

Space Data Is Critical – it provides global coverage and helps *unlock* other observations, supports implementation of adaptation/mitigation at national and local scales.

International Coordination Is Critical – no nation could do it on its own.

Although coordination is effective, on-going **investment in developing and sustaining both in-situ and space borne observatories** remains important.

There are two key bodies that help coordinate how the space agencies respond to the needs of the climate change community:

CEOS (The Committee on Earth Observation Satellites) ensures the climate observation requirements identified by the Global Climate Observing System (GCOS) in response to the needs of the UNFCCC are addressed through space agency planning processes.

CGMS (The Coordination Group for Meteorological Satellites) supports operational weather monitoring and forecasting and climate change monitoring.

Space Agencies' Role

- Evolve **systematic observation of climate from space**
- Strengthen scientific knowledge on climate
- Support provision of knowledge-based information to climate service
- Support decision-making

Strategy

- Implementation of the **Climate Monitoring Architecture from Space (2013)**
- Identify existing and potential future gaps in the provision of climate data requested by GCOS
- Coordination and optimisation of the planning of future satellite missions and constellations
- Improve delivery of climate data

CEOS Activities relevant to UNFCCC

Implementation of REDD+

- Provide support to developing countries to exploit satellite data
- Support adaptation and mitigations measures

UN Sustainable Development Goals

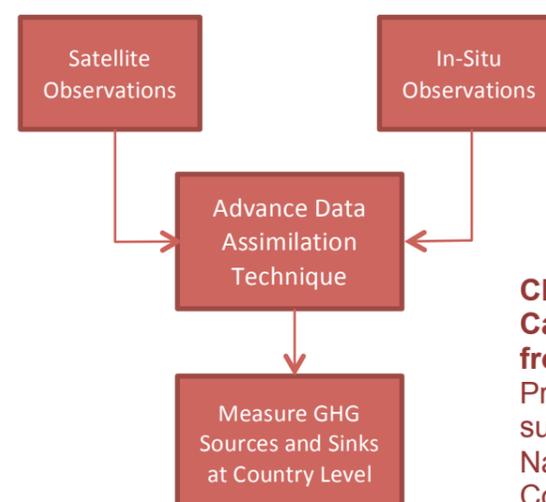
- Promotes the use of Earth Observation and spatial data in support of sustainable development
- Provide support to UN agencies

Implementation of Sendai Framework for Disaster Risk Reduction 2015-2030

- Coordinate provision of data
- Engage with relevant UN agencies and authorities

Carbon Monitoring

Developing an Effective Measurement System



CEOS Strategy for Carbon Observations from Space:
Provide nations with support data to monitor Nationally Determined Contributions (NDCs) and stocktaking.

2016 CEOS Initiatives

"Harnessing New Opportunities"

- **Future Data Access & Analysis Architectures**
 - Support agencies to remove obstacles to data uptake by taking advantage of new technologies
 - To help deliver economic, environmental and societal potential of the data.
- **Non-Meteorological Applications for Next Generation Geostationary Satellites**
 - Identify opportunities to exploit the capabilities of next-generation geostationary satellites, including coordination with low-Earth orbit missions
 - To identify the implications for the production of Essential Climate Variables in response to GCOS requirements.

CEOS Contribution to the Group on Earth Observation (GEO)

- Cross-cutting coordination of satellite Earth observation as the *space arm* of GEO
- Direct support for Initiatives and Flagships of GEO
- Implementation of thematic observing strategies for topics such as carbon and water

CEOS Contribution to the GEO Strategic Implementation Plan

- Establish a strong framework to respond to user needs in thematic observation
- Engage in efforts to exploit next generation data architecture
- Process *Analysis Ready Data for Land* in order to make it more usable to tackle real world challenges