UMAP 2018 Agenda

Presentations are allocated 15 minutes (12 mins + 3 mins questions) or 20 minutes (15 mins + 5 mins questions)

All presentations except for breakout groups will be held in the main auditorium on level 1

Monday 26 February 2018			

0900-1010 **Session I: Meeting Opening**

1.	Ben Shipway/Marty Singh	Welcome & logistics	10 mins
2.	Xubin Zeng/Daniel Klocke	Introduction and Aims for GASS and the meeting	10 mins
3.	Jon Petch/Martin Miller	Historical look at GASS/GCSS	30 mins
4.	Keith Williams	Outcomes from the WGNE systematic errors workshop	20 mins

1010-1040 **Coffee break**

1040-1230 **Session II: Shallow and Deep convection I** *Chairs: Walter Hannah, Peter Bogenschutz*

1.	Steve Klein	Using Doppler lidar observations of vertical velocity to infer boundary layer controls on shallow cumulus at the ARM Southern Great Plains Site	20 mins
2.	Ian Boutle	The Role of Precipitation in Controlling the Transition from Stratocumulus to Cumulus Clouds in a Northern Hemisphere Cold-Air Outbreak	20 mins
3.	Mirjana Sakradzija	Challenges in parameterization of shallow convection on kilometre scales	20 mins
4.	Kirsty Hanley	Improving the representation of convective storms in the Unified Model at 1.5 km gridlength	20 mins
5.	Steve Sherwood	Identifying the sources of convective memory in cloud-resolving simulations for various convective organisation types	15 mins
6.	Pier Siebesma	A Grey-zone project	15 mins

1230-1400		**Lunch & Posters**	

1400-1430		**Session II: Shallow and Deep convection I (cont.)**	*Chairs: Sofia Schäfer, Robert Pincus*
	7.	Christian Jakob	Convection, the ITCZ and climate models - Vale Benjamin Möbis (15 mins)	15 mins
	8.	Guido Cioni	Investigating the predictability of a Mediterranean Tropical-like Cyclone using a non-hydrostatic high-resolution model	15 mins

1430-1530		**Session III: Clouds, radiation and circulation feedback**	*Chairs: Sofia Schäfer, Robert Pincus*
	1.	Richard Forbes	Understanding global model systematic errors in cloud and radiation; a focus on the Southern Ocean shortwave bias	20 mins
	2.	Parthasarathi Mukhopadhyay	Recent Advancement in Cloud-Convection-Radiation parameterization for improved model forecast vis-à-vis high resolution model for extreme prediction over India	20 mins
	3.	William D. Collins:	Large Regional Shortwave Forcing by Anthropogenic Methane Enhanced by Clouds	20 mins

1530-1600		**Coffee break**	

1600-1730		**Session IV: New observational efforts**	*Chairs: Shaocheng Xie, Yunyan Zhang*
	1.	Silke Trömel	Fusion of Radar Polarimetry and Numerical Atmospheric Modelling Towards an Improved Understanding of Cloud and Precipitation Processes	10 mins
	2.	Sandrine Bony	a field study to study the couplings between clouds, convection and circulation	20 mins
	3.	James H Mather	Atmospheric Radiation Measurement (ARM) Activities and Support for Model Development	20 mins
	4.	Steve D. Eckermann	The Deep Propagating Gravity Wave Experiment (DEEPWAVE): Science Highlights and Applications to Numerical Weather Prediction (remote)	20 mins
	5.	Christopher S. Bretherton	Christopher S. Bretherton: SOCRATES: Observations and modeling of Southern Ocean clouds and aerosols	20 mins

1730-1900		**Poster session I and ice breaker**	

Tuesday 27 February 2018

0900-1030 **Session V: Surface drag and momentum feedbacks I** *Chairs: Irina Sandu, Simon Vosper*

1.	Louise Nuijens	Convective momentum transport and the coupling of clouds to circulations (winds) (remote)	20 mins
2.	Inna Polichtchouk	Sensitivity of the Brewer-Dobson circulation and polar vortex variability to parametrized non-orographic gravity-wave drag in a high-resolution atmospheric model	20 mins
3.	Jakob Mann	Momentum flux over flat and complex terrain	20 mins
4.	Abhnil Prasad	Assessment of convectively-generated gravity waves over Northern Australia in satellite observations and mesoscale model simulations	15 mins
5.	Irina Sandu	On the causes of systematic wind turning biases in NWP models	15 mins

1030-1100 **Coffee break**

1100-1230 **Session VI: Next generation modelling** *Chairs: Walter Hannah, Mike Pritchard*

1.	Tanmoy Goswami	Simulation of Indian summer monsoon rainfall extremes by superparameterized community models	20 mins
2.	Qi Tang	How well does regionally refined model represent the uniform high-resolution E3SM V1 atmosphere model over the Contiguous United States	20 mins
3.	Masaki Satoh	Recent outcomes of the Non-hydrostatic Icosahedral Atmospheric Model NICAM for global simulations of multi-scale convective systems	20 mins
4.	Mike Pritchard	Ultraparameterization: Global Modeling with Explicitly Simulated Boundary Layer Turbulence	15 mins
5.	Walter Hannah	A Super-Parameterized Model for the Exascale Era: Results from the new SP-E3SM	15 mins

1230-1400 **Lunch & Posters**

1400-1530	**Session VII: Physics-dynamics coupling**		*Chairs: Ben Shipway, Daniel Klocke*
	1. Phil Rasch/Hui Wan	Quantifying and Understanding the Impact of Time Integration Errors Related to Atmospheric Physics Parameterizations	20 mins
	2. Robert Beare	Understanding couplings between the boundary layer and the large-scale dynamics`	20 mins
	3. Ligia Bernardet	Community infrastructure for facilitating improvement and testing of physical parameterizations	20 mins
	4. Martin Jucker	MiMA: Closing the Gap Between Simple and Comprehensive General Circulation Models	15 mins
	5. Jiong Chen	Boundary Layer Parametrization Coupling to Charney-Phillips Vertical Grid in GRAPES Model	15 mins

1530-1600	**Coffee break**		

1600-1730	**Session VIII: Polar prediction**		*Chairs: Irina Sandu, Gunilla Svensson*
	1. Gijs de Boer	Advanced measurement techniques for helping to understand the lower Arctic atmosphere	20 mins
	2. Eric Bazile	GABLS4: A model inter-comparison exercise to study the stable boundary layer on the polar region	15 mins
	3. Fleur Couvreux	The GABLS4 Model Inter-comparison, A Challenging Intercomparison For Large-eddy Simulations in Very Stable Conditions	20 mins
	4. Florentin Lemonnier	Comparison between CloudSat and in-situ radar snowfall rates in East Antarctica	15 mins
	5. Felix Pithan	Progress and perspectives in understanding Arctic air mass transformations	20 mins

Wednesday 28 February 2018

0900-1030   **Session IX: Surface drag and momentum feedbacks II**   *Chairs: Annelize van Niekerk, Irina Sandu*

1.	Todd Lane	Multiscale analysis of convective momentum transport from organised convection	20 mins
2.	Simon Vosper	Constraining orographic drag parametrization through high-resolution simulations	20 mins
3.	Steve Garner	Ground-truth-model evaluation of sub-grid orographic base-flux parameterization	20 mins
4.	Damian J Murphy	Interactions between the elements of gravity-wave parameterizations	15 mins
5.	Yimin Ma	A new parameterisation for turbulent orographic form drag	15 mins

1030-1100   **Coffee break**

1100-1230   **Parallel Discussion sessions**

Constraining Drag Processes   *Chair: Irina Sandu*
Annelize Van Niekerk (20 mins), Pirkka Ollinaho (15 mins), Martin Köhler (15 mins) M. Joan Alexander (20 mins)

Modelling the precipitation diurnal cycle   *Chair: Shaocheng Xie*
TBC

Fog modelling intercomparison   *Chairs: Ian Boutle, Adrian Hill*
TBC

Dynamics-physics coupling   *Chairs: Ben Shipway, Hui Wan*
TBC

Joint modelling activity over the Caribbean   *Chairs: Pier Siebesma, Daniel Klocke*
TBC

Land temperature and snowpack on subseasonal to seasonal prediction   *Chair: Yongkang Xue*
TBC

Grey-zone modelling   *Chair: Adrian Lock, Pier Siebesma*
TBC

1230-1330   **Lunch**

1330-1430   **Plenary discussion**

1430-   **Free time**

Thursday 1 March 2018

0900-1050 **Session X: Microphysics and aerosol interactions** *Chairs: Hugh Morrison, Zachary J. Lebo*

1.	Adrian Hill:	Report on the GASS microphysics project – KiD-A	20 mins
2.	Wojciech W. Grabowski	Modeling of cloud microphysics. Can we do better?	20 mins
3.	Olaf Morgenstern	The Deep South Clouds and Aerosols project	20 mins
4.	Bernhard Vogel	The relative importance of the feedback of aerosols clouds and radiation for weather forecast	20 mins
5.	Tomoki Ohno	Impact of Cloud Microphysics and Vertical Resolution on High-cloud Amount Response on SSTs	15 mins
6.	Bethan White	ACPC: Identifying, disentangling, and quantifying signals of impacts of aerosol perturbations on clouds, precipitation, and radiation	15 mins

1050-1120 **Coffee break**

1120-1230 **Session XI: Shallow and deep convection II** *Chairs: Catherine Rio, Daniel Klocke*

1.	Alain Protat	Tropical convection process studies using weather radar observations to inform cumulus parameterization development	20 mins
2.	Georg Grell	Development and test of the scale- and aerosol-aware Grell-Freitas convection parameterization within the Next Generation Global Prediction System (NGGPS)	20 mins
3.	Samson Hagos	A stochastic framework for modeling the population dynamics of convective clouds	15 mins
4.	Jean-Marcel Piriou	A subgrid convection scheme, PCMT, for predicting dry, moist and precipitating convection in Numerical Weather Prediction and Climate models	15 mins

1230-1400 **Lunch & Posters**

1400-1420 **Session XI: Shallow and deep convection II (cont.)** *Chairs: Catherine Rio, Daniel Klocke*

5.	Hongyan Zhu	Effects of the changing heating profile associated with melting layers in a climate model	20 mins

1420-1530	**Session XII: Clouds, radiation and circulation feedback**	*Chairs: Sofia Schäfer, Robert Pincus*

1.	Sophia Schäfer	Interaction of radiation, clouds and dynamics in mid-latitude cyclones	20 mins
2.	Ji Nie	Does the sensitivity of extreme precipitation follow the CC scaling?	20 mins
3.	Robert Pincus	Balancing accuracy, efficiency, and flexibility in a radiative transfer parameterization for dynamical models	15 mins
4.	Nidhi Nishant	Aerosol Induced Modification of Organised Convection and Top-of-Atmosphere Radiation	15 mins

1530-1600	**Coffee break**

1600-1740	**Session XIII: Methods for gaining model insight**	*Chairs: Martin Singh, Kevin Reed*

1.	Marat Khairoutdinov	Intraseasonal Variability in a Cloud-Permitting Near-Global Equatorial Aqua-Planet Model	20 mins
2.	Allison Wing	The Radiative-Convective Equilibrium Model Intercomparison Project (RCEMIP)	20 mins
3.	Christian Jakob	Radiative-Convective Equilibrium and organized convection – An observational perspective (15 min)	15 mins
4.	Yunyan Zhang	Continental Active Surface-forced Shallow cumulus (CASS) – a new composite modeling case based on ARM SGP long-term observations	15 mins
5.	Bill Gustafson	Routine, Symbiotic Large-Eddy Simulation and Observation Data Bundles of Continental Shallow Convection for Improving Atmospheric Models	15 mins
6.	Sarah-Jane Lock	On stochastic representations of parametrized physics process uncertainties in the IFS	15 mins

1740-1900	**Poster session II**
1900-	**Conference dinner**

Friday 2 March 2018

0900-1030   **Session XIV: Land-Atmosphere interactions**   *Chairs: Yunyan Zhang, Kwinten Van Weverberg, Gab Abramowitz*

1. Nicolas Rochetin	Morphology of breeze circulations induced by surface flux heterogeneities and their impact on convection initiation	20 mins
2. Hsi-Yen Ma	U.S. summertime surface warm bias in models – A summary from the CAUSES project	20 mins
3. Adrian Lock	Understanding land/atmosphere interactions through the DIurnal land/atmosphere Coupling Experiment (DICE)	20 mins
4. Yongkang Xue	Spring Land Surface and Subsurface Temperature Anomalies and Subsequent Downstream Late Spring-Summer Droughts/Floods in North America and East Asia, and deficiencies in current land modeling and reanalysis data in producing this relationship	15 mins
5. Cathy Hohenegger	When the plants wilt, the rain comes	15 mins

1030-1100   **Coffee break**

1100-1230   **Future GASS projects**

1230-1330   **Lunch & Meeting Close**

Poster Session I: Monday 0900 – Tuesday 1900

Convection

1.1	Ian Boutle	The Role of Precipitation in Controlling the Transition from Stratocumulus to Cumulus Clouds in a Northern Hemisphere Cold-Air Outbreak
1.2	Wayne M. Angevine	Shallow cumulus in a mesoscale model evaluated with the LASSO framework
1.3	Charmaine Franklin	Sensitivity of a tropical squall line simulation to horizontal resolution
1.4	Brian Medeiros	Understanding climate model errors in trade-wind clouds
1.5	Hugh Morrison	Theoretical expressions for the ascent rate of moist convective thermals
1.6	Abhik Santra	Role of cumulus parameterization on tropical rainfall biases in ACCESS
1.7	Georg A. Grell	The Grell-Freitas Convection Parameterization: Recent Developments and Applications within the NASA GEOS Global Model *(On behalf of Saulo R. Freitas)*
1.8	Alison Stirling	The ParaCon Programme
1.9	Alison Stirling	Why closure for convection should not depend on CAPE
1.10	Joseph Olson	Developing the MYNN-Eddy Diffusivity/Mass-Flux PBL Scheme to Improve Non-Local Mixing Across the Greyzone
1.11	Shaocheng Xie	Convective variability and transition simulated by the DOE E3SM Atmosphere Model
1.12	Evan Kalina	Evaluation of the Grell-Freitas Cumulus Scheme in the HWRF model
1.13	Romain Roehrig	Single-column modeling of convection during the CINDY2011/DYNAMO field campaign with the CNRM climate model version 6
1.14	Rosimar Rios-Berrios	Development of a Multi-scale Aquaplanet Framework to Study the Relationship between Tropical Cyclogenesis and Convectively Coupled Equatorial Waves
1.15	Jiawei Bao	Extreme precipitation, convective organization and their associations with microphysics in idealized numerical modeling simulations
1.16	Jing-Jia Luo	Systematic biases of ACCESS-GC models in simulating and predicting tropical climate
1.17	Daniel Klocke	Convection in weather forecasts beyond the grey-zone over summer land and the tropical Atlantic
1.18	Martin Singh	Understanding the seasonal cycle of tropical precipitation: a convective quasi-equilibrium model
1.19	Steven Sherwood	Where is the memory of convection coming from? *(On behalf of Maxime Colin)*
1.20	His-Yen Ma	Investigating the role of wind and precipitation biases on the equatorial Pacific cold tongue bias in CESM through a hindcast approach *(On behalf of Angela Cheska Siongco)*
1.21	Anurag Dipankar	Understanding biases in simulating diurnal cycle of convection over the western coast of Sumatra
1.22	Steven Siems	Open Mesoscale Cellular Convection over the Southern Ocean
1.23	Bethan White	Precipitation extremes in Australia - what are they, and how much are they driven by organised convection?

1.24	Wolfgang Langhans	Alternatives to the Eddy-Diffusivity/Mass-Flux boundary-layer and shallow-cumulus scheme uncovered through parameter optimization
1.25	Catherine Rio	Interaction between shallow and deep convection: Impact on tropospheric humidity and variability of tropical precipitation
1.26	Robert A. Warren	A new idealised intercomparison for CRMs and SCMs
1.27	Harun Rashid	Sensitivity of simulated rainfalls over the Maritime Continent to changes in the horizontal resolution in an AGCM
1.28	Parthasarathi Mukhopadhyay	Recent Advancement in Cloud-Convection-Radiation parameterization for improved model forecast vis-à-vis high resolution model for extreme prediction over India
1.29	Kirsty Hanley	Improving the representation of convective storms in the Unified Model at 1.5 km gridlength

New observational efforts

1.30	Silke Trömel	Fusion of Radar Polarimetry and Numerical Atmospheric Modelling Towards an Improved Understanding of Cloud and Precipitation Processes
1.31	James H Mather	Atmospheric Radiation Measurement (ARM) Activities and Support for Model Development
1.32	Xudong Liang	Application of IVAP-based observation operator in radar radial velocity assimilation

Next generation modelling

1.33	Falko Judt	What is the ultimate limit of weather prediction? – Insights into atmospheric predictability through global cloud-resolving simulations
1.34	Masaki Satoh	Recent outcomes of the Non-hydrostatic Icosahedral Atmospheric Model NICAM for global simulations of multi-scale convective systems
1.35	Tanmoy Goswami	Simulation of Indian summer monsoon rainfall extremes by superparameterized community models
1.36	Kevin Reed	Reduced Complexity Frameworks for Exploring Resolution Dependence in Global Models
1.37	Yun Qian	Applications of Uncertainty Quantification techniques in improving the atmospheric process understanding
1.38	Chungang Chen	A non-oscillatory multi-moment finite volume global transport model on cubed-sphere grid using WENO slope limiter
1.39	Xinpeng Yuan	Adaptive mesh methods in atmospheric dynamics
1.40	Cathy Hohenegger	ICON-A, the atmosphere component of the ICON Earth System Model. Part II: Model evaluation *(On behalf of Traute Crueger)*

Physics-dynamics coupling

1.41	Martin Jucker	MiMA: Closing the Gap Between Simple and Comprehensive General Circulation Models
1.42	Ligia Bernardet	Community infrastructure for facilitating improvement and testing of physical parameterizations
1.43	Ben Shipway	Coupling finite difference physics parametrizations to a mixed finite element dynamical core

1.44	Hongliang Zhang	The iterative time-stepping scheme based on a 3D reference dynamical core of GRAPES_GFS
1.45	Yong Su	The research progress of 3D reference profile in GRAPES_GFS
1.46	Jiong Chen	Boundary Layer Parametrization Coupling to Charney-Phillips Vertical Grid in GRAPES Model
1.47	May Wong	Diagnosis of model physics errors using a convection-permitting ensemble data assimilation system
1.48	Phil Rasch	Quantifying and Understanding the Impact of Time Integration Errors Related to Atmospheric Physics Parameterizations *(On behalf of Hui Wan)*
1.49	Robert Beare	Understanding couplings between the boundary layer and the large-scale dynamics
1.50	Angus Gray-Weale	Modelling wind bursts with a periodically driven Langevin equation

Surface drag and momentum feedbacks

1.51	Irina Sandu	Orographic drag uncertainties impact forecast skill
1.52	Irina Sandu	Constraining the source of significant variation in orographic drag representation in NWP and climate models: a model intercomparison of mean and subgrid orographic fields *(On behalf of Andy Elvidge)*
1.53	Jin-Luen Lee	A novel numerical treatment of pressure gradients over complex terrains suitable for next-generational global models

Polar prediction

1.54	Kuan-Man Xu	The Response of Simulated Arctic Low Clouds to Sea Ice Cover Variation under Constant Large-Scale Forcing
1.55	Felix Pithan	Progress and perspectives in understanding Arctic air mass transformations
1.56	Ramon Fuentes Franco	Sensitivity of interactions between atmospheric variability and ice dynamics over the Arctic ocean to changes in atmospheric and ocean model resolution
1.57	Eric Bazile	Meteo-France contribution for the YOPP-SH
1.58	Anna Fitch	Improving the representation of turbulent vertical velocity in weather and climate models
1.59	Gunilla Svensson	Arctic airmass transformation cases explored using an Atmosphere Ocean Single Column Model
1.60	Florentin Lemonnier	Precipitation in Antarctica: comparison between Cloudsat observations and the LMDz global climate model
1.61	Fleur Couvreux	The GABLS4 Model Inter-comparison, A Challenging Intercomparison For Large-eddy Simulations in Very Stable Conditions

Predictability

1.62	Guido Cioni	Investigating the predictability of a Mediterranean Tropical-like Cyclone using a non-hydrostatic high-resolution model

Poster Session II: Wednesday 0900 – Thursday 1900

Convection

2.1	Allison Wing	The Radiative-Convective Equilibrium Model Intercomparison Project (RCEMIP)
2.2	Phil Rasch	Factors contributing to bias and variability of convective and stratiform properties with various cloud microphysics schemes for an MC3E Squall Line Case *(On behalf of Jiwen Fan)*
2.3	Samson Hagos	Equatorial Asymmetry and the Propagation of the Madden-Julian Oscillation across the Maritime Continent
2.4	William I. Gustafson Jr.	Routine, Symbiotic Large-Eddy Simulation and Observation Data Bundles of Continental Shallow Convection for Improving Atmospheric Models
2.6	Gretchen Mullendore	Departures from Idealized Parcel Theory: Radar Observations of Deep Convection

Surface drag and momentum feedbacks

2.7	Gunilla Svensson	Diagnosing topographic forcing over the Rocky Mountains in ERA-Interim *(On behalf of Kerstin Hartung)*
2.8	Inna Polichtchouk	Zonal-mean circulation response to reduced air–sea momentum roughness
2.9	Annelize van Niekerk	Resolved versus parametrized orographic drag over the Himalayan Plateau
2.10	Annelize van Niekerk	Assessing Orographic Drag Parametrization Uncertainty and Structural Error Using a Perturbed Parameter Ensemble and Statistical Emulator
2.11	Qiying Chen	Momentum Budget Diagnosis and the Parameterization of Subgrid-Scale Orographic Drag in Global GRAPES
2.12	Abhnil Amtesh Prasad	Assessment of convectively-generated gravity waves over Northern Australia in satellite observations and mesoscale model simulations
2.13	Mariska Koning	The role of convective momentum transport in the wind-skill of fine weather forecasts for wind energy design
2.14	Beatrice Saggiorato	Convective momentum transport by shallow convection in cold air outbreaks
2.15	Michael D. Toy	Development of the new Drag Suite for High-Resolution Regional and Global Applications
2.16	Stephen Garner	Ground-truth-model evaluation of sub-grid orographic base-flux parameterization
2.17	Jordan C. Alpert	Integrating a Unified Gravity Wave Physics into the
2.18	Kevin Helfer	The response of shallow convection and its momentum transport to the wind profile in Large Eddy Simulations
2.19	Irina Sandu	Uncertainties related to the representation of momentum transport in shallow convection *(On behalf of Linda Schlemmer)*
2.20	Irina Sandu	Why do modelled and observed surface wind stress climatologies differ in the trade wind regions *(On behalf of Isla Simpson)*
2.21	Felix Pithan	Beyond Rayleigh drag: A simplified representation of surface drag for dry dynamics
2.22	Martin Köhler	Turbulent Orographic Form Drag based on 12m orgraphy TanDEM-X data

Land-atmosphere interactions

2.23	Jungmin Lee	Large eddy simulation of the life cycle of the shallow cumuli over heterogeneous land surface
2.24	Kwinten Van Weverberg	CAUSES: Attribution of surface radiation errors near the Southern Great Plains in NWP and Climate models
2.25	Xubin Zeng	The impact of a low bias in snow water equivalent initialization on NCEP/CFS seasonal forecasts
2.26	Mei Zhao	Impact of Land-surface Initialization on ACCESS-S1
2.27	Guido Cioni	A simplified model of precipitation enhancement over a heterogeneous surface
2.28	His-Yen Ma	CAUSES: On the role of surface energy budget errors to the warm surface air temperature error over the Central U.S.
2.29	Nicolas Rochetin	Radiative-Convective Equilibrium over land surfaces

Microphysics and aerosol interactions

2.30	Xingliang Li	An Oscillation-less MCV Nonhydrostaic Atmospheric Dynamic Core
2.31	Chein-Jung Shiu	Implementation of a two-moment cloud microphysics parameterization for convective and stratiform clouds of TaiESM: Single column and global model simulations
2.32	Zhe Li	Study of the Influence of Microphysical Processes on Typhoon Nida (2016) using a New Double-Moment Microphysics Scheme in the Weather Research and Forecasting Model
2.33	Ian Boutle	Aerosol-fog interaction and the transition to well-mixed radiation fog
2.34	Claire Ryder	Aircraft Observations of Fresh and Transported Saharan Mineral Dust: Changes in Size and Optical Properties
2.35	Georg A Grell	Including strong aerosol sources (such as biomass burning or dust) in operational-like modeling systems such as the HRRR or FV3: Impact on Numerical Weather Prediction
2.36	Belinda Roux	Improving forecasts of visibility in the ACCESS NWP model
2.37	Evelyn D. Grell	On the Importance of a Consistent Treatment of Cloud Microphysics between Resolved and Unresolved Scales
2.38	Evelyn D. Grell	The impact of different microphysical parameterizations on the simulated compensatory feedback between microphysical processes *(On behalf of Jian Wen Bao)*
2.39	Tomoki Ohno	Impact of Cloud Microphysics and Vertical Resolution on High-cloud Amount Response on SSTs
2.40	Jayakumar	Sensitivity of Delhi 330m model visibility forecast to the Cartosat orography
2.41	Zachary J. Lebo	The potential effects of aerosol-induced warming and updraft width and slope on updraft intensity in deep convective clouds
2.42	Bernhard Vogel	The role of cold pools for an extreme dust storm in the Eastern Mediterranean.

Clouds, radiation and circulation feedback

2.43	Hideaki Kawai	A New Index for Low Cloud Cover and Interpretation of Low Cloud Feedback

2.44	Akira Noda	Cloud feedback and circulation in decadal-scale nonhydrostatic global simulations
2.45	Richard Forbes	Clouds in the trade cumulus regime - the "too few, too bright" problem
2.46	Yuying Zhang	Validation of model-simulated clouds with satellite and ground-based simulators and their uncertainties
2.48	Fleur Couvreux	Digging into the 3D radiative effects of shallow cumulus clouds: the effect of cloud clustering on the shortwave total albedo and transmittance *(On behalf of Najda Villefranque Myah)*
2.49	Yaocun Zhang	Simulations of transient eddy activity in northern hemispheric mid-latitude regions
2.50	Sophia Schäfer	Interaction of radiation, clouds and dynamics in mid-latitude cyclones
2.51	Sophia Schäfer	Global impact of 3D cloud-radiation interactions and importance of cloud geometry
2.52	Jiandong Li	Sub-seasonal variation of cloud macro-properties and cloud radiative effects over Southeast China
2.53	Sharmila Sur	High-resolution simulation of tropical cyclone genesis frequency: Influence of model biases in climate conditions
2.54	Wei-Liang Lee	Impact of 3-D Radiation-Topography Interaction in GCM Simulations
2.55	Sonya Fiddes	Radiation, cloud and precipitation response to global perturbations of dimethyl sulfide
2.56	Stan Benjamin	Toward Reducing PBL Errors Including Cloud-Radiation Errors from Day 1 to Week 4 Prediction
2.57	Roger Marchand	Observed Cloud Responses to Climate Variability over the Extratropical Oceans