The Royal Belgian Institute of Natural Sciences

is recruiting
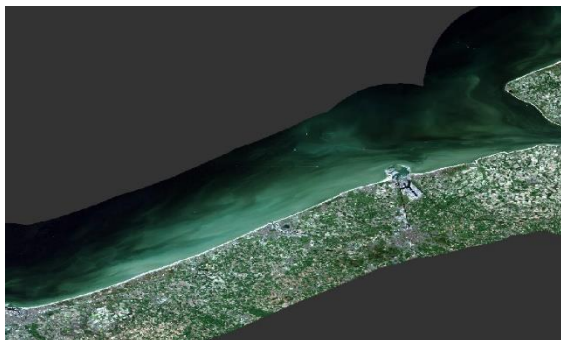
1 Satellite Data Analyst/Scientist
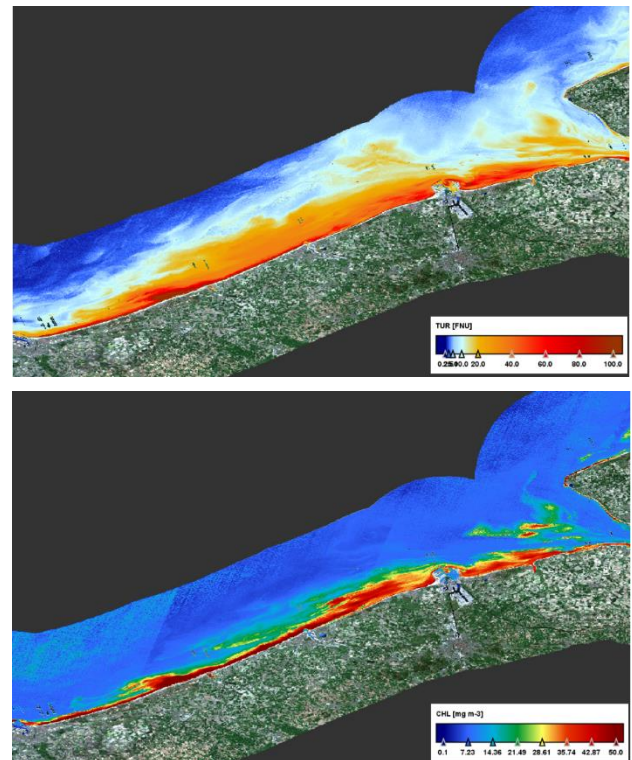
for a

contract of fixed duration (2 years)

Context

You will work in the REMSEM (Remote Sensing and Ecosystem Monitoring) team in the Operational Directorate Natural Environment (OD Nature) of RBINS on projects in the field of operational ocean colour satellite data services including the development of processing chains, cloud processing, data cube systems, product quality control and ocean colour algorithm development. The REMSEM team uses satellite data to measure parameters of environmental relevance such as the concentrations of chlorophyll a (phytoplankton) and suspended sediments in marine environments. A description of our remote sensing activities can be found at http://odnature.naturalsciences.be/remsem/.

Sentinel 2 image for Belgian Coastal zone on 20th of April 2020 (RGB, Turbidity and Chlorophyll a concentration

Tasks

The main tasks include:

SW1 level (Master level):

- Development of ocean colour satellite applications that enable data access, data visualisation and data processing.
- Development of new ocean colour algorithms and implementation of data cube systems (https://xcube.readthedocs.io/en/latest/) for efficient data analysis.
- Investigate potential of Machine Learning techniques in ocean colour applications.

- Work in a small productive team in cooperation with partners from other European countries.
- Writing technical documentation and/or scientific publications
- Presentation of results in English

SW2 level (PhD level):

- SW1 level tasks
- Work Package Management in ongoing European projects

Diploma

SW1: Master of Science, Master of Bioscience Engineering or equivalent.
SW2: PhD in Science, PhD in Bioscience Engineering or equivalent.

Technical skills

- Good knowledge of software design and software development, with a focus on Python and its data science and image processing modules (numpy, xarray, pandas,…)
- Ideally experience, but at least great interest in ocean colour remote sensing and oceanography.
- Understanding of big data ecosystems: cloud processing
- Understanding of geospatial data-analysis: data science, GIS and algorithm development in Python are a plus

General skills

- Enthusiasm for data science
- Ability to work flexibly in a team on multiple projects and interact with end-users
- Good communication skills (orally and by videoconference, web and social media content, written scientific reporting, etc.)
- Good knowledge of English is necessary; A basic knowledge of either French or Dutch is desirable and a willingness to improve is essential.
- Thirst for knowledge and the will to find elegant solutions to complex questions

Experience

- Experience with Unix is required.
- Experience in Python coding for image processing is required

Our offer

The employment contract will start as soon as possible and be of fixed duration of 2 years with possible extension if funding permits.

The salary is defined according to the standard scale for federal government scientists as published in the *Moniteur Belge/Belgisch Staatsblad* (http://www.ejustice.just.fgov.be/cgi/welcome.pl) A.R./K.B. 2.6.2010 (publication 10.6.2010), for grade SW1 or SW2 with index = 1.9999 (Jan 2023).

The nominal workplace is Brussels 1000 (29 rue Vautierstraat), with typically 5-20 days per year abroad for workshops, conferences, and other meetings and with significant homeworking possibilities (typically 3 days per week).

Free public transport is offered from home to workplace as well as a bicycle bonus.

How to apply

Application letter and curriculum vitæ should be addressed to Dimitry Van der Zande, and should be sent before **12:00 10th of March 2023** (by email to jobsREMSEM2023@naturalsciences.be. Selected candidates will be invited for an oral interview by videoconference in March 2023.