



Statement of the Group on Earth Observations at the UNFCCC SBSTA-46 Research Dialogue

The Group on Earth Observations (GEO) is an Intergovernmental Organization of more than 100 member governments and 100 Participating Organizations. Together, the GEO community is creating a Global Earth Observation System of Systems (GEOSS) to better integrate observing systems and openly share data. GEOSS specifically targets: spatial and temporal gaps in data sets and eroding or scarce technical infrastructure in many parts of the world; global access to EO data and associated benefits; coordination of data integration and interoperability; support to processing systems to transform data into useful information; and strengthening user involvement. The GEOSS Common Infrastructure (GCI) links over 150 data catalogues containing over 200 million open Earth observation data and information resources, accessible through an easy-to-use GEOSS Portal.

The GEO-XIII Plenary (November 2016) agreed on three priority engagement areas, including “Climate Change and Greenhouse Gas Monitoring” to support the implementation of the Paris Agreement. The GEO Executive Committee in March 2017 confirmed the focus on both adaptation and mitigation. Many GEO activities that harness environmental data are linked to climate. The GEO Carbon and GHG Initiative (GEO-C) is developing a coordinated system of observations and evaluation of changes in the carbon cycle and greenhouse gas emissions. GEO-C builds on existing initiatives and networks, supports continuity and coherence, and facilitates cooperation and interoperability.

GEO is building regional initiatives, including AfriGEOSS (in Africa), AmeriGEOSS (in the Americas) and AOGEOSS (in Asia-Oceania), to support decision-making and regional sustainable development, and build institutional and individual capacity through engagement of experts, stakeholders and decision makers. For example, AfriGEOSS is leveraging the Africa Data Intensive Research Cloud (ADIRC), to provide researchers in African countries access to high performance computing (HPC) infrastructures, enabling them to take part in big data science projects and to build Earth observation data processing platforms.

GEO engages providers and users of climate data resources through outreach, including targeted workshops and its annual international Plenary, to ensure a sustained dialogue around the information needs of those seeking to integrate climate products and services into adaptation processes and decisions.