

MODIS TECHNICAL TEAM MEETING

July 29, 1999

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Ken Anderson, Bill Barnes, Francesco Bordi, Barbara Conboy, Wayne Esaias, Al Fleig, Bruce Guenther, Dorothy Hall, Michael Hohner, Steve Kempler, Michael King, Gene Legg (NOAA), Ed Masuoka, Harry Montgomery, Bob Murphy and Eric Vermote, with Deborah Howard recording the minutes.

1.0 SCHEDULE OF EVENTS

SAFARI Program Implementation Meeting (Gaborone, Botswana)	July 26–30, 1999
Next PI Processing Meeting (GSFC) Location TBD	September 8, 1999
Terra Launch Vandenberg Air Force Base	October 4, 1999
Next MODIS Science Team Meeting (GSFC-area) Location TBD	Tentatively October or November 1999
AGU 1999 Fall Meeting (San Francisco, CA)	December 13–17, 1999
IGARSS 2000 Abstracts Due	December 1999
AGU 2000 Spring Meeting (Washington, DC)	May 30–June 3, 2000
IGARSS 2000 (Honolulu, HI)	July 24–28, 2000
EOS-PM Launch	December 21, 2000

2.0 MINUTES OF THE MEETING

2.1 MODIS Level 1 Integration

Bordi briefly reviewed the summary status of MODIS Level 1 Integration. Level 1B (PGE02) version 2.1.6 is at the DAAC; further changes in the look up table upgrade it to v.2.1.7 (at SDST). Level 1A and geolocation has been promoted to DAAC Ops (Drop 4PY); promotion to DAAC Ops (Drop 5A) is expected by

August 18. The MOSS-2 dry run was completed on July 21 and the formal MOSS-2 is underway.

Bordi reviewed the list of MODIS L1 integration issues. Item #2, regarding resolution of ECS problems at the DAAC remains open until items on the schedule are received from ECS. Masuoka presented an approach to resolving issue #5, regarding L1 product data volumes, at the Discipline Leaders Meeting this morning; that action is closed. According to Mike Moore (ESDIS) the fix for the external data (GDAS) format change will be released as part of patch 5A.01 (to Drop 5A) and delivered to the DAAC on Aug 21 (issue #7). The MCST request for ECS to generate a new ESDT for L1B) is at CCR per Guenther (item #10). Two new issues include the post-launch time period for data release to the public (#11) and a proposal to store Level 0 data and regenerate L1A data as needed to save storage space (#12). ECS initiated this suggestion (#12) with MODIS and Murphy discussed it with the Discipline Leaders who concurred. Masuoka plans to hold L1A for a month or two while processing L1B data. Bordi said that overall MODIS is making progress on Level 1 integration issues. (See Attachment 1.)

2.2 SDST

Masuoka reported on the MOSS-2 formal test. He showed the group a “Tic-tac-toe” chart on Geolocation, Level 1b and cloud mask and said that it took more than 24 hours to get 8 hours of data. The problem is on the distribution side in ECS Drop 4PY; it seems there are some problems with the distribution server. Information after the meeting suggests it was caused by a single threaded FTP session and not the distribution server. The production level is not yet at 70%, which is the target level so that an emergency backup would not be necessary. However, Masuoka estimated that production would reach 70% within a day. MODAPS starts production this evening on this test; an earlier start would very likely cause failed products.

Masuoka discussed highlights of progress on at-launch PGEs. He said he would delineate SDST versus ECS responsibilities.

2.3 Instrument Report

Anderson reported that with the additional thermal cyclings, previously discussed, we are now at approximately day 50 of thermal vacuum testing. Two thermal cycles are to characterize the registration; a separate short test will cycle the radiative cooler temperature up and down. A third thermal cycle of the entire sensor is under review. Anderson said he saw two major issues at this time. The first issue is misregistration. An additional issue related to misregistration is a pointing issue. There is a 100 arc second change in the absolute pointing. There is also some question of a longer term change in the instrument pointing over the last 18 months. However, there is some evidence

that this may have been overstated. The second issue is analog-digital converter (ADC) bin size; a test is being run to check various combinations of cross strapping the electronics. Esaias raised a third major issue—the PC band drift and the potential workaround that limits the blackbody temperature. Anderson said depending on a decision later today thermal vacuum would be completed sometime next week.

Salomonson commented that we seem to be diverging and seeing more problems; Barnes agreed. Guenther said there may be a way to resolve these issues and that he would brief Salomonson on possible approaches.

Guenther showed the Technical Team slides on preliminary analysis of FM-1 band-to-band registration (BBR) shifts in both the track and scan direction using the IAC. Guenther commented that testing is just about complete on registration. There appears to be a long-term shift in track uniformly across all the focal planes. The BBR shift in scan would be minimized with adjustments to the read out timing before leaving thermal vac. We expect BBR to be within spec for scan but a waiver will be requested for track direction BBR.

2.4 Budget Issues

Michael King briefly commented on a House subcommittee funding bill that could cut NASA's budget and significantly affect the Goddard Earth Science budget.

2.5 GDAAC

Kempler reported that the formal MOSS-2 test in progress is using Drop 4PY. The DAAC will install Drop 5A, the at-launch version that includes the SIPS ingest, in TS1 and Ops modes next week and then will integrate PGEs. Salomonson asked about the DAAC regarding the upcoming ORR review . Kempler said that from the DAAC's point of view we have proven we can do all of the functions, however, there are some outstanding production issues. (See Attachment 2.)

Vermote commented that MOSS 2 was supposed to process 70% of the data according to an agreement between MODIS and ESDIS. He said that from the Land group's point of view the ORR should be delayed and we should have a MOSS-3 in about a month that would illustrate 70% performance and use Drop 5A; Esaias concurred. Salomonson asked Murphy to carry our concerns to ESDIS. Murphy, Masuoka, and Vermote agreed to meet with V. Griffin and request a delay.

2.6 MAST

Salomonson suggested coordinating the next MODIS Science Team meeting with the Terra launch and keeping the October/November timeframe tentative.

Conboy will continue collecting possible meeting dates from PIs. A final decision for meeting dates will be made at the end of August. King reported that the Discipline Leaders suggested a small Science Team meeting with members and their associates only. This meeting might be held in September.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward

1. Masuoka and Kempler: Discuss with Mike Moore the resolution of issues regarding production plan failures at the DAAC when fractured data is received from EDOS and related ECS/DAAC issues.

Status: This item remains open.

2. Legg: Find out when and how NASA MODIS representatives will be integrated into the NOAA review process and report on status to the MODIS Technical Team. NOAA has agreed to have MODIS representatives serve on the NESDIS data product review boards. However, MODIS representatives have not yet been invited to participate in an advisory panel.

Status: This item remains open.

3. Murphy and Conboy: Inputs for the EOS Data Products Handbook PM-1 Volume 2 were due to Barbara Conboy by June 17, 1999.

Status: This item remains open. Conboy is awaiting final corrections/input from Bob Murphy.

4. Hohner and Howard: Develop a weekly MODIS news page linked to the MODIS home Web site. It should include hot items and reflect weekly progress.

Status: This item is in progress. Completion is expected by mid-August.

5. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open.