

PERSONAL INFORMATION

Jenny Pistoia



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Sex Female | Date of birth 10/08/1983 | Nationality Italian

WORK EXPERIENCE

From March 2018-Ongoing  
(A)

**Senior Research Associate**

CMCC Centro euro Mediterraneo sui Cambiamenti Climatici

- Data Assimilation Scientist
  - Operational Oceanography support (CMEMS service)
- Business or sector** Operational Oceanography

From June 2014-March2018  
(B)

**Technologist**

INGV Istituto Nazionale Geofisica e Vulcanologia

- Data Assimilation Support
- Ocean Forecasting and Observing Simulation Experiments/Observing System Simulation Experiments(E-AIMS Project)
- Background Error Covariance Matrix evaluation

**Business or sector** Operational Oceanography

From January 2013- to June 2014  
(C)

**Post Doc**

CMCC, Euro-Mediterranean Centre on Climate Change

- Development of SST Assimilation in the Med MFC system
- Set up Glider assimilation
- TAPAS data assimilation

**Business or sector** Operational Oceanography

From June 2012- to December 2012  
(D)

**Post Degree**

CMCC, Euro-Mediterranean Centre on Climate Change

- Implementation of automatic data visualization in the framework of TESSA Project,
- ASCAT data download, pre-processing and archiving

From August 2011 to December 2011  
(E)

**Visiting Position**

College of Engineering, Mathematics and Physical Sciences, University of Exeter (UK)

- Singular Value Decomposition and EOF regularization for SuperEnsemble techniques

**Business or sector** Oceanography – Mathematics - Statistics

EDUCATION AND TRAINING

From January 2008 to March 2012  
(A)

**Doctor of Philosophy, Geophysics**

EQF Level 8

Alma Mater Studiorum, Bononia University (Italy)

Curricula Oceanography and Climatology

Thesis: Development of Superensemble Technique for the Mediterranean Forecasting System

- High Resolution Ocean Modelling
- Study on the LIW formation and spreading

From October 2005 to October 2007

**MSc in Physics (address Physics of the Atmosphere and Meteorology)**

EQF Level 7

(B) Alma Mater Studiorum, Bononia University (Italy)

From October 2002 to October 2005  
(C)

**BSc in Physics of the Atmosphere and Meteorology**

EQF Level 6

Alma Mater Studiorum, Bononia University (Italy)

- Thesis "Climate Change and population migration" Relator Prof. Rolando Rizzi
- Thesis: "Quality check for the Mediterranean Forecasting System" Relator: Prof. Nadia Pinardi

Mother tongue(s) Italian

Other language(s)

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

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

Communication skills

- very good communication skills gained through my experience in the operational group and through collaboration with the other team members

PERSONAL SKILLS

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- Projects**
- (A) Involved in:
    - CMEMS Copernicus Marine Environment Monitoring Service is funded by the EU's HORIZON 2020 (EU Research and Innovation programme 2014-2020). This Service has been designed to respond to issues emerging in the environmental, business and scientific sectors. Using information from both satellite and in situ observations, it provides state-of-the-art analyses and forecasts daily from global ocean to marginal seas.
  - (B)
    - E-AIMS (2013-2015) project, WP3.3 Task Manager OSE/OSSE in Mediterranean Sea and WP 6.2 participant member
    - The overall objective of the project is to improve the European contribution to the international Argo observing system and to prepare the next scientific and operational challenges for in-situ monitoring of the world ocean. The main objective is to prepare the evolutions of Argo floats for the next decade: improved reliability and life time, telecommunication capabilities, biogeochemical observations, deeper measurements, under ice operations in the polar seas, sampling of marginal seas. All these evolutions are essential to improve our knowledge on the role of ocean on climate and for operational oceanography (GMES Marine Service) and its applications
  - (C)
    - The MyOcean (2009-2012) , MyOcean2 ( 2012-2014) and MyOcean follow-on ( October 2014- March 2015) projects, respectively funded by the EU's Seventh Framework Programme for Research ( FP7 2007-2013) and HORIZON 2020 (EU Research and Innovation programme 2014-2020) have been designed to prepare and to lead the demonstration phases of the future Copernicus Marine Environment Monitoring Service. The latter is meant to be full operational from 2015 onwards.
  - (D)
    - NEXTDATA
    - The Project of Interest NextData will favour the implementation of measurement networks in remote mountain and marine areas and will develop efficient web portals to access meteorological and atmospheric composition data, past climate information from ice and sediment cores, biodiversity and ecosystem data, measurements of the hydrological cycle, marine reanalyses and climate projections at global and regional scale. New data on the present and past climatic variability and future climate projections in the Alps, the Himalaya-Karakoram, the Mediterranean region and other areas of interest will be obtained and made available.
  - (E)
    - TESSA :\_Development of technologies for the "Situational Sea Awareness" (2012-2015)
    - Project funded under the Ministry of Education funds. Objective: The general objective of this project is to improve and consolidate the products and the operational oceanography service
  - (F)
    - MEMA12: morphobathymetric, geophysical, geological and oceanographical investigations in the southern Adriatic Sea coordinated by ISMAR-CNR

- Computer skills**
- Very good Knowledge of Microsoft Office™ tools
  - Operating System: Linux, Unix and Windows
  - Programming languages: Good Fortran 77/90
  - Good C++(programming experience and university exam)
  - Good Java (programming experience and university exam)
  - Good Python
  - Very good Matlab
  - NCL
  - File transfer protocol: SCP SSH FTP SCFTP
  - Bash script programming

**Other skills**

I have always been able to achieve my goals, no matter the initial background.  
 Even if I didn't have enough previous knowledge I was able to complete the degree in the ideal term lasting.  
 I'm very a very flexible scientist, moving my scientific interests from statistical and numerical study to Data assimilation scheme, data denial experiments as OSE/OSSEs and supporting the operational chain of my company.

ADDITIONAL INFORMATION

Driving licence B

Curriculum Vitae

Replace with First name(s) Surname(s)

- Pierre Yves Le Traon, Antonio Reppucci and all. "From observation to information and users: the Copernicus Marine Service perspective" , Frontiers in Marine Science,2019 <https://doi.org/10.3389/fmars.2019.00234>
- J.Pistoia , E.Clementi , D.Delrosso , G. Mattia ,C.Fratianni ,M.Drudi , A. Grandi , D.Paleletti ,P. Di Pietro , A.Storto, and N. Pinardi, "Last improvements in the data assimilation scheme for the Mediterranean Analysis and Forecast system of the Copernicus Marine Service" Conference Paper 8 th EuroGOOS Conference <http://eurogoos.eu/download/publications/EuroGOOS-2017-Conference-Proceedings.pdf>
- R.Arcucci, L. D'Amore, J. Pistoia, R. Toumi, A. Murli, "On the variational data assimilation problem solving and sensitivity analysis", Journal of Computational Physics, 2017 <https://doi.org/10.1016/j.jcp.2017.01.034>
- J.Pistoia, P.Oddo, N.Pinardi,M. Collins, G. Korres, Y. Drillet, " Development of Super-Ensemble techniques for ocean analyses: the Mediterranean Sea case ", Natural Hazard,2016. <http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2016-46/>
- Ali Aydoğdu, Pinardi, Pistoia, Martinelli, Belardinelli, Sparnocchia "Assimilation Experiments for the Fishery Observing System in the Adriatic Sea" Journal of Marine Systems, 2016. doi: 10.1016/j.jmarsys.2016.03.002
- M. Tonani, N. Pinardi, C. Fratianni, J. Pistoia, S. Dobricic, S. Pensieri, M. de Alfonso, K. Nittis: "Forecast and Analysis Assessment through Skill Scores in the Mediterranean Sea" Ocean Science discussion, 4, S29-S36 (2007)
- "Quality control system of the Mediterranean Forecasting System products" Technical Report : Marilisa Trani, Marina Tonani, Alessandro Grandi, Jenny Pistoia, Paolo Oddo, Giacomo Girardi Feruzza and Massimiliano Drudi (2014)
- "Assimilation Experiments for the Fishery Observing System in the Adriatic Sea" Conference Paper Ali Aydoğdu ,Pinardi, Pistoia, Martinelli, Belardinelli, Sparnocchia The 47th International Liege colloquium, Liege; May 2015

Presentations

- EGU General Assembly 2019,Talk(co-author) The CMEMS Mediterranean analysis and forecasting physical system latest upgrades: description and skill assessment. E. Clementi , J. Pistoia, D. Delrosso, R. Escudier, M. Drudi, A. Grandi, S. Ciliberti, V. Lyubartsev, S. Masina, G. Coppini , N.Pinardi.
- EGU General Assembly 2017,Talk(co-author) "Monitoring and long-term assessment of the Mediterranean Sea physical state" S. Simoncelli, C. Fratianni, E. Clementi, M. Drudi, J. Pistoia, A. Grandi, and D. Del Rosso
- "Impact of the Background error Covariance Matrix formulation in the Copernicus Marine Service" – Jenny Pistoia Joint Data Assimilation and METOP Task Team Workshop UC Santa Cruz, Santa Cruz, USA 11-13 July 2016 [https://www.godae.org/~godae-data/OceanView/Events/DA-MEAP-TT-workshop-July-2016/D4.1-Pistoia\\_da\\_tt.pdf](https://www.godae.org/~godae-data/OceanView/Events/DA-MEAP-TT-workshop-July-2016/D4.1-Pistoia_da_tt.pdf)
- EGU General Assembly 2016,Talk(co-author) Mediterranean Forecasting System: a focus on wave-current coupling : E. Clementi, M. Drudi, C. Fratianni, A. Grandi, D. Delrosso, J. Pistoia, N. Pinardi P. Oddo, M. Tonani, M. Adani
- EGU General Assembly 2016,Talk(co-author) : Mediterranean monitoring and forecasting operational system for Copernicus Marine Service G.Coppini et al.
- An improved data assimilation scheme for the Mediterranean Forecasting system Data Assimilation Task Team Workshop (DA-TT)Met Office, Exeter, 20-22 May 2015 <https://www.godae-oceanview.org/outreach/meetings-workshops/task-team-meetings/da-tt-workshop-2015/presentations/>
- ARGO observing system evaluation in the Mediterranean Sea with OSE/OSSE OSEval-TT / GSOP-CLIVAR Workshop( CLS, Toulouse, 10-11 December 2014) <https://www.godae-oceanview.org/outreach/meetings-workshops/task-team-meetings/OSEval-TT-Workshop-co-located-with-E-AIMS-and-GSOP/>
- Variational Ocean Data Assimilation for the Mediterranean Forecasting System , SIMAI Conference (7-10 July 2014 Taormina,IT)
- EGU General Assembly 2014,Talk(co-author)The Mediterranean Forecasting System: recent developments(2014)
- MyOcean WP9 Med workshop March 7th 2012 Athens(Greece) (Research and Development): Talk "Superensemble forecast system"
- MyOcean WP9 MED-MFC & MOON MNG Meeting, Rome (IT), 28-30 September 2010, Talk "Med-currents R&D (Research and Development): Superensemble forecast system"
- Ocean Sciences Meeting; Portland (OR); 22-26 February 2010 Talk:"Krishnamurti's approach in BHM simulations".

Posters

- EGU 2017: .Pistoia, P.Oddo, N.Pinardi,M. Collins, G. Korres, Y. Drillet, " Development of Super-Ensemble techniques for ocean analyses: the Mediterranean Sea case
- GODAE OceanView symposium Baltimore, 4-6 November 2013, poster(co-author) The evolution of the regional forecasting systems of the Mediterranean Sea during the 20th century
- 2nd "MyOcean Science Days" Edition, 19-21 Nov.2012, Geesthacht (Germany) poster - "Development of superensemble techniques for the Mediterranean ocean Forecasting System

## Post degree Schools

- 2014: Data assimilation and visualization course, 15-19 September , Reading (UK),
- 2013: Advanced School on Data Assimilation, 24-28 June, Bologna(IT)
- 2011:AMS American Mathematical Society "Von Neumann Symposium" 4-7 July, Snowbird (UT)
- September-December 2009, Bayesian inference Statistics (statistic science faculty) alma mater studiorum
- May 2008 Introduction to Paralleling Computer with MPI and OpenMP CINECA Bologna

## Ocean Cruises

- MEMA12 (20/04/2012 al 02/05/2012) , Southern Adriatic, Leader Foglini