

**Table 1: November 22, 2000 - CM Status**

SS No.	SS Lead	Status	Problems
CM	Ayers	<ul style="list-style-type: none"><li>• SCCRs submitted since last DMTM: 231-234;</li><li>• SCCRs updated since last DMTM: 230 &amp; 231; SCCRs to be reviewed for approval (Subsystems 1-4): 230 &amp; 231 (see following pages). (Ayers)</li><li>• Tested and released the CERESlib and Clouds delivery packages to the Langley DAAC. (Ayers)</li><li>• Updated the Delivery Schedule and posted it on the CERES CM home page. (Ayers, Franklin)</li></ul>	

## CERES System Configuration Change Request Submittal

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Subsystem: ERBElite   SCCR Date: 10/23/2000   SCCR Number: 230

Description of Change (Science):

1. No Science changes made.

Reason for Change (Science):

1. No Science changes made.

Description of Change (non-Science):

1. Removed the Makefile command from the hdf comparison script.  
Created a script to compile all test\_suite software at the beginning of the test procedures.
2. Renamed Snow PGE PCF generator script to the same naming conventions as the Inversion PGE PCF generator scripts.
3. Updated gen\_pcf scripts to include "# END METADATA ..." line in accordance with SEC and DAAC.
4. Standardized the User Runtime Parameters for all ERBE-like PGEs.
5. Added code to write default data to page 23 of QC Report file when no data for that hour is processed.
6. Adding the QC Report Checker Software. It contains additional functions as requested by the Science Team to help catch problems that may occur in the inversion data. Previous monthly QC Report files are accessed for averaging over extended data periods.
7. Modified gen\_pcf.CER2.2 script to contain previous monthly qc report file names as needed by the QC Report Checker Software.
8. Modified monthly qc file daily updating script to remove the lock, ".lck", file created during processing.

Reason for Change (non-Science):

1. Compilation is done at the beginning of the test procedures prior to executing any programs. This was done at the request of the DAAC SSI&T team.
2. The renaming of the Snow PGE PCF generator script was done to standardize all PGE PCF generator script names.
3. The "# END METADATA ..." line added to all PCF files serves as an indicator to the DAAC epilogue script that the endof

- the user runtime parameter section has been reached.
4. All required user runtime parameters, ie. SamplingStrategy, CERDataDateYear, CERDataDateMonth, use the same logic ID's throughout the ERBE-like PGE's.
  5. Originally, when no data was processed for a particular hour, data for that hour was omitted. To avoid confusion, default data is now supplied.
  6. The QC Report Checker Software will check the data in the Inversion QC Report using statistical analysis, range checking, searches for overflow values and NaNs, and more.

Several tests can be performed on the data for which ERBE-like personnel are notified by email when any of these tests fail.

7. The PCF can only list files that exist. The script checks to see if the previous month is within the data time period for that instrument and whether the Monthly QC Report file exist before listing it in the PCF.
8. The script removes the file to prevent a zero length file from existing after processing the PGE.

Estimates Man Power: N/A

Schedule : To be delivered to CM on or before October 27, 2000.

Impact : None.

Date: 10/23/2000 Status: SUBMITTED

Originator: KIZER, EDWARD A. (SAIC)

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ADDITIONAL CHANGES TO SCCR NO. 230:

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Description of Change (Science):

N/A

Reason for Change (Science):

N/A

Description of Change (non-Science):

9. Modified QC Checker script "QCchecker.csh" email distribution list to include Richard Green (RAB).

Reason for Change (non-Science):

9. Email distribution list now includes Richard Green (RAB).

Date & Time: 2000-11-16 16:28:51

Originator : KIZER, EDWARD A. (SAIC)

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## CERES System Configuration Change Request Submittal

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Subsystem: Clouds    SCCR Date: 11/13/2000    SCCR Number: 231

### Description of Change (Science):

(1) Added N<sub>2</sub>O absorption to Correlated K calculation.

(2) Improved surface emissivity maps.

(3) Improved 0.6 um model.

(4) Added TISA night time cloud retrieval.

(5) Modified 1.6 um ratio model.

(6) Improved CERES mask algorithm.

### Reason for Change (Science):

General improvements/modifications to algorithms made in response to science team member requests.

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

(1) An error was found in Subset processing, which caused bad exit code. Modified the code to fix this error.

(2) In previous delivery, monthly QC files did not produce meta data file. This delivery will correct this.

(3) In previous delivery, some .met files did not use CERES lib defaults. This delivery corrects this.

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

General changes made to code to comply with requirements and to enhance other features. Errors were corrected as needed.

Estimates Man Power: Done

Schedule : Nov. 15, 2000

Impact : N/A

Date: 11/13/2000      Status: APPROVED

Originator: MURRAY, TIMOTHY D. (SAIC)

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ADDITIONAL CHANGES TO SCCR NO. 231:  
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Description of Change (Science):  
No additional

Reason for Change (Science):  
None

Description of Change (non-Science):  
Detection of no imager scan lines within a file to prevent further processing. Corrected call to Write\_Output in Failed\_Execution to handle granule number.

Reason for Change (non-Science):  
Both allow control shutdown of code for foreseen conditions.

Date & Time: 2000-11-15 11:23:38  
Originator : MILLER, WALTER F. (SAIC)

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**Table 2: November 22, 2000 - Subsystem Status**

SS No.	SS Lead	Status	Problems
1.0	Cooper/ Escuadra	<ul style="list-style-type: none"><li>• Working to validate new Terra data products using March 17th as our test date. (Instrument Team)</li><li>• Continuing analysis of the TRMM/Terra data. (Hess, Spence)</li><li>• Continuing analysis of TRMM stow data for March and April to determine if the noise signal is staying consistent. Results are still being studied. Each try at determining consistency results in more questions. (Spence)</li><li>• Continuing work on post-processor to read a TRMM BDS and correct the radiances for crosstalk. This is being done in conjunction with the analysis of the stow data for TRMM March and April 2000. (Szewczyk)</li><li>• Continuing work to add the ability to have Solar Geometry data on the BDSSs. Output product generation and scan processing need to be revised. (Escuadra)</li><li>• Working to gather data for previous data months for CERES Percent Usable Data latency reports. This is a time consuming process due to the late receipt of Terra data for data months early in 2000. (Cooper)</li><li>• Continued TRMM/Terra operations/analysis support. (Weaver)</li></ul>	

**Table 2: November 22, 2000 - Subsystem Status**

SS No.	SS Lead	Status	Problems
2.0	Kizer	<ul style="list-style-type: none"><li>• Met with Stephanie Weckmann to further discuss carrying on her work with ERBE-like data validation upon her departure. (Kizer)</li><li>• Continuing to look at processing ERBE data run through the CERES ERBE-like Subsystem. Ran 19841109 ERBS data and compared QC report data to that produced during ERBE-reprocessing. (Kizer)</li><li>• Continuing to work on the Spectral Correction Coefficient algorithm. Examining code for further enhancements. (Walikainen)</li><li>• Continuing to tweak the ranges and sigma levels used in the statistical analysis routines for each data value tested. (Walikainen)</li><li>• Modifying existing IDL plotting software to ingest ES4 and ES9 HDF file. (Kizer)</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 2: November 22, 2000 - Subsystem Status**

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	<ul style="list-style-type: none"><li>• Participated Javascript and Web Page Design training. (R.Brown)</li><li>• Ran Edition 1 QC results. Tested and Debugged QC Gif Generator to add new functionality. Set up corresponding web pages on development server for preliminary viewing. Worked on fixing problem with data orientation on QC maps. (R.Brown)</li><li>• Ran 4 months of 1986 dx data. Produced 12 months of emittance maps. These maps were validated (Chen).</li><li>• Modified monthly QC so that it will produce .met files. Thanks to Joe Stassi for writing the wonderful c-wrapper for Cloud subsystem. This was tested and validated. (Stassi/Sun-Mack)</li><li>• Assisted Lin Chamber's request on CloudVis visualization over ARM SGP and TWP sites. (Sun-Mack).</li><li>• Dr.Qilong Min had requested some ARM SGP CERES results so that he can do validation independently. Communicated with him and assisted him on the information he requested. (Sun-Mack).</li><li>• Extracted cloud retrieval information from CloudVis files for all 8 month of VIRS data over ARM SGP. Posted the results on the web. Communicated with Dong about further validation. (Sun-Mack).</li><li>• Cloud Subsystem Edition 1 delivery! Thanks to Tim Murray. Cloud Subsystem could not had delivered on time without him! (R.Brown/Sun-Mack/Tim Murray)</li></ul>	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	

**Table 2: November 22, 2000 - Subsystem Status**

SS No.	SS Lead	Status	Problems
4.4	Miller	<ul style="list-style-type: none"> <li>• Worked with Ms. Hopson, Langley DAAC, on problems during production of clouds and convolution. The January 1998 subset files have been completed. There were approximately 200 hours that failed. Production has been going smoothly for ValR5 April 1998 processing. (Miller)</li> <li>• Reviewed Emails and ASCII Quality Control summaries from production. (Miller)</li> <li>• Updated Operations Manual. (Miller)</li> <li>• Delivered code to CM on Wednesday, Nov 15, 2000. (Miller)</li> <li>• Corrected a segmentation fault caused by having a loop limit less than the start which occurs when there were no subsets within an hour. Tested changes before delivery. (Miller)</li> </ul>	
4.5	Nolan	<ul style="list-style-type: none"> <li>• Continued modifications to the SSF HDF code to include a CERESlib module, so SARB can use it in their HDF code. (Franklin)</li> <li>• Continued work on PGE CER4.5-6.2P1. Modified SSF Subset comparison software for type definition 117. Continued testing SSF Subset software. (Nolan)</li> </ul>	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> <li>• Reviewed changes made to Main-Processor to enable use of the monthly surface albedo map with Fred Rose. Now implementing the last of the changes in the F90 code and the PCF generation scripts. (Coleman, Caldwell)</li> </ul>	
7.2	Coleman	Combined with above.	
12.0	Coleman	<ul style="list-style-type: none"> <li>• Worked with Fred Rose to evaluate ECMWF+GEOS3-based MOA data. Corrected a minor regridding problem affecting profile values for altitudes above 10 hPa, and coordinated a delivery date with CM. (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>	

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SS No.	SS Lead	Status	Problems
10.0	Nguyen/Raju	<ul style="list-style-type: none"> <li>Completed validating SW surface fluxes. Validating LW surface fluxes with the available GGEO cloud parameters.</li> <li>Studying the RMS for different time averaging of the data. Concentrating on the Central Facility site, studying the time history plots to eliminate data at the cloudy times for downwelling SW surface flux.</li> <li>Compared the original 30 minute averaged SW surface flux measured data (from Tim Alberta) and the current averaged data. Reported the differences to Dave Rutan.</li> </ul>	
6.0	Stassi/Nguyen	<ul style="list-style-type: none"> <li>Combined with SS 9.0</li> </ul>	
9.0	Stassi/Nguyen	<ul style="list-style-type: none"> <li>Changed subsystem files from mckoy to stassi. (McKoy)</li> <li>Preparing for processing April 1998 in validation. (Stassi, Nguyen)</li> </ul>	
11.0	Stassi/Fan	<ul style="list-style-type: none"> <li>Processed all four satellites for the month of February 1998. (Stassi)</li> <li>Updated GGEO web plot programs to display the three new cloud property gif files. (Flug)</li> <li>Writing new module to handle intercomparison calibration coefficients. (Stassi)</li> <li>Actively working with an SGI technical representative to resolve the lib-4211 ERROR message that occurs during processing. Some progress in this area. (Stassi)</li> </ul>	
CERESlib Stassi/Ayers		<ul style="list-style-type: none"> <li>Delivered CERESlib to CM with new meta_write wrapper routines and other previously mentioned changes to CERESlib. (Stassi)</li> <li>Added two routines to the string_utilities.f90 module: CtoFstring() and FtoCstring().</li> <li>Added a routine to the surfmap_io.f90 module to return maps on a 1-DEG grid rather than on a 10-MIN grid. (Stassi)</li> </ul>	

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SS No.	SS Lead	Status	Problems
IST	Flug	<ul style="list-style-type: none"><li>Added the Moon Azimuth and Elevation Angles and the Moon Entry/Exit Times to the CERES Operations Products Web page. Added the capability to download a tab-delimited version of the moon and sun azimuth and elevation angle files. Modified code to use the new ftp password access to toronto. Since toronto is no longer an anonymous ftp server, it was also necessary to replace the "ftp://..." references with code which downloads and displays the reports. Completed a program which merges the moon and sun azimuth and elevation angle files. The results can be displayed in the browser window or downloaded as a tab-delimited file which can then be viewed in a spreadsheet program.</li></ul>	