ANNUAL SEMINAR 2014

Use of satellite observations in numerical weather prediction

8–12 September 2014

Programme

Monday 8 September		
12:00-13:00	Registration	
13.00-13.10	Opening	Erland Källén (ECMWF)
13.10-13.15	Introduction to the seminar	Stephen English (ECMWF)
Session 1:	**Applications of satellite data assimilation**	
13.15-14.15	Assimilation of satellite data for meteorology	John Derber (NCEP)
14.15-15.15	Assimilation of satellite data for atmospheric composition	Hendrik Elbern (RIU)
15.15-15.45	***Coffee break***	
15.45-16.45	Assimilation of satellite data for the land surface	Brett Candy (Met Office)
16.45-17.45	Assimilation of satellite data for the ocean	Laurent Bertino (NERSC)
18.00	***Cocktail Reception***	
Tuesday 9 September		
Session 2:	**NWP tools and components for satellite data assimilation**	
9.15-10.15	Advances in data assimilation techniques and their relevance to satellite data assimilation	Andrew Lorenc (Met Office)
10.15-10.45	***Coffee break***	
10.45-11.45	Advances in model physics and their relevance to satellite data assimilation	Jean-Francois Mahfouf (Météo-France)
11.45-12.00	***Comfort break***	
12.00-13.00	Overview of the status of radiative transfer models for satellite data assimilation	Jérôme Vidot (Météo-France)
13.00-14.00	***Lunch break***	
14:00-15:00	Progress towards better representation of observation and background errors in 4D-var	Niels Bormann (ECMWF)
15:00-15:30	***Coffee break***	
Session 3:	**Satellite instrument characterisation and reanalysis**	

15:30-16:30	Techniques and processes for pre-launch characterisation of new instruments	Dieter Klaes (EUMETSAT)
16.30-17.30	Use of satellite data in reanalysis	Dick Dee (ECMWF)
Wednesday 10 September		
9.15-10.15	Techniques for characterising instruments post-launch	William Bell (Met Office)
10.15-10.45	***Coffee break***	
Session 4:	**Satellite winds**	
10.45-11.45	Active techniques for wind and wave observations: scatterometer, altimeter, SAR	Giovanna De Chiara and Saleh Abdalla (ECMWF)
11.45-12.00	***Comfort break***	
12.00-13.00	The assimilation of wind information from radiances: AMV and 4D-var tracing	Mary Forsythe (Met Office)
13.00-14.00	***Lunch break***	
14.00-14.30	Prospects for lidar wind assimilation	Michael Rennie (ECMWF)
Session 5:	**Satellite water vapour, cloud and precipitation**	
14.30-15.00	Prospects for radar and lidar cloud assimilation	Marta Janiskova (ECMWF)
15.00-15.30	***Coffee break***	
15.30-16.30	The assimilation of water vapour, cloud and rain information from sounders	Alan Geer (ECMWF)
16.30-17.30	Assimilation of microwave imagers (GCOM-W1/AMSR2, GPM/GMI)	Masahiro Kazumori (JMA)
19.00	***Seminar dinner***	
Thursday 11 September		
9.15-10.15	Convective scale satellite data assimilation	Thomas Auligné (UCAR)
10.15-10.45	***Coffee break***	
Session 6:	**Satellite temperature and humidity sounding**	
10.45-11.45	Assimilation of infrared sounder radiances	Andrew Collard (NCEP)
11.45-12.00	***Comfort break***	
12.00-13.00	Principal component and reconstructed radiance based assimilation techniques	Marco Matricardi (ECMWF)
13.00-14.00	***Lunch break***	
14:00-15:00	Techniques for modelling land, snow and sea ice emission and scattering	Fatima Karbou (Météo-France)
15:00-15:30	***Coffee break***	
15:30-16:30	Assimilation in the upper troposphere lower stratosphere: role of radio occultation	Sean Healy (ECMWF)
16.30-17.30	Assimilation in the upper stratosphere: role of radiances	Ben Ruston (NRL)
Friday 12 September		
Session 7:	**Design and evaluation of the Global Observing System**	
9.15-10.15	Impact of satellite data for global NWP: evaluation using OSEs and new techniques	Tony McNally (ECMWF)

10.15-10.45	***Coffee break***	
10.45-11.45	Forthcoming changes in the Global Satellite Observing Systems	Mitch Goldberg (NOAA)
11:45-12.45	The WMO Vision for global observing systems: to what extent will it be met by space agencies' plans	John Eyre (Met Office)
12:45-13:00	Discussion	
13.00	**Closure**	Erland Källén (ECMWF)