



# Remote Sensing Applications Division (RSAD)

## CDR Program Office

Weekly Report for Oct 10, 2014  
Ed Kearns, Chief



# CDR Program Office

## OISST Rejuvenation Project

Team Lead:  
Drew Saunders

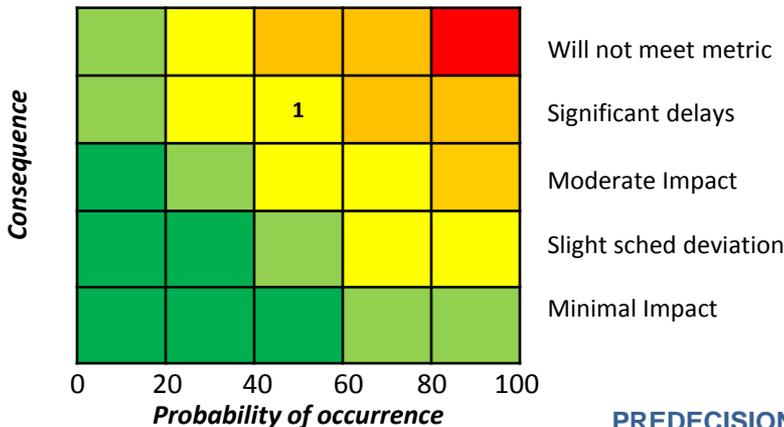
### Weekly Report – October 3, 2014

#### 1 ISST – Optimum Interpolated Sea Surface Temperature

- **Verifying results of final product test runs.**
- **Updated schedule based on delays. Working FOC estimate.**
- DEV container created.
- Performing dry runs for the System Acceptance Test (SAT).
- Draft OISST Transition to Operations Project Plan.
- Successfully completed 30 day parallel test.
- Comparing NCDG GTS with NCEP ship/buoy data for use. GCAD is resolving issues but requires new operational code.
- AVHRR data for the 15 day delay product is available from CLASS.
- GSTWG discussing inputs and production of preliminary OISST.
- Created a SOP for operational OISST.
- Completed refactoring of each component.
- Conducted Technology Assessment Review.

Monitor Project	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	NOV
Test																
Dry Run SAT																
Setup DEV																
Verify DEV																
Setup TEST																
Dry Run TEST																
SAT																
FOC																
Reprocessing																
SAs																
SLA																

### Risk Matrix



### Risk and Mitigation

1 Time to progress through the three tier environment. ITB support is required.



# CDR Program Office

## Ingest Monitoring Tool

Team Lead:  
Linda Copley

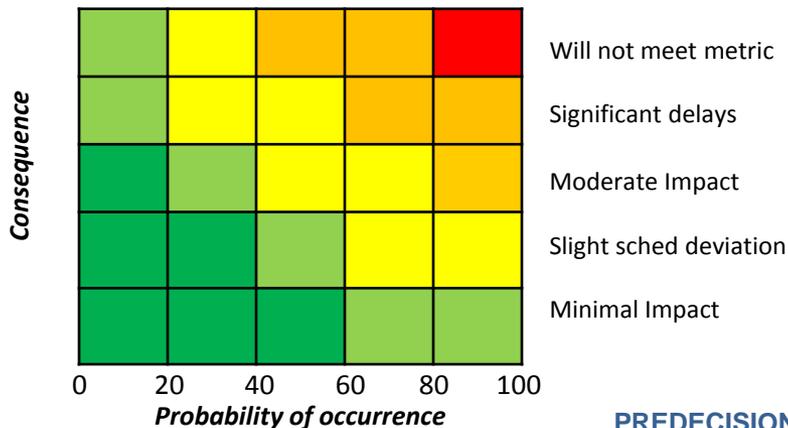
### Weekly Report – October 3, 2014

#### 1 Operations Monitoring Tool development

- Utilizing SIPGenSys infrastructure.
- Meeting to discuss similar efforts and shared requirements.
- Designing module to collect status data from iRODS.
- Working on database design.
- Defined requirements for Phase 1 of the project.
- Phase 1 implements basic functionality .
- Additional datasets can be added in later phases.
- Updated the monitoring project plan.
- Monitoring of operational ingest.

Monitor Project	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	NOV
Phase 1	[Red bar]															
Status View	[Red bar]															
Dashboard			[Red bar]													
Email Notification				[Red bar]												
Phase II																

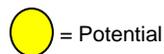
### Risk Matrix



### Risk and Mitigation

PREDECISIONAL DRAFT INFORMATION

10/16/2014



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



# CDR Program Office

## Federated Archive Search Tool (FAST)

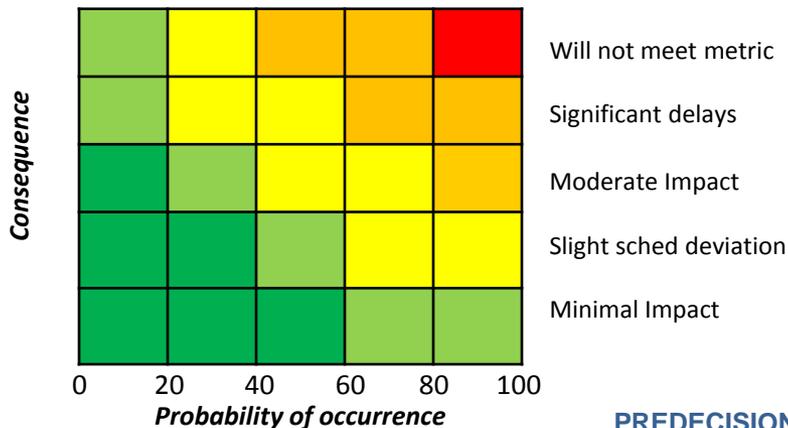
Team Lead:  
Linda Copley

### Weekly Report October 3, 2014

- 1 Federated Archive Search Tool proof-of-concept**
- **Investigating Hollings Scholar intern opportunity**
  - **Working on application to demonstrate query capabilities.**
  - Connected all data to geographic and date references.
  - Designed and loaded VIIRS catalog graph data.
  - Designed and loaded Storm Events graph data.
  - Loaded FIPS geographic data.
  - Installed Neo4j graph database with spatial extension.

Monitor Project	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	NOV
Proof-of-concept																
Demonstrate																
Analysis																
Recommendation																

### Risk Matrix



### Risk and Mitigation

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# CDR Program Office

## Reprocessing VIIRS SDRs

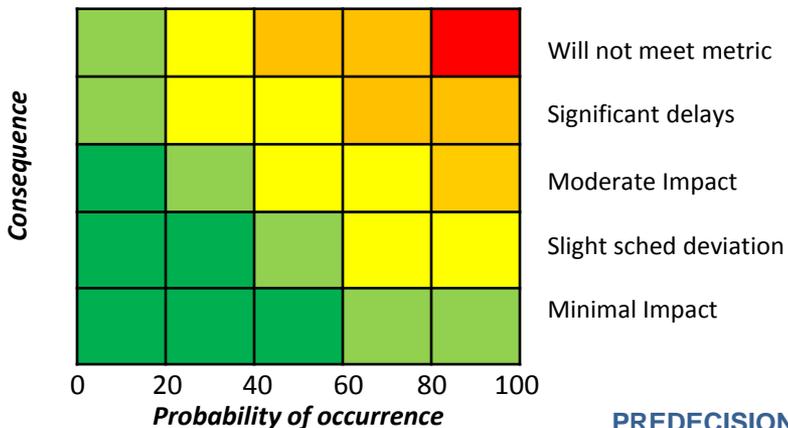
Team Lead:  
Jim Biard

### Weekly Report – October 3, 2014

#### 1 Reprocessing VIIRS SDRs

- **Currently working Obs4MIBs and graph DB.**
- Defined schedule estimates for project.
- Present to Stewardship Council for information.
- Talking with STAR scientists (Changyong Cao, etc) to identify parallelization capability of VIIRS algorithms.
- Developed draft white paper to identify issues and scope.
- Have identified parts of the algorithm that need to 'conditioned' during runtime and will affect reprocessing estimates.
- Discussed scope and goals of the project with CDRP scientist.

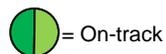
### Risk Matrix



### Risk and Mitigation

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# CDR Program Office

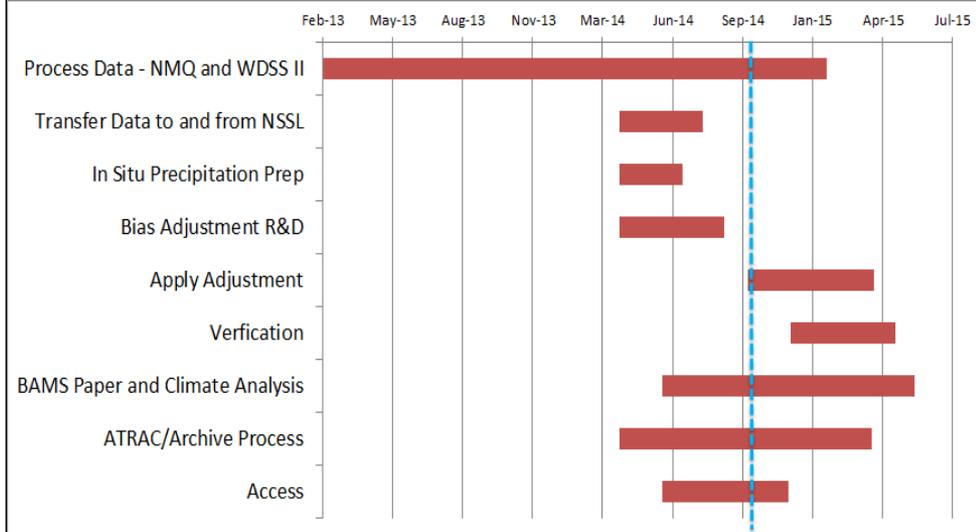
## NOAA NEXRAD Reanalysis

Project Manager:  
B. Nelson

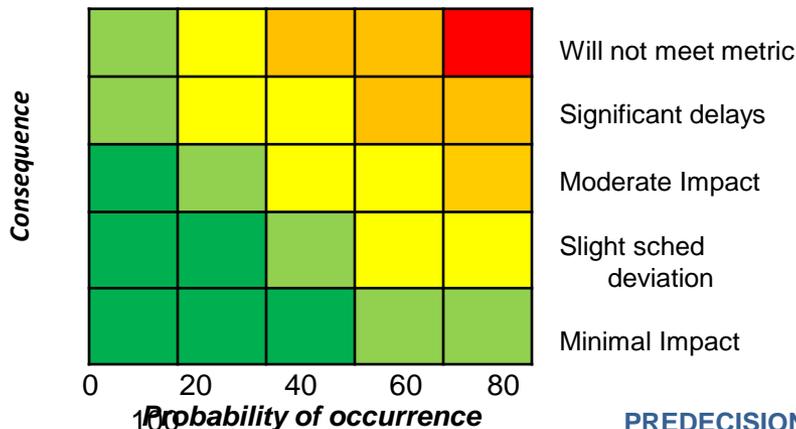
### Weekly Report

#### NRR – NOAA NEXRAD Reanalysis

- Radar only reprocessing is finished
- Still investigating the COOP obs time issue
- Re-do daily gauge-radar processing to consider obs time for COOP data.
- Hourly data for HADS locs has been processed for 4 full years
- 2003 radar only processing
- 2005 radar only processed
- Assessment of Bias at Hourly for 2 months (4 years)
- Assessment of Bias at Daily scale for 4 years (2008 - 2011)
- Gauge radar merging for one year (2011)
- 2005 radar only processed



### Risk Matrix



### Risk and Mitigation

No Risk at this time

10/9/2014



PREDECISIONAL DRAFT INFORMATION



= Potential management action required



= Management attention required



# CDR Program Office

## ISCCP Processing @ NCDC

Project Manager:  
A. Young/K. Knapp

### Weekly Status Update

- Continuing to pre-process data.
- Ordering replacement data from EUMETSAT
- Sent beta data to users for feedback.
- Preparing ancillary calibration data for processing.
- Working on ISCCP Website for NCDC
- Preparing data for Beta users (preliminary output)
- Prepared space and scripts for ISCCP processing on CICS server.
- Received pre-processing software to QC input files (GEO/B1 & LEO/AVHRR)

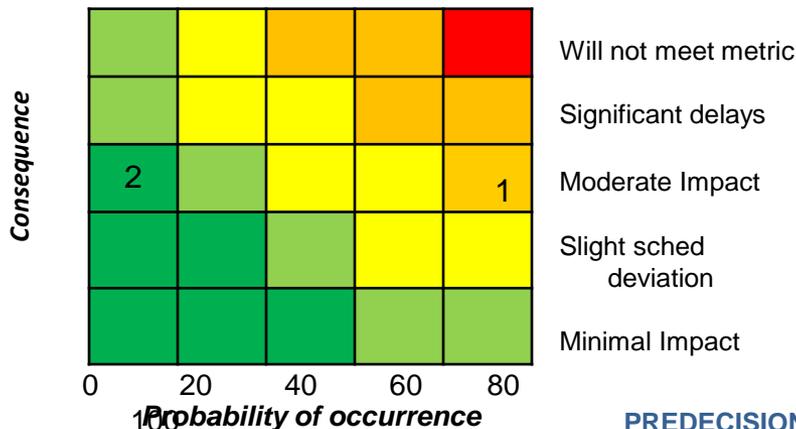
### Objectives

Produce ISCCP cloud products at NCDC following IOC R20 procedures. Plan for routine updates to follow.

### Schedule

- |                         |                   |
|-------------------------|-------------------|
| • Start Date            | 1983? 2003? 2013? |
| • Begin processing      | September 2014    |
| • End processing        | December 2014     |
| • QC & Analysis         | Jan-Feb 2015      |
| • Archive               | March 2015        |
| • Routine updates start | June 2015         |

### Risk Matrix

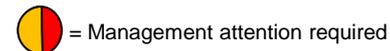


### Risk and Mitigation

1. Delivery of software late and other delays. **Raised level to moderate impact. Processing will likely start 1 month late. Impact upon completion isn't yet clear.**
2. CICS server space

**PREDECISIONAL DRAFT INFORMATION**

8/7/2014





# CDR Program Office

## Obs4MIPS

Project Manager:  
H. Semunegus

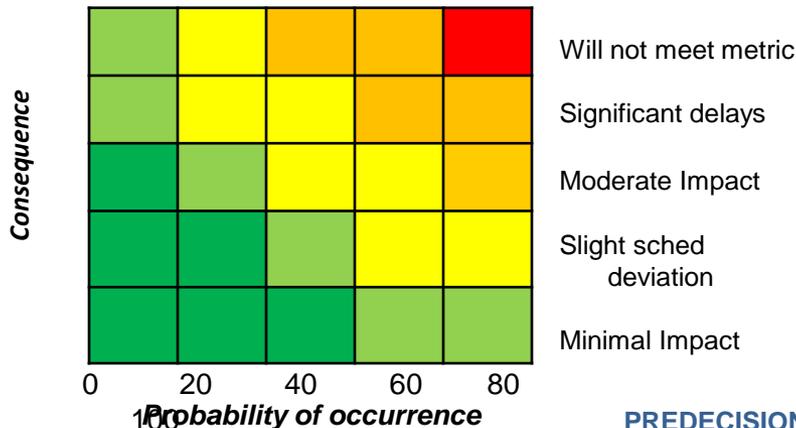
### Weekly Status Update

- J. Baird prototyped a conversion utility.
- Scoping out a potential third dataset for initial transition.
- Test data was converted to Obs4MIPS format.
- Planning meeting completed and schedule revised.
- Initial datasets selected for Obs4MIPS: OISST and OLR
- Lots of emails and investigations ongoing.
- Many CDRs can't work in Obs4MIPS: all FCDRs and all Mean Layer Temperatures aren't fit for this purpose.
- Kickoff meeting held 7/18
- Initial plans developed.

Obs4MIPS using CDRs (Project Manager: Hilawe Semunegus)					2014												2015				
Task (team member)	Start Date	End Date	Duration (days)	Percent Complete	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
1.1 Present project plan and time commitment to team members (all)	2014-07-15	2014-07-31	17	100%																	
1.2 Select 3 CDRs for Obs4MIPS conversion (all)	2014-07-15	2014-07-31	17	50%																	
1.3 Assess uncertainty estimates for selected CDRs based on CATBDs (J. Matthews)	2014-07-15	2014-07-31	17	0%																	
1.4 Assess time commitment for writing a "Technical Note Template" (SMEs): <a href="https://www.eaathysystemcog.org/site_media/projects/obs4mips/Obs4MIPsTechnicalNoteGuidancev3.pdf">https://www.eaathysystemcog.org/site_media/projects/obs4mips/Obs4MIPsTechnicalNoteGuidancev3.pdf</a>	2014-07-15	2014-07-31	17	0%																	
1.5 Determine methodology for temporal and spatial upscaling/downscaling/averaging (SMEs and Jim Bard)	2014-07-15	2014-08-14	31	0%																	
2.0 Analysis (Sampling and validation)	2014-08-15	2014-11-14	92	0%																	
2.1 Create a sample monthly netCDF file for each Obs4MIPS-compliant CDR (Bard and SME)	2014-08-15	2014-09-14	31	0%																	
2.2 Independently compare sample output for scientific validation (SMEs and Bard)	2014-09-15	2014-10-14	30	0%																	
2.3 Validate that all metadata compliances are passed for sample files: CF, Obs4MIPS OMPs and CDR Metadata standards (Bard)	2014-10-15	2014-11-14	31	0%																	
3.0 Implementation (Code and documents)	2014-11-15	2015-02-28	106	0%																	
3.1 Produce Obs4MIPS CDRs for entire period of record (Bard and SMEs)	2014-11-15	2014-12-31	47	0%																	
3.2 Submit Obs4MIPS Data Set Proposal Form (SMEs)	2015-01-01	2015-01-14	14	0%																	
3.3 Write Technical Note for each CDR (SMEs)	2015-01-01	2015-02-28	59	0%																	
4.0 Testing	2015-03-01	2015-04-30	61	0%																	
4.1 Test data scientifically (SMEs and Programmer)	2015-03-01	2015-03-31	31	0%																	
4.2 Test for monthly production (regular updates) of CDRs (within 10 days of succeeding month)	2015-03-15	2015-04-30	47	0%																	
5.0 Deployment (Archive)	2015-04-15	2015-10-31	200	0%																	
5.1 Complete Archive Request Form or ATRAC (SMEs, PM and Archive)	2015-04-15	2015-04-29	15	0%																	
5.2 Complete all Archive requirements (SMEs, PM and Archive)	2015-05-01	2015-07-31	92	0%																	
5.3 Serve CDRs via GFDL or NCDC ESG node (NCMADS-DAAD)	2015-08-01	2015-08-31	31	0%																	
5.4 UESB Product Briefing (SMEs)	2015-09-01	2015-09-15	15	0%																	
5.5 Add Obs4MIPS project to CDRP website																					

Initial datasets: Daily OLR, OISST, Sea Ice

### Risk Matrix



### Risk and Mitigation

TBD

8/7/2014

= On-track

= Potential management action required

= Management attention required



# CDR Program Office

## UW HIRS Processing @ NCDC

Project Manager:  
A. Young

### Weekly Status Update

- Found space to temporarily store 10 TB of 10 yrs of product.
- Waiting for final code delivery from Wisconsin.
- Preparing plan for processing on CICS server.
- Working on finding space for the 10TB of input data (pixel level cloud data).

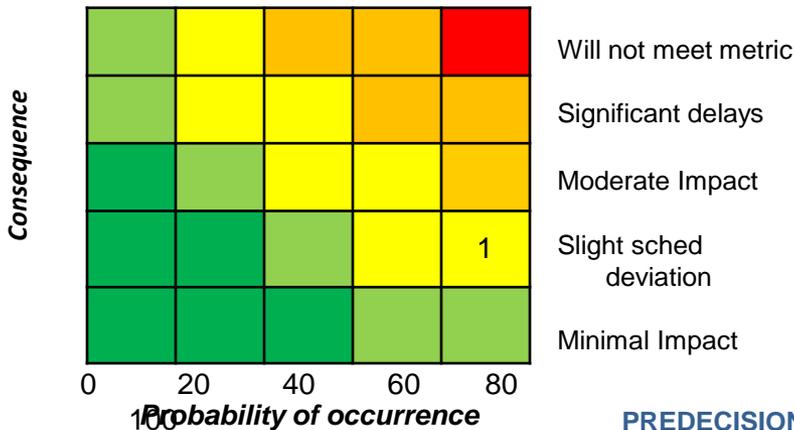
### Objectives

Produce global total precipitable water and cloud top pressure estimates from HIRS data using the UW algorithm (P. Menzel).

### Schedule

- Start Date                      TBD
- End Date                         TBD

### Risk Matrix



### Risk and Mitigation

1. Programmer was assigned to another task. Impact: Schedule may slip.

PREDECISIONAL DRAFT INFORMATION

8/7/2014



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# CDR Program Office

## Albedo of the Americas

Project Manager:  
J. Matthews

### Weekly Status Update

- Continued validation via collaboration with SAMSI (at NCSU).
- Loaned 42 TB of disk space allocation to ISCCP Project

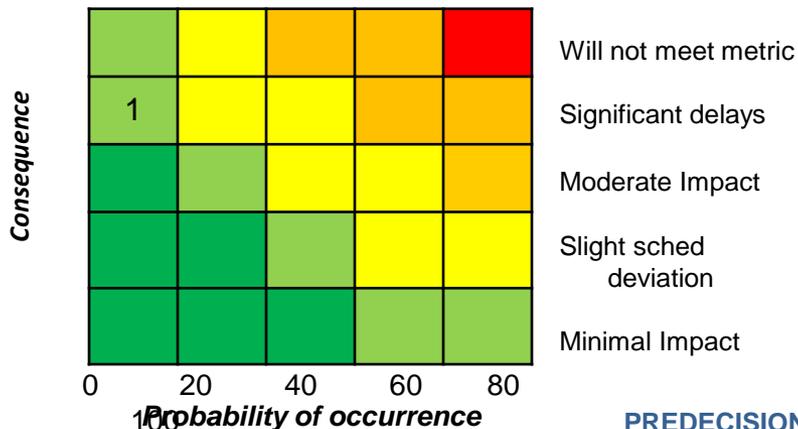
### Objectives

Produce a daily land surface albedo product over North and South America from GOES-GVAR observations for 1995-2014.

### Schedule

- Start Date: January 2015
- End Date: June 2016

### Risk Matrix

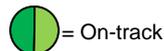


### Risk and Mitigation

- Loaned disk space is not returned  
\* Could cause delays. Unlikely since more disk space is planned.

8/7/2014

PREDECISIONAL DRAFT INFORMATION



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