

The Space for Climate Observatory

Supporting EO-based applications for climate action

The SCO aims to provide operational tools and studies to help decision-makers to adapt to climate change,

especially at a **local scale**, using satellitebased observation tools together with insitu data and models.









Transparency of its actions, of data used and provided local capacity building Sharing of knowledge effective applications for climate change adaptation

The four pillars of SCO





































Addressing the SDGs



An alliance of 29 space agencies and organisations



Stimulate actions
through projects

to design operational tools
for decision-makers

Governments

Local authorities

Space agencies

Meteorological agencies

R&D centres

Copernicus program

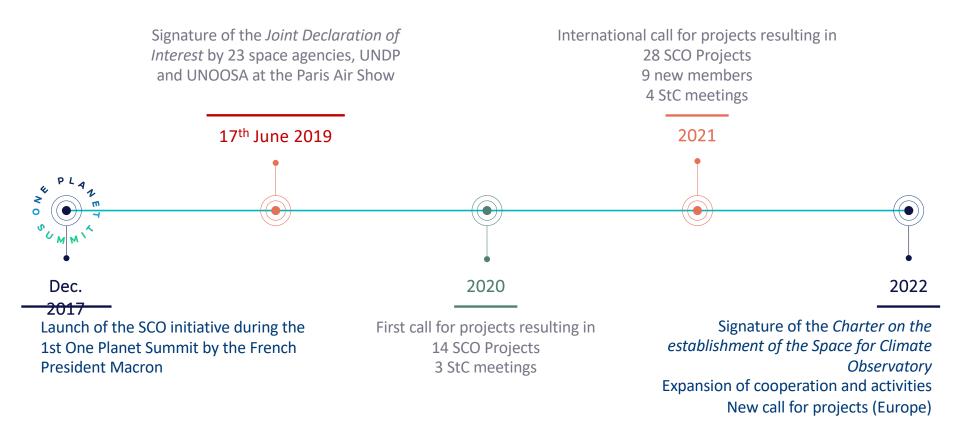
Private companies

Computing infrastructures

Group of Earth Observations

Etc.

Overview of the SCO since its launch



France and Europe call for SCO Projects 2022/2023

From Sep. 1st to Nov. 15th, 2022 All of Europe



Each project is assessed by three different reviewers and graded

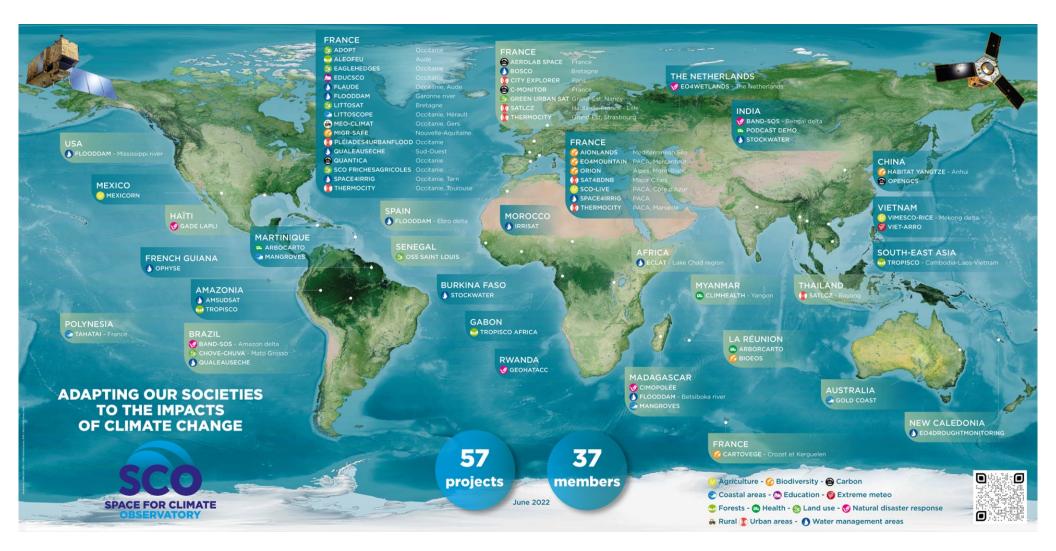
Grade A Project in full adequation with SCO criteria

Grade B ↑
Project still lacking on certain aspects

Grade C or D

Project too far removed from the expectations

This call for Projects is open to all interested European Signatories.



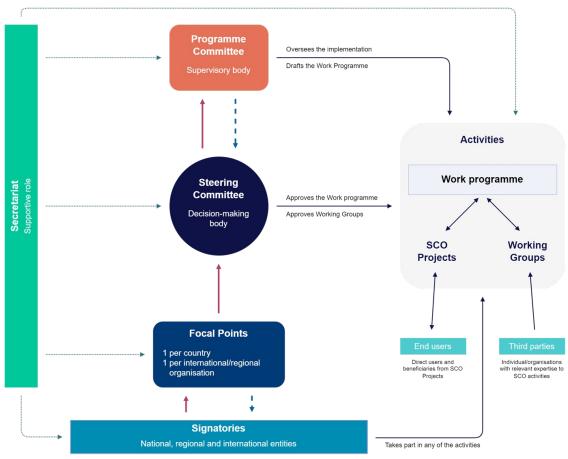


Sentinel-2 (26) Sentinel-1 (22) Satellite data in SCO Projects (2) (3) 20 15 10 5 Other Copernicus CRTS TanDEM-X (1) CCI (3) TerraSAR-X (2) DLR ESA SMOS (2) **EUMETSAT CNSA** EUMETSAT Meteosat (2) Gaofen-2(1) **CNES** NASA AIRS (1) SPOT World Heritage (2)

The Charter on the establishment of the Space for Climate Observatory (SCO)

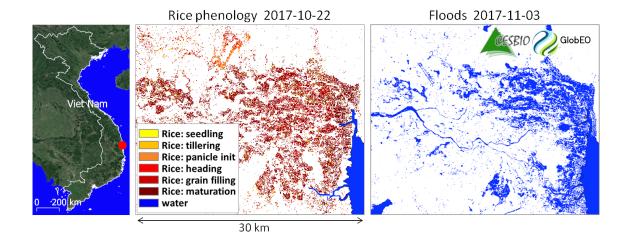
- Long-standing drafting process involving all members and under coordination of UNOOSA
- Formalising and clarifying the objectives, activities and functioning of the SCO
- Creating new opportunities for cooperation (Working Groups, Work Programme, etc.)
- Developing a more multilateral and decentralised governance





VietARRO _ Vietnam Agriculture Resilient Recovery Observatory

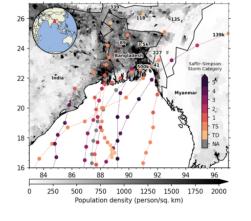
- Triggered in the framework of SCO (Typhoon Damrey, 2017)
- Managed by CNES and VAST/VNSC with the support of Athena Global
- Target user: Ministry of Agriculture and Rural Development, Vietnam National Disasters Management Agency (MARD/VNDMA)
- Need to assess accurately affected rice extent and yield loss and to monitor agriculture recovery process
- Products: Water extent/flood maps (time series, duration), Rice maps, Growth status, Sowing dates,...



BANDSOS: Bangladesh Delta Floodings. An integrated framework for social adaptation to cyclone surges

Bengal Delta :

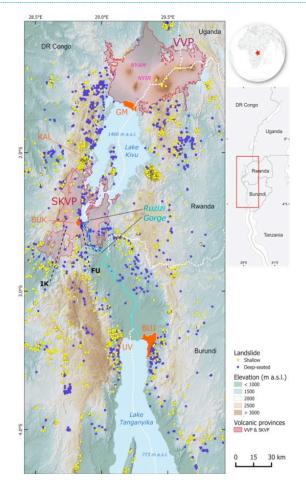
- the broadest tropical delta, across India and Bangladesh
- densely populated (150 M p.)
- Extremely vulnerable to coastal floodings
- 5% of the global cyclones but 75% of global casualties
- Objectives: Translate a state-of-the-art forecasting platform (including natural hazard and socio-spatial vulnerability) into preoperational mode and transfer it to the Flood Forecasting and Warning Center (FFWC).
- Start : April 2022. Duration : 24 months.





GeoHaTACC: Geo-Hydrological Hazards triggered by rain in Tropical Africa: A demonstrator for Rwanda to document the effects of Climate Change

- Objective: To build exhaustive inventories of Geohydrological hazards in Rwanda based on Satellite data and Media associated to information on forcing triggering meteorological event (rain)
- P.I.: Jean-Philippe Malet, Aline Deprez (Institut Terre et Environnement de Strasbourg/CNRS)
- Partners: MINEMA (Ministry of Disaster Management, Meteo Rwanda, Ministry of Environment, Land, Water and Forestry, Rwanda Water and Forest Authority, Centre for Research on Epidemiology of Disasters, UCLouvain, Musée Royale de l'Afrique Centrale
- Start : October 2022. Duration : 24 months.





Online activity

www.spaceclimateobservatory.org



Newsletter: www.spaceclimateobservatory.org/newsletter
Projects: https://www.spaceclimateobservatory.org/projects

