4.5 DSS - Data Server Subsystem

4.5.1 Introduction

The Data Server subsystem is responsible for the permanent storage of earth science and related data, provides search and retrieval access to this data, and supports administration of the data, supporting hardware devices, and software products. As part of its retrieval function, the subsystem also provides for the distribution of data electronically or on physical media. Other subsystems can access ithe Data Server subsystem directly, or via the Data Management subsystem (if they need assistance with searches involving data at multiple sites).

In Release Ir1, the Data Server subsystem provides a data retrieval interface, only, for the purpose of supporting TRMM interface testing. In Release A, the Data Server subsystem provides access to TRMM and Version 0 data; in Release B, the subsystem additionally provides access to EOS AM-1 data, Landsat 7 data and supporting data.

The subsystem is based on the following COTS and custom software components:

- Database management systems to manage earth science data, implement spatial searching, and manage system administrative and operational data.
- A COTS-based document management system to provide storage and information retrieval for guide documents, scientific articles, and other types of document data.
- COTS File storage management systems to provide archival and staging storage for large volumes of data.
- Data type libraries that provide services on earth science and related data that is not available off-the-shelf (e.g., spatial search algorithms and translations among coordinate systems). The libraries will interface with the database and file storage management systems.

Other components include, for example, administrative software to manage the subsystem resources and perform data administration functions (e.g., to maintain the database Schema); and data distribution software, including software for media handling and format conversions.

4.5.2 Data Server Subsystem Summary

4.5.2.1 Subsystem Interfaces

For a context diagram, and for more detail of the flows between subsystems, please refer to Section 3 of 305-CD-024-002. The Data Server Subsystem has the following flows to other subsystems:

- The Data Server Subsystem provides advertisements for data types and associated services to the Interoperability subsystem.
- The Data Server Subsystem stores data received via the Ingest Subsystem, and stores data products generated by the Data Processing Subsystem.
- The Data Server Subsystem issues production requests to the Planning Subsystem, and supports the Planning Subsystem by storing data availability schedules.

- The Data Server Subsystem accepts data search and access requests from ECS clients or other ECS subsystems, either directly or via the DIM and LIM services of the Data Management Subsystem.
- The Data Server Subsystem provides the data resulting from access requests, through electronic transfer or on physical media. The subsystem provides references to this data in the Universal Reference format.
- The Data Server Subsystem interfaces with MSS/SMC to provide subsystem status information necessary to support ECS system management functions.

Each Data Server provides access to a collection of earth science and related data. The scope of data and services offered by a Data Server are defined as follows:

The Data Server makes its data collections and services known to the ECS community by providing Advertisements to the Advertising Service. The contents of Advertisements include the name of the data collection and the names of the Earth Science Data Type (ESDT) being offered, as well as descriptions of the services (e.g., search, browse, subsetting, subsampling, and other types of access services) being offered for the collection.

The Data Server provides a formal description of its ESDTs, including their attributes and operations, as a Data Server Schema. Data search and access operations are expressed in terms of this Schema. For example, searching for LIS03 data based on 'spatial coverage' and 'temporal coverage' is only possible if 'spatial coverage' and 'temporal coverage' have been defined in the Schema; the definition would specify, for example, what types of input parameters can be used in the search.

The Data Server provides a description of the meaning of each ESDT, each attribute, and each operation or service in the Data Server Data Dictionary. The data dictionary can be browsed and accessed by science users from the Scientist Workbench in the Client Subsystem. Moreover, the data dictionary is defined as an ESDT in the Data Server Schema, and thus is accessible through the normal data search and access interfaces provided by the Data Server.

The Data Server Schema is an object Schema. The Schema presents the data in terms of the ESDT and the operations available on each ESDT (the operations are called the "Data Type Services"). For example, to obtain spatial and temporal coverage of a LIS03 granule, a User would request ‘spatial_coverage, temporal_coverage of LIS03’ (other specifications in the request would deal with selecting the granules of interest). The Schema also presents any other services available on objects as operations. For example, to obtain a browse image of LIS03 granules, the client would request ‘browse_image of LIS03’; to obtain a subset, the client might request ‘subset(subset_criteria) of LIS03’; and to obtain the subset in a specific format, the client might request ‘my_format of subset(subset_criteria) of LIS03’.

4.5.2.2 CSCI Overview

4.5.2.2.1 SDSRV CSCI - Science Data Server

Science Data Servers provide data access capability, for science users and clients, that remove any arbitrary distinctions between stored data and computed data, and between data and metadata. Each Science Data Server provides consistent data query and access capabilities by treating metadata and data as logically equivalent entities and by providing transparent data access. By

treating data and services as logically equivalent entities, the Science Data Server CSCI provides consistent access to all data, whether it is stored, computed, or scheduled for future acquisition.

The Science Data Server CSCI collaborates with other CSCIs within the Data Server Subsystem as follows:

- *Storage Management Software CSCI*–to provide persistent storage for large objects on a hierarchy of storage devices.
- *Data Distribution CSCI*–to distribute collections of data instances (e.g., data granules) to the requester
- *Document Server CSCI*–to allow clients to access related document-type information of the Data Server's data objects

The Science Data Server CSCI also collaborates with the services of the Interoperability Subsystem to provide information on the data types managed by a given Data Server, and the associated Data Type services.

The SDSRV CSCI requirements define its capabilities for the following:

- receiving and executing service requests for the Science Data Server.
- performing the processing needed to accumulate and determine accounting information for the Science Data Server.
- creating advertisements.
- logging and log processing.
- management and tracking of sessions within the Science Data Server.
- subscription processing within the Science Data Server.
- inserting, checking and storing data.
- costing and resource utilization.
- distributing data types.
- inventory processing.
- monitoring Service Requests and acquiring appropriate directions from the user at key decision points.

4.5.2.2.2 DDSRV Document Data Server CSCI

The Document Data Server will function in a similar manner as other Data Servers, but will exclusively handle documentation. Access to this Data Server may be limited to a single protocol which is specifically designed for document handling (e.g., HTTP).

4.5.2.2.3 STMGT- Storage Management Software CSCI

The Storage Management Software CSCI provides a generalization of the interfaces to the various data resources managed by the Data Server subsystem. The Storage Management Software CSCI provides a single interface for making large objects (i.e., "typed files") persistent in a multi-tiered storage architecture, and instantiating them from storage into memory or onto staging devices for direct access by science software. It will update the persistent state of these objects, or remove them from persistent storage.

The Storage Management Software CSCI also provides a general interface to the storage hardware, including archive tape libraries, tape recorders, staging space devices, and hard media peripherals used for ingesting and distributing data. The Data Server subsystem includes several different types of storage services. A given storage service may offer a variation of that general interface which provides functions that are unique to that particular type of storage.

The Storage Management Software CSCI interface allows its clients to specify semantics of storage requirements which then may select a specific type or pool of storage. For example, it may be desirable from a resource management perspective to store the data search results on a specific set of devices, and to monitor storage allocation to protect the server against shutdown due to storage overflow. One of the purposes of the Storage Management Software CSCI is to separate the semantics of storage requirements from the semantics of device types, storage and data management technologies, and interface syntax.

These requirements for the STMGT CSCI define the capabilities that it will perform for the following:

- o archive request processing
- o archive processing
- o archive configuration processing
- o archive data type processing
- o archive log processing
- o archive resource management
- o archive resource services
- o billing and accounting processing
- o archive storage processing.

4.5.2.2.4 DDIST- Data Distribution Services CSCI

The Data Distribution CSCI provides the Data Server and its operations staff the capability to monitor and control the processing associated with the distribution of data. Data Distribution processing mainly consists of preparing requested data objects for distribution on specified media or via the network and subsequently delivering or allowing the delivery of data products to requesting clients. This includes the staging of data on a file system for subsequent direct access by remote programs via the WAN (e.g., via network file system access).

Part of the preparation of the data objects includes the reformatting of the data into a format requested by the user. The reformatting may also include compression, if requested and the data is not already held in the compressed form, to more efficiently utilize the distribution medium.

In addition to preparing of the data, Data Distribution will also generate the necessary packaging materials if the data is to be distributed on media and distribution metadata if the data is to be distributed via the network. The packaging materials include the packing list, showing all data objects stored on the delivery media, and the media label that relates it to the requester. The media will include, but not be limited to, CD ROM, tape of various formats, etc. This activity is also described further in the Operations Concept document.

The Data Distribution CSCI collaborates with the Storage Management CSCI to access data held on a storage resource. It also utilizes the interfaces of CSMS to perform the network dissemination.

The requirements for the DDIST CSCI define the capabilities that it will perform for the following:

- o distribution request processing
- o distribution billing/accounting processing
- o client processing
- o distribution log processing
- o distribution media processing
- o distribution resource processing
- o distribution interface processing.

4.5.3 Requirements Table

The following table lists all DSS L4 requirements for Releases Ir1, A & B in numerical order together with their RbR parent requirements.

Data Server Subsystem L4 to RbR traceability (1 of 369)

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00010	IR1	The SDSRV CI shall accept Data Requests for Data that is managed within the STMGT CI.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			TRMM3100#Ir1	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.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			DADS0610#B	Each DADS shall support reprocessing.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0610#A	Each DADS shall support reprocessing.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00015	A	The SDSRV CI shall insure that each Data Request includes a User Identifer, a Request Priority, and a Data Identifier.	DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			IMS-0780#B	The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.
			IMS-0780#A	The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
S-DSS-00020	IR1	The SDSRV CI shall accept Service Requests from clients.	IMS-0030#A	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.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			IMS-0550#A	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
			TRMM3100#Ir1	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			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.
			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
S-DSS-00023	A	The SDSRV CI shall perform services specified by Service Requests.	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.
			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
			IMS-0030#A	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.
			IMS-0550#A	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
S-DSS-00025	A	The SDSRV CI shall insure that each Service Request includes a User Identifer, a Request Priority, and all other parameters required for that request.	DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
S-DSS-00030	A	The SDSRV CI shall provide the capability to queue Service Requests prior to their execution.	DADS2160#A	Each DADS shall maintain a list/schedule of standing orders.
			DADS2170#A	Each DADS shall maintain a list/schedule of retrospective orders.
			DADS2160#B	Each DADS shall maintain a list/schedule of standing orders.
			DADS2170#B	Each DADS shall maintain a list/schedule of retrospective orders.
S-DSS-00040	A	The SDSRV CI shall provide operations staff the capability to view queued Service Requests.	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
			IMS-1650#A	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
S-DSS-00050	A	The SDSRV CI shall process each Service Request on the basis of Priority Information specified in the Service Request.	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
			SDPS0150#A	The SDPS shall assign priority and distribute expedited data and expedited data availability notices.
			SDPS0150#B	The SPDS shall assign priority and distribute expedited data and expedited data availability notices.
			DADS0690#B	Each DADS shall support the prioritized retrieval and delivery of data based on the priority information specified in the data retrieval request.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0690#A	Each DADS shall support the prioritized retrieval and delivery of data based on the priority information specified in the data retrieval request.
			DADS2090#A	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
			DADS2090#B	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
S-DSS-00051	A	The SDSRV CI shall verify that each Service Request has valid Priority Information.	DADS2090#B	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
			DADS2090#A	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			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
			SDPS0150#A	The SDPS shall assign priority and distribute expedited data and expedited data availability notices.
			SDPS0150#B	The SPDS shall assign priority and distribute expedited data and expedited data availability notices.
S-DSS-00055	A	The SDSRV CI shall initiate the processing of Service Requests of equal priority in the order in which they are received.	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
			SDPS0150#A	The SDPS shall assign priority and distribute expedited data and expedited data availability notices.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0150#B	The SPDS shall assign priority and distribute expedited data and expedited data availability notices.
			DADS0690#B	Each DADS shall support the prioritized retrieval and delivery of data based on the priority information specified in the data retrieval request.
			DADS0690#A	Each DADS shall support the prioritized retrieval and delivery of data based on the priority information specified in the data retrieval request.
			DADS2090#A	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
			DADS2090#B	Each DADS shall reevaluate its schedule after receiving new orders from the IMS.
S-DSS-00060	IR1	The SDSRV CI shall acknowledge the receipt of Service Requests from local and remote clients.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			TRMM3100#Ir1	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.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			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).
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#B	Each DADS shall verify product orders from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS1020#A	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).
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
S-DSS-00065	A	The SDSRV CI shall accept Service Requests from the Data Processing subsystem and, as a result, provide access to Data for the purpose of standard processing.	DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00070	B	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.	DADS0610#B	Each DADS shall support reprocessing.
S-DSS-00080	A	The SDSRV CI shall process Data Insert Requests that request the storage of Data Products and associated Metadata.	DADS0475#A	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.
			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.
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
S-DSS-00090	A	The SDSRV CI shall validate that each Data Insert Request contains a List of Data Files.	DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0475#A	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.
			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.
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
S-DSS-00095	IR1	The SDSRV CI shall return a Reject Notification if a Service Request fails validation.	DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS1020#A	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).
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#A	Each DADS shall verify product orders from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			TRMM3100#Ir1	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.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			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).
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
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Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-00100	A	The SDSRV CI shall allow operations staff to set a threshold for the number of Service Requests to be queued for processing.	DADS2160#B	Each DADS shall maintain a list/schedule of standing orders.
			DADS2170#B	Each DADS shall maintain a list/schedule of retrospective orders.
			DADS2160#A	Each DADS shall maintain a list/schedule of standing orders.
			DADS2170#A	Each DADS shall maintain a list/schedule of retrospective orders.
S-DSS-00110	A	The SDSRV CI shall provide operations staff the capability to determine the status of any or all existing Service Requests.	IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
			IMS-1300#A	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-00115	B	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.	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.
S-DSS-00116	B	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.	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.
			IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-00120	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for any specifed pending Service Requests, in return.	IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1300#A	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-00130	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for all pending Service Requests submitted by a specified user, in return.	IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
			IMS-1300#A	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-00140	A	The SDSRV CI shall validate that a Status Request specifies either a valid pending Request Identifier or a valid User Identifier.	DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
S-DSS-00150	A	The SDSRV CI shall accept and process Insert Metadata Requests to insert Metadata into the Inventory.	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.
			IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			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
			DADS0120#A	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
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
S-DSS-00160	A	The SDSRV CI shall accept and process Update Metadata Requests to update Metadata that has been previously stored in the Inventory.	DADS0010#A	Each DADS shall receive updated metadata for products that have been QA'd.
			DADS0020#A	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.
			DADS0010#B	Each DADS shall receive updated metadata for products that have been QA'd.
			DADS0020#B	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.
S-DSS-00165	A	The SDSRV CI shall update the Inventory with the updated Metadata that was received.	DADS0020#B	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.
			SDPS0032#B	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.
			DADS0020#A	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.
S-DSS-00170	A	The SDSRV CI shall accept and process Search Requests to search the Inventory.	IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
			IMS-0610#A	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
S-DSS-00180	B	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.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
S-DSS-00190	A	The SDSRV CI shall provide the capability for operations staff to delete a queued Data Request.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00191	A	The SDSRV CI shall notify the client whenever operations staff deletes a queued Data Request.	DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
S-DSS-00200	B	The SDSRV CI shall provide the capability for a user to delete their own queued Data Request.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
S-DSS-00210	B	The SDSRV CI shall provide operations staff the capability to update the Priority Information for a queued Service Request.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS2210#B	Each DADS shall provide tools for the creation and manipulation of its plans/schedules.
S-DSS-00215	B	The SDSRV CI shall provide operations staff the capability to modify any field in a queued Service request.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-00216	A	The SDSRV CI shall provide the capability for operations staff to submit Service Requests under that user's User Identifier.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
S-DSS-00220	A	The SDSRV CI shall provide operations staff the capability to cancel any Service Request.	DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-00230	B	The SDSRV CI shall provide users the capability to cancel their own Service Requests.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			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.
S-DSS-00240	B	The SDSRV CI shall determine which Data Requests require post-retrieval processing.	DADS2200#B	Each DADS shall maintain a list of data which requires some form of data manipulation such as subsetting.
S-DSS-00250	B	The SDSRV CI shall provide an application program interface for the submission of Service Requests.	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.
			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.
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD5300#B	ECS shall provide APIs and infrastructure for science user extensions and direct search and access to data.
S-DSS-00251	A	The SDSRV CI custom GUIs shall conform to the guidelines in version 5.1 of the ECS Interface Style Guide.	EOSD1703#A	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
S-DSS-00260	B	The SDSRV CI shall provide an application program interface for the submission of requests for administrative services.	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.
			DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			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.
S-DSS-00264	B	The SDSRV CI shall provide an application program interface which permits DAAC operations staff to link special subsetting capabilities into a Science Data Server.	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. Time d. WRS

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-00270	B	The SDSRV CI shall accept and process Data Requests for Repaired Orbit Data.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
S-DSS-00280	B	The SDSRV CI shall accept and process Data Requests for Attitude Data.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
S-DSS-00290	B	The SDSRV CI shall accept Suspend Requests to suspend processing a client session.	DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-00300	B	The SDSRV CI shall accept Resume Requests to resume processing of a client session.	DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-00310	B	The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
S-DSS-00320	B	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.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
S-DSS-00330	B	The SDSRV CI shall record Request Identifiers to be used for accounting purposes.	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
S-DSS-00331	B	The SDSRV CI shall record the User Identifier of the science investigator associated with a Service Request, to be used for accounting purposes.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00332	B	The SDSRV CI shall record the amount of user storage associated with a science user, to be used for accounting purposes.	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
S-DSS-00333	B	The SDSRV CI shall record the amount of connect time associated with a science user, to be used for accounting purposes.	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
S-DSS-00340	B	The SDSRV CI shall record the level of CPU utilization for each Service Request to be used for accounting.	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
S-DSS-00350	B	The SDSRV CI shall record the level of I/O utilization for each Service Request to be used for accounting.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00360	B	The SDSRV CI shall record, for accounting purposes, a fixed personnel cost for Service Requests requiring interaction with operations staff.	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
S-DSS-00370	B	The SDSRV CI shall record a archival storage cost based on the number of bytes stored, to be used for accounting.	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
S-DSS-00375	B	The SDSRV CI shall associate User Accounting Information with client sessions.	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
S-DSS-00376	B	The SDSRV CI shall provide User Accounting Information to the SMC.	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
			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.
S-DSS-00377	B	The SDSRV CI shall support operations staff in the creation of utilization reports, and operations staff shall distribute them on a periodic basis to a predefined list of report recipients.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00378	B	Operations staff shall be able to distribute SDSRV utilization reports eletronically or in hard copy or on eletronic media.	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.
S-DSS-00400	B	The SDSRV CI shall accept pricing information, based on disk, CPU and media utilization, from CSMS.	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
S-DSS-00410	B	The SDSRV CI shall provide actual cost information by the completion of a Service Request.	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
S-DSS-00420	B	The SDSRV CI shall record the amount of media utilized for a Distribution Request.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00430	B	The SDSRV CI shall accept the amount of media utilized from the distribution services.	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
S-DSS-00440	B	The SDSRV CI shall be capable of providing estimated Service Request Cost.	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
			DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
S-DSS-00450	A	The SDSRV CI shall provide Advertisements that indicate the class of data available from the Data Server.	IMS-0360#A	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.
			IMS-0430#A	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.
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-00460	A	The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.	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.
			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.
			IMS-0360#A	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.
			IMS-0430#A	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.
S-DSS-00470	A	The SDSRV CI shall log all access to data in a Data Access Log.	DADS1085#B	Each DADS shall maintain a data access log.
			DADS1085#A	Each DADS shall maintain a data access log.
S-DSS-00480	A	The SDSRV CI shall provide the capability for operations staff to view the Data Access Log.	DADS1085#A	Each DADS shall maintain a data access log.
			DADS1085#B	Each DADS shall maintain a data access log.
S-DSS-00500	A	The SDSRV CI shall provide the capability for operations staff to sort the Data Access Log by time frame, source of access and data type.	DADS1085#B	Each DADS shall maintain a data access log.
			DADS1085#A	Each DADS shall maintain a data access log.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00510	A	The SDSRV CI shall provide the capability for operations staff to select for viewing from the Data Access Log entries related to data type, source of access, or time frame.	DADS1085#A	Each DADS shall maintain a data access log.
			DADS1085#B	Each DADS shall maintain a data access log.
S-DSS-00520	A	The SDSRV CI shall return a successful completion status to the provider of data only after all data and associated Metadata has been successfully stored.	DADS1510#B	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.
			DADS1510#A	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.
S-DSS-00530	A	The SDSRV CI shall provide Data Dictionary Information to the Data Management subsystem.	DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-00540	A	The SDSRV CI shall provide Schema Information to the Data Management subsystem.	DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-00550	A	The SDSRV CI shall provide the capability for operations staff to view Schema Information.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-0240#A	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
S-DSS-00560	A	The SDSRV CI shall provide the capability for operations staff to create Schema Information.	IMS-0355#A	The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.
			IMS-0355#B	The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.
S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.	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
			EOSD5200#A	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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-0240#A	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
			IMS-0250#A	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
			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.
S-DSS-00610	A	The SDSRV CI shall provide the capability for operations staff to delete Schema Information.	IMS-0250#A	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
			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
S-DSS-00620	A	The SDSRV CI shall provide the capability to categorize messages to operations staff into informational, warnings or error categories.	DADS1300#A	Each DADS shall display all faults to the system operators.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1300#B	Each DADS shall display all faults to the system operators.
S-DSS-00630	A	The SDSRV CI shall notify operations staff of any system error or fault.	DADS1300#B	Each DADS shall display all faults to the system operators.
			DADS1300#A	Each DADS shall display all faults to the system operators.
S-DSS-00640	A	The SDSRV CI shall report to operations staff all errors involving file accesses.	DADS1310#B	Each DADS shall track and report to the SMC problems such as missing or corrupted files requiring restoration or regeneration of data.
S-DSS-00650	A	The SDSRV CI shall expect an acknowledgment for all messages sent to internal components of ECS	DADS1510#B	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.
S-DSS-00660	A	The SDSRV CI shall acknowledge all messages from internal components of ECS	DADS1510#B	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.
			DADS1510#A	Each DADS shall ensure that IMS acknowledges receipt of metadata on all products stored in the DADS.
S-DSS-00670	A	The SDSRV CI shall be capable of receiving data from the PRONG CI.	DADS0120#A	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
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00680	A	The SDSRV CI shall be capable of receiving data from the AITTL CI.	DADS0120#A	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
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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
			PGS-0900#A	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
			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
S-DSS-00690	A	The SDSRV CI shall be capable of receiving data from the PLANG CI.	DADS2180#A	Each DADS shall maintain a list/schedule of reprocessed data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0120#A	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
			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
			DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
S-DSS-00692	A	The SDSRV CI shall be capable of receiving data from the DDSRV CI.	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
			DADS2110#B	The DADS shall provide scheduling information to the SMC.
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2110#A	The DADS shall provide scheduling information to the SMC.
S-DSS-00694	A	The SDSRV CI shall be capable of receiving data from the STMGT CI.	DADS2110#A	The DADS shall provide scheduling information to the SMC.
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			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
			DADS2110#B	The DADS shall provide scheduling information to the SMC.
S-DSS-00696	A	The SDSRV CI shall be capable of receiving data from the DDIST CI.	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
			DADS2110#B	The DADS shall provide scheduling information to the SMC.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			DADS2110#A	The DADS shall provide scheduling information to the SMC.
S-DSS-00700	A	The SDSRV CI shall be capable of receiving data from FOS.	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
S-DSS-00702	A	The SDSRV CI shall be capable of sending management directives to DDSRV CI.	DADS0100#B	Each DADS shall receive management directives from the SMC.
			DADS0100#A	Each DADS shall receive management directives from the SMC.
S-DSS-00704	A	The SDSRV CI shall be capable of sending management directives to DDIST CI.	DADS0100#A	Each DADS shall receive management directives from the SMC.
			DADS0100#B	Each DADS shall receive management directives from the SMC.
S-DSS-00710	A	The SDSRV CI shall accept Data Insert Requests from other Data Servers.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0140#A	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
S-DSS-00720	A	The SDSRV CI shall accept Metadata Problem Reports.	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.
			IMS-0460#A	The IMS shall provide the capability to accept metadata problem reports from users, and inform the PGS quality assurance staff of the problem.
S-DSS-00730	B	The SDSRV CI shall provide the capability to store Metadata problem reports.	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.
S-DSS-00732	B	The SDSRV CI shall provide the capability for one Data Server to accept Data Availability Schedules from another Data Server.	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)
S-DSS-00734	A	The SDSRV CI shall provide the capability to store Data Availability Schedules.	DADS2020#A	Each DADS shall have the capability to receive data availability schedules at a minimum, from: a. c. ADCs e. Other DADS f. TRMM (SDPF)
			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)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00740	B	The SDSRV CI shall notify operations staff of the receipt of Metadata problem reports.	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.
S-DSS-00750	B	The SDSRV CI shall provide Metadata problem reports to operations staff upon request.	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.
S-DSS-00760	B	The SDSRV CI shall provide application program interfaces to all the operator functions.	IMS-1460#B	The Virtual IMS Information Management software shall provide the capability to electronically load data base structures and their content.
			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.
S-DSS-00770	B	The SDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.	DADS1340#B	Each DADS shall use tools to analyze system performance.
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00780	B	The SDSRV CI shall utilize vendor supplied tools to monitor the performance of query processing.	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
			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
S-DSS-00790	B	The SDSRV CI shall utilize vendor supplied tools to analyze system storage performance.	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
			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
			DADS1340#B	Each DADS shall use tools to analyze system performance.
S-DSS-00800	B	The SDSRV CI shall utilize vendor supplied tools to tune system throughput performance.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-00810	B	The SDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.	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
			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
			DADS1340#B	Each DADS shall use tools to analyze system performance.
S-DSS-00820	A	The SDSRV CI shall provide a mechanism to control changes to the Configuration Management Data.	DADS1850#A	Each DADS shall utilize the configuration management toolkit provided by the SMC.
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS1850#B	Each DADS shall utilize the configuration management toolkit provided by the SMC.
S-DSS-00821	A	The SDSRV CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.	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
			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
			IMS-1620#A	The IMS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
S-DSS-00822	B	The SDSRV CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	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
			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
S-DSS-00823	B	The SDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-00824	B	The SDSRV CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	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
			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
S-DSS-00825	B	The SDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-00826	B	The SDSRV CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	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
			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
S-DSS-00827	B	The SDSRV CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-00828	A	The STMGT CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.	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
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
S-DSS-00829	B	The STMGT CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00830	B	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.	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
			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.
			DADS1320#B	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.
			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.
			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
S-DSS-00831	A	The ACMHW CI shall support collection and maintenance of management data for Fault Management, configuration, performance, accountability, and security of Data Server CI hardware resources.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
S-DSS-00832	A	The WKSHW CI shall support collection and maintenance of management data for Fault Management, configuration, performance, accountability, and security of Data Server CI hardware resources.	DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			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
S-DSS-00833	A	The DRPHW CI shall support collection and maintenance of management data for Fault Management, configuration, performance, accountability, and security of Data Server CI hardware resources.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
S-DSS-00834	A	The DIPHW CI shall support collection and maintenance of management data for Fault Management, configuration, performance, accountability, and security of Data Server CI hardware resources.	DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			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
S-DSS-00835	B	The STMGT CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00836	B	The STMGT CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	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
S-DSS-00837	B	The STMGT CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	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
S-DSS-00838	B	The STMGT CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	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
S-DSS-00839	B	The STMGT CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00840	B	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.	DADS2230#B	Each DADS shall inform the collocated PGS of any anticipated resource availability conflicts.
S-DSS-00841	A	The DDIST CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.	DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			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
S-DSS-00842	B	The DDIST CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00843	B	The DDIST CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	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
S-DSS-00844	B	The DDIST CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	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
S-DSS-00845	B	The DDIST CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	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
S-DSS-00846	B	The DDIST CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00847	B	The DDIST CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	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
S-DSS-00848	B	The DDIST CI shall collect and provide Distribution Management data to the MSS using a MSS provided Distribution Management API.	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
S-DSS-00849	A	The DDSRV CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.	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
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00850	A	The SDSRV CI shall provide the capability to control access to Data Server services.	IMS-0210#A	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
			IMS-0240#A	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
			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
			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
S-DSS-00851	B	The DDSRV CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00852	B	The DDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	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
S-DSS-00853	B	The DDSRV CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.	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
S-DSS-00854	B	The DDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	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
S-DSS-00855	B	The DDSRV CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00856	B	The DDSRV CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.	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
S-DSS-00860	A	The SDSRV CI shall inform a client that a requested service is not accessible if the client attempts to access services outside their access level.	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
			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
			IMS-0210#A	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
			IMS-0240#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00870	A	The SDSRV CI shall allow Data Access Privileges to be configurable by User Identifier and Data Type for read, write, update, delete, and any combination thereof.	IMS-0210#A	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
			IMS-0240#A	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
			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
			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
S-DSS-00880	A	The SDSRV CI shall use the User Identifier of the user on whose behalf a Service Request is issued as the basis for access control decisions.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			IMS-0210#A	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
			IMS-0230#A	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.
S-DSS-00900	A	The SDSRV CI shall support the interruption of a data base administrative or maintenance activity and its restart without loss of information.	IMS-0250#A	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
			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
S-DSS-00901	A	The SDSRV CI shall provide tools for database backup and restore.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0250#A	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
S-DSS-00902	A	The SDSRV CI shall provide a database management capability that maintains database integrity during concurrent user interactions.	IMS-0250#A	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
			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
S-DSS-00920	B	The SDSRV CI shall provide Logistics Status to the SMC.	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
S-DSS-00930	B	The SDSRV CI shall provide training information to the SMC.	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
S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0210#A	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
			IMS-0230#A	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.
			IMS-0260#A	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.
			IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			EOSD2400#A	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			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
			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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.	EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
			EOSD2400#A	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			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.
			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
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0210#A	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
			IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0260#A	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.
			IMS-0230#A	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.
S-DSS-00970	A	The SDSRV CI shall provide the capabilities to add, delete, or modify ECS Metadata to authorized users only.	IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
S-DSS-00980	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, management directives.	DADS0100#B	Each DADS shall receive management directives from the SMC.
			SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-00990	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, directives for integration, testing, and simulation.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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
S-DSS-01000	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, configuration management directives.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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
			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.
S-DSS-01010	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, logistics management directives.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-01020	B	The SDSRV CI operations staff shall have the capability to receive from the SMC fault management directives.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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
S-DSS-01030	B	The SDSRV CI operations staff shall have the capability to receive from the SMC security directives.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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
			EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
S-DSS-01035	B	The SDSRV CI operations staff shall have the capability to receive from the SMC scheduling directives, and scheduling adjudication directives.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1980#B	Each DADS shall receive from the SMC scheduling directives for system level, site/element-to-site/element, testing, and simulation activities.
			DADS2010#B	Each DADS shall receive from the SMC schedule adjudication directives.
			DADS2000#B	Each DADS shall receive from the SMC scheduling directives in response to emergency situations.
S-DSS-01040	B	The SDSRV CI operations staff shall provide integration, testing, and simulation status to the SMC.	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
S-DSS-01050	B	The SDSRV CI operations staff shall have the capability to receive training management directives from the SMC.	SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
			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
S-DSS-01060	A	The SDSRV CI shall send a Notification to a client that issued a Data Request once the Data Product has been produced or when the STMGT CI has made the Data available.	DADS0960#A	Each DADS shall automatically send data distribution status to the IMS upon completion of the distribution process.
			DADS0960#B	Each DADS shall automatically send data distribution status to the IMS upon completion of the distribution process.
S-DSS-01070	IR1	The SDSRV CI shall respond to a Data Request with a response that shall contain a status and a pointer to the data.	DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			TRMM3100#Ir1	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.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
S-DSS-01080	B	The SDSRV CI shall notify operations staff in the event that data required for an on-demand data production is not accessible.	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.
S-DSS-01090	A	The SDSRV CI shall maintain a list of all active Service Requests within the Data Server. The list shall include Request Priorities, Distribution Instructions, and all information necessary to process each request.	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.
			DADS0660#A	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.
S-DSS-01100	A	The SDSRV CI shall provide the capability for operations staff to view the list of active Service Requests within the Data Server.	DADS0660#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01120	A	The SDSRV CI shall provide the capability to manage multiple Service Requests from clients.	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
			IMS-0260#A	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.
			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.
S-DSS-01130	A	The SDSRV CI shall provide the capability to process Service Requests asynchronously.	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.
			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
			IMS-0260#A	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.
S-DSS-01140	A	The SDSRV CI shall provide the capability to list and status, Service Requests initiated by aclient.	IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
			IMS-1300#A	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-01150	A	The SDSRV CI shall log all Service Requests entered during a client session.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0665#A	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.
S-DSS-01160	A	The SDSRV CI shall provide periodic, asynchronous status messages to the client during the execution of a Search Request.	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.
			IMS-0665#A	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.
S-DSS-01170	B	The SDSRV CI shall provide the capability to monitor resource utilization on a client basis.	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
S-DSS-01180	A	For each Data Request, the SDSRV CI shall log the processing performed, the Data Products produced, any supporting data used and the recipient of the data.	IMS-1060#B	The IMS shall maintain a cross reference of processing performed, data sets produced, supporting data used, and data recipient.
			IMS-1060#A	The IMS shall maintain a cross reference of processing performed, data sets produced, supporting data used, and data recipient.
S-DSS-01190	A	The SDSRV CI shall provide the capability for operations staff to view the resources used and allocated by a client.	DADS1470#B	Each DADS shall manage element resource utilization.
			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
			IMS-1660#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1470#A	Each DADS shall manage element resource utilization.
S-DSS-01200	B	The SDSRV CI shall notify the requester in the event that an on-demand data production cannot be completed.	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.
S-DSS-01210	A	The SDSRV CI shall provide Request Status to a client, concerning pending Service Requests, as specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1010#A	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS1000#A	The DADS shall receive distribution status requests from the collocated PGS.
S-DSS-01220	B	The SDSRV CI shall provide the capability for a client to suspend processing of a client session.	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.
S-DSS-01290	B	The SDSRV CI shall provide the capability for the operations staff to suspend all active client sessions.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01300	B	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.	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.
S-DSS-01310	B	The SDSRV CI shall provide the capability for the client to resume a client session, previously suspended by the client.	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.
S-DSS-01320	B	The SDSRV CI shall provide the capability for the operations staff to terminate any or all active or suspended client sessions.	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.
S-DSS-01330	B	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.	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.
S-DSS-01360	B	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.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01400	IR1	The SDSRV CI shall log the termination of the processing of a Service Request.	TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			TRMM3100#Ir1	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.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			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.
S-DSS-01405	IR1	The SDSRV CI shall log the termination of client session.	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.
			TRMM3100#Ir1	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.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
S-DSS-01410	B	The SDSRV CI shall log the suspension of the processing of a Service Request or the suspension of a client session.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01420	B	The SDSRV CI shall log the resumption of a previously suspended Service Request or client session.	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.
S-DSS-01430	IR1	The SDSRV CI shall log the initiation of the processing of a Service Request.	TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			TRMM3100#Ir1	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.
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			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.
S-DSS-01440	B	The SDSRV CI shall provide client Session Status Information to the requester.	IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.
S-DSS-01450	B	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.	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.
			IMS-1410#B	The Virtual IMS Information Management software shall provide metadata management services for local SCF metadata.
			IMS-1420#B	The Virtual IMS Information Management software shall provide the capabilities to search the local SCF data base.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			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
			EOSD5300#B	ECS shall provide APIs and infrastructure for science user extensions and direct search and access to data.
S-DSS-01460	A	The SDSRV CI shall accept Subscription Requests that specify an action to be taken and an event to initiate the action.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0150#A	The SDPS shall assign priority and distribute expedited data and expedited data availability notices.
			SDPS0150#B	The SPDS shall assign priority and distribute expedited data and expedited data availability notices.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01470	A	The SDSRV CI shall validate Subscription Requests for receipt of data type events.	DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01472	A	The SDSRV CI shall validate Subscription Requests for change in core metadata events.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01474	B	The SDSRV CI shall validate Subscription Requests for time interval events. Time intervals will be limited to daily, weekly, or monthly.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
S-DSS-01480	A	The SDSRV CI shall validate Subscription Requests for distribution of data actions.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01482	A	The SDSRV CI shall validate Subscription Requests for send notification actions.	DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01484	A	The SDSRV CI shall validate Subscription Requests for collection of data for later distribution actions.	DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01488	A	The SDSRV CI shall validate Subscription Requests for a Data Request action.	DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01490	A	The SDSRV CI shall process Subscription Requests at the occurrence of the specified event.	DADS2480#A	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.
			DADS2480#B	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01500	A	In the event that more than one Subscription is linked to a single event, the SDSRV CI shall process the actions defined in the Subscriptions on a first-come, first-serve basis.	DADS2480#B	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.
			DADS2480#A	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.
S-DSS-01510	A	The SDSRV CI shall provide the capability to notify users when data has been archived and is available for access.	SDPS0050#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			DADS1210#A	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
			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.
			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.
			DADS1210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
S-DSS-01520	B	The SDSRV CI shall provide the capability to notify a user that a new version of the data has been archived.	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01525	A	The SDSRV CI shall accept Subscriptions for Data Availability Schedules from the PLANG CI.	DADS2020#A	Each DADS shall have the capability to receive data availability schedules at a minimum, from: a. c. ADCs e. Other DADS f. TRMM (SDPF)
			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)
S-DSS-01530	A	The SDSRV CI shall provide the capability for Subscriptions to notify users via email or directly to a program interface.	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.
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
			IMS-1080#A	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
			IMS-0740#A	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, spacecraft housekeeping and ancillary data.
S-DSS-01540	B	The SDSRV CI shall provide the capability to bundle notification of discrete events into a single notice to the subscriber.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-01550	A	The SDSRV CI shall provide the capability for a user to request notification of data arrival.	DADS0540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
			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).
			DADS0540#A	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
			DADS0550#A	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).
S-DSS-01560	B	The SDSRV CI shall accept Subscription Update Requests to update stored Subscriptions by changing the event or the action.	DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01570	A	The SDSRV CI shall provide the capability for operations staff to view the stored Subscriptions.	DADS2160#A	Each DADS shall maintain a list/schedule of standing orders.
			DADS2160#B	Each DADS shall maintain a list/schedule of standing orders.
S-DSS-01580	B	The SDSRV CI shall provide the capability for operations staff to update the stored Subscriptions by changing the event and/or action.	DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01590	B	The SDSRV CI shall provide the capability for a user client to update their stored Subscriptions by changing the action and/or event.	DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01600	A	The SDSRV CI shall provide the capability for operations staff to delete any stored Subscription.	DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01610	A	The SDSRV CI shall provide the capability for a user to delete their own stored Subscription.	DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01620	B	The SDSRV CI shall validate that Subscription Update Requests specify a valid Subscription Identifier and a valid replacement Subscription.	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.
			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
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-01630	A	The SDSRV CI shall provide the capability to notify a subscriber of QA changes.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1080#A	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
			IMS-0740#A	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, spacecraft housekeeping and ancillary data.
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-01640	A	The SDSRV CI shall provide the capability to notify a subscriber on individual data granule basis.	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.
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
			IMS-0740#A	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, spacecraft housekeeping and ancillary data.
			IMS-1080#A	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-01700	B	The SDSRV CI shall periodically report on new events for timer-based Subscriptions and will not repeat notification of old events.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-01760	IR1	The SDSRV CI shall log all reported error conditions.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1340#A	Each DADS shall use tools to analyze system performance.
			DADS1300#A	Each DADS shall display all faults to the system operators.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			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
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2450#Ir1	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			TRMM3100#Ir1	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.
			DADS1340#B	Each DADS shall use tools to analyze system performance.
			DADS1300#B	Each DADS shall display all faults to the system operators.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1080#B	Each DADS shall maintain a data receipt log.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
			TRMM4090#Ir1	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS1080#A	Each DADS shall maintain a data receipt log.
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
S-DSS-01770	A	The SDSRV CI shall log all reported warning conditions.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1340#B	Each DADS shall use tools to analyze system performance.
			DADS1300#B	Each DADS shall display all faults to the system operators.
			DADS1080#B	Each DADS shall maintain a data receipt log.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0500#A	Each DADS shall receive changes to standing orders from the IMS.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS1340#A	Each DADS shall use tools to analyze system performance.
			DADS1300#A	Each DADS shall display all faults to the system operators.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1080#A	Each DADS shall maintain a data receipt log.
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0600#A	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#A	Each DADS shall verify product orders from the IMS.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0600#B	Each DADS shall accept requests from the IMS to distribute data archived in the DADS to requesting users.
			DADS0570#B	Each DADS shall verify product orders from the IMS.
			DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0500#B	Each DADS shall receive changes to standing orders from the IMS.
S-DSS-01780	A	The SDSRV CI shall be capable of canceling the execution of a Service Request.	DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01790	B	The SDSRV CI shall provide access to compound data type services.	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
			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.
S-DSS-01800	A	The LaRC DAAC SDSRV CI shall support TRMM end-to-end testing 9 months before TRMM launch.		
S-DSS-01810	A	The MSFC DAAC SDSRV CI shall support TRMM end-to-end testing 9 months before TRMM launch.		
S-DSS-01820	A	The SDSRV CI shall support TRMM end to end testing	TRMM8010#A	TRMM shall manage, and ESDIS shall support, the TRMM end-to-end system testing of the interfaces between ECS and TRMM.
			TRMM8010#B	TRMM shall manage, and ESDIS shall support, the TRMM end-to-end system testing of the interfaces between ECS and TRMM.
S-DSS-01840	A	The Science Data Server shall accept and validate Data Requests per hour as derived from Section E.6 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-01850	A	The Science Data Server shall be capable of supporting 200% growth in the number of Data Requests it accepts and validates without architecture or design change.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS3090#A	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.
			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.
			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.
S-DSS-01860	A	The Science Data Server shall support making stored Data Products available on physical media within 24 hours of receipt of a Media Distribution Request.	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.
			DADS2770#A	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.
S-DSS-01870	A	The Science Data Server shall support distributing product QA data produced at the collocated Data Processing Subsystem within 1 hour from the time it is ready.	DADS3120#A	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
			DADS3120#B	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
S-DSS-01880	A	The Science Data Server shall support making archive data associated with a predefined ECS standard format available to the network in that format within an average of 2 minutes.	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.
			DADS3126#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01890	A	The Science Data Server shall support making archive data associated with a predefined ECS standard format available to the network in a different format within an avg. of 5 minutes.	DADS3126#A	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.
			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.
S-DSS-01900	A	The Science Data Server shall be capable of receiving a combined maximum number of Data Requests per hour (across ECS) from the Data Management Subsystem and/or the client Subsystem as derived from Section E.6 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS3135#B	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
			DADS3135#A	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
S-DSS-01910	A	The Science Data Server shall be capable of receiving a combined maximum number of Browse Requests per hour (across ECS) from the Data Management Subsystem and/or the Client Subsystem as derived from Section E.6 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS3135#B	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
			DADS3135#A	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01920	A	The Science Data Server shall support making pre-computed Browse Data available to a requester in 58 seconds after accepting and validating the request in the number of seconds specified in Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS3135#A	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
			DADS3135#B	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
S-DSS-01930	A	The Science Data Server and Science Management within the Data Server shall be capable of accepting and storing Data Products derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B from the PRONG CI while supporting standard product retrieval and browse data access loads.	DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
S-DSS-01940	A	The Science Data Server and Science Management within the Data Server shall be capable of ingesting product data at a maximum rate (three times the nominal rate derived from the number of bytes per day specified in Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B from the PRONG CI until the backlog is processed, while standard product retrieval and browse data access loads are suspended.	DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-01950	A	The Science Data Server shall support distributing the number of bytes of data per day derived from Sections E.1 & E.3 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B to the PRONG CI (in support of production) by accepting and validating the number requests per day from the PRONG CI derived from Sections E.1 & E.3 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	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).
			DADS3100#A	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).
S-DSS-01960	A	The Science Management within the Data Server shall support distributing the bytes of data per day derived from Sections E.1 & E.3 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B to the PRONG CI (in support of production) by retrieving and staging the number of bytes per day for the PRONG CI derived from Sections E.1 & E.3 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS3100#A	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).
			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).
S-DSS-01970		The SDSRV CI shall have the capacity to accept a daily average of two (2) percent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.	EOSD1030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-02000	A	The ACMHW CI shall be sized to support the bytes/second rates derived from Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B on the electronic data distribution interfaces. (Supports user push/pull electronic distribution)	DADS3100#A	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).
			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).
S-DSS-02010	A	The ACMHW CI shall be sized to support the number of operations/second derived from Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			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).
			DADS3100#A	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).
S-DSS-02020	A	The ACMHW CI shall be configured to support the SDPS function of local Data Request Submission's Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.	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).
			EOSD3980#A	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).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-02030	A	The ACMHW CI shall be configured to support the SDPS function of data order submission across DAACs Availability requirement of .96 and Mean Down Time requirement of < 4 hrs during times of staffed operation.	EOSD3990#A	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).
			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).
S-DSS-02040	A	The ACMHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.	EOSD3920#A	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).
			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).
S-DSS-02041	A	The ACMHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.	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).
			EOSD3930#A	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).
S-DSS-02042	A	The ACMHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.	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).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD3940#A	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).
S-DSS-02043	A	The ACMHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.	EOSD3960#A	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).
			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).
S-DSS-02044	A	The ACMHW CI shall be configured to support the SDPS function of Information Searches On Local Holding's availability requirement of .96 and mean down time requirement of < 4 hours during times of staffed operations.	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).
			EOSD3970#A	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).
S-DSS-02045	A	The ACMHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.	EOSD4000#A	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).
			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).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-02046	A	The ACMHW CI 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.	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.
			EOSD4100#A	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.
S-DSS-02047	A	The maximum down time of the ACMHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
			EOSD3630#A	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
S-DSS-02900	A	The SDSRV CI shall provide Data Type services on ECS Data as listed in Appendix F of the current version of 304-CD-005.	DADS0760#A	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)
			DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.
			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. Time d. WRS
			DADS0760#B	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)
			SDPS0031#B	The SDPS shall generate browse data and metadata for routing to the requesting users.
			SDPS0031#A	The SDPS shall generate browse data and metadata for routing to the requesting users.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-02901	B	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.	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
			DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.
			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
			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. Time d. WRS
S-DSS-02902	B	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.	DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.
			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
			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. Time d. WRS

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-02903	B	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.	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
			DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.
			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
			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. Time d. WRS
S-DSS-02904	B	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.	DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.
			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. Time d. WRS

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-0705#B	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat7 subinterval indentified by: a. WRS b. Geographic location (x,,z) spatial with rectangular boundries c. Spectral Band d. Time
S-DSS-03002	B	The SDSRV CI shall be capable of receiving L0 - L4 Data.	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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			DADS0130#B	Each DADS shall receive from the EDOS and SDPF, at a minimum, the following: a. Production data (L0) b. Expedited data
S-DSS-03004	B	The SDSRV CI shall be capable of receiving Ancillary Data.	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
			DADS0260#B	Each DADS shall receive non-EOS correlative and ancillary digital data.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03006	B	The SDSRV CI shall be capable of receiving Metadata associated with Ancillary Data.	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
			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
			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
			DADS0260#B	Each DADS shall receive non-EOS correlative and ancillary digital data.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
S-DSS-03010	A	The SDSRV CI shall be capable of receiving Calibration Data.	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
			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
			DADS0120#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS0140#A	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
			DADS0220#A	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
S-DSS-03020	A	The SDSRV CI shall be capable of receiving Metadata associated with Calibration Data.	DADS0120#A	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03030	A	The SDSRV CI shall be capable of receiving Science Software Archive Packages.	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
			IMS-0300#A	The IMS shall maintain a log of all information update activity.
			IMS-0550#A	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
			DADS0120#A	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0190#A	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
			SDPS0025#A	The SDPS shall accept scientific and non-scientific investigator supplied dataset specific data transformations.
			IMS-0300#B	The IMS shall maintain a log of all information update activity.
			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
			SDPS0025#B	The SDPS shall accept scientific and non-scientific investigator supplied dataset specific data transformations.
S-DSS-03040	A	The SDSRV CI shall be capable of receiving Metadata associated with Science Software Archive Packages.	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.
			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
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0550#A	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
			DADS0120#A	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
			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
S-DSS-03050	B	The SDSRV CI shall be capable of receiving FDF Orbit Data for AM-1 instruments.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
S-DSS-03060	B	The SDSRV CI shall be capable of receiving FDF Attitude Data for AM-1 instruments.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
S-DSS-03100	B	The SDSRV CI shall be capable of receiving FDF Metadata for Orbit and Attitude data for AM-1 instruments.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03110	A	The SDSRV CI shall be capable of receiving Instrument Calibration Data.	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
			DADS0220#A	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
S-DSS-03120	A	The SDSRV CI shall be capable of receiving Metadata associated with Instrument Calibration Data.	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
S-DSS-03122	B	The SDSRV CI shall be capable of receiving real EOS instrument data to support pre-launch checkout of the ground system.	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
			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.
S-DSS-03124	B	The SDSRV CI shall be capable of receiving simulated EOS instrument data to support pre-launch checkout of the ground system.	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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03130	A	The SDSRV CI shall be capable of receiving Instrument Characterization Data.	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
S-DSS-03150	A	The SDSRV CI shall be capable of receiving Instrument Historical Data.	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
			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
S-DSS-03160	A	The SDSRV CI shall be capable of receiving Metadata associated with Instrument Historical Data.	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
S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.	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
			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.
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			IMS-0550#A	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
S-DSS-03190	B	The SDSRV CI shall be capable of receiving Orbit/Attitude data.	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
S-DSS-03200	B	The SDSRV CI shall be capable of receiving Metadata associated with Orbit/Attitude data.	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
S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.	IMS-0545#B	The IMS shall provide the capability to search a products processing history.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			IMS-0030#A	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.
			IMS-0550#A	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
S-DSS-03250	A	The SDSRV CI shall be capable of receiving QA Statistics.	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.
			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
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0550#A	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
S-DSS-03260	A	The SDSRV CI shall be capable of receiving Metadata associated with QA Statistics.	IMS-0030#A	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.
			IMS-0550#A	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
			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.
			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
S-DSS-03270	A	The SDSRV CI shall be capable of receiving scientific calibration data.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03280	A	The SDSRV CI shall be capable of receiving Metadata associated with scientific calibration data.	DADS0120#A	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
			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
S-DSS-03290	B	The SDSRV CI shall be capable of receiving Spacecraft Historical Data.	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
S-DSS-03310	A	The SDSRV CI shall be capable of receiving correlative data.	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
			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
			DADS0260#B	Each DADS shall receive non-EOS correlative and ancillary digital data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0190#A	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
			DADS0260#A	Each DADS shall receive non-EOS correlative and ancillary digital data.
			DADS0140#A	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
S-DSS-03320	A	The SDSRV CI shall be capable of receiving Metadata associated with correlative data.	DADS0260#A	Each DADS shall receive non-EOS correlative and ancillary digital data.
			DADS0190#A	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
			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
			DADS0260#B	Each DADS shall receive non-EOS correlative and ancillary digital data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03330	B	The SDSRV CI shall be capable of receiving Special Data Products.	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
S-DSS-03340	B	The SDSRV CI shall be capable of receiving Metadata associated with Special Data Products.	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
S-DSS-03350	A	The SDSRV CI shall be capable of receiving V0 Migration Data in native format	V0-0340#A	The ECS shall have the capability of ingesting migration data in the following data format (s): a. HDF b. native format c. TBD
			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
			SDPS0085#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03360	A	The SDSRV CI shall be capable of receiving Metadata associated with V0 Migration Data in native format	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.
			SDPS0085#A	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.
			V0-0340#A	The ECS shall have the capability of ingesting migration data in the following data format (s): a. HDF b. native format c. TBD
			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
S-DSS-03361	B	The SDSRV CI shall be capable of receiving NMC data.	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
S-DSS-03362	B	The SDSRV CI shall be capable of receiving First Look Products from the DAO.	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
S-DSS-03363	B	The SDSRV CI shall be capable of receiving Reanalysis Products from the DAO.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03364	B	The SDSRV CI shall be capable of receiving Final Analysis Products from the DAO.	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
S-DSS-03365	A	The SDSRV CI shall supply metadata on collections to the global master change directory in directory interchange format.	IMS-0356#A	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.
			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.
S-DSS-03366	A	The SDSRV CI shall be capable of receiving inventory characteristic data.	IMS-0550#A	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
S-DSS-03367	A	The SDSRV CI shall be capable of receiving File Format Descriptions (e.g. HDF Spec.).	DADS0440#A	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.)
S-DSS-03369	A	The SDSRV CI shall be capable of receiving expedited data from instruments.	DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
S-DSS-03370	A	Upon receipt of data types the SDSRV CI shall perform data type specific checking.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0290#A	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, and correctness of the data set granule size.
S-DSS-03380	A	Upon receipt of valid data types the SDSRV CI shall pass the data to the STMGT CI.	DADS0440#A	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.)
			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.)
S-DSS-03390	A	The SDSRV CI shall update the Inventory after the Data it received for insertion into its data holdings have passed the validity checks applicable to the respective data types.	IMS-0430#A	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.
			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.
S-DSS-03400	B	The SDSRV CI shall verify compliance of scientist provided data with EOSDIS defined standards for file content and structure (not scientific content).	DADS0320#B	Each DADS shall verify compliance of scientist provided data with EOSDIS defined standards for metadata and file content (not scientific content).
S-DSS-03410	B	The SDSRV CI shall verify compliance of scientist provided Metadata with EOSDIS defined standards for Metadata content and structure (not scientific content).	DADS0320#B	Each DADS shall verify compliance of scientist provided data with EOSDIS defined standards for metadata and file content (not scientific content).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			IMS-1450#B	The Virtual IMS Information Management tools shall provide the capability to modify the data base structure while adhering to established standards.
			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
S-DSS-03412	A	The SDSRV CI shall interface with the STMGT CI to provide storage for L0 - L4 Data.	DADS0440#A	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.)
			DADS0465#A	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.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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.)
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			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.
S-DSS-03414	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Ancillary Data.	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS0475#A	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.
			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.
			DADS0465#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0440#A	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.)
S-DSS-03416	A	The SDSRV CI shall provide storage for Metadata associated with Ancillary Data.	DADS0440#A	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.)
			DADS0465#A	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.
			DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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.)
			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.
S-DSS-03420	A	The SDSRV CI shall interface with the STMGT CI to provide storage for calibration data.	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0475#A	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.
			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.
			DADS0440#A	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.)
S-DSS-03430	A	The SDSRV CI shall provide storage for Metadata associated with calibration data.	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0475#A	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.
			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.
			DADS0440#A	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.)
S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			IMS-0030#A	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.
			DADS0475#A	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.
			IMS-0550#A	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
			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.
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			PGS-1025#A	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines
			PGS-0900#A	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
			DADS0465#A	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.
			DADS0440#A	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.)
			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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			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
S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.	PGS-1025#A	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines
			DADS0465#A	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.
			DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0030#A	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.
			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.
			DADS0475#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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.
			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
			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.
			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
S-DSS-03460	B	The SDSRV CI shall interface with the STMGT CI to provide storage for FDF Orbit Data for AM-1 instruments.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.)
S-DSS-03470	B	The SDSRV CI's MD Component shall provide storage for Metadata associated with FDF Orbit and Attitude Data for AM-1 instruments.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			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.)
S-DSS-03480	A	The SDSRV CI shall interface with the STMGT CI to provide storage for instrument calibration data.	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.)
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			DADS0475#A	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.
			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.
			DADS2315#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0465#A	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.
			DADS0450#A	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
			DADS0440#A	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.)
			DADS0281#A	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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03490	A	The SDSRV CI shall provide storage for Metadata associated with instrument calibration data.	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
			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.)
			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.
			DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS0440#A	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.)
			DADS0465#A	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.
			DADS0450#A	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
S-DSS-03492	B	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.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03494	B	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.	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.
S-DSS-03500	A	The SDSRV CI shall interface with the STMGT CI to provide storage for instrument characterization data.	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.)
			DADS0440#A	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.)
S-DSS-03520	A	The SDSRV CI shall interface with the STMGT CI to provide storage for instrument historical data.	DADS0440#A	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.)
			DADS0465#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.)
			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.
S-DSS-03522	A	The SDSRV CI shall provide storage for Metadata associated with Instrument Historical Data.	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
			DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0465#A	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.
S-DSS-03540	A	The SDSRV CI shall provide storage for inventory characteristic data.	DADS0440#A	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.)
			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.)
			IMS-0030#A	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.
			IMS-0550#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
S-DSS-03560	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Orbit/Attitude data.	DADS0175#A	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS0440#A	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.)
			DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03570	A	The SDSRV CI shall provide storage for Metadata associated with Orbit/Attitude data.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			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.)
			DADS0440#A	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.)
			DADS0175#A	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.	DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.)
			IMS-0030#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03600	B	The SDSRV CI shall interface with the STMGT CI to provide storage for production plans.	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.)
			DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.	DADS0440#A	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.)
			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.
			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
			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.
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0550#A	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
			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.)
S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.	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.
			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
			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.
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0550#A	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
			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.)
			DADS0440#A	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.)
S-DSS-03640	A	The SDSRV CI shall interface with the STMGT CI to provide storage for scientific calibration data.	DADS0465#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0440#A	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.)
			DADS0475#A	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.
			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.
			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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-03650	A	The SDSRV CI shall provide storage for Metadata associated with scientific calibration data.	DADS0465#A	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.
			DADS0220#A	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
			DADS0440#A	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.)
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.)
			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.
			DADS0475#A	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.
			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.
S-DSS-03660	B	The SDSRV CI shall interface with the STMGT CI to provide storage for spacecraft historical data.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.)
S-DSS-03680	A	The SDSRV CI shall interface with the STMGT CI to provide storage for correlative data.	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.)
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0475#A	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.
			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.
			DADS0440#A	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.)
			DADS0450#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0465#A	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.
S-DSS-03690	A	The SDSRV CI shall provide storage for Metadata associated with correlative data.	DADS0475#A	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.
			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.
			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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			DADS0465#A	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.
			DADS0450#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0440#A	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.)
S-DSS-03700	B	The SDSRV CI shall interface with the STMGT CI to provide storage for special Data Products.	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
			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
S-DSS-03710	B	The SDSRV CI shall provide storage for Metadata associated with special Data Products.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03712	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Research results (articles, algorithms, data sets, software).	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
			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.)
			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
			DADS0140#A	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
			DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			PGS-1025#A	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines
S-DSS-03720	A	The SDSRV CI shall interface with the STMGT CI to provide storage for V0 migration data.	DADS0465#A	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.
			DADS0440#A	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.)
			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.)
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03730	A	The SDSRV CI shall provide storage for Metadata associated with V0 migration data.	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.)
			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.
			DADS0465#A	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.
			DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03740	A	The SDSRV CI shall provide storage for validated Inventory data.	DADS0440#A	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.)
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			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.)
			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.
			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.
S-DSS-03741	B	The SDSRV CI shall interface with the STMGT CI to provide storage for NMC data.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03742	B	The SDSRV CI shall interface with the STMGT CI to provide storage for First Look Products.	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
S-DSS-03743	B	The SDSRV CI shall interface with the STMGT CI to provide storage for Reanalysis Products.	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
S-DSS-03744	B	The SDSRV CI shall interface with the STMGT CI to provide storage for Final Analysis Products.	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
S-DSS-03745	A	The SDSRV CI shall interface with the STMGT CI to provide storage for File Format Descriptions (e.g., HDF Spec.).	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.)
			DADS0440#A	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.)
S-DSS-03746	A	The SDSRV CI's MD Component shall provide storage for checksum metadata value associated with each file of each data granule stored in the STMGT CI.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1370#A	Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.
S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.	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
			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
			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
			IMS-0250#A	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
			IMS-0240#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.	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.
			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
			EOSD5250#A	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
			IMS-0260#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			EOSD5200#A	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.
S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			EOSD5200#A	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.
			DADS0590#B	Each DADS shall support the capability for subsetting, and subsampling data products ordered via the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD5250#A	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
			IMS-0420#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			IMS-0260#A	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.
			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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.	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.
			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
			IMS-0260#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			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.
			EOSD5200#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-03810	A	The SDSRV CI shall have the ability to cancel the advertising of publicly available services.	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 loss d. Updates
S-DSS-03820	A	Each SDSRV CI Advertisement shall identify the service's interface.	DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-03830	A	Each SDSRV CI Advertisement shall include Service Descriptions.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-03860	A	The SDSRV CI shall be capable of receiving status from the PRONG CI.	DADS0120#A	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
			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
			DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.
			DADS1000#A	The DADS shall receive distribution status requests from the collocated PGS.
			DADS1010#A	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03862	A	The SDSRV CI shall be capable of sending status to the PRONG CI.	DADS0120#A	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
			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
S-DSS-03864	A	The SDSRV CI shall be capable of receiving status from the PLANG CI.	DADS0120#A	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
			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
S-DSS-03865	A	The SDSRV CI shall be capable of receiving scheduling data from the PLANG CI.	DADS0120#A	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

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-03866	A	The SDSRV CI shall be capable of sending status to the PLANG CI.	DADS0120#A	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
			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
S-DSS-03868	A	The SDSRV CI shall be capable of sending status to the WKBCH CI.	DADS0120#A	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03870	A	The SDSRV CI shall be capable of receiving status from the INGST CI.	DADS1070#B	The DADS shall send data check and storage status to the provider of ingest data.
			DADS0120#A	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
			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
			DADS1070#A	The DADS shall send data check and storage status to the provider of ingest data.
S-DSS-03872	A	The SDSRV CI shall be capable of sending status to the INGST CI.	DADS1070#A	The DADS shall send data check and storage status to the provider of ingest data.
			DADS0120#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS1070#B	The DADS shall send data check and storage status to the provider of ingest data.
S-DSS-03874	A	The SDSRV CI shall be capable of receiving status from the LIMGR CI.	DADS0120#A	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
			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
S-DSS-03876	A	The SDSRV CI shall be capable of sending status to the LIMGR CI.	DADS0120#A	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

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-03940	B	The SDSRV CI shall be capable of receiving estimated disk utilization from the PLANG CI.	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
S-DSS-03950	B	The SDSRV CI shall be capable of receiving estimated CPU utilization from the PLANG CI.	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
S-DSS-03960	B	The SDSRV CI shall be capable of receiving estimated disk utilization from the STMGT CI.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-03990	B	The SDSRV CI shall be capable of receiving actual disk utilization from the PLANG CI.	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
S-DSS-04000	B	The SDSRV CI shall be capable of receiving actual CPU utilization from the PLANG CI.	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
S-DSS-04010	B	The SDSRV CI shall be capable of receiving actual disk utilization from the STMGT CI.	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
S-DSS-04035	A	The SDSRV CI shall supply the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.	SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			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
			IMS-0890#A	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.
			SDPS0130#A	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
S-DSS-04037	A	The SDSRV CI shall supply the Metadata associated with the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.	SDPS0130#A	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			IMS-0890#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04038	B	The SDSRV CI shall supply L0 - L4 Data to the DDIST CI.	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
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			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.
			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.
			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
S-DSS-04040	A	The SDSRV CI shall supply calibration data to the DDIST CI.	SCF-0310#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-04050	A	The SDSRV CI shall supply Metadata associated with calibration data to the DDIST CI.	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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			SCF-0310#A	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.
			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.
S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.	IMS-0030#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			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.
			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
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.	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
			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.
			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
			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.
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			IMS-0030#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0550#A	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
S-DSS-04080	B	The SDSRV CI shall supply FDF orbit data for AM-1 instruments packages to the DDIST CI.	DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-04082	B	The SDSRV CI shall supply FDF attitude data for AM-1 instruments packages to the DDIST CI.	DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			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.)
S-DSS-04090	A	The SDSRV CI shall supply Metadata associated with FDF orbit data for AM-1 instruments to the DDIST CI.	DADS0175#A	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04100	A	The SDSRV CI shall supply instrument calibration data to the DDIST CI.	DADS0175#A	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS2345#A	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
			DADS2340#A	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
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			DADS2315#A	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.
			DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
S-DSS-04110	A	The SDSRV CI shall supply Metadata associated with instrument calibration data to the DDIST CI.	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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0175#B	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS0175#A	The GSFC DADS shall receive from FDF, at a minimum : a. Orbit data b. Attitude data c. Metadata
			DADS2315#A	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.
			DADS2340#A	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
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			DADS2345#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04112	B	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.	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.
S-DSS-04114	B	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.	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.
S-DSS-04120	A	The SDSRV CI shall supply instrument characterization data to the DDIST CI.	DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-04140	A	The SDSRV CI shall supply instrument historical data to the DDIST CI.	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
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04150	A	The SDSRV CI shall supply Metadata associated with instrument historical data to the DDIST CI.	DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			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
S-DSS-04160	A	The SDSRV CI shall supply inventory characteristic data to the DDIST CI.	IMS-0030#A	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.
			IMS-0550#A	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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-04180	B	The SDSRV CI shall supply Orbit/Attitude Data to the DDIST CI.	DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			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.
			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
S-DSS-04190	B	The SDSRV CI's MD Component shall supply Metadata associated with Orbit/Attitude Data to the DDIST CI.	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
			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.
S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-0030#A	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.
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0550#A	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
S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.	IMS-0030#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
S-DSS-04230	A	The SDSRV CI shall supply Metadata associated with production plan data to the DDIST CI.	DADS2180#A	Each DADS shall maintain a list/schedule of reprocessed data.
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
			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
S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.	SDPS0032#A	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0130#A	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			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.
			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
			SDPS0032#B	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.
			SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			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.
			IMS-0030#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.	IMS-0030#A	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.
			IMS-0550#A	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
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.
			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
			SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
			SDPS0032#B	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.
			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.
			SDPS0032#A	The SDPS shall provide the PIs and the other science users with the updated metadata for the assessment of data product quality.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0130#A	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
S-DSS-04260	A	The SDSRV CI shall supply scientific calibration data to the DDIST CI.	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.
			DADS2315#A	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.
S-DSS-04270	A	The SDSRV CI shall supply Metadata associated with scientific calibration data to the DDIST CI.	DADS2315#A	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.
			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.
S-DSS-04280	A	The SDSRV CI shall supply spacecraft historical data to the DDIST CI.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
S-DSS-04300	A	The SDSRV CI shall supply correlative data to the DDIST CI.	DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04310	A	The SDSRV CI shall supply Metadata associated with correlative data to the DDIST CI.	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
			DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs
S-DSS-04320	B	The SDSRV CI shall supply special Data Products to the DDIST CI.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04330	B	The SDSRV CI shall supply Metadata associated with special Data Products to the DDIST CI.	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
S-DSS-04332	B	The SDSRV CI shall supply Research results (articles, algorithms, data sets, software) to the DDIST CI.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04340	B	The SDSRV CI shall supply V0 migration Data Products to the DDIST CI.	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.
S-DSS-04350	B	The SDSRV CI shall supply Metadata associated with V0 migration Data Products to the DDIST CI.	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.
S-DSS-04351	B	The SDSRV CI shall supply NMC data to the DDIST CI.	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
S-DSS-04352	B	The SDSRV CI shall supply First Look Products to the DDIST CI.	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
S-DSS-04353	B	The SDSRV CI shall supply Reanalysis Products to the DDIST CI.	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
S-DSS-04354	B	The SDSRV CI shall supply Final Analysis Products to the DDIST CI.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04360	A	The SDSRV CI shall include granule-specific information as defined in the SDPS Core Metadata Baseline (194-00269TPW).	DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
			IMS-0320#A	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
			DADS2180#A	Each DADS shall maintain a list/schedule of reprocessed data.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04370	A	The SDSRV CI shall have the ability to store product specific Metadata.	DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			SCF-0140#B	The ECS shall have the capability to receive Metadata, related to Special Products, from the SCF.
			TRMM5010#B	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.
			TRMM5010#A	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04380	A	The STMGT CI shall store the following Metadata: granule id, date and time of storage, data check status and data format type.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS0360#A	Each DADS shall augment PGS-generated metadata with DADS-generated metadata.
			DADS0350#A	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
			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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS0360#B	Each DADS shall augment PGS-generated metadata with DADS-generated metadata.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04390	A	Standard Product related Metadata at the Data Server shall include Metadata associated with static subsetted, subsampled, and summary products.	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
			IMS-0320#A	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
S-DSS-04400	A	The SDSRV CI shall have the ability to store references to calibration data as Metadata for science data.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0330#A	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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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
S-DSS-04410	B	The SDSRV CI's MD Component shall have the ability to store references to Orbit/Attitude Data as Metadata for science data.	DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04420	A	The SDSRV CI shall have the ability to store references to instrument engineering data as Metadata for science data.	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
			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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			IMS-0330#A	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
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			IMS-1720#A	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
			IMS-0330#A	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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			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
S-DSS-04440	A	The SDSRV CI shall have the ability to store references to data generation software as Metadata for science data.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			IMS-0330#A	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
			IMS-1720#A	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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04450	A	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.	DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0330#A	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
			IMS-1720#A	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
			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
			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
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04460	A	The SDSRV CI shall have the ability to store references to data recipients as Metadata for science data.	DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0330#A	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
			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
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04470	A	The SDSRV CI shall have the ability to store references to the data production facility as Metadata for science data.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0330#A	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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04476	A	The DDSRV CI shall provide the ability to store documents and/or data.	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.
			IMS-0480#A	The IMS shall allow the user to store documents in the ECS.
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
S-DSS-04480	A	The SDSRV CI shall have the ability to store references to QA Statistics as Metadata for science data.	DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			IMS-0330#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04490	A	The SDSRV CI shall have the ability to store references to reference documentation as Metadata for science data.	DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0320#A	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
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04500	B	The SDSRV CI's MD Component shall have the ability to indicate the need for on-demand product generation as Metadata for science data.	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.
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
S-DSS-04510	A	The STMGT CI shall support the capability to logically group a set of granule ids such that the set can be referenced by a single identifier.	DADS1780#B	Each DADS shall provide the capability to store as a single entity logically grouped sets of data.
			DADS1780#A	Each DADS shall provide the capability to store as a single entity logically grouped sets of data.
S-DSS-04520	A	The SDSRV CI shall provide the capability to validate metadata before insertion into the Inventory.	IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			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.
S-DSS-04530	A	The SDSRV CI shall provide the capability to validate updated metadata before insertion into the Inventory.	IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-04540	A	The SDSRV CI shall reject metadata which fails one or more validations constraints.	IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			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.
S-DSS-04570	A	The SDSRV CI shall provide services to add to the existing Inventory	IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
S-DSS-04580	A	The SDSRV CI shall provide services to delete from the existing Inventory	IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
S-DSS-04590	A	The SDSRV CI shall provide services to modify the existing Inventory	IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			SCF-0250#A	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.
			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.
			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

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			PGS-1130#A	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
S-DSS-04595	A	The SDSRV CI shall be capable of receiving QA metadata updates from the DESKT CI.	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
			PGS-1130#A	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
S-DSS-04596	A	The SDSRV shall provide the capability to allow DAAC operations personnel to approve the QA metadata update.	PGS-1130#A	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
			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
S-DSS-04600	A	The SDSRV CI shall update the Metadata for a data item whenever an unexpected loss occurs.	DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-0455#A	The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss
			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 loss d. Updates
S-DSS-04610	A	The SDSRV CI shall update the Metadata whenever a data item is updated.	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 loss d. Updates
			IMS-0455#A	The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss
			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
			DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04620	B	The SDSRV CI shall update the Metadata for a data item that has been purged from the system.	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 loss d. Updates
S-DSS-04630	B	The SDSRV CI shall update the Metadata whenever a data item is relocated to another site.	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 loss d. Updates
S-DSS-04640	A	The SDSRV CI shall provide services to retrieve Metadata from the Inventory.	IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
			EOSD1740#A	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
			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.
			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
S-DSS-04650	A	The SDSRV CI shall accept Search Requests	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.
			IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
S-DSS-04660	A	The SDSRV CI shall provide Result Sets to the client, in response to Search Requests	IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD1740#A	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
			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.
			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
S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.	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
			IMS-0545#B	The IMS shall provide the capability to search a products processing history.
			IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0330#A	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
			IMS-0660#A	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.
			IMS-0610#A	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.	IMS-0330#A	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
			IMS-0660#A	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.
			IMS-0610#A	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
			IMS-0340#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.
			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.
			IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.	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
			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.
			IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			IMS-1730#B	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\
			IMS-1740#A	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.
			IMS-1730#A	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\
			IMS-0610#A	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.
			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.
			IMS-0340#A	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.
			IMS-0660#A	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.
			IMS-0330#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-04700	A	The SDSRV CI shall provide Search Results to requesting agencies.	IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.
S-DSS-04710	A	The SDSRV CI shall respond to a query with a null Result Set, if no products in the Inventory meet the specified criteria.	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.
			IMS-0990#A	The IMS shall determine if necessary lower level products exist for processing of the requested data product.
			IMS-0930#A	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.
			IMS-0990#B	The IMS shall determine if necessary lower level products exist for processing of the requested data product.
S-DSS-04720	B	The SDSRV CI shall provide DARs to ASTER ICC.	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.
			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.
S-DSS-04730	B	The SDSRV CI shall accept DARs from the client.	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.
S-DSS-04740	B	The SDSRV CI shall provide DAR status to the client, in response to DAR Status Requests.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1230#B	The IMS shall accept from the ICC 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
			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.
S-DSS-04745	B	The SDSRV CI shall provide operations staff with the ability to display and list outstanding DARs that are accessible by the Data Server.	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
			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
S-DSS-04750	B	The SDSRV CI shall accept DAR Status from IPs	IMS-1262#B	The IMS shall provide the capability to receive the ASTER GDS data acquisition request status in accordance with applicable IRDs and ICDs and provide the status to the data acquisition requester.
S-DSS-04760	B	The SDSRV CI shall accept Subscription Requests from the client linked to a specified, existing DAR.	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.
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-04770	B	The SDSRV CI shall send DAR Status Requests to ASTER ICC.	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.
			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.
			IMS-1230#B	The IMS shall accept from the ICC 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
S-DSS-04780	B	The SDSRV CI shall receive DAR Status from the ASTER ICC.	IMS-1262#B	The IMS shall provide the capability to receive the ASTER GDS data acquisition request status in accordance with applicable IRDs and ICDs and provide the status to the data acquisition requester.
			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.
S-DSS-10010	A	The guide shall be maintained on-line by the DDSRV CI.	IMS-0410#A	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOSDIS data sets.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0410#B	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOSDIS data sets.
S-DSS-10020	B	The DDSRV CI shall accept Subscriptions for metadata from the client.	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.
			IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
S-DSS-10030	A	The DDSRV CI shall support storage, retrieval and searching of documents in HTML format.	IMS-0535#A	The IMS shall support hierarchical searching of suitably structured documents.
			IMS-0535#B	The IMS shall support hierarchical searching of suitably structured documents.
S-DSS-10040	A	The DDSRV CI shall accept Documents from the INGST CI.	DADS0190#A	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
			DADS0110#A	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders
			DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS0110#B	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders
			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
S-DSS-10050	A	The DDSRV CI shall provide documents to requesting agencies.	DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS2380#A	Each DADS shall send to the SCF, at a minimum, the following: a. L0-L4 b. Expedited data d. Metadata e. Ancillary data f. Calibration data g. Correlative data h. Documents i. Algorithms
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS2340#A	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
			DADS2345#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2370#A	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
S-DSS-10051	A	The DDSRV CI shall provide the capability to add, delete, or modify individual ECS Metadata entries.	DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates
			IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			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 loss d. Updates
S-DSS-10052	A	The DDSRV CI shall generate an update to metadata reflecting changes in data holdings resulting from a purge operation.	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 loss d. Updates
			DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10053	A	The DDSRV CI shall generate an update to metadata reflecting changes in data holdings resulting from an unexpected loss.	DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates
			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 loss d. Updates
S-DSS-10054	A	The DDSRV CI shall generate an update to metadata reflecting changes in data holdings resulting from an intra-site data transfer or some other update.	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 loss d. Updates
			DADS1160#A	Each DADS shall provide the IMS with metadata reflecting changes as a result of: a. Purges b. Transfers to other site(s) c. Unexpected loss d. Updates
S-DSS-10055	B	The DDSRV CI shall provide, to qualified users, access to all documents and data types held in the server's collection.	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
			EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10060	A	The DDSRV CI shall provide access to the ECS guide (documentation/reference material) and guide services.	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.
			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
			IMS-0030#A	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.
			IMS-0550#A	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
S-DSS-10070	A	The DDSRV CI shall store, maintain and provide data management services for ECS guide (documentation/reference material).	IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			IMS-0410#A	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOSDIS data sets.
			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.
S-DSS-10080	A	The DDSRV CI shall provide the capability to add, delete, or modify groups of ECS Metadata entries.	IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.
			IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10090	A	The DDSRV CI shall be capable of receiving documentation of processing algorithms used for EOS and other Earth Science Data Products generated by the ECS	IMS-0420#A	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
			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
S-DSS-10095	A	The DDSRV CI shall be capable of receiving data from the PLANG CI.	IMS-0410#B	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOSDIS data sets.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS2180#A	Each DADS shall maintain a list/schedule of reprocessed data.
			DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
S-DSS-10100	A	The DDSRV CI shall be capable of receiving references to results of science data quality assessments of EOS data	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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0091#A	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.
			IMS-0420#A	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
S-DSS-10110	A	The DDSRV CI shall be capable of receiving bibliography information of published and unpublished literature (as available) derived from the project	IMS-0420#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-10120	A	The DDSRV CI shall be capable of providing cross references between differing studies of the same data	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-0420#A	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
S-DSS-10130	A	The DDSRV CI shall be capable of receiving other documents relevant to quality assessment of EOS data	IMS-0420#A	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
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0475#A	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.
			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
			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.
			SDPS0091#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10140	A	The DDSRV CI shall provide the capability to receive data describing format and media options available for a given data set.	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
			IMS-0420#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10150	A	The DDSRV CI shall be capable of receiving instrument specifications	IMS-0420#A	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10160	A	The DDSRV CI shall provide the capability to receive summaries of data sets derived from observation logs	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
			IMS-0420#A	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
S-DSS-10170	A	The DDSRV CI shall receive user supplied documents in HTML & ASCII	IMS-0480#A	The IMS shall allow the user to store documents in the ECS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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.)
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			DADS0140#A	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
			DADS0440#A	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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10180	A	The DDSRV CI shall provide the capability to receive data describing subsetting, subsampling, and transformation options available for a given data set.	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
			IMS-0420#A	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
S-DSS-10184	A	The DDSRV CI shall notify operations staff of any system error or fault.	DADS1300#B	Each DADS shall display all faults to the system operators.
			DADS1300#A	Each DADS shall display all faults to the system operators.
S-DSS-10186	A	The DDSRV CI shall report to operations staff all errors involving file accesses.	DADS1310#B	Each DADS shall track and report to the SMC problems such as missing or corrupted files requiring restoration or regeneration of data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10190	A	The DDSRV CI shall receive Guide Data from Version 0 in HTML & ASCII	DADS0140#A	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
			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
S-DSS-10200	A	The DDSRV CI shall provide the capability to ingest documentation in ASCII text format.	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
			IMS-0480#A	The IMS shall allow the user to store documents in the ECS.
			IMS-0490#A	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. Postscript f. WordPerfect

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0140#A	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
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
S-DSS-10202	B	The DDSRV CI shall provide the capability to ingest documentation in Microsoft WORD format.	IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10204	A	The DDSRV CI shall provide the capability to ingest documentation in HTML format.	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
			IMS-0480#A	The IMS shall allow the user to store documents in the ECS.
			IMS-0490#A	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. Postscript f. WordPerfect
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
			DADS0140#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10206	B	The DDSRV CI shall provide the capability to ingest documentation in Interleaf format.	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
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
S-DSS-10208	B	The DDSRV CI shall provide the capability to ingest documentation in WordPerfect format.	IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10209	A	The DDSRV CI shall provide the capability to ingest documentation in Postscript format.	IMS-0480#A	The IMS shall allow the user to store documents in the ECS.
			IMS-0490#A	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. Postscript f. WordPerfect
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			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. Postscript f. WordPerfect
S-DSS-10210	A	The DDSRV CI shall receive information that describes spacecraft-housekeeping and Ancillary Data parameters stored in the Science Data Server.	IMS-0440#B	The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.
			IMS-0440#A	The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.
S-DSS-10220	A	The DDSRV CI shall receive Guide Data from Version 0.	IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10230	B	The DDSRV CI shall provide application programming interfaces that support addition of documents for use as Guide data for DAAC-specific Data Products.	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
			EOSD0502#B	ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.
			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.
			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.
S-DSS-10231	B	The DDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.	DADS1340#B	Each DADS shall use tools to analyze system performance.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10232	B	The DDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.	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
			DADS1340#B	Each DADS shall use tools to analyze system performance.
S-DSS-10233	B	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.	DADS1320#B	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.
			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.
S-DSS-10238	A	The DDSRV CI shall provide storage for production plan data.	DADS2180#B	Each DADS shall maintain a list/schedule of reprocessed data.
			DADS2180#A	Each DADS shall maintain a list/schedule of reprocessed data.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10241	A	Upon receipt of all supported document formats and descriptive data, the DDSRV CI shall provide storage for the document and descriptive data.	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
			IMS-0480#B	The IMS shall allow the user to store documents in the ECS.
			IMS-0420#A	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
			IMS-0480#A	The IMS shall allow the user to store documents in the ECS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10250	A	Upon receipt and successful storage of all supported document formats and descriptive data, the DDSRV CI shall provide access to the document and/or data.	IMS-0420#A	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
			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.)
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0440#A	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.)
S-DSS-10260	B	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.	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
			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.
S-DSS-10290	A	The DDSRV CI shall supply documents to the DDIST CI.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2340#A	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
S-DSS-10292	A	The DDSRV CI shall receive management directives from the SDSRV CI.	DADS0100#A	Each DADS shall receive management directives from the SMC.
			DADS0100#B	Each DADS shall receive management directives from the SMC.
S-DSS-10300	B	The Document Data Server shall complete a search for a guide document by a single keyword in not exceeding 8 seconds.	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.
S-DSS-10305	B	The Document Data Server shall complete a directory search using a single keyword in a period not to exceed 8 seconds.	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.
S-DSS-10306	B	The Document Data Server shall complete a directory search using multiple keywords in a period not to exceed 13 seconds.	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.
S-DSS-10310	B	The Document Data Server shall complete a keyword search on a 1000 page document of not exceeding 3 seconds.	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.
S-DSS-10320	A	The Document Data Server shall accept and validate the number of Distribution Requests per hour derived from Section E.6 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-10330	A	The Document Data Server shall be capable of supporting 200% growth in the number of Distribution Requests it accepts and validates without architecture or design change.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS3090#A	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.
			EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.
			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.
			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.
S-DSS-10340	A	The Document Data Server shall support making stored documents available on physical media within 24 hours of receipt of a Media Distribution Request.	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.
			DADS2770#A	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.
S-DSS-10350	A	The Document Data Server shall be capable of receiving a combined maximum of product orders per hour as derived from Section E.6 of Appendix E (across ECS) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B from the Data Management Subsystem and/or the Client subsystem.	DADS3135#B	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.
			DADS3135#A	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-10360	A	The Document Data Server shall be capable of accepting and storing documents and related data at a nominal rate derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B from external clients while supporting standard data retrieval and access loads.	DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
S-DSS-20010	A	The STMGT CI shall validate all Service Requests.	EOSD5110#A	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.
			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.
			SDPS0050#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20020	A	The STMGT CI shall accept Insert Requests for insertion of data into the archive.	DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0475#A	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.
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
S-DSS-20025	A	The STMGT CI shall place an entry in the Archive Activity Log corresponding to each Insert Request.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20030	A	The STMGT CI shall check each Insert Request it receives for the correct type of data in all fields. Fields that shall be checked include Request Identifier, date of request, Priority Information, data type and original identifier.	SDPS0050#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			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.
			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.
			DADS0475#A	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.
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
S-DSS-20040	A	The STMGT CI shall accept Retrieve Requests for data. Each Retrieve Request shall include the granule id(s) for the data. Granule id was assigned when granule was originally archived. The granule id serves as a unique data identifier.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-20045	A	The STMGT CI shall place an entry in the Archive Activity Log corresponding to each Retrieve Request.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20050	A	The STMGT CI shall check each Retrieve Request it receives for correct type of data in all fields. Fields that shall be checked include Request Identifier, date of request, date and time for requested data, Priority Information, and data type.	DADS0520#B	Each DADS shall accept requests for data needed for Standard Product production.
			DADS0498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS0498#A	Each designated DADS shall receive standing and retrospective product orders from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			SDPS0050#A	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.
			DADS0520#A	Each DADS shall accept requests for data needed for Standard Product production.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-20060	A	The STMGT CI shall accept Archive Status Requests for the status of ongoing Insert and Retrieve Requests.	DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1000#A	The DADS shall receive distribution status requests from the collocated PGS.
			DADS1070#A	The DADS shall send data check and storage status to the provider of ingest data.
			DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.
			DADS1070#B	The DADS shall send data check and storage status to the provider of ingest data.
S-DSS-20065	A	The STMGT CI shall place an entry in the Archive Activity Log corresponding to each Archive Status Request.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20070	A	The STMGT CI shall check each Archive Status Request it receives for the correct type of data in all fields. Fields that shall be checked include Current Request Identifier and Request Identifier of previous Insert or Retrieve Requests to be statused.	DADS1070#B	The DADS shall send data check and storage status to the provider of ingest data.
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1000#A	The DADS shall receive distribution status requests from the collocated PGS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0050#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			DADS1070#A	The DADS shall send data check and storage status to the provider of ingest data.
			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.
			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.
			DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.
S-DSS-20080	A	The STMGT CI shall maintain an Archive Activity Log of all Service Requests received. The log of Service Requests shall be in chronological order and shall include a Request Identifier, the operation requested, completion status of request and a date/time stamp.	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.
			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.
			SDPS0050#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20090	A	The STMGT CI shall maintain an Inventory Update Log. The following information shall be recorded: time and date of update, unique data identifier, archive media name, source of data, storage device name and requester.	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.
			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.
			DADS1100#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			SDPS0050#A	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.
			DADS1805#A	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.
			DADS1800#A	Each DADS shall maintain data storage inventories defining the physical location of files.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS1800#B	Each DADS shall maintain data storage inventories defining the physical location of files.
			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.
S-DSS-20095	A	The STGMT CI shall have the capability to mount archival media via automated means.	DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
			DADS1791#A	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20100	A	The STMGT CI shall provide operations staff personnel the capability to manually access archive media resident in storage devices.	DADS2950#A	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS2950#B	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.
S-DSS-20110	A	The STMGT CI shall provide operations staff the capability to insert archive media into storage devices which support removable media.	DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS0435#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			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.
S-DSS-20120	A	The STMGT CI shall provide operations staff the capability to remove archive media from storage devices which support removable media.	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.
			DADS0435#A	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.
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20125	A	The STMGT CI shall, where appropriate, comply with the evolving guidelines and standards emerging from the IEEE Reference Model for Open Storage Systems Interconnection.	DADS1700#B	Where appropriate, the DADS shall comply with the evolving guidelines and standards emerging from the IEEE-CS MSS Reference Model.
			DADS1700#A	Where appropriate, the DADS shall comply with the evolving guidelines and standards emerging from the IEEE-CS MSS Reference Model.
S-DSS-20130	A	The STMGT CI shall provide operations staff the capability to manually dismount archive media.	DADS2950#A	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.
			DADS2950#B	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.
S-DSS-20140	A	The STMGT CI shall provide operations staff the capability to manually mount archive media.	DADS2950#B	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.
			DADS2950#A	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20150	A	The STMGT CI shall provide operations staff the capability to manually dismount backup archive media.	DADS3055#A	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.
			DADS3055#B	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.
S-DSS-20160	A	The STMGT CI shall provide operations staff the capability to manually mount backup archive media.	DADS3055#A	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.
			DADS3055#B	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.
S-DSS-20170	A	The STMGT CI shall automatically request operations staff to load a new archive media to store data if no media exists with sufficient space for the new data.	DADS1791#A	Each DADS shall have the capability to mount archival media via automated means.
			DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20171	B	The STGMT CI shall provide operations personnel with the capability to screen the archive holdings for lost volumes.	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.
S-DSS-20180	A	The STMGT CI shall have the capability to automatically dismount archive media from storage devices which support removable media when different archive media must be mounted to store data.	DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
			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.
			DADS0435#A	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.
			DADS1791#A	Each DADS shall have the capability to mount archival media via automated means.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20190	A	The STMGT CI shall have the capability to automatically dismount archive media from storage devices which support removable media when different archive media must be mounted to retrieve data.	DADS0435#A	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.
			DADS1791#A	Each DADS shall have the capability to mount archival media via automated means.
			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.
			DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20200	A	The STMGT CI shall provide a mechanism to remove archive media from storage devices to allow insertion of new or different archive media in the storage device.	DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
			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.
			DADS0435#A	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.
			DADS1791#A	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20210	B	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.	EDOS-4.2.7#B	The DPF shall interface with the LaRC DAAC to receive DEDSs on removable physical media.
			EDOS-4.2.8#B	The DPF shall interface with the GSFC DAAC to receive DEDSs on removable physical media.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EDOS-B.4.6#B	The DPF shall provide the capability to receive DEDs from the LaRC DAAC on removable physical media.
			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.
S-DSS-20220	A	If an uncorrectable error occurs during archive, the STMGT CI shall notify the operations staff, select a different piece of Media and complete the archive operation. Note: Contents of original media shall be recreated on new media and the original removed from system.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
S-DSS-20230	A	The STMGT CI shall notify operations staff to discard source archive media after its contents have been re-created on the new media.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
S-DSS-20240	A	If the end of the archive media is encountered before completing a write operation, the STMGT CI shall select new media and complete the write operation with the new archive media.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
S-DSS-20250	A	If an uncorrectable error occurs during retrieval operations, STMGT CI shall terminate the operation and notify operations staff and the user/data requester of the failure.	DADS1320#B	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.
			DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
			DADS1320#A	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.
S-DSS-20255	A	If an uncorrectable error occurs during retrieval operations, STMGT CI shall automatically recreate the contents on new media.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20260	B	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.	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.
S-DSS-20270	B	The STMGT CI shall provide the capability to change the length of time to store data on archive media before deletion of the data.	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.
S-DSS-20280	B	The STMGT CI shall provide the capability to directly notify active users when Data Products will be deleted.	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.
S-DSS-20290	B	The STMGT CI shall provide the capability to indirectly notify users when Data Products will be deleted via a bulletin board type mechanism.	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.
S-DSS-20300	A	The STMGT CI shall provide operations staff the capability to display information about the archive media resident in storage devices. Such information shall include: archive volume name, creation time/date, archive volume status.	DADS1620#A	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
			DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
S-DSS-20350	A	The STMGT CI shall use a fully described file structure to store data.	DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1720#A	The FSMS at each DADS shall be based on published and open architectures which fully describe the physical organization and structures of files.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20360	A	The STMGT CI shall use a fully described physical file organization to store data.	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
			DADS1790#B	Each DADS shall periodically verify that all data sets are present and accounted for.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			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.
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1720#A	The FSMS at each DADS shall be based on published and open architectures which fully describe the physical organization and structures of files.
S-DSS-20370	A	The STMGT CI shall use openly published and non-proprietary data formats to store data.	DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1720#A	The FSMS at each DADS shall be based on published and open architectures which fully describe the physical organization and structures of files.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			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.
S-DSS-20380	A	The STMGT CI shall provide the capability to continue operations in a degraded mode despite hardware failures of individual archive storage devices, archive media and/or operator consoles.	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.
			DADS1610#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20390	A	The STMGT CI shall provide operations staff a mechanism for recovery of data as a result of failed archive media. Note: Failed archive media are media which can not be read.	DADS1540#A	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
			DADS1630#A	At each DADS tools shall be provided for recovery of data from failed media and devices.
			DADS1540#B	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
			DADS1630#B	At each DADS tools shall be provided for recovery of data from failed media and devices.
S-DSS-20400	A	The STMGT CI shall provide operations staff a mechanism for recovery of data as a result of failed archive storage devices.	DADS1630#B	At each DADS tools shall be provided for recovery of data from failed media and devices.
			DADS1630#A	At each DADS tools shall be provided for recovery of data from failed media and devices.
S-DSS-20420	A	The STMGT CI shall be capable of producing backup archive media which uses openly published and non-proprietary formats for recording data.	DADS2302#A	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.
			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.
S-DSS-20430	A	The STMGT CI shall be capable of producing backup archive media which has a fully described file structure.	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.
			DADS2302#A	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.
S-DSS-20440	A	The STMGT CI shall be capable of producing backup archive media which has a fully described physical file organization.	DADS2302#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-20442	A	The STMGT CI shall provide the capability to archive Data Availability Schedules.	DADS2020#A	Each DADS shall have the capability to receive data availability schedules at a minimum, from: a. c. ADCs e. Other DADS f. TRMM (SDPF)
			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)
S-DSS-20444	A	The STMGT CI shall provide the capability to retrieve Data Availability Schedules.	DADS2020#A	Each DADS shall have the capability to receive data availability schedules at a minimum, from: a. c. ADCs e. Other DADS f. TRMM (SDPF)
			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)
S-DSS-20450	B	The STMGT CI shall provide the capability to archive real EOS instrument data to support pre-launch checkout of the ground system.	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.
S-DSS-20455	B	The STMGT CI shall provide the capability to retrieve real EOS instrument data to support pre-launch check out of ground systems.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20457	B	The SDSRV CI shall interface with the STMGT CI to provide storage for real EOS instrument data to support pre-launch instrument checkout.	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
S-DSS-20460	B	The STMGT CI shall provide the capability to archive simulated EOS instrument data to support pre-launch checkout of the ground system.	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.
S-DSS-20462	B	The STMGT CI shall provide the capability to retrieve simulated EOS instrument data to support pre-launch checkout of the ground system.	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.
S-DSS-20465	B	The SDSRV CI shall interface with the STMGT CI to provide storage for simulated EOS instrument data to support pre-launch instrument checkout.	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
S-DSS-20470	B	The STMGT CI shall provide the capability to retrieve simulated EOS instrument data to support pre-launch checkout of the ground system.	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.
S-DSS-20475	A	The STMGT CI shall provide the capability to retrieve non-EOS data to be used for standard product production.	DADS2330#A	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-20480	A	The STMGT CI shall provide operations staff the capability to perform physical inventories of archive media resident in archive storage devices.	DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20490	A	The STMGT CI shall control access to archived data to prevent unauthorized access.	EOSD2400#A	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
			EOSD2430#A	Data base access and manipulation shall accommodate control of user access and update of security controlled data.
			EOSD2400#B	ECS shall provide multiple categories of data protection based on the sensitivity levels of ECS data, as defined in NHB 2410.9.
			EOSD2430#B	Data base access and manipulation shall accommodate control of user access and update of security controlled data.
S-DSS-20500	A	The STMGT CI shall report unauthorized attempts to access archived data when detected to operations staff.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD2510#A	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
S-DSS-20510	A	The STMGT CI shall provide operations staff the capability to obtain configuration information about operator selected storage devices.	DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
S-DSS-20520	A	The STMGT CI shall provide operations staff the capability to change the allocation of storage devices to individual Data Servers.	DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS0430#A	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
			DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
S-DSS-20530	A	The STMGT CI shall provide the capability to display/view/print the allocation of storage devices to Data Servers.	DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
			DADS0430#A	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
			DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
S-DSS-20540	A	The STMGT CI shall provide an automatic capability during startup to allocate storage devices to Data Servers.	DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
			DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS0430#A	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
			DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS1620#A	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
			DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
S-DSS-20550	B	The STMGT CI shall provide operations staff a mechanism to display/view storage system operating parameters which affect storage system performance.	DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
			DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
S-DSS-20560	B	The STMGT CI shall provide operations staff a mechanism to display/view storage system operating parameters which affect storage system scheduling.	DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
			DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20570	B	The STMGT CI shall provide operations staff the capability to change storage system operating parameters which affect storage system performance.	DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
			DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
S-DSS-20580	B	The STMGT CI shall provide operations staff the capability to change storage system operating parameters which affect storage system scheduling.	DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
			DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
S-DSS-20590	A	The STMGT CI shall provide archival storage which is field-expandable. Field-expandable is defined as increasing the capacity or size of archive storage without removing archive storage device from site.	DADS2910#A	Archival storage at each DADS shall be field-expandable.
			DADS2910#B	Archival storage at each DADS shall be field-expandable.
S-DSS-20600	A	The STMGT CI shall provide the capability to uniquely identify each data granule that is archived.	DADS1795#B	Each DADS shall update internal file directories with the unique Data set 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.
			DADS1795#A	Each DADS shall update internal file directories with the unique Data set ID.
			DADS1805#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20610	B	The STMGT CI shall provide the capability to archive multiple versions of Data Granules.	DADS0405#B	Each DADS shall provide the capability to archive multiple versions of selected archive data.
S-DSS-20620	A	The STMGT CI shall provide the capability to retrieve each individual data granule that is stored.	DADS1780#A	Each DADS shall provide the capability to store as a single entity logically grouped sets of data.
			DADS1806#A	Each DADS shall provide the capability of retrieving any data granule stored in the archives.
			DADS1780#B	Each DADS shall provide the capability to store as a single entity logically grouped sets of data.
			DADS1806#B	Each DADS shall provide the capability of retrieving any data granule stored in the archives.
S-DSS-20621	A	The STMGT CI shall calculate a checksum for each file associated with each data granule stored in the archive.	DADS1370#A	Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.
			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.
S-DSS-20622	A	The STMGT CI shall provide to the SDSRV CI's MD Component a copy of the checksum value calculated upon initial receipt of each file in each data granule stored in the archive.	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.
			DADS1370#A	Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.
S-DSS-20623	A	The STMGT CI shall recalculate the checksum value of each file associated with each retrieved data granule and compare it with the checksum metadata value for that file stored in the SDSRV CI's MD Component for accuracy.	DADS1370#A	Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.
			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.
S-DSS-20624	B	The STMGT CI shall provide a mechanism to statistically monitor the checksum error rate of archive media.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20625	B	The STMGT CI shall allow the operator to manually specify archive media to be recopied/refreshed.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
S-DSS-20670	A	For each data item archived, the STMGT CI shall record the event in the Inventory Update Log.	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.
			DADS1100#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			SDPS0050#A	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.
			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.
			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.
S-DSS-20690	A	The STMGT CI shall provide the capability to display/view/print the Inventory Update Log.	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.
			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.
			DADS1100#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0050#A	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.
			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.
S-DSS-20700	A	The STMGT CI shall provide the capability to select/extract Inventory Update Log records for time periods selected by operations staff.	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.
			DADS1100#A	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.
			SDPS0050#A	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.
			SDPS0080#A	The SDPS shall archive, manage, and quality check and account for all science data received from the EPDSs and ancillary data received from the EPDSs, the SCFs, the ADCs, other DAACs, PIs and the other EOS science users.
			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.
			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.
S-DSS-20710	A	The STMGT CI shall assign a unique identifier to new archive media.	DADS1375#B	Each DADS shall provide automatic management and copying/refresh of archive media.
S-DSS-20720	B	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.	DADS0410#B	Each DADS shall archive the current version of a product, making the preceding version of a product eligible for deletion.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
S-DSS-20730	B	The STMGT CI shall provide a mechanism to automatically delete archived data which has been marked for deletion.	DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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.
S-DSS-20740	A	The STMGT CI shall provide operations staff the capability to retrieve data that has been safe-stored at an external facility.	DADS2276#A	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.
			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.
S-DSS-20750	B	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.	DADS2307#B	DADS shall fulfill requests for L0 data from EDOS with L0 or L1A data, as available.
			EDOS-B.4.4#B	The DPF shall provide the capability to transfer ADSs to the LaRC DAAC.
			EDOS-B.4.6#B	The DPF shall provide the capability to receive DEDs from the LaRC DAAC on removable physical media.
			EDOS-4.2.8#B	The DPF shall interface with the GSFC DAAC to receive DEDSs on removable physical media.
			EDOS-4.2.3-#B	The DPF shall interface with the GSFC DAAC to transfer PDSs, QDSs, ADSs, and Mission Test Data Sets.
			EDOS-B.4.5#B	The DPF shall provide the capability to copy ADSs to removable physical media for backup to electronic delivery.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EDOS-4.2.7#B	The DPF shall interface with the LaRC DAAC to receive DEDSs on removable physical media.
S-DSS-20760	A	The STMGT CI shall provide operations staff the capability to view/display/print the Archive Activity Log.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20770	A	The STMGT CI shall provide the capability to sort, extract and/or select Archive Activity Log entries by the following: start/stop time, operation requested, result of request.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
S-DSS-20780	A	The STMGT CI shall provide operations staff the capability to view/display/print the Intermediate Activity Log.	DADS1114#A	Each DADS shall maintain a log of staging activity.
			DADS1114#B	Each DADS shall maintain a log of staging activity.
S-DSS-20790	A	The STMGT CI shall provide the capability to sort, extract and/or select Intermediate Activity Log entries by the following: start/stop time, intermediate operation, Request Identifier, and staging resource(s).	DADS1114#B	Each DADS shall maintain a log of staging activity.
			DADS1114#A	Each DADS shall maintain a log of staging activity.
S-DSS-20800	B	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.	DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.
S-DSS-20810	B	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.	DADS0430#B	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20820	B	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.	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.
			DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20830	B	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.	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.
			DADS1791#B	Each DADS shall have the capability to mount archival media via automated means.
S-DSS-20840	B	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.	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
S-DSS-20850	B	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.	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20860	B	The STMGT CI shall provide a mechanism to monitor the performance of the ECS archival storage system.	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
			DADS1340#B	Each DADS shall use tools to analyze system performance.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20870	B	The STMGT CI shall provide operations staff the capability to view/display performance information on the storage system.	DADS1340#B	Each DADS shall use tools to analyze system performance.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20880	A	The STMGT CI shall maintain an Intermediate Activity Log. It shall include date/time stamp, operation id (file space alloc./dealloc., media mount/dismount/loads/unload, file read/write/delete), affiliated Request Identifier and associated staging resources.	DADS1114#A	Each DADS shall maintain a log of staging activity.
			DADS1114#B	Each DADS shall maintain a log of staging activity.
S-DSS-20890	A	The STMGT CI shall provide operations staff the capability to load media into storage devices which support removable media.	DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS3040#B	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).
			DADS3040#A	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20900	A	The STMGT CI shall provide operations staff the capability to initialize media in storage devices which support removable media.	DADS3040#A	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS3040#B	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).
S-DSS-20910	A	The STMGT CI shall provide operations staff the capability to unload media from storage devices which support removable media.	DADS1710#B	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
			DADS3040#B	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).
			DADS3040#A	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).
			DADS1710#A	The DADS shall comply with evolving guidelines and standards in such areas as file storage, storage management, and backup where appropriate.
S-DSS-20980	A	The STMGT CI shall provide the SDSRV CI the capability to open files on archive storage media in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-20985	A	The STMGT CI shall provide the SDSRV CI the capability to open files on archive storage media in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-20990	A	The STMGT CI shall provide the SDSRV CI the capability to close files on archive storage media in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-20995	A	The STMGT CI shall provide the SDSRV CI the capability to close files on archive storage media in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-21000	A	The STMGT CI shall provide the SDSRV CI the capability to read information from files on archive storage media in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-21005	A	The STMGT CI shall provide the SDSRV CI the capability to read information from files on archive storage media in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-21010	A	The STMGT CI shall provide the SDSRV CI the capability to write information into files on archive storage media in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-21015	A	The STMGT CI shall provide the SDSRV CI the capability to write information into files on archive storage media in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-21020	A	The STMGT CI shall provide the SDSRV CI the capability to allocate archive storage devices for Service Request processing in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-21025	A	The STMGT CI shall provide the SDSRV CI the capability to allocate archive storage devices for Service Request processing in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-21030	A	The STMGT CI shall provide the SDSRV CI the capability to deallocate archive storage devices in the DRPHW CI.	DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-21035	A	The STMGT CI shall provide the SDSRV CI the capability to deallocate archive storage devices in the DRPHW CI.	DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS0460#A	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0460#B	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0488#B	Each DADS shall archive the EDOS production data sets (Level 0) received from EDOS, or the equivalent Level 1A data.
S-DSS-21040	A	The STMGT CI shall provide the SDSRV CI the capability to open files on staging devices in the WKSHW CI.	DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
S-DSS-21050	A	The STMGT CI shall provide the SDSRV CI the capability to close files on staging devices in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS0680#B	Each DADS shall have the capability to support all required requests and shall grow as demand expands.
S-DSS-21060	A	The STMGT CI shall provide the SDSRV CI the capability to write information into files on staging devices in the WKSHW CI.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
S-DSS-21070	A	The STMGT CI shall provide the SDSRV CI the capability to read information from files on staging devices in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-21080	A	The STMGT CI shall provide the SDSRV CI the capability to delete files on staging devices in the WKSHW CI.	DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
S-DSS-21090	A	The STMGT CI shall provide the SDSRV CI the capability to rename files on staging devices in the WKSHW CI.	DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
S-DSS-21100	A	The STMGT CI shall provide the SDSRV CI the capability to obtain information concerning files on staging devices in the WKSHW CI. Note: File info. includes file name, size, type, organization, creation date, protections, owner, last access time and id of last entity to access file.	DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS1010#A	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS1180#A	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1180#B	Each DADS shall provide the collocated PGS with data storage and retrieval capabilities.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
S-DSS-21110	A	The STMGT CI shall provide the SDSRV CI the capability to allocate storage on staging devices in the WKSHW CI.	DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
S-DSS-21120	A	The STMGT CI shall provide the SDSRV CI the capability to deallocate storage on staging devices in the WKSHW CI.	DADS1230#A	Each DADS shall be capable of providing temporary storage for a collocated PGS.
			DADS1230#B	Each DADS shall be capable of providing temporary storage for a collocated PGS.
S-DSS-21130	B	The STMGT CI shall provide estimates of staging device time delays for subsetted Data Requests.	DADS0930#B	Each DADS shall provide the IMS an estimate of the staging delay before subsetted, subsampled, or summary data sets are available.
S-DSS-21140	B	The STMGT CI shall provide estimates of staging device time delays for subsampled Data Requests.	DADS0930#B	Each DADS shall provide the IMS an estimate of the staging delay before subsetted, subsampled, or summary data sets are available.
S-DSS-21150	B	The STMGT CI shall provide estimates of staging device time delays for summary Data Requests.	DADS0930#B	Each DADS shall provide the IMS an estimate of the staging delay before subsetted, subsampled, or summary data sets are available.
S-DSS-21160	A	The STMGT CI shall provide operations staff the capability to set the operational state (UP or DOWN) of storage devices.	DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
S-DSS-21170	A	The STMGT CI shall provide operations staff the capability to query the operational state (UP or DOWN) of storage devices.	DADS1860#B	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
			DADS1860#A	Each DADS shall, in conjunction with the SMC, provide configuration management for its internal resources.
S-DSS-21180	A	The STMGT CI shall provide operations staff the capability to backup storage system unique files, which shall include all logs, files used by the storage system and files indicating the allocation of storage devices to Data Servers.	DADS2300#A	Each DADS shall provide a capability for local and offsite backup/restore of system files.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2300#B	Each DADS shall provide a capability for local and offsite backup/restore of system files.
S-DSS-21190	A	The STMGT CI shall provide operations staff the capability to restore storage system unique files.	DADS2300#B	Each DADS shall provide a capability for local and offsite backup/restore of system files.
			DADS2300#A	Each DADS shall provide a capability for local and offsite backup/restore of system files.
S-DSS-21200	A	The STMGT CI shall provide operations staff a mechanism to display/view storage system data storing operations by ECS element.	DADS1360#A	Each DADS shall monitor the status of all storage systems used.
			DADS1470#A	Each DADS shall manage element resource utilization.
			DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
S-DSS-21210	A	The STMGT CI shall provide operations staff a mechanism to display/view storage system data retrieval operations by ECS element.	DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
			DADS1360#A	Each DADS shall monitor the status of all storage systems used.
			DADS1470#A	Each DADS shall manage element resource utilization.
S-DSS-21220	A	The STMGT CI shall provide operations staff a mechanism to display/view storage system archive media backup/restore operations by ECS element.	DADS1360#A	Each DADS shall monitor the status of all storage systems used.
			DADS1470#A	Each DADS shall manage element resource utilization.
			DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1470#B	Each DADS shall manage element resource utilization.
S-DSS-21230	A	The STMGT CI shall provide operations staff a mechanism to display/view storage system storage allocations by ECS element.	DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
			DADS1360#A	Each DADS shall monitor the status of all storage systems used.
			DADS1470#A	Each DADS shall manage element resource utilization.
S-DSS-21240	B	The STMGT CI shall provide operations staff a mechanism to display/view storage system utilization by ECS element.	DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
S-DSS-21250	B	The STMGT CI shall provide operations staff a mechanism to display/view storage system performance by ECS element.	DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
S-DSS-21260	B	The STMGT CI shall provide operations staff a mechanism to display/view storage system cost by ECS element.	DADS1360#B	Each DADS shall monitor the status, cost, and performance of all storage systems used.
			DADS1470#B	Each DADS shall manage element resource utilization.
S-DSS-21270	A	The STMGT CI shall provide the operations staff the capability to display information about archive storage devices. Such information shall include current status, current operation, # operations completed, # errors reported, time/date of last error.	DADS1620#B	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.
			DADS1620#A	At each DADS tools shall be available for operations/systems/maintenance personnel to monitor performance, carry out maintenance, and alter operating parameters.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21280	B	The SDSRV CI shall provide application programming interfaces (APIs) to support Insert Requests.	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.
			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.
			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.
			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.
S-DSS-21290	B	The STMGT CI shall provide application programming interfaces (APIs) to support Retrieval Requests.	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.
			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.
			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.
S-DSS-21300	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Insert Requests.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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.
S-DSS-21310	B	The STMGT CI shall provide application programming interfaces (APIs) to support Status Requests related to previous Retrieval Requests.	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.
			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.
			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.
S-DSS-21311	A	The STMGT CI custom GUIs shall conform to the guidelines in Version 5.1 of the ECS User Interface Style Guide.	IMS-1380#A	The IMS shall provide the capability to integrate the element toolkits with a common user interface.
S-DSS-21312	A	The STMGT CI shall be developed using file storage management systems that have configuration-controlled application programming interfaces (APIs).	DADS3150#A	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.
			DADS1730#A	The DADS shall be developed using file storage management systems that have configuration-controlled application programming interfaces (APIs)
			DADS3160#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21320	B	The STMGT CI shall provide the capability to estimate time delays for data retrievals due to contention for hardware resources.	DADS0930#B	Each DADS shall provide the IMS an estimate of the staging delay before subsetted, subsampled, or summary data sets are available.
S-DSS-21330	A	The STMGT CI shall notify operations staff whenever a device failure condition occurs. Such failures shall also be logged in the Archive Activity Log.	DADS1300#A	Each DADS shall display all faults to the system operators.
			DADS1300#B	Each DADS shall display all faults to the system operators.
			DADS1310#B	Each DADS shall track and report to the SMC problems such as missing or corrupted files requiring restoration or regeneration of data.
S-DSS-21340	B	The STMGT CI shall provide data to support administrative requests for Accounting Management Data.	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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21350	B	The STMGT CI shall collect Accounting Management Data as defined in Appendix K of the current version of 304-CD-005.	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
			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
S-DSS-21360	A	The STMGT CI shall use a hierarchy of disk and/or tape storage devices and associated storage media to store data.	DADS1520#A	Each DADS shall provide an FSMS. Storage shall be based on a hierarchy of devices and media, with location-transparent access to the files.
			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.
S-DSS-21363	A	The STMGT CI shall provide location-transparent access to the archived data.	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.
			DADS1520#A	Each DADS shall provide an FSMS. Storage shall be based on a hierarchy of devices and media, with location-transparent access to the files.
S-DSS-21365	A	The STMGT CI shall provide storage for the Data Products listed in Appendix F of the current version of 304-CD-005.	DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS1235#A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			DADS1235#B	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).
			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.)
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			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
			DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0440#A	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.)
S-DSS-21366	A	The STMGT CI shall provide storage for the Metadata associated with the Data Products listed in Appendix F of the current version of 304-CD-005.	DADS0490#A	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0440#A	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.)
			DADS0370#A	Each DADS shall provide the IMS with metadata on newly stored data granules.
			DADS0370#B	Each DADS shall provide the IMS with metadata on newly stored data granules.
			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.)

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
			DADS0475#A	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.
			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.
S-DSS-21370	A	The STMGT CI shall use, where appropriate, a hierarchy of disk and/or tape storage devices and associated storage media to retrieve data.	DADS1520#A	Each DADS shall provide an FSMS. Storage shall be based on a hierarchy of devices and media, with location-transparent access to the files.
			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.
S-DSS-21380	A	In the event of storage device or archive media failure, the STMGT CI shall notify operations staff and provide appropriate information to include failed device name or media, failure code or reason and time/date of failure.	DADS1320#B	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS1320#A	Each DADS shall provide to the SMC fault isolation information at the DADS system and subsystem levels.
			DADS1610#A	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.
S-DSS-21390	A	The STMGT CI shall maintain a File Directory of all data files which have been archived.	DADS1530#A	Each DADS shall maintain a file directory of all files under its control.
			DADS1530#B	Each DADS shall maintain a file directory of all files under its control.
S-DSS-21400	A	The STMGT CI shall provide operations staff a mechanism to create the File Directory.	DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
			DADS1550#A	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
S-DSS-21410	A	The STMGT CI shall provide operations staff a mechanism to append records to the File Directory.	DADS1550#A	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
			DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
S-DSS-21420	A	The STMGT CI shall provide operations staff a mechanism to display selected records in the File Directory.	DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
			DADS1550#A	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
S-DSS-21430	B	The STMGT CI shall provide operations staff a mechanism to delete records from the File Directory.	DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
S-DSS-21440	A	The STMGT CI shall provide operations staff a mechanism to update records in the File Directory.	DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
			DADS1550#A	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21450	A	The STMGT CI shall provide operations staff the capability to backup the contents of the File Directory.	DADS1540#A	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
			DADS1540#B	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
S-DSS-21460	A	The STMGT CI shall provide operations staff the capability to recover the contents of the File Directory in the case of file corruption.	DADS1540#B	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
			DADS1540#A	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.
S-DSS-21470	A	The STMGT CI shall provide operations staff the capability to view/display/print contents of the File Directory.	DADS1550#A	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
			DADS1550#B	Operations/systems personnel shall be able to access, list, or modify the contents of the file directory in a special privileged mode.
S-DSS-21480	A	The STMGT CI shall maintain a unique data set id for each data item in its File Directory.	DADS1795#B	Each DADS shall update internal file directories with the unique Data set 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.
			DADS1795#A	Each DADS shall update internal file directories with the unique Data set ID.
			DADS1805#A	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.
S-DSS-21490	A	The STMGT CI shall be capable of tracking the physical location of each data granule via use of the File Directory.	DADS1800#A	Each DADS shall maintain data storage inventories defining the physical location of files.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1805#A	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.
			DADS1800#B	Each DADS shall maintain data storage inventories defining the physical location of files.
			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.
S-DSS-21500	A	The Science Management within the Data Server shall support making stored Data Products available on physical media within 24 hours	DADS2770#A	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.
			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.
S-DSS-21510	A	The Science Management within the Data Server shall be capable of providing of 200% expansion in capacity without architecture or design change.	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.
			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.
			DADS3090#A	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.
			DADS1640#A	The DADS shall support the number of files derivable from Appendix C, with the ability to expand to match growth.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.
			DADS1640#B	The DADS shall support the number of files derivable from Appendix C, with the ability to expand to match growth.
S-DSS-21520	A	The Science Management within the Data Server shall be capable of processing a combined maximum number of Data Requests per hour (across ECS) from the Data Management Subsystem and/or the Client Subsystem as derived from Section E.6 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
S-DSS-21540	A	The Science Management within the Data Server shall support distributing product QA data produced at the collocated Data Processing Subsystem within 1 hour from the time it is ready.	DADS3120#A	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
			DADS3120#B	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
S-DSS-21570	A	The Science Management within the Data Server shall have the capacity to archive the total bytes of data derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
S-DSS-21600	A	The MSFC DAAC Science Management within the Data Server shall archive original TSDIS standard products (Level 1B-3) after reprocessing for a minimum of 6 months	TRMM5070#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-21610	B	The MSFC DAAC Science Management within the Data Server shall make TSDIS original standard products (Level 1B-3) eligible for deletion after 6 months	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.
S-DSS-21630	A	The GSFC DAAC Science Management within the Data Server shall archive original TSDIS standard products (Level 1B-3) after reprocessing for a minimum of 6 months	TRMM5070#A	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.
			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.
S-DSS-21640	A	The Science Management within the Data Server shall support making archive data associated with a pre-defined ECS standard format available to the network in that format within an average of 2 minutes.	DADS3126#A	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.
			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.
S-DSS-21650	A	The Science Management within the Data Server shall support making archive data associated with a pre-defined ECS standard format available to the network in a different format within an average of 5 minutes.	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.
			DADS3126#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21655	A	The Science Management within the Data Server shall utilize media with a rated shelf life of at least 10 years as determined by National Archives and Record Administration (NARA), National Institute for Standards and Technology (NIST), NASA or an industry organization.	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).
			DADS0425#A	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).
S-DSS-21700	A	The WKSHW CI shall be sized to temporarily store the number of bytes of data derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
S-DSS-21710	A	The WKSHW CI shall be sized to support a sustained I/O rate derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B in bytes/second of data.	DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21720	A	The DRPHW CI shall be sized to support a sustained I/O rate of 1x the production volume from electronic distribution, where 1x production volume is derived from Section E.1 of, Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
S-DSS-21730	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of product data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1790#A	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
			DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
S-DSS-21740	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of record based data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2900#B	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
			IMS-1790#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			DADS2900#A	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.
S-DSS-21750	A	The DRPHW CI shall provide a bit error rate after correction less than 1 in 1 X 10**12. (This requirement may be fulfilled with a combination of hardware and software components.)	DADS3000#A	To support archival data integrity, the bit error rate after correction shall be less than 1 in 10 to the 12th.
			DADS3000#B	To support archival data integrity, the bit error rate after correction shall be less than 1 in 10 to the 12th.
S-DSS-21760	A	The DRPHW CI shall utilize archive media with a manufactured shelf life of at least 10 years when stored in a controlled environment	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.
			DADS3010#A	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.
S-DSS-21770	A	The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.	DADS3090#A	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.
			EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			IMS-1800#A	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.
			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.
			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.
S-DSS-21800	A	The DRPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time of < 2 hrs. during times of staffed operation.	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).
			EOSD3920#A	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).
S-DSS-21810	A	The DRPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's Availability requirement of .96 and a Mean Down Time of < 4 hrs. during times of staffed operation.	EOSD3960#A	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).
			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).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-21813	A	The DRPHW CI shall be configured to support the SDPS function of Information Searches on Local Holding's Availability of .96 and a Mean Down Time of < 4 hrs. during times of staffed operations.	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).
			EOSD3970#A	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).
S-DSS-21814	A	The DRPHW CI shall be configured to support the SDPS function of Client, Interoperability, Data Management and Data Server (IMS) Data Base Management and Maintenance Interface's Availability of .96 and a Mean Down Time of < 4hrs. during times of staffed operations.	EOSD4000#A	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).
			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).
S-DSS-21820	A	The DRPHW CI shall be configured to support the SDPS function of User Interfaces to Client, Interoperability, Data Server, and Data Management (IMS) services at Individual DAAC Site's availability requirement of .993 and a mean down time requirement of < 2 hours during times of staffed operations.	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).
			EOSD3930#A	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).
S-DSS-21825	A	The DRPHW CI 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.	EOSD4100#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-21830	A	The maximum down time of the DRPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	EOSD3630#A	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
			EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
S-DSS-30010	A	The DDIST CI shall accept Electronic Distribution Requests or Media Distribution Requests.	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.
			IMS-1280#A	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.
			IMS-1005#A	The IMS shall forward, to the appropriate DADS, Product Orders for distribution of the products generated as a result of the Product Processing Order.
			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.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30020	A	Distribution Requests shall have the format described in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			EOSD1720#A	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: b. Data Distribution Requests c. Reprocessing Requests
			EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests b. Data Distribution Requests c. Reprocessing Requests
S-DSS-30030	A	The DDIST CI shall validate each Electronic Distribution Request and verify that the format conforms to that specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests b. Data Distribution Requests c. Reprocessing Requests
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD1720#A	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: b. Data Distribution Requests c. Reprocessing Requests
			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.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			IMS-0760#A	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.
S-DSS-30040	A	The DDIST CI shall log the following on the Distribution Activity Log whenever an Electronic Distribution Request fails validation: User Identifier, Request Identifier, Date and Time, and an explanation of the failure.	DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30045	A	The DDIST CI shall send Notifications to users via email in the event that the request is canceled by operations staff and the user has an active session.	DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30046	A	The DDIST CI shall send Notifications to the user's desktop application in the event that the request is canceled by operations staff and the user has an active session.	DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30050	A	The DDIST CI shall send a Notification to the source of the request if an Electronic Distribution Request fails validation.	DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30060	A	The DDIST CI shall validate each Media Distribution Request and verify that it conforms to the format specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	IMS-0760#A	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.
			DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			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.
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2510#A	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
			EOSD1720#A	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: b. Data Distribution Requests c. Reprocessing Requests
			EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests b. Data Distribution Requests c. Reprocessing Requests
S-DSS-30070	A	The DDIST CI shall log a Distribution Failure Message whenever a Media Distribution Request fails validation.	DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2510#A	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
			DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
S-DSS-30080	A	The DDIST CI shall send a Notification to the source of the request if a Media Distribution Request fails validation.	DADS2410#B	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2410#A	Each DADS shall distribute data from the archive in response to receipt of a product order from the IMS.
			DADS2510#A	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
S-DSS-30090	A	The DDIST CI shall provide the capability to prioritize requests for data based on whether the request is an Electronic Distribution Request or a Media Distribution Request.	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
S-DSS-30100	A	The DDIST CI shall provide operations staff the capability to change the Priority Information for a Distribution Request before the processing of the request has begun.	DADS2460#B	Each DADS shall have a manual override function capable of altering the priority of a distribution request.
			DADS2460#A	Each DADS shall have a manual override function capable of altering the priority of a distribution request.
S-DSS-30110	A	The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to whether the request is an Electronic Distribution Request or a Media Distribution Request.	DADS1030#A	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30115	A	The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to Request Identifier and status.	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
			IMS-1650#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS1030#A	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30120	A	The DDIST CI shall provide the capability for operations staff to select for viewing Media Distribution Requests and Electronic Distribution Requests.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS1030#A	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30130	A	The DDIST CI shall provide the capability for operations staff to cancel the processing of Electronic Distribution Requests prior to the start of the transmission of the data.	DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-30140	A	The DDIST CI shall provide the capability for operations staff to cancel the data transmission initiated by the processing of an Electronic Distribution Request.	DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-30150	A	The DDIST CI shall provide the capability for operations staff to cancel the processing of a Media Distribution Request prior to the shipment of the media.	DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
			DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-30160	A	The DDIST CI shall send a Notification to the originator of a Distribution Request in the event that the request is canceled by operations staff.	DADS0700#B	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0700#A	Each DADS shall be capable of complying with data transfer cancellation or delay notifications.
S-DSS-30162	A	The DDIST CI custom GUIs shall conform to the guidelines in Version 5.1 of the ECS User Interface Style Guide.	IMS-1380#A	The IMS shall provide the capability to integrate the element toolkits with a common user interface.
			EOSD1703#A	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
S-DSS-30163	A	The DDIST CI shall authenticate the User Identifier of operations staff submitting an Distribution Cancellation Request.	DADS0525#A	Each DADS shall accept updates/cancellations of data order requests.
			DADS0525#B	Each DADS shall accept updates/cancellations of data order requests.
S-DSS-30165	A	The DDIST CI shall log a Distribution Request Cancellation Message whenever a Distribution Request is cancelled by the operations staff.	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
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			DADS1110#A	Each DADS shall maintain a data distribution log.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1340#A	Each DADS shall use tools to analyze system performance.
			DADS1110#B	Each DADS shall maintain a data distribution log.
			DADS1340#B	Each DADS shall use tools to analyze system performance.
S-DSS-30167	A	The DDIST CI shall log a Distribution Request Cancellation Message whenever a Distribution Request is cancelled by the science user.	DADS1110#B	Each DADS shall maintain a data distribution log.
			DADS0901#A	The DADS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management h. Distribution and Ingest Management
			DADS1110#A	Each DADS shall maintain a data distribution log.
			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
S-DSS-30170	A	The DDIST CI shall respond to Status Requests from science users with a Request State indicating that the specified Distribution Request is "pending", "active", or "not found".	DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1010#B	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1010#A	Each DADS shall send to the requesting PGS or IMS, staging status of requests for retrieval of data products.
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-30171	A	The DDIST CI shall respond to Status Requests from operations staff with a Request State indicating that the specified Distribution Request is "pending", "staging", "transferring" or "not found".	DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
S-DSS-30175	A	Status Requests shall have the format given in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.	DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-30180	A	The DDIST CI shall process queued Distribution Requests in prioritized order.	DADS2480#B	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.
			DADS2480#A	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.
S-DSS-30190	B	The DDIST CI shall record the cost of the shipping and handling of the media associated with each Media Distribution request.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
			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
			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
S-DSS-30200	B	The DDIST CI shall record the network cost of data transmission, the User Identifier and the Request Identifier.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
S-DSS-30210	B	The DDIST CI shall record the cost of CPU intensive operations performed on data to be distributed. Such operations include compression/decompression and reformatting.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
			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
S-DSS-30220	B	The DDIST CI shall record the cost of archive storage for data to be distributed based on distribution size.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			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
S-DSS-30230	B	The DDIST CI shall provide the capability to report the estimated media utilization to the SDSRV CI.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
			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

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
S-DSS-30240	B	The DDIST CI shall provide the capability to report the actual media utilization to the SDSRV CI.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
			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
			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
S-DSS-30245	B	The DDIST CI shall provide the capability to report accounting data to the SDSRV CI.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
S-DSS-30250	A	Upon the receipt of a status request, DDIST shall validate and provide the status of previously submitted distribution request.	DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS1000#B	The DADS shall receive distribution status requests from the collocated PGS.
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS2320#A	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
			DADS1000#A	The DADS shall receive distribution status requests from the collocated PGS.
			DADS2320#B	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog
S-DSS-30260	A	The DDIST CI shall log the receipt of a Data Distribution Request in the Distribution Activity Log.	EOSD1720#B	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: a. Data Acquisition Requests b. Data Distribution Requests c. Reprocessing Requests
			DADS1110#A	Each DADS shall maintain a data distribution log.
			EOSD1720#A	ECS elements shall receive from the ECS user community the following types of data requests at a minimum: b. Data Distribution Requests c. Reprocessing Requests
			DADS1110#B	Each DADS shall maintain a data distribution log.
S-DSS-30270	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Media Distribution Request: User Identifier, Media Identifiers, Media Type/Form Factor, and the Distribution Size.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS1110#B	Each DADS shall maintain a data distribution log.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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
			IMS-1720#A	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
			DADS1030#A	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS1110#A	Each DADS shall maintain a data distribution log.
S-DSS-30280	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Electronic Distribution Request: User Identifier, Data Destination, and the Distribution Size.	DADS1110#A	Each DADS shall maintain a data distribution log.
			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
			IMS-1720#A	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
			DADS1110#B	Each DADS shall maintain a data distribution log.
S-DSS-30288	A	The DDIST CI shall forward the Distribution Activity Log entries to the SMC.	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.
			IMS-1646#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1720#A	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
			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
S-DSS-30290	A	The DDIST CI shall provide operations staff with the capability to display the Distribution Activity Log.	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
			IMS-1740#A	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.
			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.
			IMS-1720#A	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
			DADS1110#B	Each DADS shall maintain a data distribution log.
			DADS1110#A	Each DADS shall maintain a data distribution log.
S-DSS-30295	A	The DDIST CI shall alert operations staff when electronic transmission problems are encountered.	DADS2675#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
S-DSS-30296	B	The DDIST CI shall alert SMC when electronic transmission problems are encountered.	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.
S-DSS-30300	A	The DDIST CI shall provide the capability to view entries according to type of distribution, by time period or by Request Identifier (i.e., source of request).	DADS0760#A	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)
			DADS0760#B	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)
			DADS1110#B	Each DADS shall maintain a data distribution log.
			DADS1110#A	Each DADS shall maintain a data distribution log.
S-DSS-30305	A	The DDIST CI shall provide the capability to view entries according to type of distribution, by time period or by data type (i.e., source of request).	DADS1110#A	Each DADS shall maintain a data distribution log.
			DADS1110#B	Each DADS shall maintain a data distribution log.
S-DSS-30310	A	The DDIST CI shall provide the capability to sort the Distribution Activity Log by distribution type (i.e., electronic (push/pull) and physical media type (tape, CD-ROM, etc.)).	DADS1110#B	Each DADS shall maintain a data distribution log.
			DADS1110#A	Each DADS shall maintain a data distribution log.
S-DSS-30320	A	The DDIST CI shall record in the Distribution Activity Log the occurrence of correctable errors.	DADS1110#A	Each DADS shall maintain a data distribution log.
			DADS1110#B	Each DADS shall maintain a data distribution log.
S-DSS-30330	A	If the DDIST CI is unable to distribute data electronically, the User Identifier, the list of data, and the reason for the failure will be logged.	DADS2190#A	Each DADS shall maintain a list of products which could not be delivered electronically (e.g., workstation off-line).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2675#A	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.
			DADS2190#B	Each DADS shall maintain a list of products which could not be delivered electronically (e.g., workstation off-line).
			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.
S-DSS-30340	A	If the DDIST CI is unable to distribute data electronically, the user shall be sent a Notification.	DADS2190#B	Each DADS shall maintain a list of products which could not be delivered electronically (e.g., workstation off-line).
			DADS2190#A	Each DADS shall maintain a list of products which could not be delivered electronically (e.g., workstation off-line).
S-DSS-30350	A	The DDIST CI shall provide the capability to generate reports on the distribution activity for a period specified by operations staff.	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
			IMS-1720#A	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
			DADS0927#B	Each DADS shall generate and send to SMC reports of the status of the distribution of data.
			DADS0927#A	Each DADS shall generate and send to SMC reports of the status of the distribution of data.
S-DSS-30355	A	The DDIST CI shall provide the capability to generate reports on the distribution backlog.	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

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			IMS-1700#A	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
S-DSS-30370	A	The DDIST CI shall log the number of physical media that is created during distribution.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30380	A	The DDIST CI shall log the Media Destination and the number of data items distributed in a physical media distribution.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30390	A	The DDIST CI shall log the Data Destination and the number of data items distributed in an electronic distribution.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30400	A	The DDIST CI shall log the User Identifier for the user that originated the Data Distribution Request.	DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30430	A	The DDIST CI shall provide the capability for the operations staff to manually enter the status of a physical media shipment. Status will be updated from "waiting for shipment" to "shipped".	DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1030#B	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
			DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS1030#A	Each DADS shall generate data distribution status to monitor the progress of the distribution process.
S-DSS-30431	A	The DDIST CI shall log a physical media shipment using the following categories: pending, active, waiting for shipment.	DADS0940#A	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.
			DADS0940#B	Each DADS shall send distribution status to the IMS in response to distribution status requests from the IMS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30440	A	The DDIST CI shall provide the capability to distribute on 8mm tape.	SDPS0100#A	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.
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2490#A	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
			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.
			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
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30450	A	The DDIST CI shall provide the capability to distribute on 4mm tape.	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
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2490#A	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
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			SDPS0100#A	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.
S-DSS-30460	B	The DDIST CI shall provide the capability to distribute on 3480/3490 tape.	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.
			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
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30470	A	The DDIST CI shall provide the capability to distribute on CD ROM.	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
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0100#A	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.
			DADS2490#A	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
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30480	A	The DDIST CI shall provide the capability to distribute on 6250 tape.	SDPS0100#A	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.
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2490#A	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
			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.
			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
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30482	B	The DDIST CI shall provide the capability to support additional data distribution formats and conversion software.	DADS0780#B	Each DADS shall have the capability to incorporate additional ingest and data distribution formats and conversion software.
S-DSS-30490	A	If an uncorrectable error occurs while writing to distribution media, the operation shall be aborted and a new piece of media automatically requested from operations staff.	DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30500	B	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.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30510	B	Operations staff shall have the capability to specify a threshold of correctable errors for each type of distribution media.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30515	A	The Data Server shall distribute data in the approved ECS standard format in which it is stored. (i.e., HDF-EOS, V0 native, or Landsat 7 standard format.)	DADS0760#A	The DADS shall distribute data in approved standard formats including HDF and the Landsat 7 standard format (Landsat data only.)
S-DSS-30520	A	The DDIST CI shall provide the capability to place Data in publicly available disks for users to "pull" the data, via ftp, at their discretion.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			SDPS0100#A	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.
			PGS-0900#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			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
			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.
S-DSS-30530	A	The DDIST CI shall provide the capability to limit access to Data in the user pull area to the science user and the operations staff.	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.
			SDPS0100#A	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.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			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.
			IMS-0760#A	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.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30540	A	The DDIST CI shall monitor the percentage of space utilized in the user pull area.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30550	A	The DDIST CI shall provide a mechanism for operations staff to view/display the percentage of space utilized in the user pull area.	DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30560	A	The DDIST CI shall notify operations staff if the percent utilization in the user pull area exceeds a specified threshold.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30570	A	When Data is placed in the user pull area, requesting user shall be notified that the Data is available for a limited time.	DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30575	A	The DDIST CI shall notify operations staff when the time limit has expired for Data in the user pull area.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30580	A	The DDIST CI shall, after operator confirmation, delete expired Data from the user pull area.	DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30585	A	Operations staff shall be able to turn off the function of operator confirmation associated with the automatic deletion of Data in the user pull area.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30600	A	The DDIST CI shall provide the capability to distribute Data electronically via ftp (push).	SDPS0100#A	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.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			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.
			DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30620	B	The DDIST CI shall provide the capability to distribute documents electronically via FAX transmissions.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
S-DSS-30640	A	The DDIST CI shall provide the capability for operations staff to change the state (on-line vs. off-line) of a peripheral device that is used for distribution.	DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30650	A	The DDIST CI shall provide the capability for operations staff to display the state (on-line vs. off-line) of peripheral distribution devices.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30660	A	In the event of media failure (i.e., tape breaks), the DDIST CI shall provide the capability to restart the distribution on a new piece of media.	DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30670	A	If an electronic push distribution fails, DDIST CI shall make a system defined number of additional attempts before aborting the transmission and notifying the originator of the failure. These additional attempts shall be included in the Distribution Activity Log.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2675#A	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.
S-DSS-30680	A	The DDIST CI shall provide the capability for operations staff to change the system defined number of additional attempts for re-transmission.	DADS2675#A	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.
			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.
S-DSS-30690	B	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.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30700	B	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.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30705	A	For physical media distributions, DDIST CI shall generate a packing list describing the data on the media.	DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
			DADS2530#A	The DADS shall be capable of distributing by physical media to meet user demand.
S-DSS-30710	A	The DDIST CI shall provide the capability to distribute any Data , or appropriate subset, listed in the Inventory. Note: The appropriate subset of a data item is determined by and depends on the subject data type.	SDPS0050#A	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.
			DADS2450#A	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			DADS2430#A	Each DADS shall be capable of distributing any data granule stored in the archive.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS2315#A	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.
			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.
			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.
			DADS2450#B	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.
			DADS2430#B	Each DADS shall be capable of distributing any data granule stored in the archive.
S-DSS-30730	A	The DDIST CI shall provide the capability for operations staff to manually load media into the peripheral devices.	DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
			DADS2510#A	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
S-DSS-30740	A	The DDIST CI shall provide the capability for operations staff to manually unload media from the peripheral devices.	DADS2510#A	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
			DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
S-DSS-30750	A	The DDIST CI shall provide the capability for the operations staff to specify a percent utilization threshold for the user pull area above which operations staff will be notified.	DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
			DADS2580#A	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30770	B	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.	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.
			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.
S-DSS-30780	A	The DDIST CI shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI for distribution of TRMM data to the TSDIS .		
S-DSS-30795	B	For physical media distributions, the DDIST CI shall record the cost of the media to be used for accounting.	DADS0880#B	For data which it has distributed, each DADS, via the LSM, shall generate required accounting information.
			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
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30797	A	The DDIST CI shall receive management directives from the SDSRV CI.	DADS0100#B	Each DADS shall receive management directives from the SMC.
			DADS0100#A	Each DADS shall receive management directives from the SMC.
S-DSS-30800	A	The Data Distribution within the Data Server shall support making stored products available on physical media within 24 hours.	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.
			DADS2770#A	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.
S-DSS-30810	A	The Data Distribution within the Data Server shall be capable of distributing Data via physical media generated a rate equivalent to the daily rate data are ingested at that site.	DADS3110#A	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.
			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.
S-DSS-30840	A	The Data Distribution within the Data Server shall support distributing product QA data produced at the collocated Data Processing Subsystem within 1 hour from the time it is ready.	DADS3120#B	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
			DADS3120#A	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it is ready.
S-DSS-30850	A	The Data Distribution within the Data Server shall support making archive data associated with a predefined ECS standard format available to the network in that format within an avg. of 2 minutes.	DADS3126#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30860	A	The Data Distribution within the Data Server shall support making archive data associated with a predefined ECS format available to the network in a different format within an average of 5 minutes.	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.
			DADS3126#A	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.
S-DSS-30870	A	The DAAC Data Distribution within the Data Server shall be capable of electronically distributing data to users in support of Electronic Distribution Requests at a rate equivalent to daily product volume, L1-L4.	DADS3100#A	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).
			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).
S-DSS-30875	A	The Data Distribution within the Data Server shall be capable of providing 200% expansion in capacity without architecture or design change.	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.
			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.
			DADS3090#A	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.
			EOSD0540#A	ECS elements shall be expandable to facilitate updates in instrument data products and algorithms, particularly with respect to storage capacity and processing capability.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-30890	A	The Data Distribution within the Data Server shall be capable of distributing the number of bytes of data per day derived from Table E-6 of Appendix E of the current version of 304-CD-002 to TSDIS (for the purpose of reprocessing).	TRMM3100#A	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.
			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.
S-DSS-30950	A	The DIPHW CI shall be sized to temporarily store the total number of bytes of distribution data derived from Section E.1 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2770#A	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.
			DADS3126#A	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.
			DADS3110#A	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.
			DADS3125#A	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.
			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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			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.
S-DSS-30960	A	The DIPHW CI shall be sized to support a sustained I/O rate of 1x the production volume for media distribution, where 1x production volume is derived from Section E.1 of, Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	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.
			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.
			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).
			DADS2770#A	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.
			DADS3100#A	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).
			DADS3110#A	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-31000	A	The DIPHW CI shall be configured to support the SDPS function of Archiving and Distributing Data's Availability requirement of .98 and a Mean Down Time requirement of < 2 hrs. during times of staffed operation. (This applies to distributing data and ingesting hard media.)	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).
			EOSD3920#A	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).
S-DSS-31010	A	The DIPHW CI shall be configured to support the SDPS function of Metadata Ingest and Update's availability requirement of .96 and a mean down time requirement of < 4 hours during times of staffed operations.	EOSD3960#A	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).
			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).
S-DSS-31015	A	The DIPHW CI 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.	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.
			EOSD4100#A	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.
S-DSS-31020	A	The maximum down time of the DIPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	EOSD3630#A	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
			EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-60010	A	The electrical power requirements for ACMHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60020	A	The air conditioning requirements for the ACMHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60030	A	The grounding requirements for ACMHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60040	A	The fire alarm requirements for ACMHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60050	A	The acoustical requirements for ACMHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60060	A	The physical interface requirements between ACMHW CI equipment and the facility shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-60070	A	The footprint size and the physical layout of ACMHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-60110	A	The operating system for each Unix platform in the ACMHW CI shall conform to the POSIX.2 standard.	EOSD5020#A	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.
			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.
S-DSS-60120	A	The ACMHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	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.
			EOSD5020#A	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.
S-DSS-60130	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	EOSD5020#A	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.
			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.
S-DSS-60140	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	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.
			EOSD5020#A	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.
S-DSS-60150	A	The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	EOSD5020#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-60160	A	The ACMHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	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.
			EOSD5020#A	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.
S-DSS-60170	A	The ACMHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	EOSD5020#A	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.
			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.
S-DSS-60180	A	The ACMHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	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.
			EOSD5020#A	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.
S-DSS-60190	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.	EOSD5020#A	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.
			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.
S-DSS-60195	A	Each development environment associated with the POSIX.2 compliant platform in the ACMHW CI shall have an interactive source level debugger for ECS supported languages.	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			EOSD5020#A	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.
S-DSS-60930	A	The ACMHW CI at the GSFC DAAC shall be capable of ingesting data from TSDIS at the nominal rate specified in Sections E.2 & E.3 of Appendix E of the current version of 304-CD-002.	DADS0475#A	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.
			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.
S-DSS-60940	A	The ACMHW CI at the GSFC DAAC shall be capable of ingesting data at a maximum rate that is three times the nominal rate specified in Sections E.2 & E.3 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS2778#A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
			DADS0475#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			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.
			DADS2778#B	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.
S-DSS-60950	A	The ACMHW CI at the GSFC DAAC shall be capable of ingesting Version 0 data at the nominal rate specified in Section E.4 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0475#A	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.
			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.
			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
			DADS0250#A	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-60970	A	The ACMHW CI at the GSFC DAAC shall be capable of ingesting data at a nominal rate of TBD bytes per day from the DAO by network data transfer.	DADS0475#A	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.
			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.
			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
			DADS0145#A	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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-61010	A	The ACMHW CI at the LaRC DAAC shall be capable of ingesting Version 0 data by network data transfer at the nominal rate specified in Section E.4 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	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
			DADS0250#A	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media
S-DSS-61020	A	The ACMHW CI at the LaRC DAAC shall be capable of ingesting data at a nominal rate of TBD bytes per day from the DAO by network data transfer.	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
			DADS0145#A	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
S-DSS-70010	A	The electrical power requirements for WKSHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70020	A	The air conditioning requirements for the WKSHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70030	A	The grounding requirements for WKSHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70040	A	The fire alarm requirements for WKSHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70050	A	The acoustical requirements for WKSHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70060	A	The physical interface requirements between WKSHW CI equipment and the facility shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70070	A	The footprint size and the physical layout of WKSHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-70075	A	The WKSHW CI shall be configured to support the SDPS function of Archiving and DIstributing Data's Availability requirement of .98 and Mean Down Time requirement of < 2 hours during times of staffed operation.	EOSD3920#A	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).
			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).

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-70080	A	The WKSHW CI 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.	EOSD4100#A	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.
			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.
S-DSS-70090	A	The maximum down time of the WKSHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	EOSD3630#B	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
			EOSD3630#A	The maximum down time shall not exceed twice the required MDT in 99 percent of failure occurrences.
S-DSS-80010	A	The electrical power requirements for DRPHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80020	A	The air conditioning requirements for the DRPHW CI equipment shall be in accordance withthe ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80030	A	The grounding requirements for DRPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80040	A	The fire alarm requirements for DRPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-80050	A	The acoustical requirements for DRPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80060	A	The physical interface requirements between DRPHW CI equipment and the facility shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80070	A	The footprint size and the physical layout of DRPHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-80110	A	The operating system for each Unix platform in the DRPHW CI shall conform to the POSIX.2 standard.	EOSD5020#A	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.
			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.
S-DSS-80120	A	The DRPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	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.
			EOSD5020#A	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.
S-DSS-80130	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	EOSD5020#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-80140	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	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.
			EOSD5020#A	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.
S-DSS-80150	A	The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	EOSD5020#A	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.
			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.
S-DSS-80160	A	The DRPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	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.
			EOSD5020#A	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.
S-DSS-80170	A	The DRPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	EOSD5020#A	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.
			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.
S-DSS-80180	A	The DRPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	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.
			EOSD5020#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-80190	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.	EOSD5020#A	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.
			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.
S-DSS-80195	A	Each development environment associated with the POSIX.2 compliant platform in the DRPHW CI shall have an interactive source level debugger for ECS supported languages.	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.
			EOSD5020#A	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.
S-DSS-90010	A	The electrical power requirements for DIPHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90020	A	The air conditioning requirements for the DIPHW CI equipment shall be in accordance withthe ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90030	A	The grounding requirements for DIPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90040	A	The fire alarm requirements for DIPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-90050	A	The acoustical requirements for DIPHW CI equipment shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90060	A	The physical interface requirements between DIPHW CI equipment and the facility shall be in accordance with ECS Facilities Plan (DID 302/DV2).	SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90070	A	The footprint size and the physical layout of DIPHW CI equipment shall be in accordance with the ECS Facilities Plan (DID 302/DV2).	SDPS0120#B	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
			SDPS0120#A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.
S-DSS-90110	A	The operating system for each Unix platform in the DIPHW CI shall conform to the POSIX.2 standard.	EOSD5020#A	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.
			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.
S-DSS-90120	A	The DIPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	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.
			EOSD5020#A	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.
S-DSS-90130	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	EOSD5020#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-90140	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	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.
			EOSD5020#A	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.
S-DSS-90150	A	The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	EOSD5020#A	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.
			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.
S-DSS-90160	A	The DIPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	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.
			EOSD5020#A	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.
S-DSS-90170	A	The DIPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	EOSD5020#A	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.
			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.
S-DSS-90180	A	The DIPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	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.
			EOSD5020#A	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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-90190	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have the capability to compile and link strictly conformant POSIX-compliant source code.	EOSD5020#A	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.
			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.
S-DSS-90195	A	Each development environment associated with the POSIX.2 compliant platform in the DIPHW CI shall have an interactive source level debugger for ECS supported languages.	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.
			EOSD5020#A	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.
S-DSS-90300	A	The DIPHW CI at the GSFC DAAC shall be capable of ingesting Version 0 data from physical media agreed upon between ECS and Version 0, at the nominal rate specified in Section E.5 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0475#A	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.
			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.
			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

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
			DADS0250#A	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media
S-DSS-90310	A	The DIPHW CI at the MSFC DAAC shall be capable of ingesting Version 0 data from physical media agreed upon between ECS and Version 0, at the nominal rate specified in Section E.4 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	DADS0250#A	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media
			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
			DADS0475#A	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.
			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.

Data Server Subsystem L4 to RbR traceability

L4 ID	Rel	L4 Text	RbR ID	RbR Text
S-DSS-90320	A	The DIPHW CI at the LARC DAAC shall be capable of ingesting Version 0 data from physical media agreed upon between ECS and Version 0, at the nominal rate specified in Section E.4 of Appendix E of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.	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
			DADS0250#A	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media
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