

**GPM X-Cal Meeting
and
NOAA AMSU/MHS/SSMT2 CDR
Workshop**

**March 2-4, 2011
ESSIC @ M-Square
College Park, MD**

Logistics and Other Information

- Loading your presentations
- Restrooms
- Food & Beverages
 - Breakfast and Lunch on Thurs
 - Snacks
 - Need your contributions!
- Wireless – “ESSIC” open network
- Around the room introductions
- Group Photo at coffee break
- Pay as you go dinner tonite?
- Web site – will upload presentations
- We will put together ~10 page workshop report

NOAA Workshop on Climate Data Records from Satellite Passive Microwave Sounders – AMSU / MHS / SSMT2 - Agenda

Wednesday, March 2, 2011

Time	Presentations / Topics	Speaker
1:00 PM	<i>Welcome, goals, logistics</i>	R. Ferraro, H. Meng, J. Luo, A. Busalacchi
Session 1 - Overviews		--
1:15 PM	<i>CDR Program - Precipitation</i>	B. Nelson
1:30 PM	<i>STAR's Contributions to the CDR Program</i>	M. Goldberg
Session 2 - AMSU-A		--
1:45 PM	<i>AMSU CDR Project - Overview</i>	H. Meng
2:00 PM	<i>Intersatellite/Intersensor Calibration of Microwave Radiometers over Antarctica</i>	T. Mo
2:30 PM	<i>AMSU-A Asymmetry</i>	W. Yang
3:00 PM	<i>Coffee Break</i>	--
3:15 PM	<i>A Brief Overview of AMSU-A Intercalibration using the SNO Method</i>	R. Iacovazzi
3:35 PM	<i>An update on the NOAA MSU/AMSU/SSU sounding CDR development</i>	C. Zou
Session 3 - AMSU-B/MHS		--
3:55 PM	<i>AMSU-B/MHS Asymmetry</i>	C. Devaraj
4:15 PM	<i>Title TBD</i>	J. Ackermann/TBC
4:45 PM	<i>Discussions - AMSU-A, AMSU-B, MHS</i>	All
5:15 PM	<i>Workshop Ends for the Day - Possible Group Dinner at 6:00 pm</i>	--

Thursday, March 3, 2011

Time	Presentations / Topics	Speaker
Session 4 - SSMT/2 and Beyond		--
8:30 AM	<i>SSMT/2 and MOZAIC: Bringing Together Satellite and Aircraft Long-Term UTH Measurements</i>	J. Luo
9:00 AM	<i>An A-Train Water Vapor CDR using Cloud Classification</i>	E. Fetzer
9:30 AM	<i>A Multi-Sensor Perspective on the Tropical Interannual Variability of Humidity and Clouds</i>	C. Liang
10:00 AM	<i>Coffee Break</i>	--
Session 5 - Other Topics		--
10:20 AM	<i>Non-linear trends in AMSU</i>	F. Weng
10:50 AM	<i>Geolocation Errors in AMSU/MHS</i>	I. Moradi
11:10 AM	<i>Optimizing and Validation of ATMS CDR's</i>	B. Blackwell
11:40 AM	<i>Monitoring the JASON-2 AMR Stability using SNO Observations from AMSU and MetOp and NOAA Satellites</i>	R. Chen
12:00 PM	<i>Eat-In/Working Lunch</i>	--
12:30 PM	<i>Plenary - List and rank major sources of errors, and difficulty in resolving them, etc.</i>	All
2:30 PM	<i>Wrap Up</i>	--
3:00 PM	<i>Workshop Ends</i>	--

CDR Workshop Goals and Expectations

- Build off success of March 2010 SSM/I & MSU/AMSU CDR Workshop
- Learn about AMSU/MHS/SSMT2 sensor characteristics from experts in the field
 - How these relate to our ability to generate CDR's related to the **hydrological cycle**
 - **Mainly focused on window and water vapor channels**
- Identify problem areas and most viable means to characterize them
 - What can be accomplished in the next 1-2 years?
- Develop a roadmap for the CDR maturity

Key Scientific Questions

- What is the preferred method(s) to:
 - Compute AMSU/MHS across scan bias
 - Characterize RFI
 - Perform intersatellite calibration
 - Geolocation
 - Orbital Drift
- How best to utilize CRTM for window and H₂O channels?
- What tools can we leverage from other ongoing activities in CDR and X-Cal?
- How important are diurnal cycle affects
 - On calibration
 - On the TCDR's

AMSU/MHS CDR Issue Matrix

Issue	Magnitude	Status	Priority
Across Scan Bias			
Intersatellite Calibration			
Orbital Drift			
Orbital Decay			
Sensor RFI			
Channel Loss			
Metadata			
QC of Level 1			
Geolocation			