

February 11, 2009 – NPP FM5 Reports

CERES RDR Processing

- X86 progress: PGEs CER1.2P1, CER1.3P1, and CER1.3P2 have all been successfully tested. PGE CER1.1P1 is in testing, currently working on elevation and azimuth angle calculations which are not matching values calculated by the code run on the SGI.
- Working to test Level-0 files created by the new PGE CER1.0P2 CERES FM5 RDR preprocessor. At the current time there is an issue reading the packets themselves and possible updates to the Ada code may be necessary to fully support FM5.

VIIRS Radiance/Geolocation Subsets

- Drafted and distributed for comments the NPP VIIRS Sub-Sampled Processor Test Plan. (Miller and Saunders)

Toolkit Issues

- No report.

Telecon/eRoom/Meeting

- Attended the NPP Mission Data Format Control Book Stakeholder review February 3. Approved the latest revisions to the CERES section of the document pending the inclusion of a legend for the new data type field in several tables.
- Attended the bi-weekly IICDO Focus Group telecon February 6.
- Coordinated and conducted a review of the ERB CARS Science Requirements Specification with the ASDC February 4.

System Engineering/Management Topics

- Reviewed and edited the SDS Operations Concept document for ERB CARS. Currently under internal review.
- Researched and drafted subsection headers for ERB CARS Requirements test cases. Currently under internal review.
- Revised the SDS level 3 requirements for ERB CARS and delivered to Bob Schweiss and Mary Hunter at GSFC.
- Drafted an update to The CERES Science and Data Products Working Agreement to obtain RDRs though SD3E FTP during anomalies. (Miller)
- SCCR activity – Clouds SCCR 701 submitted (see following page for details). (Ayers)

Upcoming Meetings

- No report.

CERES Software Configuration Change Request Submittal

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Subsystem: Clouds

SCCR Date & TIME: 2009-02-10 08:35:17

SCCR No.: 701

Parameter Change: () YES (X) NO

Description of Change (Science):

Selecting a limited number of NPP VIIRS bands and sub-sampling radiances, reflectances, brightness temperatures, geolocation, view geometry, time code, and QA flags from NPP VIIRS five-minute granules (approximately) which are aggregated by SDS Land PEATE. (Req 4-9)

Reason for Change (Science):

To reduce data volume and still maintain adequate resolutions for CERES project.

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:

N/A

Reason for Parameter Change:

N/A

Affected PGEs in this Subsystem:

NPP-VIMD-CERES

Estimated Time to Complete Change: 300 hours

Planned Delivery Date: February 18, 2009

List Affected Subsystems and PGE Names: Subsystems: Inversion, SARB and TISA. PGE Names: unknown at this time.

Originator: SUN-MACK, SUNNY (SSAI)

Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
Early NCT3 - Ground EEO	Scheduled due to slip in NCT3 schedule	09/16/2009 – 10/05/2009	8
Flight Thread Tests	FTTs are used to verify functional requirements contained in the Mission Requirements Specification.		
<ul style="list-style-type: none"> • FTT 8 	This test will verify the ingest and validation of selected IDPS (NESDIS) generated RDRs and xDRS (TDRs, EDRs, and SDRs) from ADS in SDS.	07/30/2009 - 08/05/2009	5
Interface Confidence Tests	The ICTs will be discussed at the Test Data Summit, Dec 9-10 at Goddard.		
<ul style="list-style-type: none"> • ICT 2 	SDS <-> IDPS – Schweiss requests at least dial in for kick off discussion during the Test Data Summit, Dec 9-10.	06/30/2009 - 07/14/2009	5
<ul style="list-style-type: none"> • ICT 4 	ADS/CLASS <-> SDS	06/16/2009 - 06/29/2009	5
<ul style="list-style-type: none"> • ICT 23 	SDS <-> NSIPS	05/05/2009 - 05/18/2009	5
<ul style="list-style-type: none"> • ICT 24 	SDS <-> LaRC (ASDC)	05/26/2009 - 06/08/2009	5
Mission Rehearsal Tests			
<ul style="list-style-type: none"> • MRT3 	Sensor activation and checkout: Sensor activation, Sensor deployments, Mission data handling, & Cal/Val.	Launch - 7 months (06/16/2010 – 06/22/2010)	8
<ul style="list-style-type: none"> • MRT4 	Combination of Mission Rehearsal #2 and Mission Rehearsal #3.	Launch - 4 months (09/16/2010 – 09/22/2010)	8
<ul style="list-style-type: none"> • MRT4A 	Dress Rehearsal	Launch - 1/2 weeks (01/04/2011 – 01/10/2011)	8
NPP Compatibility Tests	The NCTs exercise flight and ground interaction. Each NCT is comprised of functional thread and interface tests that provide a continuing higher degree of confidence leading up to operational readiness.		
<ul style="list-style-type: none"> • NCT3 	This test exercises the flow of data from the satellite through C3S, IDPS, SDS, and to the ADS with the appropriate products being generated at each stage. (This test was previously scheduled to begin on 06/10/2008 and to last for 5 days. The slippage of that schedule led to the “Early NCT3-Ground EEO.”)	02/01/2010 – 02/08/2010	8

Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
<ul style="list-style-type: none"> • NCT4 	This test exercises mission configuration, 3 days in the mission life with all elements of ground segment. This is the final test opportunity with the satellite before shipment to launch facility. (Ref. #1 shows the test duration as 10 days which is apparently an error.)	07/23/2010 – 07/30/2010	8
Operations Readiness Test (ORT)	Verify that the ground system and operations personnel are ready to support the mission.	10/18/2010 – 10/22/2010	8
SDS Function Tests	From the "SDS System Test Schedule" - more info/details to follow.		
<ul style="list-style-type: none"> • Land to CERES 		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> • CERES to CLASS/ADS 		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> • CERES to CasaNOSA 		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> • CERES to Science Team 		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> • CERES to C3S (WRS) 		05/05/2009 - 05/07/2009	6
NPP Mission Freeze Date	The purpose of this date is to lock-down the mission configuration before launch. The mission freeze date generally applies to major hardware/software items within the ground system and mission operations area such as ground software and hardware. A comprehensive list of items that apply to the launch freeze will be generated by the MOWG.	Launch - 2 months	
<ul style="list-style-type: none"> • NPP Launch 		01/16/2011	8

Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
References:	<ol style="list-style-type: none"> 1. SI&T Plan (GSFC 429-03-02-07) 2. NPP Mission Operations Management Plan (GSFC 429-04-02-29) 3. Mission Rehearsal Test Plan (GSFC 429-04-02-31) 4. CERES FM5 on NPP schedule as of 09/30/2008 5. NPP_SDS_Schedule_Dec_18_2008.mpp.pdf ... from Mary Hunter's "Thu 12/18/2008 1:40 PM" email (RE: NPP SDS Schedule). 6. SDS Functional 2-schedule 12.12.08.xls ... from Vic Buczkowski's "Fri 12/19/2008 10:42 AM" email ([NPP-SDS] SDS Progress-Score Card & Test Schedule). 7. C3S Cartoon - Replan Jan – Sept 09. The filename in eRooms is "C3S Cartoon Schedule Replan FY09 r3.ppt" which may be found at https://collab2.st.northropgrumman.com/eRoom/npoess/CommandControlCommunication/0_29b25d. 8. NPP Schedule – Mission Drivers (NPP Schedule to Launch_012209.mpp via NPP Mission Drivers Schedule_012209_4pg-r1-1.pdf) 		