

CERES Data Management Team Minutes for 09/08/2004

• Schedule:

Fall, 2004 Earliest date for move back into B1250 (rumor stage only)
11/02-04/2004 CERES Science Team Meeting, Williamsburg, VA
11/05-12/2004 Data management Stand-down: SCF Upgrades to IRIX 6.5.25m and MIPSpro 7.4 and storage review
Refer to the attached minutes of the planning meeting and the presentation on the upgrade.
11/16/2004 ASDC Upgrades to IRIX 6.5.25m and MIPSpro 7.4

Ongoing Activities:

- ceresarchive replacement is in progress with IOC on or about 09/15/04
- SAIC onsite personnel moving offsite (to be completed by 09/30/04)
- Center Re-organization (effective 10/01/04)

Priority Items:

- Critical:
 - 3 years Terra Edition 2B SSF/SFC/SRBAVG (march 00 thru feb 03)
 - 1 year Terra Edition 2B CRS/FSW (crosstrack)
 - 1 year Aqua Edition 1A SSF/SFC
 - BDS/ERBE-Like Edition 1&2 Terra & Aqua as inputs available
- Important:
 - 5 month Terra Beta SYN/AVG/ZAVG
 - 9 month TRMM Beta SYN/AVG/ZAVG
 - additional 6 months (through 12/03) of Aqua Edition 1A SSF
 - Additional 2 years of Terra CRS/FSW (crosstrack)
- SCF
 - Re-architecture of network for security requirements
 - Storage capacity upgrades
 - Equipment reconciliation
 - IRIX Upgrade on SGI 3800
- Data Management Deliveries

Minutes to ASDC/CERES Meeting on IRIX Upgrade

On Friday, September 3, 2004, a meeting was held to discuss the plans for upgrading the SGI computers (SCF and ASDC) to a more current version of the Operating System. The attendees were the recipients of this e-mail. This upgrade affects the Calipso-asd and icing platforms at the same time. Calipso has placed an order for compilers for their platform; icing does not need to.

The schedule for the upgrade was discussed. The upgrade of the SCF was moved up to be the 11/4/04 timeframe with the ASDC to be upgraded on 11/16 or 11/17. This corresponds to the end of the CERES STM.

The target version of IRIX was discussed. Originally, this was planned to be 6.5.22m, the version against which all the CERES subsystems have been tested. Support for this version is, according to SGI, going to expire prior to the end of the CERES Phase II Project. SGI recommends that we upgrade to 6.5.25m to ensure maximum duration of support for the systems. The compilers for this version are the same as the compilers for 6.5.22m and have already been tested.

Subsystem testing was discussed. During the last cycle, the purpose of subsystem testing was to determine if we should make the upgrade and to minimize the downtime of both the SCF and ASDC. Since the determination has already been made to upgrade to 6.5.25m, the purpose of any subsystem testing is to fix code so that it will compile and run in this version of the operating system. Since the compilers have not changed, but some of the runtime libraries WILL change, it was determined that no testing will be required in advance of the upgrade. Ms. Geier recommended that the testbed be configured with the new system and that Ms. Ayers be requested to test the codes which are going to be run during the early post-upgrade operations at the ASDC. This would ensure their readiness to process, as soon as possible. Ms. Geier took an action to identify which codes these would be. Mr. Little will discuss it with Mr. Robbins to determine if Ms. Ayers can do this preliminary testing; otherwise it should be performed on the SCF after it is upgraded.

The status of the DAAC archive was discussed. Mr. Cordner indicated that the movement of the archive off warlock and onto the new Origin 350 had not occurred, however this is scheduled for 10/15/04, since AMASS will not reliably run on 6.5.25m. This is a potential roadblock for the upgrade; if the ASDC is unable to move the archive over to the Origin 350 by 10/15/04, the upgrade of warlock cannot occur on schedule. This will preclude the upgrade of the SCF on 11/4/04 and place at risk the entire upgrade until next spring.

ACTIONS

- a) Mr. Little will update the powerpoint charts to reflect the current plans and distribute them. (Due 9/7/04) Minutes will also be prepared (Due 9/7/04)
- b) Mr. Little will coordinate the upgrade with Mr. Currey (Calipso). (Due 9/7/04) (COMPLETED 09/07/04)
- c) Ms. Geier will determine which codes need to be run as soon as possible after the ASDC upgrade. She will also identify what codes are expected to be running when the upgrade occurs. (Due 9/7/04)
- d) Mr. Cordner will identify the extent of SSI&T testing required after the upgrade for discussion at the DMT. (Due 9/8/04)
- e) Mr. Cordner will determine if 6.5.17m will run on the Origin 350. (Due 9/8/04)
- f) Mr. Cordner will report to the group the status of the movement of the archive onto the Origin 350. (DUE 10/18/04).
- g) A go/no-go decision about the upgrade during November will be made on 10/22/04 and briefed to Mr. Wielicki.
- h) Mr. Little will request of Mr. Wielicki, a one-week SCF stand down to perform housekeeping, reconfiguration, testing and data file cleanup. This will be scheduled during from 11/4/04 to 11/10/04.
- i) Mr. Cordner agreed to ensure that someone from ASDC will attend the DMT on 9/8/04 to discuss this upgrade. (DUE 9/8/04)

Standing Committee Reports

(These notes supplement the reports posted by the various Committee's on the CERES DMT status page.)

Agenda	Committee	Responsibility	Updated	Status/Issues
1.00	ASDC/ECS Interfaces	Hopson/Harris/ Link	09/08/04	IBM cluster is expected to be powered by 09/29/04 with Initial Operational Capability by about 12/29/04. The IRIX upgrade will be to 6.5.25m. The AMASS disk array will move to an Origin 350 with a suitable version of the Operating System.
2.00	SCF	Flippo	09/08/04	Ceresarchive is assembled and undergoing final testing. The AtmSci firewall is waiting for network connections to commence testing. Patches have been identified to correct the SGI compiler problem resulting in the error codes in GGEO.
3.00	Toolkit	Flippo	09/08/04	No additional information was provided.
4.00	System Issues			
4.01	Processing Strategy	Geier	09/08/04	Ms. Geier will identify PGE's that will be running during or soon after the IRIX upgrade at the ASDC. PR90-04 is cancelled along with PR 87-04, 88-04. PR81-04, 82-04 will start this week. PR75-04 to 76-04 will hold until Gains are delivered in October, 2004. PR72-04 and 71-04 are in production.
4.02	Systems Engineering Committee	Nolan/Sorlie/ Hopson/ Ayers/Cooper	09/08/04	No meeting has occurred since the last DMT meeting. No actions are outstanding.
4.03	Configuration Management & SCCR/DCCR Review	Ayers / Saunders	09/08/04	SCCR's still need to have the parameter impact statements.
	Working Group Status			(See posted Subsystem Status Reports)
5.01	External Interfaces-	Spence	09/08/04	No additional information was provided.

	Instrument			
5.02	External Interfaces- Data Sources	Link	09/08/04	No problems have been experienced.
5.03	External Interfaces- Customers	Kizer	09/08/04	No additional information was provided.
5.04	Simulator	Chapman	04/09/03	No additional information was provided.
5.05	Visualization/ Validation Tools	Lee	01/15/03	No additional information was provided.
5.06	Instrument (SS 1)	Cooper/ Hess/Spence/ Szewczyk/Filer	09/08/04	Ms. Geier will coordinate a meeting to discuss problems with the cc codes and the bad data reported in the Status Report.
5.07	ERBE-like (SS 2, SS3)	Robbins Walikainen/	09/08/04	No additional information was provided.
5.08	Clouds (SS 4.1, 4.2, 4.3)	Sun-Mack	09/08/04	Clouds storage requirements are in excess of 7TB, more than currently in use. CloudVis images are being used for validation.
5.09	Clouds (SS 4.4)	Miller	09/08/04	MISR data will be stored on the ceresarchive. More space will be required on the QC server.
5.10	Inversion (SS 4.5, 4.6)	Nolan	09/08/04	Aqua Ed1 SSF subsets will be placed in the archived.
5.11	SARB (SS 5.0, 7.2, 12.0)	Coleman	09/08/04	No additional information was provided.
5.12	TISA -(SS 6.0, 9.0) Gridding	Raju	09/08/04	No additional information was provided.
5.13	TISA -(SS 11.0) GGEO	Stassi	09/08/04	The new PGE will write defaults to images rather than re-processing the entire month.
5.14	TISA -(SS10.0, 8.0) Averaging	Nguyen	09/08/04	Delivery is still scheduled for 09/10/04.
5.15	CERESlib	Stassi	09/08/04	No additional information was provided.

Plan for IRIX Upgrade to 6.5.25m

**The Contents of this Document are Tentative
And NOT not to be considered an approved Plan**

Report any issues or problems to
Mike Little
CERES DMT Lead

Pre-requisites for Upgrading

- Each CERES Subsystem tested at SCF
 - Executables running at time of upgrade
 - Make deliveries in new OS if old versions cannot be used
 - Test all others on SCF after upgrade
- Calipso Subsystem testing complete
 - 1-Day test complete
 - All subsystem testing complete
- ASDC
 - Production tools and supporting applications tested in new OS
 - APGS, legato, compilers, IDL, OS, NFS, logs, e-mail
 - AMASS running on Origin 350 with demonstrated performance
 - Informix running on separate platform for retention in 6.5.17m
 - Production completed on data products to be run in old OS
 - Ready to accept deliveries in new OS
 - Ready to stage data and run available executables to produce data products
 - Disable PGEs which
 - Fail under new OS until new promotion or not tested
- Production
 - Clouds production run complete (no split runs)

Inch-Pebbles for IRIX OS Upgrade

Date	Event
DONE	CERES SS complete testing of old exec and compilation under 6.5.22m
DONE	ASDC completes testing of production support software -Begin resolution of Informix & AMASS issues
DONE	Clouds Aqua Ed1A Delivery in .16m
07/14/04	Calipso and ASDC complete testing and confirm AMASS, INFORMIX
10/22/04	Go-NoGo decision (Default is GO) (Bruce, Mike, Chris and Dave)
11/04/04	SCF upgrades to IRIX 6.5.25m, MIPSpro 7.4 - Deliveries on hold until ASDC is upgraded
11/05/04	CERES SA's begin workstation upgrades
11/14/04	ASDC completes processing backlog in IRIX 6.5.17m -Clouds Aqua Ed1A (12mo)
11/16/04	ASDC Upgrades warlock to IRIX 6.5.25m
11/17/04	CERES CM begins Delivery on new system (Pri by Erika B. Geier) -Re-delivers old codes for re-compilation, as required -New deliveries needing processing
11/17/04	ASDC begins production with compatible old codes -Run new codes or re-deliveries as they are promoted
12/15/04	CERES SA's complete workstation upgrades

9/15/04 09:14

Contact: Michael Little

CERES SCF & ASDC IRIX Upgrade

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Pre-Req Status for IRIX OS Upgrade

as of 09/07/04 (not updated with last DMT status)

Subsystem	Run Old EXEC In .22m	Compile PGEs in .22m & MIPSpro7.4	Next Delivery	Next Production
Instrument	OK	OK	TBD	Takes 4 days after delivery
ERBE-like	OK	OK	TBD	TBD
Clouds	Needs recompile, not redelivery	Terra-OK Aqua-OK	TBD	TBD
Inversion	OK	Redelivery required due to CERESlib changes	Aqua-TBD (.25m) Terra-TBD (.25m)	TBD
SARB	OK	OK	TBD	TBD
MOA	OK	2-3 weeks work to clean up ECMWF lib interfaces	TBD	TBD
TISA Ave	OK	OK	TBD	TBD
TISA Grid	OK	OK	TBD	TBD
GGEO	OK	OK	TBD	TBD
CERESlib	OK	OK	TBD	TBD
DAAC Production Systems	Inst Testing in progress AMASS OK after 8/9/04	OK	N/A	Need 2 day notice Need 24 hr outage
CERES Production Schedule			+16 Processors	ASDC working out production Schedule
Calipso	N/A	Testing during 1-day test Conting-New OS, Old Comp	1-day test 7/15/04	TBD
Icing Study	OK	OK	OK	OK

9/15/04 09:14

Contact: Michael Little

CERES SCF & ASDC IRIX Upgrade

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