

**FIFTH WMO WORKSHOP ON THE IMPACT OF
VARIOUS OBSERVING SYSTEMS ON NWP**

**Sedona, Arizona, (USA)
22-25 May 2012**



Draft Programme
(updated 13 March 2012)

The Fifth WMO Workshop on the Impact of Various Observing Systems on NWP
Sedona, AZ, United States, 22 - 25 May 2012
DRAFT PROGRAMME

Tuesday 22 May 2012

09:00	Welcome and opening remarks	
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Session 1: Global forecast impact studies

Co-chairs: Florence Rabier and Ron Gelaro

09:30	Rolf Langland, Naval Research Laboratory	Uncertainty in operational atmospheric analyses and re-analyses
09:55	James Jung, NOAA	Observing System Experiments using the NCEP Global Data Assimilation System
10:20	Break	
10:50	John Eyre, Met Office	Impact studies with satellite observations at the Met Office
11:15	Erik Andersson, ECMWF	Impact of satellite and conventional observations on the performance of the ECMWF data assimilation system by Observing System Experiments
11:40	Alexander Cress, DWD	Global impact studies at the German Weather Service and Regional impact studies at the German Weather Service (DWD)
12:05	Nancy Baker, NRL	The Impact of Satellite Atmospheric Motion Vectors in the U.S. Navy Global Data Assimilation System
12:30	Lunch	
13:30	Yong-Sang Kim, KMA	The new NWP system at KMA and some preliminary results of sensitivity test to observational data
13:55	Yan Liu, China Meteorological Administration	Use and impact of GPS radio occultation data in GRAPES
14:20	Patrick Moll, Météo-France	Data impact studies in the global NWP model at Meteo-France
14:45	Break	
15:15	Florence Rabier, Météo-France	Impact of observations in the Southern Polar area during the Concordiasi field experiment
15:40	Lidia Cucurull, NOAA	Assessing the benefits of assimilating GPS RO profiles into Global Numerical Weather Prediction Models
16:05	Sean Healy, ECMWF	GNSS radio occultation measurements: Current status and future perspectives
16:30	Yoichiro Ota, NCEP	Observation impact estimates using the NCEP GFS/EnKF
16:55	Discussion session 1	
18:00	Cash bar	

Wednesday 23 May 2012

Session 2: Regional forecast impact studies

Co-chairs: John Eyre and Yoshiako Sato

09:00	Stan Benjamin, NOAA	Impact of upper-air and near-surface observations on short-range forecasts from an hourly assimilation cycle (RUC and Rapid Refresh)
09:25	Yoshiaki Sato, Japan Meteorological Agency	Global and regional impact studies at JMA
09:50	Dale Barker, Met Office	Marginal benefit of higher resolution analysis and mesoscale observing networks in the UK Met Office operational convective scale model
10:15	Xiang-Yu Huang, UCAR	Monitoring the observation impact with Taiwan Central Weather Bureau operational analysis/forecast system
10:40	Break	
11:10	Gergely Bölöni, Hungarian Meteorological Service	Regional aspects of a European upper-air network redesign study: results obtained with the ALADIN limited-area model at the Hungarian Meteorological Service
11:35	Siebre de Haan, KNMI	Operational use of high resolution observations for very short term numerical forecasting
12:00	Roger Randriamampianina, Hungarian Meteorological Service	Impact of different observation types in the HIRLAM/ALADIN-LACE regional weather forecasting models
12:25	Lunch	
13:25	Jean-François Mahfouf, Météo-France/CRNS, CNRM/GAME, GMAP	Evaluation of data impact in the mesoscale AROME 3D-Var system at Météo-France
13:50	Chris Tingwell, Centre for Australian Weather and Climate Research	Observing system impact studies in ACCESS
14:15	Ralph Petersen, University of Wisconsin	Impact of AMDAR aircraft observations
14:40	José Antonio Aravéquia, INPE/CPTEC	The role of assimilating satellite data over South America using LETKF
15:05	Break	
15:35	Discussion session 2	

Session 3: Specific scientific areas (including network design)

Co-chairs: Carla Cardinali and Lars-Peter Riishojgaard

16:35	Sharan Majumdar, Rosenstiel School of Marine and Atmospheric Science, University of Miami	Targeted observations for improving Numerical Weather Prediction: An overview
17:00	Brett Hoover, University of Wisconsin	Observation target regions for improving NWP tropical cyclone motion forecasts: Comparison of objective sensitivity-targeting techniques

17:25 Adjourn

Thursday 24 May 2012

Session 3: Specific scientific areas (continued)

08:30	Martin Weissmann, Ludwig-Maximilians Universität	The impact of T-PARC special observations on typhoon track and mid-latitude forecasts
08:55	Richard Marriott, Met Office	Adjoint-based impact studies of surface-based observation types at the Met Office
09:20	Sangwon Joo, Korea Meteorological Administration	Satellite impact to short-range global forecast using the adjoint-based sensitivity method
09:45	Toshiuki Ishibashi, Japan Meteorological Agency	Estimation of linear observation impact and its applications
10:10	Break	
10:40	Cristina Lupu, ECMWF	Use of DFS to estimate observation impact in numerical weather prediction. Comparison of observation impact derived from OSEs and DFS results
11:05	Ron Gelaro, NOAA/GMAO	The Impact of Satellite Atmospheric Motion Vectors in the GMAO GEOS-5 Global Data Assimilation System
11:30	Carla Cardinali, ECMWF	Monitoring the observations performance in the forecast
11:55	Ronald M. Errico, NASA	The use of observation impact estimates to validate an OSSE
12:20	Johannes Schmetz, EUMETSAT	On the role of NWP impact studies to support the evolution and development of current and future satellite programmes
12:45	Lunch	
13:45	Yves Rochon, Environment Canada	Observation system simulation experiments for the PREMIER mission
14:10	Louis Garand, Environment Canada	Assimilation impact from satellite wind observations filling the gap at high latitudes
14:35	Junghong Wang, National Center for Atmospheric Research (NCAR)	Opportunities and challenges in designing a reference upper-air network in support of NWP
15:00	Stefan Klink, DWD	Update on observation impact studies coordinated by EUCOS and plans for future studies
15:25	Break	
15:55	Jaime Daniels, NOAA	Satellite winds
16:20	Discussion session 3	

17:20 Adjourn

Friday 25 May 2012

Session 4: Workshop discussions and conclusions

09:00	Discussion and recommendations (Session 1)
10:00	Break
10:30	Discussion and recommendations (Session 2)
11:30	Discussion and recommendations (Session 3)
12:30	Closure of the workshop