

ANNUAL SEMINAR 2014

Use of satellite observations in numerical weather prediction

Applications of satellite data assimilation

Assimilation of satellite data for meteorology	John Derber (NCEP)
Assimilation of satellite data for atmospheric composition	Hendrik Elbern (RIU)
The use of satellite information in land data assimilation to support operational NWP	Brett Candy (Met Office)
Assimilation of satellite data for the ocean	Laurent Bertino (NERSC)

NWP tools and components for satellite data assimilation

Advances in data assimilation techniques and their relevance to satellite data assimilation	Andrew Lorenc (Met Office)
Advances in model physics and their relevance to satellite data assimilation	Jean-François Mahfouf (Météo-France)
Overview of the status of radiative transfer models for satellite data assimilation	Jérôme Vidot (Météo-France)
Progress towards better representation of observation and background errors in 4DVAR	Niels Bormann (ECMWF)

Satellite instrument characterisation and reanalysis

Techniques and processes for pre-launch characterisation of new instruments	Dieter Klaes (EUMETSAT)
Use of satellite data in reanalysis	Dick Dee (ECMWF)
Post-launch characterisation of satellite instruments	William Bell (Met Office)

Satellite winds

Active techniques for wind observations: scatterometer	Giovanna De Chiara (ECMWF)
Active techniques for wind and wave observations: radar altimeter	Saleh Abdalla (ECMWF)
Assimilation of wind information from radiances: AMVs and 4D-Var tracing	Mary Forsythe (Met Office)
Prospects for wind lidar assimilation	Michael Rennie (ECMWF)

Satellite water vapour, cloud and precipitation

Prospect for radar and lidar cloud assimilation	Marta Janisková (ECMWF)
Assimilation of water vapour, cloud and precipitation from microwave sounders	Alan Geer (ECMWF)
Assimilation of microwave imagers (GCOM-W1/AMSR2, GPM/GMI)	Masahiro Kazumori (JMA)
Convective scale satellite data assimilation	Thomas Auligné (UCAR)

Satellite temperature and humidity sounding

Assimilation of infrared sounder radiances	Andrew Collard (NCEP)
Principal component and reconstructed radiance based assimilation techniques	Marco Matricardi (ECMWF)
Techniques for modelling land, snow and sea ice emission and scattering	Fatima Karbou (Météo-France)
Assimilation in the upper-troposphere and lower-stratosphere: The role of GPS radio occultation	Sean Healy (ECMWF)
Assimilation in the upper stratosphere and mesosphere: role of radiances	Ben Ruston (NRL)

Design and evaluation of the Global Observing System

The impact of satellite data on NWP	Tony McNally (ECMWF)
Forthcoming changes in the Global Satellite Observing Systems	Mitch Goldberg (NOAA)
The WMO Vision for global observing systems in 2025: to what extent will it be met by space agencies' plans	John Eyre (Met Office)