

**MODIS Technical Team Meeting**  
**Thursday, June 28, 2001**  
**3:00 PM**

Vince Salomonson chaired the meeting. Present were Jack Xiong, Skip Reber, Barbara Conboy, Wayne Esaias, Eric Vermote, Steve Kempler, Ed Masuoka, Dorothy Hall, Michael King, Bill Barnes, Mike Roberto, and Bob Murphy, with Rebecca Lindsey taking the minutes.

**1.0 Schedule of Upcoming Events**

- ESIP Federation Meeting July 24-26, 2001  
University of North Dakota, Grand Forks
- MODIS Science Team Meeting September 24-26, 2001  
BWI Marriott
- Terra Results Symposium January 7-11, 2002  
RSMAS/University of Miami, Miami, FL

**2.0 Meeting Minutes**

**2.1 Instrument Update**

Salomonson briefly described the recovery strategy for MODIS, which was to turn MODIS on in low power mode during a long real time pass this afternoon, probably as the meeting was happening, essentially using Command Processor B (CPB) and Power Supply 1 (PS1). The instrument would be kept in this low power mode until near the end of the real time pass and would then be turned off. Telemetry would be analyzed, and if found to be normal and stable, the instrument would then be turned back on within one day and placed in the normal science mode.

Toward the end of the meeting, Barnes and Roberto came in and reported that all had not gone as expected with the pass. Roberto said that they would be getting together at 5:30 p.m. (after the meeting) to analyze the telemetry and determine precisely what happened.

Barnes said that he imagines it would be several days before they try to turn it on again. Roberto said that although some might interpret the unexpected result as an indication that the issue should have been studied further before proceeding, there was really a small set of initial states that they could have put the instrument in, and you have to start somewhere.

POST-Meeting Note: Telemetry analysis from yesterday's meeting (Thursday evening) indicates no instrument damage. It appears as if there was a Command Processor (CP-B) reset similar to what we have seen in

testing of CP-A. This was unexpected for CP-B. They are developing a plan for a second attempt, which is not likely to be before Monday or Tuesday of next week (7/2 or 7/3).

## 2.2 MODAPS

Salomonson indicated that he was very interested in getting MODAPS into a steady production state. He is concerned that we have products that haven't been produced from as far back as February. It is essential that for the MODAPS processing to become stable and "operational", changes will have to be minimal to zero.

Masuoka presented a status report on consistent year production. PGEs that are in production include all Level 2 (L2) atmosphere, all L2 land except surface reflectance (which is now delivered), and L2 and L3 oceans, except primary productivity which is not due to run for 2 more weeks. They are still expecting an improvement in polarization for Ocean color in about 2 weeks. All L3 atmosphere, Land Surface Reflectance and L2g products were deleted in preparation for re-doing them. King indicated the reason for deleting the atmosphere level 3 daily product had to do with desired changes to the bin intervals for the probability density functions and joint histograms that are produced for each 1°x1° grid cell. This does not change the PGE code at all, but only changes the file spec.

MODAPS is processing the 8-day periods from 145-152 and day 64 onward. (Masuoka reminded the group that the plan for the retrospective component of the consistent year is to do days 64-144 and then to go back to November and go forward.) There are still some holes in the data from 144 and 145, and the DAAC has in high-priority requests with EDOS.

Masuoka's concern is that we are in good shape going into the weekend, but we need to be very careful about introducing changes from now on. He said there is a meeting with disciplines where they can tell us when to stop production of a single PGE, for example in the case of serious errors. He indicated he would notify Salomonson if such a request was made.

Salomonson asked about a polarization correction for Oceans and Esaias said there is an important correction coming in about a week, but that collection 3 granules already processed will not need to be redone until the end of the consistent year, if there is time. So for now, there will be a few weeks that will not be consistent. Esaias indicated that his team is preparing the one page summary required by the policy drafted by Robert Wolfe for the ocean team's and TL's review.

### 2.3 General Discussion

Salomonson reported that with respect to the Terra results symposium, Jon Ranson suggested presentations on various themes, like the ESE science questions. They would have leaders in each theme give talks, and instrument presentations that contribute to those themes. Salomonson suggested that the Science Team should also use those questions to shape their MODIS Science Team Meeting presentations much as was started at the last Science Team meeting. These approaches will be considered further in the next few weeks.

Conboy reported that Ana Reis of Westover Consultants had been assigned to coordinate the logistics of the Terra symposium.

### 2.4 FM1 Status

Xiong reported that there is a problem with the aperture hole on the Solar Diffuser Stability Monitor, which apparently was cut too large. So the issue is not just the screen. They are probably going to take the SDSM off the instrument and fix it. Barnes indicated that they still had some question as to whether we could live with a modeling correction, and Salomonson said that the Team has rejected that proposition.

### 2.5 GES DAAC

Kempler reported that in the time they are waiting for data, they have completed 10% of the SAFARI granules, and 98% of the Oceans request. They are using S4PM to reprocess. He reminded the group of the issue with the PDR server and that they must stay close to what MODAPS is doing in order to be efficient.

There was discussion about whether the DAAC could produce a sampled (5 km X 5 km) product, and Kempler said the DAAC could absorb the extra volumes, but there could be a concern from ESDIS. Salomonson indicated that Masuoka should go forward with the idea of getting the product into the DAAC because many people are expected to want to use it. King agreed and commented that the DAAC might want to use a rolling archive for this sampled, L1B (1 km) product.

Esaias commented that PGE 71 (subset of ocean bands at L1a) could also be made visible. Right now it is only sent to Miami, and is not publicly available.

King commented that he gets distributionweekly reports from the EOS project that includes data archive and distribution summaries for each

DAAC and that the trend is that ASTER and Landsat are comparable, and are currently higher than MODIS, especially at EDC (land products).

Murphy commented that the community that uses high-resolution data such as that from ASTER or ASTER tends to focus on a single scene or a regional mosaic. There is a large experienced community engaged in this kind of work. MODIS users must be prepared to handle large, multi-temporal data sets. He felt it is premature to compare MODIS data usage to that of ASTER, Landsat or even MISR.

Masuoka said that the community that uses atmosphere and oceans are focused on global issues and are not the same users as those who want high-resolution regional land data.

## 2.6 EOSDIS

Reber reported that a working group for quality assurance has come up with a recommendation that there be a granule-level hidden data capability that would let people on instrument teams see and order all the data, where as everyone else can see all data, but not order all data. Vermote said that he thought the recommendation was an interpretation (perhaps misinterpretation) of an original desire to be able to hide a data set or an orbit, like if we knew that an orbit had bad ancillary data. . Salomonson told Reber that he could tell the working group that, based on present understanding, the MODIS team absolutely objects to such a procedure or rule.

Reber also reported that back in December, when they had a meeting with Jack Kaye, they promised that they would put out the status for individual products, and the schedule for when they would be provisional, etc. They now have that capability on their page. He asked that the team provide him the information necessary to fill that table in.

Murphy commented that this was a complicated issue, for example, can higher-level products be provisional if the L1 B is still beta? Vermote said it is very band dependent. Oceans said that all Oceans products with the exception of 2 would be provisional in Collection 3. However if MODIS goes back to A-side power supply, there might be segments of Collection 3 that will be beta again until L1b and ocean L2 LUTs are developed (a 2-4 month process). Murphy said that we couldn't tell the whole story with a table that goes on Reber's web page.

King commented that the Atmosphere discipline group page has a dynamic table that provides info on product quality data available through

the GSFC DAAC, updated day by day (url is <http://modis-atmos.gsfc.nasa.gov/products.html>.) It clearly specifies what time period and what processing day generated the data, and a single product can have multiple entries, some at beta quality and others at provisional quality (those from the recently started consistent year production using version 3.0 software). Salomonson wondered if the other teams could do something similar.

Murphy indicated that he would update his table based on Salomonson's instructions. Salomonson said that, in his opinion, it should say, to a general approximation, collection 3 products are provisional. If users want more detail they can contact the Team member associated with a particular product.

Kempler asked if this related to the DAAC's caveat page, and Salomonson said if Kempler sent him something to review, he would rework it.

## 2.7 MAST

Salomonson indicated that all Team members should be giving close attention to the commitments, obligations and costing of their funding. Several are well below what they should be by this late in the year.

Also, Conboy reported that Brandon Maccherone had presented a draft design concept for the revision of the MODIS web site. She indicated that some had provided feedback already, and asked that others please do so soon, so that he could begin the work of converting all the MODIS web pages. King, Salomonson, and Esaias commented that they thought it looked very good.

## 3.0 Action Items

3.1 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.

Status: Open.

3.2 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.

Status: Open.