

Images of Silence: a creative and artistic approach to communicating the findings of a seismic experiment in northern Chile

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PRESENTATION

As part of the Fondecyt Postdoctoral Program of the National Research and Development Agency ANID, the project Imaging the Seismotectonic Features in Northern Chile: An Updated and Extended High-Resolution Characterization of the Taltal Segment Using Local Earthquake Tomography was awarded a three-year grant to update the seismotectonic features of the area, study the interaction between subduction and large-scale surface structures, and estimate the regional distribution of cupriferous deposits.

An essential part of every research is the ability to transfer the generated knowledge to a wider audience. In this sense, a novel and unconventional scientific dissemination product has been created. The product is represented by 6 illustrations that summarize the period 2022 of the project.

Images of the Desert, an approach to a seismic experiment in the Atacama Desert, shows us, using digital watercolor technique, how the Taltal seismic network experiment was carried out. We installed seismic sensors that operated for a period of 8 months, between March and October 2020. Also, through iconographies of the traditional communities of Alto El Loa, Atacameña and Changa (inhabitants of the Antofagasta region), the illustrations make an analogy of how the earthquakes pass through the silence of the desert, carrying valuable information - similar to the ancient travelers who crossed the desert with food and supplies - which, when detected by the seismological stations, can be translated into high resolution images that reveal the structures present inside the Earth.

Images of the Silence is an transdisciplinary work with scientifics, journalists and artists to develop an unconventional approach to better communicate our results and remind us that science and art always go together.

