

APPENDIX A

WEATHER MAPS AND GRAPHS

EXCEPTIONAL EVENTS DEMONSTATION FOR 2022 PM_{2.5}
EXCEEDANCES AT ATASCOSA, HIDALGO, NUECES, TARRANT,
AND WEBB COUNTIES

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 - MAY 5, 2022

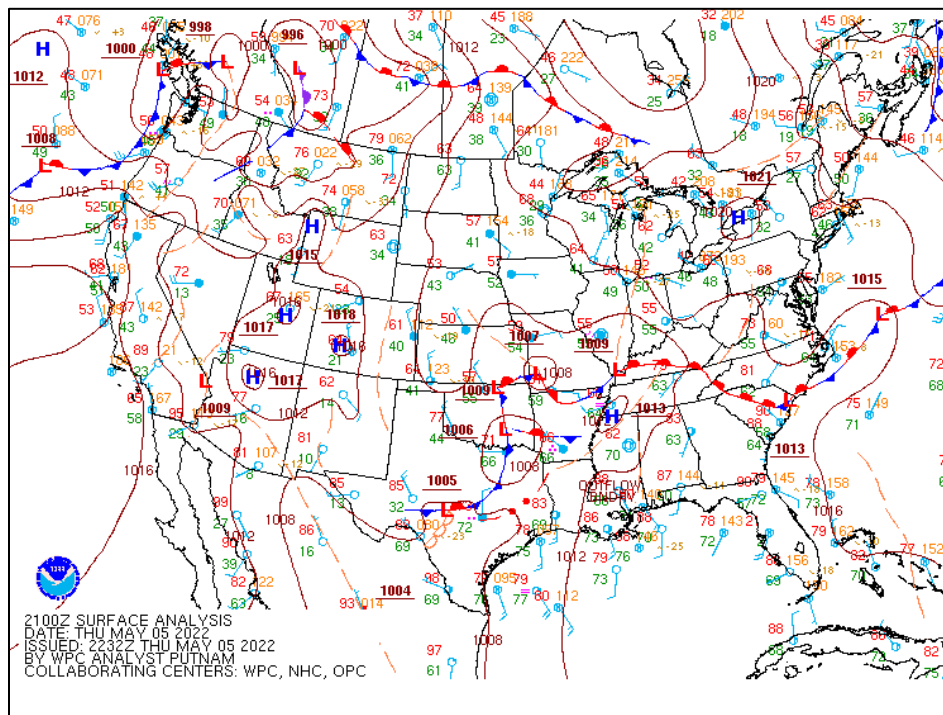


Figure A-1: National Weather Service Weather Prediction Center (May 05, 2022) CONUS Surface Analysis (21Z) 00:00 a.m. CDT

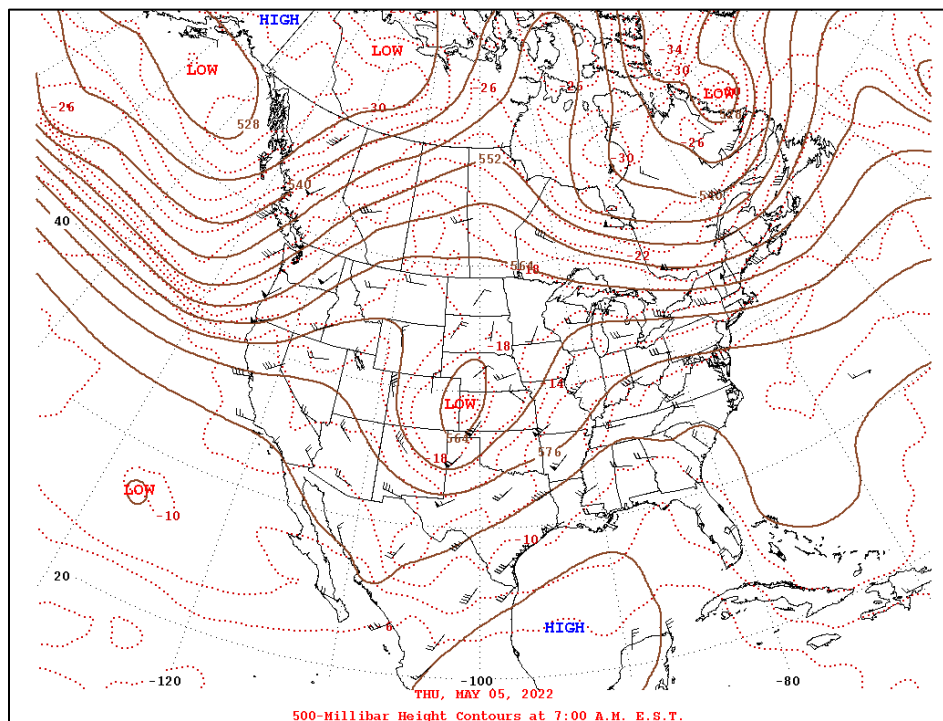


Figure A-2: National Weather Service, Storm Prediction Center (May 05, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

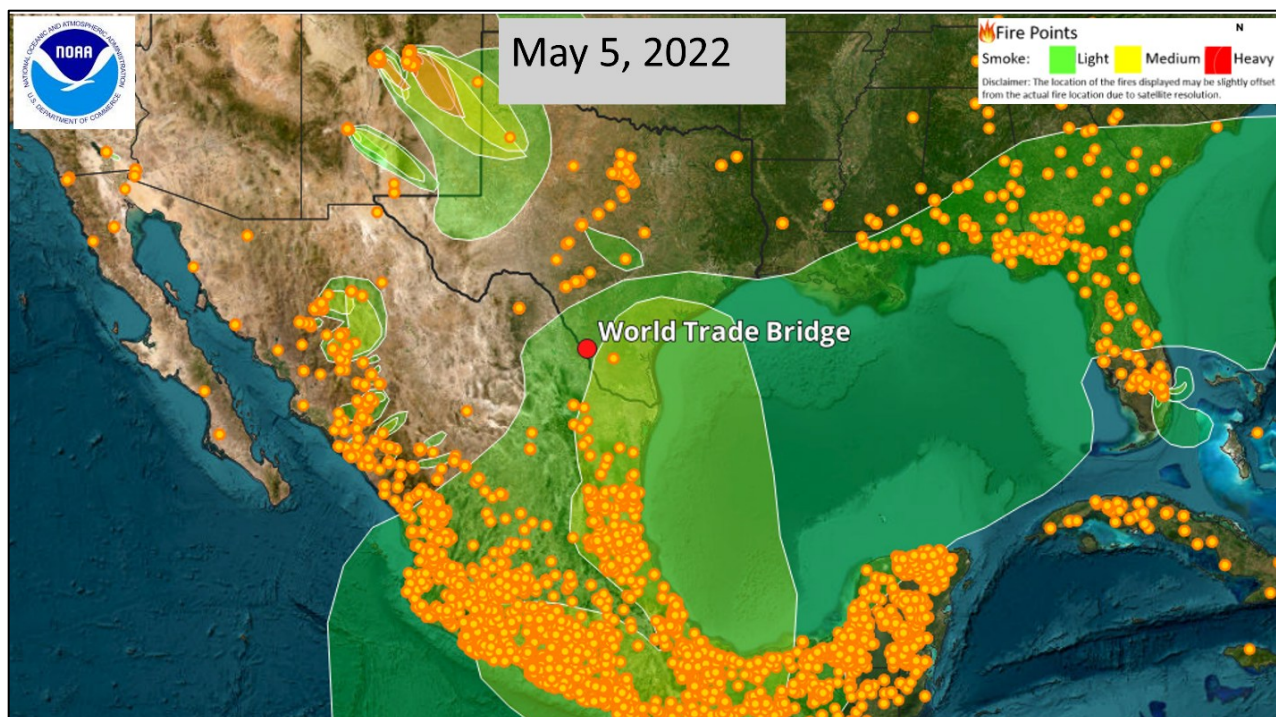


Figure A-3: NOAA HMS Fire and Smoke Map on May 5, 2022

A. 2:GROUP 2 – MAY 8 AND MAY 9, 2022

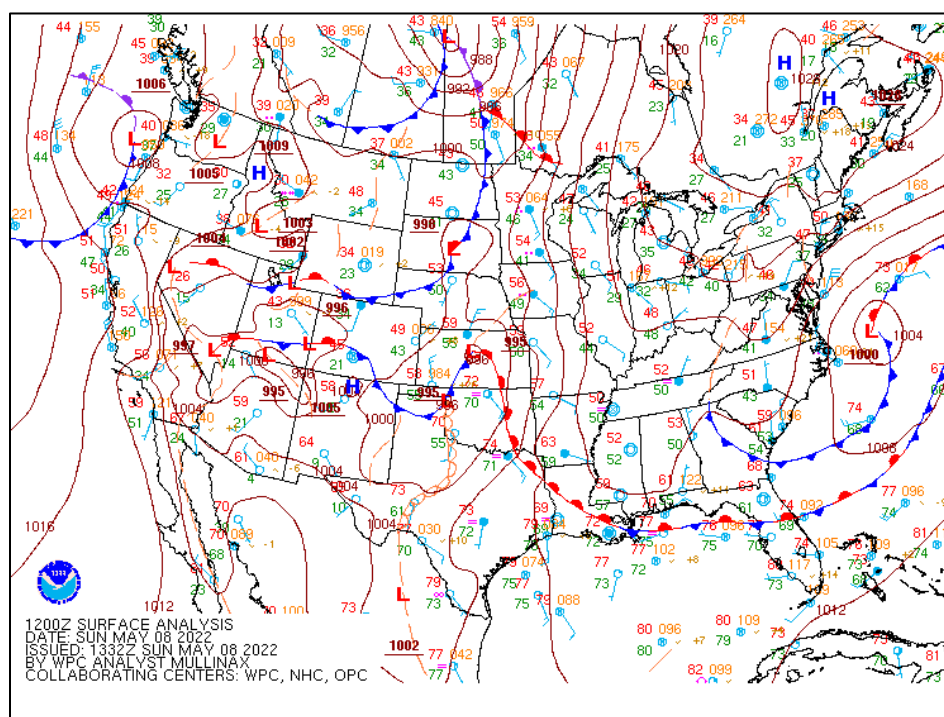


Figure A-4: National Weather Service Weather Prediction Center (May 08, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

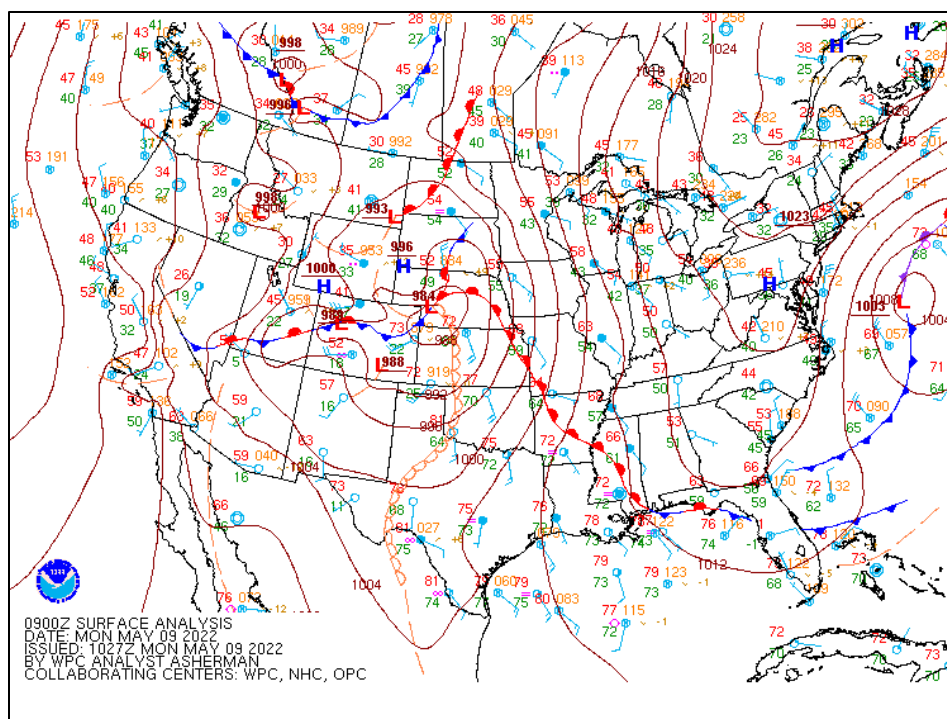


Figure A-5: National Weather Service Weather Prediction Center (May 09, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

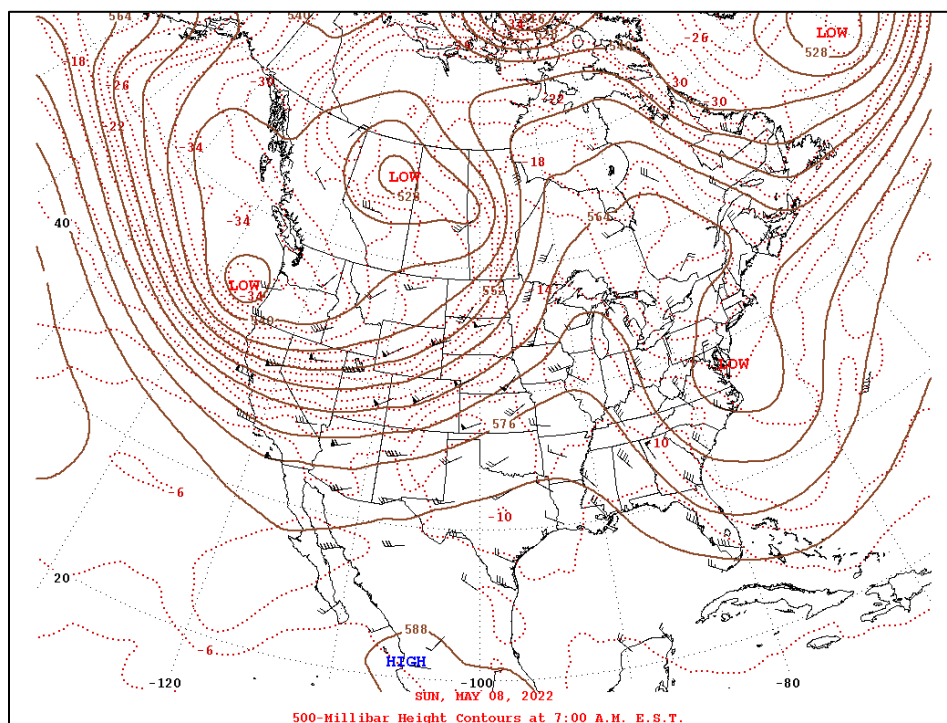


Figure A-6: National Weather Service, Storm Prediction Center (May 08, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

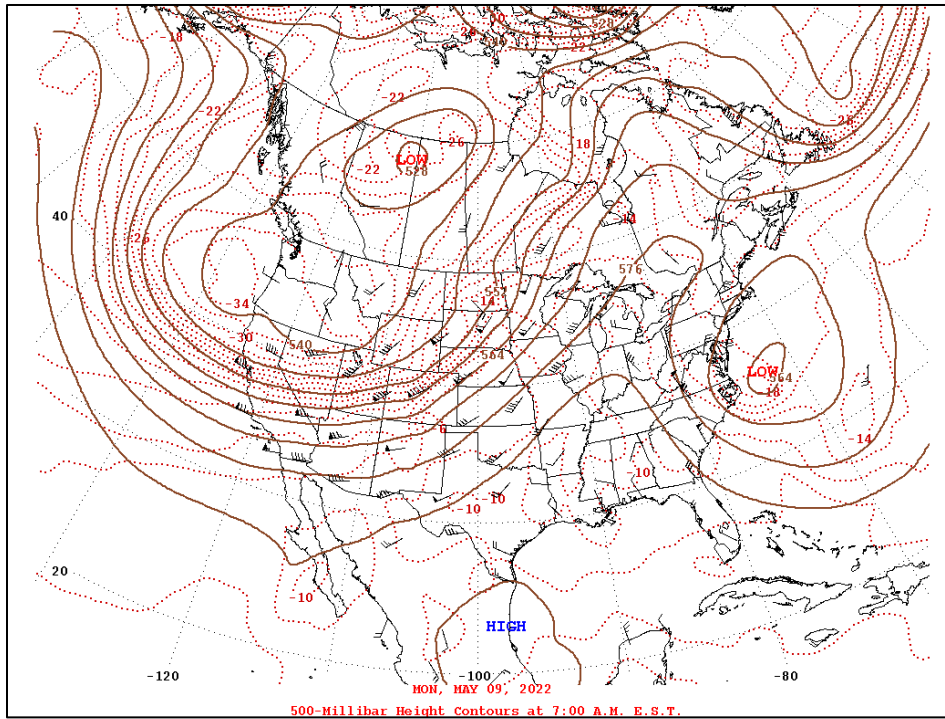


Figure A-7: National Weather Service, Storm Prediction Center (May 09, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

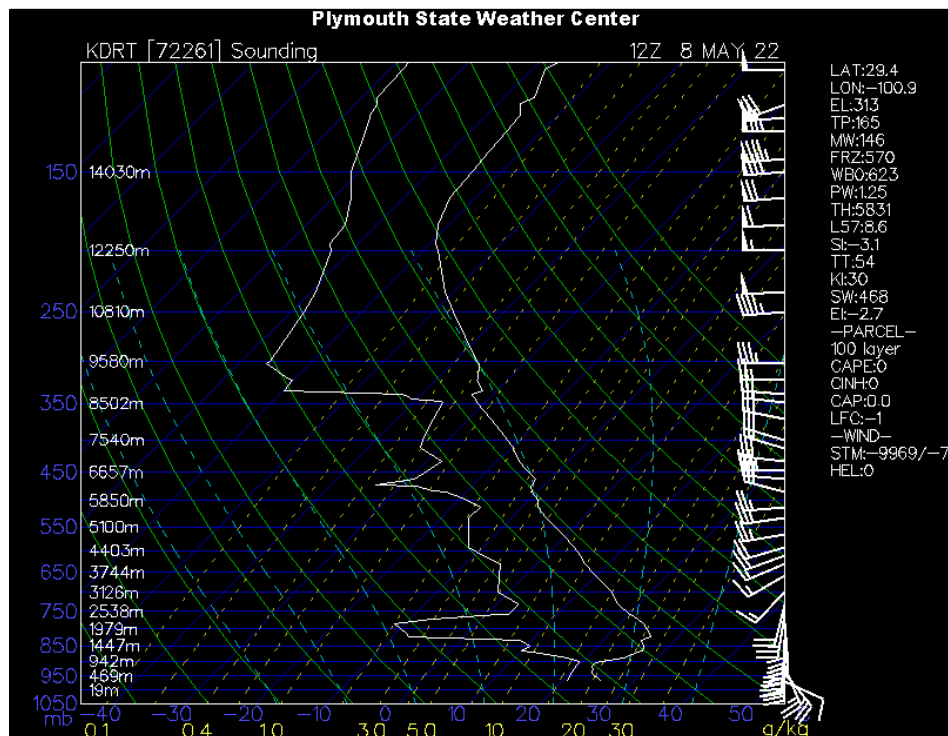


Figure A-8: Upper Air Sounding Chart from Del Rio International, Texas on May 8, 2022, at (12Z) 6:00 a.m. CDT

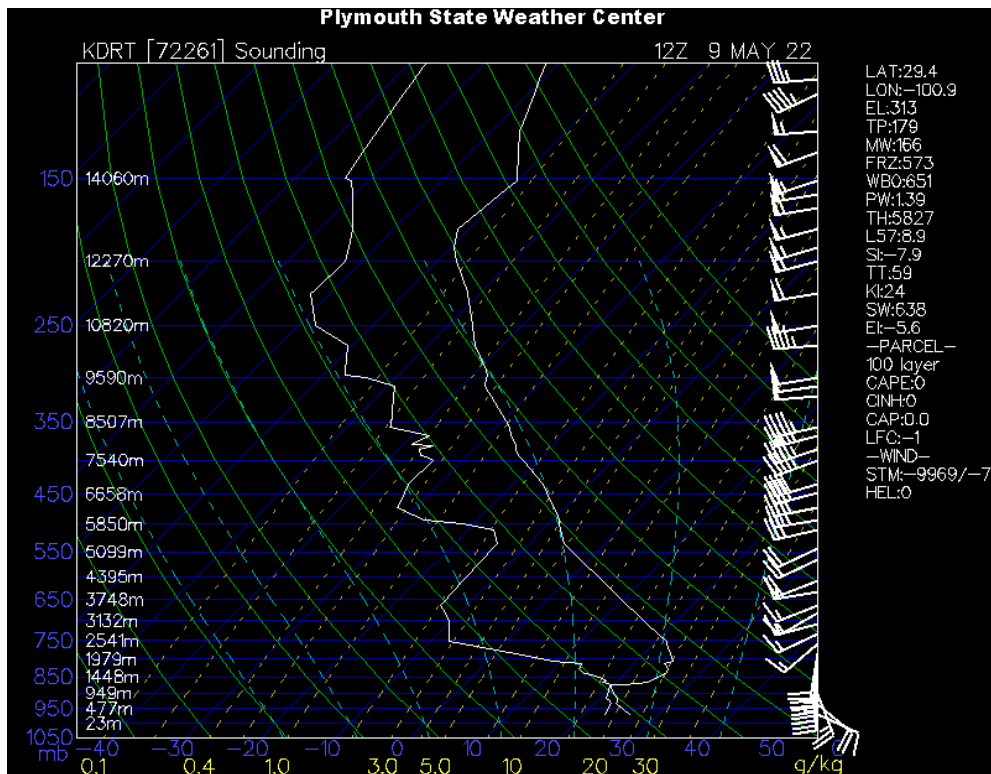


Figure A-9: Upper Air Sounding Chart from Del Rio International, Texas on May 9, 2022, at (12Z) 6:00 a.m. CDT

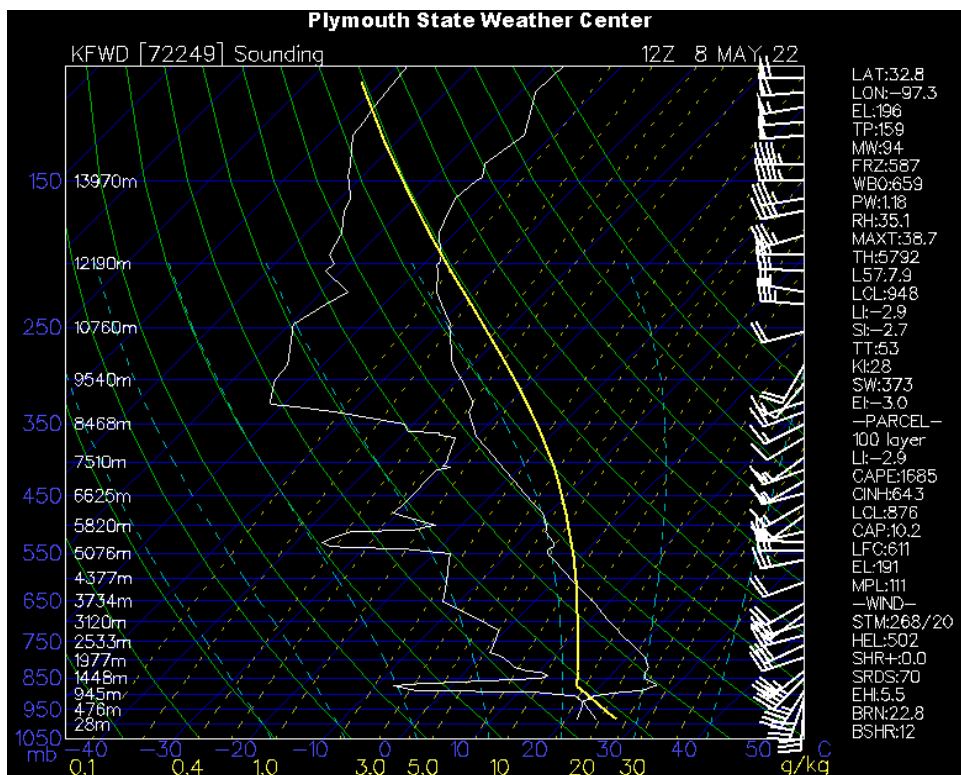


Figure A-10: Upper Air Sounding Chart from Fort Worth, Texas on May 8, 2022, at (12Z) 6:00 a.m. CDT

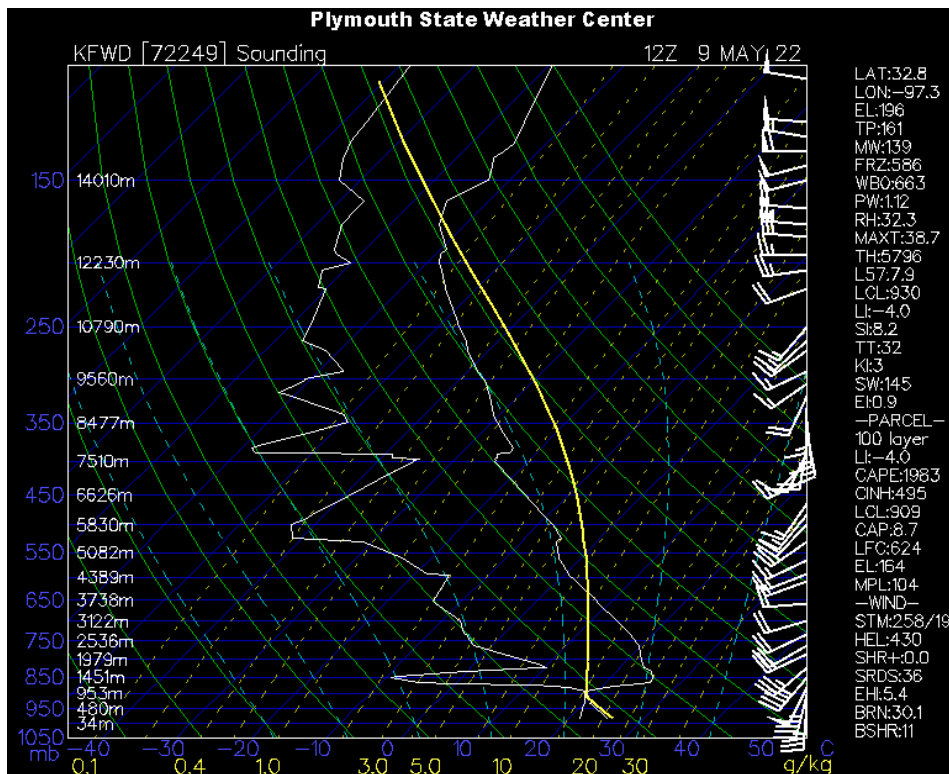


Figure A-11: Upper Air Sounding Chart from Fort Worth, Texas on May 9, 2022, at (12Z) 6:00 a.m. CDT

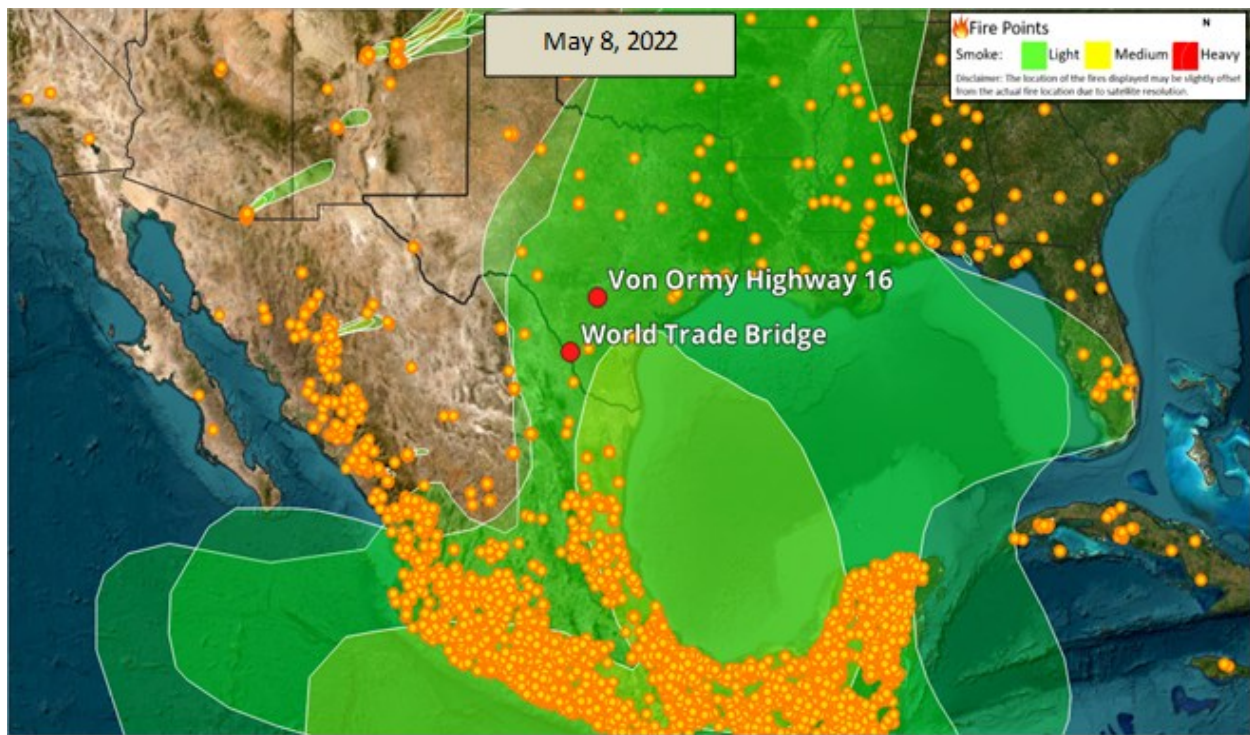


Figure A-12: NOAA HMS Fire and Smoke Map on May 8, 2022

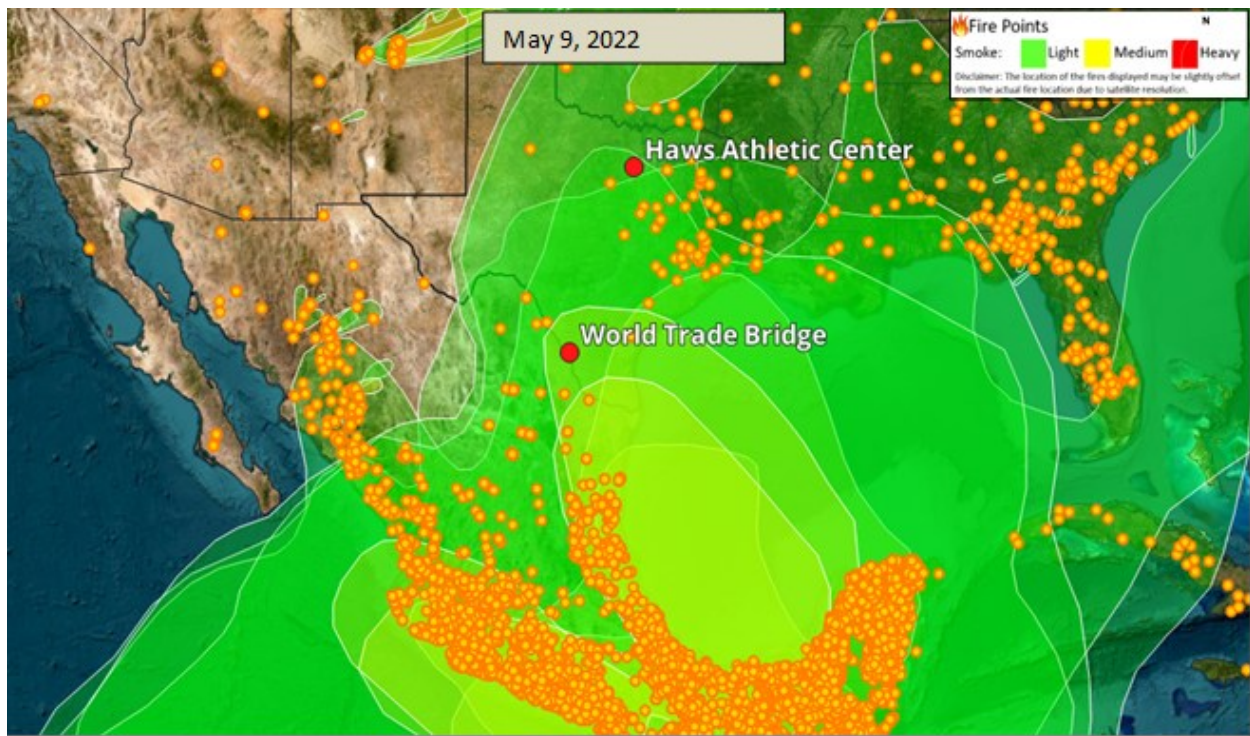


Figure A-13: NOAA HMS Fire and Smoke Map on May 9, 2022

A. 3:GROUP 3 - MAY 20 AND MAY 21, 2022

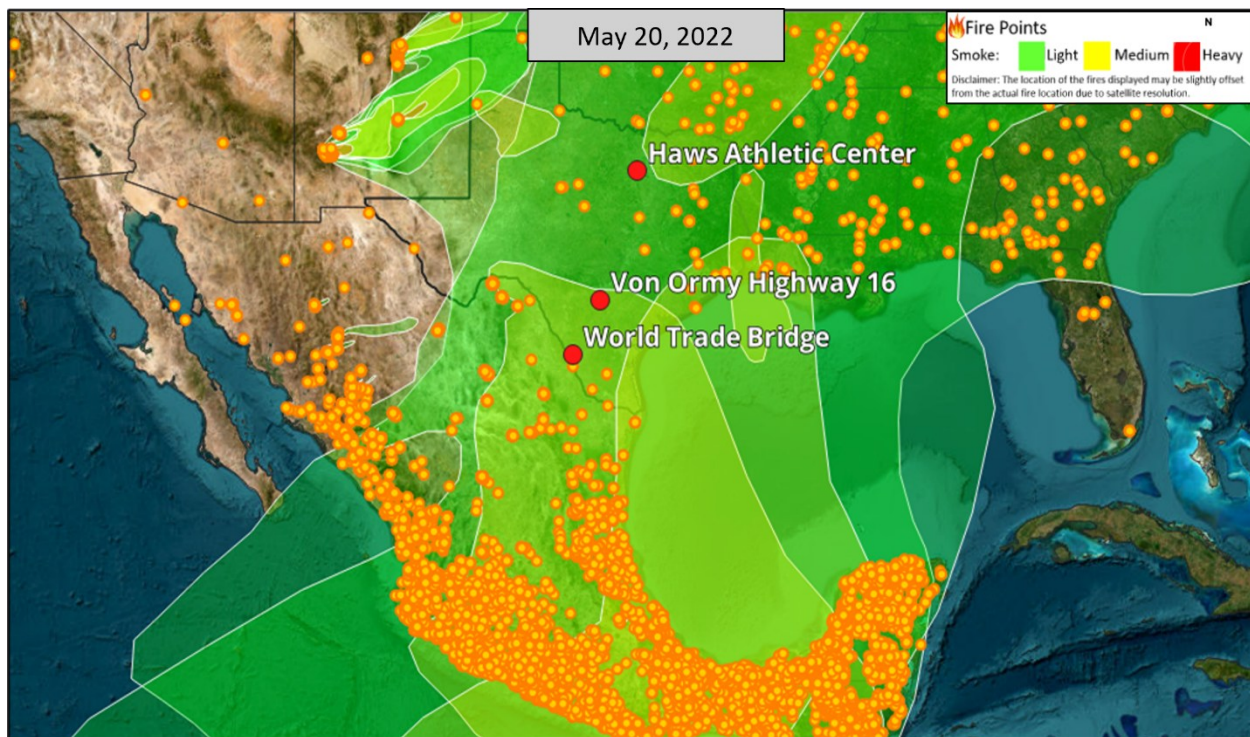


Figure A-14: NOAA HMS Fire and Smoke Map on May 21, 2022

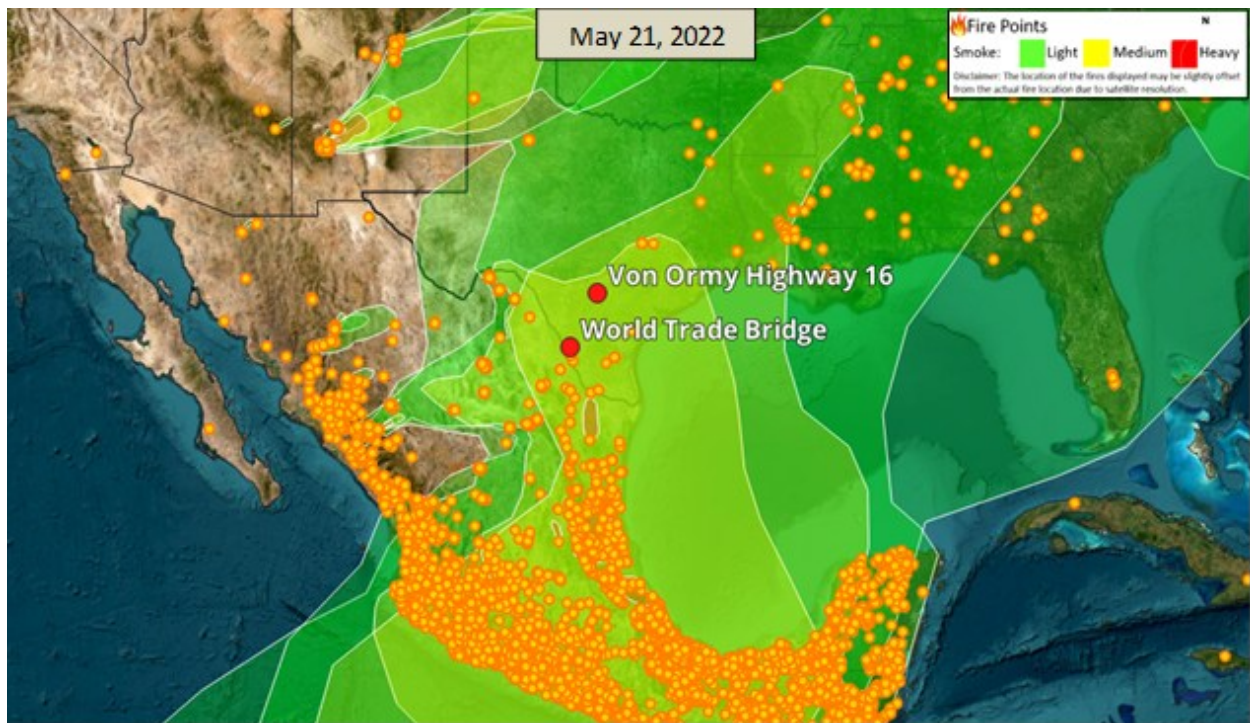


Figure A-15: NOAA HMS Fire and Smoke Map on May 21, 2022

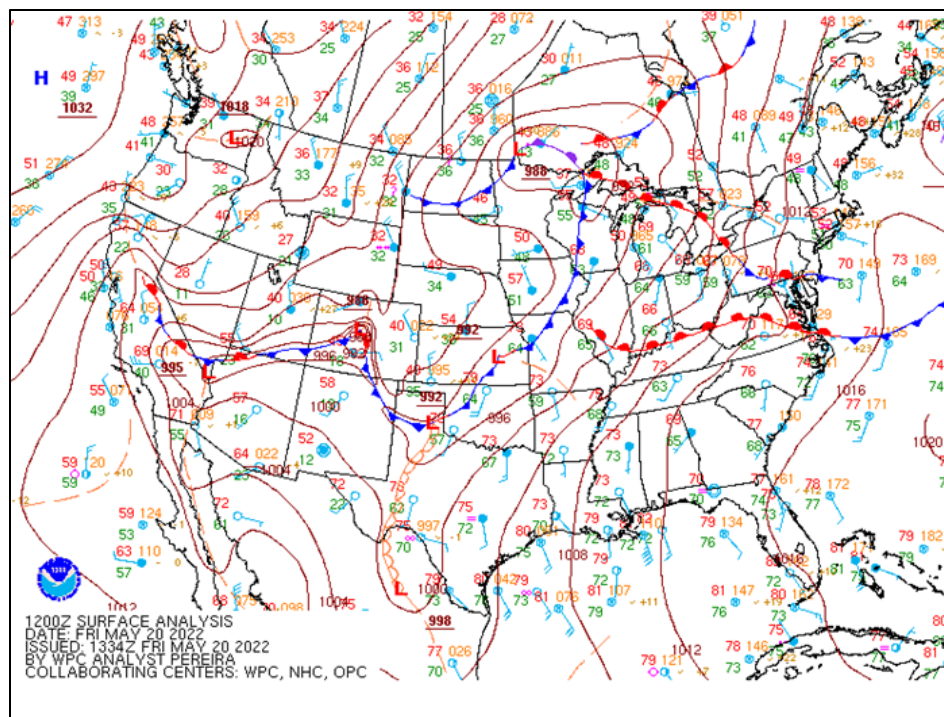


Figure A-16: National Weather Service Weather Prediction Center (May 20, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

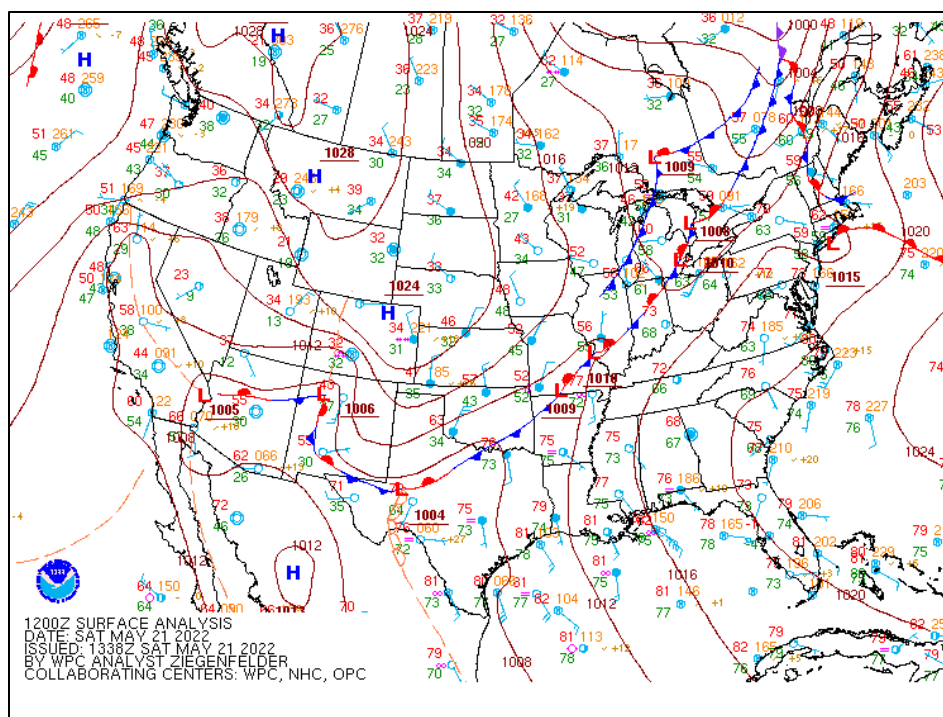


Figure A-17: National Weather Service Weather Prediction Center (May 21, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

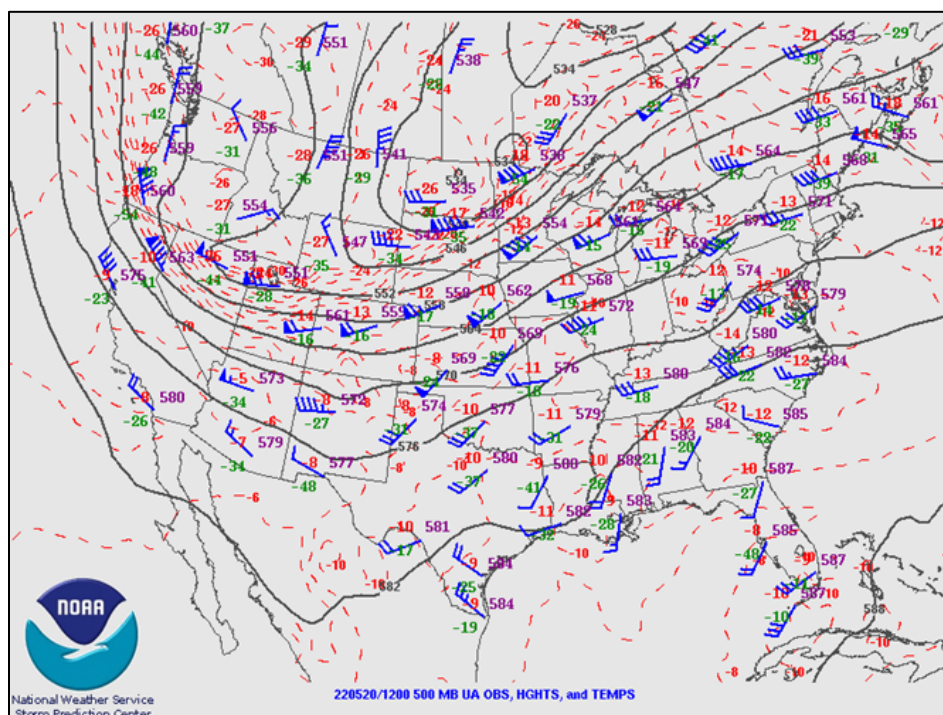


Figure A-18: National Weather Service, Storm Prediction Center (May 20, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

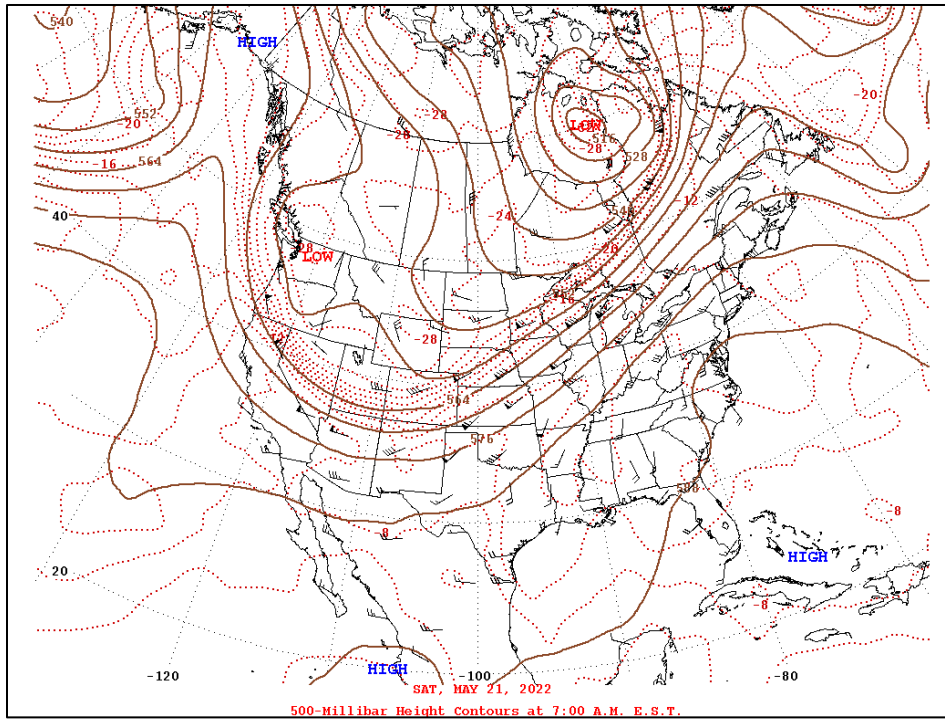


Figure A-19: National Weather Service, Storm Prediction Center (May 21, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

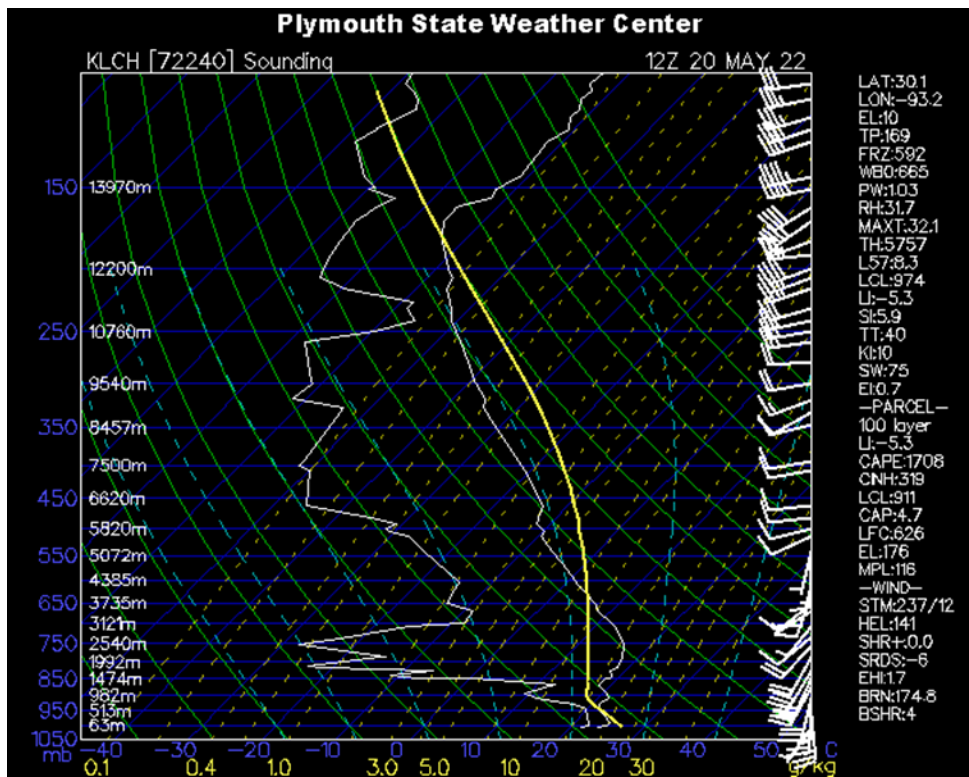


Figure A-20: Upper Air Sounding Chart from Lake Charles, Louisiana on May 20, 2022, at (12Z) 6:00 a.m. CDT

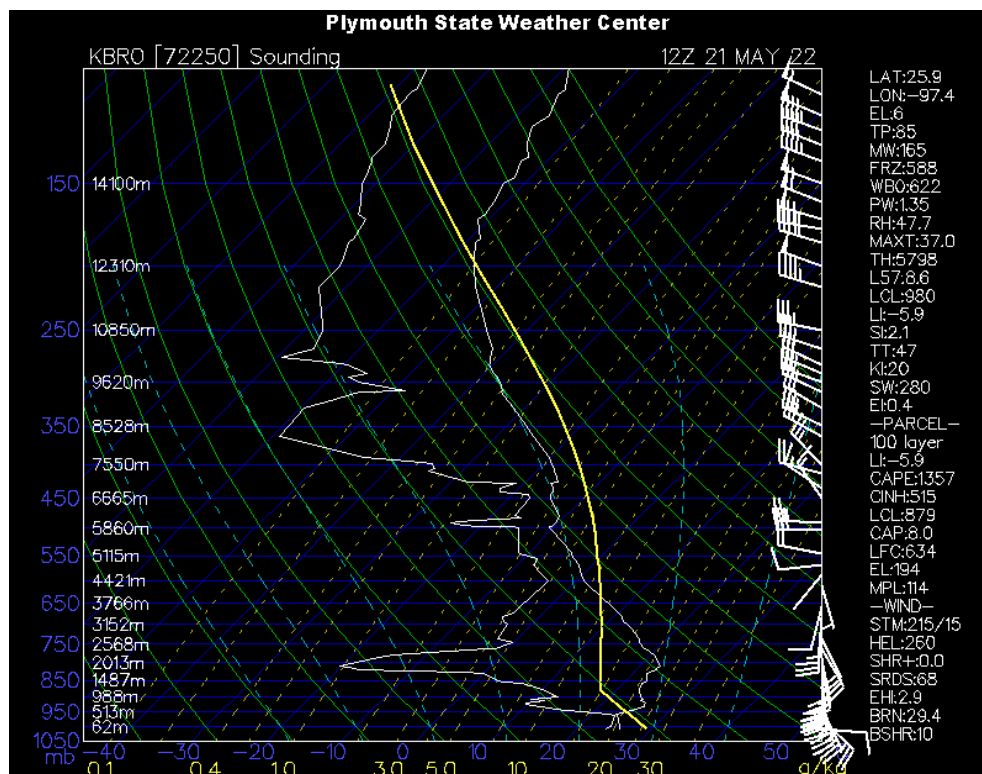


Figure A-21: Upper Air Sounding Chart from Brownsville, Texas on May 21, 2022, at (12Z) 6:00 a.m. CDT

A. 4:GROUP 4 - JUNE 12 THROUGH JUNE 17, 2022

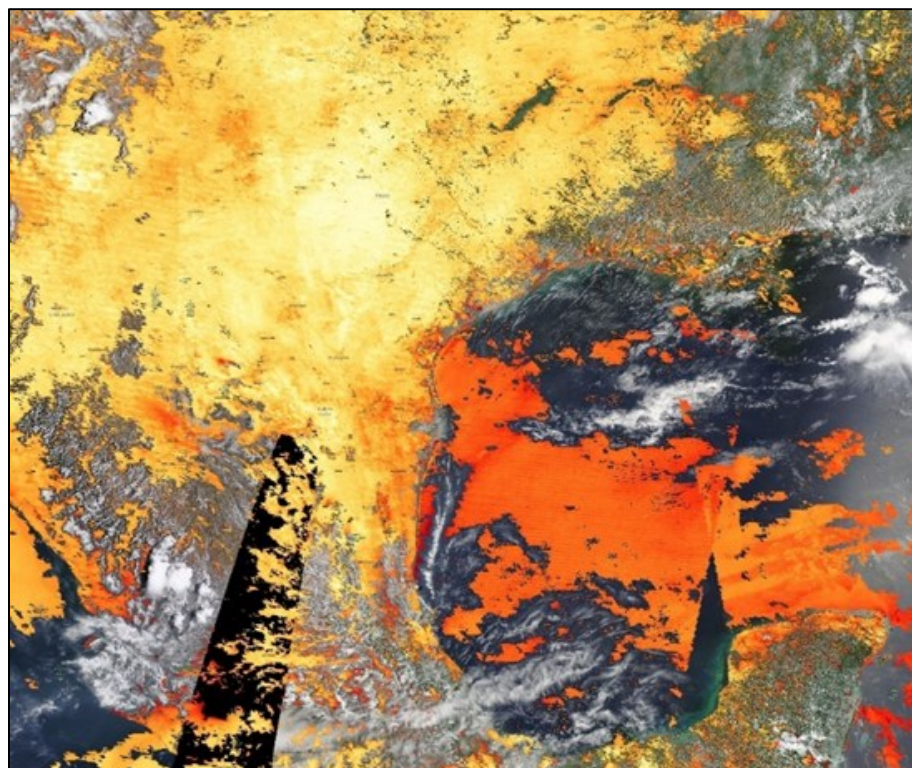


Figure A-22: MAIAC Combined Aerosol Optical Depth Image on June 12, 2022

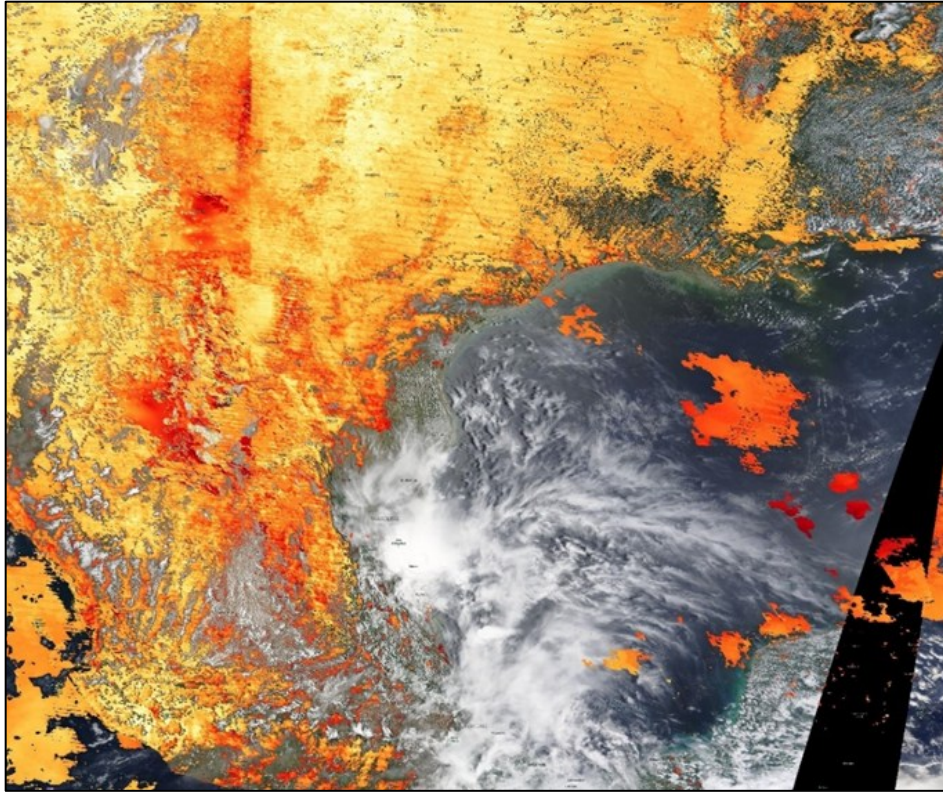


Figure A-23: MAIAC Combined Aerosol Optical Depth Image on June 13, 2022

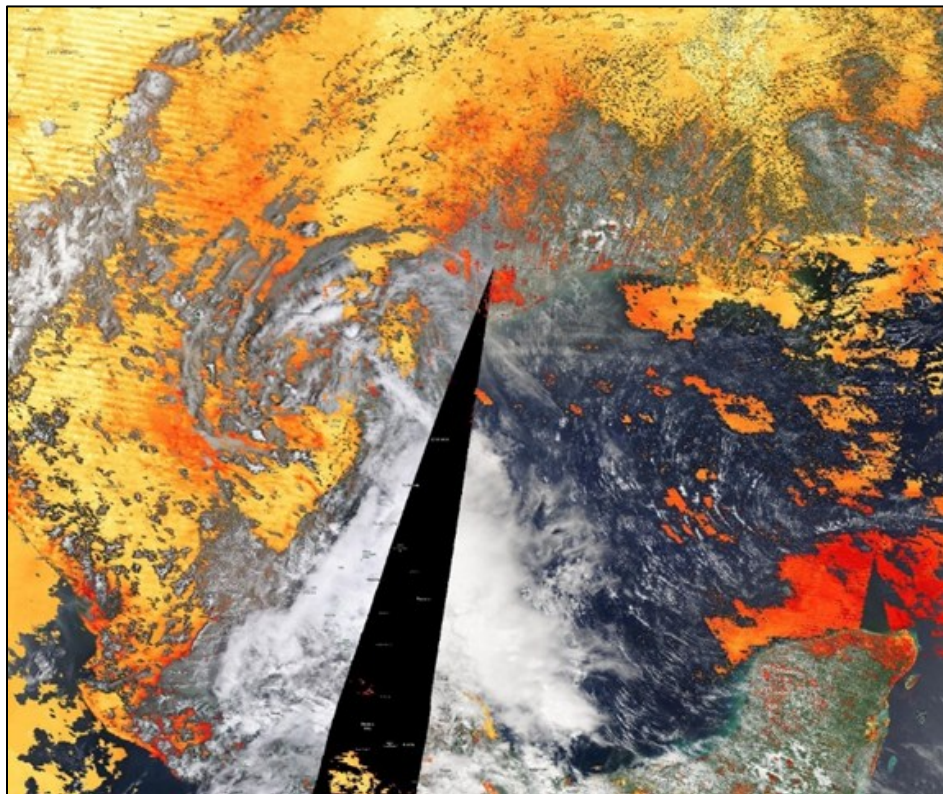


Figure A-24: MAIAC Combined Aerosol Optical Depth Image on June 14, 2022

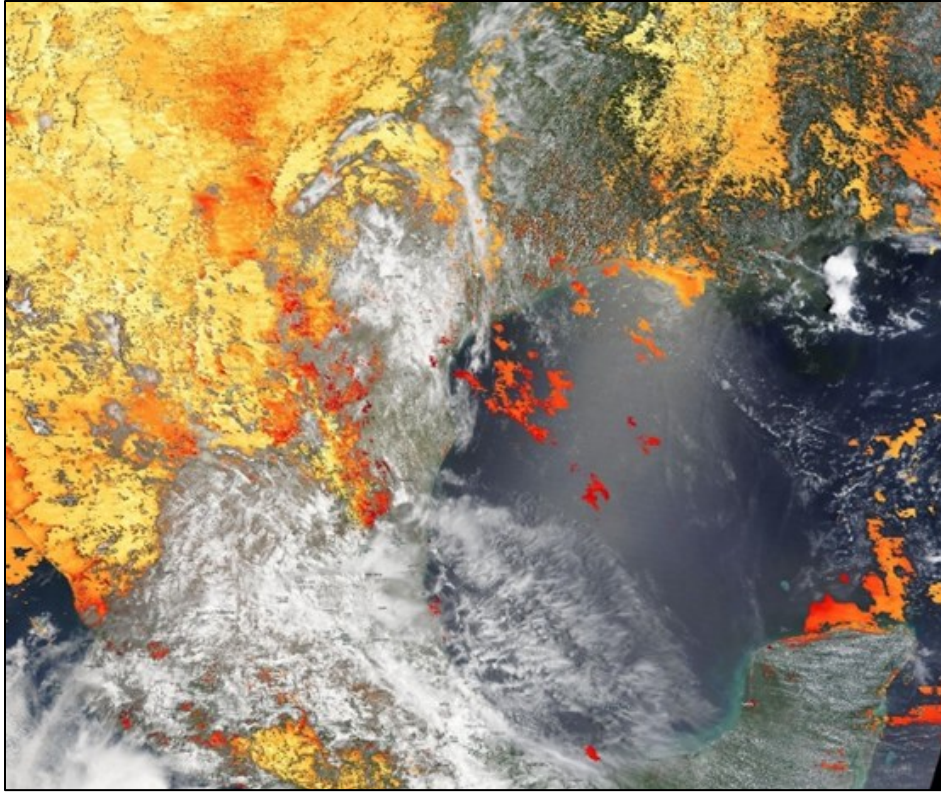


Figure A-25: MAIAC Combined Aerosol Optical Depth Image on June 15, 2022

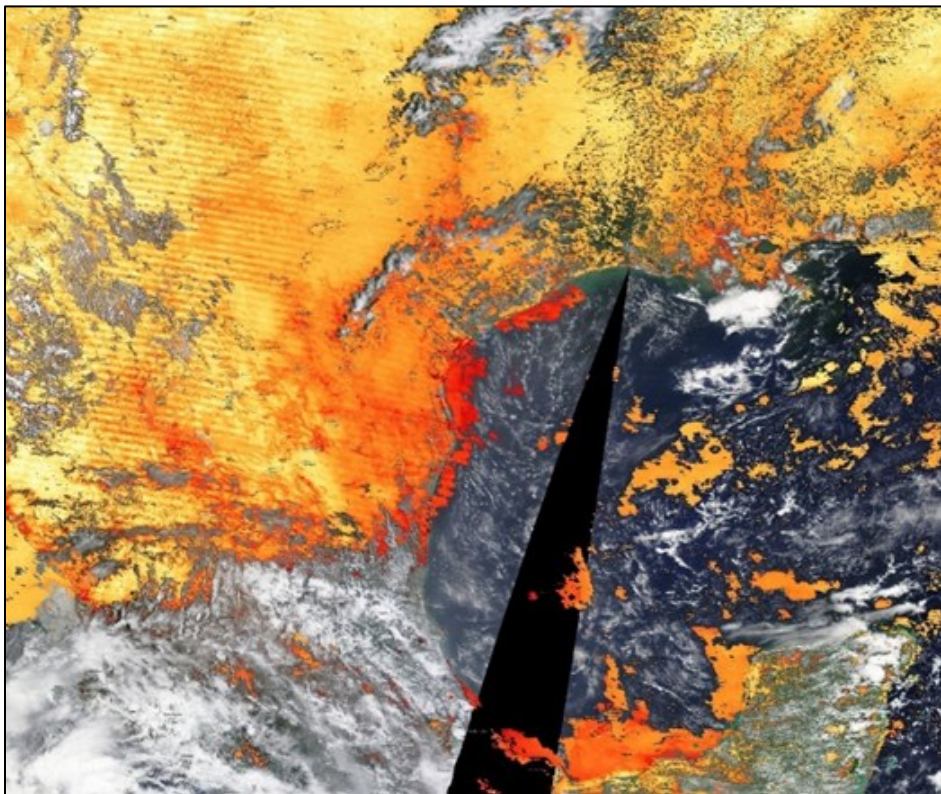


Figure A-26: MAIAC Combined Aerosol Optical Depth Image on June 16, 2022

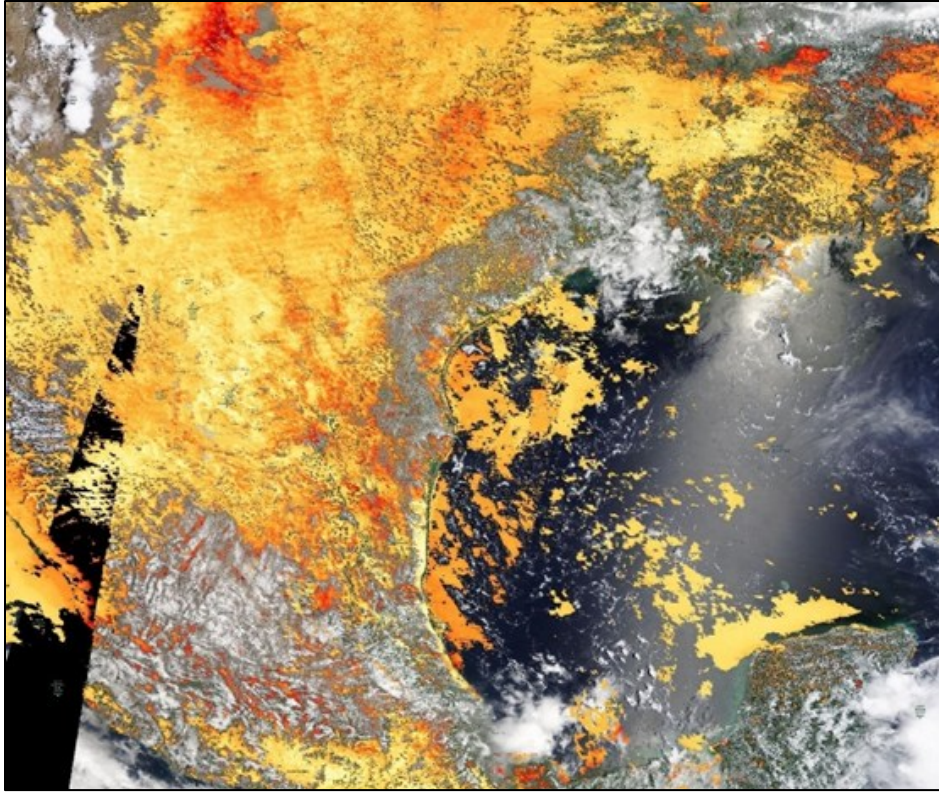


Figure A-27: MAIAC Combined Aerosol Optical Depth Image on June 17, 2022

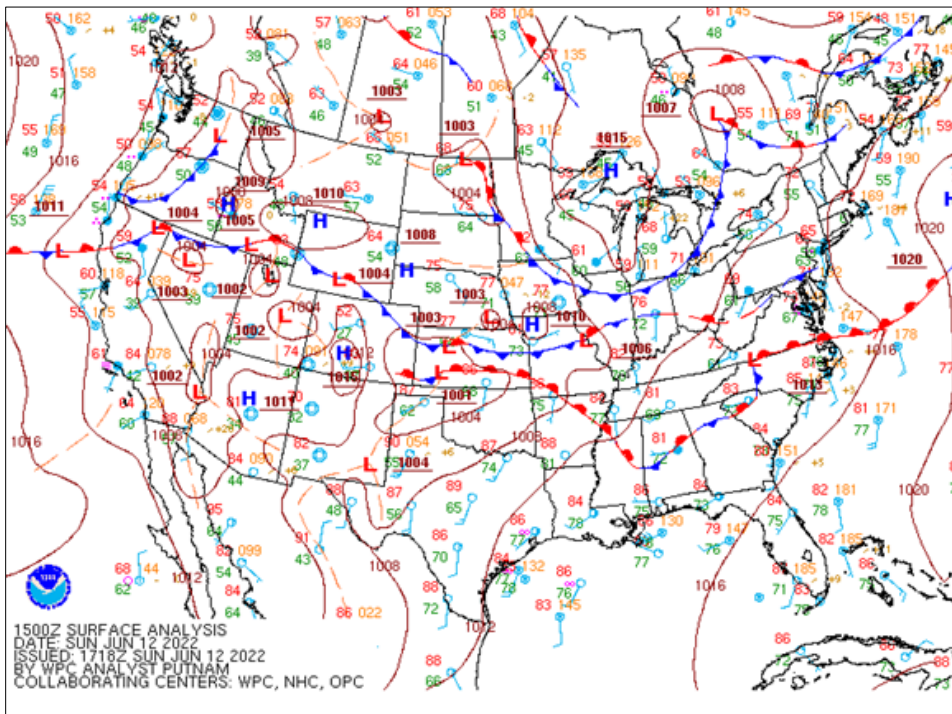


Figure A-28: National Weather Service Weather Prediction Center (June 12, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

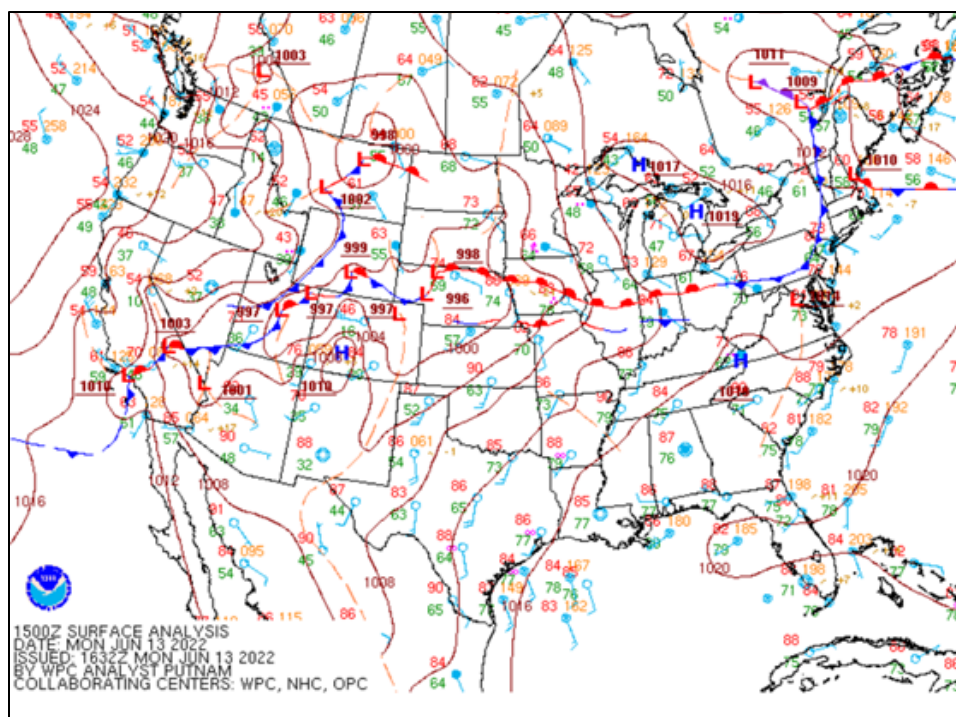


Figure A-29: National Weather Service Weather Prediction Center (June 13, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

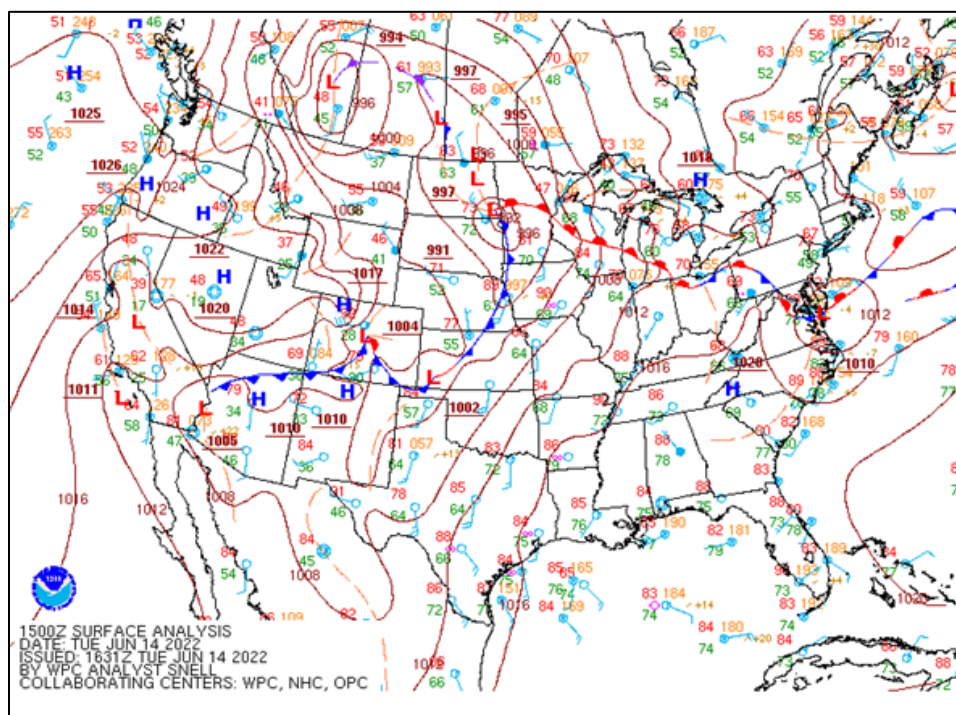


Figure A-30: National Weather Service Weather Prediction Center (June 14, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

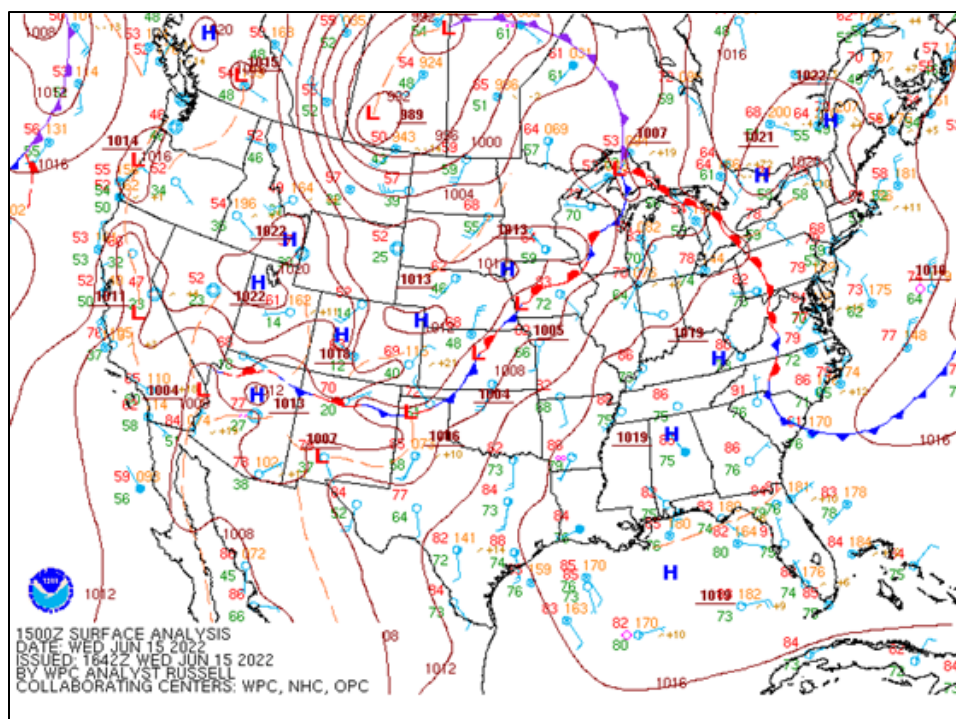


Figure A-31: National Weather Service Weather Prediction Center (June 15, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

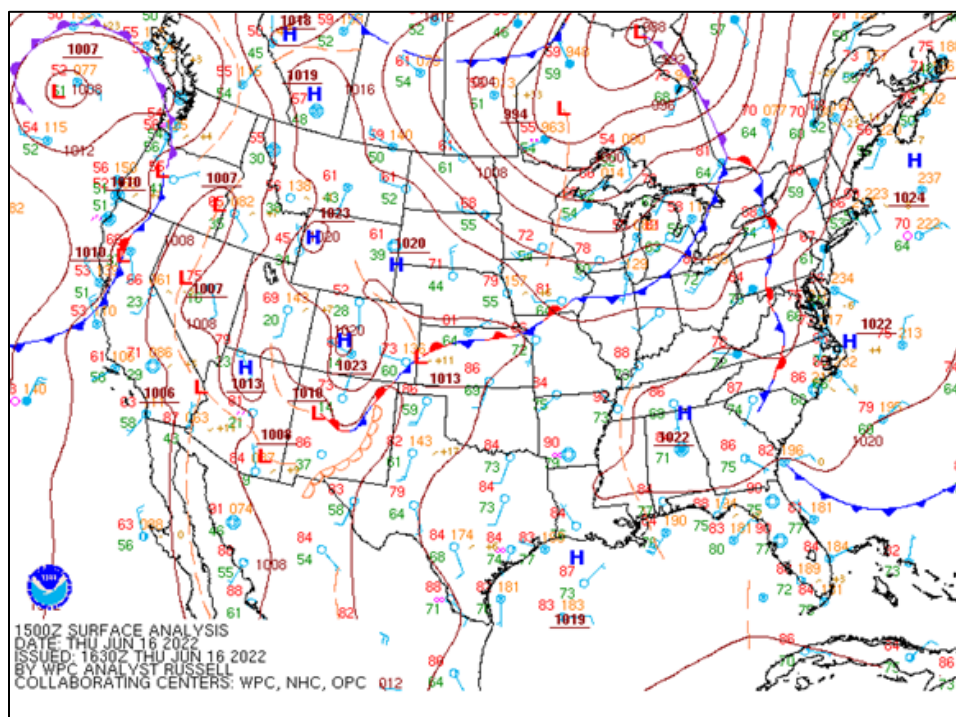


Figure A-32: National Weather Service Weather Prediction Center (June 16, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

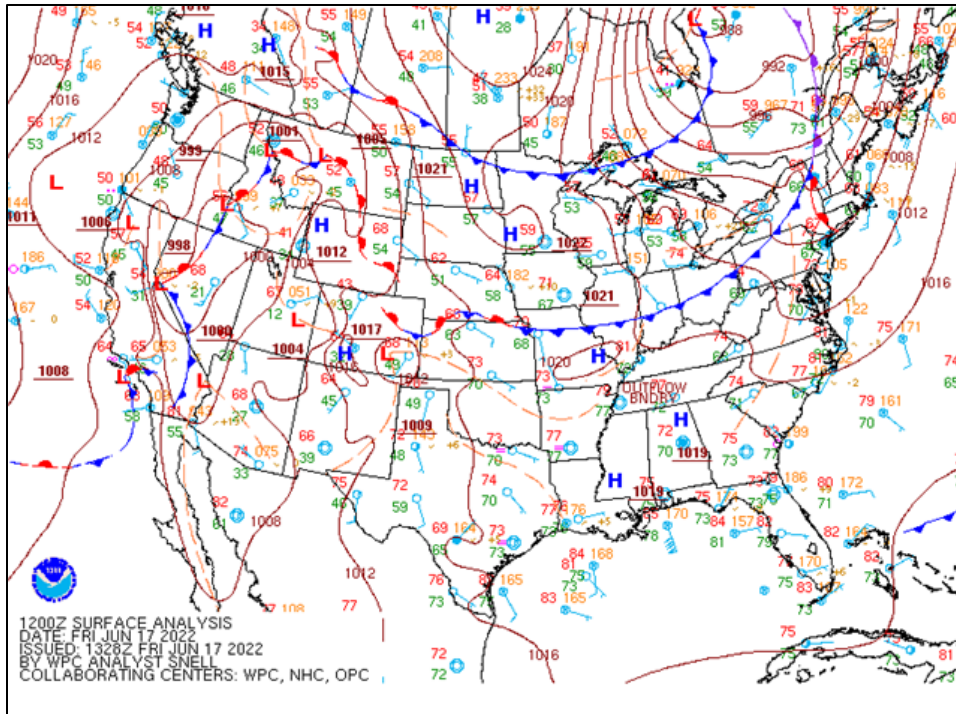


Figure A-33: National Weather Service Weather Prediction Center (June 17, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT

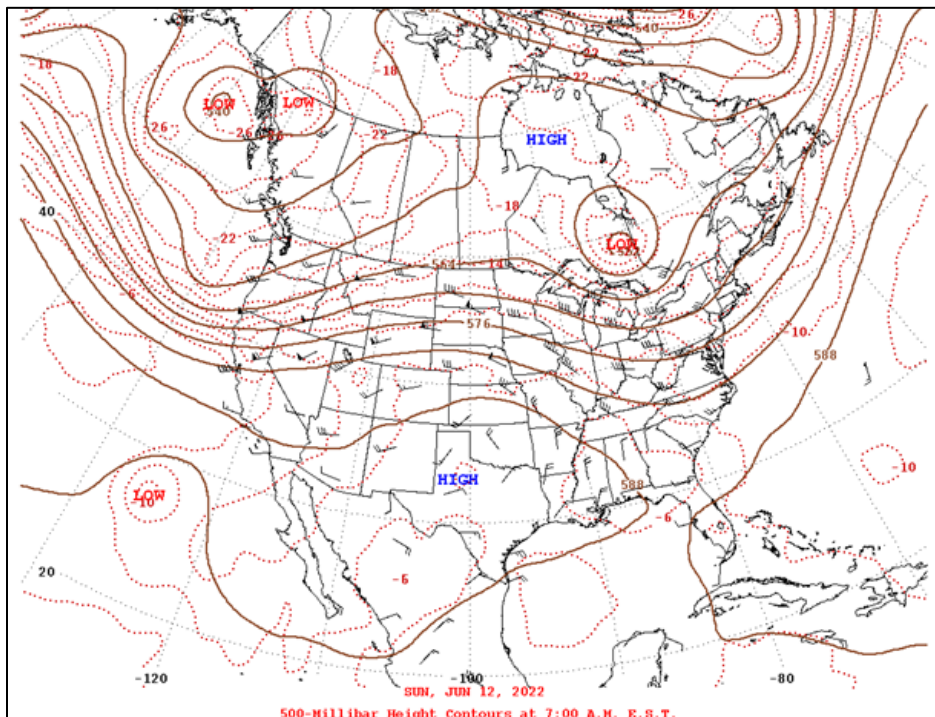


Figure A-34: National Weather Service, Storm Prediction Center (June 12, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

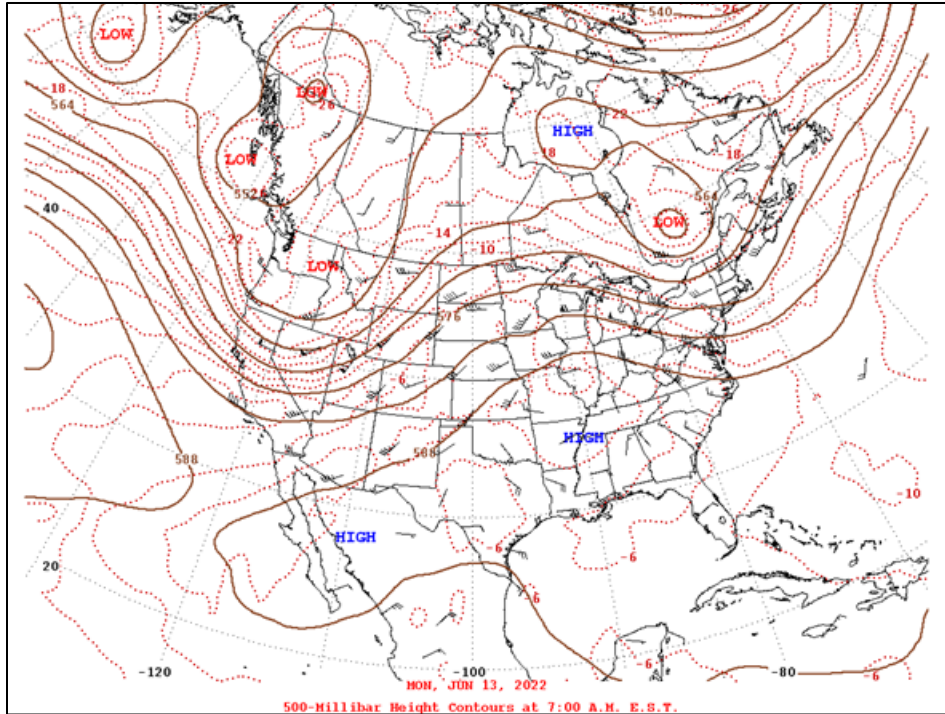


Figure A-35: National Weather Service, Storm Prediction Center (June 13, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

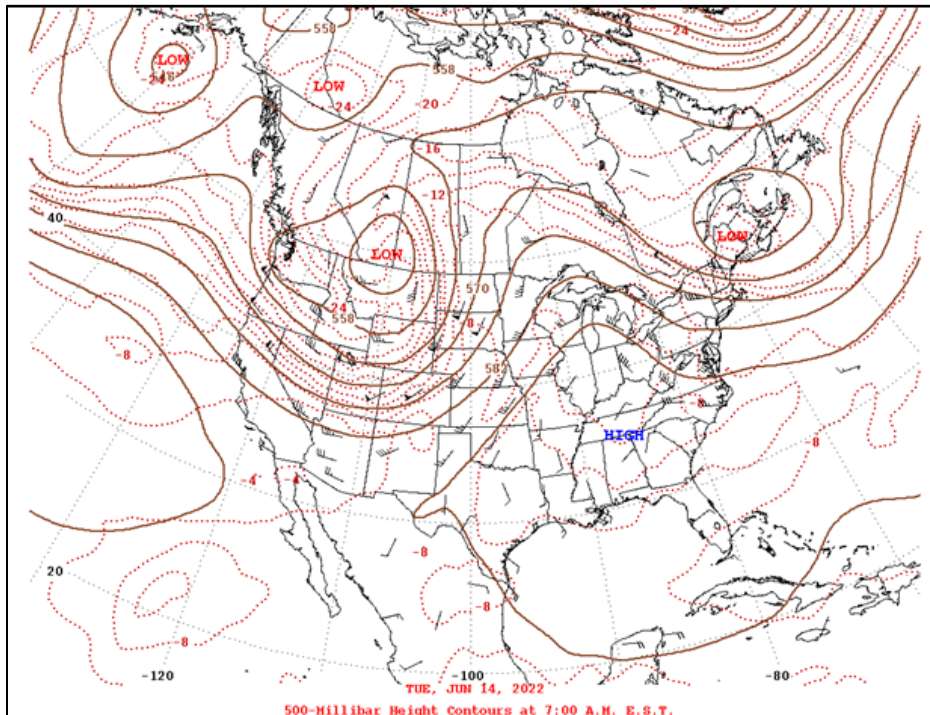


Figure A-36: National Weather Service, Storm Prediction Center (June 14, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

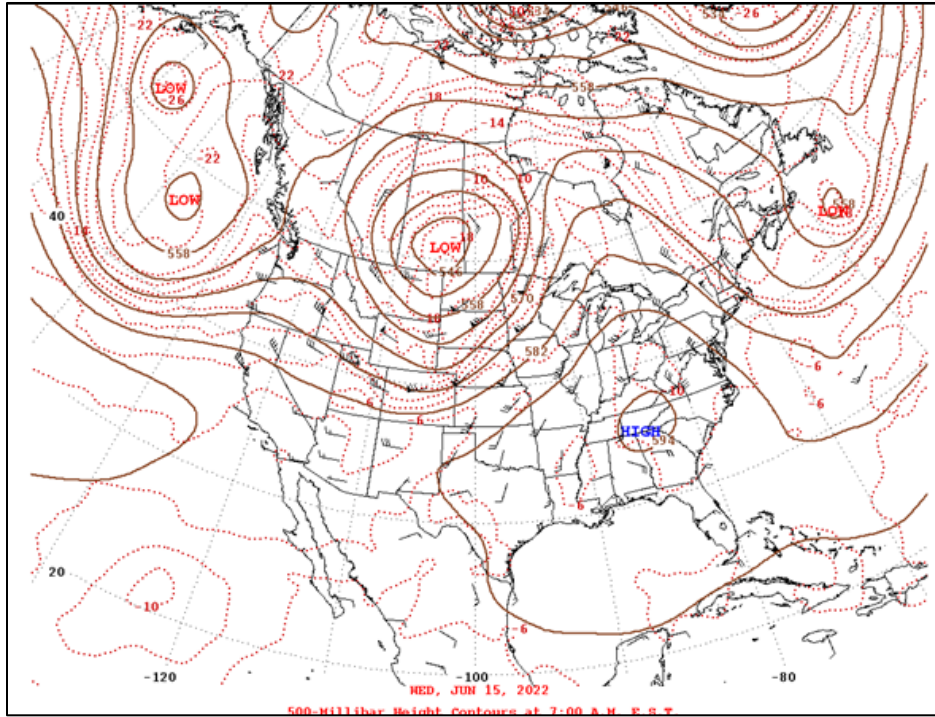


Figure A-37: National Weather Service, Storm Prediction Center (June 15, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

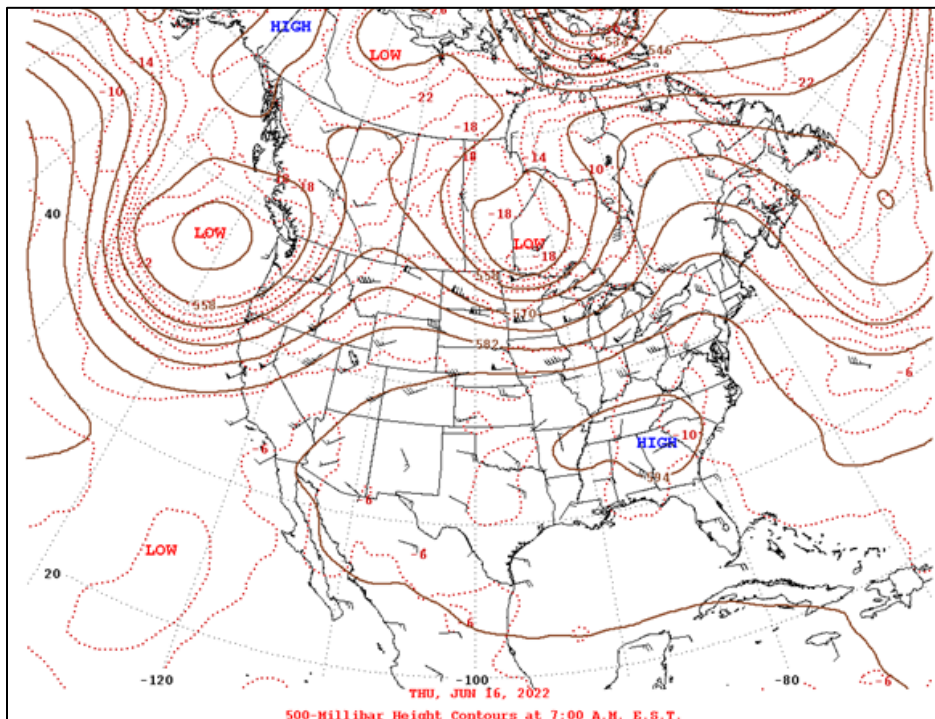


Figure A-38: National Weather Service, Storm Prediction Center (June 16, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

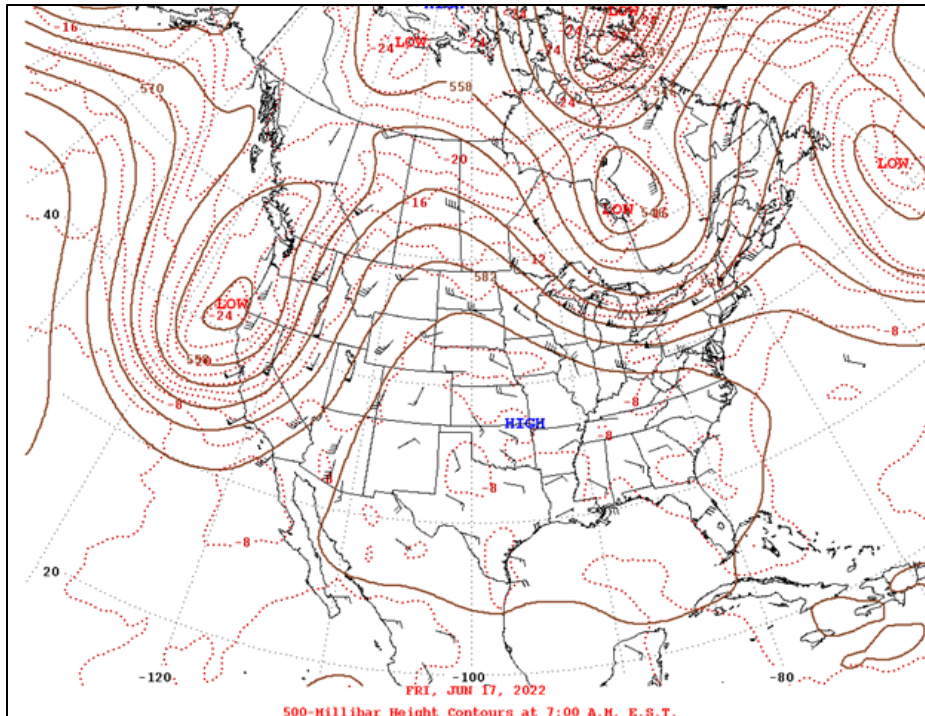


Figure A-39: National Weather Service, Storm Prediction Center (June 17, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

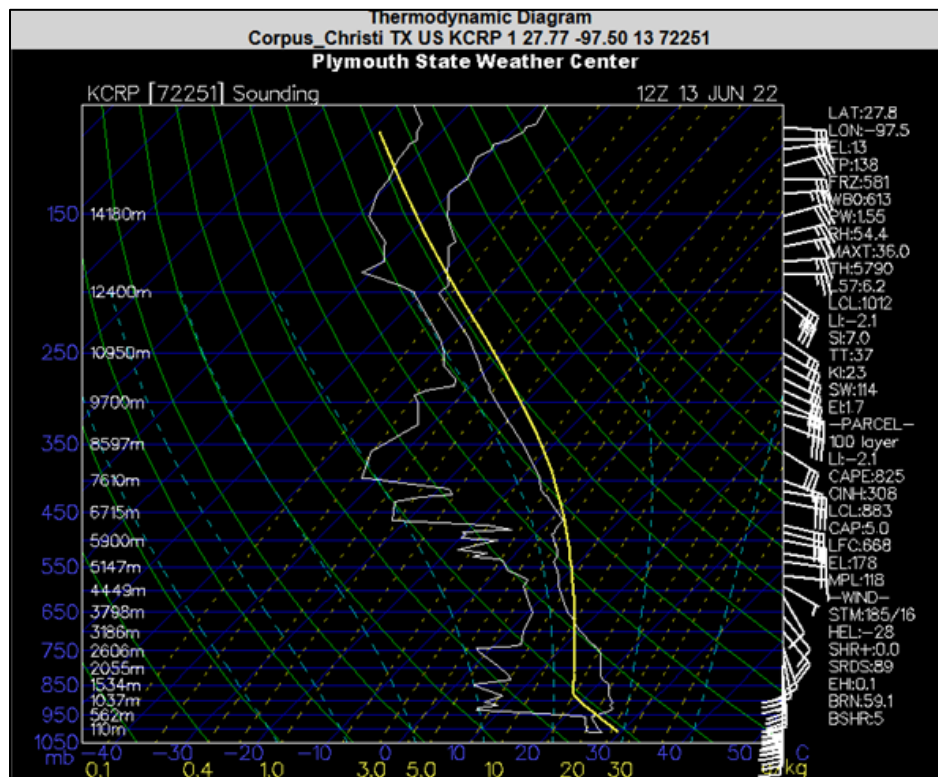


Figure A-40: Upper Air Sounding Chart from Corpus Christi, Texas on June 13, 2022, at (12Z) 6:00 a.m. CDT

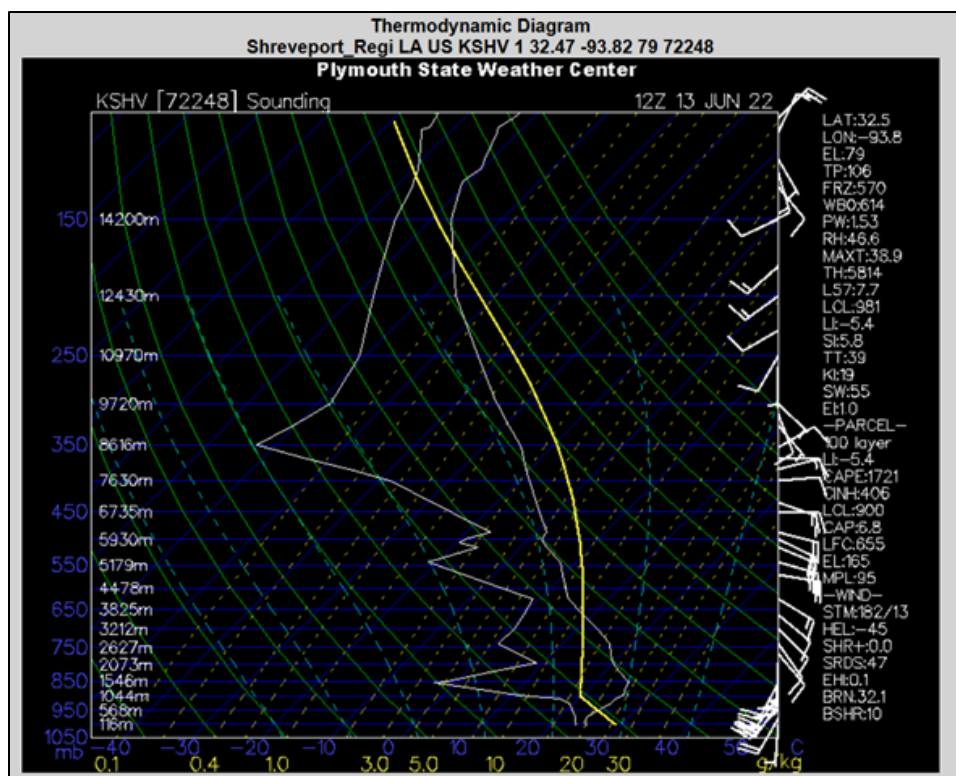


Figure A-41: Upper Air Sounding Chart from Shreveport, Louisiana on June 13, 2022, at (12Z) 6:00 a.m. CDT

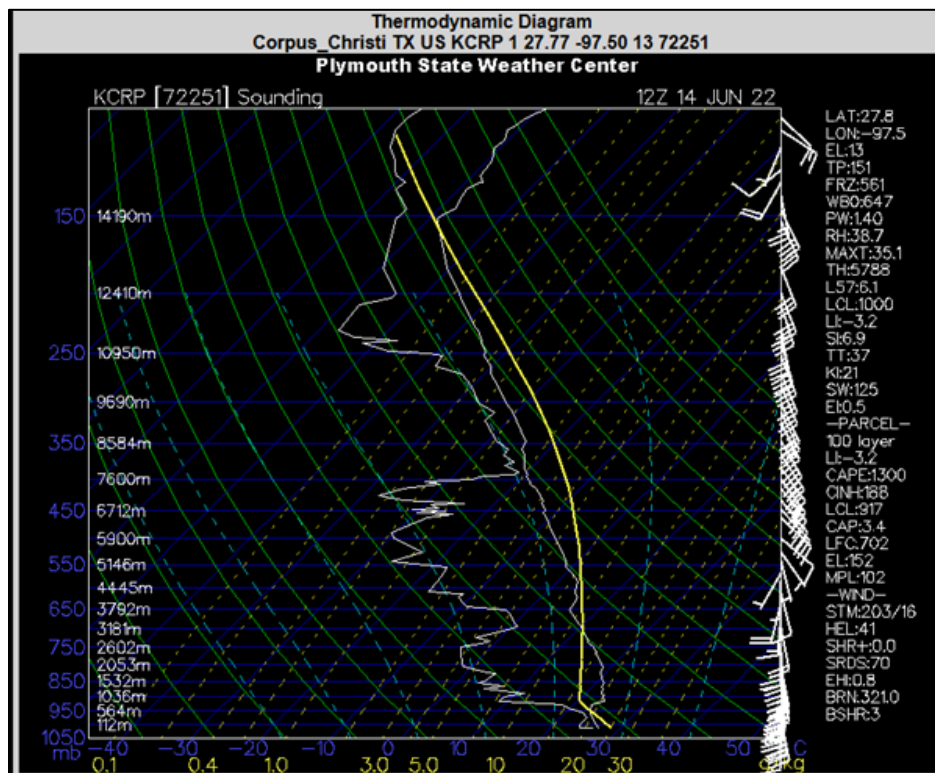


Figure A-42: Upper Air Sounding Chart from Corpus Christi, Texas on June 14, 2022, at (12Z) 6:00 a.m. CDT

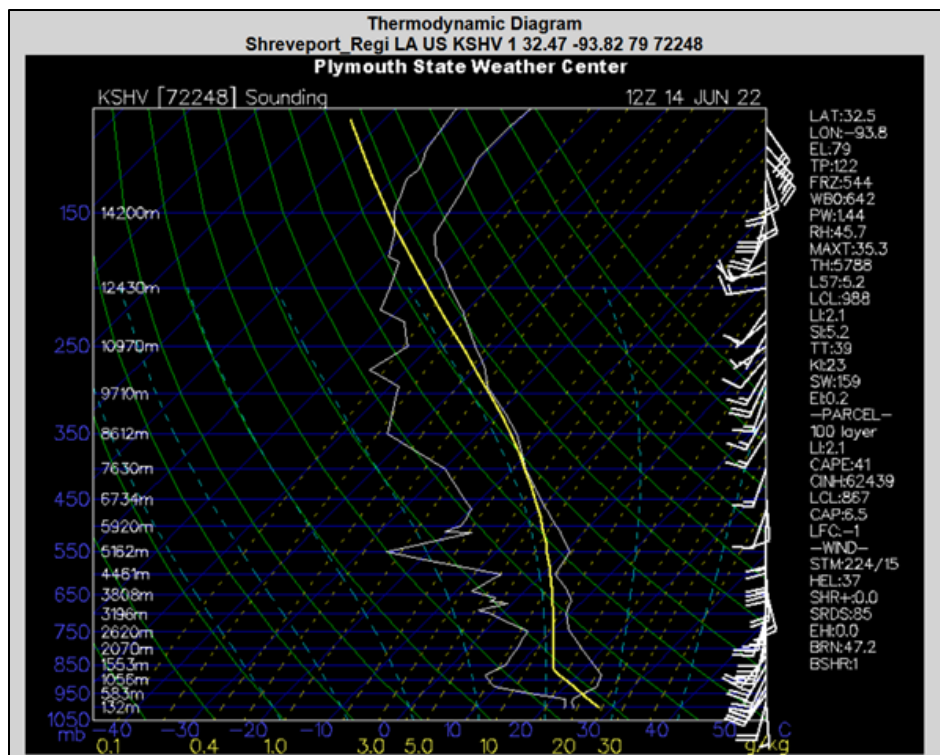


Figure A-43: Upper Air Sounding Chart from Shreveport, Louisiana on June 14, 2022, at (12Z) 6:00 am CDT

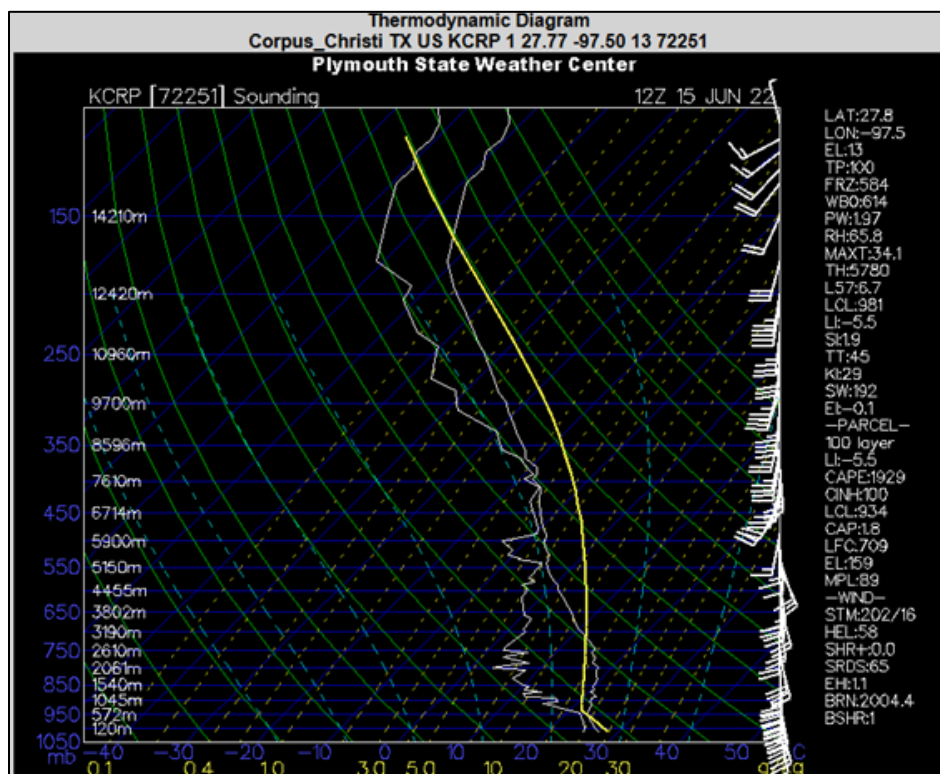


Figure A-44: Upper Air Sounding Chart from Corpus Christi, Texas on June 15, 2022, at (12Z) 6:00 am CDT

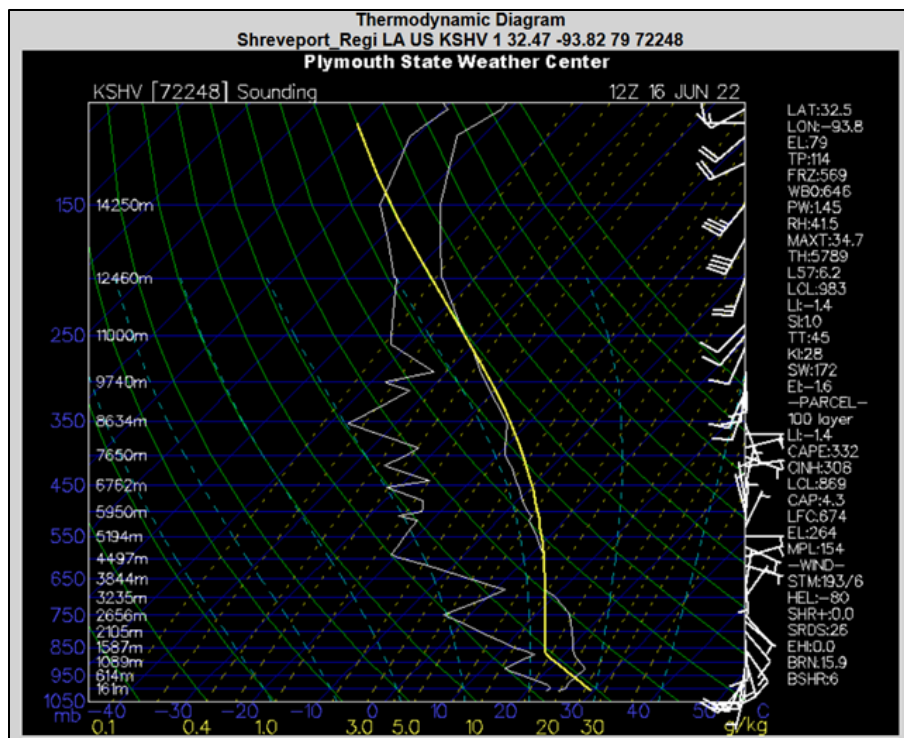


Figure A-45: Upper Air Sounding Chart from Shreveport, Louisiana on June 16, 2022, at (12Z) 6:00 am CDT

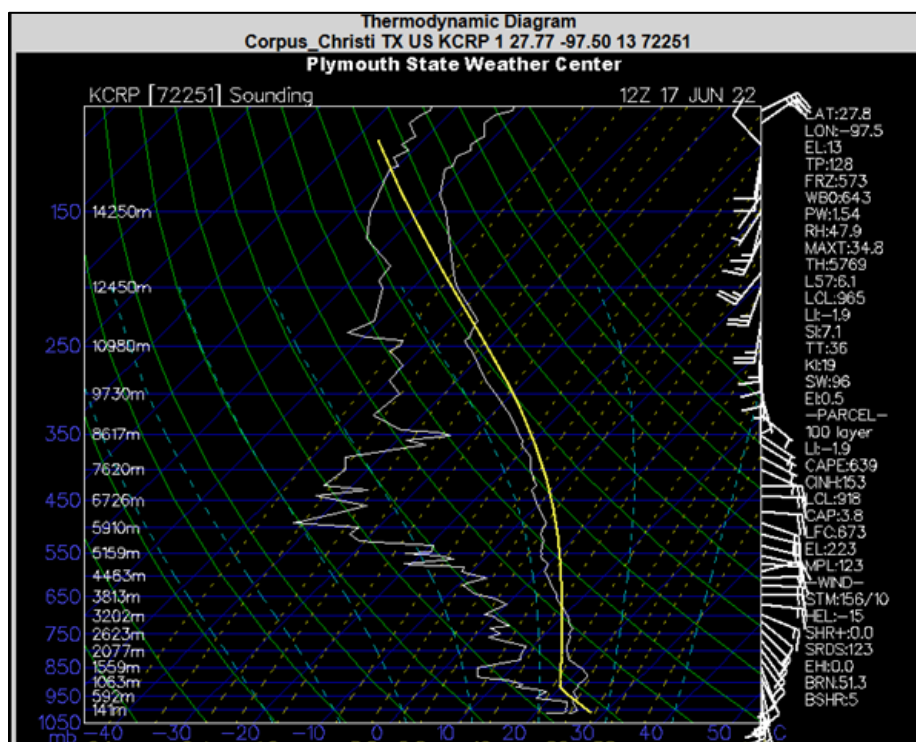


Figure A-46: Upper Air Sounding Chart from Corpus Christi, Texas for June 17, 2022, at (12Z) 6:00 am CDT

A. 5:GROUP 5 - JULY 16 THROUGH JULY 18, 2022

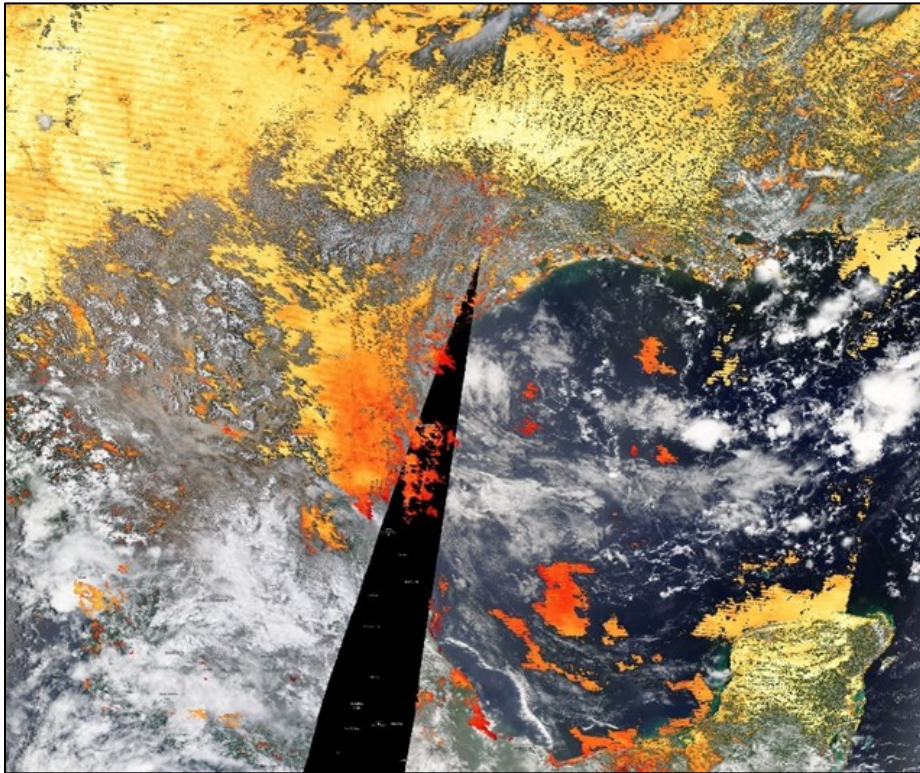


Figure A-47: MAIAC Combined Aerosol Optical Depth Image on July 16, 2022

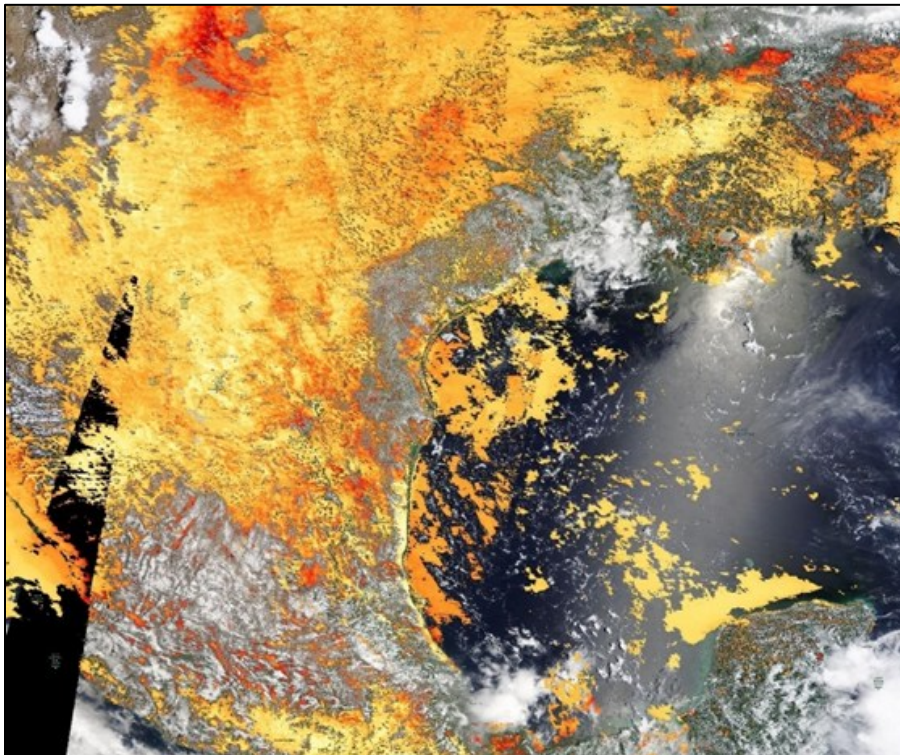


Figure A-48: MAIAC Combined Aerosol Optical Depth Image on July 17, 2022

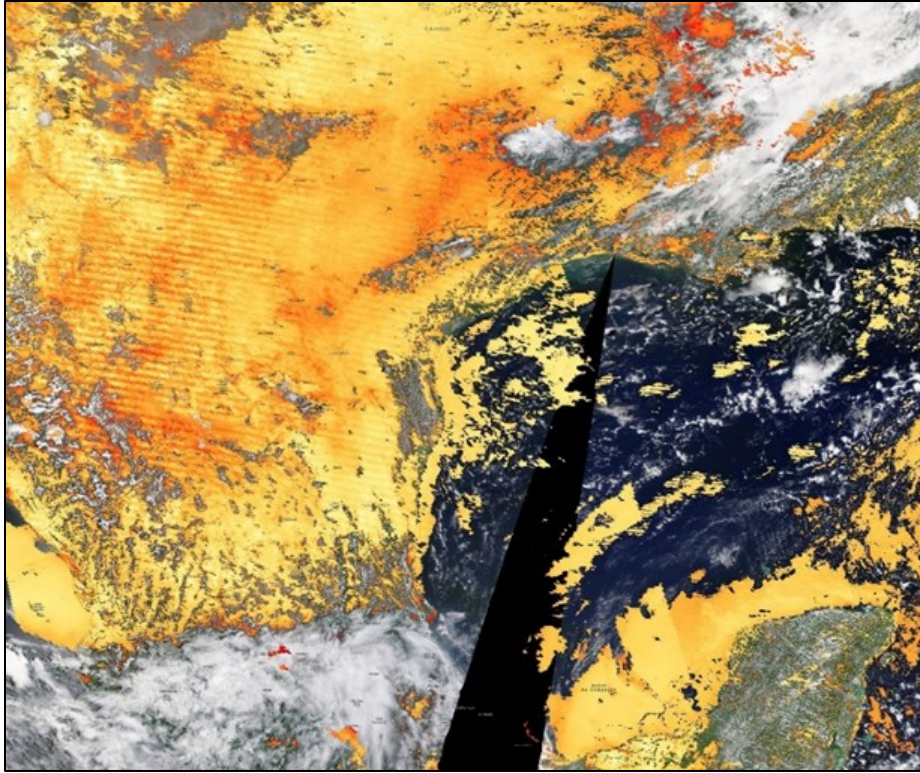


Figure A-49: MAIAC Combined Aerosol Optical Depth Image on July 18, 2022

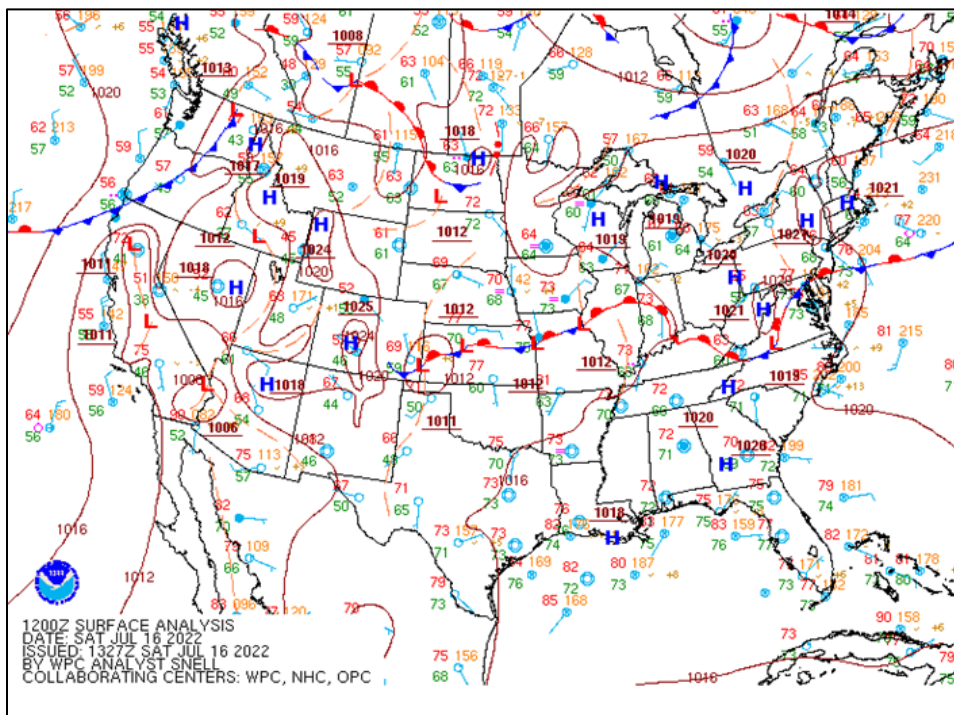
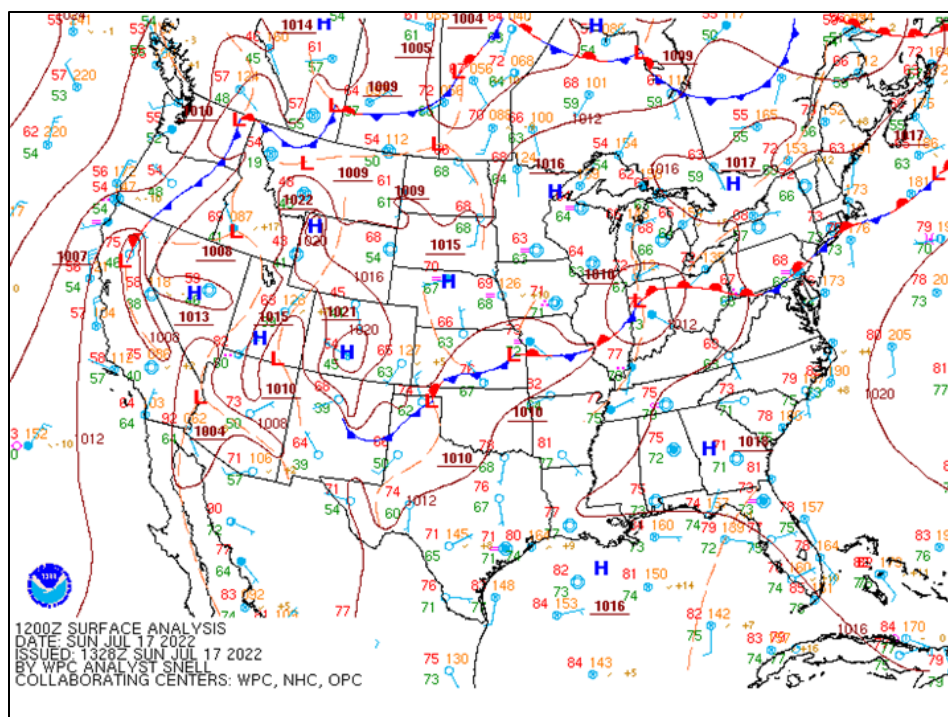


Figure A-50: National Weather Service Weather Prediction Center (July 16, 2022) CONUS Surface Analysis (12Z) 6:00 a.m. CDT



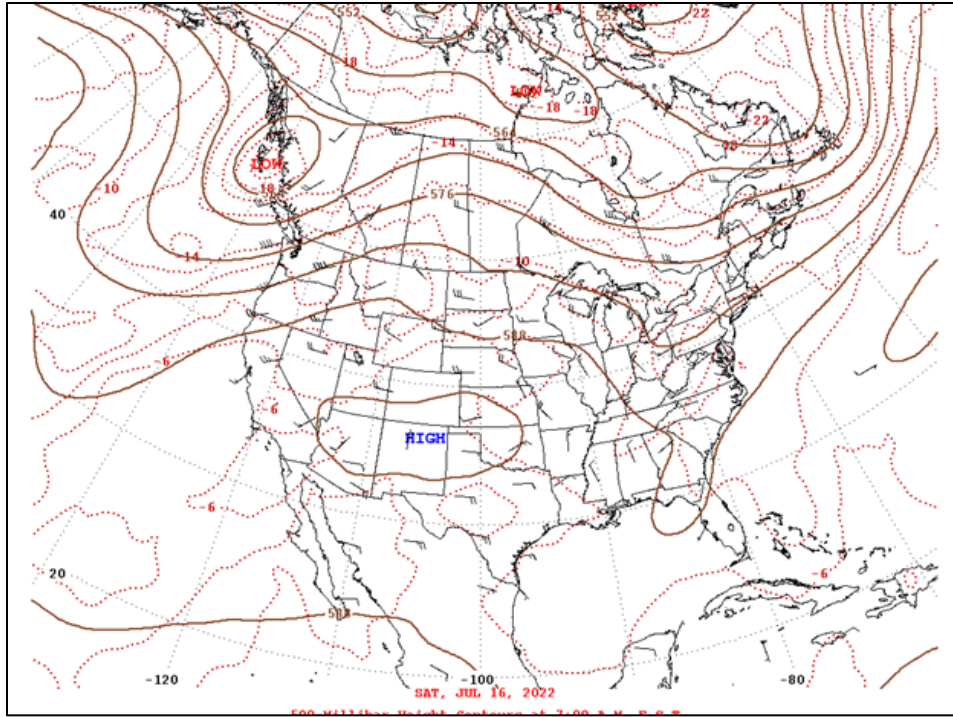


Figure A-53: National Weather Service, Storm Prediction Center (July 16, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

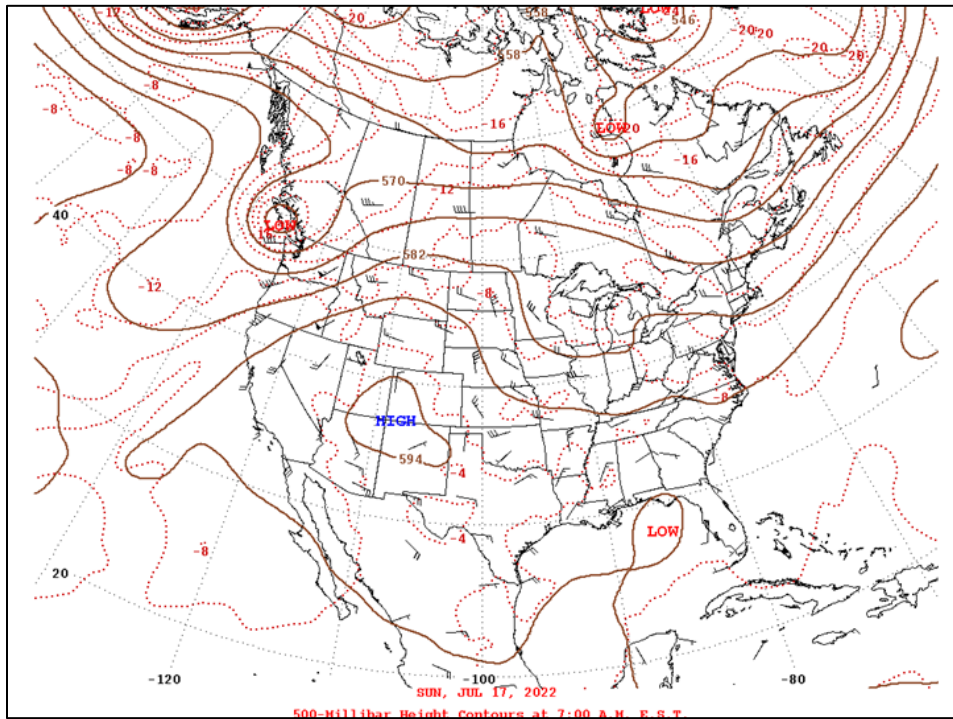


Figure A-54: National Weather Service, Storm Prediction Center (July 17, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

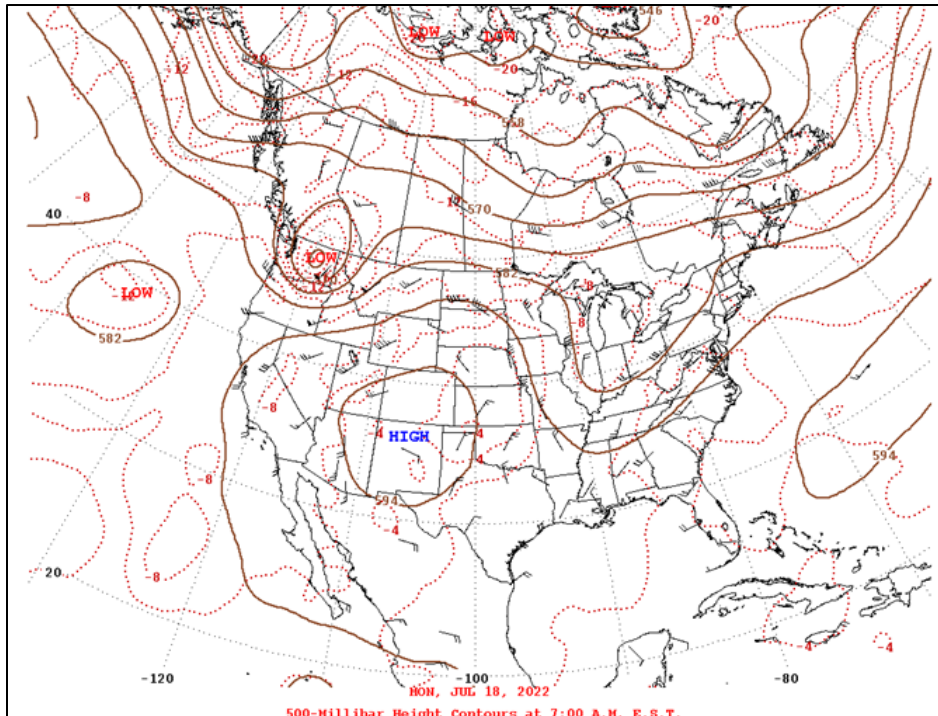


Figure A-55: National Weather Service, Storm Prediction Center (July 18, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

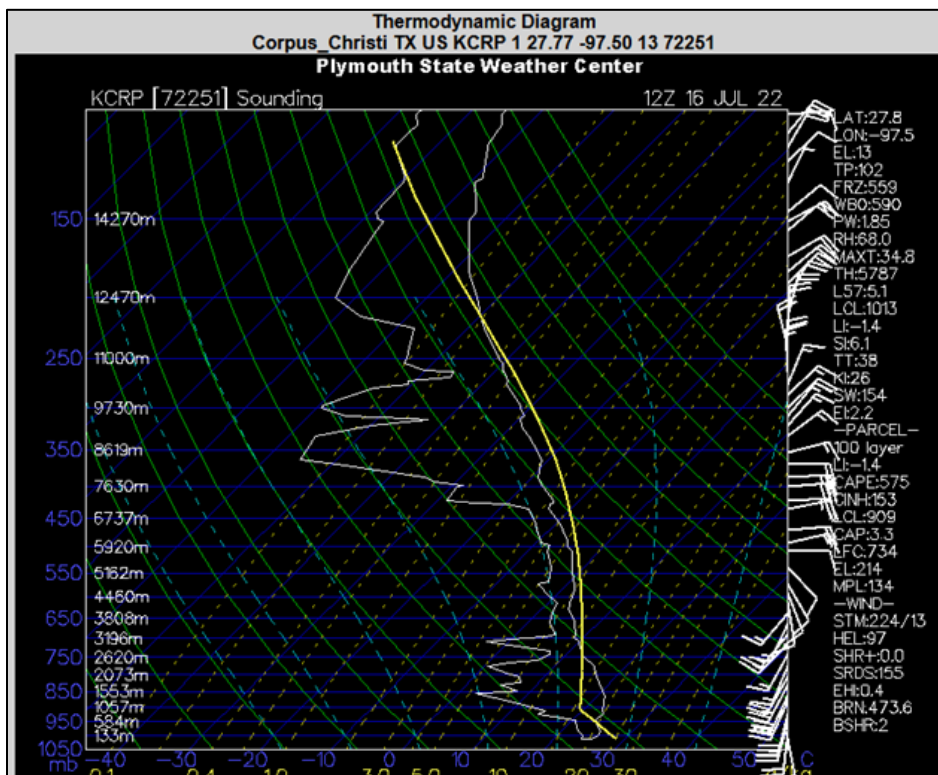


Figure A-56: Upper Air Sounding Chart from Corpus Christi, Texas on July 16, 2022, at (12Z) 6:00 am CDT

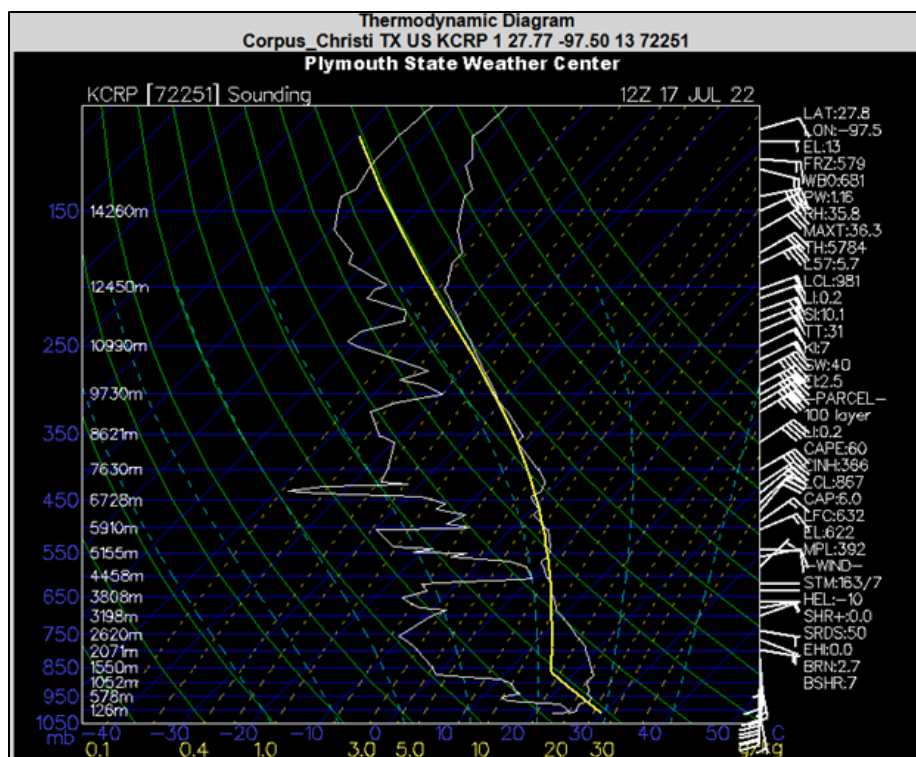


Figure A-57: Upper Air Sounding Chart from Corpus Christi, Texas on July 17, 2022, at (12Z) 6:00 am CDT

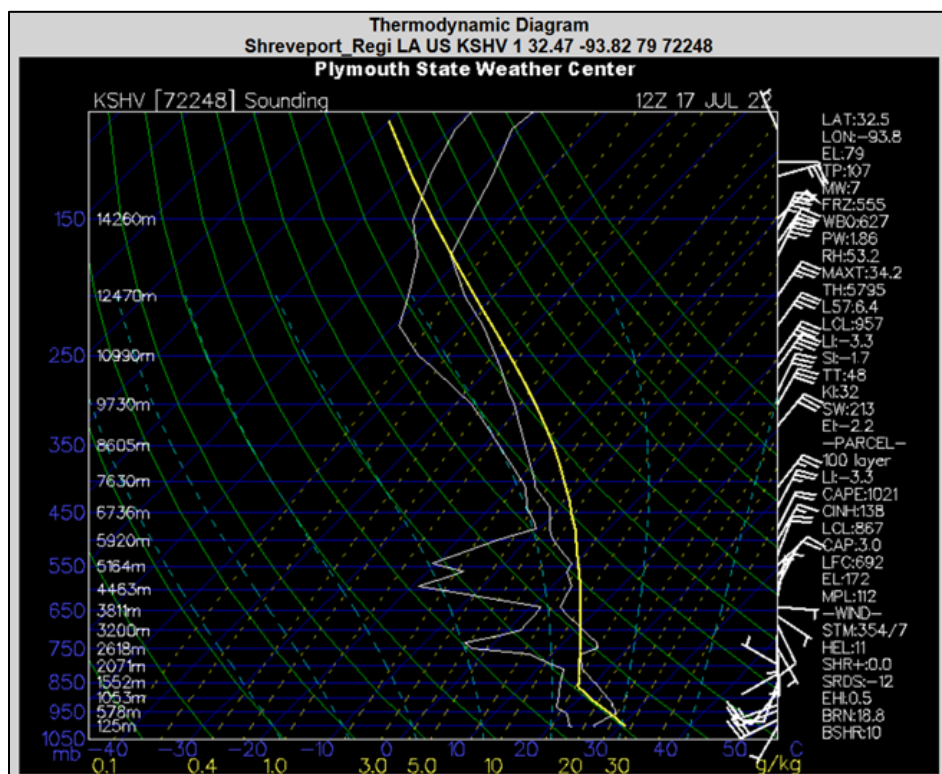


Figure A-58: Upper Layer Sounding Chart from Shreveport, Louisiana on July 17, 2022, at (12Z) 6:00 am CDT

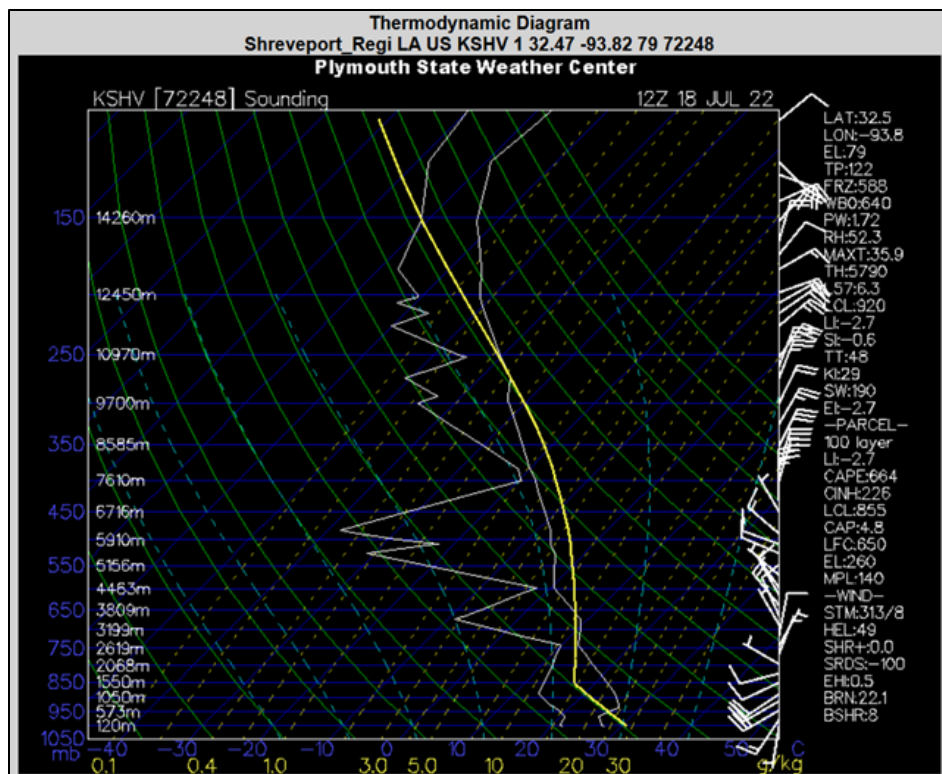


Figure A-59: Upper Air Sounding Chart from Shreveport, Louisiana on July 18, 2022, at (12Z) 6:00 am CDT

A. 6:GROUP 6 - OCTOBER 3, 2022

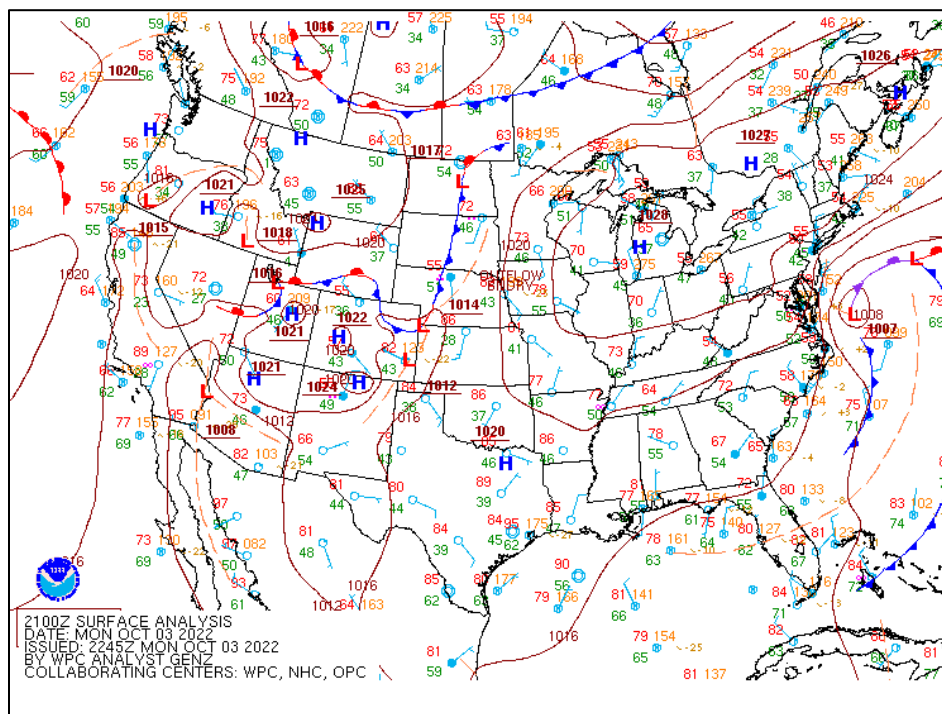


Figure A-60: National Weather Service Weather Prediction Center (October 3, 2022) CONUS Surface Analysis (21Z) 00:00 a.m. CDT

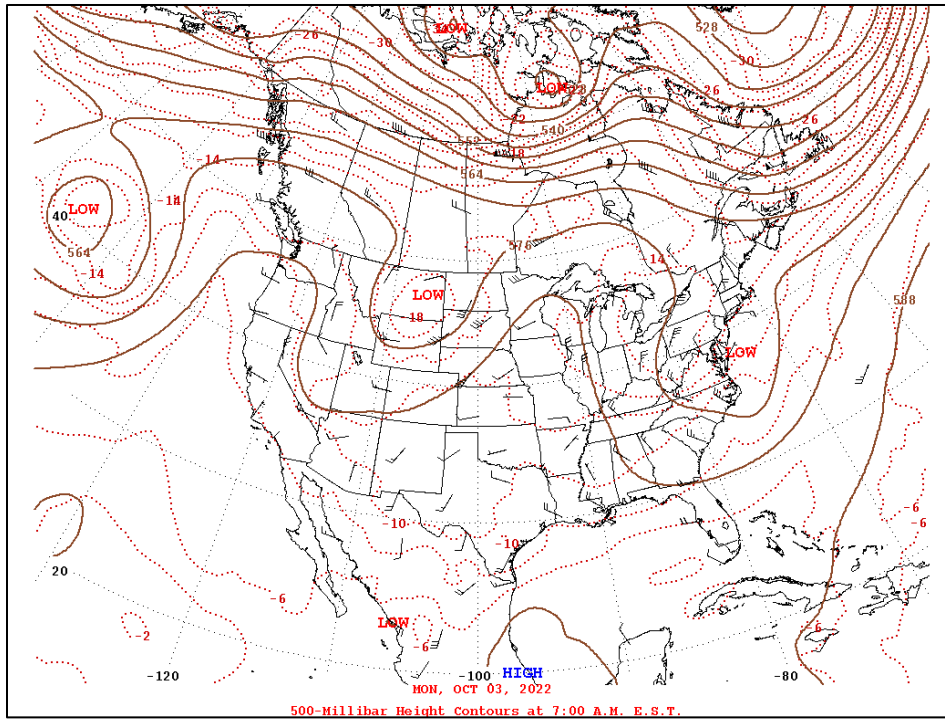


Figure A-61: National Weather Service, Storm Prediction Center (October 3, 2022) 500 MB Analysis (12Z) 6:00 a.m. CDT

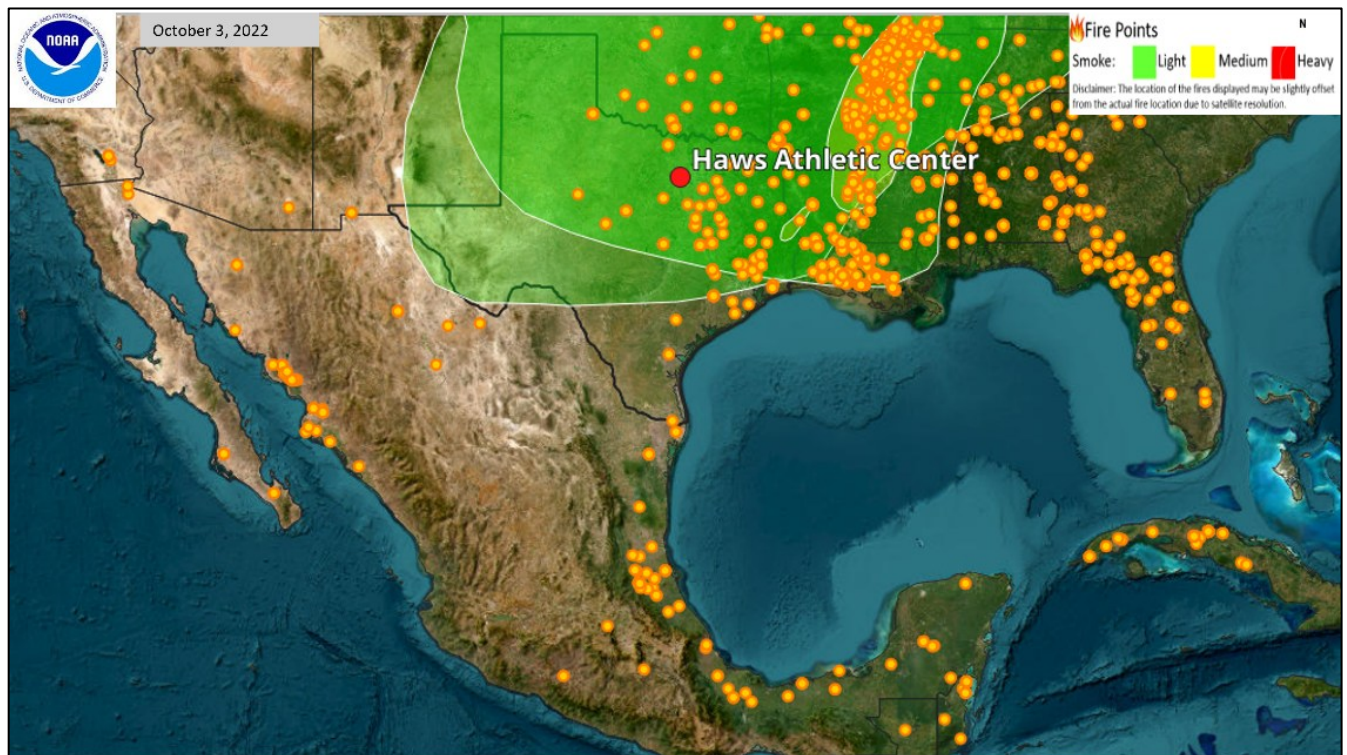


Figure A-62: NOAA HMS Fire and Smoke Map on October 3, 2022