

Postdoc position

Tundra Energy Fluxes at Pan-arctic Scale

Project description

Substantial warming and an increase in precipitation are predicted for the Arctic in the 21st century. Such climatological changes impact the energy, water, and carbon cycle of the Arctic terrestrial system. A tight coupling of the three cycles exists through the short- and longwave radiation absorption and the partitioning into sensible, latent, and ground heat flux. This Postdoc project will assess the status of surface energy fluxes in the tundra biome and identify drivers through synthesizing existing pan-arctic data. A further research focus is the coupling of energy fluxes to other components of the system. Results will contribute to a better prediction of land surface feedbacks in the Arctic system.

After a literature review of the status of tundra surface energy fluxes, the postdoc will explore and analyze existing energy flux data at pan-arctic scale (integration and upscaling of in situ to satellite data) and involve the community to discuss the coupling with other components of the Arctic system.

Framework and required skills

The position requires a PhD in micrometeorology, remote sensing, climate sciences, environmental sciences, or a closely related field. Data management and statistical skills are a requirement, as well as advanced communication skills at international level. The postdoc will assist in the supervision of a related PhD project in the Siberian tundra which involves micrometeorological measurements and mechanistic modelling. Candidates might join in field campaigns at our station in the Siberian tundra (<https://eu-interact.org/field-sites/chokurdakh-scientific-tundra-station/>) experiencing simple living conditions, running field experiments and handling instruments.

Postdoc conditions

The project is funded by the Swiss National Science Foundation for a duration of initially 2 years, ideally starting after 1 September 2018. The Postdoc will work in an international setting, under supervision of Dr. G. Schaepman-Strub (<http://www.ieu.uzh.ch/staff/leaders/schaepman.html>).

Application deadline and further information

Please send your application as **one single** pdf-file (including application letter, CV (including list of publications), names and contact details of two referees) to maja.weilenmann@ieu.uzh.ch no later than **August 12, 2018**. For questions contact maja.weilenmann@ieu.uzh.ch (formal requirements) or gabriela.schaepman@ieu.uzh.ch (content-related questions, but expect severe delay in response due to field work!)