

Agenda for Future of Cumulus Parametrization Workshop

10-14 July 2017, Delft University of Technology, The Netherlands

Monday 10 July	Setting the Scene	
0830-0900	Registration	
Session 1	Perspectives	
0900-0930	Welcome and Workshop goals	Pier Siebesma and Christian Jakob
0930-1000	What should a cumulus parametrization do?	Cathy Hohenegger
1000-1030	What should a cumulus parametrization do?	Dave Randall
1030-1100	Coffee Break	
1100-1130	Cumulus parametrization: A Global NWP perspective on challenges in the tropical regions	Peter Bechtold
1130-1200	Cumulus Parametrization using higher-order closures	Peter Bogenschutz
1200-1330	Lunch	
Session 2	Supporting Cumulus Parametrization	
1330-1400	Radiative regulation of tropical convection as implied from satellite observations	Hiro Masunaga
1400-1430	What can we learn from ground-based observations?	Louise Nuijens
1430-1500	What can we learn from atmospheric soundings, simple models, and complex models in idealized settings?	Kerry Emanuel
1500-1530	High Cloud Responses to a Warming SST in Radiative Convective Equilibrium Experiments using a Global Non-hydrostatic Model	Masaki Satoh
1530-1600	Coffee	
Session 3	Where the rubber hits the road!	
1600-1715	Practitioners' perspectives on cumulus parametrization	Alison Stirling Masahiro Watanabe Catherine Rio Guang Zhang

		Parthasarathi Mukhopadhyay
1715-1745	Convective Parameterization — Full Steam in the Wrong Direction.	Bjorn Stevens
1800	Ice Breaker	
Tuesday 11 July	Organized convection	
0900-0930	Organized convection--what is it and what needs parameterizing?	Robert Houze
0930-0945	Conceptual model of a shallow circulation induced by low-level radiative cooling	Ann-Kristin Naumann
0945-1000	When Good Connections Matter: Updraft Merging in Organized Tropical Deep Convection	Ian B. Glenn
1000-1015	The role of 3D radiative transfer in the formation of cloud streets	Fabian Jakob
1015-1030	Interaction of radiation, clouds and dynamics in midlatitude cyclones	Sophia Schäfer
1030-1100	Coffee	
1100-1300	Poster Session 1	
1300-1400	Lunch	
1400-1415	Land/Ocean Contrasts in Precipitation Characteristics Observed with the GPM DPR and Their Relationship to Column Relative Humidity	Yukari N. Takayabu
1415-1430	Radiative-convective equilibrium and the organisation of convection - An observational perspective	Christian Jakob
1430-1445	Effects of the changing heating profile associated with melting layers in a climate model	Hongyan Zhu
1445-1500	Effects of parameterised convection on large-scale flow in comprehensive and idealised models	Penelope Maher
1500-1515	Impacts of modifying the convection scheme in ECHAM6.3 on simulated daily to intra-seasonal tropical precipitation variability	Karsten Peters
1515-1530	Object tracking in LES for parameterization development	Fleur Couvreur

	Coffee	
1530-1600		
1600-1730	Breakout groups 1	
Wednesday 12 July	Transitions	
0900-0930	Diurnal cycles and convection	Pierre Gentine
0930-0945	Shallow cumulus and congestus modes in circulating equilibria of the tropical atmosphere in a two-column RCE model	Louise Nuijens
0945-1000	Local factors governing the stratocumulus break-up and evolution in Southern West Africa	Xabier Pedruzo-Bagazgoitia
1000-1015	Fine Simulations for Parameterization of Mixed-phase Arctic Cumulus	Jan Chylik
1015-1030	Unscrambling anvil development – from low to very high resolution modelling of deep convection	Harald Rybka
1030-1100	Coffee	
1100-1300	Poster Session 2	
1300-1400	Lunch	
1400-1415	Coastal Tropical Convection in a Stochastic Modeling Framework	Martin Bergemann
1415-1430	Low-level thermodynamics as the dominant source for convective memory	Maxime Colin
1430-1445	A new multi-plume stochastic Eddy-Diffusivity/Mass-Flux model: A step towards unified turbulence and convection parameterization	Kay Sušelj
1445-1500	The new CNRM convection parameterization: current status and ongoing developments	Romain Roehrig
1500-1515	Developments and applications using the scale and aerosol aware Grell-Freitas convection parameterization	Georg A. Grell
1515-1530	A scale-adaptive turbulence scheme in the grey zone of turbulence	Rachel Honnert
1530-1600	Coffee Break	

1600-1730	Breakout groups 2	
1900-late	Dinner	
Thursday 13 July	Stochastic parametrizations and the Grey Zone	
0900-0930	Stochastic parametrization	Robert Plant
0930-0945	A new stochastic, scale-aware grey-zone convection scheme based on boundary-layer turbulence statistics	Mike Whittall
0945-1000	Testing the super-parameterization of deep convection in the grey-zone	Stefan Tulich
1000-1015	Examining Chaotic Convection with Super-Parameterization Ensembles	Todd R. Jones
1015-1030	An Estimate of intrinsic limits of predictability using a stochastic convection scheme	Tobias Selz
1030-1100	Coffee	
1100-1300	Poster Session 3	
1300-1400	Lunch	
1400-1415	The impact of a simple, physically-based stochastic boundary-layer parametrization on the development of deep convection in a convection-permitting model	Peter Clark
1415-1430	Convective Updraft Velocities in Parameterizations and the Gray Zone	Leo Donner
1430-1445	Development of stochastic models of convective cloud populations	Samson Hagos
1445-1500	Sensitivity of ECMWF ensemble forecasts to different stochastic representations of model uncertainty associated with convection	Sarah-Jane Lock
1500-1515	Comparison of parameterized/resolved cloud top height with satellite observation	Kengo Matsubayashi
1515-1530	Using LES as a testing ground for developing scale-aware cumulus parameterizations	Roel Neggers
1530-1600	Coffee	
1600-1730	Breakout groups 3	

Friday 14 July	The Future	
0900-1030	Reports from the breakout groups	Chairs and Rapporteurs
1030-1100	Coffee	
1100-1130	What we think we heard this week	The Organizing Committee
1130-1230	The great debate	Plenary Discussion
1230	Workshop closes	