

37th International Conference on Alpine Meteorology (ICAM)

CROATIA 2025
ICAM

Programme Booklet

29 September - 3 October 2025

Poreč, Croatia



Organized by:

DRŽAVNI HIDROMETEOROLOŠKI ZAVOD
CROATIAN METEOROLOGICAL AND HYDROLOGICAL SERVICE

DEPARTMENT OF GEOPHYSICS
FACULTY OF SCIENCE
University of Zagreb

Croatian Meteorological Society

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Table of contents

Conference Overview 6

Day-by-Day Schedule 7

Oral Sessions 9

MONDAY, 29 Sept 2025 ..... **9**

TUESDAY, 30 Sept 2025 ..... **13**

WEDNESDAY, 1 Oct 2025 ..... **16**

THURSDAY, 2 Oct 2025 ..... **18**

FRIDAY, 3 Oct 2025 ..... **22**

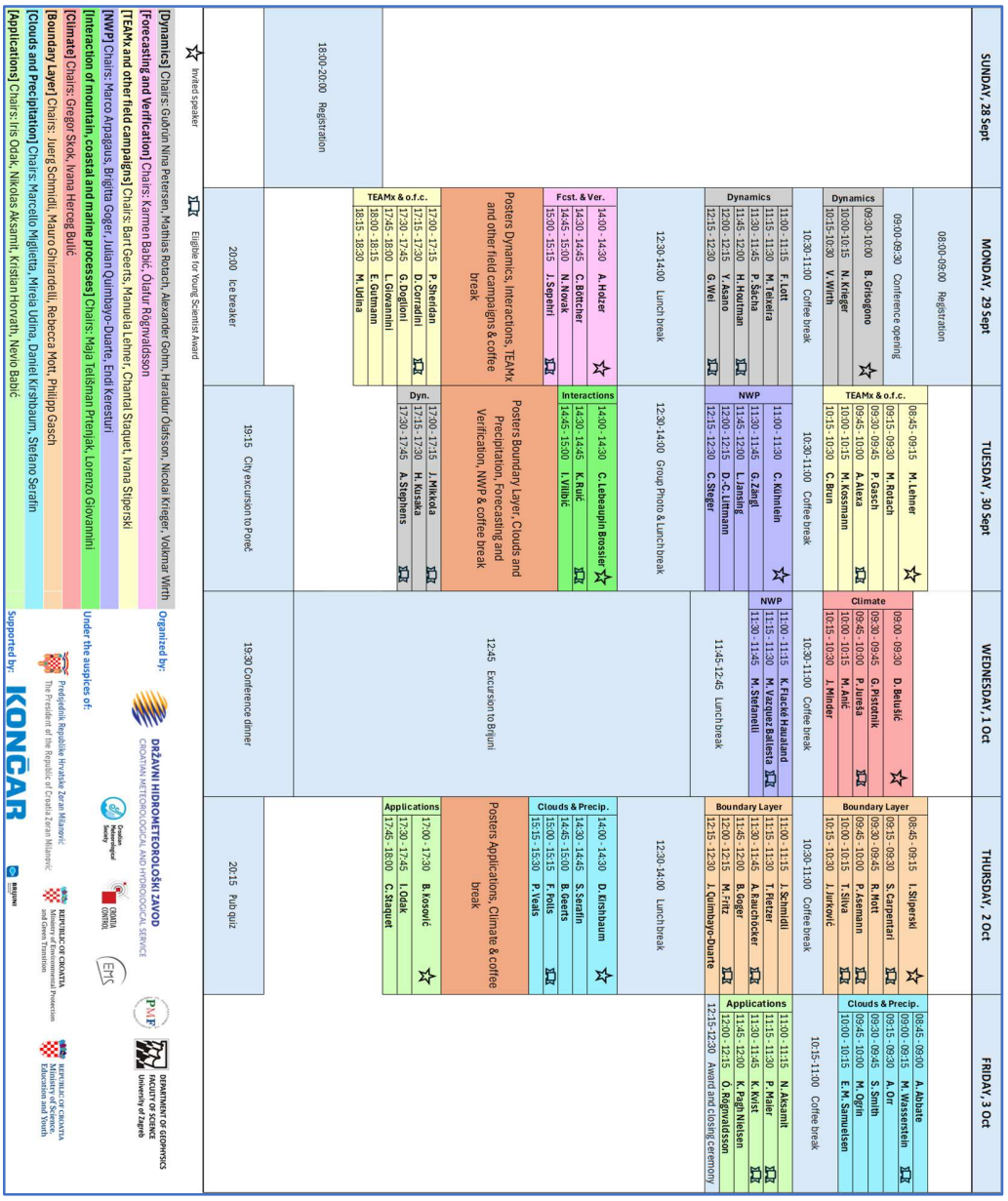
Poster Sessions 24

MONDAY, 29 Sept 2025 ..... **24**

TUESDAY, 30 Sept 2025 ..... **26**

THURSDAY, 2 Oct 2025 ..... **30**

Conference Overview



Day-by-Day Schedule

SUNDAY
28 Sept
2025

18:00 - 20:00 **Registration**

MONDAY
29 Sept
2025

08:00 - 09:00 **Registration**
09:00 - 09:30 **Conference opening** (performance by *Umjetnička škola Poreč*)
09:30 - 10:30 **Dynamics 1**
10:30 - 11:00 **Coffee break**
11:00 - 12:30 **Dynamics 2**
12:30 - 14:00 **Lunch break**
14:00 - 15:15 **Forecasting and Verification**
15:15 - 17:00 **Coffee break & Posters 1** (Dynamics, Interactions, TEAMx and other field campaigns)
17:00 - 18:30 **TEAMx and other field campaigns 1**

20:00 - **Ice breaker**

TUESDAY
30 Sept
2025

08:45 - 10:30 **TEAMx and other field campaigns 2**
10:30 - 11:00 **Coffee break**
11:00 - 12:30 **NWP 1**
12:30 - 14:00 **Group Photo & Lunch break**
14:00 - 15:00 **Interactions of Mountain, Coastal and Marine Processes**
15:00 - 17:00 **Coffee break & Posters 2** (Boundary Layer, Clouds and Precipitation, Forecasting and Verification, NWP)
17:00 - 17:45 **Dynamics 3**

19:15 - **City excursion to Poreč**

WEDNESDAY 1 Oct 2025

09:00 - 10:30 **Climate**
10:30 - 11:00 **Coffee break**
11:00 - 11:45 **NWP 2**
11:45 - 12:45 **Lunch break**
12:45 - 19:30 **Excursion to Brijuni**
19:30 - **Conference dinner**

THURSDAY 2 Oct 2025

08:45 - 10:30 **Boundary Layer 1**
10:30 - 11:00 **Coffee break**
11:00 - 12:30 **Boundary Layer 2**
12:30 - 14:00 **Lunch break**
14:00 - 15:30 **Clouds and Precipitation 1**
15:30 - 17:00 **Coffee break & Posters 3** (Applications, Climate)
17:00 - 18:00 **Applications 1**

20:15 - **Pub quiz**

FRIDAY 3 Oct 2025

08:45 - 10:15 **Clouds and Precipitation 2**
10:15 - 11:00 **Coffee break**
11:00 - 12:15 **Applications 2**
12:15 - 12:30 **Award and closing ceremony**

Oral Sessions

MONDAY, 29 Sept 2025

08:00-09:00	Registration	
09:00-09:30	Conference opening (performance by *Umjetnička škola Poreč*)	
09:30-10:30	**Oral Session:** DYNAMICS 1 **Chair:** Guðrún Nína Petersen & Mathias Rotach	
09:30-10:00 **O1.1** ☆	**Invited talk:** Non-Synoptic Windstorms Through the Eyes of Others	***Branko Grisogono***
10:00-10:15 **O1.2**	A local windstorm in a deep and narrow valley: measurements and decametre-scale large-eddy simulations	***Nicolai Krieger**, Michael Sprenger, Christian Kühnlein, Maxime Hervo, Philipp Bättig, Ulrich Krieger, Eugen Müller, Heini Wernli*
10:15-10:30 **O1.3**	Flow regimes conducive to banner cloud formation: Combining Large Eddy Simulations with observations from the MatterHEX field campaign	***Volkmar Wirth**, Marius Thomas, Sebastian Hoch, Michael Lehning, Hendrik Huwald*
10:30-11:00	Coffee break	
11:00-12:30	**Oral Session:** DYNAMICS 2 **Chair:** Alexander Gohm & Haraldur Ólafsson	
11:00-11:15 **O1.4** **online**	Rationale for a subgrid scale orography parameterization that includes turbulent form drag, gravity wave drag and low level flow blocking	***François Lott**, Anton Beljaars, Bruno Deremble*

11:15-11:30 **O1.5**	Estimating orographic drag based on the vertical velocity field of 2D trapped lee waves	***Miguel Teixeira**, José Argaín*
11:30-11:45 **O1.6**	What is the skill of the current subgrid-scale orography parameterization schemes for the flow over idealized isolated hills?	***Petr Šácha**, Dominika Hájková, Šimon Bartoň*
11:45-12:00 **O1.7**	Investigating lee wave trapping mechanisms over the UK and Ireland	***Hette Houtman G.**, Miguel A.C. Teixeira, Suzanne L. Gray, Simon Vosper, Peter Sheridan, Annelize van Niekerk*
12:00-12:15 **O1.8** **online**	Non-Hydrostatic Effects of Mountain Width on Downslope Windstorm Occurrence	***Yuki Asano**, Hiroyuki Kusaka*
12:15-12:30 **O1.9**	Dynamical Mechanisms of Background Wind Shear Weakening the Surface Momentum Flux of Orographic Gravity Waves Excited in Unidirectional Flow Over Three-Dimensional Mountain	***Guorui Wei, Xin Xu***
12:30-14:00	Lunch break	
14:00-15:15	**Oral Session:** FORECASTING AND VERIFICATION **Chair:** Karmen Babić & Ólafur Rögnvaldsson	
14:00-14:30 **O1.10**	**Invited talk:** Forecasting severe convective storms close to complex topography - the relevance of the TIM Field Campaign	***Alois Holzer**, Jannick Fischer, Stefan Eisenbach, Pieter Groenemeijer*
14:30-14:45 **O1.11** **online**	Improvements of the German Fire Weather Index of the German Meteorological Service for the application in mountainous regions	***Christopher Böttcher***

14:45-15:00 **O1.12**	Machine Learning in Postprocessing of Numerical Weather Prediction and Data Fusion for Hyperlocal Short-Term Weather Forecast – International Hackathon Perspective	***Hrvoje Novak**, Vinko Lešić, Kristian Horvath, Endi Keresturi*
15:00-15:15 **O1.13**  **online**	Multi-Step Multivariate Weather Forecasting Using Two-Layer Neural Networks: A Case Study of Pincher Creek	***Jeff (Jafar) Sepehri**, Alireza Hakimi*
15:15-17:00	**Coffee break & Posters 1** (Dynamics, Interactions, TEAMx and other field campaigns)	
17:00-18:30	**Oral Session:** TEAMx AND OTHER FIELD CAMPAIGNS 1 **Chair:** Bart Geerts & Manuela Lehner	
17:00-17:15 **O1.14**	High resolution MetUM forecasts over Alps during TEAMx	*Amritraj Dash, **Peter Sheridan***
17:15-17:30 **O1.15** 	Evaluating convective clouds and precipitation in ICON using deep learning and high resolution observations	***Daniele Corradini**, Claudia Acquistapace, Elsa Cattani, Annika Oertel, Bernhard Pospichal*
17:30-17:45 **O1.16**	Disentangling mechanisms controlling atmospheric transport and mixing processes over mountain areas at different space- and timescales: preliminary results from the field campaigns of the project DECIPHER.	*Francesco Barbano, Elena Barbaro, Alessandro Bracci, Warren R. L. Cairns, Sebastiano Carpentari, Massimo Cassiani, Giulio Cozzi, Fabrizio De Blasi, Costanza Di Felice Fabrizi, Paolo Di Girolamo, Marco Di Paolantonio, Silvana Di Sabatino, **Giorgio Doglioni**, Eleonora Favaro, Angelo Finco, Jacopo Gabrielli, Giacomo Gerosa,*

		Lorenzo Giovannini, Riccardo Marzuoli, Christian Nardon, Davide Plebani, Davide Poggi, Claudia Rossetti, Mira Shivani hankar, Federuico Porcù, Akanksha Rajput, Nadia Vendrame, Dino Zardi
17:45-18:00 **O1.17**	Investigating the surface energy balance closure over mountain areas: results from the INTERFACE project	***Lorenzo Giovannini,*** *Sebastiano Carpentari, Martina Destro, Manuela Lehner, Roberto Monsorno, Mathias W. Rotach, Mira Shivani Sankar, Beth Saunders, Mohammadamin Soltaninezhad, Stefano Tondini, Nadia Vendrame, Dino Zardi*
18:00-18:15 **O1.18**	Valley winds and ridge scale turbulence influences on alpine boundary layer and surface fluxes	***Ethan Gutmann,*** *Jessica Lundquist, Bianca Adler, Daniel Kirschbaum, Eli Schwat*
18:15-18:30 **O1.19**	LIAISE-2021 campaign: irrigation impact on boundary layer and precipitation characteristics in WRF model simulations	***Mireia Udina****, Eric Peinó, Francesc Polls, Jordi Mercader, Iciar Guerrer, Arianna Valmassoi, Alexandre Paci, Joan Bech*
20:00-	Ice breaker	

TUESDAY, 30 Sept 2025

08:45-09:15	**Oral Session:** TEAMx AND OTHER FIELD CAMPAIGNS 2 **Chair:** Chantal Staquet & Ivana Stiperski	
08:45-09:15 **O2.1** ☆	**Invited talk:** The TEAMx Observational Campaign	***Manuela Lehner***, *Mathias W. Rotach*
09:15-09:30 **O2.2**	On the Mountain Boundary Layer (MoBL) height	***Mathias W. Rotach***, *Manuela Lehner*
09:30-09:45 **O2.3**	Linking valley flow and vertical exchange in complex terrain – the LIVAVERT(EX)^2 project	***Philipp Gasch***
09:45-10:00 **O2.4**	Three-dimensional turbulence characteristics in a small Alpine valley measured with a fleet of uncrewed aerial systems during TEAMx	***Almut Alexa***, *Norman Wildmann, Alexander Gohm*
10:00-10:15 **O2.5** **online**	Mountain boundary layer observations in the Inn valley exit area during the TEAMx summer EOP	***Meinolf Kossmann***, *René Suthfeldt, Stephan F.J. de Wekker, Katrin Sedlmeier, Oliver Nitsche, Schrall Leslie, Marc Heinrich, Ronny Leinweber, Eileen Päschke, Daniela Hüber, Carsten Enskat, Astrid Eichhorn-Müller, Gudrun Mühlbacher*
10:15-10:30 **O2.6**	In situ observation of turbulence in katabatic and anabatic winds on steep slopes from the Austrian to the Italian Alps	***Christophe Brun***, *Hervé Michallet, Eletta Negretti*
10:30-11:00	Coffee break	

11:00-12:30	**Oral Session:** NWP 1 **Chair:** Marco Arpagaus & Brigitta Goger	
11:00-11:30 **O2.7** ☆	**Invited talk:** Developing a model framework for future weather prediction and research	***Christian Kühnlein***
11:30-11:45 **O2.8**	Operational 500-m ICON forecasts for Germany and the TEAMx Observational Campaign	***Günther Zängl***
11:45-12:00 **O2.9**	Advances and challenges in predicting convective precipitation with ICON over the Alpine region	***Lukas Jansing**, David Leutwyler, Marco Arpagaus, Günther Zängl*
12:00-12:15 **O2.10**	Evaluating Convection and Thermally Driven Flows over the Alps Using High-Resolution Models	***Daniela-Christin Littmann**, Alberto de Lozar, Chiara Marsigli, Günther Zängl, Linda Schlemmer*
12:15-12:30 **O2.11**	Evaluating a Topography–Surface Radiation Parameterization in ICON for NWP	***Christian Steger**, David Leutwyler*
12:30-14:00	Group Photo & Lunch break	

14:00-15:00	**Oral Session:** INTERACTIONS OF MOUNTAIN, COASTAL AND MARINE PROCESS **Chair:** Maja Telišman Prtenjak & Lorenzo Giovannini	
14:00-14:30 **O2.12** ☆	**Invited talk:** Ocean-atmosphere coupling and its impacts on Mediterranean heavy precipitation	***Cindy Lebeaupin Brossier**, Florence Sevault, Sylvie Malardel, Marie-Noëlle Bouin, Jonathan Beuvier, Soline Bielli, Fleur Nicolay, Alice Dalphinet*
14:30-14:45 **O2.13**	Potential predictability of compound storm surge and meteotsunami extremes – tested on 29-30 October 2018 event	***Krešimir Ruić**, Jadranka Šepić, Maja Telišman Prtenjak, Kristian Horvath, Marko Kvakić*
14:45-15:00 **O2.14**	Observing and modelling bora-driven dense water dynamics in the Adriatic Sea	***Ivica Vilibić***
15:15-17:00	**Coffee break & Posters 2** (Boundary Layer, Clouds and Precipitation, Forecasting and Verification, NWP)	
17:00-17:45	**Oral Session:** DYNAMICS 3 **Chair:** Nicolai Krieger & Volkmar Wirth	
17:00-17:15 **O2.16**	Impact of black carbon on thermally-driven valley winds in idealised simulations	***Johannes Mikkola**, Victoria Sinclair, Giancarlo Ciarelli, Federico Bianchi*
17:15-17:30 **O2.17** **online**	Temporal and Spatial Evolution of a Local Wind in Japan, "Kiyokawa-dashi": Insights from High-Density Observations and Numerical Simulations	***Hiroyuki Kusaka**, Taira Onodera, Yuki Asano*
17:30-17:45 **O2.18** **online**	The characterization and impact of extreme winds in Nares Strait	***Alexandra Stephens**, Kent Moore*
19:15-	City excursion to Poreč	

WEDNESDAY, 1 Oct 2025

09:00-10:30	**Oral Session:** CLIMATE **Chair:** Gregor Skok & Ivana Herceg Bulić	
09:00-09:30 **O3.1** ☆	**Invited talk:** Benefits of kilometer-scale climate models for wind in complex terrain: present and future climate	***Danijel Belušić***
09:30-09:45 **O3.3**	Synthesizing a high-resolution climatology of severe thunderstorms in the Greater Alpine region	***Georg Pistotnik**, Andreas Gobiet, Theresa Schellander-Gorgas, Benedikt Bica, Klaus Haslinger, Douglas Maraun*
09:45-10:00 **O3.4**	Kilometer-scale climate projections of downslope windstorms in the Scandinavian mountains	***Patrik Jureša**, Danijel Belušić, Felicitas Hansen, Sophie Marimbordes, Petter Lind, John Abatzoglou*
10:00-10:15 **O3.5**	Impact of climate change on forestry and agriculture in Highland Croatia	***Mislav Anić**, Ksenija Cindrić Kalin, Kornelija Špoler Čanić, Antonio Stanešić*
10:15-10:30 **O3.6** **online**	The character and causes of elevation-dependent climate warming over the Andes Mountains in kilometer-scale simulations	***Justin Minder***
10:30-11:00	Coffee break	

11:00-11:45	**Oral Session:** NWP 2 **Chair:** Julian Quimbayo-Duarte & Endi Keresturi	
11:00-11:15 **O3.7** **online**	Meteorological Impact of Glacier Retreat and Proglacial Lake Temperature in Western Norway	***Kristine Haualand***, *Tobias Sauter, Jakob Abermann, Simon de Villiers, Alexander Georgi, Brigitta Goger, Isaac Dawson, Sigurd D. Nerhus, Benjamin A. Robson, Kamilla H. Sjursen, Daniel J. Thomas, Moritz Thomaser, Jacob C. Yde*
11:15-11:30 **O3.8**	Downscaling meteorological data with a deep learning algorithm using a sampling method	***Manuarii Vazquez Ballesta***, *Chantal Staquet, Thierry Hedde*
11:30-11:45 **O3.9**	A neural network-based observation operator for weather radar data assimilation	***Marco Stefanelli***, *Ziga Zaplotnik, Gregor Skok*
11:45-12:45	Lunch break	
12:45-19:30	Excursion to Brijuni	
19:30-	Conference dinner	

THURSDAY, 2 Oct 2025

08:45-10:30	**Oral Session:** BOUNDARY LAYER 1 **Chair:** Juerg Schmidli & Mauro Ghirardelli	
08:45-09:15 **O4.1** ☆	**Invited talk:** Near-surface Turbulence over Mountainous Terrain	***Ivana Stiperski***
09:15-09:30 **O4.2**	Impact of Processing Techniques on Flux Estimates and Surface Energy Balance Closure in Complex Terrain	***Sebastiano Carpentari***, *Mira Shivani Sankar, Nadia Vendrame, Dino Zardi, Lorenzo Giovannini*
09:30-09:45 **O4.3**	Fine-Scale Thermal Dynamics of Glacier Winds	***Rebecca Mott***, *Michael Haugeneder, Ivana Stiperski, Patricia Asemann, Dylan Reynolds, Lindsey Nicholson*
09:45-10:00 **O4.4**	Turbulence and Stratification Near the Jet in Glacier Winds: Insights from Infrared Imaging	***Patricia Asemann***, *Maximilian Sesselmann, Michael Haugeneder, Ivana Stiperski, Michael Lehning, Rebecca Mott*
10:00-10:15 **O4.5**	Climatology, Synoptic and Atmospheric Boundary Layer Conditions during Piteraqs in Southeast Greenland	***Tiago Silva***, *Kristine Flacké Haualand, Caroline Drost Jensen, Jacob Clement Yde, Johan Hassing Scheller, Jakob Abermann, Kerstin Rasmussen, Andreas Trügler, Simon de Villiers, Wolfgang Schöner*
10:15-10:30 **O4.6**	Identifying bora wind pulsations in ceilometer backscatter	***Jadran Jurković***, *Nevio Babić, Karmen Babić*

10:30-11:00	Coffee break	
11:00-12:30	**Oral Session:** BOUNDARY LAYER 2 **Chair:** Rebecca Mott & Philipp Gasch	
11:00-11:15 **O4.7**	On the structure of the atmospheric boundary layer over highly complex terrain	***Juerg Schmidli***, *Bruno Neininger*
11:15-11:30 **O4.8**	Revealing Hidden Coherent Structures in Plume-Atmospheric Dynamics	***Tamara Pletzer***, *Dongqi Lin, Peyman Zawar-Reza, Marwan Katurji*
11:30-11:45 **O4.9**	Turbulence Anisotropy in Large Eddy Simulations of Convective Boundary Layer Flows over Idealized Ridges	***Andreas Rauchöcker***, *Ivana Stiperski*
11:45-12:00 **O4.10**	Exploring the potential of a large-eddy simulation over entire Switzerland to simulate mountain boundary layer processes and severe moist convection	***Brigitta Goger***, *Anurag Dipankar*
12:00-12:15 **O4.11**	Parameter estimation for the YSU boundary-layer turbulence scheme over heterogeneous terrain	***Magdalena Fritz***, *Stefano Serafin, Martin Weissmann*
12:15-12:30 **O4.12**	Assessing the representation of flow separation in Foehn descent with high-resolution numerical simulations	***Julian Quimbayo-Duarte***, *Yue Tian, Juerg Schmidli*
12:30-14:00	Lunch break	

14:00-15:30	**Oral Session:** CLOUDS AND PRECIPITATION 1 **Chair:** Marcello Miglietta & Mireia Udina	
14:00-14:30 **O4.13** ☆	**Invited talk:** Convection initiation mechanisms over complex terrain	***Daniel Kirshbaum***
14:30-14:45 **O4.14**	Thermally-driven orographic convection initiation is sensitive to terrain steepness	*Matthias Göbel,* ***Stefano Serafin****, Mathias Rotach*
14:45-15:00 **O4.15**	A Case Study of Cold-season Emergent Orographic Convection and its Impact on Precipitation	***Bart Geerts****, Francis O.T. Afrifa, Lulin Xue, Sisi Chen*
15:00-15:15 **O4.16**	Comparative analysis of precipitation phase classification using MRR, X-band polarimetric data, and disdrometer observations in complex terrain	***Francesc Polls****, Eulàlia Busquets, Albert García-Benadí, Mireia Udina, Brice Boudevillain, Joan Bech*
15:15-15:30 **O4.17** **online**	Predicting Snow-to-Liquid Ratio in the Mountains of the Western United States	***Peter Veals****, Michael Pletcher, Andrew Schwartz, Randy Chase, Kirstin Harnos, Jimmy Correia, Michael Wessler, Jim Steenburgh*
15:30-17:00	**Coffee break & Posters 3** (Applications, Climate)	
17:00-18:00	**Oral Session:** APPLICATIONS 1 **Chair:** Iris Odak & Nikolas Aksamit	
17:00-17:30 **O4.18** ☆	**Invited talk:** Multiscale simulations of atmospheric boundary layer flows for wind energy applications	***Branko Kosović***

17:30-17:45 **O4.19**	Detection of Adverse and Compound Weather Events Impacting Power Infrastructure in Mountainous Regions	*Irene Schicker,* ***Iris Odak***
17:45-18:00 **O4.20**	Impact of heatwave variability on near-surface temperature of an Alpine valley	*Manuarii Vazquez-Ballesta,* ***Chantal Staquet****, Thierry Hedde*
20:15-	Pub quiz	

FRIDAY, 3 Oct 2025

08:45-10:15	**Oral Session:** CLOUDS AND PRECIPITATION 2 **Chair:** Daniel Kirshbaum & Stefano Serafin	
08:45-09:00 **O5.1** **online**	On the applicability of the LUME model testing convective orographic rainfalls: Case studies in the Alpine mountain range	***Andrea Abbate***
09:00-09:15 **O5.2**	Orographic Influences on Precipitation in a Continental Mountain Environment as Observed by Mountain and Valley Profiling Radars	*Jim Steenburgh,* ***Michael Wasserstein****, Ashley Evans, Peter Veals, Gerald Mace, David Kingsmill, Randy Chase*
09:15-09:30 **O5.3**	Using novel lake-based snowfall measurements in the Rockies, Alps, and Himalayas to optimise the representation of snowfall in the MetUM regional atmospheric model at kilometre grid-scales	*Siddharth Gumber,* ***Andrew Orr****, Paul Field, Hamish Pritchard, Federico Covi, Pranab Deb, Marc Girona-Mata, Emily Potter, Martin Widmann*
09:30-09:45 **O5.4**	*Representing sub-grid orographic forcing in a new convection scheme*	***Samantha Smith***
09:45-10:00 **O5.5**	The influence of topography on lowered snow line in alpine valleys	*Danijela Strle, Luka Likar, Tim Gregorčič,* ***Matej Ogrin, Gregor Skok***
10:00-10:15 **O5.6**	Icing sensitivity to horizontal resolution of the Harmonie-AROME model during orographically-forced flow in Norway	***Eirik Mikal Samuelsen****, Kristoffer Kvist*
10:15-11:00	Coffee break	

11:00-12:15	**Oral Session:** APPLICATIONS 2 **Chair:** Kristian Horvath & Nevio Babić	
11:00-11:15 **O5.7**	Simplifying Snow Transport Dynamics: Reduced Order Models and Accumulation Diagnostics	***Nikolas Aksamit**, Alex Encinas-Bartos, Holt Hancock*
11:15-11:30 **O5.8**	Undercatch-corrected gridded precipitation data to improve hydrological modelling in high-alpine complex orography	***Philipp Maier**, Caroline Ehrendorfer, Sophie Lücking, Fabian Lehner, Franziska Koch, Mathew Herrnegger, Herbert Formayer*
11:30-11:45 **O5.9**	Detecting Mountain Waves from MODIS Satellite Imagery Using a Hybrid Spectral and Machine Learning Approach	***Kristoffer Kvist**, Eirik Mikal Samuelsen*
11:45-12:00 **O5.10**	The Destination Earth On-Demand digital twin	***Kristian Pagh Nielsen**, The Destination Earth On-Demand Extremes Team*
12:00-12:15 **O5.11**	The Weather On-Demand Framework	***Ólafur Rögnvaldsson**, Karolina Stanislawska, Mikolaj Okrzesa, Heitor Chang, João A. Hackerott*
12:15-12:30	Award and closing ceremony	

Poster Sessions

MONDAY, 29 Sept 2025

15:15-17:00	**Posters 1** (Dynamics, Interactions, TEAMx and other field campaigns)	
	DYNAMICS	
P1.1	Extreme winds in East-Iceland caused by mountain wave breaking?	***Guðrún Nína Petersen***, *Haraldur Ólafsson*
P1.2	Depiction of rotors over the Falkland Islands using LiDAR and very high resolution simulations	***Peter Sheridan***
	INTERACTIONS OF MOUNTAIN, COASTAL AND MARINE PROCESSES	
P1.4	Quantifying Bora Wind Gustiness Along the Eastern Adriatic: A Buoy-Based Index Approach	*Lidija Fuštar,* ***Antea Copić, Jure Vranić***
P1.5	Impact of Bora Wind Events on Sea Surface Temperature in the Kvarner Bay: Insights from High-Resolution Buoy Data	***Antea Copić, Jure Vranić,*** *Lidija Fuštar*
P1.6	Statistical and neural network climatology of fog and mist at coastal Pula Airport in Croatia	*Marko Zoldoš, Tomislav Džoić,* ***Jadran Jurković,*** *Frano Matić, Sandra Jambrošić, Ivan Ljuština, Maja Telišman Prtenjak*
P1.7	Investigating the Role of Orography on Deep Mixing and Boundary Layer Evolution over the Tibetan Plateau	*Harshwardhan Jadhav, Jaydeep Singh,* ***Juerg Schmidli***

P1.8	Numerical simulations of supercells in northeastern Italy with WRF-HAILCAST	***Lorenzo Giovannini***, *Andrea Perbellini, Antonio Palmeri, Agostino Manzato, Francesco Sioni*

TEAMx AND OTHER MEASUREMENT CAMPAIGNS

P1.9	Pressure Spectra and Pressure–Turbulence Coupling in Winter Slope-Following ABL Flows: Insights from the TEAMx Campaign	***Mauro Ghirardelli***, *Ivana Stiperski*
P1.10	Observing multiscale interactions in a small Alpine valley during TEAMx: Overview and first results	***Alexander Gohm***, *Norman Wildmann, Almut Alexa*
P1.11	Investigating Flow Conditions During the Transition from Pre-Convective to Convective Situations in the Sarntal Alps and the Adige Valley Using Novel Observation Systems	***Manfred Dorninger***, *Daniel Stanka, Christoph Feichtinger, Rene Hörschinger, Thomas Lumesberger*
P1.14	Doppler lidar volume flux observations in a broad Alpine valley	***Sarah Paratoni***, *Alexander Gohm, Philipp Gasch*
P1.15	The impact of snow cover on the valley-wind circulation in the Inn Valley – a WRF sensitivity study	*Francesco Rizziero, Emily Collier,* ***Manuela Lehner***
P1.16	Data-Driven Parameterization of Subgrid-Scale Orographic Gravity Waves	***Haoyang Wu***, *Xin Xu*

P1.17	First results of the data collected by the meteorological monitoring network on Biokovo Mountain	***Ivana Herceg Bulić,*** *Zoran Pasarić, Dalibor Paar, Marijana Boras, Lucija Cokarić, Ksenija Protrka, Hrvoje Škrabić*
P1.18	Cold-Air-Pool Development in mountain frost hollows: A Comparative Study from Bükk plateau (Hungary) and Komna Alpine plateau (Slovenia)	***Andras Dobos****, Iztok Miklavčič, Tim Gregorčič,* ***Matej Ogrin,*** *Farkas Reka*
P1.19	Land-atmosphere interaction, boundary-layer dynamics, venting, and orographic convection in an arid environment: a call for integrated multi-scale observations	***Bart Geerts****, Curtis N. James, Steven E. Koch, Angela K. Rowe, Michael Biggerstaff, Stephan De Wekker, Jason Knievel, Adriana Bailey*

TUESDAY, 30 Sept 2025

15:00-17:00	**Posters 2** (Boundary Layer, Clouds and Precipitation, Forecasting and Verification, NWP)
	BOUNDARY LAYER

P2.1	Structure of the convective boundary layer over complex terrain: ICON-LES and high resolution 3D wind observations during a TEAMx test flight	***Juerg Schmidli****, Philipp Gasch*
P2.2	On the Sensitivity and Reliability of Turbulent Inflow Generation by Eddy Recycling in Large-Eddy Simulations	***Andreas Rauchöcker****, Ivana Stiperski*

P2.3	Neutral and convective boundary layer over gentle hills: investigating the sources of anisotropy	***Damian K. Wójcik***, *Miguel A. C. Teixeira, Ivana Stiperski*
P2.4	Turbulence structure and scaling in stable boundary layers	***Maja-Sophie Wedel***
P2.5	Flow regimes, their drivers and turbulence characteristics on a mid-latitude glacier	***Ivana Stiperski***, *Giordano Nitti, Lindsey Nicholson*
P2.6	Exploring the importance of horizontal transport terms in katabatic flow over a glacier	***Ilga Staudinger***, *Ivana Stiperski, Brigitta Goger*
P2.7	Analysis of turbulence measurements from several eddy covariance stations on an Alpine glacier: Hintereisferner, Austria	***Jean Emmanuel Sicart***, *Evan Lemur, Lalia Bouhenni, Ivana Stiperski*
P2.8	Refining valley wind days detection from in situ observations and ERA5 reanalysis	***Sebastiano Carpentari***, *Mira Shivani Sankar, Nadia Vendrame, Dino Zardi, Lorenzo Giovannini*
P2.9	Characteristics of Land-Atmosphere Interactions in the Complex Mountainous Terrain of the Southeastern margin of the Tibetan Plateau	***Huizhi LIU***
P2.10	Characteristics of topographic sheltering in Iceland	***Haraldur Ólafsson***, *Guðrún Nína Petersen*
P2.11	Trends in Land Surface Temperatures in Iceland	*Iman Rousta,* ***Haraldur Ólafsson***

CLOUDS AND PRECIPITATION

P2.13 	Impact of Southwesterly Upper-Level Flow on Precipitation in the Kvarner Region – First Approach	***Josipa Kuzmić***, *Boris Mifka, Maja Telišman Prtenjak*
P2.14	The Role of Orography on Convection Initiation over Hainan Island	*Guilin Liu,* ***Daniel Kirshbaum****, Huiwen Xue*
P2.16 	Multi-ridge Effects on Cool-season Orographic Precipitation in the Wasatch Range, Utah, USA	***Michael Wasserstein****, W. James Steenburgh, David E. Kingsmill*
P2.17 	Characteristics of Cool-Season Precipitation in the Park Range of Northwest Colorado	***Annegret J. Lang,*** *W. James Steenburgh, A. Gannet Hallar, Gerald G. Mace*
P2.18 	Observation of microphysical cloud properties with holographic imager on Sonnblick Observatory	***Sebastian Käser****, Cuiqi Zhang, Christian Maier, Elke Ludewig , Zamin A. Kanji, Jan Henneberger, Ulrike Lohmann*
P2.19	The Indian Summer Monsoon: Aerosol-Cloud Interactions and Their Impact on Extreme Rainfall Events	***Rituparna Chowdhury***

FORECASTING AND VERIFICATION

P2.20	Verification and Spatial Autocorrelation of Precipitation Predictions from COSMO-2k8, COSMO-7k0, and ICON-LAM Models in Relation to RainGRS Model Values: A Case Study of the September 2024 Flood in Southwestern Poland	***Bartłomiej Sobczyk****, Andrzej Wyszogrodzki*

P2.21	Enhancing Wind Speed Forecasting over the Complex Terrain in Croatia	***Jakov Lozuk**, Iris Odak*
P2.22	Operational Forecasting Challenges of Bora Wind Events for Eastern Adriatic Airports	***Karmen Babić**, Nevio Babić, Jadran Jurković*
P2.23	Dynamic and statistical analysis of giant hail environments in northeast Italy	*Francesco De Martin, Agostino Manzato, Nicola Carlon, Martin Setvák, **Mario Marcello Miglietta***
	NWP	
P2.24	Seasonal prediction of hydrological drought in Lake Victoria Basin in Uganda using three proposed forecasting systems	***Jamilah Amurikiire**, Joanitah Nakimwero, Joanitah Nakimwero, George Kaddu*
P2.25	Earth observation for biodiversity, hydrology and Integrated Water Resource Management (IWRM) monitoring: A case study of Uganda	***Brendah Nassiwa**, Nazwifah Hussein, Janat Nassanga*
P2.26	Evaluation of precipitation forecasts of several NWP modelling systems in complex terrain of the southeastern Europe	***Kristian Horvath**, Iris Odak, Endi Keresturi*
P2.27	Estimating parameters of orographic drag schemes using high-resolution simulations over complex Alpine terrain	***Georgios Thalassinos**, Stefano Serafin, Martin Weissmann*
P2.28	Evaluating Precipitation Microphysics in the WRF Model over Complex Terrain: A Winter Case Study in the Pyrenees	***Eulàlia Busquets**, Mireia Udina, Joan Bech, Francesc Polls*

P2.29	Developments of Gravity Wave Drag Representation in the Unified Model and Impacts on Arctic Circulation	***Callum Dinnett***
P2.30	Physically consistent model evaluation in complex terrain	*Gaspard Simonet,* ***Manuela Lehner***

THURSDAY, 2 Oct 2025

15:30-17:00	**Posters 3** (Applications, Climate)	
	APPLICATIONS	
P3.1	Understanding local Air Pollution Dynamics in Bogotá: Atmospheric Modelling and Observations	***Julian Quimbayo-Duarte****, Oscar Gamba*
P3.2	Solar Resource Assessment in Iceland by a synergy of WRF modelling, Satellite Data, Surface Observations and a Deep Learning Model	*Jorge Rosas Santana,* ***Ólafur Rögnvaldsson***
P3.3	A Warning System for the Laseyer Windstorm in a Narrow and Deep Valley of Northeastern Switzerland	***Michael Sprenger****, Irina Mahlstein, Andrina Caratsch, Marielle Müller*
P3.4	Towards revision of extreme wind estimation over the wider Adriatic region	***Kristian Horvath****, Endi Keresturi, Ines Olrom Muić, Lasta Slaviček, Ena Kožul Rajčić*
P3.5	Influence of the Dinaric Alps on the issuance of SIGMET warnings within FIR Zagreb	***Nevio Babić****, Jadran Jurković*

		***Mireia Udina**, Laura Trapero, Anna Albalat, Víctor Marín, Cristina Campos, Eulàlia Busquets, Francesc Polls, Yolanda Sola, Joan Bech*
P3.6	Ozone pollution in the Pyrenees: influence of heatwave events	
P3.7	Improving the operational forecasts of outdoor Universal Thermal Climate Index with post-processing	*Danijela Kuzmanović, **Gregor Skok**, Jana Banko*
P3.8	Bridging Science and Sky: The MET Panel as a Hub for Atmospheric Research and Free Flight	***Tobia Lezuo**, Bruno Neininger*
	CLIMATE	
P3.9	Spiral strip visualization graphic	***Gregor Skok***
P3.10	Extreme Precipitation Months in the High Mountain Regions of Bulgaria and Link to Atmospheric Circulation	***Nina Nikolova**, Kalina Radeva, Simeon Matev*
P3.11	The Dynamics of Snow Cover at High-Mountain Stations in Bulgaria	***Simeon Matev**, Nina Nikolova, Kalina Radeva*
P3.13	3D heat wave types in European regions	*Zuzana Poppová, Ondřej Lhotka, Jan Stryhal, **Jan Kyselý***
P3.14	Quantifying rates of climate change and risks in mountain regions of Czechia	*Veronika Šustková, **Radim Tolasz**, Pavel Lipina*
P3.15	More Than Just Rain: Spatial and Temporal Variations in Precipitation Across the Verona-Tyrol Alpine Transect, 1923-2024	***Sebastiano Carpentari**, Dino Zardi*

P3.16	Urban Heat Island Characterization in an Alpine Valley City: Integrating Observations and Models in Bolzano's Complex Terrain	***Gaspard Simonet**, Alice Crespi, Massimiliano Pittore, Lorenzo Giovannini*
P3.17	The influence of Climate Change on Temporal Trends of Avalanche Activity and Nivo-meteorological Variables in the Aosta Valley, Italy	***Carlo Bee**, Daniel Zugliani, Giorgio Rosatti*
P3.18	The impact of ocean-atmosphere coupling on precipitation climatology over eastern Adriatic and Dinaric Alps	***Sarah Ivušić**, Ivan Güttler, Kristian Horvath*
P3.19	Identifying Convective Hotspots in the European Alps by Analyzing Synoptic Environments and Report Data of the last 30 Years	***Helge Jentsch**, Katharina Schröer*
P3.20	Extreme Weather Event Detection in High-resolution Climate Simulations	***Lana Hercigonja**, Maja Telišman Prtenjak*