



## Curriculum vitae Standardized form

**Cesar Azorin-Molina**

**Web of Science ResearcherID:** IZP-9544-2023

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**Google Scholar ID:** [https://scholar.google.com/citations?user=tmGX\\_FYAAAAJ&hl=en](https://scholar.google.com/citations?user=tmGX_FYAAAAJ&hl=en)

**ResearchGate:** [https://www.researchgate.net/profile/Cesar\\_Azorin-Molina](https://www.researchgate.net/profile/Cesar_Azorin-Molina)

**Date:** 3 November, 2025

## SUMMARY

**Cesar Azorin-Molina is a Tenured Scientist** -*Científico Titular*- since 2021 at the Spanish National Research Council (<https://www.csic.es/>; 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** funded by the Valencian Regional Government (PROMETEO grant Ref. CIPROM202338; 2024-2028). Azorin-Molina has an outstanding track record and wide scientific background (23-years of experience, 2003-2025; and **18-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 implications on a wide socioeconomic and environmental issues. He has pioneered the advances in the knowledge of wind changes worldwide, publishing **>150 peer-reviewed articles**, 60 chapter of books and proceedings, and 9 reports, with a **h-index of 56** and **~14,000 citations**; and contributed with >220 oral/poster presentations in national/international conferences (30 invited talks). Since 2016, he coordinates the State of the Climate – Surface winds section of the “Bulletin of the American Meteorological Society”; and actively participated in the ISTI-POST (comparison of wind sensors) of the World Meteorological Organization, the Copernicus (C3S) Data Rescue Service, and the CORDEX-WCRP project. **He coordinated as PI an EC H2020 MSCA-IF, and 15 research projects** funded by the Swedish Research Council, the Spanish Ministry of Science and Innovation, the Swedish Research Council FORMAS, the Spanish CSIC, the GVA, the FBVAA and the NextGenerationEU; **with a total funding of ~8.6 M €**. In addition, he has actively participated in the research team of 15 european, 25 national and 3 regional projects. His supervision tasks cover **4 PhD thesis defended** (2 Sweden, 1 China and 1 in Spain), and **3 ongoing PhD thesis** at the Climatoc-Lab; along with the supervision of 9 Master thesis, 7 postdoc and 2 contracts. He is **associated Editor** of the *Adv. Clim. Chang. Res.* and *Ocean-Land-Atmosphere Research* journals, and reviewer for the Spanish ANEP and DEVA, Swiss National Science Foundation, the United Arab Emirates University, the Poland National Science Centre, and the OSPA EGU / AGU; among other research agencies. Since 2017, **he is principal convener at the EGU**, and also acted as convener at CLIVAR and co-organized 2 scientific meetings. He is also an active member of the CSIC PTI+ Climate where he leads the development of a **wind monitor based on AI**. His Climatoc-Lab recently **defined the “Standardized Wind Speed Index”**, a multiscalar indicator to evaluate wind speed conditions with direct transfer to the wind industry (e.g., assessment of wind droughts). Owing his scientific records, he has been awarded with **5 prizes** (e.g., the BBVA Leonardo award in Earth Sciences); granted with **6 highly competitive fellowships** (FPU, Torres Quevedo, JAE-Doc, JdC, MSCA IF, and ranked 1<sup>st</sup> for “Ramon y Cajal” grant); scientist in 6 centres in Spain and 4 institutions in **Sweden, USA, the Netherlands and Australia (>4-years abroad)**. Finally, he has experience in **teaching** at the University (aprox. 12 ECTS), solid skills on environmental instrumentation, and the development of field experimental campaigns and weather station networks. In 2025, he co-designed a “Meteo-Dron” for monitoring atmosphere up to 5-7 km. He has actively disseminated his wind research through TV, radio newspapers, and [@AzorinCesar](#), [@azorincesar.bsky.social](#), [@ClimatocLab](#) and [@climatoclab.bsky.social](#)

### CV in numbers:

*Doctoral thesis supervised:* 4 defended (2 Sweden, 1 China and 1 Spain) + 3 in progress

*Master thesis supervised:* 9 defended (2 in Sweden)

*Publications in SCI journals:* >150 (including *Nature*, *Nat. Clim. Chang.*, *PNAS*, etc.)

*Total citations:* Web of Science 9,205, Scopus 10,219, Google Scholar 13,849

*H-index:* Web of Science 48, Scopus 49, Google Scholar 56 i10-index 136

*Books as editor and scientific monographs:* 9

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

*Scientific conferences:* >220 + EGU & CLIVAR 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 private companies and / or public administrations:* 6

## 1. PERSONAL DATA

**Family name:** Azorin-Molina      **Forename:** Cesar

**Gender:** M

**Nacionality:** Spaniard

## 2. ACADEMIC BACKGROUND

[1] **Bachelor of Geography.** University of Alicante. *June 2002.*

[2] **DEA degree (\*Master) in Climatology.** University of Alicante. *June 2004.*

[3] **Master in Applied Climatology.** University of Barcelona. *June 2005.*

[4] **European PhD degree in Geography – Climatology.** University of Alicante. *January 31<sup>st</sup>, 2008.*

## 3. PRESENT PROFESSIONAL POSITION

**Institution:** Spanish National Research Council (CSIC)

**Faculty, School or Institute:** Centro de Investigaciones sobre Desertificación (CIDE)

**Department:** Ecology and Global Change

<http://www.uv.es/cide/>

**Laboratory:** Climate, Atmosphere and Ocean Lab (Climatoc-Lab).

<https://climatoclab.csic.es/en/>

**Address:** Ctra. CV-315, km 10,7, 46113 Moncada (Valencia)

**Country:** SPAIN

**Telephone (indicate prefix, number and extension):** +34 963424126

**E-mail:** [cesar.azorin@csic.es](mailto:cesar.azorin@csic.es)

**Field of study (UNESCO codes):**

2209.90; 2501.03; 2501.06; 2502.01; 2502.06; 2502.07; 2505.07; 2509.02; 2509.07; 2509.10;  
2509.11; 2509.16; 2509.17; 2509.19; 3311.99

**Professional status:** *Científico Titular* and Head of the Climatoc-Lab

**Duration:** Tenured researcher (*Científico Titular*) at CSIC since 16-November-2021

**Sexenios (six-year research period):** 2 periods, 2010-2015 and 2016-2021

#### 4. RESEARCH INTEREST

- WIND SPEED
- WIND EXTREMES
- CLIMATE CHANGE
- CLIMATE VARIABILITY
- ATMOSPHERIC CIRCULATION
- CLIMATE DATA AND HOMOGENIZATION
- CLIMATE SERVICES

#### 5. PAST SCIENTIFIC EXPERIENCE

- [1] **Collaboration scholarship.** University Institute of Geography. Laboratory of Climatology. University of Alicante. *October 2001 – December 2002.*
- [2] **FPU Pre-doctoral researcher.** University Institute of Geography. Laboratory of Climatology. University of Alicante. *January 2003 – May 2006.*
- [3] **FPU Pre-doctoral visitor.** Laboratory of Climatology. Group of Climatology. University of Barcelona. *November 2003 – March 2004.*
- [4] **FPU Pre-doctoral visitor.** Laboratory of Climatology. Group of Climatology. University of Barcelona. *August 2004 – May 2005.*
- [5] **FPU Pre-doctoral visitor.** Earth Science Centre. Regional Climate Group. University of Göteborg (Sweden). *August 2005 – December 2005.*
- [6] **Pre-doctoral researcher.** University Institute of Geography. Laboratory of Climatology. University of Alicante. *June 2006 – December 2006.*
- [7] **FPU Pre-doctoral visitor.** Cooperative Institute for Research in the Atmosphere. Colorado State University (USA). *June 2006 – September 2006.*
- [8] **Postdoctoral researcher.** Atmospheric Research Program. The CEAM Foundation (Valencia). *February 2008 – December 2008.*
- [9] **Torres Quevedo postdoctoral researcher.** Atmospheric Research Program. The CEAM Foundation (Valencia). *January 2009 – May 2009.*
- [10] **Torres Quevedo postdoctoral researcher.** Meteorology and Climatology Program. The CEAM Foundation (Valencia). *June 2009 – December 2010.*
- [11] **Postdoctoral visitor.** Weather Research Department. The Royal Netherlands Meteorological Institute (KNMI. The Netherlands). *August 2010 – December 2010.*
- [12] **JAE-Doc postdoctoral researcher.** Pyrenean Institute of Ecology. Spanish Research Council (CSIC). *December 2010 – December 2012.*
- [13] **Juan de la Cierva postdoctoral researcher.** Pyrenean Institute of Ecology. Spanish Research Council (CSIC). *December 2012 – Until December 2015.*

[14] **Postdoctoral visitor.** Commonwealth Scientific and Industrial Research Organisation (CSIRO, Australia). *March 2015 – May 2015.*

[15] **Postdoctoral researcher.** Pyrenean Institute of Ecology. Spanish Research Council (CSIC). *January 2016 – Until August 2016.*

[16] **Marie Sklodowska-Curie Individual Fellowship.** Earth Science Centre. Regional Climate Group. University of Göteborg (Sweden). *September 2016 – August 2018.*

[17] **Postdoctoral visitor - Marie Sklodowska-Curie Individual Fellowship.** R&D Observations and Data Technology Department. The Royal Netherlands Meteorological Institute (KNMI. The Netherlands). *November 2016 – February 2017.*

[18] **Assistant Professor (*Forskarassistent*).** Earth Science Centre. Regional Climate Group. University of Göteborg (Sweden). *September 2018 – August 2019 (resigned in August 2019 to start the Ramon y Cajal position at CSIC).*

[19] **Ramon y Cajal fellowship.** Desertification Research Centre. Spanish National Research Council (CIDE, CSIC-UV-GVA). *September 2019-November 2021.*

[20] **Científico Titular - tenure-track.** Desertification Research Centre. Spanish National Research Council (CIDE, CSIC-UV-GVA). *Since 16 November 2021.*

## 6. ACADEMIC PRIZES

[1] **Beca Leonardo a Investigadores y Creadores Culturales - Award in Earth Sciences.** BBVA Foundation. Bilbao, Spain, *June 2021.*

[2] **Award for outstanding contribution in reviewing.** Editors of Atmospheric Research. Elsevier, Amsterdam, The Netherlands, *May 2015.*

[3] **Extraordinary Doctoral Prize to the best Ph.D. Student in Geography.** University of Alicante. Alicante, *January 2011.*

[4] **First prize - scientific photography.** Spanish Climatological Society. Santander, *November 2004.*

[5] **National Award Prize to the best national student's record of the Geography's Degree.** National Final-Year Prize 2001/2002. Spain's Education and Science Ministry. Madrid, *June 2003.*

## 7. LANGUAGES

<i>Language</i>	<i>Speaking</i>	<i>Reading</i>	<i>Writing</i>
<b>SPANISH</b>	P	P	P
<b>ENGLISH</b>	G	P	P
<b>VALENCIAN/CATALAN</b>	G	P	P

(N = NORMAL, G = GOOD, P = PERFECTLY).

## 8. PUBLICATIONS

### 8.1. PEER-REVIEW PAPERS [available in the ISI Web of Science, Scopus, etc.]

- [162] LI, H., YANG, S., ZHANG, G., **AZORIN-MOLINA, C.**, ZHAO, Q., QIU, W., CHEN, X., DENG, K. 2026: Uncovering Seasonal Wind Speed Changes Across China Using Surface and Upper-Air Observations. *Atmospheric Research* 239, 108550. doi: 10.1016/j.atmosres.2025.108550
- [161] VICENTE-SERRANO, S.M., BEGUERÍA, S., REIG, F., ROYO-ARANDA, A., ARRETXE, M., GIL-GUALLAR, M., LATORRE, B., EL KENAWY, A., FRANQUESA, M., HALIFA-MARIN, A., ADELL-MICHAVILA, M., CRESPILO, A., PÉREZ-PAJUELO, D., DOMINGUEZ-CASTRO, F., BARRIOPEDRO, D., GUTIERREZ, J.M., **AZORIN-MOLINA, C.**, GIMENO, L., NIETO, R., 2025: Developing science-informed maps and climate service for extreme rainfall in Spain. *Natural Hazards*. doi: 10.1007/s11069-025-07731-0
- [160] LI, Z., LIU, C., **AZORIN-MOLINA, C.**, AN, S-I., ZHAO, Y., XU, Y., SHIN, J., CHEN, D., SHEN, C. 2025: Asymmetric response of Northern Hemisphere near-surface wind speed to CO2 removal. *Weather and Climate Dynamics* 6(4), 1107-1117. doi: 10.5194/wcd-6-1107-2025
- [159] HALIFA-MARIN, A., BEGUERÍA, S., REIG, F., ROYO-ARANDA, A., ARRETXE, M., GIL-GUALLAR, M., LATORRE, B., EL KENAWY, A., FRANQUESA, M., ADELL-MICHAVILA, M., CRESPILO, A., PÉREZ-PAJUELO, D., DOMÍNGUEZ-CASTRO, F., GUTIÉRREZ, J.M., **AZORIN-MOLINA, C.**, GIMENO, L., NIETO, R., VICENTE-SERRANO, S.M., 2025: Spatial assessment of dry-spell hazards in Spain: Toward an Operational Climate Service. *Water Scarcity and Drought* 1(1), 4.
- [158] CHEN, A., LI, Y., HUANG, H., **AZORIN-MOLINA, C.**, LU, M., LAI, H-W., CHEN, P., WANG, H., LIU, J. 2025. Regional changes of tropical cyclone rainfall in the western North Pacific. *Global and Planetary Change*, 105094. doi: 10.1016/j.gloplacha.2025.105094
- [157] ZHANG, G., MA, Y., **AZORIN-MOLINA, C.**, MINOLA, L., WANG, Y., LIN, Z., MA, H., SHI, P., 2025: An increase in wind erosion dominated by wind speed changes over the Tibetan Plateau from 1982-2020. *Science of the Total Environment*. 998, 180278
- [156] VICENTE-SERRANO, S.M., GARRIDO-PEREZ, J.M., BEGUERÍA, S., FERNANDEZ-ALVAREZ, J.C., GIMENO-SOTELO, L., BEGUERIA, S., HALIFA-MARÍN, A., LATORRE, B., EL KENAWY, A., FRANQUESA, M., ADELL-MICHAVILA, M., DOMINGUEZ-CASTRO, F., BARRIOPEDRO, D., GIMENO, L., NIETO, R., **AZORIN-MOLINA, C.**, ANDRÉS-MARTÍN, M., GUTIÉRREZ, J.M., GARCÍA-HERRERA, R., 2025: Characteristics of widespread extreme precipitation events in Peninsular Spain and the Balearic Islands: spatio-temporal dynamics and driving mechanisms. *Climate Dynamics* 63, 340. doi: 10.1007/s00382-025-07829-y
- [155] **AZORIN-MOLINA, C.**, DUNN, R.J.H., RICCIARDULLI, L., McVICAR, T.R., NICOLAS, J.P., MEARS, C.A., ZENG, Z., BOSILOVICH, M.G. 2025: Land and ocean surface winds [in "State of the Climate in 2024"]. *Bulletin of American Meteorological Society* 106(8), S81-S83. [https://doi.org/10.1175/2025BAMSSStateoftheClimate\\_Intro.1](https://doi.org/10.1175/2025BAMSSStateoftheClimate_Intro.1)
- [154] MATTEO, A., TURCO, M., GINES-GARNES, M., PROVENZALE, A., TORRES-VAZQUEZ, M.A., BEDIA-JIMENEZ, J., DUNN, R., **AZORIN-MOLINA, C.**, DI GIUSEPPE, F., HERRERA GARCÍA, S., RIBEIRO, A., QUILCAILLE, Y., MORENO TORREIRA, A., 2025: Challenges in

assessing Fire Weather changes in a warming climate. *NPJ Climate and Atmospheric Science* 8, 284, doi: 10.1038/s41612-025-01163-0

- [153] ZHAO, Q., QIU, W., YANG, S., CHEN, D., **AZORIN-MOLINA, C.**, LI, H., ZHANG, G., ZHA, J., DENG, K., 2025: Changes in the upper-air wind speed over China linked to the intensification of Tropical Pacific Zonal SST gradient in boreal winter. *Journal of Climate*. doi: 10.1175/JCLI-D-24-0772.1
- [152] VICENTE-SERRANO, S.M., DOMINGUEZ-CASTRO, F., BEGUERÍA, S., EL KENAWY, A., GIMENO-SOTELO, L., FRANQUESA, M., **AZORIN-MOLINA, C.**, ANDRES-MARTIN, A., HALIFA-MARÍN, A. 2025: Atmospheric Drought Indices in future projections. *Nature Water* 3, 374-387. doi: 10.1038/s44221-025-00416-9
- [151] VICENTE-SERRANO, S.M., TRAMBLAY, Y, REIG, F., GONZÁLEZ-HIDALGO, J.C., BEGUERÍA, S., BRUNETTI, M., CINDRIĆ KALIN, K., PATALEN, L., KRŽIČ, A., LIONELLO, P., LIMA, M.M., TRIGO, R.M., EL-KENAWY, A.M., EDDENJAL, A., TÜRKES, M., KOUTROULIS, A., MANARA, V., MAUGERI, M., BADI, W., MATHBOUT, S., BERTALANIĆ, R., BOCHEVA, L., DABANLI, I., DUMITRESCU, A., DUBUISSON, B., SAHABI-ABED, S., ABDULLA, F., FAYAD, A., HODZIC, S., IVANOV, M., RADEVSKI, I., PEÑA-ANGULO, D., LORENZO-LACRUZ, J., DOMÍNGUEZ-CASTRO, F., GIMENO-SOTELO, L., GARCÍA-HERRERA, R., FRANQUESA, M., HALIFA-MARÍN, A., ADELL-MICHAVILA, M., NOGUERA, I., BARRIOPEDRO, D., GARRIDO-PEREZ, J.M., **AZORIN-MOLINA, C.**, ANDRES-MARTIN, M., GIMENO, L., NIETO, R., CARMEN LLASAT, M., MARKONIS, Y., SELMI, R., RACHED, S.B., RADOVANOVIĆ, S., SOUBEYROUX, J.-M., RIBES, A., ELMEHDI SAIDI, M., BATAINEH, S., EL KHALKI, ROBAA, S., BOUCETTA, A., ALSAFADI, K., MAMASSIS, N., MOHAMMED, S., FERNÁNDEZ-DUQUE, B., CHEVAL, S., MOUTIA, S., STEVKOV, A., STEVKOVA, S., YOLANDA LUNA, M., POTOPOVÁ, V. 2025: High temporal variability not trend dominates Mediterranean precipitation. *Nature* 639, 658-666. doi: 10.1038/s41586-024-08576-6
- [150] MA, Y., SHI, P., **AZORIN-MOLINA, C.**, MINOLA, L., GUIJARRO, J.A., MA, H., WANG, Y., ZHANG, G. 2024: Decline in daily maximum wind speed over the Tibetan Plateau during 1973-2020: an examination of likely causes. *Climate Dynamics*. doi: 10.1007/s00382-024-07436-3
- [149] **AZORIN-MOLINA, C.**, DUNN, R.J.H., RICCIARDULLI, L., MEARS, C.A., NICOLAS, J.P., McVICAR, T.R., ZENG, Z., BOSILOVICH, M.G. 2024: Land and ocean surface winds [in “State of the Climate in 2023”]. *Bulletin of American Meteorological Society* 105(8), S76-S79. doi: 10.1175/BAMS-D-24-0116.1
- [148] UTRABO-CARAZO, E., LOCKWOOD, J.F., DUNN, R.J.H., MINOLA, L., AGUILAR, E., **AZORIN-MOLINA, C.**, 2024: Effects of extreme stratospheric polar vortex events on near-surface wind gusts across Europe. *Environmental Research Letters* 19(9), 094044. doi: 10.1088/1748-9326/ad67f4
- [147] ZHA, J., CHUAN, T., QIU, Y., ZHAO, D., FAN, W., ZHAO, T., ANDRES-MARTIN, M., **AZORIN-MOLINA, C.**, CHEN, D., 2024: Projected near-surface wind speed changes over Central Asia using dynamical downscaling with bias-corrected global climate models. *Advances in Climate Change Research*. doi: 10.1016/j.accres.2024.07.007
- [146] ANDRES-MARTIN, M., **AZORIN-MOLINA, C.**, SERRANO, E., GONZALEZ, S., GUIJARRO, J.A., BEDOYA-VALETT, S., UTRABO-CARAZO, E., VICENTE-SERRANO, S.M. 2024: Near-surface wind speed trends and variability over the Antarctic Peninsula, 1979–2022. *Atmospheric Research*. doi: 10.1016/j.atmosres.2024.107568

- [145] VERDU, M., BOCHET, E., ESPIGARES, T., MARGALEF-MARRASE, J., NICOLAU, J.M., YU, Y., **AZORIN-MOLINA, C.**, GARCÍA-FAYOS, P., 2024. Climate change may alter the signal of plant facilitation in Mediterranean drylands. *Oikos* 2024(8), e10217. doi: 10.1111/oik.10217
- [144] ZHANG, G., **AZORIN-MOLINA, C.**, CHEN, D., McVICAR, T.R., GUIJARRO, J.A., DENG, K., MINOLA, L., LEE, J., SON, S-W., MA, H., SHI, P. 2024: Variability and trends of near-surface wind speed over the Tibetan Plateau: the role played by the westerly and Asian Monsoon. *Advances in Climate Change Research* 15(3), 525-536. doi: 10.1016/j.accre.2024.04.007
- [143] LIU, Y., ZHOU, L., QIN, Y., **AZORIN-MOLINA, C.** SHEN, C., XU, R., ZENG, Z., 2024: Impacts of anemometer changes, site relocations and processing methods on wind speed trends in China. *Atmospheric Measurement Techniques* 17, 1123-1131. doi: 10.5194/amt-17-1123-2024
- [142] MINOLA, L., ZHANG, G., OU, T., KUKULIES, J., CURIO, J., GUIJARRO, J.A., DENG, K., **AZORIN-MOLINA, C.**, SHEN, C., PEZZOLI, A., CHEN, D., 2024: Climatology of near-surface wind speed from observations and high-resolution climate models over the Tibetan Plateau. *Climate Dynamics* 62, 933-953. doi: 10.1007/s00382-023-06931-3
- [141] PASHAIE, Z., SARI SARRAF, B., **AZORIN-MOLINA, C.**, MOHAMMADI, G.H., GUIJARRO, J.A., 2023: A marked interannual variability of haze linked to particulate sources and meteorological conditions in Tehran (Iran), 1990-2020. *Urban Climate* 52, doi: 10.1016/j.uclim.2023.101682
- [140] ZHAO, Y., LIANG, S., LIU, Y., McVICAR, T.R., **AZORIN-MOLINA, C.**, ZHOU, L., DUNN, R.J.H., JEREZ, S., QING, Y., YANG, X., XU, J., ZHENZHONG, Z. 2023: Global assessment of spatiotemporal changes of frequency of terrestrial wind speed. *Environmental Research Letters*. 18(4), 044048. doi: 10.1088/1748-9326/acc9d5
- [139] FERNANDEZ-DUQUE, B., VICENTE-SERRANO, S.M., MAYNARD, O., DOMINGUEZ-CASTRO, F., PEÑA-ANGULO, D., NOGUERA, I., **AZORIN-MOLINA, C.**, EL KENAWY, A. 2023. Long-term changes of temperature, relative humidity and vapour pressure deficit in Bolivia (1950-2019). *International Journal of Climatology* 43(14): 6484-6504. doi: 10.1002/joc.8226
- [138] ANDRES-MARTIN, M., **AZORIN-MOLINA, C.**, SHEN, C., FERNÁNDEZ-ÁLVAREZ, J.C., GIMENO, L., VICENTE-SERRANO, S.M., ZHA, J. 2023. Uncertainty in wind speed projections over the Iberian Peninsula: CMIP6 GCMs vs. a WRF-RCM. In “The Year in Climate Science Research”. *Annals of the New York Academy of Sciences*. 1-8. doi: 10.1111/nyas.15063
- [137] MINOLA, L., LÖNN, J., **AZORIN-MOLINA, C.**, ZHOU, C., ENGSTRÖM, E., WERN, L., HELLSTRÖM, S., ZHANG, G., SHEN, C., PEZZOLI, A., CHEN, D. 2023. The contribution of large-scale atmospheric circulation to variations of observed near-surface wind speed across Sweden since 1926. *Climatic Change*. 176(5): 54. doi: 10.1007/s10584-023-03525-0
- [136] **AZORIN-MOLINA, C.**, DUNN, R.J.H., RICCIARDULLI, L., MEARS, C.A., McVICAR, T.R., NICOLAS, J.P., ZENG, Z., BOSILOVICH, M.G. 2023: [Global climate; Atmospheric circulation] Land and ocean surface winds [in “State of the Climate in 2022”]. *Bulletin of American Meteorological Society*. 104(9), S72-S74. doi: 10.1175/2023BAMSStateoftheClimate.1

- [135] HUANG, X., DUNN, R.J.H., LI, L.Z.X., McVICAR, T.R., **AZORIN-MOLINA, C.**, ZENG, Z. 2023. Increasing global terrestrial diurnal temperature range for 1980-2021. *Geophysical Research Letters*. 50(11), e2023GL103503, doi: 10.1029/2023GL103503
- [134] ENGSTRÖM, E., WERN, L., HELLSTRÖM, S., KJELLSTROM, E., ZHOU, C., CHEN, D., **AZORIN-MOLINA, C.**, 2023: Data rescue of historical wind observations in Sweden since the 1920s. *Earth System Science Data* 15(6), 2259-2277. doi: 10.5194/essd-15-2259-2023
- [133] **AZORIN-MOLINA, C.**, SAFAEI PIROOZ, A.A., BEDOYA-VALESTT, S., UTRABO-CARAZO, E., ANDRES-MARTIN, M., SHEN, C., MINOLA, L., GUIJARRO, JOSE A., AGUILAR, E., BRUNET, M., FLAY, R. G.J., VICENTE-SERRANO, S.M., McVICAR, T.R., CHEN, D., 2023: Biases in wind speed due to anemometer changes. *Atmospheric Research* 289, 106771. doi: 10.1016/j.atmosres.2023.106771
- [132] UTRABO-CARAZO, E., **AZORIN-MOLINA, C.**, AGUILAR, E., BRUNET, M., 2023: A Spectral Analysis of Near-Surface Wind Speed and Gusts over the Iberian Peninsula. *Geophysical Research Letters*. 50, e2023GL103323. <https://doi.org/10.1029/2023GL103323>
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## 10. MASTER AND DOCTORAL THESIS SUPERVISED

### *Doctoral thesis*

- [7] ANDRES-MARTIN, M.: *Estudio de la variabilidad de los eventos de “wind drought” y su aplicación a servicios climáticos*. CIDE (CSIC-UV-GVA), Valencia. Directed by **Dr. Cesar Azorin-Molina** and Dr. Sergio M. Vicente-Serrano. FPU scholarship. Since November 2022. Ongoing.
- [6] BEDOYA VALESTT, S.: *Cambios observados y simulados de los vientos locales y brisas marinas*. CIDE (CSIC-UV-GVA), Valencia. Directed by **Dr. Cesar Azorin-Molina** and Dr. Luis Gimeno. Santiago Grisolia scholarship. Since September 2022. Ongoing.
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- [4] SHEN, C.: *Evaluation and projection of the changes in near-surface wind speed: implication for wind energy potential*. Earth Sciences Centre, Regional Climate Group, University of Gothenburg, Göteborg, Sweden. Supervised by Dr. Deliang Chen. **Assistant supervisor: Dr. Cesar Azorin-Molina**. Defended 13 September 2024.
- [3] NAVARRO-SERRANO, F.M.: *Análisis del comportamiento altitudinal de la temperatura del aire superficial en áreas de montaña*. Instituto Pirenaico de Ecología, Spanish National Research Council (IPE-CSIC), Zaragoza, Spain. Directed by Dr. Juan-I. Lopez-Moreno and **Dr. Cesar Azorin-Molina**. Defended 18 December 2020.
- [2] MINOLA, L.: *Changes in near-surface winds across Sweden over the past decades – Observations and simulations*. Earth Sciences Centre, Regional Climate Group, University of Gothenburg, Göteborg, Sweden. Directed by **Dr. Cesar Azorin-Molina** and Dr. Deliang Chen. Defended 11 December 2020.
- [1] ZHANG, G.: *Wind speed variability and associated environment issues with a focus on northern China*. Beijing Normal University, Beijing, China. Directed by Dr. Peijun Shi, Dr. Deliang Chen and **Dr. Cesar Azorin-Molina**. Defended 20 May 2020.

### *Master thesis*

- [9] MARTIN-BARRIO, A.: University of Granada, Spain. Master thesis of Science. Directed by Dr. Nuria Plaza, **Dr. Cesar Azorin-Molina**.
- [8] LÖNN, J.: Earth Sciences Centre, Regional Climate Group, University of Gothenburg, Göteborg, Sweden. Master thesis of Science. Directed by Dr. Lorenzo Minola, **Dr. Cesar Azorin-Molina** and Dr. Deliang Chen.
- [7] ANDRES-MARTIN, M.: Tendencias de la velocidad del viento en superficie en el norte de la Península Antártica y su relación con modos de variabilidad climática. *Universidad Complutense de Madrid, Madrid, Spain. Master thesis of Science*. Directed by **Dr. Cesar Azorin-Molina** and Dr. Encarna Serrano Mendoza.
- [6] LARA ZAMBRANO, J.: *Tendencias de la velocidad media del viento en Ecuador*. Department of Geography, University of Valencia, Valencia, Spain. Master thesis of Science. Directed by **Dr. Cesar Azorin-Molina** and Dr. Maria Jose Estrela-Navarro
- [5] BEDOYA VALESTT, S.: *Tendencias de la velocidad de la brisa marina en el este de la Península Ibérica, 1961-2019*. Polytechnic University of Valencia, Valencia, Spain. Master thesis of Science. Directed by **Dr. Cesar Azorin-Molina**
- [4] UTRABO-CARAZO, E.: *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*. *Universidad Complutense de Madrid, Madrid, Spain. Master thesis of Science*. Directed by **Dr. Cesar Azorin-Molina** and Dr. Encarna Serrano Mendoza.
- [3] WESSELSCHMIDT, N.: *Near-surface wind speed trends from different reanalysis datasets*. Earth Sciences Centre, Regional Climate Group, University of Gothenburg, Göteborg, Sweden. Master thesis of Science. 30 August 2017. Maxima Cum Laude Directed by **Dr. Cesar Azorin-Molina** and Dr. Deliang Chen.
- [2] MINOLA, L.: *Homogenization, assessment and attribution of observed near-surface wind speed trends across Sweden, 1956-2013*. Earth Sciences Centre, Regional Climate Group, University of Gothenburg, Göteborg, Sweden. Master thesis of Science. 2 June 2015. Maxima Cum Laude. Directed by **Dr. Cesar Azorin-Molina** and Dr. Deliang Chen.
- [1] ZAKI, S.: Spatial and temporal comparison of different vegetation indices and satellite datasets in the Iberian Peninsula. Master thesis of Science. CIHEAM. 24 de octubre de 2012. Máxima Cum Laude. Directed by Dr. Sergio M. Vicente-Serrano and **Dr. Cesar Azorin-Molina**.

### **Supervision of contracts and visitors**

\* 3 Postdoctoral contracts APOSTD (by the Valencian Regional Government) funded but declined by the candidates (due to the delay in the resolution)

CIAPOS/2023/040 Alejandro Vichot Llano

CIAPOS/2021/236 Devanil Choudhury

APOSTD/2021/369 Gangfeng Zhang

[17] MONSALVEZ, K.: Observed wind speed gridded product. Hired by the PTI+Clima CSC2300000. CIDE (CSIC-UV-GVA), Valencia. Since 01/01/2025.

[16] LI, H.: PhD student from the Sun Yat-sen University (China). Oct-2024 till Oct-2025.

- [15] POGGI, M.: PhD student from the University of Buenos Aires (Argentina). Oct-Nov 2024.
- [14] GRANELL, F. (Technician): Quality control and homogenization of wind speed series. Hired by the ThinkInAzul programme. CIDE (CSIC-UV-GVA), Valencia. Since 15/07/2024.
- [13] GOMEZ-REYES, J. (Technician): Meteo-Dron. Hired by the ThinkInAzul programme. CIDE (CSIC-UV-GVA), Valencia. Since 1/07/2024.
- [12] PASHAIE, Z. (PhD student): University of Tabriz (Iran). January - June 2024.
- [11] SHEN, C. (PhD student): University of Gothenburg (Sweden). November 2023.
- [10] YANG, W. (PhD student): Beijing Normal University (China). Oct-2023 till Oct-2024.
- [9] MARTINEZ, M. (Postdoc): Observed wind speed gridded product. Hired by the PTI+Clima CSC2300000. CIDE (CSIC-UV-GVA), Valencia. Since 15/11/2023.
- [8] MINOLA, L. (Postdoc): University of Gothenburg (Sweden). Two periods: September 2022 till November 2022; September 2023 till November 2023.
- [7] PLAZA, N. (Postdoc): Observed wind speed gridded product. Hired by the AICO/2021/023 and PTI+Clima CSC2300000. CIDE (CSIC-UV-GVA), Valencia. Since September 2022.
- [6] KHORCHANI, M. (Postdoc): Observed wind speed gridded product. Hired by the AICO/2021/023. CIDE (CSIC-UV-GVA), Valencia. January 2022 – June 2022.
- [5] ZHOU, C. (Postdoc): Postdoc fellowship on homogenization and wind speed variability and wind extremes in the framework of the FORMAS – A Swedish Research Council for Sustainable Development - 2019-00509: «Assessing centennial wind speed variability from a historical weather data rescue project in Sweden». RCG-University of Gothenburg, Gothenburg (Sweden). 01/06/2021-31/12/2022.
- [4] ANDRES-MARTIN, A. (PhD student): Evaluación de la variabilidad climática de la velocidad del viento en la Antártida. Beca JAE-INTRO 20\_01279. CIDE (CSIC-UV-GVA), Valencia. 01/10/2020-28/02/2021.
- [3] BEDOYA-VALESTT, S. (PhD Student): Hired by the RyC grant + RTI2018-095749-A-I00 projects. CIDE (CSIC-UV-GVA), Valencia. 15/06/2020-15/09/2022.
- [2] DENG, K.: Postdoc fellowship on wind speed variability and wind extremes in the framework of the VR Project #2017-03780 (Swedish Research Council): «Detection and attribution of changes in extreme wind gusts over land». RCG-University of Gothenburg, Gothenburg (Sweden). 01/09/2019-31/08/2021.
- [1] REIG-GRACIA, F. (Technician): Calibración y georreferenciación de imágenes NOAA-AVHRR mediante programación IDL. IPE-CSIC, Zaragoza. 01/01/2012-31/12/2013.

## 11. PARTICIPATION IN RESEARCH PROJECTS

### 11.1. INTERNATIONAL RESEARCH PROJECTS

[15]

**PROJECT TITLE:** «Red española e iberoamericana sobre variabilidad climática y servicios climáticos en ecosistemas terrestres y marinos» RED-CLIMA 2

**FINANCIAL ENTITY:** Spanish National Research Council (CSIC). The International Laboratory in Global Change. LINCGLOBAL Ref. LINC24042

**LENGHT FROM:** jul-2024 **TO:** dec-2026

**PRINCIPAL INVESTIGATORS:** Dr. Cesar Azorin-Molina (Spanish CSIC)

**FUNDING:** 37.500 €

[14]

**PROJECT TITLE:** «Red española e iberoamericana sobre variabilidad climática y servicios climáticos en ecosistemas terrestres y marinos» RED-CLIMA

**FINANCIAL ENTITY:** Spanish National Research Council (CSIC). The International Laboratory in Global Change. LINCGLOBAL Ref. INCGL0023

**LENGHT FROM:** 2021 **TO:** 2023

**PRINCIPAL INVESTIGATORS:** Dr. Cesar Azorin-Molina (CIDE, CSIC-UV-GVA)

**FUNDING:** 29.941 €

[13]

**PROJECT TITLE:** «Changes in extreme winds and their impact on coastal areas across mid- and high- European latitudes»

**FINANCIAL ENTITY:** Swedish Research Council – Vetenskapsrådet (VR) 2021-00444

**LENGHT FROM:** 2022 **TO:** 2024

**PRINCIPAL INVESTIGATORS:** Dr. Lorenzo Minola (University of Gothenburg)

**FUNDING:** 306.199,83 €

[12]

**PROJECT TITLE:** «Assessing centennial wind speed variability from a historical weather data rescue project in Sweden»

**FINANCIAL ENTITY:** FORMAS – A Swedish Research Council for Sustainable Development - 2019-00509

**LENGHT FROM:** 2020 **TO:** 2022

**PRINCIPAL INVESTIGATORS:** Dr. Cesar Azorin-Molina (CIDE, CSIC-UV-GVA) and Dr. Erik Engström (SMHI)

**FUNDING:** 278.614,33 €

[11]

**PROJECT TITLE:** «High resolution climate modelling with a focus on convection and associated precipitation over the Third Pole Region»

**FINANCIAL ENTITY:** World Climate Research Programme (WCRP) - CORDEX

**LENGHT FROM:** 2019 **TO:** 2023

**PRINCIPAL INVESTIGATOR:** Dr. Deliang Chen (University of Gothenburg)

**FUNDING:** \*No allocated funding

[10]

**PROJECT TITLE:** «Detection and attribution of changes in extreme wind gusts over land»

**FINANCIAL ENTITY:** Swedish Research Council – Vetenskapsrådet (VR) 2017-03780

**LENGHT FROM:** 2018 **TO:** 2021

**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (University of Gothenburg)

**FUNDING:** 356.595,60 €

[9]

**PROJECT TITLE:** «Towards improved understanding of the worldwide decline of wind speed in a climate change scenario (STILLING)»

**FINANCIAL ENTITY:** European Commission

**LENGTH FROM:** 2016 **TO:** 2018

**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (University of Gothenburg)

**FUNDING:** 185.857,20 €

[8]

**PROJECT TITLE:** «Assessment of the global stilling phenomenon under a climate change scenario in Sweden»

**FINANCIAL ENTITY:** Swedish Research Council and Formas – University of Gothenburg

**LENGTH FROM:** 2015 **TO:** 2018

**PRINCIPAL INVESTIGATOR:** Dr. Deliang Chen (University of Gothenburg)

**CO-PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (University of Gothenburg)

**FUNDING:** 422.466 €

[7]

**PROJECT TITLE:** «Preventing and remediating degradation of soils in Europe through land care - RECARE»

**FINANCIAL ENTITY:** European Union. FP7-ENV-2013- TWO STAGE Ref. 603498

**LENGTH FROM:** 2013 **TO:** 2018

**PRINCIPAL INVESTIGATOR:** Dr. Artemi Cerdà (University of Valencia) – Coordinated with Wageningen University.

**FUNDING:** 8.549.525 €

[6]

**PROJECT TITLE:** «Demonstration and validation of innovative methodology for regional climate change adaptation in the Mediterranean area - MEDACC»

**FINANCIAL ENTITY:** LIFE12 ENV/ES/000536

**LENGTH FROM:** 2013 **TO:** 2017

**PRINCIPAL INVESTIGATORS:** Dr. Sergio M. Vicente-Serrano (IPE-CSIC); Dr. Gabriel Borrás (OCCC)

**FUNDING:** 2.548.841 €

[5]

**PROJECT TITLE:** «Assessment of climate change impacts on the quantity and quality of water in mountains - ACQWA»

**FINANCIAL ENTITY:** European Union. 7th Framework Programme

**LENGTH FROM:** 2009 **TO:** 2013

**PRINCIPAL INVESTIGATORS:** Dr. José María García Ruiz (IPE-CSIC); Dr. Martin Beniston (University of Geneva)

**FUNDING:** 7.000.000 €

[4]

**PROJECT TITLE:** «A European approach to GEOSS - EuroGEOSS»

**FINANCIAL ENTITY:** European Commission

**LENGTH FROM:** 2009 **TO:** 2012

**PRINCIPAL INVESTIGATORS:** Dr. Sergio M. Vicente-Serrano (IPE-CSIC); Dr. Francis Bertrand

**FUNDING:** 6.888.296 €

[3]

**PROJECT TITLE:** «Regional Cooperation towards adaptation to Climate Change – REGIOCLIMA»

**FINANCIAL ENTITY:** European Union. Programme INTERREG IVC

**LENGHT FROM:** 2008 **TO:** 2011

**PRINCIPAL INVESTIGATOR:** Dr. Millan Millan (representative of The CEAM Foundation)

**FUNDING:** 30.000 €

[2]

**PROJECT TITLE:** «Creating a knowledge and innovation community to address climate change mitigation and adaptation – CLIMATE - KIC»

**FINANCIAL ENTITY:** European Institute of Innovation and Technology (EIT)

**LENGHT FROM:** 2010 **TO:** 2013

**PRINCIPAL INVESTIGATOR:** Dr. Millan Millan (representative of The CEAM Foundation)

**FUNDING:** 764.500.000 €

[1]

**PROJECT TITLE:** «Strategic tools to support adaptive, integrated water resource management under changing conditions at catchment scale a co-evolutionary approach»

**FINANCIAL ENTITY:** European Commission. Fifth framework programme. EVK1-2001-00149

**LENGHT FROM:** 2002 **TO:** 2004

**PRINCIPAL INVESTIGATOR:** Dr. Paul Jeffrey (University of Cranfield) and Dr. Antonio Escarré (University of Alicante)

**FUNDING:** 1.504.532 €

## 11.2. NATIONAL RESEARCH PROJECTS

[25]

**PROJECT TITLE:** «Evaluación del papel del viento en los incendios forestales mediante el uso de datos masivos e inteligencia artificial - VENTAFOCS»

**FINANCIAL ENTITY:** Programa Momentum

**LENGHT FROM:** 15/12/2024 **TO:** 14/12/2028

**PRINCIPAL INVESTIGATOR:** Dr. Juli García Pausas (CIDE, CSIC-UV-GVA); **Dr. César Azorín Molina** (CIDE, CSIC-UV-GVA)

**FUNDING:** 370.517 €

[24]

**PROJECT TITLE:** «Clima y servicios climáticos»

**FINANCIAL ENTITY:** Ministerio para Transición Ecológica y el Reto Demográfico. CSC2300000

**LENGHT FROM:** 2023 **TO:** 2026

**PRINCIPAL INVESTIGATORS:** Dr. Sergio M. Vicente Serrano (IPE-CSIC); Dr. Jose M. Gutiérrez (IFCA-CSIC); Dr. David Barriopedro (IGEO-CSIC); **Dr. César Azorín Molina** (CIDE, CSIC-UV-GVA); Dr. Santiago Beguería (EEAD-CSIC)

**FUNDING:** 6.250.000 € (CIDE 632.487,52 €)

[23]

**PROJECT TITLE:** «MEcanismos de las olas de CAlor y SEquías en España: el papel de las retroalimentaciones suelo-atmósfera y la dinámica atmosférica (MECASE)»

**FINANCIAL ENTITY:** Ministerio de Ciencia, Innovación y Universidades. PID2022-137244OB-I00

**LENGHT FROM:** 2023 **TO:** 2026

**PRINCIPAL INVESTIGATORS:** Dr. Sergio M. Vicente Serrano; **Dr. César Azorín Molina** (CIDE, CSIC-UV-GVA)

**FUNDING:** 437.500 €

[22]

**PROJECT TITLE:** «Servicio de monitorización de viento y predicción de sequías de viento para la industria eólica – WIND-ATLAS»

**FINANCIAL ENTITY:** Agencia Estatal Consejo Superior de Investigaciones Científicas – Proyecto Intramural Ref. 2022301068

**LENGHT FROM:** 03/11/2022 **TO:** 31/12/2023

**PRINCIPAL INVESTIGATOR:** **Dr. César Azorín-Molina**

**FUNDING:** 5.000 €

[21]

**PROJECT TITLE:** «Evaluación a largo plazo de los cambios en la CUBierta vegetal en los parques nacionales españoles y su conexión con los procesos de VARIabilidad y cambio CLImático»

**FINANCIAL ENTITY:** Ministerio para la Transición Ecológica y Reto Demográfico

**LENGHT FROM:** 01/01/2023 **TO:** 31/12/2026

**PRINCIPAL INVESTIGATOR:** Dr. Sergio M. Vicente Serrano

**FUNDING:** 97.462,50 €

[20]

**PROJECT TITLE:** «Evolución de los incendios a escala global y regional y a distintas escalas temporales según el forzamiento climático - ONFIRE»

**FINANCIAL ENTITY:** Ministerio de Ciencia e Innovación. Ref. PID2021-123193OB-I00

**LENGHT FROM:** 01/01/2023 **TO:** 31/12/2025

**PRINCIPAL INVESTIGATOR:** Dr. Marco Turco (UM)

**FUNDING:** 150.040,00€

[19]

**PROJECT TITLE:** «Servicio de monitorización y estimación del viento en el litoral a partir de instrumentación de bajo coste y aprendizaje automático»

**FINANCIAL ENTITY:** NextGenerationEU – GVA-THINKINAZUL/2021/018

**LENGHT FROM:** 01/07/2022 **TO:** 30/12/2025

**PRINCIPAL INVESTIGATOR:** **Dr. César Azorín Molina** (CIDE, CSIC-UV-GVA)

**CO-PRINCIPAL INVESTIGADOR:** Dr. Verónica Nieves (UV)

**FUNDING:** 204.957,69€

[18]

**PROJECT TITLE:** «Stilling vs. reversal: proyecciones de la velocidad del viento en el siglo XXI y oscilaciones atmósfera-océano asociadas»

**FINANCIAL ENTITY:** Fundación BBVA. Beca Leonardo a Investigadores y Creadores Culturales 2021

**LENGHT FROM:** 01/07/2021 **TO:** 31/12/2022

**PRINCIPAL INVESTIGATOR:** **Dr. César Azorín Molina** (CIDE, CSIC-UV-GVA)

**FUNDING:** 39.951 €

[17]

**PROJECT TITLE:** «Cartografía de alta resolución espacial del manto de nieve y su variabilidad reciente en los PPNN de montaña, y los impactos del cambio climático para el horizonte 2050»

**FINANCIAL ENTITY:** Ministerio para la Transición Ecológica y el reto demográfico

**LENGHT FROM:** 01/01/2021 **TO:** 31/12/2023

**PRINCIPAL INVESTIGATOR:** Dr. Juan I. López Moreno (IPE-CSIC)

**FUNDING:** 60.418,70 €

[16]

**PROJECT TITLE:** «Red de seguimiento de la biodiversidad y del cambio climático»

**FINANCIAL ENTITY:** Fundación Biodiversidad F.S.P.

**LENGHT FROM:** 01/03/2020 **TO:** 28/02/2021

**PRINCIPAL INVESTIGATOR:** Dr. Francesco de Bello (CIDE, CSIC-UV-GVA)

**FUNDING:** 69.866 €

[15]

**PROJECT TITLE:** «Evaluación y atribución de la variabilidad de la velocidad media y las rachas máximas de viento: causas del fenómeno “stilling” - IBER-STILLING»

**FINANCIAL ENTITY:** Ministerio de Ciencia e Innovación. RTI2018-095749-A-I00

**LENGHT FROM:** 2019 **TO:** 2022

**PRINCIPAL INVESTIGATOR:** Dr. César Azorín Molina (CIDE, CSIC-UV-GVA)

**FUNDING:** 108.900 € + 1 PhD student (\*Eduardo Utrabo-Carazo)

[14]

**PROJECT TITLE:** «Evaluación del impacto en las series de temperatura de las transiciones entre sistemas de observación - IMPACTRON»

**FINANCIAL ENTITY:** Ministerio de Economía y Competitividad. CGL2015-70192-REDT

**LENGHT FROM:** 2016 **TO:** 2017

**PRINCIPAL INVESTIGATOR:** Dr. Enric Aguilar Anfrons (Universidad Rovira i Virgili)

**FUNDING:** 20.000 €

[13]

**PROJECT TITLE:** «Red de variabilidad y cambio climático - RECLIM»

**FINANCIAL ENTITY:** Ministerio de Economía y Competitividad. CGL-2014-517221-REDT

**LENGHT FROM:** 2015 **TO:** 2016

**PRINCIPAL INVESTIGATOR:** Dr. Sergio M. Vicente-Serrano (CSIC)

**FUNDING:** 20.000 €

[12]

**PROJECT TITLE:** «Estudio del manto de nieve en la montaña española y su respuesta a la variabilidad y cambio climático - IBERNIEVE»

**FINANCIAL ENTITY:** Ministerio de Economía y Competitividad. CGL-2014-52599P

**LENGHT FROM:** 2015 **TO:** 2018

**PRINCIPAL INVESTIGATOR:** Dr. Juan-I. López-Moreno (CSIC)

**FUNDING:** 178.000 €

[11]

**PROJECT TITLE:** «El glaciar de Monte Perdido: Monitorización y estudio de su dinámica actual y procesos criosféricos asociados como indicadores de procesos de cambio global»

**FINANCIAL ENTITY:** Ministerio de Agricultura, Alimentación y Medio Ambiente 844/2013

**LENGHT FROM:** 2014 **TO:** 2016

**PRINCIPAL INVESTIGATOR:** Dr. Juan-I. López-Moreno (CSIC)

**FUNDING:** 64.500 €

[10]

**PROJECT TITLE:** «Glacier retreat in the Cordillera Blanca and Cordillera Huaytapallana in Perú: Evidences and impacts on local population»

**FINANCIAL ENTITY:** CSIC para el Desarrollo – ICOOP89  
**LENGHT FROM:** 2012 **TO:** 2013  
**PRINCIPAL INVESTIGATOR:** Dr. Juan-I. López-Moreno (CSIC)  
**FUNDING:** 17.900 €

[9]

**PROJECT TITLE:** «Hidrología nival en el Pirineo Central español: variabilidad espacial, importancia hidrológica y su respuesta a la variabilidad y cambio climático (HIDRONIEVE)»  
**FINANCIAL ENTITY:** Ministry of Economy and Competitiveness. CGL2011-27536  
**LENGHT FROM:** 2012 **TO:** 2014  
**PRINCIPAL INVESTIGATOR:** Dr. Juan-I. López-Moreno (CSIC)  
**FUNDING:** 74.000 €

[8]

**PROJECT TITLE:** «Impactos hidrológicos del calentamiento global en España (HIDROCAES)»  
**FINANCIAL ENTITY:** Ministry of Economy and Competitiveness. CGL2011-27574-C02-02  
**LENGHT FROM:** 2012 **TO:** 2014  
**PRINCIPAL INVESTIGATOR:** Dr. Sergio-M. Vicente-Serrano (CSIC)  
**FUNDING:** 45.000 €

[7]

**PROJECT TITLE:** «Influencia del cambio climático en el turismo de nieve»  
**FINANCIAL ENTITY:** Comunidad de Trabajo de los Pirineos. CTTTP01/10  
**LENGHT FROM:** 2011 **TO:** 2012  
**PRINCIPAL INVESTIGATOR:** Dr. Juan I. López Moreno (CSIC)  
**FUNDING:** 34.960 €

[6]

**PROJECT TITLE:** «Procesos de formación de ozono y evaluación de estrategias de mejora de la calidad del aire - PROMECA»  
**FINANCIAL ENTITY:** Ministry of Science and Innovation. CGL2009-10309  
**LENGHT FROM:** 2010 **TO:** 2012  
**PRINCIPAL INVESTIGATOR:** Dr. Nuria Castell-Balaguer (The CEAM Foundation)  
**FUNDING:** 59.000 €

[5]

**PROJECT TITLE:** «Evaluación del agua de niebla en la vertiente mediterránea de la Península Ibérica. Potenciales usos y aplicaciones»  
**FINANCIAL ENTITY:** Ministry of Science and Innovation. CGL2008-04550/CLI  
**LENGHT FROM:** 2009 **TO:** 2011  
**PRINCIPAL INVESTIGATOR:** Dr. Maria-Jose Estrela-Navarro (The CEAM Foundation – University of Valencia)  
**FUNDING:** 93.000 €

[4]

**PROJECT TITLE:** «Programa de actividades de la red RIMARC (Red Ibérica Mediterránea para el análisis de los riesgos climáticos)»  
**FINANCIAL ENTITY:** Ministry of Education and Science.  
**LENGHT FROM:** 2008 **TO:** 2009  
**PRINCIPAL INVESTIGATOR:** Dr. Maria-Jose Estrela-Navarro (The CEAM Foundation)  
**FUNDING:** 12.000 €

[3]

**PROJECT TITLE:** «Varimos: vigilancia ambiental densa mediante redes inalámbricas de motas con sensores. Aplicación a un problema medioambiental en entornos urbanos»

**FINANCIAL ENTITY:** Ministry of Industry, Tourism and Trade. TSI-020100-2008-350

**LENGHT FROM:** 2008 **TO:** 2009

**PRINCIPAL INVESTIGATOR:** Enrique Mantilla-Iglesias (The CEAM Foundation)

**FUNDING:** 10.615,50 €

[2]

**PROJECT TITLE:** «Multidisciplinary Research Consortium on Gradual and Abrupt Climate Changes; and their Impacts on the Environment (GRACCIE)»

**FINANCIAL ENTITY:** Ministry of Education and Science. CONSOLIDER-INGENIO 2010 – Programme CSD2007-00067

**LENGHT FROM:** 2007 **TO:** 2011

**PRINCIPAL INVESTIGATOR:** Dr. Joan Grimalt-Obrador (CSIC)

**FUNDING:** 1.659.235 €

[1]

**PROJECT TITLE:** «Red Ibérica Mediterránea para el análisis de los riesgos climáticos - RIMARC»

**FINANCIAL ENTITY:** Ministry of Education and Science. CGL2004-21663-E/CLI

**LENGHT FROM:** 2003 **TO:** 2007

**PRINCIPAL INVESTIGATOR:** Dr. Maria-Jose Estrela-Navarro (The CEAM Foundation)

**FUNDING:** 18.000 €

### **11.3. REGIONAL RESEARCH PROJECTS**

[3]

**PROJECT TITLE:** «Potential effects of anthropogenic climate warming on wind storm hazards: detection, attribution and prediction of downbursts»

**FINANCIAL ENTITY:** Valencian Regional Government – GVA. PROMETEO Grant CIPROM/2023/38 for Excellence Research Groups.

**LENGHT FROM:** 01-Sep-2024 **TO:** 31-Aug-2028

**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (CIDE, CSIC-UV-GVA)

**FUNDING:** 600.000 €

[2]

**PROJECT TITLE:** «Cambios observados, proyecciones futuras e índices de la velocidad del viento y sus extremos en la Comunidad Valenciana»

**FINANCIAL ENTITY:** Valencian Regional Government – GVA. AICO-Program AICO/2021/023

**LENGHT FROM:** 2021 **TO:** 2023

**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (CIDE, CSIC-UV-GVA)

**FUNDING:** 89.858,69 €

[1]

**PROJECT TITLE:** «Las sequías climáticas en la cuenca del Ebro y su respuesta hidrológica: estimación del tiempo de respuesta y recuperación en un contexto de cambio climático»

**FINANCIAL ENTITY:** Aragon Regional Government – DGA Caixa

**LENGHT FROM:** 2009 **TO:** 2010

**PRINCIPAL INVESTIGATOR:** Dr. Sergio-M. Vicente-Serrano (CSIC)

**FUNDING:** 45.000 €

**12. PARTICIPATION IN RESEARCH CONTRACTS OF SPECIAL RELEVANCE WITH COMPANIES AND/OR PRIVATE OR PUBLIC FUNDING BODIES****[6]****CONTRACT TITLE:** «Predicción de la velocidad media del viento a corto plazo con IA en Torrevieja - TWindPRED»**FINANCIAL ENTITY:** University of Alicante (UA, TI-LAB) & Torrevieja City Council**LENGHT FROM:** 2025 **TO:** 2025**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina (CIDE, CSIC-UV-GVA)**CO-PRINCIPAL INVESTIGATOR:** Dr. Marcos Martinez-Roig (CIDE, CSIC-UVA-GVA)**FUNDING:** 17.989,60 €**[5]****CONTRACT TITLE:** «Diagnóstico de la contaminación atmosférica del término municipal de Valencia en el marco del plan estratégico de la calidad del aire»**FINANCIAL ENTITY:** Valencia City Council**LENGHT FROM:** 2008 **TO:** 2009**PRINCIPAL INVESTIGATOR:** Enrique Mantilla-Iglesias (The CEAM Foundation)**FUNDING:** 50.000 €**[4]****CONTRACT TITLE:** «Previozono 2009. Programa de vigilancia del ozono troposférico »**FINANCIAL ENTITY:** Valencia Regional Government**LENGHT FROM:** Jan-2009 **TO:** Dec-2009**PRINCIPAL INVESTIGATOR:** Enrique Mantilla-Iglesias (The CEAM Foundation)**FUNDING:** 90.000 €**[3]****CONTRACT TITLE:** «Previozono 2008. Programa de vigilancia del ozono troposférico »**FINANCIAL ENTITY:** Valencia Regional Government**LENGHT FROM:** Jan-2008 **TO:** Dec-2008**PRINCIPAL INVESTIGATOR:** Enrique Mantilla-Iglesias (The CEAM Foundation)**FUNDING:** 90.000 €**[2]****CONTRACT TITLE:** «Estudio y evaluación de la contaminación atmosférica por ozono troposférico en España»**FINANCIAL ENTITY:** Ministry of Environment and Rural and Marine. ES272004**LENGHT FROM:** 2005 **TO:** 2009**PRINCIPAL INVESTIGATOR:** Dr. Millan Millan (The CEAM Foundation)**FUNDING:** 988.894,21 €**[1]****CONTRACT TITLE:** «Atlas Toponimic Valenciá: Provincia d´Alacant»**FINANCIAL ENTITY:** Valencia Regional Government**LENGHT FROM:** 2003 **TO:** 2004**PRINCIPAL INVESTIGATOR:** Dr. Juan-Antonio Marco-Molina (University of Alicante)**FUNDING:** 17.369 €

### 13. TECHNOLOGY TRANSFERENCE ACTIVITIES

[5]

**TECHNOLOGY TRANSFERENCE ACTIVITY:** «Technical maintenance of the Valencian Meteorological Stations Network», which consists 30 remote and 2 manual weather stations in the Valencia region.

**FINANCIAL ENTITY:** Valencia Regional Government

**LENGHT FROM:** June 2009 **TO:** December 2010

**PRINCIPAL INVESTIGATOR:** David-Corell-Custardoy (The CEAM Foundation)

[4]

**TECHNOLOGY TRANSFERENCE ACTIVITY:** «Technical maintenance of the Valencian Fog Collectors Network», which consists 9 remote weather stations in the Valencia region. This is the first fog collector network all around the Iberian Peninsula.

**FINANCIAL ENTITY:** Valencia Regional Government

**LENGHT FROM:** June 2009 **TO:** December 2010

**PRINCIPAL INVESTIGATOR:** David-Corell-Custardoy (The CEAM Foundation)

[3]

**TECHNOLOGY TRANSFERENCE ACTIVITY:** «Technical installation and maintenance of the Mediterranean Fog Collectors Network», which consists 11 remote weather stations in the eastern region of the Iberian Peninsula (from Catalunya to Almeria). This is the first fog collector network covering the entire eastern fringe of the Iberian Peninsula.

**FINANCIAL ENTITY:** Ministry of Innovation and Science

**LENGHT FROM:** June 2009 **TO:** December 2010

**PRINCIPAL INVESTIGATOR:** David-Corell-Custardoy (The CEAM Foundation)

[2]

**TECHNOLOGY TRANSFERENCE ACTIVITY:** «Technical re-calibration of rain gauges in laboratory because of over/under reading»

**FINANCIAL ENTITY:** Valencia Regional Government

**LENGHT FROM:** June 2009 **TO:** December 2010

**PRINCIPAL INVESTIGATOR:** David-Corell-Custardoy (The CEAM Foundation)

[1]

**TECHNOLOGY TRANSFERENCE ACTIVITY:** «Technical re-calibration of anemometers in laboratory because mechanical damage»

**FINANCIAL ENTITY:** Valencia Regional Government

**LENGHT FROM:** June 2009 **TO:** December 2010

**PRINCIPAL INVESTIGATOR:** David-Corell-Custardoy (The CEAM Foundation)

### 14. STAYS IN RECOGNIZED RESEARCH CENTRES

#### 14.1. INTERNATIONALS

[6]

**CENTRE:** The Royal Netherlands Meteorological Institute (KNMI)

**PLACE:** De Bilt **COUNTRY:** The Netherlands **YEAR:** Nov 2016-Feb 2017 **LENGHT:** 4-months

**TOPIC:** Rescuing long-term wind speed datasets from the ECA&D project

**KEY:** Postdoctoral – Marie Curie secondment

**COLLABORATION WITH:** Dr. Albert Klein Tank ; [albert.klein.tank@knmi.nl](mailto:albert.klein.tank@knmi.nl)

[5]

**CENTRE:** Earth Science Centre. Regional Climate Group. University of Göteborg  
**PLACE:** Göteborg **COUNTRY:** Sweden **YEAR:** September 2016- August 2019  
**LENGHT:** 2-years and 8 months (with 4-months of secondment at KNMI)  
**TOPIC:** Towards improved understanding of the worldwide decline of wind speed in a climate change scenario (STILLING)  
**KEY:** Postdoctoral – Marie Curie and VR project  
**COLLABORATION WITH:** Dr. Deliang Chen; [deliang@gvc.gu.se](mailto:deliang@gvc.gu.se)

[4]

**CENTRE:** The Commonwealth Scientific and Industrial Research Organisation (CSIRO)  
**PLACE:** Canberra **COUNTRY:** Australia **YEAR:** Mar-May 2015 **LENGHT:** 3-months  
**TOPIC:** Long-term trends of wind gusts in the Iberian Peninsula  
**KEY:** Postdoctoral  
**COLLABORATION WITH:** Dr. Tim R. McVicar ; [Tim.Mcvicar@csiro.au](mailto:Tim.Mcvicar@csiro.au)

[3]

**CENTRE:** The Royal Netherlands Meteorological Institute (KNMI)  
**PLACE:** De Bilt **COUNTRY:** The Netherlands **YEAR:** Aug-Dec 2010 **LENGHT:** 5-months  
**TOPIC:** A numerical study of non-forecasted convection associated with sea breezes  
**KEY:** Postdoctoral  
**COLLABORATION WITH:** Dr. Sander Tijm ; [sander.tijm@knmi.nl](mailto:sander.tijm@knmi.nl)

[2]

**CENTRE:** Cooperative Institute for Research in the Atmosphere (CIRA). Colorado State University  
**PLACE:** Fort Collins **COUNTRY:** Colorado State (USA) **YEAR:** 2006 **LENGHT:** 4-months  
**TOPIC:** Sea breeze cloud frequency composites using remote sensing data (NOAA-AVHRR)  
**KEY:** Ph.D.Student  
**COLLABORATION WITH:** Dr. Bernadette H. Connell ; [Bernie.Connell@colostate.edu](mailto:Bernie.Connell@colostate.edu)

[1]

**CENTRE:** Earth Science Centre. Regional Climate Group. University of Göteborg  
**PLACE:** Göteborg **COUNTRY:** Sweden **YEAR:** 2005 **LENGHT:** 4-months  
**TOPIC:** Objective methods for finding sea breeze episodes  
**KEY:** Ph.D.Student  
**COLLABORATION WITH:** Dr. Deliang Chen ; [deliang@gvc.gu.se](mailto:deliang@gvc.gu.se)

## 14.2. NATIONALS

[2]

**CENTRE:** Laboratory of Climatology. Group of Climatology. University of Barcelona  
**PLACE:** Barcelona **COUNTRY:** Spain **YEAR:** 2004-2005 **LENGHT:** 9-months  
**TOPIC:** Regional teleconnection patterns: Western Mediterranean Oscillation Index (WeMOi)  
**KEY:** Ph.D.Student  
**COLLABORATION WITH:** Dr. Javier Martin-Vide ; [jmartinvide@ub.edu](mailto:jmartinvide@ub.edu)

[1]

**CENTRE:** Laboratory of Climatology. Group of Climatology. University of Barcelona  
**PLACE:** Barcelona **COUNTRY:** Spain **YEAR:** 2003-2004 **LENGHT:** 5-months  
**TOPIC:** Statistical methods for studying the degree of occurrence and persistence of sea breezes  
**KEY:** Ph.D.Student  
**COLLABORATION WITH:** Dr. Javier Martin-Vide ; [jmartinvide@ub.edu](mailto:jmartinvide@ub.edu)

**15. TEACHING EXPERIENCE****[13]****LECTURER: Azorín Molina, C.****COURSE:** "Wind studies at the Villena-Las Virtudes weather station" – 32 students from the University of Gothenburg (Sweden) – Prof. Alexander Walther and Prof. Bengt Liljebladh**TYPE OF PRESENTATION:** Teaching**MEETING PLACE:** Villena (Alicante, Spain)**DATE:** 18-19/12/2023**[12]****LECTURER: Azorín Molina, C.****COURSE:** "Estación meteorológica Villena-Las Virtudes" Jornada de Convivencia del CIDE (CSIC-UV-GVA)**TYPE OF PRESENTATION:** Teaching**MEETING PLACE:** Villena (Alicante, Spain)**DATE:** 25/10/2022**[11]****LECTURER: Azorín Molina, C.****COURSE:** "Desert Room – Laboratorio de Clima " Escápate con la Ciencia. Semana de la Ciencia**TYPE OF PRESENTATION:** Teaching**MEETING PLACE:** Valencia (Spain)**DATE:** 2-8/11/2021**[10]****LECTURER: Azorín Molina, C.****COURSE:** "Estacions meteorològiques automàtiques: L'adquisició de dades del temps per als estudis climàtics" en "Conèixer el temps i clima per a una societat sostenible"**TYPE OF PRESENTATION:** Teaching - Part-time assistant professor**MEETING PLACE:** Valencia (Spain)**DATE:** 24-26/06/2016**[9]****LECTURER: Azorín Molina, C.****COURSE:** El clima i el seu estudi a través de estacions meteorològiques. Programa La Nau Gran.**TYPE OF PRESENTATION:** Teaching - Part-time assistant professor**MEETING PLACE:** Valencia (Spain)**DATE:** 28/11/2015 (12 hours)**[8]****LECTURER: Azorín Molina, C.****COURSE:** Master International of Land and Water Management – Course «Sustainable Land and Water Management, Spain (Wageningen UR code WRM-33306)»**TYPE OF PRESENTATION:** Teaching - Part-time assistant professor**MEETING PLACE:** Wageningen University (The Netherlands)**DATE:** June 2015 (10 hours)**[7]****LECTURER: Azorín Molina, C.****COURSE:** Introducción a la Geografía

**TYPE OF PRESENTATION:** Teaching History degree (1<sup>st</sup> Course) - Part-time assistant professor

**MEETING PLACE:** University of Valencia (Spain)

**DATE:** 01/02/2014 - 31/05/2014 (90 hours)

[6]

**LECTURER:** Azorín Molina, C.

**COURSE:** III Curso Intensivo de Verano de la AEC sobre técnicas y métodos estadísticos avanzados para estudios climáticos

**TYPE OF PRESENTATION:** Teaching practice - «Análisis de imágenes de satélite. Estimación y clasificación de nubes».

**MEETING PLACE:** University of Zaragoza – CSIC/AEC (Zaragoza, Spain)

**DATE:** 29/06/2009 - 3/07/2009

[5]

**LECTURER:** Azorín Molina, C., Olcina Cantos, J., and Moltó Mantero, E.

**COURSE:** Conèixer el nostre clima y predir el temps

**TYPE OF PRESENTATION:** Teaching

**MEETING PLACE:** University of Alicante (Alicante, Spain)

**DATE:** Academic course 2006-2007.

[4]

**LECTURER:** Azorín Molina, C.,

**COURSE:** Clima y vegetación

**TYPE OF PRESENTATION:** Teaching

**MEETING PLACE:** State School – Aitana Alicante (Alicante, Spain)

**DATE:** 27/03/2006 – 29/03/2006

[3]

**LECTURER:** Azorín Molina, C., Olcina Cantos, J., and Moltó Mantero, E.

**COURSE:** Conèixer el nostre clima y predir el temps

**TYPE OF PRESENTATION:** Teaching

**MEETING PLACE:** University of Alicante (Alicante, Spain)

**DATE:** Academic course 2005-2006.

[2]

**LECTURER:** Olcina Cantos, J., Azorín Molina, C., and Martínez Ibarra, E.

**COURSE:** II Curso de Verano de la AEC. Métodos y técnicas de análisis de riesgos climáticos

**TYPE OF PRESENTATION:** Teaching practice - «Análisis de áreas de inundación y cartografía del riesgo»

**MEETING PLACE:** The CEAM Foundation. Paterna (Valencia, Spain)

**DATE:** 30/06/2004 - 3/07/2004

[1]

**LECTURER:** Azorín Molina, C.

**COURSE:** Climatology / Meteorology – Bachelor of Geography

**TYPE OF PRESENTATION:** Teaching practice

**MEETING PLACE:** Laboratory of Climatology. University of Alicante (Alicante, Spain)

**DATE:** 2003-2006

**16. INVITED LECTURES****[30]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «Meteo-Dron»**CONGRESS:** Innotransfer | Drones/UAVs: Innovación desde el aire. Drones y UAS frente a escenarios extremos**MEETING PLACE:** Science Park – University of Valencia (Spain)**DATE:** 13/11/2025**[29]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «The forgotten part of climate change: winds of change»**CONGRESS:** The International Association of Wind Engineering (IAWE) - webinars**MEETING PLACE:** Online – Wellington (New Zealand)**DATE:** XX/11/2025**[28]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «The Climate, Atmosphere and Ocean lab at the Spanish CSIC: Current Research and Projects»**CONGRESS:** The 23<sup>rd</sup> China International Talent Exchange Conference**MEETING PLACE:** Shanghai Expo Center, Fourth Floor, Shanghai (China)**DATE:** 21/10/2025**[27]****LECTURER: Azorin-Molina, C.****TITLE:** «Downbursts y cambio climático»**CONGRESS:** Downburst project meeting**MEETING PLACE:** Casa de la Ciencia del CSIC – Valencia (Spain)**DATE:** 04/04/2025**[26]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «The forgotten part of climate change: winds of change»**CONGRESS:** NIWA seminars**MEETING PLACE:** National Institute of Water and Atmosphere (NIWA) – Wellington (New Zealand)**DATE:** 20/02/2025**[25]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «Una visión sobre la PTI+ Clima»**CONGRESS:** IV Jornadas Científicas PTI+ Salud Global**MEETING PLACE:** Science Park – University of Valencia (Spain)**DATE:** 28/10/2024**[24]****LECTURER: Azorin-Molina, C.****TITLE:** Keynote speaker «Plataforma Temática Interdisciplinar (PTI+) Clima y Servicios Climáticos»**CONGRESS:** XXVI Jornadas Científicas de la Asociación Meteorológica Española – 22<sup>º</sup> Encuentro Hispano – Luso de Meteorología

**MEETING PLACE:** Cádiz – San Fernando

**DATE:** 13/03/2024

[23]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «El viento, el elemento olvidado del cambio climático»

**CONGRESS:** Ciclo de conferencias. Villena en la frontera del conocimiento

**MEETING PLACE:** Sede Universitaria UA de Villena

**DATE:** 01/03/2024

[22]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «El viento, el elemento olvidado del sistema climático»

**CONGRESS:** Ciclo de conferencias. Las múltiples caras del cambio climático

**MEETING PLACE:** Casa de la Ciencia CSIC, Valencia

**DATE:** 01/02/2024

*Visit of the Spanish Ministry of Science, Innovation and Universities: Diana Morant*

[21]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Los vientos y el cambio climático»

**CONGRESS:** SAPIencia – Una copa con la ciencia

**MEETING PLACE:** Centro Aragón, Sagunto

**DATE:** 19/01/2024

[20]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Postdoctoral funding opportunities»

**CONGRESS:** I Jornadas de Jóvenes Investigadores del Clima de la AEC

**MEETING PLACE:** Casa de la Ciencia CSIC, Valencia

**DATE:** 15/12/2023

[19]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Cambios en la velocidad del viento: Los fenómenos “stilling” y “reversal” y sus implicaciones socioeconómicas y ambientales»

**CONGRESS:** Seminarios Científico-Técnicos IVIA & CIDE (CSIC-UV-GVA) & GVA

**MEETING PLACE:** Moncada (Valencia)

**DATE:** 26/03/2021

[18]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Wind speed variability and extremes»

**CONGRESS:** The 1st BNU (China)-Europe climate workshop

**MEETING PLACE:** Beijing Normal University (Beijing, China)

**DATE:** 31/10/2020

[17]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Estaciones meteorológicas: adquisición de datos del tiempo para el estudio del clima»

**CONGRESS:** CIDE Seminar (online)

**MEETING PLACE:** Centro de Investigaciones sobre Desertificación (CIDE, CSIC-UV-GVA),  
Moncada-Valencia (Spain)  
**DATE:** 16/07/2020

[16]

**LECTURER:** Anna Pons (Directora del CEACV), **César Azorin-Molina (CIDE, CSIC-UV-GVA)**, José A. Alloza (CEAM), Paula Tuzón (Secretaria Autonómica de Emergencia Climática)  
**TITLE:** Webinar «Cap a la nova normalitat verda»  
**CONGRESS:** Webinar Día Mundial del Medio Ambiente  
**MEETING PLACE:** Webinar Online  
**DATE:** 05/06/2020  
**URL LINK:** <https://attendee.gotowebinar.com/recording/4288536659874535692>

[15]

**LECTURER:** Azorin-Molina, C.  
**TITLE:** «State-of-the-art of climate variability and trends of wind speeds and extremes: a reversal in global terrestrial stilling»  
**CONGRESS:** Seminarios Científico-Técnicos CIDE (CSIC-UV-GVA)  
**MEETING PLACE:** Centro de Investigaciones sobre Desertificación (CIDE, CSIC-UV-GVA),  
Moncada-Valencia (Spain)  
**DATE:** 26/03/2020

[14]

**LECTURER:** Azorin-Molina, C.  
**TITLE:** «Past and current climate research, with focus on wind and the “stilling” phenomenon»  
**CONGRESS:** CIDE Seminar  
**MEETING PLACE:** Centro de Investigaciones sobre Desertificación (CIDE, CSIC-UV-GVA),  
Moncada-Valencia (Spain)  
**DATE:** 12/09/2019

[13]

**LECTURER:** Azorin-Molina, C.  
**TITLE:** «Assessing anemometer drift as a partial cause of the stilling phenomenon: A statistical approach to correct biases in wind speed series »  
**CONGRESS:** Parallel Data Analysis Workshop - IMPACTRON network Final Event  
**MEETING PLACE:** Center for Climate Change C3, Universitat Rovira i Virgili, Vilaseca, Tarragona  
(Spain)  
**DATE:** 07/11/2017

[12]

**LECTURER:** Azorin-Molina, C. together with C. Fleming (Chalmers) and P. Matos (UGOT)  
**TITLE:** «Postdoc opportunities: Marie Curie Individual Fellowship»  
**CONGRESS:** PhD Day – Panel discussion moderated by Göran Broström  
**MEETING PLACE:** Faculty of Science – University of Göteborg, Göteborg (Sweden)  
**DATE:** 5/04/2017

[11]

**LECTURER:** Azorin-Molina, C.  
**TITLE:** «Past and current climate research, with focus on wind and the STILLING Project»  
**CONGRESS:** Regional Climate Group’s Seminar  
**MEETING PLACE:** Department of Earth Sciences – University of Göteborg, Göteborg (Sweden)

**DATE:** 28/10/2016

[10]

**LECTURER:** Azorín Molina, C.

**TITLE:** «Variabilidad climática del viento y el fenómeno stilling»

**CONGRESS:** IV Encuentro de Aficionados a la Meteorología de Beniarrés

**MEETING PLACE:** Joan Fuster – Beniarrés (Alicante)

**DATE:** 21/05/2016

[9]

**LECTURER:** Azorín Molina, C.

**TITLE:** «Estudios sobre la variabilidad climática del viento»

**CONGRESS:** I Encuentro Emeritense de Climatología

**MEETING PLACE:** Centro Universitario de Mérida (Mérida, Spain)

**DATE:** 15/09/2015

[8]

**LECTURER:** Azorín Molina, C.

**TITLE:** «Global Stilling y tendencias climáticas de la velocidad del viento en España y Portugal»

**CONGRESS:** Seminario

**MEETING PLACE:** Instituto de Hidráulica Ambiental de la Universidad de Cantabria (Santander)

**DATE:** 12/02/2015

[7]

**LECTURER:** Azorín Molina, C.

**TITLE:** «Climatología de la nubosidad a partir del sensor AVHRR (1979-2010). Impacto en la variabilidad climática, hidrológica y vegetal en Aragón»

**CONGRESS:** Seminar «Charlas del Instituto Pirenaico de Ecología»

**MEETING PLACE:** Instituto Pirenaico de Ecología - CSIC (Zaragoza, Spain)

**DATE:** 07/04/2011

[6]

**LECTURER:** Corell-Custardoy, D., and Azorín Molina, C.

**TITLE:** «Red de colectores de agua de niebla de la Fundación CEAM»

**CONGRESS:** Seminar «Charlas del Instituto Universitario CEAM-UMH»

**MEETING PLACE:** Centro de Estudios Ambientales del Mediterráneo (Paterna, Valencia, Spain)

**DATE:** 16/09/2010

[5]

**LECTURER:** Azorín Molina, C.

**TITLE:** «Brisa marina y estados del cielo en Alicante»

**CONGRESS:** Seminar «Clima y paisaje en Alicante, entre la realidad y el mito»

**MEETING PLACE:** Alicante (Spain)

**DATE:** 10/03/2006

[4]

**LECTURER:** Azorin-Molina, C.

**TITLE:** «Methodological approach to the study of daily persistence and occurrence of the sea breeze in Alicante (Spain)»

**CONGRESS:** Workshop of the Regional Climate Group

**MEETING PLACE:** Göteborg (Sweden)

**DATE:** 01/12/2005

[3]

**LECTURER:** Azorin-Molina, C.  
**TITLE:** «Sea breeze study in Spain»  
**CONGRESS:** D-Seminar of the Regional Climate Group  
**MEETING PLACE:** Göteborg (Sweden)  
**DATE:** 28/11/2005

[2]

**LECTURER:** Celdrán Bernabeu, M.A., and Azorín Molina, C.  
**TITLE:** «Condiciones climáticas y producción industrial de sal en Torrevieja»  
**CONGRESS:** Seminar «Cambio climático, peligros naturales y sociedad del riesgo»  
**MEETING PLACE:** Torrevieja (Alicante, Spain)  
**DATE:** 23/09/2005

[1]

**LECTURER:** Azorín Molina, C.  
**TITLE:** «Qué significan las nubes. Predicción del tiempo»  
**CONGRESS:** Seminar «VOLCAM»  
**MEETING PLACE:** Mutxamel (Alicante, Spain)  
**DATE:** 04/07/2003

### 17. EXPERIENCE IN ORGANIZATION R&D ACTIVITIES (Congresses, seminars, etc., scientific-technologicals)

[15]

**CONGRESS:** *Downburst y cambio climático – Aplicación web Downburst MXO – Presentación del Meteodrone*  
**FINANCIAL ENTITY:** CIDE (CSIC-UV-GVA) y Climatoc-Lab  
**PARTICIPANTS:** CSIC, AVAMET and general public  
**LENGHT, FROM:** 14<sup>th</sup> April 2025 **TO:** 14<sup>th</sup> April 2025  
**PLACE:** *Casa de la Ciencia del CSIC en Valencia*  
**PRINCIPAL INVESTIGATOR:** Dr. Cesar Azorin-Molina

[14]

**CONGRESS:** *13rd Annual Meeting of the Spanish Climatological Society*  
**FINANCIAL ENTITY:** Spanish Climatological Society  
**PARTICIPANTS:** Complutense University of Madrid and IGEO-CSIC  
**LENGHT, FROM:** 22<sup>nd</sup> January 2025 **TO:** 24<sup>th</sup> January 2025  
**PRINCIPAL INVESTIGATOR:** Dr. J. Fidel Gonzalez Rouco  
**CO-CONVENER SESSION 1. OBSERVATIONS:** Dr. Cesar Azorin-Molina

[13]

**CONGRESS:** *EGU General Assembly 2025*  
**FINANCIAL ENTITY:** European Geosciences Union  
**PARTICIPANTS:** European Geosciences Union. Session: CL3.1.2 Regional climate extremes: detection, modelling, attribution, and uncertainties  
**LENGHT, FROM:** 1<sup>st</sup> September 2022 **TO:** 28<sup>th</sup> April 2023  
**PRINCIPAL CONVENER:** Dr. Chunlüe Zhou  
**CO-CONVENERS:** Dr. Kunhui Ye, Dr. Ziniu Xiao, Dr. Wenhong Li, Dr. Cesar Azorin-Molina,

[12]

**CONGRESS:** *EGU General Assembly 2025*

**FINANCIAL ENTITY:** European Geosciences Union

**PARTICIPANTS:** European Geosciences Union. Session: CL5.3 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes

**LENGHT, FROM:** 1<sup>st</sup> September 2024      **TO:** 2<sup>nd</sup> May 2025

**PRINCIPAL CONVENER:** Dr. Nuria P. Plaza-Martin

**CO-CONVENERS:** Dr. Lorenzo-Minola, Dr. Cesar Azorin-Molina, Dr. Rob Roebeling, Dr. Xiaolan Wang.

[11]

**CONGRESS:** *EGU General Assembly 2024*

**FINANCIAL ENTITY:** European Geosciences Union

**PARTICIPANTS:** European Geosciences Union. Session: CL5.5 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes

**LENGHT, FROM:** 1<sup>st</sup> September 2023      **TO:** 19<sup>th</sup> April 2023

**PRINCIPAL CONVENER:** Dr. Lorenzo Minola

**CO-CONVENERS:** Dr. Cesar Azorin-Molina, Dr. Xiaolan Wang, Dr. Rob Roebeling, Dr. Corrado Motta

[10]

**CONGRESS:** *EGU General Assembly 2023*

**FINANCIAL ENTITY:** European Geosciences Union

**PARTICIPANTS:** European Geosciences Union. Session: CL3.1.3 Regional climate extremes: detection, modelling, attribution, and uncertainties

**LENGHT, FROM:** 1<sup>st</sup> September 2022      **TO:** 28<sup>th</sup> April 2023

**PRINCIPAL CONVENER:** Dr. Chunlüe Zhou

**CO-CONVENERS:** Dr. Deliang Chen, Dr. Wenhong Li, Dr. Cesar Azorin-Molina, Dr. Yaoming Ma

[9]

**CONGRESS:** *EGU General Assembly 2023*

**FINANCIAL ENTITY:** European Geosciences Union

**PARTICIPANTS:** European Geosciences Union. Session: CL5.5 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes

**LENGHT, FROM:** 1<sup>st</sup> September 2023      **TO:** 28<sup>th</sup> April 2023

**PRINCIPAL CONVENER:** Dr. Lorenzo Minola

**CO-CONVENERS:** Dr. Cesar Azorin-Molina, Dr. Xiaolan Wang, Dr. Rob Roebeling

[8]

**CONGRESS:** *CLIVAR 2023: Towards and Integrated View of Climate. Sesión 2. Observación climática y técnicas de reconstrucción instrumental del clima*

**FINANCIAL ENTITY:** CLIVAR

**LENGHT, FROM:** November 2022      **TO:** January 2023

**PRINCIPAL CONVENER:** Dr. Cesar Azorin-Molina

**CO-CONVENERS:** Dra. Dhais Peña-Angulo, Miquel Tomás-Burguera

**CLIVAR Exchanges**

[7]

**CONGRESS:** *EGU General Assembly 2022*

**FINANCIAL ENTITY:** European Geosciences Union

**PARTICIPANTS:** European Geosciences Union. Session: CL5.03 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes

**LENGHT, FROM:** 1<sup>st</sup> September 2021                      **TO:** 31<sup>st</sup> May 2022  
**PRINCIPAL CONVENER:** Dr. Lorenzo Minola  
**CO-CONVENERS:** Dr. Cesar Azorin-Molina, Dr. Xiaolan Wang, Dr. Rob Roebeling

[6]  
**CONGRESS:** *EGU General Assembly 2021*  
**FINANCIAL ENTITY:** European Geosciences Union  
**PARTICIPANTS:** European Geosciences Union. Session: CL5.03 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes  
**LENGHT, FROM:** 1<sup>st</sup> September 2020                      **TO:** 30<sup>th</sup> April 2021  
**PRINCIPAL CONVENER:** Dr. Xiaolan Wang  
**CO-CONVENERS:** Dr. Cesar Azorin-Molina, Dr. Enric Aguilar, Dr. Rob Roebeling

[5]  
**CONGRESS:** *EGU General Assembly 2020*  
**FINANCIAL ENTITY:** European Geosciences Union  
**PARTICIPANTS:** European Geosciences Union. Session: CL5.03 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes  
**LENGHT, FROM:** 1<sup>st</sup> September 2019                      **TO:** 8<sup>th</sup> May 2020  
**PRINCIPAL CONVENER:** Dr. Cesar Azorin-Molina  
**CO-CONVENERS:** Dr. Xiaolan Wang, Dr. Enric Aguilar, Dr. Rob Roebeling

[4]  
**CONGRESS:** *EGU General Assembly 2019*  
**FINANCIAL ENTITY:** European Geosciences Union  
**PARTICIPANTS:** European Geosciences Union. Session: CL5.03 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes  
**LENGHT, FROM:** 1<sup>st</sup> September 2018                      **TO:** 12 April 2019  
**PRINCIPAL CONVENER:** Dr. Cesar Azorin-Molina  
**CO-CONVENERS:** Dr. Xiaolan Wang, Dr. Enric Aguilar, Dr. Rob Roebeling

[3]  
**CONGRESS:** *EGU General Assembly 2018*  
**FINANCIAL ENTITY:** European Geosciences Union  
**PARTICIPANTS:** European Geosciences Union. Session: CL5.03 Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes  
**LENGHT, FROM:** 1<sup>st</sup> September 2017                      **TO:** 13 April 2018  
**PRINCIPAL CONVENER:** Dr. Xiaolan Wang  
**CO-CONVENERS:** Dr. Rob Roebeling, Dr. Petr Stepanek, Dr. Enric Aguilar, Dr. Cesar Azorin-Molina

[2]  
**CONGRESS:** *10th Annual Meeting of the Spanish Climatological Society*  
**FINANCIAL ENTITY:** Spanish Climatological Society  
**PARTICIPANTS:** University of Alicante  
**LENGHT, FROM:** 1<sup>st</sup> January 2016                      **TO:** 31<sup>st</sup> October 2016  
**PRINCIPAL INVESTIGATOR:** Dr. Jorge Olcina-Cantos  
**NUMBER OF RESEARCHERS:** 10

[1]  
**CONGRESS:** Segundas Jornadas de Meteorología y Climatología del Mediterráneo Occidental – IJMCMO.  
**FINANCIAL ENTITY:** Ministry of Science and Innovation – CGL2009-07949-E

**PARTICIPANTS:** The CEAM Foundation and University of Valencia

**LENGHT, FROM:** 1st January 2010 **TO:** 31st December 2010

**QUANTITY:** 8.000 euros

**PRINCIPAL INVESTIGATOR:** Dr. Jose-Luis Palau-Aloy

**NUMBER OF RESEARCHES:** 5

## 18. EXPERIMENTAL CAMPAIGNS (selected)

[7]

**Scientific field campaign – designing and flying a “Meteo-Dron” in New Zealand and Spain.**

Planned February 2025 until August 2025.

[6]

**Scientific field campaign – weather station networks in high-elevation areas - Tibet Region - Himalaya (China).**

Lhasa (China). 04-16 August 2019.

[5]

**Glacier retreat monitoring in the Cordillera Blanca and Cordillera Huaytapallana in Perú.**

Project: “Glacier retreat in the Cordillera Blanca and Cordillera Huaytapallana in Perú: Evidences and impacts on local population”. Huaraz and Huancayo (Perú). June 2012.

[4]

**Snow distribution measurements using a long range terrestrial laser scanner (TLS).** Project:

“Hidrología nival en el Pirineo Central español”. Izas and Panticosa (Huesca, Spain). Since 2011 until now.

[3]

**Remote SO<sub>2</sub> and NO<sub>2</sub> mass flux measurements using COSPEC.** Project: “Desarrollo de una nueva Tecnología de Vigilancia y Control de Focos de contaminación atmosférica”. Andorra (Teruel, Spain). May 2009.

[2]

**NO<sub>2</sub> measurements using passive dosimetry.** Project: “Diagnóstico de la contaminación atmosférica del término municipal de Valencia en el marco del plan estratégico de la calidad del aire”. Valencia (Valencia, Spain). December-March 2009.

[1]

**Atmospheric soundings.** Project: “Estudio y evaluación de la contaminación atmosférica por ozono troposférico en España”. Puertollano (Ciudad Real, Spain). June 2008

## 19. INSTRUMENTATION EXPERIENCE

### **Dataloggers:**

CR3000; CR1000; CR800; CR510; CR200; ZENO 3200; OPUS 10

### **Wind Speed and Direction:**

Windsonic (Opt.1 and 4) – Gill Instruments LTD; Gill Microvane & 3 Cup Anemometer Model 12005 – Gill Instruments LTD; 03002 – R.M. Young Company; 05103-45-5 – R.M. Young Company; 7914 – Davis Instruments

***Radiation:***

Pyranometer CM3 – Kipp&Zonnen; Pyranometer LI200Z – LI-COR Biosciences; Albedometer CMA-6 – Kipp&Zonnen; NR-LITE-L – Kipp&Zonnen

***Air Temperature and Relative humidity:***

HMP45A probe – Vaisala ; HMP50Y probe – Vaisala ; HMP155 probe – Vaisala ; MP100A probe - Campbell Scientific ; 107 probe – Campbell Scientific ; PCE-HT71 – PCE Iberica; OPUS 10 TSE;

***Rain:***

52203 tipping bucket – Young Company; 7852M tipping bucket – Davis Instruments; 3029/5 – Précis Mécanique; Raingauge SBS500H; Geonor T-200B; Hellmann raingauge 120 and 200 cm<sup>2</sup>

***Atmospheric pressure:***

BP1 Barometric Pressure Sensor – Adcon Telemetry

***Snow-depth:***

SR50A Sonic Ranging Sensor – Campbell Scientific

***Surface temperature:***

IR100/IR120 Infrared Remote Temperature Sensor

***Fog:***

Cylindrical fog water instrument (i.e. omnidirectional collection efficiency) based on the ASRC (Atmospheric Science Research Centre, State University of New York) string collector.

\* I am currently responsible (installation and maintenance) of the Automatic Weather Stations (AWS) in the Pyrenees / Central System from the Pyrenean Institute of Ecology IPE-CSIC (PI Juan-Ignacio Lopez-Moreno); and four AWS in Villena (Alicante, Spain) involved in AVAMET (<https://www.avamet.org/>).

## 20. OTHER ACHIEVEMENTS

### 20.1. CURRENT AND PAST RESEARCH GROUP MEMBER & RESEARCH TEAMS

- **Group leader of the Climate, Atmosphere and Ocean Lab (Climatoc-Lab).** Desertification Research Centre – Spanish National Research Council (CIDE, CSIC-UV-GVA). Founded in 2019.

\*Consolidated Research Group awarded by the Valencian Regional Government, AICO/2021/023 (2021-2023)

\*Excellence Research Group awarded by the Valencian Regional Government, CIPROM/2023/38 (2024-2028)

- Member of the Laboratory of Climatology. University Institute of Geography. University of Alicante. Director: Jorge Olcina-Cantos.
- Member of the Group of Climatology (2014 SGR 300 – Catalan Regional Government) of the University of Barcelona. Director: Javier Martin-Vide.
- External Member of the Regional Climate Group. Earth Sciences Centre. University of Göteborg. Director: Deliang Chen.
- Associated Researcher of the Laboratory of Meteorology-Climatology. University Institute CEAM-UMH. Director: Maria-Jose Estrela-Navarro.
- Member of the Soil Erosion and Degradation Research Group (SEDER). Director: Artemi Cerdà.
- Member of the Excellence Research Group: “Geomorfología y cambio global”. Aragon Regional Government.
- Member of the ISTI Parallel Observations Science Team (POST):
- Member of the Land surface wind speed’s team of the “State of the Climate” – Bull. Amer. Meteor. Soc., American Meteorological Society.
- Member of the Climate Indicator Bulletins’s team (CIBs) of the Royal Netherlands Meteorological Institute (KNMI) for the World Meteorological Organization.
- Member of the C3S (Copernicus Climate Change Service) Data Rescue Community - Atmospheric Circulation Reconstructions over the Earth (ACRE) - European Centre for Medium-Range Weather Forecasts.
- Member of the PTI-Climate and Climate Services. Spanish National Research Council.
- CSIC representative in climate change during the “Visit of CSIC to the Joint Research Centre (JRC) – European Commission” in Ispra (Italy), 5-6 October 2023.
- CSIC representative in climate change during the “Visit of CSIC of Commissioner Ekaterina Zaharieva - Startups, Research & Innovation” in Valencia (Spain), 29 April 2025
- Co-Principal CSIC representative in the Climate-KIC. Since March 2024 till May 2025.

## **20.2. ASSOCIATIONS RESEARCH - MEMBER**

- Member – N° 192 of the Spanish Climatological Society. Since 1999 – Until 2021.
- Member – Spanish Geographers Society. Since 2002 – Until 2008.
- Member of the Group of Climatology – Spanish Geographers Society. Since 2002 – Until 2008.
- Member of the American Geophysical Union (AGU). Since 2014. \* Temporary

- Member of the European Geophysical Union (EGU). Since 2018. \* Temporary
- Member – N° 141 of the 'l'Associació Valenciana de Meteorologia Josep Peinado (AVAMET). Since 2015.

### **20.3. EDITOR OF SCIENTIFIC JOURNALS**

- Editorial board of the «Revista de Climatología» (ISSN 1578-8768). Since Oct. 2006 – Until 2021.
- Editorial board of the «Advances in Meteorology» (ISSN 1687-9309). Since April 2015 – Until 2019.
- Editorial board of the «PLOS ONE» (ISSN 1932-6203). Since May 2018
- Editorial board of the «Atmosphere» (ISSN 2073-4433). Since December 2019
- Editorial board of the «Advances in Climate Change Research» (ISSN 1674-9278). Since Dec. 2020
- Editorial board of the «Ocean-Land-Atmosphere Research» (ISSN 2771-0378). Since May. 2025

### **20.4. REFEREE OF SCIENTIFIC JOURNALS**

- Referee of the «Revista de Climatología» (ISSN 1578-8768). Since October 2006.
- Referee of the «Advances in Science and Research». Since October 2007.
- Referee of the «International Journal of Climatology». Since January 2009.
- Referee of the «Pirineos». Since January 2009.
- Referee of the «Journal of Applied Meteorology and Climatology». Since January 2009.
- Referee of the «Atmosfera». Since May 2010.
- Referee of the «Journal of Geophysical Research – Atmospheres». Since May 2011.
- Referee of the «Atmospheric Research». Since June 2011.
- Referee of the «Science of Total Environment». Since March 2012.
- Referee of the «Journal of Atmospheric Sciences». Since April 2012.
- Referee of the «Atmospheric Chemistry and Physics Discussions». Since May 2012.
- Referee of the «Cuadernos de Investigación Geográfica». Since June 2013.
- Referee of the «Thethys». Since January 2014.
- Referee of the «Advances in Meteorology». Since March 2015.
- Referee of the «Land Degradation and Development». Since March 2015.
- Referee of the «Journal of Climate». Since July 2015.
- Referee of the «Global and Planetary Change». Since December 2015.
- Referee of the «Pure and Applied Geophysics». Since December 2015.
- Referee of the «Meteorology and Atmospheric Physics». Since January 2016.
- Referee of the «Advances in Space Research». Since January 2016.
- Referee of the *10th Annual Meeting of the Spanish Climatol.Society*. June-September 2016
- Referee of «Climate Research». Since October 2016.
- Referee of «Plos One». Since October 2016.
- Referee of «Quarterly Journal of the Royal Meteorological Society». Since January 2017.
- Referee of «Natural Hazards». Since March 2018.
- Referee of «Geografiska Annaler». Since October 2018.
- Referee of «Climate Dynamics». Since October 2018.
- Referee of «Nature». Since November 2018.
- Referee of «iScience». Since March 2021.

**20.5. REFEREE OF SCIENTIFIC RESEARCH PROJECTS**

-Referee of the «Agencia Nacional de Evaluación y Prospectiva, ANEP», Earth Sciences. Since April 2010

-Referee of the «Agencia Nacional de Evaluación y Prospectiva, ANEP», Social Sciences. Since October 2015.

-Referee of the «Agencia Andaluza del Conocimiento, Dirección de Evaluación y Acreditación, DEVA», Earth Sciences. Since August 2020.

-Referee of the «Swiss National Science Foundation, SNSF», Div. Mathematics, Physical and Engineering Sciences. Since December 2020.

-Referee of the «United Arab Emirates University, UAEU», Associate Provost for Research. Since December 2022.

-Referee of the «National Science Centre», Poland. Since September 2023.

**20.6. REFEREE OF DOCTORAL THESIS AND MASTER THESIS**

**LEYVA-GARCÍA, E.**, 2011: *Clasificación objetiva del perfil vertical troposférico en el área sur-occidental del Mediterráneo y su relación con la intrusión de polvo africano*. The Miguel Hernández University of Elx, Alicante (Spain), PhD degree, 312 pp.

**ESPINOS-MORATO, H.**, 2015: *Emisiones difusas: Medidas experimentales y modelización aplicadas a instalaciones de tratamiento de aguas residuales*. University of Valencia, Valencia (Spain), PhD degree, 252 pp.

**SANCHEZ ROMERO, A.**, 2016: *Sunshine duration as a proxy of the atmospheric aerosol content*. University of Girona, Girona (Spain), PhD degree, 204 pp. \* External referee

**GILABERT, A.**, 2016: *Assessment of the bias introduced by the automatization of climate records combining climatological and metrological approaches*. University of Rovira i Virgili, Tarragona (Spain), PhD degree, 207 pp. \* Chairperson

**SORÍ GÓMEZ, R.**, 2018: *Atmospheric moisture transport: the bridge between ocean evaporation and hydrological extremes in major tropical river basins*. University of Vigo, Ourense (Spain), PhD degree, 186 pp.

**LUCIO ECEIZA, E.E.**, 2018: *Multidecadal to centennial surface wind variability over Northeastern North America*. Complutense University of Madrid, Madrid (Spain), PhD degree, 277 pp. \* External referee

**PEÑA-GALLARDO, M.**, 2019: *Drought indices validation: Improving monitoring knowledge on different systems in Spain and the United States*. Universidad de Sevilla, Sevilla (Spain), PhD degree, 193 pp. \* External referee.

**MARTIN-HERNANDEZ, N.**, 2019: *The use of long-term high-spatial resolution Normalized Difference Vegetation Index (NDVI) to determine different environmental processes in Spain*. Universidad de Zaragoza, Zaragoza (Spain), PhD degree, 190 pp.

**RAMON-GAMON, J.**, 2021. High-quality observations for improved seasonal predictions. Implications for the wind energy sector. Universidad de Barcelona, Barcelona (Spain), PhD degree, 181 pp.

**CAMACHO-MANCO, JUAN C.** 2023. Sistemas Convectivos de Mesoescala sobre el norte de Colombia: una visión desde las simulaciones de Convección Permitida. Universidad de Antioquia, Medellín (Colombia), MSc degree, 179 pp.

**RE, A.** 2025. Assessing vulnerability to rapid-onset coastal flooding. Advancing methodological approaches with a focus on the Mediterranean Sea Basin. Politecnico di Torino, Torino (Italy), PhD degree, 164 pp.

### **20.7. RECRUITMENT COMMITTEE AND OTHER DUTIES**

Committee member of the recruitment project nr. 4360. 25/06/2019. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Dr. Cesar Azorin-Molina and Dr. Céline Heuzé

Committee member of the recruitment project nr. 4361. 20/06/2019. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Prof. Hans Linderholm, Dr. Heather Reese and Dr. Cesar Azorin-Molina.

Committee member of the recruitment “Dirección de Evaluación y Acreditación de la Agencia Andaluza del Conocimiento” (DEVA-ACC). Postdoc positions 2020. Coordinated by: Luis Gimeno Presa.

Committee member of the recruitment project nr. 2020/6758. 11/01/2021. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Dr. Cesar Azorin-Molina and Dr. Julia Curio

Committee member of the recruitment project nr. 2021/7173. 06/04/2021. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Dr. Cesar Azorin-Molina, Dr. Kristina Seftigen and Dr. Keyan Fang.

Committee member of the recruitment “Dirección de Evaluación y Acreditación de la Agencia Andaluza del Conocimiento” (DEVA-ACC). Proyectos de Excelencia 2020. Coordinated by: Luis Gimeno Presa.

Committee member of the recruitment project nr. 2021/7599. 10/06/2021. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Dr. Cesar Azorin-Molina, and Dr. Kristina Seftigen.

Committee member of the recruitment project nr. 2022/585. 19/05/2022. Department of Earth Sciences. University of Gothenburg (Sweden). Head of the Committee: Prof. Deliang Chen. Members of the Committee: Dr. Cesar Azorin-Molina, Dr. Julia Curio and Dr. Lorenzo Minola.

Head of the committee of the recruitment project Santiago Grisolia – PhD grants. July-August 2022. Spanish National Research Council and Valencian Regional Government.

Secretary member of the recruitment “Dirección de Evaluación y Acreditación de la Agencia Andaluza del Conocimiento” (DEVA-ACC). Proyectos I+D+I – Área TNA. Coordinated by: Sergio M. Vicente Serrano. September 2022.

Secretary member of the recruitment “Escala de Científicos Titulares de los Organismos Públicos de Investigación” BOE N° 161, published on 6 July 2022. Comité Panel #24. Position “Tecnologías físicas para la observación de la Tierra y los océanos”. Geosciences Barcelona (Geo3BCN-CSIC), 21-23 November 2022.

Member of the committee panel of the position “Profesor Titular de Universidad – Geografía Física”, Candidate: Enrique Morán Tejeda. Evaluation # 28/2022. Universitat Illes Balears (Mallorca, Spain), 5 December 2022.

Committee member of the recruitment “Ramón y Cajal 2022” postdoc positions. Area: *Ciencias y Tecnologías Medioambientales*; Subarea: *Clima y Atmósfera*. Spanish Ministry of Science.

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 (Madrid, Spain, 3rd May 2023), in which the climate crisis (including weather extremes) and the energy transition (wind power to decarbonization) were key issues to discuss (as PI of the RED-CLIMA network and collaboration with scientists in Colombia): <https://www.uv.es/uvweb/desertification-research-centre/en/current-news/scientific-representation-gala-dinner-offered-their-majesties-king-queen-spain-occasion-first-state-visit-president-colombia-gustavo-petro-1285923353218/Novetat.html?id=1286315949675>

Secretary member of the recruitment “Titulado Superior Fuera de Convenio, y Titulado Medio fuera de Convenio” – CSIC Jan-Jul 2024.

Secretary at the “Claustro Científico” of the Desertification Research Centre (CIDE, CSIC-UV-GVA), 2023-2026.

Committee member of the “SIMPLIFICA 2” - Working group #5 of the Spanish CSIC, aimed at suggesting improvements for applying and managing internal projects funded by the CSIC.

Scientific Committee of the XIII Spanish Climatology Meeting, Spain. Since October 2024.

Scientific advisor in the “Disaster and Emergency Advisory Group (GADE)” of CSIC for the flooding occurred in Valencia on 29 October 2024.

Secretary member of the committee of the recruitment of PhD grants for GVA funded projects (PROMETEO, CIDEAGENT, etc). December 2024 - January 2025. Spanish National Research Council and Valencian Regional Government.

Scientific committee of the Spanish Association of Climatology. XIV International Meeting. “*Cambio climático, riesgos y territorio. Avances y respuestas científicas*”. University of La Laguna (Tenerife, Spain). 2026.

## **20.8. OSPA JUDGE FOR THE AGU / EGU MEETING**

OSPA Judge for the session "A34C: Improved Understanding of the Surface Energy Balance and the Spatiotemporal Variation of Its Components I". AGU Fall Meeting 2014, San Francisco (USA). 15-19 December 2014.

OSPA Judge for the session "CL5.03: Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes". EGU 2018, Vienna (Austria). 8-13 April 2018.

OSPA Judge for the session "CL5.02: Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes". EGU 2018, Vienna (Austria). 7-12 April 2019.

### **20.9. OFFICIAL METEOROLOGICAL OBSERVER**

- Official meteorological observer (Villena-Ciudad station, 8007E, Spain) – Spanish Meteorological Agency (AEMET). Since January 1999; Official meteorological observer (Salinas mountain range, Alicante, Spain). Since January 2003; Official meteorological observer (Las Virtudes station, Spain) – The CEAM Foundation. Since January 2008
- Daily collaboration supplying meteorological data to some Spanish TV and Radio Media: Televisió de Catalunya (TV3), Televisió Valenciana (Canal 9), Canal Méteo (Canal Satélite Digital), Telecinco, CNN+, Radio Villena Ser and Flaix FM. January 1999 – December 2007.

### **20.10. OFFICIAL WEATHER FORECASTER**

- Weather forecaster for the Fire Unit of the Alicante Council (Spain), June 2002 – December 2006.
- Weather forecaster in the The Tall Ships' Races. Alicante (Spain), July 4-7th 2007.
- Weather forecaster in the Volvo Ocean Race 2011/2012 for the Groupama Sailing Team:  
<http://www.cammas-groupama.com/en/index.jsp>

### **20.11. DISSEMINATION ON TV, RADIO AND NEWSPAPERS**

-Scientific interviews about climatic advice and weather forecast on some Spanish TV and Radio Media: Radio Villena-Cadena Ser and Radio MQR-Cope (April 2003); Televisión Alicantina-Canal 33 (18/07/2003); Canal 9 (19/07/2003); Antena 3-Territorial Comunidad Valenciana (30/07/2003); Antena 3-Nacional (3/08/2003 and 4/08/2003); Antena 3-Territorial Comunidad Valenciana (15/10/2003); Antena 3-Nacional (15/10/2003); Canal 9-Live Noticias 9 from the Laboratory of Climatology (15/10/2003); News Second Edition TVE (15/10/2003); Televisión Alicantina-Canal 33 (15/10/2003); Report "Laboratorio de Climatología" in the Campus Universitari of Punt2 (25/01/2006). Periodical interviews in Radio Media (Cadena Ser, Onda Cero, Cope, Radio 9, etc.) and Newspaper (Diario Información, La Verdad. Las Provincias, El País, Levante, ABC, El Mundo, etc.); Horizon Magazine (05/10/2017): [https://horizon-magazine.eu/article/what-happens-world-dying-winds\\_en.html](https://horizon-magazine.eu/article/what-happens-world-dying-winds_en.html) "The stilling: global wind speeds slowing since 1960". Cosmos Magazine "Climate Watch: Where the Wind Slows" April 2018 written by Michael Lucy. Issue 78, pp 24-25 <https://cosmosmagazine.com/climate/the-wind-is-slowing-down>; "Las Mañanas de RNE" with Mar Lupión, November 2019; 05/01/2020 interviews in "Levante" and "Diario Información" newspapers; 09/02/2021 en Onda Cero Sagunto with Palmira Benajas Medina; 24/05/2022 en Efecto Mariposa Radio (Chile); La Vía Verda – ÀPunt 27/02/2024; Radio Villena Cadena Ser 01/03/2024; MQR Cope 01/03/2024; News article "Las lecciones no aprendidas de la dana" – El País 9/11/2024 <https://elpais.com/ciencia/2024-11-09/las-lecciones-no-aprendidas-de-la-dana.html>; News article "Eventos climáticos extremos en España: adónde vamos y de dónde venimos" - Agencia SINC 12/11/2024 <https://www.agenciasinc.es/Reportajes/Eventos-climaticos-extremos-en-Espana-adonde-vamos-y-de-donde-venimos>; News First Edition TVE (12/11/2024); Science Media Centre (09/12/2024), opinion about the Global Threat of Drying Lands: Regional and global aridity trends and future projections (UNCCD): <https://sciencemediacentre.es/la-poblacion-en-zonas-aridas-podria-duplicarse-en-2100-con-el-peor-escenario-de-cambio-climatico>; RNE 14/04/2025 Aplicación web DOWNBURST MXO and several press media, e.g.: <https://www.levante-emv.com/comunitat-valenciana/2025/04/14/avamet-aplicacion-desarrollada-uv-csic-viento-extremo-reventones-116380686.html>; <https://www.europapress.es/comunitat-valenciana/noticia-desarrollan-aplicacion-ciencia-ciudadana-detecta-viento-extremo-tiempo-real-20250414103308.html>; [https://www.apuntmedia.es/noticies/societat/una-aplicacio-web-detectara-vents-extrems-temps-real-comunitat-valenciana\\_1\\_1780375.html](https://www.apuntmedia.es/noticies/societat/una-aplicacio-web-detectara-vents-extrems-temps-real-comunitat-valenciana_1_1780375.html); More than 30 TV and Press releases in national and regional media about the Meteo-Dron (Antena 3, Telecinco, APunt, etc.)

**20.12. ATTENDANCE TO WORKSHOPS**

- Workshop "On local scale air quality modelling", using MM5 and TAPM meteorology to drive EMEP air chemistry model. September 29th 2005. Earth Science Centre. RCG (Göteborg).
- Workshop «Daily tropical cyclone discussions». Cooperative Institute for Research in the Atmosphere (CIRA), Regional Mesoscale Meteorology Branch (RAMMB), Fort Collins (Colorado State), June 30th – October 27th 2006, USA.
- Workshop «Daily weather discussions». Cooperative Institute for Research in the Atmosphere (CIRA), Regional Mesoscale Meteorology Branch (RAMMB), Fort Collins (Colorado State), June - September 2006, USA.
- Workshop «Daily weather briefings». Royal Netherlands Meteorological Institute (KNMI), De Bilt (The Netherlands), August - December 2010, The Netherlands.