

4.12 Common Services Tools

This section describes the tools used by DAAC operators on a day-to-day basis:

1. Common Desktop Environment (CDE) Tool
2. MS Office
3. Netscape Communicator
4. Netscape Enterprise Server
5. EOSView
6. User Registration
7. Subscription Server
8. Java Data Acquisition Requests Tool (JDAR)
9. Earth Science Online Directory (ESOD) Tool

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4.12.1 Common Desktop Environment

The ECS uses the Common Desktop Environment (CDE) COTS package to manage X windows. It is a commercial graphical user interface for UNIX supporting AIX, Digital UNIX, HP/UX, and Solaris operating systems. It provides users registered at an ECS site with generalized support for performing the basic operations listed in Table 4.12.1-1

Table 4.12.1-1. Common ECS Operator Functions Performed with CDE

Operating Function	GUI	Description	When and Why to Use
Start a desktop session	Basic login with userid and password	Invokes the CDE window manager	Access an ECS host
Use the Front Panel	Front Panel window	Contains set of controls for performing common tasks, i.e.,calendar, email, clock, print, file management.	As needed during work session.
Manage files	File Manager	File management tool	Perform file navigation/manipulation.
Use Application Manager	Application Manager	How to run applications using Application Manager, the main repository for applications in CDE	Need to invoke applications.
Customize the desktop environment	Style Manager	Allow for customizing the look and behavior of desktop.	Need to customize desktop environment
Use text editor	Text Editor	Supports creation/editting of short documents, e.g., memos, mail, resource files	Need to create short documents
Use mailer	Mailer	Allows for sending/receiving email messages.	Need to access email
Print	Printing	Explains how to access printers	Need to print/change default printer.
Use Terminal	Terminal	Explains how to display and customize terminal emulator windows on desktop	Need to access control terminal window
Use Icon editor	Icon Editor	Creates files for use as desktop icons or backdrops	Need to create icons/backdrops
Use Image Viewer	Image Viewer	Allows for capture, viewing, editing, printing, and translation of monochrome/color image files.	Need to perform image manipulation.
Use Address Manager	Address Manager	How to find cards on users, hosts, and systems and perform operations on them.	Need to access/manipulate info on users, hosts, systems.

4.12.1.1 Quick Start Using Common Desktop Environment

4.12.1.1.1 Invoking CDE From the Command Line Interface

After being registered as an ECS user by the site administrator, the user accesses the CDE window manager by logging in to an ECS host using a defined UserID and password.

4.12.1.2 CDE Main Screen

Figure 4.12.1-1 presents an example of the type of support provided by the CDE window manager.

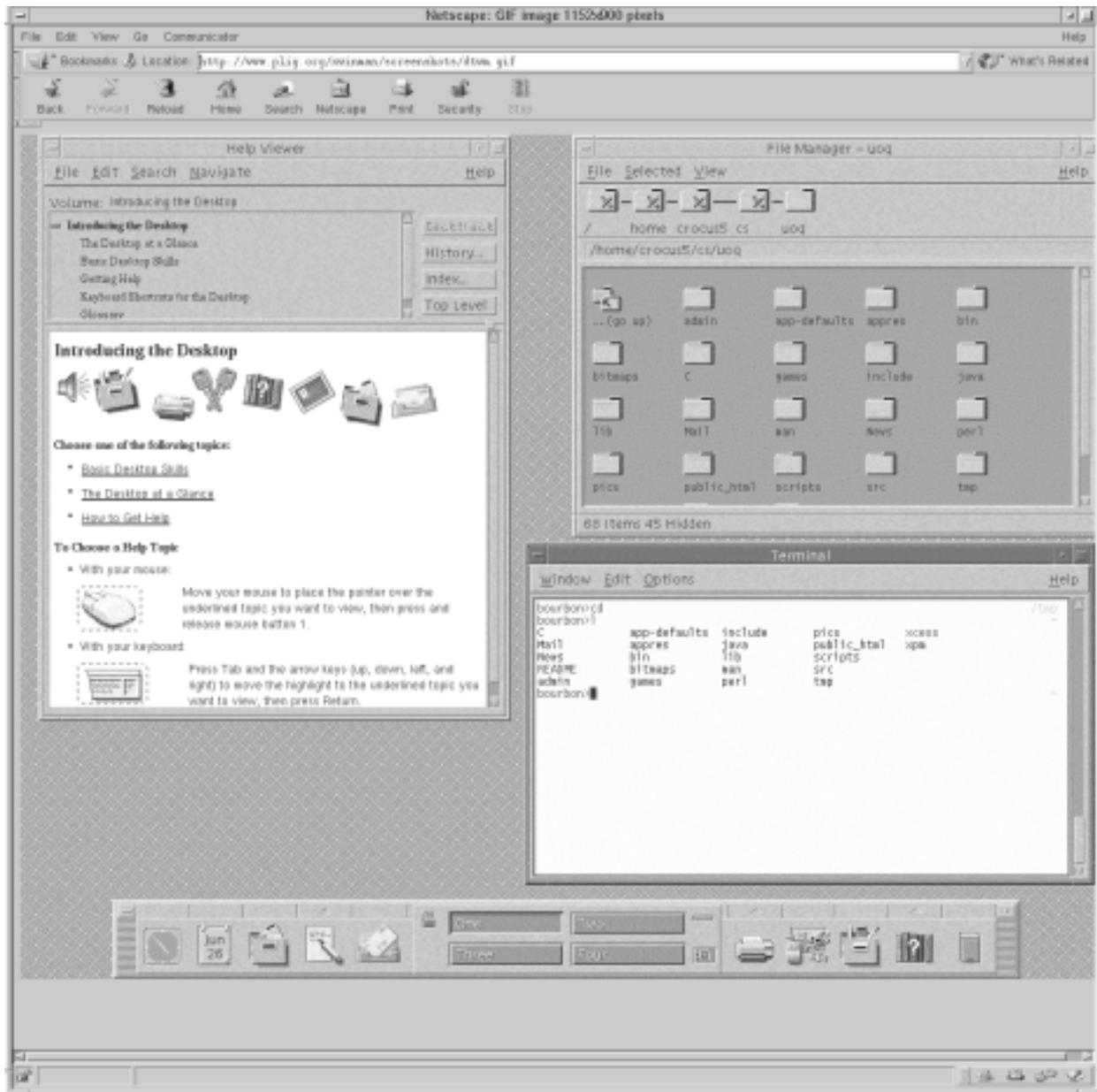


Figure 4.2.1-1. Example of CDE Window Manager Provided Support Features

The Front Panel window at the lower part of the screen contains a set of icons allowing access to common support features. Through this panel the user can obtain time, date, monitor schedule, access email, edit text files, print, access file manager to navigate the file system, and application manager to invoke and manage custom applications.

The Help Viewer window to the left of the screen is a support feature the user can invoke to obtain detailed online explanation of CDE support capabilities.

The File Manager window at the upper right of the screen supports navigating the file system and creating, deleting, and moving file objects.

The Terminal window below the File Manager on the screen allows Unix command line access to operating system services.

In addition to the help accessible to the online user, detailed documentation of CDE capabilities from the user standpoint and the system administrator are available from the Sun vendor at the web location <http://docs.sun.com/ab2/coll.8.40/@Ab2CollToc>.

4.12.1.3 Required Operating Environment

Refer to the Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide available at the Sun vendor's documentation link.

4.12.1.4 Databases

Not applicable.

4.12.1.5 Special Constraints

Access to CDE is available only to registered users of ECS sites.

4.12.1.6 Outputs

Not applicable.

4.12.1.7 Event and Error Messages

CDE issues both status and error messages to the operator screen. Error messages are listed in the CDE support documentation accessible at the web link <http://docs.sun.com/ab2/coll.8.40/@Ab2CollToc>.

4.12.1.8 Reports

None.

4.12.2 Microsoft Office

ECS provides office automation tools at the DAACs which are hosted on SSI&T workstations and on the MSS Server. These workstations have the capability to run the Microsoft Office suite of office automation tools via SunSelect's Windows Application Binary Interface, (**WABI**) middleware that allows Microsoft Windows-based applications to be run in a window on UNIX-based workstations.

The Microsoft Office Standard (version 4.3) software package contains office automation tool packages used to perform the following operator functions listed in Table 4.12.2-1.

Table 4.12.2-1. Common ECS Operator Functions Performed with Microsoft Office

Operating Function	GUI Program	Description	When and Why to Use
Word processing	Microsoft Word 6.0	allows operator to create, edit, open, save, and print documents allows incorporation of material generated in Excel and PowerPoint	to create and maintain DAAC policies and procedures
Develop a spreadsheet	Microsoft Excel 5.0	allows operator to manage, format, chart and analyze data imported from the MSS database	imports data from the MSS database to create a report on an as needed basis
Develop a presentation	PowerPoint 4.0	allows operator to produce presentation slides, drawings, handouts, speaker notes, outlines and graphs allows incorporation of material generated in Excel and Word	to develop briefings on an as needed basis

4.12.2.1 Quick Start Using Microsoft Office

Microsoft's Program Manager contains the Microsoft Office icon which can be selected to provide Excel, Word, PowerPoint icons that launch the applications. Refer to the following Microsoft documentation for more detail its applications:

- *Microsoft Word User's Guide*
- *Microsoft Excel User's Guide*
- *Microsoft PowerPoint User's Guide*

The documentation of Microsoft Office used as a basis and referenced in this section is for version 4.3 for Windows 3.11.

Microsoft Office is installed on both workstations and PCs. The method of invoking Microsoft Office is nearly identical for the two; however, an additional step (invoking **WABI**) is required for invoking MS Office on a workstation. **WABI** is invoked from the command line, while the actual invocation of MS Office (or the individual MS Office components) is via the **WABI** GUI.

The **WABI** software used to support Microsoft Office in the Unix environment is part of the SUN support software. When **WABI** is executed it displays a GUI “Program Manager” similar to the Windows 3.11 **Program Manager** (see Figure 4.12.2-1).

The version of Microsoft Office installed in **WABI** for ECS Release 4 is Office 4.3 for Windows 3.1.1 ®. This version includes the following Office product releases:

- MS WORD Release 6.0
- MS EXCEL Release 5.0
- MS PowerPoint Release 4.0

Note that Microsoft Office can also be launched from a SSI&T Manager pull-down menu (see Section 4.5.1 “SSI&T Manager”).

4.12.2.1.1 Invoking Microsoft Office From the Command Line Interface

On a workstation, **WABI** must be invoked from the command line before Microsoft Office can be invoked. Once **WABI** has started, Microsoft Office products may be invoked by selecting icons from the **WABI** GUI titled “Program Manager”.

To execute **WABI** from the command line prompt use:

WABI

This GUI emulates the behavior of Windows 3.11 ® and the Microsoft Office product icons may be selected as if the operator was using a PC instead of an Xterm.

On a PC running Window 3.11 ® the Microsoft Office products will have a selection Group containing the individual product icons similar to the panel displayed in Figure 4.12.2-2.

On a PC running Windows 95 ® the Microsoft Office products can be selected from the right margin tool bar (if present) or the “Start” menu. The “Start” menu may contain an entry for “Microsoft Office” with the individual products listed in a submenu as well as the individual products listed separately in the menu.

4.12.2.2 Microsoft Office Main Screen (WABI “Program Manager”)

In response to invoking **WABI** on the command line the **WABI** “Program Manager” window is displayed. This window is shown in Figure 4.12.2-1 below.

The Microsoft Office products are displayed in a panel on the upper left corner,

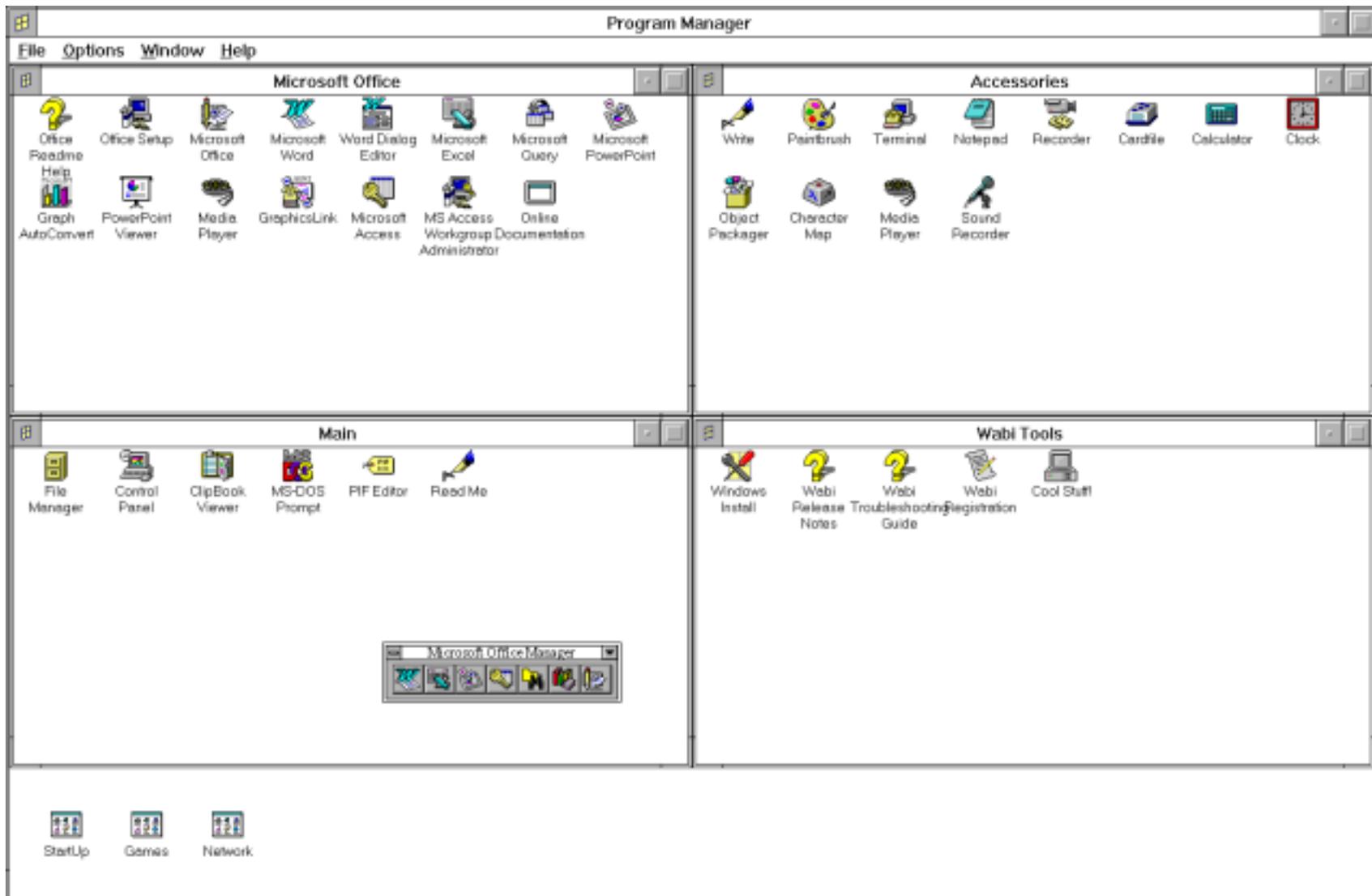


Figure 4.12.2-1. Microsoft Office Main Screen (WABI Program Manager)

The Microsoft Office Products are displayed on the panel shown in Figure 4.13.3-2. The individual products (MS Word, MS EXCEL, MS PowerPoint, etc) can be invoked by double-clicking on the appropriate icon in the panel display. The product name is given below the icon picture and is part of the icon.

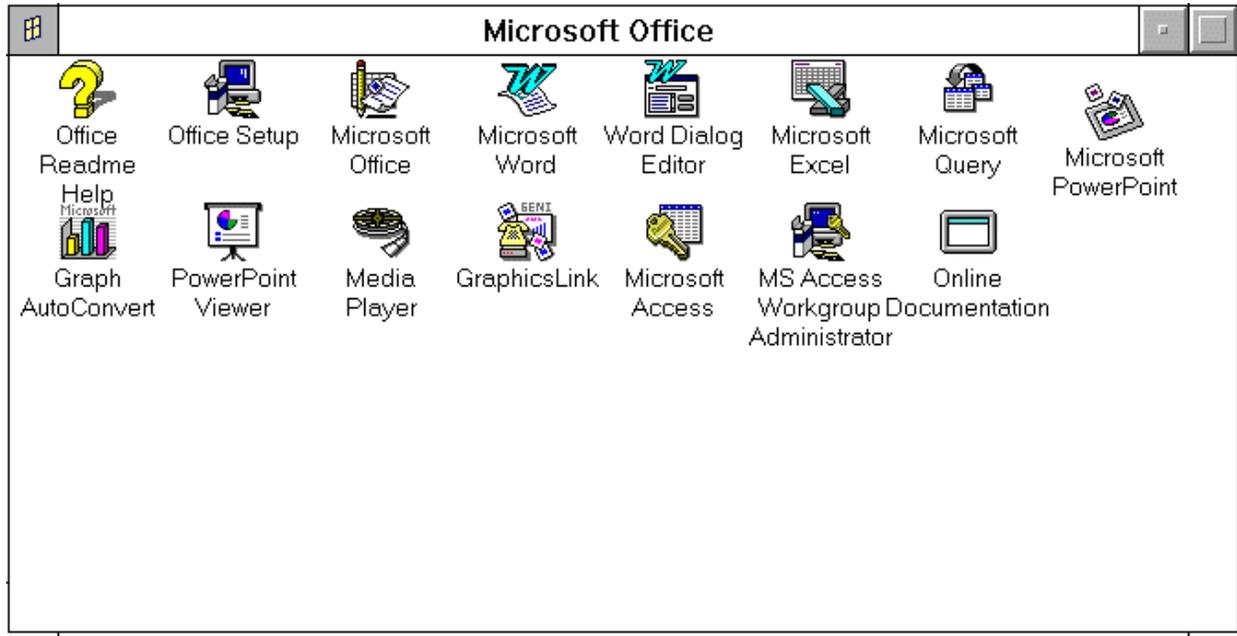


Figure 4.12.2-2. Microsoft Office Panel on Microsoft Office Main Screen

Alternatively, the standard Microsoft Office Tool Bar is provided on the **WABI** Program Manager screen (see Figure 4.12.2-1 on the lower section of the screen in the **Main** panel.). The Tool Bar “floats” and may be moved anywhere on the Program Manager screen. The icons on the tool bar do not display the product names as those on the panel do. Products may be selected from the tool bar with a single click on the icon.



Figure 4.12.2-3. Microsoft Office Tool Bar on WABI Program Manager screen

The icons for the popular products Microsoft Word, Excel and PowerPoint used for selection are shown below.:

4.12.2.2.1 Microsoft Office Word

The Microsoft Word main screen is invoked from the Microsoft Word icon.



Figure 4.12.2-4. Microsoft Word Icon

4.12.2.2.2 Microsoft Office Excel

The Microsoft Excel main screen is invoked from the Microsoft Excel icon.



Figure 4.12.2-5. Microsoft Excel Icon

4.12.2.2.3 Microsoft Office Power Point

The Microsoft PowerPoint main screen is invoked from the Microsoft PowerPoint icon.



Figure 4.12.2-6. Microsoft PowerPoint Icon

4.12.2.3 Required Operating Environment

The installed Microsoft Office requires **WABI** version 2.1 to run on the SUN workstation. **WABI** 2.1 is supported by Solaris 2.3, 2.4, and 2.5.

For all COTS packages, appropriate information on operating environments, tunable parameters, environment variables, and a list of vendor documentation can be found in a CM controlled document for each product. To find the documentation for Office, refer to the ECS Baseline Information System web page, URL <http://cmdm.east.hitc.com/>.

4.12.2.3.1 Interfaces and Data Types

The Microsoft Office applications Word, Excel and PowerPoint work alike and interface with each other as if they were a single program. In addition, Excel can interface with the MSS database to

import data into a spreadsheet format. **WABI** interfaces with UNIX to emulate a DOS windows environment.

4.12.2.4 Databases

The individual Microsoft Office products maintain their “products” in proprietary file structures:

MS Word = **.doc**

MS EXCEL = **.xls**

MS PowerPoint = **.ppt**

Each release of these products can accept output from previous releases of the same product, and generally, their competitor’s products available at the time of their release. However, they may not be able to use the same file extension name structures created by a later release. See the Special Constraints Section 4.12.2.5 below.

4.12.2.5 Special Constraints

The version of Microsoft Office installed is Office 4.3 for Windows 3.1.1 . Users must take care when importing files (.doc, .xls, and .ppt) that the files are not produced by a later version of these products.

Specifically, MS Word 6.0 is installed in the ECS Release 4. The generally available version of MS Word for PCs is 7.0. Frequently software products cannot interpret files produced from later versions of the same product. Thus if a document was created or modified on a PC with release 7.0 then moved back to the UNIX environment the release 6.0 version would not be able to OPEN the file. The products usually provide a “Save As” feature to produce output that is compatible with earlier versions of the product. Thus the operator at a PC would use the “Save As” File menu option and select “Word 6.0 for MS-DOS” in the “Save as Type” list of the dialog box presented.

4.12.2.6 Outputs

The Microsoft Office products display their “products” on screen and produce printed output appropriate to the product as described in Section 4.12.2. 8 Reports below.

In addition, Microsoft Office allows objects to be embedded or linked from its applications. For more information, see Chapter 28: Exchanging Information with Other Applications of the *Microsoft Word User’s Guide*, Chapter 7: Using PowerPoint with Other Applications of the *Microsoft PowerPoint User’s Guide*, and Part 9: Exchanging Data with Other Applications of the *Microsoft Excel User’s Guide*.

The output from Office 4.3 products is acceptable for input to later Microsoft Office products.

4.12.2.7 Event and Error Messages

Microsoft Office provides help windows to identify and explain any Microsoft Office error messages.

4.12.2.8 Reports

MS Word displays documents on the screen which can be saved to disk in native(.doc) or a format compatible with other word processors. Documents can be sent to a printer or a file. For more information see Part 6: File Management , Part 8: Using Word with Other Applications, and Chapter 10: Document Templates of the *Microsoft Word User's Guide*.

The spreadsheets created using Microsoft Excel may be printed. Microsoft Excel provides means to capture parts of sheets and formatting features to produce printed versions of elaborate spreadsheets. For information on creating reports using Microsoft Excel, see Chapter 14: Essential Skills, “Creating and Printing Custom Reports” and Chapter 29: Using Solver to Analyze Multiple-Variable Problems, “Microsoft Excel Solver Solutions and Special Reports” of the *Microsoft Excel User's Guide*.

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4.12.3 Netscape Communicator

Netscape Communicator version 4.0.6 is a GUI interface for browsing the World-Wide Web and for obtaining information from other sources. Some of the Netscape Communicator functions are:

- view/process text/html files as well as other MIME formats
- provide an interface to Telnet, Gopher, FTP, Email, and Newsgroups.
- Read content of world-wide-webavailable bulletin boards

Netscape Communicator is used to perform the following operator functions listed in Table 4.12-1. Please refer to the *Netscape Communicator Help component* for additional information on functionality not explicitly mentioned here.

Table 4.12.3-1. Common ECS Operator Functions Performed with Netscape Communicator (1 of 2)

Operating Function	Command/Action	Description	When and Why to Use
View Web Pages	Main window	<ul style="list-style-type: none"> • Operator views pages written in HTML source code • These pages provide images, text, and form templates 	To obtain information and to process user-interactive forms
Process Forms	Main window	<ul style="list-style-type: none"> • Forms are provided for operator input • Certain operations will require a password 	Used to search or manipulate the existing database (functions add, delete, modify)
Read a message and attachments	Netscape Mail and Discussions window	Allows the operator to read messages received. If there are any file attachments, they can be also be read or processed if they are not text files.	To read a message and if applicable, read or process an attachment
Reply to a message	Compose Window	Allows the operator to send a message to the originator of the message received or to all recipients of the original message.	To send (reply) messages to the originator of a message or all recipients of the message with an option to include the original message in the reply

Table 4.12.3-1. Common ECS Operator Functions Performed with Netscape Communicator (2 of 2)

Operating Function	Command/Action	Description	When and Why to Use
Send a new message	Compose Window	Allows the operator to create and send a message. Text or binary files can be attached to the message.	To send a new message to one or more recipients with attached files.
Delete/undelete messages	Netscape Mail and Discussions window	Allows the operator to mark messages for deletion. The messages are permanently deleted when the Update option is selected or when quitting Messenger Mailbox. Messages can only be undeleted before Update is selected or before quitting Messenger Mailbox.	To delete messages and free disk storage space
Browse bulletin boards	Netscape Message Center window	Allows for exchange of information with users and scientists that share the same interest	To ask or provide information on the BB subject to a large community of users

4.12.3.1 Quick Start Using Communicator

For more information, the *Netscape Communicator* Help Component is available online (Open the "Help" pulldown menu from the Netscape Communicator main screen and select Help Contents. The main page with the contents of the Netscape Help will appear. The operator can select subjects he/she is interested in by following the available links. A hardcopy of the displayed text may be obtained by opening the "File" menu and selecting "Print...").

4.12.3.1.1 Command Line Interface

To execute Netscape Communicator from the command line prompt use:
> **netscape &**

4.12.3.2 Netscape Communicator Main Screen

Once invoked, Netscape Communicator displays the main screen shown in Figure 4.12.3-1.

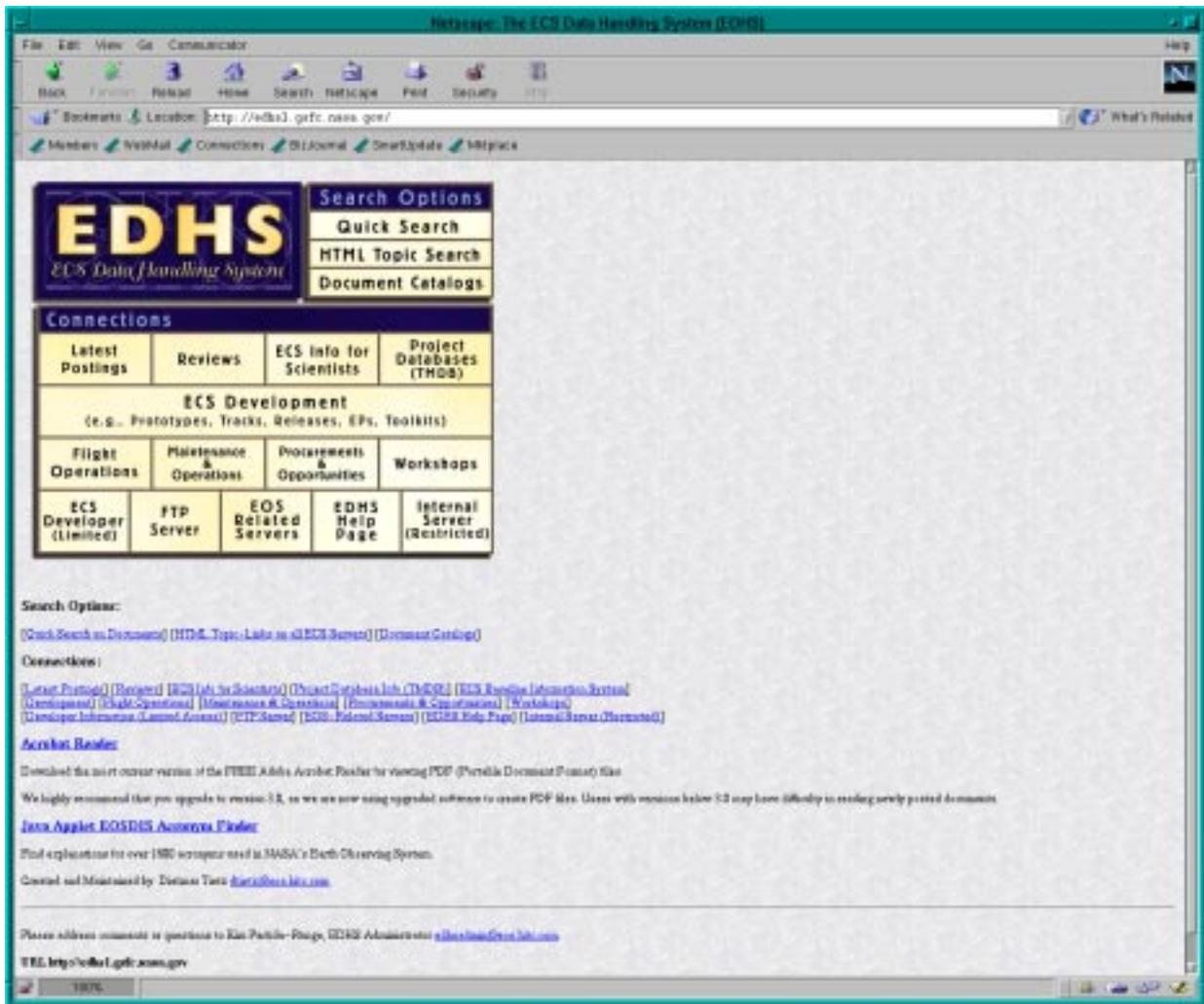


Figure 4.12.3-2. Netscape Communicator: Browser with Display Field

From the start-up Netscape Communicator screen, the operator has several choices for loading pages in any of the MIME formats known by Netscape Communicator:

- Move the cursor to a link in the display field and click on this link.
- Select a URL from the “Bookmarks” pulldown menu.
- Click on “File” and then “Open Page” of the Netscape Communicator Toolbar to enter a a URL address or a file.
- In the “Location” text field beneath the Toolbar and Directory Buttons, type Ctrl+U (^U) to erase the line and type the desired URL.

- Modify a URL displayed in the “Location:” text area. Use the mouse to select the portion to be changed, press <Backspace> to delete the highlighted text, and enter the new text.

It is recommended that operators have bookmarks of pages that have to be accessed frequently (file bookmarks.html in the ~/.netscape directory). Please refer to the *Netscape Communicator Handbook* for further details.

Buttons at the lower right corner of the screen provide direct access to functionality provided by, respectively, the browser, the mail message, the discussion group, and the composer windows.

4.12.3.3 Required Operating Environment

For all COTS packages, appropriate information on operating environments, tunable parameters, environment variables, and a list of vendor documentation can be found in a CM controlled document for each product. To find the documentation for Netscape, refer to the ECS Baseline Information System web page, URL <http://cmdm.east.hitc.com/>.

4.12.3.4 Databases

Netscape Communicator can interface with Sybase tables via cgi programs when operators process forms. Please refer to the appropriate sections for the databases used by ECS tools that are accessible via Netscape.

While these databases are not directly required for the operation of Netscape Communicator, some form processing features would be hampered if the interface to these databases does not work.

4.12.3.5 Special Constraints

None

4.12.3.6 Outputs

Netscape Communicator provides the outputs listed in Table 4.12.3-2 below.

Table 4.12.3-2. Outputs

Output	Description and Format
Screen Display	Shows the Netscape Communicator browser GUI screen, adjusts to the screen format
Hardcopy of Display Window	Printed version of the contents of the display window
Display Window saved to disk	Contents of the display window can be saved to disk in Text, Source or Postscript format
Modified, deleted or created data files	Processing of forms allows the operator to modify, delete or create data files

4.12.3.7 Event and Error Messages

Netscape Communicator issues both status and error messages to document the status of loading a document or to display the reason for not loading a document. For further information, refer to the *Netscape Communicator Handbook*.

4.12.3.8 Reports

None.

4.12.4 Netscape Enterprise Server

Version 3.6 of the Netscape Enterprise Server is shipped with Release 5 of ECS, as stated in the XRP II-based baseline of ECS.

The Netscape Enterprise Server by the Netscape Communications Corporation is used in ECS to administer and manage all of the custom world-wide web-based applications. An instance of the Netscape server is installed for each ECS application that relays on it and for each mode. For example, the interface server where both IOS and CLS applications run, there are six instances of the Netscape server - one for each of the three modes and one for each of the two subsystems. The port number to be used for each of these Netscape Enterprise Servers can be found in the XRP baseline.

The Enterprise Server COTS provides a great deal of functionality related to the web server administration, including:

- Administering the Server (i.e., performing common server administration tasks with the tool provide by the Netscape Server like Server Selector, and Server Manager)
- Programming the server (i.e., using CGI, Java, and writing CGI application)
- Monitoring the server (i.e., viewing the access and error log files and archiving log files)
- Configuring the system settings (i.e., shutting down the server, tuning server performance, and changing network settings)
- Indexing documents (i.e., creating collections of documents)
- Cataloging the server's content (i.e., running the catalog agent, browsing the server content)
- Provide Security and Encrypting transactions (i.e., setting security references, generating key files, and requesting and installing certificates)
- Managing server content and styles (i.e., specifying a document root, setting up virtual servers, using version control, and creating and using styles).

The Netscape Enterprise Server, allows also the ECS operator to create and publish new web pages, through one of its component - the Composer.

Table 4.12.4-1 summarizes the most important functionality provided by the Netscape Enterprise Server. For a complete description of such functionality the reader is referred to the following more specific documentation:

Netscape Enterprise Server - Administrator's Guide for Unix

Netscape Enterprise Server - Programmer's Guide for Unix

Netscape LiveWire - Developer's Guide

Table 4.12.4-1 also provides a reference to the documentation that should be used to find information about specific tasks that can be accomplished with Netscape Enterprise Server.

Table 4.12.4-1. Common ECS Operator Functions Performed with the Netscape Enterprise Server (1 of 4)

Operating Function	Command/Script	Description	When and Why to Use
Administering the server	See Administrator's Guide, Chapter 3, "Configuring and Managing your server"	<ul style="list-style-type: none"> • Using the Server Selector for: <ul style="list-style-type: none"> • Install a new server • Remove a server • Configure administration • Use the Server Manager for performing periodic maintenance like: <ul style="list-style-type: none"> • changing server name • changing port number • adding, changing, removing users from the user database files 	<ul style="list-style-type: none"> • When the need arises to manage multiple servers • When the server needs reconfiguration
Programming the server	See Administrator's Guide, Chapter 8, "Using programs with your Server", and the Programmer's Guide, Chapter 2, "CGI Basic"	Using CGI programs and Java Applets, Java Servlets, and JSQL <ul style="list-style-type: none"> • Writing CGI Application • Writing Servlets • Writing Enterprise Java Beans • Multitier web database solutions 	<ul style="list-style-type: none"> • To run server-side applications • To allow the server to run programs that can process HTML forms and other data coming from clients and send a response back to the client

Table 4.12.4-1. Common ECS Operator Functions Performed with the Netscape Enterprise Server (2 of 4)

Operating Function	Command/Script	Description	When and Why to Use
Monitoring the server	Administrator's Guide, Chapter 9, "Monitoring the server"	<ul style="list-style-type: none"> • Viewing access and error log files • Archiving log files • Monitoring the network with the Simple Network Management Protocol (SNMP) 	<ul style="list-style-type: none"> • During troubleshooting when the operator needs to examine log containing information on the server activity. • When the operator needs new log and error files • To graphically visualize information about a managed device (e.g. device is up or down, number of particular error messages received)
Configuring the system settings	Administrator's Guide, Chapter 5, "Configuring System Settings"	<ul style="list-style-type: none"> • Shutting down/ Restarting the server • Tuning server performance • Changing network settings 	<ul style="list-style-type: none"> • When a reload of configuration files is required • To configure the server's technical options, including: <ul style="list-style-type: none"> Number of processes spawn max/min number of threads • listen queue size • DNS usage • When maintenance on the server requires: <ul style="list-style-type: none"> • Changing server location (i.e., directory) • Changing the server user account • Changing the server name • Changing the server port number • Changing the server binding address

Table 4.12.4-1. Common ECS Operator Functions Performed with the Netscape Enterprise Server (3 of 4)

Operating Function	Command/Script	Description	When and Why to Use
Indexing Documents	Administrator's Guide, Chapter 10, "Creating a text search interface"	<ul style="list-style-type: none"> • To create and maintain an end-user text search interface that allows client to search the web site 	<ul style="list-style-type: none"> • When a customization of a text search interface is appropriate for tailoring the interface to the user community needs.
Cataloging the server's content	Administrator's Guide, Chapter 11, "Cataloging your web site"	<ul style="list-style-type: none"> • To automatically generate web pages that list and categorize the HTML files in the web site 	<ul style="list-style-type: none"> • When the operator needs to provide web user with easy access to the web content by: <ul style="list-style-type: none"> • listing all the HTML document in the web sites • generating HTML views of the web site content organized by title, classification, author, and last-modified date • generating automatic directory information (i.e., resource description) for HTML document in the web site

Table 4.12.4-1. Common ECS Operator Functions Performed with the Netscape Enterprise Server (4 of 4)

Operating Function	Command/Script	Description	When and Why to Use
Providing Security and Encrypting transactions	Administrator's Guide, Chapter 7, "Encryption and SSL"	<ul style="list-style-type: none"> • Setting security preferences • Generating key files • Requesting and installing certificates 	<ul style="list-style-type: none"> • When turning on the Secure Sockets Layer for the server and defining the system-wide preferences, including: <ul style="list-style-type: none"> • SSL version • Client certificates • Cipher (i.e., encryption algorithm) • When the operators needs to generates the server's public and private key • Requesting a certificate from a Certification Authority and installing the received certificate
Managing server content	Administrator's Guide, Chapter 4, "Managing Server Content"	<ul style="list-style-type: none"> • Setting the primary document directory • Customizing public information directory • Enabling remote file manipulation • Using Version Control 	<ul style="list-style-type: none"> • When the operator wants to be sure that not all data present on the server is accessible by the all the end-users • When users on the host machine are to be allowed to add web document without the direct intervention of the web administrator • When access control must be provided to remote users • To provide check-in, check-out, and roll-back capability to groups of people working on the same set of documents

4.12.4.1 Quick Start Using Netscape Enterprise Server

The Netscape Enterprise Server is managed from a single interface - the Server Selector. The administration server must be running before the operator can configure any specific web server using the Server Manager.

4.12.4.1 Command Line Interface

The Administration Server can be started executing the following steps:

```
cd $ECS_HOME/<mode>/COTS/ns-home  
./start-admin
```

where the `$ECS_HOME/<mode>/COTS/ns-home` is the directory where the Enterprise Server was initially installed.

This will start the administration server using the port that was selected during installation.

To access the Server Selector and proceed to access the functionality discussed in section 4.12.4.1 use a web browser to enter the URL for the administration server:

<http://<servername>.<ECSdomain>.<domain>:<portnumber>>

The operator is then prompted for a username and a password. Once this information is entered the Netscape Server Selector web page appears as shown in figure 4.12.4.-1.

Note that the browser used for this task must be capable of supporting frames and JavaScript. Netscape. Navigator 3.0, included in the ECS baseline, is capable of supporting both frames and Java Script.

4.12.4.2 Netscape Enterprise Server Main Screen

The Netscape Server Selector is the main screen that appears when the Netscape Enterprise Server is started.

The figure shows how several servers can be brought on or off. Additionally, three buttons are made available to the operator. The associated functionality include the following:

- Install a new Netscape Enterprise Server
- Remove a server from the host machine
- Administer the server configuration

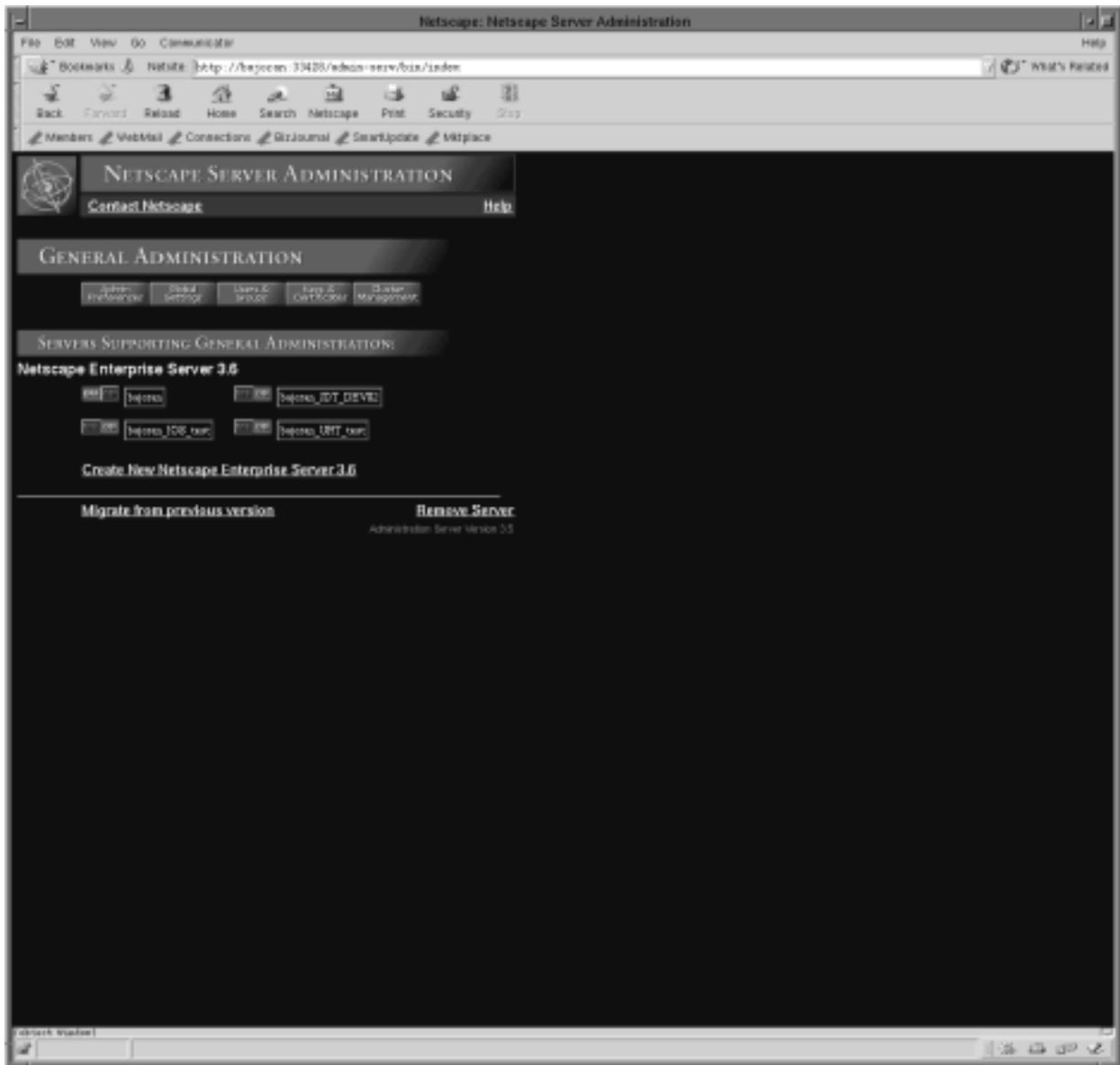


Figure 4.12.4-1. Netscape Server Selector Screen

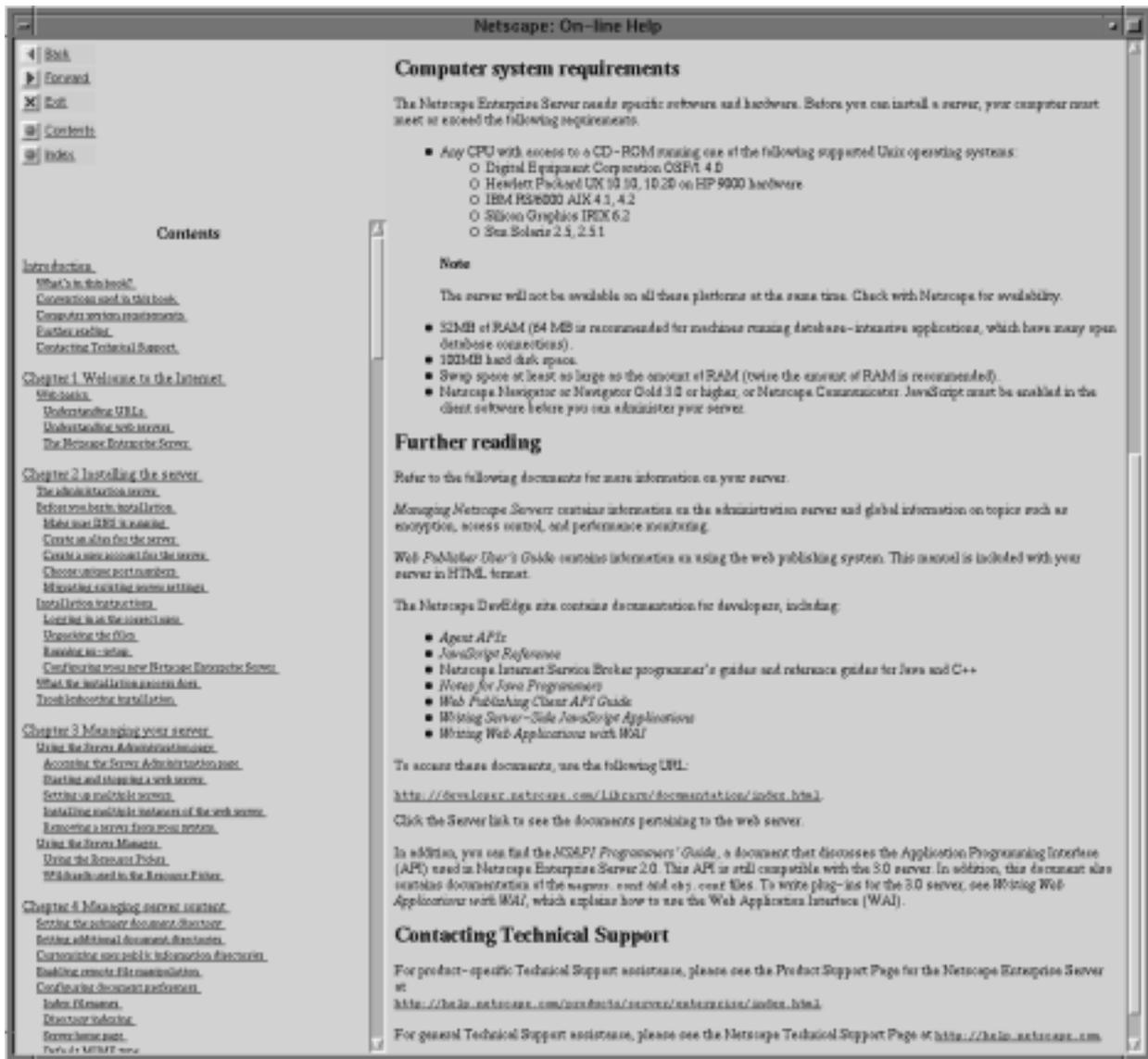


Figure 4.12.4-2. Netscape Server Admin Help

4.12.4.3 Required Operating Environment

The Netscape Enterprise Server is a COTS package. For all COTS packages, appropriate information on operating environment, tunable parameters, environment variables, and a list of vendor documentation can be found in a CM controlled document for each product. To find the documents for the Enterprise Server, please refer to the ECS Baseline Information System web page, at the following URL:

<http://cmd.east.hitc.com/>.

Within the context of the proper functioning of this tool, it needs to be pointed out that during the installation of the CLS software a configuration file, named obj.conf, is generated that requires the server name as specified during the Netscape server configuration process. Thus, the operator installing the CLS software has to be made aware of the server name used during the Netscape server configuration.

4.12.4.4 Databases

The Enterprise Server uses a High-speed database called DBM that is mainly used for storing and administering the following information:

- User (i.e., adding, removing, listing, and editing profiles of users allowed (or denied) to access the resources available on the server)
- Groups (i.e., administering users by grouping features)
- Password (i.e., creating and changing passwords)

Refer to the *Administrator's Guide, chapter 6* for further information on the database used by the Enterprise Server.

4.12.4.5 Special Constraints

None

4.12.4.6 Outputs

The Enterprise Server allows for the real-time monitoring of the server activities. Several outputs are made available to the Operator to understand the way the server is handling the network traffic. The output data include:

- How much of the server resources are being used,
- Percentage of threads being used totally
- Number of idle (i.e., awaiting connection) threads
- Number of threads dealing with reading requests
- Number of threads dealing with writing responses
- Number of threads dealing with resolving hostnames

Additionally, the monitoring of the server provides the output of the following server totals data:

- Bytes transferred
- Total requests
- Bad Requests

See the Administrator Guide, Chapter 9, “Monitoring the server” for further information.

4.12.4.7 Event and Error Messages

All errors encountered by the server are logged in a error log file.

This file contains also information about the major server events, such as when the server was started. Incorrect user authentication is also included in this file.

4.12.4.8 Reports

A log file called *access* is where all the main activities, regarding the server administrated by the Enterprise Server are logged. The operator can customize the *access* logging for each server resource by specifying whether to log accesses, who not to record accesses from, and whether the server should spend time looking up the domain names of the clients when they access a resource.

Format used for the *access* log is selectable by the operator and includes:

- Common Logfile Format
- Flexible log format
- User customizable format.

Refer to the Administration’s Guide, Chapter 9, “Monitoring the server” for additional information on the available reports from the Netscape Enterprise Server.

4.12.5 EOSView

EOSView is a custom HDF file verification tool. It displays the contents of HDF files and the contents of files containing HDF-EOS data. Individual objects can be selected for display. Displays include Raster images, datasets in tables, pseudo-color images of datasets, attributes, and annotations. Simple animation can be performed for a file with multiple raster images.

EOSView has a unique interface for handling HDF-EOS data structures. The Swath/Grid/Point interface uses only HDF-EOS library calls. The EOSView operator will not see the underlying HDF structures but will be prompted for which parts of the structure they wish to view.

EOSView is used to perform the operator functions listed in Table 4.12.5-1.

**Table 4.12.5-1 Common ECS Operator Functions Performed by EOSView
(1 of 2)**

Operating Function	Command/Script or GUI	Description	When and Why to Use
Display HDF file contents	EOSView File Contents window	Looks at data file images, metadata, and auxiliary information	To verify structures put in a file
Display Raster Image	Image Display window	<ul style="list-style-type: none"> • displays Browse images, geolocated maps, etc • multiple zoom features in image display available • pan feature available • multiple palettes available 	To view a snapshot of an image (not data)
Animate Raster Images	Animation Window	presents in order images as they appear in each file	To show a succession of movement (e.g., temperature adjustment from one image to the next)
Display of SDS data in table	<ul style="list-style-type: none"> • SDS data table • Vdata table 	Displays a one or two dimensional list of data in a scrollable list	To view/compare associated numbers
Expand a Vgroup	Select "Vgroup" from File Contents window	Vgroups are logical groupings of information such as Vdata, SDS data, and images	To view information by a certain subject (e.g., the information associated with Geolocation)

**Table 4.12.5-1 Common ECS Operator Functions Performed by EOSView
(2 of 2)**

Operating Function	Command/Script or GUI	Description	When and Why to Use
Pseudo-color display of SDS data	Image Display Window	Converts data into a visual image	To view the pseudo-color image of an SDS table
Display text objects	Text (Attributes) Window	Describes the types of data strings for an individual object or for an entire file	To look at factors when doing computations (e.g., longitude/latitude)
Hypertext help	On-line Help	On-line help is available from all menu bars	to help in the navigation and use of EOSView
Swath/Point/Grid interface (HDF-EOS)	File Contents Display window for swath, point and grid files	View HDF-EOS objects at a high level (i.e., data types cannot be broken down)	To view segments of data in terms of swath, a point on the earth, and grid (e.g., lat/long) data
Plot VData	EOSView Plot Window	Static line plot display of x and y data (from a Vdata Table)	To view line plot of data capabilities
Plot SDS Data	EOSview surface/contour plot window	Surface or contour plot of SDS	To view plots of SDS tables

4.12.5.1 Quick Start Using EOSView

This section presents an orientation of EOSView.

4.12.5.1.1 Command Line Interface

EOSview can be started from the UNIX command line by typing the command:
EOSView

EOSView can also be run by clicking on “Product Examination” from the SSI&T Manager Tools pull-down menu (see Section 4.5.1 “SSI&T Manager”).

4.12.5.2 EOSView Main Screen

The EOSView Main Window (shown in Figure 4.12.5-2) displays the current version of EOSView and date.

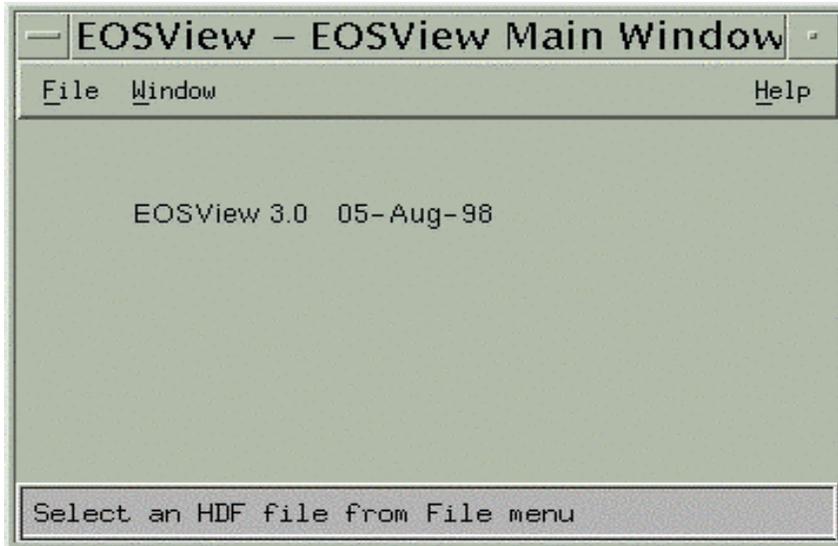


Figure 4.12.5-2. EOSView Main Screen

From the **F**ile pulldown menu, the operator can select Open or Exit.

- **Open** -- This will cause a file selection dialog to appear (shown in Figure 4.12.5-3)
- **Exit** – Exits EOSView

From the **W**indow pulldown menu, the operator can select an EOSView screen and have the focus change to that window as long as it is currently open. This feature is described in Section 4.12.5.2.17.3 “Window Pulldown Menu.”

From the **H**elp pulldown menu, the operator can select help on context, on help, on window, keys, contents, index and version. This feature is described in Section 4.12.5.2.17.5 “Help Pulldown Menu.”

4.12.5.2.1 EOSView File Selection Dialog

Selecting **O**pen from the EOSView File pulldown menu will bring up the File Selection Dialog shown in Figure 4.12.5-3. This is a standard file selection dialog box that lets the operator search through directories and select an HDF file.

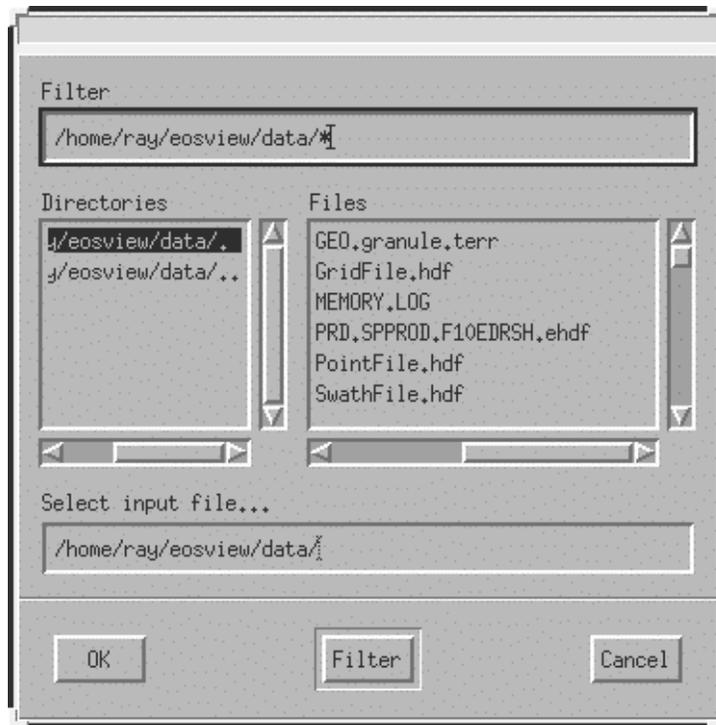


Figure 4.12.5-3. File Selection Dialog

Table 4.12.5-2 describes the File Selection fields.

Table 4.12.5-2. EOSView File Selection Field Description

Field Name	Data Type	Size	Entry	Description
Filter	system generated (editable)	unlimited	required	displays file selection parameters to filter the directories
Directories	selection	unlimited	required	displays a list of directories
Files	selection	unlimited	required	displays a list of files to select from
Select Input File	system generated (editable)	unlimited	required	displays the filename selection

In addition, the following pushbuttons are provided:

- **OK** – opens the specified file
- **Filter** – filters through the directories in layers until the desired directory/file is displayed
- **Cancel** – closes the file selection dialog

4.12.5.2.2 File Contents Display Pop-up

Once the HDF file has been selected, the File Contents Pop-up (see Figure 4.12.5-4) for that file will appear. This is a scrollable window with the following menu items:

- The **F**ile pulldown menu (described in Section 4.12.5.2.17.1) provides additional information about a file and provides a way to close the file.
- The **O**ptions pulldown menu (described in Section 4.12.5.2.17.2) and its Animate images selection becomes sensitized when the selected file contains multiple Raster Image Groups. This will cause all the images to be lined up and displayed in order in an EOSView - Animation Window.
- From the **W**indow pulldown menu, the operator can select an EOSView window and have the focus change to that window as long as it is currently open. This feature is described in Section 4.12.5.2.17.3 “Window Pulldown Menu.”
- From the **A**tttributes pulldown menu (described in Section 4.12.5.2.17.4), the operator can view the global attributes for the selected HDF file.
- From the **H**elp pulldown menu (described in Section 4.12.5.2.17.5), the operator can select help on context, on help, on window, keys, contents, index and version.

To select an HDF object simply double-click on the object that is displayed in the scrollable window. Objects can be Numeric Data, Vdata, Vgroup, Raster Images, or Grid/Swath/Point data. Each of these objects are described in the following sections.

4.12.5.2.3 Numeric Data Group

In this example, the GEO.granule.terr HDF file was selected from the File Selection Dialog, bringing up the File Contents Display Pop-up shown in Figure 4.12.5-4.

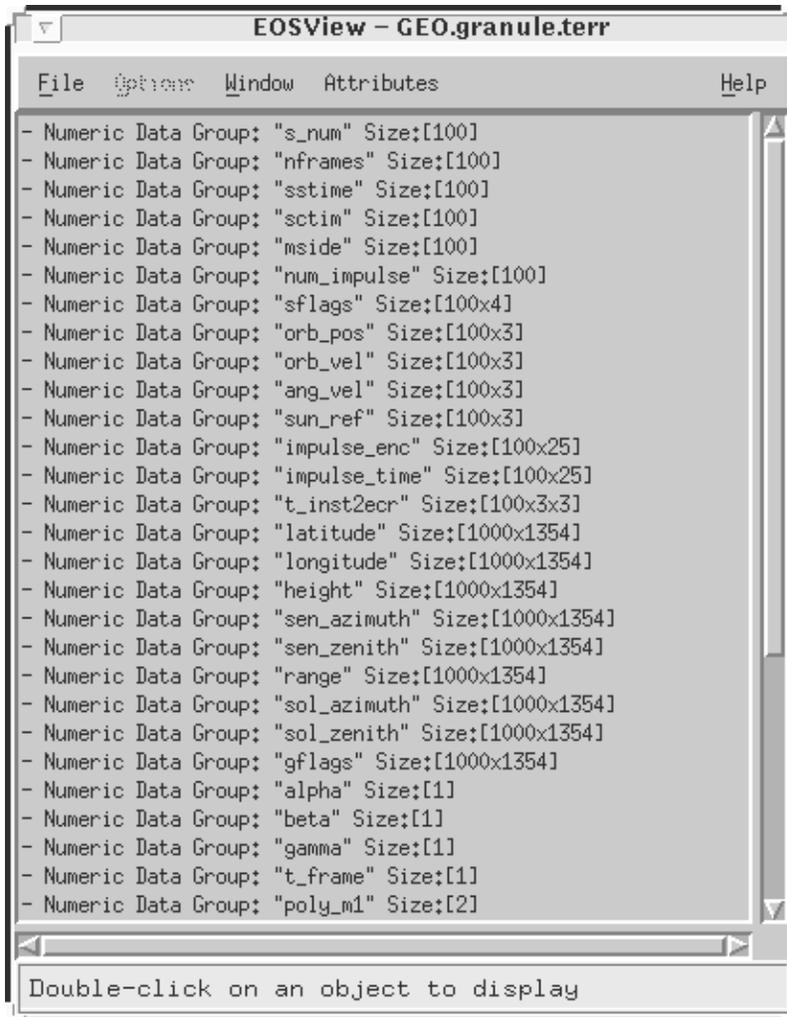


Figure 4.12.5-4. EOSView File Contents Pop-up

Double-clicking on an item from the EOSView File Contents Pop-up (in this example, Numeric Data Group: "sol_azimuth" Size : [1000X1354] was selected) brings up the Multi-Dimension SDS window as shown in Figure 4.12.5-5. This window allows the operator to select dimensions and indices for other dimensions.

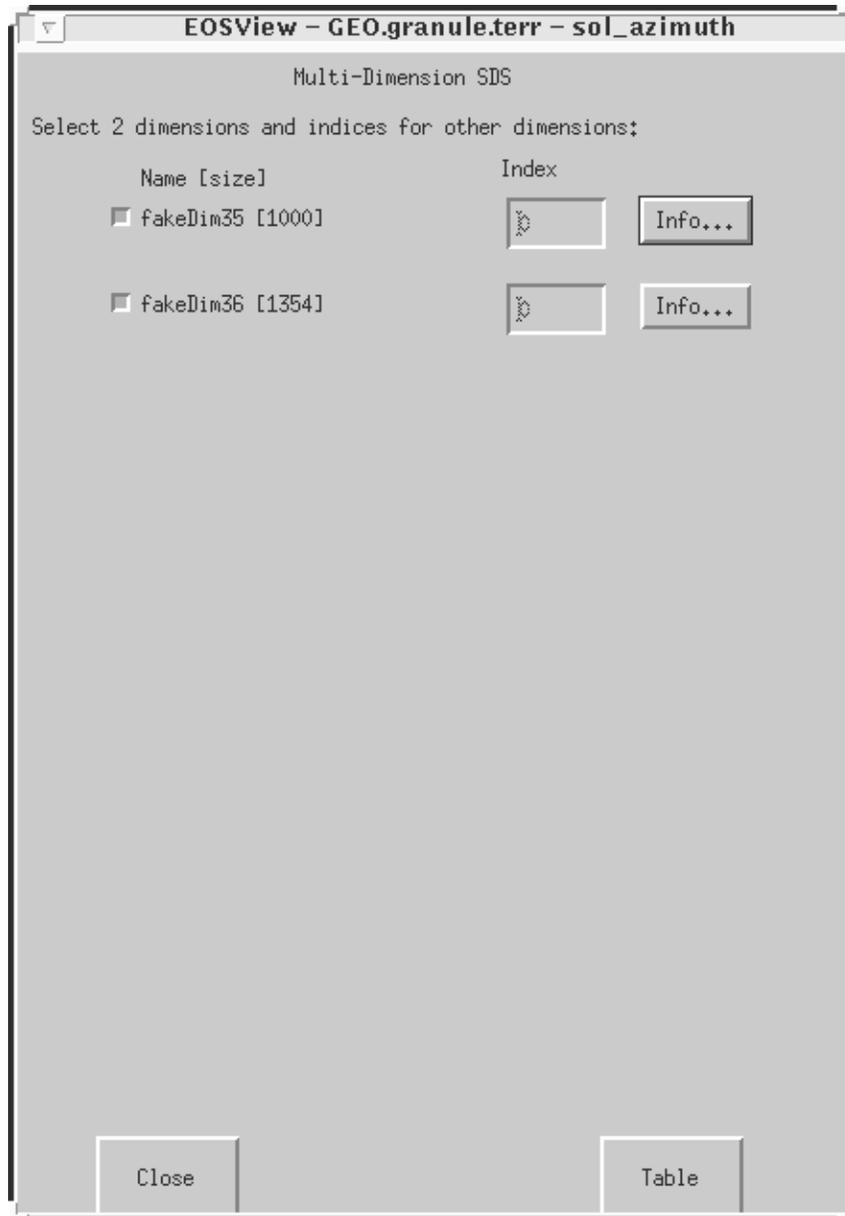


Figure 4.12.5-5. Multi-Dimension SDS Pop-up

Table 4.12.5-3 describes the fields of the Multi-Dimension SDS Pop-up.

Table 4.12.5-3. Multi Dimension SDS Field Description

Field Name	Data Type	Size	Entry	Description
Index	integer	N/A	Required	Index of involved dimensions. For the selected dimension the default value is 0. For the unselected dimension the number can be as large as what is in bracket after dimension name.

EOSView can only display 2 dimensional datasets. If a dataset contains more than 2 dimensions, a 2-D slice of the dataset needs to be selected. This is accomplished by selecting ONLY 2 dimension boxes to the left of the dimension name. The other dimensions can have an index entered in the text box. Additional information for each dimension can be displayed in a separate window by pressing the button next to the dimension the information is desired. Clicking on the **Info** button will bring up a Dimension Information pop-up shown in Figure 4.12.5-6.

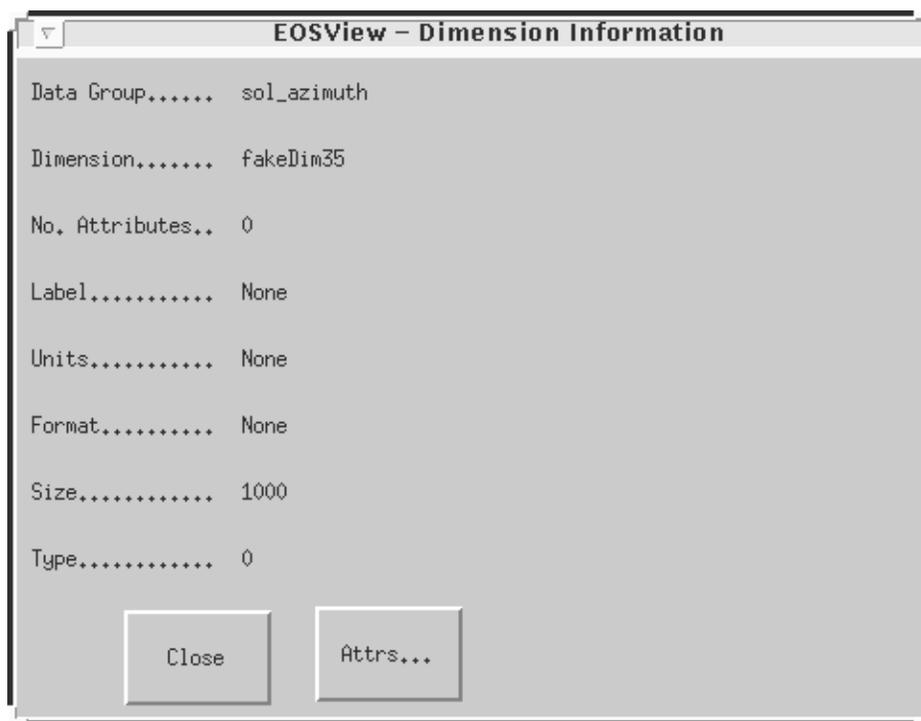


Figure 4.12.5-6. Dimension Information Pop-up

This window contains information such as number of attributes, units, format, size, etc. From this window, the operator can display textual output of the attributes for this dimension by clicking on the **Attrs...** button. Selecting **Close** closes the EOSView - Dimension Information Window.

Selecting the **Table** button from the Multi-Dimension SDS window brings up a table window as shown in Figure 4.12.5-7 . The table window will display a 1 or 2 dimensional list of the data as either a Scientific Data Group or Vdata. The window is sizable and contains horizontal and vertical scrollbars.

The **File** pulldown menu contains the following items, as shown in Figure 4.12.5-7:

- **Make Image** - This will create a pseudo-color image of the selected table. Selecting this option causes the Min/Max Values Pop-up to appear (Figure 4.12.5-11).
- **Plot** - if the table has been created from an SDS the operator has the option of converting the table to a surface or contour plot as shown in Figure 4.12.5-8.
- **Attributes** - This displays text attributes assigned to this table. Selecting this option will cause the Attributes Text Display Pop-up to appear as shown in Figure 4.12.5-34.
- **Statistics** - EOSView has basic statistical capabilities for table data. An SDS table will have the minimum, maximum and average for the entire table displayed in the EOSView - Stats window (see Figure 4.12.5.12). For a table created from Vdata data the same stats will be calculated for each column of data (field of Vdata). The EOSView stats window displays the name, min, max, and average values of a table. The name corresponds to the name of the SDS or Vdata file name. The data is not editable and non-selectable. Hitting the “Ok” button will close the EOSView Stats Window.
- **Save** - This option allows the operator to save the table in either ASCII or binary format. Once the operator has selected ASCII or binary from the cascading menu the EOSView File Save is displayed (see Figure 4.12.5-13). This window is similar to the EOSView File Open Dialog. EOSView will only save tables to a new file, therefore, a unique file name must be entered in the “Save as:” text field.
- **Close Window** - Closes the table window.

	0	1
7	23437	23455
8	23434	23451
9	23431	23448
10	23427	23445
11	23424	23441
12	23421	23438
13	23417	23435
14	23414	23431
15	23411	23428
16	23407	23425
17	23421	23439
18	23418	23435
19	23415	23432
20	23411	23429
21	23408	23425
22	23405	23422
	23401	23419
	23398	23415
	23394	23412
	23391	23408
	23405	23423
	23402	23419
	23398	23416

Figure 4.12.5-7. EOSView “sol_azimuth” Table Pop-up

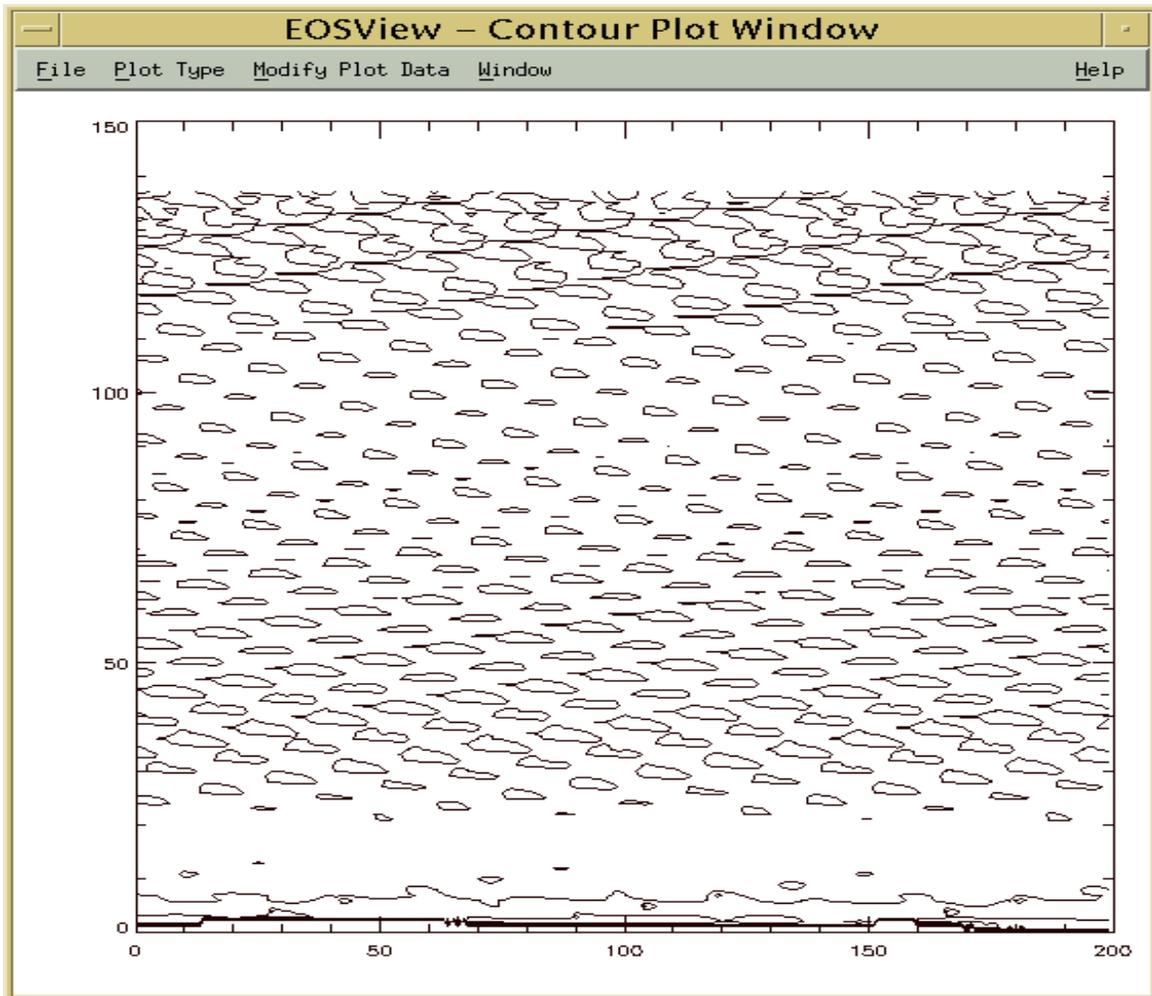


Figure 4.12.5-8. EOSView Contour Plot Pop-up

4.12.5.2.4 Surface/Contour Plot

The EOSView Contour/Surface Display will display a surface or contour plot of the selected Numeric Data Group. The window contains a menubar and can be resized.

- The **F**ile menubar option contains only one option. Selecting **C**lose will close the surface/contour plot window.
- The **P**lot **T**ype menubar options acts as a toggle between the surface and contour plots. If the current plot being displayed is a contour plot then the option listed will be **S**urface **P**lot. If the current plot being displayed is a surface plot then the option listed will be **C**ontour **P**lot. Selecting this option will cause a new window to appear with the selected plot.

- The **Modify Plot Data** menubar option allows the user to modify the plots based on three criteria. The user may modify a plot by excluding a range of data, excluding up to three individual values, or plotting between a minimum and maximum value.
- The **Window** option lists in a pull-down menu all windows which are currently open. Opens any window selected. See Section 4.12.5.2.17 “Window Pulldown Menu.”

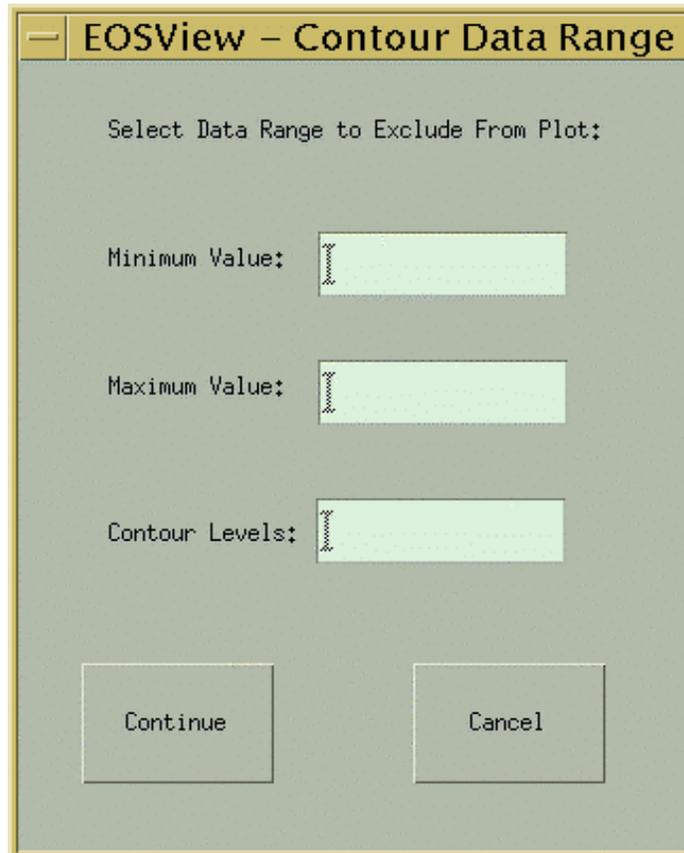


Figure 4.12.5-9. Contour/Surface Data Range Pop-up

The option **Data Range to Exclude** listed under the **Modify Plot Data** menubar option will cause the Contour/Surface Data Range window to appear (Figure 4.12.5-9). The user can select a range of data to exclude from the plot by entering the minimum value to exclude in the Minimum Value text field and the maximum value to exclude in the Maximum Value text field. The user can select the number of contour levels desired by entering the number in the Contour Levels text field. Entering data in the Contour Levels text field is optional. The Contour Levels text fields will only appear in the Data Range Pop-up if the plot was a contour plot. Pressing the **Continue** button will cause a new plot to be drawn without the data range entered. Pressing the **Cancel** button closes the window with no further action.

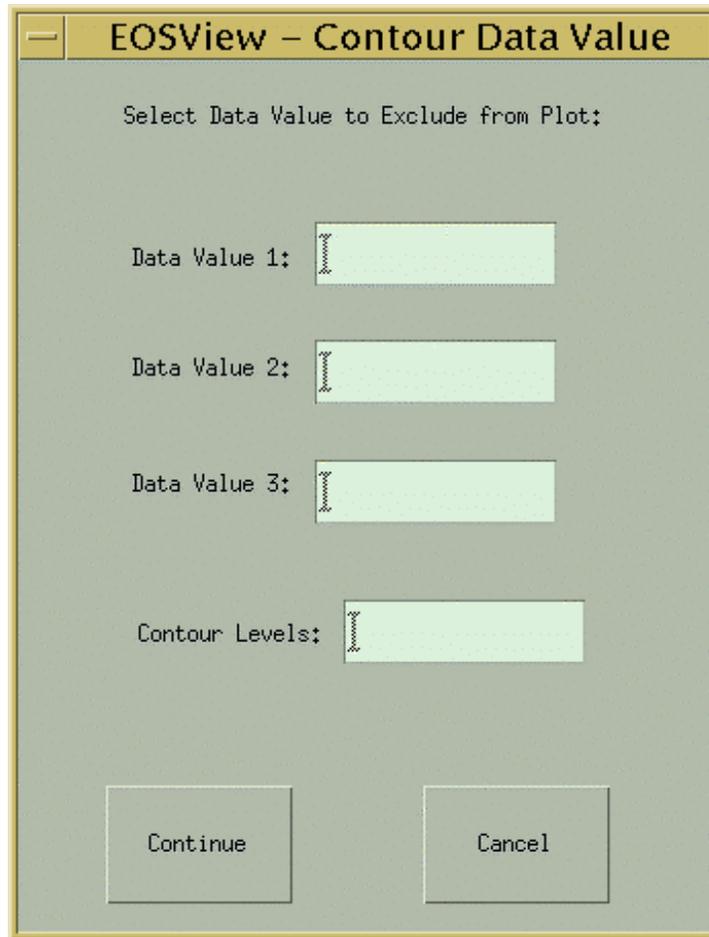


Figure 4.12.5-10. Contour/Surface Data Value Pop-up

The option **Data Value** listed under the **Modify Plot Data** menubar option will cause the Contour/Surface Data Value window to appear (Figure 4.12.5-10). The user can enter up to three values that will not be plotted. The first value should be entered in the Data Value 1 text field, the second value should be entered in the Data Value 2 text field, and the third value should be entered in the Data Value 3 text field. The user can select the number of contour levels desired by entering the number in the Contour Levels text field. Entering data in the Contour Levels text field is optional. The Contour Levels text fields will only appear in the Data Range Pop-up if the plot was a contour plot. Pressing the **Continue** button will cause a new plot to be drawn without the data range entered. Pressing the **Cancel** button closes the window with no further action.

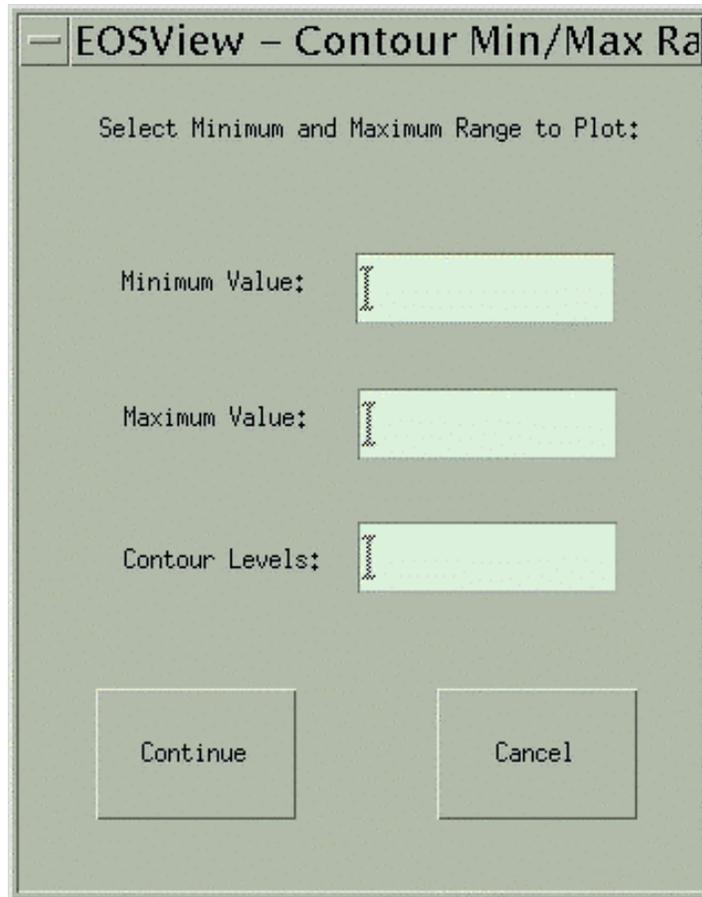


Figure 4.7.12-11. Contour/Surface Min/Max Range Pop-up

The option **Min - Max Range** listed under the **Modify Plot Data** menubar option will cause the Contour/Surface Min/Max Range window to appear (Figure 4.12.5-11). The user can enter a range of values that is desired to be plotted. All values less than the minimum value and greater than the maximum value will not be plotted. The minimum value to be plotted may be entered in the Minimum Value text field. The maximum value to be plotted may be entered in the Maximum Value text field. The user can select the number of contour levels desired by entering the number in the Contour Levels text field. Entering data in the Contour Levels text field is optional. The Contour Levels text fields will only appear in the Data Range Pop-up if the plot was a contour plot. Pressing the **Continue** button will cause a new plot to be drawn without the data range entered. Pressing the **Cancel** button closes the window with no further action.



Figure 4.12.5-12. EOSView Stats Pop-up

The EOSView Statistics Pop-up window will list the minimum value, maximum value and average value in a table. For a table created from an SDS the values will be taken from the entire table. For a table from a Vdata the values will be from each column. No statistics will be calculated for character data. To close this window press the **OK** button.

4.12.5.2.5 File Save Dialog

The user may save a table in EOSView in one of two ways. The table may be saved in either an ASCII format or it may be saved as a binary file. Selecting the save option will cause the File Save Dialog to appear. The user may then enter the name of the file that is desired to save the table into. EOSView will only save the table to a new file. The EOSView table save mechanism saves to the HDF ASCII Interchange Format (HAIF).

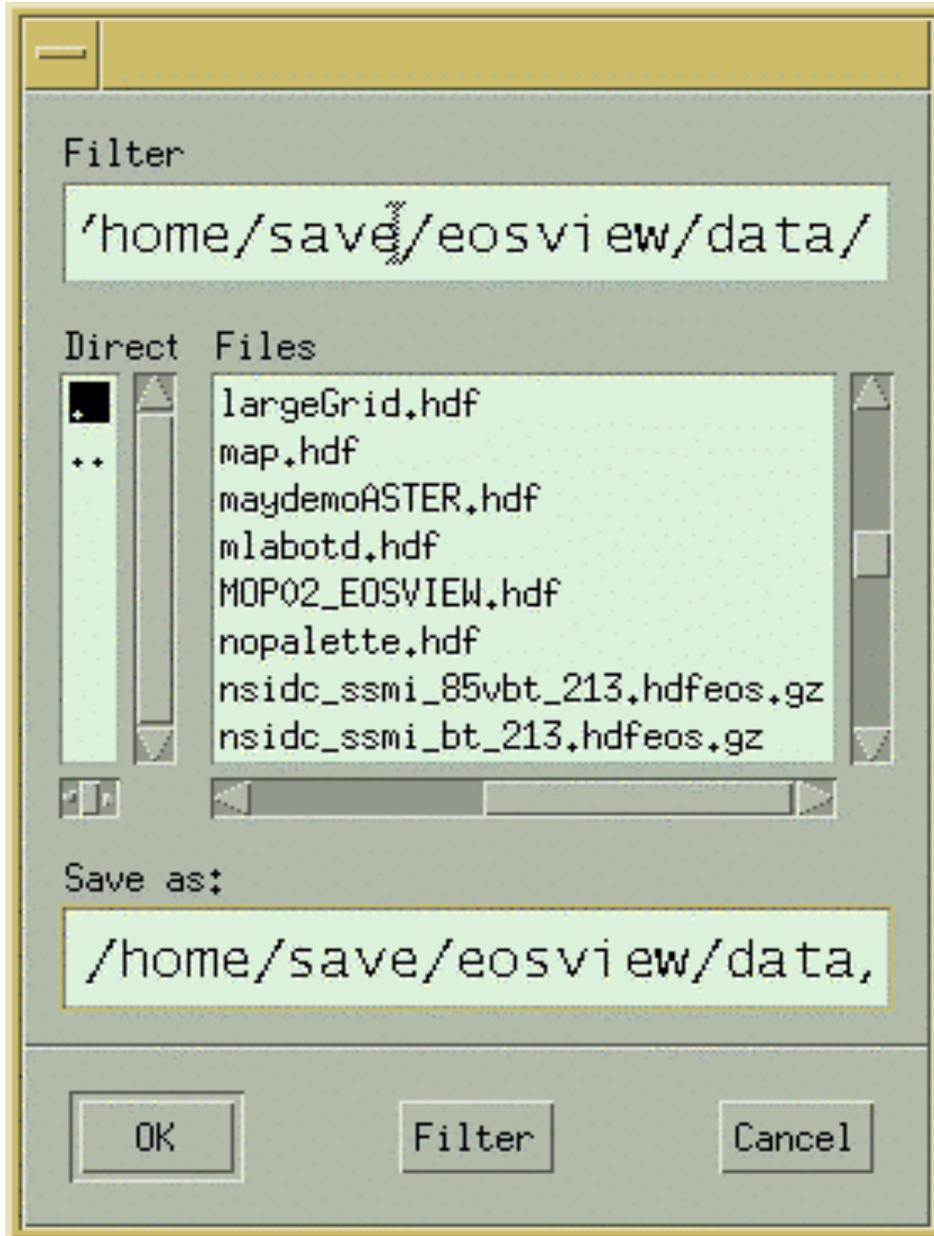


Figure 4.12.5-13. File Save Dialog

Table 4.12.5-4 describes the File Save fields.

Table 4.12.5-4. EOSView File Save Field Description

Field Name	Data Type	Size	Entry	Description
Filter	system generated (editable)	unlimited	required	displays file selection parameters to filter the directories
Directories	selection	unlimited	required	displays a list of directories
Files	selection	unlimited	required	displays a list of files
Save As	system generated (editable)	unlimited	required	displays the filename selection - user may enter to new filename in this field

In addition, the following pushbuttons are provided:

- **OK** – saves to the specified file
- **Filter** – filters through the directories in layers until the desired directory is displayed
- **Cancel** – closes the file save dialog

4.12.5.2.6 Make Image From Table Data

A pseudo-color image can be built from the data displayed in the Table. The image can be created by selecting **File - Make Image** from the menu bar of the EOSView - Table Pop-up. Selecting this option causes the Min/Max Values window to appear as shown in Figure 4.12.5-14. Table 4.12.5-5 describes the fields of the Min/Max Values Pop-up.

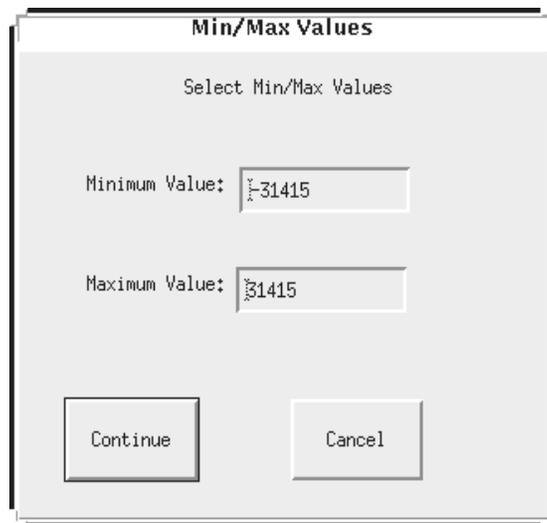


Figure 4.12.5-14. Min/Max Values Pop-up

Table 4.12.5-5. Min/Max Values Window Field Description

Field Name	Data Type	Size	Entry	Description
Minimum Value	integer or float (depending upon original data values)	N/A	required	Min value used for the image (field size is limited by the values that first appear when the window opens)
Maximum Value	Integer or float (depending upon original data values)	N/A	required	Max value used for the image (field size is limited by the values that first appear when the window opens)

From the Min/Max Values Window, the operator has the opportunity to enter the minimum and maximum values used for the image. Pressing the **Continue** button will cause the EOSView - Image Display Pop-up to appear (shown in Figure 4.12.5-15). The operator may cancel all actions by pressing the **Cancel** button.



Figure 4.12.5-15. "sol_azimuth" Image Display Pop-up

4.12.5.2.7 Image Display

The Image Display pop-up has the following pulldown menu options: File, Palette, Zooming, Cursor, Window, and Help.

- Inside the **File**, the Overlay option is active only if the image has been created from a grid table. The Overlay option allows the operator to have lat/lon lines drawn over the image or the operator may have an icon displayed at the point on the grid image. See Section 4.12.5.2.8 which describes the EOSView lat/lon window for symbols and cursor positioning. Selecting Close option exits the Image Display Window.
- The **Palette** pulldown menu allows the operator to select colors from the following types of palettes for comparison: Default, Greyscale, Antarctica, Rainbow, and World Colors. The first palette option is "Default" which is the palette provided within the HDF file of the image being displayed; if no palette was provided, the default color map is used. The second palette option is "Grayscale" which will be a black and white version of the image being displayed. The next three options are "Antarctica", "Rainbow" and "World Colors." These three palettes are provided as part of EOSView. Selecting one of these three palettes will cause the current image to use that palette. The "Use Entire Palette" option is not functional.
- The **Zooming** pulldown menu allows the operator to select from two zoom methods: Bilinear Interpolation and Nearest Neighbor. Bilinear Interpolation uses interpolation to calculate the probable color during an expansion/compression event; it gives a much smoother image during zooming. The second is Nearest Neighbor which uses sub-sampling or super sampling to determine probable color, e.g., two red pixels are now four red pixels during expansion.
- The **Cursor** options allows the operator to set the cursor at one of the positions. The first is "X-Y Position". The Operator will be prompted for an X-Y location and the cursor will be positioned at that location. In EOSView, position 0,0 is the lower left corner (see Section 4.12.5.2.9, which describes the EOSView - x-y cursor window). If the image has been created from a grid table, the operator may enter a lat/lon position and the cursor will be positioned to that location. See Section 4.12.5.2.8 which describes the "EOSView - lat/lon window (used for symbols and cursor positioning). If the image has been created from a swath table the operator may position the cursor at the selected scan line. The cursor will be placed at the beginning of the scanline. See Section 4.12.5.2.10 which describes the EOSView Scanline Cursor Window.
- The **Window** option lists in a pull-down menu all windows which are currently open. Opens any window selected. See Section 4.12.5.2.17.3 "Window Pulldown Menu."
- **Help** – see Section 4.12.5.2.17.5 "Help Pulldown Menu."

The Image Display also has the following pushbuttons: Zoom In and Zoom Out. It also has a panning feature as described .

- **Zoom In** and **Zoom Out** pushbuttons -- pressing the Zoom In button will cause the image to be zoomed in and re-drawn in the image window. Pressing the Zoom Out button will cause the image to be zoomed out until it returns to original size. The zoom factor will be displayed in the bottom left corner of the EOSView - Image Display Window on the status bar.

- **Pan Window** -- If the operator has zoomed in on an image, the operator may pan around the image by holding down the left mouse button while the cursor is in the postage stamp size image and moving it around. The cursor will be outlined by a box which indicates the portion of the image being displayed in the full size image window.

The Image Display Pop-up also has cursor tracking capabilities for all non-grid created images. Placing the cursor on the image and holding the left mouse button will cause the cursor position (in x-y coordinates) to be displayed on the left side of the status bar. If the image has been created from a grid table the cursor position will be displayed in lat/lon coordinates on the left side of the status bar.

4.12.5.2.8 Lat/Lon Symbol Pop-up

The EOSView Lat/Lon symbol (cursor) pop-up (Figure 4.12.5-16) allows the operator to enter the desired coordinate pair in one of two ways. Degrees-minutes-seconds (DMS radio button) allows the operator to type in the degrees (Deg), minutes (Min), and seconds (Sec) for the latitude and the longitude (the operator can switch between North (N), South (S), and East(E), West (W) by using the list buttons to the right of the text entry fields). The second method is by entering degrees (DEG radio button) in the degrees text fields. Also in this case the operator switch between North (N), South (S), and East(E), West (W) by using the list buttons to the right of the text entry fields. For both entry methods, hitting the “Ok” button will cause the cursor to be positioned or a symbol drawn at the desired location. Hitting the “Cancel” button will cancel the operation.

Lat/Lon Symbol Window

Enter Latitude/Longitude for symbol position:

Method

DMS

DEG

Lat: [] [] [] N [▼]

Lon: [] [] [] E [▼]

Degrees

Lat: [] N [▼]

Lon: [] E [▼]

OK Cancel

Figure 4.12.5-16. Lat/Lon Symbol Pop-up

Table 4.12.5-6 describes the parameters in the Lat/Lon Symbol Window.

Table 4.12.5-6. Lat/Lon Symbol Window Field Description

Field Name	Data Type	Size	Entry	Description
Lat (DMS)	float	N/A	required	Latitude (if DEG is selected)
Lon (DMS)	float	N/A	required	Longitude (if DEG is selected)
Lat/Lon (Deg)	float	N/A	required	Degrees of Latitude/Longitude (if DMS is selected)
Lat/Lon(Min)	float	N/A	required	Minutes of Latitude/Longitude (if DMS is selected)
Lat/Lon(Sec)	float	N/A	required	Seconds of Latitude/Longitude (if DMS is selected)

4.12.5.2.9 X-Y Cursor Window

The operator may enter the X-Y coordinates to have the cursor positioned by using the EOSView X-Y cursor pop-up. The operator may enter the desired X-Y location in the corresponding X-Y text field. The X-Y limits are placed to the right of the text fields. Hitting the “Ok” button will cause the cursor to be placed at the desired location in the image. Hitting the “Cancel” button will cancel the operation.

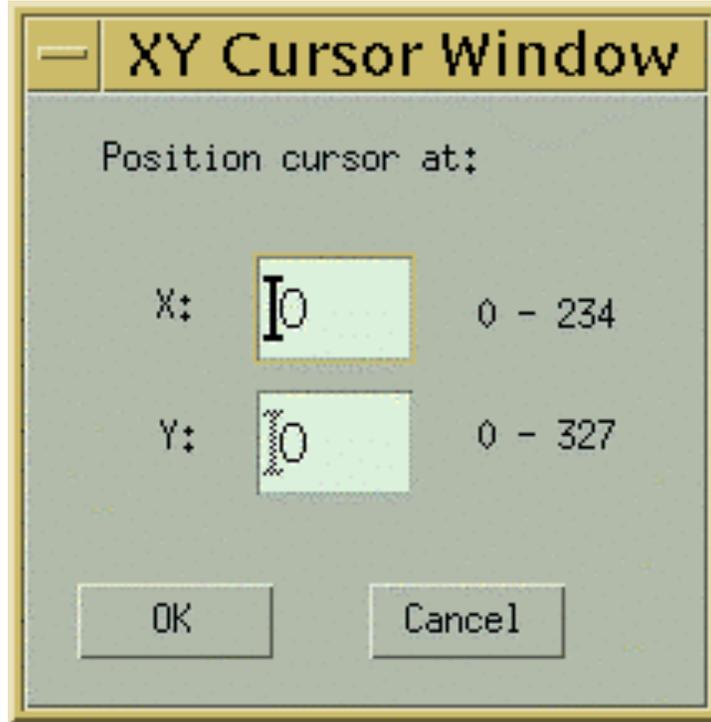


Figure 4.12.5-17. X-Y Cursor Pop-up

Table 4.12.5-7 describes the parameters in the X-Y Cursor Pop-up.

Table 4.12.5-7. X-Y Cursor Window Field Description

Field Name	Data Type	Size	Entry	Description
X:	integer	N/A	required	X horizontal coordinate (max accepted value is listed to the right of the text field)
Y:	integer	N/A	required	Y vertical coordinate (max accepted value is listed to the right of the text field)

4.12.5.2.10 ScanLine Cursor Window

If the image was created from a Swath table the operator may position the cursor to the beginning of the scanline by using the EOSView - ScanLine Cursor Pop-up. Moving the slider left and right will cause the scanline value below the slider to decrease and increase, respectively. Once the desired scanline is achieved, hitting the “Ok” button will cause the cursor to be placed at the beginning of the scanline. Hitting the “Cancel” button will cancel the operation.

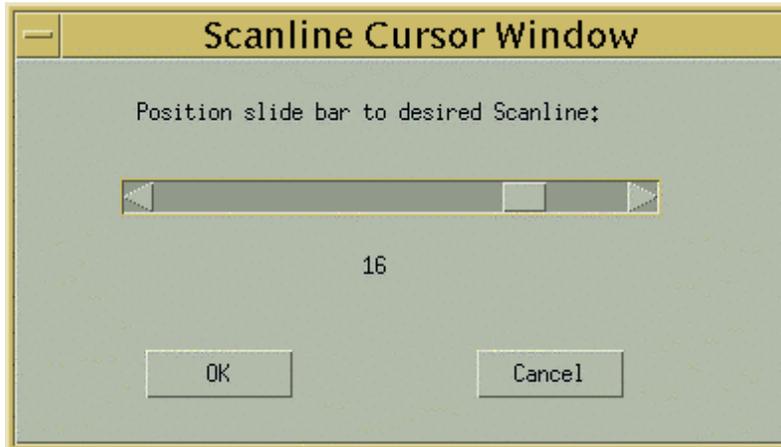


Figure 4.12.5-18. Scanline Cursor Pop-up

4.12.5.2.11 Vdata

In this example, the packVdata1.hdf file was selected from the File Selection dialog, bringing up the Vdata File Contents Pop-up (see Figure 4.12.5-19).

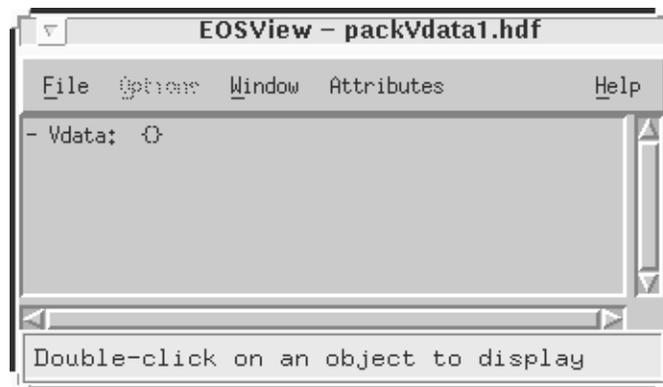


Figure 4.12.5-19. File Contents Pop-up Containing Vdata

Double-clicking on the Vdata entry brings up the “EOSView - VData Field Select” pop-up (shown in Figure 4.12.5-20). This window lists all the field names in the selected Vdata. The operator may select one or more fields for display. If the fields contain multiple values for a field, then that field will appear in its own table.

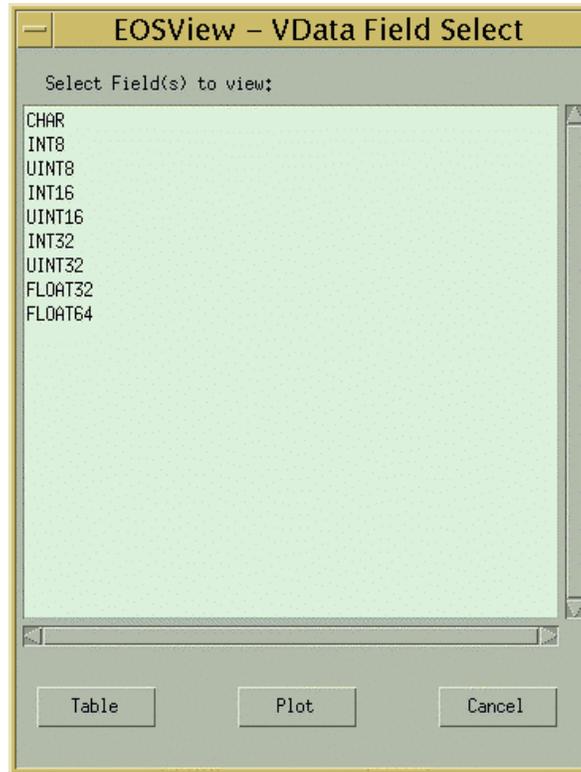


Figure 4.12.5-20. EOSView - Vdata Field Select Pop-up

Table button - Once the operator has selected the fields desired, pressing the table button will cause the Vdata to appear in a table.

0	65	65
1	66	66
2	67	67
3	68	68
4	69	69
5	70	70
6	71	71
7	72	72
8	73	73
9	74	74
10	75	75
11	76	76
12	77	77
13	78	78
14	79	79
15	80	80
16	81	81
17	82	82
18	83	83
19	84	84
20	85	85
21	86	86
22	87	87

Figure 4.12.5-21. Table containing Vdata field Pop-up

Plot button - The operator may select one or two non-character data fields and have the data plotted by pressing the plot button (see Figure 4.12.5-22).

Cancel button - Cancels all actions

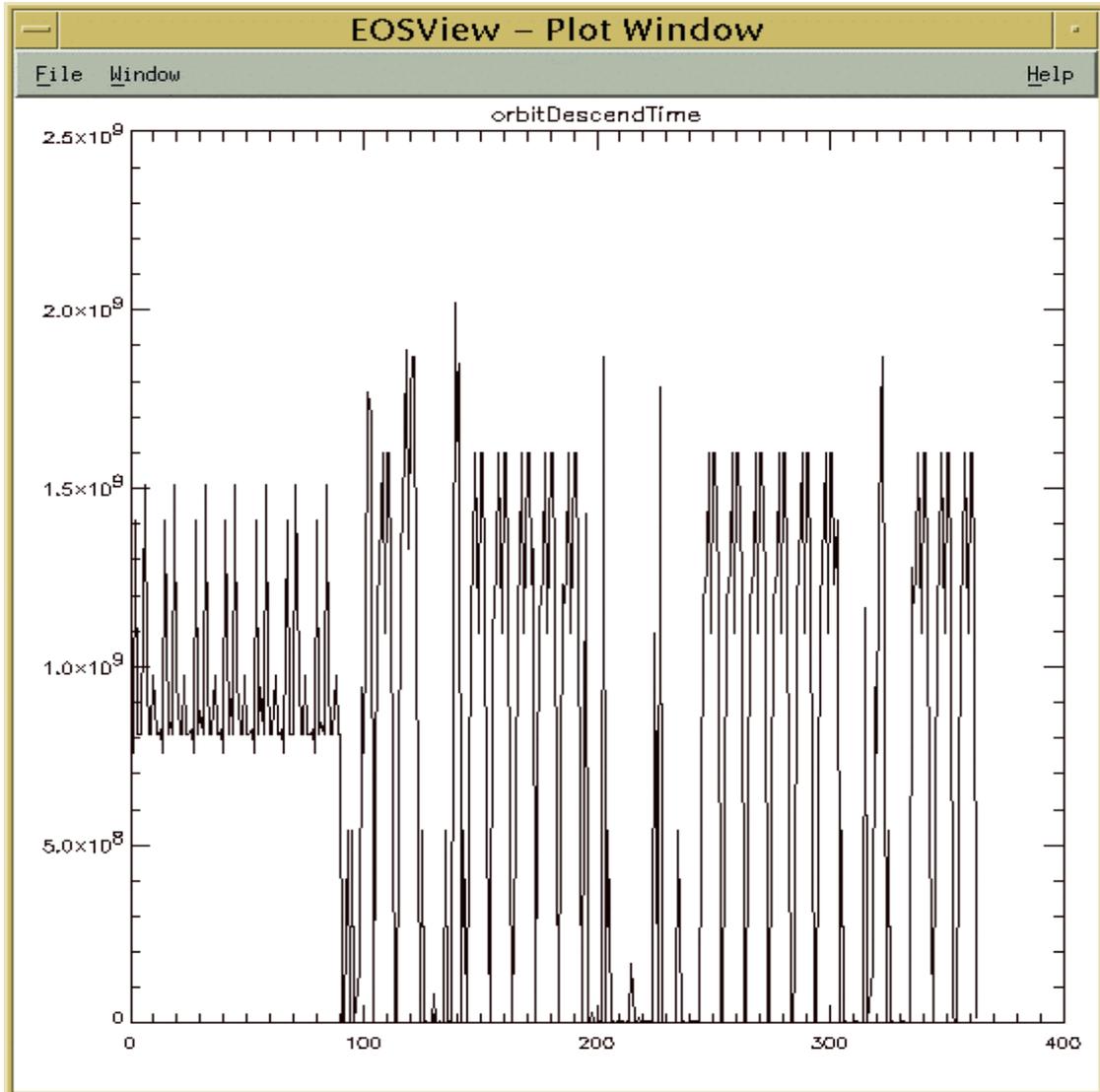


Figure 4.12-22. Plot Pop-up

The Plot Pop-up created from the Vdata Field Select window contains the following menu options:

- The **F**ile options allows the user to close the window by selecting **C**lose.
- The **W**indow option lists in a pull-down menu all windows which are currently open. Opens any window selected. See Section 5.2.22 “Window Pulldown Menu.”

4.12.5.2.12 VGroup

If the object in the File Contents Display Window is a **Vgroup**, the contents of the VGroup will be added to the list and the list will be re-drawn in the list box. Clicking on a VGroup that has already had the contents expanded will cause the contents of the VGroup to disappear and the list will be re-drawn in the list box. Figure 4.12.5-23 shows several expanded and unexpanded Vgroup categories.

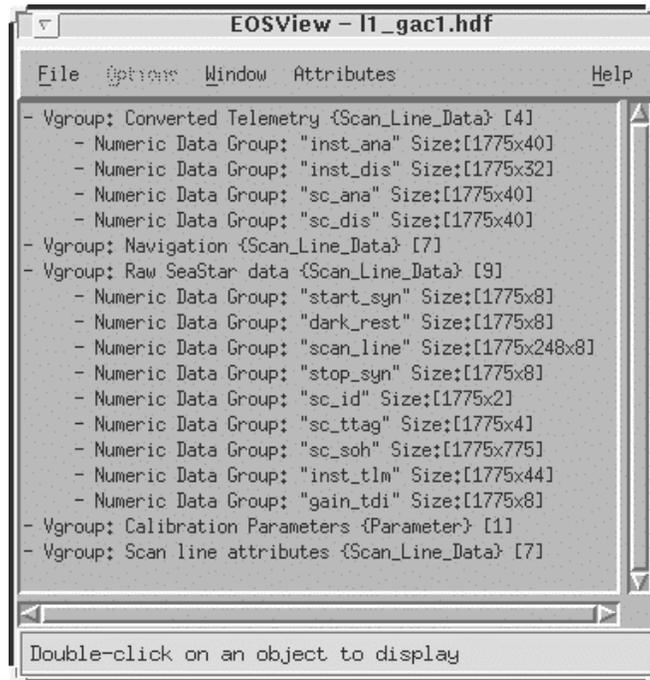


Figure 4.12.5-23. File Contents Pop-up containing Vgroups

4.12.5.2.13 Raster Image

In this example, the alltovs.hdf file was selected from the File Selection dialog, bringing up the File Contents Display Window shown in Figure 4.12.5-24.

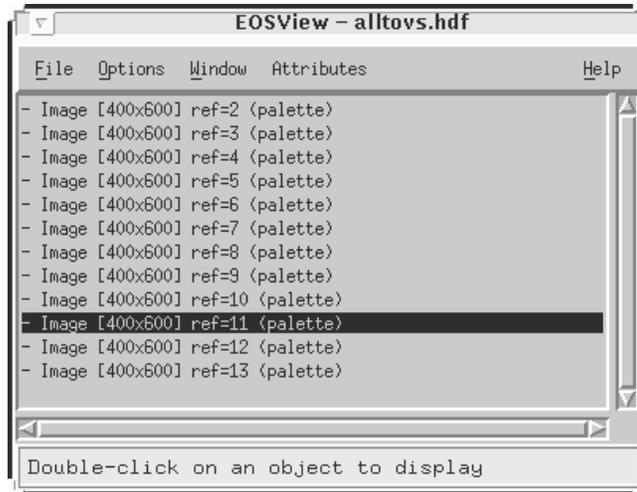


Figure 4.12.5-24. File Contents Pop-up containing Raster Images

Clicking on a Raster Image Group will cause the image to be drawn in an EOSView - Image Display Pop-up (see Figure 4.12.5-25).

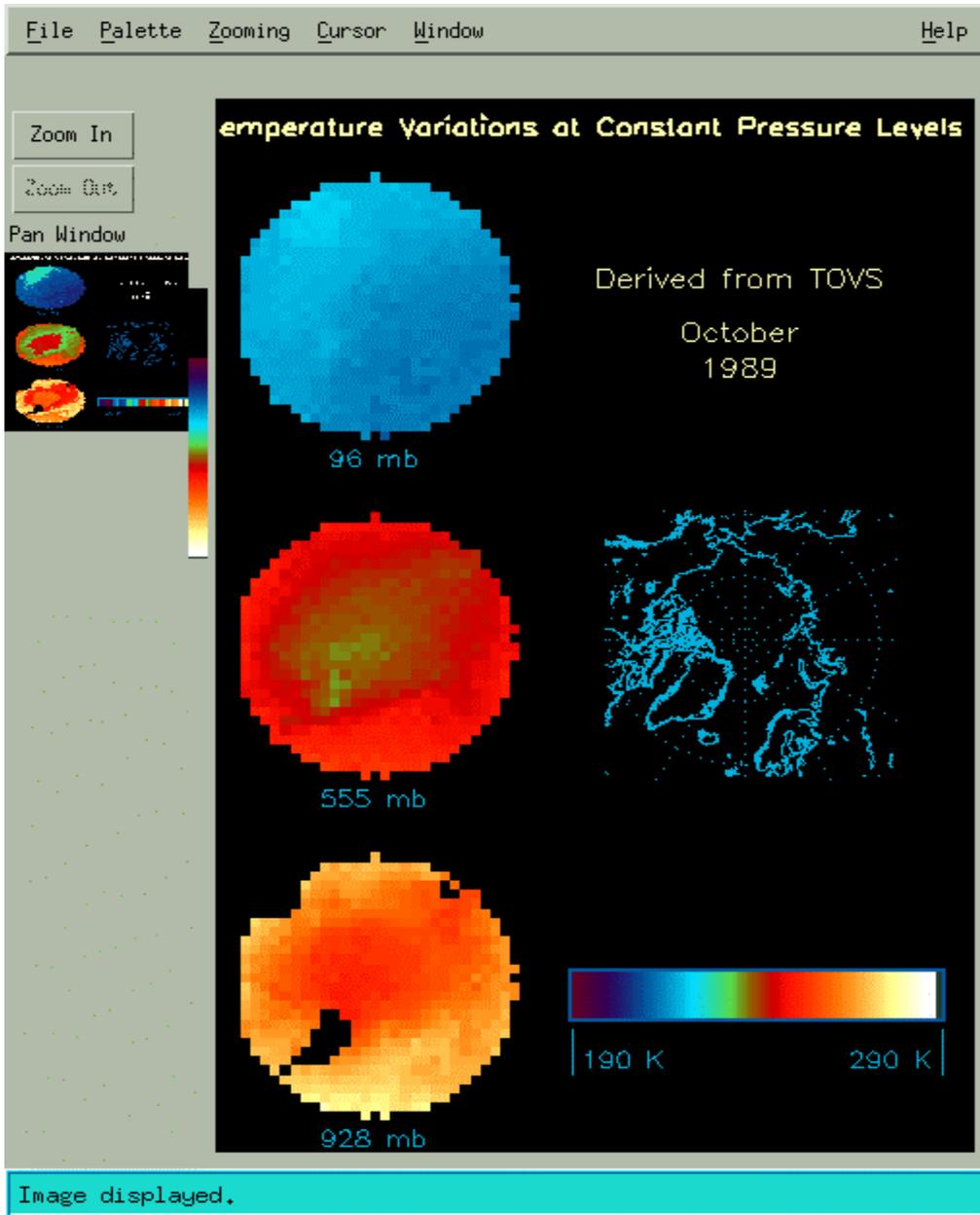


Figure 4.12.5-25. Raster Image Pop-up

A Raster image is different than the pseudo-color image shown in Section 4.12.5.2.3 since this image is not drawn from data. It is simply a visual depiction of an object. The menus and pushbuttons for this window are the same as those described for the pseudo-color display.

4.12.5.2.14 EOSView Grid Select GUI

In this example, the GridFile.hdf was selected from the File Selection dialog, bringing up the GridFile File Contents Display shown in Figure 4.12.5-26.

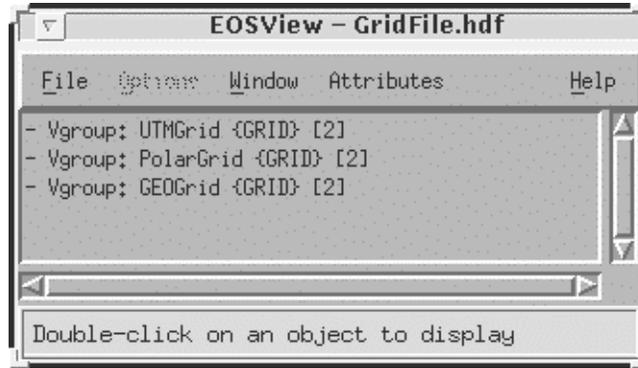


Figure 4.12.5-26. Grid File Contents Display Pop-up

Double-clicking on a selection (in this case, the object *Vgroup: UTMGrid {GRID} [2]* was selected) brings up the Grid Select Pop-up shown in Figure 4.12.5-27.

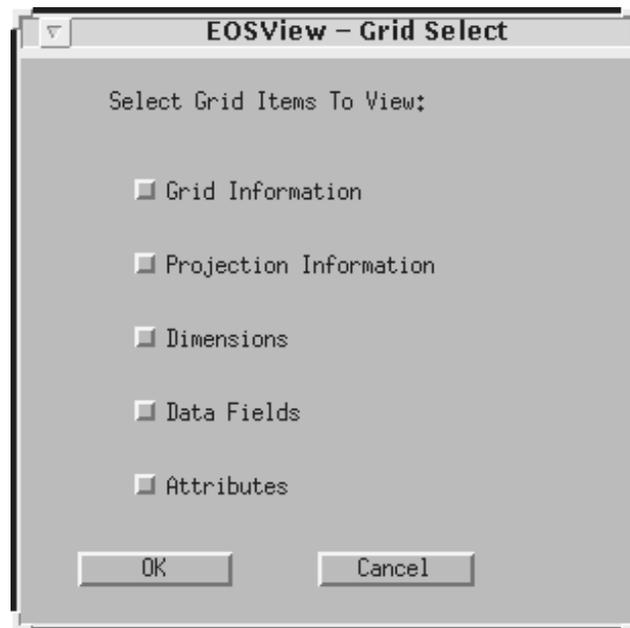


Figure 4.12.5-27. Grid Select Pop-up

All of the following options are available for selection: Grid Information, Projection Information, Dimensions, Data Fields, and Attributes. Selecting **OK** will bring up windows for all the items selected. Clicking on **Cancel** will return the operator to File Contents Window. Assuming that all the items have been selected, the following windows will appear:

Grid Information Dialog

To view a summary of a selected Grid object, click on the Grid Information checkbox. The Grid Information dialog pop-up (shown in Figure 4.12.5-28) displays information about the selected grid such as X-Dimension value, Y-Dimension value, Upper Left Point values, and Lower Right Point values.



Figure 4.12.5-28. Grid Information Dialog Pop-up

This window can be closed by pressing the **OK** button.

Projection Information

To view the Projection Information of the selected Grid object, click on the Projection Information checkbox in the EOSView - Grid Select window and press the **OK** button. This will cause the EOSView - Grid Projection Information pop-up shown in Figure 4.12.5-29 to appear.



Figure 4.12.5-29. Projection Information Pop-up

The Projection Information pop-up displays information about the projection of the selected grid in a dialog box. The first item displayed is the Projection itself. If the projection is Universal Transverse Mercator, the next item is displayed in the Zone Code. For any other projection the next items displayed are the thirteen (13) Projection Parameters. This window can be closed by pressing the **OK** button.

Dimensions

To view the dimensions of the selected Grid object, click on the Dimensions checkbox in the EOSView - Grid Select pop-up and press the **OK** button. This will cause the EOSView - Grid Dimensions window (shown in Figure 4.12.5-30) to appear.

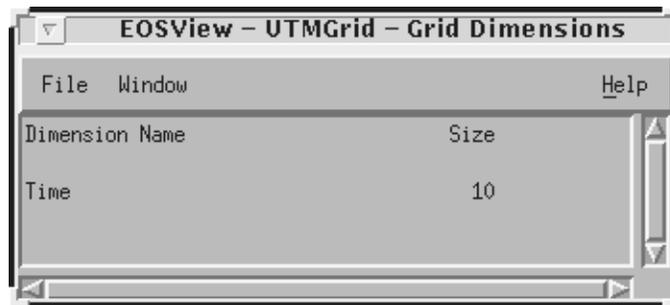


Figure 4.12.5-30. Grid Dimensions Pop-up

This window lists Dimension Names and Sizes for the selected Grid in table form in a scrollable window. The items listed are non-selectable and are for display/verification purposes only.

Data Fields

To view the Data Fields of the selected Grid object simply click on the Data Fields checkbox in the EOSView - Grid Select pop-up and press the **OK** button. This will cause the EOSView - Grid Data Fields window (shown in Figure 4.12.5-31) to appear.

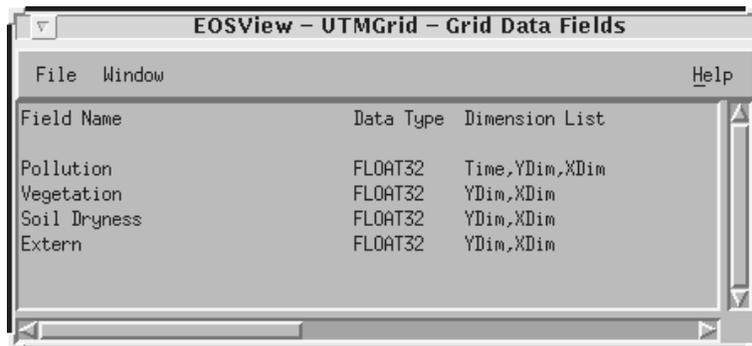


Figure 4.12.5-31. Grid Data Fields Pop-up

To view a slice of the Grid Geolocation/Data Field data, move the pointer over the object and double click the left mouse button. This will cause the EOSView - Start/Stride/Edge pop-up (shown in Figure 4.12.5-32) to appear.

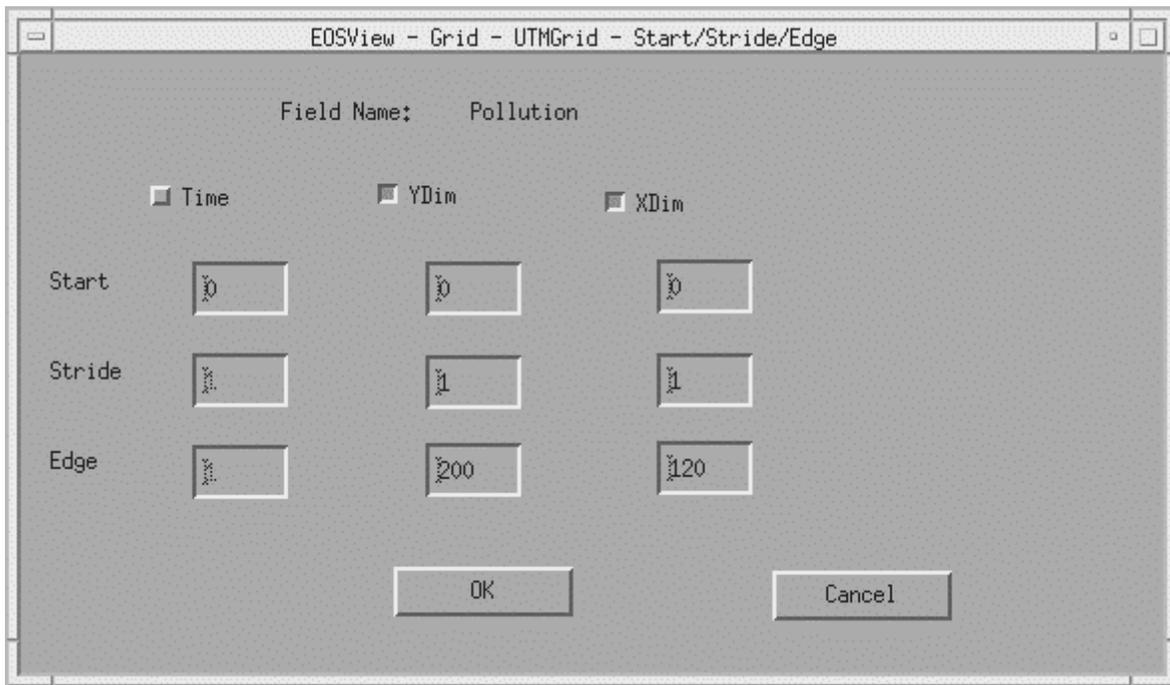


Figure 4.12.5-32. Start/Stride/Edge Pop-up

Table 4.12.5-8 describes the Start/Stride/Edge pop-up fields.

Table 4.12.5-8. Start/Stride/Edge Pop-up Field Description

Field Name	Data Type	Size	Entry	Description
Start	Integer	N/A	required	Start for grid geolocation/data field data
Stride	Integer	N/A	required	Stride for grid geolocation/data field data
Edge	Integer	N/A	required	Edge for grid geolocation/data field data

This pop-up displays the Start, Stride, and Edge values for each dimension (there may be up to eight). The start value for each dimension may be edited but the stride and edge values may only be edited for the selected dimensions. This is a way of subsampling the data desired. A dimension may be selected by clicking on the check box next to the dimension name. A maximum of two dimensions may be selected since only a two dimensional table can be displayed.. Once the operator has entered the desired data the **OK** button may be pressed and the selected dimension

data will be displayed in the EOSView - Grid Table. For more information on a Table, building a pseudo-color image, and the Min/Max Values Pop-up, see Section 4.12.5.2.3. The operator may cancel all actions by pressing the **Cancel** button.

Note that if an input error occurs, a warning dialog (Figure 4.12.5-33) will appear, displaying the dimension name that is in error and a size total. The operator must meet the criteria in the formula displayed in the warning dialog. Click OK to return to the Start/Stride/Edge Window to re-enter the correct values.

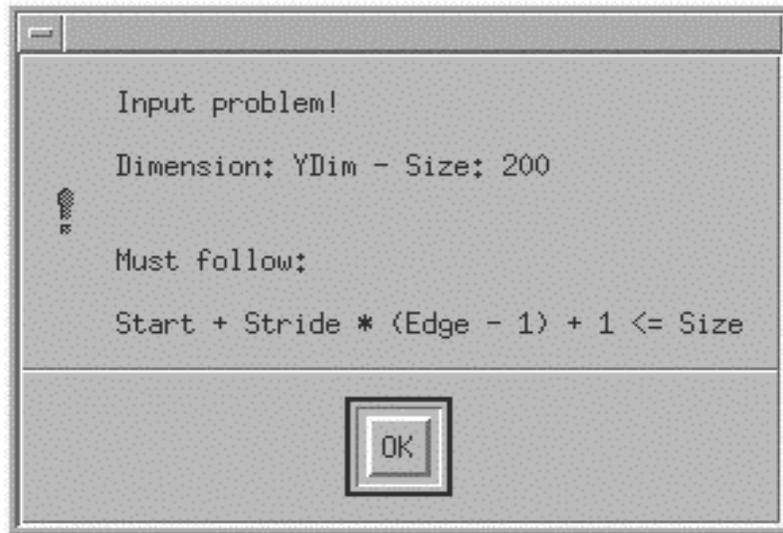


Figure 4.12.5-33. Warning Pop-up

Attributes

Clicking on the Attributes checkbox in the EOSView Grid Select Pop-up brings up the Attributes Text Display shown in Figure 4.12.5-34.

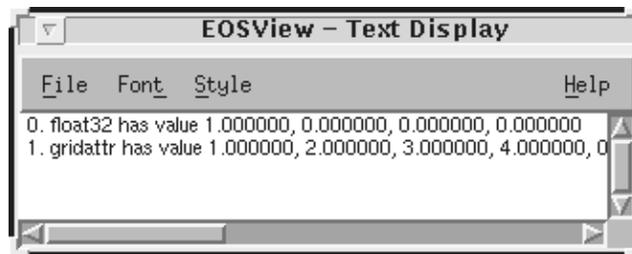


Figure 4.12.5-34. Attributes Text Display Pop-up

This display shows the attributes associated with a particular dataset. The text display can be closed from the **F**ile pulldown menu, the text can be modified using the **F**ont and **S**tyle pulldown menus, and additional help can be obtained from the **H**elp pulldown menu (see Section 4.12.5.2.17.5 “Help Pulldown Menu.”)

4.12.5.2.15 EOSView Swath Select

In this example, the SwathFile.hdf file was selected from the File Selection dialog, bringing up the File Contents Pop-up shown in Figure 4.12.5-35.

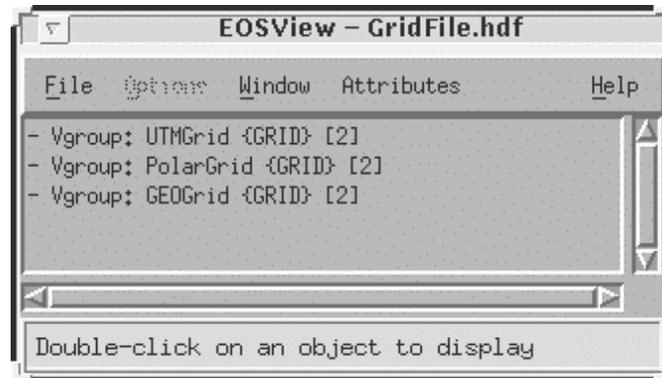


Figure 4.12.5-35. SwathFile File Select Pop-up

Double clicking on an item in the File Select window brings up the Swath Select Pop-up shown in Figure 4.12.5-36.

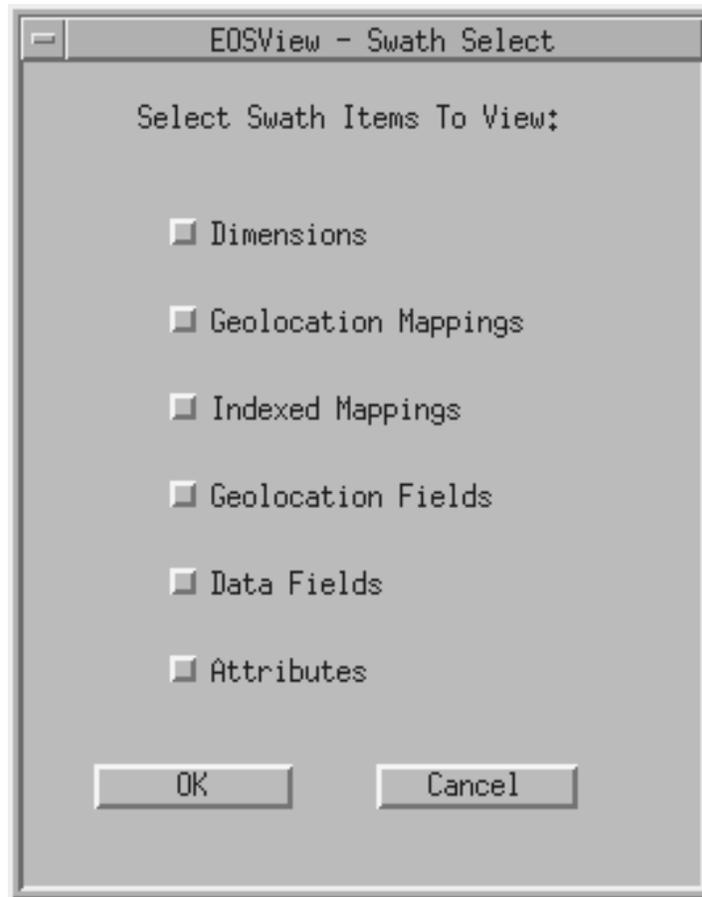


Figure 4.12.5-36. Swath Selection Pop-up

As many options desired can be selected from the following list: Dimensions, Geolocation Mappings, Indexed Mappings, Geolocation Fields, Data Fields, and Attributes. Selecting OK will bring up windows for all the items selected. Clicking on Cancel will return the operator to the main Swath screen. Assuming that all the items have been selected, the following windows will appear.

Dimensions

To view the dimensions of the selected Swath object, click on the Dimensions checkbox in the EOSView - Swath Select pop-up and press the OK button. This will cause the EOSView - Swath Dimensions pop-up to appear. This window lists the Dimension Names and Sizes for the selected Swath in a table form in a scrollable window. The items listed are non-selectable and are for display/verification purposes only.

Geolocation Mappings

To view the Geolocation Mappings of the selected Swath object, click on the Geolocation Mappings checkbox in the EOSView - Swath Select pop-up and press the OK button. This will cause the EOSView - Swath Geolocation Mappings window (shown in Figure 4.12.5-37) to appear.

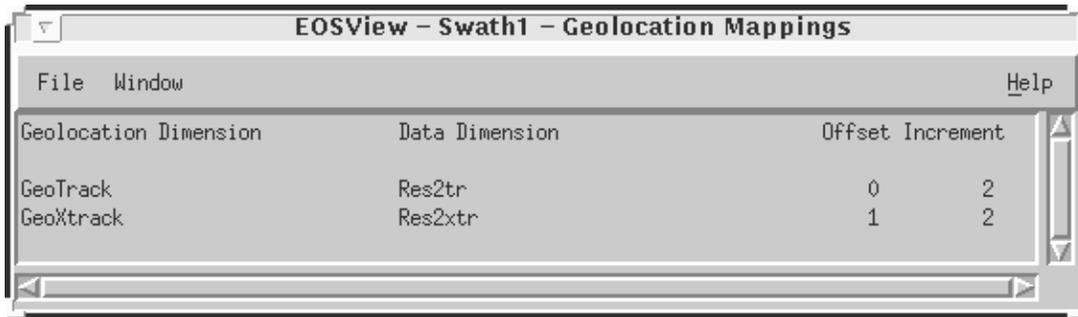


Figure 4.12.5-37. Swath Geolocation Mappings Pop-up

This window lists the Geolocation Dimensions, Data Dimensions, Offsets, and Increments for the selected Swath in a table form in a scrollable window. The items listed are non-selectable and are for display/verification purposes only.

Indexed Mappings

To view the Indexed Mappings of the selected Swath object, click on the Indexed Mappings checkbox in the EOSView - Swath Select pop-up and press the OK button. This will cause the EOSView - Swath Indexed Mappings pop-up (shown in Figure 4.12.5-38) to appear.

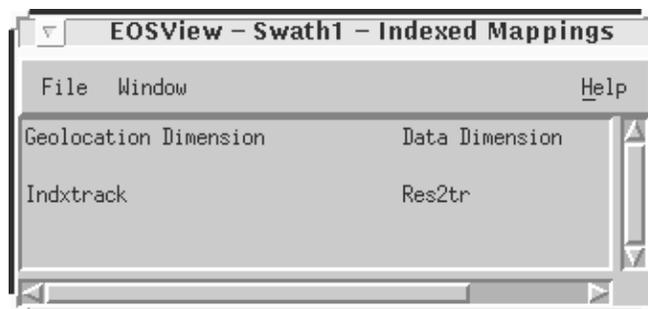


Figure 4.12.5-38. Swath Indexed Mappings Pop-up

Viewing the size of the mapping may be performed by moving the pointer over the object and double clicking the left mouse button. This will cause the EOSView - Indexed Mapping Sizes pop-up (shown in Figure 4.12.5-39) to appear.

Geo Index	Data Index
0	0
1	1
2	3
3	6
4	7
5	8
6	11
7	12
8	14
9	24
10	32
11	30

Figure 4.12.5-39. Index Mapping Sizes Pop-up

This window lists the Geolocation Indices and Data Indices for the selected Swath in a table form in a scrollable window. The items listed are non-selectable and are for display/verification purposes only. The window can be closed by selecting “Close” from the File menu.

Geolocation Fields

To view the Geolocation Fields of the selected Swath object, click on the Geolocation Fields checkbox in the EOSView - Swath Select pop-up and press the OK button. This will cause the EOSView - Swath Geolocation Fields window (shown in Figure 4.12.5-40) to appear.

Field Name	Data Type	Dimension List
Time1	FLOAT32	GeoTrack
Time2	FLOAT32	GeoTrack
Time3	FLOAT32	GeoTrack
OneD	FLOAT32	Unlim
LonLat	FLOAT32	TW0,GeoTrack,GeoXtrack
Longitude	FLOAT32	GeoTrack,GeoXtrack
Latitude	FLOAT32	GeoTrack,GeoXtrack
Temp1	FLOAT32	GeoTrack,GeoXtrack
Temp2	FLOAT32	GeoTrack,GeoXtrack

Figure 4.12.5-40. Swath Geolocation Fields Pop-up

Selecting a Swath Geolocation to view a slice of the data may be performed by moving the pointer over the object and double clicking the left mouse button. This will cause the EOSView - Start/Stride/Edge pop-up to appear. This window lists the Start, Stride, and Edge values for each dimension listed.

Data Fields

To view the Data Fields of the selected Swath object, click on the Data Fields checkbox in the EOSView - Swath Select pop-up and press the OK button. This will cause the EOSView - Swath Data Fields pop-up to appear.

Attributes

To view the attributes of the selected Swath object, click on the Attributes checkbox in the EOSView - Swath Select window and press the OK button.

4.12.5.2.16 Point Files

In this example, selecting PointFile.hdf from the File Select dialog brings up the File Contents pop-up shown in Figure 4.12.5-41.

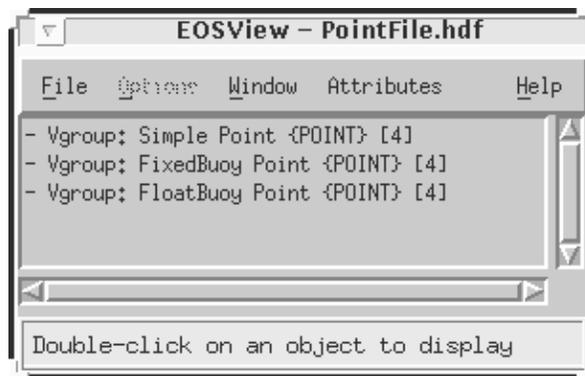


Figure 4.12.5-41. PointFile File Contents Pop-up

Double-clicking on an item in the PointFile pop-up (in this example, the *Vgroup: FloatBuoy Point {POINT} [4]* object is selected) opens the Point Select Pop-up shown in Figure 4.12.5-42.

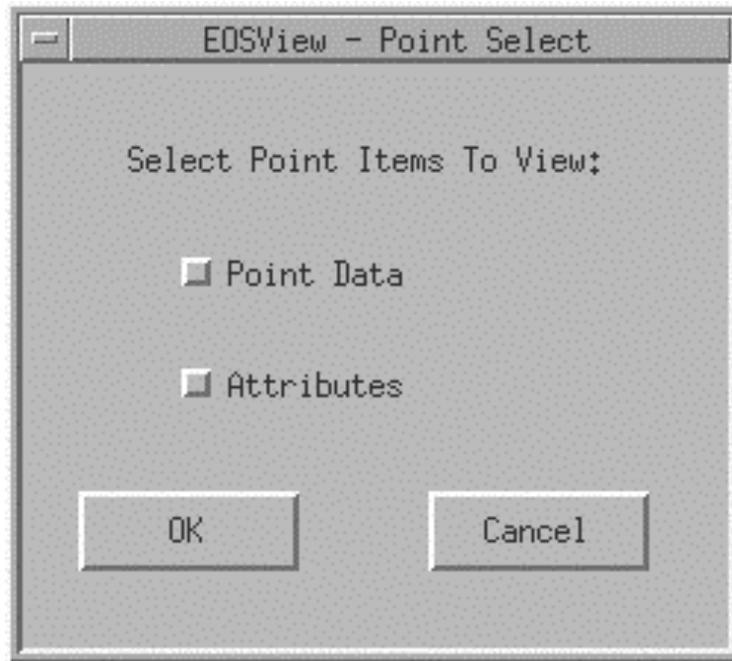


Figure 4.12.5-42. Point Select Pop-up

Either Point Data, Attributes or both options can be selected. Clicking on OK will open the corresponding windows for the options selected. Clicking on Cancel will return the operator to the main Point screen. Assuming both items have been selected, the windows as described below will appear.

Point Data

To view the Point Data of the selected Point object, simply click on the Point Data checkbox in the EOSView - Point Select window and press the OK button. This will cause the EOSView-Point Level Info pop-up to appear as shown in Figure 4.12.5-43.

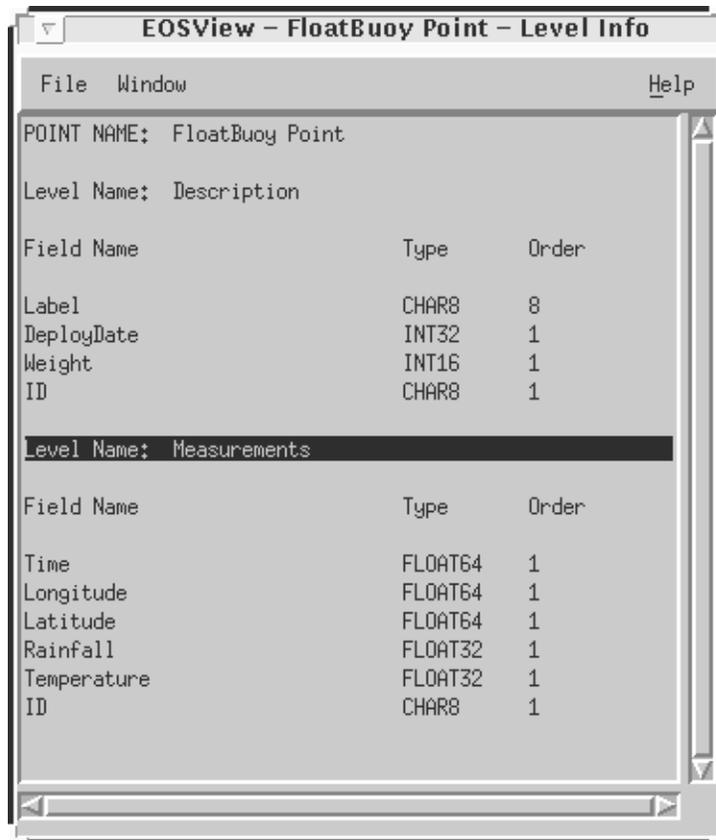


Figure 4.12.5-43. Point File Level Information Pop-up

Double-clicking on any **Level Name** will bring up the Vdata field select pop-up, shown in figure 4.12.5-44. The operation of the Vdata field select pop-up is described in Section 4.12.5.2.11.

Selecting a field or multiple fields will bring up the table window shown in Figure 4.12.5-44.

	0	1
0	34532000.000000	-56.795451
1	34655930.800000	-51.144523
2	34761777.400000	73.005232
3	34924857.400000	-51.289537
4	35010197.100000	-137.896586
5	35113965.300000	70.943919
6	35146430.000000	-141.334164
7	35180802.900000	-51.291848
8	35286334.700000	-141.921518
9	35359789.300000	-139.960931
10	35510873.500000	-56.995840
11	35583198.000000	73.083084
12	35741969.400000	-138.607937
13	35811504.600000	-52.535794
14	35890062.600000	71.995167
15	36015258.200000	-51.100562
16	36176650.200000	-141.603094
17	36292709.900000	-53.052534
18	36307577.300000	-53.937608
19	36384294.900000	-55.381183
20	36576747.400000	-141.588561
21	36725342.200000	-51.199441
22	36758333.400000	-138.998481

Figure 4.12.5-44. Vdata Table Pop-up

The data in this table can be saved by selecting Save from the File pulldown menu. The statistics of this table may be viewed by selecting Statistics from the File pulldown menu. To close this window select Close from the file pulldown menu.

Attributes

To view the attributes of the selected Point Select object, click on the Attributes checkbox in the EOSView - Point Select window and press the OK button. This window is similar to the Grid file attributes pop-up described in Section 4.12.5.2.14 “Attributes.”

4.12.5.2.17 Pulldown Menus

The File Contents Displays all have a common pulldown menu structure with the following options: File, Options, Window, Attributes, and Help. These are described in the sections below.

4.12.5.2.17.1 File Pulldown Menu

The File pulldown menu consists of the following options: File Info and Close. The File Info pulldown menu selection allows the operator to bring up information on the number of Raster Image Groups, Scientific Data Groups, Palettes, Vgroups, LoneVdata, and Annotations in the form of a File Information dialog as shown in Figure 4.12.5-45.

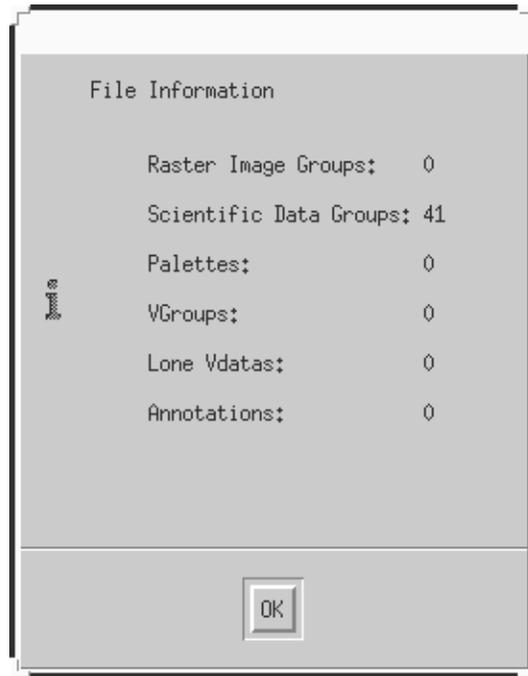


Figure 4.12.5-45. File Information Dialog

Clicking on **OK** button takes the operator back to the File Contents Window for the HDF file.

4.12.5.2.17.2 Options Pulldown Menu

The Options pulldown menu and its **Animate images** selection becomes sensitized when the selected file contains multiple Raster Image Groups. This will cause all the images to be lined up and displayed in order in an EOSView - Animation Window. The Animation Window is depicted in Figure 4.12.5-46, with different frames of an actual animation shown (skull.hdf file).

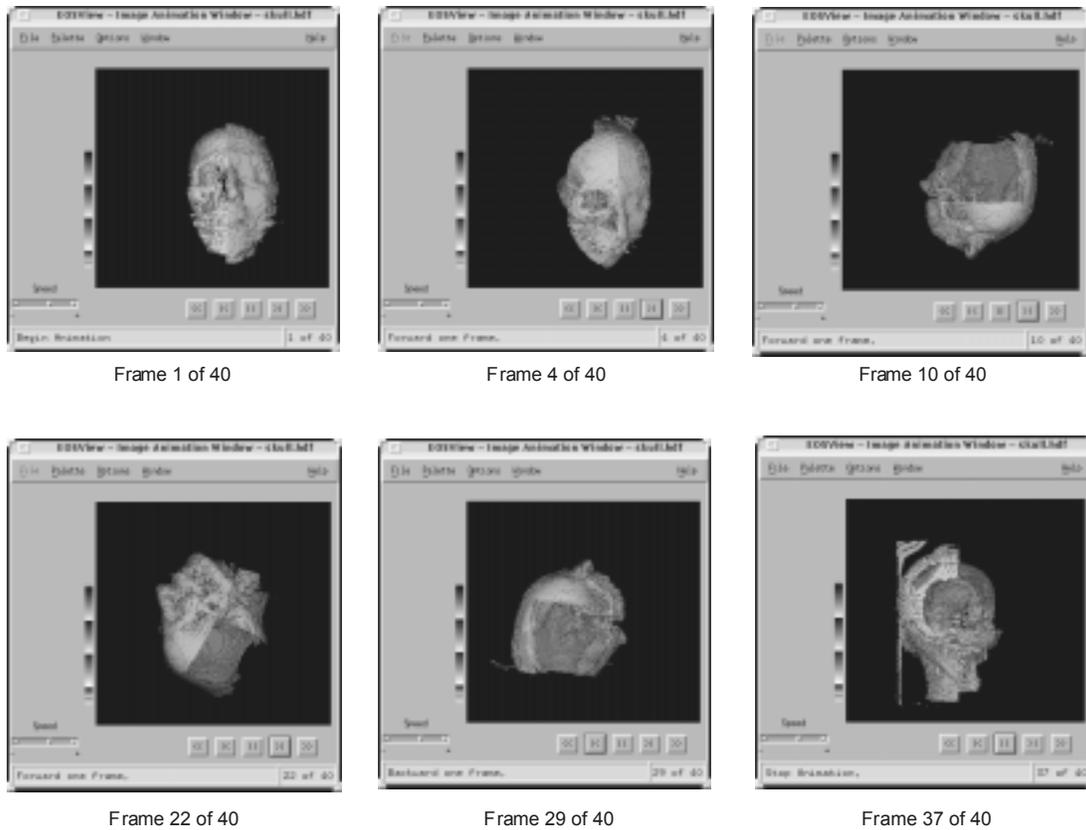


Figure 4.12.5-46. Animation Window Pop-up

The Animation Window has the following features:

- **Closing Animation Window** – The Close option on the menu bar of the animation window will cause the animation window to close.
- **Palette** – see Section 4.12.5.2.7 for a description of the Image Display palette.
- **Modes** -- There are three modes of animation. These modes may be selected by selecting the Options - Modes options of the animation window menu bar.
 - The first option "Stop at end" will display the images until the last image or first image is displayed. This is based upon what direction was selected for animation.
 - The second option "Continuous run" will cause the animation to go into an endless loop in the direction selected until the stop button is pressed.
 - The third option "Bounce" will cause the animation to run back and forth in forward and reverse order until the stop button is pressed.

- **Speed Control** -- The speed control slider will adjust the speed of the animation to the desired speed. Moving the slider in the "+" direction will increase the animation speed while moving the slider in the "-" direction will cause the animation to decrease in speed.
- **Window** – see Section 4.12.5.2.17.3 “Window Pulldown Menu.”
- **Help** – see Section 4.12.5.2.17.5 “Help Pulldown Menu.”
- **Start/Stop Buttons** -- There are five buttons centered underneath the animation image. The five buttons are labeled "<<" "<" "||" ">" and ">>". These buttons are known as the Start/Stop Buttons.
 - The button labeled "<<" will cause the animation to begin in reverse direction.
 - The button labeled "<" will cause the animation image to decrease by one frame.
 - The button labeled "||" is the Stop button and will cause the animation to stop.
 - The button labeled ">" will cause the animation image to increase by one frame.
 - The button labeled ">>" will cause the animation to begin in forward direction.

The mode of operation of these buttons will be controlled by selecting the Modes option on the menu bar.

4.12.5.2.17.3 Windows Pulldown Menu

The Window pulldown menu lists all windows which are currently open. Any window selected from this list will be shuffled to the top. Figure 4.12.5-47 shows the Window pulldown menu provided when the EOSView Main Window, orbital.hdf, rainbow.hdf and skull.hdf files are open.

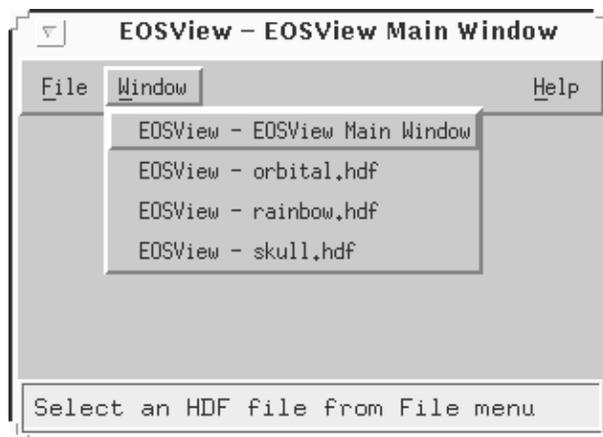


Figure 4.12.5-47. EOSView Main Screen Showing Window Pulldown Menu

The Window pulldown menu provides the same function on all other screens on which it appears.

4.12.5.2.17.4 Attributes Pulldown Menu

The Attributes option contains one pull-down menu item “Global...” which brings up a text file window (shown in Figure 4.12.5-48) with a list of attributes (e.g., parameters, values, version numbers) for the entire file or brings up a dialog which states that there are no attributes available.

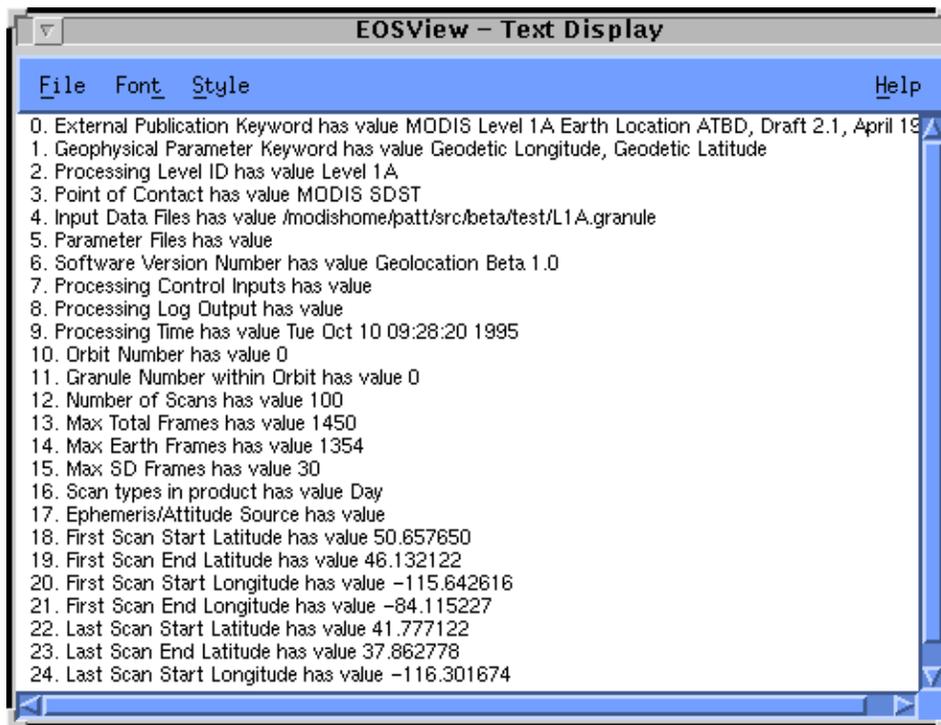


Figure 4.12.5-48. Text Display Pop-up

From the text window, the operator can do the following using the pull-down menus:

- **File** – exit the window
- **Font** – select from a list of fonts (e.g., courier, Helvetica). A box showing what the text looks like based on the selection is provided.
- **Styl**e – select from a list of styles (e.g., normal, bold, italic) and point sizes (e.g., 8 pt, 10 pt.)
- **Help** – see Section 4.12.5.2.17.5 “Help Pulldown Menu.”

4.12.5.2.17.5 Help Pulldown Menu

The Help option contains a pulldown menu with the following selections: help on context, on help, on window, keys, contents, index and version.

Help On Context – turns the mouse pointer into a “?” which can be clicked on an area of interest, bringing up help text for that item.

Help On Help – tells the operator how to use the EOSView on-line help feature (see Figure 4.12.5-49) to help understand how to navigate through the Help system using the on-line hypertext system.

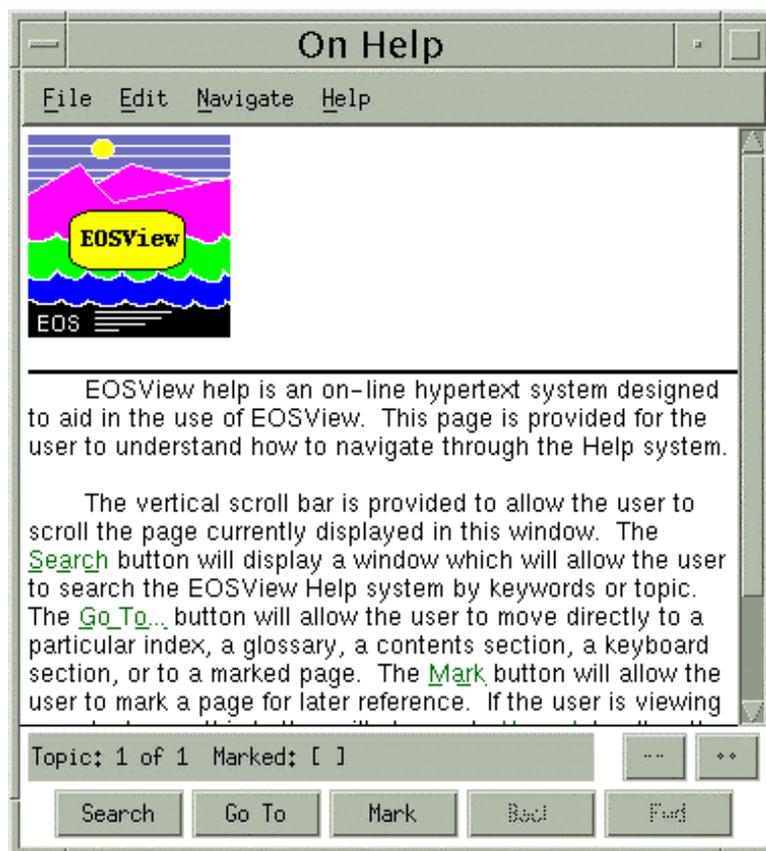


Figure 4.12.5-49. EOSView Online Help Pop-up

- **File** – allows the operator to exit the On Help window. Print and Print Setup are not available.
- **Edit** – allows the operator to Copy, Copy Part of a Topic, or Copy as Wrapped

- **Navigate** – allows the operator to search for a topic, go to a specified topic, bookmark items of interest, go forward and back to a topic (these items are available in the form of pushbuttons at the bottom of the screen), and view a previous or next topic.
- **Help** – provides help on how to use help and “about help” (not functional).

The On Help window provides the following pushbuttons:

- The "**Search...**" button provides a way to search the EOSView Help system in one of two ways. The operator may select to search by Topic in which case a list of topics will be displayed for the operator to choose from or the operator may select search by Keyword in which case the operator will be presented with a list of keywords from which to choose.
- The "**Go To...**" button allows the operator to move to one of five topics:
 1. Index - the help described in the Help - Index selection from the menu bar.
 2. Glossary - a defined glossary of selectable terms common to EOSView.
 3. the help described in the Help - Contents selection from the menu bar.
 4. the help described in the Help - On Keys selection from the menu bar.
 5. any marked page (see below).
- The "**Mark**" button allows the operator to mark a page. Once the page is marked the page appears in a list box in the "Topic Go to Dialog" box. The marked page may then be selected and immediately recalled. The "Mark" button will appear as "Unmark" when viewing a marked page.
- The "**Unmark**" button allows the operator to unmark a marked page. If the operator is currently viewing a marked page an "X" appears in the check box labeled "Marked:." Pressing the "Unmark" button will cause the "X" to disappear and the page will not appear in the list box of the "Topic Goto Dialog."
- The "**Back**" button will return the operator to the previously viewed page. The operator should think of the help system as a book. The back button will only appear sensitized if the previously viewed page would be logically backward from the point of current view.
- The "**Forward**" button will move the operator to the last forward page viewed. The operator should think of the help system as a book. The forward button will only appear sensitized if the previously viewed page would have a page number greater than the page being currently viewed.

Help On Window

The Help On Window is the same as the Help On Index Window shown below.

Help On Keys

When Help On Keys is selected from the Help pulldown menu, the following message will appear in a Keys Window: “EOSView uses no special keys to traverse through the program. To navigate through EOSView simply use the mouse and click on the options that are desired.”

Help On Contents

The Help On Contents window tells the operator that EOSView is a tool written to assist operators view the contents of HDF files and that it is capable of displaying the contents of files containing HDF-EOS data. More help can be obtained by selecting the topic desired (see Figure 4.12.5-50).

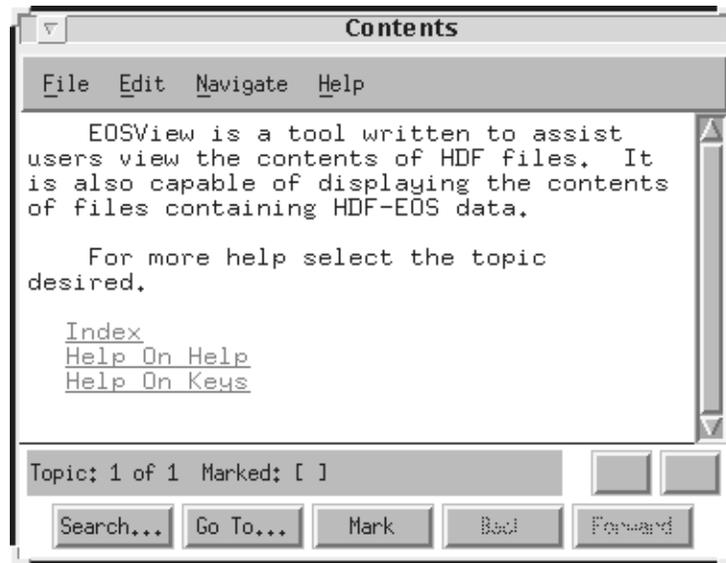


Figure 4.12.5-50. Help On Contents Pop-up

Help On Index

Selecting Help On Index brings up the Index window shown in Figure 4.12.5-51. This pop-up presents a list of each EOSView window and a list of hypertext help items.

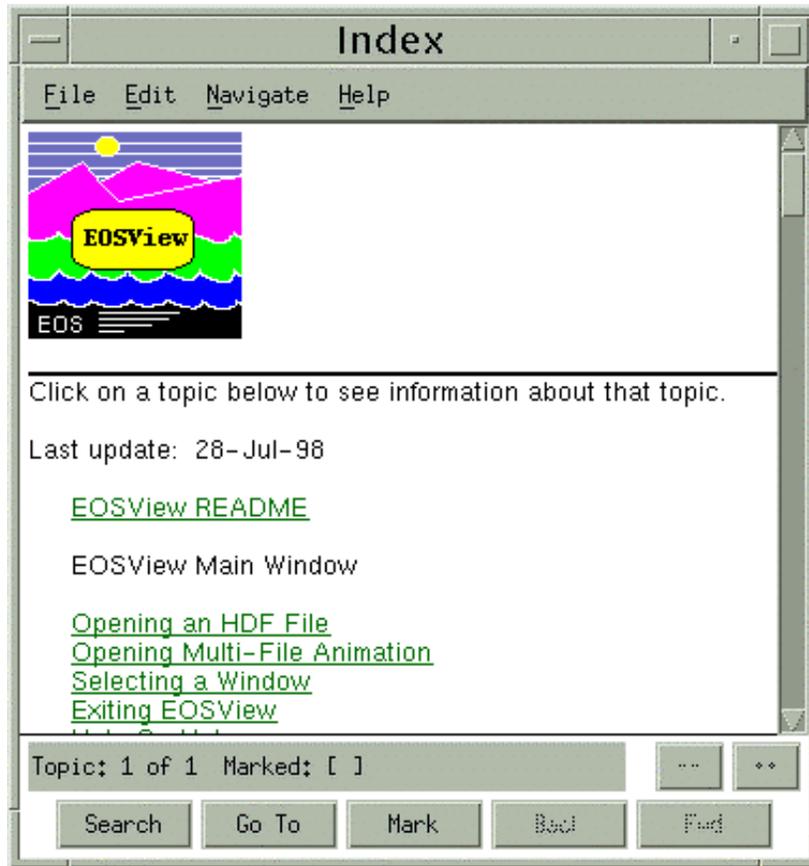


Figure 4.12.5-51. Help On Index Pop-up

Help On Version

Selecting Help On Version from the Help pulldown menu brings up the dialog shown in Figure 4.12.5-52.

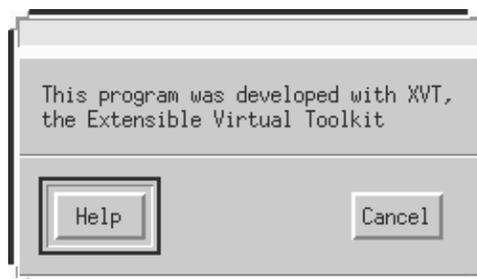


Figure 4.12.5-52. Help On Version Dialog

Clicking on the Help button takes the operator to the Help on Contents screen. Click on Cancel to close the dialog.

4.12.5.3 Required Operating Environment

For information on the operating environment, tunable parameters, and environment variables of the EOSView refer to the 920-TDx-013 “Custom Code Configuration Parameters” documentation series . The “x” refers to the installed location, e.g. 920-TDG-013 is for GSFC DAAC.

The following Table 4.12.5-9 identifies the supporting products this tool depends upon in order to function properly.

Table 4.12.5-9. Support Products and Protocols for EOSView

Product Dependence	Protocol Used	Comments
IDL	Internal I/F	Image and Plot Display
xvt	Internal I/F	GUI Builder

4.12.5.4 Databases

None.

4.12.5.5 Special Constraints

EOSView will read only HDF and HDF-EOS formatted files.

4.12.5.6 Outputs

Output from the EOSView tool are the data displayed on the GUI screen discussed in the previous 4.12.5.2 paragraph and related sub-paragraphs.

4.12.5.7 Event and Error Messages

See Appendix A.

4.12.5.8 Reports

None.

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4.12.6 User Registration

The User Registration GUI is a world wide web-based tool that provides a first-time EOSDIS user the ability to register on-line. During the registration process the user is asked to select a “home DAAC”. The selection operated by the user can be based either on geographical location of the DAAC (the closer the DAAC to the user site the more expedite the retrieval of scientific data) or based on the area of scientific interest specific to the DAAC. The EOSDIS opens an account for the user as a result of the registration request. Once the account is opened the EOSDIS provides enhanced order and access capabilities to the EOSDIS user. The information gathered during the registration process also allows the EOSDIS to provide accounting and billing service for the user. These services will be handled by the “home DAAC” selected by the user during the registration.

Table 4.12.6-1 provides a synopsis of the functions accomplished by the User Registration Tool.

Table 4.12.6-1. Common Functions Performed with the User Registration Tool

Operating Function	GUI	Description	When and Why to Use
Allow the user to select a “home DAAC”	User Registration - chose a home DAAC	Allow the users to specify a DAAC as home DAAC either because the data they are interested in are stored at that DAAC or because the DAAC is geographically the closest to the user location.	When the user decides to register and has to select where his information are going to be stored.
Gather user information	User Registration - Register	Allow the users to provide personal information including mailing addressing, scientific area of interest and professional/educational affiliation.	When the user decides to register and has to provide mandatory - and optional - information so that an account can be open. User related functions such as accounting and billing will based on this information.

4.12.6.1 Quick Start Using User Registration

This tool consist of two main web pages:

- User Registration - Choose a Home DAAC
- User Registration - Register

The user can access both web pages starting from the EOSDIS Home Page by typing in the proper URL, following a link within a web browser, or clicking on the User Registration icon, as described in the following Sections 4.12.6.1.1 and 4.12.6.1.2.

4.12.6.1.1 Invoking the ECS Home Page from the Command Line Interface

The User Registration Tool works under the assumption that the user decides to register after accessing the EOSDIS home page with a world wide web-based browser GUI. Hence, no command line is required to start the tool. The EOSDIS home page can be access via a link available in a web page where the EOSDIS services are advertised or it may be reached by typing in the URL from inside the web browser. The URL that has to be typed in has the following structure:

http://<ServerName>.[<DAACName>].ecs.nasa.gov:<Port#>/

where:

the <ServerName> is the name of the interface server used to provide the internet services at an EOSDIS DAAC;

the <DAACName> is an ID for an EOSDIS DAAC (e.g., gsf<ringID> where <ringID> is the one-letter ID that identifies the ring in the DAAC the <ServerName> belongs to); note that <DAACName> should be specified only if an operator tries to connect internally to the EOSDIS home page while the name resolution service should make unnecessary this step for an external user.

and the <Port#> is the number assigned to the http service on the server machine and is related to the mode for which the service is provide (e.g., 10000 is the default port number that is assigned to the OPS mode).

Typing in the above URL address accesses the EOSDIS home page, discussed in the following Section 4.12.6.2. From there the option to go through the registration process is provided via an available html link.

4.12.6.2 User Registration Main Screen

Upon connecting to the EOSDIS home page, as discussed in the previous Section 4.12.6.1.1, the User is presented with the HTML page shown in Figure 4.12.6-2.

Each EOSDIS page contains two frames: the Left Hand Side (LHS) frame that is common to all the HTML-based ECS tools and the Main frame that includes the tool-specific page, in this case the EOSDIS home page. The LHS frame provides access, through nine buttons, to several ECS resources and functionality that are described in greater details in other sections of this document and are only briefly introduced here for completeness.

- **Home** creates a connection with the EOSDIS Home page, as shown in Figure 4.12.6-2;
- **On-line Directory** is a link to the Earth Science Online Directory tool;
- **Data Retrieval** provides access to three data retrieval tools made available by EOSDIS: B0SOT, Version 0 WWW Gateway, and JEST, all described in other sections of this document;

- **Documents** links a list of Earth Science related documents stored by EOSDIS;
- **Glossary** links to a list of definitions of terms commonly used in the EOSDIS environment;
- **Info Exchange** provides reference to EOSDIS-related Newsgroups and Bulletin Boards;
- **Comments** allows the user to provide feedback to the EOSDIS Operations personnel;
- **Help** links to on-line context sensitive help;
- **Site Index** brings up a map of the entire EOSDIS web site.

The Main frame includes a number of HTML links. The only one concerned with the tool documented in the present section is the “**User Registration**”. Further details on this link are provided in the following Section 4.12.6.2.1.

Other links include the following:

- “**About EOSDIS**” links to documentation where the EOSDIS Web site high level overall purpose is explained to the newcomer user;
- “**Web and Java Tools**” connects with pages containing introductory technical documentation about tools offered by the EOSDIS system to optimize the retrieval of information and data available in the EOSDIS site;
- “**X/Motif Tools**” connects with a page from where several UNIX-based tools that allow to completely exploit the capabilities offered by the EOSDIS system can be downloaded;
- “**System Requirements**” displays a list of ECS recommended settings for Netscape for the most commonly used operating systems.

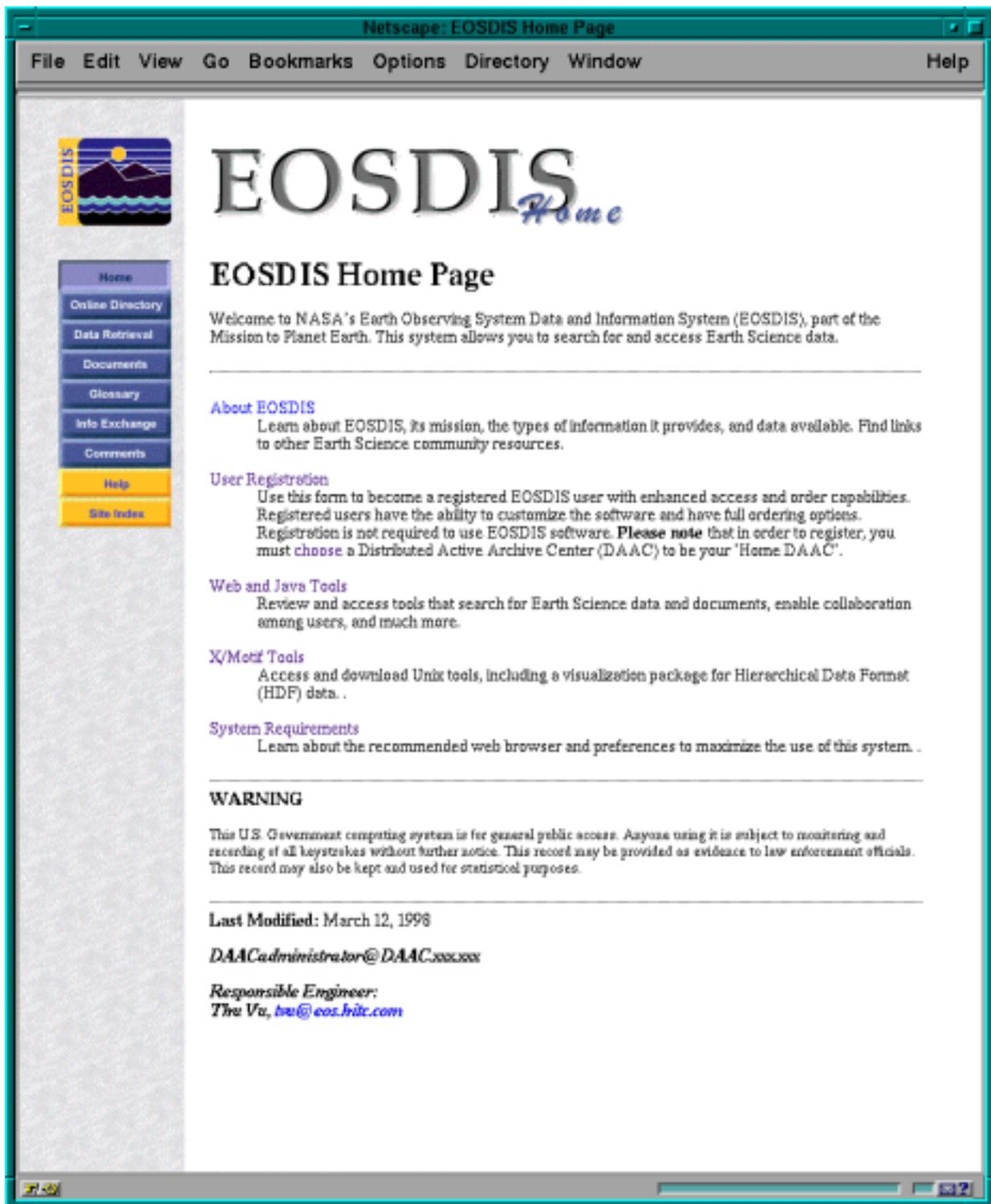


Figure 4.12.6-2. EODIS Home Page (Main Screen)

4.12.6.2.1 User Registration - Choose a Home DAAC Page

Clicking on the “User Registration” link shown on the EOSDIS Home Page brings up the “Choose a Home DAAC” page shown in the two Figures 4.12.6-3 and 4.12.6-4. Please note that this is a unique web page that has been broken down in two complementary figures in this document for readability purpose.

The web page is divided in three different regions.

The first one gives a brief explanation of the reasons why a home DAAC should be selected by the user (see Figure 4.12.6-3).

The second region allows the user to select from a table the preferred DAAC either based on the DAAC scientific area(s) of interest or based on the DAAC geographical location. Links are also available both to visit the DAAC web sites for gathering further information and to move directly to the proper registration page of the selected DAAC. Note that, as shown in Figure 4.12.6-3, not all of the listed DAACs are presently able to accept user registration applications.

Finally, the third region is a clickable map that takes the user directly to the registration page of the desired DAAC (refer to Figure 4.12.6-4). Also in this case some of the DAACs are shown as not presently able to accept user registration applications (their names appear grayed-out on the map).

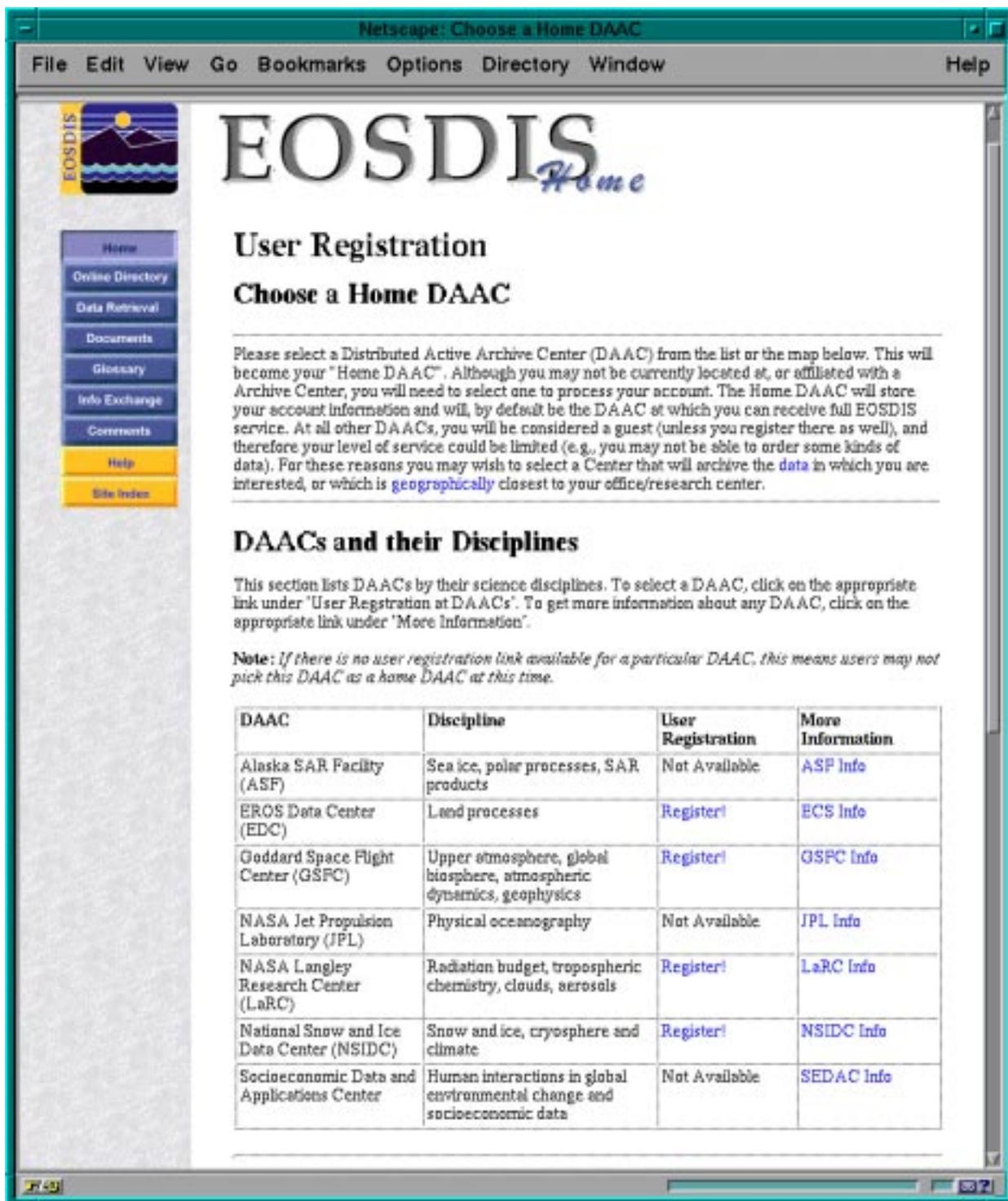


Figure 4.12.6-3. Choose a Home DAAC Page - Upper Portion

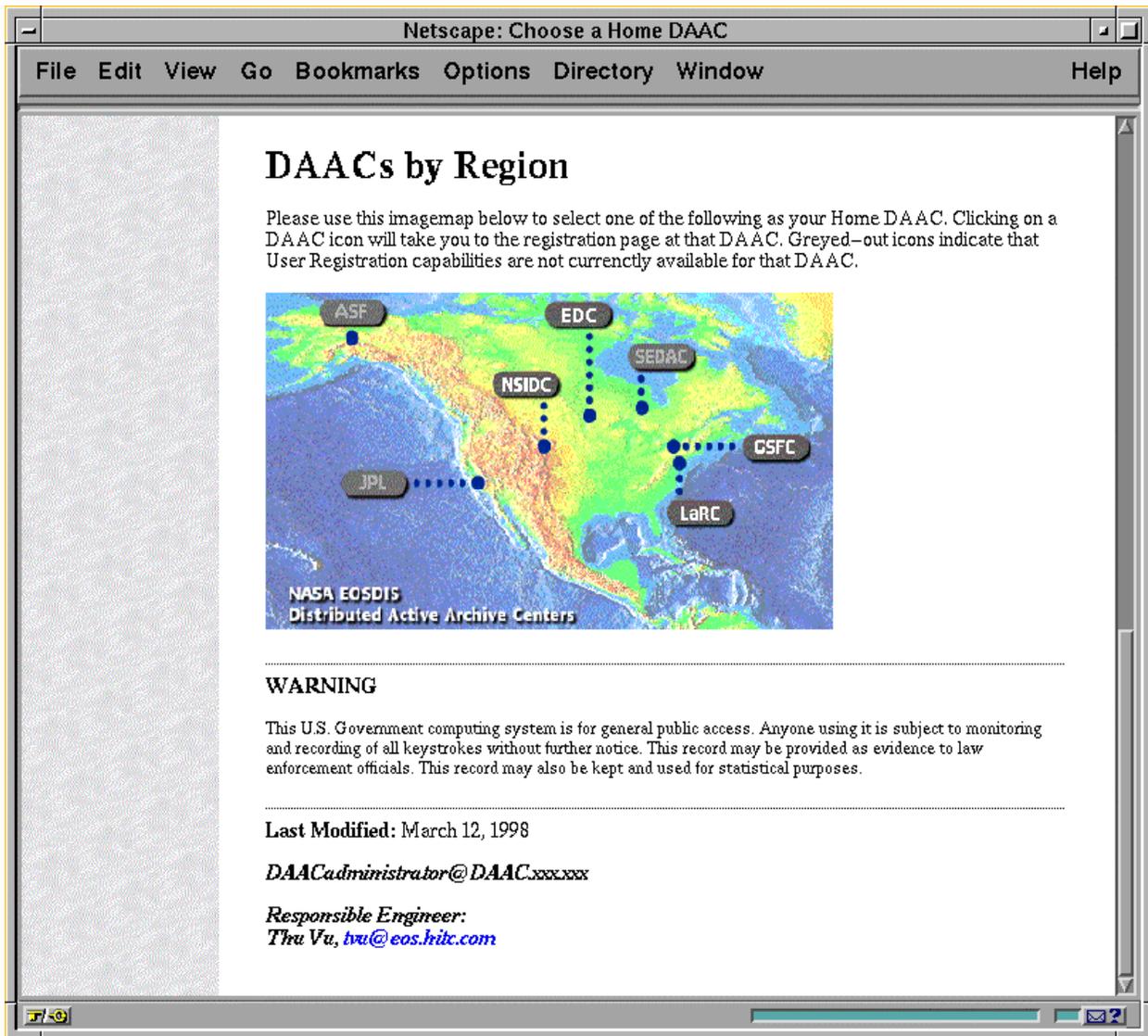


Figure 4.12.6-4. Choose a Home DAAC Page - Lower Portion

4.12.6.2.2 EOSDIS User Registration Page

After selecting the home DAAC as described in the previous section, the user is presented with the registration form shown in Figure 4.12.6-5 and 4.12.6-6 (also in this case a single web page has been split in two figures). The first part of the registration form is concerned with User Information, the second one with the user Mailing Address. Table 4.12.6-2 describes each field included in the User Registration form.

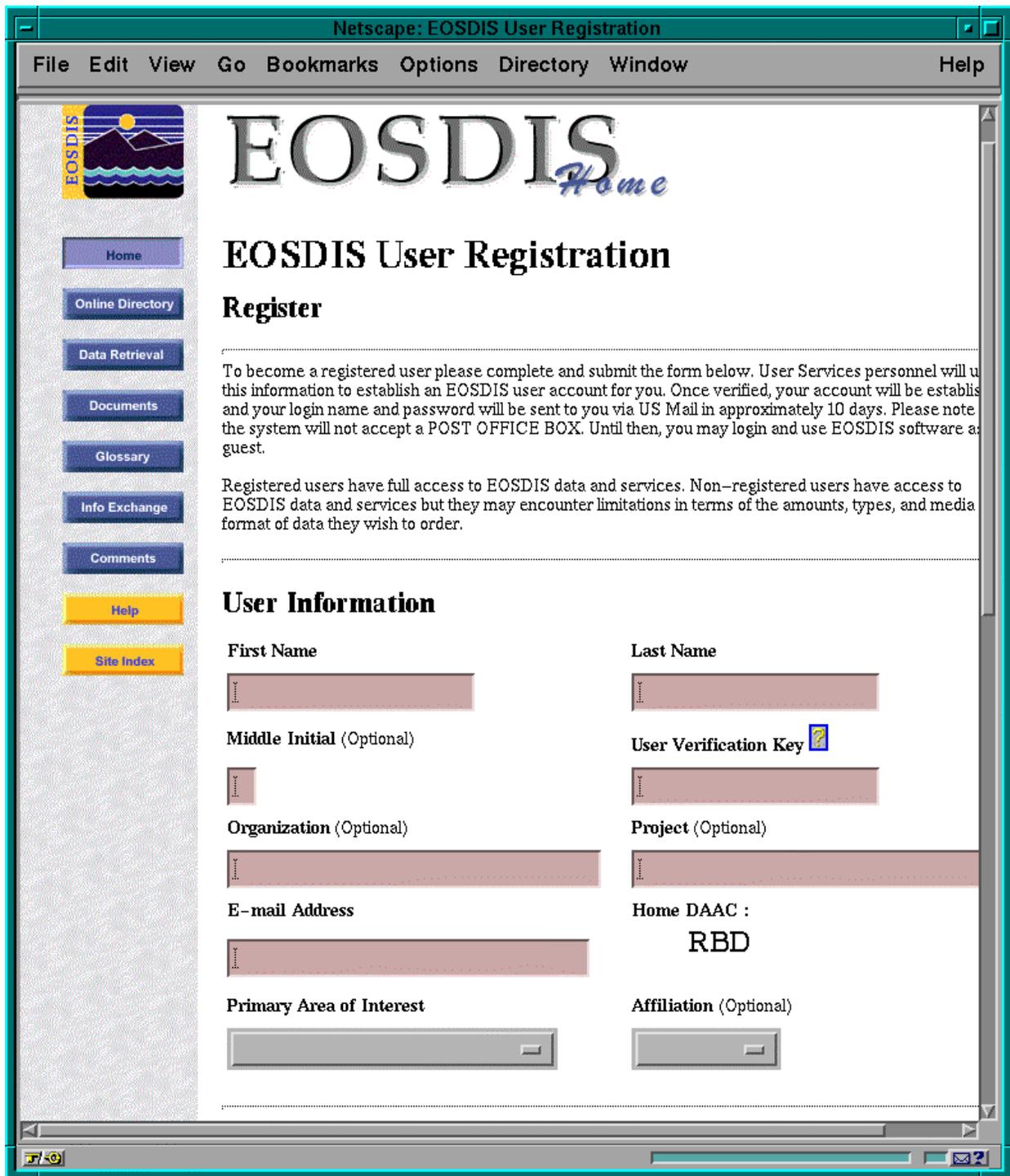


Figure 4.12.6-5. User Registration Form - Upper Portion

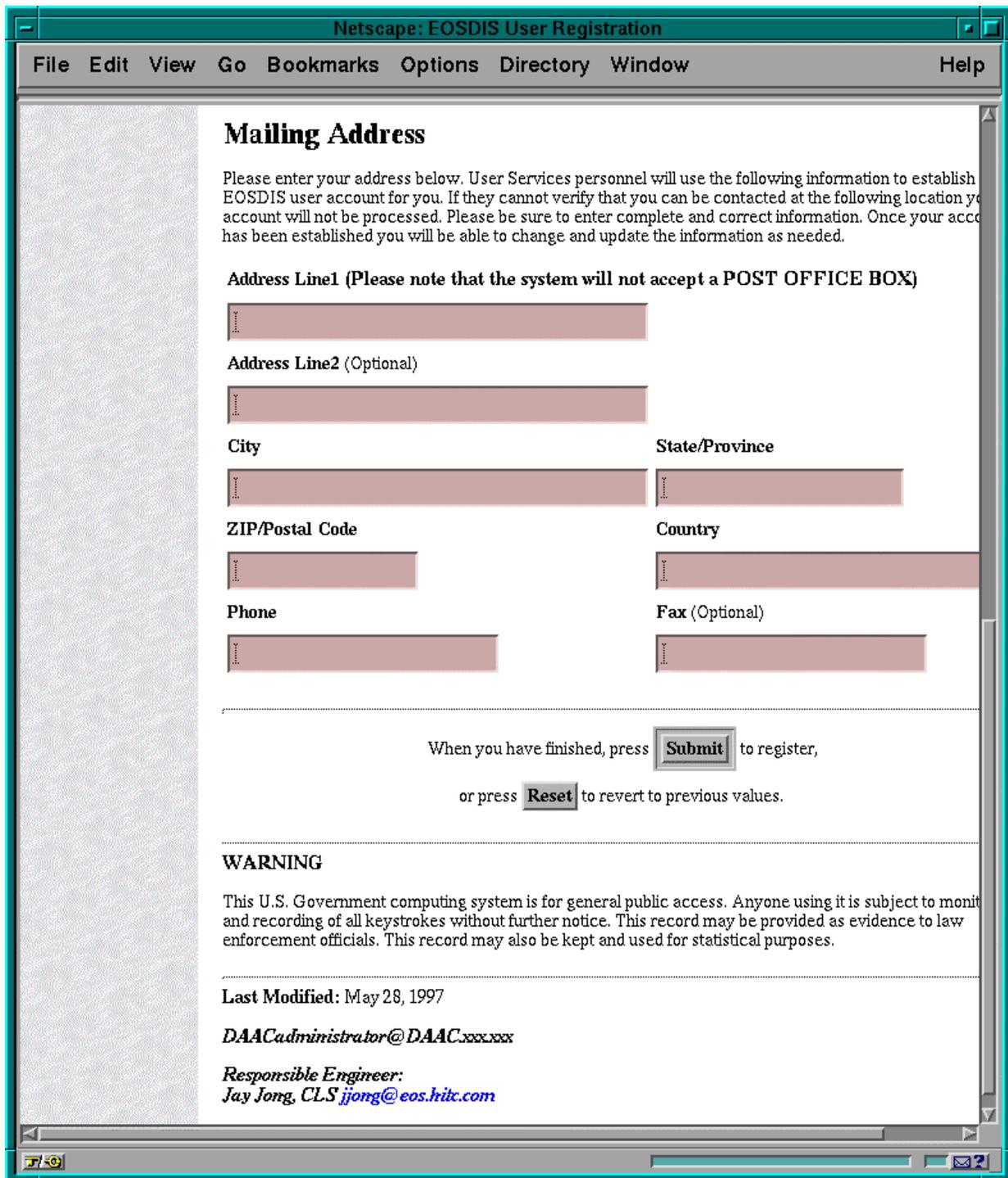


Figure 4.12.6-6. User Registration Form - Lower Portion

**Table 4.12.6-2. EOSDIS User Registration Page - Data Types
Field Description**

Field Name	Data Type	Size	Entry	Description
First Name	character	20	Required	User first name
Last Name	character	20	Required	User last name
Middle Initial	character	1	Optional	User middle initial
User Verification Key	character	20	Required	Key chosen by the user for verification purpose.
Organization	character	31	Optional	User association
Project	character	30	Optional	Current User Project
E-mail Address	character	64	Required	User e-mail address
Home DAAC	character	3	System generated	Read-only field that reports the three-letter ID for the user selected home DAAC
Address Line-1	character	35	Required	Street portion of the user address
Address Line-2	character	35	Optional	Street portion of the use address (alternative)
City	character	35	Required	City portion of the user mailing address
State/province	character	20	Required	State portion of the user mailing address
ZIP/Postal Code	character	15	Required	ZIP code portion of the user mailing address
Country	character	30	Required	Country portion of the user mailing address
Phone	character	22	Required	User Phone Number
Fax	character	22	Optional	User Fax Number

Additional graphical elements are made available on the form to the users to specify their scientific and professional interests. Two drop-down selection buttons let the user specify Primary area of Interest (e.g., Geophysics, Global Biosphere) and Affiliation (e.g., K-12, Commercial, Government).

A pop-up is displayed when the user clicks on the link available near the User Verification Key field. The pop-up, shown in Figure 4.12.6-7, provides a brief explanation of the purpose of the Verification Key. The user closes the pop-up window by clicking the **OK** button.

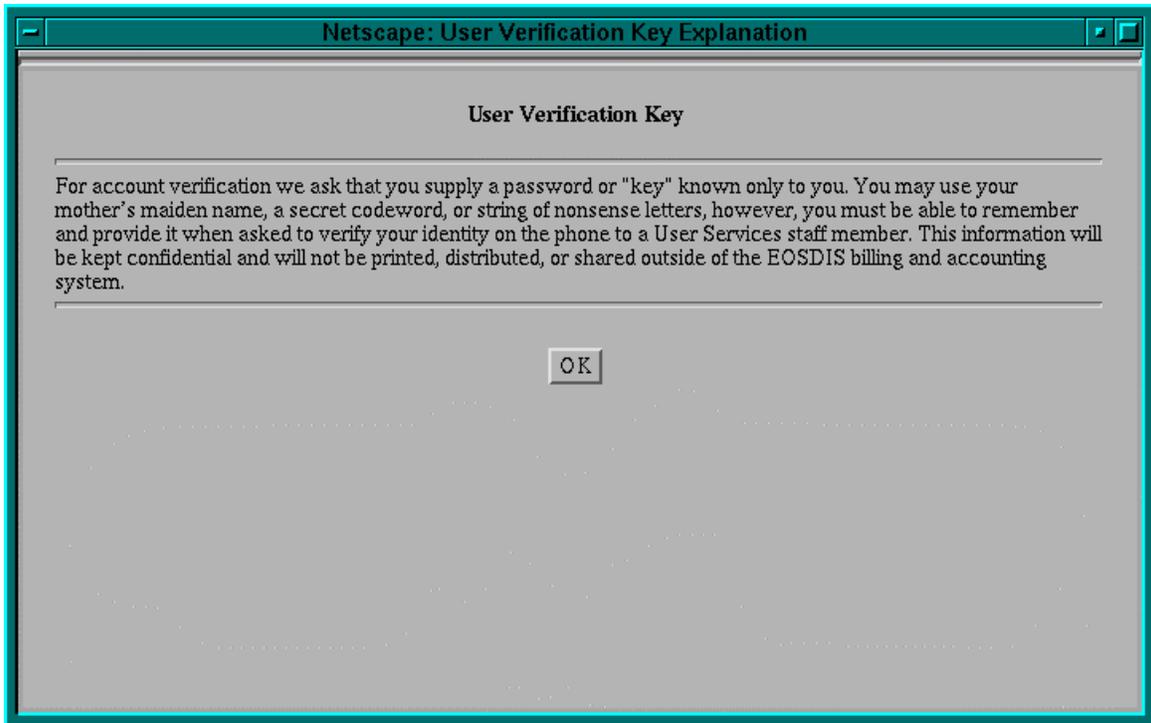


Figure 4.12.6-7. User Verification Key Pop-up

The users can reset the form contents and restart the input of data at any moment by clicking the **Reset** button at the bottom of the page.

When the user finishes filling in all of the registration form fields, the Registration application can be submitted by clicking on the **Submit** button. Note that if any (required) field is left blank or is not in a valid format the HTML source page issues related error messages to the Users. Two sample pop-ups, one warning that the required First Name field has been left blank and the other warning that the e-mail address is not in the correct format are shown, respectively, in Figure 4.12.6-8 and Figure 4.12.6-9.

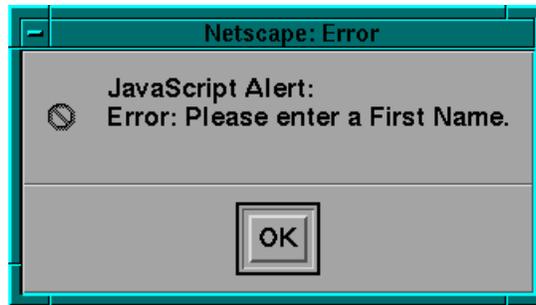


Figure 4.12.6-8. User Registration Pop-up - User First name missing

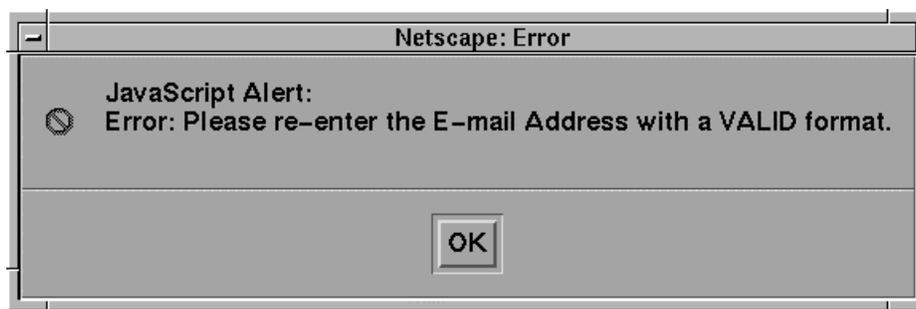


Figure 4.12.6-9. User Registration Pop-up - Wrong E-mail Address Format

After the form is submitted a new page re-displays the same form for confirmation. The page has the same appearance as the one discussed previously, so the field and graphical component descriptions will not be repeated here. The only differences with the previous page are the background color and the content of the page introduction, as shown in the Figure 4.12.6-10.

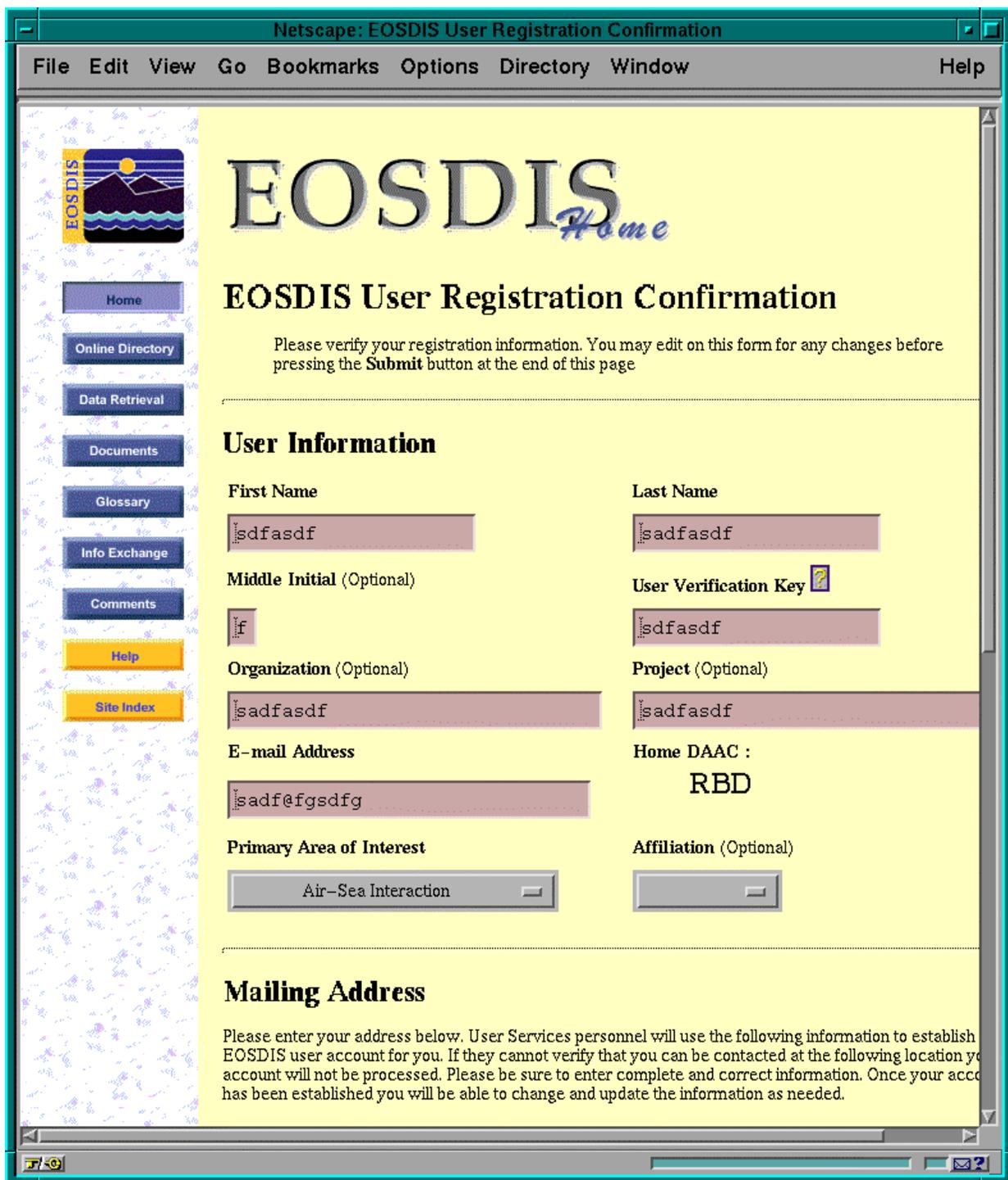


Figure 4.12.6-10. User Registration Confirmation Page

Although the form can still be edited, the fields are now filled in with the information previously submitted. The user can change this information, if needed, and re-submit the form for final approval.

A new HTML page confirms that the registration application has been processed and accepted by the ECS system (see Figure 4.12.6-11) or alerts that the application could not be processed for the unavailability of the System Management server (see Figure 4.12.6-12).

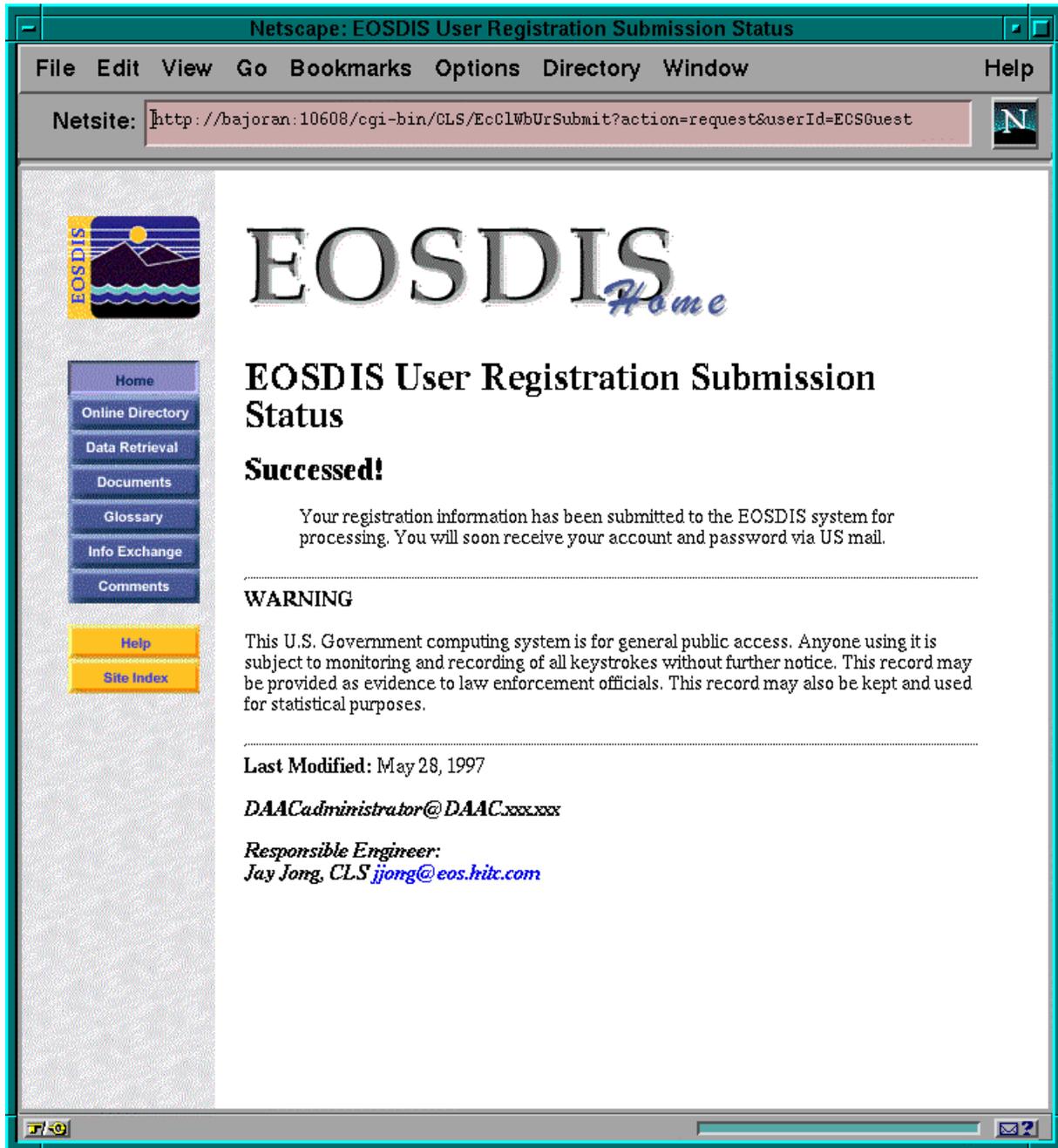


Figure 4.12.6-11. Successful User Registration Status Page

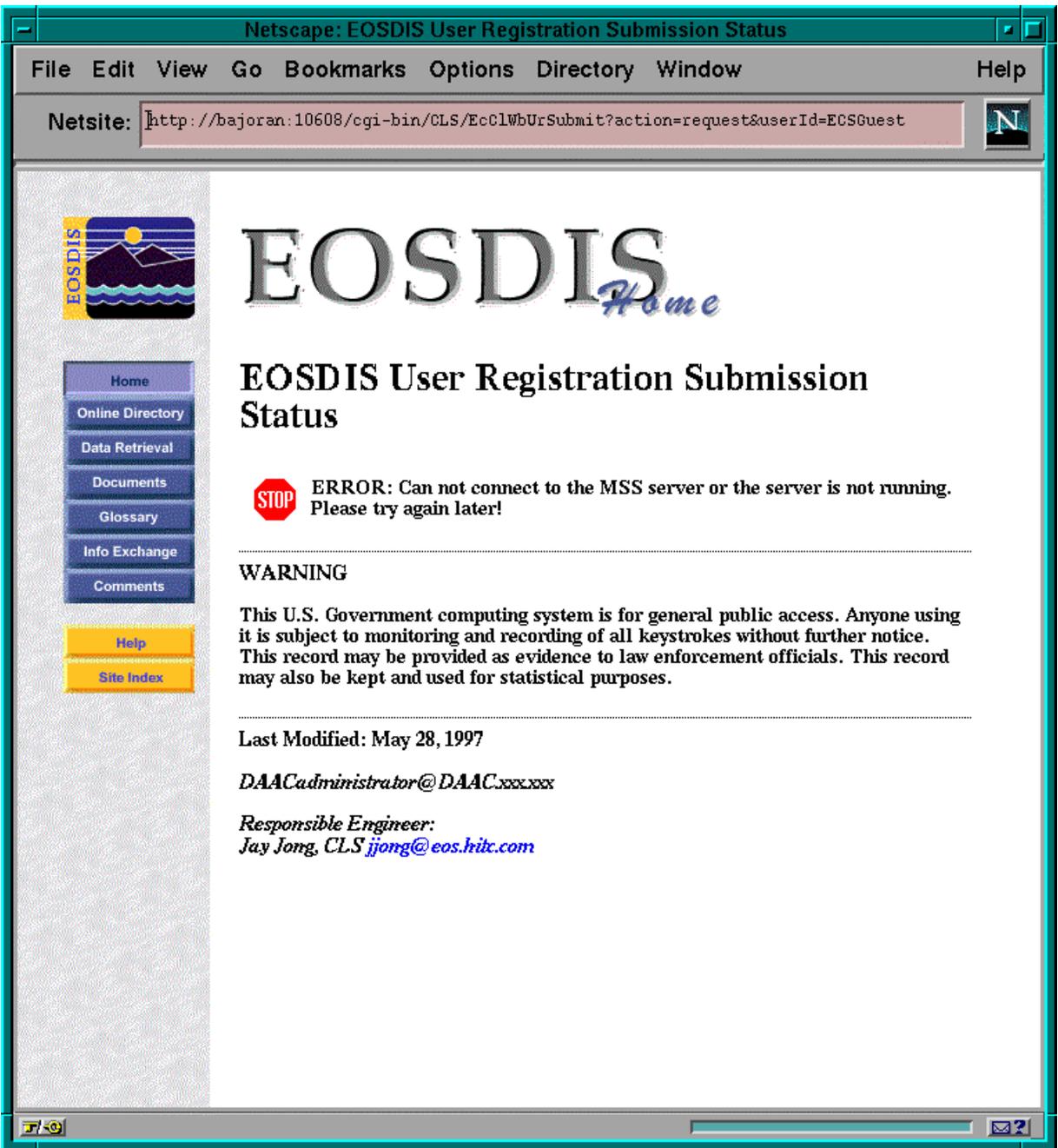


Figure 4.12.6-12. Unsuccessful User Registration Status Page

4.12.6.3 Required Operating Environment

For information on the operating environment, tunable parameters, and environment variables refer to the 920-TDx-013 “Custom Code Configuration Parameters” documentation series . The “x” refers to the installed location, e.g. 920-TDG-013 is for GSFC DAAC.

4.12.6.3.1 Interfaces and Data Types

Table 4.12.6-3 lists the supporting products that this tool depends upon in order to function properly.

Table 4.12.6-3. User Registration Interface Protocols

Product Dependency	Protocols Used	Comments
Netscape (both client and server)	http	via cgi scripts

4.12.6.4 Databases

User Registration information is maintained on the MSS database. The MSS database description for Release 4 is found in ECS document 311-CD-105-005, *Management Support Subsystem Database Design and Schema Specifications for the ECS Project*. The operator may have to identify individual data fields by examination of the descriptions in the documentation. Some data may be directly accessible through the database software.

4.12.6.5 Special Constraints

In order to complete the User Registration process the MSS provided Accountability Service must be available, as shown in paragraph 4.12.6.2.

4.12.6.6 Outputs

The User Registration Tool displays the information discussed in Section 4.12.6.2, and may update the database described in Section 4.12.6.4.

4.12.6.7 Event and Error Messages

Both event and error messages are listed in Appendix A.

4.12.6.8 Reports

No reports are produced by the User Registration Tool.

4.12.7 Subscription Server

Subscriptions permit users to register their interest in changes to (and other events associated with) data and services using a common service function called the Subscription Service. ECS services will describe their support for subscriptions in their advertisement. To use subscriptions a Subscription Request is registered with the Subscription Service. This tool, the Subscription Server GUI, allows operators to manage Subscription Requests. The Subscription Server accepts new Subscription Requests that specify an event for initiation and the action to be taken in response to the event. It will also accept and validate the Subscription Requests, identify all subscriptions of a specified event and process any action defined in the subscription. The Subscription Server GUI uses e-mail to notify science user subscribers.

Table 4.12.7-1. ECS Subscription Server Functions

Operating Function	Command/Script or GUI	Description	When and Why to Use
Add subscription	Add Subscription	Allows operators to add a known subscription.	Add new subscriptions.
Edit subscription	Edit Subscription	Allows operators to edit a known subscription.	Operators may edit existing subscriptions, User ID, email text, start date, expiration date and data associated with actions.
Filter subscription	Filter Subscription	Allows operators to filter subscriptions.	Operators may filter subscriptions by Event ID, User ID, Expire Date, or by original list of resources (All) in Subscription Information list.
Delete multiple subscriptions	Delete Multiple Subscriptions	Allows operators to delete subscriptions.	Operators may delete multiple subscriptions by Event ID, User ID, Expire Date, or by original list of resources (All) as listed in Subscription Information GUI (see figure 4.12.7-2).
Delete subscription	Delete Subscription	Operator may highlight a subscription in the main screen and delete that subscription.	Operators may delete only one subscription.
Refresh subscription	Refresh Subscription	Refresh displayed subscriptions on the main screen.	Operators may refresh all subscriptions by getting all the information from database.

4.12.7.1 Quick Start Using Subscription Server

The Subscription Server is started through command line.

4.12.7.1.1 Invoking Subscription Server from the Command Line Interface

To execute Subscription Server from the command line prompt use:

EcSbSubServerGUIStart <mode>

<mode> is the ECS mode for the execution.

4.12.7.2 Subscription Server Main Screen

The Subscription Server GUI provides operations personnel at the DAAC the capability to manage Subscription Requests. The main screen has two tabs; one for showing available subscriptions and the other for showing existing events. Operators can use this tool to edit existing subscriptions or add new ones. Figure 4.12.7-1 shows the **subscriptions** tab screen layout.



Figure 4.12.7-1. Subscription Server GUI – subscriptions Tab.

Table 4.12.7-2 describes the **subscriptions** tab fields.

Table 4.12.7-2. subscriptions Tab Field Descriptions

Field Name	Data Type	Size	Entry	Description
Current Filter	character	10	display	Shows the filter selections from the Filter Subscription GUI (Figure 4.12.7.-7).
Subscription ID	character	100	display	Unique identifier for subscriptions.
Event ID	character	100	display	Unique identifier for the event used to trigger this subscription.
Requestor ID	variable character	100	display	Identify the user that submitted the subscription.
Start Date	date/time	8	display	Display the Greenwich Mean Time (GMT), mm/dd/yyyy-hh:mm, the subscription was entered into the subscription server.
Expiration Date	date/time	8	display	Display the Greenwich Mean Time (GMT), mm/dd/yyyy-hh:mm, the subscription will expire and removed from the system.
Email Address	variable character	100	display	Email Address of Requestor.
Email Text	variable character	unlimited	display	Display information related to subscription.
Qualifiers	character	1	display	Indicates by Y or N whether any qualifiers have been specified for the subscription (Figure 4.12.7-5).
Action	character	1	display	Indicates by Y or N whether any actions have been specified for the subscription, (Figure 4.12.7.-5).
Find	character	255	optional	This field can be used to search for any of entries listed on subscription GUI. If the list is long, operator can use this field to search on subscription ID, events ID, start/expiration date, email address, and email text.

A list and description of subscription events can be obtained by clicking on the **events** tab on the main screen. The **events** tab screen layout is shown in Figure 4.12.7-2.

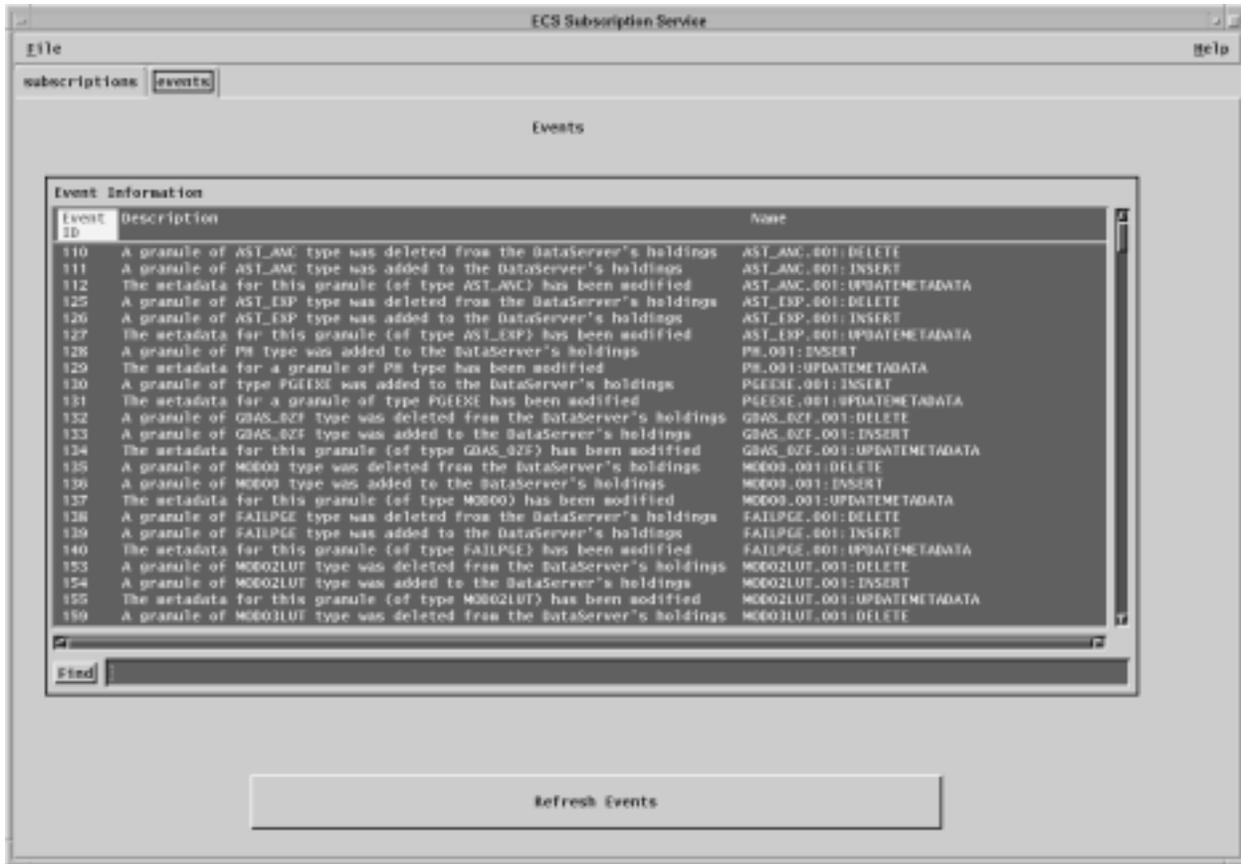


Figure 4.12.7-2. Subscription Server GUI Main Screen – events Tab

Table 4.12.7-3 describes the **event** tab fields.

Table 4.12.7-3. events Tab Field Descriptions

Field Name	Data Type	Size	Entry	Description
Event ID	character	N/A	Display from database	Unique identifier for a subscribable event.
Description	character	N/A	Display from database	Description of the event.
Name	character	N/A	Display from database	Name of the event.

4.12.7.2.1 Add/Edit Subscription

Clicking on the **Add Subscription...** or **Edit Subscription...** button on the main screen (Figure 4.12.7-1) will bring up the Add/Edit Subscription Screen shown in Figure 4.12.7-3. This screen is used to add a new subscription in response to a requester's email or telephone call, or to

change an existing subscription for a requester. A Subscription Request requires the information collected on this screen; Event ID name, Event Description, requester User ID, email address and text, start date, expiration date can be defined by using this screen. The **Browse Events** button displays the Browse Event Screen (Figure 4.12.7-4). Selecting an event in the Event Information window of the Browse Event Screen will fill the **Event ID** and **Event Description** fields. The **User Profile** button is used to populate the **Email Address** field for a **User ID**. If the User Profile information is not available, operator needs to enter the requestor's **Email** information manually. Operator needs to enter the email text in the **Email Text** field, this will be used for email notification for the subscriber. **Expiration Date** for the Subscription has to be later than **Start Date**, or an error dialog box will be displayed. Clicking on **Submit** will submit the Subscription Request and shows the new subscription on Main Screen in the Subscription Information window with the appropriate button(edit or add) selected.

The screenshot shows a window titled "Add/Edit Subscription" with the following fields and controls:

- Event ID:** A text box containing "0" and a "Browse Events" button.
- Event Description:** A text box.
- User ID:** A text box and a "user Profile" button.
- Email Address:** A text box.
- Email Text:** A text box.
- Start Date:** A date picker showing "05 / 21 / 1999" with up and down arrow buttons.
- Expiration Date:** A date picker showing "05 / 21 / 1999" with up and down arrow buttons.
- Actions:** A button.
- Qualifiers:** A button.
- Submit:** A button.
- Cancel:** A button.

Figure 4.12.7-3. Add/Edit Subscription Screen

Table 4.12.7-4 lists and describes the Add/Edit Subscription GUI fields:

Table 4.12.7-4. Add/Edit Subscription Field Descriptions

Field Name	Data Type	Size	Entry	Description
User ID	variable character	100	required	Identify the user that submitted the subscription.
Email Address	variable character	100	required	Provide user's email address.
Email Text	variable character	unlimited	required	Text the user has specified be included in the e-mail sent each time a specified event has occurred.
Start Date	date/time	8	required	Display the date the subscription was entered into the subscription server. Greenwich Mean Time (GMT) is in the format: mm/dd/yyyy
Expiration Date	date/time	8	required	Display the date the subscription will expire and removed from the system. Greenwich Mean Time (GMT) is in the format: mm/dd/yyyy.

4.12.7.2.2 Browse Events

To browse events, click on the Browse Events button of the Add/Edit Subscription Screen, activating the Browse Event GUI shown in Figure 4.12.7-4. This GUI provides a list of event's ID, description, and name. The Event ID, Description, and Name selected by the operator will be shown in the Add/Edit Subscription Screen.

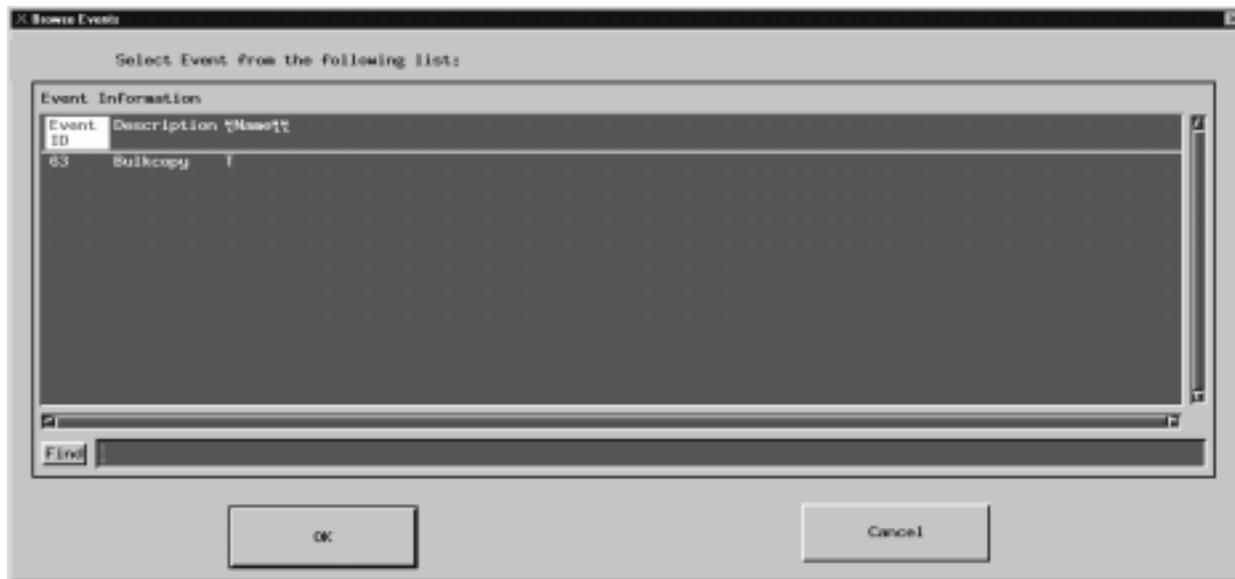


Figure 4.12.7-4. Browse Event Screen

Table 4.12.7-5 describes the fields in the Browse Event screen.

Table 4.12.7-5. Browse Event Field Descriptions

Field Name	Data Type	Size	Entry	Description
Event ID	character	N/A	display from database	Unique identifier for a subscribable event.
Description	character	N/A	display from database	Description of the event.
Name	character	N/A	display from database	Name of the event.
Find	character	255	optional	This field can be used to search for any of entries listed on browse event GUI. If the list is long, operator can use this field to search on name, description, and event ID.

4.12.7.2.3 Actions

Clicking on **Actions** from the Add/Edit Subscription GUI will bring up the Actions Screen, Figure 4.12.7-5. The operator may chose either FTP Push or 8MM Tape as an action to be performed other than email notification that the subscriber wants to occur as the consequence of the subscribed event. **Ftp Push** selects FTP Push as an action to be performed and **8 MM tape** selects the generation and shipping of 8MM tape as an action to be performed when the subscribed event occurs. If Ftp Push is selected, the operator will need to fill in all the fields as described in Table 4.12.7-6. The password will be entered twice to verify the user has typed it correctly. For security reasons, the password will be encrypted when the subscription is sent to the Subscription Server. In the case of selecting 8 MM tape, operator only need to fill in user profile. **OK** will save all the information and the screen will return to Add/Edit Subscription Screen.

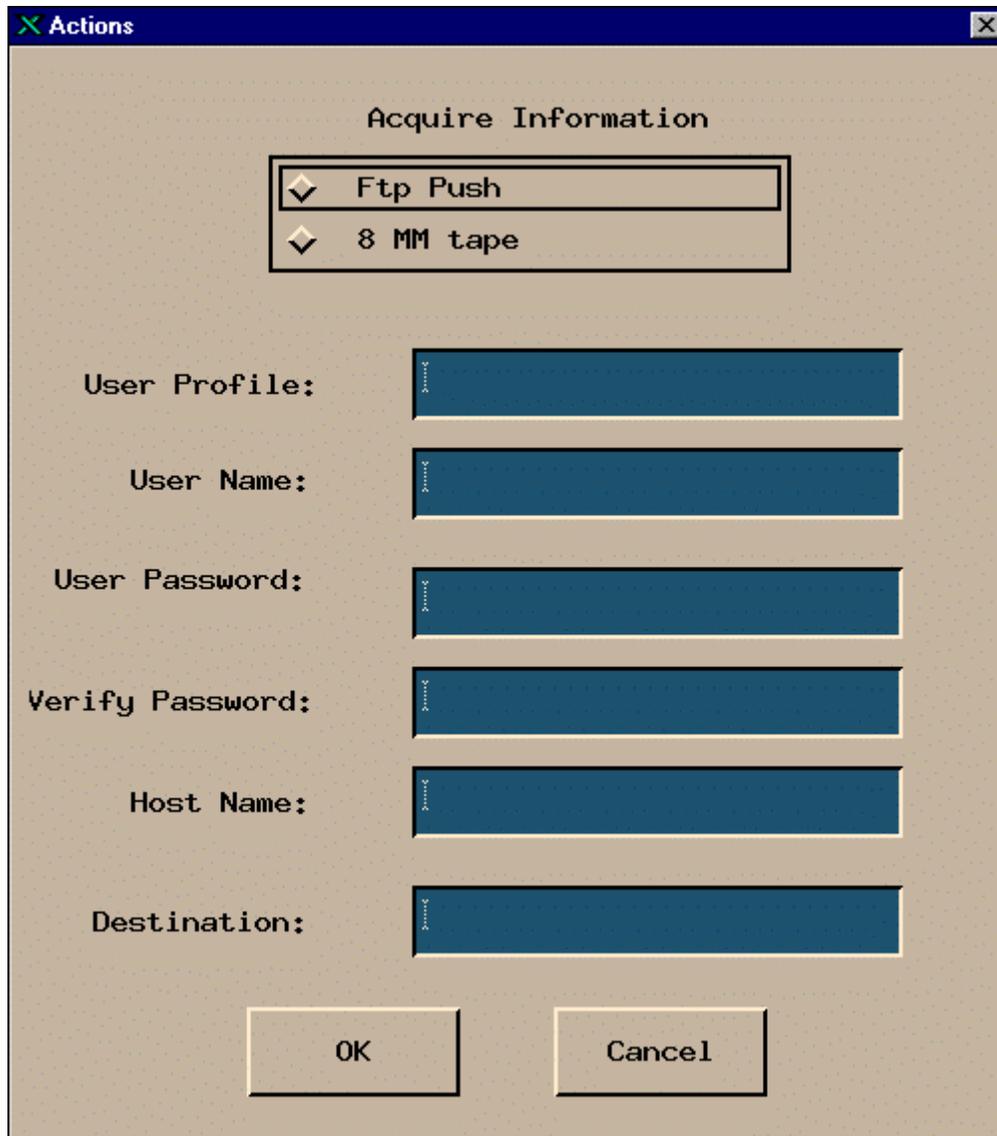


Figure 4.12.7-5. Actions Screen

Table 4.12.7-6 describes the fields in the Actions screen.

Table 4.12.7-6. Actions Field Descriptions

Field Name	Data Type	Size	Entry	Description
Ftp Push	N/A	N/A	required for Ftp push only	It will select the ftp push as an action to be performed when the subscription event occurs.
8 mm tape	N/A	N/A	required for 8mm tape only	It will select the 8 MM tape as an action to be performed when the subscription event occurs. The tape will be shipped to subscriber.
User Profile	variable character	255	required (only if 8 MM Tape is selected by operators)	Display the user profile. This field must be completed if operator selects 8 MM tape as an action to be performed when the subscription event occurs.
User Name	variable character	100	required for Ftp push only	Identify the user who submitted the subscription or event.
User Password	variable character	100	required for Ftp push only	Specifies unique identifier of a registered user.
Verify Password	variable character	100	required for Ftp push only	Second entry of the user password.
Host Name	variable character	100	required for Ftp push only	Desire to which data is to transferred
Destination	variable character	unlimited	required for Ftp push only	Specifies the site to which data is to be transferred

4.12.7.2.4 Qualifier

Clicking on **Qualifier** from the Add./Edit Subscription Screen will bring up the Qualifiers Screen, Figure 4.12.7-6. This screen will show the qualifiers name associated with the selected event. First, the operator must select a qualifier and then an appropriate operator and value. Clicking on **Add to the list** button will display the selected operation and value of that qualifier to the information list. The operator may add multiple qualifiers to the information list. **OK** will save all the information and operator will return to Add/Edit Subscription Screen.

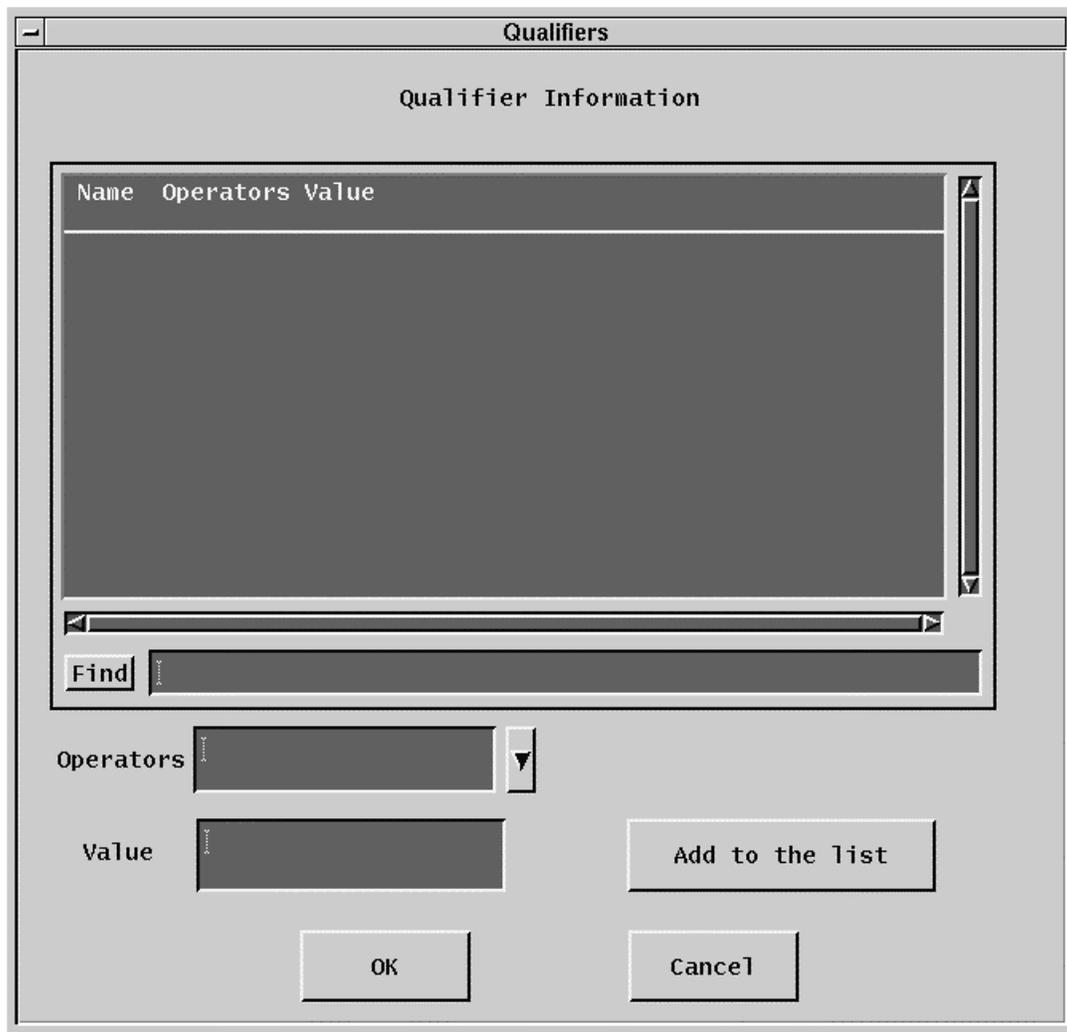


Figure 4.12.7-6. Qualifiers Screen

Table 4.12.7-7 describes the fields in the Qualifiers screen.

Table 4.12.7-7. Qualifiers Field Descriptions

Field Name	Data Type	Size	Entry	Description
Name	Character		display from database	Qualifier name
Operators(data)	Character	N/A	selected from list	A list of operators(data) (i.e., ==, <, >, !=) are provided in pull down list. Operators(computer) must select an appropriate operator(data) which delimites the value entry and enter value for the qualifier.
Value	Integer	N/A	typed in by operator	Identifies the specific instance of a subscribable event.

4.12.7.2.5 Filter Subscriptions

Clicking on the **Filter Subscriptions** button on the main screen brings up the Filter dialog Screen shown in Figure 4.12.7-7. This screen allows operators to filter subscriptions by Event ID, User ID, Expire Date, or by original list of resources (All) in the Subscription Information list of the main screen. The operator must select one of the fields in the box. Selection is indicated by an outline around the name. To the right of the outlined selection is an input box to enter the value of the filter. The **OK** button will return to the Main Screen and display the selected Filter in the upper left part.

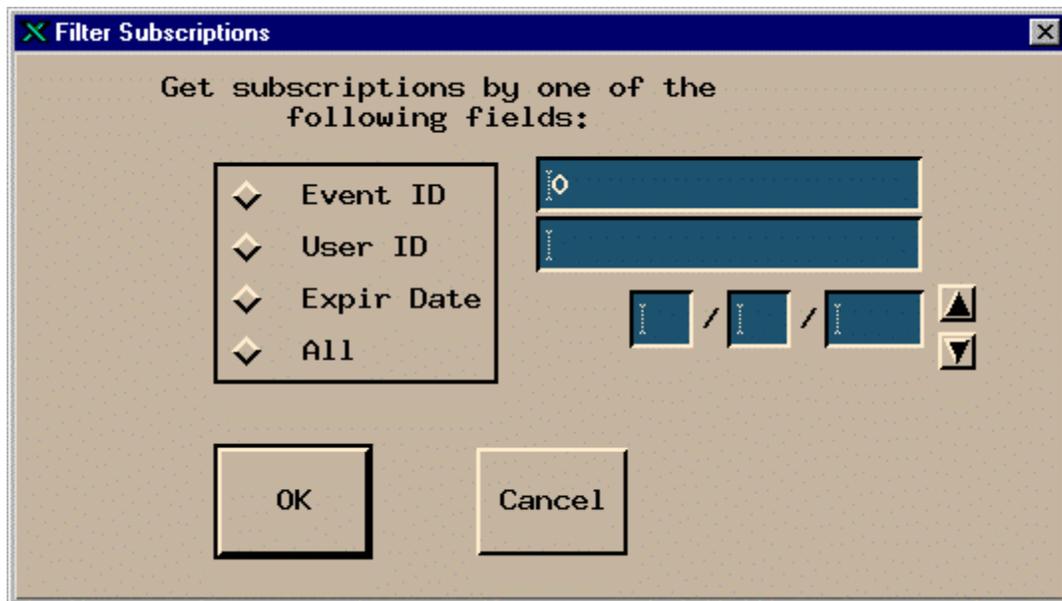


Figure 4.12.7-7. Filter Subscription Screen

Table 4.12.7-8 describes the fields in the Filter Subscription screen.

Table 4.12.7-8. Filter Subscription Field Descriptions

Field Name	Data Type	Size	Entry	Description
Event ID	long integer	N/A	optional	Identifier of the event.
User ID	variable character	100	system generated	Identity of the user who submitted the subscription.
Expire Date	date/time	2/2/4	optional	Display the Greenwich Mean Time (GMT), mm/dd/yyyy, the subscription will expire and removed from the system.
All	N/A	N/A	optional	Selects the original list of resources including Event ID, User Id, and Expire Date.

4.12.7.2.6 Delete Multiple subscriptions by one of the following fields

Clicking on the **Delete Subscription...** button on the main screen brings up the Delete Subscriptions dialog shown in Figure 4.12.7-8. This screen allows operators to delete subscriptions by Event ID, User ID, Expire Date, or by original list of resources (All) as listed in Subscription Information list of the main screen. The operator must select one of the fields in the box. Selection is indicated by an outline around the name. To the right of the outlined selection is an input box to enter the value of the filter. **OK** will save all the inputs and return to main screen.

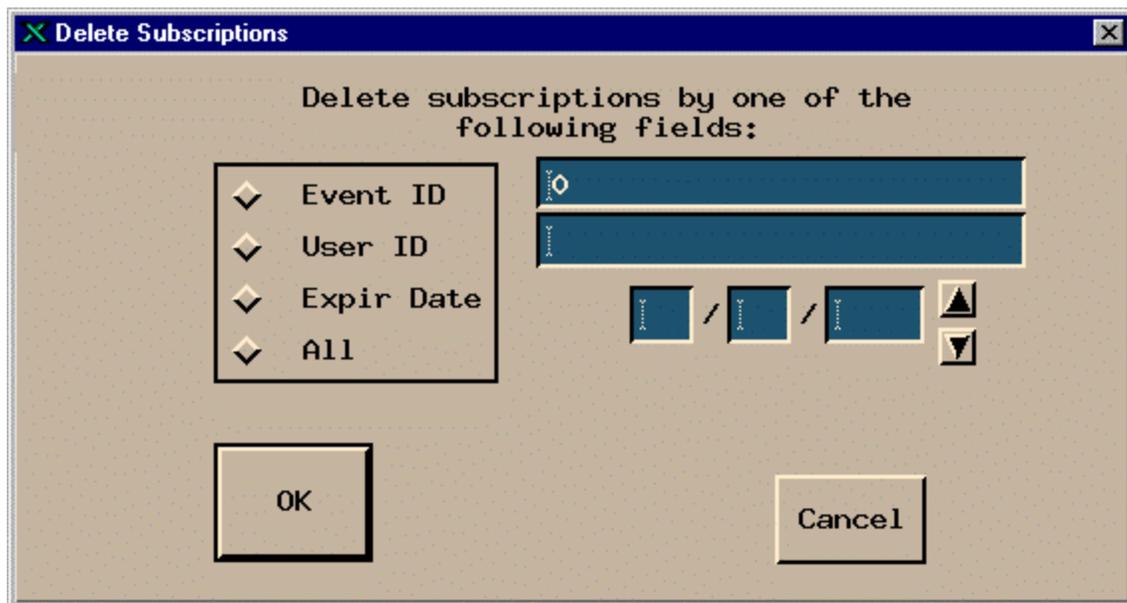


Figure 4.12.7-8. Delete Subscriptions Dialog

Table 4.12.7-9 describes the fields in the Delete Subscriptions screen.

Table 4.12.7-9. Delete Subscriptions Field Descriptions

Field Name	Data Type	Size	Entry	Description
Event ID	long integer	N/A	optional	Identifier of the event.
User ID	variable character	100	system generated	Identify the user who submitted the subscription.
Expire Date	date/time	2/2/4	optional	Display the date the subscription will expire and removed from the system. Greenwich Mean Time (GMT) is in the format: mm/dd/yyyy.
All	N/A	N/A	optional	Selects the original list of resources including Event ID, User Id, and Expire Date.

4.12.7.2.7 Refresh Subscription

Clicking on the **Refresh Subscriptions....** button on the main screen (Figure 4.12.7-1) will redisplay the screen reflecting any changes made since the last refresh.

4.12.7.3 Required Operating Environment

For information on the operating environment, tunable parameters and environment variables of Subscription Server refer to the 920-TDx-013 “Custom Code Configuration Parameters” documentation series . The “x” refers to the installed location, e.g. 920-TDG-013 is for GSFC DAAC.

4.12.7.3.1 Interfaces and Data Types

The Subscription Server GUI exchanges data of various types through interfaces within and external to ECS. Table 4.12.7-10 lists the Subscription Server’s interfaces for Version 2.0.

Table 4.12.7-10. Interfaces Protocols

Interface	Type of Primary Interface Protocols	Type of Backup Interface Protocols	Comments
Subscription Server GUI to Subscription Server	Asynchronous requests/responses	none	1. The GUI is separate from the Subscription Server. The GUI acts as a client to the Subscription Server.
Subscription Server to other ECS components	Asynchronous requests/responses		Subscription Server will interface with these components as peer-to-peer: 1. DDICT: Validate qualifiers 2. SDSRV: Register insert event with qualifiers 3. Subscriber (CLS): Submit subscription with qualifiers and values and receive notifications from subscription server 4. IOS: Discover advertisement 5. Action Provider: Receive action request from subscription server and returns status and results

4.12.7.4 Databases

The Subscription Server accesses several ECS databases. Table 4.12.7-10 indicates the document for the individual databases used in the Subscription Server. The operator may have to identify individual data fields by examination of the descriptions in the documentation. Some data may be directly accessible through the database software.

Table 4.12.7-10. Subscription Server Database References

CI	Database documents for Version 2.0
DDIST	<i>Data Distribution Database Design and Schema Specifications, 311-CD-101-005</i>
IOS	<i>Interoperability Subsystem (IOS) Database Design and Schema Specifications, 311-CD-104-005</i>
MSS	<i>Management Support Subsystem Database Design and Schema Specifications, 311-CD-105-005</i>
PDPS	<i>Planning and Data Processing Subsystem Database Design and Schema Specifications, 311-CD-106-005</i>
SDSRV	<i>Science Data Server Database Design and Schema Specifications, 311-CD-107-005</i>

4.12.7.5 Special Constraints

None.

4.12.7.6 Outputs

The Subscription Server displays information on the various screens described above, sends the indicated E-mail notifications, and produces error messages.

4.12.7.7 Event and Error Messages

The Subscription Server GUI issues both status and error messages to indicate that a problem has occurred, and if the problem needs correction by the operations staff. Error messages are listed in Appendix A.

4.12.7.8 Reports

None.

4.12.8 The Java Data Acquisition Request (JDAR) Tool

A Java Data Acquisition Request (DAR) is a request for data to be obtained via the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) instrument on board the AM-1 spacecraft. The AM-1 satellite and the ASTER instrument platform are tasked by the ASTER Ground Data System (GDS), located in Japan. GDS schedules the ASTER platform based on the JDARs received by ASTER users. The ASTER GDS controls scheduling of the ASTER instrument, and provides the collected data as level 1A and level 1B data to the Earth Resources Observation System (EROS) Data Center.

A typical JDAR includes information about the area that is to be imaged, the time range over which images are to be taken, and which of three telescopes that are part of the ASTER instrument platform are to be used in acquiring the image data. In addition, the user request can specify a look angle or a range of look angles at which the image can/should be acquired as well as acceptable sun angles.

The JDAR tool provides a graphical user interface (GUI) by which science users submit JDARs from the Earth Observing System Data and Information System (EOSDIS) Core System (ECS) client. It is via the JDAR , an ECS client interface, that scientists in the United States can submit JDARs to the ASTER GDS for scheduling.

The Java Management Tool. JDAR uses the JMAPI and the latest in state-of-the-art Java "Swing" components. JDAR Common Desktop Environment (CDE) for the JDAR user is only a tab-click away.

**Table 4.12.8-1. Functions Performed with the
Data Acquisition Requests Tool (1 of 2)**

User Function	Command/ Script or GUI	Description	When and Why to Use
Viewing the contents of locally stored JDAR.	Main JDAR screen - "Summary" Tab	Displays "nodes" in a tree structure. Each node represents a JDAR files stored locally.	To view the contents of JDARs that have been saved or sent to ASTER GDS and/or to "load" previously saved JDAR work back in the tool to edit or modify it.
Creating or Editing a Data Acquisition request.	Main JDAR screen - "Create/Edit Request" Tab	Provides the fields in which the user can name the JDAR request and set several of the JDAR parameters. Also, contains a row of pushbuttons used to launch dialogs and secondary windows in which additional JDAR parameters are set.	To fill out required information for a JDAR request and to navigate to other portions of the interface which also carry widget controls which allow the user to define required and optional JDAR parameters.
Specifying an Area of Interest Polygon for a JDAR.	"Spatial Requirements" Secondary Window (launched from pushbutton found on the Main JDAR screen - "Create/Edit Request" Tab)	Provides an interactive map and text entry whereby the user can specify coordinates to be used in the calculation of the Area of Interest polygon.	To specify the geographically area of which ASTER image data is to be taken.
Specifying the Start and End dates for observations for a given JDAR	"Temporal Requirements" Secondary Window (launched from pushbutton found on the Main JDAR screen - "Create/Edit Request" Tab)	Provides an interactive timeline and text entry whereby the user can specify dates over which image data should be acquired for the JDAR.	To specify when ASTER image data should be acquired of a given area.
Specifying "Advanced Viewing Geometry" parameters (specific look angle, look angle range, view swath ID, and/or sun angle range.	"Advanced Viewing Geometry" Dialog (launched from pushbutton found on the Main JDAR screen - "Create/Edit Request" Tab)	Provides an interface from which look angle and sun angle can be specified for the acquisition of JDAR data.	When user has specific look angle, view swath, or lighting requirements for a particular JDAR request that cannot be fulfilled by ASTER instrument default settings.
Specifying "Special Request" parameters (parameters that effect the priority in which a JDAR is scheduled or processed).	"Special Request" Dialog (launched from pushbutton found on the Main JDAR screen - "Create/Edit Request" Tab)	Provides an interface from which the user set parameters that change the priority in which JDARs are scheduled or processed.	When user wants to request an increase in priority for the scheduling of a JDAR or the processing and shipping of image data collected for the JDAR.

Table 4.12.8-1. Functions Performed with the Data Acquisition Requests Tool (2 of 2)

User Function	Command/ Script or GUI	Description	When and Why to Use
Displaying a “Resource Estimate;” an estimate on the number of scenes to be obtained for a given JDAR request based on the spatial and temporal data specified by the user.	“Resource Estimate” (launched from pushbutton found on the Main JDAR screen - “Create/Edit Request” Tab)	Displays the user to view an estimate on the number of scenes to be obtained for a JDAR based on the spatial and temporal data specified by the user.	When a user wants an estimate of how many scenes the JDAR will generate based on specified spatial and temporal data.
Submitting a JDAR to ASTER GDS	Main JDAR screen - “Create/Edit Request” Tab ñ “Submit” Button	Pressing the “Submit” button causes all parameters for a JDAR to be sent to the JDAR Com Gateway which in turn forwards the JDAR to ASTER GDS. Upon receipt of a JDAR at ASTER GDS, GDS sends a JDAR ID back to the user.	When the user has completed all required JDAR parameters and as many optional parameters as desired and wants to send the JDAR parameters to ASTER GDS in order to obtain image data.
Modifying a JDAR that has already been submitted to ASTER GDS.	Main JDAR screen - “Modify Request” Tab	The user can modify two JDAR parameters from this screen provided that the JDAR has already been sent to ASTER GDS and a JDAR ID has been received.	When a JDAR has already been sent to ASTER GDS and the user wishes to change cloud coverage to a less restrictive setting, to suspend an active JDAR request or to reactivate a suspended JDAR request.
Submitting the a modified JDAR to ASTER GDS.	Main JDAR screen - “Modify Request” Tab	Pressing the “Submit” button causes the modified JDAR parameters to be sent to the JDAR Com Gateway which in turn forwards the modified JDAR to ASTER GDS. Upon receipt of the modified JDAR at ASTER GDS, GDS sends a confirmation back to the user.	When a JDAR has already been sent to ASTER GDS and the user wishes to change cloud coverage to a less restrictive setting, to suspend an active JDAR request or to reactivate a suspended JDAR request.

4.12.8.1 Quick Start Using the JDAR

There are two methods by which the JDAR can be launched. The first method is by clicking on the JDAR icon found on the ECS desktop. The other is by executing the `./runJDAR` script from a command line.

It is important to note that launching the JDAR from the ECS Desktop is preferable to using the script, for the following reason.

When a JDAR is submitted to ASTER GDS from the JDAR tool a JDAR ID is returned and shown to the user in an Information Dialog. When the user presses the “OK” button found on the JDAR ID information dialog, this causes a subscription to be sent to the subscription server that allows the user to be notified when the granules for the JDAR are ingested into ECS via email. The subscription server gets the user’s email address from the ECS Desktop. If the user is not logged into and using the ECS desktop, the email address cannot be sent to the subscription server. The JDAR will be scheduled and fulfilled, but the user will not be notified of the arrival of the corresponding granules.

4.12.8.1.1 Invoking the JDAR from the Command Line Interface

To launch the JDAR via script, the user must perform the following steps:

```
dce_login <dce user name>
```

```
<dce password>
```

```
./runJDAR <ECS_HOME> <ECS_MODE> <ECS_USERID>
```

The parameters used above are:

<**dce user name**> is the user’s ECS DCE user name to log on for ECS connection.

<**dce password**> is the user’s ECS DCE password with the user name to log on for ECS connection.

<**ECS_HOME**> is the user’s ECS home directory (~home)..

<**ECS_MODE**> is the mode of operation the JDAR is to run under (usually OPS)

<**ECS_USERID**> the user’s ECS userid for access to the ECS system.

Refer to the 920-TDx-013 “Custom Code Configuration Parameters” documentation series , for a listing of the **./runJDAR script**.

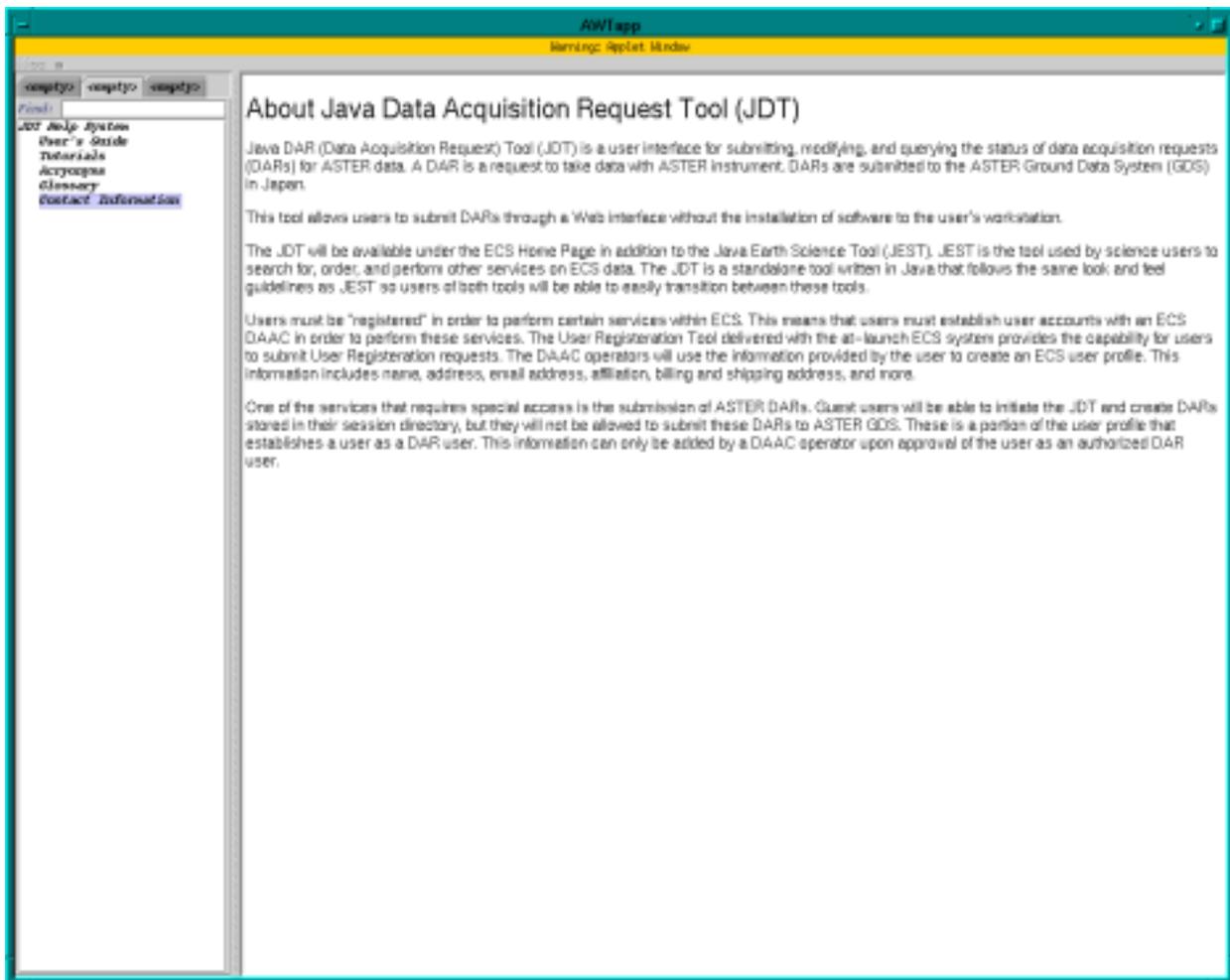


Figure 4.12.8-1a. JDAR About

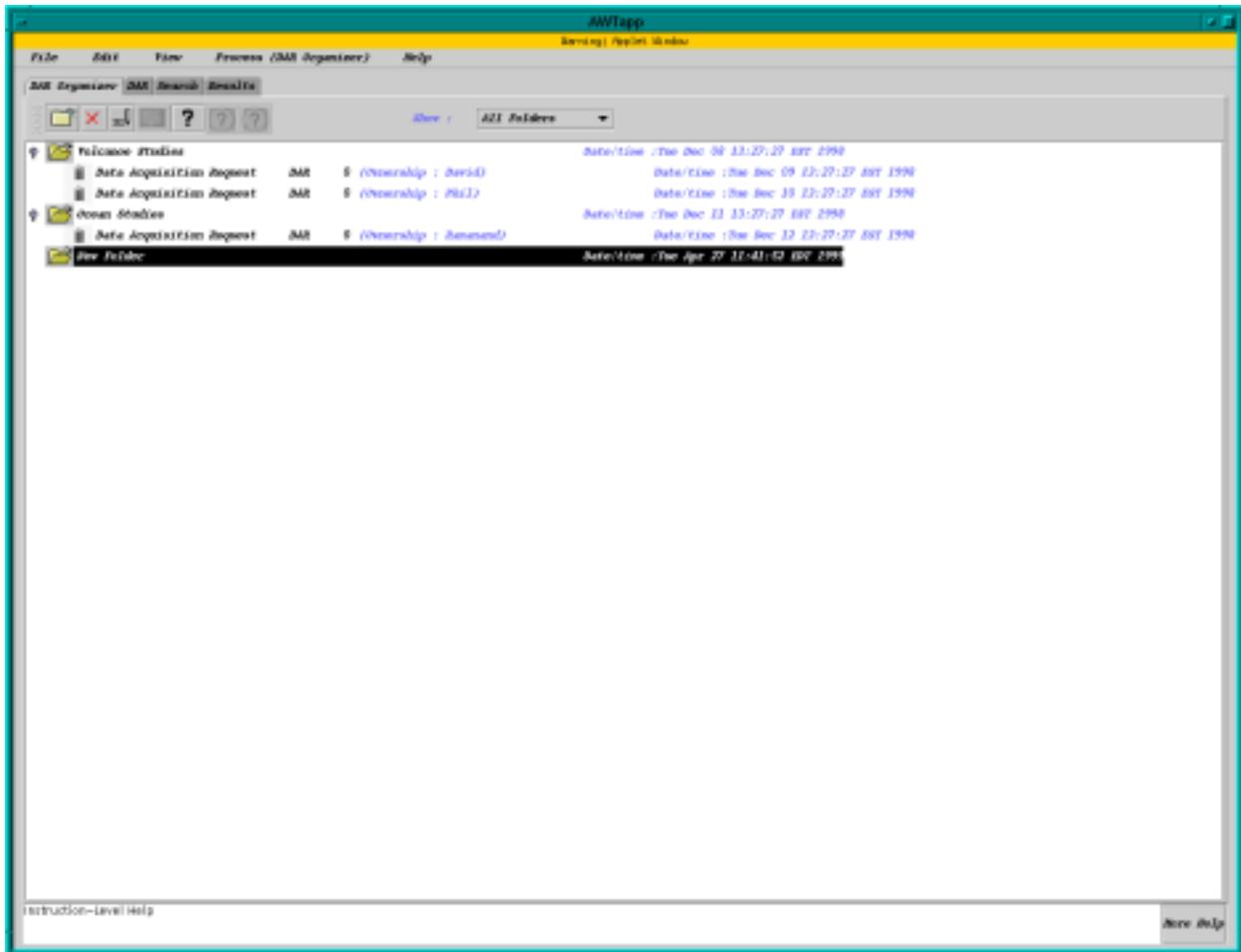


Figure 4.12.8-1b. JAR Organizer

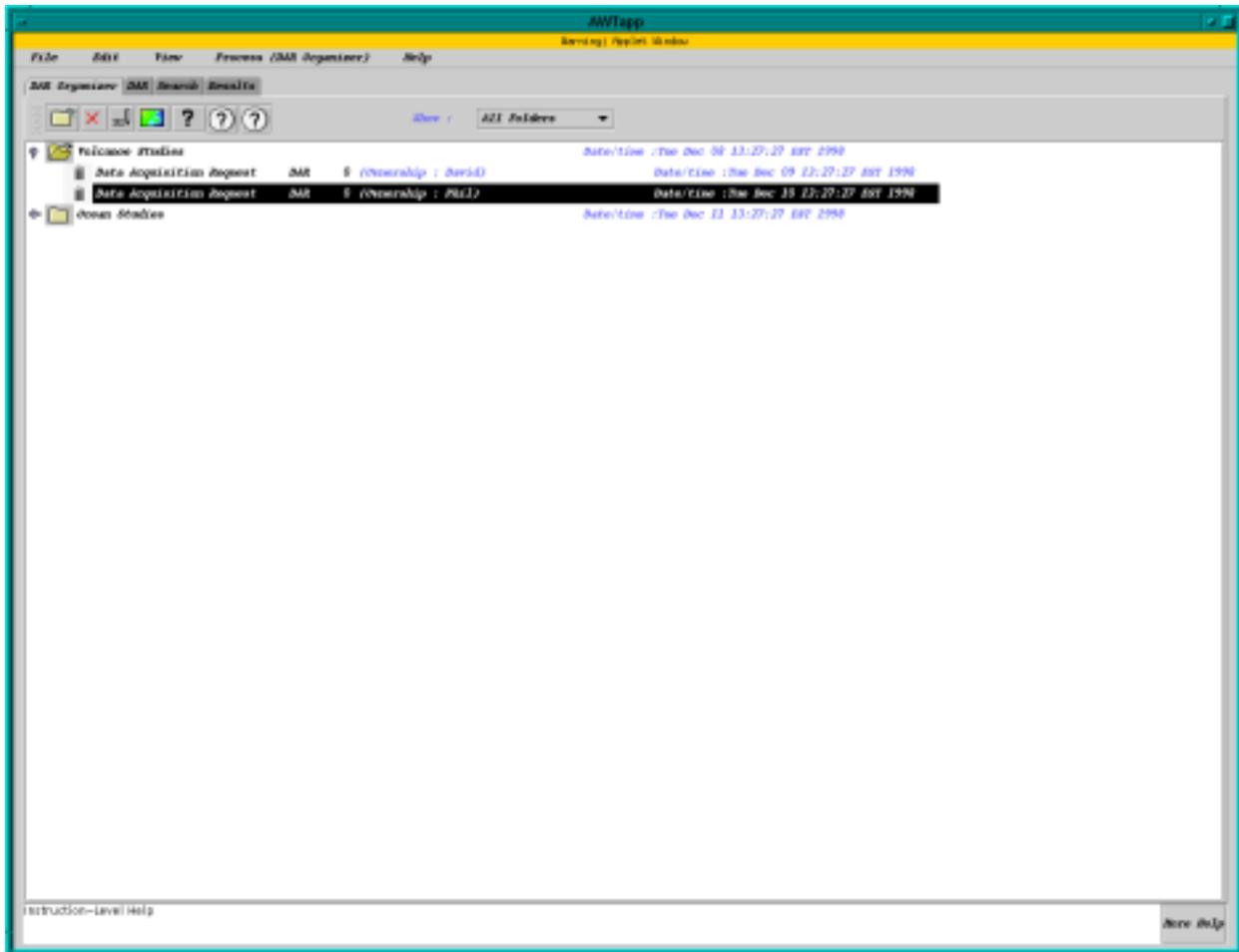


Figure 4.12.8-1c. JDAR Organizer

4.12.8.2 The JDAR Main Screen

The main screen of JDAR uses tabs as its primary navigation tool. There are three tabs on the main window of the JDAR . One tab is called “Summary” and allows the user to view a condensed presentation of xAR work, query parameters, and the returned results of submitted xAR request that are stored locally (on a hard drive or LAN). As the name suggests, the second tab, called “Create/Edit Requests” possesses the functionality necessary to create a new xAR request or to edit the parameter of a previous xAR Request that is locally stored. The third tab, called “Modify Request” will possess the functionality to modify certain attributes of a JDAR that has already been submitted to ASTER GDS.

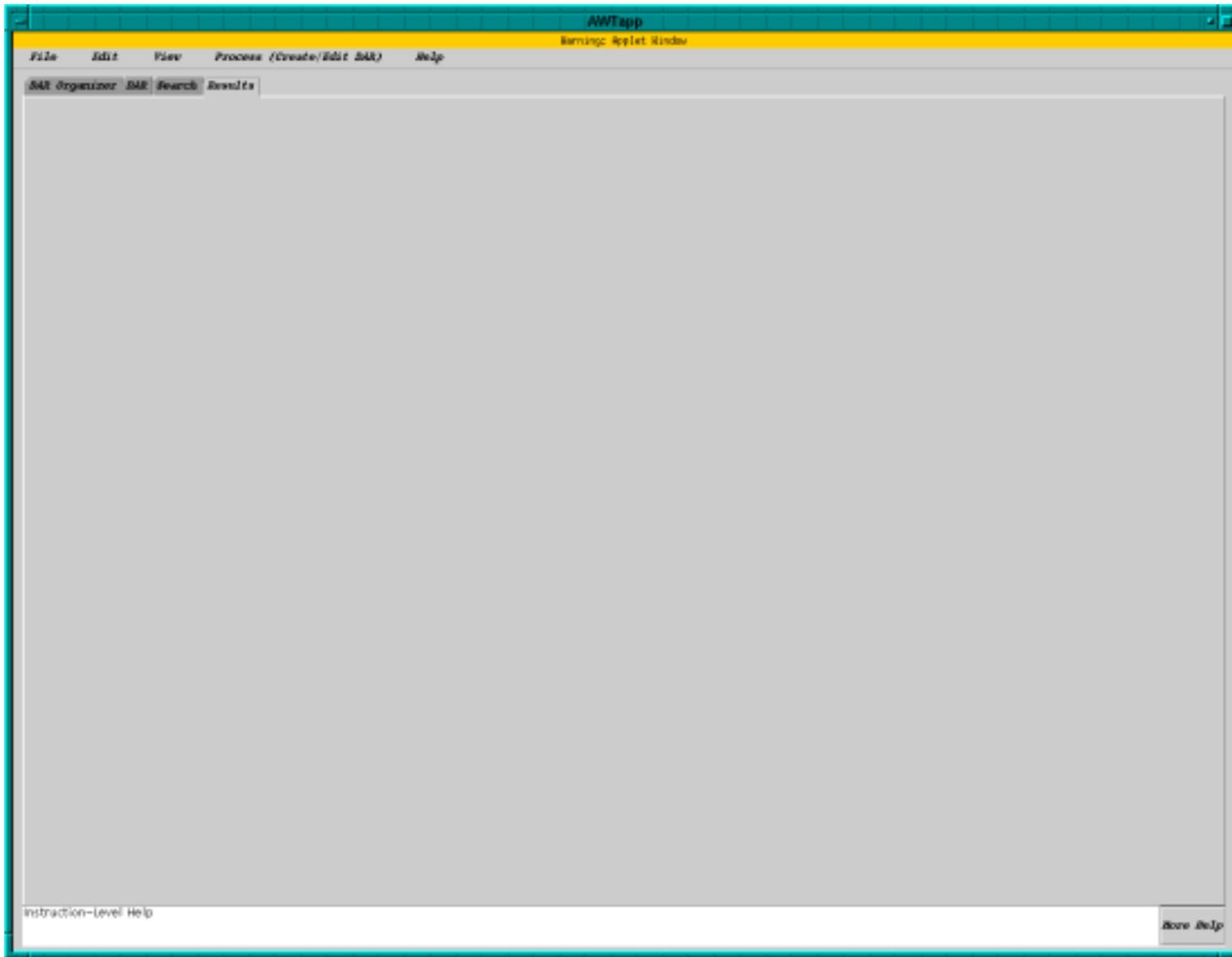


Figure 4.12.8-2. The JDAR Main Screen showing the Summary Tab

4.12.8.2.1 The Summary Tab

When the JDAR is initially launched from the desktop, the JDAR tool opens with the first tab, called “Summary”. The JDAR main screen with the default Summary tab is shown in Figure 4.12.8-2. There are two main functional areas on this tab: the “Project Folders” area (on the left) and the “Parameters” area (on the right).

The Project Folders area is intended to behave in a fashion similar to a file manager. In this area, JDARs that are locally stored (on a hard drive or LAN) are displayed by name in a Project Folder “tree.” This includes JDAR requests upon which a user is still working and the parameters of JDARs that have been successfully sent to GDS for which a JDAR ID has been returned. It is intended that when a user selects a node for a particular JDAR in the Project folder area, that all the information that has been saved for that JDAR is displayed in the “Parameters” area, which is found to adjacent, to the right of the Project Folders area.

If the user wishes to edit the contents of a JDAR stored locally (i.e.: finish an incomplete JDAR that was saved or edit a previous JDAR for which the parameters had been saved), the user can select the desired item from the Project Folders list by clicking on it and then depress the pushbutton below the Project Folders area that is labeled “Copy Parameters.” The action will cause all parameters stored for the highlighted item to populate the appropriate fields in the “Create/Edit Request” functional group where the user can inspect and/or edit them.

4.12.8.2.2 Create/Edit Request Tab

From the “Create/Edit Request” tab, the user has access to all fields necessary or desirable to complete a JDAR request or to edit existing xAR parameters. There are three “screens” through which a user must navigate in order to create or edit a xAR request. In addition, there are several additional functions available via popup windows.

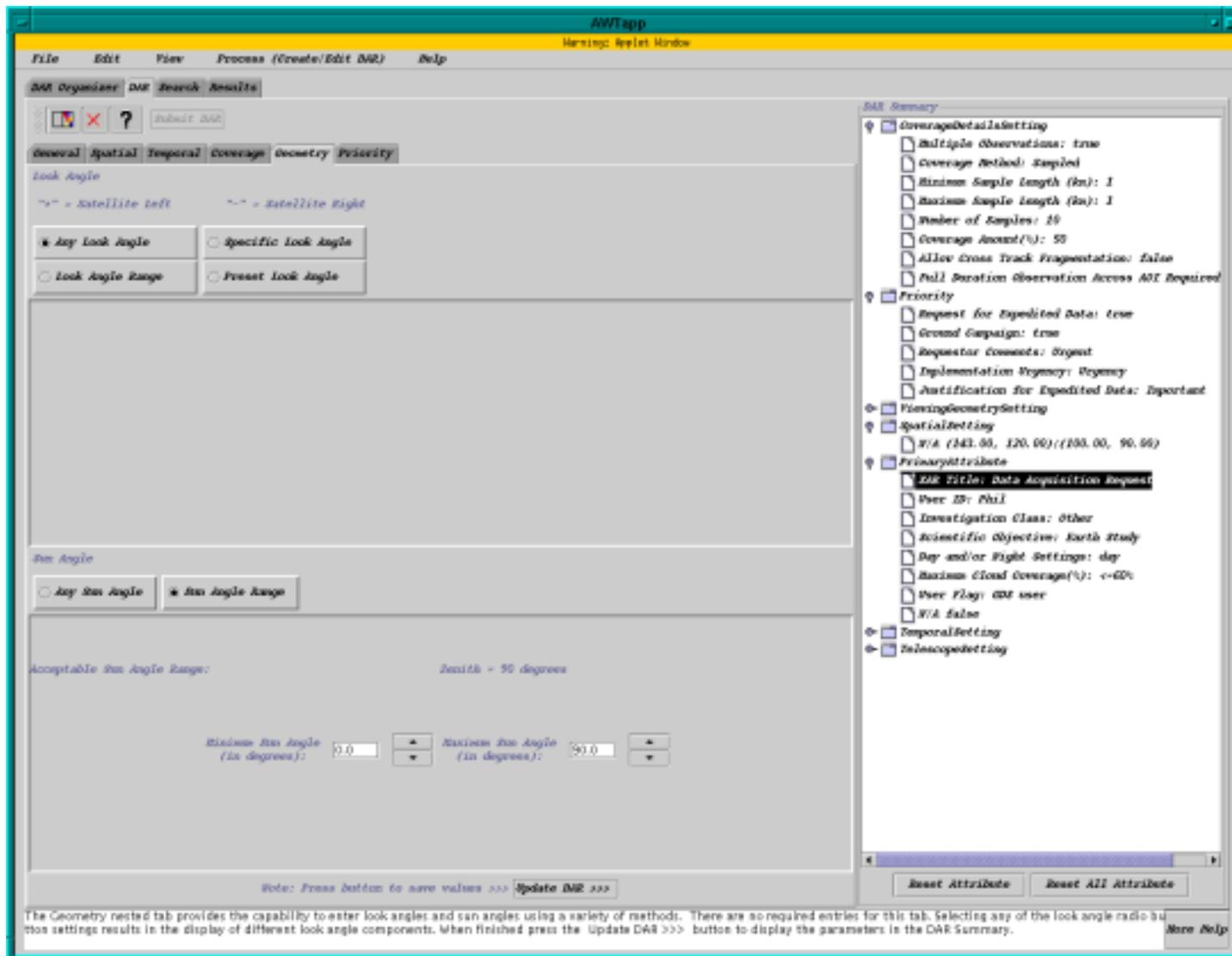


Figure 4.12.8-3. The JAR Geometry Tab

xAR Information

The first screen the user must visit is the “xAR Information” area (upper left) of the contents of the “Create/Edit Request” tab. This area contains many of the elements necessary to create or edit a JDAR request, including: xAR Title, Investigation Class, Scientific Objective, Cloud Coverage, Lighting Requirements, Telescope Selection, and Telescope Gain Settings. The fields displayed in this area are described in Table 4.12.8-2 below.

The Create/Edit Request Tab also has a series of buttons to activate secondary windows in which spatial requirements and temporal requirements (the second and third required screens) for the JDAR are defined as well as other advanced user options which allow the user to identify look and sun angles for the JDAR or change settings which effect the priority in which the JDAR is scheduled or processed. A check box has been placed to the left of each pushbutton that launches one of these secondary windows. This was done to provide a visual reference for users indicating which screens they have visited and to which they have saved entries or changes. It is intended to function such that when a user visits a secondary window; makes an entry; and “applies” them, a check mark appears in the checkbox next to the corresponding pushbutton.

The functions available through these buttons are:

- **xAR Information** is the default “screen area” occupying the upper left of the Create/Edit Request Tab.
- **Spatial Requirements** launches Spatial Requirements pop-up.
- **Temporal Requirements** launches Temporal Requirements pop-up.
- **Advanced Viewing Geometry** launches Advanced Viewing Geometry pop-up.
- **Priortrity** launches Special Request pop-up.
- **Calculate & Display** calculates an approximate number of scenes to be acquired to fulfill the JDAR based on spatial and temporal data provided by the user
- **Submit button** sends JDAR data to ASTER GDS to be scheduled.

Finally, there is a button labeled “**Submit**” in the lower right-hand corner of the “Create/Edit” tab. When the user has supplied all the JDAR parameters to be input, the “Submit” buttons is pressed to send the JDAR to GDS.

Table 4.12.8-2. xAR Information Field Descriptions

Field Name	Data Type	Size	Entry	Description
xAR Title	character	32	Optional	Allows user to name JDAR
Investigation Class	character	1	Optional	User enters the scientific discipline that JDAR request is supporting.
Scientific Objective	character	32	Optional	Brief description of the purpose of the study.
Cloud Coverage	character	1	Optional	Allows user to specify the maximum amount of cloud coverage (%, 0-100) acceptable for a image data acquired
Lighting Requirements	character	1	Optional	Allows user to specify whether image data should be acquired at day or night (or both).
Telescope Selection	character	1	Optional	User can choose from three ASTER telescopes, alone or in combination, to acquire image data.
Show Gain Settings	N/A	N/A	Optional	Gives user the option to see the “gain setting” controls on the xAR Information interface.
Band 1	character	1	Optional	Allows user to request a gain setting resolution for band 1 of VNIR telescope during image acquisition.
Band 2	character	1	Optional	Allows user to request a gain setting resolution for band 2 of VNIR telescope during image acquisition.
Band 3	character	1	Optional	Allows user to request a gain setting resolution for band 3 of VNIR telescope during image acquisition.
Band 4	character	1	Optional	Allows user to request a gain setting resolution for band 4 of SWIR telescope during image acquisition.
Band 5	character	1	Optional	Allows user to request a gain setting resolution for band 5 of SWIR telescope during image acquisition.
Band 6	character	1	Optional	Allows user to request a gain setting resolution for band 6 of SWIR telescope during image acquisition.
Band 7	character	1	Optional	Allows user to request a gain setting resolution for band 7 of SWIR telescope during image acquisition.
Band 8	character	1	Optional	Allows user to request a gain setting resolution for band 8 of SWIR telescope during image acquisition.
Band 9	character	1	Optional	Allows user to request a gain setting resolution for band 9 of SWIR telescope during image acquisition.
Resource Estimate	N/A	N/A	Optional	Calculates an approximate number of scenes to be acquired to fulfill the JDAR based on spatial and temporal data provided by the user.

4.12.8.2.2.1 Spatial Requirements Pop-up

The Spatial Requirements Screen, displayed in a secondary window and launched by a pushbutton on the JDAR main window, allows the user to define an Area of Interest (AOI) and specify coverage criteria such as sampling, cross track fragmentation and area of interest duration for the query. The “Spatial Requirements” screen makes use of the tabs to organize a variety of functions related to the map display in a way that is logical and that keeps them in close proximity to the map display. The

functional organization includes three tabs; one for “Pan and Zoom,” one called “Map Display Controls” and a third tab called “CoverageDetails.”

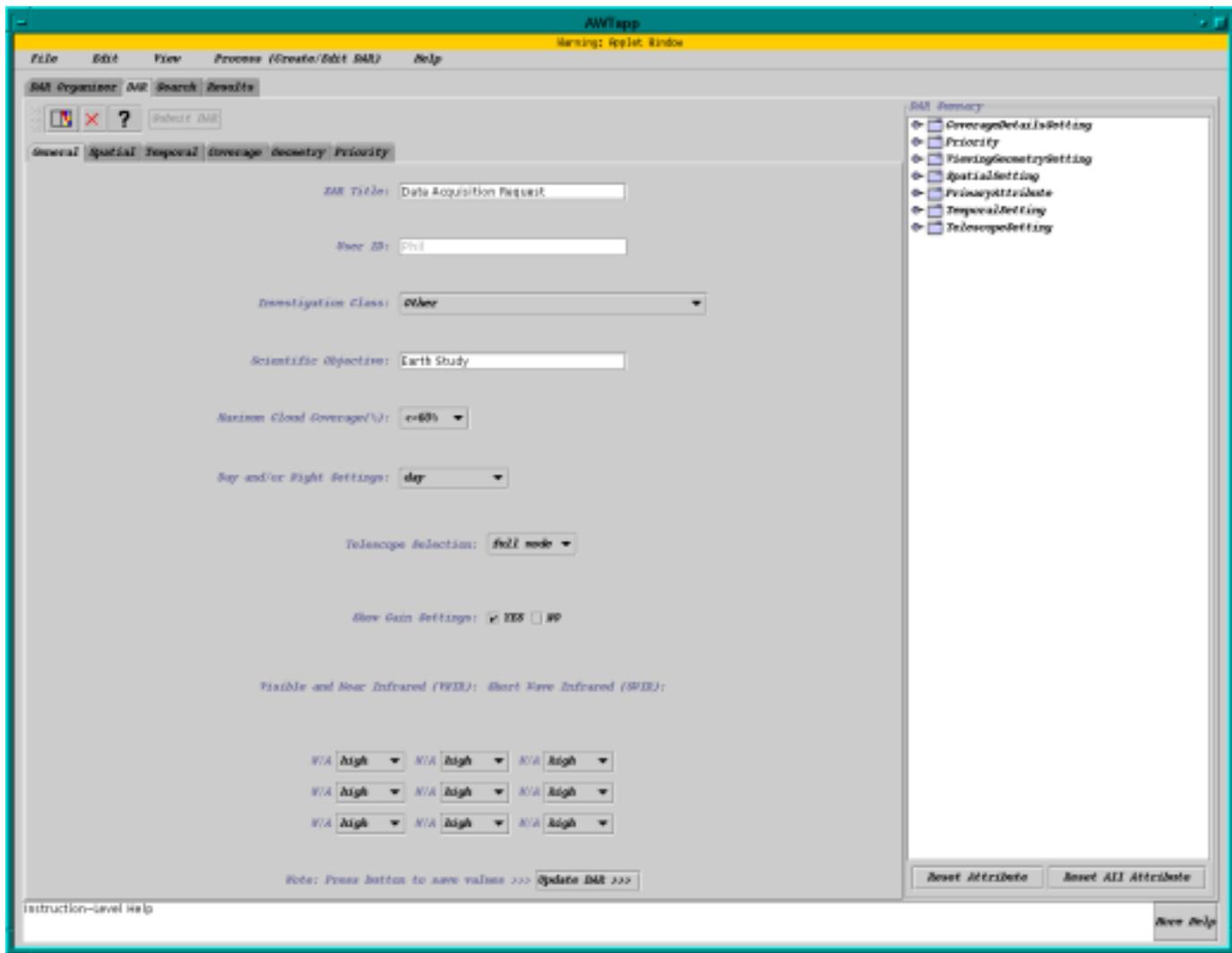


Figure 4.12.8-4. The Spatial Requirements Pop-up showing the Area of Interest Polygon Selection and the Pan & Zoom subtab.

Area of Interest Polygon

Immediately below the map display is an area labeled “Area of Interest Polygon Selection.” This area provides the text entry and modification of points in the AOI polygon. Most of these controls are desensitized except for a pushbutton labeled “**Create AOI**” (Note: at the completion of the AOI creation process this pushbutton displays “**Finished AOI**”). When the “**Create AOI**” pushbutton is depressed, the other “Area of Interest Polygon Selection” buttons become sensitized and the map display area enters the polygon selection mode. In this state, an AOI polygon can be defined by one of two mechanisms: mouse operations or text entry. After “**Create AOI**” has been depressed, it is intended that the user move the mouse over the map display and click the first mouse button to place a point of the AOI polygon. In this manner, the user can continue to place points and after each point is placed the polygon should be redrawn upon the map. Also, the coordinates for each point placed by the mouse operation should appear in the extended list widget in the “Area of Interest Polygon Selection” section. The other way to enter points in the AOI polygon is to enter the latitude and longitude of the point (if the coordinates are known) in the text fields provided and then depress the button labeled “**Add Point.**” The AOI polygon is limited to 50 points. It is intended that users will also have the ability to edit or delete AOI points. To edit a point, the user should be able to highlight the coordinates for the point entry in the extended list widget and depress the button labeled “**Modify Point.**” This action will result in the latitude and longitude text fields becoming repopulated with the coordinate data that was entered. At this point the user can modify the entry in the appropriate text fields and depress the “**accept changes**” or “**ignore changes**” button to either apply or reject the edit action. To delete a point, the user should be able to select a point in the extended list and press the “**delete point**” entry. This should remove the point from the list and cause the AOI polygon to be redrawn on the map without the deleted point.

The functions available through the Create AOI buttons are:

- **Create AOI** – Pressing this button changes the state of the map from a “pan & zoom” state to a state in that points can be entered.
- **Cancel** – Resets map.
- **Add Point** – This causes any coordinate data entered into the latitude and longitude text entry fields to be added to the list of AOI polygon points and to be drawn on the map.
- **Accept Changes** – When a point is being modified by the user and the new coordinates have been entered into the latitude and longitude text entry fields, this button causes the new coordinates to replace the coordinates for the point in question.
- **Ignores Changes** – When a point is being modified by the user and the new coordinates have been entered into the latitude and longitude text entry fields, this button causes the new coordinates entered by the user to be ignored and to restore the original data point.
- **Modify Point** – When a point is highlighted by the user in the “point list,” pressing this button causes the coordinates to be populated into the latitude and longitude text entry fields where the user can change them

- **Delete Point** – When a point is highlighted by the user in the “point list,” pressing this button causes the point to be deleted.

The entry of Area of Interest Polygon points is required in order to create and submit a valid JDAR request (see fields marked “*” in Table 4.12.8-3). However, the user has the option to enter these points either through the latitude and longitude text entry fields or through direct interaction with the map or a combination of both.

Table 4.12.8-3. Spatial Requirements -”Create AOI” Field Description

Field Name	Data Type	Size	Entry	Description
Latitude	Character	7	Required*	Allows user to the latitude of an AOI point via text entry.
Longitude	Character	8	Required*	Allows user to the longitude of an AOI point via text entry.
Map	N/A	N/A	Required*	This is an interactive map that allows users to create and display an Area or Interest polygon.
Point List	N/A	N/A	N/A	Displays a list of AOI points that have been entered either through keyboard entry or by interaction with the map.

Pan & Zoom subTab

It is intended that the user have the capability of panning and zooming on the map display via mouse or key board operation. Both methods are described here and both require that the tab be set to the “Pan & Zoom” tab.

The functions available through the Pan & Zoom subTab buttons are:

- **Pan** – Resets the center of the map so a different map area is displayed with a new center point based determined by the user.
- **Zoom In** – Resets the map scale to show more detail (less area) by a pre-determined increment on a coordinate point that is specified by the user..
- **Zoom Out** – Resets the map scale to show a wider area (less detail) by a pre-determined increment on a coordinate point that is specified by the user.

Pan

To pan the map via mouse, the user should click on the “Pan” button, found on the “Pan & Zoom” tab. The user should then click on the map. The point the user clicks on becomes the new “center” of the map as the map is redrawn.

To pan the map via keyboard operation, the user should add in the coordinate entry field labeled “Pan to:” the coordinate which the user intends to be at the center of the map as it is drawn on the

interface. When the user is finished entering the coordinates, depressing the “pan” button causes the map to be redrawn using the coordinates supplied by the user as the map center.

Zoom

To zoom in on the map via mouse, the user should click on the “Zoom In” button, found on the “Pan & Zoom” tab. The user should then click on the map. The point the user clicks on becomes the new “center” of the map as the map is redrawn to a scale increment that is determined by the tool.

To zoom out on the map via mouse, the user should have the user should click on the “Zoom Out” button, found on the “Pan & Zoom” tab. The user should then click on the map. The point the user clicks on becomes the new “center” of the map as the map is redrawn to a scale increment that is determined by the tool.

To zoom in on the map via keyboard operation, the user should add in the coordinate entry field labeled “Zoom Around:” the coordinate which the user intends to be at the center of the map as it is drawn on the interface. When the user is finished entering the coordinates, depressing the “Zoom in” button causes the map to be redrawn using the coordinates supplied by the user as the map center as the map is redrawn to a scale increment that is determined by the tool.

To zoom out on the map via keyboard operation, the user should add in the coordinate entry field labeled “Zoom Around:” the coordinate which the user intends to be at the center of the map as it is drawn on the interface. When the user is finished entering the coordinates, depressing the “Zoom out” button causes the map to be redrawn using the coordinates supplied by the user as the map center as the map is redrawn to a scale increment that is determined by the tool.

Table 4.12.8-4. Spatial Requirements - Pan & Zoom Field Description

Field Name	Data Type	Size	Entry	Description
Latitude	Character	7	Optional	Allows user to specify via text entry the latitude in which the map should be panned.
Longitude	Character	8	Optional	Allows user to specify via text entry the longitude in which the map should be panned.
Latitude	Character	7	Optional	Allows user to specify via text entry the latitude in which the map should be zoomed.
Longitude	Character	8	Optional	Allows user to specify via text entry the longitude in which the map should be zoomed.

Map Display Controls

The second tab of three on the Spatial Requirements Tab is called “Map Display Controls.” As stated before, the design illustrated here is subject to change based upon the capabilities of the mapping tool that this screen will use. This tab provides the controls responsible for the all aspects of the map display. This includes the type of map, its resolution quality, and the projection of map overlays (such as rivers, borders, etc.). This also includes views of the ASTER satellite's ground track and swath views over a given period of time that can be specified by the user.

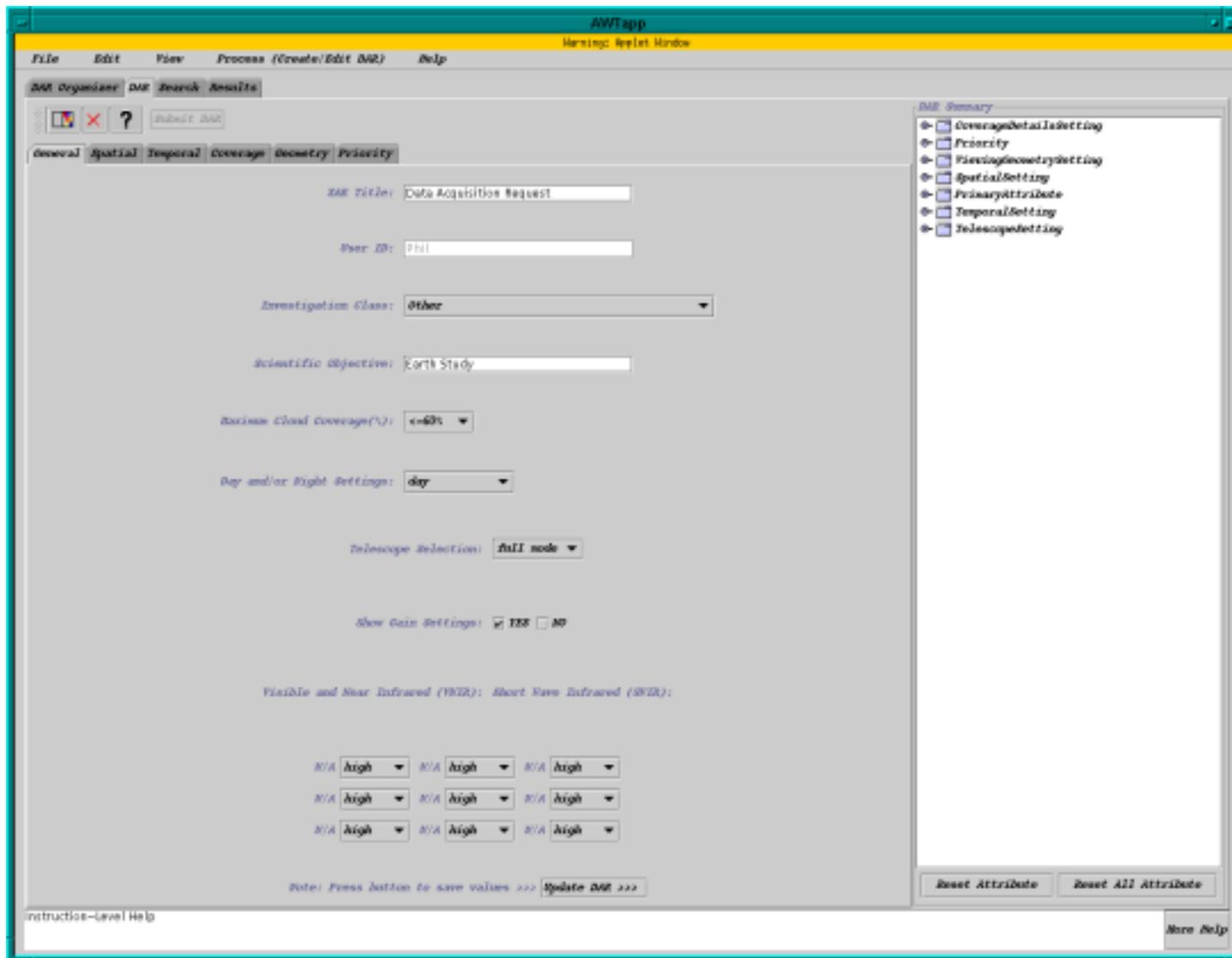


Figure 4.12.8-5. The Spatial Requirements Pop-up showing the Map Display Controls tab

The functions available through the Map Display Controls buttons are:

- **Projection** – Used to select type of map to be shown in the map display.
- **Ground Track Ascending** – Allows the user to have the ascending portion of the satellite ground track displayed on the map.
- **Ground Track Descending** – Allows the user to have the descending portion of the satellite ground track displayed on the map.
- **Look Angle and View Swath** – Allows user to select look angles and/or view swaths to be displayed as on overview on the map given a begin and end date.
- **Default Look Angle and View Swath** – Allows the default look angle and view swath to be displayed on the map given a begin and end date.
- **Other** – Allows user to select other overlays to be displayed on the map.
- **Political/Ocean** – Toggles on and off the display of overlays with political and ocean boundaries.
- **Highway/Railroad** – Toggles on and off the display of overlays of highways and railroads.
- **Rivers/Lakes** – Toggles on and off the display of overlays of rivers and lakes.
- **Urban/Built-up** – Toggles on and off the display of overlays with urban and other high-population density areas.

**Table 4.12.8-5. Spatial Requirements - Map Display Controls
Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Begin	Character	N/A	Optional	Allows the user to define the begin date and time for the portion of the ground track to be displayed on the map.
End"	Character	N/A	Optional	Allows the user to define the end date for the portion of the ground track to be displayed on the map.
Specified Look Angle	Character	N/A	Optional	Allows the user to specify a look angle to be displayed on the map given a begin and end date.
Specified View Swath ID	Character	N/A	Optional	Allows the user to specify a pre-determined view swath to be displayed on the map given a begin and end date.
Look Angle Range	Character	N/A	Optional	Allows the user to specify a look angle range to be drawn onto the map given a begin and end date.

Coverage Details

The third tab of three on the Spatial Requirements Tab is called “Coverage Details.” Primarily, this tab possesses the controls responsible for selecting coverage method (normal or sampled), specifying whether full duration AOI is required (yes or no), and specifying cross-track fragmentation (yes or no). If, for “coverage method,” “normal” is selected, than the controls used to set the sampling parameters (minimum sampled length, maximum sampled length, number of samples, and coverage amount) should be desensitized (greyed-out). Even though “Coverage Amount” is desensitized, it should show a value of 100%. If “sampled” is selected for “coverage method,” this interface sensitizes the controls used to set the sampling parameters (minimum sampled length, maximum sampled length, number of samples, and coverage amount) and the user can set these parameters.

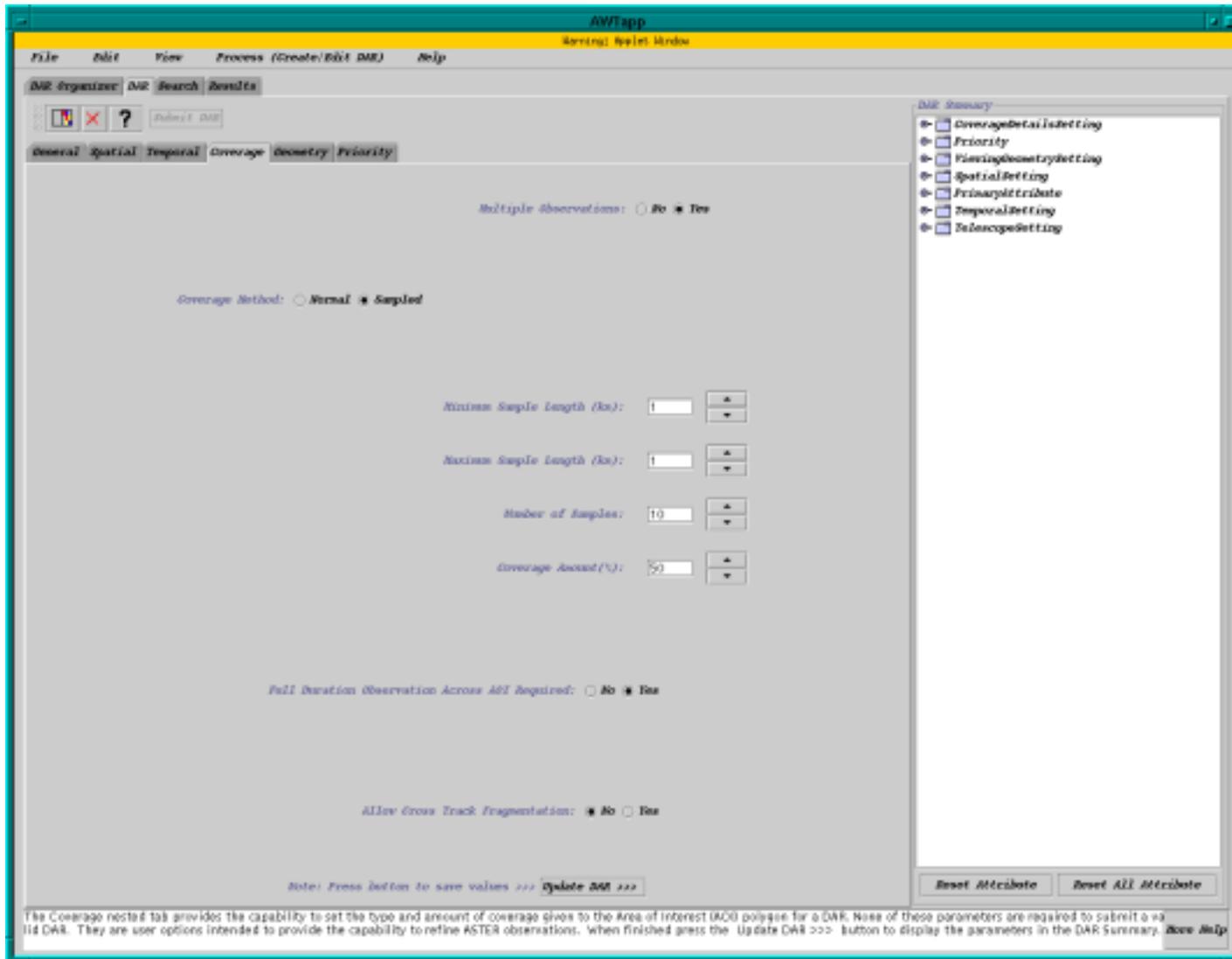


Figure 4.12.8-6. The Spatial Requirements Pop-up showing the “Coverage Details” tab.

The functions available through the Coverage Details buttons are:

- **Coverage Methods** – Allows user to choose between “Normal” and “Sampled” coverage of the AOI
- **Normal** <default> – User specifies that 100% of the AOI area is to be imaged.
- **Sampled** – This sensitizes the controls that allow the user to specify sampling parameters
- **Full AOI Duration Required** – The user specifies whether or not the full AOI duration is required.
- **Allow Cross Track Fragmentation** – The user specifies whether or not cross track fragmentation is allowed.

When the AOI is selected and all the desired parameters set, the user then depresses the “Apply” button to accept the settings. When “Apply” is pressed, the check box beside the “Spatial Requirements” push button on the “Create/Edit Request” tab becomes checked-off and the user-specified spatial requirements are applied.

Table 4.12.8-6. Spatial Requirements - Coverage Details Field Descriptions

Field Name	Data Type	Size	Entry	Description
Minimum sample length.	Character	2	Optional	User specifies the minimum acceptable number of consecutive scenes in a continuous “ribbon” of scenes taken from the AOI.
Maximum sample length.	Character	2	Optional	User specifies the maximum number of consecutive scenes in a continuous “ribbon” of scenes taken from the AOI.
Number of samples	Character	2	Optional	User specifies the number of samples to be taken from a defined area.
Coverage Amount	Character	3	Optional	The user specifies the minimum acceptable percentage of the AOI to be sampled.

Temporal Requirements Pop-up

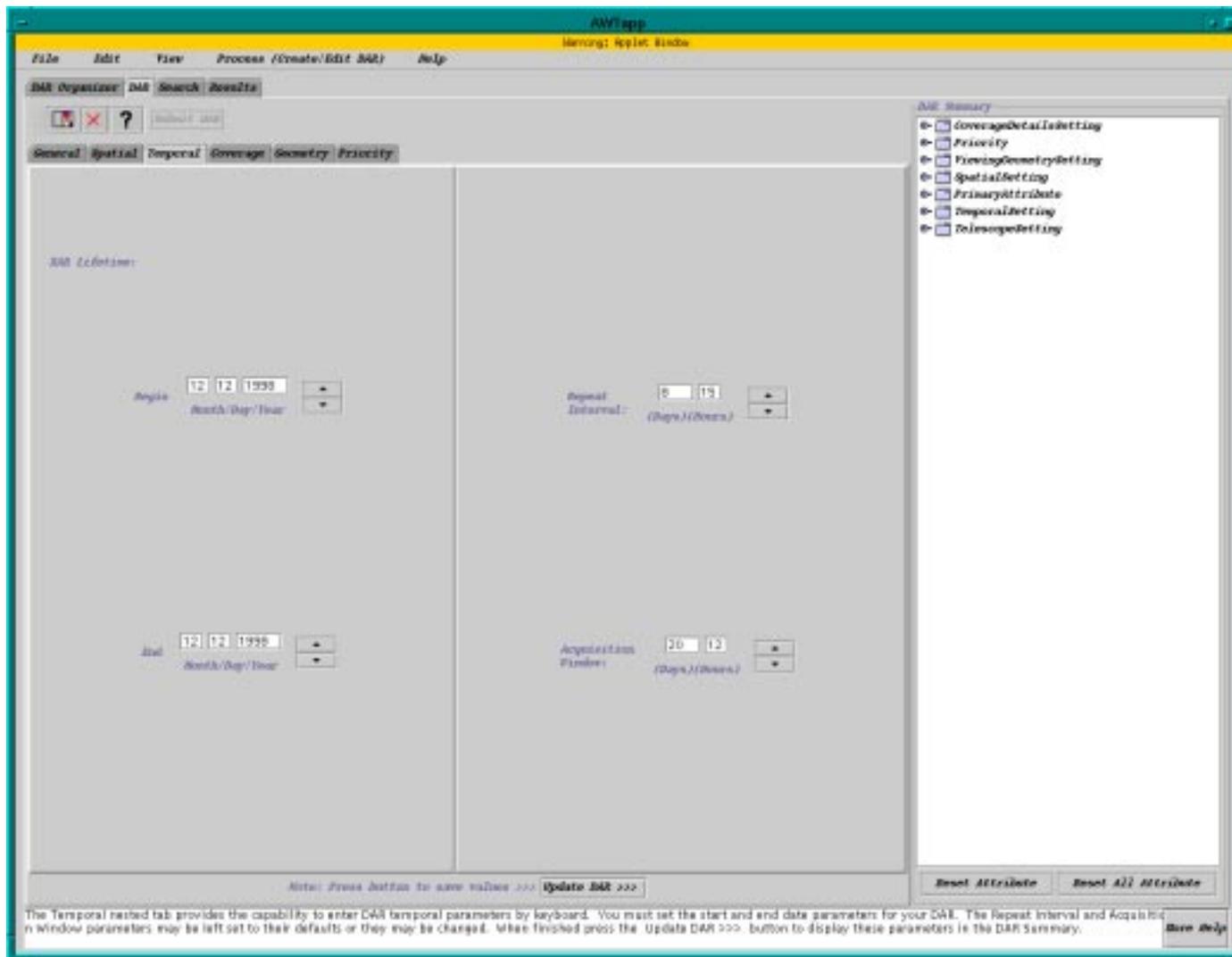


Figure 4.12.8-7. The Temporal Requirements Pop-up (default)

The Temporal Requirements Pop-up (launched by a pushbutton on the Create/Edit Request Tab) is provided so that a user can specify the time (in days) that the Area of Interest described in a JDAR request are to be observed. Also, a user can requests multiple observations at regularly scheduled intervals in a single JDAR request This window is designed to allow user to enter temporal information textually or graphically.

The functions available through the Temporal Requirements buttons are:

- **Time Increment options** – Allows user to specify unit of time (months or years) to be displayed on time line.
- **Time line** – Interactive time line that allows user to set and also displays the temporal requirements of the JDAR.
- **Set** – Allows user to choose between setting an observation time window or a single observation time.
- **Start and End Dates for Acquisition Window(s)** – Displays start and end dates for acquisition windows that result from Repeat Interval and Acquisition Window settings.
- **Apply** – Apply the changes made to the JDAR display.
- **Dismiss** – Dismiss or ignoree the changes made to the JDAR display
- **Clear** – Clear the fields on the JDAR display.
- **Help** – Display a Help dialog explaining fields and buttons on the screen.

xAR Lifetime

This area of the screen is used to select the times at which observations for a specific JDAR are to occur. For most observations, a user must set the “xAR Lifetime. The “xAR Lifetime” is the basic unit of time for a JDAR request. Simply stated, the user enters the date on which observations are requested to start and the date on which they are requested to end.

The user can either enter the xAR Lifetime start and endpoints via mouse interacting with the timeline widget directly or by entering the start and end dates into the appropriate text fields, which in turn, update the timeline display.

Multiple Observations

In some instances, it may be desirable for a user to request multiple observations of the same Area of Interest at regularly scheduled intervals rather than a steady stream of data during the entire xAR lifetime. If the user decides that it is not necessary to have a steady stream of data about a particular AOI, but wants image data from the same AOI at regular time intervals, then the user can choose the option to request multiple observations of the AOI. To set request multiple observations, the user must set two parameters, “Repeat Interval” and “Acquisition Window.” Both are interdependent and both must be set in order to create multiple observations. The “Repeat Interval,” expressed in terms of days and hours, is the amount of time separating the start of each desired observation. The “Acquisition Window,” also expressed in days and hours, refers to the duration of each Repeat

Interval. Like the xAR Lifetime, the Repeat Interval, & Acquisition Window both graphically via mouse operation and textually via keyboard operation.

Table 4.12.8-7. Temporal Requirements Field Descriptions

Field Name	Data Type	Size	Entry	Description
Time Increment text field	Character	2	Optional	Allows user to specify number of units of time to be displayed on time line.
"beginning" text field	character	8	Optional	Allows user to specify the beginning data for the time increment to be displayed on the time line.
xAR Lifetime Begin Text field	Character	9	*Required	User enters the beginning date from which images should be taken in support of JDAR.
xAR Lifetime End Text field	Character	9	*Required	User enters the end date at which image acquisition should terminate for the JDAR.
Repeat Interval	Character	5	Optional	Allows user to set the time between recurring acquisitions in a single JDAR.
Acquisition Window	Character	5	Optional	Allows user to set the duration of recurring acquisition windows in a single JDAR.

- The xAR Lifetime begin and end date are mandatory but can be set either with the text entry widgets or the time line or both.

Specific Observation Time

In a few instances, it may be desirable for the user to select a "Specific Observation Time." The "Specific Observation Time" option is not to be used often and its use is constrained in terms of both time and space. If a user selects this option, a specific day and time must be provided as well as the duration of time that ASTER instruments are to be left on. Day & time must be specified with precision to the second and duration is expressed in minutes and second. Due to limitations of satellite hardware, the duration of a specific observation cannot exceed 16 minutes per orbit. Also, if a user does enter a Specific Observation Time, any AOI data entered by the user is disregarded as the ASTER instruments can only image what is directly beneath the satellite at the specified time.

To set a "Specific Observation Time," the user must select the radio button labeled "Specific Observation Time." This radio button is found immediately below the "temporal widget." Once the "Specific Observation Time" selected, the "temporal widget" & "time increment" controls are desensitized. Also, the text fields to set xAR Lifetime, Repeat Interval, and Acquisition Window are replaced with text fields to set the start time and duration of the Specific Observation Time. Specific Observation Time can only be set with these text controls. No graphical input is possible.

**Table 4.12.8-8. Temporal Requirements -
Specific Observation Time Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Specific Observation Start Date/Time	Character	14	*Required	To set a specific date and time for JDAR data acquisitions.
Duration of Intervals Window	Character	4	*Required	Allows user to specify a duration of the specific observation period (not to exceed 16 minutes).

- If Specific Observation Time is selected, a date, time, and duration entry are required. If Multiple Observations are selected, then it is necessary to set a xAR Lifetime, but the user should not a specific observation time.

Advanced Viewing Geometry

This option is available as a dialog enabled by a pushbutton located on the Create/Edit Request Tab for users who would like to specify acceptable look angles, sun angles, and/or view swaths for a given JDAR request. To access any or all of these options, the user can press the “Advanced Viewing Geometry” pushbutton found on the Create/Edit Request Tab. That action spawns an Advanced Viewing Geometry popup containing look angle, sun angle, and view swaths options.

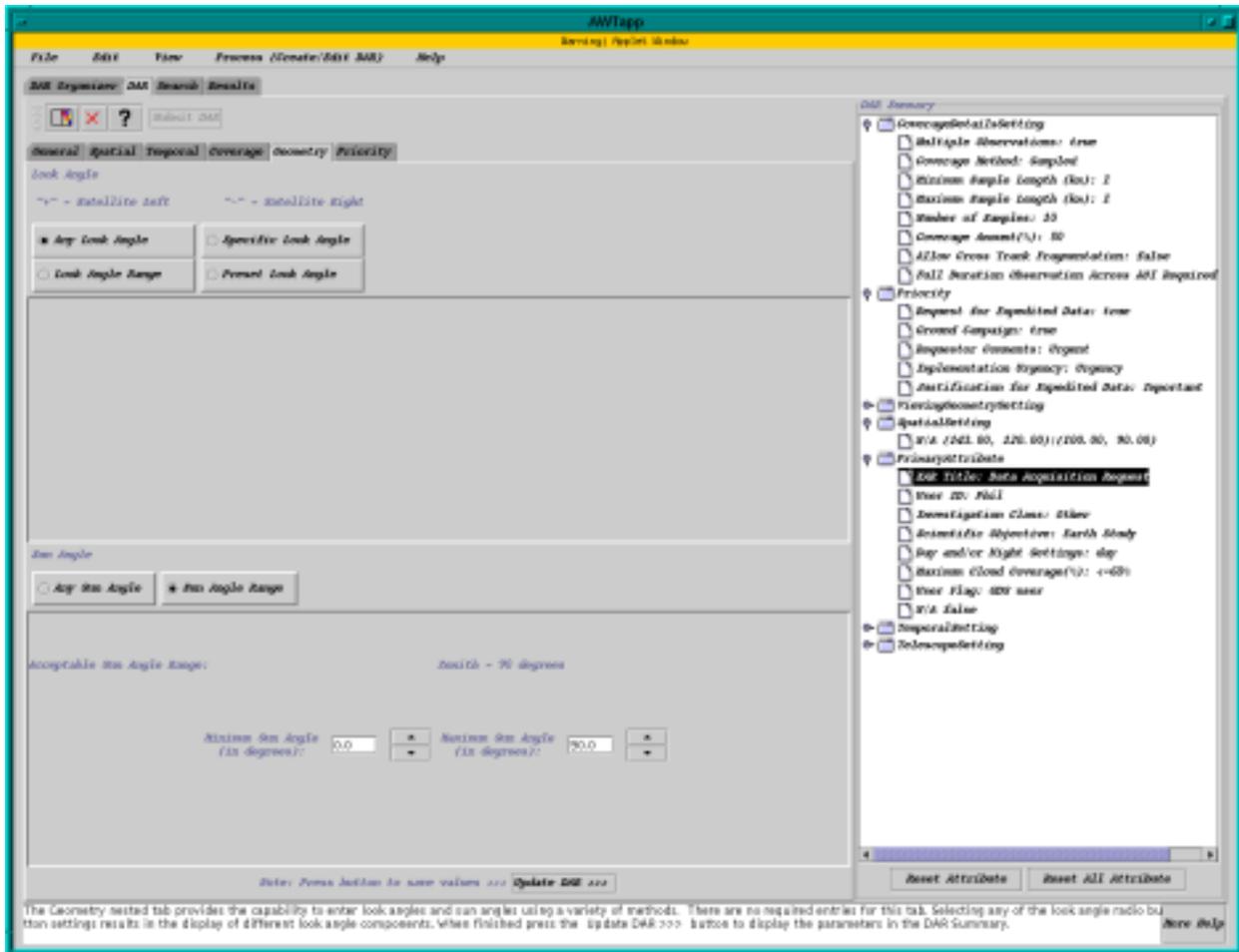


Figure 4.12.8-9. The Advanced Viewing Geometry Pop-up

For look angle, the user can select a specific look angle, specify a range of valid look angles, use a pre-determined look angle “ID” to set a look angle, or choose to use the default look angle setting. For the Sun Angle, the user can select the option to specify a range of valid look angles or to the default look angle setting.

The functions available through the Temporal Requirements buttons are:

- **Look Angle and View Swath** – Allows user to pick default look angles and view swaths, a specific look angle, a look angle range, or a view swath ID.
- **Default Look Angle and View Swath** – Allows user to specify to ASTER GDS that default look angle and view swath settings should be used for the ASTER platform in the acquisition of image data to fulfill the JDAR.
- **Sun Angle** – Allows user to pick decide between using default sun angle settings or setting acceptable sun angles for the JDAR.

- **Default Sun Angle** – Allows user to specify to ASTER GDS that default sun angles should be used for the ASTER platform in the acquisition of image data to fulfill the JDAR.
- **Apply** – Apply the changes made to the JDAR display.
- **Dismiss** – Dismiss or ignore the changes made to the JDAR display
- **Help** – Display a Help dialog explaining fields and buttons on the screen.

Table 4.12.8-9. Advanced Viewing Geometry Field Descriptions

Field Name	Data Type	Size	Entry	Description
Specified Look Angle	Character	1	Optional	Allows user to specify to ASTER GDS a single look angle setting for the ASTER platform in the acquisition of image data to fulfill the JDAR.
Specified View Swath ID	Character	1	Optional	Allows user to specify to ASTER GDS a single view swath (from a list of predetermined view swaths, each given its own identification number) setting for the ASTER platform in the acquisition of image data to fulfill the JDAR.
Minimum Look Angle Range	Character	4	Optional	Allows user to specify to ASTER GDS the minimum acceptable look angle for a rang or look angles for the ASTER platform in the acquisition of image data to fulfill the JDAR.
Maximum Look Angle Range	Character	4	Optional	Allows user to specify to ASTER GDS the minimum acceptable look angle for a rang or look angles for the ASTER platform in the acquisition of image data to fulfill the JDAR.
Minimum Sun Angle Range	Character	2	Optional	Allows user to specify to ASTER GDS the minimum acceptable look angle for a rang or look angles for the ASTER platform in the acquisition of image data to fulfill the JDAR.
Maximum Sun Angle Range	Character	2	Optional	Allows user to specify to ASTER GDS the minimum acceptable look angle for a rang or look angles for the ASTER platform in the acquisition of image data to fulfill the JDAR.

Priority

“Priority” refers to a dialog that is enabled by a pushbutton located on the Create/Edit Request Tab that allows the user to specify conditions that effect the JDAR is given during scheduling and processing. The Priority” dialog provides the opportunity to indicate to ASTER GDS whether the JDAR being requested is coincident with research being conducted on the ground, the urgency of the request, or the necessity for expedited processing if requested.

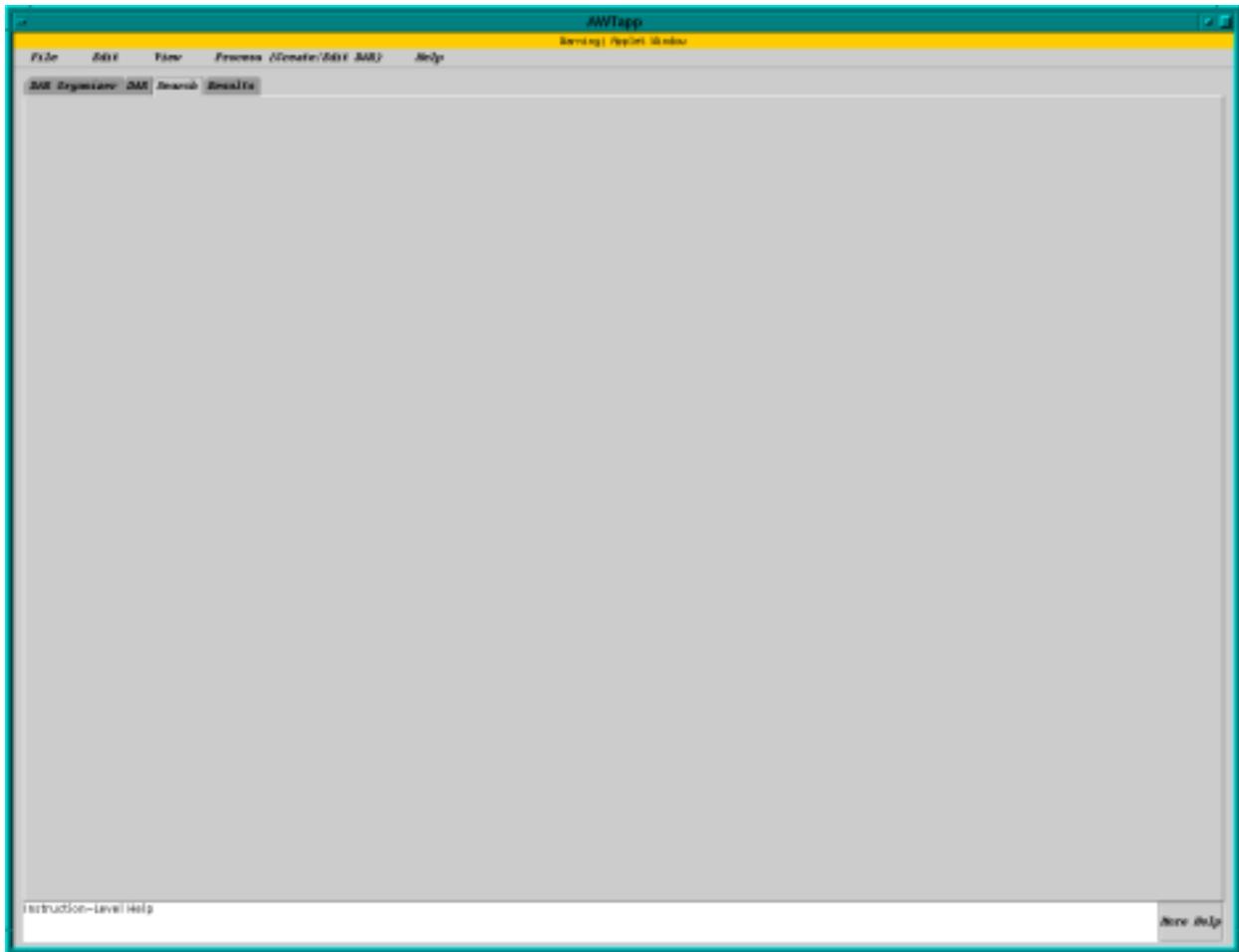


Figure 4.12.8-10. The Priority Pop-up

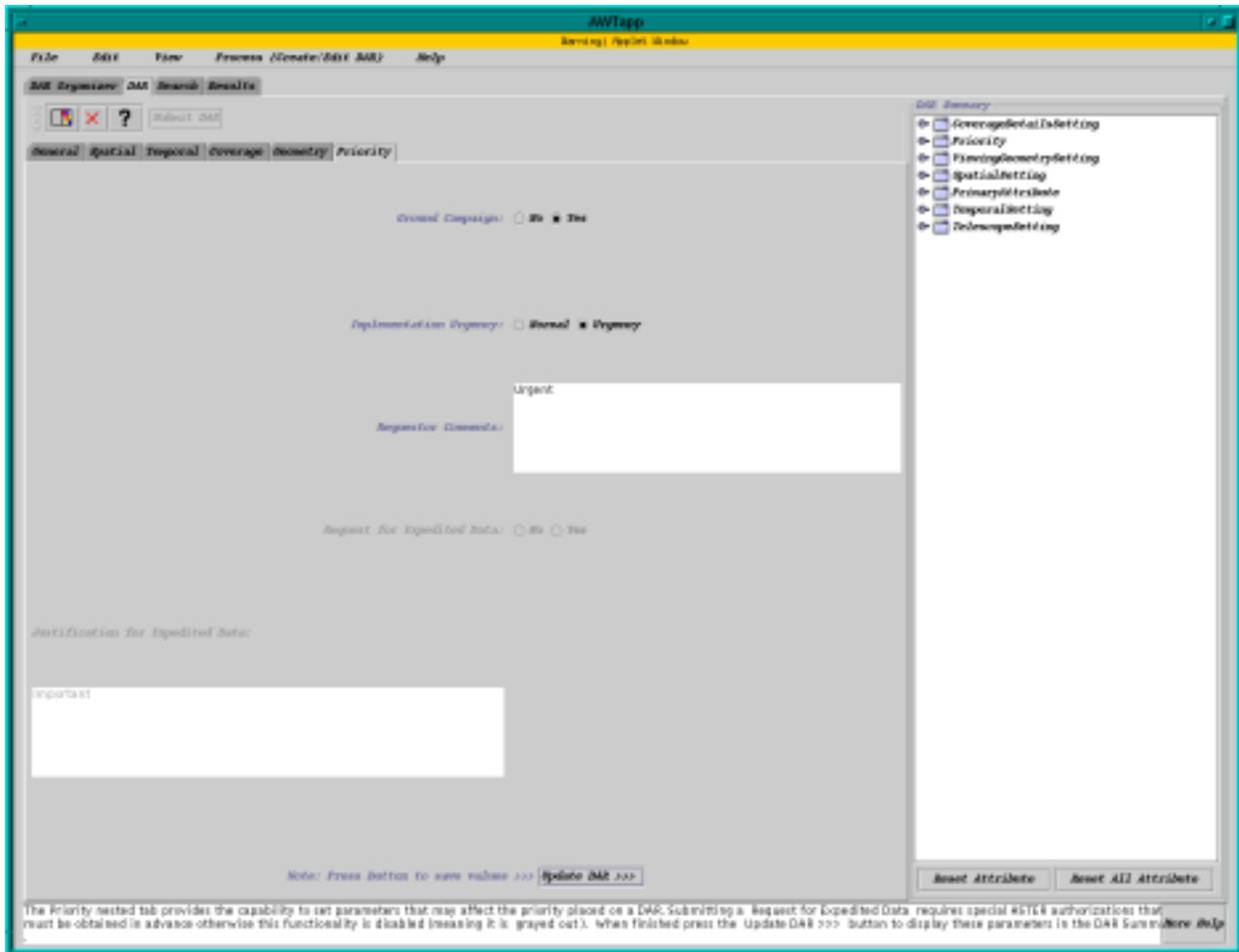


Figure 4.12.8-11. The Priority Pop-up

One of the choices on this popup, Implementation Urgency, allows the user to choose between “normal” and “urgent” priority. The default setting is “normal.” At the suggestion of ASTER science team, the interface is being design so that if the user selects “Urgent” for this choice, than the xAR Lifetime must be set to begin and end within 18 days following the request. Any request in which the xAR lifetime exceeds 18 days cannot be flagged urgent. Conversely, if a request is flagged urgent prior to setting Temporal Requirements and the user attempts to an enter a xAR lifetime end time that exceeds 18 days (following the day the request is being submitted), the software will not allow the entry. The 18 day figure was derived based on the 16 day spacecraft cycle + two days for processing delays and that information that could be obtained after one 16 day cycle of the satellite should not be deemed urgent. This implementation is intended to prevent abuses of the Urgency setting.

The functions available through the Priority buttons are:

- **Ground Campaign** – Indicates to ASTER GDS whether the temporal requirements for this JDAR are coincident with supporting research being conducted on the ground. When set to “yes,” this raises the scheduling priority for the JDAR.
- **Implementation Urgency** – Indicates an urgent request to ASTER GDS. When this option is set to “yes,” the xAR Lifetime cannot exceed 18 days beyond the current date.
- **Request for Expedited Data** – When set to “yes,” this indicates to ASTER that the user is requesting priority processing and shipping of image data collected for this JDAR
- **Request for Direct Downlink** – NOT SUPPORTED BY ASTER
- **Justification for Direct Downlink** – NOT SUPPORTED BY ASTER
- **Apply** – Apply the changes made to the JDAR display.
- **Dismiss** – Dismiss or ignore the changes made to the JDAR display
- **Help** – Display a Help dialog explaining fields and buttons on the screen.

Table 4.12.8-10. Special Request Field Description

Field Name	Data Type	Size	Entry	Description
“Requester Comments” text field	Character	256	Optional	Allows user to provide information to the scheduler that supports requests for higher priority in the scheduling or processing of JDAR data.
“Justification for Expedited Data” text field.	Character	256	*Required	If the user sets the “Request for Expedited Data” radio box to “yes,” then an entry in the “Justification for Expedited Data” text field is required.

Resource Estimate

The Resource Estimate option, displayed on a read-only dialog that is enabled by a pushbutton located on the Create/Edit Request Tab, executes an algorithm that estimates the number of good scenes that will be returned from the xAR request in progress. This estimate is calculated by request when the user depresses the “**Resource Estimate**” button found on the “Create/Edit Request” tab of the JDAR main window and is based on the spatial and temporal parameters for the JDAR that have been specified by the user. The user must specify an Area of Interest and a xAR Lifetime before the JDAR can calculate a resource estimate. The result of the calculation is displayed in an information dialog that is dismissed by the user after viewing the result by pressing “**OK.**”

Submit

When the user has completed setting all required JDAR parameters (xAR Information, Spatial requirements, and Temporal Requirements), depressing the “**Submit**” button on the JDAR “Create/Edit Request” tab causes the JDAR request to be sent to ASTER GDS. If the request is successfully received, a unique identification number, called a JDAR ID will be returned to the user from ASTER GDS approximately 15 seconds later. This JDAR ID is shown to the user in an information dialog.

4.12.8.2.2.2 Modifying a JDAR

Once a JDAR is submitted to ASTER GDS and a JDAR ID returned, the user can modify one of two parameters. The user can change “Acceptable Cloud Coverage” to a setting that is less restrictive than the original JDAR request. The user can also change “xAR Status” – this means suspending an active JDAR or re-activating a suspended JDAR.

When a JDAR ID is returned and the JDAR is loaded into the JDAR , the user can go the “Modify Request” tab (located on the JDAR main window), change one or both of the two modifiable JDAR parameters, and then “Submit” the modification.

The user should not be able to perform a “**Submit**” action from the “Modify Request” tab if either:

1. One no change has been made
2. The modifications(s) have been submit already.
3. Attributes other than the “modifiable” ones have been edited elsewhere in the JDAR tool.

4.12.8.3 Required Operating Environment

JDAR requires Sun Solaris 2.5.1. For information on the operating environment, tunable parameters and environment variables of JDAR refer to the 920-TDx-013 “Custom Code Configuration Parameters” documentation series. The “x” refers to the installed location, e.g. 920-TDG-013 is for GSFC DAAC.

4.12.8.4 Databases

The JDAR stores the information received in the user’s home directory. This information will be available on subsequent JDAR sessions if the user chooses to modify the request for re-submission. Data used to create the mapping displays is stored in a proprietary database that is not accessible to JDAR users, the ESRI Mapping Tool.

4.12.8.5 Special Constraints

None.

4.12.8.6 Outputs

The output of the JDAR are data requests in xAR file format and the information displayed on the JDAR screens. A copy of the generated request is stored in the user's home directory. If the user activated the "Submit" button a copy of the request is sent to the ASTER GDS.

4.12.8.7 Event and Error Messages

The JDAR issues error messages to indicate that a problem has occurred. There are two types of error messages. One type is a user message that indicates to the user that an invalid entry has been made by the user and should be changed before the Data Acquisition Request can be submitted. Other error messages are of the type that may require operator or technical support. Error messages produced by JDAR are listed in Appendix A.

4.12.8.8 Reports

None.

4.12.9 Earth Science Online Directory (ESOD) Advertising Tool

The ESOD is a World Wide Web (www) based directory that holds descriptions of earth science providers, earth science data, and earth science related services. ECS provides the web-based ESOD Advertising GUI tool to allow users access to these advertisements.

Users can perform the functions listed in Table 4.12.9-1 with the ESOD Advertising Tool GUI.

Table 4.12.9-1. Common ECS Operator Functions Performed with the Custom Advertising Tool

Operating Function	Command/Script or GUI	Description	When and Why to Use
New Advertisements	ESOD Online Directory	User selects this link to view listing of new and updated entries.	User needs to view recent additions and modifications to Advertisements
Search All	ESOD Online Directory	User selects this link to perform a text search on all advertisements.	User needs to view advertisements with a common attribute.
Search Data Entries only	ESOD Online Directory	User selects this in order to perform a search on data entries	User needs to view data entries.

4.12.9.1 Quick Start and GUI Overview

The ESOD Advertising tool is a web-based GUI which ECS users invoke using Netscape 4.06 or equivalent browser.

4.12.9.1.1 Invoke ESOD Advertising Tool From Command Line

To view the ESOD Advertising tool web page, first bring up netscape by entering the following command:

```
% netscape
```

Next one must specify the web page. Choose the “Open Page” (ALT-O) from the “File” menu. Then type “http://g0ins02u.ecs.nasa.gov:10000/IOAdEsodHome.html” for GSFC or

“http://e0ins02u.ecs.nasa.gov:10000/IOAdEsodHome.html” for EDC or

“http://l0ins02u.ecs.nasa.gov:10000/IOAdEsodHome.html” for LARC or

“http://n0ins02u.ecs.nasa.gov:10000/IOAdEsodHome.html” for NSIDC,

then hit “Return.” The “EOSDIS Online Directory” page should now load.

4.12.9.2 ESOD Advertising Tool Main Screen

Figure 4.12.9-1 shows the ESOD Advertising Tool home web page.

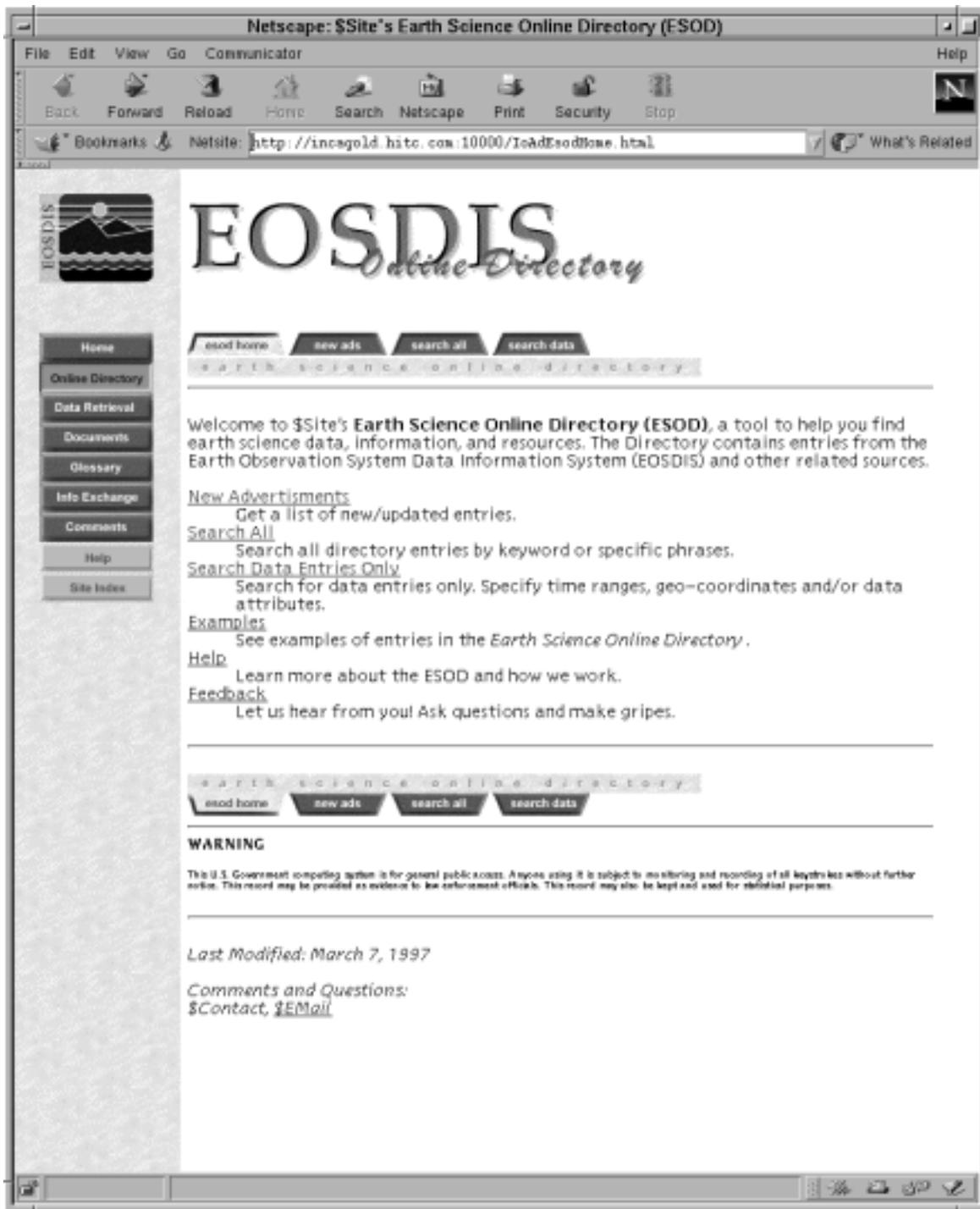


Figure 4.12.9-2. ESOD Advertising Home Page

From the home page, the user can access six ESOD advertising-specific subpages through the following highlighted links:

1. New Advertisements (also accessible by pressing “new ads” tab at top and bottom of page)
2. Search All (also accessible by pressing “search all” tab at top and bottom of screen)
3. Search Data Entries Only (also accessible by pressing “search data” tab at top and bottom of screen)
4. Examples
5. Help
6. Feedback

In addition, the left of the screen has nine common support buttons allowing the user to access the EOSDIS home page, access other EOSDIS services, and provide EOSDIS help.

4.12.9.2.1 New Advertisements

To view the new advertisements click the “New Advertisement” link on the ESOD home page. A list of new advertisement links will appear on the screen as shown in Figure 4.12.9-3. This page allows the user to link to each new advertisement submitted within the last 30 days.



Figure 4.12.9-3. ESOD New Advertisement Page

4.12.9.2.2 Search All

Click the “Search All” link on the home page to view a search engine. A page with “Text Search” should appear as in Figure 4.12.9-4.

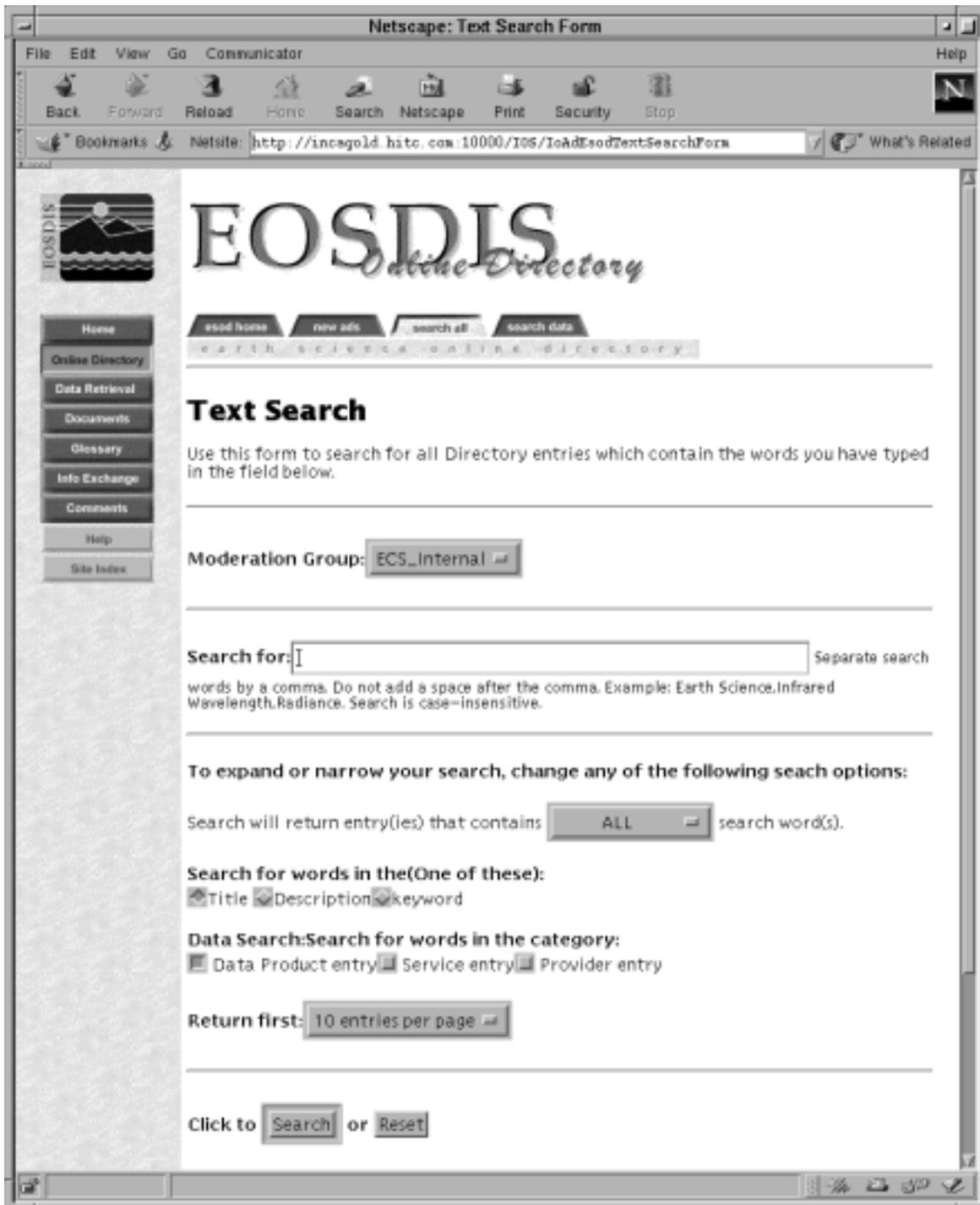


Figure 4.12.9-4. ESOD Search All Page

The Search All screen allows a user to search the ESOD advertisement database with specific queries and perform free-text searches similar to typical search engines.

4.12.9.2.3 Search Data Entries Only

Clicking the “Search Data Entries Only” link brings the user to the “Data Search Form” page shown in Figure 4.12.9-5. Here after following the directions at the top of the page, users can search on advertisements that pertain to data.

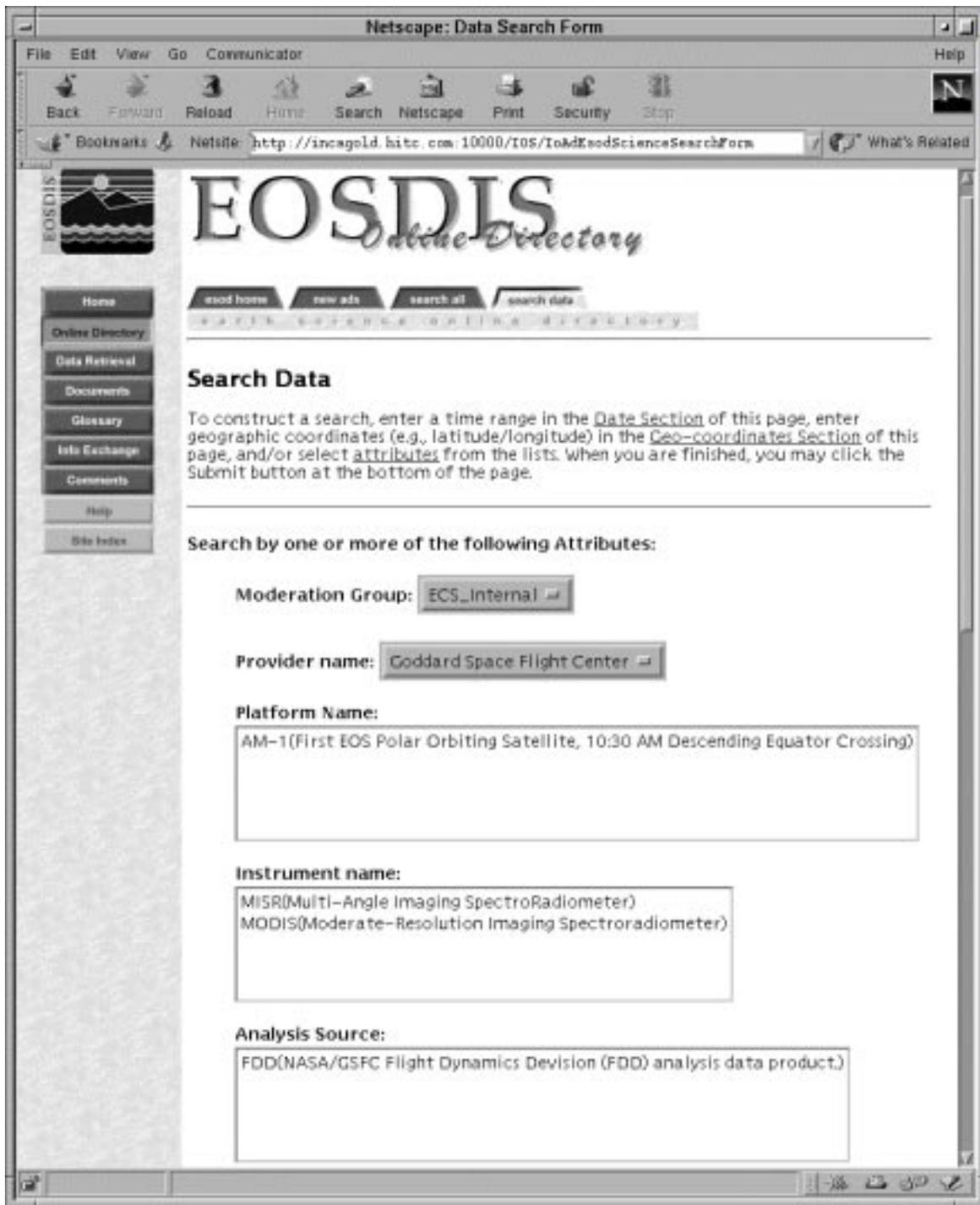


Figure 4.12.9-5. Data Entries Only Page (1 of 2)

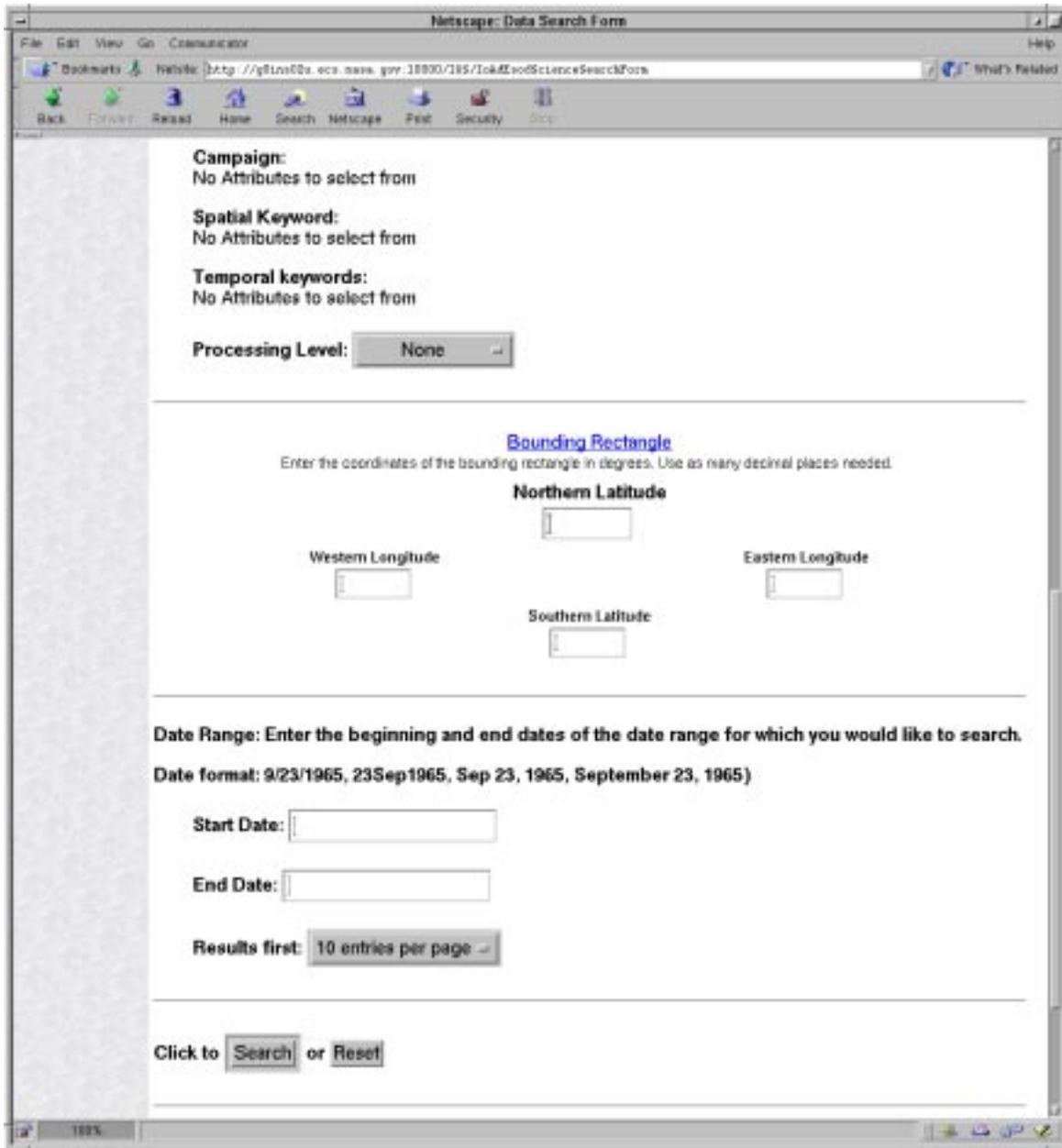


Figure 4.12.9-5. Data Entries Only Page (2 of 2)

Additional capabilities exist to search by science data related metadata. For example, users can search by time on geographic areas as well as common science data metadata.

4.12.9.2.4 Examples

To view the example page click the "Examples" link on the ESOD home page. The Examples page shown in Figure 4.12.9.6 will come up showing directory entries.

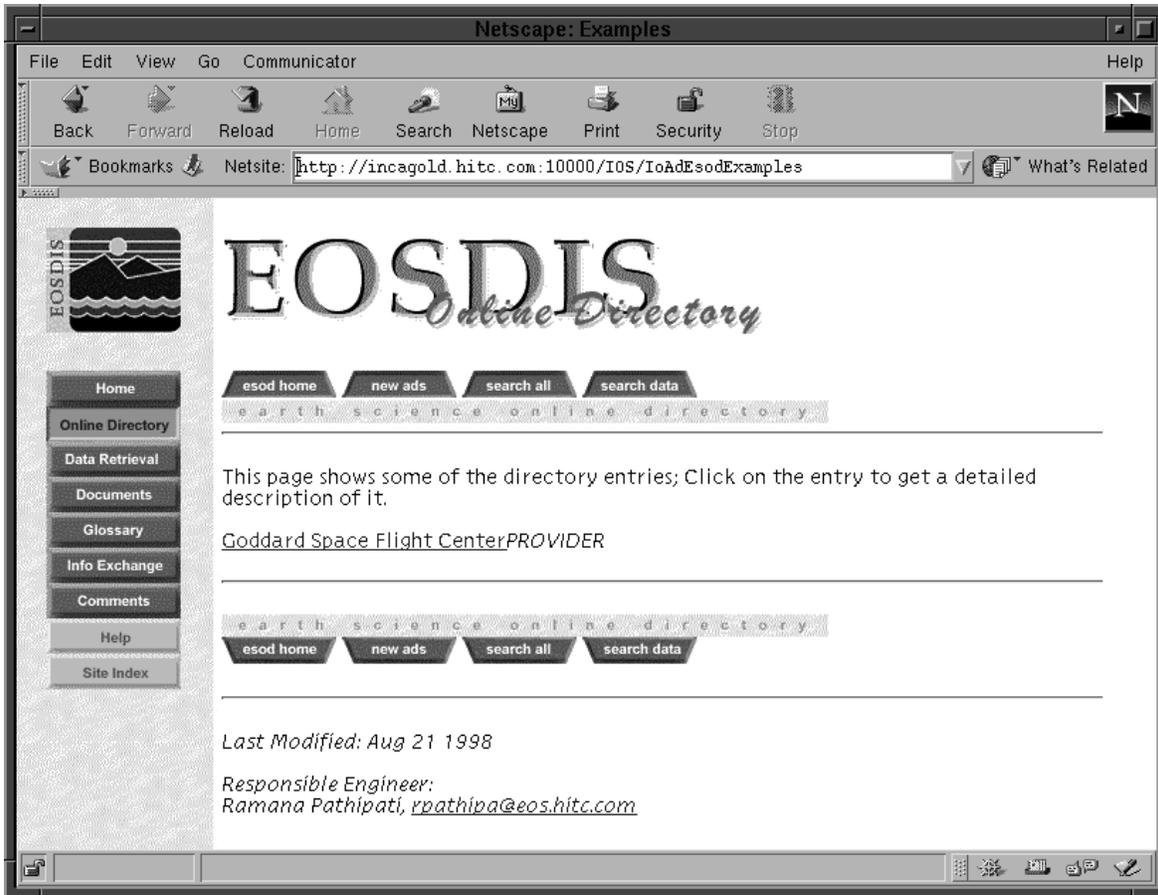


Figure 4.12.9-6. Examples Screen

4.12.9.2.5 Help

To get help and learn more about ESOD user shall click on the “Help” link. Here users will find a table of contents and links to those topics (Figure 4.12.9-7).

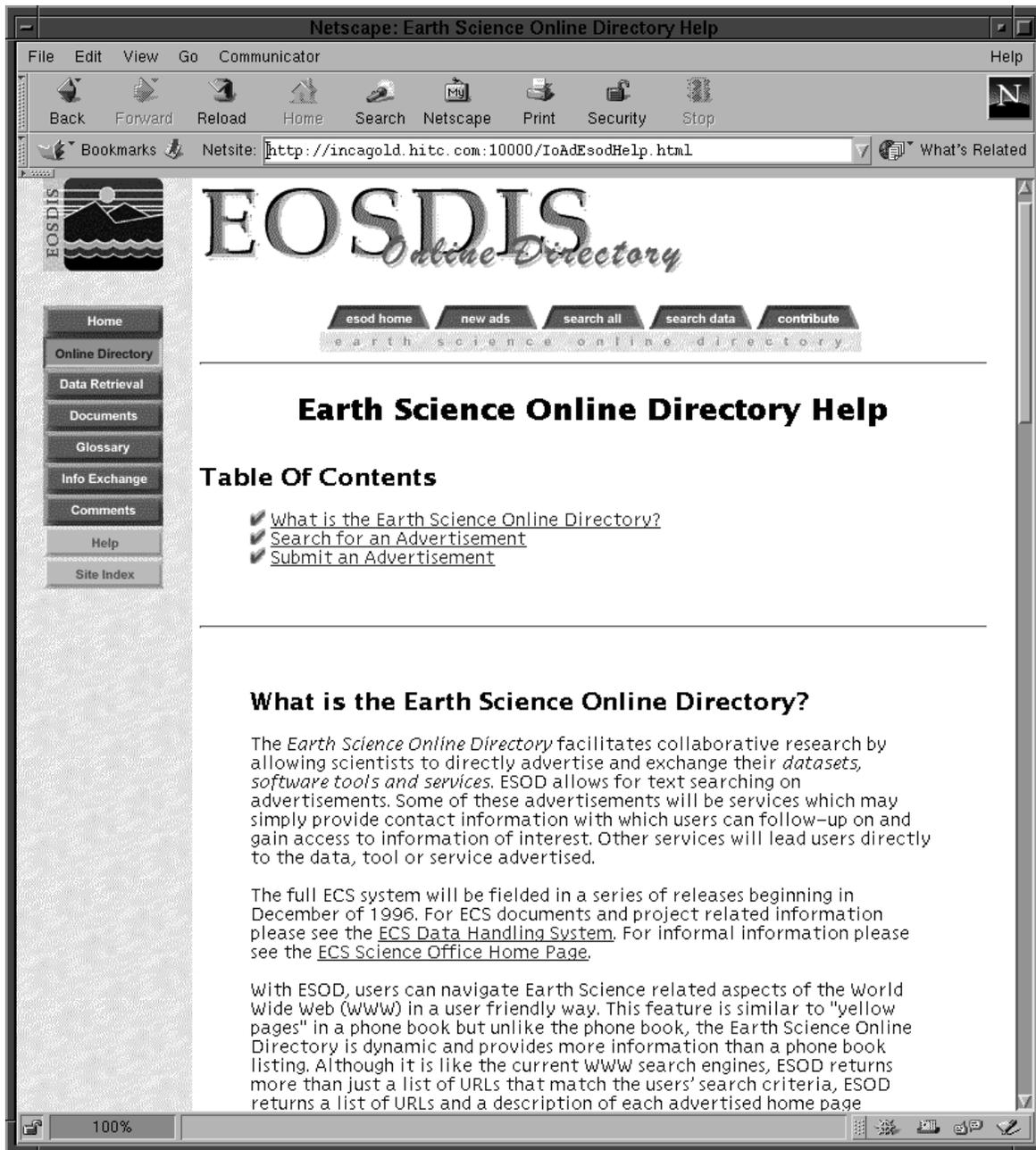


Figure 4.12.9-7. Help Screen

4.12.9.2.6 Feedback

Clicking the "Feedback" brings up the browsers designated email application. Users shall click this link when they wish to present feedback and suggestions.

4.12.9.3 Required Operating Environment

ESOD Advertising tool is accessible with an environment supporting a web browser such as Netscape version 4.06.

4.12.9.4 Databases

The ESOD database supplies advertising data to web browsing users.

4.12.9.5 Special Constraints

None.

4.12.9.6 Outputs

Information on ESOD maintained data is returned on user query.

4.12.9.7 Event and Error Messages

TBS

4.12.9.8 Reports

None.

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Appendix A. User Interface Messages

A.1 Overview

In the following section, all messages that appear on the graphical user interface (GUI) of ECS custom applications are presented in separate tables. (For information on commercial applications used in ECS, see the user's manuals of the individual applications.) The tables are organized according to the ECS subsystem to which the applications belong. Each table has the following columns:

- **Message Text.** Messages can refer to user actions or provide information about what is happening in the application or in the system. There can be error, application state changes, informational and debugging, transactional, and security messages. In the following tables, messages are presented exactly as they appear on the current user interface.
- **Impact.** In the following tables, a brief description is presented of what could occur as a consequence of the information provided in the message. Impact can refer to effects on the application, or the system.
- **Cause and Corrective Action.** Where it is useful to the user and appropriate to the message, the following tables provide a brief statement of what caused the event that prompted the message to be displayed and what, if anything, the user can or should do about it.

A.2 User Interface Messages

The User Interface Messages are presented in the following order:

- A.2.1 CLS
- A.2.2 DMS
- A.2.3 IOS
- A.2.4 DSS
- A.2.5 INS
- A.2.6 CSS
- A.2.7 MSS
- A.2.8 PLS
- A.2.9 DPS

A.2.1 Client Subsystem (CLS)

The following tables present user interface messages for the User Registration Tool, the B.0 Search and Order Tool (B0SOT), EOSView, and the Data Acquisition Request (DAR) Tool.

Table A.2.1-1. User Registration Tool User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
Error: Please enter a User Verification Key	This is a mandatory field; so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. For account verification, users must supply a password or "key", for instance, mother's maiden name, a secret code word, or a string of nonsense letters.
Error: Please enter a First Name	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.
Error: Please enter a Last Name	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.
Error: Please enter an Email Address	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.
Error: Please enter a city	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.

Table A.2.1-1. User Registration Tool User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
Error: Please enter State/Province	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.
Error: Please enter a zip or postal code	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.
Error: Please enter phone number where you can be reached	This is a mandatory field, so the system will not allow users to submit the form without completing the indicated area.	Entry was not completed. Click OK on the error message popup window. Then, complete the missing information.

Table A.2.1-2. B.0 Search and Order Tool (BOSOT) User Messages (1 of 4)

Message Text	Impact	Cause and Corrective Action
The Abort will end all unfinished searches.	Active search will be aborted.	User should CANCEL the Abort until the search is complete.
Do you really want to clear the comments?	Comments field would be cleared.	Confirmation is required before the text area will be cleared.
Do you wish to exit the system?	Tool will be exited.	Confirmation is required before exiting the tool.
Do you want to abort the mark/unmark operation?	Granules currently marked will become unmarked.	Confirmation is required before granules are unmarked.
Do you wish to combine the new search results with your current search results? Note: Selecting No will clear results from previous searches.	Results from previous searches will be deleted.	Confirmation is required before deleting search results.

**Table A.2.1-2. B.0 Search and Order Tool (BOSOT) User Messages
(2 of 4)**

Message Text	Impact	Cause and Corrective Action
Do you really want to clear the search message?	Search message criteria will be cleared.	Confirmation is required before clearing the search message.
Do you really want to delete the saved search?	Saved search criteria will be deleted.	Confirmation is required before deleting the saved search.
Invalid Data Center.	The entry is not accepted into the search criteria.	Correct the Data Center entry.
Invalid Campaign/Project.	The entry is not accepted into the search criteria.	Correct the Campaign/Project entry.
Invalid Data Set.	The entry is not accepted into the search criteria.	Correct the Data Set entry.
Invalid Date.	The entry is not accepted into the search criteria.	Correct the Data entry.
Provide all geographic info.	The entry is not accepted into the search criteria.	Correct the Geographic Info entry.
Invalid Time Interval.	The entry is not accepted into the search criteria.	Correct the Time Interval entry.
Invalid Latitude.	The entry is not accepted into the search criteria.	Correct the Latitude entry.
Invalid Longitude.	The entry is not accepted into the search criteria.	Correct the Longitude entry.
Invalid Parameter.	The entry is not accepted into the search criteria.	Correct the Parameter entry.
Invalid Processing Level.	The entry is not accepted into the search criteria.	Correct the Processing Level entry.
Invalid Sensor.	The entry is not accepted into the search criteria.	Correct the Sensor entry.
Invalid Source/Platform.	The entry is not accepted into the search criteria.	Correct the Source/Platform entry.

**Table A.2.1-2. B.0 Search and Order Tool (BOSOT) User Messages
(3 of 4)**

Message Text	Impact	Cause and Corrective Action
Problem with getting Dependent Valid. Notify System Staff.	Tool cannot be used because the dependent valids file is not readable or is not found.	Contact DAAC User Services for assistance.
Search required Geographic Information and either Sensor or Parameter or Data Set.	Insufficient information is entered to execute the search.	Enter the required information so that the search can be executed.
Search required Data Set Information and a Granule Request.	Insufficient information is entered to execute the search.	Enter the required information so that the search can be executed.
No Search to Abort.	User has requested a search Abort, but no search is active.	Informational message only.
Southernmost lat. exceeds Northernmost lat.	The entry is not accepted into the search criteria.	Correct the latitude entries.
End date exceeds Start date.	The entry is not accepted into the search criteria.	Correct the date entries.
End time exceeds Start time.	The entry is not accepted into the search criteria.	Correct the time entries.
Westernmost long exceeds Easternmost long.	The entry is not accepted into the search criteria.	Correct the longitude entries.
At the top.	The user is trying to scroll up a list but is already at the top of the list.	Scroll down.
At the bottom.	The user is trying to scroll down a list but is already at the bottom of the list.	Scroll up.
You must select a Data Set before viewing the detail information. To select a Data Set click on the Data Set number button for the Data Set.	Detailed information cannot be displayed as requested.	Select a Data Set by clicking on the Data Set number button for the Data Set.

**Table A.2.1-2. B.0 Search and Order Tool (BOSOT) User Messages
(4 of 4)**

Message Text	Impact	Cause and Corrective Action
Previous search is still active.	A new search will not be executed.	Wait until current search is complete before initiating a new search.
Marking/Unmarking of many Granules for Order will result in looping through each Granule to check for Packaging type. If there are Multiple Options for a Granule, the system will pop-up a message for you to select an Option. You may see several of these pop-up messages depending on the number of Granules with Multiple Options.	Informational message only.	Informational message only. No corrective action required.
Packaging information is not available for the product you've requested. Your request will be forwarded to that Data Center's User Services Office for disposition. They should be contacting you with the appropriate packaging information for your request. If you have any questions, contact the User Services Office at the Data Center listed above. Contact Information is available under the Help Menu Option.	The user is unable to completely define an order due to insufficient information being provided by a DAAC. The order is submitted incompletely.	The user will be contacted directly by DAAC User Services to complete the Order definition.
No Saved Searches.	Since no search criteria have been saved, a list of Saved Searches cannot be retrieved.	Informational message only. No corrective action required.

Table A.2.1-3. EOSView User Messages (1 of 10)

Message Text	Impact	Cause and Corrective Action
PROBLEM WITH FILE: Either file is not an HDF file or read permission is not set for this file.	The file selected by the user in the file selection dialog can not be viewed with EOSView.	Re-select "File-Open" from EOSView Main Window and pick a different file.
Display for this object not implemented.	User selected an HDF object that can not be displayed.	Select a different HDF object.
Input error - integer input must be in the range of: X = 0 - <number> Y = 0 - <number>	Integer values entered were out of range.	Re-enter values in the range listed.
Error reading from SDS. Unable to get stats.	EOSView could not read the selected SDS to calculate statistics.	None
Error creating stats list.	EOSView had an error while trying to display statistical data.	None
Error attaching to Vdata.	Error occurred while trying to read from selected VData.	None
Error setting field <fieldname>.	Error occurred while trying to read from selected VData.	None
Error in Vseek with field <fieldname>	Error occurred while trying to read from selected VData	None
Error reading from field <fieldname>	Error occurred while trying to read from selected VData	None
Statistics will not be calculated for character data.	User requested to see statistics for tabular data but cannot be done for character arrays.	None
Unable to set help directory.	EOSView is unable to load hypertext help file.	Select hypertext help file (eosview.csc) in the file selection dialog.
File needs to be an HDF file.	Running EOSView with a script and file passed in was not in HDF format.	None

Table A.2.1-3. EOSView User Messages (2 of 10)

Message Text	Impact	Cause and Corrective Action
File must contain at least one raster image.	Running EOSView with a script requesting animation but input file has no raster images.	None
File: <filename> Line: <number> Bad memory allocation size: (<number> bytes)	Tried to allocate zero or fewer bytes of memory.	None
File: <filename> Line: <number> Error allocating memory (<number> bytes), Exiting...	Not enough memory for allocation.	EOSView will exit.
File: <filename> Line: <number> Error reading file: <filename>	Running EOSView with script with input file that cannot be opened.	None
Line maximum reached. Ignoring rest	Text display has reached maximum number of lines to display.	Not all of the text in the file will be available for viewing.
Out of space	Trying to reallocate memory with none available.	Text display operation will cease.
Corrupt Data Encountered. Image Cannot be made!	During pseudocolor image creating bad data was detected.	Image will not be displayed.
No items to view	HDF file selected contains no objects.	File contents window will be empty.
Unable to create SLIST	Unable to create list of HDF objects contained in selected file.	User will not be allowed to view file objects.
Unable to create contents window	Unable to create window to display list of HDF objects contained in selected file.	User will not be allowed to view file objects.
Unable to open Field List Window.	Unable to open window containing list of fields in VData.	User will not be allowed to view VData.
Unable to create Fields List.	Unable to create list of VData field names for display.	User will not be allowed to view VData.

Table A.2.1-3. EOSView User Messages (3 of 10)

Message Text	Impact	Cause and Corrective Action
At least one Field must be selected.	To display a table or plot at least one VData field name must be selected.	Select a field.
Can't open text window.	Unable to open window containing HDF attributes.	Text data will not be viewed.
No attributes to display.	Selected object contains no attributes.	None
File: <filename> Line: <number> Error with file id.	Bad file id returned in file open.	Data can not be viewed.
File: <filename> Line: <number> Error with Sdrefindex.	Error converting reference id to index.	SDS data will not be displayed.
File: <filename> Line: <number> Error with Sdselect.	Error selecting SDS data in file.	SDS data will not be displayed.
Unable to attach to <grid name> to view Grid Information.	Grid attach failed.	Grid information can not be viewed.
Unable to open grid to view Grid Information	Grid open failed.	Grid information can not be viewed
Unable to attach to <grid name> to view Projection Information.	Grid attach failed.	Projection information can not be viewed.
Unable to open grid to view Projection Information	Grid open failed.	Projection information can not be viewed
Unable to retrieve projection information	Grid projection information retrieval failed.	Projection information can not be viewed
Unable to retrieve grid information	Grid information retrieval failed.	Grid information can not be viewed
ERROR: Quantization of 24-bit image failed!	Converting 24-bit image to 8-bit image failed.	Image will not be available for viewing.
ERROR: Could not write 8 bit image	8-bit image data copy error occurred.	Image will not be available for viewing
ERROR: Unable to set HDF Palette!	Image palette data could not be set.	Image will not be available for viewing
ERROR: Unable to create 8 bit image.	Could not write 8 bit image to temporary file.	Image will not be available for viewing

Table A.2.1-3. EOSView User Messages (4 of 10)

Message Text	Impact	Cause and Corrective Action
Can Plot on 1 or 2 Fields - please re-select	User selected three or more fields for plotting.	De-select fields until less than three are selected.
Field <fieldname> is character data. Only numeric data may be selected for plotting.	User selected character data for plotting.	De-select character data field.
Field <fieldname> has an order of <number> and must be plotted alone.	Field has multiple numbers per record and can not be plotted against another field.	None
Error in Vssetfields	VData operation failed	VData will not be viewed.
Error at Vsseek	VData operation failed	VData will not be viewed.
Error at Vsread	VData operation failed	VData will not be viewed.
No groups to display	HDF file has no data	File will be closed.
Error reading SDS data. No data displayed.	Error in SDS operation.	SDS data will not be available for viewing.
File: <filename> Line: <number> Error in reading group items.	Error trying to get group items.	HDF file can not be viewed.
File: <filename> Line: <number> Bad data pointer for ReadHDFImage	Image data is null.	Image will not be displayed.
File: <filename> Line: <number> Error reading Raster image	Error reading raster image data from file	Image will not be displayed
File: <filename> Line: <number> Error reading file <filename>	Error during file read operation.	Selected data will not be viewed.
File: <filename> Line: <number> Error closing file	Error during file close operation	None
File: <filename> Line: <number> Error in allocation node memory	Not enough memory for new data node.	This object will not be available for selection

Table A.2.1-3. EOSView User Messages (5 of 10)

Message Text	Impact	Cause and Corrective Action
File: <filename> Line: <number> Unknown SDS data type	Data stored in this SDS is not HDF standard	Data will not be displayed.
File: <filename> Line: <number> Error in DFR8nimages	Error while trying to determine the number of 8-bit images in the file.	8-bit image data will not be checked in this file.
File: <filename> Line: <number> Error in DFR24nimages	Error while trying to determine the number of 24-bit images in the file.	24-bit image data will not be checked in this file.
Error initializing IDL - EOSView must exit!	EOSView found a problem in IDL commands file (eosview.dat)	EOSView will exit.
Unable to set IDL Directory.	EOSView could not find IDL commands file.	Select the file eosview.dat in file selection dialog.
Unable to create list box lists!	Lat/Lon cursor position window lists can not be created	User will not be allowed to position cursor on selected lat/lon.
Data invalid - input must be <INTEGER/FLOAT>! Maximum value: <number>	User entered data out of type or range for the field.	Re-enter data that meets warning window requests.
Coordinates entered are outside the boundaries of this GRID.	User entered valid coordinates but area is not covered by selected grid.	Re-enter coordinates or look at grid information to determine grid coverage.
Failure in Gdgetpixels	Error in getting pixel location	Cursor positioning will not function for this request.
Error receiving Grid projection/pixel information.	Error in location proper pixel.	Cursor positioning will not function for this request.
Error getting Lat/Lon from x-y position	Error in locating proper pixel	Cursor positioning will not function for this request.
File: <filename> Line: <number> NULL ximage	Error occurred while converting image data to ximage.	Requested image will not be displayed.

Table A.2.1-3. EOSView User Messages (6 of 10)

Message Text	Impact	Cause and Corrective Action
Unable to attach to <Point name> to view Point Level Info	Error attaching to selected point.	Point Level data will not be displayed.
Unable to open point to view Point Level Info.	Error opening to selected point.	Point Level data will not be displayed.
No levels exist for point.	Selected point contains no level data.	Level information can not be viewed.
Unable to create levels list.	List to display level information had an error.	Point Level information will not be available for viewing.
Error getting fields	Error while getting Point Level Field names.	Point Level information will not be available for viewing.
Unable to attach to <swath/grid name> to view attributes.	Error attaching to selected swath/grid.	Swath/Grid attribute data can not be displayed.
Unable to open swath to view attributes.	Error opening selected swath.	Swath attribute data can not be displayed.
Unable to open grid to view attributes.	Error opening selected grid.	Grid attribute data can not be displayed.
Unable to attach to <swath/grid name> to view dimensions.	Error attaching to selected swath/grid.	Swath/Grid dimensions data can not be displayed.
Unable to open swath to view dimensions.	Error opening selected swath.	Swath dimensions data can not be displayed.
Unable to open grid to view dimensions.	Error opening selected grid.	Grid dimensions data can not be displayed.
Unable to open grid to view Data Fields	Error opening selected grid.	Grid data fields can not be displayed.
Unable to attach to <grid name> to view Data Fields.	Error attaching to selected grid.	Grid data fields can not be displayed.
Unable to open swath to view Geolocation/Data Fields	Error opening selected swath.	Swath Geolocation/Data fields can not be displayed.
Unable to attach to <swath name> to view Geolocation/Data Fields.	Error attaching to selected swath.	Swath Geolocation/Data fields can not be displayed.
Unable to attach to <swath name> to view Indexed Mapping.	Error attaching to selected swath.	Swath Indexed Mapping can not be displayed.
Unable to open swath to view Indexed Mapping	Error opening selected swath.	Swath Indexed Mapping can not be displayed.

Table A.2.1-3. EOSView User Messages (7 of 10)

Message Text	Impact	Cause and Corrective Action
Unable to open swath to view Indexed Mapped Sizes	Error opening selected swath.	Swath Indexed Mapped Sizes can not be displayed.
Unable to attach to swath to view Indexed Mapped Sizes	Error attaching to selected swath.	Swath Indexed Mapped Sizes can not be displayed.
Error reading from Swath/Grid Fields. Unable to get stats.	Error reading swath/grid data fields.	Requested stats will not be displayed.
This swath contains no attributes.	Data request can not be filled since data is not present.	None
This grid contains no attributes.	Data request can not be filled since data is not present.	None
This point contains no attributes.	Data request can not be filled since data is not present.	None
This swath contains no Dimensions.	Data request can not be filled since data is not present.	None
This grid contains no Dimensions.	Data request can not be filled since data is not present.	None
Unable to create Dimensions list.	Error occurred while creating list of dimensions.	Swath/Grid dimension data can not be viewed.
This Grid contains no Data Fields.	Data request can not be filled since data is not present.	None
This Swath contains no Geolocation/Data Fields.	Data request can not be filled since data is not present.	None
Unable to create Geolocation/Data Fields list.	Error occurred while creating list of geolocation/data fields.	Geolocation/Data Fields data can not be viewed.
2 items already selected!	User tried to selection more than two dimensions for viewing.	Maximum number of dimensions to view is 2. Either de-select a dimensions or hit the OK button.
Must select at least one dimension!	User must select at least one dimension for viewing.	Select a dimension checkbox and hit the OK button.

Table A.2.1-3. EOSView User Messages (8 of 10)

Message Text	Impact	Cause and Corrective Action
Input problem! Dimension: <dimension name> Size: <number> Must follow: Start + Stride * (Edge - 1) + 1 <= Size	User altered start/stride/edge values for subsetting but entered values out of range.	Re-enter start/stride/edge values following formula provided in dialog.
This Swath contains no Geolocation Mappings.	Data request can not be filled since data is not present.	None
Unable to create Geolocation Mappings list.	Error occurred while creating list of geolocation mappings.	Geolocation mappings data can not be viewed.
This Swath contains no Indexed Mapping.	Data request can not be filled since data is not present.	None
Unable to create Indexed Mapping list.	Error occurred while creating list of indexed mapping.	Indexed mapping data can not be viewed.
Unable to create Indexed Mapping Sizes list.	Error occurred while creating list of indexed mapping sizes.	Indexed mapping size data can not be viewed.
This Indexed Mapping contains no data.	Data request can not be filled since data is not present.	None
No global attributes in file.	Data request can not be filled since data is not present.	None
Can't open main EOSView window	Unable to open main window.	EOSView will terminate.
Help file is unreadable, please choose another.	Selected help file is not readable.	Select eosview.csc from the file selection dialog.
Invalid help file, please choose another.	Selected file is not the EOSView help file.	Select eosview.csc from the file selection dialog.
No dimension attributes.	Data request can not be filled since data is not present.	None
File: <filename> Line: <number> Error getting file.	Selected file had a problem.	Select another file in the file selection dialog.
File <filename> contains no Raster Images to display.	File name passed into EOSView script file for image display contains no images.	EOSView will start but image display will not occur.

Table A.2.1-3. EOSView User Messages (9 of 10)

Message Text	Impact	Cause and Corrective Action
File <filename> does not contain <number> Raster Images.	File name passed into EOSView script file to display image <number> does not contain <number> images.	EOSView will start but image display will not occur.
Input file <filename> is not an EOSView Script File.	File name passed into EOSView as a script file is not in script file format.	EOSView will start and main window will display.
Unable to create table save element	Not enough memory for table save element exists.	Table save operation can not be performed.
This file exists - must create new file.	User tried to save table to file that already exists.	Enter file name that does not exist. Table must be saved to a new file.
Must enter a file name!	User tried to write table to file with no name.	Enter valid file name in file open dialog.
Unable to open file <filename>	Tried to save table to file that could not be opened.	May want to check to see if user has write permission in this directory.
Error attaching to Vdata. Save aborted.	Error occurred while attaching to Vdata.	Table save operation is canceled.
Error setting Vdata fields. Save aborted.	Error occurred while setting Vdata fields.	Table save operation is canceled.
Unable to allocate buffer to read data.	Not enough memory to read table for table save operation.	Table save operation is canceled.
Vdata seek failed.	Error occurred in Vsseek operation.	Table save operation is canceled.
Vdata read failed.	Error occurred in Vsread operation.	Table save operation is canceled.
Error writing to file <filename>.	Error occurred while writing table data to file.	Table save operation is canceled.
Error reading data. Save option aborted.	Error occurred reading table data.	Table save operation is canceled.
Data written to file <filename>	Table save operation worked correctly.	None
Error Reading Animation Images.	Error reading animation images from script file.	Animation operation will not occur.

Table A.2.1-3. EOSView User Messages (10 of 10)

Message Text	Impact	Cause and Corrective Action
Error Reading Animation Images: no image.	No image data detected in file sent in from EOSView script file for animation.	Animation operation will not occur.
Animate allocation error: Animation will be truncated.	Not enough memory to animate all images in file.	Animation will occur but not all images in file will be used.
File: <filename> Line: <number> Not enough images for animation.	File sent into EOSView script file for animation contains less than 2 images.	EOSView will start but animation will not occur.

Table A.2.1-4. Data Acquisition Request (DAR) Tool User Messages

Message Text	Impact	Cause and Corrective Action
TBS	TBS	TBS

A.2.2 Data Management Subsystem (DMS)

The following table presents user interface messages for the Data Dictionary Maintenance Tool.

Table A.2.2-1. Data Dictionary Maintenance Tool User Messages (1 of 5)

Message Text	Impact	Cause and Corrective Action
Acronym Editor Will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Acronym Editor.
Duplicate names in name mapping section of config file	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with no duplicate entries in it.
Duplicate names or syntax errors in required values section of config file	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File and check the syntax of entries.
Missing name mappings	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries in the name mapping section.
The following required items are missing <item list>	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File. Check the syntax of its entries.
Attribute Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Attribute Editor.
Collection Editor will not be available	Cannot use the tool properly.	Configuration File Problem. Use the correct Configuration File with entries for Collection Editor.
Failed	Cannot proceed with the subsequent and corresponding actions.	The user action did not result in the desired program function. Check prior entries before action entries.
Can't undo	Cannot cancel previous action.	Cancellation is not possible.
The Query failed for all the collections.	Query cannot be performed.	Could not perform the query for all the collections.

Table A.2.2-1. Data Dictionary Maintenance Tool User Messages (2 of 5)

Message Text	Impact	Cause and Corrective Action
The Query failed for some of the collections	Query cannot be completely performed.	Could not perform the query for some of the collections
The query succeeded for all the collections	N/A	Informational message.
The Query succeeded for some collections	N/A	Informational message.
Error connecting to Data Dictionary server	Data dictionary server not connected.	Could not connect to the server. Check the connection to the server from outside the program.
Querying database	N/A	Informational message.
Updating database	N/A	Informational message.
The update was successful	N/A	Informational message.
The update failed.	Database cannot be updated.	Updating the database did not work. Check the action and try again
No attribute has been specified	No further action on attributes will occur.	Attributes are not specified. Specify the attributes.
A valid value has not been specified	No further action will occur.	A value was not specified. Specify a value.
Unable to connect to Data Dictionary server. Please try later.	Data dictionary server not connected.	Could not connect to the server. Check the connection to the server from outside the program.
The query matched no items in database	N/A	Informational message.
The query failed	N/A	Check the action and try again.
Unknown internal error. Please try again.	The connection to the server is not available.	Check the server connection.
Glossary Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Glossary Editor.

Table A.2.2-1. Data Dictionary Maintenance Tool User Messages (3 of 5)

Message Text	Impact	Cause and Corrective Action
Information Manager Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Information Manager Editor.
Instrument Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Instrument Editor.
Keyword Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Keyword Editor.
First select a database type from the database Type field at top	No database access is available.	Trying to access the database before selecting its type.
Cannot open valids file <valids filename>	Valids file will not be available.	The valids file specified does not exist. Specify the correct valids file.
Saved file <filename>	N/A	Informational message.
Data Dictionary and Advertising updated	N/A	Informational message.
Data Dictionary updated	N/A	Informational message.
You have pending actions, which will be lost if you exit. Do you really want to exit?	Loss of pending actions	User trying to exit before confirming the database changes Confirm before exiting
Do you really want to exit?	Seeks user confirmation	user confirmation required before exiting Confirm before exiting
Cannot edit unknown type: <database type>	No database access available	Specify the correct database type
Unable to open specified file. Try another filename.	File specified will not be available	The file specified by the user cannot be opened Specify correct filename
You have made changes to <item name> , which will be lost if you proceed. Do you want to continue?	Loss of current changes	Seeking user confirmation before exiting the current action Confirm before proceeding
This object was deleted. Undo delete?	Specified object not available	Referring to a deleted object Check before referring again

Table A.2.2-1. Data Dictionary Maintenance Tool User Messages (4 of 5)

Message Text	Impact	Cause and Corrective Action
Query failed	N/A	Database search resulted in no selections.
Unable to connect to Data Dictionary server. Please try again later.	Connection to DDICT sever not available.	Problem connecting to DDICT server. Exit and try later.
The query failed, possibly due to a server problem	Connection to DDICT sever not available.	Problem connecting to DDICT server. Exit and try later.
The query matched no items in database	N/A	No items were selected from the database.
Unable to open output file <filename>	Output file not available.	<filename> does not exist. Check its presence.
Cannot delete unknown type <database type>	No database access available.	Specify the correct database type.
Platform Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Platform Editor.
Sensor Editor will not be available	Cannot use the tool properly.	Configuration File Error. Use the correct Configuration File with entries for Sensor Editor.
Not available < List of items not available>	File is not available.	Configuration File Error Use the correct Configuration File with all the entries required
No file specified. Please select or type a file name	File not available.	A filename has not been specified. Select the proper filename.
<filename> does not exist. Please try again	File not available.	File selected does not exist. Select a file that is present.
Unable to access <filename>. Please try again.	File not accessible.	Cannot access the file specified. Check the presence of the file specified.
<filename> is a directory. Please also specify a file.	File not available.	File selected does not exist. Specify a filename instead of the directory.

Table A.2.2-1. Data Dictionary Maintenance Tool User Messages (5 of 5)

<filename> is not a proper file. Please try again.	File not available.	File selected is not proper. Specify a proper filename.
<filename> already exists and will be overwritten. Do you want to continue?	A file will be overwritten.	Use of an existing file name. Use a different filename to avoid overwriting an existing file.
Value missing for required field. Please specify a value.	Cannot proceed with the action.	Improper entry in the desired field. Make a proper entry.
Elements in valids section of data file not understood	The data file is not usable.	The valids file is not correct. Use the proper valids file.
Elements in valids section of data file not understood	The data file is not usable.	The valids file is not correct. Use the proper valids file.

A.2.3 Interoperability Subsystem (IOS)

The following table presents user interface messages for the Administration and Moderation Facility for the Earth Science Online Directory (ESOD).

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (1 of 6)

Message Text	Impact	Cause and Corrective Action
Failed when fetching product	Users will not be able to see a descriptive detail of the chosen product-type ad.	See the error log on the server side for more details. Usually, this has to do with retrieving data from the database.
You do not have the required permission to do this.	Prevent the users from completing a task that requires security check up.	Check to make sure that the user does have permission privileges to perform the current task. Usually, the user is trying to perform a Moderator or Esod Administration task.
You do not have authorization to view requests from this group. You need to be on DCE Access Control List for the DCE resource named.	Same as above.	Same as above.
Advertising server is currently down.	Users are not able to make queries.	Check to see if the EcloAdServer is up, running, and listening.
DCE Exception occurred.	Unable to perform the current query.	Check the server's log to determine what type of DCE exception happened.
Exception raised	Unable to perform the current query.	Usually, this is not a DCE exception or problem within the Advertising Service. Check the server's log, client's log, and Netscape Enterprise Server's logs for any detail.
<FieldName> cannot be empty. Please fill in this field.	Unable to submit the current query.	Check to make sure that all the "REQUIRED" fields on the form have been filled in.

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (2 of 6)

Message Text	Impact	Cause and Corrective Action
An error has occurred while opening or reading the config file.	Unable to perform the current query.	Usually, check to see if the file loAdHtml.cnfg is in /usr/ecs/<MODE>/CUSTOM/data/IOS.
Unable to open file for appending javaScript.	Unable to perform the current query.	Depends on what type of advertisement you are trying to submit. Check to see if (choose the one that fits you) any of the following parameters exist and are valid in /usr/ecs/<MODE>/CUSTOM/data/IOS/loAdSiteSpecific.cnfg CreateProductIntro, CreateTemplateIntro, CreateContactIntro, CreateServiceIntro, CreateWebServIntro, CreateInstServIntro, CreateProviderIntro
Internal error has occurred. Invalid Approved Adv.	Unable to perform the current query.	The current ad is not an approved ad.
Internal error has occurred. Unable to create view using builder.	Unable to perform the current query.	The current ad is not an approved ad.
Internal error has occurred. Unknown action specified.	Unable to perform the current query.	The action specified is neither update, create, or delete.
Error: Permission Denied	Unable to perform the current query.	Users do not have the appropriate permission to perform the task.
Error: Cannot install service	Unable to access the installation form for a given service.	Check to see if the file /usr/ecs/<MODE>/CUSTOM/data/IOS/loAdSiteSpecific.cnfg contains "ShowInstallForm" parameter.

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (3 of 6)

Message Text	Impact	Cause and Corrective Action
No groups to select from	Unable to perform the current query.	User forgot to select a group for a given ad.
No requests to display	None	There are no requests in the queue currently to display. (This user has to be a Moderator or an Admin in order to see the requests.)
Error Fetching Request	Unable to see any requests.	Check the server's log for more information.
Discarding request (ID: <some id>) failed	Unable to reject a request.	Check the server's log for more information.
Your request of <request type> has been discarded due to another request related to your ad has been approved.	N/A	N/A
Unable to send email to the <person name>.	The person who was supposed to receive an email is either a moderator or a contributor of an ad. Therefore, one of them is not going to receive a notification email relating to an ad.	Check to make sure that both the email addresses of the moderator and the contributor are valid.
Send email to <personTitle>: <personEmail> is an invalid email address.	See above	See above
Authentication failure.	Unable to perform the current query.	This user's DCE login is invalid.
Description file URL not specified.	Unable to perform FTP.	Check to see if the ftp URL is present for this product ad in order to download the long template.
Unable to transfer description file.	The FTP process is interrupted.	While downloading, an error occurred. Check the server's log for more information.

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (4 of 6)

Message Text	Impact	Cause and Corrective Action
Unable to open description file: <file name>	Unable to perform the current query.	Check to see if the <file name> exists.
Cannot find parameter: "Title"	Unable to perform the current query.	Check to see if "Title" is included in the long template for the submission of a product ad.
Cannot find parameter: "Provider"	Unable to perform the current query.	Check to see if "Provider" is included in the long template for the submission of a product ad.
Cannot find parameter: "Description"	Unable to perform the current query.	Check to see if "Description" is included in the long template for the submission of a product ad.
Invalid value(s) for Bounding Rectangle	Unable to perform the current query.	Check to see if the values specified or Bounding Rectangles are valid.
Invalid action specified	Unable to perform the current query.	Action specified is neither update, delete, or create.
Unable to create Ad View using builder	Unable to perform the current query.	Invalid class Id. On the web page, look at the document source and make sure that the class Id is set to any of the following values: 10:ad.product, 10:ad.service, 15:ad.service.mime, 15:ad.service.inst, 14:ad.service.sig, 11:ad.provider
Specified ID: <adId> does not exist	Unable to perform the current query.	The adId specified is an invalid one (not in the database).
Comments to Moderator cannot exceed 255 characters.	Unable to perform the current query.	Make the comments to the moderator shorter.

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (5 of 6)

Message Text	Impact	Cause and Corrective Action
Internal error has occurred. Invalid action specified.	Unable to perform the current query.	Action specified is neither update, delete, or create.
Unable to open file for appending Intro Section: <File Name>	Unable to perform the current query.	Check if <File Name> exists.
File doesn't exist	Unable to perform the current query.	Check if /usr/ecs/<MODE>/CUSTOM/data/IOS/loAdHtml.cnfg exists.
An error has occurred while opening or reading the config file.	Unable to perform the current query.	Make sure that the file /usr/ecs/<MODE>/CUSTOM/data/IOS/loAdHtml.cnfg exists.
Internal error has occurred. Unable to build view; Unknown classId.	Unable to perform the current query	Invalid classId. On the web page, look at the document source and make sure that the classId is set to any of the following values: 10:ad.product, 10:ad.service, 15:ad.service.mime, 15:ad.service.inst, 14:ad.service.sig, 11:ad.provider
Group should be selected.	Unable to perform the current query.	Make sure a group is selected.
No such group as specified.	Unable to perform the current query.	The group specified is not in the database.
Internal Error has occurred	Unable to perform the current query.	Check the server's log.
Exception raised: Please contact your System Administrator	Unable to perform the current query.	Check the server's log.
Fetching Adv: No such Adv as specified	Unable to perform the current query.	The advId specified is not in the database.
Fetching Adv: Permission denied	Unable to perform the current query.	Users do not have appropriate permissions to perform this task.

Table A.2.3-1. Administration and Moderation Facility for the Earth Science Online Directory (ESOD) Tool User Messages (6 of 6)

Message Text	Impact	Cause and Corrective Action
Initialization problem	Unable to communicate with the Advertising Server.	Check the obj.conf of the Netscape Enterprise Server to see if "MODE" and "CONFIG_PATH" environment variables are set.
Duplicate Advertisement	Unable to submit an ad.	Exactly the same ad already exists in the database.
Error occurs when storing Request..	Unable to submit a request.	Check server's log for more information.
An error occurs when fetching group. Please review the error logs for more details.	Unable to perform the current query.	Check the server's log for more information.
An error occurs when counting. Please review error logs for more details.	Unable to perform a search request.	Check the server's log for more information.
Error occurs when fetching data.	Unable to perform the current query.	Check the server's log for more information.
An error occurs when search all requests for this group.	Unable to perform the search.	Check the server's log for more information.
Duplicate Advertisement for request	Unable to submit this request.	This request for creating a new ad is a duplicate of an ad that already exists in the database.
Permission denied for request	Unable to perform the current query.	Users do not have the appropriate permissions.
Error occurs when accepting request	Unable to approve an ad.	Check the server's log for more information.
Request fetch failed for request <RequestID>	Unable to see a request. (This is a moderator's task.)	Check the server's log for more information.
Error occurs when rejecting request	Unable to reject an ad.	Check the server's log for more information.

A.2.4 Data Server Subsystem (DSS)

The following tables present user interface messages for the Science Data Server Operator GUI, the Data Distribution Operator GUI.

Table A.2.4.-1. Science Data Server Operator GUI User Messages

Message Text	Impact	Cause and Corrective Action
No Selected Request – Please select one	No operations on request will be performed	Select a current request
Descriptor Information not Available	Information on a particular descriptor file is not available	Could generally happen because ESDT was installed from a different directory. Copy descriptor to original place.
Science Data Server Not Found	No operations will be possible.	Bring Science Data Server up.
Possible Server Connection Error – Try Reconnecting	A connection to the Science Data Server is not possible.	Try clicking on the Refresh/Reconnect button under the Data Type tab.
Datatype Successfully Added	Datatype will be ready to be used.	None
Failure to Add Datatype	Datatype will not be available for use.	Check error logs, fix the error, and try again.
Failure to Load Descriptor File	Information on Descriptor File will not be available.	Look for file in original installation directory.
Changing Request Priority – Please wait...	Request priority is being changed.	Informational message only. No corrective action is needed.

Table A.2.4-2. Data Distribution Operator GUI User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
DDist Refresh Failure.	DDist Refresh Error. Dialog Message GUI was not able to get new request list from server.	Check the database with Mode. Check the DBOverride in the Configuration File.
DDist Mark Shipped Failure.	GUI received failure from server. Request was not marked shipped.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Set Priority Failure.	GUI received failure from server. Request set priority failed.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Cancel Failure.	GUI received failure from server. Request was not canceled.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Resume Failure.	GUI received failure from server. Request was not resumed.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Resume All Failure.	GUI received failure from server. Requests were not resumed.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Suspend Failure.	GUI received failure from server. Request was not suspended.	Check request state. This may not be a valid operation. Check for DDist Server running.
DDist Suspend All Failure.	GUI received failure from server. Requests will not be submitted in aSuspendAll state.	Check for DDist Server running.
No DDist request selected. Please select one.	An operation was performed without selecting a request from the Scrolled list.	Select a request from the list, then retry the operation.
Invalid text field entry	Invalid data was entered.	Reenter valid data and retry operation.
Cannot create the DsDdDistRequestList	The Request List was not created.	Select Refresh to try again. Check the database with Mode.

Table A.2.4-2. Data Distribution Operator GUI User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
DsDdRequestMgrC create handle error	Error cannot create request Manager Handle to the Data Distribution Server.	Select Refresh to try again. Check the database with Mode.
Cannot create connection pool	Attempt to create connection pool to database failed.	Select Refresh to try again. Check the database with Mode.
Cannot get a dbInterface connection pool	Attempt to get a dbInterface from connection pool to database failed.	Select Refresh to try again. Check the database with Mode.
DsDdRequestMgrC Mark Shipped Failure	GUI received failure from server. Request was not Mark Shipped.	Check request state. This may not be a valid operation. Check for DDist Server running.
DsDdRequestMgrC Set Priority Failure	GUI received failure from server. Request priority was not changed.	Check request state. This may not be a valid operation. Check for DDist Server running.
DsDdRequestMgrC Cancel Failure	GUI received failure from server. Request was not canceled.	Check request state. This may not be a valid operation. Check for DDist Server running.
DsDdRequestMgrC Resume Failure	GUI received failure from server. Request was not resumed.	Check request state. This may not be a valid operation. Check for DDist Server running.

A.2.5 Ingest Subsystem (INS)

The following tables presents user interface messages for the Ingest Operator GUI.

Table A.2.5-1. Ingest Operator GUI User Messages (1 of 5)

Message Text	Impact	Cause and Corrective Action
Media Type needs to be set.	Without this information, media ingest can not be submitted.	Select a media type from the Media Type combo box.
Stacker ID needs to be specified.	Without this information, media ingest can not be submitted.	Enter stacker id in the Stacker ID field.
Stacker Slot ID needs to be specified.	Without this information, media ingest can not be submitted.	Enter stacker slot id in the Stacker Slot ID field.
Data Provider ID needs to be provided.	Without this information, media ingest can not be submitted.	Select a data provider from the Data Provider combo box.
Data Provider is not authorized for ingest.	Unable to perform Media Ingest for this data provider.	Resolve the issue with this data provider.
Volume ID is empty.	Without this information, media ingest can not be submitted.	Enter media volume id in the Media Volume ID(Barcode) field.
Data Delivery Record location needs to be specified.	Without this information, media ingest can not be submitted.	Click on one of two provided Data Delivery Record File Location.
Data Delivery Record filename needs to be specified.	Without this information, media ingest can not be submitted.	Enter data delivery record filename in the Data Delivery Record File Name field.
Can not obtain new request id from database.	Without this information, media ingest can not be processed.	Ask DBA to correct this problem.
Unable to allocate a media device.	Without the allocation of the media device, media ingest can not be processed.	Make sure the device driver has been brought up in the sudo mode.
Unable to request mount media service.	Without the mount, media ingest can not be processed.	Inform Storage Management personnel to correct this problem.
Can not obtain Data Delivery Record file.	Without the data delivery record file, media ingest can not be processed.	If the data delivery record is embedded in media, make sure the staging disk has been created to receive the file. If the data delivery record is on network, make sure the ftp network is OK.

Table A.2.5-1. Ingest Operator GUI User Messages (2 of 5)

Message Text	Impact	Cause and Corrective Action
Unable to copy data files to staging disk.	Without the data files, media ingest can not be processed.	Make sure the staging disk has been created to receive data files and there is enough disk space on the system.
Dismount media failure.	Media ingest can not be processed.	Inform Storage Management personnel to correct this problem.
Deallocate device failure.	Media ingest can not be processed.	Inform Storage Management personnel to correct this problem.
Unable to process the request.	Media ingest can not be processed.	Make sure Request Manager server is up and ready to receive the request.
Media Ingest Request completed.	N/A.	N/A.
Unable to obtain data provider list.	"Modify External Data Provider/User Information" screen can not be used to update InExternalDataProviderInfo table.	Ask DBA to correct this database problem.
Update is not allowed without password confirmation.	Unable to perform password update.	Click on password confirmation OK button to perform password confirmation prior to password update.
Invalid Old Password.	Unable to perform password confirmation.	Re-enter the correct old password.
New password does not match what was originally typed.	Unable to perform password confirmation.	Re-enter the correct new password.
Unable to obtain the system information.	"Modify System Parameters" screen can not be used to update the InSystemParameters table.	Ask DBA to correct this database problem.

Table A.2.5-1. Ingest Operator GUI User Messages (3 of 5)

Message Text	Impact	Cause and Corrective Action
Can not obtain selected data provider information.	"Modify External Data Provider/User Information" screen can not be refreshed with the updated information.	Ask DBA to correct this database problem.
Volume Threshold exceeds the system volume threshold.	Can not update InExternalDataProviderInfo table for the specified data provider.	Make sure the new volume threshold entered does not exceed the allowed system volume threshold.
Request Threshold exceeds the system request threshold.	Can not update InExternalDataProviderInfo table for the specified data provider.	Make sure the new request threshold entered does not exceed the allowed system request threshold.
Can not update selected data provider information.	Can not update InExternalDataProviderInfo table for the specified data provider.	Ask DBA to correct this database problem.
Can not update the system threshold information.	Can not update InSystemParameters table with new values.	Ask DBA to correct this database problem.
SMC History File Build Failed.	Unable to build SMC history file.	Ask DBA to correct this database problem.
Destination MUST be provided.	Can not perform file transfer.	Enter transfer destination in the Transfer Destination field.
Select new file and push the file selection OK button.	Can not perform file transfer.	Enter new file in the Selection field.
Destination MUST be host/path (e.g. kodiak/tmp).	Can not perform file transfer.	Correct the destination syntax error.
FTP failed.	File failed the ftp file transfer.	Make sure FTP connection is OK.
Value entered is not a valid integer.	Unable to monitor/control the specified request ID.	Re-enter a valid integer request ID.

Table A.2.5-1. Ingest Operator GUI User Messages (4 of 5)

Message Text	Impact	Cause and Corrective Action
Unable to obtain the data provider list.	Unable to build the list for Data Provider combo box on Monitor/Control screen.	Ask DBA to correct this database problem.
No data matching search criteria.	Unable to display the request text view information for the search criteria.	Ask DBA to correct this database problem.
Data not found for search criteria.	Unable to display the request text view information for the search criteria.	Ask DBA to correct this database problem.
Can not read the request information file.	Unable to display request/granule text view information in the text browser.	Make sure the file permission is OK.
Priority Level needs to be set.	Unable to change the priority for the selected request.	Select the desired priority form the Priority combo box.
Unable to process request control.	Unable to perform the selected request control.	Make sure Request Manager server is up to receive the appropriate rpc call.
Request Control Status: Success.	N/A	N/A
Unable to obtain data provider list.	Unable to build the list for Data Provider combo box on History Log screen.	Ask DBA to correct this database problem.
Unable to obtain data type list.	Unable to build the list for Data Type combo box on History Log screen.	Ask DBA to correct this database problem.
Unable to obtain final request status list.	Unable to build the list for Final Request Status combo box on History Log screen.	Ask DBA to correct this database problem.
Invalid Stop Time.	Unable to display the History Log information.	Re-enter a valid stop time.
Invalid Start Time.	Unable to display the History Log information.	Re-enter a valid start time.
Invalid time interval.	Unable to display the History Log information.	Re-enter correct start and stop times, i.e., the stop time has to be after the start time.

Table A.2.5-1. Ingest Operator GUI User Messages (5 of 5)

Message Text	Impact	Cause and Corrective Action
Unable to read the history log.	Unable to display History Log information.	Make sure the file permission is OK.
Detail Level needs to be set.	Unable to display History Log information.	Click on the desired detail level toggle button.
Can not retrieve data based on search criteria.	Unable to display History Log information.	Ask DBA to correct this database problem.
Data not found for search criteria.	Unable to display History Log information.	Re-enter the search criteria.
Value entered is not a valid integer.	Unable to display History Log information.	Re-enter a valid integer value.
Invalid input value.	Unable to display History Log information.	Re-enter a valid input value.
RequestID selected is not a valid integer.	Unable to display granule level information.	Ask DBA to correct this database problem.
Can not obtain data type for selected RequestID.	Unable to display granule level information.	Ask DBA to correct this database problem.
Printer name is not specified.	Unable to print the currently displayed information.	Specify a valid printer name.

A.2.6 Communications Subsystem (CSS)

The following table presents user interface messages for the ECS Subscription Service User Messages.

Table A.2.6-1. ECS Subscription Service User Messages (1 of 4)

Message Text	Impact	Cause and Corrective Action
Failed to create subscription	Edit subscription window will not be populated, therefore; user can not edit the subscription	If a subscription was not selected on the main screen and the user goes to edit window. Select a subscription and then go to edit window.
Refresh Subscription Failed	Subscriptions will not be refreshed or fetched from the database	Subscription server may be down. Check to see if the Server is running and try again.
MSS server is not running, enter email address	Can't get the user profile.	MSS user profile server that was suppose to provide the user's email address is not running. Enter the e-mail address manually.
Enter the Email Address (Message)	Can't talk to the MSS server.	MSS server is running but you can't get the information. Enter the email address manually.
Modification of qualifiers is not supported (Message)	Can't update the qualifiers of an existing subscription.	Update of qualifier is not implemented.
Couldn't connect to the server	Event Browser will not come up.	Event server is down. Need to get the server running.
Error refreshing events	Event Browser will not come up.	Event server could be down. Need to get the server running.
Invalid Start Date	Subscription will not be submitted.	User has entered an invalid start date for subscription. Re-enter and re-submit the subscription.
Fill all the fields on the form	Subscription will not be submitted.	User didn't fill out all the required fields in the add subscription form. Fill in all the fields and re-submit the subscription.

Table A.2.6-1. ECS Subscription Service User Messages (2 of 4)

Message Text	Impact	Cause and Corrective Action
Error in creating subscription	Subscription will not be submitted.	Couldn't create the subscription with the user input. Try submitting it again and make sure the fields are filled in correctly
Error in submitting subscription	Subscription will not be submitted.	Couldn't submit the subscription, server could be down. Check to see if the server is running properly.
There is no subscription to submit	Subscription will not be submitted.	User tried submitting without creating a subscription.
Failed to create subscription	Subscription will not be updated.	User didn't provide the right data to update a subscription.
Invalid expiration date	Subscription will not be updated.	User entered an invalid expiration date for updating a subscription. Reenter the information
Couldn't update the selected subscription	Subscription will not be updated.	Subscription server could be down.
Error Selecting Subscription	Subscription will not be selected.	User cannot select a subscription on the main screen. System may be down or slow.
Can't filter, collector is empty	Filter subscription will not display requested information.	User tried filtering the subscription and it didn't happen. There might be some problem with the database or the server could be down.
Must fill in valid Event ID	Subscription will not be deleted.	User tried to cancel a subscription for a particular event and didn't enter anything in Event ID field. Enter a valid event ID and try again.

Table A.2.6-1. ECS Subscription Service User Messages (3 of 4)

Message Text	Impact	Cause and Corrective Action
Must fill in User ID field	Subscriptions will not be deleted.	User tried to cancel a subscription for a particular user and didn't enter anything in the User ID field. Enter a valid user ID and try again.
Must fill in proper date	Subscriptions will not be deleted.	User tried to cancel a subscription expiring on a particular date and didn't enter anything in date field.
Must select a category to delete events from	Subscription will not be deleted.	User tried to delete a subscription and didn't select event, user or expiration date.
Error in canceling the subscriptions	Subscription will not be deleted.	There was some error in canceling the requested subscription. Server could be down.
Enter the passwords again	Action for the subscription will not be created.	User didn't enter the same password twice for verification. Enter the information again.
Must fill in user profile	Action for the subscription will not be created	User didn't enter the user profile information in the Action window.
Must fill in all the required fields	Action for the subscription will not be created.	User didn't fill out all the required fields in the Action window. Re-enter the information.
Must choose a distribution method	Action for the subscription will not be created	User didn't choose a distribution method for Action
Couldn't get the Event ID	Selection of an event from the browser failed.	User didn't select an event from the event browser. Go to the browser and select an event for creating a subscription.
Must fill in operator and value fields to add	Subscription will not have qualifiers.	User didn't fill in operator and value to add to the qualifier list.

Table A.2.6-1. ECS Subscription Service User Messages (4 of 4)

Message Text	Impact	Cause and Corrective Action
Couldn't select qualifiers	Can't build a qualifier list for the subscription.	User didn't select a qualifier from the list. Select a qualifier from the provided list before adding operators to it.
Could not create a known subscription to delete	Subscription will not be deleted	Selected subscription for deletion could not be created again. Server could be down or there could be a database problem.
Unable to get the event server ur	Couldn't connect to the event server.	Event server could be down.
Unable to get the Subscription server ur	Couldn't connect to the subscription server	Subscription server could be down.
Unable to connect to Subscription server	Can't Initialize the GUI for start up.	Server is down.
Make sure you have logged into dce and the subscription server is running	GUI can't come up	User either didn't do a dce_login or the server is not up yet.

A.2.7 Management Support Subsystem (MSS)

The following tables presents user interface messages for ECS User Account Management, ECS Order Tracking, MIB Browser, and Trouble Ticket. (Note: Mode Manager does not have user interface messages.)

Table A.2.7-1. ECS User Account Management User Messages (1 of 3)

Message Text	Impact	Cause and Corrective Action
Can Not Connect To The Server. Try again later.	None	When: Retrieving request user. Action: Start up the User Profile Server
Can Not Connect To The Server. Please check DCE login.	None	When: Retrieving request user Action: Login to DCE.
No data found in the database.	None	When: Retrieving No register users for this particular HOME DAAC. Action: None.
The DCE Password, DCE Group, and DCE Organization, V0GW password, and Gate Way User Type can not be Empty.	None	When: Creating a user profile Action: Add all fields required.
Create Register User Failed Please check log file for error.	None	When creating user profile. Action: Check log file. Possible problems may come from Sybase or DCE failed.
Delete request user failed	None	When: Deleting request user. Action: check log file. Possible problems may come from Sybase or DCE failed.
Update Failed for Register User Please try again	None	When: Updating the request user. Action: Check log file. Possible problems may come from Sybase or DCE failed.
The First Name, Last Name, Telephone number and Email Address can not be Empty.	None	When: Creating user profile. Action: Enter information in all fields required.

Table A.2.7-1. ECS User Account Management User Messages (2 of 3)

Message Text	Impact	Cause and Corrective Action
Insert has failed for Regist User, Please try again	None	When: Creating user profile. Action: Check log file. Possible problems may come from Sybase or DCE failed.
Delete failed for Register User Please try again	None	When: Deleting a request user. Action: Action: Check log file. Possible problems may come from Sybase or DCE failed.
Can Not Connect To The Server. Try again later.	None	When: Retrieving user profile Action: Start up the User Profile Server.
Can Not Connect To The Server. Please check DCE login	None	When: Retrieving user profile. Action: Login to DCE
No data found in the database.	None	When: Retrieving user profile and no users for this particular HOME DAAC. Action: None.
Update Failed for profile database Please try again	None	When: Updating the user profile. Action: Check log file. Possible problems may come from Sybase or DCE failed.
DCE password textfield is empty. The password is not updated	None	When: Updating DCE password. Action: Add DCE password.
DCE cell admin password can not be empty	None	When: Login to DCE administrator. Action: Add DCE admin password.

Table A.2.7-1. ECS User Account Management User Messages (3 of 3)

Message Text	Impact	Cause and Corrective Action
Change DCE password Failed Please try again.	None	When: Changing DCE password. Action: Check log file. Possible problems may come from Sybase or DCE failed.
V0 GateWay password is empty. The password is not updated.	None	When: Updating V0 gateway password Action: Add V0 gateway password.
Change V0 GateWay password Failed. Please try again.	None	When: Changing V0 gateway password. Action: Check log file. Possible problems may come from Sybase or DCE failed.
Delete failed for profile database Please try again	None	When: Deleting a user profile. Action: Check log file. Possible problems may come from Sybase or DCE failed.
Update Failed for profile database Please try again.	None	When: Updating a user profile. Action: Check log file. Possible problems may come from Sybase or DCE failed.
No e-mail address	None	When: Changing Aster category or deleting DAR privilege. Action: Add e-mail address in the configuration file.

Table A.2.7-2. ECS Data Order Tracking User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
No requests found for the order	None	When: User retrieves the request with a specific order.
Unable to read from the Request Database. Try again later	None	When: Retrieving request. Cause: DCE, network, or Order server failed.
Unable to read from the Order Database. Try again later	None	When: Retrieving Orders. Cause: DCE, network, or Order server failed Action: Check log file to determine the reasons.
No orders were found.	None	When: retrieving order with specific order ID
Please select a request first.	None	When: Updating or deleting a request Action: Click on a request.
No orders match the request ID	None	When: Retrieving an order with a request ID.
The order is no longer in the database	None	When: Retrieving an order with an order ID.
Please select an order first.	None	When: Deleting, updating, or viewing shipping information. Action: Click on an order.
Unable to read from the Request Database.	None	When: Retrieving orders. Cause: DCE, network, or order server failed. Action: check log file to determine the reasons.

Table A.2.7-2. ECS Data Order Tracking User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
Please delete the corresponding requests first!	None	<p>When: Deleting an order.</p> <p>Cause: The order to be deleted has some requests associated with it.</p> <p>Action: Delete the requests first, and then delete the order.</p>
Unable to delete order in the Order Database. Try again later.	None	<p>When: Deleting an order.</p> <p>Cause: DCE, network, or order server failed.</p> <p>Action: Check log file to determine the reasons.</p>
Unable to delete request in the Order Database. Try again later	None	<p>When: Deleting a request.</p> <p>Cause: DCE, network, or Order server failed.</p> <p>Action: Check log file to determine the reasons.</p>
Server error, can not update order	None	<p>When: Update an order.</p> <p>Cause: DCE, network, or order server failed.</p> <p>Action: Check log file to determine the reasons.</p>

Table A.2.7-3. MIB Browser User Messages (1 of 4)

Message Text	Impact	Cause and Corrective Action
Error: The variable has general error	Cannot monitor ECS application resources.	The target host failed to process a SNMP request correctly.
Error: The variable is read only	Cannot modify ECS application resource settings.	A write attempt was made to a SNMP variable using a MIB view (controlled by community string) that permits read-only type SNMP requests.
Error: The variable has bad value	Cannot modify ECS application resource settings.	A SNMP Set request value was outside the permitted range of values for this variable.
Error: There is no such variable name	Cannot monitor ECS application resources.	The SNMP variable requested is not supported by the target host.
Error: NULL returned pdu	Cannot monitor ECS application resources.	There is a failure in processing the SNMP request at the target machine. Try again.
No value(s) returned for query	Cannot monitor ECS application resources.	A SNMP response was received for the request. However, the target machine failed to properly construct a SNMP reply.
Query Stopped	Cannot monitor ECS application resources.	The SNMP query was terminated by the operator by pressing the Stop Query button on the MIB Browser application.
Timed Out: No response arrived before timeout. Possible causes include invalid community name, etc.	If the community name was incorrect, the SNMP agent will also respond with an SNMP trap indicating an authentication failure. This trap is received by HP OpenView and displayed in the trap log but not in the MIB Browser.	Ask the SA for the proper community name and reenter it in the community text field.

Table A.2.7-3. MIB Browser User Messages (2 of 4)

Message Text	Impact	Cause and Corrective Action
SNMP query PDU composed error	Cannot monitor ECS application resources.	There was a problem assembling a SNMP request on the HP OpenView platform.
Missing MIB Object ID	Cannot monitor ECS application resources.	Request requires object ID. Enter OID or MIB object text string in the MIB object ID field.
Nothing to MIB Set	Cannot modify ECS application resource settings.	The setting of MIB variables requires that a MIB variable be selected. The instance and value fields will be populated once the MIB object has been selected.
You must first specify a node or IP address.	Cannot monitor ECS application resources.	This information is needed for selecting a target host for a SNMP query.
Leaf node has no children	None (informational message).	When navigating down the MIB tree, the leaf nodes will eventually be reached. At this point, the user can go no further.
Invalid MIB Instance	Cannot monitor ECS application resources.	The instance identifier associated with a SNMP query was not valid. Check for valid instances by starting a query from the parent node of the MIB variable.

Table A.2.7-3. MIB Browser User Messages (3 of 4)

Message Text	Impact	Cause and Corrective Action
Missing Instance value for < > OID	Cannot monitor ECS application resources.	The instance of a MIB variable must be selected for setting. The instance differentiates rows in the MIB table. For example, a host might have several network interfaces. Each interface resource represented by a MIB variable will have an instance associated with it.
You must select only one node on the Ovw map.	Cannot monitor ECS application resources.	A target host can be selected from the OV map by highlighting its icon. Only one target host can be selected for a query at a given time.
You must first select a node on the Ovs map.	Cannot monitor ECS application resources.	The target host name for an SNMP query must appear in the Name or IP Address field. A target host can be entered manually or selected from the OV map by highlighting its icon.
Invalid object identifier:	Cannot monitor ECS application resources.	The OID entered in the MIB Object ID field is not supported by any installed MIB in OpenView. Check to see that the OID was properly entered.
ECS enterprise MIB %s not found.	Cannot monitor ECS application resources.	There was a problem loading the ECS MIB. The MIB browser cannot run properly without this MIB. Check to see that the ecs-mib is pointed to by the ECSTMIB_PATH or OV_SNMP_MIBS environment variable.

Table A.2.7-3. MIB Browser User Messages (4 of 4)

Message Text	Impact	Cause and Corrective Action
Could not parse string <integer> value.	Cannot modify ECS application resource settings.	When setting MIB variables in the Set Value field, only integer values are permitted.
Can't convert MIB variable name < > NAME to OID	Cannot monitor ECS application resources.	MIB objects can be entered using their string names, which are converted to their OID mappings for SNMP packet construction. The mapping function has failed if this message appears. Check the spelling of this MIB string and re-enter the proper name.
Could not open SNMP session to < > HOST.	Cannot monitor ECS application resources.	The target host could not be reached.
SNMP query failed: < > ERROR	Cannot monitor ECS application resources.	There was a failure in sending the SNMP request on the management side for the given reason.

Table A.2.7-4. Trouble Ticket User Messages

Message Text	Impact	Cause and Corrective Action
Error- There has been an error in the Trouble Ticket service	The user is prevented from logging a Trouble Ticket.	Check to see if the Remedy Server is running or not. If the Remedy Server is running, then check to see if the MsTtHTML.config file with the macro call RemedyServerHost is assigned with the appropriate hostname where Remedy Server resides.
There has been an error communicating with the Profile Server	The user is prevented from logging a Trouble Ticket.	Check to see if the Accountability Server is running, if not running bring up the Accountability server else, check the MsTtHTML.config file with the macro Site and Mode to see whether the correct assignment to these macro that is related to the accountability server.
ERROR- There has been an error in locating filetype *.config = configuration Call system admin in regard to FileType: MsTtHTML.config- Mode = SHARED	The user is prevented from logging a Trouble Ticket.	Make sure that the MsTtHTML.config file is installed in the path of /usr/ecs/SHARED/CUSTOM/cfg.
ERROR- There has been an error in locating filetype *.config = configuration Call system admin in regard to FileType: MsTtEnviro.config - Mode = SHARED	The user is prevented from logging a Trouble Ticket.	Make sure that the MsTtEnviro.config file is installed in the path of /usr/ecs/SHARED/CUSTOM/cfg.
Access denied. You can only access Trouble Ticket using a valid user id.	The user is prevented from logging a Trouble Ticket.	Use the Accountability User's Registration Tools (GUI) to create an account in to the Profile database.

Table A.2.7-5. ECS Assist Messages

Message Text	Impact	Cause and Corrective Action
No Clearcase component available for: Mode: XXXX Subsystem: YYYY	Preparation for installation will not proceed.	Caused by incorrect input provided during the preparation for installation of Subsystem YYYY in Mode XXXX

A.2.8 Planning Subsystem (PLS)

The following tables presents user interface messages for Resource Definition, Resource Scheduler, Planning Workbench, Production Request Editor, and Production Strategy.

Table A.2.8-1. Resource Definition User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
Resource name required	No name, no resource gets generated.	Enter a resource name.
A resource with this name already exists - re-enter name	Name must be unique in the database.	Choose a different name.
Strings should be selected	Autosys requires, during creation, that a string name to be associated.	Select and associate a String.
Resource is reserved - cannot modify	This resource is reserved by the Resource Scheduler GUI.	Leave that resource alone. Another option: Use the Resource Scheduler to change the status or delete the reservation.
Unable to lock Resource tables - cannot modify resource	The resource or its member resource is being used by the Processing software.	Decide not to modify this resource. Another option: Wait until the resource is released.
Number of cpus required	This is a required field.	Enter a value.
Total ram required	This is a required field.	Enter a value.
Operating system required	This is a required field.	Enter the required information.
Number of cpus must be an integer number	Non-numeric data are not valid.	Enter an integer.

Table A.2.8-1. Resource Definition User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
Total ram must be an integer number	Integer only	Enter an integer.
Error saving computer resource	The operation failed maybe because of an error in the database interface.	Check the database status.
Error saving computer resource comments	Database interface error	Check the database status.
Error modifying computer resource	DB I/F error	Check the database status.
Error modifying computer resource comments	DB I/F error	Check the database status.
Unable to lock Resource tables - cannot delete resource	The resource or its member resource is being used by the Processing software.	Do not delete this resource. Another option: Wait until the resource is released.
Partition Size required	This is a required field.	Enter the required information.
Block Size required	This is a required field.	Enter the required information.
Partition Size must be a number - reenter	Integer only	Use an integer.
Block Size must be an integer number - reenter	Integer only	Use an integer.
Activity Type is Not initialized	Without this field initialized, the Save operation gets rejected.	Slay all the Resource Planning tasks, run the initialization sql script, and restart RP tasks.
Select a resource to modify from the list	The selected resource should be one of the defined resources.	Select a list item.
Resources loaded	The resources list has been loaded from the MSS baseline configuration.	N/A (informational message).
Resources not loaded - file not found	The MSS baseline configuration file is not found in the previously designated directory.	Check with MSS about the location of the file.

Table A.2.8-2. Resource Scheduler User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
This Name: < > with status: < > has been used, Please pick another Name.	The reservation name must be unique.	Choose a different name.
New Resvation can't leave resources list of ResvName: < > empty	This required field must be filled.	Enter the name.
Can't insert new ResvName: < > into database	The database cannot be updated.	Database error.
resvName: < > status is changed to < >	Informational message.	N/A
resvName: < > can't replace new Interval List	The database cannot be updated.	Use a unique name.
resvName: < > can't replace new Resource List	The database cannot be updated.	Database error.
Success to update resvName: < >name	Informational message.	N/A
Fail to modify resvName: < >	The database cannot be updated.	Database error.
ResvName: < > Selected Intervals list can't be empty	This required field must be filled.	Enter name.
ResvName: < > Selected Resources list can't be empty	This required field must be filled.	Enter name.
ResvName: < > accepts new resources list	Informational message.	N/A
ResvName: < > resource list is less now	Informational message.	N/A
I can't find < Plan Name >.	There is a problem with the resource pool.	Enter valid name.
resvName: < > fails to approve - status is changed to < >.	The plan will not get approved.	Conflict with another reservation. Rework.

Table A.2.8-2. Resource Scheduler User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
resvName: < > myTime: < > resourceName: < > conflicted Time: < > conflictResvName: < >	Informational message.	N/A
PIRpSiScheduler::modi fyReservation - can't save new info for resvName: < >.	The database cannot be updated.	Database error.
can't send requestActChg to resource model for resvName: < >	The database cannot be updated.	Database error.
ResvName: < > can't uncommitted < > RActAlls	The database cannot be updated.	Database error.
Delete ResvName: < > from the list	The database cannot be updated.	Select from the list.
ResvName: < > already has status < >.	Action cannot be completed.	Choose a different action.
Success to approve reservation Name: < >	Informational message.	N/A
ResvName: < > status is changed from approved to committed	Informational message.	N/A
Error in creating a new object for row: < >.	The database cannot be updated.	Database error.
Open one Reservation at a time, Please	Reservation cannot be opened.	Close one reservation before opening another.
A Reservation must be selected to modify	User cannot proceed.	Select a reservation.
A Reservation must be selected to delete	User cannot proceed.	Select a reservation.
Must select reservation	User cannot proceed.	Select a reservation.

Table A.2.8-3. Planning Workbench User Messages

Message Text	Impact	Cause and Corrective Action
<p>You have already submitted the plan, <plan name> and this plan is currently active. Do you want to create a new plan?</p>	<p>If the operator has already submitted this plan for activation, PWB will not allow it to be submitted twice.</p>	<p>By answering "Yes" to dialog, PWB will create a new plan which the operator can use for re-planning. Alternatively, the operator can use an already existing plan to activate and replan.</p>
<p>You cannot reschedule with the current active plan. Do you want to create new plan to schedule production request(s) and to reactivate the plan?</p>	<p>Cannot replan under the same plan name.</p>	<p>By answering "Yes" to dialog, PWB will create a new plan which the operator can use for re-planning. Alternatively, the operator can use an already existing plan to activate and replan.</p>
<p>You need to save the current plan before you activate the plan!!!</p>	<p>Insures consistency between the database active plan and what actually gets activated</p>	<p>Press "Yes" in the dialog and the plan will be saved. Next time you try to activate, there will be no error message.</p>
<p>The following dpr jobs were failed when you activated the plan <plan name> <list of failed dprs, one per line> Do you want to recover the failed dpr jobs?</p>	<p>PWB detects that JobManagement has not received the dprs correctly. The operator needs to be aware that there is (are) failed jobs.</p>	<p>Press "Recover" and the failed jobs will be resubmitted.</p>
<p>Start Time must be less than Stop Time</p>	<p>Improper time interval setting for plan activation</p>	<p>Enter a start time which is less than the stop time.</p>
<p>Date entered 'date that was entered' is invalid</p>	<p>Improper time format.</p>	<p>Enter time in mm/dd/yyyy format.</p>

Table A.2.8-4. Production Request Editor User Messages (1 of 5)

Message Text	Impact	Cause and Corrective Action
Please specify production request to filter by		Filter button acts on the pattern specified in the filter text entry area. Here, the user can filter all the production requests by the specified pattern.
Data Processing Request not open, Data Processing Request to be open must be selected.		Select a DPR from the DPR List first. Then open that DPR through the file menu.
Data Processing Request not open, Data Processing Request to be open must be selected.		Same as above
PIDpr Construct from Database Failed.		Select a DPR from the DPR List first. Then open that DPR through the file menu or using the keyboard Ctrl + O.
myDprPIProductionRequest Construct from Database Failed.		Write a NCR if this occurs.
myPIUserParametersCollection Construct from Database Failed.		Write a NCR if this occurs
Please select a Dpr you want to delete from the DPR List.		Select a DPR from the DPR List first. Then delete that DPR through the Edit menu or using the keyboard Ctrl +D
DPR Delete Failed.		Look at the messages in EcPIPReDitor.ALLOG file.
Do you want to delete this DPR "DPRID"?		Yes, will delete the DPR. No, will not delete the DPR
Production Request not saved, Production Request already exists.		Enter a new name for the production request and save the PR.

Table A.2.8-4. Production Request Editor User Messages (2 of 5)

Message Text	Impact	Cause and Corrective Action
Production Request not saved, Production Request must have a name shorter than 20 characters before its saved		Enter a PR name with less than 20 Characters.
Production Request not saved, Production Request must have a name before its saved.		Enter a new name for the production request and save the PR.
Production Request not open, Production Request to be open must be selected.		Select a PR from the PR List first. Then, open that PR through the file menu or using the keyboard Ctrl + O.
Production Request not open, Production Request to be open must be selected.		Select a PR from the PR List first. Then, open that PR through the file menu or using the keyboard Ctrl + O.
Environment variable PL_NEW not set		Check the EcPIPReEditor.CFG file for PL_NEW . If it is not specified, add this line PL_New = New.
Unable to Initialize PIProductionRequest Pool.		Unable to read the PR table from the database.
Unable to Initialize PIPge Pool.		Unable to read the PGE table from the database.
Unable to Initialize PIDpr Pool.		Unable to read the DPR table from the database.
Production Request not saved, save Production Request first.		Before opening a new PR save the modified PR first.
Please select a PR you want to delete from the PR List.		Select a PR from the PR List first. Then, delete that PR through the Edit menu or using the keyboard Ctrl +D.

Table A.2.8-4. Production Request Editor User Messages (3 of 5)

Message Text	Impact	Cause and Corrective Action
Please select a PR you want to delete from the PR List.		Select a PR from the PR List first. Then, delete that PR through the Edit menu or using the keyboard Ctrl +D.
Please select a PR you want to delete from the PR List.		Select a PR from the PR List first. Then, delete that PR through the Edit menu or using the keyboard Ctrl +D.
PR Failed - Need to include 1st orbit in the Orbit model.		Make sure that the 1 st orbit information is in the database table Orbit model.
PR Failed - Read failure from PIOrbitModel.		Unable to read the Orbit Model table from the database.
PR Failed - Need to include 1st orbit in the Orbit model.		Make sure that the 1 st orbit information is in the database table Orbit model
PR Failed - Read failure from PIOrbitModel.		Unable to read the Orbit Model table from the database
Write to Database of Production Request Failed.		Unable to write the data to the database.
Production Request Explosion into DPRs Failed, zero DPRs Generated.		Look at the messages in EcPIPReDitor .ALOG file
Zero DPR Generated. Production Request Not Saved.		This may be a duplicate DPR . Also look at the EcPIPReDitor .ALOG file
Production Request Explosion into DPRs ok. "NoOfDprs" DPR(s) Generated.		For information only. This display will show how many DPR(s) generated as part of the PR Explosion.
myPIPge Construct from Database Failed.		Write a NCR if this occurs.

Table A.2.8-4. Production Request Editor User Messages (4 of 5)

Message Text	Impact	Cause and Corrective Action
myPIUserParametersCollection Construct from Database Failed.		Write a NCR if this occurs.
myPIProductionRequestInstance Construct from Database Failed.		Write a NCR if this occurs.
myPIPge Construct from Database Failed.		Write a NCR if this occurs.
SECURITY VIOLATION: no write permission.		User does not have the permission to save a production request.
Invalid Time is entered or End time is less than Begin Time.		Check the duration time from the PR Edit screen and make sure the time entered here is a valid time.
myPIUserParametersCollection Construct from Database Failed.		Write a NCR if this occurs.
Must select a PGE for Production Request before saving.		Open the PGE screen by clicking the mouse on PGE.. push button of the PR Edit screen. Then select a PGE from the PGE list and click on OK.
myPIUserParametersCollection Construct from Database Failed.		Write a NCR if this occurs.
myPIUserParametersCollection Construct from Database Failed.		Write a NCR if this occurs.
Production Request Delete Failed.		Unable to delete a PR from the database. Look at the messages in EcPIPReEditor.ALLOG file.
Production Request "PRNAME" Deleted; "NoOfDprs" DPR(s) deleted from the database.		For information only - to show how many DPR's associated with that PR,
Production Request Explosion into DPR(s) Failed.		Look at the messages in EcPIPReEditor.ALLOG file.

Table A.2.8-4. Production Request Editor User Messages (5 of 5)

Message Text	Impact	Cause and Corrective Action
Zero DPR Generated. Production Request Not Saved.		Look at the messages in EcPIPREditor.ALLOG file.
Production Request Explosion into DPR(s) ok. "NoOfDprs" more DPR(s) Generated.		For information only - to show how many more DPR's generated for that PR,
Dpr Generation Incomplete for PR "PRNAME". Do you want to complete Dpr explosion?		Yes, will complete the DPR generation. No, will display another message that will show how many DPR's generated so far.
Do you want to delete this PR "PRNAME"?		Yes, will delete the PR. No, will not delete the PR.
"oOfDprs" Dpr(s) have previously been generated. Are you sure you want to delete this PR?		Yes, will delete that PR. No, will clear this message.

Table A.2.8-5. Production Strategy User Messages

Message Text	Impact	Cause and Corrective Action
Value out of range (0-10).		User must enter a value between 0 - 10.
Value out of range (0-100).		User must enter a value between 0 - 100.
Total Weight must be 100 - Normalize weights.		Click on the Normalize push button.
This StrategyID already exists.		Enter a new name for the Strategy ID.
Invalid StrategyID. Please enter a StrategyID.		User did not specify the Strategy ID. Enter a Strategy ID.
No StrategyID selected. Please select one.		Select a Strategy ID from the List.

A.2.9 Data Processing Subsystem (DPS)

The following tables presents user interface messages for SSI&T Manager, SSAP Editor, PDPS/SSIT DB Update, Prohibited Function Checker, Process Control File Checker, Binary File Difference Assistant, and QA Monitor.

Table A.2.9-1. SSI&T Manager User Messages (1 of 4)

Message Text	Impact	Cause and Corrective Action
DPATMGR_F_SYSTEM_ERR	GUI Internal Error. Some kind of system error has occurred.	Restart the GUI. If that doesn't work, check LogStatus file in the logs directory.
DPATMGR_F_CANT_OPEN_FILE or "DPATMGR_E_CANT_OPEN_FILE or "DPATMGR_W_CANT_OPEN_FILE	File Access Error. GUI cannot access the file necessary to complete the requested action. Different versions of the error indicate criticality (F = Failure, E = Error, W = Warning)	Check to make sure the file exists. Most file locations are defined in the PCF for GUI (in data/DPS/DpAtMgrInternal.pcf) or in the configuration file (EcDpAtMgr.CFG).
DPATMGR_E_BAD_ENV_VAR	Environment Variable error. An environment variable used by the GUI is not set.	Check configuration file for the GUI (EcDpAtMgr.CFG) and make sure all environment variables have correct values.
"DPATMGR_E_CANT_FIND_PROGRAM"	File Access Error. GUI cannot find the program the user has chosen to run.	Check to make sure the program exists given the current users path and the PCF (EcDpAtMgrInternal.pcf) . If program cannot be found, adjust the user's path or the PCF appropriately.
"DPATMGR_E_CANT_FORK"	Called Program Error. Specified program cannot be started.	Check to make sure that the chosen program exists and can be run from the command line.
"DPATMGR_E_BAD_EXIT"	Called Program Error. Specified program returned a bad exit status upon completion.	Error is with called program, not the GUI itself. Check to make sure that the chosen program exists and the current version works appropriately.

Table A.2.9-1. SSI&T Manager User Messages (2 of 4)

Message Text	Impact	Cause and Corrective Action
"DPATMGR_E_PROGR AM_NOT_READY"	Called Program Error. Specified program cannot be executed.	Check to make sure the program exists given the current users path and the PCF (EcDpAtMgrInternal.pcf) . If program cannot be found, adjust the user's path or the PCF appropriately.
"DPATMGR_W_INVALID_FILENAME"	Data Error. The filename specified in the PCF was invalid.	Check to make sure the program is correctly specified in the PCF (EcDpAtMgrInternal.pcf) .
Unable to open database	Database Access Error. The Database used for the SSIT checklist (a UNIX file) cannot be opened.	Check the *.dir and *.pag files in the data directory. If they do not exist then the database has been deleted. Restart the GUI to recreate them.
Unable to create database	Database Access Error. The Database used for the SSIT checklist (a UNIX file) cannot be created.	Check permissions on the data directory to make sure that the GUI can write the *.dir and *.pag files that make up the database.
Error writing to database	Database Access Error. GUI failed to write to the Database used for the SSIT checklist (a UNIX file).	Check the *.dir and *.pag files in the data directory. If they do not exist or have been corrupted then the GUI will not be able to write to them. Restart the GUI (and delete files if corrupted) to recreate them.
Error reading from database	Database Access Error. GUI failed to read from Database used for the SSIT checklist (a UNIX file).	Check the *.dir and *.pag files in the data directory. If they do not exist then the database has been deleted. Restart the GUI to recreate them.

Table A.2.9-1. SSI&T Manager User Messages (3 of 4)

Message Text	Impact	Cause and Corrective Action
Database currently not open	Database Access Error. GUI expected database to be open and it was not. This should never happen.	GUI internal error that should not occur.
Database currently open	Database Access Error. GUI expected database to be closed and it was open. This should never happen.	GUI internal problem that should not occur.
Database open for reading only	Database Access Warning. Database used for the SSIT checklist (a UNIX file) only has read permission for the current user.	Check permissions on the data directory and the *dir and *.pag files to make sure that the GUI can write to them.
Missing DATABASE= specification or Missing CHECKLIST= specification”	Checklist File Error. The file that defines the SSIT Checklist has missing entries.	Check to make sure that the file defining the checklist (in the data directory) has entries for “DATABASE=” and “CHECKLIST=”.
Error Allocation Memory	Memory allocation error. GUI has run out of memory.	Restart GUI. Note that anything started from the Tools menu will NOT have to be restarted.
Unable to open. . . .	File Access Error. File defined in the PCF could not be opened.	Check to make sure the logical ID entry 603 is correctly specified in the PCF (EcDpAtMgrInternal.pcf)
Unable to get log/checklist database qualifier	File Access Error. File entry defining the SSIT Checklist was missing or incorrect in the PCF.	Check to make sure the logical ID entry 603 is correctly specified in the PCF (EcDpAtMgrInternal.pcf)

Table A.2.9-1. SSI&T Manager User Messages (4 of 4)

Message Text	Impact	Cause and Corrective Action
Specified Checklist does not match the one in the database.	File/Database mismatch. Checklist database and the <checklist>.database file are out of sync.	Either find the correct <checklist>.database file or remove *.pag and *.dir files and create new database. Need to restart the GUI in either case.
Error while closing file	File Access Error. Could not close the file that defines the Run menu on the GUI.	Make sure that file has not been corrupted or removed. Restart the GUI.
"....returned from....."	Program Error. Program selected from menu returned an error upon completion.	Error with the specified program. Check into specified program operation.

Table A.2.9-2. SSAP Editor User Messages (1 of 8)

Message Text	Impact	Cause and Corrective Action
Cannot add new Assoc Collection.	Metadata Write Error. GUI could not write Associated Collection metadata to disk.	First check to make sure that Associated Collection was entered correctly. Correct any errors. If that doesn't fix the problem, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Cannot create a new SSAP. Verify name is valid.	User Error. SSAP name has special characters within it that are not allowed because information is saved as a file.	Correct SSAP name not to have special characters.
Refresh failed.	Connectivity Error. SSAP Editor could not connect to Data Server to get the information needed to refresh the screen.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation.

Table A.2.9-2. SSAP Editor User Messages (2 of 8)

Message Text	Impact	Cause and Corrective Action
The current SSAP has been changed. Do you want to abort changes and work on another SSAP?	Informational. Current SSAP has changed and not been submitted to the Data Server and the user has selected a new or different SSAP.	Select Yes or No on the pop-up window.
Cannot select SSAP.	GUI internal error. The SSAP GUI has gotten out of sync with the Data Server.	Restart the GUI to synchronize the list of SSAPs with that kept at the Data Server.
Cannot open the Metadata information.	Connectivity Error. SSAP Editor could not retrieve the metadata information from the Data Server or the metadata retrieved is invalid.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation.
Cannot get metadata list.	Connectivity Error. SSAP Editor could not retrieve the metadata information from the Data Server or the metadata retrieved is invalid.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation.
Do you want to reset the SSAP including File list and Metadata?	Informational. User hit the reset button and the GUI is just confirming that action.	Select Yes or No on the pop-up window.
Cannot reset File List.	File Access Error. GUI cannot find the backup file for the current File List.	Reset action cannot be performed. User must either keep the current changes (to the File List) or re-select the SSAP to cancel all changes.
Cannot reset Metadata List.	File Access Error. GUI cannot find the backup file for the metadata.	Reset action cannot be performed. User must either keep the current changes (to the metadata) or re-select the SSAP to cancel all changes.

Table A.2.9-2. SSAP Editor User Messages (3 of 8)

Message Text	Impact	Cause and Corrective Action
Metadata has changed without saving. Please save or reset.	User Error. User changed the Metadata for the SSAP and did not save it before attempting to submit to the Data Server.	User Error. Either save SSAP Metadata or reset (to remove changes made) and then submit the SSAP again.
The current SSAP has not changed.	User Error. GUI will not allow SSAP to be submitted to the Data Server if not changes have been made.	None. Only submit SSAP after changes have been made.
Cannot submit to the data server.	Connectivity Error. GUI could not save the SSAP to the Data Server.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation (note that all changes will be lost).
Submit to the data server successfully.	Informational. Submit to Data Server succeeded.	None.
Do you really want to delete the selected SSAP?	Informational. User has clicked on the Delete button and this is a confirmation message.	Select Yes or No on the pop-up window.
Cannot delete the selected SSAP.	Connectivity Error. GUI could not submit Deletion request to the Data Server.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation.
Select a SSAP first.	User Error. User must first select an SSAP (on the Main tab) before choosing the desired function.	Select an SSAP on the Main Tab and then reselect the desired function.
Cannot Open the file list.	Disk Access error. GUI cannot find the File List on disk.	Submit current changes to the Data Server and restart the GUI.
Invalid path entered.	User Error. Path entered on File List tab does not exist on the local machine.	Enter corrected path.

Table A.2.9-2. SSAP Editor User Messages (4 of 8)

Message Text	Impact	Cause and Corrective Action
Cannot go to the parent directory.	User Error. User attempted to go to the parent of the root directory.	None.
Cannot set the selected directory to the current path.	User Error. Path entered on File List tab does not exist on the local machine.	Enter corrected path.
Do you really want to delete the selected file(s) from this SSAP?	Informational. User has clicked on the Delete button on the File List tab and this is a confirmation message.	Select Yes or No on the pop-up window.
Select a File Type first.	User Error. User did not select a File Type before trying to add to, extract from or delete from the SSAP.	Select the appropriate File Type and repeat the command.
Cannot Add the selected files to the current SSAP.	File Access error. The selected files cannot be found to add to the current SSAP.	Maybe sure that the files still exist on the local disk.
No Items selected to delete	User Error. No files selected in the SSAP File List window before the delete button was pressed.	User Error. Select files to delete before pressing the delete button.
Name and Version must have non-null values.	User Error. User did not fill in a value for Name and/or version not he Associated Collections window.	User Error. Make sure that both Name and Version are filled in before pressing the OK button on the Associated Collections window.
Cannot add new Assoc Collection.	Metadata Write Error. Associated Collection could not be added to the metadata.	First check to make sure that Name and Version were entered correctly on the Associated Collections window. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.

Table A.2.9-2. SSAP Editor User Messages (5 of 8)

Message Text	Impact	Cause and Corrective Action
Duplicate Short Name/Version.	User Error. User entered a Short Name/Version pair that already exists in Associated Collection.	User Error. Not action needed. Duplicate entry was NOT added to the Associated Collection list.
Cannot change SW date last modified.	User Error. Date in the SW Data Last Modified entry is invalid.	Correct the date in the SW Data Last Modified entry.
Failed changing SW date last modified.	Metadata Write Error. GUI could not write SW Date Last Modified metadata to disk.	First check to make sure that SW Data Last Modified was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Cannot change Acceptance date	User Error. Date in the Acceptance Date entry is invalid.	Correct the date in the Acceptance Date entry.
Failed updating Acceptance date.	Metadata Write Error. GUI could not write Acceptance Date metadata to disk.	First check to make sure that Acceptance Date was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Cannot change PGE date last modified.	User Error. Date in the PGE Date Last Modified entry is invalid.	Correct the date in the PGE Date Last Modified entry.
Failed changing PGE date last modified.	Metadata Write Error. Could not write PGE Date Last Modified metadata to disk.	First check to make sure that PGE Data Last Modified was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.

Table A.2.9-2. SSAP Editor User Messages (6 of 8)

Message Text	Impact	Cause and Corrective Action
Cannot set maturity Code. . . .	Metadata Write Error. Could not write Maturity Code metadata to disk.	First check to make sure that Maturity Code was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Cannot Reset Metadata	File Access Error. GUI cannot find the backup file for the metadata.	Reset action cannot be performed. User must either keep the current changes (to the metadata) or re-select the SSAP to cancel all changes.
Cannot get Metadata information.	Connectivity Error. SSAP Editor could not retrieve the metadata information from the Data Server or the metadata retrieved is invalid.	Check to make sure that Data Server is up and functioning normally. If Data Server is alive and well, restart the GUI and then repeat the operation.
Cannot save Metadata without Associate Collection	User Error. Need to set at least one Associate Collection before attempting to Save the metadata.	Create the appropriate Associated Collection and then Save the metadata.
Cannot save Metadata	Metadata Write Error. GUI could not write metadata to disk.	First check to make sure that all visible metadata fields are correct. Correct any errors and Save again. Otherwise, check LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.

Table A.2.9-2. SSAP Editor User Messages (7 of 8)

Message Text	Impact	Cause and Corrective Action
Failed changing PGE Name.	Metadata Write Error. GUI could not write PGE Name metadata to disk.	First check to make sure that PGE Name was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Failed changing PGE id.	Metadata Write Error. GUI could not write PGE ID metadata to disk.	First check to make sure that PGE ID was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Failed changing PGE Function.	Metadata Write Error. GUI could not write PGE Function metadata to disk.	First check to make sure that PGE Function was entered correctly. Correct any errors. If the problem still exists, check LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Failed changing PGE Version.	Metadata Write Error. GUI could not write PGE Version metadata to disk.	First check to make sure that PGE Version was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.

Table A.2.9-2. SSAP Editor User Messages (8 of 8)

Message Text	Impact	Cause and Corrective Action
Failed changing algorithm package Name.	Metadata Write Error. GUI could not write Algorithm Package Name metadata to disk.	First check to make sure that Algorithm Package Name was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Failed changing Description Type.	Metadata Write Error. GUI could not write Description Type metadata to disk.	First check to make sure that Description Type was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.
Incorrect value. Must be one of: Initial Delivery Early Delivery ENGRG MOD Operational Enhancement SW Patch	User Error. Value for the Delivery Purpose must be one of those specified.	Correct value and hit enter.
Failed changing Delivery Purpose.	Metadata Write Error. GUI could not write Delivery Purpose metadata to disk.	First check to make sure that Delivery Purpose was entered correctly. Correct any errors. If the problem still exists, check the LogStatus file in the logs directory for reason for the failure and take appropriate action to correct.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (1 of 6)

Message Text	Impact	Cause and Corrective Action
Are you sure you want to overwrite data for the current selection	Warning message. Data will be overwritten if the "Yes" button is clicked.	User must decide if he/she wants data overwritten and then click on the appropriate answer.
Unknown Exception in	GUI error. GUI encountered an unexpected error. GUI is in a bad state.	Note down the location of the error (it appears after "in") for debugging purposes. GUI must be restarted.
Memory Allocation Failure in	GUI Error. GUI encountered an error allocating memory.	Note down the location of the error (it appears after "in") for debugging purposes. GUI must be restarted to free up memory.
Unable to retrieve pge versions from the database in	Database error. GUI could not find versions for user selected PGE.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Need to select Name/Version pair before Display is allowed.	User Error. User did not select both a PGE Name and PGE Version.	User must select a PGE Name and Version pair to continue.
Unable to open the Odl file in	Configuration Error. GUI cannot locate file to display ODL for PGE or ESDT definition.	Check GUI configuration file for correct location of PGE/ESDT SCIENCE METADATA FILES. Restart the GUI with corrected location.
Unable to display (File may not exist) in	Configuration Error. GUI cannot locate file to display ODL for PGE or ESDT definition.	Check GUI configuration file for correct location of PGE/ESDT SCIENCE METADATA FILES. Restart the GUI with corrected location.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (2 of 6)

Message Text	Impact	Cause and Corrective Action
Need to select Name/Version pair before Delete is allowed.	User Error. User did not select both a PGE Name and PGE Version before clicking the Delete button.	User must select a PGE Name and Version pair and then click on the Delete button.
Need to select correct Profile ID before Delete is allowed.	User Error. User did not select a Profile ID before clicking the Delete button.	User must select a Profile ID and then click on the Delete button.
Are you sure you want to delete the listed PGEs with same SW id from the disk?	Warning message. PGEs will be deleted if the "Yes" button is clicked.	User must decide if he/she wants PGEs deleted and then click on the appropriate answer.
Unable to obtain science software id from the database (can't delete) in	Database error. GUI could not find science software id for PGE selected to delete.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Need to select Name/Version pair before Edit is allowed.	User Error. User did not select both a PGE Name and PGE Version before clicking the Edit button.	User must select a PGE Name and Version pair and then click on the Edit button.
Need to select correct Profile ID before Edit is allowed.	User Error. User did not select a Profile ID before clicking the Edit button.	User must select a Profile ID and then click on the Edit button.
Unable to obtain user parameters from the database in	Warning message. No User Parameters were found in the database.	No action unless User Parameters were expected. Then restart the GUI to fix database connection or inconsistency problem.
There are no user parameters for this pge	Warning message. No User Parameters were found in the database.	No action unless User Parameters were expected. Then restart the GUI to fix database connection or inconsistency problem.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (3 of 6)

Message Text	Impact	Cause and Corrective Action
There are no Esdt for this pge	Warning message. No ESDTs were found in the database.	No action unless ESDTs were expected. Then restart the GUI to fix database connection or inconsistency problem.
Unable to obtain Resource requirements from the database in	Database error. GUI could not find Resource Requirements for selected PGE.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Unable to obtain performance data from the database in	Database error. GUI could not find Performance Data for selected PGE.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
This value would cause overflow or underflow	User Error. User entered a value that is too large or too small.	User must enter a value within the accepted range.
Maximum integer value exceeded in	User Error. User entered an Integer value that is too large.	User must enter a value within the accepted range.
Resource Manager construction FAILED!	GUI Error. GUI encountered an error allocating memory (for the Resource Manager).	Note down the location of the error (it appears after "in") for debugging purposes. GUI must be restarted to free up memory.
Unable to retrieve processing strings from the Database	User Error. Resource Planning information is not in the current database.	Need to run Resource Planning for the current database and then restart the GUI.
Unable to retrieve computer strings from the Database	User Error. Resource Planning information is not in the current database.	Need to run Resource Planning for the current database and then restart the GUI.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (4 of 6)

Message Text	Impact	Cause and Corrective Action
There are no processing strings in the Database	User Error. Resource Planning information is not in the current database.	Need to run Resource Planning for the current database and then restart the GUI.
There are no computer names in the Database	User Error. Resource Planning information is not in the current database.	Need to run Resource Planning for the current database and then restart the GUI.
Processing String or the computer name is not in the list of Valids, found in	Database Error. Processing String or Computer Name Valids have changed while the GUI was operating.	Database inconsistency problem. GUI must be restarted to fix inconsistency problem.
Maximum floating point value exceeded in	User Error. User entered a floating point value that is too large.	User must enter a value within the accepted range.
Unable to create the User Parameter Collection class: Aborting update in	Database error. GUI could not save User Parameter data to the database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Unable to create resource requirements class: Aborting update in	Database error. GUI could not save Resource Requirement data to the database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Failure connecting to the database in	Database error. GUI could not connect to the database.	Database connectivity problem. GUI must be restarted to fix connection. If problem still occurs, Sybase support may be needed.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (5 of 6)

Message Text	Impact	Cause and Corrective Action
Cannot select Computer from database in	Database error. GUI cannot find computer in database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Cannot get StringName from database in	Database error. GUI cannot find string in database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Unable to create PIPerformance class: Aborting update in	Database error. GUI cannot save data to database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
Unable to update the database in	Database error. GUI cannot save data to database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
PGE has now changed from New to Existing	Informational. PGE has now been marked as "existing" in the database and can be scheduled.	No action need to be taken. After all info for a PGE has been saved by the GUI and PGE is marked as "existing" and can be scheduled.

Table A.2.9-3. PDPS/SSIT DB Update User Messages (6 of 6)

Message Text	Impact	Cause and Corrective Action
Could not get PGEs from the Database in	Database error. GUI cannot retrieve PGEs from the database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
There are no PGEs in the database Found in	Database error. GUI cannot retrieve PGEs from the database.	Database corruption, inconsistency or connectivity problem. GUI must be restarted to fix connection or inconsistency problem. If problem still occurs, the database must be checked for corrupted entries.
There are no Existing PGEs	Warning message. No Existing PGEs were found in the database when the user selected "Existing" from "New"	No action required.
Unable to retrieve new pges from the database Found in	Warning message. No New PGEs were found in the database (the tool defaults to this PGE state).	No action required.
There are no More New PGEs	Warning message. No New PGEs were found in the database (the tool defaults to this PGE state).	No action required.

Table A.2.9-4. Prohibited Function Checker Messages

Message Text	Impact	Cause and Corrective Action
An Item must be selected from the list for viewing	User Error. User must select an item before clicking the View button.	Select the item desired and click the View button.
No files selected	User Error. User did not select one of more files to check.	Select one of more files and re-select the command.
No reference to prohibited functions list file could be found in the process control file	Process Control File (PCF) error. PCF has missing/corrupted entries.	Check that the PCF (DpAtMgrInternal.pcf) has appropriate entries for prohibited functions.
Error accessing the Process Control File. Check that the environment variable PGS_PC_INFO_FILE is defined and that its value is the location of a valid Process Control File.	PCF error. Configuration file for the prohibited function checker is pointing to an invalid PCF.	Check the EcDpAtBadFuncGui.CFG file for the setting of PGS_PC_INFO_FILE and make sure that it is pointing to a valid PCF.
Unable to open the prohibited functions list file defined in the Process Control File.	PCF error. Process Control File has a bad location for the prohibited functions list for the specified file type.	Check PCF (DpAtMgrInternal.pcf) for definition of prohibited functions list and make sure it exists and is valid.
Encountered unexpected error. . . ."	GUI internal error. An unknown error occurred.	Check LogStatus file in the logs directory for possible debugging information.
Invalid file name	User Error. The filename specified for the report is invalid.	Correct the report filename (remove any special characters, make sure location exists) and try the command again.
Invalid directory specification"	User Error. The directory specified does not exist.	Correct the directory name and try the command again.

**Table A.2.9-5. SSAP Process Control File Checker User Messages
(1 of 2)**

Message Text	Impact	Cause and Corrective Action
An error was encountered while getting default directory name to display on file selector. Your current directory is displayed instead. Check setting of environment variable PGS_PC_INFO_FILE and rerun program to display default directory	PCF error. Configuration file for the PCF checker is pointing to an invalid PCF.	Check the EcDpAtCheckPCF.CFG file for the setting of PGS_PC_INFO_FILE and make sure that it is pointing to a valid PCF.
Cannot open selected PCF	File Access Error. Selected PCF either does not exist or is not readable.	Check that PCF exists and is readable. Restart the GUI.
\$PGSHOME not set or \$PGSHOME is not a valid directory	Configuration File error. Configuration file for the PCF checker has not set PGSHOME correctly.	Check the EcDpAtCheckPCF.CFG file for the setting of PGSHOME. Fix it and restart the GUI.
Error while getting temporary output file name	PCF error. PCF does not have correct entry for temporary files.	Correct setting in PCF (DpAtMgrInternal.pcf) under temporary files section.
Invalid file name	User Error. Specified filename is invalid.	Correct the filename (removing any special characters, making sure the directory exists) and try the command again.
Printing to default printer	Informational. Tool always prints to the default printer.	If printer is incorrect, change the default printer in your environment and select print again.
Can't save to	User Error. Specified file to save to cannot be written to.	Check to make sure that the user has permission to write to the file.
Save of file. . . .complete	Informational. File save has completed successfully.	None.

**Table A.2.9-5. SSAP Process Control File Checker User Messages
(2 of 2)**

Message Text	Impact	Cause and Corrective Action
Can not open temporary output file containing PCF checker results	File Access Error. Temporary file cannot be found or opened.	Check that temporary file has not been deleted or moved. Its location is specified in the PCF (DpAtMgrInternal.pcf).
Could not allocate enough space to display file containing PCF checker results. Free some space and retry	Memory error. GUI has run out of memory.	Restart the GUI.
Read error while attempting to read the contents of PCF checker results file into buffer for display	File Access Error. Temporary file cannot be read.	Temporary output file is corrupted. Delete the file (its location is specified in the PCF) and try the check again.

Table A.2.9-6. Binary File Difference Assistant User Messages

Message Text	Impact	Cause and Corrective Action
Copy operation - successful	Informational. File copy succeeded.	None.
Copy operation - unsuccessful	File copy failure. The copying of the specified file failed.	Check permissions in the target directory and make sure that space is available on the machine.
Text must be entered into the text field	User Error. Text field may not be blank.	Fill in text field.
"Unable to open file"	File Access Error. Specified file could not be found or opened.	Check that file exists and is readable. Retry the command.
File is empty	File Access Error. Specified file contains no data.	Check that file has not been corrupted or copied over. Get corrected file and then retry the command.
Unable to allocate memory	Memory allocation error. GUI could not allocate needed memory.	Restart the GUI.
Did not read entire file	File Access Error. GUI could not parse the entire contents of the specified file.	File is probably corrupted. Find uncorrupted version of the file and retry the command.

Table A.2.9-7. QA Monitor User Messages (1 of 2)

Message Text	Impact	Cause and Corrective Action
Call to EcPfClient constructor failed.	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded.	EcPfClient may not find the Config file. Make sure that Config file exists. Exit GUI and try again later
Call to DpPrQaMonitor constructor failed.	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded.	DpPrQaMonitor may not read the parameters in the Config file. Exit GUI and try again later
Unable to initialize PIDataType pool.	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded.	May not connect to database, exit GUI. Make sure that PDPS database is up and running, exit GUI and try again later
Failed due to < > errors while constructing DpPrQaMonitor object	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded.	Run-time system error. May exit GUI and try again later.
Failed due to unexpected runtime errors while constructing DpPrQaMonitor object	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded.	Run-time system error. May exit GUI and try again later.
...No data granule is selected.	Cannot retrieve the data granule	Select 1 or more data granule(s)
...Retrieving data granules failed...	Some how retrieving data granule(s) failed	May not connect to Data Server. Try it again later.
...Querying Data failed	Some how the querying data granules failed	May not connect to Data Server. Try it again later.
Date Interval is invalid. Please enter a valid date.	The querying cannot be performed	Make sure that the end date is greater than the start date and the dates have to be between Jan. 2, 1901 and June 1, 2036

Table A.2.9-7. QA Monitor User Messages (2 of 2)

Message Text	Impact	Cause and Corrective Action
...UpdateMetaData failed	The updating meta data cannot be performed	May not connect to Data Server. Try it again later.
... Visualizing Data failed	the visualizing data cannot be performed	May not invoke EOSView. Try it again later.
Failed due to < > while constructing EcPfClient or EcUtCIHelp.	The query, retrieve, and update cannot be performed. However, the visualization of data may be proceeded. Also the help would not be available	System unexpected run-time error

Glossary

access control list	A mechanism used by DCE to control the access by DCE principals (e.g. users) to named objects (e.g. files, directories).
ACLs Editor	Provided by CSS, facilitates creation and maintenance of access control lists for given resources and services.
Advertising service	HTML screens that allow researchers to submit requests to create an advertisement, update an advertisement, and delete an advertisement. In addition, users can download an advertised service directly to their PCs.
Admin. & Mod. ESOD	Html-based tool for the administration and moderation of the Earth Science Online Directory (ESOD).
agent system	An agent system is a device or computer system that is managed by the HP OpenView Network Node Manager.
AMASS	File Storage Management Service (files, volumes, media, drives, and jukeboxes). Integrated with Volserv (volume serving system) and Ingres (database management system) COTS products.
AutoSys/AutoXpert	COTS software that provides job scheduling and management. Also provides graphics to monitor, analyze, forecast and plan AutoSys implementations.
Bulletin Boards	Interface that manages posting of electronic messages and files/attachments for sharing information among users and operations staff.
cell	A cell is an administrative entity within DCE that consists of a set of associated users, computers, and supporting resources. A cell establishes a security boundary between the users and resources within the cell and those outside of the cell.
Cell Directory Service	The Cell Directory Service (CDS) is the DCE component that looks up and manages names within a DCE cell.
ClearCase	Software change manager that stores ECS custom software and science software, regulates access to the files, controls and logs file changes, performs software builds, and maintains a record of the build. Maintains a library of software deployed to sites.
CMI	Cryptographic Management Interface. Used to create accounts for given user names and passwords.
Crack	Used to determine if passwords are secure.

DART	Allow user to construct a Data Acquisition Request.
Data Dict. Maintenance	Tool that allow the operator to maintain the ECS Data Dictionary.
Data Distrib. Request	Monitors and controls the request for data distribution.
Data Ingest	Provides a means for external providers to ask for ECS ingest services.
Data Products	<p>Designated as standard or special data products, generated as a part of research investigation using EOS data. The various levels of data are defined as follows (1995 MTPE/EOS Reference Handbook):</p> <p><i>Level 0</i> - Reconstructed, unprocessed instrument/payload data at full resolution; any and all communications artifacts, e.g., synchronization frames, communications headers, duplicate data removed.</p> <p><i>Level 1A</i> - Reconstructed, unprocessed instrument data at full resolution, time-referenced, and annotated with ancillary information, including radiometric and geometric calibration coefficients and georeferencing parameters, e.g., platform ephemeris, computed and appended but not applied to the Level 0 data.</p> <p><i>Level 1B</i> - Level 1A data that have been processed to sensor units (not all instruments will have a Level 1B equivalent).</p> <p><i>Level 2</i> - Derived geophysical variables at the same resolution and location as the Level 1 source data.</p> <p><i>Level 3</i> - Variables mapped on uniform space-time grid scales, usually with some completeness and consistency.</p> <p><i>Level 4</i> - Model output or results from analyses of lower level data, e.g., variables derived from multiple measurements.</p>
Data Server	Software associated with storing earth science and related data, searching and retrieving the data, and supporting the administration of the data, hardware devices, and software products.
DCE	DCE is the Distributed Computing Environment. DCE is a set of services that support the interaction of applications in a distributed computer system. DCE supports interprocess communication between clients and servers, a common location-independent naming system for computer resources, a distributed time service, a security service, and a distributed file service.
DCE Cell Manager	Manages a DCE cell's directory namespace, time-provider processes and configuration and security registry.
DDTS	Change request manager used to compose, submit, report and track status of proposals to change ECS resources electronically.

Distributed Time Service	The Distributed Time Service (DTS) is the DCE component that synchronizes the computer clocks within a network.
Document Data Server	Provides search, on-line access and storage of documents in HTML, Postscript, ASCII, PDF and RTF formats.
ECS Desktop	Simulates Common Desktop Environment (CDE); interface that acts like a file manager, allowing launch of applications, creation of directories and moving/copying/ deleting files.
Email	Service that manages electronic mail messages for DAAC operators.
EOSView	A custom HDF file verification tool. Displays HDF files and HDF-EOS data.
ESSM	Tool that interfaces with Sybase to perform database administration. Available through Tivoli.
event	An event, in this context, is an unsolicited notification from the HP OpenView performance management software that describes a change in the status or performance.
Event Log	The Event Log Database resides at each ECS site. It records status and error messages generated by the various ECS applications at the site. The Event Log Browser is used to view the status and error messages.
Event Log Directory	This directory resides on every computer platform and contains the log files used by applications to report status and error messages. Log files in the Event Log Directory are loaded into the Event Log Database on a periodic basis.
FLEX/lm	COTS for the administration of licenses.
GCMD Data Export	Extracts Data Interchange Format (DIF) from the SDSRV inventory database to the Global Change Master Directory (GCMD).
HP OpenView	Customized COTS used to monitor system performance and manage system components.
IDL	Interactive data language used to interactively visualize and analyze scientific and engineering data products.
Ingest GUIs	Allows monitor and control of Ingest requests, modification of system and external data-provided parameters and initiate hard media ingest. An HTML interface allows for submission of ingest requests for processing.
iFOR/lis	COTS for the administration of network licenses.
ILM	Helps M&O maintaining records that describe all inventory components, structures, and interdependencies.

INN	Bulletin Board server.
Intelligent Query (IQ)	Generates reports by extracting and formatting information from a database.
isql	SQL command parser utility used to interact with a SQL server and databases on a SQL server.
Main Window Manager	Provides login to UNIX and ECS, authenticates the user and brings up the appropriate ECS Desktop based upon the operator role.
Management Data Access	Centralizes, processes and provides access to information logged into the management data log file on each management host from various sources via the MSS Management Agent Services.
manager system	An HP OpenView software system that executes network management operations which monitor and control components (agent systems) of ECS.
MS Office	A collection of applications that work together as if they were a single program. Includes Word (word processing), Excel (spreadsheet) and PowerPoint (graphics/presentation) programs.
msql	An interactive query processor and SQL command line interpreter that provides access to the Illustra database.
Netscape Commerce Server	Server for World Wide Web (WWW) documents.
Netscape Navigator	World Wide Web (WWW) browser. Used to obtain information from other sources.
Network Node Manager	The Network Node Manager is part of the HP OpenView product and is a network management application that manages TCP/IP networks and devices that support SNMP.
Networker	Tool used by system administrators to perform site-wide system backup except databases.
nnpost	Software that allows posting material to the bulletin board.
OpenView Windows	OpenView Windows is supplied as part of the HP OpenView product and provides the X-Windows interface to the ECS system performance management capabilities.
Order Tracking	User services tool that tracks order status and request status.
Physical Network Manager	Provides graphical layouts of a configuration based on a logical configuration management environment.

principal	A principal is a user of a DCE-based system. DCE principals include human users, servers, machines, and cells.
Process Control File	Specifies the names and locations of files used by science software executables, and defines the correspondence between the file specifications and the logical identifiers used by the science software to reference the specified files.
Prod. Strategies	Used to tailor the priority of the Production Requests.
Prod. Plann. Workbench	Used to include a Production Request in a plan and receive a forecast of the resource needed based on past experience with the same kind of request.
Prod. Request Editor	Allows the Operator to submit production Requests which produce data product.
QA Monitor	Assist in manual quality assurance activities such as query and retrieve data granules, visualize data products and update metadata.
registry database	The registry database is a database utilized by DCE to maintain information about DCE users (principals), groups, organizations, and accounts. The database contains information similar to that contained in the UNIX group and password files.
Release B Search and Order Tool (BOSOT)	Searches data holding for Release B; allows users to search for and order data from the ECS Data and V0 data servers.
Remedy Action Request System	Provides DAACs with a trouble ticketing service to classify, track and report problems.
Remote Procedure Call	Applications that use RPCs look and behave much like local applications. However, an RPC application is divided into two parts: an RPC server, which offers one or more sets of remote procedures, and an RPC client, which makes remote procedure calls to RPC servers. A server and its clients generally reside on separate systems and communicate over a network.
Replication Server	Maintains warm standby copies of application data and replicates changes among databases at different sites.
Resource Planning	Used to plan the allocation of DAAC resources.
SATAN	Examines network services to investigate potential security problems.
Sniffers	Monitors network traffic for collisions and troubleshooting.
SQL Server	A SQL Server is a set of cooperating processes that manage multiple Sybase databases and multiple users.
SQR Report Writer	Generates reports for SQL-based relational databases.

SSI&T Manager	Allows check in and verification of science software delivered by the instrument teams at the SCFs. Provides access to all COTS tools and custom applications that are part of the SSI&T environment.
Subscription Editor	Allows the operator to manually enter Subscription to the Subscription Server.
Subscription Server	Allows user to register their in events related to a certain type of data.
submap	A submap is an X-Windows display that contains symbols that represent portions of the ECS network that are managed by HP OpenView.
Sybase Replication Server	Maintains warm standby copies of application data and replicates changes among databases at different sites.
TCP Wrappers	Monitors and controls access to network services on a host.
Tivoli	An integrated desktop that provides the capability to perform systems administration (Tivoli ADMIN), system monitoring (Tivoli Enterprise Console), and performance and fault monitoring (Tivoli Sentry).
Tripwire	An intrusion detection tool that monitors files for changes.
Tuple	Data reflecting unique strings of information associated with and descriptive of an event (e.g., names, identifier numbers, data types)
User Account Manger	Tool used by DAAC operators to process new accounts and manage existing ones.
User Audit Tool	Used to browse for user activity such as logins, host names, and login status.
User Comments Tool	HTML page that allows ECS users give feedback on an ECS application via survey.
User Registration Tool	HTML page that contains an ECS registration form.
V0 Gateway Metadata Import	extracts ESDT data into an export file, maps the valids to the V0 domain and stores it in the V0 gateway database.
XRP II	Baseline Manager used to maintain records of baselined operational system configurations.

Abbreviations and Acronyms

ACL	access control list
ACS	Automated Cartridge System
ACSLs	Automated Console System for Library Services
ADC	affiliated data center
ADSRV	Advertising Service CSCI
AI&T	algorithm integration and test
AITTL	Algorithm Integration and Test CSCI
ALOG	Application Log file
AM-1	EOS AM Project spacecraft 1, morning spacecraft series -- ASTER, CERES, MISR, MODIS and MOPITT instruments
AMASS	Archival Management and Storage System
AML	Automated Media Library
AMU	Automated Management Unit
ANSI	American National Standards Institute
API	application program (or programming) interface
AR	Action Request
ASCII	American Standard Code for Information Exchange
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
BBS	Bulletin Board System
BIS	Baseline Information System
BLM	BaseLine Manager
CAP	Cartridge Access Port
CD	Cartridge Drives
CD-ROM	compact disk -- read only memory
CDE	Common Desktop Environment
CDRL	contract data requirements list

CDS	Cell Directory Service
CERES	Clouds and Earth's Radiant Energy System
CHUI	Character-based User Interface
CIDM	Client, Interoperability and Data Management Subsystem
CLS	Client Subsystem
CM	Configuration Management
CMI	Cryptographic Management Interface
COTS	commercial off-the-shelf
CPU	central processing unit
CRM	Change Request Manager
CSCI	Computer Software Configuration Item
CSDT	Computer Science Data Type
CSMS	Communications and Systems Management Segment
CSS	Communications Subsystem
DAAC	Distributed Active Archive Center
DAN	Data Availability Notice
DAO	Data Assimilation Office
DART	Data Acquisition Request Tool
DAS	data availability schedule
DB	database
DBMS	database management system
DCCI	Distributed Computing Software CSCI
DCE	Distributed Computing Environment
DDA	Data Delivery Acknowledgment
DDICT	Data Dictionary CSCI
DDN	Data Delivery Notice
DDSIT	Data Distribution Service CSCI
DDSRV	Document Data Server CSCI
DDTS	Distributed Defect Tracking System

DID	data item description
DIF	Data Interchange Format
DMS	Data Management System
DO	Derived Objects
DPR	data processing request
DPS	Data Processing Subsystem
DSKT	Desktop CSCI
DSS	Data Server Subsystem
DTS	Distributed Time Service
ECS	EOSDIS Core System
EDC	EROS Data Center
EDF	ECS Development Facility
EDHS	ECS Data Handling System Home Page
EDHS	ECS Data Handling System
EIF	Entry Interface Facility
EIN	Equipment Inventory Number
EOC	EOS Operations Center (ECS)
EOS	Earth Observing System
EOS-AM	EOS Morning Crossing (Descending) Mission -- see AM-1
EOSDIS	Earth Observing System Data and Information System
ESDIS	Earth Science Data and Information System
ESDT	Earth Science Data Types
ESN	EOSDIS Science Network
ESOD	Earth Science Online Directory
ESSM	Enterprise SQL Server Manager
FDDI	fiber distributed data interface
FOS	Flight Operations System
FSMS	File Storage Management System
FTP	file transfer protocol

GB	gigabyte
GCMD	Global Change Master Directory
GSFC	Goddard Space Flight Center
GTWAY	V0 Interoperability Gateway CSCI
GUI	graphic user interface
GV	ground validation
HDF	hierarchical data format
HDF-EOS	an EOS proposed standard for a specialized HDF data format
HLE	High Level Event
HMI	human machine interface
HPOV	HP Open View
HTML	HyperText Markup Language
HTTP	Hypertext Transport Protocol
HWCI	Hardware Configuration Item
I&T	integration and test
I/O	input/output
ICD	interface control document
ID	identification
IDL	interactive data language
ILM	Inventory, Logistics and Maintenance Manager
IMSL	International Math and Statistics Library
INCI	Internetworking CSCI
INGST	Ingest Services CSCI
INS	Ingest Subsystem
IOS	Interoperability Subsystem
IQ	Intelligent Query and IQ Access
Ir1	Interim Release One
IRD	interface requirements document
ISO	International Standards Organization

isql	interactive SQL
ISS	Internetworking Subsystem
JIL	Job Information Language
JM	Job Management
JPL	Jet Propulsion Laboratory
L0-L4	Level 0 (zero) through Level 4
LAN	local area network
Landsat	Land Remote-Sensing Satellite
LaRC	Langley Research Center (DAAC)
LCU	Library Control Unit
LPS	Landsat Processing Subsystem
LTM	log transfer managers
MACI	Management Agents CSCI
MB	megabyte (10 ⁶)
MCI	Management Software CSCI
MDA	Management Data Access
MIB	Management Information Bases
MLCI	Management Logistics CSCI
MODIS	Moderate-Resolution Imaging Spectrometer
MOPITT	Measurements of Pollution in the Troposphere
MSS	System Management Subsystem (of CSMS)
MTPE	Mission to Planet Earth
MUA	Mail User Agent
NCS	Network Computing System
NCS	Netscape Commerce Server
NESDIS	National Environmental Satellite Data and Information Service
NMC	National Meteorological Center (NOAA)
NNM	Network Node Manager

NOAA	National Oceanic and Atmospheric Administration
ODL	Object Description Language
OODCE	Object Oriented DCE
OSF	Open Systems Foundation
OSI	Open System Interconnect
OTS	Off-the-Shelf
OV	OpenView (HPOV)
OVW	OpenView Windows
PCF	Process Control File
PDPS	Planning & Data Processing System
PDS	production data set
PGE	product generation executable
PLANG	Production Planning CSCI
PLS	Planning Subsystem
PM	Preventative Maintenance
PNM	Physical Network Manager
POSIX	Portable Operating System Interface for Computer Environments
PR	Production Request
PR	Precipitation Radar (TRMM)
PRONG	Processing CSCI
PWB	Planning WorkBench
QA	quality assurance
QRU	Query/Retrieve/Update
RAID	Redundant Array of Inexpensive Disks
RASOT	Release A Search and Order Tool
RPC	remote procedure call
RSM	Replication Server Manager
RSSD	Replication Server System Database
RTF	rich text format

SAA	satellite active archive
SAGE	Stratospheric Aerosol and Gas Experiment
SATAN	Security Administrator Tool for Analyzing Networks
SCF	Science Computing Facility
SDP	Science Data Processing
SDPF	Sensor Data Processing Facility (GSFC)
SDPS	Science Data Processing Segment (ECS)
SDPTK	SDP Toolkit CSCI
SDSRV	Science Data Server CSCI
SGI	Silicon Graphics Inc.
SMC	System Management Center (ECS)
SNMP	Simple Network Management Protocol
SPRHW	Science Processing HWCI
SQL	structured query language
SQR	SQL Report Writer
SSI&T	Science Software Integration and Test
SSM/I	Special Sensor for Microwave/Imaging (DMSP)
SST	sea surface temperature
STMGT	Storage Management CSCI
TDP	Tabular Datastream Protocol
TEC	Tivoli Enterprise Console
TMI	TRMM Microwave Image
TOMS	Total Ozone Mapping Spectrometer
TONS	TDRS On-board Navigational System
TRMM	Tropical Rainfall Measuring Mission (joint US-Japan)
TSDIS	TRMM Science Data and Information System
TT	Trouble Ticket
UFS	Unix File System
URDB	User's Recommendations Home Page

UT	universal time
UTC	universal time code
V0	Version 0
VIRS	Visible Infrared Scanner (TRMM)
VOB	versioned object base
WAIS	Wide Area Information Server
WAN	wide area network
WKBCH	Workbench CSCI
WWW	World-Wide Web