# 2010 International Ocean Vector Winds Meeting Agenda

**Tuesday Morning, 18 May**

## Introductory Session

**8:30**
**Introduction from the organizing committee**  
Mark Bourassa (FSU), Marcos Portabella, Ernesto Rodriguez, and Ad Stoffelen

**8:35**
**Words from the Local Host, Marcos Portabella**

**8:40**
**Dr. Alberto Palanques (Director of CMIMA)**

**8:45**
**Dr. Juan José Dañobeitia (Director of UTM)**

**8:50**
**The NASA Perspective**  
Peter Hacker (NASA HQ)

**9:00**
**The EUMETSAT Perspective**  
Hans Bonekamp (EUMETSAT)

## Future Missions

**9:15**
**Design And Performance Simulation Of A Ku-Band Rotating Fan-Beam Scatterometer**  
Dr. Xiaolong Dong (Center for Space Science and Applied Research, Chinese Academy of Sciences), Wenming Lin, and Di Zhu

**9:30**
**Effect of rain on Ku band fan beam Ku band scatterometer**  
Dr. Jean Tournadre (IFREMER) and Y. Quilfen

**9:45**
**On Performance Measures for Spaceborne Wind Sensors**  
Dr. Ad Stoffelen (KNMI), Maria Belmonte Rivas (UCAR), and Jos de Kloe (KNMI)

**10:00**
**Break & Snack (30 minutes, poster viewing)**

**10:30**
**Reprocessing the 10-year QuikSCAT Climate Data Record and Future Scatterometer Mission Prospects**  
Dr. Ernesto Rodriguez (Jet Propulsion Laboratory/Cal Tech), Bryan Stiles, Alexandra Chau, Robert W. Gaston, Svetla Hristova-Veleva, Scott Dunbar, and Joe Turk

**10:45**
**The Status of GCOM-W1 and W2**  
Prof. Haruhisa Shimoda (Tokai University)

**11:00**
**The CEOS Ocean Vector Wind Virtual Constellation: Current Status and Challenges**  
Dr. Stan Wilson (NOAA Satellite & Information Service), Hans Bonekamp (EUMETSAT) and B.S. Gohil (ISRO)

## International Collaboration

**11:20**
**Status of scatterometer ocean wind vector data assimilation in Environment Canada’s global variational analysis and forecast system**  
Dr. Robert Tardif (Data Assimilation and Satellite Meteorology, Environment Canada), Stéphane Laroche, Mateusz Reszka, and Judy St-James
11:35 Status of EUMETSAT ASCAT products and services

11:50 Latest Developments for PO.DAAC's OVW Products
Mr. David Moroni (Jet Propulsion Laboratory)

12:05 Discussion (15 minutes)

12:20 Lunch Break (85 minutes)
Tuesday Afternoon, 18 May

New Products

1:45 Wind Retrieval and GMF Development Activities for Oceansat-2 Scatterometer
   Dr. Bhawani Singh Gohil (Scientist), B.S. Gohil, R. Sihakolli, R.K. Gangwar, R.K. Sharma, A. Sarkar, A.S. Kiran
   Kumar and R.R. Navalgund

2:00 The RSS WindSat Version 7 All-Weather Wind Vector Product: Radiative Transfer Model, Algorithm and
   Validation
   Dr. Thomas Meissner (Remote Sensing Systems), Lucrezia Ricciardulli and Frank Wentz

2:15 A Neural Network Technique for Improving the Accuracy of QuikSCAT Winds in Rainy Conditions as
   Compared with NDBC Buoys
   Dr. Bryan Stiles (JPL) and Dr. R. Scott Dunbar

2:30 ASCAT sea ice modelling and detection
   Dr. Ad Stoffelen (KNMI), Maria Belmonte Rivas (UCAR) and Jeroen Verspeek (KNMI)

2:45 Stress Related Improvements in Surface Turbulent Heat Fluxes – A DFS Application
   Professor Mark Bourassa (Florida State University)

3:00 Discussion (15 minutes)

Meteorology

3:15 Hurricane Dynamic and Thermodynamic Balances as Revealed by the Azimuth Asymmetry of Wind-stress
   Dr. W Timothy Liu (Jet Propulsion Lab., Caltech ) and Wenqing Tang

3:30 Assimilation of ocean surface wind vectors into global and regional models of tropical cyclones: present and
   future
   Professor Sharanya Majumdar (University of Miami), R. Atlas, J. S. Whitaker, T. M. Hamill, R. D. Torn, S. M. Leidner
   and J. V. Ardizzone

3:45 Break & Snack (30 minutes, poster viewing)

4:15 Applications of OVW-derived Surface Pressures in Tropical Storms
   Ralph Foster (APL/University of Washington), Jerome Patoux, and R.A. Brown

4:30 Observational Evidence of SST Influence on the Troposphere over the Gulf Stream
   Professor Dudley Chelton (Oregon State University), Jack F. Dostalek, Mark DeMaria and Brian McNoldy

4:45 Study of Wind Field Distribution within Hurricane Force Extratropical Cyclones in North Pacific Using
   QuikSCAT and ASCAT Scatterometer Measurements
   Dr. Zorana Jelenak (NOAA/NESDIS/STAR-UCAR), Dr Khalil Ahmad, Mr Joseph Sienkiewicz and Dr Paul Chang

5:00 Synthetic Aperture Radar Wind Field Retrieval With Respect to Cyclones
   Dr. Jochen Horstmann (NATO Undersea Research Center), and Silvia Falchetti

5:15 On the use of Doppler shift for SAR wind retrieval
   Dr. Fabrice COLLARD (CLS), Alexis MOUCHE (CLS), and Betrand CHAPRON (IFREMER)

5:30 Multi-Platform Analyses of Surface Convergence and Atmospheric Convection in the Tropical Indo-Pacific
   on Sub-Daily Timescales
   Dr. Ralph Mililiff (NWRA/CoRA Division) and Dr. Jeremiah Brown

5:45 Discussion (15 minutes)

6:00 Close for the day
Wednesday Morning, 19 May

**Calibration/Validation and Definitions**

chair: Ad Stoffelen

8:30  ASCAT scatterometer quality control  
Dr. Marcos Portabella (Unidad de Tecnología Marina (UTM - CSIC)), Ad Stoffelen, Anton Verhoef, and Jeroen Verspeek

8:45  Calibration and Validation of ASCAT Backscatter  
Dr. Craig Anderson (Eumetsat), Hans Bonekamp, Julia Figa, Julian J Wilson, Arthur de Smet, and Colin Duff

9:00  Quality of high-resolution scatterometer winds  
Dr. Jur Vogelzang (KNMI), Ad Stoffelen, and Anton Verhoef

9:15  Improved ASCAT wind retrieval using NWP ocean calibration  
Mr. Jeroen Verspeek (KNMI), Ad Stoffelen, Anton Verhoef and Jur Vogelzang

9:30  Cross-validation of scatterometer measurements via sea-level pressure retrieval  
Dr. Jerome Patoux (University of Washington), Ralph C. Foster and R.A. Brown

9:45  Analysis of Small-scale Coastal Wind Features Using Scatterometers and Synthetic Aperture Radars  
Mr. Michael Caruso (University of Miami/CSTARS)

10:00  Improving QSCAT Retrievals of High Winds  
Dr. Lucrezia Ricciardulli (Remote Sensing Systems) and Frank Wentz

10:15  **Break & Snack (30 minutes, poster viewing)**

10:45  A comparison of QuikSCAT winds to in situ observations in the Western Boundary Current regions  
Dr. Jessica Kleiss (University of Washington), Kathryn A. Kelly, LuAnne Thompson, and Suzanne Dickinson

11:00  SST-Induced Surface Wind Response: Comparison of QuikSCAT and ASCAT depiction of the phenomenon.  
Dr. Svetla Hristova-Veleva (Jet Propulsion Laboratory) and Ernesto Rodriguez

11:15  Estimation of Level-1B & Level-2A Sigma0 parameters for Oceansat-2 Scatterometer Payload  
Mr. Kirti Padia (Space Applications Centre (ISRO)), Santanu Chowdhury, Jalpa Modi and Dinesh Jain

11:30  Cal/Val Activities and Initial Assessment for Oceansat-2 Scatterometer  
Dr. RAJ KUMAR (ISRO), Suchandra A Bhowmick, Sanjib K Deb, B S Gohil, Abhijit Sarkar, A S Kiran Kumar and Ranganath R Navalgund

11:45  Discussion (30 minutes)

12:15  **Lunch Break (90 minutes)**
Wednesday Afternoon, 19 May

**Oceanography**

co-chairs: Tony Lee and Emili Garcia-Ladona

1:45 Studies Of the Influence Of Rainfall Upon Scatterometer Estimates For Sea Surface Stress: Applications To Boundary Layer Parameterization And Drag Coefficient Models Within Tropical Cyclone Environments
Dr. David Weissman (Hofstra University), Henry Winterbottom, and Mark Bourassa

2:00 The CMOD5 wind data and the TCNNA algorithm can distinguish between Surfactants and Low Wind in Synthetic Aperture Radar (SAR) imagery.
Dr. Oscar Garcia-Pineda (Florida State University), Ian MacDonald, Xiaofeng Li, and William Pichel.

2:15 Vertical Structure in Satellite Wind Derived Ocean Currents
Dr. Kathleen Dohan (Earth and Space Research)

2:30 Warming of the South-Pacific Ocean associated with the 2009-10 El Nino
Dr. Tong Lee (JPL & CalTech)

2:45 Role of point-wise scale invariance in geophysical turbulence: applications in oceanography
Dr. Antonio Turiel (Institut de Ciencies del Mar, Barcelona), Baptiste Mourre, Jerome Gourrion, Joaquim Ballabrerapoy, and Marcos Portabella

3:00 Bi-static L-band scatterometry
Dr. Estel Cardellach (ICE/CSIC-IEEC), and Dr. Joseph Tenerelli (CLS)

3:15 **Break & Snack (30 minutes, poster viewing)**

3:45 Interannual Variability of Synoptic Scale Winds over the Northern West Florida Shelf from SeaWinds and ASCAT
Dr. Steven Morey (Florida State University), Dr. Mark Bourassa and Mr. Austin Todd

4:00 Ocean Surface Wind and Wave Retrieval Using C- and X-Band SAR
Dr. Thomas König (German Aerospace Center (DLR)), Xiao-Ming Li, Stephan Brusch and Susanne Lehner

4:15 Discussion (30 minutes)

**Operations**

chair: Hans Hersbach

4:45 Impact of the Loss of QuikSCAT on NOAA NWS Marine Warning and Forecast Operations
Mr. Joseph Sienkiewicz (NOAA Ocean Prediction Center), Dr. Michael J. Brennan, Dr. Richard Knabb, Dr. Paul S. Chang, Mr. Hugh Cobb, Dr. Zorana J. Jelenak, Dr. Khalil A. Ahmad, Dr. Seubson Soisuvarn, Mr. David Kosier, and Mr. George Bancroft

5:00 NOAA/NESDIS High Wind C-band Model Function and its Impact on Detection of Hurricane Force Winds in Extratropical Storms
Dr. Zorana Jelenak (NOAA/NESDIS/STAR-UCAR), Dr Seubson Soisuvarn, Dr Khalil Ahmad, Dr Paul S Chang, Mr Joseph Sienkiewicz and Mrs Qi Zhu

5:15 Discussion (30 minutes)
5:45 Close for day
Thursday Morning, 20 May

**Other Issues**

chair: Naoto Ebuchi

8:30  On the Symbiotic Association Between Wind Scatterometry and the Planetary Boundary Layer Models
     Robert Brown (University of Washington)

8:45  Ocean Monitoring Using L-Band Microwave Radiometry and GNSS-R Observations
     Prof. Adriano Camps, Xavier Bosch-Lluis, Isaac Ramos-Perez, Juan F. Márchan-Hernández, Nereida Rodriguez,
     Enric Valencia, and Jose M. Tarongi

9:00  Ultra High Resolution ASCAT Winds and Land/Ice Imaging
     Professor David Long (Brigham Young University),

9:15  Discussion (15 minutes)

**Gridded Products**

chair: Ralph Foster

9:30  The usage of Scatterometer data at ECMWF
     Dr. Hans Hersbach (ECMWF), P.A.E.M. Janssen

9:45  Operational use of Scatterometer Winds in the JMA Data Assimilation System
     Mr. Masaya Takahashi (Numerical Prediction Division/Japan Meteorological Agency),

10:00  Break & Snack (30 minutes, poster viewing)

10:30  Evaluating QuikSCAT Wind and Stress Products Against Buoy Winds Using a Taylor Diagram
     Professor Kathryn Kelly (University of Washington), and Suzanne Dickinson

10:45  Two decades of satellite-based ocean vector wind time series
     Dr. Lisan Yu (Woods Hole Oceanographic Institution),

11:00  Wave and Anemometer-based Sea-surface Wind (WASWind) dataset for climate change analysis: Comparison and
     validation against satellite wind observations
     Dr. Hiroki Tokinaga (IPRC/University of Hawaii), and Shang-Ping Xie

11:15  Global surface wind product J-OFURO V2: Drake Passage Oscillation Index (DPOI) and its correlated wind
     field over the Antarctic Ocean
     Dr. K Kutsuwada (Tokai University), Mikio Naganobu and Junya Kondo

11:30  Oceansat-2 Scatterometer Data Products Software
     Mr. Kirti Padia (Space Applications Centre (ISRO)), Santanu Chowdhury, BS Gohil, Devang Mankad and Suresh
     Gurjar

11:45  Discussion (15 minutes)

12:00  Closing discussion (15 minutes)

12:15  End of meeting
**Posters**

**Gridded Products**

- Spectral Analysis of Gridded Wind Products  
  Professor Mark Bourassa (Florida State University), and Paul J. Hughes

- Determining the Error Characteristics of H*Wind  
  Mr. Steven DiNapoli (Florida State University), and Mark A. Bourassa

- Comparison of ASCAT with QSCAT  
  Professor Masahisa Kubota (School of Marine Science and Technology, Tokai University), and Shin’ichiro Kako

**New Products**

- Arctic and Boreal Surface Water Cover Variability as Observed by QuikSCAT  
  Dr. Nicole Smith-Downey (UT Austin), and Rong Fu

**Meteorology**

- Assessment of Surface Heat Fluxes in North Atlantic Storms Modeled by WRF  
  Professor Kathryn Kelly (University of Washington), Susan Bates, Jimmy Booth, LuAnne Thompson and Suzanne Dickinson

- Altimeter microwave surface observations in extreme events  
  Dr. Yves Quilfen (IFREMER), B. Chapron, and D. Vandemark

- The influence of variability in the sea surface temperature and surface heat fluxes on midlatitude storm cyclogenesis in the Gulf Stream region in the ERA-40 reanalysis.  
  Mr. James Booth (University of Washington), Kathryn Kelly, Jerome Patoux, and LuAnne Thompson

**International Collaboration**

- A monthly climatology of mesoscale turbulence calculated from 10 years of QuikSCAT winds over the Pacific Ocean  
  Dr. Gregory King (Centro de Geofisica - IDL, University of Lisbon), and Robert M. Kerr

**Calibration/Validation and Definitions**

- Validation of QuikSCAT wind vectors by dropwindsonde data from Dropwindsonde Observations for Typhoon Surveillance Near the Taiwan Region (DOTSTAR)  
  Professor Sharanya Majumdar (University of Miami), K.-H. Chou, C.-C. Wu, and P.-H. Lin

- Assessing Representation Error of In Situ Wind Related Variables for Comparison to Satellite Data  
  Ms. Jackie Rauch (Florida State University) and Mark A. Bourassa
Other Issues

Characteristics of sea ice in the Okhotsk coastal polynyas revealed by QuikSCAT/SeaWinds with AMSR-E, ice-profiling sonar, and digital camera observations
Professor Naoto Ebuchi (Hokkaido University), Sohey Nihashi, and Shuhei Takahashi

Developing CALIPSO Ocean Surface Product for Complimenting Scatterometer Studies
Dr. Yongxiang Hu (NASA LaRC)

Operations

Status on the use of scatterometer data at Meteo-France
Mr. Christophe Payan (Meteo-France and CNRS),

Workshop on the use of scatterometer and altimeter wind and wave data in marine forecasting - a report
Ms. Julia Figa (EUMETSAT), Stan Wilson, Zorana Jelenak (NOAA), Henk Verschuur, Hans Bonekamp (EUMETSAT), and Ad Stoffelen (KNMI)

Oceanography

Investigating the impacts of surface currents on scatterometer-derived wind retrievals in a marginal sea
Ms. Amanda Plagge (University of New Hampshire), Dr. D. Vandemark, Dr. D. Long, and Dr. E. Rodriguez

Comparison of QuikSCAT Wind Products versus In Situ and NWP Model Data in the North Sea and Baltic Sea
Ms. Ioanna Karagali (Risoe DTU), Charlotte B. Hasager, Merete Badger, and Andrea Hahmann