

PERSONAL INFORMATION

Andrea Borrelli

📍 Via F.lli Dandolo, 1 40131 Bologna

☎ +390510301624 📠 +3934479595786

✉ andrea.borrelli@cmcc.it

Sex male | Date of birth 17/01/1980 | Nationality Italian

WORK EXPERIENCE

November 2007-today

Research Associate

Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC)

- development, implementation, analysis of seasonal and climate models
- Business or sector Research Consortium

September 2007-October 2007

Employed

Istituto di ricerche farmacologiche Mario Negri - IRCSS

- Technical activity on environmental analysis
- Business or sector Research

March 2006-January 2007

Stage

Centro Epson Meteo

- Technical activity on nowcasting
- Business or sector Services

September 2004-July 2005

University grant

University of Calabria

- Research activity on numerical sea-wave model
- Business or sector Public University

EDUCATION AND TRAINING

1998-2005

Degree in Physics, 26/07/2005, Calabria University, Italy.

- Validation of meteo-marine limited area model in forecast configuration

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

English

French

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1	B1	B1	B1	B1
B1	B1	B1	B1	B1

Technical skills

- Development and maintenance of an operational chain for seasonal forecasts
- Statistical analysis of large climate datasets
- Extensive experience as forecaster in an operational center
- Good proficiency of F77, F90, NCL, nco, cdo
- Good proficiency of Unix/Linux

MOST RELEVANT PUBLICATIONS (H index = 7)

- Sanna, A. Borrelli, P. Athanasiadis, S. Materia, A. Storto, S. Tibaldi and S. Gualdi.: "CMCC-SPS3: The CMCC Seasonal Prediction System 3", ftp://downloads.cmcc.bo.it/p_seasons/CMCC_SPS3_TechRep_RP0285.docx
- Senatore A., Fuoco D., Sanna A., Borrelli A., Mendicino G., Gualdi S. (2020) Evaluation of an Integrated Seasonal Forecast System for Agricultural Water Management in Mediterranean Regions. In: Sergeyev Y., Kvasov D. (eds) Numerical Computations: Theory and Algorithms. NUMTA 2019. Lecture Notes in Computer Science, vol 11973. Springer, Cham.
- Athanasiadis, P. J., Bellucci, A., Scaife, A. A., Hermanson, L., Materia, S., Sanna, A., Borrelli, A., MacLachlan, C., & Gualdi, S. (2017). A Multisystem View of Wintertime NAO Seasonal Predictions, *Journal of Climate*, 30(4), 1461-1475. Retrieved Mar 30, 2021
- Alessandri, A., Borrelli, A., Cherchi, A., Materia, S., Navarra, A., Lee, J., & Wang, B. (2015). Prediction of Indian Summer Monsoon Onset Using Dynamical Subseasonal Forecasts: Effects of Realistic Initialization of the Atmosphere, *Monthly Weather Review*, 143(3), 778-793. Retrieved Mar 30, 2021
- Athanasiadis, P. J., Bellucci, A., Hermanson, L., Scaife, A. A., MacLachlan, C., Arribas, A., Materia, S., Borrelli, A., Gualdi, S. (2014). The Representation of Atmospheric Blocking and the Associated Low-Frequency Variability in Two Seasonal Prediction Systems. *J. Climate*, 27, 9082–9100, <https://doi.org/10.1175/JCLI-D-14-00291.1>.
- Materia, S., Borrelli, A., Bellucci, A., Alessandri, A., Di Pietro, P., Athanasiadis, P., Navarra, A., & Gualdi, S. (2014). Impact of Atmosphere and Land Surface Initial Conditions on Seasonal Forecasts of Global Surface Temperature, *Journal of Climate*, 27(24), 9253-9271. Retrieved Mar 30, 2021
- Athanasiadis, P. J., Bellucci, A., Hermanson, L., Scaife, A. A., MacLachlan, C., Arribas, A., Materia, S., Borrelli, A., & Gualdi, S. (2014). The Representation of Atmospheric Blocking and the Associated Low-Frequency Variability in Two Seasonal Prediction Systems, *Journal of Climate*, 27(24), 9082-9100. Retrieved Mar 30, 2021
- Alessandri, A., Borrelli, A., Navarra, A., Arribas, A., Déqué, M., Rogel, P., & Weisheimer, A. (2011). Evaluation of Probabilistic Quality and Value of the ENSEMBLES Multimodel Seasonal Forecasts: Comparison with DEMETER, *Monthly Weather Review*, 139(2), 581-607. Retrieved Mar 30, 2021
- Alessandri, A., Borrelli, A., Masina, S., Cherchi, A., Gualdi, S., Navarra, A., Di Pietro, P., & Carril, A. F. (2010). The INGV–CMCC Seasonal Prediction System: Improved Ocean Initial Conditions, *Monthly Weather Review*, 138(7), 2930-2952. Retrieved Mar 30, 2021
- Alessandri, A., Borrelli, A., Gualdi, S., Scoccimarro, E., & Masina, S. (2011). Tropical Cyclone Count Forecasting Using a Dynamical Seasonal Prediction System: Sensitivity to Improved Ocean Initialization, *Journal of Climate*, 24(12), 2963-2982. Retrieved Mar 30, 2021
- Min, Y.-M., Lim, C.-M., Yoo, J.-H., Kim, H.-J., Kryjov, V., N., Jeong, D., Lim, A.-Y., Ham, S., Chen, M., Xiao, Y., Gagnon, M., Ke, Z., Hwu, J.-H., Perret, G., Borrelli, A., Harada M., Ji, H.-S., Jo, S., Kiktev, D., Matyugin, V., McLean, P., and Pawson, S. (2025). A Diachronic Assessment of Advances in Seasonal Forecasting: Evolution of the APCC Multi-Model Ensemble Prediction System Over the Last Two Decades. (submitted to GRL, March 2025)
- Crochemore, L., and Coauthors, 2024: A Framework for Joint Verification and Evaluation of Seasonal Climate Services across Socioeconomic Sectors. *Bull. Amer. Meteor. Soc.*, 105, E1218–E1236, <https://doi.org/10.1175/BAMS-D-23-0026.1>.

Curriculum Vitae in formato europeo di ciascuna risorsa impegnata nell'attuazione del programma di ricerca del CN, redatto in lingua inglese e contenente l'autorizzazione al trattamento dei dati personali (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)