

# EOS GROUND SYSTEM INTEGRATION AND TEST (EGS I&T)

REPORT OF THE INTERFACE CONFIDENCE TEST (ICT)
BETWEEN ECS EROS Data Center and ASTER GDS (GROUND
DATA SYSTEM) IN JAPAN
(ICT 12.1)

August 30, 2000

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5B.04 SUN, 5B.03\_JDT.01, DPS.01. Both TS1 and OPS modes were used during this test. The test was successful even though seven Trouble Tickets were written. The Trouble Tickets written were deemed more as enhancements to the JDT rather than failures of the system. The problems encountered did not stop the functionality of the tool and the trouble tickets identify areas where a user may become discouraged in the use of the tool. Queries were done on DARs that were previously submitted to Japan since the systems is operational and DARs were not submitted.

The problems encountered and the slowness of the system had a great impact during testing. The system crashed several times while executing basic commands, (e.g. creating a folder and zooming the map) and a significant amount of time was involved in waiting for the system to recover. The tool disappeared several times during the test. All four requirements for this test were verified despite the limitations mentioned. Seven trouble tickets were submitted to EDC DAAC, but none were deemed to be of severity 1 or 2.

See Attachment 2 for Trouble Tickets generated during this test.

#### 5.0 Test Results

The results of the test are as follows:

In TS1 mode the following features were verified:

- Submitted DARs using various options, e.g. Spatial, Temporal, Coverage, Geometry and Priority
- A new DAR was created copying the results of a xAR search.

In the Operational mode the following features were verified:

- Connectivity to the ASTER GDS database.
- Spatial searches for previously submitted DARs using various options, e.g. Spatial, Temporal, Coverage, Geometry and Priority
- Verified status of previously submitted DARs.
- Results of the xAR seaches were viewed graphically and textually using the AOI and AOS viewer. Acquired Scenes were also displayed, and results were consistent when viewed textually and graphically.
- Searches and search results were deleted successfully from the ASTER DAR Tool organizer, and the correct messages were displayed when both were deleted.

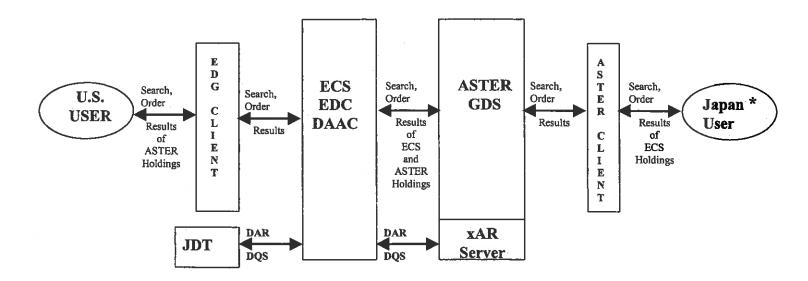
#### **6.0 Test Recommendations**

The following are recommendations based on the results of the testing performed:

- Retest when future patches are installed.

#### 7.0 Reference Diagram

This diagram illustrates a general overall data flow between EDC DAAC and ASTER GDS.



**Attachment 1** 

Requirements

The following identifies the status of all requirements associated with this interface at the completion of this test.

Requirement ID	Description	Status	Date Tested
ASTER-0110	ECS shall have the capability to send and ASTER GDS shall have the capability to receive DARs for the ASTER instrument. DARs shall contain the following information, at a minimum: a. Observation number b. Experimenter identification c. Experimenter address d. Investigation identification e. Scientific discipline f. Observation repetition period g. Tolerance in observation time h. User priority i. Scheduling priority and target of opportunity flag j. Descriptive text k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates I. Earliest start time m. Latest stop time n. Minimum coverage required o. Maximum coverage required o. Maximum coverage desired p. Deleted r. Associated product generation request and product distribution request. s. Pointing angle t. Calibration requirements v. Data transmission requirements v. Data transmission requirements w. Illumination requirements (day/night) x. Specific time of observation y. Sun angle z. Direct downlink option	PASSED	8/15/2000

Requirement ID	Description	Status	Date Tested
ASTER-0120	ASTER GDS shall have the capability to send and ECS shall have the capability to receive DAR status, when requested by ECS. [Issue 9] DAR status shall include such information as confirmation or rejection of the DAR, and notification of DAR scheduling and completion, to include at a minimum:  a. Date and time b. Instrument ID c. DAR ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection	PASSED	8/15/2000
ASTER-0130	ECS shall have the capability to send and ASTER GDS shall have the capability to receive queries for the current status of ASTER DARs which were previously submitted to the ASTER GDS by ECS.	PASSED	8/15/2000
ASTER-0140	ECS shall have the capability to send and the ASTER GDS shall have the capability to receive changes to DARs for the ASTER instrument.	PASSED	8/15/2000

#### **Attachment 2**

### **Discrepancies**

The following is a list of discrepancies noted during the execution of this test.

Discrepancy	Description
EDC000000005762	Over a period of 8 hours JDT crashes 4 - 5 times throughout the day. Problem appears to be a conflict between Netscape and the JDT.
EDC00000005763	Executing a simple function on the tool e.g. creating a new folder, zooming the map, etc. takes two minutes or more. Connecting to GDS database is not a problem, only the basic functions on the tool is a problem.
EDC000000005764	Selected AOI, then clicked on points to create a polygon. All attributes were reset but could not create a new polygon. Received an error message.
EDC000000005765	Several searched failed during the test with the following errors: "Search failed. Please try again later." "Search error code 15023 in EcMjDarQueryxARScenesProxy:Error received from GDS."
EDC000000005766	JDT needs an hourglass. While running the test the system hangs and it takes 10 – 15 minutes before it starts working again. If the system is doing something there should be an hourglass to let the client know that the system is busy.
EDC000000005781	Bring up ASTER DAR tool -> Click on Spatial -> click on Map Overlay -> Apply.  Results: The map still shows options that were not selected.

EDC00000005780	Select untitled folder
	Click on Rename
	Type the name of the folder
	Click on any part of the page and the
	name disappears.



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August 31, 2000

National Aeronautics and Space Administration Goddard Space Flight Center Greenbelt, MD 20771

Attention:

Ms. Phyllis McNatt, Contract Specialist

Code 423

Reference:

Contract No. NAS5-32605

Subject:

Contract Deliverable

Dear Ms. McNatt:

Enclosed is one copy of the Report of the Interface Confidence Test (ICT) between ECS EROS Data Center and ASTER GDS (Ground Data System) in Japan (ICT12.1), (deliverable 1128).

Distribution is also being made as noted below.

Should you require any additional information, please let me know.

Sincerely,

AverStar, Inc., a Titan Company.

Stephen A. Miller Business Manager

**Enclosure** 

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