

PERSONAL INFORMATION



**Giusy Fedele**

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 ☎ Skype giusy-fedele-91

WORK EXPERIENCE

- 1 Oct. 2021 – today      Post-doc Researcher  
CMCC FOUNDATION - REMHI DIVISION
- 1 Mar. 2021 – 30 Sept. 2021      Post-doc Researcher  
CMCC FOUNDATION - CSP DIVISION
- 1 Mar. 2020 – 28 Feb. 2021      Research Fellow  
The National Institute of Oceanography and Applied Geophysics, OGS, MAOS DIVISION
- 01 Sept. 2019– 28 Feb. 2020      Scientific Collaborator  
CMCC FOUNDATION - ODA DIVISION
- Nov. 2013– today      Scientific Collaborator  
CAMPANIALIVE

EDUCATION AND TRAINING

- Sept. 2019 – Oct. 2020      Master in Science and Management of Climate Change, Dynamic Climatology  
Università Cà Foscari, Venezia, Italia
- 1 Oct. 2018 – 31 Mar. 2019      Internship at “Institut des Géosciences de l'Environnement”  
IGE, Grenoble, Francia
- 1 Nov. 2016 – 2 Mar. 2020      Ph.D.  
Cà Foscari University, Venezia, Italia  
▪ Analysis of the Kuroshio Extension decadal variability: Internal Mechanisms and External Forcings (cum laude)
- Jan. 2016 – Feb. 2016      Internship  
Fondazione CMC, Bologna, Italia
- 2014 – 2016      Master Degree in “Scienze e Tecnologie della Navigazione”  
Parthenope University, Napoli, Italia  
▪ Title: “Analisi della variabilità decennale dell'estensione del Kuroshio da dati modellistici meteo-oceanografici”  
(110/110 cum laude)
- 2. July 2014 – 4. July 2014      Oceanographic Cruise  
ISPRA, Ancona, Italia
- 28. Oct. 2014 – 1. Nov. 2014      Oceanographic Cruise  
ISPRA, Brindisi, Italia
- 2010 – 2013      Bachelor Degree in “Scienze Nautiche ed Aeronautiche”  
Parthenope University, Napoli, Italia  
▪ Title “Meccanismi di variabilità decennale atmosferica ed oceanica nel Pacifico Settentrionale”  
(110/110 cum laude)

PERSONAL SKILLS

Mother Tongue

Italian

English

UNDERSTANDING		SPEAKING		WRITING
Listening C1	Reading C1	Spoken interaction C1	Spoken production C1	C1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

**Communication Skills**

Excellent communication skills obtained through the long experience in the research field (e.g., lectures, summer schools, workshops, conferences, seminars).

**Managerial Skills**

Focal point at CMCC Foundation for the REMHI division within many European Projects.

**Digital Skills**

**SELF-ASSESSMENT**

Information processing	Communication	Content creation	Safety	Problem solving
Expert	Proficient	Proficient	Proficient	Expert

▪ Expert in Office, Python, Matlab, Ocean Data View, Surfer, Linux, Windows, CDO Tool

**Driving Licence**

B

**Publications**

Fedele, G., Bellucci, A., Masina, S. et al. Decadal variability of the Kuroshio Extension: the response of the jet to increased atmospheric resolution in a coupled ocean–atmosphere model. *Clim Dyn* (2020). <https://doi.org/10.1007/s00382-020-05528-4>

Bellucci, A., Athanasiadis, P., Scoccimarro, E. et al. Air-Sea interaction over the Gulf Stream in an ensemble of HighResMIP present climate simulations. *Clim Dyn* (2021). <https://doi.org/10.1007/s00382-020-05573-z>

Fedele, G., Penduff, T., Pierini, S. et al. Interannual to decadal variability of the Kuroshio extension: analyzing an ensemble of global hindcasts from a dynamical system viewpoint. *Clim Dyn* (2021). <https://doi.org/10.1007/s00382-021-05751-7>

Fedele, G., Mauri, E., Notarstefano, G., and Poulain, P. M.: Characterization of the Atlantic Water and Levantine Intermediate Water in the Mediterranean Sea using 20 years of Argo data, *Ocean Sci.*, 18, 129–142, <https://doi.org/10.5194/os-18-129-2022>, 2022.

Menna, Milena & Gacic, Miroslav & Martellucci, R. and Notarstefano, Giulio & Fedele, Giusy & Mauri, Elena & Gerin, Riccardo & Poulain, Pierre-Marie. (2022). Climatic, Decadal, and Interannual Variability in the Upper Layer of the Mediterranean Sea Using Remotely Sensed and In-Situ Data. *Remote Sensing*. 14. 1322. [10.3390/rs14061322](https://doi.org/10.3390/rs14061322).

Nicoli, Dario & Bellucci, Alessio & Ruggieri, Paolo & Athanasiadis, Panos & Materia, Stefano & Peano, Daniele & Fedele, Giusy & Hénin, Riccardo and Gualdi, Silvio. (2023). The Euro-Mediterranean Center on Climate Change (CMCC) decadal prediction system. *Geoscientific Model Development*. 16. 179-197. [10.5194/gmd-16-179-2023](https://doi.org/10.5194/gmd-16-179-2023).

Manco, I., De Lucia, C., Repola, F., Fedele, G., and Mercogliano, P.: A comparative performance study of the atmospheric models: WRF, COSMO and ICON over the Italian Peninsula at very high resolution. (2023) 20, 1–20. [10.3369/tethys.2023.20.01](https://doi.org/10.3369/tethys.2023.20.01)

Fedele Giusy, Manco Ilenia, Barbato Giuliana, Verri Giorgia, Mercogliano Paola (2024). Evaluation of atmospheric indicators in the Adriatic coastal areas: a multi-hazards approach for a better awareness of the current and future climate. *Frontiers in Climate*. 6. 2624-9553. [10.3389/fclim.2024.1330299](https://doi.org/10.3389/fclim.2024.1330299)

Alfredo Reder, Giusy Fedele, Ilenia Manco and Paola Mercogliano: Statistical downscaling based on EQM bias correction as a complementary method to dynamical downscaling: estimating pros and cons. *Journal of Climatology*, under review.

Giorgia Verri, Luca Furnari, Murat Gunduz, Alfonso Senatore, Vladimir Santos Da Costa, Alessandro De Lorenzis, Giusy Fedele, Ilenia Manco, Lorenzo Mentaschi, Emanuela Clementi, Giovanni Coppini, Paola Mercogliano, Giuseppe Mendicino and Nadia Pinardi Climate projections of the Adriatic Sea: the role of river release. *Frontiers in Climate*, accepted.

## Presentations

23/01/2019 – IGE, Grenoble - DRAKKAR 2019

DECADAL VARIABILITY OF THE KUROSHIO EXTENSION: THE RESPONSE OF THE JET TO INCREASED MODEL RESOLUTION.

**Giusy Fedele**, Alessio Bellucci, Stefano Pierini, and Simona Masina.

09/04/2019 – EGU 2019, Wien

ANALYSIS OF THE KUROSHIO EXTENSION DECADAL VARIABILITY: INTERNAL MECHANISMS AND EXTERNAL FORCINGS.

**Giusy Fedele**, Thierry Penduff, Stefano Pierini, Alessio Bellucci, and Simona Masina.

28/11/2019 – THEMES WORKSHOP, Venice,

INTERANNUAL-TO-DECADAL VARIABILITY OF THE KUROSHIO EXTENSION: ANALYZING AN ENSEMBLE OF GLOBAL HINDCASTS FROM THE DYNAMICAL SYSTEMS THEORY VIEWPOINT.

**Giusy Fedele**, Thierry Penduff, Stefano Pierini, Alessio Bellucci, and Simona Masina.

03/02/2020 – DRAKKAR 2020, Grenoble, 03/02/2020.

INTERANNUAL-TO-DECADAL VARIABILITY OF THE KUROSHIO EXTENSION: ANALYZING AN ENSEMBLE OF GLOBAL HINDCASTS FROM A DYNAMICAL SYSTEM VIEWPOINT.

**Giusy Fedele**, Thierry Penduff, Stefano Pierini, Alessio Bellucci, and Simona Masina.

05/05/2020 – EGU 2020, Wien, 05/05/2020.

INTERANNUAL-TO-DECADAL VARIABILITY OF THE KUROSHIO EXTENSION: ANALYZING AN ENSEMBLE OF GLOBAL HINDCASTS FROM A DYNAMICAL SYSTEM VIEWPOINT.

**Giusy Fedele**, Thierry Penduff, Stefano Pierini, M.Carmen Alvarez-Castro, Alessio Bellucci, and Simona Masina.

24/11/2020 – Virtual event, 9th MONGOOS MEETING & WORKSHOP

CHARACTERIZATION OF THE AW AND LIW IN THE MEDITERRANEAN SEA FROM ARGO FLOATS.

**Fedele G.**, Mauri E., Notarstefano G. and Poulain P.M.

08/09/2021 – EMS Annual Meeting 2021

PREDICTING CLIMATE CHANGE OVER THE MULTI-ANNUAL RANGE: A PERSPECTIVE FROM CMCC DECADAL PREDICTION SYSTEM

Dario Nicoli, Alessio Bellucci, Paolo Ruggieri, Panos Athanasiadis, **Giusy Fedele**, and Silvio Gualdi

22/09/2021 - SISC 9th Annual Conference, Virtual Meeting

INTERANNUAL TO DECADAL PREDICTABILITY OF HEATWAVES OVER EUROPE IN LARGE-ENSEMBLE HINDCASTS.

**Fedele G.**, Athanasiadis P., Tsartsali E., Nicoli D., Tibaldi S., and Gualdi S.

23/09/2021 - SISC 9th Annual Conference

PREDICTING CLIMATE CHANGE OVER THE MULTI-ANNUAL RANGE: A PERSPECTIVE FROM CMCC DECADAL PREDICTION SYSTEM.

D. Nicoli, A. Bellucci, P. Ruggieri, P. Athanasiadis, **G. Fedele** and S. Gualdi

15/02/2022 – 19/02/2022 – Bologna, 4° CONGRESSO NAZIONALE AISAM

SVILUPPO DI UN SERVIZIO CLIMATICO A SUPPORTO DELLE ATTIVITÀ DI PROGRAMMAZIONE DELLA REGIONE CAMPANIA.

Villani, Barbato, D'Ambrosio, **Fedele**, Giugliano, Mercogliano, Schiano, Onorati

21/06/2022 – 22/06/2022 – Bologna - Seconda Conferenza Nazionale sulle Previsioni Meteorologiche e Climatiche

IMPATTO DELLA RISOLUZIONE ORIZZONTALE SULLE PRESTAZIONI DEL MODELLO ATMOSFERICO WRF A SCALA "CONVECTION PERMITTING" SULLA REGIONE PUGLIA"

**Fedele G.**, Manco I. and Mercogliano P.

12/10/2022 – 13/10/2022 – Brussels, Belgium - 7th Argo Science Workshop

CHARACTERIZATION OF THE ATLANTIC WATER AND LEVANTINE INTERMEDIATE WATER IN THE MEDITERRANEAN SEA USING 20 YEARS OF ARGO DATA

**Fedele G.**, Mauri E., Notarstefano G. and Poulain P.M.

19/10/2022 – 21/10/2022 – Roma, SISC2022: Governing the Future

INTEGRATION AND ASSESSMENT OF DIFFERENT PRODUCTS FOR WILDFIRE PREDICTION OVER THE APULIA REGION CASE STUDY

**G. Fedele**, Giuliana Barbato Giuseppe Giugliano, Ilenia Manco, Mario Raffa, Paola Mercogliano and Pasquale Schiano

06/03/2023 – 08/03/2023 "ICCARUS", DWD Headquarter, Offenbach Germany and hybrid participation

A NEW URBAN PARAMETERISATION FOR THE ICON ATMOSPHERIC MODEL

J.-P. Schulz, P. Mercogliano, M. Adinolfi, C. Aprea, F. Bassani, E. Bucchignani, A. Campanale, D. Cinquegrana, R. Dumitrache, **G. Fedele**, V. Garbero, W. Interewicz, A. Iriza-Burca, A. Jaczewski, P. Khain, Y. Levi, B. Maco, A. Mandal, M. Milelli, M. Montesarchio, M. Raffa, A. Reeder, L. Uzan, H. Wouters, A. Wyszogrodzki

30/05/2023 – Ugento, CMCC Annual Meeting 2023

RESILIENCE AND ADAPTATION TO CLIMATE CHANGE IN THE ADRIATIC COASTAL AREAS: TOOLS AND INDICATORS DEVELOPED WITHIN THE ADRIACLIM ITALIA-CROATIA INTERREG PROJECT

**G. Fedele**, G. Barbato, P. Mercogliano

26/06/2023 – Bari, Convegno AdriaClim: STRUMENTI DI INFORMAZIONE, MONITORAGGIO E GESTIONE DEI CAMBIAMENTI CLIMATICI PER LE STRATEGIE DI ADATTAMENTO NELLE AREE COSTIERE DELL'ADRIATICO

AZIONI A SUPPORTO DELLA RESILIENZA E ADATTAMENTO AL CAMBIAMENTO CLIMATICO NELLA REGIONE PUGLIA E PROSPETTIVE FUTURE

**Giusy Fedele**

28/06/2023 – Ancona, Convegno AdriaClim: "Monitoraggio e tutela del territorio tra adattamento ed innovazione: il contributo di Interreg per lo sviluppo ambientale delle Marche"

Azioni a supporto della resilienza e adattamento al cambiamento climatico nella regione marche e prospettive future: un focus sugli indicatori climatici

**Giusy Fedele**

### Seminars

27/09/2018, CMCC, Bologna.

ANALYSIS OF THE KUROSHIO EXTENSION DECADEAL VARIABILITY: INTERNAL MECHANISMS AND EXTERNAL FORCINGS  
**Giusy Fedele**, Alessio Bellucci, Stefano Pierini, and Simona Masina.

09/12/2020 – Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, OGS, Trieste

CHARACTERIZATION OF THE AW AND LIW IN THE MEDITERRANEAN SEA FROM ARGO FLOATS.  
**Fedele G.**, Mauri E., Notarstefano G. and Poulain P.M.

17/05/2022 – Istituzione scolastica I.I.S.S. Archimede

TRAINING ON "INQUINAMENTO MARINO DA IDROCARBURI: MODELLI DI PREVISIONE DELLA DIFFUSIONE DEGLI INQUINANTI IN MARE"  
**Fedele G.**

16/09/2022 – Roma, E-GEOS

TRAINING SCHOOL ON "ATMOSPHERICAL MODELLING: SCIENTIFIC AND PRACTICAL SESSION"  
REMHI Division. Paola Mercogliano, **Giusy Fedele**, Giuliana Barbato e Giuseppe Giugliano.

12/03/2024 – CMCC Webinar

Evaluation of atmospheric indicators in the Adriatic Coastal Areas: a multi-hazards approach for a better awareness of the current and future climate  
**Giusy Fedele**, CMCC

19/04/2024 – Roma, Festival delle Scienze

Che tempo farà?

**Giusy Fedele**, CMCC

### Memberships

- AISAM and SISC member.
- Member of the scientific committee of 4th AISAM National Conference

### Courses

- 09-14 July 2017 – Bad Honnef Physics of the Ocean Summer School 2017. Bad Honnef
- 10-22 Sept. 2017 - Climate Modelling Summer School 2017-NCAS. Cambridge
- 05-09 Feb. 2018 - COST-Eumetsat training school 2018 on "Copernicus Marine Data in Ocean Models and Operational Applications", Hamburg
- 27-30 Jan. 2020 - Diva Workshop 2020. Bologna
- 23 - 27 October 2023 - International Autumn School on Satellite Data Analysis: Unveiling EUMETSAT's MSG, MTG and SAF products", Athens
- 10-16 March 2024 - NWP SAF Satellite Data Assimilation Training Course 2024, Reading

### Awards

- 19/06/2015 - Paolo Iannotti University Award 2015: Special Award "Excellent Graduates", Napoli
- Winner of the national contest "PlayEnergy" organized by ENEL

### Data e Luogo

18/04/2024, Mercogliano