Automatic daily evaluation of UH AQF system

Southeast Texas Photochemical Modeling Technical Committee

Feb, 27, 2014

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Dr. Xiangshang Li: Research Scientist
Lijun Diao: Ph.D. student
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University of Houston

Dr. Hyuncheol Kim (NOAA-ARL): Collaborator

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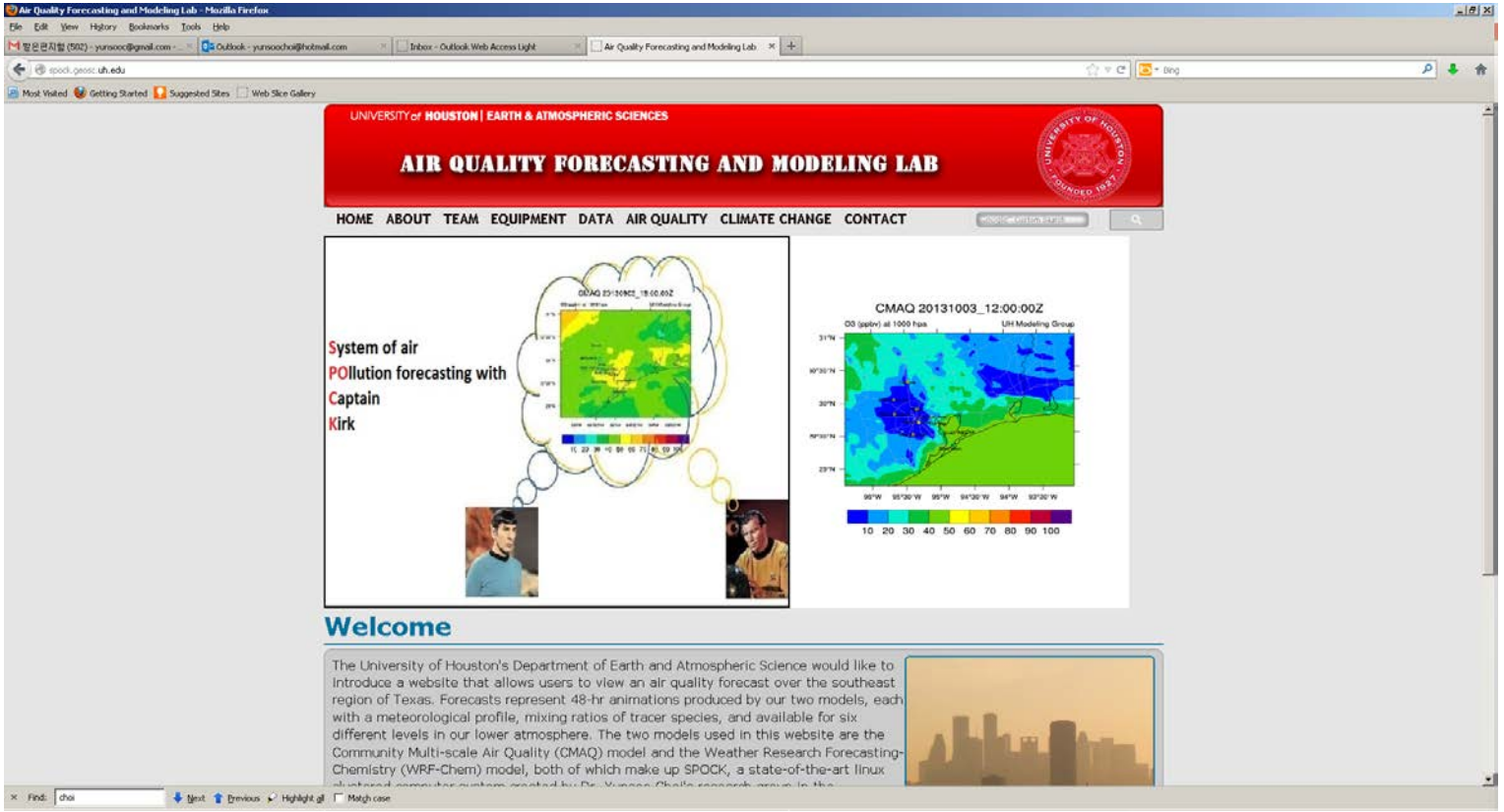
UH AQF WEBSITE: SPOCK.GEOSC.UH.EDU



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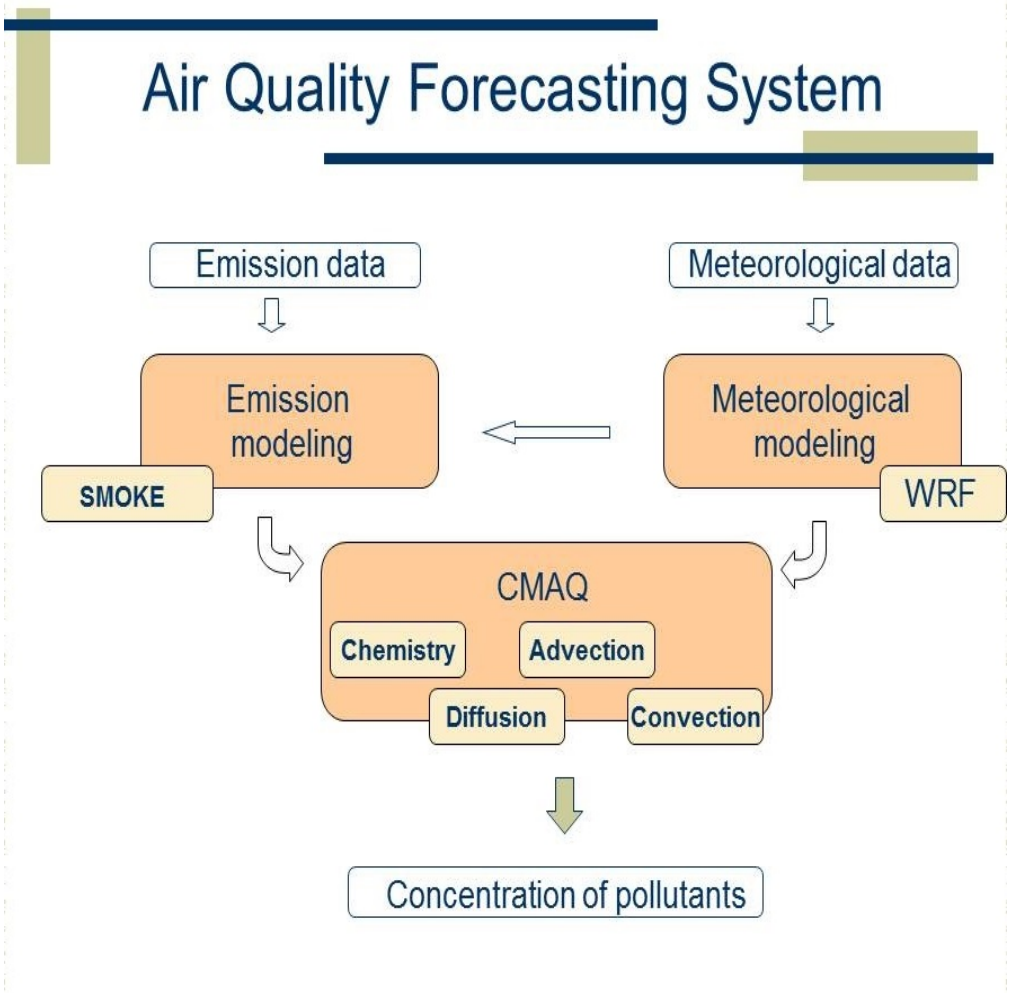
UH AQF Flow Chart



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DISCOVER-AQ Houston: September, 2013

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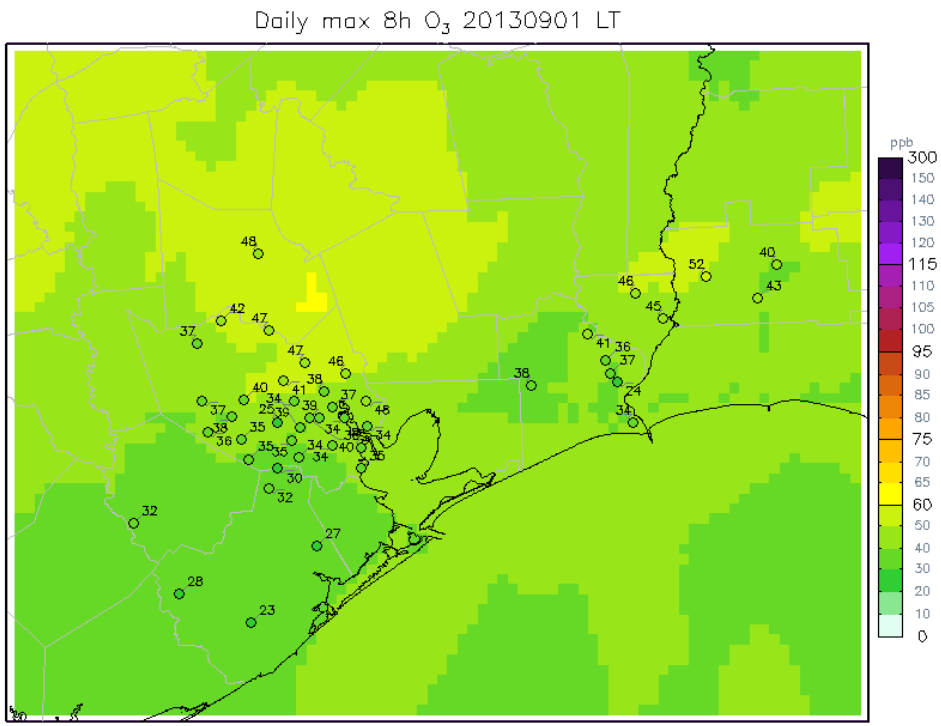
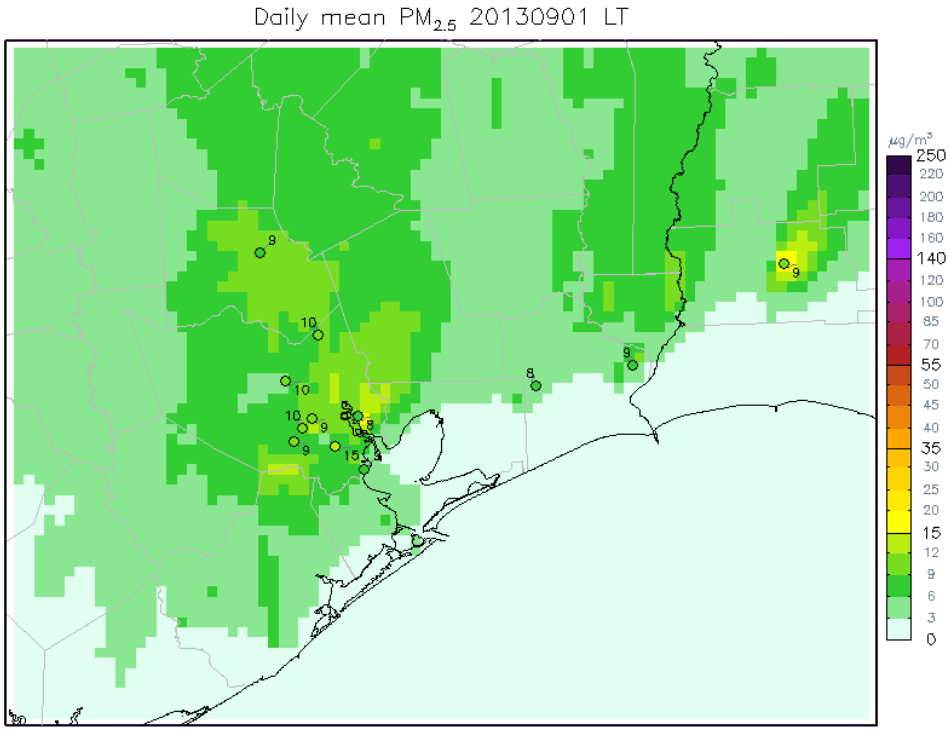
4km UH CMAQ AQF Ozone and PM2.5 Movie





O_3 and PM2.5 high days were shown for September 25-27.

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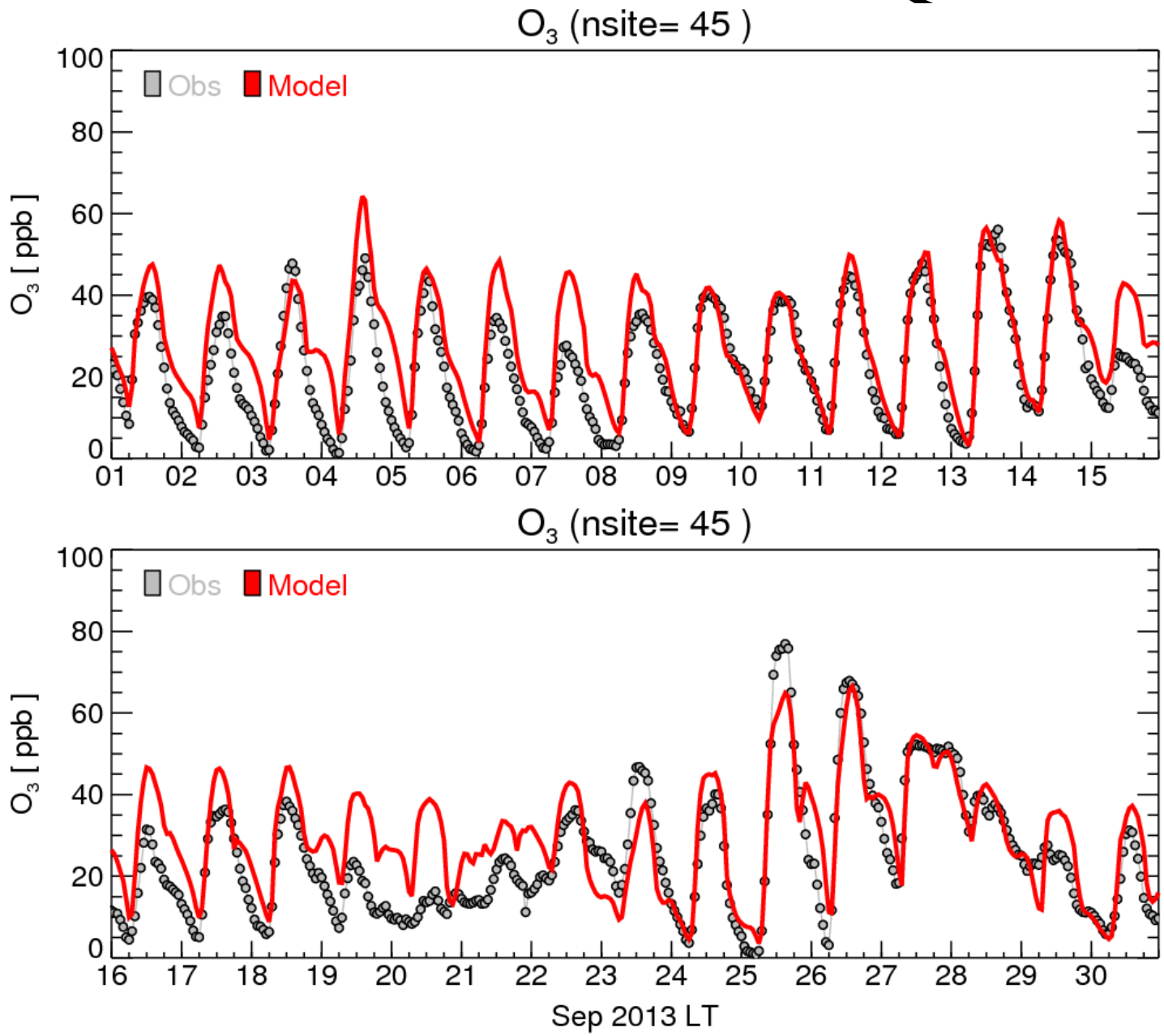
4km UH CMAQ



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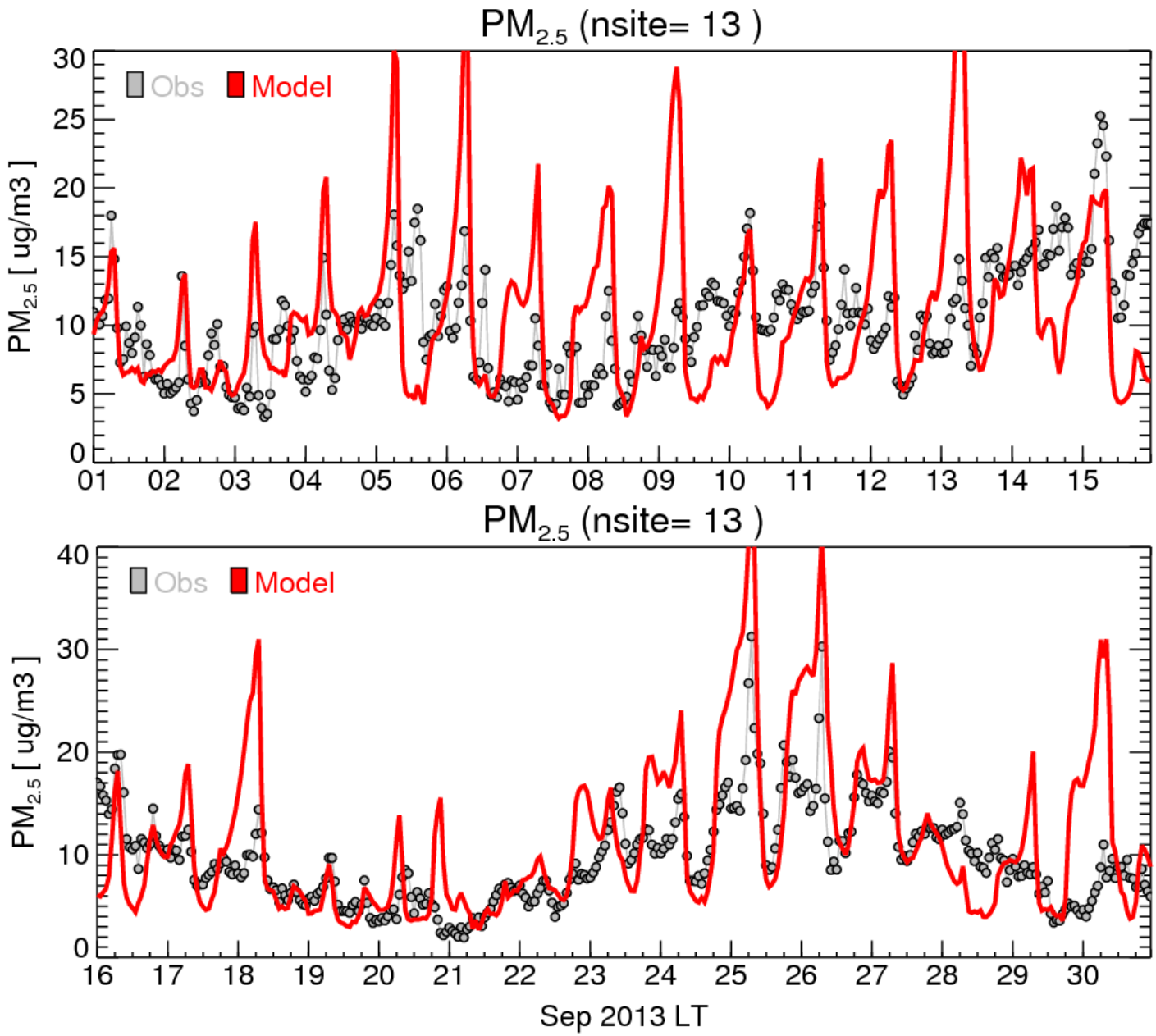
4km UH CMAQ



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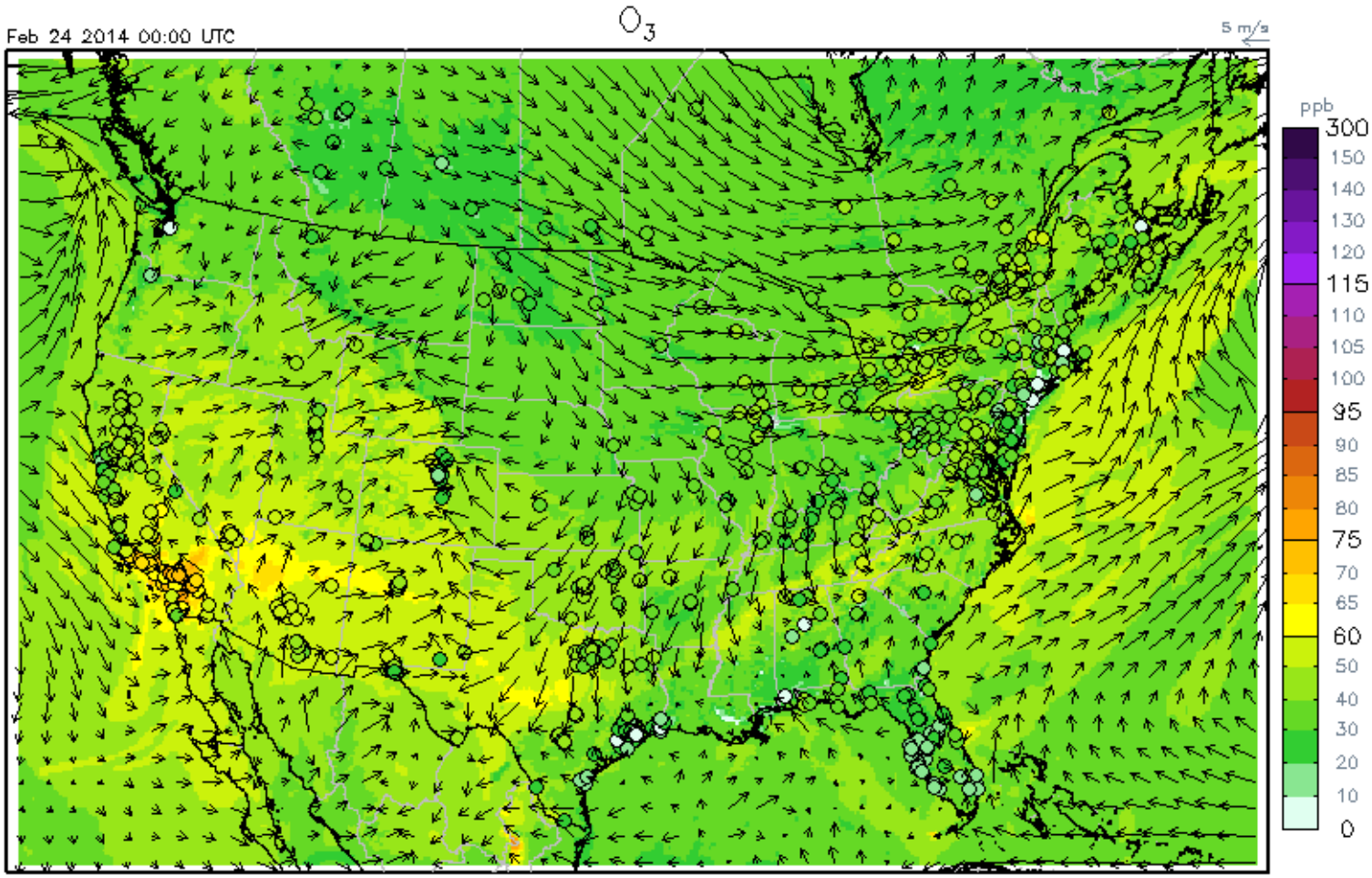
O_3 forecasting over US (12km) on Feb 24, 2014



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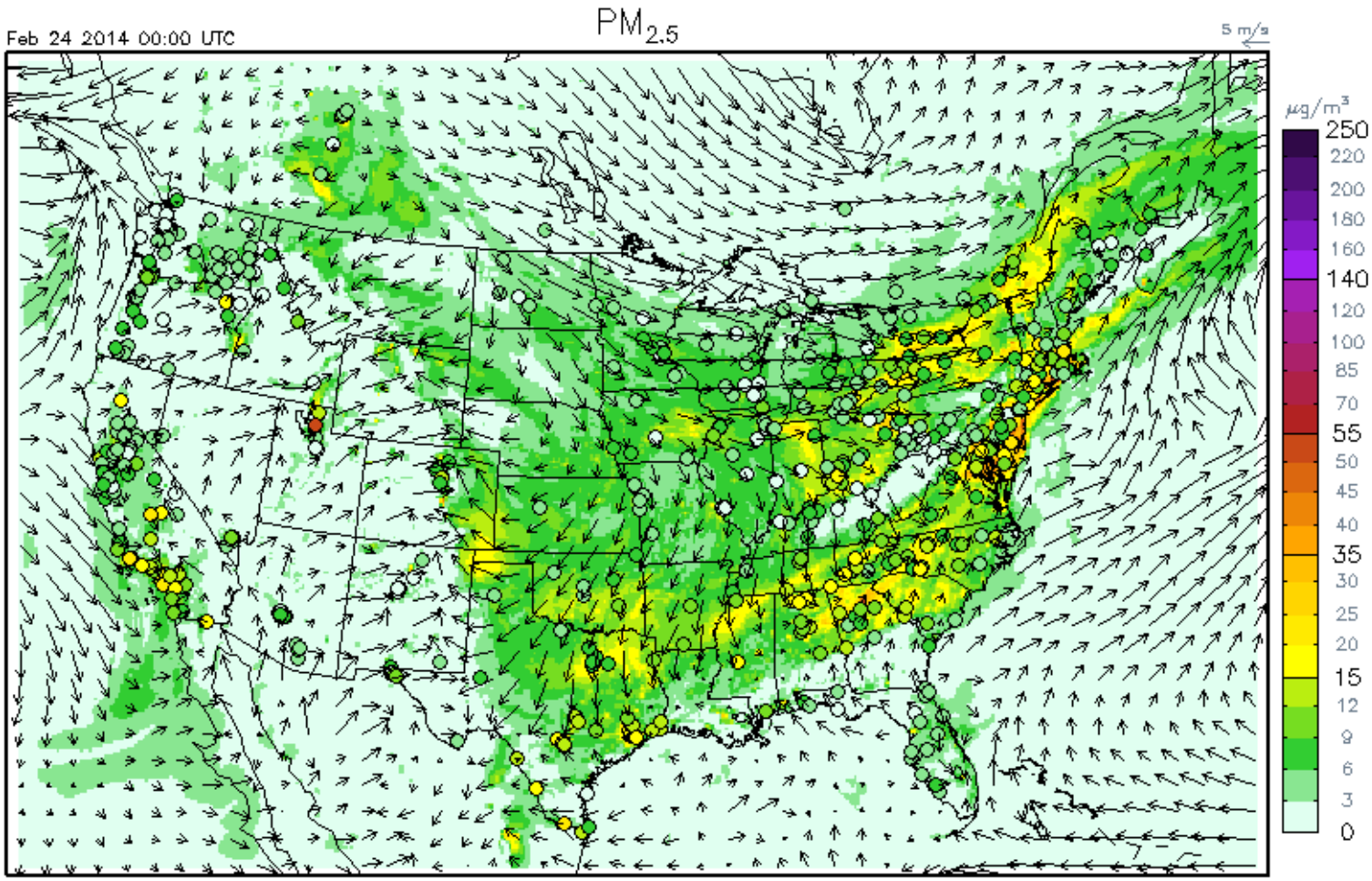
PM25 forecasting over US (12km) on Feb 24, 2014



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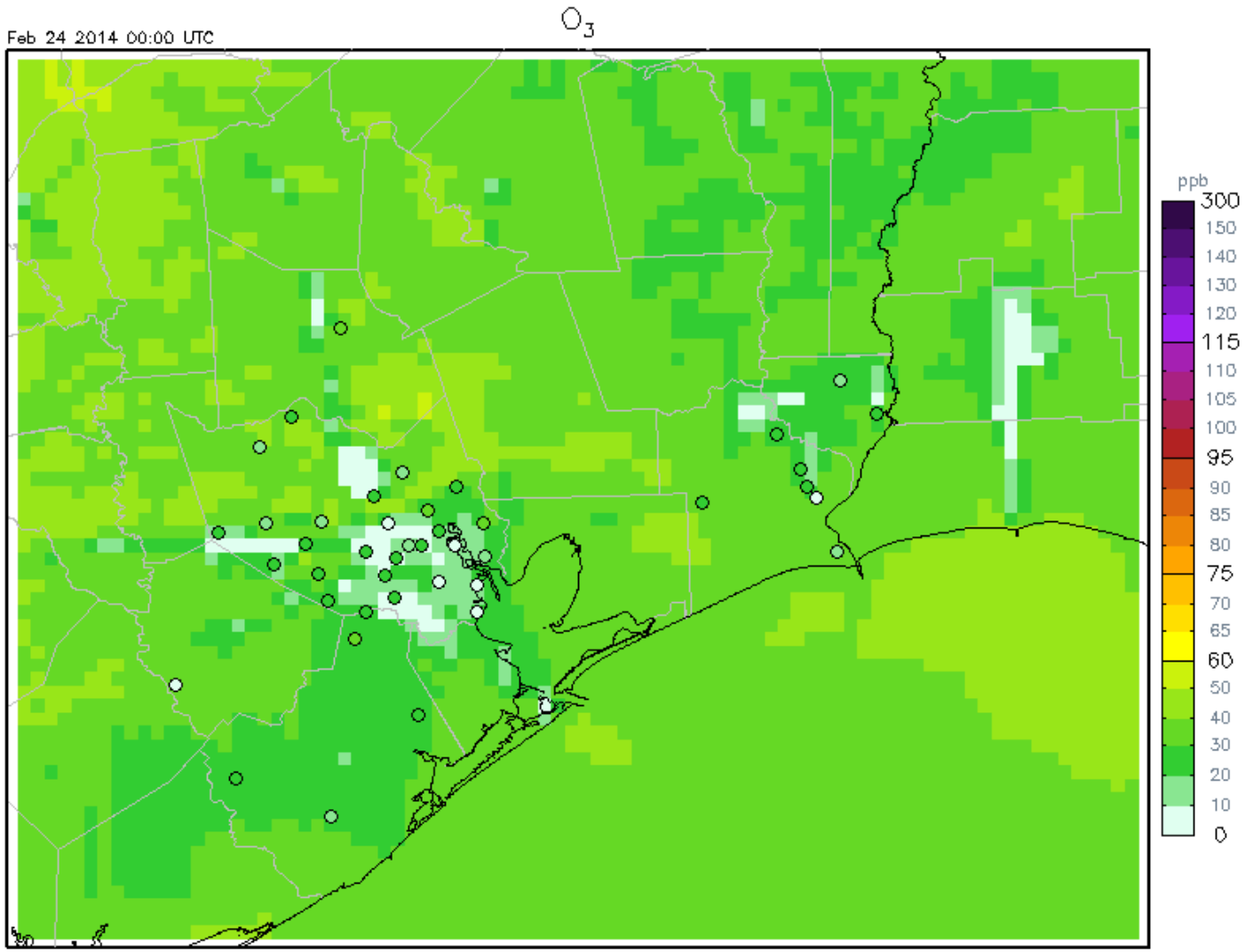
O_3 over Southeast Texas (4km) on Feb 24, 2014



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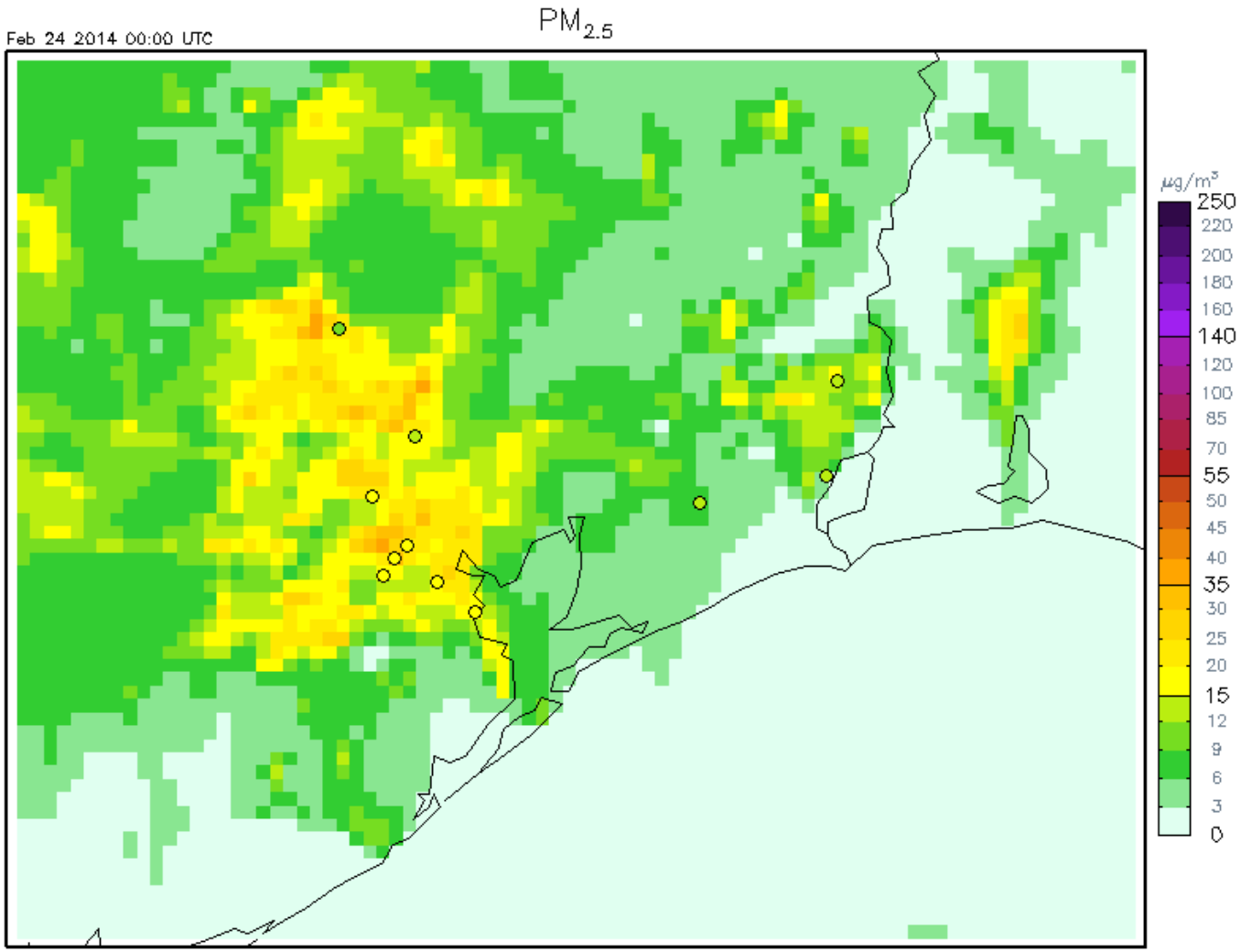
PM25 over Southeast Texas (4km) on Feb 24,



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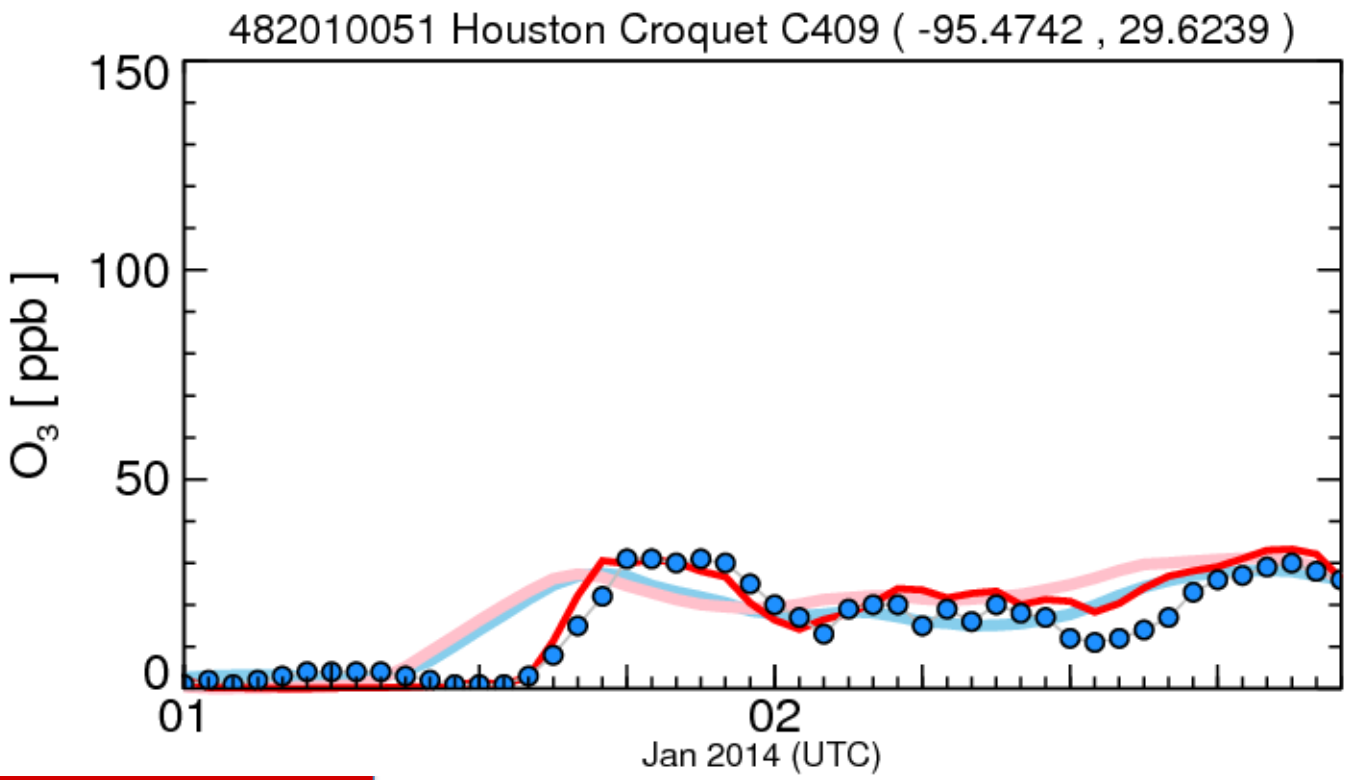
O_3 forecasting with in-situ measurement



- **Blue color: in-situ measurement**
- **Red color: simulation**

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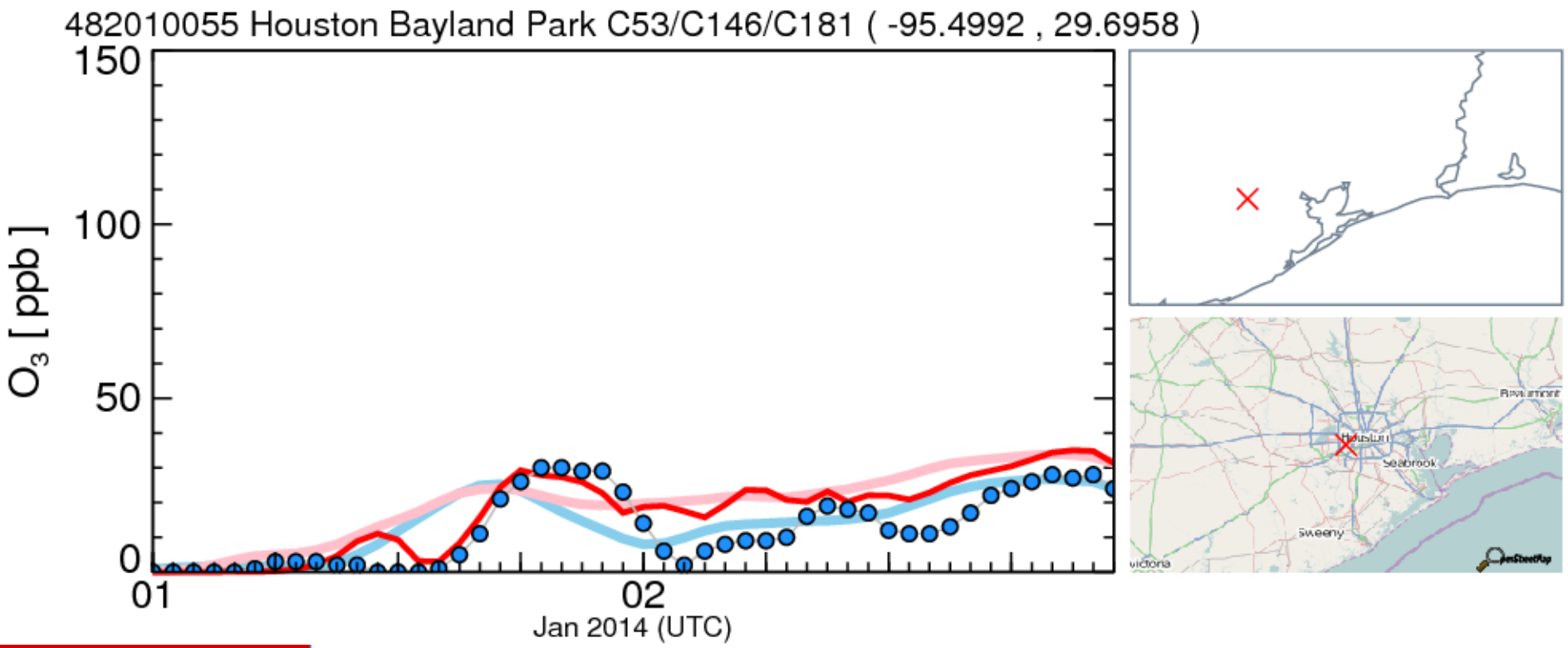
O_3 forecasting with in-situ measurement



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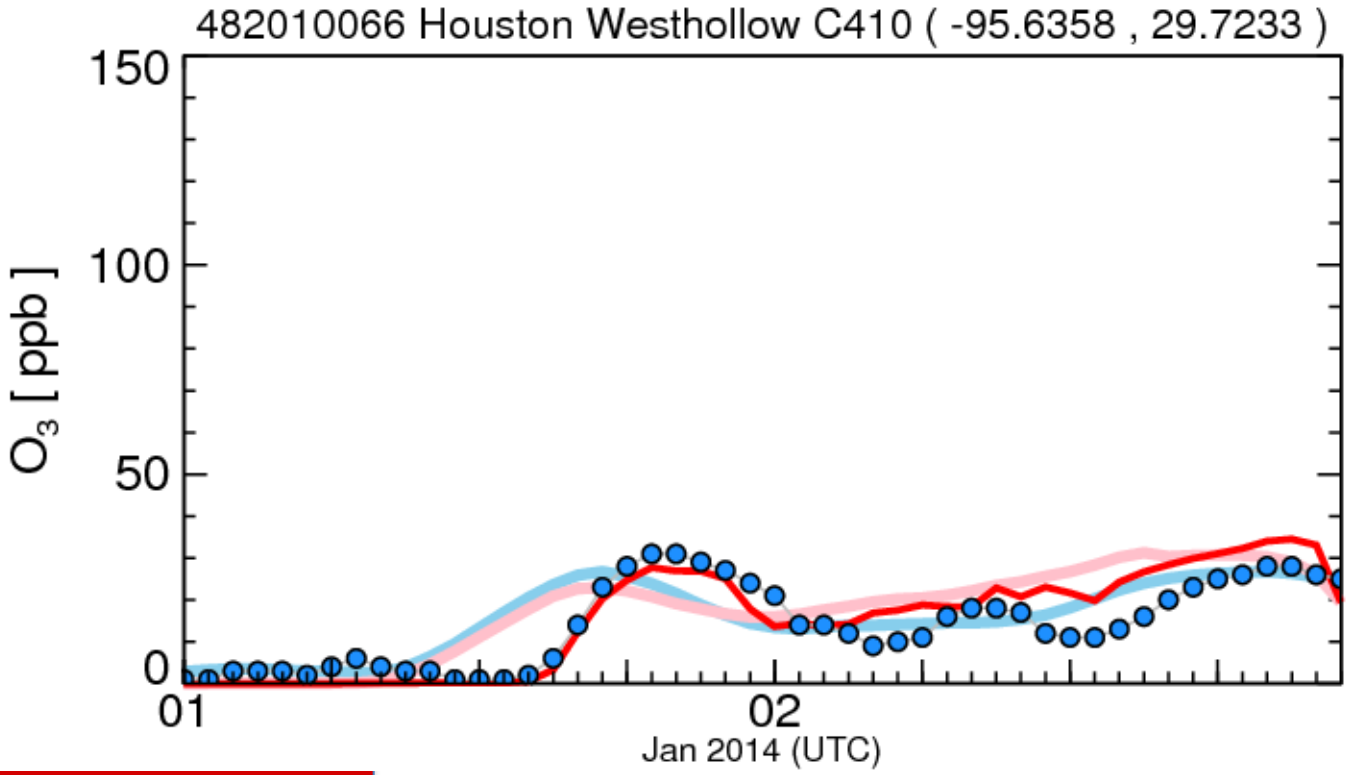

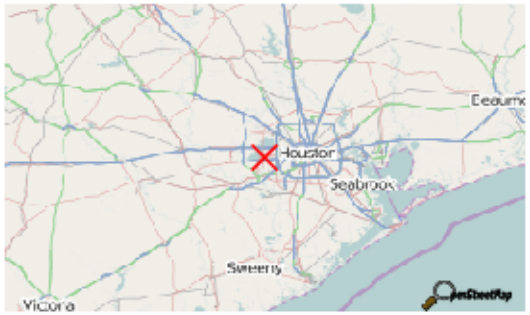

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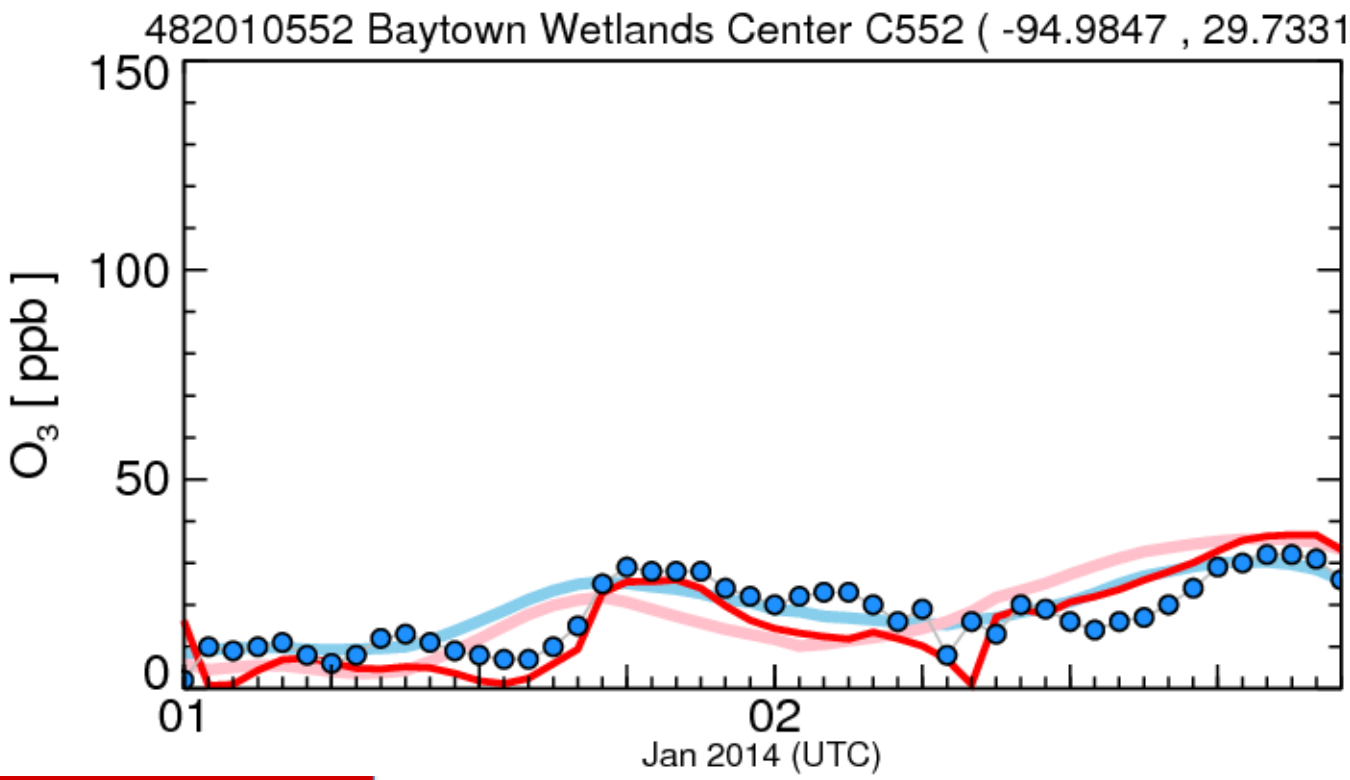

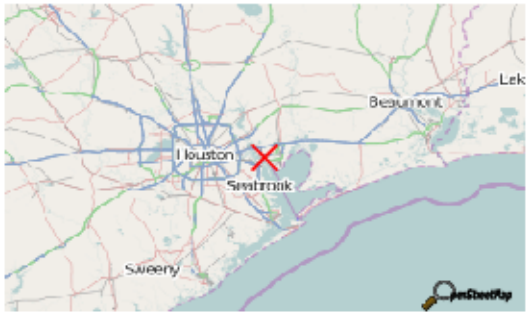

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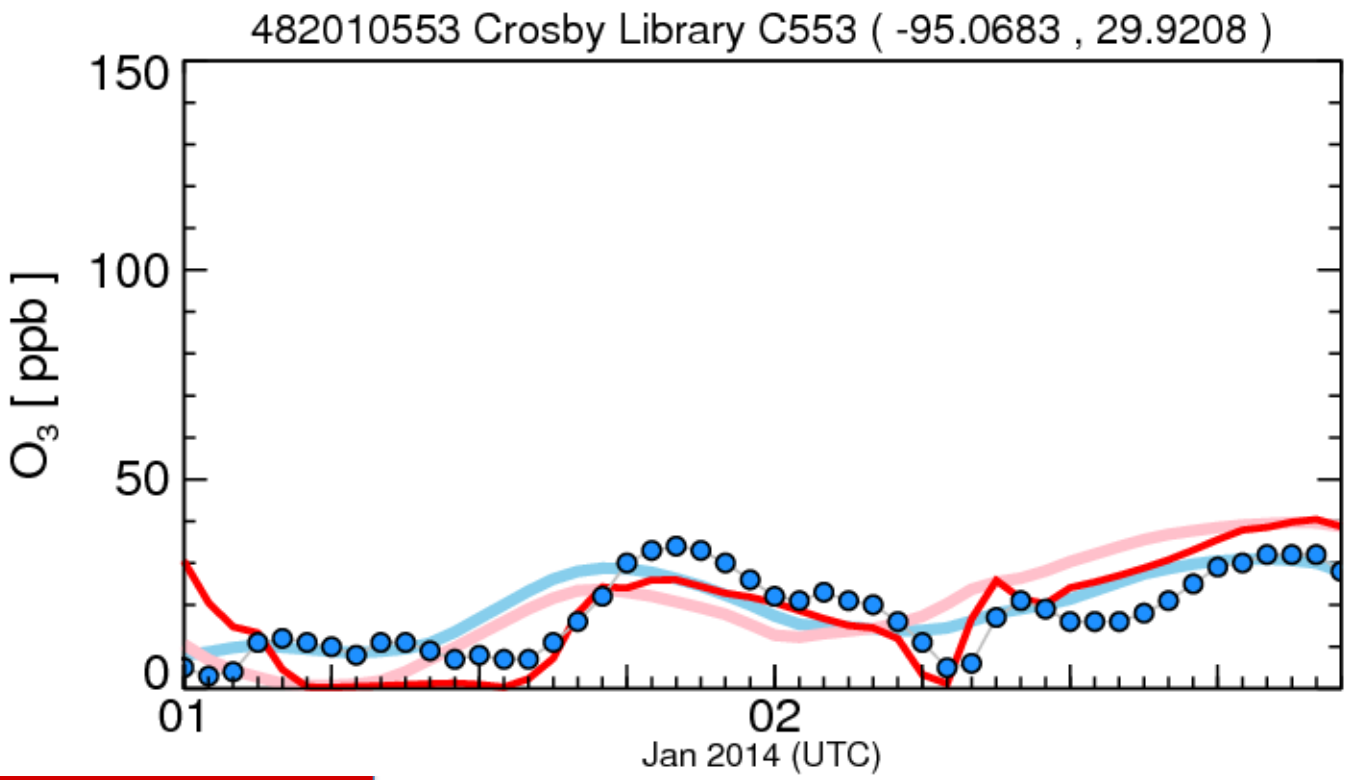

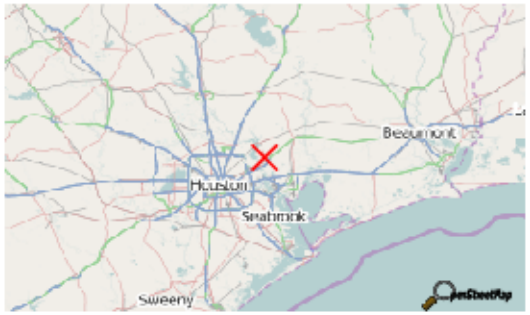

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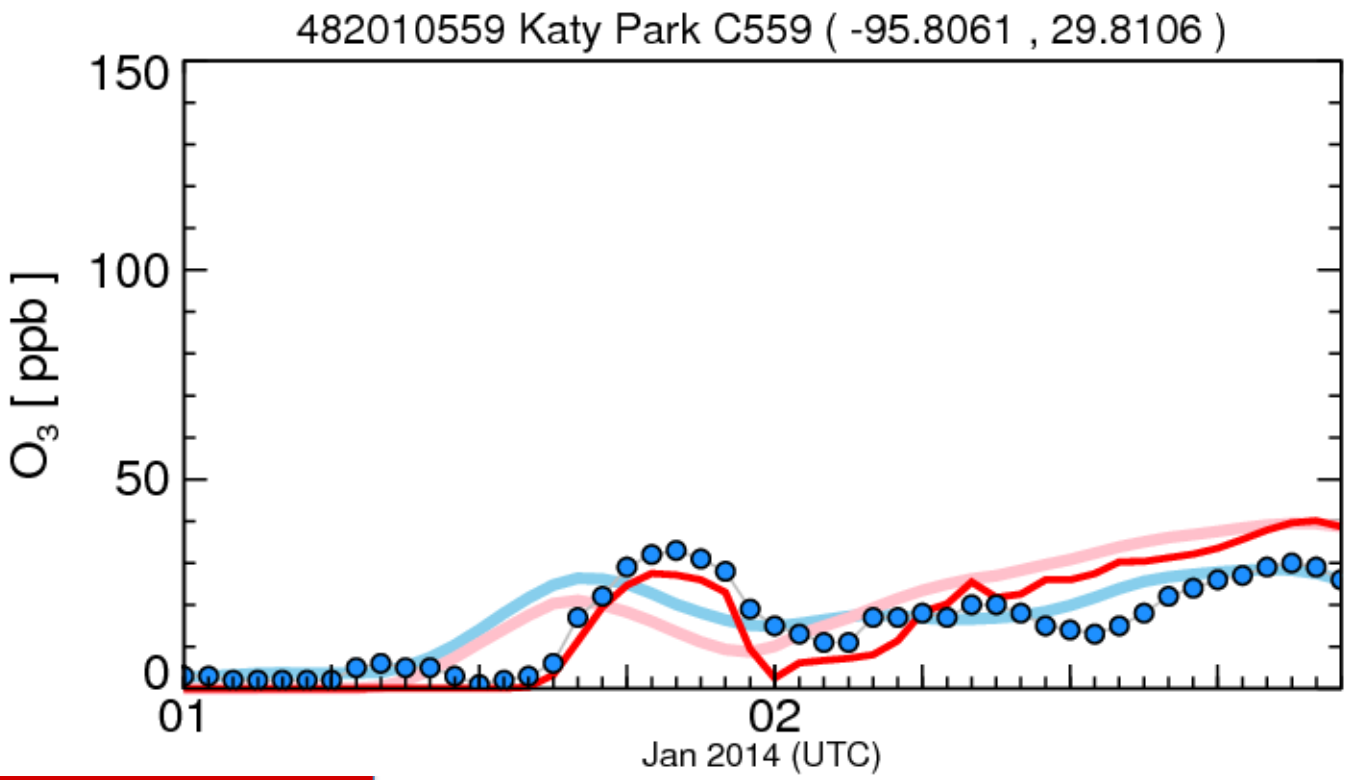

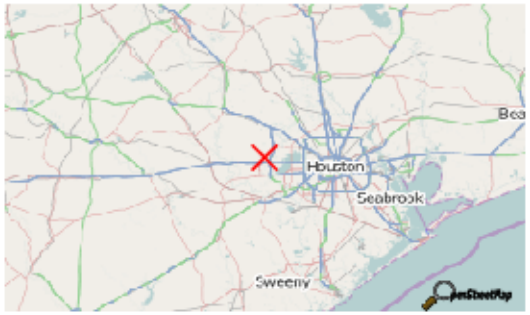

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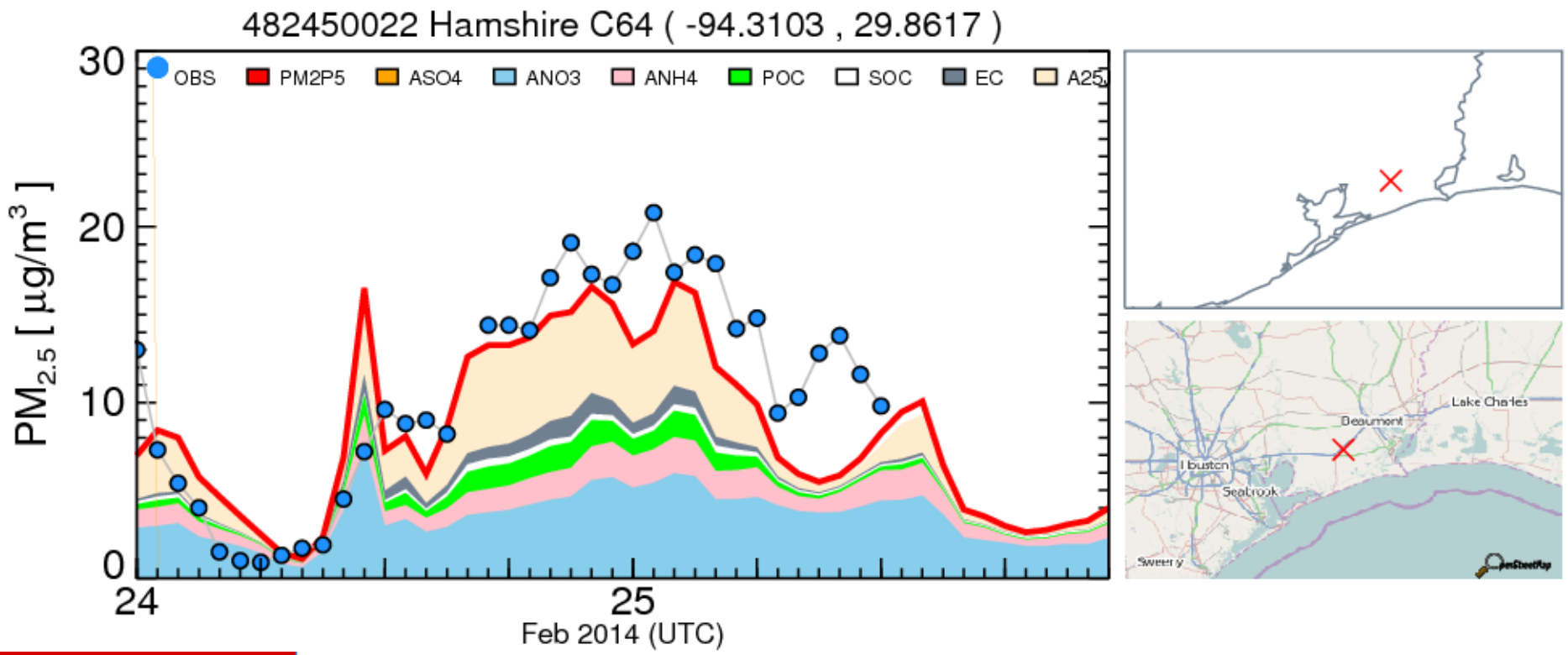
PM2.5 FORECASTING WITH IN-SITU MEASUREMENT



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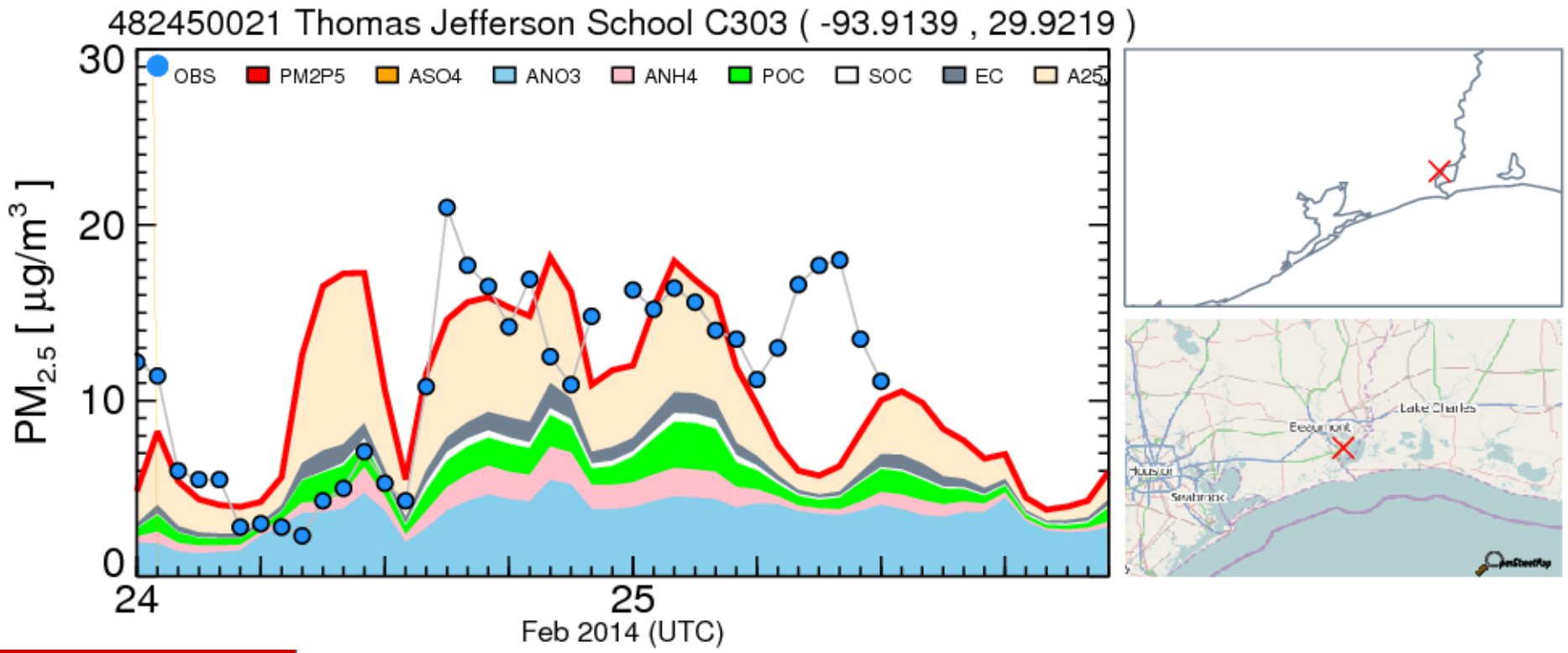
PM2.5 FORECASTING WITH IN-SITU MEASUREMENT



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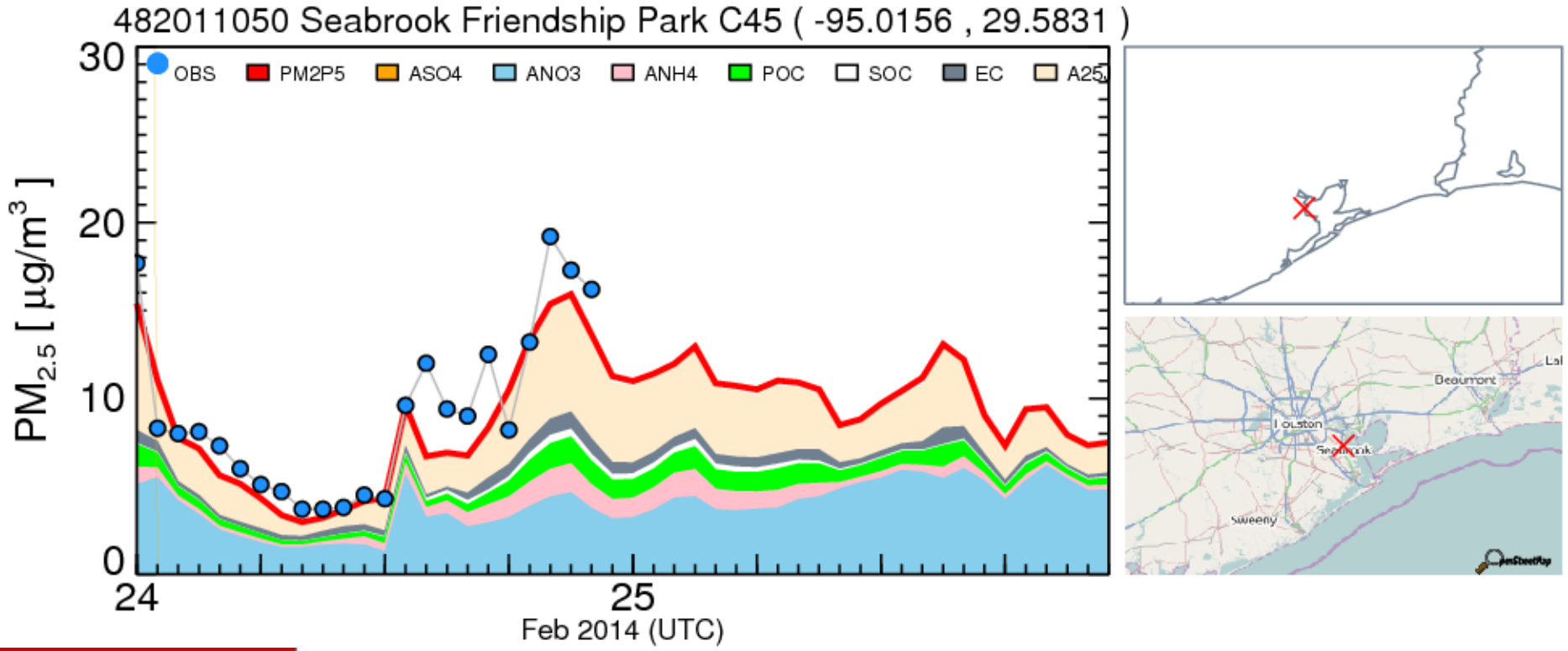
PM2.5 FORECASTING WITH IN-SITU MEASUREMENT



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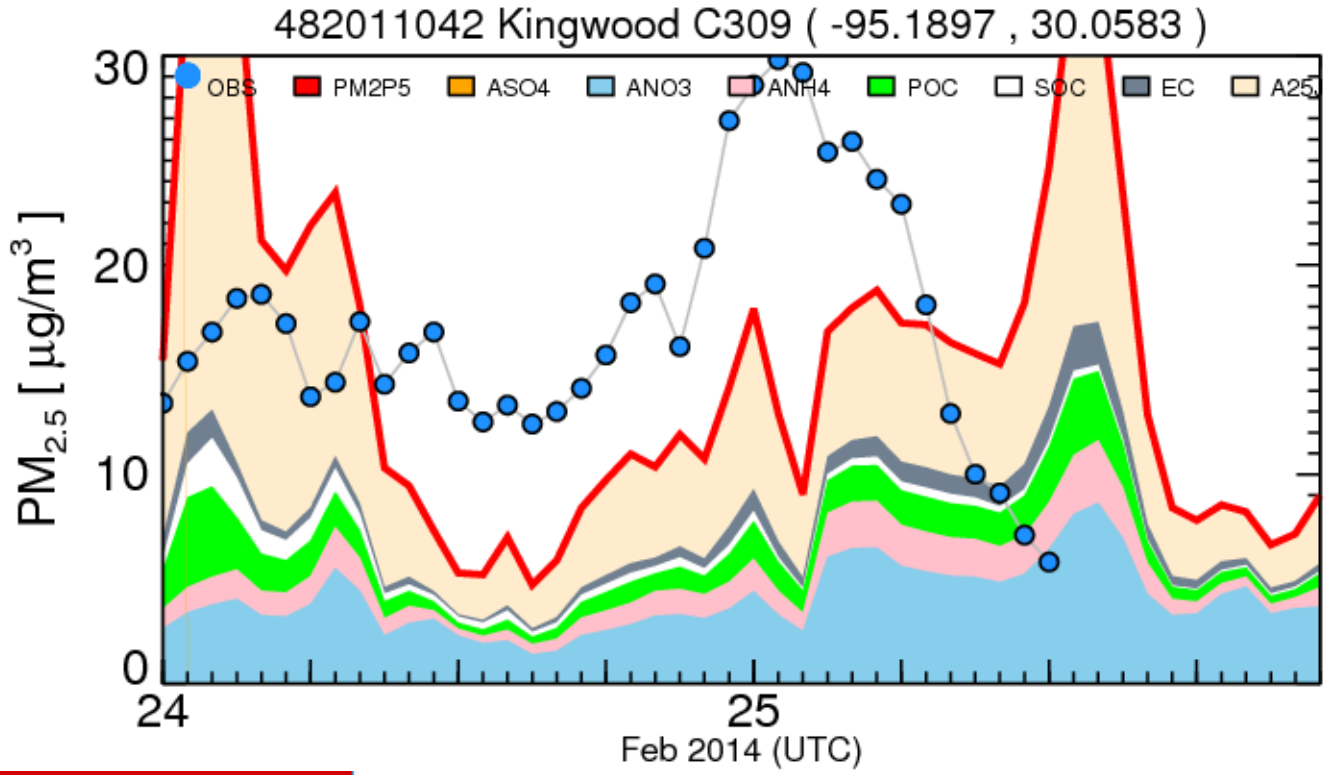

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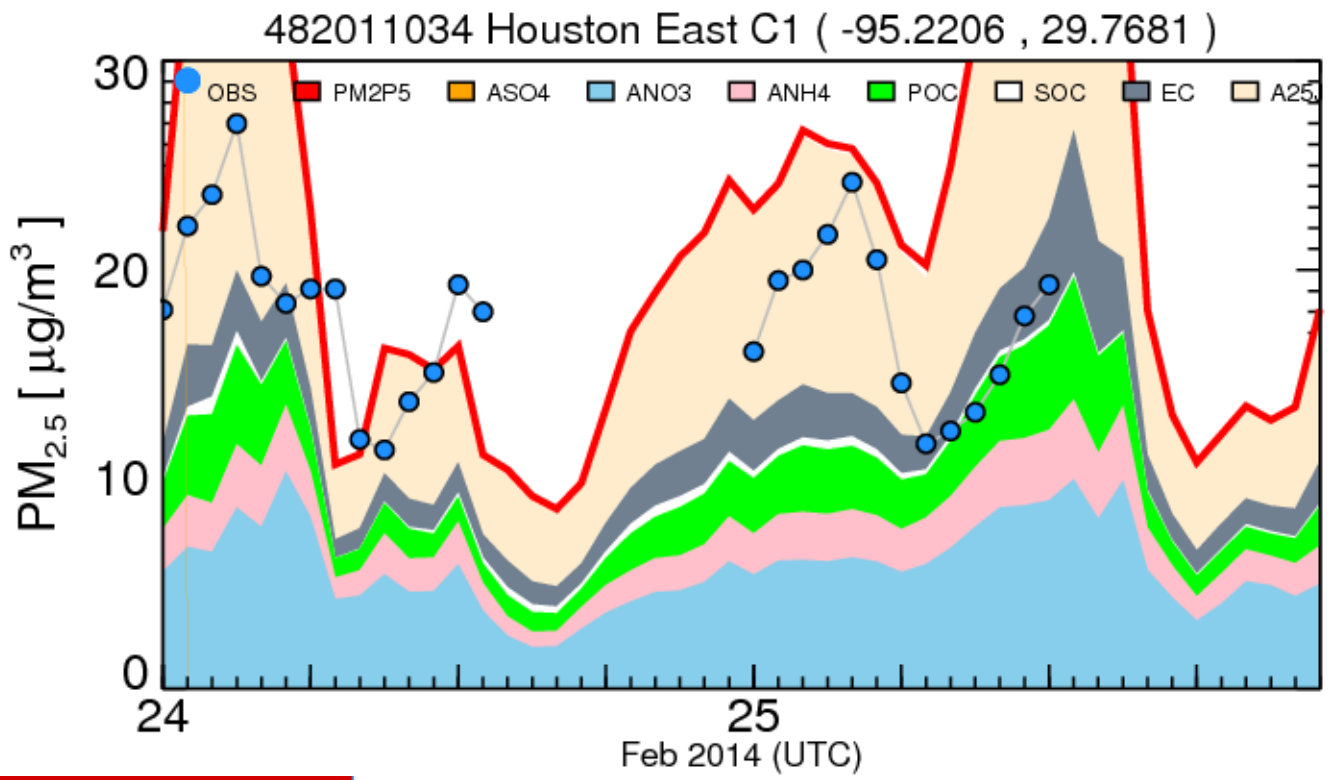

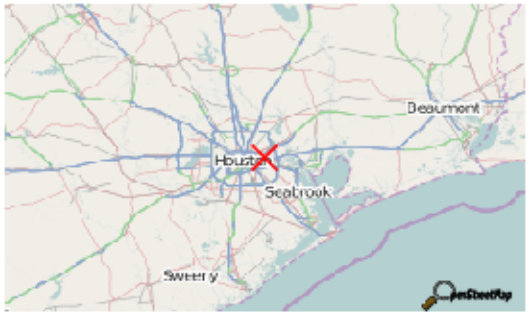

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