Connecticut Department of Energy and Environmental Protection

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

June 16, 2016 OTR Ozone Exceedances

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Connecticut Department of Energy and Environmental Protection

Summary

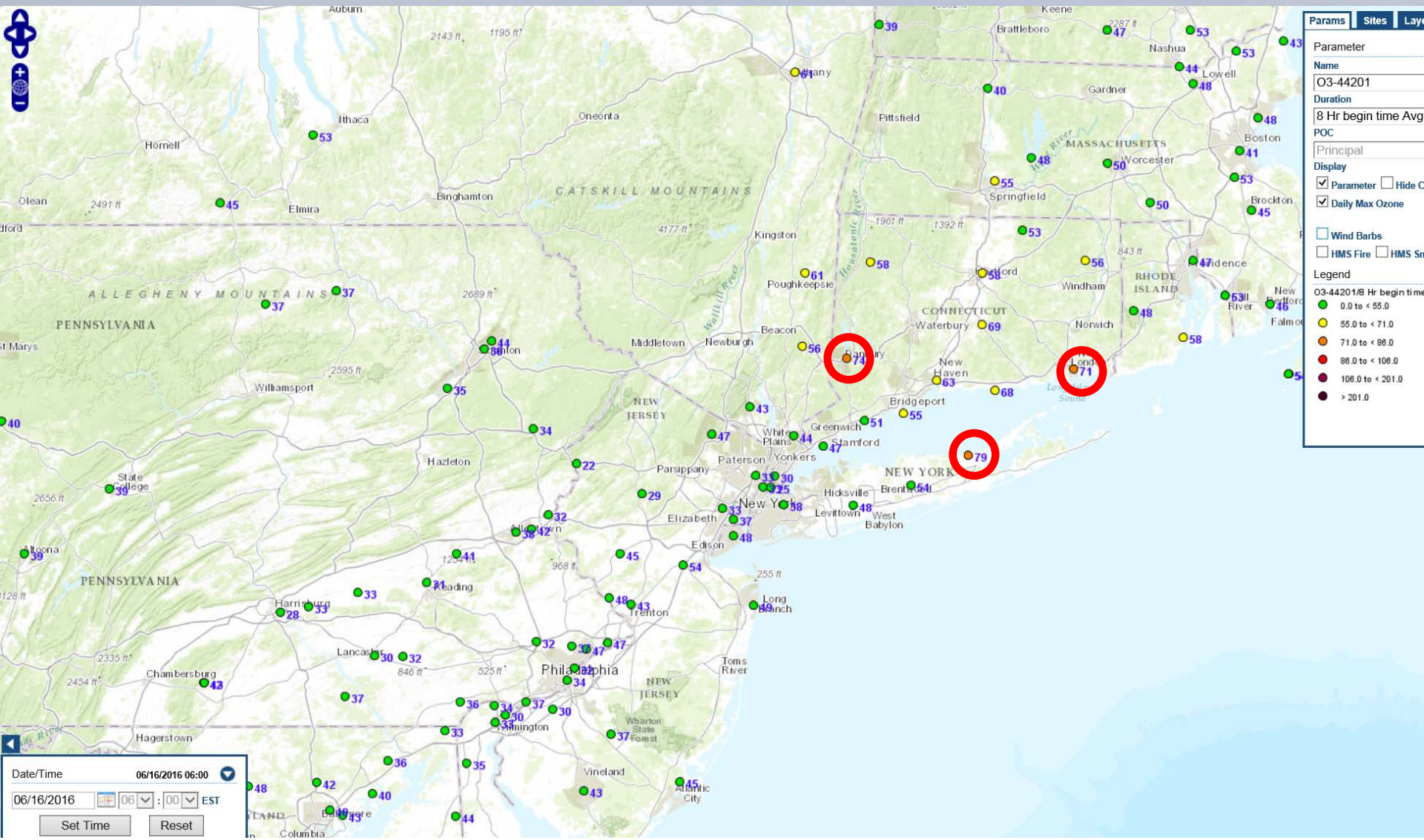
- Mostly Good throughout the OTR, with Moderates and USG around CT ;
- 3 sites in OTR reached USG.
  1. 3 sites above 70 ppb ozone NAAQS, 2 sites in CT
  2. 1 sites above (2008) 75 ppb ozone NAAQS, 0 sites in CT
  3. 0 sites above (1997) 84 ppb ozone NAAQS, 0 sites in CT

Design Value Summary

	Site Name	To Date: 2016 DV	To Date 2016 Compliance Status x = Violating NAAQS: 2015 NAAQS	2008 NAAQS	1997 NAAQS	
SWCT Portion of NY-NJ-CT non-attainment area	Danbury	78	X	X		Four more 102+ ppb days violates 1997 NAAQS
	Greenwich	78	X	X		Four more 93+ ppb days violates 1997 NAAQS
	Madison	72	X			One more 78+ ppb day violates 2008 NAAQS
	Middletown	77	X	X		Four more 97+ ppb days violates 1997 NAAQS
	New Haven - Criscuolo Park	72	X			Three more 75+ ppb days violates 2008 NAAQS
	Stratford	76	X	X		Four more 95+ ppb days violates 1997 NAAQS
	Westport	80	X	X		**Two more 87+ ppb days violates 1997 NAAQS**
Greater CT	Cornwall	71	X			Three more 86+ ppb days violates 2008 NAAQS
	East Hartford	74	X			**Two more 76+ ppb days violates 2008 NAAQS**
	Groton Fort Griswold	71	X			Three more 86+ ppb days violates 2008 NAAQS
	Stafford	73	X			Three more 79+ ppb days violates 2008 NAAQS
	Abington (CASTNET)	68				Two more 76+ ppb days violates 2015 NAAQS

June 16, 2016 Peak East Coast Ozone

- Mostly GOOD ozone levels , except USG for Danbury, Groton Connecticut and Riverhead New York.

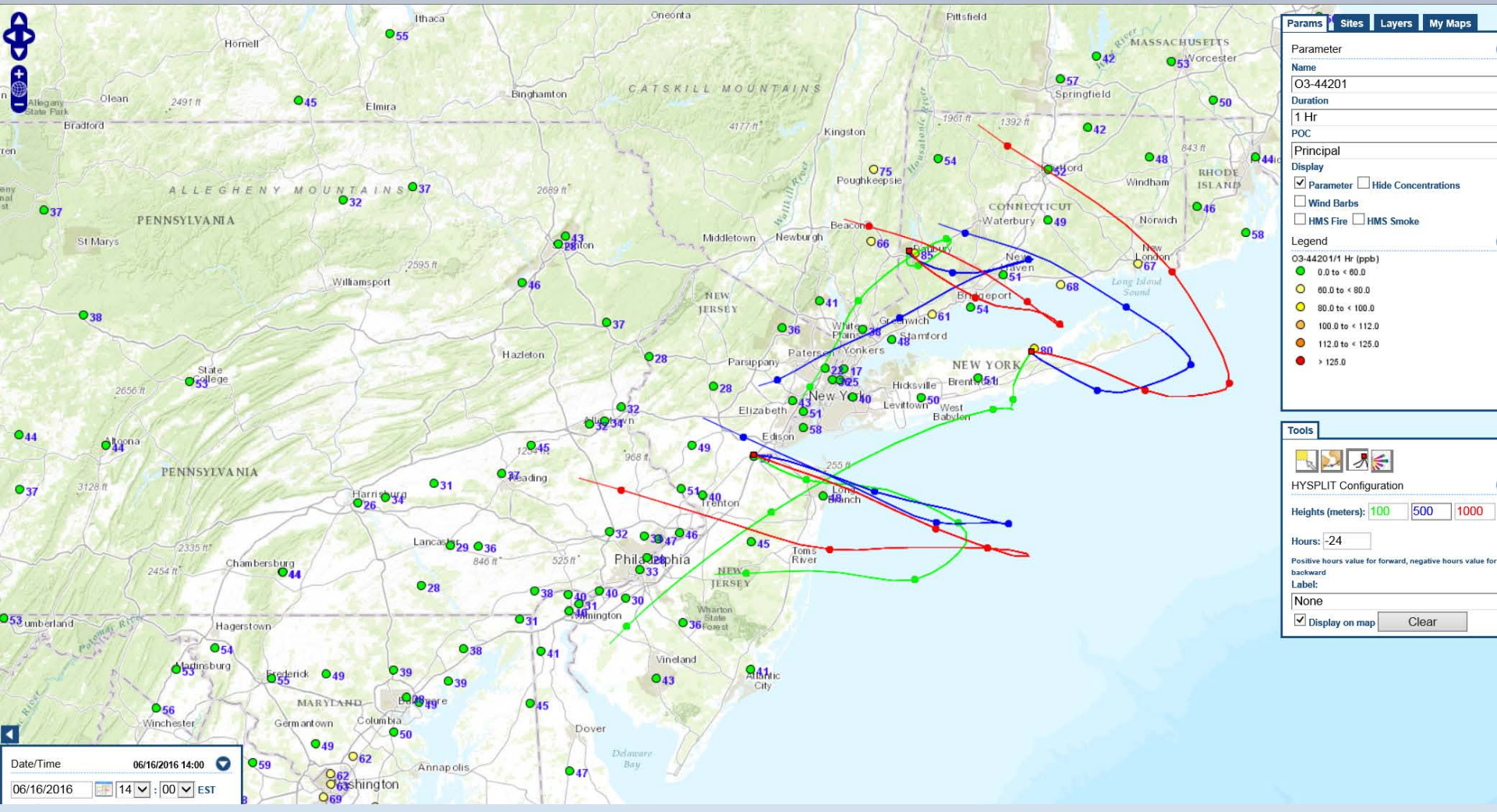


Tables of OTR and CT Monitoring Sites

- Mostly Good to Moderate across the OTR with 3 USG exceedances

Site	Site AQS	Param	Date (LST)	Max 8-hr Ozone
Riverhead	361030004	O3	6/16/2016	79
Danbury	090011123	O3	6/16/2016	74
Groton Fort Gri	090110124	O3	6/16/2016	71
Middletown	090070007	O3	6/16/2016	69
Madison-Beach R	090099002	O3	6/16/2016	68
New Haven - Cri	090090027	O3	6/16/2016	63
Loudonville	360010012	O3	6/16/2016	61
Millbrook	360270007	O3	6/16/2016	61
Cornwall	090050005	O3	6/16/2016	58
East Hartford	090031003	O3	6/16/2016	58
Narragansett	440090007	O3	6/16/2016	58
Abington	090159991	O3	6/16/2016	56
Mt Ninham	360790005	O3	6/16/2016	56
Amherst	360290002	O3	6/16/2016	55
CHICOPEE	250130008	O3	6/16/2016	55
PG Equestrian C	240338003	O3	6/16/2016	55
Stratford	090013007	O3	6/16/2016	55

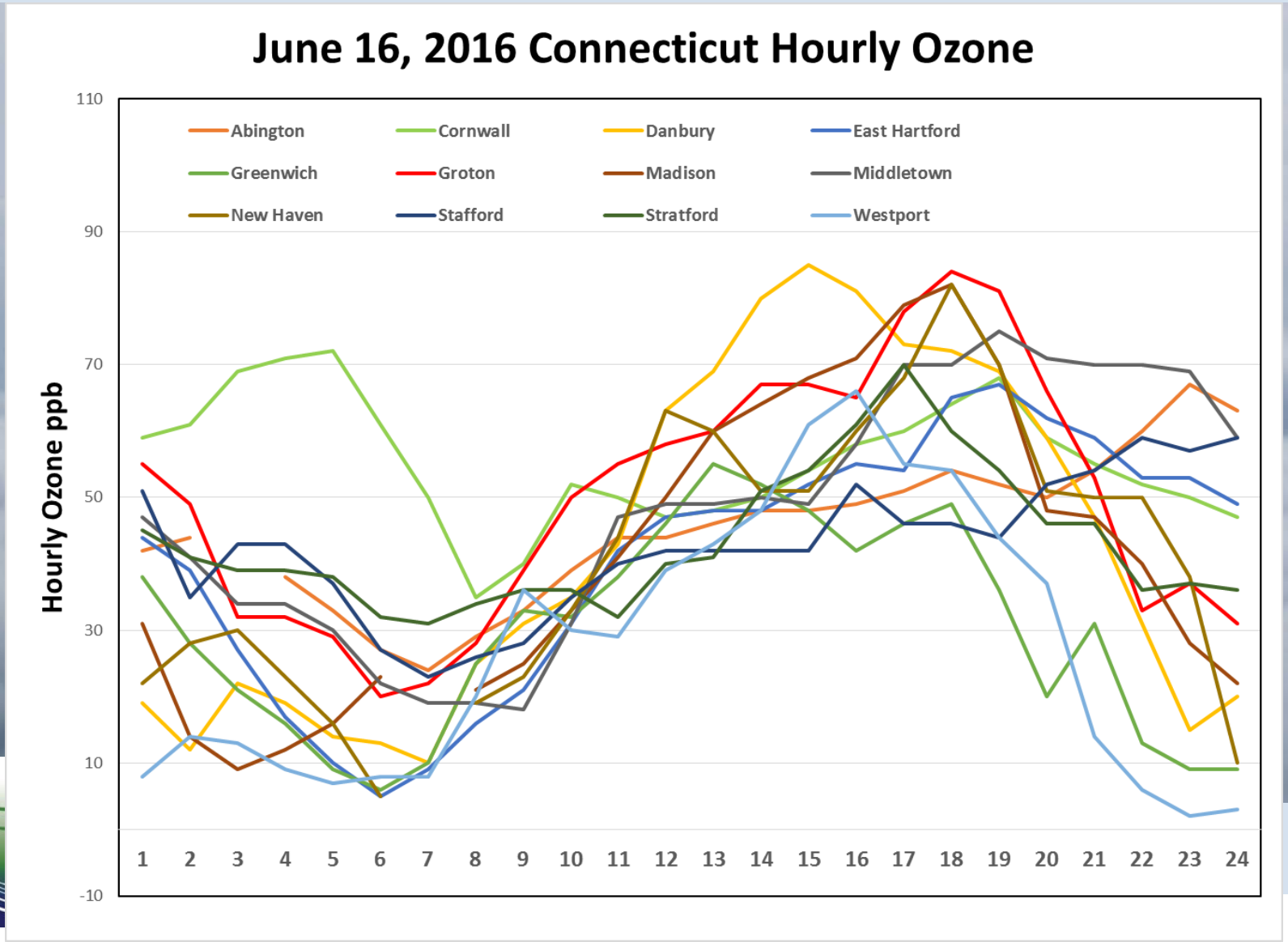
24-hr Back Trajectories 2:00 pm EST



The 100/500/1000 meters trajectories to Danbury were very localized, with lowest levels originating from NYC. Riverhead NY low level trajectory had influence from Philadelphia area while further to the south, the clean air blew in from the Atlantic.

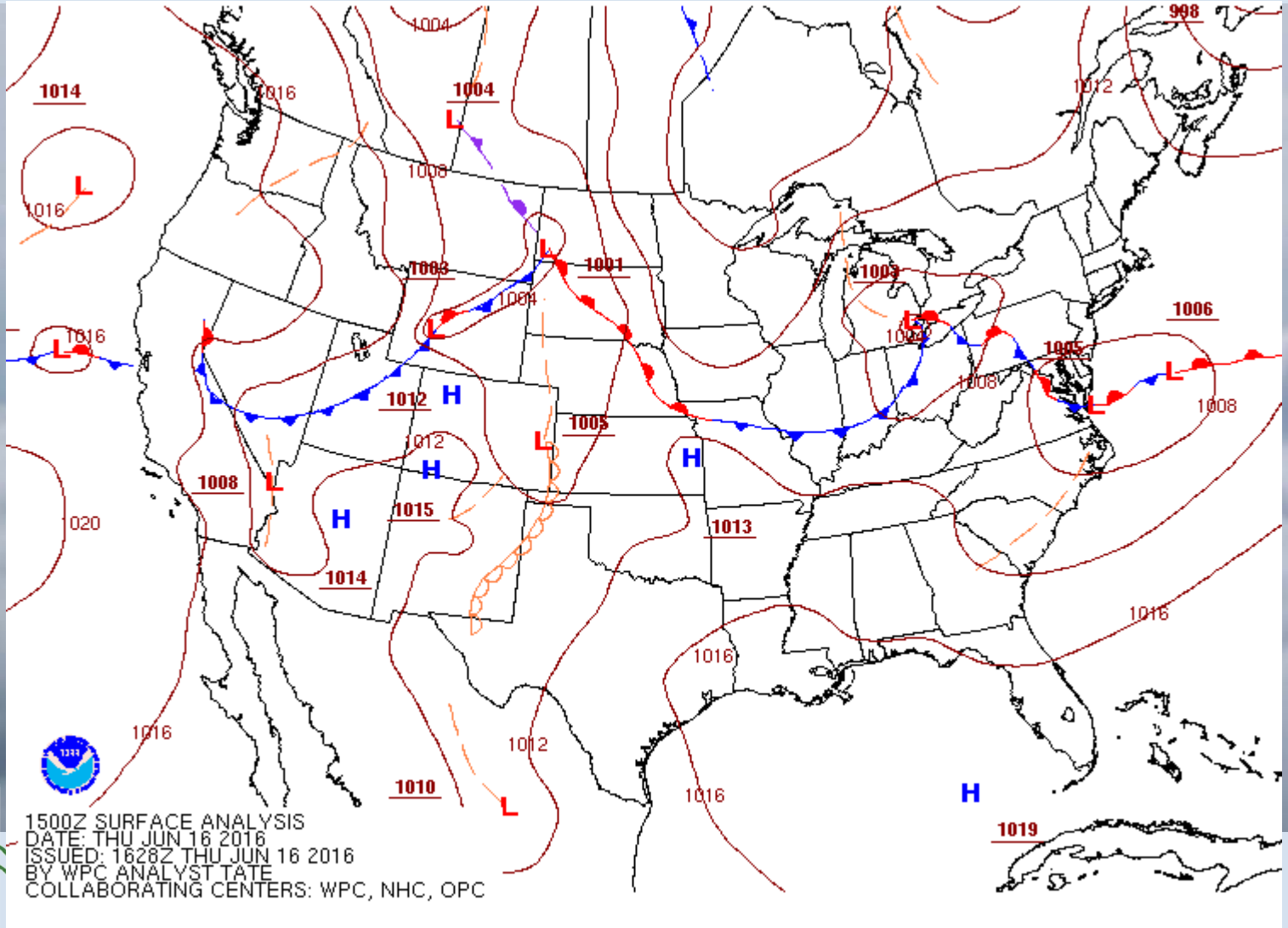
June 16, 2016 CT Ozone Monitors

Most CT sites had elevated ozone for several hours, however, only Danbury and Groton were high enough to exceed the NAAQS.



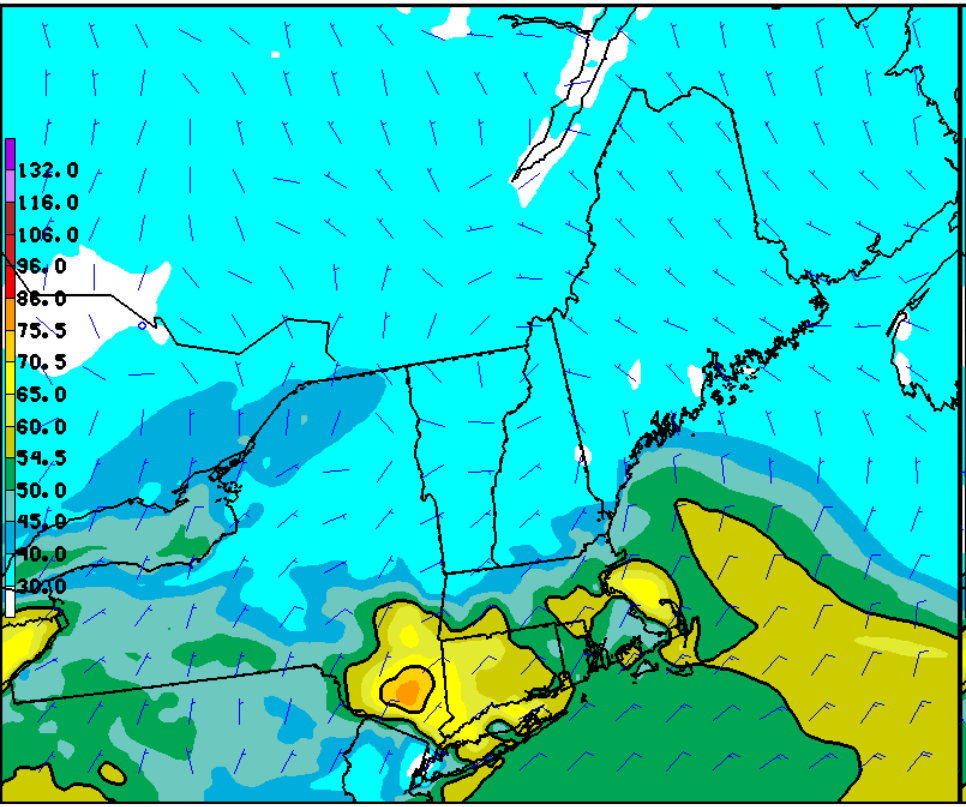
June 16, 2016 Surface Analysis

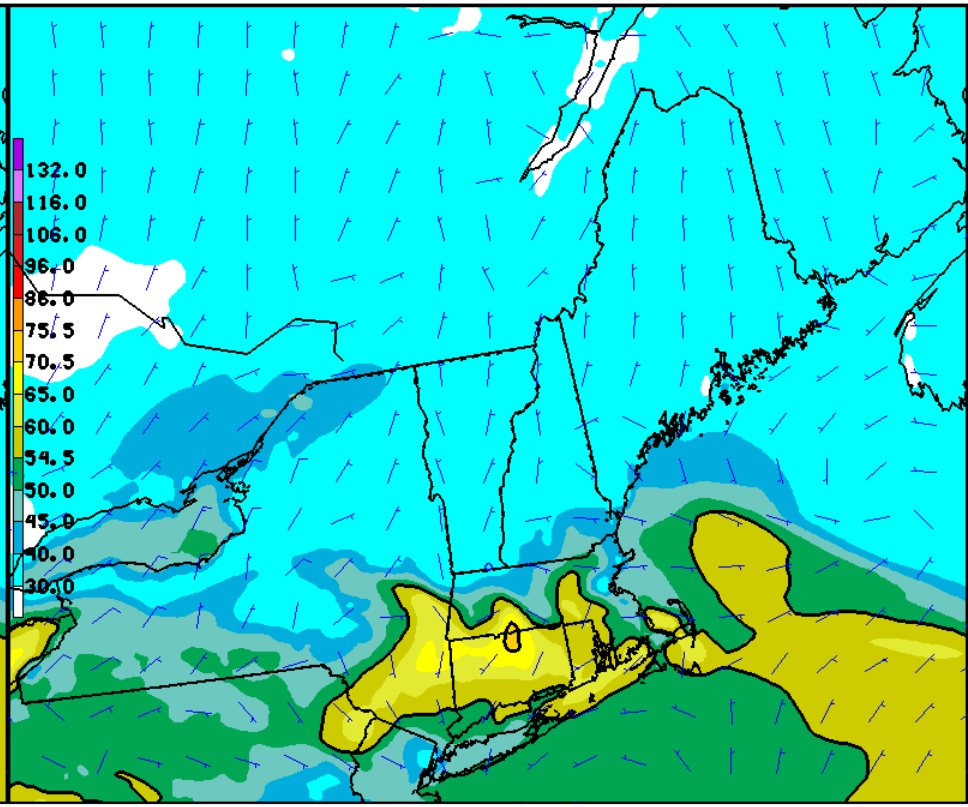
Weak low pressure to our south caused light winds, which turned to the east during the afternoon



NOAA Ozone Model

Models had difficulty predicting the area for highest levels of ozone. Day before model forecasted in NY, while same day model run showed plume being transported into northern CT. The meteorology models did not have a good handle on the expected weather pattern.





Barons MAQSIP Ozone Model

MAQSIP day before model run showed mostly GOOD air quality, while same day model run was more realistic of monitored results. It was a difficult forecast using day before model runs.