

## 2021 IOVWST Meeting

Start times for discussions are  
Midnight JST, 8:30 PM IST, 4 PM CET, 3 PM GT, 10 AM EST, 7 AM PST

Feb. 24<sup>th</sup> 10:00 AM to 11:30 AM ET

**Session: How can we make improvements to the constellation and what can we do with it?**

- 10:00 Statement from the session Chairs
- 5 m Stefanie Linow and Raj Kumar
- 10:05 Importance of high quality coastal wind measurements
- 5 m Raj Kumar, Paul Chang, Stefanie Linow, Ad Stoffelen
- 10:10 [WMO CGMS Scatterometer Actions](#) (invited talk)
- 5 m Ad Stoffelen (KNMI), Paul Chang, Raj Kumar, Stefanie Linow, Regis Bordes and Steve Wanzong
- 10:15 The Future of Satellite Microwave Radiometers for Measuring Ocean Winds
- 5 m Frank Wentz (Remote Sensing Systems), Thomas Meissner, Lucrezia Ricciardulli
- 10:20 Challenges and Solutions to Increasing Quantity and Diurnal Coverage of Scatterometer Ocean Vector Wind Measurements
- 5 m Patrick Walton (Brigham Young University), David Long, and Timothy Lang
- 10:25 Group Discussion

March 3<sup>rd</sup> 10:00 AM to 11:30 AM ET

**Session: User guidance on the different climate records; where do OVW products agree, disagree, and how to make this visible?**

- 10:00 Statement from the session Chairs
- 5 m Ad Stoffelen and Frank Wentz
- 10:05 [Intercalibration Of ASCAT Scatterometers on METOP-A, -B, And -C For A Stable Wind Climate Data Record](#) (invited talk)
- 5 m Lucrezia Ricciardulli (Remote Sensing Systems) and Frank Wentz
- 10:10 Hurricane Ocean Wind Speeds (Invited talk)
- 5 m Ad Stoffelen (KNMI), Gert-Jan Marseille, Weicheng Ni, Alexis Mouche, Federica Polverari, Marcos Portabella, Wenming Lin, Joe Sapp, Paul Chang, Zorana Jelenak
- 10:15 [Strengths and weakness of using multi-instrument, multi-mission climate data records to understanding how the Earth System is changing](#) (invited talk)
- 5 m Svetla Hristova-Veleva (Jet Propulsion Laboratory),
- 10:20 Group Discussion

March 10<sup>th</sup> 10:00 AM to 11:30 AM ET

**Session: Air-Sea Fluxes and their impacts on the Ocean and Atmosphere**

10:00 Statement from the session Chairs

5 m Mark Bourassa and xx

10:05 [The Submesoscale Ocean Dynamics Experiment \(S-MODE\) \(pdf\)](#)

5 m Tom Farrar (Woods Hole Oceanographic Institution)

10:10 [Objectives of an Air-Sea Interaction Observing Strategy: If we can't close the ocean heat budget, what can we do?](#) (invited talk)

5 m Sarah Gille, Meghan Cronin, Chelle Gentemann, Carol Anne Clayson, Mark Bourassa, Shannon Brown, Tom Farrar, Tong Lee, Kelly Lombardo, Rhys Parfitt, Hyodae Seo, Aneesh Subramanian, and Victor Zlotnicki

10:15 Simultaneous Measurements of Winds and Currents: a status report (invited talk)

5 m E. Rodríguez (Jet Propulsion Laboratory, California Institute of Technology) & the WaCM team, and F. Ardhuin (Laboratoire d'Océanographie Physique et Spatiale (LOPS)) & the STREAM team

20:20 [Butterfly: revealing the ocean's impact on our weather and climate \(pdf\)](#) (invited talk)

5 m C. Gentemann (Farallon Institute), C.A. Clayson, T. Lee, S. Brown, A. Subramanian, M. Bourassa, K. Lombardo, R. Parfitt, H. Seo, S. Gille, T. Farrar, J. Whitaker, D. Kleist, P. Browne, C. Harris, H. Tomita, A. Bentamy

10:25 Distributed system solutions for NASA air-sea coupling (invited talk)

5 m Nadya Vinogradova Shiffer

10:30 Group Discussion

## Asynchronous Presentations

### Atmosphere and Ocean Coupling

Simultaneous Measurements of Winds and Currents: a status report (invited talk)  
E. Rodríguez (Jet Propulsion Laboratory, California Institute of Technology) & the WaCM team,  
and F. Ardhuin (Laboratoire d'Océanographie Physique et Spatiale (LOPS)) & the STREAM  
team

#### [Effects of spatial resolution and temporal offset of air-sea boundary-layer variables on turbulent heat flux estimates](#)

Tong Lee (Jet Propulsion Laboratory), Chelle Gentemann, Carol Anne Clayson, Mark Bourassa,  
Shannon Brown, J. Thomas Farrar, Kelly Lombardo, Sarah Gille, Rhys Parfitt, Hyodae Seo,  
Aneesh Subramanian, and Victor Zlotnicki

#### [Evaluating the role of air-sea interactions in Bering Sea warming](#)

Emily Hayden (Oregon State University -- CEOAS), Melanie R. Fewings, Larry W. O'Neill

#### [Impact of Global Ocean Surface Flux Product, J-OFURO3](#)

Kunio Kutsuwada (School of Marine Science and Technology, Tokai University), Hiroyuki  
TOMITA, Shin'ichirou KAKO, Tsutomu HIHARA, Masahisa KUBOTA

#### [Anchoring of the Gulf Stream Convergence Zones by the storm track and sea surface temperatures](#)

Niklas Schneider (University of Hawai'i at Mānoa), Ryusuke Masunaga, Bruce Cornuelle, Larry  
O'Neill, Thomas Kilpatrick, Masami Nonaka, Justin Small and Shang-Ping Xie

#### [Observed Wind and SST Variability off the California Coast during Summertime High Wind Events](#)

Weiguang (Roger) Wu (MIT-WHOI Joint Program), Ana Beatriz Villas Bôas (Scripps Institution  
of Oceanography, UC San Diego), Professor Sarah Gille (Scripps Institution of Oceanography,  
University of California San Diego),

#### [The Seasonal Cycle of Significant Wave Height in the Ocean: Local vs Remote Forcing](#)

Luke Colosi (Scripps Institution of Oceanography), Ana B. Villas Bôas, and Sarah Gille

#### [Development of offshore surface roughness length parameterization over deep seas](#)

Alberto Rabaneda (Barcelona Expert Centre (BEC), Institute of Marine Sciences (ICM-CSIC)),

## **Current and Future Ocean Vector Wind Mission Updates**

### [Present Status of GCOM-W/AMSR2 and GOSAT-GW/AMSR3](#)

Naoto Ebuchi (Hokkaido University), Misako Kachi, Marehito Kasahara, Hideyuki Fujii, Rigen Shimada, Keiichi Ohara, Takashi Maeda, Kazuya Inaoka, Yasushi Kojima

### [Status of EUMETSAT scatterometer missions](#)

Stefanie Linow (EUMETSAT), C Anderson

### [The European Next Generation Scatterometer \(SCA\) - Status of Processing and Products](#)

Craig Anderson (EUMETSAT), J.J.W. Wilson, S. Linow, F. Ticconi

### [Compact Ocean Wind Vector Radiometer on ISS Mission Status](#)

Shannon Brown, Sidharth Misra, Amarit Kitiyakara, and Mary Morris

### [Veery, a Small Scatterometer Intended for a Constellation](#)

Patrick Walton (Brigham Young University), David Long, and Timothy Lang

### [Time-varying empirical probability densities of Southern Ocean surface winds: Leading modes linked to SAM, the annual cycle, and product differences](#)

Momme Hell (UCSD/SIO), Bruce D. Cornuelle, Sarah T. Gille, Nicholas J. Lutsko

### [The impact of high-frequency wind variability on mixed-layer physics](#)

Natalie Freeman (University of Colorado Boulder), Donata Giglio, Sarah Gille, Momme Hell

## **Waves, Currents and Ice**

### [Tracking Iceberg A68 on a Collision Course with South Georgia Island](#)

Professor David Long (Brigham Young University),

## **New Products and Applications**

### [A New Dataset of Tropical Cyclone Winds from Microwave Radiometers](#)

Andrew Manaster (Remote Sensing Systems), Thomas Meissner, Lucrezia Ricciardulli

### [A land-corrected ASCAT coastal wind product](#)

Jur Vogelzang (KNMI), Ad Stoffelen

### [An evaluation of the latest NOAA CyGNSS wind product in the tropical cyclone environment \(powerpoint\)](#)

Faozi Said (Global Science & Technology/National Oceanic and Atmospheric Administration), Zorana Jelenak, Paul S. Chang

### [Status on the wind processing of CFOSAT scatterometer](#)

Wenming Lin (Nanjing University of Information Science and Technology), Xiaolong Dong, Marcos Portabella, Shuyan Lang, Jianqiang Liu

### [NWP Ocean Calibration for the CFOSAT wind scatterometer and wind retrieval evaluation](#)

Zhen Li (Royal Netherlands Meteorological Institute), Ad Stoffelen, Jeroen Verspeek, Anton Verhoef

### [Wind field from SAR over the Venice lagoon, Italy](#)

Stefano Zecchetto (National Research Council of Italy), Andrea Zanchetta

### [On Improved UHR Ambiguity Selection Algorithms](#)

Professor David Long (Brigham Young University), and Greg Schachterle

### [Wind direction retrieval from SAR images using ResNet](#)

Andrea Zanchetta (Hong Kong Baptist University), and Stefano Zecchetto

### [HY-2B and HY-2C winds and services from the OSI SAF](#)

Anton Verhoef (KNMI Royal Netherlands Meteorological Institute), Ad Stoffelen, Rianne Giesen, Juhong Zou, Zhixiong Wang, Simon Elliott, and David Long

### [Discrete Band-Limited Signal Reconstruction from Irregular Samples](#)

Professor David Long (Brigham Young University)

### [Recent Update on Operational Use of Scatterometer Winds in JMA's Global NWP System](#)

Shin Koyamatsu (Japan Meteorological Agency)

### [PO.DAAC Data in the Cloud: Current Status and Strategic Direction](#)

David Moroni (JPL)

Estimating Sea Surface Vorticity from the RapidScat Scatterometer Ku-Band NRCS by Using Coincident Sub-Footprint Scale Winds and Dual Polarization Analysis

David E. Weissman (Hoffstra University)

## **Meteorological Applications**

### [Evaluating the Detection of Mesoscale Outflow Boundaries using Scatterometer Winds at Different Spatial Resolutions](#)

Georgios Priftis (University of Alabama in Huntsville), Timothy J. Lang, Garg Piyush, Richard Lindsley, Stephen W. Nesbitt and Themis Chronis

### [Estimating the Impact of Satellite Winds for Tropical Cyclone Forecasts Using Ensemble Forecast Sensitivity Approach \(pdf\)](#)

Noel Chawang (Indian Institute of Space Science and Technology (IIST), Valiamala) and Govindan Kutty

Regional effects of scatterometer sampling and weather in ERA\* performance through Monte-Carlo simulations

A. Trindade (Universitat Politècnica de Catalunya), M. Portabella, A. Stoffelen

Monte-Carlo simulations Impact of INSAT-3D AMVs in WRF-HYBRID (ENSEMBLE-3DVAR) data assimilation system for the simulation of monsoon over the month of July 2016

Rekha Bharali Gogoi (North Eastern Space Applications Centre), Govindan Kutty and Arup Borgohain

### [Scatterometer Winds in the Lee of the Hawaiian Islands](#)

Professor David Long (Brigham Young University), Nolan Hutchings, and Thomas Kilpatrick

### [The Diurnal Cycle of Tropical Oceanic Mesoscale Cold Pools from NASA RapidScat and Buoy Network](#)

Piyush Garg (University of Illinois Urbana-Champaign), Stephen W. Nesbitt, Timothy J. Lang, and George Priftis

Utilization of SCATSAT-1 scatterometer observations for Vegetation and soil moisture studies  
Manoj Kumar Mishra (Space Physics Laboratory, Vikram Sarabhai Space Centre, ISRO), and C. Suresh Raju

### [Towards triple collocation analysis of 4D wind observations \(pdf\)](#)

Federico Cossu (Barcelona Expert Centre, Institute of Marine Sciences, CSIC), Marcos Portabella, Wenming Lin, Ad Stoffelen, Gert-Jan Marseille, Jur Vogelzang, and Isabel Monteiro

### [Hurricane Ocean Wind Speeds](#)

Ad Stoffelen (KNMI), Gert-Jan Marseille, Weicheng Ni, Alexis Mouche, Federica Polverari, Marcos Portabella, Wenming Lin, Joe Sapp, Paul Chang and Zorana Jelenak

### [Comparing Winds near Tropical Oceanic Precipitation Systems with and without Lightning \(powerpoint\)](#)

Timothy Lang (NASA MSFC)

Warning for Oceanic Extra-tropical Storms of Hurricane Force Strength – a Twenty Year Perspective

Joseph Sienkiewicz (NOAA Ocean Prediction Center)

[A Newly Developed Form Drag Derived from Sea Spray Influenced Surface Wind Stress at Hurricane Force Winds](#)

Renee Richardson (Florida State University (FSU)/Center for Ocean-Atmospheric Prediction Studies (COAPS)), Mark A. Bourassa, Steven L. Morey

[An Analysis of the Near-Surface Layer in Hurricanes Using Dropsondes](#)

Daniel Wallace (Florida State University COAPS & EOAS), Mark Bourassa, and Heather Holbach

[Analyzing Gaps in Hurricane Rain Coverage to Inform Future Satellite Proposals](#)

Justin P. Stow (Florida State University), Mark A. Bourassa, and Heather M. Holbach

[SFMR Algorithm Updates](#)

Heather Holbach (FSU, NGI, NOAA/AOML/HRD)

[UMass Simultaneous Frequency Microwave Radiometer \(USFMR\) instrument description, current and future work](#)

Jezabel VilardeLL Sanchez (UMass Amherst MIRSL), Joseph W. Sapp, Zorana Jelenak, Paul S. Chang, and Stephen J. Frasier

Steps Toward Incorporating Nonlinear Mean Flow Model in Tropical Cyclone Surface Pressure Retrieval

Ralph Foster (University of Washington),

## **Oceanographic Applications**

Rain and SST correction to the Scatsat-1 derived winds

Abhisek Chakraborty (Space Applications Centre, Indian Space Research Organization), Atul Kumar Varma and Raj Kumar

### [Modeling and Analysis of the Ka-band Ocean Surface Radar Cross Section Using the Doppler Scatterometer Measurements from the Air Sea Interaction Tower Experiment](#)

Federica Polverari (Jet Propulsion Laboratory, California Institute of Technology), Alexander Wineteer, Ernesto Rodriguez, Dragana Perkovic-Martin, Paul Siqueira, J. Thomas Farrar, and J. Max Adam, James Edson

### [Quadruple collocation analysis of buoy, scatterometer, and NWP winds](#)

Jur Vogelzang (KNMI), and Ad Stoffelen

### [A Comparison Of Quality Indicators for Ku-Band Wind Scatterometry & For Typhoons Lekima and Krosa](#)

Xingou Xu (National Space Science Center, Chinese Academy of Sciences), Ad Stoffelen, Marcos Portabella, Wenming Lin, and Xiaolong Dong

## **Coastal Working Group contributions**

### [Towards QuikSCAT coastal winds at OSI-SAF \(pdf\)](#)

Giuseppe Grieco (Institute of Marine Sciences (ICM), CSIC ), M. Portabella, A. Stoffelen, A. Verhoef, and J. Vogelzang

### [Marine heat waves in the Chile-Peru Eastern Boundary Upwelling System: rates of change in sea-surface temperature anomalies near a major upwelling center](#)

Kylene Cooley (Oregon State University, College of Earth, Ocean, and Atmospheric Sciences), Melanie R. Fewings, James Lerczak

### [Seasonality in the Ocean Warming Response to Wind Relaxations off the Western United States](#)

Melanie Fewings (Oregon State University), Kevin S. Brown (Oregon State University), and Carlos Moffat (University of Delaware)

### [Along-shore structure of marine heat wave events along the California Current System](#)

Gwendolyn Larson (University of Delaware), Carlos Moffat, Melanie R. Fewings, and Kevin S. Brown

### [Evaluation of the ERA\\* Ocean Forcing Product Under Storm Surge Conditions in the Adriatic Sea](#)

Eugenia Makarova (CSIC), Marcos Portabella, and Ana Trindade



## **Climate Data Record Development and Analysis**

### [The JPL SCATSAT Climate Quality Data Product](#)

Alexander Fore (Jet Propulsion Laboratory), Bryan Stiles, Sermsak Jaruwatanadilok, and Ernesto Rodriguez

### [Toward a consistent C- and Ku-band scatterometer ocean vector wind data record](#)

Bryan Stiles (Jet Propulsion Laboratory), Alexander Fore, Svetla Hristova-Veleva, and Alexander Wineteer

### [Improvements to the Cross-Calibrated Multi-Platform \(CCMP\) analysis](#)

Carl Mears (Remote Sensing Systems), Tong Lee, Susan Wijffels and Frank Wentz

### [Characterizing Buoy Wind Speed Error in Extreme Conditions with ASCAT and ERA5 \(powerpoint\)](#)

Ethan Wright (COAPS Florida State University) and Mark Bourassa

## **Climate Working Group contributions**

### [Creating an extended and consistent ESDR of the ocean surface winds, stress and their dynamically-significant derivatives for the period 1999-2022 - a MEaSURES-funded proposal: Developing and evaluating the harmonized retrievals of wind and stress](#)

SVETLA HRISTOVA-VELEVA (Jet Propulsion Laboratory), Mark Bourassa, Alexander Fore, Thomas Kilpatrick, David Moroni, Larry O'Neill, Ernesto Rodriguez, Bryan Stiles, F. Joseph Turk, Douglas Vandemark, Alexander Wineteer, Shang-Ping Xie, P. Peggy Li, Brian Knosp, Quoc Vu, Philip Callahan, Roy S. Dunbar, Marc Emond, Ethan Wright, Robin Vane, and Joseph Jacob

### [Distinct impacts of short- and long-time fluctuations of Indian Ocean surface wind fields on Indian summer monsoon rainfall at regional scales](#)

Yangxing Zheng (Center for Ocean-Atmospheric Prediction Studies, Florida State University), Mark A. Bourassa, and M. M. Ali