2009 Scatterometry and Climate Meeting
19 – 21 August 2009
Arlington, VA

AGENDA

Wednesday Morning, 19 August 2009

7:30  Breakfast

Introduction and Programmatic
Co-Chairs: Ernesto Rodriguez and Naoto Ebuchi

8:00  Meeting Overview and Goals
      Organizing Committee

8:10  Developing Accuracy Constraints for Climate Quality Observations
      Mark Bourassa (Florida State University)

8:20  NASA Perspective on Scatterometers and Climate
      Michael Freilich (NASA, Oregon State University)

8:45  Short NOAA Introduction
      Stan Wilson (NOAA Satellite and Information Service)

9:00  Global Change Observation Mission (GCOM)
      Haruhisa Shimoda (JAXA, EORC)

Scatterometer Measurements and Systems
Chair: Naoto Ebuchi

9:20  Overview of Past, Present, and Future Scatterometer Measurement Capabilities
      Ernesto Rodriguez (JPL & Cal Tech)

9:40  Break (20 minutes)
Wednesday Morning (Continued), 19 August 2009

High Winds
Co-Chairs: Shang-Ping Xie and Joseph Sienkiewicz

10:00  High Winds and Wind Jets Mapped from QuikSCAT
       Shang-Ping Xie (University of Hawaii)

10:20  Extra-tropical Cyclone Climatology
       Joseph Sienkiewicz (NOAA/NWS/NCEP/Ocean Prediction Center)

10:40  Satellite-Based Midlatitude Cyclone Statistics Over the Southern Ocean – Tracks and Surface Fluxes
       Xiaojun Yuan (Lamont-Doherty Earth Observatory of Columbia University), J. Patoux, and C. Li

11:00  Aspects of Global Tropical Cyclone
       Ryan Maue (COAPS, Florida State University)

11:20  Global Monitoring of Tropical Cyclones with a Dual Frequency Scatterometer
       Richard Knabb (Central Pacific Hurricane Center) and M. Brennan

11:40  Relationship Between Hurricane Surface Winds, Surface Rain Measurements and Surface Roughness Observed with QuikSCAT
       David Weissman (Hofstra University) and M. Bourassa

12:00  Lunch Break (70 minutes)

Wednesday Afternoon, 19 August 2009

1:10  Translation Speed Increases Asymmetry and Weakens Hurricanes
       W. Timothy Liu (JPL) and W. Tang

1:25  SST and Atmospheric Memory Of Tropical Cyclones And Its Implications On Winter Climate
       Bob Hart (Florida State University)

1:40  Discussion and Additional Short Presentations (35 minutes)
Fluxes
Co-Chairs: Mark Bourassa and Lisan Yu

2:15  Surface Turbulent Fluxes and Scatterometry
      Mark Bourassa (Florida State University)

2:35  Current Issues in Deriving Surface Air-Sea Fluxes From Satellites and Models
      Carol Anne Clayson (Florida State University), B. Roberts, P. Robertson, D. Jackson, and M. Bourassa

2:55  The Rate of Working of the Surface Wind Stress on the Geostrophic Component of the Surface Oceanic Flow
      Robert Scott (University of Texas at Austin & National Oceanography Centre, Southampton)

3:05  Break (20 minutes)

3:25  Scatterometry and Ocean Evaporation: Past, Present, and Future Connection
      Lisan Yu (WHOI)

3:45  Evaporation and Water Transport Dynamics over the Oceans Derived from Satellites
      Frank Wentz (Remote Sensing Systems) and K. Hillburn

4:05  Utilizing Scatterometer Winds to Assess Global and Regional CO₂ Fluxes
      Rik Wanninkhof (Atlantic Oceanographic and Meteorological Laboratory), J. Trinanes, and G-H Park

4:10  Estimates of Gas Transfer Velocity from Radar Backscatter
      David Glover (WHOI) and N. Frew

4:30  The Sensitivity of Air-Sea Gas Transfer to Wind Speed and Stress
      Gary Wick (NOAA ESRL, PSD) and D. Jackson

5:10  Discussion and Short Presentations (50 minutes)
Thursday Morning, 20 August 2009

7:30  Breakfast

Air-Sea Interaction and Ocean Circulation
Co-Chairs: Larry O’Neill and Tong Lee

8:10  Mesoscale Coupled Ocean-Atmosphere Interaction
Dudley Chelton (Oregon State University)

8:30  Seasonal Pulsing of the Global Mesoscale Surface Wind Stress Response to SST
Larry O’Neill (Naval Research Laboratory), D. Chelton, and S. Esbensen

8:50  Fallacy of Mapping Global Ocean Surface Winds from Scatterometer Stress Measurements
W. Timothy Liu (JPL), X.-S. Xie

9:10  Air-Sea Interaction over the Western North Atlantic Ocean
Kathryn Kelly (University of Washington), J. Booth, S. Bates, S. Dickinson, L. Thompson, J. Kleiss

9:30  Discussion and Short Presentations (20 minutes)

9:50  Break

10:10  Studying Decadal Climate Variability Using Satellite Scatterometer Data
Tong Lee (JPL)

10:30  Small-Scale and Short-Term Variability of Ocean Surface Winds: Applications to Objective Analyses and Ocean Modeling
Alexey Kaplan (Lamont-Doherty Earth Observatory of Columbia University)

10:50  Dependance of OSCAR Surface Currents on Scatterometer Winds
Kathleen Dohan (Earth and Space Research), G. Lagerloef, and T. Gunn

11:10  Ocean Model Results Forced by CCMP, OBJ QSCAT, and ECMWF Winds
Eric Hackert (Earth System Science Interdisciplinary Center/University of Maryland), A.J. Busalacchi, J.V. Ardizzone, X. Wang, and R. Atlas

11:30  Discussion and Short Presentations (45 minutes)

12:15  Lunch Break (75 minutes)
Thursday Afternoon, 20 August 2009

**Atmosphere**  
*Co-Chairs: Ralph Milliff and Zorana Jelenak*

**1:30**  
*El Niño, South American Monsoon and Atlantic Niño: Links as Detected by a Decade of QuikSCAT, TRMM and TOPEX/JASON Observations*  
Rong Fu (University of Texas at Austin, Department of Geological Sciences), L. Huang, and P. Arias

**1:50**  
*Role of Scatterometer Data in Tropical Meteorology*  
Tetsuo Nakazawa

**2:10**  
*Can the QuikSCAT Climate Data Record Validate Aspects of Long-Standing Hypotheses of the Southern Oscillation?*  
Ralph Milliff (NWRA, CoRA), H. van Loon, and J. Brown

**2:30**  
Discussion and Short Presentations (35 minutes)

**3:05**  
**Break (15 minutes)**

**Cryosphere**  
*Co-Chairs: David Long and Son Nghiem*

**3:20**  
*Decadal Scatterometer Observation of Arctic Sea Ice and Its Context in Arctic Climatic Change*  

**3:50**  
*Ku- and C-Band Scatterometers as Ice Climate Record Sensors*  
David Long (Brigham Young University)

**4:10**  
*Use of QuikSCAT to Detect, Understand, and Improve Models of Surface Water and Ice Changes in the Boreal and Arctic Region*  
Diandong Ren (Jackson School of Geosciences, The University of Texas at Austin), N. Smith-Downey, and R. Fu

**4:30**  
Discussion and Short Presentations (45 minutes)
Friday Morning, 21 August 2009

7:30 Breakfast

**NOAA Perspective on the Future of Scatterometry**  
*Chairs: Paul Chang and Zorana Jelenak*

8:00 **NOAA Perspective on the Future of Scatterometry**  
M. Kicza (NOAA)

**Climate Data Sets**  
*Chair: Mark Bourassa*

8:30 **NOAA’s Climate Data Record Effort and Blended Sea Winds at NCDC**  
Huai-Min Zhang (NOAA National Climate Data Center), J. Bates, E. Kearns, and J. Privette

8:45 **Toward the J-OFURO Version 3**  
Masahisa Kubota (Tokai University), H. Tomita, S. Iwasaki

9:00 Discussion and Short Presentations (30 minutes)

**9:30 Break (15 minutes)**

**Coastal and Biological**  
*Chairs: Ernesto Rodriguez and Paul Chang*

9:45 **Applications and Future Requirements of Satellite Vector Winds for Coastal and Shelf Studies**  
Steven More (COAPS, Florida State University), D. Dukhovskoy, A. Todd, M. Bourassa

10:05 **From Wind to Whales: Ocean Vector Winds and Living Marine Resources**  
David Foley (Joint Institute for Marine and Atmospheric Research, University of Hawaii)

10:25 **Coastal Winds in Upwelling Regions**  
Ted Stub (Oregon State University)

10:40 Discussion and Short Presentations (15 minutes)

**Planning for Scatterometry and Climate Report**  
*Chair: Organizing Committee*

10:55 Planning for Scatterometry and Climate Report (65 minutes)

12:00 End of workshop