Posted: Mon, Dec 9, 1991 4:54 PM EST Msg: CJJB-1694-6038
From: LCARPENTER
To: MODIS.DATA.TEAM
Subj: MODIS SDST Minutes 12/06/91

MODIS Science Data Support Team (SDST) Meeting Minutes 12/06/91

ATTENDEES:

Lloyd Carpenter	RDC	982-3708
Al Fleig	900	286-7747
Harold Geller	MCST/RDC	982-3740
Tom Goff	RDC	982-3704
Liam Gumley	RDC	982-3748
Lou Kouvaris	Hughes	464-7365
Ravi Kumar	STX	513-1630
Ed Masuoka	920	286-7608
Al McKay	RDC	982-3720
Wil Webster	920.2	286-4506

NEXT MEETING:

Date	Time	Building	Room
Friday, December 13	10:00 am	16	242

There will be no MODIS SDST meeting on Friday, December 27, 1991. Beginning Friday, January 3, 1992, the meetings will be held in the Laboratory for Terrestrial Physics Conference Room, Building 22, Room G95.

TOPICS:

1. GSFC/SBRC MODIS-N System Study Review: Al Fleig attended the GSFC/SBRC MODIS-N System Study Review. SBRC has selected the Cadre TeamWork CASE Tools for the first systematic use of CASE Tools throughout a project. SBRC is using Microsoft Project as a project management tool.

The SDST will also use TeamWork and Microsoft Project, since they are well supported industry standard systems and to maintain compatibility. One concern is that TeamWork may not be supported on the IRIS

2. MODIS AIRBORNE SIMULATOR (MAS): Liam Gumley reported that the MAS has flown 8 FIRE missions over Coffeyville, Kansas plus 2 missions over the

Louisiana gulf coast between November 14, 1991 and December 5, 1991. INS data have been received for the flights through November 26. The handout contains a plot of the MAS flight track, a plot of the cold and warm black body temperatures, and plots of the cold and warm black body counts of various channels for the November 14th flight. Completion of Level-1 processing depends upon receipt of valid calibration data for the visible/near-IR channels. The field team is leaving Houston on December 8.

Paul Menzel advised Liam that some averaging of blackbody data may be needed for the IR channels. This is based upon preliminary noise calculations on IR channel data obtained over the ocean. The MAS processing software can be easily modified to accommodate an averaging strategy if and when agreed upon. Jeff Myers at ARC advised Liam that the aircraft tape recorder is likely to be changed to an Exabyte system by June of 1992. Then the MAS data could be distributed on Exabyte tapes.

Liam is working with Mike King on an article on the MAS for the Earth Observer.

3. MODIS SDST FY92 WORK PLAN: Lloyd Carpenter presented an updated and restructured version of the MODIS SDST FY92 Work Plan. The new version has been entered into the EasyProject Project Management PC software. This will be converted to Microsoft Project when this software is received. Another meeting was scheduled between Al Fleig and Lloyd Carpenter to firm up the plan.

4. NetCDF vs HDF: Tom Goff has been in communication with Andy Pursch of the AIRS data team, discussing the relative merits of NetCDF and HDF. The AIRS data team has decided to use HDF for AIRS Level-3 and higher data, based upon their experience with HDF on HIRS/2 and MSU data sets. They had heard that NetCDF is less efficient than HDF in processing time. There is interest in combining the advantages of NetCDF flexible data types with the HDF hierarchical structure to produce a better standard format.

The XDR subset of the NetCDF libraries has been compiled on the Mac with the Think "C" compiler, but then the XDR test routine produces incorrect results. This problem is still being worked.

Version 2.0 of the NetCDF library has been announced for distribution. Tom presented an algorithm for passing parameters between FORTRAN and C on the IRIS.

Al Fleig emphasized that SDST generated code must be of professional quality and consistency using a single approach, which the Cadre Teamwork tools will support.

The algorithm development guidelines for Team Members should be concise and to the point (the ten page variety). The SDST will make only those modifications to Team Member algorithms which are necessary to integrate them into the EOSDIS system, making them "good enough" to do the job and satisfy EOSDIS requirements and standards.

5. THE (TLCF): Al McKay presented an updated chart of the projected TLCF utilization, expanding on the previous list of categories. Near-term communications requirements for the TLCF were also tabulated.

6. MODIS DATA SIMULATION: The handout contained a description of the system simulation being generated for AIRS. Al Fleig is most interested in generating simulated data which will put the processing algorithms through their paces, without regard for the science content of the simulated data.

ACTION ITEMS:
08/30/91 [Lloyd Carpenter and Team]: Draft a schedule of work for the next 12 months. Include primary events and milestones, documents to be produced, software development, MAS support, etc. (A new version was included in the handout.) STATUS: Open. Due date 09/27/91.

10/04/91 [Phil Ardanuy and Team]: Prepare questions for the project to characterize the spacecraft position and attitude knowledge and the MODIS pointing knowledge in a way that will facilitate the evaluation of methods such as image registration to meet the science team requirements for earth location. (The letter to the project was prepared, 10/28/91.) STATUS: Open. Due date 10/18/91.

12/06/91 [Liam Gumley]: Investigate a cataloguing scheme for the MAS data. Consider the Master Catalogue, PLDS and PCDS. STATUS: Open. Due date 02/14/92.

12/06/91 [Liam Gumley, Tom Goff, Ed Masuoka]: Develop a plan for storing and distributing MAS data. STATUS: Open. Due date 02/14/92.

12/06/91 [Ed Masuoka]: Arrange for the "QA" company to come in and give a demonstration of their Performance Analysis Tool. STATUS: Open. Due date 12/20/91.

12/06/91 [Al McKay]: Set up a meeting with Al Fleig to go over the TLCF functions. STATUS: Open. Due date 12/13/91.