

Nationality: Italian | Gender: Male | [francesco.palermo@cmcc.it](mailto:francesco.palermo@cmcc.it) | Skype: f.palermo |

CMCC - via Augusto Imperatore, 16, 73100, Lecce, Italy

About me: GNU/Linux user since 2001, Computer Engineer, System Administrator, (Web) Developer, CMEMS Marine Data Expert.

## ● WORK EXPERIENCE

---

10/2014 – CURRENT – Lecce, Italy

### **SOFTWARE ENGINEER – CMCC - Euro-Mediterranean Center on Climate Change**

Member of the "Services and Operations" Team of OPA ("Ocean Predictions and Applications") [1] Division of CMCC ("Euro-Mediterranean Center on Climate Change") [2], he is in charge of activities on Software Engineering and Development, System Administration, Training on CMEMS Marine Data.

He has experience on the design, implementation, maintenance and monitoring of software infrastructures of operational oceanography services on HPC clusters and on private and public cloud.

He takes part also on the development of Progressive Web Applications in the context of the oceanography's data visualization and Decision Support Systems.

Since 2015 he participates to the European Commission's project named Copernicus [3] and in particular to the Marine Data project CMEMS [4], the "Copernicus Marine Environment Monitoring Service", in different roles (services developer and maintainer, users support desk, trainer on Marine Data).

Since 2018 he is in charge for the the role of consultant as "Technical Expert" for the CMEMS "Black-Sea Monitoring and Forecasting Center".

[1] OPA - "Ocean Predictions and Applications" - <https://www.cmcc.it/research-organization/research-divisions/ocean-predictions-and-application>

[2] CMCC - "Euro-Mediterranean Center on Climate Change" - <https://www.cmcc.it>

[3] Copernicus Project - <https://www.copernicus.eu>

[4] CMEMS - <http://marine.copernicus.eu>

OPA - Ocean Predictions and Applications | Professional, scientific and technical activities |

<https://www.cmcc.it/research-organization/research-divisions/ocean-predictions-and-applications>

via Augusto Imperatore 16, 73100, Lecce, Italy

## ● PROJECTS

---

02/2020 – CURRENT

### **Blue-Cloud**

<https://www.blue-cloud.org/>

Blue-Cloud is a European H2020 project with the overarching aim of federating and piloting innovative services for Marine Research & the Blue Economy.

He is working at the development of a dedicated web interface to provide and display environmental indicators and information on the environmental quality of the ocean.

07/2018 – CURRENT

### **Blue-Health**

<https://bluehealth2020.eu/>

BlueHealth is a pan-European research initiative investigating the links between urban blue spaces, climate and health. It is combining interdisciplinary approaches to examine how wellbeing might be promoted through the development of blue infrastructure. Funded by the EU's Horizon 2020 programme, BlueHealth has brought together over 90 researchers from nine European institutions.

He has participated to the development (with Ionic/Angular + PHP/MySQL) of the Blue-Health DST (Decision Support Tool) hosted at <https://www.bluehealth2020-dst.eu/>

07/2018 – CURRENT

### **EUCISE 2020**

<http://www.eucise2020.eu/>

EUropean test bed for the maritime Common Information Sharing Environment in the 2020 perspective. He has participated on the CMCC EUCISE Node setup and deployment and maintains the related WMS service.

01/2018 – CURRENT

### **GOFs16 - CMCC Global Ocean Forecast System**

<http://gofs.cmcc.it>

The Global Ocean Forecast System GOFs16 is an operational ocean analysis and forecast system that runs daily at the Euro-Mediterranean Center on Climate Change since early 2017.

03/2015 – CURRENT

## **CMEMS - Copernicus Marine Environment Monitoring Service**

<https://marine.copernicus.eu/>

The Copernicus Marine 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, which offer an unprecedented capability to observe, understand and anticipate marine environment events.

Activities:

- Member of the CMCC's team responsible of the CMEMS releases for the Mediterranean-Sea and Black-Sea
- He has been System Administrator and Software Developer for the Dissemination Unit (DU) of the MED-MFC (Mediterranean-Sea Monitoring and Forecasting Center) and BS-MFC (Black-Sea).
- He has been in charge of the role of "Dissemination Unit and Archive Unit (DU/AU) Manager" for the BS-MFC
- Member of the user support desk ("Local Service Desk") for the MED-MFC and BS-MFC services
- Now he is "Technical Expert" for the BS-MFC

10/2014 – 2015

## **TESSA**

<http://tessa.linksmt.it/en/home>

Web Developer (Liferay + jQuery) for the **Decision Support Systems** of the **TESSA** project:

- [www.visir-nav.com](http://www.visir-nav.com) *discoVerIng Safe and efficient nautical Routes in the Mediterranean Sea*
- [www.ocean-sar.com](http://www.ocean-sar.com) *Maritime Search and Rescue Service in the Mediterranean Sea*
- [www.witool.com](http://www.witool.com) *predicting the fate and transport oil spills in the Mediterranean Sea*
- [www.marinenvironment.com](http://www.marinenvironment.com) *access to oceanographic and environmental indicators and products related to the Mediterranean Sea*

## ● **CONFERENCES AND SEMINARS**

---

09/12/2019 – 10/12/2019 – Bologna, Italy

### **CMEMS Training Workshop for the Mediterranean Sea**

Regional Copernicus Marine Service Training Workshop dedicated to the Mediterranean Sea organized by [Mercator Ocean International](#), [CMCC](#) and the [University of Bologna](#). He participated as Trainer for accessing and handling Marine Data through Jupyter Notebook.

<https://marine.copernicus.eu/copernicus-marine-service-training-mediterranean-sea/>

04/09/2019 – 06/09/2019 – Ghent, Belgium

### **EMODnet Open Sea Lab II Hackaton**

During three days, teams competed and brought their expertise to develop novel marine and maritime applications using [EMODnet](#), [ICES](#) and [Copernicus Marine's](#) wealth of marine data and services. He participated as Coach and expert on CMEMS and Marine Data.

<https://www.emodnet.eu/conference/opensealab/>

26/06/2019 – 27/06/2019 – Constante, Romania

## **CMEMS Training Workshop for the Black-Sea region**

Regional Copernicus Marine Service Training Workshop dedicated to the Black Sea region organized by [Mercator Ocean International](#) and the [National Institute for Marine Research and Development "Grigore Antipa"](#). He participated as a Trainer for accessing and handling Marine Data through Jupyter Notebooks.

<https://marine.copernicus.eu/copernicus-marine-service-training-workshop-for-the-black-sea-region/>

11/07/2018 – 12/07/2018 – University of Malta, Malta

## **JERICO-NEXT Malta Summer School 2018**

"Operational Oceanography for Blue Growth" is a summer school organised by the JERICO-NEXT project, hosted by the University of Malta. He participated as Expert on CMEMS Marine Data.

<http://www.jerico-ri.eu/events/operational-oceanography-for-blue-growth/>

## ● **PUBLICATIONS**

---

### **Progresses in the CMEMS BS-MFC for improving forecasting capabilities and monitoring the Black Sea**

---

Bibcode: 2020EGUGA..2222304C

2020

The BS-MFC (Black Sea Monitoring and Forecasting Centre) delivers near real time and multi-year products for the Black Sea region with the scope to describe its physical, biogeochemical and wave conditions in the frame of CMEMS.

### **Black Sea Observing System**

DOI: 10.3389/fmars.2019.00315

2019

Combining and optimizing in situ, remote sensing, modeling and forecasting into a Black Sea observing system is a task that has to be solved, and that will allow to get a more complete and comprehensive picture of the state of the marine environment as well as to forecast future changes of physical and biogeochemical state of the Black Sea and the Black Sea ecosystem.

### **The Black Sea Monitoring and Forecasting Center (BS-MFC) in the framework of the Copernicus Marine**

---

Bibcode: 2017EGUGA..1915637P

2017

The BS-MFC entered the Copernicus Marine Environment Monitoring Service ([CMEMS](#)) in October 2016, providing regular and systematic information about the ocean state in the Black Sea in operational mode.

## **Decision support system for emergency management of oil spill accidents in the Mediterranean Sea**

---

DOI identifier: 10.5194/nhess-16-2009-2016

2016

This paper presents an innovative web-based decision support system to facilitate emergency management in the case of oil spill accidents, called WITOIL (Where Is The Oil).

## **Development of decision support system for oil spill management in the Mediterranean Sea**

---

Bibcode: 2016EGUGA..18.6556L

2016

## **Mediterranean monitoring and forecasting operational system for Copernicus Marine Service**

---

EGU General Assembly 2016, Vol 18

<https://cris.unibo.it/handle/11585/674976?mode=full.2653> – 2016

The MEDiterranean Monitoring and Forecasting Center (Med-MFC) system provides regular and systematic information about the physical state of the ocean and marine ecosystems for the Mediterranean Sea.

## **VISIR: Technological infrastructure of an operational service for safe and efficient navigation**

---

DOI: 10.5194/nhess-2016-32

2016

VISIR (discoVerIng Safe and effcient Routes) is an operational Decision Support Sys-tem (DSS) for ship routing designed and implemented in the frame of the TESSA (TEchnology forSituational Sea Awareness) project.