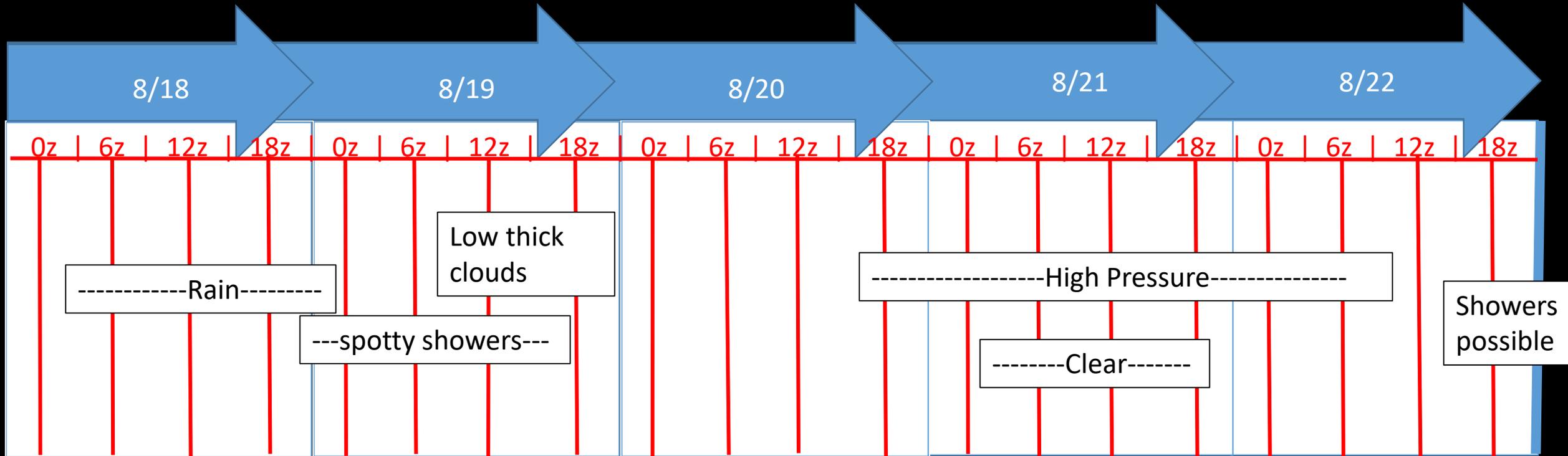


# Forecast for 8/18-8/22

Forecaster: Matthew Brewer

Forecast made: 8/17/2017

# Outlook



Day -1

Day 0

Day 1

Day 2

Day 3-5

# Overview for Day 8/18

- Rain very likely throughout day
- Morning likely to be heaviest rain
- Moderate CAPE in afternoon may help initiate isolated thunderstorms
- Cloud base likely to be low with thick drizzling stratus likely progressing to more cumulus in the afternoon

Day -1

Day 0

Day 1

Day 2

Day 3-5

# Overview for 8/19

- Low LCL likely in the morning due to high dew points and surface near saturation
- Scattered light showers possible in morning and early afternoon
- Low pressure system will continue north giving us light W winds

Day -1

Day 0

Day 1

Day 2

Day 3-5

# Overview for Day 3-5

- Sunday- Showers possible in the morning, then high to move into the area and bringing in drier weather
- Monday- High will be located directly over head, creating dry and clear weather good for solar eclipse viewing
- Tuesday- High pressure will be replaced by a low pressure system giving chance of precip later in the day/early evening

Day -1

Day 0

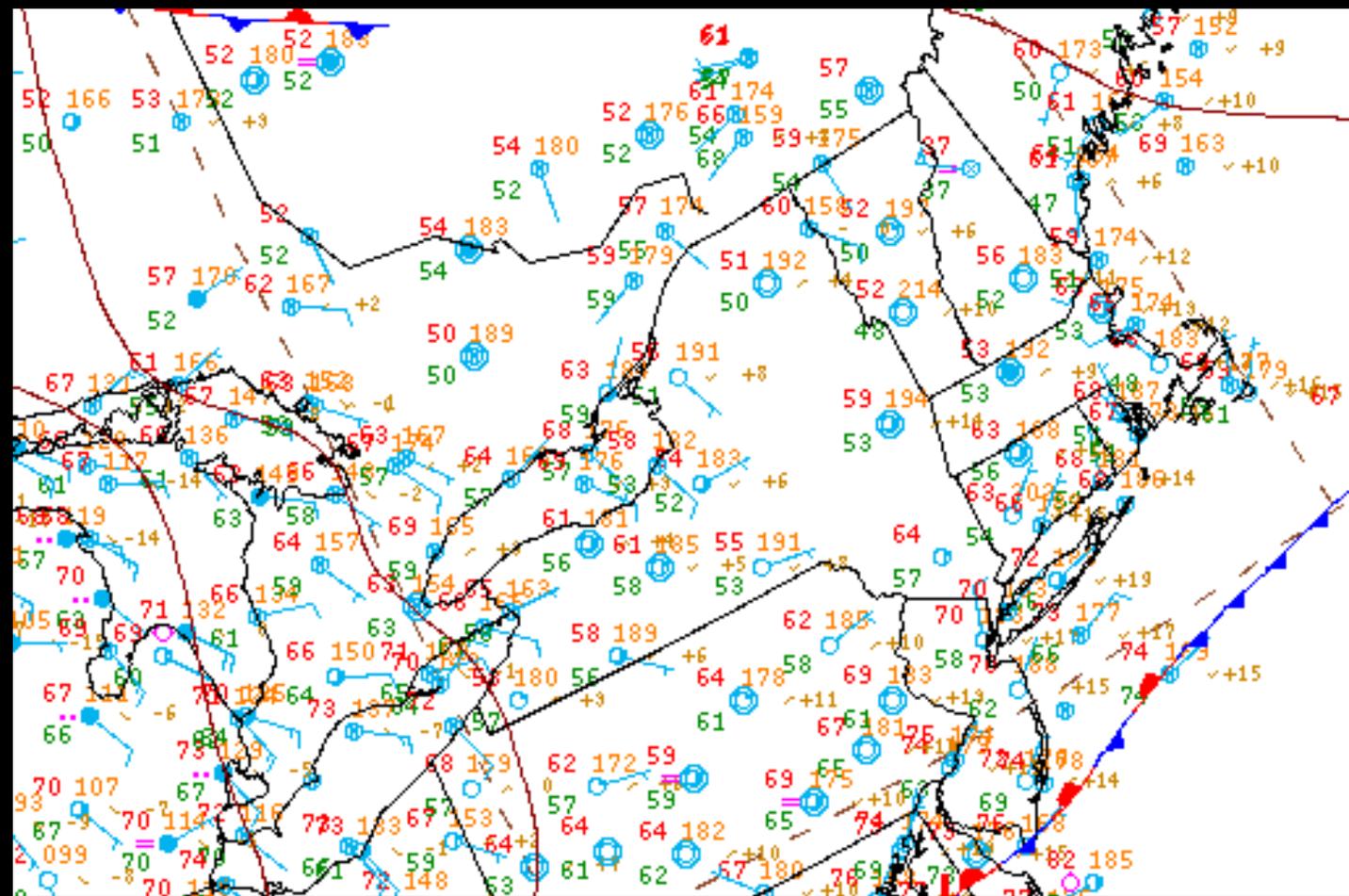
Day 1

Day 2

Day 3-5

# Current Surface Analysis

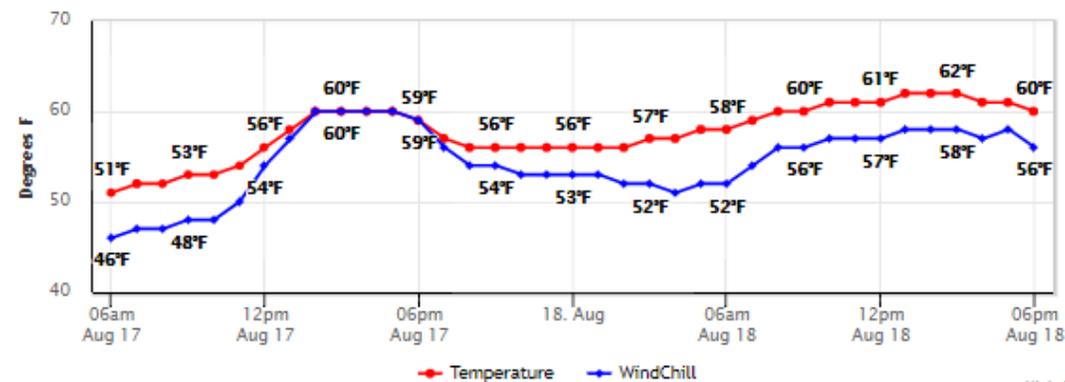
- Shown is the NOAA WPC surface analysis from 12z 8/16/2017
- We are in an area of generally high pressure, quite and calm weather calm with partly sunny skies



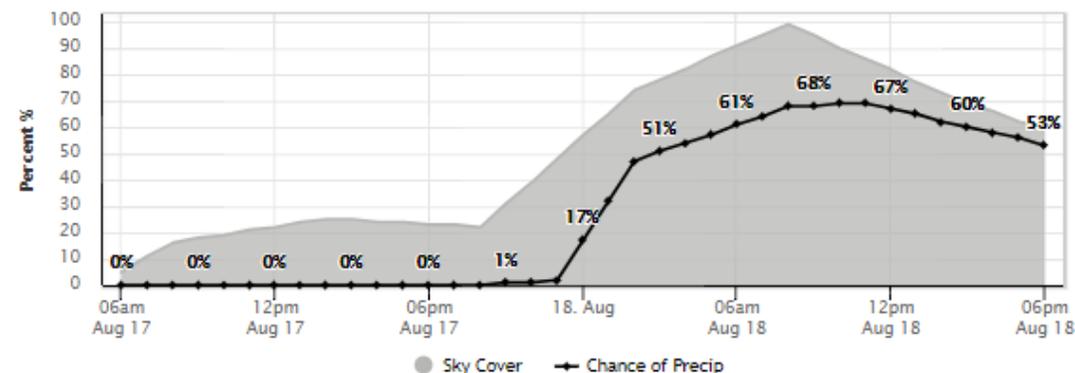
# Summit forecast

- Shown is the NWS Burlington's summit forecast
- The forecast show the chance precip tomorrow with the highest chance in the morning
- Winds will shift from NW to S as the low move into the area

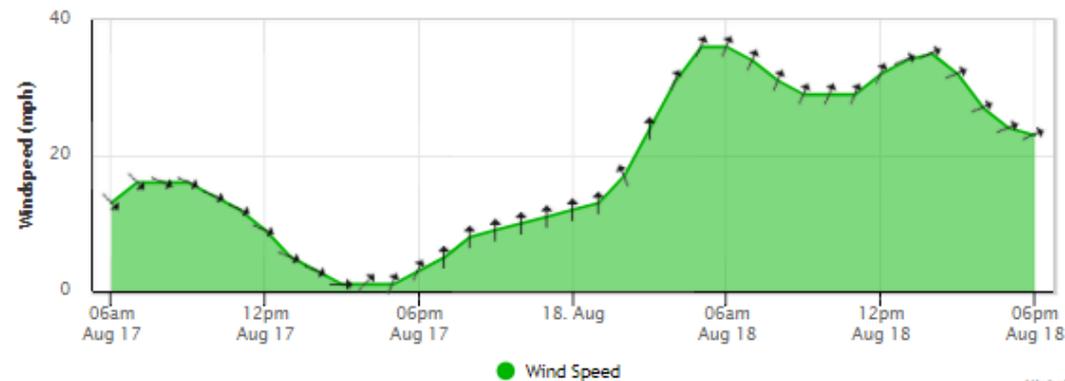
Temperature & Wind Chill Forecasts for Whiteface Mountain, NY at 4867'



Precipitation & Sky Cover Forecasts for Whiteface Mountain, NY at 4867'



Wind Speed & Direction Forecasts for Whiteface Mountain, NY at 4867'



Day -1

Day 0

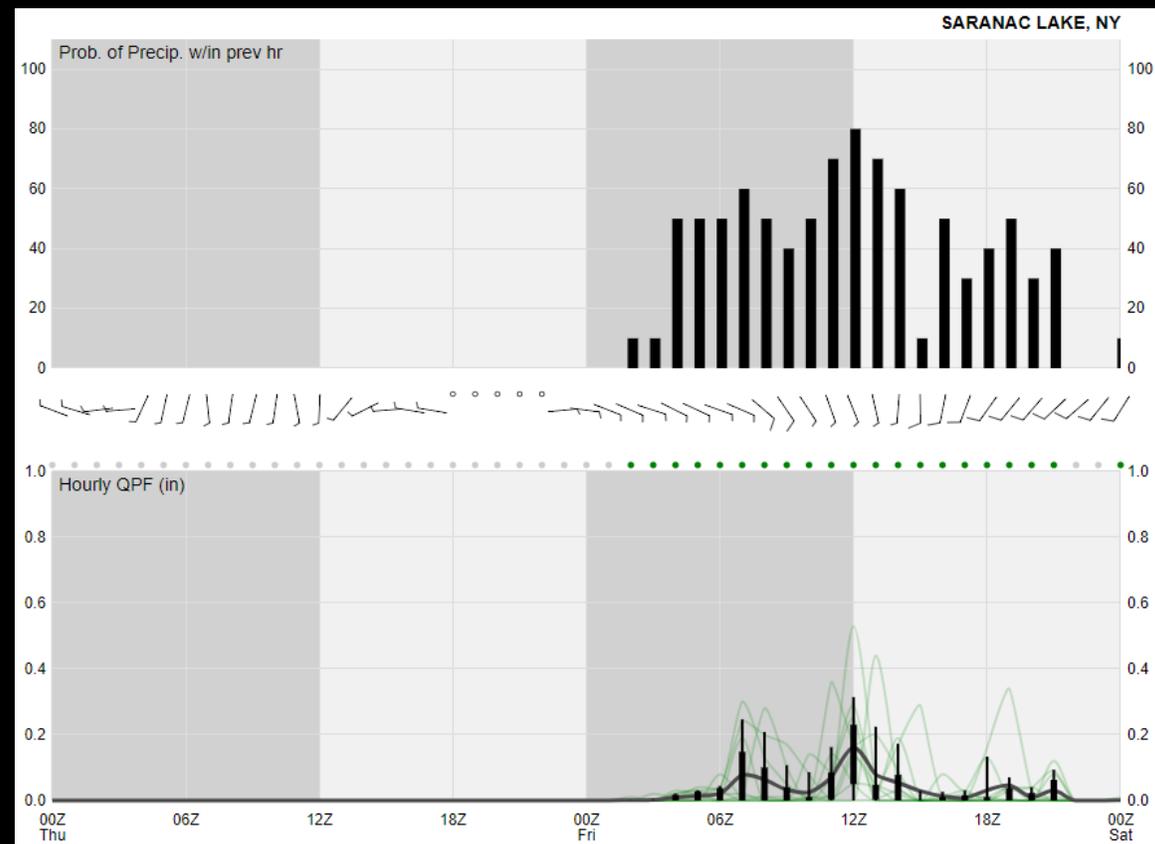
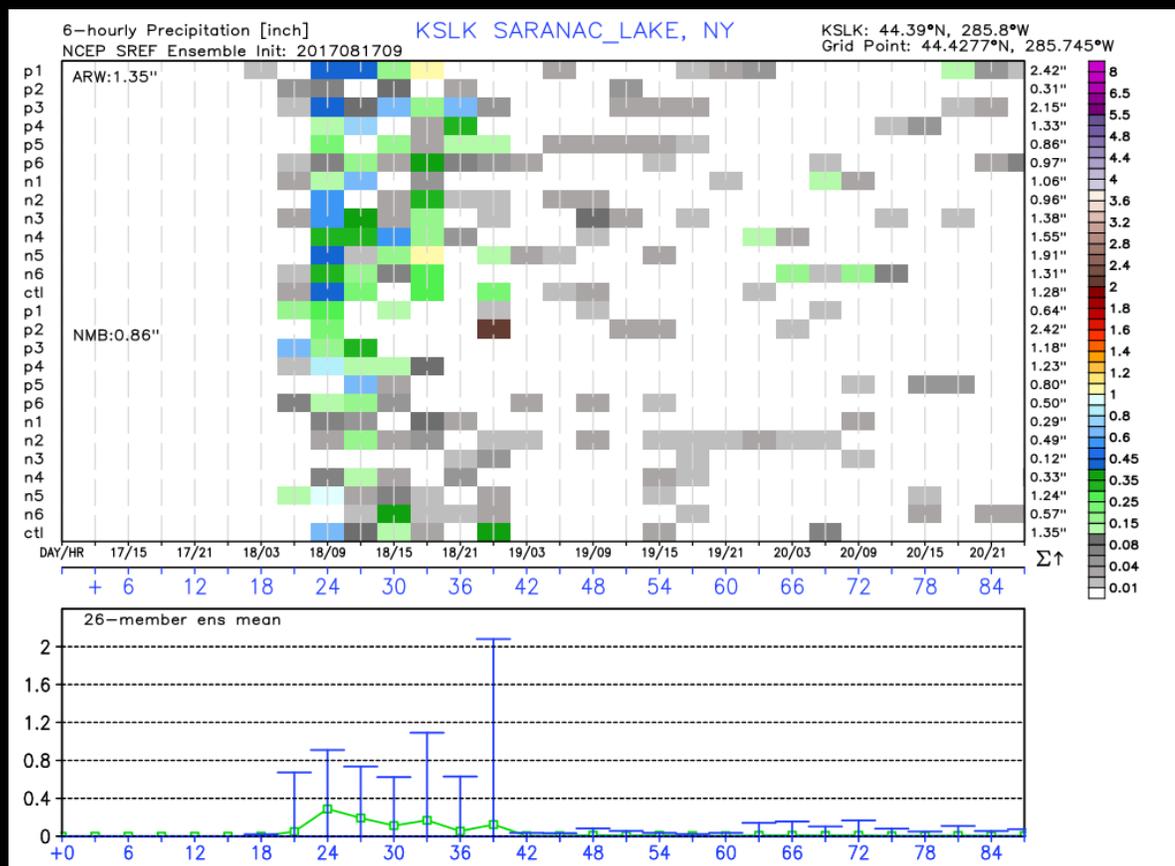
Day 1

Day 2

Day 3-5

# Precip Meteograms

- Left: NCEP SREF 9z 8/17 run showing 6 hourly precip
- Right: NCAR ensemble 0z 8/17 run showing probability of precip and hourly QPF
- Both models forecast the rest the precip for tomorrow morning
- First thing in the morning looks to be the highest chance of precip with the likely hood tapering of as we progress through the day



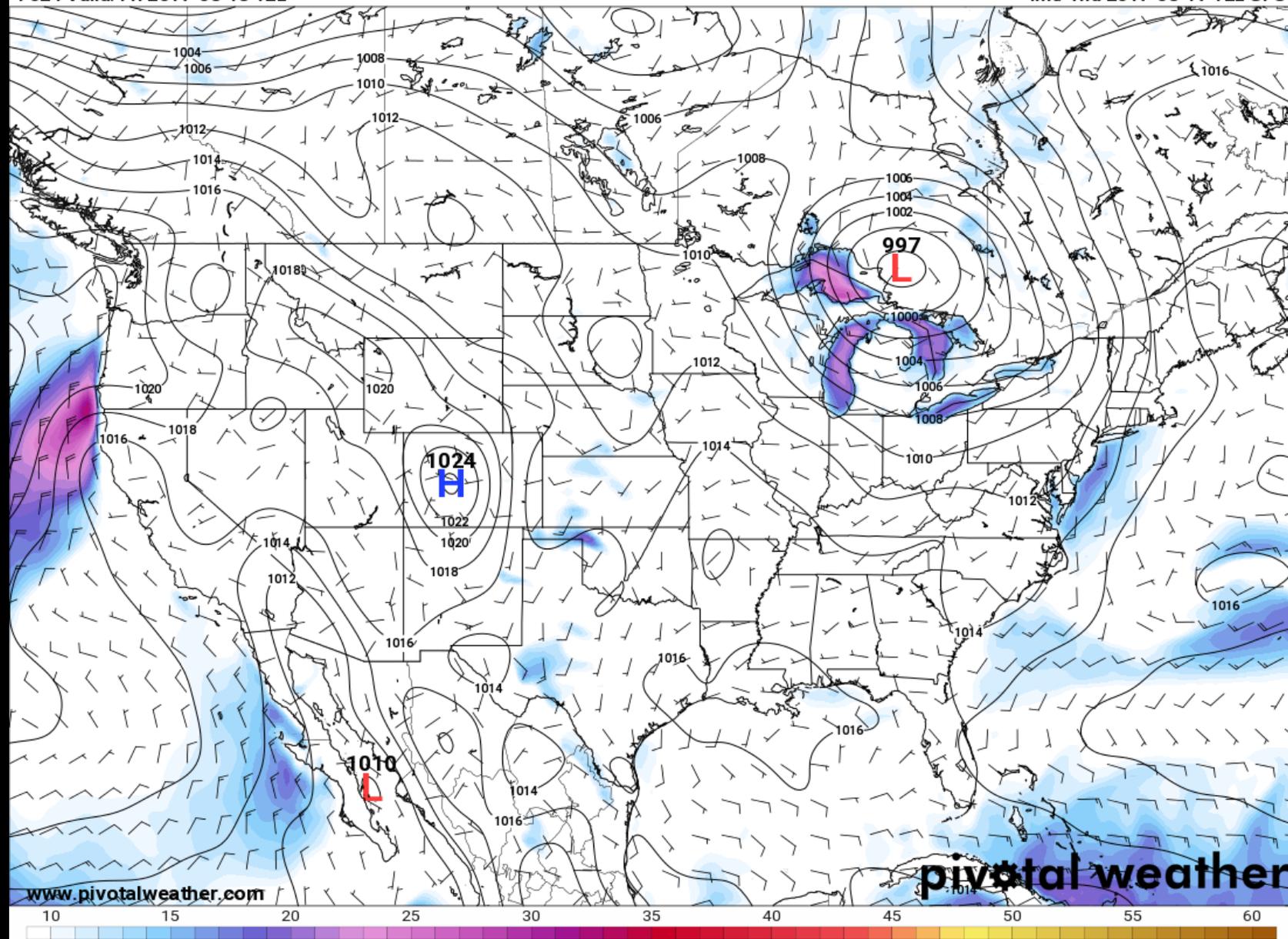
# Synoptic weather

- Shown is the 8/17 12z GFS MSLP and 10m winds valid for 12z 8/18
- The low pressure system will be to our north west
- This system will bring in precip in throughout the day and create southerly flow

MSLP (mb) and 10 m AGL Wind (kt)

F024 Valid: Fri 2017-08-18 12z

Init: Thu 2017-08-17 12z GFS



Day -1

Day 0

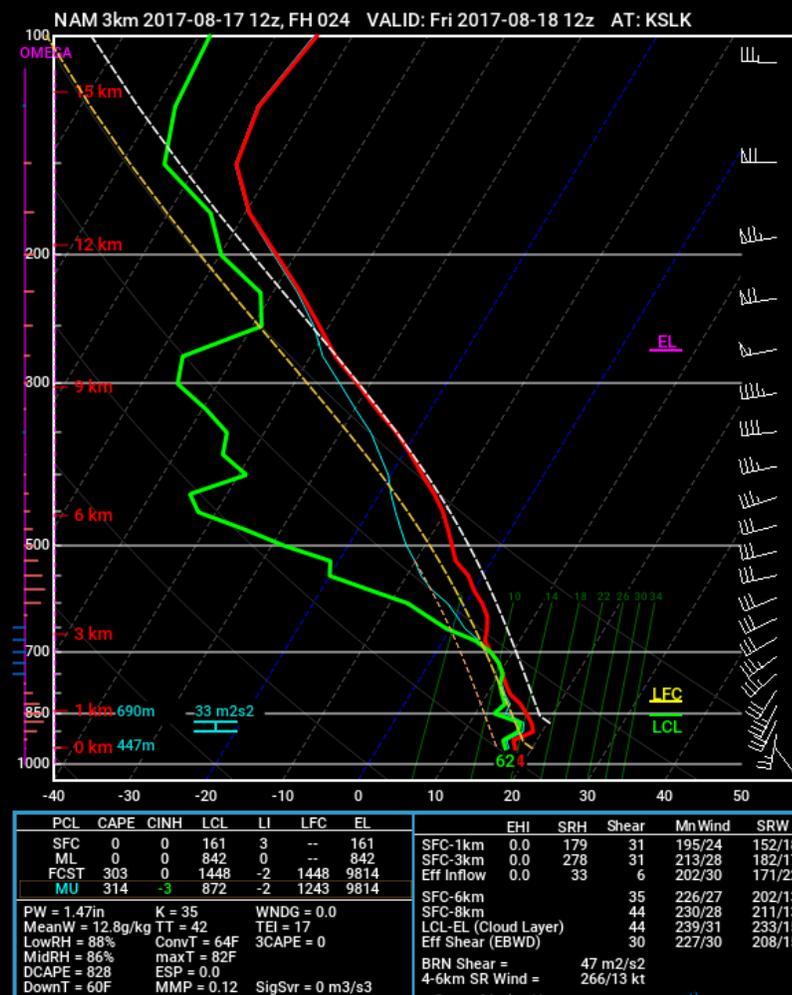
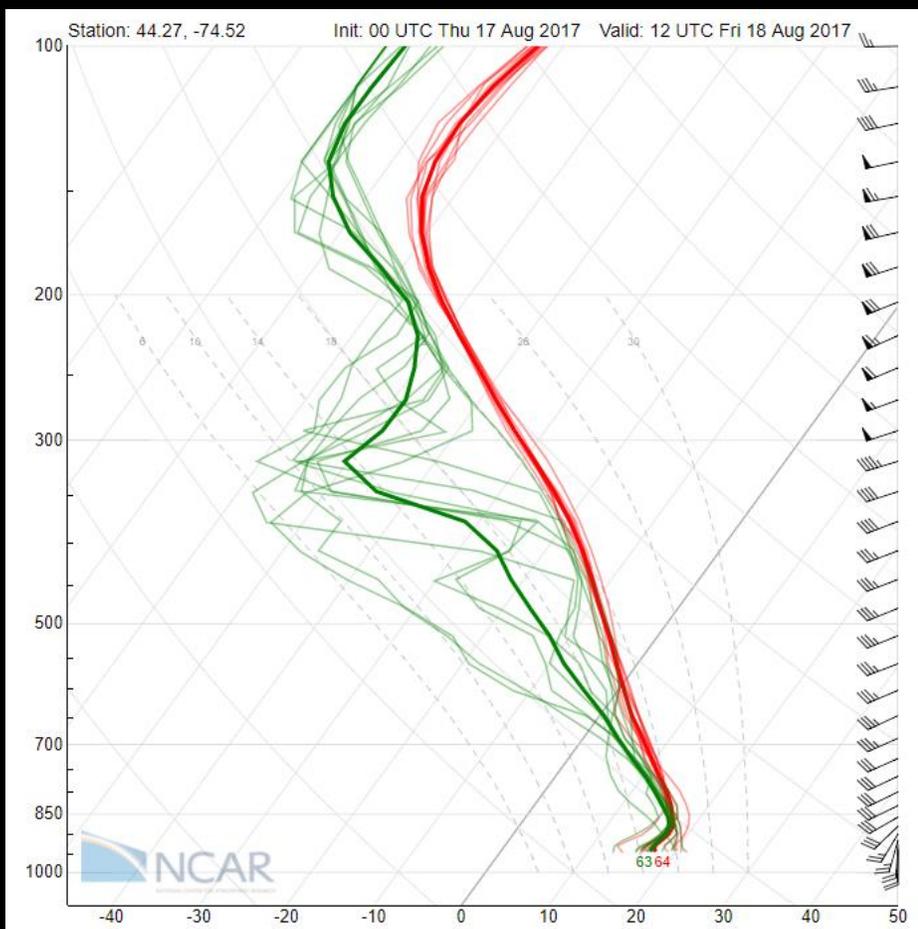
Day 1

Day 2

Day 3-5

# Model Soundings

- Shown is the 8/17 12z 3km NAM sounding valid for 12z 8/18 and the 0z 8/17 NCAR ensemble sounding for 12z 8/18
- Due to the precip there will likely be low thick stratus clouds with intermittent precip
- Cloud base will likely be below the lake placid turn in the morning



Day -1

Day 0

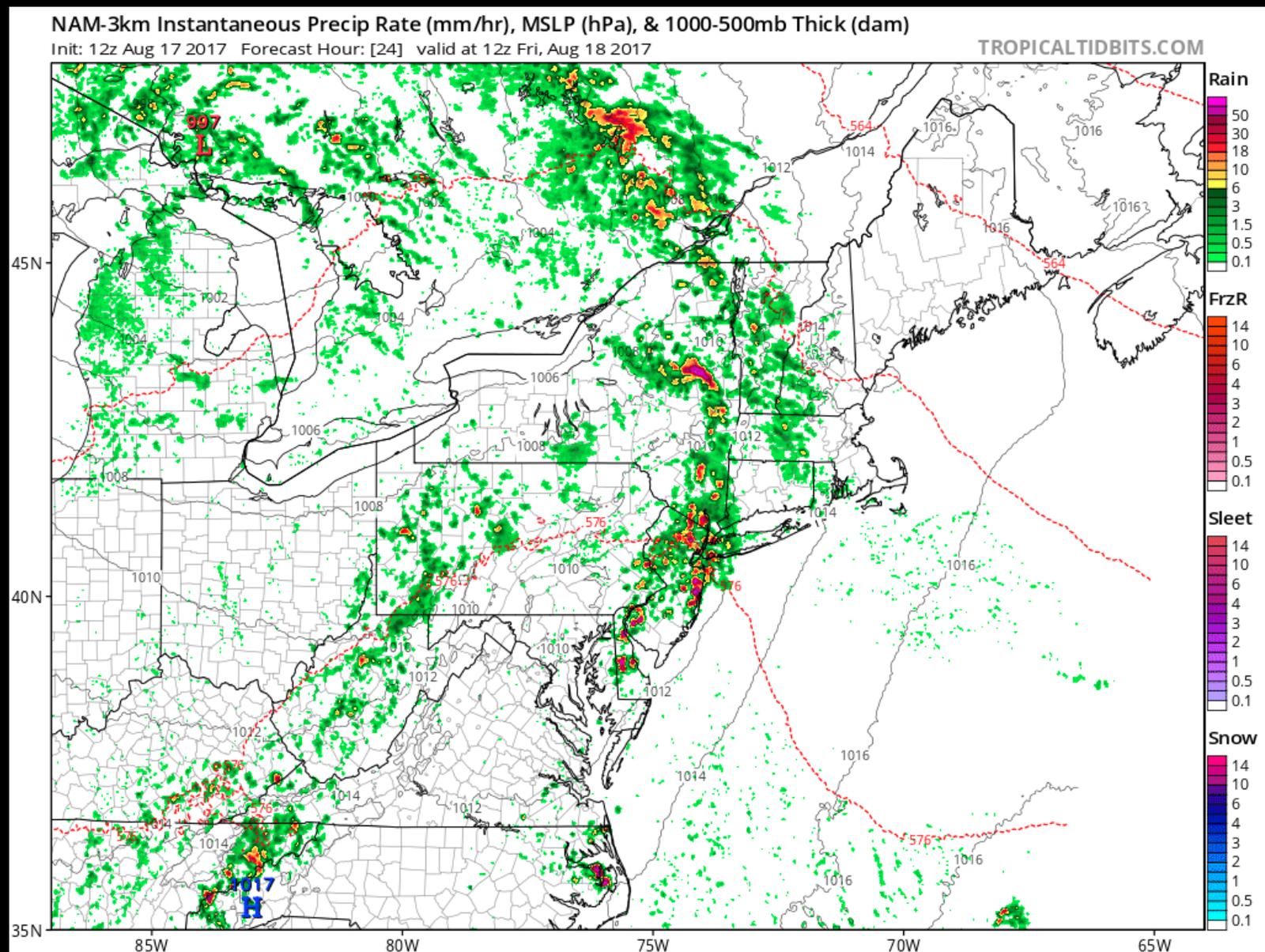
Day 1

Day 2

Day 3-5

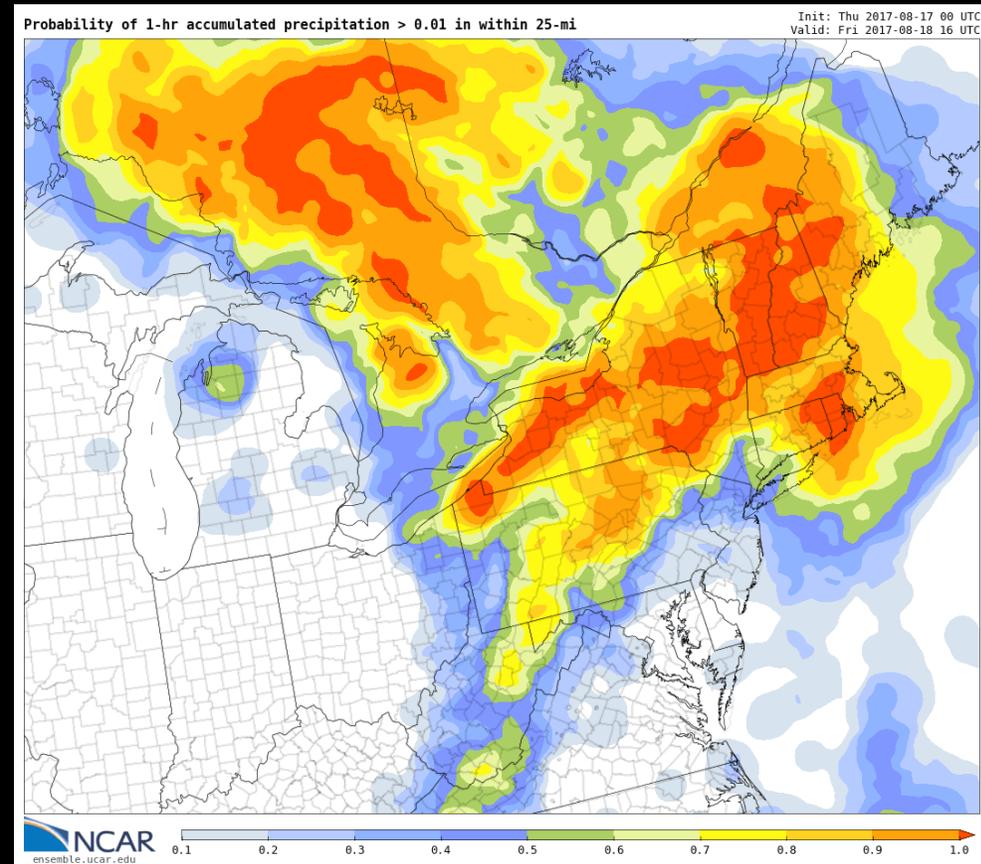
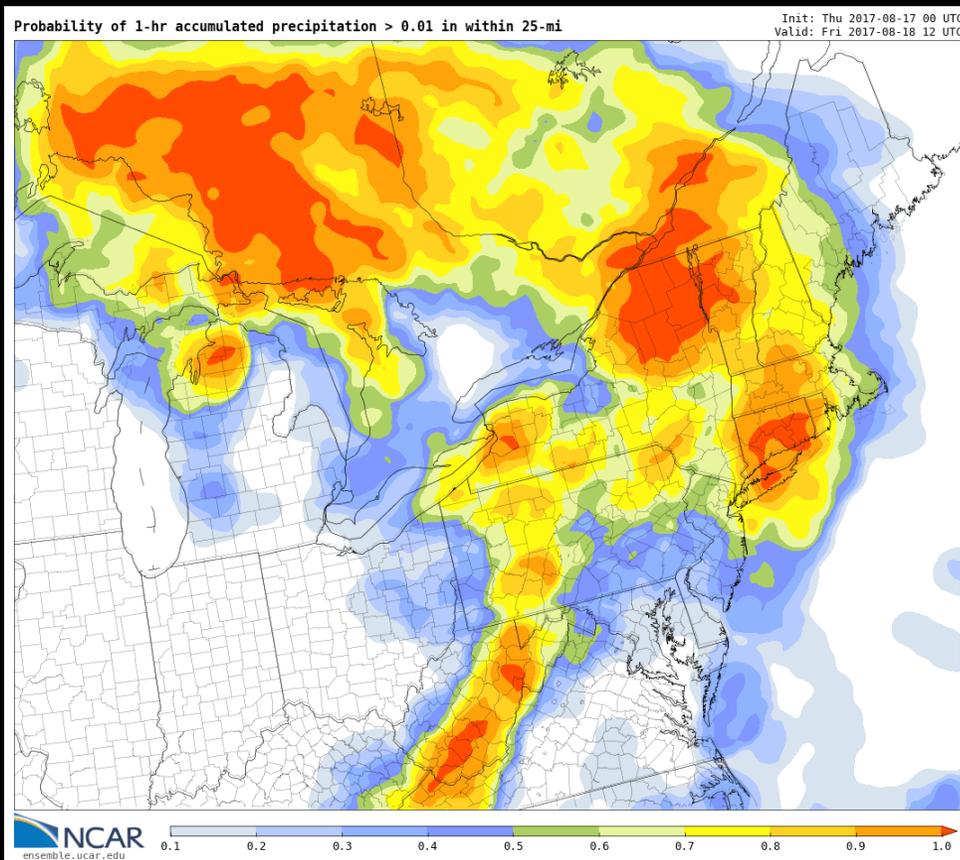
# Friday Precip

- 12z 8/17 3-km NAM Surface Reflectivity and MSLP valid for 12z 8/18
- The NAM is forecasting the precip to passed through the area by 12z but will likely continue to affect us will more isolated storms



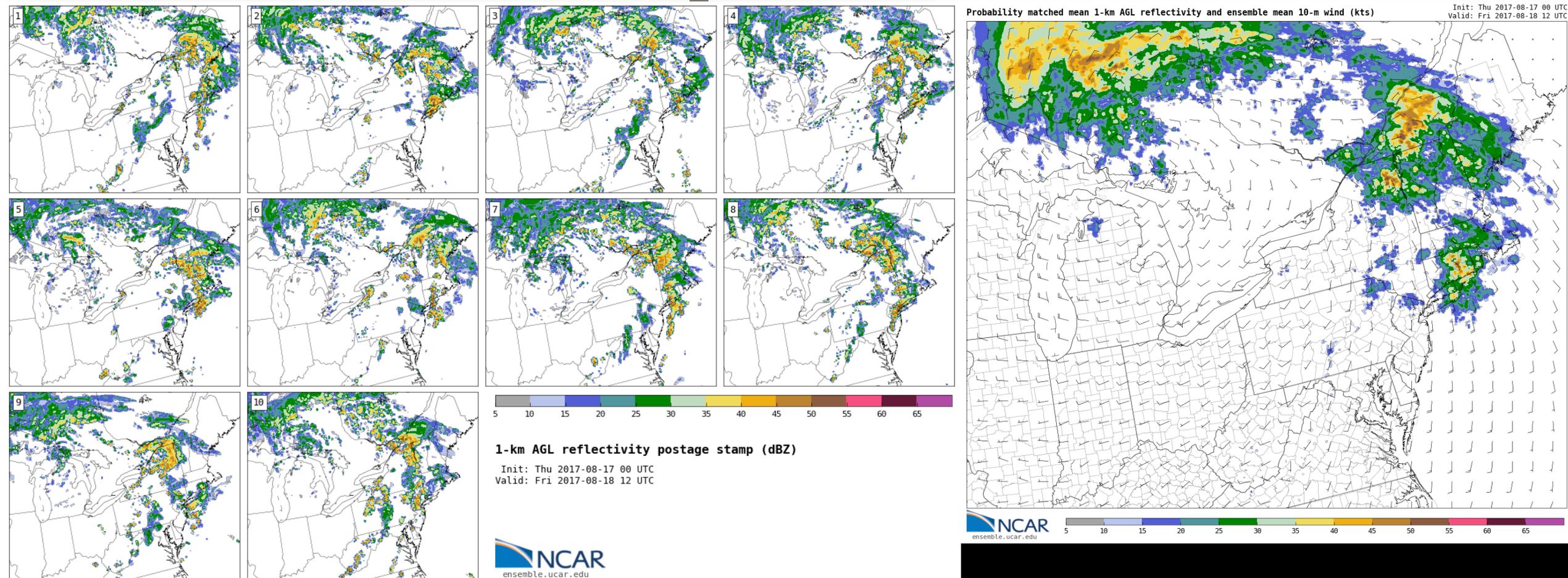
# Friday Precip

- Show in the 0z NCAR ensemble probability of 1hr precip  $> 0.01$ in within 25 miles for 12z and 16z 8/18
- This forecast give a very high probability of precip first thing in the morning with probability of precip at 16z roughly 80% which may be more indicative of passing isolated storms



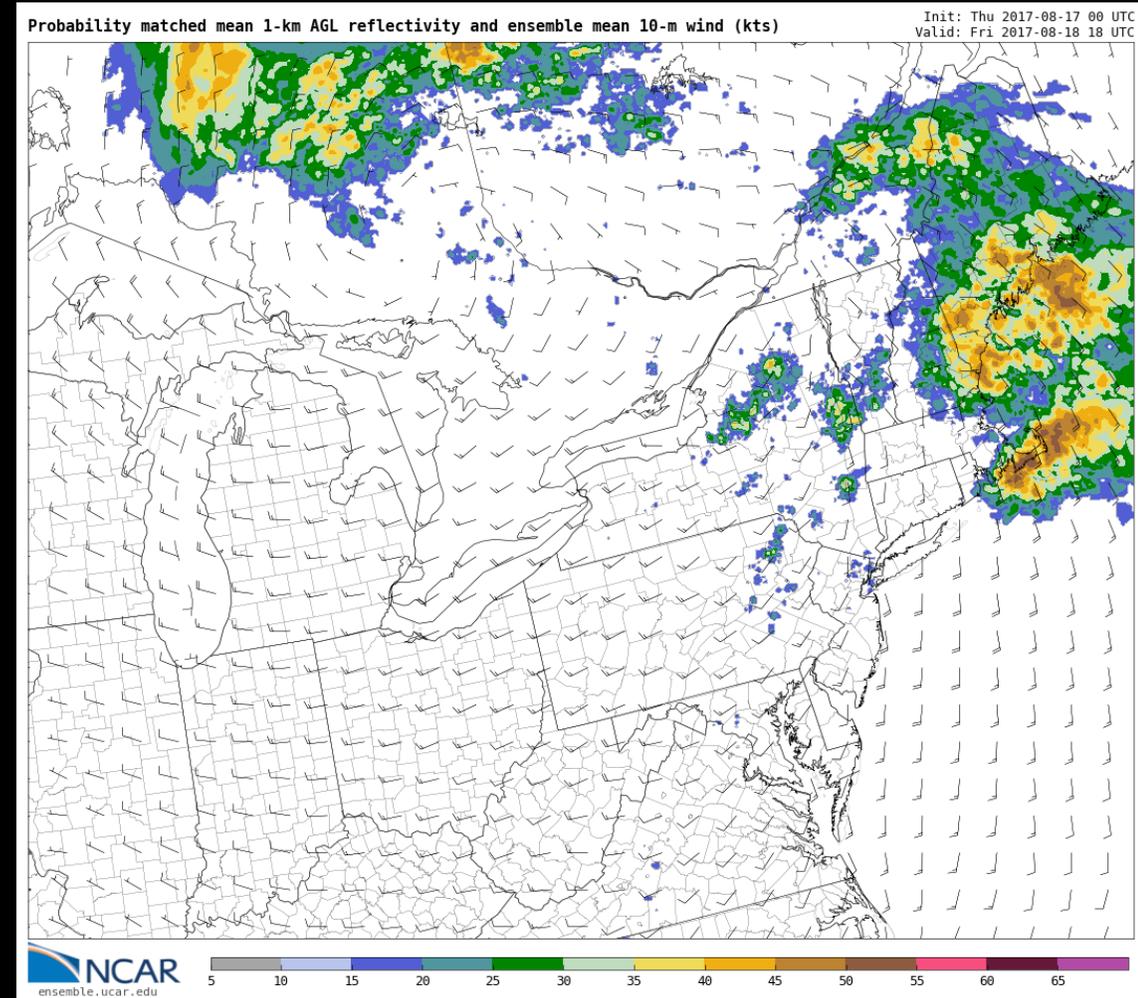
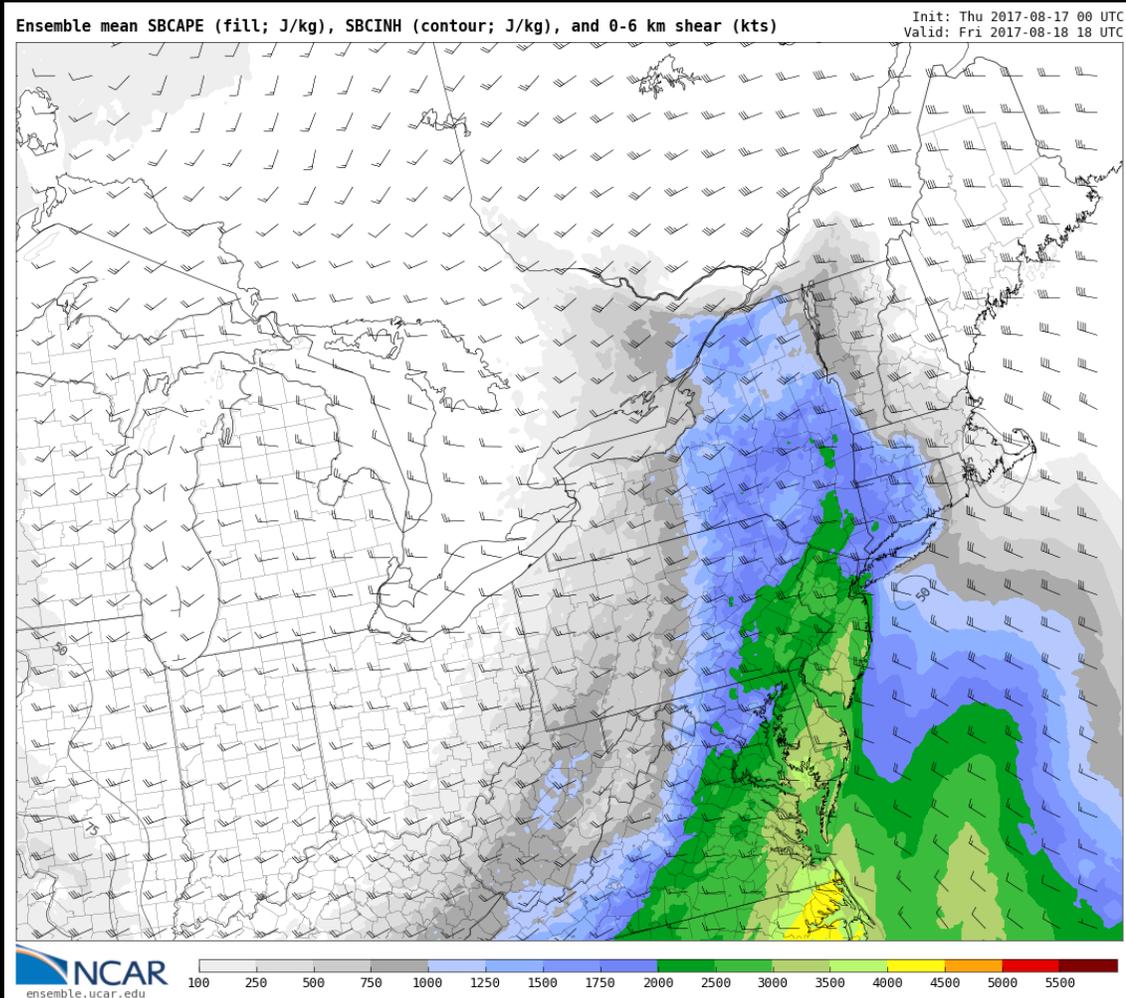
# Friday Precip

- Show in the 0z NCAR ensemble 1km AGL reflectivity postage stamps and ensemble mean for 12z 8/18
- Many of the ensemble members have the bulk of the precip off to the east by 12z, however there are still heavy shower that will affect our area as they move to the northeast
- The ensemble mean has the precip mostly over head still, with some of the heaviest rain in our area



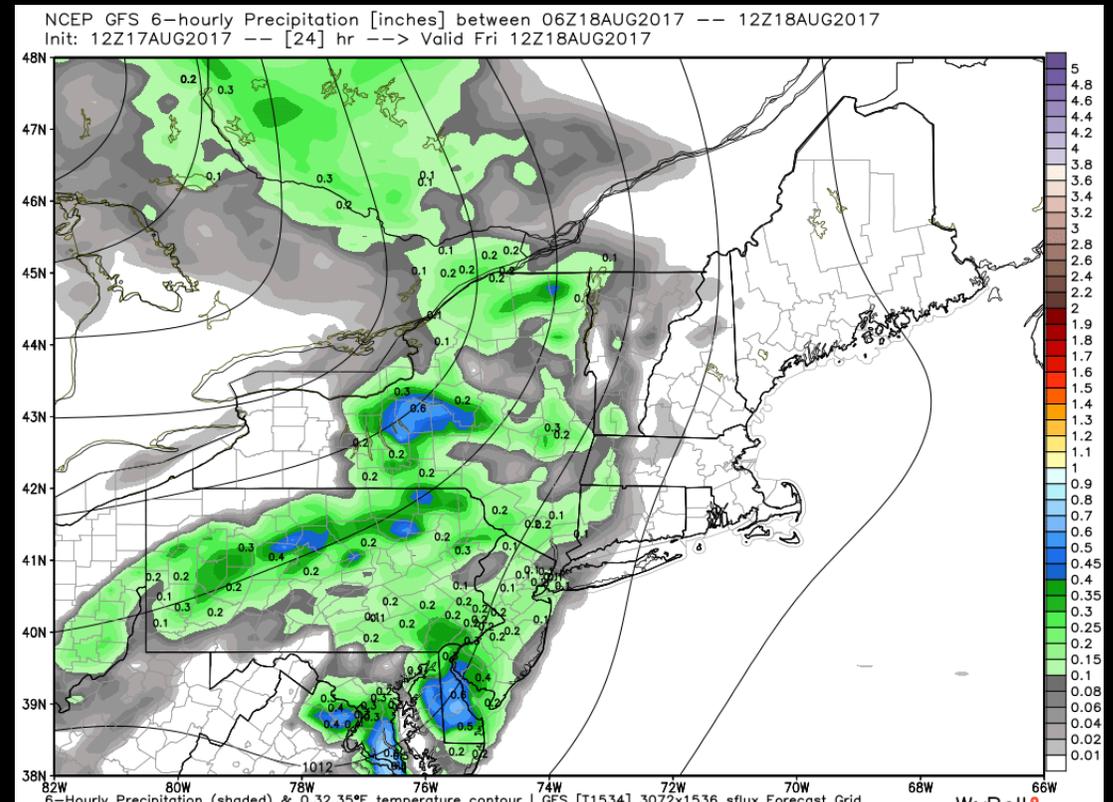
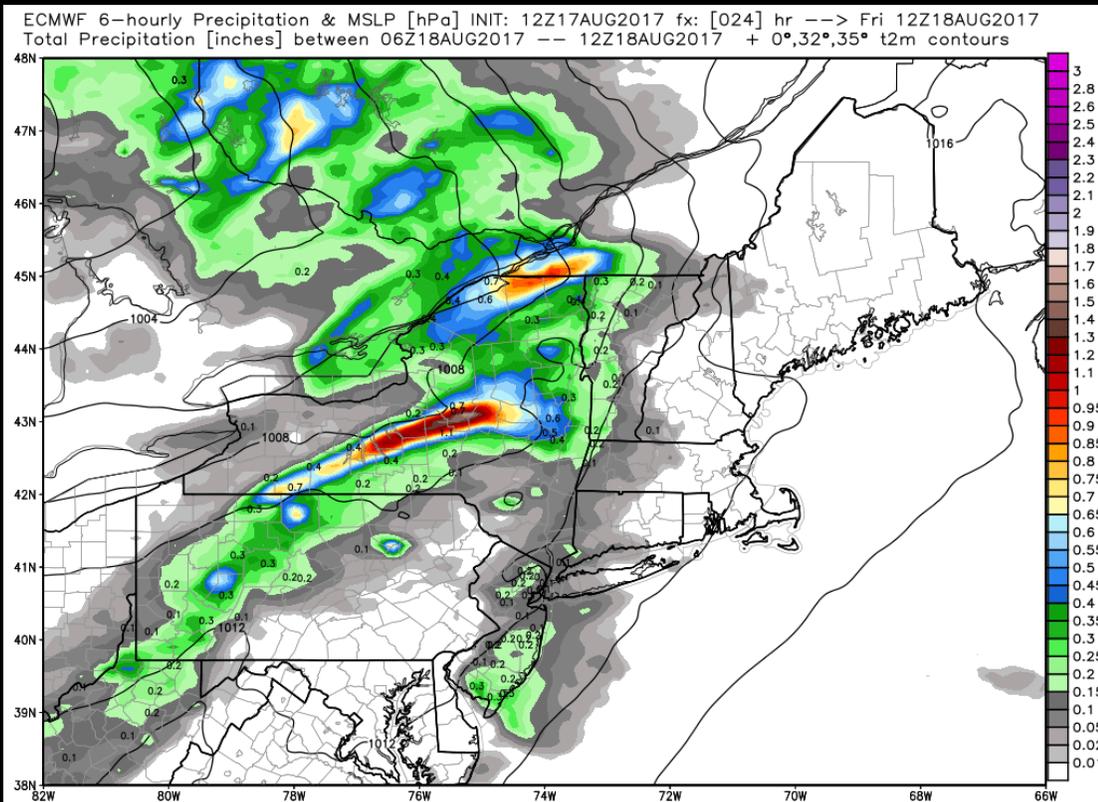
# Friday Precip

- Show in the 0z NCAR ensemble 1km AGL reflectivity ensemble mean and ensemble mean CAPE for 18z 8/18
- Moderate CAPE in the afternoon will aid in creation of isolated thunderstorm that may pass through the area
- Vorticity advection aloft will provide lifting to also aid in the formation of convection



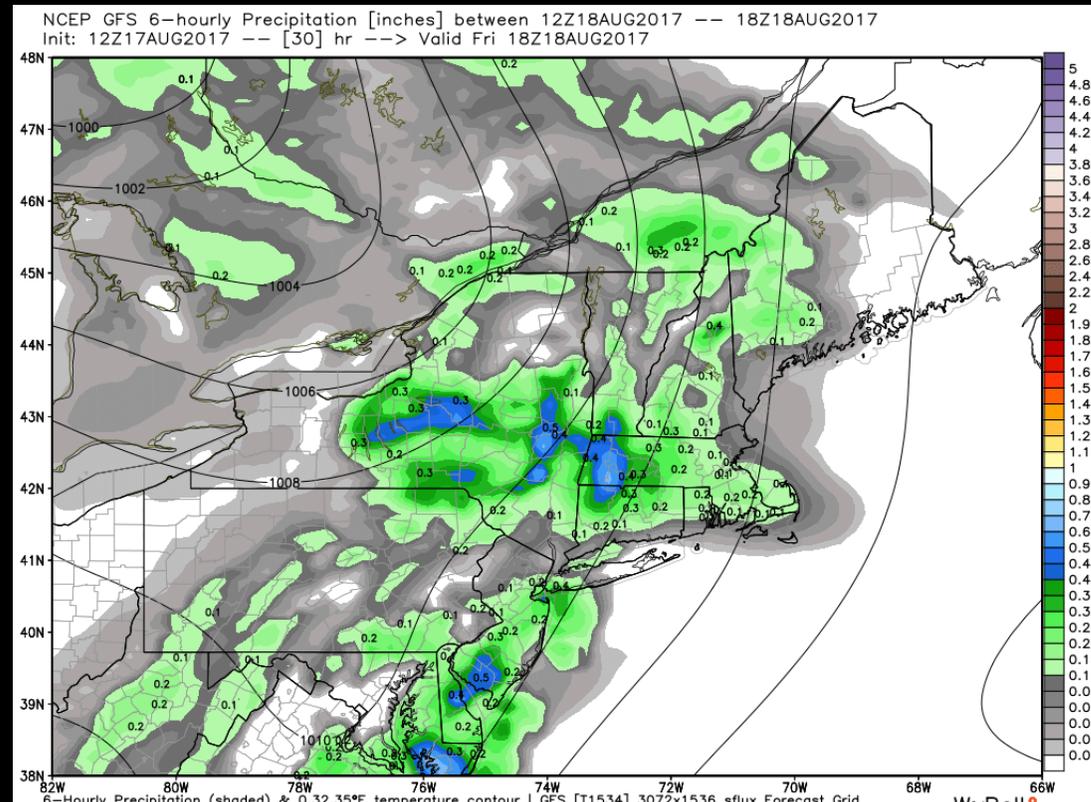
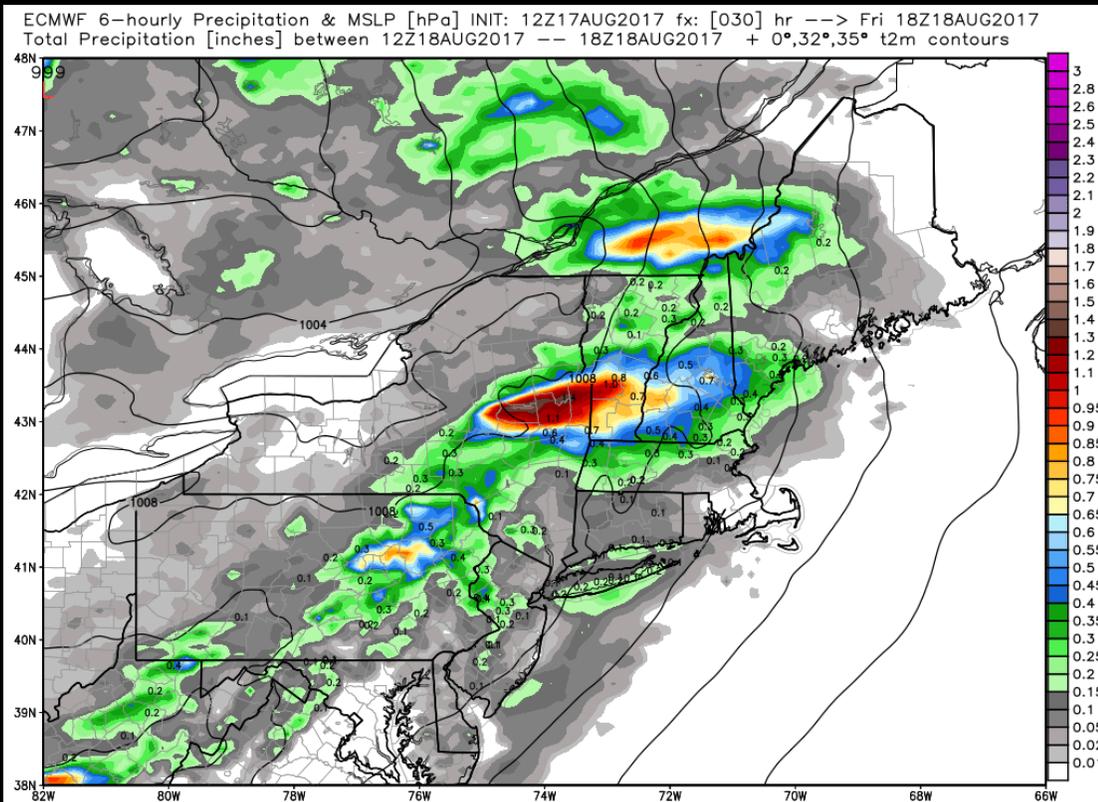
# Friday Precip

- Left: 12z 8/17 ECMWF run showing 6hr precip accumulation and MSLP for 12z 8/18
- Right: 12z 8/17 GFS run showing 6hr precip accumulation and MSLP for 12z 8/18
- The Euro has our region getting slightly more rain between 6Z and 12Z while the GFS has much lighter precip accumulations
- The models seem to be stating to converge on a similar outcome



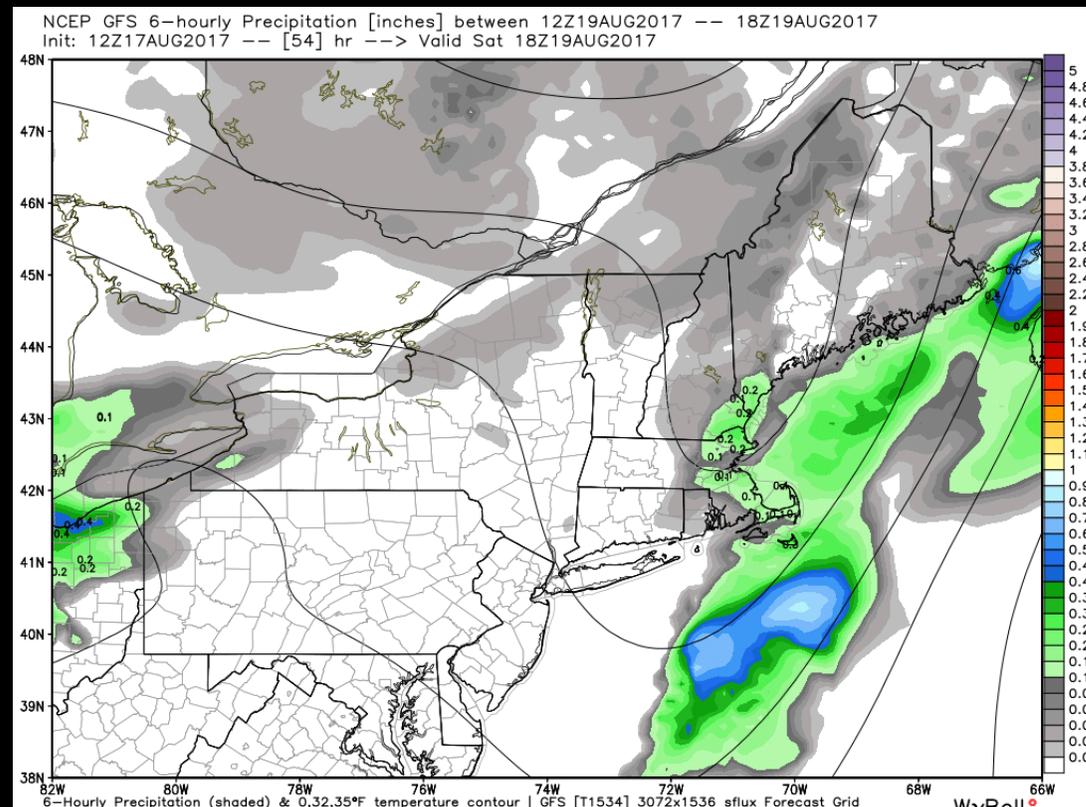
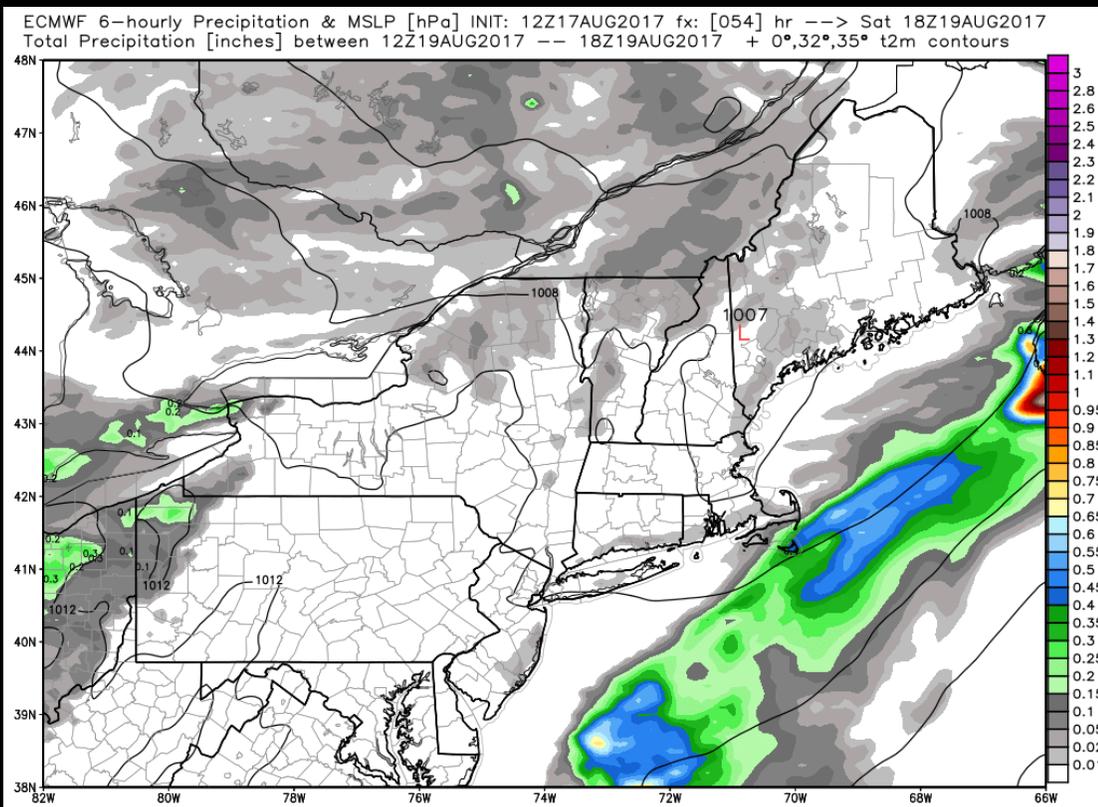
# Friday Precip

- Left: 12z 8/17 ECMWF run showing 6hr precip accumulation and MSLP for 18z 8/18
- Right: 12z 8/17 GFS run showing 6hr precip accumulation and MSLP for 18z 8/18
- The Euro has precip continue into the morning and likely trailing off in the afternoon while the GFS is forecasting little to no precip for our location between 12z and 18z



# Saturday

- Left: 12z 8/17 ECMWF run showing 6hr precip accumulation and MSLP for 18z 8/19
- Right: 12z 8/17 GFS run showing 6hr precip accumulation and MSLP for 18z 8/19
- Showers may be possible Saturday but will likely be spotty and light
- Exact timing may affect early morning operations but cloud will likely stick around due to the moist atmosphere



Day -1

Day 0

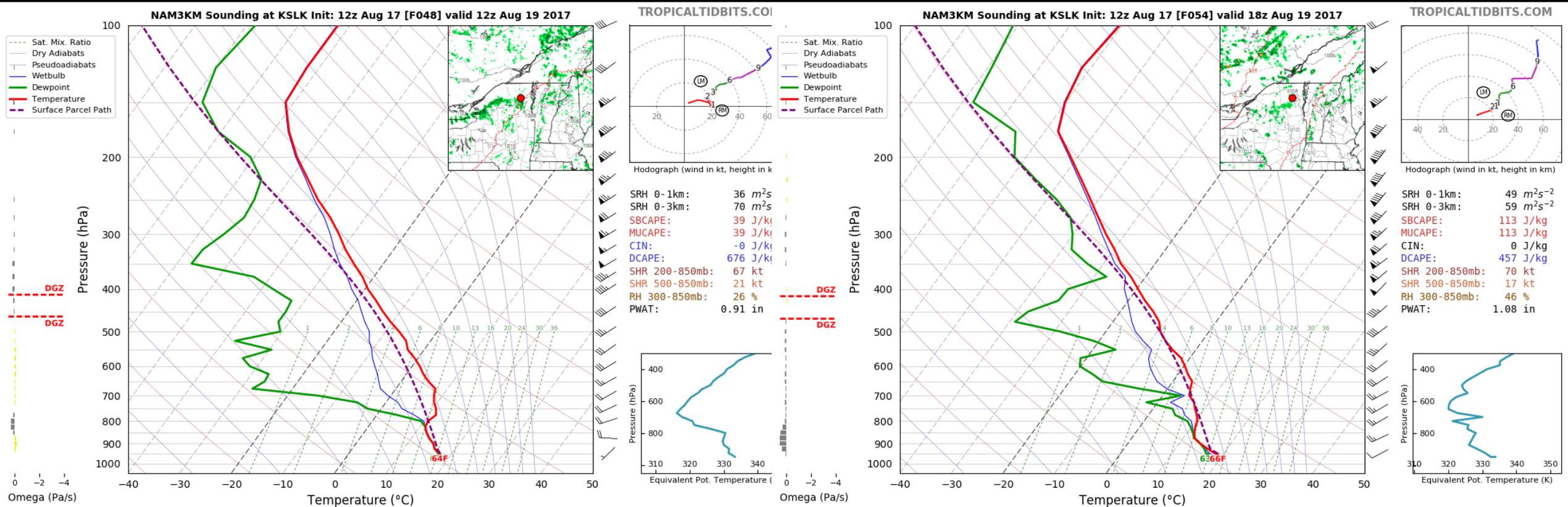
Day 1

Day 2

Day 3-5

# Saturday

- Shown is the 12z 8/17 3km NAM model soundings with simulated radar inset valid for 12z and 18z 8/19
- The soundings forecast a thick low cloud base for Saturday
- The inset simulated radar show the possibility for light passing showers at the time of each sounding





# Long Term

- 12z 8/17 GFS run showing 6hr precip accumulation and MSLP for 12z 8/21
- High pressure is forecasted to dominate the region Monday giving dry and clear weather, good for solar eclipse viewing

MSLP (mb) and 10 m AGL Wind (kt)

F096 Valid: Mon 2017-08-21 12z

Init Thu 2017-08-17 12z GFS

