

April 6, 2005 - System Issues and Status

Table 1: Process Strategy/Geier as of 04/06/05
Active Requests in order of priority (1 of 3)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
4-05	Aqua	ValR7	TISA gridding (SS9)	9.2P1 9.3P1 9.4P1	7/02 - 2/03	Done 3/18/05.
44-05, 45-05	Geostationary	ValR12	GGEO (SS11)	11.1P10 11.2P1	5 months 7/02, 1/02, 4/02, 10/02, 12/02	Waiting on delivery to promote. Processes new MCI-DAS format.
41-05, 42-05, 43-05	Geostationary	ValR13	GGEO (SS11)	11.1P5-8 11.2P1 11.4P1	7/02	Waiting on delivery to promote. Processes native format.
40-05	Geostationary	ValR13	GGEO (SS11)	11.6P1	7/02	Waiting on delivery to promote. Joe's new "Weeder" code.
5-05	Terra FM1 or FM2	Edition2C	TISA gridding (SS6)	6.1P1 6.2P1 6.3P1	3/00 - 3/03	
3-05	Aqua	Edition1B	TISA gridding (SS9)	9.2P1 9.3P1 9.4P1	7/02 - 7/1/03 hr 11	
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 3/05 - present	DO NOT PROCESS 3.2P2 - it is disabled.

Table 1: Process Strategy/Geier as of 04/06/05
Active Requests in order of priority (2 of 3)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
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 3/05 - present	DO NOT PROCESS 3.2P2 - it is disabled. Stop processing FM4 for 3/30/05 forward.
PRs 29-05 to 34-05 (repeated in standing request 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 12/04 forward (11/04 forward for TISA)	DO NOT PROCESS 3.2P2 - it is disabled. HOLDING - waiting on next set of gains/ SRF.
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 8/04 - present	HOLDING - waiting for associated ValRx to run. DO NOT PROCESS 3.2P2 - it is disabled.
Standing request PM-PR 12-03	Aqua/ Terra	Edition2	ES4/ES9 (SS3)	3.2P1	For 1/04 - 7/04	
PR 28-05	Terra	Edition2-QC	Clouds (SS4.1)	4.1-4.1P2 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1	1/04 - 11/04	Extend current Terra Cloud run as soon as inputs available.
PR 27-05	Terra	Edition2B	Inversion (SS4.5)	4.5-6.1P2 4.5-6.2P2 4.5-6.4P1	1/04 - 11/04	Extend current Terra SSF run as soon as inputs available.
PR 26-05	Terra	Edition2C	SFC (SS9)	9.2P1 9.3P1 9.4P1	12/31/03 - 11/1/04	Extend current Terra SFC run as soon as inputs available. Do not process Nov'04 until 12/1/04 available.

Table 1: Process Strategy/Geier as of 04/06/05
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Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 25-05	Aqua	Beta1	FSW (SS6)	6.1P1 6.2P1 6.3P1	7/02 - 3/03	
M-PR 3-02		NSIDC-NESDIS	EICE ESNOW (SS4.1)	4.1-4.0P1	Standing request	
M PR 2-04		GEOS4	MOA (SS12)	12.1P1	3/05 - present	Back in production.
M PR 1-04		GEOS4	PMOA (SS9.1)	9.1P1	3/05 - present	
PR 39-05	Terra	ValR5	SSF (SS4.5-6)	4.5-6.6P2	9 select days	Done 4/1/05.
PR 38-05	Aqua	Beta1	CRS-monthly (SS5)	5.4P1	7/02 - 3/03	Done 3/22/05.

Table 2: Process Strategy/Geier as of 04/06/05
Coming Soon (1 of 2)

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
4/05	Terra	ValRx	SRBAVG (SS10)	3/00 - 2/03	Waiting on delivery.
	Terra	Edition2D	SRBAVG (SS10)	3/00 - 2/03	
	Aqua	ValRx	SRBAVG (SS10)	7/02 - 2/03	
	Aqua	Edition1B	SRBAVG (SS10)	7/02 - 2/03	
		ValR12	GGEO (SS11)	3/03 - 6/03	Requires redelivery to handle GOES-9 and GOES-12; requires coefficients.
	Terra	ValRx	SRBAVG (SS10)	3/03 - 6/03	Waiting on GGEO and TISAavg deliveries.
	Aqua	ValRx	SRBAVG (SS10)	3/03 - 6/03	
		Edition2A	GGEO (SS11)	3/03 - 6/03	ValR11 must be approved.
	Terra	Edition2D	SRBAVG (SS10)	3/03 - 6/03	
	Aqua	Edition1B	SRBAVG (SS10)	3/03 - 6/03	
unkn		ValR12	GGEO (SS11)	? months	7/03 - 6/04; requires coefficients.
		Edition2A	GGEO (SS11)	7/03 - 6/04	
	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.

**Table 2: Process Strategy/Geier as of 04/06/05
Coming Soon (2 of 2)**

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

Table 3: April 6, 2005 - System Issues and Status

Activity	Lead	Status
CM	Ayers	<ul style="list-style-type: none">• 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 deliveries and released them to the ASDC: Instrument (SCCR 582) and GGEO (SCCR 553). (Saunders, Ayers)• Provided information concerning the SFC, SSF, and SRBAVG sample read packages to User Services. (Ayers)• Delivered the February 2005 Clouds S'COOL data file to the ASDC. (Ayers)• Updated the CERES Subsystem Delivery Schedule and posted it on the CERES CM Web site. (Ayers, Saunders)

Table 4: CERES Subsystem Delivery Schedule - April 2005
(Next CERES Science Team Meeting - May 3 - 5, 2005 in Princeton, NJ)

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Delivery to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)
Inversion (SCCR 581)	March 18	April 1	April 8	Delivery of Terra alternate main PGE, CER4.5-6.3P2, to make the hourly and daily processing equivalent.		
TISA Averaging	April			Terra Edition2D SRBAVG needed for Science Team Meeting.		X
Instrument	Mid-April			Aqua gains.		
ERBE-like	Mid-April			Aqua spectral response function files.		
Clouds	April			To process MODIS V005. Delivery needs to be made just before delivery of July 2005 Terra gains and spectral response function files.		
Clouds	Spring			Support TRMM VIRS-only processing of August 2001 forward.		

Table 5: SCCR Activity March 21 at 12:30 p.m. - April 4 at 12:15 p.m.

SCCR	S	U	A	C	D	SS	Page No.	Comments
580				X		5		
581	X		X			4.5 & 4.6	8	
582	X		X			1	9	

CERES Software Configuration Change Request Submittal

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Subsystem: Inversion

SCCR Date & TIME: 2005-03-28 11:52:53

SCCR No.: 581

Description of Change (Science):

Terra Inversion-only PGE CER4.5-6.3P2 will be modified to spectrally correct the filtered radiances and replace unfiltered radiances on the SSF.

Reason for Change (Science):

Spectral correction may be needed in the future for all the Inversion-only PGEs

Description of Change (non-Science):

Expected output will be created for second test case (FM2) for PGE CER4.5-6.3P2.

Reason for Change (non-Science):

To satisfy new requirement that data from all Instruments be tested.

Affected PGEs : CER4.5-6.3P2

Est. Time to Complete Changes: 1 week

Planned Delivery Date : April 1, 2005

Impact : n/a

Originator: NOLAN, SANDY K. (SAIC)

CERES Software Configuration Change Request Submittal

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Subsystem: Instrument

SCCR Date & TIME: 2005-03-29 14:45:39

SCCR No.: 582

Description of Change (Science):

N/A

Reason for Change (Science):

N/A

Description of Change (non-Science):

Update CER1.1P3, CER1.1P5 and CER1.3P3 input find scripts to better distinguish between old and new ephemeris and attitude filenames.

Reason for Change (non-Science):

An error found during production when the search key to find the old filename for ephemeris/attitude data matched numbers in the filename of a different date's new filenaming convention. The required fix was incorporated into all the input file creation scripts to avoid this occurrence at a later date in another one of the scripts.

Affected PGEs : CER1.1P3, CER1.1P5, CER1.3P3

Est. Time to Complete Changes: 2 days

Planned Delivery Date : March 31, 2005

Impact : Dates that saw this problem can now be processed

Originator: COOPER, DENISE L. (SAIC)

Table 6: April 6, 2005 - Subsystem Issues and Status (1 of 5)

SS No.	SS Lead	Status	Problems
1.0	Cooper	<ul style="list-style-type: none"> Continued monitoring receipt of Aqua and Terra Level-0, Ephemeris, and Attitude data at the ASDC. (Cooper & Snyder) An interesting feature found in data for Terra from 6/13/2000 started an investigation that has found a problem with the Level-0 data for this data date. Updates to the SS1 code to look for the problem and delete packets that are deemed suspect have been made. Testing the updates has become a low priority due to problems with Aqua-FM4. (Cooper) Aqua-FM4 SW channel went into a RESET condition beginning at 18:42 UT on 3/30/2005. Investigation into the cause of this problem is on-going. Updates to the Instrument Subsystem to turn off saturation and 3-channel checks of the radiances were made to allow processing of the Total and WN channel data to allow analysts to determine if there are problems with these channels. (Team) A delivery of scripts to fix a problem encountered trying to run Terra Edition2 for March 22 & 23, 2004. The problem is related to a search key being found in a different type of filename causing the script problems. An update to “weed” out the improper file was implemented and sent to CERES CM and on to ASDC through a Delta Delivery. (Cooper) 	
2.0	Walikainen	<ul style="list-style-type: none"> Recreating Terra Direct comparison plots using theoretically derived spectral correction coefficients. (Walikainen) Checking FM2’s response to increased solar calcs. Normally done bi-weekly, now every orbit starting 3/1/2005. The first 15 days showed no loss of performance. (Walikainen) Discovered a 101 minute span of corrupted Terra data (6/13/00 about the 2nd orbit). Checked Terra erbelike data for any similar corruptions; none detected between 3/1/2000 and 6/30/2004. (Walikainen) 	

Table 6: April 6, 2005 - Subsystem Issues and Status (2 of 5)

SS No.	SS Lead	Status	Problems
2.0	Walikainen (Cont'd)	<ul style="list-style-type: none"> 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) 	
3.0	Walikainen	Combined with above.	
4.1	Sun-Mack	<ul style="list-style-type: none"> Completed processing Cloudvis images for TRMM Edition2 VIRSonly for the Peru Coast region from January 2000 through December 2000. CloudVis images were also processed for the Bahrain region for Terra MODIS Edition2-QC from February 2000 through December 2003. Aqua MODIS Edition1a Cloudvis images were also processed for various regions. (R. Brown) QC results for Aqua Edition1a, Terra Edition2-QC and TRMM Edition2-VIRSonly were reprocessed to include changes to offline QC code and also to produce new cloud property results. QC Web Viewer was updated to include these changes as well. IDL and DX code were modified to produce new cloud property results. (R. Brown & Chen) Continuing CO2 Slicing algorithm implementation. (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"> Incorporated IES read subroutines into one module. Modified this module to integrate into inversion code for using Edition1 IESs. (Miller) Processed two days of combined CERES/MODIS/MISR data. Problems seem to be related to MISR input data. (Miller) Moving of SSF daily binary QC to nearline storage continued. Completed Terra FM1 and started FM2. (Miller) Pulled QC files for Aqua FM3 and FM4 for first year processed. (Miller) 	

Table 6: April 6, 2005 - Subsystem Issues and Status (3 of 5)

SS No.	SS Lead	Status	Problems
4.4	Miller (Cont'd)	<ul style="list-style-type: none"> Monitored Terra Edition2-QC processing. There were four hours without IES for January 2004. (Miller) 	
4.5	Nolan	<ul style="list-style-type: none"> Continued work to modify PGE CER4.5-6.2P2 to include an SSF validation subset which contains S'COOL sites. Created S'COOL validation output file with metadata. Initiated work to validate a day of data. (Sothcott) Continued work to extract Aqua FM4 daytime and nighttime SSF subsets from the ASDC archive and place the files in the CERES archive using NLstore. Seven months of FM4 Edition1B SSF subsets were archived. (Snyder) Successfully tested tar files for CER4.5-6.3P2 using both FM1 and FM2 test cases. (Snyder) Completed work to add spectral correction to PGE CER4.5-6.3P2 and add a second test case for the PGE using FM2 data. Updated Inversion Test Plan to include Spectral Correction Coefficient input files and the second test case for CER4.5-6.3P2. Delivered to CERES CM on April 1, 2005. (Nolan) Updated Inversion Operator's Manual to include spectral correction input files for CER4.5-6.3P2 and alternate source PGEs or CER4.5-6.3P2, CER4.5-6.3P3, CER4.5-6.6P2, and CER4.5-6.6P3. (Nolan) Initiated work to create MISR subset using SSF subset format. (Sothcott and Nolan) Initiated work to create SSFs with Edition1 IES radiances. (Zentz and Nolan) 	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> Worked with ASDC to determine if there was problem with Monthly Post-Processor. All involved now believe problem to be resolved. (Caldwell & Coleman) Posted Aqua CRS QC plots to SARB Web Site. (Zentz & Caldwell) 	

Table 6: April 6, 2005 - Subsystem Issues and Status (4 of 5)

SS No.	SS Lead	Status	Problems
7.2	Coleman	<ul style="list-style-type: none"> Resolved differences caused by testing with latest version of SARBlib that was modified to include Jim Donaldson's changes for running in the Open Source environment. (Zent & Caldwell) 	
12.0	Coleman	<ul style="list-style-type: none"> No new updates. 	
7.1	Nguyen	<ul style="list-style-type: none"> No new updates. 	
8.0	Nguyen	<ul style="list-style-type: none"> No new updates. 	
10.0	Nguyen	<ul style="list-style-type: none"> Ran the regional cloud averaging and gave the results to Dennis Keyes to compare with his results. There are differences in regional averaging outputs. Debugged code to find the error. The differences are due to the different way of averaging. Dave Doelling suggested to average using the interpolated data for the number of observations. Dave Young insisted on averaging only for the day with CERES observations. (Nguyen) Modified code to correct the zonal and global averagings for cloud parameters. (Nguyen) Working on documentations for the new PGEs. (Nguyen) Changed the cloud regional averaging code as suggested by Dave Doelling. Ran July 2001 for validation. (Nguyen) Changed the cloud regional averaging code back to the original code as suggested by Dave Young. (Nguyen) Received cloud averaging process logic from Dave Doelling for code validation purposes. A test program was written to read SFC data and process through the routines. Results showed the regional averaging process looks correct, but zonal/global averaging needed modifications. Results were sent to TISA science team for evaluation. (Raju) Checked surface flux module code at SSIT, and provided requested information on surface skin temperature in surface longwave net Model A or B process to Dave Doelling. (Raju) 	

Table 6: April 6, 2005 - Subsystem Issues and Status (5 of 5)

SS No.	SS Lead	Status	Problems
6.0	Raju	<ul style="list-style-type: none"> • Provided requested FSW/SFC products parameter information to Dave Doelling. (Raju) • Monitoring Terra Edition2C FSW production runs. Started documenting the hours that are not included in the monthly process. (Raju) • Started working on Sample Read Package to support Edition2C FSW product. (Raju) • Continued work to test PGE CER6.3P1 process runtime improvements. (Raju) 	
9.0	Raju	<ul style="list-style-type: none"> • Monitoring Terra, Aqua SFC production runs. Started documenting the hours that are not included in the monthly process. (Raju) 	
11.0	Stassi	<ul style="list-style-type: none"> • Problems were found in the July 2002 one-hourly data Web plots for the GMS-5, METEO-5, and METEO-7 data. The problems were traced to satellite-specific IR default values which were not converted to the standard default value. The GGEO code was modified to fix this problem, and the July 2002 data for these satellites were rerun. The output has not yet been evaluated. (Stassi) • A decision was made to use “MCIDAS-{satName}” for the Sampling Strategy when processing McIDAS input data. This change will be made in the GGEO scripts, as well as in the Operators Manual and Test Plan. (Stassi, Auberg, Geier, & Hopson) 	
CERESlib Stassi/Ayers		<ul style="list-style-type: none"> • No updates. 	