



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Post-Doctoral Fellow offer:

Improving assimilation methods of Earth Observation descriptors into crop models

A Post-Doctoral Fellow position is available in the Science and Technology Branch of Agriculture and Agri-Food Canada starting in winter 2019 and continuing for 2 years. The position will remain open until a suitable candidate is found. The successful candidate will join a multidisciplinary team made of agro-ecosystem modellers, remote sensing specialists and micrometeorologists. The national project entitled “Towards tracking the resilience and sustainability of crop growth from space by assimilating Earth observation data in crop growth models” is funded for two years by Agriculture and Agri-Food Canada and the Canadian Space Agency. The objectives consist in 1) build a framework for scaling field-based crop models to regional scale using assimilation of Earth Observation data and high spatial resolution meteorological forcing data; 2) pilot models on corn and soybean crops in Ontario and Quebec; and 3) aggregate models to regional scale to predict crop yield and biomass response to climate variation. The candidate will be involved in the data acquisition and analyses, the database management for model verification, the crop modeling, the improvement of assimilation methods, and preparation of annual reports scientific papers and communication.

Desired expertise and qualities:

- Ph.D. relevant to modelling in agricultural or biological sciences
- Good knowledge in statistics, model performance evaluation, optimization techniques and database management.
- Abilities to use and write scripts in Matlab and R.
- Experience working in windows and Linux operating systems
- Basic knowledge in climatology, micrometeorology, agronomy and use of Earth Observation data.

The candidate will be actively involved in communicating the research results (workshops and scientific papers). He/she should be fluent in English (oral and written) and have a valid driver's licence. Knowledge of French is an asset.

For more information on the funding program please follow the link:

Candidates will be hired through the Postdoctoral Research Program of the Government of Canada. More information can be found here:

<https://www.nrcan.gc.ca/careers/17880>

To be eligible the candidate must have obtained its PhD within the last three years. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Salary is dependent on experience starts at \$55870 plus benefits.

The position will be primarily located at the Central Experimental Farm, in Ottawa (Ontario, Canada) with possible terms at Quebec City (Quebec, Canada).

Please submit your resume, cover letter and the names, institution and email address of two referees either by mail or email to:

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