



Remote Sensing Applications Division (RSAD)

Weekly Report for January 14, 2011

John J Bates, Chief

PREDECISIONAL DRAFT INFORMATION



CDR Program Office

FY11 Climate Data Records

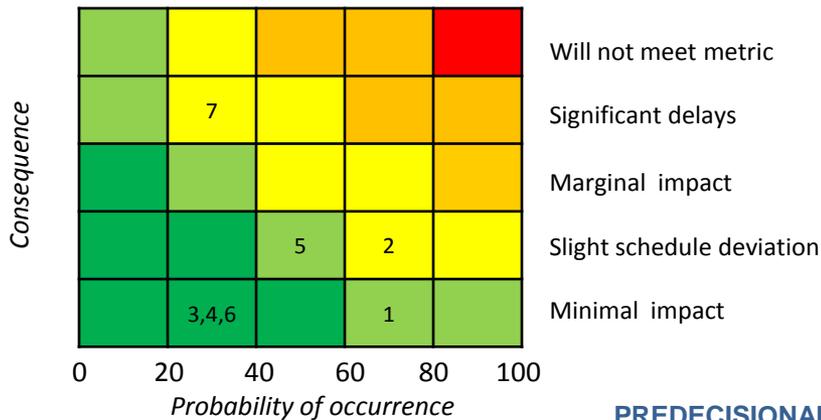
Weekly Report – Jan 14, 2011

- ① **Sea Ice**
 - Initial assessment complete – NSIDC coordination needed
- ② **Mean Layer Temperatures**
 - Initial assessment complete – telecon with PI needed
- ③ **Microwave Sounder FCDR**
 - Initial assessment complete – great shape
- ④ **Microwave Imager FCDR**
 - Initial assessment complete – data and docs transferred
- ⑤ **Aerosol Properties**
 - Initial assessment complete – good shape
- ⑥ **Longwave Radiation - Top of Atmosphere (TOA)**
 - Initial assessment complete – great shape
- ⑦ **Sea Surface Temperature**
 - Initial assessment complete – NODC coordination needed

FY11 CDRs	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
① Sea Ice	ASSESSMENT		SUBMISSION PREP			TRANSFER	VALIDATION	ARCHIVE	ACCESS	
② Mean Layer Temperature	ASSESSMENT		SUBMISSION PREP				TRANSFER	VALIDATION	ARCHIVE	ACCESS
③ MW Sounder FCDR	ASSESSMENT		SUBMISSION PREP				TRANSFER	VALIDATION	ARCHIVE	ACCESS
④ MW Imager FCDR	ASSESSMENT		SUBMISSION PREP		TRANSFER	VALIDATION	ARCHIVE	ACCESS		
⑤ Aerosol Properties	ASSESSMENT		SUBMISSION PREP		TRANSFER	VALIDATION	ARCHIVE	ACCESS		
⑥ LW Top of Atmosphere	ASSESSMENT		SUBMISSION PREP			TRANSFER	VALIDATION	ARCHIVE	ACCESS	
⑦ Sea Surface Temperature	ASSESSMENT		SUBMISSION PREP			TRANSFER	VALIDATION	ARCHIVE	ACCESS	

R2O PHASE: ASSESSMENT SUBMISSION PREP TRANSFER VALIDATION ARCHIVE ACCESS

Risk Matrix

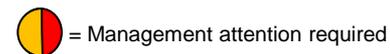


Risk and Mitigation

Mean Layer Temperatures - Unsure of effort needed for source code to meet IOC standards, telecon scheduled with PI

Sea Surface Temp - Complete process from L1b-to-NetCDF still has to be validated, processing also occurs in two places: U of Miami then NODC

PREDECISIONAL DRAFT INFORMATION



Sea Ice

CDR Product: TCDR - Sea ice concentration/extent/area estimates, 1979-2010 (xx GB)

GEOSS Societal Benefit: Climate, Water, Ecosystems, Agriculture

Project Status

- Completed Initial Assessment
- Sent Submission Agreement questionnaire to PI

Next Action / Milestone

- Decide what to archive at NCDC and what to serve at NSIDC, capture decisions in submission agreement
- Determine delivery schedule



Project Risks

- NSIDC will be serving the data to the public
- Need coordination with NASA for source code release

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	Complete	12/7/2010	1/7/2011												
2	Transfer Prep		1/7/2011	3/31/2011												
2a	Comment Source Code		1/15/2011	2/15/2011												
2b	Create Documents		1/7/2011	2/28/2011												
2c	Format data for delivery		3/1/2011	3/31/2011												
3	Transfer Code, Docs, and Data		4/1/2011	4/21/2011												
4	Validate Code, Docs, and Data		4/21/2011	5/15/2011												
5	Archive Code, Docs, and Data		5/15/2011	6/15/2011												
6	Provide Access to Code, Docs, and Data		6/15/2011	7/15/2011												

Mean Layer Temperatures

CDR Product: TCDR - Monthly gridded anomalies for three layers (LT, MT, LS), 19XX-2010 (xx GB)

GEOSS Societal Benefit: Energy, Climate, Ecosystems

Project Status

- Initial Assessment completed
- Conference call scheduled with PI, POC, and CDRP office

Next Action / Milestone

- Have telecon with Christy, Lei, Jeff, and Ed to discuss effort needed to meet IOC requirements
- Set up schedule



Project Risks

- Unsure if any effort will be put forth by the PI to document code (FORTRAN 77, 15K lines), written by multiple people over last 15 yrs

ID	Task Name	Status	Start	Stop	FY11 Q2			FY11 Q3			FY11 Q4		
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	Complete	1/1/2011	1/15/2011	█								
2	Transfer Prep		1/15/2011	5/30/2011	█	█	█	█	█				
2a	Comment Source Code		1/15/2011	3/15/2011	█	█	█						
2b	Create Documents		3/15/2011	4/30/2011			█	█					
2c	Format Data for delivery		4/30/2011	5/30/2011					█	█			
3	Transfer Code, Docs, and Data		6/1/2011	6/30/2011						█	█		
4	Validate Code, Docs, and Data		7/1/2011	7/30/2011							█	█	
5	Archive Code, Docs, and Data		8/1/2011	8/30/2011								█	█
6	Provide Access to Code, Docs, and Data		9/1/2011	9/30/2011									█

Microwave Sounder FCDR

CDR Product: FCDR - AMSU- A Brightness Temperature, CH 8 & 9; 2001 - 2010 (100 GB)

GEOSS Societal Benefit: Climate, Water, Ecosystems

Project Status

- Completed Initial Assessment
- Sent Submission Agreement questionnaire to PI

Next Action / Milestone

- Fill out SA questionnaire
- Set up schedule



Project Risks

- Minimal

ID	Task Name	Status	Start	Stop	FY11 Q2			FY11 Q3			FY11 Q4		
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	Complete	1/1/2011	1/15/2011	█								
2	Transfer Prep		1/15/2011	5/30/2011		█	█	█	█				
2a	Comment Source Code		1/15/2011	3/15/2011		█	█						
2b	Create Documents		3/15/2011	4/30/2011			█	█					
2c	Format Data for delivery		4/30/2011	5/30/2011					█	█			
3	Transfer Code, Docs, and Data		6/1/2011	6/30/2011						█	█		
4	Validate Code, Docs, and Data		7/1/2011	7/30/2011							█	█	
5	Archive Code, Docs, and Data		8/1/2011	8/30/2011								█	█
6	Provide Access to Code, Docs, and Data		9/1/2011	9/30/2011									█

Microwave Imager FCDR

CDR Product: FCDR - Intercalibrated SSMI Brightness Temperatures (v6), 1987 – 2010 (xx GB)

GEOSS Societal Benefit: Climate, Water, Ecosystems

Project Status

- Completed Initial Assessment
- Received non NetCDF data in archive

Next Action / Milestone

- Set up schedule
- Complete documentation



Project Risks

- Minimal concern about source code release

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
1	Initial Assessment	Complete	1/1/2011	1/15/2011				█						
2	Transfer Prep		1/1/2011	2/28/2011				█	█					
2a	Comment Source Code		1/1/2011	1/30/2011				█						
2b	Create Documents		1/1/2011	2/28/2011				█	█					
2c	Format data for delivery		2/1/2011	2/28/2011					█					
3	Transfer Code, Docs, and Data		3/1/2011	3/31/2011						█				
4	Validate Code, Docs, and Data		4/1/2011	4/30/2011							█			
5	Archive Code, Docs, and Data		5/1/2011	5/31/2011								█		
6	Provide Access to Code, Docs, and Data		6/1/2011	6/30/2011										█

Aerosol Properties

CDR Product: TCDR - Aerosol Optical Thickness (AOT), 1981 – 2010 (430 GB)

GEOSS Societal Benefit: Disasters, Health, Climate, Ecosystems

Project Status

- Completed Initial Assessment
- Sent proposed CDR subset to Jeff for approval
- Coordinating with archive branch (Phil) on naming conventions
- Commented Source Code

Next Action / Milestone

- Decide which CDR variables needs to be subsetted from the 400+ variables
- Set up schedule



Project Risks

- Data not subsetted, need programmer support
- Data not in NetCDF format, need programmer support

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
1	Initial Assessment	Complete	11/29/10	12/15/10										
2	Transfer Prep		1/1/2011	3/15/2011										
2a	Comment Source Code	Complete	1/1/2011	1/30/2011										
2b	Create Documents		1/1/2011	3/15/2011										
2c	Subset CDR variables		2/1/2011	2/14/2011										
2d	Format to netCDF		2/15/2011	2/28/2011										
3	Transfer Code, Docs, and Data		3/1/2011	3/31/2011										
4	Validate Code, Docs, and Data		4/1/2011	4/30/2011										
5	Archive Code, Docs, and Data		5/1/2011	5/31/2011										
6	Provide Access to Code, Docs, and Data		6/1/2011	6/30/2011										

Longwave Radiation - Top of Atmosphere (TOA)

CDR Product: FCDR - HIRS OLR Time Series, monthly mean, 2.5 deg, 1979 – 2010 (CDR : 20 MB, Orbit Files: 700 GB)

GEOSS Societal Benefit: Energy, Climate, Ecosystems

Project Status

- Completed Initial Assessment
- Significant coordination has taken place with Bill Hankins
- Sent SA questionnaire to PI

Next Action / Milestone

- Start submission agreement process
- Verify schedule
- Process remainder of POR (2009-2010)
- Work on creating necessary documentation



Project Risks

- Minimal risk involved
- PI concerned about source code release

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	Complete	11/29/10	12/15/10												
2	Transfer Prep		12/15/2011	2/28/2011												
2a	Comment Source Code		12/15/2011	1/30/2011												
2b	Create Documents		1/1/2011	2/28/2011												
2c	Format data for delivery		3/1/2011	3/31/2011												
3	Transfer Code, Docs, and Data		4/1/2011	4/30/2011												
4	Validate Code, Docs, and Data		5/1/2011	5/31/2011												
5	Archive Code, Docs, and Data		6/1/2011	6/30/2011												
6	Provide Access to Code, Docs, and Data		7/1/2011	7/31/2011												

Sea Surface Temperature

CDR Product: TCDR - Pathfinder v5.2, Daily nighttime and daytime global SST fields, 1981-2010, (4 TB)

GEOSS Societal Benefit: Climate, Water, Ecosystems, Agriculture

Project Status

- Completed Initial Assessment
- Need to work out details with NODC on data storage, distribution, and documentation
- Sent SA questionnaire to PI

Next Action / Milestone

- Fund documentation and reprocessing efforts
- Get HDF to NetCDF conversion code from NODC, once tested
- Verify/modify schedule



Project Risks

- Reprocessing may take longer than anticipated
- Complete process from level 1b to HDF to NetCDF has yet to be completed/validated
- Source code documentation may require additional hire
- Final data set will be maintained at NODC

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	Initial Assessment	Complete	11/29/10	12/15/10									
2	Run SeaDAS code (v5.2) 1981-2010		1/1/11	3/1/11									
3	Run HDF to netCDF conversion code		3/1/11	3/15/11									
4	Comment Source Code		1/1/11	3/1/11									
5	Create Documents		2/1/11	3/1/11									
6	Transfer Copy of Code and Docs		3/15/11	3/30/11									
7	Validate Code and Docs		4/1/11	4/15/11									
8	Archive Code and Docs		4/15/11	4/30/11									
9	Provide Access to Code and Docs		5/1/11	5/30/11									
	(Point to Data served at NODC)												

PREDECISIONAL DRAFT INFORMATION

PI: Evans (U of Miami) RSAD POC: Banzon

BACKUP CDR -- International Satellite Cloud Climatology Project

CDR Product: TCDR Global Cloud Coverage, 3 hourly, xx km res, 19XX-20XX, (XX GB)

GEOSS Societal Benefit: Energy, Climate, Water, Agriculture

Project Status

- ISCCP is a backup CDR to ensure the NCDC performance metric is successfully met.
- Initial Assessment – Data, source code and docs are very mature (could easily fill the gap if any of the FY11 CDRs fail to deliver)

Next Action / Milestone

- Chose what outputs should be included in CDR package
- Subset variables
- Work on documentation



Project Risks

- Minimal

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4		
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2	Transfer Prep		12/15/2011	2/28/2011												
2a	Comment Source Code		12/15/2011	1/30/2011												
2b	Create Documents		1/1/2011	2/28/2011												
2c	Format data for delivery		3/1/2011	3/31/2011												
3	Transfer Code, Docs, and Data		4/1/2011	4/30/2011												
4	Validate Code, Docs, and Data		5/1/2011	5/31/2011												
5	Archive Code, Docs, and Data		6/1/2011	6/30/2011												
6	Provide Access to Code, Docs, and Data		7/1/2011	7/31/2011												

PREDECISIONAL DRAFT INFORMATION



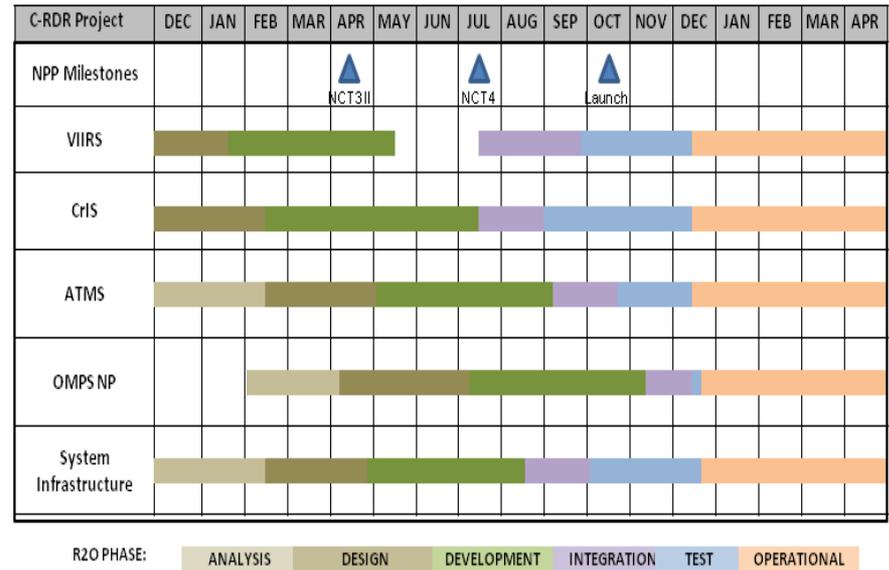
CDR Program Office

NPP/JPSS Climate Raw Data Records (C-RDRs) project

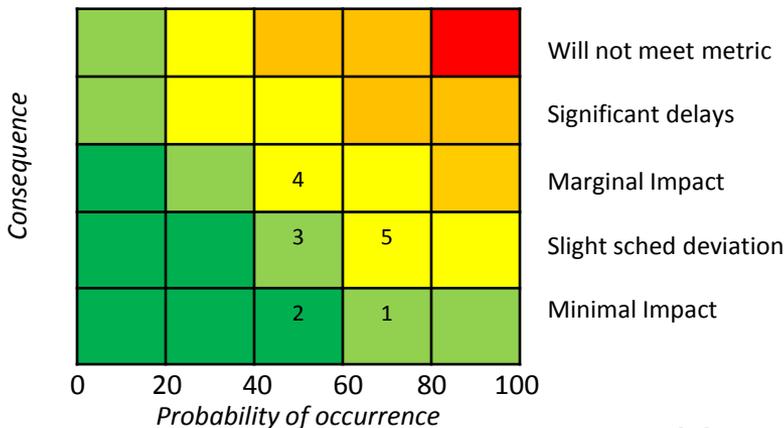
Weekly Report – Jan 14, 2011

1. **VIIRS**
 - C-RDR data and metadata defined
2. **CrIS**
 - Defining C-RDR data
3. **ATMS**
 - Porting ATMS algorithm software to NCDC
4. **OMPS NP**
 - Delayed OMPS NP to focus resources on system infrastructure and other sensors
5. **System Infrastructure**
 - Working with CLASS to test ingest of RDRs

Completed extended abstract and poster for AMS.
 Reworking schedule including resource contingencies and dependencies.



Risk Matrix



Risk and Mitigation

- VIIRS, CrIS, ATMS, OMPS NP, System Infrastructure -**
- Short schedule to NPP launch on October 2011. Hiring additional software engineer(s).
 - Operational software is under maintenance, updated versions may affect C-RDR ported version.
- System Infrastructure –**
- Availability of automated receipt of NPP RDRs from the CLASS system. Need to test ingest of RDRs from CLASS and develop an automated mechanism for re-requesting data.
 - Capability of CLASS to ingest and archive C-RDRs.

PREDECISIONAL DRAFT INFORMATION

- = On-track
 = Potential management action required
 = Management attention required

Visible Infrared Imaging Radiometer Suite (VIIRS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format

GEOSS Societal Benefit: Climate, Water, Ecosystems, Agriculture, Biodiversity, Energy

Project Status

- Ported operational algorithms (NASA Land PEATE)
- Defining the C-RDR format, data, and metadata
- Preparing the VIIRS C-RDR Product Specification for review
- Developing software to create the C-RDR
- Converting the supporting data files to netCDF4
- Merging latest Land PEATE modifications into C-RDR baseline

Next Action / Milestone

- Development complete for the VIIRS C-RDR



Project Risks

- NPP Launch Date: October 25, 2011
- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis		10/23/2009	5/4/2010																		
2	Design		5/6/2010	1/5/2011																		
3	Development		1/6/2011	5/13/2011																		
3a	Develop VIIRSS processing component		1/6/2011	3/4/2011																		
3b	Test VIIRS processing component		3/7/2011	5/13/2011																		
4	Integration		7/21/2011	8/26/2011																		
5	Test		9/1/2011	12/19/2011																		
5a	Dry Runs/some with launch data		9/1/2011	12/12/2011																		
5b	System Acceptance Test		12/12/2011	12/19/2011																		
6	Operational		12/20/2011																			

PREDECISIONAL DRAFT INFORMATION

Cross-track Infrared Sounder (CrIS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format

GEOSS Societal Benefit: Climate, Water, Energy

Project Status

- Ported operational algorithms (Space Dynamics Lab at Utah State)
- Defining the C-RDR format, data, and metadata

Next Action / Milestone

- Complete definition of CrIS C-RDR



Project Risks

- NPP Launch Date: October 25, 2011
- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version
- Correctly identify additional data required for the C-RDR

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis		8/16/2010	11/24/2010	█																	
2	Design		11/26/2010	2/15/2011		█	█	█														
3	Development		2/16/2011	7/22/2011				█	█	█	█	█	█									
3a	Develop CrIS processing component		2/16/2011	5/11/2011				█	█	█												
3b	Test CrIS processing component		5/12/2011	7/22/2011						█	█	█										
4	Integration		7/25/2011	8/19/2011									█	█								
5	Test		9/1/2011	12/19/2011												█	█	█	█			
5a	Dry Runs/some with launch data		9/1/2011	12/12/2011												█	█	█	█			
5b	System Acceptance Test		12/12/2011	12/19/2011																█		
6	Operational		12/20/2011																		█	█

Advanced Technology Microwave Sounder (ATMS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format

GEOSS Societal Benefit: Climate, Water, Energy

Project Status

- Obtained ported operational algorithms (Space Dynamics Lab at Utah State)
- Working to get the ported software running at NCDC

Next Action / Milestone

- Port operational algorithms to NCDC



Project Risks

- NPP Launch Date: October 25, 2011
- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version
- Developer shares time working NPP and CLASS issues.

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis		10/29/2010	2/10/2011																		
2	Design		2/11/2011	4/29/2011																		
3	Development		5/2/2011	9/7/2011																		
3a	Develop ATMS processing component		5/2/2011	6/27/2011																		
3b	Test ATMS processing component		6/28/2011	9/7/2011																		
4	Integration		9/8/2011	10/20/2011																		
5	Test		10/21/2011	12/19/2011																		
5a	Dry Runs/some with launch data		10/21/2011	12/12/2011																		
5b	System Acceptance Test		12/12/2011	12/19/2011																		
6	Operational		12/20/2011																			

PREDECISIONAL DRAFT INFORMATION

Ozone Mapping Profile Suite (OMPS) Nadir Profiler (NP)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format

GEOSS Societal Benefit: Climate, Energy

Project Status

- Delayed OMPS NP development to focus resources on system infrastructure and other sensors

Next Action / Milestone

- Obtain IDPS software when the OMPS modifications stabilize



Project Risks

- OMPS NP C-RDRs may not be available at launch. Mitigation: hire another developer for OMPS NP.
- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis		2/1/2011	4/12/2011																		
2	Design		4/13/2011	7/7/2011																		
3	Development		7/8/2011	11/15/2011																		
3a	Develop OMPS NP processing component		7/8/2011	9/1/2011																		
3b	Test OMPS NP processing component		9/2/2011	11/7/2011																		
4	Integration		11/8/2011	12/7/2011																		
5	Test		12/8/2011	12/19/2011																		
5a	Dry Runs/some with launch data		12/8/2011	12/12/2011																		
5b	System Acceptance Test		12/12/2011	12/19/2011																		
6	Operational		12/20/2011																			

PREDECISIONAL DRAFT INFORMATION

C-RDR System Infrastructure

C-RDR Product: Infrastructure to automate the production of the C-RDRs.

GEOSS Societal Benefit: None

Project Status

- Analyzing existing ingest and dissemination capabilities.
- Working with CLASS to test ingest of RDRs.
- Working on database infrastructure design.
- Working on the Archive Recommendation Package for C-RDRs.

Next Action / Milestone

- Complete analysis of existing system infrastructure



Project Risks

- NPP Launch Date: October 25, 2011
- Ability of CLASS to provide full stream of RDRs and ability to ingest stream of C-RDRs.
- Need to develop an automated re-request mechanism for CLASS.

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q1			FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis		9/29/2010	2/10/2011																		
2	Design		2/11/2011	4/22/2011																		
3	Development		3/7/2011	8/9/2011																		
3a	Develop & Test sensor algorithms processing		4/25/2011	8/9/2011																		
3b	Develop & Test ingest		3/7/2011	4/8/2011																		
3c	Develop & Test dissemination		4/11/2011	5/27/2011																		
4	Integration		7/21/2011	9/28/2011																		
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6	Operational		12/20/2011																			



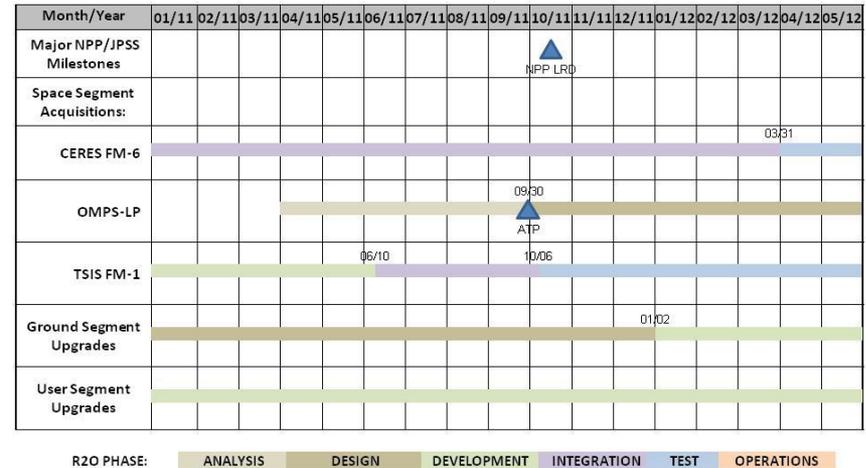
CDR Program Office

JPSS Climate Sensors and Program Status

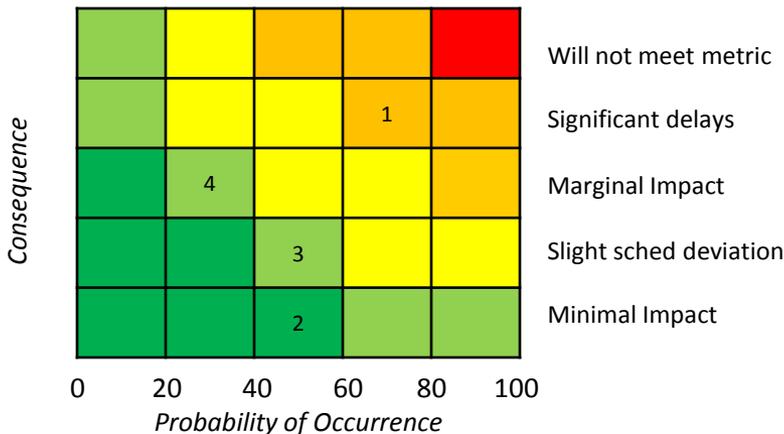
Current Status

- JPSS Climate Sensors are all on track with the exception of CERES:
 - CERES FM-6 on JPSS-1
 - KDP C Milestone briefing for CERES FM-6 is scheduled for January 20, 2011
 - OMPS-LP on JPSS-2
 - TSIS FM-1 on a Free-Flyer
- JPSS Program is still in transition and delays may cause a slip in the launch of JPSS-1:
 - JPSS L1RD, Version 4.4, dated December 15, 2010 is the latest draft; it still has not been signed
 - Decision regarding TSIS FM-1 free-flyer platform is still pending

Current Schedules



Risk Matrix



Risks and Mitigation

- FY-11 funding for CERES FM-6 and TSIS FM-1 R2O transition activities and User Segment upgrades may be in jeopardy due to Congressional actions
 - Could cause delays in the delivery of these capabilities
- Agreement between NASA and NOAA for CERES FM-6, OMPS-LP, and TSIS FM-1 transitions is needed ASAP
- R2O Transition and Instrument Support teams for CERES FM-6 and TSIS FM-1 are needed ASAP

PREDECISIONAL DRAFT INFORMATION

Clouds & Earth's Radiant Energy System (CERES) FM-6

Purpose: Continuity of Earth Radiation Budget (ERB) Measurements

GEOSS Societal Benefit: Climate

Project Summary

- CERES will fly on the NPP and JPSS-1 satellites, which have Launch Readiness Dates (LRDs) in late 2011 and 2015
- NOAA/NESDIS/OSD has funded the acquisition of the CERES FM-5 and FM-6 instruments by NASA's Langley Research Center (LaRC)
- OSD is also responsible, as the instrument provider, for any required upgrades to the JPSS Common Ground Segment (CGS) and CERES FM-6 instrument operations support
- JPSS Program is responsible for integrating and flying the CERES FM-6 instrument on the JPSS-1 spacecraft, post-launch satellite operations, data collection and initial processing, and delivering processed data via the Interface Data Processing Segment (IDPS) to the NOAA archive

Next Action/Milestone

- KDP C Milestone Briefing is scheduled for January 20, 2011

Project Risks

- Finalizing the Level 1 Requirements Document (L1RD) and securing an agreement between NASA and NOAA for the acquisition of the CERES FM-6 instrument, including resolving the dispute over on board calibration
- Negotiating an agreement between NASA/LaRC and NOAA/NESDIS/NCDC for the Research-to-Operations (R2O) transition of CERES higher-level data processing (or reprocessing) and Climate Data and Information Record (CDR/CIR) generation capabilities

Project Schedule

Schedule is under construction

Ozone Mapping & Profiler Suite-Limb Profiler (OMPS-LP)

Purpose: Continuity of Stratospheric Ozone Measurements

GEOSS Societal Benefit: Climate and Energy

Project Summary

- OMPS-LP will fly on the NPP and JPSS-2 satellites, which have Launch Readiness Dates (LRDs) in late 2011 and 2018
- NOAA/NESDIS/OSD has funded the acquisition of the OMPS-LP instruments by NASA (for NPP) and the JPSS Program (for JPSS-2)
- OSD is also responsible, as the instrument provider, for any required upgrades to the JPSS Common Ground Segment (CGS) and OMPS-LP instrument operations support
- JPSS Program is responsible for integrating and flying the OMPS-LP instrument on the JPSS-2 spacecraft, post-launch satellite operations, data collection and initial processing, and delivering processed data via the Interface Data Processing Segment (IDPS) to the NOAA archive

Next Action/Milestone

- Authorization to Proceed (ATP) decision for the acquisition of the JPSS-2 OMPS-LP is expected by end of September 2011

Project Risks

- Drafting a Level 1 Requirements Document (L1RD) and securing an agreement between the JPSS Program and NOAA for the acquisition of the OMPS-LP instrument for JPSS-2
- Negotiating an agreement between NASA/GSFC and NOAA/NESDIS/NCDC for the Research-to-Operations (R2O) transition of OMPS-LP higher-level data processing (or reprocessing) and Climate Data and Information Record (CDR/CIR) generation capabilities

Project Schedule

Schedule is under construction

Total Solar Irradiance Sensor (TSIS) FM-1

Purpose: Continuity of Solar Irradiance Measurements

GEOSS Societal Benefit: Climate and Energy

Project Summary

- TSIS will fly on the NPP satellite and as a free-flyer in conjunction with the JPSS-2 satellite, which have Launch Readiness Dates (LRDs) in late 2011 and 2018
- NOAA/NESDIS/OSD funded the acquisition of the TSIS FM-1 instrument by NASA
- OSD is also responsible, as the instrument provider, for any required upgrades to the JPSS Common Ground Segment (CGS) and TSIS instrument operations support
- JPSS Program is responsible for integrating and flying the TSIS FM-1 instrument, post-launch satellite operations, data collection and initial processing, and delivering processed data via the Interface Data Processing Segment (IDPS) to the NOAA archive

Next Action/Milestone

- Integration and testing of the TSIS FM-1 instrument is scheduled to begin on June 10, 2011

Project Risks

- Finalizing the Level 1 Requirements Document (L1RD)
- Conducting a mission trade study in conjunction with the JPSS Program to determine the most efficient launch option for TSIS
- Negotiating an agreement between NASA/GSFC, the Laboratory for Atmospheric and Space Physics (LASP), and NOAA/NESDIS/NCDC for the Research-to-Operations (R2O) transition of TSIS higher-level data processing (or reprocessing) and Climate Data and Information Record (CDR/CIR) generation capabilities

Project Schedule

Schedule is under construction

Other Tasks

- Drafting slides for presentation to the NOAA Assistant Administrator for Satellite and Information Services regarding the Research-to-Operations (R2O) transition of CERES operations and data processing capabilities
 - Initial draft was sent to Mike Tanner for review on January 11th
- Reviewing the latest version of the JPSS Level 1 Requirements Document (L1RD); that is, Version 4.4, dated December 15, 2010
 - Review completed on January 12th
- Drafting a Statement of Work (SOW) template for CDR Program developer post-delivery support
 - In progress
- Contacting Bruce Barkstrom for background information on the Consolidated Observational Requirements List (CORL)
 - Contacted Bruce Barkstrom on January 3rd; responses forwarded to Jeff Privette
- Reviewing two documents developed by Dean Carter:
 1. IOC and FOC Defined for Pre-NPP CDR – Completed on January 11th
 2. Transitioning CDRs from Research to Operations – In progress