

Traineeship Opportunity for “Young Graduate Trainees”

Reference	Field of specialisation	Duty Station	Closing Date
ESA/YG-ESRIN(2015)002	Earth Observation Exploitation	ESRIN	15 December 2015

Overview of the Division's mission

The Exploitation and Services Division and the Science Strategy, Coordination & Planning Office, based at ESA/ESRIN in Frascati Italy, stimulate exploitation of Earth Observation data by the research community, public sector, and industry. It maintains close contact with research teams worldwide, who exploit data from ESA and third party EO missions, including Earth Explorers, Sentinels and archives (ERS, ENVISAT). The team works with international scientific programmes, and supports European and Canadian EO value-adding industry to develop innovative EO-based services.

Activities in the coming year will focus on scientific exploitation of data from the Sentinel and Earth Explorer missions with innovative approaches to EO science and applications via open science methods and tools (http://www.esa.int/spaceinvideos/Sets/Earth_Observation_Open_Science_2.0).

Overview of the field of activity proposed

The successful Young Graduate Trainee (YGT) will:

- explore new, open science based approaches and data analytics techniques (e.g. self organizing maps) for validation and exploitation of EO-based global data sets (e.g. global land cover, soil moisture etc.). The goal is to uncover patterns, anomalies, trends in multivariate data sets, that can help better understand and attribute environmental risks and enable better management of food-water-energy security. An approach that will actively involve citizens and scientists should be favoured.
- conduct this via a one-year project including: 1) project planning and definition, 2) accessing and exploiting open data and open source tools 4) proposing an approach for validating EO data 5) documenting, publishing and presenting results. The candidate will contribute to preparing and organizing the next EO Open Science conference at ESRIN (Autumn 2016).

Educational and other requirements

Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a relevant technical or scientific discipline: Physics, Electronic Engineering, Computing, Oceanography, Atmospheric Physics, Remote Sensing, Geophysics, Environmental Engineering. First hand experience of working with Earth Observation data products and software tools is necessary, as are to date programming skills and knowledge of advanced visualization tools. Applicants planning to undertake a PhD course are welcome to apply.

Applicants should have good interpersonal and communication skills and should be able to work in a multi-cultural environment, both independently and as part of a team.

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

How can I apply?

Please fill in the [online](#) application form.

Please note that only one application may be submitted for the YGT Scheme.

The YGT Scheme is open to recently qualified young men and women
who are nationals of one of the following states:

Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy,
Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, and the UK,
or Canada as a Cooperating State, Bulgaria, Latvia, Lithuania, Slovakia and Slovenia as European Cooperating States
(ECS).