



Earth Systems Summer School 2023

Land-Atmosphere-Ocean interactions in a changing planet. A hands-on approach to Earth Systems observation and modelling.

2 – 8, July
Angra do Heroísmo,
Terceira Island, Azores

For PhD students and other post-graduate students in all topics of **Earth System Science**, including Meteorology and Climate, Physical Oceanography, Geology, Geodesy, Geophysics and Environment.

Course Description

The summer school will include lectures, hands-on sessions and field trips on various topics of Earth Systems. We will focus on the dynamics of and interactions between the different spheres of the Earth: solid Earth, ocean, atmosphere and biosphere. Lectures will focus on state-of-the-art research and recent advances. Hands-on sessions will include both observation, including field work, and data analysis. The topics of hands-on sessions will cover atmospheric processes, coastal environments, oceanic dynamics, environmental seismology and geophysics. Field work includes both land and ocean observations. Students will present their work in a final 2-minute "pitch" presentation.

Fee: 350 €

The fee includes the registration and a diploma from FCUL (University of Lisbon, 3 ECTS), as well as hostel (double and triple rooms), breakfast, lunches, field trips and one group dinner. All other costs, including the traveling to the venue, must be covered directly by the students.

Applications

Pre-application deadline: 3/Mar/2023. For applications received until this date, the organization will prioritize candidates in the two first years of their PhD programs. We will also aim to maximize networking between students from different scientific areas and institutions. After the pre-application deadline, applicants will be selected on a "first come, first served" basis. Final deadline: 31/May/2023. Applications should be sent by email to earthsystems@fc.ul.pt. Applications must include the applicant's CV and a short motivation letter from the candidate, including the title of the PhD, supervisors and year of PhD. Max. number of students: 25.



Lecturers

- Prof. **Sierd Cloetingh**, Geosciences & Tectonics, Univ. Utrecht
- Prof. **Christoph Schär**, Atmosphere and Climate Dynamics, ETH Zurich
- Prof. **Bilal Haq**, Sea Level Change, Sorbonne Univ., Paris & Smithsonian Institution, Washington
- Prof. **João Luis Gaspar**, Volcanology, IVAR & Univ. Azores
- Prof. **Miguel Miranda**, Geomagnetism & Geophysics, IDL & FCUL, Univ. Lisbon
- Prof. **João Miguel Dias**, Physical Oceanography, CESAM & Univ. Aveiro
- Prof. **Ana Ferreira**, Mantle Dynamics, UCL London
- Prof. **Pedro Miranda**, Atmospheric Sciences, IDL & FCUL, Univ. Lisbon
- Prof. **Fátima Viveiros**, Volcanology, IVAR & Univ. Azores
- Dr. **Adriano Pimentel**, Volcanology, IVAR & Univ. Azores
- Dr. **Wolfram Geissler**, Geophysics, Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven
- Prof. **Ricardo Ramalho**, Volcanology, Cardiff Univ.
- Dr. **Francesca Gallo**, Aerosol Science, NASA Langley Research Center, Hampton.
- Dr. **Joana Barcelos Ramos**, Marine Biology, IITAA, Univ. Azores & ENA_ARM
- Prof. **João Duarte**, Tectonics & Geodynamics, IDL & FCUL, Univ. Lisbon
- Prof. **Maria João Costa**, Atmospheric Science, ICT & Univ. Évora
- Dr. **Pedro Mateus**, Geodesy, IDL & FCUL, Univ. Lisbon
- Prof. **Pedro Costa**, Coastal Geology, IDL & Univ. Coimbra
- Prof. **Susana Custódio**, Seismology, IDL & FCUL, Univ. Lisbon
- Dr. **Pedro Mateus**, Geodesy, IDL & FCUL, Univ. Lisbon
- Prof. **José F. Borges**, Geophysics, ICT & Univ. Évora



Location

Activities at Universidade dos Açores & Observatório do Ambiente dos Açores; Field work at various locations in Terceira Island, including a boat trip; Students Lodging at Globo Happy Hostel.

Organization

- **Eduardo Brito de Azevedo**, OAA & IITAA - Univ. Azores & ENA, Graciosa Island ARM Facility.
- **João da Silva Madruga**, IITAA & Univ. Azores
- **João Miguel Dias**, CESAM & University of Aveiro
- **Maria João Costa**, ICT & University of Évora
- **Pedro Costa**, IDL & University of Coimbra
- **Rui Caldeira**, IDL & ARDITI
- **Pedro Miranda**, IDL & Faculty of Sciences, Univ. Lisbon
- **Susana Custódio**, IDL & Faculty of Sciences, Univ. Lisbon
- **Mariana Andrade**, IDL & Faculty of Sciences, Univ. Lisbon

