

Workshop: Shedding light on the greyzone

13 – 16 November 2017



Programme

Monday 13 November		
13:15-14:00	Registration	Weather Room
14:00-14:20	Introduction	Andy Brown/Nils Wedi (ECMWF)
14:20-14:50	European Cloud Moist Work so Far	Peter Bechtold (ECMWF)
14:50-15:20	Coffee break	
Session 1: Turbulence, convection, cloud and their interaction		CHAIR: Richard Forbes
15:20-15:50	NWP model tuning for the convective greyzone: operational experience at DWD and possible pathways towards the convection-resolving scale	Günther Zängl (DWD)
15:50-16:20	Greyzone in the Great White North: Recent Developments at the Canadian Meteorological Centre	Ron McTaggart-Cowan (CMC)
16:20-16:50	Experiences with Convection Permitting versions of the UM	Humphrey Lean (Met Office)
16:50-17:20	PBL and precipitation interaction and grey-zone issues	Song You Hong (KIAPS)
17:30	Drinks reception and posters	
Tuesday 14 November		
Session 1: Turbulence, convection, cloud and their interaction		CHAIR: Michail Diamantakis
09:00-09:30	Some light shed on the grey zone of turbulence	Rachel Honnert (Météo-France)
09:30-10:00	Dynamic sub-grid modelling of an evolving CBL at grey-zone resolutions	George Efstathiou (Exeter)
10:00-10:30	From small-scale turbulence to large-scale convection: a unified scale-adaptive EDMF parameterization	Kay Sušelj (JPL)
10:30-11:00	Coffee break	
		CHAIR: Martin Koehler
11:00-11:30	On the use of a TKE equation to compute subgrid fluxes in the "Grey Zone"	Stephan de Roode (TU Delft)

11:30-12:00	Entropy production as a constraint to subgrid-scale modeling: role of subgrid scales for the simulation of breaking gravity waves	Almut Gassman (IAP)
12:00-12:30	A new stochastic, scale-aware convection scheme for the Met Office Unified Model	Michael Whittall (Met Office)
12:30-13:00	Going through the grey zone of deep convection with the ALADIN System	Piet Termonia (RMI/ Aladin)
13:00-14:00	Lunch break	
CHAIR: Alison Stirling		
14:00-14:30	A scale-aware convective parameterization scheme developed at KIAPS	Young Kwon (KIAPS)
14:30-15:00	Convection in weather forecasts at 40km to 100m resolution over summer land and the tropical Atlantic	Daniel Klocke / Martin Koehler (DWD)
15:00-15:30	CRM and LES approaches for simulating tropical deep convection: successes and challenges	Jean Pierre Chaboureau (Laboratoire d'Aerologie)
15:30-16:00	Coffee break	
16:00-16:30	Necessity of parameterizations for initiating and controlling convection in high resolution cloud permitting models - from experience of JMA's operational meso-scale regional models	Tabito Hara (JMA)
16:30-17:00	Numerical realization of thermal convection at kilometer scale	Zbigniew Piotrowski (IMGW)
17:00-17:30	Challenges in parameterization of shallow convection on kilometre scales	Mirjana Sakradzija (MPI)
Wednesday 15 November		
Session 2: Ensembles and stochasticity		CHAIR: Martin Leutbecher
09:00-09:30	Exploring the impacts of stochastic representations of parameterized physics process uncertainties	Sarah-Jane Lock (ECMWF)
09:30-10:00	Representation of model uncertainty in a convection permitting EPS - HarmonEPS	Inger-Lise Frogner (Met Norway / HIRLAM)
10:00-10:30	The Irish Regional Ensemble (IRE): development of a convection-permitting EPS at Met Éireann	Alan Hally (Met Éireann)
10:30-11:00	Coffee break	
Session 3: Surface Heterogeneity		CHAIR: Irina Sandu
11:00-11:30	Scale issues for atmospheric modelling at urban scale	Valéry Masson (Météo-France)
11:30-12:00	Orographic drag and the mountain-wave grey zone	Annelize VanNiekerc (Met Office)
12:00-12:30	Land surface-atmosphere interaction approaching high resolution	Patrick Samuelsson (SMHI)
Session 4: Physics-dynamics interface and emerging HPC		CHAIR: Nils Wedi

Workshop programme - continued

12:30-13:00	Developing a km-scale model system over the Alpine arc	Oliver Fuhrer (Meteo Swiss)
13:00-14:00	<i>Lunch break</i>	
14:00-14:30	Simulation in the greyzone with the Finite-Volume Module of the IFS	Christian Kühnlein (ECMWF)
14:30-15:00	Coupling physical parameterizations to a three-dimensional spectral element model	Alex Reinecke (NRL)
15:00-15:30	Physics-dynamics coupling for GungHo	Ben Shipway (Met Office / Gung-Ho)
15:30-16:00	<i>Coffee break</i>	
16:00-18:30	Working groups	
Thursday 16 November		
09:00-10:30	Working groups	
10:30-11:00	<i>Coffee break</i>	
11:00-13:00	Working groups	
13:00-14:00	<i>Lunch break</i>	
14:00-15:00	Plenary	