

Table 1: May 1, 1997 - Subsystem Status.

SS No.	SS Lead	Status	Problems
1.0	Escuadra	<ul style="list-style-type: none"> • Work continues to move the latest updates to the DAAC for TRMM SIM #2. Code has been ported to both warlock and samantha and is now working on both machines using the CODINE job submittal system. (Cooper) • TRMM SIM #2 preparation. Problems arose trying to process all of the days from a predicted ephemeris files through DPREP. The problems have been fixed and verification of these files is being done. (Cooper, Weaver) • Working issues related to TRMM SIM #2 operations and mission planning for CERES. An incorrect definition of Solar Beta Angle was found in the TRMM planning aid data. Working the issue of what needs to be changed to fix this problem. (Weaver) • Continuing development of the Release 2 flight ready system. (Anselmo, Cooper, Escuadra, Hess, Weaver) • Working on the FORTRAN interface to the Metadata routines written by Alice Fan. Success calling FORTRAN 90 intrinsic functions from Ada. Working on linking to the FORTRAN 90 metadata routines. (Rodier) 	
2.0	Chang	<ul style="list-style-type: none"> • Processed the latest PRES8_19861001_1 simulated RAPs data file from Kam-Pui and provided the output results to Erika. (Chang) • Wrote programs and produced the actual data ranges for filtered and unfiltered radiometric values, and TOA estimates, from four ES8 and four S8 files, one pair of ES8 and S8 from each validation month, for Georgia to write graphics programs to plot ERBE-like daily instantaneous data. Evaluated the negative values for min filtered and unfiltered SW data. (Chang, Snell) • Attended the CERES Science Team meeting. (Chang, Snell) • Moved the ERBE-like code and files from thunder to samantha, compiled and tested them. The EOF code for direct access file was changed from -1 to 168 in the ERBE-like code on samantha. (Chang) 	

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2.0	Chang	<p>(continued)</p> <ul style="list-style-type: none"> • Received 64 months of new LW and albedo thresholds from Dave, created the new snow map files for ERBE-like Subsystem 2 on thunder, and copied the new files to samantha. (Chang) • Processed 4 validation months of s8 file plus s8_850331_2, s8_850501_2, s8_850630_2, s8_850801_2, s8_850930_2, s8_851101_2, s8_851231_2, and s8_860201_2 files through ERBE-like Subsystem 2 on samantha. (Chang) • Completed 4 validation months of ERBS data through ERBE-like Subsystems 2 and 3 on samantha. The output ES4/4G files were provided to Georgia for making plots to put on ERBE-like web site. The Inversion QC reports and ES9 files were copied to thunder for Richard and Dave, and the ES4G files were copied to thunder for Tak. (Chang) • Looked into the possibility of using the metadata wrapper for ERBE-like programs. (Chang, Snell) • Worked with Dave Young on doing 3 test cases on finding out "What would be the effect on estimates of cloud forcing from the EOS-PM CERES data if we could not do a deep-space calibration to get accurate offsets?" (Chang) 	
3.0	Chang	Combined with above.	

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4.1	Murray	<ul style="list-style-type: none"> • Worked with Ms. Fan to test the Metadata wrappers on the Cloud Subsystem. (Sun-Mack) • Completed implementation of a new CRH update algorithm (with metadata wrappers) that allows for concurrent execution of hours. (Sun-Mack) • Conducted a study comparing the Stowe Sunlint value with the Cox/Munc Sunlint used by the Clouds Subsystem. (Sun-Mack) • Worked with Mr. Miller to design, code, test, and execute a program to produce simulated VIRS radiances and initiated contact with Mr. Rich Slywczak (TSDIS) to find an algorithm to calculate reflectances from VIRS radiances. (McIntire) • Extended functionality of both the CID_AVHRR and CID_VIRS modules to extend `fat' Cookiedough production. (McIntire) • Worked with Bryan Baum and Chris Currey to derive a daily gridded product from the CloudVis data product suitable for visualization purposes and for examining the differences between the CERES and VINT Cloud Mask algorithms. (Murray) • Began work on a rework of the CloudVis Data Product and the post-processors. (Murray, McIntire) 	
4.2	Murray	Combined with above.	
4.3	Murray	Combined with above.	
4.4	McKinley	<ul style="list-style-type: none"> • Continued to expand and refine scope of QC reporting framework. (McKinley, Miller) • Updated routines to read IES in Release 2 HDF format, validated nadir-scan mode, incorporated header into cookie dough, and removed code to build overlap files, since this is now accomplished in SS4.1-4.3. (McKinley) • Processed first attempt at simulating VIRS radiance data. Mixture of success and problems: successfully created cookie dough and SSF, but had some problems in cloud retrievals due to noncoherence in the simulated data. Contacted VIRS science team to obtain algorithm for albedo and reflectance. (Miller) • Provided Dr Gunther SS4.4 source code and updated flowcharts, architecture, and ATBDs to allow him to study optimization of code. (Miller) • Performed analysis on using water phase as a method to determine cloud layers within a footprint. (Miller) 	

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4.5	Nolan	<ul style="list-style-type: none"> • Downloaded the latest version of EOSView, Version 2.3, and initiated testing this updated version of the software using HDF-EOS HDF files. Attempts to view newly created HDF SSF files with EOSView 2.3 identified additional errors. Continued to work with ECS and their attempt to recreate the identified problems on different platforms. (Franklin) • Modified Subsystem 4.5 and 4.6 code to add a runtime parameter for the subsystem software version. Completed Release 2 modifications in Subsystem 4.6.3, LW Model B software. (Nolan) • Initiated modification of Subsystem 4.5 and 4.6 software to use Toolkit time conversion routines and to produce actual start and stop time on QC report in ASCII UTC. (Nolan) • Generated three files containing SSF data for Kory Priestly. (Nolan) • Tested Subsystem 4.5 and 4.6 code using simulated TRMM/VIRS data. (Nolan) • Completed the revision of the software which writes the SSF footprints in HDF using the new SSF definitions and Science Data Sets (SDS) for the footprint data and Vdatas for the header information. (Franklin) • Initiated work to add Metadata information to the HDF SSF files. (Franklin) • Completed draft sample CERES Release 2 Test Plan. (Franklin, Nolan) • Continued work to create graphic displays for Subsystem 4.6.3 using Data Explorer. (Nolan) • Attended CERES Science Team meeting. (Franklin, Nolan) 	
4.6	Nolan	<ul style="list-style-type: none"> • Combined with above. 	
5.0	Coleman	<ul style="list-style-type: none"> • Successfully processed second set of 24 hour data from clouds. Determined and fixed cause of all nans that occurred. Prepared a table of run times from the 24 hour test. (Coleman, Gupta) • Discussed upcoming modifications to code that may be made prior to DAAC delivery with Fred Rose and began to determine how to implement these changes. (Coleman, Gupta) • Began updating SYN_IO module to reflect release 2 changes to the TSI and SYN products. (Gupta) 	
7.2	Coleman	Combined with above.	

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12.0	Coleman	<ul style="list-style-type: none"> • Began developing code to ingest SSM/I microwave data. (Kizer) • Met with Dave Kratz to discuss questions regarding the SSM/I data. (Coleman, Kizer) • Continued working with Don Cahoon in the development of the aerosol optical depth climatology. (Kizer) • Discussed with Shashi Gupta the implementation of SMOBA and EP-TOMS ozone data. (Coleman, Kizer) 	
7.1	Jimenez	<ul style="list-style-type: none"> • Combined with below 	
8.0	Jimenez	<ul style="list-style-type: none"> • Combined with below 	
10.0	Jimenez	<ul style="list-style-type: none"> • Began modifying code to average the visible optical depth cloud property. (Jimenez) • Wrote code to read and subset an ES-8 flat file and ES-8 HDF-EOS file for time comparison purposes. (Jimenez) • The TSI module was modified according to R2 specifications and sent to the SARB working group. (Raju) • Input routines and prologues were modified to accommodate the new SFC and FSW type definitions. (Raju) • The PostMOA code was modified according to changes in the MOA_IO routine and the TISA nested grid. These changes were tested on thunder. (Raju) 	
6.0	McKoy	<ul style="list-style-type: none"> • Continued updating the type definitions within the main processor. (McKoy) • Continued to work on the implementation of the cloud category algorithm and provided type definitions to Dave Young (NASA) who will provide test data for the algorithm. (McKoy) • Began making modifications to the TISA Gridding software to handle the file boundary problem. (Ayers) 	
9.0	McKoy	Combined with above.	
11.0	Stassi/ Fan	<ul style="list-style-type: none"> • Corrected the view zenith angle calculation. (Stassi, Sun-Mack, Young) • Studying the McIDAS navigational code to use for pixel geolocation of GOES Canadian B1 input. (Stassi) 	

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CERESlib	Stassi/ Fan	<ul style="list-style-type: none"> • Added program to test suites to check the EOF and DA_EOF values in CERESlib. (Stassi) • Modified the polar flags test program to apply to either grid system. (Stassi) • Added program to test suites to check the utc_ascii_to_jd and utc_jd_to_ascii subroutines. (Stassi) • Added to_upper() and to_lower() functions to the string_utilities module. (Stassi) • Corrected the HDF environment variables in the ceres-env.csh start-up scripts so that they are defined relative to the \$PGSDIR directory. (Stassi) • Made correction to the makemake utility so that the F90 compiler will look for user-enhanced versions of CERESlib module information before checking the CERESlib modules. (Stassi) • Ported CERESlib to samantha. Changed the DA_EOF value to 168 on samantha SGI versions only. (Stassi) • Updated the following modified modules in CERESlib: solar_declination, polar_flag, weights, crs_io, sarb_params, ceres_time. (Mitchum, Coleman, Gupta, McKoy, Raju, Stassi) • Added ceres_versions module with cereslib_date function (last CERESlib modification date). (Stassi). • Tested NAG 64-bit F90 compiler on blizzard. Currently checking the SGI/Cray compiler on saisi02. (Flippo, Stassi) • Updated the MCF template to include the required attributes from the metadata workshop. (Fan) • Implemented option to allow users to add product specific attributes, other than the selected 13, to the CERES header written to a nonHDF file. (Fan) • Held metadata meeting to orient programmers to WriteMeta wrapper. Provided a test program to illustrate the calling sequence. (Fan, Detweiler, Harbison) • Helped Sunny implement metadata for CRH update. (Fan) • Responded to inquiry from Linda Sipple of SAGE concerning CERES metadata approach. (Fan) 	
CM	Ayers	No update at this time.	

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IST	Flug	<ul style="list-style-type: none">• Ms. Flug will be out for approximately 8 weeks beginning April 17. In her absence Ms. Nguyen will be her backup. She will be checking on the files from the TRMM simulations that will be taking place over the next several weeks and will report any workstation-related problems to saic+sysadmin@larc. There were no problems during the last simulation, so none are anticipated this time.• Ms. Flug has left comprehensive documentation describing her work and it's status. For example, "The Tropical Rainfall Measuring Mission (TRMM) Instrument Support Toolkit (IST)" document is a fifty-eight page description of the snap files and the TRMM IST Web application that is being developed to provide instrument analysts access to these snap files and planning aid files. The "Snap/BDS Merge Program" document is an eight page description of the Snap/BDS Merge Program and how to run it.	