



Towards an operational high-resolution air quality forecasting system at ECCC

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Urban environments are particularly sensitive to weather, air quality (AQ), and climatic conditions. Despite the efforts made in Canada to reduce pollution in urban areas, AQ continues to be a concern for the population, especially during short-term episodes that could lead to exceedances of daily air quality standards. Furthermore, urban air pollution has long been associated with significant adverse health effects. In Canada, the large percentage of the population living in urban areas ($\sim 81\%$, according to the Canada's 2011 census) is exposed to elevated air pollution due to local emissions sources. Thus, in order to improve the services offered to the Canadian public, Environment and Climate Change Canada has launched an initiative to develop a high-resolution air quality prediction capacity for urban areas in Canada.

This presentation will show observed pollution trends (2010-2016) for Canadian mega-cities along with some preliminary high-resolution air quality modelling results. Short-term and long-term plans for urban AQ forecasting in Canada will also be described.