Paolo Ghinassi

Curriculum Vitae

Personal information

First name	Paolo
Last name	Ghinassi
Place and date of birth	Ravenna (RA), Italy, 05 September 1991
Nationality	Italian

Employment

January 2026 - present	**Postdoctoral Researcher, Institute for Earth System Predictions**, *Climate Variability and Prediction Division*, Euro-Mediterranean Center on Climate Change (CMCC), Bologna.
	Researcher in the Decadal Prediction unit, with a focus on extratropical large scale circulation and air-sea interactions.
April 2024 - December 2025	**Postdoctoral Researcher, Climate Dynamics**, *CNR-ISAC, Bologna*.
	ENCIRCLE project, PI Dr. Giuseppe Zappa. Analysis of extreme precipitation events associated with Mediterranean Cyclones.
January 2023 - April 2024	**Postdoctoral Researcher, Climate Dynamics**, *CNR-ISAC, Bologna*.
	DestinE, PI Dr. Paolo Davini. Analysis of Tropical Cyclones in the Destination Earth climate simulations.
September 2019 - December 2022	**Postdoctoral Researcher, Climate Dynamics**, *CNR-ISAC, Bologna*.
	PRIMAVERA project, PI Dr. Susanna Corti. Analysis of Rossby wave packets and Weather Regimes in high resolution climate simulations.

Education

October 2015 - July 2019	**PhD, Theoretical Meteorology**, *Institute for Atmospheric Physics, Johannes Gutenberg University (Mainz, Germany)*, final grade: Magna cum Laude.
	Thesis title: "Investigating the dynamics of Rossby wave packets using Local Finite Amplitude Wave Activity" within the Waves to Weather transregional collaborative center. Supervisors Prof. Volkmar Wirth (JGU Mainz), Prof. George Craig (LMU Munich).
September 2014 - September 2015	**Master Degree "Atmosphere, Ocean and Climate"**, *University of Reading (Reading, UK)*, final grade: Distinction.
	Master Thesis entitled "Predator Prey Model for Storm Track Variability in a Simplified Climate Model". Supervisors Prof. Maarten Ambaum, Dr. Ben Harvey (University of Reading) and Dr. Lenka Novak (Caltech, Pasadena, CA).
September 2010 - March 2014	**Bachelor Degree "Atmospheric Physics and Meteorology"**, *University of Bologna (Bologna, Italy)*, final grade 106/110.
	Bachelor Thesis entitled "Error Growth in Weather Forecasting". Supervisors Prof. Francesco Mainardi (University of Bologna) and Dr. Anna Trevisan (ISAC-CNR, Bologna).
July 2010	**Diploma di Maturità Scientifica**, *Liceo Scientifico "A.Oriani" (Ravenna, Italy)*, final grade 87/100.

Publications

F. Doblas Reyes et al., The Destination Earth digital twin for climate change adaptation, 2025, *submitted to Geoscientific Model Development*.

Iacomino, C, Pascale, S., Zappa, G., Iotti, M. Grazzini, F., **Ghinassi, P.**, Portal, A., 2025, A classification of high-risk atmospheric circulation patterns for Italian precipitation extremes, *International Journal of Climatology*, https://doi.org/10.1002/joc.70118.

Nurisso, M., Davini, P., Von Hardenberg, J., Nazarova, N., Caprioli, S., Ghosh, S., **Ghinassi, P.** et al.,2025, DestinE-Climate-DT/AQUA: v0.13.2 (v0.13.2). Zenodo. doi:10.5281/zenodo.14906075.

Ghinassi, P., Fabiano, F. and Corti, S., 2022: How well is Rossby wave activity represented in the PRIMAVERA coupled simulations?, *Weather Clim. Dynam.*, doi:10.5194/wcd-2021-39.

Fabiano, F., Meccia, V., Davini, P., **Ghinassi, P.**, and Corti, S., 2021: A regime view of future atmospheric circulation changes in Northern mid-latitudes, *Weather Clim. Dynam.*, doi:10.5194/wcd-2020-37.

Ghinassi, P., Baumgart, M., Teubler, F., Riemer, M. and Wirth, V., 2020: A budget equation for the amplitude of Rossby wave packets based on finite amplitude local wave activity, *J. Atmos. Sci.*, doi:10.1175/JAS-D-19-0149.1.

Baumgart, M., **Ghinassi, P.**, Selz, T. Craig, G., Wirth, V. and Riemer, M., 2019: Quantitative view on the processes governing the error growth from the convective to the planetary scale in simulations with a stochastic convection scheme, *Mon. Wea. Rev.*, doi:10.1175/MWR-D-18-0292.1.

Ghinassi, P., G. Fragkoulidis, and V. Wirth, 2018: Local Finite Amplitude Wave Activity as a diagnostic for Rossby wave packets, *Mon. Wea. Rev.*, doi:10.1175/MWR-D-18-0068.1.

Professional experiences

May 2021	**European Centre for Medium-Range Weather Forecasts (ECMWF) training course**, *A hands-on introduction to Numerical Weather Prediction Models: Understanding and Experimenting (online course).*
September 2018	**Workshop on machine learning and neural networks**, *basic workshop about theory and applications (with Python) (Garmisch-Partenkirchen, Germany).*
September - October 2017	**Visiting student (Dynamical processes group, University of Reading, UK)**, *Testing different wave activity formulations in the barotropic model, hosted by Dr. Ben Harvey (University of Reading).*
October 2016	**Forecaster**, *member of the forecasting team during the NAWDEX field campaign (Keflavik, Iceland).*
May 2016	**ECMWF training course**, *Predictability and ensemble forecast systems (Reading, UK).*
May 2015	**UK Met Office forecasting course**, *completed a one-week introductory course about forecasting taught by UK Met Office instructors. The experience was part of the MSc at University of Reading (Reading, UK).*

Languages

Italian	Mother tongue.
English	Professional proficiency.
German	Basic knowledge.

Computer skills

Operating systems	Good knowledge of Windows's OS and related OFFICE packages; good knowledge of Linux environment (Ubuntu, Debian).
Programming	Advanced knowledge of Python. Basic knowledge of C++ and fortran90; habitual user of LaTeX writing language.

Driving Licence

European Driving Licence, category A, B.

Sailing Licence

Italian Sailing Licence (Patente Nautica cat. A, senza limiti dalla costa).

Bologna, 26/10/2025

Paolo Ghinassi