

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

Sustainable agriculture practices monitoring by satellite remote sensing (12 months position with possible extension)

Job description

The successful applicant will join a motivated team of young researchers in charge of research and development of innovative crop monitoring applications using the optical and radar Copernicus Sentinels time series along with complementary datasets. This research activity will capitalize on a set of open source toolboxes coordinated by our lab, i.e. Sen2Agri* (<http://www.esa-sen2agri.org>) and Sen4CAP** (<http://esa-sen4cap.org>).

In close collaboration with European partners, ESA and international agencies like FAO and CIMMYT, the new researcher will be in charge of different activities linked to the two following projects coordinated by Dr. Sophie Bontemps for:

- Testing and demonstrating the **“ESA Agricultural Virtual Laboratory (AVL)”** which is the new ESA collaborative platform. AVL aims at enabling the R&D EO community to develop advanced methods for innovative agriculture applications thanks to a ready-to-use cloud computing environment. The new researcher will conduct research to develop the monitoring capacity to support sustainable agricultural practices in the context of the conservation agriculture and water use efficiency. The other partners of this Agricultural Virtual Lab are three European IT companies;
- Training and developing advanced uses of the **Sen4CAP processing system** for the European user community via training, webinars, collaboration with private sector and capacity building activities.

***“Sen2Agri - Sentinel-2 for Agriculture” system** was the first system providing the international user community with validated open source algorithms and a software to process Sentinel-2 data in an operational manner to derive EO agriculture products for crop monitoring around the world.

****“Sen4CAP - Sentinels for the Common Agriculture Policy” system** was developed on the request of the EU DG-Agri to support the reform of the Common Agriculture Policy and to enable the monitoring.

Qualifications

The applicants will be:

- graduated in bioengineering, agricultural engineer, or geoinformation science;
- 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 crop monitoring using satellite remote sensing, in advanced image processing, in field measurement for various cropping systems, and knowledge of Python and R programming are most welcomed. Applications by PhD holders are also most welcome as the position could be adjusted accordingly.

Application

The interested candidates are invited to send a curriculum vitae and a motivation letter by email to Brigitte Bedoret (Brigitte.Bedoret@uclouvain.be, cc: Pierre.Defourny@uclouvain.be) **as soon as possible and not later than the 5th May 2021** to

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