



TRAINING COURSE

EUMETSAT/ECMWF NWP-SAF Satellite data assimilation

18–22 March 2019

	Monday 18 March	Tuesday 19 March	Wednesday 20 March	Thursday 21 March	Friday 22 March
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 Occultation: Extended applications Sean Healy	Satellites for environmental monitoring and forecasting Melanie Ades	Bias Correction Methods for Satellite data Niels Bormann
10:45-11:15	<i>Coffee break</i>				
11:15-12:30	Theoretical background (1) What do satellites measure? Tony McNally	GPS Radio Occultation: Principles and NWP use Chris Burrows	The detection and assimilation of clouds in infrared radiances Reima Eresmaa	Background errors for satellite data assimilation Tony McNally	Satellite information on the ocean surface (SCAT) Giovanna De Chiara
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	Microwave applications – clear sky temperatures, cloud and rain detection and assimilation Alan Geer	Observation errors for satellite data assimilation Niels Bormann	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 Marco Matricardi	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	