



Ozone and PM_{2.5} NOAA CMAQ Model vs. Observations in Maine

NOAA's 9/10-11/2015 Forecaster focus group workshop
Silver Springs, MD

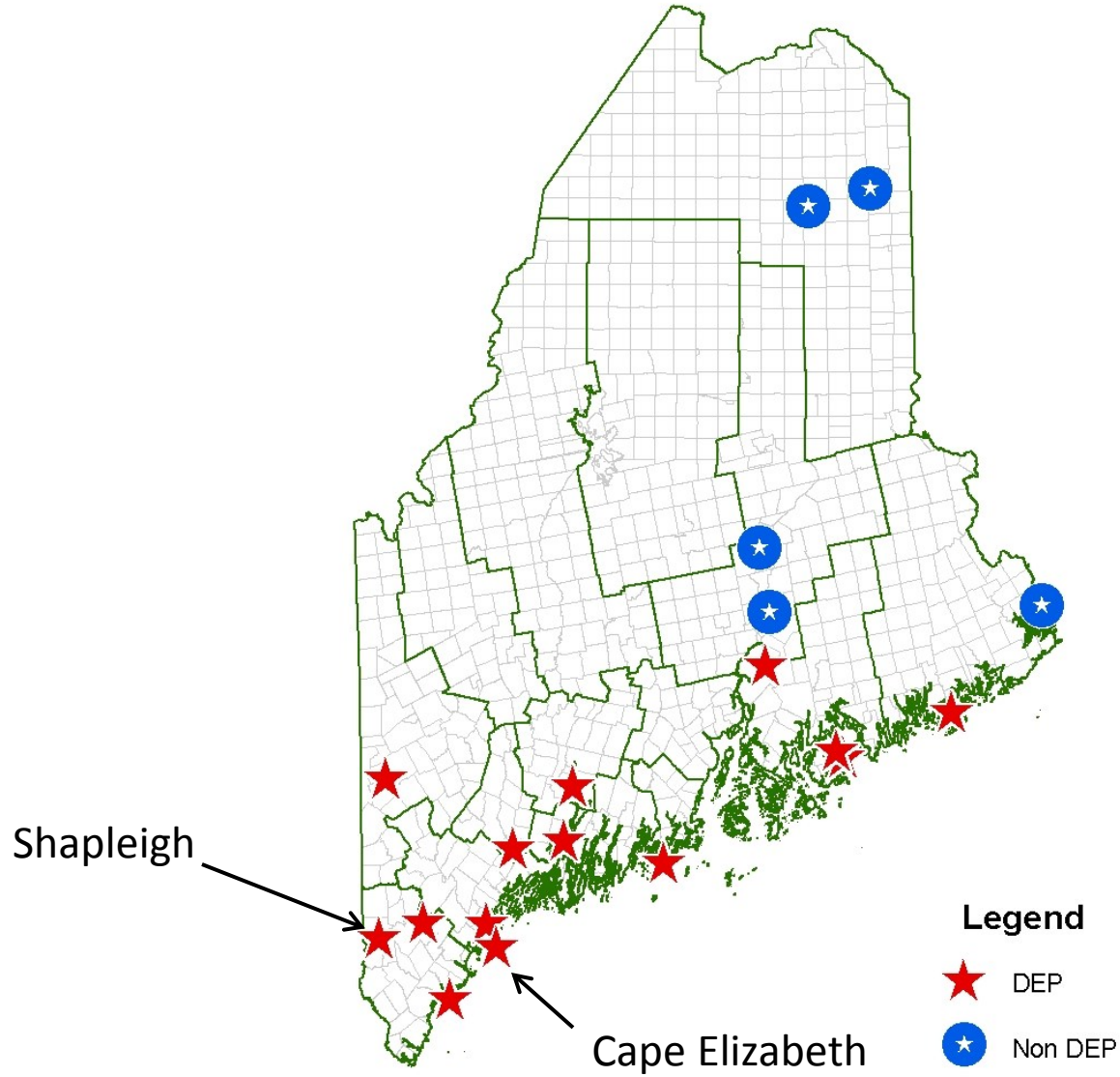
Tom Downs, CCM
Chief Meteorologist

Atmospheric Science and Analysis Section
Division of Air Quality Assessment

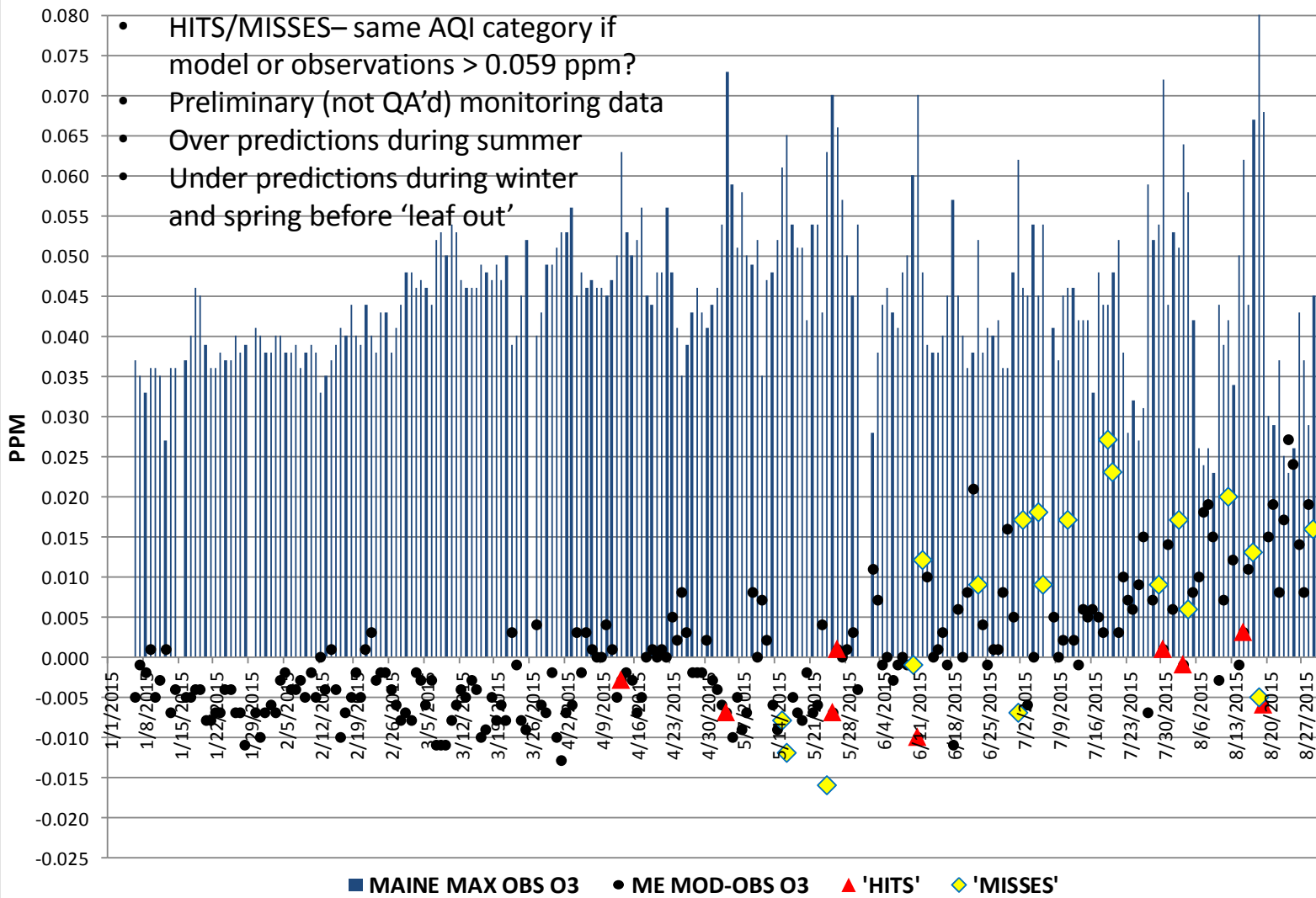
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

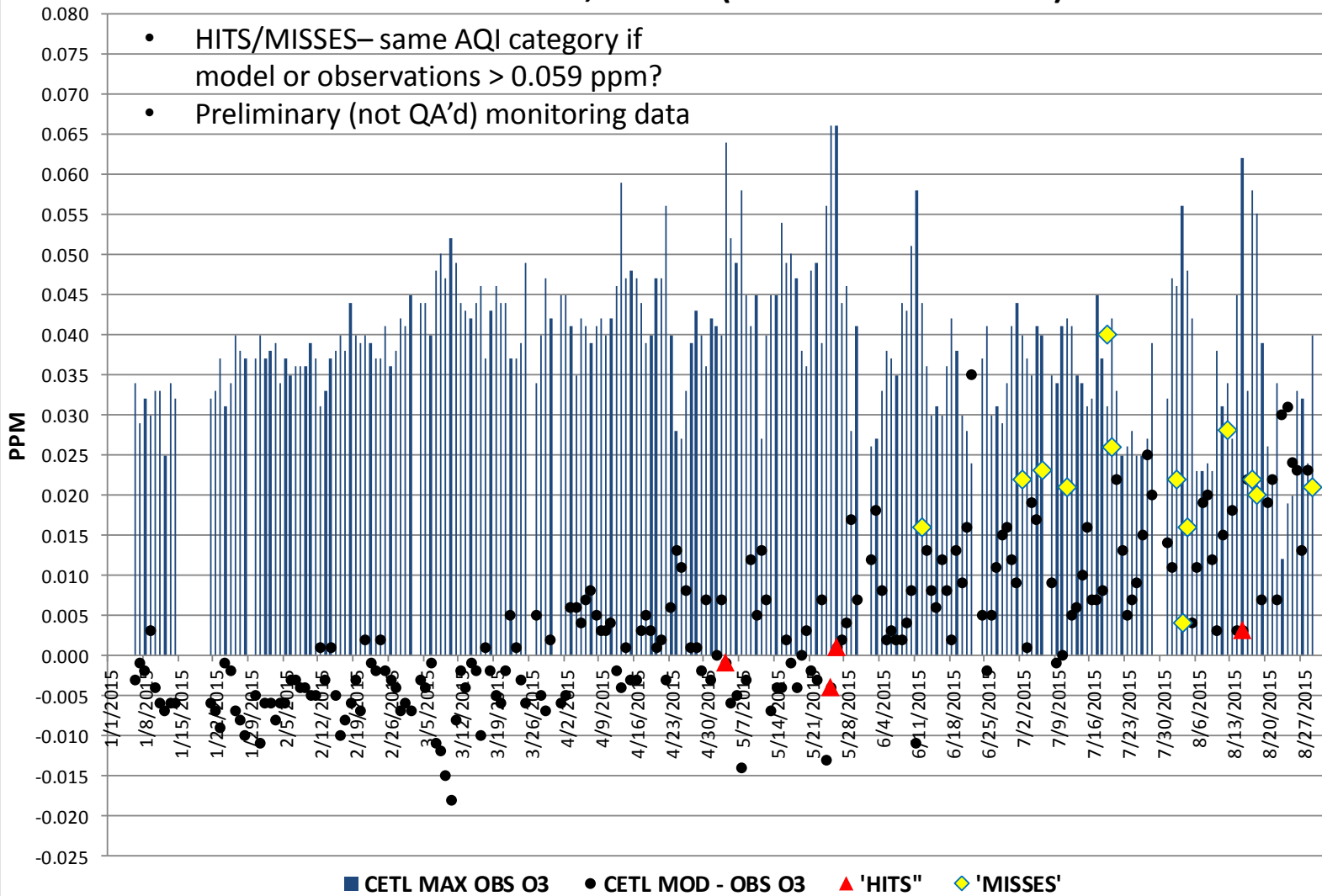
Ozone Monitor Network



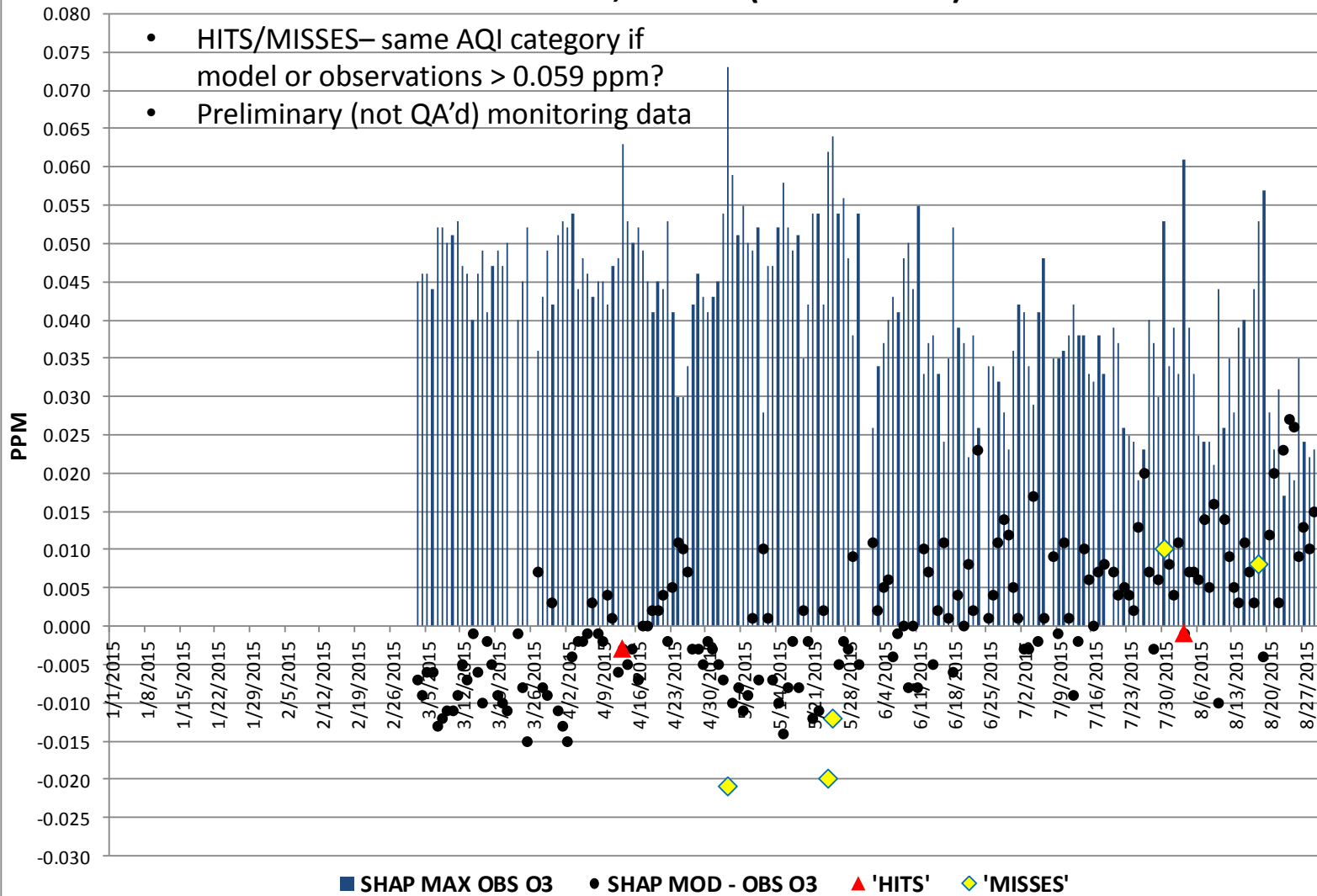
NOAA's AQFS CMAQ MODEL MAXIMUM OZONE PREDICTIONS vs OBSERVATIONS IN MAINE



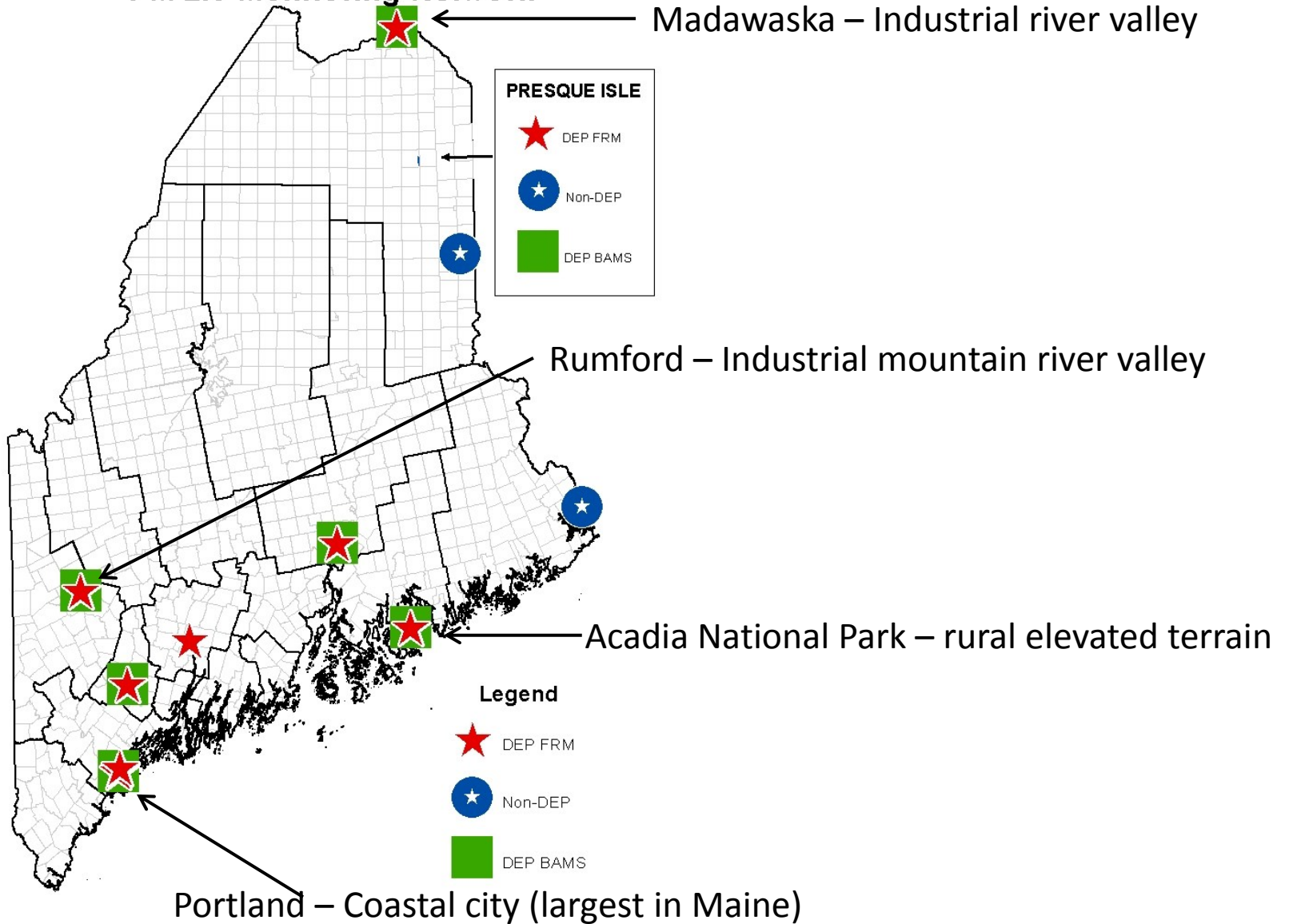
NOAA's AQFS CMAQ MODEL OZONE PREDICTIONS vs OBSERVATIONS AT CAPE ELIZABETH, MAINE (Southwest Coast Site)



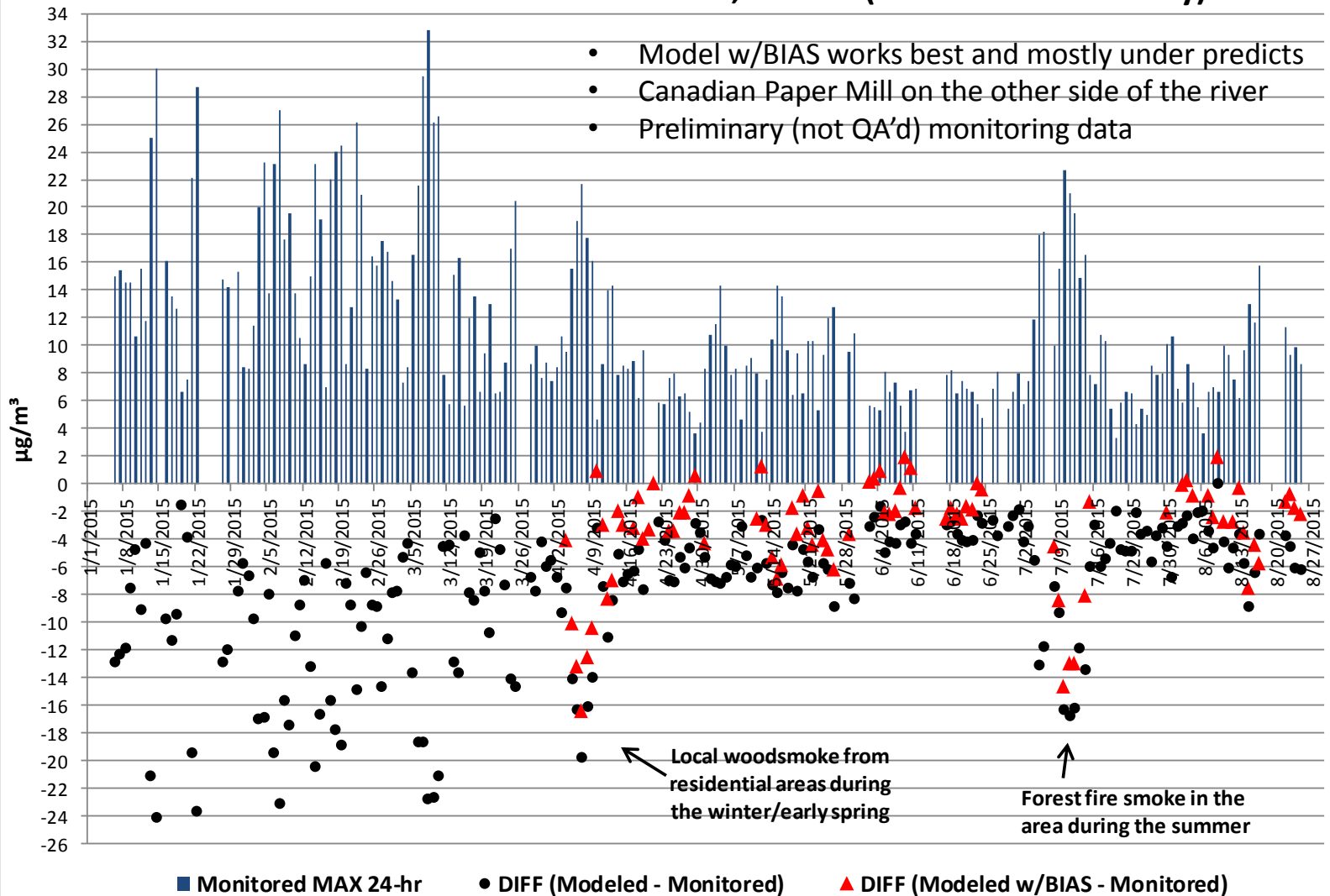
NOAA's AQFS CMAQ MODEL OZONE PREDICTIONS vs OBSERVATIONS AT SHAPLEIGH, MAINE (INLAND SITE)



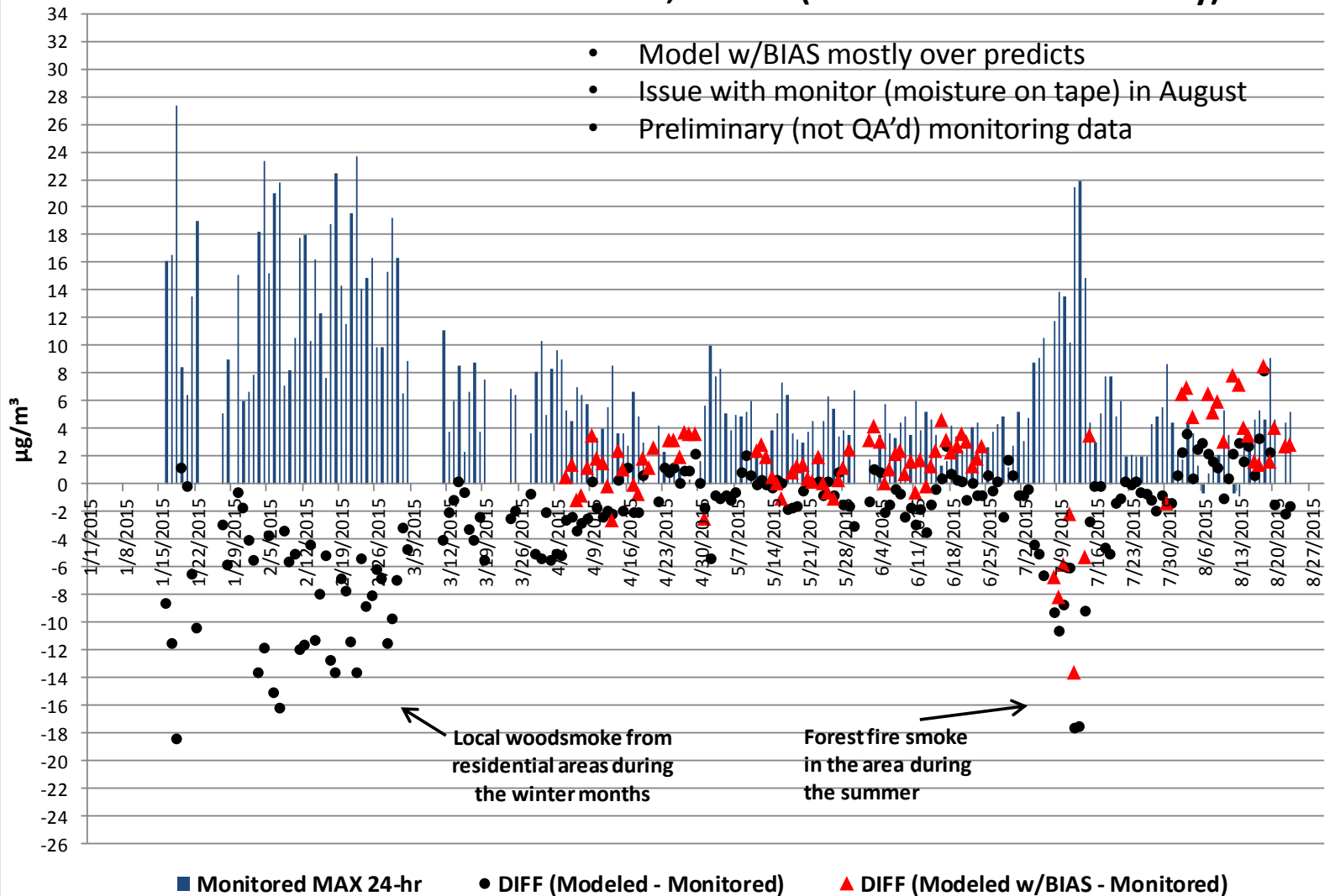
PM 2.5 Monitoring Network



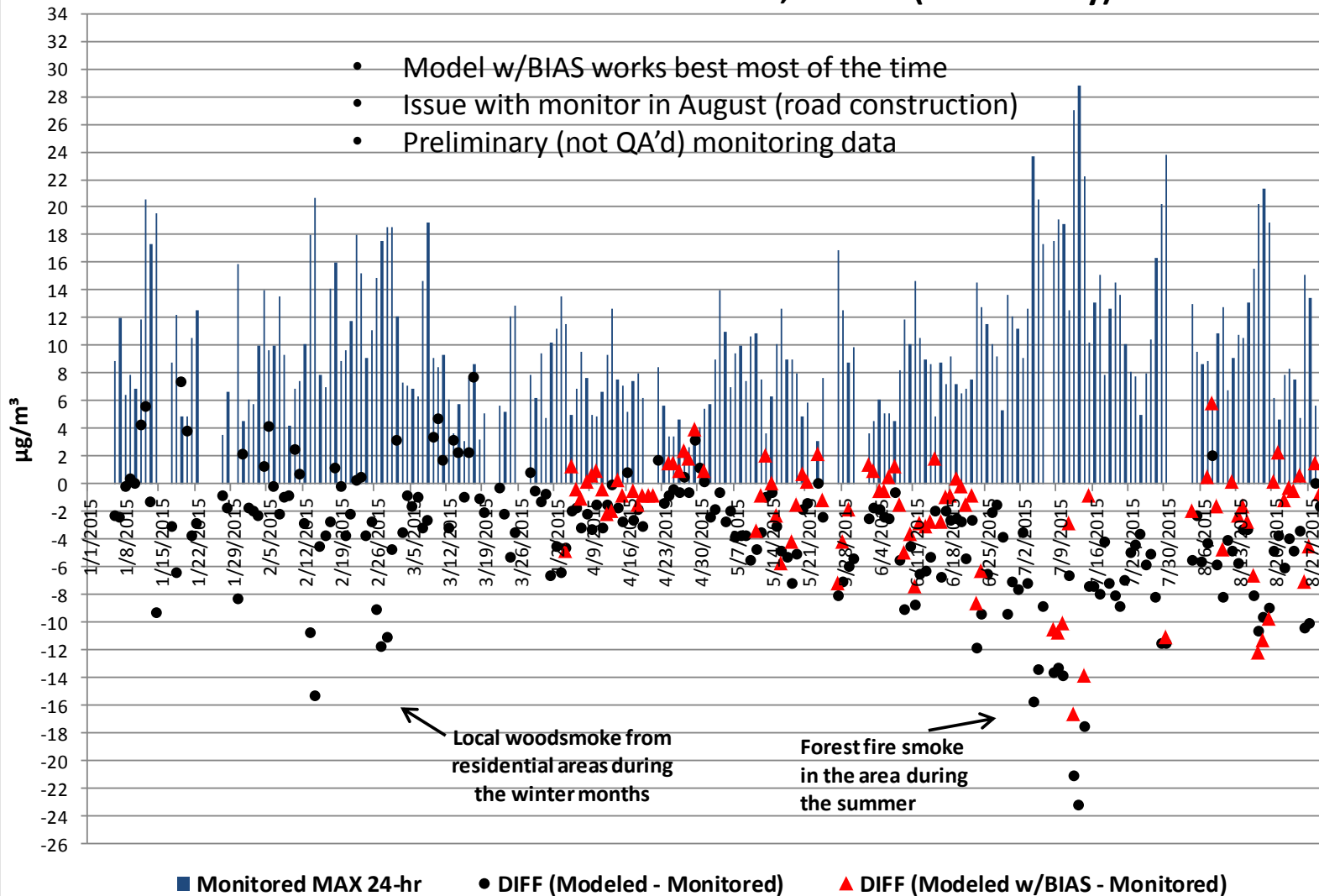
NOAA's AQFS CMAQ EXPERIMENTAL MODEL 24-hr PM2.5 PREDICTIONS vs OBSERVATIONS AT MADAWASKA, MAINE (industrial river valley)



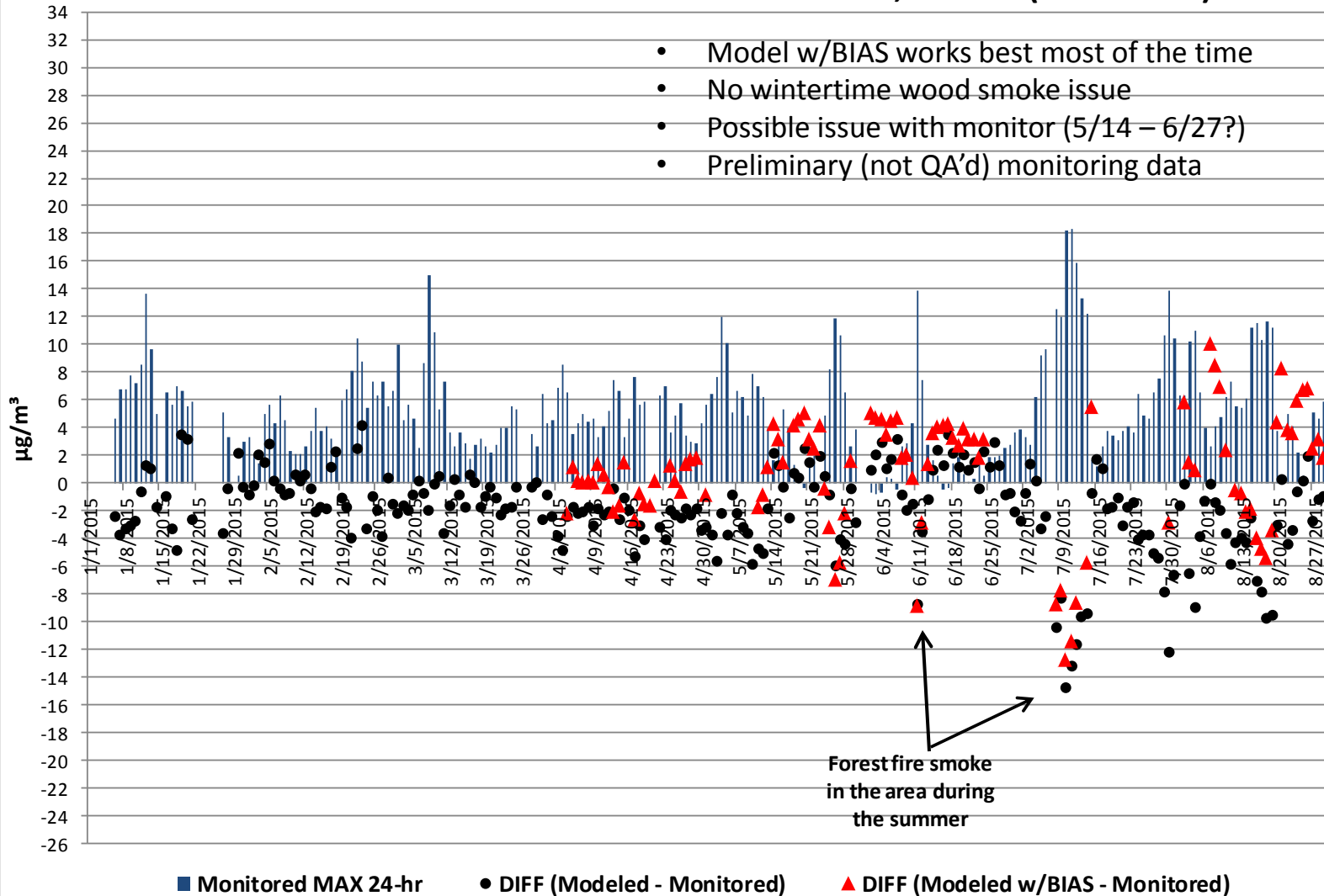
NOAA's AQFS CMAQ EXPERIMENTAL MODEL 24-hr PM2.5 PREDICTIONS vs OBSERVATIONS AT RUMFORD, MAINE (industrial mountain valley)



NOAA's AQFS CMAQ EXPERIMENTAL MODEL 24-hr PM2.5 PREDICTIONS vs OBSERVATIONS AT PORTLAND, MAINE (Coastal City)



NOAA's AQFS CMAQ EXPERIMENTAL MODEL 24-hr PM2.5 PREDICTIONS vs OBSERVATIONS AT ACADIA NATIONAL PARK, MAINE (rural coast)



- Model w/BIAS works best most of the time
- No wintertime wood smoke issue
- Possible issue with monitor (5/14 – 6/27?)
- Preliminary (not QA'd) monitoring data

Forest fire smoke
in the area during
the summer





tom.downs@maine.gov

207-287-7026

www.maine.gov/dep

