



CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION		CV date	4/12/2021
First name	Elsa		
Family name	Mohino Harris		
Gender	Female	Birth date (dd/mm/yyyy)	10/09/1977
e-mail	emohino@ucm.es	http://tropa.fis.ucm.es/members/6	
Open Researcher and Contributor ID (ORCID)	0000-0002-4342-6349		

A.1. Current position

Position	Associate Professor (Titular de Universidad)		
Initial date	21/11/2020		
Institution	Universidad Complutense de Madrid (UCM)		
Department/Center	Physics of the Earth and Astrophysics	Physics Faculty	
Country	Spain	Teleph. number	+34 91 394 4390
Key words	Climate Variability, atmosphere-ocean interactions, West African Monsoon		

A.2. Previous positions (research activity interruptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
1/09/2009-28/02/2011	Postdoctoral Fellowship Spanish Education Ministry / Institute Pierre Simon Laplace IPSL (Paris) / France
1/03/2011-18/11/2015	Assistant Professor (Prof. Ayudante Doctor)/Spain/UCM
20/06/2013	Interruption due to son's birth (1 year)
19/11/2015-20/11/2020	Associate Professor (Prof. Contratado Doctor)/Spain/UCM

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD	Universidad Complutense de Madrid (UCM)	2005
Physics Licensed	Universidad Complutense de Madrid (UCM)	2000

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

Research Indicators:

- Research Periods in units of 6 years (Sexenios): 2
- PhD Thesis supervised: 3
- Total research publications in Q1 journals: 27 (73%) out of 37 in JCR journals.
- **Publications period 16-12-2010-15-12-2021:** 32 in JCR journals, 26 (81%) in Q1, 22 (69%) with international collaboration

	Scopus	Web of Science	Google Scholar
Total citations:	1041	1024	1524
Average # references per article:	30	29	2944
h-index:	15	13	17

In the last 10 years I have co-authored 32 peer-reviewed articles published in JCR journals, 80% of which were published in Q1 JCR journals, like Scientific Reports, Geophys. Res. Lett., Clim. Dyn. or J. Climate, with an overall of 1000 citations and an h index of 15 (source: Scopus). 22 of these publications (69%) were international collaborations. I have 2 recognized periods of 6 years (sexenios). I have participated in a total of 9 research projects, 6 founded by the Spanish National Science Ministry and 3 European Commission (2 in H2020



and 1 in FP7), with approx. 2M€ in total budget. I have participated in one knowledge transfer project for the Industry (Artículo 83) analysing the variability of wind over Colombian site for energy generation purposes. The results of my research have been presented in numerous congresses, mostly at international levels, some of which I have helped to organize.

My experience in research project management began in 2012 as PI of project CGL2011-13564-E, funded by the Spanish MICIN, to analyse short-term climate change. Thanks to this project, I directed the work from postdoctoral researcher Marco Gaetani related to the decadal predictability of the West African Monsoon (Gaetani and Mohino 2013), collaboration that continued and provided further co-authored papers (e.g. Otero et al. 2016). From 2013, TROPA-UCM research group was involved in the EU project PREFACE, which was founded in the framework of FP7 programme. It consisted in 13 work packages, one of which was led by me: WP9 devoted to research on the interannual-to-multidecadal variability of the Tropical Atlantic. I was also co-PI of the PRE4CAST project, founded by the Spanish Ministry of Economy and Competitiveness, related to predictability in the Atlantic sector and I am currently PI at UCM of EU-H2020 project NextGEMS, which aims at developing 2 storm-resolving atmosphere-ocean coupled models for their use in climate change studies.

My research interests in climate variability in the Tropical Atlantic region, and particularly related to the West African Monsoon, have led me to participate in scientific-academic collaboration with the Simeon Fongang Laboratory of Physics of the Atmosphere and Ocean at the Cheikh Anta Diop University of Dakar (Senegal), with 5 founded projects in the last 10 years, two of which were led by me. Through this collaboration, I co-supervised the PhD Thesis of Coumba Niang related to the intra-seasonal variability of the West African Monsoon, defended in April 2015. In the framework of this collaboration, I'm currently co-supervising the PhD thesis of Senegalese students Aissatou Badji and Cassien Ndiaye.

I have also supervised the PhD Thesis of Julián Villamayor Moreno on the variability of the West African Monsoon at decadal time scales, defended at UCM on February 2018 and has provided 3 peer-reviewed articles published in Q1 journals. I have also co-supervised the PhD Thesis of Antonio Castaño Tierno, defended on October 2019, on tropical ocean-atmosphere interactions.

I have over 1500 hours of face-to-face teaching at undergraduate and graduate levels. I have been evaluated as "Excelent" teacher in the last period (2018-19 to 2020-21). I have participated in 5 projects related to educational innovation, one of which I supervised (<http://www.ucm.es/theoscarlab>). I'm currently the Academic Secretary of the Department of Physics of the Earth and Astrophysics since February 2018.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (10 most relevant, 2011-2021)

1. Gómarra I, B Rodríguez-Fonseca, E **Mohino**, T Losada, I Polo, M Coll (2021). Skillful prediction of tropical Pacific fisheries provided by Atlantic Niños. *Environmental Research Letters*, 16(5), 054066.
2. **Mohino** E, B Rodríguez-Fonseca, CR Mechoso, T Losada, I Polo (2019). Relationships among Intermodel Spread and Biases in Tropical Atlantic Sea Surface Temperatures. *J. Climate*, 32(12), 3615-3635
3. Castaño-Tierno A, E **Mohino**, B Rodríguez-Fonseca, T Losada (2018) Revisiting the CMIP5 Thermocline in the Equatorial Pacific and Atlantic Oceans. *Geophys. Res. Lett.* 45(23):12–963
4. Villamayor J, E **Mohino**, M Khodri, J Mignot, S Janicot (2018) Atlantic control of the late Nineteenth-Century Sahel humid period. *J. Climate*, 31 (20): 8225-8240, DOI: 10.1175/JCLI-D-18-0148.1
5. Gómarra I, E **Mohino**, T Losada, M Domínguez, R Suárez-Moreno, B Rodríguez-Fonseca (2018) Impact of dynamical regionalization on precipitation biases and teleconnections over West Africa. *Clim. Dyn.*, 50(11-12):4481–4506
6. Niang C,E **Mohino**, AT Gaye, JB Omotosho (2017) Impact of the Madden Julian Oscillation on the summer West African monsoon in AMIP simulations. *Clim. Dyn.*, 48(7-8):2297–2314
7. **Mohino** E, N Keenlyside, H Pohlman (2016) Decadal prediction of Sahel rainfall: where does the skill (or lack thereof) come from? *Clim. Dyn.*, DOI 10.1007/s00382-016-3416-9



8. Otero N, **Mohino E**, M Gaetani (2016) Decadal prediction of Sahel rainfall using dynamics-based indices. *Clim. Dyn.*, 47(11):3415–3431
9. **Mohino E**, S Janicot, H Douville, L Li (2012) Impact of the Indian part of the summer MJO on West Africa using nudged climate simulations, *Clim. Dyn.*, DOI: 10.1007/s00382-011-1206-y
10. **Mohino E**, S Janicot, J Bader (2011) Sahel rainfall and decadal to multi-decadal sea surface variability. *Clim. Dyn.*, Vol. 37, 419-440. DOI: 10.1007/s00382-010-0867-2. **176 citations.**

C.2. Congress (2011-2021)

Organization of international meetings

1. **PREFACE KO Meeting**, held in Madrid, 2-4 Dec 2013 (Mohino E. and B. Rodriguez-Fonseca, local organizing committee)
2. **Session “Tropical Climate Variability and Teleconnections: past, present and future”** EGU General Assembly, Viena, Austria. Convener edition 2014 and co-convener for 2016, 2015, 2013, 2012, 2011, 2010, 2009

Invited international oral contributions

1. **Mohino E** (2017) Decadal Prediction of Sahel rainfall. 16th CAS-TWAS-WMO Forum International Symposium on Advances in Seasonal to Decadal Prediction. Yuanchenxin International Hotel, Beijing, China del 18-20 Sep 2017.
1. **Mohino E**, Losada T (2016) Impacts of the Atlantic Equatorial Mode in a warmer climate. ICTP Workshop on Teleconnections in the Present and Future Climate. Miramare, Trieste, Italy, 24-28 October 2016.
1. **Mohino** (2014) Impacts of ENSO at regional scale : West-Africa and Tropical Atlantic MEDNET SPRING SCHOOL, Aix en Provence, France, 23-25 April 2014.

C.3. Research projects (2011-2021)

International (1 as PI + 2 as researcher, Total amount at UCM: 1M€)

1. **NextGEMS**. Funding: H2020 EU (246.875,00 € at UCM). **1 Sep 2021 – 31 Aug 2025**. Coordinator: Bjorn Stevens (MPI-Meteorology, Germany). **PI at UCM: Elsa Mohino.**
2. **TRIATLAS**, Funding: H2020 EU (258.000,00 € at UCM). **1 jun 2019 – 31 may 2023**. Coordinator: Noel Keenlyside (University Bergen). **PI at UCM: Belén Rodríguez-Fonseca.**
3. **PREFACE**. Funding: FP7 EU (512.000,00€ at UCM). **1 Nov 2013 - 31 oct 2017**. Coordinator: Noel Keenlyside (University of Bergen). **PI at UCM: Belén Rodríguez-Fonseca. Elsa Mohino was leader of work package 9.**

National Plan (2 as PI + 4 as researcher, Total amount at UCM: ~1 M€)

4. **PRE4CAST: Predictibilidad del clima en el sector Atlántico**. Ref.: CGL2017-86415-R. Funding: Ministerio de Economía, Industria y Competitividad, RETOS 2017: (133.100,00€). **01/01/2018-31/12/2020. PI: Elsa Mohino and Belén Rodríguez-Fonseca.**
5. **UPNAO: Determinación del Upwelling costero en NW África a partir de diarios de Navegación (1700-actualidad)**, Ref. CGL2015-72164-EXP. Funding: Ministerio Econom. y Competitividad (50.00,00 €). **1/05/2017-30/04/2019. PI: Ricardo García Herrera**
6. **MULCLIVAR: Variabilidad Climática a diferentes escalas. Impactos en la agricultura y la economía**. Coordinated project. Ref.: CGL2012-38923-C02-01. Funding: Ministerio Economía y Competitividad (229.320,00 € at UCM). **1/02/2013-31/01/2016. IP at UCM and coordinator: Belén Rodriguez-Fonseca.**
7. **Predictabilidad y Proyecciones de Cambio Climático a corto plazo**. Ref, CGL2011-13564-E. Funding: Ministerio Economía y Competitividad (35.000,00 €). **01/01/2012-31/05/2012. PI: Elsa Mohino**
8. **TRACS: Variabilidad del Atlántico Tropical y la Transición Climática**. Ref. CGL2009-10285. Funding: Ministerio de Educación y Ciencia (162.000,00 €). **01/01/2010-31/12/2012. PI: Belén Rodriguez-Fonseca.**
9. **MOVAC: Modelización de la variabilidad climática global mediante una jerarquía de modelos climáticos. Relevancia en el clima de la península ibérica**. Ref. 200800050084028. Funding: Ministerio Medio Ambiente, Medio Rural y Marino, (361.001,00 €). **15/09/2008-30/06/2012. PI: Maria Luisa Montoya (UCM)**



C.4. Contracts, technological or transfer merits (2011-2021)

1. Análisis de variabilidad climática del viento en el norte de Colombia y su impacto en la producción de energía eólica. Institutions/Enterprises: UCM, Barlovento Recursos Naturales S.L. and InterMet Sistemas y Redes S.L. U. Researchers at UCM: PI: T. Losada; Participants: B. Rodríguez-Fonseca, E. **Mohino**, I. Polo. Period: 16-07-2020 a 16-09-2020. Funding: 6.611,57 €. Type of funding: **Contrato bajo artículo 83 LOU**.

C.5. Supervisor of research studies (2011-2021)

- 1. PhD Thesis:** Interacciones tropicales Océano-Atmósfera en modelos acoplados. El caso de la termoclina ecuatorial y el afloramiento del noroeste de África. PhD student: Antonio Castaño. **Defense: oct. 2019.** Supervisors: E. **Mohino**, T. Losada y B. Rodríguez-Fonseca.
- 2. PhD Thesis:** Análisis de la variabilidad decadal y multidecadal de las temperaturas de la superficie del mar y sus impactos en precipitación. PhD student: Julián Villamayor (FPI grant). **Defense: feb. 2018.** Supervisor: E. **Mohino**.
- 3. PhD Thesis:** Influence of Madden-Julian Oscillation (MJO) on rainfall variability over West Africa at intraseasonal timescale. Autora: Coumba Niang. **Defensa: abril 2015.** Directores: A. T. Gaye, J. A. Omotosho, E. **Mohino**
- 4. Master Thesis:** In total 14 since the academic year 2011/2012, related to climate variability from interannual to decadal timescales in the tropics.

C.6. Scientific evaluation: Reviewer of national and international projects (2011-2021)

- Red Española de Supercomputación (RES). Reviewer in 2021 in May-June 2021 call for use of supercomputer resources.
- Science Support Division, Czech Academy of Sciences. Reviewer in March-June 2020 of Research Institutions in the Czech Republic.
- DIVISIÓN DE COORDINACIÓN, EVALUACIÓN Y SEGUIMIENTO CIENTÍFICO Y TÉCNICO, Ministerio de Ciencia e Innovación. Reviewer in September 2019 of projects.
- Member of panel moderator for project selection in the call "Future Climate for Africa (FCFA) research programme", UK. International call for projects up to 3 million pounds each. Agencies "Department for International Development (DFID)" and "Natural Environment Research Council(NERC)". 2014.
- "Agence nationale de la recherche", France, 2012. Reviewer of projects.

C.7. University management (2011-2021)

- Academic Secretary of the Physics of the Earth and Astrophysics Department, Universidad Complutense Madrid, since february 2018.

C.8. International cooperation (2011-2021): Participation in 5 cooperation projects, acting as PI in 2 of them:

- 1. Fortalecimiento de los recursos en Investigación, Educación y Desarrollo tecnológico del Laboratorio de Física de la Atmósfera y el Océano Simeon Fongang en UCAD, Senegal.** Ref.: 7, XIV Convocatoria UCM de Proyectos de Cooperación al Desarrollo Sostenible 2017. del Vicerrectorado Relaciones Institucionales y Gabinete del Rector – UCM). Funding: Universidad Complutense de Madrid (18.000,00 €). 01/03/2018 to 31/12/2018. **PI: Elsa Mohino Harris**
- 2. Actualización de Recursos del Laboratorio de Física de la Atmósfera y el Océano Simeon Fongang en UCAD (Senegal).** (Ref.: 63 IX Convocatoria UCM de Proyectos de Cooperación al Desarrollo 2012 (20.534,00 €). 01/05/2013 to 30/09/2014. **PI: Elsa Mohino.**

C.9. International stays (2011-2021):

- University of Bergen: 2 months (1/08/2015-30/09/2015). Research: decadal prediction of Sahel rainfall. Funding: NILS Ciencia y Sostenibilidad (ES07 – EEA Grants), ABEL-IM-2014A (6.160,00 €)