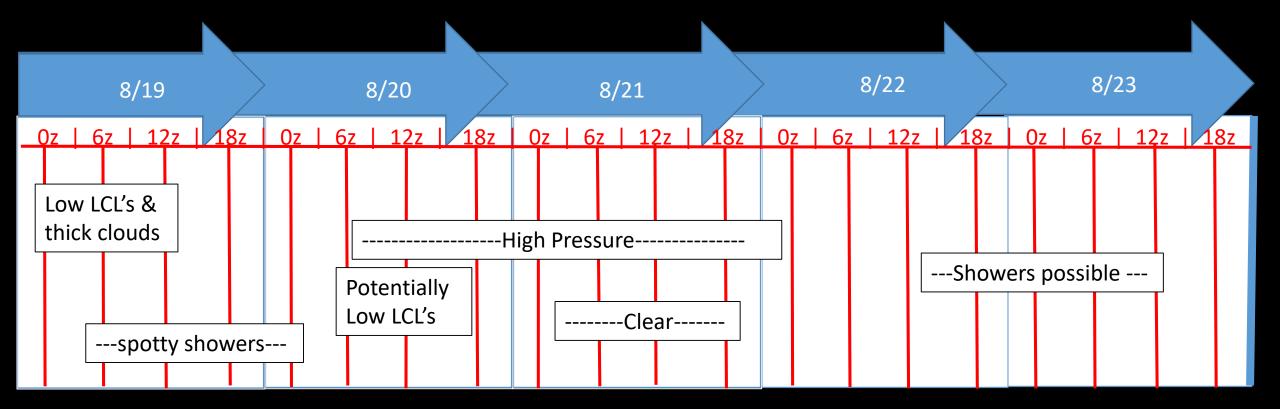
# Forecast for 8/19-8/23

Forecaster: Matthew Brewer

Forecast made: 8/18/2017

## Outlook





## Overview for Day 8/19

- Moist lower troposphere good for low LCL's and thick clouds
- Slight chance of precip forced by weak vorticity advection aloft creating upward vertical motion
- Winds WSW
- Likely ideal day



#### Overview for 8/20

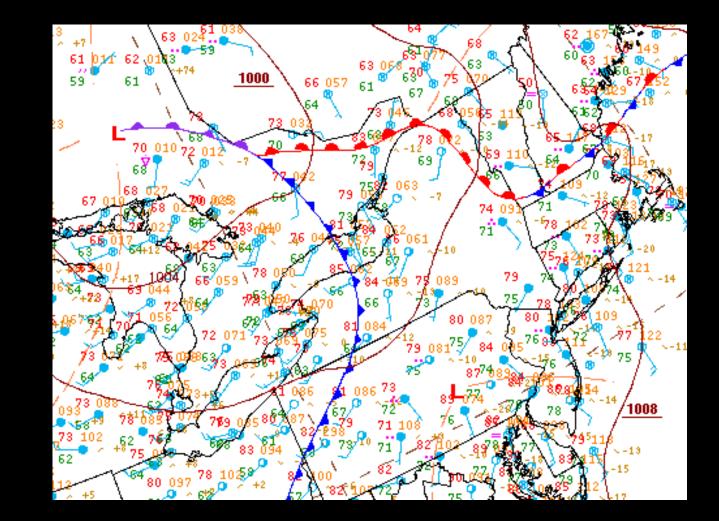
- Potentially low LCL
- Dry layer aloft may prevent cloud formation
- Dry and mostly sunny as high move into the area

#### Overview for Day 3-5

- Monday- High will be located directly over head, creating dry and clear weather good for solar eclipse viewing
- Tuesday- Rain possible later in the day
- Wednesday- Rain possible/low LCL's

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

- Shown is the NOAA WPC surface analysis from 18z 8/18/2017
- The warm front that moved through our area this morning associated with the precip
- The cold front will likely move through the area this evening possibly bring some showers along the front



Day 2 Day 3-5 Day 0 Dav 1 Day -1

# Summit forecast

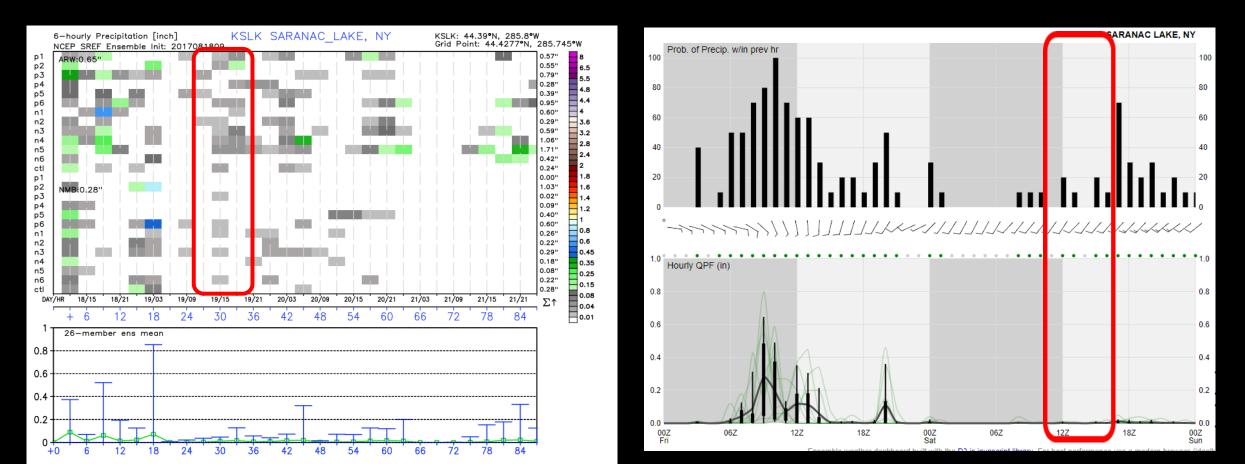
- Shown is the NWS Burlington's summit forecast
- The forecast show the chance precip • tomorrow with the highest chance in the morning
- Winds will shift from NW to S as the  $\bullet$ low move into the area

Temperature & Wind Chill Forecasts for Whiteface Mountain, NY at 4867' 70 63° 60 56°F Degrees 50°F 50 44 40 06pm 19. Aug 06am 12pm 06pm 20. Aug 06am 06pm 12pm Aug 19 Aug 19 Aug 18 Aug 19 Aug 20 Aug 20 Aug 20 - WindChill Temperature Highcharts.c Precipitation & Sky Cover Forecasts for Whiteface Mountain, NY at 4867  $\equiv$ 100 90 80 70 8 60 Percent 9 50 40 30% 24% 30 18% 17% 18% 16% 14% 20 12% 9% 10 3% 1% 1% 0 19, Aug 06'am 20. Aug 06pm 12 pm 06<sup>o</sup>m 06'am 12pm 06 nm Aug 19 Aug 19 Aug 19 Aug 20 Aug 20 Aug 20 Aug 18 Sky Cover + Chance of Precip Hohcharts.co Wind Speed & Direction Forecasts for Whiteface Mountain, NY at 4867' ≡ 40 Windspeed (mph) 20 0 19. Aug 06am 20. Aug 06'am 06pm 12pm 06pm 12pm 06<sup>°</sup>pm Aug 19 Aug 19 Aug 20 Aug 20 Aug 18 Aug 19 Aug 20 Wind Speed

≡

#### Precip Meteograms

- Left: NCEP SREF 9z 8/18 run showing 6 hourly precip
- Right: NCAR ensemble 0z 8/18 run showing probability of precip and hourly QPF
- Both models forecast the rest the precip for today tonight
- Additionally both models are only slight chance of rain with very light accumulation for the morning



# Synoptic weather

Day 1

Day 0

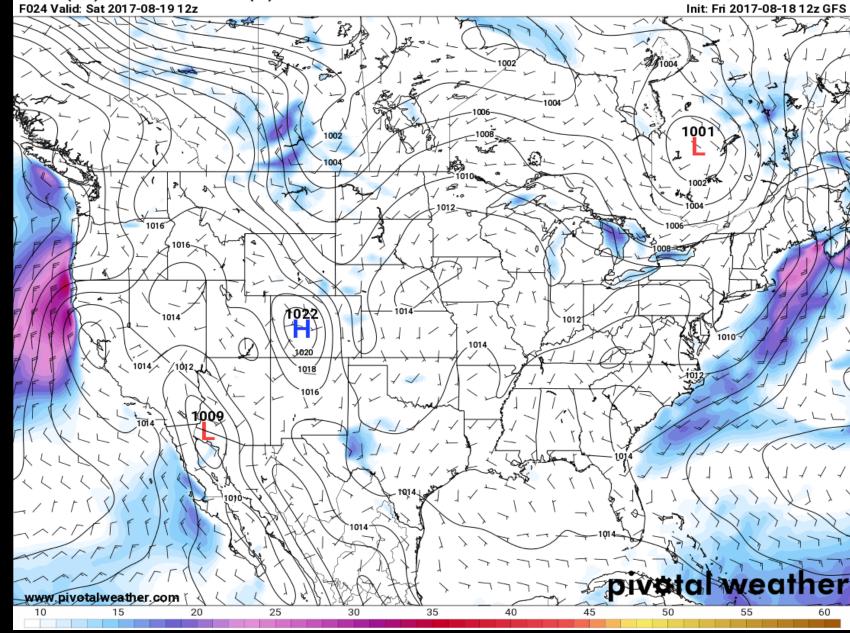
Day -1

Day 2

Day 3-5

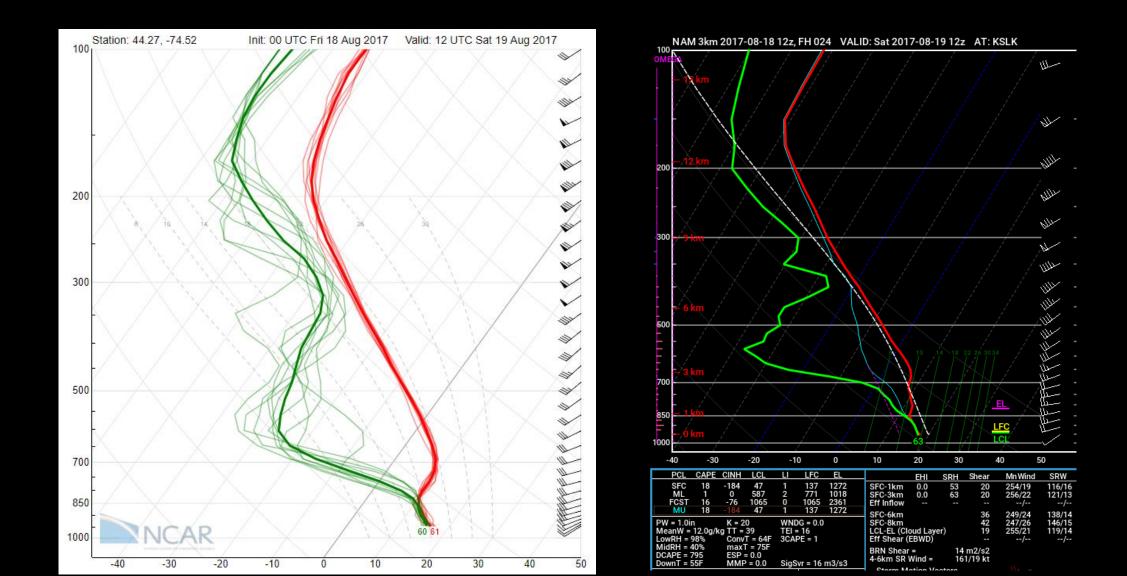
MSLP (mb) and 10 m AGL Wind (kt)

- Shown is the 8/18 12z GFS MSLP and 10m winds valid for 12z 8/19
- The low pressure system will be to our north
- As the system moves out we will predominantly have WSW flow



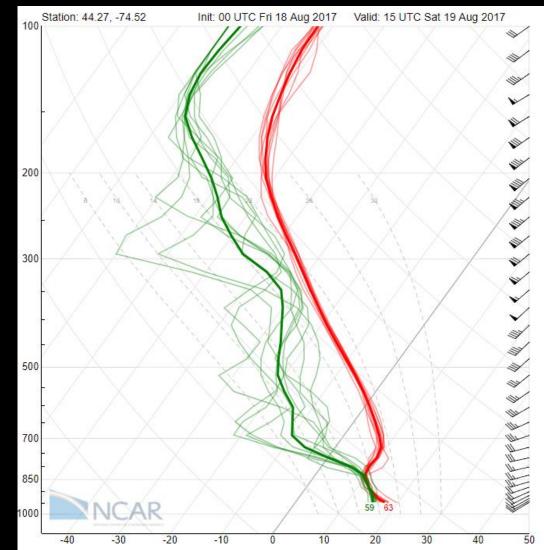
#### Day 1 Day 2 Day 3-5 Model Soundings

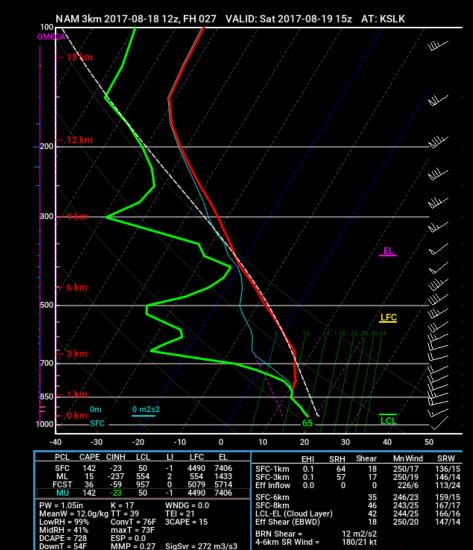
- Shown is the 8/18 12z 3km NAM sounding valid for 12z 8/19 and the 0z 8/18 NCAR ensemble sounding for 12z 8/19
- Both the NCAR ensemble and the NAM are forecasting a thick saturated layer giving us low LCL's



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

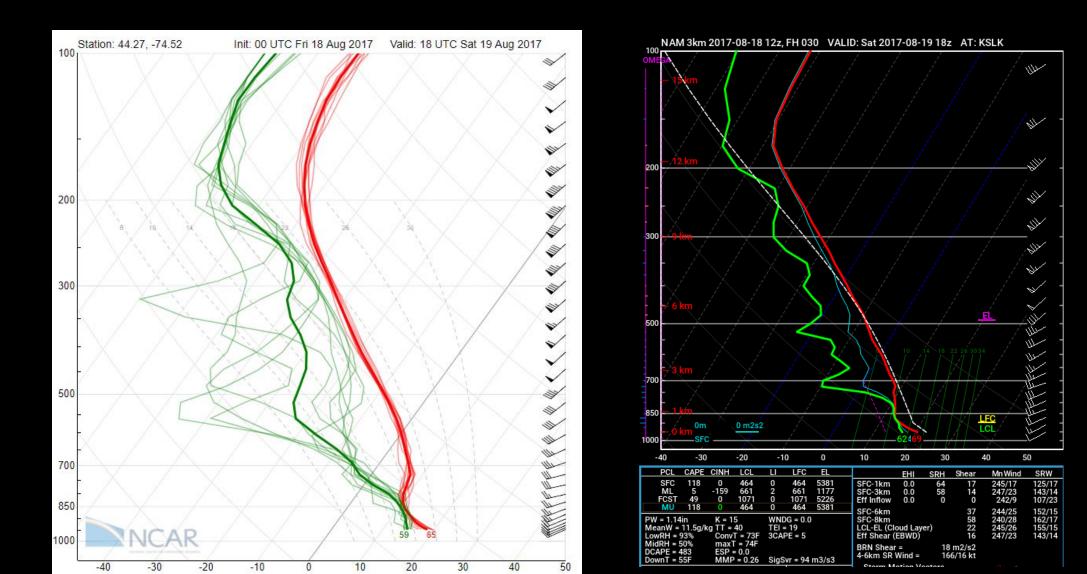
- Shown is the 8/18 12z 3km NAM sounding valid for 15z 8/19 and the 0z 8/18 NCAR ensemble sounding for 15z 8/19
- Both the NCAR ensemble and the NAM are forecasting continue to keep the lower troposphere completely saturated with low LCL's
- A capping inversion just above 850mb may prevent vertical development of clouds at this time





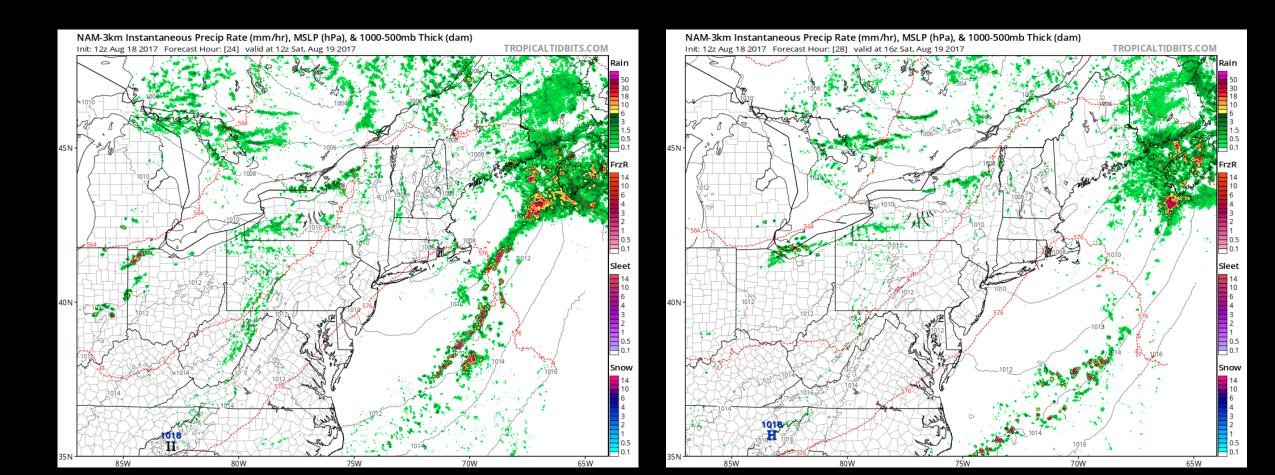
#### Day 1 Day 2 Day 3-5 Model Soundings

- Shown is the 8/18 12z 3km NAM sounding valid for 18z 8/19 and the 0z 8/18 NCAR ensemble sounding for 18z 8/19
- Both the NCAR ensemble and the NAM even into the afternoon are forecasting the LCL's to be below 850mb
- As the surface warm there may be more of a chance of convection



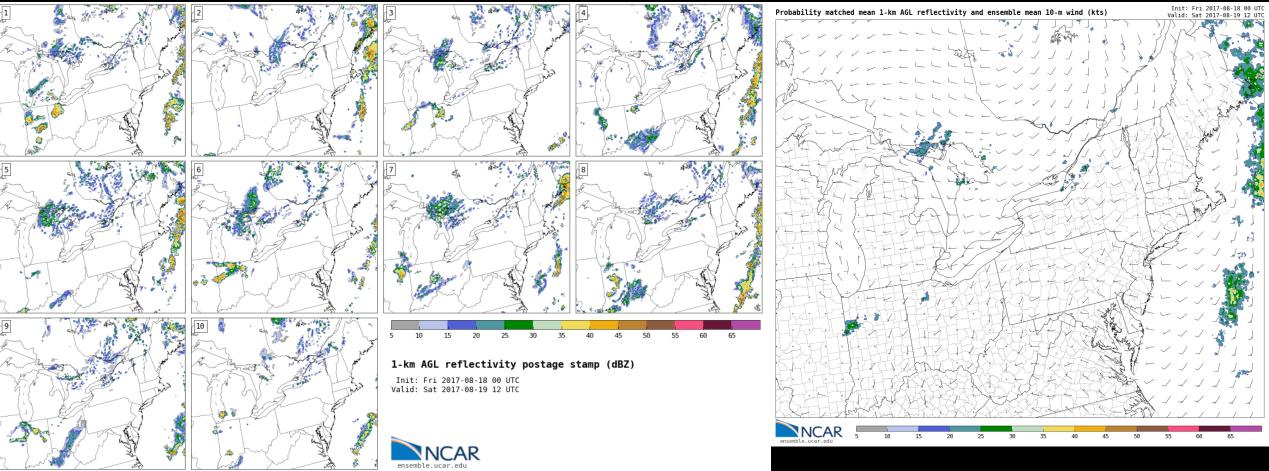
## Saturday Precip

- 12z 8/18 3-km NAM Surface Reflectivity and MSLP valid for 8/19 12z and 16z respectively
- The NAM is forecasting showers to be very spotty, light, and passing
- These shower may only effect our operations for 15-30 mins at a time and would likely be easy to work around



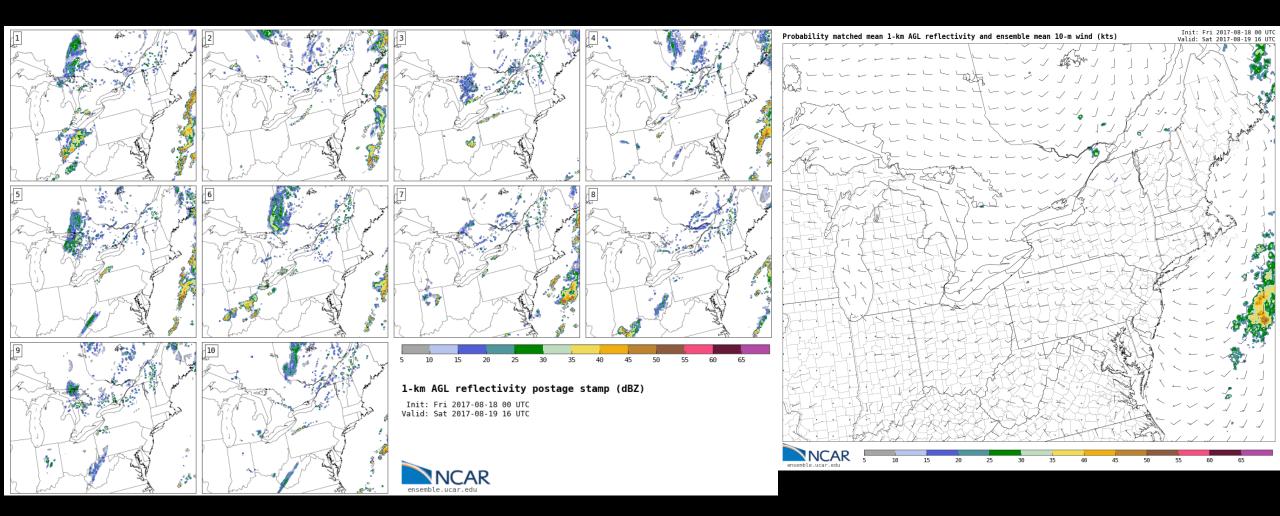
## Saturday Precip

- Show in the Oz NCAR ensemble 1km AGL reflectivity postage stamps and ensemble mean for 12z 8/19
- All of the members have the precip very light and generally isolated, thus giving only a slight chance that our operations would be effected
- The ensemble mean has very little precip forecasted, with most of it to the south or west of our area



## Saturday Precip

- Show in the Oz NCAR ensemble 1km AGL reflectivity postage stamps and ensemble mean for 16z 8/19
- Many of the members again have the precip very light and generally isolated
- The ensemble mean is forecasting our area to be completely rain free



# Long Term

Day 0

Day -1

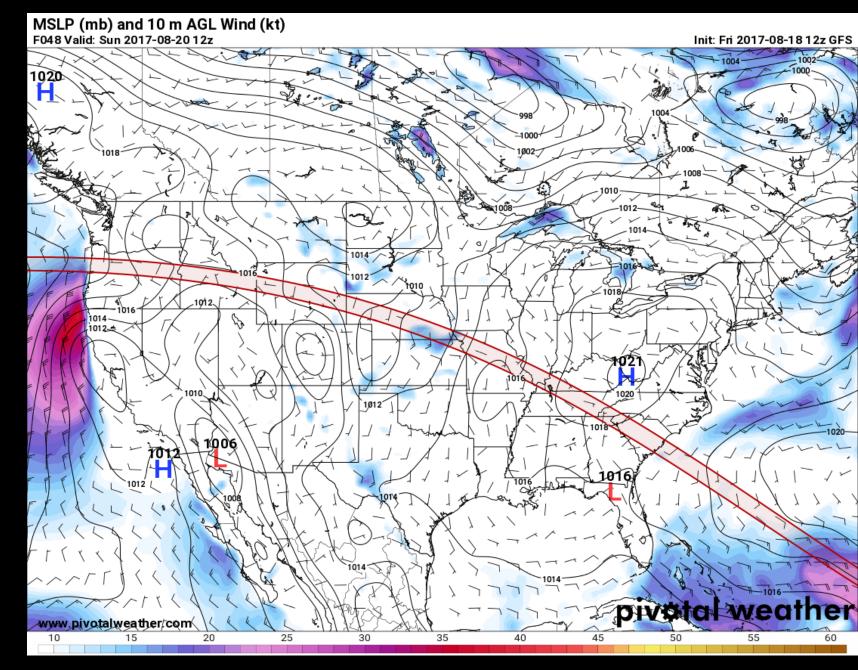
 12z 8/18 GFS run showing 6hr precip accumulation and MSLP for 12z 8/20

Day 1

Day 3-5

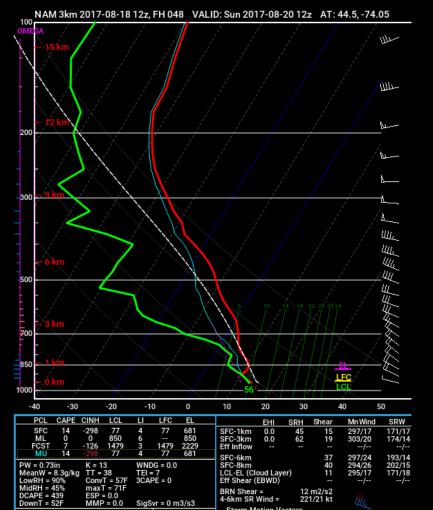
Day 2

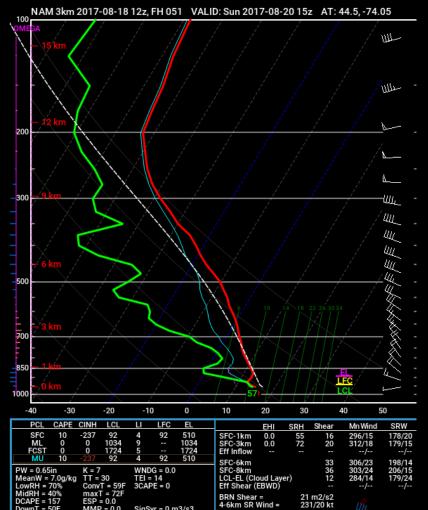
 High pressure is forecasted to move into the area Sunday bringing dry and mostly sunny weather



## Sunday Model Soundings

- Shown is the 12z 8/17 3km NAM model soundings with simulated radar inset valid for 12z an 15z 8/20
- The forecasted LCL's are low enough to be a favorable day however a dry later aloft new the summit may prevent cloud formation at the summit





# Long Term

Day 0

Day -1

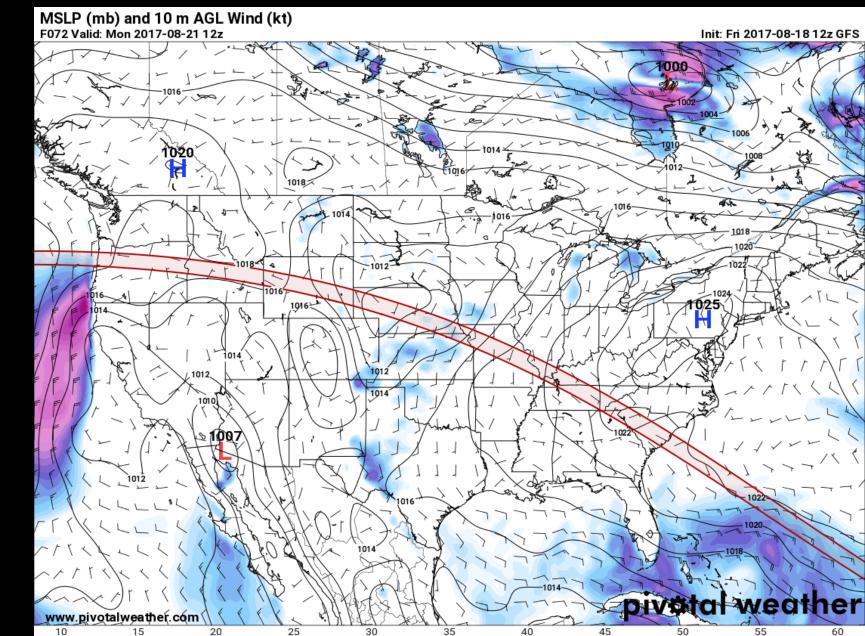
 12z 8/18 GFS run showing 6hr precip accumulation and MSLP for 12z 8/21

Day 1

Day 2

Day 3-5

 High pressure is forecasted to dominate the region Monday giving dry and clear weather, good for solar eclipse viewing



#### Day 2 Day -1 Day 0 Day 1

#### Day 3-5

## Long Term

- Right: 12z 8/17 ECMWF run showing 6hr min/max temp and 6hr precip accumulation
- Left: 12z 8/17 GFS run showing 6hr min/max temp and 6hr precip accumulation
- Monday is forecasted by both models to be dry
- The GFS is forecasting rain Tuesday afternoon while the Euro holds the rain off till Wednesday morning
- Given these products, depending on the rain Wednesday and Thursday may be favorable days for operations

