

# Charles Troupin

## ① – Contact data

 charles.troupin@gmail.com  
 <https://gitlab.com/ctroupin>  
 <https://orcid.org/0000-0002-0265-1021>  
 <https://twitter.com/CharlesTroupin>

 charles.troupin1  
 <https://github.com/ctroupin/>  
 [https://www.researchgate.net/profile/Charles\\_Troupin](https://www.researchgate.net/profile/Charles_Troupin)

## ② – Experience



### 2017/01 present | Senior researcher | GeoHydrodynamics and Environment Research (GHER)

- | Improvement and testing of the DIVA and DIVAnd interpolation software tools.
- | User support and training, documentation writing.
- | Analysis of suspended particular matter satellite images in the North Sea.
- | Interpolation of velocity measurements using HF radar and drifters.

### 2014/03–2017/01 | Head of Data Centre | Balearic Islands Coastal Ocean Observing and Forecasting System (SOCIB)

- | Management of the projects and staff.
- | Relations with external users (national and European), data providers and other facilities.
- | Development of applications for the access and visualisation of oceanographic data.
- | Forecasting of extreme sea level events (*rissaga*) using time series.
- | Acquisition and processing of satellite, remote-sensing data (wind, salinity sea surface temperature, chlorophyll concentration).
- | Analysis and interpretation of multi-platform observations (HF radar, satellite, stations, mobile platforms).

### 2013/03–2014/03 | Post-doctoral researcher | Mediterranean Institute for Advanced Studies (IMEDEA)

- | Preparation of high-resolution altimetry products in the Mediterranean Sea (MyOcean 2 project).
- | Analysis of in situ and remote-sensed data in the Balearic Sea.
- | Processing (interpolation, filtering) and interpretation of multi-sensor measurements (High-frequency radar, underwater glider, altimeter).
- | Operational production of regional altimetry maps (satellite imagery).

### 2010/10–2013/02 | Research assistant | University of Liège

- | Supervisor of the laboratory "Microscopes" for undergraduate students (laboratory sessions for 60-80 students, evaluation).
- | Analysis of total-suspended matter images on the North Sea.
- | Spatio-temporal interpolation of satellite wind data.
- | Improvement and testing of DIVA interpolation software tool.

### 2006/10–2010/09 | PhD Candidate | Fund for Research Training in Industry and Agriculture (National Fund for Scientific Research, Belgium), GeoHydrodynamics and Environment Research (GHER, University of Liège)

- | Study of the upwelling filament off Cape Ghir (Northwest Africa).
- | Hydrographic climatology for the North-East Atlantic Ocean.
- | Implementation of the ROMS model at high-resolution around Cape Ghir and design of process-oriented experiments.
- | Participation to the CAIBEX cruise onboard *Sarmiento de Gamboa* (summer 2009) off Cape Ghir and processing of the cruise data.

MATLAB ROMS DIVA  
Spatial interpolation  
Quality control

#### 2010/08–2010/09 | Trainee | NATO Undersea Research Center, La Spezia (Italy)

- | Development of an operational, multivariate processing for the reconstruction of incomplete satellite images.
- | Pre-processing of remote-sensed data (chlorophyll concentration, sea surface temperature).

MATLAB DINEOF  
Remote sensing  
Multivariate analysis  
EOF analysis

#### 2005/10–2005/12 | Research Engineer | University of Liège

- | Modeling of Coccolithophore blooms in the Bay of Biscay using a 1-dimensional model (GOTM)

Fortran MATLAB  
netCDF Atmospheric forcing

### 3 – Main research interests

- | Data visualisation in environmental sciences
- | Spatial interpolation techniques applied to geophysical data
- | Processing and analysis of satellite images
- | High-resolution numerical modelling in coastal areas
- | Air-sea interactions and influence of physical processes on biology

### 4 – Education

#### 2006–2011 | PhD in Sciences – Oceanography | University of Liège and University of Las Palmas de Gran Canaria: *Study of the Cape Ghir upwelling filament using variational data analysis and regional numerical model*

👤 Supervisors: J.-M. Beckers and P. Sangrà

📅 Lecture date: 15 September 2011

🔗 <http://hdl.handle.net/2268/105400>

#### 2005–2006 | Advanced Master in Modelling of the Marine Environment | University of Liège and University of Las Palmas de Gran Canaria

Final project: *Simulation of annual cycles of phytoplankton, zooplankton and nutrients using a mixed layer model coupled with a biological model*

👤 Supervisor: P. Sangrà

🔗 <http://hdl.handle.net/2268/112587>

#### 2000–2005 | Civil Engineer in Physics | University of Liège

Final project: *Structuring in granular media*

👤 Supervisors: P.C. Dauby and N. Vandewalle (ULg)

🔗 <http://hdl.handle.net/2268/112588>

#### 4.1 – Training

2019/11/29 Professional software dedicated to research, ULiège (3h), J. Fays, R. Hoyoux

2019/11/29 Software development strategy, ULiège (3h), J. Fays

2018/01/21 Managing an international research team, ULiège (3h), I. Halleux

2016/07 [Big Data: Data Visualisation](#), 2 weeks / 2 hours per week, Queensland University of Technology

2016/06 [SQL: Table Transformation](#), Code Academy

2016/06 [Learn SQL](#), Code Academy

**2016/01** [Tropical Mesoscale Convective Systems](#), 1.5 hour, Comet MedEd

**2016/01** [Using Scatterometer Wind and Altimeter Wave Estimates in Marine Forecasting](#), 2 hours, Comet MedEd

**2015/12** [Monitoring Climate from Space](#), 5 weeks / 3 hours per week, European Space Agency

**December 2015** [Google's Python Class](#), 2 days, Google for Education

**2012/11/06** *Interview in English*, Gembloux (1 day), J.-P. Hermann

**2012/10/26** *Understanding the factors of success and failure in the first year of university*, ULg (1/2 day), L. Leduc and B. Mérenne

**2012/10/24** *Keys and main principles of team management*, ULg (1/2 day), L. Maréchal

**2012/05/10** *Efficient slides and graphics*, ULg (2h), J.-L. Doumont (Principiæ)

**2011** *Structuring written documents*, ULg (2h), J.-L. Doumont (Principiæ)

## ⑤ – Skills and Competencies

### 5.1 – Technical skills

**Data analytics** Quality control, Time series analysis, Singular events, Filtering, Data mining, Statistics, Predictive modelling

**Engineering** Fluid mechanics, Aerodynamics, Finite-Element Method, Atmospheric Physics, Numerical simulations, Numerical analysis, Signal processing, Optimization, High-performance computing

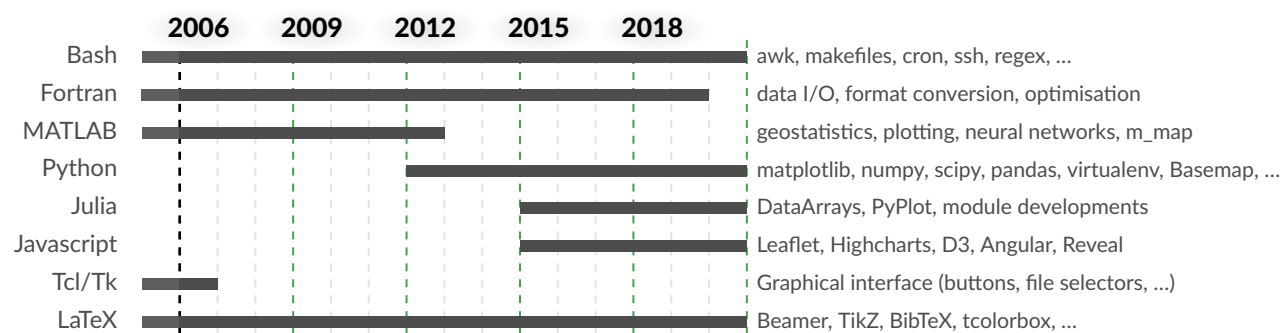
**Physical Oceanography** Spatial interpolation, Time-Series Analysis, Principal Component Analysis, Process-oriented modelling, Database Management, Satellite Image Processing

### 5.2 – IT skills

#### ⌘ Programming

Functional programming  
Object oriented programming  
Test-oriented development  
Control version system (git, svn)  
Unit testing  
Continuous integration

#### Languages



#### 🔧 Tools

**Visualisation:** bokeh, matplotlib, folium, plotly, leaflet, cartopy

**Data bases:** MySQL, PostgreSQL

**Operating systems:** Linux (Mint, Ubuntu) · Experience with Mac OS X Lion, Microsoft Windows

**Image processing:** GIMP, Inkscape, Darktable, ImageJ, Matlab, Python, ffmpeg, hugin, ImageMagick

**Oceanography software:** Ocean Data View, DIVA (spatial interpolation), DINEOF (spatio-temporal interpolation of satellite images)

**Misc:** NX Client, VPN, Asana, QGIS

### 5.3 – Management

**Projects and management** Planning and monitoring, scientific and technical reports, teamwork, deadlines, specification documents, applications for grants and supports.

**Communication** Oral presentations at international conferences (in English, Spanish or French), social networking, management of group accounts on twitter (@SOCIB\_data, @GHER\_ULg).

**Conference organisation** Main organiser of several editions of the Diva workshop (10 participants from European research centres on average) and member of the organising committee of the 48th International Liège Colloquium on Ocean Dynamics (200 participants from 40 countries).

## 5.4 – Languages

### Summary

English for the communication with the project partners and for the writing of technical document. Spanish, English and Catalan in the previous working environment.

**French** Native speaker

**Spanish** Highly proficient in spoken and written Spanish

**English** Highly proficient in spoken and written English

**Catalan** Limited working proficiency

**German** Limited working proficiency

**Italian** Elementary proficiency

**Dutch** Elementary proficiency (basic course for beginners)

## 5.5 – Teaching and Training

### Summary

My experience of training at the University is complemented by several training courses given in the frame of European projects or invited lectures.

**2019/10/28–30** *Introduction to scientific Python. Application to Oceanography*, University of Cádiz, Facultad de Ciencias del Mar y Ambientales: Graduate students, researchers and professors.

**2017/11/15–17** *Open Sea Lab Workshop*, De Serre, Antwerp: Participant coaching for the EMODnet data access and usage.

**2017/04** *Geophysical Fluid Dynamics*, University of Liège, Faculté des Sciences: Master students.

**2016/01/27–29** *Introduction to scientific Python. Application to Oceanography*, University of Cádiz, Facultad de Ciencias del Mar y Ambientales: Graduate students, researchers and professors.

**2015/12/10–11** CMEMS Regional User Training Workshop dedicated to the Atlantic European South West Shelf Ocean, Lisbon (Portugal): data and tools of the In Situ Thematic Assembly Center (INSTAC).

**2015/12/03–04** CMEMS Regional User and Training Workshop dedicated to the Mediterranean Sea, La Spezia (Italy): data and tools of the In Situ Thematic Assembly Center

- | Manipulation of netCDF files.

- | Discovery and access to data.

- | Use of Python and Ocean Data View to process oceanographic data.

**2010/10–2013/02** *Physics laboratory (optics)*, University of Liège, Faculty of Medicine and Faculty of Veterinary Medicine: Undergraduate students.

**2007–2013** *Physical Oceanography, Risk Management, Marine Meteorology* (assistant), University of Liège, Faculty of Sciences: Undergraduate students.

## 6 – Projects and services

### Summary

Since 2006, I have been involved in several internal, national and European projects dealing with data analysis and management, operational oceanography or numerical modelling. I contributed to the project proposals, the preparation of the deliverables, the support to users and was participating to the meetings of the technical task group and steering committee.

## 6.1 – European projects

**2019–ongoing** [PHIDIAS](#) (CEF Telecom): Deployment of DIVAnd tool in a HPC environment.

**2019–ongoing** [EMODnet Physics](#): Creation of velocity maps by interpolating drifter and high-frequency radar measurements.

**2018–ongoing** [EOSC-Hub](#): Development of a data analytics platform for marine data.

**2017–ongoing** [EMODnet Biology](#): Creation of gridded fields based on species counts and observations.

**2017–ongoing** [EMODnet Chemistry](#)

- | Creation of gridded field for chemical variables.
- | Visualisation of the products using the OceanBrowser tool.
- | Preparation of merged products combining all the regional components.
- | Generation of XML records for the data catalog.

**2017–ongoing** [EMODnet Data Ingestion](#): Development on new gridded products using the data obtained in the frame of the project.

**2017–ongoing** [SeaDataCloud](#) (H2020): Further developing the pan-European infrastructure for marine and ocean data management

- | Improvement and testing of the DIVA software tool.
- | Development of a user interface for Diva on a Virtual Research Environment.
- | Preparation of the new regional products.

**2015–2017** [JERICO-NEXT](#) (H2020): Data management best practices; glider data processing and calibration.

**2015–2017** [ODIP 2](#) (Ocean Data Interoperability portal)

- | Test of new standards in data and metadata management
- | Data visualisation tools

**2015–2017** Copernicus Marine Environment Monitoring Service, In Situ Thematic Assembly Center (INSTAC):

- | Elaboration of the Ocean State Report.
- | Coordinator of the outreach, training and communication activities.
- | Preparation and participation to the regional user training workshops.

**2013–2014** MyOcean 2, Ocean monitoring and forecasting infrastructure:

- | Preparation of high-resolution altimetry products in the Mediterranean Sea.
- | Data analysis during a multi-platform experiment in the Ibiza Channel.

**2012–2013** [ODIP](#) (Ocean Data Interoperability portal): Definition of standards for the data and metadata exchange.

**2011–2015** PERSEUS (Policy-oriented marine Environmental Research for the Southern European Seas): Processing of glider and campaign data

**2009–2013** [EMODnet – Chemistry](#): Pilot component for a final operational European Marine Observation and Data Network:

- | Improvement to the DIVA tool.
- | Development of the DIVA web-interface.

**2009–2013** [SeaDataNet 2](#): Infrastructure for ocean and marine data exchange.

**2008–2009** CAIBEX (Study of the Exchanges between continental shelf and ocean in the Canaries-Iberian marine ecosystem):

- | Implementation of a high-resolution numerical model in the Cape Ghir region.
- | Participation to the CAIBEX-Cape Ghir cruise (August 2009).

**2006–2011** [SeaDataNet](#): Infrastructure for ocean and marine data exchange:

- | Contribution to the project proposal.
- | Development, documentation and testing of DIVA software tool.
- | Organization of the user training workshops.

## 6.2 – National projects

- 2019–ongoing** Multisync: combination of satellites measurements at different resolutions to reconstruct suspended particular matter in the North Sea.
- 2014–2017** BlueFin Tuna: combination of observations and models to understand and predict tuna abundance.
- 2014–2017** Grumers: Database for jellyfish observations around the Balearic Islands.
- 2014–2017** [Medclib](#) (Oceanographic data in the Mediterranean Sea at one click): Providing access to SOCIB sensors data.
- 2014–2015** SeaTurtle: Development of a viewer showing turtle trajectories in real-time.
- 2011–2013** HiSea (High-resolution merged satellite Sea surface temperature fields): EOF analysis of satellite images improved with numerical model outputs.
- 2010/08** REP10 (Recognized Environmental Picture): Analysis and reconstruction of incomplete satellite images on the Ligurian Sea.

## 7 – Research stays

- 3 September - 31 October 2018** Analysis of surface currents in the Gulf of Trieste using high-frequency radar, Marine Biology Station Piran, National Institute of Biology (NIB), Piran (Slovenia).
- 5 August - 5 September 2010** Analysis of satellite images in the Ligurian Sea, NATO Undersea Research Centre (NURC), La Spezia (Italy).
- 15 July 2009 - 30 September 2009** Preparation and participation to CAIBEX cruise, Las Palmas (Spain) and Cape Ghir (Morocco).
- 5 January 2009 - 31 March 2009** Diagnostics on model outputs, ULPGC, Las Palmas de Gran Canaria (Spain).
- 30 May - 30 August 2008** High-resolution configuration for the model, ULPGC.
- 5 December 2007 - 5 March 2008** Diagnostics on model outputs, ULPGC.
- 21 May - 24 August 2007** Design of process-oriented numerical experiments, ULPGC.
- 5 January - 15 March 2007** Implementation of ROMS numerical model, ULPGC.

## 8 – Scientific contributions

### Summary

In the frame of international projects, I authored or co-authored several works published in peer-reviewed journal and mainly focused on data analysis and tools.

**20+**  
Papers in peer-review  
journals

**100 +**  
Presentations at  
international conferences

Reviewer for  
**7** journals

## Articles

- [1] A. Barth, C. Troupin, E. Reyes, A. Alvera-Azcárate, J.-M. Beckers, and J. Tintoré, 2021. Variational interpolation of high-frequency radar surface currents using DIVAnd. *Ocean Dynamics*. [doi](#) [10.1007/s10236-020-01432-x](#). URL <http://hdl.handle.net/2268/253954>. In press.
- [2] A. Alvera-Azcárate, C. Troupin, H. Goosse, M. J. McPhaden, and J.-M. Beckers, Dec 2020. Editorial to the liège colloquium special issue: Long-term studies in oceanography – a celebration of 50 years of science at the liège colloquium (1969 – 2018). *Ocean Dynamics*, 71(1):119–123. ISSN 1616-7228. [doi](#) [10.1007/s10236-020-01421-0](#). URL <https://link.springer.com/article/10.1007/s10236-020-01421-0>.



- [3] A. Barth, A. Alvera-Azcárate, M. Licer, and J.-M. Beckers, Mar 2020. Dincæ 1.0: a convolutional neural network with error estimates to reconstruct sea surface temperature satellite observations. *Geoscientific Model Development*, 13(3):1609–1622. ISSN 1991-9603. doi 10.5194/gmd-13-1609-2020. URL <https://gmd.copernicus.org/articles/13/1609/2020/>.
- [4] S. Ruiz, M. Claret, A. Pascual, A. Olita, C. Troupin, A. Capet, A. Tovar-Sánchez, J. Allen, P.-M. Poulain, J. Tintoré, and A. Mahadevan, 2019. Effects of Oceanic Mesoscale and Submesoscale Frontal Processes on the Vertical Transport of Phytoplankton. *Journal of Geophysical Research*, 124(8):5999–6014. doi 10.1029/2019JC015034. URL <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019JC015034>.
- [5] C. Troupin, A. Pascual, S. Ruiz, A. Olita, B. Casas, F. Margirier, P.-M. Poulain, G. Notarstefano, M. Torner, J. G. Fernández, M. A. Rújula, C. Muñoz, E. Alou, I. Ruiz, A. Tovar-Sánchez, J. T. Allen, A. Mahadevan, and J. Tintoré, Jan 2019. The AlborEX dataset: sampling of sub-mesoscale features in the Alboran Sea. *Earth System Science Data*, 11(1):129–145. ISSN 1866-3516. doi 10.5194/essd-11-129-2019. URL <https://www.earth-syst-sci-data.net/11/129/2019/>.
- [6] A. Barth, A. Mahadevan, A. Pascual, S. Ruiz, and C. Troupin, 2018. The 48th Liege Colloquium: Submesoscale processes: mechanisms, implications, and new frontiers. *Ocean Dynamics*, 68(8):1067–1069. doi 10.1007/s10236-018-1173-5. URL <https://link.springer.com/article/10.1007/s10236-018-1173-5>.
- [7] A. Iona, A. Theodorou, S. Sofianos, S. Watelet, C. Troupin, and J.-M. Beckers, 2018. Mediterranean Sea climatic indices: monitoring long-term variability and climate changes. *Earth System Science Data*, 10(4):1829–1842. doi 10.5194/essd-10-1829-2018. URL <https://www.earth-syst-sci-data.net/10/1829/2018/essd-10-1829-2018.html>.
- [8] A. Iona, A. Theodorou, S. Watelet, C. Troupin, J.-M. Beckers, and S. Simoncelli, Jul 2018. Mediterranean Sea Hydrographic Atlas: towards optimal data analysis by including time-dependent statistical parameters. *Earth System Science Data*, 10(3):1281–1300. ISSN 1866-3516. doi 10.5194/essd-10-1281-2018. URL <https://www.earth-syst-sci-data.net/10/1281/2018/>.
- [9] F. Lenartz, C. Troupin, and W. Lefebvre, Sep 2017. Data interpolating variational analysis for the generation of atmospheric pollution maps at various scales. In *International Technical Meeting on Air Pollution Modelling and its Application*, pages 231–235. Springer International Publishing. ISBN 9783319576459. ISSN 2213-8692. doi 10.1007/978-3-319-57645-9\_37. URL [https://link.springer.com/chapter/10.1007%2F978-3-319-57645-9\\_37](https://link.springer.com/chapter/10.1007%2F978-3-319-57645-9_37).
- [10] M. Licer, B. Mourre, C. Troupin, A. Kriemeyer, A. Jansá, and J. Tintoré, Mar 2017. Numerical study of Balearic meteotsunami generation and propagation under synthetic gravity wave forcing. *Ocean Modelling*, 111:38–45. ISSN 1463-5003. doi 10.1016/j.ocemod.2017.02.001. URL <http://www.sciencedirect.com/science/article/pii/S1463500317300136>.
- [11] A. Pascual, S. Ruiz, A. Olita, C. Troupin, M. Claret, B. Casas, B. Mourre, P.-M. Poulain, A. Tovar-Sanchez, A. Capet, E. Mason, J. Allen, A. Mahadevan, and J. Tintoré, 2017. A multiplatform experiment to unravel meso- and submesoscale processes in an intense front (AlborEx). *Frontiers in Marine Science*, 4(39):1–16. doi 10.3389/fmars.2017.00039. URL <http://journal.frontiersin.org/article/10.3389/fmars.2017.00039/full>.
- [12] A. Barth, S. Watelet, C. Troupin, A. Alvera-Azcárate, G. Santinelli, G. Hendriksen, A. Giorgetti, and J.-M. Beckers, October 2016. OceanBrowser: on-line visualization of gridded ocean data and in situ observations. In I. N. di Oceanografia e di Geofisica Sperimentale, editor, *Bollettino di Geofisica teorica ed applicata - IMDIS 2016 International Conference on Marine Data and Information Systems*, volume 57 - supplement, pages 39–40. IOPAN and IMGW. URL <http://www3.ogs.trieste.it/bgta/pdf/IMDIS2016.pdf>.
- [13] M. Juza, R. Escudier, A. Pascual, M.-I. Pujol, G. Taburet, C. Troupin, B. Mourre, and J. Tintoré, 2016. Impacts of reprocessed altimetry on the surface circulation and variability of the Western Alboran Gyre. *Advances in Space Research*, 58(3):277–288. doi 10.1016/j.asr.2016.05.026. URL <http://www.sciencedirect.com/science/article/pii/S0273117716302125>.
- [14] M. Juza, B. Mourre, L. Renault, S. Gómara, K. Sebastián, S. Lora, J. P. Beltran, B. Frontera, B. Garau, C. Troupin, M. Torner, E. Heslop, B. Casas, R. Escudier, G. Vizoso, and J. Tintoré, 2016. SOCIB operational ocean forecasting system and multi-platform validation in the Western Mediterranean Sea. *Journal of Operational Oceanography*, 9(sup1):s155–s166. doi 10.1080/1755876X.2015.1117764. URL <http://www.tandfonline.com/doi/full/10.1080/1755876X.2015.1117764#.V4M5xP7HjGc>.
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- [17] C. Troupin, B. Frontera, J. P. Beltran, A. Kriemeyer, K. Sebastian, S. Gómara, M. Gomila, R. Escudier, M. Juza, B. Mourre, Àngels Garau, T. Cañellas, and J. Tintoré, October 2016. Medclit: the Mediterranean in one click. In I. N. di Oceanografia e di Geofisica Sperimentale, editor, *Bollettino di Geofisica teorica ed applicata - IMDIS 2016 International Conference on Marine Data and Information Systems*, volume 57 - supplement. IOPAN and IMGW. URL <http://www3.ogs.trieste.it/bgta/pdf/IMDIS2016.pdf>.
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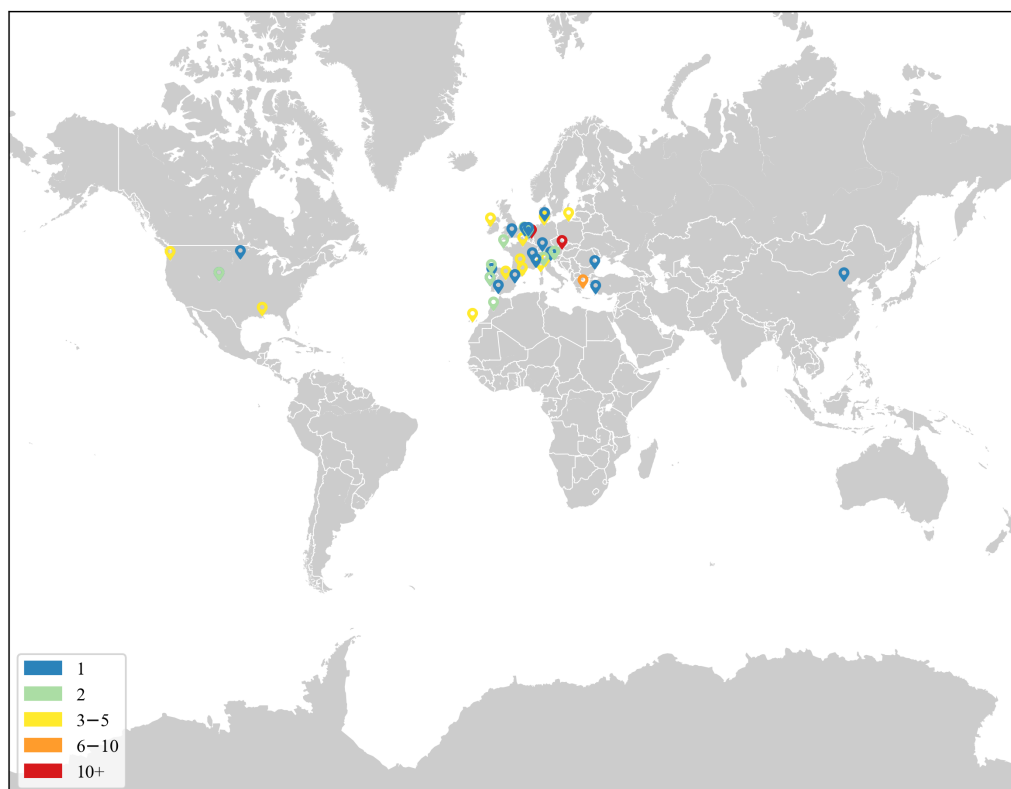


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## 8.1 – Invited Editor

Ocean Dynamics: Special Issue for the 48th Liège Colloquium on Ocean Dynamics, [doi 10.1007/s10236-018-1173-5](https://doi.org/10.1007/s10236-018-1173-5)

## 8.2 – Reviewer

Earth System Science Data, Ocean Science, Ocean Dynamics, Ocean Engineering, Journal of Marine Systems, Journal of Geophysical Research – Ocean, Remote Sensing of Environment

## 8.3 – Doctoral thesis tribunal

**2017/09/25** Bàrbara Barceló-Llull (ULPGC, Spain)

*Shedding light into mesoscale dynamics and vertical motion through synthetic and in situ observations*

**2017/09/16** Yeray Santana Falcón (ULPGC, Spain)

*Transport, Respiration, and Sequestration of Organic Carbon in the Canary Current Ecosystem: Relevance within the Global Carbon Cycle*

## 8.4 – Undergraduate student training

**2012/05/12–2012/05/19** Joaquim Pereira Bento (Uni-Kiel, Germany)

*In situ and satellite data interpolation*

**2011/09–2011/11** Nikolaos Zarokanellos (HCMR, Greece)

*Data interpolation for the Eastern Mediterranean Sea*

**2009/01–2009/05** Marc Piedeleu (ULPGC, Spain)

*Analysis of in situ observations south of the Canary Islands*

**2008/11–2008/12** Anna Rabitti (OGS, Italy)

*Spatial interpolation of in situ data in the Adriatic Sea*

## 8.5 – Organisation of conferences

### Summary

From 2006 on, I have organised several editions of a training workshop about an interpolation software tool (DIVA) and helped in the organisation of the International Liège Colloquium on Ocean Dynamics. In 2016, I co-organised the 48th Edition on *Submesoscale processes*, which gathered over 200 scientists from 40 countries.

**2016/05/23–27** 48th International Liège Colloquium on Ocean Dynamics on *Submesoscale Processes: Mechanisms, Implications and new Frontiers* (Liège, Belgium)

- | Invitation of keynote speakers.
- | Applications for sponsorship.
- | Preparation of the scientific program.
- | Design of the conference flyer.
- | Organisation of social events.

**2012/10/08–12** 6th Diva workshop (Roumaillac, France)

- | Scientific content.
- | Invitation of the participants.
- | Logistic: meeting venue, transportation from/to the airport.

**2010/11/03–06** 5th Diva workshop (Calvi (France)

**2009/10/23–26** 4th Diva workshop (Calvi, France)

**2008/10/15–17** 3rd Diva workshop (Calvi, France)

**2007/11/04–06** 2nd Diva workshop (Calvi, France)

**2006/11/13–15** 1st Diva workshop (Liège, Belgium)

- | Workshop program.
- | General logistics.

## 9 – Misc

### 9.1 – Grants and funding

**2011/04 & 2015/04** EGU Young Scientist's Travel Award

**2008/05–2008/09** Travel grant (French Community of Belgium)

**2006/10–2010/09** Fund for Research Training in Industry and Agriculture (National Fund for Scientific Research, Belgium)

**2006/02–2006/09** Erasmus travel grant (European Commission)

**2005/09–2005/12** Pisart supervision grant: creation of the presentation support for the course *Thermodynamics of continuous media* in LaTeX

**2004/02–2004/06** State grant: writing of the course notes for the course *Further Study of Digital Analysis (Equations with Partial Derivatives)*

### 9.2 – Representation

**2017–ongoing** Delegate at the Department Council (Astrophysics, Geophysics and Oceanography, ULiège)

**2015–2016** Member of the Monitoring Committee of the Framework Agreement between AEMET and SOCIB

**2003–2005** Student delegate

**2011–2013** Delegate at the Department Council (Astrophysics, Geophysics and Oceanography, ULiège)

### 9.3 – Memberships

| European Geosciences Union (EGU)

| American Geophysical Union (AGU)

| Cloud Appreciation Society

### 9.4 – Personal interests

| [Running](#): trails, mountain races, track

| 📷 Photography: landscape, portraits, time-lapse, astro-photography

| 🗺 Travel blogging

| 🚴 Road cycling