DISCOVER-AQ Outlook for Saturday, July 9, 2011

A frontal system will be moving through the study area tonight and offshore by Saturday morning. However, the models appear to keep some residual cloudiness in the study region behind the front on Saturday morning. Considerable low-level cumulus could also develop in the afternoon. This would preclude flying tomorrow. Sunday and Monday look much better, cloud-wise and pollution-wise.

Recommendations for July 9th – 11th:

Sat., July 9: No Fly – residual clouds behind front

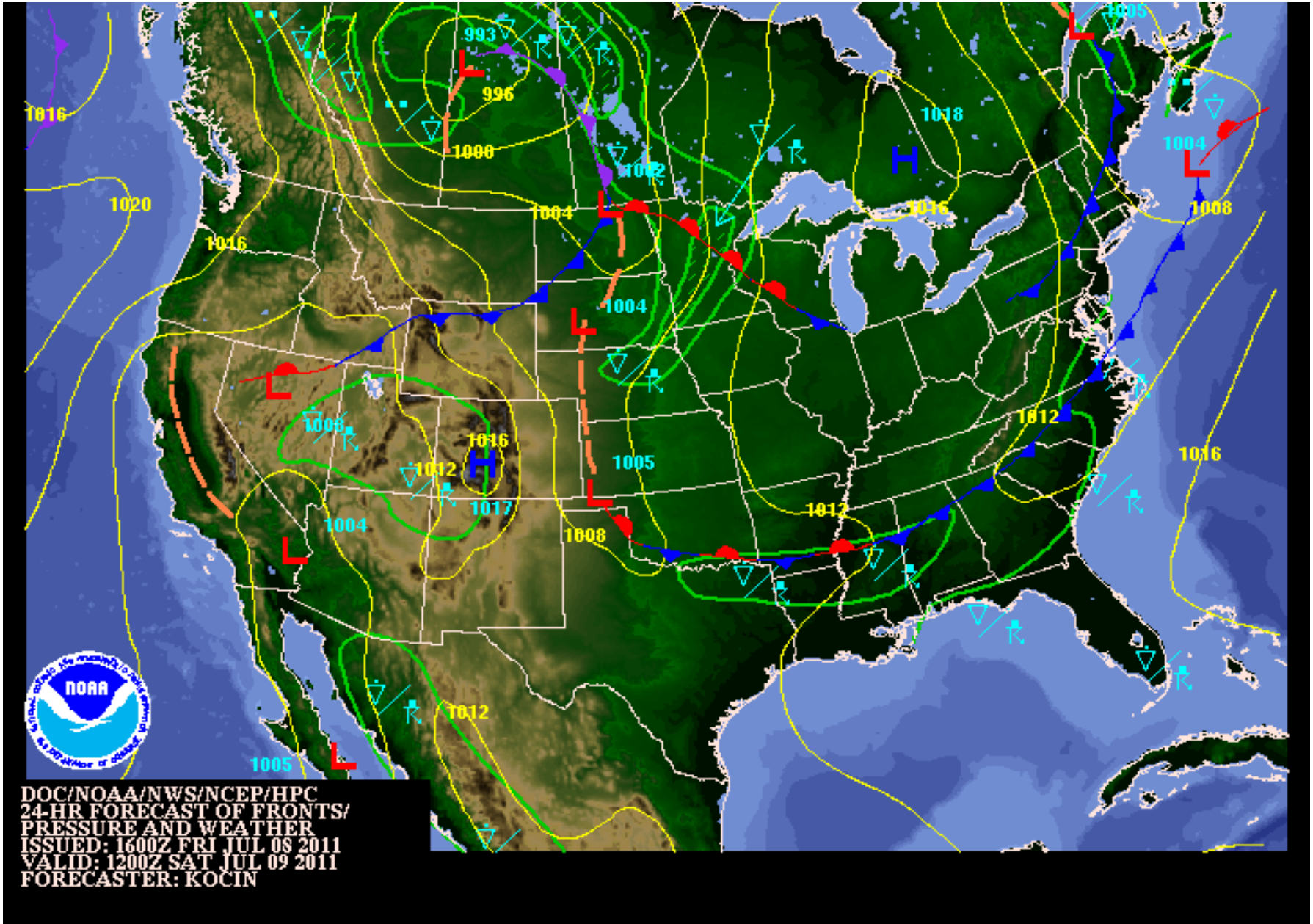
Sun., July 10: Fly - clear skies; likely Code Orange

Mon., July 11: Likely Fly (keep watch of possible afternoon high clouds in advance of next frontal system). Likely Code Orange (Red possible at some sites?)

Ken Pickering, Clare Flynn, Greg Garner

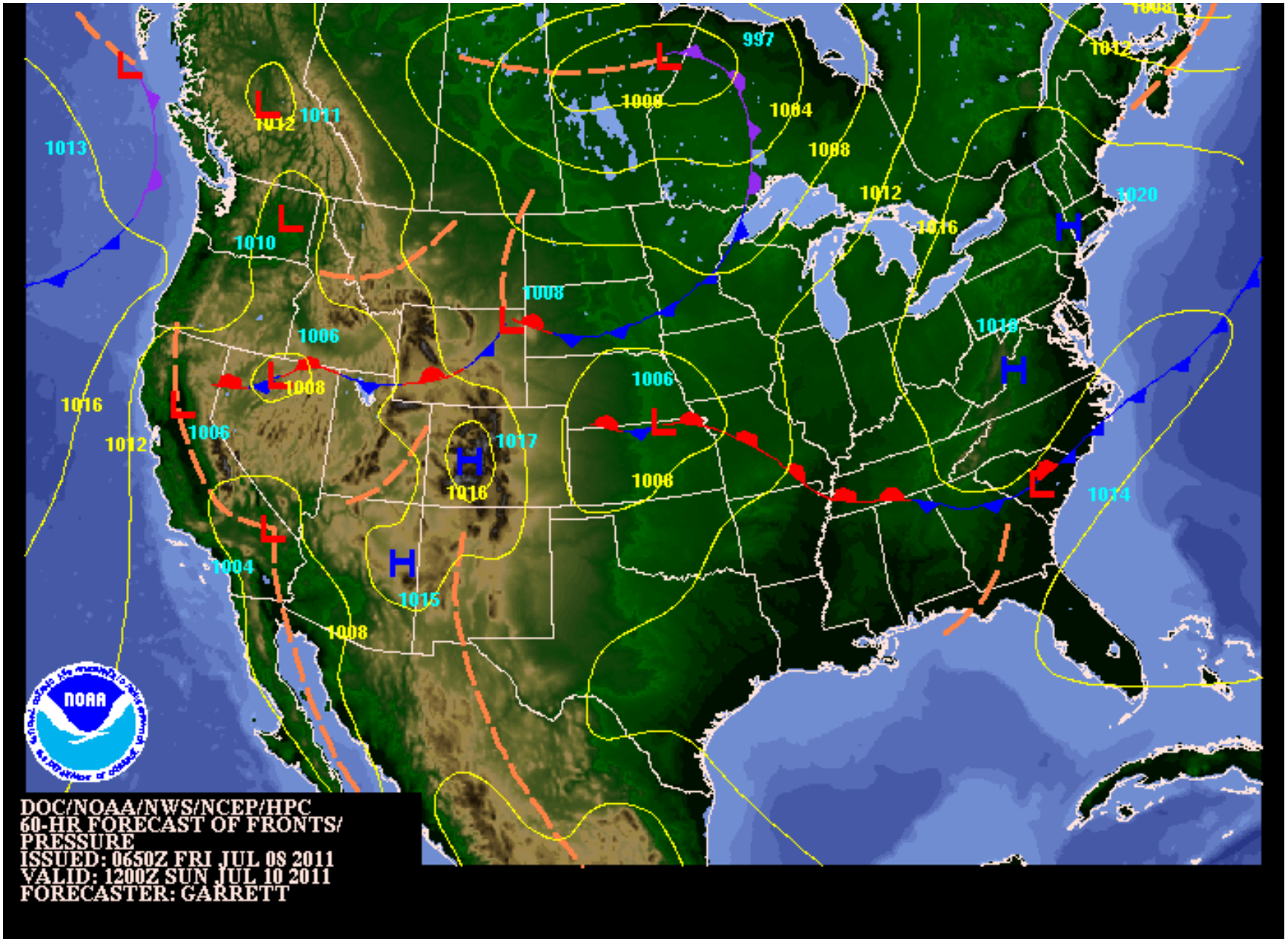
July 8, 2011

Saturday:



DOC/NOAA/NWS/NCEP/HPC
24-HR FORECAST OF FRONTS/
PRESSURE AND WEATHER
ISSUED: 1600Z FRI JUL 08 2011
VALID: 1200Z SAT JUL 09 2011
FORECASTER: KOCIN

Sunday:


997
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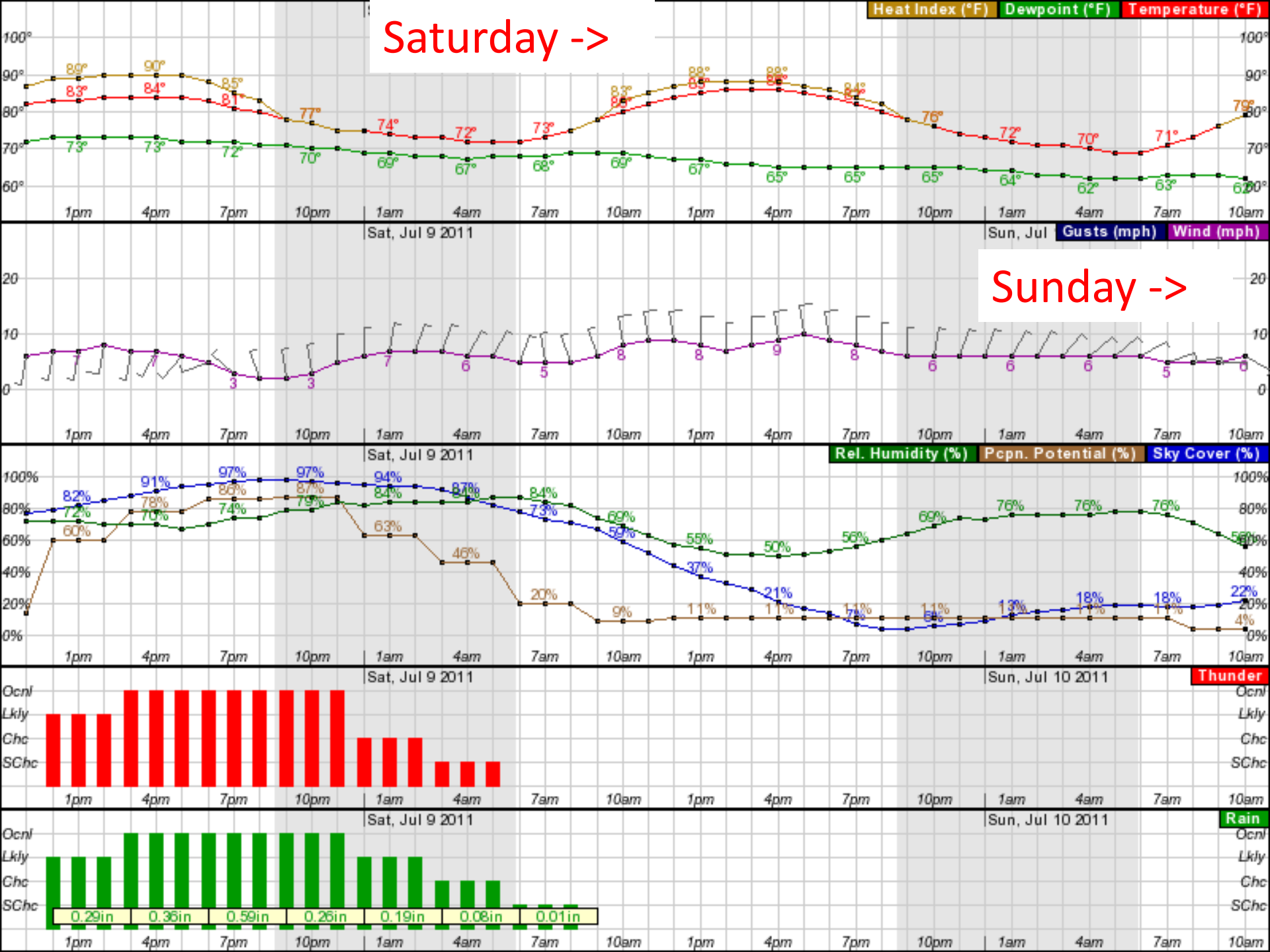
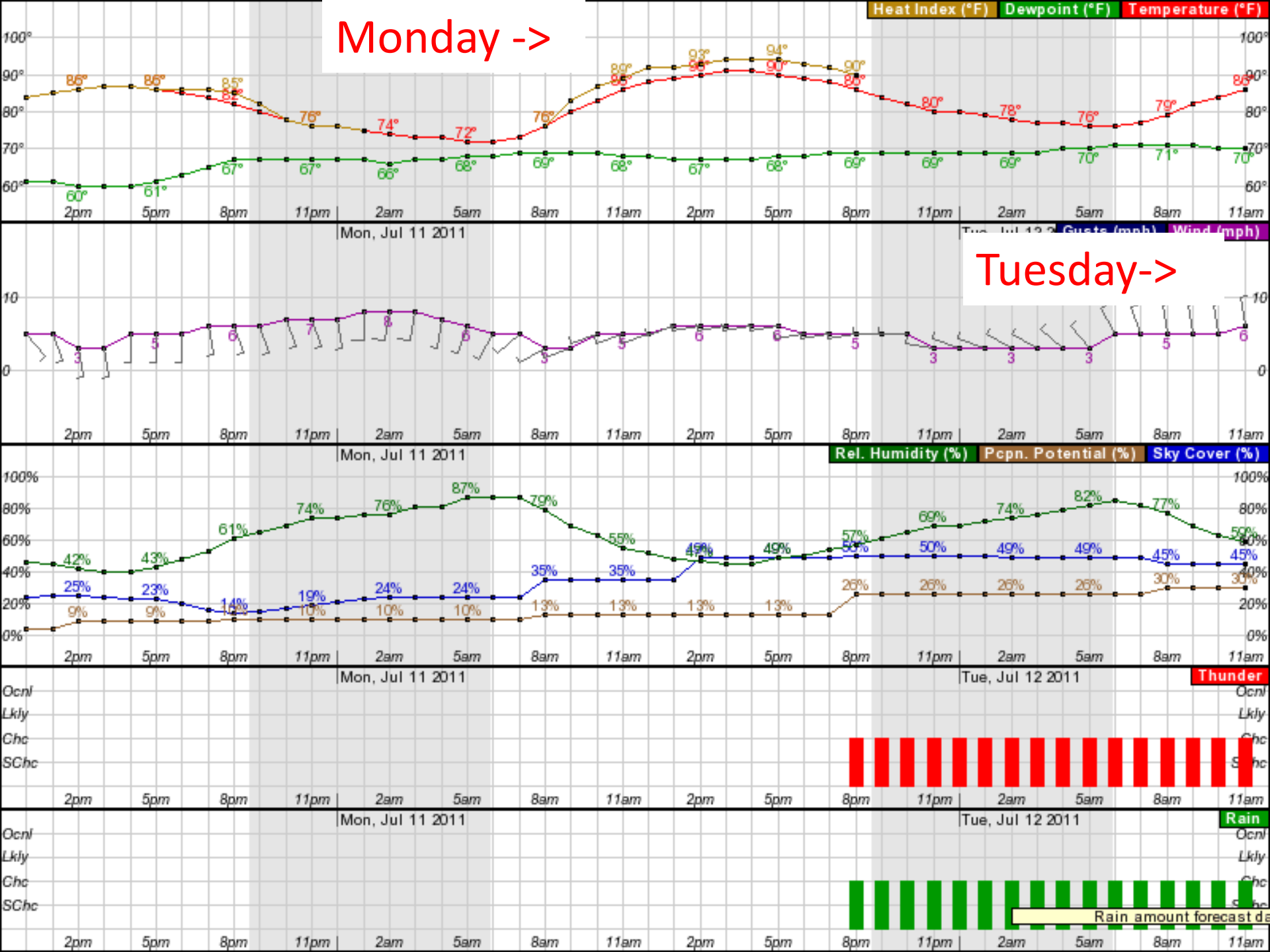
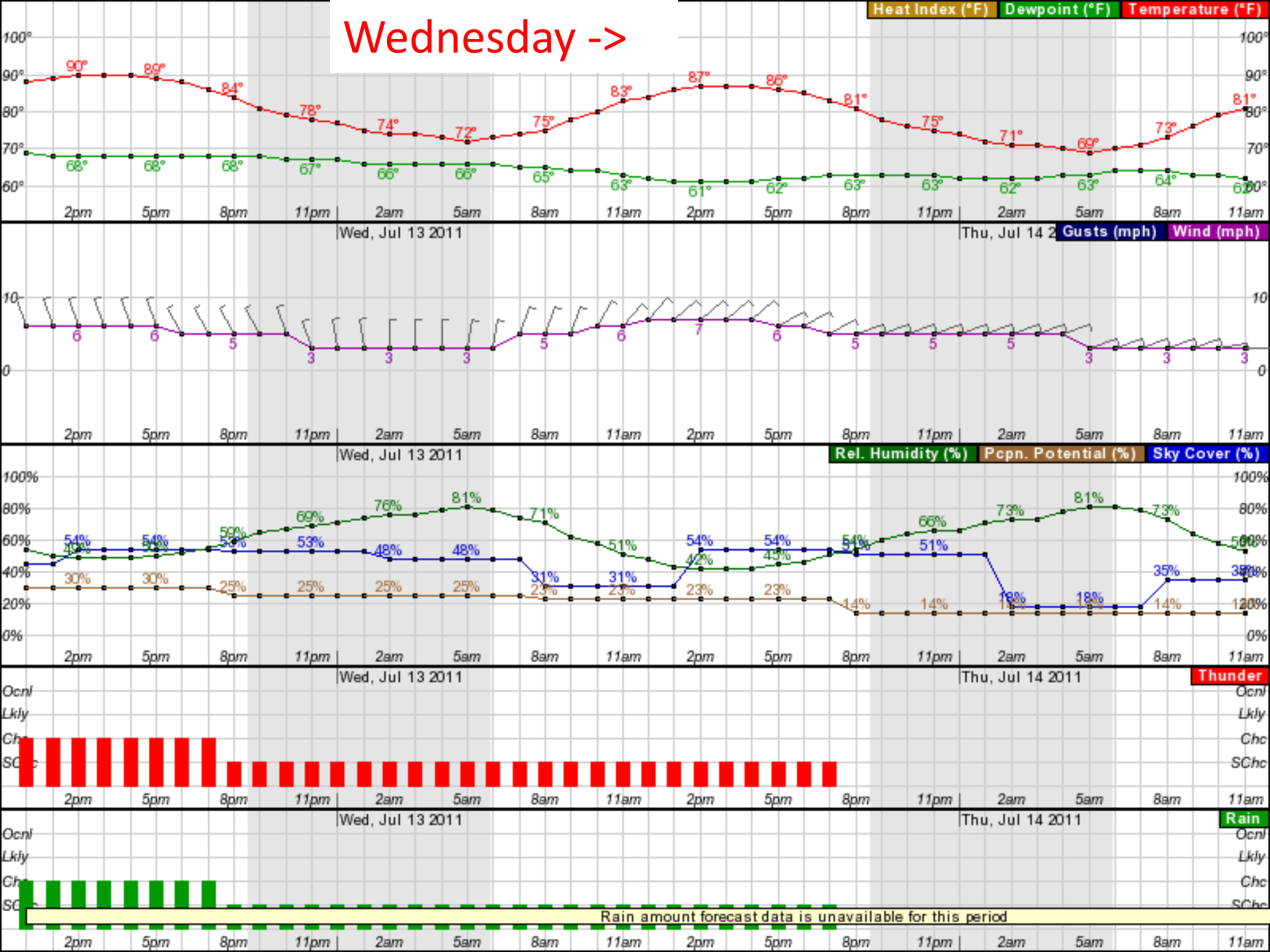
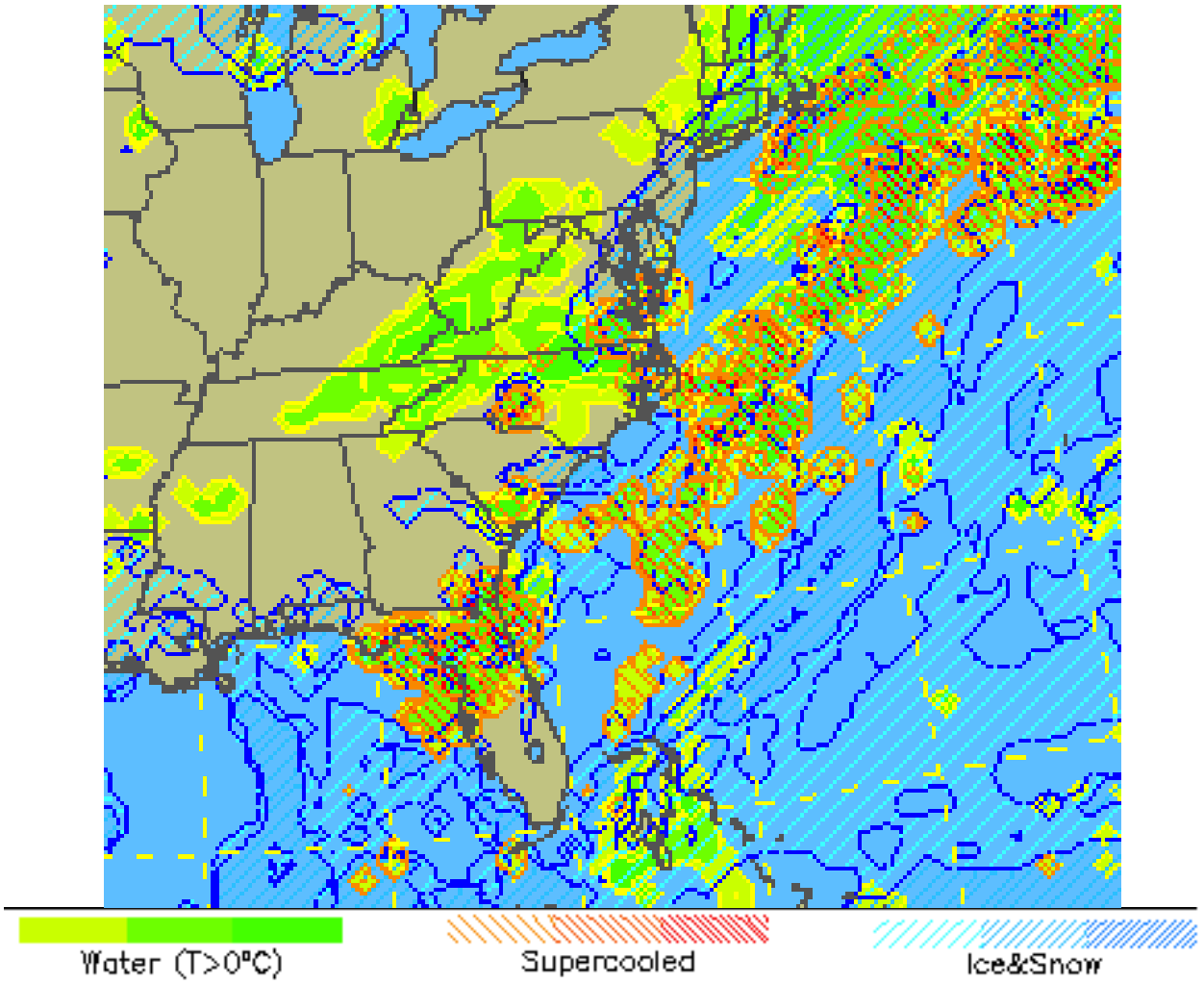
DOC/NOAA/NWS/NCEP/HPC
60-HR FORECAST OF FRONTS/
PRESSURE
ISSUED: 0650Z FRI JUL 08 2011
VALID: 1200Z SUN JUL 10 2011
FORECASTER: GARRETT


Saturday ->
Heat Index (°F)
Dewpoint (°F)
Temperature (°F)
Sat, Jul 9 2011
Sun, Jul
Gusts (mph)
Wind (mph)
Sunday ->
Rel. Humidity (%)
Pcpn. Potential (%)
Sky Cover (%)
Sun, Jul 10 2011
Thunder
Ocnl
Lkly
Chc
SChc
Rain
0.29in
0.36in
0.59in
0.26in
0.19in
0.08in
0.01in
1pm
4pm
7pm
10pm
1am
4am
7am
10am

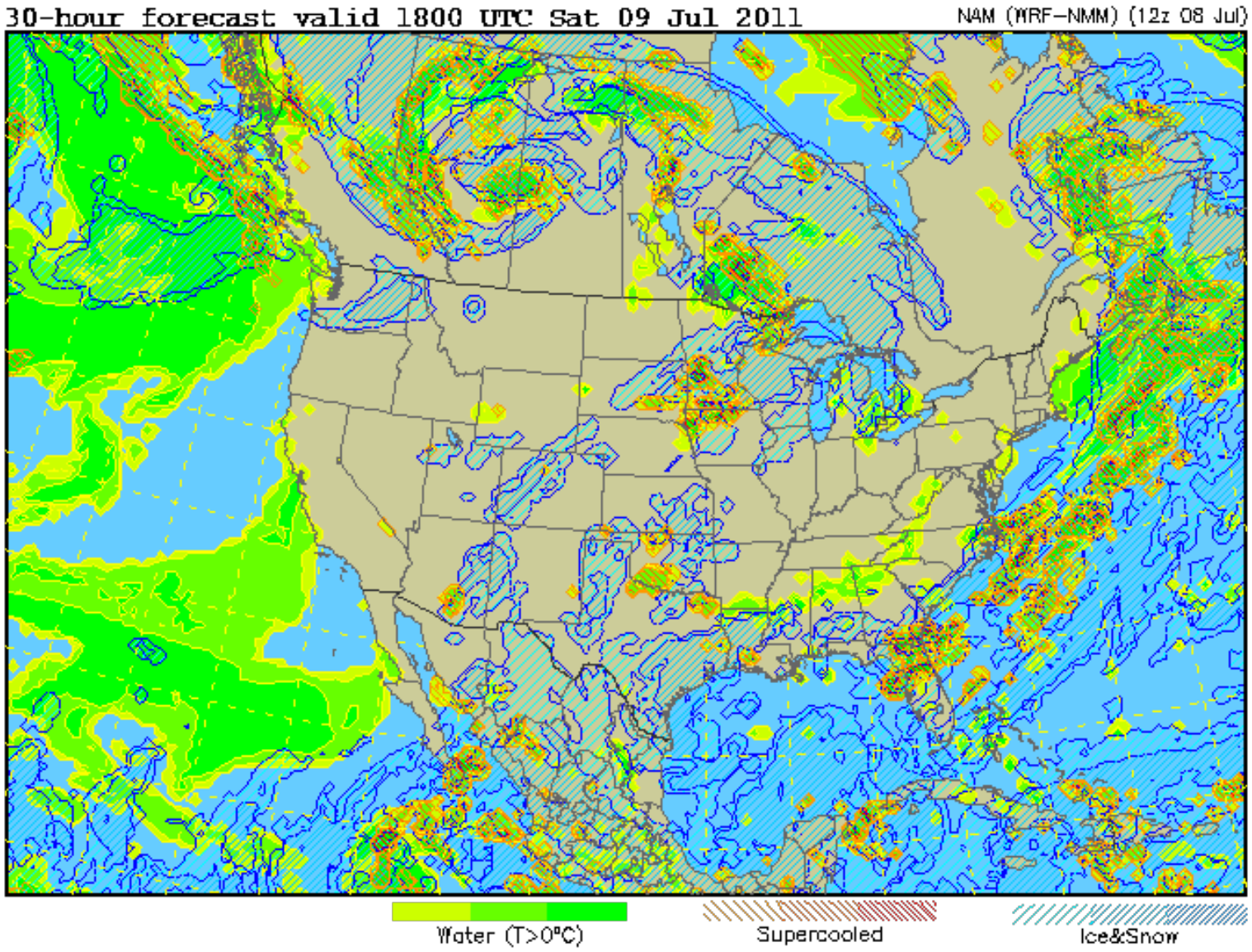

Monday ->
Heat Index (°F)
Dewpoint (°F)
Temperature (°F)
Mon, Jul 11 2011
Tue, Jul 12 2011
Tuesday->
Gusts (mph)
Wind (mph)
Rel. Humidity (%)
Pcpn. Potential (%)
Sky Cover (%)
Thunder
Ocnl
Lkly
Chc
SChc
Rain
Rain amount forecast da
2pm
5pm
8pm
11pm
2am
5am
8am
11am


Wednesday ->
Heat Index (°F)
Dewpoint (°F)
Temperature (°F)
Wed, Jul 13 2011
Thu, Jul 14 2011
Gusts (mph)
Wind (mph)
Rel. Humidity (%)
Pcpn. Potential (%)
Sky Cover (%)
Thunder
Rain
Ocnl
Lkly
Chc
SChc
Rain amount forecast data is unavailable for this period

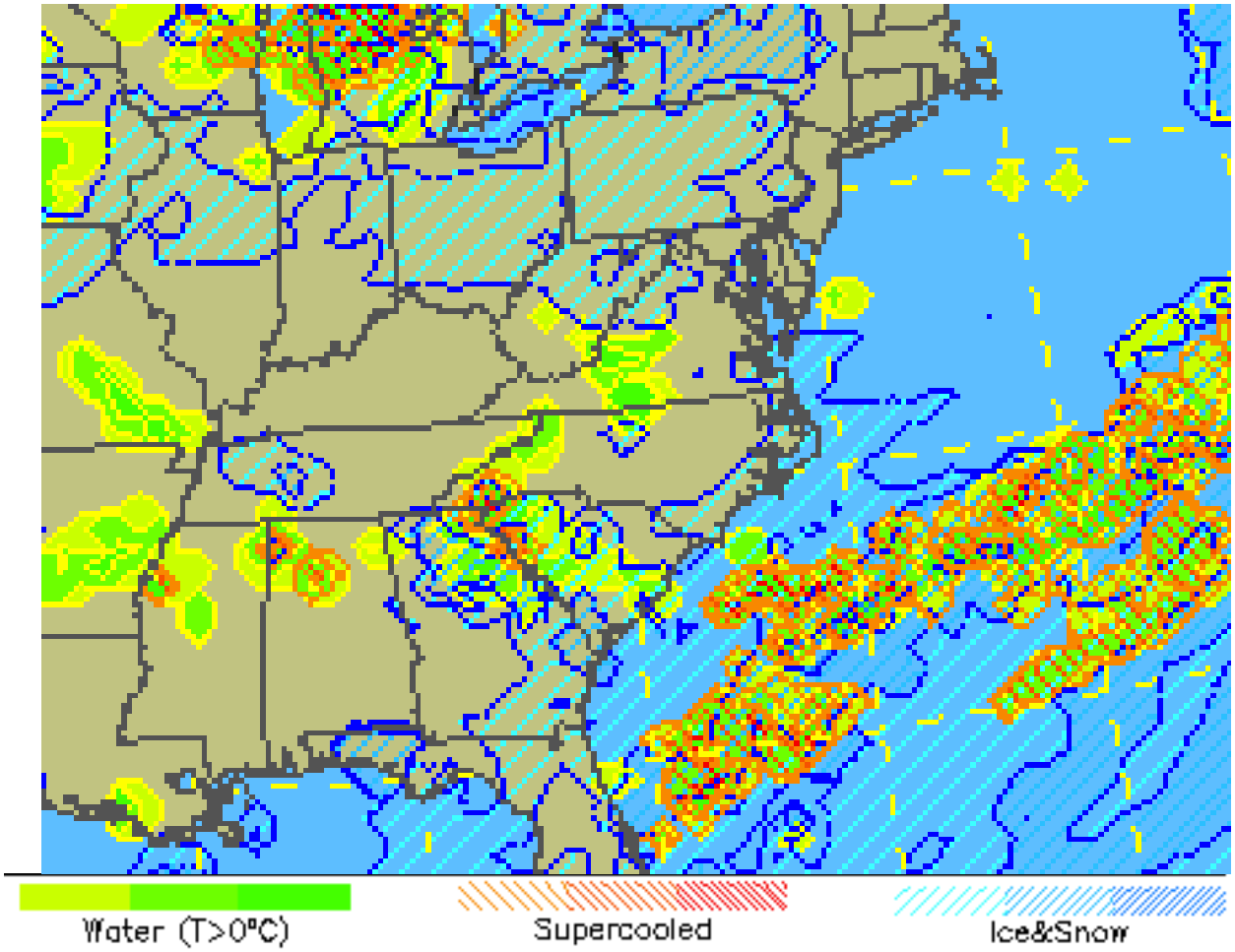
Saturday 8am: Presence of high clouds and lower level clouds (18,000ft and 6-12,000ft)



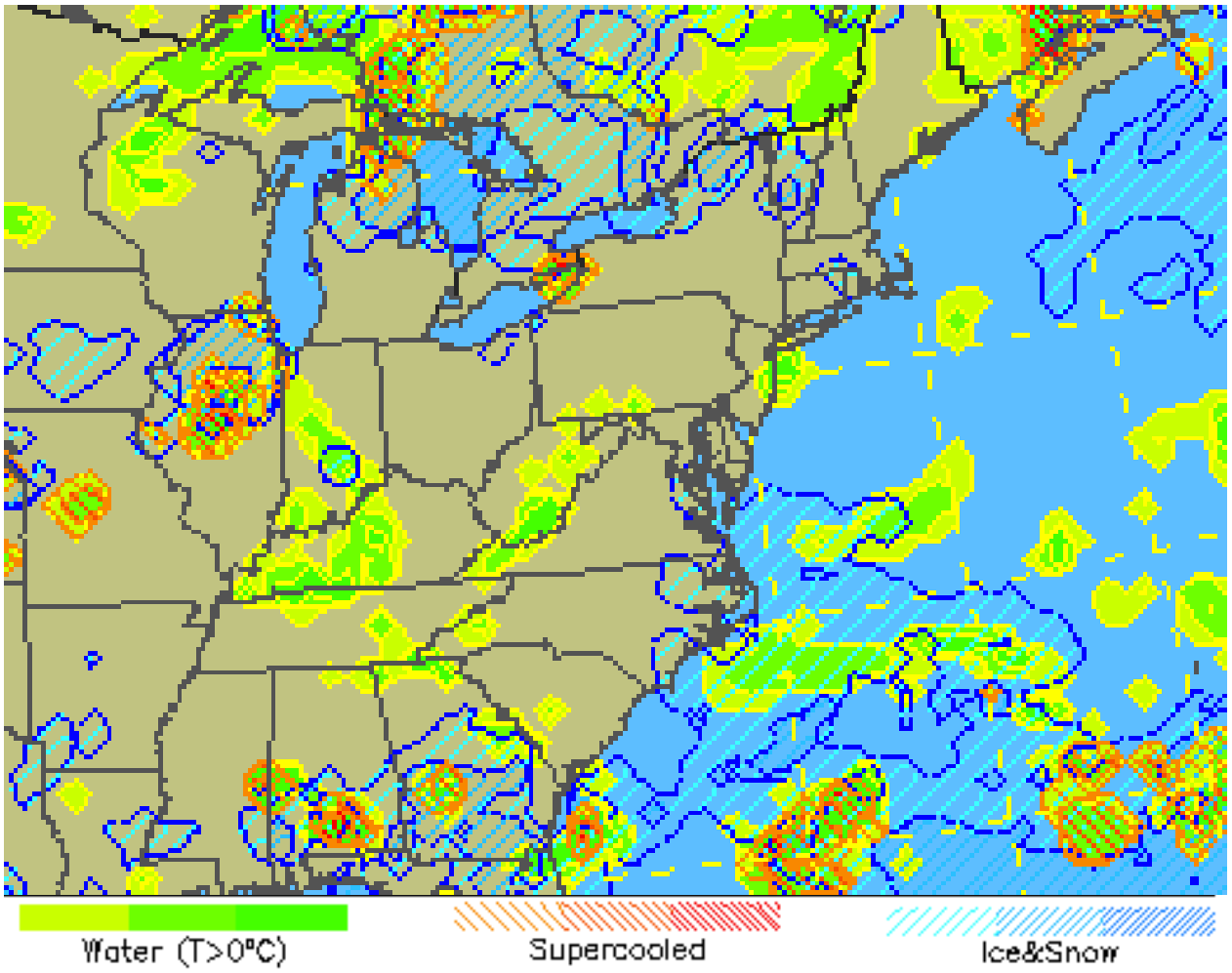
NAM (1200 UTC 08 July): Clouds – All Levels Saturday 1400 EDT

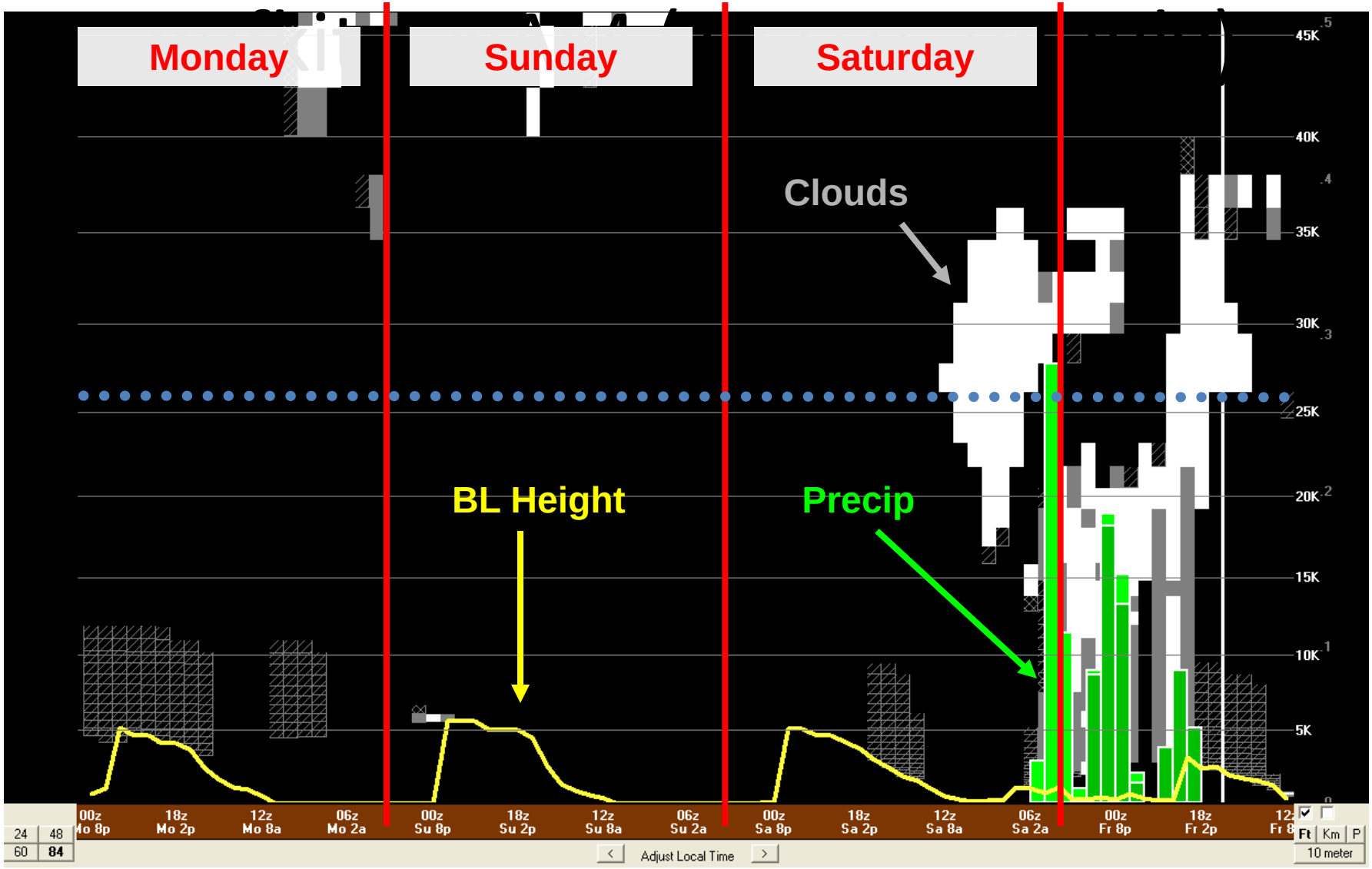


Sunday 8am: NAM keeps region clear on Sunday throughout day



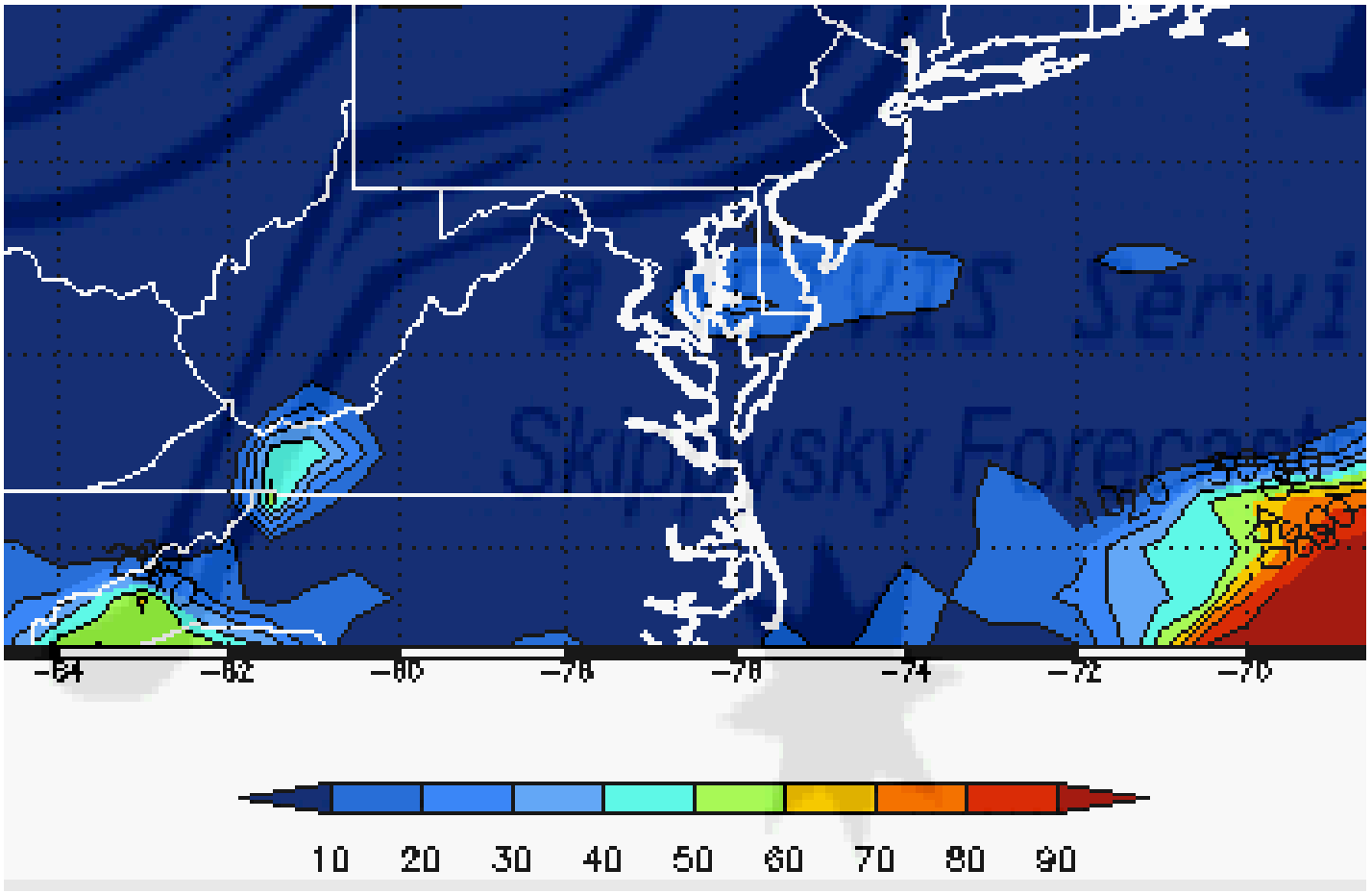
Monday 8am: NAM keeps Monday morning clear



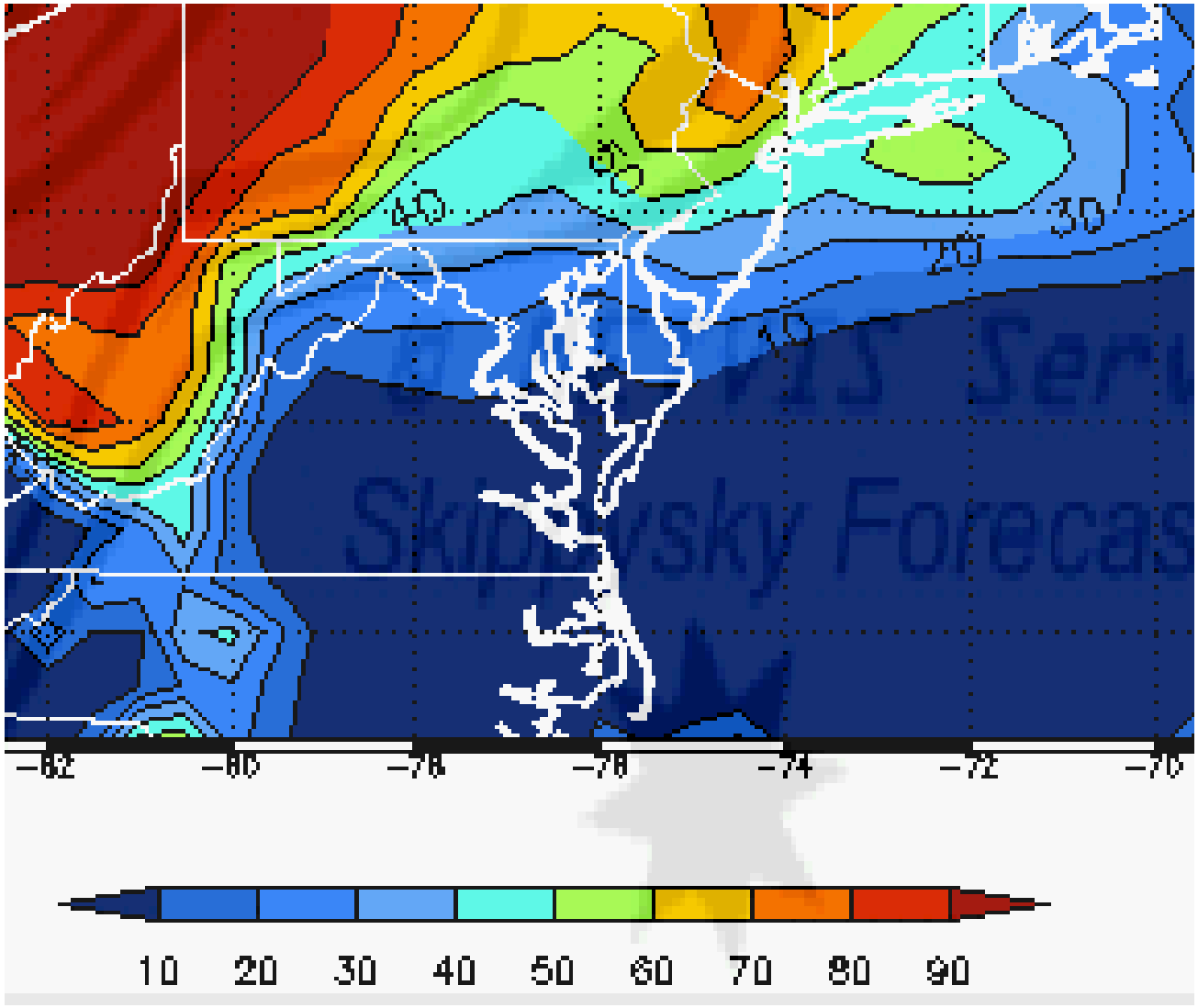


- Clouds and showers on Saturday morning
- Thin low-level clouds in the afternoon
- Clear on Sunday
- Chance for thin low-level clouds on Monday

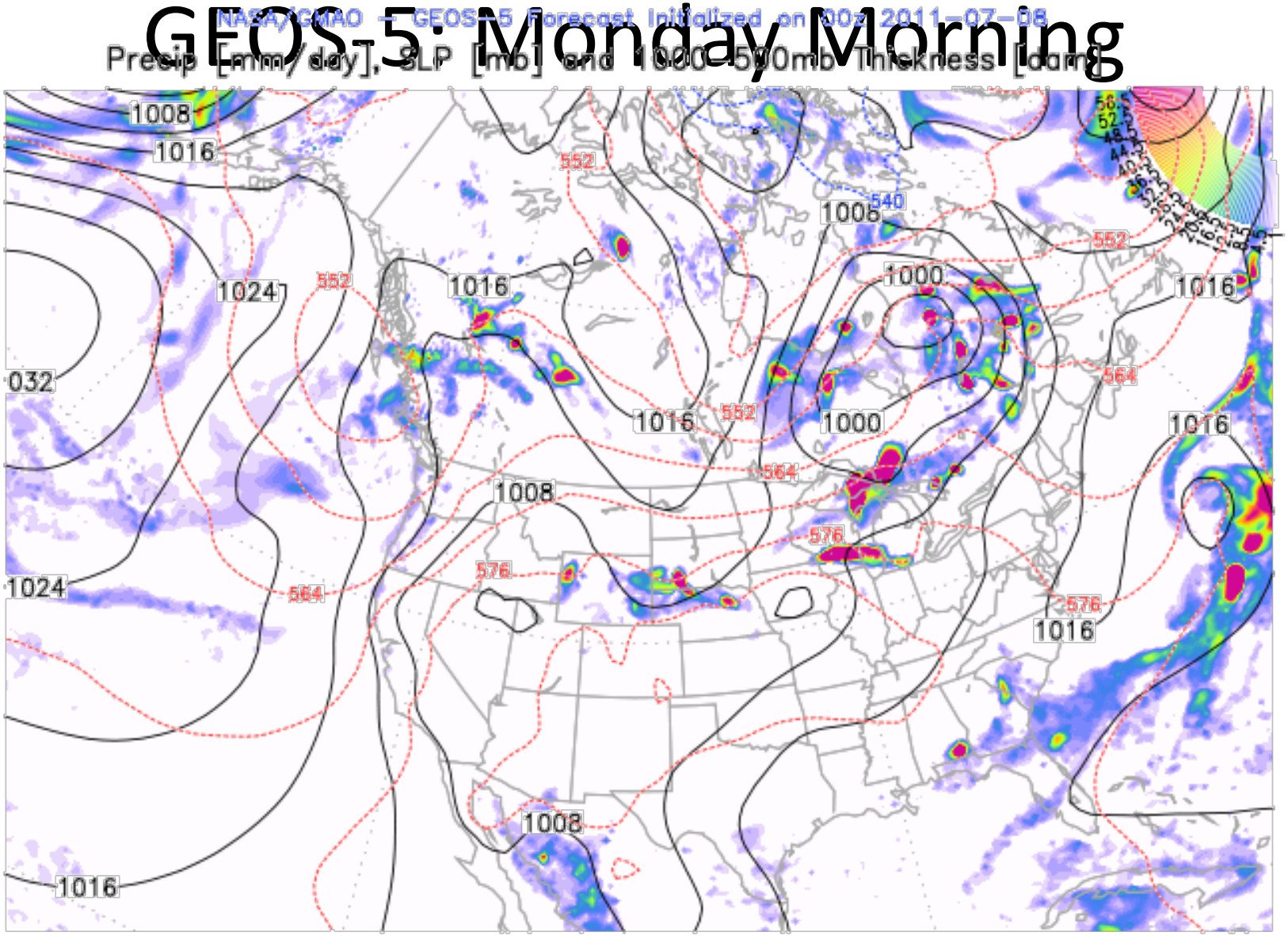
Sunday 2pm: GFS also keeps Sunday clear all day



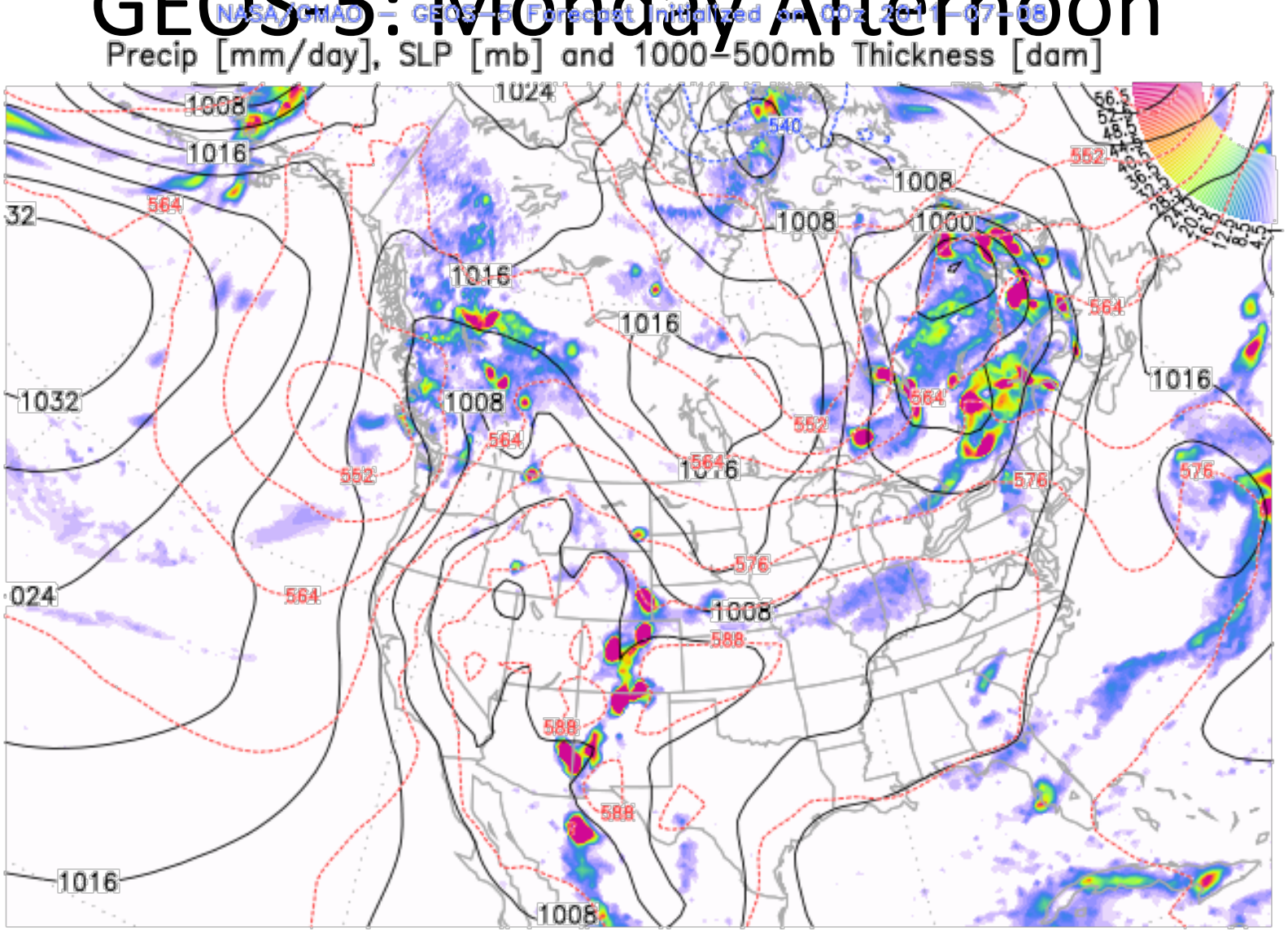
Monday 2pm: Monday remains clear through afternoon in GFS



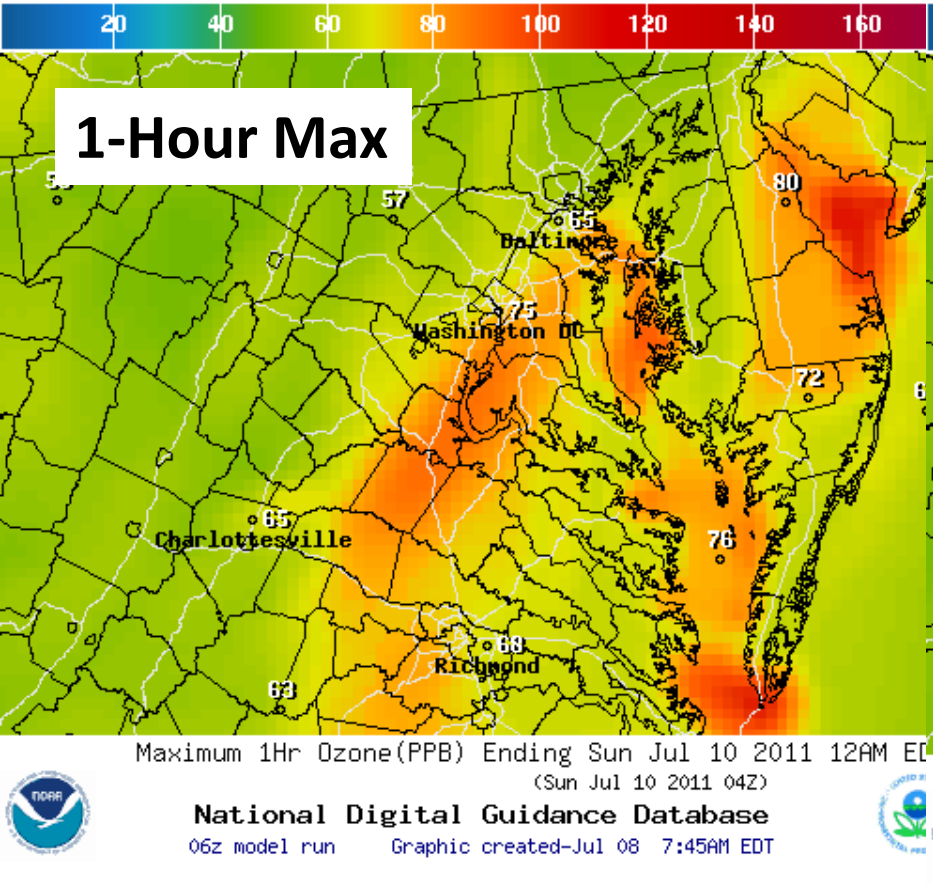
GEOS-5: Monday Morning

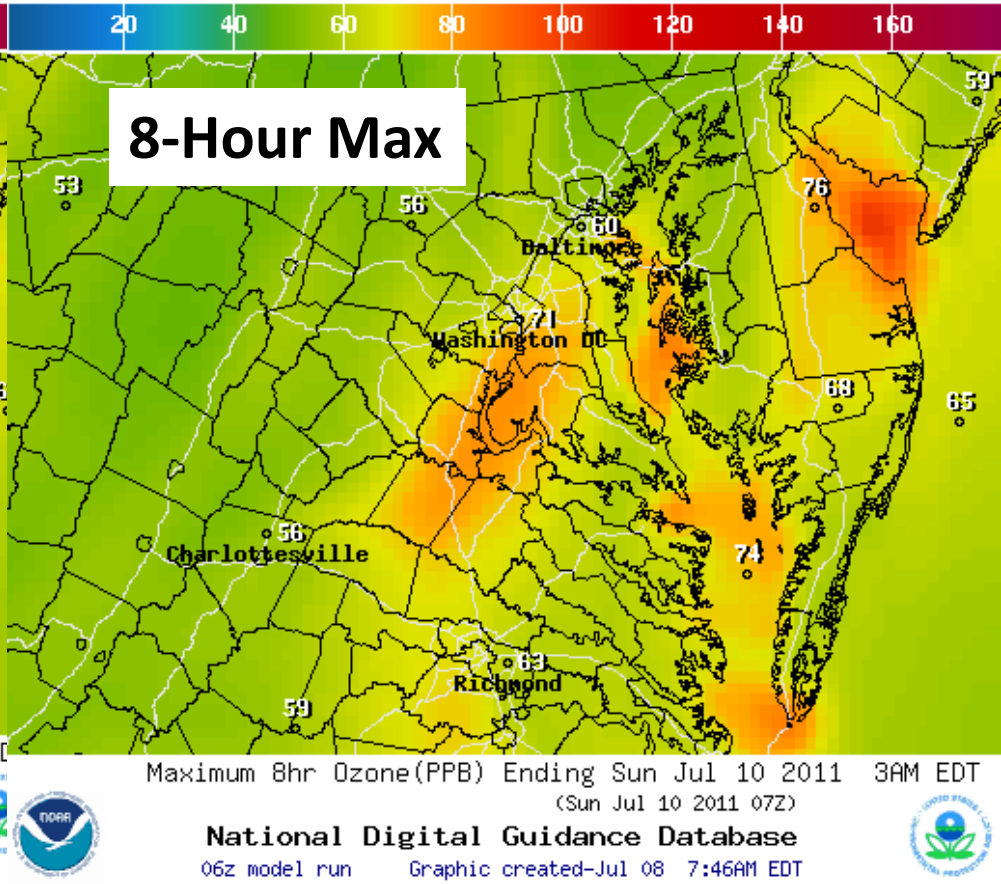


GEOS-5: Monday Afternoon

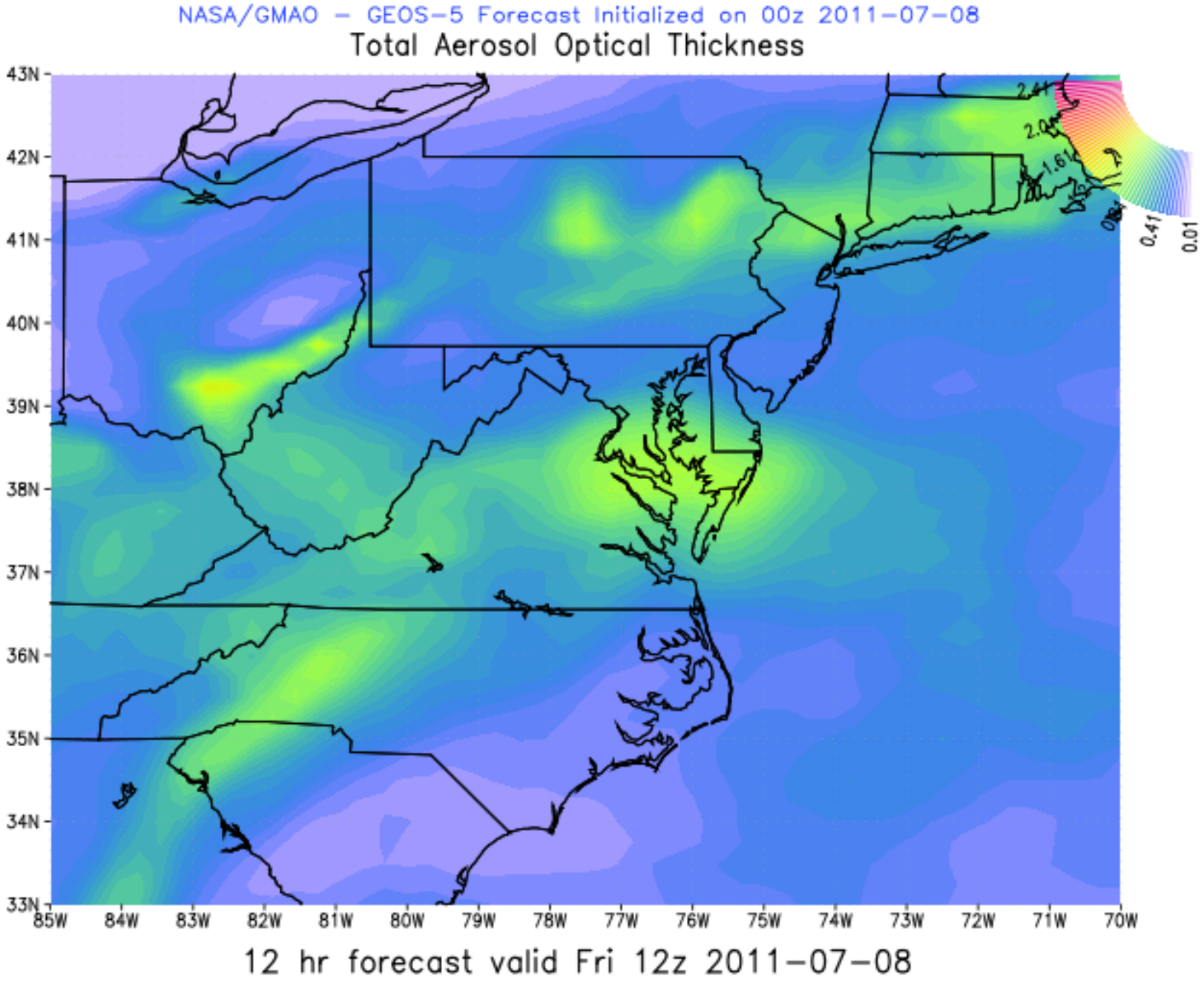


Saturday: Ozone in moderate range. Highest mixing ratios in the low 70's ppbv.

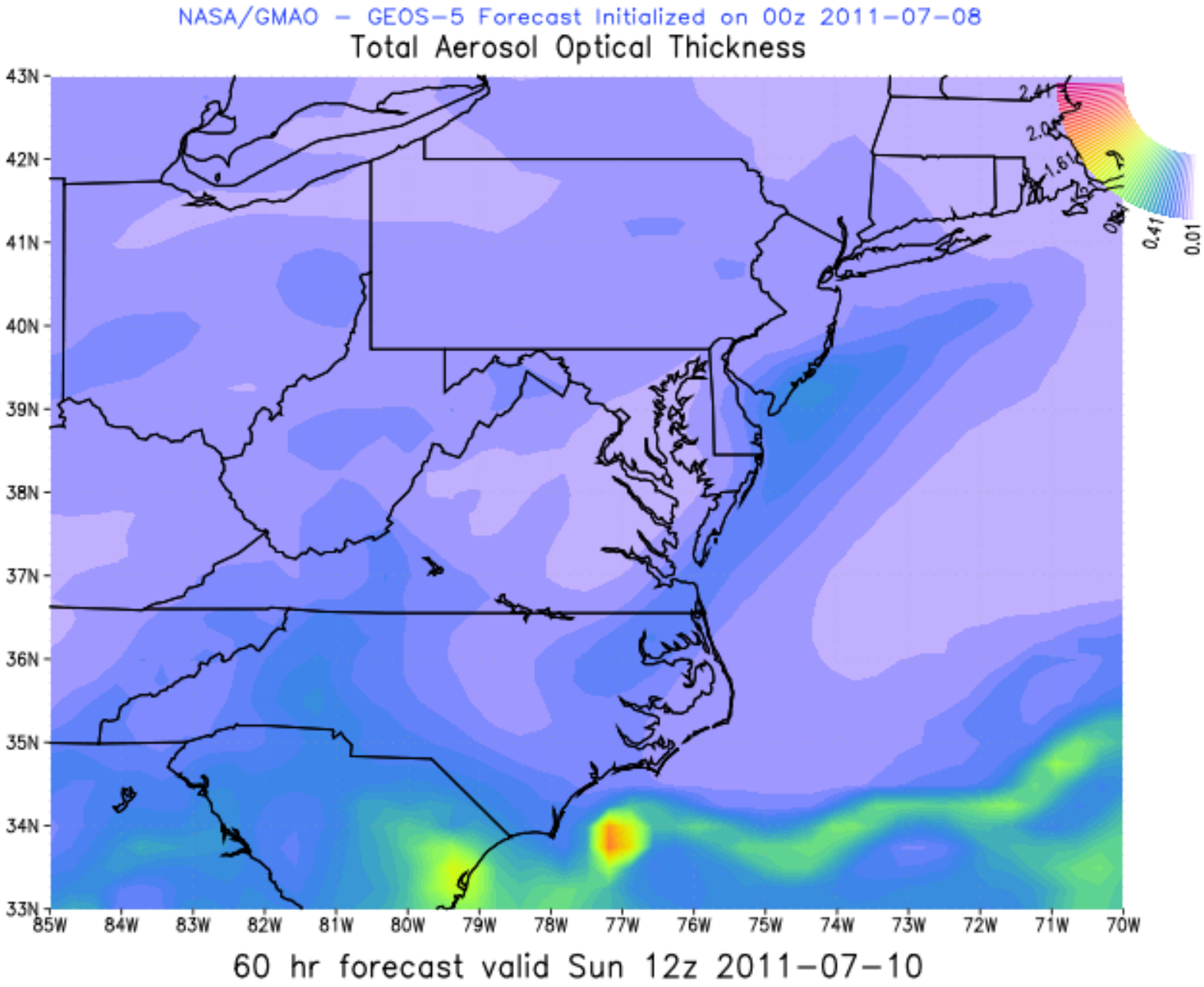




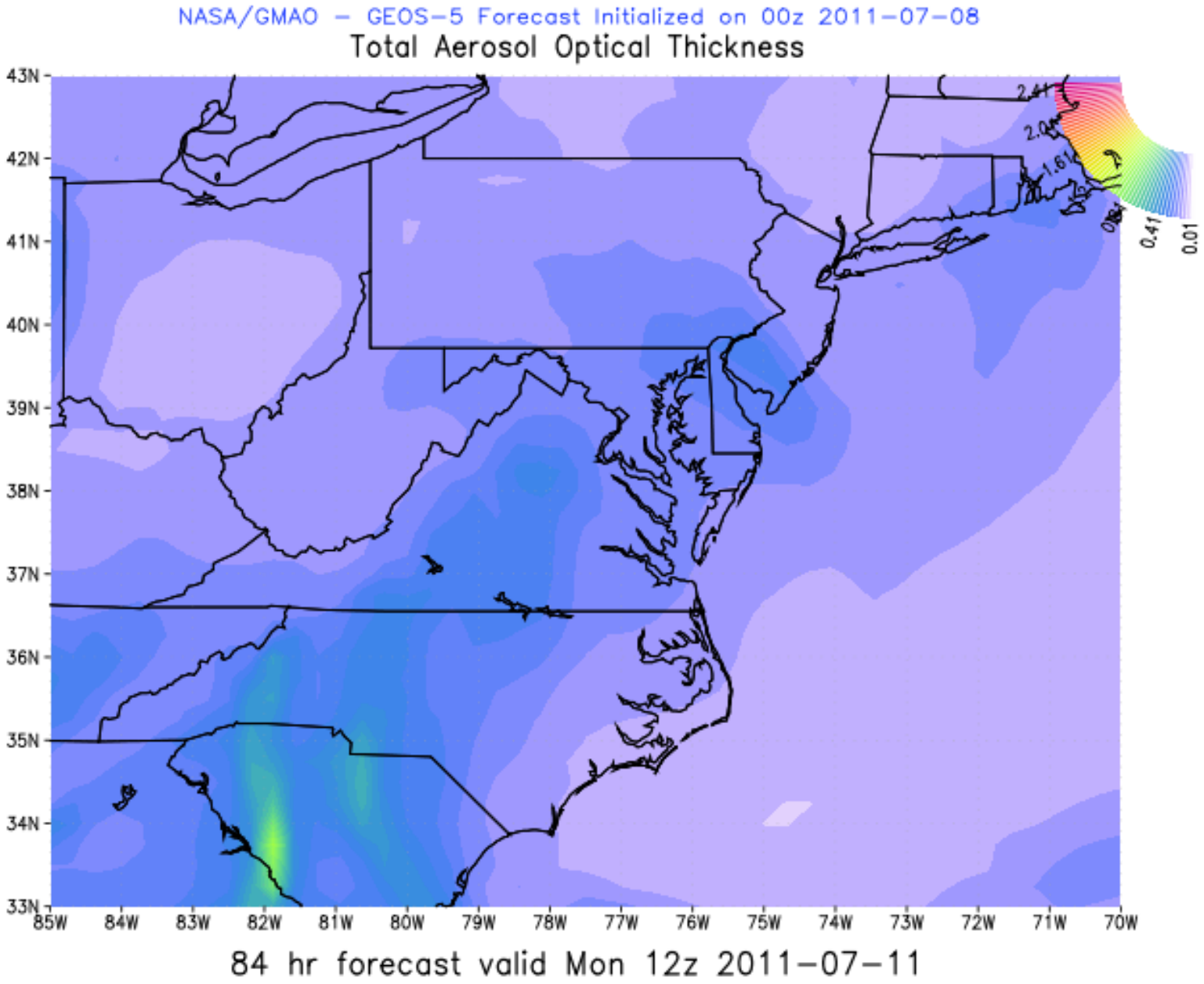
Today's AOT forecast: small impact from wildfires/power plants



Sunday: minimal aerosol impact



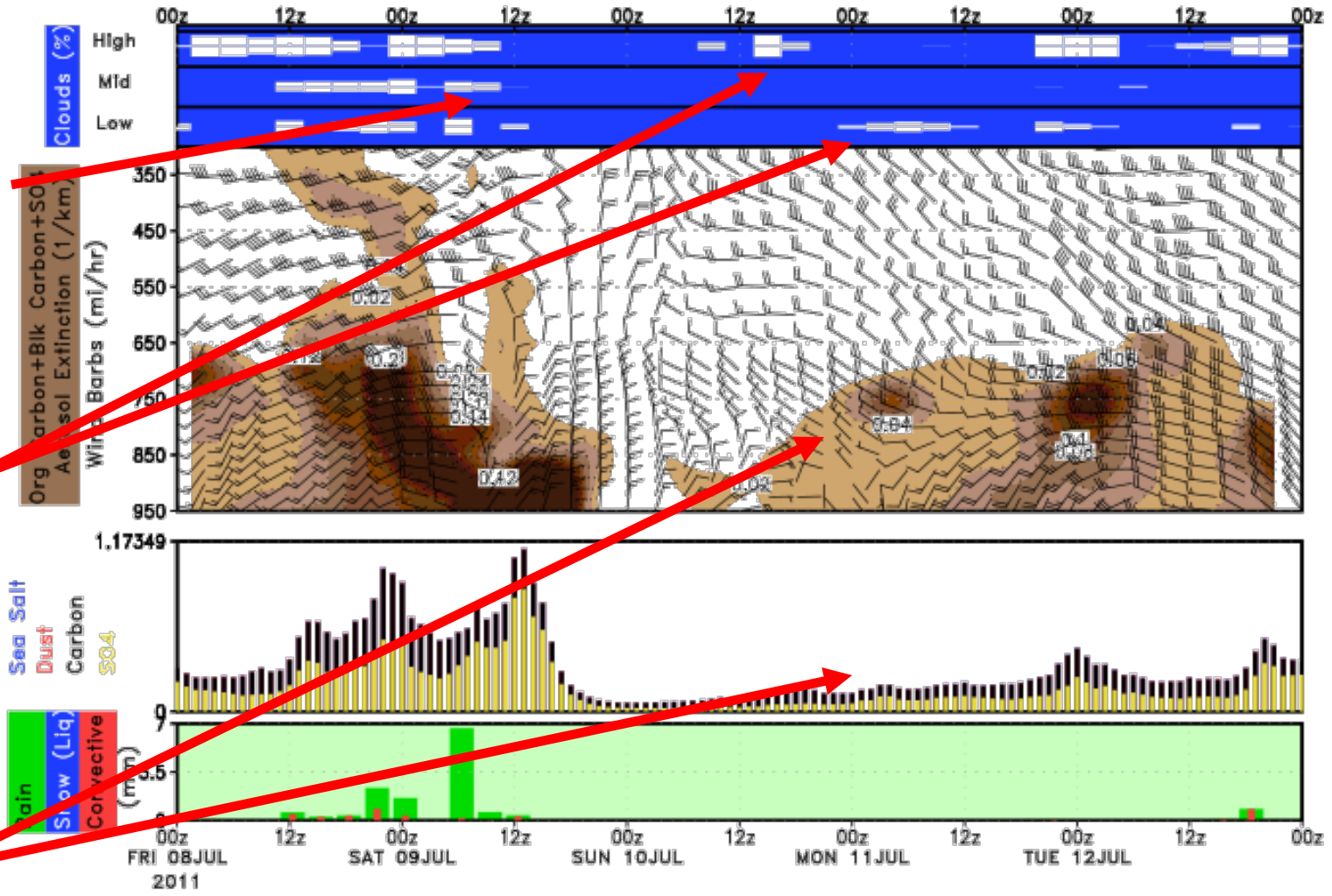
Monday: Small impact of smoke (Georgia wildfires), power plants

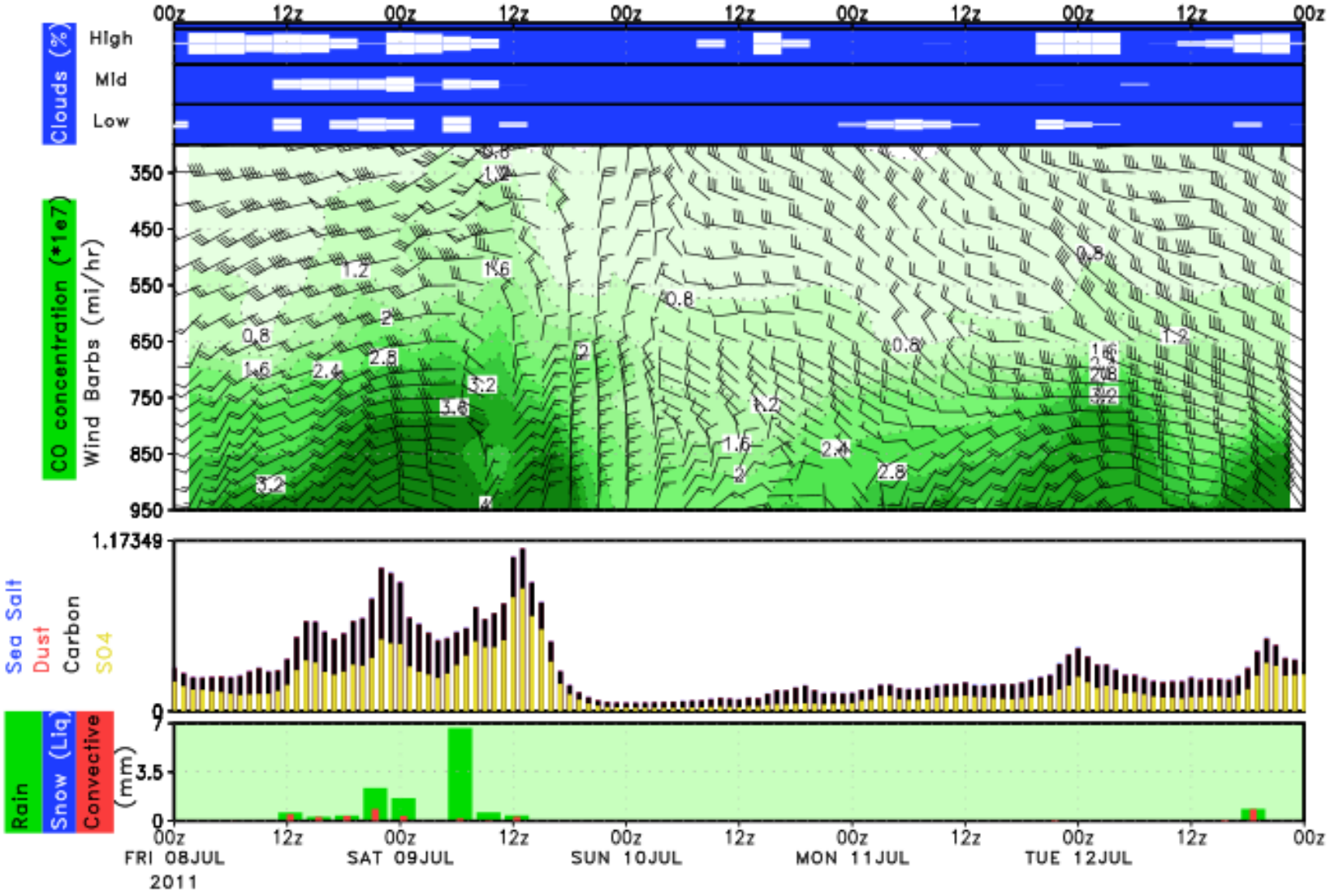


GEOS-5 Envirogram through 12 July 2011

Beltsville

- Mix-level clouds on Saturday AM. Clear in afternoon.
- Chance for high-level afternoon clouds on Sunday. Low-level clouds on Monday
- Low aerosol Saturday afternoon



- Precip free Saturday afternoon through Monday

Beltsville Envirogram