Ancillary Measurements (TTAM)

Thierry LeBlanc Tony Reale **Task (0); Product / Sensor Inventory:** Survey current and legacy satellites, sensors and associated nrt (weather) and post processed (climate) derived satellite products for atmospheric temperature and moisture profiling suitable for validation and application in determining atmospheric column at a given GRUAN site.

Main Contact: Reale / Schroder Due Date:

Status: Ongoing

Milestone: Spread sheet of satellites, sensors and products suitable for site bases analysis

Progress: Coordination with 2nd Workshop GEWEX water vapor assessment (G-

VAP)

Issues: Restore to Master Action List?

Task (5): Retain Collocated Radiances: Retain radiances associated with satellite products collocated with GRUAN reference (NPROVS+)

Main Contact: T. RealeDue Date: Feb 2013Status: OngoingMilestone:Complete satellite collocation data record containing derived profiles and
"all" associated radiance data within 500km of ground target for selected
sat/sensor combination

Progress: Data now routinely stored for CrIS, ATMS onboard S-NPP with infrastructures in place for VIIRS, MetOp (IASI, ATMS, AVHRR) and EOS Aqua (AIRS, AMSU, MODIS)

Issues:



The GEWEX water vapor assessment (G-VAP)

Marc Schröder, Maarit Lockhoff

Special thanks goes to

Ralf Bennartz, Frank Fell, John Forsythe, Antonia Gambacorta, Anthony Reale, Remy Roca, Noelle Scott, Lei Shi, Tim Trent, Andi Walther, June Wang, Qiong Yang

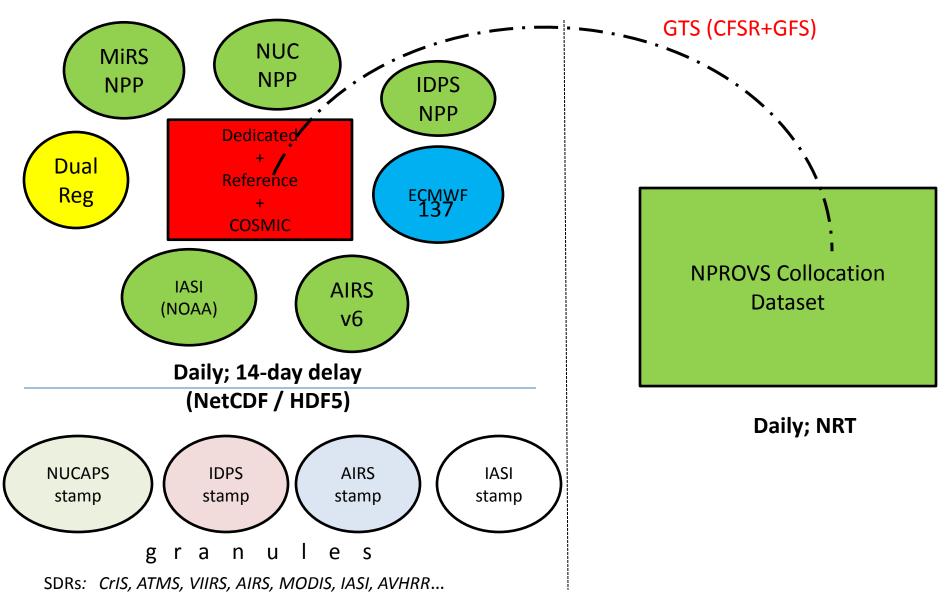


Candidate data records

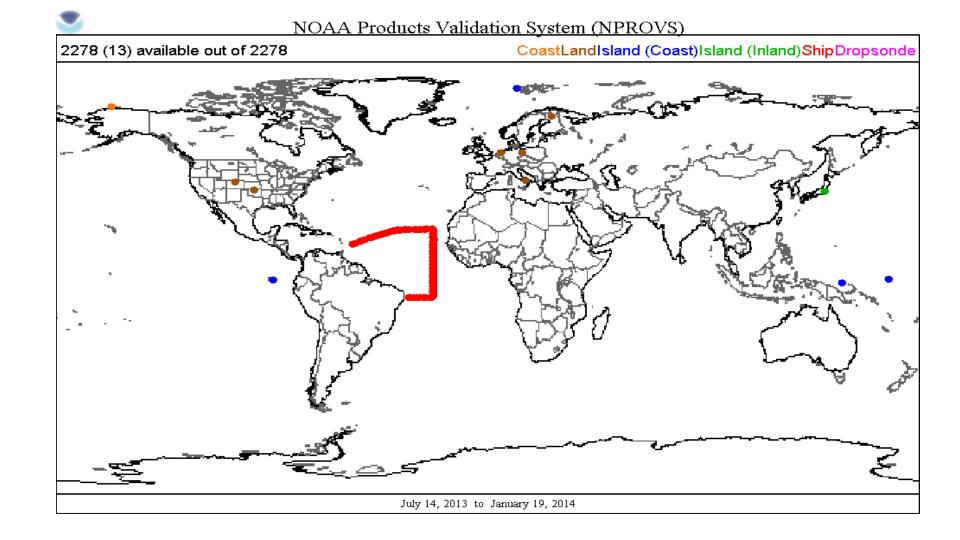
- Candidate satellite data records (to be evaluated): 36 (23)
 Candidate data records (for comparison): 22
- Candidate data records (for comparison): 32

Instrument(s)/Technique	Data set	Parameters	Temporal coverage	Anticipated use in G-VAP
AIRS	NASA NOAA	TCWV, WV TCWV, WV	2002-present	To be evaluated
AIRS, AMSU, CloudSat, MODIS	NASA		2006-2011	To be evaluated
AMSR-E	RSS/NASA JAXA	TCWV TCWV	2002-2011	To be evaluated
AMSR-2	JAXA	тсwv	2012-present	To be evaluated
AMSU-B/MHS	UKMO	TCWV, UTH	1999-2011	To be evaluated
ATMS	NOAA	TCWV, WV	2011-present	To be evaluated
ATOVS	CM SAF	TCWV, WV	1999-2011	To be evaluated

See assessment plan for full tables.



NPROVS+



378 dedicated, 1900 GRUAN

Task (7): SASBE at Satellite Overpass

Main Contact: Dykema /Reale

Due Date: April, 2014 **Status:**

Ongoing

Milestone: Routine SASBE in at each site at time of satellite overpass for T and H20 vapor for use in satellite product validation; weather

Progress: SASBE (from Tobin) compared to various RAOB combinations and differences analysed using satellite averaging kernels computed for 6 month test data set from SGP **Issues:**

Task (8): Generic SASBE Main Contact: Dykema Status:

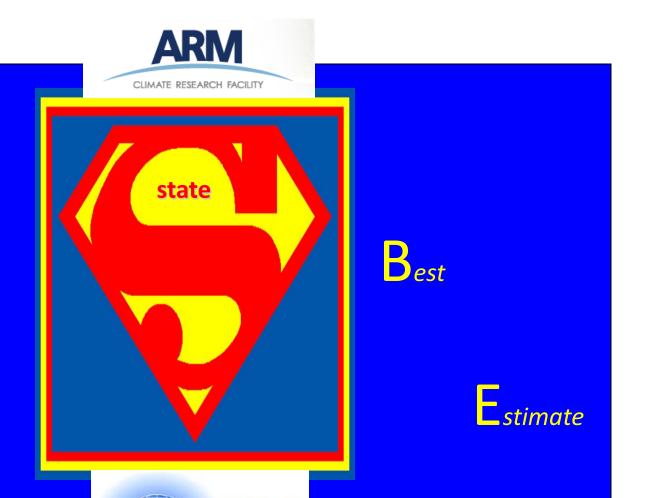
Due Date: Dec 2016

Milestone:Routine SASBE at each site for climate monitoringProgress: Defined as routine SASBE any time RAOB in launched for use in climatemonitoring, focused on temperature and H20 vapor profileIssues:Reference processing of dedicated sonde desired



Site

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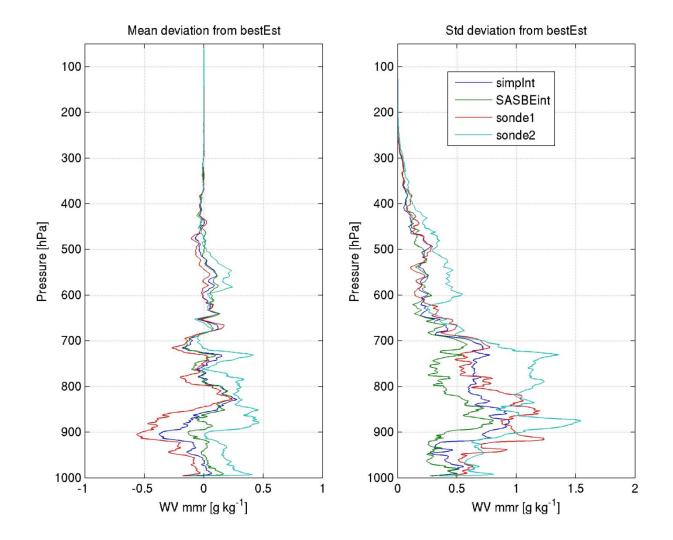


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Using raman lidar for water vapor



Courtesy J Dykema

Task (10): Feedback to LC on RS92 storage, performance

Main Contact:Sommer / RealeDue Date:Feb, 2013Status:OngoingMilestone:Set up mechanism for routine feedback to LCProgress:Interaction among LC and NOAA STAR staff established, issues identified,routine program under developmentIssues:Various sources of data from ARM sites, ie synoptic vs dedicated RAOB, areambiguous