

EARTH OBSERVATION CLIMATE INFORMATION SERVICE

Second Call for Ideas for Actionable Information Projects

The UK Earth Observation Climate Information Service (EOCIS) seeks partners for projects to develop concepts that will increase the uptake of climate data from Earth observation (EO) within business, public good and decision-making sectors. This Call for Ideas is the first stage of developing these projects.

'Actionable information' is, in this context, 'EOCIS data presented in a form and context supportive of climate action' by users without requiring users to have EO expertise. This encompasses a range of possibilities from informative visualisations to the embedding of actionable information within formal disciplinary practices, e.g., within planning.

Headline features of Call for Ideas

- Funding at a flexible case-specific level between £10,000 and £100,000 per project will be dedicated to "actionable information projects" (AIPs).
- Interaction with EOCIS science lead at pre-submission stage is encouraged.
- Call for ideas: submission window: 1 February 2024 to 15 April 2024.
- Confidentiality and case-by-case approach to intellectual property.
- Ideas to be pursued as AIPs will be developed into an agreed statement of work jointly between proposer and EOCIS.
- AIP projects will involve:
 - o Focus on concepts for data-to-information transformation
 - Use of EOCIS data, particularly combinations of data
 - At least one EOCIS and one non-University non-EOCIS partner
 - Full funding of time and travel (or national capability formula for academics)
- All activity and invoicing to be completed by 28 February 2025.

Further details

Funding. Funding will be project-specific between £10,000 and £100,000, commensurate with the project's ambition and impact.

Non-EOCIS, non-University partners (e.g., commercial entities, NGOs, government agencies) may be funded up to the normal charge-out cost for the agreed dedicated effort plus agreed expenses.

All University partners (whether an EOCIS consortium institution or otherwise) will be funded under the National Capability formula applicable for EOCIS. Note: this involves a smaller provision for overheads than standard research council grants.

All deliverables must be accepted and invoices must be received by 28 February 2025. No payments can be made outside of the financial year 2024-25.

Eligibility. Every AIP will involve at least one EOCIS core partner institution and at least one non-EOCIS non-academic UK organisation (commercial, not-for-profit, charitable, or public sector).

Non-EOCIS universities may also participate as external partners in combination with one or more non-academic external partners.

In-kind contributions and effort are welcomed, but all partners may be funded for effort and agreed expenses (such as travel) subject to the notes above under "Funding".

Scope. AIPs shall involve evidence-based development of methods to transform EOCIS scientific data/datasets into novel, contextualised provisions of information in a form actionable by clearly identified users for specific climate-action related purposes.

Without implying any restriction of topic, the follow examples topic areas are given:

- Local authority planning
- Climate risk to infrastructure
- Habitat assessment or change
- Adding value/detail to climate projections
- Impacts of climate-related events
- Support of net zero goals or UNFCCC obligations
- Environmental health

It is not essential to propose prototyping of a climate service for an AIP, the focus being on innovation in actionable forms of information, based on evidence of suitability to drive actual uptake of actionable information in climate-related action or decision making. However, projects that demonstrate potential services are welcome.

Process. This round of call for ideas is open 1 February 2024 to 15 April 2024 (5pm GMT). Ideas may be submitted at any time within the submission window. Ideas will be reviewed

on a rolling basis with decision meetings of the EOCIS project management group scheduled for: 20 February, 19 March and 16 April. Early development and submission of ideas is encouraged.

Potential submitters are welcome to discuss concepts at an early stage with the EOCIS project lead, Prof. Chris Merchant, by e-mailing eocis@reading.ac.uk in the first instance. This includes the discussion of potential EOCIS partners with external organisations, where helpful.

Once an idea is formulated and agreed between EOCIS and non-EOCIS partners, submitters will complete and submit the call for ideas response form, using the link on the EOCIS Announcements and Opportunities page.

The response form comprises a user-focused problem statement, solution concept, roughorder-of-magnitude (ROM) effort and cost estimates and the partners. There is no word limit, but succinct information is encouraged.

At decision meetings, the EOCIS project management group will triage submitted ideas into the following categories:

- take no further
- explore further and invite to resubmit
- take forward

Ideas taken forward will be formulated into a statement of work by negotiations addressing the following:

- task descriptions
- milestones and deliverables
- intellectual property arrangements
- project Gantt chart
- budget (to be broadly consistent with ROM cost)

EOCIS (University of Reading) will issue a single-action procurement, the response to which will be appraised for compliance with respect to the statement of work and budget.

Confidentiality and intellectual property. All information submitted in response to the call for ideas and subsequent interactions will be confidential and used by EOCIS staff only in pursuit of the AIP. Ownership of intellectual property (IP) arising from the AIP will generally be joint between University of Reading (as procuring institution, held on behalf of the National Centre for Earth Observation) and AIP partners, although other IP ownership arrangements may be negotiated case by case, depending on the nature and context of the idea. Whether through joint IP ownership or other arrangements (e.g., licensing) information datasets arising from the AIP activities shall be presented and made available by EOCIS, including for scientific publication and promotional purposes.

Where similar or overlapping ideas are submitted, adherence to this confidentiality policy will not prevent (i) pursuit of an AIP with one successful submitter, nor (ii) discussion of other possibilities such as merging proposals.

EOCIS datasets. EOCIS datasets are in a variety of stages of maturity. AIPs shall be formulated appropriately with respect to EOCIS dataset maturity, and ideas applicable to transforming EOCIS datasets that are still in developing are not precluded. EOCIS datasets are associated staff are listed on the next two pages.

Climate data record / essential climate variable		
Global datasets		
Aerosol and particulate matter	Peter North, NCEO Swansea University	
Surface radiation / cloud / aerosol	Brian Kerridge, NCEO Rutherford Appleton Laboratory	
Fire occurrence and fire emissions	Martin Wooster, King's College London David Moore, NCEO University of Leicester	
Land and lake surface temperature	Darren Ghent, NCEO University of Leicester Laura Carrea, University of Reading	
Methane, water vapour and ozone	Brian Kerridge, NCEO Rutherford Appleton Laboratory Rob Parker, NCEO University of Leicester	
Ocean reflectance and chlorophyll	Shubha Sathyendranath, NCEO Plymouth Marine Lab	
Sea surface temperature	Owen Embury, NCEO University of Reading	
Regional datasets		
Ice sheet mass	Andrew Shepherd, CPOM University of Northumbria	
Ice sheet velocity, Antarctica	Anna Hogg, University of Leeds	
Arctic sea ice	Andrew Shepherd, CPOM University of Northumbria	
Soil moisture, Africa	Tristan Quaife, NCEO University of Reading	

Climate data at high resolution for the UK: variable	Activity lead & organisation
Coastal-zone water colour	Steve Groom, NCEO-PML
Aerosol and particulate matter (hi-res)	Peter North, NCEO Swansea University
Lake catchment change	Stefan Simis, NCEO-PML
Urban flood extents	Sarah Dance, NCEO University of Reading
Rapid fire detection and management	Martin Wooster, NCEO King's College London
	Kevin Tansey, University of Leicester
Multi-satellite harmonisation to support downscaling	Sam Hunt, National Physical Laboratory