Training Opportunity for Portuguese Trainees

Reference	Specialist Area	Duty Station
PT-2010-EOP-SE	**Exploitation of Earth Observation Data**	**ESRIN**

Overview of the Division missions:

The division stimulates increased and widespread exploitation of Earth Observation data within the research community, the public sector, and industry, it maintains close contact with more than a thousand research teams worldwide, who exploit ESA EO data from ERS, ENVISAT, and the forthcoming Earth Explorers. The division liaises with end-user organizations from the public sector in Europe, with international scientific programmes and implements cooperative projects with developing countries. It supports European and Canadian EO service industry to develop marketable EO-based services. Present focus is on exploitation of the recently launched Earth Explorer missions, generation of consistent satellite based global data products for the Essential Climate Variables, and preparing the exploitation of the GMES Sentinel missions.

Overview of the field of activity proposed:

The successful candidate will:

- Contribute to Earth Observation research and applications development in Terrestrial, Oceanographic, Atmospheric or Cryospheric fields. A broad range of project opportunities exist on global change, land-cover mapping, atmospheric composition, as well as regional phenomena such as hydrology, water management, drought, forestry, coastal water quality, maritime security, earthquakes, land-slides

- Analyse data from ESA and third-party EO missions including SAR, INSAR, Polinsar, optical imaging (VHR, low res, imaging spectrometry), ocean colour, sea surface temperature, radar altimetry, atmospheric limb & nadir sounding (UV - Far IR). This may include analysis relevant for the forthcoming Spanish EO missions.

- Conduct a one-year project focussing on one of the above areas. This will involve 1) project planning and definition, 2) acquiring suitable EO data 3) developing algorithms and software 4) analysing and validating EO data 5) documenting, publishing and presenting results. The candidate may also help organize thematic workshops, prepare training courses, participate in the dialogue with end users and international stakeholders.

Priorities for this opportunity relate to, data, algorithms and applications of specific relevance for Portugal, including early exploitation of data from the first earth explorer missions (SMOS, CRYOSAT-2, GOCE) and to global monitoring of essential climate variables.

Required Education:

Masters degree in a relevant discipline: Physics, Electronic Engineering, Computing, Oceanography, Atmospheric Physics, Remote Sensing, Geophysics, Marine Biology, etc.

Knowledge of Earth Observation systems, data products & algorithms is necessary. Candidates intending to integrate their ESA project within a PhD or Masters course are welcomed.

Candidates must be fluent in English or French, the official languages of the Agency.

Candidates 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.