

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	Cesar		
Family name	Azorin-Molina		
Gender	M	Birth date	23/06/1980
ID number	73997301E		
e-mail	cesar.azorin@csic.es	URL Web: https://climatoclab.csic.es/	
Open Researcher and Contributor ID (ORCID) (*)		0000-0001-5913-7026	

A.1. Current position

Position	Tenured Scientist - <i>Científico Titular</i> -		
Initial date	16/11/2021		
Institution	Spanish National Research Council (CSIC)		
Department/Center	Ecology & Global Change	CIDE (CSIC-UV-GVA)	
Country	Spain	Phone number	(+34) 96 3424162
Key words	Climatology; Atmospheric Sciences; wind speed; wind extremes; “stilling” vs. “reversal”; climate variability; climate change; wind services		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
Jan 2003 / Dec 2007	FPU - PhD. University of Alicante, Spain
Feb 2008 / Dec 2010	Postdoc Torres Quevedo. The CEAM Foundation, Spain
Dec 2010 / Aug 2016	Postdoc JAE-Doc & JdC. IPE-CSIC, Spain
Sep 2016 / Aug 2019	Postdoc MSCA & Assist. Prof. University of Gothenburg, Sweden
Sep 2019 / Nov 2021	Postdoc RyC. CIDE (CSIC-UV-GVA), Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Bachelor of Geography	University of Alicante (Spain)	2002
DEA degree	University of Alicante (Spain)	2004
MSc in Applied Climatology	University of Barcelona (Spain)	2005
European PhD in Geography	University of Alicante (Spain)	2008

Part B. CV SUMMARY

Cesar Azorin-Molina is a *Científico Titular* since 2021 at the Desertification Research Centre (CIDE, CSIC-UV-GVA, Valencia, Spain), where he is the **PI of the Climatoc-Lab** (<https://climatoclab.csic.es/>); an **Excellence Research Group** (Ref. CIPROM/2023/38) funded by the GVA. Azorin-Molina has an outstanding track record (24-years of experience, 2003-2026; and 19-years since his PhD) in the fields of **Meteorology and Atmospheric Sciences**. His scientific aim is to assess and attribute climate change and variability with focus on **surface winds and wind extremes**, their physical mechanisms and socioeconomic (e.g., wind energy) and environmental (e.g., droughts) implications. He has published **>175 peer-reviewed articles**, 56 chapter of books and proceedings, and 9 reports, with a **h-index of 61 and >16,300 citations**; and contributed with >250 oral/poster presentations to national/international conferences. He currently coordinates the State of the Climate – Surface winds section of the BAMS; and actively participated in the ISTI-POST / Extreme Indices of the WMO, the Copernicus (C3S) Data Rescue Service, among others. He coordinated as PI an EC H2020 MSCA-IF, and 15 research projects **with a total funding of ~8.6 M €**. His **supervision tasks** cover 6-defended thesis (1 Argentina, 1 China, 2 Spain & 2 Sweden), 4 ongoing PhD thesis, 9 Master thesis, 12 postdocs & 2 contracts. He is **associated Editor** of *Adv. Clim. Chang. Res.* and *Ocean-Land-Atmosphere Research*. He has been appointed **principal coordinator** of the “Climate & Atmosphere” (CYA) by the Spanish AEI for 2026-2029, and has also served with several other national and international funding agencies, including DEVA, the Swiss NSF, the United Arab Emirates University, the Polish NSC, and the OSPA committees of the EGU / AGU. He is **principal convener** at the EGU. He is also an active member of the PTI-CSIC on Climate Services. Azorin-Molina has been awarded with 5 prizes; granted with 6 fellowships (FPU, Torres Quevedo, JAE-Doc, JdC, MSCA IF, RyC); scientists in 6 centres in Spain and 4 in Sweden, USA, the Netherlands and Australia. Finally, he has solid skills on weather station networks and field campaigns; and has been interviewed by media, including dissemination [@AzorinCesar](#), [@azorincesar.bsky.social](#), [@ClimatocLab](#) and [@climatoclab.bsky.social](#)

Summary in numbers (22-Sep-2026):

Doctoral thesis supervised: 6 defended (1 Argentina, 1 China, 2 Spain, 2 Sweden) + 4 in progress

Master thesis supervised: 9 defended (2 in Sweden)

Publications in SCI journals: >175 (including *Nature*, *Nat. Clim. Chang.*, *PNAS*, etc.)

Total citations: Web of Science 10,727, Scopus 11,838, Google Scholar 16,392

H-index: Web of Science 51, Scopus 52, Google Scholar 61 i10-index 156

Books as editor and scientific monographs: 9

Chapters in publications in journals not included in JCR, SCI and SSCI: 60

Scientific conferences: >250 + EGU & CLIVAR & AEC convener

Participation in research projects: 43 (15 European + 25 National + 3 Regional)

PI and Co-PI in research projects: 15 with 8.6 M€, 1 EC MSCA (€ 186K), 1 Swedish Research Council (€ 356K), 1 Swedish FORMAS (€ 278K), 2 Spanish Ministry (€ 108K + 438K), 3 CSIC (€ 73K), 1 FBBVA (€ 40K), 2 Next Generation EU (€ 6.250K + 175K), 2 GVA (€ 690K)

Contracts with companies and / or administrations: 6

Part C. RELEVANT MERITS

C.1. SCI Publications (selected in the last 5-years)

VICENTE-SERRANO, S.M., *et al.* 2025: High temporal variability not trend dominates Mediterranean precipitation. *Nature* 639, 658-666.

AZORIN-MOLINA, C., *et al.* 2024: [Global climate; Atmospheric circulation] Land and ocean surface winds [in “State of the Climate in 2023”]. *Bull. Am. Meteorol. Soc.* 105(8), S76-S79.

UTRABO-CARAZO, E., *et al.*, 2024: Effects of extreme stratospheric polar vortex events on near-surface wind gusts across Europe. *Environ. Res. Lett.* 19(9), 094044.

ANDRES-MARTIN, M., AZORIN-MOLINA, C., *et al.* 2024: Near-surface wind speed trends and variability over the Antarctic Peninsula, 1979–2022. *Atmos Res.* 309, 107568.

ZHANG, G., AZORIN-MOLINA, C., *et al.* 2024: Variability and trends of near-surface wind speed over the Tibetan Plateau: the role played by the westerly and Asian Monsoon. *Adv. Clim. Chang. Res.* 15(3), 525-536.

ANDRES-MARTIN, M., AZORIN-MOLINA, C., *et al.* 2023. Uncertainty in wind speed projections over the Iberian Peninsula: CMIP6 GCMs vs. a WRF-RCM. *Ann. N. Y. Acad. Sci.* 1-8.

AZORIN-MOLINA, C., *et al.* 2023: Biases in wind speed due to anemometer changes. *Atmos. Res.* 289, 106771.

ZHOU, L. LIU, H., JIANG, X., ZIEGLER, A.D., AZORIN-MOLINA, C., LIU, J., ZENG, Z. 2022: An artificial intelligence construction of global gridded surface winds. *Science Bulletin.* 67(20), 2060-2063.

BEDOYA-VALESST, S., AZORIN-MOLINA, C., *et al.* 2023: Opposite trends of sea-breeze speeds and gusts in Eastern Spain, 1961-2019. *Clim. Dyn.* 60, 2847-2869.

SHEN, C., ZHA, J., LI, Z., AZORIN-MOLINA, C., DENG, K., MINOLA, L., CHEN, D. 2022: Evaluation of global terrestrial near-surface wind speed simulated by CMIP6 models and their future projections. In “The Year in Climate Science Research”. *Ann. N. Y. Acad. Sci.* 1518(1), 249-263.

AZORIN-MOLINA, C., *et al.* 2021: [Global climate; Atmospheric circulation] Land and ocean surface winds [in “State of the Climate in 2019”]. *Bull. Am. Meteorol. Soc.* 102(8), S73-S77.

DENG, K., AZORIN-MOLINA, C., MINOLA, L., ZHANG, G., CHEN, D., 2020: Global near-surface wind speed changes over the last decades revealed by reanalyses and CMIP6 model simulations. *J. Clim.* 34(6), 2219-2234.

AZORIN-MOLINA, C., *et al.* 2020: A decline of observed daily peak wind gusts with distinct seasonality in Australia, 1941-2016. *J. Clim.* 34(8), 3103–3127.

ZHANG, G., AZORIN-MOLINA, C., CHEN, D., GUIJARRO, J.A., KONG, F., MINOLA, L., McVICAR, T.R., SON, S.-W., SHI, P., 2020: Variability of daily maximum wind speed across China, 1975-2016: An examination of likely causes. *J. Clim.* 33(7), 2793-2816.

MINOLA, L., ZHANG, F., AZORIN-MOLINA, C., PIROOZ SAFAEI, A.A., FLAY, R.G.J., HERBACH, H., CHEN, D., 2020: Near-surface mean and gust wind speeds in ERA5 across Sweden: towards an improved gust parametrization. *Clim. Dyn.* 55, 887-907.

ZENG, Z., ..., AZORIN-MOLINA, C., CHAPPELL, A., MEDVIGY, D., WOOD, E.F., 2019: A reversal in global terrestrial stilling and its implications for wind energy production. *Nat. Clim. Chang.* 9, 979-985.

C2. Conferences (30 invited talks)

AZORIN-MOLINA, C., 2025: Keynote speaker “The Climatoc-Lab at the Spanish CSIC: Current Research and Projects”. *The 23rd China International Talent Exchange Conference*, Shanghai, China.

C.3. Ongoing research projects (as Principal Investigator)

Potential effects of anthropogenic climate warming on wind storm hazards: detection, attribution and prediction of downbursts. GVA. PROMETEO Ref. CIPROM/2023/38. 2024-2028 (€600K)

Evaluación del impacto del calentamiento global en las brisas marinas mediterráneas mediante el uso de un Meteo-Dron y simulación atmosférica. GVA. SG Ref. CIGRIS/2026/092. 2026-2030 (€129K)

Evaluación del papel del viento en los incendios forestales mediante el uso de datos masivos e inteligencia artificial – VENTAFOCS. Momentum Programme – CSIC. 2025-2028 (€370K)

Red española e iberoamericana sobre variabilidad climática y servicios climáticos en ecosistemas terrestres y marinos – RED-CLIMA 2. CSIC. Ref. LINGCG24042. 2024-2026 (€ 37.5K).

Mecanismos de olas de calor y sequías en España: el papel de las retroalimentaciones suelo-atmósfera y la dinámica atmosférica – MECASE. Ministerio de Ciencia, Innovación y Universidades. PID2022-137244OB-I00. 2023-2027 (€437.5K).

C.4. Participation in contracts

TWindPred. Torrevieja City Council – UA. 2025 (€17K). PI: Cesar Azorin-Molina (CSIC)

PREVIOZONO 2008 and 2009. GVA. 2008-2009 (€90K/year) PI: Enrique Mantilla (CEAM)

Ozono troposférico en España. Spanish Ministry. 2005-2009 (€988.9K). PI: Dr. Millan M. (CEAM)

C.5. Technological results

Meteo-Dron – 1st in Spain for atmospheric profiling. <https://climatoclab.csic.es/meteo-dron/>

Automatic weather station networks for different Institutions: UA, CEAM, CSIC. Total: >70 stations

C.6. Member of international research networks

Member of the ISTI Parallel Observations Science Team (POST) of the WMO.

Member of the Surface wind speed's team of the “State of the Climate” – Bull. Amer. Meteor. Soc.

Member of the Copernicus Climate Change Service (C3S) Data Rescue Service.

Member of the *Plataforma Temática Interdisciplinar* (PTI+)-Climate and Climate Services. CSIC.

C.7. Supervision of PhD, Master students, and postdoctorals grants & technicians

C7.1. PhD thesis

CHEN, M.: *Brisas marinas mediterráneas en un clima cambiante: observación con Meteo-Dron y modelización atmosférica*. CIDE-CSIC, Valencia. Ongoing.

BARRIO-MARTIN, A.: *ESCLAFITS: Climatología, Tendencias y Atribución al Cambio Climático Antropogénico en la Comunidad Valenciana*. CIDE-CSIC, Valencia. Ongoing.

ANDRES-MARTIN, M.: *Estudio de la variabilidad de los eventos de wind drought y su aplicación a servicios climáticos*. CIDE-CSIC, Valencia. Ongoing.

BEDOYA VALESTT, S.: *Cambios observados y simulados de los vientos locales y brisas marinas*. Dr. Cesar Azorin-Molina. Since July 2020. Ongoing.

POGGI, M.: *Variabilidad climática de la velocidad media viento, mecanismos de circulación atmosférica y su predictibilidad en Argentina*. UAB, Defended June 2026.

UTRABO-CARAZO, E.: *Estudio y atribución de la variabilidad multidecadal del viento y sus extremos, con énfasis en la Península Ibérica*. CIDE-CSIC, Valencia. Defended January 2026.

SHEN, C.: *Evaluation and projection of the changes in near-surface wind speed: implication for wind energy potential*. University of Gothenburg, Göteborg, Sweden. Defended 13 September 2024

NAVARRO-SERRANO, F.M.: *Análisis del comportamiento altitudinal de la temperatura del aire superficial en áreas de montaña*. IPE-CSIC. Zaragoza, Spain. Defended 18 December 2020.

MINOLA, L.: *Changes in near-surface winds across Sweden over the past decades – Observations and simulations*. University of Gothenburg, Göteborg, Sweden. Defended 11 December 2020.

ZHANG, G.: *Wind speed variability and associated environment issues with a focus on northern China*. Beijing Normal University, Beijing, China. Defended 20 May 2020.

C7.2. Master thesis

- ANDRES-MARTIN, M. 2022: *Tendencias de la velocidad del viento en superficie en el norte de la Península Antártica y su relación con modos de variabilidad climática*. UCM, Spain.
- LARA ZAMBRANO, J. 2021: *Tendencias de la velocidad media del viento en Ecuador*. UV, Spain.
- BEDOYA VALESTT, S. 2020: *Tendencias de la velocidad de la brisa marina en el este de la Península Ibérica, 1961-2019*. UPV, Spain.
- UTRABO-CARAZO, E. 2020: *Trends in the near-surface mean wind speed and gusts over the Iberian Peninsula and its connection with modes of climate variability in the Euro-Atlantic sector, 1961-2019*. UCM, Spain.
- WESSELSCHMIDT, N. 2017: *Near-surface wind speed trends from different reanalysis datasets*. Earth Sciences Centre, University of Gothenburg, Sweden.
- MINOLA, L. 2015: *Homogenization, assessment and attribution of observed near-surface wind speed trends across Sweden, 1956-2013*. University of Gothenburg, Sweden.

C.7.3. Supervision of postdoctoral grants

ZHANG, G. (BNU, China); DENG, K. (GU, Sweden); MINOLA, L. (GU, Sweden); ZHOU, C. (GU, Sweden); KHORCHANI, M. (CSIC); PLAZA, N. (CSIC); MARTÍNEZ, M. (CSIC); FERREIRA, A.P. (CSIC); MONSALVEZ, K. (CSIC); CALVO, C. (CSIC *JdC); CHEN, C. (CSIC *JdC)

C.7.4. International visitors

ZHAO, Q. (SYS-U, China); LI, H. (SYS-U, China); POGGI, M. (UAB, Argentina); PASHAIE, Z. (UT, Iran); SHEN, C. (GU, Sweden); YANG, W. (BNU, China)

C.8. R&D management

- Principal coordinator of “Climate & Atmosphere (CYA)” area for the Spanish AEI. 2026-2029.
- Principal CSIC scientific representative in the Climate-KIC.
- Secretary at the Scientific Faculty, CIDE (CSIC-UV-GVA), Spain.
- CSIC representative “Visit of CSIC to the JRC – European Commission”, Ispra-Italy.
- CSIC representative - invited by the Spanish King Felipe VI and Queen Letizia of Spain to the gala dinner to the Colombian President Gustavo Francisco Petro at the Royal Palace.
- Committee member of the “SIMPLIFICA 2” - Working group #5 of the CSIC
- Referee panel of 9 doctoral thesis.
- Referee of projects / recruitment committees at ANEP, CSIC, DEVA, Swiss National Science Foundation and United Arab Emirates University, National Science Centre of Poland and GU-Sweden.
- Referee >80 papers for 30 SCI Journals; “Outstanding reviewer” for *Elsevier*.
- Referee for OSPA and OSPP awards at EGU / AGU.
- Official weather observer Id. 8007E (Villena, Alicante) of AEMET. Since 2006.
- Scientific Advisory Board for wind predictions for the Groupama Sailing Team in the “Volvo Ocean Race 2011/2012” and “The Tall Ships Races 2007”.
- Editor. board (ongoing) of *Adv. Clim. Chang. Res. and Ocean-Land-Atmosphere Research*
- Member of 5 societies: AEC, AGE, EGU, AGU, AVAMET -citizen science-; and 7 research groups.
- Coordinator of the “Land and Ocean surface winds” section of the #State of the Climate published by the “Bulletin of the American Meteorological Society”, USA.

C.9. Other merits: convenership, invited talks, teaching, international field campaigns

- Convener EGU since 2017, CLIVAR-2022 and AEC-2025.
- Part-time assistance professor, University of Alicante / Valencia, approx. 12 ECTS. 2002-2014.
- Organizer at IIJCMCO-2009 (Valencia) and AEC-2016 (Alicante).
- Organizer of the CIDE’s Seminars, CIDE (CSIC-UV-GVA), Spain
- Organizer of the Online Seminars RED-CLIMA, CIDE (CSIC-UV-GVA), Spain
- Experimental field campaigns in Cordillera Blanca (Perú) and Tibet-Himalayas (China)
- Research stays, >4-years: GU (Sweden), CIRA (USA), KNMI (The Netherlands), CSIRO (Australia)

C.10. Science dissemination and communication

- Scientific interviews on TV (TVE, Antena 3, Canal 9, ARTE, etc.), Radio (RNE, Cadena Ser, Onda Cero, Cope, Radio 9, etc.), and Newspapers (Horizon, Cosmos, El Pais, El Mundo, ABC, Diario Información, La Verdad. Las Provincias, Levante, etc.)
- Workshops at Primary and Secondary schools.