Eighth International
Winds Workshop

Beijing, China
24 - 26 April 2006

Workshop Programme

EUMETSAT
Eighth International Winds Workshop

24-28 April 2006
Beijing, China

Host: National Satellite Meteorological Center
Location: Science and Technology Building, 1st floor
Workshop Co-Chairs: Kenneth Holmlund and Christopher Velden

Sunday, 23 April 2006
14h00 - 17h00 Registration, in the lobby of the Xiyuan hotel

Monday, 24 April 2006
08h00 - 08h45 Registration

SESSION I
Operational Data Producer Status Reports

Chair: Xu Jianmin

08h45 - 09h00 Welcome and Workshop Opening

09h00 - 09h20 Xu Jianmin, Zhang Qisong, Zhang Xiaohu, Wang Sujuan, Lu Feng
Status of operational AMVs from FY2C

09h20 - 09h40 Takahito Imai
Status of Atmospheric Motion Vectors in JMA

09h40 - 10h00 Eun Ha Sohn, Mi Jin Jang, Myoung Hwan Ahn
Current status of AMV system at KMA

10h00 - 10h20 Ken Holmlund, A. de Smet, J. Gustafsson, G. Dew
Status report on the operational derivation of Atmospheric Motion Vectors at EUMETSAT

10h20 - 10h40 Break

10h40 - 11h00 Jaime Daniels, C. Velden, W. Bresky, K. Turner, Yi Song
Operational satellite wind product processing at NOAA/NESDIS. A status report

11h00 - 11h20 Ramesh Bhatia, Devendra Singh
Use of Meteosat-5 derived winds for operational weather forecasting
SESSION II
Global NWP and Data Assimilation

Chair: Lars Peter Riishojgaard

11h20 - 11h50 Jean-Noël Thépaut, N. Bormann, C. Delsol
Impact of Atmospheric Motion Vectors on global numerical weather prediction

11h50 - 12h10 Claire Delsol, N. Bormann, J-N. Thépaut
Status of Atmospheric Motion vectors at ECMWF

12h10 - 12h30 Niels Bormann, C. Delsol, J-N. Thépaut
Challenges and plans for the assimilation of Atmospheric Motion Vectors at ECMWF

12h30 - 14h00 Lunch

14h00 - 14h20 Wei Han, Jishan Xue, Jianmin Xu, Qisong Zhang
Assimilation of FY2C AMVS in grapes

14h20 - 14h40 Alexander Cress, C. Köpken, H.W. Bitzer
Impact of Atmospheric Motion Vectors from Meteosat 8 on the analyses and forecasting system of DWD

14h40 - 15h00 Roger Randriamampianina
Investigation of the AMV data derived from Meteosat-8 in the ALADIN/HU data assimilation system

15h00 - 15h20 Koji Yamashita
Assimilation of Hourly MTSAT-1R AMV into JMA-MSM

15h20 - 15h40 Mary Forsythe, R. Saunders
AMVs at the MetOffice: Status, results and future plans

15h40 - 16h00 Break

SESSION III
AMV Characteristics (Quality Control, Height Assignment) and Validation

Chairs: Régis Borde and Chris Velden

16h00 - 16h20 Christophe Payan
Quality control of winds from Meteosat 8 at Meteo France: Some results

Error characterization and use of Atmospheric Motion Vectors at the JCSDA

16h40 - 17h00 Howard Berger, C. Velden, J. LeMarshall
New quality indicators for GOES derived winds and their potential effect on NWP data impact experiments

19h00 - 21h00 Icebreaker (Xiyuan Hotel, Banquet Hall, 1st floor)
09h00 - 09h20  Jörgen Gustafsson
The use of statistics to analyze AMV performance. Representativity in space and time for MSG AMVs. Some early results from MSG-2

09h20 - 09h40  Luiz Machado, R. Galante, W.F.A. Lima, S.R. Macedo, S.H.S. Ferreira
CPTEC Atmospheric Motion Vectors: Validation, assimilation and characteristics

09h40 - 10h00  Greg Dew
Introduction of the recursive filter function in MSG MPEF environment

10h00 - 10h20  Jaime Daniels, W. Bresky, C. Velden,
Characterization of tracer height assignment errors: A recurring theme for satellite-derived Atmospheric Motion Vectors

10h20 - 10h40  Break

10h40 - 11h00  Arthur de Smet
AMV height assignment with Meteosat-8: current status and future developments

11h00 - 11h20  Régis Borde
AMV height assignment methods with Meteosat-8

11h20 - 11h40  Mary Forsythe, M. Doutriaux-Boucher, A. García-Mendez
What can we learn from the NWP SAF AMV monitoring?

11h40 - 12h30  Plenary discussion on AMV characteristics. Is height assignment still the primary error source?
(Leads: Mary Forsythe and Chris Velden)

12h30 - 14h00  Lunch

14h00 - 14h40  Visit to FY-2 SOCC to follow live reception of full resolution global image

SESSION IV
Research Methods and Applications
Chairs: Ken Holmlund and Jaime Daniels

14h40 - 15h00  Lu Feng, W.P. Menzel, C. Velden, Xu Jianmin, S. Wanzong, Li Jun
Attempts to improve GOES image navigation

15h00 - 15h20  Liu Jian, Xu Jianmin
An automated, dynamic threshold cloud detection algorithm for FY-2C images

15h20 - 15h40  Wang Zhenhui, Xu Jianmin, He Huiqing, Zhang Hong, Zhang Lejian
An experiment to derive cloud motion vectors from satellite images with 2-D Fourier phase analysis technique

15h40 - 16h00  Break

16h00 - 16h20  Wayne Bresky, Jaime Daniels
The feasibility of an optical flow algorithm for estimating atmospheric motion
16h20 - 16h40 Alexander Nerushhev, E.K. Kramchaninova
Studies of regions with intense turbulent motions based on MSG data

16h40 - 17h00 Jim Purdom
Satellite-derived winds in the severe storm environment: now and in the future

19h00 - 21h00 Workshop dinner (Peking Roast Duck restaurant)

Wednesday, 26 April 2006

09h00 - 09h20 Steve Wanzong, C. Velden, D. Santek, J. Otkin
Wind vector calculations using simulated hyperspectral satellite retrievals

09h20 - 09h40 Iliana Genkova, C. Velden, S. Wanzong
Satellite wind vectors from GOES sounders moisture fields

09h40 - 10h00 Roger Davies
Report on the progress and status of cloud motion vector retrieval by MISR on the Terra satellite

10h00 - 10h40 Break

10h40 - 11h00 Jo Schmetz, R. Borde, K. Holmlund, M. König, H.J. Lutz
Upper tropospheric divergence in tropical convective systems from Meteosat-8

11h00 - 11h20 André Szantai, E. Mémin
Comparison of atmospheric motion vectors and dense vector fields calculated from MSG images

11h20 - 11h40 Liu Jian
The international geostationary laboratory (IGEOLAB)

11h40 - 12h00 Lars Peter Rüshøjgaard, B. Atlas, D. Chesters, K. Holmlund, J. Key, S. Kidder, A. Krueger, P. Menzel, J-N. Thépaut, C. Velden, T. Vonder Haar
An update of the Molniya orbit imager

Wednesday Afternoon: Lunch and Group Excursion (Forbidden City)
SESSION V
Microwave / LIDAR Studies
Chair: Alexander Nerushev

09h00 - 09h20 Paul Ingmann, Anne Grete Straume
Status report on the Doppler wind Lidar profiling mission ADM-Aeolus

09h20 - 09h40 Ad Stoffelen, G-J. Marseille, J. Barkmeijer
SOSE: Sensitivity Observing System Experiment

09h40 - 10h00 Ad Stoffelen
EUMETSAT Satellite Application Facility Scatterometer Activities

10h00 - 10h20 S. Lehner, J. Schulz-Stellenfleth, Thomas Koenig, G. Song
Remote sensing of extreme wind and ocean wave fields

10h20 - 10h40 Break

SESSION VI
Regional and Mesoscale Applications
Chair: Ramesh Bhatia

10h40 - 11h00 Massimo Bonavita, L. Torrisi
Characterization and use of MSG AMVs in the Italian weather service regional NWP system

11h00 - 11h20 Bjarne Amstrup
Recent OSEs with Atmospheric Motion Vector wind data in the DMI-HIRLAM 3D-Var data analysis system

11h20 - 11h40 Devendra Singh, V.R. Rao, L.R. Meena, R.C. Bhatia
Recent developments in Cloud Motion Vectors derived from KALPANA 1 and INSAT 3A satellites and their impact on NWP model

11h40 - 13h10 Lunch

13h10 - 14h40 Plenary Discussion: Recommendations from CGMS-33 and a fresh look at AMV research and development (Leads: Jean-Noël Thépaut and Johannes Schmetz)

14h40 - 15h00 Break

15h00 - 17h00 Working Group Sessions
Working Group 1: AMV Extraction Methods (Chairs: Szantai/Davies)
Working Group 2: AMV Data Assimilation (Chair: Cress)
Working Group 3: AMV Characterization (Chairs: DeSmet/Wanzong)
09h00 - 09h20  Munmun Das Gupta, Raghavendra Ashrit, J.P. George, A.K. Mitra, A.K. Bohra
Impact of satellite winds on simulation of tropical cyclone over Indian seas

09h20 - 09h40  Javier García-Pereda, J.M. Fernández Serdán
Description and validation results of the high resolution wind product from HRVIS MSG channel at the EUMETSAT Nowcasting SAF (SAFNWC)

09h40 - 10h00  J.M. Fernández-Serdán, Javier García-Pereda
Objective use of high resolution winds product from HRVIS MSG channel for nowcasting purposes

10h00 - 10h20  V.V. Rama Rao, H.R. Hatwar, S.R. Kalsi, R.C. Bhatia, Devendra Singh
Impact of Satellite data on limited area model analysis and forecast system in IMD

10h20 - 10h40  Break

SESSION VII
Polar Winds
Chair: Niels Bormann

10h40 - 11h00  Lars Peter Riishojgaard, M. Sienkiewicz, Guang Ping Lou
The impact on forecast skill of water vapor and window channel winds from MODIS

11h00 - 11h30  Jeff Key, W. Straka, D. Santek, C. Velden
Satellite-derived winds at direct broadcast sites in the polar regions

11h30 - 11h50  David Santek, Jeff Key, C. Velden
A visualization of the impact of MODIS-derived polar winds on global forecasts

11h50 - 13h30  Lunch

13h30 - 15h00  Working Group Reports
Working Group 1: AMV Extraction Methods (Chairs)
Working Group 2: AMV Data Assimilation (Chairs)
Working Group 3: AMV Characterization (Chairs)

15h00 - 15h30  Plenary Discussion

15h30          Closing Ceremony - WORKSHOP ENDS

15h30 - 16h00  Programme Committee Meeting