B100120.060 B100120.100 B100410.030 B100410.050 B100430.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.	mission essential	demo	T209-30.01.01	B100120.050 B100120.060 B100410.030 B100410.050 B100430.040
DADS2440#B	Each DADS shall distribute data under a multi-level priority system. For example: a. Expedited data b. QA data c. Data products requested by standing order d. Data products requested retrospectively	mission essential	demo	B244.02.03	B100120.080 B100410.030 B100410.050 B100430.040
DADS2450#B	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.	mission essential	demo	B244.02.03	B120330.050 B120340.050 B120340.060 B120420.010 B120420.040 B120730.010 B120730.020 B120730.030 B120730.040 B120730.050 B120740.010
DADS2460#B	Each DADS shall have a manual override function capable of altering the priority of a distribution request.	mission essential	demo	B244.02.03	B100120.050 B100120.060 B100410.030 B100410.050 B100430.040
DADS2470#B	Each DADS shall transfer Standard Products and subsetted, subsampled, or summary data to the requester.	mission essential	demo	B244.02.03	B100120.040 B100410.030 B100410.050 B100430.040
DADS2480#B	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.	mission essential	demo	T209-20.01.01	B100120.060 B100120.100 B100410.030 B100410.050 B100420.040 B100420.050 B100430.040
DADS2490#B	Each DADS shall distribute data using a variety of approved high density storage media such as : a. 8 mm tape b. 4 mm DAT c. 3480/3490 tape d. CD ROM e. 6250 tape	mission essential	demo	T209-20.01.01 T209-41.02.01	B100120.080 B100410.030 B100410.050 B100430.040 B120330.050 B120420.030 B120650.030
DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.	mission essential	demo	T209-20.01.01	B100120.080 B100420.030 B120330.050 B120340.060 B120640.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.	mission essential	demo	T209-20.01.01 T209-20.01.02 T209-20.01.03 T209-41.02.01 T209-41.02.02	B120820.020
DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.	mission essential	demo	T209-41.02.03	B100120.080 B100410.030 B100410.050 B100430.040
DADS2675#B	Each DADS shall maintain a log of all transmission problems, take internal corrective action, and notify SMC when network performance begins to impact distribution effort adversely.	mission essential	demo	T209-71.02.05	B080160.010 B090110.010 B090120.020 B090120.030 B090130.010 B090140.030 B090210.010 B090220.020 B090230.010 B090240.030 B090310.010 B090320.020 B090330.020 B090330.030 B090340.010 B090350.030 B090410.010 B090420.020 B090430.010 B090440.030 B090510.010 B090520.010 B090530.030 B090610.020 B090620.010 B090630.030 B090710.020 B090720.010 B090810.010
DADS2770#B	Upon receipt and approval of a request, the designated DADS shall make stored data products available for delivery to the requester within 24 hours for data distributed on physical media.	mission fulfillment	demo	T209-20.01.01	B120820.020
DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.	mission essential	demo	T244-50.02.02 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.020
DADS2780#B	Each DADS shall be capable of ingesting data at the maximum output bandwidth of the EDOS.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.010
DADS2910#B	Archival storage at each DADS shall be field-expandable.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.020
DADS2950#B	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.	mission critical	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080140.040
DADS3000#B	To support archival data integrity, the bit error rate after correction shall be less than 1 in 10 to the 12th.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.020
DADS3010#B	Archival and backup media at each DADS shall have a manufacture-rated shelf life of at least 10 years when stored in a controlled environment.	mission essential	inspection	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.020
DADS3040#B	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).	mission essential	inspection	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.020
DADS3055#B	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.020
DADS3090#B	Each DADS shall be capable of 200% expansion in throughput and archive capacity without architecture or design change. This expansion capacity shall apply to the total of the at-launch requirement plus the yearly growth requirement specified in Appendix C.	mission fulfillment	analysis	T244-50.02.12	B080160.020
DADS3100#B	Each DADS shall be capable of transmitting data over communications network in support of data production requests at the data rate specified in Appendix C and in support of data distribution requests at a rate equivalent to daily product volume (L1-L4).	mission essential	test	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.030 B120820.020
DADS3110#B	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B080160.010 B120820.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
DADS3120#B	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.	mission fulfillment	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120820.030
DADS3125#B	Each DADS shall make archive data, associated with a pre-defined ECS standard format, that is requested for communications network delivery, available to the network in that ECS standard format within an average of 2 minutes after the receipt of a request for that data.	mission fulfillment	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.020 B120820.010
DADS3126#B	Each DADS shall make archive data, associated with a pre-defined ECS standard format, that is requested for communications network delivery available to the network in a different ECS standard format within an average of 5 minutes after the request for that data.	mission fulfillment	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.020 B120820.010
DADS3135#B	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.	mission essential	demo	T244-50.02.01 T244-50.02.05 T244-50.02.06 T244-50.02.08 T244-50.02.09	B120810.050 B120820.010
DADS3140#B	The DADS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of DAAC-unique data ingest services operated independently of the delivered ECS DADS services.	mission essential	demo	T212-10.01.02 T244-60.02.02	B090120.020 B090130.010 B090220.020 B090230.010 B090320.020 B090330.020 B090340.010 B090420.020 B090430.010 B090520.010 B090610.020 B090620.010 B090710.020 B090720.010 B090810.010 B120640.010 B120640.020 B120640.030
DADS3150#B	The DADS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of DAAC-unique data distribution services operated independently of the delivered ECS DADS services.	mission fulfillment	demo	T209-12.02.04 T209-12.02.05 T209-30.01.02	B100110.090 B100120.090 B100310.060 B100410.060 B120640.030
DADS3160#B	The DADS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of an operator interface that may bypass the delivered DADS operator interface.	mission fulfillment	demo	T209-12.02.04	B100110.090 B100120.090 B100310.060 B100410.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-4.1.15-#B	The DIF shall interface with the SMC to transfer Operations Management Data, and Operations Management Test Data Sets.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-4.2.2-#B	The DPF shall interface with the LaRC DAAC to transfer PDSs, QDSs, Archive Data Sets (ADSs), and Mission Test Data Sets.	mission essential	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-4.2.3-#B	The DPF shall interface with the GSFC DAAC to transfer PDSs, QDSs, ADSs, and Mission Test Data Sets.	mission essential	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-4.2.7#B	The DPF shall interface with the LaRC DAAC to receive DEDSs on removable physical media.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-4.2.8#B	The DPF shall interface with the GSFC DAAC to receive DEDSs on removable physical media.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-A.1.1#B	The DIF shall provide the capability to transfer return link real-time Path Service EDOS Data Units (EDUs) to the EOC.[EDOS generates EDUs by concatenating an EDOS service header (ESH) with each applicable return link path service data unit (SDU)].	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120120.040
EDOS-A.1.13#B	The DIF shall provide the capability to transfer return link rate buffered Path Service EDUs to the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120820.040
EDOS-A.1.2#B	The DIF shall provide the capability to transfer Command Link Control Word EDUs to the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120120.040
EDOS-A.1.3#B	The DIF shall provide the capability to receive forward link real-time CLTUs from the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120120.040
EDOS-A.1.4#B	The DIF shall provide the capability to transfer Customer Operations Data Accounting (CODA) reports as specified in Applicable Document 1.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120120.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-A.1.5#B	The DIF shall provide the capability to transfer TDRSS Service Session (TSS) Summary Reports as specified in Applicable Document 1 to the EOC following the completion of each TSS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.020
EDOS-A.2.1#B	The DIF-EOC interface shall provide the capability to support the transfer of real-time return link EDUs to the EOC at a rate of up to 1.1 Mbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120820.020
EDOS-A.2.2#B	The DIF-EOC interface shall provide the capability to support the transfer of Operations Management data to the EOC at a rate of up to 50 kbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
EDOS-A.2.3#B	The DIF-EOC interface shall provide the capability to support the receipt of forward link real-time CLTUs from the EOC at a rate of 35 kbps for a single channel.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
EDOS-A.2.4#B	The DIF shall provide the capability to initiate the transfer of a TSS Summary Report to the EOC within 90 seconds of completion of the TSS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120820.020
EDOS-B.1.1#B	The DIF shall provide the capability to transfer PDS Delivery Records as specified in Applicable Document 1 to the LaRC DAAC following the delivery of each PDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-B.1.2#B	The DIF shall provide the capability to transfer QDS Delivery Records as specified in Applicable Document 1 to the LaRC DAAC following the delivery of each QDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-B.1.3#B	The DIF shall provide the capability to transfer ADS Delivery Records as specified in Applicable Document 1 to the LaRC DAAC following the delivery of each ADS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-B.1.6#B	The DIF shall provide the capability to receive status data from the LaRC DAAC as specified in Applicable Document 1, including but not limited to the following: b. Verification of PDSs delivered c. Verification of ADSs delivered	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-B.2.1#B	The DIF-LaRC DAAC interface shall provide the capability to support the transfer of Operations Management data to the LaRC DAAC at a rate of up to 50 Kbps.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-B.2.2#B	The DIF shall provide the capability to initiate transfer of a PDS Delivery Record to the LaRC DAAC within 120 seconds of delivery of the PDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-B.2.3#B	The DIF shall provide the capability to initiate transfer of a QDS Delivery Record to the LaRC DAAC within 120 seconds of delivery of the QDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-B.2.4#B	The DIF shall provide the capability to initiate transfer of an ADS Delivery Record to the LaRC DAAC within 120 seconds of delivery of the ADS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-B.3.3#B	The LaRC DAAC shall provide the capability to initiate transfer of the Verification of ADSs delivered status message to the DIF within 8 hours following the delivery of all ADSs for a 24 hour period.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-B.4.1#B	The DPF shall provide the capability to transfer QDSs to the LaRC DAAC.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-B.4.2#B	The DPF shall provide the capability to transfer any PDS to the LaRC DAAC.	mission essential	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-B.4.3#B	The DPF shall provide the capability to copy PDSs to removable physical media for backup to electronic delivery.	mission essential	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010 B090310.010
EDOS-B.4.4#B	The DPF shall provide the capability to transfer ADSs to the LaRC DAAC.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-B.4.5#B	The DPF shall provide the capability to copy ADSs to removable physical media for backup to electronic delivery.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010 B090310.010
EDOS-B.4.6#B	The DPF shall provide the capability to receive DEDs from the LaRC DAAC on removable physical media.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010
EDOS-B.5.1#B	The DPF-LaRC DAAC interface shall provide the capability to support the transfer of QDSs to the LaRC DAAC at a rate of up to 22 Mbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120820.020
EDOS-B.5.2#B	The DPF-LaRC DAAC interface shall provide the capability to support the transfer of PDSs to the LaRC DAAC at a rate of up to 22 Mbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120820.020
EDOS-C.1.1#B	The DIF shall provide the capability to transfer PDS Delivery Records as specified in Applicable Document 1 to the GSFC DAAC following the delivery of each PDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-C.1.2#B	The DIF shall provide the capability to transfer QDS Delivery Records as specified in Applicable Document 1 to the GSFC DAAC following the delivery of each QDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-C.1.3#B	The DIF shall provide the capability to transfer ADS Delivery Records to the GSFC DAAC as specified in Applicable Document 1 following the delivery of each ADS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-C.1.6#B	The DIF shall provide the capability to receive status data from the GSFC DAAC including but not limited to the following: a. Verification of ODSs delivered b. Verification of PDSs delivered c. Verification of ADSs delivered	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-C.2.1#B	The DIF-GSFC DAAC interface shall provide the capability to support the transfer of Operations Management data to the GSFC DAAC at a rate of up to 50 Kbps.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-C.2.2#B	The DIF shall provide the capability to initiate transfer of a PDS Delivery Record to the GSFC DAAC within 120 seconds of delivery of the PDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.2.3#B	The DIF shall provide the capability to initiate transfer of a QDS Delivery Record to the GSFC DAAC within 120 seconds of delivery of the QDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.2.4#B	The DIF shall provide the capability to initiate transfer of an ADS Delivery Record to the GSFC DAAC within 120 seconds of delivery of the ADS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.3.1#B	The GSFC DAAC shall provide the capability to initiate transfer of the Verification of QDSs delivered status message to the DIF within 60 minutes following the delivery of all QDSs for each TSS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.3.2#B	The GSFC DAAC shall provide the capability to initiate transfer of the Verification of PDSs delivered status message to the DIF within 8 hours following the delivery of all PDSs for a 24 hour period.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.3.3#B	The GSFC DAAC shall provide the capability to initiate transfer of the Verification of ADSs delivered status message to the DIF within 8 hours following the delivery of all ADSs for a 24 hour period.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.4.1#B	The DPF shall provide the capability to transfer QDSs to the GSFC DAAC.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-C.4.2#B	The DPF shall provide the capability to transfer PDS to the GSFC DAAC.	mission essential	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-C.4.3#B	The DPF shall provide the capability to copy PDSs to removable physical media for backup to electronic delivery.	mission fulfillment	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010 B090310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-C.4.4#B	The DPF shall provide the capability to transfer ADSs to the GSFC DAAC.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-C.4.5#B	The DPF shall provide the capability to copy ADSs to removable physical media for backup to electronic delivery.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010 B090310.010
EDOS-C.4.6#B	The DPF shall provide the capability to receive DEDs from the GSFC DAAC on removable physical media.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090310.010
EDOS-C.5.1#B	The DPF-GSFC DAAC interface shall provide the capability to support the transfer of QDSs to the GSFC DAAC at a rate of up to 22 Mbps.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-C.5.2#B	The DPF-GSFC DAAC interface shall provide the capability to support the transfer of PDSs to the GSFC DAAC at a rate of up to 22 Mbps.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-H.1.1#B	The DIF shall provide the capability to transfer PDS Delivery Records as specified in Applicable Document 1 to the SMC following the delivery of a PDS to any EGS element.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-H.1.2#B	The DIF shall provide the capability to transfer QDS Delivery Records as specified in Applicable Document 1 to the SMC following the delivery of a QDS to any EGS element.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B090110.010 B090310.010
EDOS-H.1.3#B	The DIF shall provide the capability to transfer ADS Delivery Records as specified in Applicable Document 1 to the SMC following the delivery of an ADS to any EGS element.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B080130.020
EDOS-H.2.1#B	The DIF-SMC interface shall provide the capability to support the transfer of Operations Management data to the SMC at a rate of up to 50 kbps.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EDOS-H.2.2#B	The DIF shall provide the capability to initiate transfer of a PDS Delivery Record to the SMC within 120 seconds of delivery of the PDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-H.2.3#B	The DIF shall provide the capability to initiate transfer of a QDS Delivery Record to the SMC within 120 seconds of delivery of the QDS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EDOS-H.2.4#B	The DIF shall provide the capability to initiate transfer of an ADS Delivery Record to the SMC within 120 seconds of delivery of the ADS.	mission critical	test	B244.02.03 B244.02.04 B233.01.02 B240.02.09 T209-61.02.01 T209-61.02.03	B120820.020
EOC-0030#B	The EOC shall receive the LTSP and LTIP from the SMC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B080330.020 B110120.010 B120210.010
EOC-0040#B	The EOC shall interface with EDOS for coordinating EDOS-provided services required by the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.010 B120120.010 B120220.020
EOC-1005#B	The EOC shall provide the IMS with spacecraft information, including at a minimum orbit information, for use in DAR generation.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.040 B120210.010
EOC-2010#B	The EOC shall accept from the FDF planning and scheduling information for the EOS spacecraft and instruments, which includes, at a minimum, the following: a. Predicted orbit data including predicted ground track b. EOS spacecraft UAV data c. PSATs d. Spacecraft maneuver information	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040 B120210.010
EOC-2020#B	The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIP from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B120210.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-2030#B	The EOC shall store and maintain EOS planning and scheduling information, which includes, at a minimum, the following: a. IWG science guidelines, as specified in the LTSP and LTIP b. Long-term spacecraft operations plan c. Predicted availability of the spacecraft resources d. Baseline activity profile for each applicable instrument e. Planning and scheduling information received from the FDF f. Preliminary resource schedules, including TDRSS contact times g. Detailed activity schedules, including TDRSS contact times	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.040 B120210.010 B120210.020 B120210.040
EOC-2040#B	The EOC shall provide to any authorized users (including the ICCs) read-only access to EOS planning and scheduling information.	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.040 B110130.060
EOC-2045#B	The EOC shall provide to any authorized users (including the ICCs) a common set of capabilities for formulating requests and for visualizing EOS planning and scheduling information.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.040 B110130.060
EOC-2070#B	The EOC shall provide the capability to generate a spacecraft subsystem resource profile, based, at a minimum, on the following: a. Spacecraft orbit maintenance needs b. Spacecraft navigation needs c. Spacecraft subsystem maintenance needs	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030 B120210.020
EOC-2160#B	The EOC shall provide plans and schedules to the IMS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
EOC-2170#B	The EOC shall be capable of planning and scheduling observations for which time may be specified in fixed or variable terms.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.040
EOC-2180#B	The EOC shall be capable of planning and scheduling observations for those EOS instruments whose operations may be periodic, intermittent, or continuous.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.020 B110120.030
EOC-2190#B	The EOC shall be capable of planning and scheduling coordinated observations involving multiple instruments.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.030 B110130.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-2200#B	The EOC shall plan and schedule the management of spacecraft resources that include, at a minimum, the following: a. Spacecraft recorder b. Communications subsystems c. Thermal and power subsystems d. SCC-stored command table.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030
EOC-2210#B	The EOC shall have the capability to generate plans and schedules in both human readable and machine usable forms.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030
EOC-2220#B	The EOC shall identify and resolve conflicts based on, at a minimum, the following: a. Resources needed for each observation or instrument support activity b. Resources needed for each spacecraft subsystem activity, if applicable c. Inter-instrument dependency d. In situ observation dependency e. Priorities set by the LTSP	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.030 B110210.090 B120210.030
EOC-2240#B	The EOC shall reintroduce applicable requested activities in its planning and scheduling function when the activity did not occur due to a deviation from the schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.090 B120210.030
EOC-2250#B	The EOC shall be capable of performing its planning and scheduling function in batch and incremental interactive-user modes.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110130.030
EOC-2260#B	The EOC shall provide "what-if" capabilities for planning and scheduling analysis, and provide them to authorized users, including the ICCs.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.090
EOC-2270#B	The EOC shall accept an instrument resource profile or instrument resource deviation list (when a resource profile exists for the instrument) from each ICC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.030 B120210.030
EOC-2272#B	For the instruments that have resource deviations lists, the EOC shall build instrument resource profiles by combining the resource deviation lists with the respective baseline resource profiles.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030
EOC-2280#B	At least once each week, the EOC shall generate for each spacecraft a preliminary resource schedule that describes all operations currently planned for the following target week.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.030 B120210.020 B120210.030
EOC-2290#B	Whenever the ICCÍs instrument resource profile cannot be integrated into a preliminary resource schedule, the EOC shall provide the ICC with a notification that includes, at a minimum, an identification of the conflicting activities and the source of conflict.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B080320.010 B080320.020 B080320.030 B110120.030 B110130.030 B120210.030 B120320.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-2300#B	The EOC shall build or update the preliminary resource schedule based on the following, at a minimum: a. Existing preliminary resource schedules, if any b. Instrument resource profiles c. Spacecraft subsystems resource profile d. Science guidelines e. Spacecraft operations constraints f. TDRSS schedule	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110130.010 B110140.010 B120210.020 B120210.030
EOC-2310#B	The EOC shall build a preliminary resource schedule by performing the following: a. Integrating the spacecraft subsystems resource profile and individual instrument resource profiles b. Determining if required resources, including SN resources, are within limits c. Using guidelines established by the LTSP d. Resolving conflicts between the proposed activities	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030 B110140.010 B120210.030
EOC-2320#B	The preliminary resource schedule shall include, at a minimum, the following: a. Activity or DAR identifiers b. Resource availability and usage requirements c. Time constraints and alternatives for planned activities d. TDRSS schedule	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030 B120210.020 B120210.030 B120320.010
EOC-2350#B	The EOC shall provide the preliminary resource schedule to the ICCs upon generation.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110140.010 B120210.020 B120210.030 B120320.010
EOC-2370#B	The EOC shall generate TDRSS schedule requests based on the data rate profiles of all the instruments and spacecraft subsystems.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010
EOC-2400#B	The EOC shall submit the TDRSS schedule requests to the NCC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120210.020 B120210.030
EOC-2405#B	The EOC shall accept the forecast TDRSS schedule from the NCC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120210.020 B120210.030
EOC-2410#B	The EOC shall accept from the NCC notification of rejection along with the reason for rejection, when all or a portion of the TDRSS schedule request cannot be accommodated.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120210.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-2420#B	In response to the rejection of a TDRSS schedule request, the EOC shall have the capability to modify the request for resubmission to the NCC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120210.030
EOC-2430#B	The EOC shall, in 95 percent of all cases, generate a preliminary resource schedule for one spacecraft within 2 hours after all required inputs are available.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B120210.020 B120210.030 B120820.040
EOC-2460#B	The EOC shall be capable of generating or updating a spacecraft subsystem activity list based on at a minimum the following: a. Existing detailed activity schedule b. Preliminary resource schedule c. Spacecraft subsystem activities identified after the preliminary resource schedule has been generated d. Current predicted orbit data and related information e. Responses to emergency/contingency situations	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110140.010 B110210.020 B110210.060
EOC-2480#B	The EOC shall accept from each ICC an instrument activity list or an instrument activity deviation list (when an activity profile exists for the instrument) and any updates thereto.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B120210.030 B120320.020
EOC-2482#B	For the instruments that have instrument activity deviation lists, the EOC shall build the instrument activity lists by combining the instrument activity deviation lists with the respective baseline activity profiles.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.020 B110210.090 B120210.030
EOC-2490#B	For each day the EOC shall be capable of generating or updating a detailed activity schedule for each spacecraft and its instruments, nominally covering the next 7 days.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B120210.040
EOC-2510#B	The EOC shall generate a detailed activity schedule for the spacecraft and its instruments by: a. Integrating the spacecraft subsystem activity list and individual instrument activity lists b. Determining if the aggregate resource requirements are within limits d. Ensuring that all the sequencing constraints among the proposed activities are respected e. Scheduling the spacecraft recorder, direct downlink, and communication subsystem operations	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040
EOC-2520#B	If additional TDRSS schedule needs are identified while generating or updating a detailed activity schedule, the EOC shall make a request to the NCC for additional TDRSS services.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-2530#B	If the request to the NCC for additional SN services is denied, the EOC shall regenerate or modify a detailed activity schedule to account for the TDRSS service availability constraints.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110130.040 B110210.030
EOC-2535#B	The EOC shall be capable of scheduling the use of the DSN, GN, or WOTS, in the event of an emergency or contingency that prevents communication through the TDRSS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120220.030
EOC-2540#B	The EOC shall notify the ICC of any instrument activities that cannot be integrated into a detailed activity schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B120320.020
EOC-2550#B	The detailed activity schedule shall include, at a minimum, the following: a. Instrument activities b. Spacecraft activities necessary to support all instrument activities c. Spacecraft activities necessary for the spacecraft subsystem maintenance d. Spacecraft resource requirements for each activity e. Traceability of instrument activities to DARs	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B120320.020
EOC-2555#B	The EOC shall evaluate the impact of a TOO observation, , or a change to a scheduled observation, on other previously scheduled activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
EOC-2570#B	In support of a TOO observation or late change, the EOC shall update the detailed activity schedule within 1 hour after receipt of the update to the corresponding instrument activity list or the instrument activity deviation list (when an activity profile exists for the instrument), if the update does not affect existing detailed activity schedule events or create new conflicts.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B110320.030 B120820.040
EOC-2590#B	In support of a TOO observation or a late change, the EOC shall update the detailed activity schedule within 10 hours after the receipt of the update of the corresponding instrument activity list (or instrument activity deviation list), if the update affects existing detailed activity schedule events or creates new conflicts.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B110320.030 B120820.040
EOC-2620#B	The EOC shall provide the ICC with the detailed activity schedule and any updates upon generation.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B120320.020
EOC-2630#B	The EOC shall, in 95 percent of all cases, generate a detailed activity schedule for the spacecraft within 2 hours after all required inputs are available.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110130.040 B110320.030 B120210.040 B120820.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-3015#B	The EOC shall accept SCC flight software updates from the SDVF.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.020 B120220.010
EOC-3017#B	The EOC shall accept from the FDF parameters necessary for spacecraft command data generation, including the following: a. Navigational operations parameters b. Spacecraft maneuver parameters	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040
EOC-3020#B	The EOC shall accept from the ICC instrument loads, SCC-stored instrument commands, and SCC-stored instrument tables as well as the associated information that includes at a minimum the following: a. Instrument identifier b. Schedule identifier, if applicable c. Identification of commands that could impact spacecraft or instrument safety (i.e., critical commands)	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B120220.010
EOC-3024#B	The EOC shall validate the expected resource usage.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110130.050
EOC-3030#B	The EOC shall authenticate the originator of command information from the ICCs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.010
EOC-3050#B	At least once per day, the EOC shall generate SCC-stored spacecraft commands and SCC-stored spacecraft tables based on the detailed activity schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.050 B120220.010 B120820.040
EOC-3070#B	The EOC shall generate SCC-stored spacecraft commands and SCC-stored spacecraft tables for 24 hours of spacecraft operations in less than 1 hour.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.050 B120220.010 B120820.040
EOC-3080#B	The EOC shall generate, validate, and store preplanned spacecraft commands for later use in emergency situations to protect the health and safety of the spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.050
EOC-3086#B	The EOC shall generate a command-to-memory location map for SCC-stored command loads.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.050 B120220.010
EOC-3090#B	As frequently as necessitated by the detailed activity schedule, the EOC shall build a spacecraft and instrument memory load, which includes as many of the following as needed: a. SCC-stored spacecraft and instrument commands b. SCC-stored spacecraft and instrument tables c. Instrument loads d. SCC software updates.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B120220.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-3160#B	The EOC shall generate operational reports including, at a minimum, the following: a. SCC-stored command load report b. Integrated report having orbital events, command execution times, and TDRS contacts with candidate loads. \\1431 0\\	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110130.050 B120320.030
EOC-3200#B	The EOC shall accept from the ICC instrument preplanned command groups for issuance by the EOC in the event of an anomaly that requires an immediate responseor in the event that the ICC is unable to command the instrument.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110210.050
EOC-3210#B	The EOC shall store and maintain preplanned instrument commands for all instruments on the spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.050
EOC-3225#B	In support of a TOO observation or late change, the EOC shall prepare the corresponding integrated load and/or real-time instrument command set within 15 minutes of receipt of the SCC-stored instrument commands, SCC-stored instrument tables, or instrument load from the ICC, if the observation does not impact previously scheduled activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B110320.030 B120820.040
EOC-3226#B	In support of a TOO observation or late change, the EOC shall prepare the corresponding integrated load and/or real-time instrument command set within 1 hour of receipt of the SCC-stored instrument commands, SCC-stored instrument tables, or instrument load from the ICC, if the observation impacts previously scheduled activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B110320.030 B120820.040
EOC-3238#B	Within 1 minute of detecting a predefined emergency/contingency situation, the EOC shall prepare spacecraft and instrument commands for transmission to EDOS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120820.040
EOC-3240#B	The EOC shall be capable of producing spacecraft and instrument memory loads covering 24 hours of spacecraft operation in less than 1 hour.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B110320.030 B120220.010 B120820.040
EOC-4005#B	The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the: a. SN b. GN, DSN, WOTS (for contingency or emergency operations)	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030
EOC-4008#B	The EOC shall be capable of transmitting commands via Ecom.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-4010#B	For each spacecraft and its instruments, the EOC shall prepare uplink data that conform to the CCSDS Telecommand Standard.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110210.050
EOC-4015#B	The EOC shall provide the capability to build real-time commands based on operator input and validate the generated commands.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.030
EOC-4018#B	The EOC shall validate instrument real-time command groups.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050
EOC-4020#B	The EOC shall merge the real-time commands supplied by the spacecraft operator, command groups, and the spacecraft and instrument memory loads into one uplink stream.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.030
EOC-4060#B	The EOC shall provide the capability to exchange messages with the NCC, which include at a minimum status and reconfiguration messages.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.030 B120220.030
EOC-4100#B	The EOC shall provide the capability to control the uplink of critical commands by requiring a second positive response from the operator.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050
EOC-4120#B	The EOC shall provide the capability to verify via telemetry the successful receipt of all commands by the spacecraft and instruments.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030
EOC-4125#B	The EOC shall provide the capability to verify via telemetry the successful execution of spacecraft commands.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020
EOC-4130#B	The EOC shall provide the capability to receive and evaluate command transmission status information from EDOS.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030
EOC-4140#B	The EOC shall generate command: related event messages for display and for history logging to include: a. Command uplink status b. Command verification status	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030 B120230.010 B120230.020
EOC-4160#B	The EOC shall maintain a record of the uplink status of all spacecraft and instrument memory loads and real-time commands.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030
EOC-4166#B	The EOC shall provide the ICC with instrument uplink status, which includes at a minimum the following: a. Receipt at the EOC b. Validation status c. Receipt at the spacecraft and instrument	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.010 B120220.020 B120220.030 B120320.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-4168#B	The EOC shall provide the ICCs with instrument command notification messages, when emergency/contingency instrument commands are issued. \\1333, 946 \\	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.030
EOC-4200#B	The EOC shall support several uplink rates to the spacecraft, which include at a minimum the following: a. 10 kilobits per second (kbps) (SSA uplink) b. 1 kbps (SMA uplink) c. 125 bits per second (bps) (SSA uplink during contingency operations) d. 2 kbps (emergency operations via S-band DSN link)	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020
EOC-4210#B	The EOC shall process and output a single real-time emergency command within 500 milliseconds of receiving the request from an ICC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B110320.030 B120820.040
EOC-5010#B	The EOC shall receive from EDOS the following telemetry data types in CCSDS packets containing: a. Real-time spacecraft and instrument housekeeping data b. Spacecraft recorder housekeeping data c. SCC memory dump data	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120220.020 B120230.010 B120230.020
EOC-5012#B	The EOC shall be capable of processing spacecraft recorder data for all periods of time during which real time data was not received.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.010
EOC-5015#B	The EOC shall be capable of simultaneously receiving all EOS telemetry data types.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110320.020
EOC-5020#B	The EOC shall receive and process spacecraft telemetry data during spacecraft launch.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5030#B	The EOC shall provide the capability to receive and process, non-telemetry data, which includes at a minimum the following: a. Messages from the NCC b. Monitor blocks from the DSN, GN, and WOTS c. Status messages from EDOS	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.030 B120220.030
EOC-5045#B	The EOC shall be capable of supporting all EOS telemetry formats for spacecraft and instrument housekeeping data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5050#B	The EOC shall provide the capability to receive and report data quality information with the incoming CCSDS packets as provided by EDOS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5070#B	The EOC shall provide the capability to detect and report gaps in the telemetry data it receives.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-5080#B	The EOC shall provide the capability to decommutate spacecraft and instrument housekeeping data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020
EOC-5090#B	The EOC shall perform the necessary engineering unit conversion, derived parameter generation, and digital and discrete state determination on the decommutated housekeeping data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5100#B	The EOC shall provide the capability to perform limit checking on all non discrete parameters within the real-time telemetry, flagging all parameters that have limit violations.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020
EOC-5105#B	The EOC shall support the definition of multiple sets of boundary limits for each non-discrete parameter, with each set including definitions for one or more upper and lower boundaries.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5110#B	The EOC shall provide the capability to generate an event message whenever a predetermined number of limit violations for a parameter is detected.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-5120#B	The EOC shall provide the capability to accept temporary or permanent changes to limit definitions. \\, 1418, 1428\\	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-5130#B	The EOC shall determine the best estimate for SCC memory contents.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120220.010 B120230.020
EOC-5180#B	The EOC shall provide the capability to extract specified subsets of the telemetry stream.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040 B110210.040 B120230.010
EOC-5185#B	The EOC shall provide the FDF with a subset of telemetry stream, which includes the following: a. Attitude sensor data b. Navigation telemetry data c. Spacecraft maneuver telemetry data	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040 B120230.010
EOC-5187#B	The EOC shall have the capability to determine the spacecraft clock time bias required for synchronizing the spacecraft clock relative to Coordinated Universal Time (UTC).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
EOC-5190#B	The EOC shall provide the capability to store spacecraft recorder housekeeping data as they are received from EDOS in CCSDS packets.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.020
EOC-5200#B	The EOC shall provide the capability to process stored telemetry data at an operator-selectable rate.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110320.020
EOC-5220#B	The EOC shall be able to process real-time data at rates up to 50 kbps per spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-5230#B	The EOC shall be able to receive and record spacecraft recorder data at rates up to 1.544 Mbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
EOC-5240#B	The EOC shall be able to process history and archived spacecraft recorder data at rates up to 150 kbps.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120820.040
EOC-6010#B	The EOC shall provide the capability to perform analysis on real-time telemetry data, spacecraft recorder housekeeping data, and data from the EOC history log.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
EOC-6020#B	The EOC shall accept instrument status data from each ICC.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020
EOC-6050#B	The EOC shall provide the capability to determine, for specified parameters over a specified time interval, at a minimum the following: a. Minimum value b. Maximum value c. Mean value d. Standard deviation of the parameter e. Time and duration of limit violations	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
EOC-6060#B	The EOC shall provide the capability to plot a specified parameter against another parameter or against time.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
EOC-6070#B	The EOC shall provide the capability to time-correlate related spacecraft parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
EOC-6080#B	The EOC shall provide the capability to define, check, and manage spacecraft operations procedures.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010
EOC-6100#B	The EOC shall provide the capability to perform trend analysis on spacecraft and instrument housekeeping parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
EOC-6110#B	The EOC shall provide the capability to monitor and evaluate the spacecraft functions, resources, and performance, including at a minimum the following: a. Stored command processing b. Spacecraft recorders c. Safe mode processes d. Electrical power subsystem e. Propulsion subsystem	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.060 B110310.010
EOC-6130#B	The EOC shall monitor the configuration of the spacecraft and instruments.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.040
EOC-6135#B	The EOC shall have the capability to recommend spacecraft reconfigurations.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-6140#B	The EOC shall provide the capability to maintain a record of the spacecraft and instrument configuration, including the state of all spacecraft subsystems and instruments.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.020 B110310.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-6150#B	The EOC shall provide the capability to maintain a master ground image of the SCC spacecraft memory.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120230.020
EOC-6160#B	The EOC shall provide the capability to compare the master ground image and the SCC memory dump.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120230.020
EOC-6195#B	The EOC shall provide the capability to detect, isolate, and report failures and anomalies at the spacecraft subsystem level, and the spacecraft level.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080620.010 B110210.060 B110310.030
EOC-6200#B	The EOC shall detect, isolate, and participate in the resolution of failures and anomalies involving the spacecraft and instruments, communications with the spacecraft, and ground operations support of the spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.030 B110210.060 B110210.080
EOC-6210#B	The EOC shall be capable of providing recommended courses of actions for selected contingency situations.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110210.030 B110210.060 B110210.080 B120230.020
EOC-7010#B	The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints i. Report formats j. NCC configuration codes l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7015#B	The EOC shall receive from the ICCs instrument-specific portion of the PDB and/or any updates thereto.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7020#B	The EOC shall maintain the latest two versions of the PDB.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7025#B	The EOC shall provide the capabilities to generate and modify the PDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7030#B	The EOC shall be capable of syntax and structure checking of the PDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7040#B	The EOC shall provide accounting information on the contents of the PDB.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110110.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-7045#B	The EOC shall generate a report identifying any problems with the contents of the PDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
EOC-7060#B	The EOC shall maintain a history log for the spacecraft and instruments for the most recent 7 days, including at a minimum the following: a. All messages sent and received b. Telemetry data c. Operator requests/directives d. Real-time commands e. Stored command loads f. Memory loads and dumps g. Limits violations h. Error conditions i. Warnings j. Alarms k. Spacecraft and instrument status information l. Executed schedules m. Analysis results n. Responses to operator requests o. User interface language procedures as they were executed p. EOC reconfiguration information q. Master ground image	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.020 B120220.020 B120220.030 B120230.010 B120230.020
EOC-7110#B	The EOC shall provide the capability to send the complete history log or a subset of the data with associated metadata to a designated DADS.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020
EOC-7115#B	The EOC shall accept storage status, indicating the success or failure of the storage of the history data, from the DADS.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.020
EOC-7116#B	The EOC shall maintain the history log until the DADS has notified the EOC of successful storage.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.020
EOC-7120#B	The EOC shall be capable of extracting data sets from the history log by specifying time and data type to include as a minimum: telemetry, command, non-telemetry messages, operator directives, events, or limits violations.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020 B110310.030
EOC-7130#B	The EOC shall be capable of maintaining a subset of history data in support of long term analysis.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020
EOC-7140#B	The EOC shall be capable of storing documentation on-line for operator support, including at a minimum the following: a. Operator guides b. Operational procedures	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-7150#B	The EOC shall store the technical documentation of the spacecraft hardware and software from before launch through the end of spacecraft operation.	mission fulfillment	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.010
EOC-7160#B	The EOC shall be capable of updating the spacecraft technical documentation.	mission fulfillment	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010
EOC-8010#B	The EOC shall have the capability to schedule its systems and communications interfaces that are used for instrument operations and for other activities, including maintenance, upgrade, sustaining engineering, testing, and training.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010
EOC-8020#B	The EOC shall participate in the scheduling of interface and end-to-end tests with the external elements involved, including the ICCs, the spacecraft simulator(s), the SMC for other EOS elements, and EDOS for MO&DSD data delivery systems.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B120120.010
EOC-8090#B	The EOC shall establish its configuration, including functional connectivity within the EOC and between the EOC and external interfaces, for multiple spacecraft and instrument operations, tests, and maintenance.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010
EOC-8100#B	The EOC shall perform prepass operational readiness tests on the EOC and between the EOC and external interfaces (via test messages).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010
EOC-8110#B	The EOC shall support reconfiguration to work around faults and anomalies without interrupting other ongoing operations.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-8130#B	The EOC shall allow operator override for reconfiguration requests that violate operational constraints.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.080
EOC-8140#B	The EOC shall manage initialization and shutdown of EOC functions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010
EOC-8150#B	The EOC shall provide the capability to analyze and report its internal performance at a minimum for the following: a. CPU utilization b. Processing throughput for plans and schedules, and commands c. Equipment downtime d. Mass storage utilization e. Communication resource utilization f. Data accounting	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.080 B110320.020 B110320.030
EOC-8160#B	The EOC shall alert the operator when its status changes or when data errors exceed operator-specified levels.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.040 B110210.080

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-8220#B	The EOC shall manage its faults including at a minimum the following: a. Fault identification and reporting b. Identification of recommended solutions c. Log of fault activities through resolution	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-8230#B	The EOC shall analyze and report the configuration, status, accounting, and performance information received from EOC components.	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.080
EOC-8240#B	The EOC shall be capable of initiating diagnostics to aid in isolating internal faults, using safeguards to prevent their operations from affecting other operations.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-8250#B	The EOC shall participate in the resolution of failures and anomalies involving the interfaces of the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-8260#B	The EOC shall provide tests for validating, verifying, and checking functional capabilities and performance for EOC functions after the EOC has been repaired or upgraded.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
EOC-8270#B	The EOC shall provide standard test data sets to be used in the validation of EOC functions.	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.010 B120230.030
EOC-8285#B	The EOC shall support instrument integration activities associated with the spacecraft prior to launch.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110320.020 B110320.030 B120230.030
EOC-8290#B	The EOC shall use simulations and test functions of the spacecraft simulator(s) to check out the EOC functions.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B120230.030
EOC-8320#B	The EOC shall support spacecraft and instrument tests at the integration site and at the launch site.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110320.020 B120230.030
EOC-8330#B	The EOC shall provide the capabilities: a. To test both nominal operations and failure paths b. To log test activities and test configuration c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110210.080 B110310.020
EOC-8370#B	The EOC shall generate at a minimum the following: a. Security audit log b. EOC resource utilization report c. EOC status report d. EOC hardware/software configuration history	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-8372#B	The EOC shall be capable of accessing ICC reports.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.030
EOC-8375#B	The EOC status report shall include at a minimum the following: a. Compliance with the LTSP and LTIP b. Anomaly reports c. Maintenance report d. ICC status report information	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110120.010 B110140.010 B110210.020 B110310.030
EOC-8380#B	The EOC shall provide the SMC with access to EOC reports, including at a minimum the following: a. Plans and schedules b. Security actions c. Maintenance information	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080720.010 B110110.010 B110130.040
EOC-9010#B	The EOC shall provide the capability for the operator to control the EOC functions and components, utilizing a combination of input devices.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090
EOC-9020#B	The EOC shall provide the capability for the operator to send to displays, printers, and files spacecraft, instrument, and ground system information used or generated by each EOC function.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090
EOC-9025#B	The EOC shall provide the capability to notify the operator of events and alarms.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080
EOC-9040#B	The EOC shall support the use of a high-level interactive control language, which consists of a set of directives and programming-like language capabilities, including at a minimum the following: a. Evaluate algebraic and logical expressions b. Exercise decision logic (IF statements) c. Automated execution of a set of multiple directives (i.e., user interface language procedure) d. Internally branch to other parts of the user interface language procedure e. Next user interface language procedures within procedures f. Initiate other EOC applications	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.040 B110210.050 B110210.070 B110210.080 B110310.010 B110320.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOC-9080#B	The EOC shall provide the operator with the capability to create, modify, and delete user interface language procedures.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.040 B110210.050 B110210.070 B110210.080 B110310.010 B110320.010
EOC-9090#B	The EOC shall provide the capability for the operator to define the format and contents of text and graphics displays.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.010
EOC-9110#B	The EOC shall respond to operator inputs within 0.5 seconds.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110320.010 B110320.020 B110320.030 B120820.040
EOC-9130#B	The EOC shall be capable of updating displays of rapidly changing information at rates of up to once per second.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110320.010 B120820.040
EOC-9510#B	The EOC shall support the following simultaneous activities: a. Performing mission coordination, planning, scheduling, monitoring, and commanding of the U.S. spacecraft and instruments as listed in Table D-1. b. At least two of the following: mission test activities, EOC system upgrades, training, and/or maintenance	mission critical	demo	(Testcase link to RBR for FOS not in RTM) T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02	B110110.010 B110320.040
EOC-9520#B	The EOC computer hardware shall be able to grow without redesign to twice the processing, storage, and communications capacities estimated for full system operation.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.040
EOC-9570#B	The EOC computer processing, storage, and communications capacity utilization shall be less than 50 percent at turnover for operations.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B080530.010 B110320.040
EOC-9580#B	The EOC architecture shall be capable of growing to support additional spacecraft without major redesign. \\ 1324\\	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.040
EOSD0010#B	ECS shall use and support the Space Network (SN), via the EDOS/EBnet interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	mission essential	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B080170.010 B110210.010 B120110.020 B120220.020 B120230.020
EOSD0015#B	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/EBnet interface, as backup of the SN, to obtain forward and return link data communications.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B080170.010 B110210.010 B120220.030 B120230.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD0020#B	ECS shall use and support the EDOS/EBnet interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B080170.010 B110210.010 B120120.020 B120430.020 B120440.020 B120510.020
EOSD0025#B	ECS shall use EBnet for flight operations data transfers.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.010 B120220.020 B120220.030 B120230.010 B120230.020
EOSD0030#B	ECS shall, during its lifetime, ingest, archive distribute and provide search and access for EOS TRMM, Landsat 7 (including IGS metadata and browse) and related non-EOS data and products.	mission essential	test	B210.01.05 B212.01.01 B240.02.01 B260.02.02 T212-20.01.04 T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.08	B090140.020 B090140.040 B090240.030 B090240.040 B090350.030 B090350.040 B090440.030 B090440.040 B090530.030 B090530.040 B090630.030 B090630.040 B110210.040
EOSD0040#B	ECS shall provide users without prior approved accounts access to the system for descriptive information about ECS and the types of data it contains.	mission fulfillment	test	B210.01.05	B100110.010 B100310.010
EOSD0500#B	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution	mission critical	test	(Testcase link to RBR for FOS not in RTM) B210.01.01 B210.01.05 B211.01.05 B221.02.03 B221.02.07 B221.02.08 T211-91.01.01 T211-92.01.01 T221-30.02.04 T252-10.02.03 T252-20.02.01 T253-10.02.01	B120110.050 B120210.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD0502#B	ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.	mission essential	demo	(Testcase link to RBR for FOS not in RTM) T209-10.01.03	B100210.010 B100210.030 B100220.010 B100220.030 B100230.010 B100230.030 B100240.010 B100240.030 B100250.010 B100250.030 B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.030 B110130.040 B110130.050 B110130.060 B110140.010 B110210.010 B110210.020 B110210.030 B110210.040 B110210.050
EOSD0510#B	ECS shall be capable of being tested during all phases of its development and flight operations.	mission essential	test	(Testcase link to RBR for FOS not in RTM) B230.02.26 B230.02.27 B240.02.12 B260.02.07 T209-82.02.01 T209-82.02.02 T209-82.02.03 T209-82.02.04 T210-10.01.01 T210-10.01.02 T211-91.01.02 T211-92.01.02 T212-30.01.01 T252-10.02.04 T252-60.02.01 T252-60.02.02 T252-60.02.03 T252-60.02.04 T252-60.02.05	B120110.050 B120120.010 B120120.020 B120120.030 B120230.030 B120650.040
EOSD0540#B	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.	mission fulfillment	analysis	T252-60.02.05	B080210.010 B110320.040
EOSD0545#B	ECS shall be able to accommodate growth (e.g., capacity) in all of its functions as well as the addition of new functions.	mission fulfillment	analysis	(Testcase link to RBR for FOS not in RTM)	B080210.010 B110320.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD0560#B	ECS benchmark tests and test data sets shall be defined for system verification and data quality evaluation.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B120120.020 B120230.030
EOSD0630#B	ECS shall be capable of simultaneously supporting the Independent Verification and Validation (IV&V) activities and ECS development activities, both before and after flight operations begin.	mission essential	demo	B210.01.03 B230.02.26 B230.02.27 B240.02.12 B260.02.07 T209-82.02.01 T209-82.02.02 T209-82.02.03 T209-82.02.04 T210-10.01.01 T210-10.01.02 T212-30.01.01 T252-60.02.01 T252-60.02.02 T252-60.02.03 T252-60.02.04 T252-60.02.05	B110110.010
EOSD0700#B	Each ECS element shall provide the following, to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080520.010 B110110.010 B120120.020 B120120.030 B120810.010 B120810.020 B120810.030 B120810.040 B120810.050 B120810.060 B120810.070 B120810.080 B120810.090
EOSD0710#B	Each ECS element shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.	mission essential	demo	(Testcase link to RBR for FOS not in RTM) B230.02.26 B230.02.27 B240.02.12 B260.02.07 T209-82.02.01 T209-82.02.02 T209-82.02.03 T209-82.02.04 T212-30.01.01	B080160.030 B110110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD0720#B	Each ECS element shall be able to validate at any time during the life-time of the ECS that the ECS element primary functional performance is consistent with pre-defined operational benchmark tests.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02	B110110.010 B120120.020 B120120.030 B120810.010 B120810.020 B120810.030 B120810.040 B120810.050 B120810.060 B120810.070 B120810.080 B120810.090 B120820.010
EOSD0730#B	Each ECS element shall be capable of verifying the fidelity of the ECS element interface to: a. Other ECS elements at any time during the lifetime of the ECS b. Entities external to ECS at any time during the lifetime of the ECS	mission critical	test	(Testcase link to RBR for FOS not in RTM) B211.01.05 B221.02.08 T252-30.02.04	B080170.020 B080170.030 B110110.010 B120230.030
EOSD0740#B	Each ECS element shall provide a set of real or simulated functional capabilities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. ECS System (Integration of ECS elements)	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B110110.010
EOSD0750#B	Each ECS element shall provide a set of real or simulated functions which interfaces with both its ECS internal and external entities for use in the following types of test: a. Subsystem (components of an ECS element) b. Element (fully integrated element) c. EOSDIS System (Integration of EOSDIS elements)	mission fulfillment	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B120650.040
EOSD0760#B	Each ECS element shall support end-to-end EOS system testing and fault isolation.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B120110.050 B120230.030 B120650.040
EOSD0780#B	Each ECS element shall be capable of being monitored during testing.	mission fulfillment	demo	(Testcase link to RBR for FOS not in RTM) T210-10.01.01 T210-10.01.02 T252-20.02.02 T252-60.02.01 T252-60.02.02	B110110.010 B120230.030
EOSD0800#B	Each ECS element shall be capable of supporting end-to-end test and verification activities of the EOS program including during the pre-launch, spacecraft verification, and instrument verification phases.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B120110.050 B120230.030 B120650.040 B120810.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1000#B	ECS elements shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real-time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a Tracking and Data Relay Satellite System (TDRSS) link is available for contact to the spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.05	B120820.020
EOSD1010#B	ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.05 T250-10.02.23	B120820.010
EOSD1030#B	ECS shall have the capacity to accept a daily average of (2) per cent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.	mission critical	test	T212-20.01.05	B120820.060 B120820.070
EOSD1040#B	ECS shall provide sufficient capacity to permit the reprocessing of all EOS science data at twice the incoming data rate at a minimum, concurrently with processing of new data.	mission essential	analysis	T250-10.02.05 T252-60.02.01	B120810.040 B120810.050 B120810.060 B120810.070 B120810.080 B120810.090
EOSD1050#B	ECS shall generate and make available to the users Level 1 Standard Products within 24 hours after the availability to ECS of all necessary input data sets.	mission fulfillment	analysis	T250-10.02.22 T250-10.02.24	B120820.020
EOSD1060#B	ECS shall generate and make available to the users Level 2 Standard Products within 24 hours after the availability to ECS of all necessary Level 1 and other input data sets.	mission fulfillment	analysis	T250-10.02.22 T250-10.02.24	B120820.020
EOSD1070#B	ECS shall generate and make available to the users Level 3 Standard Products within 24 hours after the availability to ECS of all necessary Level 2 and other input data sets.	mission fulfillment	analysis	T250-10.02.22 T250-10.02.24	B120820.020
EOSD1080#B	ECS shall generate and make available to the users Level 4 Standard Products within one week after the availability to ECS of all necessary Level 3 and other input data sets.	mission fulfillment	analysis	T250-10.02.22	B120820.020
EOSD1085#B	ECS shall be capable of ingesting and archiving Landsat7 Level OR data produced by LPS over 12 hours, (see Appendix C) within 8 hours from the time of receipt of the data availability notice from LPS.	mission critical	test	B253.02.04 T244-50.02.03 T244-50.02.10 T244-50.02.11	B120820.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1140#B	ECS shall allocate 10% of development resources (the ECS Sustaining Engineering Facility at GSFC), including processing, storage, and networks, for the IV&V activity.	mission fulfillment	analysis	T244-50.02.11	B080410.020
EOSD1480#B	ECS shall receive from the resident EOS Project Scientist the IWGs Long Term Science Plan (LTSP) and updates as required.	mission critical	demo	(Testcase link to RBR for FOS not in RTM) T252-50.02.01	B110110.010 B120210.010
EOSD1490#B	ECS elements shall interface with the resident EOS Project Scientist for resolution of conflicts between observations of equal priority.	mission essential	demo	T244-50.02.11	B110130.030 B110210.090
EOSD1500#B	ECS shall interface with the EOS spacecraft and with the EOS instruments in order to perform mission operations, including planning, scheduling, commanding, and monitoring functions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.050 B110210.060 B110210.070
EOSD1502#B	ECS elements shall use EBnet for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF h. Production Data Transfers between DAACs i. Management Data exchange with SMC j. Data Products Exchange with ADCs, IPs, and Others	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B090310.010 B110120.040 B110130.010
EOSD1505#B	ECS elements shall receive EOS spacecraft predicted orbit data and post pass ephemeris determination data from the FDF.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040 B120210.010
EOSD1510#B	ECS elements shall provide the FDF with subsets of spacecraft housekeeping data related to the on-board attitude and orbit systems.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040
EOSD1520#B	ECS elements shall receive TDRSS schedules from the Network Control Center (NCC).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080330.020 B110130.010
EOSD1530#B	ECS elements shall submit TDRSS schedule requests to the NCC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080310.010 B110130.010
EOSD1600#B	The ECS elements that interface with EDOS elements shall exchange element level status data with EDOS.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120120.020 B120220.020 B120430.020 B120440.020 B120510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1605#B	ECS elements shall receive from EDOS telemetry data, including housekeeping, engineering, ancillary, and science data from EOS instruments and spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020
EOSD1607#B	ECS shall receive data from near term Earth Probe missions to include the following as a minimum: a). TRMM data for archive and distribution b). Landsat 7 data for archive and distribution including IGS metadata and browse.	mission essential	test	B210.01.05 B212.01.01 B240.02.01 B260.02.02 T212-20.01.01 T212-20.01.04	B090110.010 B090210.010 B090220.020 B090250.020 B090250.030 B090320.020 B090360.020 B090360.030 B090420.020 B120410.020 B120420.020 B120420.050 B120430.020 B120650.010 B120650.020
EOSD1608#B	ECS elements shall receive from EPDSs the following at a minimum: a. Data products b. Ancillary data c. Calibration data d. Correlative data e. Metadata f. Data information g. Documentation	mission essential	test	B210.01.05 B212.01.01 B240.02.01 B260.02.02 T212-20.01.01 T212-20.01.04	B090110.010 B090210.010 B090220.020 B090250.020 B090250.030 B090320.020 B090360.020 B090360.030 B090420.020 B120410.020 B120410.030 B120420.020 B120420.050 B120430.020 B120650.010 B120650.020
EOSD1680#B	ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software and Validation Facility (SDVF)	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B110210.040
EOSD1690#B	ECS elements shall provide commands to the EOS spacecraft simulators.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
EOSD1695#B	The ECS shall provide 2-way interoperability with the V0 system.	mission fulfillment	test	T250-10.02.04	B080170.020 B100130.020 B100130.040 B100310.020 B100420.010
EOSD1703#B	ECS shall provide maintenance and operations interfaces to the DAACs to support the functions of: a). System Management b). Science Algorithm Integration c). Product Generation d). Data Archive/Distribution e). User Support Services f). System Maintenance	mission essential	demo	T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.08 T250-10.02.09	B080130.020 B080150.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1705#B	ECS shall support interfaces to DAAC Unique components.	mission fulfillment	analysis	T233-11.01.01 T233-11.01.02 T252-10.02.04	B100250.030 B100320.010 B100410.010 B120640.010 B120640.020 B120640.030 B120640.040 B120640.060
EOSD1710#B	ECS elements shall exchange with ADCs/ODCs, such as NOAA and other data processing and archiving facilities, information including the following: a. Directories b. Product Orders c. Order Status d. Science Data e. Management Data	mission fulfillment	demo	B252.02.01 B252.02.02 B252.02.03 B252.02.04 B260.02.05 B260.02.07 T252-10.02.03 T252-20.02.04 T252-20.02.05 T252-20.02.06 T252-30.02.01 T252-30.02.02 T252-30.02.03 T252-30.02.06	B100140.020 B100320.030 B120730.040 B120730.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests for the ASTER Instrument b. Data Distribution Requests c. Reprocessing Requests	mission essential	demo	B233.02.02 T233-31.02.02	B090140.010 B090240.010 B090350.010 B090440.010 B090530.010 B090630.010 B100120.050 B100120.060 B100120.070 B120310.020 B120310.040 B120330.060 B120410.050 B120410.060 B120420.030 B120420.040 B120430.050 B120430.060 B120440.070 B120440.080 B120450.040 B120450.050 B120510.050 B120510.060 B120520.040 B120520.050 B120530.040 B120530.050 B120610.030 B120610.040 B120610.050 B120620.050 B120620.060 B120630.050 B120630.060 B120640.020 B120640.030 B120640.040 B120640.050 B120640.060 B120650.020 B120650.030
EOSD1730#B	ECS elements shall receive from the ECS user community Special Products, research results, and new derived data sets produced from EOS data.	mission fulfillment	demo	T250-10.02.07	B120710.010
EOSD1740#B	ECS elements shall send the following types of data at a minimum to the ECS user community: a. Metadata b. Browse data c. Science data	mission essential	test	T250-10.02.07	B100120.020 B100410.020 B100430.020 B120730.010 B120730.020 B120730.030 B120730.040 B120730.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1750#B	ECS elements shall receive data including the following types of supporting information from the ECS science community (TLs, TMs, PIs, and Co-Is): a. Algorithms b. Software fixes c. Instrument calibration data d. Integration support requests e. Metadata for Special Products archiving f. Data transfer requests (inventories, directories, and browse) g. Data Quality/Instrument assessment h. Instrument operations information i. Ancillary data	mission essential	demo	B244.02.01 B244.02.02 T209-42.02.01	B080130.020 B080160.030 B090140.040 B090160.010 B090160.020 B090160.030 B090170.010 B090240.040 B090270.010 B090270.020 B090280.010 B090350.040 B090380.010 B090380.020 B090380.030 B090390.010 B090440.040 B090470.010 B090470.020 B090470.030 B090480.010 B090530.040 B090550.010 B090550.020 B090550.030 B090560.010 B090630.040 B090650.010 B090650.020 B090660.010 B110210.040 B120110.060 B120120.030 B120710.010
EOSD1760#B	The ECS elements shall send the following types of data at a minimum to the ECS science community (TLs, TMs, PIs, and Co-Is): a. Software Problem Reports b. Documentation c. Metadata (copies of inventories) d. Browse data e. Archived data f. Accounting information	mission essential	test	B244.02.01	B100110.110 B100210.010 B100210.030 B100220.010 B100220.030 B100230.010 B100230.030 B100240.010 B100240.030 B100250.010 B100250.030 B100410.020 B100430.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD1770#B	ECS elements shall exchange the following types of data at a minimum with the Ips: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B090410.020 B090420.070 B090490.010 B110210.090 B120310.050 B120310.060 B120320.010 B120320.020 B120320.030 B120330.020 B120330.050 B120340.040 B120340.060 B120640.050 B120640.060 B120720.010 B120720.020
EOSD1990#B	The ECS system and elements shall employ security measures and techniques for all applicable security disciplines which are identified in the preceding documents. These documents shall provide the basis for the ECS security policy.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B080730.010
EOSD2100#B	The ECS technical security policy planning shall be comprehensive and shall cover at least the following areas: a. Applicability of the C2 Level of Trustedness as defined by the NSA b. Applicability of the C2 Object Reuse capability c. Discretionary control and monitoring of user access d. ECS communications, network access, control, and monitoring e. Computer system "virus" monitoring, detection, and remedy f. Data protection controls g. Account/privilege management and user session tailoring h. Restart/recovery i. Security audit trail generation j. Security analysis and reporting k. Risk analysis	mission essential	inspection	(Testcase link to RBR for FOS not in RTM) T250-10.02.06	B080730.010
EOSD2200#B	Selection criteria meeting overall ECS security policies and system requirements shall be applied when selecting hardware.	mission essential	inspection	(Testcase link to RBR for FOS not in RTM) T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.08 T250-10.02.09	B080730.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.	mission essential	test	(Testcase link to RBR for FOS not in RTM) B212.01.02 B220.02.01 B230.02.17 B233.02.05 B240.02.03 B240.02.04 B244.02.02 B244.02.03 B244.02.04 B260.02.01 B260.02.02 T209-10.01.02 T209-12.02.07 T209-51.02.07 T212-10.01.01 T212-10.01.02 T222-30.02.01 T231-32.02.02 T231-32.02.07 T231-51.01.03 T244-30.02.01 T244-60.02.01 T244-60.02.02	B080630.010
EOSD2430#B	Data base access and manipulation shall accommodate control of user access and update of security controlled data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080630.010 B100120.010 B100410.070 B110110.020
EOSD2440#B	Data base integrity including prevention of data loss and corruption shall be maintained.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T252-60.02.05	B080630.010
EOSD2480#B	ECS elements shall require unique sessions when security controlled data are being manipulated.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B080630.010 B100120.100 B110210.010
EOSD2510#B	ECS elements shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B080630.010 B110310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD2550#B	The ECS elements shall limit use of master passwords or use of a single password for large organizations requiring access to a mix of security controlled and non-sensitive data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080630.010 B110110.010
EOSD2555#B	ECS shall maintain confidentiality of user product request and accounts.	mission essential	test	B221.02.05	B080630.010
EOSD2620#B	ECS elements shall disconnect a user/element after a predetermined number of unsuccessful attempts to access data.	mission essential	test	B221.02.05	B110110.010
EOSD2640#B	ECS elements shall relinquish a connection between the element and a user when the user has not been active for a configurable period of time.	mission essential	test	B221.02.05	B080630.010 B110110.010
EOSD2650#B	ECS elements shall report detected security violations to the SMC.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B080630.020 B110110.010
EOSD2660#B	ECS elements shall at all times maintain and comply with the security directives issued by the SMC.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080630.020
EOSD2710#B	ECS elements shall report all detected computer viruses and actions taken to the SMC.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080630.020
EOSD2990#B	The ECS elements shall support the recovery from a system failure due to a loss in the integrity of the ECS data or a catastrophic violation of the security system.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B080140.020
EOSD3000#B	The ECS shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup.	mission critical	demo	(Testcase link to RBR for FOS not in RTM) B210.01.02 B221.02.05 B221.02.06 B221.02.08 T221-60.02.01	B080120.010 B080120.020 B080120.030 B080120.040 B080140.010 B080140.020 B080140.030 B080140.040
EOSD3200#B	A minimum of one backup which is maintained in a separate physical location (i.e., different building) shall be maintained for ECS software and key data items (including security audit trails and logs).	mission critical	inspection	(Testcase link to RBR for FOS not in RTM) T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.08	B080160.020
EOSD3220#B	All media shall be handled and stored in protected areas with environmental and accounting procedures applied.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM) T211-30.01.02	B080160.020
EOSD3490#B	Reliability statistics for ECS shall be collected and monitored using the Mean Time Between Maintenance (MTBM) for each component and operational capability.	mission fulfillment	demo	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3492#B	RMA data shall be maintained in a repository accessible for logistics analysis and other purposes.	mission fulfillment	inspection	(Testcase link to RBR for FOS not in RTM) T252-10.02.03	B080510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD3500#B	The ECS RMA Program shall adhere to GSFC 420-05-03, Performance Assurance Requirements for the EOSDIS.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3510#B	Reliability predictions shall be calculated in accordance with the parts count analysis method, Appendix A, of MIL-HDBK-217F, Reliability Prediction of Electronic Equipment.	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3600#B	Maintainability shall be predicted in accordance with MIL-HDBK-472, Maintainability Prediction, Procedure IV.	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3610#B	The Maintainability Status Report shall be based on MIL-STD-470A, Maintainability Program for Systems and Equipment, Task 104 and shall include any changes in the MTBM predictions.	mission fulfillment	inspection	(Testcase link to RBR for FOS not in RTM)	B080720.020
EOSD3615#B	The Maintainability Status Report shall also include data on items specified for maintainability reporting in GSFC 420-05-03.	mission fulfillment	inspection	(Testcase link to RBR for FOS not in RTM)	B080720.020
EOSD3620#B	ECS shall predict and periodically assess maintainability by measuring the actual MDT and comparing to the required MDT.	mission fulfillment	test	B221.02.05	B080510.020
EOSD3625#B	For ECS functions with a backup capability, ECS shall use switchover time to the backup capability in measuring maintainability, rather than down time, when the component goes down.	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3700#B	ECS functions shall have an operational availability of 0.96 at a minimum (.998 design goal) and an MDT of four (4) hours or less (1.5 hour design goal), unless otherwise specified. The above requirement covers equipment including: a. "Non-critical" equipment configured with the critical equipment supporting the functional capabilities in the requirements. b. Equipment providing other functionality not explicitly stated in the RMA requirements that follow.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3710#B	The ECS shall have no single point of failure for functions associated with real-time operations of the spacecraft and instruments.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080620.010 B110110.010 B110210.080

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD3800#B	The FOS shall have an operational availability of 0.9998 at a minimum (.99997 design goal) and an MDT of one (1) minute or less (0.5 minute design goal) for critical real-time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real-time commanding and associated monitoring for spacecraft and instrument health and safety	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3810#B	The FOS shall have an operational availability of 0.99925 at a minimum (.99997 design goal) and an MDT of five (5) minutes or less (0.5 minute design goal) for non-critical real-time functions.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3820#B	The FOS shall have an operational availability of 0.992 at a minimum (.99997 design goal) and an MDT of one (1) hour or less (0.5 minute design goal) for functions associated with Targets Of Opportunity (TOOs).	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B080510.020
EOSD3900#B	The SDPS function of receiving science data shall have an operational availability of 0.999 at a minimum (.99995 design goal) and an MDT of two (2) hours or less (8 minutes design goal).	mission critical	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3910#B	The switchover time from the primary science data receipt capability to a backup capability shall be 15 minutes or less (10 minutes design goal).	mission critical	test	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3920#B	The SDPS function of archiving and distributing data shall have an operational availability of 0.98 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (9 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3930#B	The user interfaces to Information Management System (IMS) services at individual Distributed Active Archive Center (DAAC) sites shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.6 hour design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3940#B	The SDPS function of Information Searches on the ECS Directory shall have an operational availability of 0.993 at a minimum (.9997 design goal) and an MDT of two (2) hours or less (1.4 hour design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD3950#B	The SDPS function of ASTER Instrument Data Acquisition Request (DAR) Submittal including TOOs shall have an operational availability of 0.993 at a minimum (.999999 design goal) and an MDT of two (2) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3960#B	The SDPS function of Metadata Ingest and Update shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3970#B	The SDPS function of Information Searches on Local Holdings shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3980#B	The SDPS function of Local Data Order Submission shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD3990#B	The SDPS function of Data Order Submission Across DAACs shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD4000#B	The SDPS function of IMS Data Base Management and Maintenance Interface shall have an operational availability of 0.96 at a minimum (.999999 design goal) and an MDT of four (4) hours or less (6 minutes design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD4010#B	Each computer providing product generation shall have an operational availability of 0.95 at a minimum (.9995 design goal).	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B080510.020
EOSD4020#B	At each DAAC site, the product generation functional capabilities shall be spread across multiple product generation computers thereby providing a "failsoft" environment.	mission essential	inspection	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03	B120830.020
EOSD4030#B	The SMC function of gathering and disseminating system management information shall have an operational availability of .998 at a minimum (.999998 design goal) and an MDT of 20 minutes or less (5 minutes design goal), for critical services.	mission critical	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.07 T250-10.02.03 T250-10.02.02 T250-10.02.03 T250-10.02.07 T250-10.02.08 T250-10.02.09 T250-10.02.10	B080510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD4035#B	The ESN shall have no single point of failure for functions associated with site-specific network databases and configuration data.	mission critical	test	T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.07 T250-10.02.08 T250-10.02.09	B080510.010
EOSD4036#B	The operational availability of individual ESN segments shall be consistent with the specified operational availability of the supported ECS functions.	mission critical	analysis	T250-10.02.02 T250-10.02.05 T250-10.02.07 T250-10.02.09 T250-10.02.11 T250-10.02.12 T250-10.02.13 T250-10.02.14 T250-10.02.15 T250-10.02.16 T250-10.02.17 T250-10.02.18 T250-10.02.19 T250-10.02.27	B080510.010
EOSD4100#B	The ECS segments, elements, and components shall include the on-line (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.	mission essential	test	(Testcase link to RBR for FOS not in RTM) B212.01.02 T212-30.01.01 T212-30.01.02	B080620.010 B120110.050
EOSD5000#B	ECS shall enable the addition of other data providers, e.g. DAACs, SCFs, ADCs, ODCs, which may:- provide heterogeneous services, i.e. services in support of EOS which may be less than or different than ECS services.- be connected with varying topologies- have variable levels of reliability or operational availability.	mission fulfillment	analysis	T212-30.01.01	B080210.010 B100140.010 B100140.020 B100140.030 B100140.040 B100210.040 B100220.040 B100230.040 B100240.040 B100250.040 B100320.010 B100320.020 B100320.030 B100320.040
EOSD5010#B	ECS shall enable extended provider support, i.e. client access of data and services at SCFs and DAACs, as authorized, without distinction to the client.	mission essential	test	B210.01.03 B230.02.07 B232.02.01 T222-40.02.06 T232-10.02.03	B080210.010
EOSD5020#B	ECS software, hardware, and interfaces shall enable transparent portability across heterogeneous site architectures, i.e. performing the same function at different ECS sites that may have different hardware implementations.	mission fulfillment	analysis	T231-10.01.09 T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.07 T250-10.02.08	B080210.010 B120830.020
EOSD5030#B	ECS shall enable the addition of information search and retrieval services, e.g. WAIS, WWW.	mission fulfillment	demo	T222-40.02.06	B080210.010 B100110.020 B100310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD5040#B	ECS shall enable the combination of services from ECS and other data providers in arbitrary, i.e. non-predefined, ways as needed by users to conduct EOS science.	mission fulfillment	analysis	B222.02.02 B232.02.01 T222-40.02.04 T222-40.02.06 T222-40.02.07 T232-10.02.02	B080210.010 B100210.010 B100210.020 B100210.030 B100210.040 B100220.010 B100220.020 B100220.030 B100220.040 B100230.010 B100230.020 B100230.030 B100230.040 B100240.010 B100240.020 B100240.030 B100240.040 B100250.010 B100250.020 B100250.030 B100250.040
EOSD5060#B	ECS shall enable interoperability with equivalent International systems, e.g. European and Japanese systems, to support the following:a). Browse servicesb). Data retrieval services.	mission essential	demo	B230.02.07 B232.02.01 T222-40.02.06 T232-10.02.03	B080210.010 B120340.030 B120340.050
EOSD5070#B	ECS shall enable expansion to GByte networks including the ability to provide increased volume of data distribution/access..	mission fulfillment	analysis	T250-10.02.04	B080210.010 B120830.010
EOSD5100#B	ECS shall enable evolution of ECS to be a federated unit within GCDIS, e.g. GCDIS data centers should not have to negotiate different interfaces with each DAAC.	mission fulfillment	analysis	T231-40.01.03 T231-41.02.01 T250-10.02.04	B080210.010 B120830.020
EOSD5110#B	ECS shall enable the separate use of data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces between the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.	mission fulfillment	analysis	T209-12.02.04 T209-12.02.05 T209-30.01.02 T209-42.02.04 T209-61.02.04	B080210.010 B120830.020
EOSD5200#B	ECS shall enable the addition of the following as required for discipline specific user support: unique fields to metadata, unique products for browse, and unique documents for data products guides. These activities shall not require software changes to ECS.	mission fulfillment	analysis	T209-10.01.03 T209-12.02.08	B080210.010 B090140.050 B090240.050 B090350.050 B090440.050 B090530.050 B090630.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
EOSD5210#B	ECS shall enable development of a local user interface that accesses the core metadata and browse data base servers, bypassing the delivered "core" user interface. This server interface shall be configuration controlled and documented for the programmers' use.	mission fulfillment	analysis	T209-12.02.04 T231-10.01.08	B080210.010 B100120.090
EOSD5220#B	ECS shall enable addition of new storage devices, if required, to serve discipline-unique and site-unique archiving needs. An applications programming interface that permits the DAACs to integrate this addition to the DAAC shall be developed and configuration controlled.	mission fulfillment	analysis	T209-42.02.04 T209-61.02.04	B080210.020 B120830.010
EOSD5230#B	ECS shall enable the addition of new data types similar to previous types with minimal changes to the software of the core system.	mission fulfillment	analysis	T209-42.02.04	B080210.010
EOSD5240#B	ECS shall enable addition of new data types significantly different from previous types with minimal changes to the core architecture.	mission fulfillment	analysis	T209-42.02.04	B080210.010
EOSD5250#B	ECS shall enable access to configuration controlled applications programming interfaces that permit development of DAAC-unique value added services and products where DAAC-unique value added services may consist of one or more of the following types of developments: a. Visualization utilities and products b. Data sets and inter-data set usability utilities and products c. Data analysis utilities d. Special subsetting capabilities (e.g. dynamic) e. On-line analysis functions f. New search and access techniques g. Data acquisition planning and utilities h. Experimental QA techniques i. Non-digital data utilities and products j. System Management Functions	mission fulfillment	analysis	T209-12.02.04 T209-12.02.06 T209-12.02.08	B080210.020 B100120.090 B100410.060
EOSD5300#B	ECS shall provide APIs and infrastructure for science user extensions and direct search and access to data.	mission fulfillment	demo	T209-12.02.04 T209-12.02.08	B100120.090 B100410.060
EOSD5410#B	ECS shall enable the existence of additional ISTs if desired by the PI/TL to accommodate Co-Investigators and Team Members, who may be at geographically separate locations.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080210.010
ESN-0003#B	The ESN shall enable researchers on existing networks (TCP/IP and GOSIP) to gain access to data and ECS services in a transparent manner to the underlying differences between the networks.	mission essential	analysis	T250-10.02.04	B100110.010 B100310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-0006#B	ESN shall interface with NSI to reach all external non-ECS network-attached facilities and science users.	mission essential	analysis	T250-10.02.04 T250-10.02.05	B100110.010 B100310.010
ESN-0010#B	ESN shall provide the following standard services: a. Data Transfer and Management Services b. Electronic Messaging Service c. Remote Terminal Service d. Process to Process Communication Service e. Directory and User Access Control Service f. Network Management Service g. Network Security and Access Control Service h. Internetwork Interface Services i. Bulletin Board Service	mission essential	test	B211.01.04 B211.01.06 B220.02.01 B220.02.03 B221.02.01 B221.02.02 B221.02.03 B221.02.08 B221.02.09 B260.02.01 T211-60.01.02 T211-92.01.01 T221-30.02.03 T221-50.02.01 T221-50.02.02 T250-10.02.04 T250-10.02.05 T252-10.02.03 T252-20.02.01 T253-10.02.01	B080610.010 B080610.030 B080610.040
ESN-0070#B	The ESN shall support the intrasite elements data flow requirements identified in this specification.	mission critical	test	B221.02.09 T250-10.02.04 T250-10.02.05 T252-10.02.03	B080610.030
ESN-0080#B	The ESN shall interface with EBnet for inter-site data transmission between ECS DAACs.	mission essential	test	T250-10.02.04	B120120.010
ESN-0240#B	The ESN shall be extensible in its design to provide capability for growth and enhancement.	mission essential	analysis	T250-10.02.04 T250-10.02.05 T250-10.02.06 T252-20.02.01 T253-10.02.01	B080210.010
ESN-0280#B	The ESN shall provide file transfer and management service and as a minimum shall include the capability to transfer the following data types: a. Unstructured Text b. Binary Unstructured c. Binary Sequential d. Sequential Text	mission critical	test	T253-10.02.01	B080130.020
ESN-0290#B	The file transfer and management service shall be available in interactive and non-interactive services.	mission critical	test	T211-80.01.01	B080130.020
ESN-0300#B	The file transfer and management non-interactive services shall be able to be scheduled.	mission critical	test	T211-80.01.01	B080310.010
ESN-0340#B	The ESN shall interoperate and exchange messages and data with external SMTP and X.400 mail systems.	mission essential	test	B210.01.01 B211.01.04 T211-60.01.01	B080170.040
ESN-0345#B	The ESN shall be capable of transparently transmitting Multi-purpose Internet Mail Extensions (MIME) messages.	mission essential	test	B221.02.07	B080170.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-0350#B	The Electronic Messaging Service, shall be capable of exchanging binary data.	mission essential	test	B221.02.07	B080170.040
ESN-0370#B	The ESN shall provide interactive virtual terminal services.	mission essential	test	B221.02.07 B221.02.08	B100210.010 B100210.020 B100210.030 B100210.040 B100220.010 B100220.020 B100220.030 B100220.040 B100230.010 B100230.020 B100230.030 B100230.040 B100240.010 B100240.020 B100240.030 B100240.040 B100250.010 B100250.020 B100250.030 B100250.040 B110110.010
ESN-0450#B	The ESN shall provide process-to-process communication service.	mission critical	test	B221.02.03 B221.02.04 B221.02.06 B221.02.09 T211-80.01.01 T211-92.01.03 T211-92.01.04	B080610.030
ESN-0490#B	The ESN shall provide a name-to-attribute mapping Directory Service at a minimum.	mission critical	test	B221.02.07	B080610.030
ESN-0510#B	The directory function shall be able to respond to requests for information concerning named objects, either physical or logical, so as to support communications with those objects.	mission critical	test	B221.02.07	B080610.030
ESN-0590#B	The ESN Directory Service shall be protected by access control capabilities.	mission critical	test	B221.02.07	B080610.030
ESN-0600#B	The ESN Directory service shall include services and supporting mechanisms to authenticate the credentials of a user for the purpose of granting access rights and authorizing requested operations.	mission critical	test	B221.02.07	B080610.030
ESN-0610#B	The ESN shall include multiple Directory Service Agents (DSAs) which shall be collectively responsible for holding or retrieving all directory information which is needed by ECS.	mission critical	test	B221.02.07	B080610.030
ESN-0620#B	The ESN shall include a network management function to monitor and control the ESN.	mission critical	test	T250-10.02.04 T252-20.02.01 T253-10.02.01	B080610.010
ESN-0640#B	The ESN shall include management functions at each ECS element, equipment or gateway within the ESN.	mission critical	test	T250-10.02.04	B080610.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-0650#B	The ESN shall perform the following network management functions for each protocol stack implemented in any ECS element, and each communications facility: a. Network Configuration Management b. Network Fault Management c. Network Performance Management d. Network Security Management	mission critical	test	T250-10.02.04	B080410.020 B080530.020 B080620.020 B080630.020
ESN-0690#B	The ESN shall be capable of reconfiguration transparent to network users.	mission critical	test	T250-10.02.04	B080610.010
ESN-0740#B	The ESN network management service shall retrieve performance/fault data about ESN protocol stacks and equipment.	mission essential	test	T250-10.02.04	B080530.020 B080620.020
ESN-0750#B	The ESN shall provide statistical processing capabilities to allow extraction and tabulation of network performance data.	mission essential	test	T252-20.02.07	B080530.020
ESN-0760#B	The ESN report generation function shall provide, on an interactive and scheduled basis, accounting, network configuration, fault and performance management information.	mission essential	test	B221.02.09 T252-30.02.04	B080720.020
ESN-0770#B	The ESN query capability shall generate ad hoc statistics and reports based on parameters entered.	mission essential	test	T250-10.02.04	B080720.020
ESN-0780#B	The network elements including the Internet interfaces, shall have the capability to report, periodically and on an interactive basis , network statistics to the ESN network management function, including the following information: a. Network round trip delay b. Network reset and restart indications c. Outages and CRC errors d. Performance statistics	mission essential	test	T250-10.02.04	B080620.020
ESN-0790#B	The ESN shall include the following configuration management functions at a minimum: a. collect information describing the state of the network subsystem and its communications resources, b. exercise control over the configuration, parameters, and resources of the subsystem, and over the information collected, c. store the configuration information collected, and d. display the configuration information	mission essential	test	T252-20.02.02	B080410.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-0800#B	The ESN shall be capable of displaying the local network configuration status related to each system locally, and for all systems at the SMC.	mission essential	test	B252.02.01 B252.02.02 B260.02.05 B260.02.07 T252-30.02.01 T252-30.02.02	B080410.020
ESN-0810#B	ESN shall provide the following fault management functions at a minimum: a. detect the occurrence of faults, b. control the collection of fault information, and c. diagnose the probable cause of a detected fault	mission essential	test	T252-30.02.04	B080620.020
ESN-0815#B	Network simulation and traffic modeling capability shall be provided to troubleshoot network problems and to use in network planning.	mission essential	analysis	T250-10.02.04	B080210.010 B080620.020
ESN-0830#B	The ESN shall have the capability to detect and report communications related errors and events both locally and at the SMC.	mission critical	test	B221.02.09	B080620.020
ESN-0840#B	The ESN shall have error reporting, event logging and generation of alerts.	mission critical	test	B221.02.09	B080620.020
ESN-0900#B	Errors and events to be detected shall include at least: a. communications software version or configuration errors b. communications hardware errors c. protocol errors d. performance degradation conditions e. telecommunications errors and failures	mission critical	test	B221.02.09	B080620.020
ESN-0910#B	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the SMC: a. set, view, and change alert threshold values b. enable and disable alert notifications (alarms) within a system c. enable and disable event reports within a system d. manage error and event logging files	mission essential	test	B221.02.09	B080620.020
ESN-0920#B	The ESN shall provide a set of utilities to perform diagnostic and testing functions for purposes of fault isolation.	mission critical	inspection	B253.02.03	B080620.020
ESN-1000#B	The ESN network management function shall have the capability to build histories for different types of errors and events, and the capability to analyze errors and recommend corrective action wherever practical.	mission essential	test	B253.02.03 T211-91.01.02 T252-10.02.03	B080620.020
ESN-1010#B	The ESN shall provide, for selective use as a debugging aid, the capability to perform packet tracing of its supported protocols.	mission essential	test	T250-10.02.04	B080620.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-1030#B	The ESN shall perform periodic testing of alternate communication capabilities to verify that they are operational.	mission critical	demo	B253.02.03	B080150.010
ESN-1060#B	The ESN performance management function shall provide the capability to evaluate the performance of ESN resources and interconnection activities.	mission essential	test	T252-20.02.02	B080530.020 B120820.030
ESN-1065#B	The ESN performance management function shall include trend analysis for prediction of loading and bottlenecks/delays.	mission fulfillment	analysis	T252-10.02.03	B120820.030
ESN-1070#B	The ESN shall provide the capability to perform the following functions, at a minimum: a. generate/collect network statistics b. control collection/generation of network statistics c. store system statistics and statistical histories d. display the system statistics e. track end-to-end transaction performance	mission essential	test	T252-10.02.03	B080610.010 B120820.030
ESN-1090#B	The ESN shall provide the capability to control the communications performance parameters of the network.	mission essential	test	T252-10.02.03	B080530.020
ESN-1140#B	The ESN shall provide protocol translation, termination, bridging and routing.	mission critical	test	B210.01.01	B080170.010
ESN-1170#B	The ESN shall provide necessary translation within supported file transfer and e-mail services.	mission critical	test	B210.01.01	B080170.040
ESN-1180#B	The ESN shall interoperate with NSI to provide user access to ECS.	mission critical	test	B210.01.01	B080170.020
ESN-1181#B	The ESN shall provide an ECS Bulletin Board capability.	mission essential	demo	B210.01.01 T211-60.01.02	B080610.040
ESN-1206#B	The ESN capacity and performance shall be consistent with the specified capacity and performance requirements of the ECS functions.	mission critical	test	T250-10.02.05 T250-10.02.06	B120820.030
ESN-1207#B	The ESN capacity and performance shall be capable of expansion to be consistent with the specified capacity and performance growth requirements of the ECS elements and functions.	mission critical	analysis	T250-10.02.04 T250-10.02.05 T250-10.02.06	B120830.010
ESN-1330#B	The ESN shall provide ISO/OSI data communications protocols and services specified in the GOSIP (see Figure 8-3) to external interfaces as required by the IRDs.	mission essential	analysis	B221.02.09	B080170.010 B120120.010 B120120.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-1340#B	The ESN shall provide support for TCP/IP communications protocols and services to external interfaces as required by the IRDs.	mission critical	analysis	B221.02.09	B080170.010 B100140.010 B100140.020 B100140.030 B100140.040 B100210.010 B100210.020 B100210.030 B100210.040 B100220.010 B100220.020 B100220.030 B100220.040 B100230.010 B100230.020 B100230.030 B100230.040 B100240.010 B100240.020 B100240.030 B100240.040 B100250.010 B100250.020 B100250.030 B100250.040 B100320.010 B100320.020 B100320.030 B100320.040 B120120.010 B120120.020
ESN-1350#B	The ESN LANs shall provide physical devices and the corresponding medium access control (MAC) protocol compatible with ISO and ANSI standards.	mission critical	analysis	T250-10.02.04	B080170.010
ESN-1360#B	The ESN shall control access of processes and users through an authentication and authorization service that meets GNMP standards.	mission critical	test	T250-10.02.03	B080170.010
ESN-1365#B	The ESN shall isolate FOS with secure interfaces.	mission critical	test	B210.01.01 B211.01.01 B211.01.02 B211.01.03 B211.01.04 B221.02.02 T211-70.01.01 T221-30.02.04 T250-10.02.04	B110110.010 B120110.070
ESN-1367#B	IST users not within FOS facilities shall communicate with secure interfaces only with the use of a data integrity service.	mission critical	test	T250-10.02.04	B120110.070

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ESN-1380#B	The ESN shall provide countermeasures for the following security threats related to data communications: a. modification of data (i.e., manipulation) while in transit over the network b. disclosure of authentication information c. degradation in network or processing resource performance through denial of service attack d. Impersonation of authentication credentials or authorization privileges.	mission critical	test	B210.01.01	B080630.020
ESN-1400#B	The following security functions and services, at a minimum, shall be provided: a. authentication b. access (authorization) control c. data integrityd. data confidentiality	mission critical	test	B220.02.01 B220.02.03 B221.02.09 B260.02.01	B080630.010
ESN-1430#B	The ESN shall provide the following security event functions: a. Event detection b. Event reporting c. Event logging	mission critical	test	B260.02.01	B080630.020
FOS-0020#B	The FOS shall provide a training mode of operation for use during operator training and/or user training that does not interfere with ongoing operations.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02	B080450.020 B110110.010
FOS-0025#B	The FOS shall provide a test mode of operation that does not interfere with ongoing operations, and which supports independent element and subsystem tests, end-to-end tests, and integration and verification activities occurring during at a minimum: a. Spacecraft and instrument integration and test b. Pre-launch c. Upgrades and enhancements	mission critical	demo	(Testcase link to RBR for FOS not in RTM) T210-10.01.01 T210-10.01.02 T252-60.02.01 T252-60.02.02	B110110.010 B120230.030
FOS-0030#B	The FOS shall adopt an extensible general-purpose scheduling interface for communicating planning and scheduling information between FOS elements.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.030 B110130.040 B110130.050 B110130.060 B110140.010 B110210.020 B110210.090

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
FOS-0040#B	The FOS shall be capable of supporting flight operations of the EOS spacecraft and instruments as listed in Table D-1 that are controlled from GSFC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090
FOS-1010#B	The FOS shall provide the capability to receive, manage and display the AM-1 Solid State Recorder (SSR) trash buffer, and to transfer the buffer to external interfaces, such as the Software Development and Validation Facility.	mission fulfillment	test	(Testcase link to RBR for FOS not in RTM)	B110210.070
ICC-0010#B	The GSFC ICC shall be responsible for planning, scheduling, commanding, and monitoring the instruments allocated to GSFC in Table D-1, Instrument Manifest.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.020 B110130.060 B110210.040 B110210.050
ICC-0020#B	The ICC shall be capable of interfacing with one or more local and/or remote ISTs for the instrument supported by the ICC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030 B110210.040 B110210.060 B120210.030
ICC-0030#B	The ICC shall have the capability to notify the TL or instrument PI at the IST of, at a minimum, the following: a. Conflicts found in planning and scheduling b. Arrival of instrument engineering data c. Instrument anomalies found during instrument monitoring	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040 B110130.030 B110210.060
ICC-0040#B	The ICC shall receive the LTSP and LTIP from the SMC.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B080330.020 B110120.010 B120210.010
ICC-0050#B	An ICC shall have the capability to interface with other ICCs both electronically and by voice to facilitate, at a minimum, the following: a. Planning of coordinated operations b. Resolution of conflicts c. Exchange of instrument status	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110130.030
ICC-0055#B	The ICC shall interface with EDOS for coordinating EDOS-provided services (e.g., data delivery service messages, status).	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-0070#B	The ICC shall be capable of accommodating instrument team-provided software and/or hardware to perform functions such as: a. Planning b. Scheduling c. Analysis d. Onboard microprocessor management	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110130.060 B110140.010 B110210.020 B110310.030
ICC-1130#B	In support of a TOO observation, the ICC shall be able to evaluate the corresponding request within 30 minutes.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-2010#B	The ICC shall have the capability to access the EOC planning and scheduling information.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.040 B110130.060
ICC-2015#B	The ICC shall have the capability to access and execute EOC "what-if" functions for planning and scheduling analysis.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.090
ICC-2020#B	Upon request from the PI/TL at the IST, the ICC shall provide the IST with planning and scheduling information, which includes, at a minimum, the following: a. LTSP and LTIP b. Current resource availability information c. Current predicted orbit data and related information. d. Plans and schedules	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.040 B110130.040
ICC-2050#B	The ICC shall identify and resolve instrument planning and scheduling conflicts of its instrument based on, at a minimum, the following: a. Resource and time constraints b. In situ observation dependency c. Coordinated observation dependency among instruments d. Priorities set by the LTSP and LTIP	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110140.010 B110210.020 B120210.030
ICC-2052#B	The ICC shall generate the instrument baseline activity profiles, based upon the LTIPs for the applicable instrument.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.020 B120210.020
ICC-2060#B	The ICC shall reintroduce applicable requested activities in its planning and scheduling function when the activity did not occur due to a deviation from the schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.090 B120210.030
ICC-2110#B	The ICC shall be capable of converting PI/TL provided instrument deviation requests into scheduling directives suitable for inclusion in its instrument resource profile.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020 B120320.010
ICC-2115#B	The ICC shall have the capability to plan and schedule instrument maintenance activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030
ICC-2120#B	The ICC shall accept instrument deviation requests from the IST.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-2140#B	At least once each week, the ICC shall build an instrument resource profile or an instrument resource deviation list (when a baseline resource profile exists for the instrument), which includes a description of instrument operations currently planned for the target week.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.040
ICC-2150#B	The ICC shall accept from the EOC a notification of rejection of its instrument activities proposed in the instrument resource profile or instrument resource deviation list.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030 B120210.030
ICC-2170#B	The GSFC ICC architecture shall be capable of growing to support additional instruments without major redesign.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.040
ICC-2180#B	The ICC shall accept from the IST information regarding the resolution of conflicts encountered while building or updating an instrument resource profile or instrument resource deviation list.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030
ICC-2190#B	The ICC shall build or update its instrument resource profile, or when a resource profile exists, its instrument resource deviation list, based, at a minimum, on the following: a. PI/TL provided instrument deviation requests b. LTSP and LTIP c. Current resource availability d. Current predicted orbit data and related information e. Rejection notification from the EOC of activities that can not be accommodated in the preliminary resource schedule f. Existing preliminary resource schedule	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.030 B110140.010 B110210.020
ICC-2210#B	The ICC shall ensure that its instrument resource profile contains no internal conflicts.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030
ICC-2220#B	The ICC shall be able to generate the instrument resource profile in both machine usable and human readable forms.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.040
ICC-2230#B	When generated, the ICC shall provide the EOC with its instrument resource profile or, when a resource profile exists, an instrument resource deviation list.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.040 B120210.020
ICC-2250#B	The ICC shall accept the preliminary resource schedule from the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110140.010 B120210.020 B120210.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-2270#B	For each day the ICC shall be capable of generating or updating, an instrument activity list or an instrument activity deviation list (when an activity profile exists for the instrument) nominally covering the next 7 days.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
ICC-2280#B	The ICC shall generate or update the instrument activity list, or when a baseline activity profile exists, the instrument activity deviation list, based, at a minimum, on the following: a. PI/TL provided instrument deviation requests. b. LTSP and LTIP c. Preliminary resource schedule d. Current resource availability information e. Current predicted orbit data and related information f. Responses to contingency/emergency conditions g. Rejection notification from the EOC of the activities that cannot be accommodated in the detailed activity schedule	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110140.010 B110210.020 B120210.040
ICC-2290#B	The ICC shall generate the instrument activity list or the instrument activity deviation list (when an activity profile exists for the instrument) in both machine-usable and human-readable forms, to describe for each activity, at a minimum, as many of the following that apply: a. Activity identifier including traceability to PI/TL provided deviation requests. b. Objectives c. Resource requirements d. Start time constraints and duration e. Instrument modes as a function of time f. Pointing angles and field of view (FOV) g. Specified tolerance limits h. Disturbances caused for each instrument mode	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
ICC-2300#B	The ICC shall accept from the EOC a notification of rejection of instrument activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030 B110130.030 B110210.090 B120210.030
ICC-2350#B	In support of a TOO observation or a late change, the ICC shall update the instrument activity list or the instrument activity deviation list (when an activity profile exists for the instrument) within 8 hours, if the corresponding observation or the late change affects existing instrument activities or creates new conflicts.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110210.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-2370#B	In support of a TOO observation, the ICC shall update the instrument activity list or the instrument activity deviation list (when an activity profile exists for the instrument) within 30 minutes, if the corresponding observation or the late change does not affect existing instrument activities or create new conflicts.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.020
ICC-2380#B	In support of a late change, the ICC shall be capable of updating the instrument activity list within 75 minutes, if the request for instrument support activity does not affect existing instrument activity list events or create new conflicts.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.020
ICC-2390#B	The ICC shall provide the EOC with the instrument activity list or instrument activity deviation list (when an activity profile exists for the instrument) and any updates thereto, when generated.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020 B120210.040
ICC-2400#B	The ICC shall have the capability to update the instrument activity list or instrument activity deviation list (when an activity profile exists for the instrument) in response to instrument malfunctions or other special events that affect the continuation of the existing schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.030 B110210.020 B110210.060
ICC-2420#B	The ICC shall send to the IST the generated instrument activity list (or instrument activity deviation list) to be reviewed and/or approved by the PI/TL.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
ICC-2430#B	The ICC shall notify the PI/TL at the IST of any problems encountered while building or updating its instrument activity list (or instrument activity deviation list).	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.030
ICC-2450#B	The ICC shall accept from the IST notification of problem resolution regarding the instrument activity list (or the instrument activity deviation list).	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.030
ICC-3010#B	The ICC shall validate instrument loads, SCC-stored instrument commands, and/or SCC-stored instrument tables, as appropriate, that are generated at the ICC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020
ICC-3020#B	The ICC shall accept the detailed activity schedule or its updates from the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.040 B120210.040
ICC-3040#B	The ICC shall be capable of generating, at least once each day, instrument loads, SCC-stored instrument commands, and/or SCC-stored instrument tables based on the detailed activity schedule.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B110130.050
ICC-3050#B	The ICC shall be able to generate a command-to-memory location map for instrument-stored command loads.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B110130.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-3060#B	The ICC shall generate and validate, in less than 1 hour, the instrument loads, SCC-stored instrument commands, and/or SCC-stored instrument tables for 24 hours of operation of its instrument.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.030
ICC-3070#B	In support of a TOO observation or late change, the ICC shall generate and validate the corresponding commands within 25 minutes of receiving an updated detailed activity schedule from the EOC, if the corresponding observation does not impact previously scheduled activities.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.030
ICC-3071#B	In support of a TOO observation, the ICC shall be capable of generating and validating the corresponding commands within 55 minutes of receiving an updated detailed activity schedule from the EOC, if the corresponding observation impacts previously scheduled activities.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.030
ICC-3085#B	In support of a late change, the ICC shall be capable of generating and validating the corresponding commands within 115 minutes of receiving an updated detailed activity schedule from the EOC, if the corresponding activity impacts previously scheduled activities.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.030
ICC-3090#B	The ICC shall generate, validate, and store, as command groups, preplanned instrument commands for later use in emergency situations to protect the health and safety of its instrument.	mission critical	analysis	(Testcase link to RBR for FOS not in RTM)	B110130.020
ICC-3100#B	The ICC shall be able to generate, validate, and store preplanned contingency instrument commands to support specific TOO observations.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110140.010 B110210.020
ICC-3110#B	The ICC shall be able to generate, validate, and store preplanned contingency instrument commands to be used in event of instrument anomalies.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110130.020
ICC-3150#B	The ICC shall be able to accept from the PI/TL, via the IST, instrument memory loads, including software and table updates.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.020
ICC-3160#B	Upon request from the PI/TL at the IST, the ICC shall provide the IST with at a minimum the following: a. Current detailed activity schedule b. Instrument commands/tables and instrument loads c. Instrument command status information	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.020 B110130.040 B110210.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-3210#B	The ICC shall provide the EOC with instrument loads, SCC-stored instrument commands, SCC-stored instrument tables, preplanned real-time instrument commands, and associated information that includes, at a minimum, the following: a. Instrument identifier b. Schedule identifier, if applicable c. Critical command information	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110130.020 B120220.010
ICC-3220#B	The ICC shall have the capability to accept, via the IST, an instrument command request from the PI/TL.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-3230#B	The ICC shall evaluate a command request from the IST against the current detailed activity schedule to determine whether it can be met with the corresponding commands without impacting previously scheduled activities.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-3240#B	The ICC shall generate and validate a preplanned instrument command in response to an instrument command request from the PI/TL at the IST.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-3270#B	The ICC shall be able to generate and validate emergency/contingency instrument command groups in emergency/contingency situations.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-3370#B	The ICC shall provide the capability to verify the successful receipt and execution of instrument commands.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-3380#B	The ICC shall accept from the EOC instrument uplink status, which includes at a minimum the following: a. Receipt at the EOC b. Validation status as determined by the EOC c. Receipt at the spacecraft	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050 B120220.020 B120220.030
ICC-3400#B	Upon request from the PI/TL at the IST, the ICC shall provide the IST with instrument command status, which includes at a minimum the following: a. Receipt at the EOC b. Validation status as determined by the EOC c. Receipt at the spacecraft d. Execution at the instrument	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.050
ICC-3420#B	The ICC shall provide the IST with command request status, which includes the receipt of the command request at the ICC and the status of for the corresponding instrument command groups.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-4010#B	Upon request from the PI/TL, the ICC shall provide the IST with at a minimum the following: a. Instrument housekeeping and engineering data b. Spacecraft housekeeping data c. Derived parameters for its instrument	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4020#B	The ICC shall provide the capability to accept CCSDS packets from EDOS containing at a minimum the following data types: a. Spacecraft and instrument housekeeping data b. Instrument engineering data or instrument science data within which instrument engineering data is embedded c. Instrument memory dump data	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4040#B	The ICC shall be capable of simultaneously receiving real-time and spacecraft recorder data for all housekeeping and instrument engineering data types.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110320.020
ICC-4045#B	The ICC shall provide the capability to extract instrument housekeeping data and relevant spacecraft parameters from the spacecraft and instrument housekeeping data stream.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4050#B	The ICC shall be capable of extracting instrument engineering data from instrument science data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4060#B	The ICC shall support all EOS telemetry formats for instrument engineering data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4070#B	The ICC shall provide the capability to receive and report data quality information with the incoming CCSDS packets as provided by EDOS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4090#B	The ICC shall provide the capability to detect and report gaps in the telemetry data it receives.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4095#B	The ICC shall provide the capability to receive and process, non-telemetry data, which includes at a minimum the following: a. Monitor blocks from the DSN, GN, and WOTS b. Status messages from EDOS	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.010 B110210.040
ICC-4100#B	The ICC shall have the capability to perform instrument housekeeping and engineering data processing, which include: a. Decommutation b. Engineering unit conversion c. Limit checking, flagging out-of-limit parameters	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-4110#B	The ICC shall support the definition of sets of multiple sets of boundary limits for each non-discrete parameter, with each set including definitions for one or more upper and lower boundaries.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4120#B	The ICC shall provide the capability to accept temporary or permanent changes to limit definitions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4130#B	The ICC shall have the capability to continuously process instrument housekeeping and engineering data in real time as it is being received.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4150#B	The ICC shall have the capability to provide event messages whenever a predetermined number of limit violations for a parameter is detected.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4170#B	The ICC shall provide the capability to determine the best estimate for instrument memory contents.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120230.020
ICC-4180#B	The ICC shall be able to process 24 hours of spacecraft recorder instrument housekeeping and engineering data within 2 hours.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.020
ICC-4190#B	The ICC shall provide the capability to store spacecraft recorder telemetry data as it is being received.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4200#B	The ICC shall provide the capability to process stored telemetry data at an operator-selectable rate.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4210#B	The ICC shall be capable of extracting instrument engineering data from instrument science data. at science data rates up to 1.544 Mbps.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.020
ICC-4220#B	The ICC shall be capable of receiving and processing real-time housekeeping and engineering data at rates up to 50 kbps.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.020
ICC-4230#B	The ICC shall be capable of receiving and recording spacecraft recorder data at rates up to 1.544 Mbps.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.020
ICC-4410#B	The ICC shall provide the capability to perform analysis on real-time data, spacecraft recorder data, and data from the ICC history log.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
ICC-4420#B	The ICC shall receive spacecraft status data from the EOC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010 B120230.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-4440#B	The ICC shall provide the capability to determine, for specified parameters over a specified time interval, at a minimum the following: a. Minimum value b. Maximum value c. Mean value d. Standard deviation of the parameter e. Time and duration of limit violations	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
ICC-4450#B	The ICC shall provide the capability to plot specified parameters against other specified parameters or against time.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
ICC-4460#B	The ICC shall provide the capability to time-correlate related instrument parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-4470#B	The ICC shall provide the capability to define, check, and manage instrument-specific operations procedures.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-4480#B	The ICC shall have the capability to monitor and evaluate instrument environmental parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B110320.010
ICC-4490#B	The ICC shall provide the capability for trend analysis of instrument parameters.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B120230.020
ICC-4500#B	The ICC shall provide the capability to generate instrument performance data based on the processing of instrument housekeeping data and instrument engineering data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-4510#B	The ICC shall have the capability to generate instrument status data based on instrument performance data and instrument anomaly data.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-4540#B	The ICC shall monitor the configuration of the instrument.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-4545#B	The ICC shall have the capability to recommend instrument reconfigurations.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.080
ICC-4550#B	The ICC shall have the capability to compare and display selected instrument telemetry parameter values with the expected values based on, at a minimum the following: a. Scheduled instrument operational mode b. Trend analysis c. Instrument-specific telemetry information in the IDB	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030 B110320.010
ICC-4560#B	The ICC shall maintain a record of the instrument configuration, including the state of instrument subsystems.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.020 B110310.030
ICC-4570#B	The ICC shall provide the capability to maintain a master ground image of the instrument memory.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120230.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-4580#B	The ICC shall provide the capability to compare the master ground image and the instrument memory dump.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B120230.020
ICC-4590#B	The ICC shall provide the capability to detect, isolate, and resolve instrument failures and anomalies.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.060
ICC-4600#B	The ICC shall accept from the IST at a minumum the following: a. Instrument anomaly notifications and instructions b. PI/TL analysis results c. Calibration information	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.060 B110310.030
ICC-4610#B	Upon request from the PI/TL, the ICC shall provide the IST with at a minimum the following: a. Instrument performance assessment data	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-4710#B	The ICC Instrument Data Base (IDB) shall include at a minimum the following: a. Instrument housekeeping data formats b. Instrument engineering data formats c. Housekeeping and engineering parameter descriptions d. Command descriptions e. Syntactical rules for commands and operator directives f. Operator directives g. Display formats h. Planning and scheduling definitions and constraints i. Analysis algorithms j. Report formats k. Derived telemetry parameter equations l. Parameter limits m. Instrument characteristics n. Command validation parameters	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4720#B	The ICC shall maintain the latest two versions of the IDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4730#B	The ICC shall have the capability to modify records in the IDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4740#B	The ICC shall provide syntax and structure checking of the IDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4750#B	The ICC shall provide accounting information on the contents of the IDB.	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4760#B	The ICC shall generate a report identifying any problems with the contents of the IDB.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4765#B	The ICC shall provide the PI/TL at the IST access to any data in the IDB.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4770#B	The ICC shall accept updates to the IDB from the IST.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-4775#B	The ICC shall provide the EOC with the instrument-specific portion of the PDB and/or updates thereto.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-4780#B	The ICC shall maintain a history log of instrument and ICC activities for at least 7 days, including at a minimum the following: a. All messages sent and received b. Engineering and housekeeping data c. Operator requests/directives and responses d. Commands e. Microprocessor loads and dumps f. Limits violations g. Error conditions h. Instrument status data i. Executed schedules j. Analysis results k. Instrument calibration parameters l. Spacecraft status information m. ICC reconfiguration information	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.020 B120230.020
ICC-4790#B	The ICC shall be capable of extracting data sets from the history log by specifying time and data type.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-4800#B	The ICC shall provide a designated DADS with the instrument history log or subsets of the history log and associated metadata.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.020
ICC-4810#B	The ICC shall accept storage status from the DADS indicating the success or failure of the storage of the history data.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020
ICC-4820#B	The ICC shall maintain the history log until the DADS has notified the ICC of successful storage.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.020
ICC-4830#B	The ICC shall be capable of storing documentation on-line for operator support, including at a minimum the following: a. Operator guides b. Operational procedures	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-6005#B	The ICC shall have the capability to schedule its systems and communications interfaces that are used for its instrument operations and for other activities including maintenance, upgrade, sustaining engineering, testing, and training.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-6010#B	The ICC shall participate in the scheduling of interface and end-to-end tests with the external elements involved including the EOC, the SMC for other EOS elements, and EDOS for MO&DSD data delivery systems.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-6020#B	The ICC shall establish its configuration, including functional connectivity within the ICC and between the ICC and external interfaces, for its instrument operations, tests, and maintenance.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-6030#B	The ICC shall perform prepass operational readiness tests on the ICC and between the ICC and external interfaces (via test messages).	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010
ICC-6040#B	The ICC shall support reconfiguration to work around ICC faults and anomalies without interrupting other ongoing operations.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6060#B	The ICC shall allow operator override for ICC reconfiguration requests that violate operational constraints.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6070#B	The ICC shall manage initialization and shutdown of ICC functions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.080
ICC-6080#B	The ICC shall provide the capability to analyze and report its internal performance at a minimum for the following: a. CPU utilization b. Processing throughput for plans and schedules, and commands c. Equipment downtime d. Mass storage utilization e. Communication resource utilization f. Data accounting	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.080 B110320.020 B110320.030
ICC-6090#B	The ICC shall alert the operator when its status changes or when data errors exceed operator-specified levels.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.040 B110210.080
ICC-6110#B	The ICC shall manage its faults, including at a minimum the following: a. Fault identification b. Identification of recommended solutions c. Log of fault activities through resolution	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6120#B	The ICC shall analyze and report the configuration, status, accounting, and performance information received from ICC components.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6130#B	The ICC shall be capable of initiating diagnostics to aid in isolating internal faults, using safeguards to prevent their operations from affecting other operations.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6135#B	The ICC shall participate in the resolution of failures and anomalies involving the interfaces of the ICC.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6140#B	The ICC shall provide tests for validating, verifying, and checking functional capabilities and performance for ICC functions after the ICC has been repaired or upgraded.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.080
ICC-6145#B	The ICC shall provide standard test data sets to be used in the validation of the ICC functions.	mission essential	inspection	(Testcase link to RBR for FOS not in RTM)	B110210.080

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-6150#B	The ICC shall provide the capability to support the instrument integration test activities associated with the instrument testing, spacecraft and instrument integration testing, and launch site testing.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110210.060 B110210.080 B110210.090
ICC-6195#B	The ICC shall provide the capabilities: a. To test both nominal operations and failure paths b. To log test activities and configuration c. To support analysis of test data and the generation of test results d. To maintain test procedures and test results	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110210.080 B110310.020 B110310.030
ICC-6200#B	The ICC shall provide capabilities to generate at a minimum the following: a. Security audit log b. ICC resource utilization report c. ICC status report d. ICC hardware/software configuration history	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.020
ICC-6205#B	The ICC status report shall include at a minimum the following: a. Compliance with LTIP b. Anomaly reports c. Maintenance reports	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-6210#B	The ICC shall provide the SMC and the EOC with access to ICC reports.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B080720.010 B110310.030
ICC-6510#B	The ICC shall provide the capability for the operator to control the ICC functions and components, utilizing a combination of input devices.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090
ICC-6520#B	The ICC shall provide the capability for the operator to send to displays, printers, and files spacecraft, instrument, and ground system information used or generated by each ICC function.	mission critical	inspection	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090
ICC-6525#B	The ICC shall provide the capability to notify the operator of events and alarms.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.010 B110210.030 B110210.040 B110210.050 B110210.060 B110210.070 B110210.080 B110210.090

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-6540#B	The ICC shall support the use of a high-level interactive control language, which consists of a set of directives and programming-like language capabilities, including at a minimum the following: a. Evaluate algebraic and logical expressions b. Exercise decision logic (IF statements) c. Automated execution of a set of multiple directives (i.e., user interface language procedure) d. Internally branch to other parts of the user interface language procedure e. Nest user interface language procedures within procedures f. Initiate other ICC applications	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.050 B110210.070 B110210.080 B110310.010 B110320.010
ICC-6580#B	The ICC shall provide the operator with the capability to create, modify, and delete user interface language procedures.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.040 B110210.050 B110210.070 B110210.080 B110310.010 B110320.010
ICC-6590#B	The ICC shall provide the capability for the operator to define the format and contents of text and graphics displays.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.010
ICC-6600#B	The ICC shall respond to user inputs within 0.5 seconds.	mission critical	demo	(Testcase link to RBR for FOS not in RTM)	B110320.010
ICC-6620#B	The ICC shall be capable of updating displays of rapidly changing information at rates of up to once per second.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110320.010
ICC-7010#B	The IST shall have the capability to accept from the ICC and display, in parallel with any current activities in the IST, a notification regarding at a minimum the following: a. Conflicts found in planning and scheduling b. Arrival of instrument engineering data c. Instrument anomalies found during instrument monitoring	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.060 B110210.090 B120210.030 B120230.010 B120230.020
ICC-7030#B	The IST shall have the capability to accept the requested data from the ICC in parallel with any current activities in the IST.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110210.060 B110210.090
ICC-7050#B	The IST shall have the capability to provide the ICC with updates to the IDB.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110110.020
ICC-7060#B	The IST shall have the capability to accept data from the Science Computing Facility (SCF), which include at a minimum the following data: a. Microprocessor memory loads b. Changes in the instrument parameters	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-7070#B	The IST shall have the capability to provide data to the SCF, which include at a minimum the following data: a. Microprocessor memory dumps b. Instrument analysis results	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.070 B110310.030
ICC-7210#B	The IST shall provide the capability to generate a request for an instrument activity and submit it to the ICC.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B120210.030
ICC-7214#B	The IST shall interface with the ICC to receive notification of request for instrument support activity receipt.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110140.010 B120210.030
ICC-7220#B	The IST shall have the capability to request and accept from the ICC planning and scheduling information, which includes, at a minimum, the following: a. LTSP and LTIP goals and priorities b. Current resource availability information c. Current predicted orbit data and related information d. Plans and schedules	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.040 B110130.040 B120210.010
ICC-7230#B	The IST shall have the capability to access planning and scheduling functions.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110120.010 B110120.020 B110120.030 B110120.040 B110130.010 B110130.020 B110130.030 B110130.040 B110130.060
ICC-7240#B	The IST shall accept from the ICC a request for resolving conflicts identified at the ICC while building or updating plans or schedules for its instrument.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.030 B120210.030
ICC-7250#B	The IST shall provide the capability to view and evaluate the requests for resolving problems of the instrument plans and schedules.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.030
ICC-7270#B	The IST shall provide the ICC with the results of evaluating the plans and schedules (in response to the conflict resolution requests from the ICC).	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110130.030 B120210.030
ICC-7290#B	The IST shall have the capability to request and accept from the ICC at a minimum the following: a. Current detailed activity schedule b. Instrument commands and memory loads c. Instrument command status	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110130.040 B110210.050 B120210.040
ICC-7330#B	The IST shall provide the capability to review instrument commands.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-7350#B	The IST shall provide the capability to generate and display a command request.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-7360#B	The IST shall have the capability to provide a command request to the ICC.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110210.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-7370#B	The IST shall have the capability to accept from the ICC command request status, which contains at a minimum the following: a. Receipt of the command request at the ICC b. Receipt of the commands at the EOC c. Status of command transmission to the spacecraft d. Receipt of the commands at the spacecraft e. Execution of the commands at the instrument	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.050
ICC-7390#B	The IST shall have the capability to send instrument microprocessor memory loads to the ICC.	mission essential	demo	(Testcase link to RBR for FOS not in RTM)	B110130.020 B120220.010
ICC-7400#B	In support of a TOO observation or a late change, the IST shall provide the corresponding command request to the ICC within 10 minutes of receiving initiation notification.	mission essential	analysis	(Testcase link to RBR for FOS not in RTM)	B110320.030
ICC-7430#B	The IST shall have the capability to request and accept from the ICC at a minimum the following: a. Real time instrument housekeeping and engineering data b. Real time spacecraft housekeeping data c. Derived parameters for its instrument d. Instrument performance assessment data	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B110310.030 B120230.010
ICC-7460#B	The IST shall provide the capability to display and process the raw or engineering unit converted instrument engineering data.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040 B120230.010
ICC-7500#B	The IST shall have the capability to analyze instrument housekeeping and engineering data to determine the instrument trend.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.030
ICC-7510#B	The IST shall have the capability to access any data in the ICC history log.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110310.020
ICC-7550#B	The IST shall provide the capability to notify the ICC of any instrument anomalies detected.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110210.040
ICC-8010#B	The ICC shall be capable of supporting the following simultaneous activities: a. Performing mission coordination, planning, scheduling, monitoring, and commanding of its instruments. b. At least two of the following: mission test activities, ICC system upgrades, training, and/or maintenance.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110110.010 B110210.090

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
ICC-8020#B	The ICC computer hardware shall be able to grow without redesign to twice the processing, storage, and communications capacities estimated for full system operation.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110320.040
ICC-8040#B	The ICC computer processing, storage, and communications capacity utilization shall be less than 50 percent at turnover for operations.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B110320.040
ICC-8050#B	When the ICC encounters a conflict while building or updating an instrument resource profile (or instrument resource deviation list), and the ICC does not have sufficient information to resolve the conflict, the ICC shall forward a request for its resolution to the PI/TL at the IST.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.030
IMS-0010#B	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.	mission essential	inspection	T231-42.02.06	B120810.010
IMS-0020#B	The IMS shall always be accessible to users and an informational status message describing the current availability status of ECS services and the predicted time for resumption of services which are temporarily unavailable shall be provided.	mission essential	demo	B230.02.24 B260.02.01 T222-30.02.05	B080160.030 B100110.010 B100110.020 B100110.030 B100310.010
IMS-0030#B	The IMS shall provide from each ECS access node, access to the full range of services spanning the whole of ECS, including data and services available from all DAACs without requiring that the user know the physical location of the data.	mission essential	demo	B230.02.12 B230.02.23 B260.02.03 T209-30.01.01 T209-32.02.04 T231-20.02.01 T231-31.01.03 T231-40.01.03	B080170.030
IMS-0040#B	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.	mission critical	test	B220.02.01 B260.02.01 T211-30.01.03 T222-30.02.01	B080630.020 B100110.010 B100310.010
IMS-0050#B	The IMS shall provide the capability for users to define and modify user profile information, to include at a minimum: a. User electronic address b. Data distribution media c. Data distribution address d. User expertise level e. Default query parameters f. Terminal characteristics g. Technical specialty.	mission essential	test	B220.02.04 B222.02.03 B230.02.14 B260.02.01 B260.02.03 T222-10.02.02	B080160.030 B100110.050
IMS-0060#B	The IMS shall, when creating ECS user accounts, request registration approval, user account priorities, and authorized user services from the SMC.	mission critical	test	B220.02.01 B260.02.01 T222-30.02.02	B080630.020 B100110.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0070#B	The IMS shall provide the user with initial system access procedures, priority information, and authorized services as maintained in the SMC.	mission essential	demo	B220.02.02 B260.02.01 T222-30.02.04	B080630.020 B100110.010 B100310.010
IMS-0080#B	The IMS shall maintain a list of authorized ECS services for each user and shall update the list with information supplied by the SMC.	mission essential	inspection	B220.02.01 B260.02.01 T211-30.01.03	B080630.020 B100110.040
IMS-0085#B	The IMS shall provide unregistered users access to ECS services as authorized by the SMC.	mission essential	inspection	B220.02.01 B260.02.01 T211-30.01.03	B080630.020 B100110.040
IMS-0090#B	The IMS shall be accessible to users via, at a minimum: a. Direct connection b. Dial up connection c. Network link	mission essential	inspection	B220.02.01 B260.02.01 T211-30.01.03	B080170.030 B100110.010 B100110.020 B100110.030 B100310.010
IMS-0100#B	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface d. Simulated sessions for training purposes	mission essential	inspection	B220.02.04 B230.02.20 B260.02.01 T222-10.02.02 T222-10.02.03 T222-10.02.04 T222-31.01.03 T222-31.01.09 T222-40.02.04 T231-62.01.03	B080160.030 B080450.020 B100110.020 B100110.030 B100110.050 B100310.010 B100410.070 B120120.020 B120120.030
IMS-0110#B	The IMS user interface shall support access from dumb terminals, both local and remote, as well as bitmap display workstations that do not support the IMS toolkit.	mission essential	inspection	B222.02.01 T222-31.01.03 T222-31.01.04	B080160.030 B100110.010 B100110.020 B100110.030 B100310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0120#B	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information base of associations between variables (e.g., between instruments and geophysical parameters) e. Ability to restore a session after interruption f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields i. Capability to save and restore the contents of a menu or form j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	mission essential	inspection	B220.02.06 B222.02.01 B222.02.02 B230.02.08 B230.02.10 B230.02.25 B260.02.01 B260.02.03 T222-10.02.03 T222-30.02.05 T222-31.01.03 T222-31.01.05 T222-31.01.08 T222-31.01.09 T222-32.01.03 T222-40.02.01 T222-40.02.02 T222-40.02.03 T222-40.02.04 T222-40.02.05 T222-40.02.06 T222-40.02.07 T231-31.02.05 T231-41.02.09 T231-51.01.03 T231-60.02.05	B080140.040 B080160.030 B080610.020 B100110.050
IMS-0130#B	The IMS shall verify that a user is authorized to access a particular IMS service before providing the service to the user.	mission critical	demo	B220.02.01 B260.02.01 T222-30.02.01	B100110.010 B100110.020 B100110.030 B100310.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0140#B	The IMS shall provide the capability for multiple simultaneous sessions _ for example, the capability to transition back and forth smoothly between directory search, inventory search, and data visualization. For example, when viewing a directory entry, the user shall have easy access to the corresponding guide (documentation/reference material) and inventory information.	mission fulfillment	demo	B220.02.04 B222.02.03 B230.02.11 B230.02.20 B230.02.25 B260.02.01 B260.02.03 T209-31.02.01 T209-31.02.02 T209-31.02.03 T209-31.02.04 T209-31.02.05 T209-31.02.06 T209-52.02.01 T209-52.02.02 T222-10.02.02 T222-10.02.03 T222-30.02.05 T231-31.02.04 T231-32.01.04 T231-32.01.05 T231-32.02.01 T231-41.02.03 T231-41.02.08 T231-41.02.10 T231-42.02.01 T231-42.02.02 T231-60.02.01 T231-60.02.02 T231-60.02.03 T231-60.02.04 T231-62.01.02 T231-62.01.03	B100120.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0150#B	The IMS shall supply a uniform user interface for access to the following at a minimum: a. Heterogeneous data sets b. Communications networks c. Data bases that are geographically dispersed d. Multi-disciplined directories and inventories	mission fulfillment	demo	B230.02.21 T231-51.02.05	B090110.030 B090120.070 B090130.060 B090140.050 B090160.010 B090160.020 B090160.030 B090170.030 B090210.030 B090220.070 B090230.060 B090240.050 B090250.060 B090270.010 B090270.020 B090280.030 B090310.030 B090320.070 B090330.070 B090340.060 B090350.050 B090360.060 B090380.010 B090380.020 B090380.030 B090390.030 B090410.020 B090420.070 B090430.060 B090440.050 B090470.010 B090470.020 B090470.030 B090480.030 B090510.030 B090520.060 B090530.050 B090550.010 B090550.020 B090550.030 B090560.030 B090610.070 B090620.060 B090630.050 B090650.010 B090650.020 B090660.030 B090710.050 B090720.060 B090810.060 B100110.010 B100120.020 B100410.070

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0160#B	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)	mission fulfillment	demo	T222-30.02.07 T231-62.01.04	B100110.010 B100110.020 B100110.030 B100110.060 B100120.020 B100310.010 B100310.030
IMS-0170#B	The IMS user interface shall be designed so that restructuring of the IMS data bases shall not result in the need for changes to the IMS interface.	mission fulfillment	analysis	B220.02.01 B260.02.01 T211-30.01.03	B100120.100
IMS-0180#B	The IMS shall extract relevant data from the user profile information and display as default values.	mission fulfillment	demo	B220.02.04 B222.02.03 B260.02.01 T222-10.02.02	B100110.050
IMS-0190#B	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.	mission essential	demo	B232.01.02 B232.02.02 T222-40.02.01 T222-40.02.04 T231-60.02.05 T232-20.01.05 T233-30.02.07	B080150.020
IMS-0210#B	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above	mission critical	demo	T231-10.01.03 T231-10.01.05 T231-32.02.02 T231-42.02.03 T231-51.02.01 T231-51.02.06 T231-52.01.02 T231-52.01.03 T231-52.02.01	B080150.020
IMS-0220#B	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.	mission essential	demo	B230.02.23 T231-10.01.01 T231-20.02.01 T231-31.01.01 T231-32.01.01 T231-41.02.01 T231-51.02.02 T231-51.02.06	B080150.020
IMS-0230#B	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.	mission critical	demo	T222-20.02.06 T231-10.01.01 T231-10.01.02 T231-32.02.02 T231-42.02.03 T231-51.01.03 T231-52.01.03 T231-52.02.01	B080150.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0240#B	The IMS shall provide, at a minimum, data base administration utilities for: a. Modifying the data base schema b. Performance monitoring c. Performance tuning d. Administration of user access control e. On-line incremental backup f. On-line recovery g. Export/import of data	mission critical	demo	B253.02.07 B253.02.08 T209-11.02.05 T209-51.02.09 T209-72.02.01 T209-72.02.02 T209-72.02.03 T231-10.01.01 T231-10.01.02 T231-10.01.03 T231-10.01.05 T231-31.01.01 T231-31.02.02 T231-40.01.05 T231-41.02.01 T231-41.02.02 T231-51.01.02 T231-51.02.01 T231-51.02.06	B080150.020 B100120.100 B100410.070
IMS-0250#B	The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a maintenance session and restart the session without loss of information	mission essential	demo	T231-10.01.02 T231-31.01.01 T231-31.02.02 T231-40.01.05 T231-41.02.01 T231-41.02.02 T231-51.02.01 T231-51.02.06	B080150.020 B100120.100 B100410.070
IMS-0260#B	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.	mission essential	demo	T209-12.02.07 T222-31.01.03 T222-31.01.06 T222-31.01.09 T231-32.02.02 T231-51.02.01 T231-52.02.01	B080150.020 B100120.010 B100410.070
IMS-0270#B	IMS shall maintain information on the science processing library holdings and provide the capability for users to search for and order science processing library software.	mission essential	demo	B232.02.01 T231-20.02.02 T232-10.02.02	B100120.020 B100420.020 B100420.030
IMS-0280#B	The IMS shall maintain DAR generation information, for example, instrument information received from the ICC and spacecraft information received from the EOC, in a data base which will be accessible during the DAR planning and submittal process.	mission critical	demo	B230.02.10 B230.02.11 B230.02.17 B232.02.02 B260.02.03 T209-52.02.02 T233-30.02.03	B120310.010
IMS-0290#B	IMS internal data base management queries shall be expressed in a standard query language.	mission fulfillment	analysis	T231-40.01.04	B080150.020 B100110.010 B100410.070 B100420.020
IMS-0300#B	The IMS shall maintain a log of all information update activity.	mission essential	inspection	B220.02.01 B260.02.01 T211-30.01.03	B090140.050 B090240.050 B090350.050 B090440.050 B090530.050 B090630.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0320#B	Standard Product related metadata shall contain, at a minimum: a. Keywords and glossary from investigators b. Keywords, synonyms, and glossary for cross-product and cross-directory referencing c. Identifiers for locating products in the DADS archive by granule d. Documentation on algorithms, including version history, authors, written description of product, equations, and references e. Documentation on instrument(s) and spacecraft(s) including history of housekeeping and ancillary parameters, discipline characterization, calibration parameters, key individuals, and references f. Identifiers, algorithms, written descriptions, equations, authors, and references associated with static browse products and subsetted, subsampled, and summary data products g. Published papers, research results, significant results, and references by author and date h. Key organizations and personnel for all product-related DAACs, ADCs, and ODCs i. Granule-specific information as listed in Tables C-10 and C-11 in Appendix C	mission essential	inspection	B230.02.07 B232.02.01 B232.02.02 T231-10.01.02 T231-10.01.03 T231-10.01.04 T231-51.01.01 T231-51.02.01 T231-51.02.02 T231-51.02.06 T231-51.02.07 T231-52.01.02 T231-52.01.03 T231-52.02.01 T232-10.02.03 T233-30.02.05	B090120.050 B090130.040 B090220.050 B090230.040 B090320.050 B090330.050 B090340.040 B090420.050 B090430.040 B090460.030 B090610.050 B090620.040 B090720.040 B090810.040 B100120.020
IMS-0330#B	The metadata maintained by the IMS shall provide a cross reference that relates science data to the following at a minimum: a. Calibration data, navigation data, and instrument engineering data b. Processing algorithms used for data generation at the PGS c. Software used for data generation at the PGS d. Parameters used for data generation at the PGS e. Input data used for data generation at the PGS f. Data recipients g. The PGS at which the data was processed h. QA and validation data, reports, and algorithms	mission essential	demo	B240.02.02 B260.02.02 T209-42.02.03	B090120.050 B090130.040 B090220.050 B090230.040 B090320.050 B090330.050 B090340.040 B090420.050 B090430.040 B090460.030 B090610.050 B090620.040 B090720.040 B090810.040 B100120.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0340#B	The metadata maintained by the IMS shall contain content-based summary information, including statistical summaries and granule features, for all ECS standard and special products.	mission essential	inspection	B232.01.01 B232.02.02 T232-10.01.01 T233-30.02.05 T233-30.02.06	B090120.050 B090130.040 B090220.050 B090230.040 B090320.050 B090330.050 B090340.040 B090420.050 B090430.040 B090460.030 B090610.050 B090620.040 B090720.040 B090810.040 B100120.020
IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.	mission critical	inspection	T231-32.02.02 T231-51.01.03 T231-52.02.01	B090140.050 B090240.050 B090350.050 B090440.050 B090530.050 B090630.050
IMS-0355#B	The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.	mission fulfillment	analysis	T231-31.01.01 T231-41.02.01	B100120.020
IMS-0356#B	The IMS shall provide a mechanism to create and update directory entries on EOSDIS data sets and forward directory entries in the appropriate format to the Global Change Master Directory.	mission fulfillment	analysis	B230.02.23	B080160.030
IMS-0360#B	The IMS shall maintain or provide access to an on-line Earth Science master directory of information, which may be geographically distributed, that describes whole data sets in the Earth science disciplines.	mission essential	demo	B230.02.23	B100110.060 B100310.030
IMS-0380#B	The IMS shall provide the capability to exchange directory data with IP data centers, ADCs, and selected ODCs.	mission essential	demo	B230.02.23	B080170.020 B100140.010 B100320.010 B120640.050
IMS-0390#B	The IMS shall maintain or provide access to directory entries for all data sets accessible through the IMS search and order service.	mission essential	demo	B230.02.23 T231-20.02.01	B100110.060 B100120.010 B100310.030 B100420.020 B100420.030 B120340.010
IMS-0410#B	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOSDIS data sets.	mission essential	demo	B230.02.21	B080150.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0415#B	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.	mission essential	demo	T222-31.01.03	B100110.070 B100310.040 B100420.020 B120340.010
IMS-0420#B	The IMS on-line guide (documentation /reference material) shall provide or, where appropriate, contain references to such information as: a. Documentation of processing algorithms used for EOS and other Earth science data products generated by the ECS b. Results of science data quality assessments of EOS data c. Bibliography of published and unpublished literature (as available) derived from the project d. Cross references between differing studies of the same data e. Other documents relevant to quality assessment of EOS data f. Product specifications g. Instrument specifications h. Summaries of data sets derived from observation logs i. Format options available for the given data set j. Subsetting, subsampling, and transformation options available for the given data set k. Inventory search options available for the given data set	mission essential	demo	B244.02.03 B244.02.04 T209-10.01.02	B100110.070 B100310.040
IMS-0430#B	The IMS shall maintain an on-line inventory with information that individually describes each granule of EOSDIS data, where granule refers to the minimum traceable logical unit of data stored in the archives, as defined by the instrument science team.	mission essential	analysis	B244.02.04	B080430.010 B100110.080 B100310.050 B120340.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0440#B	The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.	mission essential	demo	B244.02.04	B090110.030 B090120.070 B090130.060 B090140.050 B090160.010 B090160.020 B090160.030 B090170.030 B090210.030 B090220.070 B090230.060 B090240.050 B090250.060 B090270.010 B090270.020 B090280.030 B090310.030 B090320.070 B090330.070 B090340.060 B090350.050 B090360.060 B090380.010 B090380.020 B090380.030 B090390.030 B090410.020 B090420.070 B090430.060 B090440.050 B090470.010 B090470.020 B090470.030 B090480.030 B090510.030 B090520.060 B090530.050 B090550.010 B090550.020 B090550.030 B090560.030 B090610.070 B090620.060 B090630.050 B090650.010 B090650.020 B090660.030 B090710.050 B090720.060 B090810.060 B110310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0450#B	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.	mission essential	test	T209-42.02.02	B080160.010 B090110.030 B090120.060 B090130.050 B090140.040 B090150.030 B090160.010 B090160.020 B090160.030 B090170.030 B090210.030 B090220.060 B090230.050 B090240.040 B090250.050 B090260.030 B090270.010 B090270.020 B090280.030 B090310.030 B090320.060 B090330.060 B090340.050 B090350.040 B090360.050 B090370.030 B090380.010 B090380.020 B090380.030 B090390.030 B090410.020 B090420.060 B090430.050 B090440.040 B090450.030 B090460.030 B090470.010 B090470.020 B090470.030 B090480.030 B090510.030 B090520.050 B090530.040 B090540.030 B090550.010 B090550.020 B090550.030 B090560.030 B090610.060 B090620.050 B090630.040 B090640.030 B090650.010 B090650.020 B090660.030 B090710.040 B090720.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B090810.050
IMS-0455#B	The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: a. Purges b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss	mission essential	test	T209-42.02.02	B080130.020 B080140.040 B080160.010 B090110.010 B090120.040 B090130.030 B090140.040 B090210.010 B090220.040 B090230.030 B090240.040 B090250.040 B090310.010 B090320.040 B090330.040 B090340.030 B090350.040 B090360.040 B090410.010 B090420.040 B090430.030 B090440.040 B090510.010 B090520.030 B090530.040 B090610.040 B090620.030 B090630.040 B090720.030 B090810.030
IMS-0460#B	The IMS shall provide the capability to accept metadata problem reports from users, and inform the PGS quality assurance staff of the problem.	mission fulfillment	demo	T209-22.02.02	B080720.020 B120710.020
IMS-0480#B	The IMS shall allow the user to store documents in the ECS.	mission essential	demo	B244.02.03 B244.02.04 T209-10.01.01 T222-31.01.06	B090120.060 B090130.050 B090220.060 B090230.050 B090320.060 B090330.060 B090340.050 B090420.060 B090430.050 B090460.030 B090520.050 B090610.060 B090620.050 B090710.040 B090720.050 B090810.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0490#B	The IMS shall provide the capability to ingest documentation in a number of digital text formats, at a minimum the following: a. ASCII text b. Microsoft WORD c. HTML d. Interleaf e. Postscriptf. WordPerfect	mission essential	demo	B244.02.03 B244.02.04 T209-10.01.01 T222-31.01.06	B090120.020 B090120.030 B090130.020 B090220.030 B090230.020 B090320.030 B090330.020 B090330.030 B090340.020 B090420.030 B090520.020 B090610.030 B090620.020 B090710.030 B090720.020 B090810.020
IMS-0500#B	The IMS shall provide access to information to include at a minimum: a. Metadata b. Spacecraft housekeeping and ancillary data information c. Engineering data d. EOC historical data e. Data acquisition plans and schedules f. Processing schedules g. Documentation h. ESDIS Project Policies and Procedures obtained from SMC data base i. Science Processing Library software j. Documentation on data format and metadata standards	mission essential	demo	B230.02.01 B230.02.05 B230.02.07 B230.02.10 B232.02.01 B232.02.02 B260.02.03 B260.02.04 T222-31.01.03 T222-31.01.06 T222-31.01.07 T232-10.02.02 T232-10.02.03 T233-30.02.03	B100120.020 B100410.070
IMS-0510#B	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information f. Geographic reference aids g. Spacecraft location projections.	mission critical	demo	B220.02.07 B230.02.09 B230.02.10 B230.02.16 B232.01.02 B232.02.02 B260.02.03 T222-20.02.04 T222-20.02.07 T231-52.01.01 T232-20.01.06 T233-30.02.03	B100120.020
IMS-0530#B	The IMS shall provide document text search.	mission essential	demo	B230.02.21	B100110.060 B100310.030
IMS-0535#B	The IMS shall support hierarchical searching of suitably structured documents.	mission fulfillment	demo	B230.02.21 T231-51.02.05	B100110.060 B100310.030
IMS-0540#B	The IMS shall display PGS system processing schedules to users.	mission fulfillment	demo	B230.02.14 B260.02.03	B100120.050
IMS-0545#B	The IMS shall provide the capability to search a products processing history.	mission fulfillment	demo	B230.02.01 B230.02.05 B232.02.01 B260.02.04 T232-10.02.02	B100120.040 B100420.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0550#B	The IMS shall allow a user to locate and identify desired data without detailed knowledge of the ECSs: a. Architecture b. Data Base management system c. Data Base structure d. Query languages e. Data formats	mission fulfillment	demo	B230.02.12 B232.01.01 B232.02.01 B240.02.10 B240.02.11 B260.02.03 T209-30.01.01 T209-32.02.04 T231-31.01.03 T231-32.01.02 T231-40.01.03 T231-40.01.04 T231-41.02.01 T231-41.02.04 T231-52.01.02 T231-60.02.05 T232-10.01.01 T232-10.02.04	B100120.020
IMS-0560#B	The IMS shall decompose complex data base search requests into executable data base queries in a manner which is transparent to the user.	mission fulfillment	demo	B232.01.01 B232.01.02 B232.02.01 T231-31.01.01 T231-31.01.02 T231-31.02.03 T231-32.01.02 T231-32.01.03 T231-32.01.05 T231-32.01.06 T231-32.02.03 T231-40.01.01 T231-40.01.02 T231-40.01.03 T231-40.01.04 T231-41.02.01 T231-41.02.02 T231-41.02.04 T231-41.02.05 T231-41.02.06 T231-42.02.02 T231-42.02.03 T231-42.02.04 T231-42.02.05 T231-51.01.02 T231-60.02.01 T231-60.02.05 T232-10.01.01 T232-10.02.04 T232-20.01.06	B080150.020
IMS-0570#B	The IMS shall provide an incremental search capability.	mission fulfillment	demo	B232.02.02 T231-32.01.03 T231-40.01.02 T233-30.02.07	B100120.020 B100420.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0575#B	The IMS shall provide the capability to search across multiple data sets for coincident occurrences of data in space and/or time and any other attribute(s) of metadata.	mission essential	demo	B232.02.01 T231-32.01.03 T231-40.01.01 T231-40.01.04 T231-41.02.01 T231-41.02.02 T231-41.02.05 T231-41.02.06 T231-42.02.02 T231-42.02.03 T231-42.02.04 T231-42.02.05 T231-51.01.02 T232-10.02.01	B100120.020 B100420.020
IMS-0580#B	The IMS shall provide geographic and geophysical (e.g. ocean bathymetry surface features) overlays to aid in the selection of spatial data and to enhance the display of metadata.	mission fulfillment	demo	B220.02.07 B230.02.28 B232.01.02 T222-20.02.03 T222-20.02.04 T222-20.02.07 T232-20.01.01 T232-20.01.02 T232-20.01.03 T232-20.01.07	B100120.020 B100120.030
IMS-0590#B	The IMS shall provide the capability to distribute information: a. On-line (i.e., over a network) b. Off-line (hardcopy or offline data media).	mission essential	demo	B230.02.21	B100120.080 B100410.030 B100410.050 B100430.040
IMS-0600#B	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.	mission essential	demo	B230.02.01	B100110.060 B100140.020 B100310.030 B100320.030 B100420.020
IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.	mission essential	demo	B230.02.01 B232.01.02 B232.02.01 B260.02.04 T231-31.01.03 T231-40.01.03 T232-10.02.01 T232-20.01.04	B100110.080 B100310.050 B100420.020 B120730.020 B120730.030 B120730.050 B120740.010
IMS-0620#B	The IMS shall provide access to inventories of selected ODCs and ADCs via level II and level III catalog interoperability as specified in ICDs.	mission essential	demo	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04	B100140.010 B100140.020 B100140.030 B100140.040 B100320.010 B100320.020 B100320.030 B100320.040 B120730.040 B120730.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0625#B	The IMS shall provide bi-directional interoperability between ECS and V0 for access to the inventory metadata, guide information, and browse products via level III catalog interoperability as specified in ICDs.	mission fulfillment	demo	T231-61.01.01 T231-61.01.02 T231-61.01.03	B100130.020 B100130.040 B100310.020
IMS-0630#B	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof	mission essential	test	B232.01.01 B232.01.02 B232.02.01 T231-20.02.02 T231-32.01.02 T231-41.02.06 T231-41.02.07 T231-51.01.01 T232-10.01.02 T232-10.01.03 T232-10.01.04 T232-10.01.05 T232-10.02.04 T232-20.01.01 T232-20.01.02 T232-20.01.03	B100120.020
IMS-0640#B	The IMS shall provide the capability to query geographic metadata by any of the following criteria at a minimum: a. Geographic reference b. Data element content (as specified in metadata) c. Minimum bounding rectangle d. Point and radius e. Polygon f. Geographic name (based on a standard data base, such as USGS Geographic Names Information System) g. WRS h. Any combination of the above	mission essential	test	B230.02.16 B232.01.02 B232.02.01 T232-10.02.01 T232-20.01.01 T232-20.01.02 T232-20.01.03 T232-20.01.05 T232-20.01.07	B100120.020
IMS-0650#B	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Logical and Boolean operators g. Min/max range search h. Any combination of the above	mission essential	test	B232.01.01 B232.02.01 T231-20.02.02 T231-32.01.02 T231-41.02.06 T231-41.02.07 T231-51.01.01 T232-10.01.02 T232-10.01.03 T232-10.01.04 T232-10.01.05 T232-10.02.01 T232-10.02.04	B100120.020
IMS-0660#B	The IMS shall provide inventory metadata search based on any combination of the core (Table C-10, Appendix C) and where applicable dataset-specific (Table C-11, Appendix C) inventory metadata attributes and geophysical parameters at a minimum.	mission essential	test	B230.02.01 B232.01.02 B260.02.04 T231-10.01.06 T232-20.01.04	B100120.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0665#B	The IMS shall provide informational messages to indicate that a query is being executed, and shall provide the capability for the user to abort any time-intensive operations.	mission essential	demo	B230.02.04 B230.02.11 B232.02.02 B260.02.03 B260.02.04 T209-12.02.03 T209-32.02.02 T209-52.02.01 T209-52.02.02 T222-30.02.05 T231-31.01.02 T231-31.02.02 T231-32.02.01 T231-40.01.02 T231-40.01.05 T231-41.02.03 T233-30.02.08	B100120.020
IMS-0670#B	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.	mission fulfillment	demo	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T222-30.02.06 T231-10.01.07 T231-40.01.01	B100120.050 B100120.060 B100420.030 B120650.020
IMS-0680#B	The IMS shall provide data order capabilities integrated with metadata search capabilities.	mission essential	demo	B232.02.02 T233-30.02.05	B100120.050 B100420.030
IMS-0690#B	The IMS shall provide the capability to visualize pre-order data products and metadata (e.g. coverage maps, summary data) to facilitate the data selection and ordering process.	mission essential	demo	B232.01.02 B232.02.02 T222-20.02.09 T232-20.01.07 T233-30.02.01	B100110.090 B100310.060 B100410.010 B100420.030
IMS-0700#B	The IMS shall provide the capability for users to request subsetted, subsampled, and summary data products, which have been processed at the PGS during the routine production processing and archived at the DADS, whenever associated inventory information is displayed.	mission essential	demo	B232.02.02 T233-30.02.06	B100120.040 B100420.030
IMS-0705#B	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat 7 subinterval indentified by: a. WRS b. Geographic location (x,,z) spatial with rectangular boundries c. Spectral Band d. Time	mission essential	demo	B232.02.02 T209-32.02.01 T233-30.02.06	B100120.040 B120650.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0720#B	The IMS shall provide the capability to request data products which are processed ad hoc in response to user requests for subsetting, subsampling, or averaging within a granule based on defined criteria to include: a. Geographical location (x, y, z - spatial with rectangular boundaries) b. Spectral band c. Time d. WRS	mission essential	test	B230.02.15	B100120.040 B100410.010
IMS-0730#B	The IMS shall, using information supplied by the DADS, provide the user an estimate of how long it will take before subsetted, subsampled, and summary data products are ready for visualization.	mission fulfillment	demo	B230.02.14 B260.02.03	B100120.040
IMS-0740#B	The IMS shall provide the capability for users to generate and update requests for one-time orders or standing orders for the DADS to distribute DADS archive holdings to include, at a minimum, Standard Products, Standard Product software, EOC historical data, spacecraft housekeeping and ancillary data, and engineering data.	mission essential	demo	B230.02.02 B230.02.03 B230.02.11 B230.02.13 B230.02.22 B232.02.02 B260.02.03 B260.02.04 T209-42.02.03 T209-52.02.02 T209-91.02.01 T209-91.02.02 T209-91.02.03 T221-40.02.02 T221-40.02.03 T222-30.02.05 T231-10.01.07 T233-30.02.04	B100120.050 B100120.060 B100410.030 B100410.050 B100430.040
IMS-0750#B	The IMS shall provide the capability for the user to order Standard Product software and associated documentation in accordance with EOSDIS distribution criteria.	mission fulfillment	demo	B230.02.13 B260.02.03	B100120.050 B100120.060
IMS-0760#B	The IMS shall access distribution criteria for each data product and data product software and compare the distribution criteria to the requester's data access rights to verify that the data and software can be distributed as requested.	mission essential	test	B232.02.02	B100120.080
IMS-0770#B	The IMS shall allow users to formulate a data order based on any combination of the inventory core metadata attributes and geophysical parameters at a minimum.	mission essential	test	B232.02.02 T233-30.02.05	B100120.050 B100120.060 B100420.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0780#B	The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.	mission essential	test	T231-61.01.03	B100120.050 B100120.060 B120340.020 B120340.060 B120410.050 B120430.050 B120440.070 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.040 B120650.030 B120730.010 B120730.020 B120730.030 B120730.040 B120730.050 B120740.010
IMS-0790#B	The IMS shall determine the location of requested data products and submit the product order to the data center where the data are archived.	mission essential	test	T231-40.01.04	B100120.050 B100120.060
IMS-0800#B	The IMS shall determine the amount of data expected to be returned as the result of the product order and provide the information to the requester.	mission fulfillment	demo	B230.02.14 B260.02.03	B100110.100 B100410.030 B100410.050 B100420.030 B100430.040
IMS-0810#B	The IMS shall prepare, for output to the DADS, product orders to retrieve specified data from the archive and distribute it, which contains the following information at a minimum: a. Requester identification b. Data type c. Data set identifier d. Data set subsetting instructions e. Data formats f. Distribution instructions, including media requirements g. Request priority h. Suggested earliest start time i. Suggested latest completion time	mission essential	test	B232.02.02 T233-30.02.02	B100120.050 B100410.030 B100410.050 B100420.030 B100430.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0820#B	The IMS shall provide to the user product order status information from the DADS to confirm or reject an order, which contains the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times	mission essential	test	B230.02.14 B260.02.03	B100120.060 B120340.040 B120340.060
IMS-0830#B	The IMS shall, using information provided by the DADS, notify users when products will not be distributed within the estimated time, and provide the reason for the delay and modified arrival times.	mission essential	test	B230.02.13 B260.02.03	B080620.010
IMS-0840#B	The IMS shall provide the capability to receive data order status from the DADS when the ordered data has been shipped to the user.	mission essential	demo	B230.02.14 B260.02.03	B100120.050 B100120.060 B100420.030
IMS-0860#B	The IMS shall provide an interface to ADC and ODC data systems and archives that produce, process, and/or maintain Earth science data sets and that have agreed to make the information and services available to ECS.	mission essential	demo	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04	B080170.020 B100140.010 B100140.020 B100140.030 B100140.040 B100320.010 B100320.020 B100320.030 B100320.040 B120120.020 B120730.040 B120730.050
IMS-0870#B	The IMS shall provide access in accordance with MOUs to ADC and ODC data that: a. Has been generated by ADC and ODC data systems b. Is stored by ADC and ODC archives and requested by EOSDIS users c. Is required as ancillary data for production processing	mission essential	test	B230.02.06 T231-40.01.03 T231-61.01.01	B080170.020 B100140.010 B100140.020 B100140.030 B100140.040 B100320.010 B100320.020 B100320.030 B100320.040 B120730.040 B120730.050
IMS-0890#B	The IMS shall provide the capability to receive the metadata from the DADS when ADC or ODC data has been ingested into the ECS archives.	mission essential	test	B232.02.02	B080170.020
IMS-0900#B	The IMS shall provide an interface to the IPs for ordering data to be delivered directly to the user or to a DADS.	mission essential	test	B232.02.02 T233-30.02.05	B100110.100 B120310.040 B120310.050 B120340.040 B120640.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0910#B	he IMS shall provide the capability to receive the metadata from the DADS, when IP data has been ingested into the EOSDIS archives.	mission essential	test	B232.02.02 T233-30.02.05	B090420.060 B090440.040 B090470.010 B090470.020 B090470.030 B090480.030 B100410.040 B100430.010
IMS-0915#B	The IMS shall provide an interface to the Version 0 system for ordering data products to be delivered directly to the user, or as specified in ICDs.	mission essential	test	B230.02.13 B260.02.03 T231-61.01.01 T231-61.01.03	B100130.020
IMS-0920#B	The IMS shall provide the capability for users to construct and submit standing orders and one-time requests for processing of ECS data by pre-existing processes, which shall contain the following information at a minimum: a. Requester identification b. Algorithm input requirements c. Text description of need for processing d. Level 0-4 data set/subset e. Required time of generation f. Requested priority for product processing g. Resulting product type h. Processing parameters	mission essential	test	B230.02.02 B230.02.03 B230.02.11 B230.02.22 B260.02.03 B260.02.04 T209-52.02.02 T209-91.02.01 T209-91.02.02 T209-91.02.03 T221-40.02.02 T221-40.02.03 T231-10.01.07	B100120.050 B100120.060 B100420.030
IMS-0925#B	The IMS shall provide the capability for users to construct a Product Order associated with a Product Processing Order.	mission essential	test	B232.02.02 T233-30.02.04	B100120.050 B100420.030
IMS-0930#B	The IMS shall provide the capability to search metadata holdings for the purpose of identifying the product desired and the input data to be processed.	mission essential	test	B230.02.05 B232.02.02 B260.02.04 T209-32.02.07 T233-30.02.07	B100120.020 B100420.020
IMS-0940#B	The IMS shall integrate the searching of metadata holdings for identifying information needed to complete a processing request into the request construction and submission process.	mission essential	test	B232.02.02 T233-30.02.07	B100120.020 B100420.020
IMS-0950#B	The IMS shall accept from the originator changes to existing standing orders for data to be processed by the PGS.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.060 B100420.030
IMS-0960#B	The IMS shall provide the capability to request priority processing of requested data.	mission essential	test	B260.02.03	B100120.050 B100140.040 B100320.020 B100430.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-0970#B	The IMS shall determine if requested data products already exist and can be retrieved.	mission essential	test	B230.02.13 B260.02.03	B100120.050 B100430.030
IMS-0980#B	The IMS shall determine the necessary processing required to generate a requested product.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.050
IMS-0990#B	The IMS shall determine if necessary lower level products exist for processing of the requested data product.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.050 B100430.030
IMS-1000#B	The IMS shall prepare, for output to the PGS, the Product Processing Order for specifying processing and data to be used in generating a product, which shall contain the following information at a minimum: a. Identification of the product(s) to be generated b. Identification of the expected time/time window of receipt of input products, and ancillary data c. Product processing priority d. Destination(s) of product output e. Suggested earliest start time f. Suggested latest completion time	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.050
IMS-1005#B	The IMS shall forward, to the appropriate DADS, Product Orders for distribution of the products generated as a result of the Product Processing Order.	mission essential	test	B232.02.02 T233-30.02.04	B100120.050
IMS-1010#B	he IMS shall accept from the PGS a processing status message to confirm or reject a processing order, which shall contain the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times.	mission essential	test	B230.02.13 B230.02.14 B240.02.07 B260.02.03	B080160.030 B090150.010 B090150.020 B090150.030 B090260.010 B090260.020 B090260.030 B090370.010 B090370.020 B090370.030 B090450.010 B090450.020 B090450.030 B090540.010 B090540.020 B090540.030 B090640.010 B090640.020 B090640.030 B100420.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1020#B	The IMS shall prepare, for output to the SMC, a request for conflict adjudication in the event a processing conflict cannot be resolved between the IMS, the requester, and the PGS.	mission critical	test	B230.02.18	B080320.010 B080320.020 B080320.030
IMS-1030#B	The IMS shall accept from the SMC and provide to the requester, conflict resolution, which shall contain the following information at a minimum: a. Request identification b. Data type c. Priority modifications d. Account balance modifications e. Information on when request will be serviced f. SMC contact point	mission essential	test	B230.02.18	B080320.010 B080320.020 B080320.030
IMS-1040#B	The IMS shall, using information provided by the PGS, notify users when processing will not be completed within the estimated time, and provide the reason for the delay and modified arrival times.	mission essential	test	B230.02.14 B253.02.09 B260.02.03	B100120.050 B100120.060
IMS-1050#B	The IMS shall provide the capability to notify the user community if data has been reprocessed.	mission fulfillment	demo	B230.02.14 B260.02.03	B100120.070 B120330.060
IMS-1060#B	The IMS shall maintain a cross reference of processing performed, data sets produced, supporting data used, and data recipient.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.050
IMS-1070#B	The IMS shall provide the capability for users to construct DARS for collection of ASTER instrument data which shall contain the following information at a minimum: a. Observation number b. Experimenter identification c. Experimenter address d. Investigation identification e. Scientific discipline f. Observation repetition period g. Tolerance in observation time h. User priority i. Scheduling priority and target of opportunity flag j. Descriptive text k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates l. Earliest start time m. Latest stop time n. Minimum coverage required o. Maximum coverage desired	mission critical	demo	B230.02.08 B230.02.09 B260.02.03	B120310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1071#B	The IMS shall provide the capability for users to construct a Product Order associated with a Data Acquisition Request.	mission essential	demo	B230.02.11 B260.02.03	B120310.040
IMS-1072#B	The IMS shall provide the capability for users to construct a Product Processing Order associated with a Data Acquisition Request.	mission essential	demo	B230.02.11 B260.02.03	B120310.040
IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.	mission critical	demo	B230.02.11 B230.02.22 B260.02.03 T209-42.02.03 T209-52.02.02 T209-91.02.01 T209-91.02.02 T209-91.02.03 T221-40.02.02 T221-40.02.03	B100120.050 B100120.060
IMS-1090#B	The IMS shall accept requests for changes to existing ASTER DARs from the requester and forward the changes to the ASTER GDS.	mission critical	demo	B230.02.11 B260.02.03	B110140.010 B110210.020
IMS-1100#B	The IMS shall accept from the EOC the current data acquisition schedules and plans and make the data acquisition schedules and plans accessible to authorized users on request.	mission essential	test	B230.02.10 B232.02.02 B260.02.03 T233-30.02.03	B120310.010
IMS-1105#B	The IMS shall maintain or provide access to climatology databases for DAR generation.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B120310.020
IMS-1130#B	The IMS shall provide descriptive information on instruments and parameters available in Standard Products to help with the creation of data acquisition requests for the ASTER.	mission essential	test	B230.02.10	B120310.020
IMS-1140#B	The IMS shall provide ASTER instrument specific graphic displays to help with the creation of data acquisition requests, which shall include at a minimum: a. Geographic reference aids b. Spacecraft location projections	mission essential	demo	B230.02.09 B230.02.10 B260.02.03	B120310.020
IMS-1150#B	The IMS shall provide product specific help to identify instruments needed to create a product.	mission essential	test	B230.02.10 B260.02.03	B120310.020
IMS-1160#B	The IMS shall provide instrument specific default settings for instrument configurable parameters.	mission essential	inspection	B230.02.08 B260.02.03	B120310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1170#B	The IMS shall provide instrument specific help to assist with setting instrument parameters.	mission essential	test	B230.02.08 B230.02.10 B260.02.03	B120310.020
IMS-1180#B	The IMS shall validate that user specified instrument settings are within the range of acceptable values.	mission critical	test	B230.02.08 B260.02.03	B120310.030
IMS-1190#B	The IMS shall validate DAR parameters against EOC provided constraints.	mission critical	test	B230.02.08 B260.02.03 T231-62.01.01	B120310.030
IMS-1195#B	The IMS shall validate DAR parameters against constraints provided by external instrument operations facilities (e.g. ASTER) as applicable and in accordance with applicable MOUs.	mission critical	test	B230.02.08 B260.02.03 T231-51.01.02 T231-62.01.01	B090460.010 B120310.030
IMS-1210#B	The IMS shall forward the processing product orders associated with a DAR to the appropriate PGS.	mission essential	test	B230.02.11 B260.02.03	B120310.040
IMS-1220#B	The IMS shall forward, to the appropriate DADS, product orders for distribution of the products generated as a result of the DAR.	mission essential	test	B230.02.11 B260.02.03	B120310.040
IMS-1230#B	The IMS shall accept from the ASTER GDS and provide to the requester such information as data acquisition request confirmation or rejection, and notification of data acquisition request scheduling and completion, to include at a minimum: a. Date and time b. Instrument ID c. Data acquisition request ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection	mission critical	test	B230.02.08 B230.02.11 B260.02.03 T209-52.02.01 T209-52.02.02	B120310.060 B120320.020
IMS-1240#B	The IMS shall be expandable to accept from the IP Information Management System or an equivalent IP facility the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft, and shall make the schedules and plans accessible to authorized users on request, in accordance with applicable MOUs.	mission essential	analysis	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B080330.020
IMS-1250#B	The IMS shall be expandable to forward DARs for U.S. instruments on IP spacecraft to the IP Information Management System or an equivalent IP facility, in accordance with applicable MOUs.	mission critical	analysis	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B080170.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1260#B	The IMS shall be expandable to provide the capability to receive, from the IP Information Management System or an equivalent IP facility, data acquisition request status in accordance with applicable MOUs and provide the status to the data acquisition requester.	mission essential	test	B230.02.11 B260.02.03	B080170.020 B120320.020
IMS-1261#B	The IMS shall provide the capability to forward data acquisition requests to the ASTER GDS, in accordance with applicable IRDs and ICDs.	mission critical	test	T209-52.02.01	B090460.010 B120310.050
IMS-1262#B	The IMS shall provide the capability to request and receive the ASTER GDS data acquisition request status in accordance with applicable IRDs and ICDs and provide the status to the data acquisition requester.	mission critical	test	T209-52.02.01	B090460.010 B120320.020
IMS-1270#B	The IMS shall determine the ECS elements responsible for processing and distributing, and the input data required for processing using the product thread information provided by the SMC.	mission essential	test	T209-51.02.07	B080160.010 B120310.040
IMS-1280#B	The IMS shall send a product order, priority, and suggested start time and completion time to the ECS elements responsible for processing and distributing a product.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100120.050 B100420.030
IMS-1290#B	The IMS shall send a product order to an ADC or an ODC with the identification of the destination DADS and suggested shipping deadline for data required for product processing.	mission essential	test	T231-61.01.01 T231-61.01.03	B100140.020 B100320.030 B100420.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.	mission fulfillment	demo	B220.02.04 B220.02.05 B222.02.03 B230.02.04 B230.02.11 B230.02.20 B230.02.25 B232.02.02 B260.02.01 B260.02.03 B260.02.04 T209-31.02.04 T209-31.02.05 T209-31.02.06 T209-32.02.02 T222-10.02.01 T222-10.02.02 T222-30.02.05 T222-31.01.02 T231-32.01.05 T231-42.02.03 T231-60.02.05 T233-30.02.04 T233-30.02.08	B100110.100
IMS-1310#B	The IMS shall provide the capability to accept, from product requesters, product distribution status requests, retrieve the request status, and display the status to the requester for an ECS, ADC, or ODC data product.	mission essential	test	B230.02.22 B232.02.02 B260.02.03 T233-30.02.02	B100140.030 B100320.040 B120730.010 B120730.020 B120730.030 B120730.040 B120730.050
IMS-1320#B	The IMS shall provide the capability to accept, from ASTER instrument data acquisition requesters, data acquisition status requests, retrieve the request status, and display the status to the requester.	mission essential	test	B230.02.11 B260.02.03	B100120.030
IMS-1330#B	The IMS shall provide the capability to accept, from data processing requesters, data processing status requests, retrieve the request status, and display the status to the requester.	mission essential	test	B232.02.02 T233-30.02.08	B100120.050
IMS-1340#B	The IMS shall, using information provided by the SMC, provide the capability for users to preview billing costs for EOSDIS data products prior to order submission.	mission essential	test	B230.02.13 B260.02.03 T211-20.01.03 T251-10.02.09	B080710.020
IMS-1350#B	The IMS shall provide the capability for users to preview billing costs, which are based upon MOUs with the ADC and non-EOSDIS data centers, prior to ADC and non-EOSDIS data product order submission.	mission essential	test	B230.02.13 B260.02.03	B100140.030 B100320.040
IMS-1360#B	The IMS shall provide the capability for users to request and receive the current status of their account balance.	mission essential	test	T211-30.01.03 T222-31.01.02 T252-40.02.01	B100110.110

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1370#B	The IMS shall present account status reports prepared by the SMC to requesters.	mission essential	test	T222-31.01.02 T251-10.02.08	B080720.010
IMS-1380#B	The IMS shall provide the capability to integrate the element toolkits with a common user interface.	mission fulfillment	test	T222-40.02.03 T222-40.02.04 T233-12.01.01 T233-12.02.01 T233-32.01.01 T252-50.02.01	B080210.010 B120710.010 B120710.020
IMS-1385#B	The IMS toolkit software shall be able to interactively display interrupt messages.	mission fulfillment	test	T222-30.02.06	B080620.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010 B120710.010 B120710.020
IMS-1400#B	The Virtual IMS Information Management software shall operate with a local data base using an ECS supported DBMS provided by the SCF, thereby facilitating the process of importation of the local data base into the ECS.	mission essential	demo	T209-12.02.08 T209-42.02.04	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1410#B	The Virtual IMS Information Management software shall provide metadata management services for local SCF metadata.	mission essential	demo	T209-12.02.08	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1420#B	The Virtual IMS Information Management software shall provide the capabilities to search the local SCF data base.	mission essential	demo	T209-12.02.08	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1430#B	The Virtual IMS Information Management software shall provide local interactive and batch data management capabilities to: a. Add b. Update c. Delete d. Retrieve	mission essential	demo	T209-12.02.07	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1440#B	he Virtual IMS Information Management software shall provide local SCF data base administration utilities for, at a minimum: a. Modifying the data base schema b. Performance monitoring c. Administration of user access control d. Data base backup e. Data base recovery	mission essential	demo	B253.02.07 B253.02.08 B253.02.09 T209-51.02.09 T209-72.02.01 T209-72.02.02 T209-72.02.03	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040 B100410.070

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1450#B	The Virtual IMS Information Management tools shall provide the capability to modify the data base structure while adhering to established standards.	mission essential	demo	T209-42.02.02	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040 B100410.070
IMS-1460#B	The Virtual IMS Information Management software shall provide the capability to electronically load data base structures and their content.	mission essential	demo	T209-12.02.04	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040 B100410.070
IMS-1470#B	The Virtual IMS Information Management software data base management system shall provide, at a minimum, the capability to select data for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Combinations thereof	mission essential	demo	B232.01.01 T232-10.01.02	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1480#B	The Virtual IMS Information Management software shall allow a user to locate and identify desired data without having detailed knowledge of the systemÍs: a. Architecture b. Data base management system c. Data base structure d. Query languages e. Data formats	mission essential	demo	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100210.010 B100210.030 B100220.010 B100220.030 B100230.010 B100230.030 B100240.010 B100240.030 B100250.010 B100250.030
IMS-1490#B	The IMS toolkit software shall provide users, including those working from ICCs and ISTs, with the capability to locally construct the requests for IMS services, forward the requests to the IMS server, and obtain request results.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
IMS-1500#B	The IMS toolkit software shall provide the tools to support user preparation or automated generation of metadata, for example, directory, inventory, and guide (documentation/reference material) entries.	mission essential	test	B230.02.02 B230.02.03 B230.02.22 B260.02.04 T231-10.01.07	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040
IMS-1505#B	The IMS toolkit software shall provide the tools to simulate an on-line IMS session for training sessions.	mission fulfillment	test	T222-10.02.04	B100210.040 B100220.040 B100230.040 B100240.040 B100250.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1510#B	The IMS data visualization toolkit capabilities shall be portable and execute on ECS supported workstations and appropriate ECS facility computers.	mission essential	test	B230.02.19	B100210.010 B100210.020 B100210.030 B100220.010 B100220.020 B100220.030 B100230.010 B100230.020 B100230.030 B100240.010 B100240.020 B100240.030 B100250.010 B100250.020 B100250.030
IMS-1520#B	The IMS toolkit software shall provide data visualization tools to assist the investigators to perform the following functions, at a minimum: a. QA/Validation of products generated by the PGS b. Algorithm development c. Calibration functions, parameter verification, and anomaly detection d. View subsetted, subsampled, and summarized data whenever associated inventory information is displayed	mission essential	test	B220.02.07 T222-20.02.06 T231-31.02.03 T231-41.02.06	B100210.010 B100220.010 B100230.010 B100240.010 B100240.020 B100250.010
IMS-1530#B	The IMS data visualization toolkit shall provide the capability to visualize data in raster and vector formats and to visualize animated products.	mission essential	demo	B220.02.07 T222-20.02.03 T222-20.02.04 T222-20.02.05 T222-20.02.07 T222-20.02.09	B100210.010 B100210.020 B100210.030 B100220.010 B100220.020 B100220.030 B100230.010 B100230.020 B100230.030 B100240.010 B100240.020 B100240.030 B100250.010 B100250.020 B100250.030
IMS-1540#B	The IMS toolkit software shall provide the capability to generate, at a minimum: a. Two-dimensional plots (x-y plots, scatter plots, profiles, histograms) b. Three-dimensional plots c. Contour plots d. Three-dimensional surface diagrams	mission essential	demo	B220.02.07 T222-20.02.03 T222-20.02.06	B100210.010 B100210.020 B100210.030 B100220.010 B100220.020 B100220.030 B100230.010 B100230.020 B100230.030 B100240.010 B100240.020 B100240.030 B100250.010 B100250.020 B100250.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1550#B	The IMS toolkit data visualization tools shall provide capabilities for image manipulation (e.g., pan, zoom, color, contrast).	mission essential	demo	B220.02.07 T222-20.02.01 T222-20.02.02	B100210.010 B100210.020 B100210.030 B100220.010 B100220.020 B100220.030 B100230.010 B100230.020 B100230.030 B100240.010 B100240.020 B100240.030 B100250.010 B100250.020 B100250.030
IMS-1570#B	The IMS toolkit software shall provide statistical analysis capabilities.	mission essential	test	T222-20.02.08	B100210.010 B100210.020 B100210.030 B100220.010 B100220.020 B100220.030 B100230.010 B100230.020 B100230.030 B100240.010 B100240.020 B100240.030 B100250.010 B100250.020 B100250.030
IMS-1590#B	The IMS toolkit data visualization tools shall provide capabilities for sizing and positioning the cursor by: a. Earth coordinates b. Image coordinates c. Instrument scan-line coordinated	mission essential	test	T222-20.02.07	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
IMS-1600#B	The IMS shall provide access to the following communication services at a minimum: a. File transfer b. Multi media mail c. Remote log-on d. Electronic Bulletin Board e. Access to other networks	mission essential	demo	B220.02.06 T222-30.02.03 T222-40.02.07	B100120.100

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1620#B	The IMS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management c. Accounting Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management	mission essential	test	B230.02.02 B230.02.03 B260.02.04 B260.02.06 B260.02.07 T209-62.02.01 T209-62.02.02 T231-20.02.02 T231-20.02.03 T231-32.02.07 T231-42.02.09 T231-51.02.02 T231-62.01.05 T250-10.02.21	B080160.010
IMS-1630#B	The IMS shall provide the capability to receive from the SMC, directives to include at a minimum: a. Directives for integration, testing, and simulation b. Maintenance directives c. Configuration management directives d. Logistics management directives e. Training management directives f. Fault management directives g. Security directives	mission fulfillment	demo	T209-51.02.07 T231-20.02.02 T231-32.02.06 T231-42.02.08	B080410.020 B080420.030 B080440.010 B080450.020 B080530.010 B080620.020 B080630.020 B080730.010
IMS-1640#B	The IMS shall provide to the SMC, status to include at a minimum: a. Integration, testing, and simulation status b. Maintenance status c. Logistics status d. Training information	mission fulfillment	demo	T209-51.02.07 T211-30.01.04 T231-20.02.02 T231-32.02.01 T231-32.02.05 T231-41.02.03 T231-42.02.07 T231-51.02.03 T231-52.02.02 T231-62.01.02 T231-62.01.04	B080420.030 B080440.010 B080450.010 B080530.010
IMS-1645#B	The IMS shall accept from the users and output to the SMC, user feedback information, which shall contain the following at a minimum: a. Product data quality assessment b. Schedule performance assessment c. Evaluation of quality of ECS service	mission fulfillment	demo	B220.02.03 T211-30.01.03 T222-31.01.01	B080530.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1646#B	The IMS shall provide to the SMC a record of data orders for the purposes of maintaining a full and complete history of all data orders.	mission fulfillment	demo	B220.02.03	B080160.010 B100120.040 B100420.030 B120310.040 B120340.020 B120410.050 B120420.030 B120430.050 B120440.070 B120450.040 B120510.050 B120520.040 B120530.040 B120610.040 B120620.050 B120630.050 B120640.030 B120640.040 B120640.060 B120650.030
IMS-1650#B	MS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests	mission critical	test	B230.02.11 B253.02.07 B260.02.03 T209-52.02.03 T209-72.02.01 T209-81.02.05 T231-32.02.01 T231-41.02.03 T231-52.02.02 T231-62.01.02	B080130.020 B100120.100
IMS-1660#B	The IMS shall provide to the SMC a full and complete history of all IMS resources used by science investigators including, at a minimum: a. CPU utilization b. Amount of user storage c. Connect time d. Session histories	mission essential	test	B253.02.07 T209-72.02.01 T209-81.02.02 T209-81.02.05 T209-81.02.07 T231-10.01.05 T231-20.02.02 T231-32.02.01 T231-32.02.07 T231-41.02.03 T231-41.02.08 T231-42.02.09 T231-51.02.02 T231-52.02.02 T231-62.01.02	B080410.020 B100120.100
IMS-1665#B	he IMS shall provide to the SMC, IMS services usage by each user (to include at a minimum user name, IMS service identification, date/time stamp, time expended, facilities used) for later reporting and determination of access patterns.	mission fulfillment	test	T209-81.02.07 T231-41.02.03 T231-62.01.02	B080630.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1680#B	The IMS status monitoring function shall provide the capability to distribute reports on a periodic basis to a predefined list of report recipients.	mission essential	demo	T209-81.02.08 T231-31.02.01 T231-40.01.06 T231-52.02.03 T231-62.01.06	B100120.100
IMS-1690#B	The IMS status monitoring function shall provide the capability to disseminate reports on-line electronically and off-line on either paper or electronic media.	mission essential	demo	T209-81.02.08 T231-31.02.01 T231-40.01.06 T231-52.02.03 T231-62.01.06	B100120.100
IMS-1700#B	The IMS shall provide the capability to generate reports on: a. The backlog of data distribution requests b. The backlog of processing requests c. The backlog of data acquisition requests d. Data quality assessment e. Daily IMS operations summaries f. IMS performance summaries	mission critical	test	B230.02.11 B260.02.03 T209-52.02.03 T231-31.02.01 T231-40.01.06 T231-62.01.06	B100120.100
IMS-1710#B	The IMS shall provide the capability to produce reports that correlate science data to associated: a. Calibration data b. Navigation data c. Instrument engineering data	mission essential	test	B260.02.03	B080720.020 B100120.020
IMS-1720#B	The IMS shall provide the capability to produce reports that relate data sets to: a. Processing algorithms used for data generation at the PGS b. Software used for data generation at the PGS c. Parameters used for data generation at the PGS d. Data recipients	mission essential	test	B260.02.03	B080720.020 B090170.010 B090170.020 B090280.020 B090390.020 B090480.020 B090560.020 B090660.020 B100120.020
IMS-1730#B	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\	mission essential	test	T209-21.02.05	B100120.020
IMS-1740#B	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.	mission essential	test	T209-21.02.05	B080720.010 B100120.020
IMS-1760#B	The IMS shall send detected hardware faults to the SMC, to include at a minimum: a. IMS processors b. IMS network interfaces c. Storage devices	mission essential	demo	B252.02.03 B252.02.05 B260.02.07 T209-51.02.11 T231-42.02.09 T231-51.02.02 T231-62.01.04 T252-10.02.02 T252-10.02.03	B080620.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1765#B	The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users: a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data products c. Development of DAAC-specific data acquisition request utilities d. Support of data visualization utilities for DAAC-specific products e. Support of DAAC-specific data analysis utilities f. Development of DAAC-unique metadata search and access services that will operate independent of the delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique metadata search and access services	mission essential	test	T209-10.01.03 T209-12.02.08 T222-30.02.08 T222-32.01.01 T222-32.01.02 T231-10.01.08 T231-10.01.09	B100120.090 B100410.060
IMS-1780#B	The IMS shall respond to each user session operation within the time period specified in Table 7-4 with the specified rate of IMS operations.	mission essential	test	T209-11.02.01 T209-11.02.02 T209-11.02.03 T209-11.02.04 T231-32.02.04 T231-40.01.07	B120810.020 B120820.010
IMS-1785#B	The IMS performance specified in Table 7-4 shall be maintained during other IMS operational activities such as database updates from the DADS.	mission essential	test	T231-32.02.04	B120820.010
IMS-1790#B	The IMS shall provide, based upon the data model defined in Appendix C, sufficient storage for, at a minimum: a. Directory metadata b. Guide (documentation/reference material) metadata c. Inventory metadata d. System space, LSM data, and data base system overhead e. Metadata staging area f. Spacecraft housekeeping and ancillary data metadata g. Science processing library software metadata h. Summary data statistics i. User workspace	mission critical	test	T250-10.02.20	B080440.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
IMS-1800#B	The IMS design and implementation shall have the flexibility to accommodate 100% expansion in processing and storage capacity without major changes to the IMS hardware and software design. This expansion capacity shall apply to the total at-launch requirement plus the yearly product growth requirement specified in Appendix C.	mission fulfillment	analysis	T209-21.02.05	B080210.010
LAND-0015#B	The MOC shall have the capability to interface with ECS as a user to acquire Landsat 7 metadata via a standing order.	N/A	test	B240.02.01 B260.02.02	B100120.060 B120650.020
LAND-0020#B	The ECS shall have the capability to provide access to the Landsat 7 directory in the GCMD.	N/A	test	B240.02.01	B090420.020
LAND-0030#B	The LPS shall have the capability to send and the ECS shall have the capability to receive data availability notices for Landsat 7 Level 0R data, and associated inventory metadata and browse data.	N/A	test	B240.02.01	B090410.010 B120650.010
LAND-0040#B	The ECS shall have the capability to provide access to the Landsat 7 guide information.	N/A	test	B240.02.01	B090420.020 B120650.030
LAND-0050#B	The LPS shall have the capability to send and the ECS shall have the capability to receive inventory metadata for Landsat 7 Level 0R data.	N/A	test	B240.02.01	B090410.010 B120650.010
LAND-0060#B	The LPS shall have the capability to send and the ECS shall have the capability to receive browse data for Landsat 7 Level 0R data.	N/A	test	B240.02.01	B090410.010 B120650.010
LAND-0070#B	The LPS shall have the capability to send and the ECS shall have the capability to receive Landsat 7 Level 0R data.	N/A	test	B240.02.01	B090410.010 B120650.010
LAND-0080#B	The ECS shall have the capability to send and the LPS shall have the capability to receive a data transfer acknowledgement.	N/A	test	B240.02.01	B090420.020 B120650.010
LAND-0085#B	The ECS shall have the capability to send and the LPS shall have the capability to receive an acknowledgment after ECS archives the Landsat 7 data.	N/A	test	B240.02.01	B090420.060 B120650.010
LAND-0090#B	The IGSs shall have the capability to send and the ECS shall have the capability to receive inventory metadata for Landsat 7 IGS data.	N/A	test	B212.01.01 B240.02.01 B260.02.02 T212-20.01.04	B090420.020 B120650.010
LAND-0100#B	The IGSs shall have the capability to send and the ECS shall have the capability to receive browse data for Landsat 7 IGS data.	N/A	test	B212.01.01 B240.02.01 B260.02.02 T212-20.01.04	B090420.020 B120650.010
LAND-0110#B	The IAS shall have the capability to send and the ECS shall have the capability to receive Landsat 7 instrument (ETM+) calibration information and associated metadata.	N/A	test	B212.01.01 T212-20.01.01	B090420.020 B120650.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
LAND-0115#B	The IAS shall have the capability to interface with ECS as a user to acquire Landsat Level OR data.	N/A	test	B252.02.05	B120650.020
LAND-0120#B	The ECS shall have the capability to send and the MMO shall have the capability to receive system management status.	N/A	test	B252.02.05 T252-50.02.04 T252-50.02.09 T252-50.02.12	B080170.020 B090420.010
LAND-0125#B	The ECS shall have the capability to send and the MMO shall have the capability to receive statistics (TBD) and reports (TBD).	N/A	test	B252.02.05	B120650.030
LAND-0130#B	The MMO shall have the capability to send and the ECS shall have the capability to receive system management status.	N/A	test	T252-50.02.04 T252-50.02.05 T252-50.02.09 T252-50.02.10 T252-50.02.12	B080170.020 B090420.010
LAND-0140#B	The MMO shall have the capability to send and the ECS shall have the capability to receive product cost information.	N/A	test	T251-10.02.19	B100110.110
LAND-0150#B	All information exchanged between the Landsat 7 System and the ECS shall be provided in mutally agreed to formats.	N/A	test	T251-10.02.19	B090420.020B090420.030 B090420.040
LAND-0160#B	All information provided to the ECS by the IGSs shall be provided in mutally agreed to formats.	N/A	test	T251-10.02.19	B090420.020B090420.030 B090420.040
LAND-0170#B	ECS elements shall be capable of supporting end-to-end test and verification activities of the EOS program including pre-launch, satellite verification, and instrument verification and operational phases as they pertain to the Landsat 7/ECS interface.	N/A	test	T251-10.02.19	B120650.040
LAND-0180#B	ECS shall be capable of ingesting, storing and distributing data from LPS to support Landsat-7 for: a. Pre-launch checkout of instruments b. Development of initial calibration information.	N/A	test	T251-10.02.19	B090420.050 B120650.040
LAND-0185#B	The ECS shall be capable of supporting interface testing, operations testing and acceptance testing with the LPS, IAS and MOC.	N/A	test	T251-10.02.19	B120650.040
LAND-0201#B	The ECS shall be capable of ingesting and archiving and acknowledging Landsat 7 Level OR data produced by LPS over 12 hours, within 8 hours from the time of receipt of the data availability notice from LPS.	N/A	test	T251-10.02.19	B120650.010
LAND-0210#B	The ECS shall begin normal distribution of Landsat 7 products, within 24 hours from the time of receipt of the product order.	N/A	test	T250-10.02.22 T250-10.02.24	B120650.020 B120650.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
LAND-0220#B	The Landsat 7 LPS shall provide the FDDI connector(s) and cable for connection to the DCS router and FDDI interface at EDC, required to transmit and receive Landsat 7 datato and from ECS.	N/A	test	T251-10.02.19	B080170.020 B090420.020 B090420.030 B100120.100
LAND-0230#B	The ECS shall be capable of interfacing with the MMO and MOC via the Internet.	N/A	test	T251-10.02.19	B080170.020
LAND-0240#B	The interfaces and any systems connecting to the ECS through these interfaces shall be consistent and capatible with ESDIS implementation of all security requirements imposed on the ECS and with all security documents applicable to ECS.	N/A	test	T251-10.02.19	B080630.020
NI-0010#B	ECS shall have the capability to communicate with the TDRSS via the EDOS/EBnet interface.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.020 B120220.020 B120230.020
NI-0020#B	ECS shall have the capability to communicate with the TDRSS for transmitting commands to EOS spacecraft (via the EDOS/EBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.020 B120220.020
NI-0030#B	ECS shall have the capability to interface with the TDRSS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/EBnet interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission Detailed Mission Requirements documents.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.020 B120230.020
NI-0110#B	ECS shall have the capability to communicate with the NCC via the EBnet interface.	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120210.020 B120210.030
NI-0120#B	ECS shall have the capability to send TDRSS schedule requests to the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS .	mission essential	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120210.020 B120210.030
NI-0130#B	ECS shall have the capability to receive schedule result messages from the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120210.020 B120210.030
NI-0140#B	ECS shall have the capability to receive TDRSS schedule messages from the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120210.020 B120210.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NI-0150-a#B	ECS shall have the capability to send other non-telemetry data messages to the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS. (Partial Implementation for Release A)	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.010 B120110.030
NI-0150-b#B	ECS shall have the capability to send other non-telemetry data messages to the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS. (Full Implementation for Release B)	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110130.010 B110210.010 B120220.030
NI-0160#B	ECS shall have the capability to receive other non-telemetry data messages from the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120220.030
NI-0170#B	ECS shall have the capability to communicate with the NCC to coordinate support from GN, DSN, and WOTS for EOS missions. This interface is defined in the Operations Interface Procedures Between the Network Control Center (NCC) and the Spaceflight Tracking and Data Network Users.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120220.030
NI-0210#B	ECS shall have the capability to communicate with the GN, DSN, and WOTS via the EDOS/EBnet interface.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.030 B120220.030 B120230.010
NI-0220#B	ECS shall have the capability to communicate with the GN, DSN, and WOTS for transmitting commands to EOS spacecraft (via the EDOS/EBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.030 B120220.030
NI-0230#B	ECS shall have the capability to interface with the GN, DSN, and WOTS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/Ecom interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission-level Detailed Mission Requirements documents.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.030 B120230.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NI-0240#B	ECS shall have the capability to receive non-telemetry data from the GN, DSN, and WOTS (via the EDOS/Ecom interface). Mission-specific requirements for supporting EOS spacecraft operations will be documented in the EOS mission-level Detailed Mission Requirements documents.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120220.030
NI-0310-a#B	ECS shall have the capability to communicate with the FDF via the EBnet interface (FOS and CSMS only).	mission essential	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.030 B120210.010 B120230.010
NI-0310-b#B	ECS shall have the capability to communicate with the FDF via the Ecom interface (FOS, SDPS, CSMS)	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.04	B120110.030 B120330.040
NI-0330#B	ECS shall have the capability to send a subset of EOS spacecraft telemetry stream to the FDF, which includes the following: a. Attitude sensor data b. Navigation telemetry data c. Spacecraft maneuver telemetry data Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040
NI-0340-a#B	ECS shall have the capability to receive planning and scheduling information for the EOS spacecraft and instruments from the FDF (FDF institutional products only).Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.030 B120210.010
NI-0340-b#B	ECS shall have the capability to receive planning and scheduling information for the EOS spacecraft and instruments from the FDF (AM-1 mission-specific products).Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120110.040 B120210.010
NI-0350#B	ECS shall have the capability to receive parameters necessary for spacecraft command data generation from the FDF, including the following: a. Navigational operations parameters b. Spacecraft maneuver parameters Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B110120.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NI-0360#B	ECS shall have the capability to send a notification of orbit or attitude quality checks and request updated (refined/repaired) orbit or attitude data from the FDF when necessary. Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	T250-10.02.04	B110120.040
NI-0365#B	ECS shall have the capability to receive from FDF a notification of orbit or attitude quality checks. Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	T250-10.02.04	B110120.040
NI-0370-a#B	ECS shall have the capability to receive from FDF, at a minimum the following: a. Repaired Orbit data and associated metadata b. Repaired Attitude data and associated metadata Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.	mission critical	test	T250-10.02.04	B080170.020 B110120.040
NI-0400#B	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via EBnet to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data	mission essential	test	T250-10.02.04	B080170.020 B090110.010 B090120.020 B090130.010 B090140.030 B090150.020 B090210.010 B090220.020 B090230.010 B090240.030 B090260.020 B090310.010 B090330.020 B090340.010 B090350.030 B090420.020 B090430.010 B090440.030 B090450.020 B090510.010 B090530.030 B090540.020 B090550.020 B090610.020 B090620.010 B090630.030 B090640.020 B120110.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NI-0430#B	ECS shall have the capability to receive notification of faults in the NOLAN network that may affect the quality of NOLAN services between ECS and its users.	mission critical	test	T252-50.02.06	B120110.040
NI-0440#B	ECS shall have the capability to receive information regarding fault status and estimated time to repair or resolve NOLAN faults that may affect the quality of NOLAN services between ECS and its users.	mission critical	test	T252-50.02.06	B120110.040
NI-0450#B	ECS shall have the capability to receive periodic summary information about faults that may have affected the quality of NOLAN services between ECS and its users.	mission critical	test	T252-50.02.06	B120110.040
NI-0460#B	ECS shall have the capability to receive periodic information regarding EBnet network performance and link utilization.	mission fulfillment	test	T252-50.02.10	B120110.040
NI-0470#B	ECS shall have the capability to receive notifications of security breaches at NOLAN sites or within the NOLAN network that could potentially affect ECS sites.	mission critical	test	T252-50.02.14	B120110.040
NI-0480#B	ECS shall have the capability to send to NOLAN notifications of security breaches at ECS facilities that could affect NOLAN and other EOSDIS sites.	mission critical	test	T252-50.02.14	B120110.040
NI-1000#B	ECS functions shall have an operational availability (computed as defined in the Functional and Performance Requirements Specification for the ECS) of 0.96 at a minimum and a Mean Down Time (MDT) of four (4) hours or less, unless otherwise specified.	mission critical	test	(Testcase link to RBR for FOS not in RTM) T250-10.02.01	B080510.020
NI-1010#B	The ECS FOS shall have an operational availability of 0.9998 at a minimum and a MDT of one (1) minute or less for critical real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020
NI-1030#B	The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for non-critical real time functions.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B080510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NI-1060#B	The ECS shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a TDRSS link is available for contact to the spacecraft.	mission critical	test	(Testcase link to RBR for FOS not in RTM)	B120820.020
NOAA0010#B	The interface between ECS and the SAAs shall support one-way level 2 or 3 catalog interoperability as defined by the CEOS such that an ECS user can can access the SAA.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B080170.020
NOAA0020#B	The ECS shall maintain a controlled list of the mutually-agreed data sets required from the NOAA ADC to support ECS standard product generation.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.070 B090330.070 B100140.010 B100320.010
NOAA0030#B	The interface providing catalog interoperability between the ECS and the SAA shall support the V0 protocol.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.070 B090330.070 B100140.010 B100320.010
NOAA0100#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive advertising information.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0120#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive User Authentication Requests.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0140#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive User Authentication Results.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0210#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Guide Queries.	mission critical	test	T231-61.01.05	B100140.020 B100320.030
NOAA0220#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Guide Query Results.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.020 B100320.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NOAA0230#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Guide Query Results.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100320.030
NOAA0250#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Inventory Queries.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0260#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Inventory Query Results.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0290#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Browse Requests.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.010 B100320.010
NOAA0300#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Browse Results.	mission essential	test	T231-61.01.02 T231-61.01.04	B100140.010 B100320.010
NOAA0330#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Cost Estimate Requests.	mission critical	test	T231-61.01.04	B100140.020 B100320.030
NOAA0340#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Cost Estimates.	mission critical	test	T231-61.01.04	B100140.020 B100320.030
NOAA0410#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Product Requests.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.020 B100320.030
NOAA0430#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Product Delivery Status Requests.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.030 B100320.040
NOAA0440#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Product Delivery Status.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.030 B100320.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NOAA0460#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Spacecraft Schedules for SAA data sets requested by the ECS as ancillary data for ECS product generation.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.010 B090330.010 B100140.020 B100320.030
NOAA0510#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive data sets to be used as ancillary data for ECS standard product generation.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.020 B090330.010 B100140.020 B100320.030
NOAA0530#B	The SAAs shall have the capability to send, to ECS users, SAA-cataloged information, to include as a minimum data products, calibration data, documents, and algorithm packages.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100140.020 B100320.030
NOAA0560#B	The SAAs and the ECS shall have the capability to perform Schedule Adjudication via telephone.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.010 B090330.010 B100140.020 B100320.030
NOAA0570#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Algorithm Packages contributed by the SAAs as EOSDIS resources.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.020 B090330.020 B100140.020 B100320.030
NOAA0600#B	The SAAs shall have the capability to send and the ECS shall have the capability to receive Network Management information.	mission critical	test	T252-50.02.03 T252-50.02.08	B080610.010
NOAA0610#B	The ECS shall have the capability to send and the SAAs shall have the capability to receive Network Management information.	mission critical	test	T252-50.02.03 T252-50.02.08	B080610.010
NOAA0700#B	The ECS shall have the capability to send and the NMC shall have the capability to receive requests for ancillary data to support ECS standard product generation.	mission critical	test	T231-61.01.04	B090120.010 B090330.010 B120330.030 B120440.030 B120450.020 B120510.030 B120620.030 B120630.030
NOAA0710#B	The NMC shall have the capability to send and the ECS shall have the capability to receive data sets to be used as ancillary data for ECS standard product generation.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.010 B090330.010 B120330.030 B120440.030 B120450.020 B120510.030 B120620.030 B120630.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NOAA0720#B	The ECS shall have the capability to send and the NMC shall have the capability to receive Product Availability Queries.	mission critical	test	T231-61.01.03	B100140.010 B120330.030 B120440.030 B120510.030 B120620.030 B120630.030
NOAA0730#B	The NMC shall have the capability to send and the ECS shall have the capability to receive Product Availability Lists.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B090120.010 B090330.010 B120330.030 B120440.030 B120450.010 B120510.030 B120620.030 B120630.030
NOAA0800#B	The NOAA Data Centers shall have the capability to send and the ECS shall have the capability to receive advertising information.	mission critical	test	T231-61.01.01 T231-61.01.02 T231-61.01.03 T231-61.01.04 T231-61.01.05 T231-61.01.06	B100320.020
NSI-0010#B	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS Operations Center (EOC), Gorddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska	mission critical	test	B252.02.01	B080170.030
NSI-0020#B	NSI shall provide support for TCP/IP communication protocols and services to ESN.	mission critical	test	B252.02.01	B080170.010
NSI-0030#B	NSI shall have the capability of sending and ECS shall have the capability of receiving notification of faults in NSI's network that may affect the quality of NSI services between ECS and its users.	mission critical	test	B252.02.01 B252.02.02 T252-30.02.06	B080620.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
NSI-0040#B	NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	mission critical	test	B252.02.01 B252.02.02 T252-30.02.06	B080620.020
NSI-0050#B	NSI shall provide ECS with periodic summary information about faults that may have affected the quality of NSI services between ECS and its users.	mission critical	test	B260.02.05 T252-30.02.03	B080620.020
NSI-0060#B	NSI shall provide ECS SMC with load analysis reports, reflecting or summarizing NSI performance measurements over various time intervals.	mission critical	test	B252.02.03 B252.02.04	B080530.010
NSI-0070#B	NSI shall have the capability of sending and ECS shall have the capability of receiving notification of security breaches at NSI sites or within the NSI network that could potentially affect ECS sites.	mission critical	test	T252-50.02.13	B080630.020
NSI-0080#B	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ESC facilities that could affect NSI and other EOSDIS sites.	mission critical	test	T252-50.02.13	B080630.020
PGS-0140#B	The PGS shall provide tools to help the PGS staff create and modify SDPS plans, schedules, and lists.	mission essential	test	T233-20.01.03	B090140.020 B090240.020 B090350.020 B090440.020 B090530.020 B090630.020 B120330.010 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0150#B	The PGS shall receive from the collocated DADS data availability schedules for remote DADS, SDPF, the IPs, the ADCs and ODCs.	mission essential	test	B233.02.06 B240.02.06 T233-20.01.01 T233-21.02.01	B090110.010 B090120.010 B090130.010 B090210.010 B090220.020 B090230.010 B090320.020 B090330.010 B090330.020 B090340.010 B090420.020 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010 B120330.010 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120620.010 B120630.010
PGS-0160#B	The PGS shall receive standing orders, changes to standing orders, and product requests from the IMS.	mission essential	test	B233.01.01 B233.02.02 B240.02.07 B260.02.03 T233-20.01.02 T233-31.02.02 T233-31.02.03	B090150.010 B090260.010 B090370.010 B090450.010 B090540.010 B090640.010 B100120.060 B100410.040 B100420.030 B100430.010
PGS-0165#B	The PGS shall accept priority processing requests from the IMS.	mission essential	test	B233.01.01 B233.02.02 B240.02.07 B260.02.03 T233-20.01.02 T233-31.02.02	B090150.010 B090180.010 B090260.010 B090290.010 B090370.010 B090395.020 B090450.010 B090490.010 B090540.010 B090570.010 B090640.010 B090670.010
PGS-0170#B	The PGS shall receive priority assignments, schedule conflict resolutions, and other operational directives from the SMC.	mission essential	test	B240.02.06	B080330.020 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0180#B	The PGS shall receive a notice from DADS when data that it has received is available.	mission essential	test	B240.02.06 T233-21.02.01	B090110.010 B090120.020 B090130.010 B090210.010 B090220.020 B090230.010 B090320.020 B090330.020 B090340.010 B090410.010 B090420.020 B090430.010 B090510.010 B090520.010 B090610.020 B090620.010 B090710.020 B090720.010 B090810.010 B120330.020 B120330.030 B120410.020 B120430.020 B120430.030 B120440.020 B120440.030 B120450.020 B120510.020 B120510.030 B120520.020 B120530.020 B120610.020 B120620.020 B120620.030 B120630.020 B120630.030
PGS-0190#B	The PGS shall coordinate with the DADS on the staging of data for product generation.	mission essential	test	B240.02.06	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0210#B	The PGS shall maintain an algorithm processing control language capable of constructs (e.g., if-then-else) based on the complexities of the PGS. This control language shall be utilized in conjunction with a database of product specifications that contains the recipe for the generation of all Standard Products allocated to that PGS including, at a minimum: a. The algorithm(s) to be used b. The order in which algorithms are to be executed c. The input data sets required d. Time and other processing resources required	mission essential	test	B233.02.01 T233-31.02.01	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0220#B	The PGS shall create a reprocessing plan containing at a minimum: a. A list of processing tasks needed to carry out each productís reprocessing b. Estimated schedule for each task c. The order in which tasks will be executed	mission essential	test	B233.02.02 B233.02.06 T233-20.01.01 T233-31.02.02	B090140.020 B090150.020 B090240.020 B090260.020 B090350.020 B090370.020 B090440.020 B090450.020 B090530.020 B090540.020 B090630.020 B090640.020 B120330.060 B120410.060 B120430.060 B120440.080 B120450.050 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060
PGS-0230#B	The PGS shall base the PGS reprocessing plan on, at a minimum: a. Requests received from the IMS b. SMC directives c. The Standard Product specifications	mission essential	test	B233.02.02 B233.02.06 T233-20.01.01 T233-20.01.03 T233-31.02.02	B090140.020 B090150.020 B090240.020 B090260.010 B090350.020 B090370.020 B090440.020 B090450.020 B090530.020 B090540.020 B090630.020 B090640.020 B120330.060 B120410.060 B120430.060 B120440.080 B120450.050 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0240#B	The PGS shall perform reprocessing according to the PGS reprocessing plan and the availability of resources.	mission essential	test	B233.02.02 B233.02.03 B240.02.05 B240.02.07 B260.02.03 T233-31.02.02	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030 B120330.060 B120410.060 B120430.060 B120440.080 B120450.050 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060
PGS-0250#B	The PGS shall schedule product generation when all inputs required to generate a Standard Product for which there is a current order (from IMS) are available. Entries in the schedule shall contain, at a minimum: a. The product to be generated b. The specific algorithm(s) and calibration coefficients to be used c. The specific data sets needed and their sizes d. Priorities and deadlines that apply to the order for the product	mission essential	test	B233.02.06 B240.02.07 B260.02.03 T233-20.01.01	B090150.020 B090260.020 B090370.020 B090450.020 B090540.020 B090640.020 B100120.050
PGS-0260#B	The PGS shall schedule other functions, including, at a minimum: a. File backups b. File maintenance c. Calibration data handling	mission essential	test	B240.02.07	B090180.010 B090290.010 B090395.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
PGS-0270#B	The PGS shall provide the capability to perform the following functions, at a minimum: a. Allocate tasks among processors b. Suspend execution of tasks c. Resume execution of a suspended task d. Cancel execution of tasks e. Request and verify the staging and/or destaging of data stored in the DADS	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0285#B	The PGS shall transmit to the IMS a status message to confirm or reject a processing order. The reason for rejection shall be included.	mission essential	test	B233.02.02 B240.02.07 B260.02.03 T233-31.02.02 T233-31.02.03	B090150.010 B090150.020 B090260.010 B090260.020 B090370.010 B090370.020 B090450.010 B090450.020 B090540.010 B090540.020 B090640.010 B090640.020 B100120.050
PGS-0290#B	The PGS shall make electronic copies of its plans and schedules available to the IMS, the SMC, and the collocated DADS.	mission essential	test	B240.02.06	B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010 B120330.010 B120330.040 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010
PGS-0295#B	The PGS shall transmit a status message notifying the IMS of a revised completion time if processing will not complete per original schedule.	mission fulfillment	test	B233.01.03 B240.02.08 B260.02.03 T233-22.02.04	B090150.020 B090260.020 B090370.020 B090450.020 B090540.020 B090640.020
PGS-0300#B	The PGS shall have the capability for an operator to interactively review and update the current data processing schedule.	mission essential	test	B233.02.06 T233-11.02.01 T233-20.01.01	B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010
PGS-0310#B	The PGS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management c. Accounting Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management.	mission essential	test	B260.02.06 T233-11.01.03	B080160.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0320#B	The PGS shall display detected faults to the system operators.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B080620.010
PGS-0325#B	The PGS shall provide the SMC with scheduling and status information.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B080330.010 B080330.020 B120330.010 B120330.040 B120410.010 B120430.010 B120440.010 B120450.010 B120510.010 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010
PGS-0330#B	The PGS shall report detected processing system faults to the SMC.	mission essential	test	B252.02.05 T252-10.02.02	B080620.010
PGS-0340#B	The PGS shall utilize fault isolation tools provided by the LSM for the PGS and its subsystems.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B080620.010
PGS-0350#B	The PGS shall utilize tools provided by the LSM to support fault isolation between the PGS and external interfaces.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B080620.010
PGS-0360#B	The PGS shall generate a PGS processing log that accounts for all data processing activities.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020 B120330.040 B120330.060 B120410.040 B120410.060 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120450.030 B120450.050 B120510.040 B120510.060 B120520.030 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120620.040 B120620.060 B120630.040 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0370#B	The PGS shall utilize the LSM to generate a PGS resource utilization report.	mission fulfillment	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0380#B	The PGS shall monitor its internal operations and generate a status report periodically and on request.	mission essential	test	B233.02.02 B240.02.07 B260.02.03 T233-31.02.02 T233-31.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0400#B	The PGS shall have the capability to monitor the status of all algorithm and calibration coefficient testing and generate algorithm and calibration test reports.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090170.010 B090170.020 B090280.020 B090390.020 B090480.020 B090560.020 B090660.020
PGS-0410#B	The PGS shall have the capability to track the processing status of all products scheduled to be generated.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090150.030 B090210.020 B090260.030 B090310.020 B090370.030 B090450.030 B090510.020 B090540.030 B090640.030 B120330.040 B120330.060 B120410.040 B120410.060 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120450.030 B120450.050 B120510.040 B120510.060 B120520.030 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120620.040 B120620.060 B120630.040 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0420#B	The PGS shall provide tools to analyze system performance.	mission essential	test	T251-22.02.08	B080520.010 B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030
PGS-0430#B	The PGS shall utilize the LSM to monitor and account for data andinformation transfer between it and other EOSDIS elements.	mission essential	test	T252-20.02.01 T253-10.02.01	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0440#B	The PGS shall accept from the DADS L0-L4 data products. Received information shall contain at a minimum: a. Product identification b. L0-L4 data set c. Metadata required for processing d. Current date and time e. DADS identification	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0450#B	The PGS shall accept from the DADS ancillary data sets. Received information shall contain at a minimum: a. Product identification b. Ancillary data set c. Metadata required for processing d. Current date and time e. DADS identification	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0455#B	The PGS shall have the capability to assess the quality of spacecraft orbit and attitude (O/A) data contained in the ancillary data. QA shall be in the form of limits checking.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03	B090120.040 B090330.040
PGS-0456#B	The PGS shall notify the FDF, via the DADS, of O/A quality checks and request updated (refined/repaired) O/A data from the FDF when necessary.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03	B090330.040 B090350.030
PGS-0458#B	The PGS shall use configuration-controlled calibration coefficients and selected engineering data to generate calibrated ancillary data products necessary as input to the generation of Level 1 Standard Products in a timeframe that assures that production schedules for all products can be met.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03	B090170.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0470#B	The PGS shall have the capability to produce each Standard Product as specified in that product's Standard Product specification.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090160.020 B090160.030 B090210.020 B090310.020 B090510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0480#B	The PGS shall have the capability to perform all its processing based on priority.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030
PGS-0490#B	The PGS shall have the capability to access and use, for the generation of Standard Products, information such as: a. Digital terrain map databases b. Land/sea databases c. Climatology databases d. Digital political map databases	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0500#B	The PGS shall have the capability to generate Level 1 through 4 Standard Products using validated algorithms and calibration coefficients provided by the scientists.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04	B090110.020 B090210.020 B090310.020 B090510.020 B120330.040 B120330.060 B120410.040 B120410.060 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120450.030 B120450.050 B120510.040 B120510.060 B120520.030 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120620.040 B120620.060 B120630.040 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0510#B	The PGS shall have the capability to generate metadata (see Appendix C) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020 B120330.040 B120330.060 B120410.040 B120410.060 B120430.040 B120430.060 B120440.040 B120440.050 B120440.060 B120440.080 B120450.030 B120450.050 B120510.040 B120510.060 B120520.030 B120520.050 B120530.030 B120530.050 B120610.030 B120610.050 B120620.040 B120620.060 B120630.040 B120630.060
PGS-0512#B	The PGS shall generate unique granule IDs for all products generated at the PGS.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0520#B	The PGS shall have the capability to generate data products from any single data input or combination of data inputs according to the algorithms provided by the scientists.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0540#B	The PGS shall reprocess specified science data using original or updated algorithms provided by the scientists.	mission essential	test	B233.02.02 T233-31.02.02	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030 B120330.060 B120410.060 B120430.060 B120440.080 B120450.050 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0550#B	The PGS shall reprocess science data using the original or updated (provided by the scientists) calibration coefficients.	mission essential	test	B233.02.02 T233-31.02.02	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030
PGS-0560#B	The PGS shall maintain copies of generated products to be used as inputs to other scheduled products for processing efficiency.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0590#B	The PGS shall have the capability to indicate the temporary status of data stored in the DADS that is awaiting QA or human interaction in product production.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030
PGS-0595#B	The PGS shall provide, to the ASTER science software, access to a relational database management system.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090420.070
PGS-0600#B	The PGS shall provide an algorithm and calibration test and validation environment that is fully compatible with but isolated from the operational production environment.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0602#B	The PGS shall have the capability to accept POSIX-compliant science algorithms and compile algorithm source code written in a standard programming language (e.g., Fortran, C, Ada).	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B080170.010 B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0605#B	The PGS shall process pre-launch test data and provide test data product samples for user verification.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090160.010 B090160.030 B090270.010 B090270.020 B090380.010 B090380.020 B090380.030 B090470.010 B090470.020 B090470.030 B090550.010 B090550.020 B090550.030 B090650.010 B090650.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0610#B	The PGS shall accept from the SCFs new or modified calibration coefficients to be validated in the test environment. Calibration coefficients shall contain the following information at a minimum: a. Identification of coefficient data set b. Calibration coefficients values c. Author and version number d. Identification of related processing algorithm e. Start and stop date/time of applicability f. Date and time g. SCF identification h. Reasons for update	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090170.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0620#B	The PGS shall have the capability to validate received calibration coefficients for completeness and correct format.	mission essential	test	B233.02.02 B240.02.07 B260.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-0630#B	The PGS shall send the DADS new or modified calibration coefficients which shall contain the following information at a minimum: a. Identification of coefficient data set b. Calibration coefficients values c. Author and version number d. Identification of related processing algorithm e. Start and stop date/time of applicability f. Documentation	mission essential	test	B240.02.03 B240.02.04 B260.02.02	B090170.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0640#B	The PGS shall accept from the SCF new or modified Standard Product algorithms to be tested at the processing facility. This software shall be received into the test environment and shall contain the following information at a minimum : a. Algorithm identification b. Algorithm source code c. List of required inputs d. Processing dependencies e. Test data and procedures f. Algorithm documentation	mission essential	test	B244.02.01 T244-10.02.02 T244-10.02.03	B090170.020 B090280.020 B090390.020 B090480.020 B090560.020 B090660.020
PGS-0650#B	The PGS shall have the capability to validate required operational algorithm characteristics prior to scheduling algorithm test time. These characteristics shall be include at a minimum: a. Language b. Operational impacts (e.g., algorithm software size, required resources) c. Algorithm documentation d. Data handling standards as appropriate e. Units and models used f. Operational compatibility g. Required metadata outputs	mission essential	test	T233-11.01.03	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0860#B	The PGS shall have the capability to schedule and coordinate algorithm and calibration coefficient test time in the test environment with the appropriate SCF.	mission essential	test	B240.02.12	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0870#B	The PGS shall have the capability to schedule algorithm test resources that do not interfere with the operational production environment.	mission essential	test	B240.02.12 B260.02.07	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0900#B	The PGS shall send test products to the SCF for analysis. These shall contain the results of algorithm testing and shall contain the following information at a minimum: a. Algorithm identification b. Test time(s) c. Processor identification d. Test results	mission essential	test	B240.02.12	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0910#B	The PGS shall have the capability to support analysis of algorithm test results.	mission essential	test	T250-10.02.26	B090170.020 B090280.020 B090390.020 B090480.020 B090560.020 B090660.020
PGS-0915#B	The PGS shall support remote science software integration and test activities at the DAACs including: a. executing code checkers, compiling, linking, debugging code, file comparison and science software resource profiling from the SCF. b. Interactive remote access to a job scheduling tool for defining and executing jobs.	mission fulfillment	demo	T250-10.02.26	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0920#B	The PGS shall have the capability to validate, through testing, that SCF processing algorithms will execute properly in the operational environment. Validation shall include final compilation and linkage of the source code and testing to verify proper software execution in the operational environment based on indicated data and test results provided by the SCF and the investigator, but shall not include scientific validation of products.	mission essential	test	T250-10.02.26	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0925#B	The PGS shall validate algorithms used for conversions, calibrations and transformations of EOS engineering data.	mission essential	test	T250-10.02.26	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-0930#B	The PGS shall have the capability to transfer validated algorithm software and calibration coefficients from the test environment to the operational environment to be used in the production of Standard Products.	mission essential	test	B233.02.05	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0940#B	The PGS shall provide storage for all candidate algorithms' software executables and calibration coefficients.	mission essential	test	B233.02.05	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0950#B	The PGS shall interface to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data, and results c. Date and time of operational installation d. Compiler identification and version e. Final algorithm documentation	mission essential	test	B233.02.05	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0960#B	The PGS shall send the DADS new or modified algorithms. This delivery shall contain the following information at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data and results c. Date and time of operational installation d. Final algorithm documentation e. Calibration coefficient values	mission essential	test	B240.02.03 B240.02.04 B260.02.02	B090170.020 B090280.020 B090390.020 B090480.020 B090560.020 B090660.020
PGS-0970#B	The PGS shall provide §le access subroutines that enforce compliance with the adopted standard ECS formats.	mission essential	test	B260.02.02	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-0980#B	The PGS shall provide job control routines that provide all required task parameters to the Standard Product software.	mission essential	test	B260.02.02	B090170.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-0990#B	The PGS shall provide error logging subroutines for use by Standard Product software in notifying the system operators of conditions requiring their attention.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020
PGS-1000#B	The PGS shall provide error logging subroutines for use by Standard Product software in notifying users of conditions requiring their attention.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1010#B	The PGS shall provide mass storage allocation subroutines that provide algorithms with a means for dynamic allocation of storage for temporary files.	mission essential	test	B260.02.02	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-1015#B	The PGS shall provide ancillary data access subroutines that provide Standard Product software access to ephemeris data (e.g., solar, lunar, and satellite ephemeris), Earth rotation data, and time and position measurement data. These subroutines shall perform operations such as: a. Interpolation b. Extrapolation c. Coordinate system conversion	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.04	B090170.010 B090280.010 B090390.010 B090480.010 B090560.010 B090660.010
PGS-1020#B	The PGS shall provide mathematical libraries including: a. Linear algebra and analysis (e.g., LINPAC, IMSL) b. Statistical calculations (e.g., SAS, SPSS)	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020
PGS-1025#B	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines	mission essential	test	B240.02.02 B260.02.02 T209-42.02.01 T209-42.02.03	B090110.020 B090210.020 B090310.020 B090510.020
PGS-1030#B	The PGS shall provide a toolkit to the SCF containing versions of the routines specified in requirements PGS-0970 to PGS-1020.	mission essential	test	B260.02.02	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090510.020 B090530.030 B090630.030
PGS-1050#B	The PGS shall provide the capability to perform both automatic and manual QA of generated products.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020
PGS-1060#B	The PGS shall have the capability to perform automatic QA of generated products utilizing algorithms provided by the scientists.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020
PGS-1080#B	The PGS shall have the capability to provide an inventory and review copy of generated products to the data product quality staff before the product is sent to the DADS for storage.	mission essential	test	B260.02.02	B090110.020 B090210.020 B090310.020 B090510.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1090#B	The PGS shall have the capability to provide the data product quality staff with the algorithms, calibration coefficient tables, input data sets, or other information related to product processing for the purpose of reviewing and analyzing the quality of production.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090510.020 B090530.040 B090630.040
PGS-1100#B	The PGS shall have the capability to accept product quality data input.	mission essential	test	B233.01.02 B240.02.09 B260.02.03 T233-12.01.03	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090510.020 B090530.040 B090630.040
PGS-1110#B	The PGS shall have the capability to associate data quality with a generated product.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090510.020 B090530.040 B090630.040
PGS-1120#B	The PGS shall send the DADS updated metadata provided by the data product quality staff relating to product QA review. This QA review metadata shall contain the following information at a minimum: a. Product ID b. QA Approval field c. Other metadata	mission essential	test	B233.01.02	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B120710.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1130#B	The PGS shall receive product QA from the SCF which shall describe the results of the scientists product quality review at an SCF. Product QA shall contain the following information at a minimum: a. Identification of product b. QA results c. Product storage and processing instructions	mission essential	test	B233.01.02	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
PGS-1140#B	The PGS shall have the capability to provide the data product quality staff with the Product QA data from the SCF.	mission essential	test	B233.01.02	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
PGS-1150#B	The PGS shall have the capability to accept the identification of products that are not to be stored in the DADS due to inferior quality or other reasons. The reason for all such actions shall also be specified.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1160#B	The PGS shall have the capability to accept from the product quality staff commands to suspend specified production processing due to inferior quality or other reasons in line with SMC guidelines. The reasons for all such actions shall also be specified.	mission essential	test	T233-11.02.01	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040
PGS-1170#B	The PGS shall have the capability to identify data products awaiting QA that have not been reviewed within the amount of time allocated for QA.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040
PGS-1175#B	The PGS shall maintain a list of products requiring QA by SCF or the PGS.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
PGS-1180#B	The PGS shall have the capability to update the processing status of a given product as a result of a QA timeout.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1190#B	The PGS shall have the capability to log the identification of all non-stored products or suspended processing directed by the data product quality staff to support the maintenance of performance statistics.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040
PGS-1200#B	The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the products input data sets.	mission essential	test	B233.01.02	B090110.020 B090140.040 B090210.020 B090240.040 B090310.020 B090350.040 B090440.040 B090530.040 B090630.040
PGS-1210#B	The PGS shall coordinate the disposition of PGS data stored temporarily in the DADS.	mission essential	test	B233.01.02	B090140.040 B090240.040 B090350.040 B090440.040 B090530.040 B090630.040
PGS-1220#B	The PGS shall have the capability to receive GFE databases and associated tools, including COTS and public domain databases, and maintain them as required as inputs to product generation: Example databases are: a. Digital terrain map databases b. Land/sea databases c. Climatology databases d. Digital political map databases	mission essential	test	B233.01.02	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090530.030 B090630.030
PGS-1230#B	The PGS shall accept special data sets from the DADS. Received information shall contain at a minimum: a. Product identification b. Special data set c. Metadata required for processing d. Current date and time e. DADS identification	mission essential	test	B233.01.02	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090530.030 B090630.030
PGS-1240#B	The PGS shall send the generated Level 1 to Level 4 Standard Products to the DADS. These products shall contain the following information at a minimum: a. Product identification b. L1-L4 data set c. Product processing priority d. Current date and time e. Associated metadata	mission essential	test	B233.01.02	B090110.020 B090140.030 B090210.020 B090240.030 B090310.020 B090350.030 B090440.030 B090530.030 B090630.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1250#B	The PGS shall send the DADS the calibrated ancillary data.	mission essential	test	B233.01.02	B090170.030 B090390.030 B090480.030 B090560.030 B090660.030
PGS-1270#B	The PGS design and implementation shall have the flexibility to accommodate PGS expansion up to a factor of 3 in the processing capacity with no changes to the processing design, and up to a factor of 10 without major changes to the processing design. Such expansion in capacity or capability shall be transparent to existing algorithms or product specifications. This requirement shall apply to the system at all phases of contract performance, including the final system, as well as the at-launch system.	mission fulfillment	analysis	B233.01.02	B120830.010
PGS-1300#B	Each PGS shall provide a processing capacity four times the size necessary to process all EOS science data for which it is responsible, except for the Data Assimilation Office requirements shown in Appendix C, Table C-5. It shall be possible to effectively utilize the entire reprocessing capacity at each site on computers with similar architectural design (e.g., parallel processors), for a single algorithm or any mix of algorithms normally run at that site. The four times processing capacity accounts for: a. 1 times to allow for normal processing demands b. 2 times to allow for reprocessing demands c. 1 times to allow for algorithm integration and test demands, production of prototype products, ad hoc processing for "dynamic browse" or new search and access techniques developed by science users, and additional loads due to spacecraft overlap.	mission essential	analysis	T250-10.02.23	B120830.010
PGS-1301#B	The effective CPU processing rates used for sizing purposes in PGS-1300 shall not be greater than 25% of peak-related CPU capacity.	mission essential	analysis	T250-10.02.23	B120830.010
PGS-1310#B	The processing capacity necessary to process all EOS science data for which each PGS is responsible shall be based on the data volumes and instrument processing load requirements (MFLOPS) assigned to each DAAC.	mission essential	analysis	T250-10.02.23	B120830.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
PGS-1315#B	Each PGS shall have the capacity to support I/O to temporary and intermediate storage or multiple passes over input products as required by individual science algorithms.	mission essential	analysis	T250-10.02.23	B120820.030
PGS-1400#B	The PGS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development and integration of new algorithms developed at each DAAC to support DAAC value-added production.	mission fulfillment	test	T233-11.01.02	B080210.020
PGS-1410#B	The PGS shall provide the capability for each DAAC to add to the data production environment toolkit DAAC-developed software required to support discipline specific needs.	mission fulfillment	test	T233-11.01.01	B080210.020
SCF-0001#B	The SCF interface platform shall adhere to requirements specified in the Data Production Software and SCF Standards and Guidelines, GSFC 423-16-01. This standards document includes SCF requirements for operating system, computer communications, e-mail protocol, and windowing protocol.	mission critical	test	T250-10.02.23	B100210.040B100220.040 B100230.040 B100240.040 B100250.040
SCF-0010#B	The SCF interface shall consist of an ESDIS approved computing platform that shall have a C compiler. To access FORTRAN routines in the ECS Toolkits, the platform shall also have a FORTRAN compiler.	mission critical	test	T250-10.02.23	B100210.030B100220.030 B100230.030 B100240.030 B100250.030
SCF-0020#B	The SCF interface platform shall supply the DCE client and have an I/O communication port and the ability to run TCP/IP software for communication to the ECS.	mission critical	test	T250-10.02.23	B100210.030B100220.030 B100230.030 B100240.030 B100250.030
SCF-0025#B	The SCF interface platform shall provide one of the following levels of security for interoperation with ECS: a. Kerberized authentication for bi-directional file transfers. b. User of Distributed Computing Environment (DCE) for authentication of users, authorization of users for access to services such as remote file access, and provision for integrity of data being transferred.	mission critical	test	T250-10.02.23	B100210.030B100220.030 B100230.030 B100240.030 B100250.030
SCF-0030#B	The SCF interface platform shall have adequate computing resources for the storage, compilation, linking, and execution of ECS supplied software resident on the platform.	mission critical	test	T250-10.02.23	B100210.030B100220.030 B100230.030 B100240.030 B100250.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0060#B	The ECS shall have the capability to provide to the SCF the Toolkit Delivery and Update Package. This package includes the PGS toolkit which supplies tools for the emulation of the ECS production environment and contains a ECS-standardized software routines to aid in science data production software development.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010
SCF-0070#B	The ECS shall have the capability to provide Integration and Test Specifications to the scientist at the SCF. These specifications are defined by the Data Processing Focus Team. These specifications are implemented in the Data Production Software Delivery Package and support smooth integration of the data production software into the ECS production environment.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010
SCF-0080#B	The ECS shall have the capability to provide an Interactive Session Dialog with the SCF. This dialog, to aid integration and test of the data production software into the ECS production environment, shall support, at a minimum, general communications between the ECS and the SCF that include logins, mail messages, status reports, test coordination, test execution scripts, and solutions to minor problems.	mission critical	test	T250-10.02.23	B100210.010B100220.010 B100230.010 B100240.010 B100250.010
SCF-0090#B	The SCF shall have the capability to provide ECS with the Data Production Software Delivery Package with "Required Items For Delivery" as specified by the Science User's Guide and Operations Procedure Handbook for the ECS Project.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010
SCF-0100#B	The ECS shall have the capability to forward Test Products to the SCF. These products generated by the science software at the ECS will require the review of the scientist at the SCF who submitted the software.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0110#B	The ECS shall have the capability to receive Test Product Reviews from the SCF. These reviews shall include the comments and recommendations of the scientist at the SCF who has reviewed the Test Products.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010
SCF-0120#B	The ECS shall have the capability to receive Data Production Software Updates from the SCF. These Data Production Software Updates include modifications to any data production software already submitted to the ECS by the SCF. The Data Production Software Updates may include some or all the items required in the Data Production Software Delivery Package.	mission critical	test	T250-10.02.23	B090170.010B090280.010 B090390.010 B090480.010 B090560.010 B090660.010 B100210.010 B100220.010 B100230.010 B100240.010 B100250.010
SCF-0130#B	The ECS shall have the capability to receive Special Products from the SCF. These shall include L1 - L4 Special Products.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0140#B	The ECS shall have the capability to receive Metadata, related to Special Products, from the SCF.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0150#B	The ECS shall have the capability to receive Ancillary Data, related to Special Products, from the SCF.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0160#B	The ECS shall have the capability to receive Calibration Data, related to Special Products, from the SCF.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0170#B*	The ECS shall have the capability to receive Correlative Data, related to Special Products, from the SCF.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0180#B	The ECS shall have the capability to receive Documents from the SCF that are related to Special Products and deemed necessary by the contributing scientist.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0190#B	The ECS shall have the capability to receive Data Production Software, related to Special Products, from the SCF.	mission critical	test	T250-10.02.23	B090160.020B090270.020 B090380.020 B090470.020 B090550.020 B090650.020
SCF-0200#B	The ECS shall have the capability to receive from the SCF a QA Notification Specification. This specification, submitted by the scientist at the SCF, describes the conditions under which data should be forwarded to the SCF for QA.	mission critical	test	T250-10.02.23	B090140.040B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020
SCF-0210#B	The ECS shall have the capability to send a Data Quality Request Notification to the SCF. This notification is sent when QA notification criteria are met during routine ECS processing. The notification states the data product and the time by which a notification, and optionally data, must be evaluated and returned to the ECS for inclusion as an update to the product metadata.	mission critical	test	T250-10.02.23	B090140.040B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.040 B120610.030 B120620.040 B120630.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0220#B	The ECS shall have the capability to receive from the SCF a Request for Data to QA. This request may be a standing request specified in the QA Notification Specification and may include the data product specified in the Data Quality Request Notification, or other data required by the scientist to QA the data product.	mission critical	test	T250-10.02.23	B090240.040B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
SCF-0230#B	The ECS shall have the capability to send Data Delivered for QA to the SCF. This data includes the data requested by the scientist needed for the QA of data products.	mission critical	test	B233.02.02 T233-31.02.02	B090140.040B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0240#B	The ECS shall have the capability to receive an On Time QA from the SCF. This shall consist of the science QA codes describing the results of product QA and any further instructions to the ECS. The ECS shall accept the On Time QA when it is received within the time-out period specified in the Data Quality Request Notification. ECS shall accept post-time-out QA updates as Metadata Updates as specified by Requirement SCF-0250.	mission critical	test	B233.02.02 T233-31.02.02	B090140.040B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120330.040 B120410.040 B120430.040 B120440.040 B120440.050 B120440.060 B120510.040 B120520.030 B120530.030 B120610.030 B120620.040 B120630.040
SCF-0250#B	The ECS shall have the capability to receive Metadata Updates from the SCF. These shall include the science QA codes and optionally a report describing the results of product QA and any further instructions to the ECS. The ECS shall only accept Metadata Updates when they are received after the time allotment specified in the Data Quality Request Notification.	mission critical	test	B233.02.02 T233-31.02.02	B090140.040B090240.040 B090350.040 B090440.040 B090530.040 B090630.040 B100210.020 B100220.020 B100230.020 B100240.020 B100250.020 B120330.040
SCF-0260#B	The ECS shall have the capability to make a Reprocessing Request Template available to the SCF. This template will be used by the scientist at the SCF to prepare a Reprocessing Request.	mission critical	test	B233.02.02 T233-31.02.02	B090140.010B090350.010 B090440.010 B090530.010 B090630.010 B100210.030 B100220.030 B100230.030 B100240.030 B100250.030 B120330.060 B120410.060 B120430.060 B120440.080 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0270#B	The ECS shall have the capability to receive a Reprocessing Request from the SCF. This request, at a minimum, contains the following, a list of all the products to be generated, the version numbers of the science software and calibration coefficients, a list of all ancillary data, and data start and stop times.	mission critical	test	B233.02.02 T233-31.02.02	B090140.010 B090350.010 B090440.010 B090530.010 B090630.010 B100210.030 B100220.030 B100230.030 B100240.030 B100250.030 B120330.060 B120410.060 B120430.060 B120440.080 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060
SCF-0280#B	The ECS shall have the capability to supply a Reprocessing Status to the SCF. This status that includes the reprocessing schedule informs the scientist at the SCF the status of his reprocessing request and provides notification upon completion of the reprocessing by the ECS.	mission critical	test	B233.02.02 T233-31.02.02	B090140.020B0 90140.050 B090240.020 B090240.050 B090350.020 B090350.050 B090440.020 B090440.050 B090530.020 B090530.050 B090630.020 B090630.050 B100210.030 B100220.030 B100230.030 B100240.030 B100250.030 B120330.060 B120410.060 B120430.060 B120440.080 B120510.060 B120520.050 B120530.050 B120610.050 B120620.060 B120630.060
SCF-0290#B	The ECS shall have the capability to send the Local Data Access Services Delivery Package to the SCF. This package shall provide management of, search of, and access to local metadata.	mission critical	test	T209-10.01.03	B100210.040
SCF-0300#B	The SCF shall have the capability to install and make operational in the SCF environment all COTS products that are required by Local Data Access Services.	mission critical	test	B233.02.02 T233-31.02.02	B100210.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SCF-0310#B	The ECS shall have the capability to receive Calibration Coefficient Requests from the SCF. The current or past calibration coefficients used in processing of instrument data may be requested by the scientist from the ECS.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0320#B	The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request.	mission essential	demo	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0330#B	The ECS shall have the capability to receive a Calibration Coefficient Update Package from the SCF. This package shall include a calibration coefficient file and other documentation needed to implement the updated coefficients.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0340#B	The SCF shall have the capability to send a Request for Processing Status to the ECS for the status of SCF-requested data processing.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0350#B	The ECS shall have the capability to provide SCF with the Processing Status of SCF-requested data processing.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0360#B	The SCF shall have the capability to send a Request for Resource Usage to the ECS for information about ECS resource usage during SCF-requested data processing.	mission critical	test	B233.02.02 T233-31.02.02	B100210.040
SCF-0370#B	The ECS shall have the capability to provide SCF with information about ECS Resource Usage during SCF-requested data processing.	mission critical	test	B233.02.02 T233-31.02.02	B100210.040
SCF-0380#B	The SCF shall have the capability to send a Request for Product History (including the algorithms used) to the ECS for the history of data products that the SCF specifies.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030
SCF-0390#B	The ECS shall have the capability to provide SCF with the Product History of data products that the SCF specifies.	mission critical	test	B233.02.02 T233-31.02.02	B100210.030 B100220.030 B100230.030 B100240.030 B100250.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SDPS0010#B	The SDPS shall provide CSMS with operational, data processing, data quality and accounting status.	mission essential	test	B260.02.06 T252-10.02.03	B090110.010 B090110.020 B090120.040 B090120.070 B090130.030 B090130.060 B090140.030 B090140.040 B090150.030 B090160.010 B090160.020 B090160.030 B090210.010 B090210.020 B090220.040 B090220.070 B090230.030 B090230.060 B090240.030 B090240.040 B090250.030 B090250.050 B090260.030 B090270.010 B090270.020 B090310.010 B090310.020 B090320.040 B090320.070 B090330.040 B090330.070 B090340.030 B090340.060 B090350.030 B090350.040 B090360.030 B090360.050 B090370.030 B090380.010 B090380.020 B090380.030 B090410.010 B090420.040 B090420.070 B090430.030 B090430.060 B090440.030 B090440.040 B090450.030 B090460.030 B090470.010 B090470.020 B090470.030 B090510.010 B090510.020 B090520.030 B090520.060 B090530.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B090530.040 B090540.030 B090550.010 B090550.020 B090550.030 B090610.040 B090610.070 B090620.030 B090620.060 B090630.030 B090630.040 B090640.030 B090650.010 B090650.020 B090710.020 B090710.050 B090720.030 B090720.060 B090810.030 B090810.060
SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.	mission essential	test	B230.02.18 T209-51.02.07 T231-32.02.06 T231-42.02.08	B080320.010 B080320.020 B080320.030 B090180.010 B090290.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
SDPS0016#B	The SDPS shall coordinate and resolve schedule conflicts between IMS, DADS and PGS.	mission essential	test	B260.02.06	B080320.010 B080320.020 B080320.030 B090180.010 B090290.010 B090395.010 B090395.020 B090490.010 B090570.010 B090670.010 B090730.010 B090820.010
SDPS0020#B	The SDPS shall receive EOS science, engineering, ancillary and expedited data from the EDOS, the SDPF, and the IPs, and non-EOS data, in situ data, associated algorithms, documentation, correlative data, and ancillary data (as listed in Appendix C) from ADCs, EPDSs, and ODCs.	mission critical	test	B212.01.01 B233.01.02 B240.02.01 B240.02.09 B244.02.01 B260.02.02 B260.02.03 T212-20.01.03 T244-10.02.08 T244-10.02.09 T244-10.02.10	B090110.010 B090120.020 B090210.010 B090310.010 B090330.020 B120330.020 B120410.020 B120420.020 B120420.050 B120430.020 B120440.020 B120510.020 B120650.010 B120650.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SDPS0021#B	SDPS0021 - The SDPS shall convert the following ancillary data sets from their native formats into internal formats to allow access by science algorithms: a. NMC GRIB formatted final analysis product b. NESDIS Snow/Ice Product in DEF format c. TOMS products (format currently unspecified)	mission critical	test	B260.02.06	B090120.020 B090330.020 B090340.010
SDPS0022#B	The SDPS shall utilize FOS plans and scheduling information to generate EDOS Level 0 data availability information and integrate it into SDPS data availability schedules.	mission critical	test	B233.01.01	B090110.010 B090310.010 B120430.010 B120440.010 B120510.010
SDPS0025#B	The SDPS shall accept scientific and non-scientific investigator supplied dataset specific data transformations.	mission essential	test	B233.01.01	B090150.010 B090260.010 B090370.010 B090450.010 B090540.010 B090640.010
SDPS0026#B	The SDPS shall provide the capability for performing dataset specific data transformations.	mission essential	test	B233.01.01 B240.02.07 B260.02.03 T233-20.01.02	B090150.030 B090260.030 B090370.030 B090450.030 B090540.030 B090640.030 B100120.100
SDPS0030#B	The SDPS shall produce Standard Products (as listed in Appendix C, including prototype products on a time-available basis) for EOS instruments based on the algorithms source code and calibration coef§cients supplied by EOS scientists.	mission essential	test	B233.01.01	B090110.020 B090210.020 B090310.020 B090410.010 B090510.020
SDPS0031#B	The SDPS shall generate browse data and metadata for routing to the requesting users.	mission essential	test	B233.01.01	B100120.090
SDPS0032#B	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.	mission essential	test	B233.01.01	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030 B100210.010 B100210.020 B100220.010 B100220.020 B100230.010 B100230.020 B100240.010 B100240.020 B100250.010 B100250.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SDPS0035#B	The SDPS shall produce derived ancillary products as Standard Products for EOS investigators based on algorithms and coefficients for conversion, calibration, and transformation of selected engineering/housekeeping data parameters.	mission essential	test	B233.01.01	B090140.030 B090240.030 B090350.030 B090440.030 B090530.030 B090630.030 B100120.060 B100120.100 B100410.050 B100430.040
SDPS0050#B	The SDPS shall archive, manage, quality check, and account for the generated data products, and distribute the data products to the appropriate destinations as required.	mission essential	test	B233.01.01	B090110.010 B090110.020 B090110.030 B090210.010 B090210.020 B090210.030 B090310.010 B090310.020 B090310.030 B090410.010 B090410.020 B090510.010 B090510.020 B090510.030 B120330.040 B120330.050 B120330.060 B120410.040 B120410.050 B120410.060 B120420.030 B120420.040 B120430.040 B120430.050 B120430.060 B120440.040 B120440.050 B120440.060 B120440.070 B120440.080 B120450.030 B120450.040 B120450.050 B120510.040 B120510.050 B120510.060 B120520.030 B120520.040 B120520.050 B120530.030 B120530.040 B120530.050 B120610.030 B120610.040 B120610.050 B120620.040 B120620.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B120620.060 B120630.040 B120630.050 B120630.060
SDPS0080#B	The SDPS shall archive, manage, quality check, and account for all science and ancillary data received from the IPs, the EPDSs, the SCFs, the ADCs, the ODCs, other DAACs, PIs and the other EOS science users.	mission essential	test	T209-91.02.02 T221-40.02.04	B090120.020 B090120.040 B090120.060 B090130.010 B090130.020 B090130.030 B090130.050 B090220.020 B090220.040 B090220.060 B090230.010 B090230.020 B090230.030 B090230.050 B090320.030 B090320.040 B090320.060 B090330.020 B090330.040 B090330.060 B090340.010 B090340.020 B090340.030 B090340.050 B090420.020 B090420.040 B090420.060 B090430.010 B090430.020 B090430.030 B090430.050 B090460.030 B090520.010 B090520.020 B090520.030 B090520.040 B090520.050 B090610.020 B090610.040 B090610.060 B090620.010 B090620.020 B090620.030 B090620.050 B090710.020 B090710.030 B090720.010 B090720.020 B090720.030 B090720.050 B090810.010 B090810.020 B090810.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
					B090810.050 B120330.020 B120330.030 B120420.010 B120420.020 B120420.050 B120430.030 B120440.030 B120450.020 B120510.030 B120620.030 B120630.030 B120650.010 B120650.020
SDPS0085#B	The SDPS shall support data products transitioned from V0 at a level of service equal to or greater than the level of service provided for those same data products by V0. The level of service are defined in Appendix C of the ESDIS Project Level 2 Requirements, Volume 5 EOSDIS Version 0.	mission essential	test	B233.01.01	B100130.010 B100420.030
SDPS0090#B	The SDPS shall interface with the PIs and the other science users to support the development and testing of data product algorithms and QA of produced data products.	mission essential	inspection	B233.01.01	B090170.030 B090280.030 B090390.030 B090480.030 B090560.030 B090660.030 B100210.010 B100210.020 B100220.010 B100220.020 B100230.010 B100230.020 B100240.010 B100240.020 B100250.010 B100250.020
SDPS0091#B	The SDPS shall receive a quality report that is generated and transmitted by the PIs or the other science users, and appended to the data products being archived by the SDPS.	mission fulfillment	test	B220.02.03 T222-31.01.01	B100210.020 B100220.020 B100230.020 B100240.020 B100250.020
SDPS0095#B	The SDPS shall provide science user interfaces that are individually tailorable including settable preferences, user defined keywords, query save capabilities, and screen layout preferences.	mission fulfillment	test	T209-20.01.01	B100120.050
SDPS0100#B	The SDPS shall be responsible for delivery of EOS data and data products to the ADCs, and the other science users via EOSDIS networks and on a variety of physical media.	mission essential	test	T209-20.01.01 T209-41.02.01	B100140.030 B100320.040 B120340.050 B120340.060

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SDPS0110#B	The SDPS shall be responsible for coordination of the transfer of production and expedited science and engineering data from EDOS SDPF and the IPs	mission essential	test	T209-20.01.01	B080160.030 B090110.010 B090210.010 B090310.010 B090420.020 B120330.020 B120410.020 B120430.020
SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.	mission essential	test	T233-11.01.04 T250-10.02.25	B120810.010
SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.	mission essential	test	T233-11.01.04	B100140.010 B100140.020 B100320.010 B100320.030 B100420.010
SDPS0140#B	The SDPS shall support element, system, and subsystem test activities throughout the development phase.	mission essential	inspection	B230.02.26 B230.02.27 B240.02.12 B260.02.07 T209-82.02.01 T209-82.02.02 T209-82.02.03 T209-82.02.04 T212-30.01.01	B080210.010
SDPS0150#B	The SPDS shall assign priority and distribute expedited data and expedited data availability notices.	mission essential	test	B230.02.26	B090110.010 B090210.010
SDPS0170#B	The SDPS shall accommodate growth in the instrument processing load and storage capacity without changes to the SDPS architecture or design.	mission essential	test	B230.02.26	B120830.010
SDPS0200#B	In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting through the use of geographical masking (land/sea mask, snow/ice mask) for standard production as well as reprocessing.	mission fulfillment	demo	T233-12.01.04	B090110.020 B090140.030 B090150.030 B090210.020 B090240.030 B090260.030 B090310.020 B090350.030 B090370.030 B090440.030 B090450.030 B090460.030 B090510.020 B090530.030 B090540.030 B090630.030 B090640.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SDPS0210#B	In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support the application of lossless compression and decompression techniques on data set files for removal of data set fill pixels, for standard production as well as reprocessing.	mission fulfillment	demo	B230.02.26	B090110.020 B090140.030 B090150.030 B090210.020 B090240.030 B090260.030 B090310.020 B090350.030 B090370.030 B090440.030 B090450.030 B090460.030 B090510.020 B090530.030 B090540.030 B090630.030 B090640.030
SDPS0220#B	In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting through swath width reduction by selection of a range of pixels from each swath row, for standard production as well as reprocessing.	mission fulfillment	demo	B230.02.26	B090110.020 B090140.030 B090150.030 B090210.020 B090240.030 B090260.030 B090310.020 B090350.030 B090370.030 B090440.030 B090450.030 B090460.030 B090510.020 B090530.030 B090540.030 B090630.030 B090640.030
SDPS0230#B	In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting by spectral band(s) selection, for standard production as well as reprocessing.	mission fulfillment	demo	B230.02.26	B090110.020 B090140.030 B090150.030 B090210.020 B090240.030 B090260.030 B090310.020 B090350.030 B090370.030 B090440.030 B090450.030 B090460.030 B090510.020 B090530.030 B090540.030 B090630.030 B090640.030
SMC-0300#B	The SMC shall be designed to accommodate 100 percent growth in processing speed without requiring modifications or upgrades to existing applications software.	mission essential	analysis	T250-10.02.01 T250-10.02.02	B080210.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-0310#B	The SMC shall be designed to accommodate 100 percent growth in storage capacity without requiring modifications or upgrades to existing applications software.	mission essential	analysis	T250-10.02.01 T250-10.02.02	B080210.020
SMC-0320#B	The SMC shall be capable of scheduling ground activities to a minimum of one minute resolution.	mission essential	test	B240.02.13 T250-10.02.01	B120820.050
SMC-0330#B	The SMC shall be capable of executing events to a minimum of one minute resolution.	mission essential	test	B240.02.13	B080210.020
SMC-0340#B	The SMC shall have the capability of responding to system faults within a maximum of five minutes.	mission critical	test	B240.02.13	B120820.050
SMC-0350#B	The SMC shall have the capability of responding to security compromises within a maximum of five minutes.	mission critical	test	B240.02.13	B120820.050
SMC-1000#B	The SMC shall provide application programming interfaces (APIs) for the monitoring and control of managed resources. These APIs shall provide mechanisms for: a. Capturing, by an application, of management data b. Exchanging management data between a managed application and its management agent c. Exchanging management data between a management agent and the LSM d. Performing analyses and generating reports using management data	mission essential	test	B240.02.13	B080160.010
SMC-1300#B	The SMC shall support and maintain the ECS policies and procedures regarding instrument and ground event scheduling, including, at a minimum: a. Mission and science guidelines b. Directives for scheduling instrument data ingest, processing, reprocessing, retrieval, and data distribution	mission critical	test	T221-21.02.05	B080730.010
SMC-1305#B	The LSM shall provide SMC access to scheduling information from each element.	mission critical	test	T221-21.02.05	B080330.010 B080330.020
SMC-1310#B	The SMC shall support and maintain the allocation of ground event functions and capabilities to each site and element.	mission essential	test	T221-21.02.05	B080130.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-1315#B	The LSM shall provide each elements scheduling function with access to the system-wide scheduling information, including, at a minimum: a. ECS policies and procedures regarding instrument and ground event scheduling b. Other elements plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations	mission critical	test	T211-30.01.04	B080330.020
SMC-1320#B	The SMC shall support and maintain priorities used in scheduling ground events.	mission essential	test	T221-21.02.05	B080130.010
SMC-1325#B	The LSM shall provide the operations and management staff at a site or element the capability to communicate scheduling information to and receive scheduling information from the SMC, including, at a minimum: a. Routine scheduling information b. Request scheduling information c. Schedule conflict alert information d. Emergency scheduling information.	mission critical	test	T221-21.02.05	B080330.020
SMC-1330#B	The SMC shall support and maintain the information for end-to-end data ingest, processing, reprocessing, archive, and data distribution for each product, including, at a minimum: a. Product information b. Product generation information c. Product delivery information	mission critical	test	T252-10.02.04	B120330.010 B120330.040 B120330.050 B120330.060 B120410.010 B120410.040 B120410.050 B120410.060 B120430.010 B120430.040 B120430.050 B120430.060 B120440.010 B120440.040 B120440.050 B120440.060 B120440.070 B120440.080 B120510.010 B120510.040 B120510.060 B120520.010 B120530.010 B120610.010 B120620.010 B120630.010
SMC-1335#B	The LSM shall have the capability to automatically extract, process, and send to the SMC, pertinent scheduling information.	mission critical	test	T233-22.02.01	B080330.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-1340#B	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element integration, testing, and simulation activities.	mission essential	test	T233-22.02.01	B080310.020
SMC-1345#B	The LSM shall perform priority management services to resolve conflicts for ECS resources.	mission critical	test	T233-22.02.01	B080320.010 B080320.020 B080320.030
SMC-1350#B	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element maintenance activities.	mission essential	test	T221-21.02.05	B080310.020
SMC-1360#B	The SMC shall generate ground resource scheduling directives, or recommendations for FOS elements, in response to emergency situations.	mission critical	test	T233-22.02.01	B080310.020
SMC-1500#B	The SMC shall perform schedule conflict analysis and resolution services in response to a schedule conflict involving sites, ECS elements, or external elements, agencies, or organizations, except for conflicts associated with flight operations.	mission essential	test	T233-22.02.05	B080320.010 B080320.020 B080320.030
SMC-1600#B	The SMC shall receive product generation schedules from the DAACs and analyze the schedules for cross-DAAC dependencies (e.g., inputs that must be generated and provided by one DAAC before a product can be generated at another DAAC).	mission essential	test	T233-22.02.05	B080310.020
SMC-1610#B	The SMC shall recommend adjustments in the product generation schedules to ensure that product generation functions and the DAAC-to-DAAC data transfers required, are accomplished in accordance with overall mission requirements (e.g., without the development of a product generation backlog at any DAAC).	mission essential	test	T233-22.02.05	B080310.020
SMC-1620#B	The SMC shall transmit the recommended schedules back to the DAACs for consideration, iterate with the DAACs as required, and develop a coordinated schedule for implementation.	mission essential	test	T233-22.02.05	B080310.020
SMC-1630#B	The SMC shall confirm that the coordinated schedule is implemented and monitor product generation and data transfers for compliance with the coordinated schedule.	mission essential	test	T233-22.02.01	B080330.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-2100#B	The SMC shall have the capability to generate and send ground operations (i.e., non-instrument related) events to sites and elements for implementation. Ground operations events include, at a minimum, actions associated with: a. Configuring element resources b. Fault recovery c. Security d. Maintenance e. Testing f. Simulations g. Logistics h. Training i. Accounting and accountability j. General requests for information	mission essential	test	T221-21.02.05	B080130.010
SMC-2105#B	The LSM shall convey ground operations (i.e., non-instrument related) events to sites or elements for implementation. Ground operations events include, at a minimum, actions associated with: a. Configuring element resources b. Fault recovery c. Security d. Maintenance e. Testing f. Simulations g. Logistics h. Training classes i. Accounting and accountability j. General requests for information	mission critical	test	T221-21.02.05	B080130.010
SMC-2110#B	The SMC shall have the capability to generate managerial and operational directives affecting, at a minimum, an elements: a. Operational status b. Resource allocation c. Upgrade	mission essential	demo	B210.01.04 T211-40.01.01	B080310.020
SMC-2115#B	The LSM shall convey for site or element implementation, the managerial and operational directives regarding the allocation or upgrade of any elementÍs hardware and scientific and systems software.	mission essential	analysis	B210.01.04	B080310.010
SMC-2120#B	The SMC shall make available for automated distribution to authorized users all unlicensed toolkit software, toolkit software upgrades, and toolkit documentation.	mission essential	demo	B210.01.04 T211-40.01.01	B080410.010
SMC-2130#B	The SMC shall administer and distribute licenses for deployed commercial-software funded by the ECS contract, including commercial software as authorized for specific users.	mission essential	demo	T211-50.01.01	B080410.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-2200#B	The SMC shall assist each site or element, when necessary, in the performance of on-site preventive and corrective hardware and systems software maintenance.	mission essential	demo	B221.02.06 T221-21.02.03 T221-21.02.04 T221-21.02.05 T221-21.02.06	B080420.010 B080420.020
SMC-2205#B	The LSM shall support on-site preventive and corrective hardware and systems software maintenance.	mission critical	analysis	T221-21.02.03 T221-21.02.04 T221-21.02.05	B080420.010 B080420.020
SMC-2210#B	The SMC shall coordinate with each site or element in the management of off-site corrective hardware and systems software maintenance.	mission essential	demo	T221-21.02.06	B080420.030
SMC-2215#B	The LSM shall coordinate with the SMC in the management of off-site corrective hardware and systems software maintenance.	mission critical	analysis	T221-21.02.06	B080420.030
SMC-2220#B	The SMC shall monitor hardware and systems software maintenance status for off-site repair actions.	mission essential	demo	T221-21.02.01	B080420.030
SMC-2300#B	The SMC shall monitor the spares inventory within each element.	mission critical	demo	T221-21.02.01 T221-21.02.02	B080430.020
SMC-2305#B	The LSM shall monitor the spares inventory within its element.	mission critical	demo	T221-21.02.02	B080430.020
SMC-2310#B	The SMC shall oversee the replenishment of spare parts for all elements.	mission critical	demo	T221-21.02.02	B080440.010
SMC-2315#B	The LSM shall manage the replenishment of spare parts within its element.	mission critical	demo	T221-21.02.02	B080440.010
SMC-2320#B	The SMC shall monitor the consumable inventory within each element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	mission essential	demo	T221-21.02.01 T221-21.02.02 T250-10.02.02 T250-10.02.03 T250-10.02.07 T250-10.02.08	B080430.020
SMC-2325#B	The LSM shall monitor the consumable inventory within its element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	mission essential	demo	T221-21.02.02	B080430.020
SMC-2330#B	The SMC shall monitor the replenishment of consumable items for all elements.	mission essential	demo	T221-21.02.01 T221-21.02.02	B080440.010
SMC-2335#B	The LSM shall manage the replenishment of consumable items for its element.	mission essential	demo	T221-21.02.02	B080440.010
SMC-2400#B	The SMC shall support the management of training and certification programs for ECS.	mission essential	demo	B211.01.05 B221.02.07	B080450.010
SMC-2405#B	The LSM shall coordinate with the SMC in managing the training program for its element.	mission fulfillment	analysis	B221.02.07 B211.01.05	B080450.010
SMC-2410#B	The SMC shall provide support for the development of schedules for training courses.	mission fulfillment	demo	B221.02.07	B080450.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-2415#B	The LSM shall receive from the SMC descriptions and schedules for training courses.	mission fulfillment	analysis	B211.01.05 B221.02.07	B080450.010
SMC-2420#B	The SMC shall support the development of on-the-job training.	mission fulfillment	demo	B221.02.07	B080450.020
SMC-2430#B	The SMC shall support the development and use of training materials.	mission fulfillment	demo	B221.02.07	B080450.020
SMC-2450#B	The SMC shall support the evaluation of the effectiveness of the training programs.	mission fulfillment	demo	T211-40.01.01	B080450.020
SMC-2500#B	The SMC shall establish and maintain a system-wide inventory of all hardware, scientific and system software contained within ECS, including at a minimum: a. Hardware or software identification numbers b. Version numbers and dates c. Manufacturer d. Part number e. Serial number f. Name and locator information for software maintenance g. Location where hardware or software is used	mission essential	test	T221-21.02.01 T221-21.02.02	B080430.030
SMC-2505#B	The LSM shall update the system-wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.	mission critical	test	T221-21.02.01 T221-21.02.02	B080430.030
SMC-2510#B	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS. The management system shall support the migration of hardware and software upgrades into the operational environment.	mission essential	analysis	T250-10.02.01 T250-10.02.02 T250-10.02.03 T250-10.02.07 T252-20.02.16 T252-20.02.21 T252-20.02.22 T252-20.02.23	B080410.020
SMC-2515#B	The LSM shall provide configuration management for at least the operational hardware, system software, and scientific software within its element and for the migration of enhancements into the operational system.	mission critical	test	T250-10.02.01	B080410.020
SMC-2520#B	The SMC shall evaluate received system enhancement requests to determine, at a minimum: a. Technical feasibility b. Implementation schedule c. Expected costs d. Existing system-wide hardware and software impacts	mission essential	analysis	T250-10.02.01	B080220.010
SMC-2530#B	Upon approval of a system enhancement, the SMC shall provide overall management of the implementation of the approved changes to the hardware and system software.	mission essential	analysis	T250-10.02.01	B080220.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-2535#B	Upon approval of an enhancement, the LSM shall facilitate the implementation of the approved changes within an elements hardware and software.	mission essential	analysis	B210.01.04 T211-40.01.01	B080220.010
SMC-2540#B	Upon approval to include a fully tested enhancement to the algorithms, the SMC shall provide overall management of the implementation of the approved and modified software into the operational environment.	mission essential	analysis	T250-10.02.01	B080220.010
SMC-2600#B	The SMC shall support, control, and maintain ECS policies and procedures covering the following areas, at a minimum: a. Site or element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	mission fulfillment	inspection	T221-22.02.01	B080110.010 B080110.020 B080110.030 B080730.010
SMC-2605#B	The LSM shall support the site and element in implementing ESDIS Project policies and procedures received from the SMC covering the following areas, at a minimum: a. Element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	mission fulfillment	analysis	T221-22.02.01	B080110.010 B080110.020 B080110.030 B080730.010
SMC-2610#B	The SMC shall provide and maintain a bulletin board service with information on ECS status, events, and news.	mission essential	demo	B221.02.08	B080610.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-2620#B	The SMC shall maintain via the ECS bulletin board service, the SMC toolkit consisting of a list of SDPS approved CASE tools and references to standards for exchanging data for scientist use.	mission essential	inspection	B210.01.04 T211-40.01.01 T250-10.02.03	B080610.040
SMC-3300#B	The SMC shall monitor site and element hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test modee. In simulation mode	mission essential	demo	B210.01.03 T210-10.01.01 T210-10.01.02 T211-10.01.01 T211-10.01.02 T252-10.02.05 T252-20.02.01 T252-20.02.02 T252-60.02.01 T252-60.02.02 T253-10.02.01	B080420.010 B080420.030
SMC-3305#B	The LSM shall monitor its elements hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode	mission critical	test	T211-10.01.01 T252-10.02.03 T252-20.02.01 T252-20.02.02 T252-60.02.01 T252-60.02.02 T253-10.02.01	B080420.010 B080420.030
SMC-3310#B	The SMC shall monitor each elements schedule and execution of events.	mission essential	demo	T251-22.02.08	B080130.010
SMC-3315#B	The LSM shall monitor its elements schedule and execution of events.	mission essential	demo	T251-22.02.08 T252-20.02.01	B080130.010
SMC-3320#B	The SMC shall monitor execution of ground operations events.	mission essential	demo	T252-20.02.01 T253-10.02.01	B080130.010
SMC-3325#B	The LSM shall monitor execution of ground operations events.	mission critical	demo	T252-20.02.01 T253-10.02.01	B080130.010
SMC-3330#B	The SMC shall compare and evaluate system-wide, site, and element actual schedule performance against planned schedule performance.	mission essential	demo	T252-20.02.01 T253-10.02.01	B080530.010
SMC-3335#B	The LSM shall compare and evaluate its elements actual schedule performance against planned schedule performance.	mission critical	test	T252-20.02.01 T253-10.02.01	B080530.010
SMC-3340#B	The SMC shall perform quality assurance for the overall ECS performance as well as programmatic areas that include, at a minimum: a. System quality testing, benchmarks, and audits for system enhancement implementations b. System quality checking and audits of products processed and delivered c. Quality testing and audits of site and element resource performance.	mission critical	analysis	T252-20.02.02 T252-20.02.07	B080530.030

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-3345#B	The LSM shall perform quality assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,	mission critical	analysis	T252-20.02.07	B080530.030
SMC-3350#B	The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as: a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations	mission critical	analysis	B252.02.05 T211-30.01.04 T252-10.02.01 T252-10.02.04 T252-10.02.05	B080510.010 B120820.050
SMC-3355#B	The LSM shall implement the performance criteria from SMC (including parametric limits and operational threshold levels) for evaluating element resource performance.	mission essential	analysis	B252.02.05	B080510.010 B120820.050
SMC-3370#B	For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation	mission critical	analysis	B252.02.05	B080510.010 B120820.050
SMC-3375#B	For each limit checked parameter, the LSM (including those thresholds directed by the SMC) shall have the capability of evaluating multiple levels of thresholds including, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation	mission critical	test	B252.02.05	B080510.010 B120820.050
SMC-3380#B	The SMC shall evaluate the overall system performance including the analysis of EBnet related fault and performance information and their long term trend analysis to determine the impact to ECS system.	mission essential	analysis	B253.02.03 T252-20.02.01 T253-10.02.01	B080530.010 B120820.050
SMC-3385#B	The LSM shall evaluate system performance against the ESDIS project established performance criteria.	mission critical	analysis	T252-20.02.01 T253-10.02.01	B080530.010 B120820.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-3390#B	The SMC shall generate alert indicators of fault or degraded conditions with the corrective actions.	mission critical	test	B252.02.01 B252.02.02 B260.02.05 T252-20.02.01 T252-30.02.02	B080510.010 B120820.050
SMC-3395#B	The LSM shall generate, in response to each limit check threshold, alert indicators of fault or degraded conditions.	mission critical	test	B252.02.01	B080510.010 B120820.050
SMC-3397#B	The LSM shall generate, as needed, requests for performance testing, including, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	mission critical	test	T252-20.02.02 T252-20.02.03	B080520.020 B120820.050
SMC-3400#B	The SMC shall generate, as needed, requests for performance testing that includes, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	mission essential	demo	T252-20.02.03 T252-30.02.05	B080520.020 B120820.050
SMC-3410#B	The SMC shall perform short and long-term trend analysis of system, site, and element performance to include, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	mission essential	analysis	B253.02.01 B253.02.02 B253.02.03	B080530.010 B120820.050
SMC-3415#B	The LSM shall perform short and long-term trend analysis of element performance, including, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	mission essential	test	B253.02.01	B080530.010 B120820.050
SMC-3420#B	The SMC shall perform short and long term trend analysis of system, site, and element performance to determine the impact on resources of, at a minimum: a. Modifying system, site, or element activity allocations b. Potential enhancements to system, site, or element	mission essential	analysis	B253.02.01 B253.02.02 B253.02.03	B080210.020 B080530.010 B120820.050
SMC-3421#B	The SMC shall analyze user feedback information supporting the development of recommended remedial or enhancement actions.	mission essential	analysis	B210.01.03 B220.02.03 T211-30.01.03	B080220.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-4300#B	The SMC shall support, maintain, and update system fault management policies and procedures including, at a minimum: a. Fault identification b. Fault priorities c. Recovery or corrective actions	mission essential	demo	B253.02.01	B080730.010
SMC-4305#B	The LSM shall maintain fault management policies and procedures for its element.	mission essential	analysis	B253.02.01	B080730.010
SMC-4310#B	The SMC shall perform fault analysis including, at a minimum: a. Isolation b. Location c. Identificationd. Characterization	mission essential	analysis	B252.02.01 B252.02.02 B260.02.05 T252-30.02.02 T252-30.02.06	B080620.010
SMC-4311#B	The SMC shall have the capability to perform fault analysis to the level of, at a minimum: a. Subsystem b. Equipment	mission essential	demo	B252.02.01 B252.02.02 B252.02.03 B252.02.04 T252-10.02.03 T252-30.02.06	B080620.010
SMC-4315#B	The LSM shall, at a minimum, isolate, locate, and identify faults, identify subsystem, equipment, and software faults, and identify the nature of the faults within its element.	mission critical	test	T252-30.02.05	B080620.010
SMC-4320#B	SMC shall support fault diagnosis testing to include, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing	mission essential	demo	T252-30.02.05	B080620.010
SMC-4325#B	The LSM shall request fault diagnosis testing be performed, including, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing within its element	mission essential	demo	T252-30.02.05	B080620.010
SMC-4330#B	SMC shall have the capability to generate fault recovery commands, directives, and instructions to sites and elements except for faults directly related to flight operations.	mission essential	test	T252-30.02.05	B080620.010
SMC-4335#B	The LSM shall generate fault recovery commands, directives, and instructions within its element.	mission critical	test	T252-30.02.05	B080620.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-5300#B	The SMC shall, in conjunction with sites and elements, establish, support, maintain, and update security policies and procedures to include, at a minimum: a. Physical security b. Password management c. Operational security d. Data security e. Privileges f. Network security g. Compromise mitigation	mission essential	analysis	T221-30.02.01	B080730.010
SMC-5305#B	The LSM shall maintain security policies and procedures, including, at a minimum: a. Physical security b. Password management c. Operational security d. Data classifications e. Access/privileges f. Compromise mitigation	mission critical	analysis	T252-30.02.05	B080730.010
SMC-5320#B	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.	mission critical	test	B210.01.03 B220.02.03 T211-30.01.03 T252-40.02.02	B080630.020
SMC-5325#B	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.	mission critical	test	B210.01.03	B080630.020
SMC-5330#B	The SMC shall provide support, manage, maintain, and request security testing that includes, at a minimum, password checking and control of site and element internal privileges.	mission critical	test	B210.01.03	B080630.020
SMC-5335#B	The LSM shall perform security testing that includes, at a minimum, password auditing and element internal access/privileges checking.	mission critical	test	B210.01.03	B080630.020
SMC-5340#B	The SMC shall perform security risk analyses and compromise detection.	mission critical	analysis	B210.01.03	B080630.020
SMC-5345#B	The LSM shall perform compromise (e.g., virus or worm penetration) risk analysis, and detection.	mission critical	analysis	B210.01.03	B080630.020
SMC-5350#B	The SMC shall have the capability to initiate recovery procedures in response to a detected security compromise.	mission critical	demo	B210.01.03	B080140.040 B080630.020
SMC-5355#B	The LSM shall isolate the compromised area, detach the compromised input I/O, and the compromised areas output I/O until the compromise has been eliminated.	mission critical	test	B210.01.03	B080630.020
SMC-5360#B	SMC shall have the capability to manage encrypted information, including keys.	mission essential	demo	T221-30.02.02	B080630.020
SMC-5365#B	The LSM shall generate recovery actions in response to the detection of compromises.	mission critical	test	B210.01.03	B080140.040 B080630.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-6300#B	The SMC shall support, maintain, and update accounting and accountability policies and procedures based on ESDIS Project policies and procedures.	mission essential	analysis	B210.01.03	B080730.010
SMC-6301#B	The SMC accounting policies and procedures shall conform with accounting principles, standards, and facilities including: a. General Accounting Office (GAO) Title 2-Accounting and Title 3-Audit b. Office of Management and Budget (OMB) Circular No. A-127, Financial Management Systems c. OMB Circular No. A-130, Management of Federal Information Resources	mission essential	analysis	T211-20.01.01	B080730.010
SMC-6310#B	The SMC shall perform, as needed, security audit trails.	mission essential	demo	B210.01.03	B080630.020
SMC-6315#B	The LSM shall perform, as needed, security audit trails within its element.	mission essential	demo	B210.01.03	B080630.020
SMC-6320#B	The SMC shall perform, as needed, data and user audit trails.	mission essential	demo	T251-10.02.06 T251-10.02.13 T251-10.02.17 T251-10.02.18	B080630.020
SMC-6325#B	The LSM shall perform, as needed, data and user audit trails within its element.	mission essential	demo	B210.01.03	B080630.020
SMC-6330#B	The SMC shall establish, maintain, and update a data tracking system that, at a minimum: a. Tracks data transport from system input to system output b. Allows the status of all product-production activities to be determined	mission essential	test	B210.01.03	B080130.020
SMC-6335#B	The LSM shall, as needed, maintain and update a data tracking system that, at a minimum: a. Tracks data transport from element input to element output b. Allows the status of all product-production activities to be determined	mission essential	demo	T251-22.02.06	B080130.020
SMC-6340#B	The SMC shall track system configuration that, at a minimum, audits: a. Hardware resources b. Software resources	mission essential	demo	T251-10.02.19	B080410.020
SMC-6345#B	The LSM shall, as needed, perform configuration accountability to include, at a minimum, the audit of hardware and software resources within its element.	mission essential	demo	T251-10.02.19	B080710.010
SMC-6360#B	The SMC shall maintain ESDIS project authorized billing algorithms and rates used to calculate resource utilization costs.	mission essential	demo	T251-10.02.19	B080710.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-6370#B	The SMC shall make the billing algorithms available to other elements for the purpose of informing science users of the cost of ECS services.	mission essential	demo	B251.02.02 B251.02.03 B251.02.04 T211-20.01.03 T251-10.02.09 T251-10.02.22	B080710.020
SMC-6380#B	The SMC shall calculate the resource unit costs associated with processing information from system input to system output.	mission essential	test	B251.02.02 B251.02.03 B251.02.04 T251-10.02.19 T251-10.02.20 T252-10.02.03 T252-10.02.04 T252-60.02.04	B080710.020
SMC-6385#B	The LSM shall, as needed, calculate the resource unit cost associated with processing information from element input to element output.	mission essential	test	T252-10.02.04	B080710.020
SMC-6390#B	The SMC shall establish, maintain, and update resource utilization account information for, at a minimum: a. Individuals b. Groups c. Processes	mission essential	test	T251-10.02.19	B080710.010 B120330.050 B120340.060 B120650.030
SMC-6400#B	The SMC shall generate invoices, including billing information for ECS.	mission essential	demo	B210.01.06 B211.01.04 T211-20.01.02 T251-10.02.03	B080710.020 B120330.050 B120340.060 B120650.030
SMC-6410#B	The SMC shall perform on a periodic basis the generation and distribution of bills.	mission essential	demo	B210.01.06 B211.01.04 B251.02.02 T211-20.01.02 T211-20.01.03	B080710.020
SMC-6420#B	The SMC shall perform the accounts payable, accounts receivable, and disposition of receipt accounting functions for ECS.	mission essential	test	T251-10.02.01 T251-10.02.02 T251-10.02.03 T251-10.02.04 T251-10.02.05 T251-10.02.06 T251-10.02.07 T251-10.02.08 T251-10.02.10 T251-10.02.11 T251-10.02.12 T251-10.02.13 T251-10.02.14 T251-10.02.15 T251-10.02.16 T251-10.02.17	B080710.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-7300#B	The SMC shall establish, maintain, and update the authorized users inventory to include, at a minimum: a. Users identifications b. Addresses c. Allowed privileges	mission critical	test	B210.01.02 B220.02.01 B220.02.02 B251.02.01 B260.02.01 T211-30.01.01 T211-30.01.03	B080430.030
SMC-7310#B	The SMC shall establish, maintain, and update the approved facility and equipment inventory to include, at a minimum: a. Facility and equipment identification b. Addresses c. Allowed accesses to privileges	mission essential	test	T211-30.01.02	B080430.030
SMC-7320#B	The SMC shall establish, maintain, and update the system profile, as opposed to science data profile, inventory to include, at a minimum: a. Data identifications b. Data purposes c. Data locations d. Data classifications (proprietary, open, confidential, etc.) e. Data priorities	mission essential	test	T211-30.01.02	B080430.010
SMC-8300#B	The SMC shall have a generalized report generator with the capability to customize output reports covering, at a minimum, data previously captured in a management DBMS including: a. All or portions of the system b. Variable amounts of time	mission essential	test	B211.01.05 B221.02.07 T221-21.02.01 T221-21.02.02 T221-22.02.01 T251-21.02.01 T251-22.02.01	B080720.010
SMC-8305#B	The LSM shall have the same report generator capability as for the SMC, except it shall be limited to generating reports covering only its particular site or its particular element.	mission essential	test	T250-10.02.08	B080720.020
SMC-8700#B	The SMC shall have the capability to generate a functional allocation report which gives the current allocation of ground segment functions to the sites and elements, including, at a minimum: a. The allocation of generation and storage function by standard product to each active archive b. The allocation of instrument responsibility to each ICC	mission essential	test	T251-22.02.08	B080720.010
SMC-8705#B	The LSM shall have the capability to generate the same types of reports listed under the SMC report generation service, except that each report shall cover only its particular site or its particular element.	mission essential	test	B211.01.05 B221.02.07 T221-21.02.01 T221-21.02.02 T221-21.02.03 T221-21.02.04 T221-22.02.01	B080720.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-8710#B	The SMC shall have the capability to generate summary and detailed configuration status reports that includes, at a minimum: a. Current status of all hardware, system and scientific software b. Reason why item not currently operational.	mission essential	test	T252-20.02.19 T252-20.02.20	B080720.010
SMC-8730#B	The SMC shall have the capability to generate reports showing detailed and summary information about the maintenance schedule for system hardware, system software, and scientific software, including, at a minimum: a. Routine maintenance schedules b. Non-routine maintenance schedules c. Upgrade maintenance schedule	mission essential	test	T221-21.02.03 T221-21.02.04 T252-20.02.24	B080720.010
SMC-8750#B	The SMC shall have the capability to generate detailed and summary training reports, including, at a minimum: a. Training programs b. Training course schedules c. Training course contents d. Training course locations e. Training attendees	mission fulfillment	analysis	T251-22.02.10	B080720.010
SMC-8770#B	The SMC shall have the capability to generate, at a minimum, detailed and summary reports showing the inventory of: a. Hardware, system, and scientific software b. Spares and consumables	mission essential	test	T252-20.02.25	B080720.010
SMC-8790#B	The SMC shall have the capability to generate, as necessary, a list of proposed enhancements with at least these elements: a. Proposal name b. Description of enhancement c. Rationale d. Impacts e. Costs f. Milestone schedule	mission fulfillment	analysis	T251-21.02.01	B080720.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-8800#B	The SMC shall have the capability to generate detailed and summary reports indicating the overall performance of the ECS. At a minimum, they shall include: a. Scheduled versus actual data collection, processing, retrieval, and delivery of routine data b. Scheduled versus actual data collection, processing, retrieval, and delivery of user requested data c. Reason(s) for failure to meet schedules d. Quality of the data e. Ground operations event execution f. Number of interactive user requests and timeliness of response g. User feedback	mission essential	test	B251.02.04 B260.02.06 T251-22.02.02 T251-22.02.04 T251-22.02.06 T251-22.02.08	B080720.010
SMC-8820#B	The SMC shall have the capability to generate detailed and summary reports indicating the product generation status made in processing, reprocessing, and storage of all standard products.	mission essential	test	T251-22.02.03 T251-22.02.06	B080720.010
SMC-8840#B	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: a. Resource availability b. Reason for down time c. Resource utilization d. Ability of resource to meet performance criteria e. Short and long-term trend analysis and capacity planning results	mission essential	test	B251.02.04 B260.02.06 T251-22.02.02 T252-20.02.08 T252-20.02.09 T252-20.02.10 T252-20.02.11 T252-20.02.12 T252-20.02.13	B080720.010
SMC-8841#B	The SMC shall have the capability to generate detailed and summary user feedback analysis reports describing the results of analyzing user satisfaction queries, including, at a minimum: a. User information b. Type of transaction c. Satisfaction statistics d. User recommendations e. SMC recommendations	mission essential	test	T251-22.02.02	B080720.010
SMC-8860#B	The SMC shall have the capability to generate detailed and summary fault management reports describing the fault management of ground resources, including, at a minimum: a. Fault type and description b. Time of occurrence of fault c. Effect on system d. Status of fault resolution e. Fault statistics	mission essential	test	B251.02.04 T251-22.02.07 T252-20.02.14 T252-20.02.15 T252-20.02.16 T252-20.02.17 T252-20.02.18	B080720.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
SMC-8880#B	The SMC shall have the capability to generate detailed and summary security compromise reports indicating security compromises of ground resources and facilities, including, at a minimum: a. Security compromise type and description b. Time of occurrence c. Cause of security compromise d. Impact on system e. Status of security compromise resolution f. Security compromise statistics g. Results of security compromise risk analysis	mission critical	test	B251.02.01 B251.02.02 T251-22.02.11 T252-60.02.04	B080720.010
SMC-8890#B	The SMC shall have the capability to generate detailed and summary accountability reports describing the results of accounting audits of ground resources, security, work-in-process, data, and users of the system.	mission essential	test	B260.02.06 T251-22.02.02 T251-22.02.04 T251-22.02.05 T251-22.02.06	B080720.010
SMC-8920#B	The SMC shall have the capability to generate detailed and summary reports indicating the financial accounting of ground segment resource utilization by ECS and external users, including, at a minimum: a. Account authorization and balances by users/groups b. Resource utilization costs by service rendered c. End-to-end cost accounting information by standard product d. User/group accounts payable/accounts receivable information	mission essential	test	B251.02.01 B251.02.02 B251.02.03 B251.02.04 T251-10.02.02 T251-10.02.03 T251-10.02.04 T251-10.02.05 T251-10.02.08 T251-10.02.17 T251-10.02.18 T251-10.02.19 T251-10.02.21 T251-10.02.22 T251-22.02.08 T251-22.02.09	B080720.010
TRMM1010#B	The ECS systems at the LaRC DAAC shall ingest CERES Level 0 and quick-look data sets from SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010 B120430.020
TRMM1030#B	The SDPF Level 0 and quick-look data sets for CERES shall contain quality and accounting information.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1040#B	The SDPF Level 0 and quick-look data sets for CERES shall contain a detached SFDU header.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1050#B	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of CERES Level 0 production or quick-look data.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1060#B	The ECS systems at the LaRC DAAC shall, after notification by SDPF, retrieve CERES Level 0 production by an agreed-upon file transfer protocol.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM1070#B	The ECS systems at the LaRC DAAC shall ensure that CERES data has been received and validated.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1080#B	The ECS systems at the LaRC DAAC shall acknowledge successful receipt of a CERES data set from the SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1090#B	Upon the ECS systems at the LaRC DAAC, upon discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need for regeneration.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1100#B	SDPF shall regenerate/reprocess CERES Level 0 data for the ECS systems at the LaRC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090140.030
TRMM1110#B	SDPF shall provide a CERES Level 0 data set to the ECS systems at the LaRC DAAC once per day within 24 hours of the last acquisition session.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120820.060
TRMM1120#B	The SDPF shall retain CERES Level 0 data sets for five (5) days.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120430.020
TRMM1130#B	The ECS systems at the LaRC DAAC shall receive CERES scheduled quick-look from SDPF 3 times per day plus occasional special quick-look data sets.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120430.020
TRMM1140#B	A CERES quick-look data set shall contain data received during a single spacecraft contact.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1150#B	SDPF shall notify the ECS systems at the LaRC DAAC of availability of a CERES quick-look data set within 2 hours of the end of the acquisition session.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120820.060
TRMM1160#B	CERES special quick-look data collection and processing shall be scheduled with SDPF by human interaction.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090180.010
TRMM1170#B	Data collected and processed for CERES solar calibration shall be scheduled by human interaction.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090170.010 B090180.010
TRMM1180#B	ECS shall be able to process SDPF Level 0 and quick-look data sets in SPDF-defined format.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.020
TRMM1190#B	SDPF shall retain CERES raw data for 2 years.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120820.060
TRMM1195#B	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of predictive or definitive orbit data.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM1200#B	The ECS systems at the LaRC DAAC shall ingest predicted orbit data from the SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM1280#B	ECS shall be able to accept CERES simulated data from SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090110.010
TRMM2010#B	The ECS systems at the MSFC DAAC shall ingest LIS data from SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010 B120410.020
TRMM2030#B	The SDPF Level 0 and quick-look data sets for LIS shall contain quality and accounting information.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2040#B	The SDPF Level 0 and quick-look data sets for LIS shall contain a detached SFDU header.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2050#B	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of LIS Level 0 production or quick-look data.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2060#B	The ECS systems at the MSFC DAAC shall, after notification by SPDF, retrieve LIS Level 0 production and quick-look data by an agreed upon file transfer protocol.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2070#B	The ECS systems at the MSFC DAAC shall ensure that LIS data has been received and validated.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2080#B	The ECS systems at the MSFC DAAC shall acknowledge successful receipt of a LIS data set to the SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010 B120410.020
TRMM2090#B	Upon the ESC operations at the MSFC DAAC discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need for regeneration.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2100#B	SDPF shall regenerate/reprocess LIS Level 0 data for the ECS systems at the MSFC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090240.030
TRMM2110#B	SDPF shall provide a LIS Level 0 data set to the ECS systems at the MSFC DAAC once per day within 24 hours of the last acquisition.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120820.070
TRMM2120#B	SDPF shall retain retrieved LIS Level 0 data sets for five (5) days.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120410.020
TRMM2130#B	The ECS systems at the MSFC DAAC shall receive LIS scheduled quick-look from SDPF 3 times per day plus occasional special quick-look.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120410.020
TRMM2140#B	A LIS quick-look data set shall contain data received during a single spacecraft contact.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM2150#B	SDPF shall notify the ECS systems at the MSFC DAAC of availability of a LIS quick-look data set within 2 hours of the end of the acquisition session.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120820.070
TRMM2160#B	LIS special quick-look data collection and processing shall be scheduled with SDPF by human interaction.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.020 B090290.010
TRMM2170#B	ECS shall be able to process LIS Level 0 and quick-look data sets in SDPF-defined formats.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.020
TRMM2180#B	SDPF shall retain LIS data for 2 years.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120410.020
TRMM2185#B	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of predictive or definitive orbit data.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2190#B	The ECS systems at the MSFC DAAC shall ingest predicted orbit data from the SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2200#B	ECS systems at the MSFC DAAC shall ingest definitive orbit data from the SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM2270#B	ECS shall be able to accept LIS simulated data from SDPF.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090210.010
TRMM3010#B	The ECS systes at the MSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) for PR and TMI from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020 B120420.020 B120420.050
TRMM3030#B	The ECS MSFC DAAC shall ingest TRMM browse products for PR and TMI from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020 B120420.020 B120420.050
TRMM3040#B	The ECS systems at the MSFC DAAC shall ingest algorithms and documentation for PR and TMI from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090220.030 B090250.020
TRMM3050#B	The ECS systems at the MSFC DAAC shall ingest TRMM Ground Validation (GV) data products and associated metadata from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020 B120420.020 B120420.050
TRMM3060#B	The PR, TMI, and GV data ingested from TSDIS by ECS shall be archived in the ECS systems at the MSFC DAAC.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.060 B090250.050 B120420.020 B120420.050
TRMM3070#B	The ECS systems at the MSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020
TRMM3080#B	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the MSFC DAAC.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090250.020 B120420.020 B120420.050

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM3090#B	TSDIS shall electronically provide status information to the ECS systems at the MSFC DAAC about delayed products.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090250.020
TRMM3100#B	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM PR, TMI, GV, and SSM/I ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS also shall daily ingest an average of 2-days worth of reprocessed data from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120810.040
TRMM3110#B	TRMM shall make a standing order to ECS for SSM/I data to be delivered from the ECS systems at the MSFC DAAC to TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090250.010 B120420.010
TRMM3120#B	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B080170.020
TRMM3130#B	All data transferred between TSDIS and the ECS systems at the MSFC DAAC, including GV, shall follow ESDIS-defined standards with specific product formats to be jointly agreed to and documented in ICDs.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.040 B090250.030
TRMM4010#B	The ECS systems at the GSFC DAAC shall ingest TRMM standard prducts (Level 1A - 3B) for VIRS from TSDIS.	mission critical	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.020 B090360.020 B120420.020 B120420.050
TRMM4030#B	The ECS systems at the GSFC DAAC shall ingest TRMM browse products for VIRS from TSDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.020 B090360.020 B120420.020 B120420.050
TRMM4040#B	The ECS systems at the GSFC DAAC shall ingest from TSDIS algorithms and documentation for VIRS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.020 B090320.030 B090360.020
TRMM4050#B	The VIRS data ingested from TSDIS by ECS shall be archived at the ECS systems at the GSFC DAAC.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.060 B090360.050 B120420.020 B120420.050
TRMM4060#B	The ECS systems at the GSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.020 B090360.020
TRMM4070#B	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the GSFC DAAC.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.010 B090360.020 B120420.020 B120420.050
TRMM4080#B	TSDIS shall electronically provide status information to the ECS systems at the GSFC DAAC about delayed products.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.010 B090360.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM4090#B	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and AVHRR, GOES Precipitation Index (GPI), Global Precipitation Climatology Project (GPCP), and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS shall also daily ingest an average of 2-days worth of reprocessed data from TSDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120810.030 B120810.040
TRMM4100#B	TSDIS shall make a standing order to ECS for AVHRR, GPI, GPCP, and NMC ancillary data to be delivered from the ECS systems at the GSFC DAAC to TSDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090360.010 B120420.010
TRMM4110#B	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS standard products, metadata, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.	mission essential	inspection	T209-21.02.01 T209-21.02.02 T209-21.02.03	B080170.020
TRMM4130#B	All data transferred between TSDIS and ECS systems at the GSFC DAAC shall follow ESDIS-defined standards, with specific product formats to be jointly agreed to and documented in ICDs.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090320.040 B090360.030
TRMM5010#B	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020 B090320.020 B090360.020
TRMM5020#B	Availability of TRMM data products (PR, VIRS, TMI, and GV) shall be based on the TSDIS product schedule, and an electronic status mechanism shall be available for late products.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.010 B090250.020 B090320.010 B090360.020
TRMM5030#B	ECS shall have the capability to ingest directory and guide information from TSDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.020 B090250.020 B090320.020 B090360.020
TRMM5040#B	ECS shall have the capability to archive and distribute standard TRMM data files and products (including VIRS, PR and TMI data, metadata, GV data, algorithms and documentation) as provided and produced by TSDIS and the TRMM Science Team.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.060 B090250.050 B090320.060 B090360.050
TRMM5050#B	TRMM shall support maintenance of a TRMM user model for use in the overall ECS user model.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B080420.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
TRMM5060#B	ECS shall provide standard information management functions for browse, and order of data and products provided by TSDIS and delivered to the MSFC and GSFC DAACs (including VIRS, PR and TMI data, metadata, GV data, TRMM Science Team algorithms and documentation).	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.070 B090250.060 B090320.070 B090360.060
TRMM5070#B	ECS will continue to archive original TRMM standard products (Level 1B-3) after reprocessing for 6 months, after which the products will become eligible for deletion.	mission fulfillment	test	T209-21.02.03	B120420.050 B120810.030
TRMM5100#B	ECS shall provide products status for TRMM products to users based upon ECS holdings. Status also shall be based on the TRMM schedule provided electronically by TSDIS and an interactive status mechanism for late products.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B090220.010 B090320.010
TRMM8010#B	TRMM shall manage, and ESDIS shall support, the TRMM end-to-end system testing of the interfaces between ECS and TRMM.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8020#B	ESDIS shall support testing, fault isolation, verification, and validation of the interfaces with the TRMM end-to-end ground system.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8030#B	The TRMM I&T Program shall develop an overall ground segment integration and test plans and procedures.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8031#B	ESDIS shall develop test plans and procedures in support of the development, verification, and testing of the interfaces with the TRMM ground system.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8040#B	ESDIS shall support TRMM development of test plans and procedures in support of the development, verification, and testing of the interfaces between the TRMM ground system and ECS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8050#B	The TSDIS elements shall support integration and test activities defined in the TRMM overall ground segment integration and test plans and procedures.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8060#B	ECS shall archive and distribute TRMM test plans and procedures for the interface between ECS and the TRMM ground system including TSDIS.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
TRMM8071#B	ECS shall support all dataflows and archival and distribution functionality for integration and test with the TRMM ground system.	mission fulfillment	test	T209-21.02.01 T209-21.02.02 T209-21.02.03	B120830.020
V0-0010#B	The ECS shall provide two way interoperability to the ESDIS V0 system IMS via Level 3 interoperability.	mission fulfillment	test	T231-61.01.01	B100130.020 B100130.040

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
V0-0020#B	ESDIS V0 IMS shall have the capability to send and ECS shall have the capability to receive User Authentication Requests [implementation issue 1].	mission fulfillment	test	T231-61.01.04	B100130.040
V0-0030#B	The ECS shall have the capability to send and ESDIS V0 IMS shall have the capability to receive ECS User Authentication Information [implementation issue 1].	mission fulfillment	test	T231-61.01.04	B100130.020
V0-0040#B	The ECS shall have the capability to send and ESDIS V0 IMS shall have the capability to receive V0 User Authentication Requests [implementation issue 1].	mission fulfillment	test	T231-61.01.04	B100130.020
V0-0050#B	ESDIS V0 IMS shall have the capability to send and ECS shall have the capability to receive V0 User Authentication Information [implementation issue 1].	mission fulfillment	test	T231-61.01.04	B100130.040
V0-0055#B	Version 0 shall permit ECS to use agreed upon Version 0 network components and services.	mission fulfillment	test	T250-10.02.04	B100130.040
V0-0060#B	The ECS shall have the capability to send and ESDIS V0 IMS shall have the capability to receive Inventory Search Requests via V0 protocols.	mission fulfillment	test	T231-61.01.01	B100130.020 B100130.030 B100310.020
V0-0070#B	The ESDIS V0 IMS shall have the capability to send and ECS shall have the capability to receive Inventory Search Results via V0 protocols.	mission fulfillment	test	T231-61.01.01	B100130.020 B100130.030 B100310.020
V0-0080#B	The ECS shall have the capability to send and the ESDIS V0 IMS shall have the capability to receive Guide Search Requests via V0 protocols.	mission fulfillment	test	T231-61.01.05	B100130.020 B100130.030 B100310.020
V0-0090#B	The ESDIS V0 IMS shall have the capability to send and the ECS shall have the capability to receive Guide Search Results via V0 protocols.	mission fulfillment	test	T231-61.01.05	B100130.020 B100130.030 B100310.020
V0-0100#B	The ECS shall have the capability to send and the ESDIS V0 IMS shall have the capability to receive Browse Requests via V0 protocols.	mission fulfillment	test	T231-61.01.02	B100130.020 B100130.030 B100310.020
V0-0110#B	The ESDIS V0 IMS shall have the capability to send and the ECS shall have the capability to receive and Browse Results via V0 protocols.	mission fulfillment	test	T231-61.01.03	B100130.020 B100130.030 B100310.020
V0-0120#B	The ECS shall have the capability to send and ESDIS V0 IMS shall have the capability to receive Product Requests via V0 protocols.	mission fulfillment	test	T231-61.01.03	B100130.030 B100310.020
V0-0150#B	ESDIS V0 IMS shall have the capability to send and the ECS shall have the capability to receive Inventory Search Requests via V0 protocols.	mission fulfillment	test	T231-61.01.01	B100130.040 B100130.050 B100310.020

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
V0-0160#B	ECS shall have the capability to send and ESDIS V0 IMS shall have the capability to receive Inventory Search Results via V0 protocols.	mission fulfillment	test	T231-61.01.01	B100130.040 B100130.050 B100310.020
V0-0170#B	V0 ESDIS IMS shall have the capability to send and ECS shall have the capability to receive Guide Search Requests [implementation issue 2].	mission fulfillment	test	T231-61.01.05	B100130.040 B100130.050 B100310.020
V0-0180#B	The ECS shall have the capability to send and V0 ESDIS IMS shall have the capability to receive Guide Search Results [implementation issue 2].	mission fulfillment	test	T231-61.01.05	B100130.040 B100130.050 B100310.020
V0-0190#B	V0 ESDIS IMS shall have the capability to send and ECS shall have the capability to receive Browse Requests [implementation issue 2].	mission fulfillment	test	T231-61.01.02	B100130.040 B100130.050 B100310.020
V0-0200#B	The ECS shall have the capability to send and V0 ESDIS IMS shall have the capability to receive Browse Results [implementation issue 2].	mission fulfillment	test	T231-61.01.02	B100130.040 B100130.050 B100310.020
V0-0230#B	The ESDIS V0 IMS shall have the capability to send and ECS shall have the capability to receive Product Requests via V0 protocols.	mission fulfillment	test	T231-61.01.03	B100130.050 B100310.020
V0-0240#B	ECS and Version 0 shall exchange pricing information, as necessary.	mission fulfillment	test	T231-61.01.04	B080710.020
V0-0260#B	The DAACs V0 IMS shall have the capability to send and ECS shall have the capability to receive Migration Metadata.	mission fulfillment	test	T231-61.01.01	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0270#B	The DAACs V0 DADS shall have the capability to send and ECS shall have the capability to receive Migration Data Products.	mission fulfillment	test	T231-61.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0280#B	The DAACs V0 DADS shall have the capability to send and ECS shall have the capability to receive Migration Browse Data.	mission fulfillment	test	T231-61.01.02	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
V0-0290#B	The DAACs V0 DADS shall have the capability to send and ECS shall have the capability to receive Migration Documentation Data.	mission fulfillment	test	T231-61.01.02	B090130.020 B090230.020 B090340.020 B090430.020 B090520.020 B090620.020 B090720.020 B090810.020
V0-0300#B	The DAAC V0 DADS shall have the capability to send and ECS shall have the capability to receive Migration Ancillary Data and Correlative Data.	mission fulfillment	test	T231-61.01.01	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0310#B	The DAACs V0 PGS shall have the capability to send and ECS shall have the capability to receive Migration Data Products.	mission fulfillment	test	T231-61.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0320#B	The DAACs V0 PGS shall have the capability to send and ECS shall have the capability to receive Migration Browse Data.	mission fulfillment	test	T231-61.01.02	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0330#B	The DAACs V0 PGS shall have the capability to send and ECS shall have the capability to receive Migration Metadata.	mission fulfillment	test	T231-61.01.01	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0331#B	The DAACs V0 PGS shall have the capability to send and ECS shall have the capability to receive Migration Data Products according to the agreed schedule.	mission fulfillment	test	T231-61.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0340#B	The ECS shall have the capability of ingesting migration data in the following data format (s): a. HDF b. native format c. TBD	mission fulfillment	test	T231-61.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010

Table 4-2. Release B RBR Matrix

RBR Req. Source ID	Requirement Text	Req. Category	Verif. Method	Release I&T/FOS Test ID	Acceptance Test ID
V0-0350#B	The ECS shall have the capability of receiving data products from the DAAC(s) V0 system on the following media: a. CD-ROM b. 4mm tape c. 8mm tape d. 6250 bpi magnetic tape e. electronic transfer	mission fulfillment	test	T231-61.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010
V0-0360#B	The ECS and DAAC(s) shall have the capability to exchange Migration Coordination messages [implementation issue 3].	mission fulfillment	test	T231-61.01.03	B090130.050 B090230.050 B090340.050 B090430.050 B090520.050 B090620.050 B090720.050 B090810.050
V0-0370#B	The DAAC(s) shall have the capability to send and ECS shall have the capability to receive Advertising Information [implementation issue 6].	mission fulfillment	test	T231-61.01.03	B100130.020
V0-0380#B	ECS shall have the capability to send and the ESDIS IMS team shall have the capability to receive Dependent Valids Information.	mission fulfillment	test	T231-10.01.03	B090130.010 B090230.010 B090340.010 B090430.010 B090520.010 B090620.010 B090720.010 B090810.010 B100130.020
V0-0390#B	The ECS shall have the capability to send and DAAC's V0 PGS shall have the capability to receive the requested geophysical products and metadata.	mission fulfillment	test	T231-61.01.03	B090130.060 B090230.060 B090340.060 B090430.060 B090520.060 B090620.060 B090720.060 B090810.060