

March 24, 2004 - System Issues and Status

**Table 1: Process Strategy/Geier as of 03/24/04
Active Requests in order of priority (1 of 3)**

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 18-04	Terra	ValR1	SRBAVG (SS10)	10.1P1	1/01 - 12/01	Waiting on delivery.
PR 20-04	Terra	ValR2	FSW (SS6)	6.1P1 6.2P1 6.3P1	7/01	Done 3/17/04.
PR 17-04	Terra	Edition2A	SRBAVG (SS10)	10.1P1	3/00 - 2/02	ValR1 must be approved before this starts.
PR 21-04	Terra	Edition2A	CRS (SS5)	5.0P1 5.1P1 5.4P1	1/01, 4/01, 7/01, 10/01	Done 3/15/04.
PR 19-04	Terra	Edition2A	FSW (SS6)	6.1P1 6.2P1 6.3P1	1/01, 4/01, 7/01, 10/01	ValR2 must be approved before this runs. Crosstrack only.
PR 21-04	Terra	Edition2A	CRS (SS5)	5.0P1 5.1P1 5.4P1	1/01 - 12/01 remaining 8 months	Expected to complete by 3/23/04.
PR 19-04	Terra	Edition2A	FSW (SS6)	6.1P1 6.2P1 6.3P1	1/01 - 12/01 remaining 8 months	ValR1 must be approved before this runs. Crosstrack only.
M PR 99-03		GEOS4	MOA (SS12)	12.1P1	1/04 - present	Standing request to process data as it arrives.
M PR 109-03		GEOS4	PMOA (SS9.1)	9.1P1	1/04 - present	
PR 116-03	TRMM	Beta3	TSI (SS7.1)	7.1.1P1	4/98, 7/98, 8/98	Waiting on delivery to promote.
PR 97-03	Terra	Edition2-QC	SSF (SS4)	4.1-4.1P2 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1	3/02 - 2/03	Holding - waiting on corrupted 2002 data blocks to be replaced.
PR 10-04, 11-04	Terra	Edition2A	SSF (SS4.5-6)	4.5-6.1P2 4.5-6.2P2 4.5-6.4P1	3/02 - 2/03	

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PR 9-04	Terra	Edition2A	SFC (SS9)	9.2P1 9.3P1 9.4P1	3/02 - 2/03	Need to rerun 8/02 and continue forward as SSFs become available.
PR 8-04		Edition2	GGEO (SS11)	11.4P1	3/02 - 12/02	Waiting on SFC inputs to become available.
PR 8-04		Edition2	GGEO (SS11)	11.1P5 11.1P6 11.1P7 11.1P8 11.2P2 11.4P1	1/03 - 2/03	Waiting on SFC inputs.
PR 17-04	Terra	Edition2A	SRBAVG (SS10)	10.1P1	3/02 - 2/03	ValR1 must be approved before this starts.
PR 21-04	Terra	Edition2A	CRS (SS5)	5.0P1 5.1P1 5.4P1	3/00	All other 2000, 2002 months not needed.
PR 19-04	Terra	Edition2A	FSW (SS6)	6.1P1 6.2P1 6.3P1	3/00	
PR 13-04	Aqua	Beta2	SRBAVG (SS10)	10.1P1	12/02	Run once GGEO and SFC inputs are available.
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 3/04 - present	DO NOT PROCESS 3.2P2 - it is on hold.

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Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
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 7/03 - present	Need Gains and SCR before processing any further. (ValRX 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 3/04 - present	Do not start until all January'04 data received. 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 7/03 - present	Need Gains and SCR before processing any further. (ValRX approved.) DO NOT PROCESS 3.2P2 - it is on hold.
Standing request PM-PR 12-03	Aqua/ Terra	Edition2	ES4/ES9 (SS3)	3.2P1	For 7/03 - present	Need Gains and SCR before processing any further. (ValRX approved.)
M-PR 3-02		NSIDC- NESDIS	EICE ESNOW (SS4.1)	4.1-4.0P1	Standing request	
PR 97-03	Terra	Edition2-QC	SSF (SS4)	4.1-4.1P2 4.1-4.2P1 4.1-4.2P2 4.1-4.3P1	3/03 - 6/03	Run at LOW priority after 2/03 finishes.
PR 10-04, 11-04	Terra	Edition2A	SSF (SS4.5-6)	4.5-6.1P2 4.5-6.2P2 4.5-6.4P1	3/03 - 6/03	
PR 9-04	Terra	Edition2A	SFC (SS9)	9.2P1 9.3P1 9.4P1	3/03 - 6/03	

**Table 2: Process Strategy/Geier as of 03/24/04
Coming Soon (1 of 2)**

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
6/04	Terra	Beta2	TSI (SS7.1)	12 months	
	Aqua	Edition1A	SSF(SS4)	First 12 months	
	Aqua	Beta3	SFC(SS9)	First 12 months	
		Edition3	GGEO (SS11)	3/00 - 6/03	
7/04	TRMM	Beta3	Synoptic SARB (SS7.2)	9 mo	Rerun 3 months of SYNI to use as input for SYN/AVG/ZAVG.
	Aqua	Beta3	SRBAVG (SS10)	First 12 months	
	Terra	Beta2	Synoptic SARB (SS7.2)	4 seasonal months & 3/00	
8/04	Aqua	Beta1	CRS(SS5)	First 12 months	
	Aqua	Beta1	FSW (SS6)	First 12 months	Test at SCF to verify no redelivery needed.
9/04	TRMM	Beta1	SYN/AVG/ZAVG (SS8)	9 mo	Need Synoptic SARB input.
	Terra	Beta1	SYN/AVG/ZAVG (SS8)	4 seasonal months & 3/00	Need Synoptic SARB input.
	Aqua	Edition1A	SSF(SS4)	Second 12 months	
	Aqua	Beta3	SFC(SS9)	Second 12 months	
	Terra	Edition2B	SSF (SS4.5-6)	50 months	Updated ADMs, code correction, correct clear area coverage as needed (50-60 deg lat).
	Terra	Edition2B	SFC (SS9)	50 months	
10/04	Terra	Edition2B	SRBAVG (SS10)	50 months	
	Terra	Edition2B	CRS(SS5)	50 months	
		Edition3	GGEO (SS11)	7/03 - 6/04	

**Table 2: Process Strategy/Geier as of 03/24/04
Coming Soon (2 of 2)**

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
	TRMM	Beta4	Synoptic SARB (SS7.2)	9 months	
	Terra	Beta3	Synoptic SARB (SS7.2)	12 months	
11/04	TRMM	Beta4	SYN/AVG/ ZAVG (SS8)	9 months	
	Terra	Beta3	SYN/AVG/ ZAVG (SS8)	12 months	
	Aqua	Beta3	SRBAVG (SS10)	7/03 - 6/04	
	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: March 24, 2004 - System Issues and Status

Activity	Lead	Status
CM	Ayers	<ul style="list-style-type: none"> • See Table 4 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 4. (Ayers) • Installed the Regrid MOA delta delivery (SCCR 512) in the SSI&T area on <i>warlock</i> and released it to the ASDC. (Ayers) • Delivered updates for the SFC and CRS sample read packages to the ASDC. (Ayers) • Provided information to the ASDC concerning directories/files that should be promoted to production for each subsystem. (Ayers) • Currently testing the Instrument delivery (SCCR 514). (Ayers) • Delivered various documents to the ASDC. (Ayers, Saunders)

Table 4: SCCR Activity March 8 at 2:30 p.m. - March 22 at 2:00 p.m.

SCCR	S	U	A	C	D	SS	Page No.	Comments
499				X		6		
511				X		4.1-4.3		
512	X		X			12	7	
513	X					10	7	
514	X					1	8	
515	X					5	8	

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

CERES Software Configuration Change Request Submittal

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Subsystem: Instrument SCCR Date & TIME: 2004-03-15 13:54:22 SCCR No.: 514

Description of Change (Science):
N/A

Reason for Change (Science):
N/A

Description of Change (non-Science):
Flags used by analyst to determine spaceclamp validity were being overwritten with either GOOD or No 2nd Value, instead of the proper QA explanation. This does not affect the radiance conversion, bad spaceclamp values were set to CERES Defaults as expected and radiances were not calculated.

Reason for Change (non-Science):
The spaceclamp flags are used by analysts in offline programs such as the Moon View program. The Moon in FOV flag was no longer being set, so the Moon View program could not find the necessary data to calculate radiances for Moon views during the spaceclamp.

Affected PGEs : CER1.1P1 thru CER1.1P6
Est. Time to Complete Changes : 1 day
Planned Delivery Date : 3/19/04
Impact : No reprocessing is necessary, the flag only affects offline analysis

Originator: COOPER, DENISE L. (SAIC)

CERES Software Configuration Change Request Submittal

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Subsystem: InstSARB SCCR Date & TIME: 2004-03-22 10:39:29 SCCR No.: 515

Description of Change (Science): N/A

Reason for Change (Science): N/A

Description of Change (non-Science):
Modified the Monthly QC Summary Post-Processor (PGE CER5.4P1) to produce additional reports summarizing error counts and validation region overpasses, along with preparing files necessary for the QC plots used by the working group to evaluate results.

Reason for Change (non-Science):
Automating manual processes to expedite delivering QC information to the SARB Working Group

Affected PGEs : None
Est. Time to Complete Changes : 3 months
Planned Delivery Date : March 26, 2004
Impact : SARB Working Group will receive QC information faster

Originator: COLEMAN, LISA H. (SAIC)

Table 5: March 24, 2004 - Subsystem Issues and Status (1 of 5)

SS No.	SS Lead	Status	Problems
1.0	Cooper	<ul style="list-style-type: none"> • Continued tracking receipt of Aqua and Terra data at ASDC. (Cooper, Snyder) • Continued work to determine updates to the Terra gain coefficients and SRFs covering July 2003 through December 2003. (Cooper, Kizer, Walikainen) • Delivered an update to fix the flagging of spaceclamp values written to the BDS in PGE CER1.1Px. This did not affect science data, but these flags are used for off-line analysis programs. (Cooper) • PFM-FM1/FM2 validation data reprocessing. Using Edition1 and Edition2 data to help clarify the differences being seen in TISA. (Szewczyk) 	
2.0	Walikainen	<ul style="list-style-type: none"> • Generating Terra ES8N files to support July thru Dec 2003 Edition2 processing. (Walikainen) • Continuing to provide instrument support in studying flight, ground and zero scan offsets comparison studies. Generated monthly averaged data files and graphics. (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) • Updating ERBE-like direct comparison Web Page. User will be able to view previous versions of these plots. (Flug) • Regenerated March 2000 PFM Web gif files - daily radiance and flux geolocated plots. (Walikainen) 	
3.0	Walikainen	Combined with above.	

Table 5: March 24, 2004 - Subsystem Issues and Status (2 of 5)

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	<ul style="list-style-type: none"> • Processed CloudVis images for Aqua-MODIS Beta 2 for December 2002 for the following regions: Oklahoma ARM Site, Tropical Western Pacific, Alaska ARM NSA Site, Paliseau, France (SIRTA site), Syowa, Antarctica, and Georg Von Neumayer, Antarctica sites. Processed Terra-MODIS Edition2-QC CloudVis images for the Alaska ARM Site through December 2001. (R. Brown) • Processed Daily QC results for Aqua MODIS Beta2 for December 2002 and posted results on the Web. Completed processing Terra MODIS Edition2 Monthly QC results through 200208. (R. Brown) • Implemented CloudVis Web Viewer and began using with Aqua MODIS Beta2 CloudVis results. Modified QC Web Viewer to do comparison between Aqua MODIS Beta2 and Terra MODIS ValR4 QC results. (R. Brown) • Continued studying the impact of problem regarding polar transition (first found in Sea of Okhotsk). Re-processed 4 days in July 2001 to produce SSF for Norm Loeb. Worked with Pat Minnis on Data Quality Summary Caution. Lots communications with Pat Minnis. (Chen, Sun-Mack) • Validated Terra-MODIS_Edition2-QC cloud amount with Micro-pulse Lidar measurements over ARM NSA from March 2000 to June 2002. (Chen, Spangenberg, 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"> • Monitored Terra Edition2-QC clouds production for August 2002. Six hours failed to process during this time. One hour ended with a segmentation fault. It had the same problem that the hour being investigated in January (2002010406) had. Unavailable IES input data was the cause of failure for the remaining hours. (Miller) 	

Table 5: March 24, 2004 - Subsystem Issues and Status (3 of 5)

SS No.	SS Lead	Status	Problems
4.4	Miller (Cont'd)	<ul style="list-style-type: none"> • Investigated segmentation fault that occurred for 2000071305, 2001072904, and 2002081917 during Terra Edition2-QC processing. The cause of the segmentation fault was isolated to an uninitialized index in the cloud retrieval algorithm for determining optical depth (same problem for three other hours). A bad surface radiance caused the code to bypass the branch that set the index. For these tiles, clouds incorrectly identified as clear lowered the skin temperature. The moisture profile is adjusted to obtain TOA radiance that would match the observation and MOA skin temperature. The index will be initialized. A request was sent to Dr. Minnis if other action should be done. (Miller) • Investigated the hour failing in segmentation fault during Edition2-QC processing. It is not the same problem as we have been seeing. There are no out-of-bound array accesses. (Miller) • Planned MODIS corrupt file recovery plan. (Miller) • Rewrote the Aqua Beta2 SSF Data Abstract to specify SSF parameters. (Miller) 	
4.5	Nolan	<ul style="list-style-type: none"> • Continued to develop new PGE CER4.5-6.6P2. Issues with metadata are being resolved. The HDF generator was modified to process a full 24 hours worth of SSF binary data. (Hoppe) • Placed all Inversion PGE scripts and test suite software under CVA, a version control system. (Nolan) • Completed work at the request of Norman Loeb to create new software to rewrite all Terra FM2 2002 Principle Plane scan SSF subset files to include a default admgeo parameter. The new subset files were assigned SSF ID 120 and have a format compatible with the Edition2A Terra SSFs Subsets. (Nolan) • Created 8 days of July 2001 FM1 binary SSFs and SSF subset files for Norman Loeb for an albedo study. (Nolan) 	

Table 5: March 24, 2004 - Subsystem Issues and Status (4 of 5)

SS No.	SS Lead	Status	Problems
4.5	Nolan (Cont'd)	<ul style="list-style-type: none"> Attended meeting on March 15, 2004 to discuss upgrading the SGI operating systems and compilers. (Nolan) 	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> Produced Monthly QC plots for the first year of Terra Edition2A data processed at ASDC (THANKS ASDC!). (Caldwell) Supplied an updated CRS Data Description/Abstract for Terra Edition2A to ASDC. (Coleman) Preparing Monthly QC Summary Post-Processor (PGE CER5.4P1) for a delivery. (Zentz, Caldwell) Provided background information to Jim Donaldson for his better understanding of the Instantaneous SARB Subsystem and CERES in general. (Coleman) 	
7.2	Coleman	<ul style="list-style-type: none"> Worked with the Working Group and determined that developing a MODIS-based ocean chlorophyll climatology is more feasible than obtaining a regular subscription to some product with that data. (Coleman) Incorporating ocean chlorophyll climatology software provided by Fred Rose into the Synoptic SARB Subsystem. (Zentz) 	
12.0	Coleman	<ul style="list-style-type: none"> Completed delta delivery of PCF generation scripts for SCCR 512. (Caldwell) 	
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"> Delivered the read SRBAVG software. (Nguyen) Corrected the monthly mean SW flux and albedo for the North pole and South pole regions where there is no sun light and there is sun light but no CERES observation cases. (Nguyen) Modifying code to interpolate and replace the default zonal mean SW and net fluxes. (Nguyen) 	

Table 5: March 24, 2004 - Subsystem Issues and Status (5 of 5)

SS No.	SS Lead	Status	Problems
10.0	Nguyen (Cont'd)	<ul style="list-style-type: none"> Updated code to get ready for the new ADM algorithm. Replaced the ADM code and in the process of testing. (Nguyen) 	
6.0	Raju	<ul style="list-style-type: none"> Started working on FSW Terra ValR2 product validations. (Raju) 	
9.0	Raju	<ul style="list-style-type: none"> Processed 10 days of July 2001 SFC Terra data with updated code at SCF and notified the location of the generated SFC binary files to TISA Averaging working group for validation. (Raju) Wrote FORTRAN 90 code to read colat, longitude, TOA sw mean values from SFC binary product for a requested hour and output values to an Ascii file. Processed July 2001 Terra data at SCF and the data was plotted using view_hdf software. Sent plots to Mr. Dave Young (RAB) for validations. (Raju) Modified FORTRAN 90 programs that are used to show narrowband-to-broadband relationship for LW Flux. Processed July 2001 Terra SFC data. The output file containing IR radiances, narrowband, broadband LW Fluxes & cloud info. was sent to Dave Young for analysis. (Raju) Updated SFC_readhdf.c program to include more detail description of the product and sent to CM. (Raju) 	
11.0	Stassi	<ul style="list-style-type: none"> Copied the GGEO Main processor design diagrams into MS PowerPoint. The hard copy diagrams were originally created with "Software through Pictures," which is no longer available in our environment. (Stassi) Modifying the GGEO Main processor code and scripts to move calibration coefficients from the code to ancillary data files. (Stassi) Redesigning the modules which handle the calibration adjustments for the VIS and IR channels so that it is easier to understand how the adjustments are being made. (Stassi) 	
CERESlib Stassi/Ayers		<ul style="list-style-type: none"> No updates. 	