Ninth International Winds Workshop (9IWW)

14-18 April 2008
Annapolis, Maryland, USA

Local Host/Sponsor: NOAA/NESDIS
Venue: Historic Inns of Annapolis
Workshop Co-Chairs: Christopher Velden and Kenneth Holmlund

Sunday, 13 April 2008

19h00 - 21h00   **Registration, lobby of the Historic Inns hotel, Governor Calvert House**

Monday, 14 April 2008

08h00 - 09h00   **Registration and Continental Breakfast**

09h00 - 09h25   **Welcome and Workshop Opening**

09h25 – 09h40   **Johannes Schmetz**
Introducing recommendations from CGMS 35 to the 9th International Winds Workshop

SESSION I
Operational Data Producer Status Reports
Chair: Jaime Daniels

09h40 - 10h00   **Antonio Irving**, Qi Hongming, W. Pennyoer, R. Potash, R. Rollins
Operational satellite wind product processing at NOAA/NESDIS: A status report

10h00 - 10h20   **Ken Holmlund**
Status report on the operational derivation of Atmospheric Motion Vectors at EUMETSAT

10h20 - 10h40   **Break**

10h40 - 11h00   **Ryo Oyama** and **K. Shimoji**
Status of and future plans for JMA's Atmospheric Motion Vectors

11h00 - 11h20   **John Le Marshall**, R. Seecamp, J. Jung, M. Dunn, C. Velden,
                              J. Daniels and A.Rea
Locally generated and error characterized MTSAT-1R atmospheric motion vectors and their
contribution to operational NWP in the Australian region

11h20 - 13h00   **Lunch (sponsored)**
                              Group Photo

SESSION II
Polar Winds
Chair: Mary Forsythe

13h00 - 13h20   **Jeffrey Key, D. Santek, C. Velden, J. Daniels, R. Dworak**
The polar wind product suite

13h20 - 13h40   **David Santek**
The impact of MODIS-derived polar winds on global forecasts

13h40 - 14h00   **Lars Peter Riishojgaard, I. Appel, C. Redder**
Observing System Experiments for MODIS winds in the Joint Center for Satellite Data Assimilation

14h00 - 14h20   **Gregory Dew**
AVHRR polar winds derivation at EUMETSAT: Current status and future developments

14h20 - 14h40   **Richard Dworak, J. Key**
Assessing the quality of historical AVHRR polar wind height assignments

14h40 - 15h10   **Break**

SESSION III
AMV Height Assignment
Chair: Chris Velden

15h10 - 15h40   **Christopher Velden and Kris Bedka**
Identifying the uncertainty in determining satellite-derived AMV height assignments

15h40 - 16h00   **Arthur de Smet**
AMV height assignment with Meteosat-9: Current status and future developments

16h00 - 16h20   **Regis Borde, R. Oyama**
A direct link between feature tracking and height assignment of operational AMVs

16h20 - 16h40   **Ryo Oyama, R. Borde, J. Schmetz, T. Kurino**
Development of AMV height assignment directly linked to feature tracking at JMA

16h40 - 17h00   **Geneviève Sèze, S. Marchand, J. Pelon, R. Borde**
Comparison of AMV cloud top pressure derived from MSG with space-based Lidar observations

18h00 - 20h00   **Icebreaker (sponsored by NOAA/NESDIS)**

08h00 – 09h00   **Continental Breakfast**

SESSION IV
AMV Methods/QC
Chairs: Ken Holmlund

09h10 - 09h30   <u>A. Hernandez-Carrascal</u>, S. Nasuto
A Swarm Intelligence Method for Feature Tracking in AMV Derivation

09h30 - 09h50   <u>André Szantai</u>, G. Sèze
Improved extraction of low-level AMVs over West Africa from MSG images

09h50 - 10h10   <u>Eunha Sohn</u>
The impact of window size on AMV

10h10 - 10h30   <u>Howard Berger</u>, C. Velden, S. Wanzong, J. Daniels
Assessing the "Expected Error" as a potential new quality indicator for AMVs

10h30 - 10h50   **Break**

10h50 - 12h00   <u>Iliana Genkova</u>, R. Borde, J. Schmetz, J. Daniels, C. Velden, K. Holmlund
Global Atmospheric Motion Vector inter-comparison study

12h00 - 13h30   **Lunch (sponsored)**

SESSION V
Data Assimilation and NWP applications
Chairs: Peter Bauer and Claire DelSol

13h30 - 13h50   <u>Mary Forsythe</u>, R. Saunders
AMV monitoring: results from the 3rd NWP SAF analysis

13h50 - 14h10   <u>Mary Forsythe</u>, R. Saunders
AMV errors: a new approach in NWP

14h10 - 14h30   <u>Koji Yamashita</u>
Upgraded usage of AMVs from all geostationary satellites in the operational global and meso-scale 4D-VAR assimilation system at JMA

14h30 - 14h50   <u>Alexander Cress</u>, C. Köpken, H.W. Bitzer
Recent satellite wind impact studies at the German Weather Service

14h50 - 15h40   **Break**

15h40 - 16h00   <u>Steve Wanzong</u>, I. Genkova, C. Velden, D. Santek
AMV research using simulated datasets

16h00 - 16h20   Lüder von Bremen, N. Bormann, S. Wanzong, M. Hortal, D. Salmond,
                  J.-N. Thépaut, <u>Peter Bauer</u>
Evaluation of AMVs derived from ECMWF model simulations

16h20 – 16h40   <u>Claire Delsol</u>, N. Bormann, G. Kelly, L. von Bremen,
                  J.-N. Thépaut, Peter Bauer
Operational use of AMVs at ECMWF

16h40 - 17h00   <u>Claire Delsol</u>, D. Dee, S. Uppala, N. Bormann, J.-N. Thépaut, P. Bauer
Use of reprocessed AMVs in the ECMWF interim reanalysis

17h00 - 17h20   <u>Dongliang Wang</u>
Impact of variational data assimilation of AMVs on tropical cyclone track forecasts

19h00 - 21h00   **Workshop Dinner** (sponsored by EUMETSAT)

Wednesday, 16 April 2008

07h45 – 08h30   **Continental Breakfast**

SESSION VI
Science Applications
Chair: Dr. Pramod Mahajan

08h30 - 08h50   <u>Iliana Genkova</u>, C. Velden
Saharan dust motion extraction from MSG-SEVIRI

08h50 - 09h10   <u>Kristopher Bedka</u>, C. Velden, W. Feltz, R. Petersen
Development, validation, and application of a mesoscale AMV product at UW-CIMSS

09h10 - 09h30   <u>Javier García-Pereda</u>
Evolution of High Resolution Winds product (HRW), at the Satellite Application Facility in
support to Nowcasting and very short range forecasting (SAFNWC)

09h30 - 09h50   <u>Pramod Mahajan</u>, S.G.Narkhedkar, A. Prabhu
Impact of INSAT-observed Kelvin wave type disturbances during summer Monsoon

09h50 - 10h20   **Break**

SESSION VII
Microwave Studies
Chair: Paul Ingmann

10h20 - 10h40   Ad Stoffelen
Advancements in Scatterometer wind processing

10h40 - 11h00   Christophe Payan
Status on the use of Scatterometer data at METEO-FRANCE

11h00 - 11h20   Li Bi, J. Jung, J. Le Marshall
Assimilating the WINDSAT winds in the NCEP global data assimilation system and determining the forecast impact from a two-season study

11h20 - 11h40   Roger Davies, M. Garay
Cloud Motion Vectors from MISR: Update and comparison with QuikSCAT

Wednesday Afternoon: Lunch (sponsored)
Group Excursion (Optional)

Thursday, 17 April 2008

07h45 – 08h30   Continental Breakfast

SESSION VIII
Future Satellites
Chair: Roger Davies

08h30 - 08h50   Paul Ingmann, A. G. Straume
ADM-AEOLUS – Progressing towards mission exploitation

08h50 - 09h10   Ad Stoffelen, J. de Kloe, G.-J. Marseille, K. Houchi
Scientific preparations for Aeolus and Aeolus follow-on

09h10 - 09h30   David Tan, et al.
ADM-Aeolus wind retrieval algorithms for Numerical Weather Prediction

09h30 - 09h50   Michael Kavaya
Expected characteristics of global wind profile measurements with a scanning, hybrid, Doppler Lidar system

09h50 - 10h10   Jaime Daniels, C. Velden, W. Bresky, I. Genkova, S. Wanzong
Algorithm and software development of Atmospheric Motion Vector products for the future GOES-R Advanced Baseline Imager (ABI)

10h10 - 10h40   Break

SESSION IX
Open Forum/Discussion
Chair: Johannes Schmetz

10h40 - 11h40	**Open plenary discussion on topics of interest (Stoffelen)**
11h40 – 11h50	**Review of recommendations from CGMS-33 (Schmetz)**
11h50 – 12h00	**Charge to working group breakout sessions (Holmlund/Velden)**
12h00 - 13h30	**Lunch (sponsored)**
13h30 - ????	**Working Group (WG) Sessions** WG 1: AMV Extraction/QC Methods (Chairs: de Smet/LeMarshall) WG 2: AMV Data Assimilation (Chairs: Cress/Riishojgaard) WG 3: AMV Height Assignment (Chairs: Borde/Genkova)

Friday, 18 April 2008

08h00 – 09h00	**Continental Breakfast**
09h00 - 10h30	**Working Group Reports (Respective Chairs)** Working Group 1: AMV Extraction/QC Methods Working Group 2: AMV Data Assimilation Working Group 3: AMV Height Assignment
10h30 - 11h00	**Plenary Discussion** **Closing Comments - WORKSHOP ENDS**
Lunch	**On your own** **Program Committee Meeting**

The following papers were not presented at the workshop, but are included in the proceedings:

Luiz Machado	CPTEC/INPE operational GOES-10 AMV
Sanjib Deb	Estimation of cloud motion winds from Kalpana VHRR
Sanjib Deb	Water vapour winds from Kalpana VHRR: A new approach
Feng Lu	Status of operational AMVs from FY2C
Ashim Mitra	An operational status and validation of cloud motion vectors with improvement in water vapour winds derived from Kalpana-1 satellite at IMD
Alexander Nerushev	Determination of the atmospheric dynamic characteristics from the MSG data in zones of dangerous atmospheric phenomenon