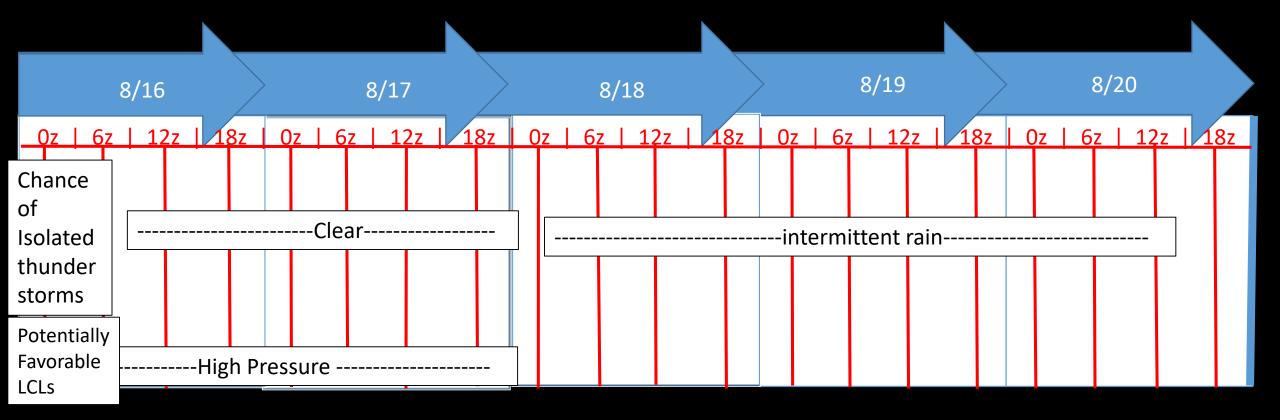
# Forecast for 8/16-8/20

Forecaster: Matthew Brewer

Forecast made: 8/15/2017

# Outlook





# Overview for Day 8/16

- High pressure moving in creating a dry and mostly sunny day
- Weak north winds throughout day
- Early morning fog, potentially low LCL's but dry layer aloft may prevent cloud formation



## Overview for 8/17

- High pressure to dominate the area
- Unfavorable LCL's
- Dry and mostly sunny

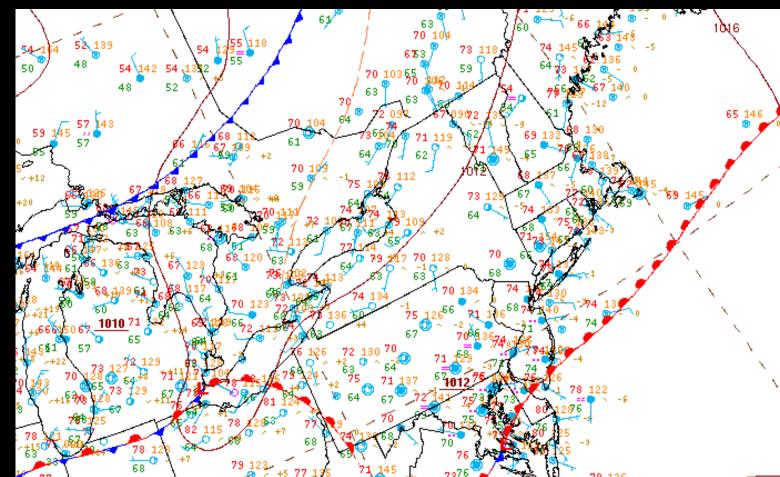
Day -1 Day 0 Day 1	Day 2 Day 3-5
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## Overview for Day 3-5

- Friday- low pressure system to move into the area bring precip through the day
- Saturday- shower possible in the morning as the low move out of the area
- Sunday- More showers possible, chance is much lower than previous two day

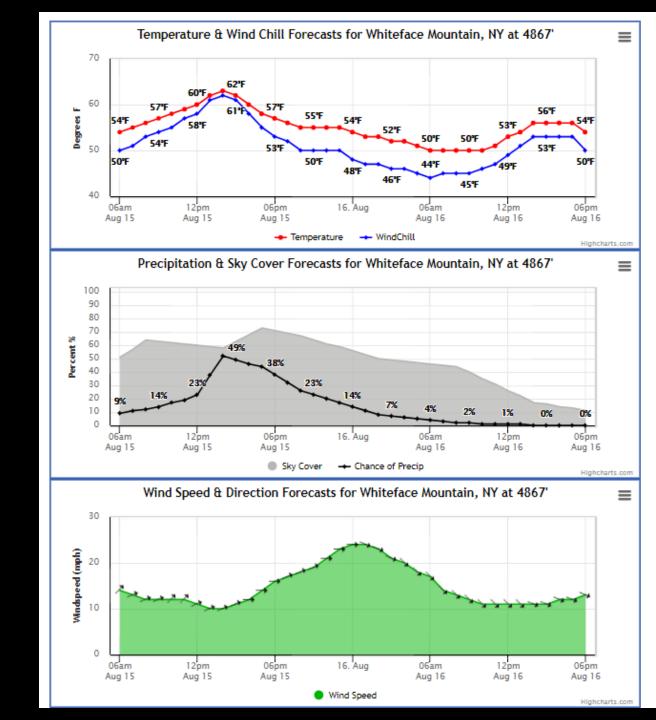
#### Day 1 Day 0 Day 1 Day 2 Day 3-5 Current Surface Analysis

- Shown is the NOAA WPC surface analysis from 15z 8/15/2017
- Generally quite weather in our region with a high pressure system off to the north west



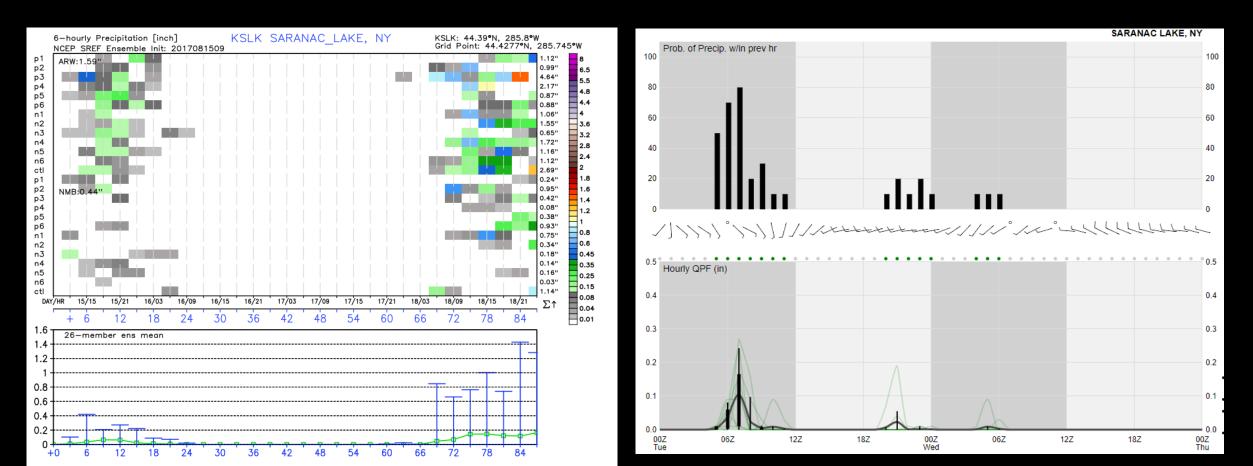
# Summit forecast

- Shown is the NWS Burlington's summit forecast
- The forecast show the chance precip this evening with tomorrow being dry and becoming gradually cloud free
- Winds will shift to more NW as the high moves in tomorrow



## Precip Meteograms

- Left: NCEP SREF 9z 8/15 run showing 6 hourly precip
- Right: NCAR ensemble 0z 8/15 run showing probability of precip and hourly QPF
- Both models show a chance of precip this evening and Wednesday being totally dry
- The SREF also keeps Thursday completely dry and show precip moving in Friday morning associated with a low pressure system



# Precip probability

Day 1

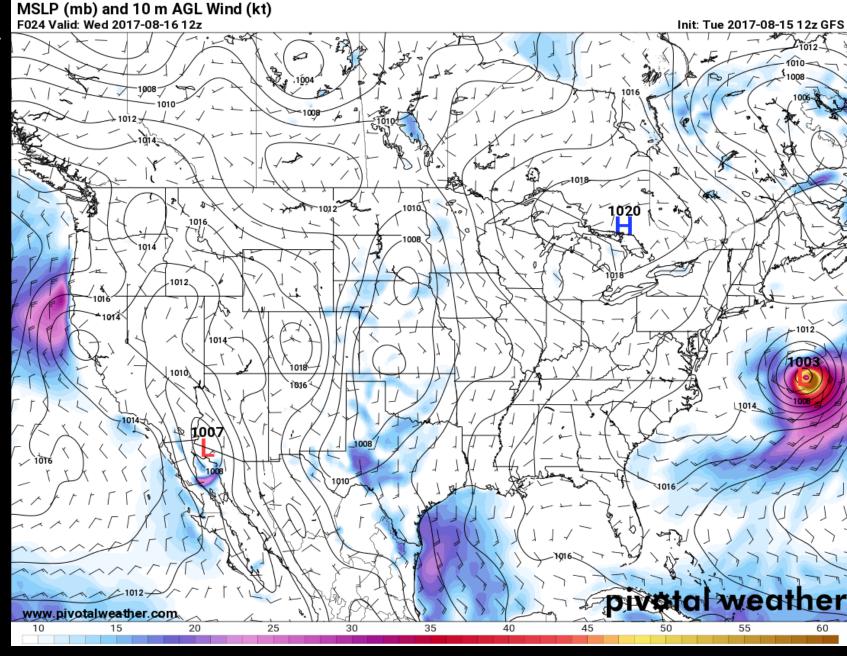
Day 0

Day -1

Day 3-5

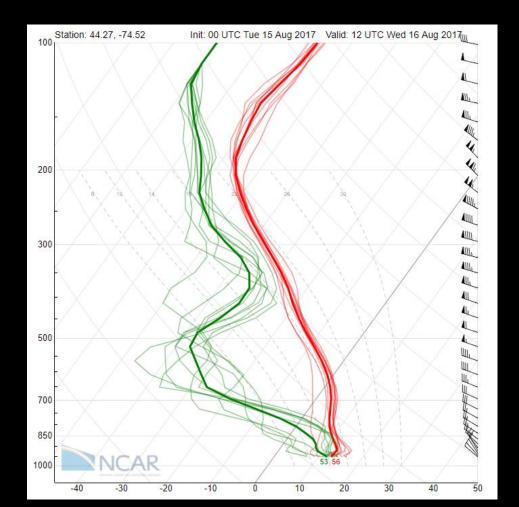
Day 2

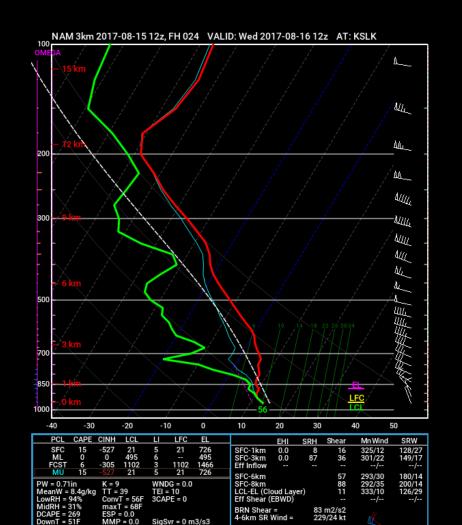
- Shown is the 8/15 12z GFS MSLP and 10m winds valid for 12z 8/16
- The high pressure system moving into the area will create large scale subsidence keeping the day very dry and mostly sunny



### Day -1 Day 0 Day 1 Day 2 Day 3-5 Model Soundings

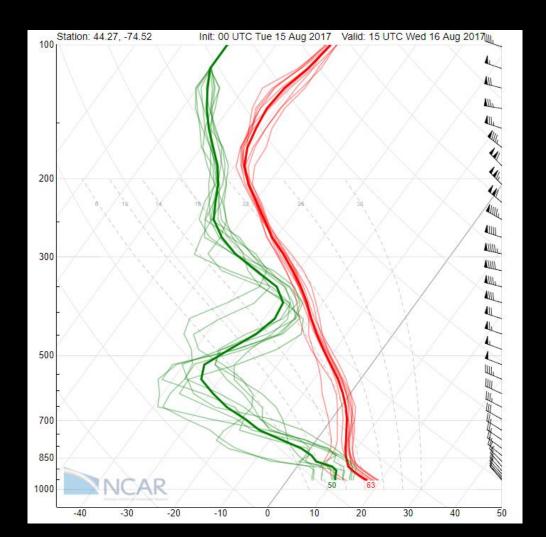
- Shown is the 8/15 12z 3km NAM sounding valid for 12z 8/16 and the 0z 8/15 NCAR ensemble sounding for 12z 8/16
- Spread in the NCAR ensemble give me low confidence on forecasting an LCL some member show the LCL at 850 while others have the lower troposphere very dry
- The NAM sounding is similar to some of the more moist NCAR members giving a possible lower LCL, however is a cloud were to form entrainment of dry air aloft may prevent cloud formation

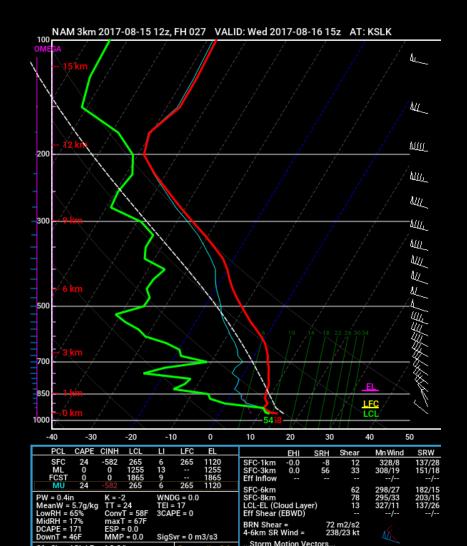




#### Day -1 Day 0 Day 1 Day 2 Day 3-5 Model Soundings

- Shown is the 8/15 12z 3km NAM sounding valid for 15z 8/16 and the 0z 8/15 NCAR ensemble sounding for 15z 8/16
- Again with the NCAR ensemble there is high variability in the member giving me low confidence in the model, the mean indicates that by 15z the surface will have warmed and raised the LCL likely above the summit
- The NAM sounding show the dry air aloft moving lower in the troposphere which will likely prevent cloud formation





# Synoptic Forcing

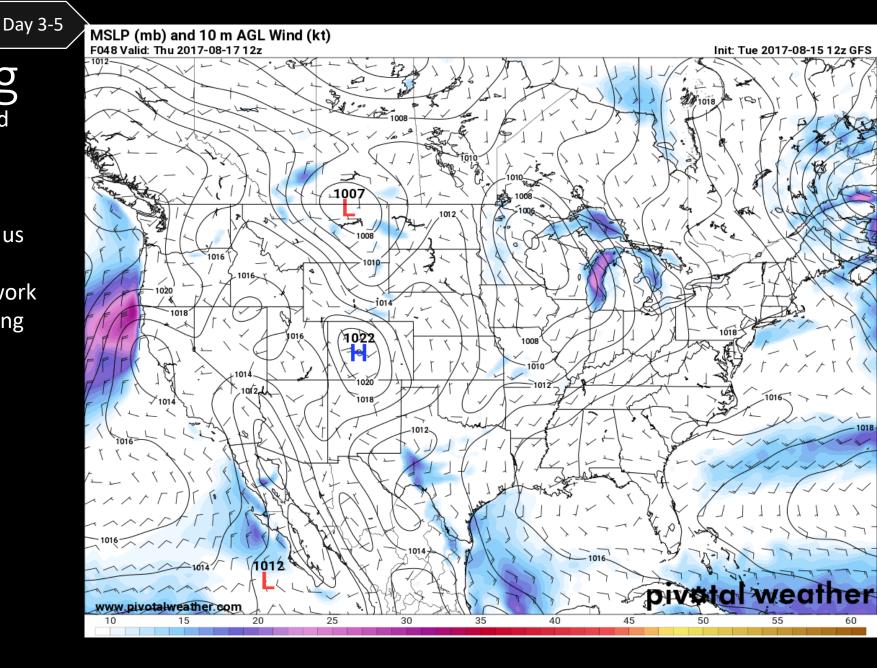
Day 1

Dav 2

Day 0

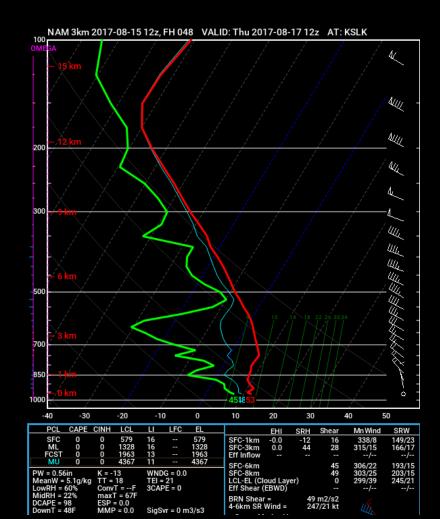
Day -1

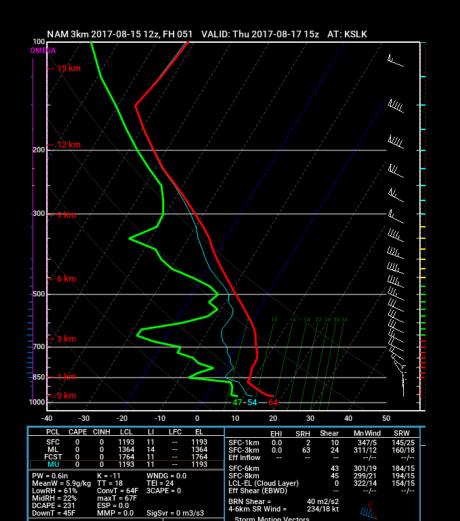
- Shown is the 12z 8/15 GFS MLSP and 10m winds for 12z 8/17
- The borad area of high pressure is forecasted to stay in our region throughout the day Thursday giving us dry weather
- A low pressure system will start to work its way into the area Thursday evening
- Winds will likely be weak variable



#### Day 3-5 Day 0 Day -1 Day 1 Day 2 • Shown is the 8/15 12z 3km NAM sounding valid for 12z 8/17 and 15z 8/17

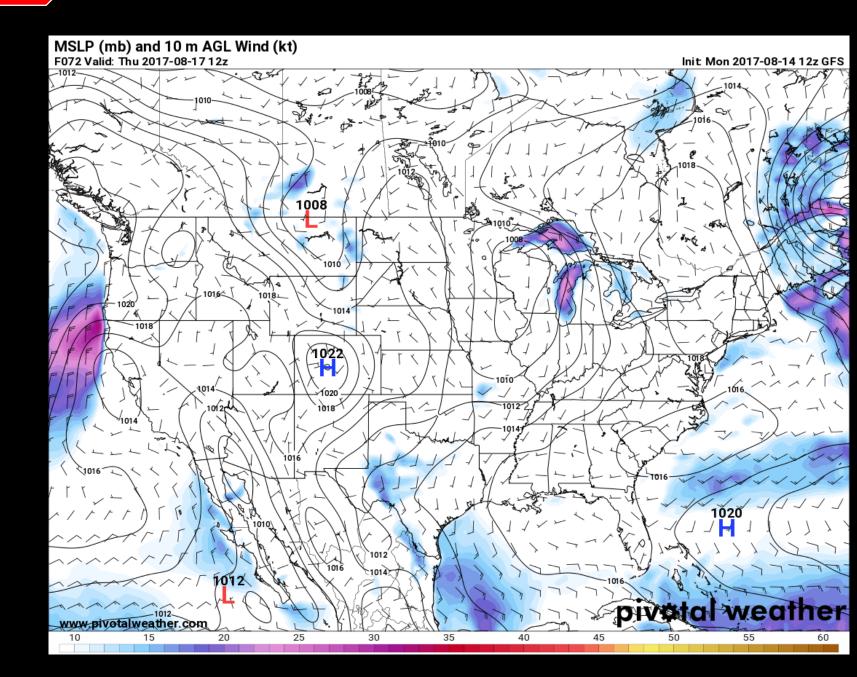
- Based off of the model soundings Thursday will likely be a very unfavorable day for cloud formation below the summit  $\bullet$ due to low dew points and dry air aloft



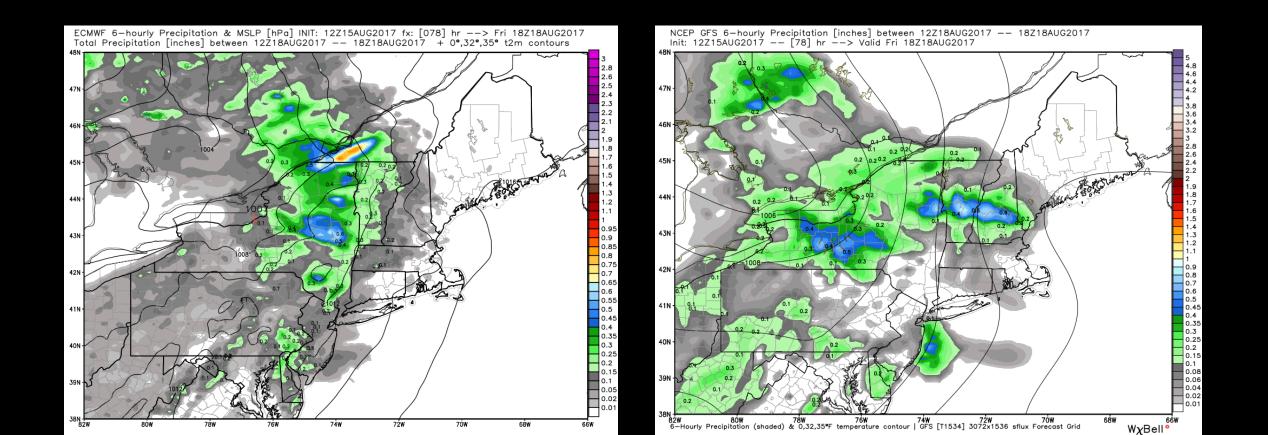


# Long Term

- 12z 8/14 GFS run showing MSLP and 10m wind for 12z 8/17
- The GFS and Euro have finally come to an agreeance about Thursday
- They are both forecasting the day to start in a high pressure region which will move out throughout the day but it will be a dry day



- Left: 12z 8/15 ECMWF run showing 6hr precip accumulation and MSLP for 18z 8/18
- Right: 12z 8/15 GFS run showing 6hr precip accumulation and MSLP for 18z 8/18
- Rain is definite during the day Friday, with period of heavy rain likely



- Left: 12z 8/15 ECMWF run showing 6hr precip accumulation and MSLP for 18z 8/19
- Right: 12z 8/15 GFS run showing 6hr precip accumulation and MSLP for 18z 8/19
- Precip may linger on into Saturday morning but may be more spotty than on Friday

