

Two postdoctoral positions: national carbon flux estimation system for forest ecosystems of Canada

The [Remote Sensing Lab](#) at the [School of Earth, Environment and Society, McMaster University](#), ON, Canada (PI [Alemu Gonsamo](#), Canada Research Chair) is recruiting two postdoctoral fellows to develop a national carbon flux estimation system for forest ecosystems of Canada. The postdoctoral fellows will develop novel mechanisms, including deep learning algorithms, to quantify annual net carbon flux of all forest ecosystems in Canada including carbon fixed through plant primary production, and carbon emissions through land cover change and disturbance. The project will involve the use of satellite-based LIDAR, optical and SAR observations and forest inventory data.

The postdoctoral fellows will be members of a growing number postdoctoral fellows and graduate students that are funded by NSERC Alliance Grant and World Wildlife Fund Canada (WWF-Canada). WWF-Canada is one of Canada's largest conservation organizations actively contributing to the protection, management, and restoration of the environment. The postdoctoral fellows will have opportunity to interact closely with the Science, Research and Innovation division of WWF-Canada office in Toronto.

The postdoctoral fellows will also have opportunity to collaborate, including research visits, with the project collaborators: Dr. Werner Kurz (Canadian Forest Service), Dr. Xiaoyuan Geng (Canadian Soil Information Service), Dr. Sarah Finkelstein (University of Toronto) and members of Lands and Resources Department of the Mushkegowuk Council representing Cree First Nations in Hudson and James Bay lowlands.

The positions are ideally suited to researchers with strong skills in regional or global remote sensing of vegetation with keen interest in C cycle processes in terrestrial ecosystems. The successful candidates will be provided with the opportunity to lead the research project, coordinate collaborations, and publish results. Funding is available for 2 years at a competitive salary that is commensurate with qualifications and experience, with the possibility of renewal. Start date is January 1, 2022 but may be flexible. Experienced researchers are highly encouraged to apply as a Research Associate with 3-year contract.

Candidates must exhibit effective written and oral communication skills, experience working in R or other computer languages, have demonstrated ability to publish peer-reviewed papers, and have a Ph.D. pending or awarded in relevant discipline. To apply, please send a letter of interest, current CV, and names and contact information of two references to Alemu Gonsamo at gonsamo@mcmaster.ca. The application deadline is December 10, but review will start immediately and continue until the position is filled.

The newly established Remote Sensing Lab (<https://remotesensing-mcmaster.org/>) at McMaster University has several high performance lab computers equipped with the latest remote sensing software (e.g. ENVI, IDL, ArcGIS, Google Earth Engine, R), and access and benefits from allocated computing resources at compute Canada's super computers.