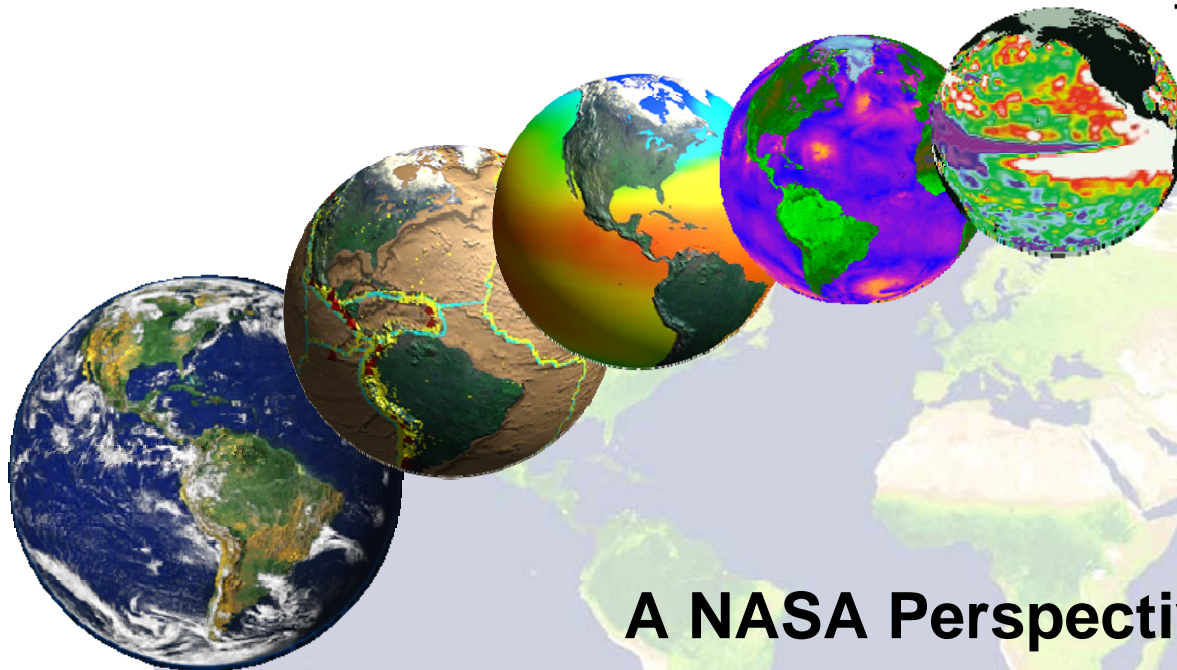


2010 International Ocean Vector Winds Meeting Barcelona, Spain, 18-20 May 2010



A NASA Perspective: *Present Status and Moving Forward*

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NASA Science Mission Directorate
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18 May 2010**



Milestones/Achievements

- **QuikSCAT-** Decade+ dataset for research providing new insights into the scatterometer, the Earth system and improvements in operational weather forecasting/warning.
- **Sea/lake ice products from scatterometers-** Although OVW is our focus, recognition of the important work to use QuikSCAT as a coarse resolution SAR to support ice detection and forecasting (complete daily coverage and data were free).
- **ASCAT- EUMETSAT** achievements for the operational system aboard METOP, which provides scatterometer OVW data into the next decade.
- **OCEANSAT-2-** Successful launch and ongoing cal/val by India SAC/ISRO.
- **IOVWST-** Web-site rich with previous materials, papers, resources.



Ongoing Planning

- **NOAA collaborating with NASA and JAXA-** To pursue the DFS on JAXA's GCOM-W2/W3 satellites as a step in realizing a sustained operational satellite scatterometer OVW capability.
- **Scatterometer plans of China-** The community looks forward to data from these scatterometers in support of research and operational weather and climate applications.

Recent NASA OVWST Solicitation- Six Research Themes Identified



NASA plans to fund projects in all six themes.

- a) Oceanographic, meteorological, climate, and/or interdisciplinary research that utilizes in a fundamental way the multiyear time series of QuikSCAT and SeaWinds standard backscatter and vector wind products, including development of techniques for improving estimates, and identifying and reducing biases.
- b) Focused geophysical analyses that exploit the frequent sampling or complimentary information obtained through combining observations from multiple wind sensors including QuikSCAT;
- c) Development, refinement, and application of advanced validation techniques that quantify the accuracy of remotely sensed ocean vector wind measurements and derived products;

Recent NASA OVWST Solicitation- Six Research Themes Identified



- d) Development, validation, and scientific application of advanced backscatter and vector wind products that have increased temporal resolution, spatial resolution, and/or accuracy, based on Ku-band data and other measurements and models;
- e) Development of techniques that exploit differences in intercalibrated Ku-band and C-band or passive microwave observations to understand physical processes related to rain and the ocean surface; and
- f) Development, refinement, and application of assimilation and analysis techniques that improve the impact and effectiveness of scatterometer and related ocean surface vector wind measurements for operational uses, including weather, marine hazard, and short-term climate forecasting.

Moving Forward



- NASA is strongly committed to a continuing OVW science activity and has nearly finished the selection process for the next NASA OVWST. We plan to fund science teams around topics rather than satellite missions.
- Although QuikSCAT is no longer collecting swath wind data, it is still useful for collecting data for instrument cross-calibration. NASA has endorsed this activity by modifying the goals of the QuikSCAT mission to cross-calibration and uniform processing of all data.
- NASA endorses collaboration and intercalibration activities with other space agencies by providing data at all levels and technical interchanges with other space agencies. The recent NOAA/NASA/ISRO meeting is an example of a promising ongoing collaboration. (Move from present “Letter of Intent” to a “NASA/ISRO Implementing Arrangement for Oceansat-2” in parallel with NOAA.)

Moving Forward



- The scatterometer science community should add climate studies as one of its priorities. The IOVWST is likely the correct vehicle for coming up with community-wide agreements on the work required for arriving at a climate data set and a validation of the quality and limitations of this data set.
- NASA encourages NOAA to proceed with DFS on GCOM-W2 and W3, and more generally, plans to work with NOAA to make DFS and XOVWM happen.

How can you help the IOVWST (and NASA)?

- Deliver scientific breakthroughs and well-cited publications.
- Report these results/publications to the Science Team.
- Attend and actively support Science Team meetings on a regular basis (generally one IOVWST meeting and one specialized workshop per year).
- Respond, as necessary, to requests from the Science Team leaders for scientific and technical input.



***Our Special Thanks to:
Meeting Hosts,
Meeting Organizers, and
Participants.***

***And we look forward to a
productive meeting.***

Thank you!