



Experimental Forecasts of Wildfire Pollution at the Canadian Meteorological Centre

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Environment and Climate Change Canada's Canadian Meteorological Centre Operations division (CMCO) has been running an experimental North American air quality forecast system with near-real-time wildfire emissions since 2014. This system, named FireWork, also takes anthropogenic and other natural emission sources into account. FireWork 48-hour forecasts are provided to CMCO forecasters and external partners in Canada and the U.S. twice daily during the wildfire season. This system has proven to be very useful in capturing short- and long-range smoke transport from wildfires over North America.

Several upgrades to the FireWork system have been made since 2014 to accommodate the needs of operational AQ forecasters and to improve system performance. In this talk we will present performance statistics and some case studies for the 2014 and 2015 wildfire seasons. We will also describe current limitations of the FireWork system and ongoing and future work planned for this air quality forecast system.