

# 30th International Conference on Alpine Meteorology

Rastatt, Germany, 11 - 15 May 2009

Venue: **Badnerhalle**, Kapellenstraße 20, D-76437 Rastatt, Tel. +49-7222-38 29 0

## Overview Timetable

Time	Monday 11 May 2009	Tuesday 12 May 2009	Wednesday 13 May 2009	Thursday 14 May 2009	Friday 15 May 2009
09:00	<b>Opening</b> short addresses	<b>Session 04</b> <i>BoundLayer</i> Turbulence	<b>Session 08</b> <i>PRECIP</i> D-PHASE	<b>Session 12</b> <i>BoundLayer</i> Cold Pools	<b>Session 16</b> <i>PRECIP</i> other regions
-	2 'historic' talks				
10:30	1 review talk	6 talks	1 review, 4 talks	6 talks	6 talks
	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>
11:00	<b>Session 01</b> <i>PRECIP</i> COPS-Observation	<b>Session 05</b> <i>BoundLayer</i> Therm. driven flows	<b>Session 09</b> <i>NWP</i> COPS-DPHASE	<b>Session 13</b> <i>SNOW</i>	<b>Session 17</b> <i>NWP</i> Towards the future
-					
12:30	6 talks	6 talks	6 talks	6 talks	6 talks
	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i> & guided tour through baroque residence	<i>Lunch</i>	<b>Awards+Discuss.</b> 13:00 <i>Lunch</i>
14:00	<b>Session 02</b> <i>PRECIP</i> Idealized	<b>Session 06</b> <i>DYNAMICS</i> Synoptic scale		<b>Session 14</b> <i>DYNAMICS</i> Meso.mount.flows 1	
-					
15:00	4 talks	4 talks	15:30	<b>Poster Session C</b>	
15:00	<b>Poster Session A</b>	<b>Poster Session B</b>	<b>Session 10</b> <i>PRECIP</i> Aerosols	<i>DYN &amp; SNOW</i>	
-	<i>PRE &amp; CLI-1</i>	<i>BL &amp; CLI-2</i>		(with refreshments)	
16:30	(with refreshments)	(with refreshments)	4 talks		
16:30	<b>Session 03</b> <i>PRECIP</i> Convect. Initiation	<b>Session 07</b> <i>CLIMATE</i>	<i>Coffee</i>	<b>Session 15</b> <i>DYNAMICS</i> Meso.mount.flows 2	
-			<b>Session 11</b> <i>PRECIP</i> Analyses		
18:00	6 talks	6 talks	4 talks	6 talks	
19:30	<b>ICEBREAKER</b>		<b>DINNER</b>		
-					
21:30					
22:30					

**Note:** All submissions were grouped in topical categories, most of them with sub-categories:

<i>CLIMATE</i>	climate aspects	<i>BoundLayer</i>	boundary layer processes
<i>DYNAMICS</i>	dynamical aspects	<i>PRECIP</i>	precipitation processes
<i>NWP</i>	numerical weather prediction	<i>SNOW</i>	snow pack

Typically, packets of 4 or 6 presentations are assembled to fill the 17 oral sessions as given above.

Poster groups *PRE*, *BL* and *DYN* are accompanied by the remaining posters in such a way as to achieve fairly equal numbers of poster presentations for each day (~36).

The programme also serves as table of contents for the 2-page Extended Abstracts (these are available for all contributions for which a page number is given)

as of 4 May 2009

## Part A) Sequence of events and oral presentations

<b>Sunday, 10 May 2009</b>		
17:00-19:00		<b>Registration</b>
<b>Monday, 11 May 2009</b>		
08:00-09:00	<b>page</b>	<b>Registration</b> (continued)
		<b>Opening session</b> <b>Welcome and short address</b> Chair: <i>Hans Volkert</i>
09:10-09:20	<b>002</b>	<b>Gerhard Adrian</b> (DWD, Offenbach, D): ICAM as a regular visitor: Back to Germany for the fifth time
		<b>Two 'historic' talks with some modern ingredients:</b>
09:20-09:40	<b>004</b>	<b>Haraldur Ólafsson</b> (Univ. of Reykjavík, Iceland & Univ. of Bergen, N) and <b>Ágústsson</b> : Mountain Meteorology in the Middle Ages
09:40-10:00	<b>008</b>	<b>Arnold Tafferer</b> (DLR, Oberpfaffenhofen, D), <b>Hoinka</b> and <b>Zängl</b> : The 'miraculous' föhn in Bavaria of January 1704
10:00-10:30		<b>Overview after a recent field campaign in the neighbourhood:</b> <b>Volker Wulfmeyer</b> (University of Hohenheim, Stuttgart, D): The Convective and Orographically-induced Precipitation Study (COPS): A unique data set for studying the initiation and organization of convection in low-mountain regions
10:30-11:00		<b>Coffee</b>
	<b>Session 01</b>	<b>Precipitation Processes: Observations during COPS</b> Chair: <i>Mathias Rotach</i>
11:00-11:15		<b>Stephen Mobbs</b> (Univ. of Leeds, UK): Observations of shallow convection over the Black Forest during COPS
11:15-11:30	<b>010</b>	<b>Andrew Russell</b> (Univ. of Manchester, UK) and <b>Vaughan</b> : An examination of atmospheric lids during COPS
11:30-11:45	<b>012</b>	<b>Jan Handwerker</b> (KIT, Karlsruhe, D), <b>Träumner</b> , <b>Grenzhäuser</b> , <b>Wieser</b> : Wind measurements with lidar and cloud radar during COPS
11:45-12:00	<b>014</b>	<b>Paolo di Girolamo</b> (Univ. Basilicata, Potenza, I), <b>Summa</b> , <b>Bhawar</b> , <b>di Iorio</b> , <b>Vaughan</b> , <b>Norton</b> and <b>Peters</b> : Lidar and Radar Measurements of the melting layer in the frame of the Convective and Orographically-induced Precipitation Study
12:00-12:15	<b>016</b>	<b>Rohini Bhawar</b> (Univ. Basilicata, Potenza, I), <b>di Girolamo</b> , <b>Summa</b> , <b>di Iorio</b> and <b>Demoz</b> : Study of an MCS using Raman Lidar in the frame of the Convective and Orographically induced Precipitation Study
12:15-12:30	<b>018</b>	<b>Alan Blyth</b> (Univ. of Leeds, UK), <b>Huang</b> , <b>Brown</b> , <b>Cotton</b> , <b>Jones</b> , <b>Coe</b> , <b>Choularton</b> , <b>McFiggans</b> and <b>Irwing</b> : Influence of orography and aerosols on the microphysics of convective clouds observed during COPS
12:30-14:00		<b>Lunch</b>
	<b>Session 02</b>	<b>Precipitation Processes: Idealized studies</b> Chair: <i>Dale Durran</i>
14:00-14:15	<b>020</b>	<b>Ulrich Blahak</b> (KIT, Karlsruhe, D): Idealized numerical sensitivity studies on shallow-convection-triggered storms in a low mountain range
14:15-14:30		<b>Daniel J. Kirshbaum</b> (Univ. of Reading, UK): Lee-wave triggering of deep convection
14:30-14:45	<b>022</b>	<b>Axel Seifert</b> (DWD, Offenbach, D) and <b>Zängl</b> : Scaling relations in warm orographic precipitation
14:45-15:00	<b>024</b>	<b>Günther Zängl</b> (DWD, Offenbach, D): The influence of the freezing level on orographic precipitation patterns at small scales

<b>Monday, 11 May 2009</b> (continued)		
15:00-16:30	<b>POSTER SESSION A</b>	<i>with refreshments</i>
	<b>Precipitation Processes and Climate</b>	
<b>Session 03</b>	<b>page</b>	<b>Precipitation Processes:</b> Chair: <i>Ron McTaggart-Cowen</i>
		<b>Convective initiation</b>
16:30-16:45		<i>Christoph Kottmeier</i> (KIT, Karlsruhe, D), <i>Kalthoff, Corsmeier, Barthlott, Träumner, Arnold, Wieser and Mahlke</i> : Initiation and coherent structures of PBL convection over low mountains during the campaigns ESCOMPTE, VERTIKATOR, CSIP, and COPS
16:45-17:00	<b>026</b>	<i>Ulrich Corsmeier</i> (KIT, Karlsruhe, D), <i>Barthlott, Kalthoff, Konow et al.</i> : Driving processes for convection initiation over complex terrain: COPS observations and respective COSMO simulations
17:00-17:15	<b>028</b>	<i>Evelyne Richard</i> (Lab. d'Aérodologie, Toulouse, F), <i>Chaboureau, Flamant</i> : Forecasting summer convection over the Black Forest: A case study from the COPS experiment
17:15-17:30	<b>030</b>	<i>Christian Barthlott</i> (KIT, Karlsruhe, D), <i>Schipper, Kalthoff, Adler and Kottmeier</i> : COSMO model simulation of convergence zones in complex terrain: A case study from COPS
17:30-17:45	<b>032</b>	<i>Martin Hagen</i> (DLR, Oberpfaffenhofen, D), <i>van Baelen and Richard</i> : Influence of the wind profile on the location of hotspots of convection in mountainous terrain
17:45-18:00		<i>Andreas Behrendt</i> (Univ. of Hohenheim, Stuttgart, D), <i>Pal, Radlach, Aoshima and Wulfmeyer</i> : Analysis of convection initiation processes in complex terrain with the synergy of COPS remote sensing data
19:30-21:30	<b>ICEBREAKER</b>	

<b>Tuesday, 12 May 2009</b>		
<b>Session 04</b>		<b>Boundary Layer Processes: Turbulence</b> Chair: <i>Christian Barthlott</i>
09:00-09:15	<b>034</b>	<i>Branko Grisogono</i> (Univ. of Zagreb, CRO): Generalizing the local mixing length-scale for stable atmospheric boundary layers
09:15-09:30	<b>036</b>	<i>Željko Vecenaj</i> (Univ. of Zagreb, Zagreb, CRO), <i>Belušić and Grisogono</i> : Characteristics of the near-surface turbulence during a bora event
09:30-09:45	<b>038</b>	<i>Marwan Katurji</i> (Univ. of Canterbury, New Zealand), <i>Sturman, Zawar</i> : An investigation into ridge-top turbulence characteristics: A New Zealand case study of in situ measurements and large eddy simulation
09:45-10:00	<b>040</b>	<i>Rebecca Mott</i> (SLF, Davos, CH) and <i>Lehning</i> : The application of microscale airflow simulations for quantifying snow drift processes over complex terrain
10:00-10:15		<i>Stefano Serafin</i> (Univ. of Trento, I), <i>Caresia, Panelatti and Zardi</i> : A numerical investigation of the potential temperature and turbulent kinetic energy budgets in thermally driven winds in alpine valleys
10:15-10:30		<i>Stephan de Wekker</i> (Univ. of Virginia, Charlottesville, USA), <i>Lee, Craven, George and Tertell</i> : A preliminary investigation of atmospheric boundary layer evolution over the Blue Ridge Mountains in Virginia
10:30-11:00	<b>Coffee</b>	
<b>Session 05</b>		<b>Boundary Layer Processes:</b> Chair: <i>Branko Grisogono</i>
		<b>Thermally driven flows</b>
11:00-11:15	<b>042</b>	<i>Jürg Schmidli</i> (IAC ETH, Zurich, CH) and <i>Rotunno</i> : Mechanisms of along-valley winds
11:15-11:30	<b>044</b>	<i>Dino Zardi</i> (Univ. of Trento, I): A conceptual model for the daytime evolution of the thermal structure in a mountain valley under fair weather conditions

11:30-11:45	<b>046</b>	<b>Bart Geerts</b> (Univ. of Wyoming, Laramie, USA) and <i>Demko</i> : Observations and numerical simulations of the interaction between the thermally-forced orographic circulation in the convective boundary layer and deep convection
11:45-12:00	<b>048</b>	<b>Jian-Wen Bao</b> (NOAA, Boulder, USA), <i>E. Grell, Michelson</i> and <i>G. Grell</i> : Investigation of orographic venting of atmospheric boundary layer air using observations and the WRF-Chem model
12:00-12:15	<b>050</b>	<b>Stefan Emeis</b> (KIT, Garmisch, D), <i>Schäfer, Forkel, Obleitner &amp; Suppan</i> : Assessment of air quality and mixing-layer height in an Alpine valley from measurements and numerical modelling
12:15-12:30	<b>052</b>	<b>Cyrille Flamant</b> (IPSL, Paris, France), <i>Champollion, Richard, Masson, Cuesta et al.</i> : Complex valley flows and their impact on water vapor transport in pre-convective and convective environments: a case study
12:30-14:00	<b>L u n c h</b>	
<b>Tuesday, 12 May 2009</b> (continued)		
<b>Session 06</b>	<b>page</b>	<b>Dynamics: Synoptic scale aspects</b> Chair: <i>Manfred Dorninger</i>
14:00-14:15	<b>054</b>	<b>Ron McTaggart-Cowan</b> (Env. Canada, Dorval, CAN), <i>Galernau</i> and <i>Bosart</i> : Development of an Alpine lee cyclone during MAP D-PHASE: Forcings for cyclogenesis
14:15-14:30		<b>Kristian Horvath</b> (DHMZ, Zagreb, CRO), <i>Ivatek-Šahdan, Ivančan-Picek</i> and <i>Grubišić</i> : Evolution and structure of two severe cyclonic Bora events: Contrast between the northern and southern Adriatic
14:30-14:45	<b>056</b>	<b>Sylvain Mailler</b> (LMD/CNRS, Paris, F) and <i>Lott</i> : A dynamical influence of the Himalayas on the winter south-eastern Asian monsoon
14:45-15:00	<b>058</b>	<b>Sixiong Zhao</b> (CAS, Beijing, China) and <i>Fu</i> : Dynamics of a vortex with heavy rainfall east of the Tibetan Plateau
15:00-16:30	<b>Poster session B with refreshments</b> <b>Boundary Layer Processes and Climate</b>	
<b>Session 07</b>		<b>Climate</b> Chair: <i>David Whiteman</i>
16:30-16:45		<b>Reinhold Steinacker</b> (Univ. of Vienna, A), <i>Sperka</i> and <i>Mayer</i> : A new high resolution Alpine re-analysis
16:45-17:00	<b>060</b>	<b>Simona Fratianni</b> (Univ. of Turin, I) and <i>Aquaotta</i> : Climate variability in North-Western Italy through the use of reconstructed and homogenized thermo-pluviometric series
17:00-17:15	<b>062</b>	<b>Sophie Fukutome</b> (MeteoSwiss, Zurich, CH), <i>Liniger</i> and <i>Frei</i> : An Alpine climatology of extreme events
17:15-17:30	<b>064</b>	<b>Monika Rauthe</b> (KIT, Karlsruhe, D), <i>Kunz</i> and <i>Mohr</i> : Winter storms with high loss potential in a changing climate: A regional perspective
17:30-17:45	<b>066</b>	<b>Rebekka Posselt</b> (MeteoSwiss, Zurich, CH), <i>Dürr, Stöckli</i> and <i>Müller</i> : Satellite-based retrieval of global radiation over complex terrain: A climatology for the Alps
17:45-18:00	<b>068</b>	<b>Jochen Wagner</b> (Univ. Bodenkultur, Vienna, A), <i>Arola, Blumthaler, Fitzka, Kift, Kreuter, Rieder, Simic et al.</i> : Comparison of ground-based UV irradiance measurements with satellite-derived values: 1-D and 3-D-radiative transfer model calculations in mountainous terrain

Evening side meetings:

18:30-21:00

D-PHASE Steering Committee

18:30-20:00

HYMEX: Information and discussion meeting

(check on-site announcements)

Wednesday, 13 May 2009		
<b>Session 08</b>	<b>page</b>	<b>Precipitation Processes: D-PHASE</b> Chair: <i>Andreas Behrendt</i>
09:00-09:30	<b>070</b>	<i>Mathias Rotach</i> (MeteoSwiss, Zurich, CH), <i>Arpagaus, Dorninger, Hegg, Montani</i> and <i>Ranzi</i> : MAP D-PHASE: Lessons learned and future developments ( <i>overview presentation</i> )
09:30-09:45	<b>072</b>	<i>Tanja Weusthoff</i> (MeteoSwiss, Zurich, CH), <i>Ament, Arpagaus</i> and <i>Rotach</i> : Verification of precipitation forecasts of the D-PHASE data set
09:45-10:00		<i>Luca Panziera</i> (MeteoSwiss, Zurich, CH) and <i>Germann</i> : Probabilistic nowcasting of orographic rainfall
10:00-10:15		<i>Simon Jaun</i> (WSL, Birmensdorf, CH), <i>Walser, Schär</i> and <i>Zappa</i> : Evaluation of a coupled meteorologic-hydrologic (ensemble) prediction system within the MAP D-PHASE
10:15-10:30	<b>074</b>	<i>Uwe Ehret</i> (TUniv. München, D) Evaluation of operational weather forecasts: Applicability for flood forecasting in Alpine Bavaria
10:30-11:00 <b>C o f f e e</b>		
<b>Session 09</b>		<b>Numerical Weather Prediction: COPS and D-PHASE</b> Chair: <i>Andrea Buzzi</i>
11:00-11:15	<b>076</b>	<i>Stefano Mariani</i> (ISPRA, Roma, I), <i>Casalioli, Lanciani, Accadia</i> and <i>Tartaglione</i> : A multi-model intercomparison study for quantitative precipitation forecast using the 6-month MAP D-PHASE dataset
11:15-11:30		<i>Hans Stefan Bauer</i> (Univ. of Hohenheim, Stuttgart, D), <i>Wulfmeyer, Zus, Schwitalla, Dick, Bender, Wickert</i> and <i>Gendt</i> : The SPP1167 Project COPS-GRID and results of first studies using GPS and radar data
11:30-11:45		<i>Matthias Zimmer</i> (Univ. of Mainz, D) and <i>Wernli</i> : Verification of precipitation forecasts from different regional NWP model categories
11:45-12:00	<b>078</b>	<i>Kathrin Wapler</i> (DWD, Offenbach, D), <i>Seifert</i> and <i>Ritter</i> : Using COPS data for the validation of the high-resolution NWP model COSMO-DE
12:00-12:15	<b>080</b>	<i>Olivier Caumont</i> (Météo-France, Toulouse, F), <i>Wattrelot, Jaubert</i> and <i>Ducrocq</i> : Assimilation of weather radar reflectivity in the AROME model for the COPS-IOP9
12:15-12:30	<b>082</b>	<i>Geneviève Jaubert</i> (Météo-France, Toulouse, F), <i>Yan, Ducrocq, Brousseau, Champollion</i> and <i>Flamant</i> : Impact of GPS data assimilation on the convective scale prediction of COPS-IOP9
12:30-15:30 <b>L u n c h &amp; [ICAM Steering Committee (12:45-13:30)]</b> <b>guided tour through baroque residence (14:00-15:00)</b>		
<b>Session 10</b>		<b>Precipitation Processes: Aerosols</b> Chair: <i>Mark Žagar</i>
15:30-15:45	<b>084</b>	<i>Jean-Pierre Chaboureau</i> (Univ. of Toulouse, F), <i>Richard, Pinty, di Girolamo, Kiemle</i> and <i>Flamant</i> : Long-range transport of Saharan dust from CALIPSO, airborne and ground-based lidars, and a regional model during COPS
15:45-16:00		<i>Gregor Gläser</i> (Univ. of Mainz, D) and <i>Knippertz</i> : Influence of the Atlas Mountains on large-scale dust storms in the Sahara desert
16:00-16:15	<b>086</b>	<i>Céline Planche</i> (LaMP, Clermont-Ferrand, F), <i>Flossmann</i> and <i>Wobrock</i> : The influence of aerosol particle number and hygroscopicity on the evolution of convective cloud systems and their precipitation: A numerical study based on the COPS observations on 12 and 13 August 2007
16:15-16:30	<b>088</b>	<i>Heike Noppel</i> (KIT, Karlsruhe, D), <i>Blahak, Seifert</i> and <i>Beheng</i> : Investigations of the impact of aerosols on a hailstorm in the Black Forest
16:30-17:00 <b>C o f f e e</b>		

<b>Wednesday, 13 May 2009</b> (continued)			
<b>Session 11</b>	<b>page</b>	<b>Precipitation Processes: Analyses</b>	Chair: <i>Ronald B. Smith</i>
17:00-17:15	<b>090</b>	<i>Idar Barstad</i> (Univ. of Bergen, N), <i>Heikkila</i> and <i>Mesquita</i> : Precipitation downscaling at western Norway: Time-step precipitation intensity	
17:15-17:30	<b>092</b>	<i>Mark Liniger</i> (MeteoSwiss, Zurich, CH), <i>Schiemann</i> and <i>Frei</i> : Gridding daily precipitation from sparse surface networks in complex topography: A reduced space optimal interpolation approach	
17:30-17:45	<b>094</b>	<i>Theresa Gorgas</i> (Univ. of Vienna, A), <i>Dorninger</i> and <i>Steinacker</i> : High resolution analyses based on the D-PHASE & COPS GTS and non-GTS data sets	
17:45-18:00		<i>Stefan Schneider</i> (Univ. of Vienna, A), <i>Steinacker</i> , <i>Dorninger</i> and <i>Gorgas</i> : High resolution precipitation measurements during COPS	
19:30-22:30	<b>DINNER</b>		

<b>Thursday, 14 May 2009</b>			
<b>Session 12</b>		<b>Boundary Layer Processes: Cold Pools</b>	Chair: <i>Kristian Horvath</i>
09:00-09:15	<b>096</b>	<i>David Whiteman</i> (Univ. of Utah, Salt Lake City, USA), <i>Hoch</i> , <i>Lehner</i> & <i>Hahnenberger</i> : Nocturnal cold air intrusions at Arizona's Meteor Crater	
09:15-09:30		<i>Sharon Zhong</i> (Mich. State Univ., East Lansing, USA) and <i>Yao</i> : Atmospheric conditions leading to the formation of a strong temperature inversion in an enclosed basin	
09:30-09:45	<b>098</b>	<i>Manfred Dorninger</i> (Univ. of Vienna, A): Aspects of cold pool life cycle in Austrian sinkholes	
09:45-10:00		<i>Daniel Martinez</i> (Univ. Illes Bal., Palma, E), <i>Cuxart</i> and <i>Jiménez</i> : Analysis of a cold pool formed in a large basin	
10:00-10:15		<i>Sebastian Hoch</i> (Univ. of Utah, Salt Lake City, USA), <i>Whiteman</i> and <i>Mayer</i> : Topographic effects on radiative cooling in valleys and basins	
10:15-10:30	<b>100</b>	<i>Thomas Haiden</i> (ZAMG, Vienna, A): The role of subsidence in valley and basin warming	
10:30-11:00	<b>Coffee</b>		
<b>Session 13</b>		<b>Snow pack</b>	Chair: <i>Massimiliano Fazzini</i>
11:00-11:15		<i>Justin Minder</i> (Univ. of Washington, Seattle, USA), <i>Wayand</i> , <i>Durran</i> , and <i>Roe</i> : The sensitivity of mountain snowpack accumulation to climate warming: Insights from a hierarchy of models	
11:15-11:30	<b>102</b>	<i>Christian Wüthrich</i> (MeteoSwiss, Zurich, CH), <i>Beggert</i> , <i>Scherrer</i> , <i>Crocimaspoli</i> , <i>Appenzeller</i> and <i>Weingartner</i> : Analyses of newly digitised snow series over the last 100 years in Switzerland	
11:30-11:45		<i>Michi Lehning</i> (SLF, Davos, CH), <i>Stössel</i> , <i>Manes</i> , <i>Guala</i> and <i>Fierz</i> : Measurements and simulations of surface mass- and energy balance over snow at a mountain site	
11:45-12:00		<i>Markus Engelhardt</i> (KIT, Karlsruhe, D), <i>Lehner</i> , <i>Salzmann</i> and <i>Hauck</i> : Ground-atmosphere modelling of Alpine permafrost and the significance of the snow cover	
12:00-12:15	<b>104</b>	<i>Heidi Escher-Vetter</i> (BAdW, Munich, D) and <i>Weber</i> : Determination of snow accumulation in high mountains based on data from climate stations	
12:15-12:30	<b>106</b>	<i>Roberto Barbiero</i> (DPCTT, Trento, I), <i>Fazzini</i> and <i>Gaddo</i> : The exceptional meteorological conditions of the December 2008 in the Trentino area (north east Italy): Synoptic and nivological analysis at mesoscale	

<b>Thursday, 14 May 2009</b> (continued)			
12:30-14:00		<b>L u n c h</b>	
<b>Session 14</b>	<b>page</b>	<b>Dynamics: mesoscale mountain flows I</b>	Chair: <i>Vanda Grubišić</i>
14:00-14:15	<b>108</b>	<i>Hans Richner</i> (IAC ETH, Zurich, CH): Estimating foehn dynamics from train and cable car accidents	
14:15-14:30		<i>Berit Hagen</i> (Meteorological Institute, Bergen, N), <i>Ólafsson</i> , <i>Sandvik</i> and <i>Tveita</i> : Greenland, the sea ice and extreme winds	
14:30-14:45		<i>Michael Würsch</i> (IAC ETH, Zurich, CH), <i>Sprenger</i> and <i>Jenker</i> : Lagrangian-based analysis of airflow during foehn in the Alps	
14:45-15:00		<i>Simon Vosper</i> (MetOffice, Exeter, UK), <i>Wells</i> , <i>Yan</i> and <i>Arnold</i> : Using satellite data to constrain gravity-wave drag parametrizations	
15:00-16:30		<b>Poster Session C with refreshments</b> <b>Dynamics and Snow</b>	
<b>Session 15</b>		<b>Dynamics: mesoscale mountain flows II</b>	Chair: <i>Günther Zängl</i>
16:30-16:45		<i>Vanda Grubišić</i> (Univ. of Vienna, Austria), <i>Haimov</i> , <i>French</i> , <i>Oolman</i> and <i>Xiao</i> : Wave-induced turbulence in the lee of the Medicine Bow mountains	
16:45-17:00	<b>110</b>	<i>Ivana Stiperski</i> (DHMZ, Zagreb, CRO) and <i>Grubišić</i> : Trapped lee wave interference in presence of surface friction	
17:00-17:15		<i>Dale Durran</i> (Univ. of Washington, Seattle, USA) and <i>Reinecke</i> : The over-amplification of gravity waves in numerical solutions to flow over topography	
17:15-17:30		<i>Patrick Reinecke</i> (NRL, Monterey, USA) and <i>Durran</i> : Initial condition sensitivities and the predictability of downslope winds	
17:30-17:45		<i>Daniel Reinert</i> (Univ. of Mainz, D) and <i>Wirth</i> : The role of gravity waves for banner cloud dynamics	
17:45-18:00		<i>Helen Wells</i> (MetOffice, Exeter, UK) and <i>Vosper</i> : Predictability of orographic drag for realistic atmospheric profiles	

Evening side meeting:

19:00-21:00 (max.) COPS: Current state, future plans (check on-site announcement)

<b>Friday, 15 May 2009</b>			
<b>Session 16</b>		<b>Precipitation Processes: A look outside of the Alps</b>	Chair: <i>Christian Keil</i>
09:00-09:15		<i>Ronald B. Smith</i> (Yale Univ., New Haven, USA) and <i>Kirshbaum</i> : Orographic precipitation in the tropics: Linear theory of triggered convection	
09:15-09:30		<i>Claus-Jürgen Lenz</i> (KIT, Karlsruhe, D), <i>Kottmeier</i> and <i>Corsmeier</i> : Dynamics and predictability of Mediterranean cyclones: The influence of sea surface and steep orography	
09:30-09:45		<i>Michael Sprenger</i> (IAC ETH, Zurich, CH), <i>Schlemmer</i> and <i>Martius</i> : Disentangling the forcing mechanisms of heavy precipitation events along the Alpine south side using potential vorticity inversion	
09:45-10:00	<b>112</b>	<i>Véronique Ducrocq</i> (Météo-France, Toulouse, F), <i>de Saint Aubin</i> , <i>Bresson</i> , <i>Nuissier</i> and <i>Ricard</i> : A numerical study of the combined processes leading to Mediterranean quasi-stationary MCS	
10:00-10:15	<b>114</b>	<i>Ulrike Romatschke</i> (Univ. of Washington, Seattle, USA), <i>Medina</i> , <i>Houze</i> and <i>Rasmussen</i> : Topographic and diurnal effects on tropical and sub-tropical convection in South America	
10:15-10:30	<b>116</b>	<i>Socorro Medina</i> (Univ. of Washington, Seattle, USA), <i>Houze</i> , <i>Williams</i> and <i>Kingsmill</i> : Structure of mid-latitude cyclones crossing the California Sierra Nevada as seen by vertically pointing radar	
10:30-11:00		<b>Coffee</b>	

<b>Friday, 15 May 2009</b> (continued)			
<b>Session 17</b>	<b>page</b>	<b>Numerical Weather Prediction: Towards the future</b>	Chair: <i>Evelyne Richard</i>
11:00-11:15	<b>118</b>	<i>Christian Keil</i> (DLR, Oberpfaffenhofen, D) and <i>Craig</i> : Sources of uncertainty determined by high-resolution ensemble modelling	
11:15-11:30	<b>120</b>	<i>Kirstin Kober</i> (DLR, Oberpfaffenhofen, D), <i>Craig, Keil</i> and <i>Tafferner</i> : Probabilistic forecasting of thunderstorms through combining nowcasting methods and numerical weather prediction	
11:30-11:45		<i>Chiara Marsigli</i> (ARPA-SIM, Bologna, I), <i>Montani</i> and <i>Paccagnella</i> : Intercomparison of limited-area ensemble systems during the MAP D-PHASE operation period	
11:45-12:00	<b>122</b>	<i>Javier Garcia Hernandez</i> (LCH EPF, Lausanne, CH), <i>Sirvent, Jordan,</i> <i>Boillat</i> and <i>Schleiss</i> : Ensemble meteorological forecast for the upper Rhone river basin	
12:00-12:15	<b>124</b>	<i>Jason Milbrandt</i> (Env. Canada, Dorval, CAN), <i>Mailhot</i> and <i>McTaggart-</i> <i>Cowen</i> : The Canadian high-resolution NWP system for the 2010 winter Olympics	
12:15-12:30		<i>Trevor Smith</i> (Env. Canada, Vancouver, CAN), <i>Synder</i> and <i>McLennan</i> : Some forecasting challenges for the 2010 Olympic and Paralympic winter games	
<b>Closing session</b>			Chair: <i>Stephen Mobbs</i>
12:30		<b>A w a r d s</b>	
-		<i>David Parsons</i> (WMO, THORPEX-IPO, Geneva, CH): Towards ICAM-2011: Resumé of current research efforts and envisioned trends	
13:00		<b>D i s c u s s i o n</b> and <b>a d j o u r n</b>	
13:00- ...		<b>L u n c h</b>	



## Part B) Poster blocks

All posters are on display for the full week. Authors are asked to be ready for discussions at the poster times on Monday, Tuesday and Thursday afternoon.

### Monday

#### **Poster blocks Pnn and Cnn: Session A "Precipitation Processes and Climate-1"**

	<b>page</b>
<b>P01</b> <i>Lindsay <b>Bennett</b> (University of Leeds, UK), Blyth, Weckwerth, Burton and Gadian:</i> Observations of convection initiation and development from the Doppler on Wheels radars and comparison with high resolution WRF simulations	<b>128</b>
<b>P02</b> <i>Andreas <b>Schäfler</b> (DLR, Oberpfaffenhofen, D), Craig, Dörnbrack, Kiemle, Rahm and Wirth:</i> Characterising the convective environment with direct measurements of moisture flux from airborne wind and water vapour lidars	
<b>P03</b> <i>Samuel <b>Buisán</b> (AEMET, Zaragoza, E), Espero, Sanz, Cortés and Lafragüeta:</i> Characterization of convective activity in the Eastern Iberian Range, Spain	<b>130</b>
<b>P04</b> <i>Bianca <b>Adler</b> (KIT, Karlsruhe, D), Kalthoff, Barthlott, Corsmeier, Mobbs, Crewell, Träumner, Kottmeier, Wieser and V. Smith:</i> The initiation of deep convection by boundary layer convergence zones during COPS	<b>132</b>
<b>P05</b> <i>Mamina <b>Kamara</b> (Senegal Met Office, Senegal), Ba and Ndiaye:</i> Case study: impact of the exceptional rains on the floods in Senegal	
<b>P06</b> <i>Vanja <b>Kovač</b> (ARSO, Ljubljana, SI), Cedilnik, N. Žagar and M. Žagar:</i> Influence of local orography on forecast of precipitation in case of flash floods in Slovenia on September 18, 2007	<b>134</b>
<b>P07</b> <i>Wolfgang <b>Langhans</b> (IAC ETH, Zurich, CH), Gohm and Zängl:</i> The orographics impact on patterns of embedded convection during the August 2005 Alpine flood	<b>136</b>
<b>P08</b> <i>Jože <b>Rakovec</b> (Univ. of Ljubljana, SI), Žabkar and M. Žagar:</i> Analysis of different ALADIN forecast runs for the flash flood case in Slovenia, 18 September 2007	<b>138</b>
<b>P09</b> <i>Jianhua <b>Sun</b> (CAS, Beijing, China) and Zhao:</i> The impact of multi-scale systems on freezing rain and snow storms over southern China	<b>140</b>
<b>P10</b> <i>Günther <b>Zängl</b> (DWD, Offenbach, D) and Seifert:</i> Misrepresentation of the seeder-feeder mechanism by Kessler-type auto-conversion schemes	<b>142</b>
<b>P11</b> <i>Idar <b>Barstad</b> (Univ. of Bergen, N):</i> [contents of intended poster amalgamated with oral presentation in session 11]	
<b>P12</b> <i>Raffaele <b>Salerno</b> (Epson Meteo Centre, Milano, I):</i> Predictability analyses in global and regional scale applications	
<b>P13</b> <i>Andrea <b>Montani</b> (ARPA-SIM, Bologna, I), Marsigli and Paccagnella:</i> Limited-area ensemble activities at the Hydro-Meteorological Service of Emilia-Romagna: the COSMO-LEPS system	

	<b>page</b>
<b>P14</b> Thomas <b>Schwitalla</b> (Univ. of Hohenheim, Stuttgart, D), <i>Bauer, Zus and Wulfmeyer</i> : The WRF modeling system and first results of its application within the COPS period	<b>144</b>
<b>P15</b> Andrea <b>Buzzi</b> (ISAC-CNR, Bologna, I), <i>Diavolio, Drofa and Malguzzi</i> : The PROSA project: monitoring, nowcasting and short range forecasting over the Alps and other areas of Italy	
<b>P16</b> Kirsty E. <b>Hanley</b> (Univ. of Reading, UK), <i>Belcher, Clark and Kirshbaum</i> : Predictability of convection in COPS: high-resolution ensemble forecasts from the Unified Model	
<b>P17</b> Suraj D. <b>Polade</b> (Univ. of Hamburg, D) and <i>Ament</i> : Towards a verification of the hydrological cycle in the D-PHASE models: An evaluation of integrated water vapor	
<b>P18</b> Mathieu <b>Reverdy</b> (LaMP, Clermont-Ferrand, F), <i>van Baelen, Walpersdorf, Dick, Hagen and Richard</i> : Water vapor fields retrieved with tomography software.	<b>144</b>
<b>P19</b> Frédéric <b>Tridon</b> (LaMP, Clermont-Ferrand, F), <i>van Baelen and Pointin</i> : Simultaneous X-band and K-band study of precipitation to derive localized Z-R relationships	<b>146</b>
<b>P20</b> Helge <b>Tuschy</b> (DLR, Oberpfaffenhofen, D), <i>Hagen and Mayr</i> : Environmental conditions and radar observations of organized thunderstorms	<b>148</b>
<b>P21</b> Holger <b>Mahlke</b> (KIT, Karlsruhe, D), <i>Corsmeier and Kottmeier</i> : Modification of atmospheric parameters by deep convection over complex terrain during COPS	<b>150</b>
<b>P22</b> Uwe <b>Ehret</b> (TUniv. München, D): Convergence index: A new performance measure for the jumpiness of operational rainfall forecasts	<b>152</b>
<b>P23</b> Véronique <b>Ducrocq</b> (Météo-France, Toulouse, F), <i>Drobinski, Lionello et al. :</i> HyMeX: An experimental programme dedicated to the hydrological cycle in the Mediterranean	<b>154</b>
<b>P24</b> Frédéric <b>Jordan</b> (E-DRIC, Epalinges, CH), <i>Garcia Hernandez and Gal</i> : Operational performance of discharge prediction in Alpine regions	<b>156</b>
<b>P25</b> Giacomo <b>Poletti</b> (Univ. of Trento, I), <i>de Franceschi, Bellin and Zardi</i> : Analysis of precipitation patterns on Mount Baldo (Italy)	<b>158</b>
<b>P26</b> Matthias <b>Grzeschik</b> (Lab. d'Aérologie, Toulouse, F), <i>Jaubert, Flamant and Richard</i> : Assimilation of LEANDRE2 water vapor observations with the AROME 3D-Var cycle for COPS	<b>160</b>
<b>C01</b> Fiorella <b>Acquaotta</b> (Univ. of Turin, I) and <i>Fратиanni</i> : A contribution to the study of the methods to create the references series	<b>162</b>

	<b>page</b>
<b>C02</b> <i>Stefan Sperka</i> (Univ. of Vienna, A), <i>Mayer</i> and <i>Steinacker</i> : A quality control and bias correction method developed for irregularly spaced time-series of observational pressure- and temperature-data	<b>164</b>
<b>C03</b> <i>Dino Zardi</i> (Univ. of Trento, I) and <i>Rampanelli</i> : History and analysis of the temperature series of Trento, Italy (1816-2008)	
<b>C04</b> <i>Joan Cuxart</i> (Univ. IB, Palma, E), <i>Molinos</i> , <i>Martínez</i> , <i>Jiménez</i> and <i>Cunillera</i> : Conditioned climatology of the stably stratified nights in the Ebro basin	
<b>C05</b> <i>Mark Žagar</i> (Univ. of Ljubljana, SI) and <i>Strajnar</i> : Radar-based hail climatology of eastern Slovenia	<b>166</b>
<b>C06</b> <i>Michael Kunz</i> (KIT, Karlsruhe, D) and <i>Puskeiler</i> : Spatial variability and trends of hailstorm frequency and the relation to atmospheric characteristics in southwest Germany	<b>168</b>
<b>C07</b> <i>Pavol Faško</i> (SHI, Bratislava, SK), <i>Lapin</i> , <i>Pecho</i> and <i>Mikulová</i> : Analysis of snow cover change in Slovakia in 1981-2008	<b>170</b>
<b>C08</b> <i>Nadejda Petkova</i> (BAS, Sofia, BG), <i>Andronov</i> and <i>Koleva</i> : Snow cover variability in Bulgaria	
<b>C09</b> <i>Michael Fitzka</i> (Univ. Bodenkultur, Vienna, A), <i>Simic</i> , <i>Weihs</i> and <i>Kromb-Kolb</i> : 15 years of spectral UV-measurements at Sonnblick observatory: Investigation of short- and long-term changes at a high altitude alpine station	<b>172</b>
<b>C10</b> <i>Maria Zoran</i> (National Institute for Optoelectronics, Bukuresti, ROM): Satellite remote sensing assessment of climate risks and their impact on Romanian mountain forests	<b>174</b>
<b>C11</b> <i>Michael Sprenger</i> (IAC ETH, Zurich, CH), <i>Schlemmer</i> and <i>Martius</i> : Detection and climatology of fronts in a high-resolution model reanalysis over the Alps	
<b>C12</b> <i>Christophe Lavaysse</i> (LMD/IPSL, Palaiseau, F), <i>Drobinski</i> and <i>Vrac</i> : Downscaling precipitation and wind in the complex French Mediterranean region	

## **Tuesday**

### **Poster blocks Bnn and Cmm:      Session B "Boundary Layer Processes and Climate-2"**

<b>B01</b> <i>Peter Sheridan</i> (MetOffice, Exeter, UK), <i>Wells</i> , <i>Vosper</i> , <i>Price</i> , <i>Ross</i> , <i>Brown</i> , <i>Mobbs</i> and <i>Horlacher</i> :      COLPEX - Cold Pool Experiment	
<b>B02</b> <i>Meinolf Kossmann</i> (DWD, Offenbach, D), <i>Hoch</i> , <i>Whiteman</i> and <i>Sievers</i> : Modelling of nocturnal drainage winds at Meteor Crater, Arizona, using KLAM_21	<b>182</b>
<b>B03</b> <i>Josep R. Miró Cubells</i> (MSC, Barcelona, E) and <i>Pagès Secall</i> : Minimum temperatures classification at the Pyrenees area using Empirical Orthogonal Functions (EOF)	<b>184</b>
<b>B04</b> <i>Marina Mileta</i> (DHMZ, Zagreb, CRO): Fog water collection with SFC during the period 2000-2008 in Croatia	<b>186</b>

	<b>page</b>
<b>B05</b> <i>Lin-lin Qi</i> (CAS, Beijing, China) and <i>Sun</i> : The application of the coupling model in the numerical simulation of the local radiation fog	<b>188</b>
<b>B06</b> <i>Renzo Richiardone</i> (Univ. of Turin, I), <i>Manfrin, Ferrarese, Frantone</i> and <i>Fernicola</i> : Temperature measurement with sonic anemometers: an instrument characterization	
<b>B07</b> <i>Mathias Bavay</i> (SLF, Davos, CH), <i>Dawes, Lehning, Aberer</i> and <i>Parlange</i> : Swiss Experiment: Application of a collaborative research platform to spatial interpolation validation	
<b>B08</b> <i>Christof Gromke</i> (SLF, Davos, CH), <i>Walter, Manes</i> and <i>Lehning</i> : Aerodynamic roughness lengths of snow surfaces	<b>190</b>
<b>B09</b> <i>Stephan de Wekker</i> (Univ. of Virginia, Charlottesville, USA), <i>Godwin</i> and <i>Emmitt</i> : Wind- and aerosol structure in the Salinas Valley and adjacent mountains in California from airborne Doppler lidar data	
<b>B10</b> <i>Haraldur Ólafsson</i> (Univ.s of Bergen, N & Reykjavík, Iceland), <i>Rögnvaldsson, Reuder, Ágústsson, Kristjánsson</i> and <i>Petersen</i> : Monitoring the atmospheric boundary-layer in the Arctic at Gufuskálar, Iceland	<b>192</b>
<b>B11</b> <i>Sandip Pal</i> (Univ. of Hohenheim, Stuttgart, D), <i>Behrendt, Riede, Schiller</i> and <i>Wulfmeyer</i> : High resolution measurements of water vapor and aerosol fields with UHOH scanning DIAL system at Hornisgrinde	
<b>B12</b> <i>Marcus Radlach</i> (Univ. of Hohenheim, Stuttgart, D) <i>Behrendt, Pal</i> and <i>Wulfmeyer</i> : Measurement of temperature and aerosol fields with rotational Raman lidar during the field campaign COPS at Hornisgrinde on 20th July 2007	
<b>B13</b> <i>Tammy M. Weckwerth</i> (NCAR, Boulder, USA), <i>Wulfmeyer, Behrendt, Pal</i> and <i>Aoshima</i> : Water Vapor DIAL and DOW Observations and Comparisons with Mesoscale Models in COPS	
<b>B14</b> <i>Luciana Rossato</i> (INPE, Sao Jose dos Campos, Brazil), <i>de Jeu</i> and <i>Alvalá</i> : Validation of soil moisture in Brazil as derived from AMSR-E sensor observations for cerrado regions	
<b>B15</b> <i>Yann LARGERON</i> (LEGI, Grenoble, F), <i>Staquet</i> and <i>Chemel</i> : Mixing and transport in the stable atmosphere of an idealized Alpine valley	<b>194</b>
<b>B16</b> <i>Delia Arnold</i> (INTE, Barcelona, E), <i>Schicker, Seibert</i> and <i>Vargas</i> : High resolution modelling of mountain and valley stations and its applications to complex dispersion conditions	<b>196</b>
<b>B17</b> <i>Ahmad Moghaddam</i> (Univ. of Hormozgan, Iran), <i>Taghavi</i> and <i>Khorsandi</i> : Study convective cells impact on air pollution dispersion in boundary layer on Bandar Abbas costal city in the south of Iran	
<b>B18</b> <i>Željko Vecenaj</i> (Univ. of Zagreb, CRO), <i>de Wekker</i> and <i>Grubišić</i> : Mountain wave related turbulence derived from sonic anemometers and an elastic backscatter Lidar	<b>198</b>

<b>B19</b>	<b>Željko Vecenaj</b> (Univ. of Zagreb, CRO), <i>Grubišić</i> and <i>Grisogono</i> : Along-coast features of the bora related turbulence	<b>page</b> <b>200</b>
<b>B20</b>	<b>Dino Zardi</b> (Univ. of Trento, I), <i>de Franceschi</i> , <i>Tagliazucca</i> and <i>Tampieri</i> : Analysis of second order moments in the surface layer turbulence in an Alpine valley	<b>202</b>
<b>B21</b>	<b>Pak Wai Chan</b> (Hong Kong Observatory, China): Validating turbulence parameterization schemes of a numerical model using eddy dissipation rate measurements in terrain-disrupted airflow	<b>204</b>
<b>B22</b>	<b>Norbert Kalthoff</b> (KIT, Karlsruhe, D), <i>Bischoff-Gauss</i> , <i>Khodayar</i> , <i>Fiebig-Wittmaack</i> and <i>Montecinos</i> : The diurnal cycle of the convective boundary layer over an arid Andes valley: Observations and model simulations	
<b>B23</b>	- withdrawn -	
<b>B24</b>	<b>Tammy M. Weckwerth</b> (NCAR, Boulder, USA) and <i>Wilson</i> : Radar climatology of convection initiation in the COPS Region	
<b>B25</b>	<b>Victoria Smith</b> (Univ. of Leeds, UK), <i>Hobby</i> , <i>Mobbs</i> and <i>Burton</i> : Detailed analysis of valley flows in complex terrain: A case study from the COPS field experiment	
<b>B26</b>	<b>Sharon Zhong</b> (Mich.State Univ., East Lansing, USA), <i>Vandeuse</i> , <i>Shortridge</i> and <i>Bian</i> : Estimating and testing the topographic amplification factor using GIS method and weather data from the western United States	<b>206</b>
<b>B27</b>	<b>Thierry Robert-Luciani</b> (ARPAV, Arabba, I), and <i>Marigo</i> : Winter high pressure: Mixing air mechanism in the Belluno pre-Alpine basin	<b>208</b>
<b>B28</b>	<b>Rahela Žabkar</b> (Univ. of Ljubljana, SI) and <i>Rakovec</i> : WRF-Chem study of the high ozone episode dynamics over the complex terrain of Slovenia	<b>210</b>
<b>B29</b>	<b>Ralph Burton</b> (Univ. of Leeds, UK), <i>Mobbs</i> , <i>Gadian</i> and <i>V. Smith</i> : Sensitivity of the WRF model to boundary-layer forcing: Orographic test cases and idealised studies	
<b>B30</b>	<b>Dana Micu</b> (Romanian Academy, Bukuresti, ROM), <i>Cheval</i> and <i>Baciu</i> : Heat waves in the Romanian Carpathians during the cold season	<b>212</b>
<b>B31</b>	<b>Kirsten Warrach-Sagi</b> (Univ. of Hohenheim, Stuttgart, D): Streamflow data assimilation for root zone soil moisture analysis	
<b>B32</b>	<b>Andrew Ross</b> (Univ. of Leeds, UK): Topographic effects on boundary-layer/forest-canopy exchange of gases	
<b>C13</b>	<b>Zeljko Majstorovic</b> (Hydromet. Institute, Sarajevo, BiH), <i>Zulum</i> , <i>Voljevica</i> and <i>Hodzic</i> : Impacts of climate changes to the wider Sarajevo region	

	<b>page</b>
<b>C14</b> <i>Jan Kysely</i> (IAP, Prague, CZ): Trends in heavy precipitation in mountainous and lowland areas in central Europe: Are the differences related to changes in circulation?	<b>176</b>
<b>C15</b> <i>Milan Lapin</i> (Univ. Bratislava, SK) and <i>Kremler</i> : Scenarios of air humidity and saturation deficit change for Slovakia	<b>178</b>
<b>C16</b> <i>Marian Melo</i> (Univ. Bratislava, SK), <i>Lapin</i> and <i>Damborska</i> : Shift of climatic regions in mountainous parts of Slovakia	
<b>C17</b> <i>Luis Mendes Chernó</i> (Météo. Nationale, Bissau, Guinée-Bissau): Étude de l'impact de la variabilité du climat et des changements climatiques sur la Guinée-Bissau	<b>180</b>

### **Thursday**

**Poster blocks Dnn and Snn:**

**Session C "Dynamics and Snow"**

<b>D01</b> <i>Martina Tudor</i> (DHMZ, Zagreb, CRO): Case study of bura of 1st and 3rd February 2007	<b>214</b>
<b>D02</b> <i>Ivana Stiperski</i> (DHMZ, Zagreb, CRO), <i>Ivančan-Picek</i> and <i>Grubišić</i> : The complex bora flow in the lee of southern Velebit	<b>216</b>
<b>D03</b> <i>G. Nína Petersen</i> (Met Office, Reykjavík, Iceland), <i>Renfrew</i> and <i>Moore</i> : An overview of barrier winds off southeastern Greenland during the Greenland flow distortion experiment	
<b>D04</b> <i>Richard Werner</i> (Dornbirn, A): Synchronous strong wind conditions in the middle alpine Region	
<b>D05</b> <i>Michael Sprenger</i> (IAC ETH, Zurich, CH), <i>Jenker</i> , <i>Schwierz</i> and <i>Dierer</i> : Objective foehn prediction based upon the Adaboost algorithm	
<b>D06</b> <i>Florian Pfurtscheller</i> (IMGI, Innsbruck, A) and <i>Gohm</i> : Orographic enhancement of severe windstorms in the Austrian Alps: Two case studies	<b>218</b>
<b>D07</b> <i>Klaus Burri</i> (AGF, Zurich, CH), <i>Dürr</i> , <i>Gutermann</i> , <i>Häberli</i> , <i>Neururer</i> , <i>Richner</i> and <i>Werner</i> : Foehn diagnosis and model verification	<b>220</b>
<b>D08</b> <i>Christoph Knigge</i> (Univ. of Hannover, D), <i>Etling</i> , <i>Paci</i> and <i>Eiff</i> : Laboratory experiments on mountain-induced rotors	<b>222</b>
<b>D09</b> - withdrawn -	
<b>D10</b> <i>Susanne Drechsel</i> (IMGI, Innsbruck, A), <i>Mayr</i> and <i>Chow</i> : Comparison of scanning strategies for 3D wind retrieval from dual Doppler lidar measurements	
<b>D11</b> <i>Vanda Grubišić</i> (Univ. of Vienna, A), <i>Xiao</i> , <i>Haimov</i> , <i>French</i> and <i>Oolman</i> : Lower-tropospheric waves and wave-induced turbulence zones: Insights from T-REX	

	<b>page</b>
<b>D12</b> <i>Ivana <b>Stiperski</b> (DHMZ, Zagreb, CRO) and <b>Grubišić</b>: Boundary layer effects on lee wave resonance in the semi-T-REX environment</i>	<b>224</b>
<b>D13</b> <i>Thomas <b>Raab</b> (Univ. of Innsbruck, A), <b>Mayr</b> and <b>Zängl</b>: WRF performance in complex terrain: A parameter study on downslope windstorms</i>	
<b>D14</b> <i>Haraldur <b>Ólafsson</b> (Univ.s of Bergen, N and Reykjavík, Iceland), <b>Shapiro</b>, <b>Ágústsson</b> and <b>Kristjánsson</b>: The Cape Tobin jet</i>	<b>224</b>
<b>D15</b> <i>Tiina <b>Kilpeläinen</b>, (Univ. of Bergen, N) and <b>Ólafsson</b>: Simulations of mesoscale flow over an Arctic fjord</i>	<b>226</b>
<b>D16</b> <i>Kristian <b>Horvath</b>, (DHMZ, Zagreb, CRO), <b>Bajić</b> and <b>Ivatek-Šahdan</b>: Dynamical downscaling of wind resources in complex terrain of Croatia</i>	
<b>D17</b> <i>Eirik M. <b>Samuelson</b> (Meteorological Institute, Tromsø, N), <b>Grønås</b> and <b>Ólafsson</b>: Local winds during a cold air outbreak in northern Norway</i>	
<b>D18</b> <i>Hálfdán <b>Ágústsson</b> (Univ. of Iceland, Reykjavík, Iceland) and <b>Ólafsson</b>: Extreme turbulence in the wake of SE-Iceland</i>	<b>228</b>
<b>D19</b> <i>Beathe <b>Tveita</b> (Storm Weather Centre, Bergen, N), <b>Ólafsson</b>, <b>Sandvik</b> and <b>Hagen</b>: The sensitivity of the atmospheric flow to Greenland in a case of extreme winds</i>	<b>230</b>
<b>D20</b> <i>Berit <b>Hagen</b> (Meteorological Institute, Bergen, N), <b>Ólafsson</b>, <b>Sandvik</b> and <b>Tveita</b>: Greenland, the sea ice and extreme winds (cf. also session 14)</i>	<b>232</b>
<b>D21</b> <i>Pak Wai <b>Chan</b> (Hong Kong Observatory, China) and <b>Cheung</b>: "Up-hill effect" on the winds at the Hong Kong International Airport in strong northerly winds associated with tropical cyclones</i>	<b>234</b>
<b>D22</b> <i>Haraldur <b>Ólafsson</b> (Univ.s of Bergen, N and Reykjavík, Iceland) and <b>Petersen</b>: Cyclogenesis in the lee of Iceland</i>	
<b>D23</b> <i>Uroš <b>Strajnar</b> (EARS, Ljubljana, SI): Are tornadoes possible also in Slovenia? Case study of the extreme event of 13 and 14 July 2008</i>	<b>236</b>
<b>D24</b> <i>Shuhua <b>Yu</b> (CMA, Chengdu, China), <b>Gao</b> and <b>Xiao</b>: Diagnosis of the effect of south-westerlies on the Tibetan vortex moving east</i>	
<b>D25</b> <i>Walburga <b>Wilms-Grabe</b> (KIT, Karlsruhe, D), <b>Corsmeier</b>, <b>Junkermann</b>, <b>Kottmeier</b>, <b>Holland</b>, <b>Geiss</b> and <b>Neiniger</b>: Transport and chemical conversion in convective systems above complex terrain</i>	<b>238</b>
<b>D26</b> <i>Andrea <b>Buzzi</b> (ISAC-CNR, Bologna, I) and <b>Catania</b>: Dynamical and physical processes characterizing upper-level cut-off lows in winter</i>	<b>240</b>
<b>D27</b> <i>Alan <b>Gadian</b> (Univ. of Leeds, UK), <b>Lock</b>, <b>Coals</b> and <b>Mobbs</b>: Exploring a cut-cell approach for model simulations of flow over hills</i>	<b>242</b>
<b>D28</b> <i>Hans <b>Volkert</b> (DLR, Oberpfaffenhofe, D): The summer of COPS-2007: Multi-scale dynamics visualized by variable-speed time-lapse satellite imagery</i>	<b>244</b>

	<b>page</b>
<b>S01</b> <i>Massimiliano Fazzini</i> (Univ. of Ferrara, I), <i>Romeo</i> and <i>Giallatini</i> : Snow in the central Apennines (peninsular Italy): The first analysis on 30 years of snow and temperature data	
<b>S02</b> <i>Massimiliano Fazzini</i> (Univ. of Ferrara, I) and <i>Gaddo</i> : Relationship between climatic parameters and morphology and duration of snow cover at microscale: Preliminary study in three major ski areas of the territory of Trentino (Italian Eastern Alps)	<b>246</b>
<b>S03</b> <i>Silvia Terzago</i> (Univ. of Turin, I), <i>Cremonini</i> and <i>Fратиanni</i> : Snow precipitation variability in the Western Alps of Italy: Evaluation of an algorithm for the survey of the snow cover through satellites images	<b>248</b>
<b>S04</b> <i>Ralf Becker</i> (DWD, Offenbach, D) and <i>Bisolli</i> : Using polar-orbiting weather satellite data to estimate the snowlines of central-European mountains	<b>250</b>
<b>S05</b> <i>Clemens Teutsch</i> (Univ. of Innsbruck, A) and <i>Mayr</i> : The correlation of new snow density and water equivalent	
<b>S06</b> <i>Manfred Dorninger</i> (Univ. of Vienna, A): A new device for accurate measurements of meteorological parameters in a snow rich environment	<b>252</b>
<b>S07</b> <i>Christian Hauck</i> (Univ. de Fribourg, CH), <i>Engelhardt</i> and <i>Hilbich</i> : Numerical modelling and geophysical monitoring of the sensitivity of alpine permafrost to climate change	

ICAM sponsors: Five institutions support the event through contributions in money or in kind



World Meteorological Organization (WMO)



NEC Deutschland GmbH

Deutsches Zentrum für Luft- und Raumfahrt (DLR)



Deutscher Wetterdienst (DWD)

Karlsruhe Institute of Technology (KIT)

