

# Task 42 – ECS Requirements Volume 5 Specification

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# **ECS Requirements Volume 5 Specification**

DRAFT



**Goddard Space Flight Center**  
**Greenbelt, Maryland**

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## Preface

This document is under ESDIS Project configuration control. Once this document is approved, ESDIS approved changes are handled in accordance with Class I and Class II change control requirements described in the ESDIS Configuration Management Procedures, and changes to this document shall be made by change bars or by complete revision.

Any questions should be addressed to: [esdis-esmo-cmo@lists.nasa.gov](mailto:esdis-esmo-cmo@lists.nasa.gov)

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## **Abstract**

This document provides the completed Level 4 SDPS Requirements for the Data Server Subsystem (DSS).

**Keywords:** *SDPS, DSS*

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# 1 INTRODUCTION

The EOSDIS Core System (ECS) performs information management and data archiving and distribution for Earthdata mission datasets at NASA Distributed Active Archive Center (DAAC) locations. Each DAAC performs these functions using a combination of standard capabilities provided by ESDIS, and hardware and software specific to the DAAC. The ECS was developed using special hardware and software to support the high ingest rates of EOS instruments. ECS currently resides and operates at three DAACs: Atmospheric Science Data Center (ASDC), Land Processing (LP) DAAC and National Snow and Ice Data Center (NSIDC) DAAC.

Data products are created by NASA's Science Investigator-led Processing Systems (SIPS) or, in a few cases, by systems interfacing with the ECS at the DAACs. The ECS at the DAACs ingests the data from the processing systems and archives them. ECS has interfaces with the Common Metadata Repository (CMR) to provide metadata to support search and access through CMR clients, for example, Earthdata Search. ECS also provides software toolkits to assist instrument teams in their development of product generation software at their Science Computing Facilities (SCFs) to facilitate ingest of the resulting products into ECS or into other DAAC-specific archiving and distribution systems.

ECS is structured as two segments: the Communications and Systems Management Segment (CSMS) and the Science Data Processing Segment (SDPS).

- The Communications and Systems Management Segment (CSMS) provides the communications infrastructure for the ECS and systems management for all of the ECS hardware and software components. The CSMS provides the interconnection between users and service providers within the ECS, transfer of information between subsystems, Computer Software Configuration Items (CSCIs), Computer Software Components (CSCs), and processes of the ECS.
- The Science Data Processing System (SDPS) provides science data ingest and production, search and access functions, data archive, and system management capabilities.

The ECS includes the following subsystems:

Subsystem	Segment	Subsystem Description
AIM	SDPS	Archive Inventory Management Subsystem
BMGT	SDPS	Bulk Metadata Generation Tool
CSS	CSMS	Communications Subsystem
Data Access	SDPS	Data Access Subsystem
DMS	SDPS	Data Management Subsystem
DPL	SDPS	Data Pool Subsystem
DPL-Ingest	SDPS	Data Pool Ingest Subsystem
DSS	SDPS	Data Server Subsystem
DTS	SDPS	Defect Tracking Subsystem

Subsystem	Segment	Subsystem Description
EMS	SDPS	EOSDIS Metrics Subsystem
HEG	SDPS	HDF-EOS to Geotiff Converter Subsystem
INS	SDPS	Ingest Subsystem
ISS	CSMS	Internetworking Subsystem
MGS	SDPS	Map Generation Service
MSS	SDPS	System Management Subsystem
OMS	SDPS	Order Manager Subsystem
SSS	SDPS	Spatial Subscription Server Subsystem
TKD	SDPS	Toolkit Subsystem for DAACs
TKS	SDPS	Toolkit Subsystem for Science Teams

### 1.1 Purpose

The purpose of the ECS Requirements Document Set is to present the system requirements that have been implemented for ECS. This document is one volume of the set.

### 1.2 Scope

Because the number of requirements is large, this Requirements documentation set has been divided in to a series of Volumes, partitioned by subsystem. This is one volume in the set.

Volume	Subsystems	Requirements
1	AIM, BMGT	462
2	CSS, DMS, Data Access	249
3	DPL	1,670
4	DTS, HEG	125
5	DSS	1,245
6	INS, DPL Ingest	180
7	ISS, MGS, MSS, EMS	374
8	OMS	817
9	SSS	160
10	TKD, TKS	335
	total	5,617

### 1.3 Related Documentation

The latest versions of all documents below should be used. The latest Earth Science Data and Information System (ESDIS) Project documents can be obtained from Uniform Resource Locator (URL): <https://ops1-cm.ems.eosdis.nasa.gov>. ESDIS documents have a document number starting with either 423 or 505. Other documents are available for reference in the ESDIS project library website at: [http://esdisfmp01.gsfc.nasa.gov/esdis\\_lib/default.php](http://esdisfmp01.gsfc.nasa.gov/esdis_lib/default.php) unless indicated otherwise.

#### 1.3.1 Applicable Documents

The following document contains policies or other directive matters that are binding upon the content of this document.

Document Number	Document Title
423-46-01	Functional and Performance Requirements Specification for the ECS Science Data Processing System

#### 1.3.2 Reference Documents

The following documents are not binding on the content but referenced herein and amplify or clarify the information presented in this document.

Document Number	Document Title
NPR 2810.1A	Security of Information Technology document
170-TP-013-001	HDF-EOS Data Format Converter User's Guide', (170-TP-013-001), January 2002
170-TP-600	HDF-EOS Library Users Guide Volume 1 (170-TP-600)
n/a	BMGTCollectionMetadata.dtd <a href="https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard">https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard</a>
n/a	BMGTGranuleMetadata.dtd <a href="https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard">https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard</a>
n/a	BMGTBrowseMetadata.dtd <a href="https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard">https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard</a>
n/a	ECHO PackageManifest.xsd <a href="https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard">https://earthdata.nasa.gov/esdis/eso/standards-and-references/echo-metadata-standard</a>
170-WP-023	Bulk Metadata and Browse Export Capability for the ECS Project' (170-WP-023-011, 9/27/00)
209-CD-036	Interface Control Document for ECS Interfaces That Support External Subsetters Located at DAACs', ECS Project document number 209-CD-036-001

Document Number	Document Title
304-CD-002	Science and Data Processing Segment (SDPS) Requirements Specification for the ECS Project (March 1995)
311-EMD-xxx	Archive Management Inventory (AIM) Database Design Schema Specifications for the EMD Project
423-41-57	Interface Control Document between the EOSDIS Core System (ECS) and the Science Investigator-led Processing Systems (SIPS), Volume 0
423-41-58	ICD between ECS and the LP DAAC
423-41-63	ICD between EMOS and the SDPS
423-45-02	Interface Control Document between EOSDIS Core System (ECS) and EOS Clearinghouse (ECHO) for Metadata Inventory and Ordering
423-45-03	Interface Control Document for ECS ECHO WSDL Order Component (EWOC) and External Processing Systems Co-located at the DAACs
423-ICD-EDOS/EGS	Interface Control Document Between the Earth Observing System (EOS) Data and Operations System (EDOS) and the EOS Ground System (EGS) Elements, renumbered as 428-ICD-EDOS/EGS
505-41-17	Interface Requirements Document between EOSDIS Core System (ECS) and the NASA Science Internet (NSI), 505-41-17
505-41-30	Interface Control Document Between EOSDIS Core Systems (ECS) and the Version 0 System for Interoperability', ESDIS document number 505-41-30
910-TDA-042	EMD Browsers Baseline
CK_70_01	ECS Ticket: End-To-End Checksum Capability
DP_72_02	ECS Ticket: Ingest of Level 0 Data from EDOS into the Data Pool
DP_72_03	ECS Ticket: Ingest of ASTER L1A and Browse into Data Pool
DP_72_04	ECS Ticket: Data Pool Ingest of Data at the ASDC DAAC
DP_72_05	ECS Ticket: Support for MISR Browse Linkages in Release 7.20
DP_S3_01	ECS Ticket: Populate Data Pool from ECS Archive
DP_S3_02	ECS Ticket: Accommodate Non ECS Data in Data Pool
DP_S4_07	ECS Ticket: Support Compression on Data Pool Insert
DP_S6_01	ECS Ticket: SIPS Ingest Into Data Pool
DP_SY_01	ECS Ticket: Data Pool FTP Service
DP_SY_03	ECS Ticket: Data Pool Cleanup
DP_SY_04	ECS Ticket: Data Pool Insert
DP_SY_06	ECS Ticket: Update Granule Expiration in Data Pool
DP_SY_08	ECS Ticket: Compile & Examine Data Pool Access Statistics
DS_7E_01	ECS Ticket: Removal of Science Data Server
ES_SY_01	ECS Ticket: External Subsetter Support
OD_S3_01	ECS Ticket: Order Manager

Document Number	Document Title
OD_S4_01	ECS Ticket: Improve Distribution to End Users through Data Pool
OD_S5_02	ECS Ticket: Managing HEG Orders
OD_S5_06	ECS Ticket: Hiding Order-Only Granules In The Data Pool
OG_S5_01	ECS Ticket: HEG Extensions for OWS
OM_80_01	ECS Ticket: Operational Updates to OMS
OP_S4_06	ECS Ticket: Support Multiple Data Pool File Systems
WD_S3_01	ECS Ticket: HDF-EOS Format Converter Integration with Data Pool
WD_S4_02	ECS Ticket: HEG Integration Enhancements
WL_S4_01	ECS Ticket: Synergy IV 24-Hour Workload Performance

## 2 REQUIREMENTS

### 2.1 DSS

These are the completed ECS requirements for the DSS subsystem (Data Server Subsystem). The Data Server Subsystem (DSS) subsystem consists of one CSCI called the “Archive Inventory Management” (AIM) CSCI. The AIM CSCI provides the following services:

- Services for adding new Earth Science Data Types (ESDTs)
- Services for validation of granule metadata during Ingest
- Recording and tracking the location of files within the Archives
- Recording the addition of new Volume Groups within the Archives
- Supplying events to BMGT
- Providing database functionality for BMGT processing data
- Providing a Universal Reference (UR) for each granule ingested
- Managing the removal of granules from the system
- Managing QA metadata for science granules
- Creation and storage of Metadata Control Files (MCF).

ID	Title	Status
ECS-L4-14544	S-DSS-00100 The SDSRV CI shall provide the operations staff the capability to set, at subsystem startup, a threshold for the number of Service Requests that can be accepted and processed asynchronously.	Completed
ECS-L4-14545	S-DSS-00015 The SDSRV CI shall insure that each Data Request includes a User Identifier, a Request Priority, and a Data Identifier.	Completed
ECS-L4-14546	S-DSS-00025 The SDSRV CI shall verify that each Service Request specifies a User Identifier, a Request Priority, and other required parameters.	Completed
ECS-L4-14547	S-DSS-00040 The SDSRV CI shall provide operations staff the capability to view the entries in the Service Request List.	Completed
ECS-L4-14548	S-DSS-00052 The SDSRV CI shall process each Service Request, in order, according to its relative priority in the Service Request List.	Completed
ECS-L4-14549	S-DSS-00055 The SDSRV CI shall initiate the processing of Service Requests of equal priority in the order in which they are received.	Completed

ID	Title	Status
ECS-L4-14550	S-DSS-00057 The SDSRV CI shall maintain, for each entry in the Service Request List, an indicator that determines whether the associated Service Request is being processed or is waiting to be processed.	Completed
ECS-L4-14551	S-DSS-00060 The SDSRV CI shall acknowledge the receipt of Service Requests from local and remote clients.	Completed
ECS-L4-14552	S-DSS-00070 The SDSRV CI shall accept Service Requests from the Data Processing subsystem and, as a result, provide access to Data for the purpose of reprocessing.	Completed
ECS-L4-14553	S-DSS-00072 The SDSRV CI shall receive acquire requests from the local MTMGW CI.	Completed
ECS-L4-14554	S-DSS-00073 The SDSRV CI shall update the MSS request status of an asynchronous acquire request to "Pending" after it was check-pointed and before returning a response to the submitting application.	Completed
ECS-L4-14555	S-DSS-00074 The SDSRV CI shall interface with the local MTMGW CI to return acquire responses for the acquire requests the MTMGW CI submitted.	Completed
ECS-L4-14556	S-DSS-00075 The SDSRV CI shall accept and process valid, authenticated Data Insert Requests, from any source, via the Data Insert Request API.	Completed
ECS-L4-14557	S-DSS-00080 The SDSRV CI shall prevent submission of two asynchronous acquire requests with the same rpcID from leading to faults or errors in the handling of these requests.	Completed
ECS-L4-14558	S-DSS-00085 The SDSRV CI shall provide the capability to manage, and provide access to, multiple versions of Data Products.	Completed
ECS-L4-14559	S-DSS-00095 The SDSRV CI shall return a Reject Notification including the reason for rejection if a Service Request fails validation.	Completed
ECS-L4-14560	S-DSS-00110 The SDSRV CI shall provide operations staff the capability to determine the status of any or all existing Service Requests.	Completed
ECS-L4-14561	S-DSS-00115 The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated for that Search Request.	Completed
ECS-L4-14562	S-DSS-00116 The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated since the last Search Status Request for that Search Request.	Completed
ECS-L4-14563	S-DSS-00120 The SDSRV CI shall accept and process Status Requests, for the status of any specified Service Request, and provide Service Request Status to the requesting client as a result.	Completed
ECS-L4-14564	S-DSS-00140 The SDSRV CI shall validate that a Status Request specifies either a valid pending Request Identifier or a valid User Identifier.	Completed
ECS-L4-14565	S-DSS-00144 The SDSRV CI shall assign a unique Granule ID to each granule of data stored by the STMGT CI.	Completed
ECS-L4-14566	S-DSS-00145 The SDSRV CI shall maintain Granule Inventory Metadata for each stored data granule as follows a. the Granule ID; b. the Logical File Location for each of the granule's constituent file(s) c. the Checksum for each of the granule's constituent file(s) d. the date and time of storage e. all user-searchable metadata for that granule	Completed
ECS-L4-14567	S-DSS-00155 The SDSRV CI shall provide storage for the metadata associated with all data types specified in the Data Type Services Matrix.	Completed
ECS-L4-14568	S-DSS-00158 The SDSRV CI shall provide the capability to restructure the Metadata Database in order to support database maintenance activities.	Completed
ECS-L4-14569	S-DSS-00160 The SDSRV CI shall accept and process Update Metadata Requests to update Granule Inventory Metadata that is user-searchable.	Completed

ID	Title	Status
ECS-L4-14570	S-DSS-00163 The SDSRV CI shall accept and process Update Metadata Requests that request the update of the QA Attributes for specified data granules.	Completed
ECS-L4-14571	S-DSS-00165 The SDSRV CI shall update Granule Inventory Metadata as specified by valid Update Metadata Requests.	Completed
ECS-L4-14572	S-DSS-00168 The SDSRV CI shall accept inventory searches from the local MTMGW CI.	Completed
ECS-L4-14573	S-DSS-00169 The SDSRV CI shall interface with the local MTMGW CI to return inventory search results for the searches the MTMGW CI submitted.	Completed
ECS-L4-14574	S-DSS-00170 The SDSRV CI shall accept and process Search Requests to search the Granule Inventory Metadata for the data types listed in the Data Type Services Matrix.	Completed
ECS-L4-14575	S-DSS-00171 The SDSRV CI shall provide spatial searching with polygonal search areas.	Completed
ECS-L4-14576	S-DSS-00172 The SDSRV CI shall provide storage of polygonal (store Gpolygon) spatial extents.	Completed
ECS-L4-14577	S-DSS-00173 The SDSRV CI shall accept polygons and process them using the assumption that points are ordered in a clockwise direction when viewed from above the earth.	Completed
ECS-L4-14578	S-DSS-00174 The SDSRV CI shall process polygons according to the "Right Hand Inside" rule. This rule states that the inside of the polygon is to the right of each directed arc when viewed from above the earth's surface.	Completed
ECS-L4-14579	S-DSS-00175 The SDSRV CI shall be capable of storing an entire orbit of data as the spatial extent of a granule represented with the Gpolygon data type.	Completed
ECS-L4-14580	S-DSS-00177 The SDSRV CI shall assume orient polygon points are in a clockwise direction when inserting and distributing polygon metadata data.	Completed
ECS-L4-14581	S-DSS-00178 The SDSRV CI shall support metadata queries containing a spatial constraint along with a specified factor in units of miles or kilometers for expanding the extent of the spatial literal.	Completed
ECS-L4-14582	S-DSS-00180 The SDSRV CI shall accept and process Data Requests for Data Products that are produced on demand.	Completed
ECS-L4-14583	S-DSS-00181 The SDSRV CI shall provide spatial search constraints based upon LLBOX spatial extents.	Completed
ECS-L4-14584	S-DSS-00182 The SDSRV CI shall support spatial extents [LLBOX] defined as lines of constant latitude and longitude, up to and including whole Earth. (I.e., +90 degrees to -90 degrees latitude, +180 degrees to -180 degrees longitude).	Completed
ECS-L4-14585	S-DSS-00183 The SDSRV CI shall provide storage of LLBOX spatial extents.	Completed
ECS-L4-14586	S-DSS-00184 The SDSRV CI shall support LLBOX search constraints that cross the +180 degrees to -180 degrees longitude discontinuity.	Completed
ECS-L4-14587	S-DSS-00185 The SDSRV CI shall support LLBOX interpretation of existing Metadata stored with the BoundingRectangle datatype.	Completed
ECS-L4-14588	S-DSS-00186 The SDSRV shall support the definition of predefined spatial extents to aid in spatial searching.	Completed
ECS-L4-14589	S-DSS-00187 The SDSRV shall provide capabilities to populate the SDSRV DsMdOrbitPolygons table with polygon definitions for an instrument.	Completed
ECS-L4-14590	S-DSS-00188 The SDSRV shall support predefined spatial extents that are associated with a specific instrument and platform.	Completed

ID	Title	Status
ECS-L4-14591	S-DSS-00189 The SDSRV shall support predefined spatial extents for GLAS data types that are characterized by a track number that corresponds to a prespecified spacecraft orbit, and a block number that corresponds to a spatial extent along the track.	Completed
ECS-L4-14592	S-DSS-00190 The SDSRV shall support predefined spatial extents for AMSR data types that are characterized by a track number that corresponds to a prespecified spacecraft orbit, and a block number that corresponds to a spatial extent along the track.	Completed
ECS-L4-14593	S-DSS-00191 The SDSRV CI shall notify the user whenever the operations staff cancels the user's Data Request.	Completed
ECS-L4-14594	S-DSS-00192 The SDSRV shall support the association of inserted GLAS granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region.	Completed
ECS-L4-14595	S-DSS-00193 The SDSRV shall support the association of inserted AMSR granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region	Completed
ECS-L4-14596	S-DSS-00194 The SDSRV shall validate the set of NOSE track numbers and start/end block numbers associated with a granule at the time of insertion against the predefined values defined within SDSRV for spatial extent definitions.	Completed
ECS-L4-14597	S-DSS-00195 The SDSRV shall for spatial searching for those instruments for which predefined spatial extents are defined, provide the capability to support the translation of user specified spatial search regions into one or more prespecified instrument standard spatial extents.	Completed
ECS-L4-14598	S-DSS-00210 The SDSRV CI shall provide operations staff the capability to update the Priority Information for any entry in the Service Request List.	Completed
ECS-L4-14599	S-DSS-00220 The SDSRV CI shall provide operations staff the capability to issue Cancellation Requests for any Service Request in the Service Request List.	Completed
ECS-L4-14600	S-DSS-00222 The SDSRV CI shall provide the operations staff the capability to assign, for each data type, an Archive ID which maps to a physical storage location for that data type.	Completed
ECS-L4-14601	S-DSS-00226 The SDSRV CI shall provide operations staff the capability to display the file name, status, size, archive location, and back up locations associated with a data product.	Completed
ECS-L4-14602	S-DSS-00230 The SDSRV CI shall provide the user the capability to issue Cancellation Requests for the user's own Service Requests.	Completed
ECS-L4-14603	S-DSS-00250 The SDSRV CI shall provide an application program interface for the submission of Service Requests.	Completed
ECS-L4-14604	S-DSS-00251 The SDSRV CI GUI shall have a common look and feel within the interface and with other ECS user interfaces as defined by the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-14605	S-DSS-00255 The SDSRV CI GUI shall provide for user effectiveness and satisfaction as defined by the overarching principles in the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-14606	S-DSS-00264 The SDSRV CI shall provide the capability which permits DAAC operations staff to link special subsetting capabilities into a Science Data Server.	Completed

ID	Title	Status
ECS-L4-14607	S-DSS-00310 The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.	Completed
ECS-L4-14608	S-DSS-00320 The SDSRV CI shall, upon the completion of an attempt to cancel a Service Request, notify the client that issued the Cancellation Request that the specified Service Request was either canceled or was processed to completion before it could be canceled.	Completed
ECS-L4-14609	S-DSS-00330 The SDSRV CI shall record Request Identifiers to be used for accounting purposes.	Completed
ECS-L4-14610	S-DSS-00331 The SDSRV CI shall record the User Identifier of the science investigator associated with a Service Request, to be used for accounting purposes.	Completed
ECS-L4-14611	S-DSS-00332 The SDSRV CI shall record the amount of user storage associated with a science user, to be used for accounting purposes.	Completed
ECS-L4-14612	S-DSS-00333 The SDSRV CI shall record the amount of connect time associated with a science user, to be used for accounting purposes.	Completed
ECS-L4-14613	S-DSS-00340 The SDSRV CI shall record the level of CPU utilization for each Service Request to be used for accounting.	Completed
ECS-L4-14614	S-DSS-00350 The SDSRV CI shall record the level of I/O utilization for each Service Request to be used for accounting.	Completed
ECS-L4-14615	S-DSS-00360 The SDSRV CI shall record, for accounting purposes, a fixed personnel cost for Service Requests requiring interaction with operations staff.	Completed
ECS-L4-14616	S-DSS-00370 The SDSRV CI shall record a archival storage cost based on the number of bytes stored, to be used for accounting.	Completed
ECS-L4-14617	S-DSS-00375 The SDSRV CI shall associate User Accounting Information with client sessions.	Completed
ECS-L4-14618	S-DSS-00376 The SDSRV CI shall provide User Accounting Information to the System Management Subsystem, using MSS application program interfaces.	Completed
ECS-L4-14619	S-DSS-00377 The SDSRV CI shall register its managed objects using CSS registration services.	Completed
ECS-L4-14620	S-DSS-00378 Operations staff shall be able to distribute SDSRV utilization reports electronically or in hard copy or on electronic media.	Completed
ECS-L4-14621	S-DSS-00400 The SDSRV CI shall accept pricing information, based on disk, CPU and media utilization, from CSMS.	Completed
ECS-L4-14622	S-DSS-00410 The SDSRV CI shall provide actual cost information by the completion of a Service Request.	Completed
ECS-L4-14623	S-DSS-00450 The SDSRV CI shall provide Advertisements that indicate the types of data available from the Data Server.	Completed
ECS-L4-14624	S-DSS-00460 The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.	Completed
ECS-L4-14625	S-DSS-00470 The SDSRV CI shall log all access to data in a Data Access Log.	Completed
ECS-L4-14626	S-DSS-00480 The SDSRV CI shall provide the capability for operations staff to view the Data Access Log.	Completed
ECS-L4-14627	S-DSS-00500 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.	Completed
ECS-L4-14628	S-DSS-00510 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.	Completed

ID	Title	Status
ECS-L4-14629	S-DSS-00520 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.	Completed
ECS-L4-14631	S-DSS-00550 The SDSRV CI shall provide the capability for operations staff to view the Metadata Database Schema.	Completed
ECS-L4-14632	S-DSS-00560 The SDSRV CI shall provide the capability for operations staff to create the Metadata Database Schema.	Completed
ECS-L4-14633	S-DSS-00570 The SDSRV CI shall provide the capability for operations staff to update the Metadata Database Schema.	Completed
ECS-L4-14634	S-DSS-00580 The SDSRV CI shall provide the operations staff the capability to identify the EDOS PDS ID(s) associated with any lost EDOS Level 0 or Level 1A data granules.	Completed
ECS-L4-14635	S-DSS-00610 The SDSRV CI shall provide the capability for operations staff to delete the Metadata Database Schema.	Completed
ECS-L4-14636	S-DSS-00620 The SDSRV CI shall categorize messages to the operations staff into informational, warning or error categories.	Completed
ECS-L4-14637	S-DSS-00630 The SDSRV CI shall notify operations staff of any system error or fault detected by the CI.	Completed
ECS-L4-14638	S-DSS-00640 The SDSRV CI shall report to operations staff all detected device errors, file errors, and abnormal database errors associated with attempts to access the Metadata Database.	Completed
ECS-L4-14639	S-DSS-00695 The SDSRV CI shall provide the capability to receive directories from the STMGT of all data stored by the STMGT.	Completed
ECS-L4-14640	S-DSS-00710 The SDSRV CI shall accept and process valid, authenticated Data Requests, from any source, via the Data Request API.	Completed
ECS-L4-14641	S-DSS-00715 The SDSRV CI shall provide users the capability to insert and retrieve data, within a given DAAC, without requiring the user to specify the location of the data within the DAAC.	Completed
ECS-L4-14642	S-DSS-00736 The SDSRV CI shall have the capability to receive and manage the storage of Predicted Data Availability Schedules.	Completed
ECS-L4-14643	S-DSS-00738 The SDSRV CI shall provide the capability to retrieve Predicted Data Availability Schedules.	Completed
ECS-L4-14644	S-DSS-00760 The SDSRV CI shall provide application program interfaces to all the operator functions.	Completed
ECS-L4-14645	S-DSS-00790 The STMGT CI shall provide tools to analyze the performance of the storage system when such tools are supplied by the FSMS vendor.	Completed
ECS-L4-14646	S-DSS-00800 The SDSRV CI shall provide tools to monitor and tune the performance of the Metadata Database when such tools are supplied by the database vendor.	Completed
ECS-L4-14647	S-DSS-00812 The SDSRV CI shall provide a configuration controlled API for its data search services.	Completed
ECS-L4-14648	S-DSS-00813 The database management software used by the SDSRV CI to manage and access product metadata shall offer an API that can be used to develop DAAC-unique metadata search and access services which by pass the SDSRV CI custom software.	Completed
ECS-L4-14649	S-DSS-00815 The SDSRV CI shall request user profile data from the MSS Accountability Management Service.	Completed
ECS-L4-14650	S-DSS-00823 The SDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	Completed

ID	Title	Status
ECS-L4-14651	S-DSS-00825 The SDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	Completed
ECS-L4-14652	S-DSS-00835 The STMGT CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.	Completed
ECS-L4-14653	S-DSS-00837 The STMGT CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.	Completed
ECS-L4-14654	S-DSS-00850 The SDSRV CI shall utilize a CSS authorization service to verify that a user is authorized to access DSS services and resources.	Completed
ECS-L4-14655	S-DSS-00860 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.	Completed
ECS-L4-14656	S-DSS-00900 The SDSRV CI shall support the interruption of a data base administrative or maintenance activity and its restart without loss of information.	Completed
ECS-L4-14657	S-DSS-00901 The SDSRV CI shall provide tools for database backup and restore.	Completed
ECS-L4-14658	S-DSS-00902 The SDSRV CI shall provide a database management capability that maintains database integrity during concurrent user interactions.	Completed
ECS-L4-14659	S-DSS-00905 The SDSRV CI shall provide tools for the incremental backup of the Metadata Database.	Completed
ECS-L4-14660	S-DSS-00940 The SDSRV CI shall direct the retrieval and distribution of the data files, associated with each granule requested in a valid Data Request, using the Logical File Location for each file.	Completed
ECS-L4-14661	S-DSS-00965 The SDSRV CI shall provide the capability to direct the retrieval and distribution of any data granules listed in the Granule Inventory Metadata, as specified by valid Data Request.	Completed
ECS-L4-14662	S-DSS-00990 The SDSRV CI operations staff shall have the capability to receive from the SMC, directives for integration, testing, and simulation.	Completed
ECS-L4-14663	S-DSS-00995 The AIM Archive consistency check service shall provide the capability to verify that all science granule XML metadata files listed within the Inventory database are present within the Metadata archive directories specified.	Completed
ECS-L4-14664	S-DSS-01000 The AIM Archive consistency check service shall provide the capability to verify that all science granule files listed within the Inventory database are present within the Science data directories.	Completed
ECS-L4-14665	S-DSS-01010 The AIM Archive consistency check service shall provide the capability to identify files in the Science data directories that are not represented within the Inventory database.	Completed
ECS-L4-14666	S-DSS-01020 The AIM Archive consistency check service shall provide the capability to identify files in the XML metadata file directories that are not represented within the Inventory database.	Completed
ECS-L4-14667	S-DSS-01030 The AIM Archive consistency check service shall be able to accommodate multiple volume group history sets when checking the archive against the inventory database.	Completed
ECS-L4-14668	S-DSS-01040 The AIM CI shall provide storage for the metadata associated with all data types specified in the Data Type Services Matrix.	Completed
ECS-L4-14669	S-DSS-01050 The AIM CI shall assume oriented polygon points are in a clockwise direction when inserting polygon metadata data.	Completed

ID	Title	Status
ECS-L4-14670	S-DSS-01060 The AIM CI shall maintain Granule Inventory Metadata for each stored data granule in accordance with the Release B data model.	Completed
ECS-L4-14671	S-DSS-01070 The AIM CI shall maintain Collection Metadata, for standard products, containing key organizations and personnel for all product-related DAACs, ADCs, and ODCs.	Completed
ECS-L4-14672	S-DSS-01080 The SDSRV CI shall notify operations staff in the event that data required for an on-demand data production is not accessible.	Completed
ECS-L4-14673	S-DSS-01090 The SDSRV CI shall maintain a Service Request List that lists received Service Requests, associated Priority Information, and all other information required to process each request.	Completed
ECS-L4-14674	S-DSS-01120 The SDSRV CI shall provide the capability to manage multiple Service Requests from clients.	Completed
ECS-L4-14675	S-DSS-01130 The SDSRV CI shall provide the capability to process Service Requests asynchronously.	Completed
ECS-L4-14676	S-DSS-01140 The SDSRV CI shall provide the capability to list and status, Service Requests initiated by a client.	Completed
ECS-L4-14677	S-DSS-01150 The SDSRV CI shall log all Service Requests entered during a client session.	Completed
ECS-L4-14678	S-DSS-01155 The SDSRV CI shall log all updates to the Metadata Database in a Database Transaction Log.	Completed
ECS-L4-14679	S-DSS-01160 The SDSRV CI shall accept Status Requests from the client and provide the requested status, asynchronously, during the execution of a Search Request.	Completed
ECS-L4-14680	S-DSS-01170 The SDSRV CI shall provide the capability to monitor resource utilization on a client basis.	Completed
ECS-L4-14681	S-DSS-01190 The SDSRV CI shall provide the capability for operations staff to view the resources used and allocated by a client.	Completed
ECS-L4-14682	S-DSS-01200 The SDSRV CI shall notify the requester in the event that an on-demand data production cannot be completed.	Completed
ECS-L4-14683	S-DSS-01212 The SDSRV CI shall accept and process Status Requests, for the status of any specified Data Request, and provide Data Request Status to the requesting client as a result.	Completed
ECS-L4-14684	S-DSS-01215 The DDIST CI shall accept and represent the MD5 checksum value in the form of a 32-character lowercase hexadecimal string.	Completed
ECS-L4-14685	S-DSS-01220 The SDSRV CI shall process Suspend Requests and, as a result, suspend the processing of a specified user session.	Completed
ECS-L4-14686	S-DSS-01290 The SDSRV CI shall provide the capability for the operations staff to suspend all active client sessions.	Completed
ECS-L4-14687	S-DSS-01300 The SDSRV CI shall provide the capability for the operations staff to resume any or all client sessions, previously suspended by operations staff or clients.	Completed
ECS-L4-14688	S-DSS-01310 The SDSRV CI shall process Resume Requests and, as a result, resume the processing of a specified user session that was previously suspended.	Completed
ECS-L4-14689	S-DSS-01320 The SDSRV CI shall provide the capability for the operations staff to terminate any or all active or suspended client sessions.	Completed
ECS-L4-14690	S-DSS-01322 The SDSRV CI shall provide the capability for the operations staff to terminate an active client session.	Completed
ECS-L4-14691	S-DSS-01365 The SDSRV CI shall provide operations staff the capability to recover the Metadata Database using the database backup and the Database Transaction Log.	Completed

ID	Title	Status
ECS-L4-14692	S-DSS-01375 The SDSRV CI shall provide the capability to compare directories, received from the STMGT CI, with Granule Inventory Metadata.	Completed
ECS-L4-14693	S-DSS-01385 The SDSRV CI shall restrict the capability to update Granule Inventory Metadata that is not user-searchable to the operations staff only.	Completed
ECS-L4-14694	S-DSS-01400 The SDSRV CI shall provide the capability to log, to the Event Log, the completion of each Service Request.	Completed
ECS-L4-14695	S-DSS-01405 The SDSRV CI shall log the termination of client session.	Completed
ECS-L4-14696	S-DSS-01410 The SDSRV CI shall log the suspension of the processing of a Service Request or the suspension of a client session.	Completed
ECS-L4-14697	S-DSS-01415 The SDSRV CI shall log, to the Event Log, failures to successfully complete Service Requests, and shall log the reason for such failures.	Completed
ECS-L4-14698	S-DSS-01420 The SDSRV CI shall log the resumption of a previously suspended Service Request or client session.	Completed
ECS-L4-14699	S-DSS-01425 The SDSRV CI shall log, to the Event Log, those Service Requests that fail authorization, the service requested, and the identity of the requesting user.	Completed
ECS-L4-14700	S-DSS-01430 The SDSRV CI shall provide the capability to log, to the Event Log, the initiation of each Service Request.	Completed
ECS-L4-14701	S-DSS-01435 The SDSRV CI shall log, to the Event Log, the successful completion of Data Insert Requests.	Completed
ECS-L4-14702	S-DSS-01440 The SDSRV CI shall provide client Session Status Information to the requester.	Completed
ECS-L4-14703	S-DSS-01445 The SDSRV CI shall log the following when archived data is inserted, updated, deleted, or accessed: a. User Identifier b. Data and time of the operation performed c. The identity of the data	Completed
ECS-L4-14704	S-DSS-01450 The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.	Completed
ECS-L4-14705	S-DSS-01476 The SDSRV CI shall submit requests to the Subscription Service to register a subscribable event.	Completed
ECS-L4-14706	S-DSS-01478 The SDSRV CI shall submit requests to the Subscription Service to register a subscribable event with qualifiers.	Completed
ECS-L4-14707	S-DSS-01492 The SDSRV CI shall notify the Subscription Service when a subscribable event is triggered.	Completed
ECS-L4-14708	S-DSS-01500 The SDSRV CI shall provide a command line utility for the deletion of granules.	Completed
ECS-L4-14709	S-DSS-01505 The SDSRV CI shall permit an ECS operator to perform granule deletions while it performs other requests concurrently.	Completed
ECS-L4-14710	S-DSS-01510 The SDSRV CI shall permit an ECS operator to select, via command line parameters, products for deletion by providing either of the following: 1. ESDT short name, ESDT version, and granule temporal coverage or granule insert time range; or 2. the name of a granule deletion input file listing the granules to be deleted.	Completed
ECS-L4-14711	S-DSS-01515 The SDSRV CI shall be able to process a granule deletion input file that contains either of the following formatted as one input line per granule: 1. ESDT short name, version and local granule Ids; or 2. SDSRV granule IDs(geoIDs).	Completed

ID	Title	Status
ECS-L4-14712	S-DSS-01520 The SDSRV CI shall permit an ECS operator to include the inventory metadata in the deletion, or exclude the metadata from the deletion (i.e., cause a physical delete or only a delete from archive) via a command line parameter.	Completed
ECS-L4-14713	S-DSS-01525 The SDSRV CI shall display to the ECS operator the number of granules which have been selected for deletion before performing the deletion.	Completed
ECS-L4-14714	S-DSS-01530 The SDSRV CI shall, by default, prompt the operator for confirmation after displaying the number of granules selected for deletion prior to performing the deletion.	Completed
ECS-L4-14715	S-DSS-01535 The SDSRV CI shall allow the operator to request suppression of confirmation prompts via a command line parameter.	Completed
ECS-L4-14716	<p>S-DSS-01537 The SDSRV CI shall allow the operator to request via a command line parameter that the following information be listed for each of the selected granules, prior to the display of the total number of granules selected for deletion, and on a separate line for each: 1. SDSRV granule ID (geoIDs) 2. Local granule ID (if non-NULL)</p> <p>Clarification: The granules being listed will be those directly selected by the command. It will not include QA, PH, and BROWSE granules that might be deleted indirectly because they are no longer referenced (assuming the operator chose this option). The geoID includes the ESDT shortname and version. The intent of the requirement is to allow the operator to test delete scripts by verifying what granules the script would select for deletion, without actually performing the deletion.</p>	Completed
ECS-L4-14717	S-DSS-01540 The SDSRV CI shall perform the requested granule deletion immediately after operator confirmation.	Completed
ECS-L4-14718	S-DSS-01542 The SDSRV CI shall make physically deleted granules inaccessible for normal SDSRV access commands.	Completed
ECS-L4-14719	S-DSS-01545 The SDSRV CI shall, by default, delete the BROWSE, QA, and PH granules referenced by a granule when performing a physical delete, if they are not referenced by any other granule.	Completed
ECS-L4-14720	S-DSS-01546 The SDSRV CI shall permit an ECS operator to suppress deletion of the BROWSE, QA, PH via command line option.	Completed
ECS-L4-14721	<p>S-DSS-01550 The SDSRV CI shall, by default, not physically delete granules that are being referenced as inputs by other granules.</p> <p>Clarification: For a complete physical deletion, products need to be deleted in the correct order - a granule cannot be physically deleted while it is still being referenced as an input granule. The check needs to handle UR and LGID-formatted input pointers. Note: For performance reasons, the dependency check may be performed before the deletion starts, i.e., granules being deleted by the same command will not be considered deleted.</p>	Completed
ECS-L4-14722	S-DSS-01552 The SDSRV CI shall permit an ECS operator to request via command line option that granules be included in a physical delete even if they are still referenced as inputs by other granules.	Completed
ECS-L4-14723	S-DSS-01555 The SDSRV CI shall allow the operator to specify on the command line the name of a separate granule deletion log file that is accessible to the deletion utility.	Completed
ECS-L4-14724	S-DSS-01556 The SDSRV CI shall append output to the granule deletion log file if it already exists, or create it if it does not.	Completed

ID	Title	Status
ECS-L4-14725	S-DSS-01560 The SDSRV CI shall log all deletion requests in the application log and in a separate granule deletion log file specified by the operator.	Completed
ECS-L4-14726	S-DSS-01565 The SDSRV CI shall log all delete errors in the application log and in a separate granule deletion log file specified by the operator.	Completed
ECS-L4-14727	S-DSS-01570 The SDSRV CI shall log for each deleted science granule: 1. Date and time 2. the (Unix- or MSS-) ID of the requesting user 3. the ESDT short name, ESDT version and granule ID of the deleted granule	Completed
ECS-L4-14728	S-DSS-01575 The SDSRV CI shall log for each non-science granule being deleted: 1. Date and time 2. the (Unix- or MSS-) ID of the requesting user 3. the ESDT short name, ESDT version and granule ID of the deleted granule	Completed
ECS-L4-14729	S-DSS-01577 The SDSRV CI shall include in the log for each granule deletion error: 1. Date and time 2. the (Unix- or MSS-) ID of the requesting user 3. the ESDT short name, ESDT version and granule ID of the affected granule 4. nature of the error	Completed
ECS-L4-14730	S-DSS-01580 The SDSRV CI shall perform delete operations such that they can be restarted and completed successfully if they are interrupted by a fault.	Completed
ECS-L4-14731	S-DSS-01582 The SDSRV shall handle situations where it encounters an invalid granule or archive file reference, e.g., because a concurrent or previous deletion removed the granule from the inventory and/or archive, in a graceful manner by: 1. rejecting requests that reference non-existent granules; or 2. logging an error and terminating a request that encounters an invalid granule reference with an appropriate fatal response, if it is synchronous; or 3. logging an error and continuing a request that encounters an invalid granule reference for any other granules  Clarification: For example: ' 1. If a client attempts to add a UR to a SDSRV 'collection' and there is no corresponding granule in the inventory, the SDSRV will return an error. 2. If the SDSRV processes a synchronous ACQUIRE from PDPS and a reference granule is not found it will return a FATAL error. 3. If the SDSRV encounters an invalid granule reference while processing an asynchronous ACQUIRE request from an EDG user or a subscription action, it will ignore the reference and process the remainder of the granules (if any).	Completed
ECS-L4-14732	S-DSS-01585 The SDSRV CI shall provide a 'deletion cleanup' command line utility.	Completed
ECS-L4-14733	S-DSS-01588 The SDSRV CI deletion cleanup utility shall allow an operator to remove the inventory entries for granules that have been physically deleted and make their files as well as the files of granules that have been deleted from the archive eligible for removal from the archive.	Completed
ECS-L4-14734	S-DSS-01590 The SDSRV CI deletion cleanup utility shall require an ECS operator to specify via command line parameter a deletion lag time in days, including a lag time of 0 (zero).	Completed
ECS-L4-14735	S-DSS-01595 The SDSRV CI shall remove the inventory entries of granules whose physical deletion occurred before the lag time, and not remove the inventory entries of granules whose deletion occurred after the lag time.	Completed
ECS-L4-14736	S-DSS-01600 The SDSRV CI shall provide the list of files eligible for removal from the archive to the STMGT CI.	Completed

ID	Title	Status
ECS-L4-14737	S-DSS-01603 The SDSRV CI shall include in the list of files eligible for removal from the archive the following information: 1. ESDT shortname 2. ESDT version ID 3. granule insert time 4. internal file name 5. effective date of deletion	Completed
ECS-L4-14738	S-DSS-01605 The SDSRV CI shall include in the list of files eligible for removal from the archive: 1. the files of granules whose inventory entries are being removed 2. the files of granules whose 'deletion from archive' occurred prior to the lag time	Completed
ECS-L4-14739	S-DSS-01610 The SDSRV CI shall create a separate error log recording all errors that occur while attempting to remove inventory entries for deleted granules, and write that error log to a new file or append it to an existing file whose name is specified by the operator via a command line parameter.	Completed
ECS-L4-14740	S-DSS-01615 The SDSRV CI shall display the number of granules whose inventory entries will be removed and the number of granules whose files will be made eligible for deletion from the archive, and then prompt the operator for confirmation before performing the removal.	Completed
ECS-L4-14741	S-DSS-01620 The SDSRV CI shall be capable of recovering from errors that may occur while executing the deletion cleanup utility such that inventory entries or files for deleted granules can be correctly processed by subsequent executions of the utility, and incompletely processed inventory entries (if any) do not cause ECS faults.	Completed
ECS-L4-14742	S-DSS-01625 The SDSRV CI shall provide a capability to insert into the inventory database, the following optional attributes as part of the collection level metadata: (1) user's guide URL (2) user's guide URL comment (3) miscellaneous information URL (4) miscellaneous information URL comment (5) disclaimer URL. .	Completed
ECS-L4-14743	S-DSS-01630 The SDSRV CI shall provide a capability to update the following optional attributes as part of the collection level metadata in the inventory database: (1) user's guide URL (2) user's guide URL comment (3) miscellaneous information URL (4) miscellaneous information URL comment (5) disclaimer URL.	Completed
ECS-L4-14744	S-DSS-01635 The SDSRV CI shall provide a capability to retrieve the following optional attributes as part of the collection level metadata in the inventory database: (1) user's guide URL (2) user's guide URL comment (3) miscellaneous information URL (4) miscellaneous information URL comment (5) disclaimer URL.	Completed
ECS-L4-14747	S-DSS-01680 The SDSRV Command Line Interface shall accept FTP Push distribution requests and associated parameters.	Completed
ECS-L4-14748	S-DSS-01681 The SDSRV Command Line Interface shall include the FTP Push parameters in the ACQUIRE request it submits to the SDSRV	Completed
ECS-L4-14749	S-DSS-01682 The SDSRV Command Line Interface shall accept an ECSUSERPROFILE parameter.	Completed
ECS-L4-14750	S-DSS-01683 The SDSRV Command Line Interface shall include the ECSUSERPROFILE parameter in the SDSRV ACQUIRE request it submits.	Completed
ECS-L4-14751	S-DSS-01684 The SDSRV Command Line Interface shall accept a PRIORITY parameter.	Completed
ECS-L4-14752	S-DSS-01685 The SDSRV Command Line Interface shall include the PRIORITY parameter in the SDSRV ACQUIRE request it submits.	Completed
ECS-L4-14753	S-DSS-01686 The SDSRV Command Line Interface shall accept an UserString parameter.	Completed

ID	Title	Status
ECS-L4-14754	S-DSS-01687 The SDSRV Command Line Interface shall include the UserString parameter in the SDSRV ACQUIRE request it submits.	Completed
ECS-L4-14755	S-DSS-01688 The SDSRV Command Line Interface shall accept an DDISTNOTIFYTYPE and a NOTIFY parameter.	Completed
ECS-L4-14756	S-DSS-01689 The SDSRV Command Line Interface shall include the DDISTNOTIFYTYPE and a NOTIFY parameters in the SDSRV ACQUIRE request it submits.	Completed
ECS-L4-14757	S-DSS-01690 The SDSRV Command Line Interface shall accept a tag parameter.	Completed
ECS-L4-14758	S-DSS-01691 The SDSRV Command Line Interface shall use the tag parameter to generate an rpcID for the SDSRV ACQUIRE request it submits.	Completed
ECS-L4-14759	S-DSS-01692 The SDSRV Command Line Interface shall accept a list of up to 100 granule identifiers that represent the granules to be acquired.	Completed
ECS-L4-14760	S-DSS-01693 The SDSRV Command Line Interface shall accept granule identifiers specified in V0/DORRAN format (example: 'SC:L70RWRS.001:2000022933').	Completed
ECS-L4-14761	S-DSS-01694 The SDSRV Command Line Interface shall submit an ACQUIRE command for the identified granules.	Completed
ECS-L4-14762	S-DSS-01695 The SDSRV Command Line Interface shall accept requests for a single Landsat floating scene and its associated subsetting parameters.	Completed
ECS-L4-14763	S-DSS-01696 Upon receipt of a Landsat floating scene request, the SDSRV Command Line Interface shall submit a corresponding Landsat floating scene subsetting request to the SDSRV.	Completed
ECS-L4-14764	S-DSS-01697 The SDSRV Command Line Interface shall be able to accept requests from multiple PDS instances that may employ different user profiles.	Completed
ECS-L4-14765	S-DSS-01698 The SDSRV Command Line Interface shall be able to accept requests for a designated mode.	Completed
ECS-L4-14766	S-DSS-01699 It shall be possible to submit several requests in a given mode via the SDSRV Command Line Interface concurrently.	Completed
ECS-L4-14767	S-DSS-01700 It shall be possible to submit requests via the SDSRV Command Line Interface in several different modes concurrently.	Completed
ECS-L4-14768	S-DSS-01760 The SDSRV CI shall log all detected errors, as they occur.	Completed
ECS-L4-14769	S-DSS-01785 The SDSRV CI shall accept and process Cancellation Requests for the cancellation of a specified Service request in the Service Request List.	Completed
ECS-L4-14770	S-DSS-01790 The SDSRV CI shall provide access to compound data type services.	Completed
ECS-L4-14771	S-DSS-01840 The SDSRV CI shall accept and validate Data Requests per hour as derived from Reference Table: TBD.	Completed
ECS-L4-14772	S-DSS-01850 The SDSRV CI shall be capable of supporting 200% growth in the number of Data Requests it accepts and validates without architecture or design change.	Completed
ECS-L4-14773	S-DSS-01860 The SDSRV CI shall support making stored Data Products available on physical media within 24 hours of receipt of a Media Distribution Request.	Completed
ECS-L4-14774	S-DSS-01861 The SDSRV CI shall direct the DDIST CI to distribute data and metadata, via physical media, if specified by a valid Media Distribution Request.	Completed
ECS-L4-14775	S-DSS-01865 The SDSRV CI shall provide Priority Information for each Data Distribution Request to the DDIST CI.	Completed

ID	Title	Status
ECS-L4-14776	S-DSS-01866 The SDSRV CI shall accept secure copy as a valid electronic media type in its acquire requests.	Completed
ECS-L4-14777	S-DSS-01867 The SDSRV CI shall direct the DDIST CI to transmit data and metadata electronically, via ftp, if specified by a valid Electronic Distribution Request.	Completed
ECS-L4-14778	S-DSS-01868 The SDSRV CI shall direct the DDIST CI to transmit data and metadata electronically, via secure copy, if specified by a valid Electronic Distribution Request.	Completed
ECS-L4-14779	S-DSS-01869 The SDSRV CI shall direct the DDIST CI to stage the data and metadata in the User Pull Area if specified by a valid Electronic Distribution Request.	Completed
ECS-L4-14780	S-DSS-01870 The SDSRV CI shall support distributing product QA data produced at the collocated Data Processing Subsystem within 1 hour from the time it is ready.	Completed
ECS-L4-14781	S-DSS-01880 The SDSRV CI shall be capable of making archive data associated with a predefined ECS standard format available to the network in that format, based on conditions 1 & 2 of the F&PRS DADS3125 requirement, in less than 5 minutes.	Completed
ECS-L4-14782	S-DSS-01890 The SDSRV CI shall be capable of retrieving and making a limited amount of data available to the communications network for electronic delivery in less than 60 seconds based on conditions 1, 2 and 3 of the F&PRS DADS3126 requirement.	Completed
ECS-L4-14783	S-DSS-01900 The SDSRV CI 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 Reference Table: TBD.	Completed
ECS-L4-14784	S-DSS-01910 The SDSRV CI 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 Reference Table: TBD.	Completed
ECS-L4-14785	S-DSS-01920 The SDSRV CI 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 Reference Table: TBD.	Completed
ECS-L4-14788	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.	Completed
ECS-L4-14789	S-DSS-01980 The AIM CI shall have the ability to store product specific Metadata within the XML metadata files.	Completed
ECS-L4-14790	S-DSS-01990 The AIM CI shall store and maintain Granule Inventory Metadata that references granule-related QA and validation Data.	Completed
ECS-L4-14791	S-DSS-01995 The AIM CI shall store and maintain Granule Inventory Metadata that references granule-related Production History Data.	Completed
ECS-L4-14792	S-DSS-02010 The ACMHW CI shall be sized to support the number of operations/second derived from Reference Table: TBD.	Completed
ECS-L4-14793	S-DSS-02020 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.	Completed
ECS-L4-14794	S-DSS-02030 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.	Completed

ID	Title	Status
ECS-L4-14795	S-DSS-02040 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.	Completed
ECS-L4-14796	S-DSS-02041 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.	Completed
ECS-L4-14797	S-DSS-02042 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.	Completed
ECS-L4-14798	S-DSS-02043 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.	Completed
ECS-L4-14799	S-DSS-02044 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.	Completed
ECS-L4-14800	S-DSS-02045 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.	Completed
ECS-L4-14801	S-DSS-02046 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.	Completed
ECS-L4-14802	S-DSS-02047 The maximum down time of the ACMHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	Completed
ECS-L4-14803	S-DSS-02050 The AIM CI shall restrict the capability to 'directly' update XML metadata files in the XML Archive to the operations staff only.	Completed
ECS-L4-14804	S-DSS-02060 The AIM CI shall store and maintain Granule Inventory Metadata that references granule-related QA Statistics within the XML metadata files.	Completed
ECS-L4-14805	S-DSS-02070 The AIM CI shall store and maintain metadata for granules that contain Navigation Data, including Spacecraft Orbit and Attitude Data.	Completed
ECS-L4-14806	S-DSS-02080 The AIM CI shall store and maintain metadata for granules that contain Ancillary Data.	Completed
ECS-L4-14807	S-DSS-02090 The AIM CI shall store and maintain metadata for granules that contain Calibration Data.	Completed
ECS-L4-14808	S-DSS-02100 The AIM CI shall store and maintain metadata for granules that contain Instrument Engineering Data.	Completed
ECS-L4-14809	S-DSS-02110 The AIM CI shall store and maintain Metadata that identifies the data production facility for the product within the descriptor file associated with the ESDT.	Completed
ECS-L4-14810	S-DSS-02120 The AIM CI shall accept polygons and process them using the assumption that points are ordered in a clockwise direction when viewed from above the earth.	Completed

ID	Title	Status
ECS-L4-14811	S-DSS-02130 The AIM CI shall process polygons according to the 'Right Hand Inside' rule. This rule states that the inside of the polygon is to the right of each directed arc when viewed from above the earth's surface.	Completed
ECS-L4-14812	S-DSS-02140 The AIM CI shall be capable of storing an entire orbit of data as the spatial extent of a granule represented with the Gpolygon data type.	Completed
ECS-L4-14813	S-DSS-02150 The AIM CI shall be delivered with an MCF for each of the following data types: Browse, and Delivered Algorithm Package.	Completed
ECS-L4-14814	S-DSS-02160 The AIM ESDT Maintenance GUI shall allow the operator to add new data types (ESDTs) into the system.	Completed
ECS-L4-14815	S-DSS-02170 The AIM ESDT Maintenance GUI shall authenticate the operator before allowing any operations.	Completed
ECS-L4-14816	S-DSS-02180 The AIM ESDT Maintenance GUI shall provide operations staff with the ability to update ESDTs by adding collection metadata, inventory metadata, events and new qualifiers on existing events.	Completed
ECS-L4-14817	S-DSS-02190 The AIM ESDT Maintenance GUI shall provide the operations staff with the ability to update ESDTs by replacing non-restricted collection attributes.	Completed
ECS-L4-14818	S-DSS-02200 The AIM ESDT Maintenance GUI shall provide operations staff with the ability to update ESDTs by changing a mandatory attribute to optional or updating single-valued collection metadata, multi-valued collection metadata, inventory metadata, attributes of collection-related entities and service signatures	Completed
ECS-L4-14819	S-DSS-02210 The AIM ESDT Maintenance GUI shall, when updating an ESDT, allow the addition of optional Inventory attributes.	Completed
ECS-L4-14820	S-DSS-02220 The AIM ESDT Maintenance GUI shall, when processing a request to update an ESDT, fail the request if the new descriptor file is missing any Inventory attribute defined in the installed version of the descriptor.	Completed
ECS-L4-14821	S-DSS-02230 The AIM ESDT Maintenance GUI shall reject attempts to update the following restricted attributes: ShortName and VersionID in the CollectionDescriptionClass Group, the AdditionalAttributeType associated with each AdditionalAttributeName, and spatialSearchType.	Completed
ECS-L4-14822	S-DSS-02240 The AIM ESDT Maintenance GUI shall, when updating an ESDT, include a prompt to the Operator stating that changes take affect only after the Ingest service is restarted.	Completed
ECS-L4-14823	S-DSS-02250 The AIM ESDT Maintenance GUI shall allow operators to delete existing data types (products) providing that 1) the ESDT doesn't contain any granules in the Inventory, 2) the ESDT is not defined within the Data Pool, 3) the Spatial Subscription service doesn't contain subscriptions referencing the ESDT.	Completed
ECS-L4-14824	S-DSS-02260 The AIM ESDT Maintenance GUI shall require the operator to specify a descriptor file, in ODL format, to define an ESDT as part of the ESDT Install or Update.	Completed
ECS-L4-14825	S-DSS-02270 The AIM ESDT Maintenance GUI shall allow configuration, in the application configuration file, of a directory for storing descriptor files.	Completed
ECS-L4-14826	S-DSS-02280 The AIM ESDT Maintenance GUI shall allow configuration, within the application configuration file, of a descriptor source directory to be used for identification of descriptor files to be processed.	Completed

ID	Title	Status
ECS-L4-14827	S-DSS-02290 The AIM ESDT Maintenance GUI shall, when installing or updating an ESDT, generate and store the ESDT specific granule schema file in the configured descriptor file location; replacing the schema file if present.	Completed
ECS-L4-14828	S-DSS-02300 The AIM ESDT Maintenance service shall, when updating an ESDT, replace the current descriptor file associated with the ESDT with the descriptor file provided with the update request.	Completed
ECS-L4-14829	S-DSS-02310 The AIM ESDT Maintenance GUI shall, when installing an ESDT, move the associated descriptor file from the installation source directory to the configured descriptor location.	Completed
ECS-L4-14830	S-DSS-02320 The AIM ESDT Maintenance GUI shall validate the descriptor file, included in the request to install an ESDT, to be consistent with the ECS Data Model.	Completed
ECS-L4-14831	S-DSS-02330 The AIM ESDT Maintenance GUI shall validate the descriptor file, included in the request to update an ESDT, to be consistent with the ECS Data Model.	Completed
ECS-L4-14832	S-DSS-02340 The ESDT Maintenance GUI shall display all errors and warnings found while validating the contents of the operator supplied descriptor file.	Completed
ECS-L4-14833	S-DSS-02350 The AIM ESDT Maintenance GUI shall fail the installation of an ESDT if validation errors or warnings are found.	Completed
ECS-L4-14834	S-DSS-02360 The AIM ESDT Maintenance GUI shall validate that the definitions of Product Specific Attributes (PSAs) in the descriptor match existing definitions of PSAs defined within the Inventory DB.	Completed
ECS-L4-14835	S-DSS-02370 The AIM ESDT Maintenance GUI shall, when validating the collection level Bounding Rectangle component of a descriptor file, validate the spatial geometry (this is limited to checking that the North coordinate is greater than the South coordinate).	Completed
ECS-L4-14836	S-DSS-02380 The AIM ESDT Maintenance GUI shall add the definitions of Product Specific Attributes associated with the ESDT to the Inventory database if the definition is not already present.	Completed
ECS-L4-14837	S-DSS-02390 The AIM ESDT Maintenance GUI shall, when validating a descriptor file, verify that the ShortName and VersionID of the Collection Description within the Collection section of the descriptor matches the ShortName and VersionID specified in the Inventory section and the ShortName and VersionID within the file name.	Completed
ECS-L4-14838	S-DSS-02400 The AIM ESDT Maintenance GUI shall, when validating a descriptor file, verify that the granule metadata attributes listing in the Event section for Insert events match attributes listed in the Inventory section.	Completed
ECS-L4-14839	S-DSS-02410 The AIM ESDT Maintenance GUI shall, when validating a descriptor, obtain validation rules for non-PSA and non-keyword attributes from an XML schema delivered as part of the service.	Completed
ECS-L4-14840	S-DSS-02420 The AIM ESDT Maintenance GUI shall be deployed with an XML schema definition file to be used for validating descriptor files.	Completed
ECS-L4-14841	S-DSS-02430 The AIM ESDT Maintenance GUI shall validate that the ECS keyword attributes in the descriptor match existing GCMD keyword hierarchies.	Completed
ECS-L4-14842	S-DSS-02440 The AIM ESDT Maintenance GUI shall be deployed with an XML schema file (Generic Inventory Schema) that contains the default rules for each element found in the Inventory section of the granule metadata file.	Completed

ID	Title	Status
ECS-L4-14843	S-DSS-02450 The AIM ESDT Maintenance GUI shall, when installing or updating an ESDT, generate an ESDT specific schema file that contain granule validation rules based upon the contents of the Inventory section of the Descriptor file and the default element rules.	Completed
ECS-L4-14844	S-DSS-02460 The AIM ESDT Maintenance GUI shall allow the operator to view a list of installed ESDTs.	Completed
ECS-L4-14845	S-DSS-02470 The AIM ESDT Maintenance GUI shall allow the operator to filter the list of installed ESDTs by providing a string to match against the ShortName / VersionID contained in list.	Completed
ECS-L4-14846	S-DSS-02480 The AIM ESDT Maintenance GUI shall allow the operator to view a list of descriptor files stored in the descriptor source location (awaiting installation or update).	Completed
ECS-L4-14847	S-DSS-02490 The AIM ESDT Maintenance GUI shall, when installing, updating, or deleting one or more descriptors, display processing totals for the number of descriptors processed successfully and the number of descriptors that failed.	Completed
ECS-L4-14848	S-DSS-02500 The SDSRV CI shall provide the capability to implement services for new data types, including data insert services, search services, and data distribution services.	Completed
ECS-L4-14849	S-DSS-02510 The AIM ESDT Maintenance GUI shall, when processing an Operator request to Install, Update, or Remove an ESDT, write to the application log the time of the request, Action requested, ShortName, VersionID, descriptor file name for the ESDT, and the result of the operation.	Completed
ECS-L4-14850	S-DSS-02520 The AIM ESDT Maintenance GUI shall, when processing an Operator request to generate an MCF or ESDT specific schema, write to the application log the time of the request, Action requested, ShortName, VersionID, descriptor file name for the ESDT, and the result of the operation.	Completed
ECS-L4-14851	S-DSS-02530 The AIM ESDT Maintenance GUI shall, when installing, or updating multiple ESDTs, abort ESDT Installation or Update of an individual ESDT if validation errors or warnings are encountered in the descriptor file and continue processing the remaining descriptor files selected by the operator.	Completed
ECS-L4-14852	S-DSS-02540 The AIM ESDT Maintenance GUI shall, when processing a batch of ESDTs, abort the batch if a database or file system is unavailable.	Completed
ECS-L4-14853	S-DSS-02550 The ESDT Maintenance GUI shall notify operations staff if there are no differences in a descriptor as part of the Update ESDT process.	Completed
ECS-L4-14854	S-DSS-02560 The ESDT Maintenance GUI shall, upon startup, display an error and shut down if another instance is detected within the same mode.	Completed
ECS-L4-14855	S-DSS-02570 The ESDT Maintenance GUI shall, upon startup, check for any incomplete requests from a previous run and query the operator for confirmation before recovering the failed requests.	Completed
ECS-L4-14856	S-DSS-02580 The ESDT Maintenance GUI shall, when recovering from a failed Update ESDT request, restore the previously installed version of the ESDT/descriptor.	Completed
ECS-L4-14857	S-DSS-02590 The ESDT Maintenance GUI shall allow configuration, within the application configuration file, the base directory within the small file archive to be used for creation of ESDT specific metadata directories.	Completed

ID	Title	Status
ECS-L4-14858	S-DSS-02600 The ESDT Maintenance GUI shall, when installing an ESDT, create an ESDT specific metadata directory for the ESDT being installed within the configured base directory within the small file archive to be used for ESDT specific metadata directories.	Completed
ECS-L4-14859	S-DSS-02610 The AIM ESDT Maintenance GUI shall register insert events in the Spatial Subscription Server (EcNbDb) database when installing or updating an ESDT.	Completed
ECS-L4-14860	S-DSS-02620 The AIM ESDT Maintenance GUI shall, when installing or updating an ESDT, register all Spatial Subscription Server supported Insert event qualifiers from the descriptor file into the Spatial Subscription Server database (Spatial Subscription Server supports only a subset of the Science granule metadata).	Completed
ECS-L4-14861	S-DSS-02630 The AIM ESDT Maintenance GUI shall, when installing or updating an ESDT, register the CSDT associated with ESDT in the Inventory database.	Completed
ECS-L4-14862	S-DSS-02640 The AIM ESDT Maintenance GUI shall, when installing an ESDT, shall populate the collection based tables identified in the Operations Concept of ticket DS_7E_01.	Completed
ECS-L4-14863	S-DSS-02650 The AIM ESDT Maintenance GUI shall, when updating an ESDT, replace the basic collection identification information (collection tables identified in Operations Concept of ticket DS_7E_01) in the AIM Inventory database.	Completed
ECS-L4-14864	S-DSS-02660 The AIM ESDT Maintenance GUI shall, when processing an Install, Update, or Delete operation, allow the operator to select a group of ESDT descriptor files for the operation.	Completed
ECS-L4-14865	S-DSS-02670 The AIM ESDT Maintenance GUI shall, when processing an Install, Update, or Delete operation on a set of ESDT descriptor files, process all ESDT descriptor files selected.	Completed
ECS-L4-14866	S-DSS-02680 The AIM ESDT Maintenance GUI shall, when deleting an ESDT, remove 1. all of the ESDTs XML metadata file directories from the small file archive, 2. the MCF, 3. the ESDT specific schema file, 4. the Descriptor file, 5. the ESDTs collection information from the AIM Inventory database (including the removal of PSA definitions if the PSA is not used by other ESDTs), 6. the ESDTs event definitions and qualifiers from the Spatial Subscription Server database (provided that no cancelled subscriptions are present).	Completed
ECS-L4-14867	S-DSS-02690 The AIM ESDT Maintenance GUI shall provide the ability to view the descriptor file of an installed ESDT in either ODL or XML format.	Completed
ECS-L4-14868	S-DSS-02700 The AIM ESDT Maintenance GUI shall, when installing or updating an ESDT, generate an MCF and store it in the configured MCF location.	Completed
ECS-L4-14869	S-DSS-02710 The AIM ESDT Maintenance GUI shall provide the operator the ability to generate an MCF for any installed ESDT.	Completed
ECS-L4-14870	S-DSS-02720 The AIM ESDT Maintenance GUI shall allow configuration, in the application configuration file, of a directory for storing MCFs.	Completed
ECS-L4-14871	S-DSS-02730 The AIM ESDT Maintenance GUI shall provide the operator the ability to generate an ESDT specific schema for any installed ESDT.	Completed
ECS-L4-14872	S-DSS-02740 The AIM ESDT Maintenance GUI shall remove any partially inserted information if an error is encountered while installing an ESDT.	Completed

ID	Title	Status
ECS-L4-14873	S-DSS-02750 The AIM ESDT Maintenance GUI shall recover from and process the resubmission of a partially completed ESDT update, install, or delete.	Completed
ECS-L4-14874	S-DSS-02760 The AIM ESDT Maintenance GUI shall restore the original version of the descriptor (including all steps of the update process) if a fatal error is encountered while updating an ESDT.	Completed
ECS-L4-14875	S-DSS-02770 The AIM ESDT Maintenance GUI shall, when validating a descriptor file, verify that the Product Specific attributes in the Inventory section match Product Specific attributes defined in the Collection section.	Completed
ECS-L4-14876	S-DSS-02780 The AIM ESDT Maintenance GUI shall, when validating a descriptor file, verify that the spatial attributes in the Inventory section are valid for the spatial search type identified at the 'top level' of the descriptor.	Completed
ECS-L4-14877	S-DSS-02790 The AIM ESDT Maintenance GUI shall log all validation error messages pertaining to the validation of metadata elements to the application log file.	Completed
ECS-L4-14878	S-DSS-02800 The AIM ESDT Maintenance GUI shall, when completing a successful install or update of an ESDT, or a successful restoration of a failed ESDT installation or update, remove all temporary files associated with the processing of the ESDT.	Completed
ECS-L4-14879	S-DSS-02810 The AIM ESDT Maintenance GUI shall, when processing an Install, Update, or Delete ESDT request, record the beginning of each step (RPC to a database, 1st access or processing of a file) of the request in the application log.	Completed
ECS-L4-14880	S-DSS-02820 The AIM Granule Deletion service shall be implemented as a set of command line utilities, one for each of the following operations: 1) Identify granules for deletion, 2) Mark granules as deleted or deleted from archive (DFA) (this restricts distribution of the granule and marking a granule as deleted makes it eligible for removal in the future, 3) Restore granules marked as deleted or deleted from archive to an active state, 4) Remove granules previously marked as deleted (removes the entries from the Inventory database and all constituent files).	Completed
ECS-L4-14881	S-DSS-02830 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. inclusive temporal range for comparison to the start of the acquisition time (BeginningDateTime) of the granule.	Completed
ECS-L4-14882	S-DSS-02840 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. inclusive temporal range for comparison to the acquisition time range (BeginningDateTime, EndingDateTime) of the granule.	Completed
ECS-L4-14883	S-DSS-02850 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. a single date specifying an open ended time range to be compared to the acquisition start time (return granules with the BeginningDateTime >= to the supplied value).	Completed

ID	Title	Status
ECS-L4-14884	S-DSS-02860 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. a single date specifying an open starting time range for comparison to the acquisition start time of the granule (return granules with the BeginningDateTime <= to the supplied value).	Completed
ECS-L4-14885	S-DSS-02870 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. a single date specifying an open starting time range for comparison to the acquisition end time of the granule (return granules with the EndingDateTime <= to the supplied value).	Completed
ECS-L4-14886	S-DSS-02880 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. inclusive granule insert time range.	Completed
ECS-L4-14887	S-DSS-02890 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. a single date specifying an open ended time range to be compared to the insert time (return granules with the insertTime >= to the supplied value).	Completed
ECS-L4-14888	S-DSS-02900 The SDSRV CI shall provide the data type services as specified in the Data Type Services Matrix.	Completed
ECS-L4-14889	S-DSS-02901 The SDSRV CI shall provide the capability to subset data within a Landsat subinterval granule based on floating scenes.	Completed
ECS-L4-14891	S-DSS-02903 The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Time for products as specified in the Data Type Services Matrix.	Completed
ECS-L4-14892	S-DSS-02904 The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on WRS for products as specified in the Data Type Services Matrix.	Completed
ECS-L4-14893	S-DSS-02905 The SDSRV CI shall provide the capability to subset data within a granule through the use of geographical masking for products as specified in the Data Type Services Matrix.	Completed
ECS-L4-14896	S-DSS-02908 The SDSRV CI shall provide the capability to subset data within a granule by selecting data values for a specified range of contiguous pixels in each swath scan line for products as specified in the Data Type Services Matrix.	Completed
ECS-L4-14897	S-DSS-02909 The SDSRV CI shall provide the capability to subset MODIS Level 1B data by parameter.	Completed
ECS-L4-14899	S-DSS-02911 The SDSRV CI shall be able to perform Floating scene Subsetting for products of between 0.5 & 37 scenes.	Completed
ECS-L4-14901	S-DSS-02913 The SDSRV CI shall calculate the start and stop scanlines for floating scene subsets	Completed
ECS-L4-14902	S-DSS-02914 The SDSRV CI HDF-EOS Server shall accept and pass on scanline delimited subsetting requests .	Completed
ECS-L4-14904	S-DSS-02917 The SDSRV HDF-Server shall interpolate floating scene data by corner points.	Completed

ID	Title	Status
ECS-L4-14905	S-DSS-02920 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): 1. ESDT short name, 2. ESDT version, and 3. a single date specifying an open starting time range for comparison to the insert time of the granule (return granules with the insertTime <= to the supplied value).	Completed
ECS-L4-14906	S-DSS-02930 The AIM Granule Deletion service shall, when searching for science granules to mark as deleted, permit an ECS operator to search for granules by providing (via command line parameters): a file containing: 1. ESDT short name, 2. ESDT version, and 3. Local Granule ID values (one per line).	Completed
ECS-L4-14907	S-DSS-02940 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, provide a command line option to limit the search to only granules that are marked as delete from archive (can be used to verify the outcome of operation to mark granules or to create input to restore deleted from archive granules).	Completed
ECS-L4-14908	S-DSS-02950 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, provide a command line option to search only for granules that are already marked for deletion (can be used to verify the outcome of an operation to mark granules as deleted or to create input to restore granules marked as deleted).	Completed
ECS-L4-14909	S-DSS-02960 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, output a list ECS internal granule identifiers that match the input search constraints to a file (supplied by the operator as a command line argument).	Completed
ECS-L4-14910	S-DSS-02970 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, provide a command line parameter to limit the number of granules to output as the result of a search.	Completed
ECS-L4-14911	S-DSS-02980 The AIM Granule Deletion service shall, when searching for granules to mark as deleted, if applicable, limit the list of output granules to the granule limit specified on the command line (if the search contains a constraint on BeginningDateTime or insertTime, then output list shall be sorted by specified temporal attribute prior to limiting the output).	Completed
ECS-L4-14912	S-DSS-02990 The AIM Granule Deletion service shall provide a mechanism to mark data as eligible for deletion.	Completed
ECS-L4-14913	S-DSS-03000 The AIM Granule Deletion service shall allow the operator to update the Granule Inventory Metadata to indicate that a data granule cannot be retrieved in the event of file corruption or unexpected file loss (mark as deleted from archive).	Completed
ECS-L4-14914	S-DSS-03002 The SDSRV CI shall be capable of receiving and managing the storage of L0 - L4 Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14915	S-DSS-03004 The SDSRV CI shall be capable of receiving and managing the storage of Ancillary Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14916	S-DSS-03030 The SDSRV CI shall be capable of receiving and managing the storage of Science Software Archive Packages, as requested by valid Data Insert Requests.	Completed
ECS-L4-14917	S-DSS-03050 The SDSRV CI shall be capable of receiving and managing the storage of FDF Orbit Data as requested by valid Data Insert Requests.	Completed
ECS-L4-14918	S-DSS-03070 The SDSRV CI shall process Data Insert Requests that request the storage of TAR Files, containing PGE Binaries and scripts, with associated metadata.	Completed

ID	Title	Status
ECS-L4-14919	S-DSS-03110 The SDSRV CI shall be capable of receiving and managing the storage of Instrument Calibration Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14920	S-DSS-03122 The SDSRV CI shall provide the capability to process Data Insert Requests in support of the pre-launch checkout of the ground system.	Completed
ECS-L4-14921	S-DSS-03130 The SDSRV CI shall be capable of receiving and managing the storage of Instrument Characterization Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14922	S-DSS-03150 The SDSRV CI shall be capable of receiving and managing the storage of Instrument Historical Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14923	S-DSS-03190 The SDSRV CI shall be capable of receiving and managing the storage of Orbit/Attitude Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14924	S-DSS-03210 The SDSRV CI shall be capable of receiving and managing the storage of Production History as requested by valid Data Insert Requests.	Completed
ECS-L4-14925	S-DSS-03250 The SDSRV CI shall be capable of receiving and managing the storage of QA Statistics, as requested by valid Data Insert Requests.	Completed
ECS-L4-14926	S-DSS-03253 The SDSRV CI shall be capable of receiving and managing the storage of Software Source Code, as requested by valid Data Insert Requests.	Completed
ECS-L4-14927	S-DSS-03270 The SDSRV CI shall be capable of receiving and managing the storage of Scientific Calibration Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14928	S-DSS-03290 The SDSRV CI shall be capable of receiving and managing the storage of Spacecraft Historical Data, as requested by valid Data Insert Requests.	Completed
ECS-L4-14929	S-DSS-03292 The SDSRV CI shall provide the capability to process Data Insert Requests for the storage of the metadata and data (if any), for the data types specified in the Data Type Services Matrix.	Completed
ECS-L4-14930	S-DSS-03295 The SDSRV CI shall verify that scientist-provided data and metadata, specified by a valid Data Insert Request, complies with ESDIS approved standards for metadata and file content.	Completed
ECS-L4-14931	S-DSS-03305 The SDSRV CI shall store Granule Inventory Metadata, specified by valid Data Insert Request, into the Metadata Database.	Completed
ECS-L4-14932	S-DSS-03308 The SDSRV CI shall direct the transfer of data files, specified by valid Data Insert Requests, to the STMGT CI.	Completed
ECS-L4-14933	S-DSS-03310 The SDSRV CI shall be capable of receiving and managing the storage of correlated data as requested by valid Data Insert Requests.	Completed
ECS-L4-14934	S-DSS-03365 The SDSRV CI shall supply metadata on collections to the global master change directory in directory interchange format.	Completed
ECS-L4-14935	S-DSS-03369 The SDSRV CI shall be capable of receiving and managing the storage of Expedited Data from instruments, as requested by valid Data Insert Requests.	Completed
ECS-L4-14936	S-DSS-03370 The SDSRV CI shall perform consistency and correctness checks for the metadata, specified in each valid Data Insert Request.	Completed
ECS-L4-14937	S-DSS-03380 The AIM Granule Deletion service shall permit an ECS operator to include the inventory database entry and XML metadata file when marking a granule for deletion, or exclude both from the deletion (i.e., cause a logical delete or delete from archive) via a command line parameter.	Completed

ID	Title	Status
ECS-L4-14938	S-DSS-03390 The AIM Granule Deletion service shall, when marking granules as deleted or deleted from archive, process an input file (provided as a command line option) that contains ECS Internal granule identifiers (GeOIDs) formatted as one input line per granule.	Completed
ECS-L4-14939	S-DSS-03400 The AIM Granule Deletion service shall, when marking granules as deleted, by default mark any BROWSE, QA, and PH granules referenced by the science granule as deleted, if they are not referenced by any other granule.	Completed
ECS-L4-14940	S-DSS-03410 The AIM Granule Deletion service shall, when marking science granules as deleted, permit an ECS operator to suppress deletion of the BROWSE, QA, PH via command line option.	Completed
ECS-L4-14941	S-DSS-03420 The AIM Granule Deletion service shall, when completing a request to mark granules as deleted or deleted from archive, log the following information for each type of granule modified: 1. the total number of science granules marked for deletion or DFA 2. the total number of Browse granules marked for deletion, 3. the total number of PH granules marked for deletion, 4. the total number of QA granules marked for deletion, 5. the total number of Delivered Algorithm Package granules marked for deletion, 6) the total number of failures for each of the preceding granule types.	Completed
ECS-L4-14942	S-DSS-03430 The AIM Granule Deletion service shall, when marking granules as deleted or deleted from archive, allow the operator to specify a log file as a command line option.	Completed
ECS-L4-14943	S-DSS-03440 The AIM Granule Deletion service shall, in the event that a log file is not specified when marking granules as deleted or deleted from archive, create a log file in the standard log directory for the mode.	Completed
ECS-L4-14944	S-DSS-03450 The AIM Granule Deletion service shall, when encountering a request to mark a granule as deleted or deleted from archive that is already marked in the desired way, log an error message and continue processing the remaining granules within the request.	Completed
ECS-L4-14945	S-DSS-03460 The AIM Granule Deletion service shall identify and log errors encountered when marking a granule as deleted or deleted from archive.	Completed
ECS-L4-14946	S-DSS-03470 The AIM Granule Deletion service shall, when marking a granule as deleted or deleted from archive, perform operations such that they can be restarted and completed successfully if they are interrupted by a fault.	Completed
ECS-L4-14947	S-DSS-03480 The AIM Granule Deletion service shall, when encountering an error marking a granule as deleted or deleted from archive, log an error and continue processing the remaining granules in the request.	Completed
ECS-L4-14948	S-DSS-03490 The AIM Granule Deletion service shall provide a mechanism to restore a granule that was marked deleted to an 'active' (not marked for deletion) status.	Completed
ECS-L4-14949	S-DSS-03500 The AIM Granule Deletion service shall provide a mechanism to restore a science granule that was marked as 'deleted from the archive' (DFA) to an 'active' (not marked as DFA) status.	Completed
ECS-L4-14950	S-DSS-03510 The AIM Granule Deletion service shall, when restoring a granule marked as deleted or deleted from archive to an active status, process an input file (provided as a command line option) that contains ECS Internal granule identifiers (GeOIDs) formatted as one input line per granule.	Completed

ID	Title	Status
ECS-L4-14951	S-DSS-03520 The AIM Granule Deletion service shall, when restoring a science granule marked as deleted to an active status, by default restore the BROWSE, QA, and PH granules referenced by the science granule.	Completed
ECS-L4-14952	S-DSS-03530 The AIM Granule Deletion service shall, when restoring a science granule marked as deleted to an active status, permit the operator to suppress restoring of the BROWSE, QA, PH via command line option.	Completed
ECS-L4-14953	S-DSS-03540 The AIM Granule Deletion service shall, when completing a request to restore granules previously marked as deleted or deleted from archive, log for each type of granule processed (Science, Browse, QA, PH, and DAP): 1. the total number of granules that were restored, 2. the total number of granules that failed to be restored.	Completed
ECS-L4-14954	S-DSS-03550 The AIM Granule Deletion service shall, when restoring granules marked as deleted or deleted from archive, allow the operator to specify a log file as a command line option.	Completed
ECS-L4-14955	S-DSS-03560 The AIM Granule Deletion service shall, in the event that a log file is not specified when restoring granules marked deleted or deleted from archive, create a log file in the standard log directory for the mode.	Completed
ECS-L4-14956	S-DSS-03570 The AIM Granule Deletion service shall handle a request to restore a granule that is not marked as deleted or deleted from archive by logging an error message and continuing to process the remaining granules within the request.	Completed
ECS-L4-14957	S-DSS-03580 The AIM Granule Deletion service shall identify and log errors encountered when restoring granules marked as deleted or deleted from archive.	Completed
ECS-L4-14958	S-DSS-03590 The AIM Granule Deletion service shall restore granules marked deleted or deleted from archive such the service can be restarted and completed successfully if interrupted by a fault.	Completed
ECS-L4-14959	S-DSS-03600 The AIM Granule Deletion service shall, when encountering an error restoring a granule marked as deleted or deleted from archive, log an error and continue processing the remaining granules in the request.	Completed
ECS-L4-14960	S-DSS-03610 The AIM Granule Deletion service shall process Data Delete Requests for the deletion of data and associated metadata.	Completed
ECS-L4-14962	S-DSS-03630 The AIM Granule Deletion service, when instructed to remove a granule marked as deleted from archive, shall remove all data files associated with the granule from the Science file archives and not delete the inventory entries or XML files.	Completed
ECS-L4-14963	S-DSS-03640 The AIM Granule Deletion utility for removing (physically delete) granules marked as deleted shall require an ECS operator to specify a deletion lag time in days (retain granules marked for deletion within 'lag' time days), including a lag time of 0 (zero is interpreted as a request to delete all granules marked for deletion).	Completed
ECS-L4-14964	S-DSS-03650 The AIM Granule Deletion service shall, when removing granules marked as deleted, remove granules that were marked for deletion before the current day minus the 'lag time' days, and not remove granules that were marked as deleted within lag time days.	Completed
ECS-L4-14965	S-DSS-03660 The AIM Granule Deletion service shall, when removing granules marked as deleted, display the number of granules whose inventory entries and constituent files will be removed and prompt the operator for confirmation before performing the removal.	Completed

ID	Title	Status
ECS-L4-14966	S-DSS-03670 The AIM Granule Deletion service shall, when removing science granules marked as deleted, log the start and end time of the process, the UNIX ID of the process, and log the ESDT short name, ESDT version, granule ID, and local granule ID (if present) of each science granule removed.	Completed
ECS-L4-14967	S-DSS-03680 The AIM Granule Deletion service shall, when removing non-science granules marked as deleted, log the start and end time of the process, the UNIX ID of the process, and the type (Browse, QA, PH, DAP) and granule ID for each non-science granule removed.	Completed
ECS-L4-14968	S-DSS-03690 The AIM Granule Deletion Service shall, when removing granules marked as deleted, log for each granule deletion error: the ESDT short name, ESDT version, granule ID of the affected granule, and the nature of the error.	Completed
ECS-L4-14969	S-DSS-03700 The AIM Granule Deletion service shall, when removing granules marked as deleted, prompt the operator for the name of a log file and create the log file or append to it if it already exists.	Completed
ECS-L4-14970	S-DSS-03710 The AIM Granule Deletion service shall, in the event that the operator fails to enter the name of a log file when removing granules marked as deleted, create or append to a log file with a default name in the default location.	Completed
ECS-L4-14971	S-DSS-03720 The AIM Granule Deletion service shall, when encountering an error removing the XML metadata file or the data files for a granule that is marked as deleted, log an error message and continue processing the remaining granules in the request.	Completed
ECS-L4-14972	S-DSS-03730 The AIM Granule Deletion service shall be capable of recovering from errors that may occur while removing granules marked as deleted, such that inventory entries or files for deleted granules can be correctly processed by subsequent executions of the utility, and incompletely processed inventory entries (if any) do not cause ECS faults.	Completed
ECS-L4-14973	S-DSS-03740 The AIM Granule Deletion service shall use the appropriate volume group history set to locate files when removing a granule from the archive.	Completed
ECS-L4-14974	S-DSS-03750 The SDSRV CI shall provide a Data Type Description for each data type listed in the Data Type Services Matrix.	Completed
ECS-L4-14975	S-DSS-03770 The SDSRV CI shall specify the services available for the data type in each Data Type Description.	Completed
ECS-L4-14976	S-DSS-03780 The SDSRV CI shall specify the Attributes and associated Valid Values for the data type in each Data Type Description.	Completed
ECS-L4-14977	S-DSS-03790 The SDSRV CI shall comply to the POSIX.2 standard, when technically possible, and shall deviate from the standard only when non-compliant system functions are required which have no POSIX equivalent.	Completed
ECS-L4-14978	S-DSS-03810 The SDSRV CI shall have the ability to cancel the advertising of publicly available services.	Completed
ECS-L4-14979	S-DSS-03820 The SDSRV CI shall provide Advertisements that identify the service's interface.	Completed
ECS-L4-14980	S-DSS-03830 The SDSRV CI shall provide Advertisements that identify Service Descriptions.	Completed
ECS-L4-14981	S-DSS-03840 The AIM Granule Deletion service, when recovering from a failed request to remove granules marked as deleted, shall display the number of granules that were not processed in the previous run and allow the operator to: 1. complete the removal of files from the previous run only, 2. start a new run and complete the previous run.	Completed

ID	Title	Status
ECS-L4-14982	S-DSS-03850 The AIM Granule Deletion service shall record the following science or browse granule modifications and make the information available to the Bulk Metadata Generation Tool (BMGT): 1. marking granules as deleted, 2. marking science granules deleted from archive, 3. restoring deleted or deleted from archive granules to an active state.	Completed
ECS-L4-14983	S-DSS-03860 The AIM Granule Deletion service shall exit with an error message if it detects another instance of the service running concurrently within the same mode.	Completed
ECS-L4-14985	S-DSS-03870 The AIM Granule Deletion Service shall permit an ECS operator to perform granule deletions concurrently with other ECS functions.	Completed
ECS-L4-14986	S-DSS-03880 The AIM Granule Deletion service shall, when encountering a database deadlock, retry the database request.	Completed
ECS-L4-14987	S-DSS-03890 The AIM Granule Deletion service shall abort processing if an database related access error is encountered.	Completed
ECS-L4-14988	S-DSS-03900 The AIM Inventory Insert service shall record the directory used for storing the XML metadata file in the Inventory database if it is not already recorded.	Completed
ECS-L4-14991	S-DSS-03930 The AIM Inventory Insert service shall, when inserting ASTER granule metadata, extract the Product Specific Attribute named 'RadiometricDBVersion' and store it in the Inventory database.	Completed
ECS-L4-14992	S-DSS-03940 The AIM Inventory Insert service shall, when inserting ASTER granule metadata, extract the Product Specific Attribute named 'GeometricDBVersion' and store it in the Inventory database.	Completed
ECS-L4-14993	S-DSS-03950 The AIM Inventory Insert service shall, when inserting ASTER granule metadata, extract and store the values of the Product Specific Attributes named 'DAR_ID' and store them in the Inventory database.	Completed
ECS-L4-14995	S-DSS-03970 The Inventory Insert service shall, when inserting an AST_L1B granule, link the Browse of the most recently inserted AST_L1A granule that matches the temporal range of the newly inserted AST_L1B granule to the AST_L1B granule.	Completed
ECS-L4-14996	S-DSS-03980 The Inventory Insert service shall, when inserting a Browse granule that references an AST_L1B granule, link the most recently inserted AST_L1A granule that matches the temporal range of the referenced AST_L1B granule to the newly inserted Browse granule (replace a bad Browse that was ingested with the AST_L1A).	Completed
ECS-L4-14999	S-DSS-04010 The SDSRV CI shall be capable of receiving actual disk utilization from the STMGT CI.	Completed
ECS-L4-15000	S-DSS-04020 The SDSRV CI shall provide the capability to process Data Requests for the retrieval and distribution of metadata and data (if any), for the data types specified in the Data Type Services Matrix.	Completed
ECS-L4-15001	S-DSS-04021 The SDSRV CI shall store a granule's Granule Inventory Metadata into the Metadata Database when the data file(s) for the granule is successfully stored by the STMGT CI.	Completed
ECS-L4-15002	S-DSS-04022 The SDSRV CI shall retrieve metadata, specified by valid Data Requests, from the Metadata Database and provide that metadata to the DDIST CI.	Completed
ECS-L4-15003	S-DSS-04024 The SDSRV CI shall direct the DDIST CI to retrieve data files, and to distribute data files and associated metadata as specified by valid Data Requests.	Completed

ID	Title	Status
ECS-L4-15004	S-DSS-04026 The DDIST CI shall direct the retrieval of data files, and direct the distribution of data files and associated metadata as directed by the SDSRV CI.	Completed
ECS-L4-15005	S-DSS-04028 The DDIST CI shall receive metadata from the SDSRV CI as specified by requests received from the SDSRV CI.	Completed
ECS-L4-15006	S-DSS-04030 The DDIST CI shall direct the retrieval of data files from the STMGT CI as specified by requests received from the SDSRV CI.	Completed
ECS-L4-15007	S-DSS-04032 The SDSRV CI shall have the capability to support the transaction rates as specified in Table 7-4 of the Functional and Performance Requirements Specification for the ECS.	Completed
ECS-L4-15008	S-DSS-04040 The Inventory Insert service shall, when inserting a Browse granule that references an AST_L1A or AST_L1B granule, remove the existing associations of the AST_L1A and/or AST_L1B granules to other Browse granules.	Completed
ECS-L4-15009	S-DSS-04050 The Inventory Insert service shall, when inserting a Browse granule that references an AST_L1A granule, link the Browse to an AST_L1B granule and remove any existing link if an AST_L1B granule is found satisfying the following rules: 1) the AST_L1B is the most recently inserted AST_L1B granule that matches the temporal range of the referenced AST_L1A granule 2) the AST_L1B has an insertTime that is greater than that of the referenced AST_L1A granule (replace a bad Browse that was ingested with the AST_L1A).	Completed
ECS-L4-15010	S-DSS-04060 The AIM Inventory Insert service shall validate the set of NOSE track numbers and start/end block numbers associated with a granule at the time of insertion against the predefined orbit spatial extents defined within the AIM Inventory database.	Completed
ECS-L4-15011	S-DSS-04070 The AIM Inventory Insert Service shall associate the BROWSE granule for an ASTER L1A granule with all ASTER L1B products derived from that L1A granule.	Completed
ECS-L4-15015	S-DSS-04110 The AIM Inventory Insert service shall support the association of inserted AMSR granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region.	Completed
ECS-L4-15016	S-DSS-04112 The SDSRV CI shall provide the capability to process Data Requests in support of the pre-launch checkout of the ground system.	Completed
ECS-L4-15017	S-DSS-04120 The AIM Inventory Insert service shall support the association of inserted AMSR-E granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region.	Completed
ECS-L4-15018	S-DSS-04130 The AIM Inventory Insert service shall support the association of inserted MISR granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region.	Completed
ECS-L4-15019	S-DSS-04140 The AIM Inventory Insert service shall support the association of inserted GLAS granules with predefined spatial extents by recording as metadata for the granule the set of track numbers and the set of block numbers of the spatial extents corresponding to the granules spatial region.	Completed

ID	Title	Status
ECS-L4-15020	S-DSS-04150 The AIM Inventory Insert service shall, when processing a granule with a spatialSearchType of Orbit, extract Orbit track numbers, start and stop block numbers from product specific attributes in the metadata file and store them in the AIM Inventory database.	Completed
ECS-L4-15021	S-DSS-04160 The AIM Inventory Insert service shall use the Spatial Query Server to insert LLBOX and Gpolygon metadata attributes into the Inventory database.	Completed
ECS-L4-15023	S-DSS-04180 The AIM Inventory Insert service shall allow the configuration, within the application configuration file, the number of times to retry a database.	Completed
ECS-L4-15024	S-DSS-04190 The AIM Inventory Insert Service shall, when encountering a database error, retry the insertion of granule information the configured number of times.	Completed
ECS-L4-15025	S-DSS-04200 The AIM Inventory Insert Service shall, when failing to insert the metadata of a granule into the Inventory database the configured number of times, return a failure result.	Completed
ECS-L4-15026	S-DSS-04210 The AIM Inventory Insert Service shall return a failure result if a required resource is unavailable.	Completed
ECS-L4-15027	S-DSS-04220 The AIM Inventory Insert Service shall remove metadata that is partially inserted into the Inventory database if a processing error or fault is encountered.	Completed
ECS-L4-15028	S-DSS-04230 The AIM Inventory Insert Service shall log all errors encountered in the processing of an insert request in the application log.	Completed
ECS-L4-15029	S-DSS-04240 The AIM Inventory Insert Service shall be capable of handling multiple concurrent insert requests from the DPL Ingest service.	Completed
ECS-L4-15030	S-DSS-04250 The AIM Inventory Insert service shall be able to operate in multiple modes concurrently.	Completed
ECS-L4-15031	S-DSS-04260 The AIM Inventory database shall maintain the following information for each stored science granule: a. the unique Granule ID; b. the File Location for each of the granule's constituent file(s) c. the date and time of storage d. all other metadata attributes, if present, that are assigned to tables identified in the Operational Concept of ticket DS_7E_01.	Completed
ECS-L4-15032	S-DSS-04270 The AIM Inventory Database shall provide storage of polygonal (store Gpolygon) spatial extents.	Completed
ECS-L4-15033	S-DSS-04280 The AIM Inventory database shall store and maintain Granule Inventory Metadata that references granule-related Browse Data.	Completed
ECS-L4-15034	S-DSS-04290 The AIM Inventory database shall support the storage of spatial extents [LLBOX] defined as lines of constant latitude and longitude, up to and including whole Earth. (I.e., +90 degrees to -90 degrees latitude, +180 degrees to -180 degrees longitude).	Completed
ECS-L4-15035	S-DSS-04300 The AIM Inventory Database shall supply services to provide the name and location for each of the constituent files for granules associated with a data request.	Completed
ECS-L4-15036	S-DSS-04310 The AIM Inventory database shall support predefined spatial extents for AMSR data types that are characterized by a track number that corresponds to a pre-specified spacecraft orbit, and a block number that corresponds to a spatial extent along the track.	Completed
ECS-L4-15037	S-DSS-04320 The AIM Inventory database shall support predefined spatial extents for AMSR-E data types that are characterized by a track number that corresponds to a pre-specified spacecraft orbit, and a block number that corresponds to a spatial extent along the track.	Completed

ID	Title	Status
ECS-L4-15038	S-DSS-04330 The Inventory Insert service shall support predefined spatial extents for GLAS data types that are characterized by a track number that corresponds to a pre-specified spacecraft orbit, and a block number that corresponds to a spatial extent along the track.	Completed
ECS-L4-15039	S-DSS-04340 The AIM Inventory database shall support predefined valid ECS Keyword hierarchies.	Completed
ECS-L4-15040	S-DSS-04350 The Archive Inventory Management CI shall provide capabilities to populate the Inventory DsMdOrbitPolygons table with polygon definitions for an instrument and platform combination provided by the Science Instrument teams.	Completed
ECS-L4-15041	S-DSS-04355 The AIM Inventory database shall support predefined spatial extents that are associated with a specific instrument and platform.	Completed
ECS-L4-15042	S-DSS-04357 The AIM Inventory database shall support the insertion of granules with metadata that matches existing granules within the Inventory (to facilitate the replacement of granules that are lost or reprocessed).	Completed
ECS-L4-15043	S-DSS-04360 The SDSRV CI shall maintain Granule Inventory Metadata for each stored data granule in accordance with the Release B data model.	Completed
ECS-L4-15044	S-DSS-04365 The SDSRV CI shall maintain Collection Metadata, for standard products, containing key organizations and personnel for all product-related DAACs, ADCs, and ODCs.	Completed
ECS-L4-15045	S-DSS-04370 The SDSRV CI shall have the ability to store product specific Metadata.	Completed
ECS-L4-15046	S-DSS-04372 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Navigation Data, including Spacecraft Orbit and Attitude Data.	Completed
ECS-L4-15047	S-DSS-04374 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Browse Data.	Completed
ECS-L4-15048	S-DSS-04375 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Ancillary Data.	Completed
ECS-L4-15049	S-DSS-04378 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related QA and validation Data.	Completed
ECS-L4-15050	S-DSS-04382 The SDSRV CI shall maintain a backup indicator, for each data type, that specifies whether or not backup copies are to be created and maintained for that data type.	Completed
ECS-L4-15051	S-DSS-04384 The SDSRV CI shall request that the STMGT CI create both a local backup copy and off-site backup copy of a data product, as determined by the data product's backup indicator.	Completed
ECS-L4-15052	S-DSS-04386 The SDSRV CI shall maintain the location of each primary copy of a locally-archived data product, and the location of the product's local and off-site backup copies, if they exist.	Completed
ECS-L4-15053	S-DSS-04390 Standard Product related Metadata at the Data Server shall include Metadata associated with static subsetted, subsampled, and summary products.	Completed
ECS-L4-15054	S-DSS-04400 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Calibration Data.	Completed
ECS-L4-15055	S-DSS-04420 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Instrument Engineering Data.	Completed
ECS-L4-15056	S-DSS-04450 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related Production History Data, including data generation software and its associated parameters and input data.	Completed
ECS-L4-15057	S-DSS-04470 The SDSRV CI shall store and maintain Granule Inventory Metadata that identifies the data production facility for the product.	Completed

ID	Title	Status
ECS-L4-15058	S-DSS-04480 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related QA Statistics.	Completed
ECS-L4-15059	S-DSS-04490 The SDSRV CI shall store and maintain Granule Inventory Metadata that references granule-related reference documentation.	Completed
ECS-L4-15060	S-DSS-04515 The SDSRV CI shall assign a unique Logical File Location to each data file specified by a valid Data Insert Request.	Completed
ECS-L4-15061	S-DSS-04517 The SDSRV CI shall direct the STMGT CI to archive data files in locations specified by each file's assigned Logical File Location.	Completed
ECS-L4-15062	S-DSS-04530 The SDSRV CI shall validate updated Granule Inventory Metadata, specified by Update Metadata Requests, and reject the request if the request fails validation.	Completed
ECS-L4-15063	S-DSS-04570 The SDSRV CI shall provide the operations staff the capability to add Granule Inventory Metadata for any specified data granules in a special privileged mode.	Completed
ECS-L4-15064	S-DSS-04580 The SDSRV CI shall provide the operations staff the capability to delete all Granule Inventory Metadata for any specified data granules, in a special privileged mode.	Completed
ECS-L4-15065	S-DSS-04581 The SDSRV CI shall provide the capability to directly notify active users when Data Products are eligible for deletion.	Completed
ECS-L4-15066	S-DSS-04582 The SDSRV CI shall provide the capability to notify users when Data Products are eligible for deletion via a bulletin board type mechanism.	Completed
ECS-L4-15067	S-DSS-04583 The SDSRV CI shall provide a mechanism to mark data as eligible for deletion.	Completed
ECS-L4-15068	S-DSS-04584 The SDSRV CI shall provide a mechanism to automatically delete data, which has been marked as eligible for deletion, after a six-month time interval.	Completed
ECS-L4-15069	S-DSS-04586 The SDSRV CI shall be able to provide a list of deleted or re-versioned granules, i.e., of science or browse granules that have been logically deleted, deleted from archive (DFA), or re-versioned (i.e., whose collection version was updated). [NOTE: This list can be a portion of the contents of an SDSRV table that also tracks other granule related events]	Completed
ECS-L4-15070	S-DSS-04587 The list of deleted and re-versioned ECS granules (logically deleted or DFA'ed) maintained by the SDSRV CI shall contain the following information for each granule: a. ECS dbid	Completed
ECS-L4-15071	S-DSS-04588 The SDSRV CI shall identify errors encountered in maintaining the list of deleted granules	Completed
ECS-L4-15072	S-DSS-04590 The SDSRV CI shall provide the operations staff the capability to modify all Granule Inventory Metadata for any specified data granules in a special privileged mode.	Completed
ECS-L4-15073	S-DSS-04600 The SDSRV CI shall update the Granule Inventory Metadata to indicate that a data granule cannot be retrieved in the event of file corruption or unexpected file loss.	Completed
ECS-L4-15074	S-DSS-04620 The SDSRV CI shall delete the metadata associated with the data specified in a valid Data Delete Request.	Completed
ECS-L4-15075	S-DSS-04660 The SDSRV CI shall, as a result of processing a valid Search Request, provide the requesting client access to the matching search attributes and the Universal Reference for each data granule found during the search.	Completed
ECS-L4-15076	S-DSS-04690 The SDSRV CI shall process Search Requests for searches on either Core Granule Inventory Metadata or Product-Specific Granule Inventory Metadata, or a combination of both.	Completed

ID	Title	Status
ECS-L4-15077	S-DSS-04695 The SDSRV CI shall provide the capability to perform searches that identify the source instrument for a specified data product.	Completed
ECS-L4-15078	S-DSS-04710 The SDSRV CI shall notify the requesting client that no data granules were found, in the event that no data granules match the search criteria specified in a valid Search Request.	Completed
ECS-L4-15079	S-DSS-04800 SDSRV CI mode-specific applications shall access data only for the mode in which the application is configured.	Completed
ECS-L4-15080	S-DSS-04810 SDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	Completed
ECS-L4-15081	S-DSS-04820 SDSRV CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	Completed
ECS-L4-15082	S-DSS-04830 The SDSRV CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	Completed
ECS-L4-15083	S-DSS-04840 SDSRV CI server applications shall register within their mode-associated namespace in the CSS name service.	Completed
ECS-L4-15084	S-DSS-04850 SDSRV CI client applications shall incorporate a mode identifier for CSS name service lookups.	Completed
ECS-L4-15085	S-DSS-04860 SDSRV CI mode-specific executables and scripts shall accept a specific mode only at startup.	Completed
ECS-L4-15086	S-DSS-04870 The SDSRV CI shall include the mode identifier in activity log record entries for cost and accounting data.	Completed
ECS-L4-15087	S-DSS-04900 The SDSRV CI shall, at the direction and approval of the operations staff, retrieve an offsite copy of a product.	Completed
ECS-L4-15088	S-DSS-05000 The SDSRV CI shall manage algorithm packages as defined in the ECS Core Metadata Model, and provide interfaces for storing and accessing them.	Completed
ECS-L4-15089	S-DSS-05010 The AIM Inventory database shall track QA flag updates	Completed
ECS-L4-15090	S-DSS-05020 The AIM Inventory DB shall accept and persistently store optional checksum type, checksum origin, and checksum value parameters during a file insert.	Completed
ECS-L4-15091	S-DSS-05030 The AIM Inventory DB shall provide the capability to add or remove valid checksum types.	Completed
ECS-L4-15093	S-DSS-05050 The Archive Inventory Management CI shall ensure that the following calendar transitions are handled completely and accurately: a. New Year b. New Decade c. Leap Year. d. Daylight savings time	Completed
ECS-L4-15094	S-DSS-05060 The AIM QA Update service shall accept and process Update Metadata Requests that request the update of the following QA Attributes for the specified data granules 1) Operational Quality Flag 2) Operational Quality Flag Explanation 3) Science Quality Flag 4) Science Quality Flag Explanation.	Completed
ECS-L4-15096	S-DSS-05080 The AIM QA Update service shall provide an operator configurable mode-specific request directory where all QA update request files intended for that mode reside.	Completed
ECS-L4-15097	S-DSS-05090 The AIM QA Update service shall provide a DAAC configurable e-mail address at which the QA update requests are received.	Completed
ECS-L4-15098	S-DSS-05100 The AIM QA Update service shall maintain an operator configurable list of valid Requester IDs corresponding to the sites and the ESDTs that can be updated by each site for the purpose of authenticating the QA update requests.	Completed
ECS-L4-15099	S-DSS-05140 The AIM QA Update service shall allow DAAC operations to configure, within the application configuration file, a directory location for the storage of completed request files.	Completed

ID	Title	Status
ECS-L4-15100	S-DSS-05150 The AIM QA Update service shall allow DAAC operations to configure, within the application configuration file, a directory location for the storage of failed request files.	Completed
ECS-L4-15101	S-DSS-05160 The AIM QA Update service shall provide the following e-mail notification options that can be configured by the operator for each site. a. Send e-mail notification upon successful completion of QA updates as well as non-retryable failure. b. Send e-mail notification only upon non-retryable failure.	Completed
ECS-L4-15102	S-DSS-05170 The AIM QA Update service shall allow an operator to set up a list of internal DAAC e-mail addresses to which an e-mail notification is sent or copied upon completion of a QA update run.	Completed
ECS-L4-15103	S-DSS-05180 The AIM QA Update service shall allow an operator to configure a Reply-To: e-mail address for each site to which e-mail notifications are sent.	Completed
ECS-L4-15104	S-DSS-05190 The AIM QA Update service shall allow DAAC operations to configure the maximum number of granules to update within a single request.	Completed
ECS-L4-15105	S-DSS-05200 The AIM QA Update service shall operate as a command line utility.	Completed
ECS-L4-15106	S-DSS-05210 The AIM QA Update service shall validate the command line parameters for correct syntax.	Completed
ECS-L4-15107	S-DSS-05220 The AIM QA Update service shall allow the operator to suppress the operator prompts and the display of all messages via a no-prompt command line option.	Completed
ECS-L4-15108	S-DSS-05230 The AIM QA Update service shall suppress all operator prompts if the no-prompt option is specified assuming an affirmative response in these cases.	Completed
ECS-L4-15109	S-DSS-05240 The AIM QA Update service shall be able to process an individual QA update request file provided via command line, (or) all update request files located in a configured request directory.	Completed
ECS-L4-15110	S-DSS-05250 Each AIM QA update request file name shall contain the following information as part of its name: a. Operation mode b. The site name that originated the request c. Time tag of request accurate to second.	Completed
ECS-L4-15111	S-DSS-05260 The AIM QA Update service shall, as a command line option, provide the ability to process updates which failed in a previous run without starting any new updates.	Completed
ECS-L4-15112	S-DSS-05270 The AIM QA Update service shall, as a command line option, provide the ability to skip the processing of updates which failed in a previous run.	Completed
ECS-L4-15113	S-DSS-05280 The AIM QA Update service shall, as a command line option, provide the ability to remove any update requests marked as failed or investigate in a previous run before beginning a new run.	Completed
ECS-L4-15114	S-DSS-05290 The AIM QA Update service shall, as a command line option, provide the ability to modify update requests marked as investigate to indicate they don't require investigation, before beginning a new run.	Completed
ECS-L4-15115	S-DSS-05300 The AIM QA Update service shall require the QA update request to contain the following information: a. Requester ID b. QA Flag Type (Science or Operational) c. QA metadata update request details.	Completed
ECS-L4-15116	S-DSS-05310 The Requester ID included in the request shall be provided in one of the following format: a. a valid e-mail address b. a text string identification for a site	Completed

ID	Title	Status
ECS-L4-15117	S-DSS-05320 The AIM QA Update service shall authenticate a QA update request by a. validating the Requester ID included in the request against a list of valid Requester IDs maintained at the DAAC (and) b. ensuring that the ESDT to be updated is allowed for the Requester ID.	Completed
ECS-L4-15118	S-DSS-05330 The AIM QA Update service shall provide the option to specify granules to be updated using one of the following formats within a request: a. ESDT Short name, Version ID and Granule UR (or) b. ESDT Short Name, Version ID and Local Granule ID (or) c. ESDT Short Name, Version ID and a temporal window that defines the acquisition date and time range.	Completed
ECS-L4-15119	S-DSS-05340 The AIM QA Update service shall validate the syntax (format and valid range) of the QA Flag values included in the request before performing the updates.	Completed
ECS-L4-15120	S-DSS-05350 The AIM QA Update service shall, when an update request entry specifies the literal value 'ALL' in place of a Parameter Name, update all measured parameters of the specified granules with the same set of QA flag and the explanation field values specified within the request entry.	Completed
ECS-L4-15121	S-DSS-05360 The AIM QA Update service shall append the date and time of update, accurate to the minute, to the explanation fields provided in the request before storing them in the XML metadata files and Data Pool database.	Completed
ECS-L4-15122	S-DSS-05370 The QA metadata update request specifying ESDT and temporal window shall include the following information: a. ESDT Short Name b. Version ID c. Temporal window characterized by the acquisition date and time range. d. One or more triplets of Measured Parameter name (or the literal 'ALL'), QA Flag, and the corresponding explanation field.	Completed
ECS-L4-15123	S-DSS-05380 The temporal window for QA metadata update shall be specified as the inclusive time range bounded by the beginning acquisition date and time of the earliest granule and the beginning acquisition date and time of the latest granule.	Completed
ECS-L4-15124	S-DSS-05390 The QA metadata update request based on Local Granule IDs shall include the following information for each granule: a. ESDT Short Name b. Version ID c. Local Granule ID (LGID) d. One or more triplets of Measured Parameter name (or the literal 'ALL'), QA Flag and the corresponding explanation field.	Completed
ECS-L4-15125	S-DSS-05400 The QA metadata update request based on Granule URs shall include the following information for each granule: a. ESDT Short Name b. Version ID c. Granule UR d. One or more triplets of Measured Parameter name (or the literal 'ALL'), QA Flag and the corresponding explanation field.	Completed
ECS-L4-15126	S-DSS-05410 The AIM QA Update service shall be able to accept and update QA metadata for individual parameters, each with a different set of QA flag and explanation field values, if a Parameter Name is supplied in the request.	Completed
ECS-L4-15127	S-DSS-05420 The AIM QA Update service shall, when processing multiple update request files in a request directory, process the requests originated from a particular site in order of the request time tag as indicated by the request file names.	Completed
ECS-L4-15128	S-DSS-05430 The AIM QA Update service shall, by default, display the number of granules to be updated and prompt the operator for confirmation before performing the updates.	Completed

ID	Title	Status
ECS-L4-15129	S-DSS-05440 The AIM QA Update service shall, upon completion of the update to the XML file within the XML Archive, record the time of the update within the Inventory database.	Completed
ECS-L4-15130	S-DSS-05445 The AIM QA Update service shall, upon completion of the update to the XML file within the XML Archive, record the time of the update within the XML File.	Completed
ECS-L4-15135	S-DSS-05490 The AIM QA Update service shall, in the event that a granule included in the QA update request is being removed from the DataPool when the QA update service is attempting to process it, skip the DataPool update and proceed to the next granule.	Completed
ECS-L4-15136	S-DSS-05500 The AIM QA Update service shall, in the event that a state of granule included in the QA update request is being modified in the DataPool when the QA update service is attempting to process it, skip the DataPool update for the granule, proceed to the next granule in the request, and if the new state is still eligible for QA updates, retry the update of the granule in each future run until the update is completed.	Completed
ECS-L4-15137	S-DSS-05510 The AIM QA Update service shall, when encountering an error processing an update request for a granule/parameter that is already marked as failed, update the request to indicate that investigation is required.	Completed
ECS-L4-15138	S-DSS-05520 The AIM QA Update service shall, by default, attempt to process all failed requests not marked as requiring investigation from previous runs in addition to all new update requests provided to the service (update requests marked as investigate must be modified to indicate the don't require investigation before they can be processed).	Completed
ECS-L4-15139	S-DSS-05530 The AIM QA Update service shall, when instructed to modify update requests marked as investigate, update all requests to indicate they don't require investigation before beginning a new run (in this case, all update requests known to the service will be processed).	Completed
ECS-L4-15140	S-DSS-05540 The AIM QA Update service shall, when instructed to recover failed requests only, attempt to process all failed requests from previous runs and not attempt to load any new update requests.	Completed
ECS-L4-15141	S-DSS-05550 The AIM QA Update service shall, when instructed to skip failed requests, update all failed requests to indicate that investigation is required before starting any new update requests (update requests marked as investigate are not processed).	Completed
ECS-L4-15142	S-DSS-05560 The AIM QA Update service shall, when instructed to remove any update requests marked as failed or investigate, remove any update requests marked as failed or investigate in a previous run before beginning a new run	Completed
ECS-L4-15143	S-DSS-05570 The AIM QA Update service shall, upon completion of processing a request file, generate an e-mail notification including the following information as applicable: a. The name of the request file being processed. b. Total number of granules specified in the request c. Total number of granules updated d. A list of granules not updated along with specific error messages and reasons for failure.	Completed
ECS-L4-15144	S-DSS-05580 The AIM QA Update service shall, upon completion of processing a request file, send an e-mail notification to the requester using the Reply-To: e-mail address configured for the requesting site if available.	Completed
ECS-L4-15145	S-DSS-05590 The AIM QA Update service shall, upon completion of processing a request file, send an e-mail notification to the 'From:' e-mail address included in the request if the 'Reply -To' address is not available.	Completed

ID	Title	Status
ECS-L4-15146	S-DSS-05600 The SDSRV CI shall insure that simulated data is not distributed as real data during post-launch operations.	Completed
ECS-L4-15147	S-DSS-05610 The SDSRV CI shall notify the operator whenever requested Level 0 data, or equivalent Level 1A data, cannot be retrieved or recreated.	Completed
ECS-L4-15148	S-DSS-05620 The SDSRV CI shall have the capability to receive and manage the storage of Production Plans, as specified by valid Data Insert Requests.	Completed
ECS-L4-15149	S-DSS-05630 The SDSRV CI shall have the capability to manage the storage of AM-1 spacecraft scheduling information, as specified by valid Data Insert Requests received from the Flight Operations System.	Completed
ECS-L4-15150	S-DSS-05640 The SDSRV CI shall have the capability to retrieve AM-1 spacecraft scheduling information, as specified by valid Data Requests.	Completed
ECS-L4-15151	S-DSS-05650 The SDSRV CI shall have the capability to retrieve Production Plans, as specified by valid Data Requests.	Completed
ECS-L4-15152	S-DSS-05660 The SDSRV CI shall provide the capability to extract ASCII data from EOS-HDF data granules containing ASCII data and direct the distribution of the extracted data, as specified in valid Data Distribution Requests.	Completed
ECS-L4-15153	S-DSS-05670 The SDSRV CI shall provide the capability to extract binary data from EOS-HDF data granules containing binary data and direct the distribution of the extracted data, as specified in valid Data Distribution Requests.	Completed
ECS-L4-15154	S-DSS-05710 The SDSRV CI shall notify the requesting client that a Data Insert Request has completed successfully once the storage of the associated data and metadata has been confirmed.	Completed
ECS-L4-15155	S-DSS-05715 The SDSRV CI shall provide the operations staff the capability to obtain ECS granule identifiers, for ECS Level 0 data granules or equivalent ECS Level 1A data granules, that correspond to EDOS-specified PDS IDs.	Completed
ECS-L4-15156	S-DSS-05720 The SDSRV CI shall provide the operations staff the capability to obtain ECS granule identifiers, for ECS Level 0 data granules or equivalent ECS Level 1A data granules, that correspond to EDOS-specified APIDs and associated start/stop times.	Completed
ECS-L4-15157	S-DSS-05725 The SDSRV CI shall provide the operations staff the capability to issue Media Distribution Requests for ECS Level 0 data granules and ECS Level 1A data granules.	Completed
ECS-L4-15158	S-DSS-05730 The SDSRV CI shall provide the capability to associate multiple DAR identifiers with any ingested ASTER data granule.	Completed
ECS-L4-15159	S-DSS-05735 The SDSRV CI shall return a unique Request Identifier to the requesting client, whenever a valid Service Request is received.	Completed
ECS-L4-15160	S-DSS-05740 The SDSRV CI shall be capable of receiving and managing the storage of Delivered Algorithm Packages, as requested by valid Data Insert Requests.	Completed
ECS-L4-15161	S-DSS-05745 The SDSRV CI shall validate metadata, specified by Data Insert Requests, and return a rejection status to the requester if the metadata fails validation.	Completed
ECS-L4-15162	S-DSS-05750 The SDSRV CI shall reject requests to access ECS data and services that fail authorization.	Completed
ECS-L4-15163	S-DSS-05755 The SDSRV CI shall mark the previous version of a data product eligible for deletion when a new version is archived.	Completed
ECS-L4-15164	S-DSS-05760 The SDSRV CI shall be capable of receiving and managing the storage of Browse Data, as requested by valid Data Insert Requests.	Completed

ID	Title	Status
ECS-L4-15165	S-DSS-05765 The SDSRV CI shall reject requests to delete EDOS Level 0 data if no equivalent Level 1A data resides in the archive.	Completed
ECS-L4-15166	S-DSS-05770 The SDSRV CI shall reject requests to delete Level 1A data, derived from EDOS Level 0 data, if no equivalent Level 1A or EDOS Level 0 data resides in the archive.	Completed
ECS-L4-15167	S-DSS-05775 The SDSRV CI shall store the checksum, provided by the STMGT CI for each archived file, into the Metadata Database.	Completed
ECS-L4-15168	S-DSS-05780 The SDSRV CI shall provide the INGST CI a status indicating whether or not a Data Insert Request for the storage of data has been successful.	Completed
ECS-L4-15169	S-DSS-05785 The SDSRV CI shall delete Expedited Data 48 hours after it has been received.	Completed
ECS-L4-15170	S-DSS-05790 The SDSRV CI at the GSFC DAAC shall have the capability to store Inventory Metadata for 8963 granules per day.	Completed
ECS-L4-15171	S-DSS-05791 The SDSRV CI at the LaRC DAAC shall have the capability to store Inventory Metadata for 4331 granules per day.	Completed
ECS-L4-15172	S-DSS-05792 The SDSRV CI at the EDC DAAC shall have the capability to store Inventory Metadata for 5356 granules per day.	Completed
ECS-L4-15173	S-DSS-05793 The SDSRV CI at the NSIDC DAAC shall have the capability to store Inventory Metadata for 1125 granules per day.	Completed
ECS-L4-15174	S-DSS-05795 The SDSRV CI shall access the Granule Inventory Metadata, for each granule specified in a Data Request, in order to determine the Logical File Location for each of the granule's constituent files.	Completed
ECS-L4-15175	S-DSS-05800 The SDSRV CI shall have the capability to restore lost or unreadable Level 1A or Level 0 data from corresponding replacement products received from EDOS.	Completed
ECS-L4-15176	S-DSS-05820 The SDSRV CI shall update the Granule Inventory Metadata to indicate that a lost data granule is available after it has been restored.	Completed
ECS-L4-15177	S-DSS-05825 The SDSRV CI shall provide the operations staff the capability to display and list all Granule Inventory Metadata.	Completed
ECS-L4-15178	S-DSS-05830 The SDSRV CI shall process Data Delete Requests for the deletion of data and associated metadata.	Completed
ECS-L4-15179	S-DSS-05831 The SDSRV CI shall process Data Delete Requests received from the Data Processing Subsystem.	Completed
ECS-L4-15180	S-DSS-05832 The SDSRV CI shall provide the operations staff the capability to override the automatic deletion of data that has been marked as eligible for deletion.	Completed
ECS-L4-15181	S-DSS-05865 The SDSRV CI shall ensure that the following calendar transitions are handled completely and accurately: a. New Year b. New Decade c. New Century d. Leap Year.	Completed
ECS-L4-15182	S-DSS-06100 The SDSRV CI shall update ESDTs using the updated version of the ESDT files provided by operations staff.	Completed
ECS-L4-15183	S-DSS-06101 The SDSRV CI shall provide operations staff with the ability to update ESDTs by adding optional collection metadata, optional inventory metadata, services, events and new qualifiers on existing events.	Completed
ECS-L4-15184	S-DSS-06102 The SDSRV CI shall send a command to the ADSRV CI to replace collection metadata when an ESDT is updated by adding optional collection metadata.	Completed
ECS-L4-15187	S-DSS-06105 The SDSRV CI shall send additional services to the ADSRV CI when an ESDT is updated by adding services.	Completed

ID	Title	Status
ECS-L4-15188	S-DSS-06106 The SDSRV CI shall send additional events to SBSRV when an ESDT is updated by adding events.	Completed
ECS-L4-15189	S-DSS-06107 The SDSRV CI shall send a command to SBSRV to replace an event when an ESDT is updated by adding additional qualifiers to a previously registered event.	Completed
ECS-L4-15190	S-DSS-06108 The SDSRV CI shall provide operations staff with functionality in the SDSRV Operations GUI to install updated ESDTs.	Completed
ECS-L4-15191	S-DSS-06109 The SDSRV CI shall recover from and process the resubmittal of a partially completed ESDT update.	Completed
ECS-L4-15192	S-DSS-06110 The SDSRV CI shall prohibit the use of an ESDT that has partially completed ESDT update in any other service calls.	Completed
ECS-L4-15193	S-DSS-06111 The SDSRV CI shall validate the updated descriptor as part of the Update ESDT process.	Completed
ECS-L4-15194	S-DSS-06112 The SDSRV CI shall determine the changes to the updated descriptor as part of the ESDT Update process.	Completed
ECS-L4-15195	S-DSS-06113 The SDSRV CI shall notify operations staff if there are no differences in a descriptor as part of the ESDT process.	Completed
ECS-L4-15196	S-DSS-06114 The SDSRV CI shall disable all other services during the ESDT Update process.	Completed
ECS-L4-15197	S-DSS-06115 The SDSRV CI shall only accept ESDT update requests when the SDSRV is operating in a maintenance mode.	Completed
ECS-L4-15198	S-DSS-06120 The SDSRV CI shall provide operations staff with the ability to update ESDTs by changing a mandatory attribute to optional or updating single-valued collection metadata, multi-valued collection metadata, inventory metadata, attributes of collection-related entities and service signatures.	Completed
ECS-L4-15199	S-DSS-06121 The SDSRV CI shall maintain a list of attributes that can not be updated through the ESDT update process.	Completed
ECS-L4-15200	S-DSS-06122 The SDSRV CI shall reject attempts to update attributes that have been determined to be non-updateable to include ShortName and VersionID in the CollectionDescriptionClass Group, AdditionalAttributeName, AdditionalAttributeType, SensorCharacteristicName, SensorCharacteristicType, AnalysisShortName, CampaignShortName, InstrumentShortName, PlatformShortName, and SensorShortName.	Completed
ECS-L4-15201	S-DSS-06123 The SDSRV CI shall send a command to the ADSRV CI to replace collection metadata when an ESDT is updated by updating selected collection metadata.	Completed
ECS-L4-15204	S-DSS-06126 The SDSRV CI shall send a command to the ADSRV CI to replace services when an ESDT is updated by updating the service signature.	Completed
ECS-L4-15205	S-DSS-06127 The SDSRV CI shall provide operations staff with the ability to install Platform, Sensor, Campaign, Instrument, Analysis Source, Contact, and Discipline Topic Keyword attributes by installing the Collection Reference Descriptor.	Completed
ECS-L4-15206	S-DSS-06128 The SDSRV CI shall provide operations staff with the ability to update Platform, Sensor, Campaign, Instrument, Analysis Source, Contact, and Discipline Topic Keyword attributes by updating the Collection Reference Descriptor.	Completed
ECS-L4-15207	S-DSS-06129 The SDSRV CI shall provide the operations staff with functionality in the SDSRV Operations Gui to install the collection reference descriptor.	Completed

ID	Title	Status
ECS-L4-15208	S-DSS-06130 The SDSRV CI shall provide the operations staff with functionality in the SDSRV Operations Gui to update the collection reference descriptor.	Completed
ECS-L4-15209	S-DSS-06131 The SDSRV CI shall provide operations staff with the capability to update ESDTs.	Completed
ECS-L4-15210	S-DSS-06140 The AIM QA Update service shall, upon completion of processing a request file, allow the operator to view the following information: a. A list of affected granules identified by ESDT Short Name, Version ID, LGID, dbID, along with the measured parameters and the updated QA flag values b. Total number of granules updated.	Completed
ECS-L4-15211	S-DSS-06150 The AIM QA Update Service shall, upon completion of processing a request file, move the request file to the completed request directory if all granules were processed or, in the event of an authentication error or the service is configured to exit on the first error, move the request file to the failed request directory.	Completed
ECS-L4-15212	S-DSS-06160 The AIM QA Update service shall abort with an error message if another instance is running in the same mode.	Completed
ECS-L4-15213	S-DSS-06170 The AIM QA Update service shall abort with an error message if the Data Pool Move Collection utility is running in the same mode.	Completed
ECS-L4-15214	S-DSS-06180 The AIM QA update service shall, in the event of an authentication error, send an e-mail notification to the requester indicating authentication failure	Completed
ECS-L4-15215	S-DSS-06190 The AIM QA Update service shall reject a request and terminate with a non-retryable failure if the operation mode indicated by the request file name does not match the operation mode in which the service is being executed.	Completed
ECS-L4-15216	S-DSS-06200 The AIM QA update service shall, in the event of an authentication error, reject the entire request file and continue processing any remaining request files.	Completed
ECS-L4-15217	S-DSS-06210 The AIM QA Update service shall, upon failure in validating the command line syntax, display an error message, the correct command line syntax, and terminate.	Completed
ECS-L4-15218	S-DSS-06220 The AIM QA Update service shall display a warning message if it detects that the number of granules to be updated exceeded a DAAC configurable maximum threshold.	Completed
ECS-L4-15219	S-DSS-06230 The AIM QA Update service shall, when encountering a duplicate Local Granule ID within the input request file, remove the duplicate and continue to process the request file.	Completed
ECS-L4-15220	S-DSS-06240 The AIM QA Update service shall, when encountering a duplicate UR within the input request file, remove the duplicate and continue to process the request file.	Completed
ECS-L4-15221	S-DSS-06250 The AIM QA Update service shall consider a reference to a Granule UR or a Local Granule ID that does not exist in the ECS inventory database a fatal error for the granule.	Completed
ECS-L4-15222	S-DSS-06260 The AIM QA Update service shall, upon detecting a fatal error in processing a particular granule, a. log an error and continue with the rest of the granules in the request. (or) b. log an error and terminate the entire request (default option), depending on the processing option set via command line.	Completed
ECS-L4-15223	S-DSS-06270 The AIM QA update service shall, when processing a request directory and encountering a fatal error on a single request file, continue processing the remaining request files within the directory.	Completed

ID	Title	Status
ECS-L4-15224	S-DSS-06280 The AIM QA Update service shall consider a reference to a non-existent measured parameter name a fatal error for processing the granule.	Completed
ECS-L4-15225	S-DSS-06290 The AIM QA Update service shall be able to recover from a failure while performing or recording its QA updates such that a correct record of the QA updates can be provided without error (e.g., by restarting the utility) and without incurring a performance penalty of more than 10 minutes.	Completed
ECS-L4-15226	S-DSS-06300 The SDSRV CI shall provide the capability to limit the number of Asynchronous Acquire Requests that are executed concurrently.	Completed
ECS-L4-15227	S-DSS-06301 The SDSRV CI shall provide the capability to limit the number of Asynchronous Subsetting Acquire Requests that are executed concurrently.	Completed
ECS-L4-15228	S-DSS-06302 The SDSRV CI shall provide a Cold Start capability for Asynchronous Acquire Requests.	Completed
ECS-L4-15229	S-DSS-06303 The SDSRV CI shall provide a Warm Start/Restart capability for Asynchronous Acquire Requests.	Completed
ECS-L4-15230	S-DSS-06304 The SDSRV CI shall provide a GUI that displays the Asynchronous Acquire Requests that are waiting in the queue.	Completed
ECS-L4-15231	S-DSS-06310 The AIM QA Update service shall use a standard name for its log file.	Completed
ECS-L4-15232	S-DSS-06320 The AIM QA Update service shall create a log file if the log file does not already exist.	Completed
ECS-L4-15234	S-DSS-06340 The AIM QA Update service shall include a time stamp and the process ID in all log messages.	Completed
ECS-L4-15235	S-DSS-06350 The AIM QA Update service shall log the name of the request file at the start of processing each request file.	Completed
ECS-L4-15236	S-DSS-06360 The AIM QA Update service shall log all warning and error messages encountered during the run.	Completed
ECS-L4-15238	S-DSS-06380 The AIM QA Update service shall log the following information at the end of a run a. Total number of granules requested b. Total number of granules updated c. Run completion or Failure status	Completed
ECS-L4-15239	S-DSS-06390 The AIM QA Update service shall be able to operate in multiple modes concurrently.	Completed
ECS-L4-15240	S-DSS-06400 The AIM QA Update service shall record the list of granules updated along with the new QA attribute values in the Inventory database (for use by BMGT).	Completed
ECS-L4-15241	S-DSS-06410 The AIM QA Update service shall not begin processing granule updates if the XML Archive file system is unavailable.	Completed
ECS-L4-15242	S-DSS-06420 The AIM QA Update service shall be capable of applying QA updates to metadata files in the XML Archive and the DataPool at a rate no less than 15,000 granules per hour.	Completed
ECS-L4-15243	S-DSS-06430 The AIM CI shall, upon transition to version 7.21, create a new Inventory database.	Completed
ECS-L4-15244	S-DSS-06440 The AIM CI shall, upon transition to version to 7.21, copy the required tables (listed in the Operational Concept of ticket DS_7E_01) from the SDSRV and STMGT databases to the Inventory database.	Completed
ECS-L4-15245	S-DSS-06450 The AIM CI shall, upon transition to version 7.21, copy the PSA attributes RadiometricDBVersion, GeometricDBVersion, and DAR_ID from the Science Data Server database to the Inventory database.	Completed
ECS-L4-15246	S-DSS-06460 The AIM CI shall, upon transition to version 7.21, insert a definition for the XML archive into the Ingest database.	Completed

ID	Title	Status
ECS-L4-15247	S-DSS-06470 The AIM CI shall, upon transition to version 7.21, store the association of each ESDT using the Nominal Orbit Spatial Extent (NOSE) search method to the correct set of Orbit Polygons based upon the Platform and Instrument metadata stored in the collection metadata for the ESDT.	Completed
ECS-L4-15248	S-DSS-06480 The AIM XML Validation service shall perform consistency and correctness checks for the metadata specified in the XML file of a validation request.	Completed
ECS-L4-15249	S-DSS-06490 The AIM XML Validation service shall be delivered with an XML schema file for each of the following data types: Browse, Production History, Quality Assurance, and Delivered Algorithm Package.	Completed
ECS-L4-15250	S-DSS-06500 The AIM Validation service shall be capable of validating granule metadata stored in an XML file.	Completed
ECS-L4-15251	S-DSS-06510 The AIM XML Validation service shall, when validating a descriptor, verify that all elements conform to the rules specified in the schema for descriptor files.	Completed
ECS-L4-15252	S-DSS-06520 The AIM XML Validation service shall, when validating a descriptor, return a Success result if, and only if, all elements within the received descriptor file conform to the rules in the descriptor schema.	Completed
ECS-L4-15253	S-DSS-06530 The AIM XML Validation service shall, when validating a granule metadata file, verify that all mandatory elements conform to the rules specified in the ESDT specific schema associated with the granule.	Completed
ECS-L4-15254	S-DSS-06540 The AIM XML Validation service shall, when validating granule metadata, return a Success result if, and only if, all elements within the received granule metadata file conform to the rules in ESDT specific schema associated with the granule.	Completed
ECS-L4-15255	S-DSS-06550 The AIM XML Validation service shall, when validating a granule metadata file, return a warning result if, after the removal of invalid optional elements from the granule metadata file, all remaining elements conform to the rules in the ESDT specific schema associated with the granule.	Completed
ECS-L4-15256	S-DSS-06560 The AIM XML Validation service shall, when validating a granule metadata file, return a fatal error result if any errors are encountered that prevent it from validating the XML file (including failed database operations after the configured number of retries).	Completed
ECS-L4-15257	S-DSS-06570 The AIM XML Validation service shall, when validating a granule metadata file, return a failure result if, after the removal of invalid optional elements from a granule metadata file (if present), any element doesn't conform to the rules specified in the ESDT specific schema associated with the granule.	Completed
ECS-L4-15258	S-DSS-06580 The AIM XVU shall, when validating granule metadata, allow a mandatory element to be missing if the immediate parent of the element is optional and also missing (the 'mandatory if applicable' rule).	Completed
ECS-L4-15259	S-DSS-06590 The AIM XML Validation service shall, when validating a granule metadata file, validate the values of Product Specific Attributes using the definition of the Product Specific Attribute stored in the AIM Inventory database.	Completed
ECS-L4-15260	S-DSS-06600 The SDSRV CI shall support a QA Time range measured as the number days after the value of the granule level attribute ProductionDateTime for the purpose of restricting access to granules.	Completed
ECS-L4-15261	S-DSS-06601 The SDSRV CI shall interpret a NULL QA Time range as indicating that the time range restriction rule should be applied to all granules within the collection, independent of ProductionDateTime.	Completed

ID	Title	Status
ECS-L4-15263	S-DSS-06603 The SDSRV CI shall support access rules based upon the MSS User Profile roles of P, R, and N individually or in any combination.	Completed
ECS-L4-15264	S-DSS-06604 The SDSRV CI shall support two sets of access rules for both the OperationalQualityFlag and the ScienceQualityFlag a. one set to be applicable during the QA time range as measured from the granule's production time, b. the other to define the access rules that are applicable thereafter.	Completed
ECS-L4-15273	S-DSS-06613 The SDSRV CI shall deny granule access to Regular NASAUsers ('R') if any of the following conditions are true: a. The Access Permission for the ESDT does not include 'R' and is not NULL b. The granule has quality flags for measured parameters AND the currently applicable access rule associated with the value of the granule's OperationalQualityFlag exists and does not contain 'R' c. The granule has quality flags for measured parameters AND the currently applicable access rule associated with the value of the granule's ScienceQualityFlag exists and does not contain 'R'.	Completed
ECS-L4-15274	S-DSS-06614 The SDSRV CI shall deny granule access to Non-NASAUsers ('N') if any of the following conditions are true: a. The Access Permission for the ESDT is not NULL and does not contain 'N' b. The granule has quality flags for measured parameters AND the currently applicable access rule associated with the value of the granule's OperationalQualityFlag exists and does not contain 'N' c. The granule has quality flags for measured parameters AND the currently applicable access rule associated with the value of the granule's ScienceQualityFlag exists and does not contain 'N'.	Completed
ECS-L4-15275	S-DSS-06615 The SDSRV CI shall log the user ID, ESDT short name and version, and granule ID to the SDSRV log file when attempts to access a granule are denied.	Completed
ECS-L4-15278	S-DSS-06620 The AIM Validation service shall validate the Spatial metadata of granules with a spatial search type not equal to Orbit / NOSE using the 'Spatial Query Server' COTS.	Completed
ECS-L4-15279	S-DSS-06630 The AIM Validation service shall, when validating a granule with a spatial search type equal to Orbit, consider duplicate point values within the Gpolygon elements invalid.	Completed
ECS-L4-15280	S-DSS-06640 The AIM Validation service shall, when validating a granule metadata file, use the ESDT specific schema to determine if a non-PSA element is mandatory or optional.	Completed
ECS-L4-15281	S-DSS-06650 The AIM Validation service shall, when validating a granule metadata file, treat all PSA element as optional.	Completed
ECS-L4-15282	S-DSS-06660 The AIM Validation service shall, when detecting an invalid optional element, remove the element from the granule XML metadata file.	Completed
ECS-L4-15283	S-DSS-06670 The AIM Validation service shall be capable of validating an element against a fixed domain of values.	Completed
ECS-L4-15284	S-DSS-06680 The AIM Validation service shall be capable of validating an element against a numeric range of values.	Completed
ECS-L4-15285	S-DSS-06690 The AIM Validation service shall be capable of validating an element against a fixed value.	Completed
ECS-L4-15286	S-DSS-06701 The SDSRV CI shall provide a command line tool for generating a formatted ASCII text file listing the unmerged granules from the L70RF1 & L70RF2 collections for an operator-provided granule insert time range.	Completed

ID	Title	Status
ECS-L4-15287	S-DSS-06702 The SDSRV CI shall provide a command line tool for generating a formatted ASCII text file listing the un-merged granules from the L70WRS1 and L70WRS2 collections for an operator-provided granule insert time range.	Completed
ECS-L4-15288	S-DSS-06703 The SDSRV CI shall include the Landsat base file name, format type, start time, and path/row information in the list of un-merged granules, and sort the list by Landsat base file name (descending), row (ascending), and format type.	Completed
ECS-L4-15289	S-DSS-06704 The SDSRV CI command line tool for merging and promoting Landsat L70RF1 and L70RF2 granules shall accept as input an ASCII text file formatted in accordance with the un-merged F1/F2 granule listing.	Completed
ECS-L4-15290	S-DSS-06705 The SDSRV CI command line tool for merging Landsat L70WRS1 and L70WRS2 granules shall accept as input an ASCII text file formatted in accordance with the un-merged WRS1/WRS2 granule listing.	Completed
ECS-L4-15291	S-DSS-06706 The SDSRV CI shall require operator confirmation for all granule deletions.	Completed
ECS-L4-15292	S-DSS-06707 The SDSRV CI shall perform all merge, de-merge, promote and delete operations in a way that preserves internal SDSRV database consistency.	Completed
ECS-L4-15293	S-DSS-06708 The SDSRV CI shall provide a command line tool to initiate the merging of L70RF1 and L70RF2 granules and their child WRS granules.	Completed
ECS-L4-15294	S-DSS-06709 The SDSRV CI shall provide a command line tool to initiate the merging of L70RWRS1 and L70RWRS2 granules.	Completed
ECS-L4-15295	S-DSS-06711 The SDSRV CI shall provide a command line tool to demerge individual L70R granules into component L70RF1 and L70RF2 child WRS granules in the process.	Completed
ECS-L4-15296	S-DSS-06712 The SDSRV CI shall provide a command line tool to promote "orphaned" L70RF1 or L70RF2 granules (both subinterval and scenes) to the L70R and L70RWRS collections.	Completed
ECS-L4-15297	S-DSS-06713 The SDSRV shall be able to flag unmerged L7 F1 and F2 granules as deleted from the archive via the command line.	Completed
ECS-L4-15298	S-DSS-06714 The SDSRV shall be able to flag unmerged L7 F1 and F2 WRS granules as deleted from the archive via the command line.	Completed
ECS-L4-15299	S-DSS-06715 The SDSRV CI command line tool for flagging unmerged L7 F1 and F2 granules as deleted from the archive via the command line, shall provide an option that gives operators the ability to request the physical deletion of the granules, without attempting to also delete associated BROWSE, PH, and QA granules.	Completed
ECS-L4-15300	S-DSS-06716 The SDSRV CI shall treat a request for physical deletion of L7 F1 and F2 granules in the same way as it treats that for other granules, i.e., make the granule inaccessible for normal searching, and eventually allow its removal from the inventory and archive via the deletion clean-up utility.	Completed

ID	Title	Status
ECS-L4-15301	S-DSS-06720 The SDSRV CI shall provide an automated procedure to perform insert processing of Landsat IGS Science data: a. As a regular Science granule insert when Browse data is not provided. b. As an integrated Browse insert when Science granule and Browse data is provided and the Science granule does not previously exist in the SDSRV Inventory. c. As an update to the Science granule metadata and an insert of the Browse data when both Science and Browse are provided and the Browse does not previously exist. d. Only an exact match of the following attributes will determine 'prior existence' of a Science granule within the SDSRV Inventory - Station ID, Starting path, and Subinterval Start time where a match is found if times match after truncating to the minute level.	Completed
ECS-L4-15308	S-DSS-06762 In response to an inventory search request, the SDSRV CI shall return a list of granules that match the search criteria but populating only the first data chunk with metadata.	Completed
ECS-L4-15311	S-DSS-06770 The AIM Validation service shall, when validating a granule metadata file, be capable of validating that metadata elements conform to rules stated within the ECS Data Model, with the exception of the Parameter Name element within the Measured Parameter Container which shall be allowed a length of up to 80 characters (NOTE: this attribute length is specified as 40 characters in the ECS Data Model).	Completed
ECS-L4-15312	S-DSS-06780 The XML Validation service shall return a status indicating Pass, Fail, Warning, or Fatal to the DPL Ingest CI along with a list of any validation warnings or errors found while validating the granule metadata file.	Completed
ECS-L4-15313	S-DSS-06790 The AIM XML Validation service shall return a Fatal return code if it encounters a fault or unavailable resource when validating a granule XML metadata file.	Completed
ECS-L4-15314	S-DSS-06800 The AIM XML Validation service shall allow for configuration, within the application configuration file, the number of times to retry a database error.	Completed
ECS-L4-15315	S-DSS-06810 The AIM XML Validation service shall be capable of processing multiple granule validation requests from the DPL Ingest service concurrently.	Completed
ECS-L4-15316	S-DSS-06820 The AIM XML Validation service shall be capable of running in multiple modes concurrently.	Completed
ECS-L4-15317	S-DSS-06830 The AIM XML Validation service shall log all validation warning messages and error messages pertaining to the validation of metadata elements to the application log file.	Completed
ECS-L4-15318	S-DSS-06840 The AIM XML Validation service shall log information that is sufficient to identify the granule being validated along with the time associated with each metadata validation message it logs.	Completed
ECS-L4-15319	S-DSS-07100 SDSRV CI shall associate the BROWSE granule for an ASTER L1A granule with all ASTER L1B products derived from that L1A granule.	Completed
ECS-L4-15320	S-DSS-07101 SDSRV CI shall associate the BROWSE granule for an ASTER L1A granule with all ASTER DEM products derived from that L1A granule, or from any L1B granule derived from that L1A.	Completed
ECS-L4-15321	S-DSS-07102 The SDSRV shall be able to associate the BROWSE granules for pre-existing ASTER L1A with all existing ASTER L1B products derived from each L1A granule.	Completed
ECS-L4-15322	S-DSS-07103 The SDSRV shall be able to associate the BROWSE granules for pre-existing ASTER L1A with all existing ASTER DEM products derived from each L1A granule.	Completed

ID	Title	Status
ECS-L4-15323	S-DSS-07105 The SDSRV CI shall provide the capability for the integrated browse service of an AIRS Summary Browse Product to retrieve the SCIENCE granule containing the product itself.	Completed
ECS-L4-15324	S-DSS-07200 The STMGT CI shall provide the capability to compute checksum for an ECS science granule file using any of the following checksum algorithms: a. Unix CKSUM b. ECS Checksum c. MD5 Checksum (based on RFC 1321) [Note: MD5 checksum is the new capability being added by this ticket.]	Completed
ECS-L4-15325	S-DSS-07202 The STMGT CI shall accept and represent the MD5 checksum value in the form of a 32-character lowercase hexadecimal string.	Completed
ECS-L4-15326	S-DSS-07205 The SDSRV CI shall accept and store the MD5 checksum value in the form of a 32-character lowercase hexadecimal string.	Completed
ECS-L4-15327	S-DSS-0850 The AIM XML Validation service shall validate the set of NOSE track numbers and start/end block numbers associated with a granule against the predefined orbit spatial extents defined within the AIM Inventory database for the ESDT.	Completed
ECS-L4-15328	S-DSS-09400 The SDSRV CI shall persistently store Asynchronous Acquire requests.	Completed
ECS-L4-15329	S-DSS-10300 The Document Data Server shall complete a search for a guide document by a single keyword in not exceeding 8 seconds.	Completed
ECS-L4-15330	S-DSS-10305 The Document Data Server shall complete a directory search using a single keyword in a period not to exceed 8 seconds.	Completed
ECS-L4-15331	S-DSS-10306 The Document Data Server shall complete a directory search using multiple keywords in a period not to exceed 13 seconds.	Completed
ECS-L4-15332	S-DSS-10310 The Document Data Server shall complete a keyword search on a 1000 page document of not exceeding 3 seconds.	Completed
ECS-L4-15333	S-DSS-11010 The AIM Inventory database shall store the following checksum related attributes for each browse and ancillary file object Checksum type Checksum value Last time checksum was verified Checksum Origin Checksum status (Success or Failure)	Completed
ECS-L4-15334	S-DSS-11020 The AIM Inventory database shall store two additional fields to represent the checksum status and the last checksum time of a browse file. This is needed to distinguish between the browse file in the browse disk archive and the backup browse file on tape.	Completed
ECS-L4-15336	S-DSS-11040 The AIM CI shall provide a stand-alone Archive Checksum Verification Utility (ACVU) to proactively check and verify the integrity of files stored on both tape and in the browse disk archive.	Completed
ECS-L4-15337	S-DSS-11050 The ACVU shall be capable of being scheduled and run as a background process or being run on command-line by the DAAC operator.	Completed
ECS-L4-15338	S-DSS-11060 The ACVU shall be able to verify checksum of files based on the following operator input options: A mandatory input parameter to specify the operation mode for checksum verification. Whether to calculate and store the checksum of files that do not have checksums. A single or multiple media (tape) IDs. A single or multiple volume groups. Number of Days since last checksum verification. A list of granule IDs. Percentage of files matching the above criteria to checksum.	Completed
ECS-L4-15339	S-DSS-11070 The ACVU shall organize the files selected for verification such that it will process all the files selected on one tape in the sequence in which they are stored.	Completed
ECS-L4-15340	S-DSS-11080 The ACVU shall allow the DAAC operator to configure the maximum number of tape reads it will submit at one time.	Completed

ID	Title	Status
ECS-L4-15341	S-DSS-11090 The ACVU shall allow the DAAC operator to configure the maximum number of concurrent tapes that can be used for checksum verification.	Completed
ECS-L4-15345	S-DSS-11130 The ACVU shall either log all granules that it failed to process because the tapes on which they were located were "off-line" or log the fact that a given media id was not processed because it is off-line.	Completed
ECS-L4-15346	S-DSS-11140 Upon checksum verification failure after a configurable number of retry attempts, the ACVU shall log an error message including the following information for each affected file: Media ID Granule ID ESDT ShortName and Version ID Granule insert time Complete file name and path Checksum type Computed Checksum Checksum value in database Last time checksum was verified	Completed
ECS-L4-15347	S-DSS-11150 The ACVU shall log the following statistical summary information: Start and end time of run Run input parameters Number of files checked, organized by ESDT Number of files that failed checksum verification, organized by ESDT Percentage of files that failed checksum verification organized by ESDT Total number of files checked across all ESDTs Total number of files that failed checksum verification across all ESDTs Percentage of files that failed checksum verification across all ESDTs	Completed
ECS-L4-15348	S-DSS-11160 The ACVU shall checkpoint its progress and be able to resume and complete a previous run that was interrupted, starting from the last checkpoint.	Completed
ECS-L4-15349	S-DSS-11170 The ACVU shall be able to checksum files at a rate of 200MB per minute.	Completed
ECS-L4-15350	S-DSS-11180 The ACVU shall not significantly impact the performance of other ECS subsystems.	Completed
ECS-L4-15351	S-DSS-12000 When accepting a Browse link for a granule in a collection other than ASTER, the AIM CI shall determine whether the science granule already has a Browse link, and if so, replace that it with the new link rather than adding it. [NOTE: This complements S-DPL-00780 which asks DPL Ingest to replace any existing link, as well.]	Completed
ECS-L4-15352	S-DSS-20000 The STMGT CI shall accept and store data files into the archive, as specified by requests received from the SDSRV CI.	Completed
ECS-L4-15353	S-DSS-20005 The STMGT CI shall retrieve data files from the archive, as specified by requests received from the DDIST CI.	Completed
ECS-L4-15354	S-DSS-20011 The STMGT CI shall perform reads and writes to the archive concurrently for each request.	Completed
ECS-L4-15355	S-DSS-20012 The STMGT CI shall permit only a configurable number of files to be written into or read from the archive at the same time.	Completed
ECS-L4-15356	S-DSS-20025 The STMGT CI shall place an entry in the Archive Activity Log corresponding to each Insert Request. The STMGT CI shall log, to the Event Log, the successful completion of requests to store data files into the archive.	Completed
ECS-L4-15357	S-DSS-20032 The STMGT CI shall log, to the Event Log, transmission errors and re-transmission attempts associated with Electronic Distribution Requests.	Completed
ECS-L4-15358	S-DSS-20034 The STMGT CI shall log, to the Event Log, all errors associated with media and media handling devices.	Completed
ECS-L4-15359	S-DSS-20036 The STMGT CI shall log events associated with staging activity and the allocation of staging resources.	Completed
ECS-L4-15360	S-DSS-20045 The STMGT CI shall log, to the Event Log, the successful completion of requests to retrieve data files from the archive.	Completed

ID	Title	Status
ECS-L4-15361	S-DSS-20046 The STMGT CI shall log, to the Event Log, any failure to retrieve a requested file from the archive.	Completed
ECS-L4-15362	S-DSS-20048 The STMGT CI shall log, to the Event Log, any failure to retrieve a backup copy of a requested file from the archive.	Completed
ECS-L4-15363	S-DSS-20050 The STMGT CI shall not write data of a sensitive nature (e.g. passwords) to a log in the clear.	Completed
ECS-L4-15364	S-DSS-20085 The STMGT CI shall log all detected errors and faults to the Event Log.	Completed
ECS-L4-15365	S-DSS-20095 The STGMT CI shall have the capability to automatically mount archive media into storage devices.	Completed
ECS-L4-15366	S-DSS-20110 The DRPHW CI shall provide operations staff the capability to manually insert media into archive storage devices.	Completed
ECS-L4-15367	S-DSS-20120 The DRPHW CI shall provide operations staff the capability to manually remove media from archive storage devices.	Completed
ECS-L4-15368	S-DSS-20125 The STMGT CI shall comply with ESDIS-approved standards for file storage, file storage management, and backup, where appropriate.	Completed
ECS-L4-15369	S-DSS-20127 The STMGT CI shall comply to the POSIX.2 standard, when technically possible, and shall deviate from the standard only when non-compliant system functions are required which have no POSIX equivalent.	Completed
ECS-L4-15370	S-DSS-20130 The STMGT CI shall provide operations staff the capability to manually dismount archive media from archive storage devices.	Completed
ECS-L4-15371	S-DSS-20140 The STMGT CI shall provide operations staff the capability to manually mount archive media into archive storage devices.	Completed
ECS-L4-15372	S-DSS-20180 The STMGT CI shall have the capability to automatically dismount archive media from storage devices.	Completed
ECS-L4-15373	S-DSS-20220 The STMGT CI shall notify the operations staff, select an alternate media cartridge and resume processing, if an uncorrectable error occurs during an archive file storage operation.	Completed
ECS-L4-15374	S-DSS-20230 The STMGT CI shall notify operations staff to discard source archive media after its contents have been re-created on the new media.	Completed
ECS-L4-15375	S-DSS-20240 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.	Completed
ECS-L4-15376	S-DSS-20250 The STMGT CI shall terminate the data retrieval operation and notify the operations staff whenever the retrieval of a file fails due to an uncorrectable error.	Completed
ECS-L4-15377	S-DSS-20255 If an uncorrectable error occurs during retrieval operations, STMGT CI shall automatically recreate the contents on new media.	Completed
ECS-L4-15378	S-DSS-20315 The STMGT CI shall have the capability to support the transaction rates as specified in Table 7-4 of the Functional and Performance Requirements Specification for the ECS.	Completed
ECS-L4-15379	S-DSS-20361 The STMGT CI shall have the capability to provide the SDSRV CI directories, of all stored data files, indexed by Logical File Location.	Completed
ECS-L4-15380	S-DSS-20365 The STMGT CI shall store each data file in the location specified by the Logical File Location provided by the SDSRV CI.	Completed
ECS-L4-15381	S-DSS-20370 The STMGT CI shall store data using ESDIS-approved file formats and file organization.	Completed
ECS-L4-15382	S-DSS-20380 The STMGT CI shall provide the capability to continue operations in the event of a failure of a tape drive or a disk drive.	Completed

ID	Title	Status
ECS-L4-15383	S-DSS-20390 The STMGT CI shall provide tools for recovering data from failed archive media when such tools are supplied by the vendor of the supporting FSMS product(s).	Completed
ECS-L4-15384	S-DSS-20400 The STMGT CI shall provide tools for recovering data from failed archive devices, when such tools are supplied by either the vendor of the supporting FSMS product(s) or by the vendor of the affected hardware.	Completed
ECS-L4-15385	S-DSS-20410 The STMGT CI shall notify the operator upon the failure of retrieval of a local or offsite backup copy.	Completed
ECS-L4-15386	S-DSS-20420 The STMGT CI shall be capable of producing a backup copy of designated EOS data.	Completed
ECS-L4-15387	S-DSS-20430 The STMGT CI shall be capable of producing backup archive media which is compatible with approved ECS formats.	Completed
ECS-L4-15388	S-DSS-20450 The STMGT CI shall provide file storage and retrieval capabilities in support of the pre-launch checkout of the ground system.	Completed
ECS-L4-15389	S-DSS-20480 The STMGT CI shall provide operations staff the capability to perform physical inventories of archive media resident in archive storage devices.	Completed
ECS-L4-15390	S-DSS-20510 The STMGT CI shall provide operations staff with the ability to display and modify storage resource and device configuration information.	Completed
ECS-L4-15391	S-DSS-20550 The STMGT CI shall provide operations staff a mechanism to display/view storage system configuration parameters which affect storage system performance.	Completed
ECS-L4-15392	S-DSS-20570 The STMGT CI shall permit operators to view the progress and throughput of copy operations that are in progress.	Completed
ECS-L4-15393	S-DSS-20580 The STMGT CI shall provide information on the progress of a copy operation.	Completed
ECS-L4-15394	S-DSS-20590 The STMGT CI shall provide archival storage which can be expanded to support greater storage capacity without removing it from the archive site.	Completed
ECS-L4-15395	S-DSS-20620 The STMGT CI shall be capable of retrieving any stored data file specified by the file's unique Logical File Location.	Completed
ECS-L4-15396	S-DSS-20622 The STMGT CI shall compute a checksum against each file stored as a result of a storage request, and provide that checksum to the originator of the request.	Completed
ECS-L4-15397	S-DSS-20623 The STMGT CI shall compute a checksum against each file retrieved as a result of a retrieval request and compare that checksum against the checksum provided in the request.	Completed
ECS-L4-15398	S-DSS-20624 The STMGT CI shall provide a mechanism to monitor checksum errors of archive media for purposes of statistical analysis.	Completed
ECS-L4-15399	S-DSS-20627 The STMGT CI shall use checksums to determine the quality of the products retrieved.	Completed
ECS-L4-15400	S-DSS-20632 The STMGT CI shall terminate the retrieval of a product if the product cannot be retrieved or fails the quality check.	Completed
ECS-L4-15401	S-DSS-20634 The STMGT CI shall notify the operator and automatically retrieve a local backup copy of product upon the failure of the retrieval of the primary copy of the product.	Completed
ECS-L4-15402	S-DSS-20650 The STMGT CI shall provide operations staff the capability to specify the products to be backed up at both local and offsite archives.	Completed
ECS-L4-15403	S-DSS-20660 The STMGT CI shall provide operations staff the capability to restore backups of specified data holdings.	Completed

ID	Title	Status
ECS-L4-15404	S-DSS-20670 The STMGT CI shall log all updates to the Archive Database, in a Database Transaction Log.	Completed
ECS-L4-15405	S-DSS-20680 The STMGT CI shall maintain a log of files which have been accessed including time stamp and request ID for each access.	Completed
ECS-L4-15406	S-DSS-20700 The STMGT CI shall accept the list of files eligible for deletion from the SDSRV CI.	Completed
ECS-L4-15407	S-DSS-20710 The STMGT CI shall provide an operator interface to remove the files that are eligible for deletion from the archive directories.	Completed
ECS-L4-15408	S-DSS-20720 The STMGT CI shall display the number of files eligible for deletion from the archive to the operator, and then prompt the operator for confirmation before performing the removal.	Completed
ECS-L4-15409	S-DSS-20730 The STMGT CI shall allow operators to reclaim tape space that has been freed up due to the removal of files from the archive directory.	Completed
ECS-L4-15410	S-DSS-20732 The STMGT CI shall process requests for the deletion of data files and, as a result, delete references to those data files from its file directory.	Completed
ECS-L4-15411	S-DSS-20740 The STMGT CI shall provide operations staff the capability to restore the primary copy of a product from either the local backup copy or the offsite backup copy.	Completed
ECS-L4-15412	S-DSS-20810 The STMGT CI shall provide the operations staff the capability to change the correspondence between an Archive ID, which is assigned to one or more data types, and the physical storage location associated with that Archive ID.	Completed
ECS-L4-15413	S-DSS-20840 The STMGT CI shall report information on the storage system. Information reported shall include file access time, file accesses per hour, size of files stored onto archive media, size of files retrieved from archive media, amount of storage allocated.	Completed
ECS-L4-15414	S-DSS-20850 The STMGT CI shall collect information on the storage system, i.e. avg access time, avg number of accesses per hour, mean request inter-arrival time, avg file size stored, avg file size retrieved and avg file residency time on disk.	Completed
ECS-L4-15415	S-DSS-20860 The STMGT CI shall provide to the MSS data on the performance of the ECS archival storage system.	Completed
ECS-L4-15416	S-DSS-21060 The STMGT CI shall provide external CIs the capability to write information into files resident on staging devices in the WKSHW CI.	Completed
ECS-L4-15417	S-DSS-21070 The STMGT CI shall provide external CIs the capability to read files resident on staging devices in the WKSHW CI.	Completed
ECS-L4-15418	S-DSS-21080 The STMGT CI shall provide external CIs the capability to delete files resident on staging devices in the WKSHW CI.	Completed
ECS-L4-15419	S-DSS-21090 The STMGT CI shall provide external CIs the capability to rename files resident on staging devices in the WKSHW CI.	Completed
ECS-L4-15420	S-DSS-21100 The STMGT CI shall provide external CIs the capability to obtain the file name and file size for files resident on staging devices in the WKSHW CI.	Completed
ECS-L4-15421	S-DSS-21110 The STMGT CI shall provide external CIs the capability to allocate storage on staging devices in the WKSHW CI.	Completed
ECS-L4-15422	S-DSS-21120 The STMGT CI shall provide external CIs the capability to deallocate storage on staging devices in the WKSHW CI.	Completed
ECS-L4-15423	S-DSS-21130 The STMGT CI shall provide estimates of staging device time delays for subsetted Data Requests.	Completed
ECS-L4-15424	S-DSS-21140 The STMGT CI shall provide estimates of staging device time delays for subsampled Data Requests.	Completed

ID	Title	Status
ECS-L4-15425	S-DSS-21150 The STMGT CI shall provide estimates of staging device time delays for summary Data Requests.	Completed
ECS-L4-15426	S-DSS-21160 The STMGT CI shall provide operations staff the capability to set the operational state (UP or DOWN) of storage devices.	Completed
ECS-L4-15427	S-DSS-21170 The STMGT CI shall provide operations staff the capability to query the operational state (UP or DOWN) of storage devices.	Completed
ECS-L4-15428	S-DSS-21270 The STMGT CI shall provide the operations staff the capability to display information about archive storage devices, including current status, current operation, # operations completed, # errors reported, time/date of last error.	Completed
ECS-L4-15429	S-DSS-21274 The STMGT CI shall provide operations staff with the ability to display information on queued requests for storage management resources, including request identification, requestor, status, and priority.	Completed
ECS-L4-15430	S-DSS-21280 The SDSRV CI shall provide APIs to support the submittal and processing of Data Insert Requests.	Completed
ECS-L4-15431	S-DSS-21290 The STMGT CI shall provide APIs to support the submittal and processing of file retrieval requests.	Completed
ECS-L4-15432	S-DSS-21311 The STMGT CI GUI shall have a common look and feel within the interface and with other ECS user interfaces as defined by the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-15433	S-DSS-21312 The STMGT CI shall utilize file storage management systems that provide APIs that support the development of file storage management services that are independent of the delivered services of the STMGT CI.	Completed
ECS-L4-15434	S-DSS-21315 The STMGT CI shall provide APIs to support the submittal and processing of file storage requests.	Completed
ECS-L4-15435	S-DSS-21316 The STMGT CI GUI shall provide for user effectiveness and satisfaction as defined by the overarching principles in the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-15436	S-DSS-21320 The STMGT CI shall provide the capability to estimate time delays for data retrievals due to contention for hardware resources.	Completed
ECS-L4-15437	S-DSS-21330 The STMGT CI shall notify operations staff whenever a device failure condition occurs.	Completed
ECS-L4-15438	S-DSS-21340 The STMGT CI shall provide data to support administrative requests for Accounting Management Data.	Completed
ECS-L4-15439	S-DSS-21350 The STMGT CI shall collect Accounting Management Data as defined in Reference Table: Data Glossary.	Completed
ECS-L4-15440	S-DSS-21352 The STMGT CI shall have the capability to transfer data to and from 8mm tape.	Completed
ECS-L4-15441	S-DSS-21354 The STMGT CI shall have the capability to transfer data to and from 4mm tape.	Completed
ECS-L4-15442	S-DSS-21355 The STMGT CI shall have the capability to transfer data to and from D3 tape.	Completed
ECS-L4-15443	S-DSS-21356 The STMGT CI shall have the capability to transfer data to and from 3480/3490 tape.	Completed
ECS-L4-15444	S-DSS-21357 The STMGT CI shall have the capability to transfer data from DTF-2 tape	Completed
ECS-L4-15445	S-DSS-21360 The STMGT CI shall use a hierarchy of disk and/or tape storage devices and associated storage media to store data.	Completed
ECS-L4-15446	S-DSS-21362 The STMGT CI shall have the capability to transfer data to and from 6250 BPI tape.	Completed

ID	Title	Status
ECS-L4-15447	S-DSS-21365 The STMGT CI shall provide storage for the data types listed in the Data Type Services Matrix.	Completed
ECS-L4-15448	S-DSS-21370 The STMGT CI shall use, where appropriate, a hierarchy of disk and/or tape storage devices and associated storage media to retrieve data.	Completed
ECS-L4-15449	S-DSS-21374 The STMGT CI shall transfer data from ingest media as directed by the INGST CI.	Completed
ECS-L4-15450	S-DSS-21380 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.	Completed
ECS-L4-15451	S-DSS-21384 The STMGT CI shall provide operations staff the capability to manually mount media on stand alone data input/output devices used for media ingest and distribution.	Completed
ECS-L4-15452	S-DSS-21386 The STMGT CI shall provide operations staff the capability to manually unmount media from stand alone data input/output devices used for media ingest and distribution.	Completed
ECS-L4-15453	S-DSS-21390 The STMGT CI shall maintain the one-to-one correspondence between the Logical File Location for each archived file and the physical location of the file.	Completed
ECS-L4-15454	S-DSS-21420 The STMGT CI shall provide authorized operations staff a mechanism to display selected records in the File Directory.	Completed
ECS-L4-15455	S-DSS-21450 The STMGT CI shall provide operations staff the capability to backup the contents of the File Directory.	Completed
ECS-L4-15456	S-DSS-21460 The STMGT CI shall provide operations staff the capability to recover the contents of the File Directory in the case of file corruption.	Completed
ECS-L4-15457	S-DSS-21492 The STMGT CI shall provide APIs to support the retrieval of data from devices used for the ingest of data from physical media.	Completed
ECS-L4-15458	S-DSS-21494 The STMGT CI shall provide APIs to support the writing of data to devices used for the distribution of data onto physical media.	Completed
ECS-L4-15459	S-DSS-21500 The SDSRV CI shall support making stored Data Products available on physical media within 24 hours	Completed
ECS-L4-15460	S-DSS-21510 The STMGT CI shall have the capability to expand its storage capacity by 200% with no change to its architecture or design.	Completed
ECS-L4-15461	S-DSS-21520 The SDSRV CI 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 Reference Table: TBD.	Completed
ECS-L4-15462	S-DSS-21570 The SDSRV CI shall have the capability to process Data Insert Requests at a rate sufficient to support the archiving of data volumes as derived from Tables C2 and C6 in the Appendix C of the F&PRS.	Completed
ECS-L4-15463	S-DSS-21655 The DRPHW CI 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.	Completed
ECS-L4-15464	S-DSS-21750 The DRPHW CI shall provide a bit error rate after correction less than 1 in 1 X 10 <sup>**12</sup> . (This requirement may be fulfilled with a combination of hardware and software components.)	Completed
ECS-L4-15465	S-DSS-21760 The DRPHW CI shall utilize archive media with a manufactured shelf life of at least 10 years when stored in a controlled environment	Completed
ECS-L4-15466	S-DSS-21770 The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.	Completed

ID	Title	Status
ECS-L4-15467	S-DSS-21800 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.	Completed
ECS-L4-15468	S-DSS-21810 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.	Completed
ECS-L4-15469	S-DSS-21813 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.	Completed
ECS-L4-15470	S-DSS-21814 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.	Completed
ECS-L4-15471	S-DSS-21820 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.	Completed
ECS-L4-15472	S-DSS-21825 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.	Completed
ECS-L4-15473	S-DSS-21830 The maximum down time of the DRPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	Completed
ECS-L4-15474	S-DSS-22000 The STMGT CI shall include capabilities which make it possible to ensure that data written by applications executing in different modes will not be mixed on the same tape.	Completed
ECS-L4-15475	S-DSS-22010 STMGT CI mode-specific applications shall access data only for the mode in which the application is configured.	Completed
ECS-L4-15476	S-DSS-22020 STMGT CI shall include the mode identifier in activity log record entries for the cost and accounting data.	Completed
ECS-L4-15477	S-DSS-22050 The STMGT CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	Completed
ECS-L4-15478	S-DSS-22060 The STMGT CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	Completed
ECS-L4-15479	S-DSS-22070 STMGT CI server applications shall register within their mode-associated namespace in the CSS name service.	Completed
ECS-L4-15480	S-DSS-22080 STMGT CI client applications shall incorporate a mode identifier for CSS name service lookups.	Completed
ECS-L4-15481	S-DSS-22090 The STMGT CI shall be capable of using simulated time values when executing in a non-production mode.	Completed
ECS-L4-15482	S-DSS-22100 STMGT CI mode-specific executables and scripts shall accept a specific mode only at startup.	Completed
ECS-L4-15483	S-DSS-22120 The STMGT CI shall ensure that the following calendar transitions are handled completely and accurately: a. New Year b. New Decade c. New Century d. Leap Year.	Completed
ECS-L4-15484	S-DSS-22122 The STMGT CI shall support secure electronic distribution of data.	Completed
ECS-L4-15485	S-DSS-22125 The STMGT CI shall provide the capability to place Data in publicly available disks for users to "pull" the data via ftp at their discretion as specified by valid Electronic Distribution Requests.	Completed
ECS-L4-15486	S-DSS-22130 The STMGT CI shall provide the capability to limit access to Data in the user pull area to the data requester and the operations staff.	Completed

ID	Title	Status
ECS-L4-15487	S-DSS-22140 The STMGT CI shall monitor the percentage of space utilized in the user pull area.	Completed
ECS-L4-15488	S-DSS-22150 The STMGT CI shall provide a mechanism for the operations staff to view/display the percentage of space utilized in the user pull area.	Completed
ECS-L4-15489	S-DSS-22160 The STMGT CI shall notify the operations staff if the percent utilization in the user pull area exceeds a specified threshold.	Completed
ECS-L4-15490	S-DSS-22162 The STMGT CI shall notify operations staff when the time limit has expired for Data in the user pull area.	Completed
ECS-L4-15491	S-DSS-22163 The STMGT CI shall, after operator confirmation, delete expired Data from the user pull area.	Completed
ECS-L4-15492	S-DSS-22164 The STMGT CI shall give operations staff the ability to turn off the function of operator confirmation associated with the automatic deletion of Data in the user pull area.	Completed
ECS-L4-15493	S-DSS-22165 The STMGT 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.	Completed
ECS-L4-15494	S-DSS-22170 The STMGT CI shall terminate the write operation and notify the operations staff when an uncorrectable error occurs while writing to distribution media.	Completed
ECS-L4-15495	S-DSS-22175 The STMGT CI shall abort the operation and automatically request a new piece of media from the operations staff if the number of correctable errors exceeds a system threshold for a piece of media.	Completed
ECS-L4-15496	S-DSS-22180 The STMGT CI shall provide the SDSRV CI a status indicating whether or not a request for the storage of data files has been successful.	Completed
ECS-L4-15497	S-DSS-22190 The STMGT CI shall provide the requester a status indicating whether or not a request for the retrieval of data files has been successful.	Completed
ECS-L4-15498	S-DSS-22200 The STMGT CI shall return an error status to the requester in the event that the checksum calculated on a retrieved file is different than the checksum calculated for that file when it was archived.	Completed
ECS-L4-15499	S-DSS-22210 The STMGT CI shall provide a file management system that utilizes automatic tape libraries for the storage and retrieval of files.	Completed
ECS-L4-15500	S-DSS-22230 The STMGT CI shall delete Expedited Data from temporary storage 48 hours after receipt of the data.	Completed
ECS-L4-15501	S-DSS-22270 The STMGT CI shall provide an API that supports the addition of new storage devices by the DAACs.	Completed
ECS-L4-15502	S-DSS-22280 The STMGT CI shall provide APIs to support the submittal and processing of Data Requests.	Completed
ECS-L4-15503	S-DSS-22310 The EPD shall cause the distribution of the outputs from external subsetters and processing systems via the OMS CI.	Completed
ECS-L4-15504	S-DSS-22315 The EPD shall be able to accept and distribute output granules from external processing systems for collections other than SBSTDATA, and do so for one or several granules that belong to different collections. [NOTE: This requirement cannot be integration testing since the subsetters available for testing do not generate the required outputs.]	Completed
ECS-L4-15505	S-DSS-22320 The EPD shall provide distribution capabilities as specified in ticket ES_SY_01 when configured to distribute via the DDIST CI.	Completed
ECS-L4-15506	S-DSS-22330 The EPD shall transfer the outputs of an external processing request that are identified in the PDR to a directory structure in the Data Pool SAN that is hidden from anonymous user access.	Completed

ID	Title	Status
ECS-L4-15507	S-DSS-22340 The EPD shall notify OMS of the arrival and location of the outputs it ingested, as well as the request ID of the corresponding external processing request.	Completed
ECS-L4-15508	S-DSS-22350 The EPD shall retry notifying OMS indefinitely at the configured retry interval when such notification attempts fail. [NOTE: OMS is responsible for handling the remaining distribution steps, including cleanup of the ingested files.]	Completed
ECS-L4-15509	S-DSS-30010 The DDIST CI shall direct the distribution of data and metadata to users, via physical media, via electronic transmission, or via staging to the User Pull Area as specified by the SDSRV CI.	Completed
ECS-L4-15510	S-DSS-30012 The DDIST CI shall send to the requesting client a Distribution Notification that identifies the location of data staged in response to a "pull" Electronic Distribution Request.	Completed
ECS-L4-15511	S-DSS-30014 The DDIST CI shall send to the requesting client a Distribution Notification that notifies the client that requested data has been transmitted in response to a "push" Electronic Distribution Request.	Completed
ECS-L4-15512	S-DSS-30016 The DDIST CI shall send to the requesting client a Distribution Notification that notifies the client that a Media Distribution Request has been successful and the media is ready for shipment.	Completed
ECS-L4-15513	S-DSS-30018 The DDIST CI shall, for each synchronous Electronic Distribution Request that requires the transmission of data to the requesting client, return a successful completion status to the client if and only if the STMGT CI reports that the transmission has been completed successfully.	Completed
ECS-L4-15514	S-DSS-30020 The DDIST CI shall encrypt any user provided data of a sensitive nature (e.g. passwords) before writing that data to a log.	Completed
ECS-L4-15515	S-DSS-30028 The DDIST CI shall include the type of media and the media identifiers in each Distribution Notification sent for successful media distribution of data.	Completed
ECS-L4-15516	S-DSS-30040 The DDIST CI shall provide a configurable preamble for the Distribution Notification for each type of media that data is distributed on.	Completed
ECS-L4-15517	S-DSS-30045 The DDIST CI shall send a Distribution Notification to the user in the event that the user's Distribution Request is canceled by the operations staff.	Completed
ECS-L4-15518	S-DSS-30050 The DDIST CI shall be able to display the UserString parameter of an ACQUIRE command on the DDIST GUI.	Completed
ECS-L4-15519	S-DSS-30052 The DDIST CI shall be able to recognize PDS requests based on a configurable lead-in string. (for example, if the configured string is '\$PDS', then a request associated with a user profile ID '\$PDS01' would be recognized as a PDS request).	Completed
ECS-L4-15520	S-DSS-30054 The DDIST CI shall cause PDS FTP Push requests to be distributed via HiPPI at sites where a HiPPI connection to the PDS staging area is available.	Completed
ECS-L4-15521	S-DSS-30056 The DDIST CI shall cause PDS FTP Push requests to be distributed via the internal (i.e., drg-resident) ftp distribution server.	Completed
ECS-L4-15522	S-DSS-30058 The DDIST CI shall suppress the DORRAN DN it currently sends for Landsat data requests if the request is a PDS request.	Completed
ECS-L4-15523	S-DSS-30060 The DDIST CI shall use the NOTIFY parameter of the ACQUIRE request (if specified) as the target for a DN or Failed DN if the distribution request is not associated with a Request ID.	Completed

ID	Title	Status
ECS-L4-15524	S-DSS-30065 The DDIST CI shall allocate files to media based on a specific media capacity and the following rules: (1) granules are allocated to media based on the order specified in the Media Distribution Request; (2) a granule of files in the Media Distribution Request shall not cross media boundaries.	Completed
ECS-L4-15525	S-DSS-30090 The DDIST CI shall provide the capability to give the processing of Electronic Distribution Requests priority over the processing of Media Distribution Requests.	Completed
ECS-L4-15526	S-DSS-30095 The DDIST CI shall maintain a queue of Distribution Requests that are waiting to be processed, and shall maintain, for each queued request, the request type, user, priority, and all other information necessary to process the request.	Completed
ECS-L4-15527	S-DSS-30100 The DDIST CI shall provide operations staff the capability to change the Priority Information for a queued Distribution Request.	Completed
ECS-L4-15528	S-DSS-30110 The DDIST CI shall provide the capability for operations staff to list Electronic Distribution Requests separately from Media Distribution Requests.	Completed
ECS-L4-15529	S-DSS-30115 The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to Request Identifier and requestor.	Completed
ECS-L4-15530	S-DSS-30125 The DDIST CI shall provide the capability for operations staff to list Media Distribution Requests according to media type.	Completed
ECS-L4-15531	S-DSS-30130 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.	Completed
ECS-L4-15532	S-DSS-30135 The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to distribution status.	Completed
ECS-L4-15533	S-DSS-30137 The DDIST CI shall provide the capability for operations staff to cancel the processing of a queued Electronic Distribution Request.	Completed
ECS-L4-15534	S-DSS-30139 The DDIST CI shall suspend any Electronic Distribution Request that could not be completed because the requested data could not be delivered.	Completed
ECS-L4-15535	S-DSS-30141 The DDIST CI shall provide the operations staff the capability to cancel the processing of a suspended Distribution Request.	Completed
ECS-L4-15536	S-DSS-30143 The DDIST CI shall provide the operations staff the capability to resume the processing of a suspended Distribution Request.	Completed
ECS-L4-15537	S-DSS-30150 The DDIST CI shall provide the capability for operations staff to cancel the processing of a Media Distribution Request once the requested data has been output to media and queued for shipment.	Completed
ECS-L4-15538	S-DSS-30162 The DDIST CI GUIs shall have a common look and feel within the interface and with other ECS user interfaces as defined by the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-15539	S-DSS-30165 The DDIST CI shall log the occurrence of the cancellation of a Data Request in the Event Log.	Completed
ECS-L4-15540	S-DSS-30171 The DDIST CI shall respond to Status Requests from operations staff with a Request State indicating that the specified Distribution Request is "pending", "staging", or "transferring".	Completed
ECS-L4-15541	S-DSS-30175 The SDSRV CI shall verify that each Status Requests specifies the following information: a. User Identifier b. Request Identifier of the Service Request to be stasured.	Completed
ECS-L4-15542	S-DSS-30180 The DDIST CI shall process queued Distribution Requests in order, according to their assigned Priority Information.	Completed

ID	Title	Status
ECS-L4-15543	S-DSS-30195 The DDIST CI shall provide for user effectiveness and satisfaction as defined by the overarching principles in the ECS User Interface Style Guide (January 1996) and determined by human factors' analysis based on the Guide.	Completed
ECS-L4-15544	S-DSS-30255 The DDIST CI shall interface with the MSS order tracking capability to update order and request information.	Completed
ECS-L4-15545	S-DSS-30265 The DDIST CI shall maintain a log of distribution requests which include the following: 1. the request and order id 2. the type of distribution 3. the time the request was received 4. the time the request started 5. the time acquiring data started and ended 6. the time that the request was completed	Completed
ECS-L4-15546	S-DSS-30270 The DDIST CI shall log, to the Event Log, the User Identifier, Data Product(s) Identifiers, Data Destination, and Media Identifiers associated with a completed Media Distribution Request.	Completed
ECS-L4-15547	S-DSS-30275 The DDIST CI shall log, to the Event Log, failures to successfully complete Media Distribution Requests due to failures with media or media recording devices.	Completed
ECS-L4-15548	S-DSS-30280 The DDIST CI shall log, to the Event Log, the User Identifier, the Data Product(s) Identifiers, and Data Destination associated with a completed Electronic Distribution Request.	Completed
ECS-L4-15549	S-DSS-30285 The DDIST CI shall log, to the Event Log, failures to successfully complete Electronic Distribution Requests due to transmission failures.	Completed
ECS-L4-15550	S-DSS-30345 The DDIST CI shall send to the requesting client a Distribution Notification that describes the reason for the unsuccessful completion of a Distribution Request.	Completed
ECS-L4-15551	S-DSS-30410 The DDIST CI shall log all detected errors and faults to the Event Log.	Completed
ECS-L4-15552	S-DSS-30415 The DDIST CI shall log, to the Event Log, the failure of the retrieval of a data granule.	Completed
ECS-L4-15553	S-DSS-30420 The DDIST CI shall have the capability to log, to the Event Log, the start of the processing of each Data Distribution Request.	Completed
ECS-L4-15554	S-DSS-30425 The DDIST CI shall have the capability to log, to the Event Log, the completion of the processing of each Data Distribution Request.	Completed
ECS-L4-15555	S-DSS-30430 The DDIST CI shall provide the capability for the operations staff to manually enter the status (i.e. "waiting for shipment" or "shipped") of a physical media shipment.	Completed
ECS-L4-15556	S-DSS-30431 The DDIST CI shall log, to the Event Log, changes in the status of the shipment of media associated with a Media Distribution Request.	Completed
ECS-L4-15557	S-DSS-30515 The DDIST CI 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.)	Completed
ECS-L4-15558	S-DSS-30570 The DDIST CI shall send to the requesting client a Distribution Notification that notifies the client that the Data is available for a limited time.	Completed
ECS-L4-15559	S-DSS-30600 The DDIST CI shall direct the transfer of data to external file systems, via ftp, as specified by the SDSRV CI.	Completed
ECS-L4-15560	S-DSS-30648 The DDIST CI shall support electronic distribution of data using secure copy in a configurable manner.	Completed
ECS-L4-15561	S-DSS-30649 The DDIST CI shall accept secure copy as a valid electronic media type in its distribution requests.	Completed

ID	Title	Status
ECS-L4-15562	S-DSS-30650 The DDIST CI shall direct the transfer of data to external file systems, via secure copy, as specified by the SDSRV CI.	Completed
ECS-L4-15563	S-DSS-30660 The DDIST CI shall provide the capability to resume the processing of a Media Distribution Request, using new media or an alternate device, in the event of a failure with the distribution media or its associated device.	Completed
ECS-L4-15564	S-DSS-30665 The DDIST CI shall initiate the re-transmission of data in the event of a transmission failure, in order to complete a request for the electronic distribution of data.	Completed
ECS-L4-15565	S-DSS-30670 The DDIST CI shall log, to the Event Log, all occurrences of transmission failures associated with Electronic Distribution Requests.	Completed
ECS-L4-15566	S-DSS-30680 The DDIST CI shall provide the operations staff the capability to control the number of re-transmissions that will be attempted in order to complete a request for the electronic transmission of data.	Completed
ECS-L4-15567	S-DSS-30705 The DDIST CI shall, for each successful Media Distribution Request, generate a packing list identifying each item of physical media and the data recorded on that media.	Completed
ECS-L4-15568	S-DSS-30711 The DDIST CI shall be capable of sending data to a remote DAAC.	Completed
ECS-L4-15569	S-DSS-30720 The DDIST CI shall ensure that the following calendar transitions are handled completely and accurately: a. New Year b. New Decade c. New Century d. Leap Year.	Completed
ECS-L4-15570	S-DSS-30730 The DIPHW CI shall provide operations staff the capability to manually insert media into data input/output devices used for media ingest and distribution.	Completed
ECS-L4-15571	S-DSS-30740 The DIPHW CI shall provide operations staff the capability to manually remove media from data input/output devices used for media ingest and distribution.	Completed
ECS-L4-15572	S-DSS-30800 The DDIST CI shall support making stored products available on physical media within 24 hours.	Completed
ECS-L4-15573	S-DSS-30810 The DDIST CI shall be capable of distributing Data via physical media generated a rate equivalent to the daily rate data are ingested at that site.	Completed
ECS-L4-15574	S-DSS-30840 The DDIST CI shall support distributing product QA data produced at the collocated Data Processing Subsystem within 1 hour from the time it is ready.	Completed
ECS-L4-15575	S-DSS-30870 The DAAC DDIST CI 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.	Completed
ECS-L4-15576	S-DSS-30875 The DDIST CI shall be capable of providing 200% expansion in capacity without architecture or design change.	Completed
ECS-L4-15577	S-DSS-30950 The DIPHW CI shall be sized to temporarily store the total number of bytes of distribution data derived from Reference Table: TBD.	Completed
ECS-L4-15578	S-DSS-30960 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 Reference Table: TBD.	Completed
ECS-L4-15579	S-DSS-31000 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.)	Completed

ID	Title	Status
ECS-L4-15580	S-DSS-31010 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.	Completed
ECS-L4-15581	S-DSS-31015 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.	Completed
ECS-L4-15582	S-DSS-31020 The maximum down time of the DIPHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	Completed
ECS-L4-15583	S-DSS-31110 DDIST CI mode-specific applications shall access data only for the mode in which the application is configured.	Completed
ECS-L4-15584	S-DSS-31150 The DDIST CI mode-specific applications shall be capable of simultaneous execution in different modes on the same machine.	Completed
ECS-L4-15585	S-DSS-31160 The DDIST CI mode-specific applications shall be capable of simultaneous execution in different modes on different machines.	Completed
ECS-L4-15586	S-DSS-31170 DDIST CI server applications shall register within their mode-associated namespace in the CSS name service.	Completed
ECS-L4-15587	S-DSS-31180 DDIST CI client applications shall incorporate a mode identifier for CSS name service lookups.	Completed
ECS-L4-15588	S-DSS-31190 The DDIST CI shall be capable of using simulated time values supplied by CSS, when executing in a non-production mode.	Completed
ECS-L4-15589	S-DSS-31200 DDIST CI mode-specific executables and scripts shall accept a specific mode only at startup.	Completed
ECS-L4-15590	S-DSS-31300 The DDIST CI shall comply to the POSIX.2 standard, when technically possible, and shall deviate from the standard only when non-compliant system functions are required which have no POSIX equivalent.	Completed
ECS-L4-15591	S-DSS-31500 The DDIST CI shall provide data distribution capabilities sufficient to support the pre-launch checkout of the ground system.	Completed
ECS-L4-15592	S-DSS-31510 The DDIST CI shall provide the operations staff the capability to display the queue of Distribution Requests.	Completed
ECS-L4-15593	S-DSS-31540 The DDIST CI shall provide the capability for the operations staff to cancel the processing of a queued media Distribution Request.	Completed
ECS-L4-15594	S-DSS-31600 The External Product Dispatcher (EPD) shall be able to receive external subsetter product distribution requests from external subsetters which conform with the procedures defined in the 'Interface Control Document for ECS Interfaces That Support External Subsetters Located at DAACs', ECS Project document number 209-CD-036-001.	Completed
ECS-L4-15595	S-DSS-31610 The EPD shall poll configured directories to identify and retrieve product delivery record (PDR) messages from external subsetters.	Completed
ECS-L4-15596	S-DSS-31620 The EPD shall validate the contents of PDR messages, and locate and confirm the existence of the files identified in the PDR in conformance with the 'Interface Control Document for ECS Interfaces That Support External Subsetters Located at DAACs', ECS Project document number 209-CD-036-001.	Completed
ECS-L4-15597	S-DSS-31625 The EPD shall validate the UserID and RequestID contained in the Product Request file.	Completed
ECS-L4-15598	S-DSS-31630 The EPD shall fail an external subsetter product distribution request if a product request file is not identified by the PDR received from the external subsetter or the file is not accessible for retrieval.	Completed

ID	Title	Status
ECS-L4-15599	S-DSS-31640 The EPD shall construct a distribution request message for the external subsetter products identified in the PDR, using distribution information contained in the product request file, in conformance with the protocols defined in the 'Interface Control Document for ECS Interfaces That Support External Subsetters Located at DAACs', ECS Project document number 209-CD-036-001.	Completed
ECS-L4-15600	S-DSS-31650 The EPD shall transfer distribution request messages via the DDIST Command Line Interface (DCLI) to DDIST for the distribution of external subsetter products.	Completed
ECS-L4-15603	S-DSS-31680 The EPD shall be capable of supporting 3 or more External Subsetters concurrently to receive external subsetter product distribution requests.	Completed
ECS-L4-15604	S-DSS-31690 The EPD shall resubmit a distribution request a configurable number of times at a configurable interval if the DCLI returns a status indicating that the request has failed with a retryable error, and will fail the request if a non-retryable error is returned from DCLI.	Completed
ECS-L4-15605	S-DSS-31700 The EPD shall log all distribution requests submitted to DCLI.	Completed
ECS-L4-15606	S-DSS-31710 The EPD shall log all distribution requests status messages received from the DLCI, including successful, failed, or failed with retryable errors.	Completed
ECS-L4-15607	S-DSS-31720 The EPD shall, if the validation fails for the information used from the Product Request File in generating the distribution request, fail the EPD request processing, log the failure to the EPD log indicating the type of error, and update the MSS status for the request to 'Operator Intervention'.	Completed
ECS-L4-15608	S-DSS-31730 The EPD shall, if the validation fails for the information used from the Product Request File in generating the distribution request, fail the EPD request processing, log the failure to the EPD log indicating the type of error, and update the status for the request in the order tracking information to 'Operator Intervention'. [NOTE: This replaces S-DSS-31660. See NCR 8049131.]	Completed
ECS-L4-15609	S-DSS-40010 The QAMUT CI shall be able to update the metadata QA flags and the corresponding explanation fields in the ECS inventory database.	Completed
ECS-L4-15610	S-DSS-40020 The QAMUT CI shall be able to update the Science or Operational QA flags and the corresponding explanation fields for a single or multiple data granules at a time.	Completed
ECS-L4-15611	S-DSS-40030 For data granules with multiple measured parameters, the QAMUT CI shall be able to accept and update QA metadata for all parameters with the same set of QA flag and the explanation field values.	Completed
ECS-L4-15612	S-DSS-40040 For data granules with multiple measured parameters, the QAMUT CI shall be able to accept and update QA metadata for individual parameter each with a different set of QA flag and explanation field values.	Completed
ECS-L4-15613	S-DSS-40045 The QAMUT CI shall append the date and time of update, accurate to the minute, to the explanation fields provided in the request before storing them in the ECS inventory database.	Completed
ECS-L4-15614	S-DSS-40060 The QAMUT CI shall provide a DAAC configurable e-mail address at which the QA update requests are received.	Completed
ECS-L4-15615	S-DSS-40065 The QA update request processed by the QAMUT CI shall include the following information: a. Requester ID b. QA Flag Type (Science or Operational) c. QA metadata update request details.	Completed

ID	Title	Status
ECS-L4-15616	S-DSS-40066 The Requester ID included in the request shall be provided in one of the following format: a. a valid e-mail address b. a text string identification for a SCF/DAAC site	Completed
ECS-L4-15617	S-DSS-40070 The QAMUT CI shall authenticate a QA update request by a. validating the Requester ID included in the request against a list of valid Requester IDs maintained at the DAAC (and) b. ensuring that the ESDT to be updated is allowed for the Requester ID.	Completed
ECS-L4-15618	S-DSS-40075 Upon failure in authenticating the request, the QAMUT CI shall send an e-mail notification to the requester indicating authentication failure.	Completed
ECS-L4-15619	S-DSS-40077 Upon failure in authenticating the request, the QAMUT CI shall reject the entire request and terminate the processing.	Completed
ECS-L4-15620	S-DSS-40080 The QAMUT CI shall maintain an operator configurable list of valid Requester IDs corresponding to the SCF and DAAC sites and the ESDTs that can be updated by each site for the purpose of authenticating the QA update requests. .	Completed
ECS-L4-15621	S-DSS-40090 The QA metadata update request details shall specify the granules to be updated based on a. ESDT Short name, Version ID and Granule UR (or) b. ESDT short name, version ID and Local Granule ID (or) c. ESDT short name, version ID and a temporal window that defines the acquisition date and time range	Completed
ECS-L4-15622	S-DSS-40110 The QA metadata update request based on Granule URs shall include the following information for each granule: a. ESDT Short Name b. Version ID c. Granule UR d. One or more triplets of Measured Parameter name, QA Flag and the corresponding explanation field. (or)A QA Flag, the corresponding explanation field and an indicator to apply this set of values to all measured parameters	Completed
ECS-L4-15623	S-DSS-40115 The QA metadata update request based on Local Granule IDs shall include the following information for each granule: a. ESDT Short Name b. Version ID c. Local Granule ID (LGID) d. One or more triplets of Measured Parameter name, QA Flag and the corresponding explanation field. (or)A QA Flag, the corresponding explanation field and an indicator to apply this set of values to all measured parameters	Completed
ECS-L4-15624	S-DSS-40120 The QA metadata update request specifying ESDT and temporal window shall include the following information: a. ESDT Short Name b. Version ID c. Temporal window characterized by the acquisition date and time range. d. One or more triplets of Measured Parameter name, QA Flag value and the corresponding QA Explanation field (or)A QA Flag, the corresponding Explanation field and an indicator to apply this set of values to all measured parameters	Completed
ECS-L4-15625	S-DSS-40125 The temporal window for QA metadata update shall be specified as the time range bounded by the beginning acquisition date and time of the earliest granule and the beginning acquisition date and time of the latest granule.	Completed
ECS-L4-15626	S-DSS-40130 Operators shall be able to run the QAMUT CI from the command line.	Completed
ECS-L4-15627	S-DSS-40140 The QAMUT CI shall provide an operator configurable mode-specific request directory where all QA update request files intended for that mode reside.	Completed
ECS-L4-15628	S-DSS-40145 The QAMUT CI shall be able to process an individual QA update request file provided via command line, (or) all update request files located in a configured request directory.	Completed

ID	Title	Status
ECS-L4-15629	S-DSS-40146 Each QA update request file name shall contain the following information as part of its name: a. Operation mode b. The SCF or DAAC site name that originated the request c. Time tag of request accurate to second.	Completed
ECS-L4-15630	S-DSS-40147 The QAMUT CI shall reject a request and terminate with a non-retryable failure if the operation mode indicated by the request file name does not match the operation mode in which the QAMUT is being executed.	Completed
ECS-L4-15631	S-DSS-40148 When processing all update request files in a request directory, the QAMUT CI shall process the requests originated from a particular SCF or a DAAC site in order of the request time tag as indicated by the request file names.	Completed
ECS-L4-15632	S-DSS-40149 A non-retryable failure in processing a request file in the request directory shall not prevent the QAMUT CI from processing the remaining request files in the directory.	Completed
ECS-L4-15633	S-DSS-40150 The QAMUT CI shall validate the command line parameters for correct syntax (format and valid range).	Completed
ECS-L4-15634	S-DSS-40160 Upon failure in validating the command line syntax (format and valid range), the QAMUT CI shall display an error message and the correct command line syntax.	Completed
ECS-L4-15635	S-DSS-40170 The QAMUT CI shall validate the syntax (format and valid range) of the QA Flag values included in the request before performing the updates.	Completed
ECS-L4-15636	S-DSS-40175 For a specific granule in a QA update request, the QAMUT CI shall flag as non-retryable error if a non-existent or an invalid measured parameter name is provided for that granule.	Completed
ECS-L4-15637	S-DSS-40176 For a specific granule in a QA update request, the QAMUT CI shall flag as non-retryable error if the Granule UR or the Local Granule ID does not exist in the ECS inventory database.	Completed
ECS-L4-15638	S-DSS-40190 In processing a QA update request, the QAMUT CI shall allow the operator to view, before performing the QA updates, the following information: a. A list of affected granules identified by ESDT Short Name, Version ID, LGID, dbID, along with the measured parameters and the current and new QA flag values b. Total number of granules that will be updated.	Completed
ECS-L4-15639	S-DSS-40200 The QAMUT CI shall, by default, prompt the operator for confirmation before performing the updates.	Completed
ECS-L4-15640	S-DSS-40205 The QAMUT CI shall display a warning message if it detects that the number of granules to be updated exceeded a DAAC configurable maximum threshold.	Completed
ECS-L4-15641	S-DSS-40210 In processing a QA update request, the QAMUT CI shall allow the operator to view, after performing the QA updates, the following information: a. A list of affected granules identified by ESDT Short Name, Version ID, LGID, dbID, along with the measured parameters and the updated QA flag values b. Total number of granules updated.	Completed
ECS-L4-15642	S-DSS-40220 The QAMUT CI shall allow the operator to suppress the operator prompts and the display of all messages via a no-prompt command line option.	Completed
ECS-L4-15643	S-DSS-40230 The QAMUT CI shall suppress all operator prompts if the no-prompt option is specified assuming an affirmative response in these cases.	Completed

ID	Title	Status
ECS-L4-15644	S-DSS-40232 The QAMUT CI shall provide the following e-mail notification options that can be configured by the operator for each SCF or DAAC. a. Send e-mail notification upon successful completion of QA updates as well as non-retryable failure. b. Send e-mail notification only upon non-retryable failure.	Completed
ECS-L4-15645	S-DSS-40233 The QAMUT CI shall allow an operator to configure a Reply-To: e-mail address for each SCF or a DAAC site to which e-mail notifications are sent.	Completed
ECS-L4-15646	S-DSS-40235 The QAMUT CI shall allow an operator to set up a list of internal DAAC e-mail addresses to which an e-mail notification is sent or copied upon completion of a QA update run.	Completed
ECS-L4-15647	S-DSS-40240 The e-mail notification generated by the QAMUT CI upon successful completion or non-retryable error shall include the following information as applicable: a. The name of the request file being processed. b. Total number of granules specified in the request c. Total number of granules updated d. A list of granules not updated along with specific error messages and reasons for failure in case of error. Success or error status	Completed
ECS-L4-15648	S-DSS-40250 The QAMUT CI shall send an e-mail notification to the requester using the Reply-To: e-mail address configured for the requesting site if available.	Completed
ECS-L4-15649	S-DSS-40260 If the Reply-To: address is not available, the QAMUT CI shall send an e-mail notification to the From: e-mail address included in the request.	Completed
ECS-L4-15650	S-DSS-40280 The QAMUT CI shall use a standard name for its log file.	Completed
ECS-L4-15651	S-DSS-40290 The QAMUT CI shall create a log file if the log file does not already exist.	Completed
ECS-L4-15652	S-DSS-40300 The QAMUT CI shall append the log messages to the log file if the log file already exists.	Completed
ECS-L4-15653	S-DSS-40310 The QAMUT CI shall include time stamp and the process ID in all log messages.	Completed
ECS-L4-15654	S-DSS-40320 The QAMUT CI shall log the name of the request file at the start of processing each request file.	Completed
ECS-L4-15655	S-DSS-40330 For each granule updated, the QAMUT CI shall log the granule ID (dbID) along with the measured parameters, the QA values, and the corresponding explanation fields before and after the update.	Completed
ECS-L4-15656	S-DSS-40340 The QAMUT CI shall log all warning and error messages encountered during the run.	Completed
ECS-L4-15657	S-DSS-40350 The QAMUT CI shall log the following information at the end of a run a. Total number of granules requested b. Total number of granules updated c. Run completion or Failure status	Completed
ECS-L4-15658	S-DSS-40355 The QAMUT CI shall be able to recover from a failure while performing or recording its QA updates such that a correct record of the QA updates can be provided without error (e.g., by restarting the QAMUT) and without incurring a performance penalty of more than 10 minutes.	Completed
ECS-L4-15659	S-DSS-40360 Upon detecting a non-retryable error in processing a particular granule, the QAMUT CI shall a. log an error and continue with the rest of the granules in the request. (or) b. log an error and terminate the entire request (default option). depending on the processing option set via command line.	Completed

ID	Title	Status
ECS-L4-15660	S-DSS-40370 The QAMUT CI shall be capable of performing QA updates for a total of 115,000 granules (each granule containing an average of 6 measured parameters) within a 24 -hour period; the number of granules are distributed as follows: a. 100,000 granules via update requests based on ESDT and temporal window. b. 15,000 granules via update requests based on local granule ID (LGID).	Completed
ECS-L4-15661	S-DSS-40390 The QAMUT shall be able to operate in multiple modes concurrently.	Completed
ECS-L4-15662	S-DSS-40410 The QAMUT CI shall provide a record of its QA updates that can be used by the DPL subsystem to propagate the applicable updates to the Data Pool inventory and metadata files.	Completed
ECS-L4-15663	S-DSS-40420 The QAMUT CI shall be able to provide a record of its QA updates to the DPL subsystem in multiple modes concurrently.	Completed
ECS-L4-15664	S-DSS-40500 The SDSRV database shall track QA flag updates	Completed
ECS-L4-15665	S-DSS-40510 ECS shall provide an ESDT (ECSMETU) that shall store products that contain an XML representation of granule-level QA metadata updates.	Completed
ECS-L4-15666	S-DSS-45008 The SDSRV CI shall receive an optional indication of whether supplied checksums need to be verified from the INS CI on science granule inserts.	Completed
ECS-L4-15667	S-DSS-45009 The SDSRV CI shall send the optional indication that it received from the INS CI as to whether supplied checksums need to be verified to the STMGT CI when submitting a file insert request.	Completed
ECS-L4-15668	S-DSS-45010 The SDSRV CI shall receive and persistently store optional checksum type and checksum value parameters from the INS CI on science granule inserts.	Completed
ECS-L4-15669	S-DSS-45011 The SDSRV CI shall provide an indication to the STMGT CI when submitting a file insert request for a file without a checksum as to whether the file is eligible for checksumming or not, based on whether the file is a science file or not.	Completed
ECS-L4-15670	S-DSS-45012 The SDSRV CI shall send optional checksum type and checksum value parameters to the STMGT CI during file insert.	Completed
ECS-L4-15671	S-DSS-45013 The SDSRV CI shall accept and persistently store optional checksum type and checksum value parameters received from the STMGT CI during a file insert.	Completed
ECS-L4-15672	S-DSS-45014 When saving a checksum type and value, the SDSRV CI shall set the checksum origin to 'DataProvider' if the checksum value was received from INS, and to 'STMGT' if the checksum value was received from STMGT.	Completed
ECS-L4-15673	S-DSS-45015 The SDSRV CI shall pass checksum value and checksum type for each file it requests from STMGT to the STMGT CI.	Completed
ECS-L4-15674	S-DSS-45016 The SDSRV CI shall allow DAAC operations to configure the valid checksum types.	Completed
ECS-L4-15675	S-DSS-45017 The SDSRV CI shall return an error when the provided checksum type is not valid. [NOTE: Since the validity of the checksum type is verified during ingest, this error condition needs to be tested during unit testing. It is not testable during integration testing.	Completed
ECS-L4-15676	S-DSS-45018 The SDSRV CI shall pass checksum value and checksum type for each file it submits for distribution to DDIST to the DDIST CI.	Completed
ECS-L4-15677	S-DSS-45019 The SDSRV CI shall provide an interface to its database via which other CI can retrieve the checksum type and value for a file.	Completed
ECS-L4-15678	S-DSS-45020 The SDSRV CI shall include checksum type, checksum origin, and checksum value parameters in the .met file. Effectivity: E3	Completed

ID	Title	Status
ECS-L4-15679	S-DSS-45022 The SDSRV CI shall transition the existing checksums while the system continues to operate normally.	Completed
ECS-L4-15680	S-DSS-45023 The SDSRV CI shall fail a subsetting request if it receives a checksum verification error for one of its files from the STMGT CI.	Completed
ECS-L4-15681	S-DSS-45027 The STMGT CI shall accept an optional indication for the need of checksum verification on file insert requests.	Completed
ECS-L4-15682	S-DSS-45028 The STMGT CI shall accept an optional checksum type and checksum value parameter on file insert requests, as well as an indication whether a given file that has no checksum is eligible for checksum calculation (i.e., is a science file).	Completed
ECS-L4-15683	S-DSS-45029 The STMGT CI shall return an error if the checksum type parameter indicates the need for a checksum calculation that it does not support. [NOTE: Since the validity of the checksum type is verified during ingest, this error condition needs to be tested during unit testing. It is not testable during integration testing.	Completed
ECS-L4-15684	S-DSS-45030 The STMGT CI shall provide the capability to compute an ECS internal checksum value and set the checksum type accordingly during science file insertion.	Completed
ECS-L4-15685	S-DSS-45031 The STMGT CI shall verify the checksum of a file if so requested by the file insert parameters during science file insertion by re-reading the file from the archive cache.	Completed
ECS-L4-15686	S-DSS-45032 The STMGT CI shall return a checksum verification in response to a science file insert request if the file fails the requested checksum verification.	Completed
ECS-L4-15687	S-DSS-45033 The STMGT CI shall impose a DAAC configurable limit on the maximum number of concurrent checksumming operations that a given STMGT server performs.	Completed
ECS-L4-15688	S-DSS-45034 The STMGT CI shall move a file to a DAAC configurable holding directory if its checksum verification fails, appending a unique qualifier if this is necessary to prevent overwriting a file that already exists in that directory.	Completed
ECS-L4-15689	S-DSS-45040 The STMGT CI shall provide the capability to compute file checksums, during retrieval, using any valid checksum algorithm (i.e., CKSUM and ECS).	Completed
ECS-L4-15690	S-DSS-45050 The STMGT CI shall maintain for each archive a DAAC-configurable parameter indicating the percentage of science files without a checksum type and checksum value for which a checksum should be computed during file insert. [Note: It is acceptable for a server restart to be required in order to recognize parameter changes.]	Completed
ECS-L4-15691	S-DSS-45060 The STMGT CI shall compute and send to the SDSRV CI an ECS internal checksum for the configured percentage of files without a checksum type and checksum value which the SDSRV indicated as being eligible for checksum calculation (i.e., which are science files).	Completed
ECS-L4-15692	S-DSS-45070 The STMGT CI shall maintain for each archive a DAAC-configurable parameter indicating the percentage of science files with a checksum type and checksum value whose checksums should be verified on retrieval. [Note: It is acceptable for a server restart to be required in order to recognize parameter changes.]	Completed
ECS-L4-15693	S-DSS-45080 The STMGT CI shall verify checksums during retrieval for the configured percentage of science files that have a checksum type and checksum value.	Completed
ECS-L4-15694	S-DSS-45090 The STMGT CI shall return a retryable error when a checksum verification fails.	Completed

ID	Title	Status
ECS-L4-15695	S-DSS-45100 The DDIST CI shall maintain a DAAC-configurable list of ECS UserIds (checksum distribution list) for which checksum type and checksum value parameters should be included in Distribution Notice. Effectivity: E1 [Note: The DDIST server should not need to be restarted in order to recognize changes to the list.]	Completed
ECS-L4-15696	S-DSS-45105 The DDIST CI shall interface with MSS to determine whether the DN for a given UserID needs to include the checksum type and checksum value.	Completed
ECS-L4-15697	S-DSS-45110 The DDIST CI shall include checksum type and checksum value parameters in the Distribution Notice for each file where those parameters exist and where the ECS UserId is a member of the checksum distribution list. [NOTE: This means that where a checksum type and value for a file do not exist, DDIST shall omit this information from the DN.]	Completed
ECS-L4-15698	S-DSS-45115 The DDIST CI shall pass checksum value and checksum type for each file it requests from STMGT to the STMGT CI.	Completed
ECS-L4-15699	S-DSS-45116 The DDIST CI shall suspend a request if STMGT indicates a checksum validation error for one of its files, and provide an appropriate indication of the nature of the error to the operator on the DDIST GUI.	Completed
ECS-L4-15700	S-DSS-45200 The Data Pool Ingest service shall provide a DAAC configurable option to turn on/off MISR data processing functionality.	Completed
ECS-L4-15701	S-DSS-45210 The AIM Inventory Insert Service shall maintain cross-reference information between single or multiple MISR Level 1 or Level 2 science granules with an associated MISBR granule in the AIM Inventory database.	Completed
ECS-L4-15702	S-DSS-45211 The AIM Inventory Insert Service shall capture the orbit number, path number, camera id and the product version for all configured MISR ESDTs. [Note: the MISR ESDTs that are not Level 1, Level 2 or MISBR must be added to the existing DsMdMisProcessingCriteria table. This is a new 7.21 ASDC requirement added in order to support the MISR Order Tool DUE.]	Completed
ECS-L4-15703	S-DSS-45220 The AIM Inventory Insert Service shall link a MISBR granule with MISR Level 1 science granule(s) in the AIM inventory database based upon the following matching attributes: Matching SP_AM_MISR_ProductVersion product specific attribute value Matching orbit number and path number Matching cameraId. the MISR Level 1 granule(s) have not yet been linked to other MISBR granule(s) Note : This requirement covers the situation when the MISBR granule is ingested after ingest of its associated MISR Level 1 granule(s).	Completed
ECS-L4-15704	S-DSS-45230 The AIM Inventory Insert Service shall link a MISR Level 1 science granule with a MISBR granule in the AIM inventory database based upon the following matching attributes: Matching SP_AM_MISR_ProductVersion product specific attribute value Matching orbit number and path number Matching cameraId. Note : This requirement covers the situation when the MISR Level 1 science granule is ingested after ingest of its associated MISBR granule.	Completed
ECS-L4-15705	S-DSS-45240 The AIM Inventory Insert Service shall link a MISBR granule with MISR Level 2 science granule(s) in the AIM inventory database based upon the following matching attributes: Matching orbit number and path number the MISBR granule has a cameraId of 'AN' (the cameraId value of the MISR Level 2 granule is irrelevant) the MISR Level 2 granule(s) have not yet been linked to other MISBR granule(s) Note : This requirement covers the situation when the MISBR granule is ingested after ingest of its associated MISR Level 2 granule(s).	Completed

ID	Title	Status
ECS-L4-15706	S-DSS-45250 The AIM Inventory Insert Service shall link a MISR Level 2 science granule with a MISBR granule in the AIM inventory database based upon the following matching attributes: Matching orbit number and path number the MISBR granule has a cameraId of 'AN', regardless of the cameraId value of the MISR Level 2 granule Note : This requirement covers the situation when the MISR Level 2 science granule is ingested after ingest of its associated MISBR granule.	Completed
ECS-L4-15707	S-DSS-45260 The AIM Inventory Insert Service shall link MISR Level 1 or Level 2 science granules with the most recently inserted MISBR granule in the event that multiple MISBR granules are identified using the specific linkage criteria defined for each type of MISR science granule.	Completed
ECS-L4-15708	S-DSS-45270 The AIM Inventory Insert Service shall be able to process concurrent insert of MISR Level 1, Level 2 science granules and MISBR granules and create correct linkage association. [This requirement ensures that the system will be able to adequately deal with the race conditions that may occur during concurrent insert]	Completed
ECS-L4-15709	S-DSS-45300 A transition tool shall be developed to assist ASDC transition from Release 7.20 to Release 7.21 by capturing the MISR science and MISBR linkage associations for existing data, and recording the relationships in the AIM Inventory database. The transition tool shall also capture the orbit number, path number, camera id, and the product version for all MISR ESDTs in order to support the MISR Order Tool DUE.	Completed
ECS-L4-15711	S-DSS-60110 The ACMHW CI shall provide installed operating systems on each ACMHW CI computer that conforms to the POSIX.2 standard.	Completed
ECS-L4-15712	S-DSS-60120 The ACMHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	Completed
ECS-L4-15713	S-DSS-60130 The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	Completed
ECS-L4-15714	S-DSS-60140 The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	Completed
ECS-L4-15715	S-DSS-60150 The ACMHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	Completed
ECS-L4-15716	S-DSS-60160 The ACMHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	Completed
ECS-L4-15717	S-DSS-60170 The ACMHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	Completed
ECS-L4-15718	S-DSS-60180 The ACMHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	Completed
ECS-L4-15719	S-DSS-60190 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.	Completed
ECS-L4-15720	S-DSS-60195 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.	Completed

ID	Title	Status
ECS-L4-15721	S-DSS-60310 The ACMHW CI shall have the capability to support the transaction rates as specified in Table 7-4 of the Functional and Performance Requirements Specification for the ECS.	Completed
ECS-L4-15722	S-DSS-60950 The ACMHW CI at the GSFC DAAC shall be capable of ingesting Version 0 data at the nominal rate specified in Reference Table: TBD.	Completed
ECS-L4-15723	S-DSS-61010 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 Reference Table: TBD.	Completed
ECS-L4-15724	S-DSS-70075 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.	Completed
ECS-L4-15725	S-DSS-70080 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.	Completed
ECS-L4-15726	S-DSS-70090 The maximum down time of the WKSHW CI shall not exceed twice the required MDT in 99 percent of failure occurrences.	Completed
ECS-L4-15727	S-DSS-70200 The WKSHW CI at the GSFC DAAC shall be capable of supporting the ingest of 574 GB in any given day.	Completed
ECS-L4-15728	S-DSS-70201 The WKSHW CI at the LaRC DAAC shall be capable of supporting the ingest of 295 GB in any given day.	Completed
ECS-L4-15729	S-DSS-70202 The WKSHW CI at the EDC DAAC shall be capable of supporting the ingest of 540 GB in any given day.	Completed
ECS-L4-15730	S-DSS-70203 The WKSHW CI at the NSIDC DAAC shall be capable of supporting the ingest of 20 GB in any given day.	Completed
ECS-L4-15731	S-DSS-70205 The WSHW CI at the GSFC DAAC shall be capable of supporting the distribution of 368 GB/day.	Completed
ECS-L4-15732	S-DSS-70206 The WSHW CI at the LaRC DAAC shall be capable of supporting the distribution of 146 GB/day.	Completed
ECS-L4-15733	S-DSS-70207 The WSHW CI at the EDC DAAC shall be capable of supporting the distribution of 88 GB/day.	Completed
ECS-L4-15734	S-DSS-70208 The WSHW CI at the NSIDC DAAC shall be capable of supporting the distribution of 11 GB/day.	Completed
ECS-L4-15735	S-DSS-71010 The STMGT CI shall optionally support two configurable volume group history sets per ESDT version. [NOTE: This implies that unless a second volume group history set is configured, granule inserts, retrievals, etc. are handled as today.]	Completed
ECS-L4-15736	S-DSS-71020 The STMGT CI shall support adding a volume group history set to an existing ESDT version if and only if the collection currently only has one volume group history set, and permit that volume group history set to be designated as the volume group history set for re-processing or forward processing, with the existing volume group history set then automatically taking on the other role. [NOTE: It desirable to verify on this occasion that the collection provides for temporal coverage.]	Completed
ECS-L4-15737	S-DSS-71030 The STMGT CI shall support a configurable selection date that is used to determine, on a per granule basis, which volume group history set is used for insert or retrieval. [NOTE: It is desirable to verify that any granules that may be in an existing volume group history set do not become inaccessible as a result of this.]	Completed

ID	Title	Status
ECS-L4-15738	S-DSS-71040 The STMGT CI shall insert or retrieve a granule from the volume group history set for re-processing if the beginning date of the granule's temporal coverage is less than the selection date.	Completed
ECS-L4-15739	S-DSS-71050 The STMGT CI shall insert or retrieve a granule from the volume group history set for forward processing if the beginning date of the granule's temporal coverage is greater than or equal to the selection date.	Completed
ECS-L4-15740	S-DSS-71060 The STMGT CI shall permit a null selection date to be configured when an ESDT version is first created.	Completed
ECS-L4-15741	S-DSS-71070 The STMGT CI shall permit a selection date to be configured to a non-null value only once per ESDT version. [NOTE: It is desirable to prevent this only after the population of the ESDT version has begun.]	Completed
ECS-L4-15742	S-DSS-71080 The STMGT CI shall prohibit a selection date from being set to null (implying the removal of one of the two configured volume group history sets) once it has been set to a non-null value.	Completed
ECS-L4-15743	S-DSS-71090 The STMGT CI shall allow only a single volume group history set to be configured if the selection date is null, and shall require two volume group history sets to be configured if the selection date is not null.	Completed
ECS-L4-15744	S-DSS-71100 The STMGT CI shall use the appropriate volume group history set when deleting files from the archive.	Completed
ECS-L4-15745	S-DSS-71105 The STMGT CI shall be able to accommodate multiple volume group history sets when checking the archive against the SDSRV inventory.	Completed
ECS-L4-15746	S-DSS-71106 The STMGT CI shall require the same number of volume group history sets to be configured for backup and off-site data as for the primary data copies, and apply the same date and selection rules to them as to the primary volume group sets.	Completed
ECS-L4-15747	S-DSS-71110 When archiving the files for a granule, the SDSRV CI shall pass the beginning date of that granule's temporal coverage to the STMGT CI.	Completed
ECS-L4-15748	S-DSS-71120 When retrieving the files for a granule, the SDSRV CI shall pass the beginning date of that granule's temporal coverage to the STMGT CI [NOTE: This requirement cannot be verified during integration testing since the ESDTs whose files can be accessed directly by the SDSRV have been removed from ECS scope.]	Completed
ECS-L4-15749	S-DSS-71125 The SDSRV CI shall, when forwarding files for deletions to the STMGT CI, include the beginning date of the temporal coverage of the granule for each file.	Completed
ECS-L4-15750	S-DSS-71130 The SDSRV CI shall include the beginning date of the temporal coverage of each granule included in a distribution request to the DDIST CI.	Completed
ECS-L4-15751	S-DSS-71140 When retrieving the files for a granule, the DDIST CI shall pass the beginning date of that granule's temporal coverage to the STMGT CI.	Completed
ECS-L4-15752	S-DSS-72010 The SDSRV CI shall accept and process requests for the insertion of granule metadata into the ECS inventory. [NOTE: The insert is meant to include only the metadata; the insert request will not include granule files. This may require modifications to the SDSRV CI.]	Completed
ECS-L4-15753	S-DSS-72011 The SDSRV CI shall accept and process requests for a pre-assigned ECS granule identifier, returning a unique ECS granule ID.	Completed

ID	Title	Status
ECS-L4-15754	S-DSS-72012 The SDSRV CI shall be able to allow other ECS components to correctly distinguish between the granule registration (i.e., metadata insert) time and the time the granule files are inserted into the archive. [NOTE: This requirement reflects the following issue. The SDSRV currently maintains one granule insert time that reflects the insertion of the metadata into the SDSRV inventory and the insertion of the granule files into the archive. The former is used, for example, by the BMGT to decide what to include in the ECSMETG and ECSBBR granules. The latter is used on various occasions by STMGT, OMS, and DPL to predict the archive volume group which holds the granule files. With Data Pool Insert, the two times can be very different. There is currently no provision for separating them in the SDSRV inventory. Depending on how this requirement is addressed, BMGT, STMGT, DPL, OMS may require changes to use the type of insert time appropriate for their purpose. See also the DAAC feedback on RTR action # 136.]	Completed
ECS-L4-15755	S-DSS-72013 The SDSRV CI shall accept a pre-assigned ECS granule ID and file metadata as part of the request for insertion of granule metadata into the ECS inventory.	Completed
ECS-L4-15756	S-DSS-72014 The SDSRV CI shall return granules for which the metadata were inserted but the files were not yet archived in search results.	Completed
ECS-L4-15757	S-DSS-72016 The SDSRV CI shall fail requests that require the retrieval of files for granules that were not yet copied to the archive. [NOTE: Processing orders in Synergy 3 mode is incompatible with Data Pool Ingest. This requirement ensures that if for any reason at all, an order were processed in Synergy 3 mode, the SDSRV will fail the order rather than causing some unpredictable error.	Completed
ECS-L4-15758	S-DSS-72020 The SDSRV CI shall return a status indicating success or failure (including failure details) in response to a request for the insertion of granule metadata into the ECS inventory. [NOTE: The insert is meant to include only the metadata; the insert request will not include granule files.]	Completed
ECS-L4-15759	S-DSS-72030 The SDSRV CI shall include the granule ID assigned to a granule in the successful response to requests for the insertion of granule metadata into the ECS inventory.	Completed
ECS-L4-15760	S-DSS-80110 The DRPHW CI shall provide installed operating systems on each DRPHW CI computer that conforms to the POSIX.2 standard.	Completed
ECS-L4-15761	S-DSS-80120 The DRPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	Completed
ECS-L4-15762	S-DSS-80130 The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	Completed
ECS-L4-15763	S-DSS-80140 The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	Completed
ECS-L4-15764	S-DSS-80150 The DRPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	Completed
ECS-L4-15765	S-DSS-80160 The DRPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	Completed
ECS-L4-15766	S-DSS-80170 The DRPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	Completed

ID	Title	Status
ECS-L4-15767	S-DSS-80180 The DRPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	Completed
ECS-L4-15768	S-DSS-80190 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.	Completed
ECS-L4-15769	S-DSS-80195 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.	Completed
ECS-L4-15770	S-DSS-80250 The DRPHW CI shall have sufficient capacity to backup 2% of the primary copies of locally-archived data products.	Completed
ECS-L4-15771	S-DSS-80260 The DRPHW CI, at LaRC, shall have the storage capacity to meet the GSFC DAAC requirements for off-site backup.	Completed
ECS-L4-15772	S-DSS-80270 The DRPHW CI, at GSFC, shall have sufficient storage capacity to store the offsite backup copies required by the EDC, LaRC and the NSIDC DAACs.	Completed
ECS-L4-15773	S-DSS-80310 The DRPHW CI shall have the capability to support the transaction rates as specified in Table 7-4 of the Functional and Performance Requirements Specification for the ECS.	Completed
ECS-L4-15774	S-DSS-80420 The DRPHW CI at the LaRC DAAC shall be sized to store and maintain the volume of EDOS Level 0 data for a 1-year period of time as derived from Table C-1 of Appendix C of the F&PRS.	Completed
ECS-L4-15775	S-DSS-80430 The DRPHW CI at the GSFC DAAC shall be sized to store and maintain the volume of EDOS Level 0 data for a 1-year period of time as derived from Table C-1 of Appendix C of the F&PRS.	Completed
ECS-L4-15776	S-DSS-80600 The DRPHW CI at the GSFC DAAC shall have the capacity to store 15027K files.	Completed
ECS-L4-15777	S-DSS-80601 The DRPHW CI at the LaRC DAAC shall have the capacity to store 3561K files.	Completed
ECS-L4-15778	S-DSS-80602 The DRPHW CI at the EDC DAAC shall have the capacity to store 8506K files.	Completed
ECS-L4-15779	S-DSS-80603 The DRPHW CI at the NSIDC DAAC shall have the capacity to store 1437K files.	Completed
ECS-L4-15780	S-DSS-80605 The DRPHW CI at the GSFC DAAC shall have the capacity to store 5009K Inventory Metadata entries.	Completed
ECS-L4-15781	S-DSS-80606 The DRPHW CI at the LaRC DAAC shall have the capacity to store 1187K Inventory Metadata entries.	Completed
ECS-L4-15782	S-DSS-80607 The DRPHW CI at the EDC DAAC shall have the capacity to store 2764K Inventory Metadata entries.	Completed
ECS-L4-15783	S-DSS-80608 The DRPHW CI at the NSIDC DAAC shall have the capacity to store 479K Inventory Metadata entries.	Completed
ECS-L4-15784	S-DSS-80610 The DRPHW CI at the GSFC DAAC shall have the capacity to store 574 GB in any given day.	Completed
ECS-L4-15785	S-DSS-80611 The DRPHW CI at the LaRC DAAC shall have the capacity to store 295 GB in any given day.	Completed
ECS-L4-15786	S-DSS-80612 The DRPHW CI at the EDC DAAC shall have the capacity to store 540 GB in any given day.	Completed
ECS-L4-15787	S-DSS-80613 The DRPHW CI at the NSIDC DAAC shall have the capacity to store 20 GB in any given day.	Completed
ECS-L4-15788	S-DSS-80615 The DRPHW CI at the GSFC DAAC shall have the capacity to store 245 terabytes.	Completed
ECS-L4-15789	S-DSS-80616 The DRPHW CI at the LaRC DAAC shall have the capacity to store 83 terabytes.	Completed

ID	Title	Status
ECS-L4-15790	S-DSS-80617 The DRPHW CI at the EDC DAAC shall have the capacity to store 215 terabytes.	Completed
ECS-L4-15791	S-DSS-80618 The DRPHW CI at the NSIDC DAAC shall have the capacity to store 8 terabytes.	Completed
ECS-L4-15792	S-DSS-80620 The DRPHW CI at the GSFC DAAC shall be capable of supporting the retrieval of 368 GB/day.	Completed
ECS-L4-15793	S-DSS-80621 The DRPHW CI at the LaRC DAAC shall be capable of supporting the retrieval of 146 GB/day.	Completed
ECS-L4-15794	S-DSS-80622 The DRPHW CI at the EDC DAAC shall be capable of supporting the retrieval of 88 GB/day.	Completed
ECS-L4-15795	S-DSS-80623 The DRPHW CI at the NSIDC DAAC shall be capable of supporting the retrieval of 11 GB/day.	Completed
ECS-L4-15796	S-DSS-90110 The DIPHW CI shall provide installed operating systems on each DIPHW CI computer that conforms to the POSIX.2 standard.	Completed
ECS-L4-15797	S-DSS-90120 The DIPHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm.	Completed
ECS-L4-15798	S-DSS-90130 The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 user Portability Utilities installed at a minimum: man, vi.	Completed
ECS-L4-15799	S-DSS-90140 The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 Software Development Utilities installed at a minimum: make.	Completed
ECS-L4-15800	S-DSS-90150 The DIPHW CI POSIX.2 compliant platform shall have the following POSIX.2 C-Language Development Utilities installed at a minimum: lex, yacc.	Completed
ECS-L4-15801	S-DSS-90160 The DIPHW CI POSIX.2 compliant platform shall have the following Unix shells installed at a minimum: C shell, Bourne shell, Korn shell.	Completed
ECS-L4-15802	S-DSS-90170 The DIPHW CI POSIX.2 compliant platform shall have on-line documentation or printed documentation for each installed tool.	Completed
ECS-L4-15803	S-DSS-90180 The DIPHW CI POSIX.2 compliant platform shall have installed one or more development environment supporting the following languages: a. C b. FORTRAN-77	Completed
ECS-L4-15804	S-DSS-90190 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.	Completed
ECS-L4-15805	S-DSS-90195 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.	Completed
ECS-L4-15806	S-DSS-90300 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 Reference Table: TBD.	Completed
ECS-L4-15807	S-DSS-90320 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 Reference Table: TBD.	Completed
ECS-L4-15808	S-DSS-90350 The SDSRV shall include AIRS Summary Browse Products in the distribution upon acquire of the ECSBBR granules if AIRS Summary Browse Products are referenced in the ECSBBR granule. NOTE: At this time it is anticipated that no changes will need to be made to the SDSRV ECSBBR DLL to accommodate this capability. The requirement is included however to insure AIRS Summary Browse products get distributed successfully.	Completed

ID	Title	Status
ECS-L4-15809	S-DSS-99000 ECS shall provide a DDIST Command Line Interface (DCLI) to submit distribution requests for files on disk that are accessible on the DDIST platform or on a file system NFS mounted on the DDIST platform.	Completed
ECS-L4-15810	S-DSS-99010 The DCLI shall accept a mandatory DDISTMEDIATYPE parameter.	Completed
ECS-L4-15811	S-DSS-99020 The DCLI shall verify that the DDISTMEDIATYPE parameter is provided and specifies one of the following valid ECS media types, returning a fatal error if not: ·FtpPush ·FtpPull	Completed
ECS-L4-15812	S-DSS-99030 The DCLI shall include the DDISTMEDIATYPE parameter in the distribution request it submits to the DDIST.	Completed
ECS-L4-15813	S-DSS-99040 The DCLI shall accept the following FTP Push parameters (all strings) if the DDISTMEDIATYPE is FtpPush: ·FTPUSER ·FTPPASSWORD ·FTPHOST ·FTPPUSHDEST	Completed
ECS-L4-15814	S-DSS-99050 The DCLI shall verify that all four FTP Push parameters are provided if the DDISTMEDIATYPE is FtpPush, and return a fatal error if not.	Completed
ECS-L4-15815	S-DSS-99060 The DCLI shall include the FTP Push parameters in the distribution request it submits to the DDIST.	Completed
ECS-L4-15816	S-DSS-99070 The DCLI shall accept an optional DDISTMEDIAFORMAT parameter	Completed
ECS-L4-15817	S-DSS-99080 The DCLI shall verify that the DDISTMEDIAFORMAT parameter, if present, specifies a value of 'FILEFORMAT' and return a fatal error if not.	Completed
ECS-L4-15818	S-DSS-99090 The DCLI shall include the DDISTMEDIAFORMAT parameter in the distribution request it submits to the DDIST.	Completed
ECS-L4-15819	S-DSS-99100 The DCLI shall accept a mandatory ECSUSERPROFILE parameter.	Completed
ECS-L4-15820	S-DSS-99110 The DCLI shall verify that the ECSUSERPROFILE parameter is present and refers to an existing MSS user profile or is ECSGuest, and return a fatal error if not.	Completed
ECS-L4-15821	S-DSS-99120 The DCLI shall include the ECSUSERPROFILE parameter in the DDIST distribution request it submits.	Completed
ECS-L4-15822	S-DSS-99130 The DCLI shall accept a mandatory ORDERID and a mandatory REQUESTID parameter.	Completed
ECS-L4-15823	S-DSS-99140 The DCLI shall verify that the ORDERID and REQUESTID parameters are present and refer to an existing MSS order for the same userID as the distribution request, and an existing MSS request for that order, and return a fatal error if not.	Completed
ECS-L4-15824	S-DSS-99150 The DCLI shall include the REQUESTID parameters in the DDIST distribution request it submits.	Completed
ECS-L4-15825	S-DSS-99160 The DCLI shall accept an optional PRIORITY parameter.	Completed
ECS-L4-15826	S-DSS-99170 The DCLI shall verify that the PRIORITY parameter, if present, specifies one of the following ECS priorities and return a fatal error if not: ·LOW ·NORMAL ·HIGH	Completed
ECS-L4-15827	S-DSS-99180 The DCLI shall include the PRIORITY parameter in the DDIST distribution request it submits.	Completed
ECS-L4-15828	S-DSS-99190 The DCLI shall accept an optional UserString parameter specifying a string of a maximum length of 80 characters.	Completed
ECS-L4-15829	S-DSS-99200 The DCLI shall verify that the UserString parameter does not exceed the maximum length and return a fatal error if it does.	Completed
ECS-L4-15830	S-DSS-99210 The DCLI shall include the UserString parameter in the DDIST distribution request it submits.	Completed

ID	Title	Status
ECS-L4-15831	S-DSS-99220 The DCLI shall accept an optional DDISTNOTIFYTYPE parameter.	Completed
ECS-L4-15832	S-DSS-99230 The DCLI shall verify that the DDISTNOTIFYTYPE parameter, if present, is set to MAIL, and return a fatal error if not.	Completed
ECS-L4-15833	S-DSS-99240 The DCLI shall accept a mandatory NOTIFY parameter specifying an e-mail address string.	Completed
ECS-L4-15834	S-DSS-99250 The DCLI shall verify that the NOTIFY parameter is present and return a fatal error if not.	Completed
ECS-L4-15835	S-DSS-99260 The DCLI shall include the DDISTNOTIFYTYPE and NOTIFY parameters in the DDIST distribution request it submits.	Completed
ECS-L4-15836	S-DSS-99270 The DCLI shall accept a mandatory tag parameter as a string of up to 20 characters.	Completed
ECS-L4-15837	S-DSS-99280 The DCLI shall verify that the tag parameter is present and at most 20 characters in length, and return a fatal error if not.	Completed
ECS-L4-15838	S-DSS-99290 The DCLI shall use the tag parameter to generate an rpcID for the DDIST distribution request it submits.	Completed
ECS-L4-15839	S-DSS-99300 The DCLI shall generate the identical rpcID only if it receives the identical tag on different submission requests, the generated rpcID otherwise being different.	Completed
ECS-L4-15840	S-DSS-99310 The DCLI shall accept a list of up to 100 fully qualified file/path names that represent the files to be distributed.	Completed
ECS-L4-15841	S-DSS-99320 The DCLI shall return a fatal error if less than one and more than 100 file/path names are provided.	Completed
ECS-L4-15842	S-DSS-99330 The DCLI shall assume the following default values for the corresponding optional parameters if they are not provided: ·DDISTMEDIAFORMAT = FILEFORMAT ·PRIORITY = NORMAL ·DDISTNOTIFYTYPE = MAIL	Completed
ECS-L4-15843	S-DSS-99340 The DCLI shall submit an asynchronous distribution request for the identified files to DDIST.	Completed
ECS-L4-15844	S-DSS-99350 The DCLI shall, if the submission of the DDIST request fails, return an error that identifies the error as retryable or fatal, as determined by the error status returned from DDIST.	Completed
ECS-L4-15845	S-DSS-99360 The DCLI shall be able to accept requests for a designated mode.	Completed
ECS-L4-15846	S-DSS-99370 It shall be possible to submit several requests in a given mode via the DCLI concurrently.	Completed
ECS-L4-15847	S-DSS-99380 It shall be possible to submit requests via the DCLI in several different modes concurrently.	Completed
ECS-L4-15848	S-DSS-99390 The DCLI shall be able to receive and process distribution requests through to DDIST at the rate of 40 requests per hour.	Completed

## Appendix A    Abbreviations and Acronyms

These are the abbreviations and acronyms used in the SDPS requirements Volumes 1-10. This section is replicated in all volumes.

ACL	access control list
ACVU	AIM checksum verification utility
ADC	Affiliated Data Center
ADEOS	Advanced Earth Observing Satellite
AIM	Archive Inventory Management
AIRS	Atmospheric Infrared Sounder
AMFS	Archival Management and Storage System File System
AMSR	Advanced Microwave Scanning Radiometer
ANSI	American National Standards Institute
API	Application Program Interface
APIDs	Application Process Identifiers
APIs	Application Program Interfaces?
ARP	Address Resolution Protocol
ASDC	Atmospheric Science Data Center
ASF	Alaska Satellite Facility
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
AST_L1A, AST_L1B	ASTER Level 1 A and Level 1 B data types
AVG	average
AVN	National Center for Environmental Prediction (NCEP) Aviation model, later renamed to Global Forecast System (GFS)
BGT	Bulk Metadata Generation Tool, also known as BMGT
BIL	Band Interleaved
BMGT	Bulk Metadata Generation Tool
BPI	Bits per inch
BRF	Browse Reference File
BRWS	Browse
BUFR	Binary Universal Form for the Representation of meteorological data
CCB	Configuration Control Board
CCR	Configuration Change Request
CCSDS	Consultative Committee for Space Data Systems
CD	Compact Disc

CFG	Configuration
CI	Configuration Item
CKSUM	refers to a particular algorithm or program to calculate a file checksum
CLS	Client Subsystem
CM	Configuration Management
CMO	Configuration Management Office
CMR	Common Metadata Repository
COTS	Commercial Off-The Shelf (hardware or software)
CPU	Central Processing Unit
CRON	A linux system utility to perform time scheduled executions
CS	Client Server
CSC	Computer Software Component
CSCI	Computer Software Configuration Item
CSDT	Computer Scient Data Type
CSH	C-Shell
CSMS	Communication and Systems Management Segment
CSS	Communications Subsystem
DAAC	Distributed Active Archive Center
DADS	Data Archive and Distribution System
DAR_ID	Data Acquisition Request Identifier
DB	Database
DBID	Database Identifier
DB	Database
DCLI	DDIST (Data Distribution) Command Line Interface
DD	Data Dictionary
DDIST	Data Distribution CSCI
DDR	Detailed Design Review
DEM	Digital Elevation Model
DESKT	Desktop (Computer Software Configuration Item)
DFA	Delete From Archive
DHWM	Data High Water Mark
DIF	Directory Interchange Format
DIPHW	Distribution and Ingest Peripheral HWCI
DMS	Data Management Subsystem
DN	Delivery Notification
DORRAN	Distributed Ordering, Researching, Reporting, and Accounting Network (at EDC)

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DPAD	Data Pool Action Driver
DPCV	Data Pool Checksum Verification Utility
DPIU	Data Pool Insert Utility
DPL	Data Pool
DPLINGST	Data Pool Ingest
DPLINSERT	Data Pool Insert
DPM	Data Pool Maintenance
DRPHW	Data Repository HWCI
DSS	Data Server Subsystem
DTD	Document Type Definition (XML)
DTF	Sony Digital Tape Format Tape cartridge system
DTS	Defect Tracking Subsystem
EBNET	EOSDIS Backbone Network
ECHO	EOS Clearing House
ECI, ECR	Earth Centered Inertial, Earth Centered Rotating
ECNBDB	Spatial Subscription Server database
ECS	Earth Observing System Data and Information Core System
EDC	Earth Resource Observation System Data Center
EDOS	Earth Observing System (EOS) Data and Operations System
EDR	Expedited Data Set Request
EDS	Expedited Data Set
EED	EOSDIS Evolution and Development Project
EGS	EOSDIS Ground System
EMD	EOSDIS Maintenance and Development Project
EMOS	EOS Mission Operations System
EMS	ESDIS Metrics System
EOC	Earth Observation Center (Japan), EOS Operations Center
EOS	Earth Observing System
EOSDIS	Earth Observing System Data and Information System
EPD	External Processor Dispatcher
EPSG	European Petroleum Survey Group
ESDIS	Earth Science Data and Information System
ESDT	Earth Science Data Type
ESG	Earth Science Gateway
ESI	EOSDIS Service Interface
ETE	End to End
EWOC	ECHO WSDL Order Component

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FCAPS	Fault, Configuration, Accountability, Performance, and Security
F&PRS	Functional and Performance Requirements Specification
FDDI	Fiber Distributed Data Interface
FDF	Flight Dynamics Facility
FOS	Flight Operations Segment
FSMS	File and Storage Management System
FTP	File Transfer Protocol
FTPD	File Transfer Protocol Daemon
GB	Gigabyte or Gigabit
GBYTE	Gigabyte
GCMD	Global Change Master Directory
GDS	Ground Data System
GEOTIFF	Georeferenced Tagged Image File Format
GFE	Government Furnished Equipment
GIS	Geographical Information System
GLAS	Geoscience Laser Altimeter System
GPS	Global Positioning System
GRIB	Grid in Binary
GSFC	Goddard Space Flight Center
GUI	Graphical User Interface
GZIP	GNU zip
HDF	Hierarchical Data Format
HDF-EOS	an EOS proposed standard for a specialized HDF data format
HEG	HDF-EOS-To-Geotiff Conversion Tool
HIPPI	High Performance Parallel Interface
HIRDLS	High-Resolution Dynamics Limb Sounder
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
HTTPD	Hypertext Transfer Protocol Daemon
HWCI	Hardware Configuration Item
I/O	Input/Output
I&T	Integration and Test
IAS	Image Assessment System
ICD	Interface Control Document
ICLHW	Ingest Client HWCI
ICMP	Internet Control Message Protocol

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IDL	Interactive Data Language
ID	Identifier
IEEE	Institute of Electrical and Electronics Engineering
IGS	International Ground Station
IIU	Inventory Insert Utility
IMS	Information Management System
INCI	Internetworking Hardware HWCI
INHCI	Ingest Hardware (Configuration Item)
INHWP	Ingest Hardware (Configuration Item)
INS	Ingest Subsystem
IP	Internet Protocol
IR-1	Initial Release 1
IRD	Interface Requirements Document
IRIX	Silicon Graphics version of Unix
ISS	Internetworking Subsystem
IV&V	Independent Verification and Validation
JDT	Java DAR (Data Acquisition Request) Tool
JPEG	Joint Photographic Experts Group image file format
JPG	JPEG file extension
JPL	Jet Propulsion Laboratory
KFTP	Kerberized File Transfer Protocol
LAN	Local Area Network
LARC	Langley Research Center
LAT/LON	Latitude and Longitude
LGID	Local Granule Identifier
LLBOX	Latitude/Longitude Box
LP-DAAC	Land Processes Distributed Active Archive Center
LPS	Landsat 7 Processing System
LSM	Local System Management (network)
LUNs	Logical Unit Numbers
M&O	Maintenance and Operations
MAN	Metropolitan Area Network
MAX	Maximum
MB	Megabyte (10 <sup>6</sup> )
MB/sec	Megabytes per second
MBITS/SEC	Megabits per second
MBPS	Megabytes per second

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MCF	Metadata Configuration File
MD5	Message Digest checksum algorithm number 5
MDT	Maximum Down Time
METC	refers to file containing Collection Metadata
MGS	Map Generation Subsystem
MGU	Map Generation Utility
MISBR	MISR Browse
MISR	Multi-Imaging SpectroRadiometer
MLCI	Management Logistics Configuration Item
MM	Millimeter
MM/DD/YYYY	date code representation for month, day, year
MODAPS	MODIS Adaptive Processing System
MODIS	Moderate Resolution Imaging SpectroRadiometer
MRTG	Multi Router Traffic Grapher
MSEC	Millisecond
MSM	Media Storage Manager (part of Stornext)
MSS	System Management Subsystem
MTMGW	Machine to Machine Gateway
MUTEX	Mutually Exclusive
N/A	Not Applicable/Not Available
NARA	National Archives and Records Administration
NASA	National Aeronautics and Space Administration
NBSRV	Spatial Subscription Server
NCEP	National Centers for Environmental Prediction
NCR	Non-conformance report
NESDIS	National Environmental Satellite, Data, and Information Service (NOAA)
NFS	Network File System
NIST	National Institute of Standards and Technology
NM	Name Server Subsystem
NMC	National Meteorological Center (NOAA)
NMF	Network Management Facility
NOAA	National Oceanic and Atmospheric Administration
NSBRV	Spatial Subscription Server
NSI	NASA Science Internet
NSIDC	National Snow and Ice Data Center
NTP	Network Transport Protocol

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OBU	OWS Binding Utility
ODC	Other Data Center
ODL	Object Description Language
OGC	Open GIS Consortium
OLA	On-line Archive
OMS	Order Manager Subsystem
OPS	Operations
ORNL	Oak Ridge National Laboratory
OSI	Open Systems Interconnection
OSS	Operational Support Software
OWS	OGC Web Services Subsystem
PANs	Production Acceptance Notifications
PB	Petabyte (10 <sup>15</sup> )
PC	Personal Computer
PDF	Portable Document Format
PDPS	Planning and Data Processing Subsystems
PDR	Product Delivery Record
PDRD	Product Delivery Record Discrepancy
PDSIS	Product Distribution System Information Server
PF	Process Framework
PGE	Product Generation Executable
PGEEXE	PGE executable tar file ESDT
PH	Production History
PID	Process Identifier
PO.DAAC	Physical Oceanography Distributed Active Archive Center
POSIX	Portable Operating System Interface
PREPROCERR	Preprocessing Error
PSA	Product-Specific Attribute
PTHREADS	Portable Operating System Interface (POSIX) threads
PUBERR	Publication Error
PVC	Performance Verification Center
PVL	Parameter Value Language
Q/A, QA	Quality Assurance
QAMUT	Quality Assurance Metadata Update Tool
QC	Quality Control
RARP	Reverse Address Resolution Protocol
RDBMS	Relational Database Management System

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RFC	Request for Comments
RHWM	Request High Water Mark
RLWM	Request Low Water Mark
ROM	Read Only Memory
RPC	Remote Procedure Call
RPCID	Remote Procedure Call Identifier
RTR	Requirements Technical Review
SBSRV	Subscription Server
SCF	Science Computing Facility
SCI	science
SCP	Secure Copy
SDP	Science Data Processing
SDPF	Science Data Processing Facility
SDPS	Science Data Processing Segment
SDRSV	misspelled SDSRV
SDS	Scientific Dataset(HDF-EOS term), Science Data System
SDSRV, SDSVR	Science Data Server
SIPS	Science Investigator-led Processing System
SMAP	Soil Moisture Active Passive
SNAC	StorNext Archive Cache
SNFS	StorNext File System
SNMP	Simple Network Management Protocol
SOM	Space Oblique Mercator
SORCE	Solar Radiation and Climate Experiment
SQL	Structured Query Language
SRF	Server Request Framework
SS	two digit seconds field in a time string
SSH	Secure Shell (protocol)
SSI&T	Science System Integration and Test
SSM/I	Special Sensor for Microwave/Imager
SSS	Spatial Subscription Server Subsystem
STGMT	Storage Management Subsystem
TB	Terabyte
TBD	To Be Determined/To Be Defined
TBR	To Be Resolved
TCP	Transmission Control Protocol
TCP/IP	Transmission Control Protocol/Internet Protocol

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TES	Trophospheric Emission Spectrometer
TKD	Toolkit for DAAC
TKS	Toolkit for Scientists
TOMS	Total Ozone Mapping Spectrometer
TSDIS	TRMM Science Data and Information System
TSM	Tertiary Storage Manager, component of StorNext
TTPro	TestTrack Pro
UDF	Universal Disk Format
UDP	User Datagram Protocol
UPS	Uninterruptible Power Supply
URL	Uniform Resource Locator
UR	Universal Reference, granule UR
UTC	Universal Time Coordinated/Universal Time Code
UTM	Universal Transverse Mercator
V0	Version 0, Refers to the Archive System and Protocols used in the predecessor to the ECS
VPN	Virtual Private Network
VS	versus (abbr)
W*S	refers to any member of the family of Open Geospatial Consortium (OGC) web services: WCS, WMS, WFS, WPS
WAN	Wide Area Network
WCS	Web Coverage Service
WGS84	World Geodetic System 1984
WKBCHCI	Workbench Configuration Item
WKSHW	Working Storage Hardware Configuration Item
WMS	Web Map Service
WRS	Worldwide Reference System, used by Landsat
WSDL	Web Service Definition Language
WU-FTP	Washington University File Transfer Protocol program
WWW	World Wide Web
XFR	Transfer (abbr)
XML	Extensible Markup Language
XSD	XML Schema Definition
XVU	XML Validation Utility