



JOB OFFER

The Royal Observatory of Belgium (ROB) is looking for a scientist in the frame of a project about making analogue seismograms F.A.I.R.

Thanks to funding from the Belgian Federal Science Policy Office (BELSPO), a scientific position is available in the BRAIN-be 2.0 project SeismoStorm (Making Analog Seismograms FAIR to Enable Research). The goal of the project bridging two domains of expertise, namely seismology and machine learning, is to develop methodologies to make pre-digital seismic (i.e. scanned seismogram images) data compliant with FAIR principles (Findability, Accessibility, Interoperability, and Reuse of digital assets) which are the core of modern community standards. This data and metadata, once discoverable and usable, are the only source of independent observations available to atmosphere-ocean-solid earth coupling modellers to study the ocean climate using the seismic waves they generate during the pre-satellite period. The project is done in collaboration with the Université Libre de Bruxelles (ULB), Belgium; the University of Brest, France; and the University of Hamburg, Germany.

The candidate will contribute to the seismological part of the project, namely the construction of a reliable metadata database, the simulation of realistic ground motion records for different historical instruments, the simulation of ground motions expected from major North Atlantic storms during the 20th century using WAVEWATCH III and the validation of the digitized time series provided by the ULB partner. The candidate will also assist in the writing of peer reviewed publications and scientific reports.

The ROB (<http://www.observatory.be>) is a Federal Scientific Institute in the green outskirts of Brussels (Uccle). The initial contract is for one year with a possibility for extension depending upon the available funding (salary level SW1 of the scientific personnel). Advantages include a flexible system of working hours.

WE ARE LOOKING FOR

The ideal candidate has PhD in Geophysics, Science or Engineering and combines many of the following skills:

- Advanced knowledge in seismology and geophysics
- Strong experience in seismological databases, data processing
- Experience in waveform simulation
- Experience in microseisms observation and exploitation
- Experience with python and machine learning tools
- Experience in ocean-atmosphere-solid earth coupling studies
- Working and writing proficiency in English.



HOW TO APPLY

Send your CV with a motivation letter and names and coordinates of two referees before May 23, 2021 to Thomas Lecocq, project leader in seismology (Thomas.Lecocq@seismology.be) with copy to the Human Resources department of the Royal Observatory of Belgium (hrrob@oma.be). The beginning of the employment will be on 1 July 2021 or later.