



2009 NASA Ocean Vector Wind Science Team Meeting
18-20 May 2009
Boulder, CO



AGENDA

Talks will take place on Ball Aerospace Campus, in the building marked RA-7.

Monday Morning, 18 May 2009

8:00AM Coffee, Continental Breakfast; Registration, Poster set-up

Introductory Session

Chair: Mark Bourassa

- 8:30 *Words from the Local Host*
Chip Barnes III (Ball Aerospace)
- 8:40 *Welcome and Meeting Goals*
Mark Bourassa (Florida State University/COAPS) and Ernesto Rodriguez
- 8:50 *NASA Headquarters Overview*
Eric Lindstrom (NASA Headquarters)
- 9:05 *NOAA Overview*
Stan Wilson (NOAA Satellite & Information Service)
- 9:15 *Overview of Wind Scatterometer Projects at JPL*
Rob Gaston (JPL)

International Collaboration

Chair: Zorana Jelenak

- 9:25 *Global Change Observation Mission (GCOM)*
Professor Haruhisa Shimoda (Japan Aerospace Exploration Agency)
- 9:40 *Status Of EUMETSAT ASCAT Products And Services*
Ms. Julia Figa-Saldana (EUMETSAT), Hans Bonekamp, Craig Anderson, Leonid Butenko, Colin Duff, Christelle Ponsard, Arthur de Smet and Julian Wilson (EUMETSAT), A.Stoffelen, A.Verhoef (KNMI), W.Wagner, Z.Bartalis (IPF TUWien)
- 9:55 **Break & Snack (30 minutes, poster viewing)**
- 10:25 *SMOSops secondary payload assessment: optimal FPIR radiometer configuration for sea surface roughness characterization at L-band*
Dr. Marcos Portabella (Unidad de Tecnología Marina (UTM - CSIC))

Calibration/Validation and Definitions

Chair: Ad Stoffelen

- 10:45 *Comparison of QuikSCAT and ASCAT Spatial Variability*
Mr. Michael Caruso (CSTARS)
- 11:00 *The High Wind Speed Model Function from Space*
Dr. Ernesto Rodriguez (JPL/Cal Tech) and Svetla Veleva
- 11:15 *The Development of a C-Band Advanced Scatterometer (ASCAT) Geophysical Model Function at NOAA/NESDIS*
Dr. Seubson Soisuvann (NOAA/NESDIS-UCAR), Zorana Jelenak, Paul S. Chang and Qi Zhu

Monday Morning (continued), 18 May 2009

11:30 *A Careful Comparison of Scatterometer Wind Products*
Dr. Ad Stoffelen (KNMI) , Anton Verhoef, Jur Vogelzang

11:45 ASCAT Radiometric Performance
Dr. Julian Wilson (EUMETSAT)

Lunch Break (90 minutes)

Monday Afternoon, 18 May 2009

1:30 Discussion on Cal/Val (15 minutes)

Gridded Products

Chair: Naoto Ebuchi

1:45 *Have near-surface vector winds been changing over the global oceans? - Inference from the WHOI OAF flux global wind analysis 1987-present*
Dr. Lisan Yu (Woods Hole Oceanographic Institution)

2:00 *An Example of Wind Observing System Change Influencing the Climate Record*
Prof. Mark Bourassa (Florida State University)

2:15 Discussion (30 minutes)

2:45 **Break & Snack (30 minutes, poster viewing)**

Rain Issues and Other Science

Co-Chairs: David Weissman and Svetla Hristova-Veleva

3:15 *Rain Effects on Scatterometer Data: A Review*
Kyle Hilburn, Deborah Smith, and Mr. Frank Wentz (Remote Sensing Systems)

3:30 *Advancing QuikSCAT Wind and Rain Retrieval*
Dr. David Long (Brigham Young University)

3:45 *A Neural Network Approach for Improving QuikSCAT Winds in Rain*
Dr. Bryan Stiles (JPL) and R. Scott Dunbar

4:00 *Coincident Observations, With QuikSCAT and ASCAT, of the Effects of Rain-Induced Sea Surface Stress During Hurricane Ike*
Dr. David Weissman (Hofstra University) and Mark A. Bourassa

4:15 *Systematic Geographic Differences between ASCAT, QuikSCAT and ECMWF revisited: Impact of biases and rain contamination.*
Dr. Svetla Hristova-Veleva (JPL) and Ernesto Rodriguez

4:30 **Discussion (30 minutes)**

Tuesday Morning, 19 May 2009

8:00AM Coffee, Continental Breakfast

Oceanography

Co-Chairs: Tim Liu and Tong Lee

- 8:30 *Improvements to the Wind-Driven Component of the OSCAR Surface Current Product*
Dr. Kathleen Dohan (Earth & Space Research), G.S.E. Lagerloef, and J.T. Gunn
- 8:45 *Ekman Transport and Depth-Integrated Meridional Transport in the Atlantic*
Dr. W. Timothy Liu (JPL)
- 9:00 *Interannual variability of wind-induced onshore transport over the northern West Florida Shelf*
Dr. Steve Morey (Florida State University), Mark Bourassa, and Austin Todd
- 9:15 *Studying Cyclone Nargis using multi-sensor satellite and multi-platform in-situ observations*
Dr. Tong Lee (JPL)
- 9:30 *Imprints of coastal mountains on ocean circulation and variability*
Professor Shang-Ping Xie (University of Hawaii), Chueh-Hsin Chang, Wei Zhuang, Niklas Schneider, Justin Small, Hidenori Aiki, Bunmei Taguchi, and Hideharu Sasaki
- 9:45 *Inertial Range Oscillations in the combined QSCAT-ADEOS-II ocean surface wind data set*
Dr. Robert Stockwell (NorthWest Research Associates, Colorado Research Associates Div.)

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

10:30 Discussion (30 min)

New Products

Chair: David Long

- 11:00 *Application of Remotely Sensed Ocean Surface Vector Winds to Determine Wave Generation Areas*
Mr. Joseph Sienkiewicz (NOAA/NWS/NCEP Ocean Prediction Center) and Gregory McFadden
- 11:15 *SeaWinds Sea Ice Modeling and Detection*
Dr. Ad Stoffelen (KNMI) and Maria Belmonte
- 11:30 *Using WindSat to Further Investigate the Relationship Between the Passive Wind-Induced Emissivity and the Active Bragg Scattering*
Mr. Frank Wentz (Remote Sensing Systems)
- 11:45 *Latest Developments at PO.DAAC*
Mr. David Moroni (NASA/JPL)
- 12:00 **Lunch (90 minutes)**

Tuesday Afternoon, 19 May 2009

1:30 Discussion (about new products)

Tuesday Afternoon (continued), 19 May 2009

Meteorology

Co-Chairs: Ralph Foster and Weiqing Han

- 2:00 *Application of satellite surface wind data to ocean surface wind analysis and NWP*
Dr. Robert Atlas (NOAA/AOML)
- 2:15 *Current and future experiments to improve assimilation of surface winds from satellites in global models*
Professor Sharan Majumdar (RSMAS/MPO University of Miami)
- 2:30 *QuikSCAT observations for the VOCALS Regional Experiment*
Dr. Simon de Szoeke (College of Oceanic and Atmospheric Sciences)
- 2:45 *Hurricane surface pressure fields derived from SAR imagery*
Dr. Ralph Foster (Applied Physics Laboratory, University of Washington), Jerome Patoux, and R.A. Brown
- 3:00 **Break & Snack (30 minutes, poster viewing)**
- 3:30 *Explore use of QuikSCAT to detect change of surface water cover in Arctic and Boreal regions*
Nicole Smith-Downey (Jackson School of Geosciences, The University of Texas at Austin) and Rong Fu
- 3:45 *Observations of Eastward Propagation of Atmospheric Intraseasonal Oscillations from the Pacific to the Atlantic*
Dr. Weiqing Han (Dept. Atmospheric and Oceanic Sciences, University of Colorado)
- 4:00 *Using Ensemble Sensitivity to Understand the Role of Sea Surface Temperatures in Midlatitude Storm Development in the Gulf Stream Region*
Jimmy Booth, Susan Bates, Luanne Thompson, Prof. Kathryn Kelly (University of Washington)
- 4:15 *Revisiting the Kinetic Energy Spectra from QuikSCAT Winds: Why is it not quite a power law?*
Robert G. Stockwell (CoRA/NWRA), Jeremiah Brown and Ralph F. Milliff
- 4:30 Discussion

Wednesday Morning, 20 May 2009

8:00AM Coffee, Continental Breakfast

Operations

Co-Chairs: Paul Chang and Ernesto Rodriguez

8:30 *Evaluation of the Potential Impacts of Dual Frequency Scatterometer at the National Hurricane Center*
Dr. Michael Brennan (NOAA/NWS/NCEP National Hurricane Center)

9:45 *Progress in the Dual-Frequency Scatterometer for GCOM-W2*
Dr. Ernesto Rodriguez (Jet Propulsion Laboratory/Cal Tech), Paul Chang, Zorana Jelenak, and Mark Bourassa

9:00 Discussion about DFS (30 minutes)

9:30 *The usage of Scatterometer data at ECMWF*
Dr. Hans Hersbach (ECMWF)

9:45 *Scatterometer Wind Services in Europe*
Dr. Ad Stoffelen (KNMI), Maria Belmonte, Anton Verhoef, Jeroen Verspeek, Jur Vogelzang
Marcos Portabella (Unidad de Tecnología Marina (UTM - CSIC)), Abderrahim Bentamy (IFREMER)

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

10:30 *CEOS Constellations and the Use of Scatterometer Wind and Altimeter Wave Observations for Southern Hemisphere GMDSS Operational Forecast Centers*
Dr. Stan Wilson (NOAA Satellite & Information Service)

10:45 Statistical Study of Wind Field Distribution within Extra-Tropical Cyclones from 7-Years of QuikSCAT Wind Data
Dr. Zorana Jelenak (NOAA/NESDIS), Joseph Sienkiewicz, Khalil Ahmad, Paul Chang

11:00 Discussion (30 minutes)

11:30 Closing Discussion (30 minutes)

Wednesday Afternoon, 20 May 2009

CEOS OSVW/OST Constellation meeting

1:30 Agenda TBD

Wednesday Evening, 20 May 2009

5:00 – 7:00 Tenth Anniversary Celebration (at LASP)

Posters

Benefits of XOVWM

Simulated OVW Retrieval Performance for the Dual Frequency Scatterometer in Hurricanes

Dr. Linwood Jones (Central Florida Remote Sensing Lab.), Pet Laupattarakasem, Suleiman Al-Sweiss, Svetla Veleva, Bryan W. Stiles, Ernesto Rodriguez, and Robert W. Gaston

Calibration/Validation and Definitions

Meteorology

Space-time interpolation of scatterometer-derived geophysical quantities

Dr. Jerome Patoux (University of Washington) and Gad Levy

Impact of ocean surface vector wind in the Japanese 25-year Reanalysis

Dr. Hiroki Tokinaga (IPRC/University of Hawaii) and Shang-Ping Xie

Characterization of a Regional Wind using SSM/I and QuikScat

Deborah Smith (Remote Sensing Systems), Kyle Hilburn and Frank Wentz

A General Purpose Data Assimilation Facility: DART

Jeff Anderson, Dr. Tim Hoar (NCAR), Hui Liu, Nancy Collins, and Kevin Raeder

New Products

Q-Winds OVW Retrievals in Extreme Wind Events

Dr. Linwood Jones (Central Florida Remote Sensing Lab), Pet Laupattarakasem and Christopher C. Hennon

Surface Wind Vector and Rain Rate Observation Capability of the Future Airborne Hurricane Imaging Radiometer (HIRAD)

Dr. Linwood Jones (Central Florida Remote Sensing Lab), Timothy Miller, Robert Atlas, M. C. Bailey, Peter Black, Salem El-Nimri, Robbie Hood, Mark James, James Johnson, Christopher Ruf, and Eric Uhlhorn

Development of a New Geophysical Model Function for QuikSCAT using 10 Years of Data

Dr. Lucrezia Ricciardulli (Remote Sensing Systems), Frank J. Wentz, Deborah K. Smith

Simulated OVW Retrieval Performance for the Dual Frequency

Mr. Suleiman Odeh Alswei (Central Florida Remote Sensing Lab)

Other Science

QuikSCAT as a Land/Ice Climate Record Sensor

Dr. David Long (Brigham Young University)

Biweekly Oceanic and Atmospheric Tropical Instability Waves: are they forced, coupled or resonant with the Moon?

Dr. Claire Perigaud (Caltech/JPL)

Demonstration Of Direct Measurements Of Ocean Surface Currents

Mr. Benjamin Holt (JPL), Delwyn Moller, Dragana Perkovic, Daniel Esteban-Fernandez, Ernesto Rodriguez, Yi Chao

Level 3 Products

How Accurate are QuikSCAT Wind Maps? A Metric for Evaluation

Dr. Kathryn Kelly (University of Washington) and Suzanne Dickinson

Improved Spectral Density of Wind Components through the Use of SST Information

Prof. Mark Bourassa (Florida State University) and Paul Hughes