Charles Troupin · Data analysist & modeler – Engineer in Physics

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Professional experience

2017/01–present . . . . . **Post-doctoral researcher @ GHER (ULiège)**
Data interpolation, visualisation and cloud computing

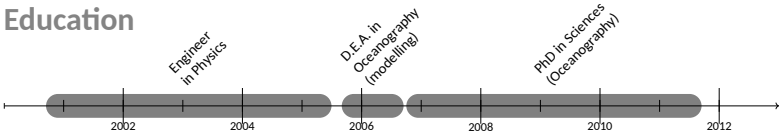
2014/03–2017/01 . . . . . **Head of the Data Centre Facility @ SOCIB**
Acquisition, processing and visualisation of oceanographic and meteorological data

2013/03–2014/03 . . . . . **Post-doctoral researcher @ IMEDEA**
Analysis of in situ, satellite altimetry and high-frequency radar data

2010/10–2013/02 . . . . . **Research assistant @ ULiège**
Multivariate reconstruction of incomplete satellite images in the North Sea

2006/10–2010/09 . . . . . **PhD Candidate @ FRIA-FNRS**
Study of the Cape Ghir filament using numerical modeling and data interpolation

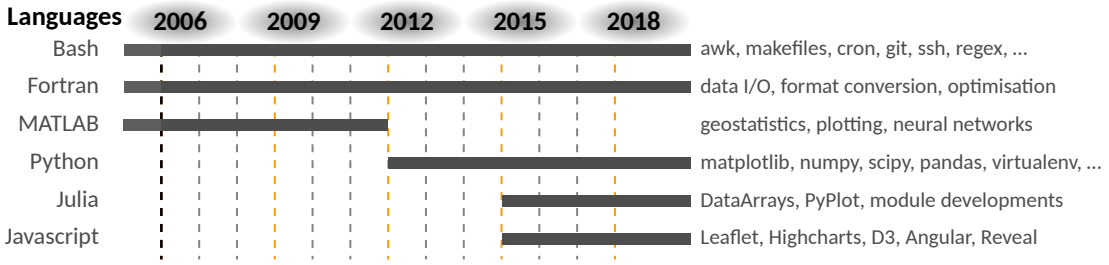
Education



Engineering
Fluid mechanics
Aerodynamics
Finite-element method
Numerical simulations
High-performance computing

Technical skills

Programming
Functional programming
Object oriented programming
Test-oriented development
Control version system (git, svn)
Jupyter-notebooks
Unit tests



Main publications

[1] C. Troupin, A. Pascual, S. Ruiz, A. Olita, B. Casas, F. Margirier, P.-M. Poulain, G. Notarstefano, M. Torner, J. G. Fernández, M. ?. 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/.

[2] C. Troupin, J. Belltran, E. Heslop, M. Torner, B. Garau, J. Allen, S. Ruiz, and J. Tintoré, 2015. A toolbox for glider data processing and management. *Methods in Oceanography*, 13-14:13–23. doi:10.1016/j.mio.2016.01.001. URL http://www.sciencedirect.com/science/article/pii/S2211122015300207.

[3] C. Troupin, A. Pascual, G. Valladeau, I. Pujol, A. Lana, E. Heslop, S. Ruiz, M. Torner, N. Picot, and J. Tintoré, 2015. Illustration of the emerging capabilities of SARAL/AltiKa in the coastal zone using a multi-platform approach. *Advances in Space Research*, 55(1):51–59. doi:10.1016/j.asr.2014.09.011. URL http://www.sciencedirect.com/science/article/pii/S0273117714005754.

[4] C. Troupin, E. Mason, J.-M. Beckers, and P. Sangrà, 2012. Generation of the Cape Ghir upwelling filament: a numerical study. *Ocean Modelling*, 41:1–15. doi:10.1016/j.ocemod.2011.09.001. URL http://www.sciencedirect.com/science/article/pii/S1463500311001557.

[5] C. Troupin, D. Sirjacobs, M. Rixen, P. Brasseur, J.-M. Brankart, A. Barth, A. Alvera-Azcárate, A. Capet, M. Ouberdous, F. Lenartz, M.-E. Toussaint, and J.-M. Beckers, 2012. Generation of analysis and consistent error fields using the Data Interpolating Variational Analysis (Diva). *Ocean Modelling*, 52-53:90–101. doi:10.1016/j.ocemod.2012.05.002. URL http://www.sciencedirect.com/science/article/pii/S1463500312000790.

[6] C. Troupin, F. Machín, M. Ouberdous, D. Sirjacobs, A. Barth, and J.-M. Beckers, 2010. High-resolution climatology of the north-east Atlantic using Data-Interpolating Variational Analysis (Diva). *Journal of Geophysical Research*, 115(C8):C08005. doi:10.1029/2009JC005512. URL http://onlinelibrary.wiley.com/doi/10.1029/2009JC005512/epdf.

[7] C. Troupin, P. Sangrà, and J. Arístegui, 2010. Seasonal variability of the oceanic upper layer and its modulation of biological cycles in the Canary Island region. *Journal of Marine Systems*, 80(3-4):172–183. doi:10.1016/j.jmarsys.2009.10.007. URL http://www.sciencedirect.com/science/article/B6VF5-4XMKB67-1/2/326bcf54e891969eb6191ec534805d35.

Complete list: https://ctroupin.github.io/CV/publicationList.pdf