# OCEAN VECTOR WIND SCIENCE TEAM MEETING March 22-24, Seattle WA Agenda

### **Tuesday March 22**

Session A (invited talks) Chair: Timothy Liu

8:30-8:50 Freeman, Tony

JPL Welcome

8:50-9:10 Gaston, Robert

SeaWinds Project status

9:10-9:30 Shimoda, Haruhisa, K. Imaoka, and A. Shibata

JAXA status and GCOM-W

9:30-9:50 Bonekamp, Hans, J. Figa, and D. Klaes

**ASCAT on METOP status** 

9:50-10:00

Announcement and logistics

10:00-10:30 Break (Please set up posters)

10:30-10:50 Legler, David

CLIVAR Program and Ocean Reanalysis

10:50-11:10 Gaiser, Peter W

WindSAT Mission status

11:10-11:30 Chang, Paul

NOAA NRT data usage

11:30-11:50 Ohhashi, Yasuaki, M. Tokuno, and T. Imazumi

Use of QuikSCAT winds in the JMA data assimilation system

11:50-12:10 Hans Hersbach, Peter Janssen, Lars Isaksen

Usage of Scatterometer data at ECMWF

12:10-1:10 Lunch

1:10-1:30 Poster viewing

### Section B Chair: David Long

1:30-1:50 Bonjean, Fabrice, Gary Lagerloef, and John Gunn

B1 Ocean wind forcing analysis of near surface currents: application to the Ocean Surface Current Analyses Real-time (OSCAR)

1:50-2:10 Donelan, Mark A., W.J. Plant and N. Suzuki

B2 Global mapping of mean surface currents

2:10-2:30 Xie, Shang-Ping

B3 Orographically triggered air-sea interaction over the eastern Pacific warm pool

2:30-2:50 Liu, W.Timothy, X. Xie, and W. Tang

B4 Oceanic influence of water cycle

2:50-3:10 Yuan, Xiaojun and C. Li

B5 Mesoscale cyclones observed by QuikSCAT in the Southern ocean: possible katabatic wind interferences

3:10-3:30 Break

3:30-3:50 Yueh, Simon

B6 Active and passive model function for hurricane ocean winds

3:50-4:10 Fu, Rong. and H. Wang

B7 Variability of the Atlantic ITCZ associated with convectively couple Kelvin waves as detected by QuikSCAT

4:10-4:30 Brown, Robert

B8 Some application of QuikSCAT and WindSAT derived pressure field

4:30-4:50 Milliff, Ralph. W.G. Large, T. Hoar, D. Nychka

B9 Tropical OGCM response to an ensemble of surface wind fields based on QSCAT during a Madden-Julian active phase

4:50-5:10 Graber, Hans, M.J. Caruso, V. J. Cardone, A. Cos, and A.R. Owniius

B10 Validation of QuikSCAT vector winds in coastal regions

5:10-5:30 Patoux, Jerome

B11 A satellite view of frontal wave development over the North Pacific Ocean

### Wednesday March 23

## Session C Chai:Kristina Katsaros

8:30-8:50 Bourassa, Mark

C1 New insights into how wind influences stress, and resulting implications to equivalent neutral winds and wind retrieval

8:50-9:10 Von Ahn, Joan and J.M. Sienkiewicz

D5 The impact of QuikSCAT winds on OPC operation

9:10-9:30 Chen, Dake

C3 Seasonality of tropical cyclones genesis over the South China Sea

9:30-9:50 Wentz, Frank, D. Smith, and T. Meissner

C4 Evaluation of microwave scatterometers and radiometers as satellite anemometers

9:50-10:10 Ebuchi, Naoto

C5 Intercomparison of wind speed observed by AMSR and SeaWinds on ADEOS-II

## 10:10-11:10 Poster Viewing

11:10-11:30 Chelton, Dudley

C6 An assessment of the accuracy of SST influence on low-level winds in the ECMWF and NCEP numerical weaher prediction models

11:30-11:50 Sienkiewicz, Joseph

C7 Operational use of QuikSCAT winds in the vicinity of SST gradient

11:50-12:10 Song, Qingtao, P. Cornillon, and T. Hara

C8 Modeling the effect of the Gulf Stream (current and SST front) on scatterometerderived winds 12:10-1:10 Lunch

1:10-1:30 Poster viewing

## Session D Chair: David Weissman

1:30-1:50 Bogucki, Darek, M.E. Carrr, W.M. Drennan, P. Woiceshyn, and M. Schmeltz

D1 Improved estimates of gas transfer using scatterometry

1:50-2:10 McGillicuddy, Dennis

D2 How productive is the equatorial Atlantic?

2:10-2:30 Long, David

D3 Tandem mission studies of polar ice in Greenland and Antarctica

2:30-2:50 Nghiem, Son V., G.R. Brakenridge, E.G. Njoku, K. Steffen, D.K.

Perovich, M.L. Van Woret

D4 Scatterometry in hydrologic and cryospheric studies

2:50-3:10 Chen, Shuyi, W. Zhao, R. Foster, and W.T. Liu

D5 High-resolution Data Assimilation of Scatterometer Surface Winds for Tropical Cyclone Prediction

3:10-3:30 Break

3:30-3:50 Hilburn, Kyle, F. Wentz, P. Ashcroft, D. Smith

D6 Active-passive remote sensing with SeaWinds and AMSR on Midori-2

3:50-4:10 Dunbar, R.Scott. and S. Veleva

D7 AMSR brightness temperature calibration for SeaWinds atmospheric corrections

4:10-4:30 Veleva, Svella, S. Dunbar, P. Callahan, S. Yuen, G. Neumann, V. Hsiao

D8 AMSR geophysical retrievals and physical modeling of attenuation and backscatter based on AMSR retrievals

4:30-5:10 Huddleston, James N, and B. Stiles

D9 Rain Flagging and Correction Algorithms/Plans for SeaWinds and QuikSCAT

4:10-5:30 Callahan, Phil. and Simon Yueh

D10 QuikSCAT data reprocessing

5:30-5:40 Challahan, Phil and Simon Yueh

Discussion on data reprocessing

#### **Thursday March 24**

#### Session E Chair: Shuyi Chen

8:30-8:50 Levy, Gad and J.C. Alpert

E1 The impact of scatterometer-based sub-grid flux parameterization on medium range global forecasting in the operational NCEP GPS

8:50-9:10 Yu, Lisan

E2 Improving the estimation and understanding of the trend and variability of global airsea heart fluxes through a combined use of QuikSCAT and SSM/I retrievals

9:10-9:30 Katsaros, Kristina

E3 Ocean surface flux work at IFREMER, AOML, and U. of Maryland

9:30-9:50 Jiang, Chuan Li

E4 Evaluation of a hybrid satellite and NWP based turbulent heat flux product using TAO buoys

9:50-10:10 Lee, Tong and W. T. Liu

E5 Effects of high-frequency wind sampling on simulated mixed-layer depth and upperocean temperature

10:10-10:30 Break

10:30-10:50 Moore, Richard, D. Braaten, B. Natarajakumar, V. J. Kurisunkal

E6 SeaWinds corrections for rain cells smaller than the scatterometer footprint

10:50-11:10 Hennon, Christopher

E7 Issues in surface wind vector validation in tropical cyclones

11:10-11:30 Weissman, David and M.A. Bourassa

E8 Correction to scatterometer wind vectors from effects of rain, using high resolution

NEXRAD radar collocations

11:30-11:50 Shibata, Akira

E9 Ocean microwave emission change due to air-sea temperature difference

11:50-12:10 Jones, Linwood, K. Ahmad, and T. Kasparis

E10 QuikSCAT radiometer rain rates for wind vector quality control

12:10-1:10 Lunch

1:10-1:30 Last Chance to view poster

### Session F Chair: Shang-Ping Xie

1:30-1:50 Portabella, Macros and A. Stoffelen

F1 A probabilistic approach for SeaWinds data assimilation

1:50-2:10 Lettvin, Ellen

F2 Geophysical model functions for the high wind regime

2:10-2:30 Gille, Sarah., S.L. Smith, and N. Statom

F3 Global observations of land breeze

2:30-2:50 Tomita, Hiroyuki

F4 Improvement of daily wind speed estimation using multi-satellites data

2:50-3:10 Foster, Ralph

F5 New developments in hurricane boundary layer theory

## 3:19-3:30 Break and Remove poster

#### 3:30-3;50 Wang, Chunzai

F6 The tropical western hemisphere warm pool

3:50-4:10 Zheng, Quanan and Jiayi Pan

F.7 Retrieval of low divergence at lower atmosphere and surface ocean from QuikSCAT vector winds

4:10-4:30 Lee, Tong

F8 Decadal variations of Indian Ocean wind and currents inferred from satellite data and reanalysis products

4:30-4:50 Han, Weiging

F9 "Indian Ocean atmospheric subseasonal variability revealed by QuikSCAT winds and their oceanic response".

4:50-5:10 Perigaud, Claire

F10 Role of QuikSCAT daily wind fluctuation in improving the simulations of Indian Ocean atmosphere intraseasonal-to-interannual climate variation

5:10-5:30 Susanto, Dwi, T. Moore, and J. Marra

F.11 Upwelling favorable wind in the Indonesian Sea

#### Poster

1 Chen, Richard, T. Lungu, R. Benada, P. Liggett Data products and toos at PO.DAAC for ocean vector winds

### 2 Freilich, Michael

Validation of preliminary WindSAT vector wind measurement using NDBC buoys and global QuikSCAT comparisons

3 Zonrana, Jelenak – Ocean wind vector retrievals from WindSAT polarimetric measurements in extreme events –2004 hurricane season

#### 4 Bettenhausen, Mike

The NRL wind vector retrieval algorithm

## 5 Laws, Kenneth

Wind retrievals from Windsat using an inversion algorithm employing a physical-base forward model – comparison of results for single-look and double-look measurement geometries

#### 6 Morzel, Jan and R.F. Milliff

Rain flag effects in wind stress curl and divergence comparisons Quikscat and WindSAT

#### 7 Atlas, Robert and J. Ardizzone

Geophysical validation of WindSAT data and its impact on numerical weather prediction

#### 8 Leidner, Mark

Mesoscale assimilation of QuikSCAT data in atmospheric model

#### 9 Persson, P. Ola G., Walter, B., and J. Hare

Maritime differences between wind direction and stress: relationships to atmospheric fronts and implications

#### 10 Thompson, LuAnne, C. Jiang, K.A. Kelley

Intraseasonal mixed-layer temperature budget in the tropical Pacific in model driven by QuikSCAT winds: the role of heat fluxes and zonal advection

11 Tang, Wenging and W. T. Liu

The role of moisture transport in the Arctic hydrologic cycle

12 McDonald, Kyle, C., J. S. Kimbal, M. Zhao, and S.W. Running Monitoring seasonal freeze-thaw processes in the terrestrial high latitudes with microwave remote sensing: relationships with land-atmosphere CO2 exchange

13 Maue, Ryan N. and M. A, Bourassa

QuikSCAT observation of warm seclusion events associated with extratropical transition

14 He, Ruoying and D. McGillicuddy

Improving coastal wind field specification in the Gulf of Maine using QuikSCAT

15 Siripong, Absornsuda, P. Sojisuporn, J. Phaksopa, W.T. Liu, and W.Tang Surface circulation model in the Gulf of Thailand forcing by ADEOS-II/SeaWinds and NOGAP and its effects on the distribution of Chl-a, SS and CDOM

16 Small, Richard Justin

Satellite observations of mesoscale ocean features and co-propagating atmospheric surface fields in the tropical belt

17 Ferrandex, D. E., Z. Jelenak, P. Chang, R. Contreras, S. Frasier, J. Carswell Measurements of surface and volume backscatter in cyclones

18 Foster, Ralph, G. Levy, D. Long

Sub-scatterometer footprint variability estimated by SAR and in situ measurements

19 Levy, Gad and T. Dunkerton

Observations of near-equatorial symmetric stability from scatterometer vector winds; an illusive connection to atmospheric circulation

20 Monaldo, Frank, D. Thompson, P. Winstead, and J. Horstmann Application of high wind speed retrieval algorithms in Hurricane Ivan

21 Jones, W. Linwood and S. Soisuvam

Ocean surface wind vector retrieval using active and passive microwave sensing on ADEOS-II

22 Jones, W.Linwood, M. Rastogi, and I. Adams SeaWinds radiometer brightness temperature calibration/validation

23 Long. David

Validation of SeaWinds/QuikSCAT rain measurements with NEXRAD

24 Portabella, M.and A. Stoffelen

Towards a generic scatterometer wind inversion

25 Hackert, Eric, R.H. Zhang, X. Wang, and A.J. Busalacchi Comparison of ocean model statistics forced by various wind products including QuikSCAT