July 22, 2009 - System Issues and Status

Table 1: Process Strategy/Coleman as of 7/20/09

Active Requests in order of priority

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	
M-PR 3-09	CERES	DAO-G5-CERES	MOA	12.1P1	Standing request	
M-PR 2-09	CERES	DAO-G5-CERES	PMOA	9.1P1	Standing request	
Standing requests AM- PR 1-05 to 7-05	Terra	Edition1-CV	BDS/ ERBElike (SS1-3)	1.1P3 1.2P1 1.3P1 1.3P2 2.1P1 2.2P1 2.3P1 2.3P2 3.1P1	Standing request	These PRs replace standing requests AM- PR 1-00 to 7-00.
Standing requests PM-PRs 15-05 to 18-05	FM3	Edition1-CV	BDS/ ERBElike (SS1-3)	1.1P5 1.2P1 1.3P1 1.3P2 2.2P1 2.3P1 2.3P2 3.1P1	Standing request	These PRs replace standing requests PM-PRs 1-05 to 4-05.
Standing requests PM-PRs 11-05 to 14-05	FM4	Ed1-CV-NoSW	BDS/ ERBElike (SS1-3)	1.1P5 1.2P1 1.3P1 1.3P2 2.2P1 2.3P1 2.3P2 3.1P1	Standing request	These PRs replace standing requests PM-PRs 7-05 to 10-05.
PR 39-09		ValR14	EICE ESNOW (SS4.1)	4.1-4.0P2	6/17/08	Done. 7/14/09
PR 38-09		ValR14-Mesh16	EICE ESNOW (SS4.1)	4.1-4.0P2	6/17/08 8/07	Done. 7/15/09
PR 37-09	FM1, FM2	ValR14	SSFI	Clouds delivery to *magneto*	8/07	Done. 7/16/09
PR 36-09	FM1, FM2	ValR14	SSF	Inversion delivery to *magneto*	8/07	In Progress
PR 35-09	FM3, FM4	ValR14	SSFI	Clouds delivery to *magneto*	8/07	Ready

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Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 34-09	FM3, FM4	ValR14	SSF	Inversion delivery to *magneto*	8/07	Ready
PR 10-09	FM3	ValR10	SFC	9.2P1 9.3P1 9.4P1	7/07	In Progress
PR 8-09	FM1	ValR10	SFC	9.2P1 9.3P1 9.4P1	5/07	In Progress
PR 57-09	FM5	PreLaunch-Beta1	Instrument	1.0P2	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 56-09	FM5	PreLaunch_Beta1	Instrument	1.1P7	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 55-09	FM5	PreLaunch-Beta1	Instrument	1.2P1	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 54-09	FM1, FM2	PreLaunch-Beta1	Instrument	1.1P8	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 53-09	FM1, FM2	PreLaunch_Beta1	Instrument	1.2P1	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 52-09	FM3, FM4	PreLaunch-Beta1	Instrument	1.1P8	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 51-09	FM3, FM4	PreLaunch_Beta1	Instrument	1.2P1	2/28/03 3/1/03 3/2/03 3/19/03	Pending Promotion
PR 50-09	FM5	PreLaunch-Beta1	Instrument	1.1P8	3/1/03	Pending Promotion
PR 57-08	FM1, FM2	Edition2A-QC	SSFI Clouds	4.1-4.1P4 4.1-4.2P3 4.1-4.2P2 4.1-4.3P2	1/1/07 – ~~9/1/07~~ 1/01/08	Ready
PR 56-08	FM1, FM2	Edition2F	SSF Inversion	4.5-6.1P2 4.5-6.2P2 4.5-6.4P1	1/1/07 – ~~9/1/07~~ 1/01/08	Ready
PR 55-08	FM1, FM2	Edition2F	SFC TISA-Grid	9.2P1 9.3P1 9.4P1	12/31/06 hr 12 – ~~9/1/07 hr 11~~ 1/1/08 hr 11	Ready

Table 1: Process Strategy/Coleman as of 7/20/09
Active Requests in order of priority

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 54-08	FM1 V005 MOD08	Edition2F	CRS Inst SARB	5.0P1 5.1P1 5.4P1	1/1/07 – ~~8/31/07~~ 12/31/07	Ready
PR 53-08	FM1	Edition2F	FSW TISA-Grid	6.1P1 6.2P1 6.3P1	1/1/07 – ~~8/31/07~~ 12/31/07	Ready
PR 33-09	FM3, FM4	Edition1B	SSFI	4.1-4.1P5 4.1-4.2P3 4.1-4.2P2 4.1-4.3P2	9/1/07 – 1/01/08	Ready
PR 32-09	FM3, FM4	Edition2C/NoSW	SSF	4.5-6.1P3 4.5-6.2P2 4.5-6.4P1	9/1/07 – 1/01/08	Ready
PR 31-09	FM3, FM4	Edition2C/NoSW	SFC	9.2P1 9.3P1 9.4P1	12/31/06 hr 12 – ~~9/1/07 hr 11~~ 1/1/08 hr 11	Ready
PR 30-09	FM3	Edition2C	CRS	5.0P1 5.1P2 5.4P2	9/1/07 – 12/31/07	Ready
PR 29-09	FM3	Edtion2C	FSW	6.1P1 6.2P1 6.3P1	9/1/07 – 12/31/07	Ready
PR 28-09	FM1, FM2, FM3, FM4	Edition2		2.4P1	9/2/07 – 1/1/09	Done. 7/13/09
PR 27-09	FM1, FM2, FM3, FM4	Edition2	BDS	1.3P3	9/2/07 – 1/1/09	Done. 7/14/09
PR 26-09	FM1, FM2, FM3, FM4	Edition2	BDS	1.2P1	9/2/07 – 1/1/09	Done. 7/14/09
PR 25-09	FM1, FM2, FM3, FM4	Edition2	ES8	2.2P1	9/2/07 – 1/1/09	Done. 7/14/09
PR 24-09	FM1, FM2, FM3, FM4	Edition2		2.3P1	9/2/07 – 1/1/09	Done. 7/14/09
PR 23-09	FM1, FM2, FM3, FM4	Edition2		2.3P2	9/2/07 – 1/1/09	Done. 7/14/09

Table 1: Process Strategy/Coleman as of 7/20/09
Active Requests in order of priority

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 22-09	FM1, FM2, FM3, FM4	Edition2	ES4, ES9	3.1P1	9/2/07 – 1/1/09	Done. 7/14/09
PR 21-09	FM1 + FM3	Edition2	ES4, ES9	3.2P1	9/2/07 – 1/1/09	Done. 7/14/09
PRs 40-09 thru 49-09	FM1, FM2, FM3, FM4	Edition2G (Terra) Edition2D/Ed 2D-NoSW (Aqua)	SSF, SFC, CRS, FSW		1/1/08 – 12/31/08	Pending input, code promotions, ValRx approvals, etc

Table 2. July 22, 2009 - System Issues and Status

Activity	Lead	Status
CM/Docu-mentation	Ayers (Saunders)	• See Table 3 for the current CERES Subsystem Delivery Schedule, Table 4 for the current CERES Coefficients Delivery Schedule, and Table 5 for the current DPC Update Schedule. (Ayers) • See Table 6 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 6. (Ayers) • Installed, compiled, and tested the GGEO delivery (SCCR 653) and released it to the ASDC on July 10. (Saunders) • Provided the SSI&T directory structure for *ami* to Jason James of the ASDC. (Ayers, Cooper) • The CERES Subsystem and Coefficients Delivery Schedules were updated and posted on the Web. (Ayers, Saunders)

Table 3. CERES Subsystem Delivery Schedule – July 2009
(Next Science Team Meeting – November 3 – 5, 2009 in Ft. Collins, CO)

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Release to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)	Certified Platform(s)
TISA Averaging (SCCR 650)	July 17	July 31	August 7	Support Terra Edition2E and Aqua Edition2B SRBAVG1-3 and Daily processing. New PGEs: CER10.0P1, CER10.0P2, & CER10.0P3.		X	*magneto-P4*
CERESlib	July 17	July 31	August 7	Clouds modifications.			*magneto-P4*
Clouds (SCCR 719)	July 17	July 31	August 7	Terra and Aqua Beta2-Edition3.	X		*magneto-P4*
Instantaneous SARB (SCCR 718)	July 17	July 31	August 7	New "pre-Synoptic" PGE CER5.0P2.		X	*magneto-P4*
ERBE-like (SCCR 696)	July 31	August 14	August 21	To process everything including all of Edition3 on *magneto*.			*magneto-P4*
Inversion (SCCR 704)	August 14	August 28	September 4	Terra and Aqua Beta2-Edition3. Note: Only one of these two Inversion deliveries scheduled for Aug. 28 will be needed.		X	*magneto-P4*
Inversion	August 14	August 28	September 4	In case Clouds doesn't make the Edition3 schedule. Note: Only one of these two Inversion deliveries scheduled for Aug. 28 will be needed.		X	*magneto-P4*
TISA Gridding	September 11	September 25	October 2	SFC Terra and Aqua Beta2-Edition3.			*magneto-P4*

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Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Release to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)	Certified Platform(s)
TISA Gridding	September 11	September 25	October 2	Edition2 & Beta2-Edition3 ISCCP-D2like-Day/Nit.			*magneto-P4*
TISA Averaging		Early Fall		SRBAVG-GEO Beta2-Edition3. Adding Model C surface fluxes and solar insulation.			*magneto-P4*
Instrument	September 18	October 2	October 9	Build that runs full Terra/Aqua Baseline1-QC and Edition1-CV as well as NPP.	X		*magneto-P4*
TISA Averaging	September 25	October 9	October 16	SRBAVG-nonGEO Beta2-Edition3.			*magneto-P4*
GGEO	October 2	October 16	October 23	Beta1-Edition3 ISCCP-D2like-Merge.			*magneto-P4*
TISA Averaging	October 16	October 30	November 6	TSIB-SSF Beta2-Edition3.			*magneto-P4*
Regrid MOA		November		Edition3 delivery.			*magneto-P4*
Instrument (SCCR 715)		Fall		Updates to PGE CER1.1P7.			*warlock*
Instrument (SCCR 716)		Fall		Delivery of all Ada PGEs except CER1.1P7 to X86 platform.			*magneto-X86*
GGEO		Fall		Edition2 & maybe Beta2-Edition3 ISCCP-D2like-GEO. [All ISCCP-D2like HDF products will have the same format.]			*magneto-P4*

Table 3. CERES Subsystem Delivery Schedule – July 2009
(Next Science Team Meeting – November 3 – 5, 2009 in Ft. Collins, CO)

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Release to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)	Certified Platform(s)
GGEO		Fall		Beta1–Edition2 delivery of new PGE CER11.7P2 (?) for new ISCCP-D2like-Merge (?) product. [All ISCCP-D2like HDF products will have the same format.]		X	*magneto-P4*
Instantaneous SARB		Fall		New PGE to produce MATCH input files.		X	*magneto-P4*
Instrument (SCCR 717)		Late Fall		Delivery of PGE CER1.1P7 to X86 platform.			*magneto-X86*
GGEO	November 20	December 4	December 11	Beta1-Edition3 delivery.			*magneto-P4*
Clouds		Late 2009		Terra and Aqua Edition3.			*magneto-P4*
Inversion		Late 2009		Terra and Aqua Edition3.			*magneto-P4*
TISA Gridding		January 2010		Beta1-Edition2 delivery of new PGE CER9.0P2 (?) for new ISCCP-D2like-Flux (?) product. [All ISCCP-D2like HDF products will have the same format.]		X	*magneto-P4*
TISA Gridding		February 2010		Edition2 ISCCP-D2like-Flux.			*magneto-P4*
Instrument		February 2010		Build corrects NPP-related errors discovered in NCT3 testing.			*magneto-P4*

Table 3. CERES Subsystem Delivery Schedule – July 2009
(Next Science Team Meeting – November 3 – 5, 2009 in Ft. Collins, CO)

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Release to Langley DAAC	Reason for Delivery	CERESlib Delivery Needed	New PGE(s)	Certified Platform(s)
Instrument		May 2010		Build corrects all NPP errors found so far. Last Build before launch freeze date.			*magneto-P4*
Clouds		Spring 2010		Terra and Aqua Edition3.			*magneto-P4*
Inversion		Spring 2010		Terra and Aqua Edition3.			*magneto-P4*
Clouds		???		Support TRMM VIRS-only processing of August 2001 forward.			*magneto-P4*
Inversion		Two to four weeks after Clouds		Support TRMM VIRS-only processing.			*magneto-P4*
Instrument		???		Delivery of simulated IES PGE to support TRMM VIRS-only processing. New PGE: CER1.0P1.		X	*magneto-P4*

Table 4. CERES Coefficients Delivery Schedule – July 2009

Subsystem	Preliminary Delivery Memo to CM	Delivery to CERES CM	Release to Langley DAAC	Reason for Delivery	Certified Platform(s)
Instrument	N/A	August 7		Terra Edition3 gain files for Launch – December 2006.	*warlock/ magneto*
ERBE-like	N/A	Fall		Terra Edition3 spectral response function files for Launch – December 2006.	*warlock/ magneto*
Instrument	N/A	Early Winter		Aqua Edition3 gain files for Launch – December 2006.	*warlock/ magneto*
ERBE-like	N/A	Winter		Aqua Edition3 spectral response function files for Launch – December 2006.	*warlock/ magneto*
Instrument/ ERBE-like	N/A	???		TRMM Edition3 gains and spectral response function files.	*warlock/ magneto*

Table 5. Data Products Catalog Update Schedule – July 2009

DPC Section	Due Date	Comments
SFC	May	Adding a few new parameters for Edition3
SRBAVG-nonGEO	Draft by July	Complete rework of DPC pages
SRBAVG-GEO	Draft by July	Complete rework of DPC pages
TSIB-SSF	September 15	New intermediate product
TSIB-GEO	September 15	New intermediate product
SYNI	September 15	Unknown severity of Edition3 DPC changes
SYN/AVG/ZAVG	September 15	Unknown severity of Edition3 DPC changes
FSW	September 15	Given CRS won't even be in draft mode yet, this date is probably incorrect. Given that CRS and FSW are decoupled from rest of processing, pressure to document & produce these products will not be as great as pressure on the other products.
CRS	December	Draft for science review
ISCCP-D2like products	???	There will be no differences between Edition2 & Edition3 DPC. Don't know the Edition2 DPC schedule.
MOA	???	Unknown if there are Edition3 changes.
GGEO	???	Unknown if there are Edition3 changes.

Table 6. SCCR Activity July 6 at 6:00 p.m. – July 20 at 4:00 p.m.

SCCR	S	U	A	C	D	SS	Page No.	Comments
709				X		1		
690				X		4.5 & 4.6		
714				X		9		
720	X					4.1 – 4.4	12	CERESlib updates

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

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

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

Subsystem: Clouds SCCR Date & TIME: 2009-07-21 15:25:44 SCCR No.: 720

Parameter Change: (X) YES ( ) NO

Description of Change (Science):
Add and remove parameters to SSF as given in SCCR 719 parameter list (Req 4-10.1). The delivery will include the Edition3 version of the ssf_typdef, ssfa_typdef, and ssfqc_typdef modules.

Reason for Change (Science):
The Science Team decided that some parameters would not have algorithms to support them in time for the delivery. Other parameters were requested by other subsystems.

Description of Change (non-Science):
None

Reason for Change (non-Science):
N/A

Parameter(s) and Product(s) Being Changed (Use Name(s) from Data Products Catalog) and Description of Parameter Change:
See SCCR 719

Reason for Parameter Change:
The Science Team decided that some parameters would not have algorithms to support them in time for the delivery. Other parameters were requested by other subsystems.

Affected PGEs in this Subsystem:
CER4.1-4.1P6

Estimated Time to Complete Change: One month
Planned Delivery Date: July 31, 2009
List Affected Subsystems and PGE Names: Inversion 4.5-6.1P4, 4.5-6.1P5 and 4.5-6.2P2; SARB 5.0P2 and 7.2.1P1; and TISA 9.2P1 and 9.0P1
Originator: MILLER, WALTER F. (SSAI)

Table 7. July 22, 2009 - Subsystem Issues and Status

SS No.	SS Lead	Status	Problems
Toolkit Issues	Zentz	• Karen Brown built a version of the 5.2.16 toolkit on the p6 platforms. A corresponding CERESlib can be found at /SCF/CERES/lib/ scf/5.2.16xlf-p6; this is merely a temp name. (Zentz)	
1.0	Cooper (Walikainen)	• Continue to monitor incoming Terra and Aqua Level-0, ephemeris and attitude data. (Snyder) • Edition3 gains are being validated for Terra from Feb. 28, 2000 thru May 1, 2005. Pre-ES8 files for validation months have been processed and are ready for ERBE-like. (Cooper, Snyder) • Work on the instrument updates for CER1.1P7 are delayed due to the higher priority of Edition3. (Cooper, Hess)	
2.0	Walikainen (Cooper)	• Continuing to examine QC checker email generated during production. (Walikainen) • Continuing to inspect ERBE-like Aqua and Terra output plots. (Walikainen) • Created a family of degraded SW spectral responses (SRs) for Edition 3 Terra instruments. This family is based upon our finalized Beginning of Mission SRs. (Walikainen).	
3.0	Walikainen (Cooper)	Combined with above.	
4.1	Sun-Mack (Brown)	• Ran 2003 03 20 with edition 2 code to test a programming change. (Smith) • Began running 2006 06 14 with CO2 QC code additions. (Smith) • Studied web programming languages. (Smith) • Continued working on the slideshow/animation feature of the Google Map tool. (Heckert)	

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack (Brown) (Continued)	• Continued working on 2.1 and 1.6 optical depth calculation. Discovered four errors. First error was profiles were reversed before calling corrk routines, second error was view zenith angles were considered at atmosphere absorption calculation and then counted again at theoretical reflectance calculation, the third error was clouds were never go higher than 600 mb when calculating atmosphere absorption, the last error was MOA index (58) and Corrk index (20) were inter-exchanged. Also switched to Kurucz's solar constants for 0.6, 1.6, 2.1 and 3.7 μm. Many tests were done for before and after cases for each error fix, each change, and sol con change. (Sun-Mack). • Continued to work on annual and seasonal results for Aqua and Terra Edition data. (Brown) • Continued working on SSF processing for Terra Edition2B. (Brown)	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller (Sun-Mack)	• Worked on Edition3 Beta2 code updates. (Miller) • Tested NEWS convolution on AMI x86 node. Performance not as impressive as the P6, but better than legacy systems. (Miller) • Started migrating files from Please_Migrate to work area. (Miller) • Started training new staff member. (Miller) • Started Terra ValR14 validation. (Miller)	
4.5	Sothcott	• Attended weekly SOFA working group meetings. (Sothcott) • Continued work on Edition3 Beta2 software. (Sothcott) • Continued work on IES-SSF new PGE. (Sothcott) • Ran test data to support clouds group testing. (Sothcott)	
4.6	Sothcott	Combined with above.	
5.0	Caldwell (Coleman)	• No new updates. (Caldwell)	

SS No.	SS Lead	Status	Problems
7.2	Caldwell (Coleman)	• Preparing for delivery of pre_Synoptic PGE on July 31. (Caldwell)	
12.0	Caldwell (Coleman)	• Attempting to read and process HDF5 sample data. (Caldwell)	
7.1	Nguyen (Raju, Filer)	• No new updates. (Nguyen)	
8.0	Nguyen (Raju, Filer)	• No new updates. (Nguyen)	
10.0	Nguyen (Raju, Filer)	• Reran 10 months of the CLARREO data as requested by Dave Doelling. (Nguyen) • Comparing the surface fluxes from Edition2D SRBAVGs and the results from the current version of the code for validation. (Nguyen) • Continued supporting the SRBAVG NetCDF group. (Nguyen) • Studying the set of code from Norm Loeb. Reorganizing the code for clarification. (Nguyen) • Preparing for the upcoming delivery. (Nguyen)	
6.0	Raju (Nguyen)	• No new updates. (Raju)	
9.0	Raju (Nguyen)	• Compiled PGEs CER9.1 – 9.4 on the p6 platform using test version of TK 5.2.16. Processed one month of MOA data through PGE 9.1 and the process took ~3.5 hours. Processed one day of SSF data through 9.2 – 9.4 and the 9.2 job ran ~2 minutes. (Raju) • Working with FLASH flux group to process flash flux data through PGEs 9.1- 9.4. Modified PCF Scripts and ran one hour of SSFB data through 9.2. Sent generated SFC-HR file and the read program to Ann Edwards for data comparisons. As per Science members' request, preparing to run 06/2009 data through 9.1 – 9.3 to create inputs to tisa averaging process. (Raju) • A new member, Ron Parrish joined TISA group.	

SS No.	SS Lead	Status	Problems
11.0	Raju (Nguyen)	• Delivered PGEs CER11.1P10, 11.2P2, 11.4P1 and coefficients to CERES CM. (Raju) • Started Working on PGE 11.6P1 for possible CM delivery. (Raju) • Provided 11/2005 – 07/2007 GGEO products for Tisa averaging process. (Raju) • Compilation failed for PGE 11.1P10 on p6 using test version of TK 5.2.16. Looking into the issue. (Raju)	
CERES -lib	Zentz	• No report received.	
Special Development Corner		• Added data from 2008 ANGe reports to database. (Coleman) • Automating process to prep email for importing into database. (Coleman)	