

PROFESSIONAL FOR GEOSCIENCE APPLICATIONS

The **Center for Advanced Studies in Arid Zones**, located in La Serena and Coquimbo - Chile is a scientific consortium, founded in 2003, which is dedicated to studying the impact of climatic and oceanographic variability on the hydrological cycle and biological productivity in the arid zones of Northern-Central Chile. CEAZA was recently granted from ANID a 5-year research fund for developing high-resolution ocean modeling activities dedicated to short to long term predictions of the ocean circulation and biogeochemistry; These activities in the frame of the CLAP project (Research Program for Climate Action Planning) will support the development of field experiments and adaptation strategies for the coastal region of the Coquimbo region by providing model ocean products at the scale of embayments based on dynamical downscaling of existing forecasts in collaboration with the operational center Mercator Ocean and the European Centre for Medium-Range Weather Forecasts (ECMWF).

In this context, the **Center for Advanced Studies in Arid Zones** is seeking an ocean modeler. The selected candidate will participate to the development and validation of regional ocean model configurations based on the CROCO model (Coastal and Regional Ocean COMMunity model) and carry investigations aimed at developing a better understanding of the regional oceanic circulation and its forcing mechanisms along the coast of western South America with a focus on the Central Chile coastal region. The position requires the ability and interest to work across disciplines, and the proven ability to work independently.

Specific duties include:

- Bias correction of oceanic and atmospheric Reanalysis
- Elaborate pre-processing tools for downscaling experiments
- Scientific analysis of numerical simulations
- Production of simulations for present and future scenarios driven by global climate model forcings
- Contribute to the development of the CEAZAMAR bulletin (<http://www.ceazamar.cl/boletines-2021/>)
- Implementing and supporting the generation of oceanographic/atmospheric products and data services automatically in standalone computer servers.

Required competencies:

- Demonstrated experience in ocean modeling and/or with working with large data sets.
- Advanced experience in at least two programming languages (e.g. Matlab, R, Python, Fortran or other).
- Highly experienced with LINUX environment.

Education:

- MSc or PhD in areas related to statistical or mathematical modeling or geosciences (e.g. climatology, meteorology, geophysics).

Experience:

- Global and regional ocean models

- Publication of research papers in peer-reviewed journals in related fields, sensitivity analyses and pre and post processing of numerical simulations and observations of various sources.
- Preparation of successful research proposals

Practical details:

- The position is available from 1 December 2021
- The position is permanent, subject to positive evaluation
- Salary based on experience
- The statement of interest can be written in English or Spanish, and should contain:
 - o A Curriculum Vitae
 - o A letter of motivation
 - o Certificates and other relevant documents that confirm University qualifications and/or other relevant information
 - o One or two letters of recommendation

Applications should be sent to Dr. Carlos Olavarría, CEAZA Executive Director, to **ofertas.laborales@ceaza.cl** before **November 15, 2021**. For additional information on the position contact Dr. Orlando Astudillo, orlando.astudillo@ceaza.cl.

Selection process

- CEAZA reserves the right to select the applicants that it deems most suitable or not select any of the candidates.
- Applicants who join this selection process agree to undertake all evaluation instruments that are deemed appropriate to verify their competencies and experience, including interviews and psychological tests.
- CEAZA will notify in writing the result of their application to all candidates, including the successful candidate, who must confirm in writing their acceptance of the offer of the position.