

European Space Agency – Future Earth joint programme call for proposals 2021: Biodiversity, climate impacts on human health, climate tipping elements

Overview

The European Space Agency (ESA) and Future Earth have [partnered](#) to facilitate the development and uptake of Earth observation data by Future Earth's research networks.

There is seed funding to support research activities on the use of satellite data to provide empirical evidence of environmental and ecosystem change, and the risk these pose to society.

Proposals are particularly welcomed on the themes of biodiversity, climate impacts on human health, or climate tipping elements, to better understand feedbacks, interactions and instabilities, but note that the call is not exclusive to these themes. This is an open call to the Global Research Networks (GRPs and KANs) of the [Future Earth community](#). The activities should address pressing research questions that are a priority for the networks.

Award Information

Funding amount: up to €20,000.

Estimated number of awards: 2-3

Eligibility

Proposals must be developed with Future Earth GRP SSC members or working group leads as participants, or KAN development committee members or working group leads as participants, and be submitted by the GRP or KAN administrative officer (IPO). There are no restrictions on who may lead the proposals. Please limit submissions to a maximum of two proposals per network.^[SEP]

Scope of proposals

Proposals should justify and cost for the following activities:

- A workshop and coordinated synthesis report (support for coordination for virtual or hybrid meetings, or for participant travel);
- A workshop and call for papers in a journal special issue (support for coordination for virtual or hybrid meetings, or for participant travel);
- Secondments or placements to build capacity of the network (support for travel and expenses);
- Training or working group study/writing weeks (support for coordination, participant travel and hosting);
- Organising and hosting hackathons: proposals could consider use of analysis platforms, data cubes or other digital interfaces that ESA has developed to support access and analysis of EO data (see links section of this call).
- Other research activities to increase participation and impact of the research network.

Due dates

All proposals must be submitted by 30th September 2021. The proposals will be reviewed and selected by a committee from the Future Earth secretariat and ESA's Science, Applications and Climate Office. Awarded projects will be notified by 31st October 2021.

Completion of the activity is required no later than December 2022.

Proposal Preparation and Submission information

- 1) Proposals should be a minimum of three and a maximum of four A4 pages (excluding CVs) in 11-point Times New Roman font.
- 2) The proposal should include the following sections: 250-word abstract, problem statement, activity plan, expected outcomes and success criteria, lead participant and supporting participant CVs, financial support required, lead participant contact information.
- 3) Proposals can request support of up to €20,000.

- 4) All proposals must be submitted by 30th September 2021 via email to sophie.hebden@futureearth.org

Review Criteria

- Proposals will be assessed by the extent of their contribution to the science plan of the network, and to projects and work streams in other GRPs or KANs, or working groups of international partners such as GEO or WCRP (growing the networks and their impact).
- Proposals should have use of ESA's Earth observation data at the core of the research questions or intended activities (maximising use of ESA data).
- Proposals are encouraged to consider support for the participation of Early Career Researchers, researchers in the Global South (widening participation).
- Consideration will be given to the feasibility of the proposal, expected impact and societal relevance, and proportionality of the funding sought.

Administrative and legal information

Awards will be administered by the Future Earth Sweden hub for cost-reimbursement of the host academic institution of the lead participant, and submission of an activity summary report. Publications and other types of outputs and products arising should acknowledge ESA and Future Earth supporting this activity.

Any assets created should follow the [Belmont Forum open data policy and principles](#) and conform to GDPR and [ESA's data protection policies](#).

Completion of the activity is required no later than December 2022.

Climate Change Initiative: Essential Climate Variables

ESA has developed a suite of Essential Climate Variable (ECV) data products in response to the UNFCCC's need for systematic observations of the climate system. ESA's [Climate Change Initiative](#) (CCI) products merge data from multiple satellites and sensors to create long time-series of climate variables that are stable and consistent over time. They have primarily been developed for climate modellers but ESA would like to consult the science community for additional data products and novel applications of the ECVs – particularly the new, higher resolution land-based datasets such as high-resolution land cover, land surface temperature and biomass - in the wider climate and environmental science community, particularly for challenges that relate to biodiversity and climate tipping elements. To support access and use of these datasets, they are freely available through the CCI [Open Data Portal](#), and can be viewed and explored on the [Climate from Space web-app](#) and manipulated and analysed using the online [Cate Toolbox](#).

Useful links

- Further [information](#) about the ESA-Future Earth Joint Program
- ESA CCI's [Climate from Space web-app](#), [Data Access](#), and [Cate Toolbox](#)
- Copernicus [Climate Data Store](#)
- Future Earth Research [Networks](#)
- Access Copernicus Sentinel data online via [Sentinel hub](#)
- [Satellite Earth Observations in Support of the Sustainable Development Goals](#) (CEOS EO Handbook Special 2018 edition)
- ESA's [EO Science for Society](#) projects, training and further ITTs
- ESA's [Earth observation for sustainable development initiative](#)
- NASA's [online datasets](#)
- [PREP](#), [WRI](#), [GEO](#) websites
- The [Earth Commission](#) is developing safe and just targets for people and planet as part of the [Global Commons Alliance](#), tailored into tangible targets for action at country, city and company-scales through the [Science Based Targets Network](#)

Questions?

If you have any questions please contact:

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