Begoña Pérez Gómez

Date of birth: 05/11/1967 | **Nationality:** Spanish | **Phone:** (+34) 646034488 (Work) | **Email:**

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Address: Los Pazos 36, 28110, Algete, Spain (Home)

ABOUT MYSELF

Physicist, PhD in Marine Science and Technology, working on physical oceanography since 1991.

WORK EXPERIENCE

CURRENT Madrid, Spain
HEAD OF CLIMATE CHANGE AND PREDICTION DEPARTMENT, PORTS OF SPAIN PORTS OF SPAIN (PHYSICAL ENVIRONMENT AREA)

- Ports of Spain REDMAR Tide Gauge Network manager since 1993
- Ports of Spain Nivmar Sea Level Forecasting System manager since 2000
- Head of Harbour Oceanography Department at the Physical Environment Area since 2017
- Participation in several European and national research projects related to physical oceanography
- Support Spanish ports climate change adaptation strategy and the implementation of the Spanish Ports Climate Change Observatory since 2021.
- Head of Climate Change and Prediction Department since November 2024

EDUCATION AND TRAINING

1991
BSC PHYSICS University Complutense of Madrid

1995
MSC IN PHYSICS University of Alcalá de Henares (Madrid)

Field of study Oceanography, fluid mechanics and climatology

PHD IN CIVIL ENGINEERING (MARINE SCIENCE AND TECHNOLOGY PROGRAM) University of Cantabria (Spain)

Field of study Marine Sciences and Technology

LANGUAGE SKILLS

Mother tongue(s): **SPANISH** | **GALICIAN**
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

COMMUNICATION AND INTERPERSONAL SKILLS

Participation in projects and international programs

Good communication skills obtained through participation in European Projects, working groups and teams in international programs and presentations at national and international meetings and conferences.

DIGITAL SKILLS

Programming languages

FORTRAN | Shell scripting | PHP | Python | LaTeX | SQL

Operating Systems

Windows | Linux | MacOS

Databases

MySQL | PostgresSQL

MANAGEMENT & LEADERSHIP SKILLS

International programs

2006 – 2015: Co-chair of the IOC Intergovernmental Working Group NEAMTWS Working Group 3 (Sea level data exchange) for the upgrade of the European sea level network to tsunami monitoring in the region)

2015 – 2021: Chair of the EuroGOOS Tide Gauges Task Team

2021 - 2023: Chair of MONGOOS Tide Gauge Task Team

Puertos del Estado

Manager of the REDMAR Tide Gauge Network since 1993
Responsible of the Nivmar Sea Level Forecasting System since 2000

NETWORKS & MEMBERSHIPS

Co-chair 2015 - 2021. Member 2021 - present
EuroGOOS Tide Gauge Task Team

Member
EuroGOOS Data Management Exchange and Quality (DataMEQ) working group

IBIROOS and MONGOOS Regional Alliance of EuroGOOS

Collaboration, national expert
Global Sea Level Observing System (GLOSS) Group of Experts

Member Scientific Advisory Board (2018 - 2022); Management Board (2022 - present)
Mercator Ocean International

Lead of Multi-Year sea level product since 2022
Copernicus Marine Service In Situ TAC

Member of Science Advisory Group since 2022
PLOCAN

Member, national expert
Knowledge Hub on Sea level Rise (JPI Oceans + JPI Climate)

HONOURS AND AWARDS

IMarEST Denny Medal (JOO) 2013

For the paper: Use of tide gauge data in operational oceanography and sea level hazard warning systems. Pérez-Gómez, B**.**, E. Álvarez-Fanjul, S. Pérez-Rubio, M. de Alfonso and J. Vela. Journal of Operational Oceanography. Vol 6(2), 1–18 (2013)

BOOKS/REPORTS/MANUALS

IOC (UNESCO). Quality Control of in situ Sea Level Observations: A Review and Progress towards Automated Quality Control, Vol. 1.Paris,UNESCO. IOC Manuals and Guides No.83.(IOC/2020/MG/83Vol. 1) (2020). https://unesdoc.unesco.org/ark:/48223/pf000037

IOC (UNESCO). Manual on Sea-level Measurements and Interpretation, Volume V: Radar Gauges. Paris, Intergovernmental Oceanographic Commission of UNESCO. 104 pp. (IOC Manuals and Guides No.14, vol. V; JCOMM Technical Report No. 89; (English) (2016)

Pérez-Gómez, B., et al. Sea level variability and trends in the Canary Current Large Marine Ecosystem. In: Oceanographic and biological features in the Current Large Marine Ecosystem. IOC - UNESCO, Paris. IOC Technical Series No. 115, 309-320 (2015).

IOC (UNESCO). North-East Atlantic, the Mediterranean and Connected Seas Tsunami Warning and Mitigation System, NEAMTWS, Implementation Plan. Technical report 73, Intergovernmental Oceanographic Commission, 2007

IOC (UNESCO). Manual on Sea Level Measurement and Interpretation. Volume IV: An Update to 2006. Technical report 31, Intergovernmental Oceanographic Commission (2006).

D. Gomis, J. García-Lafuente, B. Pérez-Gómez, E. Álvarez-Fanjul, M. Marcos, J. Del Río, S. Monserrat, J.M. Vargas, I. Rodríguez: Sube el nivel del mar. 01/2010: chapter 156: pages 11-19; Ministerio de Fomento., ISBN: 1577-637

PUBLICATIONS

2024
Bisaro, A., Galluccio, G., Fiorini Beckhauser, E., Romagnoli, C., McEvoy, S., Sini, E., Biddau, F., David, R., d'Hont, F., Le Cozannet, G., Pérez Gómez, B., Góngora Zurro, A., and Slinger, J.: Sea Level Rise in Europe: Governance Context and Challenges, State Planet Discuss. [preprint], https://doi.org/10.5194/sp-2023-37, in review, (2024)

2023
Lin-Ye, J., Pérez Gómez, B., Gallardo, A. et al.: Delayed-mode reprocessing of in situ sea level data for the Copernicus Marine Service, Ocean Sci., 19, 1743–1751, https://doi.org/10.5194/os-19-1743-2023, (2023)

2022
Pérez Gómez, B., Vilibić, I., Šepić, J., Međugorac, I., Ličer, M., Testut, L. et al.: Coastal sea level monitoring in the Mediterranean and Black seas, Ocean Sciences., 18, 997–1053, https://doi.org/10.5194/os-18-997-2022 (2022).

2022
Marcos M, Puyol B, Amores A, Pérez Gómez B, Fraile MÁ, Talke SA. Historical tide gauge sea-level observations in Alicante andSantander (Spain) since the 19th century. Geosci Data J. 2021;00:1–10. https://doi.org/10.1002/gdj3.112. (2022).

2021
Pérez-Gómez, B., García-León M., García-Valdecasas, J., Clementi, E., Mösso Aranda, C., Pérez-Rubio, S., Masina, S., Coppini, G., Molina-Sánchez, R., Muñoz-Cubillo, A., García Fletcher, A., Sánchez González, J.F., Sánchez-Arcilla, A. and Álvarez-Fanjul, E. Understanding Sea Level Processes During Western Mediterranean Storm Gloria. https://doi.org/10.3389/fmars.2021.647437. (2021)

2021
García-Sánchez G, Mancho AM, Ramos AG, Coca J, Pérez-Gómez B, Álvarez-Fanjul E, Sotillo MG, García-León M, García-Garrido V J and Wiggins S (2021). Very High Resolution Tools for the Monitoring and Assessment of Environmental Hazards in Coastal Areas.Front. Mar. Sci. 7:605804.doi: 10.3389/fmars.2020.60580 (2021)

2021

Umgiesser G, Bajo M, Ferrarin C, Cucco A, Lionello P, Zanchettin D, Papa A, Tosoni A, Ferla M, Coraci E, Morucci S, Crosato F, Bonometto A, Valentini A, Orlic M, Haigh I, Nielsen JW, Bertin X, Fortunato AB, Pérez Gómez B, et al.The prediction of floods in Venice: methods, models and uncertainty. Natural Hazards and Earth System Sciences. DOI: 10.5194/nhess-2020-361. (2021)

2020

García-Valdecasas, J., Pérez Gómez, B., Molina, R. Alberto Rodríguez, David Rodríguez, Susana Pérez, Álvaro Campos, Pablo Rodríguez Rubio, Sergio Gracia, Luis Ripollés, José María Terrés Nicoli, de los Santos, F.J., Alvarez Fanjul, E. Operational tool for characterizing high-frequency sea level oscillations. Nat Hazards. DOI: 10.1007/s11069-020-04316-x. (2020)

2020

Jue Lin-Ye, B. Pérez Gómez, E. Alvarez Fanjul, J. García-Valdecasas. The Huelva (Spain) Tsunami-Ready Station and Its Interaction with Storm Emma (March 2018). April 2020. Marine Geodesy. DOI: 10.1080/01490419.2020.1758856.

2019

Pérez Gómez, B., Pérez-González, I., Sotillo. M.G. y Alvarez-Fanjul, E. Retos de los sistemas de observación y predicción en los riesgos asociados al nivel del mar. May 2019. Ribagua 6(1):1-15. DOI: 10.1080/23863781.2019.1595212.

2019

Álvarez-Fanjul E, de Pascual Collar A, Pérez Gómez B, De Alfonso M, García Sotillo M, Staneva J, Clementi E, Grandi A, Zacharioudaki A, Korres G, Ravdas M, Renshaw R, Tinker J, Raudsepp U, Lagemaa P, Maljutenko I, Geyer G, Müller M and Çağlar Yumruktepe V.. Sea level, sea surface temperature and SWH extreme percentiles: combined analysis from model results and in situ observations In: Copernicus Marine Service Ocean State Report, Issue 3, Journal of Oper. Ocean., 12:sup1, Secti. (2019)

2016

Pérez-Gómez, B., Manzano F, Alvarez-Fanjul E, González c, Cantavella JV, Schindelé F. Lessons Derived from Two High-Frequency Sea Level Events in the Atlantic: Implications for Coastal Risk Analysis and Tsunami Detection. Frontiers in Marine Science.3:206. (2016).

2014

Vela, J., Pérez-Gómez, B., González, M., Otero, L., Olabarrieta, M., Canals, M. and Casamor, J. L. Tsunami Resonance in Palma Bay and Harbor, Majorca Island, as Induced by the 2003 Western Mediterranean Earthquake. The Journal of Geology, vol. 122(2), pages 165–182 (2014).

2014

Pérez-Gómez, B. A. Payo, D. López, P.L. Woodworth and E. Alvarez-Fanjul. Overlapping sea level time series measured using different technologies: an example from the REDMAR Spanish network. Nat. Hazards Earth Syst. Sci., 14, 589-610, (2014).

2013

Pérez-Gómez, B., E. Álvarez-Fanjul, S. Pérez-Rubio, M. de Alfonso and J. Vela. Use of tide gauge data in operational oceanography and sea level hazard warning systems. Journal of Operational Oceanography. Vol 6(2), 1–18 (2013).

2012

Pérez-Gómez, B., Brouwer, R., Beckers, J., Paradis, D., Balseiro, C.,Lyons, K., Cure, M., Sotillo, M. G., Hackett, B., Verlaan, M. and Fanjul, E. A. ENSURF: multi-model sea level forecast: implementation and validation results for the IBIROOS and Western Mediterranean regions. Ocean Science, vol. 8(2), pages 211–226, (2012).

2001

Álvarez-Fanjul, E., Pérez-Gómez, B., Sánchez Arévalo, I.R.: Nivmar: A storm surge forecasting system for the Spanish waters. Scientia Marina, 65, 145-154, (2001).

MAIN SKILLS AND INTERESTS

CURRENT
Main skills and interests

- Sea level related hazards (linked to climate change, storm surge and tsunamis)
- Early warning, monitoring and forecasting systems
- Management of observational networks
- Downstream products and services
- Data analysis and quality control including development of automatic tools
- Climate change indicators, impacts and adaptation strategies

PROJECTS

01/11/2019 – 30/12/2023
EUROSEA

Improving and Integrating European Ocean Observing and Forecasting Systems for Sustainable use of the oceans

01/10/2019 – 30/04/2023
ECCLIPSE

ECCLIPSE Evaluación del Cambio CLImático en Puertos del Sudoeste de Europa

01/01/2020 – 31/12/2023
JERICO-S3

Joint European Research Infrastructure of Coastal Observatories: Science, Service, Sustainability - JERICO S-3

01/01/2009 – 31/03/2014
MyOcean 1 and 2

Prototype Operational Continuity for the GMES Ocean Monitoring and Forecasting Service

01/01/2015 – 31/12/2018
SOPRANO

Sistema de Observación y Predicción de Riesgos Asociados al Nivel del mar (clima, tsunamis y Otros)

01/01/2010 – 31/12/2012
VANIMEDAT 1 and 2

Obtención de escenarios climáticos marinos para el siglo XXI en el Mediterráneo y en el Atlántico Nororiental

01/02/2007 – 30/04/2010
ECOOP

European Coastal Sea Operational Observing and Forecasting system

01/10/2006 – 30/09/2009
TRANSFER

Tsunami Risk and Strategies for the European Region

01/11/2002 – 31/10/2005
ESEAS-RI

European Sea Level Service Research Infrastructure