

Table 1: September 26, 2001 - System Issues and Status

Activity	Lead	Status
Processing Strategy	Geier	<ul style="list-style-type: none"> As of 9/24/01 Active processing requests in order of priority are: <ul style="list-style-type: none"> Terra Edition1 Instrument and ERBElke processing for 2001 expect this to finish up shortly Terra Beta1 and Beta1-overARM CRS using input SSF with same production strategy expect this to finish up shortly Terra Beta2 SSF and CRS (using MODIS V003 as input) for April and May 2001 SSF binary subsetter (Norman's subsetter) promoted 9/21 still waiting on Clouds Terra delivery for V003 MODIS to finish SSI&T TRMM Edition2-VIRSonly SSF using simulated IES input SSF binary subsetter (Norman's subsetter) promoted 9/21 TRMM Edition1/Transient-Ops2/Failing Sensor Instrument and ERBElke processing Processing requests expected to be active within 3 weeks are: <ul style="list-style-type: none"> TRMM Edition2A SSF using Inversion-only PGE and TRMM Edition2-QC SSF as input target date for being in production is 9/28 when this delivers it becomes the highest priority TRMM Beta2 CRS using TRMM Edition2A SSF as input all 9 months of TRMM no new code delivery TRMM Beta2 SFC/SRBAVG using TRMM Edition2A SSF as input Feb '98 is only month to be run no new code delivery TRMM Beta1 SFC/SRBAVG most likely to be deleted from archive Simmering issues: <ul style="list-style-type: none"> processing BetaX FSW for all CRS data sets in or almost in production ECMWF MOA vs. DAO MOA Incorporating MODIS aerosols (10 km and gridded) into CERES Terra products Naming convention and related issues for GGEO and Instrument outputs which will be produced twice, initially without correction and then with correction

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CM	Ayers	<ul style="list-style-type: none">• 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)• Tested and released the following software packages to the ASDC: CERESlib and Inversion. (Ayers)• Posted Delivery Memos on the CERES Configuration Management System Delivery Memos Web page (http://earth-www.larc.nasa.gov/cerescm/DeliveryMemos/) for each of the packages released to the ASDC. (Saunders, Ayers)• Continued work to the SCCR viewing code to only display those CERESlib SCCRs submitted by the CERESlib administrator when viewing the CERESlib SCCRs. Currently, the SCCRs submitted by Subsystem Personnel for CERESlib module updates/additions are also listed. (Franklin)• Closed CERESlib SCCR 296 and associated SCCRs 294 and 286. (Franklin)

Table 2: SCCR Activity August 27 at 2:00pm - September 24 at 12:30pm

SCCR	S	U	A	C	D	SS	Page No.	Comments
284		X				4.1	4	
286			X			4.6		Inversion changes in CERESlib
288				X		9.0		
290		X	X			4.5		
291	X		X	X		5.0		
292	X		X	X		9.0		
293	X	X	X		X	CERESlib		
294	X		X			4.4	6	Cloud changes in CERESlib
295	X		X	X		1.0	7	
296	X	X		X		CERESlib		
297	X		X			4.5	8	

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

CERES Software Configuration Change Request Submittal

Subsystem: Clouds4.1

SCCR Date: 08/07/2001

SCCR Number: 284

Description of Change (Science):

None

Reason for Change (Science):

None

Description of Change (non-Science):

New MCF files are delivered for SSFI, FQC, and FQCI to handle GRings with more than 72 points.

Reason for Change (non-Science):

Due to the complicated pattern of a polar orbiting satellite, more GRing points are required then TRMM. The SSF header information is being corrupted for Terra processing.

Est. Time to Complete Changes: 2 hours

Planned Delivery Date : 08/07/2001

Impact : Allow VIRS Only processing to start, prevent problems in SS4.5-4.6.

Date: 08/07/2001

Status: APPROVED

Originator: MILLER, WALTER F. (SAIC)

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ADDITIONAL CHANGES TO SCCR NO. 284:

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Description of Change (Science):

None

Reason for Change (Science):

None

Description of Change (non-Science):

Implement new GRing module from CERESlib (SCCR 294)

Reason for Change (non-Science):

The CERESlib module contains the latest corrections.

Date & Time: 2001-08-31 12:34:57

Originator : MILLER, WALTER F. (SAIC)

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Description of Change (Science):

Use the MODIS 0.47 micrometer channel when available on even days.

Reason for Change (Science):

Provide scientists with some experience using this channel.

Description of Change (non-Science):

Implement MODIS subset reader (2x2) for Version 1 and 3.

Reason for Change (non-Science):

Version 1 (before April 2001) and Version 3 data needs to be processed.

Date & Time: 2001-08-31 13:21:19

Originator : MILLER, WALTER F. (SAIC)

CERES Software Configuration Change Request Submittal

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

Subsystem: Clouds4.4 SCCR Date & TIME: 2001-08-31 12:37:21 SCCR No.: 294

Description of Change (Science):
None

Reason for Change (Science):
N/A

Description of Change (non-Science):
The module that produces the geolocation polygon (GeoPoly) for the EOS metadata will be moved to CERESlib. This module has also been modified to correct previous errors in determining GeoPoly for Terra. These changes include internally working from -180 to 180 instead of 0 to 360, slightly offsetting the longitude when -180 is needed, and better method to handle data gaps.

Reason for Change (non-Science):
Due to errors in approximately 30 percent of the Edition2-QC GeoPoly, inversion needs to recreate the GeoPoly instead of reading them from the SSFB header. ASDC works with from -180 to 180 when inputting GeoPoly. By working from this perspective, less problems should be encountered. The CERESlib wrapper was converting 360 to 0 thereby closing the GeoPoly. Other problems due to missing data were discovered with more testing.

Est. Time to Complete Changes: 80 hours
Planned Delivery Date : September 6, 2001
Impact : Needed by inversion for TRMM Edition2 processing

Originator: MILLER, WALTER F. (SAIC)

CERES Software Configuration Change Request Submittal

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Subsystem: Instrument SCCR Date & TIME: 2001-09-04 09:26:54 SCCR No.: 295

Description of Change (Science):

Fix error in determining sample based offsets for count conversion.

Reason for Change (Science):

An error was discovered that caused all offsets to be set to zero, instead of the proper values.

Description of Change (non-Science):

N/A

Reason for Change (non-Science):

N/A

Est. Time to Complete Changes: Changes complete

Planned Delivery Date : 09/07/2001

Impact : All Terra 2001 data must be reprocessed

Originator: COOPER, DENISE L. (SAIC)

CERES Software Configuration Change Request Submittal

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Subsystem: Inversion4.5 SCCR Date & TIME: 2001-09-20 11:09:00 SCCR No.: 297

Description of Change (Science):

(The following changes were originally submitted in SCCR 290 which was later modified to include only PGE 4.5-6.2P1)

1. Modify PGE CER4.5-6.3P1 to use Edition2 SW, LW, and WN ADMs WN unfiltered radiance in SSF subsets.
2. PGE CER4.5-6.3P1 will use updated SW surface flux model B module from CERESlib
3. CER4.5-6.3P1 will use CERESlib Gring correction module.

Reason for Change (Science):

1. New SW, LW, and WN ADMs and modules will be provided by Science Team
2. New SW surface flux model B module provided to CERESlib
3. Grings need to be corrected for Edition2 SSFs.

Description of Change (non-Science):

n/a

Reason for Change (non-Science):

n/a

Est. Time to Complete Changes: Completed

Planned Delivery Date : September 24, 2001

Impact : no impact on other subsystems

Originator: NOLAN, SANDY K. (SAIC)

Table 3: September 26, 2001 - Subsystem Status

SS No.	SS Lead	Status	Problems
1.0	Cooper/ Escuadra	<ul style="list-style-type: none">• Continue working on TRMM data recovery for 2000. (Szewczyk)• Continue working on Ada HDF BDS read routines. (Escuadra)• Continue working on the new PGE to subset a BDS based on the occurrence of an Internal Calibration event. (Hess)• Working on the Three Channel Intercomparison. (Spence)• Continue work tracking CERES Terra data arrival at ASDC. (Cooper)	

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SS No.	SS Lead	Status	Problems
2.0	Kizer	<ul style="list-style-type: none"> • Zero values found in winter months at poles for Terra ES-4 plots. Zero data is correct. Default data above poles is bad. Adjusting program to eliminate default values for SW at night and continue with not using night data in averaging. (Kizer) • Continuing to look into the possibilities of producing the ES-9 and ES-4 data products on the CERES 1-deg grid. (Kizer) • Final processing of CLAMS 2001 data has been completed. The ES-8 subsetted HDF files for Dr. Martial Haeffelin and the CLAMS experiment were made available on thunder and lposun. (Kizer) • TRMM-PFM 21 Feb 2001 was reprocessed at the ASDC and found to contain bad data. Consulted with instrument team on possible problems. (Walikainen, Kizer) • Continuing to determine a systematic approach to validating ES-8 & 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) • Created script to aid QC Report analysis by porting data into Excel Spreadsheets. This was created to help in analyzing flagged Night-time SW averaged offsets. (Walikainen) • Continuing to examine the 'production' email generated by the QC checker software. (Walikainen) • Continuing to inspect ERBE-like Terra and TRMM output plots and QC reports on the Web. (Walikainen, Kizer) 	
3.0	Kizer	Combined with above.	

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4.1	Sun-Mack	<ul style="list-style-type: none">Continued working on processing Cloudvis data for Modisbeta1. Modified QC code as needed. (R. Brown)Worked on the Cloud delivery for SCCR#284. (R. Brown, W. Miller, S. Sun-Mack)Worked for CERES ST Telecon: investigated the discrepancies in monthly cloud fraction means between TRMM Edition1 and TRMM Edition2 for April 1998. (R. Brown, S. Sun-Mack)Pat Minnis and Bruce Wielicki want to see CERES/MODIS intercomparisons. MODIS cloud retrieval results are stored in MOD06 product. Worked on reading MOD06, ingested MODIS cloud retrieval results as 2x2 into the production code, and displayed CERES/MODIS cloud retrieval results side by side along with many scatterplots and line plots as ways to show where the discrepancies lay. (Y. Chen, S. Sun-Mack)	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller	<ul style="list-style-type: none">Resolved problems with GRings. Need to conceptualize on a sphere not a flat map. Ten test cases were successfully processed. Module delivered to CERESlib. (Miller)Updated Operators' Manual. (Miller)	

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4.5	Nolan	<ul style="list-style-type: none">• Completed integration and test of new SW and LW / WN ADM module in PGE 4.5-6.3P1. (Nolan, Franklin)• After correcting a coding error, recreated SSF files using Edition2 ADMs at the SCF for May1-2 for SARB and SSF subset files for TOA flux module validation. (Nolan)• Completed testing of the Inversion delivery package for PGE CER4.5-6.2P1 and delivered it to CERES CM on September 17, 2001. (Nolan, Franklin)• Completed testing of the Inversion delivery package for PGE CER4.5-6.3P1 and delivered it and the updated Operator's Manual to CERES CM on September 21, 2001. (Nolan, Franklin)• Became familiar with Fortran 90, and computing environment. (Hoppe)• Tested various Fortran 90 modules to understand how to access the SSF product. (Hoppe)• Developed a preliminary search strategy to locate SSF footprints in the archived data that cover arbitrary points on the globe. (Hoppe)	
4.6	Nolan	Combined with above.	

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5.0	Coleman	<ul style="list-style-type: none">• Processed two Terra SSFs at the SCF just to double check that Terra data did not have any ill effects on the SARB mechanics. (Coleman)• Subsetted TRMM_Beta1 CRS files for January 1998 and July 1998 over the CERES Validation Regions to assist Dave Rutan with his analysis. (Coleman)• Provided modifications to the CRS TRMM_Beta1 Quality Summary and Description/Abstract drafts to User Services personnel. (Coleman)• Delivered CRS Sample Read package to CM, including a draft of the README file that followed the template supplied by Paula Detweiler. (Coleman)• Incorporating a 10-minute scene-type map, provided by Dave Rutan, into the Web-displayable plots of the CERES Validation Regions. (Caldwell)• Processed TRMM Edition2 SSF data through SARB at the SCF for May 1, 1998 for Fred Rose and the upcoming Science Team meeting. (Caldwell, Coleman)	
7.2	Coleman	Combined with above.	
12.0	Coleman	<ul style="list-style-type: none">• Followed progress of approval for Graeme Stephens to use ECMWF data. (Coleman)	
7.1	Nguyen/ Raju	<ul style="list-style-type: none">• No new updates.	
8.0	Raju/ Nguyen	<ul style="list-style-type: none">• No new updates.	

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10.0	Nguyen/ Raju	<ul style="list-style-type: none">Investigated the cause of the abnormal peaks in the total-sky and clear-sky SW TOA flux. Modified and tested code to correct the problem. (Nguyen)In clear-sky SW TOA Erbe method, there is a dip in the time series plot. Modified code to correct the error. (Nguyen)Dave Young found that the monthly mean of the SW TOA flux for region 27181 were extremely low. The code was not include the case where the area surface type is available and the scene albedo is unavailable. Updated code to solve the problem. (Nguyen)Corrected code to include the halfsine fit for the Erbe clear-sky LW TOA flux. (Nguyen)The monthly mean of the GGEO LW clear-sky TOA was found relatively high. Investigated and reported the results to Dave Young. (Nguyen)Updated the time series plot program to add the color to the line plots and also corrected the code to include the case where if there is no cloud fraction, there should not be cloud properties as requested by Dave Young. (Nguyen)Continue supporting the validation of surface flux algorithms for the telecon. (Nguyen)	
6.0	Raju/ Stassi	<ul style="list-style-type: none">Getting familiar with the SS6 code and the process for a possible CM delivery. (Raju)	
9.0	Raju/ Stassi	<ul style="list-style-type: none">Investigated and found the reason for the SS9.2 failed jobs for some hours. Corrected the error in the code. (Raju)For the TOA SW validation purposes generated several outputs and sent them to TISA science team. (Raju)	

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11.0	Stassi	<ul style="list-style-type: none">• Integrated the Intercomparison PGEs into the GGEO directory structure. Modified generator scripts so that inputs are accessed from proper directories. (Stassi)• Created a script to clean up for an intercomparison job prior to execution. Removed cleanup code from the execution scripts. (Stassi)• Modify equations for total cloud temperature and total cloud optical depth to be weighted means for both VIRS and GGEO data in the intercomparison code. Modified the plotting program to show cloud temperature on a range of 0 to 400 rather than 0 to 800. (Stassi)• Corrected GGEO code to properly handle year 2000 data. (Stassi)	
CERESlib Stassi/Ayers		<ul style="list-style-type: none">• CERESlib was delivered to CERES CM with new GRing.f90 module. (Stassi)	
IST	Flug	<ul style="list-style-type: none">• No new updates.	