

# GEO WORK PROGRAMME & THE PARIS AGREEMENT

Group on Earth Observations

### What is GEO?

The Group on Earth Observations (GEO) is an intergovernmental partnership working to improve the availability, access and use of Earth observations for the benefit of society.

### What does GEO do?

GEO works to actively improve and coordinate global EO systems and promote broad, open data sharing.

### What does GEO have to offer?

In addition to the 60+ Work Programme activities being implemented under GEO, the GEO community is creating a Global Earth Observation System of Systems (GEOSS) and has already made available over 400 million data and information resources (www.geoportal.org).

### What are GEO's priorities?

GEO's global engagement priorities include supporting the UN 2030 Agenda for Sustainable Development, the Paris Climate Agreement, and the Sendai Framework for Disaster Risk Reduction.

### What has GEO accomplished so far?

Open data policy has gone from the exception to the global norm since the inception of GEO and following work by organizations such as the G20 and the OECD. This is reinforced as a growing number of GEO Member countries adopt and pursue broad open data sharing practices. With the corresponding increase in available open Earth observations data, end-user oriented initiatives developed through the GEO Work Programme are creating real impact on a wide range of global challenges.

GEO's impact is highlighted by some examples: the GEO Global Agriculture Monitoring (GEOGLAM) initiative is improving food security by generating actionable information on future agricultural production of four major crops in order to reduce price volatility; AirNow-International provides the public, such as the City of Shanghai, with daily air quality forecasts; and the Global Forest Observations Initiative (GFOI) supports national forest monitoring systems to reduce deforestation.

### How can you get involved?

GEO is a voluntary organization and depends on the interest and energy of the international Earth observations and geospatial communities to reach its goals. There are many ways in which nations, organizations and individuals can contribute to the success of GEO and the establishment and implementation of GEOSS. Visit our website or get in touch to learn more.

### **GEO** in Numbers

### **Societal Benefit Areas**



Climate in the GEO Work Programme **Selected Flagships & Initiatives** 





# Earth observations and Paris Agreement

Earth observations enable informed and effective policy and decision making for climate change mitigation and adaptation. GEO is working to enhance global observations systems in support of the Paris Agreement.

Earth observations can support effective policy and decision making for climate change mitigation and adaptation, and in particular the following articles of the Paris Agreement:

### **Articles 4 & 13: National Reporting**

**Article 5: Mitigation** 

**Article 7: Adaption** 

**Article 8: Loss & Damage Article 10: Technology Transfer** 

### Paris Agreement

Damage	ty Development / ology Transfer	al Reporting / Stocktake	tion
s & Di	acity hnolo	ional bal St	igatio

GFOI helps countries measure and monitor forests for REDD+. By supporting developing countries to monitor their GHG emissions from forests, GFOI facilitates reporting to UNFCCC and improves transparency in line with the Paris Agreement. GFOI provides direct support to countries through capacity building, provision of methods and guidance materials on REDD+ measurement, reporting and verification (MRV), coordination of data availability, accessibility and use, coordination of R&D to fill knowledge gaps, and supports countries to produce their own GHG datasets for forests. www.gfoi.org

### **GEO Global Agricultural Monitoring Initiative (GEOGLAM)**

GEOGLAM fights food insecurity by reinforcing the international community's capacity to produce and disseminate relevant, timely and accurate projections of agricultural production at national, regional and global scales. Using Earth observations, GEOGLAM provides valuable Early Warning information that can help mitigate food crises, including from drought and flooding caused or exacerbated by climate change. www.geoglam.org

### **GEO Biodiversity Observations Network (GEO BON)**

GEO BON contributes to effective management of the world's biodiversity and ecosystems by organizing and improving terrestrial, freshwater and marine biodiversity observations globally. This information often intersects with crucial data needed by the climate science community. www.geobon.org

### **GEO Carbon and GHG Initiative (GEO-C)**

The GEO Carbon and GHG Initiative (GEO-C) is a global endeavour to promote interoperability and foster integration in the sector of greenhouse gas measurements. GEO-C builds on existing initiatives and networks to support their continuity and coherence and facilitate their cooperation and interoperability, in order to obtain a comprehensive, globally coordinated carbon and greenhouse gas observation and analysis system.

### **Blue Planet: Oceans and Society**

Oceans are an important heat and carbon sink, and are also impacted heavily by climate change. Earth observations are crucial for monitoring the state of our oceans, and GEO Blue Planet is working to coordinate global ocean observations for the protection of these crucial systems. **www.geoblueplanet.org** 

### **GEO** Regional Initiatives

GEO's regional initiatives, including AOGEOSS (Asia Oceania), AfriGEOSS (Africa), AmeriGEOSS (Americas), and EuroGEOSS (Europe) provide the necessary framework for countries and organizations to access and leverage on-going Earth observation-based initiatives, creating synergies and minimizing duplication. These initiatives play a key role in providing data for climate adaptation the regional level.

**Article 11: Capacity Development Article 14: Global stocktaking Article 15: Compliance** 



**Earth Observations** (including science and reseach)















## **GEO Climate Workshop 2018: Earth Observations for the Paris Agreement** 13 June 2018 / Geneva, Switzerland

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Learn more and register: bit.ly/GEOclimate18







www.earthobservations.org www.geoportal.org