



TRAINING COURSE

EUMETSAT/ECMWF NWP-SAF Satellite data assimilation

3–7 April 2017

	Monday 3 April	Tuesday 4 April	Wednesday 5 April	Thursday 6 April	Friday 7 April
09:30-10:45	Welcome, course overview and meet the students <i>10:30 Computer Hall tour</i>	The infrared spectrum – measurement, modelling and information content Tony McNally	GPS Radio Occulation: Extended applications Sean Healy	Satellites for environmental monitoring and forecasting Antje Inness	Satellite information on the ocean surface (SCAT) Giovanna De Chiara
10:45-11:15			<i>Coffee break</i>		
11:15-12:30	Theoretical background (1) What do satellites measure? Tony McNally	GPS Radio Occulation: Principles and NWP use Sean Healy	The detection and assimilation of clouds in infrared radiances Tony McNally	Background errors for satellite data assimilation Tony McNally	Systematic errors, monitoring and auto-alert systems Mohamed Dahoui <i>12:30 Weather Room visit</i>
12:30-13:00			<i>Comfort break</i>		
13:00-14:00			<i>Lunch break</i>		
14:00-15:15	Theoretical background (2) Data assimilation algorithms, key elements and inputs Tony McNally	Satellite information on the land surface Patricia De Rosnay	The detection and assimilation of clouds and rain in microwave radiances Alan Geer	Observation errors for satellite data assimilation Peter Weston	Current satellite observing network and its future evolution Stephen English
15:15-15:45			<i>Coffee break</i>		
15:45-17:00	The microwave spectrum – measurement, modelling and information content Alan Geer <i>17:30 Ice breaker</i>	A <i>practical</i> guide to IR and MW radiative transfer – using the RTTOV model and GUI David Rundle (UK Met Office)	Wind information from satellites (Atmospheric Motion Vectors) Katie Lean	1D-Var theory, simulator and <i>practical</i> session on background and observation errors Tony McNally	Question and answer session, course evaluation <i>Close</i>
17:00-17:30		Practical extension period	Practical extension period	Practical extension period	