**P20** Recent developments in the WRF-Chem/DART Quasi-Realtime Chemical Weather Forecast/Data Assimilation System with application to Discover AQ-Denver/FRAPPE.

**Mizzi, Arthur P.**, Gabriele G. Pfister, David P. Edwards, and Jeffrey L. Anderson, *National Center for Atmospheric Research* 

The WRF-Chem/DART Quasi-Realtime Chemical Weather Forecast/Data Assimilation System has been expanded to include the following: (i) assimilation of AirNOW in situ observations, (ii) the State Augmentation Method for constraining emission, (iii) extension of CPSRs to assimilation of retrieval partial profile, and (iv) a fully automated realtime data acquisition/assimilation/forecasting/cycling system. This poster will present/discuss those enhancements of WRF-Chem/DART and present results from applying the WRF-Chem/DART Quasi-Realtime System to Discover AQ-Denver/FRAPPE.