

PhD candidate in atmospheric ozone research (STOA-01) 100%

PMOD/WRC is a research institute located at Davos, in the Grisons, Swiss Alps. It's core mandate is to operate the world radiation center of the World Meteorological Organisation. One of its additional tasks is the maintenance of the world's longest atmospheric ozone time series based on Brewer and Dobson spectrophotometers on behalf of MeteoSwiss.

The SNF-funded project **Quantifying past, present and future Stratospheric and Tropospheric Ozone over the Alps and Europe, STOA**, is a bilateral project between Switzerland and Austria comprising partners PMOD/WRC, MeteoSwiss and the University of Natural Resources and Life Sciences (BOKU) in Vienna, Austria. PMOD/WRC (this advert, Ref. **STOA-01**) and MeteoSwiss (Ref. **STOA-02**) are seeking to recruit two PhD candidates for a fulltime, 4-year position, starting in October 2024, or by agreement. Financial support is according to SNF guidelines.

Your tasks (STOA-01)

- Assist in the operational maintenance and quality control of the ozone monitoring instruments at PMOD/WRC.
- Harmonisation of the total column ozone time series from Brewer and Dobson spectrophotometers at Arosa/Davos.
- Derive trend estimates of total column ozone datasets using state of the art statistical tools (for example Multi Linear Regression and Dynamical Linear Modelling) from Alpine and European stations.
- Derive stratospheric ozone trends from combining ozone profiles and tropospheric ozone modelling results in collaboration with the research team.
- Present project results at international conferences and workshops, write and publish your research in peer-reviewed scientific journals research publications.

Your profile

- You hold a MSc degree in natural sciences, experimental physics, or related field.
- You are proficient in writing your own software code in a high-level programming environment such as Matlab, Python, or similar.
- Experience in analysing atmospheric remote sensing data sets and related statistical tools are an asset.
- You have excellent written and oral English skills.

We offer

- An attractive workplace at a world-leading Institute in a beautiful touristic town in the Swiss Alps.
- You will join an international team of scientists with state of the art expertise in remote sensing of atmospheric ozone, statistical time series analyses, and Earth system modelling to help answer key questions concerning the state of the ozone layer and its past, present and future evolution.
- You will be affiliated to the Oeschger Centre for Climate Change Research and join the Graduate School of Climate Sciences at the University of Bern in the research group of Prof. Dr. Gunter Stober.

We respect and support the compatibility of professional and private life and promote individual development opportunities. We promote equality of opportunity, value diversity and nurture a working and learning environment. Please visit our gender equality plan(<https://www.pmodwrc.ch/en/institute/gender-equality-plan/>) for further information.

Application information

Informal inquires can be addressed to Dr. Julian Gröbner, Project coordinator, (julian.groebner@pmodwrc.ch or +41 81 417 5157).

Please send your complete application using the reference **STOA-01** including motivation Letter, curriculum vitae, list of publications, and name and contact details of at least 2 references as a single pdf file to the head of human resources, Eliane.Tobler@pmodwrc.ch, before 26 July 2024.

The interviews will be held either physically at PMOD/WRC or via suitable remote video platforms.