

In the context of several research projects supported by the European Space Agency (ESA) and related sponsors, the **Research Laboratory in Environmetrics and Geomatics of the Earth and Life Institute**, in Université catholique de Louvain, seeks qualified and highly motivated candidates to join its research team for

Monitoring crop nitrogen content and estimating crop production by satellite remote sensing

(36 months position and 5 months part-time position)

Job description

The successful applicants will join a motivated team of young researchers in charge of research, production and analysis of various crop monitoring products using the new optical and radar Copernicus Sentinels data (<http://esa-sen4cap.org/>, <http://www.esa-sen2agri.org/>, <https://sentinels.copernicus.eu/web/sentinel/missions>).

In close collaboration with the European partners and other international agencies like ESA and CIMMYT (International Maize and Wheat Improvement Center), the new researchers will contribute to various activities linked to the two below-cited projects, such as

- developing new image processing methods to produce crop maps and vegetation indicators at national scale using high resolution satellite time series demonstrating on cloud computing infrastructure;
- estimating crop areas and production in support to national statistical offices around the world.
- demonstrating the use of the Sen2-Agri / Sen4CAP processing systems across the international user community via in situ professional training and capacity building activities;

“Sentinels for Agriculture Statistics in developing countries” aims at adjusting in an operational context a system to support the production of better agricultural statistics in a timely manner thanks to satellite remote sensing. The aim is to co-develop with national partners a prototype systems to be implemented at full scale for demonstration.

“Sentinel-2 for Agriculture” system aims at providing the international user community with validated open source algorithms and a software to process Sentinel-2 data in an operational manner to derive Earth Observation products relevant for crop monitoring in the major worldwide agriculture systems.

Qualifications

The applicants will be:

- graduated in bioengineering, agricultural engineer or equivalent;
- trained in remote sensing and geomatics;
- fluent in french and english;
- motivated for applied research;
- able to actively contribute to an international collaborative work;

Additional experiences in cropping systems, field measurement, crop monitoring using remote sensing, advanced image processing, SAR physics and Python and/or R programming are most welcomed.

Application

The interested candidates are invited to send a curriculum vitae and a motivation letter by email to Pascale Thiran (Pascale.Thiran@uclouvain.be, cc: Pierre.Defourny@uclouvain.be) **as soon as possible and not later than the 28 April 2019** to

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