

**Table 1: June 20, 2001 - CM Status**

SS No.	SS Lead	Status	Problems
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 the Cloud delivery and released it to the ASDC. (Ayers)</li><li>• Delivered the latest version of the SSF sample read package to the ASDC. (Ayers)</li><li>• Currently testing CERESlib and Inversion. (Ayers)</li><li>• Updated the Delivery Schedule and posted it on the CERES Configuration Management (CM) Schedules Web page (<a href="http://earth-www.larc.nasa.gov/cerescm/schedules/">http://earth-www.larc.nasa.gov/cerescm/schedules/</a>). (Ayers, Franklin)</li><li>• Updated the File Naming Conventions table and posted it on the CERES CM Naming Conventions Web Page (<a href="http://earth-www.larc.nasa.gov/cerescm/NamingConventions/">http://earth-www.larc.nasa.gov/cerescm/NamingConventions/</a>). (Ayers, Franklin)</li><li>• Attended a class on “How to Make Your Web Site Section 508 Compliant.” (Franklin and Saunders)</li><li>• Modified the CM Home Page to include the dates that items are posted and updated. (Franklin)</li><li>• Modified the CM Home Page to include links to the latest Release 3 Delivery Memos and to a Delivery Procedures page. (Franklin)</li><li>• Posted the Delivery Procedures and Delivery Memos on the web. (Franklin)</li><li>• Initiated work on making the CM Web site 508 compliant by adding titles to the images. (Franklin)</li><li>• Modified the CM HTML files to change all web page references to be relative paths instead of absolute paths. (Franklin)</li></ul>	

**Table 2: SCCR Activity June 4 at 11:40am - June 18 at 11:30am**

<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>
259				X		4.5-4.6		
265				X		4.5-4.6		
266				X		CERESlib		
267	X		X			5.0		
268	X					4.5-4.6	3	
269	X	X				4.5-4.6	4	
270	X		X			CERESlib		

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

## CERES Software Configuration Change Request Submittal

=====

Subsystem: Inversion	SCCR Date & TIME: 2001-06-08 09:33:36	SCCR No.: 268
----------------------	---------------------------------------	---------------

\*\*\* All changes described in this SCCR were made in CERESlib. \*\*\*

### Description of Change (Science):

Modify CERESlib modules:

1. surf\_typdef.f90 - Add clear-sky downward surface flux parameter, sfc\_inso\_clr, to surf\_type structure.
2. surf\_sw\_model\_b.f90 - Compute and output clear-sky downward surface flux parameter, sfc\_inso\_clr. Change Staylor SW flux algorithm to use sfc\_inso\_clr.

### Reason for Change (Science):

Changes requested by Surface Flux Working Group.

Output parameter, sfc\_inso\_clr, required by TISA subsystems

### Description of Change (non-Science):

N/A

### Reason for Change (non-Science):

N/A

Estimated Man Power: 1 day

Schedule: Delivery to CM for CERESlib update 06/11/2001

Impact: Subroutines also used by TISA subsystems

Originator: NOLAN, SANDY K. (SAIC)

## CERES Software Configuration Change Request Submittal

Subsystem: Inversion

SCCR Date: 06/08/2001

SCCR Number: 269

### Description of Change (Science):

1. Modify PGE CER4.5-6.1P1 to use DRAFT TRMM ADMs. If TOA fluxes cannot be created for a footprint, then a CERES default value will be stored.
2. Modify PGE CER4.5-6.1P1 to replace the Window Channel (WN) unfiltered radiance parameters with values in Watts per square meter per steradian and the WN TOA and WN surface flux parameters with values in Watts per square meter.
3. PGE CER4.5-6.1P1 was modified to work with cloud algorithm change that allows a default clear sky fraction on a footprint.
4. The surface fluxes will be created using modified versions of the surface fluxes modules in CERESlib. (See SCCRs 258 and 268)
5. PGE CER4.5.2P1 was modified to add cone angle (SSF 14), clock angle (SSF 15) and along-track angle (SSF 18) to SSF subset parameters and to improve precision of field-of-view time on the SSF subset

### Reason for Change (Science):

1. CER4.5-6.1P1 will use DRAFT TRMM ADMs
2. SSF type definition modified
3. Cloud algorithm modified
4. Surface flux algorithm modified by Surface Flux Working Group
5. SSF subset FOV structure modified by ADM Working Group

### Description of Change (non-Science):

N/A

### Reason for Change (non-Science):

N/A

Est. Time to Complete Changes: 1 week

Planned Delivery Date: Scheduled delivery to CERES CM on June 15, 2001

Impact: SARB and TISA have been notified of changes

Date: 06/08/2001

Status: SUBMITTED

Originator: NOLAN, SANDY K. (SAIC)

=====

ADDITIONAL CHANGES TO SCCR NO. 269:

=====

Description of Change (Science):

LW and WN flux module modified to identify DRAFT LW and WN ADM types

Reason for Change (Science):

DRAFT LW and WN ADM type will be recorded on each SSF footprint

Description of Change (non-Science):

n/a

Reason for Change (non-Science):

n/a

Date & Time: 2001-06-12 15:27:08

Originator: NOLAN, SANDY K. (SAIC)

**Table 3: June 20, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
1.0	Cooper/ Escuadra	<ul style="list-style-type: none"> <li>Continuing Release 4 integration testing and data verification. BDSS changes have been added to code and are being tested. (Cooper, Escuadra)</li> <li>Working on updates to Release 4 for Instrument. (Hess)</li> <li>Working on the subsetting of the new MODIS subset data. (Spence, Szewczyk)</li> <li>Continue work to verify Terra operations. (Weaver)</li> </ul>	
2.0	Kizer	<ul style="list-style-type: none"> <li>Began efforts to update ERBE-like code with elimination of duplicate include files. (Kizer)</li> <li>Updated the Modification History Tables in the ES-8, ES-4, and ES-9 Description Abstracts. (Kizer)</li> <li>Suggested corrections to readme files supplied with the ERBE-like HDF read packages made available by ASDC. (Kizer)</li> <li>Modified ES-8 Data Products pages and Collection guide to reflect proper array order. (Kizer)</li> <li>Completed a Three Channel Consistency Check module for the ERBE-like software. (Walikainen)</li> <li>Implemented the Three Channel Consistence Check module in the ERBE-like inversion software. Counters were added and recorded with new entries in the QC Report file. Tested software with known bit flips and sunglints. (Walikainen, Kizer)</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.	

**Table 3: June 20, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	<ul style="list-style-type: none"><li>Continued to work on the DX Batch program. (R.Brown)</li><li>Worked on Clouds Delivery for SCCR #262. (R.Brown, Sun-Mack)</li><li>Worked on MODIS reader to accommodate new changes in MODIS subset file. Modified MODIS interface to match geolocation (1km resolution) with radiance (2km resolution), to introduce new channels, to find correct geolocation and radiance pair. Coding for all of above is finished, but not compiled/tested/debugged/validated yet. (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>Verified that the subset HDF SSF data files received by Dr. Stowe were correct. (Miller)</li><li>Investigated cloud fraction dependence on viewing zenith angle by pressure layers using April 1998 subset data. Hard to separate footprint size changes from measurements. (Miller)</li><li>Prepared images of SSF data for International Geoscience and Remote Sensing Seminar (IGARSS) meeting. (Miller)</li><li>Assisted in delivery. (Miller)</li><li>Reviewed Data Summary for TRMM Beta2. (Miller)</li></ul>	

**Table 3: June 20, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
4.5	Nolan	<ul style="list-style-type: none"> <li>Updated the SSF Sample Read Package to match the June 1, 2001 Inversion delivery and delivered it to CERES CM on June 15, 2001. (Franklin)</li> <li>Updated the ssf2hdf code to change the range of the SSF_ID on the SSF_header Vdata to be 117. (Franklin)</li> <li>Updated CERESlib module, surf_typdef, to add clear-sky downward SW flux parameter, sfc_inso_clr. Updated CERESlib module, surf_sw_model_b, to calculate sfc_inso_clr for use by TISA subsystems. Delivered updated source files and README files to CERESlib on June 11, 2001. (Nolan)</li> <li>Updated Draft ADM code to record LW and WN ADM types on SSF footprints. Corrected and tested the CERES Shortwave ADM algorithm. (Nolan)</li> <li>Completed work to add updated SW and LW ADM modules to PGE CER4.5-6.1P1 and to meet new requirement to no longer compute unfiltered radiances or TOA and surface fluxes for the Window channel as per micron. (Nolan)</li> <li>Ran tests to determine why April 9, 1998 hours 6, 8, 10, 11, 17 &amp; 19 bombed using interim SSFs from the Cloud Subsystem's upcoming delivery. Array, area_ov is no longer guaranteed to have at least one non-default number per FOV. Modified the code to fix the problem, and verified the changes by rerunning the hours that bombed. (Nolan, Franklin)</li> <li>Added 3 new parameters, cone angle (SSF 14), clock angle (SSF 15) and along-track angle (SSF 18) to the SSF subset structure. Changed time parameter, fovtime, to 8-byte real. Updated PGE CER4.5-6.2P1 to use this updated SSF subset structure. (Nolan)</li> <li>Created and tested tar files containing PGEs CER4.5-6.1P1 and CER4.5-6.2P1 and new comparison data. Delivered tar files to CERES CM on June 15, 2001. (Nolan and Franklin)</li> <li>Continued work to create a program which will create a binary SSF from an SSF HDF file. (Walter)</li> </ul>	
4.6	Nolan	Combined with above.	



**Table 3: June 20, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
5.0	Coleman	<ul style="list-style-type: none"> <li>• Successfully tested recently-made changes and for upcoming delivery. (Coleman)</li> <li>• Began preparing documentation and environment for testing prior to delivery to CM. (Coleman)</li> <li>• Working on web pages to show SARB processing results (what has been processed, plots from QA report data, etc.). (Caldwell)</li> </ul>	
7.2	Coleman	Combined with above.	
12.0	Coleman	<ul style="list-style-type: none"> <li>• Provided sample code to Greg Osterman (JPL) for decoding ECMWF data (now that all the correct permissions are in place). (Caldwell)</li> </ul>	
7.1	Nguyen/ Raju	<ul style="list-style-type: none"> <li>• No new updates.</li> </ul>	
8.0	Raju/ Nguyen	<ul style="list-style-type: none"> <li>• No new updates.</li> </ul>	
10.0	Nguyen/ Raju	<ul style="list-style-type: none"> <li>• Updating codes to add cloud fractions and effective pressures for layer cloud and exclude the effective pressures for column cloud in the time series plot data file. Modifying the time series IDL program for the new update. (Nguyen)</li> <li>• Updated to change emittance to 1 when it's night time. (Nguyen)</li> <li>• Searched for the cause of the significant difference of the SSF cosine solar zenith angle and the ground cosine solar zenith angle. Plotted to include standard deviation in the plots and to compare SSF and ground data for one-minute and 30-minute time average for all sites. (Nguyen)</li> </ul>	
6.0	Stassi/ Raju/ Nguyen	<ul style="list-style-type: none"> <li>• No new updates.</li> </ul>	
9.0	Stassi/ Raju/ Nguyen	<ul style="list-style-type: none"> <li>• Added imager data to SFC record. (Raja)</li> <li>• Replaced column cloud values with layered cloud values on SFC. (Nguyen, Stassi)</li> </ul>	
11.0	Stassi/Fan	<ul style="list-style-type: none"> <li>• Updated GGEO PCF generator scripts to include additions needed for latest Clouds subsystem changes. (Stassi)</li> </ul>	

**Table 3: June 20, 2001 - Subsystem Status**

SS No.	SS Lead	Status	Problems
CERESlib Stassi/Ayers		<ul style="list-style-type: none"><li>• Corrected problem with last_day.csh script. (Stassi)</li><li>• Updated the following modules: surf_typdef.f90 and surf_sw_model_b.f90. (Nolan, Stassi)</li><li>• CERESlib was redelivered to CERES CM. (Stassi)</li></ul>	
IST	Flug	<ul style="list-style-type: none"><li>• No new updates.</li></ul>	