in partnership with

15 February 2018

In support to the European Research Infrastructure for the biodiversity community, the Research Laboratory in Environmetrics and Geomatics of the Earth and Life Institute de l'Université catholique de Louvain, is opening one PhD fellowship in

Natural habitat monitoring using Sentinel-1&2 satellite time series for biodiversity assessment

(12 months, with renewal up to 4 years)

In the context of the European Research Infrastructure Consortium for biodiversity and ecosystems (LifeWatch ERIC - www.lifewatch.eu), an **interdisciplinary team coordinated by UCL in partnership with ULg** (Biodiversity and Landscape unit) develop the use of geospatial information for the natural habitats characterization and monitoring in order 1) to contribute to biodiversity information in Wallonia and 2) to reinforce the excellence of European biodiversity research.

Thanks to the EU Copernicus initiative, Sentinel-1 and Sentinel-2 satellites recently launched provide unprecedented Earth Observation time series for land monitoring. The exploitation of these new sources of data to derive ecologically relevant information about the natural habitat along the season is still to be developed and tested. As part of the UCL team, the PhD candidate will be in charge of the **methodological developments to monitor the dynamics of the natural habitat** (vegetation phenology, structure change, land cover land use change, management practices) in close interaction with the Walloon stakeholders and the ULg biodiversity research team. The researcher will be part of the UCL LifeWatch team within our research lab. Her/his work will combine satellite remote sensing research and field survey campaign in order to calibrate and validate the derived information. She/he could also investigate the feasibility of the integration of citizen science and other data sources to improve the natural habitat characterization. The European dimension of the LifeWatch offers also the opportunity to extent the application of the proposed methodology in various parts of Europe.

The candidate could start immediately. He/she will be:

- graduated as bioengineer or equivalent ;
- trained in remote sensing and geomatics ;
- fluent in French and English ;
- eligible and motivated to complete a PhD thesis ;
- prone to actively contribute to a service-oriented project.

Additional experiences in biotope and ecosystem monitoring, field campaign measurements, image processing and/or algorithm development are most welcomed.

For any complementary information, please contact Dr Julien Radoux (+32(0)10 47 92 57) (julien.radoux@uclouvain.be). The interested candidates are invited to send a curriculum vitae and a motivation letter by email to Pascale Thiran (pascale.thiran@uclouvain.be and cc:pierre.defourny@uclouvain.be) not later than the **20 April 2018** to

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