

GEO 2017-2019 Work Programme

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GEO FOUNDATIONAL TASKS ERROR! BOOKMARK NOT DEFINED.

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Preamble

The need for strengthened cooperation and coordination among global observing systems and research programmes in order to provide integrated global observations for the achievement of sustainable development was widely recognized at the World Summit on Sustainable Development (WSSD) (Johannesburg, 2002). Subsequent Earth observation Summits (Washington D.C., 2003; Tokyo, 2004) underscored the importance of comprehensive, coordinated and sustained Earth observations - exchanged fully and openly - as a basis for informed decision making, and, building on existing systems, called for the establishment of a “system of systems” approach to deliver those observations.

The political will and commitment demonstrated at these Summits, confirmed by the G-8 endorsement of strengthened international cooperation on global observation of the environment (Evian, 2003), reached their culmination at the Third Earth Observation Summit (Brussels, 2005) when GEO was formally launched as a partnership of Member governments and Participating Organizations working together to implement the Global Earth Observation System of Systems (GEOSS). GEOSS was designed to deliver the data and information necessary for bringing qualitative improvements in understanding the Earth system so that global policy- and decision-making abilities that promote the environment, human health, safety, and welfare would be enhanced. In particular, GEO’s initial *GEOSS 10-Year Implementation Plan (2005-2015)* foresaw GEOSS as a step towards addressing the challenges articulated by the United Nations Millennium Declaration (including the Millennium Development Goals), as well as the 2002 WSSD and implementation of other international environmental treaty obligations. Beyond addressing major policy initiatives, and building on existing local, national, regional, and international initiatives, GEO also promotes the benefits of GEOSS through enhancing capacity; engaging globally with a broad range of user communities, from managers, policy makers and scientific researchers and engineers, to civil society, governmental and non-governmental organizations, international bodies and the commercial sector; and providing Earth observations data and information yielding advances in knowledge across societal benefit areas (SBAs), as defined by purpose and scope.

With the Ministerial renewal of GEO’s mandate for another decade (Mexico City, 2015), which included endorsement of the *GEO Strategic Plan 2016-2025: Implementing GEOSS* (Strategic Plan), the threads of support for sustainable development continues to be woven into the fabric of GEO’s existence. Indeed, the Strategic Plan references historical events that have transpired since the first decade of GEO’s existence, including the advent of the UN Sustainable Development Goals (SDGs) as a response to mounting global societal challenges. Since the SDGs contain quantifiable targets and metrics (indicators) to serve as benchmarks against which progress towards achievement of the SDGs may be ascertained, the Strategic Plan specifically calls for the provision of open, timely and reliable Earth observation data and information to supplement statistical analyses used in assessing that progress. Similarly, the *GEO Mexico City Declaration* from the 2015 GEO Ministerial both affirmed that “GEO and its Earth observations and information will support the implementation of, inter alia, the 2030 Global Goals for Sustainable Development...” and called on GEO to “...launch a GEO initiative to leverage Earth observations to support the implementation, monitoring and evaluation of the 2030 Global Goals for Sustainable Development, building on the recent success of GEO’s engagement with the United Nations on this issue.” To follow these calls with concerted action, at the GEO-XIII Plenary meeting (Saint Petersburg, 2016), the *GEO Engagement Priorities for 2017-2019* identified several global policy initiatives as candidates for demonstrating that GEO is “the reference global initiative that facilitates evidence-based environmental decision-making by unlocking the potential of Earth observations.” The Plenary approved three of the policy initiatives (out of five) as initial priorities for GEO, including the 2030 Agenda for Sustainable Development (and associated SDGs), as well as the Paris Agreement on climate and the Sendai Framework for Disaster Risk Reduction.

Reflecting the importance Plenary has placed on demonstrating that GEO is responding to the observational requirements of the 2030 Agenda for Sustainable Development, the GEO Work

Programme (GWP) contains an index referencing activities as a function of support for the SDGs. This index represents the results of analyses performed by the GEO Programme Board and Secretariat through consultations with the leadership of activities across the GWP to identify those that specifically target their efforts towards achieving the SDGs in some fashion. The work to identify which of the SDG targets and indicators would potentially benefit from support from Earth observations in the relevant monitoring frameworks, as well as identifying the appropriate national statistical offices and custodial agencies with which to engage, is ongoing. Consequently, it is to be anticipated that this index mapping activities of the GWP to support of the SDGs will likely evolve with each annual update of the GWP. Similarly, future updates of the GWP will highlight GEO's expanding efforts to support assessment of the indicators associated with other major policy initiatives, such as the Paris Agreement on climate and Sendai Framework, as guided by Plenary.

The 2017-2019 GEO Work Programme

Purpose and Structure

The 2017- 2019 GEO Work Programme (GWP) is the foundational document describing the nuts and bolts of activities contributed by the GEO community to supply the Earth observation data and information needed to address challenges across all of the important policy areas that governments, science and society face today.

In this document you will find details on the activities that GEO undertakes to realize its Vision, Mission and Strategic Objectives (see *GEO Strategic Plan 2016-2025: Implementing GEOSS*) through the implementation each of its Core Functions (see *GEO Strategic Plan Reference Document*). These activities, collectively known as the GEO Implementation Mechanisms, include GEO Community Activities, GEO Initiatives, GEO Flagships, and GEO Foundational Tasks. You will find examples of how GEO Member Countries are making society more resilient with the use of Earth observations for attaining targets of the Sendai Framework for Disaster Risk Reduction. The crosscutting nature of GEO activities that support the UN 2030 Agenda for Sustainable Development are highlighted with a dedicated index, along with specific descriptions for the relevant GEO Flagships, Initiatives and Community Activities. GEO global efforts to address the existential threat of climate change to our world are made more coherent as a whole, described and arranged to illustrate integration and impact.

The GWP is a living document that is updated annually, and is proposed by the GEO Secretariat based on input from GEO Members, Participating Organizations, and the greater GEO Community. The GWP is further refined and developed in consultation with the GEO Programme Board, which ultimately presents the GWP to the GEO Plenary for acceptance.

The GWP serves two functions¹:

- It is used by GEO Members and Participating Organizations to agree on priorities and activities, including the use of the resources made available through the GEO Trust Fund and the GEO Secretariat. By quantifying resources needed for the activities including and valuating the contributions committed, the GWP provides a tool to match ambitions with available resources; and
- It provides an overview of GEO's plans, thus serving as a basis to help stakeholders align their contributions. The GWP is complemented by annual GEO Progress Reports on the developments within GEO Community Activities, GEO Initiatives, GEO Flagships, and GEO Foundational Tasks.

A GWP Reference Document (electronic, web-accessible) is maintained by the GEO Secretariat, complementing the GWP itself. It represents a compilation of the complete implementation plans of GEO Initiatives and Flagships, plus more information on Community Activities and other relevant documents. As such, the Reference document contains detailed background information on principal objectives of the actions in the GWP, their link to GEO Strategic Objectives and Core Functions, and on monitoring and evaluation activities.

Contents

The GWP is developed in three phases:

- An initiation phase to collect input from the GEO Community, the GEO Members and Participating Organizations, as well as interested third parties including United Nations Programmes, Foundations, Treaties or Conventions, and also the private sector. The initiation

¹ From the *GEO Strategic Plan 2016-2025: Implementing GEOSS Reference Document*

phase takes place during the 1st and 2nd quarters of the calendar year, during which the GEO Community may submit new Initiative or Flagship proposals, or suggest modifications to ongoing ones. Community Activities may also be proposed to the Secretariat during this phase.

- A consolidation phase during which the GEO Programme Board, supported by the GEO Secretariat, reviews the implementation plans of all GEO Initiatives and Flagships. In the case of new proposals, the Board interacts with the authors in order to strengthen the implementation plans and address any gaps or concerns. In the case of existing Initiatives or Flagships, the Board reviews progress with respect to implementation plans and takes action to help address any issues. The Board also reviews all GEO Foundational Tasks included in the draft GWP and actively works to ensure the resources are available that will enable their implementation. The consolidation phase takes place during the 2nd and 3rd quarters of the calendar year, and concludes with a formal recommendation by the Programme Board of the draft GWP for Plenary acceptance
- An acceptance phase culminating in formal acceptance of the GWP by the GEO Plenary at its annual meeting. During the acceptance phase, the GEO Secretariat supports GEO delegations in preparing their commitments at Plenary through, for example, providing complementary material and reporting updates on expected resource commitments.

The information contained in the GWP presents a synoptic view of GEO Flagships, Initiatives, Community Activities, including an overview of the scope and objectives of each activity, future plans, resources, leadership, and contributors. For Foundational Tasks, complete descriptions are provided, as well as an estimation of the resources needed to produce expected outputs for the period, both in terms of Secretariat resources and external contributions. More detailed information on GEO activities, including the complete implementation plan for GEO Initiatives and Flagships, can be found in the GWP Reference document.

Conclusions

The Plenary is asked to review and approve this update of the GEO 2017-2019 Work Programme.

Validation of the Work Programme is constituted by the confirmation from Members and Participating Organizations (POs) of the contributions that are identified in the description of the activities.

We expect GEO Principals to review the content, comment on the proposed activities, confirm proposed contributions and/or identify new potential contributions, as well as confirm the associated commitments at the Plenary meeting.

By accepting the GWP, GEO:

- **Accepts** that the GEO Foundational Tasks should be implemented with the resources indicated; and
- **Takes note** that the GEO Flagships, GEO Initiatives and GEO Community Activities are expected to be implemented with the corresponding indicative resources.

The Secretariat will issue a revision of the GWP after the Plenary meeting, prior to the end of the year, that reflects GEO Principals' inputs and the results of Plenary deliberations.

TABLE OF CHANGES

Changes Introduced with Respect to Version 1 (GEO-XIII)

Where	What
Community Activities	Added: Citizen Observatories and Crowdsourcing.
Community Activities	Added: Earth Observations for Health (EO4HEALTH).
Foundational Tasks	Updated: GEOSS In-Situ Earth Observation Resources.

Changes Introduced with Respect to Version 2 (22 December 2017)

Where	What
Table of Contents	Updated: Order of presentation changed to Flagships, Initiatives, Community Activities, and Foundational Tasks.
Table of Contents	Added: Implementation Mechanism Index by Societal Benefit Area (SBA).
Table of Contents	Added: Implementation Mechanisms Index by Sustainable Development Goal (SDG).
Preamble	New, setting political context.
Introduction	Expanded for readability.
Flagship	Updated: GEO Biodiversity Observation Network (GEO BON) Implementation Plan and Work Programme descriptive text.
Initiatives	Updated: AquaWatch Implementation Plan and Work Programme descriptive text (formerly Community Activity).
Initiatives	Updated: GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME) Implementation Plan and Work Programme descriptive text.
Initiatives	Added: EuroGEOSS.
Community Activities	Added: GEO-CRADLE: Coordinating and Integrating State-of-the-art Earth Observation Activities in the regions of North Africa, Middle East, and Balkans and Developing Links with GEO related initiatives towards GEOSS.
Community Activities	Added: Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC).

IMPLEMENTATION MECHANISMS INDEXED ALPHABETICALLY

Flagship

GEO Biodiversity Observation Network (GEO BON)	Error! Bookmark not defined.
GEO Global Agricultural Monitoring (GEOGLAM).....	Error! Bookmark not defined.
Global Forest Observation Initiative (GFOI)	Error! Bookmark not defined.
Global Observation System for Mercury (GOS4M)	Error! Bookmark not defined.

Initiative

AfriGEOSS: Reinforcing Regional African Engagement	Error! Bookmark not defined.
AquaWatch.....	Error! Bookmark not defined.
Asia-Oceania GEOSS (AOGEOSS)	Error! Bookmark not defined.
Climate Change Impact Observation on Africa's Coastal Zones (GEO-CCIOACZ)	Error! Bookmark not defined.
Data Access for Risk Management (GEO-DARMA)	Error! Bookmark not defined.
Earth Observations for Ecosystem Accounting (EO4EA)	Error! Bookmark not defined.
Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)	Error! Bookmark not defined.
EuroGEOSS	Error! Bookmark not defined.
GEO Carbon and GHG Initiative	Error! Bookmark not defined.
GEO Cold Regions Initiative (GEOCRI).....	Error! Bookmark not defined.
GEO Geohazard Supersites and Natural Laboratories (GSNL)	Error! Bookmark not defined.
GEO Global Ecosystem Initiative (GEO ECO)	Error! Bookmark not defined.
GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME)	Error! Bookmark not defined.
GEO Global Water Sustainability (GEOGLOWS)	Error! Bookmark not defined.
GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources.	Error! Bookmark not defined.
GEOSS-Evolve.....	Error! Bookmark not defined.
GEO Vision for Energy (GEO VENER).....	Error! Bookmark not defined.
GEO Wetlands Initiative	Error! Bookmark not defined.
Global Drought Information System (GDIS)	Error! Bookmark not defined.
Global Observation System for Persistent Organic Pollutants (GOS4POPS)	Error! Bookmark not defined.
Global Urban Observation and Information.....	Error! Bookmark not defined.
Global Wildfire Information System (GWIS).....	Error! Bookmark not defined.
Oceans and Society: Blue Planet.....	Error! Bookmark not defined.

Community Activity

Access to Climate Data in GEOSS.....	Error! Bookmark not defined.
Advancing Communication Networks	Error! Bookmark not defined.

African Geochemical Baselines	Error! Bookmark not defined.
Airnow International: Expanding Networks & Integrating Methods for Air Quality & Health Data	Error! Bookmark not defined.
Chinese Tsunami Mitigation System	Error! Bookmark not defined.
Citizen Observatories and Crowdsourcing.....	Error! Bookmark not defined.
Copernicus Atmospheric Monitoring Service (CAMS)	Error! Bookmark not defined.
Copernicus Climate Change Service (C3S)	Error! Bookmark not defined.
Data Analysis and Integration System (DIAS)	Error! Bookmark not defined.
Digital GEOMUSUEM	Error! Bookmark not defined.
Earth2Observe	Error! Bookmark not defined.
Earth Observations for Cultural Heritage Documentation	Error! Bookmark not defined.
Earth Observations for Disaster Risk Management	Error! Bookmark not defined.
Earth Observations for Geohazards, Land Degradation and Environmental Monitoring	Error! Bookmark not defined.
Earth Observations for Health (EO4HEALTH)	Error! Bookmark not defined.
Earth Observations for Managing Mineral Resources	Error! Bookmark not defined.
Earth Observations for the Water-Energy-Food (W-E-F) Nexus.....	Error! Bookmark not defined.
Forest Biodiversity in Asia and the Pacific Region: Capacity Building Phase.....	Error! Bookmark not defined.
GEO-CRADLE	Error! Bookmark not defined.
Global Agricultural Drought Monitoring.....	Error! Bookmark not defined.
Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC).....	Error! Bookmark not defined.
Global Flood Awareness System (GloFAS).....	Error! Bookmark not defined.
Global Flood Risk Monitoring	Error! Bookmark not defined.
GFCS - GEO Collaboration	Error! Bookmark not defined.
Global Mangrove Monitoring	Error! Bookmark not defined.
Harmful Algal Bloom (HAB) Early Warning System	Error! Bookmark not defined.
Himalayan GEOSS.....	Error! Bookmark not defined.
In-Situ Observations and Practices for the Water Cycle	Error! Bookmark not defined.
Land Cover and Land Cover Change	Error! Bookmark not defined.
Research Data Science Summer Schools	Error! Bookmark not defined.
Socio-Economic Benefits of Earth Observations	Error! Bookmark not defined.
Space and Security	Error! Bookmark not defined.
Synergized Multi-Source Remote Sensing Products and Services	Error! Bookmark not defined.
TIGGE (ThorpeX Interactive Grand Global Ensemble) Evolution Into a Global Interactive Forecast System (GIFS).....	Error! Bookmark not defined.

IMPLEMENTATION MECHANISMS INDEXED BY SOCIETAL BENEFIT AREA (SBA)

 **Biodiversity and Ecosystem Sustainability**

Flagship

GEO Biodiversity Observation Network (GEO BON)**Error! Bookmark not defined.**
Global Forest Observation Initiative (GFOI)**Error! Bookmark not defined.**

Initiative

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**
GEO Global Ecosystem Initiative (GEO ECO)**Error! Bookmark not defined.**
GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME)
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GEO Wetlands Initiative**Error! Bookmark not defined.**
Global Drought Information System (GDIS)**Error! Bookmark not defined.**
Global Urban Observation and Information.....**Error! Bookmark not defined.**
Global Wildfire Information System (GWIS)**Error! Bookmark not defined.**

Community Activity

African Geochemical Baselines**Error! Bookmark not defined.**
Earth Observations for Geohazards, Land Degradation and Environmental Monitoring **Error! Bookmark not defined.**
Forest Biodiversity in Asia and the Pacific Region: Capacity Building Phase**Error! Bookmark not defined.**
Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC)..... **Error! Bookmark not defined.**
Global Mangrove Monitoring**Error! Bookmark not defined.**
Land Cover and Land Cover Change**Error! Bookmark not defined.**

 **Disaster Resilience**

Initiative

Climate Change Impact Observation on Africa’s Coastal Zones (GEO-CCIOACZ)**Error! Bookmark not defined.**
Data Access for Risk Management (GEO-DARMA)**Error! Bookmark not defined.**
GEO Cold Regions Initiative (GEOCRI)**Error! Bookmark not defined.**
GEO Geohazard Supersites and Natural Laboratories (GSNL)**Error! Bookmark not defined.**
GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME)
.....**Error! Bookmark not defined.**
GEO Global Water Sustainability (GEOGLOWS)**Error! Bookmark not defined.**
GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**
Global Urban Observation and Information.....**Error! Bookmark not defined.**
Global Wildfire Information System (GWIS)**Error! Bookmark not defined.**

Community Activity

African Geochemical Baselines	Error! Bookmark not defined.
Chinese Tsunami Mitigation System	Error! Bookmark not defined.
Earth Observations for Disaster Risk Management	Error! Bookmark not defined.
Earth Observations for Geohazards, Land Degradation and Environmental Monitoring	Error! Bookmark not defined.
Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC).....	Error! Bookmark not defined.
Global Flood Awareness System (GloFAS).....	Error! Bookmark not defined.
Global Flood Risk Monitoring	Error! Bookmark not defined.
Land Cover and Land Cover Change	Error! Bookmark not defined.
TIGGE (ThorpeX Interactive Grand Global Ensemble) Evolution Into a Global Interactive Forecast System (GIFS).....	Error! Bookmark not defined.



Energy and Mineral Resources Management

Initiative

GEO Global Water Sustainability (GEOGLOWS)	Error! Bookmark not defined.
GEO Vision for Energy (GEO VENER).....	Error! Bookmark not defined.

Community Activity

Earth Observations for Managing Mineral Resources	Error! Bookmark not defined.
Earth Observations for the Water-Energy-Food (W-E-F) Nexus.....	Error! Bookmark not defined.
GEO-CRADLE	Error! Bookmark not defined.



Food Security and Sustainable Agriculture

Flagship

GEO Global Agricultural Monitoring (GEOGLAM).....	Error! Bookmark not defined.
Global Forest Observation Initiative (GFOI)	Error! Bookmark not defined.

Initiative

GEO Global Water Sustainability (GEOGLOWS)	Error! Bookmark not defined.
Global Drought Information System (GDIS)	Error! Bookmark not defined.

Community Activity

African Geochemical Baselines	Error! Bookmark not defined.
Earth Observations for Geohazards, Land Degradation and Environmental Monitoring	Error! Bookmark not defined.
Earth Observations for the Water-Energy-Food (W-E-F) Nexus.....	Error! Bookmark not defined.
GEO-CRADLE	Error! Bookmark not defined.
Global Agricultural Drought Monitoring	Error! Bookmark not defined.
Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC).....	Error! Bookmark not defined.

Land Cover and Land Cover Change**Error! Bookmark not defined.**

Infrastructure and Transport Management

Public Health Surveillance

Flagship

Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**

Initiative

AquaWatch.....**Error! Bookmark not defined.**

GEO Global Water Sustainability (GEOGLOWS)**Error! Bookmark not defined.**

Global Observation System for Persistent Organic Pollutants (GOS4POPS)**Error! Bookmark not defined.**

Global Urban Observation and Information.....**Error! Bookmark not defined.**

Community Activity

Airnow International: Expanding Networks & Integrating Methods for Air Quality & Health Data**Error! Bookmark not defined.**

Earth Observations for Health (EO4HEALTH)**Error! Bookmark not defined.**

Harmful Algal Bloom (HAB) Early Warning System**Error! Bookmark not defined.**

Sustainable Urban Development

Initiative

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**

Global Observation System for Persistent Organic Pollutants (GOS4POPS)**Error! Bookmark not defined.**

Global Urban Observation and Information.....**Error! Bookmark not defined.**

Community Activity

African Geochemical Baselines**Error! Bookmark not defined.**

Airnow International: Expanding Networks & Integrating Methods for Air Quality & Health Data**Error! Bookmark not defined.**

Chinese Tsunami Mitigation System**Error! Bookmark not defined.**

Earth Observations for Cultural Heritage Documentation**Error! Bookmark not defined.**

Global Flood Awareness System (GloFAS).....**Error! Bookmark not defined.**

Water Resources Management

Initiative

AquaWatch.....**Error! Bookmark not defined.**

Climate Change Impact Observation on Africa's Coastal Zones (GEO-CCIOACZ)**Error! Bookmark not defined.**

GEO Cold Regions Initiative (GEOCRI).....	Error! Bookmark not defined.
GEO Global Network for Observation and Information in Mountain Environments (GEO-GNOME)	Error! Bookmark not defined.
GEO Global Water Sustainability (GEOGLOWS).....	Error! Bookmark not defined.
GEO Wetlands Initiative	Error! Bookmark not defined.
Global Drought Information System (GDIS).....	Error! Bookmark not defined.

Community Activity

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Earth Observations for the Water-Energy-Food (W-E-F) Nexus.....	Error! Bookmark not defined.
GEO-CRADLE	Error! Bookmark not defined.
Global Agricultural Drought Monitoring	Error! Bookmark not defined.
Global Ecosystems and Environment Observation Analysis Report Cooperation (GEOARC).....	Error! Bookmark not defined.
Global Flood Awareness System (GloFAS).....	Error! Bookmark not defined.
Global Flood Risk Monitoring	Error! Bookmark not defined.
Harmful Algal Bloom (HAB) Early Warning System	Error! Bookmark not defined.
In-Situ Observations and Practices for the Water Cycle	Error! Bookmark not defined.
Land Cover and Land Cover Change	Error! Bookmark not defined.
TIGGE (Thorpex Interactive Grand Global Ensemble) Evolution Into a Global Interactive Forecast System (GIFS).....	Error! Bookmark not defined.



Cross-Cutting

Initiative

AfriGEOSS: Reinforcing Regional African Engagement.....	Error! Bookmark not defined.
AmeriGEOSS.....	Error! Bookmark not defined.
Asia-Oceania GEOSS (AOGEOSS)	Error! Bookmark not defined.
Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)	Error! Bookmark not defined.
EuroGEOSS	Error! Bookmark not defined.
GEO Carbon and GHG Initiative	Error! Bookmark not defined.
GEOSS-Evolve.....	Error! Bookmark not defined.
Oceans and Society: Blue Planet.....	Error! Bookmark not defined.

Community Activity

Access to Climate Data in GEOSS.....	Error! Bookmark not defined.
Advancing Communication Networks	Error! Bookmark not defined.
Citizen Observatories and Crowdsourcing.....	Error! Bookmark not defined.
Copernicus Atmospheric Monitoring Service (CAMS).....	Error! Bookmark not defined.
Copernicus Climate Change Service (C3S)	Error! Bookmark not defined.
Data Analysis and Integration System (DIAS)	Error! Bookmark not defined.
Digital GEOMUSUEM.....	Error! Bookmark not defined.

GFCS - GEO Collaboration	Error! Bookmark not defined.
Himalayan GEOSS.....	Error! Bookmark not defined.
Research Data Science Summer Schools	Error! Bookmark not defined.
Socio-Economic Benefits of Earth Observations.....	Error! Bookmark not defined.
Space and Security	Error! Bookmark not defined.
Synergized Multi-Source Remote Sensing Products and Services	Error! Bookmark not defined.

IMPLEMENTATION MECHANISMS INDEXED BY SUSTAINABLE DEVELOPMENT GOAL (SDG)



No Poverty

Initiative

GEO Geohazard Supersites and Natural Laboratories (GSNL)**Error! Bookmark not defined.**



Zero Hunger

Flagship

GEO Biodiversity Observation Network (GEO BON)**Error! Bookmark not defined.**

GEO Global Agricultural Monitoring (GEOGLAM).....**Error! Bookmark not defined.**

Initiative

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**

Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)**Error! Bookmark not defined.**



Good Health and Well-being

Flagship

Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**

Initiative

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**

Community Activity

Copernicus Atmospheric Monitoring Service (CAMS)**Error! Bookmark not defined.**



Quality Education

Initiative

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**



Gender Equality

Initiative

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**



Clean Water and Sanitation

Flagship

GEO Biodiversity Observation Network (GEO BON)**Error! Bookmark not defined.**

Initiative

AquaWatch.....**Error! Bookmark not defined.**

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**

Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)
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GEO Wetlands Initiative**Error! Bookmark not defined.**

Global Drought Information System (GDIS)**Error! Bookmark not defined.**

Community Activity

Copernicus Climate Change Service (C3S)**Error! Bookmark not defined.**

In-Situ Observations and Practices for the Water Cycle**Error! Bookmark not defined.**



Affordable and Clean Energy

Initiative

GEO Vision for Energy (GEO VENER).....**Error! Bookmark not defined.**

Community Activity

Copernicus Atmospheric Monitoring Service (CAMS)**Error! Bookmark not defined.**

Copernicus Climate Change Service (C3S)**Error! Bookmark not defined.**



Decent Work and Economic Growth

Initiative

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**

Community Activity

Socio-Economic Benefits of Earth Observations**Error! Bookmark not defined.**



Industry, Innovation and Infrastructure

Flagship

Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**



Reduced Inequalities

Initiative

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**



Sustainable Cities and Communities

Initiative

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**

Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)**Error! Bookmark not defined.**

GEO Geohazard Supersites and Natural Laboratories (GSNL)**Error! Bookmark not defined.**

GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources. **Error! Bookmark not defined.**

Global Urban Observation and Information**Error! Bookmark not defined.**

Community Activity

Copernicus Atmospheric Monitoring Service (CAMS)**Error! Bookmark not defined.**

Copernicus Climate Change Service (C3S)**Error! Bookmark not defined.**



Responsible Consumption and Production

Flagship

Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**

Initiative

Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**



Climate Action

Flagship

Global Forest Observation Initiative (GFOI)**Error! Bookmark not defined.**

Community Activity

Copernicus Atmospheric Monitoring Service (CAMS)**Error! Bookmark not defined.**

Copernicus Climate Change Service (C3S)**Error! Bookmark not defined.**



Life below Water

Flagship

GEO Biodiversity Observation Network (GEO BON)**Error! Bookmark not defined.**

Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**

Initiative

- AquaWatch.....**Error! Bookmark not defined.**
- Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**
- Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)
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- Oceans and Society: Blue Planet.....**Error! Bookmark not defined.**



Life on Land

Flagship

- GEO Biodiversity Observation Network (GEO BON)**Error! Bookmark not defined.**
- Global Forest Observation Initiative (GFOI)**Error! Bookmark not defined.**

Initiative

- AquaWatch.....**Error! Bookmark not defined.**
- Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**
- Earth Observations in the Service of the 2030 Agenda for Sustainable Development (EO4SDGs)
.....**Error! Bookmark not defined.**
- GEO Wetlands Initiative**Error! Bookmark not defined.**

Community Activity

- Forest Biodiversity in Asia and the Pacific Region: Capacity Building Phase**Error! Bookmark not defined.**



Peace, Justice and Strong Institutions

Initiative

- Earth Observations for Ecosystem Accounting (EO4EA)**Error! Bookmark not defined.**
- GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources.**Error! Bookmark not defined.**

Community Activity

- Forest Biodiversity in Asia and the Pacific Region: Capacity Building Phase**Error! Bookmark not defined.**



Partnerships for the Goals

Flagship

- Global Forest Observation Initiative (GFOI)**Error! Bookmark not defined.**
- Global Observation System for Mercury (GOS4M)**Error! Bookmark not defined.**

Community Activity

- Forest Biodiversity in Asia and the Pacific Region: Capacity Building Phase**Error! Bookmark not defined.**

