September 8, 2004 - System Issues and Status

Table 1: Process Strategy/Geier as of 09/08/04
Active Requests in order of priority (1 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 64-04	Terra	ValR5	SFC (SS9)	9.2P1 9.3P1 9.4P1	11/30/01 hr 12 to 1/1/02 hr 11 and 5/31/02 hr 12 to 7/1/02 hr 11	Done 8/23/04.
PR 67-04	Terra	ValR5	CRS (SS5)	5.0P1 5.1P1 5.4P1	11/30/01 hr 12 to 1/1/02 hr 11 and 5/31/02 hr 12 to 7/1/02 hr 11	Done 8/31/04.
PR 90-04	Terra	ValR5	CRS (SS5)	5.4P1	11/30/01 hr 12 to 1/1/02 hr 11 and 5/31/02 hr 12 to 7/1/02 hr 11	Rerun monthly once delivery associated with SCCR #556 is promoted.
PR 66-04	Terra	ValR5	FSW (SS6)	6.1P1 6.2P1 6.3P1	11/30/01 hr 12 to 1/1/02 hr 11 and 5/31/02 hr 12 to 7/1/02 hr 11	Done 9/1/04.
PRs 87-04, 88-04	Terra	ValR4	ERBElike (SS2&3)	2.2P1 2.3P1 3.1P1	6/30/03 to 8/1/03	Rerun a month previously run as Edition2 - Instrument group seeing peculiarities in 7/03 - 12/03 ERBE-like data.
PRs 81-04, 82-04	Terra	ValR3, ValR4	BDS (SS1)	1.1P3 1.3P3	5/28/04, 8/2/04, 12/15/03	Waiting for code promotion.
PR 77-04 to 80-04	Terra	ValR4	BDS/ ERBElike (SS1-3)	1.3P3 1.2P1 2.4P1 2.2P1 2.3P1 2.3P2	1/31/04 to 3/1/04 and 4/10/04 to 4/15/04	**HOLDING - waiting for Gains and SRF to deliver/promote.**

Table 1: Process Strategy/Geier as of 09/08/04
Active Requests in order of priority (2 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 75-04 to 76-04	Terra	ValR4	BDS/ ERBElike (SS1-3)	3.1P1 3.2P1	2/04	**HOLDING - waiting for Gains and SRF to deliver/promote and ValR4 ES8 to run.**
PR 70-04	Aqua	ValR2	SSF (SS4) Clouds	4.1-4.1P3 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1	7/2/02 to 7/28/02 and 12/1/02 to 1/1/03 hr 11	Done 8/23/04.
PR 69-04	Aqua	ValR2	SSF (SS4) Inversion	4.5-6.1P3 4.5-6.2P2 4.5-6.4P1	7/2/02 to 7/28/02 and 12/1/02 to 1/1/03 hr 11	Done 8/23/04.
PR 58-04	Aqua	ValR2	SFC (SS9)	9.2P1 9.3P1 9.4P1	7/2/02 to 7/28/02 and 12/1/02 to 1/1/03 hr 11	Done 8/25/04.
PR 74-04	Terra	Edition2B	SSF (SS4) Inversion	4.5-6.3P2 4.5-6.2P2 4.5-6.4P1	3/00 - 2/03	In production.
PR 73-04	Terra	Edition2B	SFC (SS9)	9.2P1 9.3P1 9.4P1	3/00 - 2/03	In production.
PR 72-04	Terra	Edition2B	CRS (SS5)	5.0P1 5.1P1 5.4P1	1 year (exact months not known)	**HOLDING - waiting on ValR5 approval.** Process crosstrack Instrument only.
PR 71-04	Terra	Edition2B	FSW (SS6)	6.1P1 6.2P1 6.3P1	1 year (exact months not known)	**HOLDING - waiting on ValR5 approval.**
PR 61-04	Aqua	Edition1A	SSF (SS4) Clouds	4.1-4.1P3 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1	7/02 - 6/03	In production.

Table 1: Process Strategy/Geier as of 09/08/04
Active Requests in order of priority (3 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 60-04	Aqua	Edition1A	SSF (SS4) Inversion	4.5-6.1P3 4.5-6.2P2 4.5-6.4P1	7/02 - 6/03	In production.
PR 59-04	Aqua	Edition1A	SFC (SS9)	9.2P1 9.3P1 9.4P1	7/02 - 6/03	In production.
Standing requests AM-PR 1-00 to 7-00	Terra	Edition1	BDS/ ERBElike (SS1-3)	1.1P3 1.2P1 1.3P1 1.3P2 2.1P1 2.2P1 2.3P1 2.3P2 3.1P1 ~~3.2P2~~	For 7/04 - present	**DO NOT PROCESS 7/04 forward until ValR3 and ValR4 (PRs 81-04 & 82-04) approved.** DO NOT PROCESS 3.2P2 - it is on hold.
Standing requests PM-PR 7-03A to 10-03	Aqua	Edition1	BDS/ ERBElike (SS1-3)	1.1P5 1.2P1 1.3P1 1.3P2 2.2P1 2.3P1 2.3P2 3.1P1 ~~3.2P2~~	For 8/04 - present	DO NOT PROCESS 3.2P2 - it is on hold
Standing requests AM-PR 8A-02 to 11-02	Terra	Edition2	BDS/ ERBElike (SS1-3)	1.2P1 1.3P3 2.2P1 2.3P1 2.3P2 2.4P1 3.1P1 ~~3.2P2~~	For 1/04 - present	**HOLDING - waiting for Aqua Gains and SRF to be delivered and associated ValRx to run.** DO NOT PROCESS 3.2P2 - it is on hold
Standing requests PM-PR 11-03, 13-03 to 17-03	Aqua	Edition2	BDS/ ERBElike (SS1-3)	1.3P3 1.2P1 2.2P1 2.3P1 2.3P2 2.4P1 3.1P1 ~~3.2P2~~	For 3/04 - present	**HOLDING - waiting for Aqua Gains and SRF to be delivered and associated ValRx to run.** DO NOT PROCESS 3.2P2 - it is on hold

Table 1: Process Strategy/Geier as of 09/08/04
Active Requests in order of priority (4 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
Standing request PM-PR 12-03	Aqua/ Terra	Edition2	ES4/ES9 (SS3)	3.2P1	For 1/04 - present	**HOLDING - waiting for both Terra and Aqua to have processed Edition2 data beyond 1/04.**
PR 84-04	Terra	Beta2	Synoptic SARB (SS7.2)	7.2.1P1	1/01, 4/01, 7/01, 10/01, 3/00	**HOLDING - waiting on code to promote.**
PR 86-04	Terra	Beta2	TISA avg (SS8)	8.1P1	1/01, 4/01, 7/01, 10/01, 3/00	**HOLDING - waiting on code to deliver/ promote.**
PR 83-04	TRMM	Beta3	Synoptic SARB (SS7.2)	7.2.1P1	1/98 - 8/98, 3/00	**HOLDING - waiting on code to promote.**
PR 85-04	TRMM	Beta3	TISA avg (SS8)	8.1P1	1/98 - 8/98, 3/00	**HOLDING - waiting on code to delivery/ promote.**
PRs 60-04, 61-04	Aqua	Edition1A	SSF (SS4)	4.1-4.1P3 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1 4.5-6.1P3 4.5-6.2P2 4.5-6.4P1	7/03 - 12/03	
M-PR 3-02		NSIDC-NESDIS	EICE ESNOW (SS4.1)	4.1-4.0P1	Standing request	When FLASHflux starts operational processing need to keep snow/ice maps current.
PR 72-04	Terra	Edition2B	CRS (SS5)	5.0P1 5.1P1 5.4P1	3/00 - 2/03 remaining years	**HOLDING - waiting on code promotion and SSF availability. Process crosstrack Instrument only.**
PR 71-04	Terra	Edition2B	FSW (SS6)	6.1P1 6.2P1 6.3P1	3/00 - 2/03 remaining years	**HOLDING - waiting on CRS availability.**

Table 1: Process Strategy/Geier as of 09/08/04
Active Requests in order of priority (5 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 74-04	Terra	Edition2B	SSF (SS4) Inversion	4.5-6.3P2 4.5-6.2P2 4.5-6.4P1	3/03 - 12/03	
PR 73-04	Terra	Edition2B	SFC (SS9)	9.2P1 9.3P1 9.4P1	3/03 - 12/03	
M PR 2-04		GEOS4	MOA (SS12)	12.1P1	7/04 - present	
M PR 1-04		GEOS4	PMOA (SS9.1)	9.1P1	7/04 - present	
PR 63-04	Aqua	Beta1	CRS (SS5)	5.0P1 5.1P1 5.4P1	7/02 - 6/03	
PR 62-04	Aqua	Beta1	FSW (SS6)	6.1P1 6.2P1 6.3P1	7/02 - 6/03	
PRs 60-04, 61-04	Aqua	Edition1A	SSF (SS4)	4.1-4.1P3 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1 4.5-6.1P3 4.5-6.2P2 4.5-6.4P1	1/04 - 6/04	**HOLDING - waiting on IES availability.**
PR 72-04	Terra	Edition2B	CRS (SS5)	5.0P1 5.1P1 5.4P1	3/03 - 12/03	**HOLDING - waiting on SSF availability.** Process crosstrack Instrument only.
PR 71-04	Terra	Edition2B	FSW (SS6)	6.1P1 6.2P1 6.3P1	3/03 - 12/03	**HOLDING - waiting on CRS availability.**

Table 2: Process Strategy/Geier as of 09/08/04
Coming Soon (1 of 2)

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
9/04	Terra	ValR5	SRBAVG (SS10)	3/00 and 1/01 to 12/01	Delivery will default SW fluxes with GGEO component.
10/04	Terra	Edition2B	SRBAVG (SS10)	3/00 to 2/03	Delivery will default SW fluxes with GGEO component.
11/04		ValR11	GGEO (SS11)	3/03 to 6/03	Requires redelivery to handle GOES-9 and GOES-12; requires coefficients.
		Edition2A	GGEO (SS11)	3/03 to 6/03	ValR11 must be approved.
	Aqua	ValR1	SRBAVG (SS10)	?? months	9/10/04 delivery date; may require GGEO for 3/03 - 6/03.
	Aqua	Edition1A	SRBAVG (SS10)	7/02 - 6/03	9/10/04 delivery date; requires GGEO for 3/03 - 6/03.
12/04		ValR11	GGEO (SS11)	? months	7/03 - 6/04; requires coefficients.
		Edition2A	GGEO (SS11)	7/03 - 6/04	
	Aqua	Edition1A	SRBAVG (SS10)	7/03 - 6/04	
unkn	TRMM	Beta4	TSI (SS7.1)	9 months	Not on Bruce's schedule.
	Terra	Beta3	TSI (SS7.1)	12 months	Not on Bruce's schedule.
	TRMM	Beta4	Synoptic SARB (SS7.2)	9 months	Not on Bruce's schedule.
	Terra	Beta3	Synoptic SARB (SS7.2)	12 months	Not on Bruce's schedule.
	TRMM	Beta4	SYN/AVG/ ZAVG (SS8)	9 months	Not on Bruce's schedule.
	Terra	Beta3	SYN/AVG/ ZAVG (SS8)	12 months	Not on Bruce's schedule.
	Aqua	Beta1	TSI (SS7.1)		Not on Bruce's schedule.
	Aqua	Beta1	Synoptic SARB (SS7.2)		Not on Bruce's schedule.

Table 2: Process Strategy/Geier as of 09/08/04
Coming Soon (2 of 2)

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
	Aqua	Beta1	SYN/AVG/ ZAVG (SS8)		Not on Bruce's schedule.

Table 3: September 8, 2004 - System Issues and Status

Activity	Lead	Status
CM	Ayers	• See Table 4 for the current CERES Subsystem Delivery Schedule. (Ayers) • See Table 5 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 5. (Ayers) • Tested the following subsystem deliveries and released them to the ASDC: Instrument (SCCR 552), Instantaneous SARB (SCCR 556), and Synoptic SARB (SCCR 550). (Ayers, Saunders) • Delivered updated Instantaneous and Synoptic SARB files to the ASDC. (Ayers, Saunders) • Updated the CERES Subsystem Delivery Schedule and posted it on the CERES CM Web site. (Ayers, Saunders)

Table 4: CERES Subsystem Delivery Schedule - September 2004

(Next CERES Science Team Meeting - November 2 - 4, 2004 in Williamsburg)

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Delivery to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)
TISA Averaging (Subsystem 10)	August 27	September 10	September 17	Support Terra Edition2A and Aqua Edition1A (maybe) SRBAVG processing.		
Instrument	N/A	September 17	September 17	Terra gains files.		
ERBE-like	N/A	September 17	September 17	Terra spectral response function files.		
GGEO (SCCR 553)	October			Delivery to handle GOES-9 and GOES-12.		X
Instrument	Late October			Aqua gains files.		
ERBE-like	Late October			Aqua spectral response function files.		
Clouds	November			Turn on CloudVis parameters and file for Bing Lin. Support Aqua Edition1A processing.		
Inversion	November			To run alternate main on a daily basis.		
Clouds	Spring 2005			Support TRMM VIRS-only processing from August 2001 through August 2002.		

Table 5: SCCR Activity August 23 at 2:30 p.m. - September 7 at 2:00 p.m.

SCCR	S	U	A	C	D	SS	Page No.	Comments
541				X		5		
548				X		9		
549				X		4.1-4.4		
553			X			11		
555			X			4.5 & 4.6		
556	X	X	X	X		5	11	
557	X					9	12	
558	X					6		

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

CERES Software Configuration Change Request Submittal
==========

Subsystem: InstSARB SCCR Date: 08/25/2004 SCCR Number: 556

Description of Change (Science):
None

Reason for Change (Science):
None

Description of Change (non-Science):
The PCF generator for SARB Monthly QC Post-Processor (PGE 5.4P1) was corrected to list the temporary output files in the support output files section.

Reason for Change (non-Science):
To make the epilog work.

Affected PGEs : CER5.4P1
Est. Time to Complete Changes : 2 hours
Planned Delivery Date : 8/25/04
Impact : None
Date: 08/25/2004 Status: APPROVED
Originator: CALDWELL, THOMAS E. (SAIC)

==========
ADDITIONAL CHANGES TO SCCR NO. 556:
==========
Description of Change (Science):
None

Reason for Change (Science):
None

Description of Change (non-Science):
The ASCII file generator for PGE 5.4P1 was corrected to use the proper temporary file name for comparison files.

Reason for Change (non-Science):
An incorrect name was used causing temporary files to remain when they would have otherwise been deleted.

Affected PGEs : 5.4P1
Est. Time to Complete Changes : 2 hours
Planned Delivery Date : September 1, 2004
Impact : None
Date & Time : 2004-09-01 12:36:17
Originator: CALDWELL, THOMAS E. (SAIC)

CERES Software Configuration Change Request Submittal
==========

Subsystem: TISAgrid9.0 SCCR Date & TIME: 2004-08-30 08:12:57 SCCR No.: 557

Description of Change (Science):
N/A

Reason for Change (Science):
N/A

Description of Change (non-Science):
New version of Sample Read Software package for Terra Edition2B and Aqua Edition1A SFC HDF products.

Reason for Change (non-Science):
'Snow/Ice Percentage from Imager History' SDS is deleted from SFC HDF product. (See SCCR 530)

Affected PGEs : PGE CER9.4P1
Est. Time to Complete Changes : 2 weeks
Planned Delivery Date : September 10,2004
Impact : N/A
Originator: RAJU, RAJA (SAIC)

CERES Software Configuration Change Request Submittal
==========

Subsystem: TISAgrid6.0 SCCR Date & TIME: 2004-08-30 08:18:17 SCCR No.: 558

Description of Change (Science):
N/A

Reason for Change (Science):
N/A

Description of Change (non-Science):
New version of Sample Read Software package for Terra Edition2B and Aqua Edition1A FSW HDF products

Reason for Change (non-Science):
'Snow/Ice Percentage from Imager History' SDS is deleted from FSW HDF product. (See SCCR 530)

Affected PGEs : PGE CER6.3P1
Est. Time to Complete Changes : 2 weeks
Planned Delivery Date : September 10,2004
Impact : N/A
Originator: RAJU, RAJA (SAIC)

Table 6: September 8, 2004 - Subsystem Issues and Status (1 of 5)

SS No.	SS Lead	Status	Problems
1.0	Cooper	• Continued tracking receipt of Aqua and Terra data at the ASDC. (Cooper, Snyder) • Continuing investigation of July 2003 data. At this point, it appears that Tak may have a bad set of data for this month. Waiting to get access to Tak's copy of the data for comparison with data created at the SCF and at ASDC. (Cooper, Walikainen) • Delivery of the Terra gains and SRFs has been postponed. Ran all of the data required to determine updates necessary for the Aqua instruments from March 2004 - July 2004. (Cooper) • Reviewed the Lessons Learned in CERES paper that will be presented at the AIAA Space Conference at the end of the month. (Cooper, Spence) • Reviewing all Terra data to find any bit-flips in the engineering data. This is being done in response to the problems that recently occurred when a bit-flip in the elevation counts caused a fatal error during production processing. The study will help determine what may be causing the bit-flips and if the bit-flip is causing us problems that have yet to be discovered. (Hess)	
2.0	Walikainen	• Continuing to examine the production email generated by the QC checker software. (Walikainen) • Continuing to inspect ERBE-like Aqua and Terra output plots and QC reports on the Web. (Walikainen) • Testing for Aqua Edition 2 Spectral Response Functions started [Mar04-Jul04]. (Walikainen) • FM2 Jun, Jul, and Aug 03 reprocessing pending examination of Tak's files. (Walikainen)	
3.0	Walikainen	Combined with above.	

Table 6: September 8, 2004 - Subsystem Issues and Status (2 of 5)

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	• Began processing CloudVis images for Aqua-MODIS Edition1A data for 200207. CloudVis images were generated for TRMM-VIRS Edition2 2001 data for Peru Coast and Southeast Asia regions and for Taklimakan Desert, Central China, and Greece regions from May 2001 through July 2001. CloudVis images were generated for Terra-MODIS Edition2-QC data for June 2003 for 28 subset regions. (R. Brown) • Worked on updating and modifying DX scripts to process Aqua-MODIS Edition1A data. (R. Brown) • Processed and delivered S'COOL data for July 2004. (R. Brown) • Started working on the poster for the 13th Conference on Satellite Meteorology and Oceanography. (Sun-Mack)	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller	• Developed software to read IES header and SSFB records to fill the SSF portion of a SSFM (MISR-CERES product). Created two test files. (Miller) • Developed software to read a MODIS cookiedough and build a simulated MISR input file. Notified Dr. Wenbo Sun that software was available for his adaptation to actual MISR data. (Miller) • Developed software to convolve MISR data (one angle) using the SSFM file. Tested with the simulated MISR (MODIS) data. (Miller) • Detected two problems with current Convolution code. The first skips over imager data causing loss of footprints when there is a large data gap in IES. The second prevents complete imager filling of high view zenith (>75 degrees) RAPS CERES footprints. (Miller) • Updated Clouds Operators Manual to increase the number of CloudVis Subset files possible. (Miller)	

Table 6: September 8, 2004 - Subsystem Issues and Status (3 of 5)

SS No.	SS Lead	Status	Problems
4.4	Miller (Cont'd.)	• Monitored Aqua Edition1A data. Daily QC files were generated. (Miller) • Generated Daily QC files for a majority of the Terra Edition2B hours processed. Filling of the ASDC-QA prevented all files being available. Changes have been implemented to alleviate this problem. Files can be obtained from archives to fill the gaps. (Miller)	
4.5	Nolan	• Continued testing PGE CER4.5-6.6P2. There is still an unsolved problem setting CERHROFMonth and CERHROfDay using the Toolkit metadata wrappers. (Zentz, Nolan) • Initiated work to update Inversion Production Web Site to include descriptions and locations of Terra Edition2B and Aqua Edition1A SSF subsets. (Nolan) • Initiated work to modify Inversion part of SSF QC reader. (Nolan) • Examined Aqua ValR2 SSF files and found no problems. (Nolan)	
4.6	Nolan	Combined with above.	
5.0	Coleman	• Working with ASDC to iron out kinks with the Monthly QC Summary Post-Processor (PGE CER5.4P1) epilogue-related portions of the PCF generator scripts. (Caldwell)	
7.2	Coleman	• Correcting script issues encountered in SSI&T. (Zentz, Caldwell)	
12.0	Coleman	• Investigating 64-bit ECMWF library issues. We have the degribbing routines, but not the interpolation routines. The interpolation routines are available for a small fee. (Caldwell)	
7.1	Nguyen	• No new updates.	
8.0	Nguyen	• No new updates.	

Table 6: September 8, 2004 - Subsystem Issues and Status (4 of 5)

SS No.	SS Lead	Status	Problems
10.0	Nguyen	• Continue running several test cases for the scientists to analyze. (Nguyen) • Continue preparing to deliver the code to CM. (Nguyen) • Changed the SW surface fluxes to be defaults. (Nguyen) • Using the 30-minutes averaged ARM data to compare with the computed surface fluxes from SRBAVG. (Nguyen)	
6.0	Raju	• Completed FSW Description/Abstract document. Sent the document to Ms. Watkinson. (Raju) • Examined FSW ValR5 product and found no problems. Generated Total Sky LW & SW validation plots for Dave Young. (Raju) • Responded to ASDC enquiry regarding the run time differences between PGE CER6.3P1 and PGE CER9.4P1. Ran both PGEs at SCF for comparisons. The results showed that the higher number of SDSs on FSW HDF (272) compare to on SFC HDF (127) is the cause for CER6.3P1 to run longer time than CER9.4P1. Looking into the code for run time improvements. (Raju) • Working on Terra Edition2B FSW read software. (Raju)	
9.0	Raju	• Modified PGE CER9.2P1 to read smaller chunks of data into the buffer than allocating one big array to hold all the footprints that are on ssf file. Code was compiled with SGI compiler. Processed whole month of December 2002 Aqua data at SCF successfully without having 4211 error. The purpose of this test is to give some confidence that the fix for the 4211 error is reliable. (Raju) • Working on Terra Edition2B SFC read software. (Raju)	

Table 6: September 8, 2004 - Subsystem Issues and Status (5 of 5)

SS No.	SS Lead	Status	Problems
11.0	Stassi	• Met with ASDC and DMT personnel after the last DMT meeting to discuss a new GGEO PGE which is being proposed. After a follow-up discussion with Erika, we decided that a new environment variable will be needed for the PGE in order to be able to do VAL runs. (Stassi, ...) • Finalizing updates to the GGEO plot Web site. Making plans for a demo in the next couple of weeks to show the new features that have been added to the Web site. (Flug, Stassi)	
CERESlib	Stassi/Ayers	• No updates.	