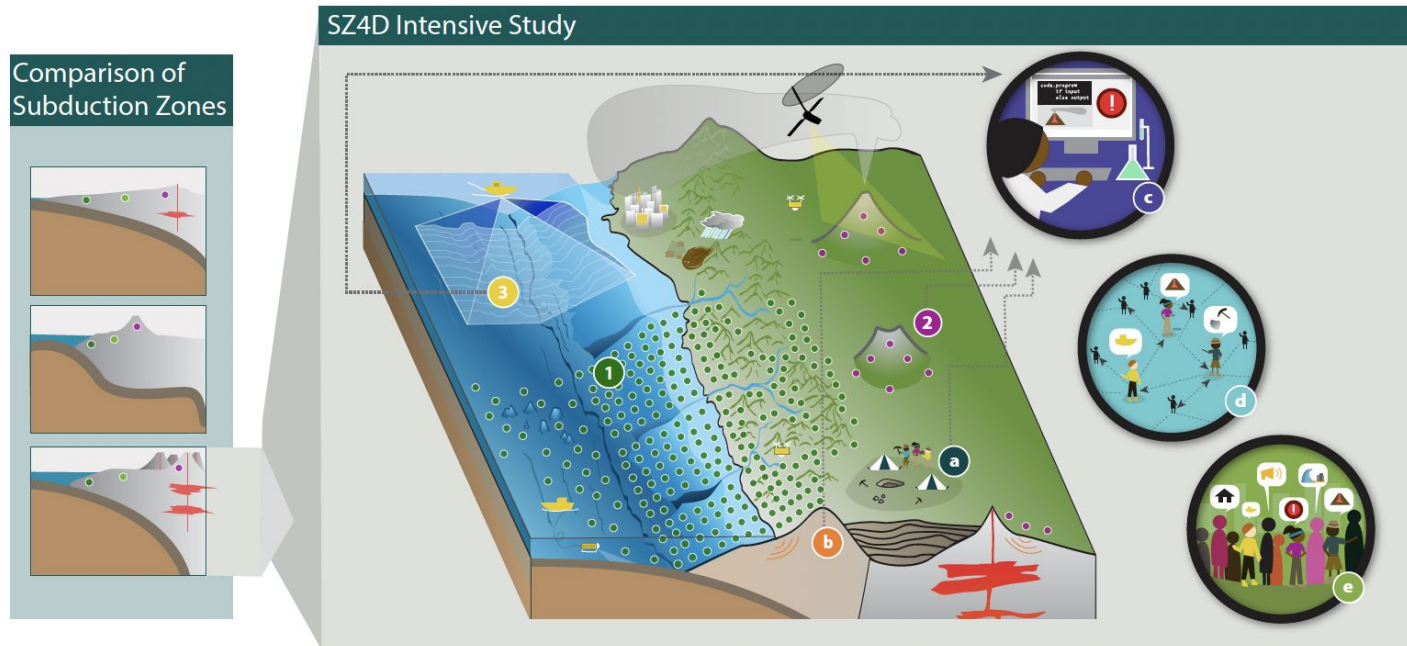


Community Seismic Imaging Experiment offshore Central Chile



- 1 **MegaArray**
(densified in areas of key interest)
- 2 **VolcArray**
(augmented by rapid-response deployments)
- 3 **SurfArray**

[SZ4D Implementation Plan]

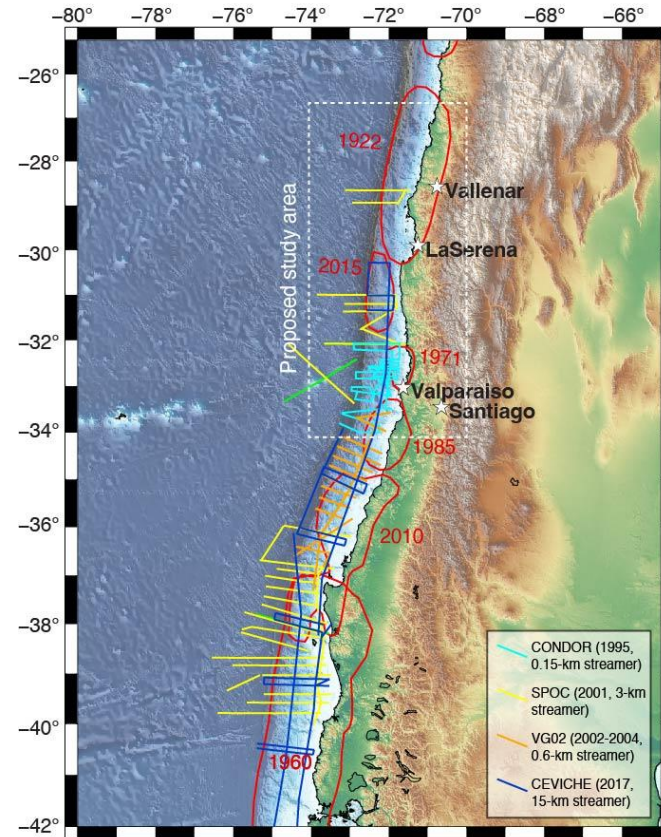


Map showing priority regions for SZ4D arrays from June 2023 AndesNet meeting.

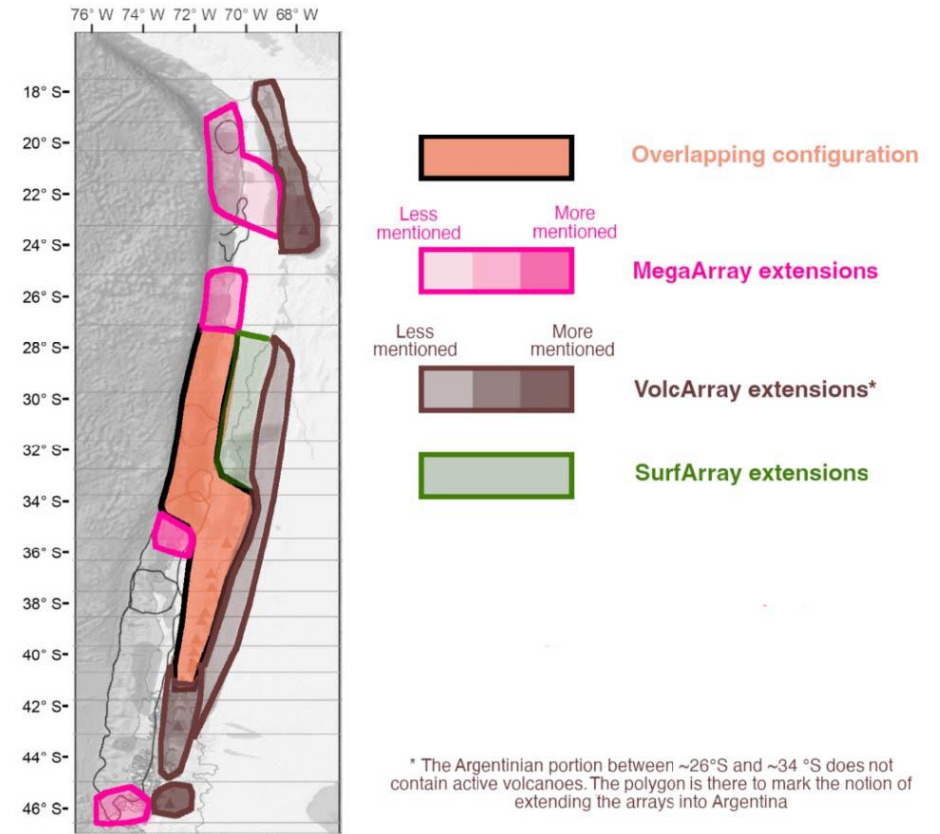
Central Chile is identified as target for SZ4D instrumentation

Community Seismic Imaging Experiment offshore Central Chile

- Central Chile lacks modern seismic imaging
- Most of the existing data were acquired with 3 km or shorter streamers and small sources, significantly limiting the imaging capability of deep structure.



Rupture patches from Lay & Nishenko, 2022. Colored lines show existing active source imaging data.



Map showing priority regions for SZ4D arrays from June 2023 AndesNet meeting.

* The Argentinian portion between ~26°S and ~34°S does not contain active volcanoes. The polygon is there to mark the notion of extending the arrays into Argentina

Virtual Planning Workshop in September 2023

- 81 participants, including scientists from US, Chile, and Europe, with a wide range of expertise.
- Two talk sessions and one discussion session.
- Participants provided useful feedback on imaging targets, survey design, usefulness of this dataset to subduction zone studies in other disciplines.



SZ4D Virtual Workshop

Planning a New Seismic Imaging Experiment Offshore Central Chile

September 26, 2023 (8am-11am PDT)

Shuoshuo Han (University of Texas at Austin)
Donna Shillington (North Arizona University)
Nathan Bangs (University of Texas at Austin)
Eduardo Contreras-Reyes (Universidad de Chile)



*MANY THANKS
to Anais Férot
for her help!*

Moving forward

- We seek to design this program to maximize the usefulness and accessibility of the resulting data and data products to the subduction zone community across disciplines.
- Invite further input from the community and continue to build a PI team
- Submit a proposal in Spring 2024; proposed data acquisition in late 2025/early 2026.

