

CURRICULUM VITAE



PERSONAL INFORMATION

ALESSANDRA MASCITELLI
Address Via Enrico Fermi 10, 66034 Lanciano (CH), Italy
Address 1 Via Eugenio Checchi 60, 00157 Rome (RM), Italy
Mobile number +39 3277343439
E-mail ale.mascitelli@gmail.com
Nationality Italian
Date of Birth 11/11/1990
Gender Female

WORK EXPERIENCE

Date	March 6th, 2023 – In progress
Employer's name and locality	University "G. d'Annunzio" of Chieti-Pescara, Italy Department of Advanced Technologies in Medicine & Dentistry (DTIM&O) Center for Advanced Studies and Technology – CAST Via Luigi Polacchi 11, 66100 Chieti (CH)
Sector	Research
Occupation or position held	RTDa
Protocol	Prot. 0019100 del 13/03/2023
Main activities and responsibilities	S.C. 02/C1 - Astronomia, Astrofisica, Fisica della Terra e dei Pianeti S.S.D. FIS/06 Fisica per il Sistema Terra e il Mezzo Circumterrestre Funded by PNRR Project Vitality (D.R. Rep. n. 1422 Prot. n. 61083 01/09/2022 G.U. 73 13.09.2022).
Date	July 1st, 2022 – February 28 th , 2023
Employer's name and locality	ISAC – CNR Via del Fosso del Cavaliere 100, 00133 Rome (RM)
Sector	Research
Occupation or position held	Post-Doctoral Research Fellow
Protocol	Prot. 0001285/2022 Ref. Call no. ISAC-004-2022
Main activities and responsibilities	Winner of a public competition aimed at "Multi-sensor analysis of extreme precipitation events over Italy". Additional research activities within the framework of the DPC agreement 2020-2021 entitled "Monitoring of hydro-meteorological parameters by remote sensing" (H SAF project); support activities to the Project Manager, to the Management Team, to the User Promotion Team and to the Validation Team.
Date	July 1st, 2021 – June 30th, 2022

Employer's name and locality	ISAC – CNR Via del Fosso del Cavaliere 100, 00133 Rome (RM)
	Italian Civil Protection Department - Natural hazard risk management office Dipartimento della Protezione Civile - Servizio Centro Funzionale Centrale - Settore rischio meteo-idrogeologico e idraulico Via Vitorchiano 2, 00189 Roma (RM)
Sector	Research
Occupation or position held	Post-Doctoral Research Fellow
Protocol	Prot. 0001615/2021 Ref. Call no. ISAC-005-2021-AR-RM prot. no. 0001284 of 05/06/2021
Main activities and responsibilities	Winner of a public competition aimed at data analysis for meteorological applications. Research activities within the framework of the DPC agreement 2020-2021 entitled "Monitoring of hydro-meteorological parameters by remote sensing" (H SAF project); support activities to the Project Manager, to the Management Team, to the User Promotion Team and to the Validation Team.
Date	January 15th, 2021 – June 30th, 2021
Employer's name and locality	Università di Padova Via 8 Febbraio 1848 2, 35122 Padova (PD)
Sector	Research
Occupation or position held	Post-Doctoral Research Fellow
Protocol	18/2021 del 07/01/2021 – Anno 2020-III/13.18.1 Ref. no. 18/2021
Main activities and responsibilities	Winner of a public competition aimed at data analysis for meteorological applications within the EU Project H2020-SESAR-2019-2 ALARM . The main aim of the project is to identify areas of high storm risk and to process, analyse and validate a large amount of data in different formats and from different sources (conventional e.g. weather stations, radiosondes and radar and non-conventional e.g. GNSS receivers, RO, lightning and different satellite sensors) in order to support the short-term forecasting of locally developed storm events.
Date	April 16th, 2019 – January 14th, 2021
Employer's name and locality	Politecnico di Milano Piazza Leonardo da Vinci 32, 20133 Milan (MI)
Sector	Research
Occupation or position held	Research Fellow
Protocol	D.D. rep. n. 1702 prot. n. 26007 - 02/27/2019
Main activities and responsibilities	Winner of a public competition (call for applications rep. n. 8720 , prot. n. 127517 of 30/11/2018) aimed at "Meteorological Applications of Gns within the Project H2020 TWIGA . Tropospheric Delay Estimates From Low Cost GNSS Networks In Africa." The main aim of the project is to identify areas of high storm risk and to process, analyse and validate a large amount of data in different formats and from different sources (conventional e.g. weather stations and radiosondes and non-conventional e.g. GNSS receivers and satellite sensors) in order to support the short-term forecasting of locally developed storm events. Activities are performed at both Politecnico di Milano and GReD s.r.l.
Date	April 11th, 2016 – April 11th, 2019
Employer's name and locality	ISAC – CNR Via del Fosso del Cavaliere 100, 00133 Rome (RM)
Sector	Research

Occupation or position held	Research Grant
Protocol	0001114 of 04/05/2016
Main activities and responsibilities	Winner of a public competition (Call no. ISAC-BS02-2016-RM, prot. no. 0000036 of 01/11/2016) aimed at research activities in the field of satellite meteorology, with particular reference to the applications of GNSS receivers - Activities carried out in the framework of a collaboration between the Department of Civil Protection and the Institute of Atmospheric Science and Climate of the National Research Council. The main aim of the activities was to analyse a large amount of data, in selected case studies in correspondence with intense weather events, in different formats and from different sources (e.g. GNSS receivers, weather stations, ground radiometers, radiosondes, weather radars, lightning sensors and satellite) in order to support assimilation into NWP models for short-term storm event forecasting.
Date	March 2016 – November 2016
Employer's name and locality	DICEA, Sapienza, University of Rome Via Eudossiana 18, 00184 Rome (RM)
Sector	Positioning
Occupation or position held	Voluntary cooperation
Main activities and responsibilities	Georeferencing of the Sapienza University of Rome buildings
Date	Novembre 05th, 2015 – April 05th, 2016
Employer's name and locality	DICEA, Sapienza, University of Rome Via Eudossiana 18, 00184 Rome (RM)
Sector	Territorial Planning
Occupation or position held	Co. Co. Co. in the frame of a PRIN
Protocol	42 of 01/11/2016
Main activities and responsibilities	Creation of a GIS project and mapping by satellite images, photointerpretation of the different settlement typologies in the context of the Roman metropolitan territory (quadrant 100 x 100 km centred on the metropolitan city of Rome) and analysis of their dynamics according to defined time intervals. Interpretation and evaluation of the settlement phenomena analysed, also in relation to other kind of data and phenomena.
Date	July 2015 – June 2016
Employer's name and locality	DICEA, Sapienza, University of Rome Via Eudossiana 18, 00184 Rome (RM)
Sector	Territorial Planning
Occupation or position held	Voluntary cooperation
Main activities and responsibilities	Study and interpretation of settlement phenomena and territorial dynamics. Creation of GIS projects on current and potential situations of the areas under study.

EDUCATION

Date	2024
Title	National Academic Qualification for the role of Associate Professor in Academic Field 02/C1 – ASTRONOMY, ASTROPHYSICS, EARTH AND PLANETARY PHYSICS. Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 02/C1 - ASTRONOMIA, ASTROFISICA, FISICA DELLA TERRA E DEI PIANETI.

Date	November 01st, 2016 – February 17th, 2020
Education or training organisation's name	DICEA, Sapienza, University of Rome Via Eudossiana 18, 00184 Rome (RM)
Main topics	Research activities in the field of satellite meteorology with particular reference to applications of GNSS receivers
Title	PhD in Infrastructure and Transport – Cycle XXXII
Classification	Curriculum Infrastrutture, Sistemi di Trasporto e Geomatica With honors
Date	January 2017
Education or training organisation's name	Europe Project Forum: European Register Of Eu-Projects Designers And Managers
Title	Entry in the European Register of Eu-Projects Designers and Managers
Date	II Session 2015
Education or training organisation's name	Sapienza, University of Rome Via Eudossiana 18, 00184 Rome (RM)
Main topics	State examination for the qualification to practice the profession of engineer
Title	Qualification to practice as a Civil and Environmental Engineer
Classification	202/240
Date	December 2015 – June 2016
Education or training organisation's name	Europa Cube Innovation Business School Via G. B. Morgagni 10, Bologna (BO)
Title	Master Eu-Projects Designers and Managers 2014-2020
Date	September 2012 - March 2015
Education or training organisation's name	Sapienza, University of Rome Civil and Industrial Engineering Faculty Via Eudossiana 18, 00184 Rome (RM)
Main topics	Urban and environmental design with the use of participatory planning techniques and graphic restitution in GIS. Geomatics and Territorial Information Systems. Basic knowledge of transport systems theory and transport policies with project laboratories. Attention to the interactions between planning and environment. Climatology and hydraulics. Analyses concerning the recovery and recycling of materials. Basic knowledge of Remediation of contaminated sites and Models of dispersion of pollutants. Remote Sensing.
	Thesis: "Progetto di Sviluppo Locale e Valorizzazione Ambientale del Territorio Teatino" Topic: Progettazione Urbana e Ambientale Advisor: Prof. Carlo Cellamare Co-advisors: Prof. Mattia G. Crespi, Prof. Giuseppe Sappa
	<u>May 29th, 2015</u> Presentation of Degree Thesis and Exposition of Graphic Elaborates under the patronage of the Municipality, Comune di Lanciano (CH)
Title	Master's Degree in Environmental Engineering
Classification	108/110
Date	September 2009 - December 2012

Education or training organisation's name Sapienza, University of Rome
 Civil and Industrial Engineering Faculty
 Via Eudossiana 18, 00184 Rome (RM)

Main topics Basic knowledge of engineering, energy, hydraulics and sustainable development. Attention to the interactions between planning and the environment. Topography/Positioning. Study of CAD and GIS elements. Environmental monitoring using satellite techniques.

Title Thesis: "Analisi di dati GPS per il monitoraggio di rockglacier: le prime campagne di misura sui siti di Schafberg e Senales"
 Topic: Topografia / Positioning
 Advisor: Prof. Mattia G. Crespi
 Co-advisors: Ing. Elisa Benedetti, Ing. Mara Branzanti

Bachelor's degree in Environmental Engineering

Classification 106/110

Date September 2004 - June 2009

Education or training organisation's name Liceo scientifico G. Galilei
 Via Don Minzoni 11, 66034 Lanciano (CH)

Main topics Experimental course PNI

Title **Maturità Scientifica**

Date June 2007

Education or training organisation's name Anglo American Centre
 Piazza Eraldo Miscia 2, 66034 Lanciano (CH)
 University of Cambridge ESOL Examinations

Main topics English certificate

Title **FCE**

Date September 2001 - June 2004

Education or training organisation's name Scuola Media Statale Umberto I
 Viale Cappuccini 63, 66034 Lanciano (CH)

Main topics Bilingual course (English and French)

Title **Diploma Licenza Media**

Date June 2002

Education or training organisation's name Anglo American Centre
 Piazza Eraldo Miscia 2, 66034 Lanciano (CH)
 The International Examinations Board

Main topics English certificate

Title **Trinity**

TRAINING

Date June 13th-16th, 2023

Education or training organisation's name ISPRA

Main topics **Summer school workshop Action 2020-2-21: Copernicus for cultural heritage**

Date April 6th, 2021

Education or training organisation's name	Marie Curie Alumni Association Italy Chapter
Main topics	Science Communication Talk Series
Date	December 4th, 2018
Education or training organisation's name	Aristotle University of Thessaloniki/Sapienza University of Rome
Main topics	Fundamentals in Data Analysis
Date	June 25th, 2018 – June 28th, 2018
Education or training organisation's name	Istituto Superiore di Sanità/Ministero della Salute
Main topics	Corso di Formazione Nazionale per Team Leader e Formatori di Team Leader per l'implementazione dei Piani di Sicurezza dell'Acqua (PSA) nella filiera idro-potabile
Date	September 25th, 2017 – October 06th, 2017
Education or training organisation's name	EUMETSAT Training
Main topics	International Summer School on Applications with the Newest Multi-spectral Environmental Satellites – Remote Sensing
Date	July 18th, 2016 – July 22nd, 2016
Education or training organisation's name	Università degli Studi di Palermo in collaborazione con MathWorks
Main topics	Scuola di calcolo scientifico con MATLAB

PUBLICATIONS

THESIS

Year	2020
Thesis	New applications and opportunities of GNSS meteorology , Mascitelli, A. (2020). Sapienza Università di Roma - http://hdl.handle.net/11573/1378843

PAPER

Year	2025
Paper	Effect of Atmospheric Temperature Variations on Glycemic Patterns of Patients with Type 1 Diabetes: Analysis as a Function of Different Therapeutic Treatments . Mascitelli, A., Tumini, S., Chiacchiaretta, P., Aruffo, E., Sacrini, L., Saltarelli, M. A., & Di Carlo, P. (2025). <i>International Journal of Environmental Research and Public Health</i> , 22(12), 1850. https://doi.org/10.3390/ijerph22121850

Year	2025
Paper	Impact of Climate Change on Cyanobacteria Growth: A Case Study of Lama Dei Peligni Rock Paintings Conservation (Majella Massif—Abruzzo Region, Italy) . Chiacchiaretta, P., Prestileo, F., Stella, E. M., Aruffo, E., Simeone, P., Lanuti, P., Di Lodovico, S., Di Giulio, M., Guarnieri, S., Del Boccio, P., Spalluto, G., Cufaro, M.C., Gatta, V., Anaclerio, F., Alisi, C., Dietrich, S., Di Carlo, P. & Mascitelli, A. (2025). <i>Sustainability</i> , 17(23), 10861.

Year	2024
Paper	Modeling of Zenith Tropospheric Delay using ERA5 data over East African region . Andima, G., Ssenyunzi, R. C., Amabayo, E. B., Mascitelli, A., & Realini, E. (2024). <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 265, 106390.

Year	2024
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Paper **The Impact of Atmospheric Temperature Variations on Glycaemic Patterns in Children and Young Adults with Type 1 Diabetes.** Chiacchiaretta, P., Tumini, S., Mascitelli, A., Sacrini, L., Saltarelli, M. A., Carabotta, M., Osmelli, J., Di Carlo, P., & Aruffo, E. (2024). *Climate*, 12(8), 121. <https://doi.org/10.3390/ci12080121>

Year 2024

Paper **Inland O3 Production Due to Nitrogen Dioxide Transport Downwind a Coastal Urban Area: A Neural Network Assessment.** Chiacchiaretta, P., Aruffo, E., Mascitelli, A., Colangeli, C., Palmeri, S., Bianco, S., & Di Carlo, P. (2024). *Sustainability*, 16(15), 6355.

Year 2024

Paper **Heritage Resilience and Identity: Lesson from Trabocchi Coast about Climate Change Adaptation Strategies.** López Campos, L.I.; Prestileo, F.; Stella, E.M.; Mascitelli, A.; Aruffo, E.; Chiacchiaretta, P.; di Carlo, P.; Dietrich, S. *Sustainability* 2024, 16, 5848. <https://doi.org/10.3390/su16145848>

Year 2024

Paper **Data Assimilation of Satellite-Derived Rain Rates Estimated by Neural Network in Convective Environments: A Study over Italy.** Torcasio RC, Papa M, Del Frate F, Mascitelli A, Dietrich S, Panegrossi G, Federico S. *Remote Sensing*. 2024; 16(10):1769. <https://doi.org/10.3390/rs16101769>

Year 2023

Paper **Cultural Heritage Resilience in the Face of Extreme Weather: Lessons from the UNESCO Site of Alberobello.** Mascitelli A, Prestileo F, Sonnessa A, Federico S, Torcasio RC, Ravanelli R, Biondi R, Dietrich S. *Sustainability*. 2023; 15(21):15556. <https://doi.org/10.3390/su152115556>

Year 2023

Paper **A549 as an In Vitro Model to Evaluate the Impact of Microplastics in the Air.** Shahzadi, C., Di Serafino, A., Aruffo, E., Mascitelli, A., and Di Carlo, P. *Biology*. 2023; 12(9):1243. <https://doi.org/10.3390/biology12091243>

Year 2023

Paper **Impact of Climate Change on the “Trabocchi Coast” (Italy): The Trabocco Turchino Case Study.** Mascitelli A, Prestileo F, Stella EM, Aruffo E, Campos LIL, Federico S, Torcasio RC, Corsi A, Carlo PD, Dietrich S. *Sustainability*. 2023; 15(14):10880. <https://doi.org/10.3390/su151410880>

Year 2023

Paper **The impact of global navigation satellite system (GNSS) zenith total delay data assimilation on the short-term precipitable water vapor and precipitation forecast over Italy using the Weather Research and Forecasting (WRF) model,** Torcasio, R. C., Mascitelli, A., Realini, E., Barindelli, S., Tagliaferro, G., Puca, S., Dietrich, S., and Federico, S. *Nat. Hazards Earth Syst. Sci.*, 23, 3319–3336, <https://doi.org/10.5194/nhess-23-3319-2023>, 2023.

Year 2023

Paper **Nowcasting extreme rain and extreme wind speed with machine learning techniques applied to different input datasets.** Chkeir, S., Anesiadou, A., Mascitelli, A., & Biondi, R. (2023) *Atmospheric Research* 282: 106548.

Previously available at SSRN 4144317 as “Nowcasting Extreme Weather with Machine Learning Techniques Applied to Different Input Datasets.”
Biondi, R., Chkeir, S., Anesiadou, A. and Mascitelli, A. (2023)

- Year 2022
Paper **Multi-Sensor Data Analysis of an Intense Weather Event: The July 2021 Lake Como Case Study.** Mascitelli, A., Petracca, M., Puca, S., Realini, E., Gatti, A., Biondi, R., Anesiadou, A., Brocca, L., Vulpiani, G., Torcasio, R.C., Federico, S., Oriente, A. and Dietrich, S. (2022). *Water*, 14(23), 3916.
- Year 2021
Paper **Time Evolution of TGF-Producing Storms Using ERA5, GPS and Geostationary Satellites Observations,** Tiberia, A., Mascitelli, A., D’Adderio, L.P., Federico, S., Marisaldi, M., Porcù, F., Realini, E., Gatti, A., Ursi, A., Fuschino, F., Tavani, M., Dietrich, S. (2021). *Remote Sensing*
- Year 2020
Paper **Assimilation of GPS Zenith Total Delay estimates in RAMS NWP model: Impact studies over central Italy,** Mascitelli, A., Federico, S., Torcasio, R.C., Dietrich, S. (2020). *Advances in Space Research*. <https://doi.org/10.1016/j.asr.2020.08.031>
- Year 2020
Paper **On the definition of the strategy to obtain absolute InSAR Zenith Total Delay maps for meteorological applications,** Meroni, A. N., Montrasio, M., Venuti, G., Barindelli, S., Mascitelli, A., Manzoni, M., Monti Guarnieri, A. V., Gatti, A., Lagasio, M., Parodi, A., Tagliaferro, G. & Realini, E. (2020). *Frontiers in Earth Science*, 8, 359.
- Year 2020
Paper **A combined IR-GPS satellite analysis for potential applications in detecting and predicting lightning activity,** D’Adderio, L.P., Paziienza, L., Mascitelli, A., Tiberia, A. and Dietrich, S. (2020). *Remote Sensing*, 12, 6.
- Year 2019
Paper **Data assimilation of GPS-ZTD into the RAMS model through 3D-Var: preliminary results at the regional scale,** Mascitelli, A., Federico, S., Avolio, E., Fortunato, M., Mazzoni, A., Realini, E., Torcasio, R. C., Transerici, C., Crespi, M. and Dietrich, S. *Measurement Science and Technology*, 2019.
- Year 2019
Paper **Tree Motion: following the wind-induced swaying of arboreous individual using a GNSS receiver,** Mascitelli, A., Bombi, P., Coletta, V., De Cinti, B., Federico, S., Matteucci, G., Mazzoni, A., Muzzini, V.G., Petenko, I. and Dietrich, S. (2019). *Italian Journal of Agrometeorology*, (3), 25-36.
- Year 2018
Paper **Precipitable water vapor content from ESR/SKYNET Sun-sky radiometers: validation against GNSS/GPS and AERONET over three different sites in Europe,** Campanelli, M., Mascitelli, A., Sanò, P., Diémoz, H., Estellés, V., Federico, S., Iannarelli, A. M., Fratarcangeli, F., Mazzoni, A., Realini, E., Crespi, M., Bock, O., Martinez-Lozano, J. A., and Dietrich, S. *Atmospheric Measurement Techniques*, 2018, 11.1: 81-94.

PROCEEDINGS

- Year 2025
 Proceedings **The role of atmospheric pollutants in type 2 diabetes prevalence across Italy.** Carrieri, F., E. Aruffo, A. Mascitelli, P. Chiacchiaretta, M. P. A. Baldassarre, G. Formoso, A. Consoli, and P. Di Carlo. In DIABETOLOGIA, vol. 68, pp. S188-S189. ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES: SPRINGER, 2025.
- Year 2025
 Proceedings **GNSS-PWV and Intense Rainfall Events: An Analysis of Two Years of Observation Acquired by the SNIK CORS on the Bari Area (Italy).** Sonnessa, A., Tarantino, E., & Mascitelli, A. (2025, June). In: Gervasi, O., et al. Computational Science and Its Applications – ICCSA 2025 Workshops. ICCSA 2025. Lecture Notes in Computer Science, vol 15894. Springer, Cham. https://doi.org/10.1007/978-3-031-97648-3_7
- Year 2022
 Proceedings **Resilience of Cultural Heritage in Extreme Weather Conditions: The Case of the UNESCO Villa Romana del Casale Archaeological Site's Response to the Apollo Mediane in October 2021.** Prestileo, F., Mascitelli, A., Meli, G., Petracca, M., Giorgi, C., Melfi, D., Puca, S. and Dietrich, S. (2022). In: Gervasi, O., Murgante, B., Misra, S., Rocha, A.M.A.C., Garau, C. (eds) Computational Science and Its Applications – ICCSA 2022 Workshops. ICCSA 2022. Lecture Notes in Computer Science, vol 13380. Springer, Cham. https://doi.org/10.1007/978-3-031-10542-5_35.
- Year 2022
 Proceedings **Preliminary Results of the AEROMET Project on the Assimilation of the Rain-Rate from Satellite Observations.** Federico, S., Torcasio, R.C., Mascitelli, A., Del Frate, F., Dietrich, S. (2022). In: Gervasi, O., Murgante, B., Misra, S., Rocha, A.M.A.C., Garau, C. (eds) Computational Science and Its Applications – ICCSA 2022 Workshops. ICCSA 2022. Lecture Notes in Computer Science, vol 13380. Springer, Cham. https://doi.org/10.1007/978-3-031-10542-5_36
- Year 2022
 Proceedings **Multivariate Multi-Step Convection Nowcasting with Deep Neural Networks: The Novara Case Study** Biondi, R., Chkeir, S., Anesiadou, A., Mascitelli, A., Realini, E., Nisi, L., and Cimarelli, C. IGARSS 2022 - 2022 IEEE International Geoscience and Remote Sensing Symposium, 2022, pp. 6598-6601, doi: 10.1109/IGARSS46834.2022.9883665.
- Year 2021
 Proceedings **A novel procedure for generation of sar-derived ztd maps for weather prediction: application to South Africa use case,** Molinari, M. E., Manzoni, M., Petrushevsky, N., Guarneri, A. M., Venuti, G., Meroni, A. N., Mascitelli, A., and Parodi, A. (2021). *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLIII-B3-2021, 405–410, <https://doi.org/10.5194/isprs-archives-XLIII-B3-2021-405-2021>, 2021.
- Year 2021
 Proceedings **Multi-instrumental analysis of the extreme meteorological event occurred in Matera (Italy) in November 2019,** Coletta, V., Mascitelli, A., Bonazza, A., Ciarravano, A., Federico, S., Prestileo, F., Torcasio, R.C. & Dietrich, S. (2021, September). In International Conference on Computational Science and Its

Applications (pp. 140-154). Springer, Cham.

Year	2020
Proceedings	Precipitable Water Vapor content from GNSS/GPS: validation against radiometric retrievals, atmospheric sounding and ECMWF model outputs over a test area in Milan , Mascitelli, A., Barindelli, S., Realini, E., Luini, L. and Venuti, G. (2019, October). In International Workshop on R3 in Geomatics: Research, Results and Review (pp. 27-34). Springer, Cham.
Year	2020
Proceedings	Statistical comparison between different approaches to GNSS single-frequency data processing for meteorological applications , Mascitelli, A., Gatti, A., Realini, E. and Venuti G. (2019, October). In International Workshop on R3 in Geomatics: Research, Results and Review (pp. 16-26). Springer, Cham.
Year	2020
Conference Paper	A Complete Fos Approach for Indoor Crowdsourced Mapping: Case Study on Sapienza University of Rome Faculties , Mascitelli, A., Ravanelli, M., Mattoccia, S., Berardocco, C. and Mazzoni, A. (2020). <i>ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XLIII-B4-2020</i> , 2020, 361–365, url: https://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XLIII-B4-2020/361/2020/ , doi: 10.5194/isprs-archives-XLIII-B4-2020-361-2020
Year	2019
Proceedings	Monitoraggio Della Stabilità Meccanica Degli Individui Arborei Tramite Un Sensore Gns A Basso Costo Coletta, V., Mascitelli, A., Bombi, P., De Cinti, B., Federico, S., Matteucci, G., Mazzoni, A., Muzzini, V.G., Petenko, I., Dietrich, S. in proceedings Ventura, F., & Poggi, G. M. (2019). Atti del XXII Convegno Nazionale di Agrometeorologia Ricerca ed innovazione per la gestione del rischio meteorologico in agricoltura, p.91.
Year	2017
Proceedings	An Open Source Platform For Indoor Navigation: Application To The Faculty Of Civil And Industrial Engineering Of "Sapienza" University Of Rome , Mascitelli, A., Bollettino Sifet N.2 – Anno2017: Sezione Scienza
CONFERENCE ABSTRACT	
Year	2025
Abstract	Cyanobacteria and climate change: Insights from Atmospheric and Heritage Studies . Mascitelli, A., Chiacchiaretta, P., Prestileo, F., Stella, E. M., Aruffo, E., Simeone, P., Lanuti, P., Di Lodovico, S., Di Giulio, M., Guarnieri, S., Del Boccio, P., Cufaro, M.C., Gatta, V., Anaclerio, F., Dietrich, S & Di Carlo, P. (2025). (No. EGU25-1414). Copernicus Meetings.
Year	2025
Abstract	Impact of the atmospheric composition and climate changes on the evolution of diabetes in Central Italy: the Vitality project . Di Carlo, P., Aruffo, E., Mascitelli, A., & Chiacchiaretta, P. (2025, April). In <i>EGU General Assembly Conference Abstracts</i> (pp. EGU25-7076).
Year	2025

Abstract	A worldwide study to estimate the relative risk to develop type 2 Diabetes Mellitus because of atmospheric pollutants exposure. Aruffo, E., Mascitelli, A., Chiacchiarretta, P., Carrieri, F., Baldassarre, M. P. A., Formoso, G., Consoli, A., & Di Carlo, P. (2025, April). In EGU General Assembly Conference Abstracts (pp. EGU25-12304).
Year	2025
Abstract	Characterization of low-cost sensors via simultaneous field measurements: a case study. Gentile, L., Aruffo, E., Mascitelli, A., Chiacchieretta, P., & Di Carlo, P. (2025). (No. EGU25-12322). Copernicus Meetings.
Year	2025
Abstract	Inland Ozone Production Due to Nitrogen Dioxide Transport Downwind of a Coastal Urban Area: A Neural Network Assessment. Chiacchiarretta, P., Aruffo, E., Mascitelli, A., Colangeli, C., Palermo, S., Bianco, S., & Di Carlo, P. (2025). (No. EGU25-1413). Copernicus Meetings.
Year	2024
Abstract	Boreal forest fire monitoring by GNSS, referring to the 2011 BORTAS experiment. Mascitelli, A., Aruffo, E., Chiacchiarretta, P., Realini, E., Gatti, A., Fumagalli, A. & Di Carlo, P. (2024). In EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-17605, https://doi.org/10.5194/egusphere-egu24-17605 .
Year	2024
Abstract	Multi-sensor approach for analysis of extreme weather events affecting areas of cultural interest. Mascitelli, A., Prestileo, F., Federico, S., Torcasio, R. C., Di Carlo, P., and Dietrich, S., EMS Annual Meeting 2024, Barcelona, Spain, 1–6 Sep 2024, EMS2024-941, https://doi.org/10.5194/ems2024-941 , 2024.
Year	2024
Abstract	Effect of cut-off processing parameter on GNSS-ZTD representativeness in extreme weather events. Mascitelli, A., Torcasio, R. C., Aruffo, E., Chiacchiarretta, P., Realini, E., Gatti, A., Laviola, S., Dietrich, S., Di Carlo, P., and Federico, S., 18th Plinius Conference on Mediterranean Risks, Chania, Greece, 30 Sep–3 Oct 2024, Plinius18-25, https://doi.org/10.5194/egusphere-plinius18-25 , 2024.
Year	2024
Abstract	A model of vernacular architecture resilience to impact of climate change and social challenges in the Mediterranean basin: the case study of the Trabocchi Coast (Abruzzo Region, Italy). Prestileo, F., Mascitelli, A., Stella, E. M., López Campos, L. I., Federico, S., Torcasio, R. C., Aruffo, E., Chiacchiarretta, P., Di Carlo, P., and Dietrich, S., 18th Plinius Conference on Mediterranean Risks, Chania, Greece, 30 Sep–3 Oct 2024, Plinius18-13, https://doi.org/10.5194/egusphere-plinius18-13 , 2024.
Year	2022
Abstract	GNSS-PWV time evolution in extreme weather events: comparison analysis with lightning and radar-VIL. Mascitelli, A., Federico, S., Vulpiani, G., Crespi, M., & Dietrich, S. (2022). (No. Plinius17-39). Copernicus Meetings.
Year	2022

Abstract	Safeguarding of the Villa Romana del Casale UNESCO site from severe weather events: the case study of Apollo medicane occurred in October 2021. Prestileo, F., Mascitelli, A., Meli, G., Petracca, M., Giorgi, C., Melfi, D., Puca, S. & Dietrich, S. (2022). (No. Plinius17-44). Copernicus Meetings.
Year	2022
Abstract	Decrease of anthropogenic emission from aviation and detection of natural hazards with potential application in geosciences using satellite sensors, ground-based networks and model forecasts in the context of the SACS/ALARM early warning system, Brenot, H., Theys, N., De Donder, E., Clarisse, L., De Buyl, P., Clerbaux, N., Dietmüller, S., Matthes, S., Grewe, V., Chkeir, S., Mascitelli, A., Anesiadou, A., Biondi, R., Mahorčič, I., Bolić, T., Bhattacharya, R., Winter, T., Durant, A., Van Roozendael, M., & Soler, M. (2022). In EGU General Assembly 2022, EGU22-8948, https://doi.org/10.5194/egusphere-egu22-8948 .
Year	2021
Abstract	Towards the integration of GNSS, SAR and NWP for heavy rainfall forecast in sub-Saharan Africa within the TWIGA project, Niyonkuru Meroni, A., Mascitelli, A., Barindelli, S., Petrushevsky, N., Manzoni, M., Molinari, M. E., Gatti, A., Tagliaferro, G., Lagasio, M., Parodi, A., Realini, E., Monti Guarnieri, A. V. & Venuti, G. (2021, April). In EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-5704, https://doi.org/10.5194/egusphere-egu21-5704 .
Year	2020
Abstract	TWIGA project activities for the enhancement of heavy rainfall predictions in Africa: low-cost GNSS network deployment and NWP model parameterization, Mascitelli, A., Niyonkuru Meroni, A., Barindelli, S., Manzoni, M., Tagliaferro, G., Gatti, A., Realini, E., Venuti, G. & Monti Guarnieri, A. (2020, May). In EGU General Assembly Conference Abstracts (p. 16122).
Year	2020
Abstract	From InSAR derived relative tropospheric Slant Total Delay maps to absolute Zenith Total Delay maps: comparisons between tropospheric delay products to define a strategy for meteorological applications, Barindelli, S., Gatti, A., Lagasio, M., Manzoni, M., Mascitelli, A., Monti Guarnieri, A., Montrasio, M., Realini, E., Tagliaferro, G. & Venuti, G. (2020, May). In EGU General Assembly Conference Abstracts (p. 17920).
Year	2018
Abstract	Assimilation of GPS-ZTD in meteorological models by 3D-Var, Mascitelli, A., Federico, S., Avolio, E., Tranterici, C., Crespi, M. and Dietrich, S. EGU General Assembly Conference Abstracts, 2018/4, vol.20, pp. 6180.
Year	2018
Abstract	Use of GNSS/GPS for calibrating ESR/SKYNET and AERONET Sun-sky radiometers: a multi-instruments approach to retrieve the precipitable water vapor content performing measurements comparability, Campanelli, M., Mascitelli, A., Sanò, P., Diémoz, H., Estellés, V., Federico, S., Iannarelli, A. M., Fratarcangeli, F., Mazzoni, A., Realini, E., Crespi, M., Bock, O., Martínez-Lozano, J. A., and Dietrich, S. EGU General Assembly Conference Abstracts, 2018/4, vol.20, pp. 7367.

	Year	2018
	Abstract	Monitoring of mechanical stability of arboreal individuals by GNSS low-cost sensors , Mascitelli, A., Bombi, P., De Cinti, B., Federico, S., Mazzoni, A., Muzzini, V.G., Petenko, I. and Dietrich, S. EGU General Assembly Conference Abstracts, 2018/4, vol.20, pp. 19639.
	Year	2018
	Abstract	A New Ground Based Augmentation Strategy for Centimetric PPP Solution with GNSS Single Frequency Receiver , Fortunato, M., Mascitelli, A., Mazzoni, A. and Crespi, M. EGU General Assembly Conference Abstracts, 2018/4, vol.20, pp. 9187.
PROJECT DELIVERABLES		
	Year	2021
	Deliverable	Extreme weather patterns report and risks map Deliverable ID: D4.1 - Dissemination Level: PU - Project Acronym: ALARM - Grant: 891467 - Call: H2020-SESAR-2019-2 - Topic: SESAR-ER4-05-2019-Environment and Meteorology for ATM - Consortium Coordinator: Universidad Carlos III de Madrid - Edition date: 30 April 2021
	Year	2021
	Deliverable	Report on the retrieval of PWV time series from in situ GNSS and weather stations Deliverable ID: D2.3 - Dissemination Level: PU - Project Acronym: TWIGA - Deliverable leader: Politecnico di Milano - Project no. 776691 - Submission date: 05 July 2021
EUMETSAT REPORT		
	Date	30 September 2022
	Report	Mesoscale Convective System (MSC) over central Italy https://www.eumetsat.int/mesoscale-convective-system-msc-over-central-italy
	Date	July 2022
	Report	2021-22 snow deficit in Italy leads to serious drought https://www.eumetsat.int/2021-22-snow-deficit-italy
	Date	26 July 2021
	Report	A slow moving upper-level low brought devastating floods to parts of north west Germany and other parts of western Europe in July 2021 https://www.eumetsat.int/devastating-floods-western-europe
H SAF CASE STUDY REPORT		
	Date	November 2021
	Report	Event report 24-29 October 2021 https://hsaf.meteoam.it
	Date	May 2022
	Report	Case study: South Africa (11-13 April 2022) https://hsaf.meteoam.it

Date May 2022
Report **Case study: Northern Italy Drought (Jan-Apr 2022)**
<https://hsaf.meteoam.it>

Date July 2022
Report **Case study: The 2021-2022 snow deficit in Italy**
<https://hsaf.meteoam.it>

SPECIAL ISSUE EDITOR

Guest Editor for Remote Sensing (ISSN 2072-4292) - Special Issue "Remote Sensing for Precipitation Measurements and Lightning Meteorology" [Special Issue Editor: Dr. Stefano Dietrich; Prof. Yoav Yair; Dr. Leo Pio D'Adderio; Dr. Alessandra Mascitelli – 2022]

PEER REVIEW ACTIVITY

Papers reviewer for the following journals:

- Remote Sensing MDPI
- Atmosphere MDPI
- AIMS Geosciences
- Advances in Meteorology
- Geo-spatial Information Science

Reviewer for publication of written contributions to "The ICCSA 2022 Conference" Proceedings.

Member of the Program Committee and reviewer for publication of written contributions to "The ICCSA 2024 Conference" Proceedings.

EDUCATIONAL EXPERIENCE

Teaching activities:

- Geomatics & ITS (Ph.D. Course in Science and Technology for Sustainable Development - Università degli Studi "G. D'Annunzio" Chieti-Pescara) - Academic Year 2023-2024
- Physics (Preparation course for admission tests for programmed numbered degree programs in medical area - Università Telematica "Leonardo Da Vinci") - Academic Year 2023-2024
- Geomatics & ITS (Ph.D. Course in Science and Technology for Sustainable Development - Università degli Studi "G. D'Annunzio" Chieti-Pescara) - Academic Year 2022-2023

Teaching support activities in the following university courses:

- Seminar in the Elementi di Climatologia course (Prof. Piero Di Carlo – Università degli Studi "G. D'Annunzio" Chieti-Pescara)
Academic Year 2023-2024 – Corso di Laurea triennale (DM 270) in Scienze Dell'Habitat Sostenibile
- Tutorato per la Scuola ICAT - Tecniche di posizionamento e controllo (Prof. Barbara Betti – Politecnico di Milano)
Academic Year 2020-2021 – Contratto di collaborazione coordinata e continuativa
- Topografia (Prof. Riccardo Barzaghi – Politecnico di Milano)
Academic Year 2020-2021 – Contratto di collaborazione coordinata e continuativa
- Geospatial Data Analysis (Prof. Giovanna Venuti – Politecnico di Milano)
Academic Year 2020-2021 – Contratto di collaborazione coordinata e continuativa
- Earth Observation (Prof. Giovanna Venuti - Politecnico di Milano)
Academic Year 2019-2020 – Contratto di collaborazione coordinata e continuativa
- Trattamento delle osservazioni (Prof. Barbara Betti - Politecnico di Milano)
Academic Year 2019-2020 – Contratto di collaborazione coordinata e continuativa
- Geomatica (Prof. Augusto Mazzoni - Sapienza, University of Rome)
Academic Year 2018-2019 - Voluntary cooperation
- Geomatics and ITS (Prof. Augusto Mazzoni - Sapienza, University of Rome)
Academic Year 2018-2019 - Voluntary cooperation
Academic Year 2017-2018 - Voluntary cooperation
- Sistemi Informativi Territoriali e Geomatica (Prof. Mattia Crespi - Sapienza, University of Rome)
Academic Year 2018-2019 - Voluntary cooperation
Academic Year 2017-2018 - Voluntary cooperation
Academic Year 2016-2017 - Voluntary cooperation
Academic Year 2015-2016 - Voluntary cooperation
- Topografia (Positioning) (Prof. Mattia Crespi - Sapienza, University of Rome)
Academic Year 2018-2019 - Voluntary cooperation
Academic Year 2017-2018 - Voluntary cooperation
Academic Year 2016-2017 - Voluntary cooperation
Academic Year 2015-2016 - Voluntary cooperation

Support for the following thesis activities:

- *Co-advisor as "expert of the subject" of one master's degree thesis in Management and Valorization of the territory:*
"A complete FOS approach for indoor crowdsourced mapping: Test studies on Humanities Faculty of Sapienza University of Rome" (2019)
- *Co-advisor of four bachelor's degree thesis in Environmental Engineering:*
"Un approccio free ed open source per la mappatura indoor della Facoltà di Ingegneria della Sapienza" (2019)
"Una piattaforma open source per la navigazione indoor alla Facoltà di Ingegneria Civile e Industriale dell'Università di Roma La Sapienza" (2018)
"Una piattaforma open source per la navigazione indoor alla Facoltà di Ingegneria Civile e Industriale dell'Università di Roma La Sapienza: prime sperimentazioni e analisi dei risultati" (2018)
"Misura dei movimenti degli alberi attraverso osservazioni GNSS (Global Navigation Satellite System)" (2017)
- *Co-advisor of three master's degree thesis in Environmental Engineering:*
"Falling Trees Phenomenon Monitoring: An Innovative GNSS-Based Approach and a First Study on Wind-Induced Effects" (2019)
"GNSS Atmosphere Smart Modelling in Local Dense Networks with Low-Cost Hardware and Free and Open-Source Software" (2018)
"Crowdsourced mapping of disused buildings in Tor Sapienza: opportunities, preliminary steps and problems" (2018)

Tutor of four "Alternanza Scuola Lavoro" Projects (Referees Prof. Mattia Crespi and Prof. Carlo Cellamare - Sapienza, University of Rome) - Years: 2016 – 2017 – 2018

Lecturer at School Lab POLIMI - Workshop "Satellite based meteorology", during the Living Planet Symposium (2019) – European Space Agency

Author/Co-author of orals and poster presentations

Rewards:

- “Best Video Contribution Award for the combination between scientific innovation and dissemination research using multimedia tools” at The Green Conservation Of Cultural Heritage 2023 - 5th International Conference - National Museum Of Art Timisoara, Romania Movie: “Climate Change Impacts On Cultural Heritage: The Case Study Of The Trabocchi Coast (Italy)”
- “Best Video Contribution Award for the combination between scientific innovation and dissemination research using multimedia tools” at YOCOCU 2022 Christmas Edition (2022) – Museum of Communication, Frankfurt/Main, Germany Movie: “Exposure of UNESCO sites to extreme meteorological events: case study of Alberobello (Southern Italy)”
- Grand finalist of the Farming By Satellite Special Africa Prize 2020 *with BAOBAB team*. Prize initiators and partners: the European GNSS Agency, European Environment Agency and CLAAS
- “Best Presentation Award - Remote Sensing: Troposphere and Weather” at Scientific and Fundamental Aspects of GNSS 7th International Colloquium (2019), ETH Zürich - Zurich, Switzerland, Organised by: European Space Agency (ESA) & ETH Zürich
- Co-financing by the Kyoto University to participate at the “2nd GEOlab-RISH Joint workshop on - GNSS and SAR Technologies for Atmospheric Sensing - The 331st Symposium on Humanosphere Science” (2017), Kihada Hall, Obaku Plaza, Uji Campus, Kyoto University, Uji, Kyoto, Japan

List:

- 2025 EGU25, April 27-May 2, 2025 Vienna, Austria
 PICO: “Cyanobacteria and climate change: Insights from Atmospheric and Heritage Studies.” (Mascitelli, A., Chiacchiarretta, P., Prestileo, F., Stella, E. M., Aruffo, E., Simeone, P., Lanuti, P., Di Lodovico, S., Di Giulio, M., Guarnieri, S., Del Boccio, P., Cufaro, M.C., Gatta, V., Anaclerio, F., Dietrich, S & Di Carlo, P.)
 Poster: “Impact of the atmospheric composition and climate changes on the evolution of diabetes in Central Italy: the Vitality project.” (Di Carlo, P., Aruffo, E., Mascitelli, A., & Chiacchiarretta, P.)
 Poster: “A worldwide study to estimate the relative risk to develop type 2 Diabetes Mellitus because of atmospheric pollutants exposure.” (Aruffo, E., Mascitelli, A., Chiacchiarretta, P., Carrieri, F., Baldassarre, M. P. A., Formoso, G., Consoli, A., & Di Carlo, P.)
 Poster: “Characterization of low-cost sensors via simultaneous field measurements: a case study.” (Gentile, L., Aruffo, E., Mascitelli, A., Chiacchieretta, P., & Di Carlo, P.)
 Poster: “Inland Ozone Production Due to Nitrogen Dioxide Transport Downwind of a Coastal Urban Area: A Neural Network Assessment.” (Chiacchiarretta, P., Aruffo, E., Mascitelli, A., Colangeli, C., Palermi, S., Bianco, S., & Di Carlo, P.)
- 2024 EMS Annual Meeting 2024, September 2-6, 2024 Barcellona, Spain

Poster: "Multi-sensor approach for analysis of extreme weather events affecting areas of cultural interest" (Mascitelli, A., Prestileo, F., Federico, S., Torcasio, R. C., Di Carlo, P., Dietrich, S.)

- 2024 18th PLINIUS Conference on Mediterranean Risks, 30 September - 3 October 2024, Chania, Greece
Poster: "Effect of cut-off processing parameter on GNSS-ZTD representativeness in extreme weather events" (Alessandra Mascitelli, Rosa Claudia Torcasio, Eleonora Aruffo, Piero Chiacchiaretta, Eugenio Realini, Andrea Gatti, Sante Laviola, Stefano Dietrich, Piero Di Carlo, Stefano Federico)
Poster: "A model of vernacular architecture resilience to impact of climate change and social challenges in the Mediterranean basin: the case study of the Trabocchi Coast (Abruzzo Region, Italy)" (Fernanda Prestileo, Alessandra Mascitelli, Eleonora Maria Stella, Luisa Irazú López Campos, Stefano Federico, Rosa Claudia Torcasio, Eleonora Aruffo, Piero Chiacchiaretta, Piero Di Carlo, Stefano Dietrich)
- 2024 Vitality Day, May 13, 2024 Chieti, Italy
Poster: "Impact of atmospheric temperature variations on glycaemic patterns of children and young adult with type 1 diabetes" (Mascitelli, A., Chiacchiaretta, P., Tumini, S., Aruffo, E., Di Carlo, P.)
- 2024 EGU24, April 14-19, 2024 Vienna, Austria
Poster: "Boreal forest fire monitoring by GNSS, referring to the 2011 BORTAS experiment" (Mascitelli, A., Aruffo, E., Chiacchiaretta, P., Realini, E., Gatti, A. Fumagalli, A., Di Carlo, P.)
- 2024 The 4th IAFOR International Conference on Arts & Humanities in Hawaii (IICAH2024), January 03-07, 2024 The Hawai'i Convention Center, Honolulu, Hawaii, United States
Pre-recorded Oral: "Extreme weather impacts on the "Trabocchi": a case study of Cultural Heritage and Climate Change in the Italian Adriatic Coast" (Mascitelli, A., Prestileo, F., Stella, E.M., Aruffo, E., López Campos, L. I., Federico, S., Torcasio, R. C., Di Carlo, P. and Dietrich, S.)
- 2023 Green Conservation of Cultural Heritage 2023 - 5th International Conference, 4-5 May 2023 National Museum Of Art Timisoara (Romania)
Oral: "Climate change impacts on cultural Heritage: the case study of the Trabocchi Coast (Italy)" (Mascitelli, A., Prestileo, F., Stella, E. M., Aruffo, E., López Campos, L. I., Federico, S., Torcasio, R. C., Corsi, A., Di Carlo, P., Dietrich, S.)

Best Video Contribution Award

- 2022 YOCOCU 2022 Christmas Edition
Oral: "Exposure of UNESCO sites to extreme meteorological events: case study of Alberobello (Southern Italy)" (Prestileo, F., Mascitelli, A., Federico, S., Torcasio, R.C., Sonnessa, A., Biondi, R. and Dietrich, S.)

Best Video Contribution Award

- 2022 17th Plinius Conference on Mediterranean Risks
Oral: "GNSS-PWV time evolution in extreme weather events: comparison

analysis with lightning and radar-VIL." (Mascitelli, A., Federico, S., Vulpiani, G., Crespi, M., & Dietrich, S.)

Oral: "Safeguarding of the Villa Romana del Casale UNESCO site from severe weather events: the case study of Apollo medicane occurred in October 2021" (Prestileo, E., Mascitelli, A., Meli, G., Petracca, M., Giorgi, C., Melfi, D., Puca, S. and Dietrich, S.)

- 2022 EUMETSAT Conference

Oral: "Multi-sensors data analysis of intense weather events - Como Lake case study, July 2021" (A. Mascitelli, M. Petracca, S. Puca, E. Realini, A. Gatti, R. Biondi, A. Anesiadou, L. Brocca, G. Vulpiani, R.C. Torcasio, S. Federico, A. Oriente and S. Dietrich)

Oral: "Global detection of natural hazards and decrease of anthropogenic emission from aviation in the context of the SACS/ALARM early warning system" (H. Brenot, N. Theys, E. de Donder, M. Van Roozendael, L. Clarisse, P. de Buyl, N. Clerbaux, S. Dietmüller, S. Matthes, V. Grewe, S. Chkeir, A. Anesiadou, A. Mascitelli, R. Biondi, I. Mahorčič, T. Bolić, R. Bhattacharya, T. Winter, A. Durant, K. Sievers and M. Soler)

Poster: "On the definition of the role of GNSS technique in severe weather events prediction: analysis of the occurrences in Italy in October 2019 by lightning and GNSS data assimilation with WRF model" (R.C. Torcasio, S. Federico, F. E. Toffah, A. Mascitelli, E. Realini, S. Puca, S. Dietrich)

- 2022 IGARSS

Oral: "Multivariate multi-step convection nowcasting with deep neural networks: the Novara case study" (R. Biondi, S. Chkeir, A. Anesiadou, A. Mascitelli, E. Realini, L. Nisi and C. Cimorelli)

- 2022 EGU

Oral: "Decrease of anthropogenic emission from aviation and detection of natural hazards with potential application in geosciences using satellite sensors, ground-based networks and model forecasts in the context of the SACS/ALARM early warning system" (H. Brenot, N. Theys, E. de Donder, L. Clarisse, P. de Buyl, N. Clerbaux, S. Dietmüller, S. Matthes, V. Grewe, S. Chkeir, A. Mascitelli, A. Anesiadou, R. Biondi, I. Mahorčič, T. Bolić, R. Bhattacharya, T. Winter, A. Durant, M. Van Roozendael and M. Soler)

- 2022. 4° CONGRESSO NAZIONALE AISAM.

Poster: "Benchmark data analysis of the intense weather event around Como Lake occurred in July 2021" (A. Mascitelli, M. Petracca, E. Realini, L. Brocca, G. Vulpiani, P. Giordano, A. Oriente, S. Dietrich, S. Puca)

Poster: "Use of a H SAF products selection for precipitation analysis: validation, inter-comparison and case studies" (M. Petracca, A. Mascitelli, J. Kanak, L. Okon, M. Dioszeghy, P. Baguis, E. Artinyan, B. Lapeta, A. Öztopal, P. Krahe, F. Porcù, S. Puca)

Poster: "Impatto dell'assimilazione di riflettività radar e fulmini con tecnica 3D-Var nel modello WRF sulla previsione a breve termine della precipitazione" (R. C. Torcasio, S. Federico, A. Mascitelli, M. Petracca, S. Puca, G. Vulpiani, M. Lagasio, A. Parodi, S. Dietrich)

- 2021. ISPRS2021. Online conference.

"A novel procedure for generation of sar derived ztd maps for weather prediction: application to South Africa use case," (Molinari, M. E., Manzoni,

M., Petrushevsky, N., Guarneri, A. M., Venuti, G., Meroni, A. N., Mascitelli, A., Parodi, A.)

- 04/2021. EGU2021. Online conference.
“Towards the integration of GNSS, SAR and NWP for heavy rainfall forecast in sub-Saharan Africa within the TWIGA project” (Niyonkuru Meroni, A., Mascitelli, A., Barindelli, S., Petrushevsky, N., Manzoni, M., Molinari, M. E., Gatti, A., Tagliaferro, G., Lagasio, M., Parodi, A., Realini, E., Monti Guarneri, A. V. & Venuti, G.).
- 30/11/2020. Farming by Satellite Prize award ceremony 2020. Online.
“BAOBAB Bridging Agriculture and satellite OBServations for African farming Business” (Mascitelli, A., Meroni, A. N., Tagliaferro, G., Letaru, L.).
- 05/2020. EGU2020. Online conference.
“TWIGA project activities for the enhancement of heavy rainfall predictions in Africa: low cost GNSS network deployment and NWP model parameterization” (Mascitelli, A., Niyonkuru Meroni, A., Barindelli, S., Manzoni, M., Tagliaferro, G., Gatti, A., Realini, E., Venuti, G. & Monti Guarneri, A.).
- 05/2020. EGU2020. Online conference.
“From InSAR derived relative tropospheric Slant Total Delay maps to absolute Zenith Total Delay maps: comparisons between tropospheric delay products to define a strategy for meteorological applications” (Barindelli, S., Gatti, A., Lagasio, M., Manzoni, M., Mascitelli, A., Monti Guarneri, A., Montrasio, M., Realini, E., Tagliaferro, G., Venuti, G.)
- 10/10/2019 - 11/10/2019. R3 in GEOMATICS: Research, Results and Review - International Workshop in memory of Prof. Raffaele Santamaria. Università degli Studi di Napoli “Parthenope”.
Oral: “Precipitable Water Vapor content from GNSS/GPS: validation against radiometric retrievals and atmospheric sounding over a test area in Milan” (A. Mascitelli, S. Barindelli, E. Realini, L. Luini, G. Venuti)
Poster: “Statistical comparison between different approaches to GNSS single frequency data processing for meteorological applications” (A. Mascitelli, A. Gatti, E. Realini)
- 24/09/2019 - 26/09/2019. Secondo Congresso Nazionale dell'Associazione Italiana di Scienze dell'Atmosfera e Meteorologia (AISAM). Università degli Studi di Napoli “Parthenope”.
Oral: “Dati di fulminazione di alta qualità: la rete LINET in Italia” (S. Dietrich, L. Paziienza, L.P. D'Adderio, A. Mascitelli, A.C. Marra, S. Federico, R.C. Torcasio, C. Transerici, M. Crespi)
Poster: “Assimilazione dati nel modello RAMS@ISAC per la previsione a brevissimo termine per un evento in Sardegna.” (S. Federico, R.C. Torcasio, E. Avolio, L.P. D'Adderio, A. Mascitelli, A.C. Marra, C. Transerici, G. Panegrossi, M. Crespi, G. Vulpiani, S. Dietrich)

- 4/09/2019 - 6/09/2019. Scientific and Fundamental Aspects of GNSS 7th International Colloquium. ETH Zürich - Zurich, Switzerland Organised by: European Space Agency (ESA) & ETH Zürich.
 Oral: "3D-Var Assimilation of GNSS Single Frequency Receiver data in RAMS NWP model: Impact Studies over Italy" (A. Mascitelli, S. Federico, R.C. Torcasio, S. Dietrich)

Best Presentation Award - Remote Sensing: Troposphere and Weather
- 8/07/2019 - 18/07/2019. 27th IUGG General Assembly. Palais des Congrès in Montréal, Québec, Canada.
 Oral: "Observation of extreme events by GNSS Single Frequency Receivers. Case study: Rome October 2018" (A. Mascitelli, M.Crespi, A.Mazzoni, S. Federico, S. Dietrich)
- 19/06/2019 - 21/06/2019. 64° Convegno Nazionale SIFET - Geomatica In Condizioni Complesse. Università luav di Venezia.
 Poster: "Applicazioni GNSS alla meteorologia" (Venuti, G., Barindelli, S., Meroni, A., Mascitelli, A., Montrasio, M., Realini, E., Tagliaferro, G., Gatti, A., Parodi, A., Pulvirenti, L., Lagasio, M., Monti Guarnieri, A., Manzoni, M., Biondi, R., Solazzo, E.)
- 17/06/2019 - 18/06/2019. 2GG Due Giorni di Geomatica 2019. Università luav di Venezia.
 Oral: "New applications and opportunities of GNSS Meteorology" (A. Mascitelli, M. Crespi, A. Mazzoni, S. Federico, S. Dietrich)
- 13/05/2019 - 17/05/2019. Living Planet Symposium 2019. Milano - European Space Agency.
 Poster: "3D-Var Assimilation of GNSS Single Frequency Receiver data in RAMS NWP model: Impact Studies over Italy" (A. Mascitelli, S. Federico, E. Avolio, M. Fortunato, A. Mazzoni, E. Realini, R. C. Torcasio, M. Crespi and S.Dietrich)

Poster: "Observation of extreme events by GNSS Single Frequency Receivers. Case study: Rome October, 2018" (A. Mascitelli, S. Federico, A. Mazzoni, A. Tiberia, M. Crespi and S. Dietrich)
- 12/07/2018 - 13/07/2018. 2GG Due Giorni di Geomatica 2018. Università Politecnica delle Marche.
 Oral: "New applications and opportunities of GNSS Meteorology" (A. Mascitelli, M. Crespi, A.Mazzoni, S. Dietrich)
- 18/06/2018 - 22/06/2018. IX Hotine-Marussi Symposium. Intercommission Committee on Theory (ICCT) of the International Association of Geodesy (IAG), Sapienza University of Rome.
 Oral: "3D-Var Assimilation of GNSS Single Frequency Receiver data in RAMS NWP model: Impact Studies over Italy" (A. Mascitelli, S. Federico, E. Avolio, A. Mazzoni, M. Crespi, S. Dietrich)

- 29/05/2018 - 2/06/2018. 11° HyMeX Workshop. Institute of Atmospheric Sciences and Climate (ISAC-CNR) in collaboration with the University of Salento and the Euro-Mediterranean Center on Climate Change (CMCC).
Oral: "3D-Var Assimilation of GPS data in RAMS NWP model: Impact Studies over Italy" (A. Mascitelli, S. Federico, E. Avolio, A. Mazzoni, M. Crespi, S. Dietrich)
- 08/04/2018 - 13/04/2018. EGU 2018. Austria Center Vienna (ACV).
Oral: "A New Ground Based Augmentation Strategy for Centimetric PPP Solution with GNSS Single Frequency Receiver" (M. Fortunato, A. Mascitelli, A. Mazzoni, M. Crespi)
Poster: "Assimilation of GPS-ZTD in meteorological models by 3D-Var" (A. Mascitelli, S. Federico, E. Avolio, M. Crespi, S. Dietrich)
Poster: "Monitoring of mechanical stability of arboreal individuals by GNSS low cost sensors" (A. Mascitelli, I. Petenko, B. De Cinti, A. Mazzoni, S. Federico, P. Bombi, V. G. Muzzini, S. Dietrich)
Poster: "Use of GNSS/GPS for calibrating ESR/SKYNET and AERONET Sun-sky radiometers: a multi-instruments approach to retrieve the precipitable water vapor content performing measurements comparability" (M. Campanelli, A. Mascitelli, P. Sanò, H. Diémoz, V. Estellés, S. Federico, A. M. Iannarelli, F. Fratarcangeli, A. Mazzoni, E. Realini, M. Crespi, O. Bock, J. A. Martinez-Lozano, S. Dietrich)
- 20/02/2018. FOSS4G-IT 2018. Sapienza, University of Rome.
Oral: "VGI for supporting indoor navigation in strategic buildings, infrastructures and GNSS denied environments: a preliminary feasibility demonstration" (A. Mascitelli, M. Ravanelli)
- 24/11/2017. Attività di controllo sull'uso dei prodotti fitosanitari. Polo Museale Santo Spirito, Lanciano (CH).
Oral: "Agricoltura di precisione: stato dell'arte e potenzialità" (A. Mascitelli, M. Crespi)
- 09/07/2017 – 11/07/2017. 2GG Due Giorni di Geomatica 2017. Politecnico di Torino.
Oral: "New applications and opportunities of GNSS Meteorology" (A. Mascitelli, M. Crespi, A. Mazzoni, S. Dietrich)
- 06/03/2017 – 09/03/2017. 2nd GEOlab-RISH Joint workshop on - GNSS and SAR Technologies for Atmospheric Sensing - The 331st Symposium on Humanosphere Science. Kihada Hall, Obaku Plaza, Uji Campus, Kyoto University, Uji, Kyoto, Japan.
Oral: "Potential of GNSS in relation to photometers" (A. Mascitelli, M. Campanelli, M. Crespi, S. Dietrich, A. Mazzoni, F. Fratarcangeli, E. Realini, F. Brunier, M. Morelli)
Participation in the Conference co-financed by the University of Kyoto

- 08/02/2017 – 10/02/2017. FOSS4G-IT 2017. Università di Genova.
Poster: “L’espansione insediativa nell’area metropolitana romana. Un processo da governare” (A. Mascitelli, C. Cellamare)
- 11/10/2016 – 13/10/2016. GEOlab-RISH Seminar - Seminar on application of GNSS, SAR and NWP models for atmosphere studies. Como Campus, Politecnico di Milano.
Oral: “New applications and opportunities of GNSS Meteorology” (A. Mascitelli, M. Crespi, S. Dietrich, A. Mazzoni, E. Realini)
- 29/08/2016 – 31/08/2016. GNSS4SWEC Summer School. Helmholtz-Centre Potsdam - GFZ German Research Centre for Geosciences Telegrafenberg, Building H, Lecture Hall.
Poster: “New applications and opportunities of GNSS Meteorology” (A. Mascitelli, M. Crespi, S. Dietrich, E. Realini)

THIRD MISSION

- 2026 Incarico di divulgatore scientifico. Prestazione occasionale presso Istituto Comprensivo "Don Milani" - Via Napoli, 83, 66034 Lanciano CH nell'ambito del progetto Next land. Marzo 2026. Theme: Climate change. Action field: life-long learning and open education
- 2025 Relatore all'evento 'Tematiche emergenti in tema di rischio cardiovascolare in eta' pediatrica: diabete, tecnologie, scuola, ipercolesterolemia, prevenzione e territorio'. Hotel Villa Maria - Contrada Pretaro, Francavilla Al Mare CH, Italia. 29/11/2025.
Oral: "Controllo metabolico e fenomeni climatici"
Action field: life-long learning and open education
- 2024 Relatore all'evento 'Tematiche emergenti in tema di rischio cardiovascolare in eta' pediatrica: il diabete le tecnologie e la scuola, l'ipercolesterolemia, la prevenzione e il territorio'. Largo Gardone Riviera, 65126 Pescara PE, Italia. 23/11/2024.
Oral: "Controllo metabolico e fenomeni climatici"
Action field: life-long learning and open education
- 2023 Relatore all'evento 'Gestione sostenibile delle risorse ambientali attività di controllo e prospettive future' – Acque destinate al consumo umano: D.L. 23 febbraio 2023 n. 18 aspetti innovativi e prospettive. Uso sostenibile dei prodotti fitosanitari per garantire la sicurezza degli alimenti e dell'ambiente di vita. Attività di controllo e limitazioni d'uso. 18-19 May 2023 Polo Museale S. Spirito Lanciano (CH - Italy)
Oral: "Satellite applications for environmental monitoring" (A. Mascitelli and S. Dietrich)
Action field: life-long learning and open education
- 2023 Participatory Workshop: "Conservare il mio Patrimonio". November 18, 2023 Sala Polivalente Comune di San Vito Chietino (CH, Italy)
Scientific committee: S. Dietrich, L. I. López Campos, A. Mascitelli, F. Prestileo e E. M. Stella
Action field: Innovative tools to support Open Science

MEMBERSHIP/PROJECT PROPOSAL

Associate as a research affiliate at the Institute of Atmospheric and Climate Sciences (ISAC), on activities of the project: Analysis of multi-sensor weather-climate data collected during extreme precipitation events.

Association duration: May 29th 2023 – March 31st 2026

Atmospheric modeling responsible within the "Telemedicine and environmental health" WP. The spoke "One health: telemedicine and environment," coordinated by the Ateneo "G. D'Annunzio" of Chieti-Pescara, is a partner of HUB Vitality, a project of the National Recovery and Resilience Plan.

January 10th 2024 – In course

Member of the IAG (International Association of Geodesy) ICCT (Inter Commission Committee on Theory) Joint Study Group JSG T.36: Dense troposphere and ionosphere sounding

http://icct.kma.zcu.cz/index.php?title=JSG_T.36

Member of three CNR-ISAC groups:

- "Lightning"
- "Numerical modeling and data assimilation"
- "Protezione del patrimonio culturale a rischio per cambiamenti climatici ed eventi estremi naturali ed antropogenici"

Member of the Local Organizing Committee of 17th Marcel Grossmann Meeting (7 - 12 July 2024 - 'Gabriele d'Annunzio' University, ICRANet and Aurum).

Member of the Local Organizing Committee of 17th Plinius Conference on Mediterranean Risks (18 - 21 October 2022).

Member of two WP groups in the framework of a collaboration between the Department of Civil Protection and the Institute of Atmospheric Science and Climate of the National Research Council (WP3 - H SAF [Task 3.1 and 3.2] and WP5 - Very Short-term Forecast con assimilazione dati [Task 5.2]).

PI of two "Projects to Start Research - Type 1" for which approval of funding was obtained:

- *"Evaluation of the impact of the use of data from GNSS receivers on the results of the application of the numerical model of weather forecast RAMS on Lazio region"* (2018)
- *"Una piattaforma Open Source per la navigazione indoor alla Facoltà di Ingegneria Civile e Industriale dell'Università di Roma Sapienza"* (2017)

MEETINGS, SEMINARS AND COURSES

PERSONAL SKILLS

NATIVE LANGUAGE ITALIAN

Participation in more than thirty meetings/seminars/workshops.

OTHER LANGUAGE	
	ENGLISH
Reading	FCE CERTIFICATE
Writing	FCE CERTIFICATE
Speaking	FCE CERTIFICATE
	FRENCH
Reading	ENTRY LEVEL
Writing	ENTRY LEVEL
Speaking	ENTRY LEVEL
	SPANISH
Reading	ENTRY LEVEL
Writing	ENTRY LEVEL
Speaking	ENTRY LEVEL
COMMUNICATION SKILLS	Ability to work in groups gained in multiple situations where collaboration between different people was essential. Participation in project activities and practices with teamwork in implementation, management and coordination.
ORGANISATIONAL / MANAGERIAL SKILLS	Organisational skills acquired during work experiences and during the voluntary work carried out in the Pioneer Group of the Italian Red Cross at the headquarters of the "Floraspe Renzetti" Hospital in Lanciano (2005-2010).
JOB-RELATED SKILLS	Knowledge of Microsoft applications and Office. Software: QGIS, Adobe Photoshop, Bernese, goGPS, RTKLIB, AutoCAD, McIDAS-V, SNAP. Use of MATLAB and Python. Use of LaTeX. Use of iMovie. Use of OSM and its Editor [JOSM].
OTHER SKILLS	Attitude to creative writing has matured over the years and culminated in the publication of a novel on April 5th, 2014. Communication skills acquired during activities carried out in different environments, sometimes multicultural. Management, organisational and interpersonal skills acquired during the activities in international research projects.
DRIVING LICENCE	B Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali); Chieti – March 20th, 2026
	Signature Alessandra Mascitelli <i>Alessandra Mascitelli</i>