

## October 22, 2003 - System Issues and Status

**Table 1: Process Strategy/Geier as of 10/22/03**  
**Active Requests in order of priority (1 of 2)**

<b>Production Request (PR)</b>	<b>Satellite</b>	<b>Production Strategy</b>	<b>Data Product</b>	<b>Data Dates</b>	<b>Special Status</b>
PR 99-03		GEOS4	MOA	4/1/00 - 12/31/03	
PR 98-03		GEOS4	MOA	2/24/00 - 3/31/00	Done 10/8/03.
PR 100-03, 101-03	Terra	ValR1	SSF	6/00	Must be approved prior to kicking off Edition2-QC. Last Cloud changes expected 10/20/03.
PR 96-03, 97-03	Terra	Edition2-QC	SSF	3/00 - 2/03	ValR1 Clouds must be approved before Edition2-QC starts.
PR 95-03	Terra	Beta2	SFC	3/00 - 2/03; every 3rd month	No delivery; run for same months as ValR9 GGEO using Edition2-QC.
PR 92-03	Terra	Beta5 (Inversion only)	SSF	1/01 - 10/02	8/29 Inversion Delivery; first cut at Terra ADMs; every other SSF FOV if vzen < 63 deg.
PR 94-03	Terra	Beta5	CRS	1/01 - 12/01	Beta5 SSF input; delivery expected to promote ASAP.
PR 93-03	Terra	Beta5	FSW	1/01 - 12/01	New CRS parameters NOT included; Beta5 CRS input; delivery promoted 10/8.
PR 77-03	Terra	Beta4	CRS	<del>4/01</del> , 4/01, 7/01, 10/01	Done 10/1/03.
Standing requests PM-PR 23-02 to 30-02 and PM-PRs 1-03, 3-03 to 6-03	Aqua	Baseline1 Edition1	BDS/ ERBELike BDS/ ERBELike	For 6/03 - present	
Standing request PM-PR 2-03	Aqua/ Terra	Edition1	ES4/ES9	For 6/03 - present	

**Table 1: Process Strategy/Geier as of 10/22/03**  
**Active Requests in order of priority (2 of 2)**

<b>Production Request (PR)</b>	<b>Satellite</b>	<b>Production Strategy</b>	<b>Data Product</b>	<b>Data Dates</b>	<b>Special Status</b>
Standing requests AM-PR 1-00 to 7-00	Terra	Edition1	BDS/ ERBELike	For 6/03 - present	
PR 94-02		ECMWF-GEOS4	MOA	Through 9/03	
PR 25-03, 26-03		ECMWF-GEOS4	PMOA	Through 9/03	
M-PR 3-02		NSIDC-NES-DIS	EICE ESNOW	Standing request	
PR 96-03, 97-03	Terra	Edition2-QC	SSF	3/03 - 6/03	Run at LOW priority after 2/03 finishes.
PR 61-03	Terra	Beta1	Synoptic SARB	1/01, 4/01, 7/01	<b>ON HOLD</b> Requires redelivery currently scheduled 10/3/03. Full delivery fixes segmentation faults, rerun TRMM data.

**Table 2: Process Strategy/Geier as of 10/22/03  
Coming Soon**

Active Month	Satellite	Processing Strategy	Data Product	Data Dates	Comments
11/03		ValR9	GGEO	3/00 - 2/03; every 3rd month	10/31/03 delivery date.
	Terra	Beta3	SRBAVG	3/00 - 2/03; every 3rd month	No delivery.
	Terra	ValR2 (Inversion only)	SSF	Several days, up to 2 months	Delivery currently scheduled for 10/24/03. This must be approved before Edition2A starts.
	Terra	Edition2A (Inversion only)	SSF	3/00 - 6/03	Production starts once ValR2 approved. Delivery currently scheduled for 10/24/03.
	Aqua	Beta2	SSF	10/02	11/7/03 delivery needed. Include renamed MODIS aerosol parameter; 4x2 MODIS; every other SSF FOV when vzen < 63 deg; 7/1 Inversion delivery handles latest SRF.
	Aqua	Beta1	CRS	10/02	Preprocessor redelivery needed; delivery needed 10/10/03.
	Terra	Beta6	FSW	1/01 - 12/01	10/31/03 delivery. Picks up new CRS parameters.
	Aqua	Beta1	FSW	0/02	Requires redelivery of 6.3; currently scheduled together with Terra delivery that picks up additional CRS parameters; delivery expected 10/31/03.
1/04	Terra	Beta2	TSI	3/00 - 2/01	Delivery need date 11/7/03.
	Terra	Beta1	SYN/AVG/ZAVG	1/01, 4/01, 7/01	
	Aqua	Beta1	TSI		Not on Bruce's schedule.
	TRMM	Beta2	Synoptic SARB	4/98, 7/98, 8/98	Rerun 3 months of SYNI to use as input for SYN/AVG/ZAVG.
	TRMM	Beta1	SYN/AVG/ZAVG	4/98, 7/98, 8/98	Delivered 8/22; if compressed HDF available when synoptic SARB delivers, TISA code will be redelivered.
	Aqua	Beta1	Synoptic SARB		Not on Bruce's schedule.
	Aqua	Beta1	SYN/AVG/ZAVG		Not on Bruce's schedule.

**Table 3: October 22, 2003 - System Issues and Status**

<b>Activity</b>	<b>Lead</b>	<b>Status</b>
CM	Ayers	<ul style="list-style-type: none"> <li>• See Table 2 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 2. (Ayers)</li> <li>• Tested the Inversion (SCCR 472) and Instantaneous SARB (SCCR 474) deliveries and released them to the ASDC. (Ayers)</li> <li>• Delivered various updated files and documentation to the ASDC. (Ayers, Saunders)</li> <li>• Posted Delivery Memos on the Web. (Ayers, Saunders)</li> </ul>

**Table 4: SCCR Activity October 8 at 12:30 p.m. - October 20 at 12:30 p.m.**

<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>
468				X		5		
469				X		5		
471				X		6		
474	X		X	X		5	5	
475	X					6	6	CERESlib modifications
476	X					6 & 9	7	

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

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

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Subsystem: InstSARB                      SCCR Date & TIME: 2003-10-14 16:00:40                      SCCR No.: 474

Description of Change (Science):  
None.

Reason for Change (Science):  
None.

Description of Change (non-Science):  
Modification of ASCII file generator for PGE 5.0P1 to use default version number of 4 for  
MODIS aerosol input files.

Reason for Change (non-Science):  
Version 4 MODIS files, if available, are preferable to version 3. The ASCII file generator was set  
to use version 3 as default.

Affected PGEs    : None.

Est. Time to Complete Changes    : 2 hours  
Planned Delivery Date                : October 15, 2003  
Impact    : None.

Originator: CALDWELL, THOMAS E. (SAIC)

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

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

Subsystem: TISAggrid                      SCCR Date & TIME: 2003-10-20 10:32:41                      SCCR No.: 475

Description of Change (Science):  
N/A

Reason for Change (Science):  
N/A

Description of Change (non-Science):  
tisa\_grid\_type\_def.f90, fsw\_type\_def.f90 modules were modified to include cloudy skies/ no aerosol data structure. fsw.f90, fsw\_file.f90 modules were modified to optionally access these parameters.

Reason for Change (non-Science):  
The cloudy skies/ no aerosol data structure is added to the FSW product to make it consistent with the CRS product.

Affected PGEs    : CER6.1P1, CER6.2P1, CER6.3P1

Est. Time to Complete Changes   : 10 weeks

Planned Delivery Date                                : Friday, October 24, 2003

Impact    : Subsystem 7.1

Originator: RAJU, RAJA (SAIC)

## CERES Software Configuration Change Request Submittal

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Subsystem: TISAGrid                      SCCR Date & TIME: 2003-10-20 11:19:31                      SCCR No.: 476

### Description of Change (Science):

Added Cloudy skies/ no aerosol flux data to FSW product.

Wrote Overlap hour records onto FSW binary files.

Added selection of TRMM ADM types & write them onto SFC & FSW data products.

### Reason for Change (Science):

The Cloudy skies/ no aerosol flux data on FSW product is requested by SARB & TISA science members to make product consistent with CRS.

The overlap hour data on FSW product is requested by TISA science team. These hours are needed in subsystem 7.1 for interpolation process to work correctly.

TRMM ADM types are selected and written to gridding products since the directional models for Subsystems 10 & 7 are based on the TRMM ADMs. This change is requested by TISA science team.

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

N/A

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

N/A

Affected PGEs                                      : All Gridding PGEs except CER9.1P1

Est. Time to Complete Changes    : 4 weeks

Planned Delivery Date                      : Friday, October 24, 2003

Impact    : TISA Averaging Subsystems 7 & 10

Originator: RAJU, RAJA (SAIC)

**Table 5: October 22, 2003 - Subsystem Issues and Status (1 of 5)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
1.0	Cooper	<ul style="list-style-type: none"> <li>Continued tracking receipt of Aqua and Terra data. (Cooper, Snyder)</li> <li>Testing updates to the SS1 main subsystem to double drift correct radiances to remove drift introduced by the Second Time Constant correction. (Cooper, Escuadra, Spence)</li> <li>Updating PGE CER1.3P3, BDS Edition2 Processor, to add double drift correction of radiances to match the SS1 main subsystem processor (PGE CER1.1Px). (Escuadra)</li> <li>Terra-Aqua validation analysis for June 2003 data was completed and results presented at the STM telecon. (Szewczyk)</li> <li>CERES/GERB validation data analysis for GERB's good geolocation days was completed. (Szewczyk)</li> <li>Principle Plane Scanning has been restarted with FM2 scanning over land, and FM3 over ocean. There is still ongoing effort to further automate command uploads. (Szewczyk)</li> <li>Developed C-Subroutine that calculates Moon-Spacecraft-Sun angle. Applying subroutine to Eclipse and non-Eclipse days to test proposed angular tolerances (13 deg - Once a day, 1 deg - hourly and 0.5 deg per scan). (Walikainen)</li> </ul>	
2.0	Kizer	<ul style="list-style-type: none"> <li>Created new ES8 nadir direct compare scatter plots for unfiltered radiances and fluxes to show the density of the data points. Plots were generated and presented to Kory for data study. Software was added to test version of ERBE-like PGE software at the SCF. (Kizer)</li> <li>Working with TISA group to insure proper implementation and testing of the HDF file compression utility. (Kizer)</li> </ul>	



**Table 5: October 22, 2003 - Subsystem Issues and Status (2 of 5)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
2.0	Kizer (Cont.)	<ul style="list-style-type: none"> <li>• Began modifying SS3 Operator's Manual to show additional scatter plots and ES-4 statistics plots. (Kizer)</li> <li>• Updated and delivered the ERBE-like ES-4, ES-8, and ES-9 Description Web pages. (Kizer)</li> <li>• Continuing to examine the production email generated by the QC checker software. (Walikainen)</li> <li>• Continuing to inspect ERBE-like Aqua and Terra output plots and QC reports on the Web. (Walikainen, Kizer)</li> </ul>	
3.0	Kizer	Combined with above.	
4.1	Sun-Mack	<ul style="list-style-type: none"> <li>• Continued processing CloudVis images for TRMM VIRS Edition2 for the Cape Verde and Ascension Islands regions through August 1998 and for Terra MODIS Edition1A for Nauru region through April 2001. (R.Brown)</li> <li>• Processed QC global images and statistics and posted on the web for ECMWF and GEOS comparison. (R.Brown)</li> <li>• Updated images and scripts to QC Web Viewer by adding in Cloud Pressure results for data sets previously processed and also reproduce images that were not produced using flat shading. Continuing to enhance comparison tool for QC Web Viewer. (R.Brown)</li> <li>• Working on getting the final Clouds code for Terra-MODIS Edition2 delivery. Continuing on comparisons between ECMWF and GEOS4 with various versions of Clouds code to compromise the decision of going for GEOS4. Participated in two CERES telecons and one CERES Clouds validation meeting. (Yan, Walt, R.Brown, Gibson, Sun-Mack)</li> </ul>	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	

**Table 5: October 22, 2003 - Subsystem Issues and Status (3 of 5)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
4.4	Miller	<ul style="list-style-type: none"> <li>• Nine days of data was processed using both GEOS4 and ECMWF MOA data. Various configurations of clouds (30noEM, 30EM, EM) were used with GEOS4 data. (Miller)</li> <li>• Analysis of the 2x2 vs. 1x1 data was worked. Times of bad 1x1 data was identified. Areas with high differences were identified and explanations sought. An updated summary was provided Dr. Wielicki. He identified other issues. (Miller)</li> <li>• The definition of admgeo was changed. Data for June 14, 2001 was run to produce SSFIs for SARB to evaluate the CRH derived snow. (Miller)</li> <li>• The cause of cloud retrieval segmentation fault was investigated. It is a result of default MOA temperatures where the code expects valid values. (Miller)</li> </ul>	
4.5	Nolan	<ul style="list-style-type: none"> <li>• Created SSF and subsets using GEOS4. Three days of January 2001 were processed. SSF and subsets were made for the ADM working group. (Hoppe)</li> <li>• Modified PGE4.5-6.2P2 to subset the new parameter 'admgeo'. (Hoppe)</li> <li>• Met with Ed Kizer to discuss using IDL plotting software with SSF HDF data. (Hoppe)</li> </ul>	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> <li>• Implementing an improved weighting scheme in the spectral albedo determination for snow, desert, and other IGBP types. (Coleman)</li> <li>• Preparing to process using "Walt's latest" at the SCF. (Coleman)</li> <li>• Looking at Fred's and S. Kato's modifications for best approach for implementation. (Caldwell, Coleman)</li> <li>• Gathering data from the hourly CRS QC reports to prepare a monthly summary of validation region overpasses. (Zentz)</li> </ul>	
7.2	Coleman	<ul style="list-style-type: none"> <li>• Testing code modification for possible fix to previous failures. (Coleman)</li> </ul>	

**Table 5: October 22, 2003 - Subsystem Issues and Status (4 of 5)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
12.0	Coleman	<ul style="list-style-type: none"> <li>Delivered scripts for processing Regrid MOA Subsystem using GMAO GEOS4.0.3. (Caldwell)</li> <li>Working with W. Su to provide MOA ozone profile data for a study she is pursuing. (Caldwell)</li> </ul>	
7.1	Nguyen	<ul style="list-style-type: none"> <li>Modifying code to include the overlap data from FSW. (Nguyen)</li> </ul>	
8.0	Nguyen	<ul style="list-style-type: none"> <li>No updates. (Nguyen)</li> </ul>	
10.0	Nguyen	<ul style="list-style-type: none"> <li>Created January and April 2001 SRBAVGs using the new GGEOs for Dave Young. (Nguyen)</li> </ul>	
6.0	Raju	<ul style="list-style-type: none"> <li>PGE CER6.2P1 code was modified to read &amp; write overlap hours (last 12 hours of previous &amp; first 12 hours of next month observation hours) onto FSW binary files. These hours are needed in Subsystem 7.1 interpolation process. (Raju)</li> <li>One day of July 1998 TRMM data was processed at SCF including last 12 hours of June 1998 &amp; first 12 hours of August 1998 overlap hours and generated FSW product. Files &amp; read software were provided to TISA averaging working group, Fred Rose (AS&amp;M) for testing. (Raju)</li> <li>PGE CER6.3P1 code was tested &amp; outputs were validated at SCF. (Raju)</li> <li>Work was started to update Subsystem 6.0 DPC &amp; Operator's Manual. (Raju)</li> </ul>	
9.0	Raju	<ul style="list-style-type: none"> <li>Dave Young (RAB) requested to implement TRMM ADM selection code into gridding process since the directional models for Subsystems 10 &amp; 7 are based on the TRMM ADMs. PGEs CER9.2P1, CER6.1P1 code was modified to access TRMM ADM routines &amp; data files to select and write TRMM ADM types onto SFC &amp; FSW products. (Raju)</li> <li>PGE CER9.2P1 was processed at the SCF using one hour of SSF FM2 Beta5 files and wrote read-in values from inputs and calculated values of TRMM &amp; Terra ADM types &amp; SW flux values for each footprint. The file was sent to TISA science members for validation. (Raju)</li> </ul>	

**Table 5: October 22, 2003 - Subsystem Issues and Status (5 of 5)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
11.0	Stassi	<ul style="list-style-type: none"><li>• Setup the directory for Cathy Nguyen to run GGEO while taking vacation. (Stassi)</li><li>• Ran January and April 2001 GGEOs. (Nguyen)</li></ul>	
CERESlib Stassi/Ayers		<ul style="list-style-type: none"><li>• No new updates. (Stassi)</li></ul>	