2015 Wrap Up


NASA


FLORIDA STATE UNIVERSITY
1851


COAPS


The EUMETSAT Network of Satellite Application Facilities
OSI SAF
Ocean and Sea Ice


EUMETSAT

Giving Credit

- Neely and Tabitha at COAPS for part of the meeting preparation (and finding a restaurant)
- Heather, Kyle and Jason for AV support
- Organizing Committee and Working Group leader for helping with the agenda
- Sponsors: NASA, COAPS, Florida State University, EUMETSAT, OSISAF
- Participants for great content

Your talks – Posting on line

- Mark will post your talks and abstracts unless told otherwise
  - Unless the lead author is from JPL (default is that I need permission)
  - Email me to change the above mbourassa@fsu.edu
  - You have three weeks to respond – then the talks will be posted

Future Meetings

- Let Mark know if you would like changes to the session topics (e.g., add instrumentation issues for past missions, new working group) or special topics

Routes Forward

- Working groups have all outlined great issues to work on
  - What issues can be resolved with less than two years of collaboration?
    - Identify people to get the work done and a timeline
    - What can the organizing committee do to help?
    - Stress working group to recommend stress parameterization (and publish recommendation)
      - Jim (and Mark)
- Workshop on high wind speed and stress calibration
  - Jim leading (others willing to help)

More Routes Forward

- There was a clear consensus that the Ku and C-band climate data records are inconsistent at present (talks by Ad and Ernesto).
- These inconsistencies can be either due to GMF inconsistency (in training) or to basic differences in the physics of the measurement. With L-band winds coming on, these frequency differences will be accentuated.
- We recommend that high priority be given to attempts to reconcile the Ku- and C-band climate data record using the RapidScat data. (Ad, Frank, and Ernesto)

More Routes Forward

- Identify approaches for dealing with air density for model calibration
  - We recommend the developers of model functions provide a good description of the data used to train the model.
  - We need to better communicate what the resulting winds mean.
  - This task is linked to the prior task (same people)

Observing Requirements for CEOS: Issues

- Early RapidSCAT results suggest that
  - the diurnal cycle can be greater than long-term trends, and
  - the semi-diurnal cycle is important in many regions
  - There could be a diurnal cycle in some higher impact weather events
- We know that Mid-latitude storms evolve through much of their life cycle in one or two days
- Therefore we suggest that the scatterometers observations should resolve the diurnal cycle
- Cross calibration is greatly enhanced by a non-sun-synchronous satellite
- Broad NWP assimilation studies found that observations from ASCAT and OSCAT, seperated by only 2 ½ hours, provided independent and beneficial impact to the forecasts.

Applying the Requirements

- The WMO requirement, of an observations within each 6 hour window, does not resolve the diurnal cycle, and is far from what is needed for the semidiurnal
- Therefore we strongly recommend
  - at least three scatterometers in orbits designed to roughly meet the WMO requirements, and
  - One instrument in a non-sun-synchronous orbit to help with the diurnal cycle, better sampling at mid-latitudes, and to improve intercalilibration.
- Paul and Julia to communicate with CEOS

Next Meeting

- Will try and find a site in late May in Soporo, Japan
- Hosted by Profs. Ebuchi and Shimoda and JAXA