

**APPENDIX A**

**WEATHER MAPS AND GRAPHS**

**EXCEPTIONAL EVENTS DEMONSTRATION FOR 2023 AND 2024  
PM<sub>2.5</sub> EXCEEDANCES AT EL PASO COUNTY**

**AUGUST 5, 2025**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
P.O. BOX 13087  
AUSTIN, TEXAS 78711-3087**

## APPENDIX A: WEATHER MAPS AND GRAPHS

### A.1: GROUP 1 - JANUARY 10, 2023

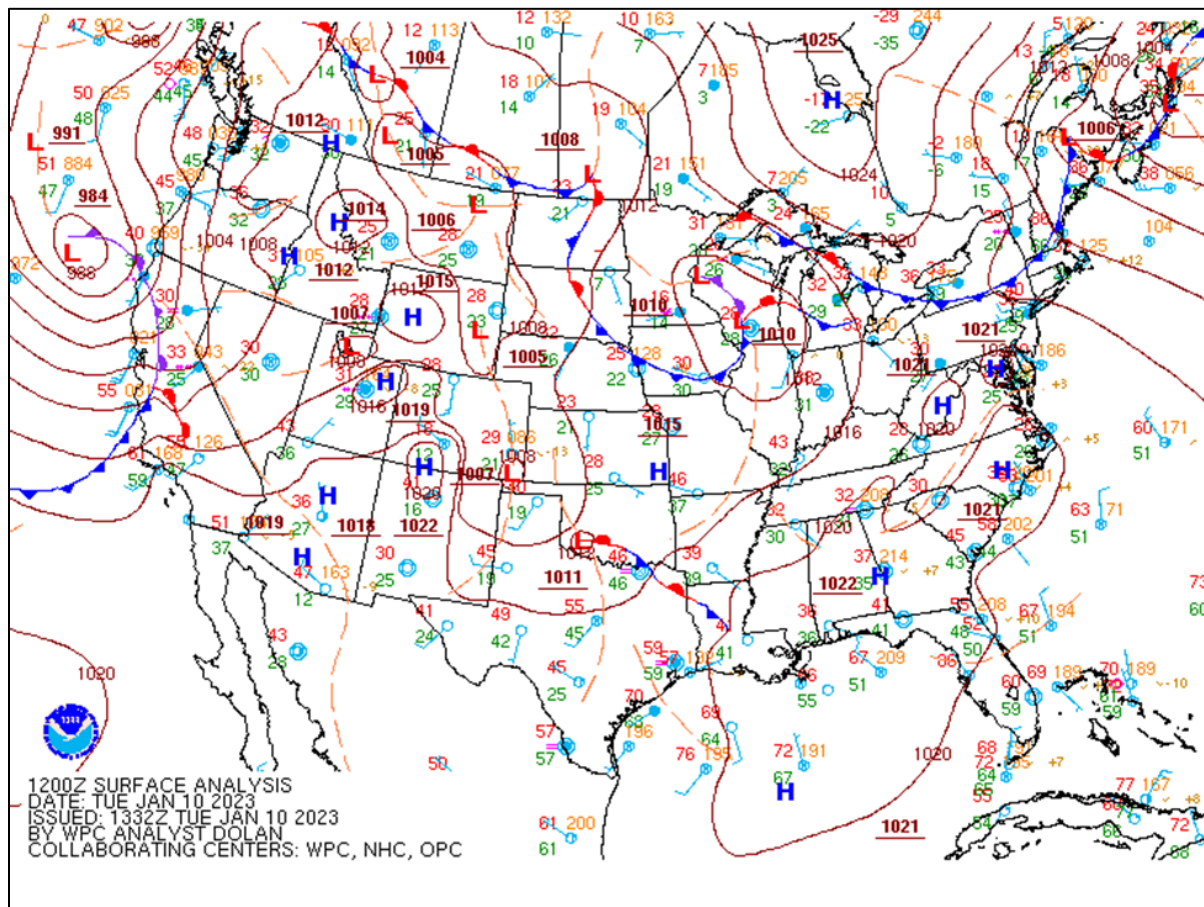


Figure A-1: National Weather Service Weather Prediction Center (January 10, 2023) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

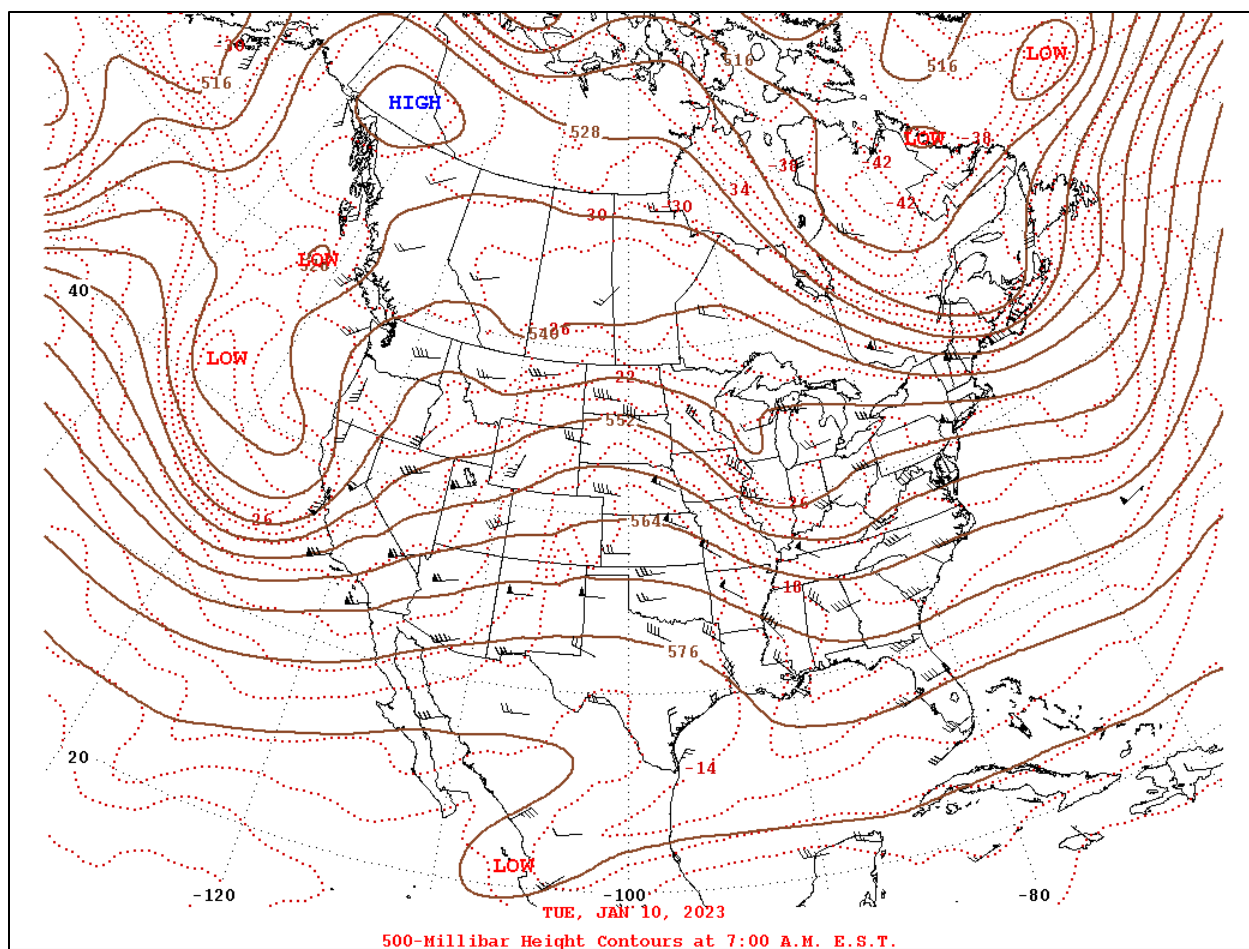


Figure A-2: National Weather Service Weather Prediction Center (January 10, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

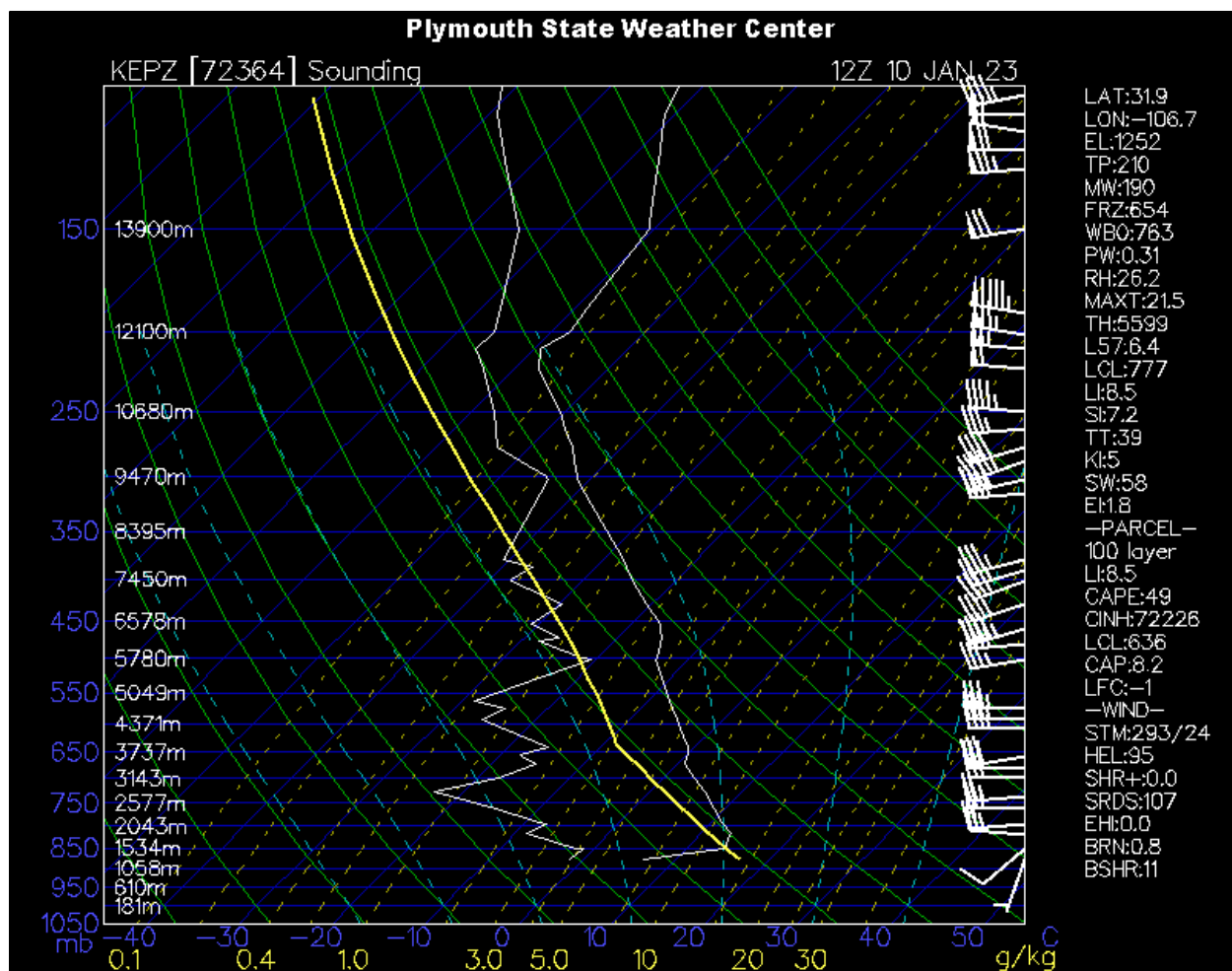


Figure A-3: Upper Air Sounding Chart from Santa Teresa, New Mexico for January 10, 2023, at (12Z) 6:00 a.m. CST

A.2: GROUP 2 - JANUARY 28 2023

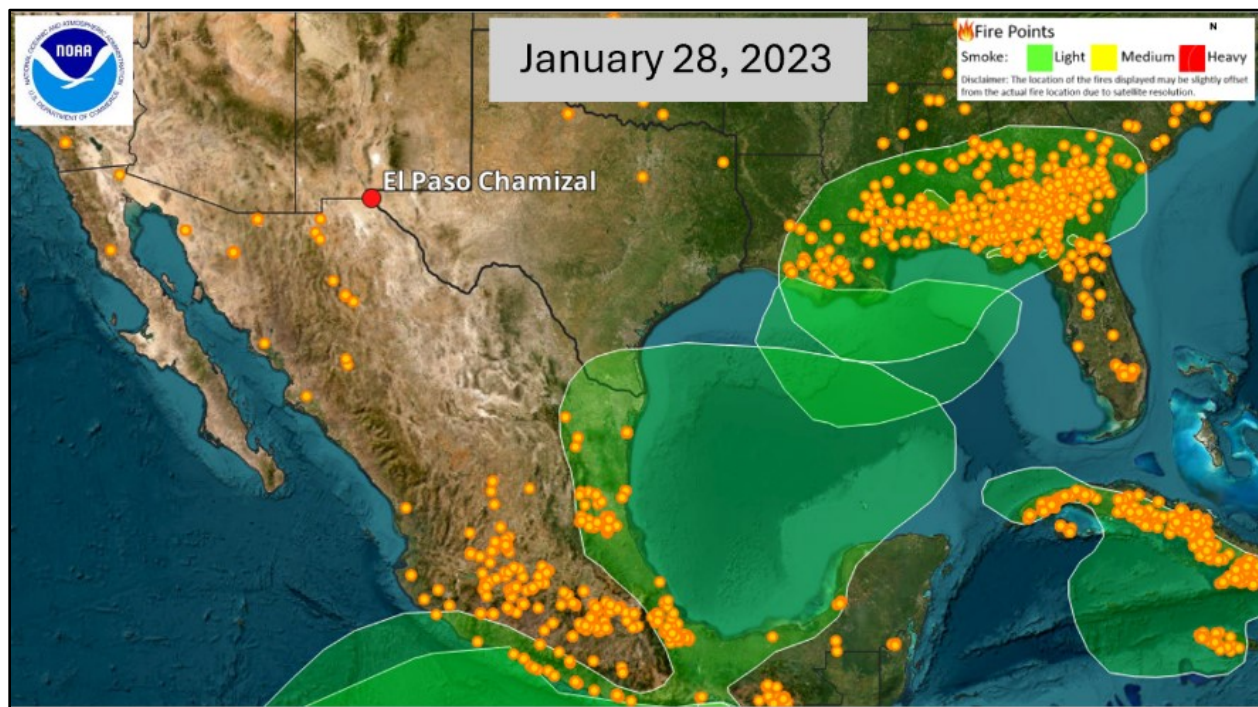
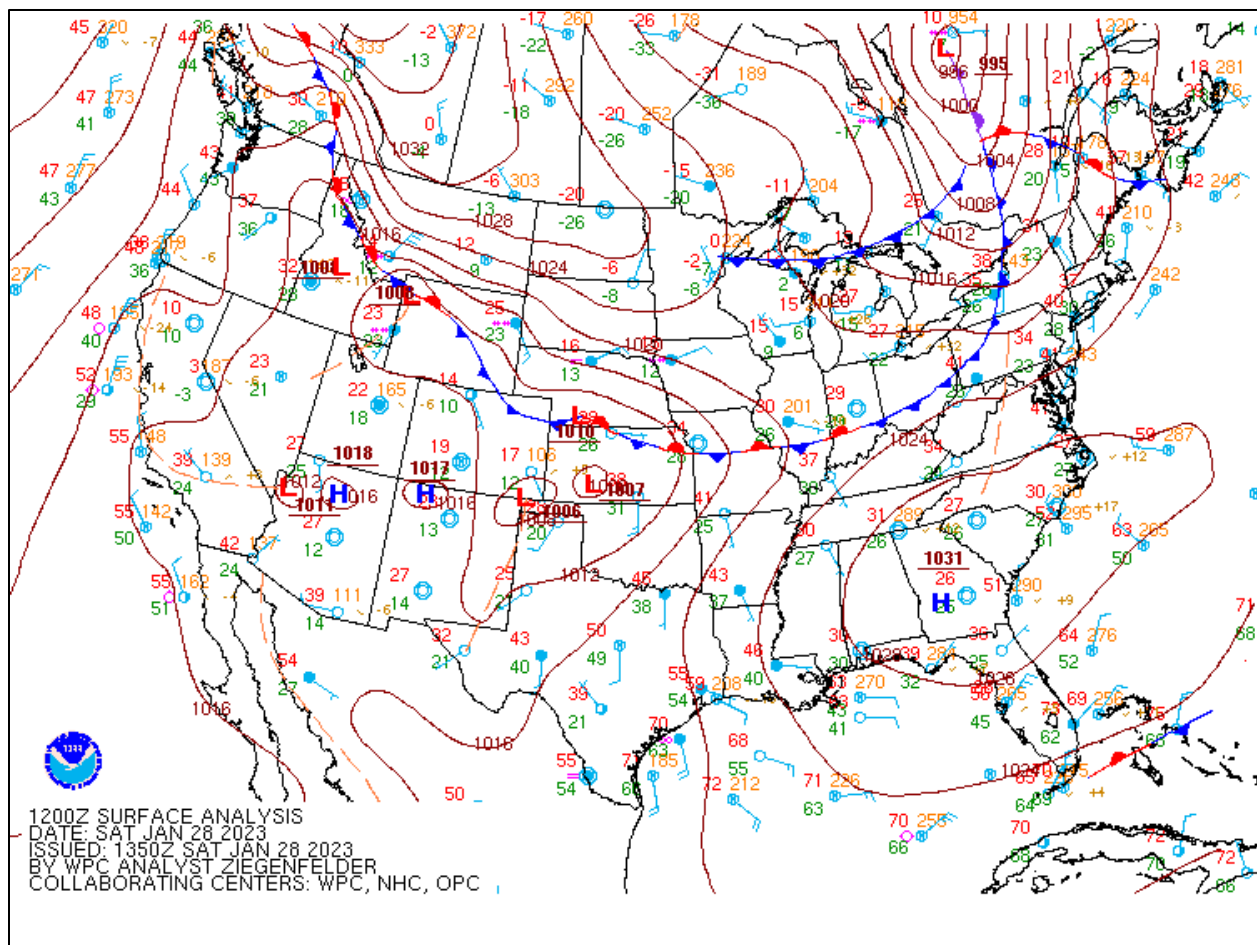


Figure A-4: NOAA HMS Fire and Smoke Map on January 28, 2024



**Figure A-5: National Weather Service Weather Prediction Center (January 28, 2023) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**



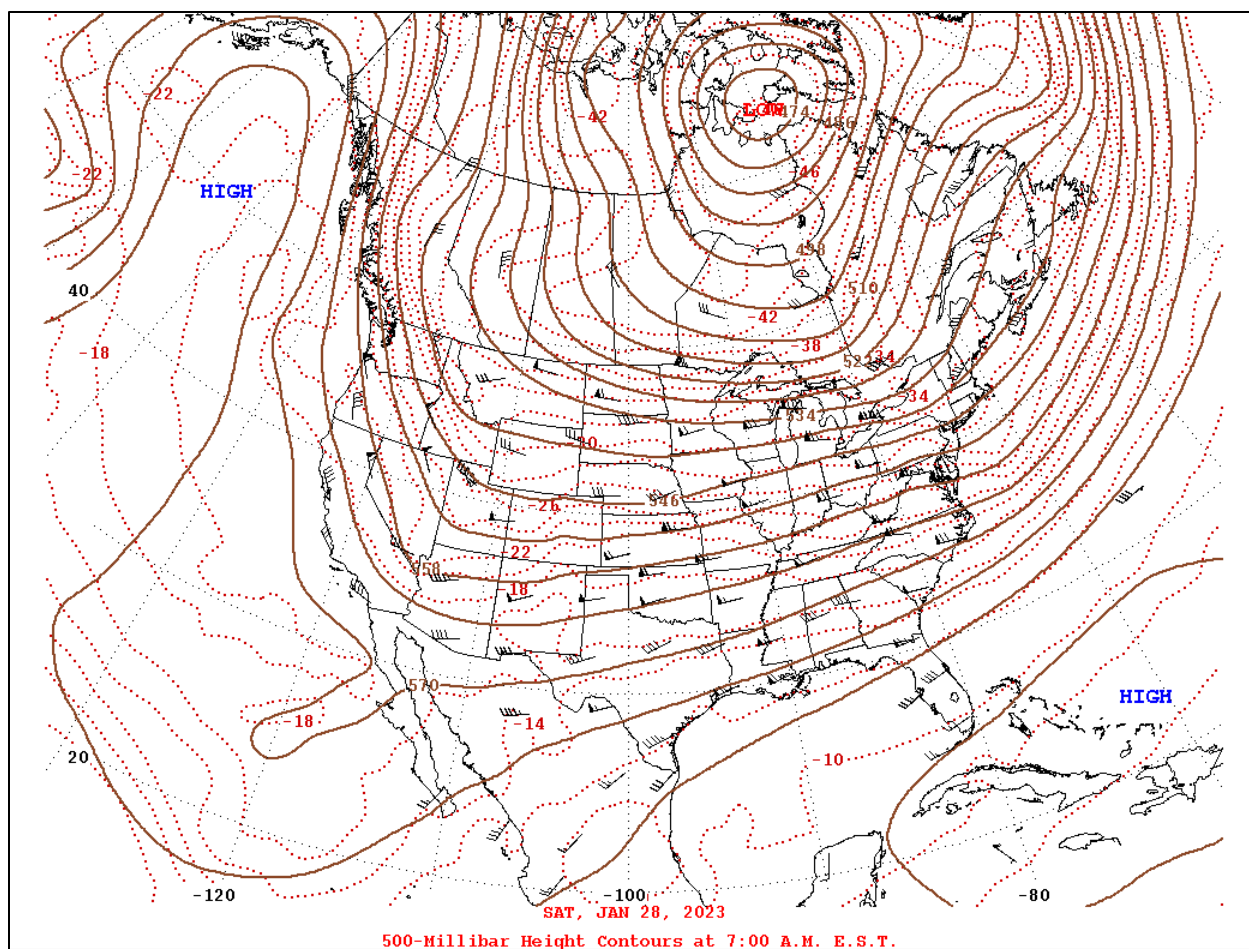


Figure A-6: National Weather Service Weather Prediction Center (January 28, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

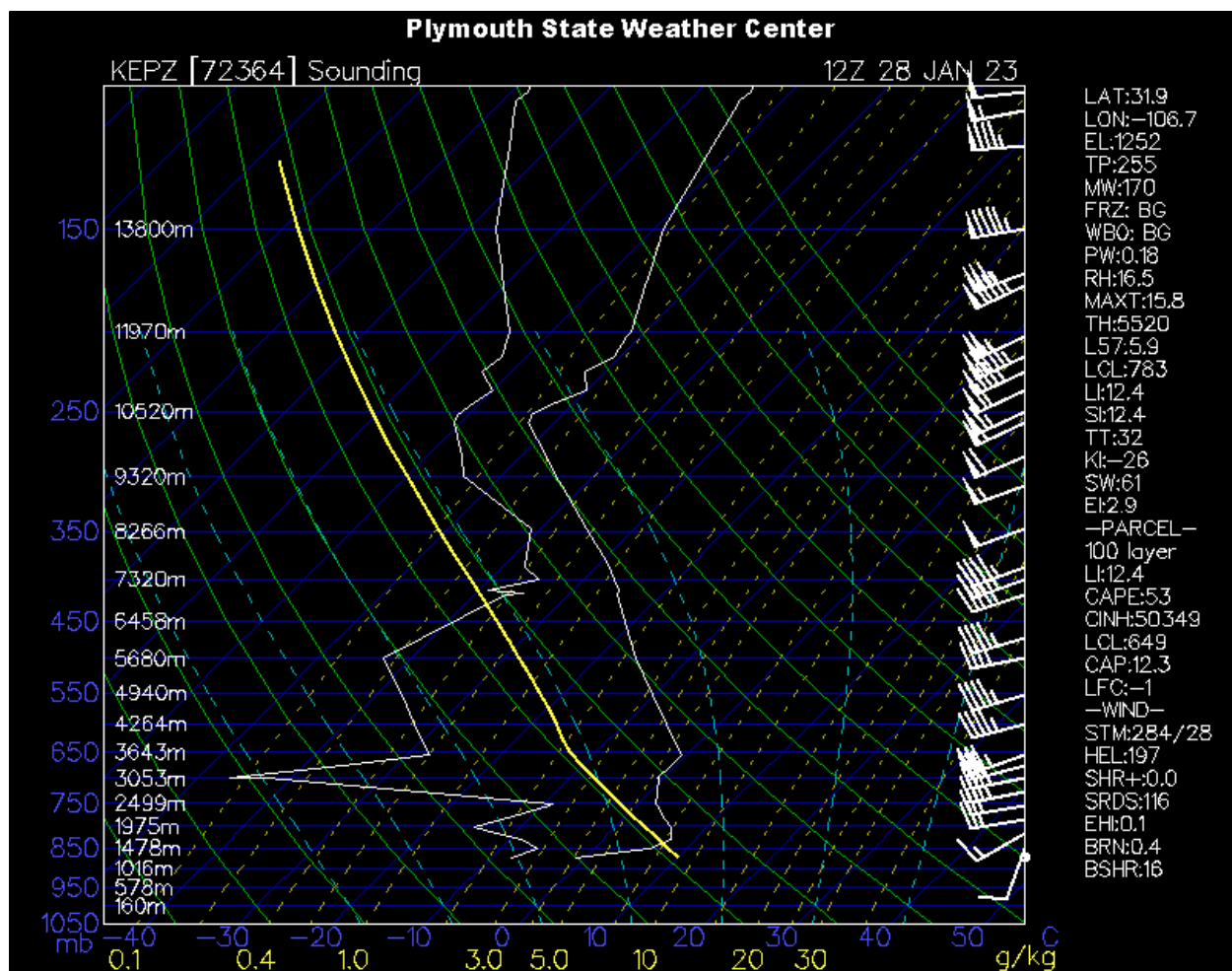


Figure A-7: Upper Air Sounding Chart from Santa Teresa, New Mexico for January 28, 2023, at (12Z) 6:00 a.m. CST



A.3: GROUP 3 - FEBRUARY 5, 2023

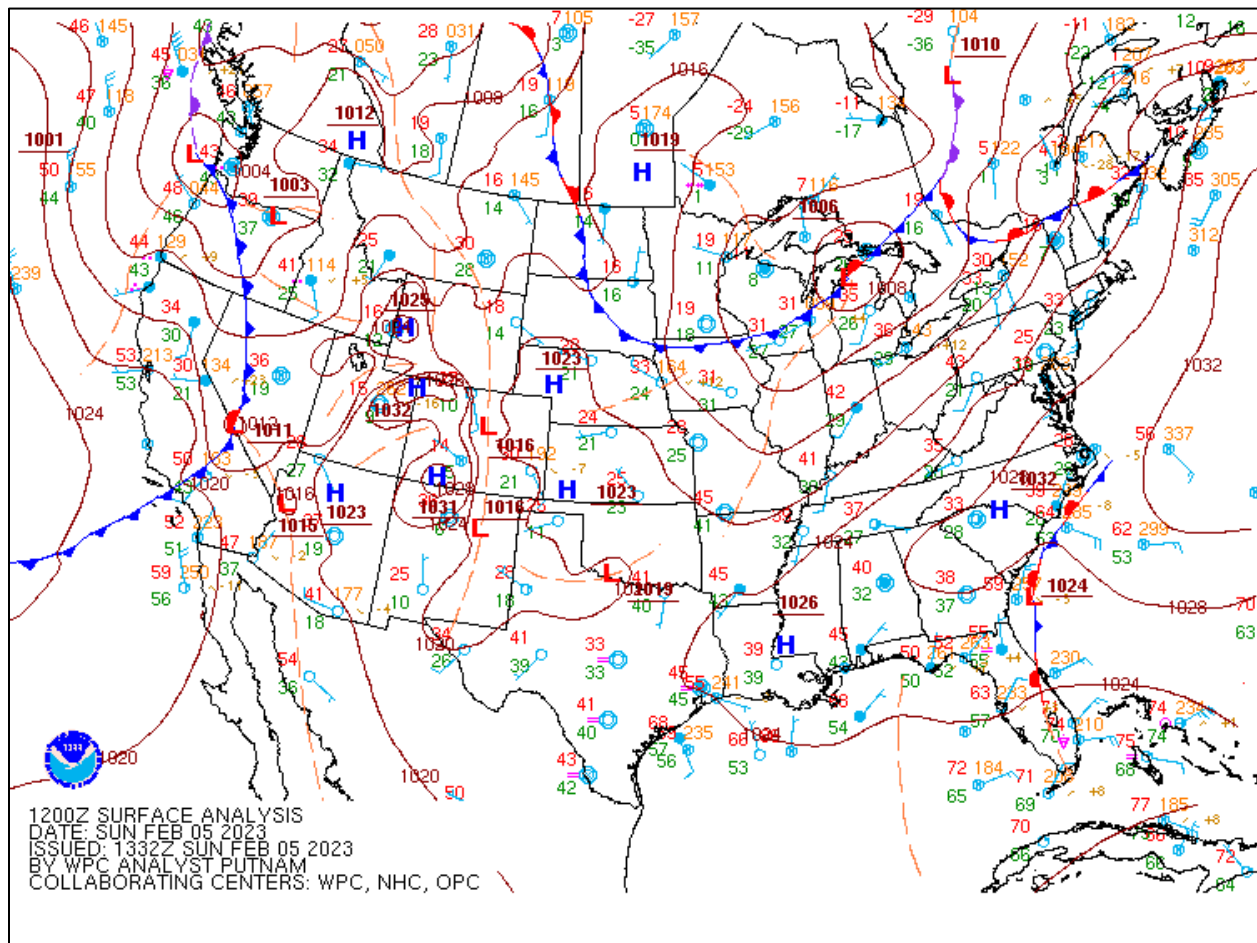


Figure A-8: National Weather Service Weather Prediction Center (February 5, 2023) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

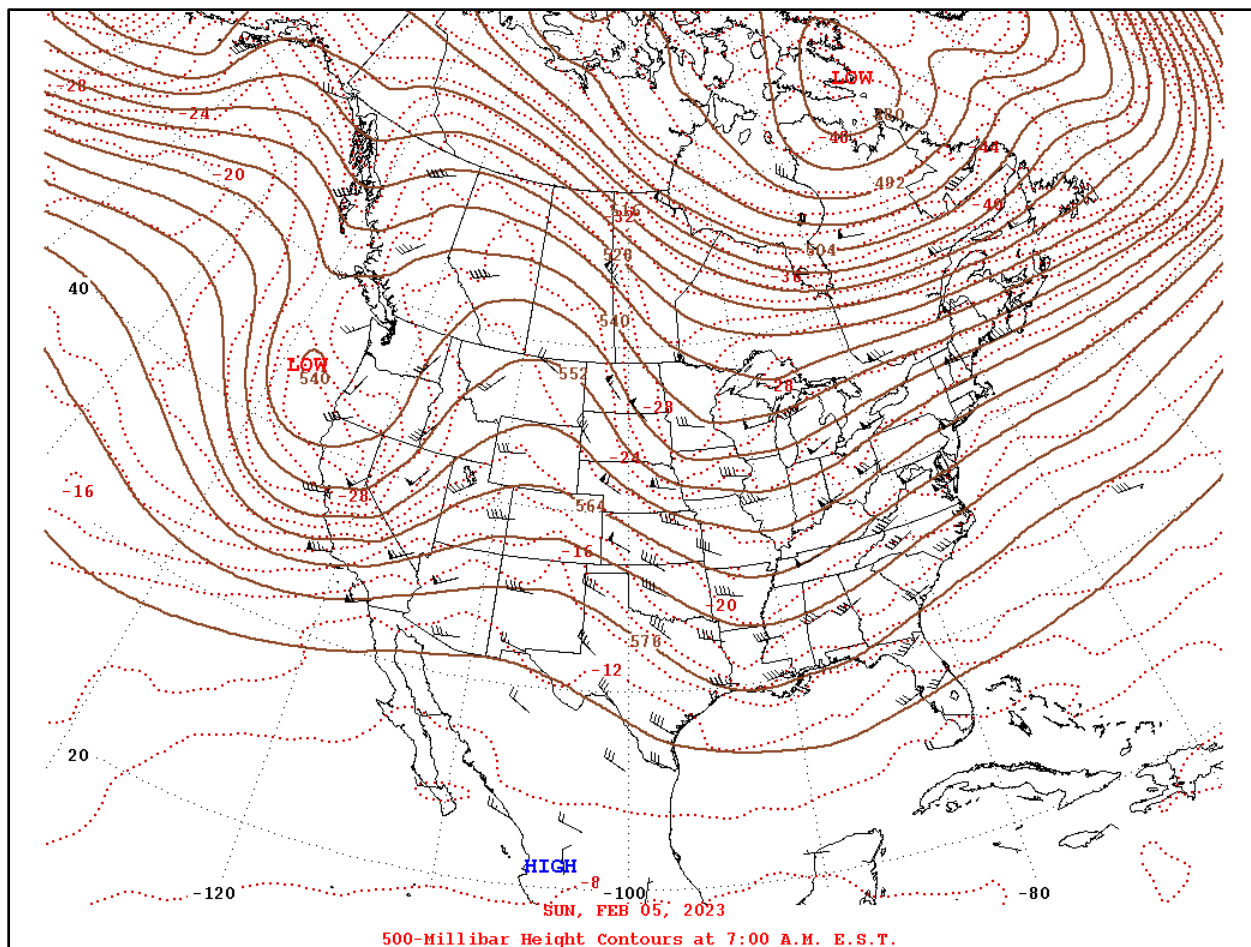


Figure A-9: National Weather Service Weather Prediction Center (February 5, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

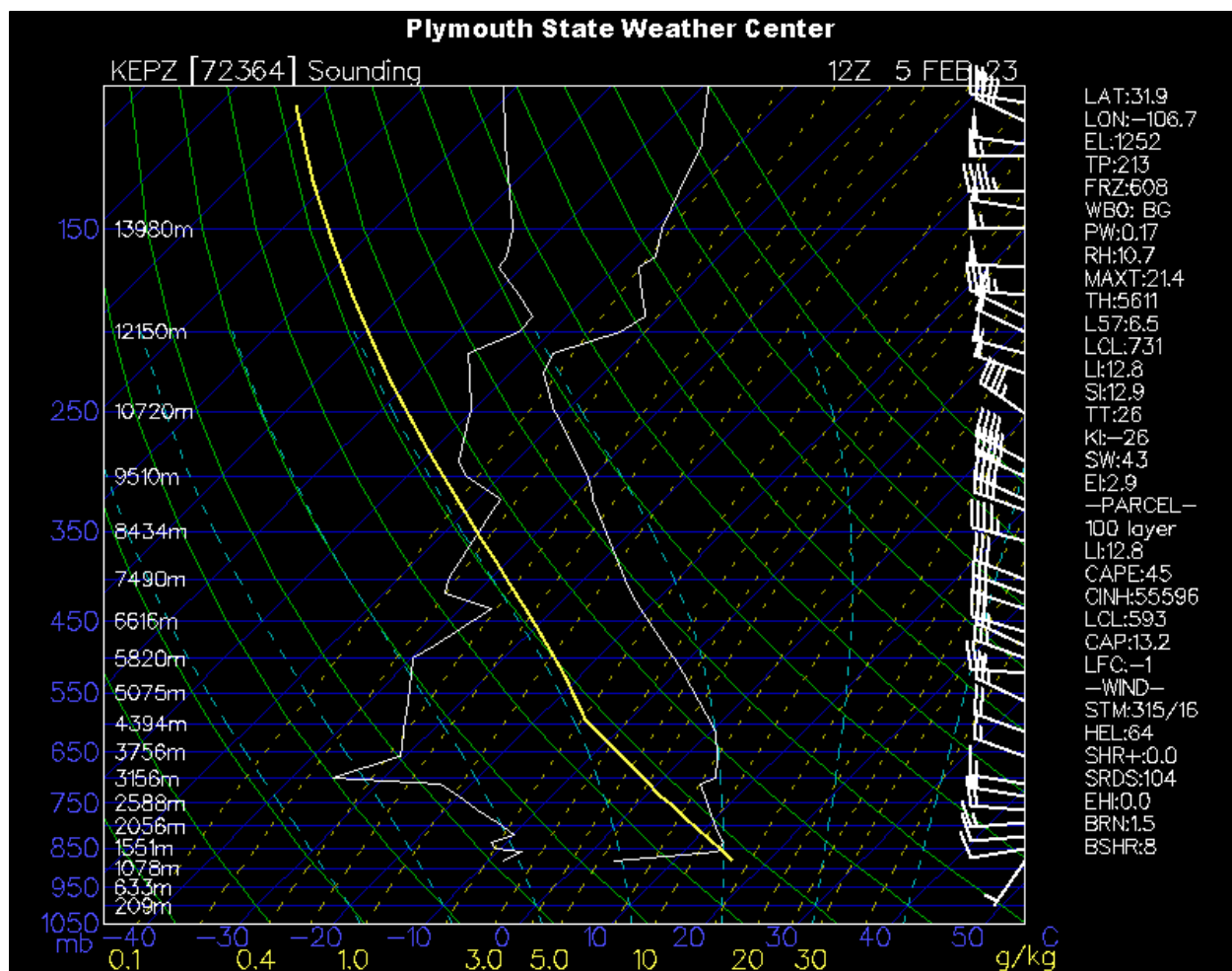
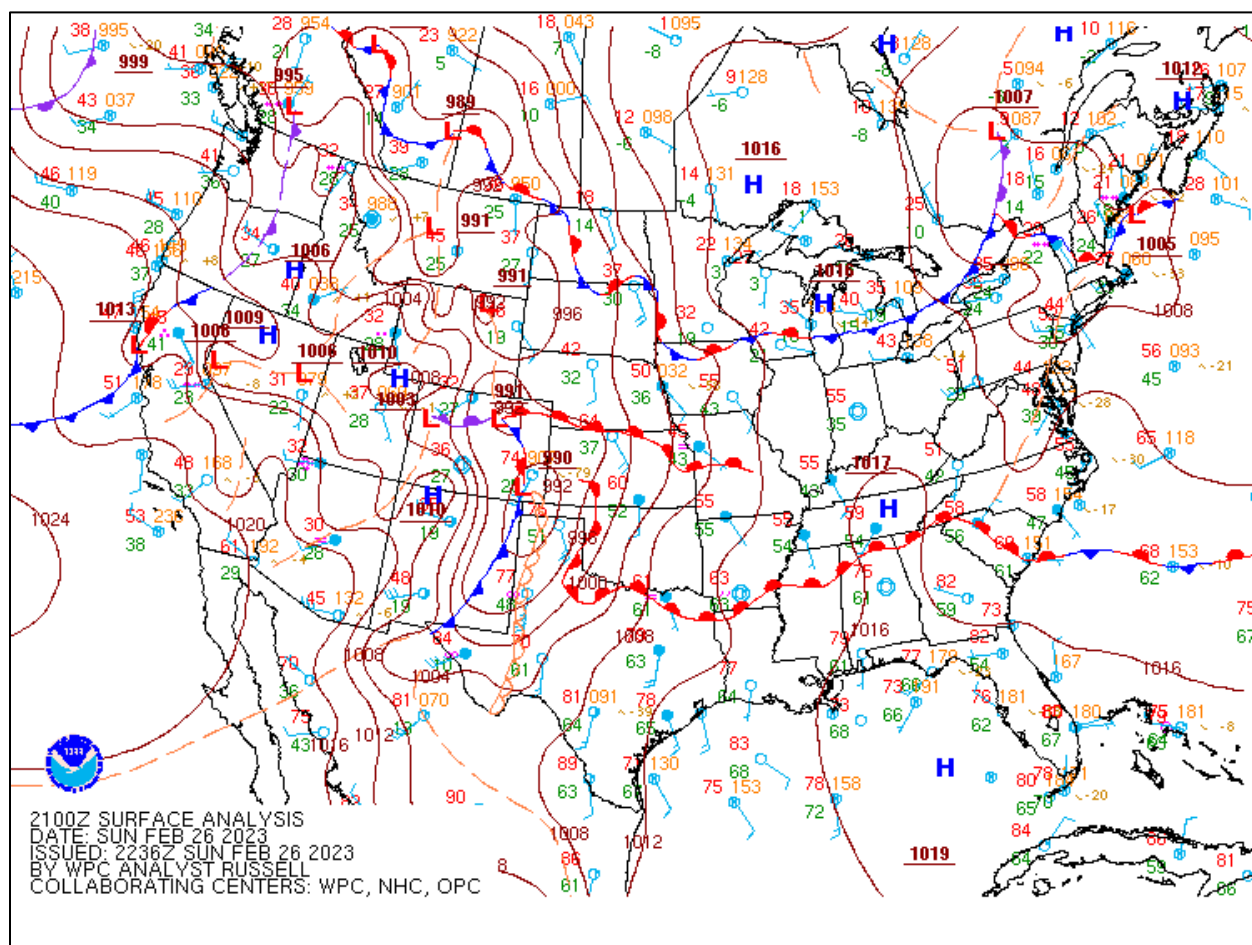


Figure A-10: Upper Air Sounding Chart from Santa Teresa, New Mexico for February 5, 2023, at (12Z) 6:00 a.m. CST

#### A.4: GROUP 4 – FEBURARY 26, 2023



**Figure A-11: National Weather Service Weather Prediction Center (February 26, 2023) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**

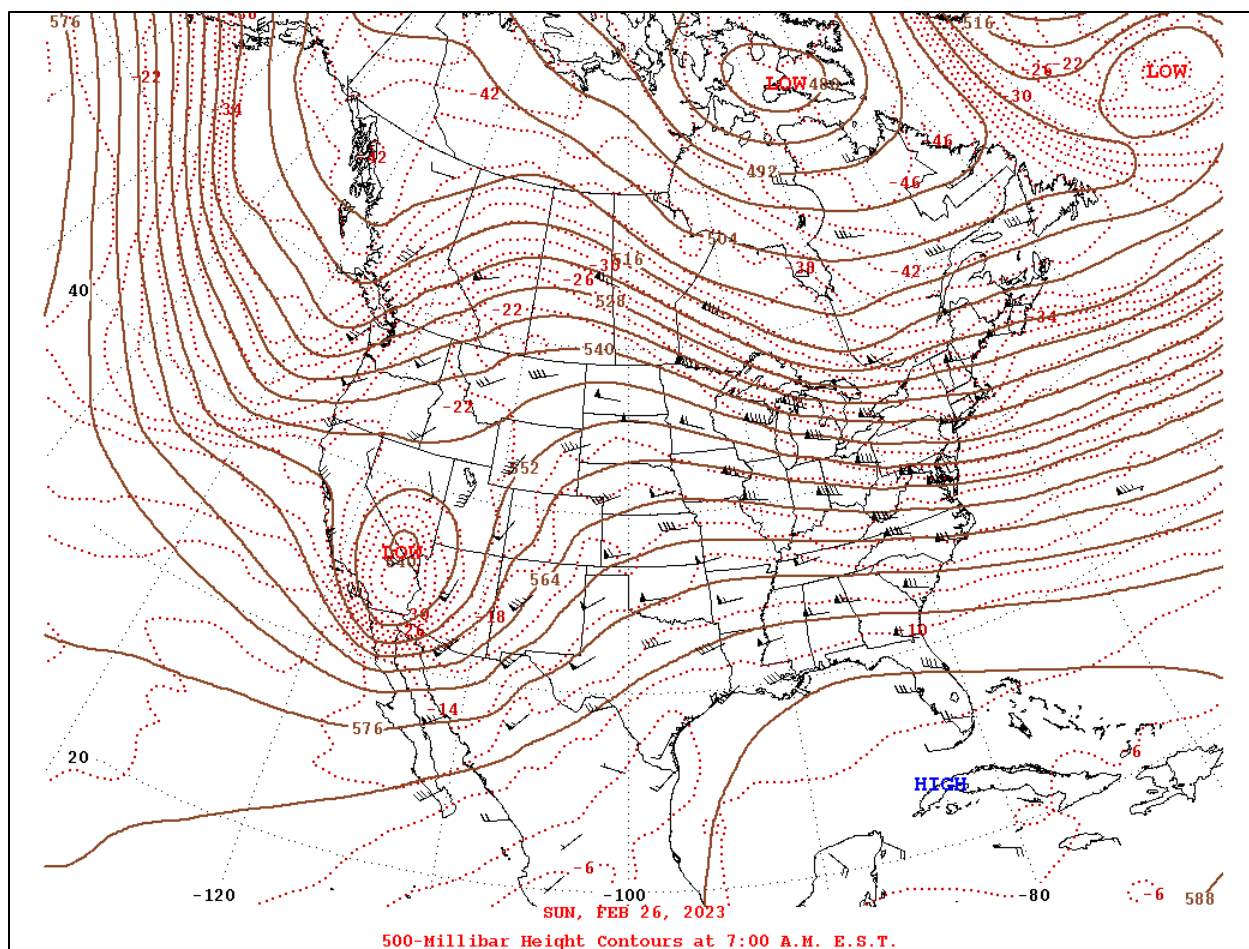


Figure A-12: National Weather Service Weather Prediction Center (February 26, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.5: GROUP 5 - NOVEMBER 5, 2023

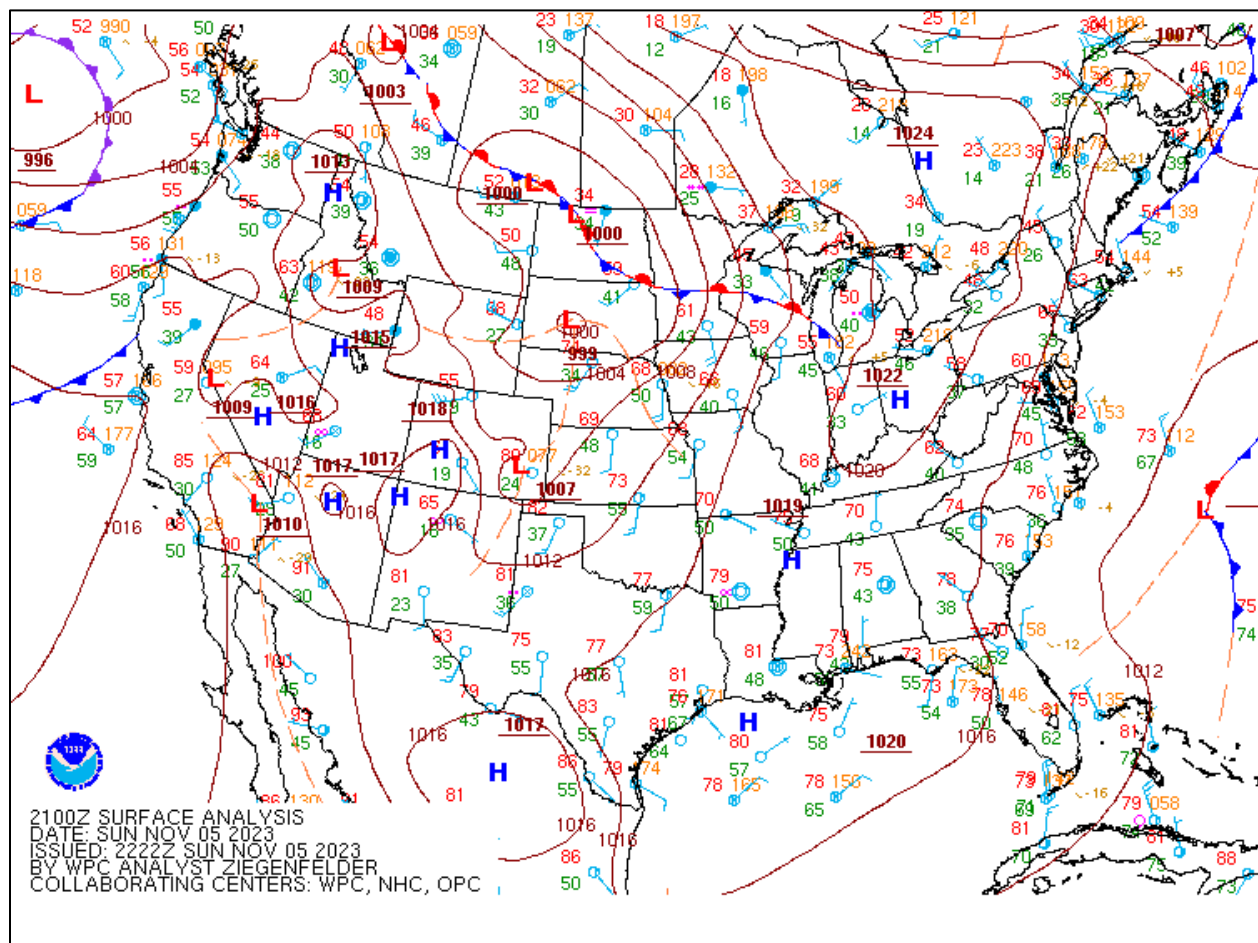


Figure A-13: National Weather Service Weather Prediction Center (November 5, 2023) CONUS Surface Analysis (12Z) 6:00 a.m. CDT



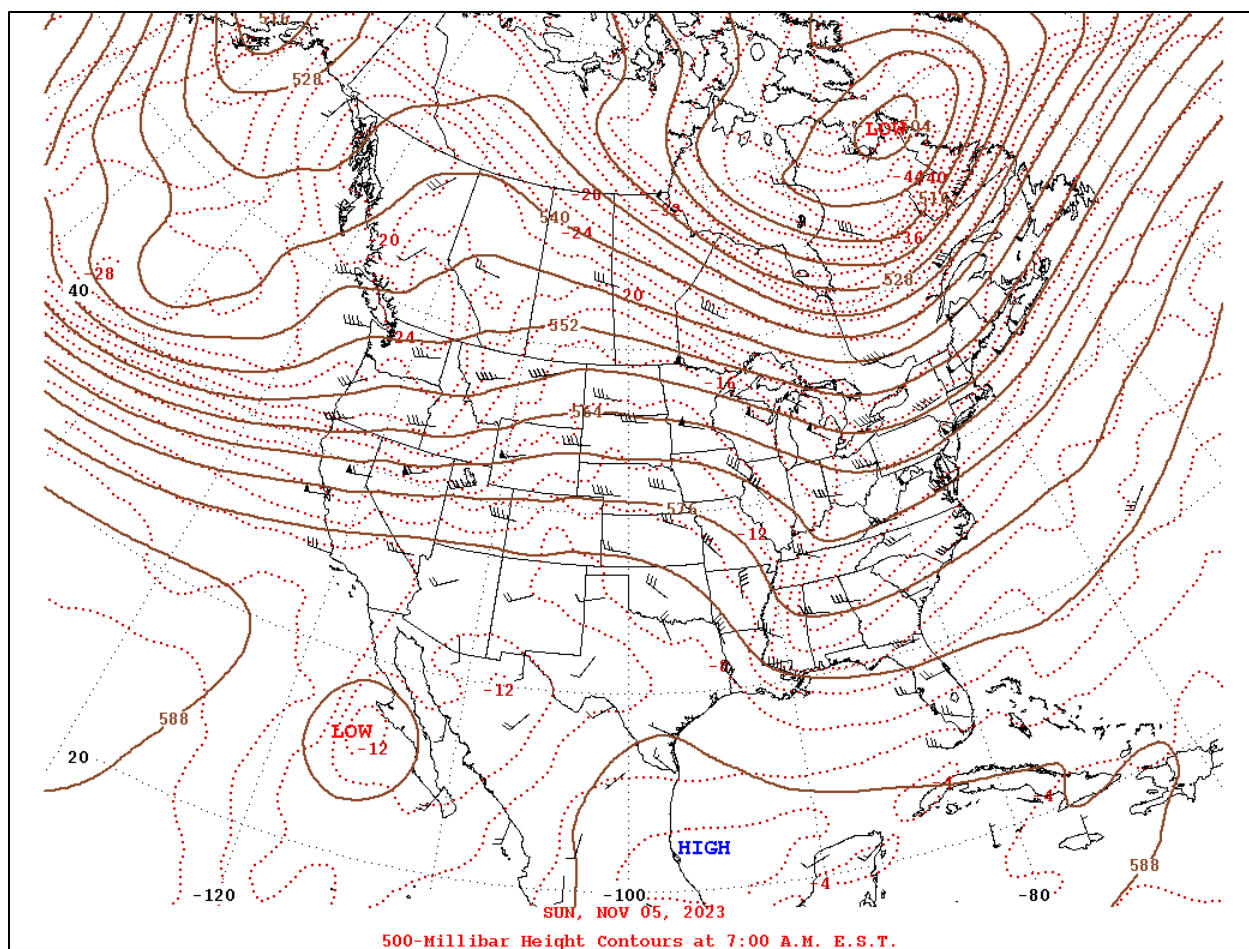


Figure A-14: National Weather Service Weather Prediction Center (November 5, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.6: GROUP 6 – NOVEMBER 23, 2023

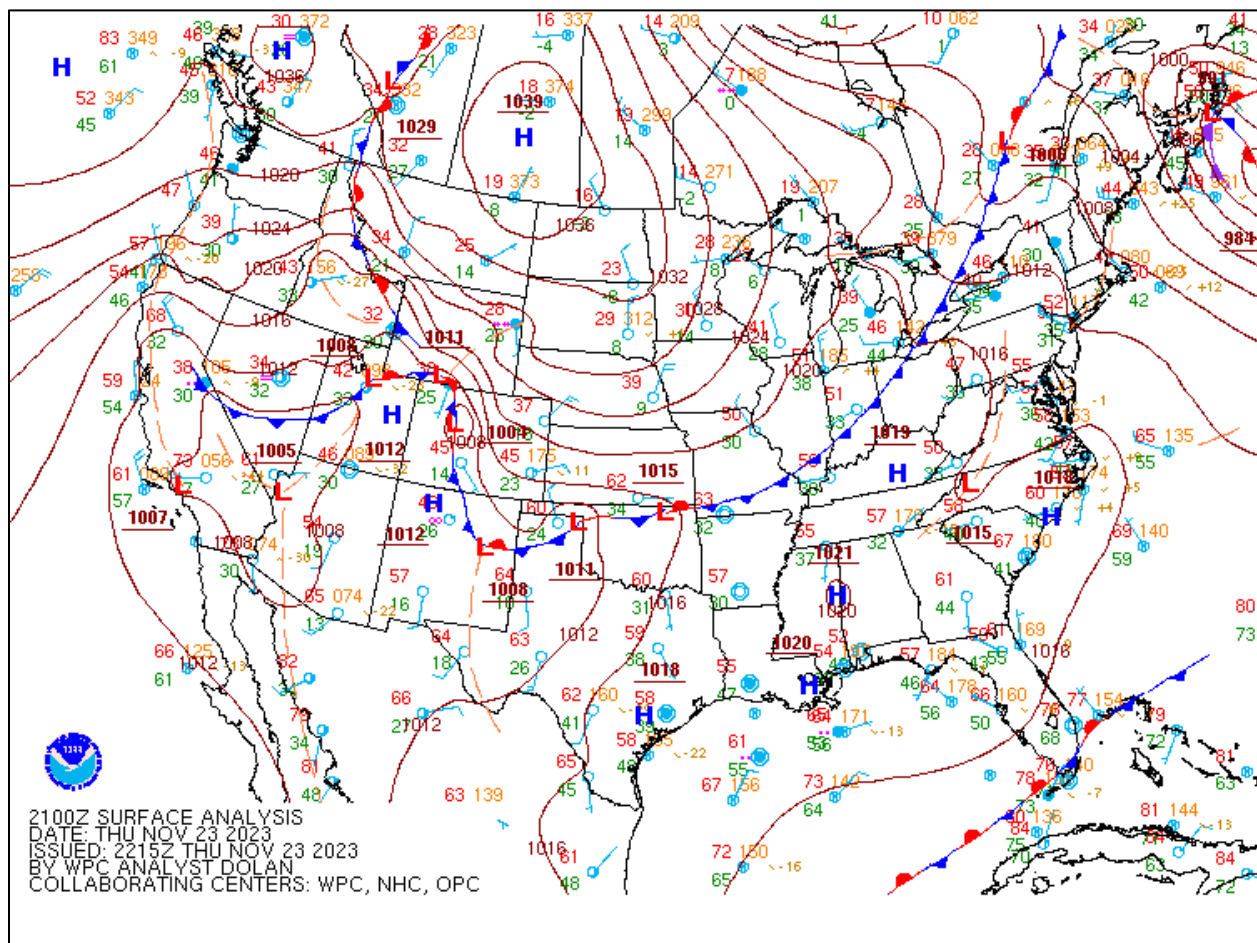


Figure A-15: National Weather Service Weather Prediction Center (November 23, 2023)  
 CONUS Surface Analysis (12Z) 6:00 a.m. CDT

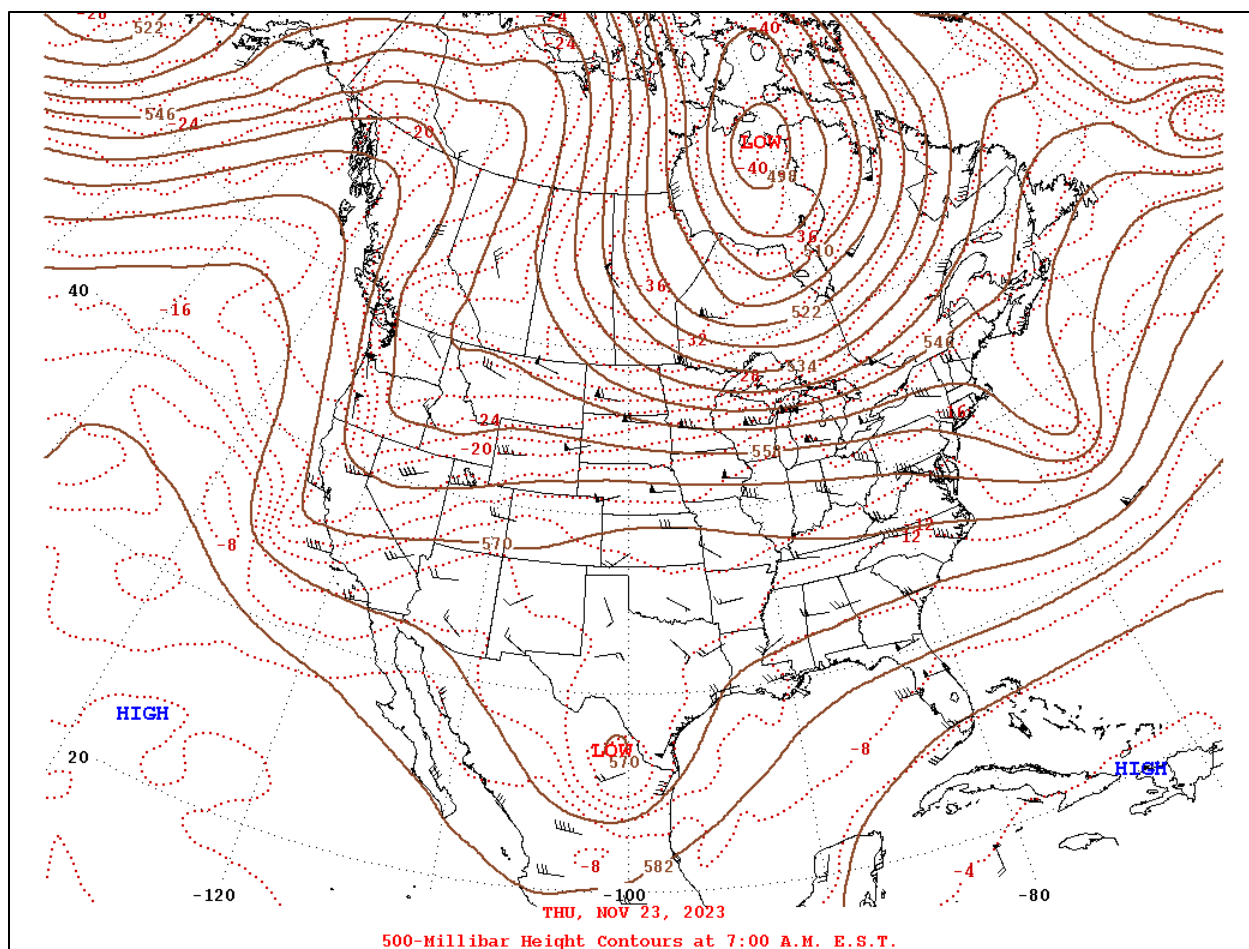


Figure A-16: National Weather Service Weather Prediction Center (November 23, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.7: GROUP 7 - DECEMBER 31, 2023

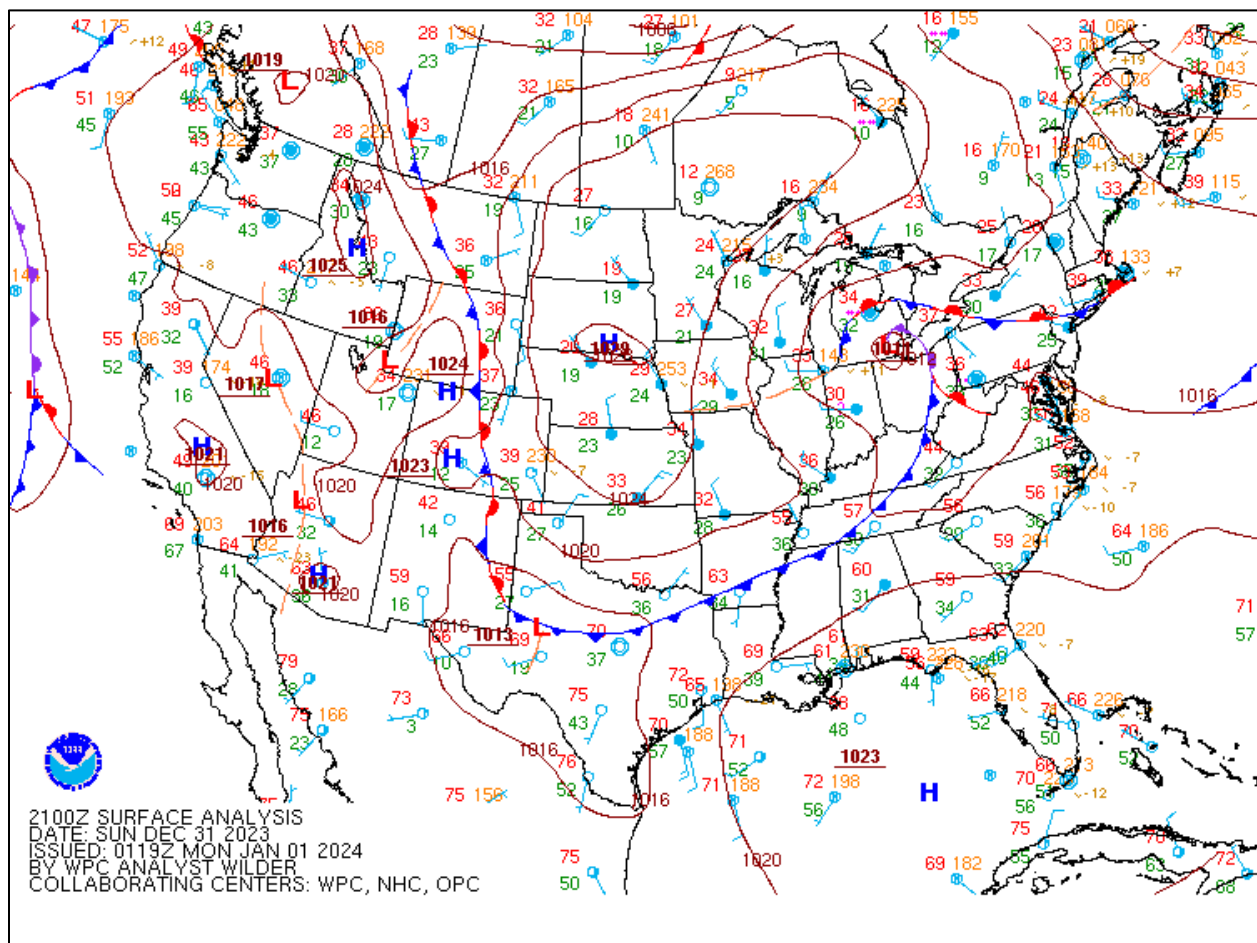


Figure A-17: National Weather Service Weather Prediction Center (December 31, 2023)  
 CONUS Surface Analysis (12Z) 6:00 a.m. CDT

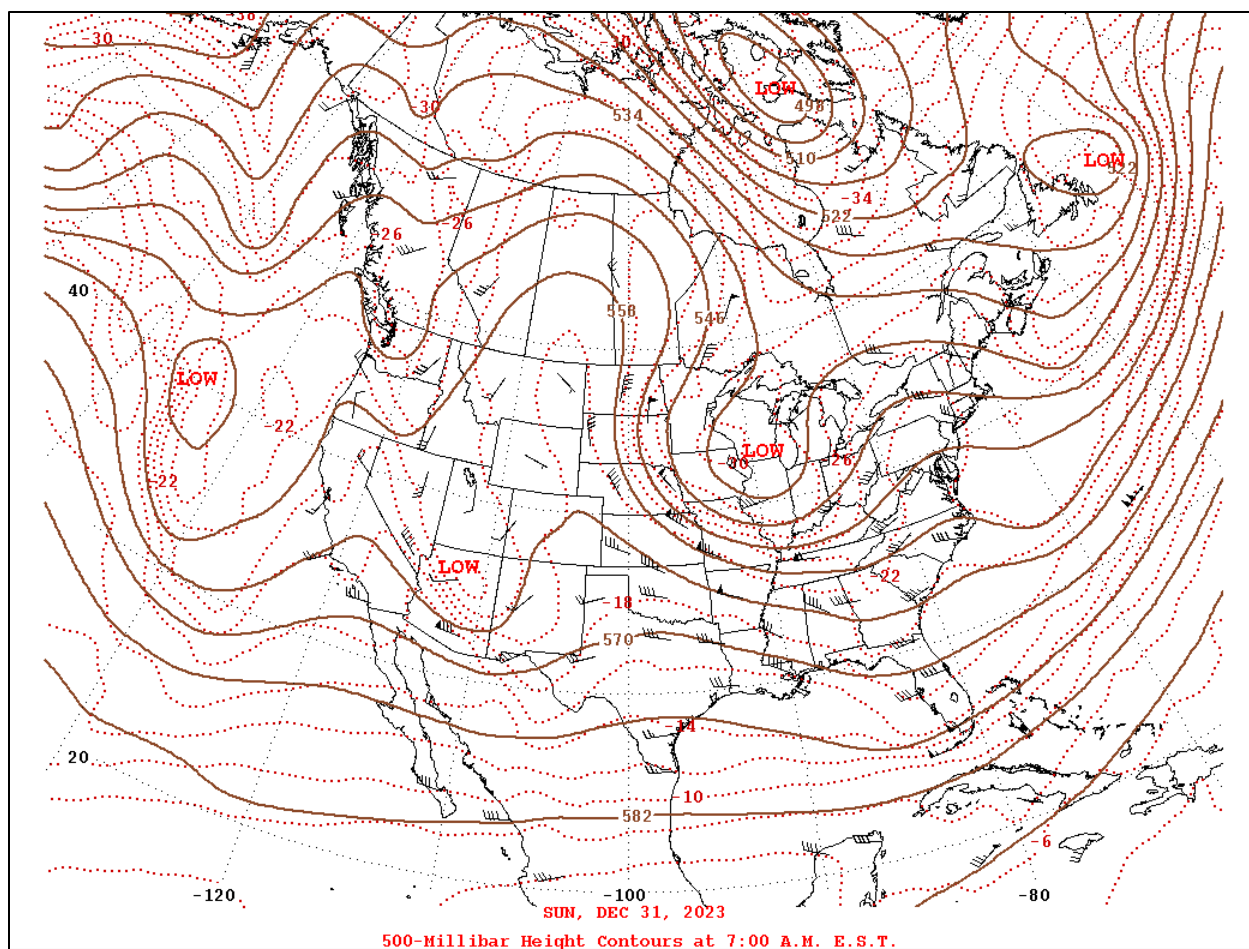


Figure A-18: National Weather Service Weather Prediction Center (December 31, 2023) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.8: GROUP 8 - JANUARY 7, 2024

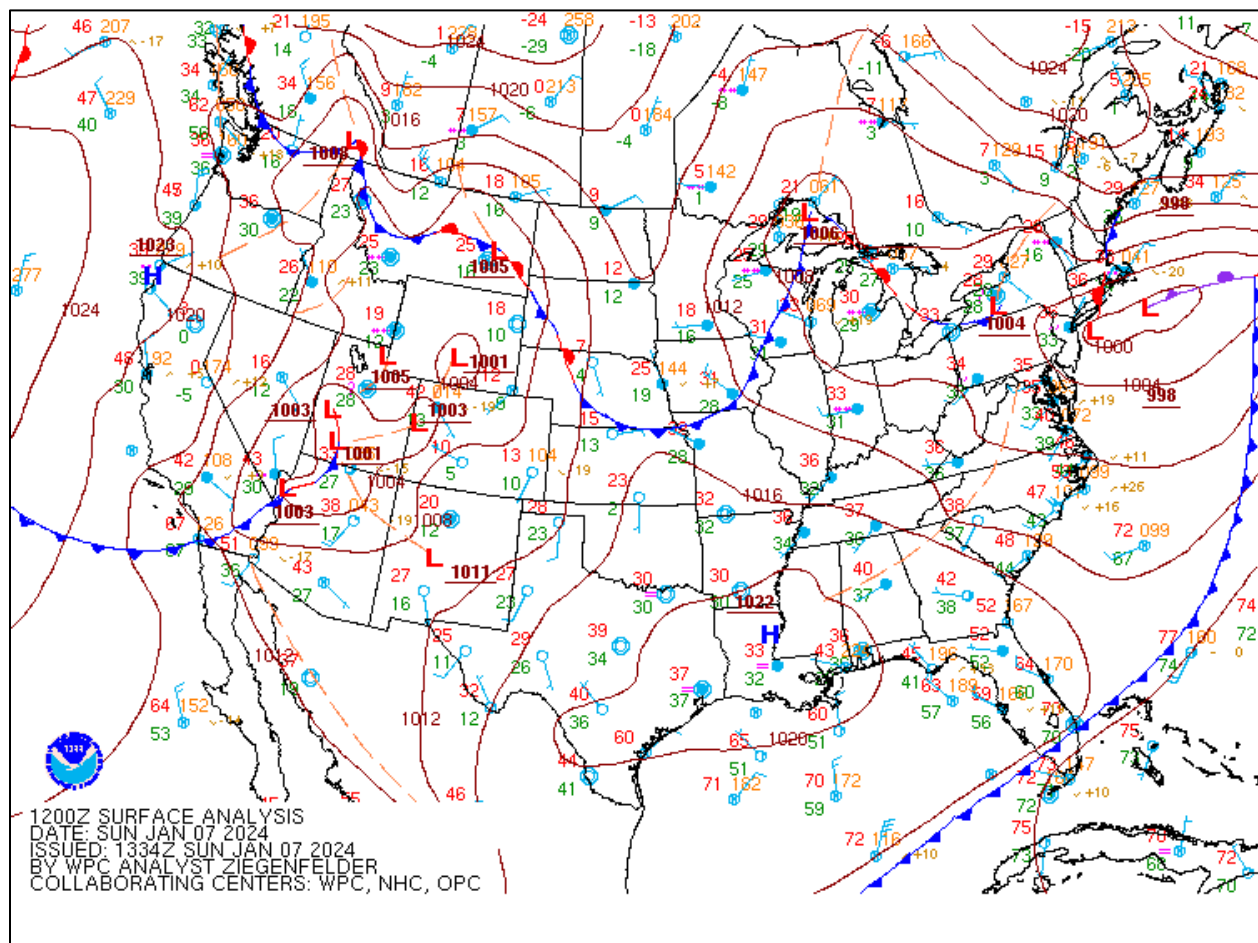


Figure A-19: National Weather Service Weather Prediction Center (January 7, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT



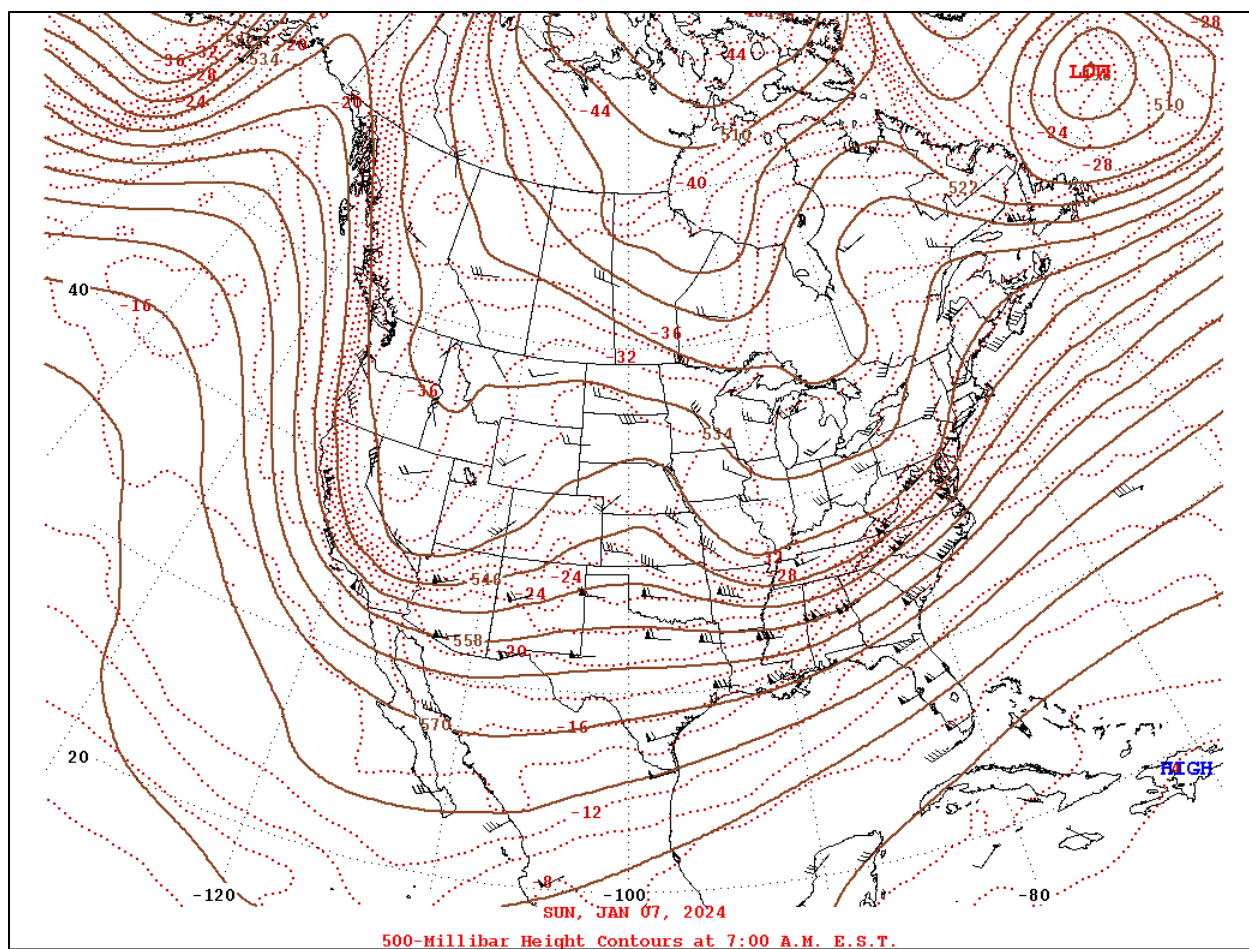


Figure A-20: National Weather Service Weather Prediction Center (January 7, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

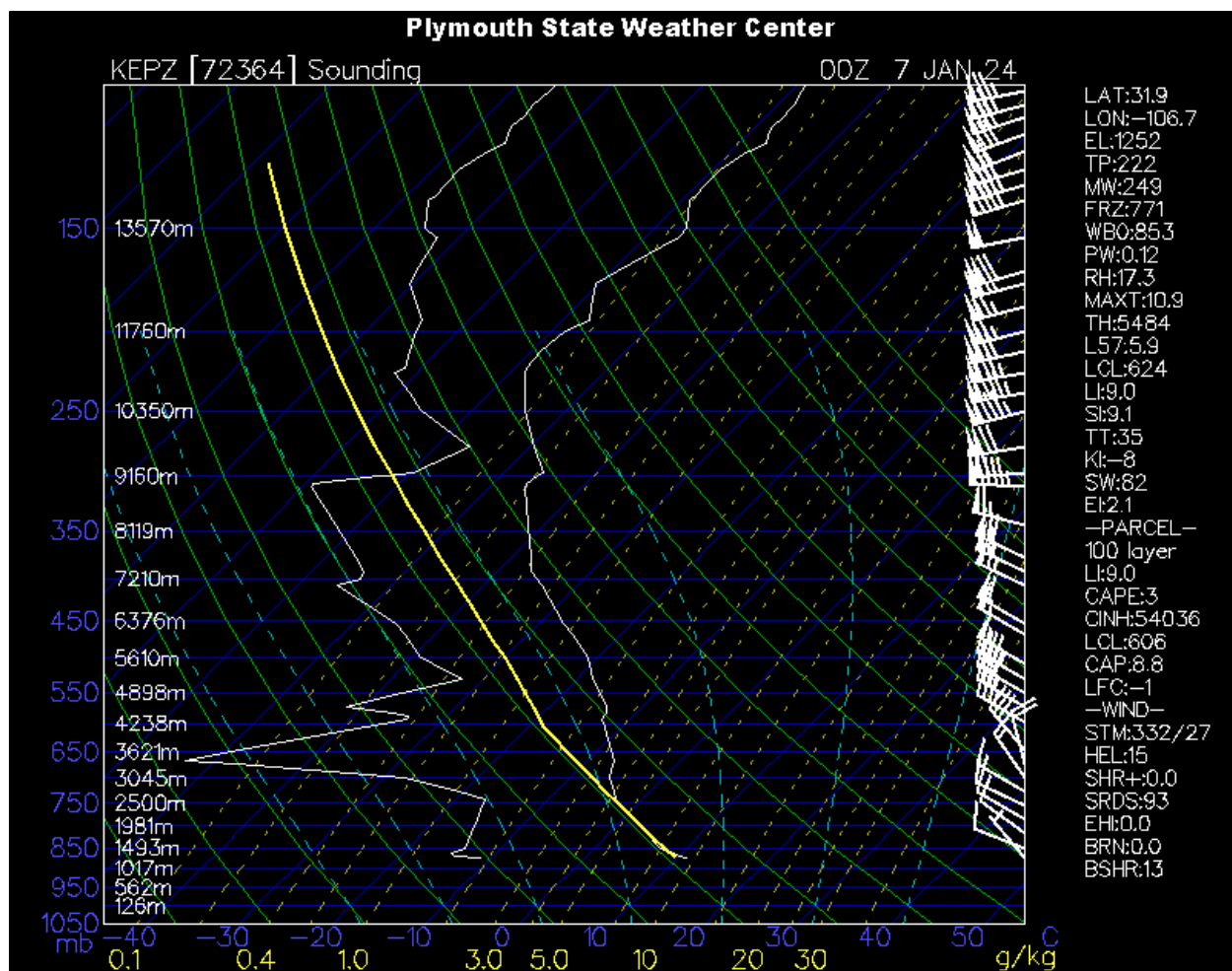
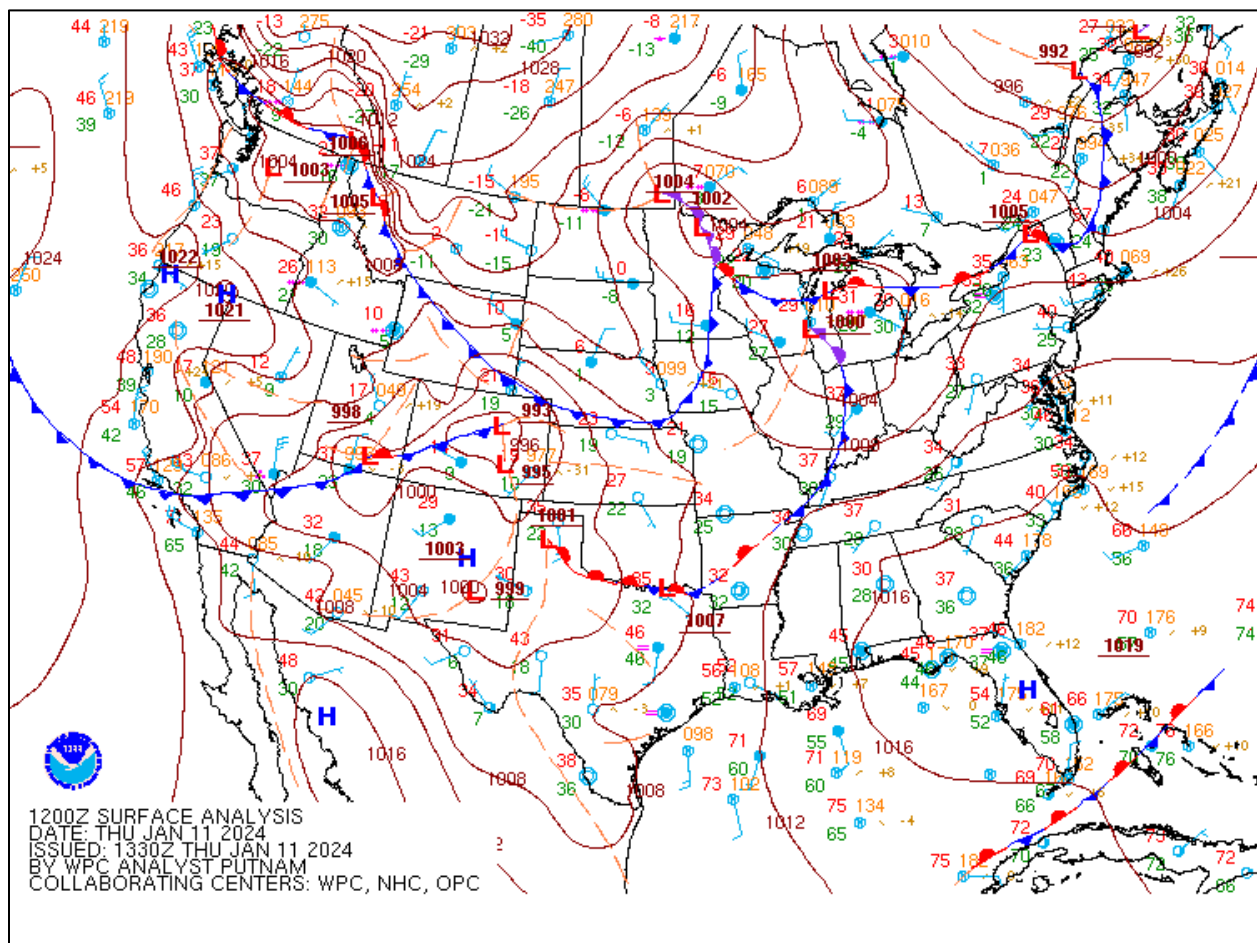


Figure A-21: Upper Air Sounding Chart from Santa Teresa, New Mexico for January 7, 2024, at (12Z) 6:00 a.m. CST

A.9: GROUP 9 - JANUARY 11, 2024



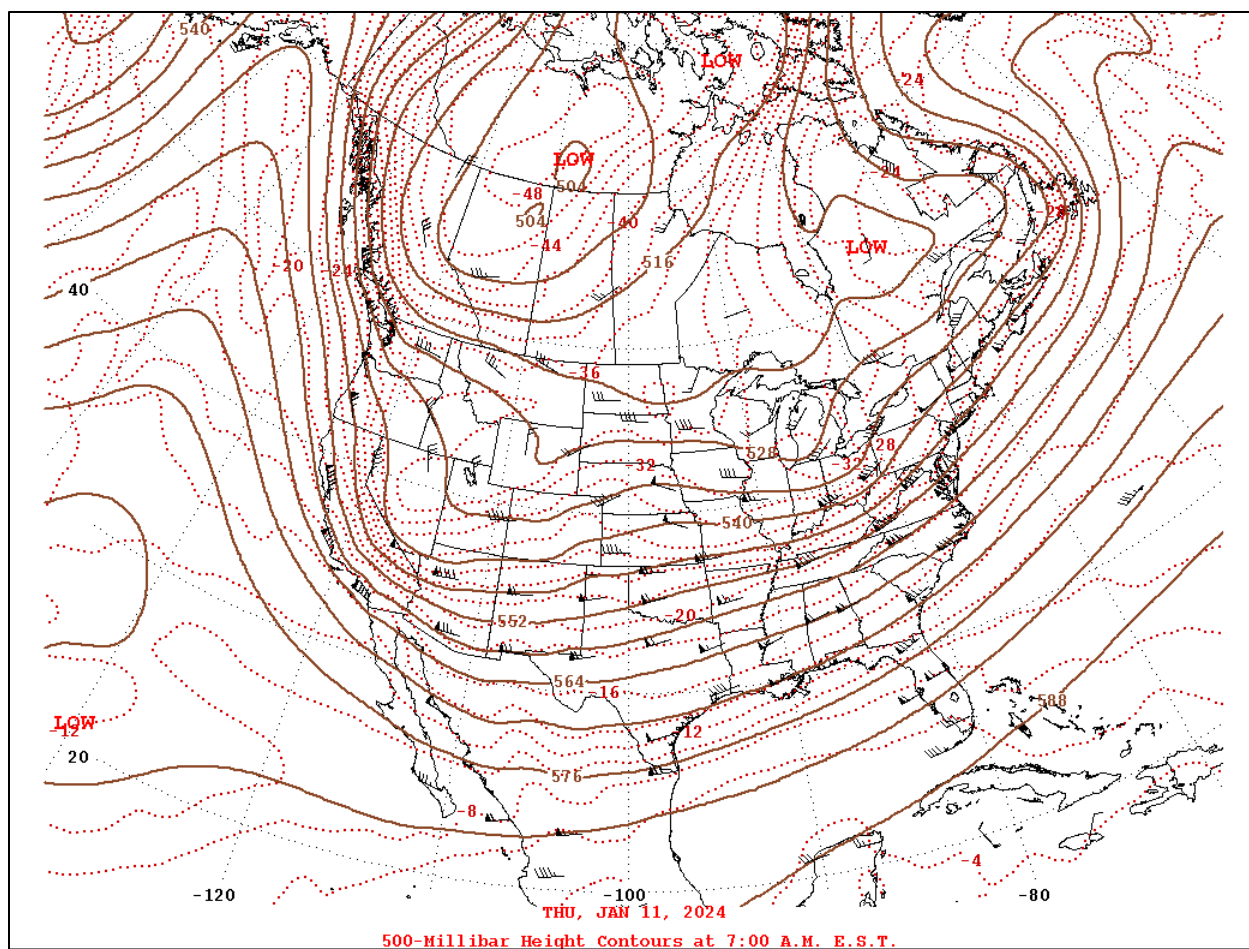


Figure A-23: National Weather Service Weather Prediction Center (January 11, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

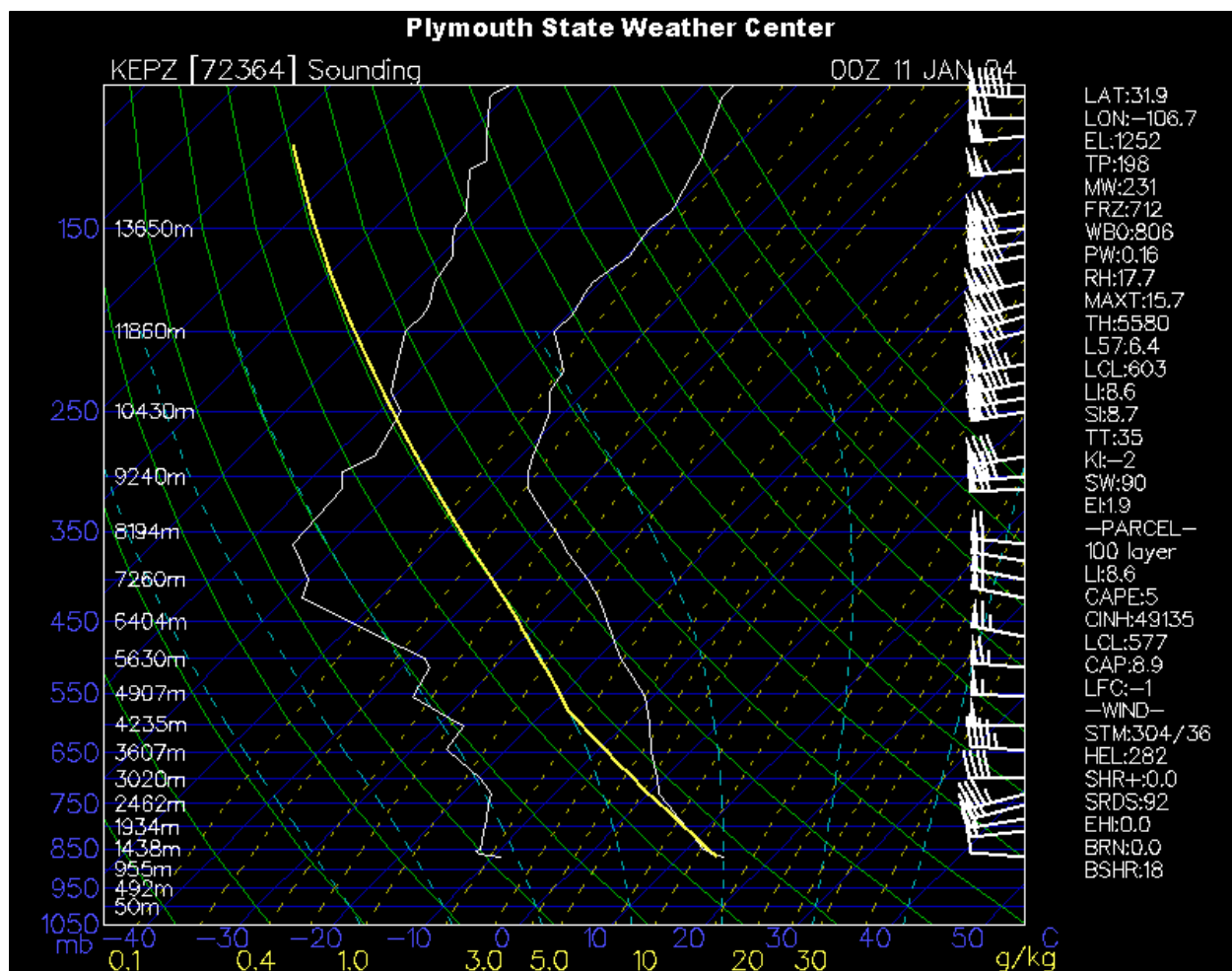
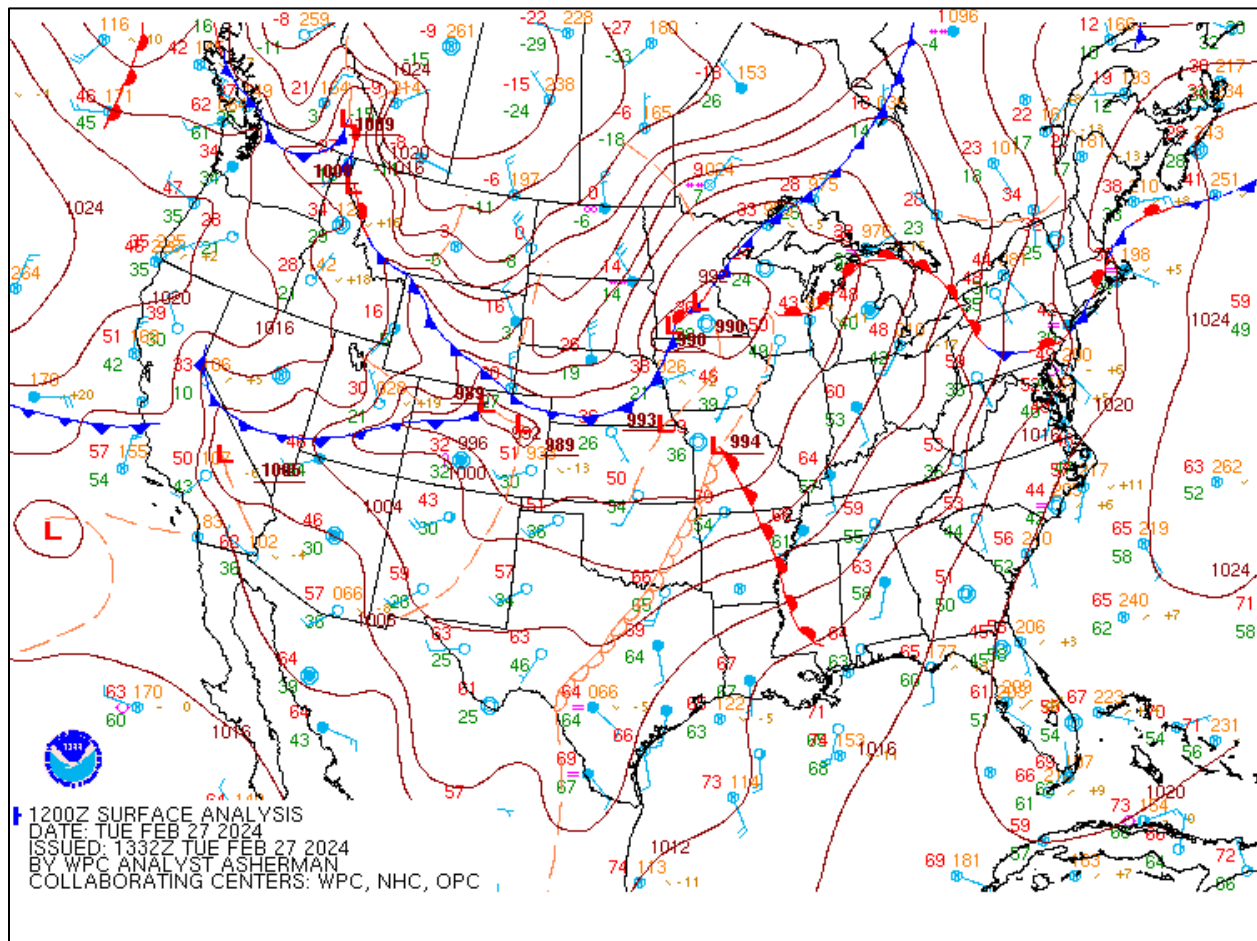


Figure A-24: Upper Air Sounding Chart from Santa Teresa, New Mexico for January 11, 2024, at (12Z) 6:00 a.m. CST

A.10:GROUP 10 - FEBRUARY 28, 2024





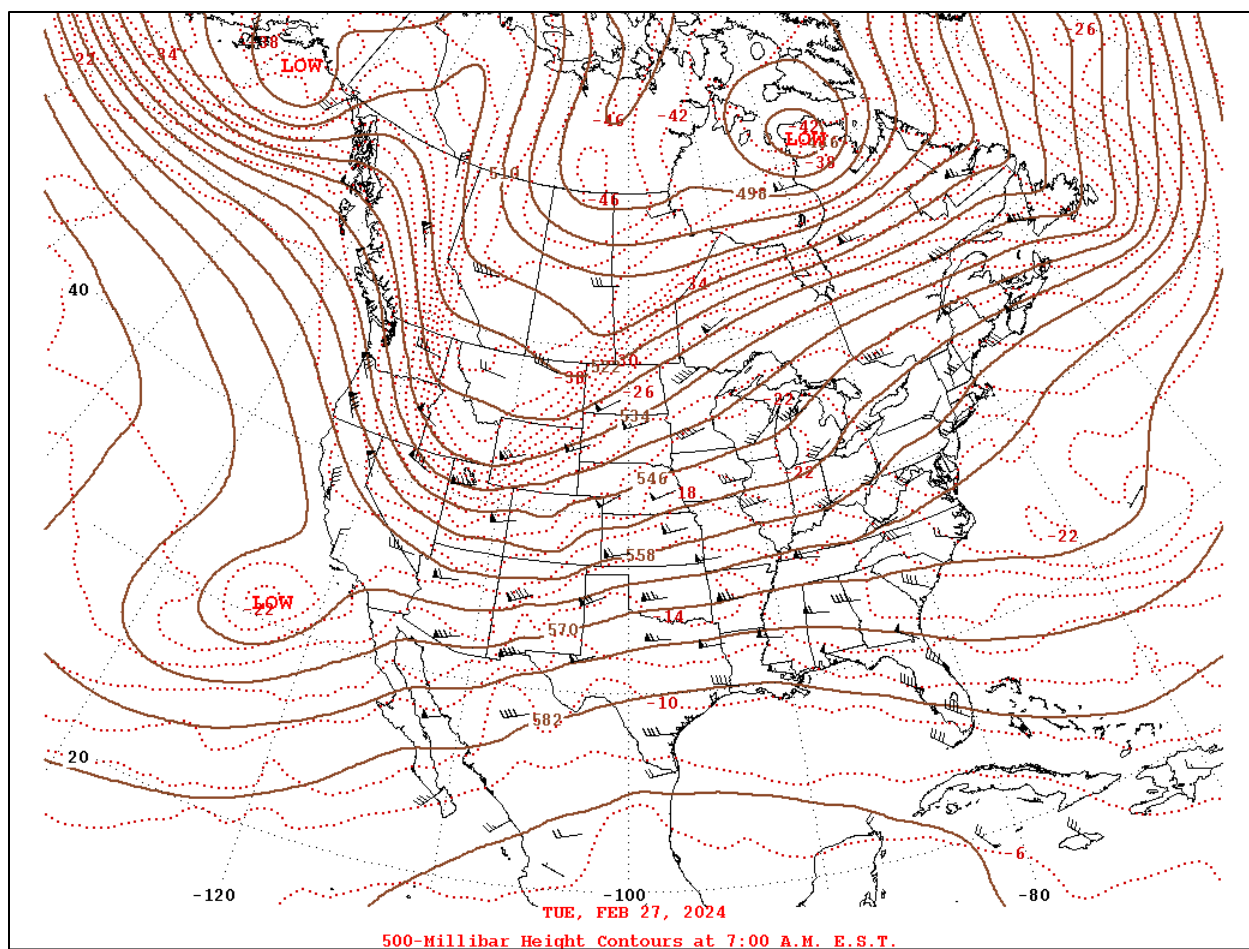


Figure A-26: National Weather Service Weather Prediction Center (February 27, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

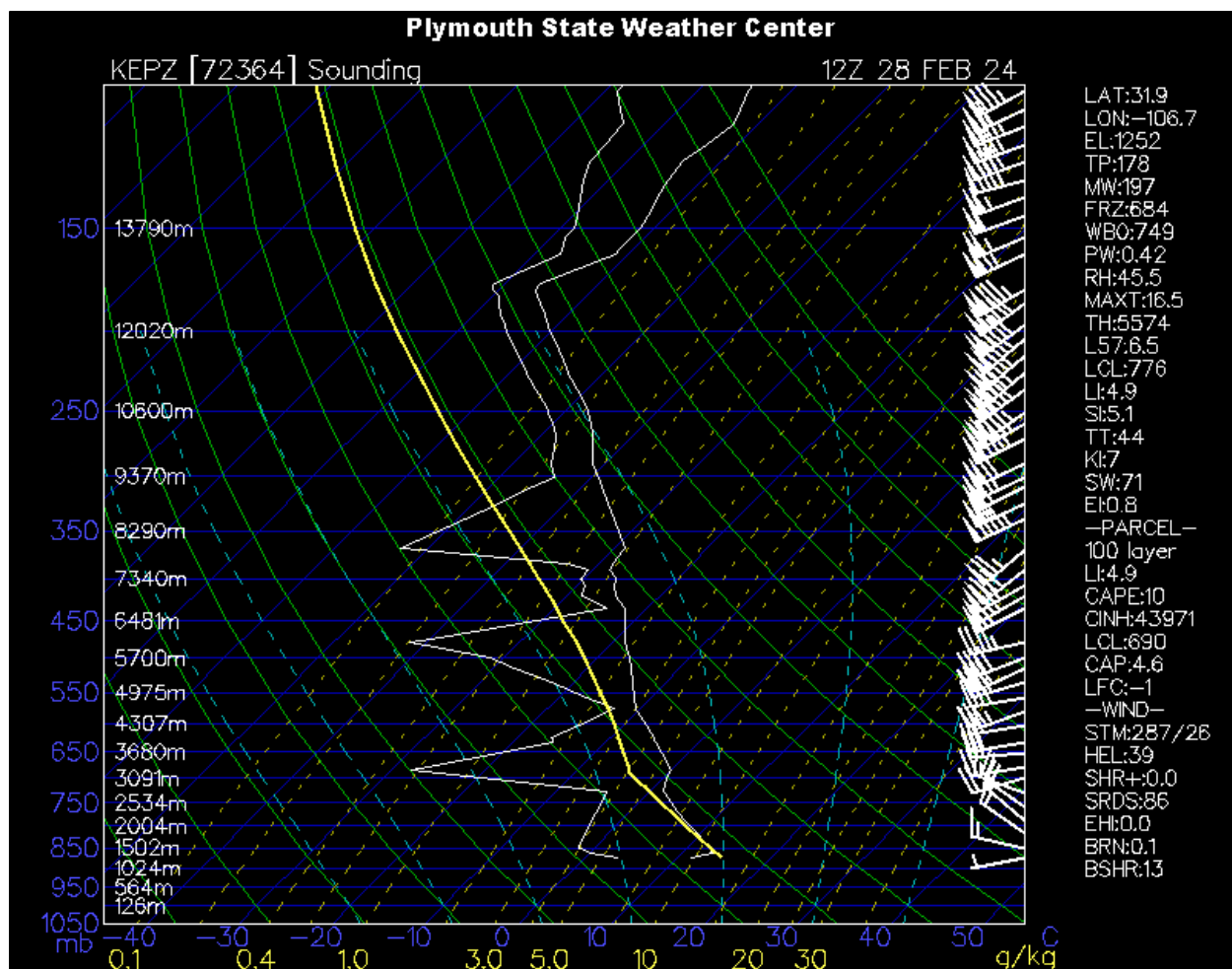
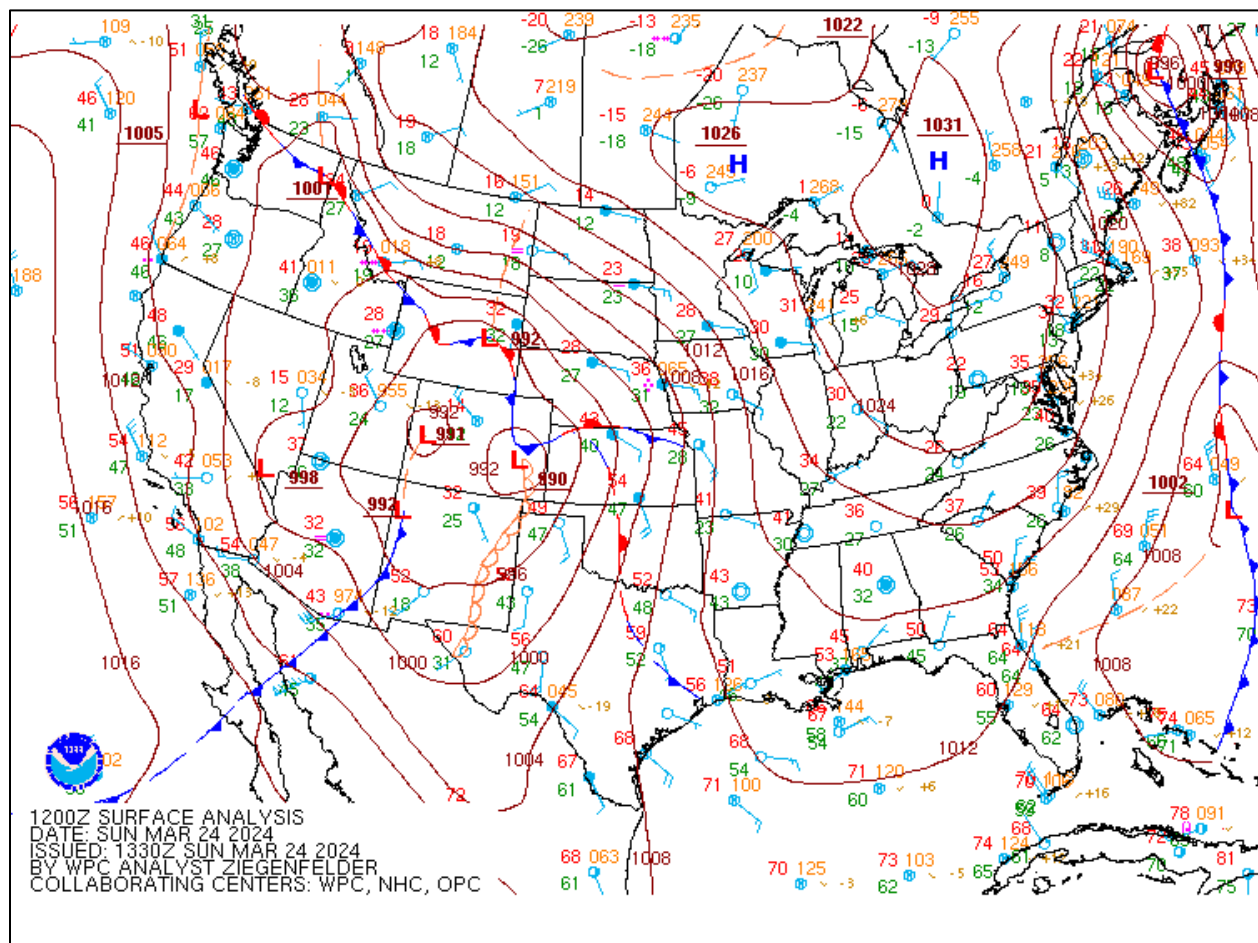


Figure A-27: Upper Air Sounding Chart from Santa Teresa, New Mexico for February 28, 2024, at (12Z) 6:00 a.m. CST

**A.11:GROUP 11 – MARCH 24, 2024**



**Figure A-28: National Weather Service Weather Prediction Center (March 24, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**

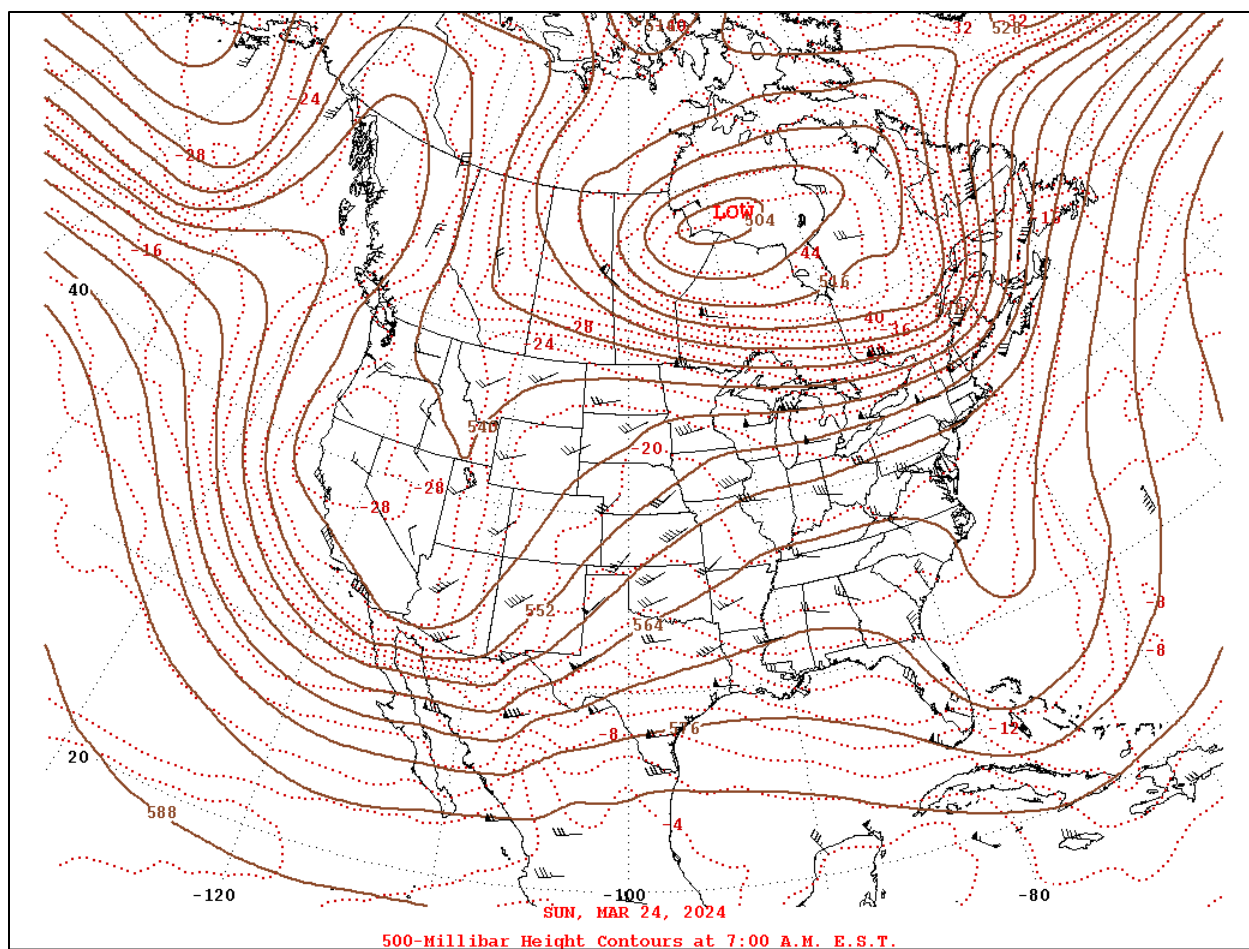


Figure A-29: National Weather Service Weather Prediction Center (March 24, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

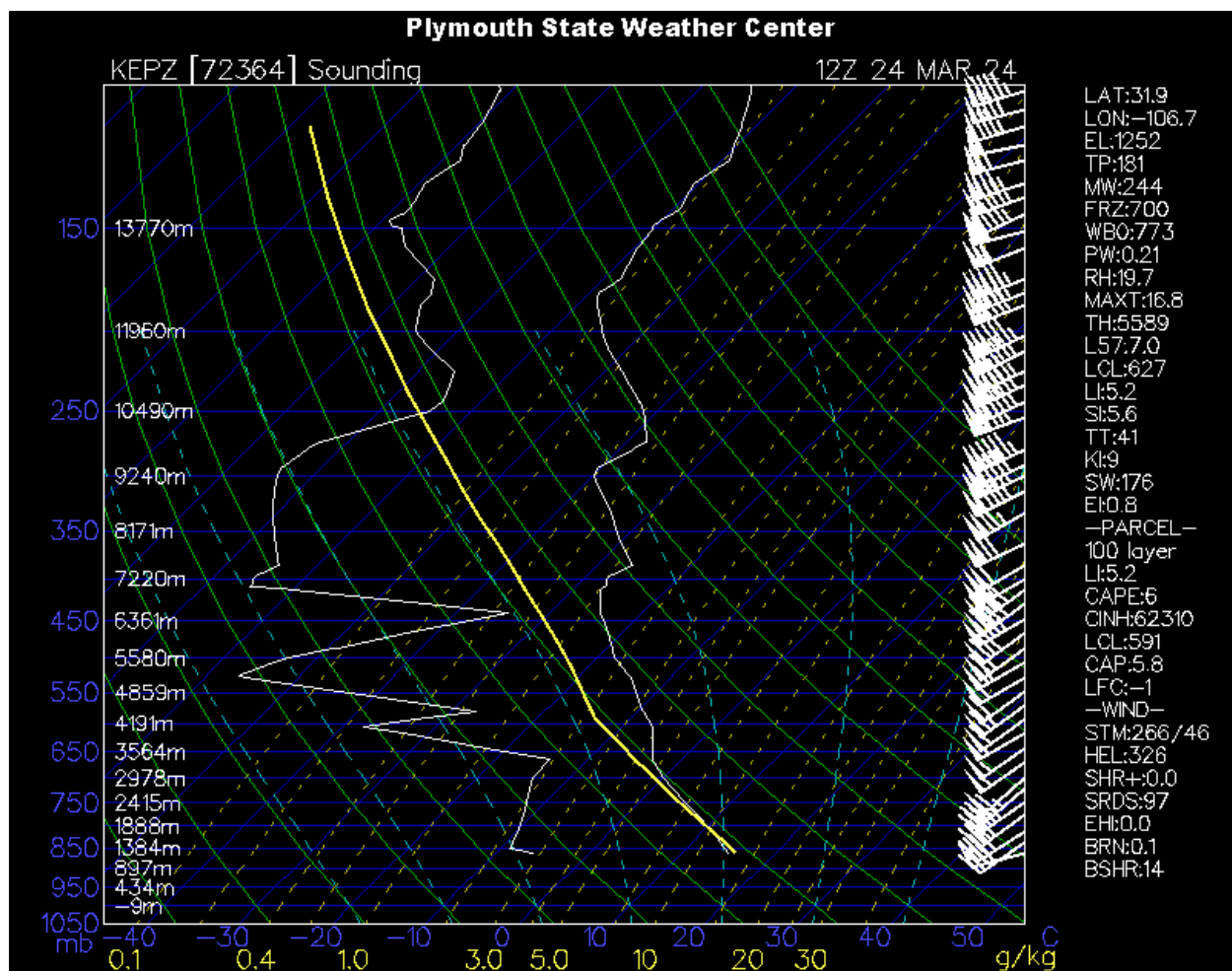


Figure A-30: Upper Air Sounding Chart from Santa Teresa, New Mexico for March 24, 2024, at (12Z) 7:00 a.m. CDT

A.12: GROUP 12 - MARCH 31, 2024

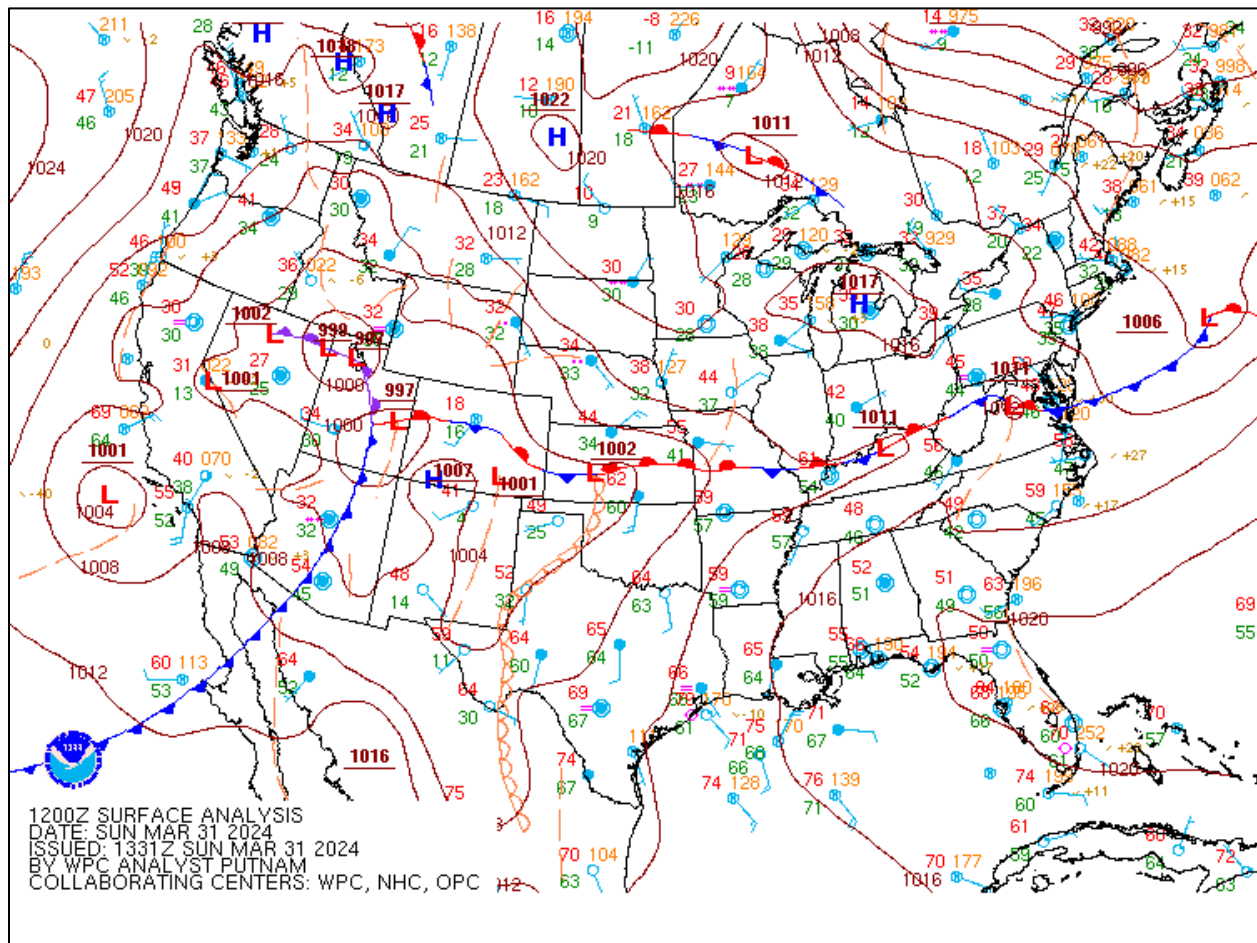
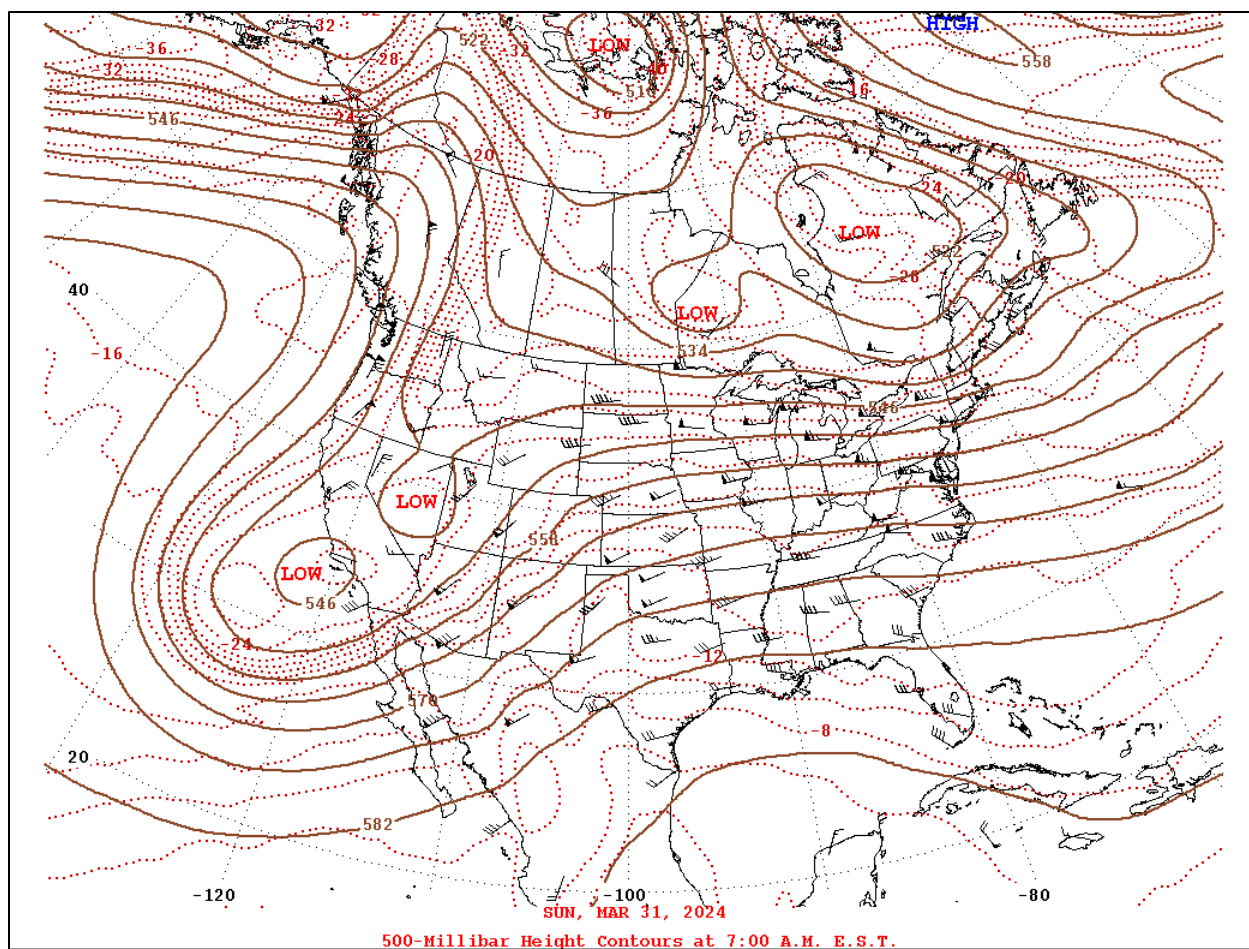


Figure A-31: National Weather Service Weather Prediction Center (March 31, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT





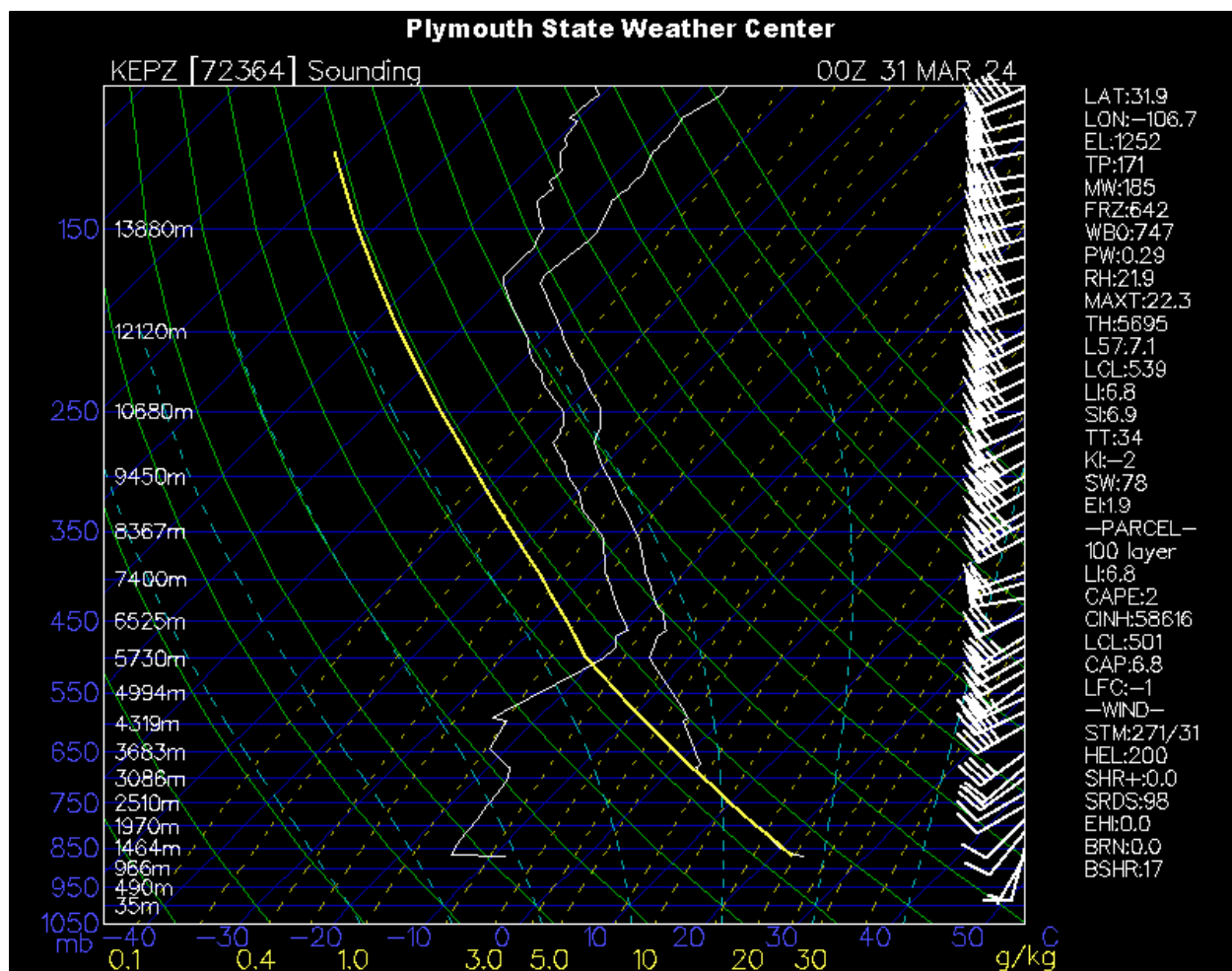


Figure A-33: Upper Air Sounding Chart from Santa Teresa, New Mexico for March 31, 2024, at (12Z) 7:00 a.m. CDT

A.13: GROUP 13 - APRIL 15, 2024

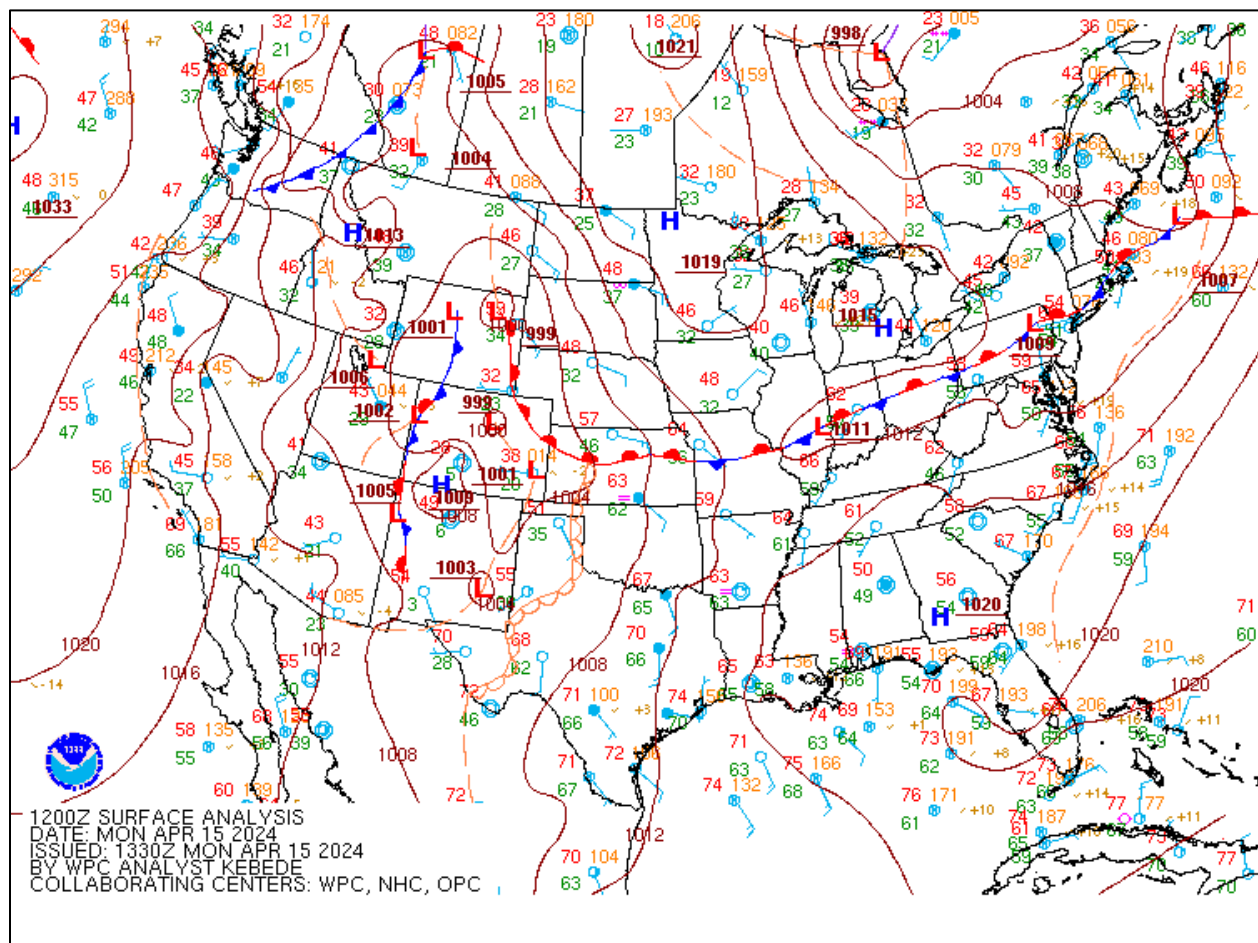


Figure A-34: National Weather Service Weather Prediction Center (April 15, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

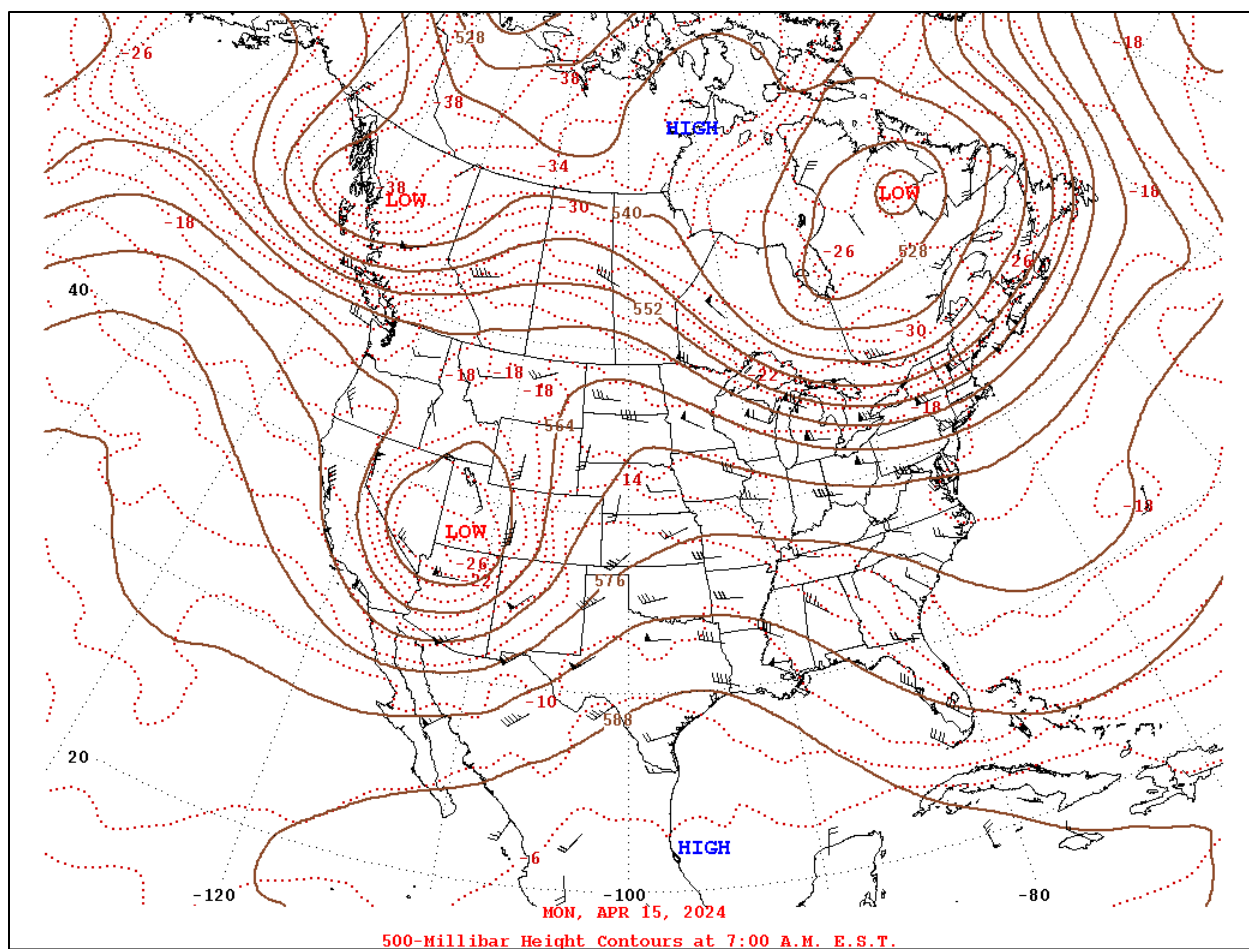


Figure A-35: National Weather Service Weather Prediction Center (April 15, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

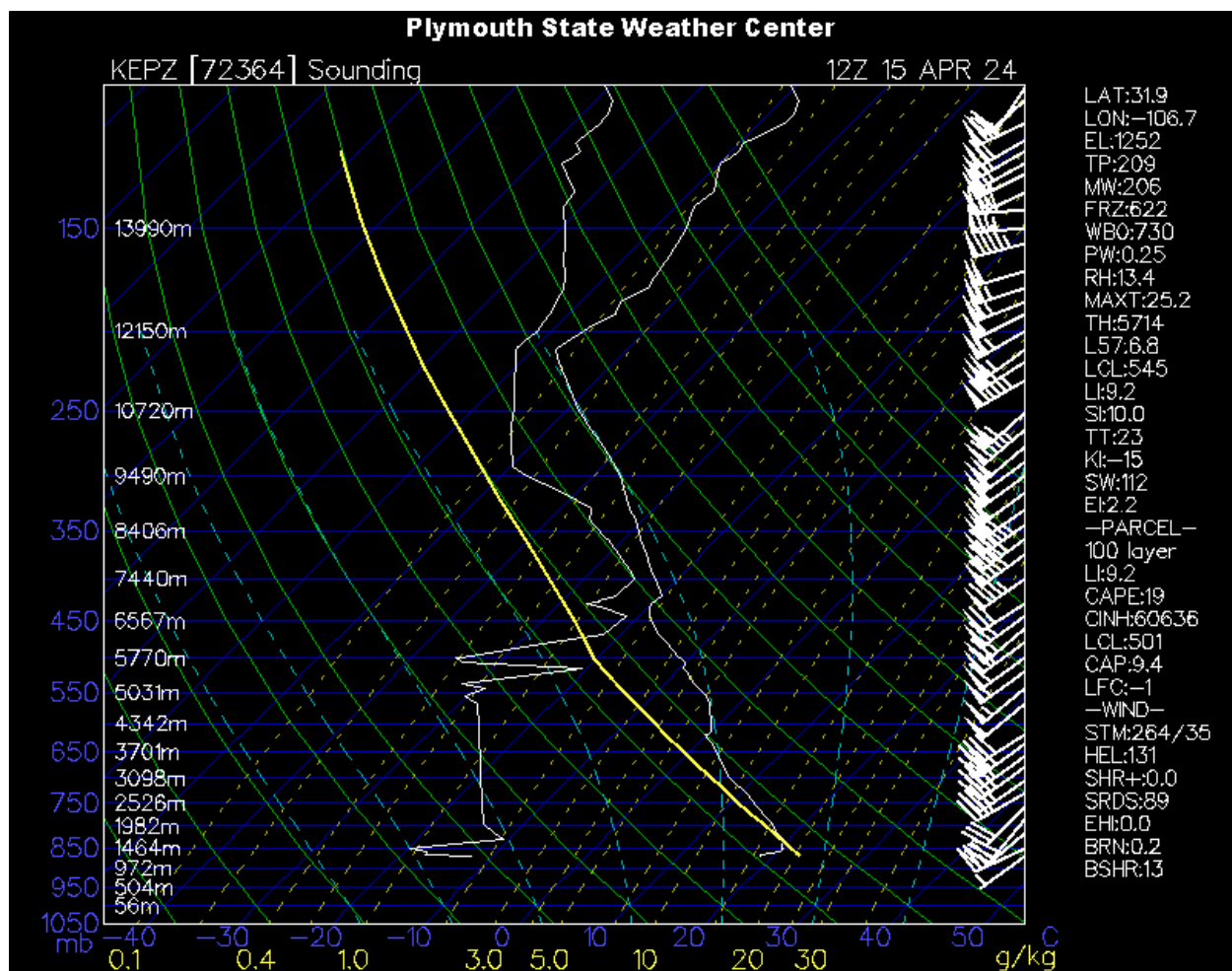


Figure A-36: Upper Air Sounding Chart from Santa Teresa, New Mexico for April 15, 2024, at (12Z) 7:00 a.m. CDT

A.14: GROUP 14 - APRIL 25, 2024

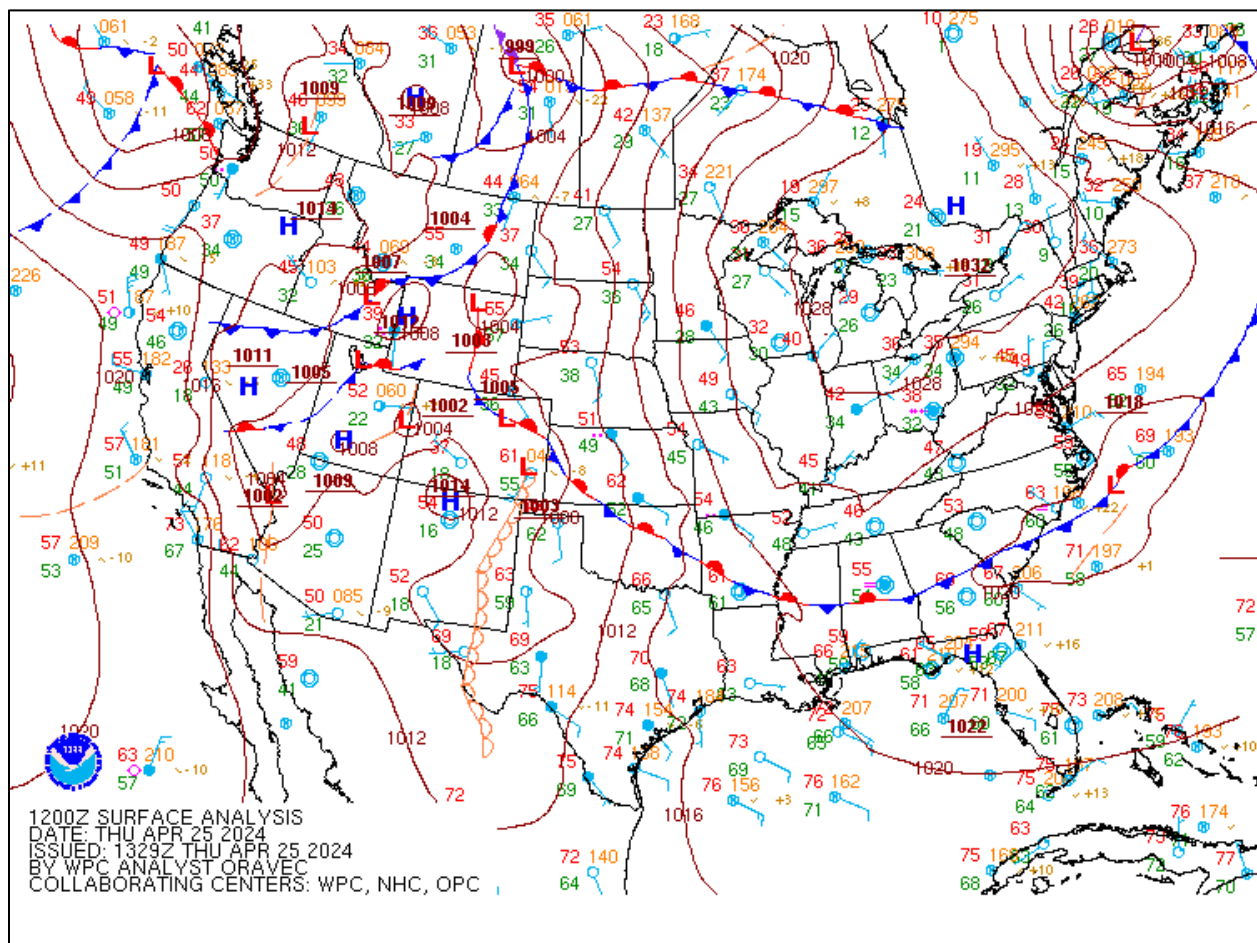


Figure A-37: National Weather Service Weather Prediction Center (April 25, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT



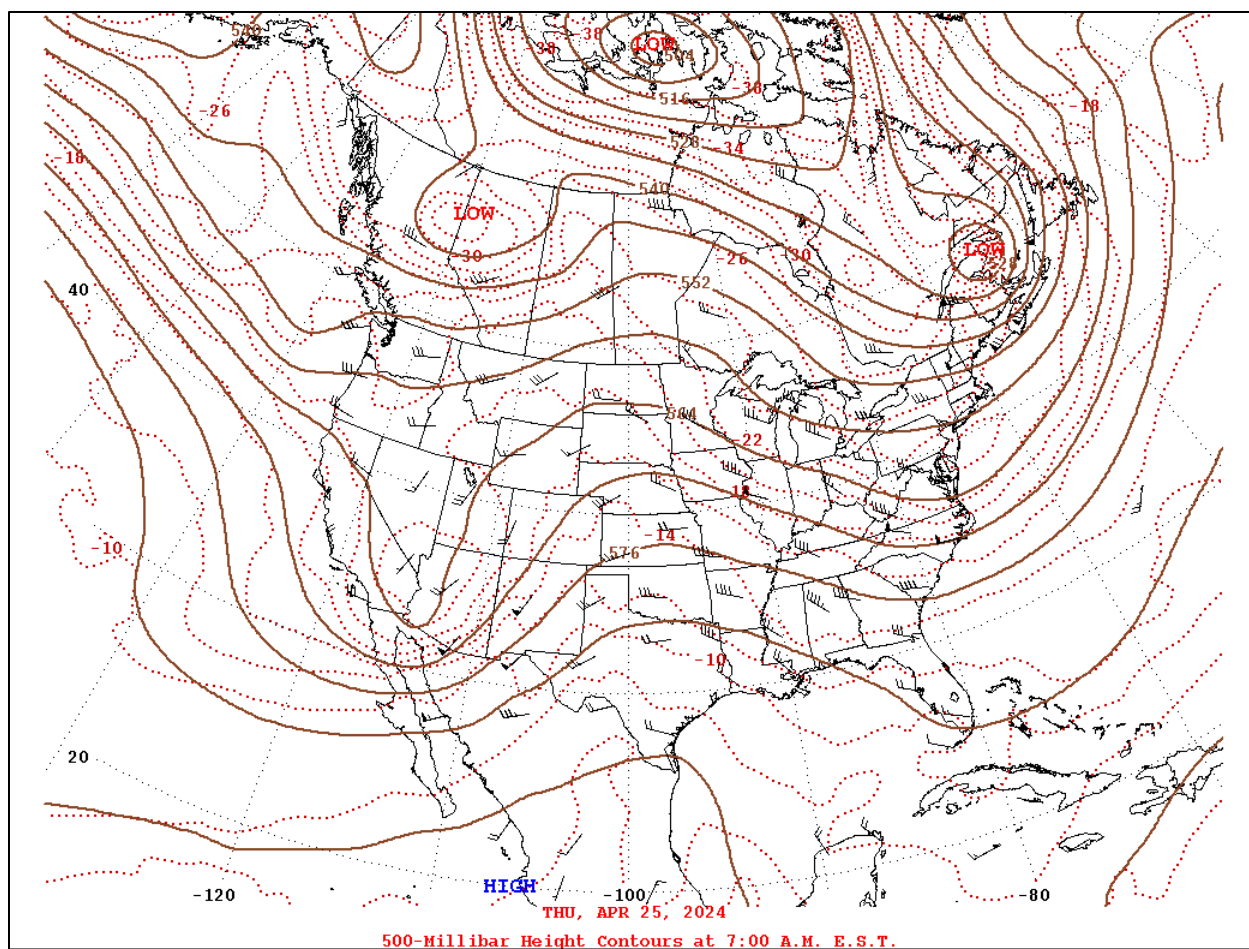


Figure A-38: National Weather Service Weather Prediction Center (April 25, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.15: GROUP 15 – JUNE 19, 2024

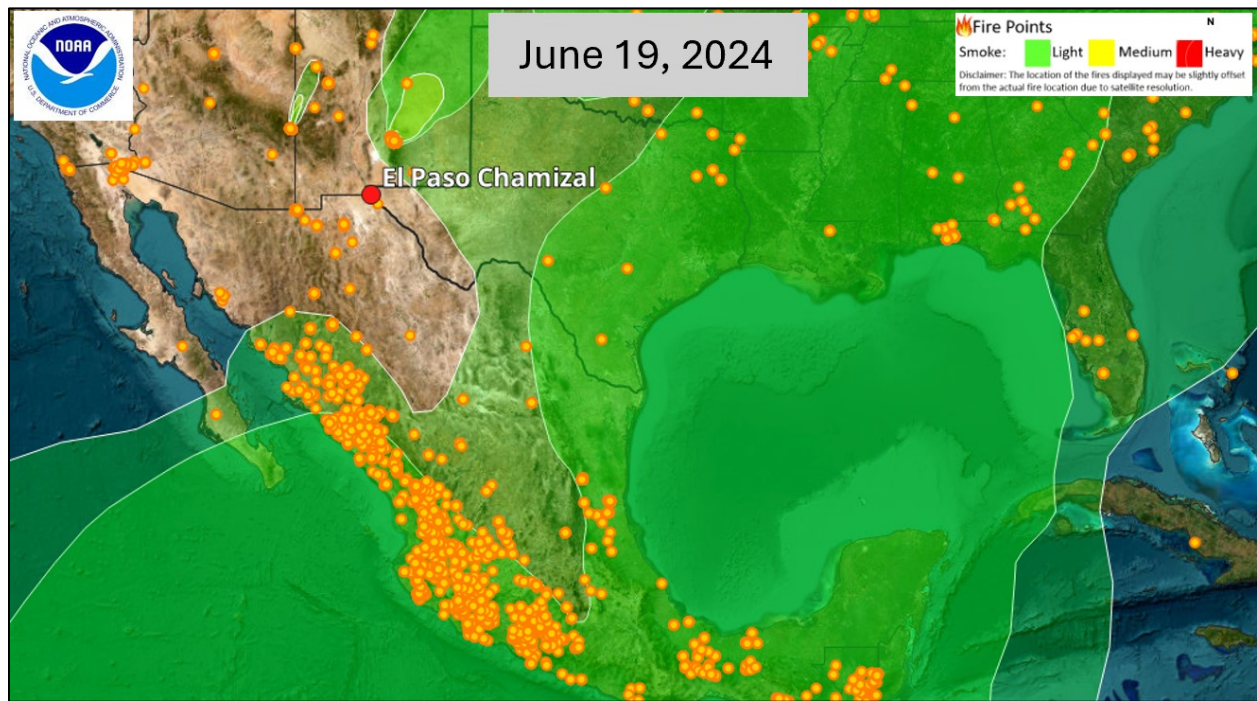
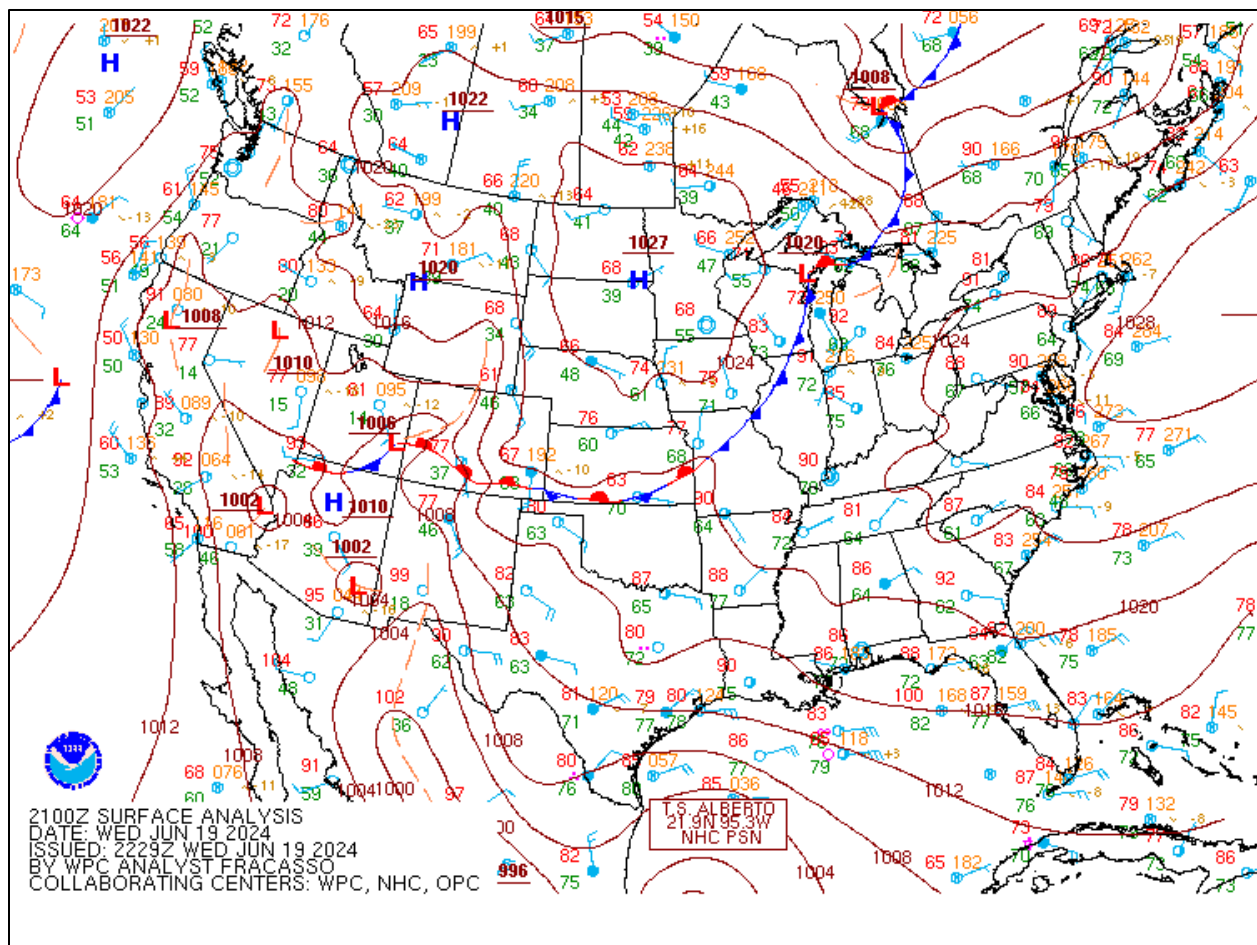


Figure A-39: NOAA HMS Fire and Smoke Map on June 19, 2024



**Figure A-40: National Weather Service Weather Prediction Center (June 19, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**

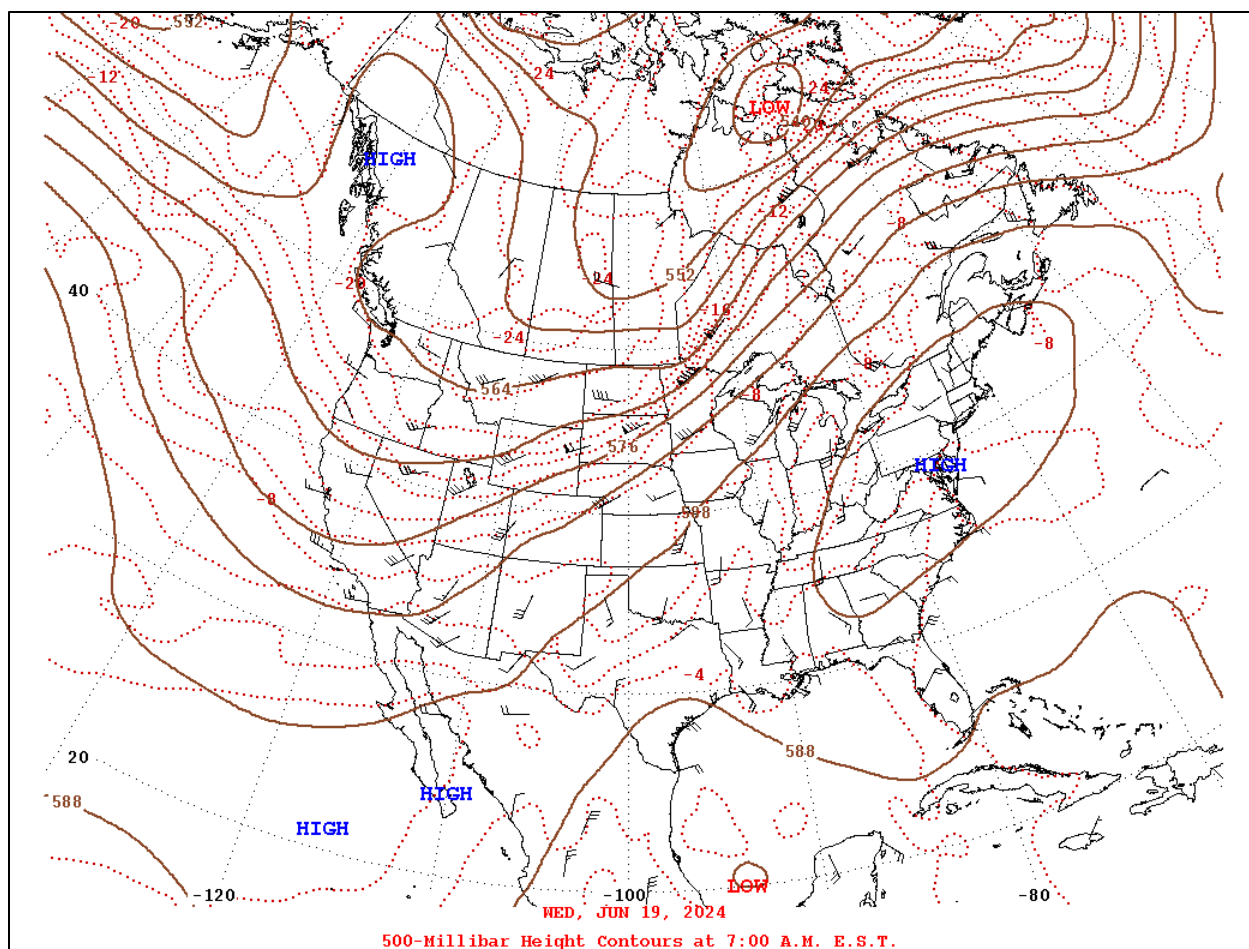


Figure A-41: National Weather Service Weather Prediction Center (June 19, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT



A.16: GROUP 16 – JULY 24 THROUGH JULY 26, 2024

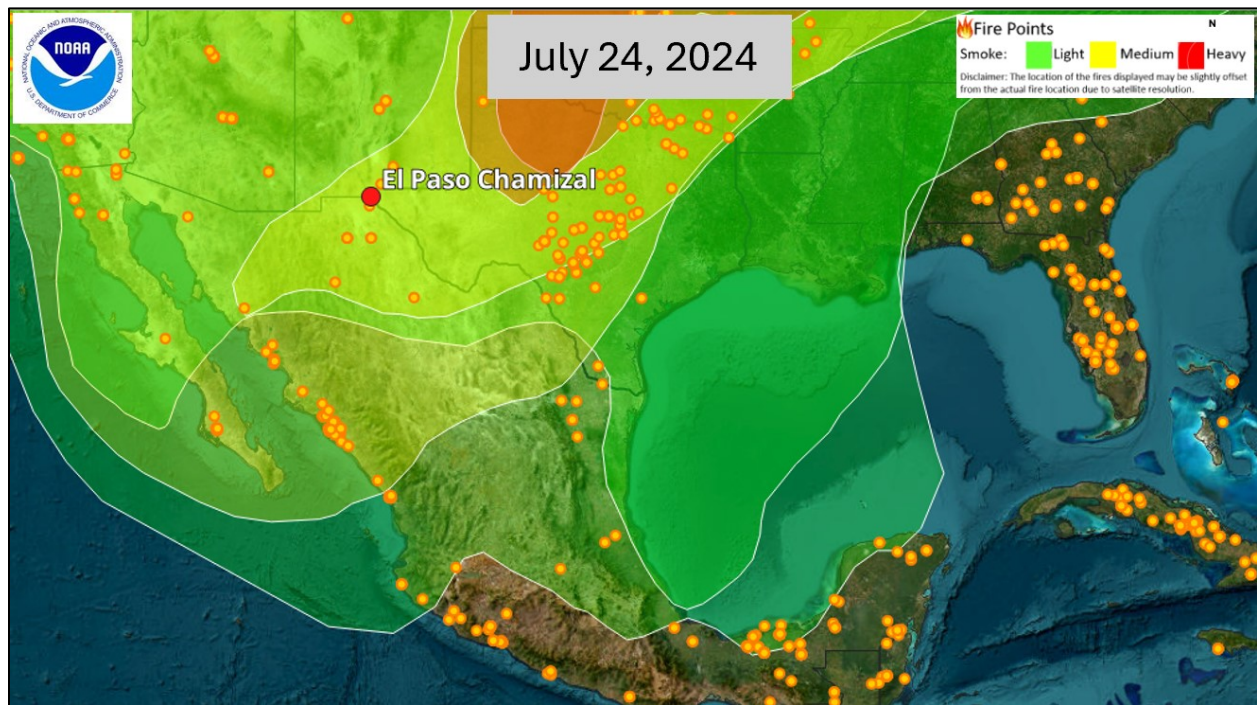


Figure A-42: NOAA HMS Fire and Smoke Map on July 24, 2024

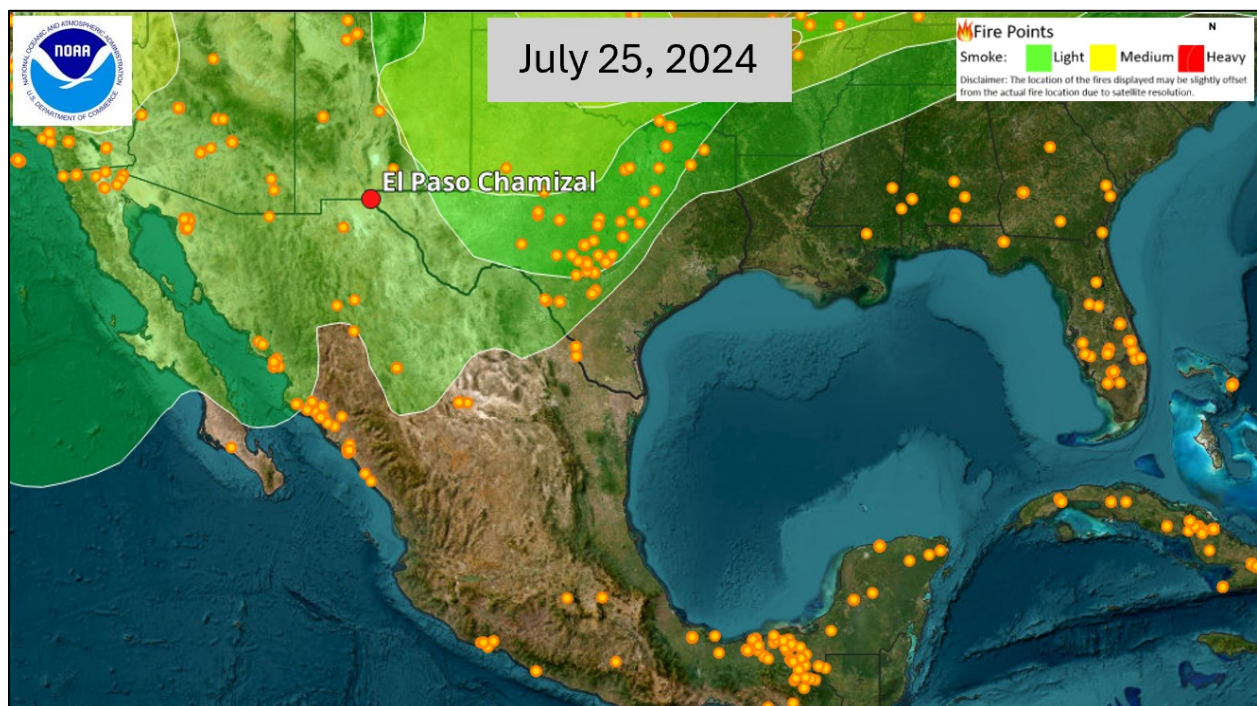


Figure A-43: NOAA HMS Fire and Smoke Map on July 25, 2024

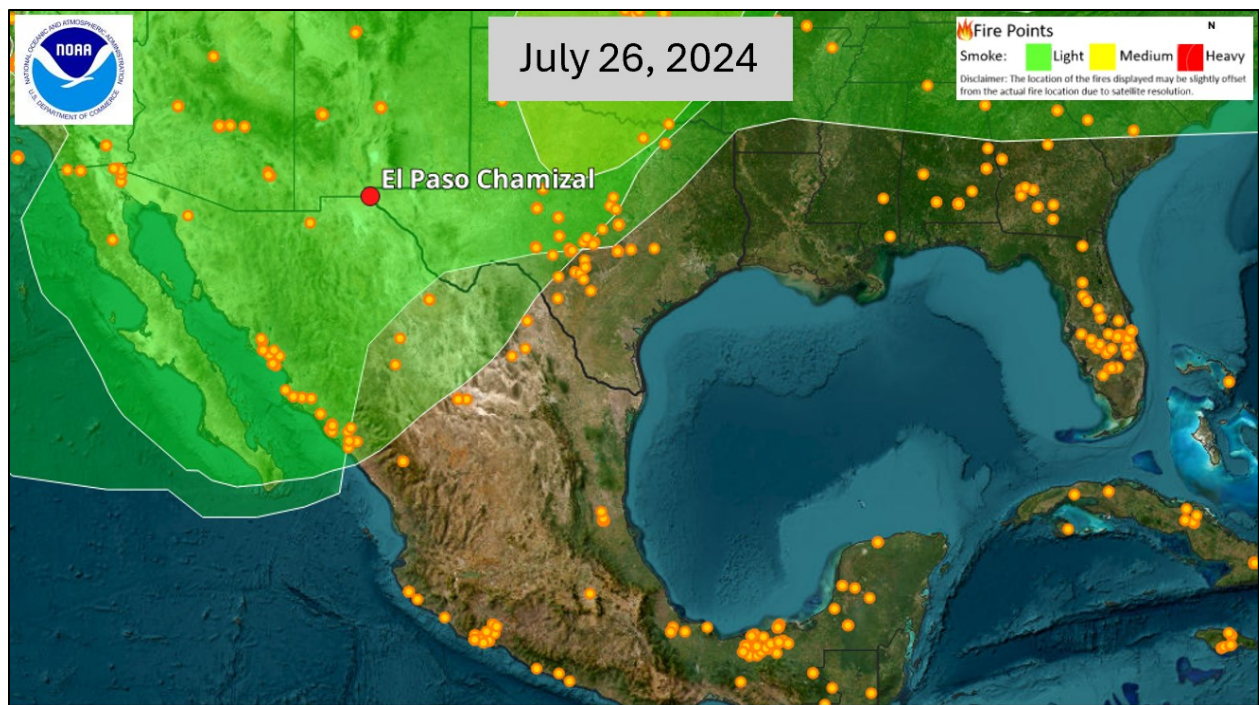


Figure A-44: NOAA HMS Fire and Smoke Map on July 26, 2024



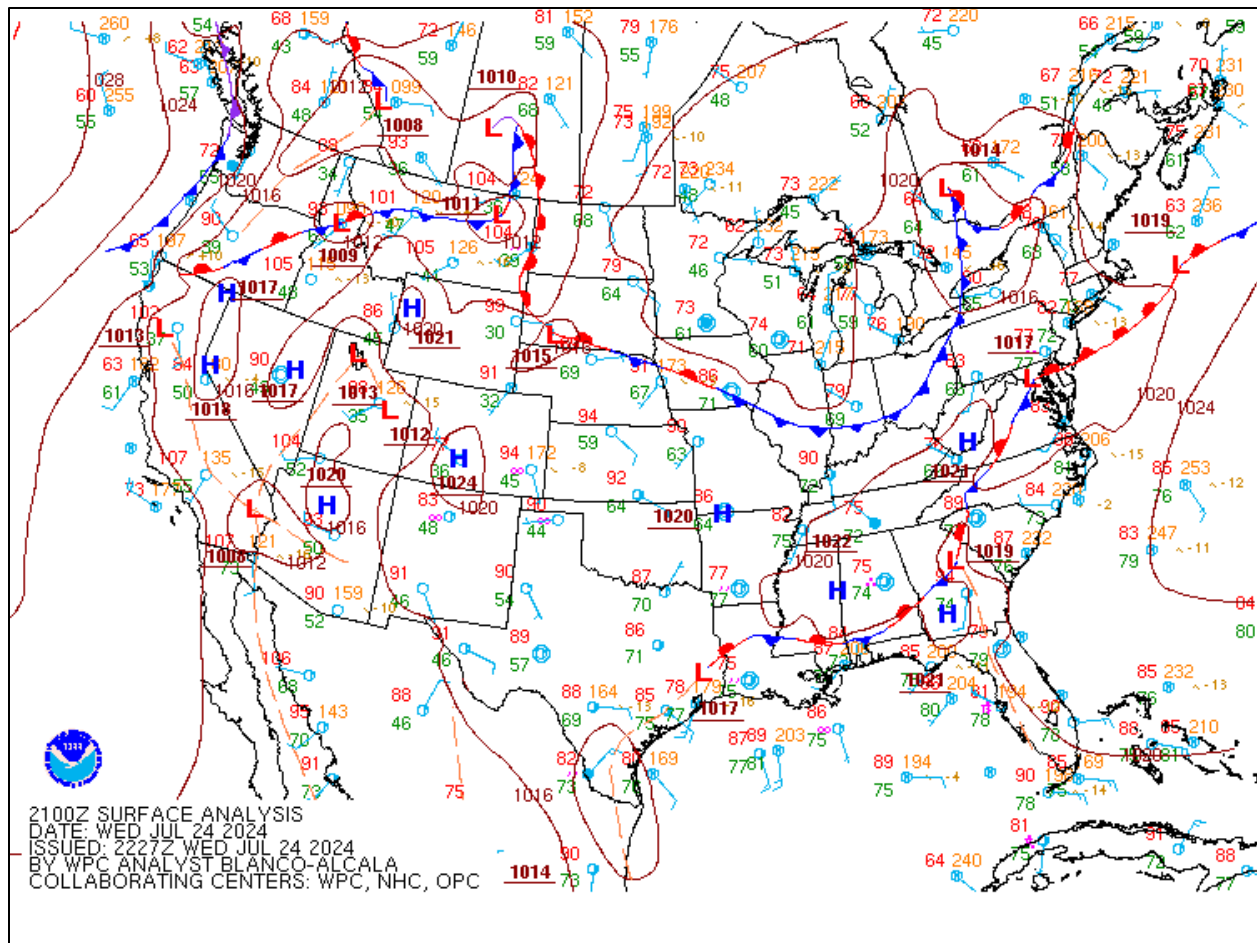


Figure A-45: National Weather Service Weather Prediction Center (July 24, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

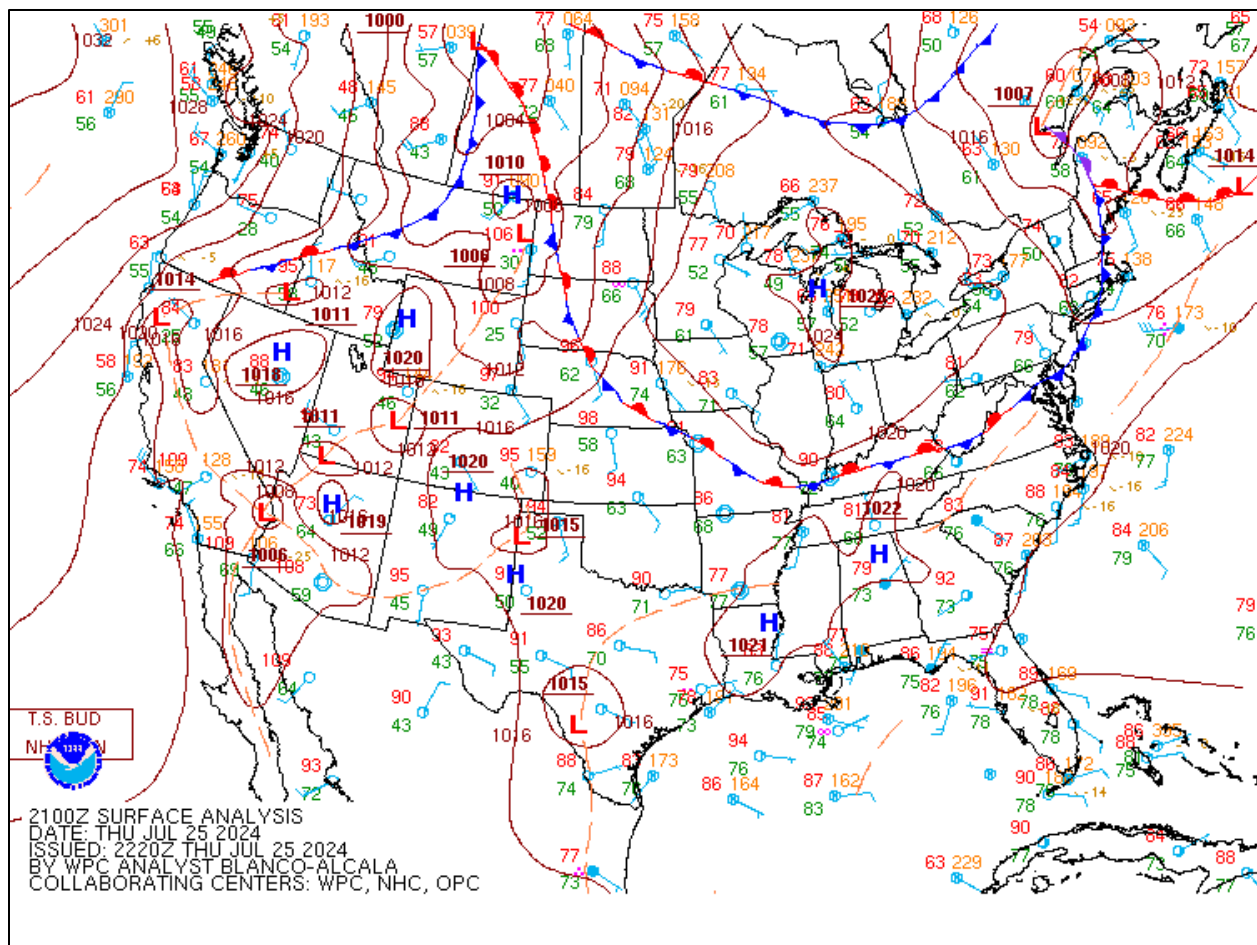


Figure A-46: National Weather Service Weather Prediction Center (July 25, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

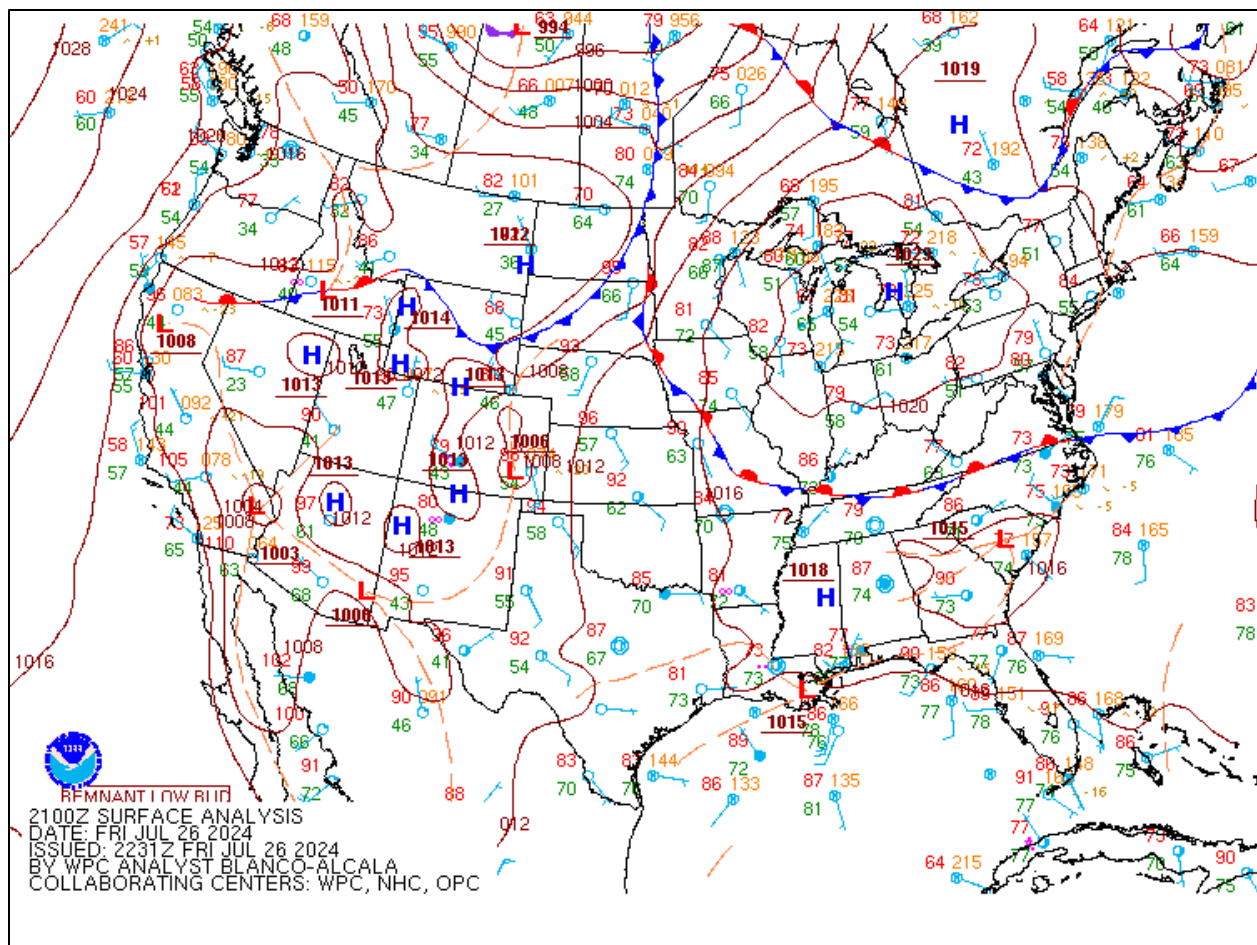


Figure A-47: National Weather Service Weather Prediction Center (July 26, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

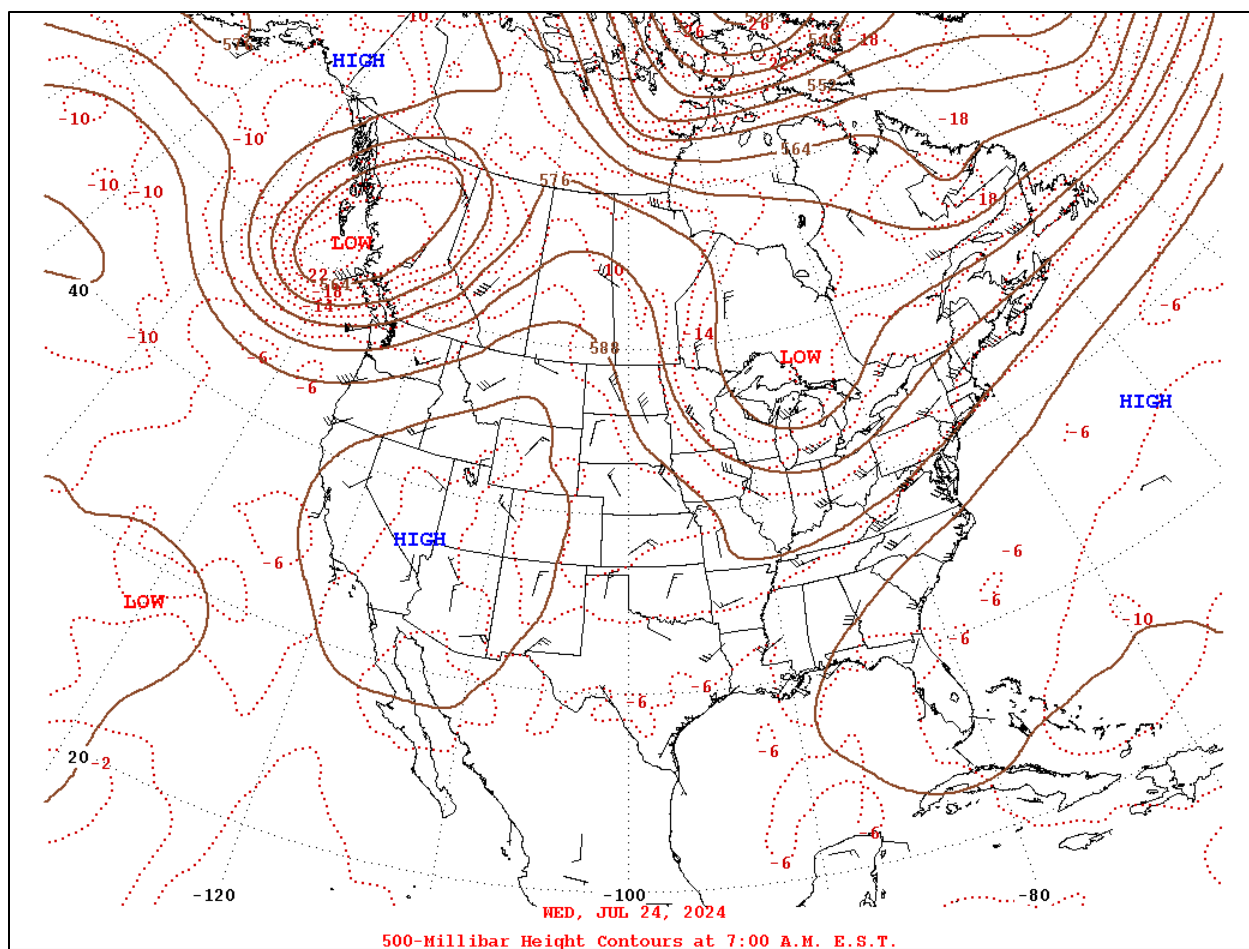


Figure A-48: National Weather Service Weather Prediction Center (July 24, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

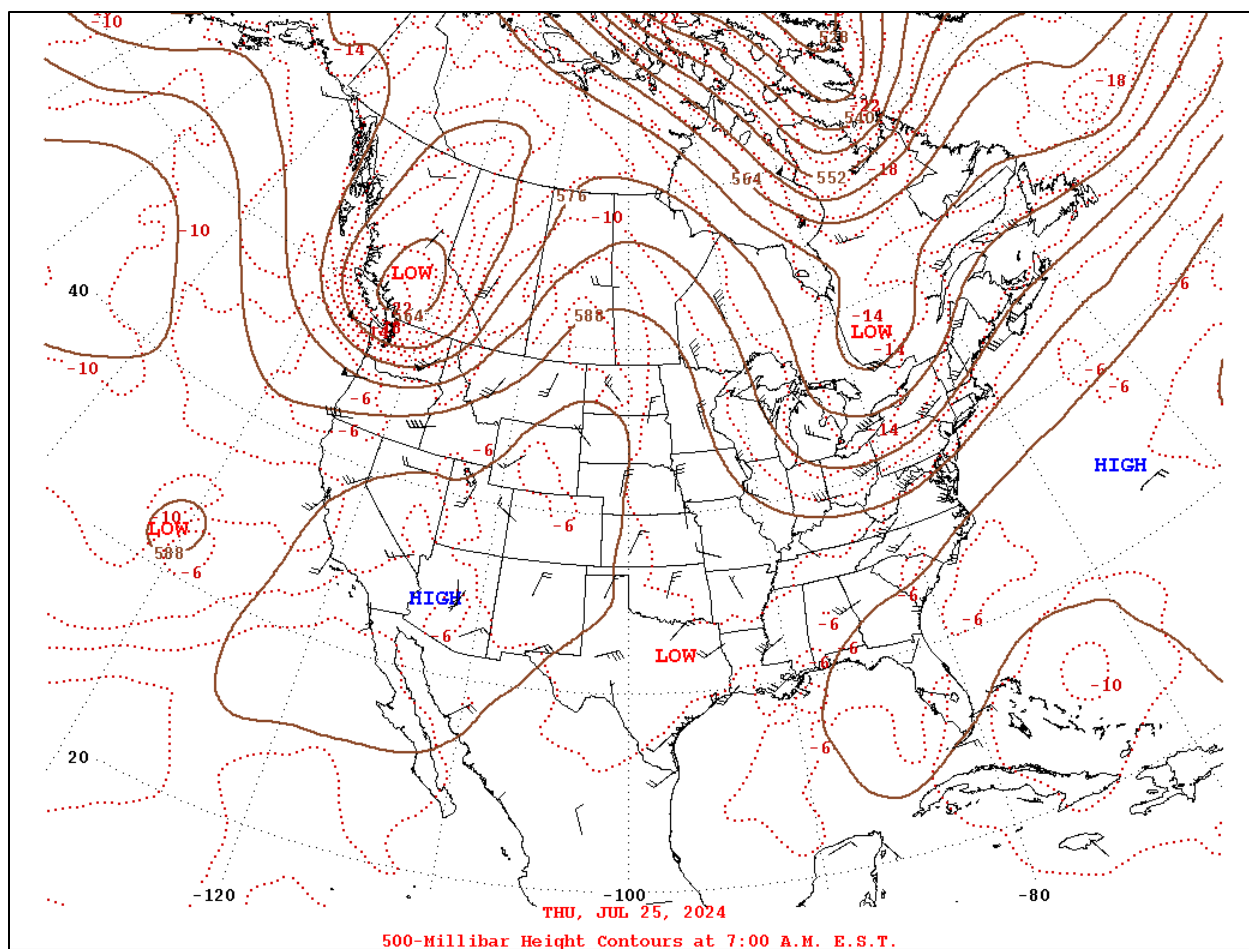


Figure A-49: National Weather Service Weather Prediction Center (July 25, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

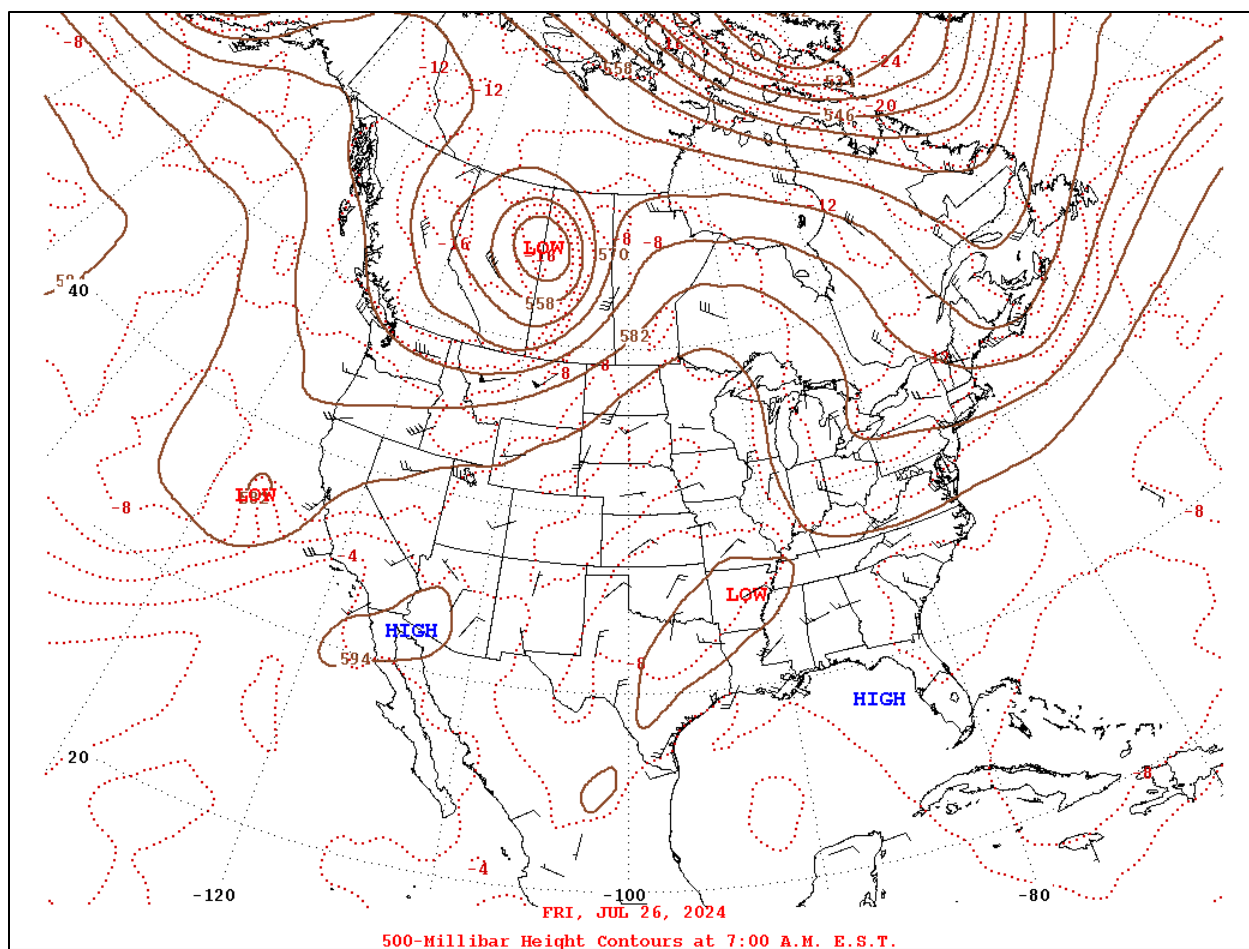


Figure A-50: National Weather Service Weather Prediction Center (July 26, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT



A.17: GROUP 17 - AUGUST 1, 2024

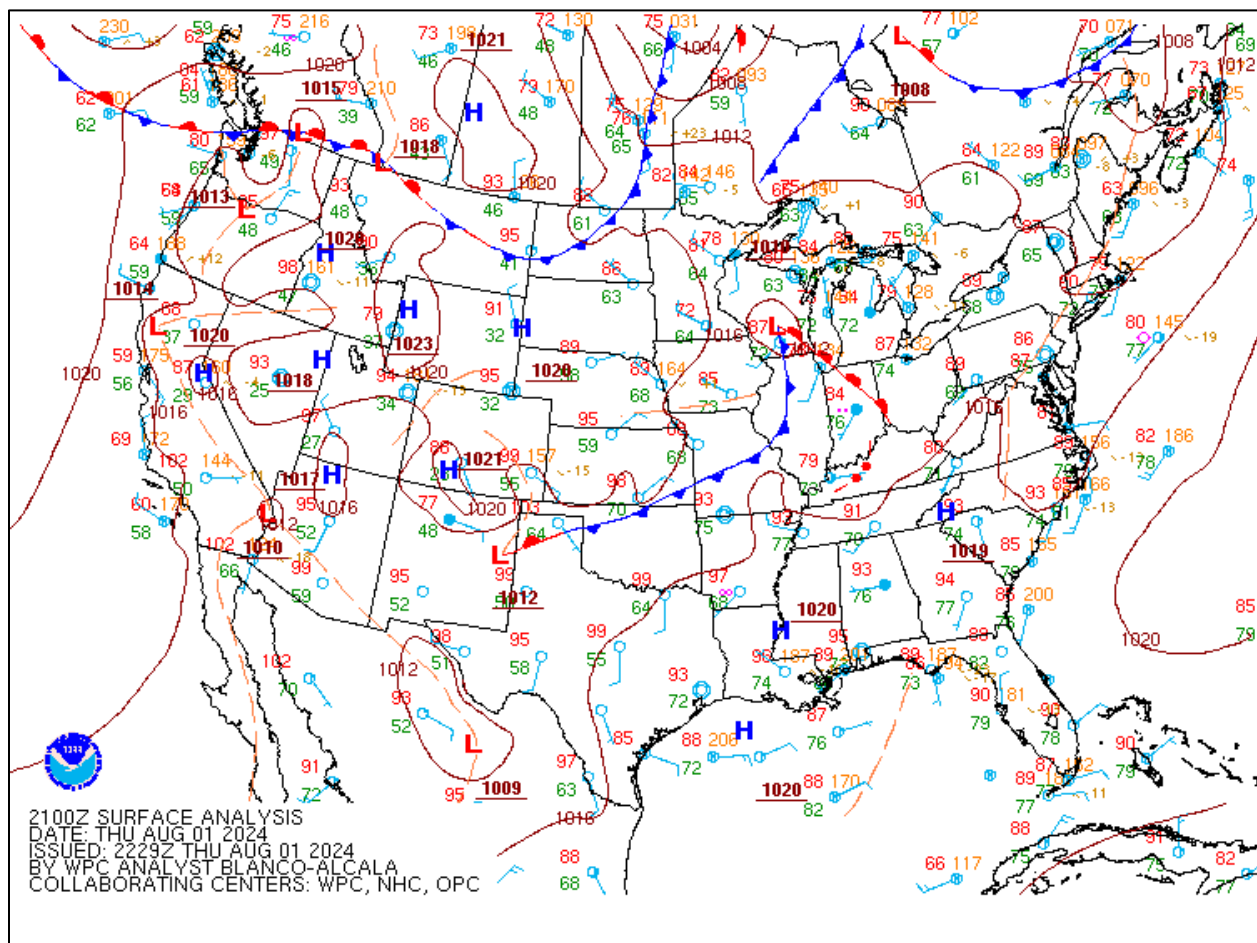


Figure A-51: National Weather Service Weather Prediction Center (August 1, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

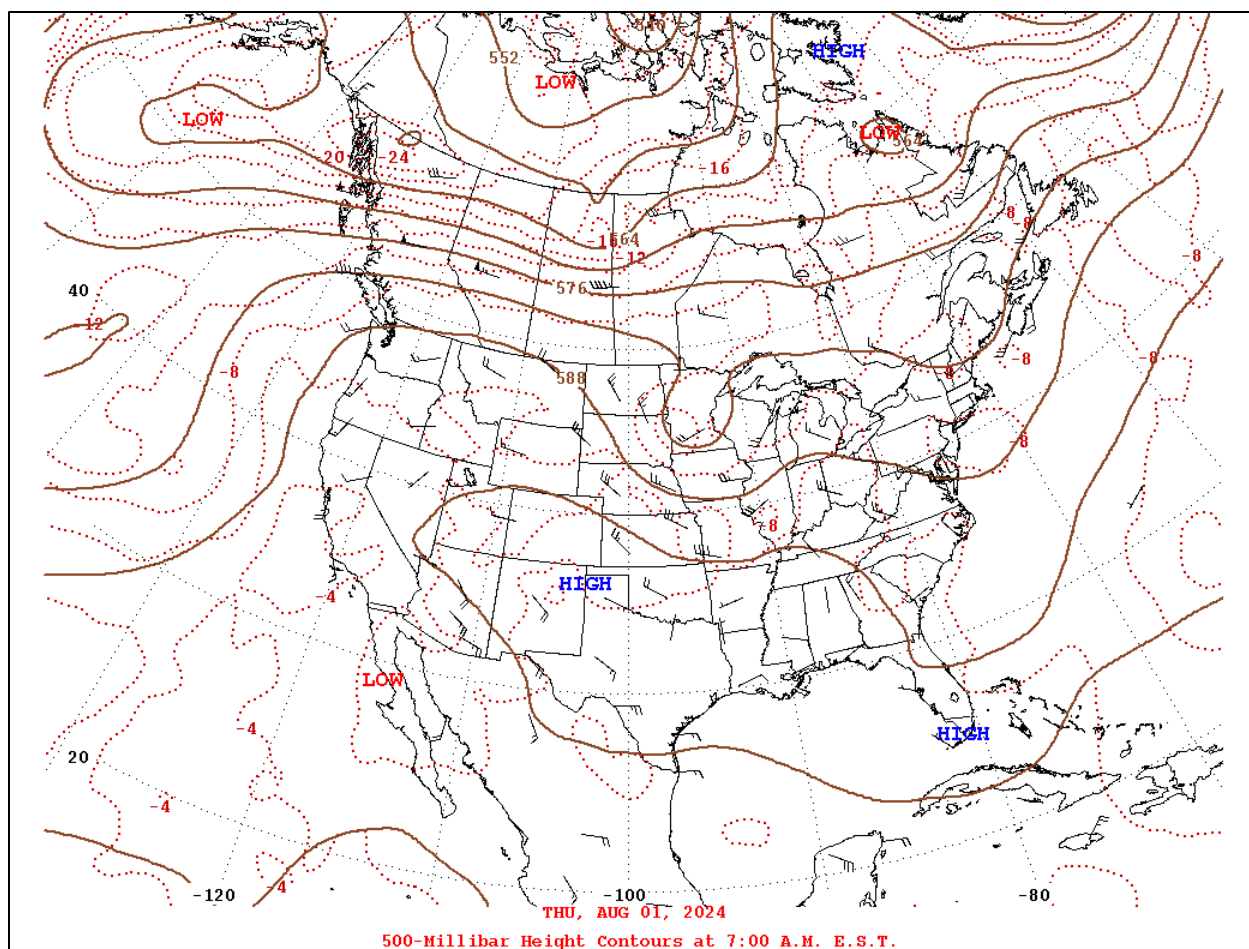


Figure A-52: National Weather Service Weather Prediction Center (August 1, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.18: GROUP 18 – AUGUST 23, 2024

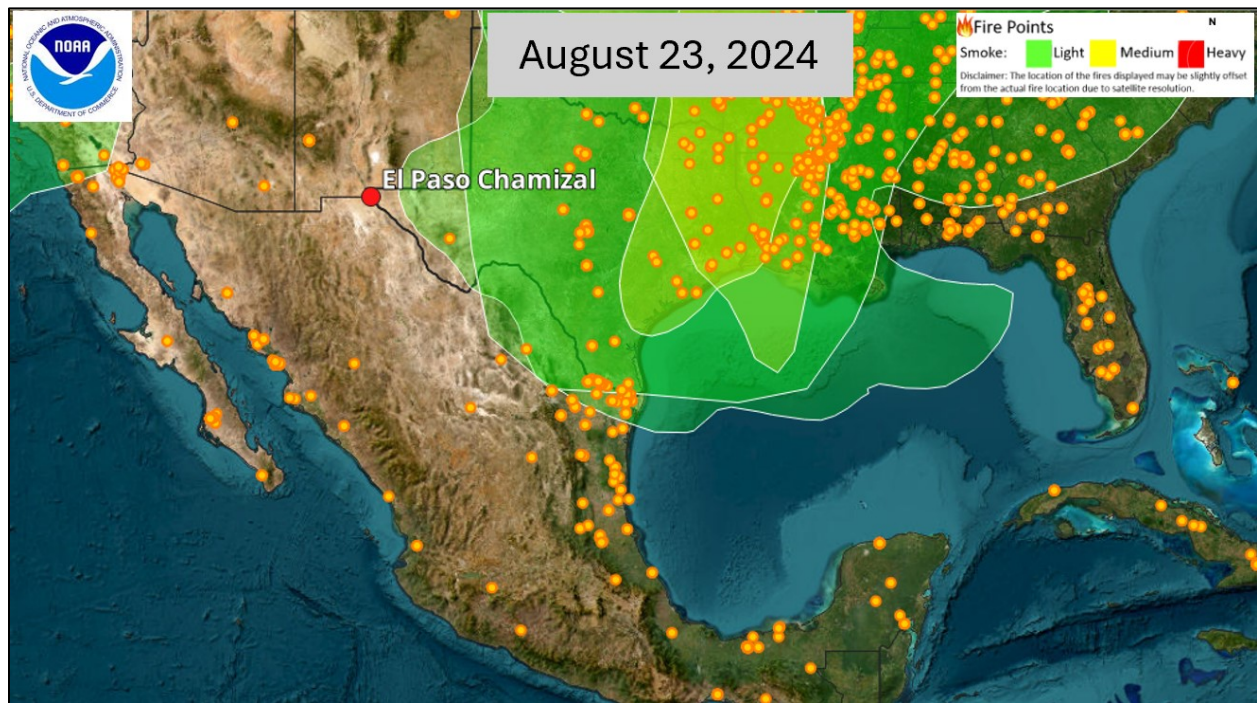
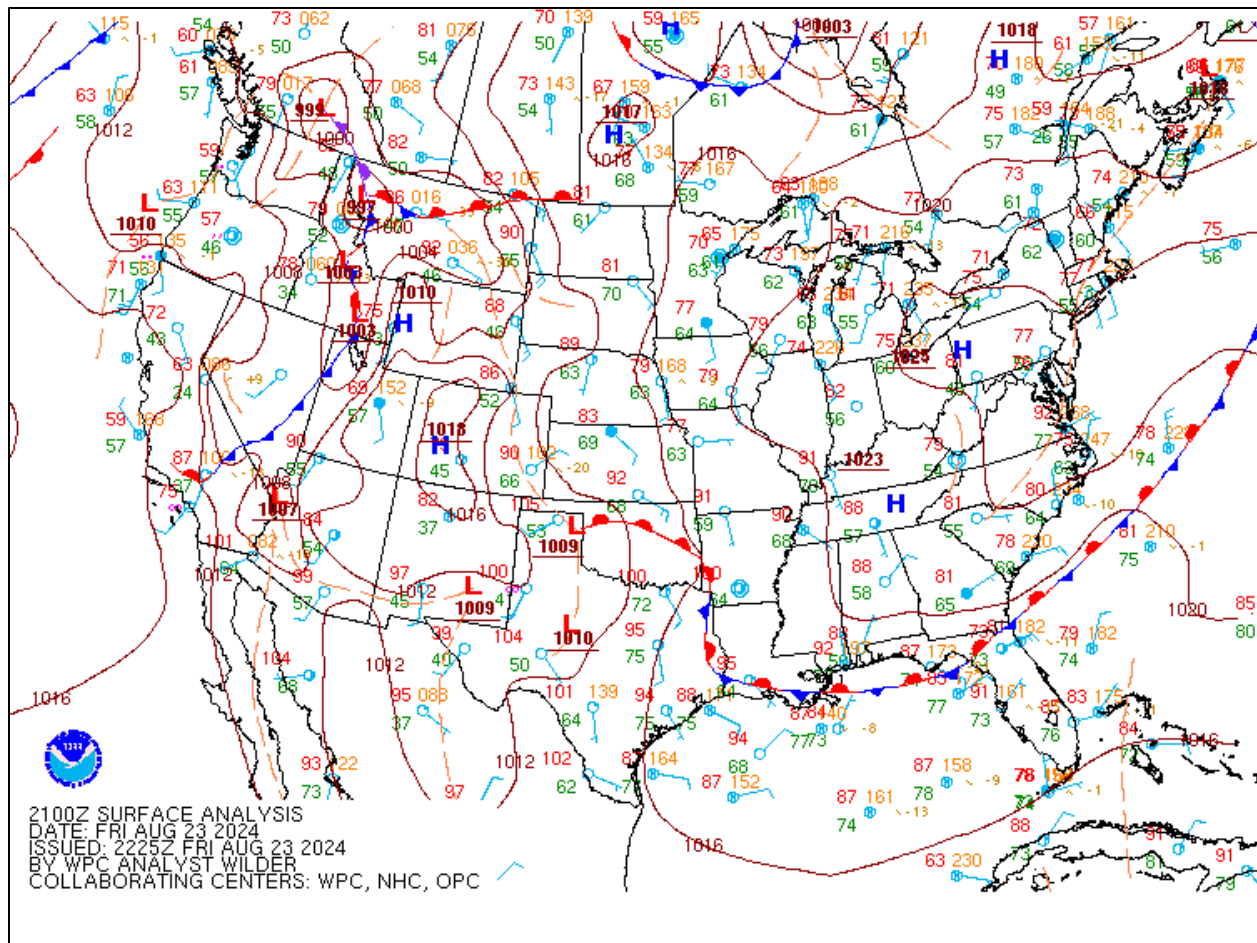


Figure A-53: NOAA HMS Fire and Smoke Map on August 23, 2024



**Figure A-54: National Weather Service Weather Prediction Center (August 23, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**

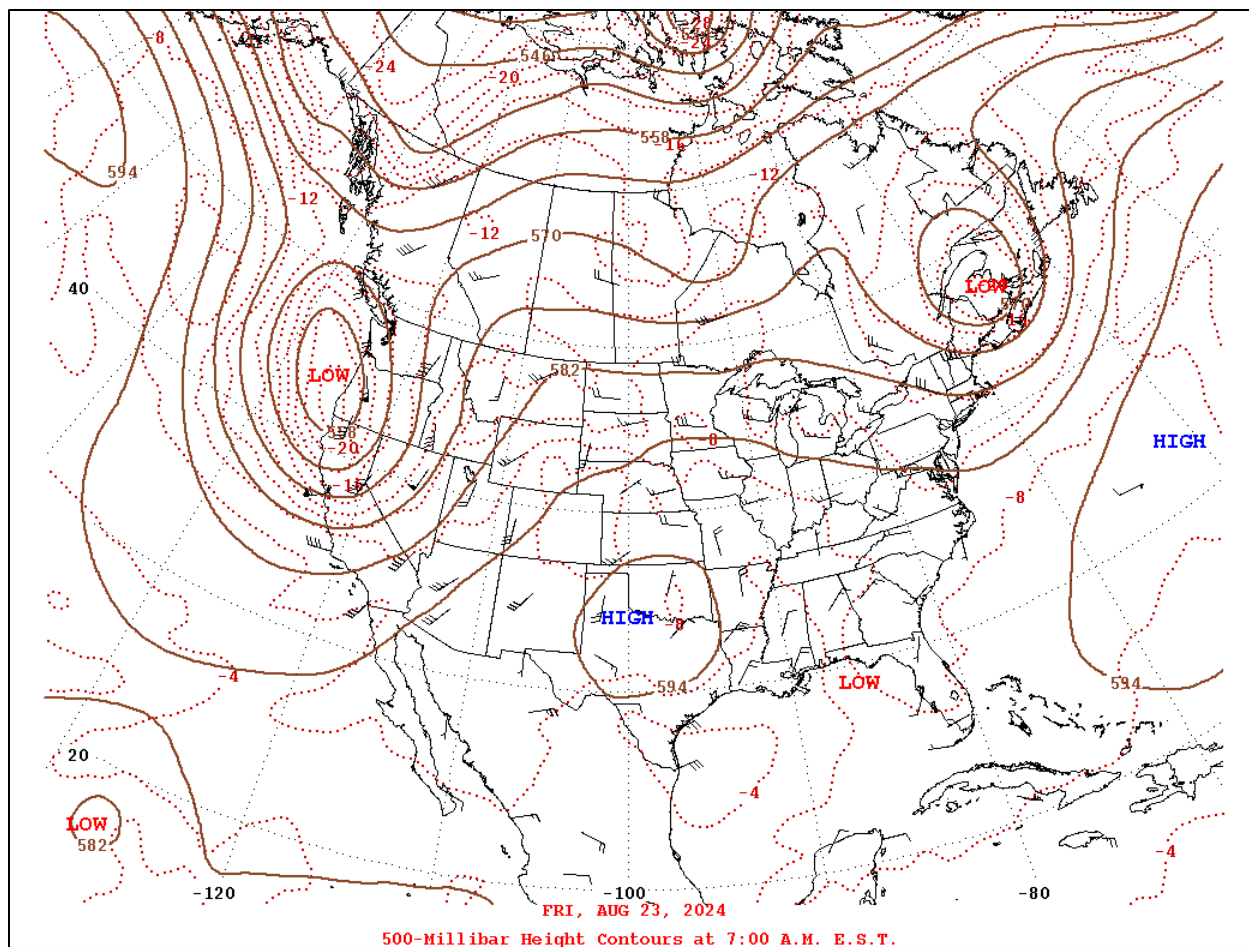


Figure A-55: National Weather Service Weather Prediction Center (August 23, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT



A.19: GROUP 19 – OCTOBER 3, 2024

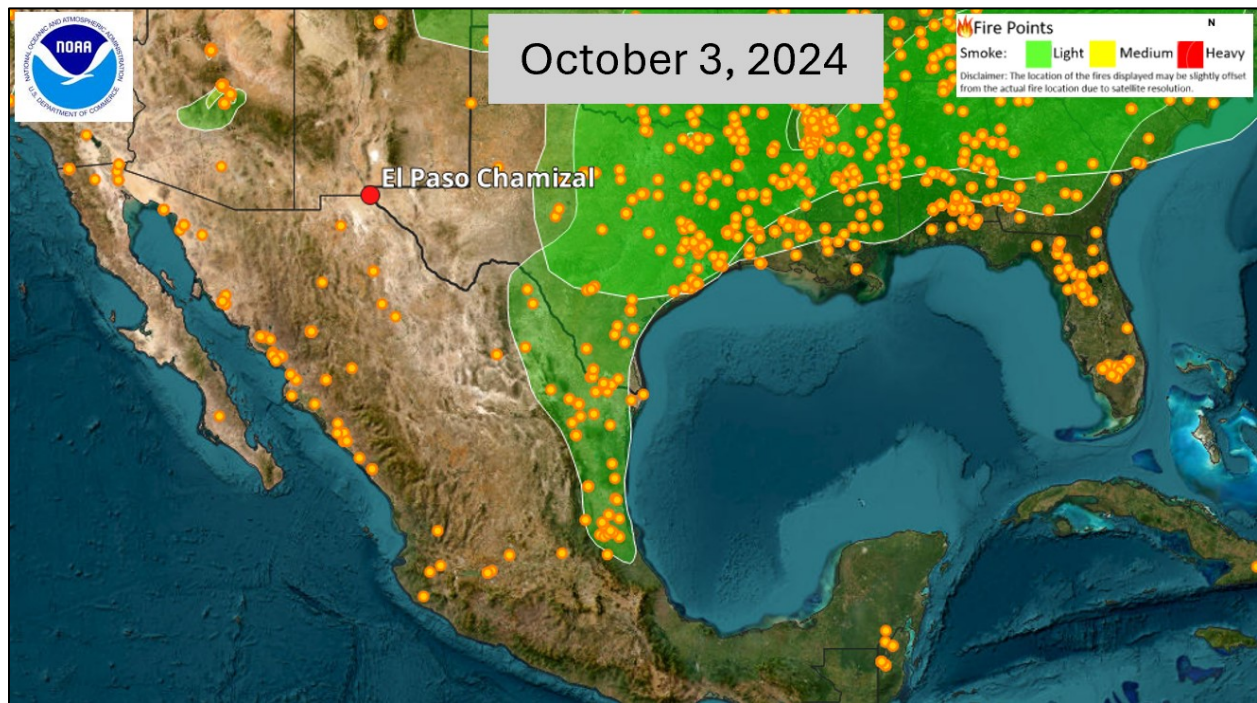
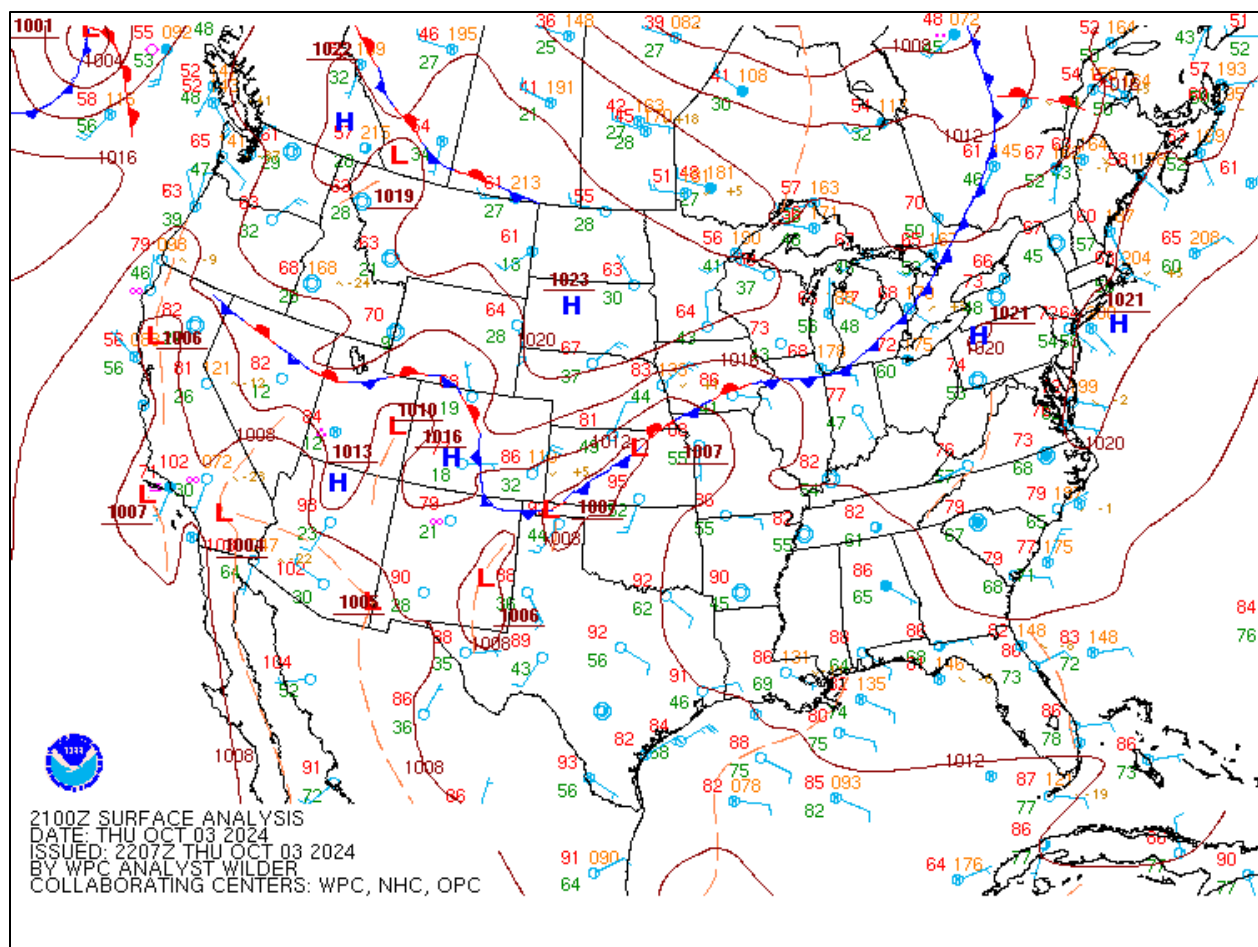


Figure A-56: NOAA HMS Fire and Smoke Map on October 3, 2024





**Figure A-57: National Weather Service Weather Prediction Center (October 3, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT**

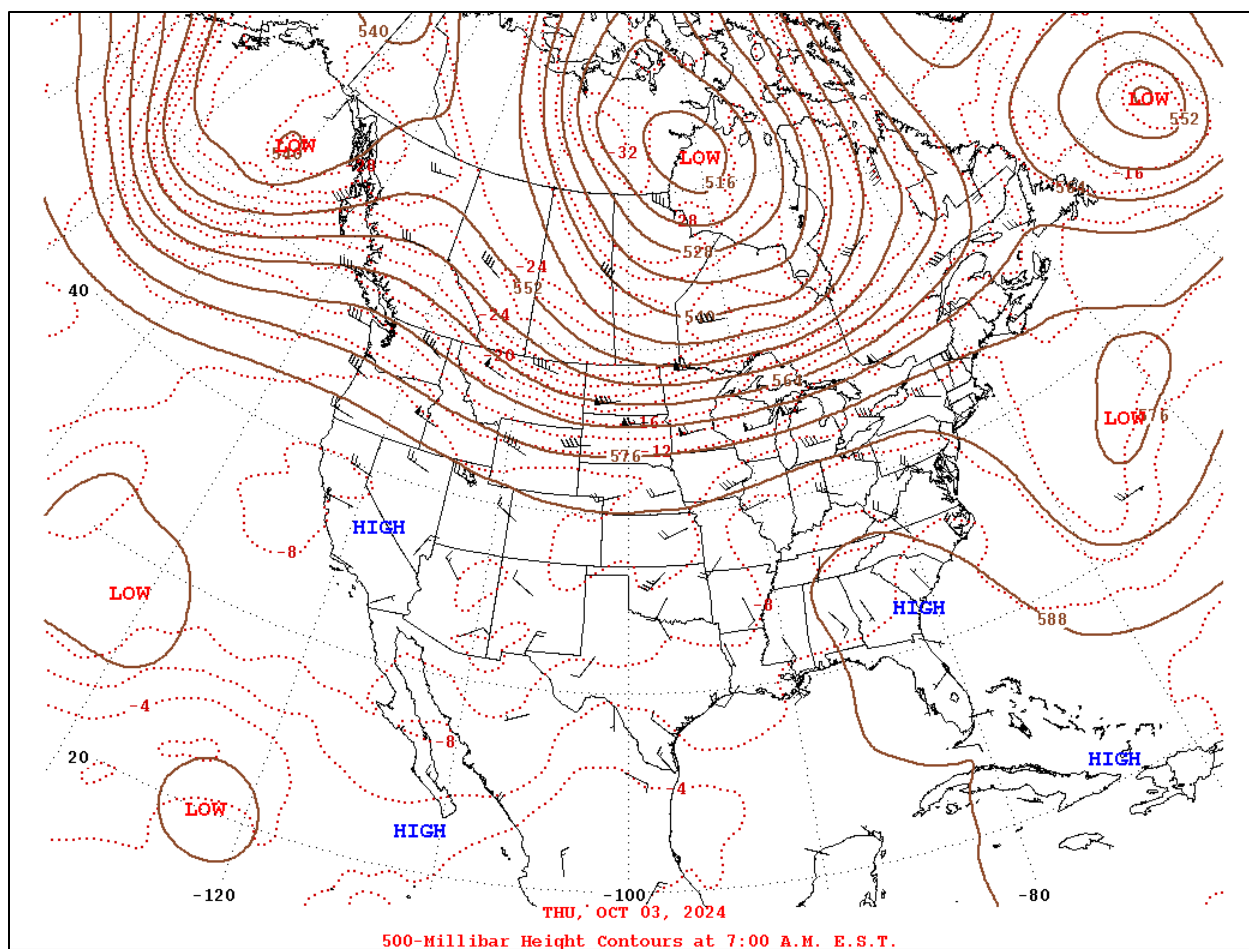


Figure A-58: National Weather Service Weather Prediction Center (October 3, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT

A.20: GROUP 20 – OCTOBER 29, 2024

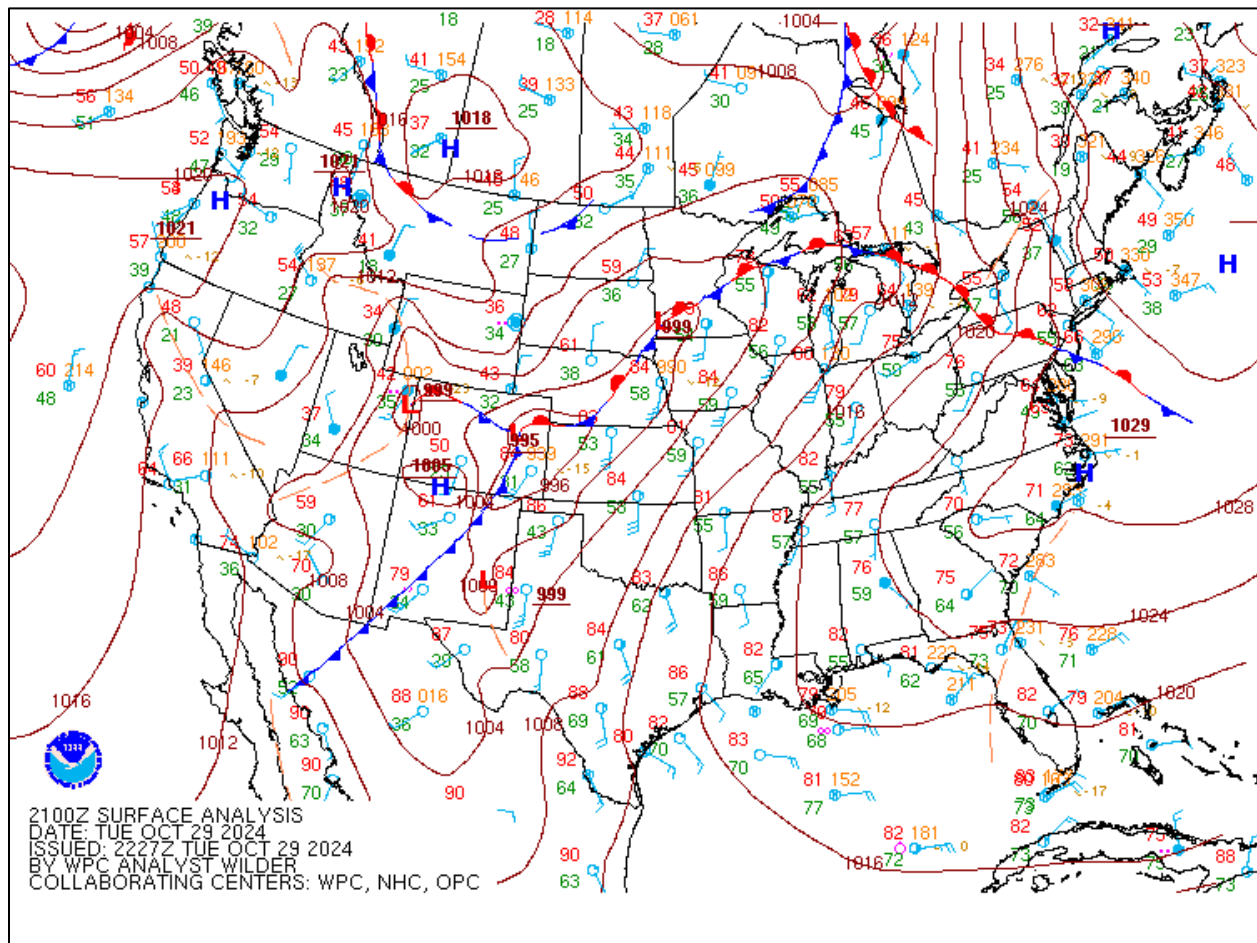


Figure A-59: National Weather Service Weather Prediction Center (October 29, 2024) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

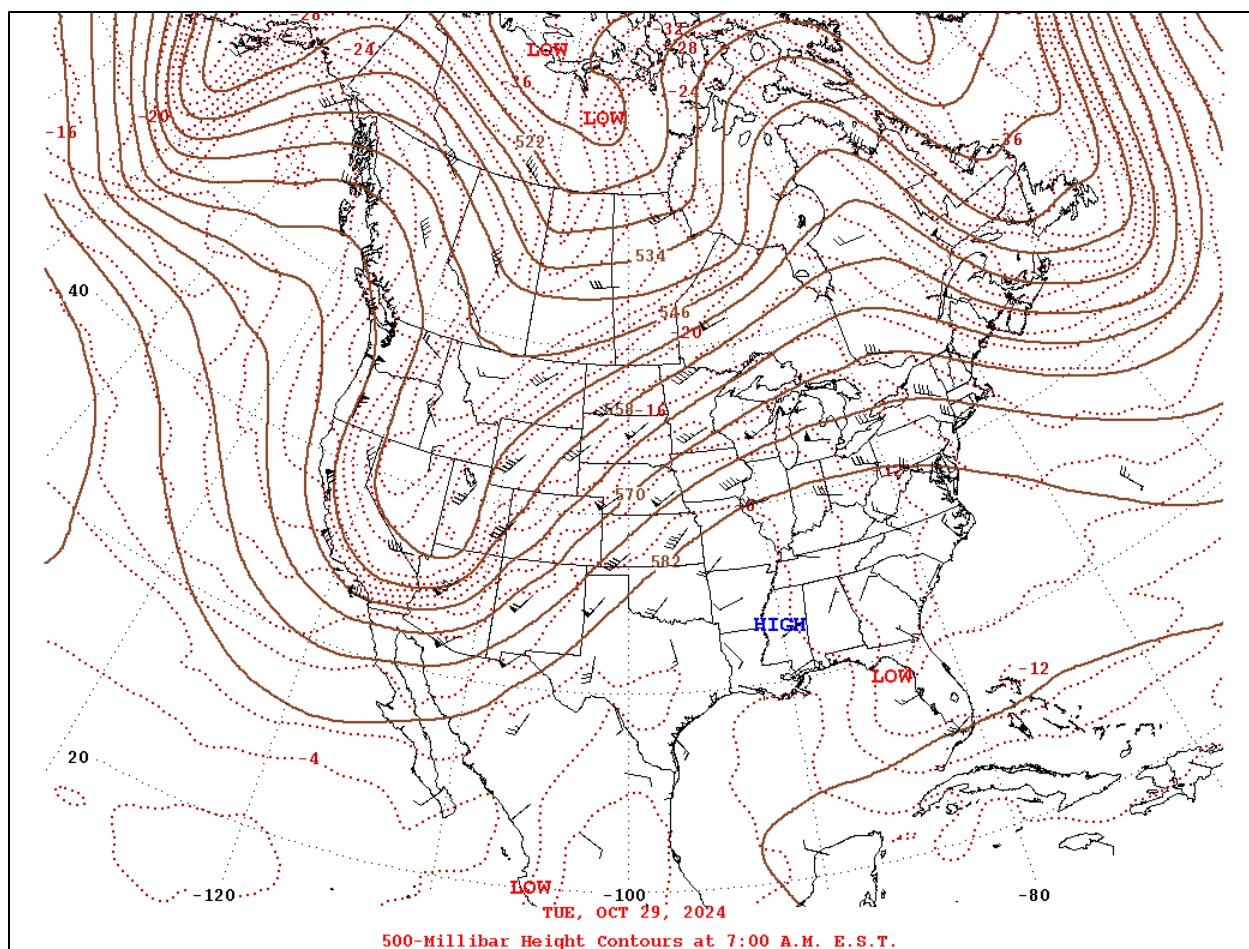


Figure A-60: National Weather Service Weather Prediction Center (October 29, 2024) 500 MB Analysis (12Z) 6:00 a.m. CDT