



JOB OPENING

The Royal Observatory of Belgium seeks a new scientific collaborator for its space weather activity

The Sun is the only star that has a significant impact on life on Earth. Under the influence of solar activity, the state of the space environment around Earth is highly variable. This variable state is known as "space weather". Solar flares, coronal mass ejections, and solar energetic particles can all affect the Earth's environment on timescales ranging from minutes to days. On longer timescales, the 11-year sunspot cycle determines the seasons of space weather.

Since our society is highly dependent on space technology, we are becoming increasingly vulnerable to short-term variations in space weather. These variations can have a significant impact on communication and GNSS services, among others. To mitigate the potential effects of space weather, it is crucial to monitor solar activity continuously and improve our understanding of how it affects the Earth's environment. This will allow us to better prepare for any adverse effects on our technology and infrastructure, and thereby mitigate those impacts.

As a federal scientific institute, the Royal Observatory of Belgium (ROB) provides services to citizens, industry, and government through alerts and predictions for space weather. These Space Weather activities are being developed further through support from the European Space Agency ESA (S2P - "Space Weather and Space Safety Program") and PECASUS (Space weather services for ICAO - International Civil Aviation Organization). Within the framework of ESA S2P, ROB is responsible for coordinating/operating SSA Space Weather Coordination Centre (SSCC) and the Solar Weather Expert Service Centre (S-ESC). Both entities play a key role in the establishment of a network of space weather services targeting a large user community whose operational systems can be severely affected by space weather.

To successfully continue our activities in this highly competitive international context, ROB is seeking a collaborator to further develop and support its space weather services.

The successful candidate will contribute to the development and provision of space weather services, particularly in the development and coordination of the [ESA S2P](#) projects. The successful candidate will be involved in operational surveillance and forecasting of space weather, including on-call operation and shift work, and also contribute to the further development of these forecasting activities.

The collaborator will work as part of the [ROB/SIDC](#) (Solar Influences Data analysis Centre), a leading space weather forecast center at the European level.

Tasks

The offered position involves:

- Assist in coordinating and managing projects with both national and international partners, focusing particularly on ESA/S2P projects.
- Assist in maintaining the operational IT infrastructure, interfaces, and templates to support space weather services, with a focus on ESA-S2P services.
- Contribute to the documentation and procedures for monitoring and reporting on service provision, specifically for ESA-S2P.
- Actively support the integration and alignment of these ESA-S2P projects with the internal operational services of SIDC.

- Contribute to operational monitoring and forecasting of space weather, including on-call duties and shift work.
- Participate in a variety of user engagement activities for space weather services.

Profile

Requirements for the Candidate:

- Must hold a Master's or PhD degree in exact sciences.
- Must have experience in Solar Physics, Space Weather, or related Space Sciences.
- Must be able to work effectively in an environment with strict, well-defined procedures while also having the capability to define and implement new procedures as needed.
- Must possess excellent communication skills in English.

Additional Preferred Qualifications:

- Experience in interacting with end users of provided services.
- Experience with operational services, particularly in Space Weather.
- Experience in managing or executing international projects.
- Familiarity with software repository tools such as SVN or GitHub.
- Knowledge of UNIX and at least one programming language.

ROB offer

The ROB (<http://www.observatory.be>) is a Belgian federal institute located in the green outskirts of Brussels in Ukkel. The institute is seeking a qualified candidate for a job opening in the “Solar Physics and Space Weather” Operational Directorate (<https://www.sidc.be>), which is a group of dedicated international scientists and engineers. The working conditions include a flexible system of working hours and teleworking, allowing for a healthy work-life balance.

The job offer is a **full-time position** in the SW1 category. To get an estimate of the salary, a simulator is available at <https://salsim.fedweb.belgium.be/mod2-q1.php>. The position is for a **one-year contract**, renewable based on mutual satisfaction.

How to apply

Send your CV and an accompanying motivation letter to Jennifer O'Hara (jennifer.ohara@oma.be), Judith de Patoul (judith.depatoul@oma.be) and dir-rob@oma.be. Candidates can contact Dr. Jennifer O'Hara for additional information. Applications are welcome until **September 01, 2024**.

