

Monday May 5th (afternoon only)

Programmatic Talks Session

Chair: Mark Bourassa

- 1:30 Welcome to Darmstadt
5 m Stefanie Linow (EUMETSAT)
- 1:35 Introduction to IOVWST 2025
5 m Authors: Mark Bourassa (FSU) and Linow, Stefanie (EUMETSAT)
- 1:40 Status and recent developments of the EUMETSAT scatterometer missions
5 m Authors: Stefanie Linow (EUMETSAT); Khosravi, Narges (CS Group); Kok Lupemba, Simon (EUMETSAT); Anderson, Craig (EUMETSAT); Cloarec (CS Group); Remus, Stefan (EUMETSAT)

Sea State

Co-Chairs: Luc Lenain and Nick Pizzo

- 1:50 Ocean Surface Wind Retrieval and Quality Control Near Sea Ice
15 m Authors: Bryan W. Stiles (Jet Propulsion Laboratory); Fore, Alexander (Jet Propulsion Laboratory); Holt, Benjamin (Jet Propulsion Laboratory); Wineteer, Alexander (Jet Propulsion Laboratory)
- 2:05 Analysis of the scatterometer ocean surface measurement dependency on sea state: an update
15 m Authors: Federico Cossu (Institute of Marine Sciences (ICM-CSIC)); Trindade, Ana (Institute of Marine Sciences (ICM-CSIC), University of Oldenburg); Portabella, Marcos (Institute of Marine Sciences (ICM-CSIC)); Verhoef, Anton (Royal Netherlands Meteorological Institute (KNMI)); Stoffelen, Ad (Royal Netherlands Meteorological Institute (KNMI))
- 2:20 Impact of Swell-induced Tilt on Scatterometer Wind Retrieval
15 m Authors: Sthitapragya Ray (Center for Ocean-Atmospheric Prediction Studies, The Florida State University); Larrañaga, Marco (Center for Ocean-Atmospheric Prediction Studies, The Florida State University); Bourassa, Mark (Center for Ocean-Atmospheric Prediction Studies, The Florida State University; Department of Earth, Ocean and Atmospheric Science, The Florida State University)
- 2:35 Discussion: Sea state, Wind, and Stress
25 m Mark Bourassa to start discussion
- 3:00 **Break and Group Picture** (30 minutes)

Air/Sea Fluxes, Flux Products, and Methods for Calculating Equivalent Neutral Winds Co-Chairs: S. Ray and Steve Morey

- 3:30 Advancing CYGNSS Derived Ocean Surface Heat Fluxes using a Data-Driven and Physical Model Fusion
15 m Authors: Shakeel Asharaf (JIFRESSE/JPL); Crespo, Juan (JIFRESSE/JPL); Posselt, Derek (JPL); Bourassa, Mark (FSU)
- 3:45 Enhanced Tropical Cyclone ASCAT Winds Guided by SAR-Learned Spatial Structure Functions
15 m Authors: Weicheng Ni (National University of Defense Technology; NUDT); Ad Stoffelen (KNMI); Kaijun Ren (NUDT); Jur Vogelzang (KNMI); Yanlai Zhao (NUDT); Xiaofeng Yang (Nanjing University); and Wuxin Wang (NUDT)
- 4:00 Satellite-Based Ocean Surface Stress in Ice-Free and Ice-Covered Polar Oceans: Recent Arctic Changes
15 m Authors: Lisan Yu (WHOI); Liu, Chao (WHOI)
- 4:15 Enhanced Tropical Cyclone PenWP Winds Guided by SAR-Learned Spatial Structure Functions
15 m Authors: Xingou Xu (NSSC,CAS), Ad Stoffelen (KNMI); Weicheng Ni (NUDT); Ke Zhao (CMA)
- 4:30 Discussion on flux products and flux calculations (30 minutes)
- 5:00 Close of day

Tuesday May 6th

9:00 Meeting Summary: Monday's Activities
10 m TBD

Mission Updates Session 1

co-chairs: Juhong Zou and Craig Anderson

9:10 The passive microwave imaging missions MWI and CIMR and their synergies with SCA

15 m Authors: Robin Ekelund (EUMETSAT), Francesco De Angelis (EUMETSAT)

9:25 Present status of AMSR3

7.5 m Authors: Naoto Ebuchi (Hokkaido University/JAXA); Kachi, Misako (JAXA); Shimada Rigen (JAXA); Yoshizawa, Eri (JAXA); Ohara, Keiichi (JAXA); Nakata, Kazuki Nakata (JAXA); Aida, Kentaro (JAXA); Miura, Takeshi (JAXA); Inaoka, Kazuya (JAXA); Kojima, Yasushi (JAXA)

9:33 The Very Small Scatterometer: Development Update

7.5 m Authors: Patrick Walton (Care Weather); Laraway, Alex (Care Weather); Long, David G. (Care Weather / BYU);

9:40 Compact Ocean Wind Vector Radiometer: Mission Status and Future Constellations

10 m Authors: Shannon Brown (Jet Propulsion Laboratory, California Institute of Technology), Amarit Kitiyakara (Jet Propulsion Laboratory, California Institute of Technology), Mary Morris (Jet Propulsion Laboratory, California Institute of Technology), Federica Polverari (Jet Propulsion Laboratory, California Institute of Technology), Steve Swadley, Eric Simon (Naval Research Laboratory Monterey), Spencer Farar (Aerospace Corporation)

9:50 Evaluation of COWVR as a Cost-Effective Sensor for Providing Climate Data Records of Ocean Vector Winds and Other Air-Sea Variables

10 m Authors: Richard Lindsley (Remote Sensing Systems); Wentz, Frank (Remote Sensing Systems); Wentz, Katherine (Remote Sensing Systems)

10:00 Discussion on Passive Microwave Winds (10 minutes)

Lightning Poster Talks: Morning Session (1 ½ minutes each)

Chair: Frederico Cossu

All speakers line up (or prepare on line) to each give a one slide summary

10:12 Comprehensive Validation of Imaging Wind and Rain Atmospheric Profiler Wind Measurements

1.5 m Authors: Zorana Jelenak (NOAA/NESDIS/STAR-UCAR), Sapp, Joseph (Global Science & Technology, Inc); Shoup, Casey (Global Science & Technology, Inc); Bjorland, Clayton (Tomorrow.IO) and Chang, Paul S. (NOAA/NESDIS/STAR)

10:14 Evaluation and Applications of Ocean Surface Wind Product From Fengyun-3 and Tianmu-1 GNSS-R Constellations

1.5 m Authors: Feixiong Huang (NSSC/CAS); Yin, Cong (NSSC/CAS); Zhai, Xiaochun (NSMC/CMA); Sun, Yueqiang (NSSC/CAS), Xia, Junming (NSSC/CAS); Bai, Weihua (NSSC/CAS)

10:16 Ocean Vector Winds from the EOS6 scatterometer

1.5 m Authors: Alexander Fore (JPL); Bryan Stiles (JPL)

10:18 Coupling Atmospheric Dynamics and Ocean with Winds from Satellites

1.5 m Authors: Stavroula Biri (KNMI); Stoffelen, Ad (KNMI)

10:20 The effect of the Stokes drift on submesoscale feature evolution

1.5 m Authors: Kayli Matsuyoshi (Scripps Institution of Oceanography, UCSD); Lenain, Luc (Scripps Institution of Oceanography, UCSD); Freilich, Mara (Brown University); Pizzo, Nick (Graduate School of Oceanography, URI)

10:22 Modeling Spray Impacts on Wind Speed, Stress, and Drag Coefficients

1.5 m Authors: Renee Richardson (FSU), Mark Bourassa (FSU)

10:24 ASCAT higher resolution winds closer to the coast

1.5 m Authors: Anton Verhoef (KNMI); Verspeek, Jeroen (KNMI); Stoffelen, Ad (KNMI)

10:26 ASCAT scatterometer wind product calibration and reprocessing

1.5 m Authors: Jeroen Verspeek (KNMI); Stoffelen, Ad (KNMI); Verhoef, Anton (KNMI)

10:28 Identifying tropical cold pools with singularity exponents

1.5 m Authors: Gregory King (Independent Scholar, Selkirk, UK); Portabella, Marcos (Institut de Ciències del Mar (ICM - CSIC)); Lin, Wenming (School of Marine Sciences, Nanjing University of Information Science and Technology)

10:30 Break (30 minutes)

Mission Updates Session 2

Chair: Shannon Brown and Zhixiong Wang

- 11:00 Talk: Post-launch performance evaluation of EOS-06/Oceansat-3 Scatterometer winds using HY-2D, In-situ and NWP model fields
15 m Authors: Sikhakolli Rajesh (NRSC, ISRO); Manche Shiva Shankar (NRSC, ISRO); Mishra Shashank Kumar (NRSC, ISRO); PV Nagamani (NRSC, ISRO); Goru Srinivasa Rao (NRSC, ISRO); Chauhan Prakash (NRSC, ISRO)
- 11:15 Near-real Time Sea-surface Wind Derived from the Haiyang-2B/C/D Scatterometer Constellation
10 m Authors: Zou Juhong; National Satellite Ocean Application Service
- 11:25 Update on DopSCA
10 m Authors: Ad Stoffelen (KNMI); Lopez Dekker, Paco (TUD); O'Driscoll, Owen (TUD); Payez, Alexandre (KNMI)
- 11:35 Talk: Retrieval of ocean surface wind and current using OSCOM airborne campaign dataset
10 m Authors: Shilei Wang (National Space Science Center (NSSC), CAS, Beijing, China)
Portabella, Marcos (Barcelona Expert Center (BEC), Institut de Ciències del Mar (ICM-CSIC), Barcelona, Spain)
Dong, Xiaolong (National Space Science Center (NSSC), CAS, Beijing, China)
Lin, Wenming (Nanjing University of Information Science and Technology (NUIST), Nanjing, China)
Bao, Qingliu (Piesat Information Technology Co.,Ltd., Beijing, China)
- 11:45 Simultaneous Winds and Surface Currents via the proposed ODYSEA Doppler Scatterometer
10 m Gille, ST (SIO), T Lee, MR Fewings, F Ardhuin, MA Bourassa (FSU), P Chang, Sophie E Cravatte, G Dibarbouré, J T Farrar, F Girard-Ardhuin, GA Jacobs, Z Jelenak, F Lyard, JC May, E Rémy, L Renault, E Rodriguez, C Ubelmann, AB Villas Boas, AG Wineteer
- 11:55 Discussion of mission synergies for science and data quality assessment (35 minutes)

NWP-Related Applications

Chair: Giovanna De Chiara and Anton Verhoef

- 12:30 Calculating Fluxes from satellite wind data vs buoy wind data
10 m Shakeel Asharaf
- 12:40 Evaluation of HSCAT Observations from HY-2B and HY-2C Satellites in KIM Data Assimilation
10 m Authors: Hyemin Shin (Korea Institute of Atmospheric Prediction Systems, KIAPS), Jeon-Ho Kang, In-Hyuk Kwon
- 12:50 Downscaling Mesoscale Wind Fields Using Lightweight U-shaped State Space Duality Network
10 m Authors: Qingguo Su (National University of Defense Technology); Shi, Xinjie (National University of Defense Technology); Wang, Wuxin (National University of Defense Technology); Ni, Weicheng (National University of Defense Technology); Duan, Boheng (National University of Defense Technology); Ren, Kaijun (National University of Defense Technology)
- 1:00 Accurate initial field estimation for weather forecasting with a variational constrained neural network
10 m Authors: Wuxin Wang (National University of Defense Technology); Su, Qingguo (National University of Defense Technology); Shi, Xinjie (National University of Defense Technology); Ni, Weicheng (National University of Defense Technology); Duan, Boheng (National University of Defense Technology); Ren, Kaijun (National University of Defense Technology)
- 1:10 Enhancing Short-Range Weather Forecasts with Oceansat-3 Retrieved Wind Vectors in WRF
5 m Authors: Meenakshi Shenoy (NCMRWF); Dutta, Suryakanti (NCMRWF); Desamsetti, Srinivas (NCMRWF) and Routray, Ashish (NCMRWF)
- 1:15 **Lunch** (1 hour)
- 2:15 Performance Evaluation of HY-2 Satellite Scatterometer Wind Data in the Yin He Global Spectral Model
10 m Authors: Boheng Duan (National University of Defense Technology); Wang, Wuxin (National University of Defense Technology); Shi, Xinjie (National University of Defense Technology); Ni, Weicheng (National University of Defense Technology); Su, Qingguo (National University of Defense Technology); Ren, Kaijun (National University of Defense Technology)

2:25 Brief Discussion (10 minutes)

Lightning Poster Talks: Afternoon Session (1 1/2 minutes each)

chair: Giuseppe Grieco

All speakers line up (or prepare on line) to each give a one slide summary

2:38 The Global L-band Observatory for Water Cycle Studies (GLOWS): High Resolution L-band Wind speeds

Author: David Long

2:40 Arctic Sea Ice Extent Mapping Using Artificial Intelligence

Authors: Nathan Roberts (BYU); David Long (BYU)

2:42 Progress in the Analysis of Antarctica as a Target for Multifrequency Cross Calibration Between ASCAT and NSCAT

Authors: Nathan Porter (Brigham Young University); Long David (Brigham Young University)

2:44 Comprehensive Validation of Imaging Wind and Rain Atmospheric Profiler Wind Measurements

Authors: Zorana Jelenak (NOAA/NESDIS/STAR-UCAR), Sapp, Joseph (Global Science & Technology, Inc); Shoup, Casey (Global Science & Technology, Inc); Bjorland, Clayton (Tomorrow.IO) and Chang, Paul S. (NOAA/NESDIS/STAR)

2:46 Data denial experiments of scatterometer winds in the JMA's global data assimilation system

Authors: Yusuke Ioka (Japan Meteorological Agency)

2:48 Let Us Help Tell Your Research Story

Authors: Annette deCharon and Mark Bourassa

2:50 C- and Ku-band enhanced-resolution radar backscatter image products

Authors: Julie Z. Miller (University of Colorado Boulder); Long, David G. (Brigham Young University)

2:52 Detecting landscape degradation in the South American Pantanal using ASCAT microwave imaging

Authors: Alex N. McBride (BYU Microwave Earth Remote Sensing Lab), Long, David G. (BYU Electrical and Computer Engineering Department)

2:54 OSCAT Simultaneous Wind/Rain Geophysical Model Function

Authors: Benjamin Fogg (BYU); Long, David (BYU)

2:56 Multidecadal OSCAT Calibrated sigma0 database using the Amazon

Authors: Benjamin Fogg (BYU); Long, David (BYU)

2:58 A theory to explain tropical cyclone kinetic energy spectra

Galperin, Boris (Univ of South Florida), Nickerson, Alexander (Univ of South Florida), King, Gregory (Independent Scholar, Selkirk, UK), Zhang, Jun (NOAA Hurricane Research Division)

3:00 Break (30 min)

Outreach and Communicating Science

Chair: Justin Stopa

3:30 Expanding the Impact of Your Research

5 m Annette deCharon and Mark Bourassa

Air/Sea Interaction, Session 1

co-chairs: Kayli Matsuyoshi and Justin Stopa

3:35 Marine Heatwaves Increased the Risk of Extreme Precipitation Events Along Southwest Coast of India during Indian Summer Monsoon

15 m Authors: D. L. Suhas (U. of Colorado); Weiqing Han (U. of Colorado); Shinoda, Toshiaki (Texas A&M U., CC); Sun, Rui (Scripps); Subramanian, Aneesh (U. of Colorado); Alexander, Mike (NOAA)

3:50 Surface winds, air-sea flux, and SST variability associated with atmospheric rivers over the Arabian Sea

15 m Authors: Toshi Shinoda (Texas A&M University - Corpus Christi), Suyang Pei (Texas A&M University - Corpus Christi), Weiqing Han (University of Colorado)

4:05 Seasonal dependence of atmospheric river impacts on marine heatwaves

15 m Authors: Sugiong Hu (Nicholas School of the Environment, Duke University, Durham, NC, USA); Shineng Hu (Nicholas School of the Environment, Duke University, Durham, NC, USA)

4:20 An Algorithm to Develop a Satellite-Based Atmospheric River Database

15 m Authors: Shineng Hu (Duke University); Liu, Tianying (Ohio State University)

4:35 Discussion (25 minutes)

5:00 Close of day

Wednesday May 7th

9:00 Meeting Summary: Tuesday's Activities
10 m TBD

Retrieval Methodologies Session 1

Chair: Roger Samelson Ad Stoffelen

9:10 Wind and wave signatures in wind scatterometry

15 m Authors: Xingou Xu (NSSC,CAS); Stoffelen Ad (KNMI)

9:25 CANVAS project: A Calibration and Validation tool for SAR

10 m Authors: Alberto Rabaneda (MET Norway); Grieco, Giuseppe (CNR-ISMAR); Portabella, Marcos (ICM-CSIC); Cossu, Federico (ICM-CSIC); Malnes, Eirik (NORCE); Yitayew, Temesgen (NORCE)

9:35 A Novel Optimization Approach for Ocean Vector Wind Retrievals Using SAR Measurements

10 m Authors: Yuting Zhu (The School of Electronic and Communication Engineering, Sun Yat-sen University) Marcos Portabella (Barcelona Expert Center (BEC), Institute of Marine Sciences (ICM-CSIC)), Giuseppe Grieco (Istituto di Scienze Marine - Consiglio Nazionale delle Ricerche (CNR-ISMAR), Calata)

9:45 Review of the NSCAT GMF in Ku-band Scatterometer Wind Retrieval

15 m Authors: Zhixiong Wang (NUIST), Ad Stoffelen (KNMI), Anton Verhoef (KNMI), Fangli Dou (CMA), Wenming Lin (NUIST), Juhong Zou (NSOAS)

10:00 A Cross-Comparison Validation between Sentinel-3A SRAL Altimeter and Metop ASCAT-B Scatterometer Wind Speed

15 m Authors: Salvatore Dinardo (EUMETSAT); Lucas, Bruno (EUMETSAT); Scharroo Remko (EUMETSAT); Nogueira Lodo Carolina (EUMETSAT)

10:15 Discussion (15 m)

10:30 Break (30 m)

Oceanographic Processes Session Ocean

Chair: Lisan Yu and Kathleen Dohan

11:00 The Role of the Lagrangian Mean Flow in Air-Sea Momentum Flux

10 m Authors: Lulabel Ruiz Seitz (Brown University), Mara Freilich (Brown University), Nicholas Pizzo (URI), Luc Lenain (UCSD), Kayli Matsuyoshi (UCSD)

11:10 Machine Learning Approaches for Characterizing Upwelling-Favorable Winds along Complex Coastlines

15 m Authors: Steven Morey (Florida A&M University)

11:25 Between the clouds: An unprecedented view of ocean surface currents

15 m Authors: Luc Lenain (SIO/UCSD); Barkan, Roy (UCLA/TAU); Pizzo, Nick (URI); Srinivasan, Kaushik (UCLA)

11:40 Near-surface wind and wave drift currents in the coupled air-sea boundary layer

15 m Authors: R. M Samelson

11:55 Discussion (35 minutes)

Air/Sea Interaction, Session 2

co-chairs: Toshi Shinoda and Mara Freilich

12:30 Momentum and Energy Fluxes in Wind-Forced Breaking Waves at High Wind Speeds

15 m Authors: Nicolo Scapin (Princeton University); Wu, Jiarong (Courant Institute); Farrar, J. Thomas (WHOI), Chapron, Bertrand (IFREMER); Popinet, Stephane (Sorbonne University), Deike, Luc (Princeton University)

12:45 Observations and theory of the initial waves generated by wind

15 m Authors: Nick Pizzo (University of Rhode Island); Goering, Andrew (University of Rhode Island); Addona, Fabio (University of Delaware); Veron, Fabrice (University of Delaware)

1:00 Multilayer simulation of wind-forced breaking wave fields statistics and Langmuir circulation

15m Authors: Rui Yang (Princeton University); Wu, Jiarong (NYU); Popinet, Stephane (Sorbonne Université and CNRS); Deike, Luc (Princeton University)

1:15 **Lunch** (1 hour)

2:15 Wind roll impacts on ocean circulation

10 m Authors: Ernesto Rodriguez (JPL/Caltech), Renault, Lionel (Univerite Toulouse, LEGOS, IRD), Conejero, Carlos (Universite Toulouse, LEGOS, IRD)

2:25 Kinematics of broad-banded gravity-capillary waves coupled with boundary layers

10 m Authors: Clara Martin Blanco (Princeton University); Scapin, Nicolo (Princeton University); Wu, Jiarong (Courant Institute of Mathematical Sciences); Popinet, Stéphane (CNRS); Farrar, Tom (WHOI); Chapron, Bertrand (Ifremer); Deike, Luc (Princeton University)

2:35 Discussion (25 m)

3:00 Break (30 m)

Meteorological Science and Applications, Session 1

Chair: Lucrezia Ricciardulli and Marcos Portabella

3:30 Relationship of rain rates and marine boundary layer states as observed by synthetic aperture radar over the subtropical ocean

15 m Authors: Justin Stopa (The University of Hawai'i at Mānoa); Eastman, Ryan (The University of Washington); Vandemark, Doug (The University of New Hampshire); Foster, Ralph (The University of Washington); Mouche, Alexis (IFREMER); Chapron, Bertrand (IFREMER)

3:45 Inferring Tropical Cyclone Boundary Layer Roll Circulations from SAR

15 m Authors: Ralph Foster (UW); Jelenak, Zorana (NOAA, NESDIS); Sapp, Joe (NOAA NESDIS); Chang, Paul (NOAA NESDIS); Mouche, Alexis (Ifremer); Chapron, Bertrand (IFREMER)

4:00 Estimating Surface Winds from IWRAP wind speed profiles

10 m Authors: Maggie Zoermer (FSU), Mark Bourassa (FSU), and Zorana Jelenak (UCAR)

4:10 Characterization of hurricane structure from satellite-derived wind fields

10 m Authors: Florimond, Thomas (Université de Nantes); Marcos Portabella (BEC, ICM-CSIC); Lin, Wenming (NUIST); Washburn, Lucas (Brown University); Cossu, Federico (BEC, ICM-CSIC); Rabaneda, Albert S. (Met Norway)

4:20 Discussion of Hurricane Observation Strategy (40 m)

5:00 Close of day

Thursday May 8th

9:00 Meeting Summary: Wednesday's Activities
10 m TBD

Retrieval Methodologies & Validation, Session 2

co-chairs: Bryan Stiles and Craig Anderson

9:10 The calibration and reprocessing of the ASCAT-A mission

15 m Narges Khosravi, Simon Kok Lupemba, Craig Anderson, Stefanie Linow

9:25 WindRAD scatterometer quality control in rain

15 m Authors: Zhen Li (KNMI); Verhoef, Anton (KNMI); Stoffelen, Ad (KNMI)

9:40 Triple Collocation-Based Network for Ocean Surface Wind Speed Retrieval on CYGNSS

10 m Authors: Xinjie Shi (National University of Defense Technology); Su, Qingguo (National University of Defense Technology); Wang, Wuxin (National University of Defense Technology); Ni, Weicheng (National University of Defense Technology); Duan, Boheng (National University of Defense Technology); Ren, Kaijun (National University of Defense Technology)

9:50 On the COWVR wind vector retrieval capabilities and the use of COWVR+TMPEST sensor combination for precipitation vertical structure estimates

15 m Authors: Federica Polverari, Mary Morris, Shannon T. Brown, F. Joseph Turk, Svetla Hristova-Veleva, Tony Lee (Jet Propulsion Laboratory, California Institute of Technology)

10:05 RSS Updates on Satellite Wind Processing and Validation

10 m Ricciardulli, Lucrezia (RSS); Meissner, Thomas (RSS); Manaster, Andrew (RSS); Lindsley, Richard (RSS); Mears, Carl (RSS); Wentz, Katherine (RSS)

10:15 Discussion (15 m, cross swath consistency, SST, air density and communication)

10:30 Break (30 m)

Retrieval Methodologies & Validation, Session 2 (continued)

co-chairs: Mark Bourassa and Tony Lee

11:00 Analysis of Coastal Winds Derived From QuikSCAT at OSI-SAF

15 m Authors: Giuseppe Grieco (ISMAR-CNR); Portabella, Marcos (Barcelona Expert Center (ICM-CSIC); Cossu, Federico (ICM-CSIC); Stoffelen, Ad (KNMI); Verhoef, Anton (KNMI); Vogelzang, Jur (KNMI); Stiles, Bryan (NASA-JPL)

11:15 Buoy Validation of SAR Derived Ocean Surface Winds using CMOD7

10 m Authors: Christopher Jackson (Global Ocean Associates); Lazzaro, Rachel (Global Science and Technology Corp); Moore-Torres, Jessie (Global Science and Technology Corp); Ruff, Tyler (Global Science and Technology Corp);

11:25 Geophysical Model Function to Retrieve Ocean Surface Wind Speeds with High-Resolution X-band Synthetic Aperture Radar (SAR) Data

10 m Authors: Yuriy Goncharenko (Capella Space Corporation); Jackson, Christopher (Global Ocean Associates); Farquharson, Gordon (Capella Space Corporation)

11:35 ASCAT higher resolution winds closer to the coast

15 m Authors: Anton Verhoef (KNMI); Verspeek, Jeroen (KNMI); Stoffelen, Ad (KNMI)

11:50 Comprehensive Validation Analysis of the Stepped Frequency Microwave Radiometer Data from 2024 Hurricane Season – Implications for the Entire 20 Years Data Record

15 m Authors: Zorana Jelenak (NOAA/NESDIS/STAR-UCAR); Holback, Heather (FSU, NGI, NOAA/AOML/HRD); Sapp, Joseph (Global Science & Technology, Inc); Shoup, Casey (Global Science & Technology, Inc); Alsheiss, Suleiman (Global Science & Technology, Inc); Bjorland, Clayton (Tomorrow.IO); Chang, Paul, S. (NOAA/NESDIS/STAR)

12:05 Discussion (25 m; high resolution & coastal winds)

Meteorological Processes

co-chairs: Federica Polverari and Ad Stoffelen

- 12:30 11:00 Improving Ocean Wind Forcing Reanalysis and Forecasting: Machine Learning Approaches for NWP Bias Correction
- 10 m Authors: Evgeniia Makarova (BEC-ICM, CSIC); Portabella, Marcos (BEC-ICM, CSIC); Stoffelen, Ad (KNMI); García León, Manuel (NOW Systems); Sotillo, Marcos (NOW Systems); Vilaplana Besler, Veronica (UPC)
- 12:40 Hadley Cell structure and evolution revisited: Did the use of retrieval algorithms, that are consistent across different instruments, alleviate the previously found discontinuity in Hadley cell width when changing the record from the QuikSCAT to the ASCAT era?
- 15 m Authors: Svetla Hristova-Veleva (JPL); Haddad, Ziad (JPL); Stiles, Bryan (JPL); Polverari, Federica (JPL); Fore, Alexander (JPL); Wineteer, Alexander (JPL); Bourassa, Mark (FSU); Wright, Ethan (FSU); O'Neill, Larry (OSU); Vendemark, Douglass (UNH); Moroni, David (JPL); Henze, Dean (JPL)
- 12:55 Examining the diurnal variability in the Hadley cell width using CYGNSS wind speed observations complemented with a constellation of satellite instruments
- 15 m Authors: Federica Polverari (Jet Propulsion Laboratory, California Institute of Technology); Hristova-Veleva, Svetla (Jet Propulsion Laboratory, California Institute of Technology); Turk, F. Joseph (Jet Propulsion Laboratory, California Institute of Technology)
- 1:15 Lunch** (60 m)
- 2:10 Intraseasonal to Decadal Wind Variability from Satellite Observations
- 15 m Authors: Lucrezia Ricciardulli (RSS); Mears, Carl (RSS)
- 2:25 Discussion (Large- and/or Long-scale Wind Variability; 35m)
- 3:00 break (30 m)
- 3:30 Meeting Summary, Tasks and Goals for (or before) the next meeting.

List of Poster by Session

Mission Updates and Remote Sensing Development Session

Evaluation and Applications of Ocean Surface Wind Product From Fengyun-3 and Tianmu-1 GNSS-R Constellations

Authors: Feixiong Huang (NSSC/CAS); Yin, Cong (NSSC/CAS); Zhai, Xiaochun (NSMC/CMA); Sun, Yueqiang (NSSC/CAS), Xia, Junming (NSSC/CAS); Bai, Weihua (NSSC/CAS)

The Global L-band Observatory for Water Cycle Studies (GLOWS): High Resolution L-band Wind speeds

Author: David Long

Arctic Sea Ice Extent Mapping Using Artificial Intelligence

Authors: Nathan Roberts (BYU); David Long (BYU)

Ocean Vector Winds from the EOS6 scatterometer

Authors: Alexander Fore (JPL); Bryan Stiles (JPL)

Progress in the Analysis of Antarctica as a Target for Multifrequency Cross Calibration Between ASCAT and NSCAT

Authors: Nathan Porter (Brigham Young University); Long David (Brigham Young University)

Air/Sea Interaction Session

Coupling Atmospheric Dynamics and Ocean with Winds from Satellites

Authors: Stavroula Biri (KNMI); Stoffelen, Ad (KNMI)

The effect of the Stokes drift on submesoscale feature evolution

Authors: Kayli Matsuyoshi (Scripps Institution of Oceanography, UCSD); Lenain, Luc (Scripps Institution of Oceanography, UCSD); Freilich, Mara (Brown University); Pizzo, Nick (Graduate School of Oceanography, URI)

Modeling Spray Impacts on Wind Speed, Stress, and Drag Coefficients

Authors: Renee Richardson (FSU), Mark Bourassa (FSU)

Identifying tropical cold pools with singularity exponents

Authors: Gregory King (Independent Scholar, Selkirk, UK); Portabella, Marcos (Institut de Ciències del Mar (ICM - CSIC));

Lin, Wenming (School of Marine Sciences, Nanjing University of Information Science and Technology)

A theory to explain tropical cyclone kinetic energy spectra

Galperin, Boris (Univ of South Florida), Nickerson, Alexander (Univ of South Florida), King, Gregory (Independent Scholar, Selkirk, UK), Zhang, Jun (NOAA Hurricane Research Division)

Retrieval Methodologies Session

ASCAT higher resolution winds closer to the coast

Authors: Anton Verhoef (KNMI); Verspeek, Jeroen (KNMI); Stoffelen, Ad (KNMI)

Comprehensive Validation of Imaging Wind and Rain Atmospheric Profiler Wind Measurements

Authors: Zorana Jelenak (NOAA/NESDIS/STAR-UCAR), Sapp, Joseph (Global Science & Technology, Inc); Shoup, Casey (Global Science & Technology, Inc); Bjorland, Clayton (Tomorrow.IO) and Chang, Paul S. (NOAA/NESDIS/STAR)

Meteorological Processes Session

ASCAT scatterometer wind product calibration and reprocessing

Authors: Jeroen Verspeek (KNMI); Stoffelen, Ad (KNMI); Verhoef, Anton (KNMI)

Data denial experiments of scatterometer winds in the JMA's global data assimilation system

Authors: Yusuke Ioka (Japan Meteorological Agency)

General Submissions

Let Us Help Tell Your Research Story

Authors: Annette deCharon and Mark Bourassa

C- and Ku-band enhanced-resolution radar backscatter image products

Authors: Julie Z. Miller (University of Colorado Boulder); Long, David G. (Brigham Young University)

Detecting landscape degradation in the South American Pantanal using ASCAT microwave imaging

Authors: Alex N. McBride (BYU Microwave Earth Remote Sensing Lab), Long, David G. (BYU Electrical and Computer Engineering Department)

OSCAT Simultaneous Wind/Rain Geophysical Model Function

Authors: Benjamin Fogg (BYU); Long, David (BYU)

Multidecadal OSCAT Calibrated sigma0 database using the Amazon

Authors: Benjamin Fogg (BYU); Long, David (BYU)