GEO | GOS⁴M

GLOBAL OBSERVATION SYSTEM FOR MERCURY

Satellites

Monitoring sites

Aircraft

Research vessels

Models
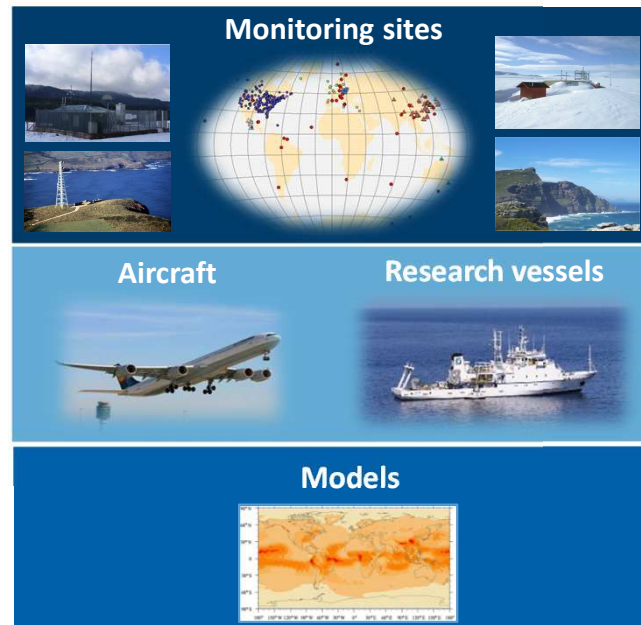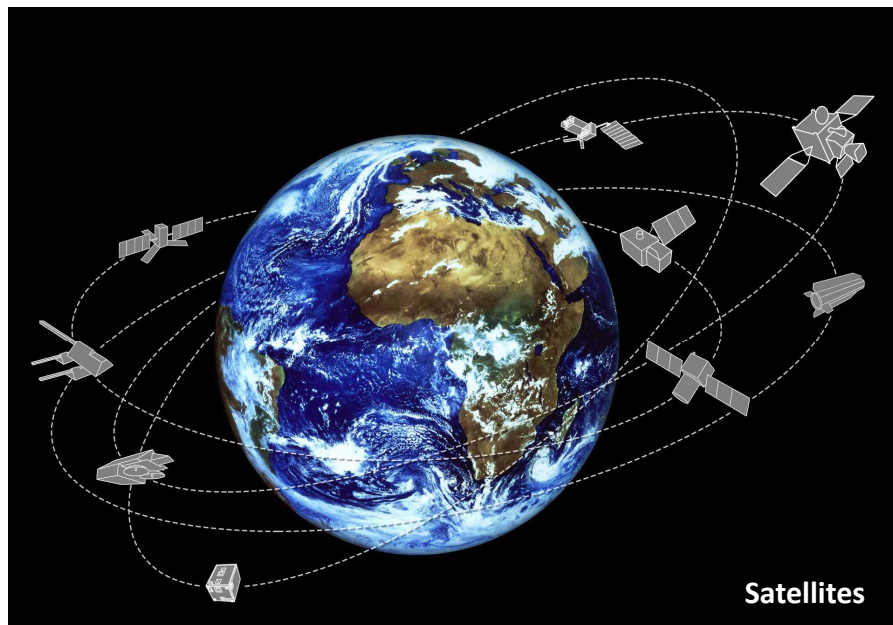
What is GOS⁴M?

The **G**lobal **O**bservation **S**ystem **for M**ercury (**GOS⁴M)** is a **GEO Flagship** aimed to provide an infrastructure for knowledge generation to support the Minamata Convention on Mercury and the United Nations 2030 Agenda for Sustainable Development (SD).

Aim

GOS⁴M specifically aims to:
- **Increase** the availability and quality of **observation** data and information
- **Federate** on-going national & regional networks
- **Harmonize** SOPs for monitoring & **metadata** production, archiving and **data sharing**
- **Contribute to the GEO Knowledge Hub** to support Countries in the implementation of the Minamata Convention on mercury and assist interested parties in achieving the targets of UN 2030 Agenda for SD

What does it offer?

- High-quality and comparable data of mercury concentrations and fluxes in air, ocean and terrestrial ecosystems
- Validated models to assess the fate of mercury in air and oceans
- A fully integrated Knowledge Hub for assessing the effectiveness of policy measures

Outcomes

A Knowledge Hub to support decision-makers in the assessment of the effectiveness of measures by co-designing different policy scenarios at national or regional levels.
The Knowledge Hub will permit the assessment of mercury fate, from sources to receptors, and estimate of costs associated with policies.

www.gos4m.org

GEO

SUSTAINABLE DEVELOPMENT GOALS

The GOS⁴M Knowledge Hub

From Observational Data to Knowledge

The **GOS⁴M Knowledge Hub** as a contribution to the GEO Knowledge Hub integrates high-quality observational data, model outputs and digital tools to co-design policy scenarios and support policy makers in selecting cost-effective strategies that would allow a Nation or a Region to achieve the target(s) of environmental legislation.

The Minamata Convention and the UN 2030 Agenda are the primary legal frameworks that the GOS⁴M Knowledge Hub is designed to respond to.

The Knowledge Hub is based on five knowledge pillars.

1. Knowledge Collection
Earth Observation data and products retrieving

Domain Expert

GOS⁴M

GEO Knowledge Hub

2. Knowledge Formalization
Information catalog (metadata creation) & Algorithms and models documentation construction

Domain Expert

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3. Knowledge Sharing

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End-User

Visualization Searching

4. Knowledge Use

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Domain Expert

Scenarios & Analyses

5. Knowledge Generation

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GEO Knowledge Hub

Decision maker Policy maker

Economic assessment

Governance

The organizational structure of GOS⁴M is comprised of the following Governing Bodies:

- A Steering Committee
- A Scientific Advisory Board

Members of each Governing Body are appointed every three years.

Each Governing Body shall elect a Chair and three co-Chairs among their Members.

More details will be defined at the first Flagship meeting.

How Participants may contribute

- By providing monitoring data, contributing to the co-design of policy scenarios, providing atmospheric and oceanic model output, contributing to socio-economic evaluations, supporting the development & validation of tools for data analysis and virtual interactive tools for end-users that will be part of the **GOS⁴M Knowledge Hub**.

- By interacting with policy makers and stakeholders at national level.

- By participating at GEO meetings and in research projects that the GOS⁴M community will develop in the near future.

- By joining the governance of the GOS⁴M Flagship.

To get involved, contact:

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