



^b
**UNIVERSITÄT
BERN**

**OESCHGER CENTRE
CLIMATE CHANGE RESEARCH**

Postdoctoral Position (80%; 30 months) in remote sensing of snow

The Remote Sensing Research Group (RSGB) at the Institute of Geography, University of Bern, Switzerland has an opening of a PostDoc position on remote sensing of snow extent (SE). This position is part of a project funded by the European Space Agency (ESA) in the frame of the Climate Change Initiative (CCI) program. The successful candidate will contribute to the ESA CCI+ snow project starting 1.May 2022. The goal of the project is to implement/develop a snow extent time series (1978 – 2023) at global and continental scale retrieved from (Advanced) Very High Resolution Radiometer (AVHRR and VHRR) data. The main focus of the research position will be on algorithm development, (pre-) processing of AVHRR GAC and LAC data, and development of uncertainty measures. The researcher should also contribute to the project reports required by ESA. In addition, a close collaboration with the team members of the international CCI+ snow consortium and RSGB scientists is expected. The PostDoc position of the ESA CCI+ project is funded for a duration of 30 months.

Your profile:

- PhD in remote sensing with focus on operational systems
- Experience in processing of AVHRR data
- Excellent skills in programming (Python) and statistical data analysis
- Good knowledge in machine learning (ML) and neuronal networks
- Experience in Linux systems and handling of big data
- Excellent knowledge in English and good writing skills
- Relevant peer-reviewed publications

Your tasks:

- Algorithm development for the retrieval of snow extent (physical based and ML)
- Data processing (with support from our ITC expert and an external CCI+ team)
- Data analysis, error propagation, and uncertainty assessment of the snow extent product
- Presentation and publication of results at project meetings, international conferences and for peer-reviewed publications
- Contribution to ESA reporting
- Supervision of master students within this project

Starting date: 1. May 2022. Application due date: 15. March 2022 or until position is filled.
Application: Applications should include (i) CV, (ii) letter of motivation and (iii) two contacts for reference.

Please, send your application in ONE pdf to stefan.wunderle@giub.unibe.ch.