





International Ocean Vector Wind Science Team Meeting May 19-21, 2015



Tuesday Morning

8:30 Registration

Programmatic Talks Chair: Mark Bourassa

9:00 Welcome

Mark Bourassa (Florida State University)

9:05 The Ocean Surface Vector Wind Constellation: Status, Health and Future? Paul Chang (NOAA/NESDIS), Julia Figa Saldana, B.S. Gohil

9:12 NASA Program Status - Ocean Vector Winds Science Team Eric Lindstrom (NASA Headquarters)

9:20 Status overview of the European Scatterometer activities Julia Figa-Saldana (EUMETSAT) and Klaus Scipal (ESTEC)

9:27 ISRO's Scatterometery Programme Raj Kumar (Space Applications Centre) Tapan Misra, Prantik Chakraborty, B S Gohil, Kirti Padia

Oceanographic Applications

9:35 Evaluation of wind stress curl and divergence represented by CMIP5 models using QuikSCAT and atmospheric reanalysis products

Tong Lee (Jet Propulsion Laboratory)

9:50 OSCAR Mixed Layer and Surface Currents Kathleen Dohan (Earth and Space Research)

10:05 The Ocean Response to Wind Relaxations off California, U.S.A.

Melanie Fewings (University of Connecticut - Avery Point) Libe Washburn, Clive E. Dorman, Christopher Gotschalk, Kevin S. Brown, Ke Chen, John Bane, Maria Aristizabal, Dylan Oldenburg

Pre-break Poster Highlights (one minute and one slide summaries)

10:13 The role of wind forcing on sea surface temperature frontal variability in Eastern Boundary Currents Renato Castelao (University of Georgia), Yuntao Wang; Yeping Yuan

10:14 Discussion (part 1)

10:30 Break

11:00 Complete (Part 2)

Climate Working Group

11:15 Climate WG Summary Frank Wentz (Remote Sensing Systems), Ad Stoffelen (Invited)

11:30 Discussion

Climate Data Record Development and Analysis

Co-Chair: Frank Wentz and Ad Stoffelen

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12:15 From tandem missions to RapidScat – uncovering the diurnal signal in the large-scale circulations. Implications for the climate record of the ocean surface winds.

Svetla Hristova-Veleva (JPL) Ernesto Rodriguez, Ziad Haddad, Bryan Stiles, F. Joseph Turk

12:30 Lunch Break

Co-Chairs: Steve Morey and Kathleen Dohan

Tuesday Afternoon

Climate Data Record Development and Analysis (continued)

Co-Chair: Frank Wentz and Ad Stoffelen

- 1:30 A long-term ocean wind and stress vector CDR
 - Ad Stoffelen (KNMI), Anton Verhoef, Jur Vogelzang, Jos de Kloe, Maria Belmonte, Jeroen Verspeek
- 1:45 Bringing Consistency Among Scatterometer Winds Using Radiometer Observations Lucrezia Ricciardulli (Remote Sensing Systems), and Frank Wentz
- 2:00 An analysis of the data quality and long term trends in the reprocessed radar backscatter from ASCAT-A Craig Anderson (EUMETSAT), J Figa-Saldaña, R Huckle, JJW Wilson, F Ticconi, J Miller, C Duff & H Bauch
- 2:15 A 17-Year Climate Record of Diurnal Winds Derived from the TRMM Microwave Imager Frank Wentz (Remote Sensing Systems), Lucrezia Ricciardulli

Pre-break Poster Highlights (one minute and one slide summaries)

- 2:30 Satellite Observation Requirements for Global Trends in Extreme Wind Speed and Wave Height Jason Keefer (COAPS, Florida State University), and Dr. Mark A. Bourassa
- 2:31 A 15-year multiyear/first-year Arctic sea ice climate record from OSCAT and QuikSCAT David Long (Brigham Young University) David B. Lindell
- 2:32 OSCAT Sea Ice Extent Product
 David Long (Brigham Young University) Jordan Hill Waves
- 2:33 Break and Poster Viewing
- 3:15 Towards Homogenization of Scatterometer Wind Retrievals Abderrahim Bentamy (IFREMER), Semyon A. Grodsky, Bertrand Chapron, and Anis Elyouncha
- 3:30 Decadal change in ocean surface wind circulation: 1988-2014 Lisan Yu (Woods Hole Oceanographic Institution) and 5 collaborators
- 3:45 Assessment of the corrected CMOD5.n ocean backscatter model using ERS scatterometer data Anis Elyouncha (Royal Military Academy), and Xavier Neyt
- 4:00 Towards the characterization and removal/mitigation of scatterometer wind sampling errors
 Ana Trindade (Institut de Ciencies del Mar (ICM-CSIC)) M. Portabella, W. Lin, A. Stoffelen and A. Verhoef
- 4:15 Surface Zonal Wind Patterns Along the Equator During El Niño and La Niña in 2000-2015 David Halpern (Jet Propulsion Laboratory)
- 4:30 The role of ocean dynamical processes in determining intraseasonal SST Variability in the tropical Indian Ocean: with implication on MJO initiation
 - Weiging Han (Department of atmospheric and oceanic sciences, University of Colorado, Boulder, Co 80309) and Yuanlong Li
- 4:45 Discussion
- 5:15 End of Sessions on Tuesday

Wednesday Morning

Current and Future Ocean Vector Wind Mission Updates

Co-Chairs: Ernesto Rodriguez and Naoto Ebuchi

9:00 CYGNSS Mission Update

Chris Ruf (University Of Michigan) Paul Chang, Maria Paola Clarizia, Scott Gleason, Zorana Jelenak, and Aaron Ridley

9:07 Update on the Winds and Currents Mission (WaCM)

Mark Bourassa (COAPS & EOAS, Florida State University) Ernesto Rodriguez, Dudley Chelton, Tom Farrar, David Long, Thomas Kilpatrick, Nikolai Maxeminko, Roger Samuelson, Frank Wentz, Shang-Ping Xie

9:15 Submesoscale and Mesoscale Ekman Pumping on Scales Shorter than 100 km Dudley Chelton (Oregon State University)

9:30 Simulation and Feasibility Study of Spaceborne Doppler Scatterometer for Ocean Surface Currents and Winds Xiaolon Dong (National Space Science Center, Chinese Academy of Sciences) Qingliu Bao, Di Zihu

9:45 L-Band High Resolution Remote Sensing of Ocean Surface Winds

Simon Yueh (Jet Propulsion Laboratory, California Institute of Technology) Alexander Fore, Wenqing Tang, and Bryan Stiles

10:00 A Method for Quality Assessment of Scatterometer-retrieved wind fields

Zengzhou Hao (The Second Institute of Oceanography, SOA) Delu Pan, Fang Gong and Tianyu Wang

Pre-break Poster Highlights (one minute and one slide summaries)

10:15 Evaluation and Validation of RapidScat Ocean Surface Vector Winds

FAOZI SAID (Global Science & Technology Inc // NOAA NESDIS) Seubson Soisuvarn, Paul S. Chang, Zorana Jelenak, Joseph Sienkiewicz, Michael Brennan

10:16 SFMR Reprocessing for High Ocean Winds

Suleiman Alsweiss (NOAA/NESDIS/STAR) Joe Sapp, Zorana Jelenak, Paul Chang and James Carswell

10:17 X-factor and the spatial response functions of QuikSCAT and RapidScat David Long (Brigham Young University) Nathan M. Madsen, and John Neidfeldt

10:18 Evaluation and Validation of Simulated CYGNSS Winds over Large Range of Tropical Cyclones Seubson Soisuvarn (NOAA/NESDIS/STAR-UCAR) Faozi Said, Zorana Jelenak, Paul S. Chang

10:19 The Simulation And Performance Analysis Of The CFOSAT RFSCAT

Risheng Yun (National Space Science Center, Chinese Academy of Sciences) XingouXu, Xiaolong Dong, Di Zhu

10:20 Evaluation of Ocean Vector Wind Data from ISS/RapidScat Naoto Ebuchi (Hokkaido University)

10:30 Break and Poster Viewing

11:00 On the Quality of HY-2A Scatterometer Wind

Wenming Lin (Institut de Ciencies del Mar (ICM - CSIC)) Marcos Portabella, Ad Stoffelen; Anton Verhoef; Youguang Zhang; Mingsen Lin; Juhong Zou; Shuyan Lang

11:15 Analysis of Radio Frequency Interference in ASCAT Backscatter Measurements

Julia Figa-Saldana (EUMETSAT) Francesca Ticconi, Craig Anderson, Julian J.W.Wilson

11:30 RapidScat Initial Results for Cross-Calibration and Diurnal Cycles

Ernesto Rodriguez (JPL/CalTech) S. Hristova-Veleva

11:45 Discussion

Meteorological Applications

Co-Chairs: Tom Kilpatrick and Marcos Portabella

12:00 Diurnal wind variability observed by RapidSCAT and comparison to model simulations

Thomas Kilpatrick (Scripps Institution of Oceanography, UCSD) Shang-Ping Xie, Sarah Gille

12:15 Using scatterometer-measured vector winds to study high-impact weather events

Timothy Lang (NASA Marshall Space Flight Center) Steven W. Nesbitt, Stella L. Choi, Themis Chronis, George Priftis

12:30 Lunch

Wednesday Afternoon

1:30	Improving High-Impact Tropical Weather Prediction Using Ocean Vector Wind Data and a High-Resolution Coupled Atmosphere-Wave-Ocean Model
	Shuyi Chen (RSMAS/University of Miami) and Brandon Kerns
1:45	Estimates of Near-surface Inflow in Tropical Cyclones From Satellite Scatterometers
	Ralph Foster (APL, University of Washington) Jun Zhang (NOAA/HRD, Miami, FL); Peter Black (Monterey CA)
1:53	National Hurricane Center Ocean Vector Wind Update
	Michael Brennan (NOAA/NWS/NCEP/National Hurricane Center)
2:00	Hurricane Force Winds in Extratropical Cyclones
	Joseph Sienkiewicz (NOAA/NWS Ocean Prediction Center) Benjamin Albright
2:15	Study for utilizing high wind speed data on JMA's Global NWP system
20	Masami Moriya (Japan Meteorological Agency)
2:30	Scatterometer winds at Météo-France: usage and new datasets
2.00	Christophe Payan (Meteo-France and CNRS), and Vincent Chabot
Pre-bi	eak Poster Highlights (one minute and one slide summaries)
	Offshore wind energy planning map for the Aegean Sea based on Envisat ASAR
20	Charlotte Hasager (DTU Wind Energy) Dr. Merete Badger
2:47	Intermittency of surface convergence in mid-latitude storm tracks
	Larry O'Neill (Oregon State University) Tracy Haack, Eric Skyllingstad, Dudley Chelton
2:48	ASCAT observations of downdrafts from mesoscale convective systems
20	Thomas Kilpatrick (Scripps Institution of Oceanography, UCSD) Shang-Ping Xie
2:49	Scatterometer surface winds for offshore wind energy applications
	Ioanna Karagali (DTU Wind Energy)
2:50	Neural Network Models of Sea Surface Rainrate Estimation from SeaWinds Data
	David Weissman (Hofstra University), Simona Doboli, and Anthony Esposito
2:51	Wind stress at the ocean surface from AltiKa measurements
	MM Ali (COAPS/FSU), Mark A. Bourssa, Suchandra A. Bhowmick, Rashmi Sharma and K. Niharika
2:52	Contribution of Monthly and Regional Rainfall to the Strength of Indian Summer Monsoon
	Yangxing Zheng, M. M. Ali, and Mark A. Bourassa
3:00	Break and Poster Viewing
3:45	Update on the Scatterometer Impact Studies at ECMWF
	Giovanna De Chiara (ECMWF), S. J. English, J.R. Bidlot, P.A.E.M. Janssen
3:52	An Improved 2DVAR Ambiguity Removal For ASCAT Wind Inversion
	Marcos Portabella (Institut de Ciencies del Mar (ICM-CSIC)), Wenming Lin, Jur Vogelzang, Ad Stoffelen, Anton Verhoef
4:00	Discussion
Chass	Chair, lim Edgam, Ca Chair, Mark Dayragaa
	S Working Group Chair: Jim Edson; Co-Chair: Mark Bourassa
4:30	Stress Summary Line Edger (LICONN)
4.45	Jim Edson (UCONN)
4:45	Surface Stress for Hurricane Winds Mark Pourses (COADS & FOAS Florida State University) Jacob Keefer Mark Pourell Nicela Thebarra
4.52	Mark Bourassa (COAPS & EOAS, Florida State University) Jason Keefer, Mark Powell, Nicole Theberge
4:53	Ocean wind stress as measured using satellite radiometer and scatterometer platforms
E.00	Doug Vandemark (Univ. of New Hampshire, EOS) and J. Edson, M. Emond
5:00	Drag coefficient in tropical cyclones W. Timethy J. iv. (let Propulsion Leberators) Wenging Tong, Vicesy Vic
F.00	W Timothy Liu (Jet Propulsion Laboratory) Wenqing Tang, Xiaosu Xie
5:08	Initial Discussion (continued tomorrow)

Thursday Morning

Stress Working Group (continued)

9:00 Discussion (continued)

Atmosphere and Ocean Coupling

Co-Chairs: Larry O'Neill and Abderrahim Bentamy

9:30 Air-sea coupling in an eastern boundary current region

Eric Skyllingstad (Oregon State University) R. M. Samelson, D. B. Chelton

9:45 Characterization of the frontal air-sea interaction by spectral response functions

Niklas Schneider (International Pacific Research Center, University of Hawaii) Kazuyoshi Kikuchi

10:00 Impact Of Sub-Cell Wind Variability On ASCAT Wind Quality

Marcos Portabella (Institut de Ciencies del Mar (ICM-CSIC)) Wenming Lin, Ad Stoffelen, Jur Vogelzang, Anton Verhoef

Pre-break Poster Highlights (one minute and one slide summaries)

10:15 Modeling the diurnal variability of SST

Ioanna Karagali (DTU Wind Energy) Jacob L. Høyer, and Craig J. Donlon

10:16 Annual variation of sea surface temperature in the central North Pacific

Masahisa Kubota (School of Marine Science and Technology, Tokai University) and Tsutomu Hihara

10:17 Wave and Wind Direction Effects on Ocean Surface Emissivity Measurements

Heather Holbach (COAPS & EOAS Florida State University) Eric Uhlhorn, Mark Bourassa

10:18 High-Frequency Wind and Sea Surface Height Variability in the Tropics

Tom Farrar (Woods Hole Oceanographic Institution) Theodore S. Durland

10:19 Extreme Coastal Wind Events - What Doesn't the Scatterometer See?

P. Ted Strub (Oregon State University) Corinne James

10:20 ASCAT Near-Coastal Wind Retrieval with Land Fraction Thresholding

David Long (Brigham Young University) Richard D. Lindsley

10:21 Implications of Scatterometry in Polar Mesocyclone Surface Turbulent Flux Simulations and Reanalysis Kyle Ahern and Mark Bourassa

10:22 Discussion (part 1)

10:30 Break and Poster Viewing

11:00 Discussion (part 2)

Coastal Working Group

11:15 Introduction for Coastal Working Group

Melanie Fewings

11:30 A modified coastal upwelling index accounting for non-local forcing

Steven Morey (COAPS-FSU)

11:45 Impact of fine-scale wind stress curl structures on coastal upwelling dynamics: The Benguela system as a case study Fabien Desbiolles (LPO (CNRS-Iferemer-IRD-UBO) & LOS (Ifremer)) Bruno Blanke, Abderrahim Bentamy

12:00 Highlights of the ASCAT high resolution processing workshop

Ad Stoffelen (KNMI) Julia Figa

12:15 Bringing Winds Closer to the Coast with QuikSCAT and RapidScat

Alexander Fore (Jet Propulsion Laboratory) Bryan Stiles, Ted Strub, Ernesto Rodriguez

12:30 Lunch

Co-Chairs: Melanie Fewings, Steve Morey, and Bryan Stiles

Chair: Jim Edson; Co-Chair: Mark Bourassa

Thursday Afternoon

1:30 Discussion (Coastal Working Group)

New Products and Applications

2:00 Diurnal Wind Variability from RapidScat

Sarah Gille (Scripps Institution of Oceanography, University of California San Diego), San Nguyen, Devon Northcott, Jasper Nutt, Aneesh Subramanian

Co-Chairs: Julia Figa and David Moroni

2:15 All-Weather ISS RapidScat Wind Speeds

Bryan Stiles (Jet Propulsion Laboratory) Alex G. Fore, W. Lee Poulsen and Svetla Hristova-Veleva

2:30 New Ocean Vector Wind Datasets and Services at the NASA PO.DAAC

David Moroni (JPL - PO.DAAC)

Pre-break Poster Highlights (one minute and one slide summaries)

2:38 NASA Working Group for Best Practices in Data Quality

David Moroni (JPL - PO.DAAC)

2:39 A multi-scale L3 gridding of 12.5km QuikSCAT L2B V3 data

T. Mike Chin (JPL / CalTech) David Moroni, Michelle Gierach, Tony Lee

2:40 Examining the Variability of Ocean Surface Winds and Precipitation from Near-Coincident RapidScat and GPM Constellation Radiometer Data

Joe Turk (Jet Propulsion Laboratory, California Institute of Technology) Svetla Hristova-Veleva

2:41 Calibration of RapidScat σ^0 over Land

David Long (Brigham Young University) Nathan M. Madsen

2:42 A Parameterized ASCAT Measurement Spatial Response Function Richard Lindsley (Brigham Young University) Craig Anderson, David Long

2:43 Construction and Intercomparisons of Gridded Data Sets of Global Surface Wind Vector Field by Satellite Scatterometers Kunio Kutsuwada (Tokai University) Suguru Kameda

3:00 Break and Poster Viewing

3:30 Diurnal variations of σ^0 over land from RapidScat Observations

David Long (Brigham Young University) Aaron C. Paget, Nathan M. Madsen

3:45 A new GMF for estimating whitecap coverage from Ku-band scatterometers

Aaron Paget (Microwave Earth Remote Sensing, Brigham Young University, Provo, UT)

4:00 Combining wind and rain in spaceborne scatterometer observations: modeling the splash effects in the sea surface backscattering coefficient

Federica Polverari (Sapienza University of Rome - Jet Propulsion Laboratory, California Institute of Technology) F. S. Marzano; L. Pulvirenti; N. Pierdicca; S. M. Hristova-Veleva; F. J. Turk

4:15 Improvement of the CMOD GMF for C-Band Scatterometers

Ad Stoffelen (KNMI), Jeroen Verspeek, Lucrezia Ricciardulli, Gerd-Jan van Zadelhoff

4:23 ASCAT-6.25 product quality

Jurriaan Vogelzang (KNMI) Ad Stoffelen (KNMI) and Richard Lindsley (BYU, MERS lab)

4:30 Relating MSG Rain over the Tropical Atlantic with ASCAT Derived Surface Divergence and Vorticity Gregory King (Institute of Marine Sciences (ICM-CSIC)) Wenming Lin, Marcos Portabella, Ad Stoffelen, Anton Verhoef

4:45 Cross-Polarized C-band Scatterometer Measurements of the Sea Surface in Moderate Winds
Joe Sapp (NOAA/NESDIS/STAR/SOCD) Suleiman Alsweiss, Zorana Jelenak, Paul Chang, Steve Frasier, James Carswell

5:00 Discussion

5:25 Closing Comments and End of Meeting

Ernesto Rodriguez

Posters

(up throughout the meeting)

(including time of a one minute highlight presentation)

Oceanographic Applications (Tuesday Morning)

10:13 The role of wind forcing on sea surface temperature frontal variability in Eastern Boundary Currents Renato Castelao (University of Georgia), Yuntao Wang; Yeping Yuan

Climate Data Record Development and Analysis (Tuesday Afternoon)

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- 2:32 OSCAT Sea Ice Extent Product
 David Long (Brigham Young University) Jordan Hill Waves, Currents and Ice

Current and Future Ocean Vector Wind Mission Updates (Wednesday Morning)

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Atmosphere and Ocean Coupling and Coastal Applications (Thursday Morning)

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