

Daily programme for room HS 1

Room HS 1 | Sun, 04 Sep 2022

SIM1 | Introduction for chairs and small reception

17:30-18:45 Introduction for chairs and small reception

Room HS 1 | Mon, 05 Sep 2022

UP2.2 | Analysis, monitoring and prediction of chemical weather, air pollution, and the effects of COVID-19

Conveners: Francesca Costabile, Cathy Wing Yi Li, Guy Brasseur | Co-conveners: Leena Järvi, Jan Semenza, Rajesh Kumar

Chairpersons: Francesca Costabile, Leena Järvi, Guy Brasseur

- 14:00–14:15 EMS2022-597
The response of secondary chemical species to COVID-19 related emission disturbances
Guy Brasseur, Benjamin Gaubert, Idir Bouarar, Wolfgang Steinbrecht, Claire Granier, and Thierno Doumbia
- 14:15–14:30 EMS2022-699
Non-CO2 Forcers and Their Climate, Weather, Air Quality and Health Impacts – New Project FOCl
Tomas Halenka and Ranjeet Sokhi
- 14:30–14:45 EMS2022-164
Introduction to the AQ-WATCH project and its multi-model air quality forecast system
Cathy Wing Yi Li, Guy Brasseur, Mikhail Sofiev, Renske Timmermans, Rajesh Kumar, Gabriele Pfister, Dan Mo, Claire Granier, Thierno Doumbia, Sara Basart, Olivier Salvi, Bastien Caillard, and Yvonne Boose
- 14:45–15:00 EMS2022-289
A comparison of the PurpleAir PA-II sensor to both regulatory particulate matter monitors and meteorological instrumentation in Asheville, North Carolina
Evan Couzo and Christopher Godfrey
- 15:00–15:15 EMS2022-322
The Korean Integrated Model (KIM) coupled with atmospheric chemistry model: plans and preliminary results
Shin-Young Park and Soo Ya Bae
- 15:15–15:30 EMS2022-604
Changes of social contacts due to the Covid-19 pandemic and the dependence on weather parameters
Lisa Schielicke, May Bohmann, and Philipp Ertz

Coffee break

ES1.8 | Physical Climate Storylines to inform decision making.

Convener: Marina Baldissera Pacchetti | Co-conveners: Bart van den Hurk, Theodore Shepherd, Suraje Dessai, Karin van der Wiel, Jana Sillmann

Chairperson: Marina Baldissera Pacchetti

- 16:00–16:05 **Introduction**
- 16:05–16:20 EMS2022-372
Co-produced storylines of climate hazard uncertainty for the heritage sector
Christopher Goddard and Fai Fung
- 16:20–16:35 EMS2022-469
Storylines of future climate extremes in Switzerland
Alina Mastai, Kathrin Wehrli, Sven Kotlarski, and Erich Fischer
- 16:35–16:50 EMS2022-494
Building storylines for wind resources: our experience with users
Ana Lopez and Gil Lizcano

- 16:50-17:05 EMS2022-416
A climate storyline approach to inform private sector decisions on cross-border climate risks:A case study of the chocolate industry in Europe
Ertug Ercin, Alexander Kaune, and Cagri Karaman
- 17:05-17:20 EMS2022-313
Storylines: A severe rainfall-landslide event in Past, Present & Future climate scenarios
Aditya Narayan Mishra, Douglas Maraun, Raphael Knevels, Heimo Truhetz, Emanuele Bevacqua, Herwig Proske, Helene Petschko, Philip Leopold, Alexander Brenning, Giuseppe Zappa, and Armin Schaffer
- 17:20-17:30 **Lessons learned roundtable**

Room HS 1 | Tue, 06 Sep 2022

OSA2.3 | Energy meteorology

Convener: Sven-Erik Gryning | Co-conveners: Ekaterina Batchvarova, Marion Schroedter-Homscheidt, Yves-Marie Saint-Drenan
Chairperson: Yves-Marie Saint-Drenan

09:00–09:15 EMS2022-486
High resolution hybrid forecast based on the combination of satellite and an All Sky Imager (ASI) network forecasts
Jorge Lezaca, Annette Hammer, and Ontje Lünsdorf

09:15–09:30 EMS2022-175
Pareto optical flow solutions for ensemble, satellite-based forecasts of irradiance and PV
Garrett Good

09:30–09:45 EMS2022-609
Using Satellite Information to Evaluate Cloud Forecast from WRF-Solar EPS
Manajit Sengupta, Jaemo Yang, Yu Xie, Pedro Jimenez, and Ju-Hye Kim

09:45–10:00 EMS2022-572
On hand available predictors for operational satellite-based forecast
Sylvain Cros, Jordi Badosa, André Szantai, and Martial Haeffelin

10:00–10:15 EMS2022-203
Comparison of irradiance forecasts from operational NWP model and satellite-based estimates over Fennoscandia
Viivi Kallio-Myers, Aku Riihelä, David Schoenach, Erik Gregow, Thomas Carlund, and Anders Lindfors

10:15–10:30 EMS2022-198
Follow the sun? The effects of national solar capacity targets on renewable generation and security of supply
Berit Czock, Julian Keutz, and Stephanie Fiedler

Coffee break

Chairperson: Marion Schroedter-Homscheidt

11:00–11:15 EMS2022-547
Worldwide solar radiation benchmark of modelled surface irradiance
Anne Forstinger, Stefan Wilbert, Adam R Jensen, Birk Kraas, Carlos Fernández Peruchena, Chris A Gueymard, Dario Ronzio, Dazhi Yang, Elena Collino, Jesús Polo Martinez, Jose A Ruiz-Arias, Natalie Hanrieder, Philippe Blanc, and Yves-Marie Saint-Drenan

11:15–11:30 EMS2022-661
End-to-end learning of representative PV capacity factors from aggregated PV feed-ins
Matthias Zech and Lueder von Bremen

11:30–11:45 EMS2022-504
Cloud Shadows in Satellite-Based Solar irradiance Estimation: Improved Correction using EUMETSAT's Cloud Top Height Data
Arindam Roy, Annette Hammer, Detlev Heinemann, and Ontje Lünsdorf

11:45–12:00 EMS2022-366
Characterizing and correcting Heliosat Surface Solar Radiation bias on intra-day time scales with deep neural networks
Alberto Carpentieri, Martin Wild, Doris Folini, and Angela Meyer

12:00–12:15 EMS2022-713
Irradiance and cloud optical properties from photovoltaic power data under variable atmospheric conditions
James Barry, Stefanie Meilinger, Klaus Pfeilsticker, Felix Gödde, Bernhard Mayer, Hartwig Deneke, Jonas Witthuhn, Leonhard Scheck, Marion Schroedter-Homscheidt, Philipp Hofbauer, and Matthias Struck

- 12:15–12:30 EMS2022-404
Solar resource mapping in Norway
Andreas Dobler, Erik Berge, Steinar Eastwood, Jean Rabault Førland, Hans Olav Hygen, and Martin Lilleeng Sætra
- 12:30–12:45 EMS2022-286
Influence of aerosols on photovoltaic power in Ghana: Case study from Koforidua
Stefanie Meilinger and Armelle Zemo Mekeng
- 12:45–13:00 EMS2022-151
Solar Power Nowcasting in the Presence of Sahara dust: Can Deep Learning based on Satellite and Synthetic Production Data Recognize the Production-Offsets?
Petrina Papazek and Irene Schicker

Lunch break

Chairperson: Ekaterina Batchvarova

- 14:00–14:15 EMS2022-216
Benefits of Doppler wind lidars to improve short-term low-level wind forecasts
Tatiana Nomokonova, Philipp Griewank, Ulrich Löhnert, Takemasa Miyoshi, Tobias Necker, and Martin Weissmann
- 14:15–14:30 EMS2022-219
Probabilistic forecasting of the aggregated Finnish wind energy based on the MetCoOp ensemble prediction system (MEPS)
Evgeny Atlaskin, Anders Lindfors, Viivi Kallio-Myers, and Irene Suomi
- 14:30–14:45 EMS2022-428
Decentralized forecasting of wind energy generation with an adaptive machine learning approach to support ancillary grid services
Lukas Holicki, Manuel Dröse, Gregor Schürmann, and Marcus Letzel
- 14:45–15:00 EMS2022-465
Study of the interaction of atmospheric wakes from several offshore wind farms as observed by Synthetic Aperture Radar (SAR) system
Bughsin' Djath and Johannes Schulz-Stellenfleth
- 15:00–15:15 EMS2022-174
Influence of offshore wind farms on the latent heat flux in the marine boundary layer
Andreas Platis, Yann Büchau, and Jens Bange
- 15:15–15:30 EMS2022-631
Assessment of atmospheric stability measurements from microwave radiometer observations for wind energy applications
Domenico Cimini, Rémi Gandoin, Stephanie Fiedler, Hector Wilson, Bernhard Pospichal, Pauline Martinet, Andrea Balotti, Sabrina Gentile, and Filomena Romano

Coffee break

Chairperson: Sven-Erik Gryning

- 16:00–16:15 EMS2022-294
Dunkelflauten in Germany: Climatology and Relation to Weather Regimes
Fabian Mockert, Christian M. Grams, Tom Brown, Fabian Neumann, and James Fallon
- 16:15–16:30 EMS2022-196
The place beyond the lines - Efficient storage allocation in a spatially unbalanced power system with a high share of renewables
Berit Czock, Amelie Sitzmann, Jonas Zinke, and Stephanie Fiedler

- 16:30–16:45 EMS2022-91
Sizing of generation and storage capacities for tidal stream energy systems in view of the temporal pattern of tidal stream power
Hans Georg Beyer and Knud Simonsen
- 16:45–17:00 EMS2022-678
Creating and validating high-resolution wind atlases
Rogier Floors, Bjarke Tobias Olsen, and Neil Davis
- 17:00–17:15 EMS2022-168
Evaluation of machine-learning-based solar PV and wind power regional models for Spain
Ricardo Aler-Mur, **Guadalupe Sánchez-Hernández**, Antonio Jiménez-Garrote, Miguel López-Cuesta, Inés Galván-León, and David Pozo-Vazquez

SIM1 | Introduction for chairs and small reception

- 18:15–19:30 **Introduction for chairs and small reception**

Room HS 1 | Wed, 07 Sep 2022

UP1.5 | Atmospheric measurements: Instruments, experiments, networks and long-term programs using in-situ and remote sensing techniques

Convener: Frank Beyrich | Co-conveners: Fred C. Bosveld, Jens Bange, Domenico Cimini

Chairpersons: Frank Beyrich, Fred C. Bosveld

Ground-based remote sensing operations and synergy

- 09:00–09:30 EMS2022-119
DWD Pilotstation – Evaluating ground-based remote sensing systems for future observing networks
Christine Knist, Markus Kayser, Moritz Löffler, Jasmin Vural, Annika Schomburg, Ulrich Görsdorf, Felix Laueremann, Ronny Leinweber, Stefan Klink, and Volker Lehmann
- 09:30–09:45 EMS2022-623
EUMETNET's E-PROFILE network for thermodynamic profiling and the detection of airborne hazards
Alexander Haefele, Simone Bircher-Adrot, Rolf Rüfenacht, Volker Lehmann, Ina Mattis, Augustin Mortier, Domenico Cimini, and Myles Turp
- 09:45–10:00 EMS2022-234
Long-term ceilometer/wind-lidar observations of aerosol-layer depth in the Arctic
Sven-Erik Gryning, Ekaterina Batchvarova, Rogier Floors, Christoph Münkel, Lise Lotte Sørensen, and Henrik Skov
- 10:00–10:15 EMS2022-676
Deriving 3D wind fields in the Paris urban atmosphere from scanning Doppler lidar observations
Jonnathan Cespedes, Simone Kotthaus, Ludovic Thobois, and Martial Haeffelin
- 10:15–10:30 EMS2022-439
Observation of turbulence profiles with lidar synergy
Diego Lange Vega, Florian Späth, Syed Abbas, Andreas Behrendt, and Volker Wulfmeyer

Coffee break

Chairpersons: Jens Bange, Frank Beyrich

Experiments and networks

- 11:00–11:30 EMS2022-616
LIAISE campaign: Measuring and Modelling Evapotranspiration over Irrigated Terrain in a Semi-Arid Environment
Oscar Hartogensis, Aaron Boone, Mary-Rose Mangan, Joaquim Bellvert, Martin Best, Jennifer Brooke, Guylaine Canut-Rocafot, Joan Cuxart, Patrick Le Moigne, Josep Ramon Miro, Jan Polcher, Jeremy Price, and Pere Quintana Segui
- 11:30–11:45 EMS2022-267
Urban meteorological networks in Europe: A review
Jelena Dunjic, Stevan Savic, Dragan Milosevic, and Ivan Secerov
- 11:45–12:00 EMS2022-462
The morphology of convective cold pools in a dense station network during FESSTVal
Bastian Kirsch, Cathy Hohenegger, and Felix Ament
- 12:00–12:15 EMS2022-214
High-resolution observation of extreme winds at the Sub-Mesoscale with Doppler wind lidars during FESSTVal
Julian Steinheuer and Ulrich Löhnert

- 12:15–12:30 EMS2022-581
Vertical velocity variance and its dependency on meteorological parameters in the convective boundary layer
 Noviana Dewani, Mirjana Sakradzija, Juerg Schmidli, and Linda Schlemmer
- 12:30–12:45 EMS2022-577
Autonomous Monitoring of Soil Moisture & Snow Water Equivalent with Stationary and Mobile Cosmic-Ray Neutron Sensors
 Martin Schrön, Steffen Zacharias, Frank Beyrich, Falk Böttcher, Friedrich Boeing, Andreas Marx, Eshrat Fatima, Rohini Kumar, Maren Kaluza, Luis Samaniego, Sabine Attinger, and Peter Dietrich
- 12:45–13:00 EMS2022-371
The Unmanned Multipurpose Airborne Sensor Carrier MASC-V for Offshore Wind Energy Research
 Ines Weber, Andreas Platis, Kjell zum Berge, Martin Schön, Jakob Boventer, Matteo Bamati, Vasileios Savvakis, Gabriela Miranda Garcia, Mosaab Sajidi, Yongtan Wang, and Jens Bange

Lunch break

Chairpersons: Fred C. Bosveld, Jens Bange

Instruments and algorithms

- 14:00–14:15 EMS2022-133
Towards spatio-temporal turbulence measurements in the atmospheric boundary layer with a fleet of UAS
 Norman Wildmann and Tamino Wetz
- 14:15–14:30 EMS2022-237
Validation of Doppler wind LiDARs of the German Weather Service (DWD) using small unmanned aerial systems (UAS)
 Jakob Boventer, Ines Weber, Martin Schön, Kjell zum Berge, Andreas Platis, Jens Bange, Frank Beyrich, Carola Detring, and Eileen Päsche
- 14:30–14:45 EMS2022-682
Characterizing the influence of obstacles on scanning microwave profilers
 Tobias Böck, Bernhard Pospichal, and Ulrich Löhnert
- 14:45–15:00 EMS2022-511
Measuring Hailstone Trajectories with the HailSonde
 Joshua Soderholm, Matthew Kumjian, Anders Peterson, Jordan Brook, and Alain Protat
- 15:00–15:15 EMS2022-154
Towards the combination of in-situ and satellite-based solar radiation data in near-realtime – the project DUETT at DWD
 Anna Klameth, Sven Brinckmann, and Jörg Trentmann
- 15:15–15:30 **Poster Pitches**

Coffee break

Chairpersons: Frank Beyrich, Fred C. Bosveld

Instrumental developments

- 16:00–16:15 EMS2022-629
A Doppler Lidar technique for monitoring the „whole“ boundary layer
 Hans-Juergen Kirtzel and Gerhard Peters
- 16:15–16:30 EMS2022-559
Latest developments on Vaisala broadband DIAL with examples
 Minttu Tuononen, Raisa Lehtinen, Pekko Tuominen, and Reijo Roininen

- 16:30–16:45 EMS2022-633
Validation of the New Version of the WindCube Scan Lidar
Cristina Benzo and Ludovic Thobois
- 16:45–17:00 EMS2022-130
Quantifying biases in open-path eddy covariance CO₂ flux measurements caused by spectroscopic effects in broadband non-dispersive infrared gas analyzers
Ivan Bogoev
- 17:00–17:15 EMS2022-59
Introducing Mobile Micrometeorological Carts (MMCs) for urban and non-urban micrometeorological measurements
Dragan Milošević, Stevan Savić, Ivan Šečerov, and Jelena Dunjić

Room HS 1 | Thu, 08 Sep 2022

UP1.1 | Atmospheric dynamics, predictability, and extremes

Conveners: Christian M. Grams, Gabriele Messori | Co-conveners: Michael Riemer, Sebastian Schemm, Davide Faranda
Chairpersons: Christian M. Grams, Gabriele Messori

Atmospheric Dynamics and Extreme Events across Climate Zones

09:00–09:30 EMS2022-642
Dynamics of dry intrusion air streams and their relevance for extreme weather
Shira Raveh-Rubin, Elody Fluck, Yonatan Givon, Eyal Ilotoviz, Noy Klaider, Leehi Magaritz-Ronen, Stav Nahum, Deepika Rai, Vered Silverman, and Tsruya Yaari

a) Midlatitudes

09:30–09:45 EMS2022-316
The role of Rossby wave breaking for extreme and annual mean precipitation in (semi)arid regions
Andries Jan De Vries, Moshe Armon, Klaus Klingmüller, Raphael Portmann, and Daniela I.V. Domeisen

09:45–10:00 EMS2022-136
A storm-track connection between North American cold extremes and European wet/windy extremes
Jacopo Riboldi, Richard Leeding, Antonio Segalini, and Gabriele Messori

10:00–10:15 EMS2022-407
Moisture origin of the extreme precipitation event in Western Europe in July 2021
Chris Weijenberg, Imme Benedict, Florian Polak, Thomas Vermeulen, Peter Kalverla, and Harald Sodemann

b) Tropics

10:15–10:30 EMS2022-652
Unraveling cross-equatorial dry intrusion influence on Indian summer monsoon rainfall
Deepika Rai and Shira Raveh-Rubin

Coffee break

UP3.7 | Sub-seasonal to seasonal predictability: Processes, methods, and impacts

Convener: Daniela Domeisen | Co-conveners: Johanna Baehr, Dominik Büeler, Maria Pyrina, Frederic Vitart, Christopher White, Priyanka Yadav
Chairpersons: Priyanka Yadav, Dominik Büeler, Daniela Domeisen

Mechanisms & Processes

11:00–11:15 EMS2022-156
Sub-seasonal prediction of the year-round Atlantic-European weather regimes
Marisol Osman, Christian M. Grams, and Remo Beerli

11:15–11:30 EMS2022-226
The role of warm conveyor belts for the sub-seasonal prediction of blocked weather regimes
Jan Wandel, Julian F. Quinting, Dominik Büeler, Peter Knippertz, and Christian M. Grams

11:30–11:45 EMS2022-429
Predictability of the North Atlantic European region and the role of Indian Ocean during early winter
Muhammad Adnan Abid, Fred Kucharski, and Franco Molteni

11:45–12:00 EMS2022-192
Which Sudden Stratospheric Warming Events are Most Predictable?
Chaim Garfinkel and Dvir Chwat

Predictability & Methods

- 12:00–12:15 EMS2022-69
Seasonal Forecasts of Winter Temperature Improved by Higher-Order Modes of Mean Sea Level Pressure Variability in the North Atlantic Sector
Clementine Dalelane
- 12:15–12:30 EMS2022-110
Identifying relevant large-scale predictors for sub-seasonal precipitation forecast using explainable neural networks
Niclas Rieger, Estrella Olmedo, Álvaro Corral, Linus Magnusson, Laura Ferranti, and Antonio Turiel
- 12:30–12:45 EMS2022-497
Ensemble forecast of an index of the Madden Julian Oscillation using a stochastic weather generator based on analogs of Z500
Meriem Krouma, Pascal Yiou, and Riccardo Silini
- 12:45–13:00 EMS2022-434
Characterizing Optimal Atlantic-European Blocking Precursors Using a Linear Inverse Model
Maria Madsen, Volkmar Wirth, Michael Riemer, and Christian Grams

Lunch break

UP1.1 | Atmospheric dynamics, predictability, and extremes

Conveners: Christian M. Grams, Gabriele Messori | Co-conveners: Michael Riemer, Sebastian Schemm, Davide Faranda
Chairpersons: Gabriele Messori, Christian M. Grams

- 14:00–14:15 EMS2022-95
The Intricacies of Identifying Equatorial Waves
Peter Knippertz, Maria Gehne, George N. Kiladis, Kazuyoshi Kikuchi, Athul Rasheeda Satheesh, Paul E. Roundy, Gui-Ying Yang, Nedjeljka Žagar, Juliana Dias, Andreas H. Fink, John Methven, Andreas Schlueter, Frank Sielmann, and Matthew C. Wheeler

c) Arctic

- 14:15–14:30 EMS2022-73
Local versus remote origin of wintertime extreme surface energy budget anomalies in the Arctic
Lukas Papritz, Sonja Murto, Rodrigo Caballero, Gabriele Messori, Matthias Röthlisberger, Gunilla Svensson, and Heini Wernli
- 14:30–14:45 EMS2022-339
Impact of low ice area in Arctic on atmospheric circulation and climate extremes in mid to high latitudes of the Northern Hemisphere
Joanna Jędruszkiewicz, Piotr Piotrowski, and Joanna Wibig
- 14:45–15:00 EMS2022-107
Stratospheric Modulation of Arctic Oscillation Extremes as Represented by Extended-Range Ensemble Forecasts
Jonas Spaeth and Thomas Birner

d) Event attribution

- 15:00–15:15 EMS2022-666
Extreme event attribution at Deutscher Wetterdienst - status and plans
Philip Lorenz, Jordis Tradowsky, and Frank Kreienkamp

Dynamics of the Jet, Rossby Waves, and Blocking

- 15:15–15:30 EMS2022-272
The Importance of Anticyclonic Transient Eddies for Atmospheric Block Persistence
Charlie Sutters, Oscar Martinez-Alvarado, Kevin Hodges, Reinhard Schiemann, and Duncan Ackerley

Coffee break

Chairpersons: Gabriele Messori, Christian M. Grams

- 16:00-16:15 EMS2022-109
Dynamics of blocked weather regimes in the Atlantic-European region: a combined PV and local wave activity approach
Franziska Teubler, Christopher Polster, Volkmar Wirth, Seraphine Hauser, Christian Grams, and Michael Riemer
- 16:15-16:30 EMS2022-120
A process-based understanding of Greenland Blocking regime life cycle dynamics in ERA-5 reanalysis from a potential vorticity perspective
Seraphine Hauser, Peter Knippertz, Julian F. Quinting, Michael Riemer, Franziska Teubler, and Christian M. Grams
- 16:30-16:45 EMS2022-276
Disentangling diabatic and adiabatic drivers during the life cycle of a jet streak from a Lagrangian PV-gradient perspective
Mona Bukenberger, Sebastian Schemm, and Stefan Rüdüsühli
- 16:45-17:00 EMS2022-250
Nonadiabatic and nonquasigeostrophic sources of upper tropospheric Rossby wave activity
Hung-I Lee and Noboru Nakamura
- 17:00-17:15 EMS2022-298
Kinematic processes contributing to the intensification of anomalously-strong North Atlantic jets
Andrew Winters

Predictability and Numerical Modelling

Room HS 1 | Fri, 09 Sep 2022

UP1.1 | Atmospheric dynamics, predictability, and extremes

Conveners: Christian M. Grams, Gabriele Messori | Co-conveners: Michael Riemer, Sebastian Schemm, Davide Faranda
Chairpersons: Annika Oertel, Christian M. Grams

- 09:00–09:15 EMS2022-398
The transition from practical to intrinsic predictability of midlatitude weather
Tobias Selz, Michael Riemer, and George Craig
- 09:15–09:30 EMS2022-287
Predictability of midlatitude Rossby wave packets and their underlying dynamics
Isabelle Prestel-Kupferer, Sören Schmidt, Michael Riemer, and Franziska Teubler
- 09:30–09:45 EMS2022-228
The role of warm conveyor belts for medium-range forecast error growth
Moritz Pickl, Christian M Grams, and Julian F Quinting
- 09:45–10:00 EMS2022-56
Impact of combined uncertainties on convective precipitation during different synoptic control
Takumi Matsunobu, Christian Keil, and Christian Barthlott
- 10:00–10:15 EMS2022-104
A two-scale model for the meso- and synoptic scales
Mirjam Hirt and George Craig
- 10:15–10:30 EMS2022-565
Impacts of the coupling of the wave and the ocean model to the atmospheric model on the predictability of extreme events
Anne Wiese, Ha Thi Minh Ho-Hagemann, Sebastian Grayek, Wolfgang Koch, and Joanna Staneva

Temperature Extremes

Coffee break

Chairpersons: Lukas Papritz, Christian M. Grams

- 11:00–11:15 EMS2022-227
How warm conveyor belt activity across the North Pacific influenced the predictability of the North American heat wave 2021
Annika Oertel, Moritz Pickl, Julian F. Quinting, Seraphine Hauser, Jan Wandel, Linus Magnusson, Magdalena Balmaseda, Frederic Vitart, and Christian M. Grams
- 11:15–11:30 EMS2022-213
The role of transient eddies and diabatic heating in the maintenance of European heat waves: a nonlinear quasi-stationary wave perspective
Qiyun Ma and Christian Franzke
- 11:30–11:45 EMS2022-252
Air-sea interactions and diabatic processes in the Gulf Stream region and their role in the life-cycle of a blocking anticyclone: a case study of European Blocking in Feb 2019.
Marta Wentz, Christian M. Grams, Lucas Papritz, and Marc Federer
- 11:45–12:00 EMS2022-602
European heatwaves in present and future climate simulations: A Lagrangian analysis
Lisa Schielicke, Theresa Allner, and Stephan Pfahl

- 12:00–12:15 EMS2022-46
Lagrangian characterization of heat waves by Eulerian tracer advection with relaxation
 Amelie Mayer and Volkmar Wirth
- 12:15–12:30 EMS2022-176
A global comparison of heatwave magnitude indices using ERA5 reanalysis data
 Emmanuele Russo and Daniela Domeisen
- 12:30–12:45 EMS2022-524
Investigation of the vertical structure of the lower atmosphere during heat wave conditions
 Till Fohrmann, Andreas Hense, and Petra Friederichs
- 12:45–13:00 EMS2022-76
Quantifying the physical processes leading to atmospheric hot extremes at a global scale
 Matthias Röthlisberger and Lukas Papritz

Lunch break

Chairpersons: Marisol Osman, Christian M. Grams

- 14:00–14:15 EMS2022-304
An upper bound for extreme temperatures over midlatitude land
 Yi Zhang and William Boos
- S2D and Climate Change**
- 14:15–14:30 EMS2022-125
Interannual vs Decadal Impacts of Pacific Variability
 Melissa Seabrook, Doug Smith, Nick Dunstone, Rosie Eade, Leon Hermanson, and Adam Scaife
- 14:30–14:45 EMS2022-19 | Young Scientist Conference Award
How is the extratropical circulation affected by reduced Atlantic and Pacific land-sea thermal contrast?
 Alice Portal, Claudia Pasquero, Fabio D'Andrea, Paolo Davini, Mostafa Hamouda, and Gwendal Rivière
- 14:45–15:00 EMS2022-40
Climate change-induced jet variability over the North Atlantic: Trends and drivers
 Alejandro Hermoso and Sebastian Schemm
- 15:00–15:15 EMS2022-560
Latent Dirichlet Allocation: a new machine learning tool to evaluate CMIP6 climate models atmospheric circulation
 Nemo Malhomme, Davide Faranda, Bérengère Podvin, and Lionel Mathelin
- 15:15–15:30 EMS2022-573
The relationship between precipitation and extra-tropical cyclone intensity in different idealised climates
 Victoria Sinclair and Jennifer Catto