

## Programme

Version: August 21, 2015

### Sunday, 30 Aug 2015

17:00 - 19:00	Registration
19:00 - 21:00	ICAM Steering Committee Meeting

### Monday, 31 Aug 2015

07:30 - 08:45		Registration
08:45 - 09:00		Welcome and Introduction
09:00 - 10:30	O1	<b>Oral Session: Orographic clouds and precipitation: Part 1</b> <i>Chair: Evelyne Richard (CNRS, France)</i>
09:00 (Invited)	O1.1	Orographic convection: progress and challenges <b>Daniel J. Kirshbaum</b> (McGill University, Canada)
09:30	O1.2	Controls on precipitation in thermally driven orographic clouds <b>Alison D. Nugent</b> (NCAR, United States of America), Campbell D. Watson, Gregory Thompson, Ronald B. Smith
09:45	O1.3	Sensitivity of orographic precipitation in Switzerland to atmospheric processes - simulations with the high-resolution numerical model COSMO <b>Nicolas Piaget</b> (ETH Zurich, Switzerland), Felix Naef, Heini Wernli
10:00	O1.4	Relation between airflow and rainfall orographic enhancement over the Pyrenees: Three heavy precipitation events <b>Laura Trapero Bagué</b> (Institut d'Estudis Andorrans, Andorra), Joan Bech, Fanny Duffourg, Jeroni Lorente
10:15	O1.5	HyMeX IOP2b: observations and numerical simulations of a supercell over the Friuli-Venezia Giulia region (northeastern Italy) <b>Mario Marcello Miglietta</b> (ISAC-CNR, Italy), Agostino Manzato, Richard Rotunno
10:30 - 11:15	P1	<b>Poster Session 1: Part 1</b>
11:15 - 12:30	O2	<b>Oral Session: Orographic clouds and precipitation: Part 2</b> <i>Chair: Günther Zängl (Deutscher Wetterdienst, Germany)</i>

11:15	O2.1	The OWLeS Orographic Field Campaign: Adventures in Intense Snowstorms on the Tug Hill Plateau <b>W. James Steenburgh</b> (University of Utah, United States of America), Leah Campbell, Peter Veals, Theodore Letcher, Justin Minder
11:30	O2.2	Variations in orographic precipitation enhancement during lake-effect storms over the Tug Hill Plateau: Observations from OWLeS IOP2 <b>Leah S. Campbell</b> (University of Utah, United States of America), W. James Steenburgh, Peter G. Veals, Theodore Letcher, Justin R. Minder
11:45	O2.3	Climatological Characteristics of Lake-Effect Storms over Eastern Lake Ontario and Orographic Enhancement over the Tug Hill Plateau <b>Peter G. Veals</b> (University of Utah, United States of America), W. James Steenburgh, Leah S. Campbell
12:00	O2.4	Mountain Waves and Orographic Precipitation in a Northern Colorado Winter Storm <b>David Kingsmill</b> (University of Colorado, United States of America), Ola Persson, Sam Haimov, Matt Shupe
12:15	O2.5	A Precipitation experiment in the Kananakis area of the Alberta Rockies <b>Julie M. Thériault</b> (Université du Québec à Montréal, Canada), Ronald E. Stewart, Juris Almonte, Stephen Berg, Émilie Bresson, Mélissa Cholette, Ida Hung, Dominic Matte, Émilie Poirier, Paul Vaquer, John Pomeroy
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12:30 - 13:45		Lunch Break
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13:45 - 14:00		Weather Forecast
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14:00 - 15:30	O3	<b>Oral Session: Orographic clouds and precipitation: Part 3</b> <b>Chair:</b> Andrew N. Ross (University of Leeds, United Kingdom)
14:00	O3.1	Scale dependence of the statistics of heavy precipitation in the Alpine region <b>Luca Panziera</b> (MeteoSwiss, Switzerland), Marco Gabella, Alexis Berne, Paolo Ambrosetti, Urs Germann
14:15	O3.2	Aerosol-Cloud interactions in orographic wave clouds (ICE-L) <b>Annette K. Miltenberger</b> (University of Leeds, United Kingdom), Paul Field, Adrian Hill, Ben Shipway
14:30	O3.3	A high-resolution weather station network in a complex terrain catchment to improve hydrometeorological forecast and water supply for the São Paulo megacity. <b>Thomas Martin</b> (University of Sao Paulo, Brazil), Jonathan Mota, Helber Freitas, Nilson Neires, Raianny Leite, Miriam Mathias, Ricardo Hallak, Humberto Rocha
14:45	O3.4	Origin and Flow History of Air Parcels in Orographic Banner Clouds <b>Volkmar Wirth</b> (University of Mainz, Germany), Sebastian Schappert
15:00	O3.5	The Impact of Mountain asymmetry on Banner Cloud Formation at Mount Zugspitze <b>Isabelle Prestel</b> (University Mainz, Germany), Volkmar Wirth, Anne Martin

15:15	O3.6	How does fog formation vary throughout a valley network? <b>Sian Lane</b> ( <i>Met Office (UK), United Kingdom</i> ), <i>Jeremy Price, Amanda Kerr-Munslow</i>
15:30 - 17:00	P1	<b>Poster Session 1: Part 2</b>
17:00 - 18:30	O4	<b>Oral Session: Thermally-driven flows and cold pools</b> <b>Chair:</b> <i>Michael Sprenger (ETH Zurich, Switzerland)</i>
17:00	O4.1	Thermally driven up-slope flows: State of the art and open questions <b>Dino Zardi</b> ( <i>University of Trento, Italy</i> )
17:15	O4.2	The impact of the temperature inversion breakup on the exchange of heat and mass in an idealized valley: Sensitivity to the radiative forcing <b>Daniel Leukauf</b> ( <i>University of Innsbruck, Austria</i> ), <i>Alexander Gohm, Mathias W. Rotach, Johannes S. Wagner</i>
17:30	O4.3	A nested large-eddy simulation study of the Ora del Garda wind in the Alps <b>Lorenzo Giovannini</b> ( <i>University of Trento, Italy</i> ), <i>Lavinia Laiti, Dino Zardi</i>
17:45	O4.4	Energetics of idealised valleys in pooling and draining configurations <b>Gabriele Arduini</b> ( <i>University of Grenoble and University of Hertfordshire, United Kingdom</i> ), <i>Charles Chemel, Chantal Staquet</i>
18:00	O4.5	Large-eddy simulations of sea breezes over a mountainous island <b>Chun-Chih Wang</b> ( <i>McGill University, Canada</i> ), <i>Daniel J. Kirshbaum</i>
18:15	O4.6	Identification and climatology of Alpine pumping from a regional climate simulation <b>Meinolf Kossmann</b> ( <i>Deutscher Wetterdienst, Germany</i> ), <i>M. Graf, K. Trusilova, G. Mühlbacher</i>
18:30 - 21:00		Icebreaker

## Tuesday, 01 Sep 2015

08:30 - 10:30	O5	<b>Oral Session: Gravity wave and airflow dynamics: Part 1</b> <b>Chair:</b> <i>Dale Durran (University of Washington, United States of America)</i>
08:30 (Invited)	O5.1	Mysteries of the Deep: Flying through New Zealand's gravity waves <b>James D. Doyle</b> ( <i>Naval Research Laboratory, United States of America</i> ), <i>Qingfang Jiang, Alex Reinecke, Carolyn Reynolds, Stephen D. Eckermann, David C. Fritts, Ronald B. Smith, Mike Taylor, Andreas Dörnbrack</i>
09:00	O5.2	Severe turbulence in a deep valley associated with rotors and interacting cross-mountain and up-valley flows <b>Lukas Strauss</b> ( <i>University of Vienna, Austria</i> ), <i>Vanda Grubišić, Stefano Serafin</i>
09:15	O5.3	Lee rotor onset prediction using linear theory with a boundary layer <b>Miguel A. C. Teixeira</b> ( <i>University of Reading, United Kingdom</i> )

09:30	O5.4	The impact of mountain width and stratification on wave-induced rotor formation <b>Johannes Sachsperger</b> (University of Vienna, Austria), Stefano Serafin, Vanda Grubišić
09:45	O5.5	Aspects of inversions and mountain flows <b>Haraldur Ólafsson</b> (HI, Iceland), Hálf dán Ágústsson, Marius Opsanger Jonassen, Birta Líf Kristinsdóttir, Sigurður Jónsson, Andréa Massad, Eiríkur Örn Jóhannesson
10:00	O5.6	Virtual and real topography for flows across mountain ranges <b>Laurence Armi</b> (University of California San Diego, United States of America), Georg J. Mayr
10:15	O5.7	Sub-kilometre simulation of terrain-disrupted airflow associated with aircraft diversion at the Hong Kong International Airport <b>K. K. Hon</b> (Hong Kong Observatory, Hong Kong S.A.R. (China)), P. W. Chan
10:30 - 11:15	P2	<b>Poster Session 2: Part 1</b>
11:15 - 12:30	O6	<b>Oral Session: Boundary layer processes: Part 1</b> <b>Chair:</b> C. David Whiteman (University of Utah, United States of America)
11:15	O6.1	A mesoscale model-based climatology of daytime atmospheric boundary layer heights over complex terrain. <b>Stephan F. J. De Wekker</b> (University of Virginia, United States of America), Stefano Serafin, Jason C. Knievel
11:30	O6.2	The Passy project: Objectives, underlying scientific questions and preliminary numerical modelling of the Passy Alpine valley <b>Chantal Staquet</b> (Université Joseph Fourier, France), Alexandre Paci, Julie Allard, Gabriele Arduini, Hélène Barral, Manuel Barret, Sébastien Blein, Christophe Brun, Frédéric Burnet, Guylaine Canut, Didier Chapuis, Charles Chemel, Florie Chevrier, Jean-Martial Cohard, Alain Dabas, Hélène Guyard, Jean-Luc Jaffrezo, Pauline Martinet, Stéphane Mercier, Grisa Mocnik, Isabel Peinke, Julian Quimbayo, Jean-Emmanuel Sicard, Delphine Six, Florence Troude, Isabella Zin
11:45	O6.3	High-resolution numerical modeling of meteorological conditions and associated particulate matter distribution over complex terrain, in the Italian Alps. <b>Elena Tomasi</b> (University of Trento, Italy), Lorenzo Giovannini, Luca Ferrero, Dino Zardi, Mariapina Castelli, Marcello Petitta
12:00	O6.4	Comparison of modelled and measured wind fields in an Alpine Valley <b>Gabriele Rau</b> (Zentralanstalt für Meteorologie und Geodynamik, Austria), Johannes Vergeiner, Mathias W. Rotach
12:15	O6.5	The impact of orography on gas dispersion and transportation during the 2014 Holuhraun eruption Elín Björk Jónasdóttir, <b>Guðrún Nína Petersen</b> (Icelandic Meteorological Office, Iceland), Halldór Björnsson, Melissa Anne Pfeffer, Sara Barsotti, Þorsteinn Jóhannsson, Tobias Dürig
12:30 - 13:45		Lunch Break
13:45 - 14:00		Weather Forecast

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14:00 - 15:30	O7	<b>Oral Session: Boundary layer processes: Part 2</b> <b>Chair:</b> Meinolf Kossmann ( <i>Deutscher Wetterdienst, Germany</i> )
14:00	O7.1	The ScaleX experiment in the TERENO-prealpine observatory <b>Benjamin Wolf</b> ( <i>Karlsruhe Institute of Technology, Germany</i> ), Christian Chwala, Frederik De Roo, Benjamin Fersch, Jakob Garvelmann, Edwin Haas, Wolfgang Junkermann, Nadine Ruehr, Klaus Schäfer, Hannes Vogelmann, Matthias Zeeman, Almut Arneht, Klaus Butterbach-Bahl, Michael Dannemann, Stefan Emeis, Ralf Kiese, Harald Kunstmann, Matthias Mauder, Peter Suppan, Ralf Sussmann, Hans-Peter Schmid
14:15	O7.2	Flux measurements over complex, forested terrain <b>Andrew N. Ross</b> ( <i>University of Leeds, United Kingdom</i> ), Rosey Grant
14:30	O7.3	Challenges when dealing with turbulence measurements in mountainous terrain <b>Ivana Stiperski</b> ( <i>University of Innsbruck, Austria</i> ), Mathias W. Rotach
14:45	O7.4	Evaluating local similarity scaling in the stable, wintertime boundary layer influenced by complex topography <b>Karmen Babić</b> ( <i>University of Zagreb, Croatia</i> ), Mathias W. Rotach, Zvezdana Bencetić Klaić
15:00	O7.5	On the role of advection for the net ecosystem carbon dioxide exchange of a subalpine grassland <b>Georg Wohlfahrt</b> ( <i>University of Innsbruck, Austria</i> ), Marta Galvagno, Edoardo Cremonese, Umberto Morra Di Cella
15:15	O7.6	A factor-separation study of convective boundary layer development over non-uniform land use and topography <b>Stefano Serafin</b> ( <i>University of Vienna, Austria</i> ), Stephan F. J. De Wekker
15:30 - 17:00	P2	<b>Poster Session 2: Part 2</b>
17:00 - 18:30	O8	<b>Oral Session: Gravity wave and airflow dynamics: Part 2</b> <b>Chair:</b> Dino Zardi ( <i>University of Trento, Italy</i> )
17:00	O8.1	The second Meteor Crater Experiment (METCRAX II): Introduction and overview of recent results <b>C. David Whiteman</b> ( <i>University of Utah, United States of America</i> ), Manuela Lehner, Sebastian W. Hoch, Matthew O. G. Hills, Norbert Kalthoff, Bianca Adler, Rich Rotunno, Roland Vogt, Iris Feigenwinter, Martina Grudzielanek, Jan Cermak, Thomas Haiden, Nihanth W. Cherukuru, Ronald Calhoun
17:15	O8.2	Downslope-windstorm-type flows and seiches in the Meteor Crater - responses of the nocturnal crater atmosphere to an impinging katabatic flow <b>Manuela Lehner</b> ( <i>University of Utah, United States of America</i> ), C. David Whiteman, Sebastian W. Hoch, Bianca Adler, Norbert Kalthoff, Richard Rotunno
17:30	O8.3	Lidar observations during METCRAX-II <b>Sebastian W. Hoch</b> ( <i>University of Utah, United States of America</i> ), Nihanth W. Cherukuru, Ronald Calhoun, C. David Whiteman, Manuela Lehner, Bianca Adler, Norbert Kalthoff, William O. J. Brown

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17:45	O8.4	A parameter based approach to idealised numerical simulations of Meteor Crater downslope-windstorm-type flows <b>Matthew Hills</b> ( <i>University of Utah, United States of America</i> ), <i>Dave Whiteman, Sebastian Hoch, Manuela Lehner</i>
18:00	O8.5	Do current theories of downslope-windstorm-type flows apply to the Meteor Crater? <b>Thomas Haiden</b> ( <i>ECMWF, United Kingdom</i> ), <i>C. David Whiteman, Manuela Lehner</i>
18:15	O8.6	Upstream conditions controlling downslope-windstorm-type flows in Arizona's Meteor Crater <b>Bianca Adler</b> ( <i>Karlsruhe Institute of Technology (KIT), Germany</i> ), <i>Norbert Kalthoff, C. David Whiteman, Sebastian W. Hoch, Manuela Lehner</i>

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### Wednesday, 02 Sep 2015

08:30 - 10:30	O9	<b>Oral Session: Gravity wave and airflow dynamics: Part 3</b> <b>Chair:</b> <i>Simon Vosper (Met Office, United Kingdom)</i>
08:30 (Invited)	O9.1	Role of Observations in Complex Terrain Research: Recent Progress and Current Challenges <b>Vanda Grubišić</b> ( <i>National Center for Atmospheric Research, United States of America</i> )
09:00	O9.2	Gravity wave predictability in the troposphere and stratosphere during DEEPWAVE <b>P. Alex Reinecke</b> ( <i>Naval Research Laboratory, United States of America</i> ), <i>James Doyle, Qingfang Jiang</i>
09:15	O9.3	An investigation of a midlatitude lower stratospheric gravity wave "valve layer" <b>Christopher G. Kruse</b> ( <i>Yale University, United States of America</i> ), <i>Ronald B. Smith</i>
09:30	O9.4	Mountain gravity waves: some new analytical solutions <b>François Lott</b> ( <i>CNRS, France</i> )
09:45	O9.5	NWP modelling of air flow over South Georgia island: an analysis of wake formation and gravity wave activity. <b>John Hughes</b> ( <i>Leeds University, United Kingdom</i> ), <i>Andrew Ross, Simon Vosper</i>
10:00	O9.6	Spatial distribution and characteristics of foehn conditions over the Larsen Ice Shelf, Antarctica, in observations and Polar WRF. <b>Jenny Turton</b> ( <i>University of Leeds and British Antarctic Survey, United Kingdom</i> ), <i>Amelie Kirchgassner, John King, Andrew Ross, Alan Gadian, Ralph Burton</i>
10:15	O9.7	Lagrangian Perspective of Orographic Blocking <b>Michael Sprenger</b> ( <i>ETH, Switzerland</i> ), <i>Nicolas Piaget, Stefan Ruedisuehli, David Leutwyler, Heini Wernli</i>
10:30 - 11:00		Coffee Break

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11:00 - 12:15	O10	<b>Oral Session: Numerical weather prediction: Part 1</b> <b>Chair:</b> Marco Arpagaus (MeteoSwiss, Switzerland)
11:00 (Invited)	O10.1	High-resolution simulations of flow over complex terrain: progress and challenges <b>Fotini K. Chow</b> (University of California, Berkeley, United States of America)
11:30	O10.2	COSMO-EULAG dynamical core for high resolution Alpine weather prediction <b>Zbigniew Piotrowski</b> (Institute of Meteorology and Water Management - National Research Institute, Poland), Bogdan Rosa, Damian Wójcik, Michał Ziemiański
11:45	O10.3	A new vertical grid nesting capability in the WRF model M. H. Daniels, <b>Katherine A. Lundquist</b> (Lawrence Livermore National Laboratory, United States of America), D. J. Wiersema, F. K. Chow, J. D. Mirocha
12:00	O10.4	Parametrizing mountain-wave and flow-blocking drag in global models: the "grey zone" in orographic drag <b>Simon Vosper</b> (Met Office, United Kingdom), Andy Brown
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12:15 - 12:30		Group Photo
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12:30 - 13:30		Lunch Break (Buffet)
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13:30 - 17:30		Excursion
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17:30 - 22:00		Celebration and Conference Dinner
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## Thursday, 03 Sep 2015

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08:30 - 10:30	O11	<b>Oral Session: Snow processes</b> <b>Chair:</b> Sascha Bellaire (University of Innsbruck, Austria)
08:30 (Invited)	O11.1	Advances in understanding and modelling mountain snow processes <b>John Pomeroy</b> (University of Saskatchewan, Canada), Richard Essery, Keith Musselman, Jonathan Conway, Michael Schirmer, Warren Helgason, Nicolas Leroux, Chris Debeer, Chad Ellis
09:00	O11.2	Modeling elevation-dependent climate warming impacts to snow: effects of temperature lapse rates <b>Matthew G. Cooper</b> (Oregon State University, United States of America), Anne W. Nolin, Mohammad Safeeq
09:15	O11.3	Modelling mountain snow with large-scale and small-scale driving data <b>Richard Essery</b> (University of Edinburgh, United Kingdom)
09:30	O11.4	Using snowboards and lysimeters to constrain snow model choices in a rain-snow transitional environment <b>Nicholas E. Wayand</b> (University of Washington, United States of America), Adam Massmann, Martyn Clark, Jessica Lundquist

09:45	O11.5	<p>Identification of snow precipitation mechanisms and accumulation patterns over complex terrain with very high resolution radar data and terrestrial laser scans</p> <p><b>Franziska Gerber</b> (EPFL / WSL-SLF, Switzerland), <i>Rebecca Mott, Jacopo Grazioli, Daniel Wolfensberger, Alexis Berne, Michael Lehning</i></p>
10:00	O11.6	<p>Propagation of uncertainty in atmospheric longwave radiation to modeled snowpack and summer evapotranspiration at mountain research sites</p> <p><b>Mark Raleigh</b> (National Center for Atmospheric Research, United States of America), <i>Karl Lapo, Danny Marks, Andrew Hedrick, Gerald Flerchinger, Martyn Clark</i></p>
10:15	O11.7	<p>Boundary layer development over a melting mountain snow cover: The Dischma Experiment</p> <p><b>Rebecca Mott</b> (WSL Institute for Snow and Avalanche Research SLF, Switzerland), <i>Sebastian Schlögl, Lisa Dirks, Michael Lehning</i></p>
10:30 - 11:15	P3	<b>Poster Session 3: Part 1</b>
11:15 - 12:30	O12	<p><b>Oral Session: Numerical weather prediction: Part 2</b></p> <p><b>Chair:</b> <i>Fotini K. Chow (University of California, Berkeley, United States of America)</i></p>
11:15	O12.1	<p>Progress in weather prediction in mountainous and snow-covered areas achieved with the ICON model</p> <p><b>Günther Zängl</b> (Deutscher Wetterdienst, Germany)</p>
11:30	O12.2	<p>The future high-resolution NWP systems of MeteoSwiss: COSMO-1 and COSMO-E</p> <p><b>Marco Arpagaus</b> (Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland), <i>Steeff Böing, Oliver Fuhrer, Daniel Leuenberger, Guy De Morsier, Jürg Schmidli, André Walser</i></p>
11:45	O12.3	<p>Parameterization of NWP WRF in statically stable situations over complex terrain</p> <p><b>Goran Gašparac</b> (Gekom Ltd., Croatia), <i>Amela Jeričević, Branko Grisogono</i></p>
12:00	O12.4	<p>A new scheme to represent sub-grid orographic rain enhancement via the seeder-feeder effect</p> <p><b>Samantha A. Smith</b> (Met Office, United Kingdom), <i>P. R. Field, S. B. Vosper, B. Shipway, A. Hill</i></p>
12:15	O12.5	<p>Toward Improved NWP Simulations of Utah Basin Persistent Cold Air Pools</p> <p><b>Erik Crosman</b> (University of Utah, United States of America), <i>John Horel, Chris Foster</i></p>
12:30 - 13:45		Lunch Break
13:45 - 14:00		Weather Forecast
14:00 - 15:30	O13	<p><b>Oral Session: Weather analysis, forecasting and verification</b></p> <p><b>Chair:</b> <i>Thomas Haiden (ECMWF, United Kingdom)</i></p>



14:00	O13.1	Assimilation of water vapor observations upstream of the precipitation events documented during HyMeX SOP1 <b>Evelyne Richard</b> (CNRS, France), Nadia Fourrié, Soline Bielli, Cyrille Flamant, Paolo Digirolamo
14:15	O13.2	Radar-Based Quantitative Precipitation Estimation and Forecasting in Switzerland. <b>Ioannis V. Sideris</b> (MeteoSwiss, Switzerland), Urs Germann, Marco Gabella, Marco Sassi
14:30	O13.3	Performance of a satellite driven nowcasting system and a high resolution NWP AROME-1km model over the Eastern Alpine area <b>Florian Meier</b> (ZAMG, Austria), Nauman Awan, Ingo Meirold-Mautner, Alexander Kann, Christoph Wittmann, Yong Wang
14:45	O13.4	Two novel approaches for precipitation nowcasting in complex terrain within the INCA system <b>Benedikt Bica</b> (ZAMG - Central Institute for Meteorology and Geodynamics, Austria), Alexander Kann, Min Chen, Martin Suklitsch, Vera Meyer, Lukas Tüchler, Yong Wang
15:00	O13.5	MesoVICT – Mesoscale Verification Inter-Comparison over Complex Terrain <b>Manfred Dorninger</b> (University of Vienna, Austria), Marion Mittermaier, Eric Gilleland, Barb Brown, Beth Ebert, Laurie Wilson
15:15	O13.6	Evaluation of a High-Resolution Numerical Weather Prediction Model in Truly Complex Terrain <b>Brigitta Goger</b> (University of Innsbruck, Austria), Mathias W. Rotach, Alexander Gohm, Oliver Fuhrer, Ivana Stiperski
15:30 - 17:00	P3	<b>Poster Session 3: Part 2</b>
17:00 - 18:30	O14	<b>Oral Session: Climate analysis and prediction: Part 1</b> <b>Chair:</b> Ivana Stiperski (University of Innsbruck, Austria)
17:00	O14.1	The unknown truth: impacts of uncertainties in European precipitation datasets on regional climate analysis <b>Andreas F. Prein</b> (National Center for Atmospheric Research, United States of America), Andreas Gobiet
17:15	O14.2	Long series of Swiss seasonal precipitation: Regionalisation, trends and the influence of large-scale flow <b>Simon C. Scherrer</b> (MeteoSwiss, Switzerland), Michael Begert, Mischa Croci-Maspoli, Christof Appenzeller
17:30	O14.3	Alpine trends in temperature and precipitation <b>Johannes Vergeiner</b> (ZAMG, Austria), Barbara Chimani, Susanne Drechsel, Klaus Haslinger, Gernot Resch, Christoph Zingerle
17:45	O14.4	Towards an Alpine Foehn Climatology <b>David Plavcan</b> (University of Innsbruck, Austria), Georg J. Mayr
18:00	O14.5	Future changes of atmospheric cyclone track types with relevance for extreme precipitation events in Central Europe <b>Michael Hofstätter</b> (ZAMG, Austria), Annemarie Lexer, Barbara Chimani, Günther Blöschl, Markus Homann, Andreas Phillip, Christoph Beck, Jucundus Jacobeit

- 18:15 O14.6 Observational Facts of Sustained Departure Plateau Vortexes  
**Shuhua Yu** (*The Chengdu Institute of Plateau Meteorology, CMA, Chengdu, China, People's Republic of*), Wenliang Gao, Jun Peng, Yuhua Xiao
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## Friday, 04 Sep 2015

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- 08:30 - 10:30 O15 **Oral Session: Climate analysis and prediction: Part 2**  
**Chair:** Daniel J. Kirshbaum (*McGill University, Canada*)
- 08:30 (Invited) O15.1 Towards Convection-Resolving Climate Modeling  
**Christoph Schär** (*ETH Zurich, Switzerland*), Nikolina Ban, Steven Böing, Oliver Fuhrer, Xavier Lapillone, Michael Keller, David Leutwyler, Daniel Lüthi, Linda Schlemmer, Jürg Schmidli, Thomas Schulthess
- 09:00 O15.2 Analysis of precipitation extremes using generalized extreme value theory in convection-resolving climate simulations  
**Nikolina Ban** (*ETH Zurich, Switzerland*), Juerg Schmidli, Christoph Schär
- 09:15 O15.3 Estimating Global-Warming-Induced Changes in Extreme Precipitation over Mid-latitude Mountains  
**Dale Durran** (*University of Washington, United States of America*), Xiaoming Shi
- 09:30 O15.4 Characterization of the Simulated Regional Snow-Albedo Feedback Using a Regional Climate Model over Complex Terrain  
**Justin R. Minder** (*University at Albany, United States of America*), Theodore Letcher
- 09:45 O15.5 Trends and Multi-decadal Variability in the Hydroclimate of the Tibetan Plateau as Manifested in Paleoclimate, Precipitation and Reanalysis Data 1850-2010.  
**G. W. Kent Moore** (*University of Toronto, Canada*)
- 10:00 O15.6 The evolution of mountain permafrost in Switzerland (the TEMPS-project)  
**Christian Hauck** (*University of Fribourg, Switzerland*), Reynald Delaloye, Isabelle Gärtner-Roer, Andreas Hasler, Christin Hilbich, Martin Hoelzle, Robert Kenner, Sven Kotlarski, Christophe Lambiel, Rachel Lüthi, Antoine Marmy, Johann Müller, Jeannette Noetzli, Marcia Phillips, Jan Rajczak, Nadine Salzmann, Michael Schaepman, Christoph Schär, Benno Staub, Ingo Völksch
- 10:15 O15.7 Changes in precipitation patterns associated with the retreat and thinning of Vatnajökull ice cap, Southeast-Iceland  
**Hálfdán Ágústsson** (*IMO, Iceland*), Haraldur Ólafsson, Helgi Björnsson, Finnur Pálsson
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- 10:30 - 11:00 Coffee Break
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- 11:00 - 12:30 O16 **Oral Session: Statistical post-processing and downscaling**  
**Chair:** Haraldur Ólafsson (*HI, Iceland*)
- 11:00 (Invited) O16.1 Making use of climate model output in the mountains: Recent progress along the continuum of downscaling complexity  
**Ethan D. Gutmann** (*National Center for Atmospheric Research, United States of America*), Martyn P. Clark, Roy M. Rasmussen, Jeffrey Arnold, Levi Brekke

11:30	O16.2	Diagnosing sub-grid valley cold air pools from numerical weather prediction (NWP) forecasts <b>Peter Sheridan</b> (Met Office, United Kingdom), Simon Vosper, Samantha Smith
11:45	O16.3	A new approach to statistical post-processing of spatial forecasts <b>Markus Dabernig</b> (University of Innsbruck, Austria), Jakob W. Messner, Georg J. Mayr, Achim Zeileis
12:00	O16.4	Probabilistic Predictions in Complex Terrain with an Analog Ensemble <b>Iris Odak Plenkovic</b> (Meteorological and Hydrological Service, Croatia), Luca Delle Monache, Kristian Horvath, Mario Hrastinski, Alica Bajic
12:15	O16.5	Improving short-range probabilistic forecasts of (intra-)daily precipitation sums <b>Manuel Presser</b> (University of Innsbruck, Austria), Jakob Messner, Reto Stauffer, Georg J. Mayr, Achim Zeileis
12:30 - 12:45		Awards
12:45 - 13:00		Closing

## Poster Session 1

**Monday, 31 Aug 2015 10:30 - 11:15 (Part 1) and 15:30 - 17:00 (Part 2)**

P1.1	Bayesian Exploration of Multivariate Orographic Precipitation Sensitivity for nearly moist neutral flows <i>S. Tushaus, D. J. Posselt, <b>Mario. M. Miglietta</b> (ISAC-CNR, Italy), R. Rotunno, L. Delle Monache</i>
P1.2	The Vertical Structure of Coastal Orographic Feeder Clouds <b>David Kingsmill</b> (University of Colorado, United States of America)
P1.3	Finescale Orographic Precipitation Variability and Gap-Filling Radar Potential in Little Cottonwood Canyon, Utah, USA <b>Leah S. Campbell</b> (University of Utah, United States of America), W. James Steenburgh
P1.4	Sea-effect precipitation processes and orographic enhancement over Hokkaido Island, Japan <b>Leah S. Campbell</b> (University of Utah, United States of America), Yasushi Fujiyoshi, Yoshinori Yamada, Masayuki Kawashima, W. James Steenburgh
P1.5	Lake-effect snow at Lake Constance, Austria: Case studies of winter precipitation over complex terrain <b>Lukas Umek</b> (University of Innsbruck, Austria), Lukas Lehner, Alexander Gohm, Susanne Drechsel
P1.6	Lake-effect precipitation at Lake Constance, Austria: Climatology and forecasting <b>Lukas Lehner</b> (University of Innsbruck, Austria), Lukas Umek, Alexander Gohm, Susanne Drechsel
P1.7	The missing link between Alpine potential-vorticity banners and banded convection: A case study of a severe Alpine snow storm <b>Simon Siedersleben</b> (University of Innsbruck, Austria), Alexander Gohm
P1.8	Sensitivity Tests and Ensemble Simulations for a Heavy Precipitation Event over Corsica <b>Phillip Scheffknecht</b> (Université Toulouse, France), Evelyne Richard, Dominique Lambert

- P1.9 Simulations of a long-lived supercell over complex terrain  
**Phillip Scheffknecht** (*Université Toulouse, France*), Stefano Serafin, Vanda Grubišić
- P1.10 On the uncertainty of altitudinal precipitation gradients  
**Michael Kuhn** (*University of Innsbruck, Austria*)
- P1.11 Analysis of the Recent nivometric conditions in Emilia Romagna territory (Northern Adriatic Italy)  
**Massimiliano Fazzini** (*University of Ferrara, Italy*), Cesare Govoni, Sandro Nanni, Valentina Pavan, Francesco Russo
- P1.12 Time and space distribution of precipitation in the Marche Region (Central Italy): preliminary observations.  
**Matteo Gentilucci** (*University of Camerino, Italy*), Carlo Bisci, Massimiliano Fazzini, Carmela Vaccaro
- P1.13 THORBEX - The Thorbjörn precipitation field experiment in SW-Iceland  
Guðrún Nína Petersen, Hálf dán Ágústsson, **Haraldur Ólafsson** (*HI, Iceland*), Þórður Arason
- P1.14 An Analysis of an extreme Rainstorm Caused by the Interaction of the Tibetan Plateau vortex and the Southwest China vortex during the Intensive Observation Period  
**Xiaolong Cheng** (*Institute of Plateau Meteorology, CMA, Chengdu, China, People's Republic of*), Yueqing Li
- P1.15 Analysis on Environmental Field and Causes for the Abnormal Track of Tibetan Plateau Vortex after Its Moving out of the Plateau  
Shuhua Yu, **Nini Tu** (*The Chengdu Institute of Plateau Meteorology, CMA, Chengdu, China, People's Republic of*), Jun Peng
- P1.16 Observing layout, field experiment of Southwest China vortex and its applications in weather research and forecast  
**Yueqing Li** (*Institute of Plateau Meteorology, CMA, Chengdu, China, People's Republic of*)
- P1.17 The correlation between aerosol and large-scale precipitation in autumn in Sichuan Basin  
**Pengping Wu** (*Institute of Plateau Meteorology, CMA, Chengdu, China, People's Republic of*), Changchun Zhou
- P1.18 Newly installed soil moisture monitoring network at middle and high elevation in Switzerland: setup and first results  
**Cécile Pellet** (*University of Fribourg, Switzerland*), Christian Hauck
- P1.19 Soil water content distribution and influence on the thermal regime of the permanently frozen ground at Schilthorn (Swiss Alps)  
**Cécile Pellet** (*University of Fribourg, Switzerland*), Adrian Wicki, Christin Hilbich, Christian Hauck
- P1.20 Thermally-driven circulation and convection over a mountainous tropical island  
**Chun-Chih Wang** (*McGill University, Canada*), Daniel J. Kirshbaum
- P1.21 Interaction of a sea breeze and a moist convection over the northeastern Adriatic coast: an analysis of the sensitivity experiments using the high-resolution mesoscale model  
Gabrijela Poljak, **Maja Telišman Prtenjak** (*University of Zagreb, Croatia*), Marko Kvakić, Kristina Šariri, Željko Večenaj

- P1.22 The impact of downslope winds and the urban heat island on fog formation over the Zagreb area  
**Maja Telišman Prtenjak** (University of Zagreb, Croatia), Martin Klaić, Joan Cuxart, Marko Kvakić, Karmen Babić, Darko Koračin, Amela Jeričević
- P1.23 Slope and valley flows at the Cerdanya valley in the Pyrenees  
**Daniel Martínez-Villagrasa** (University of the Balearic Islands, Spain), Laura Conangla, Davide Tabarelli, Maria A. Jiménez, Josep R. Miró, Dino Zardi, Joan Cuxart
- P1.24 Revisiting Albert Defant's (1909) seminal paper "Mountain and valley winds in South Tyrol" - A tribute to a pioneering contribution in mountain meteorology  
Dino Zardi, Massimiliano De Franceschi, **Lavinia Laiti** (University of Trento, Italy), Lorenzo Giovannini
- P1.25 A climatological analysis of diurnal winds in the Adige valley in the Alps  
**Lorenzo Giovannini** (University of Trento, Italy), Lavinia Laiti, Stefano Serafin, Dino Zardi
- P1.26 Evaluation of the climatological wind speed simulated by the WRF model over complex terrain  
**Lorenzo Giovannini** (University of Trento, Italy), Gianluca Antonacci, Dino Zardi, Lavinia Laiti, Luca Panziera
- P1.27 Influence of along-valley terrain heterogeneity on exchange processes over idealized valleys  
**Johannes S. Wagner** (Deutsches Zentrum für Luft- und Raumfahrt (DLR), Germany), Alexander Gohm, Mathias W. Rotach
- P1.28 The impact of embedded valleys on daytime pollution transport over a mountain range  
**Moritz N. Lang** (University of Innsbruck, Austria), Alexander Gohm, Johannes S. Wagner
- P1.29 Model simulations of inversion buildup and cold-air outflow in a small Alpine sinkhole  
**Manuela Lehner** (University of Utah, United States of America), C. David Whiteman, Manfred Dorninger
- P1.30 Global climate change and extreme low temperatures in a sinkhole - a simple relationship?  
**Manfred Dorninger** (University of Vienna, Austria), Benedikt Bica
- P1.31 A case study of cold air pool evolution in hilly terrain using field measurements  
Bradley Jemmett-Smith, **Andrew N Ross** (University of Leeds, United Kingdom), Peter Sheridan, John Hughes, Simon Vosper
- P1.32 Observations of radiative cooling and heating under clear sky and fog conditions  
**Sebastian W. Hoch** (University of Utah, United States of America), E. R. Paradyjak
- P1.33 Forecasting ice formation on roads: Application of a nocturnal cooling model to road surface temperatures for minima prediction in the Adige Valley (Trentino, Italy)  
**Claudia Di Napoli** (Autonomous Province of Trento, Italy), Andrea Piazza, Roberto Apolloni, Ilaria Pretto
- P1.34 Topoclimatological investigation of surface inversions over complex terrain  
**Klemens Stemberger** (University of Vienna, Austria), Reinhold Steinacker
- P1.35 Nocturnal winds in joining shallow valleys of different sizes - Observational and numerical studies based on the field experiment KASCADE  
**Gert-Jan Duine** (University of Toulouse, France), Pierre Roubin, Thierry Hedde, Pierre Durand

- P1.36 The Passy-2015 field experiment: An overview of the campaign and preliminary results  
**Alexandre Paci** (Meteo-France & CNRS, France), Chantal Staquet, Julie Allard, Gabriele Arduini, H el ene Barral, S ebastien Barrau, Manuel Barret, Joel Barri e, Anne Belleudy, S ebastien Blein, Thierry Bourrienne, Gilles Bouhours, Christophe Brun, Fr ed eric Burnet, Guylaine Canut, Didier Chapuis, Charles Chemel, Florie Chevrier, Jean-Martial Cohard, Alain Dabas, Jean-Marie Donier, Thierry Douffet, Jean-Michel Etcheberry, R emi Guillot, H el ene Guyard, Jean-Luc Jaffrezo, Yann Largeron, Olivier Garrouste, Dominique Legain, Pauline Martinet, Gri sa Mocnik, Eric Moulin, Isabel Peinke, Bruno Piguet, Julian-Andres Quimbayo-Duarte, William Maurel, Marie Mazoyer, St ephane Mercier, Jean-Emmanuel Sicart, Delphine Six, Quentin Rodier, David Suquia, Florence Troude, Diane Tzanos, Isabella Zin
- P1.37 Observing Spatial and Temporal Variations in Air Quality in the Salt Lake Valley Using a Light Rail Vehicle Platform  
**Erik Crosman** (University of Utah, United States of America), Logan Mitchell, John Horel, John Lin, Alex Jacques
- P1.38 PANDONIA: ESA Ground-Based Air-Quality and Satellite Validation Network  
**Martin Tiefengraber** (University of Innsbruck, Austria), Alexander Cede
- P1.39 Influence of an Idealized Valley on the Carbon Budget  
**Matthias Reif** (University of Innsbruck, Austria), Mathias W. Rotach, Georg Wohlfahrt, Alexander Gohm
- P1.40 On the combined impact of boundary layer height, near-surface meteorological conditions and nocturnal CO concentration on CO diurnal cycle patterns at a low mountaintop site: A case study using simultaneous lidar and in-situ observations  
Sandip Pal, Temple R. Lee, **Stephan F. J. De Wekker** (University of Virginia, United States of America)
- P1.41 The impact of the planetary boundary layer height on the diurnal variability and representativeness of CO mixing ratios at a low mountaintop in the Appalachian Mountains.  
Temple R. Lee, Sandip Pal, **Stephan F. J. De Wekker** (University of Virginia, United States of America)
- P1.42 Effects of intermittent turbulent events on air pollutant dispersion  
**Mireia Udina** (Universitat de Barcelona, Spain), Maria Rosa Soler, Miriam Olid
- P1.43 Atmospheric dispersion modelling with AERMOD for comparative impact assessment of different pollutant emission sources in an Alpine valley  
**Elena Tomasi** (University of Trento, Italy), Gianluca Antonacci, Lorenzo Giovannini, Dino Zardi, Marco Ragazzi
- P1.44 Problems of atmospheric transport simulation for mountain observatories  
**Petra Seibert** (Universit at f ur Bodenkultur Wien (BOKU), Austria), Anne Philipp, Radek Hofman
- P1.45 Improving the quality control of observational data in complex terrain  
**Birgit Eibl** (University of Vienna, Austria), Reinhold Steinacker
- P1.46 The National Centre for Atmospheric Science Atmospheric Measurement Facility for Mountain Meteorology  
**Victoria Smith** (National Centre for Atmospheric Science, United Kingdom), Barbara Brooks
- P1.47 Using Google Earth for visualization of meteorological data in complex terrain  
**Lukas Strauss** (University of Vienna, Austria), Stefano Serafin, Vanda Grubi si c
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**Poster Session 2****Tuesday, 01 Sep 2015 10:30 - 11:15 (Part 1) and 15:30 - 17:00 (Part 2)**

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- P2.1 Lagrangian analysis of foehn air warming in a dry and a moist event over the Swiss Alps  
**Annette K. Miltenberger** (University of Leeds, United Kingdom), *Silvia Reynolds, Michael Sprenger*
- P2.2 Nature and climatology of Pfänderwind  
**Alexander Gohm** (University of Innsbruck, Austria), *Maria Siller, Julius Bär*
- P2.3 Climatology of north foehn in southern Switzerland  
*Cecilia Cetti, Matteo Buzzi* (MeteoSwiss, Switzerland), *Michael Sprenger*
- P2.4 Nowcasting of North Foehn wind gusts in Switzerland using AdaBoosting  
**Matteo Buzzi** (MeteoSwiss, Switzerland), *Daniele Nerini*
- P2.5 New Insights Into Dimerfoehn in the Alps  
**Klaus Burri** (Alpine Research Group Foehn Rhine Valley/Lake Constance (AGF), Switzerland), *Bruno Dürr, Patrick Hächler, Daniel Gerstgrasser, Alfred Neururer, Michael Sprenger, Richard Werner*
- P2.6 150 years foehn station Altdorf, Switzerland – a climatology  
**Hans Richner** (ETH Zurich, Switzerland), *Stephan Bader, Bruno Dürr, Thomas Gutermann*
- P2.7 Numerical simulation and analysis of the gap flow emanating from the Oštarijska Vrata Pass at the onset of Bora  
**Tanja Trošić** (Meteorological and hydrological service, Croatia), *Živko Trošić*
- P2.8 Numerical analysis of microscale properties of a bora windstorm over the eastern Adriatic  
**Kristian Horvath** (Meteorological and Hydrological Service, Croatia), *Branko Kosović*
- P2.9 On the near-ground Bora turbulence  
**Petra Lepri** (Meteorological and Hydrological Service, Croatia), *Željko Večenaj, Hrvoje Kozmar, Branko Grisogono*
- P2.10 Bora-induced near-surface layer turbulence scales  
**Zeljko Vecenaj** (University of Zagreb, Croatia), *Danijel Belusic, Branko Grisogono*
- P2.11 Characteristics of bora wind at the Dubrovnik airport  
**Zeljko Vecenaj** (University of Zagreb, Croatia), *Endi Keresturi, Zeljka Pogacic, Jadran Jurkovic, Igor Kos, Branko Grisogono*
- P2.12 Extreme winds in Iceland: combined effects of cyclonic activity and complex topography  
**Guðrún Nína Petersen** (Icelandic Meteorological Office, Iceland)
- P2.13 Wind speed frequency distribution in various terrain  
**Guðrún Nína Petersen** (Icelandic Meteorological Office, Iceland), *Haraldur Ólafsson*
- P2.14 The Advection of Mesoscale Atmospheric Vortices over Reykjavík  
**Hálf dán Ágústsson** (IMO, Iceland), *Haraldur Ólafsson*
- P2.15 The impact of Vatnajökull ice cap on mesoscale atmospheric flow  
**Hálf dán Ágústsson** (IMO, Iceland), *Haraldur Ólafsson, Helgi Björnsson, Finnur Pálsson*
- P2.16 The impact of resolution on the representation of southeast Greenland barrier winds and katabatic flows  
**G. W. Kent Moore** (University of Toronto, Canada), *I. A. Renfrew, B. E. Harden, S. Mernild*

- P2.17 Progress in the observations and simulations of the fine scale structures of airflow over Bergen  
**Haraldur Ólafsson** (HI, Iceland), Jan Asle Olseth, Birgitte Rugaard Furevik, Olafur Rögnvaldsson, Ole Edvard Grov
- P2.18 Mapping of the impact of the strength and the height of inversions on the low-level flow field in the vicinity of an isolated mountain  
*Marius Opsanger Jonassen, Haraldur Ólafsson* (HI, Iceland), Hálfmán Ágústsson
- P2.19 Incorporating vertical velocity and balloon trajectory data into radiosonde gravity wave analysis: Orographic sources in New Zealand during the DEEPWAVE campaign  
**Tyler Mixa** (University of Colorado, United States of America), Lakshmi Kantha, David Fritts, Andreas Dörnbrack, Sonja Gisinger
- P2.20 Gravity wave characteristics derived from radiosonde observations at Lauder (45 S 169 E) during DEEPWAVE-NZ  
**Sonja Gisinger** (DLR, Germany), Andreas Dörnbrack, Benedikt Ehard, Bernd Kaifler, Natalie Kaifler, Markus Rapp, Markus Garhammer, Martina Bramberger, Tanja Portele, Maria Siller
- P2.21 Does strong tropospheric forcing cause large amplitude mesospheric gravity waves? A Deepwave Case Study  
**Martina Bramberger** (University of Innsbruck and DLR, Germany), Andreas Dörnbrack, Sonja Gisinger, Bernd Kaifler, Tanja Portele, Markus Rapp, Ivana Stiperski
- P2.22 Mountain Wave Propagation under Transient Tropospheric Forcing - A DEEPWAVE case study  
**Tanja Portele** (University of Innsbruck and DLR, Germany), Martina Bramberger, Andreas Dörnbrack, Sonja Gisinger, Alexander Gohm, Bernd Kaifler, Markus Rapp
- P2.23 Mountain waves over the Pyrenees: real and ideal simulations using the WRF model  
**Mireia Udina** (Universitat de Barcelona, Spain), Maria Rosa Soler, Ona Sol
- P2.24 Equatorial Mountain Torques, Equatorial Angular Momentum and Cold Surges in a GCM  
*Sylvain Mailler, François Lott* (CNRS, France)
- P2.25 The momentum flux profiles in hydrostatic mountain waves over elliptical mountains  
**Miguel A. C. Teixeira** (University of Reading, United Kingdom), Chau L. Yu
- P2.26 Drag produced by 3D trapped lee waves in two-layer atmospheres  
**Miguel A. C. Teixeira** (University of Reading, United Kingdom), Pedro M. A. Miranda
- P2.27 Drag produced by trapped lee waves and upward propagating mountain waves in directional shear flow  
*Chau L. Yu, Miguel A. C. Teixeira* (University of Reading, United Kingdom)
- P2.28 Analogies between wave trapping- and interfacial wave theory  
**Johannes Sachsperger** (University of Vienna, Austria), Stefano Serafin, Vanda Grubišić
- P2.29 Observations of lee wave and rotor development over double ridges in a stratified water tank  
*Ivana Stiperski, Hálfmán Ágústsson, Peter G. Baines, Anne Belleudy, Vanda Grubišić, Kristian Horvath, Christoph Knigge, Alexandre Paci, Johannes Sachsperger, Stefano Serafin* (University of Vienna, Austria), Lukas Strauss
- P2.30 Estimating the convective boundary layer depth during a fair weather day in the Owens Valley, CA  
*Nevio Babic, Erin Dougherty, Kelsey Everard, Seth Garland, Stephan F. J. De Wekker* (University of Virginia, United States of America)



- P2.31 Investigating the boundary layer structure in a valley using an instrumented multi-rotor  
copter  
**Stephan F. J. De Wekker** (University of Virginia, United States of America)
- P2.32 The nature of turbulence in the atmospheric boundary layer over an isolated mountain  
during the Mountain Terrain Atmospheric Modeling and Observations Program  
Mark Sghiatti, Sandip Pal, George. D. Emmitt, **Stephan F. J. De Wekker** (University of Virginia,  
United States of America)
- P2.33 On the state of the i-Box  
**Ivana Stiperski** (University of Innsbruck, Austria), Mathias W. Rotach, Brigitta Goger, Eleni Sfyri
- P2.34 Scale interactions of atmospheric flows over mountainous terrain  
**Ivana Stiperski** (University of Innsbruck, Austria), Mathias W. Rotach
- P2.35 Towards a local similarity framework for scalar turbulence in very complex terrain  
**Eleni Sfyri** (University of Innsbruck, Austria), M. W. Rotach, I. Stiperski, F. Obleitner
- P2.36 Spectral turbulence characteristics of the stable boundary layer over non-homogeneous  
terrain  
**Karmen Babić** (University of Zagreb, Croatia), Mathias W. Rotach, Zvezdana Bencetić Klaić
- P2.37 Wind regime and filtering turbulent data in the CividatEX Experiment  
**Marco Falocchi** (Università degli Studi di Brescia, Italy), Stefano Barontini, Lorenzo Giovannini,  
Dino Zardi, Roberto Ranzi
- P2.38 Katabatic drainage flow characteristics on a low-angle slope around Arizona's Meteor  
Crater  
Norbert Kalthoff, **Bianca Adler** (Karlsruhe Institute of Technology (KIT), Germany), Manuela  
Lehner, C. David Whiteman, Sebastian W. Hoch
- P2.39 Visualization of high-resolution surface temperature data collected in the Barringer Me-  
teor Crater during METCRAX II  
**Iris Feigenwinter** (University of Basel, Switzerland), Roland Vogt, Mathias Müller, Eberhard Par-  
low, Martina Grudzielanek, Mateja Maric, C. David Whiteman, Manuela Lehner, Sebastian W. Hoch
- P2.40 Infrared imaging for air flow analyses in the Barringer Meteor Crater, Arizona, as part of  
METCRAX II  
**A. Martina Grudzielanek** (Ruhr-Universität Bochum, Germany), Roland Vogt, Jan Cermak, Iris  
Feigenwinter, Mateja Maric, C. David Whiteman, Manuela Lehner, Sebastian W. Hoch, Mathias G.  
Krausz, Christian Bernhofer, Andrea Pitacco
- P2.41 Evaluation of infrared imaging for measuring near-ground flow dynamics at the Barringer  
Meteor Crater as part of METCRAX II  
**Mateja Maric** (Ruhr-Universität Bochum, Germany), A. Martina Grudzielanek, Roland Vogt, Jan  
Cermak, Iris Feigenwinter, C. David Whiteman, Manuela Lehner, Sebastian W. Hoch
- P2.42 Parameterization of subgrid wind speed sheltering/exposure in complex topography  
**Nora Helbig** (WSL Institute for Snow and Avalanche Research SLF, Switzerland), Henning Löwe,  
Adam Winstral, Tobias Jonas
- P2.43 Parameterization of orographic effects on surface radiation in AROME  
**Clemens Wastl** (ZAMG, Austria), Alexandre Mary, Yann Seity, Laura Rontu, Christoph Wittmann
- P2.44 Olympic HARMONIE 2014  
**Laura Rontu** (Finnish Meteorological Institute, Finland), Sami Niemelä, Alexander Mary, Yann  
Seity, Clemens Wastl

- P2.45 High-resolution forecasts of the thermal comfort in the urban area of Trento  
**Lorenzo Giovannini** (*University of Trento, Italy*), *Dino Zardi*
- P2.46 Prognostic deep convection interaction with mountains in 2-8 km resolution  
**Martina Tudor** (*Meteorological and Hydrological Service, Croatia*), *Stjepan Ivatek-Šahdan, Antonio Stanešić*
- P2.47 The overview of the operational forecast using ALADIN model with NH dynamics  
**Martina Tudor** (*Meteorological and Hydrological Service, Croatia*), *Stjepan Ivatek-Šahdan, Antonio Stanešić*
- P2.48 Verification of extreme weather warnings in Austria  
**Christoph Zingerle** (*ZAMG, Austria*), *Simon Hölzl*
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### Poster Session 3

Thursday, 03 Sep 2015 10:30 - 11:15 (Part 1) and 15:30 - 17:00 (Part 2)

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- P3.1 Wind Forecast Verification during Various Bora Events at Dubrovnik Airport  
**Jadran Jurković** (*Croatia control ltd, Croatia*), *Igor Kos*
- P3.2 Scale dependent evaluation of mesoscale low level winds obtained with ALADIN MNWP model  
**Mario Hrastinski** (*Croatian Meteorological and Hydrological Service, Croatia*), *Kristian Horvath, Iris Odak, Stjepan Ivatek-Šahdan, Alica Bajić*
- P3.3 The Turb-i-Sim project: Evaluation of COSMO-simulated diurnal valley winds in the Swiss Alps  
**Jürg Schmidli** (*ETH Zurich, Switzerland*), *Steven Böing, Oliver Fuhrer*
- P3.4 The impact of assimilating data from a remotely piloted aircraft on simulations of weak-wind orographic flow  
**Hálfdán Ágústsson** (*IMO, Iceland*), *Haraldur Ólafsson, Marius O. Jonassen, Ólafur Rögnvaldsson*
- P3.5 Spatial and temporal variability in snow surface temperatures induced by boundary layer processes  
**Lisa Dirks** (*WSL Schnee- und Lawinenforschungsinstitut SLF, Switzerland*), *Sebastian Schlögl, Rebecca Mott*
- P3.6 Validation of bulk-transfer parameterizations of sensible heat flux over snow in complex terrain  
*Mathias Dusch, Marc Olefs, Ivana Stiperski, Friedrich Obleitner* (*University of Innsbruck, Austria*)
- P3.7 Contribution of the turbulent heat fluxes to the summer melt of Saint-Sorlin glacier in the French Alps  
*Maxime Litt, Jean Emmanuel Sicart* (*IRD, France*), *Delphine Six, Warren D. Helgason*
- P3.8 Radiative properties of clouds over a tropical Bolivian glacier: seasonal variations and relationship with regional atmospheric circulation  
**Jean Emmanuel Sicart** (*IRD, France*), *Jhan Carlo Espinoza, Louis Quéno, Melissa Medina*
- P3.9 The energy and mass balance of tropical Lewis Glacier, Mount Kenya, and its sensitivity to climate  
**Rainer Prinz** (*University of Innsbruck, Austria*), *Lindsey Nicholson, Wolfgang Gurgiser, Thomas Mölg, Georg Kaser*

- P3.10 Simulation of snow dynamics at different scales in a high-elevation catchment  
**Michael Engel** (Free University of Bozen-Bolzano, Italy), Giacomo Bertoldi, Claudia Notarnicola, Stefano Endrizzi, Georg Niedrist, Francesco Comiti
- P3.11 Potential of the use of high-resolution meteorological forecasts for snowpack modelling in the Pyrenees  
**Louis Quéno** (Centre d'Etudes de la Neige, CNRM-GAME, France), Vincent Vionnet, Ingrid Dombrowski-Etchevers, Matthieu Lafaysse, Fatima Karbou, Samuel Morin
- P3.12 Trend analysis of snow water equivalent in the Alps  
**Anna-Maria Tilg** (WSL - Institut für Schnee- und Lawinenforschung SLF, Switzerland), Christoph Marty, Tobias Jonas, Michael Kuhn
- P3.13 Snow melt frequency in a mountainous temperate maritime environment  
**Michael Spencer** (University of Edinburgh, United Kingdom), Richard Essery
- P3.14 Snow depth extremes in Austria: Spatial modeling with extremal coefficients  
**Harald Schellander** (ZAMG, Austria), Naomi Auer, Tobias Hell, Stefan Rainer, Claudia Schmuck, Christoph Zingerle
- P3.15 Spatial validation of an operational snow cover model over the eastern Alps using remote sensing data  
**Marc Olefs** (ZAMG, Austria), Gabriele Bippus, Elisabeth Ripper
- P3.16 Proposal for avalanche risk management on the access road to the ski area of Campitello Matese (mountain massif of Matese - Molise region - Central Italy)  
**Antonio Cardillo** (Agenzia Regionale Di Protezione Civile, Italy), Massimiliano Fazzini, Sandra Scarlatelli
- P3.17 Study on snow, snow avalanches and danger levels in Bucegi and Făgăraș Mountains-Southern Carpathians (Romanian Carpathians). Preliminary results  
**Mircea Voiculescu** (West University of Timisoara, Romania), Narcisa Milian, Dana Micu
- P3.18 Studies of snow climatology at the local scale: examples of the Fiemme Valley (Trentine Dolomites) and in Monte Cimone massif (Northern Apennines)  
**Massimiliano Fazzini** (University of Ferrara, Italy), Francesco Fanari, Vincenzo Romeo, Sergio Zeni
- P3.19 The incorrect information of extreme weather events: the case of the "record snowfall" in the mountains of Abruzzo and Molise of March 2015  
Antonio Cardillo, Claudio Cassardo, **Massimiliano Fazzini** (University of Ferrara, Italy), Sandra Scarlatelli
- P3.20 Permafrost modelling to estimate the future evolution of mountain permafrost in the Swiss Alps  
**Christian Hauck** (University of Fribourg, Switzerland), Antoine Marmy, Jonas Wicky, Nadine Salzmann, Martin Hoelzle
- P3.21 Monitoring tree growth in alpine regions in Tyrol  
**David Leidinger** (BOKU Vienna, Austria), Herbert Formayer, Sonja Vospernik, José Groff, Kurt Nicolussi
- P3.22 Near-surface wind climatology over the eastern Adriatic coast in an ensemble of RCM simulations  
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