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## INTRODUCTION

Climate change risks maps for communicating information about climate impacts were developed for continental Chile, as well as Juan Fernandez and Easter islands. These maps incorporate current and future climate projections, specifying hazards, exposure and sensitivity for selected systems (i.e. Human Settlement/heat wave, Hydrology/drought) at municipal level.

For each unit, and for each valid climate-hazard/system, risk will be obtained as the product of climate threat, exposure and sensitivity. The municipal risk can be subsequently aggregated at provincial and regional levels.

The maps will be displayed in a web-based platform that allows dynamic visualization and data downloading, thus becoming an important tool for the design of public policies and the implementation of adaptation measures.

## RESULTS AND DISCUSSION

A GIS spatial database is under development, containing the characterizations of the current and future climate scenarios and the projections for the different climate related threats for each systems of interest. Exmppls of these are: floods (heavy rains), droughts, heat waves, frosts and changes in the isotherm. All the results will be uploaded to a flexible public platform that will be developed and then transfer to the Ministry of Environment. It is expected to be a dynamic tool, identifying gaps and integrating new information in order to constantly improve results and decision making.

## METHODOLOGY

Risk occurs when there is a combination of climatic hazard, over an exposed natural or human system that is also vulnerable (i.e. shows sensitivity). In order to assess the climate change risk for the different natural and human systems, we followed a multi model approach (i.e. several GCM runs). The risk is assessed comparing current climate (1980-2010) and future climate conditions (2035-2065 under RCP 8.5).

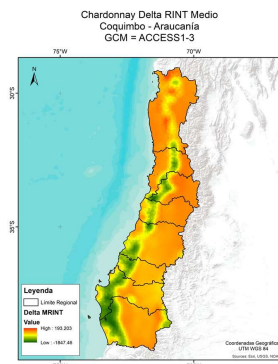


Figure 1. Changes in yield potential for Chardonnay in central Chile

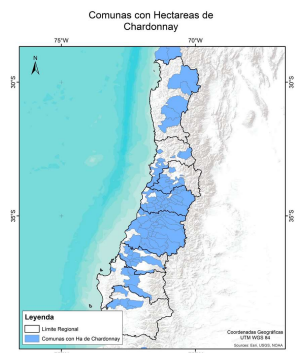


Figure 2. Surface of Chardonnay by municipality in central Chile

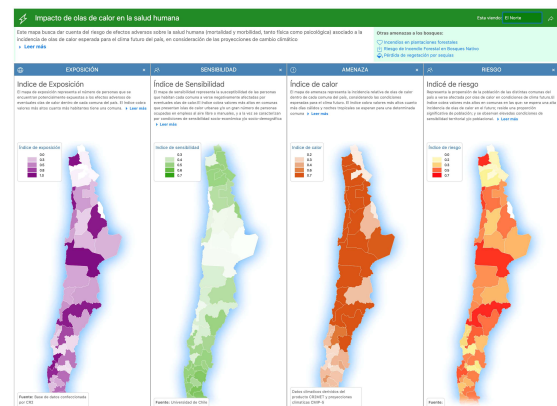


Figure 3. Example of web-based platform with dynamic visualization for main risks in Chile

## CONTRIBUTORS

