

Weather

Coupe Aéronautique Gordon Bennett

Randy Lefevre

Brad Temeyer

Saturday, 7 October 2023

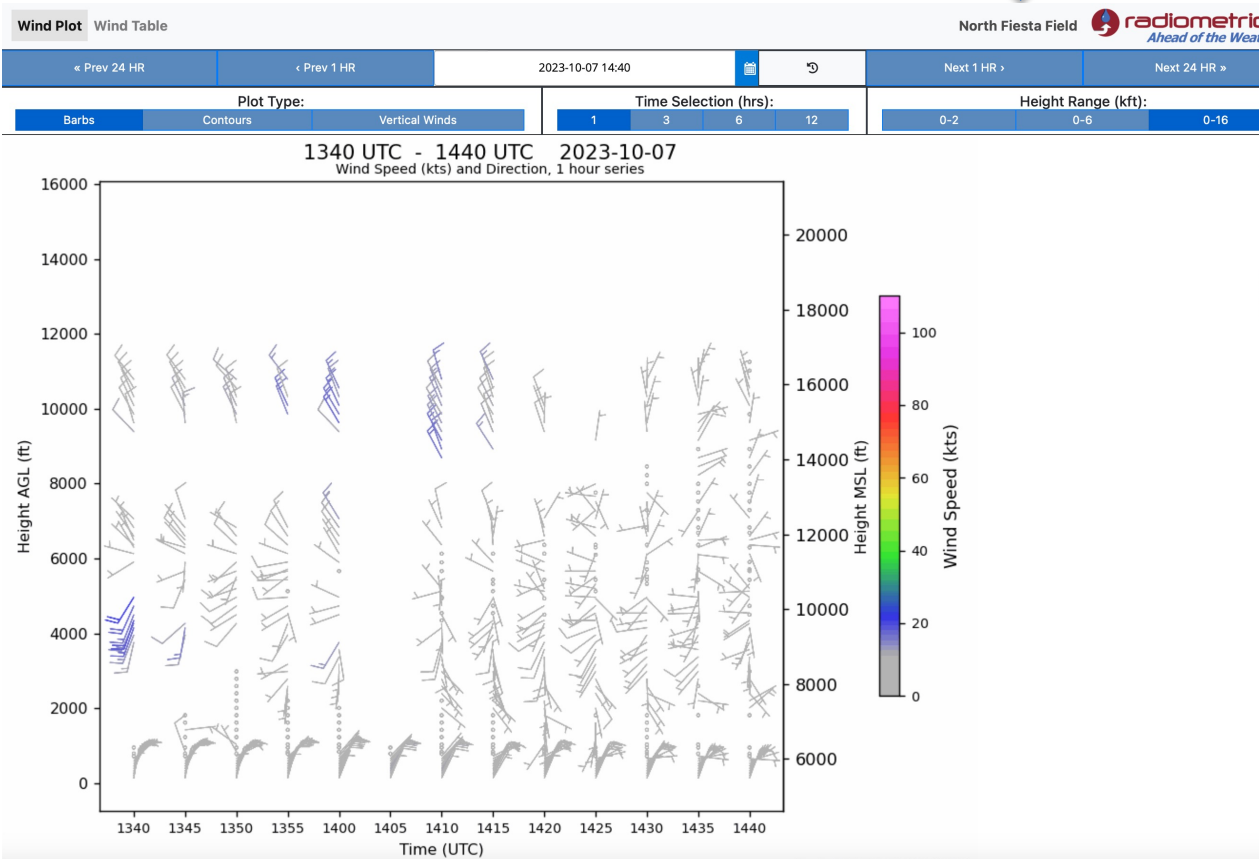
Take Away

- ✓ No significant change from yesterday's briefing
 - High pressure (fair weather) ridge western half of USA and low pressure trough over eastern USA; pattern changes Monday night into Tuesday allowing mostly west-to-east winds in middle atmosphere, then significant weather system middle USA Wednesday–Thursday
 - Generally variable wind direction during climb out of Field
 - Watching potential convection west [Arizona–New Mexico border] and north [Colorado–New Mexico]; monitor outflow winds at the surface
 - If you stay in New Mexico watch for convection on Sunday afternoon due to weak low pressure moving from Southern California–Arizona
- ✓ Weather models consistent for next 24–36 hours, then as pattern changes the models develop different forecasts and trajectories
- ✓ More opportunities for faster wind speeds after 24–36 hours

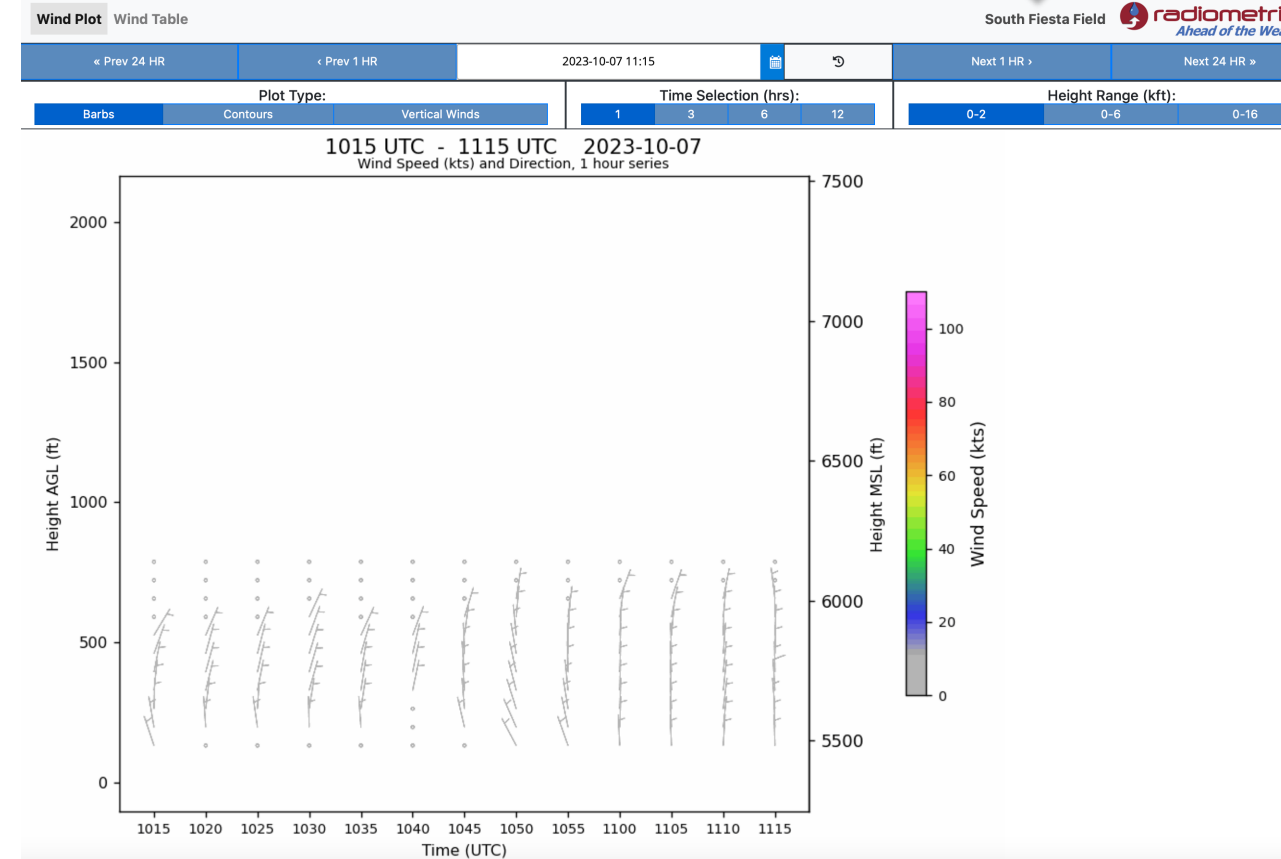
City of Albuquerque Instruments on Fiesta Field Radar Wind Profiler and LIDAR



North Field: Combine Radar & LIDAR
35.155.118.173

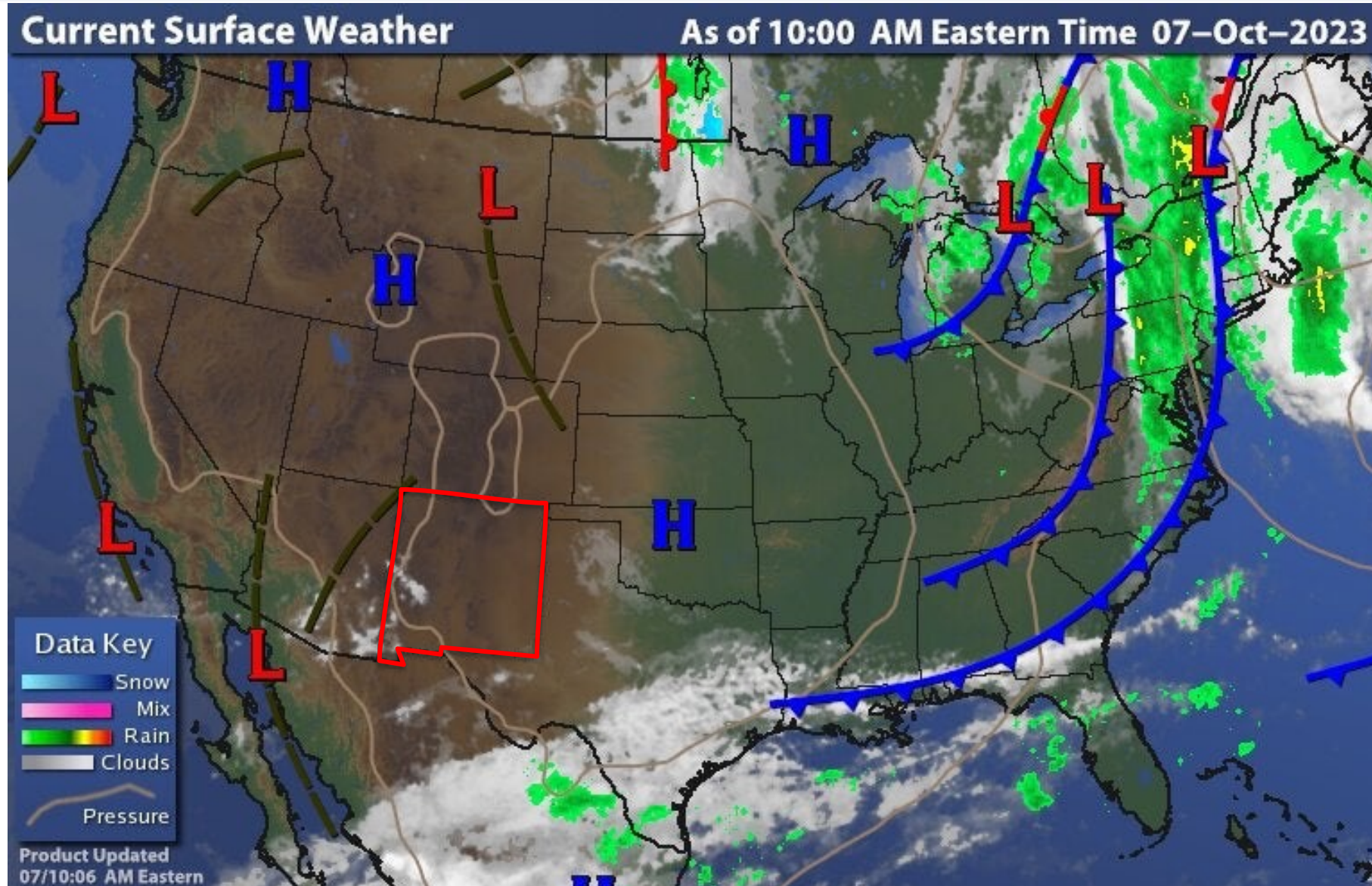


South Field: LIDAR only
52.13.235.237

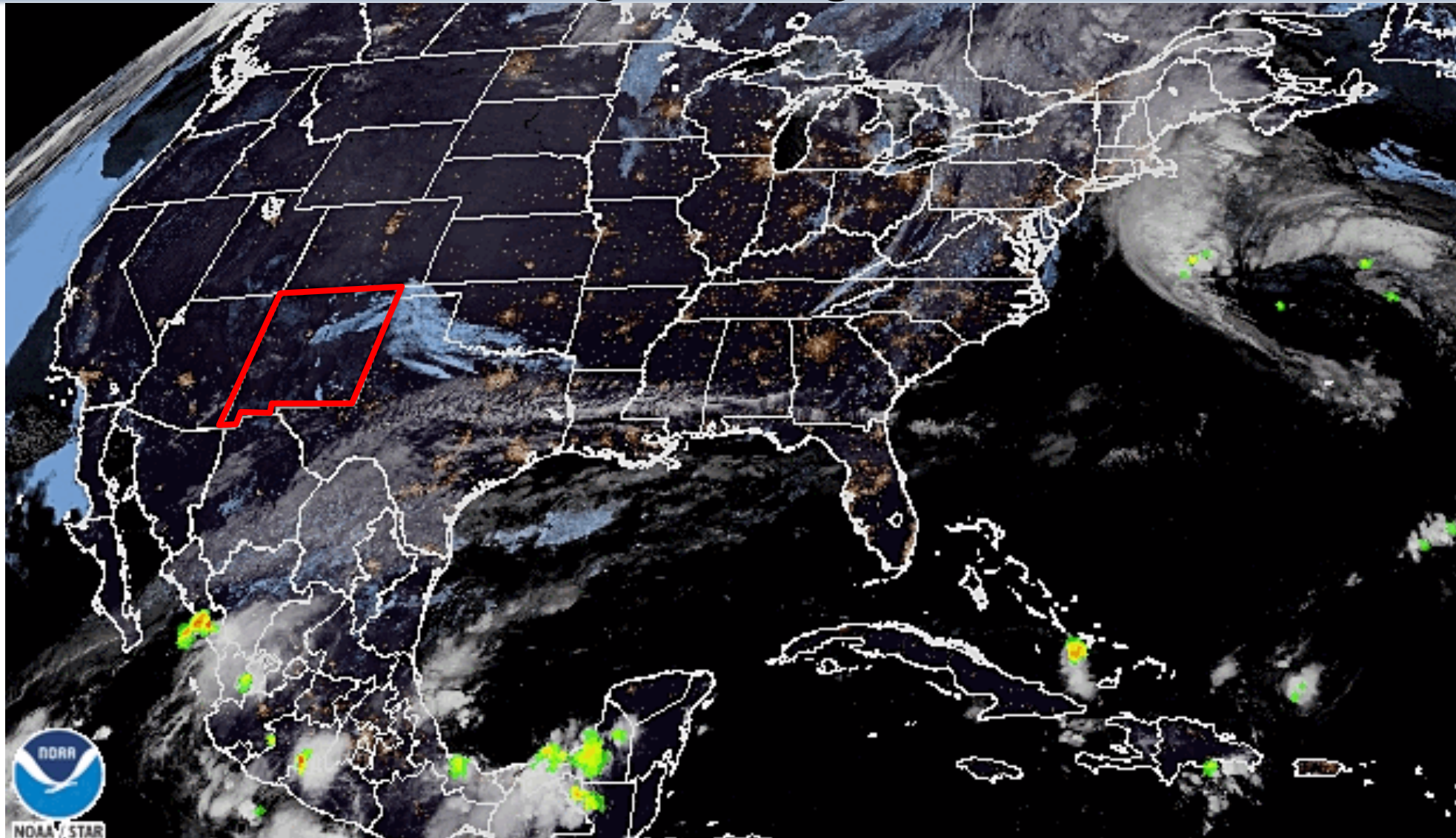


Surface Analysis

Meteorological Satellite



GOES Meteorological Satellite With Lightning Flashes



07 Oct 2023 09:51 NESDIS/STAR GOES-East GLM FED

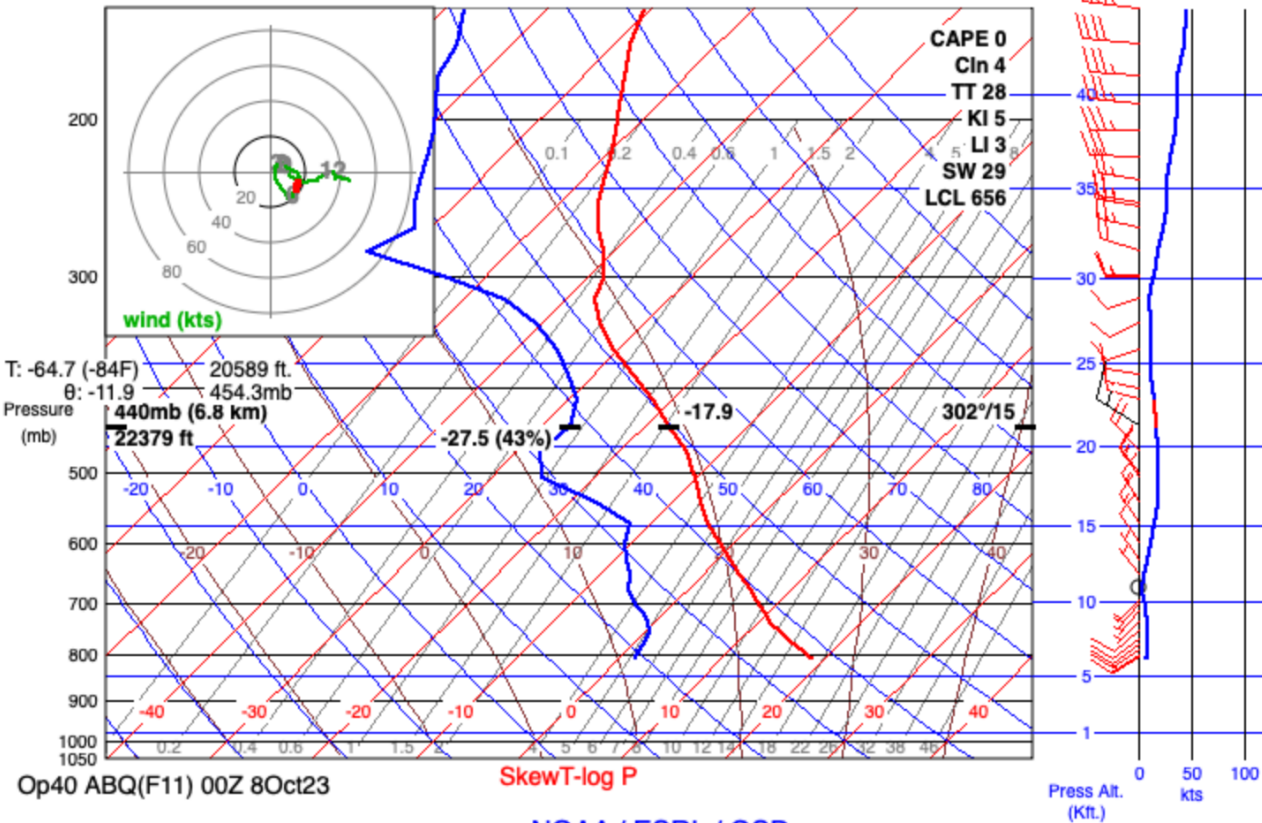
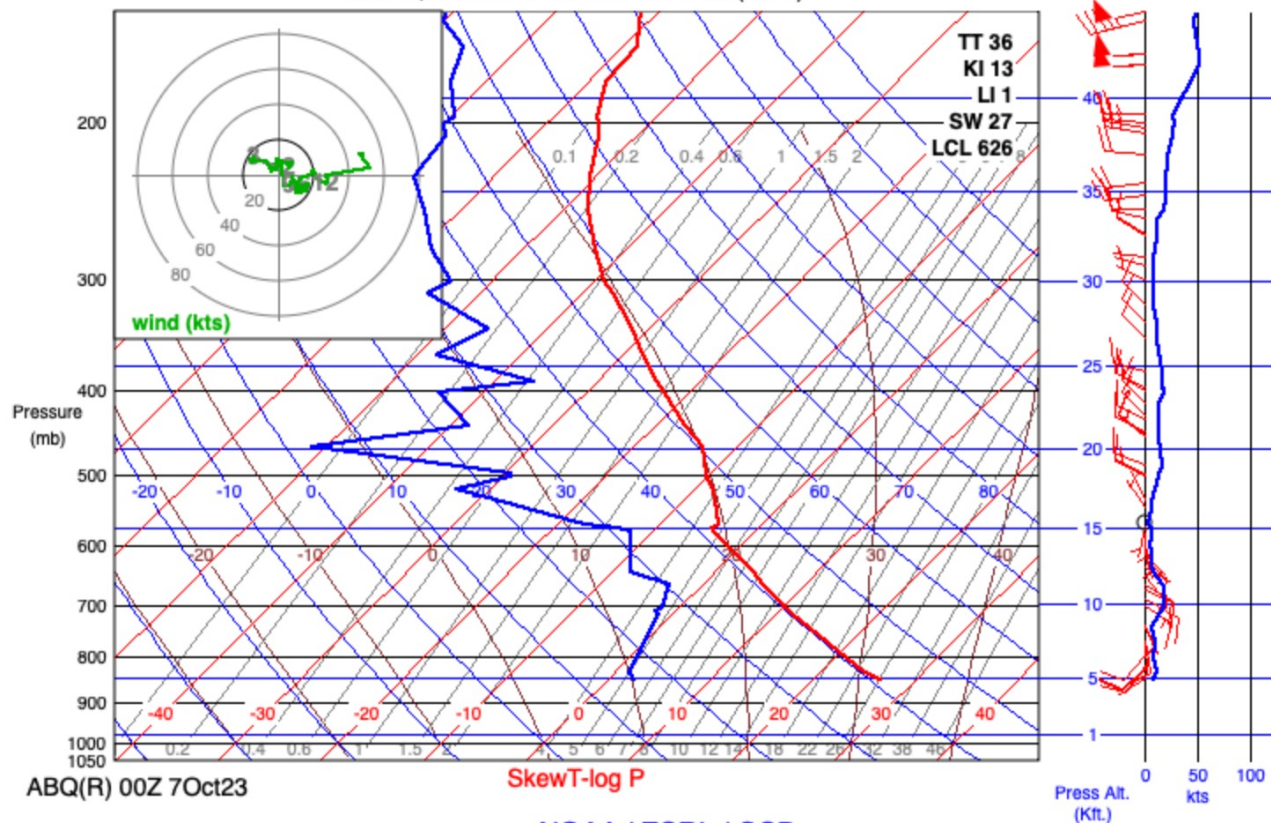
ABQ Skew-T

Observed Saturday AM

Forecast at Launch (Sunset)

RAOB, valid 07-Oct-2023 00:00:00 (ABQ)

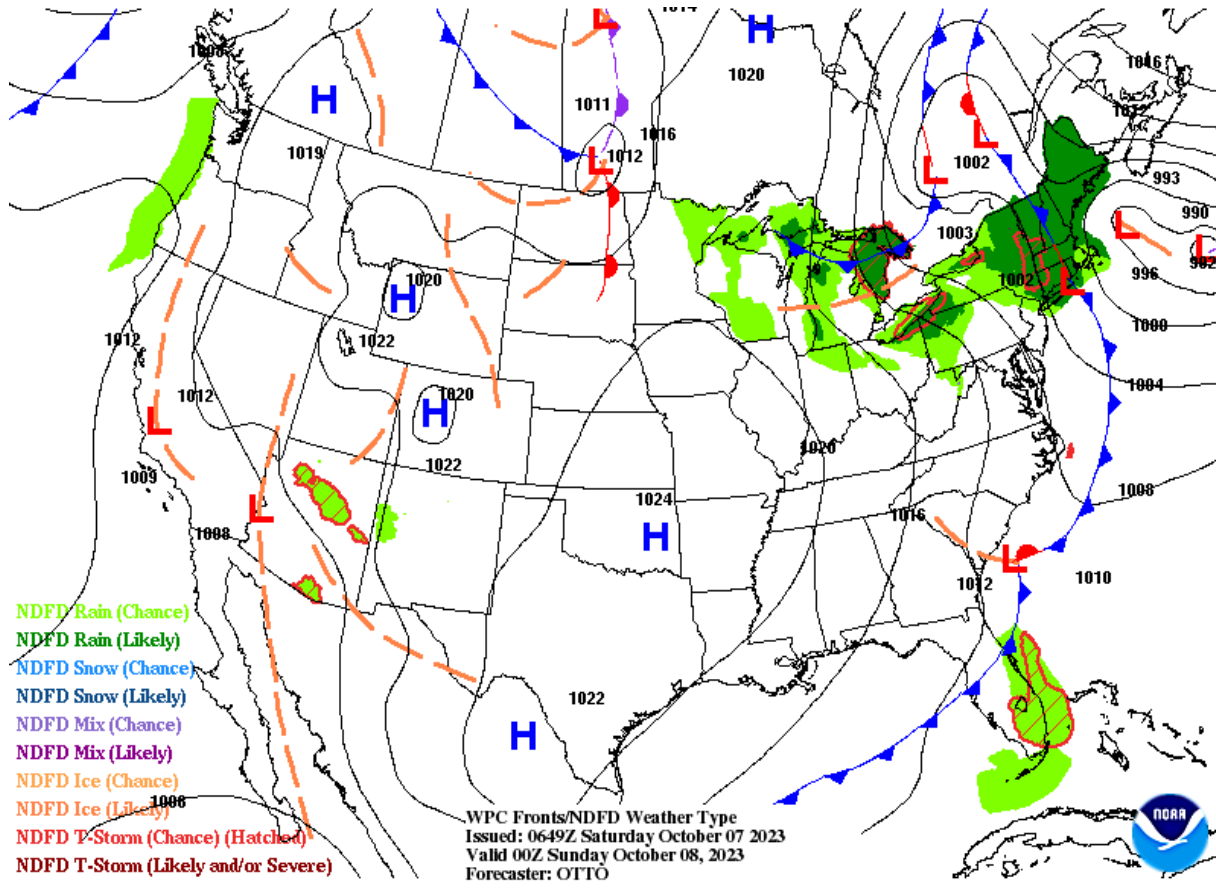
Op40 F11 Forecast, valid 08-Oct-2023 00:00:00 (10.7nm/118' from ABQ)



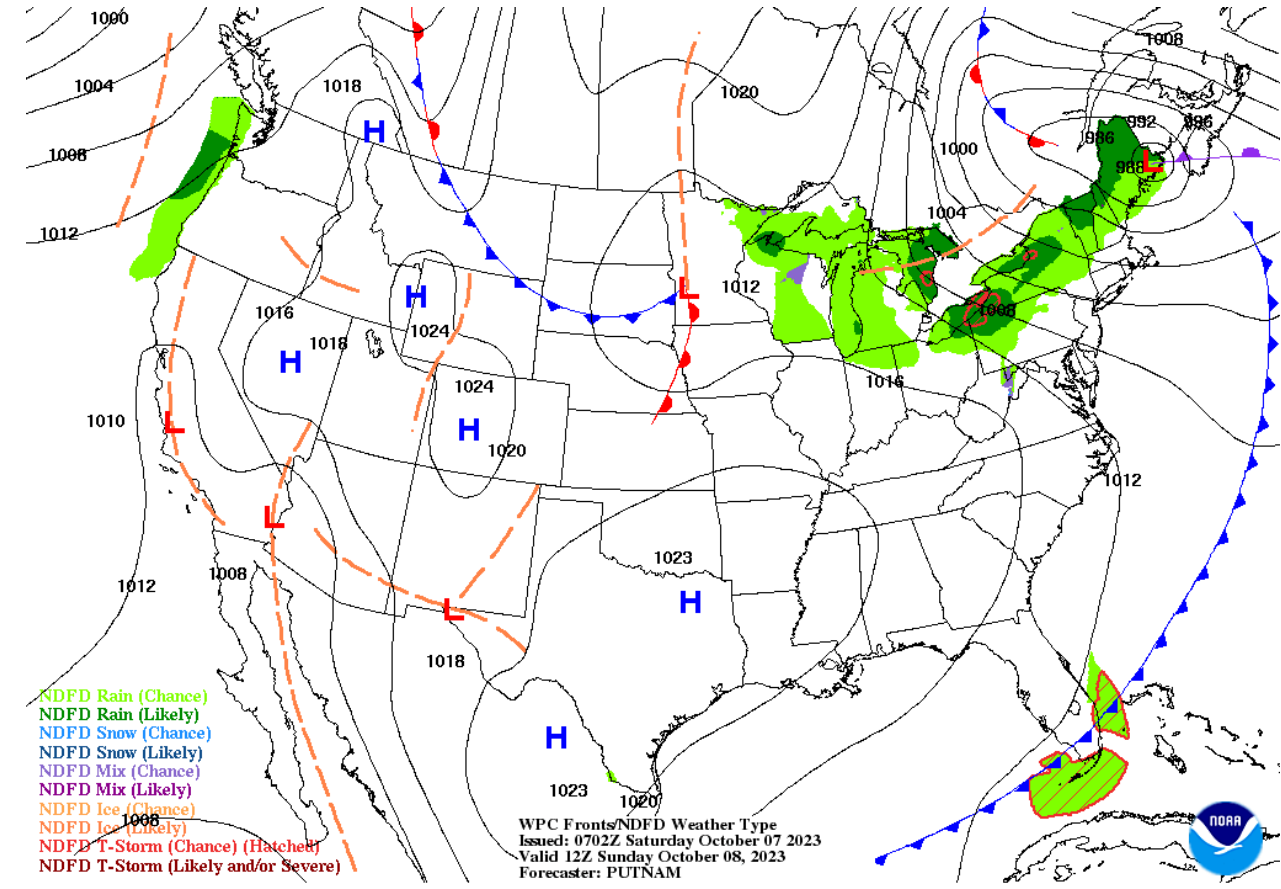
Short-Term Forecast

Valid: 6:00 PM Saturday

Valid: 6:00 PM Sunday



- NDFD Rain (Chance)
- NDFD Rain (Likely)
- NDFD Snow (Chance)
- NDFD Snow (Likely)
- NDFD Mix (Chance)
- NDFD Mix (Likely)
- NDFD Ice (Chance)
- NDFD Ice (Likely)
- NDFD T-Storm (Chance) (Hatched)
- NDFD T-Storm (Likely and/or Severe)

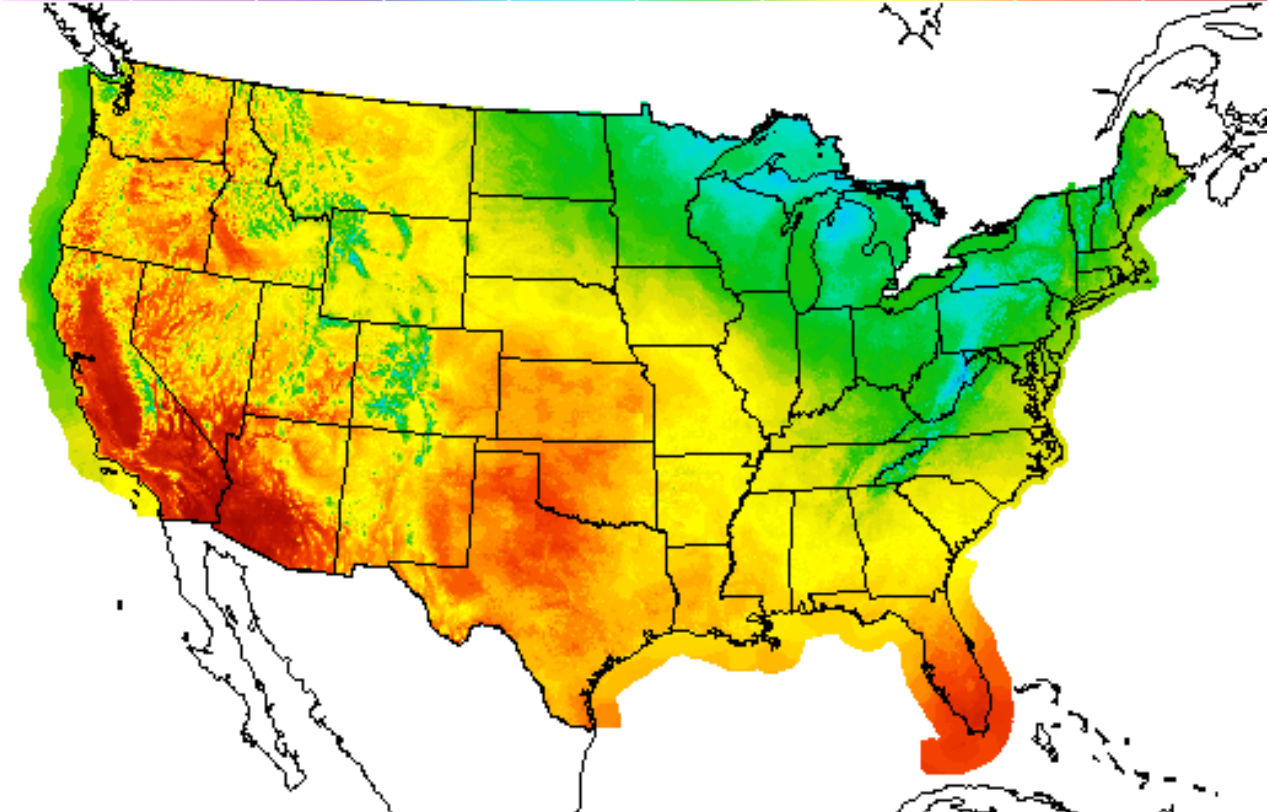
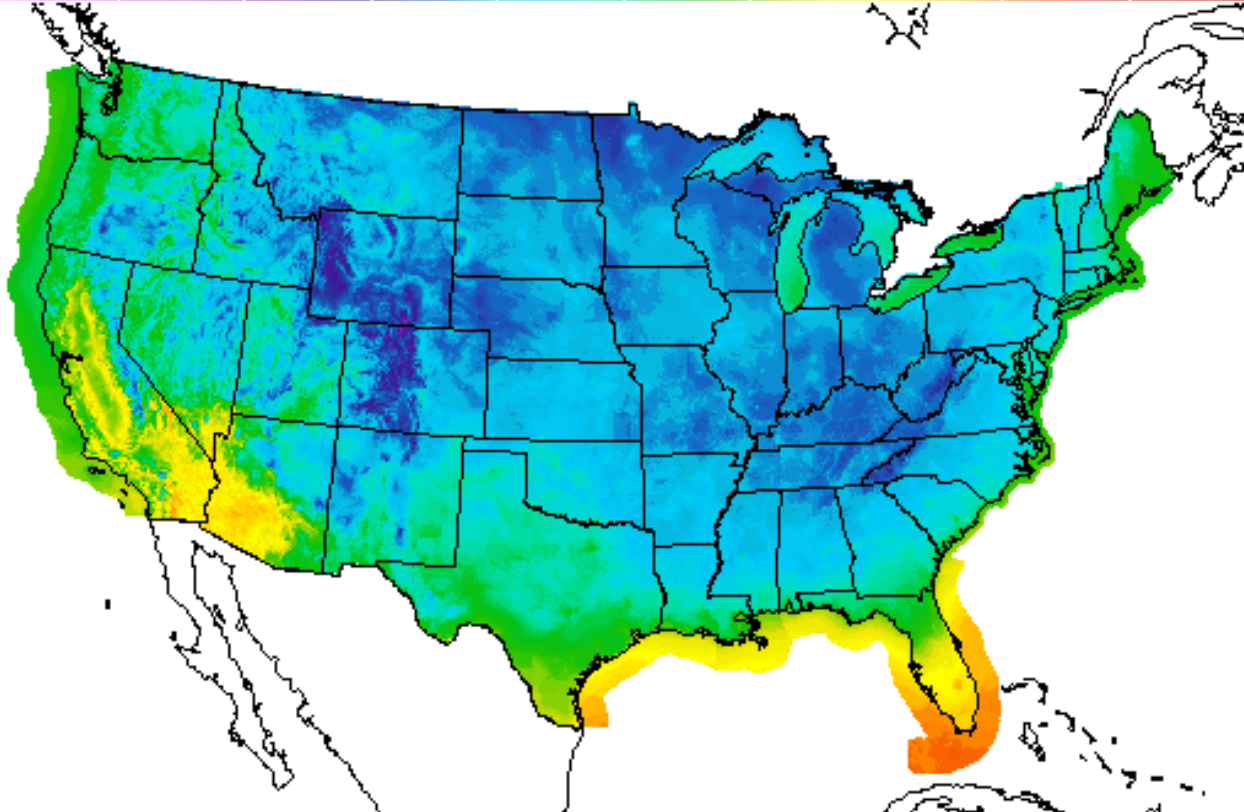


- NDFD Rain (Chance)
- NDFD Rain (Likely)
- NDFD Snow (Chance)
- NDFD Snow (Likely)
- NDFD Mix (Chance)
- NDFD Mix (Likely)
- NDFD Ice (Chance)
- NDFD Ice (Likely)
- NDFD T-Storm (Chance) (Hatched)
- NDFD T-Storm (Likely and/or Severe)

Surface Temperature

Minimum Temperature Saturday Night

Maximum Temperature Sunday



Low Temperature (F) Ending Sun Oct 08 2023 8AM EDT
(Sun Oct 08 2023 12Z)

High Temperature (F) Ending Sun Oct 08 2023 8PM EDT
(Mon Oct 09 2023 00Z)

National Digital Forecast Database
09z issuance Graphic created-Oct 07 5:13AM EDT

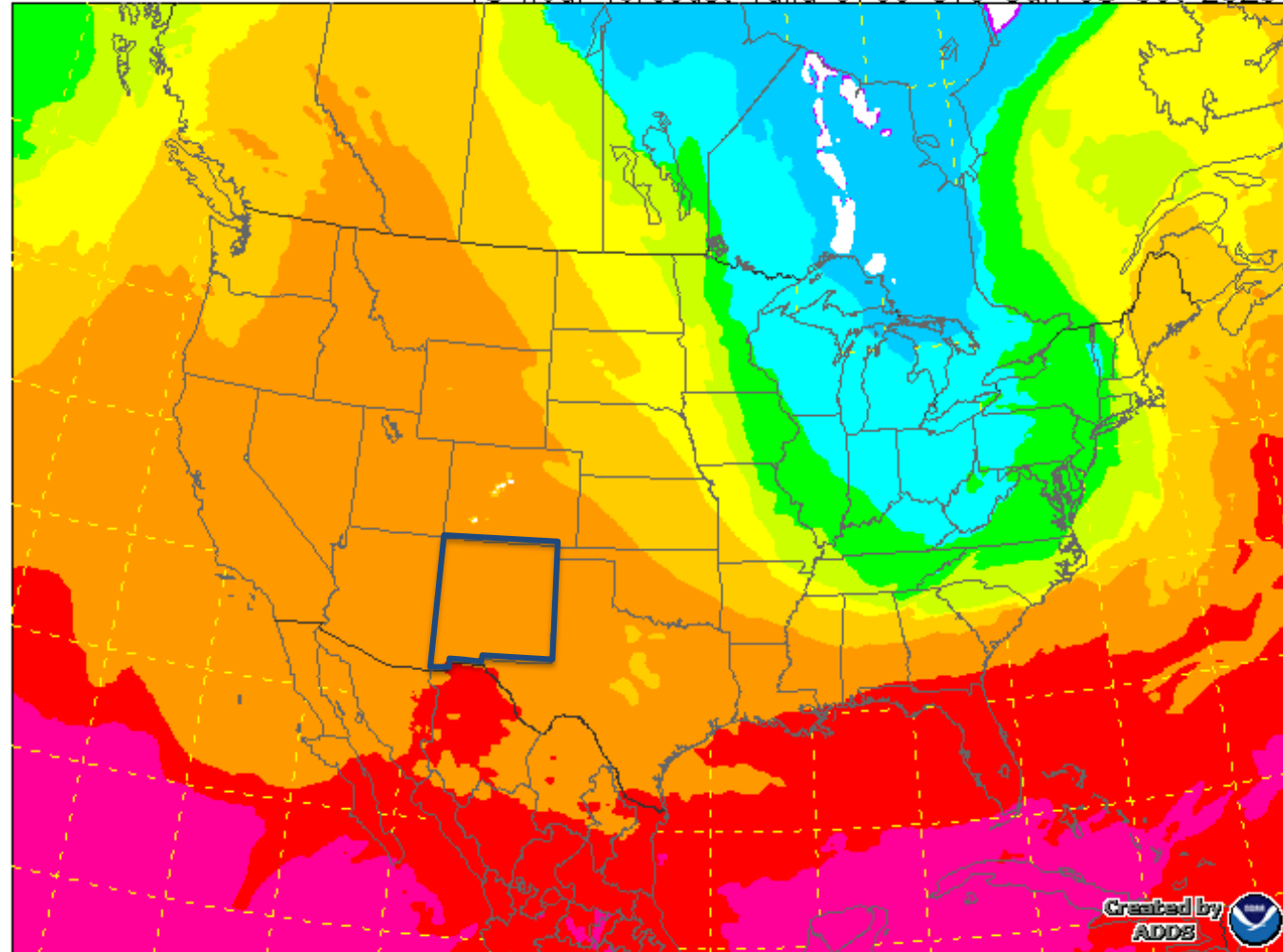
National Digital Forecast Database
09z issuance Graphic created-Oct 07 5:13AM EDT



Freezing Level

Lowest freezing level (100s of feet MSL)

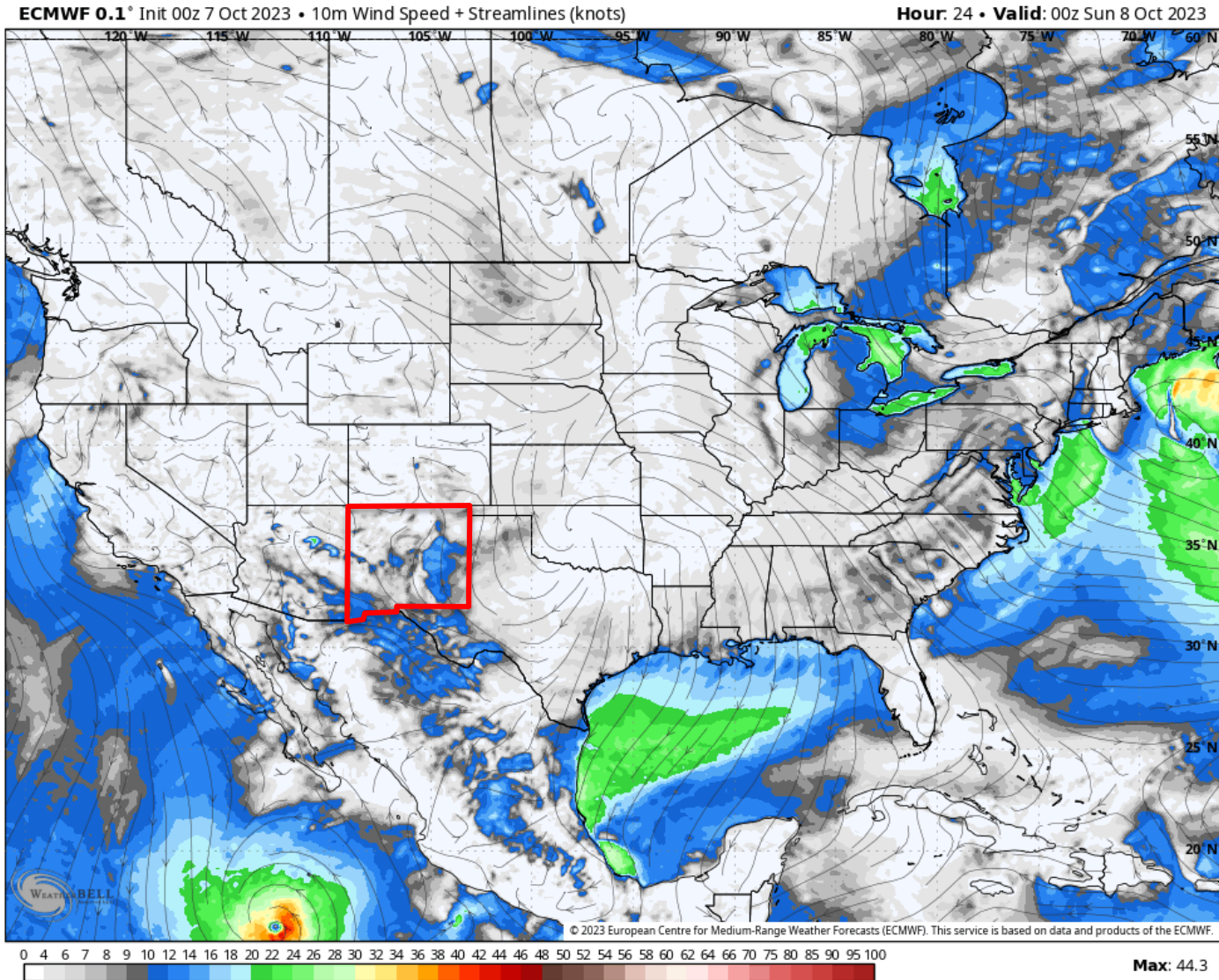
18 hour forecast valid 0700 UTC Sun 08 Oct 2023



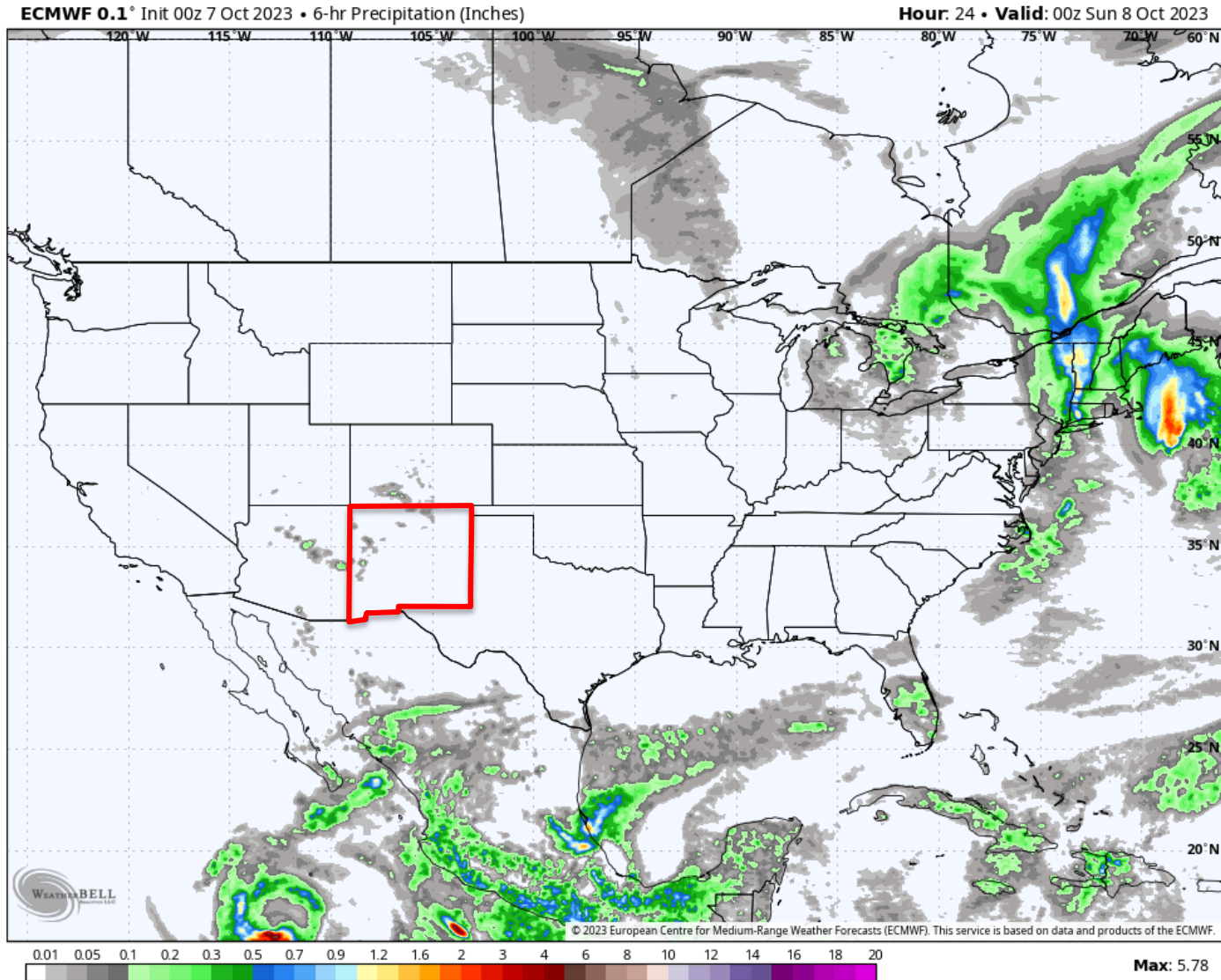
Sfc 010 030 050 070 090 110 130 150 170+
(100s of feet MSL)

Created by
ADDS 

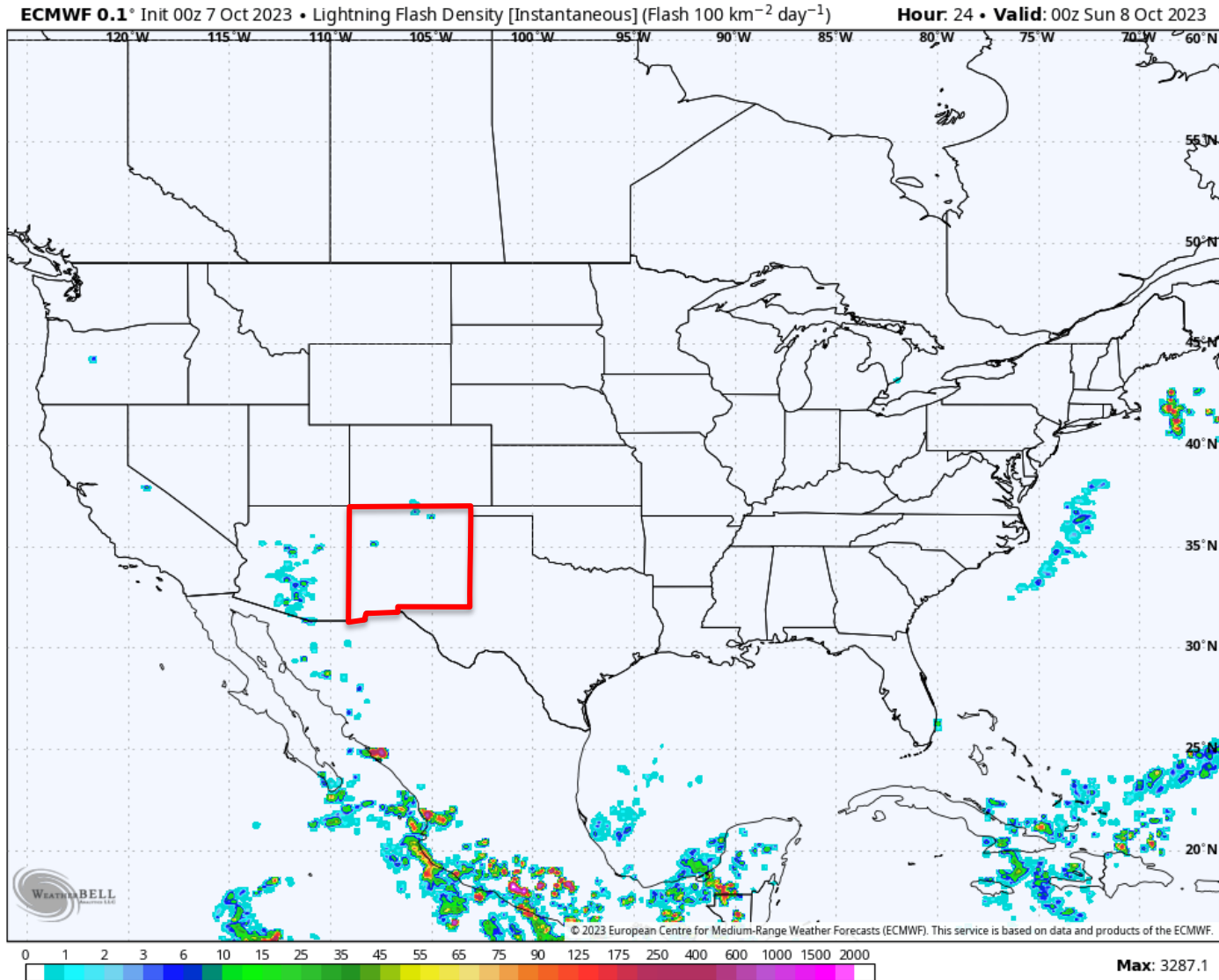
Surface Wind Speed Sat Afternoon to Wed Evening



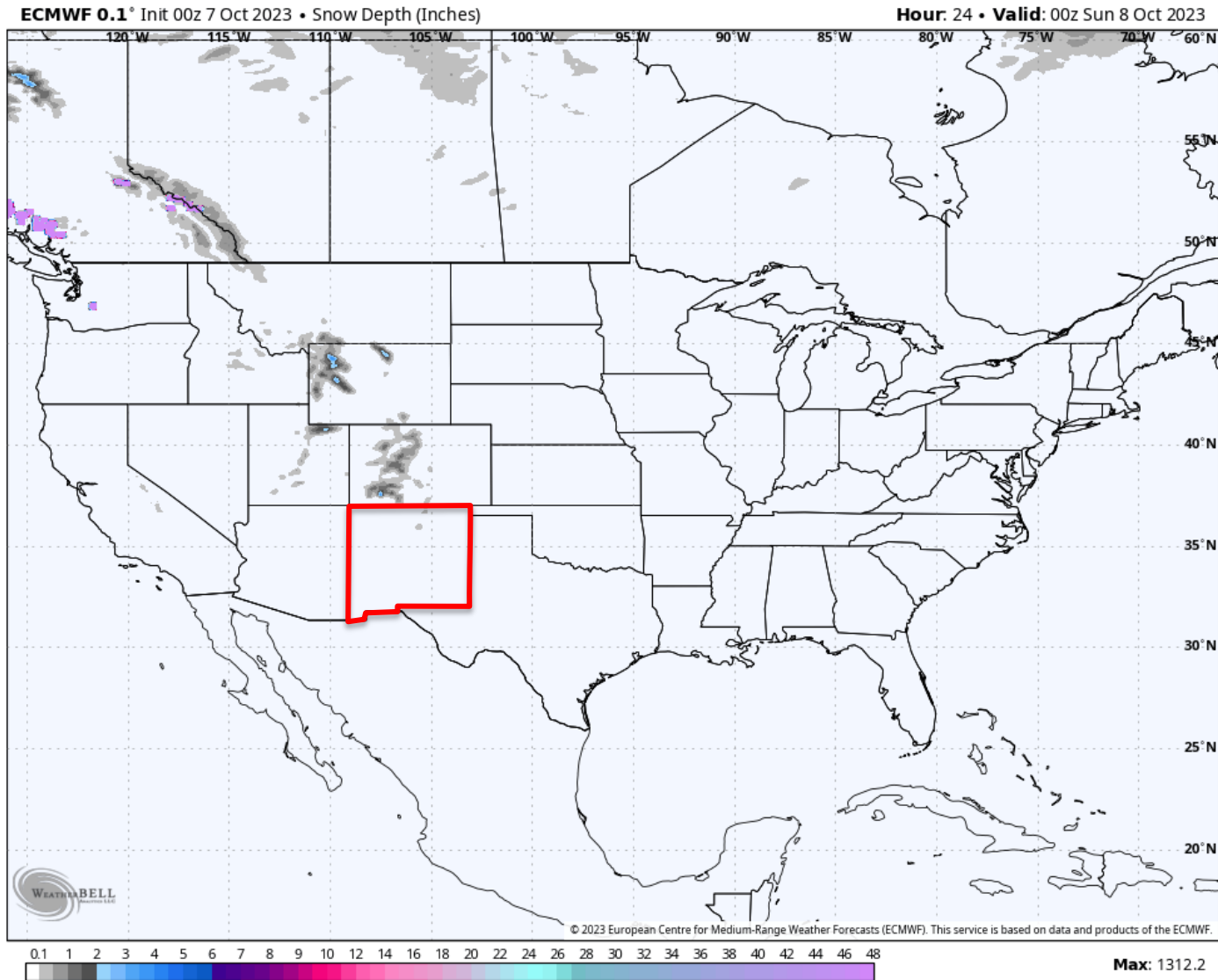
6-Hour Accumulated Precipitation Sat Afternoon to Wed Evening



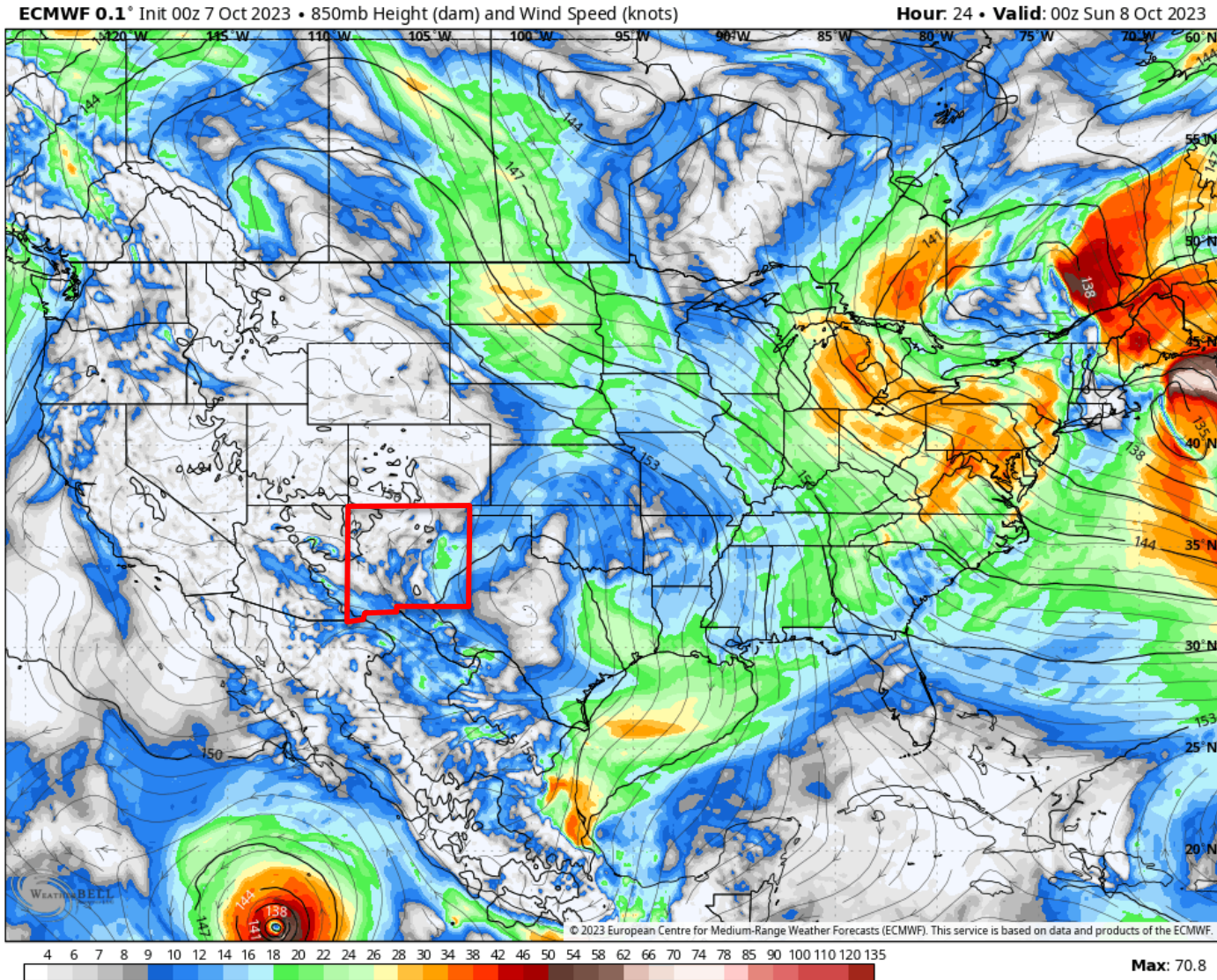
Forecast Lightning Sat Afternoon to Wed Evening



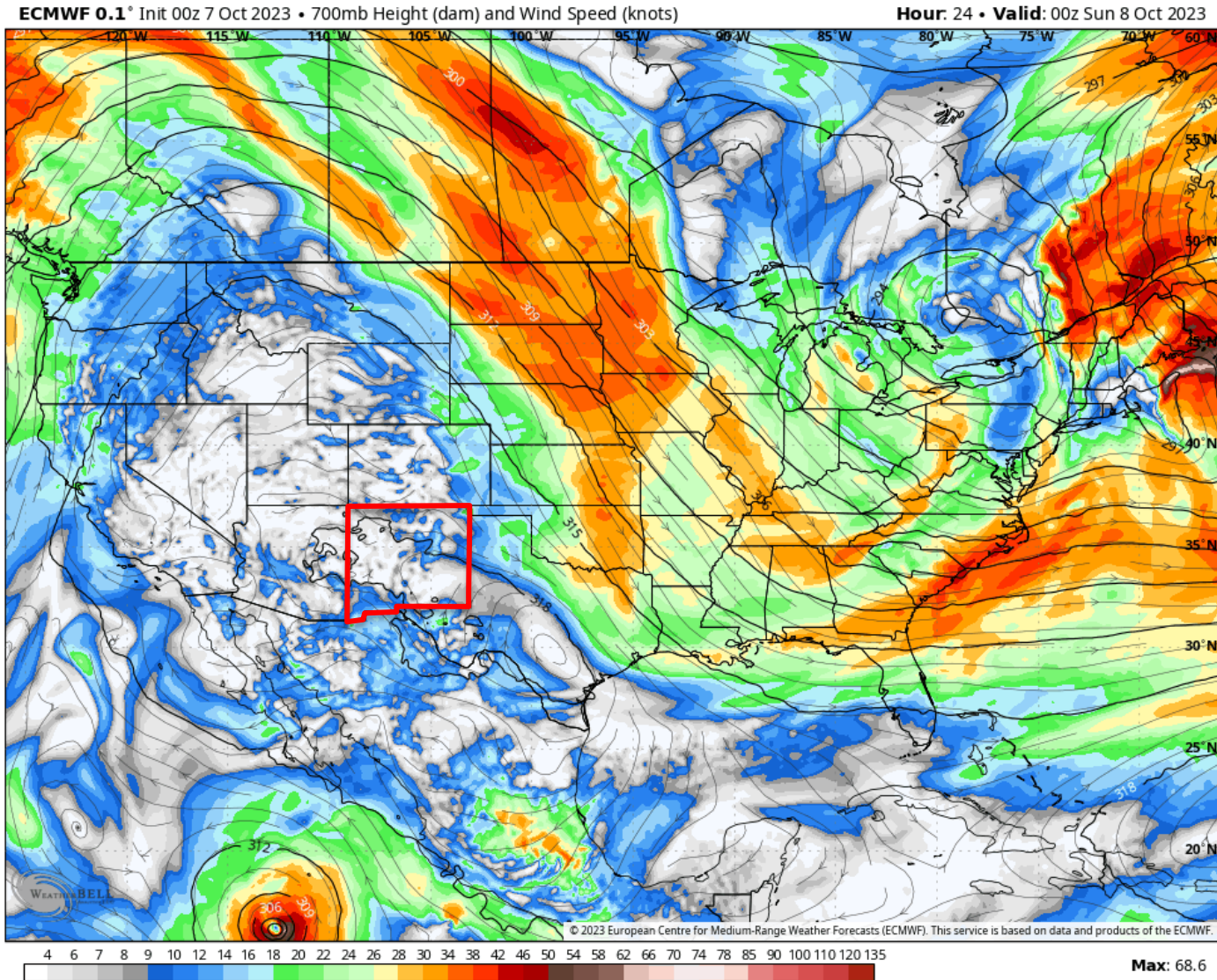
Accumulated Snow (Snow Depth) Sat Afternoon to Wed Evening



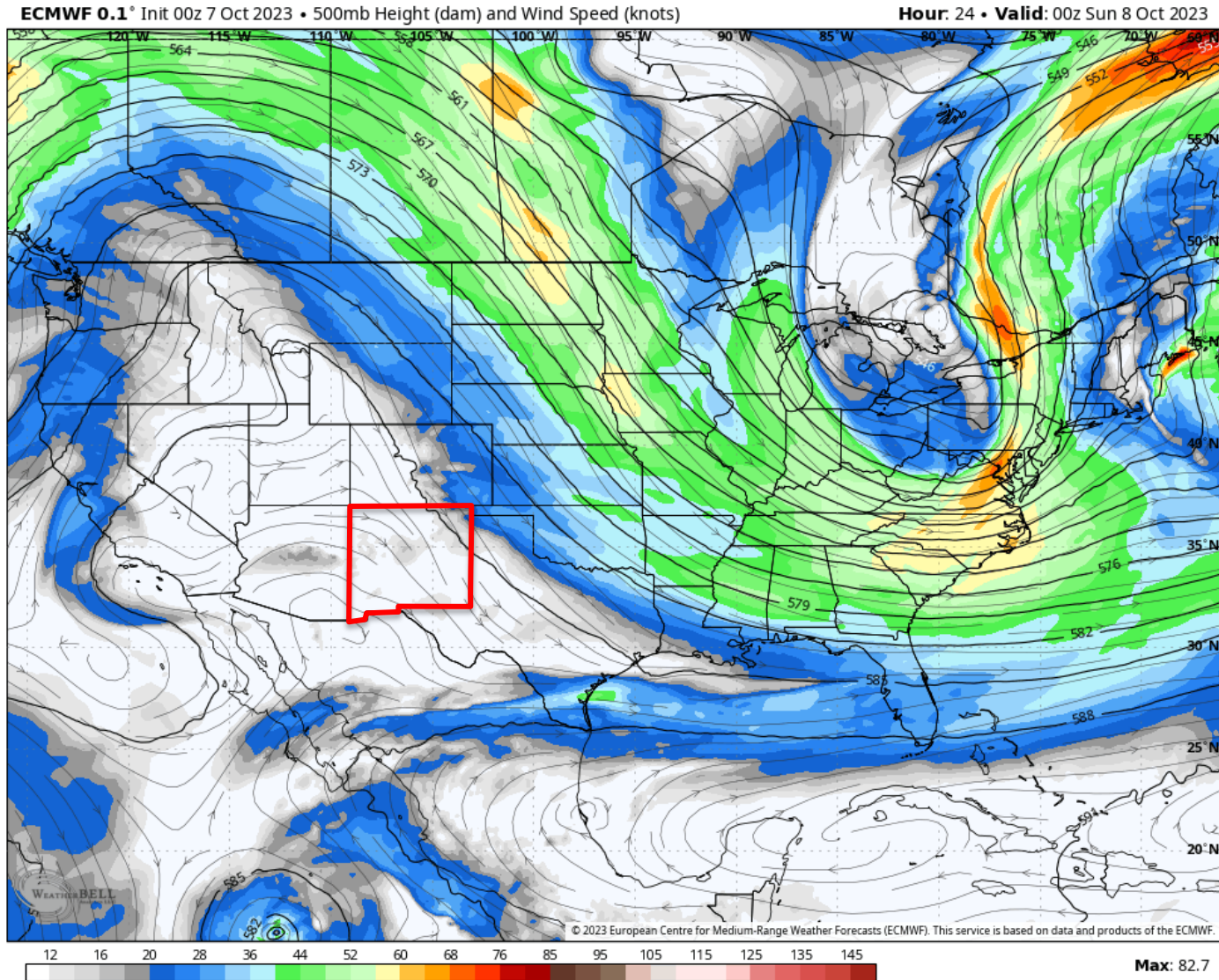
Wind 850 mb ~5kft (1,457m) Sat Afternoon to Wed Evening



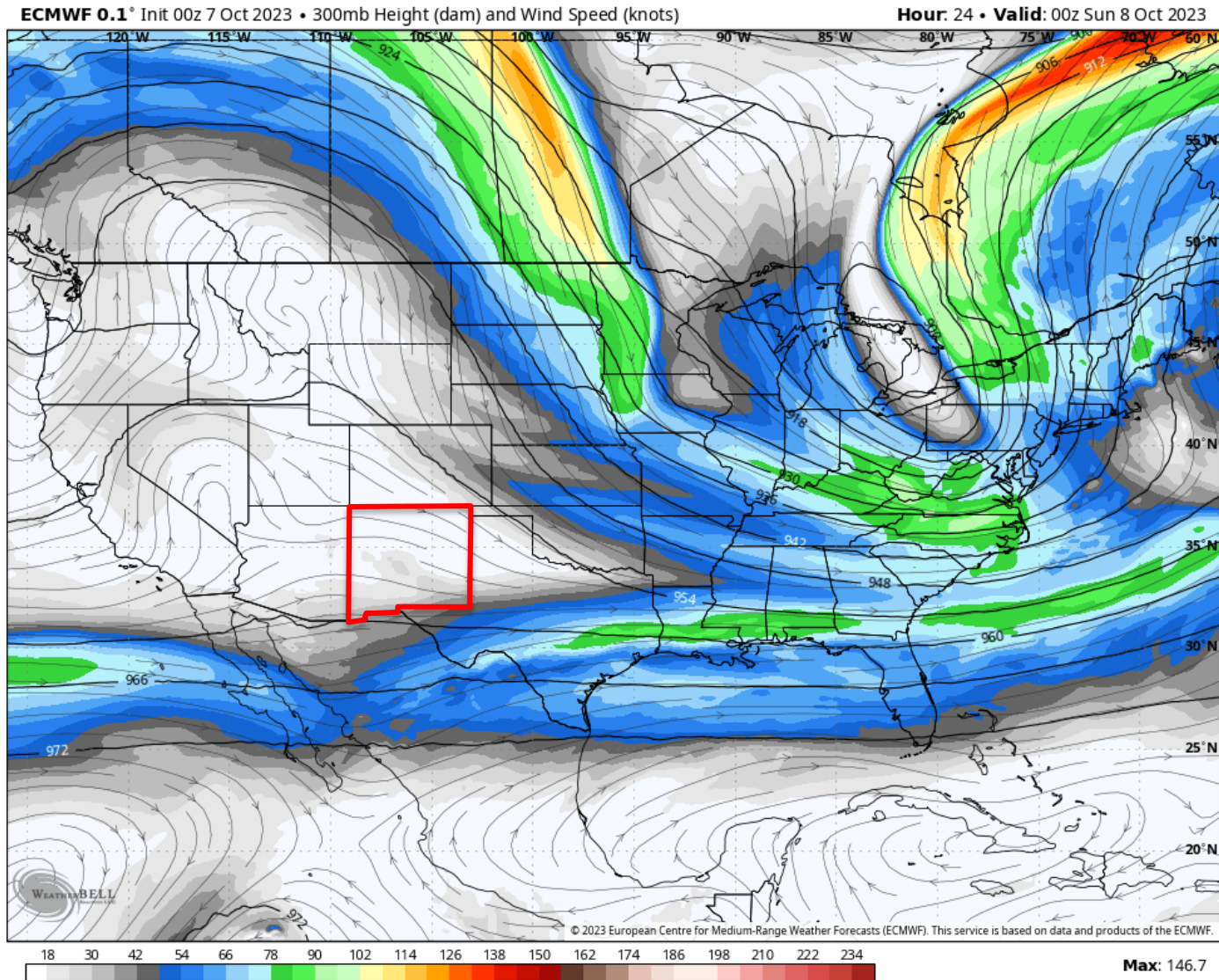
Wind 700 mb ~10kft (3,011m) Sat Afternoon to Wed Evening



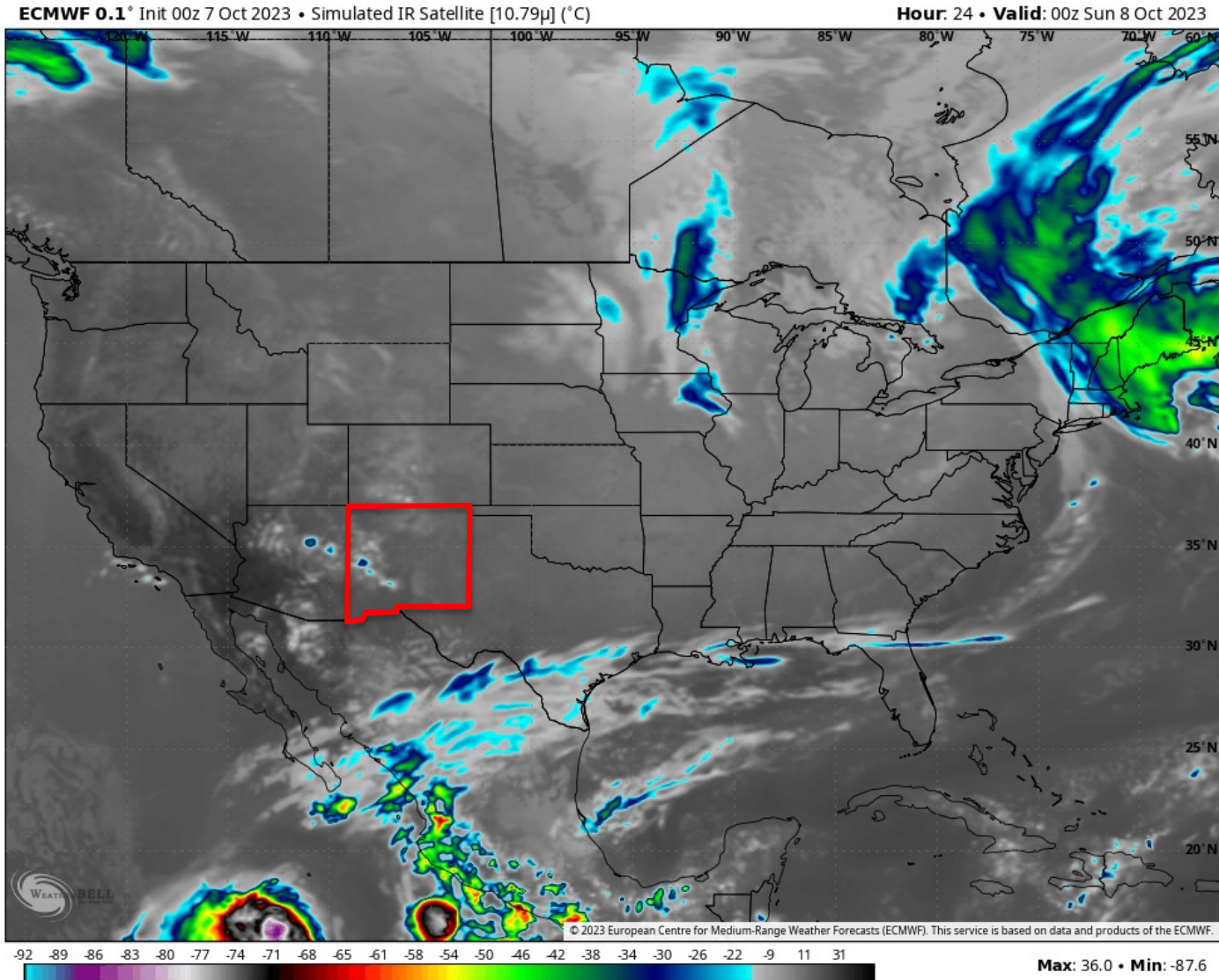
Wind 500 mb ~18kft (5,572m) Sat Afternoon to Wed Evening



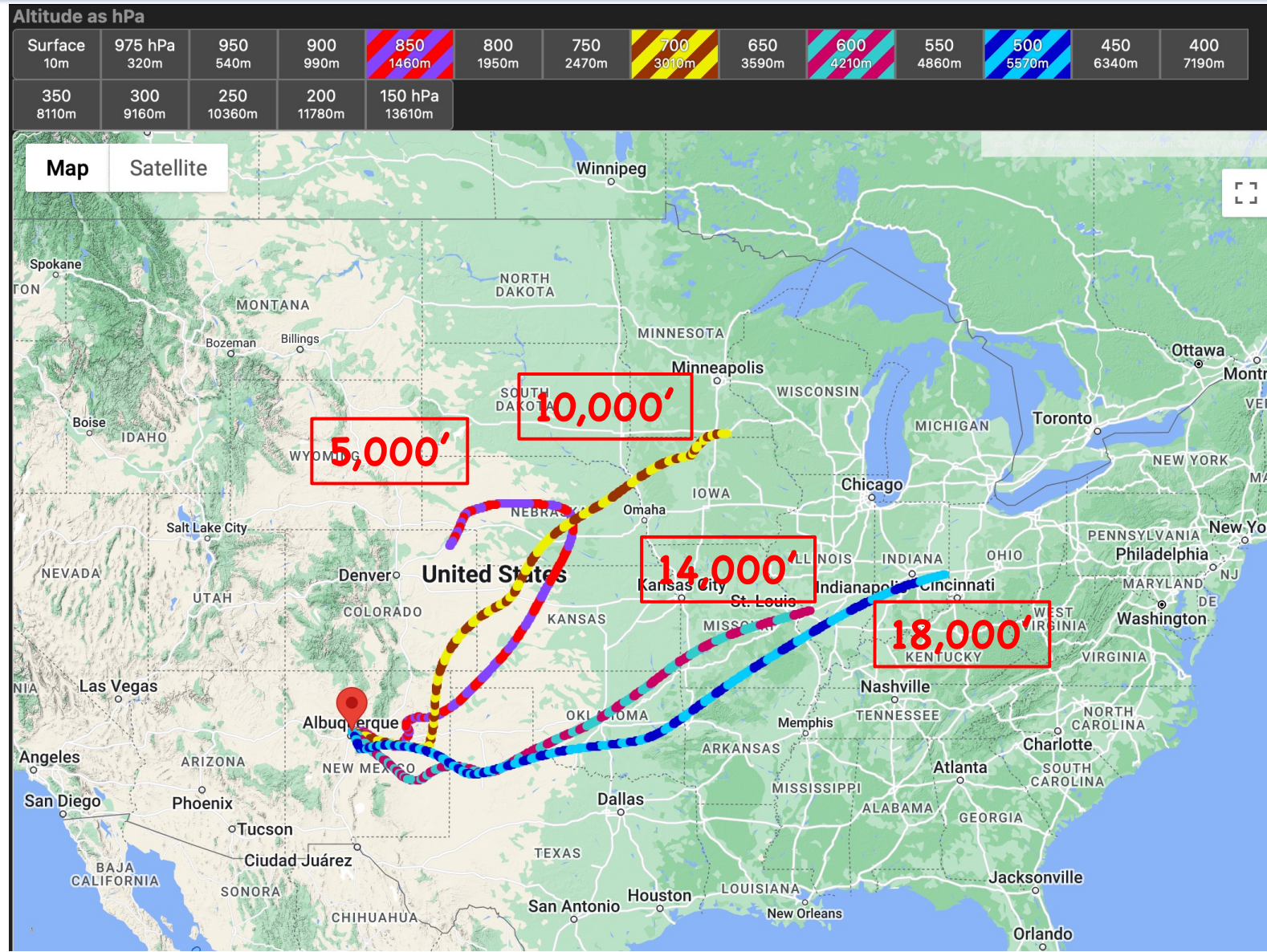
Wind 300 mb ~30kft (9,160m) Sat Afternoon to Wed Evening



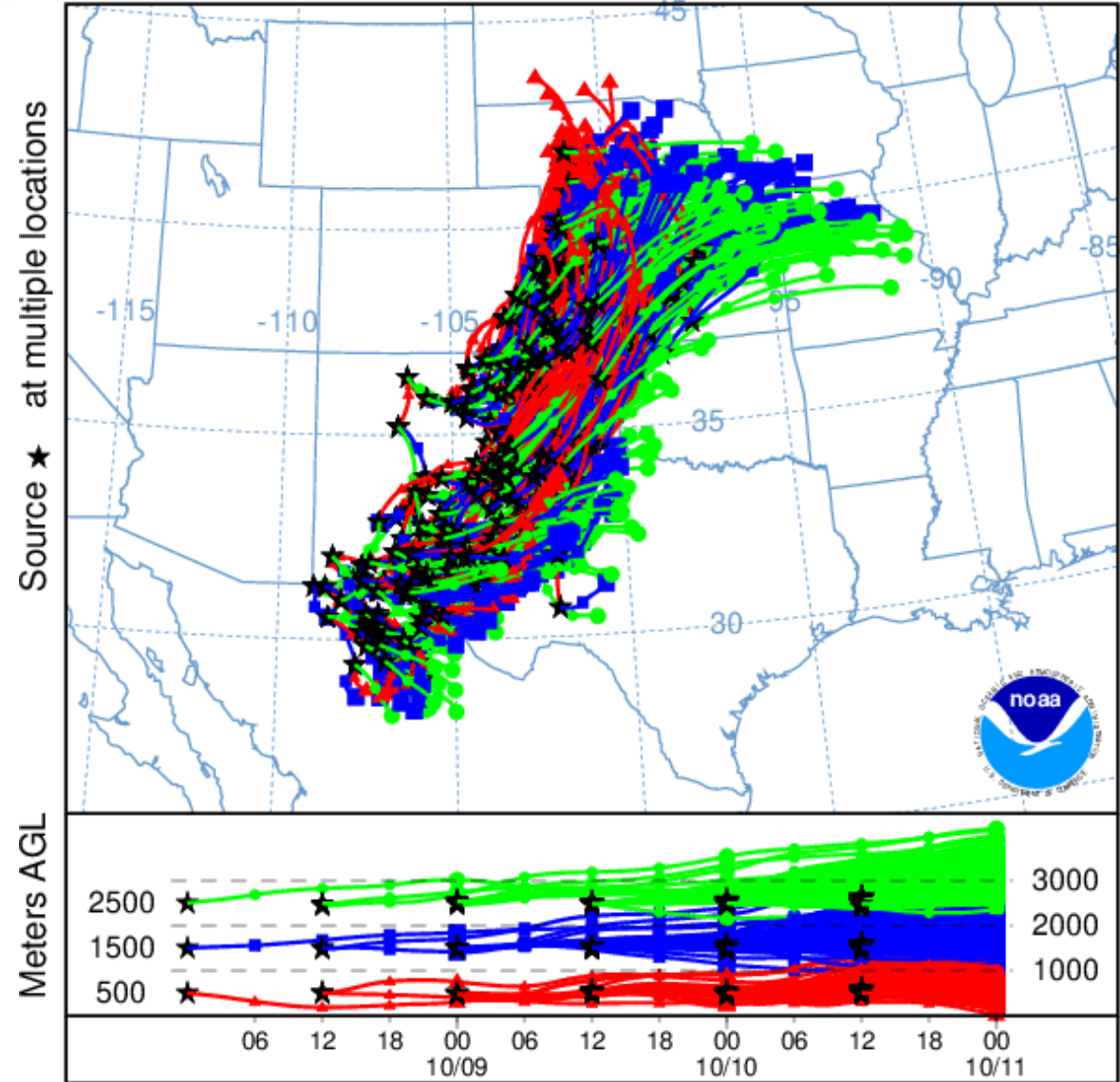
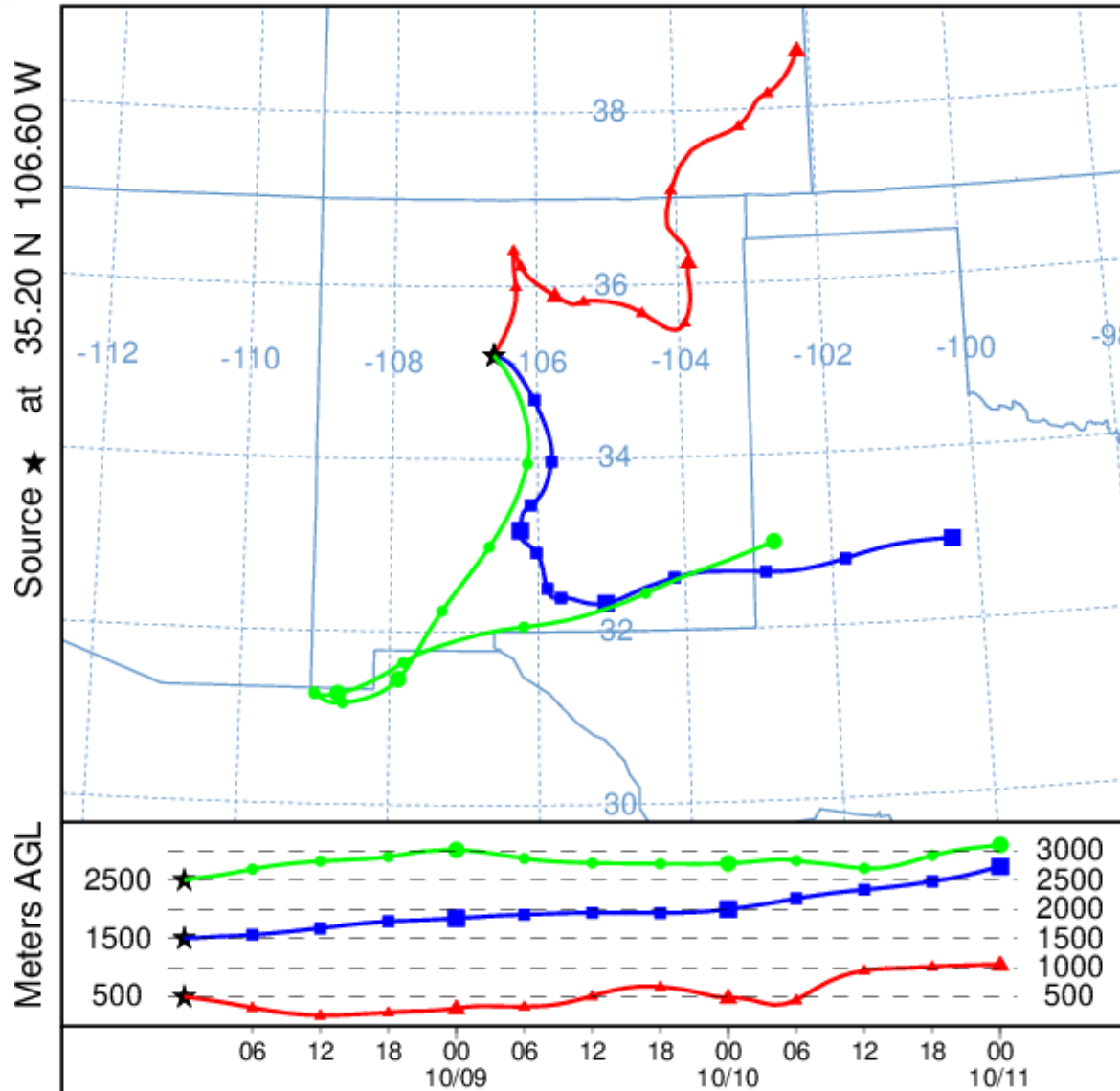
Simulated Cloud Cover Sat Afternoon to Wed Evening



72 Hour Trajectory Forecast Swiss Model



72-hour Trajectory Forecast NOAA HYSPLIT GFS



Surface Forecast for Launch Day

- ✓ Wind: SSW 8-10 knots → 4-6 knots at sunset, then potential for increase back to 8-10 knots
- ✓ Weather: None
- ✓ Sky Condition: Scattered high clouds; low cloud over mountains
- ✓ Temperature: 75°F/24°C → 60°F/16°C for afternoon through evening
- ✓ Remarks:
 - Monitoring convective outflow winds from storms Colorado-New Mexico border
 - Winds highly variable in direction during climb out
 - Sunset: 6:42 PM MDT
Sunrise: 7:06 AM MDT
Moon 40% illumination, and decreasing through your flight