

PhD thesis about Attribution of Compound Events

Location: Faculty of Sciences of the University of **Lisbon (Portugal)**, Department of Statistics and Operational Research

Duration: 3 years of PhD programme (with up to 4 years of funding)

Application Deadline: **16 april 2025**

Start Date: Between 1 September 2025 and 1 August 2026.

Dr. Luis Gimeno-Sotelo, researcher from the Centre of Statistics and Applications of the University of Lisbon (Portugal) is seeking PhD students to conduct a PhD thesis in the field of climate science, with a focus on the attribution of compound events. See his research topics here: <https://ceaul.org/o-centro/membros-ceaul/about-me/?orcidid=0000-0001-9305-2325>

Project Description

Compound events—such as the concurrent occurrence of heatwaves and droughts, extreme precipitation and wind speed—pose significant risks to society and ecosystems. The attribution of such events to anthropogenic climate change remains a challenge from a statistical and climatological point of view. This PhD project aims to advance statistical and modeling approaches to better quantify the role of climate change and natural variability in driving compound extremes.

The candidate will develop and apply methodologies integrating observational datasets, climate model simulations, and advanced statistical techniques (such as extreme value analysis and machine learning) to assess the likelihood and drivers of past and future compound events.

Interested candidates should contact Dr. Luis Gimeno-Sotelo (lgsotelo@fc.ul.pt) with a CV including academic qualifications, research experience, and publications (if any), as well as academic transcripts.

The candidates will submit their application to the Portuguese Foundation for Science and Technology (FCT) PhD Grants, available here: <https://www.fct.pt/en/concursos/concurso-bolsas-de-doutoramento-2025-linha-de-candidatura-geral>