

2016 Soberanes Fire

Monterey County, CA

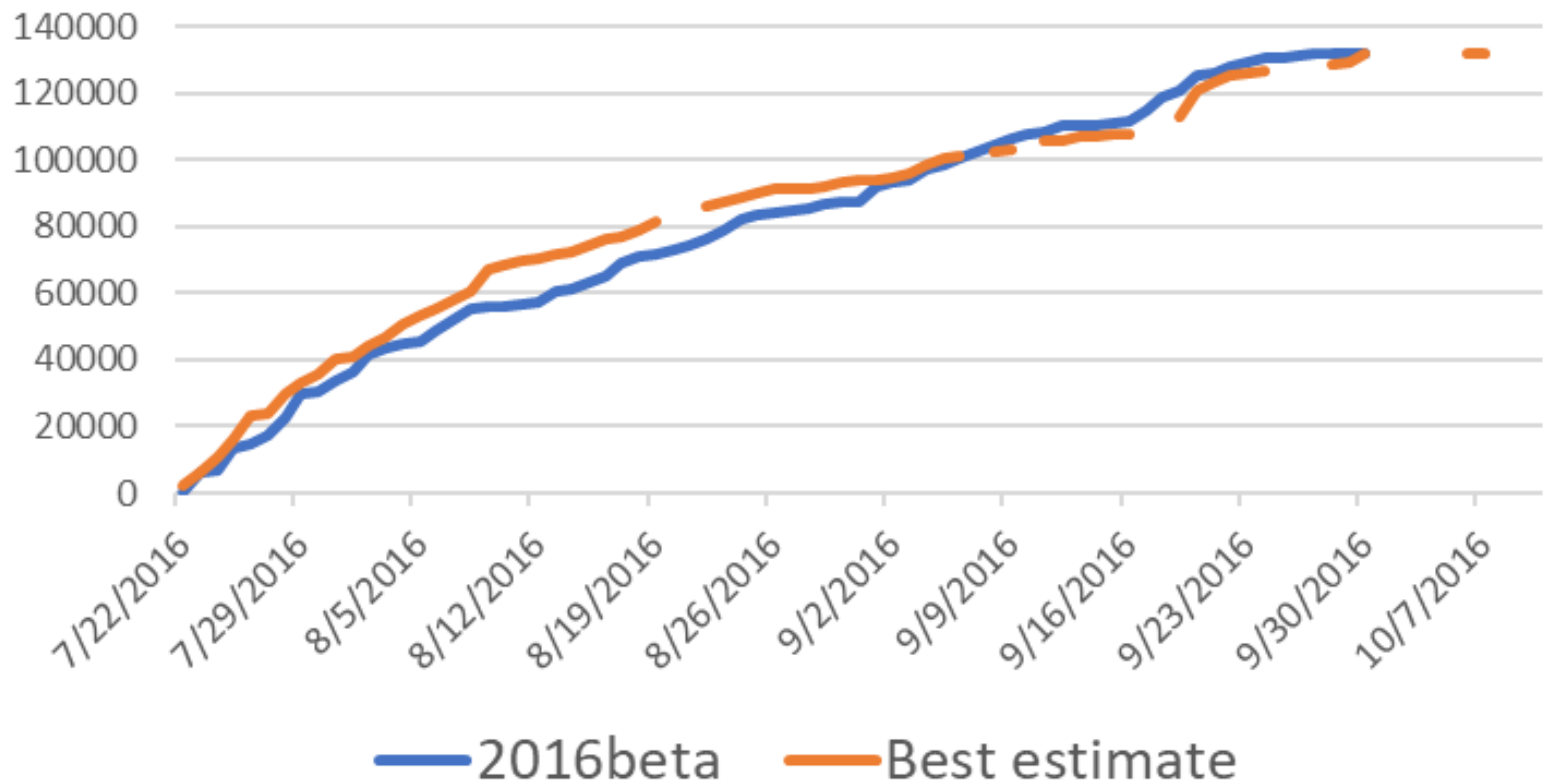
July 22-Oct 12, 2016



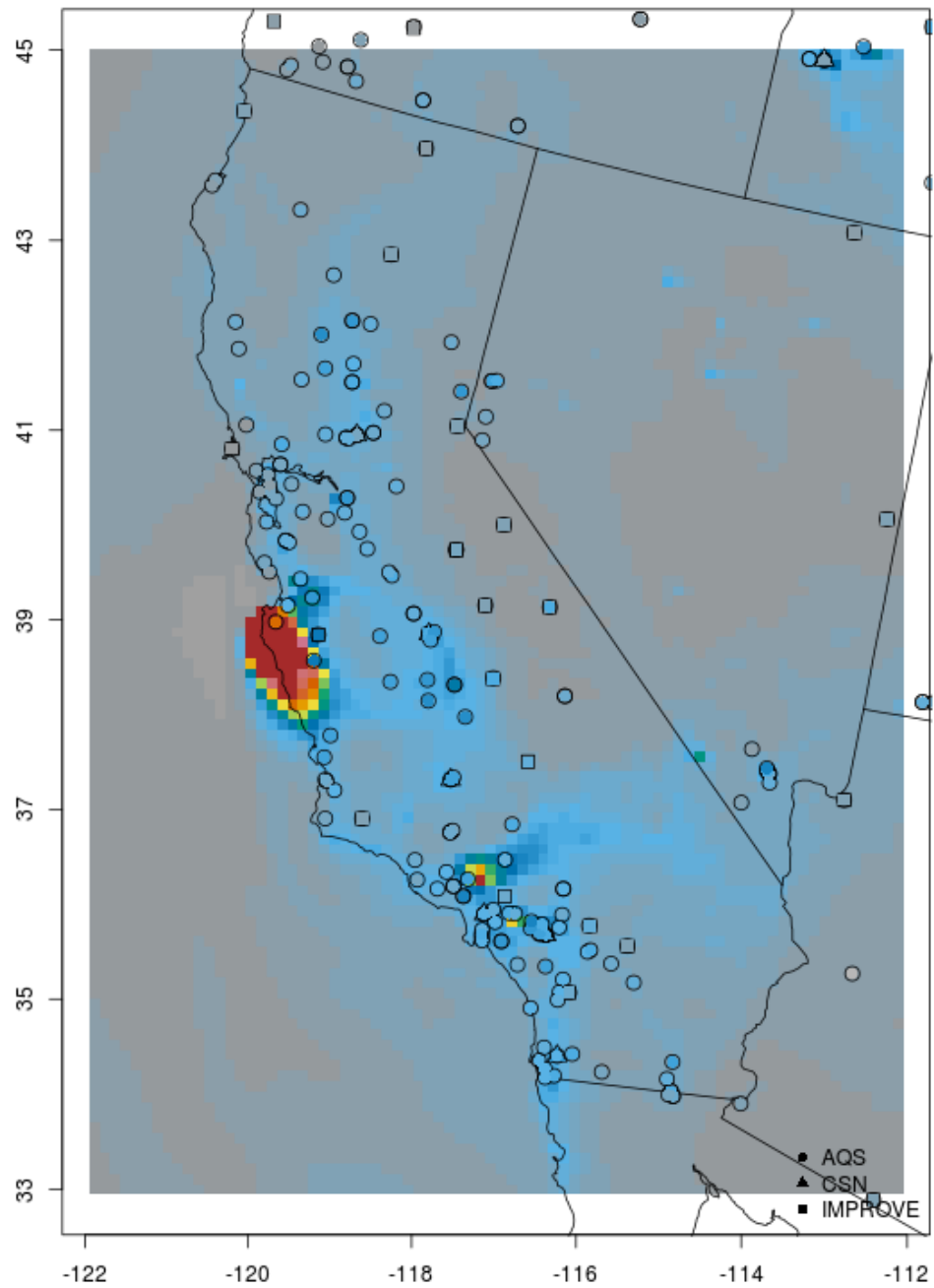
Soberanes fire: some details

- ▶ 132,200 total acres burned
- ▶ July 22-Oct 12, 2016 in Monterey County, CA
- ▶ Ranked in top 20 in CA fire history
- ▶ Big Sur coast in the Los Padres National Forest, Ventana Wilderness, and adjacent private and public land
- ▶ 57 homes and other structures burned
- ▶ Fuels: Redwood-tanoak, CA live oak, shrubland, fir, grassland
- ▶ 4th largest wildfire in 2016

Soberanes fire: total acres burned

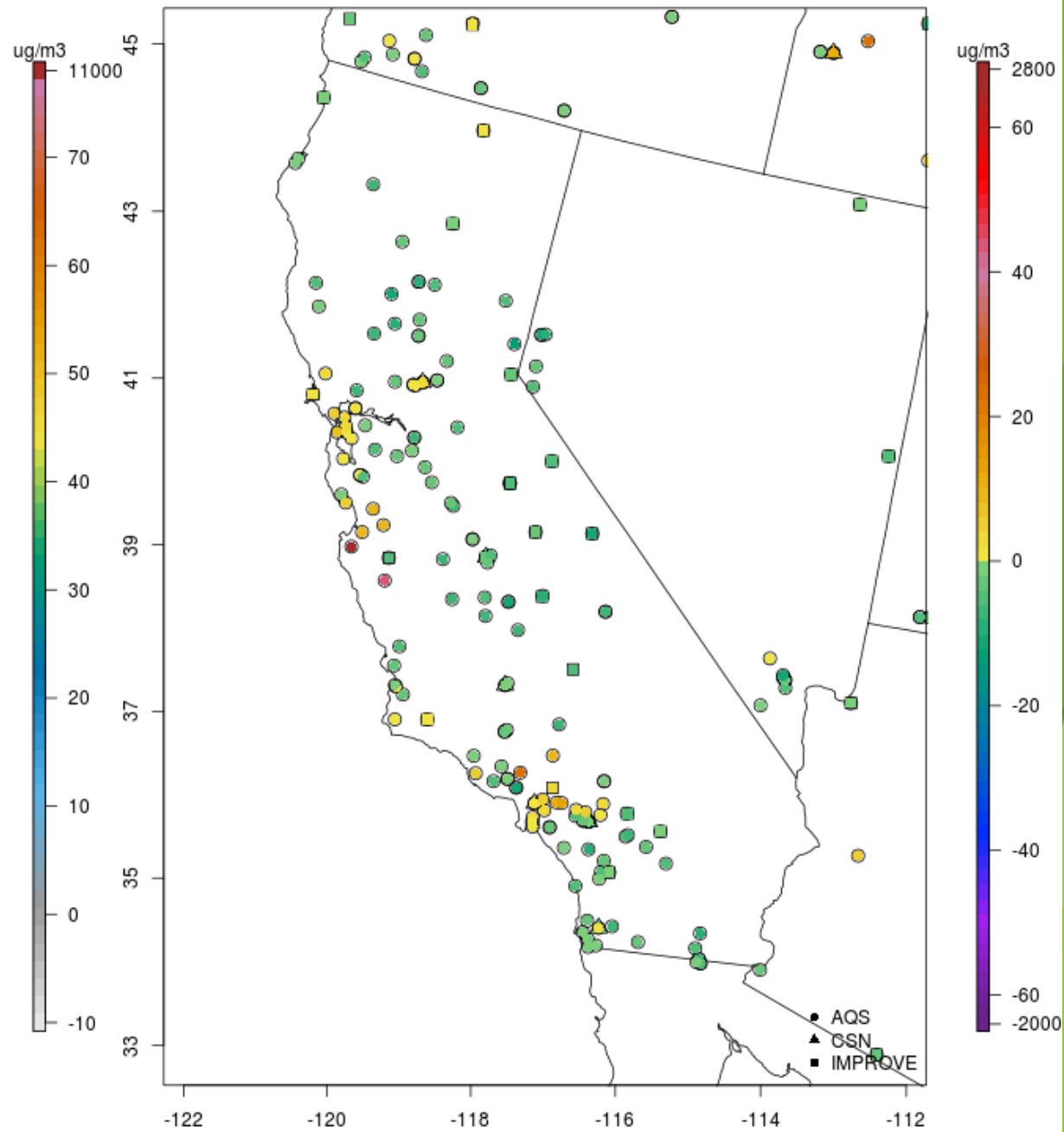


CMAQv521_2016ff_12US2_West: PM25_TOT on 07/26/2016



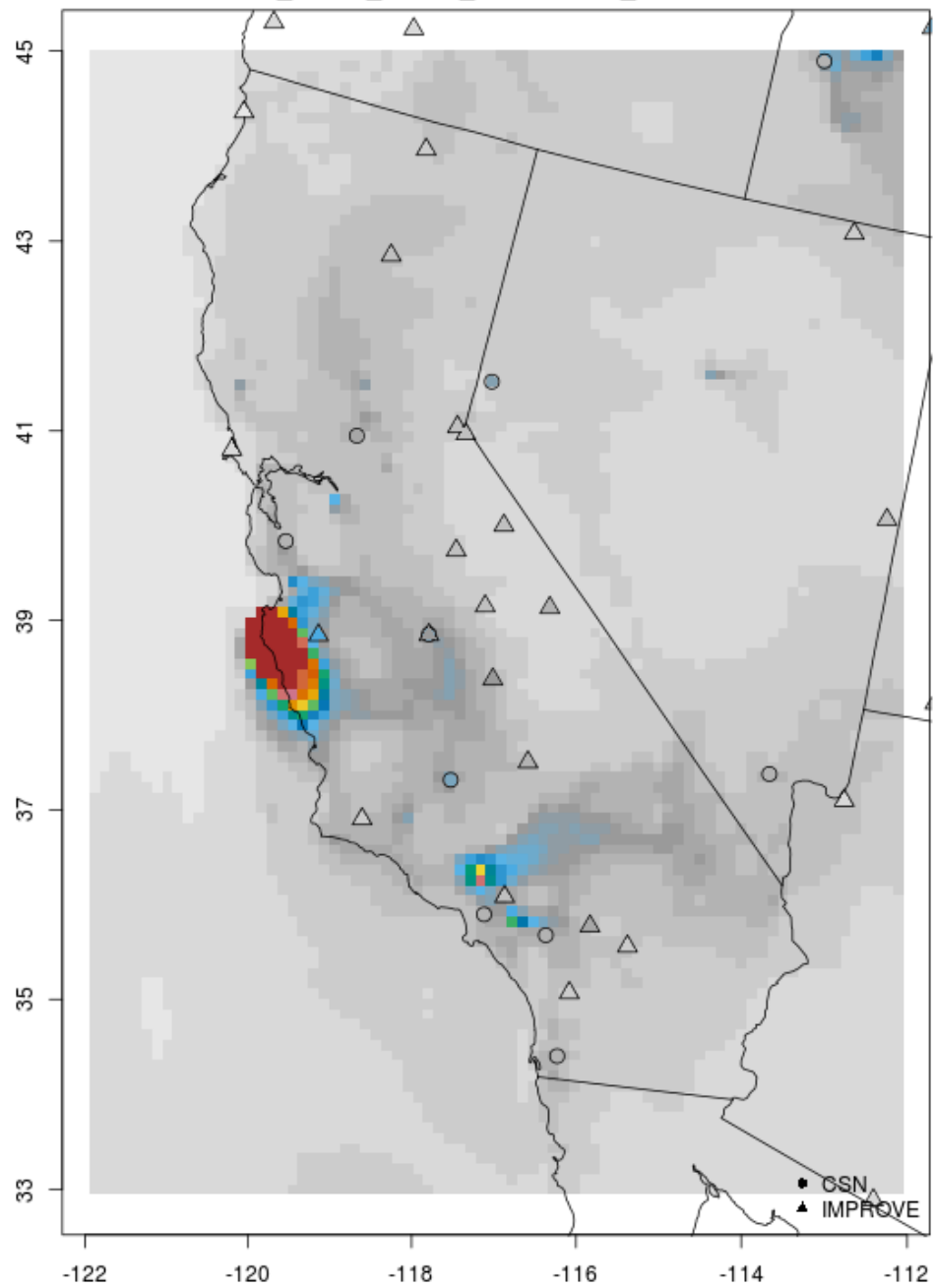
Domain size: 111x78 | Max Model = 11000 at (55, 17)
Max Obs: 64

CMAQv521_2016ff_12US2_West: PM25_TOT on 07/26/2016



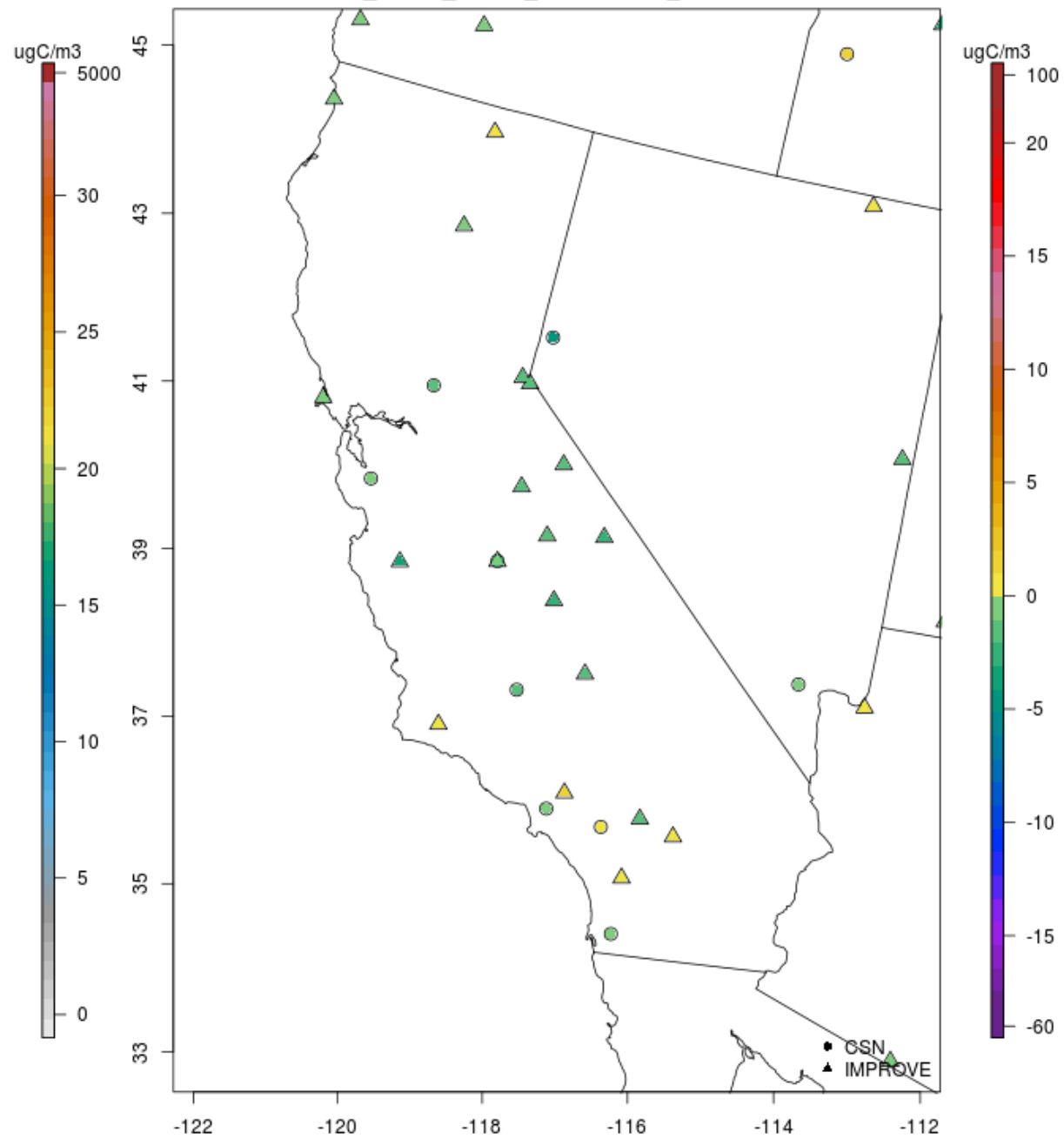
Bias Summary: [min, 25th %, 50th %, 75th %, max]
[-52, -2.3, -0.75, 1.3, 200]

CMAQv521_2016ff_12US2_West: PM25_OC on 07/26/2016



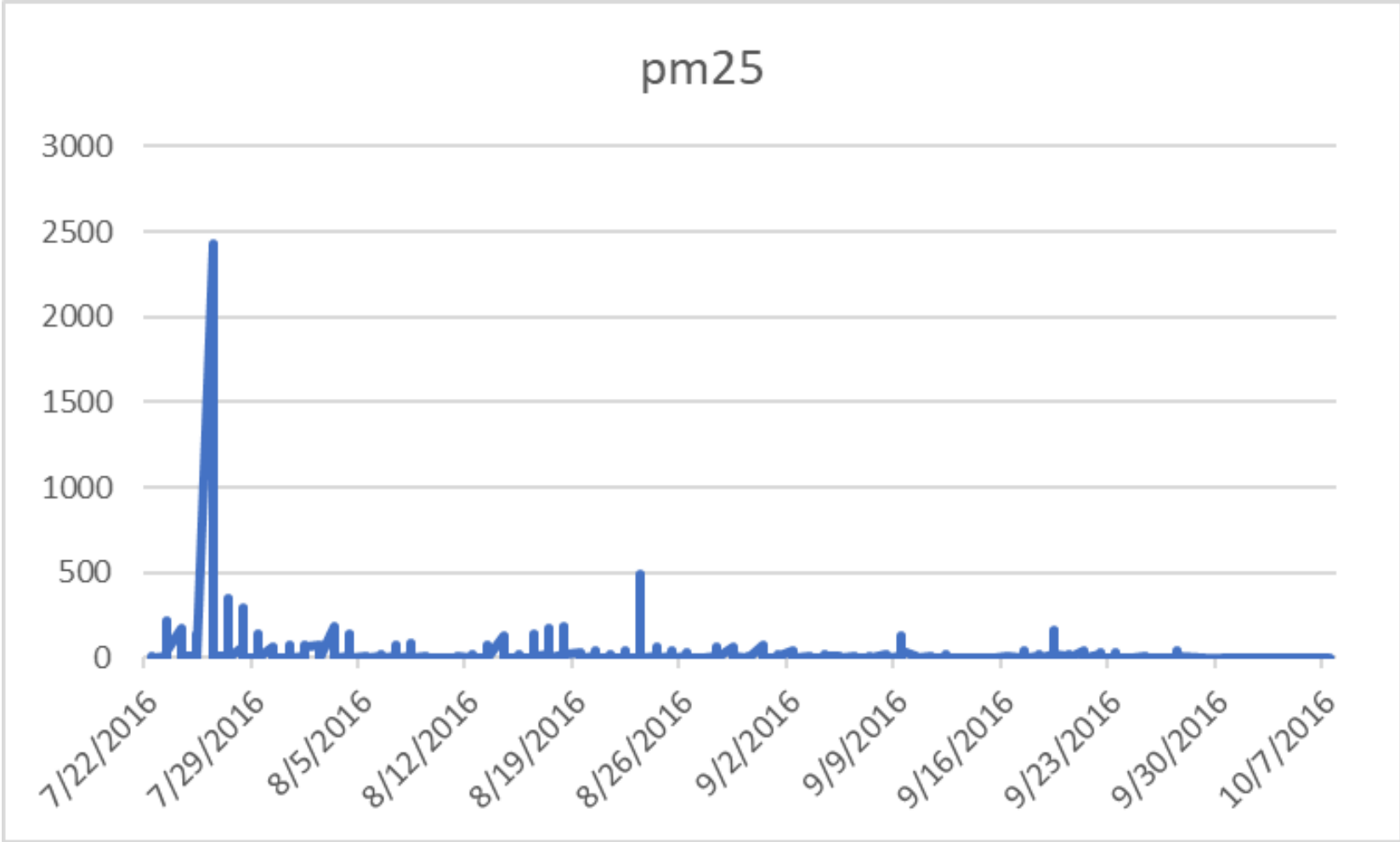
Domain size: 111x78 | Max Model = 4800 at (55, 17)
Max Obs: 9.3

CMAQv521_2016ff_12US2_West: PM25_OC on 07/26/2016



Bias Summary: [min, 25th %, 50th %, 75th %, max]
[-4.5, -0.6, -0.23, 0.29, 91]

Soberanes fire: PM2_5 emissions in 2016beta



Tons per day

Soberanes fire: Redwood-tanoak fuel

- ▶ In SmartFire2-BlueSky 2016beta, there is 2600+ acre burn for Soberanes involving Redwood-tanoak fuel
- ▶ Results in a very high heat flux and burns a considerable amount of duff and 4500 tons of PM2_5 emissions on this day
- ▶ Need to look into the duff parameters for this fuel
 - ▶ Check complete: 6 inch depth seems reasonable