

Joint 8th COPS Workshop and CSIP Meeting 2009

Talks: A prize will be given to the best talk by a “young researcher”.

Monday 26 October, 2009

13:45 – 13:55	Welcome address: Prof. Stephen Mobbs, Dir. of National Centre for Atmospheric Science (NCAS)
13:55 – 14:00	Introduction to meeting: Alan Blyth
14:00 – 15:20	Session 1: Initiation of convection in southern England and the Black Forest. Chair: Hans Volkert
14:00 – 14:20	The Convective Storm Initiation Project (CSIP): Progress towards understanding convective initiation in the UK. Keith Browning, ICAS, University of Leeds, UK
14:20 – 14:40	The Convective Orographically-Induced Precipitation Study (COPS): Progress towards understanding convective initiation in complex terrain. Volker Wulfmeyer, IPM, University of Hohenheim, Germany
14:40 – 15:00	Convection Initiation over Complex Terrain: Lessons Learned from TRACT, VERTIKATOR, PRINCE, COPS and CSIP. Ulrich Corsmeier, IMK, KIT, Germany
15:00 – 15:20	Radar Climatology of Convection Initiation and Preliminary COPS/DOW Analyses. Tammy Weckwerth and James Wilson, EOL, NCAR, USA
15:20 - 16:30	Coffee / Tea and Poster Session A
16:30 – 18:00	Session 2: Initiation of Convection Chair: Keith Browning
16:30 – 16:45	Analysis of Convection Initiation Processes in Complex Terrain with the Synergy of COPS Remote Sensing Data. Andreas Behrendt et al., IPM, University of Hohenheim, Germany
16:45 – 17:00	Deep convection in an ensemble of mesoscale models: COPS IOP 8b. Christian Barthlott et al., IMK, KIT, Germany.
17:00 – 17:15	The Black Forest storm of 15 July 2007: Numerical simulation and sensitivity studies. Evelyne Richard et al., LA, University of Toulouse, France.
17:15 – 17:30	Influence of tropopause-level disturbances on convection. Geraint Vaughan, NCAS, University of Manchester, UK
17:30 – 17:45	Title TBD. John Marsham et al., NCAS, University of Leeds, UK
17:45 – 18:00	Identification of convective hotspots in mountainous terrain. Martin Hagen et al., IAP DLR - German Aerospace Centre, Germany
19:00	Dinner at Madingley

Tuesday 27 October, 2009

09:00 – 10:30	Session 3: Initiation of Convection (cont) Chair: Stephen Mobbs
09:00 – 09:15	Characterization of the life cycle of convection from initiation to decay on the basis of case study from July, 15th 2007. Kersten Schmidt, et al. IAP DLR - German Aerospace Centre, Germany
09:15 – 09:30	Comparison of WRF model results of convective showers over the Black Forest on 12 August 2007 with observations made with the DoWs. Lindsay Bennett et al., ICAS, University of Leeds, UK.
09:30 – 09:45	What is the real relationship between deep convection and large scale PV anomalies? Andrew Russell, SAES and Geraint Vaughan, NCAS, University of Manchester, UK
09:45 – 10:00	The impact of increased spatial data resolution on the detection of the initiation of convection. Samiro Khodayar-Pardo et al., IMK, KIT, Germany
10:00 – 10:15	Driving Processes for Convection Initiation over Complex Terrain: COPS Observations of 20 July 2007 and Respective COSMO-DE Simulations. Holger Mahlke et al., IMK, KIT, Germany
10:15 – 10:30	Forecasting convective initiation over Alpine terrain by means of automatic nowcasting and a high-resolution NWP model. Georg Pistotnik et al., Central Institute for Meteorology and Geodynamics (ZAMG), Austria
10:30 - 11:30	Coffee / Tea and Poster Session B

11:30 – 13:00	Session 4: Boundary layer phenomena Chair: Andreas Behrendt
11:30 – 11:45	The dependence of convection-related parameters on surface and boundary layer conditions over complex terrain: results from the COPS experiment. Norbert Kalthoff et al., IMK, KIT, Germany
11:45 – 12:00	Numerical Simulations of localized Boundary Layer Circulations affecting the Measurements of the Energy Balance Network during COPS. Bjoern Broetz and Rafael Eigenmann, IAP, University of Mainz
12:00 – 12:15	Turbulence structure within the convective boundary layer over flat terrain detected by ground based Doppler Lidar and aircraft. Kathrin Arnold, et al., IMK, KIT, Germany
12:15 – 12:30	Water Vapour Intercomparison Effort in the Frame of the Convective and Orographically-Induced Precipitation Study: Airborne-to-Ground-based and airborne-to-airborne Lidar Systems. R. Bhawar, Paolo Di Girolamo, et al., DIFA University of Basilicata, Italy
12:30 – 12:45	Water vapour distribution and convective activity: a COPS case study. Joél Van Baelen et al., LAMP Blaise Pascal University, France
12:45 – 13:00	Developments in Radar Refractivity Retrieval. John Nicol, NCAS, University of Reading, UK
13:00 - 15:00	Lunch and Poster Session C
15:00 - 15:30	Coffee / Tea
15:30 – 16:30	Session 5: Clouds and precip Chair: Cyrille Flamant
15:30 – 15:45	Towards improved quantitative precipitation estimation with a local area X-band radar in the framework of COPS. Frédéric Triidon, et al., LAMP, Blaise Pascal University, France
15:45 – 16:00	Ice crystals properties retrieval within ice and mixed-phase clouds using the Doppler polarimetric radar TARA. Yann Dufournet et al., IRCTR Delft University of Technology, The Netherlands
16:00 – 16:15	Predictability of precipitation determined by convection-permitting ensemble modelling. Christian Keil, IAP DLR - German Aerospace Centre, Germany and George Craig, University of Munich, Germany
16:15 – 16:30	“What we didn’t learn about precipitation in CSIP.” Alan Blyth et al., NCAS, University of Leeds
16:30 – 18:00	“The way forward from here.” We will split up into groups of 5 or 6 people. All groups will then bring the ideas together in the last session. 1. Summary of CSIP and COPS and progress towards CI and QPF 2. Outstanding issues / cases to be addressed with current data 3. Next CSIP and COPS projects
19:00	Banquet Dinner at Madingley. After-dinner talk: “C3: Convection crosses Channel”, Prof. Hans Volkert, DLR, Germany.

Wednesday 28 October, 2009

09:00 – 10:15	Session 6: Clouds and data Chair: Volker Wulfmeyer
09:00 – 09:15	CSIP IOP3: Observations of an elevated mesoscale convective system. Keith Browning et al., ICAS, University of Leeds, UK
09:15 – 09:30	CSIP IOP3: Modelling of an elevated mesoscale convective system. Bethan White et al., ICAS, University of Leeds, UK
09:30 – 09:45	Orographic effects on MCS frontal structure and development during COPS IOP9c Victoria Smith, ICAS, University of Leeds, UK
09:45 – 10:00	Ground-based remote sensing of cloud-radiation interaction in the Murg Valley during COPS. Christine Brandau and Hermann Russchenberg, IRCTR Delft University of Technology, The Netherlands.
10:00 – 10:15	Towards an analysis ensemble by using the Joint D-PHASE COPS observational data set. Manfred Dorninger et al., IMGW, University of Vienna, Austria
10:15 – 10:45	Coffee / Tea
10:45 – 12:00	Session 7: Summary Session Chairs: Keith Browning and Cyrille Flamant
	<ol style="list-style-type: none">1. Presentation of prizes.2. Outcomes from Session 6.3. Updates on papers for special QJ issue on COPS4. Other business

Posters

Note: Posters will remain up for the entire workshop, but authors will be in attendance during the appropriate session.

A prize will be given to the best poster by a “young researcher”.

Poster Session A: With coffee/tea, Monday 15:20 – 16:30.

A1	Comparison of two different approaches to the assimilation of radar derived surface rain rate in a convective event. Pier Alberoni, et al. ARPA Servizio Idro-Meteo-Clima, Italy
A2	Process studies of CI using COPS data overlays and integrated data sets. Fumiko Aoshima et al., IPM, University of Hohenheim, Germany
A3	Update of recent activities in the DFG projects COPS-GRID and D-PHASE Verification. Hans-Stefan Bauer et al., IPM University of Hohenheim, Germany
A4	Response of the WRF model to boundary-layer forcing: a test case from the COPS experiment. Ralph Burton et al., NCAS, University of Leeds, UK
A5	Modelling of two cloud formations observed during COPS. John Cardwell and Tom Choularton, SAES, University of Manchester, UK
A6	Investigations of turbulence during the passage of a cold front as measured by Doppler lidar during COPS. Jenny Davis et al., CESR, University of Salford, UK
A7	Validation of IASI-derived water vapour profiles using COPS data. Thomas Deleporte et al., IPSL, LATMOS, France
A8	Reprocessing and Validation of GPS-derived Water Vapor and Slant Delays for COPS. Galina Dick et al., GFZ Potsdam, Germany
A9	Lidar and Radar Measurements of the melting layer in the frame of the Convective and Orographically-induced Precipitation Study. Paolo Di Girolamo et al., DIFA, University of Basilicata, Italy
A10	Observation of a Saharan dust outbreak on 1-2 August 2007: determination of size and microphysical particle parameters. Paolo Di Girolamo et al., DIFA, University of Basilicata, Italy

Poster Session B: With coffee/tea, Tuesday 10:30 – 11:30

B1	Use of integrated profiling techniques for studying cloud-radiation interactions. Kerstin Ebell et al., IGM University of Cologne, Germany
B2	Near-ground free convection events in the valleys of the Black Forest Mountains. Rafael Eigenmann et al., Dept. Micromet. University of Bayreuth, Germany
B3	Comparison of high-resolution rain gauge observations with radar precipitation measurements. Niko Filipovic and Reinhold Steinacker, IMGW, University of Vienna
B4	Towards a Re-Analysis for COPS. Klaus Stephan and Karolin Eichler, DWD German Weather Service, Germany.
B5	Initiation and development of ice and precipitation in orographic convective clouds observed during COPS. Yahui Huang et al., ICAS, University of Leeds, UK
B6	Impact of the complexity of land-surface model on convective precipitation forecasts. Bogumil Jakubiak et al., ICM University of Warsaw, Poland
B7	Aerosol measurements from the Hornisgrinde ground-site and the BAE-146 aircraft during COPS. Hazel Jones et al., SAES, University of Manchester, UK
B8	Scale dependent evaluation of precipitation for special weather episodes of COPS-8b,9 and 13. Ines Langer et al., IMet. Free University of Berlin, Germany
B9	Snap Shot of Wind Profiler Measurements During CSIP and COPS. Emily Norton, et al., NCAS, University of Manchester, UK
B10	Empirical radar rainfall data quality description for usage in the latent heat nudging scheme. Andrea Rossa, et al., CMT, ARPA Veneto, Italy

Poster Session C: After lunch, Tuesday 14:00 – 15:00

C1	Observations from the CSIP automatic weather station network: convection-triggered bore, IOP 03. Felicity Perry, et al., NCAS, University of Leeds, UK
C2	Does large-scale layering explain the observed vertical structure of the inflow into the Mesoscale Convective Structure in CSIP IOP3? Peter Rogberg et al., ICAS, University of Leeds, UK
C3	Dynamic State Index and Precipitation during IOP-9c. Thomas Schartner, et al., IMet. Free University of Berlin, Germany
C4	Detailed analysis of valley flows in complex terrain - A case study from the COPS field experiment. Victoria Smith et al., ICAS, University of Leeds, UK
C5	Predictability of convection in COPS: high-resolution ensemble forecasts from the Unified Model. Kirsty Hanley et al., Dept. Met., University of Reading, UK
C6	Synoptics in motion - Satellite loop for COPS analyses. Hans Volkert, IPA DLR - German Aerospace Centre, Germany
C7	Evaluation of precipitation forecasts in the COPS and D-PHASE domain. Tanja Weusthoff, et al., FOMC MeteoSwiss, Switzerland
C8	Properties of a city plume within the convective boundary layer. Walburga Wilms-Grabe et al., IMK, KIT, Germany