

**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

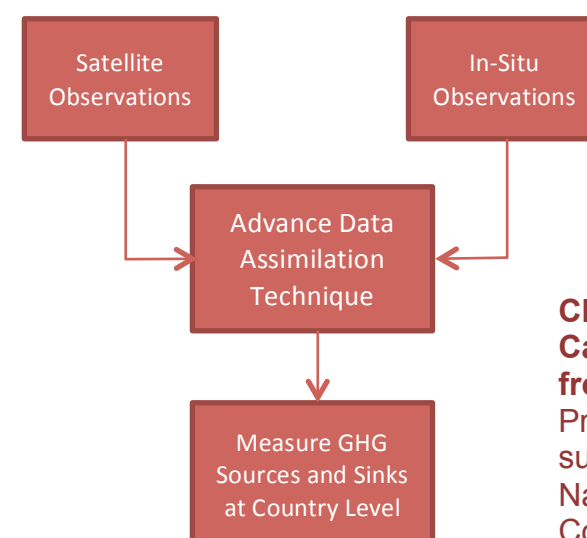
- Promotes the use of Earth Observation and spatial data in support of sustainable development
- Provide support to UN agencies

#### 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