



**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)

Wednesday Afternoon (Continued), 19 August 2009

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
- 4:55 *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*
Son Nghiem (JPL), I. G. Rigor, P. Clemente-Colón, K. Perovich, H. Eicken, J.E. Overland, T. Markus, D.G. Barber, and G. Neumann
- 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