

Summary of Feedback

Air Quality Forecaster Focus Group workshop September 13-14, 2012

Ozone:

- Air Quality forecasters rely on NOAA's ozone predictions to issue air quality forecasts for their areas. NOAA's predictions have been reliably available to them.
- NOAA ozone predictions improved from 2011 to 2012
 - Likely due to emissions updates along with transition to NMM-B met model
- Biases along coastline and bay areas have improved from 2011, positive bias was reduced overall - there are remaining issues related to the marine flow
 - 4km resolution may help further
- Seasonal trend in prediction bias is less pronounced and positive bias started later in the summer season
 - In years past, overprediction began in mid June, now later in the season
 - Consider biogenic emissions
- When humidity is high ozone is overpredicted in southeastern and southern US
- Ensemble forecasting is very helpful for forecasting air quality
 - Ensemble of opportunity that included NOAA model performed the best
- Bias dependence on day of the week was reduced (higher bias was seen on Sundays in previous years) – improved emissions helpful
- Number of false alarms was reduced , slight drop in probability of detection
- Experimental predictions are similar to operational (high bias reduced)

Summary of Feedback, continued

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Smoke, dust and PM2.5:

- Smoke predictions most useful when there are a lot of fires in the area
- Smoke concentrations too high near sources
 - Affected by smoke plume rise – update planned, BlueSky upgrade may be possible
- Dust timing good, concentrations can improve
- PM2.5 in the summer: underpredicted and the dynamic range is too low.
- PM2.5 in the winter: overpredicted, but it has a wider dynamic range and it is useful for identifying the onset of high particulate matter events

Meeting format:

- Strong positive feedback about making participation possible through an on-line meeting.
- Wider participation than in previous years, 46 participants - over 30 participants joined online meeting

Future of NAQFC:

- AQ forecasters urged NOAA to continue producing ozone predictions and prototype particulate matter predictions