

535-CD-510-001

EOSDIS Core System Project

Science Data Processing Segment (SDPS) Acceptance Data Package for the ECS Project (Release 5B)

October 2000

Raytheon Company
Upper Marlboro, Maryland

**Science Data Processing Segment (SDPS)
Acceptance Data Package
for the ECS Project (Release 5B)**

October 2000

Prepared Under Contract NAS5-60000
CDRL Item #108

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535-CD-510-001

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Preface

This document is a formal contract deliverable with an approval code 1. It requires Government review and approval prior to acceptance and use. This document is under ECS contractor configuration control. Once this document is approved, Contractor approved changes are handled in accordance with Class I and Class II change control requirements described in the Earth Observing System (EOS) Configuration Management Plan, and changes to this document shall be made by document change notice (DCN) or by complete revision.

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Abstract

This report identifies the products and associated documentation included with Release 5B of the Science Data Processing Segment (SDPS), delivered June 27, 2000.

This report includes references to Release 5B data:

- a. Acceptance Test Report.
- b. Results and Action Items from the SDPS Release 5B SRA.
- c. Version Description Document.
- d. Design data.
- e. SDPS Non-Conformance Reports (NCRs), which are included in the Distributed Defect Tracking System (DDTS).
- f. Operations Tools Manual, updated for Release 5B.
- g. Mission Operations Procedures, updated for Release 5B.
- h. ECS Project Training Material, updated for Release 5B.

Keywords: Configuration Audit Report, PCA, FCA, VDD, SRA, Acceptance Test Report, action items, operating manuals, deviation, and training material.

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Change Information Page

List of Effective Pages			
Page Number		Issue	
Title		Original	
iii through x		Original	
1-1 and 1-2		Original	
2-1 through 2-4		Original	
3-1 and 3-2		Original	
AB-1 and AB-2		Original	
Document History			
Document Number	Status/Issue	Publication Date	CCR Number
535-CD-510-001	Original	October 2000	00-1014

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Contents

Preface

Abstract

1. Introduction

1.1	Identification	1-1
1.2	Scope	1-1
1.3	Purpose	1-1
1.4	Status and Schedule.....	1-1
1.5	Organization	1-1

2. Referenced Documentation

2.1	Parent Documents	2-1
2.2	Applicable Documents	2-1
2.3	Information Documents.....	2-3

3. Acceptance Data

3.1	Configuration Audit Reports.....	3-1
3.2	System Acceptance Test Data	3-1
3.3	Release Version Identification	3-1
3.4	Release 5B Design Data	3-1
3.5	Open Action Items.....	3-2
3.6	Operating Manuals	3-2
3.6	Training Materials	3-2

Abbreviations and Acronyms

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1. Introduction

1.1 Identification

This document is the Science Data Processing Segment (SDPS) Release 5B Acceptance Data Package for the ECS Project, which is Item 108 on the Contract Data Requirements List (CDRL) and defined by Data Item Description (DID) 535/PA1 under contract NAS5-60000.

1.2 Scope

This document identifies the SDPS Acceptance Data Package for Release 5B of the ECS Project.

1.3 Purpose

This document includes by reference the information that makes up the ECS SDPS Release 5B Acceptance Data Package. Its purpose is to provide high level information regarding the content and status of the SDPS at the time of the Site Readiness Assessment (SRA) for Release 5B. This information includes acceptance testing results, configuration status, open action items from SRA, the current status of known problems, and identification of all release related documentation.

1.4 Status and Schedule

The submittal of DID 535/PA1 meets the milestone specified in the CDRL of the National Aeronautics and Space Administration (NASA) contract NAS5-60000. Current project plans specify that this deliverable is due 30 days after SRA for release 5B of the ECS SDPS.

1.5 Organization

Section 1 provides the identification, scope, purpose, status and schedule, and document organization.

Section 2 provides a list of documents that were used directly or indirectly in the preparation of this document.

Section 3 defines the SDPS Release 5B Acceptance Data Package. It includes identification of system Acceptance Test data, configuration audit results, identification and status of action items at SRA, identification of operating manuals, identification of operating procedures, and identification of training materials.

The section Abbreviations and Acronyms contains an alphabetized list of the definitions for abbreviations and acronyms used in this volume.

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2. Referenced Documentation

2.1 Parent Documents

The parent documents are the documents from which this SDPS Release 5B Acceptance Data Package's scope and content are derived.

420-05-03	Goddard Space Flight Center, EOS Performance Assurance Requirements for the EOSDIS Core System (ECS)
423-41-01	Goddard Space Flight Center, ECS Statement of Work
423-41-03	Goddard Space Flight Center, EOSDIS Core System Contract Data Requirements Document

2.2 Applicable Documents

The following documents are referenced herein in their entirety, and form a part of this document as being delivered specifically for Release 5B of the ECS Project.

305-CD-510	Release 5B Segment/Design Specification for the ECS Project
311-CD-520	Release 5B Data Management Subsystem Database Design and Schema Specification
311-CD-521	Release 5B INGEST Database Design and Schema Specification
311-CD-522	Release 5B Interoperability Subsystem Database Design and Schema Specification
311-CD-523	Release 5B Planning and Data Processing Subsystem Database Design and Schema Specification
311-CD-524	Release 5B Science Data Server Database Design and Schema Specification
311-CD-525	Release 5B Storage Management and Data Distribution Subsystem Database Design and Schema Specification
311-CD-526	Release 5B Subscription Server Database Design and Schema Specification
311-CD-527	Release 5B Systems Management Subsystem Database Design and Schema Specification
311-CD-528	Release 5B Registry Database Design and Schema Specification

313-CD-510 Release 5B ECS Internal Interface Control Document for the ECS Project

412-CD-510 ECS Science Acceptance Test Report for Release 5B

506-CD-510 Configuration Audits of the Science Data Processing Segment, Release 5B for the ECS Project 609-CD-510 Release 5B Operations Tools Manual

625-CD-501 Release 5B, ECS Project Training Material Volume 1: Course Outline

625-CD-503 Release 5B, ECS Project Training Material Volume 3: Problem Management

625-CD-504 Release 5B, ECS Project Training Material Volume 4: System Administration

625-CD-505 Release 5B, ECS Project Training Material Volume 5: Network Administration

625-CD-506 Release 5B, ECS Project Training Material Volume 6: Production Planning and Processing

625-CD-507 Release 5B, ECS Project Training Material Volume 7: Resource Planning

625-CD-508 Release 5B, ECS Project Training Material Volume 8: Ingest

625-CD-509 Release 5B, ECS Project Training Material Volume 9: Data Distribution

625-CD-510 Release 5B, ECS Project Training Material Volume 10: Archive Processing

625-CD-511 Release 5B, ECS Project Training Material Volume 11: Database Administration

625-CD-512 Release 5B, ECS Project Training Material Volume 12: Configuration Management

625-CD-516 Release 5B, ECS Project Training Material Volume 16: Science Software Integration and Test

625-CD-517 Release 5B ECS Project Training Material Volume 17: System Troubleshooting

625-CD-518 Release 5B ECS Project Training Material Volume 18: Advanced Production Planning and Processing

625-CD-520 Release 5B ECS Project Training Material Volume 2A: Introduction and Detailed System Overview: Science Data Processing Internal Training

740-PP-510	Release 5B – EDC Site Readiness Assessment (SRA)
740-PP-511	Release 5B – GSFC & NSIDC Site Readiness Assessment (SRA)
740-PP-512	Release 5B – LaRC Site Readiness Assessment (SRA)
740-PP-513	Release 5B – SMC Site Readiness Assessment (SRA)
814-RD-512	Version 2 Release 5B.03 Version Description Document (VDD) for the ECS Project

2.3 Information Documents

The following documents are referenced herein in their entirety. The current version of these documents are applicable to Release 5B of the ECS Project, but are not related solely to Release 5B.

611-CD-510	Mission Operations Procedures
211-TP-005	Transition Plan 4PX to 4PY, 4PY to 5A, and 5A to 5B for the ECS Project

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3. Acceptance Data

3.1 Configuration Audit Reports

The results of ECS FCA/PCA activities are documented in the Configuration Audits of the Science Data Processing Segment, Release 5B for the ECS Project, 506-CD-510. This report contains the results of FCAs for system acceptance tests, and the results of PCAs for ECS COTS software, Operating System patches, ECS custom code and configuration parameters.

3.2 System Acceptance Test Data

The results of all ECS SDPS acceptance testing is documented in the ECS Science Acceptance Test Report for Release 5B, 412-CD-510. This report contains listings of all tests conducted, analysis of test results, status of test findings. It identifies the existence and location of all test records.

3.3 Release Version Identification

A complete description of the released version of the Release 5B software is documented in Version 2 Release 5B.03 Version Description Document (VDD) for the ECS Project, 814-RD-512-001.

Detailed technical information documenting the current Release 5B baseline is maintained by ECSCM, and can be accessed through the Internet at URL <http://cmdm.east.hitc.com/baseline/index.html> under “Technical Documents”. These documents include information on: current operating system versions and patch levels; software port mappings; COTS patch levels; disk partitioning; COTS and ECS Custom Software Release Notes; common start-up and shutdown procedures; complete listings of site-specific hardware and software documents, diagrams, and drawings; vendor information; and network infrastructure information.

3.4 Release 5B Design Data

The overall detailed design for Release 5B of the ECS Project is documented in the Release 5B Segment/Design Specification for the ECS Project, 305-CD-510.

Subsystem specific database design data is contained in the 311-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Subsystem to subsystem interface design is contained in the Release 5B Internal Interface Control Document for the ECS Project, 313-CD-510.

3.5 Open Action Items

The results of SRA may be found in the 740-PP-series documents referenced in their entirety in Section 2.2 of this document. Any action items remaining after SRA are tracked to closure by ECS Project Management.

The current status of all known non-conformances are maintained by the ECS Project in the Distributed Defect Tracking System (DDTS), and are reported weekly to ESDIS.

3.6 Operating Manuals

The human-machine interface characteristics of the tools used by the ECS operations staff are documented in the Release 5B Operations Tools Manual, 609-CD-510.

Release 5B-updated procedures for operators, engineers, operations support, administration and management staff to configure, maintain and operate the ECS system are contained in the Mission Operations Procedures, 611-CD-510. This document contains DAAC standard procedures which may be modified at the DAACs during subsequent training.

3.6 Training Materials

Training materials for Release 5B of the ECS Project are contained in the 625-CD-series documents listed as referenced in their entirety in Section 2.2 of this document.

Abbreviations and Acronyms

CCB	Configuration Control Board
CCR	Configuration Change Request
CDRL	Contract Data Requirements List
COTS	Commercial Off the Shelf
DCN	Document Change Notice
DDTS	Distributed Defect Tracking System
DID	Data Item Description
DM	Data Management
ECS	EOSDIS Core System
ECSCM	ECS Project Configuration Management
EOSDIS	EOS Data and Information System
ESDIS	Earth Science Data and Information System (GSFC Code 423)
FCA	Functional Configuration Audit
GSFC	Goddard Space Flight Center
NCR	Non-Conformance Report
PCA	Physical Configuration Audit
QA	Quality Assurance
SRA	Site Readiness Assessment
TRR	Test Readiness Review
URL	Universal Reference Locator
VDD	Version Description Document

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