United Nations
Educational, Scientific and
Cultural Organization

UNESCO-IHP Work on Water Scarcity and Droughts

IDMP Virtual Exchange

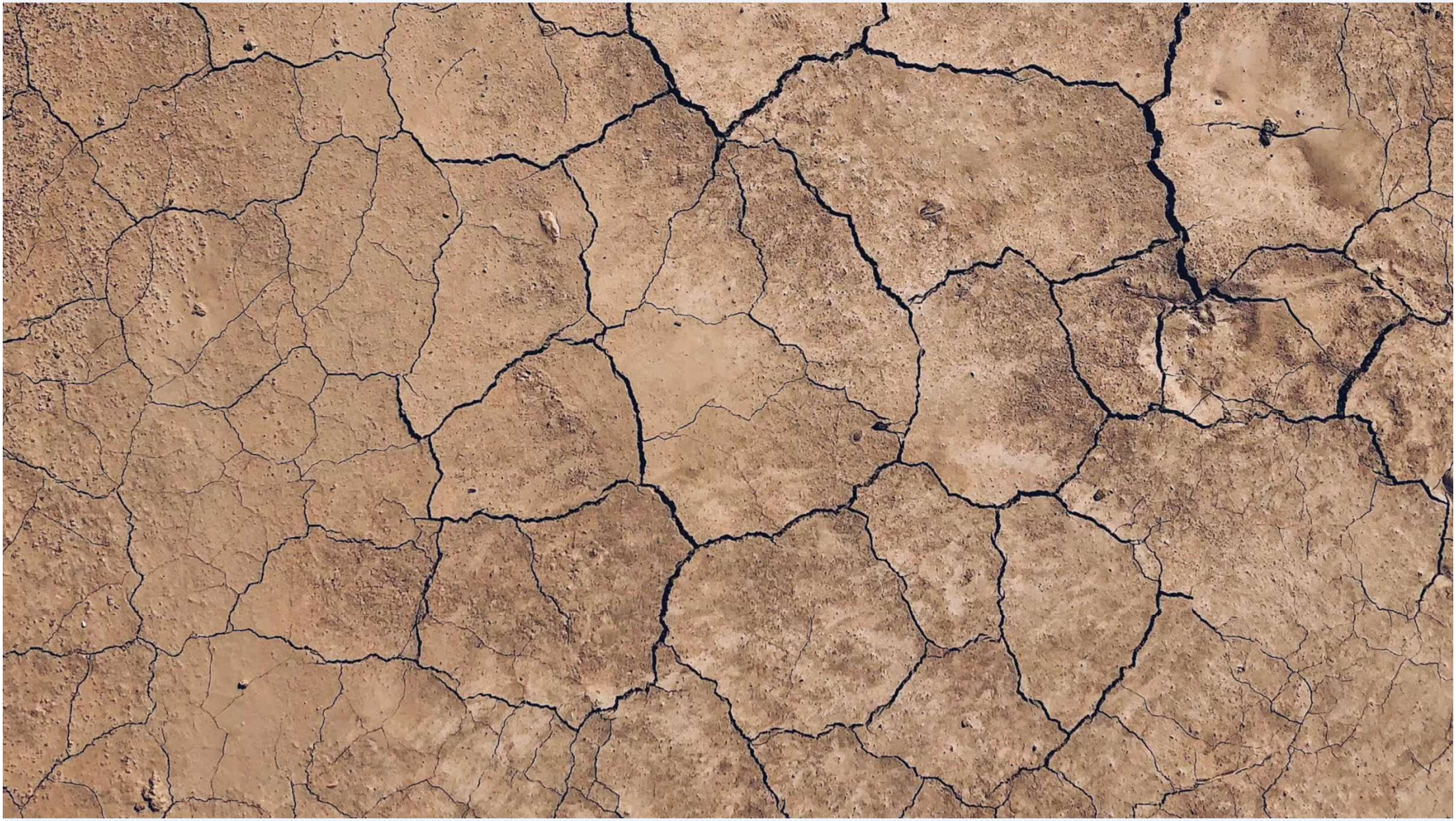
19 August 2020

IHP-VIII Responses: 6 Themes, 3 Axes 2014-2021

Serving Member states for 55 years

Axis Improve knowledge and innovation to address water security challenges

Droughts and their social, environmental and cultural impacts



Droughts in the Anthropocene

Available at
https://unesdoc.unesco.org/ark:/48223/pf0000372260?posInSet=2&queryId=027b559b-2351-4cb5-8b31-25c1af27b48f

The Latin American and Caribbean Drought Atlas

Accessible on-line in Spanish and English

LAC Drought Atlas

Historical drought frequency analysis for the countries of Latin America and the Caribbean.

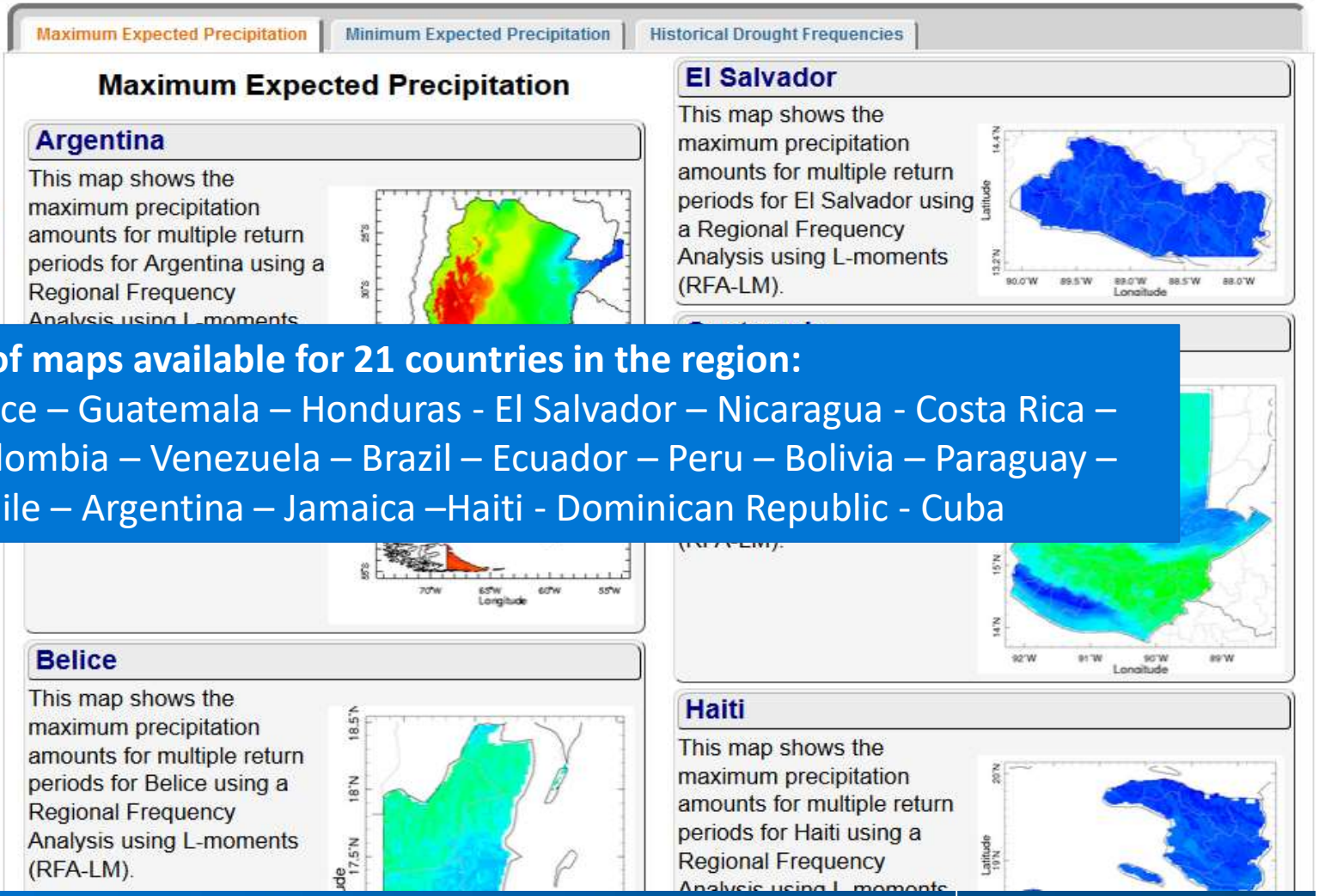
This maproom shows the results of the Regional Frequency Analysis using L-Moments. The complete analysis is described in Nuñez et al. (2010).

The Drought Atlas was developed in colaboration with the Inte
Integrated Water Resourc
(ICIWaRM) and the Europ
Centre (JRC).

Regional workshops were
support from the Flanders
(FUST) and in collaborati
projects Euroclima and R

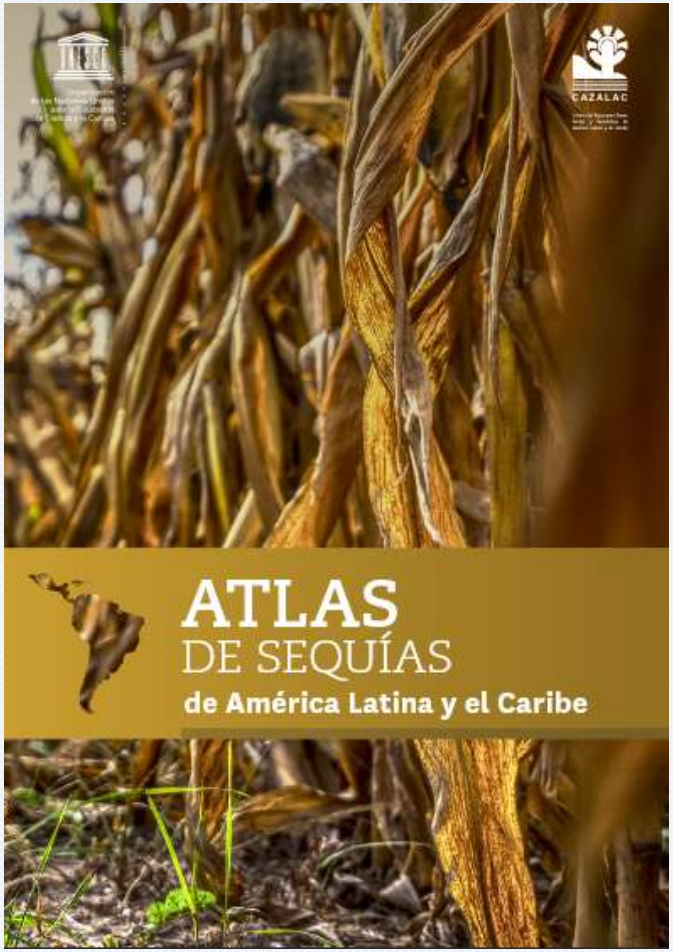
References

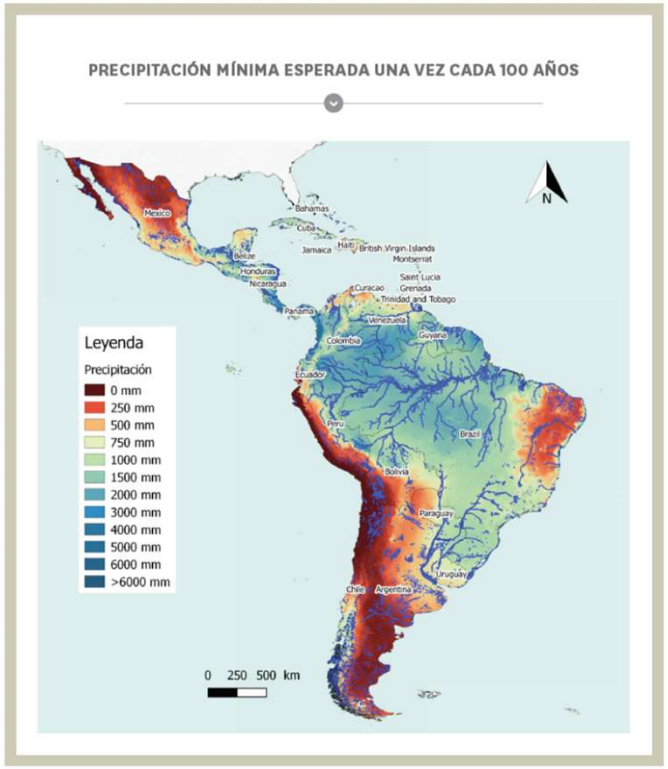
Nuñez, J.H., K. Verbist, J. Wallis, M. Schaeffer, L. Morales, and W.M. Cornelis. 2011. Regional frequency analysis for mapping drought events in north-central Chile. J. Hydrol. 405 352-366.

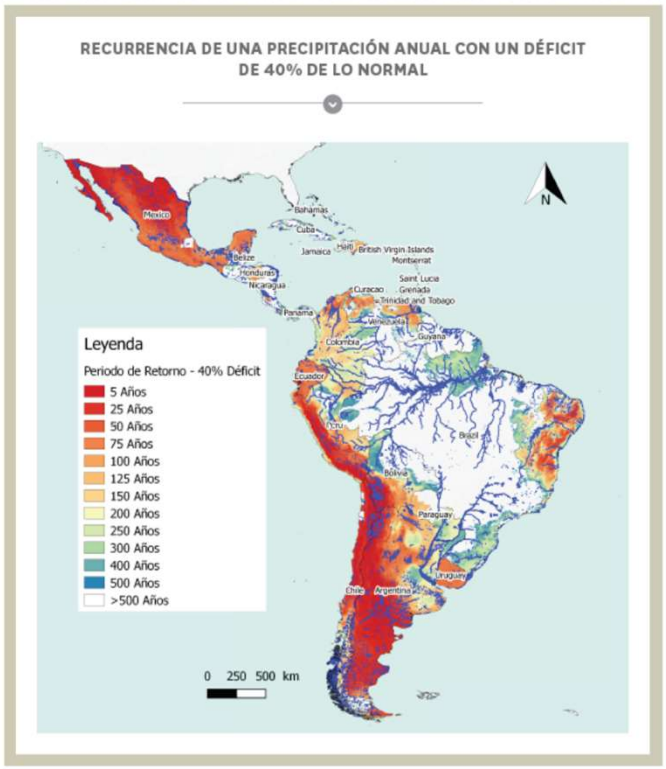


Three types of maps available for 21 countries in the region:
Mexico – Belice – Guatemala – Honduras - El Salvador – Nicaragua - Costa Rica – Panama – Colombia – Venezuela – Brazil – Ecuador – Peru – Bolivia – Paraguay – Uruguay – Chile – Argentina – Jamaica –Haiti - Dominican Republic - Cuba

The Latin American and Caribbean Drought Atlas



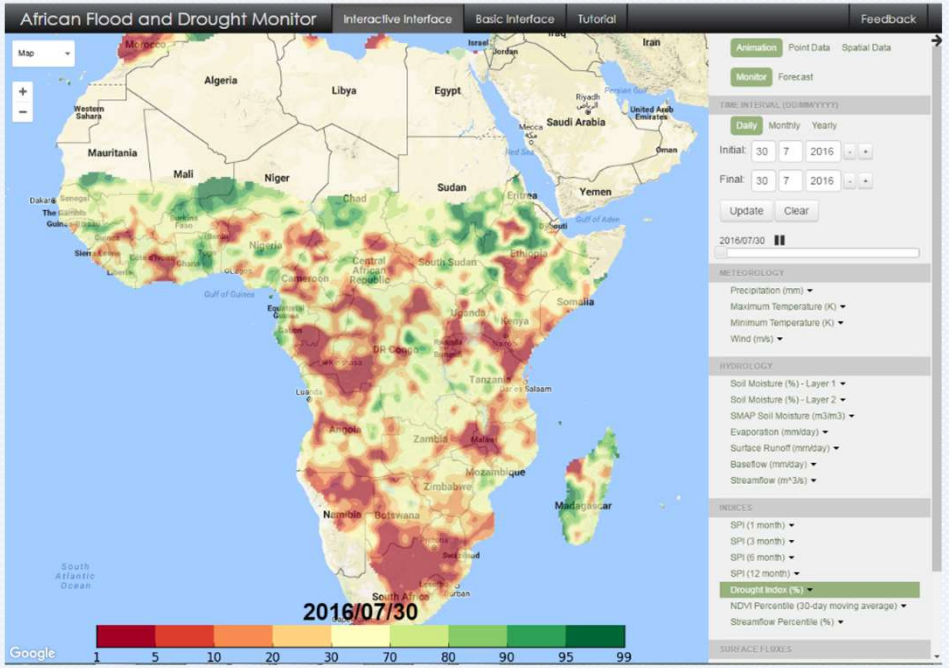




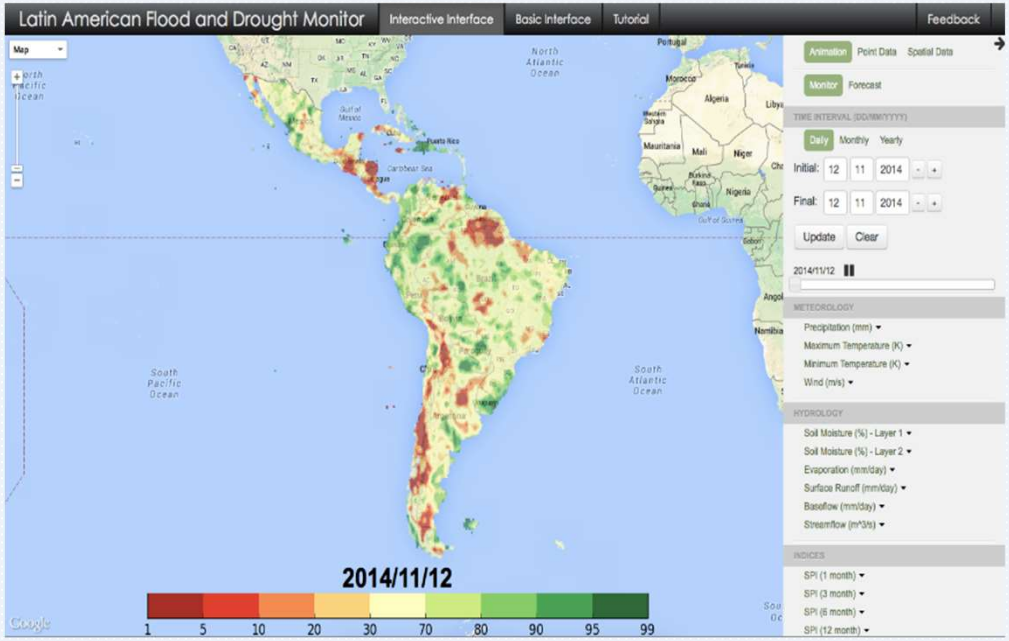
The publication includes dozens of maps of expected rainfall amounts for different levels of drought recurrence, as well as the return period associated with droughts of different levels of precipitation deficit.

Flood and Drought Monitoring Systems

Designed to strengthen the capacity of African and LAC countries for near real-time monitoring and seasonal forecasting to raise awareness of the impact of floods and droughts on vulnerable and disadvantaged groups.



User Interface: http://stream.princeton.edu



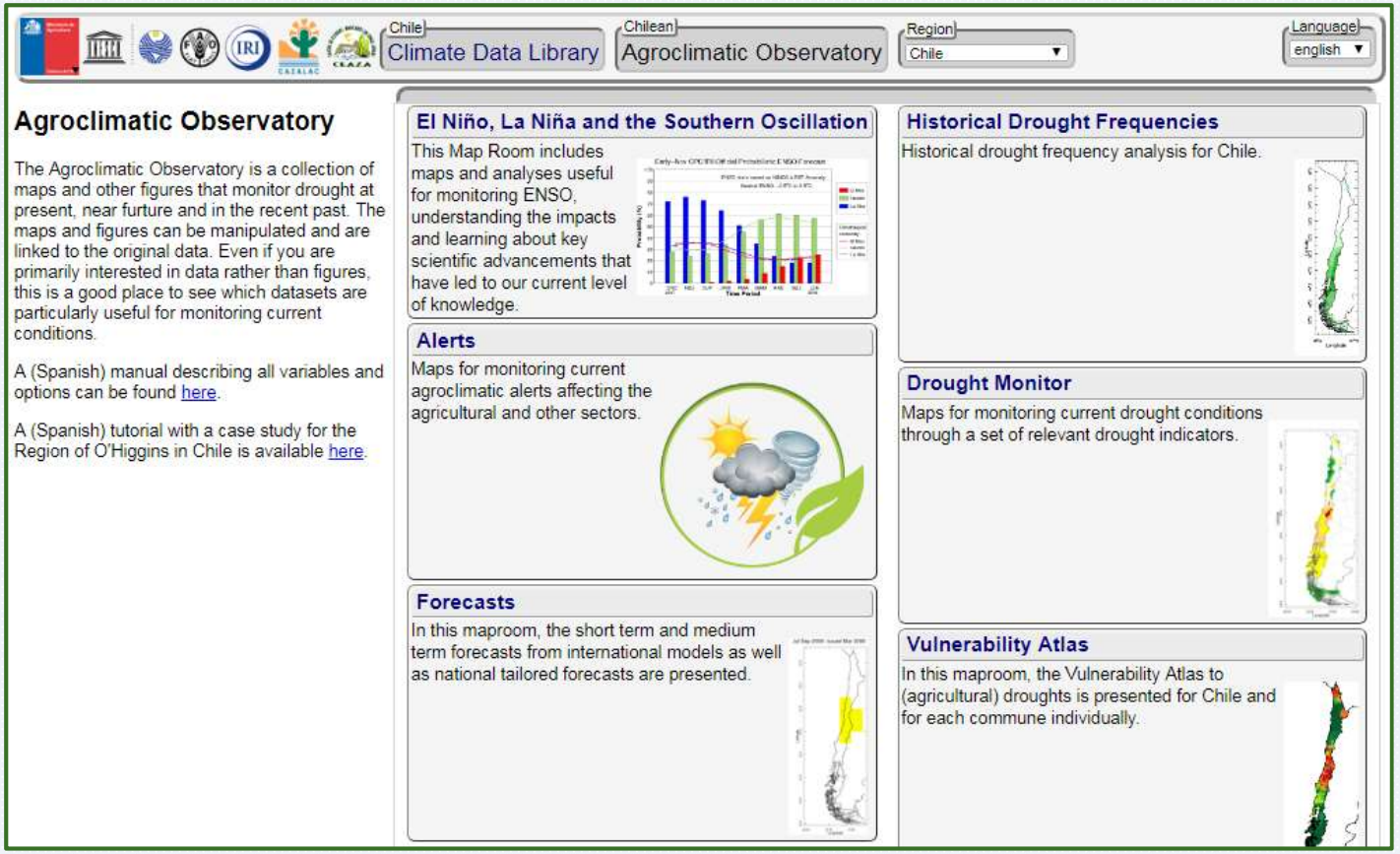
System deployed in:

- LAC
- West Africa
- East Africa
- Southern Africa
- Currently adapted for Lake Chad Basin with higher spatial resolution

Drought Observatories

- Increasing climate change preparedness:
  - Greater understanding and knowledge regarding water-related vulnerabilities
  - Enabling early-warning of water-related disasters across sectors
  - Greater understanding of the linkages between various sectors

Chilean Agroclimatic Observatory



Web-based Drought Monitoring Platform