

MODIS TECHNICAL TEAM MEETING

November 23, 1994

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were David Herring, Steve Ungar, Dorothy Hall, Wayne Esaias, Dick Weber, Locke Stuart, Joann Harnden, Ed Masuoka, Rosemary Vail, and Yoram Kaufman.

1.0 SCHEDULE OF EVENTS

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| Nov. 29 | SCAR B and C meeting at GSFC, at 8:15 a.m. in Building 22, Room 365 |
| Dec. 12 | MODIS Quarterly Review at GSFC |
| Dec. 31 | Revisions of ATBDs receiving a grade of C or D due to EOS Project Science Office |
| Jan. 15, 1995 | Semi-annual reports due to Barbara Conboy |
| Jan. 24 - 25, 1995 | MODIS Ocean Discipline Group Meeting, in Miami, FL |
| Jan. 26 - 27, 1995 | Workshop on international Calibration/Validation Efforts for EOS Ocean Color Sensors, in Miami, FL |
| May 2, 1995 | MODIS Calibration Working Group (tentative) |
| May 3 - 5, 1995 | MODIS Science Team Meeting (tentative) |

2.0 MINUTES OF THE MEETING

2.1 MODIS Project Reports

Weber announced that the chances of MODIS personnel remaining at SBRC through completion of the Protoflight Model (PFM) are improving. The issue is still being discussed within Hughes.

Weber reported receiving the latest cost estimate for MODIS from SBRC. He noted that the estimate does not reflect the costs of the impending move to El Segundo.

Weber told the Team that Vernon Weyers, Director of Flight Projects, and John Klineberg, Director of GSFC, will visit SBRC on Saturday, Dec. 3, to review the MODIS facilities, as well as the current status of instrument development. Weber reported that the Engineering Model is beginning to look assembled—the scan motor for the mirror is mounted on the mainframe, as are the coolers. SBRC has also completed installation of their thermal vacuum chamber. Tests indicate that the facility is working fine.

Weber said he received Bill Barnes' letter regarding SBRC's deviation request for VIS/NIR bands. Weber stated that MODIS Project has verbally accepted some of the deviation requests for the PFM, but not for the flight model. He noted that

Mark Abbott still has some concerns regarding Band 14 that are being studied. He asked Esaias to let him know when the Ocean Group has completed their analysis of SBRC's requested deviation on Band 14.

2.2 SDST Reports

Regarding EOSDIS' processing and storage allocation for MODIS, Masuoka reported that he sent written scenarios to the MODIS Discipline Leaders for review. As soon as he gets a consensus from them, he will forward a response to Steve Wharton.

2.2.1 GSFC DAAC User Working Group Reports

Salomonson said he received a long e-mail summary of the recent GSFC DAAC User Working Group discussions. He noted that users are not happy with Hierarchical Data Format (HDF), or the levels of service the DAAC provides to users. Ungar added that a major concern is the lack of a plan for transition from version 0 to version 1. He explained that HDF is "painful" to work with now because most of the tools currently used by remote sensing scientists don't ingest HDF. He said the DAAC User Working Group wants general acknowledgment from EOS that they can't convert all data into HDF. He stated that the Group is not rejecting HDF, they are merely pointing out its deficiencies.

Masuoka added that SDST has had problems in that HDF doesn't provide a convenient way to control interfaces in Level 2 products. Beyond that, he feels SDST can represent scan cube data in HDF as separate files at three different resolutions. He is working with Ted Meyer, of the ESDIS Project, to get core functionality of the SDST utility library in HDF.

2.2.2 Processing BRDF at GSFC

Masuoka reported that he is still working with the EDC (EROS Data Center) DAAC on their list of Level 3 products. Discussions are underway concerning the impacts of producing the BRDF (Bidirectional Reflectance Distribution Function)/Albedo product at EDC. He noted that the size of the input data sets for BRDF have been reduced through a new processing scenario for the product. Reducing the size of the inputs eliminated the network bandwidth problems associated with making BRDF at EDC.

2.2.3 MODIS Quality Assurance Plan

Masuoka stated that Bob Lutz, of EOSDIS, is leading the effort to produce a quality assurance plan for the EOS instruments. Masuoka will review the third draft of this plan for the MODIS Team.

Salomonson asked Masuoka to ascertain CERES' and MISR's perspectives on their EOSDIS processing allocations.

2.3 MAS Data from BOREAS

Ungar announced that all MAS (MODIS Airborne Simulator) data from the BOREAS campaign is now ready. He is investigating the raw data and has found it to be “stupendous”. There is some striping at the bit level which is not apparent in the images. He showed some sample images. He concluded that the MAS deployment on the C-130 was highly successful.

2.4 MAST Reports

Stuart reported that the first MODIS funding allotment is in, but has been delayed in its disbursement to the Team. Teresa Mautino has been out on sick leave due to back problems.

3.0 ACTION ITEMS

3.1 Current Action Items

1. *Masuoka*: Ascertain CERES’ and MISR’s perspectives on the EOSDIS processing allocations and report to the Technical Team. [Closed. Masuoka reports that the processing allocation has gone away.]

3.2 Action Items Carried Forward

2. *MODIS Team*: Determine how, given the MODIS bowtie effect, MODIS images will be produced at launch. [This may be a suitable topic for discussion at the next Science Team Meeting.]
3. *Fleig and Ungar*: Interact with the group leaders prior to developing a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is still in progress.]
4. *Technical Team*: Produce and forward a coordinated response to the current EOSDIS processing allocation for MODIS.

3.3 Closed Action Items

1. *Masuoka*: Develop a strawman plan for dealing with the baseline MODIS allocation for review by the MODIS Science Team.

4.0 RECENT MODIS DOCUMENTS

NOTE: All documents referenced below are maintained in MODARCH and are available for distribution upon request. Please contact David Herring, MAST Technical Manager, at (301) 286-9515, Code 920, NASA/Goddard Space Flight Center, Greenbelt, MD 20771 if you desire copies of any attachments.

“SBRC’s Deviation Request for VIS/NIR Bands,” by Ed Knight