

RELEASE CAPABILITIES MAPPING

Rel	Date	Site(s)	Objectives	Ext I/Fs	Capabilities	SDPS Services	CSMS Services	FOS Services
Inter m Reles 1	DEC 95	3 sites (GSFC, MSFC, LaRC)	SDPF (TRMM) interface testing with MSFC/LaRC TSDIS (TRMM) interface testing with GSFC, MSFC Support to TRMM Version 1 Algorithm I & T Support to EOS AM - 1 Beta and Version 1 Algorithm I & T	SDPF/MSFC SDPF//LaRC TSDIS/GSFC TSDIS/MSFC TSDIS/LaRC SCF/ECS (algorithm transfer)	SDPF/ECS(LaRC) data transfer PACOR/ECS(MSFC) data transfer TSDIS/ECS(LaRC) data transfer TSDIS/ECS(MSFC) data transfer TSDIS/ECS(GSFC) data transfer Basic ingest services at 3 sites (GSFC, MSFC & LaRC) TRMM CERES & LIS Level 0 ingest TRMM TSDIS data product ingest SCF/ECS data transfer (algorithms, algorithm support data) Full PGS toolkit support TRMM data Algorithm Integration Support Algorithm Execution/Test Support TRMM-LIS Version 1 algorithm I&T support TRMM-CERES Version 1 algorithm I&T support AM-1 Beta and Version 1 Algorithm I&T Support	<u>Data Server</u> • Data Type - Data checking (TRMM CERES & LIS L0) • Data Storage - Store and retrieve temporarily- stored data (to support I/F testing) <u>Ingest</u> - Receive TRMM (CERES & LIS) L0 from SDPF - Receive L1 and other TRMM data from TSDIS - Basic electronic ingest - Request retransmission of missing TRMM data - Basic ingest monitoring and control (SDPF/ TSDIS) - Selected media ingest for Version 0 data <u>Planning</u> • Production Planning - Processing plan generation • Production Management - Manual initiation and operator control of processing - Operator visibility (GUI) of processing and logging of success / failure <u>Data Processing</u> • Processing Management - Accept processing requests	<u>Distributed Computing CSCI</u> •Object Request Broker - RPCs via CORBA interface •Object Services - directory (DNS) - interprocess communications - DCE based security •Common Facilities - file transfer (FTP) <u>Network Management CSCI</u> •Fault Resolution Management - event logging •Performance Management - event logging - network monitoring •Security Management - address filtering •Common Management - Management User Interface - Monitoring (WAN) - Discovery (network components) <u>System Management CSCI</u> •Performance Management - basic system performance statistics gathering •Security Management - management of authentication and authorization (via host - level access)	

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Inter m Reles 1 (cont)						<ul style="list-style-type: none"> • Process Queuing <ul style="list-style-type: none"> - Queue processing requests - Automatic, simple staging / destaging of processing inputs • Processing Execution <ul style="list-style-type: none"> - Execute processing requests - Pre-processing of selected TRMM ancillary data • Executable Process <ul style="list-style-type: none"> - Science software executable with PGS Toolkit I/F (PGE) • Process I&T <ul style="list-style-type: none"> - Algorithm I&T - Standards and PGS Toolkit mandatory use checkers - Algorithm I&T - Full submission CM capabilities - Algorithm execution / test support - manual data staging / destaging tools - Algorithm execution / test support - Production scripts for end-to-end processing (based on scripts developed / delivered by the SCF) - Algorithm execution / test support - Data comparison tool 	<p><u>Network CSCI</u></p> <ul style="list-style-type: none"> •Transport <ul style="list-style-type: none"> - TCP, UDP •Network <ul style="list-style-type: none"> - IP •Data Link/Physical <ul style="list-style-type: none"> - V0 infrastructure <p><u>Agent CSCI</u></p> <ul style="list-style-type: none"> •Agents <ul style="list-style-type: none"> - SNMP (as provided by COTS) <p><u>Management Logistics CSCI</u></p> <ul style="list-style-type: none"> •Configuration Management <ul style="list-style-type: none"> - Developmental CM for HW & SW resident at EDF 	

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A	DEC 96	8 Sites (GSFC, MSFC, LaRC, EDC, NSIDC, JPL, ASF, ORNL)	<p>Version 0 interoperability</p> <p>Data search/access</p> <p>Support TRMM preparations</p> <p>Support TRMM data operations</p> <p>Landsat 7 Interface testing with EDC</p> <p>Support EOS-AM1 interface testing</p>	<p>NSI : beta users ESDIS users PSCN: SCFs ADCs inter-DAAC Ecom: EDOS FDF NCC V0 DAACs (I/F network is CNE and/or PSCN: TBD) NOAA SDPF/MSFC SDPF//LaRC TRMM DIS: (I/F network is CNE and/or PSCN: TBD) Landsat DHF/EDC Landsat DIS: (I/F network is EDC MAN and/or PSCN: TBD)</p>	<p>TRMM CERES/LIS data processing</p> <p>TRMM CERES & LIS data (L0) ingest and archive and archive services at 2 sites (LaRC and MSFC).</p> <p>TRMM data access</p> <p>TRMM data (L1-L4, ancillary, etc.) ingest and archive services at three sites (GSFC, MSFC, LaRC)</p> <p>Testbed for EOS-A1 flight ops</p> <p>Landsat LPS/ECS (EDC) Data Transfers</p> <p>Landsat LOR Data Ingest</p> <p>Basic Ingest Services at EDC</p> <p>Interoperable with CIESIN (ECS to CIESIN)</p> <p>Two-Way Interoperability with V0</p> <p>APIs for Information Management</p> <p>General scientist access</p> <p>Online archive of TBD TB (aggregate)</p> <p>algorithm-development support</p>	<p><u>Data Server</u></p> <ul style="list-style-type: none"> • Data Server - Provide access to Data Type services - Advertise data server data and services - Support initial client session management • Data Type - Insert new TRMM, initial V0, TRMM ancillary, and other data objects - Provide access to stored summary data (e.g. browse data) - Provide access to stored data - Provide search access for top levels of data pyramid - Full TRMM data checking - Receive TRMM and initial V0 HDF and native formats - Basic data checking of AM-1 L0 data - Attribute search with a graphical user interface. Addition of hypertext. - Validates lists link and guide searches available with a graphical user interface. Access to information in addition to the V0 document types will be accessible 	<p><u>Distributed Computing CSCI</u></p> <ul style="list-style-type: none"> • Object Request Broker <ul style="list-style-type: none"> - object adapter (basic) • Object Services <ul style="list-style-type: none"> - naming (directory) - time (DCE) - data integrity - lifecycle - persistence - event • Common Facilities <ul style="list-style-type: none"> - bulletin board - e-mail (x.400/SMTP gateway) - file access (remote mount) - virtual terminal (Telnet) - user interface (GUI & ChUI) - help facilities (within applications) <p><u>Network Management CSCI</u></p> <ul style="list-style-type: none"> • Fault Resolution Management <ul style="list-style-type: none"> - alarm processing/display - event log analysis (manual) - fault isolation, identification and recovery - vendor diagnostics • Performance Management <ul style="list-style-type: none"> - network performance testing - event logging and analysis - network statistics reporting - network trending 	<p><u>Planning and Scheduling Subsystem</u></p> <ul style="list-style-type: none"> • Resource Models <ul style="list-style-type: none"> - Initial instrument models - Initial spacecraft subsystem models • Scheduling Management <ul style="list-style-type: none"> - Schedule list manager - Activity tables - Planning and Scheduling DB - Timelines <p><u>Command Management Subsystem</u></p> <ul style="list-style-type: none"> • Load Management <ul style="list-style-type: none"> - Validation of loads - Build instrument loads - Build spacecraft loads • Ground Script Generation <ul style="list-style-type: none"> - Generation of CMS DB - Initial production of ground script <p><u>Command Subsystem</u></p> <ul style="list-style-type: none"> • Real-Time Commanding <ul style="list-style-type: none"> - Command modes - Command validation - Command generation - Command transmission

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A (cont)			<p>Provide core FOS functionality of planning and scheduling, CMS, telemetry, command, instrument and spacecraft analysis, user interface, and data management functions required for AM-1 spacecraft as well as IST toolkit</p> <p>Support fo TRMM CERES & LISVersion 2 Algorithm I & T</p> <p>Support to EOS AM-1 version 2 Algorithm I & T</p>	<p>IP pickup points: (I/F network is CNE and/or JPL MAN and/or PSCN-TBD)</p> <p>FDF EDOS Ecom NCC ASTER (preliminary) SDVF</p>	<p>Client/server access</p> <p>Coincident data search at individual sites</p> <p>On-line browse/data visualization</p> <p>Full PGS Toolkit support for TRMM data processing (CERES, LIS)</p> <p>TRMM (CERES, LIS) Version 2 algorithm I&T support</p> <p>Test support for TRMM end-to-end processing</p> <p>Basic SDPS Scheduling</p> <p>Ancillary data ingest, validation, reformatting, and regridding for TRMM</p> <p>Migrate and/or access selectedV0 data archives</p> <p>FOS Interface components needed to send and recieve data to/from EDOS and ECOM</p>	<ul style="list-style-type: none"> - Core metadata and geophysical parameters searches. Spatial queries using minimum bounding rectangles and point radius. Browse request and display of coverage for multiple granules simultaneously, as well as animation via a graphical user interface (e.g., footprints or points on a map) - Dataset specific results will be available as a view details operation - API for accessing ECS inventory search and administration utilities. • DS Schema Generation - Establish and export TRMM and initial V0 data schema • Data Storage - Basic resource management - Basic policy management - Store and retrieve permanently-stored data - Integrated archive management - Back up critical TRMM and system data - Provide an inventory of TRMM and initial V0 data stored within the data server. - Provide additional Register services 	<ul style="list-style-type: none"> • Security Management <ul style="list-style-type: none"> - audit information collection - unique sessions for security controlled data - address filtering/isolation LANs • Common Management <ul style="list-style-type: none"> - map/Collections - monitoring (WANs, LANs, hosts) - office Automation tools • Report Generation <ul style="list-style-type: none"> - reporting (generic as provided by COTS applications) <p><u>System Management CSCI</u></p> <ul style="list-style-type: none"> • Fault Resolution Management <ul style="list-style-type: none"> - isolation, identification and recovery (via host-level access) • Performance Management (via network management CSCI) <ul style="list-style-type: none"> - statistical data collection • Security Management (via host-level access) <ul style="list-style-type: none"> - audit information collection - intrusion detection (virus, unauthorized user access detection via host-level access) 	<ul style="list-style-type: none"> • Load Uplink <ul style="list-style-type: none"> - Load validation - Load transmission <p><u>Telemetry Subsystem</u></p> <ul style="list-style-type: none"> • General Processing <ul style="list-style-type: none"> - Receipt of real-time telemetry • Packet Processing - Decommutation - Limit checking - Engineering unit conversion <u>Analysis Subsystem</u> <ul style="list-style-type: none"> • Performance and Trending - Spacecraft subsystem performance and trends (initial) - Instrument performance and trends (initial) • History Reports - Initial reports of telemetry data <u>Resource Management Subsystem</u> <ul style="list-style-type: none"> • Ground Configuration - Create/terminate logical strings - Resource Management DB • Failure Recovery <ul style="list-style-type: none"> - Initial failure recovery software switches

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A (cont)					<p>FOS infrastructure components like user interface shell, inter-process communication, data base tables, communication interface with externals (e.g. , NCC, FDF, Ecom, EDOS)</p> <p>FOS core functionality and integration of all FOS services</p> <p>EOS AM - 1 Version 2 Algorithm I & T Support</p>	<ul style="list-style-type: none"> - Restore data - Recover data from failed devices and media - Three days worth of TRMM data archived in one day - Import/export physical media - Integration of the directory information with the knowledge base and intelligent user interface functions - Addition of hypertext linking and integration with inventory, browse, and ordering - Population of ECS guide with information (i.e. documents about datasets, sensors, platforms, and data centers) for TRMM and migrated V0 data. - Automated insert and update of inventory metadata - Automated insert and update of data set specific inventory metadata • DS Administration - Verify data is present and accounted for - Allow import/export of archive media - Allow manual mounting of archive media - Access tools for installed COTS data base products - Access Data Storage management tools - Generate selected reports 	<ul style="list-style-type: none"> • Accounting Management - user registration <ul style="list-style-type: none"> - audit trail (via host-level access) - Price estimation (e.g. media use for TRMM) • Report Generation <ul style="list-style-type: none"> - reporting via host-level access <p><u>Network CSCI</u></p> <ul style="list-style-type: none"> • Transport (per TCP/IP suite) • Network (per TCP/IP suite) • Data Link/Physical <ul style="list-style-type: none"> - LANs for Release A sites (ethernet, FDDI, implementation TBD) <p><u>Agent CSCI</u></p> <ul style="list-style-type: none"> • Agents (customized) • Physical Device Services • System Software Services <p><u>Management Logistics CSCI</u></p> <ul style="list-style-type: none"> • Inventory Management <ul style="list-style-type: none"> - spares & consumable inventory management (using OA tools and e-mail) • Training Management <ul style="list-style-type: none"> - training management (using OA tools and e-mail) • Policies and Procedures Management (using OA tools and e-mail) 	<p><u>Data Management Subsystem</u></p> <ul style="list-style-type: none"> • History Logging - Archiving of events and real-time telemetry - Initial event history reports • Project Data Base - Generation of telemetry data base - Generation of command data base <p><u>User Interface Subsystem</u></p> <ul style="list-style-type: none"> • Operator Input - Window management - User input language - User input processing <ul style="list-style-type: none"> • Data Display - Configuration displays - Real-time telemetry displays - Graphs and reports (initial) - Ground script execution

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A (conti)						<ul style="list-style-type: none"> - Provide additional administration services - COTS utilities and DBA tools for generation and loading and insert and update of data set specific metadata • Distribution - Support selected hard media distribution - Support electronic network distribution ("pull" and "push") - Provide status of data to be distributed - Provide selected data reformatting - Support data transfers to other sites (e.g. other DAACs, SCFs, etc.) - Request V0 distribution status - Provide tracking, monitoring, and statusing of data to be distributed <p><u>Ingest</u></p> <ul style="list-style-type: none"> - Receive TRMM and CERES and LIS metadata. - Additional selected media ingest - Receive ADC metadata, L0-L4 data, TRMM ancillary data, etc. - Receive SCF algorithms, L0-L4 data, etc. - Receive AM-1 L0 data - Request retransmission of missing AM-1 L0 data <p>Receive FDF refined orbit and attitude data</p>	<ul style="list-style-type: none"> • Configuration Management <ul style="list-style-type: none"> - baseline management - remote software distribution (including toolkits) - license administration - local network/system configuration management - resource management (network resource discovery/display via network CSC) - system and site enhancement analysis (via OA tools) • Reporting <ul style="list-style-type: none"> - reporting (generic as provided by COTS applications) 	

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A (conti)						<ul style="list-style-type: none"> -- Notify processing services of the arrival of data required for TRMM processing - Additional ingest monitoring and control (TRMM support/ AM-1) <u>Planning</u> <ul style="list-style-type: none"> • Production Planning - Processing plan generation based on simple strategies and DASes - Generation of local Data Availability Schedule - GUI interface to DBMS tables • Production Management - Automatically initiate processing requests based on Processing Plan and Data Availability Notices - Accept on demand processing requests for TRMM CERES and LIS products - Implement reprocessing from Plan - QA accounting and metadata update <u>Data Processing</u> <ul style="list-style-type: none"> • Process Queuing - Coordinate storage resource usage - Queue control and monitoring GUI • Processing Resource Mgmt - Processing resource allocation • Process I&T 		

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A (cont)						<ul style="list-style-type: none"> - Algorithm I&T - Algorithm performance analysis and resource management tools • Processing Execution - Automated pre-processing of ancillary data <u>Client</u> - Individual, group, and guest user privileges will be added to authentication function - Individual, group, and guest user authorization of available functions - Save user preferences (email address, mailing address, etc) at client - Menu and context sensitive help - GUI / X-windows client - Save and restore searches and results at point of access (storage in client) -- Browse request and visualization integrated with inventory search and product ordering will include the visualization of image browse data. * Coverage display (e.g. footprints or points on a map) of multiple granules simultaneously, as well as animation of browse products. - Users will be able to request data products from the ECS archive and request either "push" or "pull" of data. Users may select physical media distribution of the product order from the user interface. 		

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A (cont)						<p>On demand processing of TRMM products. Integration with the Guide function for product threads that are supplemented with additional documentation.</p> <ul style="list-style-type: none"> - Acknowledgement of order and data availability at the time the order is placed. User request of status of ftp site for ordering data from ECS. Status integrated with tracking of distributed requests. On-request status of orders. Handle notification of product distribution to user. Distribution status for orders for V0 data, NOAA and CIESIN data as negotiated in the MOU. - Status for processing on demand products for TRMM. - Notification of product processing delay and / or request conflict. - Price estimation of NOAA and CIESIN orders as negotiated in interface MOU. - Interpret HDF Data (display file organization, show arrays as spreadsheets, interpret instrument specific structures, display and interpret P=V metadata) 		

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A (cont)						<ul style="list-style-type: none"> -- EOSView Scripting (support external scripting of EOSView features) - Raster Image Display (pan and zoom images, change color mapping, color contrast) - Grid Data and Overlay Display (display projected grid data, display lat/long of selected point, overlay boundaries on image) - Animation (display a series of images, select animation sequence, control animation speed) - Annotations (display text or graphical annotations, driven by metadata)Point Data Display (display point data on image as colored or numerically labelled points) - User interface for the integration of selected COTS package will be delivered. COTS package capabilities will include regression analysis and correlation of image sets. - User interface to BBS, User interface to DCE mail, X.400 email, and remote log-on service 		

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A (cont)						<ul style="list-style-type: none"> - On-line collection of user feedback with automatic prompting, combined with user satisfaction metrics for quantitative assessment. - Incorporation of functions for event logging from applications for ad hoc analysis of user access patterns. <p><u>Data Management</u></p> <ul style="list-style-type: none"> • LIM - Two-way interoperability with Version 0. ECS to ADC Interoperability with the inventory and browse holdings of CIESIN and NOAA - Spatial temporal coincidence Inventory searches within a single site using pre-determined tolerances. - Coincidence assessment from the user interface, such as sorting of inventory results to view date and attribute clustering, and the ability to display browse footprints on a map simultaneously. - Two-way data order interoperability with Version 0. - Interoperability with the product ordering function of CIESIN and a NOAA data center. 		

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B	SEP 97	All Sites	<p>Support EOS-AM1 operations</p> <p>Support Landsat 7 Operations</p> <p>Support COLOR Operations</p> <p>SDPS/CSMS/FOS (all from formal track)</p> <p>Provide full functionality of all services required for the AM-1 spacecraft</p>	<p>NSII general users</p> <p>PSCN: dialup users</p> <p>ASTER (final)</p>	<p>ASTER DARs and Interoperable with ASTER IMS</p> <p>Subscriptions for Distribution and Processing</p> <p>DAR API</p> <p>Landsat 7 data access</p> <p>Landsat 7 data ingest and archive services at EDC</p> <p>Landsat 7 ordering support</p> <p>Online archive of TBD PB (aggregate)</p> <p>Full system integraton and completion of performance analysis required for AM-1 launch.</p> <p>Inclusion of the Decision Support System</p>	<p><u>Data Server</u></p> <ul style="list-style-type: none"> • Data Server - Provide access to additional Data Type services - Submit/delete data server subscriptions - Suspend/restore client sessions - Distribute data by means of subscriptions • Data Type - Provide search access to additional levels of the data pyramid for selected parameters - Manipulate selected stored data (subset, filter) - Insert new AM-1, additional V0, AM-1 ancillary, and other data objects - Provide access to stored data - Archive multiple data versions - Provide a toolkit of format, conversion tools - Full AM-1 data checking - Receive AM-1 and additional V0 HDF and native formats - Extract AM-1 and additional V0 inventory metadata - DAR generation function will constraint check inputs from the DAR visual aids and user interface. 	<p><u>Distributed Computing CSCI</u></p> <ul style="list-style-type: none"> • Object Request Broker <ul style="list-style-type: none"> - CORBA 2.0 ORB - dynmic invocation interface - object adapter (custom) - interface repository - implementation repository • Object Services <ul style="list-style-type: none"> - federated naming - security (public key included in B) - trading - query - concurrency - transaction (for data access) - data privcy - association - property - externalization - change management - startup - installation/activation - operational control • Common Facilities <ul style="list-style-type: none"> - enhancement for e-mail and 	<p><u>Planning and Scheduling Subsystem</u></p> <ul style="list-style-type: none"> • Resource Models - Final instrument models - Final spacecraft subsystem models • Scheduling Management - Activity builder - Analysis tools - Conflict mangement tools <p><u>Command Management Subsystem</u></p> <ul style="list-style-type: none"> • Load Management - Flight software loads - Memory dump compares - Update ground reference image - Conflict resolution of spacecraft loads • Ground Script Generation - Final production of ground script

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B (cont)						<ul style="list-style-type: none"> • DS Schema Generation <ul style="list-style-type: none"> - Establish and export AM-1, COLOR, and additional V0 data schema • DS Administration <ul style="list-style-type: none"> - Provide application programming interfaces to DS administration services - Generate additional selected reports - Enhancements for distributed inventory administration. • Distribution <ul style="list-style-type: none"> - Support additional hard media distribution - Allow prioritization of distribution requests - Generate automated accounting information for distributed data - Provide additional data distribution reports - Transfer Level 0 data to EDOS upon request <u>Ingest</u> <ul style="list-style-type: none"> - Receive AM-1 metadata, L0 data, etc. (incl. ASTER data from Japan) - Additional media ingest types - Receive EOC instrument, spacecraft, and other data - Receive AM-1 ancillary data, etc. - Basic ingest monitoring and control (AM-1) - Receive COLOR metadata, L0-L4 data, etc. 	<ul style="list-style-type: none"> • Directory Information Management • Resource Scheduling Management • Accounting Management <ul style="list-style-type: none"> - accounts payable/receivable management - credit tracking - price estimation for data - resource utilization costing - invoicing and billing • Common Management CSCI <ul style="list-style-type: none"> - management user interface with OO adaptation - monitoring (OO adaptation) - object management APIs - instance Management - policy management - policy-driven base - discovery (OO based) - customization - Load Balancing - Scheduling Management <ul style="list-style-type: none"> - cross-site scheduling - schedule adjudication • Report Generation <ul style="list-style-type: none"> - customized reporting <u>Network CSCI</u> • Transport (per TCP/IP suite) • Network (per TCP/IP suite) 	<ul style="list-style-type: none"> • History Reports <ul style="list-style-type: none"> - Final reports of telemetry data - Statistics reports <u>Resource Management Subsystem</u> • Ground Configuration <ul style="list-style-type: none"> - Logical strings for replay • Failure Recovery <ul style="list-style-type: none"> - Final failure recovery software switches Data Management Subsystem • History Logging <ul style="list-style-type: none"> - Final event history reports - Filtering of events for report purposes - Interface with SDPS for history files • Project Data Base <ul style="list-style-type: none"> - Data base file management utilities - Data base reports <u>User Interface Subsystem</u> • Operator Input <ul style="list-style-type: none"> - Advanced window management - Procedure execution

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B (cont)						<u>Planning</u> <ul style="list-style-type: none"> • Production Planning - Integration of DAAC plans - String load balancing - Implementation of complex strategies • Production Management - Monitor processing against original plan - Automatic transition from one Plan to next - DAAC QA enabling software <u>Data Processing</u> <ul style="list-style-type: none"> • Process Queuing - Predictive staging of processing inputs - Complete queuing functionality across strings • Process I&T - Enhanced submission / installation scripts and CHI • Process Execution - Pre-processing of AM-1 ancillary data <u>Client</u> <ul style="list-style-type: none"> - DAR interface operational with ASTER GDS ; user updates to DARS; user interface integrated with Guide search for help on instruments and data products. 	<ul style="list-style-type: none"> • Data Link/Physical <ul style="list-style-type: none"> - ATM (TBD) - LANs for Release B sites (implementtion TBD) <u>Agent CSCI</u> • Application Services <u>Management Logistics CSCI</u> • Inventory Management <ul style="list-style-type: none"> - spares and consumable inventory management (implementation TBD) • Training Management <ul style="list-style-type: none"> - training management (implementation TBD) • Policies and Procedures Management • Configuration Management <ul style="list-style-type: none"> - software license administration (automated) - inter-DAAC system configuration management 	<ul style="list-style-type: none"> • Data Display - Graphs and reports (final) - Display builder - On-line documentation

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B (cont)						<ul style="list-style-type: none"> - Integration of user interface with CSMS provided self registration function. - Enhancements for distributed client so users may access profile information from anywhere in the system. - Additional help for DAR submittal - Enhancements for distributed client so users may access saved searches and results from anywhere in the system (storage in the host subsystem) - Display of orbit tracks for to aid in query and DAR formulation and to help the user construct an inventory search. - Automatic guest, authorized user, individual (groups) authentication for distribution - On-demand processing of EOS-AM1 products. <p>Integration of user interface processing schedules and orbital models for help on products.</p>		

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B (cont)						<ul style="list-style-type: none"> - Interactive status of distributed requests. - Dialog with ASTER GDS for distribution and processing on demand status as negotiated in interface MOU. - Status for AM-1 processing on demand products. Status integrated with tracking of distributed requests. - Dialog with ASTER GDS for DAR status. - Cost estimation of ASTER and Landsat-7 orders as negotiated in interface MOU. - File Conversions (convert HDF records to various formats, import data from various formats) - Image reprojections (support reprojection of Level 1 or 2 data into various grids/projections) - Interpret HDF Data (continued work on instrument specific structures) - ColorTable (color table editor, sophisticated color table manipulations) - Annotations (ability for user to add their own annotations on images) - API for accessing DAR generation toolkit. 		

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B (cont)						<u>Data Management</u> <ul style="list-style-type: none"> • DIM - Interactive status of distributed requests. - Distribution of browse from distributed archive. - Distributed archive support of ECS product orders. • LIM 		

notes:

regular text: within baseline
bold text: possible evolutionary enhancement