

JAIME HERNÁNDEZ LASHERAS

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WORK EXPERIENCE

CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici) , Bologna Ocean Predictions and Applications division	2023 - actual
SOCIB (Balearic Islands Coastal Observing and Forecasting System) CSIC , Palma Mallorca Research Scientist and Data Analyst in physical oceanography	2016 - 2023
Pentaquark Consulting , Madrid Data analyst. Consulting company specialized in financial products.	2015 - 2016
Instituto de Ingenieria de la UNAM (Universidad Autonoma de Mexico) , Sisal Data analyst, research assistant in climate studies.	2014 - 2015

EDUCATION

PhD on Physical Oceanography Universidad de les Illes Balears (UIB), Palma	2017 - 2022
<ul style="list-style-type: none"><i>Impact of the assimilation of coastal observations on high resolution ocean model forecasts</i>, https://dspace.uib.es/xmlui/handle/11201/159802?show=full	
MSc on Coastal Engineering and Integrated Coastal Zone Management Universidad de Cantabria (IH Cantabria), Santander	2015
Degree in Physics (Licenciatura 5 years). Specialization in Geophysics and Meteorology Universidad Complutense de Madrid	2012

TECHNICAL STRENGTHS

Programming and Analysis	Python (pandas, numpy, xarray, scipy, scikitlearn, matplotlib, pytorch..), Matlab
Software & Tools	Linux, Latex, ArcGIS, MS Office, git, SQL
Hidrodinamic Numerical Modelling	ROMS (OGCMs), MIKE21, SMC (wave models)

LANGUAGES

Spanish	Native
English	High level (C1). IELTS 7.0
French	Intermediate level (B2)
Catalan	Intermediate level (B2)

ADDITIONAL COURSES

Artificial Intelligence (AI) for Earth monitoring. EUMETSAT. FutureLearn	2022
Neural Networks and Deep Learning. Stanford University. Coursera	2021
Introduction to Computacional Thinking and Data Science. MITx	2015
Introduction to Computer Science and Programming Using Python. MITx	2015
Introducción a la edición de textos con LaTeX. UNAM	2015

OTHERS

- European driving license B. Own vehicle
- Coastal skipper certificate (PER)
- PADI. Advanced Open Water
- Caving course. SpeleoClub Cantabro

SCIENTIFIC PUBLICATIONS

Lorente, Pablo, et al. "Coastal high-frequency radars in the Mediterranean-Part 1: Status of operations and a framework for future development." *Ocean Science* 18 (2022): 761-795.

Reyes, Emma, et al. "Coastal high-frequency radars in the Mediterranean-Part 2: Applications in support of science priorities and societal needs." *Ocean Science* 18.3 (2022): 797-837.

Hernandez-Lasheras, J., Mourre, B., Orfila, A., Santana, A., Reyes, E., and Tintoré, J. (2021). Evaluating High-Frequency radar data assimilation impact in coastal ocean operational modelling. *Ocean Science Discussions*, 1-29.

Aguiar, E., Mourre, B., Juza, M., Reyes, E., Hernández-Lasheras, J., Cutolo, E., Mason, E., and Tintoré, J.: Multi-platform model assessment in the Western Mediterranean Sea: impact of downscaling on the surface circulation and mesoscale activity, *Ocean Dynamics*

Tintoré, Joaquín, et al. "Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea." *Frontiers in Marine Science* 6 (2019): 568.

Hernandez-Lasheras, J. and Mourre, B.: Dense CTD survey versus glider fleet sampling: comparison of the performance for regional ocean prediction West of Sardinia, *Ocean Science Discussions*, pp. 1–21, <https://doi.org/10.5194/os-2018-38>, 2018.

Mourre, B., Aguiar, E., Juza, M., Hernandez-Lasheras, J., Reyes, E., Heslop, E., Escudier, R., Cutolo, E., Ruiz, S., Mason, E., Pascual, A., and Tintoré, J.: Assessment of High-Resolution Regional Ocean Prediction Systems Using Multi-Platform Observations: Illustrations in the Western Mediterranean Sea, *New Frontiers in Operational Oceanography*, pp. 663–694, <https://doi.org/10.17125/gov2018.ch24>, 2018.

Appendini, C. M., Hernández-Lasheras, J., Meza-Padilla, R., & Kurczyn, J. A. (2018). Effect of climate change on wind waves generated by anticyclonic cold front intrusions in the Gulf of Mexico. *Climate dynamics*, 51(9-10), 3747-3763.

CONGRESS AND MEETING ASSISTANCE (ONLY AS FIRST AUTHOR)

European Geophysical Union (EGU) Meeting, Vienna, Austria, April 2021.
virtual-PICO Presentation

OceanPredict '19 Symposium, Halifax, Canada, May 2019
Oral Presentation

6th COSS-TT International coordination meeting (ICM-6), Madrid, Spain , September 2018
Oral Presentation

European Geophysical Union (EGU) Meeting, Vienna, Austria, April 2018.
Oral Presentation

European Geophysical Union (EGU) Meeting, Vienna, Austria, April 2017.
Poster

PROJECTS

Main scientific projects in which I have been working for are:

- **EuroSea.** European project
- **Copernicus MED-MFC.** European project
- **Jerico-Next.** European project
- **Pre-SWOT** (CTM2016-78607-P). Funded by Spanish research agency (*Agencia Estatal de Investigación*) and European Regional Development Fund (AEI/FEDER, EU)
- **CALYPSO (Coherent Lagrangian Pathways from the Surface Ocean to Interior)** . Funded by Office of Naval Research (ONR, USA).