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

8:20 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)

10:00 Developing Accuracy Constraints for Climate Quality Observations  
Mark Bourassa (Florida State University)
Wednesday Morning (Continued), 19 August 2009

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

10:15  High Winds and Wind Jets Mapped from QuikSCAT
       Shang-Ping Xie (University of Hawaii)

10:35  Extra-tropical Cyclone Climatology
       Joseph Sienkiewicz (NOAA/NWS/NCEP/Ocean Prediction Center)

10:55  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

11:15  Aspects of Global Tropical Cyclone
       Ryan Maue (COAPS, Florida State University)

11:35  Global Monitoring of Tropical Cyclones with a Dual Frequency Scatterometer
       Richard Knabb (Central Pacific Hurricane Center) and M. Brennan

11:55  Lunch Break (70 minutes)

Wednesday Afternoon, 19 August 2009

1:05   Relationship Between Hurricane Surface Winds, Surface Rain Measurements and Surface Roughness Observed with QuiKSCAT
       David Weissman (Hofstra University) and M. Bourassa

1:20   Translation Speed Increases Asymmetry and Weakens Hurriances
       W. Timothy Liu (JPL) and W. Tang

1:35   Discussion and Additional Short Presentations (40 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

4:15 Estimates of Gas Transfer Velocity from Radar Backscatter
David Glover (WHOI) and N. Frew

4:35 The Sensitivity of Air-Sea Gas Transfer to Wind Speed and Stress
Gary Wick (NOAA ESRL, PSD) and D. Jackson

4:55 Utilizing Scatterometer Winds to Assess Global and Regional CO₂ Fluxes
Rik Wanninkhof (Atlantic Oceanographic and Meteorological Laboratory), J. Trinanes, and G-H Park

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, SSMI+QSCAT, and ECMWF Winds*
Eric Hackert (Earth System Science Interdisciplinary Center/University of Maryland), A.J. Busalacchi, J.V. Ardizzone, and X. Wang

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

3:40  Ku- and C-Band Scatterometers as Ice Climate Record Sensors
David Long (Brigham Young University)

4:00  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

4:20  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