



Paola Mazzoglio

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WORK EXPERIENCE

01/06/2022 – 31/08/2022

External consultant (hydrologist)

CINID (Consorzio Interuniversitario per l'Idrologia), Italy. Supervisor: Prof. Pierluigi Claps.

Topic: Revision of the Civil Protection Plan of the town of Noli based on investigations aimed at managing the risk for pedestrians and vehicles.

01/04/2022 – now

Member of the Young Hydrologic Society (YHS) board (blog committee)

<https://younghs.com>

Topic: blog management, in charge of the “Hallway Conversation” series

01/03/2022 - 22/05/2022

Visiting Ph.D. Student

National Technical University of Athens, Athens, Greece. Supervisor: Prof. Demetris Koutsoyiannis.

Research topic: Development of an ombrian model for rainfall frequency analysis in Sardinia region (Italy) and in Thessaly region (Greece).

01/11/2019 – now

Ph.D. Student in Civil and Environmental Engineering and Teaching Assistant

Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino, Torino (Italy). Supervisors: Prof. Pierluigi Claps, Prof. Ilaria Butera.

Research topic: “Statistical analysis of spatial hydrologic variables: a problem-solving approach”.

Other projects:

- **11/2021 – 09/2022:** Hydrological/hydraulic study and review of the civil protection plan of the town of Noli (SV).
- **05/2021 – 08/2021:** Support for the hydrological analysis necessary for the design of infrastructures for the mitigation of the hydraulic risk in Bitti (Sardegna).
- **01/2021 – now:** Project “Caratterizzazione del regime di frequenza degli estremi idrologici nel Distretto Po, anche considerando scenari di cambiamento climatico”, collaboration between Autorità di Bacino Distrettuale del Fiume Po and the Universities of the Po river basin. Main task: data collection, regional rainfall frequency analysis.
- **11/2019 – 11/2020:** Support in the development of a WebGIS for RESBA (REsistenza degli SBArramenti) Interreg project (<https://www.resba.it/>).

23/10/2019 - 31/12/2021

External consultant (hydrologist)

ITHACA (Information Technology for Humanitarian Assistance, Cooperation and Action). Via Pier Carlo Boggio 61, 10138 Torino (Italy) - www.ithacaweb.org

Topic: Collaboration in the Weather and Climate Pilot of LEXIS (Large-scale EXecution for Industry & Society) H2020 project (<https://lexis-project.eu/web/>) as hydrologist. **Main tasks:** inclusion of WRF data into ITHACA Extreme Rainfall Detection System (erds.ithacaweb.org); evaluation of

rainfall thresholds calibrated on WRF data; dissemination activities at conferences and through publications; report redaction.

19/06/2017 - 22/10/2019

GIS, remote sensing and hydrological modelling specialist

ITHACA (Information Technology for Humanitarian Assistance, Cooperation and Action). Via Pier Carlo Boggio 61, 10138 Torino (Italy) - www.ithacaweb.org

Projects:

- **02/2019 - 10/2019:** Collaboration in the Weather and Climate Pilot of LEXIS (Large-scale EXecution for Industry & Society) H2020 project (<https://lexis-project.eu/web/>) as hydrologist. Main tasks: inclusion of WRF data into ITHACA Extreme Rainfall Detection System (erds.ithacaweb.org); evaluation of rainfall thresholds calibrated on WRF data; dissemination activities at conferences and through publications.
- **11/2018 - 12/2018:** Collaboration in the project "Global Land High Resolution Hot Spot Monitoring" within the "Global Land Component" of the Copernicus Land Service (C-GL-HRM) – Lot 1 (<https://land.copernicus.eu>). Main task: land cover and land cover change analysis and validation.
- **09/2018 - 10/2018:** Collaboration for a consultancy to the European Environment Agency in implementing the In-Situ component of the Copernicus programme (<https://insitu.copernicus.eu>), with a particular focus on the mapping component of the Copernicus Emergency Management Service.
- **08/2018 - 09/2018:** Analysis of available rainfall measurement for the upgrade of a drought monitoring early warning system (drought.ithacaweb.org).
- **04/2018 - 10/2019:** Management and elaboration of geospatial information in the framework of "Copernicus Emergency Management Service" (<https://emergency.copernicus.eu/mapping/ems/rapid-mapping-portfolio>). On-demand and fast provision (within hours or days) of geospatial information derived from satellite remote sensing and completed by available in situ or open data sources in support of the emergency management activities immediately following an emergency event.
- **06/2017 - 10/2019:** Development of an early warning system based on both near real-time and forecast rainfall measurement (ERDS, Extreme Rainfall Detection System - erds.ithacaweb.org).
- **06/2017 - 12/2018:** Participation in the TRIBUTE (TRigger BUffer zones for inundation Events) project, Prevention Project for EU Civil Protection, DG-ECHO 2017-2018. Main tasks: improvement of a satellite-based extreme rainfall detection system; analysis and elaboration of precipitation data; dissemination activities at conferences and through publications.

17/10/2016 - 16/06/2017

Junior research fellow

Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino. Tutor: Prof. Francesco Laio.

Research topic: Analysis of the interaction between artificial light sources and rain fields for the development of an estimation precipitation method from photographic images.

05/09/2016 - 18/06/2018

Data scientist

WaterView SRL, Torino (Italy) - waterview.it

Main tasks: performing experiments with different cameras in every light and weather condition, in order to provide raw material to continuously improve WeatherCAM algorithms; develop and test of WeatherCAM algorithms.

09/2005 - 09/2016

Collaborator

Studio tecnico Geom. Ferruccio Mazzoglio, 15040 Lu (Italy).

Main tasks: Restructuring of small civil constructions; land registry paperwork.

TEACHING EXPERIENCE

A.Y. 2022/2023	Teaching assistant of the "Protezione idraulica del territorio" (Flood risk management) MSc course in "Environmental and Land Engineering".
	Teaching assistant of the "Meccanica dei fluidi" (Fluid mechanics) BSc course in "Mechanical Engineering" of Politecnico di Torino.
A.Y. 2021/2022	Teaching assistant of the "Meccanica dei fluidi" (Fluid mechanics) BSc course in "Mechanical Engineering" of Politecnico di Torino.
A.Y. 2020/2021	Tutor of the "Protezione civile" (Civil Protection) MSc course in "Environmental and Land Engineering" and in "Territorial, Urban, Environmental and Landscape Planning" of Politecnico di Torino.
	Tutor of the "Idrologia" (Hydrology) MSc course in "Civil Engineering" of Politecnico di Torino.
A.Y. 2019/2020	Tutor of the "Protezione Civile" (Civil Protection) MSc course in "Environmental and Land Engineering" and in "Territorial, Urban, Environmental and Landscape Planning" of Politecnico di Torino.

EDUCATION

01/11/2019 – now	Ph.D. Student in Civil and Environmental Engineering Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino (Italy).
13/02/2017	Qualification exam for the profession of engineer (section A) Politecnico di Torino, Torino (Italy).
20/03/2014 - 27/07/2016	Master's Degree in Civil Engineering – Water Engineering specialization Politecnico di Torino, Torino (Italy).
10/2010 - 14/03/2014	Bachelor's Degree in Civil Engineering Politecnico di Torino, Torino (Italy).
09/2005 - 06/2010	High school diploma Istituto Tecnico per Geometri "Pier Luigi Nervi", Alessandria (Italy).

MAIN COURSES AND WORKSHOPS

PhD Courses

- *Bayesian inference: examples in civil and environmental engineering.* Prof. Alberto Viglione, Politecnico di Torino (10 hours, 06/2022).
- *Statistical methods with application to climate variability and change assessments.* Prof. Ramesh Teegavarapu, Politecnico di Torino (20 hours, 06/2022).
- *Thinking out of the box.* Politecnico di Torino (1 hour, 07/05/2022).
- *EGU Effective Popular Writing and Media Skills for Early Career Researchers.* SciConnect & EGU (16 hours, 28/02-16/03/2022).
- *Personal branding.* Politecnico di Torino (1 hour, 23/12/2021).
- *Geostatistica per variabili ambientali.* Prof. Butera I., Politecnico di Torino (10 hours, 09-10/2021).
- *Navigating the hiring process: CV, tests, interview.* Politecnico di Torino (2 hours, 25/04/2021).
- *Advanced geospatial data management.* Prof. Ajmar A. and Prof. Giulio Tonolo F., Politecnico di Torino (15 hours, 05-26/03/2021).
- *OGC API with QGIS integration.* EO Browser (1 hour, 29/10/2020).
- *An e-infrastructure for Earth System Modelling.* CMCC webinar (1 hour, 28/10/2020).
- *Publishing research: from thesis to peer-reviewed publications.* Prof. Teegavarapu R., Politecnico di Torino (2 hours, 25/09/2020).
- *Research data management and open access publishing.* Politecnico di Torino (15 hours, 05-06/2020).
- *Scientific writing skills.* Iversity (36 hours, 05/2020).
- *Effective visual communication of science.* Politecnico di Torino (4 hours, 22/05/2020).
- *Data manipulation and visualisation - Interactive analysis of ECMWF data.* ECMWF webinar (1 hour, 14/05/2020).

- *Hydrological modelling using bucket-type models (HBV / GR4J)*. Webinar organized by Prof. Seibert J., University of Zurich (8 hours, 03/05/2020).
- *Programmazione scientifica avanzata in Matlab*. Prof. Bardella P. and Prof. Scialò S., Politecnico di Torino (28 hours, 02-05/2020).
- *GEOframe Winter School*. Università di Trento (64 hours, 8-17/01/2020).
- *Research integrity*. Politecnico di Torino (5 hours, 23/12/2019).
- *Urban flood modeling in a changing climate*. CMCC webinar (1 hour, 19/12/2019).
- *Time management*. Politecnico di Torino (2 hours, 17/12/2019).
- *Corso GNU/Linux base*. Politecnico di Torino (12 hours, 22/10/2019 - 10/12/2019).

Post Master's Degree Courses

- *River basin delineation based on NASA Digital Elevation Data*. NASA ARSET webinar (26/11/2019).
- *Introduction to Geostatistics*. Prof. Butera I., Politecnico di Torino (7 hours, 26/09/2019).
- *Estendere QGIS con Python*. GFOSS, Torino (08/06/2019).
- *Data Visualization*. Dataninja School (04/2019 - 05/2019).
- *Intermediate webinar: remote sensing for disasters scenarios*. NASA ARSET webinar (04-23-30/04/2019).
- *Corso di formazione alla salute e sicurezza per i lavoratori*. CSAO (8 hours, 02/2019).
- *Deep Learning Onramp*. MathWorks Training (21/02/2019).
- *MATLAB Onramp*. MathWorks Training (27/01/2019).
- *Python*. Consulman, Torino (40 hours, 11/2018-12/2018).
- *Cartography*. MOOC ESRI (6 weeks, 10/2018 - 11/2018).
- *Formazione project management: come gestire al meglio i progetti*. Centro estero per l'internazionalizzazione, Torino (27 hours, 09/2018 - 11/2018).
- *The 5-minute speech. Developing a clear, concise & convincing communication style*. Centro estero per l'internazionalizzazione, Torino (16 hours, 29-30/10/2018).
- *Monitoring urban floods using Remote Sensing*. NASA ARSET webinar (25/07/2018 and 01/08/2018).
- *Introduzione a QGIS - Introduction to QGIS*. MOOC Università degli Studi di Modena e Reggio Emilia (8 hours, 07/2018).
- *Advanced webinar: techniques for wildfire detection and monitoring*. NASA ARSET webinar, 12/07/2018 and 19/07/2018.
- *Monitoring tropical storms for emergency preparedness*. NASA ARSET webinar (03-10/05/2018).
- *Using NASA Earth observing data for monitoring and response to vector-borne and water-borne diseases*. NASA webinar (08/05/2018).
- *Intro to Python for Data Science Course*. Datacamp (02/2018).
- *Tecniche di promozione aziendale in lingua inglese: SOS presentation (Avoing disaster and being memorable)*. Centro estero per l'internazionalizzazione, Torino (36 hours, 09/2017 - 10/2017).
- *Introduction to Synthetic Aperture Radar*. NASA ARSET webinar (28/06/2017 and 06/07/2017).
- *Status of Global Precipitation Measurement (GPM) Mission data products and applications*. NASA webinar (03/05/2017).

Master's Degree Courses

- First year: "Construction of roads, railways and airports", "Foundations", "Geomatics", "Hydraulics 2", "Hydrology", "Structural Mechanics 2", "Technology of construction materials", "Theory and design of reinforced and prestressed concrete structures".
- Second year: "Water Supply and Sewerage", "Hydraulic Constructions", "Geotechnical Earthquake", "River Hydraulics", "Earthquake Engineering", "Slope stability".

Bachelor's Degree Course

- First year: "Mathematical analysis 1", "Chemistry", "Physics 1", "Geometry", "Computer science", "English Language 1st level", "The graphic language for civil engineering, construction and environmental".
- Second year: "Mathematical analysis 2", "Drawing", "Physics 2", "Thermodynamics and heat transfer for engineers", "Geology/Safety and civil protection", "Analytical mechanics", "Numerical and statistical methods for engineering", "Science and technology of materials", "Topography".
- Third year: "Geotechnics", "Hydraulics", "Road infrastructures", "Applied mechanics", "Structural mechanics", "Structural engineering".

High School Extra-Curricular Courses

- AUTOCAD. During the third, fourth and fifth year of high school I attended three extra-curricular courses (respectively of 33, 25 and 30 hours each) to improve the skills acquired during the lessons.

SKILLS

Languages: Italian (native language), English.

Digital skills

- Writing suites: LibreOffice, Microsoft Office, Google G-Suite, LaTeX.
- Programming languages: Matlab, Python and R.
- Operating systems: excellent knowledge of Windows; basic knowledge of Linux.
- GIS software: ESRI ArcMap, ArcGIS Pro, QGIS.
- Remote Sensing Image Processing: ENVI, SNAP.
- Hydrological – hydraulic software: HEC-RAS.
- Digital design: Photoshop, GIMP and Autocad.

Job-related skills:

- Strong attention to details and quick analytical skills.
- Flexible to work under supervision or in autonomy. Adaptive to rapidly changing circumstances and working needs. Able to work in possibly stressful situations.

Organisational skills

- Project manager of ITHACA Extreme Rainfall Detection System (2018-2019).
- Excellent team leadership skills in projects on a 24/7 shift gained through the management of the ITHACA production site team involved in Copernicus Emergency Management Service (June 2018 - October 2019).

Other skills

- Photography.

FELLOWSHIP AND AWARDS

Fellowship

- Ph.D. fellowship, Politecnico di Torino (Italy), 2019/2022.
- Post-graduate research grant, Politecnico di Torino (Italy), 2016/2017.

Awards

- Awarded in 2009 by the Piedmont Region for being one of the best 500 students in the last two years of high school.

PUBLICATIONS

Articles

1. **Mazzoglio P.**, Butera I., Alvioli M., Claps, P. The role of morphology in the spatial distribution of short-duration rainfall extremes in Italy. *Hydrology and Earth System Sciences*, **2022**, 26, 1659–1672. [\[Article\]](#)
2. **Mazzoglio P.**, Parodi A., Parodi A. Detecting extreme rainfall events using the WRF-ERDS workflow: the 15 July 2020 Palermo case study. *Water*, **2022**, 14(1), 86. [\[Article\]](#) – [\[Selected as Cover Story of Water 14\(1\)\]](#)
3. **Mazzoglio P.**, Parodi A. Identificazione di eventi estremi di pioggia da dati previsionali. *Nova Ex Caelo*, **2021**. [\[Article\]](#) – [\[Journal\]](#)
4. **Mazzoglio P.**, Macchia S., Gallo E., Winter J., Claps P. Disaster tales as communication tool for increasing risk resilience. *International Journal of Disaster Risk Science*, **2021**, 12, 341-354. [\[Article\]](#)
5. **Mazzoglio P.**, Butera I., Claps P. I²-RED: a massive update and quality control of the Italian annual extreme rainfall dataset. *Water*, **2020**, 12, 3308. [\[Article\]](#)
6. **Mazzoglio P.**, Laio F., Balbo S., Boccardo P. ERDS: an Extreme Rainfall Detection System based on both near real-time and forecast rainfall measurements. *Annual of the University of Architecture, Civil Engineering and Geodesy (Sofia)*, **2019**, 52, Issue S1, 1423-1433. [\[Article\]](#)
7. **Mazzoglio P.**, Laio F., Balbo S., Boccardo P., Disabato F. Improving an Extreme Rainfall Detection System with GPM IMERG data. *Remote Sensing*, **2019**, 11, 677. [\[Article\]](#)

Book Chapters

1. Claps P., Ganora D., **Mazzoglio P.** Rainfall regionalization techniques. In: Morbidelli R. (Ed.), Rainfall. Elsevier, 327-350, **2022**. [\[Chapter\]](#)
2. **Mazzoglio P.**, Danovaro E., Ganne L., Parodi A., Hachinger S., Galizia A., Parodi A., Martinovič J. Exploitation of multiple model layers within LEXIS Weather and Climate Pilot: an HPC-based approach. In: Terzo O., Martinovič J. (Eds.), HPC, big data, and AI convergence towards exascale. CRC Press, 147-164, **2022**. [\[Chapter\]](#)
3. **Mazzoglio P.** Insights on a global Extreme Rainfall Detection System. In: Michaelides S. (Ed.), Precipitation Science. Elsevier, 135-155, **2022**. [\[Chapter\]](#)
4. **Mazzoglio P.**, Ajmar A., Schumann G.J.P., Balbo S., Boccardo P., Perez F., Borgogno-Mondino E. Satellite-based approaches in the detection and monitoring of selected hydrometeorological disasters. In: Nhamo G., Chapungu L. (Eds.), The Increasing Risk of Floods and Tornadoes in Southern Africa. Sustainable Development Goals Series. Springer, 19-37, **2021**. [\[Chapter\]](#)
5. **Mazzoglio P.**, Domeneghetti A., Ceola S. Flood detection and monitoring with EO data tools and systems. In: Schumann G.J.P. (Ed.), Earth Observation for Flood Applications. Elsevier, 195-215, **2021**. [\[Chapter\]](#)

Conference Proceedings

1. **Mazzoglio P.**, Volpini G., Deidda R., Claps P. Stima multi-modello della severità di un evento alluvionale: il caso di Bitti, novembre 2020. In: Arena F., Fiorentino M., Malara G. Atti del XXXVIII Convegno Nazionale di Idraulica e Costruzioni Idrauliche, Reggio Calabria (Italy), 4-7 September **2022**. [\[Proceeding\]](#)
2. Monforte I., Evangelista G., Ganora D., **Mazzoglio P.**, Claps P. Nuovi open-data per nuove stime idrologiche alla scala di distretto. Il caso del Po. In: Arena F., Fiorentino M., Malara G. Atti del XXXVIII Convegno Nazionale di Idraulica e Costruzioni Idrauliche, Reggio Calabria (Italy), 4-7 September **2022**. [\[Proceeding\]](#)
3. Evangelista G., **Mazzoglio P.**, Pianigiani F., Claps P. Towards the assessment of the flood attenuation potential of Italian dams: first steps and sensitivity to basic model features. Proceedings of the 39th IAHR World Congress, Granada (Spain), 19-24 June **2022**. [\[Proceeding\]](#)
4. **Mazzoglio P.**, Ajmar A., Parodi A., Bovio L., Parodi A., Pasquali P., Martinovic J. The WRF-ERDS workflow in the November 2020 Calabria flood event. In: Borgogno-Mondino E., Zamperlin P. (Eds.). Geomatics and Geospatial Technologies. ASITA 2021. Communications in Computer and Information Science, Springer, **2022**, vol 1507. [\[Proceeding\]](#) – [\[Conference recording in Italian\]](#)
5. **Mazzoglio P.** ERDS: un sistema per l'identificazione di eventi estremi da dati satellitari e previsionali. In: Arena F., Lanzoni S., Malara G. (eds). Atti del 37° Convegno Nazionale di Idraulica e Costruzioni Idrauliche, 14-16 June **2021**. [\[Proceeding\]](#)
6. Parodi A., Danovaro E., Hawkes J., Quintino T., Lagasio M., Delogu F., D'Andrea M., Parodi A., Sardo B.G., Ajmar A., **Mazzoglio P.**, Brocheton F., Ganne L., García-Hernández R.J., Hachinger S., Hayek M., Terzo O., Krenek J., Martinovic J. LEXIS Weather and Climate large-scale pilot. In: Barolli L., Poniszewska-Maranda A., Enokido T. (Eds). Complex, Intelligent and Software Intensive Systems. CISIS 2020. Advances in Intelligent Systems and Computing, Springer, **2021**, vol 1194. [\[Proceeding\]](#)
7. **Mazzoglio P.**, Laio F., Sandu C., Boccardo P. Assessment of an Extreme Rainfall Detection System for flood prediction over Queensland (Australia). Proceedings, **2019**, 18(1), 1. 3rd International Electronic Conference on Remote Sensing (ECRS-3). [\[Proceeding\]](#) - [\[Presentation\]](#)

Conference Abstracts

1. **Mazzoglio P.**, Claps P., Iliopoulos T., Dimitriadis P., Malamos N., Butera I., Koutsoyiannis D. Estimation of the design rainfall in ungauged sites using novel regionalization approaches: an application over Thessaly region, Greece. STAHY2022 - 12th International Workshop on Statistical Hydrology, Chia (Italy), 17-20 September **2022**. [\[Abstract\]](#) - [\[Poster\]](#)
2. **Mazzoglio P.**, Butera I., Claps P. Geostatistical analysis of extreme precipitation records over North-West Italy. geoENV2022, Parma (Italy), 22-24 June **2022**.
3. **Mazzoglio P.**, Butera I., Claps P. Increasing rainfall data density in Northern Italy through daily extremes and the Hershfield factor. IAHS-AISH Scientific Assembly 2022, Montpellier (France), 29 May–3 June **2022**, IAHS2022-335. [\[Abstract\]](#)
4. **Mazzoglio P.**, Butera I., Alvioli M., Claps P. Influence of morphology on the spatial variability of rainstorms over Italy. EGU General Assembly 2022, Vienna (Austria), 23-27 May **2022**, EGU22- 6342. [\[Abstract\]](#) – Selected as Highlight
5. Claps P., Brunetto M., Evangelista E., **Mazzoglio P.**, Monforte I. FaBI: A new collection of flood data and attributes of basins in Italy. EGU General Assembly 2022, Vienna (Austria), 23-27 May **2022**, EGU22-5563. [\[Abstract\]](#)
6. **Mazzoglio P.**, Butera I., Alvioli M., Claps P. Il ruolo della morfologia sulla distribuzione spaziale degli estremi di pioggia sub-giornalieri italiani. 4° Congresso Nazionale AISAM, Milano, 15-18 February **2022**. [\[Abstract\]](#)
7. **Mazzoglio P.**, Butera I., Claps P. Orographic influence on the spatial variability of rainfall extremes in Italy. AGU Fall Meeting 2021, New Orleans & Online, 13-17 December **2021**, H45ZA-10. [\[Abstract\]](#) - [\[Poster\]](#)
8. **Mazzoglio P.**, Pasquali P., Parodi A., Parodi A. Improving weather forecasts by means of HPC solutions: the LEXIS approach in the 2020 Bitti flood event. EMS Annual Meeting 2021, online, 6–10 September **2021**, EMS2021-125. [\[Abstract\]](#)

9. **Mazzoglio P.**, Butera I., Claps P. How landscape and climate affect the spatial variability of the Italian rainfall extremes? Some initial clues based on I²-RED. EGU General Assembly 2021, online, 19–30 April **2021**, EGU21-7159. [\[Abstract\]](#) – [\[Poster\]](#)
10. **Mazzoglio P.**, Parodi A., Parodi A., Bovio L., Martinovic J. Heavy rainfall identification within the framework of the LEXIS Project: the Italian case study. 101st American Meteorological Society Annual Meeting, **2021**. [\[Abstract\]](#) - [\[Poster\]](#)
11. **Mazzoglio P.**, Balbo S., Laio F., Boccardo P., Pasquali P. ERDS: un sistema open source per il monitoraggio di eventi di pioggia intensa. FOSS4G Italia **2020**. [\[Abstract\]](#)
12. **Mazzoglio P.**, Laio F., Balbo S., Boccardo P. ERDS: an Extreme Rainfall Detection System based on both near real-time and forecast rainfall measurements. Eighth Bulgarian-Austrian Seminar "Hydrological hazards and related problems", 30-31 May **2019**, Sofia. [\[Abstract\]](#) (page 12) - [\[Presentation\]](#)
13. **Mazzoglio P.**, Boccardo P., Laio F., Balbo S., Disabato F. ERDS: a satellite-based approach in the extreme rainfall detection field. AIT 2018 - IX Conference of the Italian Society of Remote Sensing, 4-6 July **2018**, Firenze (Italy). [\[Abstract\]](#) (page 137)
14. **Mazzoglio P.**, Laio F., Disabato F., Angelucci I. GPM precipitation data as input for a real time extreme rainfall detection system. EGU General Assembly **2018**. [\[Abstract\]](#)
15. Angelucci I., Disabato F., Perez F., Balbo S., **Mazzoglio P.**, Keramitsoglou I., Kiranoudis C.T. TRIBUTE 'TRigger BUffers for inundaTion Events': the importance of flood hazard and vulnerability assessment. EGU General Assembly **2018**. [\[Abstract\]](#)

Project reports - Technical reports

1. CIMA et al. Impact on productivity and business process improvement for Weather & Climate. LEXIS H2020 Project Deliverable D9.9. **2022**. [\[Report\]](#)
2. **Mazzoglio P.**, Bovio L., Parodi A., Lagasio M., Milelli M., Mazzarella V., Brocheton F. Final report (KPI included) on demonstration and validation of the weather & climate test-bed applied to selected cases. LEXIS H2020 Project Deliverable D7.9. **2022**. [\[Report\]](#)
3. Brocheton F., Danovaro E., **Mazzoglio P.**, Pasquali P., Parodi A., Parodi A., D'Andrea M., Ferretti M., Ferretti F., Ganne L., Scionti A., Hayek M., Golasowski M. Final deployment of test-bed infrastructure components with full interoperable model layers. LEXIS H2020 Project Deliverable D7.8. **2021**. [\[Report\]](#)
4. Parodi A., Ganne L., Parodi A., **Mazzoglio P.**, Brocheton F. Deployment of test-bed infrastructure components and adoption of Weather and Climate Data Interchange for model layer interoperability. LEXIS H2020 Project Deliverable D7.6. April **2020**. [\[Report\]](#)
5. Brocheton F., Manubens N., Hawkes J., **Mazzoglio P.**, Ajmar A., Parodi A., Vaccaro N., Rocco F., Peveri R. Deployment of the First Test-bed Infrastructure Components in HPC/Cloud. LEXIS H2020 Project Deliverable D7.4. October **2019**. [\[Report\]](#)
6. Balbo S., **Mazzoglio P.** Report on satellite-derived parameters related to the estimation of extreme rainfall detection. TRIBUTE Deliverable DC2. April **2018**.

Thesis

1. **Mazzoglio P.** Laboratory experiment supporting an estimating precipitation method from photographic images. Master's Degree thesis at Politecnico di Torino, **2016**. Supervisors: Prof. Francesco Laio, Eng. Paolo Cavagnero.

OTHER PRESENTATIONS AT CONFERENCES AND SEMINARS

Presentations

1. Claps P., **Mazzoglio P.** Attributing rarity to a flood disaster: an Unsolved Problems in Hydrology. Invited talk at the National Technical University of Athens, Greece, 5 April **2022**.
2. **Mazzoglio P.** Statistical analysis of rainfall extremes over Italy: a problem-solving approach. Invited talk at the National Technical University of Athens, Greece, 5 April **2022**.
3. Claps P., **Mazzoglio P.**, Deidda R., Volpini G., Perucca E. Updating the UPH list with recent disasters: the case of Bitti (Sardinia, 2020). In: Mini-workshop on novel hydrological concepts for the engineering practice. 29 September **2021**, Bologna, Italy.
4. **Mazzoglio P.** Influence of geomorphological parameters on the spatial variability of rainfall extremes. In: "Talks in Eco-Hydro Research" organized by the Department of Environment, Land and Infrastructure Engineering of Politecnico di Torino, 4 June **2021**.
5. **Mazzoglio P.** Estremi pluviometrici: analisi di frequenza a scala regionale. In: webinar organized by Autorità di Bacino del Fiume Po within the "Aggiornamento degli estremi idrologici nel bacino distrettuale del fiume Po" series, 29 January **2021**.
6. Angelucci I., **Mazzoglio P.** An extreme rainfall detection system based on near real-time measurements. In: Seminari Internacionals sobre planificació i gestió del risc d'inundació en ambients mediterranis, 6 March **2019**, Palma de Mallorca (Spain).

7. **Mazzoglio P.** Extreme rainfall detection system based on both near real-time and forecast rainfall measurements. In: Flood forecasting meets machine learning Workshop, 16-17 January **2019**, Google campus in Tel Aviv. [\[Presentation\]](#)
8. **Mazzoglio P.** The ITHACA contribution to the TRIBUTE project. In: TRIBUTE Workshop, 26 September **2018**, Torino (Italy).
9. **Mazzoglio P.**, Pensa S. TRIBUTE in the flood events in Piedmont area. In: TRIBUTE Workshop, 14 June **2018**, Palma de Mallorca (Spain).

Citations

The new version of ERDS (which I developed during my work at ITHACA) was cited or presented during some webinars/workshops organized by NASA:

- GPM application (17/05/2019). [\[Presentation\]](#)
- Pre-conference event of the ISPRS Symposium, 18-19/11/2018. [\[Training\]](#) – [\[Presentation – pages 7/12\]](#)
- Monitoring Urban Floods Using Remote Sensing, 01/08/2018. [\[Training\]](#) - [\[Presentation - pages 36/38\]](#).
- Monitoring Tropical Storms for Emergency Preparedness, 10/05/2018. [\[Training\]](#) – [\[Presentation – pages 25/27\]](#)

OUTREACH

Presentation

- Invited speaker at the "Agri-Tech" discussion table. Open Days dell'Innovazione. 6-7 March **2019**, Torino (Italy). [\[News\]](#)

Articles

- PoliFlash, 5 October **2022**. [\[Article\]](#)
- Giornale della Protezione Civile, 27 September **2022**. [\[Article\]](#)

CONFERENCE ORGANIZATION

- Conference “Le acque sotterranee: una risorsa invisibile” organized by Associazione Idrotecnica (Sezione Liguria, Piemonte e Valle d’Aosta) for the World Water Day 2022 In Turin, 22 March **2022**. [\[Program\]](#)

REVIEWER

- Meteorology and Atmospheric Physics (2022)
- Hydrology and Earth System Sciences (2021)
- Remote Sensing of Environment (2020)
- Remote Sensing (2019-2020)
- Atmosphere (2019-2020)
- Applied Sciences (2019)
- ISPRS International Journal of GeoInformation (2019)
- Journal of Hydroinformatics (2019)

NETWORKS AND MEMBERSHIPS

- AISAM member – year 2021, 2022.
- AIT member - year 2018.
- AMS member – year 2021.
- EGU member - year 2018, 2021, 2022.
- GII member – year 2020, 2021, 2022.
- Young Hydrologic Society – years 2022.
- WATER YOUTH NETWORK - year 2019, 2020, 2021, 2022.

MENTORSHIP

Thesis relator

- Chiara Argentino. "Impiego di relazioni adattive nel tempo e nello spazio per la ricostruzione di campi di precipitazione". Rel. Pierluigi Claps, Paola Mazzoglio. Politecnico di Torino, **2022**. [\[Thesis\]](#)
- Paolo Falchetti. "Utilizzo di dati di analisi retrospettiva per l'identificazione di eventi alluvionali rilevanti: applicazione al caso Italia". Rel. Pierluigi Claps, Paola Mazzoglio. Politecnico di Torino, **2022**. [\[Thesis\]](#)
- Roberta Narcisi. "Ricostruzione delle precipitazioni areali a grande scala mediante radar meteorologici". Rel. Pierluigi Claps, Paola Mazzoglio. Politecnico di Torino, **2022**. [\[Thesis\]](#)
- Paola Cicchini. "Ricostruzione delle piogge estreme giornaliere sul bacino del Po ed analisi dell'Hershfield factor / Reconstruction of daily extreme rainfall over the Po River basin and analysis of the Hershfield factor". Rel. Pierluigi Claps, Paola Mazzoglio. Politecnico di Torino, **2021**. [\[Thesis\]](#)
- Gloria Tranchida. "Analisi spaziale dell'andamento delle precipitazioni estreme in Italia su base morfologica e geomorfologica tramite metodologie GIS-based". Rel. Pierluigi Claps, Ilaria Butera, Paola Mazzoglio. Politecnico di Torino, **2021**. [\[Thesis\]](#)
- Elena Galvano. "Ricostruzione delle forzanti meteo da sensori remoti dell'evento alluvionale del 19-24/10/2019 in Piemonte / Reconstruction of the weather forcings from remote sensors of the flood event of 19-24/10/2019 in Piedmont". Rel. Pierluigi Claps, Paola Mazzoglio. Politecnico di Torino, **2020**. [\[Thesis\]](#)

Internship tutor

- Chiara Ferraris and Mariangela Maggi (ITHACA, 2019).

DRIVING LICENCE

Driving Licence: B

PRIVACY

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Torino, 09/10/2022