

**Research Fellowship on Satellite Data for Climate Research
Directorate of Earth Observation Programmes
European Space Agency, ECSAT, UK**

Overview of the Office's mission

The overall goal of the ESA Climate Office is to expand awareness, use and scientific impact of EO data records, principally from ESA missions, working with the international climate research and modelling communities.

This is achieved through the following lines of activities:

- Implementation of the [Climate Change Initiative](#) programme (CCI), that aims to develop a lasting and structured dialogue with climate research and modelling communities worldwide, analysing their needs for long-term satellite-based observations of the climate system, as expressed via GCOS, and assessing their feedback on available EO data records;
- Translating these needs into technical performance specifications for Fundamental Climate Data Records and Essential Climate Variables based on the complete ESA EO mission archives, taking due care to account for the nature of different missions;
- Initiating and managing a suite of scientific analyses, data exploitation and system development activities to enhance ESA's capability to generate Fundamental Climate Data Records (FCDRs) and Essential Climate Variables (ECVs). These FCDRs and ECVs respond comprehensively to the needs of users in the climate change community for climate re-analysis, modelling, attribution, projection, prediction, trends assessment, and data assimilation, as well as validation of the data sets with the corresponding scientific users.

Overview of the field of activity proposed

In the framework of the above described context the selected candidate could choose to be involved in various activities depending on their previous research experience. In order of preference, the suggested topics for potential research fellows are:

- Participating in activities related to the use of ECV such as Data visualisation or Data assimilation.
- Developing activities common to a subset of Climate projects in an area such as data management (archiving, pre-processing, post-processing), processing or climate domains (Atmospheric, Land and Ocean).
- Working with one of the various CCI projects directly managed by the ESA Climate Office (Cloud_cci, Sea_Ice_cci, Soil_Moisture_cci, Fire_cci and Glaciers_cci). Websites for these projects are linked from the main [CCI page](#) (<http://www.esa-cci.org/>).
- Working to support cross cutting activities such as System Engineering, Data Harmonisation, Climate Applications and Research.

We encourage a wide range of proposals and can be reasonably flexible in what subjects can be covered.

Required qualifications

Applicant should be early career researcher and must have completed their PhD (or equivalent studies) in a subject relevant to the work done by the Climate Office, i.e. climatology/meteorology/ hydrologic or environmental sciences. Additional educational background in engineering or computer science is an asset.

Familiarity with and/or experience in one or more of the following subjects is preferable:

- data harmonisation, visualisation or assimilation
- climate science in relation to Earth Observation,
- handling large data volumes preferably those derived from satellite sensors.

Applicants should have good analytical and communication skills and should be able to work in a multicultural environment in a fairly autonomous manner.

Applicants must be fluent in either English and/or French, the working languages of the Agency. A good proficiency in English is required.

How to Apply

Information on the ESA Research Fellowship Programme and the application form are available at:

http://www.esa.int/SPECIALS/Careers_at_ESA/SEMICLRTJRG_o.html.

Applicants should send their application as described on the ESA web site (CV, covering letter, description of the research interest, list of publications and the filled-out RF application form) to temp.htr@esa.int. If not possible by email, the reference letters can also be sent via normal mail to: ESTEC HR Division, HFC-HOM, ESA/ESTEC; Keplerlaan 1, PO Box 299, 2200AG Noordwijk ZH, The Netherlands).

Applications satisfying the general conditions for eligibility, to be submitted by 20 June 2014, will be evaluated and successful applicants will be invited for an interview.

Interested candidates are highly encouraged to visit the ESA website: www.esa.int.