

April 20, 2005 - System Issues and Status

**Table 1: Process Strategy/Geier as of 04/20/05
Active Requests in order of priority (1 of 3)**

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
M-PR 3-02		NSIDC-NESDIS	EICE ESNOW (SS4.1)	4.1-4.0P1	Standing request	
44-05, 45-05	geosta- tionary	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	geosta- tionary	ValR13	GGEO (SS11)	11.1P5-8 11.2P1 11.4P1	7/02	Waiting on delivery to promote. Processes native for- mat.
40-05	geosta- tionary	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 - 7/1/04 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 4/05 - present	DO NOT PROCESS 3.2P2 - it is disabled.

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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 only (cut FM4 processing off after 3/29/05 complete)	Done 4/14/05.
Standing requests PM-PRs 1-05 to 4-05	FM3	Edition1	BDS/ ERBELike (SS1-3)	1.1P5 1.2P1 1.3P1 1.3P2 2.2P1 2.3P1 2.3P2 3.1P1	4/05 forward	
Standing requests PM-PRs 5A-05 to 6-05	FM4	AnomalousOps	BDS/ ERBELike (SS1-3)	1.1P5 1.2P1 1.3P1 2.2P1 1.3P2	3/30/05 forward	
PRs 29-05 to 34-05	Terra	Edition2	BDS/ ERBELike (SS1-3)	1.2P1 1.3P3 2.2P1 2.3P1 2.3P2 2.4P1 3.1P1	For 12/04 forward (11/04 forward for TISA)	Done 4/1/05.
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.

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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 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 46-05	Terra	ValR6	Inversion (SS4.5)	4.5-6.3P2	9 select days	Checkout hourly Terra alternate-main processing that now includes unfiltering.

Table 2: Process Strategy/Geier as of 04/20/05
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	
	Terra	Beta3	TSI (SS7.1)	12 months	
	TRMM	Beta4	Synoptic SARB (SS7.2)	9 months	
	Terra	Beta3	Synoptic SARB (SS7.2)	12 months	
	TRMM	Beta4	SYN/AVG/ ZAVG (SS8)	9 months	

**Table 2: Process Strategy/Geier as of 04/20/05
Coming Soon (2 of 2)**

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
	Terra	Beta3	SYN/AVG/ ZAVG (SS8)	12 months	
	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 20, 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 Inversion (SCCR 581) delivery and released it to the ASDC. (Saunders, Ayers)• Re-tested and re-released the GGEO (SCCR 553) delivery to the ASDC. (Saunders, Ayers)• Delivered updated Inversion and GGEO documentation to the ASDC. (Saunders)• Delivered updated GGEO software to the ASDC. (Saunders)• 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)
TISA Gridding	April 22	May 6	May 13	Delivering PGE CER6.2P1 to correct the problem encountered when processing February 2001 data.		
TISA Averaging	May			Terra Edition2D SRBAVG needed for Science Team Meeting.		X
Clouds	May			To process MODIS V005. Delivery needs to be made just before delivery of July 2005 Terra gains and spectral response function files.		
Instrument	June			Aqua gains.		
ERBE-like	June			Aqua spectral response function files.		
Clouds	Spring			Support TRMM VIRS-only processing of August 2001 forward.		

Table 5: SCCR Activity April 4 at 12:15 p.m. - April 18 at 2:00 p.m.

SCCR	S	U	A	C	D	SS	Page No.	Comments
582				X		1		

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

Table 6: April 20, 2005 - Subsystem Issues and Status (1 of 6)

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) Continuing the investigation of the Aqua-FM4 SW channel anomaly. Efforts to get the SW channel back on scale for an extended period of time have thus far failed. A reboot of the DAP processor may be done early this week. If the reboot does not help, it is possible that the instrument may be power cycled as a last resort. If we are unable to fix the SW channel, efforts will then be made to determine how to best use the Total and WN channels for relevant scientific information. (Team) Processing FM2 Edition2 data for GERB campaigns. These include Dec.03-Jan04 (winter solstice), and June-July 04 (summer solstice). Results will be presented at the GERB STM at the end of April. (Szewczyk) 	
2.0	Walikainen	<ul style="list-style-type: none"> Recreated Terra Nadir Direct comparison plots using theoretically derived spectral correction coefficients. This theory attempts to model the RAPS vs. Cross Track degradation. (Walikainen) Checked FM2's response to increased solar calibrations. Normally done bi-weekly; for March 2005, every orbit a solar calibration was executed. No loss of performance has been detected in the SW channel. Also, it shows that solar exposure (reflected from the MAM) does not explain the magnitude of the RAPS vs. Cross Track degradation. (Walikainen) Discovered a 101 minute span of corrupted FM2 data (6/13/00 about the 2nd orbit). This day showed a spike in the mean DAP checksum and solar warning event scan period. Checked Terra ERBE-like data for any similar corruptions; none detected between 3/1/2000 and 6/30/2004. (Walikainen) 	

Table 6: April 20, 2005 - Subsystem Issues and Status (2 of 6)

SS No.	SS Lead	Status	Problems
2.0	Walikainen (Cont'd)	<ul style="list-style-type: none"> Monitoring FM4's WN and Total channels. The night time nadir daily direct comparisons with FM3 show no anomalous behavior. The problem detected 3/30/05 appears to be isolated to the SW channel. (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) 	
3.0	Walikainen	Combined with above.	
4.1	Sun-Mack	<ul style="list-style-type: none"> Processed QC results for Terra-MODIS Flux V004 and V005 data. Posted results on the web. QC results were also processed for Terra-MODIS Edition2-QC for 200401 - 200404. (R. Brown, Miller, & Sun-Mack) Worked on reprocessing QC Edition QC results to incorporate changes to offline QC process including naming convention, new cloud properties, and changes to QC code. (R. Brown) CloudVis images for TRMM Virs Edition 2 were processed for the Taklimakan Desert region from January 2000 through December 2000. Terra MODIS CloudVis images were processed for the Bahrain region from March 2000 through December 2003. Also, all non polar regions for January 2004 were processed for Terra MODIS Edition2-QC. CloudVis images were also processed for Aqua MODIS Edition1A for the Salt Lake City and Paliseau, France regions from July 2000 through June 2004. (R. Brown) Processed a month of GLAS data (200210) and produced global results for Cloud Fraction, Multi Amount, and Cloud Top Heights. Validated our results with GLAS results. (Chen & Sun-Mack) Preparation for EGU meeting. (Sun-Mack) 	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	

Table 6: April 20, 2005 - Subsystem Issues and Status (3 of 6)

SS No.	SS Lead	Status	Problems
4.4	Miller	<ul style="list-style-type: none"> • Consulted with inversion team in using IES module. (Miller) • Reprocessed one day of combined CERES/MODIS/MISR data. Problem was found in MISR input data and resolved. (Miller) • Moving of SSF daily binary QC to nearline storage completed. (Miller) • Monitored Terra Edition2-QC processing. There were 29, 6, 4, and 7 hours that weren't processed for February through May 2004. Two hours in March tried to use a bad MODIS granule. Two hours in April did not have IES and MODIS data at the same time. (Miller) • Started quantifying differences between MODIS collection 4 and 5. (Miller) 	
4.5	Nolan	<ul style="list-style-type: none"> • Continued work to create MISR subset using SSF subset format. (Nolan) • Completed work to create SSFs with Edition1 IES radiances. (Zentz & Nolan) • Created a version of the SSF subset module that will open, close, and write SSF DAY and NIGHT S'COOL subsets. (Nolan) • Completed work to modify PGE CER4.5-6.2P2 to include an SSF validation subset which contains S'COOL sites. Created S'COOL SSF DAY and NIGHT subset files 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) • Initiated work to run some V004 and V005 SSFI data to be subsetted and compared. (Zentz) 	
4.6	Nolan	Combined with above.	

Table 6: April 20, 2005 - Subsystem Issues and Status (4 of 6)

SS No.	SS Lead	Status	Problems
5.0	Coleman	<ul style="list-style-type: none"> Tested the Instantaneous SARB Subsystem's subset-only mode to ensure that we can successfully process only FOVs over CERES validation regions. This was the case before we began routinely generating the CRSVB along side the CRSB, and Tom Charlock has requested that we keep the subset-only capability for validation exercises. Minor changes were required to the subsystem initialization and wrap-up logic to keep the optional capability. (Caldwell) Completed generation of all of the FSW plots of SARB interest and posted them to the Web for Fred Rose and Tom Charlock. (Zentz) 	
7.2	Coleman	<ul style="list-style-type: none"> No new updates. 	
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"> Working on documentations for the new PGEs. Testing the new PGEs. (Nguyen) Ran July 2002 with 1-hour interval GGEO and 3-hour interval GGEO for Terra and Aqua. (Nguyen) Added the new snow ADM code and ran the four seasonal months for testing and the outputs were sent to Dave Doelling for validation. (Nguyen) Studying the cause of the weird ocean problem on the SW fluxes when using 1-hr interval GGEO. (Nguyen) 	
6.0	Raju	<ul style="list-style-type: none"> Investigated and found the cause for 02/01 failed job during PGE CER6.2P1 process at the ASDC. The hour variable that checks against the hour number in the input file header increments only if the overlap file exists, and this caused the problem when there was a missed overlap file for this month. Corrected the code and processed 02/01 successfully at SCF. Preparing for PGE CER6.2P1 delivery on May 6 to process 02/01 at the ASDC. (Raju) 	

Table 6: April 20, 2005 - Subsystem Issues and Status (5 of 6)

SS No.	SS Lead	Status	Problems
6.0	Raju (Cont'd)	<ul style="list-style-type: none"> Completed work on Sample Read Package to support Edition2C FSW product. Preparing for CM delivery. (Raju) Continued to monitor Terra Edition2C FSW production runs, and documenting the hours that are not included in the monthly process. (Raju) Continued work to test PGE CER6.3P1 process runtime improvements. (Raju) 	
9.0	Raju	<ul style="list-style-type: none"> Work started to write FORTRAN 90 code to combine the Aqua and Terra SFC data according to the methods received from TISA science team and to create a single combined SFC binary product. (Raju) 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"> Modified the McIDAS read routines to use multiplying factor of 1.0 for the GMS-5 VIS channel, regardless of the pixel resolution information in the file headers. The resolution correction needed by the GOES satellites was effectively zeroing out the GMS visible data. (Stassi) Added an extra check on the McIDAS IR channel data to flag an entire scan as "no data" if all the non-default data for the scan is identical. This was needed because non-standard default values were found in some of the 2002 data. (Stassi) Replaced PRINT* statements in the McIDAS read routines with Toolkit calls to write to the LogReport file. (Stassi) Redelivered GGEO subsystem with the above corrections. (Stassi) Ran four satellites through the 1-hourly processing for December 2002. Problems with two of the satellites are being investigated. (Stassi) Comparing GGEO 1-hourly Web plots for July 2002 to the production 3-hourly plots for the same month. (Raju) 	

Table 6: April 20, 2005 - Subsystem Issues and Status (6 of 6)

SS No.	SS Lead	Status	Problems
11.0	Stassi (Cont'd)	<ul style="list-style-type: none">Made corrections to the Perl script, SATFILES_mcidas. This script selects the GEO image inputs for the Main processor PCF. Selection is based on satname, date, number of pixels per scan, and whether the processing is 1-hourly or 3-hourly. (Stassi)	
CERESlib Stassi/Ayers		<ul style="list-style-type: none">No updates.	