

Part A. PERSONAL INFORMATION

CV date

31/05/2024

First name	Jorge		
Family name	López Parages		
Gender (*)	Male	Birth date	10/05/1983
Social Security, Passport, ID number	53159729J		
e-mail	parages@uma.es	URL Web: www.ibyda.es/profile/124	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-9452-5611	

A.1. Current position

Position	“Profesor Ayudante Doctor”		
Initial date	03/04/2024		
Institution	University of Málaga (UMA)		
Department/Center	Applied Physics I	Faculty of Science	
Country	Spain	Teleph. number	+34 952137385
Key words	Climate variability, ocean-atmosphere interaction, ecosystem models		

A.2. Previous positions (research activity interruptions, art. 13.2.b))

Period	Position/Institution/Country/Interruption cause
06/2022 - 03/2024	Postdoctoral fellowship (funded by a national call) / UMA / Spain
10/2021 - 05/2022	UMA postdoctoral fellowship / UMA / Spain
04/2021	Birth of a baby and related Interruption
10/2020-02/2021	Postdoctoral contract (TRIATLAS-EU project) / Complutense Univ. of Madrid (UCM) /Spain
09/2018-08/2020	Postdoctoral contract (PRIMAVERA-EU project)/ European Centre for Research and Advanced Training in Scientific Computation (CERFACS) / France
05/2018-08/2018	Postdoctoral contract (REGIME-SHIFT project) / CREA-F-UAB research center of Barcelona / Spain
09/2017-02/2018	Postdoctoral contract (UCM-University of Bergen) / UCM /Spain
01/2016-06/2017	Postdoctoral fellowship (PREFACE-EU project) / Univ. of Venice /Italy
10/2014-12/2015	Predocotrual contract (MULCLIVAR project) / UCM/Spain
10/2010-09/2014	Predocotrual fellowship (FPI grant associated with TRACS project) /UCM/ Spain
12/2009-09/2010	Research contract (MOVAC project) / UCM /Spain
01/2009-03/2009	Research contract (DESIREX project) / UCM /Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree in Physics (5-years program)	Complutense Univ. of Madrid (UCM)	2008
Master in Geophysics and Meteorology	Complutense Univ. of Madrid (UCM)	2009
PhD in Physics	Complutense Univ. of Madrid (UCM)	2015

Part B. CV SUMMARY (max. 5000 characters, including spaces)

I am a bachelor's in physics and Master in Geophysics and Meteorology at the Complutense University of Madrid (UCM). In December 2015 I finished my PhD at the same institution under the supervision of Dra. Belén Rodríguez de Fonseca, dealing with ENSO teleconnections with the North Atlantic sector. This PhD research was awarded with the maximum grade *Cum Laude*, and with the *Doctor Europaeus* mention, and the related findings resulted in the publication of four scientific papers in first-quartile journals within the Journal Citation Ranking (JCR). During my postdoctoral period I worked at the Ca' Foscari University of Venice (UNIVE; Italy), the UCM (Spain), and the European Centre for Research and Advanced Training in Scientific Computation (CERFACS; France). In the latter case I took part of one of the most world-renowned groups in the field of climate simulations. In this experience I advanced in the understanding of the European climate by exploiting

new capabilities in high-resolution global climate modelling. Furthermore, along my postdoctoral period I began a new line of research related to the climate impacts on marine and terrestrial ecosystems. Related to that, I designed and wrote the proposal CARMEN (*Climate influence on Sardine(Illa): a challenging Modeling Exercise in Northwest Africa*). This proposal was evaluated with 92.6/100 within the Marie Skłodowska-Curie Actions 2020 and, thanks to it, it was finally funded by the Spanish Agency of Research (International Collaboration Projects call 2021). As a result, I joined the Physical Oceanography Group at the University of Málaga (GOFIMA-UMA). Recently, I got a position as *Profesor Ayudante Doctor* within the Applied Physics department of the same university. Along my curricular path I proved a strong research independence and initiative. Evidence of that is the fact that I launched new lines of collaboration among different institutions including UCM (Spain), CERFACS research center (France), Monash University (Australia), Research Institute for Sustainable Development (France), and Ca' Foscari University (Italy). All these collaborations resulted in scientific publications for high impact factor journals. As a result of all this research trajectory I published 24 scientific publications, being 20 of them *peer-review* publications (18 in the first quartile). I presented my results in more than 40 international conferences. Furthermore, I have been involved in a wide range of national and international projects, both as a contributing researcher and as a principal investigator. I have therefore experience in competitive research funds attraction. I have also organization skills, as I was involved in the coordination and development of different international meetings such as MEDCLIVAR 2012 (Madrid, Spain), THEMES 2016 (Venice, Italy), PREFACE CONFERENCE 2018 (Lanzarote, Spain), CEIMAR 2019 (Málaga, Spain) and TRIATLAS CONFERENCE 2020 (online). I was also a member of the scientific committee in three of them. I have been awarded with the *Young Scientific Award* at the Spanish Association of Climatology Conference (2012) and with the *EMS Young Scientific Award* at the European Meteorological Society Conference (2014). I have also a significant teaching and supervisory experience, the latter including 6 master final projects and 1 doctoral thesis (UCM 2022; “Sobresaliente *Cum Laude*”). I am accredited as *Profesor Ayudante Doctor* and *Profesor Contratado Doctor* by the Spanish Agency for Quality Assessment and Accreditation (ANECA).

Part C. RELEVANT MERITS (sorted by typology – 10 most relevant)

C.1. Publications

- 1) M. Wade, B. Rodríguez-Fonseca, M. Martín-Rey, A. Lazar, & **J. López-Parages** (2023) Interdecadal changes in SST variability drivers in the Senegalese-upwelling: the impact of ENSO, *Clim. Dyn.* 9, 667-685., <https://doi.org/10.1007/s00382-022-06311-3>
- 2) A. Sylla, E. Sanchez-Gomez, J. Mignot & **J. López-Parages** (2022). Impact of increased resolution on the representation of the Canary upwelling system in climate models, *Geoscientific Model Development* 15 (22), 8245-8267 <https://doi.org/10.5194/gmd-15-8245-2022>
- 3) **López-Parages, J.**, Gómara, Í., Rodríguez-Fonseca, B., & García-Lafuente, J. (2022). Potential SST drivers for Chlorophyll-a variability in the Alboran Sea: a source for seasonal predictability?. *Front. Mar. Sci.* 9, doi 10.3389/fmars.2022.931832
- 4) **López-Parages, J.** and L. Terray (2021) Tropical North Atlantic response to ENSO: sensitivity to model spatial resolution. *J. Climate* 35(1), 3-16, <https://doi.org/10.1175/JCLI-D-21-0240.1>
- 5) **López-Parages, J.**, P-A Auger, B. Rodríguez-Fonseca, N. Keenlyside, C. Gaetan, A. Rubino, M.W. Arisido, T. Brochier (2020), El Niño as a predictor of round sardinella distribution along the northwest African coast. *Prog. in Oceanography*, <https://doi.org/10.1016/j.pocean.2020.102341>.
- 6) Ayarzagüena B., **J. López-Parages**, M. Iza, N. Calvo, B. Rodríguez-Fonseca (2019). Stratospheric role in interdecadal changes of El Niño impacts over Europe. *J. Climate*, <https://doi.org/10.1007/s00382-018-4186-3>.
- 7) **López-Parages, J.**, B. Rodríguez-Fonseca, E. Mohino, T. Losada (2016) Multidecadal modulation of ENSO teleconnection with Europe in late winter: Analysis of CMIP5 models. *J. Climate*, <http://dx.doi.org/10.1175/JCLI-D-15-0596.1>
- 8) **López-Parages, J.**, B. Rodríguez-Fonseca, D. Dommenges, C. Frauen (2015) ENSO influence on the North Atlantic European climate: a non-linear and non-stationary approach, *Clim. Dyn.*, 10.1007/s00382-015-2951-0
- 9) **López-Parages, J.**, B. Rodríguez-Fonseca, L. Terray (2014) A mechanism for the multidecadal modulation of ENSO teleconnection with Europe. *Clim. Dyn.*, 10.1007/s00382-014-2319-x.

10) **López-Parages, J., B. Rodríguez-Fonseca** (2012) Multidecadal modulation of El Niño influence on the Euro-Mediterranean rainfall. *Geoph. Res. Lett.* 39 (2). doi:10.1029/2011GL050049.

C.2. Congress

- 1) Exploring the climate influence on sardine and sardinella species in northwest Africa from a novel end-to-end model strategy (Oral presentation; **López-Parages et al.**), *Ocean Science Meeting*, February 2024, New Orleans (USA).
- 2) El Niño as a predictor of round sardinella distribution along the northwest African coast (Oral presentation; **López-Parages et al.**), *ICES/PICES international symposium on "Small Pelagic Fish: New Frontiers in Science and Sustainable Management"*, November 2022, Lisbon (Portugal).
- 3) Tropical North Atlantic as a non-stationary switch-on for ENSO-European rainfall teleconnection of interannual and decadal climate variability in the tropical Atlantic region (Oral presentation; **López-Parages et al.**), *European Geosciences Union (EGU) General Assembly 2018*, April 2018, Vienna (Austria).
- 4) Exploring large-scale climate influences on North West African fisheries and related implications for statistical forecasting (Oral presentation; **López-Parages et al.**), *THEMES 2017: Physics and biogeochemistry of marine environments: multiscale analysis of past and present variability*, November 2017, Venice (Italy).
- 5) ENSO influence on the North Atlantic European climate: a non-linear and non-stationary approach (Oral presentation; **López-Parages et al.**), *16th European Meteorological Society Annual Meeting & 11th European Conference on Applied Climatology*, September 2016, Trieste (Italy).
- 6) Is El Niño impact over the European rainfall modulated by natural multidecadal variability? (Oral presentation; **López-Parages et al.**), *European Geosciences Union (EGU) General Assembly 2014*, May 2014, Vienna (Austria).
- 7) Nonstationary relationship between the Euro-Mediterranean rainfall and the El Niño phenomenon (Oral presentation; **López-Parages J. & Rodríguez-Fonseca B.**), *European Geosciences Union (EGU) General Assembly 2013*, April 2013, Vienna (Austria).
- 8) Nonstationary relationship between the Euro-Mediterranean rainfall and the El Niño phenomenon (Oral presentation; **López-Parages J. & Rodríguez-Fonseca B.**), *MedCLIVAR Final Conference 2012. The climate of the Mediterranean region: understanding its evolution and effects on environment and societies*, September 2012, Madrid (Spain).
- 9) Multidecadal Modulation of El Niño influence on the Euro-Mediterranean rainfall (Oral presentation; **López-Parages J. & Rodríguez-Fonseca B.**), *European Geosciences Union (EGU) General Assembly 2012*, April 2012, Vienna (Austria).
- 10) The ENSO influence on the Euro-Mediterranean rainfall. A Multidecadal Modulated relationship? (Oral presentation; **López-Parages J. & Rodríguez-Fonseca B.**), *MedCLIVAR Final Conference 2011. Mediterranean Climate: From Past to Future*, June 2011, Lecce (Italy).

C.3. Research projects

Title: Climate influence on Sardine(Ila): a dual Model-based evaluation in Northwest Africa (CARDUMEN; CNS2023-144704)

Funding entity: Spanish Agency of Research & EU Next Generation

IP: Jorge López Parages

From Apr 2024 to Mar 2026

Type of participation: Research staff (hired)

Funds: 120.859,48 €

Title: Oceans for Future. Innovating climate services using ocean information and communication with society (OFF)

Funding entity: Spanish Government

IP: Irene Polo Sánchez

From December 2022 to November 2024

Type of participation: Research staff

Funds: 252.410 €

Title: Climate influence on Sardine(Ila): a challenging Modeling Exercise in Northwest Africa (CARMEN; PCI2021-122061-2B)

Funding entity: Spanish Agency of Research & EU Next Generation

IP: Jose Carlos Sánchez-Garrido & Jorge López Parages

From June 2022 to May 2024

Type of participation: Research staff (hired)

Funds: 145.640 €

Title: Predictability of climate in the Atlantic Sector (PRE4CAST; CGL2017-86415-R)

Funding entity: Spanish Government

IP: Dr. Belén Rodríguez de Fonseca

From October 2018 to September 2021

Type of participation: Research staff

Funds: 133.000 €

Title: Process-based climate sIMulation: AdVances in high resolution modelling and European climate Risk Assessment (PRIMAVERA; no. 641727)

Funding entity: European Union (FP7)

IP: Dr. Laurent Terray

From September 2018 to August 2020

Type of participation: Research staff (hired)

Funds: 14.9 M€

Title: Ciencia y Colectivos sin voz frente al Cambio Climático: buscando respuestas justas a un problema global (Ref 6/17)

Funding entity: Complutense University of Madrid

IP: Dr. Jorge López-Parages

From January 2018 to December 2018

Type of participation: IP

Funds: 5242 €

Title: Enhancing Prediction of Tropical Atlantic Climate and its impacts (PREFACE; ref.603521)

Funding entity: European Union (FP7)

IP: Dr. Noel Keenlyside

From November 2013 to October 2017

Type of participation: Research staff (hired)

Funds: 512.000 €

Title: Multiscale climate variability. Agronomical and economic impacts (MULCLIVAR; CGL2012-38923-C02-01)

Funding entity: Spanish Government

IP: Dr. Belén Rodríguez de Fonseca

From February 2013 to June 2016

Type of participation: Research staff (hired)

Funds: 229.320 €

Title: Short term climate change predictability and projections

Funding entity: Spanish Government

IP: Dr. Elsa Mohino Harris

From February 2012 to January 2013

Type of participation: Research staff

Funds: 35.000 €

Title: Tropical Atlantic variability and the Climate Shift (TRACS; CGL2009-10285).

Funding entity: Spanish Government

IP: Dr. Belén Rodríguez de Fonseca

From 2010 to 2012

Type of participation: PhD student (FPI)

Funds: 196.000 €

Title: Global Climate modelization by means of a hierarchy of climate models. Application to the Iberian Peninsula (MOVAC; 20080005008402).

Funding entity: Spanish Government

IP: Dr. Maria Luisa Montoya

From 2008 to 2011

Type of participation: Research staff (hired)

Funds: 408.653 €

C.4. Contracts, technological or transfer merits

My experience has been focused on transfer of knowledge through outreach activities. They have been mainly designed for bringing science reasoning to non-expert citizens and disadvantaged groups. A very schematic summary of these activities is:

- *Creation and donation of a forecast statistical model of the Sahelian rainfall* (Outreach Project). Target audience: University Cheikh-Anta-Diop (Senegal)
- *Resources update of the Physics laboratory Simeon Fongang - Atmosphere and Ocean* (Outreach Project). Target audience: University Cheikh-Anta-Diop (Senegal)
- *Experimentos para descubrir el planeta* (Outreach activity), 2017. Target audience: Social and Cultural centre "La Casa Encendida de Madrid" (Spain)
- *Sobre el clima en el Atlántico Norte y su variabilidad* (Outreach publication in Madri+d), 2014. Target audience: General public.
- *Mesa Redonda sobre Cambio Climático* (Outreach activity), 2013. Target audience: General public.
- *Designing a Scientific dissemination webpage: a Virtual Laboratory of Meteorology and Climate* (Outreach Project), 2011. Target audience: General public.
- *Talleres de Atmósfera y Océano* (Outreach activities), 2009, 2011, 2012, 2014, 2015, 2017 & 2022. Target audience: Primary and middle school students.