

European Space Agency – Future Earth

Call for proposals 2016

Overview

The European Space Agency and Future Earth have partnered to bring the latest Earth observation data and understanding to Future Earth's research through Future Earth's Core Projects, Fast Track Initiatives and Knowledge Action Networks. The current partnership is for three years from 2016, with funds available for activities that help strengthen this partnership, and promote the use of Earth observation data in the Future Earth community. This year there is an open call to Future Earth projects, comprising two elements outlined below.

Call for proposals

1. Joint ESA-Future Earth Activities: novel use of ESA data to support Future Earth

The proposals should aim to make use of ESA current and archived mission data, products and tools to progress the overall research objectives of Future Earth. In particular, in order of preference:

Exploitation of the Essential Climate Variable datasets

ESA has been developing a number of Essential Climate Variable data products, in response to the UNFCCC's need for systematic observations of the climate system. These products merge data from multiple satellites and sensors to create long time-series of climate data, which are as stable and consistent as possible, over time. They have primarily been developed for climate modellers but ESA would like to explore other applications of the ECVs in the wider climate and environmental science community.

ECV datasets developed as part of ESA's [Climate Change Initiative](#) programme include: *Aerosol, CO₂, CH₄, Ozone, Clouds, Land Cover, Soil Moisture, Fire, Glaciers, Ice Sheets, Sea Ice, SST, Ocean Colour, Sea Level.*

Support for International Conventions and Agreements

A number of multilateral agreements and international assessments have been agreed upon, which aim at reducing environmental degradation and improving sustainable development, such as the UNFCCC, CBD, UNCCD, SDGs and IPCC, IPBES. Implementing these requires the collection, analysis and understanding of a large amount of environmental information, from local to global scales. Earth observation data can significantly contribute through improving the scientific knowledge of the environmental problems; informing and improving national responses to these agreements and assessments; contributing to the creation of common databases and reporting procedures among different conventions.

This call encourages the use of [ESA and European satellite data](#), both from the archives to currently operational missions, such as the [Sentinels](#), in order to support the implementation of international agreements and assessments.

Thematic Exploitation Platforms

The expanding operational capability of global monitoring from space, combined with data from long-term EO archives, in-situ networks, and models provide researchers with a wealth of data about the Earth system. To enable easier access and exploitation of this information, data platforms are being developed by ESA along a number of themes. These '[Thematic Exploitation Platforms](#)' use cloud computing to move the user to the data and tools, as opposed to downloading, replicating, and exploiting data 'at home'. The virtual workplaces provide access to relevant EO and non-EO data, in one place.

The Exploitation Platforms are under development phase until 2017, therefore this call supports feedback on their design, usefulness, along with collaborations to include non-EO datasets and testing of the platforms.

Exploitation Platform themes: *Coastal, Urban, Polar, Forestry, Hydrology, Geohazards (in development: Food Security)*.

2. Travel funds to engage Future Earth in the Earth Observation community

Funds are available to bring Future Earth scientists to meetings organised or supported by ESA. These can be ESA's own events, organised with the scientific community, and also meetings of GEO, CEOS, COSPAR etc. involving the wider Earth observation community.

Upcoming [ESA events](#):

- [Atmospheric Composition Validation and Evolution 2016](#)
18 - 20 October 2016
- [International workshop on measuring high-wind speeds over the ocean](#)
15 - 17 November 2016
- [Ocean salinity and water cycle variability session at AGU Fall Meeting 2016](#)
12 - 16 December 2016
- [FLEX 2017 workshop](#): fluorescence, photosynthesis and vegetation status
17 - 19 January 2017
- [Workshop on Vicarious Adjustment](#): SI traceability of Fiducial Reference Measurements
21 - 23 February 2017
- [WorldCover 2017 Conference](#): Land Cover mapping – priority setting
14 - 16 March 2017
- [Fringe 2017](#): Science and Applications of SAR Interferometry and Sentinel-1 InSAR
05 - 09 June 2017

Funding

1. Joint ESA-Future Earth Activities: novel use of ESA data to support Future Earth
ESA-Future Earth expect to fund four activities of around €12,000 each in this call.

2. Travel funds to engage Future Earth in the Earth Observation community

Funds are available throughout the year to bring Future Earth scientists to meetings organised or supported by ESA.

Guidelines

1. Joint ESA-Future Earth Activities: novel use of ESA data to support Future Earth

Each proposal should ideally bring together two or more Future Earth Core Projects, FTIs, KAN participants, and partners in the proposal. They should make use of ESA data resources and tools, in particular covering the areas outlined above.

1. Proposals should be a maximum of two A4 pages.
2. The proposal should include the following sections: Title of activity, proposed dates, overall focus, goals and structure of the activity, the intended scientific outcomes, and contact information for the key science leaders.
3. Use of ESA data is not exclusive; proposals that link with other data (EO, in situ, socio-economic, etc.) are encouraged.
4. It is envisaged that this funding will primarily be for workshops or meetings; there is flexibility in its use but it should not be used to fund individual researchers.
5. These funds should only be used for direct workshop/meeting costs and not for institution overheads.
6. The activity should be completed within a year of receiving the funding.
7. The workshop should be badged with the ESA and Future Earth logos and all products from the workshop should clearly mention ESA and Future Earth.
8. A report of the activity should be prepared after the event (500-1000 words) suitable for the Future Earth blog.

2. Travel funds to engage Future Earth in the Earth Observation community

The meetings must be organised or supported by ESA. Applications for this funding can be made throughout the year by email to [Cat Downy](mailto:Cat.Downy@esa.int).

Deadline for proposals: 21st October 2016

The proposals will be reviewed by a committee made up of the Future Earth Data Task Force, relevant Future Earth secretariat members and ESA's Science, Applications & Future Technology Division.

If you have any questions on the eligibility of a proposal please contact [Cat Downy](mailto:Cat.Downy@esa.int).

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