## PERSONAL INFORMATION

# Paola Mercogliano

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Sex Female | Nationality Italian

#### **CURRENT POSITION**

- Manager and scientific leader of REMHI Division at CMCC Foundation (Euro-Mediterranean Centre on Climate Change)
- Adjunct Professor of Advanced Meteorology at University of Naples Parthenope
- Adjunct Professor of Dynamic models for weather prediction and climate Tools at University of Campania
- president of the Italian Climatology Society for the period 2025-2026 and now member of the SISC Board
- ANVUR accredited researcher from 2004
- CEO of Dataclime service (www.dataclime.com )

#### **MAIN ACTIVITIES**

Meteorology, Climatology, Climate Change impact, Adaptation to Climate Change, Assessment of climate risk, Development of weather and climate services, Development of NWP and RCM models.

## **WORK EXPERIENCE**

## 09/ 2005 present

# C.M.C.C. Foundation

- 2013—present: Manager and Scientific Lead of the REMHI research division working on development of NWP and high-resolution climate models, atmospherical model post-processing, evaluation of the impact of climate change, as well as the development of climate risk assessment and adaptation strategies and measures at the local level. Additional info at: <a href="https://www.cmcc.it/research-organization/research-divisions/regional-models-and-geo-hydrological-impacts">https://www.cmcc.it/research-organization/research-divisions/regional-models-and-geo-hydrological-impacts</a>.
- 2006-2013: Scientific manager of the task "Impacts on Territory Monitoring and Prevention of Hydrogeological Disasters" in the CMCC research division "Impacts on the soil and coasts".

#### **CMCC Main Scientific activities:**

- 2023- present: Lead of Horizon Europe AGORA project (Grant agreement ID: 101093921), "A Gathering place to cO-design and co-cReate Adaptation." This project supports the overall objectives of the Mission on Adaptation to Climate Change by promoting and highlighting best practices, innovative approaches, policy tools, and governance mechanisms to effectively engage communities and regions in climate action. <a href="https://www.cmcc.it/it/projects/agora-a-gathering-place-to-co-design-and-co-create-adaptation">https://www.cmcc.it/it/projects/agora-a-gathering-place-to-co-design-and-co-create-adaptation</a>
- 2023-present: Scientific Lead of the MOU between CMCC and the Municipality of Rome, focused on mapping climate risks in Rome, identifying high-risk areas and priorities for intervention against climate risks. Ensured coherence with national and European plans and programs for adaptation and resilience, to support the Civil Protection and other operational entities in updating the warning and prevention system considering expected extreme weather events due to climate change. Conducted outreach and awareness activities through seminars and technical meetings to engage Rome's organizational structures in sharing information on sensitive areas and identifying adaptation actions for the identified risk scenarios and intervention priorities.
- **2023-present:** CMCC Scientific Lead of the Al-GCM (Artificial Intelligence General Circulation Model) project, founded by IFAB Foundation The project aims to evaluate the potential of deep learning

- techniques in weather forecasting in various sectors such as agriculture, transportation, and energy.
- 2022-present: CMCC Scientific Lead of the technical and scientific cooperation agreement between
  Agenzia del Demanio and CMCC, aimed at advancing the knowledge of the effects of climate change on
  real estate assets. Development of tools for analyzing and evaluating the impacts of climate change on
  both new and existing public buildings. Ultimately, our work aimed to support the increase of resilience of
  the entire national public real estate portfolio through useful studies and analyses.
- 2021-present: CMCC Scientific Lead of the collaboration with Acquedotto Pugliese S.p.a. (Apulian Aqueduct) having the goal to assess and reduce the impact of climate change risk on the infrastructure assets.
- 2020-present: CMCC Scientific Lead for support activities to the Sardinia region for the development of a
  detailed operational plan for the implementation and review of the Climate Change Adaptation Strategy
- 2022: Author of the document (Head of the chapter 3) "Climate change, infrastructure and mobility" elaborated by the commission set up by the Italian Minister of Sustainable Infrastructures and Mobility (https://www.mit.gov.it/nfsmitgov/files/media/notizia/2022-02/Rapporto Carraro Mims.pdf)
- 2022: Member of the STEMI (Structure for the Ecological Transition of Mobility and Infrastructure) and author of the ""Zero-impact climate cities: strategies and policies." Published in 2022 by MIMS "Ministry of Sustainable Infrastructure and Mobility"
- 2022: Member of the Interministerial Committee for Urban Policies (CIPU) and author of the "Urban Agenda of the Ministry of Sustainable Infrastructure and Mobility" published in 2022 by MIMS. The report offers a strategic framework to guide the policies of the Ministry of Sustainable Infrastructure and Mobility and provides public decision-makers with practices to contribute to the definition of the urban agenda for sustainable development.
- 2021–2023: CMCC Scientific Lead for the consulting service provided to TERNA S.p.a, in collaboration
  with Rina Consulting, for the development and implementation of a methodology for predicting energy
  from renewable sources.
- 2021–2022: CMCC Scientific Lead of the call launched by Fondazione Compagnia San Paolo
  "Mutamenti" to support and accompany the planning of local actions for adaptation to climate change
  some areas of the Northern Italy. <a href="https://www.compagniadisanpaolo.it/it/news/bando-mutamenti-idee-e-azioni-per-il-clima-che-cambia/">https://www.compagniadisanpaolo.it/it/news/bando-mutamenti-idee-e-azioni-per-il-clima-che-cambia/</a>
- 2020 2022: Involved in the activities supporting Molise and Lazio regions for the development of Regional Sustainable Development Strategy.
- 2019–2022: Scientific Lead in consultancies service for private and public sectors provided by CMCC srl. (e.g., RFI, Arpa Campania, Groupama)
- 2019- 2021: Lead of the service contract C3S\_430 Sectoral Information System to Support Disaster Risk Reduction funded by the COPERNICUS program (<a href="https://climate.copernicus.eu/pluvial-flood-risk-assessment-urban-areas">https://climate.copernicus.eu/pluvial-flood-risk-assessment-urban-areas</a>) concerning definition of data and application to reduce risk related to urban flooding
- 2019-2021: CMCC Scientific Lead of the consultancy service for ENEL Foundation "Climate proofing in investments and spatial planning" <a href="https://www.enelfoundation.org/topic/a/2020/04/climate-proofing-in-investments-and-spatial-planning">https://www.enelfoundation.org/topic/a/2020/04/climate-proofing-in-investments-and-spatial-planning</a>
- 2019-2022: researcher and leader of the WP on the dissemination in the project SAM-PS- Study on Adaptation Modelling Founded by DG Climate Action and leader of the Work Package on Dissemination https://www.cmcc.it/it/projects/sam-ps-study-on-adaptation-modelling
- 2016–2023: CMCC researcher supporting drafting of the National Plan for Adaptation to Climate Change and founded by Italian ministry of Environment https://www.mase.gov.it/pagina/piano-nazionale-diadattamento-ai-cambiamenti-climatici-pnacc
- 2015-2019: CMCC Scientific Lead for the consultancy service WEC (Wat-Ener-Cast) leaded by ARIA
  Technologies for the definition and implementation of weather forecasting services to support weather
  operators (currently adopted in France and Ecuador) for managing facilities.
- 2017-2018: Author of "Climate and health country profile for Italy" produced by the World Health Organization (WHO) and the United Nations Framework Convention on Climate Change (UNFCCC) and

- coordinated by Italian National Institute of Health <a href="https://www.cmcc.it/it/politica-climatica/health-and-climate-change-everything-we-know-about-italy-2">https://www.cmcc.it/it/politica-climatica/health-and-climate-change-everything-we-know-about-italy-2</a>
- 2016: CMCC Scientific Lead activities led by VICCS (Venice Centre for Climate Studies) consulting with the aim of providing a climate projection of the pluviometric probability curve on the international airport Fiumicino area.
- 2016–2017: Task leader "Climate risk analysis" in the framework of the project ChakeOu (Strengthening
  of institutional and community preparedness and coordination capacities for disaster risk reduction in
  Paraguay (code: SM/BUD/2015/91028)) funded by ECHO-Directorate- General for European Civil
  Protection and Humanitarian Aid Operations
- 2016-2018: CMCC Scientific Lead for the consulting service concerning the specialist contribution in the context of SEA for the municipality of Prato http://www.cmcc.it/it/ Articolo/climate-health-and-urbanplanning-the-case-study-of-the-municipality -of-lawn-2
- 2014–2017: CMCC Scientific Lead in the framework of FP7-SEC-2013-1 INTACT (http://www.cmcc.it/projects/intact-on-the-impact-of-extreme-weather-oncritical-infrastructures) and leader of the Work Package "Climate and extreme weather"
- 2013: Among the authors of the SNAC (Elements for the development of the National strategy for adaptation to climate change) funded by the Ministry of Environment, Land and Sea.
- 2011: Author of the white paper "Challenges and opportunities of rural development for mitigation and adaptation to climate change" coordinated by the Ministry of Agriculture, Food and Forestry.
- 2009-2013: Project manager and scientific leader of the CMCC activities for the projects: Fp7-ENV-2008 SAFELAND (http://www.cmcc.it/research/research-projects/safeland?set\_language=en ), Fp7- ENV 2010 CLUVA (http://www.cluva.eu/)
- Coordination of the scientific activities of the REMHI division for different national and European projects (more recently HE SILVANUS, H2020 EUCP development of VHR climate projections over Europe CEF-TC-2018-5 Highlander)

## 09/2005-03/2020

## Italian Aerospace Research Center (C.I.R.A.)

- Head of the Laboratory of meteorology
- Designer, scientific leader and main responsible for the management and maintenance of the CIRA experimental facility for atmosphere observation <a href="https://www.cira.it/en/environment/Monitoraggio-ambiente-e-territorio/impact-of-extreme-weather-on-critical-infrastructure/the-cira-meteo-system-center-(msc)-an-advanced-platform-providing-multisource-aviation-critical-weather-information</a>
- Designer and manager of the GIS Platform Matisse, a GIS platform for the meteorological support to aviation activities (<a href="http://meetingorganizer.copernicus.org/EMS2014/EMS2014-385.pdf">http://meetingorganizer.copernicus.org/EMS2014/EMS2014-385.pdf</a>)

# CIRA Collaboration Agreement:

- 2017-03/2020: CIRA contact person in the context of the meteorological activities established in collaboration with COMET (Operational Center for Meteorology of the Italian Air Force)
- 2017-03/2020: CIRA contact person in the context of the activity for meteorology, climatology and air quality established with ARPAC (Regional Agency for Environmental Protection of Campania Region)

## CIRA main scientific activities:

- 2019-03/2020: CIRA scientific leader and task leader of the project "Remote detection of icing conditions" H2020 SENS4ICE project (https://cordis.europa.eu/project/id/824253/it)
- 2018-03/2020: CIRA scientific leader and project manager of the H2020 Operandum project https://cordis.europa.eu/project/id/776848/it
- 2016–2019: Involved in the framework of the PJ.02-06 (SESAR2020 Work programme) project providing atmospheric scenarios and analysis of meteorological data.
- 2016–03/2020: Involved in the framework of the COAST Project (Clean Sky 2). The activities are related to the development and demonstration of the Advanced Weather Awareness System (AWAS) capable of representing to the pilot the current and the forecasted meteorological hazard areas. The proposed system aims supporting the pilot, during the different flight phases, by providing weather

|                     | <ul> <li>information (observed and forecasted).</li> <li>2012–03/2020: C.I.R.A. focal point for the activities covered by the scientific collaboration with TERNA s.p.a. and TEDASS regarding the definition of advanced models for prediction of electrical manufacturability indices from wind power generation systems.</li> <li>2011–03/2020: Leader of the meteorological activity PRORA TECVOL II concerning development of the system for weather awareness for general aviation and ultralight aircraft</li> <li>2013–2015: Project manager and scientific collaboration for SELEX GmbH within project SESAR (www.sesarju.eu) for the activity of wp15.04.09a "Description of technologies for meteorological detection".</li> <li>2013: Member of CIRA IXV Team; specifically, Lead of the weather operational service (daily bulletin) realized for the IXV drop test performed in Sardinia 2013.</li> <li>2007-2010: Member of the USV (Unmanned Space Vehicle) decisional board structure, leader of the meteorology team and weather forecaster supporting the flight activities of the U.S.V. space program. Responsible for implementation and management of the weather mission instrumentation; development of the too for calculation of the flight trajectory; responsible for the microclimatological</li> </ul> |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|
| 2040                | characterization of the flight site in Sardinia. program.  |  |  |  |  |  |
| 2019-<br>present    | Consultant for Mondadori Education Editor,  Drafting and update for some chapter related to Atmosphere and atmospheric phenomena, Climate Chang and Energy Resources and Sustainability in the book adopted by Italian High School "Earth System wit Climate Change "by M. Crippa and M. Fiorani.  |  |  |  |  |  |
| 2019 -<br>present   | Adjunct Professor of Advanced Meteorology at University of Naples Parthenope in the master's degree of Navigation Science and Technology.  |  |  |  |  |  |
|                     | The advanced meteorology course teaches about atmospheric forecasts and the complex instruments used to make them. The course aims to provide a deeper understanding of numerical models used to forecast weather at different scales, and their use for decision-making. Topics covered include the difference between weather and climate, extreme atmospheric events, reliability and uncertainty of forecasts, physical and numerical characteristics of numerical models, climate change and its impact on weather forecasting, verification methods for atmospheric forecasts, deterministic and probabilistic forecasting.  |  |  |  |  |  |
| 2022-<br>present    | Adjunct Professor of Dynamic models for weather prediction and climate" master's degree in physics at University of Campania   |  |  |  |  |  |
| 06/2005-<br>11/2004 | Scholarship Earth Simulator Center (E.S.C.) di Yokoama (Japan) founded by Italian Aerospace Research Centre (C.I.R.A.) and CMCC Earth Simulator Center (E.S.C.) (http://www.jamstec.go.jp/esc/index.en.html), Yokohama (Japan) Analysis of the geodynamic code developed at E.S.C. Studies about: computer simulation of the magnetohydrodinamic dynamo, grid system (Yin-Yang Grid) and topics of Fortran 90 implemented on the E.S.C. computer. Analysis and simulations with the GCM (Global Circulation Model) and LAM (Limited Area Model) developed at E.S.C by validation of the codes in some case studies   |  |  |  |  |  |
| 10/2004-<br>05/2003 | EU (Hydroptiment INTERREG IIIB) contract worker at A.R.P.A. Piedmont (regional agency for the protection of the environment) Meteorology, weather forecast  Analysis and development of the limited area model COSMO-LM, the German global model GME and the ECMWF model.  |  |  |  |  |  |
| 10/2004-<br>05/2003 | Meteorologist of ARPA Piemonte at the operative centre in Turin and at the local weather centre of Sestriere   |  |  |  |  |  |
| 05/2003-<br>11/2002 | Trainee at FIAT Research Center, Orbassano (TO) (Italy)  Numerical fluid dynamics studies: to optimize the design of the vehicle components (air flow simulation in a vehicle, thermal and fluid dynamics studies on water and oil radiator for competition cars) using fluid dynamical code (CFX 5 e CFX 4)   |  |  |  |  |  |

# TRAINING ACTIVITY

2004present Academic supervisor of more than 25 master's degree thesis for the Faculty of Mathematics, Physics, Environmental Sciences, Telecommunication Engineering, Aerospace Engineering, Management of the Territory Engineering, Sustainable Development Engineering, Electronic Engineering, Science and

technology of the navigation.

## 2010present

Academic supervisor of more than 5 PhD in collaboration with University of Venice Ca' Foscari "Science and Management of Climate Change"; University of Naples "Parthenope" "Phenomena and environmental risks", University of Naples Federico IIIIi

# 2004-2022 Lectures (main):

- 2019-present: "Effects of climate change on a local scale" Department of Architecture held University of Naples Federico II
- 2022: "Analysis of local-scale climate change and associated impacts and adaptation measures at the local scale." held by Fondazione Cariplo in the In the context of the evaluation activities of the "F2C Cariplo Foundation for the Climate" initiative.
- 2022: "Adaptation in territorial governance" held by National school for Public Administration (Rome) in the context of the course "Public administration dealing with climate change adaptation"
- 2018: "Climate Change Science: global scenarios and methods for producing high-resolution climate scenarios" and "Climate change and pollution: scenarios, impacts and adaptation in cities" within the module "Climate scenarios and adaptation and mitigation policies in the framework of in the SICAB project (Sino Italian capacity building for environmental protection), https://www.cmcc.it/it/projects/sicabsino-italian-capacity-building-for-environmental-protection, funded by MIUR and leaded by Polimi.
- 2015: "Climate downscaling & analysis of extreme events" in the framework of PhD "Programme on Climate Change, Science and Management" organized by Venice Centre for Climate Studies and Cà Foscari University of Venice at the Spring School "Land use and the vulnerability of socio-ecosystems to climate change: remote sensing and modelling techniques".
- 2013: "Climatological simulations, visualization and interpretation of the output of a simulation." In the training project I-AMICA at the National Research Council (CNR) of Lamezia Terme
- 2006 "Training of highly qualified personnel for the development of innovative technologies and managerial skills in the context of environmental risk ', funded by Campania region within POR 2000/2006 and organized by the University of Naples "Federico II".
- 2004 "Data Assimilation and Analysis" for the master's in meteorology at the University of Turin

| AFFILIATION TO NATIONAL |
|-------------------------|
| AND INTERNATION         |
| INSTITUTION             |

- 2020-present: member of the technical scientific board of CLIMETECH <a href="http://www.remtechexpo.com/index.php/it/descrizione/manifestazioni-parallele">http://www.remtechexpo.com/index.php/it/descrizione/manifestazioni-parallele</a>
- 2019-present: Member of the Italian Scientific Community of the WWF https://www.wwf.it/chi\_siamo/organizzazione/comunita\_scientifica/
- **2019:** Member of the Scientific Committee of the 2nd National Congress of the AISAM Association (Italian Association of Atmospheric Science and Meteorology), held in Naples.
- 2019: Member of the scientific committee of the exhibition "Poseidonia city of water-Archaeology and Climate Change" organized at the Archaeological Park of Paestum and among the authors of the event catalogue
- 2018: Member of the expert jury for the CLIMATHON 2018 held in Lecce

TRAINING AND

- 2018-present: Member of the Board of the Italian Society of Climatology (S.I.S.C.)
- 2018: Member of the Scientific Committee of the conference MEDCLIMVAR2018 http://www.medclivar2018conf.eu/index.php/sessions
- 2017-2021: Leader of the Priority Task Aevus and Aevus2 for the development of the COSMO urban configuration
- 2016-present: Member of the MENA CORDEX program, EURO-CORDEX program and EURO-CORDEX Flagship CPM (Convection Permitting Model)
- 2008-present: Member of the European CLM Assembly developing the Regional Climate Model COSMO CLM
- 2003-present: Member of the European Cosmo Consortium (Consortium for Small Scale Modelling) for the development of the COSMO LM (Limited Area Model)

| CERTIFICATION         |  |
|-----------------------|--|
| 11/05/2012–11/06/2012 | "Regulations for the design, construction and testing of the avionic system, ENAC (Italian Civil Aviation Authority                                    |
| 13/02/2012–17/03/2012 | Data Assimilation, DWD (Germany's National Meteorological Service)   |
| 19/05/2011–20/05/2011 | "Standard formats for managing scientific data" by CINECA  |
| 22/02/2010-05/03/2010 | Science communication and journalism, CIRA internal course held by professional journalist Giorgio Di Bernardo.  |
| 20/10/2010–30/10/2010 | ArcGIS (version 10.0) software and GIS technology, O. S.r.l. software and services   |
| 24/04/2006–28/04/2006 | "Predictability, diagnostic and seasonal forecast" (MET PR), ECMWF   |
| 3/03/2006–17/03/2006  | "LES and related techniques", Computational fluid dynamics, Von Karman Institute for Fluid Dynamics (VKI)  |
| 28/09/200401/10/2004  | The Fortran 90 for intensive scientific computing, C.I.L.E.A consortium  |
| 29/08/2003-03/09/2003 | International Summer School of Atmospheric and Oceanic Sciences (ISSAOS 2004) on Data Assimilation in the NWP models, CETEMPS-University of L'Aquila   |
| 22/03/2004-01/04/2004 | "Parameterization of adiabatic processes" (MET PA)" about physical parameterization in the numerical weather prediction model, ECMWF                   |
| 03/2012–11/20021      | Master of computational fluid dynamics for industrial applications and university research, C.R.S.4 (Research Centre for advanced studies of Sardinia) |

07/01/2002-15/02/2002

Programming in C e C++ language, ISVOR Fiat

01/10/1992-13/12/2001

Master's degree in physics University of Naples "Federico II" Faculty of Physics

#### **PERSONAL SKILLS**

Mother tongue(s)
Other language(s)

Italian

| UNDERSTANDING |           |         | SPEAKING           |                   | WRITING |
|---------------|-----------|---------|--------------------|-------------------|---------|
|               | Listening | Reading | Spoken interaction | Spoken production |         |
|               | C1        | C1      | C1                 | C1                | C1      |

English

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user Common European Framework of Reference for Languages

## Organisational / managerial/ communication skills

As a leader with over 10 years of experience, I have successfully led a team of more than 20 professionals from diverse backgrounds, including engineers, architects, economists, physicists, and mathematicians. My leadership style prioritizes teamwork and collaboration, inspiring my team to work effectively and efficiently under pressure, even when managing multiple projects simultaneously.

In addition to fostering a positive team dynamic, I also prioritize open communication with my colleagues to ensure their questions and concerns are addressed. My strong empathetic intelligence allows me to establish positive relationships with both colleagues and clients, creating a productive and respectful work environment.

As a results-oriented manager, I consistently set and meet objectives and milestones, taking pride in my ability to motivate and recruit team members. With extensive experience in project management, I have led teams to success in various complex situations.

Comfortable with public speaking and leading project meetings, I am also willing to travel extensively worldwide to ensure project success.

## **PUBLICATION**

## Peer reviewed Papers

- 1) Adinolfi, M., Raffa, M., Reder, A. and Mercogliano P. Investigation on potential and limitations of ERA5 Reanalysis downscaled on Italy by a convection-permitting model. *Clim Dyn* (2023). https://doi.org/10.1007/s00382-023-06803-w
- 2) Ellena, M., Melis, G., Zengarini, N., Di Gangi, E., Ricciardi, G., Mercogliano, P., & Costa, G. (2023). Micro-scale UHI risk assessment on the heat-health nexus within cities by looking at socio-economic factors and built environment characteristics: The Turin case study (Italy). Urban Climate, 49, 101514. https://doi.org/10.1016/j.uclim.2023.101514
- 3) De Vivo, C.; Barbato, G.; Ellena, M.; Capozzi, V.; Budillon, G.; Mercogliano, (2023) P. Climate-Risk Assessment Framework for Airports under Extreme Precipitation Events: Application to Selected Italian Case Studies. Sustainability 2023, 15, 7300. https://doi.org/10.3390/su15097300
- 4) Raffa, M., Adinolfi, M., Reder A., P, Mercogliano. et al. Very High-Resolution Projections over Italy under different CMIP5 IPCC scenarios. Sci Data 10, 238 (2023). <a href="https://doi.org/10.1038/s41597-023-02144-9">https://doi.org/10.1038/s41597-023-02144-9</a>
- 5) Sangelantoni, L., Sobolowski, S., Lorenz, T. et al. Investigating the representation of heatwaves from an ensemble of km-scale regional climate simulations within CORDEX-FPS convection. Clim Dyn (2023). https://doi.org/10.1007/s00382-023-06769-9
- 6) Jewson, S., Messori, G., Barbato, G., Mercogliano, P., Mysiak, J., & Sassi, M. (2023). Developing representative impact scenarios from climate projection ensembles, with application to UKCP18 and

- EURO-CORDEX precipitation. Journal of Advances in Modeling Earth Systems, 15, e2022MS003038. https://doi.org/10.1029/2022MS003038
- Ricciardi G., Ellena M., Barbato G., Giugliano G., Schiano P., Leporati S., Traina C., Mercogliano P. (2022). Climate change adaptation cycle for pilot projects development in small municipalities: The northwestern Italian regions case study. City and Environment Interactions, DOI: https://doi.org/10.1016/j.cacint.2022.100097
- 8) Diez-Sierra, J., and Coauthors, 2022: The Worldwide C3S CORDEX Grand Ensemble: A Major Contribution to Assess Regional Climate Change in the IPCC AR6 Atlas. Bull. Amer. Meteor. Soc., 103, E2804–E2826, <a href="https://doi.org/10.1175/BAMS-D-22-0111.1">https://doi.org/10.1175/BAMS-D-22-0111.1</a>.
- 9) Essenfelder, A.H., Bagli, S., Mysiak, J., Pal, J.S., Mercogliano, P., Reder, A., Rianna, G., Mazzoli, P., Broccoli, D., Luzzi, V. (2022). Probabilistic Assessment of Pluvial Flood Risk across 20 European Cities: A Demonstrator of the Copernicus Disaster Risk Reduction Service for Pluvial Flood Risk in Urban Areas. Water Economics and Policy (Accepted Paper). https://doi.org/10.1142/S2382624X22400070
- Moirani G.; Ellena, M.; Mercogliano, P.; Ricciardi, L.; Maule, M. Spatio-Temporal Pattern and Meteo-Climatic Determinants of Visceral Leishmaniasis in Italy. Trop. Med. Infect. Dis. 2022, 7, 337. <a href="https://doi.org/10.3390/tropicalmed7110337">https://doi.org/10.3390/tropicalmed7110337</a>
- Pede, E.C., Barbato, G., Buffa, A., Ellena, M., Mercogliano, P., Ricciardi, G., Staricco, L. (2022). Mountain tourism facing climate change. Assessing risks and opportunities in the Italian Alps. Tema. Journal of Land Use, Mobility and Environment, 15 (1), 25-47. <a href="http://dx.doi.org/10.6092/1970-9870/8841">http://dx.doi.org/10.6092/1970-9870/8841</a>
- 12) Benetazzo, A.; Davison, S.; Barbariol, F.; Mercogliano, P.; Favaretto, C.; Sclavo, M. Correction of ERA5 Wind for Regional Climate Projections of Sea Waves. *Water* **2022**, *14*, 1590. https://doi.org/10.3390/w14101590
- De Lucia, C.; Bucchignani, E.; Mastellone, A.; Adinolfi, M.; Montesarchio, M.; Cinquegrana, D.; Mercogliano, P.; Schiano, P. A Sensitivity Study on High Resolution NWP ICON—LAM Model over Italy. Atmosphere 2022, 13, 540. https://doi.org/10.3390/atmos13040540
- 14) Reder, A.; Raffa, M.; Padulano, R.; Rianna, G.; Mercogliano, P. (2022). Characterizing extreme values of precipitation at very high resolution: An experiment over twenty European cities. Weather and Climate Extremes, doi: 10.1016/j.wace.2022.100407
- 15) Padulano R., Costabile P., Costanzo C., Rianna G., Del Giudice G., Mercogliano P... "Using the present to estimate the future: a simplified approach for the quantification of climate change effects on urban flooding by scenario analysis." Hydrological Processes (2021). https://doi.org/10.1002/hyp.14436
- 16) De Vivo, C., Ellena, M., Capozzi, V. *et al.* Risk assessment framework for Mediterranean airports: a focus on extreme temperatures and precipitations and sea level rise. *Nat Hazards* (2021). https://doi.org/10.1007/s11069-021-05066-0
- 17) Raffa, M.; Reder, A.; Marras, G.F.; Mancini, M.; Scipione, G.; Santini, M.; Mercogliano, P. VHR-REA\_IT Dataset: Very High Resolution Dynamical Downscaling of ERA5 Reanalysis over Italy by COSMO-CLM. *Data* 2021, *6*, 88. <a href="https://doi.org/10.3390/data6080088">https://doi.org/10.3390/data6080088</a>
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