

PERSONAL INFORMATION

Mélanie Juza

📍 Parc Bit, Naorte, Bloc A 2^op. pta, 07121 Palma de Mallorca - Spain

☎ +34 971 43 98 08

✉ mjuza@socib.es

Sex Female | Date of birth 29/07/1980 | Nationality French

POSITION

PhD and engineer in physical oceanography

WORK EXPERIENCE

December 2011-present

Engineer-Researcher, scientist oceanographer SOCIB

Balearic Islands Coastal Observing and Forecasting System (SOCIB), Palma, Spain, www.socib.es.

- Development sub-regional indicators in the Mediterranean Sea from event detection in real-time to long-term variations in response to climate change.
- Development of added-value ocean products and applications to transfer knowledge to society and to support sustainable management of the oceans.
- Dynamical investigations (circulation and variability at various scales, water masses, ocean processes,) in the western Med. combining multi-platform observations and numerical simulations.
- Systematic and quantitative assessment of regional oceanic simulations (forecasts and hindcasts) implemented in the western Mediterranean using available multi-platform (remote sensing and *in situ*) observations.
- Support to operational models (ocean forecasting systems) in the western Mediterranean Sea: development, maintenance, validation, improvement.

December 2008-2011

PhD

LEGI, MEOM team, Grenoble, France.

- Numerical simulations and observations of the global ocean: development of interface, assessment of simulations and observational network, dynamical investigations. (Advisors: B. Barnier, T. Penduff)

December 2005-2008

Research engineer CNES-CNRS

LEGI, MEOM team, Grenoble, France.

- Work integrated into the international project DRAKKAR (multi-resolution modelling of the global ocean).
- Development of tools for the analysis oceanic simulations and reanalysis, of statistical methods for the comparison model/observations. Scientific analysis of the results.
- Construction, maintenance and distribution of post-processed observations & multi-model datasets.

March-August 2005

Internship (Research Master)

Ifremer, Laboratoire d'Océanographie Spatiale (LOS), Brest, France.

- Assessment of the WaveWatch III numerical model using altimetric observations. (Advisors: Y. Quilfen, B. Chapron)

March-August 2004

Internship (College engineering)

Institut de Recherche pour le Développement (IRD), Brest, France.

- Assessment and exploitation of meteorological data (*in situ*, satellites, models) in the Guinea Gulf. Calculations of turbulent air-sea fluxes. (Advisors: D. Dagorne, B. Bourlès)
- Project integrated into the EGEE program (study of the ocean circulation and its variability in the Guinea Gulf).

June-August 2003

University of Queensland, Department of Coastal Engineering, Brisbane, Australia.

- Study of seawater infiltration into beaches. (Advisor: P. Nielsen)

EDUCATION AND TRAINING

- 2008-2011 **PhD**
University of Grenoble, France, supported by the CNES. Speciality: Earth, Univers, Environment.
- 2004-2005 **Research Master**
University of Bretagne Occidentale, Brest, France: "Physics in ocean and atmosphere".
- 2001-2004 **Engineering university degree**
Institut des Sciences de l'Ingénieur de Toulon et du Var (ISITV), La Garde, France: « Marine engineering ».
- 1998-2001 **University-level preparation for the French "Grandes Ecoles"**
Physics-Chemistry, Paris, France.

PERSONAL SKILLS

Mother tongue(s) French

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C	C	C	C	C
Spanish	C	C	C	C	C
Italian	A	A	A	A	A

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

Communication skills Good communication skills:

- Oral presentations at international conferences, meetings and workshop (in English, French, Spanish)
- Poster presentations at international conferences and meetings
- Articles (scientific and public journals), deliverable project reports, internal reports

Job-related skills

- Physical oceanography
- Ocean numerical modelling (operational models and hindcast simulations)
- Multi-platform observations (satellite products, Argo floats, CTDs, XBT, gliders, drifters, fixed moorings, HF radar, animals, saildrones)
- Assessment of simulations using multi-platform observations at various spatial and temporal scales
- Data analysis (observations and numerical simulations)
- Western Mediterranean Sea (circulation, variability, water mass ocean processes)
- Extreme events and climate change
- Oceanographic products, applications and services

Computer skills

- Operating systems: Unix, Windows. Simulations in supercomputers
- Programming languages: Fortran, c, C-shell, Matlab
- Management and storage of oceanographic data (observations and numerical simulation outputs): NetCDF format, development of processing tools
- Visualization tools of oceanographic data: Matlab, Ocean Data View, MEOM tool based on NCAR graphics, html
- Editing and word processing tools: vi, LATEX, Microsoft tools
- Other softwares: Simulations in super computers (IDRIS-CNRS, CINES), SVN (version control system), NVU (web site development), ...

- Oceanographic campaigns**
- Participation to oceanographic campaigns:
 - BLUEFIN TUNA (July 2015). Stations CTD and catches tuna larvae around the Balearic Islands.
 - ALBOREX (May 2014). Multi-platform experiment in the western Mediterranean Sea.
 - PIRATA-FR19 (July 2009). Substitution of 5 fixed buoys (launching, restoring, and recovery), deployment of 10 autonomous floats, continuous measurements and hydrographic stations (XBT, CTD, water sampling) in the Equatorial Atlantic.
- Licences**
- Driving licence B, Nautical licence PNB

ADDITIONAL INFORMATION

Publications

- 2022**
- Juza, M., Fernández-Mora, A. and Tintoré, J. (2022). “Sub-regional marine heat waves in the Mediterranean Sea from observations: long-term surface changes, sub-surface and coastal responses”, *Frontiers in Marine Science*, doi:10.3389/fmars.2022.785771.
- 2021**
- Skjelvan, I., Coppola, L., Cardin, V., Juza, M., Bozzano, R., Pensieri, S., Giani, M., Siena, G., Urbini, L., Mauri, E., Martellucci, R., Cantoni, C., Luchetta, A., Izquierdo, A., Paulsen, M., & Fiedler, B. (2021). The ATL2MED mission - experiences and lessons learnt. ICOS-OTC, <https://doi.org/10.18160/9HK5-807K>.
 - Juza, M. and J. Tintoré (2021). “The *Sub-regional Mediterranean Sea Indicators* tool in support to the sustainable management of the ocean. Advances in Operational Oceanography. Proceedings of the 9th EuroGOOS International Conference, May 2021, <https://archimer.ifremer.fr/doc/00720/83160>.
 - Juza, M. and J. Tintoré (2021). “Multivariate sub-regional ocean indicators in the Mediterranean Sea: from event detection to climate change estimations”, *Frontiers in Marine Science*, 8, doi:10.3389/fmars.2021.610589.
 - Vargas-Yáñez, M., M. Juza, M.C. García-Martínez, F. Moya, R. Balbín, E. Ballesteros, M. Muñoz, E. Tel, J. Pascual, P. Vélez-Belchi, and J. Salat, 2021. “Long-term changes in water mass properties in the Balearic Channels over 1996-2019”, *Frontiers in Marine Science*, 8, doi:10.3389/fmars.2021.640535.
 - Von Schuckmann, K. et al., 2021. “The Copernicus Marine Environment Monitoring Service Ocean State report, Issue 5”. *Journal of Operational Oceanography*, under revision.
 - Prieto, L., D. Macías, J. L. Oviedo, M. Juza and J. Ruiz, 2021. “Massive occurrence of the jellyfish Portuguese Man-of-War in the Mediterranean Sea: research to the rescue of coastal manager”. In Chapter 3 Case studies. In Copernicus Marine Service Ocean State Report, Issue 5, *Journal of Operational Oceanography*, under revision.
- 2020**
- Vargas-Yáñez, M., M. Juza, R. Balbín, P. Velez-Belchi, M.C. García-Martínez, F. Moya and A. Hernández-Guerra, 2020. “Climatological hydrographic properties and water mass transports in the Balearic Channels from repeated observations over 1996-2019”, *Frontiers in Marine Science*, 7, doi:10.3389/fmars.2020.568602
- 2019**
- Juza, M., R. Escudier, M. Vargas-Yáñez, B. Mourre, E. Heslop, J. Allen, and J. Tintoré, 2019. “Characterization of changes in Western Intermediate Water enabled by an innovative geometry-based detection approach”, *Journal of Marine Systems*, 191, 1-12, doi:10.1016/j.jmarsys.2018.11.003.
 - Aguiar, E., B. Mourre, M. Juza, E. Reyes, J. Hernandez-Lasheras, E. Cutolo, E. Mason and J. Tintoré, 2019. “Multi-platform assessment reporting the impacts of downscaling on the Surface circulation and mesoscale activity in the Western Mediterranean Sea”. *Ocean Dynamics*, under revision.
 - Tintoré, J. et al., 2019. “Challenges for sustained observing and forecasting systems in the Mediterranean Sea”. *Frontiers in Marine Science*, 6, 568, doi:10.3389/fmars.2019.00568.
 - Von Schuckmann, K. et al., 2019. “The Copernicus Marine Environment Monitoring Service Ocean State report, Issue 3”. *Journal of Operational Oceanography*, S1-S123, <https://doi.org/10.1080/1755876X.2019.1633075>.
 - Gourrion et al., 2019. “Temperature and salinity anomalies in the North Atlantic subpolar gyre”. In Chapter 4 Specific events 2017. In Copernicus Marine Service Ocean State Report, Issue 3, *Journal of Operational Oceanography*, <https://doi.org/10.1080/1755876X.2019.1633075>.
 - Aguiar E., M. Juza, B. Mourre, A. Pascual, E. Mason, A. Alvera-Azcarate and J. Tintoré, 2019. “Anticyclonic eddy anomaly: impact on the boundary current and circulation in the western Mediterranean Sea”. In Chapter 4 Specific events 2017. In Copernicus Marine Service Ocean State Report, Issue 3, *Journal of Operational Oceanography*, <https://doi.org/10.1080/1755876X.2019.1633075>.
- 2018**
- Von Schuckmann, K. et al., 2018. « The Copernicus Marine Environment Monitoring Service Ocean State report, Issue 2”. *Journal of Operational Oceanography*, S1-S142, <https://doi.org/10.1080/1755876X.2018.1489208>.
 - Mulet et al., 2018. “Ocean temperature and variability”. In Chapter 1 Essential variables. In Copernicus Marine Service Ocean State Report, Issue 2, *Journal of Operational Oceanography*, S1-S142, <https://doi.org/10.1080/1755876X.2018.1489208>.
 - Deshayes, J., J. Gourrion, M. Juza, and T. Szekely, 2018. “Deep convection in Labrador Sea”. In Chapter 4 Remarkable events during 2016. In Copernicus Marine Service Ocean State Report, Issue 2, *Journal of Operational Oceanography*, S1-S142, <https://doi.org/10.1080/1755876X.2018.1489208>.

- Gourrion, J., J. Deshayes, M. **Juza**, and T. Szekely, 2018. "A persisting cold and fresh anomaly in the Northern Atlantic". In Chapter 4 Remarkable events during 2016. In Copernicus Marine Service Ocean State Report, Issue 2, *Journal of Operational Oceanography*, S1-S142, <https://doi.org/10.1080/1755876X.2018.1489208>.
- Rotllan, P., B. Frontera, E. Heslop, B. Mourre, M. **Juza**, A. Álvarez, L. Pujol, M.À. Rújula, I. Ruíz, X. Notario, C. Muñoz, M. Charcos, E. Reyes, M. Gomila, S. Gómara, J.G. Fernández and J. Tintoré. "SOCIB and Balearic islands lifeguards: an example of data products and services that provide direct social benefits". *IMDIS Proceedings 2018*. International Conference on Marine Data and Information Systems, 5-7 November, Barcelona, Spain.
- Mourre, B., E. Aguiar, M. **Juza**, J. Hernandez-Lasheras, E. Reyes, E. Heslop, R. Escudier, E. Cutolo, S. Ruiz, E. Mason, E. Pascual, and J., Tintoré, 2018: "Assessment of high-resolution regional ocean prediction systems using multi-platform observations: illustrations in the western Mediterranean Sea", 663-694, *Chapter 24 from the book "New Frontiers in Operational Oceanography"*.

2017

- Von Schuckmann, K. et al., 2017: « The Copernicus Marine Environment Monitoring Service Ocean State report ». *Journal of Operational Oceanography*, s235-s320, <http://dx.doi.org/10.1080/1755876X.2016.1273446>.
- Pujol, M.I. et al, 2017."Mesoscale activity". In Chapter 2 Large-scale changes. In Copernicus Marine Service Ocean State Report, Issue 1, *Journal of Operational Oceanography*, s235-s320, <http://dx.doi.org/10.1080/1755876X.2016.1273446>.
- Hernandez et al., 2017. "The recent North Atlantic cold event". In Chapter 4 Specific events. In Copernicus Marine Service Ocean State Report, Issue 1, *Journal of Operational Oceanography*, s235-s320, <http://dx.doi.org/10.1080/1755876X.2016.1273446>.

2016

- **Juza**, M., R. Escudier, A. Pascual, M.-I. Pujol, C. Troupin, B. Mourre, and J. Tintoré, 2016: « Improvement of reprocessed altimetry absolute dynamic topography: the Western Alboran Gyre variability ». *Advances in Space Research*, 58, 277-288, <http://dx.doi.org/10.1016/j.asr.2016.05.026>.
- Escudier, R., B. Mourre, M. **Juza**, and J. Tintoré, 2016: « Sub-surface circulation and mesoscale variability in the Algerian sub-basin from altimeter-derived eddy trajectories ». *Journal of Geophysical Research*, 121, 6310-6322, doi:10.1002/2016JC011760.
- **Juza** et al., 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.
- Capo, E., J.M. Sayol, D. Conti, M. **Juza**, S. Ruiz, M.G. Sotillo, E. García-Ladona, G. Simarro, B. Mourre, J. Tintoré, and A. Orfila, 2016: « Assessment of operational models in the Balearic Sea during the MEDESS experiment ». *Deep Sea Research Part II*, doi:10.1016/j.dsr2.2016.03.009.
- Alvarez-Berastegui, D., J.M. Hidalgo, M.P. Tugores, P. Reglero, A. Aparacio, L. Ciannelli, M. **Juza**, B. Mourre, A. Pascual, J.L. Lopez-Jurado, A. García, J.M. Rodriguez, J. Tintoré, and F. Alemany, 2016: « Pelagic seascape ecology for operational fisheries oceanography: modeling and predicting spawning distribution of Atlantic Bluefin tuna in western Mediterranean». *ICES Journal of Marine Science*, doi:10.1093/icesjms/fsw041.

2015

- **Juza** et al., 2015: « WMOP: Western Mediterranean SOCIB high-resolution ocean forecasting system ». Operational Oceanography for Sustainable Blue Growth. Proceedings of the Seventh EuroGOOS International Conference. 28-30 October 2014, Lisbon, Portugal. Buch E, Antoniou Y, Eparkhina D, Nolan G (Eds.) ISBN 978-2-9601883-1-8
- **Juza**, M., B. Mourre, and J. Tintoré, 2015: « Assessment and intercomparison of numerical simulations in the western Mediterranean: a multi-variable and multi-scale approach ». Operational Oceanography for Sustainable Blue Growth. Proceedings of the Seventh EuroGOOS International Conference. 28-30 October 2014, Lisbon, Portugal. Buch E, Antoniou Y, Eparkhina D, Nolan G (Eds.) ISBN 978-2-9601883-1-8
- **Juza**, M., B. Mourre, J.-M. Lellouche, M. Tonani, and J. Tintoré, 2015: « From basin to sub-basin scale assessment and intercomparison of numerical simulations in the western Mediterranean Sea ». *Journal of Marine Systems*, 149, 36-49, doi:10.1016/j.jmarsys.2015.04.010.

2013

- **Juza**, M., L. Renault, S. Ruiz, and J. Tintoré, 2013: « Origin and pathways of Winter Intermediate Water in the North-western Mediterranean Sea using observations and numerical simulation ». *Journal of Geophysical Research: oceans*, 118, 1-13, doi:10.1002/2013JC009231.

2012

- **Juza**, M., T. Penduff, B. Barnier, J.-M. Brankart, 2012: « Estimating the distortion of the mixed layer property distributions induced by the ARGO sampling ». *Journal of Operational Oceanography*, 5, 1.

2011

- Hasson, A., A. Koch-Larrouy, R. Morrow, M. **Juza**, and T. Penduff, 2011: « The origin and fate of mode water in the Southern Pacific Ocean ». *Ocean Dynamics*, 62, 335-354, doi:10.1007/s10236-011-0507-3.
- **Juza**, M., T. Penduff, and B. Barnier, 2011: « How should the Argo array be extended to better monitor the Global Ocean heat content variability? ». *Mercator Ocean Quarterly Newsletter, special issue with Coriolis*, 41.
- Penduff, T., M. **Juza**, B. Barnier, J. Zika, W.K. Dewar, A.-M. Treguier, J.-M. Molines, and N. Audiffren, 2011: « Sea-level expression of intrinsic and forced ocean variabilities at interannual time scales ». *Journal of Climate*, 24, 5652–5670, doi:10.1175/JCLI-D-11-00077.1.
- Penduff, T., M. **Juza**, L. Brodeau, G.C. Smith, B. Barnier, J.-M. Molines, A.-M. Treguier and G. Madec, 2010: « Impact of global ocean model resolution on sea-level variability with emphasis on interannual time scales ». *Ocean Science*, 6, 269–284.

2010

- Mathiot, P., B. Barnier, H. Gallée, J.-M. Molines, J. Le Sommer, M. **Juza**, and T. Penduff, 2010: « Introducing katabatic winds in global ERA40 fields to simulate their impact on the Southern Ocean and sea-ice ». *Ocean Modelling*, 35, 3, 146-160. doi:10.1016/j.ocemod.2010.07.001.
- Koch-Larrouy, A., R. Morrow, T. Penduff, and M. **Juza**, 2010: « Origin and mechanism of Sub Antarctic Mode Water formation and transformation in the Southern Indian Ocean ». *Ocean Dynamics*, doi:10.1007/s10236-010-0276-4.

2007

- Penduff, T., M. **Juza**, and B. Barnier, 2007: « Assessing the realism of ocean simulations against hydrography and altimetry ». *Clivar Exchanges*, No 42 (vol 12 No 3), 11-12.
- Le Sommer, J., B. Barnier, L. Brodeau, M. **Juza**, G. Madec, P. Mathiot, J.-M. Molines, T. Penduff and A.-M. Tréguier, 2007: « Southern Ocean processes and climate variability in the DRAKKAR hierarchy of ocean/sea-ice models ». *Mercator Ocean Quarterly Newsletter*. http://www.mercator-ocean.fr/documents/lettre/lettre_27_en.pdf.

Communications

2021

- **Juza**, M. and J. Tintoré, 2021: The “Sub-regional Mediterranean Sea Indicators” tool in support the sustainable management of the ocean. 9th EuroGOOS International Conference: Advances in Operational Oceanography, 3-5 May 2021, virtual meeting.
- **Juza**, M. and J. Tintoré, 2021: The “Sub-regional Mediterranean Sea Indicators” too: from event detection to climate change estimations. EGU General Assembly y, 19-30 April 2021, virtual meeting.
- **Juza**, M. et al., 2021: The CMEMS In situ TAC multi-year and multi-variate products to monitor and understand the ocean variability. EGU General Assembly y, 19-30 April 2021, virtual meeting.

2020

- **Juza**, M. et al., 2020: How CMEMS In Situ TAC contribute to the monitoring of the ocean?. EGU General Assembly y, 4-8 May 2020, virtual meeting.
- **Juza**, M. et al., 2020: INSTAC contribution in Ocean State Report. In Situ Thematic Assembly Centre General Assembly, June 2020, virtual meeting.

2019

- **Juza**, M. et al., 2019: INSTAC contribution in Ocean State Report. In Situ Thematic Assembly Centre General Assembly, 8-10 October 2019, Palma, Spain.
- Mourre, B., J. Hernández-Lasheras, M. **Juza**, E. Aguiar, A. Révelard, M.À. Fernández-Mora, A. Buils-Casasnovas, P. Rotllan, J. G. Fernández-Pineda, D. Alvarez-Berastegui, D. March, E. Reyes, E. Heslop, J. Tintoré, 2019: SOCIB ocean prediction systems and applications in the Western Mediterranean Sea. OceanPredict'19. GODAE OceanView Symposium, 6-10 May 2019, Halifax, Canada.
- Hernandez-Lasheras, J., B. Mourre, E. Reyes, E. Aguiar, M. **Juza**, A. Orfila, J. Tintoré, 2019: Impact of HF Radar Data Assimilation on Surface Currents in the Ibiza Channel. OceanPredict'19. GODAE OceanView Symposium. 6-10 May 2019, Halifax, Canada.
- Aguiar, E., A. Révelard, B. Mourre, M. **Juza**, J. Hernandez, A. Pascual, Aida Alvera-Azcarate, J. Tintoré, 2019: Disentangling the generation mechanisms of strong and long-lived anticyclonic mesoscale eddies in the Balearic Sea. EGU General Assembly, April 2019, Vienna, Austria.

2018

- **Juza**, M. et al., 2018: INSTAC contribution in Ocean State Report. In Situ Thematic Assembly Centre General Assembly, October, Brest, France.
- Mourre, B., J. Hernandez, E. Aguiar, E. Cutolo, M. **Juza**, A. Pascual and J. Tintoré, 2018: Pre-operational WMOP data-assimilative predictions in the western Mediterranean Sea, 2018: preliminary evaluation. 6th GOADE COSS-TT International Coordination Workshop (ICW6), 19 - 21 September 2018, Madrid, Spain.
- Hernandez, J., B. Mourre, E. Reyes, A. Orfila, E. Aguiar, M. **Juza**, J. Tintoré, 2018: Surface circulation improvements through HF radar data assimilation in a high resolution regional model. 6th GOADE COSS-TT International Coordination Workshop (ICW6), 19 - 21 September 2018, Madrid, Spain.
- Aguiar, E., B. Mourre, M. **Juza**, J. Hernández, E. Reyes, E. Cutolo, E. Mason, J. Tintoré, 2018: Multi-platform model assessment in the Western Mediterranean Sea. VI International Symposium on Marine Sciences, 20-22 June, 2018, Vigo, Spain.
- Prieto, L. et al., 2018: A new systematic jellyfish monitoring system in the Balearic Islands: a joint science-society approach. VI International Symposium on Marine Sciences, 20-22 June 2018, Vigo, Spain.
- J. Hernandez et al., 2018: Assimilating Ibiza Channel HF radar currents in a high resolution model. EGU General Assembly, April 2018, Vienna, Austria.
- Aguiar, E. et al., 2018: Downscaling CMEMS Mediterranean model over the western basin: impacts on mean flows and mesoscale eddies. EGU General Assembly, April 2018, Vienna, Austria.
- Heslop, E., B. Mourre, M. **Juza**, E. Aguiar, F. Margirier, A. Bosse, P. Testor, M. Torner, J. Tintoré, 2018: Understanding drivers of variability in water mass exchange through a circulation ‘choke’ point, using ocean gliders as part of a multi-platform approach. Ocean Science Meeting. February 2018, Portland, Oregon, USA.
- **Juza**, M. et al., 2018: INSTAC contribution in Ocean State Report. In Situ Thematic Assembly Centre for Copernicus Marine Environment Monitoring Service – End Phase 1 – Kickoff Phase 2, January 2018, Athens, Greece.

2017

- Aguiar, E., B. Mourre, M. **Juza**, J. Hernandez, E. Heslop, E. Reyes, R. Escudier, J. Tintoré, 2017: Multi-platform model validation in the western Mediterranean Sea: impact of downscaling. Copernicus Marine Week, 25-29 September 2017 Brussels, Belgium.
- Alvarez-Berastegui D., Alemany F., Ingram W., Reglero P., Mourre B., Balbín R., **Juza** M., Tintoré J. 2017: Multi-platform integrated assessment for the sustainability of Bluefin Tuna in the Mediterranean Sea, The Copernicus Marine Week, Brussels, 25-29 September 2017, Brussels, Belgium
- Alvarez-Berastegui D., B. Mourre, M. **Juza**, C. Trenc, L. Díaz, P. Rotllan, E. Heslop, I. Hernández, B. Frontera, M.A. Rújula, J. Tintoré, F. Alemany, P. Reglero, R. Balbín, E. Blanco, M. Martín, A. Aparicio, A. García, J.M. Rodríguez, R. Laiz, J. Quintanilla,

- R. Santiago, J. Melguizo, B. Salamanca, A. Ortega, F. De la Gándara, F.J. Abascal, A. Medina, W. Ingram, A. Orfila and A. Pascual, 2017: Operational oceanography for sustainable fisheries. Applications to Bluefin Tuna in the Western Mediterranean. The Copernicus Marine Week 2017, Brussels, Belgium.
- Tintoré, et al., 2017: Paradigm change in ocean studies: multi-platform observing and forecasting integrated approach in response to science and society needs. Copernicus Marine Week, 25-29 September, Brussels, Belgium.
 - Reyes, E., B. Mourre, J. Hernandez, E. Aguiar, M. **Juza**, A. Orfila, and J. Tintoré, 2017: HF radar: a keystone for validating high-resolution ocean models. International Radiowave Oceanography Workshop, 19-21 September 2017, Lüneburg, Germany.
 - Mourre B., E. Aguiar, A. Alvarez-Ellacuría, S. Gómara, M. Gomila, J. Hernandez, E. Heslop, M. **Juza**, T. Oguz, E. Reyes, M.A. Rújula, M. Torner and J. Tintoré, 2017: SOCIB: observaciones, predicciones y servicios marinos en el Mediterráneo Occidental. Servicios marinos y supercomputación: experiencias y retos futuros, 2017, Santiago de Compostela, Spain.
 - Heslop, E., E. Aguiar, B. Mourre, M. **Juza**, R. Escudier, and J. Tintoré, 2017: Resolving key drivers of variability through an important circulation choke point in the western Mediterranean Sea; using gliders, models and satellite remote sensing. EGU General Assembly, April 2017, Vienna, Austria.
 - Aguiar, E., B. Mourre, E. Heslop, M. **Juza**, E. Mason, R. Escudier, and J. Tintoré, 2017: Multi-platform validation of a high-resolution model in the Western Mediterranean Sea: insight into spatial-temporal variability. EGU General Assembly, April 2017, Vienna, Austria.
 - Mourre, B., J. Vitorino, S. Ciliberti, L. Ferrer, G. Korres, L. Laakso, H. Whede, J. Hernandez, M. **Juza**, E. Aguiar, et al., 2017: “Operational oceanography and coastal forecasting” Joint Research Activity Project in JERICO-NEXT, the European Coastal Observatory Network. 5th GODAE COSS-TT, 3-7 April 2017, Cape Town, South Africa.
 - Aguiar, E., M. **Juza**, J. Hernandez, B. Mourre, E. Heslop, E. Reyes, R. Escudier, and J. Tintoré, 2017: Multi-platform coastal model assessment and impact of downscaling in the Western Mediterranean Sea. 5th GODAE COSS-TT, 3-7 April 2017, Cape Town, South Africa.

2016

- Heslop, E., B. Mourre, M. **Juza**, M. Torner, P. Testor, A. Bosse, F. Mirgirier, E. Aguiar, R. Escudier, and J. Tintoré, 2016: Drivers of variability in water mass exchange at a circulation choke point: a combined observing-modelling approach. 7th EGO Conference on autonomous ocean gliders and their applications. 26-29 September 2016, Southampton, UK.
- Mourre B., J. Hernandez, R. Escudier, M. **Juza**, J. Tintoré, C. Troupin, R. Balbín, 2016: Predicciones oceánicas en el Mediterráneo Occidental. Aplicación al rescate de un fondeo del IEO en abril de 2016. 2o Seminario de Teledetección y ejercicios SAR, 2016, SASEMAR, Madrid, Spain.
- Troupin C., J. Marmain, E. Reyes, A. Lana, V. Fernández, B. Mourre, M. **Juza**, A. Orfila, J. Tintoré, 2016: SOCIB HF Radar: a key contribution to multi-platform ocean observation. JERICO-NEXT HF Radar workshop, 2016, San Sebastian, Spain.
- Troupin et al., 2016: Medclix: the Mediterranean in one click. EGU General Assembly, Vienna, Austria, April 2016.
- Heslop, E., B. Mourre, M. **Juza**, C. Troupin, R. Escudier, M. Torner, and J. Tintoré, 2016: Mesoscale circulation variability from five years of quasi-continuous glider observations and numerical simulation at a key sub-basin “choke” point. Ocean Sciences Meeting, New Orleans, United States, February 2016.
- Marmain, J., E. Heslop, A. Lana, V. Fernandez, B. Mourre, M. **Juza**, C. Troupin, A. Orfila, and J. Tintoré, 2016: SOCIB HF radar, a key contribution to multi-platform ocean observation. Ocean Sciences Meeting, New Orleans, United States, February 2016.

2015

- Marmain, J., A. Lana, V. Fernandez, B. Mourre, M. **Juza**, C. Troupin, A. Orfila, and J. Tintoré, 2015 : SOCIB HF radar : a key contribution to multi-platform ocean observation. 4th meeting of the Geo global HF radar task, 22-23 September 2015 Heraklion, Crete, Greece.
- **Juza**, M., B. Mourre, J. Marmain, R. Escudier, A. Lana, J. Noirot, E. Heslop, and J. Tintoré, 2015 : Regional and coastal assessment of the SOCIB forecasting system at various time scales in the western Mediterranean Sea. 4th GOADE COSS-TT International Coordination Workshop (ICW4), 31st August – 4th September 2015, Lisbon, Portugal.
- Mourre, B., M. **Juza**, R. Escudier, J. Tintoré, A. Pascual, A. Funk, P. Oddo, and R. Onken, 2015: SOCIB Western Mediterranean ocean forecasting system: recent progress and data assimilation experiments. 4th GOADE COSS-TT International Coordination Workshop (ICW4), 31st August – 4th September 2015, Lisbon, Portugal.
- Escudier, R., A. Pascual, L. Renault, B. Mourre, M. **Juza**, P. Brasseur, and J. Tintoré, 2015: Mesoscale eddies in the western Mediterranean Sea: characterization from altimetry and a regional model. 4th GOADE COSS-TT International Coordination Workshop (ICW4), 31st August – 4th September 2015, Lisbon, Portugal.
- Heslop, E., M. **Juza**, B. Mourre, J. Allen, J.-L. Lopez-Jurado, M. Torner, and J. Tintoré, 2015: Combining glider monitoring at a circulation “choke” point and numerical simulation. Glider community Workshop, May 2015, Norwich, UK.
- Tintoré, J., E. Heslop, B. Mourre, M. **Juza**, C. Troupin, B. Casas, M. Torner, A. Lana, V. Fernandez, J. Marmain, et al., 2015: Paradigm change in ocean studies: multi-platform observing and forecasting integrated approach in response to science and society needs. The 47th International Liège Colloquium, Marine Environmental Monitoring, Modelling and Prediction, 4th-8th May 2015, Liège, Belgium.
- Mourre, B., M. **Juza**, A. Alvarez, R. Escudier, and J., Tintoré, 2015: Western Mediterranean operational ocean forecasts at SOCIB. The 47th International Liège Colloquium, Marine Environmental Monitoring, Modelling and Prediction, 4th-8th May 2015, Liège, Belgium.
- Lana, A., J. Marmain, M. **Juza**, B. Mourre, V. Fernandez, A. Orfila, and J. Tintoré, 2015: HF Radar ocean surface current observations in the Ibiza Channel: validation, seasonal analysis and model-data comparisons. The 47th International Liège Colloquium, Marine Environmental Monitoring, Modelling and Prediction, 4th-8th May 2015, Liège, Belgium.
- Heslop, E., M. **Juza**, B. Mourre, J. Allen, J.-L. Lopez-Jurado, M. Torner, and J. Tintoré, 2015: Towards a better understanding of ocean variability, combining glider monitoring at a “choke” point and numerical simulation. The 47th International Liège Colloquium, Marine Environmental Monitoring, Modelling and Prediction, 4th-8th May 2015, Liège, Belgium.

2014

- Pascual, A., et al., 2014: ALBOREX: a major intensive multi-platform and multidisciplinary experiment in the Alboran Sea. PERSEUS 2nd Scientific, 4th December 2014, Marrakech, Morocco.

- **Juza, M., B. Mourre, L. Renault, S. Gómara, K. Sebastian, S. Lora, B. Frontera, J.P. Beltran, C. Troupin, E. Heslop, B. Casas, and J. Tintoré, 2014:** Operational SOCIB forecasting system and multi-platform validation in the western Mediterranean Sea. Oral presentation at EuroGOOS conference, 28-30 October 2014, Lisbon.
- **Juza, M., B. Mourre, and J. Tintoré, 2014:** Sub-basin scale assessment and intercomparison of numerical simulations in the western Mediterranean Sea. EuroGOOS conference, 28-30 October 2014, Lisbon.
- Alvarez-Berastegui, D. et al., 2014. An operational oceanography tool for fisheries: predicting spawning habitat of Bluefin tuna in Western Mediterranean. EuroGOOS conference, 28-30 October 2014, Lisbon.
- **Juza, M., B. Mourre, L. Renault, S. Gómara, K. Sebastian, S. Lora, B. Frontera, J.P. Beltran, C. Troupin, E. Heslop, B. Casas, and J. Tintoré, 2014:** Operational SOCIB forecasting system and multi-platform validation in the western Mediterranean Sea. MyOcean Science Days, September 2014, Toulouse.
- **Juza, M., B. Mourre, and J. Tintoré, 2014:** Assessment and intercomparison of numerical simulations in the western Mediterranean Sea. MyOcean Science Days, September 2014, Toulouse.
- **Juza, M., B. Mourre, L. Renault, and J. Tintoré, 2014:** Multi-platform operational validation of the Western Mediterranean SOCIB forecasting system. EGU General Assembly, April-May 2014, Vienna.
- **Juza, M., B. Mourre, and J. Tintoré, 2014:** Assessment and intercomparison of numerical simulations in the western Mediterranean Sea. EGU General Assembly, April-May 2014, Vienna.
- Pascual, A., R. Escudier, C. Troupin, J. Bouffard, E. Mason, A. Lana, M. **Juza**, S. Ruiz, and J. Tintoré, 2014 : Synergy between satellite and other sensors for the study of coastal processes. Coastal and Shelf Seas Task Team (COSS-TT) 3rd International Collaboration Workshop (ICW3), January 2014, Puerto Rico.

2013

- Pascual, A., M. Tomer, C. Troupin, A. Lana, S. Cusi, C. Castilla, E. Heslop, J.-P. Beltrán, K. Sebastián, S. Lora, I. Lizarán, M. **Juza**, S. Ruiz, B. Casas, G. Valladeau, M.-I. Pujol, Y. Faugère, J. Tintoré, 2013: Multi-sensors observations towards coastal and mesoscale characterization: SARAL/AltiKa, HF radar, gliders and drifters. OSTST meeting, 8-11 October 2013, Boulder, USA.
- **Juza, M.** and SOCIB's team, 2013: Science, forecasting systems and tools in the Western Mediterranean Sea as response to the society needs. Conference « Blue Growth in the Mediterranean: perspectives of Spain », 2-3 May 2013, Palma de Mallorca, Spain.
- **Juza, M. L. Renault, S. Ruiz, and J. Tintoré, 2013:** Origin and pathways of Winter Intermediate Water in the North-western Mediterranean Sea using observations and numerical simulation. EGU general assembly, April 2013, Vienna, Austria.
- Renault, L., M **Juza**, J. Tintoré, A. Orfila, and J.M. Sayol, 2013 : The SOCIB Western Mediterranean Sea Operational forecasting system. EGU general assembly, April 2013, Vienna, Austria.

2012

- **Juza, M., T. Penduff, B. Barnier, J.-M. Brankart and J.-M. Molines, 2012:** Argo-based estimates of the oceanic heat content variability: impact of the array's geometry. Argo workshop (within the "20 years of progress in radar altimetry" Symposium). 24-29 September 2012, Venice, Italy.
- Penduff, T., M. **Juza**, S. Gregorio, B. Barnier, W.K. Dewar, and J.-M. Molines, 2012: Imprint of the Intrinsic Low-frequency Ocean Variability on Satellite Observations and Climate Indices. "20 years of progress in radar altimetry" Symposium. 24-29 September 2012, Venice, Italy.
- Penduff, T., M. **Juza**, L. Brodeau, B. Barnier, A.-M. Treguier and J.-M. Molines, 2012: Joint uses of satellite/in-situ observations and Drakkar ocean models. "20 years of progress in radar altimetry" Symposium. 24-29 September 2012, Venice, Italy.
- Penduff, T., M. **Juza**, and P. Sura, 2012: Extreme Events and Statistical Structure of Sea-level Variability: AVISO vs Multi-resolution DRAKKAR Simulations. "20 years of progress in radar altimetry" Symposium. 24-29 September 2012, Venice, Italy.
- Penduff, T., M. **Juza**, B. Barnier, J. Zika, W.K. Dewar, A.M. Treguier, J.M. Molines, N. Audiffren, and B. Deremble: Intrinsic low-frequency variability in the global turbulent ocean : key features from "realistic" simulations. Second International Workshop "Nonlinear processes in oceanic and atmospheric flows", 3-6 July 2012, Madrid, Spain.
- T. Penduff, S. Gregorio, M. **Juza**, B. Barnier, W.K. Dewar, and J.-M. Molines: Intrinsic variability in the eddying ocean at low frequency: climate-relevant fingerprints. Geophysical Research Abstracts, Vol. 14, EGU2012-8060. EGU general assembly, April 2012 Vienna.
- Renault, L., J. Tintoré, M. **Juza**, T. Garrau, G. Vizoso and collaborators, 2012: WMED/BALOP: an operational model of the Western Mediterranean Sea. MOON-MedGOOS, MyOcean-Med workshop, 6-8 March 2012, Athens, Greece.

2011

- Penduff, T., M. **Juza**, B. Barnier, J. Zika, W.K. Dewar, A.M. Treguier, J.M. Molines, N. Audiffren, and B. Deremble: Intrinsic variability in the global eddying ocean at interannual timescales: sea-level, sea-surface temperature, overturning. World Climate Research Programme OSC (Climate Research in Service to Society Workshop), 24-28 October 2011, Denver, CO.
- **Juza, M., T. Penduff, and B. Barnier:** Contribution of the regions not sampled by Argo to the variability of the global ocean heat content. GODAE Ocean View / CLIVAR GSOP Technical Workshop on Observing System Evaluation and Inter-comparison, Santa Cruz, California, USA, June 13-17, 2011.
- **Juza, M., T. Penduff, and B. Barnier:** Contribution of the shallow water areas not sampled by the Argo floats to the variability of the global ocean heat content. Geophysical Research Abstracts, Vol. 13, EGU2011. EGU general assembly, April 2011 Vienna.
- Dussin, R., M. **Juza**, B. Barnier, J.M. Molines, T. Penduff, and G. Garric: Impact of vertical resolution in an eddy-permitting Ocean Global Circulation Model forced with ERA-Interim. Geophysical Research Abstracts, Vol. 13, EGU2011. EGU general assembly, April 2011 Vienna.
- Penduff, T., M. **Juza**, B. Barnier, J. Zika, W.K. Dewar, A.M. Treguier, J.M. Molines, and N. Audiffren: Sea-level expression of intrinsic and forced interannual variabilities: a global OGCM study. Geophysical Research Abstracts, Vol. 13, EGU2011. EGU general assembly, April 2011 Vienna.
- Dussin, R., B. Barnier, J.-M. Molines, A. Lecointre, M. **Juza**, and G. Garric: Sensitivity of ORCA025 to vertical grid resolution, salinity restoring, and forcing. DRAKKAR Annual Workshop, Grenoble, France, January 24-26, 2011.

2010

- Dussin, R., M. **Juza**, B. Barnier, J.-M. Molines, T. Penduff and G. Garric: Impact of vertical resolution in an eddy-permitting Ocean Global Circulation Model forced by ERA-Interim. MyOcean Days, Météo-France, Toulouse, France, December 1-2, 2010.
- **Juza**, M., T. Penduff, and B. Barnier, 2010: Recent (2008-2009) improvement of Argo accuracy in estimating the (mixed layer) heat content: a DRAKKAR model study. Journées 2010 du Groupe Mission MERCATOR/CORIOLIS, Météo-France, Toulouse, France, November 29-30, 2010.
- **Juza**, M., T. Penduff, and B. Barnier, 2010: Contribution of observations and models to understanding the sea level response to the NAO in the North Atlantic. Proceedings of the OST/ST meeting, Lisbon, 18-20 October 2010.
- Hasson, A., A. Koch-Larrouy, R. Morrow, T. Penduff, and M. **Juza**, 2010: The role of eddy mixing on the transformation of subantarctic mode waters. Proceedings of the OST/ST meeting, Lisbon, 18-20 October 2010.
- Penduff, T., B. Barnier, M. **Juza**, J. Le Sommer, and A.-M. Treguier, 2010: Intrinsic interannual variability in the ocean: global simulations and altimeter observations. Proceedings of the OST/ST meeting, Lisbon, 18-20 October 2010.
- **Juza**, M., T. Penduff, and B. Barnier, 2010: Does the Argo array accurately sample the thermal variability of the Global Ocean? 3rd Euro-Argo User Meeting, June 2010, Paris.
- **Juza**, M., T. Penduff, and B. Barnier, 2010: Assessment of DRAKKAR global simulations using hydrographic data: methods and impact of model resolution. Geophysical Research Abstracts Vol. 12, EGU2010-6604, 2010. Oral presentation at EGU General Assembly 2010, May 2010, Vienna.
- Penduff, T., M. **Juza**, and P. Sura, 2010: Global ocean model resolution impacts on the first 4 moments of surface variability. Geophysical Research Abstracts Vol. 12, EGU2010-5445, 2010. EGU General Assembly 2010, May 2010, Vienna.

2009

- Penduff, T., M. **Juza**, L. Brodeau, G.C. Smith, B. Barnier, J.M. Molines, A.M. Treguier, 2009: High resolution brings global ocean simulations closer to AVISO at large time/space scales. Ocean Surface Topography Science Team (OST/ST) Meeting. Seattle, June 22-24, 2009.
- Koch-Larrouy, A., R. Morrow, T. Penduff, and M. **Juza**, 2009: Role of eddy mixing on the formation and transformation of mode waters in the southern Indian Ocean. Ocean Surface Topography Science Team (OST/ST) Meeting. Seattle, June 22-24, 2009.
- **Juza**, M., T. Penduff, and B. Barnier, 2009: Accuracy of ARGO-derived global ocean heat content trends, interannual and seasonal variabilities./ Geophysical Research Abstracts/, Vol. 11, EGU2009. EGU general assembly, April 2009, Vienna.
- **Juza**, M., T. Penduff, and B. Barnier, 2009: Comparing model with observations: methods, tools and results. DRAKKAR Annual Workshop, Grenoble, France, February 11-13, 2009.

2008

- Penduff, T., M. **Juza**, B. Barnier, N. Wienders, and W.K. Dewar, 2008: Evidence of an eddy-driven, intrinsic interannual variability in the Southern Ocean. AGU Fall Meeting, San Francisco, California, December 15-19, 2008.
- **Juza**, M., T. Penduff, and B. Barnier, 2008: Regional accuracy of global ARGO-based monthly mixed layer property estimates: depth, heat and salt contents. GODAE Final Symposium, Nice, France, November 12-15, 2008.
- **Juza**, M., T. Penduff, and B. Barnier, 2008: Assessment of DRAKKAR global simulations against hydrography over 1958-2004: methods, metrics and model skills. GODAE Final Symposium, Nice, France, November 12-15, 2008.
- Penduff, T., M. **Juza**, A. Lecointre, L. Brodeau, B. Barnier, J.-M. Molines, A.-M. Treguier, G. Madec, 2008: Enhancing synergies between satellite, in-situ, and numerical oceanography. Ocean Surface Topography Science Team (OST/ST) Meeting, Nice, France, November 10-12, 2008.
- **Juza**, M., T. Penduff, and B. Barnier, 2008: Regional accuracy of global ARGO-based monthly mixed layer property estimates: depth, temperature and salinity. Oral presentation at EGU General Assembly, Vienna, April 13-18, 2008.
- Penduff, T., M. **Juza**, G.C. Smith, B. Barnier, J.M. Molines, 2008: Comparative assessment of the Drakkar multi-resolution 1958-2004 global simulation ensemble. Ocean Sciences Meeting, Orlando, March 2008.

2007

- Penduff, T., M. **Juza**, 2007: Global skill of the DRAKKAR models measured by altimetry and ARGO floats. Workshop on the DRAKKAR global ocean model at 1/4° resolution, sept. 2007.
- **Juza**, M., T. Penduff, 2007: Evaluation des simulations DRAKKAR globales à l'aide des données ARGO et observabilité de la couche de mélange. 4ème réunion ARGO-France, Brest, may 2007.
- **Juza**, M., T. Penduff, B. Barnier, 2007: Assessment of DRAKKAR global simulations against altimetry and hydrography: Methods and results. EGU General Assembly, Vienna, April 15-20, 2007.
- Penduff, T., M. **Juza**, B. Barnier, 2007: Comparing sea-surface topography modes of variability from altimetry and from DRAKKAR models. EGU General Assembly, Vienna, April 15-20, 2007.
- Penduff, T., M. **Juza**, and B. Barnier, 2007: Assessment of DRAKKAR global simulations against altimetry and hydrography, Ocean Surface Topography Science Team (OST/ST) Meeting, Hobart, Australia, March 2007.
- Barnier, B., T. Penduff, and M. **Juza**, 2007: Comparing sea-surface topography modes of variability from altimetry and global models, Ocean Surface Topography Science Team Meeting, Hobart, Australia, March 2007.

2006

- Penduff, T., M. **Juza**, and B. Barnier, 2006: « Quantitative validation of eddy-admitting 50-year global ocean simulations ». Rapid Climate Change International Science Conference, 24-27 October 2006. Birmingham, U.K.

Contributions to national and international projects

- TIAMAT [ICMAN-SOCIB-IIM]: elaboration of the “marine observatory of climate change in the Spanish national parks”.
- JERICO-S3: SOCIB internal co-coordination, contribution to WP1-2-4-7-8-9 (since 2020)
- Eurofleets+: WP2 – Transnational Access (R/V), WP5 - Stakeholder engagement (since 2020)
- EuroSea: contribution to WP6 – Ocean health demonstrator (since 2021)

- ATL2MED [Saildrone-SOCIB]: Atlantic to Mediterranean – Saildrones. Co-IP SOCIB experiment south of Balearic Islands (March 2020)
- CMEMS INSTAC: coordination of INSTAC for contributions to Ocean State Report (2015-present).
- CMEMS MED-MFC: development and implementation of model-glider comparisons in the Copernicus CalVal system (2016-2018).
- JERICO-Next: contribution to JRAP6: WMOP assessment in the Ibiza Channel using coastal observations (2017-2019).
- MEDCLIC [Caixa Foundation – SOCIB]: contribution to the study of circulation variability in the Mediterranean (2015-2017).
- BLUEFIN TUNA [SOCIB-IEO]: participation to the development of predictive models of Bluefin Tuna spawning locations (2012-2017).
- JELLYFISH [ICMAN-SOCIB]: development of procedures to analyse atmospheric and oceanic conditions during specific jellyfish events in the Balearic Islands (2014-2016).
- TURTLES [Alnitak-SOCIB]: relating turtle trajectories to oceanic conditions in the western Mediterranean Sea (2014-2016).
- DRAKKAR: development of numerical simulations at global scale. Participation to the development of tools for the analysis oceanic simulations and reanalysis, of statistical methods for the comparison model/observations (2005-2011).