

Postdoctoral or research associate position in very high-resolution simulations of clouds and precipitation

Location: [Centre ESCER/Department of Earth and atmospheric sciences](#), Université du Québec à Montréal (UQAM), Montréal, Canada

Starting data and duration: as soon as possible for a duration of up to 3 years.

Background: This position is part of the “High Resolution Climate Simulation and Analysis” (SACHR) project recently funded by the Quebec’s Ministry of Sustainable Development, the Environment and the Fight against Climate Change (MELCC in French). SACHR aims to develop the new version of the Canadian Regional Climate Model (MRCC6 / GEM5), based on the weather forecasting model from the Canadian Weather Service. The selected candidate will join the research team on regional climate modeling led by Professors René Laprise, Julie Thériault and Alejandro Di Luca as well as a Canada Research Chair in Extreme Winter Event.

This project aims to improve the representation of clouds and precipitation in the CRCM6/GEM5 very high-resolution climate model. Available database will be gathered to evaluate the improved model. The added value of the new parameterization will be assessed for freezing precipitation and rain-snow transitions over eastern Canada. Process studies leading to precipitation during extreme events will be conducted.

Required skills	Postdoc position	Research associate
A PhD in atmospheric science or related field	X	
A minimum of a M. Sc. Degree in atmospheric sciences or related field.		X
Experience in the area of expertise	X	X
A publication record in peer-reviewed, international journals	X	
Excellent knowledge of the Linux environment and in Python, Matlab, or R programming. Experience with Fortran programming languages and with high performance computing systems are also desirable.	X	X
Ability to handle large databases, preferably from numerical weather forecasts or climate models.	X	X
Ability to integrate and work in a team	X	X

How to apply: Please send your application package to professors Julie Thériault (theriault.julie@ugam.ca) and Alejandro Di Luca (di_luca.alejandro@ugam.ca). It should include: 1) A cover letter, 2) a complete CV and 3) Names and emails of at least 2 references