

**MODIS Technical Team Meeting**  
**Thursday, February 7, 2002**  
**Building 33, Room E125**  
**3:00 PM**

Vince Salomonson chaired the meeting. Present were Eric Vermote, Dorothy Hall, Mike Teague, Gary Alcott, Steve Kempler, Jack Xiong, and Bruce Ramsay, with Rebecca Lindsey taking the minutes.

**1.0 Upcoming Meetings**

- IGARSS 2002, June 24-28, 2002 in Toronto (abstract deadline past)
- 34TH COSPAR Scientific Assembly, October 10-19, 2002, in Houston, TX, (abstracts due 1 May)
- AGU, Spring, May 28-Jun 1, Washington, D.C.
- AMS, Atmospheric Radiation and Atmospheric Physics, first week of June, Odgen, Utah,
- MODIS Land Cover Meeting, June 3-5 (tentative), Greenbelt, MD
- MODIS Community Outreach Workshop on MODIS Vegetation Variables (VI/LAI/FPAR/NPP), July 15-19th 2002, University of Montana, Missoula, MT
- Remote Sensing of the Earth's Environment from Terra, a workshop at the International Summer School on Atmospheric and Oceanic Sciences, August 25-30, 2002, L'Aquila Italy

**2.0 Meeting Minutes**

**2.1 General Discussion**

Vermote discussed the progress he has made on the attempt to produce land products for the interdisciplinary, reduced-resolution set of products as recommended by the MODIS Data Processing Review Team. The team needs to make choices about formats and resolutions, and Vermote showed Salomonson some examples of different resolutions as they appear on a laptop screen. Images from a 1° resolution data set look a bit fuzzy, but Salomonson emphasized that we are interested in providing data for people to use in scientific and applications studies, not necessarily in providing data for images. However, an accompanying higher-resolution JPEG or GIFF image accompanying the digital data perhaps would be useful. Vermote thinks that 0.25° resolution might be the best. The starting point would be to see what resolution would fit on a CD or two.

**2.2 Instrument Update**

Xiong reported that L1B for Aqua would be delivered this week. It is currently in testing in MCST, and will be sent to SDST at the end of this week. There is no new information with respect to the instrument. Bill Barnes is at the Aqua pre-ship review in California. Xiong indicated they are prepared for Dr. James Simpson's (University of California at San Diego) visit. Salomonson asked Hall to circulate the flyer with the abstract for Simpson's talk on using a neural net approach to snow mapping. The talk will be at 2 pm next Tuesday, February 12, the in GSA conference room of the SAIC building on Forbes Blvd.

Xiong summarized some of the differences between Aqua MODIS and Terra MODIS. On the downside, there is some band saturation and Band 6 has several non-functioning detectors. On the positive side there are several examples where improvements have been incorporated. For example, the optical leak is fixed for PC bands, the gain change relative to SST has been incorporated, the 5-micrometer thermal leak looks much reduced based on T/V tests, sub-frame differences have been minimized, and the RVS information is much more complete than it was for Terra. Xiong said he would put those details into an email for Masuoka.

### 2.3 Data Processing Update

Alcott reported that the GES DAAC is processing well, and are trying to get the rest of day 24, 2002, which had missing data. It appears there is a network problem with EDOS. They are working on wet-season SAFARI data now, and have finished the validation campaigns requests from the land group. They are reprocessing days 346-365 (2001) with ancillary data that weren't available the first time.

Teague reported that MODAPS had a good week. The forward processing machine, mtvsl, has been running at about 1.5x. They are waiting for complete data for days 24 and 32, which are causing them to hold two 8-day periods open. They are about 8 days off the leading edge. Like the DAAC, they are working on SAFARI. They expect to finish dry season SAFARI by end of February, and will begin wet season after that. Aqua MOSS 6 tests occurred this week, and they went well.

Teague said that they are discussing versioning issues with Xiong, and have come to an agreement for PGE02, in particular, but which will apply in general for all Terra and Aqua PGEs. The approach will allow for the team to go in separate directions when developing Terra or Aqua PGEs. He will put out an email for the science team about the issue.

Teague announced that MODAPS had finished processing the "Consistent/Complete Year"-plus (15 months total) on February 1. Salomonson said there are plans for a small celebration in the near future to mark the successful completion of the endeavor. He expressed great appreciation and congratulations to all who made it happen.

Teague said that MODAPS began working on the processing plan for February-April, as well as a reprocessing of oceans for March 2002 in preparation for an upcoming Ocean Sciences Meeting. They are reprocessing day 346 forward with correct GDAS inputs, and are also rerunning a time period for which a control point wasn't run for PGE 60. That processing should all be done by mid-month.

Salomonson reported that Otis Brown, Peter Minnett, et al. had declared the MODIS 11 micrometer SST product validated yesterday. This includes the period from November 2000 to present for the both day and nighttime 11-12 $\mu$ m SST. Salomonson noted that all related web pages should updated to reflect this.

Salomonson needs an estimate from the atmospheres group on what it would take to get a 1°lat/long CMG, with just the means for certain parameters. He is going to talk with Bill Ridgway. Salomonson said he needs a write up as to how someone these reduced resolution products are constructed. Vermote said he could provide that for the land products. Ron Vogel and Bill Ridgeway will provide that information for oceans and atmospheres, respectively.

Salomonson said that he had been approached via e-mail by a person who wanted to know how to get the geo-referenced data that went into the "blue marble." Lindsey said she would look into whether the image developer had those data available on an ftp site. [Note added in proof: Only the cylindrical equidistant latitude/longitude projection is available via ftp. They do not have geo-referenced data available for the blue marble. Users would have to order data from the DAACs.]

#### 2.4 NOAA-NESDIS Update

Ramsay reported that per discussion at a previous TT meeting, he had followed up with Kent Hughes about making sure that the NASA products being distributed from NOAA/NESDIS were the operational products, i.e. the most current. Hughes assured Ramsay that they were in discussion with the appropriate people to review which products were being made available by NOAA. When the NOAA/NESDIS MODIS processing system is pumping data to Suitland and Camp Springs (the dark fiber line installation is expected late summer or early fall 2002), then they will have a NOAA/NESDIS Satellite Products and Services Review Board (SPSRB) meeting. At that meeting they make sure products are ready to be sent to the NWS.

Salomonson asked whether Ramsay thought these efforts would fit into the plan of the Joint NOAA/NASA Center that is focusing on assimilation of satellite data into models. Ramsay said he heard they were shifting funding support to the joint assimilation center from the polar program office. For those projects that are for assimilation, they need to be funded by the joint center, which suggests that progress is being made.

Ramsay asked where a good web site would be to find out what is the most current version of the PGEs running in operations. Kempler said he could provide a web site for the ones brought into the DAAC. Teague said he would provide one for MODAPS.

#### 2.5 Cryosphere Update

Hall reported that she attended the PoDAG meeting on Monday and Tuesday. There was considerable talk about the snow and ice products and the EDG and other EOS-related things. Vanessa Griffin spoke for an hour. There were a lot of people dissatisfied with the EDG, and reported many problems. Jeff Key gave a talk on progress with the cloud mask in polar regions, which still has significant problems. George Riggs also talked about his progress on using individual bits in the cloud mask, and it is going well. Hall said the group talked about models and what GCM modelers want, and people were saying that the best resolution they could handle now is 50 km. But they can aggregate the 5 km

resolution easily themselves and can use the 5 km for hydrological studies. So they would be happy with the 5 km.

## 2.6 Concluding Discussion

Kempler said he had attended the SEEDs workshop, which was held to encourage user and provider community participation in the development of the next paradigm of data management, for example the development of secondary data distribution centers. The goal was to develop protocols and standards with respect to things like levels of service, etc. They had six break-out meetings addressing various components, and the results were positive, but left them with a lot of things to go over.

Salomonson asked if there was much discussion of the long-term archive plans. Kempler said that they did discuss what had to happen to get to long-term archive. He said there was little interagency discussion about NOAA versus NASA roles.

Vermote told Kempler that at a recent meeting the MODLAND Science Discipline Data Team expressed complaints about recent EDG performance. Vermote said they weren't sure if it was a transient problem, but that the DAAC might want to keep track it.

## 3.0 Action Items

### Carried Forward

3.1 Hall to provide Kempler detailed information on the L2 Snow products that were unavailable through EDG in Version 3.

Status: Closed.

3.2 Kempler to check with user services about missing snow data.

Status: Closed

3.3 Salomonson to send an email to group about the status of ATBDs.

Status: Closed

3.4 Kempler to send Johnston his ORR charts.

Status: Open

3.5 Reber to send Justice the mailing list that has members of the DAWG.

Status: Open

3.6 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.

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

Status: Open.