

## EARTH OBSERVATION CLIMATE INFORMATION SERVICE

## 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 at any time up to 5 September 2023 for this round.
- 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:
  - $\circ$   $\;$  Focus on concepts for data-to-information transformation
  - Use of EOCIS data
  - At least one EOCIS and one non-University non-EOCIS partner
  - Full funding of time and travel (NC funding for EOCIS partner)
- For this round, all activity and invoicing must be completed before 31 March 2024.

• Further round to follow for completion within April – March 2025.

## Further details

**Funding.** Funding will be project-specific up to £100,000. The "external" partner(s) will not be an EOCIS institution or University, and may be funded up to the normal charge-out cost for the agreed dedicated effort plus agreed expenses. The EOCIS partner(s) will be funded under the National Capability formula applied for EOCIS as a whole. All deliverables and invoices must be received before the end of the financial year (31 March 2024).

**Eligibility.** Every AIP will involve at least one EOCIS core partner institution and at least one non-University non-EOCIS UK organisation (commercial, not-for-profit, charitable or public sector). In-kind contributions and effort are welcomed, but all partners may be funded as necessary for effort and agreed expenses (such as travel).

**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.

**Process.** This round of call for ideas is open until 5 September. Ideas may be submitted at any time and will be reviewed on a rolling (monthly) basis; 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 <u>eocis@reading.ac.uk</u> 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. At monthly meetings on 10<sup>th</sup> July, 14<sup>th</sup> August and 11<sup>th</sup> September 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 negotiation in sequence of 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 on compliance of the procurement response 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 will 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 preferred 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	Activity lead & organisation
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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:	Activity lead & organisation
variable	

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