# Earth

# Observations

## Data Access & Sharing

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(C4-Chile)

# Climate Data Gap


https://ndacc.larc.nasa.gov

# We need Observations in different Climate Zones


Atacama
The Andes
Patagonia
Antarctica
Chile's geography (from Atacama to Antarctica) makes it a natural laboratory for Earth Observations.

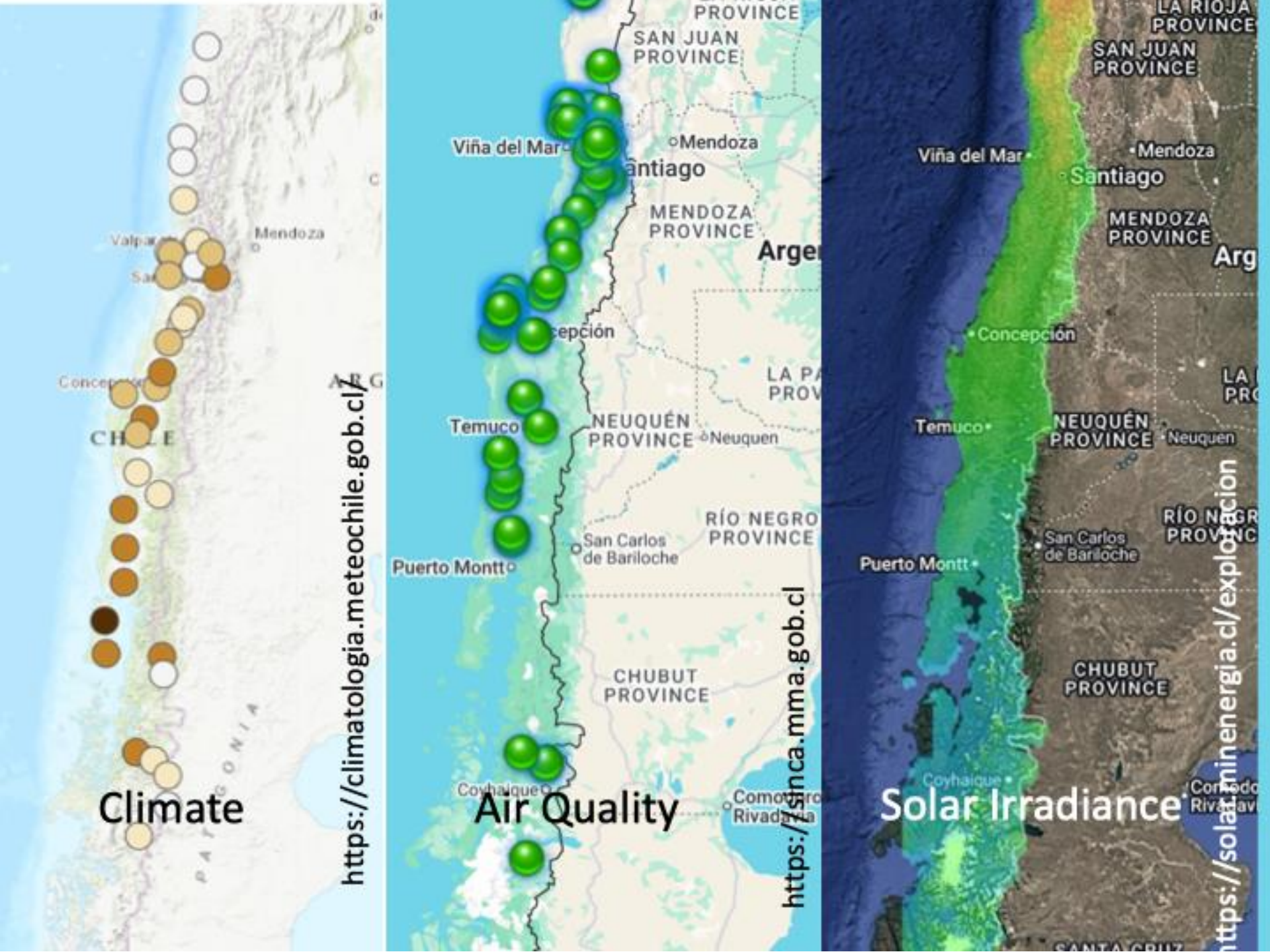
# Quality-Controlled Open Access Data

# *Data must be Accessible*

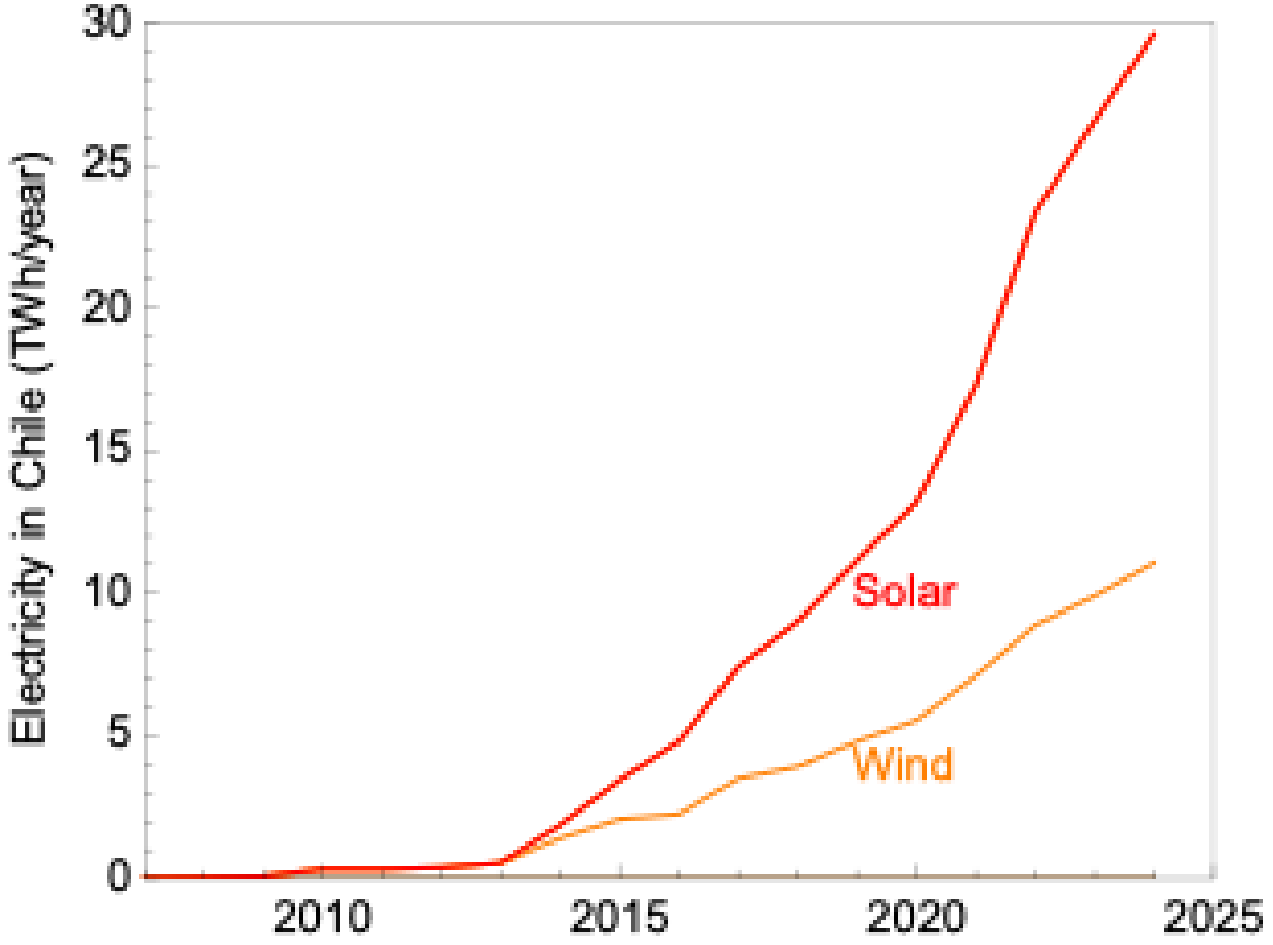
(open access fuels innovation, from academic research to citizen science)

# *Data must be Actionable*

Data must support real-world decisions


Climate
https://climatologia.meteochile.gob.cl/
Air Quality
https://sinca.mma.gob.cl
Solar Irradiance
https://solar.minenergia.cl/exploracion
Weather
https://vismet.cr2.cl
Viña del Mar
Santiago
Mendoza
Concepción
Temuco
Puerto Montt
Neuquen
San Carlos de Bariloche
Coyhaique
SAN JUAN PROVINCE
MENDOZA PROVINCE
NEUQUÉN PROVINCE
RÍO NEGRO PROVINCE
CHUBUT PROVINCE
SANTA CRUZ PROVINCE
LA RIOJA PROVINCE

# Climate Mitigation

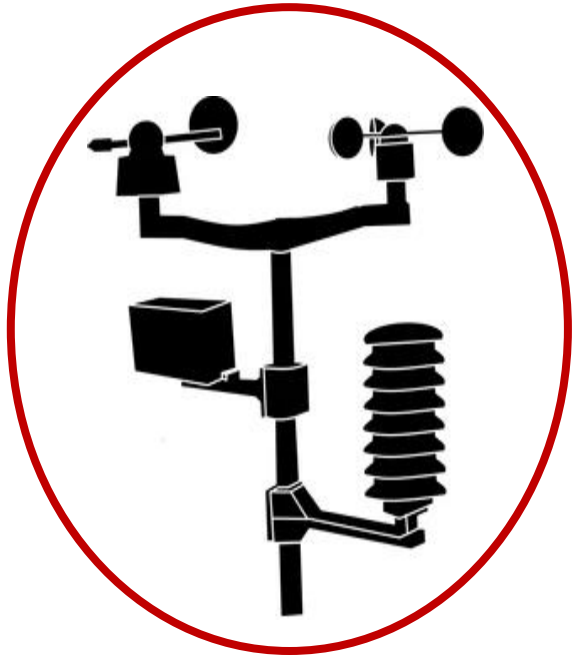



Data from; http://generadoras.cl/generacion-electrica-en-chile

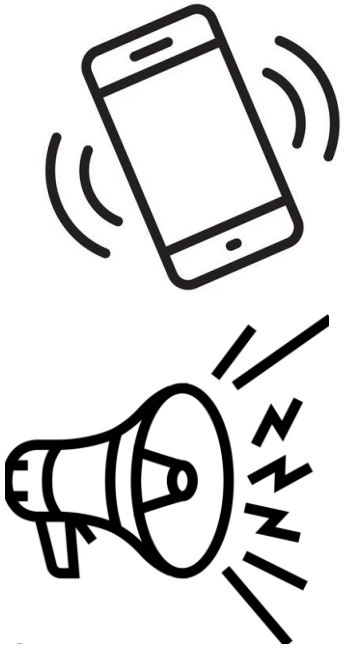
# Climate Adaptation

**Early Warning Systems (EWS)**

Hazard Risk Assessment



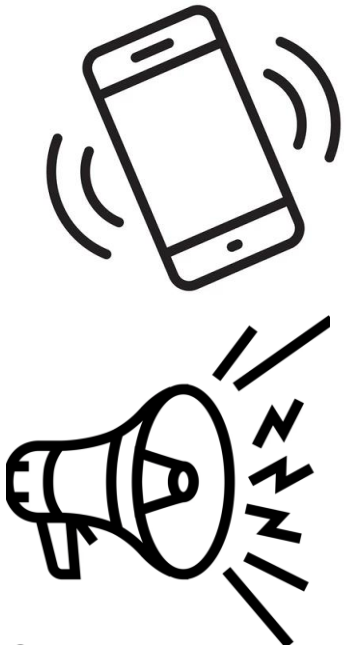
Climate Data & Services



Warning Communication

Preparedness & Response

# Climate Adaptation

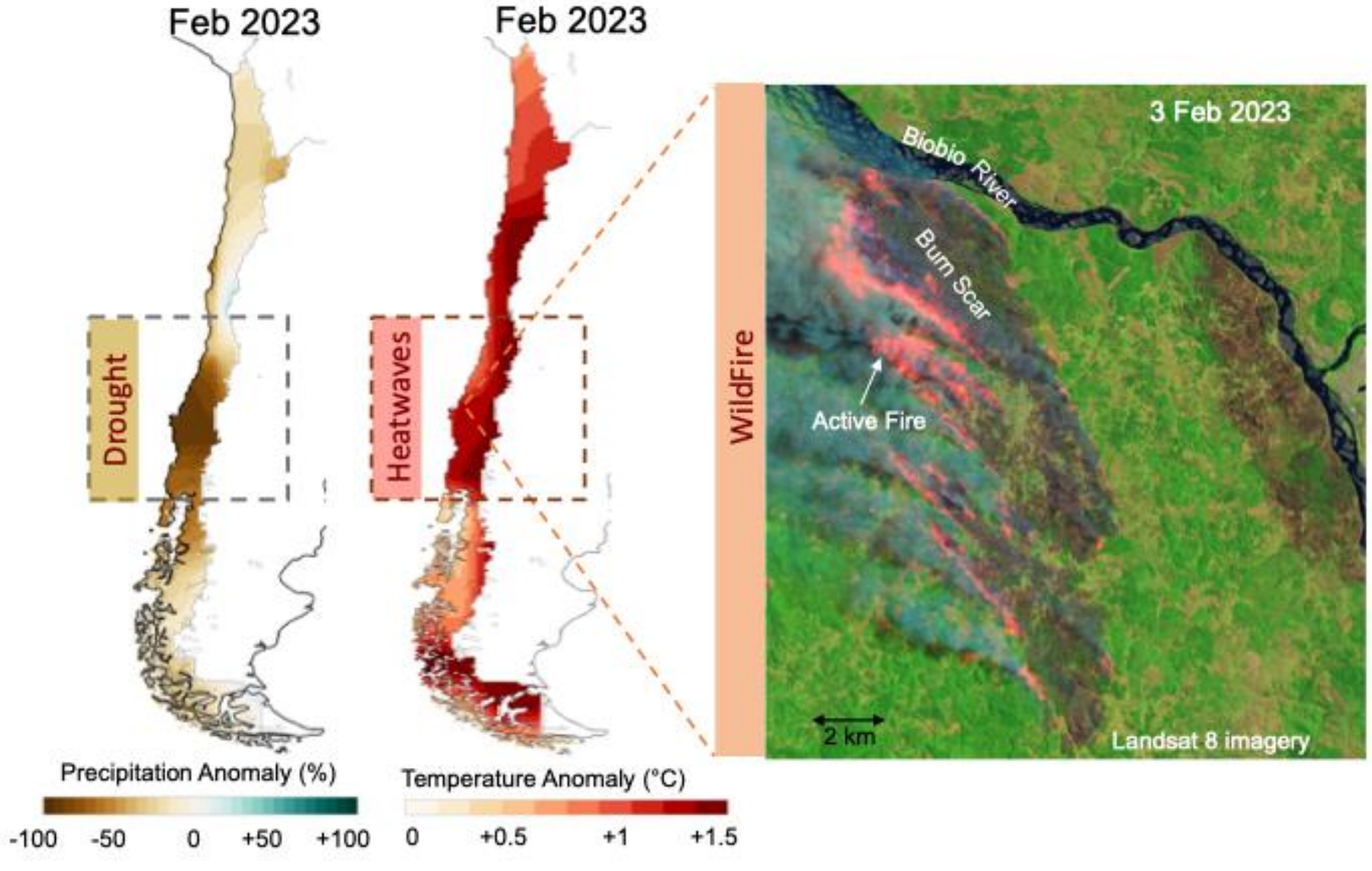


Warning
Communication

Climate Hazards

- Heat Waves
- Fires
- Floods
- Swells
- Extreme Precipitations
- Tornados
- Extreme Pollution

# Climate Adaptation




Corder et al., 2024 https://www.nature.com/articles/s41598-024-52481-x

# Path Forward

Regional data-sharing alliances

Integration of local knowledge

Investment in human capacity

Programs rather than instruments

AI and machine learning

# *Data are a Public Good*

(Quality-controlled, Open, Accessible, Actionable)