

### **JOB OPENINGS:**

#### The ROYAL OBSERVATORY OF BELGIUM (ROB) seeks several NEW COLLABORATORS for its SPACE WEATHER ACTIVITIES



The Sun is the only star which has a profound impact on life on Earth. The variable state of the space environment around Earth is called "Space Weather" and it is driven by the solar activity. Solar flares, coronal mass ejection and solar energetic particles influence the Earth environment on time-scales from minutes to days. On longer time scales, the 11-year Sunspot cycle sets the seasons of space weather. Our current society, with its large dependence on technology in space in particular, is becoming increasingly vulnerable to the short time scale variations in space weather, impacting for example communication or GNSS services.

As a federal scientific institute, the Royal Observatory of Belgium, provides services to citizens, industry and government by means of alerts and predictions for space weather. The job openings are part of the SIDC (Solar Influence Data analysis Centre), a leading space weather forecast center at European level. These Space Weather activities are increasingly developed through support by the European Space Agency ESA ("Space Safety Program", S2P), and in 2018, ICAO (*International Civil Aviation Organisation*) selected this center also as part of a consortium to deliver 24h/7d space weather services to the civil aviation actors worldwide. To assure the successful continuation of our operations in this competitive international context, the Royal Observatory of Belgium seeks several collaborators for the further development and support of its space weather services.

# Space weather forecasters

### Tasks

The offered position involves:

- operational surveillance and forecasting of space weather (including on-call operation and shift work);
- contribution to the elaboration of documentation and procedures for space weather operators and forecasters;
- contribution to the validation and verification of the space weather products and services;
- contribution to the maintenance of the IT-infrastructure in support of the space weather services (both internal applications and applications to end-users).

### Profile

The selected candidate must:

- hold a Master or PhD. in (exact) sciences;
- have an accurate, timely and systematic working attitude;
- be able to work within an environment with a set of strict and well defined procedures, as well as being able to define and implement appropriate new procedures;
- be able to work accurately, flexibly and take autonomous decisions;
- communicate fluently in English.

The following experience is considered advantageous:

- experience in Solar Physics, Space Weather or related Space Sciences;
- experience with operational Space Weather services;
- acquaintance with UNIX and programming languages.

# **Project management assistants**

#### Tasks

The offered position involves:

- execution, including reporting and management, of projects with (international) partners: in particular ESA/S2P projects and in relation to the ICAO services;
- active support for establishing and maintaining strong synergy between these projects and the internal SIDC operational service provider activity;
- contribution to the conceptual design of the IT-infrastructure, interfaces and templates in support of the space weather services (both generally and specifically for the ESA-SSA and ICAO context);
- contribution to the operational duties of the surveillance and forecasting of space weather.

### Profile

The selected candidate must:

- hold a master or PhD. in (exact) sciences;
- communicate fluently in English;
- have experience with the management or execution of (international) projects.

The following experience is considered advantageous:

- experience in Solar Physics, Space Weather or related Space Sciences;
- experience with operational (Space Weather) services;
- acquaintance with UNIX and programming languages.

# Data modeling and processing scientists

#### Tasks

The offered position involves:

- setup and integration of new data-models, data-processing and data-visualisation applications within the IT-infrastructure for the space weather services (both internal applications and applications to end-users);
- development and maintenance of data-bases of space weather data and metadata, and their associated dataflow management processes;
- contribution to the operational activities of space weather surveillance and forecasting.

#### Profile

The selected candidate must:

- hold a master or PhD. in (exact) sciences or engineering;
- be acquainted with UNIX and have experience with several programming languages;
- have experience with at least one relevant data-model or data-processing application;
- have a dedication to deliver the best possible IT setup to address the user needs;
- communicate fluently in English;

The following experience is considered advantageous:

- experience in Solar Physics, Space Weather or related Space Sciences;
- experience with the management or execution of (international) projects;

• experience with operational (Space Weather) services.

### **ROB offers**

The ROB (<u>http://www.observatory.be/</u>) is a Belgian federal institute in the green outskirts of Brussels (Ukkel). The job opening is in the "Solar Physics and Space Weather" Operational Directorate (<u>https://www.sidc.be/</u>), a small, international group of dedicated scientists and engineers. The working conditions include a flexible system of working hours and teleworking. The offered positions are immediately available and will be scaled SW1 level.



# How to apply

Send your CV and an accompanying motivation letter as soon as possible to jesse.andries@oma.be with cc: judith.depatoul@oma.be and dir-rob@oma.be. Indicate clearly the position to which you are applying. It is accepted and, if you have the proper qualification, even recommended to apply for more than one of the profiles. Candidates can contact Dr. Jesse Andries (+ 32 2 790 39 69) for additional information. Applications are welcome until February 19, 2023

If your master was awarded outside of Belgium, the Netherlands and the Grand-Duchy of Luxembourg, you will need a certificate to demonstrate the equivalence of your degree (see <a href="https://www.belgium.be/en/education/equivalence\_of\_diplomas">https://www.belgium.be/en/education/equivalence\_of\_diplomas</a>) before we can offer you a contract.