



CERES Data Management Working Group Status Report

CERES Science Team Meeting

May 7, 2013

Jonathan Gleason



Data Management Team

**Systems/
Optimization:**
Nelson Hillyer
Josh Wilkins

**Production /
Optimization:**
Lisa Coleman
Carla Grune

Instrument:
Denise Cooper
Thomas Grepiotis
Dianne Snyder

Convolution:
Igor Antropov

Inversion:
Victor Sothcott

**Product Web
Support:**
Chungwei Chu
Ed Kizer
Cristian Mitrescu

**Configuration
Management:**
Tammy Ayers
Joanne Saunders

ERBElike:
Dale Walikainen
Jeremy Lande

SARB:
Tom Caldwell

Task Manager:
Walt Miller

Clouds:
Sunny Sun-Mack
Ricky Brown
Yan Chen
Liz Heckert
Rita Smith
Sharon Gibson

TISA Gridding:
Raja Raju
Forest Wren

TISA Averaging:
Cathy Nguyen
Dennis Keyes



Overview

- Software Status Update
- Current Product Availability
- Snow / Ice Input Data Change
- Recent DMT Activity
- Production Processing Automation
- NPP Processing Approach
- Edition 3 & Edition 4 Processing Approach

CERES Production Software Overview

Subsystem Number	Subsystem Name	Number of PGEs	LOC (to nearest 1K)	Publicly Available Data Products	Product Frequency
1	Instrument/Pre-Processor	1	9K		
1	Instrument	5 + lib	161K	BDS	1/day
2	ERBE-like/ Inversion	5 + lib	31K	ES-8	1/day
3	ERBE-like/ TSA	2	14K	ES-9, ES-4	1/month
4.1 – 4.4	Clouds/VIIRS Subset Code	1	21K		12/hour
4.1 – 4.4	Clouds	11	358K		
4.5 – 4.6	Inversion	11	147K	SSF	1/hour
5	SARB	1	36K		1/hour
6 & 9	TISA-Gridding	7	35K	SSF1deg-Hour, ISCCP-D2like-Day/Nit	60/month, 36/month, 1/month
11	GGEO	1	6K	ISCCP-D2like-GEO	1/month
7.2	Synoptic SARB	1	47K		
7.1 & 8 10	TISA-Averaging	4	102K	SSF1deg-Day, SSF1deg-Month, SYN1deg-(3Hour, M3hour, Mhour, Month)	1/day, 1/month, 1/month, 5/month
12	MOA	2	14K		
	CERESlib		120K		
	Total	53	1,101K		



System Migration

- Migration from Magneto P4 system to AMI-P P6/x86 system nearly complete
- Edition 1-CV Clouds and Inversion subsystem code only code remaining active on Magneto P4
 - Inversion code delivered to AMI-P November
 - Clouds code delivery expected May 17
- Magneto transition expected fully complete July 2013
 - Power Off Ready



Current Data Availability

Product	Platform	Available through	Publicly Available
BDS (Ed 3)	Terra Aqua	Dec 31, 2012 Dec 31, 2012	Yes
SSF (Ed 3)	Terra Aqua	Dec 31, 2012 Dec 31, 2012	Yes
SFC (Ed 3)	Terra & Aqua	Aug 2012	Yes
SYN1deg (Ed 3)	Merged	Aug 2012	Yes
SSF Edition 4 Beta	Terra Aqua	Pending	No
SSF Edition 1-CV	Terra Aqua	Mar 31, 2013 Feb 28, 2013	No
ISCCP-D2like Products (All)	Terra & Aqua & GEO	Pending	Yes
SSF1deg-Month	Terra & Aqua	Pending	Yes



NOAA Snow/Ice Input Data Source Change

- CERES Ingests Snow/Ice cover microwave data and resamples for CERES and CALIPSO processing
- NOAA OSPO provided 1/8th & 1/16th mesh resolution
 - CER_ESNOW & CER_EICE
 - OSPO identified LaRC as “non operational” user via latency needs
 - Data subscription terminated and referred to CLASS for equivalent data
- Identified CLASS for 1/8th equivalent product
 - Minor software tweaks to read new file
- Identified AFWA for 1/16th equivalent product
 - Implemented new software via OSPO provided code. Non-trivial effort resulting in new PGE



Recent Activity

31 Software & Data Deliveries Since 10/22/2012

- **CATALYST & PR Tool (3)**
 - CATALYST Build 1, PR Tool Build 1
- **Instrument (2)**
 - Final Ada PGE to C++, NPP Updates
- **ERBE-like (2)**
 - Script & Ancillary file updates
- **Clouds (4)**
 - New Snow/Ice Data Provider & Beta 2 Ed4
- **Inversion (3)**
 - P4 Migration, Ed3 Bug Fix
- **Tisa Gridding (5)**
 - P4 Migration & ISCCP-D2like-Mrg correction
- **Tisa Averaging (2)**
 - Ed 3 SSF1deg-Month code delivered
- **SARB (3)**
 - Ground Validation Sites added
- **GGEO (2)**
 - P4 Migration
- **CERESlib (2)**
 - PGE support
- **Perl_Lib (3)**
 - CATALYST support



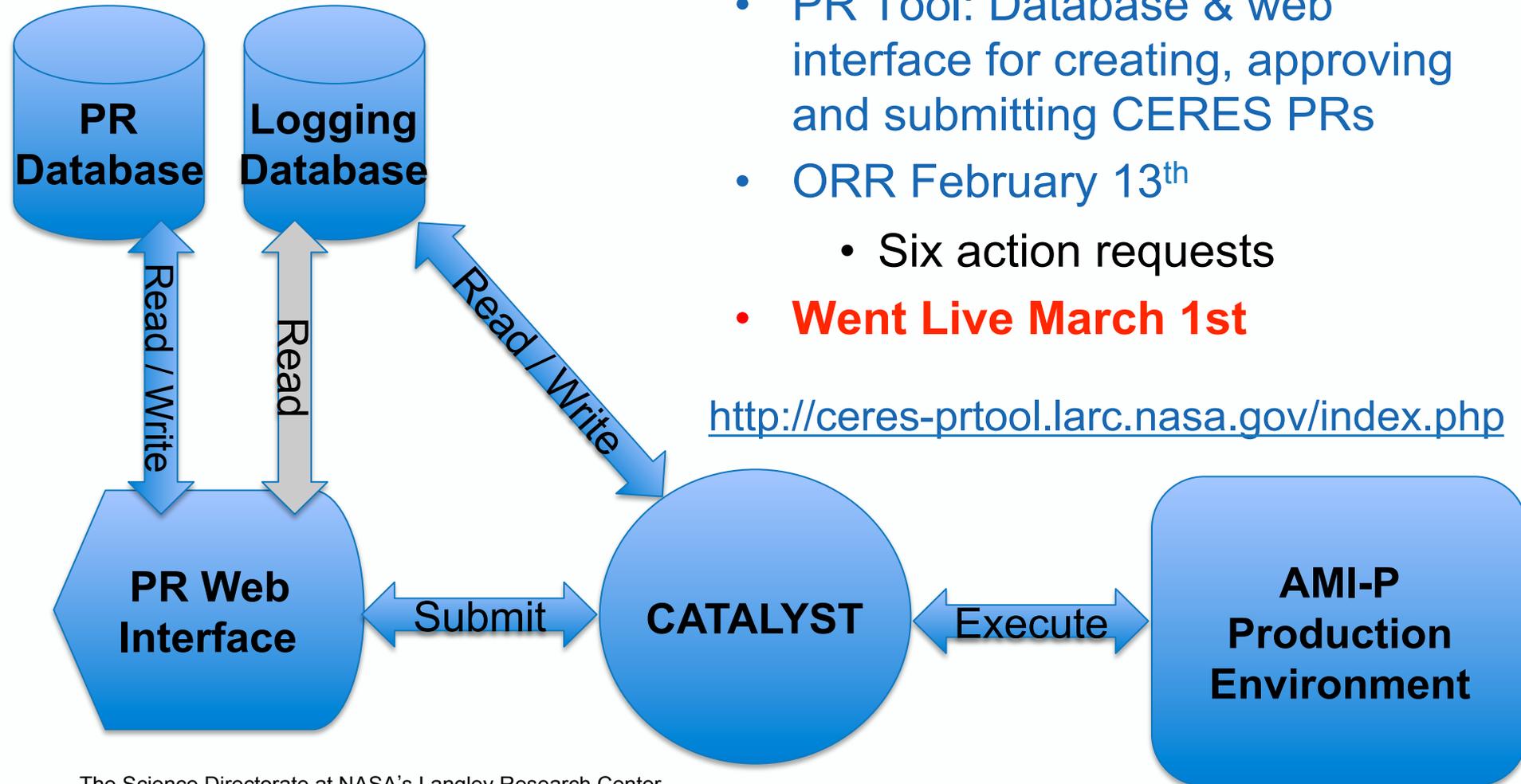
Production Automation Effort



Production Request (PR) Tool

- PR Tool: Database & web interface for creating, approving and submitting CERES PRs
- ORR February 13th
 - Six action requests
- **Went Live March 1st**

<http://ceres-prtool.larc.nasa.gov/index.php>





CATALYST

- **CERES AuTomAteD job Loading sYSTem (CATALYST)**
- Automation Framework for PGE Execution, Coordination & Logging that:
- Modularly implements science software dependency logic
- Leverages existing CERES production infrastructure
 - Ingest CERES PR to create collection of jobs
 - Build all possible individual jobs
 - Identify job input dependencies
 - Execute on AMI-P cluster
 - Send jobs to Sun Grid Engine
 - Utilize existing job submission scripts
 - Initiate ANGe ingest wrapper scripts
- Provides graphical interface for users to manage system



CATALYST (Cont'd)

- Automation Framework for PGE Execution, Coordination & Logging that:
 - Dynamically manages job input dependencies and determine when jobs are runnable
 - CATALYST jobs wait for predecessor jobs to complete
 - Predecessor jobs can be:
 - Internal to CATALYST
 - External to CATALYST (via a backlogging interface)
 - Jobs broadcast completion status to follow-on jobs for rapid follow-on execution
 - Stores job execution state long-term in a job logging database



CATALYST Implementation

- Primary languages Perl & Java
 - Perl ~12.2K LOC
 - Java ~6.6K LOC
- Defines an Application Programming Interface (API) using externally accessible XML-RPC
 - Allows users to inspect and modify job execution status programmatically in any language (with XML-RPC libraries)
 - Enables development of modular tools to function in concert with CATALYST – backlogging component
- Uses existing AMI LDAP service for user authentication
 - Permissions defined in access control list



CATALYST Operator's Console

The screenshot shows the CATALYST Operator's Console interface. At the top, there is a menu bar with 'File', 'CATALYST Server', 'PR Management', and 'Help'. Below the menu bar is a status bar showing 'Cluster Status: [green dot] CATALYST Mem Usage: 2066M'. The main area is divided into several sections:

- Production Requests:** A list of requests on the left, with a search bar and 'Search' and 'Refresh' buttons on the right.
- Blades:** A tree view on the right showing a list of blades under 'Ix-amd64' and 'Ix-ppc64'.
- Job Table:** A central table with columns: Name, Instance, State, Main Process Status, Epilog Status, Deleted. A context menu is open over the table, showing actions like 'Pause Job(s)', 'Resume Job(s)', 'Force Start Job(s)', 'Delete Job(s)', 'Resubmit Job(s)', and 'Resubmit Epilog(s)'. A 'MACROS' menu is also visible, with 'Clouds' and 'Generate Start Up Cloud Mask' options.
- Job Details:** A section on the left showing details for a specific job, including a progress bar (51.61%), 'Approve PR Complete' button, and a 'chunk_583' dropdown.
- Parameter Table:** A table at the bottom left showing parameters and their values.
- Actions:** A row of buttons at the bottom center: 'Pause Job(s)', 'Resume Job(s)', 'Force Start Job(s)', 'Delete Job(s)', 'Resubmit Job(s)', and 'Resubmit Epilog(s)'. A 'Refresh' button is also present.
- Log:** A scrollable log area at the bottom showing system messages.

Numbered callouts (1-9) point to specific UI elements: 1. Status bar and menu; 2. PR list; 3. PR status; 4. PR chunk details; 5. Job navigation; 6. Job table; 7. Job actions; 8. Blade list; 9. Log.

1. Status bar and menu
2. PR list
3. PR status
4. PR chunk details
5. Job navigation
6. Job table
7. Job actions
8. Blade list
9. Log



CATALYST Build 1 Status

- Build 1 delivered for testing 2/25
 - Internal CM testing and rework 2/26 – 3/21
 - Test Readiness Review 3/22
 - ASDC Operational Testing 3/27 – current
 - Go-Live – 6/26
- Concurrent month Terra and Aqua SSFs (8 PGEs Clouds and Inversion) produced in 30 hours for all 4 instruments.



CATALYST Builds

- **Build 1.1: Functionality**
 - API to update Logging DB with “known missing” cases
 - Job submission balancing function
 - Expected Live Oct 2013
- **Build 1.2: PGEs Only**
 - Edition 4 Inversion PGEs
 - Expected Live Dec 2013
- **Build 1.3**
 - Edition 1-CV processing stream
 - Instrument, ERBElike, Clouds, Inversion, MOA
 - Expected Live April 2014



CATALYST Builds (Cont'd)

- **Build 2.0: Functionality**
 - Expanded Ops Console Search Capability
 - Intelligent job weighting scheme
 - Improved data structure for job objects
 - Time-based job initiation (daily processing)
 - Expected Live Sept 2014

- **Build 2.1: PGEs Only**
 - SSF1deg Stream
 - SYN1deg Stream
 - Flux-By-Cloud
 - Expected Live Dec 2014



CATALYST Builds (Cont'd)

- **Build 2.2: PGE Only**
 - ISCCP-D2like stream
 - Expected Live early 2015

- **Build 2.3: PGE Only**
 - Edition 4 SARB processing stream
 - Expected Live mid 2015



CATALYST Development & Delivery Schedule Summary View

5/2/13

Key Milestones	FY13		FY14				FY15		
	3Q'13	4Q'13	1Q'14	2Q'14	3Q'14	4Q'14	1Q'15	2Q'15	3Q'15
Build 1.0: CATALYST Development & Deployment									
Conduct PPE Testing	3/27	5/14							
Operational Readiness Review (ORR)		△ 6/24							
Promote to Production/Go-Live		△ 6/26							
Build 1.1: Log DB to DPO Synchronization									
Development and Delivery to CM		6/27	△ 8/30						
Operational Testing/Go-Live		9/2	△ 10/14						
Build 1.2: Edition 4 Inversion-only PGEs									
Development and Delivery to CM		9/2	△ 11/7						
Operational Testing/Go-Live			11/8	△ 12/13					
Build 1.3: Ed 1-CV Processing Stream PGE Handlers									
Development and Delivery to CM			12/16	△ 2/14					
Operational Testing/Go-Live				2/17	△ 4/14				
Build 2.0: Enhanced API & UI Improved Performance									
Development and Delivery to CM				4/15	△ 7/28				
Operational Testing/Go-Live					7/29	△ 9/16			
Build 2.1: Ed3 SSF1deg-Hour, SYN1deg, SSF1deg-Month, & Flux-by-Cloud-Type PGE Processing Stream									
Development and Delivery to CM						9/17	△ 10/21		
Operational Testing/Go-Live						10/22	△ 12/10		
Build 2.2: ISCCP-D2like and MOA PGEs Processing Stream									
Development and Delivery to CM							12/11	△ 1/14	
Operational Testing/Go-Live							1/15	△ 2/19	
Build 2.3: Ed 4 SARB PGE Processing Stream									
Development and Delivery to CM								2/20	△ 3/12
Operational Testing/Go-Live								3/13	△ 4/17

■ Work Effort

△ Open Milestone

▲ Completed Milestone



PR Tool



PR Tool: Search Page

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

Search Product Requests

Search existing PRs by any of the below criteria.

Search PRs

Clear Form

Numbers

PR ID Number:

SCCR Number:

Status:

Select Status

Subsystem/PGE/Platform

Subsystem:

Select Subsystem

PGE:

Select PGE

Processing Platform:

Select Platform

PR Submission Details

PR Submitter:

Select Submitter

Priority:

Select Priority

PR Submit Date From:

mm/dd/yyyy

PR Submit Date To:

mm/dd/yyyy

Output Details

Output Production Strategy:

Select Production Strategy

Output Sampling Strategy:

Select Sampling Strategy

Output CC Number:

Data/Processing Details

Beginning Data Date [From]:

Beginning Data Date [To]:

Ending Data Date [From]:

Ending Data Date [To]:



PR Tool



PR Tool: Search Page

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

Search Product Requests

Search existing PRs by any of the below criteria.

Search PRs

Clear Form

Numbers

PR ID Number:

SCCR Number:

Status:

Subsystem/PGE/Platform

Subsystem:

Select Subsystem

- Instrument - 1
- ERBE-like - 2
- ERBE-like - 3
- Clouds - 4.1-4
- Inversion/SOFA - 4.5-6
- SARB - 5
- TISA Grid - 6
- TISA Avg - 7.1
- SARB - 7.2
- TISA Avg - 8
- TISA Grid - 9
- TISA Avg - 10
- GGEO - 11
- Regrid MOA - 12

PGE:

Processing Platform:

Priority:

PR Submit Date From:

mm/dd/yyyy

PR Submit Date To:

mm/dd/yyyy

y:

Output Sampling Strategy:

Output CC Number:

h]:

Beginning Data Date [To]:

Ending Data Date [From]:

Ending Data Date [To]:



PR Tool



PR Tool: Search Page

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

Search Product Requests

Search existing PRs by any of the below criteria.

Search PRs

Clear Form

Numbers

PR ID Number:

SCCR Number:

Status:

Select Status



Subsystem/PGE/Platform

Subsystem:

Instrument - 1



PGE:

Select PGE

Processing Platform:

Select Platform



PR Submission Details

PR Submitter:

Select Submitter



Output Details

Output Production Strategy:

Select Production Strategy



Data/Processing Details

Beginning Data Date [From]:

SCCR Number:

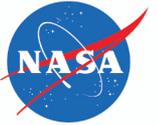
Status:

Ending Data Date [To]:

- Select PGE
- CER1.0P1 Simulated IES
- CER1.0P2 NPP RDR Pre-Processor
- CER1.1P1 Main TRMM - Ada
- CER1.1P3 Main Terra - Ada
- CER1.1P5 Main Aqua - Ada
- CER1.1P7 Main NPP - Ada
- CER1.1P8 C++ Main Processor**
- CER1.2P1 PRES8 Generator
- CER1.3P1 BDS Subsetter
- CER1.3P2 Gain Analyzer - Ada
- CER1.3P3 BDS Reprocessing
- CER1.4P1 Create subsetted BDSI
- CER1.4P2 Gain Analyzer - C++
- CER1.4P3 BDS Reprocessing - C++

PR Submit Date To:

mm/dd/yyyy



PR Tool

 **CERES**
Clouds And The Earth's Radiant Energy System

PR Tool: Search Page

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

Search Product Requests

Search existing PRs by any of the below criteria.

Search PRs **Clear Form**

Numbers

PR ID Number:

SCCR Number:

Status:

Subsystem/PGE/Platform

Subsystem:

PGE:

Processing Platform:

PR Submission Details

PR Submitter:

Priority:

PR Submit Date From:

PR Submit Date To:

Output Details

Output Production Strategy:

Output Sampling Strategy:

Output CC Number:

Data/Processing Details

Beginning Data Date [From]:

Beginning Data Date [To]:

Ending Data Date [From]:

Ending Data Date [To]:



PR Tool

PR Tool: Search Results



[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

PR Search Results

1 2 3 [Next >>](#)

PR ID	PGE ID	Purpose	Status	Priority	SCCR	Production Strategy / Sampling Strategy	CC Number	Begin Date	End Date	Details
NPP 3-12	CER1.1P8	Generate first Edition1-CV NPP BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV NPP-FM5	300302	01/27/2012	12/31/2014	View PR View Jobs
NPP 2-11	CER1.1P8	Generate first production NPP BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC NPP-FM5	300302	11/09/2011	12/31/2014	View PR View Jobs
AM 12-11	CER1.1P8	Generate first AMI production monthly Terra BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV Terra-FM1 Terra-FM2	300302	10/31/2011	12/31/2014	View PR View Jobs
AM 8-11	CER1.1P8	Generate first AMI production Terra BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC Terra-FM1 Terra-FM2	300302	12/01/2011	12/31/2014	View PR View Jobs
PM 5-12	CER1.1P8	Generate first AMI production monthly FM4 BDSs	Processing - Standing PR Active	Top Priority	878 878	Ed1-CV-NoSW Aqua-FM4	300302	10/31/2011	12/31/2014	View PR View Jobs
PM 1-12	CER1.1P8	Generate first AMI production FM4 BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC Aqua-FM4	300302	11/01/2011	12/31/2014	View PR View Jobs
PM 12-11	CER1.1P8	Generate first AMI production monthly FM3 BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV Aqua-FM3	300302	10/31/2011	12/31/2014	View PR View Jobs
PM	CER1.1P8	Generate first AMI production FM3 BDSs	Processing - Standing PR Active	Top	878	Baseline1-QC	300302	11/01/2011	12/31/2014	View PR



PR Tool

PR Tool: Search Results

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

PR Search Results

1 2 3 [Next >>](#)

PR ID	PGE ID	Purpose	Status	Priority	SCCR	Production Strategy / Sampling Strategy	CC Number	Begin Date	End Date	Details
NPP 3-12	CER1.1P8	Generate first Edition1-CV NPP BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV NPP-FM5	300302	01/27/2012	12/31/2014	View PR View Jobs
NPP 2-11	CER1.1P8	Generate first production NPP BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC NPP-FM5	300302	11/09/2011	12/31/2014	View PR View Jobs
AM 12-11	CER1.1P8	Generate first AMI production monthly Terra BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV Terra-FM1 Terra-FM2	300302	10/31/2011	12/31/2014	View PR View Jobs
AM 8-11	CER1.1P8	Generate first AMI production Terra BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC Terra-FM1 Terra-FM2	300302	12/01/2011	12/31/2014	View PR View Jobs
PM 5-12	CER1.1P8	Generate first AMI production monthly FM4 BDSs	Processing - Standing PR Active	Top Priority	878 878	Ed1-CV-NoSW Aqua-FM4	300302	10/31/2011	12/31/2014	View PR View Jobs
PM 1-12	CER1.1P8	Generate first AMI production FM4 BDSs	Processing - Standing PR Active	Top Priority	878 878	Baseline1-QC Aqua-FM4	300302	11/01/2011	12/31/2014	View PR View Jobs
PM 12-11	CER1.1P8	Generate first AMI production monthly FM3 BDSs	Processing - Standing PR Active	Top Priority	878 878	Edition1-CV Aqua-FM3	300302	10/31/2011	12/31/2014	View PR View Jobs
PM	CER1.1P8	Generate first AMI production FM2 BDSs	Processing - Standing PR Active	Top	878	Baseline1-QC	300302	11/01/2011	12/31/2014	View PR



PR Tool



Viewing PR # NPP 3-12

[Search](#) | [View Jobs](#) | [CC Lookup](#) | [Survey](#) | [Log In](#)

PR NPP 3-12

PR Num	NPP 3-12		
Purpose	Generate first Edition1-CV NPP BDSs		
Subsystem	Instrument - 1		
PGE	CER1.1P8 C++ Main Processor		
Standing PR?	Yes		
Begin Data Date	01/27/2012		
End Data Date	12/31/2014		
Satellite(s)/Instrument(s) for Output Sampling Strategy	Output Production Strategy	CC Number	
SS1	PS1_0	CC1	
NPP-FM5	Edition1-CV	300302	
Target PGEs:	CER1.2P1 PRES8 Generator CER1.4P1 Create subsetted BDSI CER1.3P3 BDS Reprocessing CER4.1-4.1P4 Ed2 Terra Main MODIS Collection 5 CER4.1-4.1P5 Ed2 Aqua Main MODIS Collection 5		
Additional Environment Variables (flags, options, etc):			
N/A			
Additional PCF Generator Arguments (flags, options, etc):			
-ic			
-sat			
Processing Platform - Toolkit	AMI-P6 - Toolkit Version 16	SCCR	878
Processing Platform - Toolkit	AMI-X86 - Toolkit Version 16	SCCR	878
Submitter	Lande, Jeremie		
Submit Date	06/13/2012		
Status	Processing - Standing PR Active <small>Last Changed: 01/31/2013</small>		
Priority	1 - Top Priority		



NPP Processing Approach



CERES Software Delivery and Data Processing Schedule NPP - FM5

5/3/13

Key Milestones	FY13			FY14				
	Q2'13	Q3'13	Q4'13	Q1'14	Q2'14	Q3'14	Q4'14	Q1'15
Deliver Edition 1 Gains & SRFs	△ 3/29							
Deliver Edition 2 Gains & SRFs						△ 4/30		
Edition 1-CV SSF								
Clouds Working Group Lead Deliver Ed 1 Clouds Science Code			△ 6/28					
DMT Reuse Aqua ADMs & SOFA Code to Create Delivery, Testing, & ValR Approval			7/29 8/9					
Reprocess Launch to Current (19 months)			8/9	9/30				
Produce Edition 1 IES with Time Varying Gains				10/1	11/27			
Instrument Group Delivery NPP Time Varying Gains			△ 7/26					
Reprocess Instrument (via 1.4P3)			7/26	8/8				
Edition 1 SSF (Inversion-only processing)								
Working Group Lead Deliver Edition 1 SOFA Science Code				△ 9/9				
Delivery, Testing, & ValR Approval			9/10	11/13				
Reprocess Launch to Current (33 months)				11/14	12/9			
Public Release					△ 12/17			
Edition 1 SSF1deg-Hour								
Working Group Lead Deliver Ed1 SSF1deg-Hour Science				△ 9/23				
Delivery, Testing, & ValR Approval			9/24	12/17				
Reprocess Launch to Current (20 months)				12/18	1/10			
Public Release					△ 12/27			
Edition 1 CRS								
Working Group Lead Deliver Ed 1 CRS Science Code				△ 9/30				
Delivery, Testing, & ValR Approval			9/30	11/19				
Reprocess Launch to Current (18 months)				11/20	11/26			
Public Release					△ 11/29			
Edition 1 SSF1deg-Month								
Working Group Lead Deliver Ed1 SSF1deg-Month Science					△ 1/6			
Delivery, Testing, & ValR Approval				1/7	3/19			
Reprocess Launch to Current (23 months)					3/20	3/24		
Public Release						△ 3/28		
Edition 1 TSI -> SYN1deg								
Working Group Lead Deliver Ed 1 TSI and SYN1deg Science						△ 4/30		
Working Group Lead Deliver Ed 1 SYN1 Science Code						△ 4/30		
Delivery, Testing, & ValR Approval					4/30	6/11		
Reprocess Launch to Current (28 months)						6/12	7/2	
Public Release							△ 6/23	
Edition 2 Clouds								
Working Group Lead Deliver Ed 2 Clouds Science Code							△ 6/30	
Delivery, Testing, & ValR Approval						6/30	8/18	
Reprocess Launch to Current (30 months)							8/19	10/22
Edition 2 Inversion								
Working Group Lead Deliver Ed 2 Inversion Science Code							△ 6/30	
Delivery, Testing, & ValR Approval						6/30	9/2	
Reprocess Launch to Current (30 months)							9/3	10/22
Public Release								△ 9/16

Open Milestone	Completed Milestone	Work Effort
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NPP Planned Milestones

Product	Science Delivery to DMT	Target Public Release
Ed1 Clouds (SSF)	June 28, 2013	Dec 17, 2013
Ed1 SOFA Code (SSF)	Sept 9, 2013	
Ed1 Gains (BDS)	July 26, 2013	Aug 8, 2013
Ed1 SSF1deg-Hour	Sept 23, 2013	Dec 27, 2013
Ed1 CRS	Sept 30, 2013	Nov 29, 2013
Ed1 SSF1deg-Month	Jan 6, 2014	Mar 28, 2014
Ed1 TSI & SYN1deg	April 30, 2014	June 23, 2014
Ed1 SYNI	April 30, 2014	
Ed2 Clouds	June 30, 2014	Sept 16, 2014
Ed2 Inversion	June 30, 2014 (ADM & SOFA Groups)	



Terra / Aqua Edition 3 & 4 Processing Approach



CERES Software Delivery and Data Processing Schedule Edition 3

5/3/13

Key Milestones	FY13		
	Q2'13	Q3'13	Q4'13
ISCCP-D2like Edition 3 Reprocessing		6/3 6/21	
Edition 3 SSF1deg-Month			
Working Group Lead Deliver Ed 4 SSF1deg-Month Science Code	▲ 3/6		
Delivery, Testing, & ValR Approval	3/6	5/24	
Reprocess Launch to Current (148 months)		5/28 6/6	
Public Release		△ 6/5	
Edition 3 Flux-by-Cloud Type			
Working Group Lead Deliver Ed 3 Flux-by-Cloud Type Science Code		△ 5/24	
Delivery, Testing, & ValR Approval		5/24	7/3
Reprocess Launch to Current (148 months)			7/5 9/3
Public Release			△ 7/18

△ Open Milestone

▲ Completed Milestone

Work Effort



CERES Software Delivery and Data Processing Schedule Edition 4

5/3/13

Key Milestones	FY13		FY14				FY15		
		Q4'13	Q1'14	Q2'14	Q3'14	Q4'14	Q1'15	Q2'15	
Edition 4 SSF1deg-Hour									
Working Group Lead Deliver Ed 4 SSF1deg-Hour Science		△ 6/28							
Delivery, Testing, & ValR Approval	6/28	████████████████████		1/6					
Reprocess Launch to Current (154 mo. Terra, 136 mo. Aqua)			1/7	████████████████████		6/30			
Public Release					△ 4/24				
Edition 4 SSF1deg-Month									
Working Group Lead Deliver Ed 4 SSF1deg-Month Science		△ 7/31							
Delivery, Testing, & ValR Approval	7/31	████████████████████		1/9					
Reprocess Launch to Current (154 mo. Terra, 136 mo. Aqua)				3/31	████████████████████		6/30		
Public Release						△ 6/27			
Edition 4 Inversion									
Working Group Lead Deliver Ed 4 SOFA Science Code			△ 9/27						
Working Group Lead Deliver Ed 4 ADMs Science Code			△ 10/18						
Delivery, Testing, & ValR Approval		10/18	████████████████████		12/23				
Reprocess Launch to Current (160 mo. Terra, 132 mo. Aqua)			12/24	12/27	12/27				
Public Release					△ 1/3				
Edition 4 TSI -> SYNI -> SYN1deg									
Clouds Group Provides TISA WG Sample 5 Channel GEO		△ 6/21							
Clouds Group Freeze 5 Channel GEO Code		△ 6/21							
Working Group Lead Deliver Ed 4 TSI Science Code				△ 12/27					
Working Group Lead Deliver Ed 4 SYNI Science Code					△ 3/31				
Working Group Lead Deliver Ed 4 SYN1deg-Month Science					△ 4/11				
Delivery, Testing, & ValR Approval			12/27	████████████████████		5/27			
Reprocess Launch to Current (166 months)					5/28	████████████████████		9/11	
Public Release						△ 6/16			
Edition 4 ISCCP-D2 Like									
Working Group Lead Deliver Ed 4 ISCCP-D2 Like Science									
Delivery, Testing, & Promote to Production					△ 5/30	████████████████████			
Reprocess Launch to Current (166 mo. Terra, 138 mo. Aqua)					5/30	7/11	8/20		
Public Release						7/14	△ 7/24		
Edition 4 CRS									
Working Group Lead Deliver Ed 4 CRS Science Code							△ 7/31		
Delivery, Testing, & ValR Approval						7/31	████████████████████		
Reprocess Launch to Current (172 mo. Terra, 144 mo. Aqua)							10/13	████████████████████	
Public Release								△ 12/22	
Edition 4 Flux-by-Cloud Type									
Working Group Lead Deliver Ed 4 Flux-by-Cloud Type							△ 9/30		
Delivery, Testing, & ValR Approval							9/30	████████████████████	
Reprocess Launch to Current (172 mo. Terra, 144 mo. Aqua)								11/17	12/16
Public Release								11/18	△ 11/28

Open Milestone	Completed Milestone	Work Effort
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Edition 3 & 4 Planned Milestones

Product	Science Delivery to DMT	Target Public Release
Ed3 Flux-By-Cloud-Type	May 24, 2013	July 18, 2013
Ed4 Spec. Response func	Aug 16, 2013	N/A
Ed4 SSF1deg-Hour	June 28, 2013	April 24, 2014
Ed4 SSF1deg-Month	July 31, 2013	June 27, 2014
Ed4 Inversion	Oct 18, 2013 (ADM & SOFA groups)	Jan 3, 2014
Ed4 TSI	Dec 27, 2013	June 16, 2014
Ed4 SYNI	Mar 31, 2014	
Ed4 SYN1deg	April 11, 2014	
Ed4 ISCCP-D2like (all 3)	May 30, 2014	July 24, 2014
Ed4 CRS	July 31, 2014	Dec 22, 2014
Ed4 Flux-By-Cloud-Type	Sept 30, 2014	Nov 28, 2014



DM Lead - Rotational Assignment



Rotational Assignment Starts May 13th

- Chris Harris will join the CERES team as Data Management Working Group Lead
- Jonathan Gleason will join the ASDC team



The goal is to provide a broader range of experience for each individual, while giving them insight into each other's team processes.