# 11/28/2007 CERES Data Management Team Meeting

**NOTE: This meeting will be held in room 1313.**

## Upcoming Events:

May 6-8, 2008 CERES Science Team in Newport News City Center

## Notes from the previous meeting (10/31/2007)

**ANNOUNCEMENTS:**

There will be a science meeting tomorrow afternoon to discuss CERES Terra and Aqua data processing; the focus will be on TISA. If you have been "invited" by your science team counterpart, please plan to attend; Bruce and Norman asked that Raja and Cathy attend (see Erika's "October 30, 2007 11:54 AM" email for additional details).

The DMT meeting on Nov 14, 2007 is cancelled due to Science Team Meeting. No reports are required for the Nov 14th meeting. Reports submitted for the Nov 28th meeting should contain activities since Oct. 31, 2007.

**ASDC:**

The operational disk space is a 96%. Lisa plans to begin removing data that's also in the archive to make additional space.

MOA processing is complete through 09/2007; PMOA processing is complete through 08/2007; the Aqua Edition2B CRS processing on *magneto* has started; Aqua FSW processing is on hold until more disk space is available. Archive system issues are keeping the Aqua Edition2B CRS from getting wrapped and written to the archive.

Archive on *magneto* was reported to be slow.

Terra MODIS collection 5 for 06/23/2007 through 06/25/2007 has been received. Terra Edition2B SSF processing for Jun 2006 will resume after Aqua Edition2B SSFG for 2006 is completed.

Erika sent in a request for some consulting time from Jim Donaldson on the toolkit problem.

27 of 69 (<40%) users have generated "keys" for new daacls/daacget. Ed stated that those using daacls/daacget from their desktops are responsible for keeping the scripts up to date. There will be no SA support, but the SAs will assist. He added that the SAs would help the SCF users generate keys on SCF systems. A *Mac* version of daacls/daacget is on the SAN. Users can create a link from the root level to /volumes/insanity/CERES/tools/bin just under /CERES on any other machine.

Several of the ASDC folks were unavailable for this meeting as they had to support the ANGe/CALIPSO Operational Readiness Review. In his absence Chris Harris provided the

following systems' comments including the "ASDC SDP Toolkit configuration table" which appears at the end of these notes.
*warlock* – nominal operations
*magneto* – GPFS upgrade completed
– head node transition deferred until maintenance period next month (the existing head node is working)
– SDP Toolkit build still has problems, even though instructions were followed with help from Landover, MD Toolkit Support staff. We will try to figure out what went wrong!

Scott said the directory "/usr/local/TOOLKIT-64 (for 64 bit)" in the lower right box of Chris' "ASDC SDP Toolkit configuration table" should not be there – it doesn't exist anymore.

Scott said that the Toolkit and CERES environment on *magneto* are still not working well together - can't see functions defined in Toolkit. Scott is working with Karen Brown on this. The Linux Toolkit is only designed to be "the Toolkit", not 32- and 64-bit versions as on SGI; Mac Toolkit is also just "the toolkit". Ada and Linux don't work well together.

*warlock* still has not needed a reboot since patching the StorNext client on October 11.

**SCF:**
Ed had 2 announcements.
1. The dependency of the other SGIs on *lightning* has now been removed to isolate them from troubles that we've been having with *lightning*.
2. Mike Little sent an email last week about a new maintenance schedule. In summary it said that starting next week, the SAs are going to reboot a Mac server weekly (on Wednesday to minimize the impact on the DM folks). The downtime is expected to be 1-2 hours. Once a month, this time will be significantly longer, maybe as much as 8 hours. During these longer "reboots" one of the two SANs (most folks only use one of these two SANs) will be unavailable too, so once every two months the SAN that supports CERES will be unavailable for ~1 day. The first such "reboot" will be next Wednesday; it will be of the shorter variety. Ed does not know yet which server will be targeted, but it will NOT be one of the SANs, i.e., not a major maintenance day. The hope is that this maintenance will reduce down time and unexpected outages.

Scott commented that everyone that has a Mac (now) has "administrator" privileges. This is necessary so that users will be able to perform system Updates as they are now responsible for taking care of this on their individual systems. This is IMPORTANT, so please do it. Ed added that the SAs were doing this but could not keep up. Mac updates are pulled from the SCF Mac update server which pulls down updates directly from Mac. The SAs will still be able to monitor if a system has been updated. An automatic update window should pop-up after the machine checks for/finds needed updates. If you don't see one within the next four weeks, tell the SAs.

Scott will be out the next 2 weeks.

**SEC:**

The SEC will make their presentation on the proposed new directory structure and changes to the Operator's Manual on Friday, Nov 9 at 10a in one of the conference rooms at SSAI. Lisa Link said that she was sure that Sue Sorlie intended to attend. This meeting is for the entire DMT and all interested from the DAAC. Everyone should have a copy of the proposal.

Erika asked if anyone had comments or concerns over the list that John presented at the last DMTM of FrameMaker documents that we do NOT intend to convert to Word. These documents were the Interface Requirements Document, ATBDs (Science), Software Requirements Documents, Software Design Documents, Validation Documents (Science), External Ancillary Input Data List: PDF, Software Computer Bulletins, DMT to DAAC Production Requests, and Data Management System Status Presentations. These files will be left as PDF files. There were no comments so John will pass this list along to the Science Team for their comments.

**SUBSYSTEM STATUS:**

**CM**

Schedule: Erika requested the following changes in the delivery schedule be made.

1. Change the delivery dates for the second SARB delivery on the schedule (MATCH data files for January – June 2007) from "Fall" to "unknown".
2. Change the first entry (Instrument/ERBE-like) in the Coefficients Delivery Schedule from "Fall 2007" to "Spring 2008".
3. Change the second entry (GGeo) in the Coefficients Delivery Schedule from "March 2008" to "unknown". The March 2008 date that is there now is for a Beta delivery.

SCCRs: There were no SCCRs in the prepared package, but Tom passed out SCCR# 661 describing a non-science change for MOA. He said that it was to correct a small problem in the MOA I/O module. The fix will be in the next CERESlib delivery which will be with the next Instrument, Inversion, or Synoptic SARB delivery.

**Instrument** – There is an issue with TK 5.2.7 – it will not read ephemeris for Sept 28 and Oct 10 through 11.

Need code delivery to support Edition2/Edition3 delivery before continuing with Ed1-CV processing. May deliver to *warlock* after the Science Team Meeting and then deliver expected output to *magneto* later.

Denise is preparing for the SEC presentation on Nov 9$^{th}$.

Beta9 and Beta10 difference: Beta9 combined spectral gain change(s); Beta10 make gain changes realistic. All of this is in the experimental/research mode at this time. Dale and Peter are working on Beta10 using deep convective clouds.

**ERBE-like** – In regard to a question on the third bullet under ERBE-like, "Continuing to develop, understand, and utilize the new combined SSF-ES8 data product", Denise replied that SSF subset data are combined with the ES8 to form the SSF-ES8 product.

**Clouds** – Sunny is working on Edition3, CO2 slicing (for the last 2-3 weeks) and plans to move on to implementing updated CO2 multilayer identification.

**Convolution** - Walt is also getting ready for the Edition3 delivery. In response to a question on an item in his status report he said there was no FM3 IES for 32 hours which explains why 32 of 39 hours did not process.

**Inversion** – Victor is testing Edition3 algorithm updates for Terra. The archive is okay, but slow (overnight retrieved only 1.5 days of SSF). He is waiting for Dave Kratz's final approval and is hoping to make delivery date.

Regarding differences between Linux cluster and SGIs results, he hasn't looked at that yet. As *warlock* is being targeted for this delivery, resolving this issue is not a high priority. However, Walt has sent him some information that may help to resolve this problem.

**Synoptic SARB –** Tom is finalizing Synoptic code and plans to delivery soon. If *magneto* not ready, delivery will go to *warlock* and *magneto* will be added to delivery later.

**MOA –** Erika sent G5-CERES plan out on Friday (10/26). Waiting for G5-CERES data to arrive. Once here, evaluate it and MOA produced from it. If large differences, science to contact GMAO. Else, process G5-CERES in same manner as MERRA 'p15.'

**TISA Averaging** – Comparing TOA estimates from SYN, AVG and ZAVG with SRBAVG to ensure they match. Also, will be delivering three sample read packages – one for each product of these products. Fred Rose found some clear-sky problems but otherwise okayed synoptic SARB. Dave Doelling still needs to approve the TSI for delivery. TSI delivery will be very high priority.

**TISA Gridding** – Lisa said she assumes that Raja provided some requested information to Dave Doelling before she left; she will be out of the office for several weeks.

**CERESlib** – In response to a question from Erika, Lisa said that the CERESlib report was provided by Scott in the CERES SCF Status report.

## Agenda:

**ASDC Status**

SI&T
Interfaces
Operations
User Services

**SCF Status**

**SEC activities**

**DM System Issues and Status**

Processing Priorities
Schedule
SCCRs
Instrument Special operations
Subsystem Reports

**Other –** Summary of Nov 9th SEC meeting on the proposed new directory structure and changes to the Operator's Manual?

- *magneto* status?
- Users "Keys" for daacget/daacls status?

## ASDC SDP Toolkit Configurations:

| Platform | OS | Hostname | Toolkit | Toolkit Version | Compilers | Location |
|---|---|---|---|---|---|---|
| SGI | IRIX 6.5.29 | Warlock, Darrin | sgi<br>sgi32<br>sgi64 | 5.2.7 | NAG f95<br>cc v7.4.3<br>f90 | /usr/local/TOOLKIT |
| SGI | IRIX 6.5.29 | Warlock | sgi<br>sgi32<br>sgi64 | 5.2.12 | NAG f95<br>cc v7.4.3<br>f90 | /usr/local/TOOLKIT-new |
| SGI | IRIX 6.5.29 | Darrin | sgi<br>sgi32<br>sgi64 | 5.2.12 | NAG f95<br>cc v7.4.3<br>f90 | /usr/local/TOOLKIT-v5.2.12 |
| SGI | IRIX 6.5.29 | Darrin | sgi<br>sgi32<br>sgi64 | 5.2.14 | NAGf95<br>cc v7.4.3<br>f90 | /usr/local/TOOLKIT-v5.2.14 |
| IBM PPC | LINUX SUSE 9 | magneto | 32 bit, 64 bit | 5.2.12 | gcc v4.2.1<br>IBM xlf | /usr/local/TOOLKIT<br>and<br>/usr/local/TOOLKIT-64 (for 64 bit) |