Air Quality Forecasting for the 2015 Pan Am Games: Showcase of Proposed Research Projects

Craig Stroud, PhD
Research Scientist III
Air Quality Modelling and Integration
Environment Canada

The Atmospheric Science and Technology Directorate at Environment Canada will showcase their new high spatial resolution environmental forecasts (e.g. heat stress, extreme weather, air quality health index, lake wave conditions) for the upcoming Pan Am Games in Toronto. The Air Quality Research Division will debut products from their next-generation GEM-MACH air quality model. To support the real-time forecasting, there will be monitoring during summer 2015 including a greatly expanded mesonet, an enhanced suite of air quality measurements at existing monitoring stations and several new supersite stations. There will also be mobile laboratories and vertical soundings to capture both horizontal distributions and vertical gradients for pollutants. This seminar will summarize the new features of the next generation GEM-MACH model and a summary of the collaborative projects developed to evaluate and improve forecast products. A focus will be on projects that assess the direct and indirect impacts of aerosol on weather and air quality in an urban environment.

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