

## Dr. Edmondo Di Giuseppe

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CONTACT INFORMATION	<p>National Research Council, Institute for Biometeorology CNR-IBIMET Via dei Taurini, 19 Room 115 Rome, 00185 Italy Work: +39-0649937689 E-mail: <a href="mailto:e.digiuseppe@ibimet.cnr.it">e.digiuseppe@ibimet.cnr.it</a> ORCID identifier: 0000-0002-6443-9106 Personal web page: <a href="http://edidigi.github.io">edidigi.github.io</a></p>
RESEARCH INTERESTS	<p><b>Statistical climatology: clustering, extreme values, geostatistics, space-time models and Bayesian inference.</b></p>
CURRENT POSITION	<p><b>Researcher</b> <span style="float: right;"><b>Nov 2018 to present</b></span> National Research Council, Institute for Biometeorology CNR-IBIMET</p> <p><b>MED-GOLD</b></p> <ul style="list-style-type: none"><li>• Turning climate-related information into added value for traditional MEDiterranean Grape, OLive and Durum wheat food systems - PI: Dr Massimiliano Pasqui</li></ul>
PREVIOUS POSITIONS	<p><b>Postdoctoral Research Assistant</b> <span style="float: right;"><b>Jan 2015 to Aug 2018</b></span> National Research Council, Institute for Biometeorology CNR-IBIMET</p> <p><b>VOPA</b></p> <ul style="list-style-type: none"><li>• Volatility of agricultural commodity prices - PI: Dr. Franco Miglietta.</li><li>• Study of the effects of <i>El Niño</i> on wheat worldwide production; Modeling of seasonal forecasts; Analysis of heat waves and their connection to large scale drivers.</li></ul> <p><b>Research Assistant</b> <span style="float: right;"><b>Nov 2003 to Dec 2014</b></span> Agricultural Research Council, Research unit for Climatology and Meteorology applied to Agriculture CREA-CMA</p> <p><b>AGROSCENARI</b></p> <ul style="list-style-type: none"><li>• Adaptation scenarios of Italian agriculture to climate change - PI: Dr. Stanislao Esposito.</li><li>• Functional clustering of temperature and precipitation; Hierarchical Bayesian approach for predicting rainfall fields from lightning records.</li></ul> <p><b>CLIMANIMAL</b></p> <ul style="list-style-type: none"><li>• Heat warning model for dairy cattle - PI: Dr. Stanislao Esposito.</li><li>• Statistical analysis of heat waves (temperature and air humidity); Logistic regression models for determining the relation between heat waves and dairy cattle mortality.</li></ul> <p><b>TEMPIO</b></p> <ul style="list-style-type: none"><li>• Seasonal forecast model for temperature and rainfall anomaly determination - PI: Dr. Stanislao Esposito.</li><li>• Canonical Correlation Analysis for evaluating the relation between heat wave/dry spells and weather types.</li></ul> <p><b>CLIMAGRI</b></p> <ul style="list-style-type: none"><li>• Climate Change and Agriculture - PI: Dr. Domenico Vento.</li><li>• Statistical analysis of rainfall, hydrometric levels, flow and dry/wet spells; Time series analysis; Models for return probability of rainfall extreme events (Generalized Extreme Value and Generalized Pareto distributions).</li></ul> <p><b>Research Assistant</b> <span style="float: right;"><b>Mar to Oct 2003</b></span> Polytechnic University of Marche, Faculty of Economics Giorgio Fua'</p> <p><b>COFIN 2001</b></p> <ul style="list-style-type: none"><li>• Complex dynamics and financial fragility in an agent-based model - PI: Professor Mauro Gallegati</li></ul>

## EDUCATION

**Ph.D., Methodological Statistics**

December, 13 2013

Sapienza University of Rome, Roma, Italy

- Thesis: *Statistical methods for the analysis of climatic phenomena*
- Advisor: Professor Giovanna Jona Lasinio
- Area of Study: Statistical climatology

**M.S., Economic Statistics**

April, 8 2002

Sapienza University of Rome, Roma, Italy

- Thesis Topic: *Evaluation of agent actions at local scale*
- Adviser: Professor Sergio Bruno
- Area of Study: Microeconomy

REFEREED  
JOURNAL  
PUBLICATIONS

- [1] Magno R., De Filippis T., **Di Giuseppe E.**, Pasqui M., Rocchi L., and Gozzini B., 2018: "Semi-Automatic Operational Service for Drought Monitoring and Forecasting in the Tuscany Region". *Geosciences*, 8(2), 49. doi:[10.3390/geosciences8020049](https://doi.org/10.3390/geosciences8020049)
- [2] **Di Giuseppe E.**, Jona Lasinio G., Esposito S., Pasqui M., 2013: Functional clustering for Italian climate zones identification. *Theoretical and Applied Climatology*, 114(1-2): 39–54. doi:[10.1007/s00704-012-0801-0](https://doi.org/10.1007/s00704-012-0801-0)
- [3] Mucciardi M., Bertuccelli P., **Di Giuseppe E.** 2012: Local Spatial Modeling of Meteorological Variables. *Advances in Mathematical and Computational Methods*, 2(3): 1–14, ISSN 2160-0635, [10.5729/amcm.vol2.issue3.1](https://doi.org/10.5729/amcm.vol2.issue3.1)

## BOOK CHAPTERS

- [4] **Di Giuseppe E.**, Jona Lasinio G., Pasqui M. and Esposito S., 2014: Predicting Rainfall Fields from Lightning Records: A Hierarchical Bayesian Approach. In: Lanzarone E., Ieva F.: *The Contribution of Young Researchers to Bayesian Statistics*, Springer Proceedings in Mathematics & Statistics, Springer International Publishing, Vol. 63, pp. 95–99. doi:[http://dx.doi.org/10.1007/978-3-319-02084-6\\_19](http://dx.doi.org/10.1007/978-3-319-02084-6_19)

CONFERENCE  
PUBLICATIONS

- [1] E. Rapisardi, M. Pasqui, V. Tarchiani, E. Di Giuseppe, and M. Baldi, 2018: Training on Seasonal Climate Forecast: enabling a more informed climate related risk management and services, *EGU General Assembly 2018*, [EGU2018-12398](https://doi.org/10.5194/EGU2018-12398)
- [2] R. Magno, M. Pasqui and **E. Di Giuseppe**, 2016: Analysis of changes in drought occurrence over the Mediterranean Basin using multiple time scales SPI index, *EMS Annual Meeting Abstracts*, Vol. 13, [EMS2016-425](https://doi.org/10.5194/EGU2016-425), 16th EMS/11th ECAC.
- [3] M. Pasqui and **E. Di Giuseppe**, 2016: Large scale atmospheric drivers for heat waves in the Mediterranean Basin, *Geophysical Research Abstracts*, Vol. 18, [EGU2016-14124-1](https://doi.org/10.5194/EGU2016-14124-1), EGU General Assembly 2016.
- [4] Magno R., Angeli L., Chiesi M., De Filippis T., **Di Giuseppe E.**, Pasqui M., Rocchi L., Zabini F., 2015: Implementation of a national drought monitoring and forecasting system, Conference: *Earth Observation for Water Cycle Science 2015*, ESA-ESRIN Frascati, Rome.
- [5] B. Parisse, **E. Di Giuseppe**, M. Scaglione, S. Esposito, 2014: Spatio-temporal distribution of calibrated Hargreaves-Samani coefficients in Italy, *Proceedings of XVII AIAM Conference: Role of agro-meteorology in the new agricultural policies*, Roma, 10–12 Giugno.
- [6] Pasqui M., Melani S., Pasi F., Gozzini B., Gaetani M., **Di Giuseppe E.**, Levizzani V., 2013: Retrospective analysis of synoptic favourable conditions for deep convective events in the Mediterranean Sea, *European Conference on Severe Storms*, Helsinki; 06/2013
- [7] M. Baldi, S. Esposito, M. Pasqui, **E. Di Giuseppe**, F. Guarnieri, 2010: An operational seasonal forecast service for agriculture in Italy: the Tempio project, *Abstracts of the Technical Conference on Changing Climate and Demands for Climate Services for Sustainable Development*, WMO/TD-No. 1521, Antalya, Turkey, 16–18 February.

- [8] S. Giavante, **E. Di Giuseppe**, S. Esposito, 2009: Flat steps models for the analysis of temperature and precipitation italian time series from 1961 to 2007, *Statistical Methods for the analysis of large data-sets - Book of short papers*, 427–430.
- [9] M. Pasqui, **E. Di Giuseppe**, S. Quaresima, F. Guarnieri, S. Giavante, S. Esposito, 2008: An atmospheric regime characterization of monthly seasonal forecast in Italy based on weather type classification, *Advances in Weather and Circulation Type Classifications & Applications (COST 733 Mid-term Conference)*, 22–25 October 2008, Krakow, Poland, pag. 69.
- [10] Baldi M., Esposito S., **Di Giuseppe E.**, Pasqui M., Maracchi G., Vento D., 2008: Seasonal forecasting climatic anomalies for agriculture in Italy: the TEMPIO Project, *EMS Annual Meeting Abstracts–European Conference on Applied Climatology (ECAC)*, Amsterdam, Netherlands 29 September–3 October, EMS2008-A-00519 European Meteorological Society.
- [11] F. Guarnieri, **E. Di Giuseppe**, B. Gozzini, F. Meneguzzo, R. Magno, G. Maracchi, M. Pasqui, 2007: Analysis of historical series of hourly pluviometric data in Central Italy, *7th EMS Annual Meeting/8th ECAM Abstracts*, Vol. 4, [EMS2007-A-00320](#).
- [12] **Di Giuseppe E.**, Esposito S., Vento D., 2007: A comparison of models in return levels calculating, *IUGG–XXIV International Union of Geodesy and Geophysics*, Perugia, Italy 2-13 July, [IAHS/HW2003 4570](#), pag. 626, ISBN: 978-88-95852-25-4.
- [13] F. Guarnieri, **E. Di Giuseppe**, B. Gozzini, F. Meneguzzo, R. Magno, G. Maracchi, M. Pasqui, 2007: Analysis of historical series of hourly pluviometric data in Central Italy, *7th EMS Annual Meeting / 8th ECAM Abstracts*, Vol. 4, [EMS2007-A-00320](#).
- [14] Mangianti De Angelis F., Epifani C., Epifani R., **Di Giuseppe E.**, 2005: A climatic analysis of some Italian tourist sites. A future scenario for tourism, *WMO Technical Conference on Climate as a Resource*, Beijing, China, 1–2 November.
- [15] Ferrari R., Pasqui M., Bottai L., Esposito S., **Di Giuseppe E.**, 2005: Assessment of soil erosion estimate based on a high temporal resolution rainfall dataset, *EMS 5th Annual Meeting Abstracts*, [EMS05-A-00285](#) European Meteorological Society.
- [16] C. Epifani, **E. Di Giuseppe**, S. Esposito, D. Vento, 2005: Extreme events of precipitation over Italy and their probability of occurrence, *EMS 5th Annual Meeting Abstracts*, EMS05-A-00311 European Meteorological Society.
- [17] **E. Di Giuseppe**, D. Vento, C. Epifani, S. Esposito, 2005: Analysis of dry and wet spells from 1870 to 2000 in four Italian sites, *EGU European Geosciences Union, Geophysical Research Abstracts*, Vol. VII , 07712
- [18] Vento D., Esposito S., Epifani C., **Di Giuseppe E.**, 2004: Analysis of Italian precipitation regimes with reference to extreme events, *EMS 4th Annual Meeting Abstracts–ECAC-5th Conference on Applied Climatology*, Vol. 1, 00249, EMS European Meteorological Society.
- [19] **Di Giuseppe E.**, Vento D., Esposito S., Epifani C., 2004: Analysis of heavy rainfall in very high temporal resolution in Italy during last 10 years, *ICCP-14th International Conference on Clouds and Precipitation Proceedings*, Vol. I, pagg. 285–288.
- [20] **E. Di Giuseppe**, G. Giulioni and M. Pasqui, 2017: Climate Effects on Wheat Markets: an Agent-based Approach, 1st Hamburg Workshop on Agent-based Modeling of Environmental Challenges and Climate Policy.
- [21] **Di Giuseppe E.**, Jona Lasinio G., Pasqui M. and Esposito S., 2013: Predicting Rainfall Fields from Lightning Records: A Hierarchical Bayesian Approach, *First Bayesian Young Statisticians Meeting-BAYSM 2013*, Milan, Italy, June 5-6, 2013.

CONFERENCE  
TALKS

	<p>[22] <b>Di Giuseppe E.</b>, Jona Lasinio G., Pasqui M., Esposito S., 2012: Point Processes for modeling lightning data, <i>IX Conference on Geostatistics for Environmental Applications geoENV2012</i>, Valencia, Spain, September 19–21, 2012, Editor: J. Jaime Gómez-Hernández, ISBN: 978-84-8363-924-5.</p> <p>[23] <b>Di Giuseppe E.</b>, Jona Lasinio G., Pasqui M., Esposito S., 2010: Functional clustering of Temperature and Precipitation data for Italian climate zones determination, <i>Gfkl-Cladag Joint Meeting 2010</i>, Book of Abstract 8-10 September 2010, Firenze, Italy, pp. 151–152.</p> <p>[24] <b>Di Giuseppe E.</b>, Jona Lasinio G., Esposito S. and Pasqui M., 2010: A functional data approach for climate zones identification, <i>11th International Meeting on Statistical Climatology Program&amp;Abstracts</i>, pp. 140–141, 12–16 July 2010, Edinburgh, Scotland.</p>
CONFERENCE POSTERS	<p>[25] V. Tarchiani, E. Rapisardi, M. Pasqui, P. Parrish, <b>E. Di Giuseppe</b>, and M. Baldi, 2017: Learning and teaching about seasonal climate forecasts: a Mediterranean educational experience toward operational climate services. In: <i>EMS Annual Meeting: European Conference for Applied Meteorology and Climatology 2017</i>, EMS2017-93.</p>
TEACHING EXPERIENCE	<p><b>WMO Regional Training Center (RTC) - Italy</b></p> <ul style="list-style-type: none"> <li>• Instructor for Training Course 2015, 2016, 2017, and 2018.</li> <li>• Responsible for R practical training.</li> <li>• Authored material at <a href="http://edidigi.github.io/code.html">http://edidigi.github.io/code.html</a>.</li> </ul>
PROFESSIONAL SERVICE	<p><b>Referee Service</b></p> <ul style="list-style-type: none"> <li>• <i>DCAI 2015: 12<sup>th</sup> International Symposium on Distributed Computing and Artificial Intelligence</i></li> </ul>
SOFTWARE SKILLS	<p>Computer Programming:</p> <ul style="list-style-type: none"> <li>• UNIX shell scripting</li> </ul> <p>Numerical Analysis:</p> <ul style="list-style-type: none"> <li>• R, CDO Operators</li> </ul> <p>Version Control:</p> <ul style="list-style-type: none"> <li>• Git, Svn</li> </ul> <p>Desktop Editing and Productivity Software:</p> <ul style="list-style-type: none"> <li>• Vim</li> <li>• T<sub>E</sub>X (L<sup>A</sup>T<sub>E</sub>X, B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>), Markdown</li> <li>• Microsoft Office, OpenOffice, LibreOffice, Google Docs</li> <li>• ArcGis, GRASS</li> </ul> <p>Operating Systems:</p> <ul style="list-style-type: none"> <li>• Apple OS X, Linux, Microsoft Windows</li> </ul>
REFERENCES AVAILABLE TO CONTACT	<p><b>Dr. Massimiliano Pasqui</b> (e-mail: <a href="mailto:m.pasqui@ibimet.cnr.it">m.pasqui@ibimet.cnr.it</a>; phone: +39-0649937615)</p> <ul style="list-style-type: none"> <li>• Permanent Researcher, National Research Council, Institute for Biometeorology,</li> <li>◊ National Research Council, Institute for Biometeorology, Via dei Taurini, 19 Rome, 00185 Italy</li> <li>★ <i>Dr. Pasqui was my postdoctoral supervisor.</i></li> </ul>

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- ★ *Prof. Jona Lasinio was my PhD Thesis Advisor.*

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- Permanent Resercher, Research Council for Agriculture-CREA
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- ★ *Dr. Esposito was my tutor during the experience in AGROSCENARI, TEMPIO, CLIMANIMAL and CLIMAGRI projects.*

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- ★ *Prof. Giulioni was my tutor during the experience in COFIN project.*

MORE  
INFORMATION

Publications in Italian language and auxiliary documents can be found at  
ResearchGate, Mendeley and Google Scholar.

DATE

August 9, 2018