

Weather

Coupe Aéronautique Gordon Bennett

Randy Lefevre

Brad Temeyer

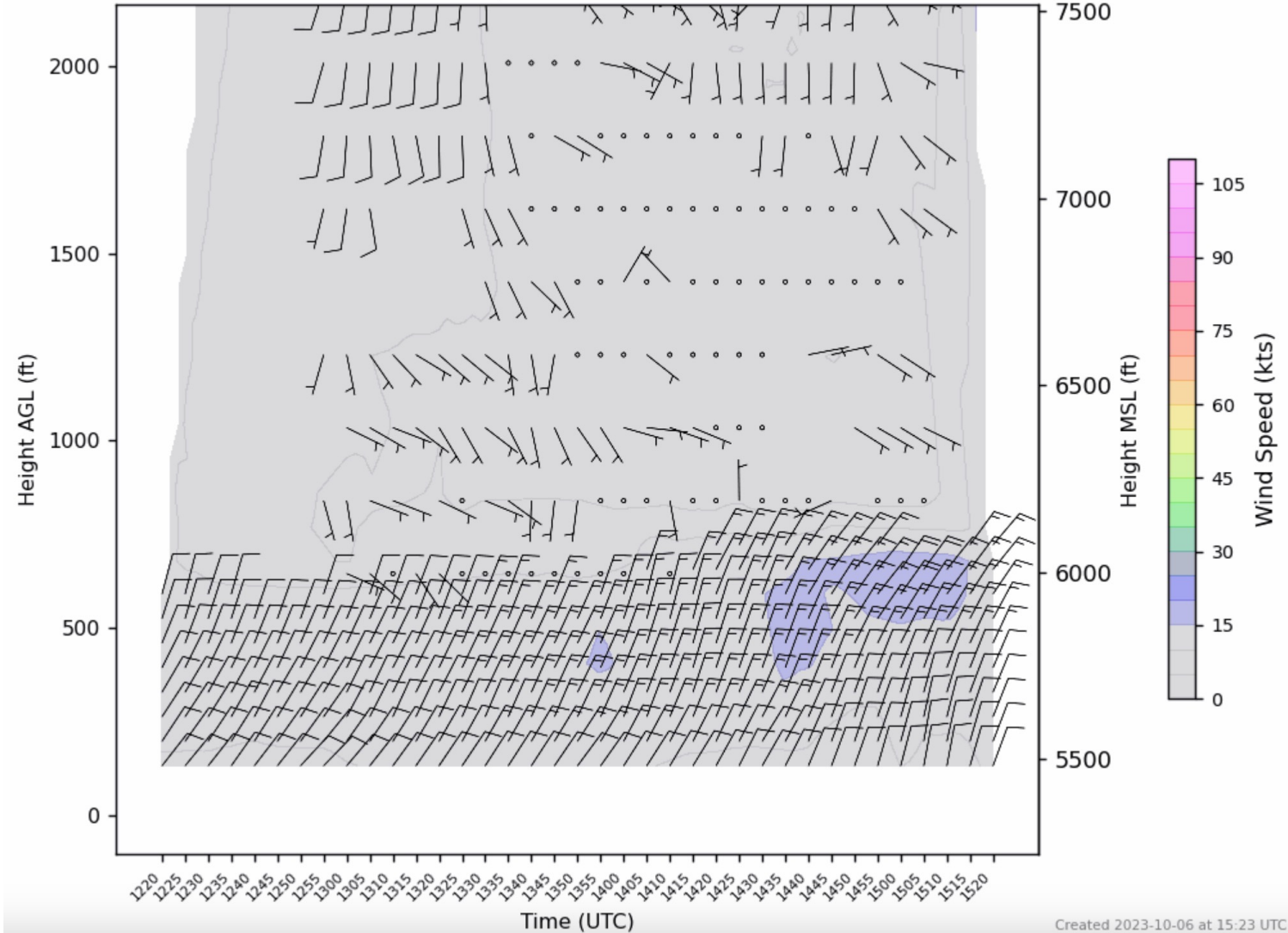
Friday, 6 October 2023

Take Away

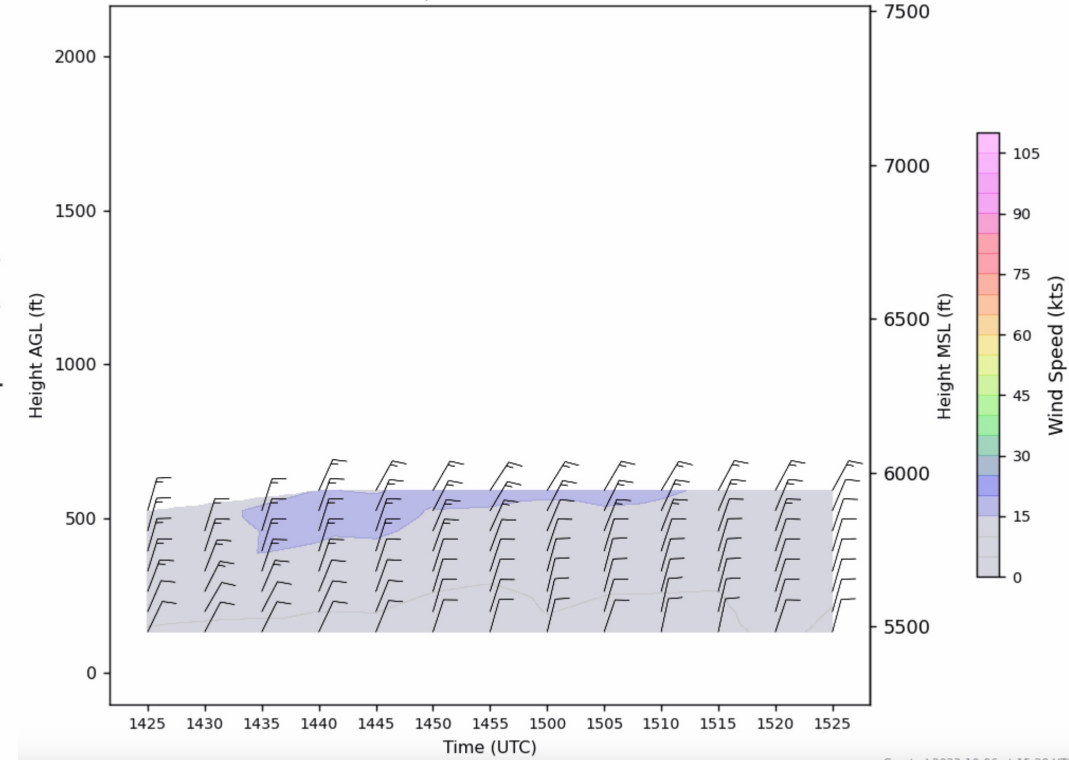
- ✓ Mainly high pressure and fair weather for the entire period of the race
- ✓ Expect some gusty surface winds late Friday night prior to inflation on Saturday, but Saturday afternoon should be fine
- ✓ Will be watching some convection on Colorado–New Mexico border Saturday afternoon; monitor outflow winds at the surface
- ✓ Due to high pressure ridge centered over Utah–New Mexico–Texas, expect variable wind directions through FL180 (5.5 km) and not very strong
- ✓ Weak low pressure from Southern California–Arizona will move through New Mexico on Sunday afternoon so if you stay in the area keep watch
- ✓ Low level pressure gradient east of New Mexico (Texas–Oklahoma) may produce moderately fast west-to-east wind speeds at FL050 (1.5 km)
- ✓ Atmospheric trough over eastern USA may allow respectable west-to-east wind speed at FL100 (3.0 km) and higher
- ✓ Fairly strong weather system moving south through middle of USA on late Tuesday into Wednesday–Thursday; expect convective weather

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

1220 UTC - 1520 UTC 2023-10-06
Wind Speed (kts) and Direction, 3 hour series

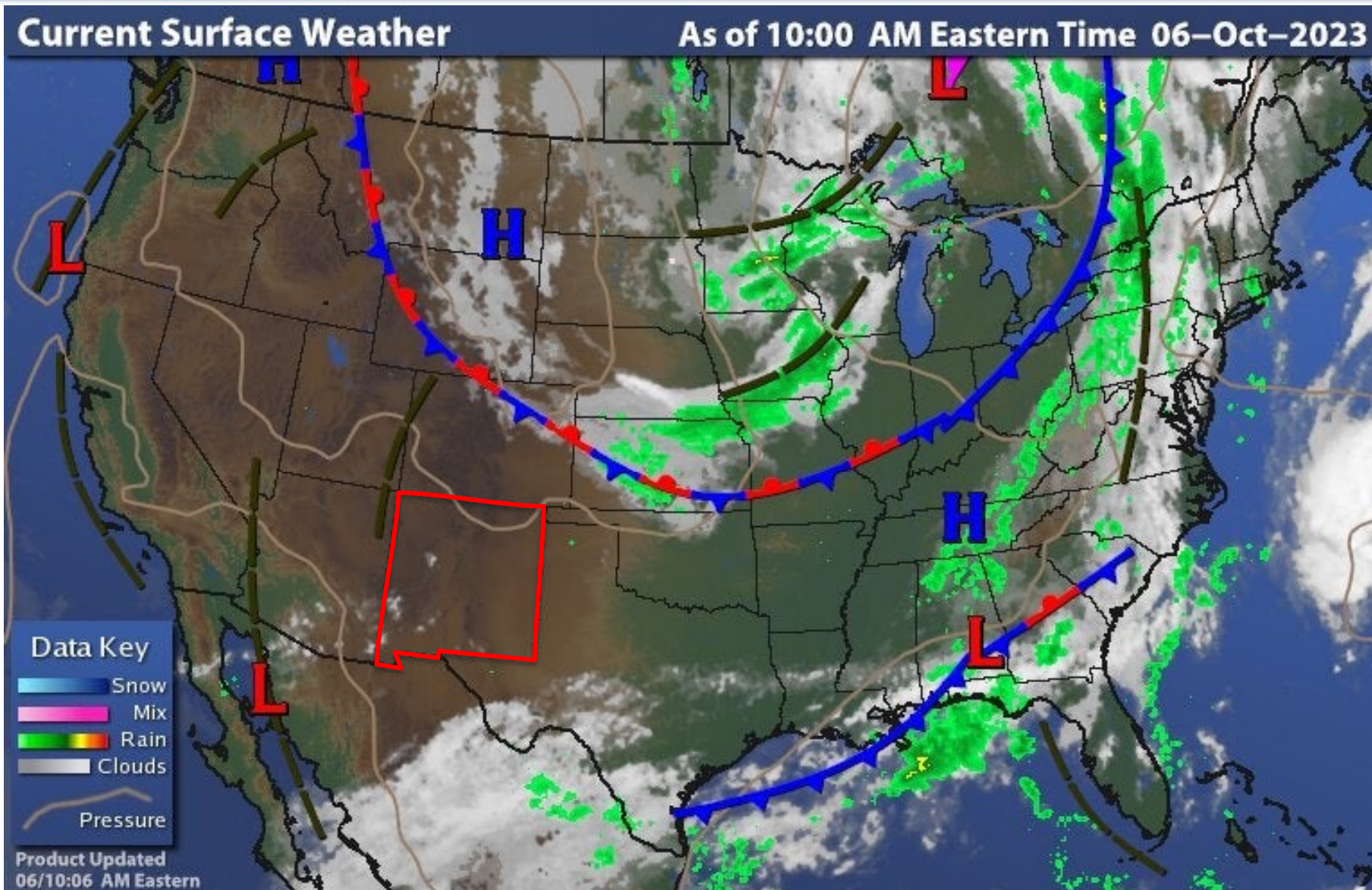


1425 UTC - 1525 UTC 2023-10-06
Wind Speed (kts) and Direction, 1 hour series



Surface Analysis

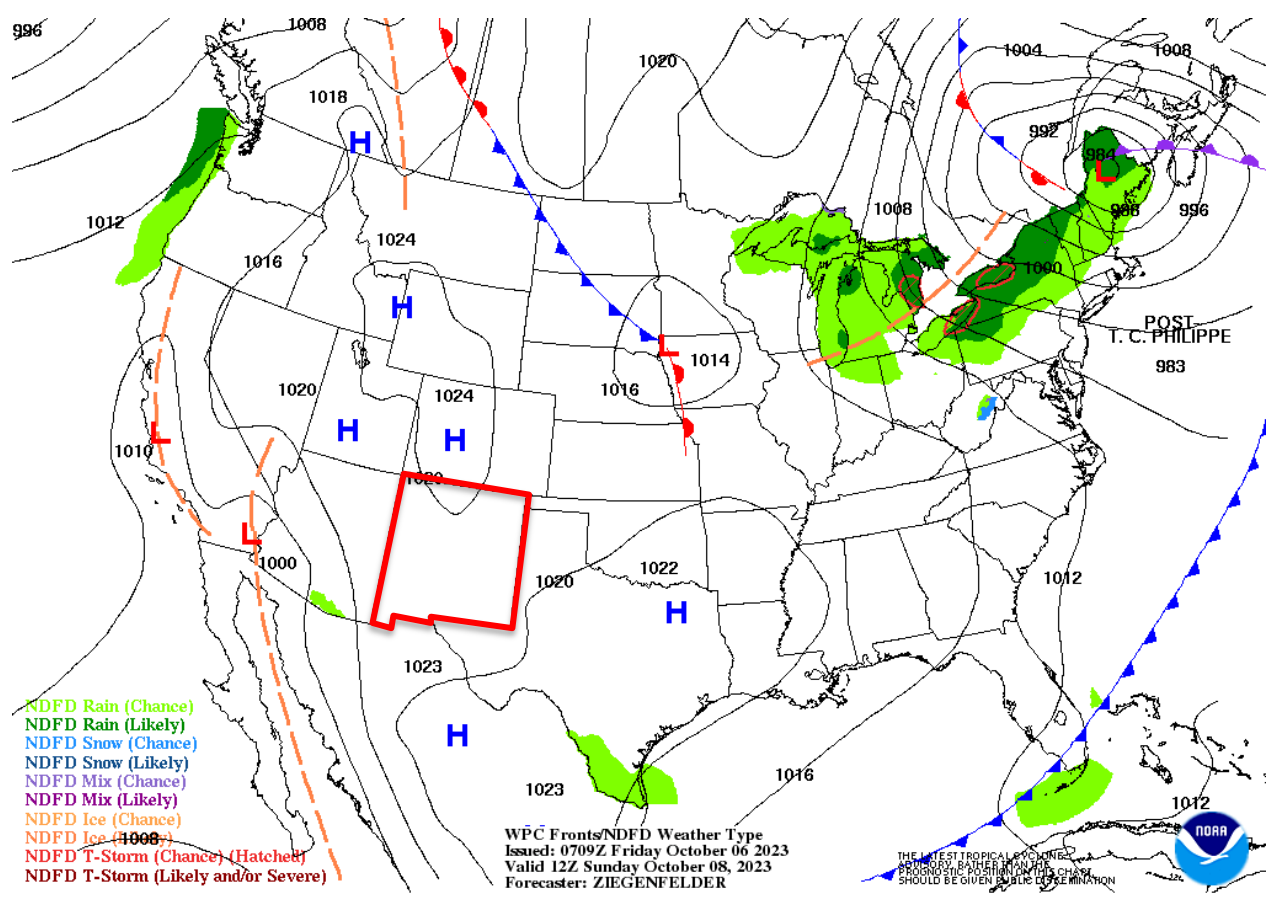
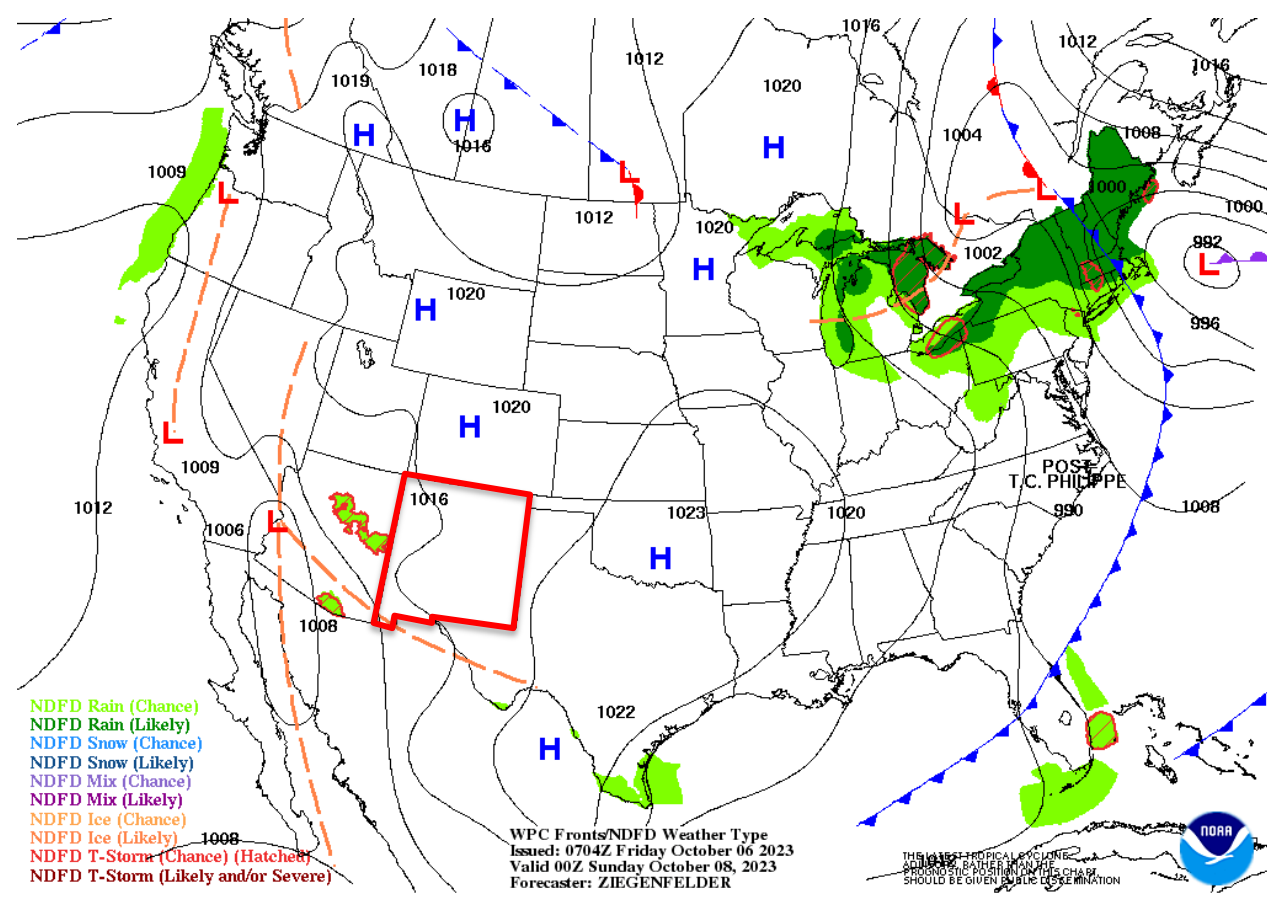
Meteorological Satellite



Short-Term Forecast

Valid: 6:00 PM Saturday

Valid: 6:00 AM Sunday



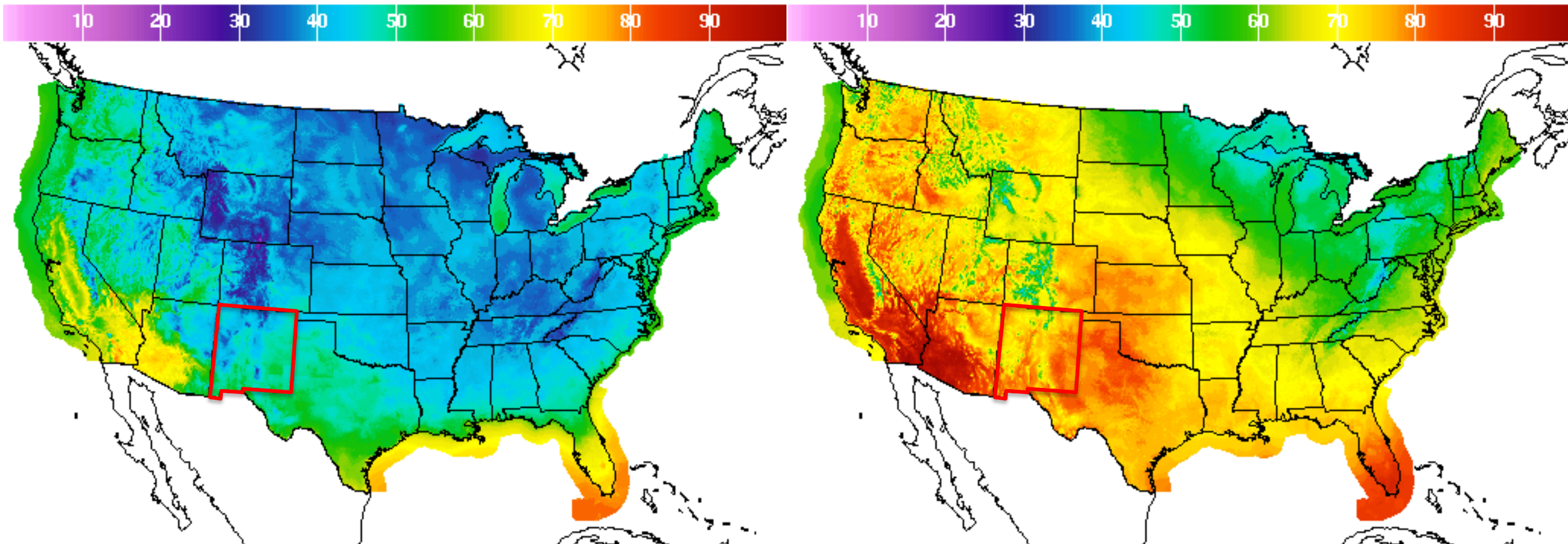
- NDFD Rain (Chance)
- NDFD Rain (Likely)
- NDFD Snow (Chance)
- NDFD Snow (Likely)
- NDFD Mix (Chance)
- NDFD Mix (Likely)
- NDFD Ice (Chance)
- NDFD Ice (Likely)
- NDFD T-Storm (Chance) (Hatched)
- NDFD T-Storm (Likely and/or Severe)

- 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 (Min / Max)

Minimum Temperature Saturday Night

Maximum Temperature Sunday



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

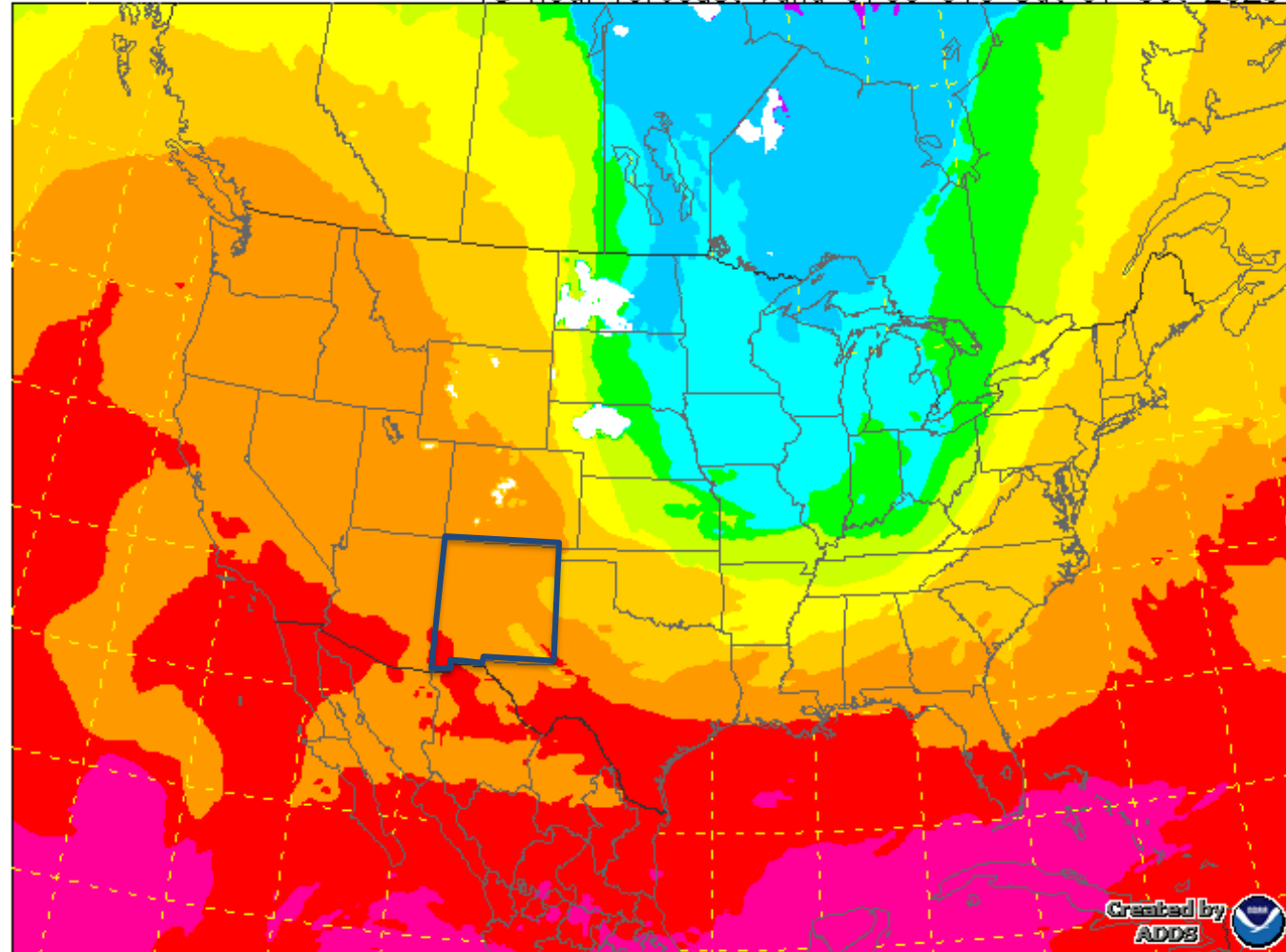
High Temperature(F) Ending Sun Oct 08 2023 8PM EDT
(Mon Oct 09 2023 00Z)



Freezing Level

Lowest freezing level (100s of feet MSL)

18 hour forecast valid 0700 UTC Sat 07 Oct 2023

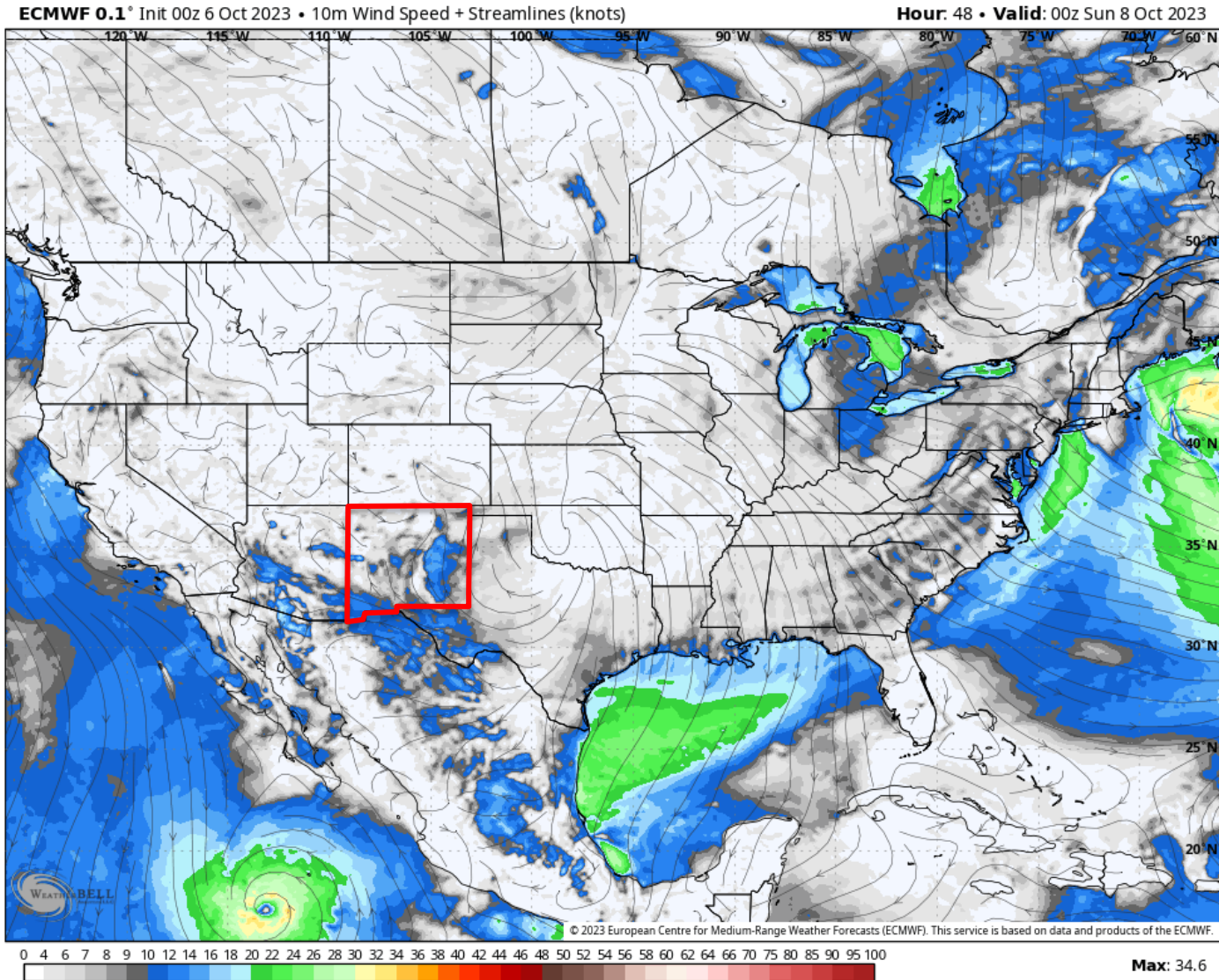


Sfc 010 030 050 070 090 110 130 150 170+
(100s of feet MSL)

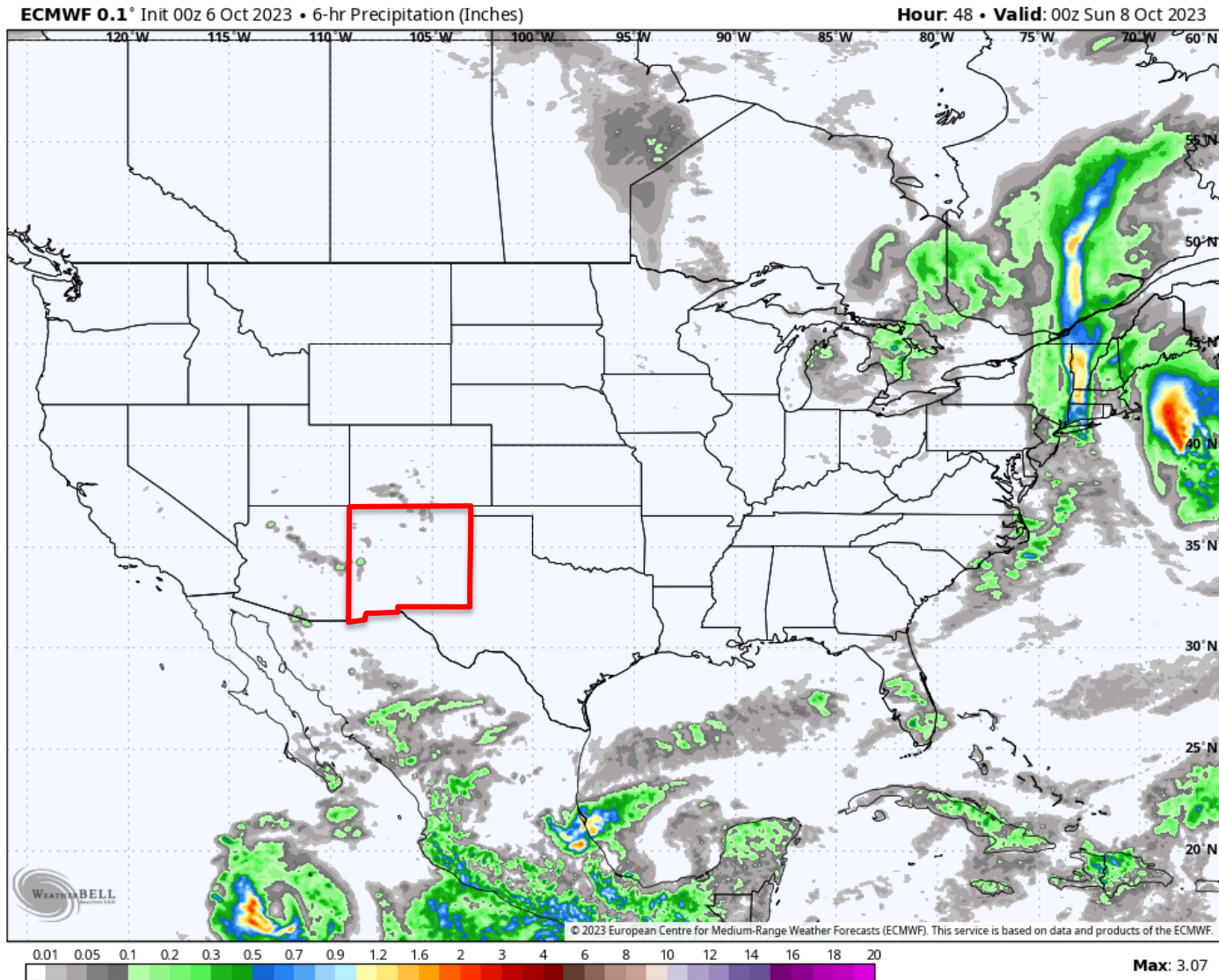
Created by
ADDS



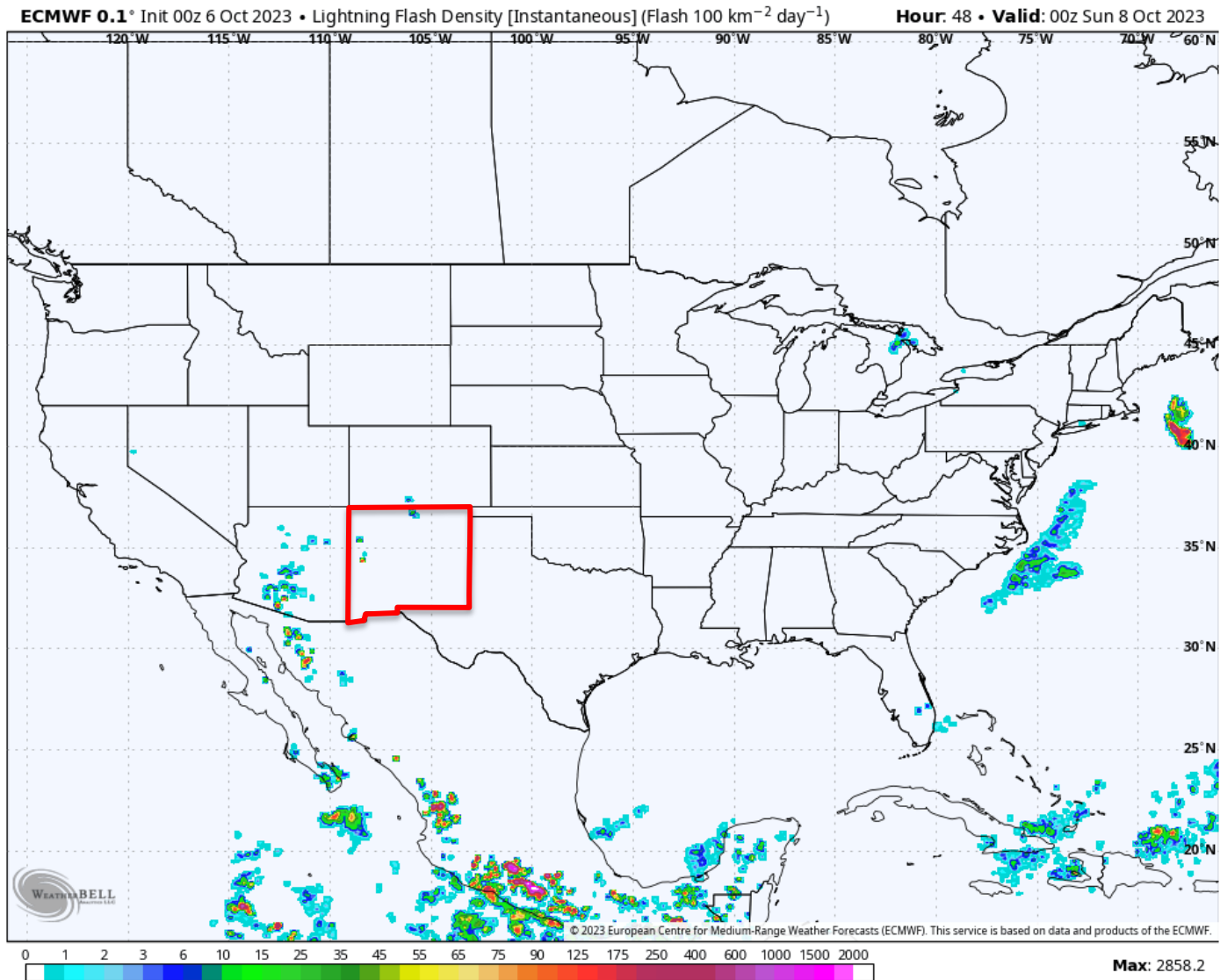
Surface Wind Speed Sat Evening to Wed Evening



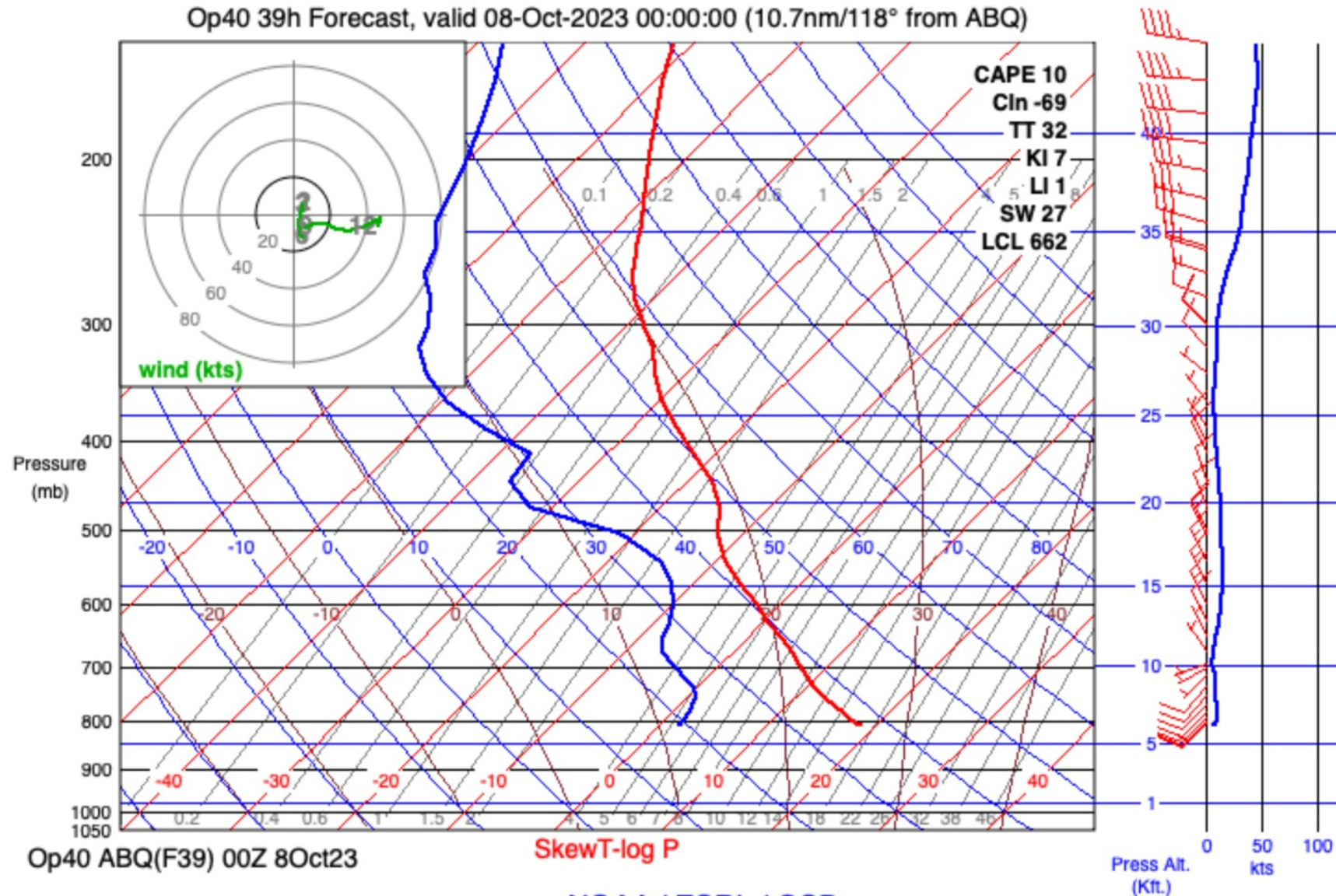
6-Hour Accumulated Precipitation Sat Evening to Wed Evening



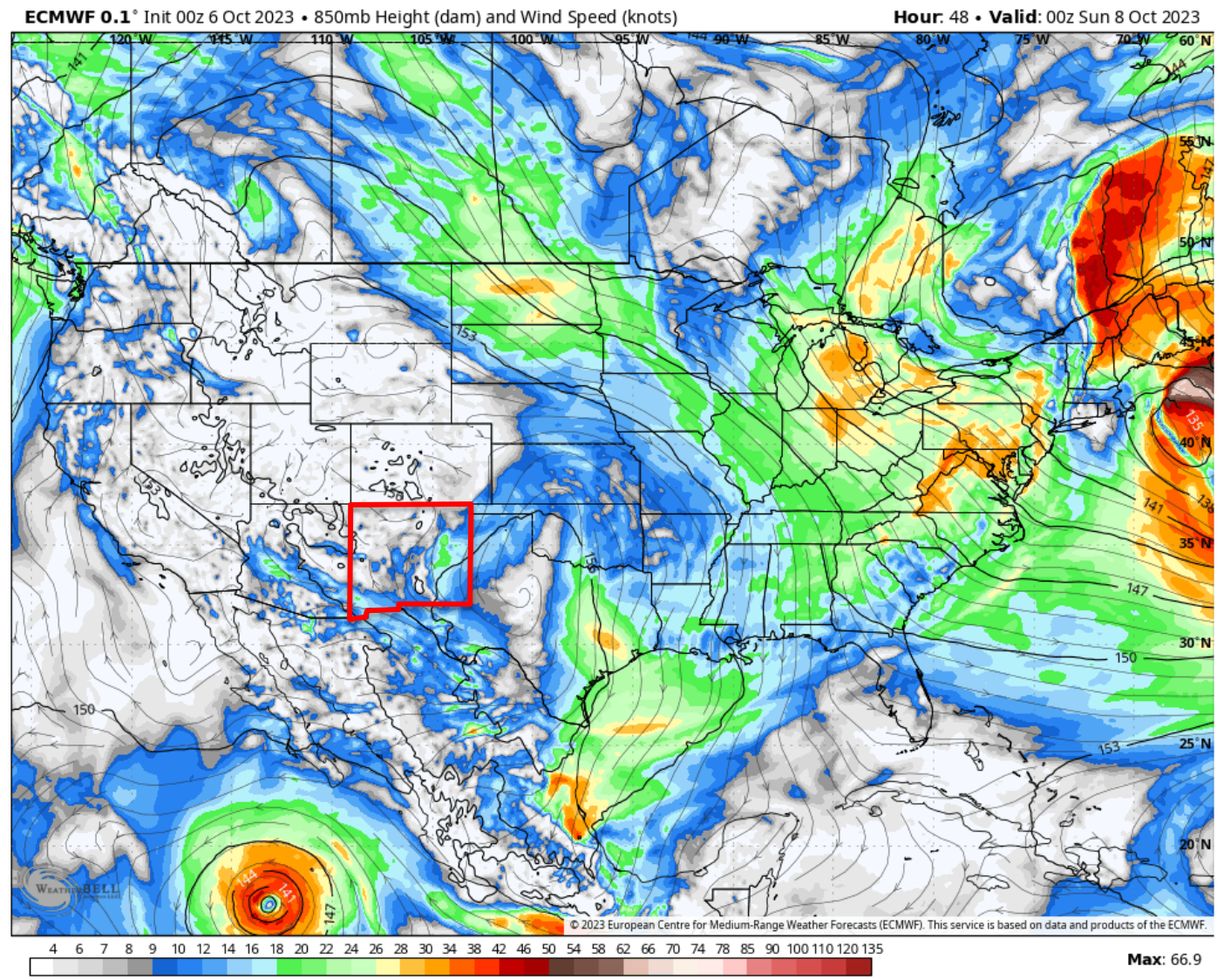
Forecast Lightning Sat Evening to Wed Evening



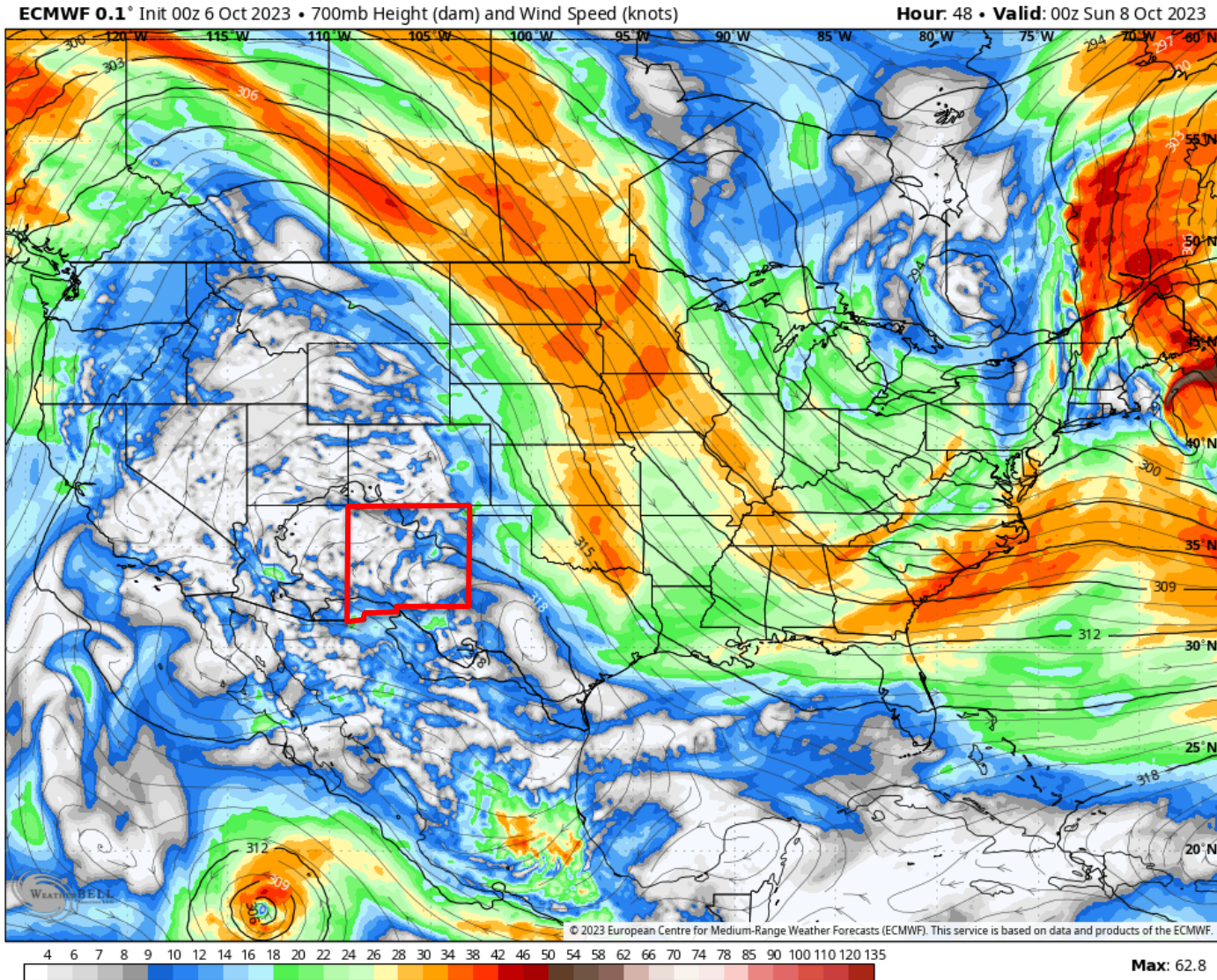
Forecast ABQ Skew-T at Launch



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

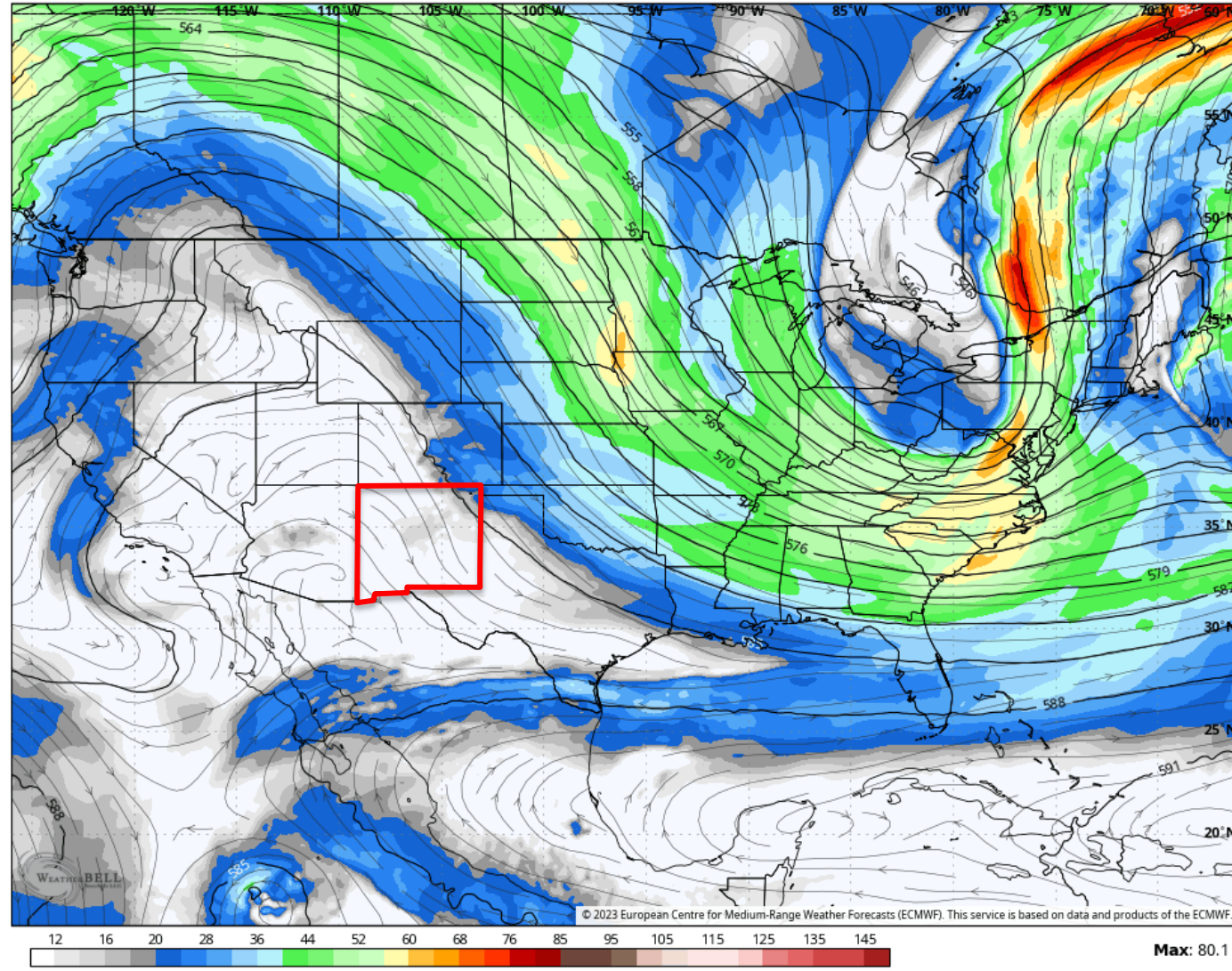


Wind 700 mb ~10kft (3,011m) Sat Evening to Wed Evening

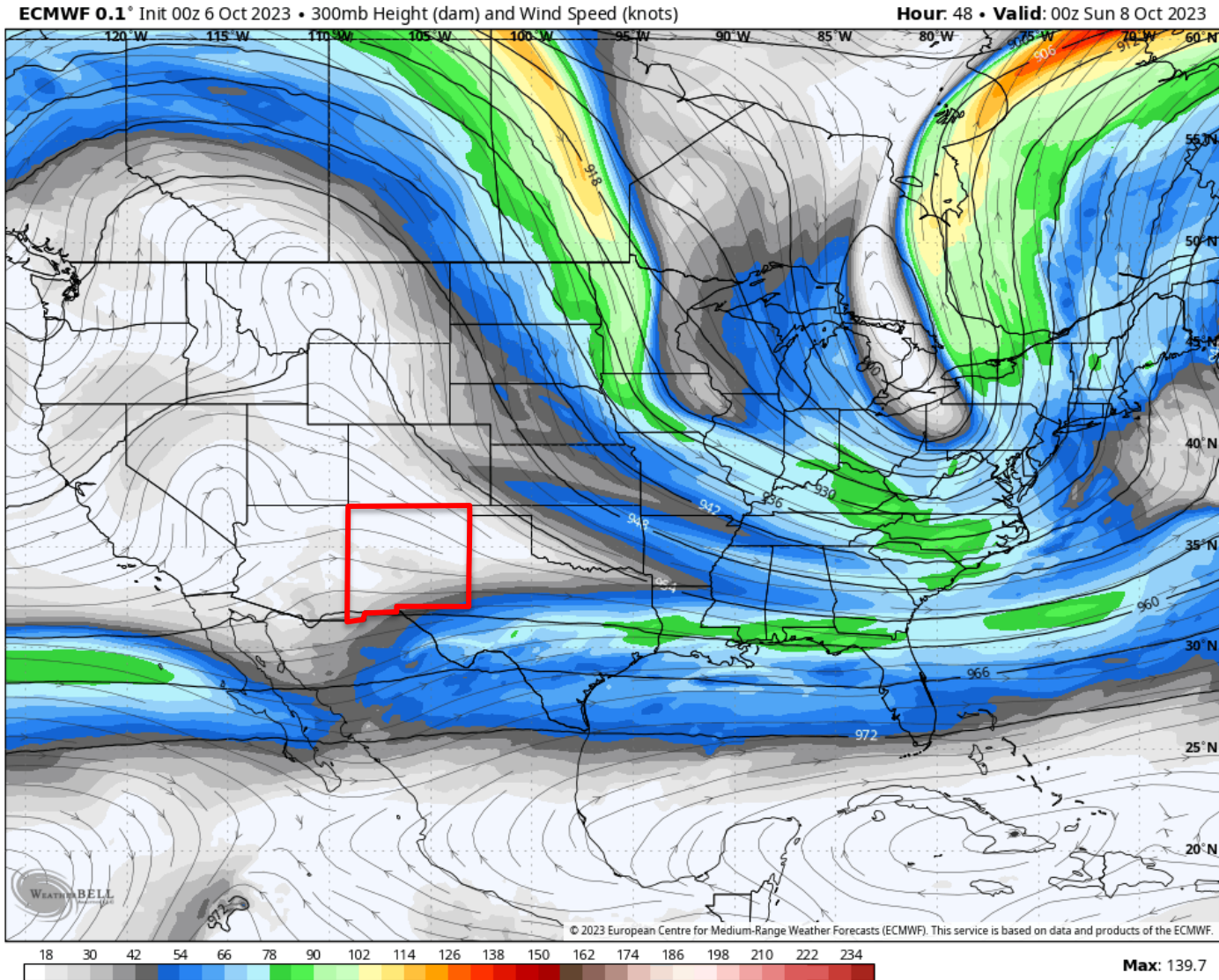


Wind 500 mb ~18kft (5,572m) Sat Evening to Wed Evening

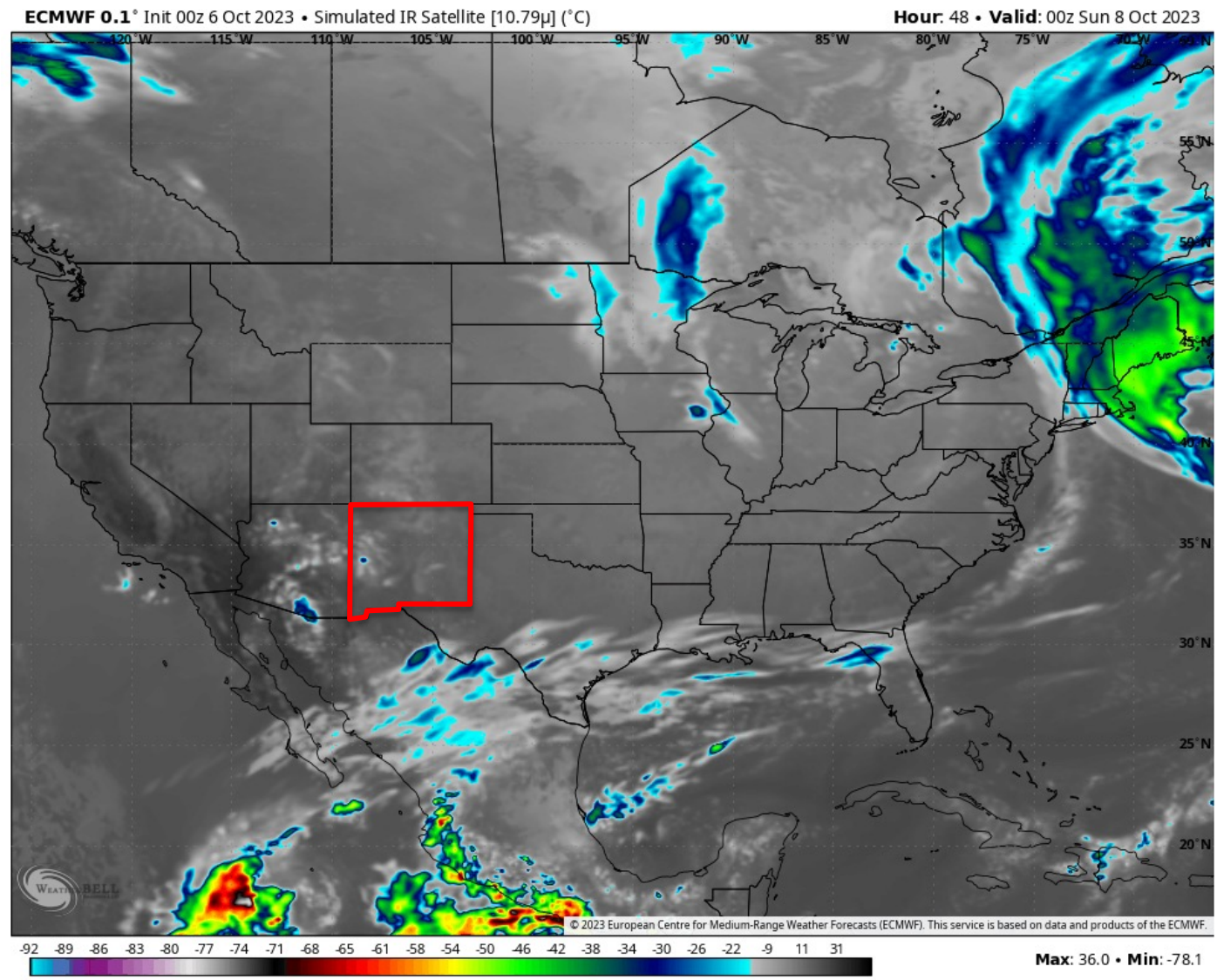
ECMWF 0.1° Init 00z 6 Oct 2023 • 500mb Height (dam) and Wind Speed (knots) Hour: 48 • Valid: 00z Sun 8 Oct 2023



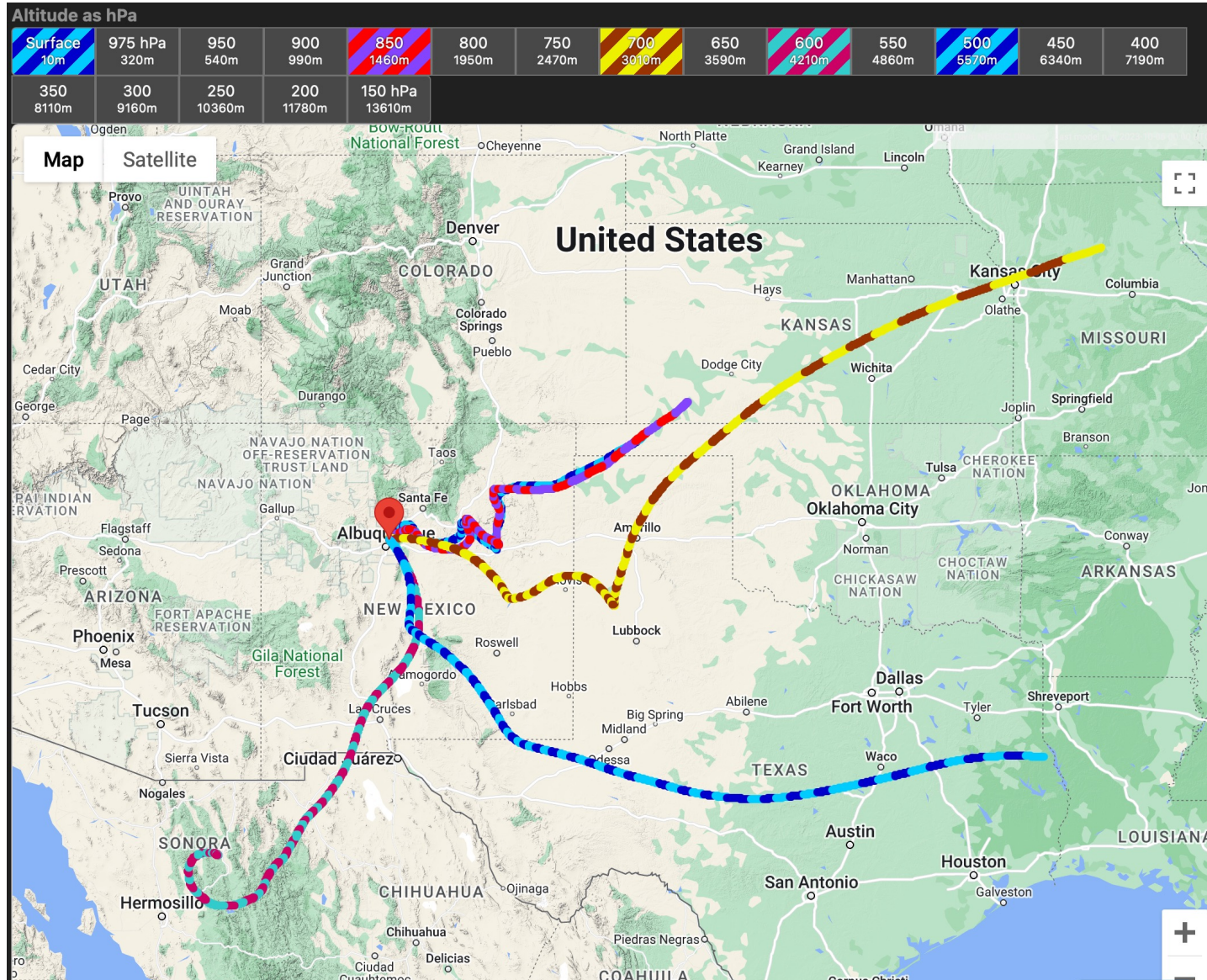
Wind 300 mb ~30kft (9,160m) Sat Evening to Wed Evening



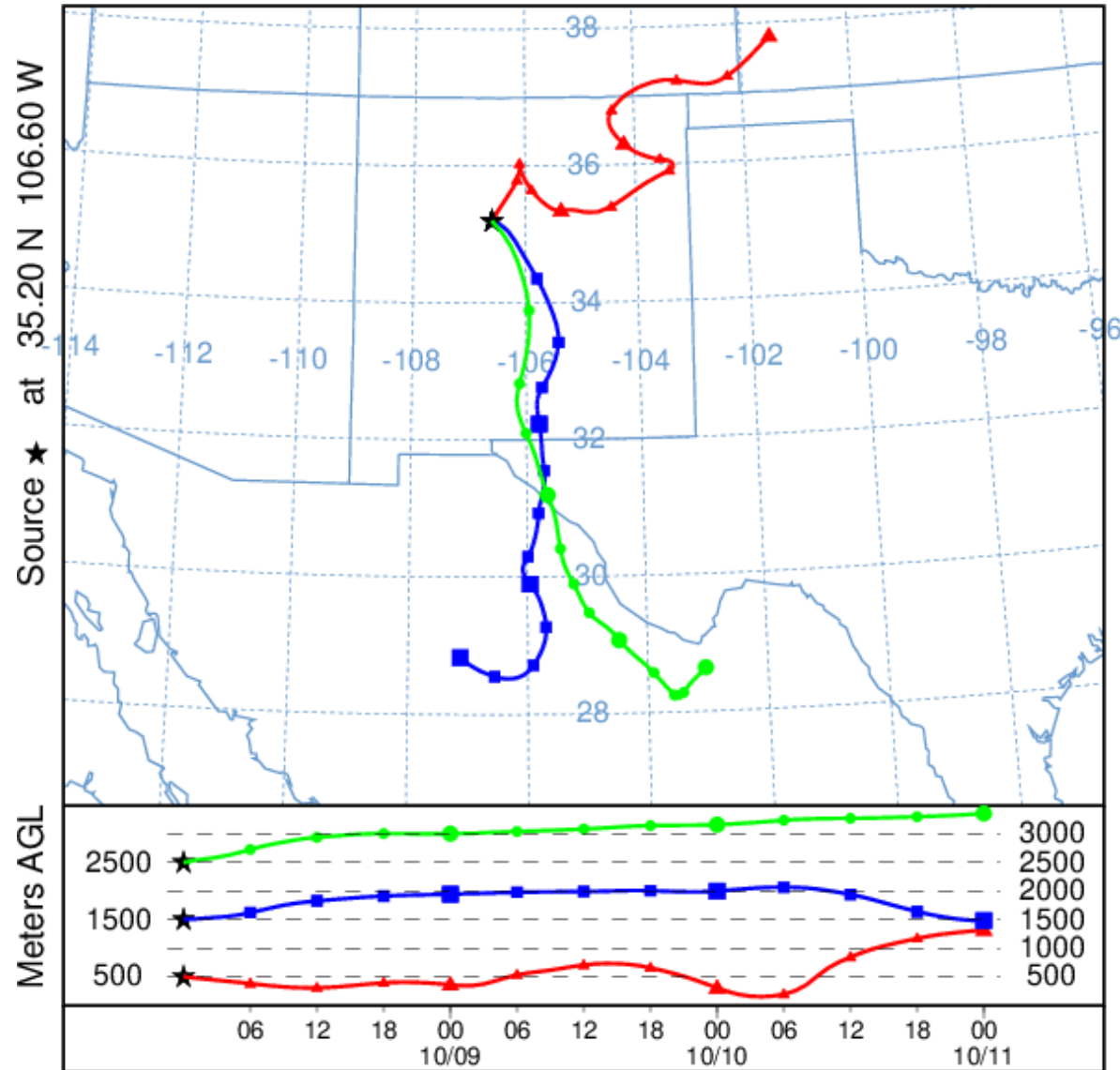
Simulated Cloud Cover Sat Evening to Wed Evening



24 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 after sunset
- ✓ 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