814-RD-101-002

EOSDIS Core System Project

HDF-EOS 2.4 Version Description Document (VDD) for the ECS Project

January 1999

Raytheon Systems Company
Upper Marlboro, Maryland

HDF-EOS 2.4 Version Description Document (VDD) for the ECS Project

January 1999

Prepared Under Contract NAS5-60000

RESPONSIBLE ENGINEER

LaVerne Jackson /s/	1/6/99
LaVerne Jackson, Staff Engineer EOSDIS Core System Project	Date

SUBMITTED BY

Mary S. Armstrong /s/	1/6/99
Mary Armstrong, Director of Development EOSDIS Core System Project	Date

Raytheon Systems Company
Upper Marlboro, Maryland

This page intentionally left blank.

Preface

This document accompanies the delivery of HDF-EOS 2.4 (Hierarchical Data Format - Earth Observing System) software for the ECS project. It is a formal deliverable and has been placed under configuration control by the EOSDIS Core System (ECS) Science Data Processing Segment. Changes to this document shall be made by document change notice (DCN) or by complete revision.

This HDF-EOS version is directed at Earth Observing System (EOS) instrument data providers who will deliver code to the ECS Version 2.0 Distributed Active Archive Centers (DAACs). It describes the HDF-EOS library tools. EOS data consumers will also use it. HDF files consist of a directory and a collection of data objects. Every data object has a directory entry, containing a pointer to the data object location, and information defining the datatype. Additions to traditional HDF are required to fully support these datatypes.

This document describes three new EOS specific datatypes – *point*, *swath*, and *grid*. Each of these new datatypes is constructed using conventions for combining standard HDF datatypes and is supported by a special application programming interface (API) which aids the data product user or producer in the application of the conventions. The APIs allow data products to be created and manipulated in ways appropriate to each datatype, without regard to the actual HDF objects and conventions underlying them. The sum of these new APIs comprises the HDF-EOS library.

Any questions regarding distribution should be addressed to:

Data Management Office
ECS Project Office
Raytheon Systems Company
1616 McCormick Drive
Upper Marlboro, MD 20774-5301

This page intentionally left blank.

Abstract

This document describes the delivery contents of HDF-EOS 2.4 software. HDF refers to the scientific data format standard selected by NASA as the baseline standard for EOS and HDF-EOS refers to EOS conventions for using HDF. The three interfaces described include – Point, Swath, and Grid.

It briefly describes the capabilities of the product, provides an inventory of the delivery, lists unresolved problems, and addresses issues such as special operating instructions, system limitations, and disclaimer notices for public domain software used in the product.

Keywords: API, HDF-EOS, standard, data, product, disk, format, point, grid, swath

This page intentionally left blank.

Change Information Page

List of Effective Pages	
Page Number	**Issue**
Title	Original
iii through xii	Original
1-1 and 1-2	Original
2-1 and 2-2	Original
3-1 through 3-8	Original
4-1 through 4-20	Original
5-1 through 5-12	Original
A-1 and A-2	Original
B-1 and B-2	Original
C-1 and C-2	Original
AB-1 through AB-6	Original

Document History			
Document Number	**Status/Issue**	**Publication Date**	**CCR Number**
814-RD-101-001	Original	June 1998	98-0799
814-RD-101-002	Original	January 1999	99-0001

This page intentionally left blank.

Contents

Preface

Abstract

1. Introduction

2. Related Documentation

3. Product Description

4. Product Inventory

5. Non-Conformance Status

Appendix A. Build/Installation Instructions

Appendix B. User Feedback Procedures

Appendix C. Test Baseline Configuration

Abbreviations and Acronyms

1. Introduction

1.1 Identification of Document

This document is a Version Description Document (VDD) prepared using NASA-STD-2100-91 as a guide. It is submitted as required for the Earth Observing System Data and Information System (EOSDIS) Core System (ECS), contract number NAS5-60000.

1.2 Scope of Document

This VDD specifies the delivery contents of the HDF-EOS 2.4 software and accompanying documentation.

1.3 Purpose and Objectives of Document

The purpose of this VDD is to describe the contents of the delivery of HDF-EOS 2.4 software. The document briefly describes all tools that incorporate the delivery, provides an inventory of the delivery, lists unresolved problems, and addresses special issues such as special operating instructions, system limitations, and disclaimer notices for public domain software used in the library.

1.4 Document Status and Schedule

This Version Description Document for HDF-EOS 2.4 is submitted as a final document. Any changes to HDF-EOS 2.4 that require a subsequent version to be released will be described in a new Version Description Document.

1.5 Document Organization

The format and contents of this document comply with NASA-DID-P500 and NASA-DID-999 as defined in NASA-STD-2100-91.

- Introduction — Introduces the VDD scope, purpose, objectives, status, schedule and document organization.
- Related Documentation — Provides a bibliography of reference documents for the VDD organized by parent and binding subsections.
- Product Description — Describes the general capabilities and product contents.
- Inventory — Lists tar file listings for HDF-EOS and test drivers, documentation, and archive tape.
- Non-conformance Status — Discusses known problems with HDF-EOS Version 2.20 and lists Non-conformance Reports with open status.
- Appendices — Contain supplemental information such as: Build/installation instructions, user feedback procedures, and the test baseline configuration.

This page intentionally left blank.

2. Related Documentation

2.1 Parent Documents

The following documents are the parent from which this document's scope and content derive:

423-41-01	EOSDIS Core System Statement of Work
423-16-02	Science Data Processing (SDP) Toolkit Requirements Specification for the ECS Project

2.2 Applicable Documents

The following documents are directly applicable to this plan to the extent referenced herein. In the event of conflict between any of these documents and this plan, the plan shall take precedence.

170-TP-100-002	HDF-EOS Library Users Guide for the ECS Project, Volume 1: Overview and Examples
170-TP-101-002	HDF-EOS Library Users Guide for the ECS Project Volume 2: Function Reference Guide
175-WP-001-001	HDF-EOS Primer for Version 1 EOSDIS
333-CD-100-002	Version 2.0 SDP Toolkit Users Guide for the ECS Project
814-RD-100-002	Version 2.0 SCF Toolkit 5.2.4 Version Description Document (VDD) for the ECS Project
NASA-STD-2100-91	NASA Software Documentation Standard, Software Engineering Program

This page intentionally left blank.

3. Product Description

This section describes the general capabilities of HDF-EOS 2.4 and the tools and test drivers provided.

3.1 Product Description and General Capabilities

HDF-EOS is an extension of NCSA (National Center for Supercomputing Applications) HDF and uses HDF library calls as an underlying basis. Version 4.1r1 of HDF is used. The library tools are written in C language and a FORTRAN interface is provided. The current version contains software for creating, accessing and manipulating grid, point and swath structures. Also included are overviews of the interfaces, function-by-function calling sequences, explanations, and code examples. Included also are tools for subsetting and data projection. EOSView, our viewing tool has been revised to accommodate the current version of the libraries.

HDF is the scientific data format standard selected by NASA as the baseline standard for EOS. These libraries are aimed at EOS data producers and consumers, who will develop their data into increasingly higher order products. These products range from calibrated Level 1 to Level 4 model data. The primary use of HDF-EOS libraries will be to create structures for associating geolocation data with their associated science data. Producers through use of supplied libraries specify this association. Most EOS data products identified fall into categories of grid, point, or swath structures. These structures are implemented in the current version of the libraries. Services based on geolocation information will be built on HDF-EOS structures. Producers of products not covered by these structures (for example, non-geolocated data) can use standard HDF libraries.

In the ECS (EOS Core System) production system, the HDF-EOS libraries will be used in conjunction with SDP (Science Data Processing) Toolkit software. The primary tools used in conjunction to HDF-EOS libraries will be those for metadata handling, process control, and status message handling. Metadata tools will be used to write ECS inventory and granule specific metadata into HDF-EOS files, while the process control tools will be used to access physical file handles used by the HDF tools.

3.2 HDF-EOS Version 2.4 Routine Listing

The HDF-EOS library is comprised of three new APIs:

- Point (PT) interface – designed to support data that has associated geolocation information, but is not organized in any well-defined spatial or temporal way

- Swath (SW) interface – tailored to support time-ordered data such as satellite swaths (which consist of a time-ordered series of scanlines), or profilers (which consist of a time-ordered series of profiles)

- Grid (GD) interface – designed to support data that has been stored in a rectilinear array based on a well defined and explicitly supported projection

The HDF library is accessible from both C and FORTRAN programs because it contains a set of "wrapper" functions that make the underlying C code callable from FORTRAN. HDF provides two names for each function; one for use in C programming and a shorter version for use in FORTRAN programming. The following HDF-EOS Routine listings provide a description of the tools.

3.2.1 PT API Routines

All C routines names in the point data interface have the prefix "PT" and the equivalent FORTRAN routine names are prefixed by "pt." The PT routines are grouped into categories that are described in the HDF-EOS User's Guide. The PT function calls are listed in the following table.

Routine Name		
C	**FORTRAN**	**Description**
PTopen	ptopen	creates a new file or opens an existing one
PTcreate	ptcreate	creates a new point data set and returns a handle
PTattach	ptattach	attaches to an existing point data set
PTdetach	ptdetach	releases a point data set and frees memory
PTclose	ptclose	closes the HDF-EOS file and deactivates the point interface
PTdeflevel	ptdeflev	defines a level within the point data set
PTdeflinkage	ptdeflink	defines link field to use between two levels
PTwritelevel	ptwrlev	writes (appends) full records to a level
PTreadlevel	ptrdlev	reads data from the specified fields and records of a level
PTupdatelevel	ptuplev	updates the specified fields and records of a level
PTwriteattr	ptwrattr	creates or updates an attribute of the point data set
PTreadattr	ptrdattr	reads existing attribute of point data set
PTnlevels	ptnlevs	returns the number of levels in a point data set
PTnrecs	ptnrecs	returns the number of records in a level
PTnfields	ptnflds	returns number of fields defined in a level
PTlevelinfo	ptnlevinfo	returns information about a given level
PTlevelindx	ptlevidx	returns index number for a named level
PTbcklinkinfo	ptblinkinfo	returns link field to previous level
PTfwdlinkinfo	ptflinkinfo	returns link field to following level
PTgetlevelname	ptgetlevname	returns level name given level number
PTsizeof	ptsizeof	returns size in bytes for specified fields in a point
PTattrinfo	ptattrinfo	returns information about point attributes
PTinqattrs	ptinqattrs	retrieves number and names of attributes defined
PTinqpoint	ptinqpoint	retrieves number and names of points in file
PTgetrecnums	ptgetrecnums	returns corresponding record numbers in a related level

Routine Name		Description (cont.)
C	FORTRAN	
PTdefboxregion	ptdefboxreg	define region of interest by latitude/longitude
PTregioninfo	ptreginfo	returns information about defined region
PTregionrecs	ptregrecs	returns # of records and record #s within region
PTextractregion	ptextreg	read a region of interest from a set of fields in a single level
PTdeftimeperiod	ptdeftmeper	define time period of interest
PTperiodinfo	ptperinfo	returns information about defined time period
PTperiodrecs	ptperrecs	returns # of records and record #s within time period
PTextractperiod	ptextper	read a time period from a set of fields in a single level
PTdefvrtregion	ptdefvrtregion	Define a region of interest by vertical field

3.2.2 SW API Routines

The SW interface consists of routines for storing, retrieving, and manipulating data in swath data sets. All C routine names in the swath data interface have the prefix "SW" and the equivalent FORTRAN routine names are prefixed by "sw." The SW routines are grouped into categories that are described in the HDF-EOS User's Guide. The SW function calls are listed in the following table.

Routine Name		Description
C	FORTRAN	
SWopen	swopen	opens or creates HDF file in order to create, read, or write a swath
SWcreate	swcreate	creates a swath within the file
SWattach	swattach	attaches to an existing swath within the file
SWdetach	swdetach	detaches from swath interface
SWclose	swclose	closes file
SWdefdim	swdefdim	defines a new dimension within the swath
SWdefdimmap	swdefmap	defines the mapping between the geolocation and data dimensions
SWdefidxmap	swdefimap	defines a non-regular mapping between the geolocation and data dimension
SWdefgeofield	swdefgfld	defines a new geolocation field within the swath
SWdefdatafield	swdefdfld	defines a new data field within the swath
SWdefcomp	swdefcomp	defines a field compression scheme
SWwritegeometa	swwrgmeta	writes field metadata for an existing swath geolocation field
SWwritedatameta	swwrdmeta	writes field metadata for an existing swath data field
SWwritefield	swwrfld	writes data to a swath field

Routine Name		
C	FORTRAN	Description (cont.)
SWreadfield	swrdfld	reads data from a swath field.
SWwriteattr	swwrattr	writes/updates attribute in a swath
SWreadattr	swrdattr	reads attribute from a swath
SWsetfillvalue	swsetfill	sets fill value for the specified field
SWgetfillvalue	swgetfill	retrieves fill value for the specified field
SWinqdims	swinqdims	retrieves information about dimensions defined in swath
SWinqmaps	swinqmaps	retrieves information about the geolocation relations defined
SWinqidxmaps	swinqimaps	retrieves information about the indexed geolocation/data mappings defined
SWinqgeofields	swinqgflds	retrieves information about the geolocation fields defined
SWinqdatafields	swinqdflds	retrieves information about the data fields defined
SWinqattrs	swinqattrs	retrieves number and names of attributes defined
SWnentries	swnentries	returns number of entries and descriptive string buffer size for a specified entity
SWdiminfo	swdiminfo	retrieve size of specified dimension
SWmapinfo	swmapinfo	retrieve offset and increment of specified geolocation mapping
SWidxmapinfo	swimapinfo	retrieve offset and increment of specified geolocation mapping
SWattrinfo	swattrinfo	returns information about swath attributes
SWfieldinfo	swfldinfo	retrieve information about a specific geolocation or data field
SWcompinfo	swcompinfo	retrieve compression information about a field
SWinqswath	swinqswath	retrieves number and names of swaths in file
SWperiodinfo	swperinfo	returns information about a defined time period
SWregionindex	swregidx	returns information about the swath region
SWupdateidxmap	swupimap	update map index for a specified region
SWgeomapinfo	swgmapinfo	retrieve type of dimension mapping for a dimension
SWdupregion	swdupregion	duplicate a region or time period

3.2.3 GD API Routines

The table below provides the routines available for storing and retrieving HDF-EOS *Grid Data.* All C routine names in the grid data interface have the prefix "GD" and the equivalent FORTRAN routine names are prefixed by "gd." The GD routines are grouped into categories, which are described in the HDF-EOS User's Guide.

Routine Name		
C	FORTRAN	Description
GDblkSOMoffset	n/a	writes block SOM offset values (special function for SOM MISR data)
GDopen	gdopen	creates a new file or opens an existing one
GDcreate	gdcreate	creates a new grid in the file
GDattach	gdattach	attaches to a grid
GDdetach	gddetach	detaches from grid interface
GDclose	gdclose	closes file
GDdeforigin	gddeforigin	defines origin of grid
GDdefdim	gddefdim	defines dimensions for a grid
GDdefproj	gddefproj	defines projection of grid
GDdefpixreg	gddefpixreg	defines pixel registration within grid cell
GDdeffield	gddeffld	defines data fields to be stored in a grid
GDdefcomp	gddefcomp	defines a field compression scheme
GDwritefieldmeta	gdwrmeta	writes metadata for field already existing in file
GDwritefield	gdwrfld	writes data to a grid field.
GDreadfield	gdrdfld	reads data from a grid field
GDwriteattr	gdwrattr	writes/updates attribute in a grid.
GDreadattr	gdrdattr	reads attribute from a grid
GDsetfillvalue	gdsetfill	sets fill value for the specified field
GDsettilecomp	n/a	function allows the user to have a field with fill values and use tiling and compression
GDgetfillvalue	gdgetfill	retrieves fill value for the specified field
GDinqdims	gdinqdims	retrieves information about dimensions defined in grid
GDinqfields	gdinqdflds	retrieves information about the data fields defined in grid
GDinqattrs	gdinqattrs	retrieves number and names of attributes defined
GDnentries	gdnentries	returns number of entries and descriptive string buffer size for a specified entity
GDgridinfo	gdgridinfo	returns dimensions of grid and X-Y coordinates of corners
GDprojinfo	gdprojinfo	returns all GCTP projection information
GDdiminfo	gddiminfo	retrieves size of specified dimension.
GDcompinfo	gdcompinfo	retrieve compression information about a field
GDfieldinfo	gdfldinfo	retrieves information about a specific geolocation or data field in the grid
GDinqgrid	gdinqgrid	retrieves number and names of grids in file
GDattrinfo	gdattrinfo	returns information about grid attributes
GDorigininfo	gdorginfo	return information about grid origin
GDpixreginfo	gdpreginfo	return pixel registration information for given grid
GDdefboxregion	gddefboxreg	define region of interest by latitude/longitude
GDregioninfo	gdreginfo	returns information about a defined region
GDextractregion	gdextrreg	read a region of interest from a field

Routine Name		Description (cont.)
C	FORTRAN	
GDdeftimeperiod	gddeftmeper	define a time period of interest
GDdefvrtregion	gddefvrtreg	define a region of interest by vertical field
GDgetpixels	gdgetpix	get row/columns for lon/lat pairs
GDgetpixvalues	gdgetpixval	get field values for specified pixels
GDinterpolate	gdinterpolate	perform bilinear interpolation on a grid field
GDdupregion	gddupreg	duplicate a region or time period
GDdeftile	gddeftle	define a tiling scheme
GDtileinfo	gdtleinfo	returns information about tiling for a field
GDsettilecache	gdsettleche	set tiling cache parameters
GDreadtile	gdrdtle	read data from a single tile
GDwritetile	gdwrtile	write data to a single tile

3.3 HDF-EOS 2.4 Test Tools and Drivers

Included in the software delivery of HDF-EOS 2.4 is a tar file containing test driver programs. These test programs are provided to aid the user in the development of software using the HDF-EOS libraries. The user may run the same test cases as included in this file to verify that the software is functioning correctly. These programs were written to support the internal testing and are not an official part of the delivery. Users make use of them at their own risk. No support will be provided to the user of these programs. The tar file contains source code for a driver in C and FORTRAN for each tool; sample output files, and input files and/or shell scripts, where applicable.

The following UNIX command will create a directory called testdrivers beneath the current directory containing all these test files.

```
zcat HDF-EOS2.4v1.00_TestDrivers.tar.Z | tar xvf -
```

3.4 HDF-EOS 2.4 Hierarchical Data Format

HDF refers to the scientific data format standard selected by NASA as the baseline standard for EOS and HDF-EOS refers to EOS conventions for using HDF. This document provides information on the use of the three interfaces included in HDF-EOS – Point, Swath, and Grid.

The Hierarchical Data Format (HDF) has been selected by the EOSDIS Project as the format of choice for standard product distribution. HDF is a *disk format* and *subroutine library* for storage of most kinds of scientific data. As a *disk format*, HDF files consist of a directory and an unordered set of binary data objects. Each directory entry describes the location, the type, and the size of these binary objects.

The *HDF subroutine library* is designed to be easy for C and FORTRAN programmers to use. The HDF library consists of callable routines, each of which belongs to a particular *interface*. Each interface within these layers address a particular HDF function or a particular HDF data structure, such as arrays, tables, and annotations.

3.5 HDF-EOS Users Guide

The purpose of the ***HDF-EOS Library User's Guide for the ECS Project, Volume 1: Overview and Examples*** (170-TP-100-002) is to provide EOS instrument data processing software developers and scientists with knowledge of HDF-EOS 2.4 functionality. The Users Guide also provides a listing of routine calling sequences, detailed descriptions, and examples of usage.

The ***HDF-EOS Library User's Guide for the ECS Project Volume 2: Function Reference Guide*** (170-TP-101-002) is intended for use by anyone who wishes to use the HDF-EOS library to create or read EOS data products. Users of this document will include EOS instrument team science software developers and data product designers, DAAC personnel, and end users of EOS data products such as scientists and researchers.

This page intentionally left blank.

4. Product Inventory

4.1 HDF-EOS 2.4 Tar File Listing

A listing of the tar file "HDF-EOS2.4v1.00.tar.Z" follows:

Checksum	Blocksize	Filename (location)
51221	35	/HDF-EOS2.4v1.00.README
41283	11150	/HDF-EOS2.4v1.00.tar
27993	5	/HDF-EOS2.4v1.00_TestDrivers.README
13439	1774	/HDF-EOS2.4v1.00_TestDrivers.tar
9896	26	/hdfeos/.cmake.state
11828	13	/hdfeos/Makefile
46351	2	/hdfeos/make_exclude_list
41536	58	/hdfeos/bin/INSTALL-HDFEOS
18720	35	/hdfeos/bin/tmp/hdfeos_env.csh.tmp
58336	30	/hdfeos/bin/tmp/hdfeos_env.ksh.tmp
52501	18	/hdfeos/doc/HDFEOS-DEFINITION.TXT
51221	35	/hdfeos/doc/README
61887	20	/hdfeos/include/HdfEosDef.h
13130	162	/hdfeos/include/cfortHdf.h
50113	2	/hdfeos/include/cproj.h
6993	7	/hdfeos/include/isin.h
17970	4	/hdfeos/include/proj.h
39743	807	/hdfeos/lib/tmp/geolibDEC.a
30028	446	/hdfeos/lib/tmp/geolibHP.a
17854	552	/hdfeos/lib/tmp/geolibIBM.a
37178	1167	/hdfeos/lib/tmp/geolibIRIX53.a
65056	784	/hdfeos/lib/tmp/geolibIRIX62-32.a
58057	1168	/hdfeos/lib/tmp/geolibIRIX62-64.a
2937	1180	/hdfeos/lib/tmp/geolibIRIX62-64mips3.a
49740	893	/hdfeos/lib/tmp/geolibIRIX62-n32.a
36025	656	/hdfeos/lib/tmp/geolibSOL24.a
60042	449	/hdfeos/lib/tmp/geolibSUN4.a
34112	1	/hdfeos/make/CLSInstall.sh
21876	9	/hdfeos/make/Makefile.instr
10601	3	/hdfeos/make/Makefile.template
20857	26	/hdfeos/make/make.options
29618	5	/hdfeos/make/make.targets
17318	5	/hdfeos/make/makeidl.include
33447	6	/hdfeos/make/makeidlxx.include
59673	4	/hdfeos/make/makerec.include
30677	1	/hdfeos/make/makerec.template
37486	3	/hdfeos/samples/AppendField.c
10711	6	/hdfeos/samples/DefineFields.c
37345	5	/hdfeos/samples/DefineGDflds.c
58369	7	/hdfeos/samples/DefineLevels.c
14443	8	/hdfeos/samples/InquireGrid.c
34761	8	/hdfeos/samples/InquireSwath.c

28050	6	/hdfeos/samples/README
22218	3	/hdfeos/samples/ReadFields.c
49331	2	/hdfeos/samples/ReadGDflds.c
5758	6	/hdfeos/samples/ReadLevels.c
54657	7	/hdfeos/samples/SetupGrid.c
21173	3	/hdfeos/samples/SetupPoint.c
23932	8	/hdfeos/samples/SetupSwath.c
25451	3	/hdfeos/samples/SubsetGrid.c
39870	3	/hdfeos/samples/SubsetPoint.c
47305	4	/hdfeos/samples/SubsetSwath.c
18745	3	/hdfeos/samples/UpdateLevels.c
17081	5	/hdfeos/samples/WriteFields.c
24018	3	/hdfeos/samples/WriteGDflds.c
45318	8	/hdfeos/samples/WriteLevels.c
47596	4	/hdfeos/samples/appendfield.f
40306	7	/hdfeos/samples/definefields.f
44383	3	/hdfeos/samples/definegdflds.f
36495	8	/hdfeos/samples/definelevels.f
8109	1	/hdfeos/samples/fixedBuoy0.txt
30568	2	/hdfeos/samples/fixedBuoy1.txt
30568	2	/hdfeos/samples/fixedBuoy1s.txt
5095	1	/hdfeos/samples/floatBuoy0.txt
2555	4	/hdfeos/samples/floatBuoy1.txt
12770	8	/hdfeos/samples/inquiregrid.f
37747	7	/hdfeos/samples/inquireswath.f
21548	3	/hdfeos/samples/readfields.f
58294	2	/hdfeos/samples/readgdflds.f
5955	6	/hdfeos/samples/readlevels.f
33814	9	/hdfeos/samples/setupgrid.f
38520	3	/hdfeos/samples/setuppoint.f
30750	8	/hdfeos/samples/setupswath.f
29431	2	/hdfeos/samples/simple.txt
25591	3	/hdfeos/samples/subsetgrid.f
48773	4	/hdfeos/samples/subsetpoint.f
13010	5	/hdfeos/samples/subsetswath.f
18143	3	/hdfeos/samples/updatelevels.f
31730	5	/hdfeos/samples/writefields.f
22732	3	/hdfeos/samples/writegdflds.f
14258	8	/hdfeos/samples/writelevels.f
23913	255	/hdfeos/src/EHapi.c
12155	759	/hdfeos/src/GDapi.c
31115	5	/hdfeos/src/Makefile
41545	3	/hdfeos/src/Makefile_CM
44753	4	/hdfeos/src/Makefile_alt
62855	452	/hdfeos/src/PTapi.c
45312	736	/hdfeos/src/SWapi.c
64346	2	/hdfeos/src/make_IT/makeDEC4.0r1
60627	2	/hdfeos/src/make_IT/makeHP4.0r1
61311	2	/hdfeos/src/make_IT/makeIBM4.0r1
60711	2	/hdfeos/src/make_IT/makeSGI4.0r1
62510	2	/hdfeos/src/make_IT/makeSUN4.0r1
63456	7	/hdfeos/src/make_IT/makeinc

27993	5	/hdfeos/testdrivers/README
57784	397	/hdfeos/testdrivers/grid/testgrid.c
7726	147	/hdfeos/testdrivers/grid/testgrid.f
32822	63	/hdfeos/testdrivers/grid/testgridf90-32.f
37905	5	/hdfeos/testdrivers/grid/tutils.h
7353	1	/hdfeos/testdrivers/point/fixedBuoy0.txt
29008	2	/hdfeos/testdrivers/point/fixedBuoy1.txt
29008	2	/hdfeos/testdrivers/point/fixedBuoy1s.txt
4627	1	/hdfeos/testdrivers/point/floatBuoy0.txt
605	3	/hdfeos/testdrivers/point/floatBuoy1.txt
28549	2	/hdfeos/testdrivers/point/simple.txt
43954	146	/hdfeos/testdrivers/point/testpoint.c
42528	132	/hdfeos/testdrivers/point/testpoint.f
30190	84	/hdfeos/testdrivers/point/testpointf90-32.f
37905	5	/hdfeos/testdrivers/point/tutils.h
36399	467	/hdfeos/testdrivers/swath/testswath.c
37805	187	/hdfeos/testdrivers/swath/testswath.f
36343	95	/hdfeos/testdrivers/swath/testswathf90-32.f
37905	5	/hdfeos/testdrivers/swath/tutils.h
29664	20	/test_drivers/README

4.2 HDF-EOS2.4v1.00_TestDrivers.tar Listing

Checksum	Blocksize	Filename (location)
23465	1	/test_drivers/AA/PGS_AA_2DRead_Driver.in
47463	34	/test_drivers/AA/PGS_AA_2DRead_Driver_c.c
23611	11	/test_drivers/AA/PGS_AA_2DRead_Driver_c.out_sample
49190	44	/test_drivers/AA/PGS_AA_2DRead_Driver_f.f
10772	37	/test_drivers/AA/PGS_AA_2DRead_Driver_f.out_sample
33031	4	/test_drivers/AA/PGS_AA_2Dgeo_Driver.in
31967	34	/test_drivers/AA/PGS_AA_2Dgeo_Driver_c.c
34948	15	/test_drivers/AA/PGS_AA_2Dgeo_Driver_c.out_sample
17843	43	/test_drivers/AA/PGS_AA_2Dgeo_Driver_f.f
52052	32	/test_drivers/AA/PGS_AA_2Dgeo_Driver_f.out_sample
13657	1	/test_drivers/AA/PGS_AA_3DRead_Driver.in
3200	37	/test_drivers/AA/PGS_AA_3DRead_Driver_c.c
39925	12	/test_drivers/AA/PGS_AA_3DRead_Driver_c.out_sample
57014	47	/test_drivers/AA/PGS_AA_3DRead_Driver_f.f
34982	19	/test_drivers/AA/PGS_AA_3DRead_Driver_f.out_sample
2755	3	/test_drivers/AA/PGS_AA_3Dgeo_Driver.in
65378	35	/test_drivers/AA/PGS_AA_3Dgeo_Driver_c.c
31951	17	/test_drivers/AA/PGS_AA_3Dgeo_Driver_c.out_sample
50022	44	/test_drivers/AA/PGS_AA_3Dgeo_Driver_f.f
16557	34	/test_drivers/AA/PGS_AA_3Dgeo_Driver_f.out_sample
14793	2	/test_drivers/AA/PGS_AA_PeVA_integer_Driver.in
27885	31	/test_drivers/AA/PGS_AA_PeVA_integer_Driver_c.c
30008	6	/test_drivers/AA/PGS_AA_PeVA_integer_Driver_c.out_sample
25252	36	/test_drivers/AA/PGS_AA_PeVA_integer_Driver_f.f
3784	12	/test_drivers/AA/PGS_AA_PeVA_integer_Driver_f.out_sample
10618	2	/test_drivers/AA/PGS_AA_PeVA_real_Driver.in
24996	31	/test_drivers/AA/PGS_AA_PeVA_real_Driver_c.c
41109	7	/test_drivers/AA/PGS_AA_PeVA_real_Driver_c.out_sample

21767	36	/test_drivers/AA/PGS_AA_PeVA_real_Driver_f.f
10094	13	/test_drivers/AA/PGS_AA_PeVA_real_Driver_f.out_sample
12423	2	/test_drivers/AA/PGS_AA_PeVA_string_Driver.in
54317	33	/test_drivers/AA/PGS_AA_PeVA_string_Driver_c.c
51207	7	/test_drivers/AA/PGS_AA_PeVA_string_Driver_c.out_sample
30463	37	/test_drivers/AA/PGS_AA_PeVA_string_Driver_f.f
21237	13	/test_drivers/AA/PGS_AA_PeVA_string_Driver_f.out_sample
62172	2	/test_drivers/AA/PGS_AA_PeV_integer_Driver.in
10827	29	/test_drivers/AA/PGS_AA_PeV_integer_Driver_c.c
5136	4	/test_drivers/AA/PGS_AA_PeV_integer_Driver_c.out_sample
62514	36	/test_drivers/AA/PGS_AA_PeV_integer_Driver_f.f
51468	7	/test_drivers/AA/PGS_AA_PeV_integer_Driver_f.out_sample
61622	2	/test_drivers/AA/PGS_AA_PeV_real_Driver.in
23871	29	/test_drivers/AA/PGS_AA_PeV_real_Driver_c.c
7561	4	/test_drivers/AA/PGS_AA_PeV_real_Driver_c.out_sample
60140	36	/test_drivers/AA/PGS_AA_PeV_real_Driver_f.f
51777	7	/test_drivers/AA/PGS_AA_PeV_real_Driver_f.out_sample
62295	2	/test_drivers/AA/PGS_AA_PeV_string_Driver.in
24071	29	/test_drivers/AA/PGS_AA_PeV_string_Driver_c.c
8328	4	/test_drivers/AA/PGS_AA_PeV_string_Driver_c.out_sample
60745	36	/test_drivers/AA/PGS_AA_PeV_string_Driver_f.f
52542	7	/test_drivers/AA/PGS_AA_PeV_string_Driver_f.out_sample
36664	2	/test_drivers/AA/PGS_AA_dcw_Driver.in
41614	32	/test_drivers/AA/PGS_AA_dcw_Driver_c.c
63913	10	/test_drivers/AA/PGS_AA_dcw_Driver_c.out_sample
40619	39	/test_drivers/AA/PGS_AA_dcw_Driver_f.f
50189	25	/test_drivers/AA/PGS_AA_dcw_Driver_f.out_sample
17212	1	/test_drivers/AA/PGS_AA_dem_double_Driver.in
58356	36	/test_drivers/AA/PGS_AA_dem_double_Driver_c.c
63415	2	/test_drivers/AA/PGS_AA_dem_double_Driver_c.out_sample
36116	44	/test_drivers/AA/PGS_AA_dem_double_Driver_f.f
5321	3	/test_drivers/AA/PGS_AA_dem_double_Driver_f.out_sample
8841	2	/test_drivers/AA/PGS_AA_dem_integer_Driver.in
51293	36	/test_drivers/AA/PGS_AA_dem_integer_Driver_c.c
30255	11	/test_drivers/AA/PGS_AA_dem_integer_Driver_c.out_sample
38082	44	/test_drivers/AA/PGS_AA_dem_integer_Driver_f.f
3307	21	/test_drivers/AA/PGS_AA_dem_integer_Driver_f.out_sample
16117	1	/test_drivers/AA/PGS_AA_dem_long_Driver.in
48334	36	/test_drivers/AA/PGS_AA_dem_long_Driver_c.c
3667	2	/test_drivers/AA/PGS_AA_dem_long_Driver_c.out_sample
42516	44	/test_drivers/AA/PGS_AA_dem_long_Driver_f.f
19078	4	/test_drivers/AA/PGS_AA_dem_long_Driver_f.out_sample
16676	1	/test_drivers/AA/PGS_AA_dem_real_Driver.in
55872	36	/test_drivers/AA/PGS_AA_dem_real_Driver_c.c
5417	3	/test_drivers/AA/PGS_AA_dem_real_Driver_c.out_sample
33781	44	/test_drivers/AA/PGS_AA_dem_real_Driver_f.f
20639	4	/test_drivers/AA/PGS_AA_dem_real_Driver_f.out_sample
37282	10	/test_drivers/AA/README.AA
44742	4	/test_drivers/AA/makefile
48052	4	/test_drivers/AA/makefile.f90
26426	1	/test_drivers/AA/AATestData/AA_PeVA_invalid1
22147	1	/test_drivers/AA/AATestData/AA_PeVA_invalid2

22442	1	/test_drivers/AA/AATestData/AA_PeVA_valid1
22228	1	/test_drivers/AA/AATestData/AA_PeVA_valid2
27006	1	/test_drivers/AA/AATestData/AA_PeVA_valid3
37669	4	/test_drivers/AA/AATestData/testIndexFile
0	0	/test_drivers/AA/AATestData/testdata1
3407	1	/test_drivers/AA/AATestData/testdata1.bfm
18157	1	/test_drivers/AA/AATestData/testdata1Support
19591	1	/test_drivers/AA/AATestData/testdata1Support_dec
2000	2	/test_drivers/AA/AATestData/testdata2
3409	1	/test_drivers/AA/AATestData/testdata2.bfm
18162	1	/test_drivers/AA/AATestData/testdata2Support
19540	1	/test_drivers/AA/AATestData/testdata2Support_dec
19540	1	/test_drivers/AA/AATestData/testdata2Support_sgi64
2000	4	/test_drivers/AA/AATestData/testdata2_dec
3474	1	/test_drivers/AA/AATestData/testdata2_dec.bfm
2000	4	/test_drivers/AA/AATestData/testdata2_sgi64
3474	1	/test_drivers/AA/AATestData/testdata2_sgi64.bfm
5106	1	/test_drivers/AA/AATestData/testdouble.bfm
21610	4	/test_drivers/AA/AATestData/testdouble.dat
18623	1	/test_drivers/AA/AATestData/testdoubleSupport
20057	1	/test_drivers/AA/AATestData/testdoubleSupport_dec
4679	1	/test_drivers/AA/AATestData/testfloat.bfm
32280	2	/test_drivers/AA/AATestData/testfloat.dat
18366	1	/test_drivers/AA/AATestData/testfloatSupport
19800	1	/test_drivers/AA/AATestData/testfloatSupport_dec
56327	2	/test_drivers/CBP/PGS_CBP_Earth_CB_Vector_Driver.in
7334	39	/test_drivers/CBP/PGS_CBP_Earth_CB_Vector_Driver_c.c
40296	9	/test_drivers/CBP/PGS_CBP_Earth_CB_Vector_Driver_c.out_sample
14264	53	/test_drivers/CBP/PGS_CBP_Earth_CB_Vector_Driver_f.f
23009	18	/test_drivers/CBP/PGS_CBP_Earth_CB_Vector_Driver_f.out_sample
59495	2	/test_drivers/CBP/PGS_CBP_Sat_CB_Vector_Driver.in
42313	41	/test_drivers/CBP/PGS_CBP_Sat_CB_Vector_Driver_c.c
39427	9	/test_drivers/CBP/PGS_CBP_Sat_CB_Vector_Driver_c.out_sample
9208	57	/test_drivers/CBP/PGS_CBP_Sat_CB_Vector_Driver_f.f
59451	20	/test_drivers/CBP/PGS_CBP_Sat_CB_Vector_Driver_f.out_sample
51871	2	/test_drivers/CBP/PGS_CBP_SolarTimeCoords_Driver.in
32936	31	/test_drivers/CBP/PGS_CBP_SolarTimeCoords_Driver_c.c
35991	8	/test_drivers/CBP/PGS_CBP_SolarTimeCoords_Driver_c.out_sample
10251	44	/test_drivers/CBP/PGS_CBP_SolarTimeCoords_Driver_f.f
61939	14	/test_drivers/CBP/PGS_CBP_SolarTimeCoords_Driver_f.out_sample
14063	34	/test_drivers/CBP/PGS_CBP_body_inFOV_Driver.in
6983	54	/test_drivers/CBP/PGS_CBP_body_inFOV_Driver_c.c
2220	120	/test_drivers/CBP/PGS_CBP_body_inFOV_Driver_c.out_sample
53099	68	/test_drivers/CBP/PGS_CBP_body_inFOV_Driver_f.f
41306	135	/test_drivers/CBP/PGS_CBP_body_inFOV_Driver_f.out_sample
40013	13	/test_drivers/CBP/README.CBP
49150	4	/test_drivers/CBP/makefile
52340	4	/test_drivers/CBP/makefile.f90
49885	9	/test_drivers/CSC/PGS_CSC_DayNight_Driver.in
18858	36	/test_drivers/CSC/PGS_CSC_DayNight_Driver_c.c
7361	33	/test_drivers/CSC/PGS_CSC_DayNight_Driver_c.out_sample
58550	54	/test_drivers/CSC/PGS_CSC_DayNight_Driver_f.f

5012	68	/test_drivers/CSC/PGS_CSC_DayNight_Driver_f.out_sample
56877	2	/test_drivers/CSC/PGS_CSC_ECItoECR_Driver.in
51801	39	/test_drivers/CSC/PGS_CSC_ECItoECR_Driver_c.c
63556	8	/test_drivers/CSC/PGS_CSC_ECItoECR_Driver_c.out_sample
9132	43	/test_drivers/CSC/PGS_CSC_ECItoECR_Driver_f.f
62316	24	/test_drivers/CSC/PGS_CSC_ECItoECR_Driver_f.out_sample
12350	3	/test_drivers/CSC/PGS_CSC_ECItoORB_Driver.in
47339	40	/test_drivers/CSC/PGS_CSC_ECItoORB_Driver_c.c
1984	14	/test_drivers/CSC/PGS_CSC_ECItoORB_Driver_c.out_sample
18336	49	/test_drivers/CSC/PGS_CSC_ECItoORB_Driver_f.f
53392	33	/test_drivers/CSC/PGS_CSC_ECItoORB_Driver_f.out_sample
63132	5	/test_drivers/CSC/PGS_CSC_ECItoSC_Driver.in
38707	38	/test_drivers/CSC/PGS_CSC_ECItoSC_Driver_c.c
45883	26	/test_drivers/CSC/PGS_CSC_ECItoSC_Driver_c.out_sample
36137	50	/test_drivers/CSC/PGS_CSC_ECItoSC_Driver_f.f
34149	67	/test_drivers/CSC/PGS_CSC_ECItoSC_Driver_f.out_sample
64437	3	/test_drivers/CSC/PGS_CSC_ECRtoECI_Driver.in
59120	39	/test_drivers/CSC/PGS_CSC_ECRtoECI_Driver_c.c
38772	7	/test_drivers/CSC/PGS_CSC_ECRtoECI_Driver_c.out_sample
9603	44	/test_drivers/CSC/PGS_CSC_ECRtoECI_Driver_f.f
50709	22	/test_drivers/CSC/PGS_CSC_ECRtoECI_Driver_f.out_sample
58049	2	/test_drivers/CSC/PGS_CSC_ECRtoGEO_Driver.in
2754	31	/test_drivers/CSC/PGS_CSC_ECRtoGEO_Driver_c.c
39629	11	/test_drivers/CSC/PGS_CSC_ECRtoGEO_Driver_c.out_sample
32858	37	/test_drivers/CSC/PGS_CSC_ECRtoGEO_Driver_f.f
17666	27	/test_drivers/CSC/PGS_CSC_ECRtoGEO_Driver_f.out_sample
22990	19	/test_drivers/CSC/PGS_CSC_Earthpt_FOV_Driver.in
21732	51	/test_drivers/CSC/PGS_CSC_Earthpt_FOV_Driver_c.c
41076	72	/test_drivers/CSC/PGS_CSC_Earthpt_FOV_Driver_c.out_sample
35469	62	/test_drivers/CSC/PGS_CSC_Earthpt_FOV_Driver_f.f
7761	84	/test_drivers/CSC/PGS_CSC_Earthpt_FOV_Driver_f.out_sample
50009	11	/test_drivers/CSC/PGS_CSC_Earthpt_FixedFOV_Driver.in
10687	49	/test_drivers/CSC/PGS_CSC_Earthpt_FixedFOV_Driver_c.c
8470	46	/test_drivers/CSC/PGS_CSC_Earthpt_FixedFOV_Driver_c.out_sample
631	61	/test_drivers/CSC/PGS_CSC_Earthpt_FixedFOV_Driver_f.f
3093	56	/test_drivers/CSC/PGS_CSC_Earthpt_FixedFOV_Driver_f.out_sample
48490	2	/test_drivers/CSC/PGS_CSC_GEOtoECR_Driver.in
35948	32	/test_drivers/CSC/PGS_CSC_GEOtoECR_Driver_c.c
43504	5	/test_drivers/CSC/PGS_CSC_GEOtoECR_Driver_c.out_sample
54228	38	/test_drivers/CSC/PGS_CSC_GEOtoECR_Driver_f.f
25959	12	/test_drivers/CSC/PGS_CSC_GEOtoECR_Driver_f.out_sample
63281	12	/test_drivers/CSC/PGS_CSC_GetFOV_Pixel_Driver.in
432	48	/test_drivers/CSC/PGS_CSC_GetFOV_Pixel_Driver_c.c
45306	91	/test_drivers/CSC/PGS_CSC_GetFOV_Pixel_Driver_c.out_sample
52196	61	/test_drivers/CSC/PGS_CSC_GetFOV_Pixel_Driver_f.f
16776	226	/test_drivers/CSC/PGS_CSC_GetFOV_Pixel_Driver_f.out_sample
1080	3	/test_drivers/CSC/PGS_CSC_GrazingRay_Driver.in
1764	35	/test_drivers/CSC/PGS_CSC_GrazingRay_Driver_c.c
52326	16	/test_drivers/CSC/PGS_CSC_GrazingRay_Driver_c.out_sample
64066	40	/test_drivers/CSC/PGS_CSC_GrazingRay_Driver_f.f
58630	39	/test_drivers/CSC/PGS_CSC_GrazingRay_Driver_f.out_sample
25819	5	/test_drivers/CSC/PGS_CSC_GreenwichHour_Driver.in

38130	32	/test_drivers/CSC/PGS_CSC_GreenwichHour_Driver_c.c
63057	28	/test_drivers/CSC/PGS_CSC_GreenwichHour_Driver_c.out_sample
27815	45	/test_drivers/CSC/PGS_CSC_GreenwichHour_Driver_f.f
12711	57	/test_drivers/CSC/PGS_CSC_GreenwichHour_Driver_f.out_sample
29938	6	/test_drivers/CSC/PGS_CSC_J2000toTOD_Driver.in
26934	37	/test_drivers/CSC/PGS_CSC_J2000toTOD_Driver_c.c
41449	31	/test_drivers/CSC/PGS_CSC_J2000toTOD_Driver_c.out_sample
57777	47	/test_drivers/CSC/PGS_CSC_J2000toTOD_Driver_f.f
63669	45	/test_drivers/CSC/PGS_CSC_J2000toTOD_Driver_f.out_sample
15932	3	/test_drivers/CSC/PGS_CSC_ORBtoECI_Driver.in
47483	40	/test_drivers/CSC/PGS_CSC_ORBtoECI_Driver_c.c
52564	16	/test_drivers/CSC/PGS_CSC_ORBtoECI_Driver_c.out_sample
18464	49	/test_drivers/CSC/PGS_CSC_ORBtoECI_Driver_f.f
6623	39	/test_drivers/CSC/PGS_CSC_ORBtoECI_Driver_f.out_sample
45571	6	/test_drivers/CSC/PGS_CSC_ORBtoSC_Driver.in
40567	38	/test_drivers/CSC/PGS_CSC_ORBtoSC_Driver_c.c
54832	21	/test_drivers/CSC/PGS_CSC_ORBtoSC_Driver_c.out_sample
35547	46	/test_drivers/CSC/PGS_CSC_ORBtoSC_Driver_f.f
26532	52	/test_drivers/CSC/PGS_CSC_ORBtoSC_Driver_f.out_sample
63132	5	/test_drivers/CSC/PGS_CSC_SCtoECI_Driver.in
42804	38	/test_drivers/CSC/PGS_CSC_SCtoECI_Driver_c.c
28996	25	/test_drivers/CSC/PGS_CSC_SCtoECI_Driver_c.out_sample
31943	49	/test_drivers/CSC/PGS_CSC_SCtoECI_Driver_f.f
14188	66	/test_drivers/CSC/PGS_CSC_SCtoECI_Driver_f.out_sample
53530	5	/test_drivers/CSC/PGS_CSC_SCtoORB_Driver.in
44566	38	/test_drivers/CSC/PGS_CSC_SCtoORB_Driver_c.c
62712	18	/test_drivers/CSC/PGS_CSC_SCtoORB_Driver_c.out_sample
28932	46	/test_drivers/CSC/PGS_CSC_SCtoORB_Driver_f.f
56938	47	/test_drivers/CSC/PGS_CSC_SCtoORB_Driver_f.out_sample
63242	5	/test_drivers/CSC/PGS_CSC_SpaceRefract_Driver.in
48559	36	/test_drivers/CSC/PGS_CSC_SpaceRefract_Driver_c.c
8199	24	/test_drivers/CSC/PGS_CSC_SpaceRefract_Driver_c.out_sample
1332	39	/test_drivers/CSC/PGS_CSC_SpaceRefract_Driver_f.f
55292	32	/test_drivers/CSC/PGS_CSC_SpaceRefract_Driver_f.out_sample
5615	3	/test_drivers/CSC/PGS_CSC_SubSatPoint_Driver.in
62257	42	/test_drivers/CSC/PGS_CSC_SubSatPoint_Driver_c.c
43304	15	/test_drivers/CSC/PGS_CSC_SubSatPoint_Driver_c.out_sample
52521	54	/test_drivers/CSC/PGS_CSC_SubSatPoint_Driver_f.f
14288	33	/test_drivers/CSC/PGS_CSC_SubSatPoint_Driver_f.out_sample
42648	6	/test_drivers/CSC/PGS_CSC_TODtoJ2000_Driver.in
28873	37	/test_drivers/CSC/PGS_CSC_TODtoJ2000_Driver_c.c
40798	31	/test_drivers/CSC/PGS_CSC_TODtoJ2000_Driver_c.out_sample
52577	47	/test_drivers/CSC/PGS_CSC_TODtoJ2000_Driver_f.f
63003	45	/test_drivers/CSC/PGS_CSC_TODtoJ2000_Driver_f.out_sample
15995	3	/test_drivers/CSC/PGS_CSC_ZenithAzimuth_Driver.in
44483	40	/test_drivers/CSC/PGS_CSC_ZenithAzimuth_Driver_c.c
50629	10	/test_drivers/CSC/PGS_CSC_ZenithAzimuth_Driver_c.out_sample
26575	56	/test_drivers/CSC/PGS_CSC_ZenithAzimuth_Driver_f.f
29276	21	/test_drivers/CSC/PGS_CSC_ZenithAzimuth_Driver_f.out_sample
20742	7	/test_drivers/CSC/PGS_CSC_nutate2000_Driver.in
42277	37	/test_drivers/CSC/PGS_CSC_nutate2000_Driver_c.c
42961	40	/test_drivers/CSC/PGS_CSC_nutate2000_Driver_c.out_sample

30423	47	/test_drivers/CSC/PGS_CSC_nutate2000_Driver_f.f
41249	46	/test_drivers/CSC/PGS_CSC_nutate2000_Driver_f.out_sample
24662	5	/test_drivers/CSC/PGS_CSC_precs2000_Driver.in
12248	35	/test_drivers/CSC/PGS_CSC_precs2000_Driver_c.c
6100	23	/test_drivers/CSC/PGS_CSC_precs2000_Driver_c.out_sample
3328	43	/test_drivers/CSC/PGS_CSC_precs2000_Driver_f.f
39944	28	/test_drivers/CSC/PGS_CSC_precs2000_Driver_f.out_sample
28710	16	/test_drivers/CSC/README.CSC
49062	4	/test_drivers/CSC/makefile
54374	4	/test_drivers/CSC/makefile.f90
45233	2	/test_drivers/CUC/PGS_CUC_Cons_Driver.in
28410	29	/test_drivers/CUC/PGS_CUC_Cons_Driver_c.c
23441	6	/test_drivers/CUC/PGS_CUC_Cons_Driver_c.out_sample
23838	34	/test_drivers/CUC/PGS_CUC_Cons_Driver_f.f
30200	14	/test_drivers/CUC/PGS_CUC_Cons_Driver_f.out_sample
5742	2	/test_drivers/CUC/PGS_CUC_Conv_Driver.in
57213	30	/test_drivers/CUC/PGS_CUC_Conv_Driver_c.c
12039	9	/test_drivers/CUC/PGS_CUC_Conv_Driver_c.out_sample
45410	35	/test_drivers/CUC/PGS_CUC_Conv_Driver_f.f
42821	22	/test_drivers/CUC/PGS_CUC_Conv_Driver_f.out_sample
57448	8	/test_drivers/CUC/README.CUC
44832	4	/test_drivers/CUC/makefile
48658	4	/test_drivers/CUC/makefile.f90
19710	11	/test_drivers/Common/Create_filename_f77.f
38834	12	/test_drivers/Common/Create_filename_f90.f
28908	85	/test_drivers/Common/PCF.baseline
37012	9	/test_drivers/Common/README.script
57049	4	/test_drivers/Common/cleanup.csh
12470	33	/test_drivers/Common/createPCF.csh
59784	8	/test_drivers/Common/diff.csh
40105	7	/test_drivers/Common/leapsec.dat.REL_B0
952	3	/test_drivers/Common/orbsim.in
32396	5	/test_drivers/Common/runAA.csh
34977	3	/test_drivers/Common/runCBP.csh
35013	3	/test_drivers/Common/runCSC.csh
8407	4	/test_drivers/Common/runDEM.csh
35049	3	/test_drivers/Common/runEPH.csh
56560	16	/test_drivers/Common/runIO.csh
63301	4	/test_drivers/Common/runL0.csh
10778	20	/test_drivers/Common/runMEM.csh
35139	3	/test_drivers/Common/runMET.csh
4128	7	/test_drivers/Common/runPC.csh
8603	21	/test_drivers/Common/runSMF.csh
34093	3	/test_drivers/Common/runTD.csh
57659	23	/test_drivers/Common/runTests
58787	9	/test_drivers/Common/rundrivers.csh
30653	1217	/test_drivers/Common/utcpole.dat.REL_B0
32301	9	/test_drivers/DEM/PGS_DEM_Driver.in
30765	166	/test_drivers/DEM/PGS_DEM_Driver_c.c
40355	44	/test_drivers/DEM/PGS_DEM_Driver_c.out_sample
1345	102	/test_drivers/DEM/PGS_DEM_Driver_f.f
22826	1633	/test_drivers/DEM/PGS_DEM_Driver_f.out_sample

35270	26	/test_drivers/DEM/README.DEM
51985	6	/test_drivers/DEM/makefile
52661	6	/test_drivers/DEM/makefile.f90
62084	2	/test_drivers/EPH/PGS_EPH_EphemAttit_Driver.in
44357	47	/test_drivers/EPH/PGS_EPH_EphemAttit_Driver_c.c
16331	12	/test_drivers/EPH/PGS_EPH_EphemAttit_Driver_c.out_sample
7210	58	/test_drivers/EPH/PGS_EPH_EphemAttit_Driver_f.f
46175	22	/test_drivers/EPH/PGS_EPH_EphemAttit_Driver_f.out_sample
4599	2	/test_drivers/EPH/PGS_EPH_GetEphMet_Driver.in
57530	36	/test_drivers/EPH/PGS_EPH_GetEphMet_Driver_c.c
48473	12	/test_drivers/EPH/PGS_EPH_GetEphMet_Driver_c.out_sample
63391	47	/test_drivers/EPH/PGS_EPH_GetEphMet_Driver_f.f
45026	19	/test_drivers/EPH/PGS_EPH_GetEphMet_Driver_f.out_sample
37589	9	/test_drivers/EPH/README.EPH
47037	4	/test_drivers/EPH/makefile
49503	4	/test_drivers/EPH/makefile.f90
34677	21	/test_drivers/GCT/PGS_GCT_Driver.in
121	79	/test_drivers/GCT/PGS_GCT_Driver_c.c
34788	101	/test_drivers/GCT/PGS_GCT_Driver_c.out_sample
61215	98	/test_drivers/GCT/PGS_GCT_Driver_f.f
61205	152	/test_drivers/GCT/PGS_GCT_Driver_f.out_sample
55214	8	/test_drivers/GCT/README.GCT
46738	4	/test_drivers/GCT/makefile
51026	4	/test_drivers/GCT/makefile.f90
29151	4	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1.in_c
7962	7	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1.in_f
12507	9	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1.in_f90
31557	23	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1_c.out_sample
22830	59	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1_f.out_sample
15157	76	/test_drivers/IO/GEN/PGS_Perm_IO_Driver1_f90.out_sample
44867	3	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2.in_c
37265	5	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2.in_f
39234	5	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2.in_f90
12576	16	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2_c.out_sample
22669	43	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2_f.out_sample
13957	45	/test_drivers/IO/GEN/PGS_Perm_IO_Driver2_f90.out_sample
63520	2	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8.in_c
64107	2	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8.in_f
64212	2	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8.in_f90
3743	4	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8_c.out_sample
44700	7	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8_f.out_sample
44805	7	/test_drivers/IO/GEN/PGS_Perm_IO_Driver8_f90.out_sample
26915	9	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a.in_c
56672	16	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a.in_f
56777	16	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a.in_f90
62742	78	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a_c.out_sample
5140	140	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a_f.out_sample
5181	140	/test_drivers/IO/GEN/PGS_Perm_IO_Driver9a_f90.out_sample
16779	3	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT1.in_f
16884	3	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT1.in_f90
17184	3	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT2.in_f
17289	3	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT2.in_f90

4860	2	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT3.in_f
4965	2	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_INIT3.in_f90
53542	87	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_c.c
41905	130	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_f.f
2632	131	/test_drivers/IO/GEN/PGS_Perm_IO_Driver_f90.f
32475	4	/test_drivers/IO/GEN/PGS_SH_IO.in
43019	3	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3.in_c
46515	8	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3.in_f
58552	10	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3.in_f90
4932	14	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3_c.out_sample
17175	58	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3_f.out_sample
1118	75	/test_drivers/IO/GEN/PGS_Temp_IO_Driver3_f90.out_sample
37801	4	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4.in_c
16323	7	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4.in_f
23674	7	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4.in_f90
19978	19	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4_c.out_sample
47530	52	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4_f.out_sample
42030	54	/test_drivers/IO/GEN/PGS_Temp_IO_Driver4_f90.out_sample
49790	3	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5.in_c
44776	8	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5.in_f
56072	10	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5.in_f90
45827	13	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5_c.out_sample
37755	57	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5_f.out_sample
10557	74	/test_drivers/IO/GEN/PGS_Temp_IO_Driver5_f90.out_sample
36214	4	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6.in_c
45381	6	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6.in_f
61308	7	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6.in_f90
64820	19	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6_c.out_sample
25351	43	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6_f.out_sample
682	47	/test_drivers/IO/GEN/PGS_Temp_IO_Driver6_f90.out_sample
34143	1	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7.in_c
34114	1	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7.in_f
34219	1	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7.in_f90
7139	4	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7_c.out_sample
39645	6	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7_f.out_sample
39686	6	/test_drivers/IO/GEN/PGS_Temp_IO_Driver7_f90.out_sample
6585	5	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b.in_c
54739	15	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b.in_f
54844	15	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b.in_f90
43776	37	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b_c.out_sample
24404	127	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b_f.out_sample
24445	127	/test_drivers/IO/GEN/PGS_Temp_IO_Driver9b_f90.out_sample
16943	80	/test_drivers/IO/GEN/PGS_Temp_IO_Driver_c.c
40840	119	/test_drivers/IO/GEN/PGS_Temp_IO_Driver_f.f
4	119	/test_drivers/IO/GEN/PGS_Temp_IO_Driver_f90.f
20453	14	/test_drivers/IO/GEN/README.IO
15771	3	/test_drivers/IO/GEN/io-env.setup
40860	3	/test_drivers/IO/GEN/logdata
34703	3	/test_drivers/IO/GEN/makefile
37931	4	/test_drivers/IO/GEN/makefile.f90
33327	3	/test_drivers/IO/GEN/mkdatadirs
53805	6	/test_drivers/IO/GEN/refresh_c

45447	5	/test_drivers/IO/GEN/refresh_f
46350	5	/test_drivers/IO/GEN/refresh_f90
2264	1	/test_drivers/IO/L0/L0sim.EOSAM.input
2385	1	/test_drivers/IO/L0/L0sim.EOSPM.input
2342	1	/test_drivers/IO/L0/L0sim.TRMM.input
2132	1	/test_drivers/IO/L0/L0sim.TRMM1.input
14291	1	/test_drivers/IO/L0/P0420132AAAAAAAAAAAAAA97292141112100.PDS
12863	373	/test_drivers/IO/L0/P0420132AAAAAAAAAAAAAA97292141112101.PDS
60068	4	/test_drivers/IO/L0/PGS_IO_L0_Driver.in
35869	65	/test_drivers/IO/L0/PGS_IO_L0_Driver_c.c
60080	52	/test_drivers/IO/L0/PGS_IO_L0_Driver_c.out_sample
24326	88	/test_drivers/IO/L0/PGS_IO_L0_Driver_f.f
25954	84	/test_drivers/IO/L0/PGS_IO_L0_Driver_f.out_sample
7084	9	/test_drivers/IO/L0/README.L0
47882	4	/test_drivers/IO/L0/makefile
51256	4	/test_drivers/IO/L0/makefile.f90
38546	3	/test_drivers/IO/L0/runL0sim.csh
3419	4	/test_drivers/MEM/PGS_DYN_MEM_Driver1.in
28954	31	/test_drivers/MEM/PGS_DYN_MEM_Driver1_c.out_sample
25089	3	/test_drivers/MEM/PGS_DYN_MEM_Driver2.in
58457	14	/test_drivers/MEM/PGS_DYN_MEM_Driver2_c.out_sample
24080	60	/test_drivers/MEM/PGS_DYN_MEM_Driver_c.c
10591	1	/test_drivers/MEM/PGS_SHM_MEM_Driver.init
34676	1	/test_drivers/MEM/PGS_SHM_MEM_Driver.sh_f
10398	1	/test_drivers/MEM/PGS_SHM_MEM_Driver.term
18563	1	/test_drivers/MEM/PGS_SHM_MEM_Driver1.in
34405	1	/test_drivers/MEM/PGS_SHM_MEM_Driver1.in_f
17310	1	/test_drivers/MEM/PGS_SHM_MEM_Driver1.sh
14079	1	/test_drivers/MEM/PGS_SHM_MEM_Driver10.in
25242	1	/test_drivers/MEM/PGS_SHM_MEM_Driver10.sh
48147	2	/test_drivers/MEM/PGS_SHM_MEM_Driver10_c.out_sample
15838	1	/test_drivers/MEM/PGS_SHM_MEM_Driver11.in
25244	1	/test_drivers/MEM/PGS_SHM_MEM_Driver11.sh
15396	3	/test_drivers/MEM/PGS_SHM_MEM_Driver11_c.out_sample
59057	2	/test_drivers/MEM/PGS_SHM_MEM_Driver1_c.out_sample
47177	4	/test_drivers/MEM/PGS_SHM_MEM_Driver1_f.out_sample
18478	1	/test_drivers/MEM/PGS_SHM_MEM_Driver2.in
28517	1	/test_drivers/MEM/PGS_SHM_MEM_Driver2.in_f
25160	1	/test_drivers/MEM/PGS_SHM_MEM_Driver2.sh
25599	3	/test_drivers/MEM/PGS_SHM_MEM_Driver2_c.out_sample
1770	3	/test_drivers/MEM/PGS_SHM_MEM_Driver2_f.out_sample
16210	1	/test_drivers/MEM/PGS_SHM_MEM_Driver3.in
28907	1	/test_drivers/MEM/PGS_SHM_MEM_Driver3.sh
9932	3	/test_drivers/MEM/PGS_SHM_MEM_Driver3_c.out_sample
15382	1	/test_drivers/MEM/PGS_SHM_MEM_Driver4.in
28877	1	/test_drivers/MEM/PGS_SHM_MEM_Driver4.sh
63511	2	/test_drivers/MEM/PGS_SHM_MEM_Driver4_c.out_sample
32643	1	/test_drivers/MEM/PGS_SHM_MEM_Driver5.sh

36390	1	/test_drivers/MEM/PGS_SHM_MEM_Driver6.sh
32645	1	/test_drivers/MEM/PGS_SHM_MEM_Driver7.sh
17616	1	/test_drivers/MEM/PGS_SHM_MEM_Driver8.in
25140	1	/test_drivers/MEM/PGS_SHM_MEM_Driver8.sh
18335	3	/test_drivers/MEM/PGS_SHM_MEM_Driver8_c.out_sample
13871	1	/test_drivers/MEM/PGS_SHM_MEM_Driver9.in
25194	1	/test_drivers/MEM/PGS_SHM_MEM_Driver9.sh
50830	2	/test_drivers/MEM/PGS_SHM_MEM_Driver9_c.out_sample
17123	55	/test_drivers/MEM/PGS_SHM_MEM_Driver_c.c
44729	39	/test_drivers/MEM/PGS_SHM_MEM_Driver_f.f
18655	12	/test_drivers/MEM/README.MEM
31550	3	/test_drivers/MEM/makefile
34713	3	/test_drivers/MEM/makefile.f90
58399	37	/test_drivers/MET/PGS_MET_Driver.in
15209	106	/test_drivers/MET/PGS_MET_Driver_c.c
34103	210	/test_drivers/MET/PGS_MET_Driver_c.out_sample
49528	116	/test_drivers/MET/PGS_MET_Driver_f.f
54734	348	/test_drivers/MET/PGS_MET_Driver_f.out_sample
54858	6	/test_drivers/MET/README.MET
62567	6	/test_drivers/MET/makefile
57837	4	/test_drivers/MET/makefile.f90
41334	7	/test_drivers/MET/MET_TestData/LISUSR
55287	62	/test_drivers/MET/MET_TestData/MCFfile
59430	62	/test_drivers/MET/MET_TestData/MCFfile_1
40139	10	/test_drivers/MET/MET_TestData/MCFfile_3
55264	62	/test_drivers/MET/MET_TestData/MCFfile_6
25184	57	/test_drivers/MET/MET_TestData/MCFfile_8
17937	5	/test_drivers/MET/MET_TestData/MCFmorahan4
15351	1	/test_drivers/MET/MET_TestData/MOP_THRESH
40384	68	/test_drivers/MET/MET_TestData/asciitestfile
26842	15	/test_drivers/MET/MET_TestData/data_dict
7969	1	/test_drivers/PC/PGS_PC_GenUniqueID_Driver.in
18399	29	/test_drivers/PC/PGS_PC_GenUniqueID_Driver_c.c
48707	4	/test_drivers/PC/PGS_PC_GenUniqueID_Driver_c.out_sample
17652	34	/test_drivers/PC/PGS_PC_GenUniqueID_Driver_f.f
16767	10	/test_drivers/PC/PGS_PC_GenUniqueID_Driver_f.out_sample
30253	11	/test_drivers/PC/PGS_PC_GetConfigDataCom_Driver.csh
18139	4	/test_drivers/PC/PGS_PC_GetConfigDataCom_Driver.csh.out_sample
39291	1	/test_drivers/PC/PGS_PC_GetConfigDataCom_Driver.in
9113	10	/test_drivers/PC/PGS_PC_GetConfigDataCom_Driver.sh
18039	4	/test_drivers/PC/PGS_PC_GetConfigDataCom_Driver.sh.out_sample
19648	1	/test_drivers/PC/PGS_PC_GetConfigData_Driver.in
41296	30	/test_drivers/PC/PGS_PC_GetConfigData_Driver_c.c
21847	4	/test_drivers/PC/PGS_PC_GetConfigData_Driver_c.out_sample
46162	35	/test_drivers/PC/PGS_PC_GetConfigData_Driver_f.f
53503	10	/test_drivers/PC/PGS_PC_GetConfigData_Driver_f.out_sample
42332	13	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.csh
56703	3	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.csh.in
22135	10	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.csh.out_sample
12061	12	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.sh
65266	4	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.sh.in
13299	14	/test_drivers/PC/PGS_PC_GetFileAttrCom_Driver.sh.out_sample

27134	3	/test_drivers/PC/PGS_PC_GetFileAttr_Driver.in
50806	34	/test_drivers/PC/PGS_PC_GetFileAttr_Driver_c.c
1168	12	/test_drivers/PC/PGS_PC_GetFileAttr_Driver_c.out_sample
10819	40	/test_drivers/PC/PGS_PC_GetFileAttr_Driver_f.f
54096	27	/test_drivers/PC/PGS_PC_GetFileAttr_Driver_f.out_sample
9726	1	/test_drivers/PC/PGS_PC_GetFileByAttr_Driver.in
5143	31	/test_drivers/PC/PGS_PC_GetFileByAttr_Driver_c.c
39642	2	/test_drivers/PC/PGS_PC_GetFileByAttr_Driver_c.out_sample
22018	36	/test_drivers/PC/PGS_PC_GetFileByAttr_Driver_f.f
39390	2	/test_drivers/PC/PGS_PC_GetFileByAttr_Driver_f.out_sample
16643	1	/test_drivers/PC/PGS_PC_GetFileSize_Driver.in
46661	30	/test_drivers/PC/PGS_PC_GetFileSize_Driver_c.c
5315	4	/test_drivers/PC/PGS_PC_GetFileSize_Driver_c.out_sample
41520	35	/test_drivers/PC/PGS_PC_GetFileSize_Driver_f.f
4193	8	/test_drivers/PC/PGS_PC_GetFileSize_Driver_f.out_sample
32100	11	/test_drivers/PC/PGS_PC_GetNumberOfFilesCom_Driver.csh
36179	3	/test_drivers/PC/PGS_PC_GetNumberOfFilesCom_Driver.csh.out_sample
21319	1	/test_drivers/PC/PGS_PC_GetNumberOfFilesCom_Driver.in
12021	10	/test_drivers/PC/PGS_PC_GetNumberOfFilesCom_Driver.sh
38733	3	/test_drivers/PC/PGS_PC_GetNumberOfFilesCom_Driver.sh.out_sample
19399	1	/test_drivers/PC/PGS_PC_GetNumberOfFiles_Driver.in
19394	29	/test_drivers/PC/PGS_PC_GetNumberOfFiles_Driver_c.c
44690	3	/test_drivers/PC/PGS_PC_GetNumberOfFiles_Driver_c.out_sample
39292	35	/test_drivers/PC/PGS_PC_GetNumberOfFiles_Driver_f.f
28188	6	/test_drivers/PC/PGS_PC_GetNumberOfFiles_Driver_f.out_sample
61253	12	/test_drivers/PC/PGS_PC_GetReferenceCom_Driver.csh
42181	3	/test_drivers/PC/PGS_PC_GetReferenceCom_Driver.csh.out_sample
20770	1	/test_drivers/PC/PGS_PC_GetReferenceCom_Driver.in
39266	11	/test_drivers/PC/PGS_PC_GetReferenceCom_Driver.sh
42089	3	/test_drivers/PC/PGS_PC_GetReferenceCom_Driver.sh.out_sample
23979	3	/test_drivers/PC/PGS_PC_GetReferenceType_Driver.in
6182	33	/test_drivers/PC/PGS_PC_GetReferenceType_Driver_c.c
10254	16	/test_drivers/PC/PGS_PC_GetReferenceType_Driver_c.out_sample
64089	38	/test_drivers/PC/PGS_PC_GetReferenceType_Driver_f.f
28630	35	/test_drivers/PC/PGS_PC_GetReferenceType_Driver_f.out_sample
16759	1	/test_drivers/PC/PGS_PC_GetReference_Driver.in
60416	30	/test_drivers/PC/PGS_PC_GetReference_Driver_c.c
25700	5	/test_drivers/PC/PGS_PC_GetReference_Driver_c.out_sample
59514	35	/test_drivers/PC/PGS_PC_GetReference_Driver_f.f
55832	10	/test_drivers/PC/PGS_PC_GetReference_Driver_f.out_sample
51602	11	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.csh
45002	2	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.csh.in
44131	5	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.csh.out_sample
29498	11	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.sh
44990	2	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.sh.in
43968	5	/test_drivers/PC/PGS_PC_GetTempReferenceCom_Driver.sh.out_sample

37490	1	/test_drivers/PC/PGS_PC_GetUniversalRef_Driver.in
41204	29	/test_drivers/PC/PGS_PC_GetUniversalRef_Driver_c.c
39705	6	/test_drivers/PC/PGS_PC_GetUniversalRef_Driver_c.out_sample
50141	35	/test_drivers/PC/PGS_PC_GetUniversalRef_Driver_f.f
9764	16	/test_drivers/PC/PGS_PC_GetUniversalRef_Driver_f.out_sample
17007	19	/test_drivers/PC/PGS_PC_Shell_Driver.csh
19744	26	/test_drivers/PC/PGS_PC_Shell_Driver.csh.out_sample
59593	10	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.csh
20910	1	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.csh.in
11519	2	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.csh.out_sample
39002	9	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.sh
20906	1	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.sh.in
11416	2	/test_drivers/PC/PGS_PC_TempDeleteCom_Driver.sh.out_sample
11072	14	/test_drivers/PC/README.PC
32243	3	/test_drivers/PC/makefile
35461	3	/test_drivers/PC/makefile.f90
3076	1	/test_drivers/PC/modis.attr1999_017
3045	1	/test_drivers/PC/modis.attr1999_018
3036	1	/test_drivers/PC/modis.attr1999_019
3844	1	/test_drivers/PC/modis.attr1999_020
32179	4	/test_drivers/PC/modis.attr1999_021
3390	1	/test_drivers/PC/modis.v1999_017
2620	1	/test_drivers/PC/modis.v1999_018
2621	1	/test_drivers/PC/modis.v1999_019
2622	1	/test_drivers/PC/modis.v1999_020
2622	1	/test_drivers/PC/modis.v1999_021
4973	1	/test_drivers/PC/pctcheck.out_sample
20259	1	/test_drivers/SMF/.netrc
50241	6	/test_drivers/SMF/AVHRR_99.t
52811	2	/test_drivers/SMF/PGS_99_sample
37655	1	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver1.in
10416	2	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver1_c.out_sample
56347	5	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver1_f.out_sample
40044	1	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver2.in
12749	2	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver2_c.out_sample
60976	6	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver2_f.out_sample
50161	28	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver_c.c
50549	33	/test_drivers/SMF/PGS_SMF_CreateMsgTag_Driver_f.f
9415	1	/test_drivers/SMF/PGS_SMF_EventLogger_Driver.csh
25615	1	/test_drivers/SMF/PGS_SMF_EventLogger_Driver.in
9948	30	/test_drivers/SMF/PGS_SMF_EventLogger_Driver_c.c
22198	5	/test_drivers/SMF/PGS_SMF_EventLogger_Driver_c.out_sample
44343	2	/test_drivers/SMF/PGS_SMF_GenerateStatusReport_Driver.in
42880	28	/test_drivers/SMF/PGS_SMF_GenerateStatusReport_Driver_c.c
4109	4	/test_drivers/SMF/PGS_SMF_GenerateStatusReport_Driver_c.out_sample
1025	33	/test_drivers/SMF/PGS_SMF_GenerateStatusReport_Driver_f.f
30547	10	/test_drivers/SMF/PGS_SMF_GenerateStatusReport_Driver_f.out_sample
32686	1	/test_drivers/SMF/PGS_SMF_GetActionByCode_Driver.in

6045	29	/test_drivers/SMF/PGS_SMF_GetActionByCode_Driver_c.c
39704	5	/test_drivers/SMF/PGS_SMF_GetActionByCode_Driver_c.out_sample
28144	34	/test_drivers/SMF/PGS_SMF_GetActionByCode_Driver_f.f
20706	11	/test_drivers/SMF/PGS_SMF_GetActionByCode_Driver_f.out_sample
36480	2	/test_drivers/SMF/PGS_SMF_GetInstrName_Driver.in
48829	28	/test_drivers/SMF/PGS_SMF_GetInstrName_Driver_c.c
52376	7	/test_drivers/SMF/PGS_SMF_GetInstrName_Driver_c.out_sample
4332	33	/test_drivers/SMF/PGS_SMF_GetInstrName_Driver_f.f
61687	18	/test_drivers/SMF/PGS_SMF_GetInstrName_Driver_f.out_sample
36376	2	/test_drivers/SMF/PGS_SMF_GetMsgByCode_Driver.in
60628	28	/test_drivers/SMF/PGS_SMF_GetMsgByCode_Driver_c.c
19328	8	/test_drivers/SMF/PGS_SMF_GetMsgByCode_Driver_c.out_sample
65262	33	/test_drivers/SMF/PGS_SMF_GetMsgByCode_Driver_f.f
59356	20	/test_drivers/SMF/PGS_SMF_GetMsgByCode_Driver_f.out_sample
59466	2	/test_drivers/SMF/PGS_SMF_GetMsg_Driver.in
43966	37	/test_drivers/SMF/PGS_SMF_GetMsg_Driver_c.c
8058	6	/test_drivers/SMF/PGS_SMF_GetMsg_Driver_c.out_sample
12460	48	/test_drivers/SMF/PGS_SMF_GetMsg_Driver_f.f
13781	13	/test_drivers/SMF/PGS_SMF_GetMsg_Driver_f.out_sample
22292	18	/test_drivers/SMF/PGS_SMF_LogStatus_Driver.csh
55930	16	/test_drivers/SMF/PGS_SMF_LogStatus_Driver10_c.out_sample
44130	25	/test_drivers/SMF/PGS_SMF_LogStatus_Driver11_c.out_sample
20270	40	/test_drivers/SMF/PGS_SMF_LogStatus_Driver12_c.out_sample
64977	42	/test_drivers/SMF/PGS_SMF_LogStatus_Driver13_c.out_sample
13405	39	/test_drivers/SMF/PGS_SMF_LogStatus_Driver14_c.out_sample
29662	11	/test_drivers/SMF/PGS_SMF_LogStatus_Driver15_c.out_sample
34639	1	/test_drivers/SMF/PGS_SMF_LogStatus_Driver16_c.out_sample
22796	9	/test_drivers/SMF/PGS_SMF_LogStatus_Driver17_c.out_sample
64471	24	/test_drivers/SMF/PGS_SMF_LogStatus_Driver18_c.out_sample
27426	1	/test_drivers/SMF/PGS_SMF_LogStatus_Driver19_c.out_sample
56647	54	/test_drivers/SMF/PGS_SMF_LogStatus_Driver1_c.out_sample
26176	1	/test_drivers/SMF/PGS_SMF_LogStatus_Driver2_c.out_sample
63877	59	/test_drivers/SMF/PGS_SMF_LogStatus_Driver3_c.out_sample
48070	62	/test_drivers/SMF/PGS_SMF_LogStatus_Driver4_c.out_sample
7749	27	/test_drivers/SMF/PGS_SMF_LogStatus_Driver5_c.out_sample
65283	37	/test_drivers/SMF/PGS_SMF_LogStatus_Driver6_c.out_sample
52614	33	/test_drivers/SMF/PGS_SMF_LogStatus_Driver7_c.out_sample
43272	12	/test_drivers/SMF/PGS_SMF_LogStatus_Driver8_c.out_sample
35271	22	/test_drivers/SMF/PGS_SMF_LogStatus_Driver9_c.out_sample
16155	9	/test_drivers/SMF/PGS_SMF_LogStatus_Driver_c.c
12763	11	/test_drivers/SMF/PGS_SMF_LogStatus_Driver_f.f
22043	1	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver1.in
6125	2	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver1_c.out_sample
40967	5	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver1_f.out_sample
32179	1	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver2.in
63388	2	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver2_c.out_sample
27574	4	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver2_f.out_sample
54337	30	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver_c.c
10235	1	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver_c.csh
10238	1	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver_f.csh
37711	37	/test_drivers/SMF/PGS_SMF_SendRuntimeData_Driver_f.f
507	2	/test_drivers/SMF/PGS_SMF_TestErrorLevel_Driver.in

5492	27	/test_drivers/SMF/PGS_SMF_TestErrorLevel_Driver_c.c
48920	13	/test_drivers/SMF/PGS_SMF_TestErrorLevel_Driver_c.out_sample
15925	34	/test_drivers/SMF/PGS_SMF_TestErrorLevel_Driver_f.f
16883	31	/test_drivers/SMF/PGS_SMF_TestErrorLevel_Driver_f.out_sample
45308	2	/test_drivers/SMF/PGS_SMF_TestFatalLevel_Driver.in
62643	27	/test_drivers/SMF/PGS_SMF_TestFatalLevel_Driver_c.c
12063	7	/test_drivers/SMF/PGS_SMF_TestFatalLevel_Driver_c.out_sample
15659	34	/test_drivers/SMF/PGS_SMF_TestFatalLevel_Driver_f.f
27827	16	/test_drivers/SMF/PGS_SMF_TestFatalLevel_Driver_f.out_sample
46196	2	/test_drivers/SMF/PGS_SMF_TestMessageLevel_Driver.in
2906	27	/test_drivers/SMF/PGS_SMF_TestMessageLevel_Driver_c.c
12160	7	/test_drivers/SMF/PGS_SMF_TestMessageLevel_Driver_c.out_sample
16591	34	/test_drivers/SMF/PGS_SMF_TestMessageLevel_Driver_f.f
17123	16	/test_drivers/SMF/PGS_SMF_TestMessageLevel_Driver_f.out_sample
45572	2	/test_drivers/SMF/PGS_SMF_TestNoticeLevel_Driver.in
5699	27	/test_drivers/SMF/PGS_SMF_TestNoticeLevel_Driver_c.c
11766	7	/test_drivers/SMF/PGS_SMF_TestNoticeLevel_Driver_c.out_sample
15572	34	/test_drivers/SMF/PGS_SMF_TestNoticeLevel_Driver_f.f
16947	16	/test_drivers/SMF/PGS_SMF_TestNoticeLevel_Driver_f.out_sample
42515	2	/test_drivers/SMF/PGS_SMF_TestStatusLevel_Driver.in
20189	29	/test_drivers/SMF/PGS_SMF_TestStatusLevel_Driver_c.c
45891	5	/test_drivers/SMF/PGS_SMF_TestStatusLevel_Driver_c.out_sample
46605	37	/test_drivers/SMF/PGS_SMF_TestStatusLevel_Driver_f.f
65162	11	/test_drivers/SMF/PGS_SMF_TestStatusLevel_Driver_f.out_sample
45779	2	/test_drivers/SMF/PGS_SMF_TestSuccessLevel_Driver.in
2019	27	/test_drivers/SMF/PGS_SMF_TestSuccessLevel_Driver_c.c
11720	7	/test_drivers/SMF/PGS_SMF_TestSuccessLevel_Driver_c.out_sample
7509	34	/test_drivers/SMF/PGS_SMF_TestSuccessLevel_Driver_f.f
16962	16	/test_drivers/SMF/PGS_SMF_TestSuccessLevel_Driver_f.out_sample
45972	2	/test_drivers/SMF/PGS_SMF_TestUserInfoLevel_Driver.in
2842	27	/test_drivers/SMF/PGS_SMF_TestUserInfoLevel_Driver_c.c
12391	7	/test_drivers/SMF/PGS_SMF_TestUserInfoLevel_Driver_c.out_sample
7079	34	/test_drivers/SMF/PGS_SMF_TestUserInfoLevel_Driver_f.f
17219	16	/test_drivers/SMF/PGS_SMF_TestUserInfoLevel_Driver_f.out_sample
253	2	/test_drivers/SMF/PGS_SMF_TestWarningLevel_Driver.in
3807	27	/test_drivers/SMF/PGS_SMF_TestWarningLevel_Driver_c.c
49463	13	/test_drivers/SMF/PGS_SMF_TestWarningLevel_Driver_c.out_sample
5829	34	/test_drivers/SMF/PGS_SMF_TestWarningLevel_Driver_f.f
57316	30	/test_drivers/SMF/PGS_SMF_TestWarningLevel_Driver_f.out_sample
18900	17	/test_drivers/SMF/README.SMF
33978	3	/test_drivers/SMF/makefile
37744	4	/test_drivers/SMF/makefile.f90
19008	1	/test_drivers/TD/PGS_TD_ASCIItime_AtoB_Driver.in
23452	29	/test_drivers/TD/PGS_TD_ASCIItime_AtoB_Driver_c.c
2456	6	/test_drivers/TD/PGS_TD_ASCIItime_AtoB_Driver_c.out_sample
22454	33	/test_drivers/TD/PGS_TD_ASCIItime_AtoB_Driver_f.f
36053	12	/test_drivers/TD/PGS_TD_ASCIItime_AtoB_Driver_f.out_sample
15260	1	/test_drivers/TD/PGS_TD_ASCIItime_BtoA_Driver.in
23422	29	/test_drivers/TD/PGS_TD_ASCIItime_BtoA_Driver_c.c
28695	5	/test_drivers/TD/PGS_TD_ASCIItime_BtoA_Driver_c.out_sample
5282	36	/test_drivers/TD/PGS_TD_ASCIItime_BtoA_Driver_f.f
42749	10	/test_drivers/TD/PGS_TD_ASCIItime_BtoA_Driver_f.out_sample

9778	1	/test_drivers/TD/PGS_TD_GPStoUTC_Driver.in
10175	29	/test_drivers/TD/PGS_TD_GPStoUTC_Driver_c.c
51938	5	/test_drivers/TD/PGS_TD_GPStoUTC_Driver_c.out_sample
10480	36	/test_drivers/TD/PGS_TD_GPStoUTC_Driver_f.f
9238	10	/test_drivers/TD/PGS_TD_GPStoUTC_Driver_f.out_sample
35496	2	/test_drivers/TD/PGS_TD_LeapSec_Driver.in
32581	31	/test_drivers/TD/PGS_TD_LeapSec_Driver_c.c
42302	7	/test_drivers/TD/PGS_TD_LeapSec_Driver_c.out_sample
56522	35	/test_drivers/TD/PGS_TD_LeapSec_Driver_f.f
50637	11	/test_drivers/TD/PGS_TD_LeapSec_Driver_f.out_sample
17941	3	/test_drivers/TD/PGS_TD_SCtime_to_UTC_Driver.in
32551	49	/test_drivers/TD/PGS_TD_SCtime_to_UTC_Driver_c.c
10518	30	/test_drivers/TD/PGS_TD_SCtime_to_UTC_Driver_c.out_sample
3083	67	/test_drivers/TD/PGS_TD_SCtime_to_UTC_Driver_f.f
57102	52	/test_drivers/TD/PGS_TD_SCtime_to_UTC_Driver_f.out_sample
24138	1	/test_drivers/TD/PGS_TD_TAIjdtoTAI_Driver.in
32556	26	/test_drivers/TD/PGS_TD_TAIjdtoTAI_Driver_c.c
13203	7	/test_drivers/TD/PGS_TD_TAIjdtoTAI_Driver_c.out_sample
7159	27	/test_drivers/TD/PGS_TD_TAIjdtoTAI_Driver_f.f
52192	9	/test_drivers/TD/PGS_TD_TAIjdtoTAI_Driver_f.out_sample
46596	2	/test_drivers/TD/PGS_TD_TAItoGAST_Driver.in
2312	29	/test_drivers/TD/PGS_TD_TAItoGAST_Driver_c.c
52950	9	/test_drivers/TD/PGS_TD_TAItoGAST_Driver_c.out_sample
49355	33	/test_drivers/TD/PGS_TD_TAItoGAST_Driver_f.f
26672	18	/test_drivers/TD/PGS_TD_TAItoGAST_Driver_f.out_sample
14483	1	/test_drivers/TD/PGS_TD_TAItoTAIjd_Driver.in
28881	26	/test_drivers/TD/PGS_TD_TAItoTAIjd_Driver_c.c
13191	7	/test_drivers/TD/PGS_TD_TAItoTAIjd_Driver_c.out_sample
54902	27	/test_drivers/TD/PGS_TD_TAItoTAIjd_Driver_f.f
54752	10	/test_drivers/TD/PGS_TD_TAItoTAIjd_Driver_f.out_sample
14033	1	/test_drivers/TD/PGS_TD_TAItoUTC_Driver.in
7806	29	/test_drivers/TD/PGS_TD_TAItoUTC_Driver_c.c
8203	8	/test_drivers/TD/PGS_TD_TAItoUTC_Driver_c.out_sample
9049	36	/test_drivers/TD/PGS_TD_TAItoUTC_Driver_f.f
4949	19	/test_drivers/TD/PGS_TD_TAItoUTC_Driver_f.out_sample
5056	1	/test_drivers/TD/PGS_TD_TimeInterval_Driver.in
49590	30	/test_drivers/TD/PGS_TD_TimeInterval_Driver_c.c
22567	3	/test_drivers/TD/PGS_TD_TimeInterval_Driver_c.out_sample
43264	37	/test_drivers/TD/PGS_TD_TimeInterval_Driver_f.f
1965	6	/test_drivers/TD/PGS_TD_TimeInterval_Driver_f.out_sample
10501	3	/test_drivers/TD/PGS_TD_UTC_to_SCtime_Driver.in
43208	44	/test_drivers/TD/PGS_TD_UTC_to_SCtime_Driver_c.c
47227	23	/test_drivers/TD/PGS_TD_UTC_to_SCtime_Driver_c.out_sample
46740	65	/test_drivers/TD/PGS_TD_UTC_to_SCtime_Driver_f.f
32027	48	/test_drivers/TD/PGS_TD_UTC_to_SCtime_Driver_f.out_sample
37007	2	/test_drivers/TD/PGS_TD_UTCjdtoUTC_Driver.in
14338	32	/test_drivers/TD/PGS_TD_UTCjdtoUTC_Driver_c.c
35265	7	/test_drivers/TD/PGS_TD_UTCjdtoUTC_Driver_c.out_sample
55525	41	/test_drivers/TD/PGS_TD_UTCjdtoUTC_Driver_f.f
57280	9	/test_drivers/TD/PGS_TD_UTCjdtoUTC_Driver_f.out_sample
13508	1	/test_drivers/TD/PGS_TD_UTCtoGPS_Driver.in
22711	29	/test_drivers/TD/PGS_TD_UTCtoGPS_Driver_c.c

49031	5	/test_drivers/TD/PGS_TD_UTCtoGPS_Driver_c.out_sample
23904	37	/test_drivers/TD/PGS_TD_UTCtoGPS_Driver_f.f
7420	10	/test_drivers/TD/PGS_TD_UTCtoGPS_Driver_f.out_sample
18136	1	/test_drivers/TD/PGS_TD_UTCtoTAI_Driver.in
20556	29	/test_drivers/TD/PGS_TD_UTCtoTAI_Driver_c.c
37364	5	/test_drivers/TD/PGS_TD_UTCtoTAI_Driver_c.out_sample
19124	36	/test_drivers/TD/PGS_TD_UTCtoTAI_Driver_f.f
26967	12	/test_drivers/TD/PGS_TD_UTCtoTAI_Driver_f.out_sample
16810	1	/test_drivers/TD/PGS_TD_UTCtoTDBjed_Driver.in
43280	30	/test_drivers/TD/PGS_TD_UTCtoTDBjed_Driver_c.c
19434	6	/test_drivers/TD/PGS_TD_UTCtoTDBjed_Driver_c.out_sample
40041	37	/test_drivers/TD/PGS_TD_UTCtoTDBjed_Driver_f.f
7447	13	/test_drivers/TD/PGS_TD_UTCtoTDBjed_Driver_f.out_sample
16828	1	/test_drivers/TD/PGS_TD_UTCtoTDTjed_Driver.in
42251	30	/test_drivers/TD/PGS_TD_UTCtoTDTjed_Driver_c.c
19623	6	/test_drivers/TD/PGS_TD_UTCtoTDTjed_Driver_c.out_sample
40377	37	/test_drivers/TD/PGS_TD_UTCtoTDTjed_Driver_f.f
7459	13	/test_drivers/TD/PGS_TD_UTCtoTDTjed_Driver_f.out_sample
16157	1	/test_drivers/TD/PGS_TD_UTCtoUT1_Driver.in
20065	29	/test_drivers/TD/PGS_TD_UTCtoUT1_Driver_c.c
57128	6	/test_drivers/TD/PGS_TD_UTCtoUT1_Driver_c.out_sample
23730	37	/test_drivers/TD/PGS_TD_UTCtoUT1_Driver_f.f
55965	13	/test_drivers/TD/PGS_TD_UTCtoUT1_Driver_f.out_sample
1378	2	/test_drivers/TD/PGS_TD_UTCtoUT1jd_Driver.in
27316	29	/test_drivers/TD/PGS_TD_UTCtoUT1jd_Driver_c.c
58536	9	/test_drivers/TD/PGS_TD_UTCtoUT1jd_Driver_c.out_sample
21842	34	/test_drivers/TD/PGS_TD_UTCtoUT1jd_Driver_f.f
6668	17	/test_drivers/TD/PGS_TD_UTCtoUT1jd_Driver_f.out_sample
58294	2	/test_drivers/TD/PGS_TD_UTCtoUTCjd_Driver.in
22875	31	/test_drivers/TD/PGS_TD_UTCtoUTCjd_Driver_c.c
11601	9	/test_drivers/TD/PGS_TD_UTCtoUTCjd_Driver_c.out_sample
43315	35	/test_drivers/TD/PGS_TD_UTCtoUTCjd_Driver_f.f
49155	15	/test_drivers/TD/PGS_TD_UTCtoUTCjd_Driver_f.out_sample
31435	15	/test_drivers/TD/README.TD
46410	4	/test_drivers/TD/makefile
50794	4	/test_drivers/TD/makefile.f90

4.3 Documentation

The documents provided with this release are:

Document Number:	170-TP-100-002
Title:	HDF-EOS Library Users Guide for the ECS Project-Volume 1: Overview and Examples
Delivery Source:	Hardcopy, WEB

Document Number:	170-TP-101-002
Title:	HDF-EOS Library Users Guide for the ECS Project-Volume 2: Function Reference Guide
Delivery Source:	Hardcopy, WEB

4.4 Archive Tape

The following magnetic tape is used to archive the delivered baseline configuration of the developed software.

904-PR-052-002

Tape label: SCF HDF-EOS2.4v1.00
Distribution Date: January 8, 1999
>>> 3.0gbyte format (low density) <<<
Filenames: HDF-EOS2.4v1.00.README
HDF-EOS2.4v1.00.tar.Z
HDF-EOS2.4v1.00_TestDrivers.tar.Z
HDF-EOS2.4v1.00_TestDrivers.README

This page intentionally left blank.

5. Non-Conformance Status

5.1 Known Problems with HDF-EOS 2.4

This section contains the list of problems closed (section 5.2) and known problems (section 5.3) as of 12/30/98 in the HDF-EOS 2.4 delivery. These problems were found and recorded during unit and integration and captured in the formal problem tracking system, Distributed Defect Tracking System (DDTS). The DDTS system generated the attached list of “closed” NCRs. HITC management has reviewed this list and HDF-EOS is considered to be acceptable for delivery at this time. The list includes the NCR ID, Title, Description, and Status. DDTS Problem Severity Definitions, on a 1-5 scale, are defined as follows:

1 Catastrophic and severely broken and no workaround.
Example: can't use major product function.

2 A severe defect that must be fixed but there is a workaround.
Example: user data must be modified to work.

3 A defect that must be fixed, but the system can be deployed with it.
Example: A rarely used Tool won't work on a rarely used platform.

4 A defect that causes small impact. Easy to recover or workaround.
Example: error messages aren't very clear.

5 Trivial defect or enhancement request.
Example: bad layout or misuse of grammar in manual.

The status of the NCRs corrected for this release is included in section 5.2. This NCR report reflects the information obtained from DDTS on December 30, 1998. To obtain a detailed description of the NCRs, the DDTS system can be accessed from the following WEB page:

http://newsroom.hitc.com/sit/ddts/ddts.html

5.2 HDF-EOS 2.4 Non-Conformance Reports (Close Status)

The following HDF-EOS problems, listed in numerical order by severity, were closed with the HDF-EOS 2.4 Release:

NCR ID: **ECSed18938**

Title: L7 acquire fails in subsetting

Severity: 1

Description: L7 acquires on the 5A baseline are failing in subsetting.

Resolution: Adding a section of codes in SWextractregion, such as was done for the data filed values, may fix the problem. But the changes, together with those previously made for the similar purpose for data field values, may cause problem when applied to general data with index mapping but without the particular format of overlapping as in Landsat-7 data. Therefore, the resolution is adding a new SWapi function called SWupdatescene. Its function is to update the metadata values of the StartRegion and StpRegion by taking into consideration of the Landsat-7 type overlap. This function should be called following the SWdefboxregion call. As a result, those changes previously made to take care of the overlap are no longer necessary and were deleted.

NCR ID: **ECSed15563**

Title: The function GDgetpixvalues fails for float32 type field data values.

Severity: 2

Description: The function GDgetpixvalues fails when the field data are float32.

Resolution: In the file /ecs/hdfeos/src/GDapi.c the function GDgetpixvalues were modified the lines:

```
/* first set offset, incr, count */
            for (ii = 0; ii < rankSDS; ii++)
            {
                offset[ii] = start[ii];
                incr[ii] = 1;
                count[ii] = edge[ii];
            }
            offset[0] += mrgOffset;
```

were replaced by:

```
            /* Set I/O offset and count Section */
            /* --------------------- */
            /*
             * start and edge != NULL, set I/O offset and count to
             * user values, adjusting the
             * 0th field with the merged field offset (if any)
             */
            if (rankFld == rankSDS)
            {
               for (j = 0; j < rankSDS; j++)
               {
```

```
            offset[j] = start[j];
            count[j] = edge[j];
    }
     offset[0] += mrgOffset;
}
else
{
    /*
     * If field really 2-dim merged in 3-dim field then set
     * 0th field offset to merge offset and then next two to
     * the user values
    */
    for (j = 0; j < rankFld; j++)
    {
            offset[j + 1] = start[j];
            count[j + 1] = edge[j];
    }
     offset[0] = mrgOffset;
     count[0] = 1;
}
/* Set I/O stride Section */
/* ---------------------- */
/* In original code stride entered as NULL.
   Abe Taaheri June 12, 1998 */
/*
 * If stride == NULL (default) set I/O stride to 1
 */
for (j = 0; j < rankSDS; j++)
{
```

```
incr[j] = 1;
}
```

NCR ID: ECSed16018

Title: The function SWregioninfo core dumps for large subset regions

Severity: 2

Description: When the subset region is large the function SWregioninfo may result in core dump because of SWXRegion[k]->nRegions exceeding 32

Resolution: In the file /ecs/hdfeos/src/SWapi.c added:

```
#define MAXNREGIONS 32
```

and changed:

```
int32 StartRegion[32];
int32 StopRegion[32];
```

to:

```
int32 StartRegion[MAXNREGIONS];
int32 StopRegion[MAXNREGIONS];
```

for more flexibility in changing 32 to a larger number.

To fix the problem described earlier the function SWdefboxregion modified and following lines:

```
/* if SWXRegion[k]->nRegions greater
 * than MAXNREGIONS free allocated memory
 * and return FAIL */
if ((SWXRegion[k]->nRegions) > MAXNREGIONS)
{
HEpush(DFE_GENAPP, "SWdefboxregion", __FILE__, __LINE__);
HEreport("SWXRegion[%d]->nRegions exceeds MAXNREGIONS= %d.\n", k, MAXNREGIONS);
free(lonArr);
free(latArr);
free(flag);
return(-1);
```

}

added after line: j = ++SWXRegion[k]->nRegions;

NCR ID: ECSed17970

Title: Resolve memory leaks in HDF EOS library - Grid interface

Severity: 2

Description: HDF EOF library code needs to be purified to remove memory leaks in the Grid interface code.

Resolution: Note: This NCR was cloned to separate NCRs for Swath, Grid, Point, Eh.

After applying purify to all testdrivers for grid, point, and swath, it was found that there is no memory leaks associated with swath and point testdrivers. There were only memory leaks in grid testdriver, that was due to improper use of GDattach and GDopen (there should be a GDdetach for every use of GDcreate or GDattach, and a GDclose for every use of GDopen). These memory leaks were fixed by adding a few GDdetach and GDclose in grid testdriver (NCR 18747). So HDFEOS itself does not result in memory leaks. User must be careful in proper usage of GDopen, GDclose, GDcreate, GDattach, and GDdetach to avoid memory leaks.

Only problem found in GDapi.c is in function GDdupregion, where contents of a structure is copied to another structure. Inside the structure there is a pointer (DimNamePtr) where during the copying the address is copied, rather than the contents. This causes "FUM", Freeing Unallocated Memory" problem, when GDdetach is used (once the memory is freed for DimNamePtr, it cannot be freed anymore for the copied structure.

The problem can be resolved by modifying GDdupregion function by adding:

```
intn      j;                  /* Loop index */

int32     slendupregion;
```

to the declarations and changing:

```
*GDXRegion[i] = *GDXRegion[oldregionID];
```

to

```
GDXRegion[i]->fid = GDXRegion[oldregionID]->fid;

GDXRegion[i]->gridID = GDXRegion[oldregionID]->gridID;

GDXRegion[i]->xStart = GDXRegion[oldregionID]->xStart;

GDXRegion[i]->xCount = GDXRegion[oldregionID]->xCount;

GDXRegion[i]->yStart = GDXRegion[oldregionID]->yStart;

GDXRegion[i]->yCount = GDXRegion[oldregionID]->yCount;
```

```
GDXRegion[i]->upleftpt[0] = GDXRegion[oldregionID]->upleftpt[0];
GDXRegion[i]->upleftpt[1] = GDXRegion[oldregionID]->upleftpt[1];
GDXRegion[i]->lowrightpt[0] = GDXRegion[oldregionID]->lowrightpt[0];
GDXRegion[i]->lowrightpt[1] = GDXRegion[oldregionID]->lowrightpt[1];
for (j = 0; j < 8; j++)
  {
        GDXRegion[i]->StartVertical[j]      =      GDXRegion[oldregionID]-
>StartVertical[j];
        GDXRegion[i]->StopVertical[j]       =      GDXRegion[oldregionID]-
>StopVertical[j];
  }
  for (j=0; j<8; j++)
  {
        if(GDXRegion[oldregionID]->DimNamePtr[j] != NULL)
        {
          slendupregion = strlen(GDXRegion[oldregionID]->DimNamePtr[j]);
          GDXRegion[i]->DimNamePtr[j] = (char *) malloc(slendupregion + 1);
                 strcpy(GDXRegion[i]->DimNamePtr[j],GDXRegion[oldregionID]-
>DimNamePtr[j]);
       }
}
```

NCR ID: **ECSed18747**

Title: testgrid.c need a few GDdetach, GDclose to resolve memory leaks

Severity: 2

Description: The testgrid.c results in memory leaks because of multiple use of GDattach, before using GDdetach to remove allocated memories. Also for every GDopen we must use GDclose to avoid memory leaks.

Resolution: This is fixed by adding the following lines to the testgrid.c

```
status= GDclose(gdfid3); /*Abe Taaheri added to avoid memory leaks */
status= GDdetach(GDid_geo);  /*Abe Taaheri added to avoid memory leaks */
status = GDdetach(GDid_utm); /* Abe Taaheri added to avoid memory leaks */
```

```
status = GDdetach(GDid3); /* Abe Taaheri added to avoid memory leaks */
```

NCR ID: ECSed18960

Title: Resolve memory leaks in HDF EOS library - Swath interface

Severity: 2

Description: HDF EOF library code needs to be purified to remove memory leaks in the Swath interface code.

Resolution: See Resolution for ECSed17970, above.

NCR ID: ECSed18961

Title: Resolve memory leaks in HDF EOS library - Point interface

Severity: 2

Description: HDF EOF library code needs to be purified to remove memory leaks.

Resolution: See Resolution for ECSed17970, above.

NCR ID: ECSed18962

Title: Resolve memory leaks in HDF EOS library - Eh interface

Severity: 2

Description: HDF EOF library code needs to be Purified to remove memory leaks.

Resolution: See Resolution for ECSed17970, above.

NCR ID: ECSed15581

Title: The function GDinterpolate does not return right buffer size

Severity: 3

Description: The function GDinterpolate in the /ecs/hdfeos/src/GDapi.c file returns the size in bytes of the original field data (which can be any type such as int32, float32, float64,...) rather than the size of the interpolated data which is type float64 always(as pointed out in the HDFEOS Users Guide).

Resolution: In function GDinterpolate changed:

```
return (size * nValues);
```

to:

```
/*always return size of float64 buffer */

return (nRetn  * nValues * sizeof(float64));
```

NCR ID: ECSed15665

Title: GDapi.c doesn't subset MISR SOM projection properly

Severity: 3

Description: The Grid interface cannot support subsetting of the MISR SOM Resolution: projection. The information needed is in the file, but the code required to access the information hasn't been put into the interface.

Resolution: This NCR is being rejected due to the fact that it is functionality not required prior to launch.

NCR ID: ECSed15859

Title: new error checking was needed for the HDF function SDstart

Severity: 3

Description: It was found that this new api was needed for HDF-EOS.

Resolution: The lines of code were added to EHopen function in EHapi.c in /ecs/hdfeos/src directory as shown below: (lines 251-253 & 282-292

```
    /* If SDstart successful ... */
    /* ------------------------ */
    if (sdInterfaceID != -1)
  {
     } else
  {
       /* If error in SDstart then report */
      /* ------------------------------- */
     fid = -1;
     status = -1;
        HEpush(DFE_FNF, "EHopen", __FILE__, __LINE__);
        sprintf(errbuf, "%s%s%s", "\"", filename,
           "\" cannot be opened for read/write access.");
       HEreport("%s\n", errbuf);
  }
```

lines 334-337 & 342-252

```
      /* If SDstart successful ... */
```

```
/* ------------------------- */
if (sdInterfaceID != -1)
{
    /* Set open access to read-only */
    /* ---------------------------- */
    acs = 0;
} else
{
    /* If error in SDstart then report */
    /* ------------------------------- */
    fid = -1;
    status = -1;
    HEpush(DFE_FNF, "EHopen", __FILE__, __LINE__);
    sprintf(errbuf, "%s%s%s", "\"", filename,
    "\" cannot be opened for read access.");
    HEreport("%s\n", errbuf);
}
```

NCR ID: ECSed15866

Title: New function was added to GDapi.c

Severity: 3

Description: A function was needed that sets the tiling/compression parameters for the specified field. This can be called after GDsetfillvalue and assumes that the field was defined with no compression/tiling set by GDdeftile or GDdefcomp.

Resolution: This new function added to /ecs/hdfeos/src/GDapi.c so that with the following calls the fill values will be set correctly:

GDdeffield

GDsetfillvalue

GDsettilecomp

NCR ID: ECSed15951

Title: All HDFEOS files need check for memory allocation.

Severity: 3

Description: In the HDFEOS functions GDapi.c, SWapi.c, EHapi.c, and PTapi.c There are numerous places where it has not been checked for successful memory allocation. This may result in core dump when enough memory is not available.

Resolution: In files

/ecs/hdfeos/src/EHapi.c

/ecs/hdfeos/src/GDapi.c

/ecs/hdfeos/src/PTapi.c

/ecs/hdfeos/src/SWapi.c

a few lines added after every allocation of memory to report error if the memory is not available. For example if memory allocated in "GDattach" function as:

```
tags = (int32 *) malloc(sizeof(int32) * 2);
```

the lines added are:

```
if(tags == NULL)
{
        HEpush(DFE_NOSPACE,"GDattach", __FILE__, __LINE__);
        return(-1);
}
```

NCR ID: ECSed16760

Title: Problem with the mixed box and vertical subsettings in SWapi.c

Severity: 3

Description: 1) After box subsetting, the info of the vertical field cannot be retrieved by calling SWregioninfo. While this may be justified because it is not affected by the box subsetting. The problem is, after a vertical subsetting upon the box-subsetted region is performed, the info of the vertical field still cannot be retrieved.

2) After a vertical subsetting upon a previously box-subsetted region is performed, not only the info of the vertical field cannot be retrieved, theSWextractregion on this field also fails.

Resolution: 1) Commented out the line status = -1 in the function SWregioninfo that prohibits the search for vertical dimensions. In this way, the function SWregioninfo will give correct information for the vertical field in the mixed box and vertical subsetting case. The function will also provide correct information of the vertical field in the simple box subsetting even though it is not affected by the subsetting.

2) In the function SWextractregion, a flag vfound is defined and made equal to 1 when a search for a match between the vertical dimension and the subsetted vertical dimensions is successful. Then when a match between this vertical dimension with the geolocation dimensions is not found, the program will perform extraction on the vertical field if vfound is equal to 1 rather than concluding that extraction is failed.

NCR ID: ECSed16815

Title: Require versioning on the HDF-EOS delivery

Severity: 3

Description: SSIT has reported missing library versioning to support the HDF-EOS delivery. Toolkit deliveries contain embedded versioning to support the delivery of their executables and libraries, which are not present with the HDF-EOS libraries on the SGI Platforms.

Resolution: Functions in HDF-EOS already exist to retrieve version information (the current version for 4PLandsat is 2.4).

NCR ID: ECSed10406

Title: SWwritefield returns incorrect value when appending to existing field

Severity: 4

Description: Swwritefield returns incorrect values when appending to an existing field. This reference User log # 971207-01

Resolution: Modify SWapi.c when appending to fields and the append is successful, to return the correct value.

5.3 HDF-EOS 2.4 Non-Conformance Reports (Open Status)

The following NCRs are liens against the HDF-EOS 2.4 delivery:

NCR ID: ECSed19128

Title: Index mapping update

Severity: 2

Description: In Landsat 7 data subsetting, when index mapping list needs to be updated, SWupdateidxmap function will either give garbage values or core dump the HDF-EOS server for index mappings other than GeoTrack/ScanlineTrack.

SWupdateidxmap function should be able to detect which needs to be updated or which does not need to.

NCR ID: ECSed06150

Title: HDF4.1r1 bug on DEC, reading tiled and compressed datasets.

Severity: 3

Description: Problem reading data from a tiled and compressed SDS object (written with HDF4.1r1 on a sun5). This problem ONLY occurs on the DEC.

The function SDreaddata returns an error of FAIL. NCSA has been notified of this problem.

NCR ID: ECSed10922

Title: HDF-EOS library has return values not being tested

Severity: 5

Description: The HDF-EOS library has functions that the return values are not being tested for correct return values. Small errors could be propagating through the library.

Appendix A. Build/Installation Instructions

Build/installation instructions for HDF-EOS are located in Appendix A of the HDF-EOS Users Guide (170-TP-100-002) and in the README file available with the HDF-EOS delivery.

This page intentionally left blank.

Appendix B. User Feedback Procedures

The mechanism for handling user feedback, documentation and software discrepancies, and bug reports follows:

a. Accounts at the ECS Landover facility have been set up for user response:

   pgstlkit@eos.hitc.com or

   hdfeos@eos.hitc.com

b. Users will e–mail problem reports and comments to the above account. A receipt will be returned to the sender. A work-off plan for the discrepancy will be developed and status report issued once a month. Responses will be prioritized based on the severity of the problem and the available resources. Simple bug fixes will be turned around sooner, while requested functional enhancements to the Toolkit will be placed in a recommended requirements database (RRDB) and handled more formally.

c. In order to help expedite responses, we request the following information be supplied with problem reports:

   Name:

   Date:

   EOS Affiliation (DAAC, Instrument, ESDIS, etc.):

   Phone No.:

   Development Environment:

   Computing Platform:

   Operating System:

   Compiler and Compiler Flags:

   Tool Name:

   Problem Description:

   (Please include exact inputs to and outputs from the toolkit call, including error code returned by the function, plus exact error message returned where applicable.)

   Suggested Resolution (include code fixes or workarounds if applicable):

d. In addition to the e-mail response mechanism, a phone answering machine is also provided. The telephone number is 301–925–0781. Calls will be returned as soon as possible. Note, however, that e-mail is the preferred method of responding to users.

This page intentionally left blank.

Appendix C. Test Baseline Configuration

The HDF-EOS library was built and tested in a multi-platform environment using the following platforms, operating systems, and compilers:

Table C–1. HDF-EOS Development Configuration

Platform	O S	Version	C Compiler	FORTRAN
Sun Sparc	Solaris	2.5.1(5.5.1)	Sun C 4.0	Sun FORTRAN 4.0
HP 9000/770	HP–UX	A.10.01	HP C 10.24	HP FORTRAN 10.24
DEC Alpha	Digital Unix	4.0	DEC C 5.2	DEC FORTRAN 5.2
IBM RS–6000	AIX	4.2	IBM C 3.1.4.0	IBM FORTRAN 3.2.5
SGI Power Challenge	IRIX	6.2	SGI C 7.2	SGI FORTRAN 7.2

This page intentionally left blank.

Abbreviations and Acronyms

A.A.	Astronomical Almanac
AA	Ancillary Data Access
AIRS	Atmospheric Infrared Sounder
API	Application Program Interface
APID	Application Process Identifier
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
BNF	Bachus-Nauer Form
CBP	Celestial Body Position
CCR	Configuration Change Request
CCSDS	Consultative Committee on Space Data Systems
CDRL	Contract Deliverable Requirements List
CERES	Clouds and Earth Radiant Energy System
COTS	Commercial off-the-shelf Software
CSMS	Communications and Systems Management Segment (ECS)
CRC	Cyclic Redundancy Code
CSC	Coordinate System Conversion
CUC	Constant and Unit Conversions
DAAC	Distributed Active Archive Center
DCE	Distributed Computing Environment
DCN	Document Change Notice
DCW	Digital Chart World
DDF	Data Distribution Facility
DEM	Digital Elevation Model
DDTS	Distributed Defect Tracking System
DPFT	Data Processing Focus Team
DTM	Digital Terrain Model

ECI	Earth Centered Inertial
ECR	Earth Centered Rotating
ECS	EOSDIS Core System
EDHS	ECS Data Handling System
EDOS	EOS Data and Operations System
EOS	Earth Observing System
EOSAM	EOS AM Project (morning spacecraft series)
EOSDIS	EOS Data and Information System
EOSPM	EOS PM Project (afternoon spacecraft series)
EPH	Ephemeris Data Access
ESDIS	Earth Science Data and Information System
ET	Ephemeris Tool
FDF	Flight Dynamics Facility
FOV	Field-of-View
ftp	file transfer protocol
GAST	Greenwich Apparent Sidereal Time
GCT	Geo-Coordinate Transformation
GMST	Greenwich Mean Sidereal Time
GPS	Global Positioning System
GSFC	Goddard Space Flight Center
HAIS	Hughes Applied Information Systems
HDF	Hierarchical Data Format
HDF-EOS	Hierarchical Data Format - Earth Observing System
HITC	Hughes Information Technology Company
http	hypertext transport protocol
I&T	Integration & Test
I/O	input/output
IEEE	Institute of Electrical and Electronic Engineers
IMS	Information Management System (ECS)

IWG	Investigator Working Group
JPL	Jet Propulsion Laboratory
LaRC	Langley Research Center
MOO	Maintain and Operation
MCF	Metada Configuration File
MDUE	Missing Data Unit Entry
MEM	Memory Management
MET	Metadata
MODIS	Moderate-Resolution Imaging Spectroradiometer
MSFC	Marshall Space Flight Center
NASA	National Aeronautics and Space Administration
NCR	Nonconformance Report
NCSA	National Center for Supercomputer Applications
netCDF	network Common Data Format
NMC	National Meteorological Center
PACOR	Packet Processor
PC	Process Control
PGE	Product Generation Executive
PCF	Process Control File
PDS	Production Data Set
PDPS	Planning & Data Production System
PCF	Process Control File
PDR	Preliminary Design Review
PGE	Product Generation Executive (formerly Product Generation Executable)
PGS	Product Generation System (ECS)
PGSTK	Product Generation System Toolkit
POSIX	Portable Operating System Interface for Computer Environments
QA	Quality Assurance
QAC	Quality and Accounting Capsule

RDBMS	Relation Data Base Management System
RPC	Remote Procedure Calls
RRDB	Recommended Requirements Database
SCF	Science Computing Facility
SDP	Science Data Production
SES	Scheduling and Execution Subsystem
SDPS	Science Data Processing Segment
SDPF	Science Data Processing Facility
SGI	Silicon Graphics International
smf	Collection of utilities and library routines used for generating SMFs and manipulating SMF-defined status values and messages
SMF	Status Message File
SPSO	Science Processing Support Office
SSM/I	Special Sensor for Microwave Imaging
TAI	International Atomic Time
TBD	To Be Determined
TD	Time Date Conversion
TDB	Barycentric Dynamical Time
TDRSS	Tracking and Data Relay Satellite System
TDT	Terrestrial Dynamical Time
TLCF	Team Leader Computing Facility
TRMM	Tropical Rainfall Measuring Mission (joint US - Japan)
TSS	(TDRSS) Service Session
UARS	Upper Atmosphere Research Satellite
URL	Universal Research Locator
US	United States
USNO	U.S. Naval Observatory
UT	Universal Time
UTC	Universal Coordinated Time

UTCF	Universal Time Correlation Factor
UTM	Universal Transverse Mercator
VCDU	Virtual Channel Data Unit
VDD	Version Description Document
VPF	Vector Product Format
WWW	World Wide Web

This page intentionally left blank.