

MONDAY 22 MAY 2023

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| 8h30-9h00 | Registration |
| 9h00-9h30 | <p>WELCOME Nicoletta Dacrema - University of Genoa Dino Zardi - Italian Association of Atmospheric Sciences and Meteorology Josep Calbó - Associació Catalana de Meteorologia Francesco Tocci - Hydrographic Institute of Italian Navy Luca Baione - WMO Permanent Representative tbd - Liguria Region Marco Bucci - Genoa Municipality</p> |
| S5 Interdisciplinary studies (Chair: J. Calbó / M. C. Llasat) | |
| 9h30-10h00 | <p>Invited talk - An interdisciplinary approach to the analysis of extreme events over the Mediterranean M. Telišman-Prtenjak</p> |
| 10h00-10h15 | <p>O5.1 - Seasonal predictions in the Mediterranean region. Application in the control of climate-sensitive diseases J. Ramon, J. Corvillo-Guerra, N. González-Reviriego, A. Llabrés-Brustenga, R. Lowe</p> |
| 10h15-10h30 | <p>O5.2 - On the seasonal prediction of nighttime heat waves in Europe V. Torralba, S. Matera, L. Cavicchia, M. C. Álvarez-Castro, E. Scoccimarro, S. Gualdi</p> |
| 10h30-11h00 | COFFEE BREAK |
| S5 Interdisciplinary studies (Chair: J. Calbó / M. C. Llasat) | |
| 11h00-11h15 | <p>O5.3 - Urban heat and dry island effects: a novel approach to characterize the metropolitan area of Turin V. Garbero, M. Milelli, F. Bassani</p> |
| 11h15-11h30 | <p>O5.4 - Application of climate risk assessment framework for selected Italian airports: a focus on extreme temperature and extreme precipitation events C. De Vivo</p> |
| 11h30-11h45 | <p>O5.5 - Efficiency of resource allocation in the suppression of European wildfires Z. Hou, F. Bosello, V. Bacciu</p> |
| 11h45-12h00 | <p>O5.6 - The trade-off between socio-environmental awareness and renewable penetration targets in energy transition roadmaps A. Maimó, V. Homar, A. Tantet, P. Drobinski</p> |
| 12h00-12h15 | <p>O5.7 - On the fires responses to climate variability and change: the ONFIRE project M. Turco, A. Gincheva, M.A. Torres-Vázquez, S. Jerez</p> |
| 12h15-12h30 | <p>O5.8 - Assessment of crop water use and its sustainability based on future projections, Aude Department (South-West France) A. Borgo</p> |

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| 12h30-13h30 | LUNCH BREAK |
| 13h30-15h00 | POSTER SESSION P1 Climatology; P4 Numerical modelling; P6 Statistical and AI-based methods |
| S5 Interdisciplinary studies (Chair: J. Calbó / M. C. Llasat) | |
| 15h00-15h15 | O5.9 - Frost climatology in Croatia B. Omazić, M. Telišman-Prtenjak, M. Anić |
| 15h15-15h30 | O5.10 - An action-oriented approach to make the most of the wind and solar power complementarity S. Jerez, D. Barriopedro, A. García-López, R. Lorente-Plazas, A.M. Somoza, M. Turco, J. Carrillo, N. Espinosa, R. M. Trigo |
| 15h30-15h45 | O5.11 - I-CHANGE Living Labs to promote citizen participation in change of individual habits in a context of climate change: a joint vision through their implementation plans L. Esbrí, M.C. Lasat, M. Llasat-Botija, R. Marcos, E. Pardo, E. Peerlings, G.-J. Steeneveld, F. Barbano, E. Brattich, T. Carlones, C. Cintolesi, S. Di Sabatino, S. Tondini, A. Mölter, F. Munerol, A. Parodi, L. Polo, M. Adnan, P. Alpert, Y. Rubin, B. Mohamadou, S. Salack, M. A. Sawadogo |
| S3 Remote and in-situ measurements (Chair: I. Ferrando / V. García-Santos) | |
| 15h45-16h15 | Invited talk - Validation of CCI LST products using in-situ measurements from six globally distributed station networks Ll. Pérez-Planells, F.-M. Göttsche |
| 16h15-16h30 | O3.1 - Are satellite imagery estimates and climate models able to explain the observed surface solar radiation trends over Europe? L. C. Segado-Moreno, J. A. Ruiz-Arias, J. P. Montávez |
| 16h30-17h00 | COFFEE BREAK |
| S3 Remote and in-situ measurements (Chair: I. Ferrando / V. García-Santos) | |
| 17h00-17h15 | O3.2 - Impact of orographic features and climatic conditions on precipitation estimates of GPM IMERG products over Catalonia E. Peinó, J. Bech, M. Udina |
| 17h15-17h30 | O3.3 - Long-term statistical results on lightning strokes recorded by the LINET network in Italy M. Petracca, S. Federico, N. Roberto, S. Puca, L.P. D'Adderio, R. C. Torcasio, S. Dietrich |
| 17h30-17h45 | O3.4 - Detection and characterization of Medicanes' warm core and deep convection L. P. D'Adderio, S. Dafis, D. Casella, S. Dietrich, J.-F. Rysman, P. Sanò, G. Panegrossi |
| 17h45-18h00 | O3.5 - Land surface Interactions with the Atmosphere over the Iberian Semi-arid Environment (LIAISE) Project: Overview of the field campaign and current status A. Boone, M. Best, J. Bellvert, J. Brooke, G. Canut-Rocafort, J. Cuxart, O. Hartogensis, J. R. Miró, P. Le Moigne, J. Polcher, J. Price, P. Quintana |
| 18h00-18h15 | O3.6 - A machine learning approach to study the aerosol typing and properties: the case of the unusually warm summer 2022 J. Tunez, F. Scarlatti, J. L. Gómez-Amo, P. C. Valdelomar, V. Estellés, M. P. Utrillas |
| 18h15-18h30 | O3.7 - Column optical properties of Saharan dust outbreaks over the western Mediterranean coast Y. Sola, A. Hernández |
| 18h30-20h00 | ICE BREAKER |

TUESDAY 23 MAY 2023**S4 Numerical modelling (Chair: V. Homar / B. Turato)**

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| 8h30-9h00 | Invited talk - The New TRAM Model: Achievements at Meteo-UIB Towards Numerical Modelling Capabilities Aimed at a Wide Range of Time-Space Scales R. Romero |
| 9h00-9h15 | O4.1 - Implementation of the urban canopy land surface scheme TERRA_URB in ICON: preliminary results over Italy A. Campanale, M. Adinolfi, M. Raffa, P. Mercogliano, J.-P. Schulz |
| 9h15-9h30 | O4.2 - Microclimate investigation to study the behavior of urban heat islands in the city of Turin L. Pauly, E. Ferrero, M. Canonico |
| 9h30-9h45 | O4.3 - SWING, The Score-Weighted Improved Nowcasting algorithm M. Lagasio, L. Campo, M. Milelli, V. Mazzarella, M. L. Poletti, F. Silvestro, L. Ferraris, S. Federico, S. Puca, A. Parodi |
| 9h45-10h00 | O4.4 - The 29 August 2020 event in the Balearic Islands: Exploring severe weather environments with CM1 simulations M. M. Vich, R. Romero |
| 10h00-10h15 | O4.5 - Cascade sensitivity tests to model deep convective systems in complex orography with WRF F. Ferrari, E. Maggioni, A. Perotto, R. Salerno, M. Giudici |
| 10h15-10h30 | O4.6 - On the influence of ocean mixed layer depth and sea surface temperature development of the tropical-like cyclone "IANOS" A. Ricchi |
| 10h30-11h00 | COFFEE BREAK |
| S4 Numerical modelling (Chair: V. Homar / B. Turato) | |
| 11h00-11h15 | O4.7 - The role of aerosols in atmospheric rivers behaviour E. Raluy, L. C. Segado-Moreno, F. Sánchez-Jiménez, E. García-Fernández, P. Jiménez-Guerrero, J. P. Montávez |
| 11h15-11h30 | O4.8 - Evaluation of aerosol effects on extreme precipitation events over Liguria (Italy) F. Cassola, F. Ferrari, A. Mazzino, M. M. Miglietta, M. Morichetti, U. Rizza |
| 11h30-11h45 | O4.9 - Impacts of the ECMWF Integrated Forecasting System (IFS) ensemble simulation with physical parameterizations perturbations on Mediterranean tropical-like cyclone forecasts M. Saraceni, L. Silvestri, P. Bechtold, P. B. Cerlini |
| 11h45-12h00 | O4.10 - High resolution WRF modeling of extreme heat events and mapping of the urban heat island characteristics in Athens, Greece N. Roukounakis, K.V. Varotsos, D. Katsanos, G. Lemesios, C. Giannakopoulos |
| 12h00-12h15 | O4.11 - Multi-model assessment of the next-decade climate over the Mediterranean region D. Nicolì, S. Gualdi, P. Athanasiadis, E. E. Tsartsali |
| 12h15-12h30 | O4.12 - What will Mediterranean convective storms look like under climate change conditions? D. Argüeso, A. Prein, A. Di Luca |
| 12h30-13h30 | LUNCH BREAK |

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| 13h30-15h00 | POSTER SESSION P2 Processes and mechanisms; P3 Remote and in-situ measurements; P5 Interdisciplinary studies |
| S2 Processes and mechanisms (Chair: J. Cuxart / P. Le Moigne) | |
| 15h00-15h30 | Invited talk - Process-based classification of Mediterranean cyclones S. Raveh-Rubin, Y. Givon |
| 15h30-15h45 | O2.1 - The integrated analysis of a summer urban flash flood in Croatia K. Horvath, I. Nimac, K. C. Kalin, T. Renko, T. Vujnović |
| 15h45-16h00 | O2.2 - A conceptual model for the development of tornadoes in the Po Valley F. De Martin, S. Davolio, M. M. Miglietta, V. Levizzani |
| 16h00-16h15 | O2.3 - Boundary layer and precipitation changes by introducing irrigation parameterization in WRF M. Udina, E. Peinó, J. Bech, F. Polls, J. Mercader, I. Guerrero |
| 16h15-16h30 | O2.4 - Nocturnal evaporation and condensation processes at the surface in the semi-arid Eastern Ebro Basin J. Cuxart, J. Groh, D. Martínez-Villagrassa, B. Martí, J. Price |
| 16h30-17h00 | COFFEE BREAK |
| S2 Processes and mechanisms (Chair: J. Cuxart / P. Le Moigne) | |
| 17h00-17h15 | O2.5 - Flux-gradient relationships for heat and water vapour in semi-arid environments D. Martínez-Villagrassa, B. Martí, J. Price, J. Cuxart |
| 17h15-17h30 | O2.6 - Characterisation of the marine-air intrusion Marinada in the eastern Ebro subbasin M. A. Jiménez, A. Grau, D. Martínez-Villagrassa, J. Cuxart |
| 17h30-17h45 | O2.7 - Two-way interactions between a small temperate lake and the atmosphere: A case of Kozjak, Plitvice Lakes, Croatia Z. B. Klaic, K. Babic, H. Mihanovic, K. Sarovic |
| 17h45-18h00 | O2.8 - Decomposing the contribution of dry intrusions for evaporation in the Gulf of Lion during Mistral Y. Givon, S. Raveh-Rubin, D. Keller Jr., P. Drobinski |
| 18h00-18h15 | O2.9 - Heatwaves in Rome (Italy) during summer 2022: interaction with sea breeze, urban heat island, and thermo-hygrometric comfort A. Di Bernardino, S. Falasca, A. M. Iannarelli, S. Casadio, A. M. Siani |
| 18h15-18h30 | O2.10 - Towards the detection of extreme sea level rises along the Mediterranean coastline using meteorological observations L. Minola, A. Re, S. Bedoya-Valestt, C. Motta, C. Azorin-Molina, A. Pezzoli, D. Chen |

WEDNESDAY 24 MAY 2023**S1 Climatology (Chair: A. Ceppi / F. Grazzini / V. Telesca)**

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| 8h30-9h00 | Invited talk - Present trend and future projections of climate impact drivers in The Mediterranean region P. Lionello |
| 9h00-9h15 | O1.1 - Precipitation climatology in Europe and the Mediterranean basin through observations and EURO-CORDEX simulations (1979-2016) E. Cattani, V. Levizzani |
| 9h15-9h30 | O1.2 - Analysis of past and future temperature extremes in the Greater Alpine Region (1951-2050) B. Diana |
| 9h30-9h45 | O1.3 - On the inaccuracy of CMIP6 models in capturing the observed long-term variability of the NAO A. Halifa-Marin, M. A. Torres-Vázquez, E. Pravia-Sarabia, R. M. Trigo, S. M. Vicente-Serrano, S. Jerez, M. Turco, P. Jiménez-Guerrero, J. P. Montávez |
| 9h45-10h00 | O1.4 - Hail climatology in the Mediterranean basin using the GPM constellation (1999-2021) S. Laviola, G. Monte, E. Cattani, V. Levizzani |
| 10h00-10h15 | O1.5 - Modelling hail hazard over Italy with ERA5 large-scale variables R. Henin, V. Torralba, A. Cantelli, E. Scoccimarro, S. Materia, A. Manzato, S. Gualdi |
| 10h15-10h30 | O1.6 - Classification of daily torrential rainfall patterns and associated synoptic types in the Campania region (southern Italy) V. Capozzi, C. Annella, G. Budillon |
| 10h30-11h00 | COFFEE BREAK |
| S1 Climatology (Chair: A. Ceppi / F. Grazzini / V. Telesca) | |
| 11h00-11h15 | O1.7 - Variability and trends of the total cloud cover over Italy (1951-2018) V. Manara, M. Brunetti, M. Wild, M. Maugeri |
| 11h15-11h30 | O1.8 - Quantifying dynamical contributions to Mediterranean cyclonic activity using the Localized Finite Amplitude Wave Activity diagnostic D. Sandler, C. Polser, H. Saaroni, B. Ziv, N. Harnik |
| 11h30-11h45 | O1.9 - Large-scale characteristics of Mediterranean tropical-like cyclones in ERA5 L. Bernini, C. Pasquero, F. Desbiolles, L. Cavicchia, E. Scoccimarro |
| 11h45-12h00 | O1.10 - Climatological analysis of cyclone tracks in the Western Mediterranean D. Hourngir, M. Burlando, D. Romanic |
| 12h00-12h15 | O1.11 - Changes in wave extremes in the Mediterranean Sea due to climate change A. L. Loarca |
| 12h15-12h30 | O1.12 - Statistical downscaling of global climate projections along the Egyptian Mediterranean coast M. Shaltout, M. ElBessa |
| 12h30-13h30 | LUNCH BREAK |
| S1 Climatology (Chair: A. Ceppi / F. Grazzini / V. Telesca) | |
| 13h30-13h45 | O1.13 - Identifying storm types leading to precipitation extreme events in the Western Mediterranean using a physics-based classification method Y. Bahuet-Bourret, D. Argüeso |
| 13h45-14h00 | O1.14 - Attributing heatwaves to climate change in mountainous areas. An analysis of the summer 2022 heatwaves in the Pyrenees M. Lemus-Canovas, S. Gonzalez-Herrero, L. Trapero, A. Albalat, D. Insua-Costa, M. Senande-Rivera, G. Miguez-Macho |
| 14h00-14h15 | Climate scenarios of weather extremes affecting the Italian energy system with a multi-hazard approach A. Trevisiol, P. Faggian |

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| 14h15-14h30 | O1.16 - Climatological analysis of precipitation on Mount Baldo (Italian Alps) over the years 1879 - 2019 D. Zardi, A. Terenzi, L. Giovannini, M. Falocchi |
| 14h30-14h45 | O1.17 - A Citizen Science project for the digitization of Italian secular precipitation and temperature records M. Maugeri, M. C. Beltrano, G. Bertoldi, Y. Brugnara, M. Brunetti, D. C. Berro, A. Ceppi, A. Crespi, V. Manara, I. Riva, F. Sudati, D. Zardi |
| S6 Statistical and AI-based methods (Chair: A. Mazzino) | |
| 14h45-15h15 | Invited talk - Towards a Machine Learning system of Sea Level in the Northern Adriatic L. Mentaschi, N. Pinardi, P. Camus |
| 15h15-15h30 | O6.1 - Physically driven wind field spatial interpolation D. Carnevale, A. Mazzino, M. Cavaiola |
| 15h30-15h45 | BREAK |
| 15h45-16h00 | O6.2 - Improving forecast of precipitation extremes with machine learning F. Grazzini |
| 16h00-16h15 | O6.3 - Deep Learning for nowcasting radar-derived sea surface currents M. Cavaiola, S. Marini, M. Magaldi, A. Mazzino |
| 16h15-16h30 | O6.4 - Evaluation of Kalman Filter based post-processing methods: focusing on the coastal region of Croatia I. Vujec, I. Odak Plenković |
| 16h30-17h00 | AWARDS AND CLOSING |