2017 Review of NOAA Air Quality Model Output

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Initial Comments from Maine DEP

Last high value for Maine ozone sites was June 12th.

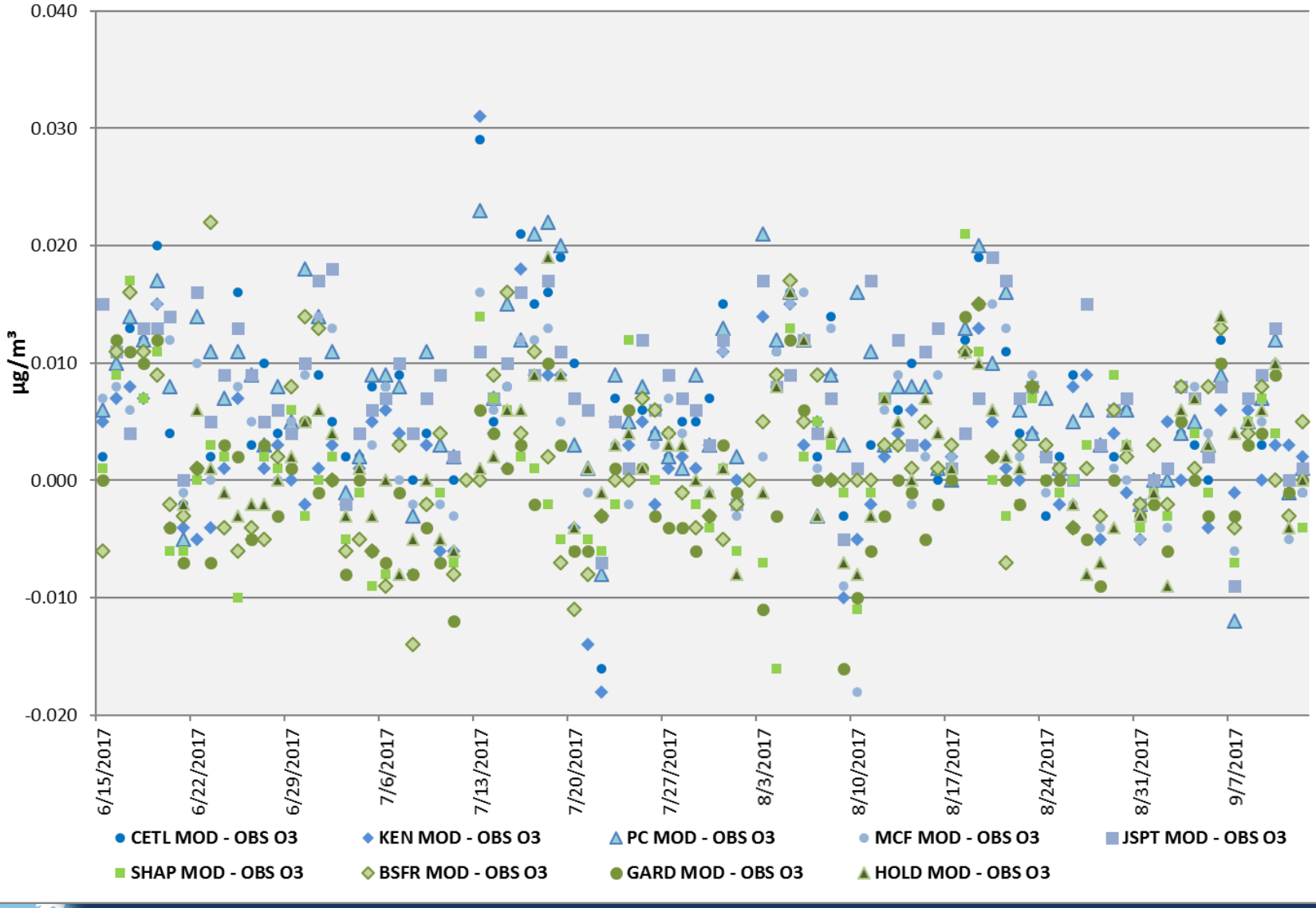
New version of model started June 14th.

PM values this summer have been more related to smoke from western fires rather than regular emissions.

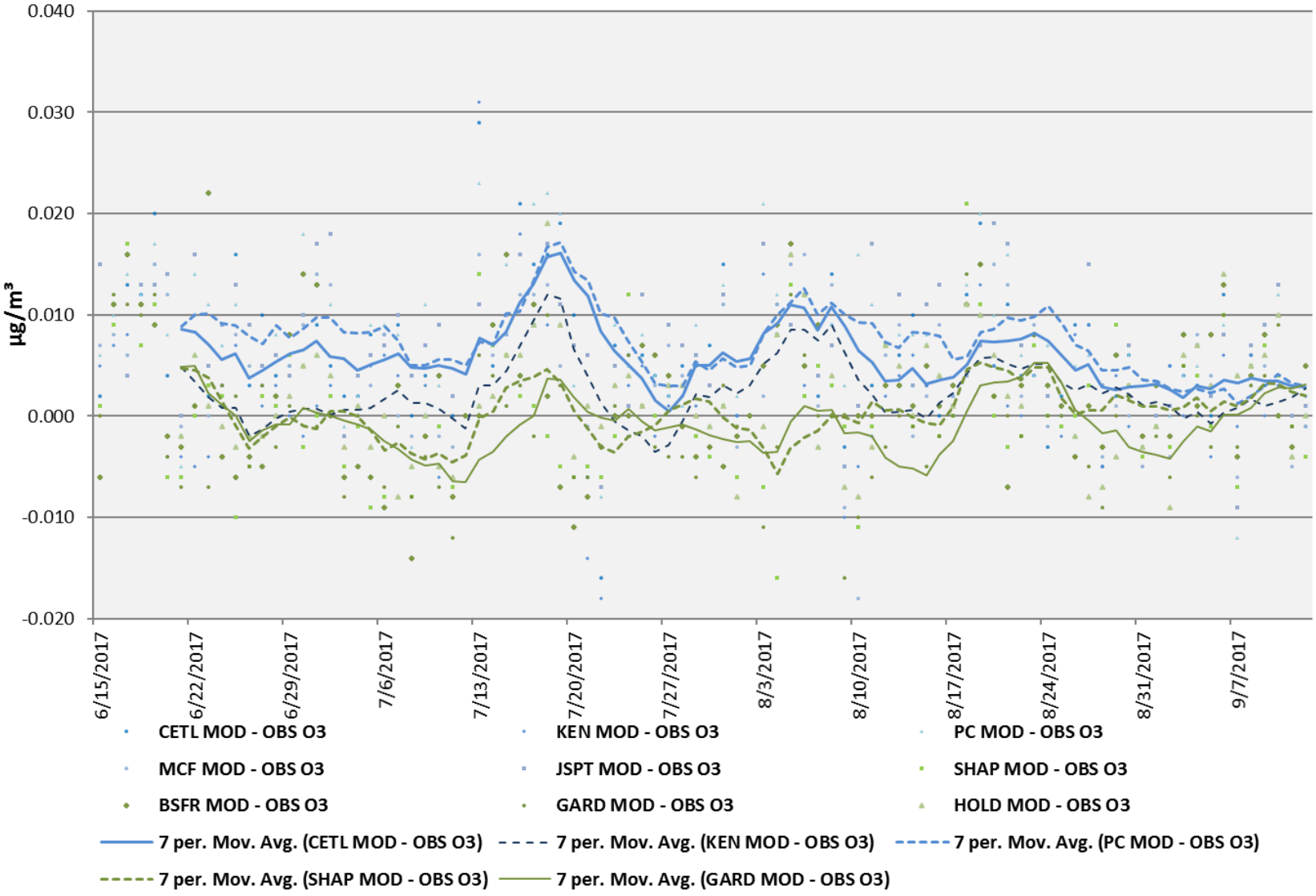
Ozone

- In the next two images the coastal sites are in blue and the interior sites are in green.
- Each chart is the model minus the observed.
  - + values are over predictions and
  - – values are under predictions
- For the trend line chart I chose two representative sites for the coast and two for the interior.
- Observed values really low toward the end of the data.

NOAA's AQFS CMAQ V5.0.2 EXPERIMENTAL MODEL OZONE BIAS FOR SITES IN MAINE



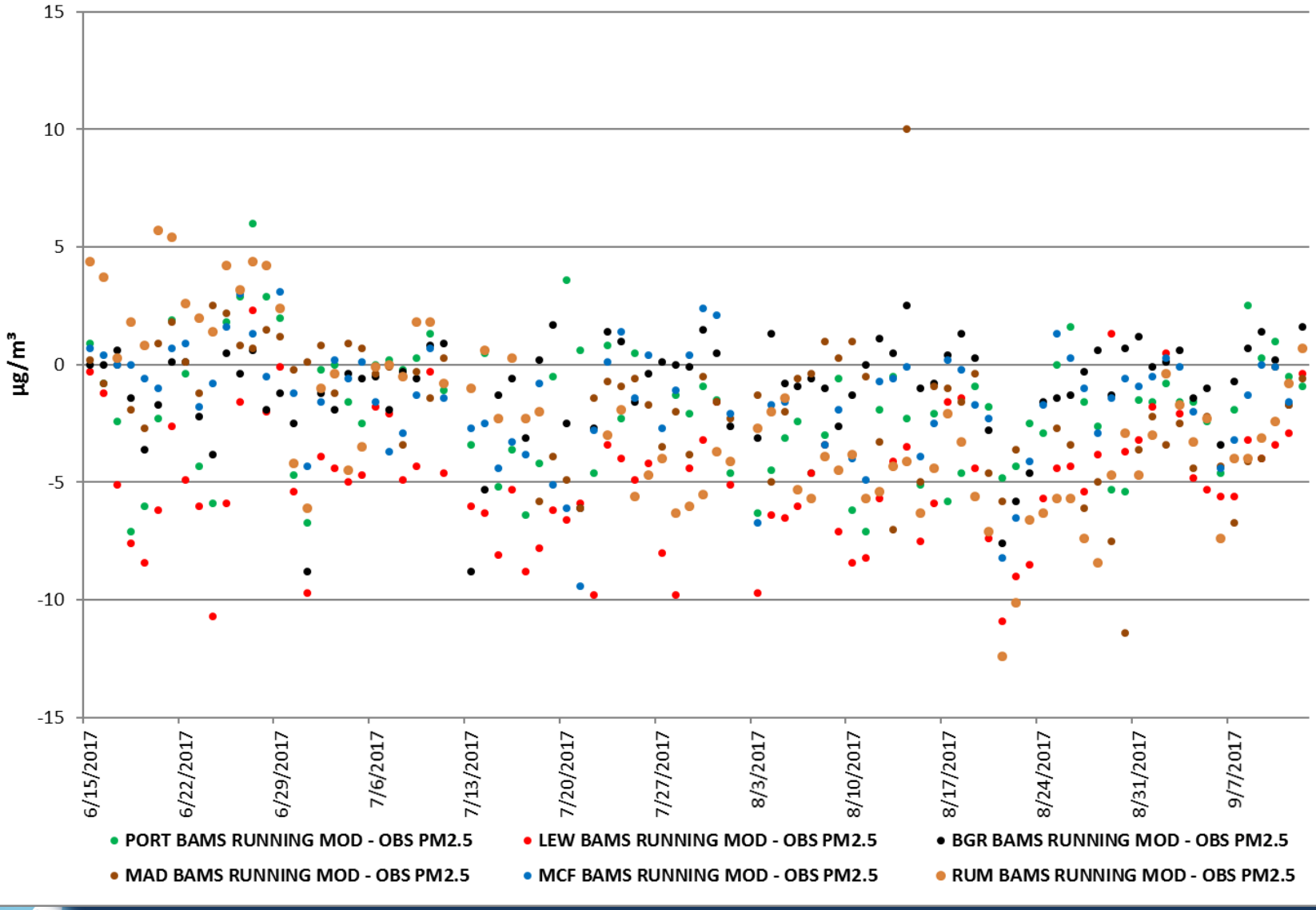
NOAA's AQFS CMAQ V5.0.2 EXPERIMENTAL MODEL OZONE BIAS FOR SITES IN MAINE



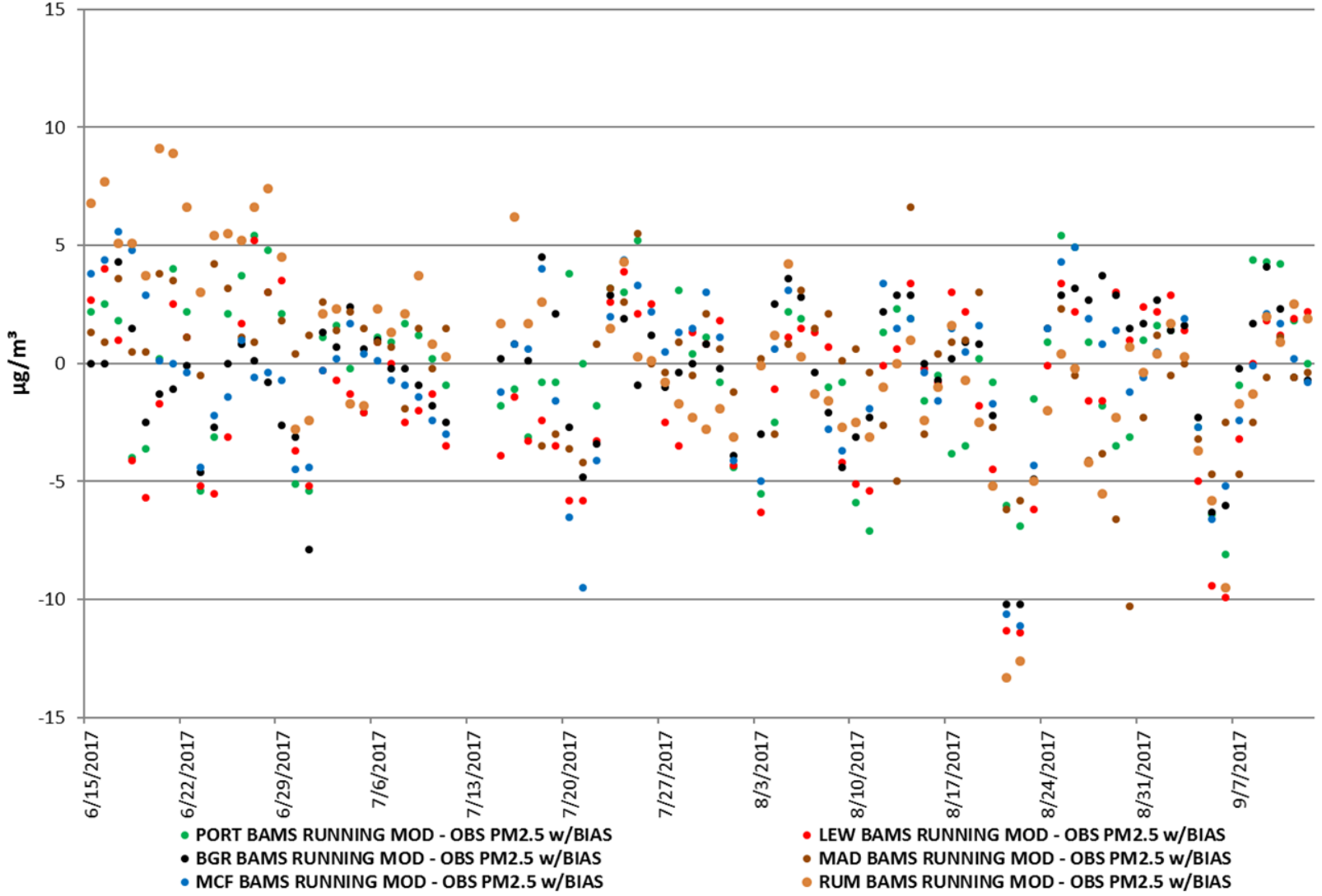
PM2.5

- The first image is the regular model minus observed values.
- The second is the bias corrected model minus observed values.
- In the latter image you can see that Rumford had the greatest absolute differences – it is a very deep complex river valley so we don’t expect good correlation.

NOAA's AQFS CMAQ V5.0.2 EXPERIMENTAL MODEL PM2.5 FOR SITES IN MAINE



NOAA's AQFS CMAQ V5.0.2 EXPERIMENTAL MODEL PM2.5 BIAS FOR SITES IN MAINE



Conclusion

- Since the new version of the model went into operation -- the summer has been a ‘non-event’ for Maine.
- Therefore, there is little to say about how the model is performing in the state nor is there enough data to really compare this new model performance with last year’s model performance.

Add contact information

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