

**Table 1: October 10, 2001 - System Issues and Status**

Activity	Lead	Status
Processing Strategy	Geier	<p><b>As of 10/5/01</b></p> <p><b>Active processing requests in order of priority are:</b></p> <ul style="list-style-type: none"> <li>- TRMM Edition2A SSF</li> <li>- TRMM Edition1/Transient_Ops2/FailingSensor BDS</li> <li>- TRMM Edition2/Transient_Ops2/FailingSensor ERBElke products</li> <li>- TRMM/Terra Edition1 ES-9, ES-4</li> </ul> <p><b>Processing requests expected to be active within 3 weeks are:</b></p> <ul style="list-style-type: none"> <li>- TRMM Beta2 CRS and FSW (waiting on SARB and TISA gridding deliveries)</li> <li>- TRMM Beta2 SFC/SRBAVG for February 1998 (waiting on TISA gridding delivery)</li> <li>- TRMM Edition2-VIROnly for Sept '98 through July '01 (waiting on Clouds delta and Inversion deliveries)</li> <li>- Terra Beta1 FSW for March 2001 (waiting on TISA gridding delivery)</li> <li>- Terra Beta2 SSF, CRS, and FSW for April and May 2001 (waiting on Inversion, SARB delta, and TISA gridding deliveries)</li> </ul> <p><b>Simmering issues:</b></p> <ul style="list-style-type: none"> <li>- ECMWF MOA vs. DAO MOA</li> <li>- Incorporating MODIS aerosols (10 km and gridded) into CERES Terra products</li> <li>- Naming convention and related issues for Instrument Terra processing including drift correction, daily or monthly spectral response, and generating spectral correction coefficients which correspond to spectral response.</li> </ul>

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Activity	Lead	Status
CM	Ayers	<ul style="list-style-type: none"><li>• See Table 2 for SCCR activity since the last DMT meeting. SCCRs for Subsystems 1-4 that need to be reviewed follow Table 2. (Ayers)</li><li>• Tested and released the following software packages to the ASDC: SARB and TISA Gridding. (Ayers)</li><li>• Currently testing Cloud delta delivery. (Ayers)</li><li>• Posted Delivery Memos on the CERES Configuration Management System Delivery Memos Web page (<a href="http://earth-www.larc.nasa.gov/cerescm/DeliveryMemos/">http://earth-www.larc.nasa.gov/cerescm/DeliveryMemos/</a>) for each of the packages released to the ASDC. (Saunders, Ayers)</li><li>• Finished work on the 'View SCCR' option for CERESlib SCCRs. Only the CERESlib SCCRs submitted by the CERESlib administrator will be displayed when the CERESlib subsystem is selected. (Franklin)</li><li>• Closed SCCRs 290 and 297. (Franklin)</li></ul>

**Table 2: SCCR Activity September 24 at 12:30pm - October 9 at 12:00pm**

<b>SCCR</b>	<b>S</b>	<b>U</b>	<b>A</b>	<b>C</b>	<b>D</b>	<b>SS</b>	<b>Page No.</b>	<b>Comments</b>
290				X		4.5		
297				X		4.5		
298	X	X	X			6 & 9		
299	X					5		
300	X	X	X			4.1-4.4	4	
301	X					4.5-4.6	6	

**S**=Submitted; **U**=Updated; **A**=Approved; **C**=Closed; **D**=Disapproved; **SS**=Subsystem

## CERES Software Configuration Change Request Submittal

Subsystem: Clouds

SCCR Date: 09/26/2001

SCCR Number: 300

Description of Change (Science):

None.

Reason for Change (Science):

None.

Description of Change (non-Science):

Provide separate CC code environment variable to handle MODIS and TRMM data independently for Snow and Ice Processor, TRMM Main Processor, Daily CRH and QC Processor, Monthly QC Processor, and Subset Imager Data.

Reason for Change (non-Science):

To provide the ability to run VIRS and MODIS code independently.

Est. Time to Complete Changes: 1 Day

Planned Delivery Date : 09/28/01

Impact :

Date: 09/26/2001

Status: SUBMITTED

Originator: BROWN, RICKY R. (SAIC)

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#### ADDITIONAL CHANGES TO SCCR NO. 300:

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Description of Change (Science):

none

Reason for Change (Science):

none

Description of Change (non-Science):

The following are the PGE numbers that are impacted by the above change:

CER4.1-4.0P1 Snow and Ice Processor

CER4.1-4.1P1 TRMM Main Processor

CER4.1-4.1P2 Terra Main Processor

CER4.1-4.2P1 Daily CRH and QC Processor

CER4.1-4.3P1 Monthly QC Processor

Reason for Change (non-Science):

n/a

Date & Time: 2001-09-27 15:19:53

Originator : BROWN, RICKY R. (SAIC)

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## **CERES Software Configuration Change Request Submittal**

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Subsystem: Inversion                      SCCR Date & TIME: 2001-10-05 08:54:17                      SCCR No.: 301

Description of Change (Science):

SW and LW Model A surface flux algorithms (surf\_sw\_model\_a.f90 and surf\_lw\_model\_a.f90) will be modified to only process SSF footprints which are at least 99.9% clear

Reason for Change (Science):

Requested by Surface-only Working Group

Description of Change (non-Science):

n/a

Reason for Change (non-Science):

n/a

Est. Time to Complete Changes: 1 day

Planned Delivery Date                      : Delivery to CERESlib on October 5, 1998

Impact    : Will not be used for TRMM Edition2A SSFs

Originator: NOLAN, SANDY K. (SAIC)

**Table 3: October 10, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
1.0	Cooper/ Escuadra	<ul style="list-style-type: none"><li>• Continue working on TRMM data recovery for 2000. (Szewczyk)</li><li>• Continue working on Ada HDF BDS read routines. (Escuadra)</li><li>• Continue working on the new PGE to subset a BDS based on the occurrence of an Internal Calibration event. (Hess)</li><li>• Working on the Three Channel Intercomparison. (Spence)</li><li>• Continue work tracking CERES Terra data arrival at ASDC. (Cooper)</li><li>• Tracked down failed production runs for TRMM. Most of these failures were due to some problem with the Level-0 files. It appears that these problems were due to files being corrupted when staged from the archive during production processing. (Cooper, Hess)</li></ul>	

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SS No.	SS Lead	Status	Problems
2.0	Kizer	<ul style="list-style-type: none"><li>• Discussed with Kory Priestly possible ways to implement time dependent spectral response functions. Looking into the impacts to possibly make spectral correction coefficient code a PGE. Information was relayed to SSF Inversion of impending changes. (Walikainen, Kizer)</li><li>• Zero values found in winter months at poles for Terra ES-4 plots. Discussions with Dave Young reveal he was aware of problem and may have a way to interpolate across default region in future. (Kizer)</li><li>• Continuing to look into the possibilities of producing the ES-9 and ES-4 data products on the CERES 1-deg grid. (Kizer)</li><li>• TRMM-PFM 21 Feb 1998 was reprocessed at the ASDC and found to contain bad data. Problem found with using wrong input file. Waiting for results of re-reprocessing at ASDC. (Walikainen, Kizer)</li><li>• Continuing to determine a systematic approach to validating ES-8 &amp; ES-4 gif files. Developing off-line code to characterize and validate geo-located radiances. Found bit flips not flagged during “3 Channel Consistency Check” in Subsystem 2.0 software. (Walikainen)</li><li>• Continuing to examine the 'production' email generated by the QC checker software. (Walikainen)</li><li>• Continuing to inspect ERBE-like Terra and TRMM output plots and QC reports on the Web. (Walikainen, Kizer)</li></ul>	
3.0	Kizer	Combined with above.	



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SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	<ul style="list-style-type: none"> <li>Finished processing MODIS-Beta1 CloudVis Subset images. (R.Brown)</li> <li>Worked on creating dx net for processing Edition2 CloudVis Subset data and began staging data. (R.Brown)</li> <li>Worked on Cloud Delivery SCCR #300. (R.Brown)</li> <li>TISA results showed clear sky temperatures way too cold over oceans at the mid-latitude. Looked into this. Found and fixed the problems, at least for the hour that Joe Stassi provided. Joe will run several days with the fixed version to determine if there is any other problem. (S.Sun-Mack)</li> <li>Bruce W and Pat M requested CERES/MODIS intercomparisons over ARM sites. MODIS cloud mask and cloud phase are stored as bits of bytes in MOD06 QA_Flags. Lots communications with MODIS team members. Wrote the code to extract cloud mask, cloud phase and 3 cloud effective radius. Run all the intercomparison cases. Displayed the images, intercompared cloud retrieval parameters side by side. (Sun-Mack)</li> <li>Goddard started sending us subsetted MODIS radiance files MOD02SS1 by using Pete Spence's subsetter. Checked three granules (2 day time and 1 night time ) to make sure the granules are subsetted ok. (Sun-Mack)</li> </ul>	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller	<ul style="list-style-type: none"> <li>Provided inputs to SSF Edition2A Data Summary. (Miller)</li> <li>Built daily SSF binary quality control files for Edition2-QC and Edition2A. (Miller)</li> </ul>	

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SS No.	SS Lead	Status	Problems
4.5	Nolan	<ul style="list-style-type: none"> <li>Created README file, SSF subset table - ID 119, and read software for Edition2A entry in the SSF Subset Table on the CERES Inversion Web page, which was updated by Helen Yu. (Nolan)</li> <li>Copied January -March 1998 Edition2A TRMM SSF subset files to lightning directories /CERES/inversion-a/Subset_Ed2A/DAY and /CERES/inversion-a/Subset_Ed2A/NIGHT. (Nolan)</li> <li>Initiated work for next delivery of PGE CER4.5-6.1P1. (Nolan)</li> <li>Learned to run the subsetting post processor from the instructions in the test plan. (Hoppe)</li> <li>Used modules in the CERES library to check validation CERES regions while the subsetting processor ran. (Hoppe)</li> </ul>	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> <li>Prepared program to print out CRS and MOA data in an ASCII format as requested by Tom Charlock. (Coleman)</li> <li>Continuing development of Web page to display CERES Validation Regions. (Coleman)</li> <li>Made delta delivery of a new Sigma table file and ASCII file name generator. (Coleman)</li> </ul>	
7.2	Coleman	Combined with above.	
12.0	Coleman	<ul style="list-style-type: none"> <li>No new updates.</li> </ul>	
7.1	Nguyen	<ul style="list-style-type: none"> <li>Familiarizing with documentations such Theoretical Manual, Test Plan, and Operator's Manual. (Boghossian)</li> <li>Familiarizing with the source code and scripts to create the PCFs. (Boghossian)</li> </ul>	
8.0	Nguyen	<ul style="list-style-type: none"> <li>No new updates.</li> </ul>	

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SS No.	SS Lead	Status	Problems
10.0	Nguyen	<ul style="list-style-type: none"> <li>• Tested new GGEO for region 35854 since the monthly mean clear-sky GGEO LW flux is greater than 400 W/m<sup>2</sup>. Sent Dave Young the resulting plots. (Nguyen)</li> <li>• Re-plotted 1-minute average surface flux data with the new set range 0-1100 W/m<sup>2</sup> to compare the match points of model A and model B. (Nguyen)</li> <li>• Wrote program to use the satellite overpass time as a mid point of the 30 minute time interval to average the ground data. Plotted ground data and SSF data for this new method of averaging. (Nguyen)</li> </ul>	
6.0	Raju	<ul style="list-style-type: none"> <li>• Modified run scripts to test and evaluate CER6.1, CER6.2, and CER6.3 processors. (Raju, Stassi)</li> <li>• Updated Tar scripts. These scripts are used in Subsystem delivery to CM. (Stassi)</li> <li>• Updated HDF write routines for angular scene parameters in Subsystem 6 to reflect the ADM changes and be consistent with the Subsystem 9 process. Updated Cloud adjustment parameter range values in the range checking input files. (Raju)</li> <li>• Tested Subsystem 6 process on Thunder and Samantha using 12 hours of input data. (Stassi, Raju)</li> <li>• Updated Test plan and Operator's manual documents and sent them to CM. (Raju, Stassi)</li> <li>• Subsystem 6 was delivered to CM. (Raju, Stassi)</li> </ul>	
9.0	Raju	<ul style="list-style-type: none"> <li>• Tested Subsystem 9 process on Thunder and Samantha using 12 hours of input data. (Stassi, Raju)</li> <li>• Subsystem 9 was delivered to CM. (Raju, Stassi)</li> </ul>	
11.0	Stassi	<ul style="list-style-type: none"> <li>• Compiled GGEO intercomparison code with NAG Fortran compiler to identify unnecessary variable declarations and other extraneous code. These were removed. (Stassi)</li> <li>• Still trying to determine what is causing the problem in the clearsky LW values. Found a problem in how the GEO data is processed through the Clouds code. This problem was corrected and a six day test of METEOSAT data was run. The output of this test is still be evaluated. (Sun-Mack, Nguyen, Stassi)</li> </ul>	

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CERESlib Stassi/Ayers		<ul style="list-style-type: none"><li>Updated the SCF versions with modified modules, surf_lw_model_a.f90 and surf_sw_model_a.f90. (Nolan, Stassi)</li><li>Attempted to compile CERESlib on linux cluster. Successfully created cereslib.a file after some code contortion, but ran into a road block trying to create the data_products.a library. Specifically, the pgf90 compiler would not allow the PARAMETER definition of a structure containing an array. The module which surfaced this problem was ssf_typdef.f90. I was not able to find a work around to the problem, so I recommended that another Fortran 90 compiler be sought. A NAG compiler option for linux is being investigated. (Stassi)</li></ul>	
IST	Flug	<ul style="list-style-type: none"><li>No new updates.</li></ul>	