

MODIS Technical Team Meeting
Thursday, May 30, 2002
Building 33, Room E125

Vince Salomonson chaired the meeting. Present were Bill Barnes, Jack Xiong, Eric Vermote, Steve Kempfer, Shaida Johnston, Ed Masuoka, Dorothy Hall, Wayne Esaias, Michael King, Robert Wolfe, and John Weier, with Yolanda Harvey taking the minutes.

1.0 Upcoming Meetings

- AMS, Atmospheric Radiation and Atmospheric Physics, first week of June, Odgen, Utah.
- MODIS Outreach Workshop on Land Cover Variables, June 3-4, University of Maryland, College Park.
- NPP Algorithm Technical Interchange Meeting on June 6
- IGARSS 2002, June 24-28, 2002 in Toronto (abstract deadline past)
- MODIS Outreach Workshop on MODIS Vegetation Variables (VI/LAI/FPAR/NPP), July 15-19th 2002, University of Montana, Missoula, MT
- MODIS Science Team Meeting, July 22-24, 2002, Greenbelt Marriott, MD
- 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
- 34TH COSPAR Scientific Assembly, October 10-19, 2002, in Houston, TX, (abstract deadline past)
- MODIS Outreach Workshop on Land Surface Radiation Products, October 24-25, 2002, Boston

2.0 Meeting Minutes

2.1 General Discussion

Salomonson reported that the preparation on a CD of the Introductory MODIS Multidisciplinary Data Set is making progress. He is going to send the cover letter that goes with it to Yolanda Harvey for review and editing. The discipline people need to review progress and content to make sure that everything is O.K.

Salomonson pointed out an interesting article by J. Heirtzler in Eos (the AGU publication) describing the effects of the South Atlantic Anomaly on spacecraft and instruments and the impact on MODIS last June, in particular.

Salomonson reported that he got a call from a scientist who was having trouble getting subsets of aerosol granules. King reported that he got a similar email. Salomonson said that Lorraine Remer has been helping out, but he will send the email to Steve Kempfer/DAAC to resolve the problem.

Salomonson reported that preparations for the July Science Team are ongoing. The emphasis will be on early Aqua results and the validation of Terra products. Barnes reported that they won't have much to talk about on Aqua since first light has been pushed back to the 26th. Salomonson said that regardless of the amount of Aqua data they have, there will be plenty to talk about on Terra validation. He continued that people are still not cognizant, as an example, of the power of the Oceans products; therefore, efforts will be made to make the Science Team meeting as open as possible so as to further inform the community as to the positive status of all products.

Salomonson said that the MODIS model in the lobby of Building 33 is together and Yolanda Harvey will label the various parts. There will be a poster behind the model on the wall that will describe the Science Team, the technical specifications, and the products. The thermal blanket will be installed soon, as well. Masuoka asked whether there will be literature about the instrument available there or will people be referred to somewhere else for additional information? Salomonson replied that it is a good idea and he would look into it.

2.2 Instrument Status

Concerning Aqua, Barnes reported that they will open the space-view door all the way tomorrow and will keep out-gassing. A week from now (May 30), they will start the science mode, then three days later Aqua will do some maneuvers. They have found that it will be necessary to do some burns to get to right orbit, then a couple of yaw maneuvers, then they will open the Earth-view door on the 26th of June. Esaias said that on First Light he wants a high-resolution image over the Ocean. He thinks that would look pretty good, but requires thermal bands to be working.

Barnes said that Chris Muller is interested in having the correction to Band 26 he has developed reviewed by interested members of the MODIS team. Barnes says that the correction is for Terra, and he can turn on in forward processing as soon as they want to, but he wanted to make sure that Salomonson is okay with it. Salomonson replied that he has seen it and is very impressed with how well it works. He feels that the change is okay, and King agreed. Vermote said that he needs a notice of when the correction will go into effect because he is already doing correction on surface reflectance and doesn't want to do it twice. Salomonson suggested that there be a documented approval of change and will approve it formally. Masuoka reported that the correction will be used in the upcoming Land Science test, and once that is done the results will be available for Salomonson and Vermote to examine. Johnston asked which "collection" the change will be in, and the answer was Collection 4. King mentioned that people will need to know what the implications of the change will be because of how it will affect certain algorithms. Salomonson said that they will test it, then share the results with Land and Atmosphere, then wait to implement the change until the release of collection 4 in August.

Barnes reported that Terra is doing fine, and that there is nothing new to report.

King reported that AMSR is having some difficulties; it toggles between a no signal mode, then counts some bands but keeps trying to reset. NASA isn't sure what is wrong with the Aqua AMSR, and Japan announced prematurely that the AMSR had failed.

2.3 DAAC

Kempler reported that they have been pushing Oceans at 8-10x. They will stop pushing tomorrow. Masuoka said that the latest patches installed at the GDAAC had created some problems with their ingest of large volumes of Oceans data and that the GDAAC had requested MODIS ship them several days of Oceans data production so that the ECS developers at Landover could debug the problem. MODAPS agreed to do so and Gary Alcott will alert the ECS contractor to monitor ingest when these data are shipped. Kempler continued that there are 26 hours over 13 days left of 2000 data, then collection 3 will be done. They are waiting for redelivery from EDOS. The data pool meeting will be on Tuesday at 11 am with PIP people to discuss what will be done with the data pool. Salomonson asked if there is any issue with the allocations in the pools? Kempler said that he will create a straw man for people to get comfortable with what can be adjusted. Salomonson asked about data mining, and Kempler noted that he gave a demonstration to Salomonson and other algorithm scientists that showed why large amounts of data are made smaller for transfer, because it will save time. Had a good turnout, good results.

Salomonson said that the number of granules is going up sharply, which is a good sign and may be a function of the availability of sub-sampled products. Kempler said that he is seeing a lot of people getting data as they become available, so he won't be able to accommodate everyone, but many of them. King said that ENVI now has hooks to read MODIS data and to do atmospheric correction. Vermote said that he had a good experience ordering L1B data. He had it within a few hours, which was great.

2.4 SDST

Masuoka reported that things are looking good for collection 4. Oceans is close to reprocessing. The last PGE is Ocean yearly, and they will have that near the end of June. At 8x they have a least a month before it needs to be in, then will need yearly at that point. The end of June presents no problem. Oceans will go green at that point. Atmospheres will test at the beginning of June, and the L2 Atmosphere products have been approved for Linux production. L3 PGEs have small metadata changes to be done for Collection 4, but will be cleared up soon. As for Land, Arizona said they will deliver key PGEs and the aggregation code today. The remaining CMG PGEs for Collection 4 will be delivered to SDST around end the of. In general, everything looks good. He talked to Moore about the L1A subset, and he said that next week will he'll be able to tell if the ESDIS Project can accommodate it within the funds allocated to address MODIS production and archive issues.

3.0 Action Items

3.1 New Action Items

3.1.1 Salomonson to send CD FTP letter to Yolanda Harvey for review and editing.

3.2 Action Items Carried Forward

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

Status: Open.

Ed Masuoka and Robert Wolfe plan to meet with the Terra Flight Operations Team to see if they can run definitive ephemeris 2-4 times per day. The context for this issue to provide better geolocation information for things like fire front tracking and similar issues.

3.2.2 The procedure for releasing Aqua MODIS products needs to be further refined via Discipline discussions and coordination with the Science Team leader, et al.

Status: Open.

3.2.3 Diane Wickland and Martha Maiden should be informed that MODAPS and the DAAC have updated their capabilities.

Status: Closed.

3.2.4 Eric Vermote to send comments on CD FTP letter to Salomonson as soon as possible.

Status: Closed.