

Submission by Chile
September 2021

RESEARCH AND SYSTEMATIC OBSERVATION SUBMISSION ON THEME FOR THE EARTH INFORMATION DAY CHILE

Chile welcomes the opportunity to submit its views on the Earth Information Day in response to the invitation by the Subsidiary Body for Scientific and Technological Advice (SBSTA). Chile looks forward to the event and suggests the following theme for consideration:

Theme: Climate Change Observatory, as a data and evidence platform at the service of mitigation and adaptation actions to Climate Change.

The scientific evidence provided by the IPCC in its 6th Assessment Cycle shed light on the need to tackle the data and knowledge gaps in several dimensions of Climate Change regarding Latin American and Caribbean countries. In fact, the Special Report on the Ocean and Cryosphere in a Changing Climate evidences the data gaps in the south cone. Similarly, the report on Climate Change 2021: The Physical Science Basis highlights the evidence gaps in extremes events and agricultural and ecological drought.

In Chile, the Scientific Committee on Climate Change recommended enhancing the national observational capacity and information systems related to climate change. Those recommendations considered the integration, interoperability, standardization, and standard compliance of the information systems' data.

The world's driest desert and Antarctica are the extreme landscapes that host a wide range of ecosystems in Chile, from the north to the country's south. This situation is unique on the globe and represents a remarkable opportunity to set the country as a global monitoring system to observe and understand climate change.

Chile's Ministry of Science, Technology, Knowledge and Innovation is developing a Climate Change Observatory considering all the above aspects. This Observatory is an initiative that aims to bring information currently hosted on multiple isolated stakeholders, from both public and private sectors, into the decision-making to promote robust and evidence-informed policies.

Information provided from Chile for this theme

Chile will present information on the Climate Change Observatory, a technologically distributed infrastructure made of a network of stakeholders and measurement tools from the public and private sectors, aiming to transform sparse data into value. Some of the characteristics that the Observatory takes into account are:

- **Strengthening observation capabilities:** the observatory aims to be a platform to observe gaps in observation systems across the country, acting as a coordinator of actions to solve gaps.
- **Increase data availability:** the observatory will be a platform that will make data available to the public, ensuring the interoperability of the information so different systems can work with each other.

The observatory consists of three main axes:

- a) Governance:** The Governance of the Observatory will be located in the Ministry of Science, Technology, Knowledge and Innovation, accompanied by expert advisers defining standards for the data.
- b) Network of sensors and data:** The Observatory will consolidate, through its platform, an integrated network of sensors and data across the country from both public and private institutions. The Observatory will perform as a coordinator of that network's information, encouraging the participation and the availability of new data sources.
- c) Data access platform:** The Observatory includes the development of a platform to gather and make data available that contributes to knowledge production and decision-making.