

PERSONAL INFORMATION

Mario Marcello Miglietta



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Date of birth 28 September 1970 | Nationality Italian

Current Position CNR-ISAC Research Director

RESEARCH INTERESTS

Summary

My research activity focuses on severe weather events, mainly analyzed through numerical simulations that consider the influence of climate change on their occurrence and severity. I have published 132 scientific articles in journals listed in Scopus on different topics of meteorology and climatology, mainly orographic precipitation, tropical-like cyclones in the Mediterranean (Medicanes), supercells and tornadoes. I am leader of the CNR-ISAC macro-area “Observations and Models for Meteorology and Climate” (about 65 people). I am currently co-chair of the orographic convection WG in the international TEAMx programme (<http://www.teamx-programme.org>), contact point for Italy in the TIM programme (<https://tim-campaign.eu>), member of the Advisory board of the European Severe Storm Laboratory (ESSL) from 14/10/2024 (4-year mandate)

Bibliometric Indicators

SCOPUS: h-index 34, citations 3230, documents 132
Google Scholar: h-index 40, citations 4405, i10-index 93
Web-of-Science: h-index 33, citations 3020, documents 128

WORK EXPERIENCE

01/10/2019-30/11/2023 &
02/09/2024-present

CNR Research Director

National Research Council of Italy - Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy

01/12/2023-01/09/2024

Full Professor

University of Bari “Aldo Moro”, Department of Earth and Geoenvironmental Sciences

01/01/2024-01/09/2024

CNR-ISAC Collaboration Associate

National Research Council Institute of Atmospheric Sciences and Climate (CNR-ISAC), Padua, Italy

05/2022-05/2025

Adjunct Professor

College of Agriculture and Natural Resources
University of Tehran (Iran)

5-10/9/2021 & 7-12/9/2024

Visiting Scientist (Medcyclones COST Action short term mobility)

University of Castilla-La Mancha (UCLM)
Toledo (Spain)

Academic year 2018, 2020, 2021,
2023, 2025

Adjunct Professor

University of Salento, Lecce, Italy
Professor in the 2nd level “Master in Physical Meteorology and Oceanography”:
Courses of Synoptic and Mesoscale meteorology (4 CFU; 2018, 2020, 2021, 2023), Dynamic Meteorology (4 CFU; 2018, 2020, 2021, 2023), Weather Forecasting (2 CFU; 2018); Meteorology (6 CFU; 2025).

11/2014-11/2016
01/2017-09/2017

Visiting Scientist

Joint Research Center, Institute for Energy and Transport, Renewable Energy Unit, Ispra, Italy
Assessment of the complementarity of wind and photovoltaic energy over Europe

04/2011-12/2011

Consultant

Joint Research Center, Institute for Environmental Sustainability, Air Quality Unit, Ispra, Italy
WRF model validation over Europe

15/11/2005-20/12/2005

Visiting Scientist

Universidade Luterana do Brasil, Porto Alegre, Brasil
WRF model operational implementation

03/2003-12/2018
(18 visits for a total of 23 months)

Visiting Scientist

NCAR, Boulder, Colorado
Collaboration with Richard Rotunno in several projects
(CNR short term mobility 2003, 2004, 2018)

01/03/2004-30/06/2004

Post-doc researcher

Atmosphere and Ocean Research Institute, University of Tokyo, Japan
WRF model implementation for the simulation of orographic rainbands

01/01/2007-30/09/2019
27/12/2001-31/12/2006

CNR Researcher

CNR Technologist

National Research Council of Italy - Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy
(from 10/2010 to 10/2012 at CNR-ISE, Verbania Pallanza)

12/1997-06/1998
12/1998-08/1999

External collaborator

FISBAT-CNR, Bologna, Italy
- Numerical simulations of moist flows over orographic obstacles
- Evaluation of error growth and predictability of precipitation in numerical models

01/2001-12/2001

Officer in the Italian Air Force Weather Service

National Center for Aeronautic Meteorology and Climatology, Aeroporto "Mario De Bernardi", Pratica di Mare, Rome, Italy
Aviation weather forecast; Validation of the High-Resolution Model (HRM) over Italy

01/1994-01/2001

Officer in the Italian Air Force Weather Service

61° Stormo, Galatina Airport, Lecce, Italy
Airdrome weather nowcasts and forecasts

EDUCATION AND TRAINING

01/11/1996-10/12/1999

PhD in Physics

University of Lecce, Italy
Thesis: Numerical simulation of moist flows over orography with meteorological limited area models

04/01/1994-10/04/1994

Specialization Course in Meteorology and Atmospheric Physics

Italian Air Force Training Center, Pratica di Mare, Italy
Training for weather forecaster (equivalent to Weather Meteorological Organization level II)

11/1988-30/07/1993

Master degree in Physics

University of Lecce, Italy
Complementary courses of Theoretical Physics; Thesis: Application of quantum groups to physics;
Grade: 110/110 with laude

09/1983-07/1988

Scientific High School

Liceo Scientifico C. De Giorgi, Lecce, Italy

High School; Final grade: 60/60

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	B1-B2	B1-B2	B1	B1	B1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

INSTITUTIONAL & OTHER RESPONSIBILITIES

May 2009-January 2016 & September 2019- Nov 2023 Member of the Managing Committee of the Institute

2011-present National representative in the steering committee of the International Conference on Alpine Meteorology (ICAM)

April 2019-Nov 2023 & February 2025- present Coordinator of the CNR-ISAC macro-area "Observations and Models for Meteorology and Climate" (65 people)

January 2023-November 2023 Responsible of CNR-ISAC, Padua unit; member of Padua CNR Research Area Committee

01/01/2019-31/12/2026 (2 4-year mandates) National Representative in the International Association of Meteorology and Atmospheric Science (IAMAS)
Member of the Italian Commission for the participation of the CNR in the International Union of Geodesy (IUGG)

11/12/2018-31/12/2022 Security referent and coordinator – CNR-ISAC, Padua Unit

13/07/2023-present Member of International Commission on Dynamical Meteorology, IAMAS/IUGG

12/06/2024-05/02/2025 Referent of the working group "Extremes", CNR-ISAC (35 people)

02/10/2024-present Member of the Steering Committee of the Plinius-EGU Conference

14/10/2024-present Member of the Advisory board of the European Severe Storm Laboratory (ESSL)

05/02/2025-present Referent of the CNR-ISAC macro-area "Observations and Models for Meteorology and Climate" (65 people)

21/02/2025-present Member of the CNR-ISAC Scientific Commission to support the procedures for the Italian Evaluation of the Quality of Research (VQR 20-24)

NATIONAL AND INTERNATIONAL GRANTS & AGREEMENTS
(as principal investigator/ WP leader)

01/01/2004-31/12/2006 Responsible for the activities of dynamic meteorology for ISAC-CNR in the project "RISK AWARE", European program

28/5/2004-22/1/2008	INTERREG IIIB - area CADSES, coordinator of activity 1.07 "Selection of meteorological models and methodologies for different scenarios"; total project funding: 2,8 M€ (co-funding: 1,4 M€); funding for ISAC-CNR unit: 198 k€;
2005-2006	Responsible of Task 3 (meteorological modeling and data assimilation) in the MIUR Project n. 245 "Development of an Integrated system using Numerical models, Instrumentation and Advanced Technologies for the Study and Forecast of the Transport and Diffusion of pollutants in the atmosphere", funded by the Italian Ministry of Education, University and Research (MIUR), decree of the General Director n. 1406, 28/5/2004; funding for the whole project: 375 k€; funding for Task 3: 31 k€; P.I. of the project "Forecast of meteorological fields in the Otranto Strait" within the Executive Program of implementation of the cooperation program in science and technology between the Government of the Italian Republic and the Government of the Republic of Albania (duration: 24 months); funds: 2 scientific visits;
01/06/2006-30/11/2008	P.I. for ISAC-CNR of the Project "RISKMED", INTERREG III B ARCHIMED region; total funds: 993 k€; funding for ISAC-CNR: 300 k€; member of the Scientific Committee of the project;
20/10/2006-31/12/2010	P.I. for CNR-ISAC of the Project "CLIMESCO" funded by the Italian Integrated Special Fund for Research as part of the Strategic Program "Sustainable development and climate change" and of the Project Objective "Simulations, diagnosis and predictions of climate change" (lead agency: CRA - Agronomic Research Institute); total funding: 2,3 M€, funding for ISAC-CNR: 239 k€; Head of research line 2 – Climate Change;
09/2007-01/2008	P.I. in the research contract n. 1400005194 "Implementing a multi-model system for forecasting meteorological fields - in particular wind on a wind farm site" funded by ENEL SpA, funding: 30 k€;
4/4/2008-11/10/2010	Scientific Leader of WP4 "Limited Area Meteorological Modeling" in the Strategic Project PS080 "Advanced nowcasting using grid and gis tools" as part of the scientific research program of Apulia region; total funding: 990 k€, funding for WP4: 155 k€; member of the Scientific and Technical Committee and of the Committee for the training of young researchers;
2013-2014	Responsible for the Italian activities in the project HyMeX-COOP, ENVI-Med 2012, as part of the activities of Mistrals metaprogram funded by the Ministry of Foreign and European Affairs of the French government; total funding of the project: 20k€; funds for ISAC-CNR: 2 scientific visits;
1/6/2016-31/12/2017	P.I. of the Italy-Japan bilateral cooperation project (CNR-JSPS) "Comparison of tornadic supercells and their environmental conditions in Japan and Italy"; total funding for ISAC-CNR: 16 k€;
01/11/2016-31/10/2019	P.I. for ISAC-CNR of the CEASELESS project, Horizon 2020, Call H2020-EO-2016, EO-3-2016 Topic: Evolution of Copernicus services, Type of action: Research and Innovation action; total funding for the project: 1,99 M€; funding for ISAC-CNR: 65 k€;
22/07/2013-21/07/2015	P.I. of the Agreement between ARPA-Puglia and ISAC-CNR for cooperation concerning weather activities;
26/01/2016-25/01/2021	P.I. of the Agreement between ARPA Friuli Venezia Giulia and ISAC-CNR for cooperation concerning weather activities;
13/06/2016-12/06/2019	P.I. of the Agreement with TerrSafeLab Enterprise (Higher Education and Applied Research in Territory Safety Innovation Lab) for cooperation concerning weather activities in the field of nowcasting;
25/01/2017-06/08/2018 & 29/09/2021-28/09/2027	P.I. of the Operating Agreement for Teaching and Research Activities between ISAC-CNR and Università del Salento;
17/10/2019-13/03/2020	P.I. for the Italian part of the research project entitled "High-resolution numerical simulations of tornadoes for using artificial intelligence", funded by Meteorological Research Institute (MRI), Japan Meteorological Agency for developing a "Detection method of tornado-spawning mesocyclones using a machine learning technique", Public/Private R&D Investment Strategic Expansion Program (PRISM) sponsored by Cabinet Office of Japan; funding: 7.4 k€;
25/01/2021-26/10/2023	P.I. for the Technical-scientific Collaboration Agreement with the Tide Forecast and Early Warning Center (CPSM) – Civil Protection - Municipality of Venice for the implementation of an experimental data assimilation system for the analysis and weather forecasting for time horizons up to 6-12 hours: MODULE 1: period of activity: 10/01/2021-09/01/2022, funding: 35 k€. MODULE 2: period of activity: 10/01/2022-09/02/2023, funding: 35 k€. MODULE 3: period of activity: 27/10/2022-26/10/2023, funding: 35 k€.
01/09/2023-31/08/2025	Unit Leader for the project "Thunderstorm outflows measurement and modeling for strong-WIND nowcast and RISK mitigation (-WIND RISK)", PRIN 2022, funding for ISAC 109.1 K€
14/03/2024-14/03/2026	WG Leader "Earth Observations as a cornerstone to the understanding and prediction of tropical-like cyclone risk in the Mediterranean (MEDICANES)" In response to: ESA CfP/5-50033/23/I-KE call, funding for ISAC 190 k€
03/05/2024-02/05/2029	P.I. of the Operating Agreement for Teaching and Research Activities between ISAC-CNR and Università di Bari;

TEACHING ACTIVITY

28-31 May 2001	Lessons during the training course in Environmental Meteorology, at IIA-CNR, Montelibretti (Roma), topic: "3D diagnostic and prognostic meteorological models" (2 hours)
2005,2006,2008	Lessons in courses at University of Salento (2005, 2006, 2008) (10,10, 16 hours)
2006 & 2014	Teacher in training courses for the personnel of ARPA Puglia (12 and 94 hours)
2007	Lessons in courses at University of Ferrara (2007) (10 hours)
25-09-2013/12-06-2014	Responsible and organizer of the "personnel training course" for ARPA-Puglia (120 hours)
2014	Teacher in a training course for the personnel of OSMER Friuli Venezia Giulia (1.5 hours)
2014-2015	Teacher in a training course for the personnel of Centro Funzionale Protezione Civile Valle d'Aosta (35 hours)
2015	Teacher in a training course for the personnel of Centro Funzionale Protezione Civile Friuli Venezia Giulia (16 hours)
2015-2024	Lecturer in the training schools CVC "Convective and Volcanic Clouds detection, monitoring and modeling"

	(topics: Orographic convection and Medicanes), Castiglione del Lago, Italy, 2015, Tarquinia, Italy, 2016 and 2017, Nicolosi, Italy, 2018, 2019, 2022, 2023, 2024, 2025 (the last six as keynote lecturer); online, 2021; (4, 6, 6, 10, 6, 4, 4, 2, 2, 1.5, 4 hours)
2016-2023	Lessons in courses at University of Bologna (2016, 2017, 2018, 2019, 2023) (4, 4, 10, 4, 2 hours)
2017	Lecturer in the training school "EASI- Exploring Air-Sea interaction via airborne measurements", Shannon (Ireland) (3 hours)
2018, 2020, 2021, 2023, 2025	Adjunct Professor, University of Salento, Lecce (Italy), Professor in Master (2nd level) in Physical Meteorology and Oceanography. Courses: - Synoptic and Mesoscale meteorology (32 hours; 4CFU, 2018, 2020, 2021, 2023) - Dynamic Meteorology (32 hours; 4 CFU, 2018, 2020, 2021, 2023) - Weather Forecasting (16 hours; 2 CFU; 2018) - Meteorology; modules of Synoptic and Mesoscale meteorology and Dynamic Meteorology (48 hours; 6 CFU; 2025)
13-16/12/2021	Lecturer in a training course for forecasters of ARPA Liguria on "Thermodynamics and atmospheric instability", 12 hours in two editions (24 hours in total), Meteo-Hydrological Center, ARPAL, Genoa
2022	Lecturer in the 8 th CNR-ISAC summer school; lessons on "Extratropical cyclones and Medicanes" (3 hours); June 20-24, 2022, Castro Marina (Lecce), Italy; http://ss2022.le.isac.cnr.it - Lecturer in the 1 st MedCyclones WORKSHOP and TRAINING SCHOOL; lesson on "Medicanes" (1 hour), June 27 – July 2, 2022, Athens, Greece Lecturer in the 9 th CNR-ISAC summer school; lessons on "The challenge of precipitation prediction" (3 hours); July 3-7, 2022, Castro Marina (Lecce), Italy; http://ss2023.le.isac.cnr.it
2023	Member of the Scientific Committee of the 1st course of operational weather forecasting co-organized by AISAM-ItaliaMeteo and Lecturer (1 hour lecture on orographic precipitation in Italy), Bologna, 23 October 2023
2024	Training session on Medicanes detection (3 hours), Tropicana workshop, Institute Pascal, Orsay, France, 5 June 2024 Lecturer on topic: "Medicanes" (2 hours; 17 July 2024), 3 rd MedCyclones WORKSHOP and TRAINING SCHOOL, Frascati, Italy, 15-19 July 2024 As Full Professor, University of Bari, Courses: "Synoptic and Mesoscale Meteorology" (Master Degree: LM74 e LM79), 4 CFU – 32 hours "Extreme Weather Events"; PhD course in "EARTH PROCESSES AND MANAGEMENT OF RESOURCES AND RISKS FOR A RESILIENT SOCIETY AND TERRITORY"; 2 CFU – 16 hours
2025	4 hour course, The weather forecast explained to non-meteorological technicians, www.moho.work and Venezia Mestre, 21-02-2025
2026	Lecturer for 5-6 hours, Centro Internazionale di Scienze Meccaniche (CISM), Udine, June – July 2026.
2002-present	-Supervisor of 9 intern, 2 bachelor, 19 master degree, 8 PhD students. Supervisor of 5 research fellows, 2 researchers (temporary position); host of 11 foreign researchers (from Spain, Japan, Austria, USA) in scientific visits

ORGANIZATION

2005-present	Member of the scientific/organizing committee in 11 summer schools organized/co-organized by ISAC-CNR
2007-2023	Convener of sessions at the European Meteorological Society (EMS) annual meeting
29/5-2/6/2018	Member of the scientific/organizing committee in the 11 th HyMeX workshop, Lecce, Italy
3/9/2019	Member of the scientific committee of the Richard Rotunno Symposium, Riva del Garda, Trento, Italy
27/09/2022	Member of the Organizing Committee of the 1 st Forecasters–Researchers Round, Bologna, Italy
18-21/10/2022	Member of the scientific committee of 17 th Plinius Conference, Frascati, Italy
08-12/05/2023	Member of the Scientific Program Committee, 11th European Severe Storms Conference, Bucharest, Romania
19-23/06/2023	Member of the Program Committee of ICAM-2023, St. Gallen, Switzerland
26/09/2023	Member of the Organizing Committee of the 2 nd Forecasters–Researchers Round table, Turin, Italy
5-9/2/2024	Member of the Scientific and Organizing Committee of the 5 th AISAM Annual meeting, Lecce
9-10/5/2024	Member of the Scientific Committee of the international conference on "Environment, Climate and Earth Sciences", ECES2024, Dep. Physics, University of Tirana, Albania
8-10/7/2024	Member of the Scientific Committee of the Workshop "Toward a better understanding of extreme events in Med Basin: combining numerical models and remote sensing", Castro Marina (Lecce), Italy
19/09/2024	Member of the Organizing Committee of the 2 nd Forecasters–Researchers Round table, Turin, Italy
25-26/9/2024	Member of the Organizing Committee and moderator of a session in the Workshop "Potentially dangerous natural events: models, uncertainties, communication", organized by the CNR – IUGG Commission, Rome
30/09-03/10/2024	Member of the Scientific Committee and Co-convener of the Session PL1, 18 th Plinius Conference on Mediterranean Risks, Chania, Greece
13-19/10/2024	Member of the Scientific Committee of the workshop "Linking weather and climate dynamics across scales", Nanjing University International Conference Center, China.
27-30/04/2025	Scientific Programme Organizing Committee of the first AfMS-WMO Scientific Conference, Addis Ababa, Ethiopia
20-25/07/2025	Scientific Committee of the joint IAMAS – IACS – IAPSO Assembly and convener of the session M09 (Mesoscale Meteorology), BACO-2025, Busan, South Korea

FURTHER INFORMATION

Awards

- 2000: FY1999 post-doctoral fellowship for North-American and European Researchers from JSPS (Japan Society for the Promotion of Science) (24 months); unused scholarship;
- 2004: JSPS short term fellowship (4-month stay in Japan)
- 2014 & 2017: Outstanding contribution in reviewing for Atmospheric Research
- 2017: The paper "Effect of a positive sea surface temperature anomaly on a Mediterranean tornadic supercell" was one of the 100 most read Earth sciences papers in Scientific Reports in 2017
- 2019: Award MeteoClima FVG of the Unione Meteorologica Friuli Venezia Giulia (member of the European Meteorological Society) for the best paper on the meteorology of the region in the period 2015-2019
- 2023: **Best Talk Jury Award ECSS2023**
- 2023: winner of the competition for Full Professor in Oceanography and Atmospheric Physics, University of Bari, Procedure Code 2023 - PO – 1240
- 2023: winner of the competition for Full Professor in Oceanography and Atmospheric Physics, University of Milan, Procedure Code 2023 - PO – 5304 (withdrawal having won the competition for P.O. in Bari)
- 2024: Selected by ScholarGPS among the Top Scholars (top 0.5%) in meteorology worldwide in the last 5 years (2018-2022) (182nd place in the ranking)

Evaluation of research results

- Reviewer for international journals (40 journals, 152 papers)
- Scientific expert for the Italian Ministry of Education and Research for the evaluation and monitoring activities of the Industrial Research and Experimental Development project AEROMAT (2019-2023)
- Member of the Review panel of the Collaborative Research Centre/Transregio 165 "Waves to Weather" of the Deutsche Forschungsgemeinschaft (2019 and 2024)
- Member of the review panel for the evaluation of the proposals submitted in response to the call Horizon 2020-MSCA-IF-2019
- Member in 12 evaluation committee board for PhD candidates, 2 evaluation boards for Associate Professor and 2 for Assistant Professor
- Participation in the Evaluation of the Italian Research 2011-2014
- Atmosphere 2022 Young Investigator Award - Committee Member
- Reviewer of project proposals for: the Czech Science Foundation; the Madsen Fund Council of the Royal Society of New Zealand; the US National Science Foundation; the United States-Israel Binational Science Foundation, CONICYT-Chile; Italian Ministry of Education and Research (MIUR); Austrian Science Fund (twice); NRD-Hungary; Israeli Ministry of Innovation, Science and Technology; Deutsche Forschungsgemeinschaft (3 times); Swiss National Science Foundation; Cyprus Research and Innovation Foundation (RIF)
- Editorial activity: Associate Editor for the **Quarterly Journal of the Royal Meteorological Society**; Associate Editor for **Atmospheric Research**; Review Editor for **Frontiers in Atmospheric Sciences**; Advisory Board member for **Atmosphere**; Guest Editor for **Advances in Science and Research** (over); Member of the Editorial Board of **Bulletin of Atmospheric Science and Technology** (over); Member of the Editorial Board and Section (Meteorology) Board of **Atmosphere** (over); Member of the Editorial Board of **Advances in Meteorology** (over); Guest Editor for a Special Issue of **Meteorologische Zeitschrift** (over); Member of the Editorial Board of **The Scientific World Journal** (over); Member of the Editorial Board of **Dataset Papers in Geosciences** (over);

Additional activities

- Advisory board of the Project "Satellite-borne and IN-situ Observations to Predict the Initiation of Convection for ATM (SINOPTICA)", H2020-SESAR-2019-2, 01/06/2020-30/11/2022
- International review team, Royal Meteorological Society's project to establish a learning portal for African Meteorological Societies (AfMS), 01/08/2022 – 30/11/2022
- 20 seminars to general public (3 participations to Science Festivals, lesson in schools), preparation of brochures and videos, several interviews in TV and radio channels, newspapers and magazines (9 radio interviews, 15 TV interviews, 5 of which were live).
- Consultant in civil and criminal trials for the Court of Justice in Lecce and for ILVA company (twice)

PERSONAL SKILLS

Communication skills

- Strong-to-very strong communication skills (certified by EU Competency Passport)
- Natural attitude to work as a team member

Organisational / managerial skills

- Online Course "Relational Leadership: Transform Conflicts into Opportunities", teacher Dr. Giancarlo Bertolo, Udemy, 2024-2025
- Strong resilience (certified by EU Competency Passport)
- Prioritizing
- Leadership

Job-related skills

- Experience in numerical meteorological modelling, in handling large datasets, in operational forecasting
- Experience in project management

ATTACHMENT

- List of the publications in the main research fields

Personal data 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

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONI

(Art. 46 del D.P.R. 28 dicembre 2000 n. 445)

DICHIARAZIONE SOSTITUTIVA DELL'ATTO DI NOTORIETA'

(Art. 47 del D.P.R. 28 dicembre 2000, n. 445)

Il sottoscritto Mario Miglietta nato a Lecce prov. Le il 28/09/1970 e residente in Vicenza via G.B. Imperiali 11, a conoscenza di quanto prescritto dall'art. 76 del D.P.R. 28 dicembre 2000, n. 445, sulla responsabilità penale cui può andare incontro in caso di falsità in atti e di dichiarazioni mendaci, ai sensi e per gli effetti del citato D.P.R. n. 445 /2000 e sotto la propria personale responsabilità:

1 March 2025

List of the main publications

- De Martin F., A. Manzato, N. Carlon, M. Setvak, M. M. Miglietta, Lessons from a dynamic and statistical analysis of giant hail environments in NE Italy, Q. J. Roy. Meteor. Soc., 2025
- Giove S., Cintolesi C., Miglietta M. M., Rotunno R., Structure and dynamics of axisymmetric tornado-like vortices simulated with a semi-slip lower boundary, J. Atmos. Sci., 2025
- Rizza U., F. M. Grasso, M. Morichetti, A. Tiesi, E. Avolio, F. de Tomasi, M. M. Miglietta, Evaluating the direct radiative forcing of a giant Saharan dust storm, Atmos. Res., 107875, 2024, <https://doi.org/10.1016/j.atmosres.2024.107875>
- Carniel C. E., A. Ricchi, R. Ferretti, G. Curci, M. M. Miglietta, M. Reale, P. Serafini, E. D. Wellmeyer, S. Davolio, D. Zardi and L. Kantha, A high-resolution climatological study of Explosive Cyclones in the Mediterranean region: frequency, intensity and synoptic drivers, QJRM, 150, 5561-5582, 2024, <http://dx.doi.org/10.1002/qj.4889>
- Avolio, E., Fanelli, C., Pisano, A., and Miglietta, M. M.: Unveiling the relationship between Mediterranean tropical-like cyclones and rising Sea Surface Temperature. Geophysical Research Letters, 51, e2024GL109921, 2024, <https://doi.org/10.1029/2024GL109921>
- Pantillon, F., Davolio, S., Avolio, E., Calvo-Sancho, C., Carrió, D. S., Dafis, S., Gentile, E. S., Gonzalez-Aleman, J. J., Gray, S., Miglietta, M. M., Patlakas, P., Pytharoulis, I., Ricard, D., Ricchi, A., Sanchez, C., and Flaounas, E.: The crucial representation of deep convection for the cyclogenesis of Medicanes, Weather Clim. Dynam., 5, 1187-1205, <https://doi.org/10.5194/wcd-5-1187-2024>, 2024.
- Kushabaha A., G. Scardino, G. Sabato, Miglietta M. M., Flaounas E., Monforte P., Marsico A., De Santis V., A.M. Borzi, G. Scicchitano, ARCHIMEDE - An Innovative Web-GIS Platform for the Study of Medicanes, Remote Sensing, 2024, 16, 2552, <https://doi.org/10.3390/rs16142552> (journal cover of issue 14)
- Burlando M., M. M. Miglietta, E. Avolio, R. Bechini, F. Cassola, F. De Martin, M. Lagasio, M. Milelli, A. Parodi, D. Romanic, The WIND RISK Project: nowcast and simulation of thunderstorm outflows, Bulletin of Atmospheric Science and Technology, Bull. of Atmos. Sci. & Technol. 5, 15, 2024; <https://doi.org/10.1007/s42865-024-00079-6>
- De Martin F., Davolio S., Miglietta M. M., A conceptual model for the development of tornadoes in a region with complex orography, Mon. Wea. Rev., 152, 2024, 1357-1377, <https://doi.org/10.1175/MWR-D-23-0222.1>
- Ferrari F., A. Mazzino, F. Cassola, M. M. Miglietta, U. Rizza, The role of atmospheric aerosols on severe convective precipitation in a Mediterranean coastal region, Atmos. Res., 305, 2024, 107421, <https://doi.org/10.1016/j.atmosres.2024.107421>
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