

DISCOVER-AQ Outlook for Thursday, July 14, 2011

We will fly tomorrow (Thursday, 8am takeoff). Air quality should be reasonably good as a front passed through the mid-Atlantic Wednesday. The next likely “fly day” is Friday. Both Thursday (northerly flow) and Friday (southerly flow) should feature mostly sunny skies and clean air as a Canadian air mass settles over the mid-Atlantic. In addition, TES will be making a special observation (Beltsville; 2:33pm) on Thursday.

Recommendations for July 14-16th

Thursday, July 14th: Fly TES 2:30pm Beltsville

Clean: Low O₃ & AOT

Friday, July 15th : Fly Likely Clean

Saturday, July 16th: Fly Need to watch cloud forecasts.

Forecast at a Glance

This Afternoon



60%

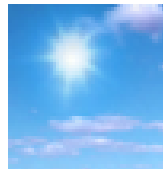
Tstms
Likely
Hi 93 °F

Tonight



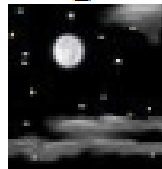
Partly
Cloudy
Lo 64 °F

Thursday



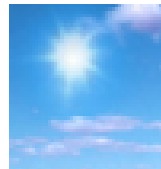
Sunny
Hi 84 °F

Thursday Night



Mostly
Clear
Lo 65 °F

Friday



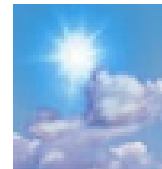
Sunny
Hi 84 °F

Friday Night



Partly
Cloudy
Lo 67 °F

Saturday



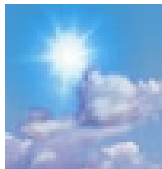
Mostly
Sunny
Hi 85 °F

Saturday Night



Partly
Cloudy
Lo 69 °F

Sunday



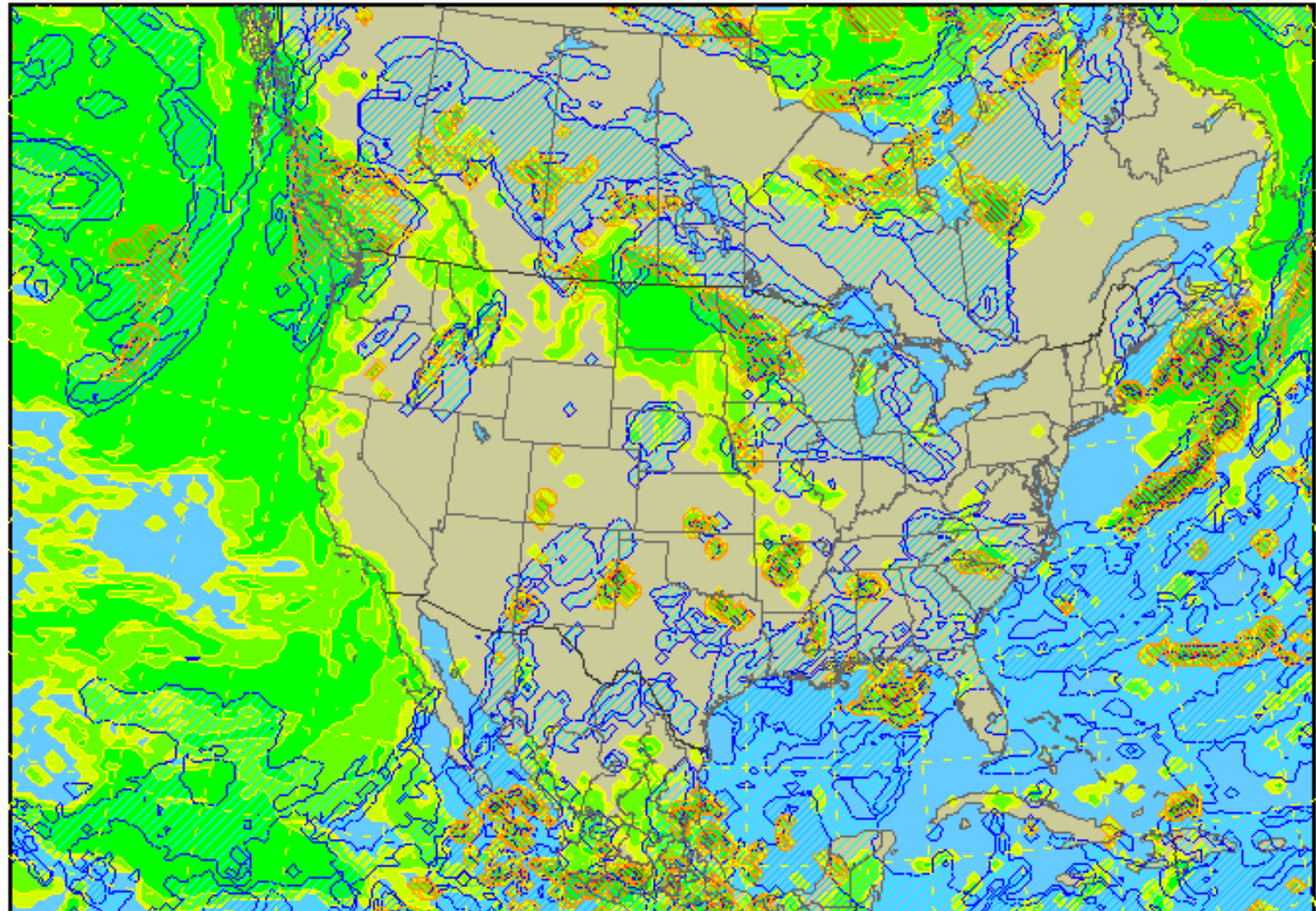
Mostly
Sunny
Hi 88 °F

THURSDAY 8am: High pressure builds overnight Thursday and into Friday.

Integrated liquid and frozen hydrometeors (all levels)

24-hour forecast valid 1200 UTC Thu 14 Jul 2011

NAM (YRF-NMM) (12z 13 Jul)



Water ($T > 0^{\circ}\text{C}$)

Supercooled

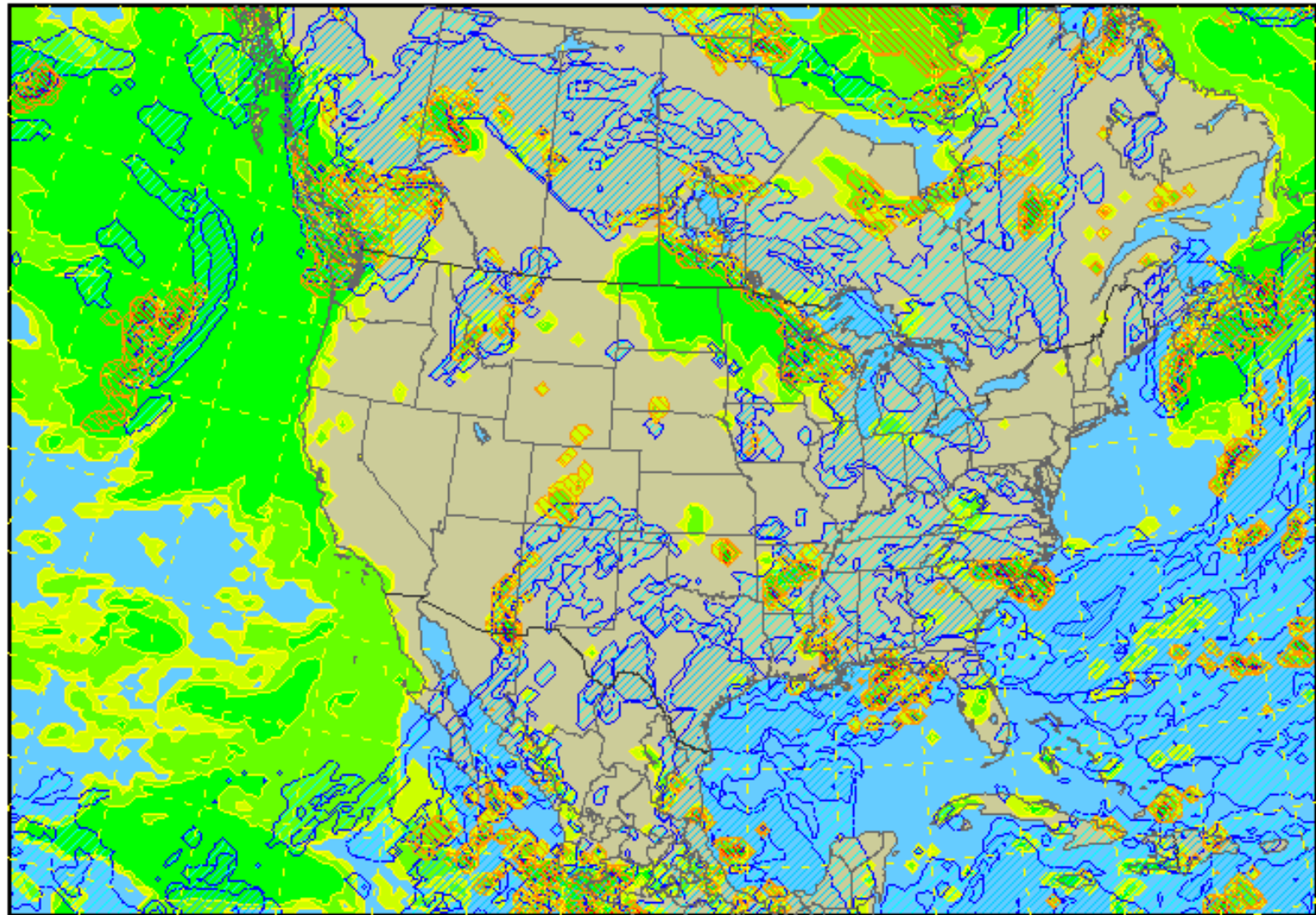
Ice & Snow

THURSDAY 2 pm: TES overpass – clear skies likely

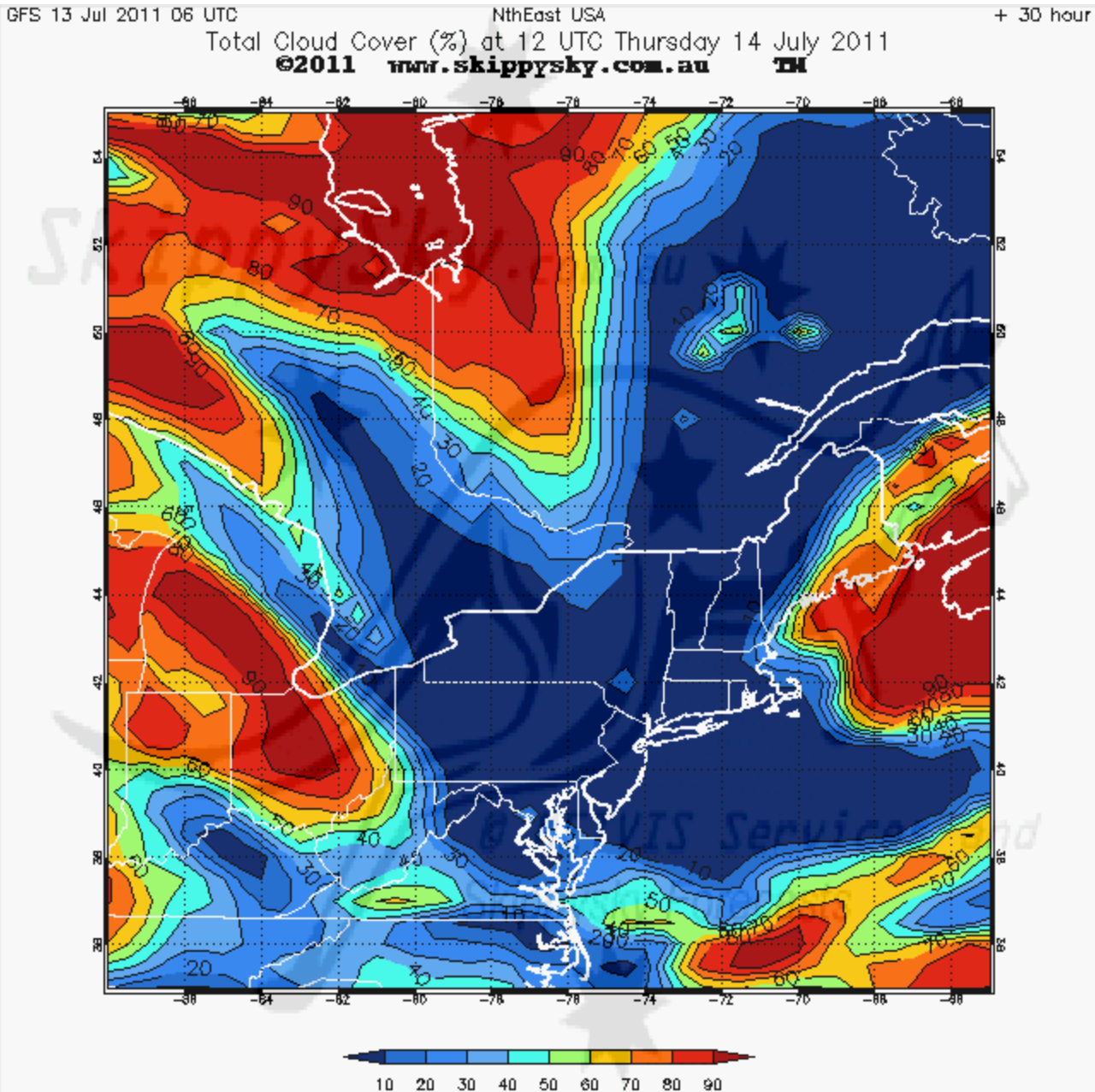
Integrated liquid and frozen hydrometeors (all levels)

30-hour forecast valid 1800 UTC Thu 14 Jul 2011

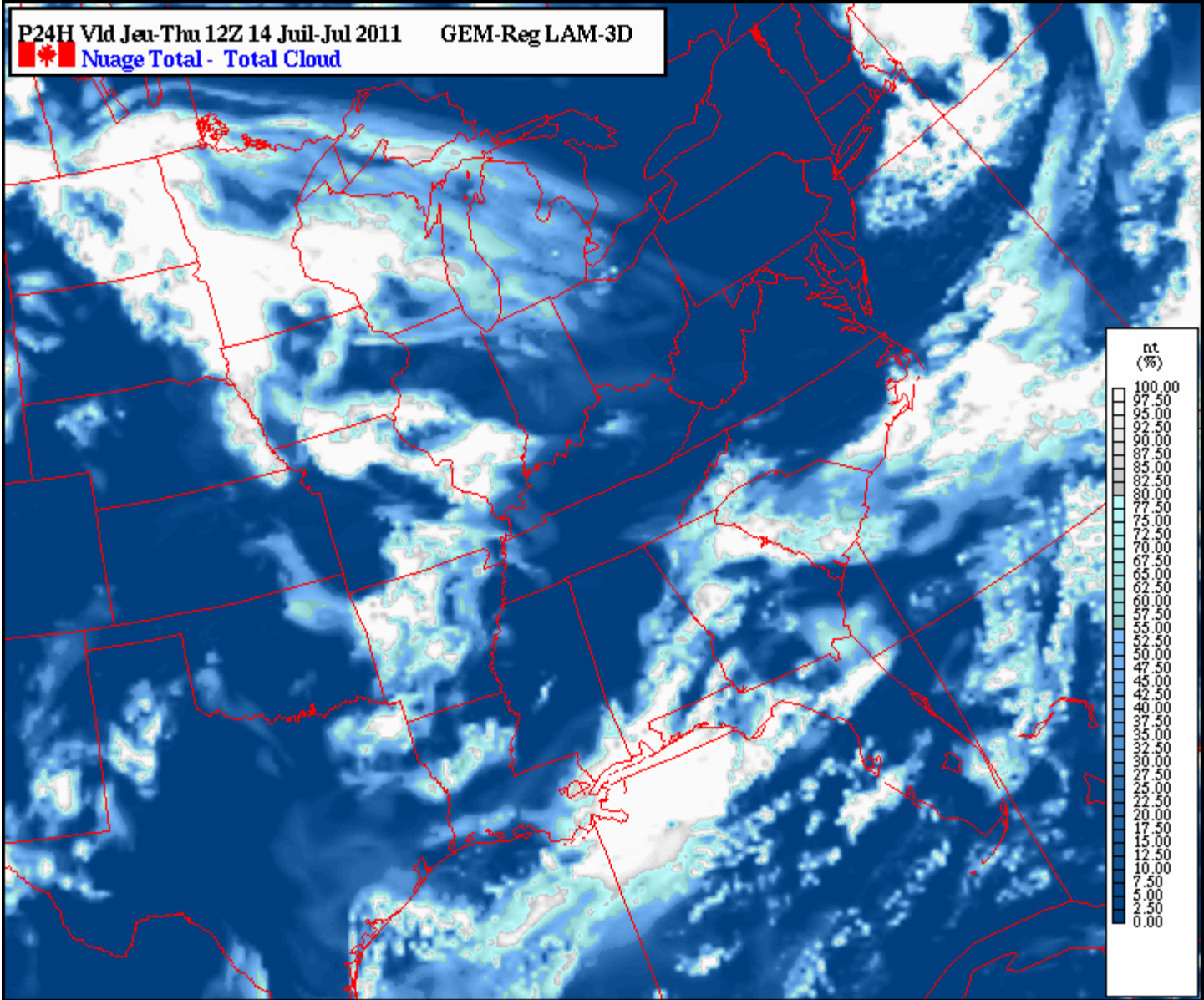
NAM (WRF-NMM) (12z 13 Jul)



Cloud Cover from GFS for Thursday at 8 am

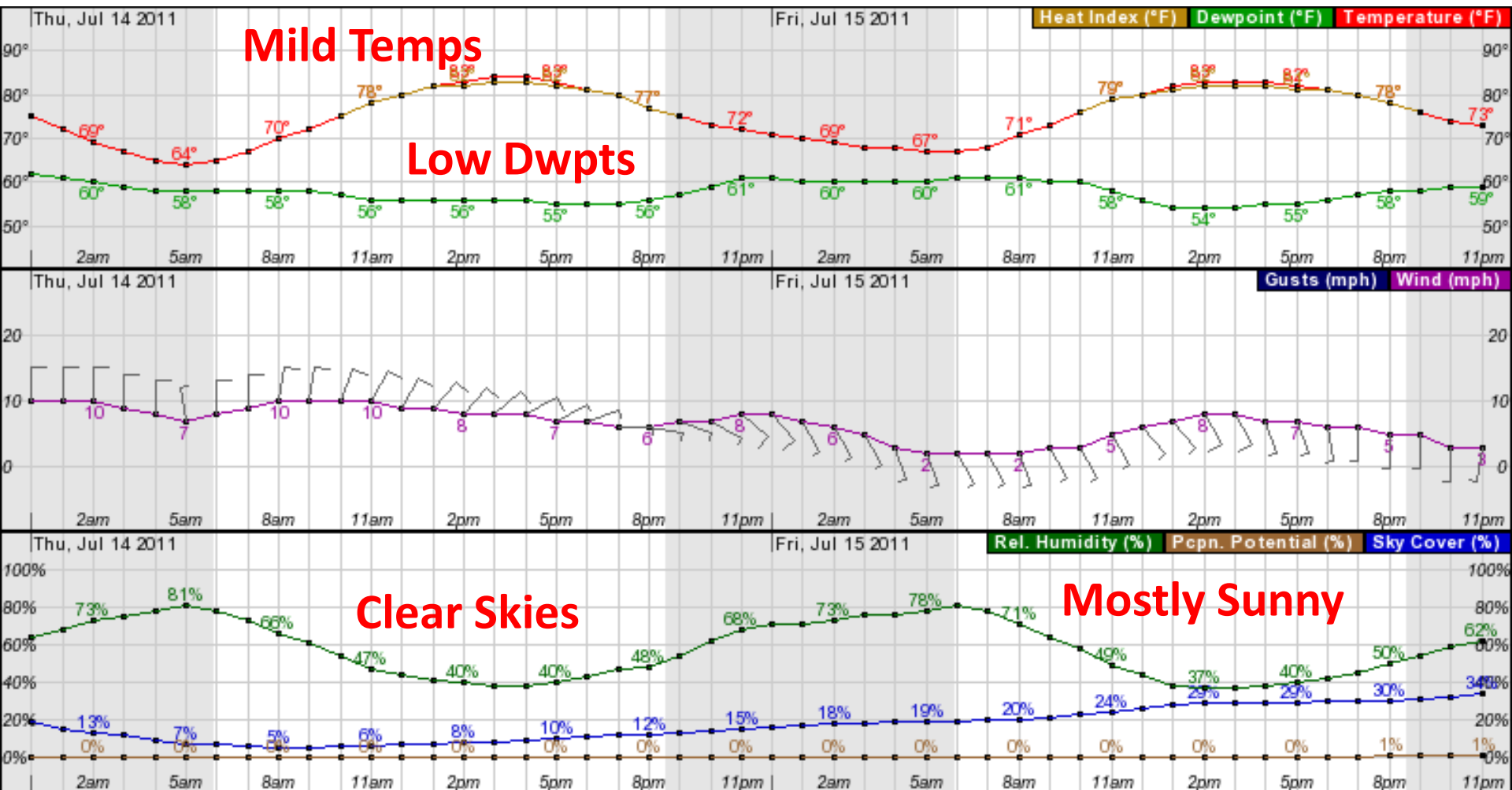


Cloud Cover from GEM for Thursday at 8 am



Thursday → Fly Day

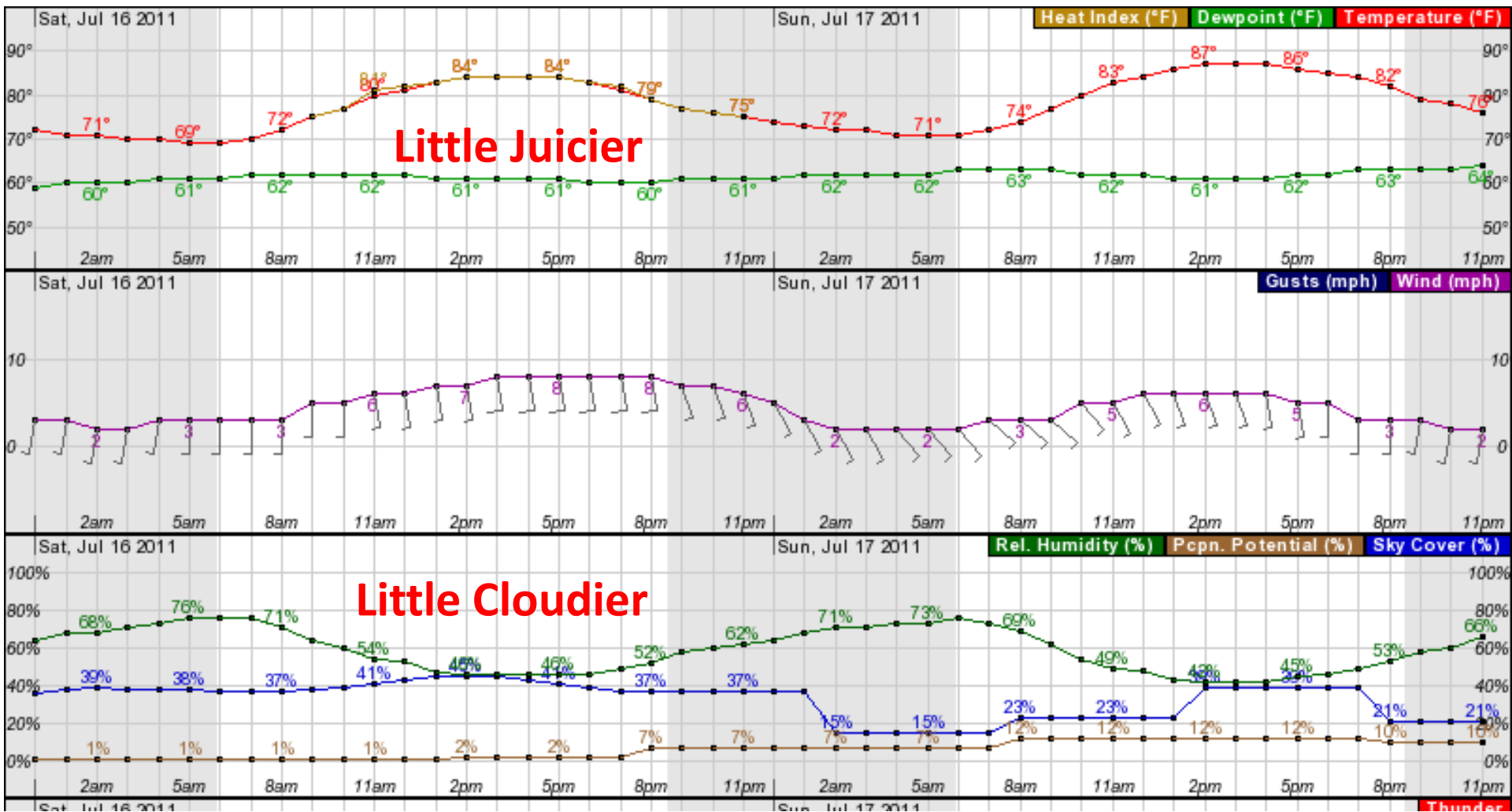
Friday → Potential Fly Day



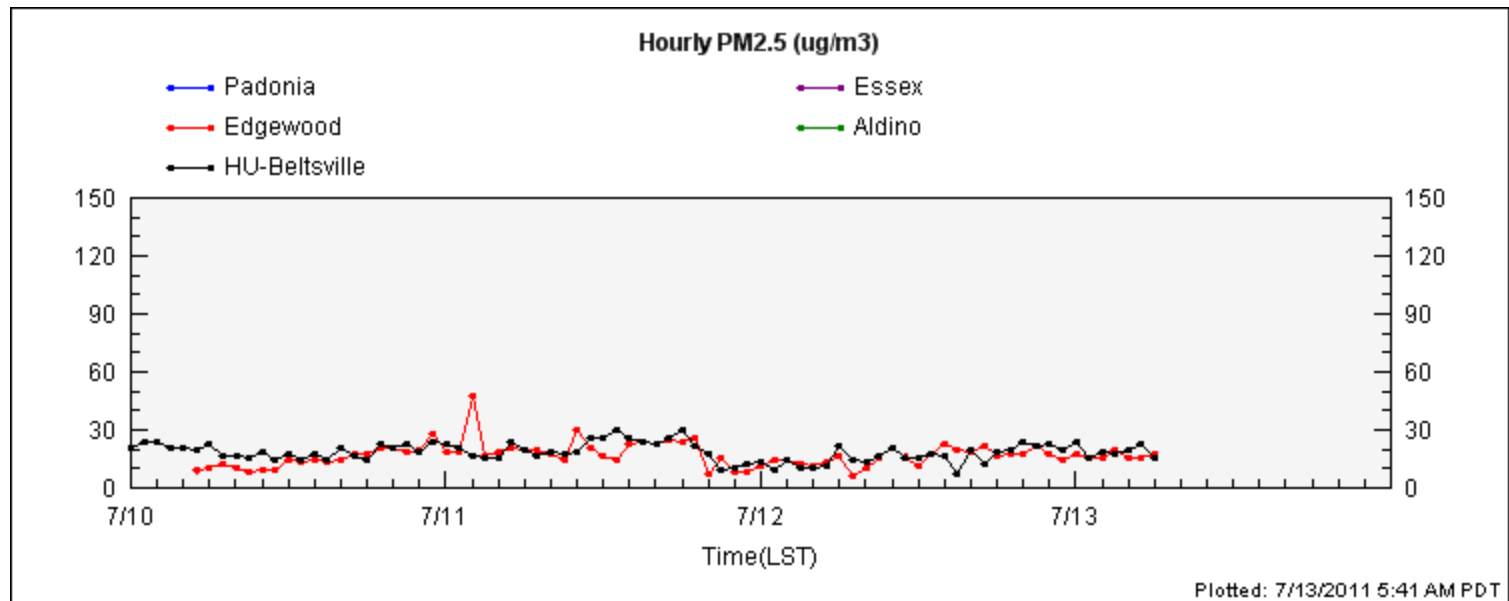
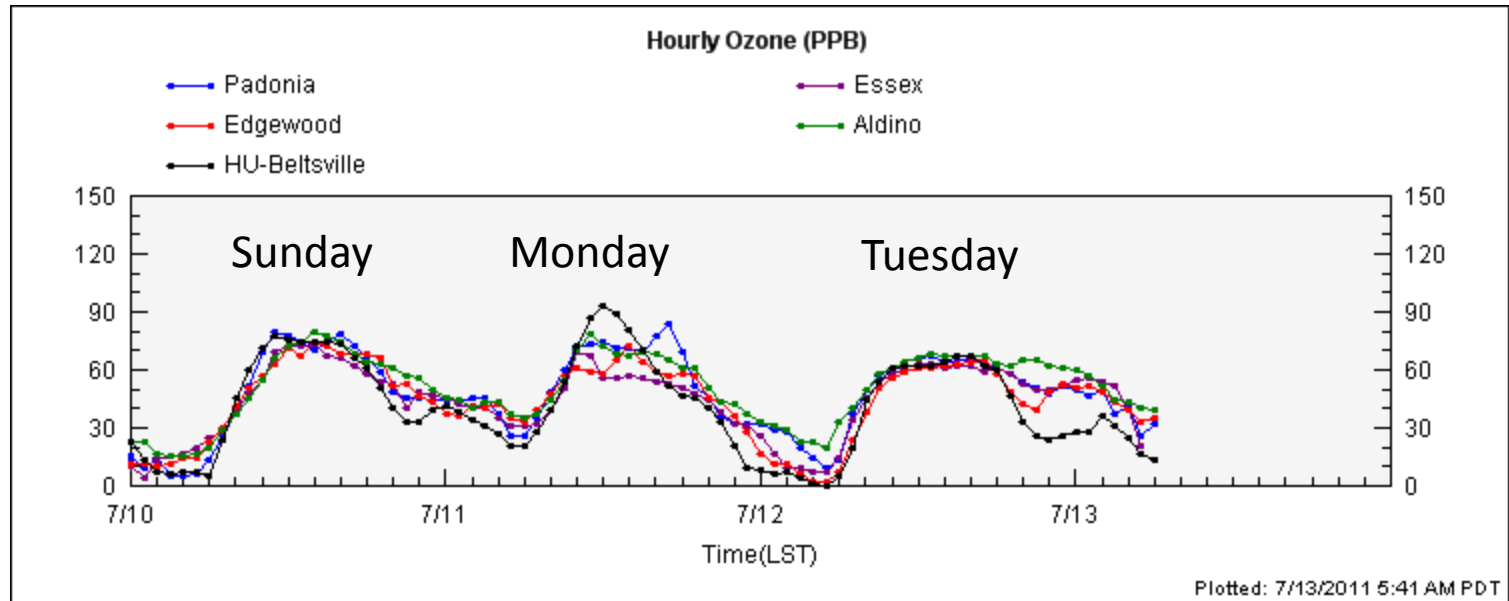
Saturday → Potential Fly Day

Sunday →

Down Day



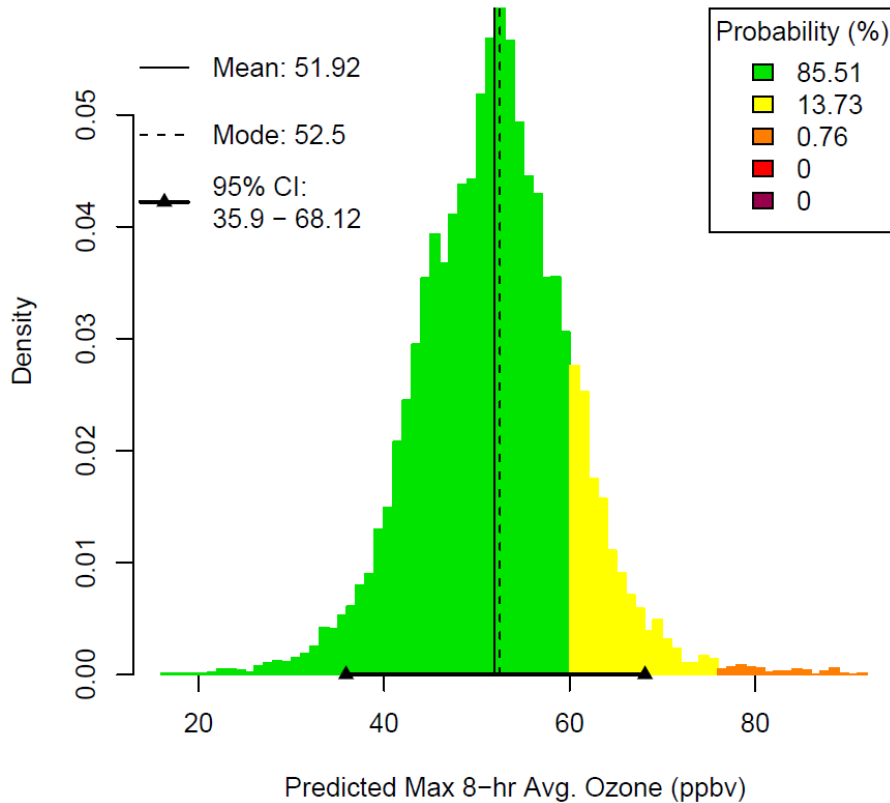
Lackluster air quality last few days ☹️



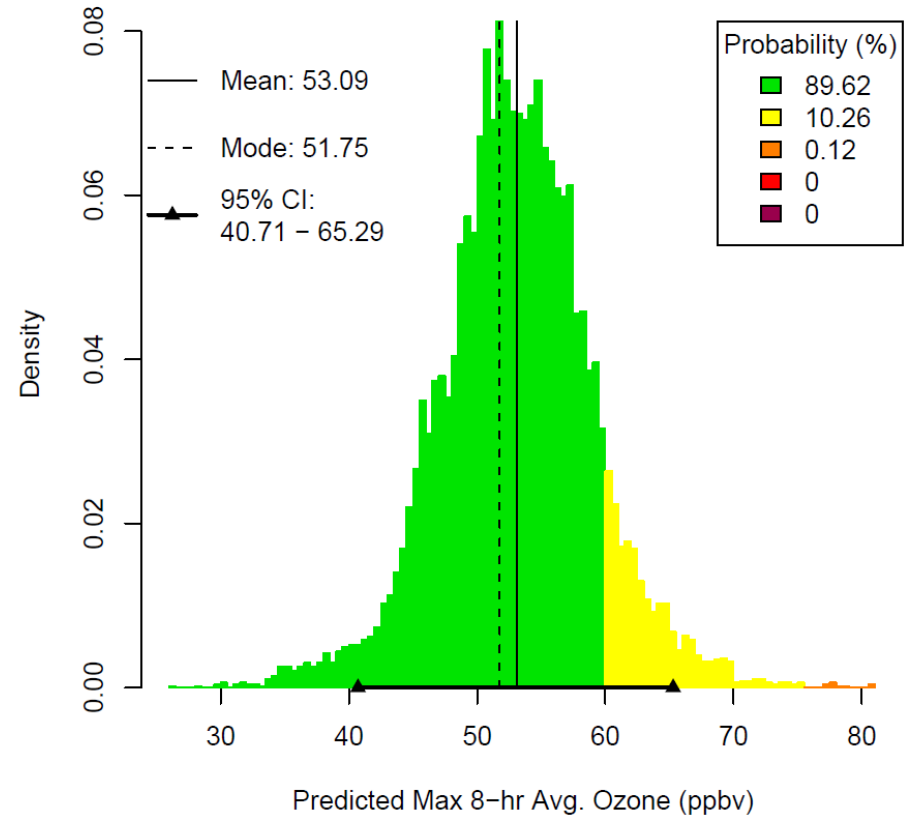
NAQFC-MOS valid for Thursday

ID: 240251001 VALID: 2011-07-14

ID: 240330030 VALID: 2011-07-14



Edgewood



Beltsville

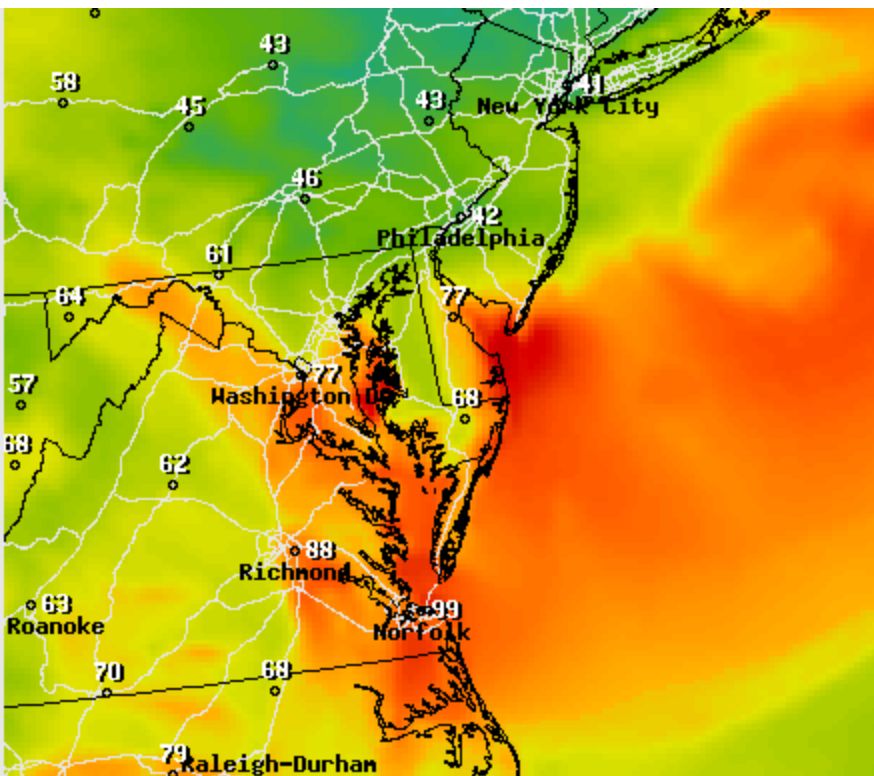
PM2.5 should be low too.

AQ forecast for Today (Wednesday)

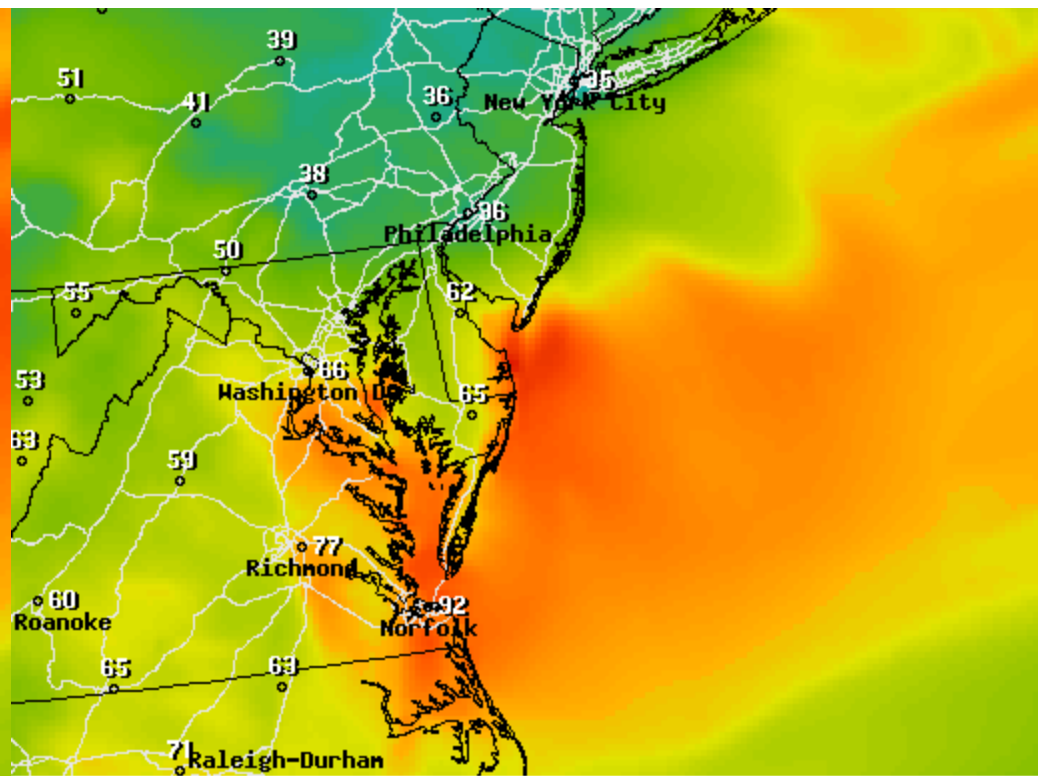
Thursday even cleaner.

1 hr Max Ozone (ppbv)

8 hr Max Ozone (ppbv)



Maximum 1Hr Ozone(PPB) Ending Wed Jul 13 2011



Maximum 8hr Ozone(PPB) Ending Thu Jul 14 2011 6AM EDT