SIBILA

PREDICTIVE LANDSLIDE SYSTEM

Geospatial World Forum · Amsterdam Session 2: Disaster Management in a Multi-Hazard World

Agencia Nacional de Investigación y Desarrollo

Ministerio de Ciencia, Tecnología, Conocimiento e Innovación

Gobierno de Chile

UNIVERSIDAD MAYOR

CENTRO UM HÉMERA Observación de la Tierra

GWF GEOSPATIAL WORLD FORUM CONFERENCE & TECH SHOW

We live with natural hazards every day: earthquakes, landslides, extreme rainfall.
Chile is a natural laboratory to observe, understand, and evaluate these processes in real conditions.

How SIBILA Works

We transform complex environmental data into actionable risk intelligence.

Satellite Data

Earth Observation imagery to capture terrain dynamics and surface changes

Terrain Analysis

Topography-derived variables that define slope stability

Climate Inputs

Precipitation and environmental triggers of landslides

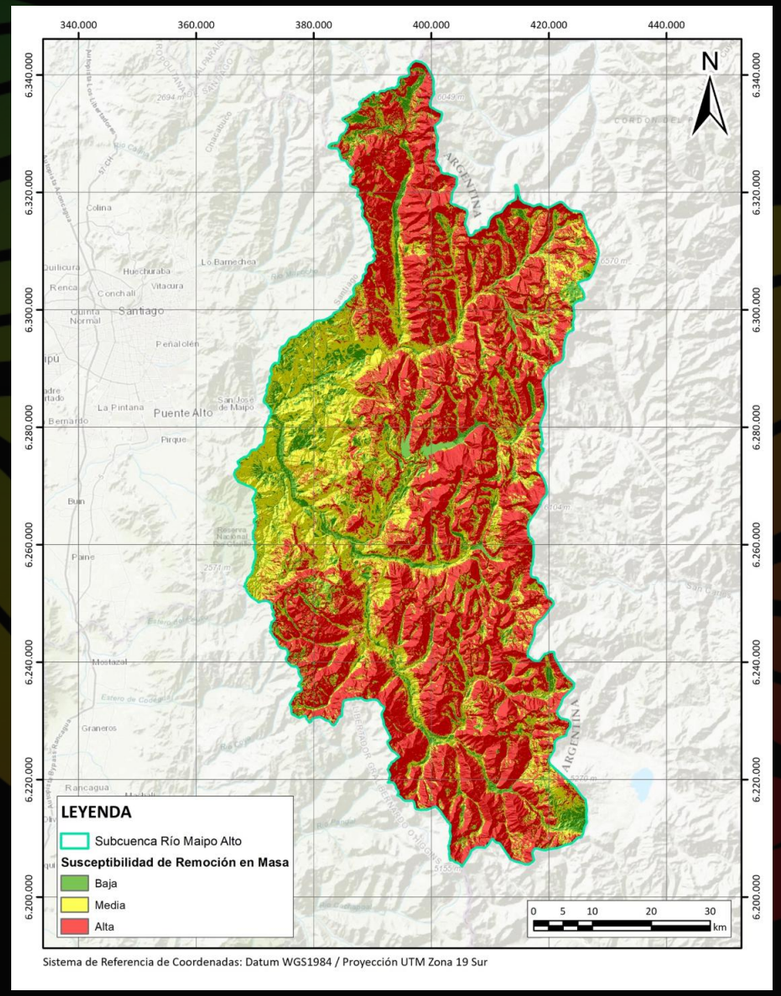
Integrated Intelligence

AI models combine all data into predictive risk outputs

Validated beyond training areas to ensure real world transferability

Training Area

This is the Maipo River basin,where the model was trained.



Using a well documented landslide inventory,we developed a robust prototype. This basin provides the foundationfor everything that comes next.

Traditionally, generating a landslide susceptibility map in the Andes can take between eight to ten months.

With SIBILA, we are now achieving comparable results in less than one hour.

Pilot Area

Cross-basin transfer: Trained in Maipo / Validated in Yerba Loca / **No retraining required**

The model demonstrated spatial consistency in the Yerba Loca basin,
establishing this territory as the first operational pilot
of a solution designed to scale internationally.

We are looking for technical collaborators and strategic partners to scale this solution.

SIBILA

ANID

Financial Support

Universidad Mayor

Academic Collaboration

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