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# **ECS Evaluation Package (EP)**

## **EP6 Consent to Ship Review**

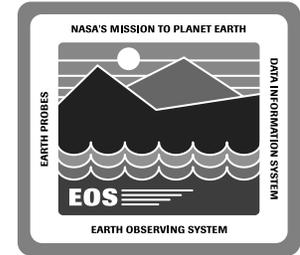
### **Naveen Hota**

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**November 9, 1995**

**(301)-925-0542; [nhota@eos.hitc.com](mailto:nhota@eos.hitc.com)**

# EP6 CSR Agenda



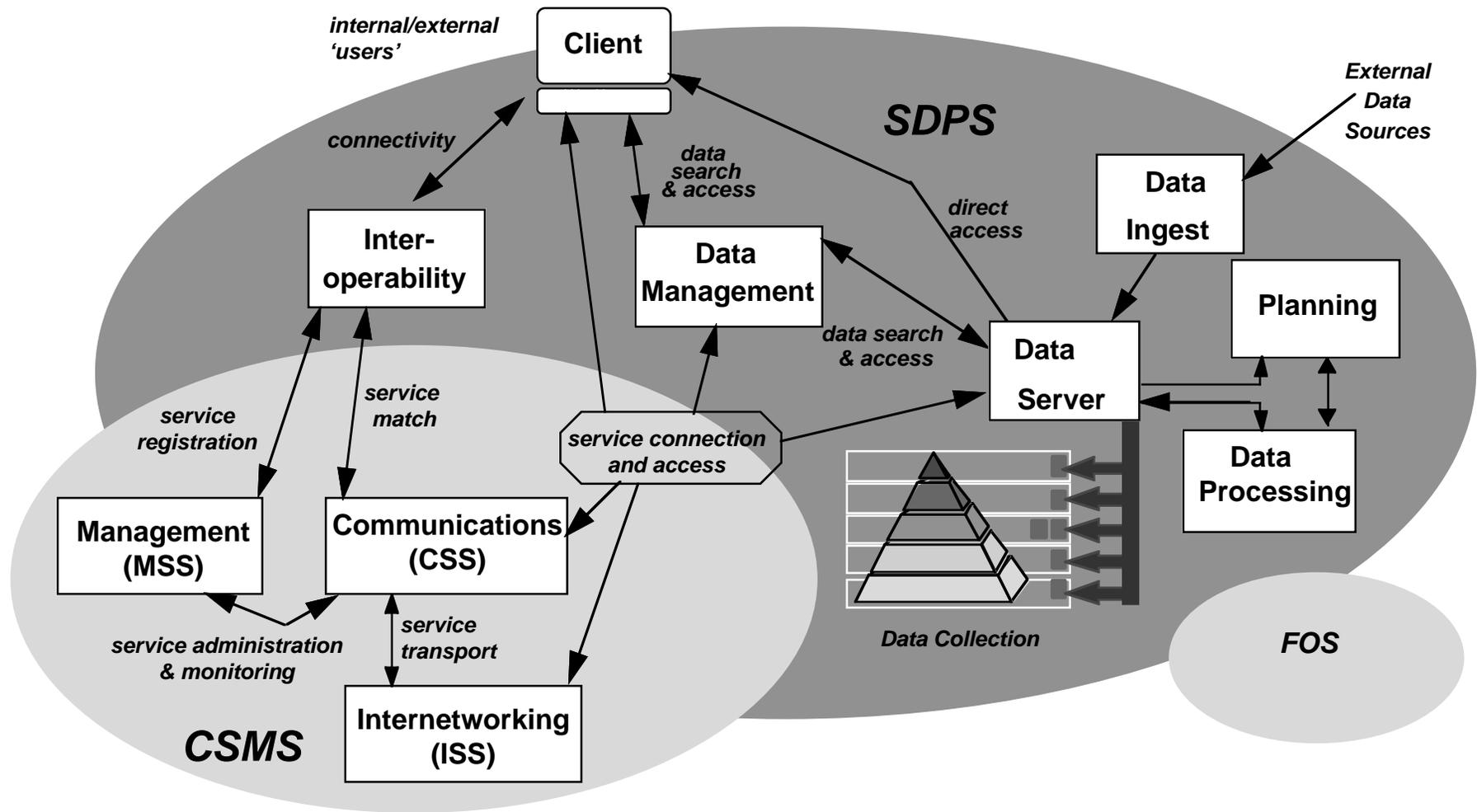
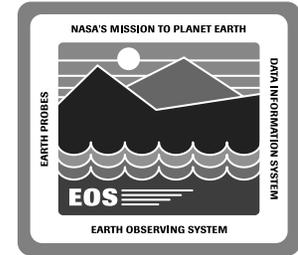
## Purpose of EP6 CSR

- Held when testing indicates EP is functioning well and all NCRs which might compromise its operation have been resolved.
- Review final content, review test status, and obtain approval to move the EP to broader visibility by installing it at the DAACs for system-wide testing.

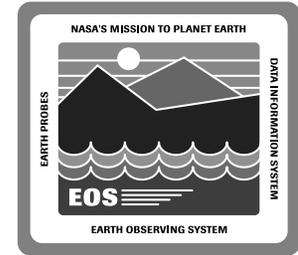
## Agenda

- 1:30 EP4 Overview & Status - Naveen Hota
- 1:50 EP4 Integration and Test - David Warr
- 2:10 EP4 Evaluation Plan - Jan Poston
- 2:30 Action Items and Next Steps - Naveen Hota
- 3:40 Adjourn

# ECS EP Context



# Summary of EP6



Directory

Security

Async Msg

Communications

User registration

Mgmt Agent

Mgmt Framework

Trouble Ticket

Management

Data Dictionary

Data Management

ESST

Product Request

EOSView

Desktop

Data Dictionary

User Registration

User Profile

Advertising

Client

Query (ESDT)

Acquire (ESDT)

Data Server

Evaluations

Usability Testing of Science Users

Survey of Science Users

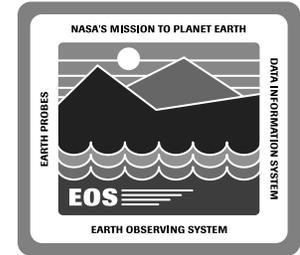
Usability Testing of Operations and User Services

Increment

Prototype

Legend

# EP6 Features



**First ECS use of the Object Oriented Distributed client server environment**

**Data type services and the associated client functionality for searching (temporal, spatial and other core metadata attributes) granule and collection metadata**

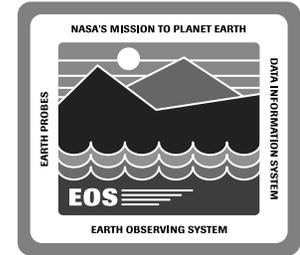
**Data push and pull services for science data and browse.**

**90 granules, 3 data sets**

**Data Dictionary provides explanation and definitions of ECS acronyms and data collections**

**Expanded services for browsing/submitting earth science related advertisements.**

# EP6 Features (cntd.)



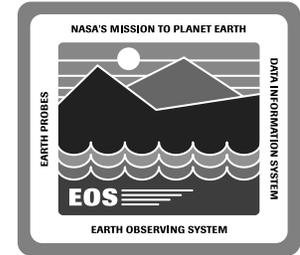
**User self-registration service, User Profile tools and User Preferences.**

**Use of Trouble Ticketing to report and track problems.**

**Use of Extensible Agents to manage applications.**

**Expanded Data Visualization tool kit (EOSView)**

# Response to EP4 and PW1 Evaluation Comments



**Provide the associated science and browse data along with the meta data**

*Metadata, science data and browse data provided for  
AVHRR 1km NDVI, ERBE S-4G, and ISSCP\_C2*

**The User interface should follow a style guide and maintain consistency in look and feel**

*ECS HCI style guide was followed closely throughout the development of the user interface, including the selection of fonts, placement of buttons*

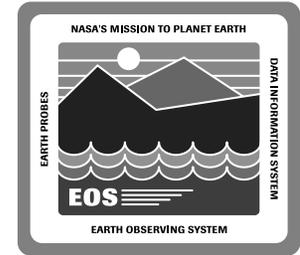
**Provide better user control over the ECS environment.**

*Added User Preference Tool to customize user preferences*

**Provide feedback indicators**

*Provided busy indicators like stop watch to indicate system processing*

# Response to EP4 and PW1 Evaluation Comments (Cntd.)



## **Improve Desktop navigation and Boolean operators**

*Provided Hierarchical views of files and more intuitive use of Boolean operators*

## **Improve Data Dictionary Service**

*Provided Temporal/Spatial Valids, Keyword Definition Enhancements*

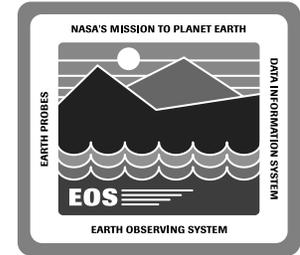
## **Provide end-to-end scenarios**

*Included two end-to-end scenarios in the EP Strategic Plan*

## **Provide Help capabilities**

*Provided basic help capability*

# Functionality not provided in EP6



## **Nesting widget to simplify the selection of the valid values.**

*Nesting widget is developed for use within ESST. However, it is not used in the selection of valid values (due to lack of extensive valid groups)*

## **Tabular display of desktop objects**

*Table display is present, but the table consists of icons as opposed to text*

## **Dynamic regrouping of data in the result set**

*Insufficient development time to provide in EP6*

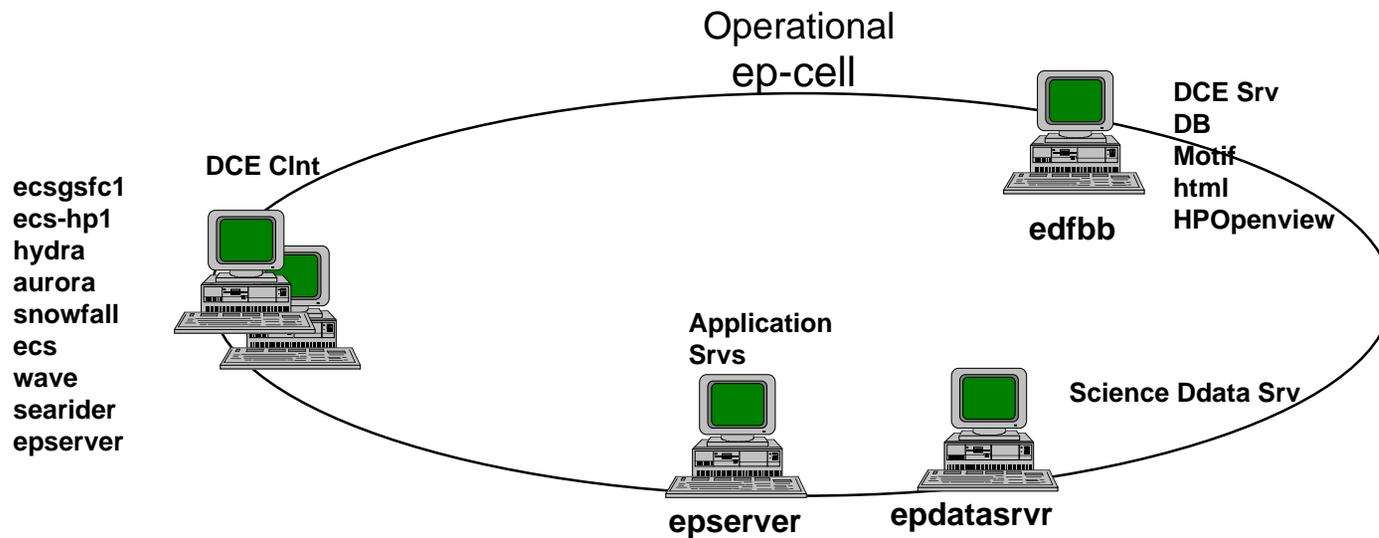
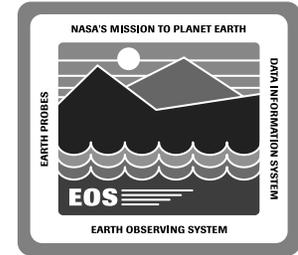
## **Dependant valids**

*Insufficient development time to provide in EP6*

## **Aliases**

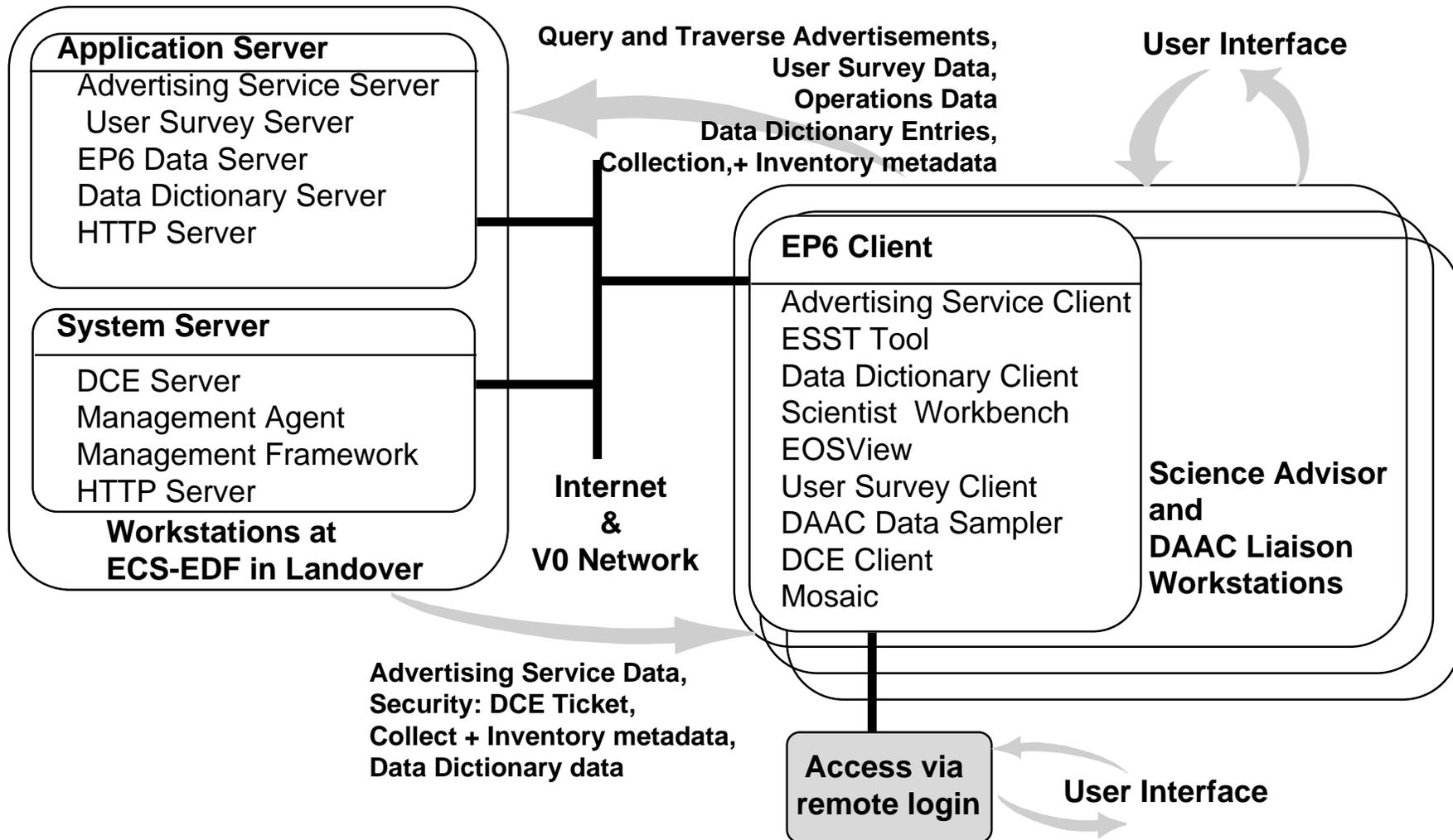
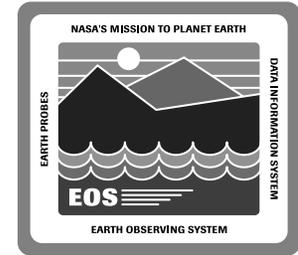
*Insufficient development time to provide in EP6*

# EP6 Configuration

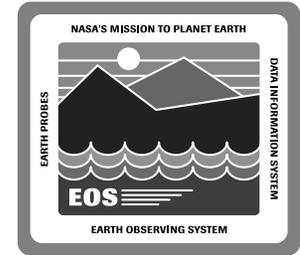


- Operational - ep cell
  - Servers at Landover facilities (edfbb, epsvrer, epdatasrvr)
  - Clients at each DAAC (DAAC Liaisons workstations)

# EP6 Configuration (Contd.)



# EP6 Client Workstation Requirements



## Supported platforms for EP6 Client

**HP: HP UX 9.05**

**Sun: Solaris 2.4**

**COTS Required: DCE Client, Motif Window Manager**

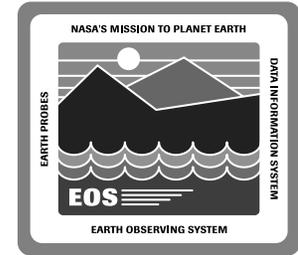
## Memory Required

**16-32 MB main memory**

**80 MB (client application binaries, desktop data, DCE client)**

**200-400MB (depending on data)**

# DAAC Liaison Workstations for EP6

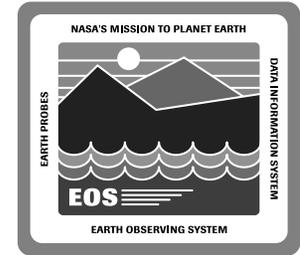


DAAC	Machine Name	Machine Type
ASF	Trouble	HP
EDC	ECS-HP1	HP
EDF	Epserver	HP
EDF	Epdataserver	SUN
GSFC	ECSGSFC1	HP
JPL	Searider	Sun
JPL	Wave	HP
LaRC	ECS	HP
MSFC	Hydra	HP
NSIDC	Snowfall	HP

**DCE Client is required to host EP6**

**Naveen to contact each Science Advisor hosting EP6 re. installation**

# Science Advisor Hosts for EP6

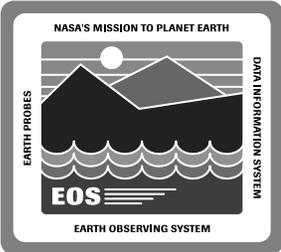


Science Advisor/ Affiliation	Affiliation / Host Type
Dan Baldwin, Bill Emery	Univ. of Colorado
Peter Evans, Bob Evans	University of Miami
Sundar Christopher, Ron Welch, Manuel Penaloza	South Dakota School of Mines
Nigel Hinds, Tony England	Univ Of Michigan
Liz Smith, Menas Kafados	GSFC
David Glover, Mike Caruso	Woods Hole
Paul Bailey, Cheryl Criag	NCAR
Dave Emmitt, SidWood	Univ of Virginia
Simon Hook, Edward Olsen	JPL
Wayne Higgins, Chris Justice	GSFC
Chris Justice	GSFC
Debbie Blake	ESDIS-GSFC

**DCE Client is required to host EP6**

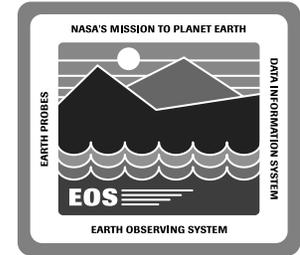
**Naveen to contact each Science Advisor hosting EP6 re. installation**

# EP6 Deployment and Evaluation Schedule



	November	December	January	February
<b>Consent to Ship Review</b>	11/9			
<b>DAAC Installation and Testing</b>	11/13 -11/17			
<b>DAAC Liaison EP6 Training Sci and Eng.</b>	11/15-11/17			
<b>EP Evaluation Readiness Review</b>	11/17			
<b>Science Advisor Installation</b>	11/17-12/1			
Installed remotely by ECS EP I&T				
<b>Independent Evaluations response via Survey</b>	11/18	-----	1/31	
<b>Usability Testing</b>	11/18	-----	1/31	
<b>EP6 Evaluation Report</b>				2/29

# EP6 NCR Summary

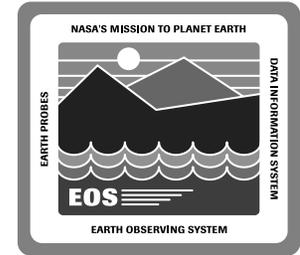


## NCR Severity Level Definitions:

- Severity 1 - Catastrophic bug without work around that causes failure or unrecoverable data loss.**
- Severity 2 - Bug which impairs functionality. Work around might exist but is unsatisfactory.**
- Severity 3 - Bug that impairs noncritical system functionality. There is a reasonable satisfactory work around.**
- Severity 5 - Minor bugs or limitations that are documented. These problems are deemed to be noncritical to the scope of EP6.**

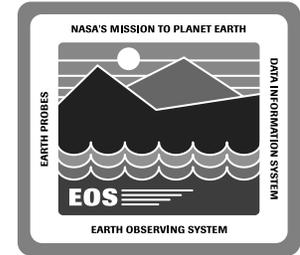
**Note: Severity 4 was not used in EP6**

# CSR Issues



- **Code Status**
  - All files baselined in configuration management tool (ClearCase)
- **Test Completion**
  - Majority of the tests cases executed (163 out of 165)
  - Regression testing continues
- **NCRs Status**
  - Unresolved Non-Conformance Reports (NCRs)
    - severity level 1 - 5
    - severity level 2 - 5
  - TBD NCRs listed as advisories in users guide
- **Real Time Telecon Updates**
  - Charts in this presentation have status current of 11/9 8:00 a.m.
  - Updates verbally identified during telecon

# Unresolved Severity 1 NCRs



**#190 - ESST not available on HP platform**

*Currently porting it to HP platform - 2 days*

**#215 - ESST crashes when attributes are deleted from Discrete Attribute**

**#208 - ESST icons do not display text (due to color map problem)**

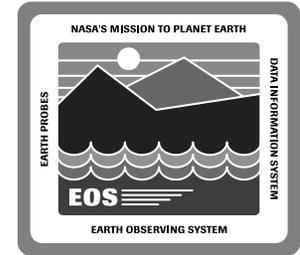
*Change the color icon to a text label widget - 1 day*

**#213 - ESST is not accepting the Invoke and Install capability from IOS**

**#234 - Can't acquire data via FTPPull or Push through ESST**

*Browse Push works; Product Order needs to be integrated with push/pull - 1 day*

# Unresolved Severity 2 NCRs



**#199 - Temporal Parameter not visible on initial ESST screen**

**Not enough color resources available - replace color icon with text labels  
- 1 day**

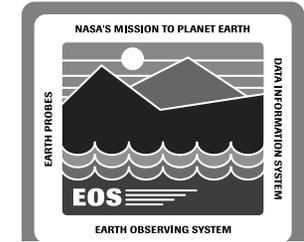
**#219 - "Delete Attribute" and "Clear All" buttons don't clear Parameter**

**#227 - Identical buttons for different parameters on ESST Window**

**#240 - ESST does not accept attributes submitted by advertising service**

**#242 - Turn off GILog messages in the client window.**

*Will turnoff debug messages after the HP port (#190) is complete*



# EP6 Integration and Test

David Warr  
I&T

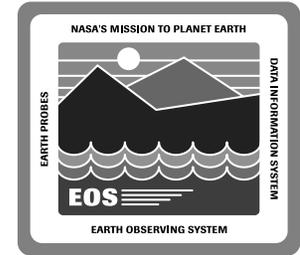
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**EP6 CSR**

**November 9, 1995**

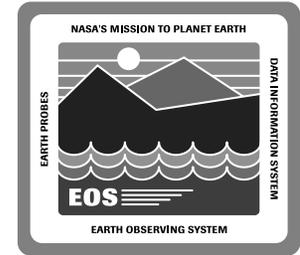
# Overview

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- **Test Status**
- **NCR Summary**
- **Installation Plan**
- **Operational System Test**

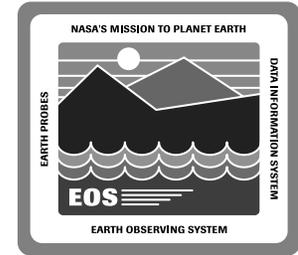
# Test Status



<b>Total Number of Test Cases</b>	<b>166</b>
<b>Test Cases Executed</b>	<b>163</b>
<b>Test Cases Withdrawn</b>	<b>01</b>
<b>Remaining Tests for Execution</b>	<b>02 (11/07/95)</b>

- **Appendix A of I&T Notebook includes all test procedures / scripts**
- **Appendix B of I&T Notebook includes all test reports**
- **Verified NCRs to be Closed by 11/16/95**
- **Test Report to be completed by 11/16//95**

# EP6 NCR Summary



		Unresolved Problems	CSR Update
Severity 1	34 (14.29%)	14	_____
Severity 2	67 (28.15%)	14	_____
Severity 3	96 (40.34%)	21	_____
Severity 5	41 (17.23%)	41	_____
<b>TOTAL</b>	<b>238</b>	<b>90</b>	_____

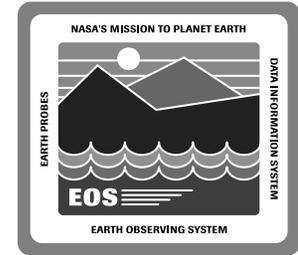
Report Date: 11/07/95

Report Date: 11/07/95

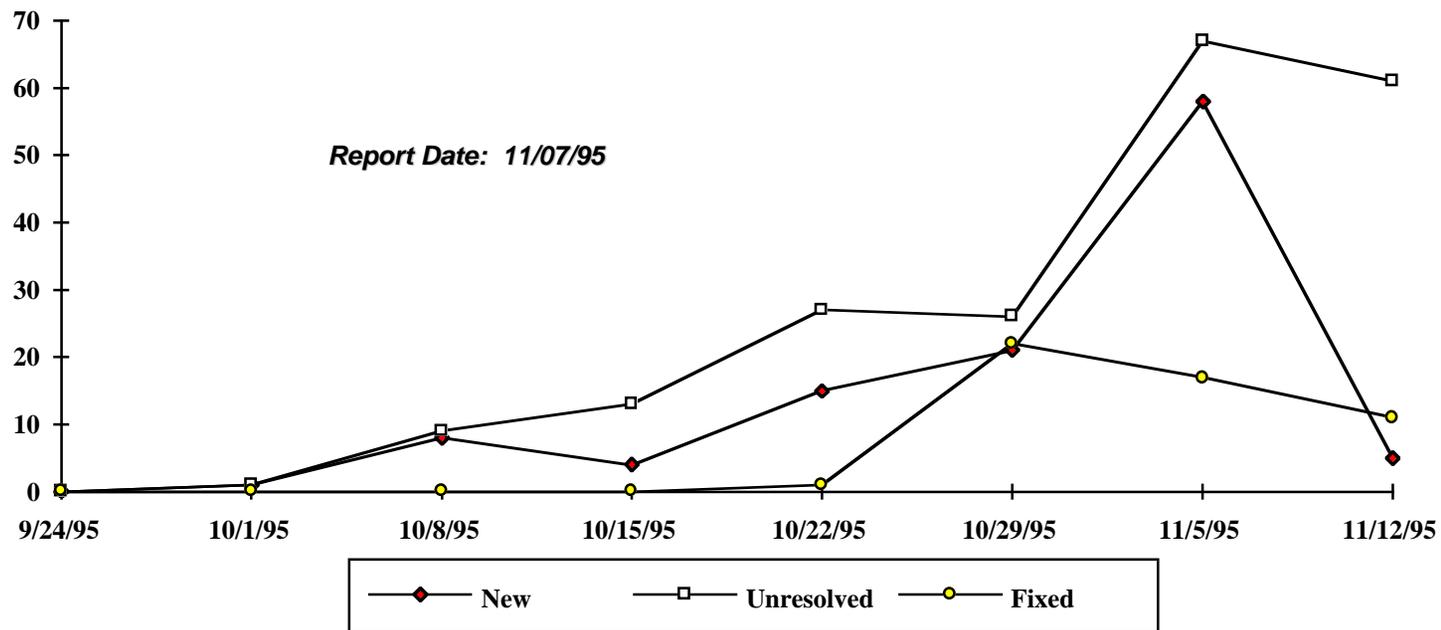
Total Problems By State	
New	00 (00.00%)
Assign Evaluation	45 (18.91%)
Assign Fix	01 (00.42%)
Fixed	35 (14.71%)
Assign Verification	03 (01.26%)
Verify	31 (13.03%)
Close	121 (50.84%)
Duplicate	02 (00.84%)
<b>TOTAL</b>	<b>238</b>

Report Date: 11/07/95

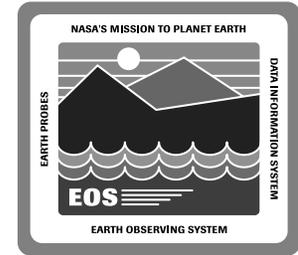
# EP6 NCR Summary (Cont.)



## Arrival and Repair Rate Summary



# Installation Plan



- Detailed installation procedures are included in the EP6 Deployment Document
- Installations of Servers will begin before CSR
- Installations of Clients will begin upon successful completion of CSR
- Servers will be installed and verified as operational
- Client Installations will follow as indicated below (see separate tables for specific DAAC and Tirekicker participants)
- I&T POCs to coordinate the installation with the DAAC Liaisons (e.g., file transfers and directory creations)

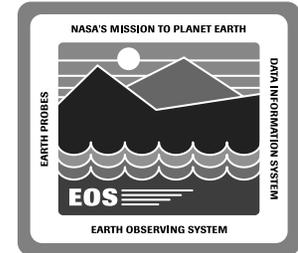
	<i>EP6 Servers</i>	<i>EP6 Client DAACs</i>	<i>EP6 Client Tirekickers</i>
<b>Installation</b>	10/31 - 11/10	11/08 - 11/14	11/08 - 11/16
<b>Operational Test</b>	11/10 - 11/114	11/14 - 11/15	11/16 - 1/31/96

△  
CSR

△  
ERR

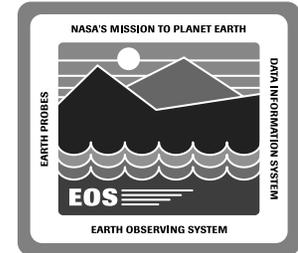
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# Installation Plan - DAACs



DAAC	DAAC LIAISONS
ASF	Ellen Chilikas Nettie Labelle-Hamer
EDC	John Daucsavage Saud Amer
EDF	HTSC
GSFC	Carolyn Whitaker A. K. Sharma
JPL	Don Merritt Glenn Shirliffe
LaRC	Dan Chrisman Haldun Direskeneli
MSFC	Danny Harden
NSIDC	Marilyn Kaminski Siri Joda Singh Khalsa

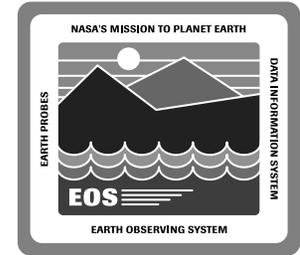
# Installation Plan - Tirekickers



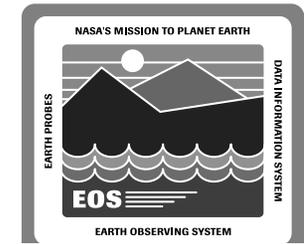
ECS TIREKICKERS	AFFILIATION
Dan Baldwin Bill Emery	University of Colorado
Peter Evans Bob Evans	University of Miami
Sundar Christopher Ron Welch Manuel Penaloza	South Dakota School of Mines
Nigel Hinds Tony England	University of Michigan
Liz Smith Menas Kafados	Old Dominion
David Glover Mike Caruso	Woods Hole
Paul Bailey Cheryl Craig	NCAR
Dave Emmitt Sid Wood	University of Virginia
Wayne Higgins	GSFC
Chris Justice Nazmi ElSaleous	GSFC
Simon Hook	JPL

# Operational System Test

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- **Verify that EP6 Clients are operational**
- **Upon successful EP6 Client installations**
  - regression test EP6
- **Operational Tests to be completed by 11/16/95**



# EP6 Evaluation Plan

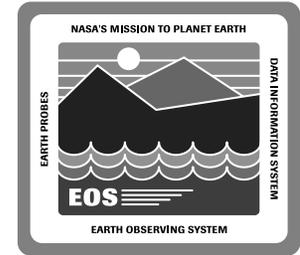
Jan Poston Day

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**EP6 CSR**

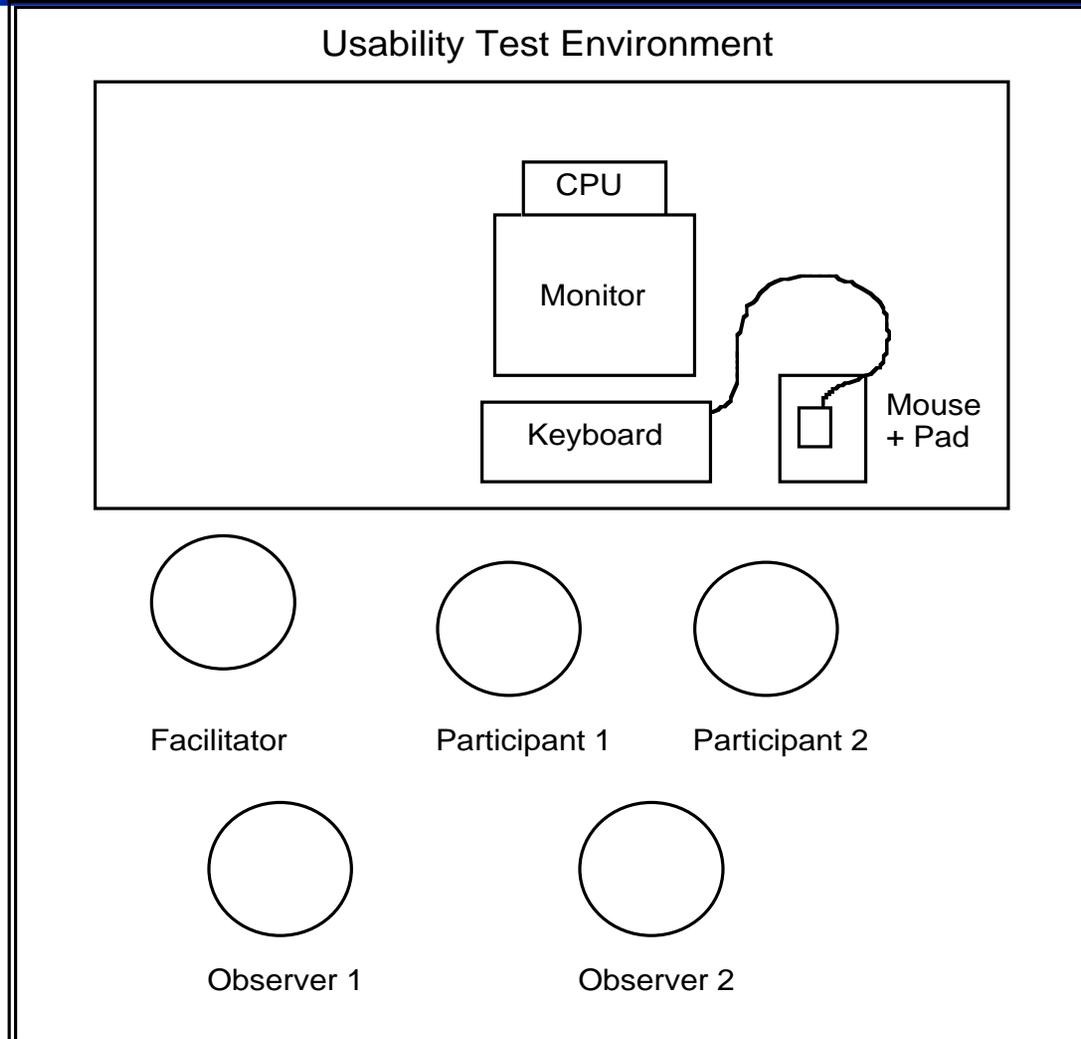
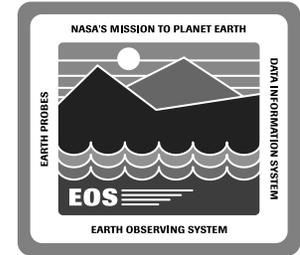
**November 9, 1995**

# EP6 Evaluation Terms

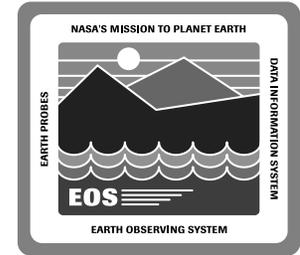


- **Independent Evaluators** - NASA Tirekickers and other potential end users of the ECS. They will access the EP6 at their own convenience using their own resources in an uncontrolled, or independent environment.
- **Usability Participants** - a subset of the Independent Evaluators who will participate in the usability test sessions conducted at Landover. These participants include experts in human factors and usability research. Usability test sessions will be conducted in a controlled environment using tasks developed for EP6 user scenarios.
- **Evaluation Period** - November 20 - January 31. The 10 week period during which Independent Evaluators will be able to log on and test the EP6.

# Usability Test Environment

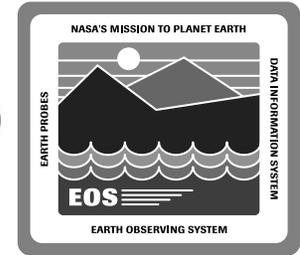


# Usability Test Schedule



- **Each test session will be allocated a minimum of 2 hours.**
- **Test Participants will be introduced to the Observers, the test environment, and the schedule for the test by the Facilitator, the host of the usability test session.**
- **A short Overview Demonstration will be shown to the Participants.**

# Usability Test Schedule (con't)



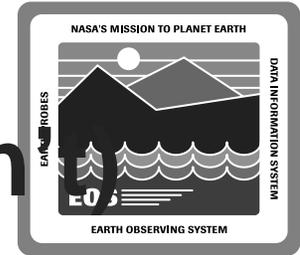
**The Participants will execute the usability tasks. Sample tasks include:**

- search for data using the ESST timeline tool**
- search for a data collection in the Advertising Service**
- look up a definition in the Data Dictionary**
- submit a trouble ticket**
- update user profile information**

**After the tasks the Participants will take the user survey accessible through the Comment Survey Tool (CST).**

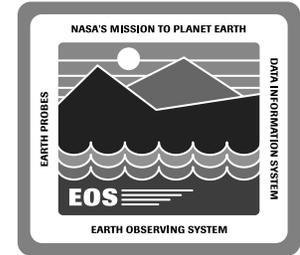
**At the conclusion of the test, the Participants will be given a choice of a candy treat as a Thank You.**

# Usability Test Schedule (con



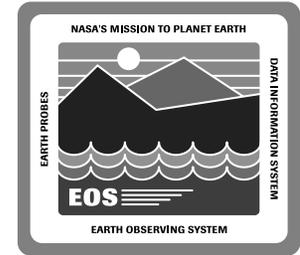
Once the participants have left the test area, the Facilitator and the Observers will debrief and transcribe their notes from the session. These notes are part of the data used in the Results Report.

# Survey Data Distribution Policy



- **Each registered evaluator is given a unique user name and password. Comments and survey information are linked to the user who logged in.**
- **Non-registered evaluators may log-in using the “guest” account. Guest user comments will be evaluated and the survey data included. Guest comments can not be attributed to a specific individual.**
- **To protect the integrity of the evaluation, when the comments and survey results are reported, individuals’ names will not be linked to specific comments.**
- **Upon request, a listing of comments made by an evaluator will be provided but only to that evaluator. The evaluator is free to publish his or her comments.**
- **During the analysis of the survey data, groupings of comments or survey analysis may be used to determine unique tendencies in the data. Examples of groups might be a specific DAAC or users services evaluators.**
- **Summary of the results, indications for changes, and plans for implementing the changes will be published in an EP6 Evaluation Results document and made available on EDHS.**

# EP6 Result Report



**The EP6 Results Report will contain the following information at a minimum:**

**Analyses of the data collected through the comment survey tool (CST) and usability tests**

**Suggestions for inclusion in next release of prototyped software**

**EP6 related comments submitted to the User Recommendations Data Base (URDB)**

**Actions Taken**

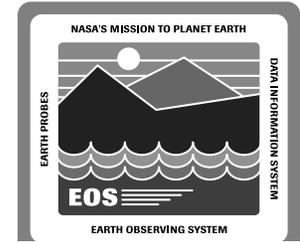
**Process Lessons Learned**

**during development**

**during Integration and Test (I&T)**

**during deployment**

**during the evaluation**



# Action Items and Next Steps

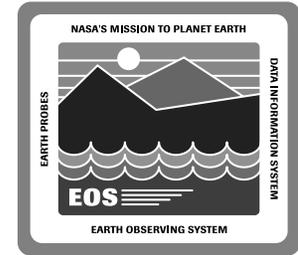
Naveen Hota

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EP6 CSR

November 9, 1995

# Open EP6 Action Items



Open Date	Description	Response By	Due Date
11/8/95	D. Warr to contact and schedule EP6 installation on DAAC liaisons' workstations	D. Warr	11/13/95
11/8/95	N. Hota to contact and schedule EP6 installation on tirekickers' workstations starting after 11/20/95	N. Hota	11/20/95
11/8/95	Text scripts available	J. Poston-Day	11/17/95
11/9/95			
11/9/95			
11/9/95			
11/9/95			