2023 IOVWST Virtual Meeting – Draft Agenda

Meeting Co-Chairs: Mark Bourassa and Steffanie Linow

Start times for discussions are
11 PM JDT, 7:30 PM IST, 4 PM CEST, 3 PM BST, 10 AM EDT, 7 AM PDT

Day 1: October 4th 10:00 AM to 12:30 PM ET

10:00 Welcome from the cohosts
1 m Stefanie Linow (EUMETSAT) and Mark Bourassa (FSU)
10:01 Welcome and remarks from HQ
2 m Nadya Vinogradova-Shiffer (NASA HQ)
10:03 Atmospheric Processes Related to Winds
15 m **Ralph Foster** (U Washington), Louise Nuijens (TU Delft), Toshiaki Shinoda (TAMU), Justin Stopa (U Hawaii)
10:18 Discussion (14 m)
10:32 Ocean Processes Related to Winds
15 m **Kathleen Dohan** (ERS), Luc Lenain (USCD), Roger Samelson (OSU)
10:47 Discussion (14 m)
11:01 Planned and Suggested Missions
15 m Shannon Brown (JPL), Paco Lopez-Dekker (TU Delft), **Alex Wineteer** (JPL), Dong Xiaolong (MIRSLAB)
11:16 Discussion (14 m)
11:30 Poster session in Gather Town (1 hour)
12:30 Close of meeting (poster session remains open to late visitors)

Day 2: November 1st 10:00 AM to 12:30 PM ET

10:00 Science and Data Needs in Coastal Regions
15 m Melanie Fewings (OSU), Giuseppe Grieco (CNR), **Weiqing Han** (U CO), and Mark Bourassa (FSU)
10:15 Discussion (15 m)
10:30 Science and Operational Impacts and Causes of Differences between Remotely Sensed Wind Products and NWP Products
15 m Giovanna De Chiara (ECMWF), **Ad Stoffelen** (KNMI) and Zhixiong Wang (NUIST)
10:45 Discussion (15 m)
11:00 Using >25 Years Wind Record for Science and Applications
15 m Svetla Hristova-Veleva (JPL/Caltech), Lisan Yu (WHOI), G. King, M. Bourassa (FSU), F. Wentz (RSS), L. Ricciardulli (RSS), A. Stoffelen (KNMI), M. Portabella (CSIC)
Acting point of contact: **Mark Bourassa**
11:15 Discussion (15 m)
11:30 Poster session in Gather Town (1 hour)
12:30 Close of meeting (poster session remains open to late visitors)

Day 3: November 15th 10:00 AM to 12:30 PM ET

10:00 Sensing Wind Coupling to Other Variables

15 m **Ernesto Rodriguez** (JPL/Caltech), Marcos Portabella (CSIC), Bia Villas Boas (CO School of Mines), Aneesh Subramanian (U CO)

10:15 Discussion (15 m)

10:30 Outstanding Issues in Calibration for Routine Conditions

15 m Richards Lindsley (RSS), **Zhen Li** (KNMI), Ad Stoffelen (KNMI)

10:45 Discussion (15 m)

11:00 Towards Consensus on Extreme Winds

15 m **Paul Chang** (NOAA), Heather Holbach (FSU), Marcos Portabella (CSIC), Lucrezia Ricciarduli (RSS) and Mark Bourassa (FSU)

11:15 Discussion (15 m)

11:30 Poster session in Gather Town (1 hour)

12:30 Close of meeting (poster session remains open to late visitors)

Community contributions to the above talks should be sent to the author whose name is formatted bold.

Posters – Day 1 October 4th (11:30 to 12:30 ET)

Atmospheric Processes Related to Winds:

Role of ocean parameters in modulating tropical cyclone intensity and structure
S. A. Bhowmick, HariKrishnan, Anup Mandal, Neeru Jaiswal, Neeraj Agarwal, Rashmi Sharma and Raj Kumar

Atmospheric Dynamic Response Ocean Surface Currents over the Gulf Stream
Jackie C. May and Mark A. Bourassa

Using scatterometer observations to correct for persistent biases in modelled ocean surface winds
Rianne Giesen, Ad Stoffelen, Jorge Miguel Fernández, and Anton Verhoef

Air-sea flux and SST variability associated with atmospheric rivers in the southeast Indian Ocean
Toshiaki Shinoda, Weiqing Han, Xue Feng

A Synergist View of the Marine Atmospheric Boundary Layer and Low-Level Clouds
Justin E. Stopa, Doug Vandemark, Ralph Foster, Chen Wang, Alex Ayet, Alexis Mouche, and Betrand Chapron

Using SAR Imagery to Diagnose TCBL Structure
Ralph Foster, Alexis Mouche, Bertrand Chapron

Influence of shallow precipitating convection on near-surface wind speed, directionality and stress

Louise Nuijens, Alessandro Savazzi, Gijs de Boer, Pierre-Etienne Brilouet, Geet George, Marie-Lothon and Dongxiao Zhang

Ocean Processes Related to Winds:

Nonlinear Surface and Local Dynamics in Wind-Driven OSCAR Currents Over Three Decades of Observations
Kathleen Dohan

Characterizing the transition to submesoscale dynamics using airborne observations
Mara Freilich, Luc Lenain, and Sarah Gille

Upper Ocean Response to Coupling Currents to Wind Stress over the Gulf Stream
Jackie May and Mark Bourassa

Near-surface wind and wave drift currents in the coupled air-sea boundary layer
Roger Samelson

Planned and Suggested Missions:

Status of Advanced Microwave Scanning Radiometer 3 (AMSR3)
Naoto Ebuchi, Misako Kachi, Rigen Shimada, Eri Yoshizawa, Keiichi Ohara, Hideyuki Fujii, Takeshi Miura, Kazuya Inaoka, and Yasushi Kojima

Simultaneous Measurements of Winds and Surface Currents from Space: ODYSEA (Ocean Dynamics and Surface Exchange with the Atmosphere)
Sarah Gille, T. Lee, F. Ardhuin, M. Bourassa, P. Chang, S. Cravatte, T. Farrar, M. Fewings, F. Girard-Ardhuin, G. Jacobs, Z. Jelenak, F. Lyard, J. May, E. Rémy, L. Renault, E. Rodriguez, C. Ubelmann, B.Villas Bôas, and A. Wineteer

Veery - The Small Satellite Scatterometer: Design and Mission Progress for Versions 0.3 and 1.0
Patrick Walton, Alex Laraway, and David G. Long

High Resolution L-band Wind speeds from the Global L-band Observatory for Water Cycle Studies (GLOWS)
David Long, Rajat Bindlish, Jeffrey Piepmeier, Giovanni De Amici, and Mark Bailey

Posters - Day 2: November 1st (11:30 to 12:30 ET)

Science and Data Needs in Coastal Regions:

Coastal winds retrievals from QuikSCAT-corrected radar cross sections
Giuseppe Grieco, Yur Vogelzang, Anton Verhoef, Ad Stoffelen, and Marcos Portabella

Coastal Upwelling in the Western Bay of Bengal: Role of Local and Remote Windstress
Sthitapragya Ray, Debadatta Swain, Meer M. Ali and Mark A. Bourassa

Subsurface Temperature Anomalies off Central Oregon During 2014-2021
Brandy Cervantes, Melanie Fewings, and Craig Risien

Using >25 Years Wind Record for Science and Applications:

Empirical corrections and quality control of ocean surface winds from scatterometers due to contamination from sea-ice, rain, and other sources
Bryan W. Stiles, Alexander G. Fore, Alexander G. Wineteer, and Benjamin M. Holt

A Stable Satellite Wind Data Climate Record for Climate Variability Studies
Lucrezia Ricciardulli, Andrew Manaster, Thomas Meissner, and Carl Mears

Estimating Atmospheric Wind from Scatterometer Equivalent Neutral Winds
Alexander Wineteer, Federica Polverari, Svetla Hristova-Veleva, Bryan Stiles, Mark Bourassa, Shakeel Asharaf, Alexander Fore, and Ernesto Rodriguez

Comparing Wind Derivative Calculation Methods from Orbital Swath Winds
Ethan E. Wright, Mark A. Bourassa, Larry W. O'Neill, Alexander Wineteer, and Svetla Histrova-Vevela

New Climate Data Record of the Ocean Surface Winds, Stress and Their Dynamically-Significant Derivatives – Vorticity and Divergence: Supporting Studies of Trends and Variability in the Large-Scale Circulation
Svetla Hristova-Veleva, Bryan Stiles, Alexander Fore, Alexander Wineteer, David Moroni, Mark Bourassa, Douglas Vandemark, Larry O'Neill, Shakeel Asharaf, Ethan Wright, Xiaosu Xie, F. Joseph Turk, Marc Emond, P. Peggy Li, Brian Knosp, Quoc Vu, Joseph Jacob, Federica Polverari, and Philip Callahan

Science and Operational Impacts and Causes of Differences between Remotely Sensed Wind Products and NWP Products:

On the use of machine learning to correct NWP model sea surface wind forecasts with scatterometer data input
Eugenia Makarova and Marcos Portabella

Assimilation experiment of HSCAT winds in JMA's NWP Systems
Yusuke Ioka

Day 3: November 15th (11:30 to 12:30 ET)

Sensing Wind Coupling to Other Variables:

High fidelity modeling of surface waves dynamics and statistics
Luc Deike, Jiarong Wu, Stephane Popinet, Tom Farrar, Bertrand Chapron, and Ernesto Rodriguez.

Observations and modeling of sea state gradients in the meso-to-submesoscale range
Gwendal Marechal, Bia Villas Bôas, Luc Lenain, Nick Pizzo

CYGNSS Ocean Surface Wind Speed Performance Update
Chris Ruf

Simultaneous Wind Rain Retrieval Using OSCAT
Benjamin Fogg and David G. Long

Rain Detection and Wind Retrieval Using U-NET on ASCAT Measurements
Matthew McKinney and David Long

Outstanding Issues in Calibration for Routine Conditions:

Higher-Order Calibration on WindRAD scatterometer winds

Zhen Li, Ad Stoffelen, and Anton Verhoef

An Analysis of Antarctica As a Target For First Order Cross-Calibration Between NSCAT, SMAP, and ASCAT
Nathan Porter and David G. Long

Towards Consensus on Extreme Winds:

Improving Our Knowledge of The Wind Profile and Air/Sea Turbulent Fluxes Through Log-Profile Analyses of the Near-Surface Layer in Hurricanes Using Dropsondes
Daniel E. Wallace, Mark A. Bourassa, Heather M. Holbach and Renee Richardson

Error characterization of in situ, satellite, and synergistic sea-surface wind products under tropical cyclone conditions
Federico Cossu, Evgeniia Makarova, Albert S. Rabaneda, Marcos Portabella, Joe Tenerelli, Nicolas Reul, Ad Stoffelen, Giuseppe Grieco, Joseph Sapp, Zorana Jelenak, Paul Chang

Tropical Cyclone Resolution Enhancement for ASCAT Winds
Weicheng Ni, Ad Stoffelen, Kaijun Ren, Jur Vogelzang, Yanlai Zhao and Wuxin Wang