

Observatory of Saline Systems of the Atacama Desert and the Andes (OSSAD-A)

Discipline: Biological Science

Research Lines: Biodiversity, environmental reconstruction, Territory Biotechnology and Innovation

The Research Ring Project “Observatory of Saline Systems of the Atacama Desert and the Andes (OSSAD-A)” emphasizes that the salt flats of northern Chile represent a central component of the hydrological regulation processes of the Atacama Desert and the Andes, together with glaciers, rivers, bofedales, lagoons, and lakes. The salt flats in this region are more than discrete units in the landscape; instead, they manifest as a system of different saline bodies interconnected by groundwater and surface waters, as well as by fauna that move among them. For this reason, our research proposal adopts a macroscopic approach to the study of salt flats, including a detailed environmental assessment of nearly 70 salt flats located between the Coastal Range and the Andean region, across four regions of northern Chile. This proposal aims to determine the relative contribution of local and regional processes to the biological diversity, uniqueness, and functioning of salt flats. Understanding these attributes will allow us to develop an appropriate classification of salt flats. This information will be central and will serve as a key input to support the National Lithium Strategy, which includes among its most important commitments the creation of a system of salt flats under different levels of protection. Accordingly, OSSAD-A aims over the next three years to generate high-quality regional information that enables the various stakeholders to make informed decisions.

RESEARCH TEAMS
IN SPECIFIC THEMATIC AREAS





RESEARCH TEAM

Principal Researchers

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MAIN ACHIEVEMENTS

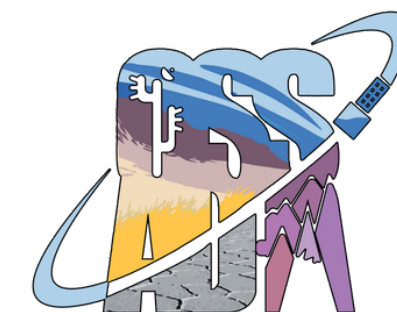
1. Our project includes 13 undergraduate students from the Schools of Geology, Biotechnology, and Environmental Engineering and Sustainability at Universidad Mayor.
2. Our project also includes 5 doctoral students from the Integrative Genomics, Integrative Ecology, and Advanced Materials programs at Universidad Mayor.
3. During this first year, 21 salt flats were visited across the regions of Arica and Parinacota, Tarapacá, and Atacama.
4. We were able to conduct assessments along the full distribution of salt flats in Chile, from Laguna Blanca Salt Flat in the far north of Chile near the border with Peru, to the Laguna del Negro Francisco Salt Flat in the Atacama Region.

Host Institutions

- Universidad Mayor

Associated Institutions

- Universidad de La Serena
- Pontificia Universidad Católica de Chile
- Universidad de La República (Uruguay) Universidad Mayor de San Simón (Bolivia)



GEOGRAPHIC PRESENCE



Science Outreach Activities:

From OSSAD-A, we have shared our research with the community with the support of Andina and Pampa. These two lovable characters, typical of the Andean region, have guided our adventures across the salt flats of the Atacama Desert and the Andes, <https://www.instagram.com/ossada.chile/>

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