

Abstract for submission to the 8th International Workshop on Air Quality Forecasting Research --
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Theme 3: Data Assimilation and Evaluation/Post-Processing

Title: UV index forecasting

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The Air Quality Research Division at Environment and Climate Change Canada has developed a comprehensive Chemical Data Assimilation (CDA) system which can be used for various air quality applications. The CDA system currently assimilates ozone measurements from different satellite instruments and includes a simplified stratospheric chemical module which allows producing ozone analyses and launching chemical forecasts. The system has been run during the summer 2015 Pan Am game for providing UV index forecasts in real time on a daily basis. The system has been evaluated against surface UV sensors including brewer instruments at different time intervals in different regions. The presentation will give an overview of the CDA system and its performance for the delivery of UV index forecasts for different weather conditions. The use of the CDA system for Air Quality forecasting applications will be also discussed.