

Future Modeling Platform Base Year Determination

APPENDIX J 2011 OZONE EVENT ANALYSIS MAPS

October 9, 2013 FINAL

Analysis maps in this appendix are sorted by types of ozone events during the 2011 Ozone season. For each day of an event the following five analysis maps were downloaded:

- Daily peak ozone AQI ozone maps (based on 75 ppb NAAQS) were downloaded from the following EPA AIRNOW web location: <http://www.epa.gov/airnow/2011/>
- Morning (12Z) surface maps
- Evening (00Z) Surface maps
- Morning (12Z) 850 mb maps
- Evening (00Z) 850 mb maps

Surface and 850 mb maps were downloaded from the following Unisys archive website: <http://weather.unisys.com/archive/index.php> . If surface maps were unavailable from the Unisys website surface maps were downloaded from the following ESRL/NOAA archives website: <http://www.esrl.noaa.gov/psd/data/gridded/data.ncep.reanalysis.html> . If 850 mb maps were unavailable from the ESRL/NOAA website 850 mb maps were downloaded from the following National Weather Service DIFAX Weather Map Archive (850mb) website: <http://archive.atmos.colostate.edu/data/misc/QHUA04/> . Here are the locations of analysis maps by type of ozone event:

Event type 1: Cut off Low:

- Figures J-16 to J-20 - July 1, 2011
- Figures J-21 to J-25 - July 2, 2011
- Figures J-26 to J-30 - July 3, 2011

Event type 2: Progressive warm-front-cold front systems:

- Figures J-1 to J-5 - June 7, 2011
- Figures J-6 to J-10 - June 8, 2011
- Figures J-11 to J-15 - June 9, 2011

- Figures J-31 to J-35 - July 5, 2011
- Figures J-36 to J-40 - July 6, 2011
- Figures J-41 to J-45 - July 7, 2011

- Figures J-46 to J-50 - July 11, 2011
- Figures J-51 to J-55 - July 12, 2011

Event type 3: Bermuda High:

- Figures J-56 to J-60 - July 17 2011
- Figures J-61 to J-65 - July 18 2011
- Figures J-66 to J-70 - July 19 2011
- Figures J-71 to J-75 - July 20 2011
- Figures J-76 to J-80 - July 21 2011
- Figures J-81 to J-85 - July 22 2011
- Figures J-86 to J-90 - July 23 2011
- Figures J-91 to J-95 - July 24 2011

FIGURE J-1: 6/7/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

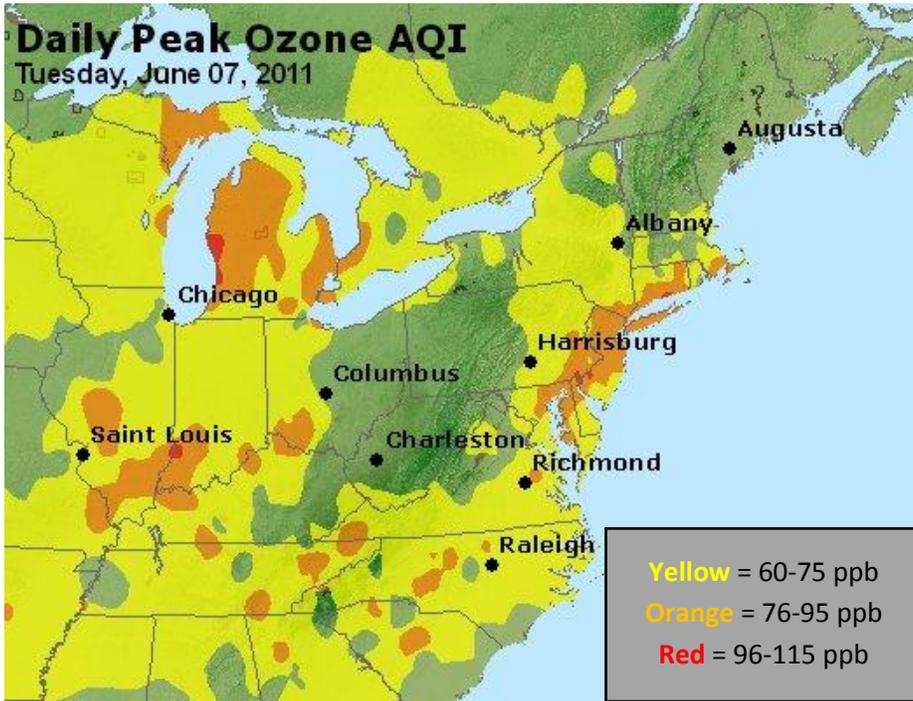


FIGURE J-2: 6/7/11 morning surface map

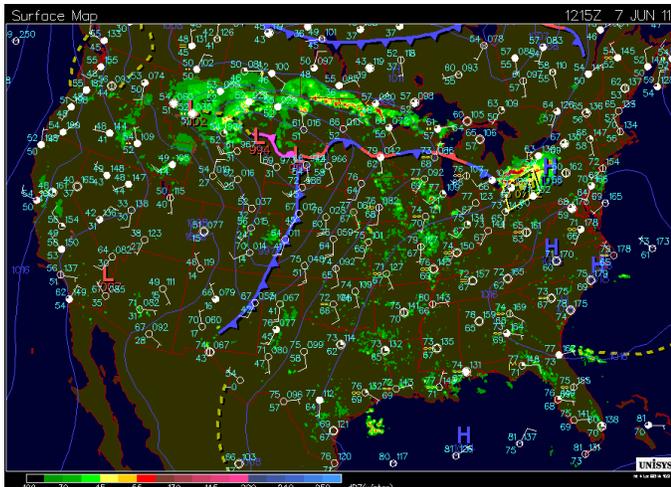


FIGURE J-4: 6/7/11 evening surface map

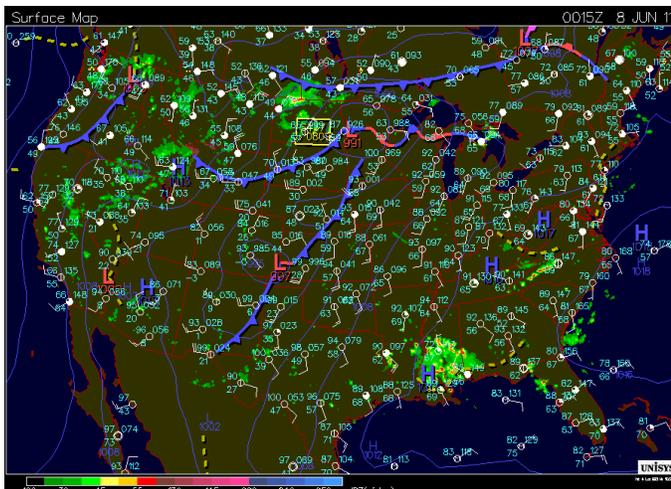


FIGURE J-3: 6/7/2011 morning 850mb map

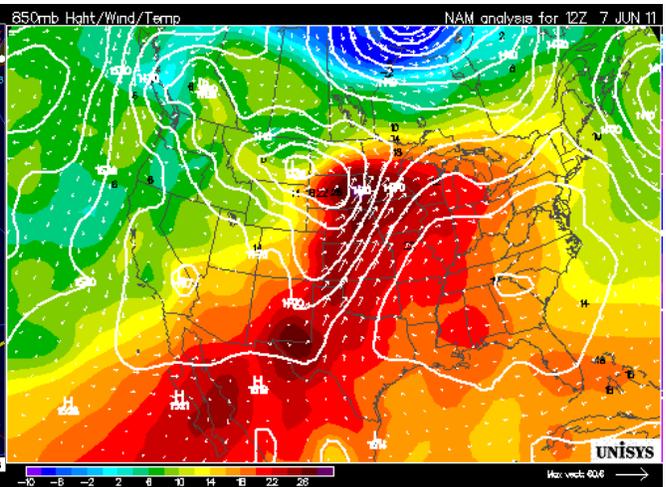


FIGURE J-5: 6/7/2011 evening 850mb map

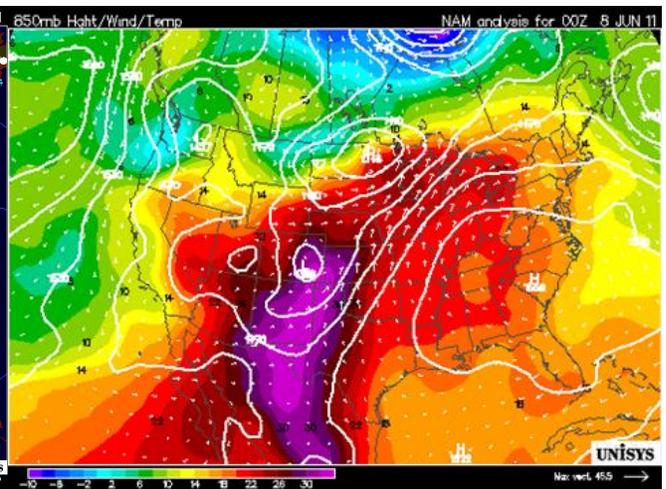


FIGURE J-6: 6/8/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

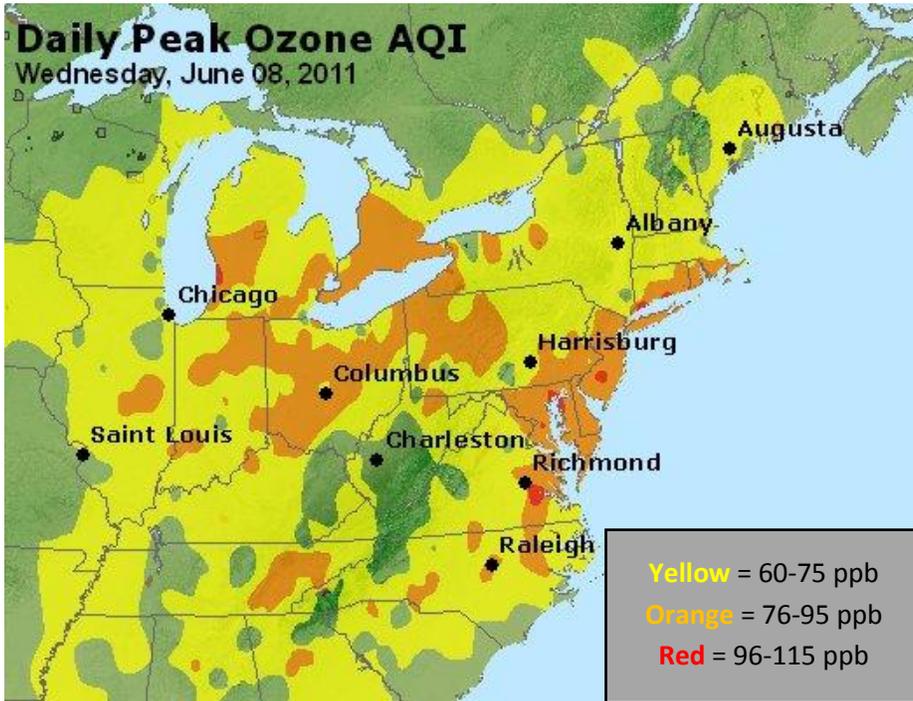


FIGURE J-7: 6/8/11 morning surface map

FIGURE J-8: 6/8/2011 morning 850mb map

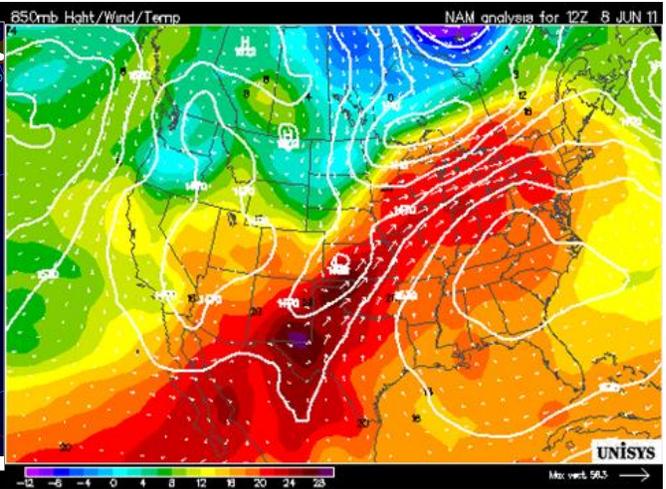
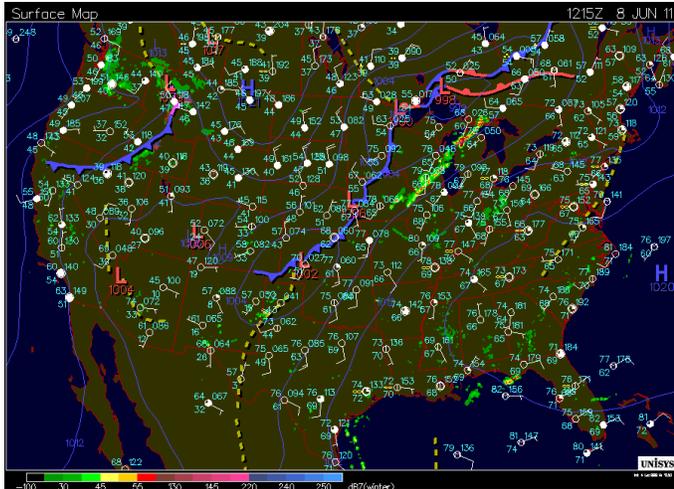


FIGURE J-9: 6/8/11 evening surface map

FIGURE J-10: 6/8/2011 evening 850mb map

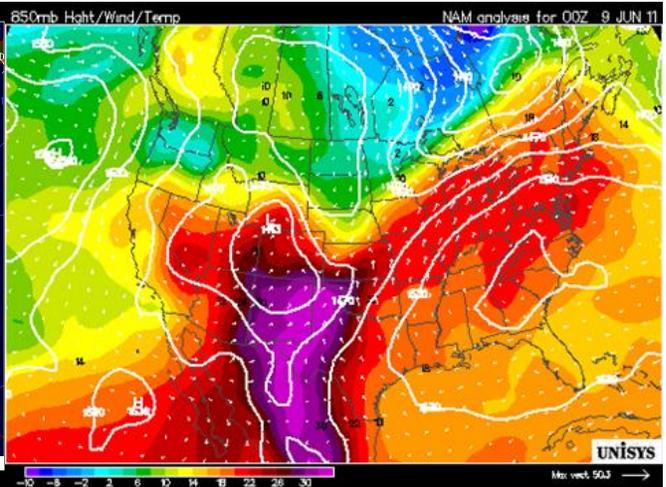
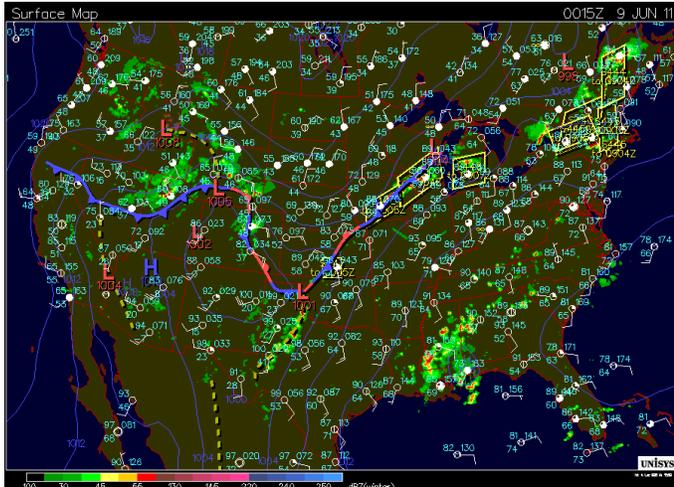


FIGURE J-11: 6/9/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

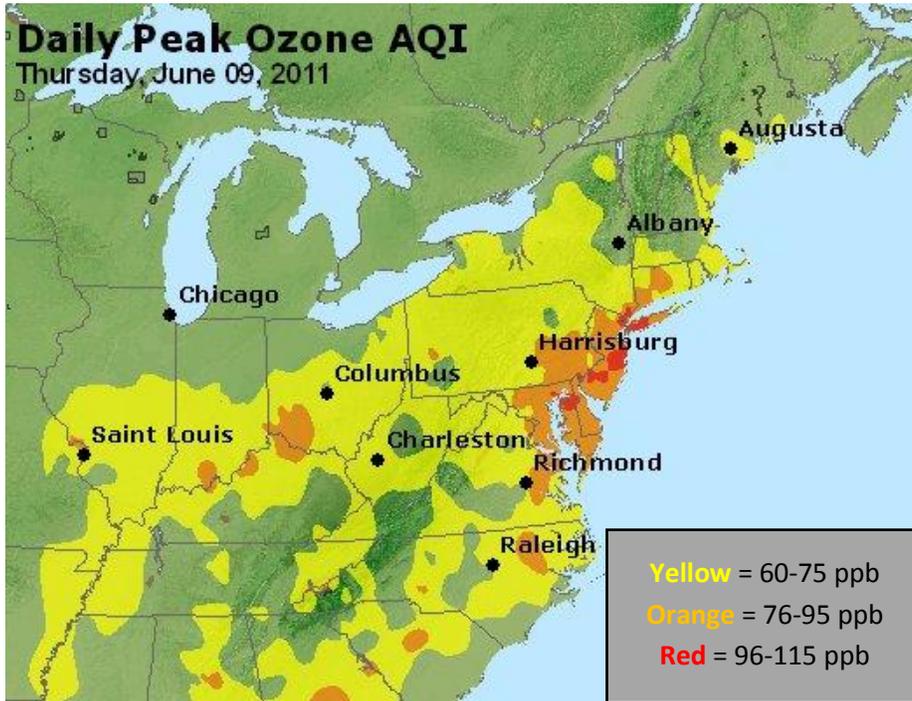


FIGURE J-12: 6/9/11 morning surface map

FIGURE J-13: 6/9/2011 morning 850mb

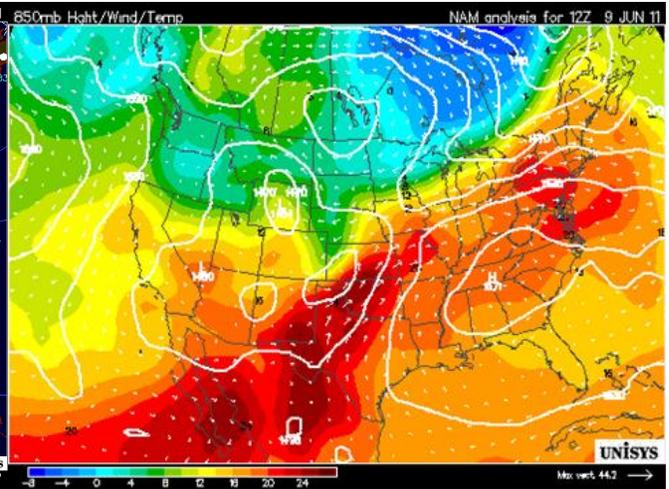
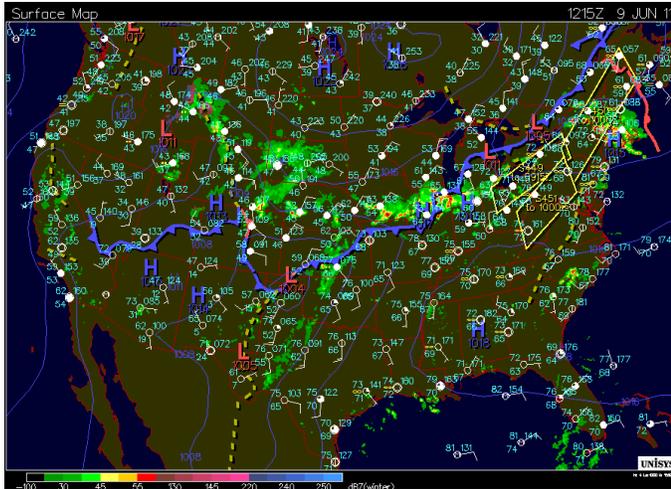


FIGURE J-14: 6/9/11 evening surface map

FIGURE J-15: 6/9/2011 evening 850mb map

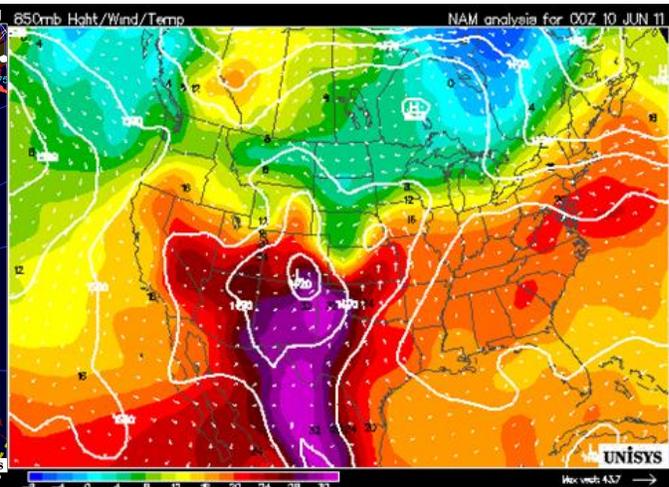
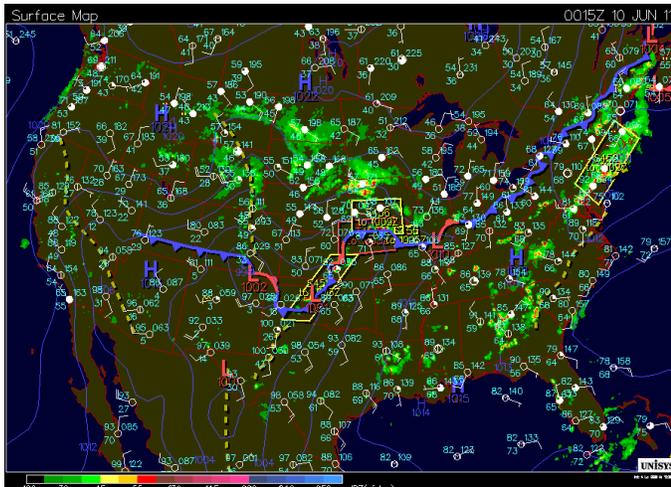


FIGURE J-16: 7/1/11 peak 8-hour ozone map (Cut off Low event)

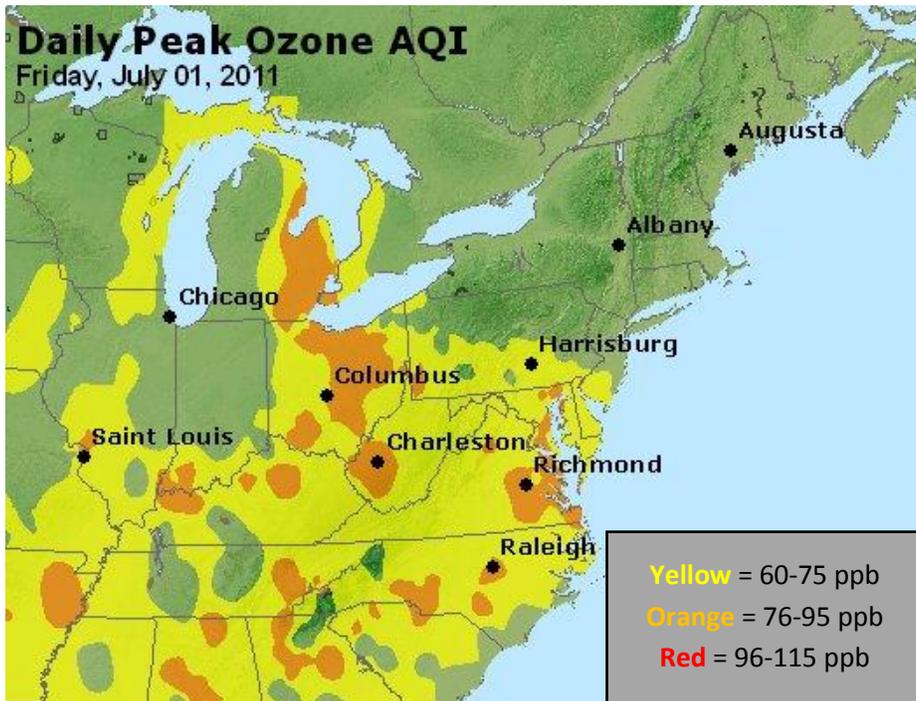


FIGURE J-17: 7/1/11 morning surface map

FIGURE J-18: 7/1/2011 morning 850mb

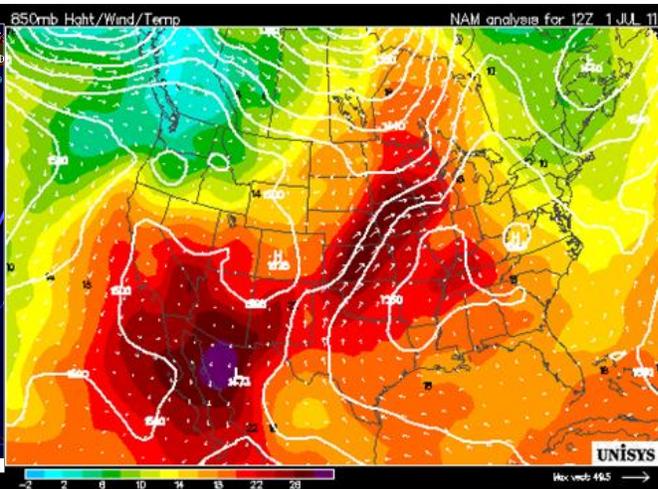
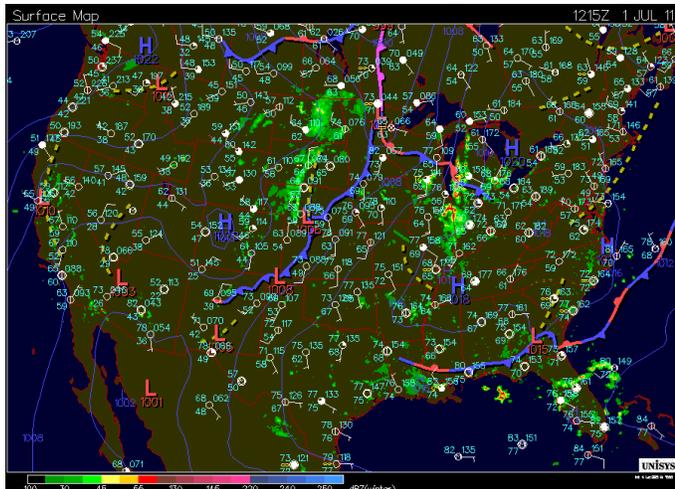


FIGURE J-19: 7/1/11 evening surface map

FIGURE J-20: 7/1/2011 evening 850mb map

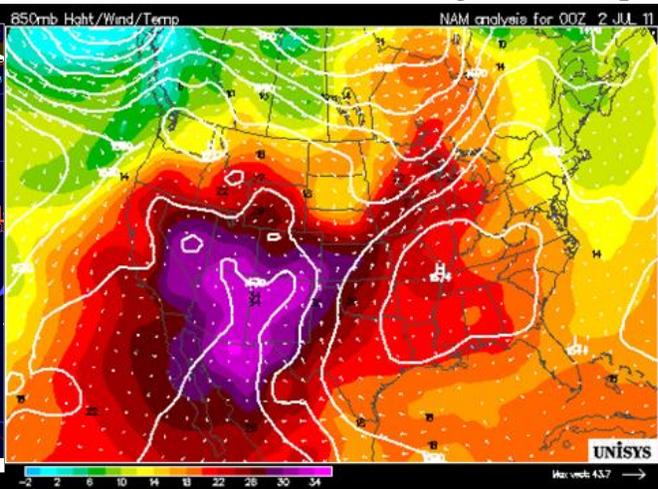
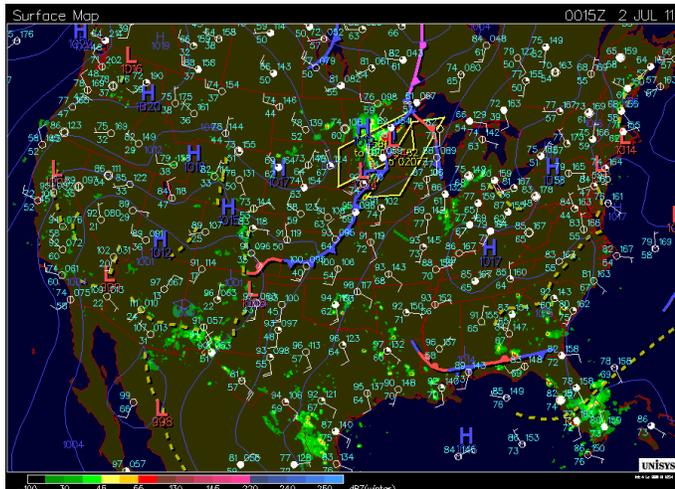


FIGURE J-21: 7/2/11 peak 8-hour ozone map (Cut off Low event)

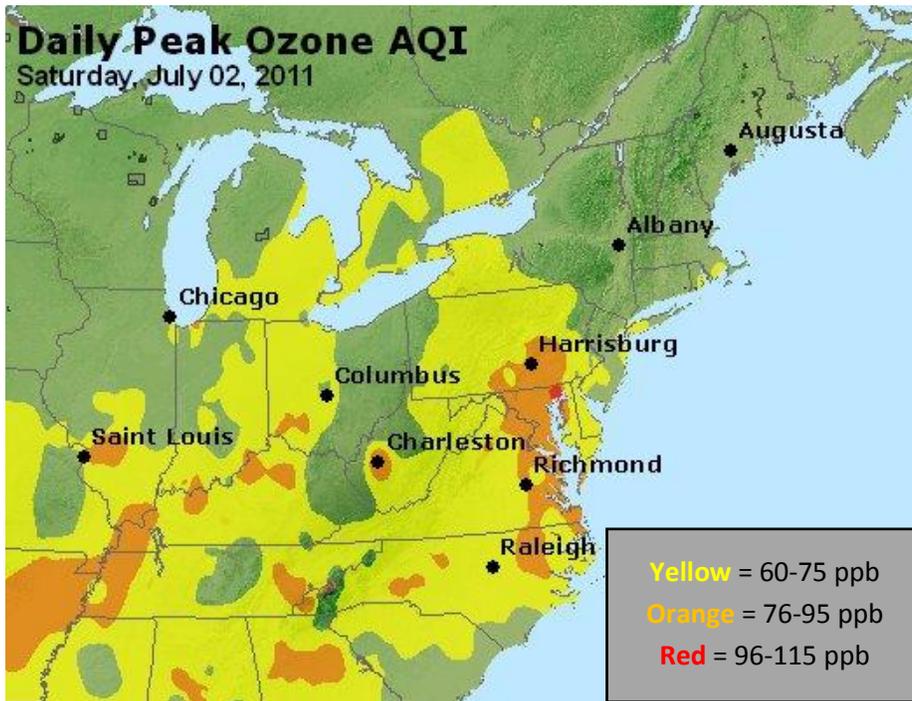


FIGURE J-22: 7/2/11 morning surface map

FIGURE J-23: 7/2/2011 morning 850mb

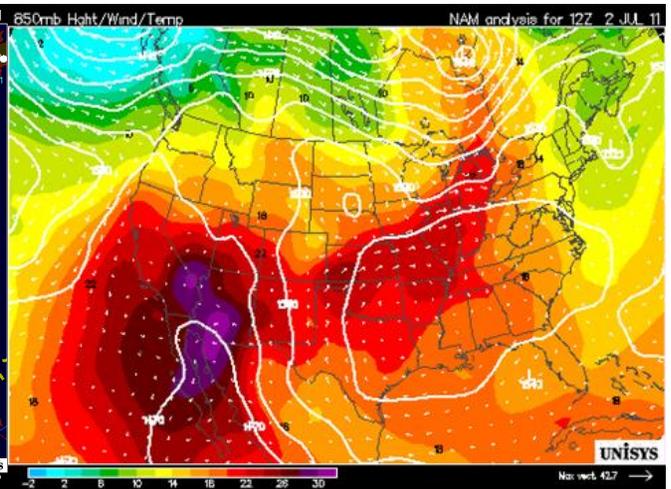
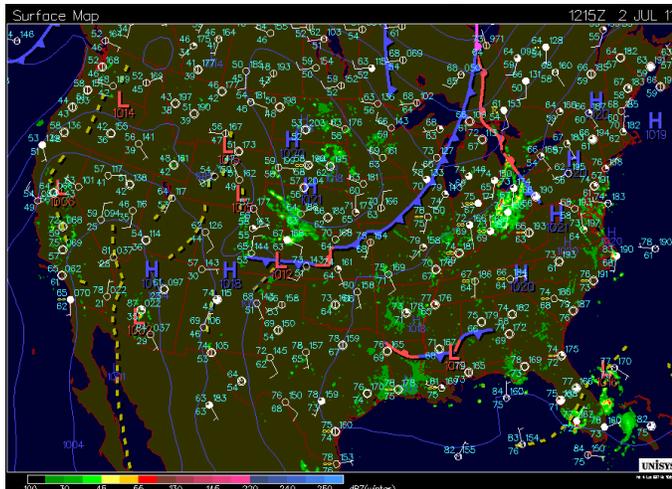


FIGURE J-24: 7/2/11 evening surface map

FIGURE J-25: 7/2/2011 evening 850mb map

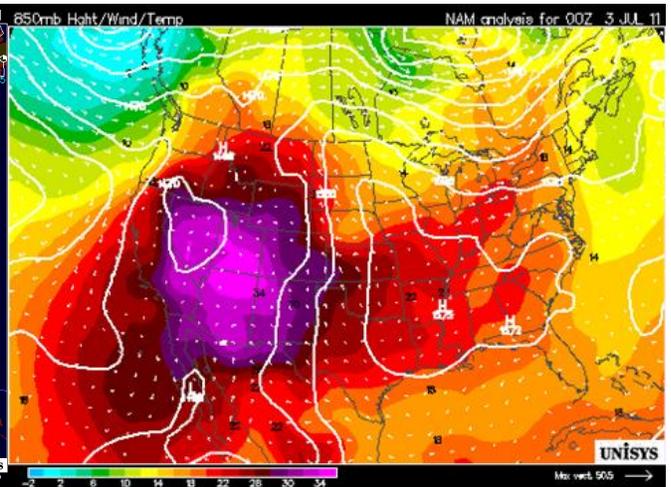
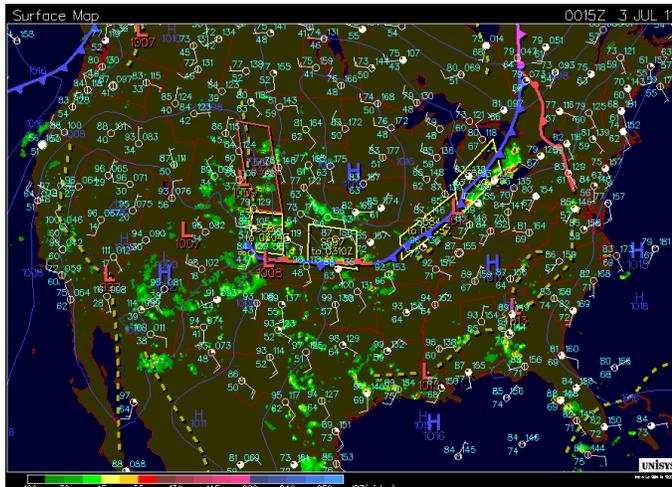


FIGURE J-26: 7/3/11 peak 8-hour ozone map (Cut off Low event)

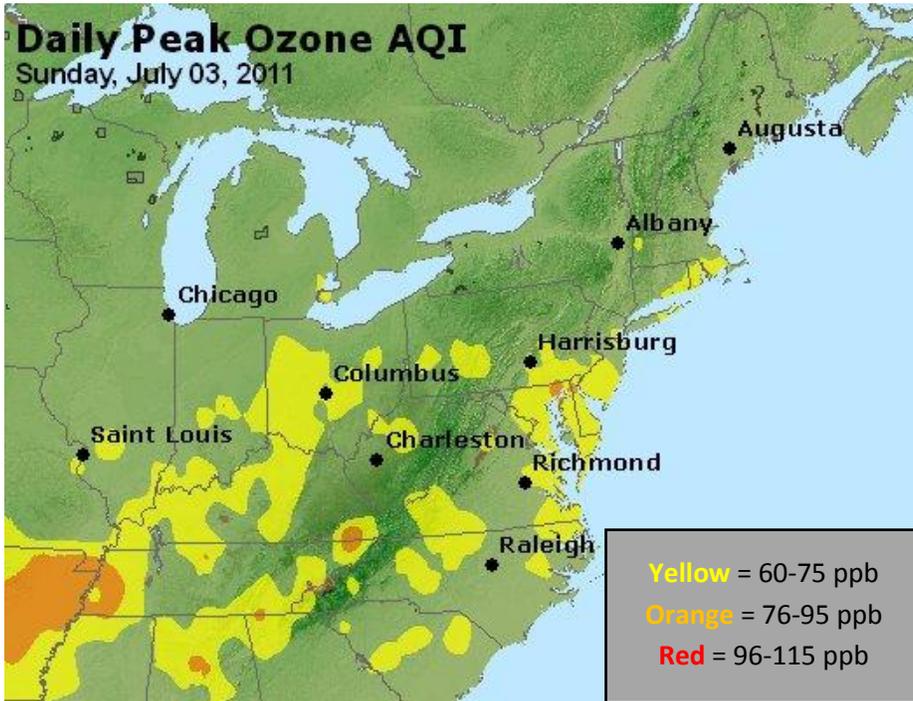


FIGURE J-27: 7/3/11 morning surface map

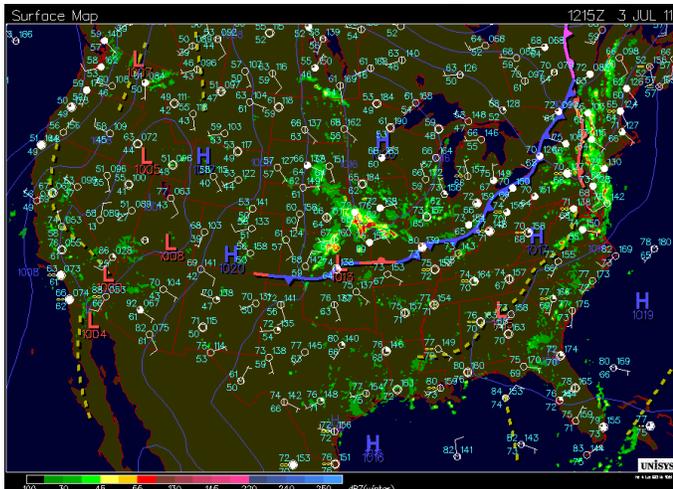


FIGURE J-28: 7/3/2011 morning 850mb

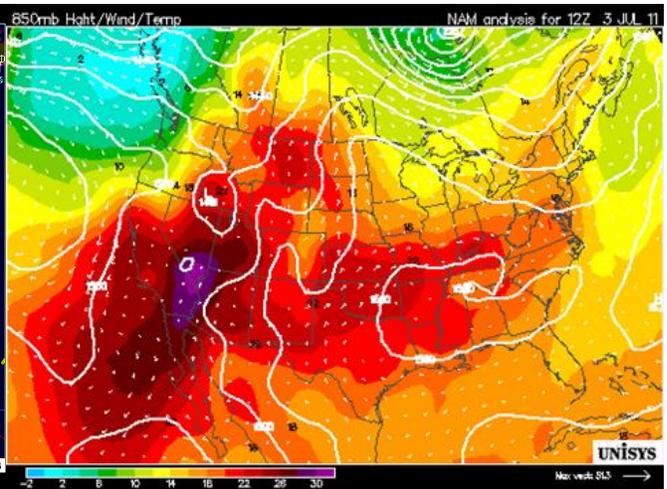


FIGURE J-29: 7/3/11 evening surface map

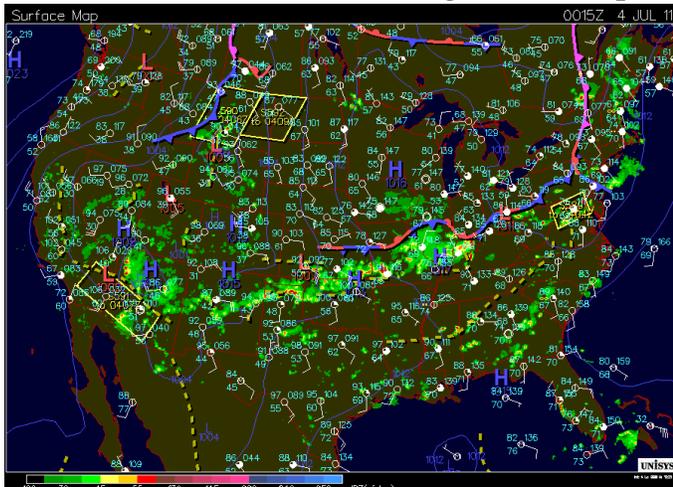


FIGURE J-30: 7/3/2011 evening 850mb map

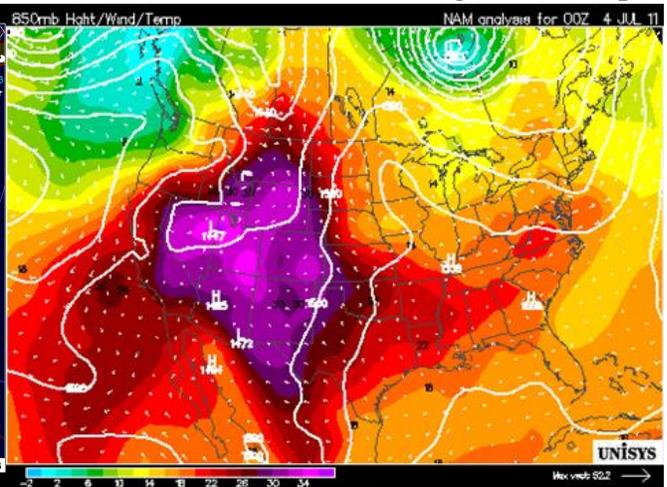


FIGURE J-31: 7/5/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

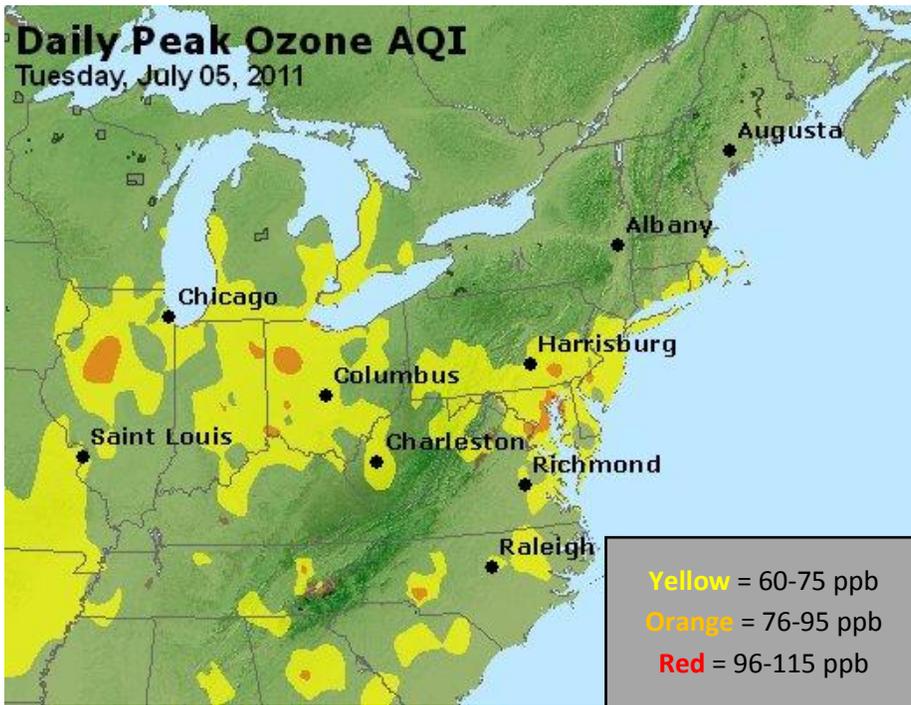


FIGURE J-32: 7/5/11 morning surface map

FIGURE J-33: 7/5/2011 morning 850mb

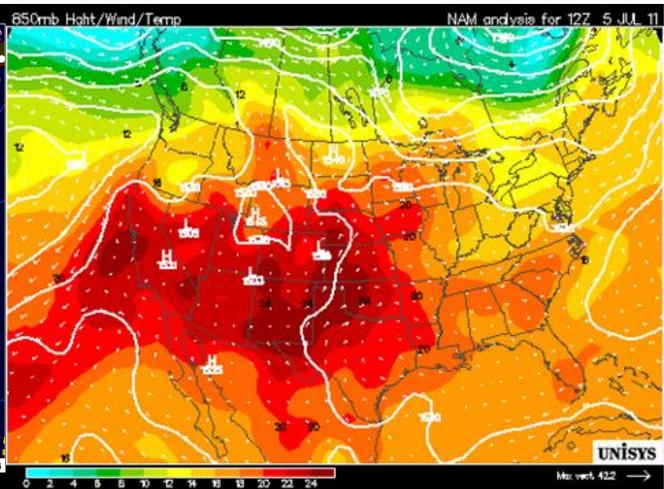
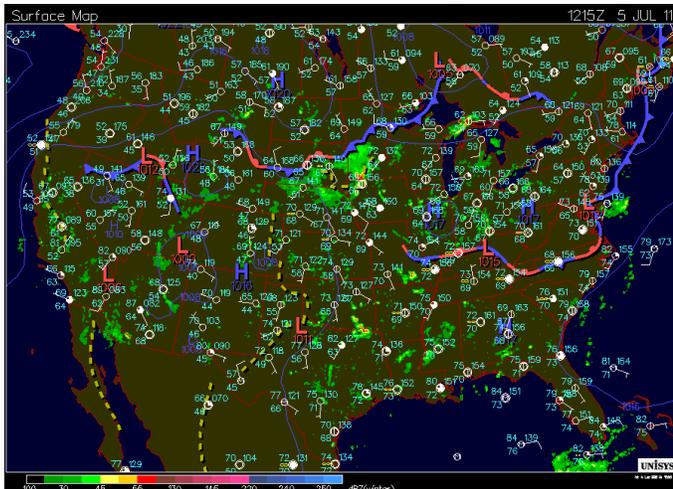


FIGURE J-34: 7/5/11 evening surface map

FIGURE J-35: 7/5/2011 evening 850mb map

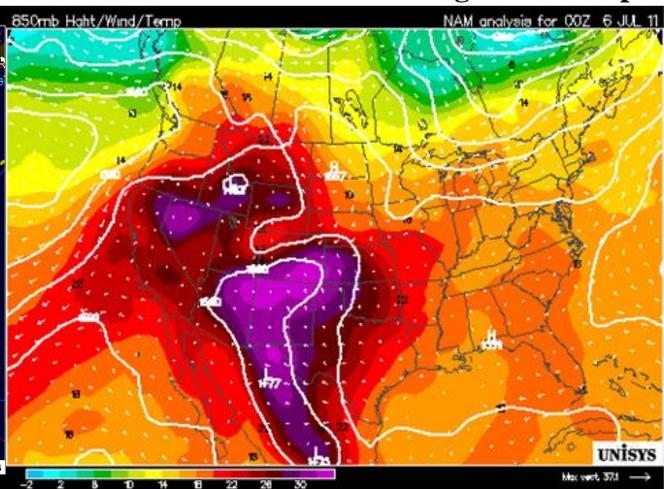
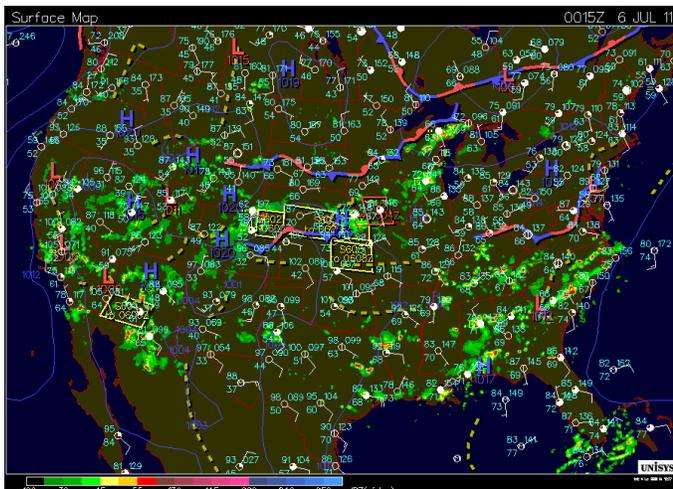


FIGURE J-36: 7/6/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

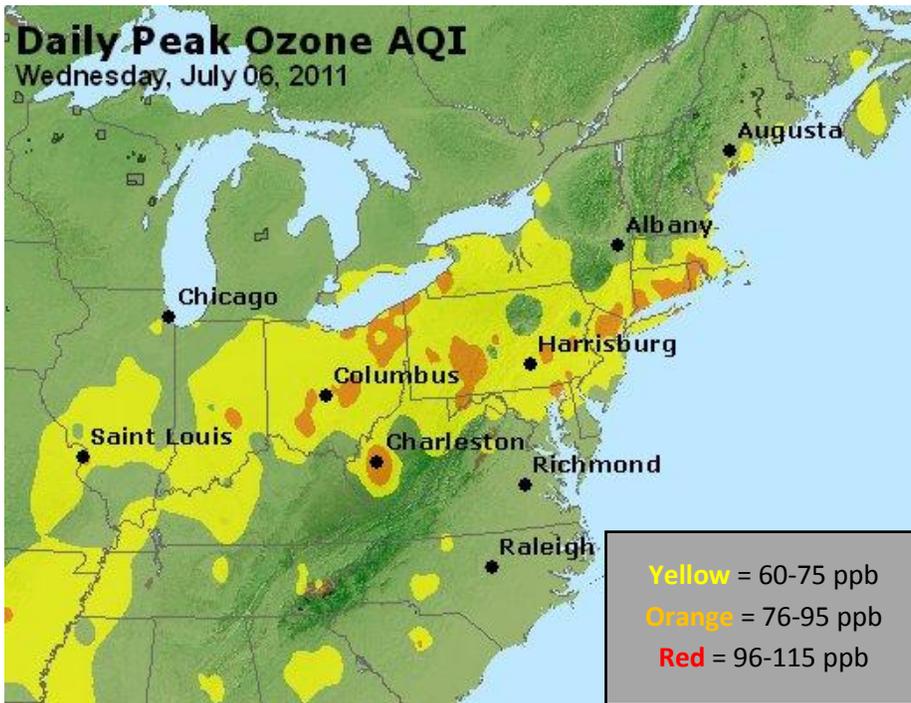


FIGURE J-37: 7/6/11 morning surface map

FIGURE J-38: 7/6/2011 morning 850mb

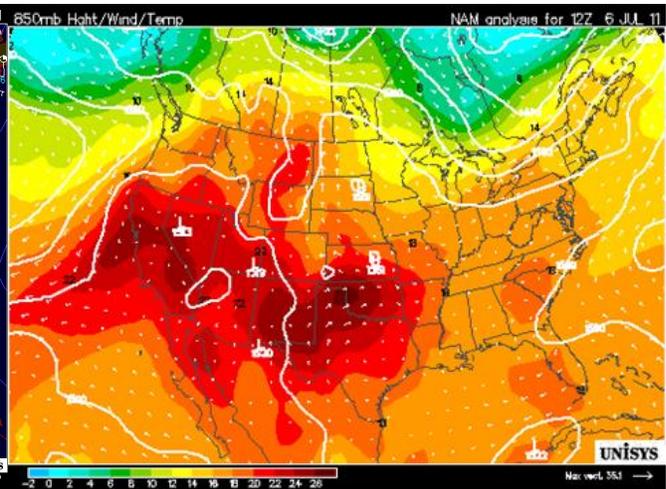
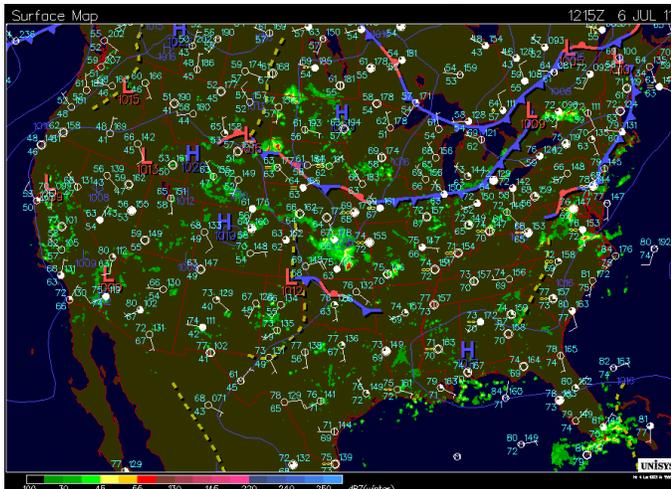


FIGURE J-39: 7/6/11 evening surface map

FIGURE J-40: 7/6/2011 evening 850mb map

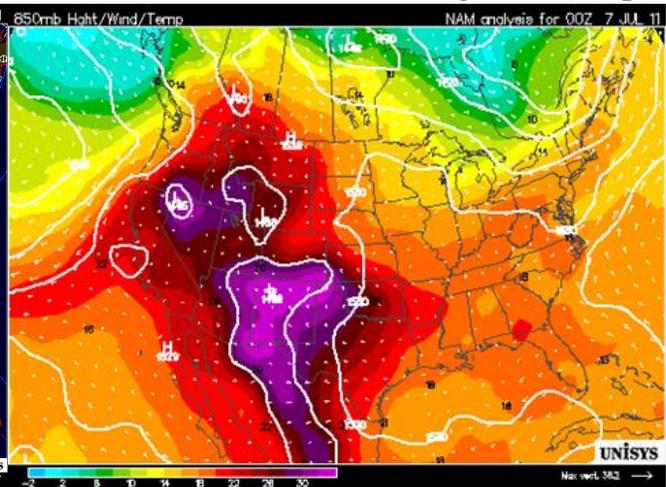
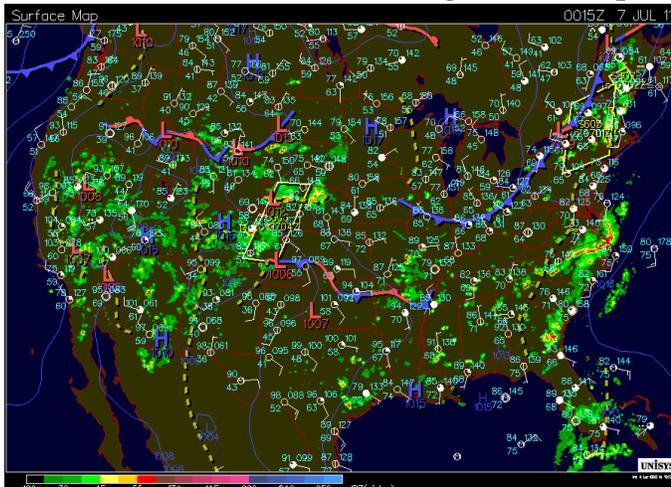


FIGURE J-41: 7/7/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

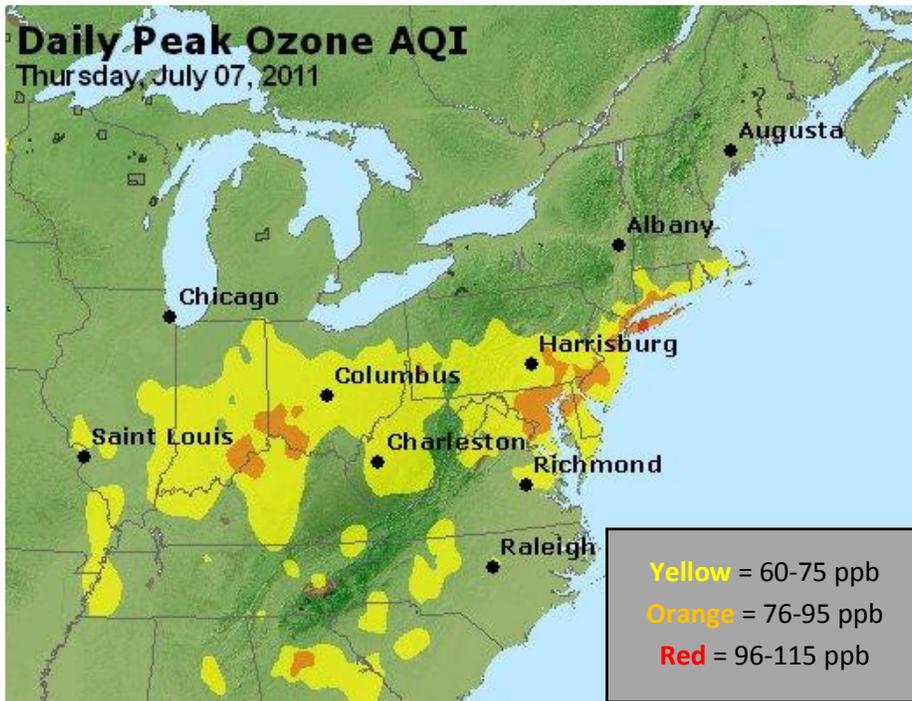


FIGURE J-42: 7/7/11 morning surface map

FIGURE J-43: 7/7/2011 morning 850mb

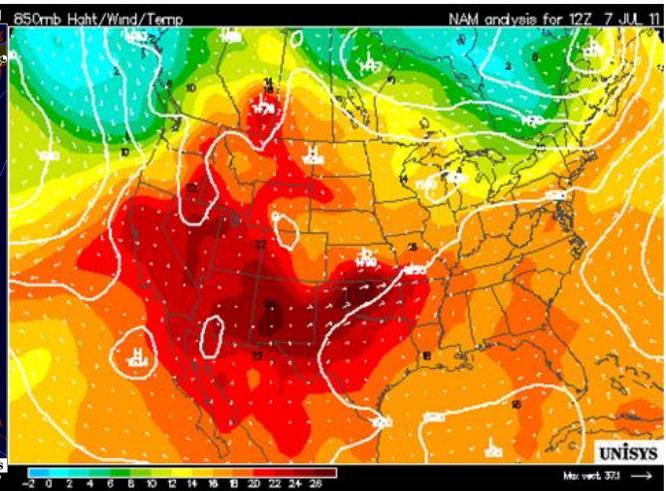
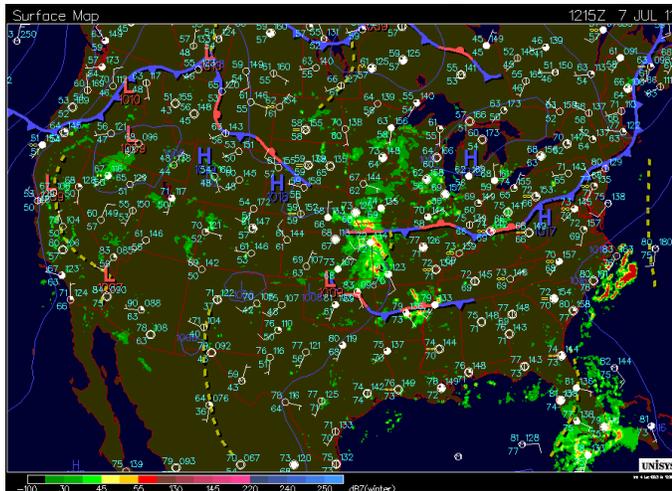


FIGURE J-44: 7/7/11 evening surface map

FIGURE J-45: 7/7/2011 evening 850mb map

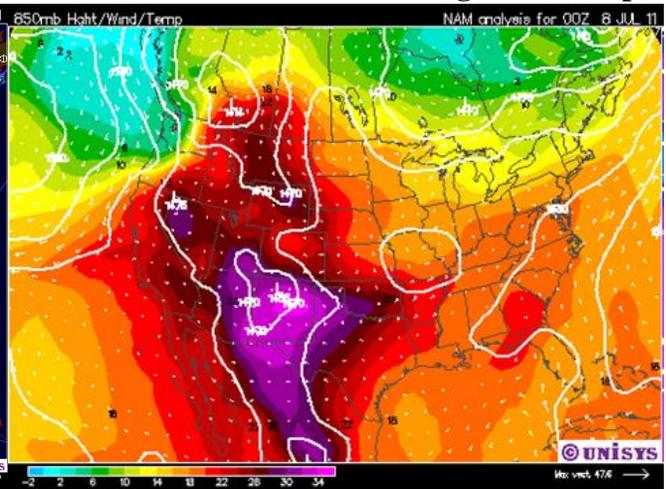
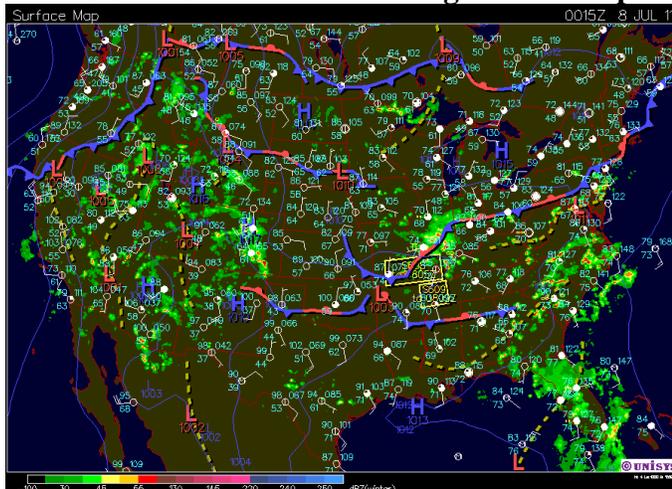


FIGURE J-46: 7/11/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

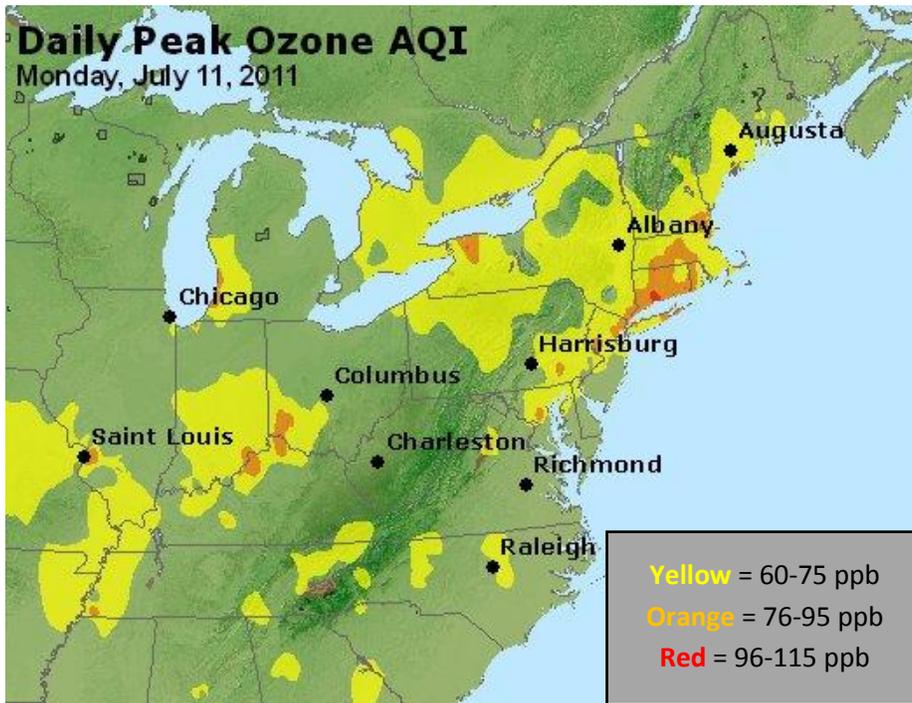


FIGURE J-47: 7/11/11 morning surface map

FIGURE J-48: 7/11/2011 morning 850mb

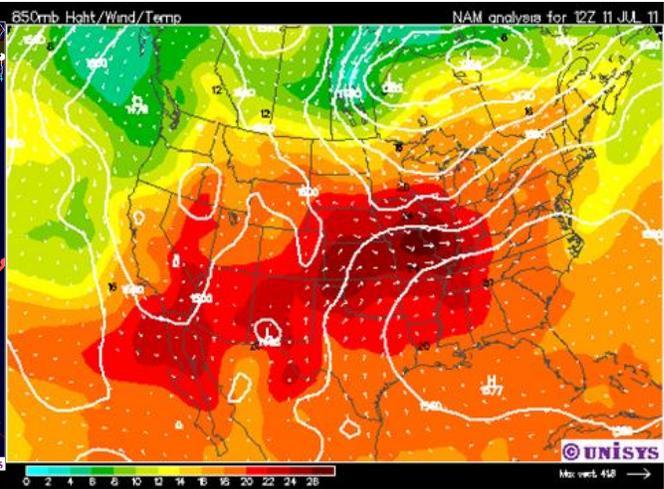
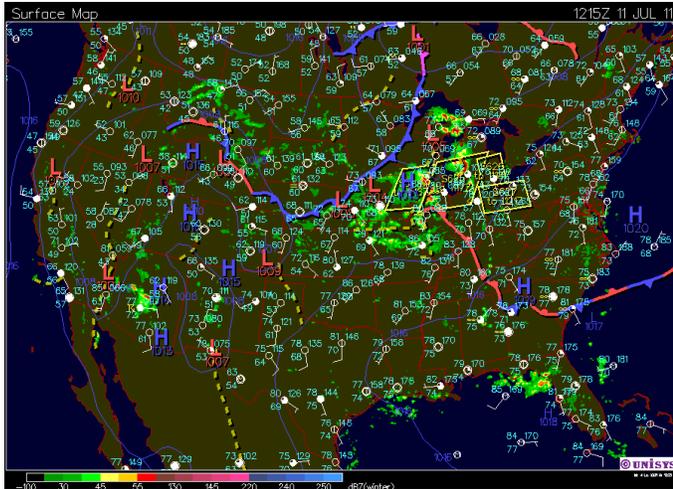


FIGURE J-49: 7/11/11 evening surface map

FIGURE J-50: 7/11/2011 evening 850mb

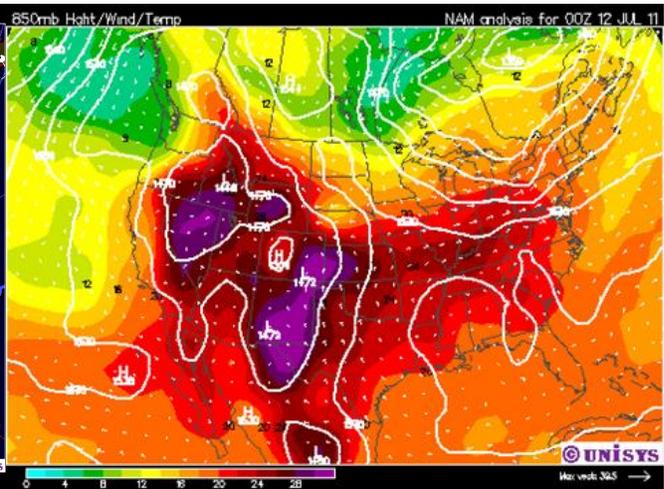
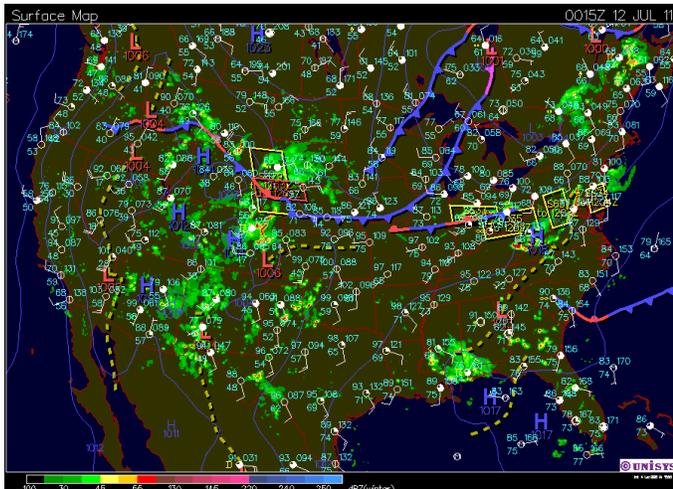


FIGURE J-51: 7/12/11 peak 8-hour ozone map (Progressive warm-front-cold-front event)

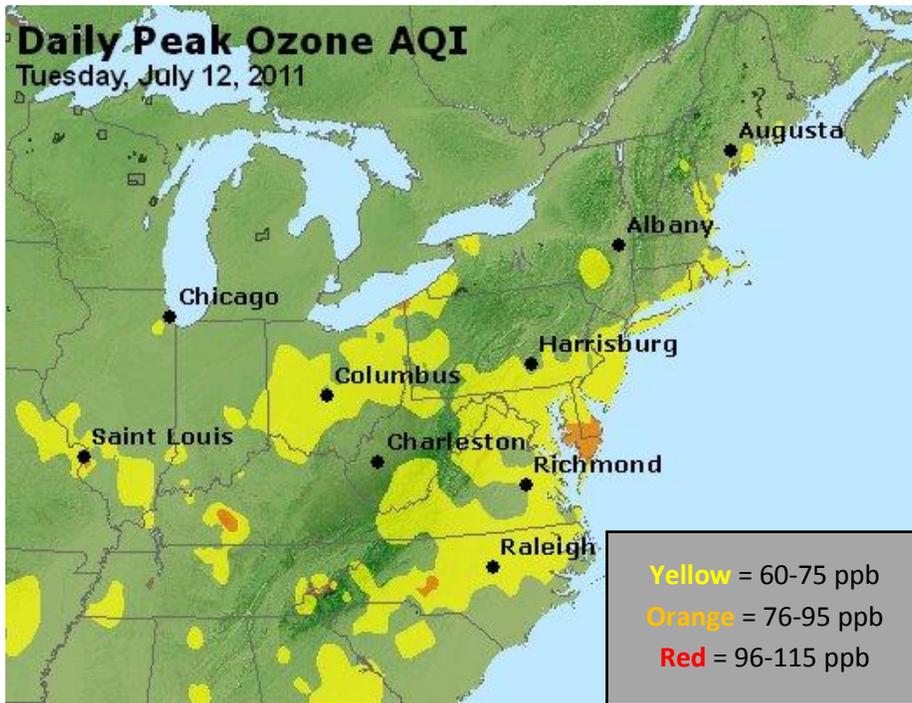


FIGURE J-52: 7/12/11 morning surface map

FIGURE J-53: 7/12/2011 morning 850mb

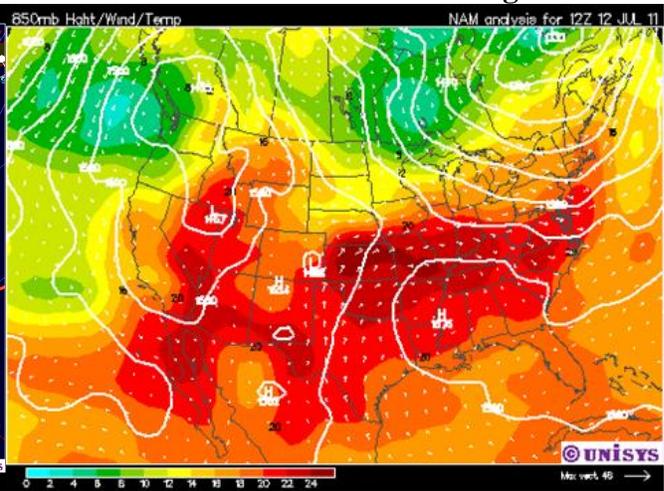
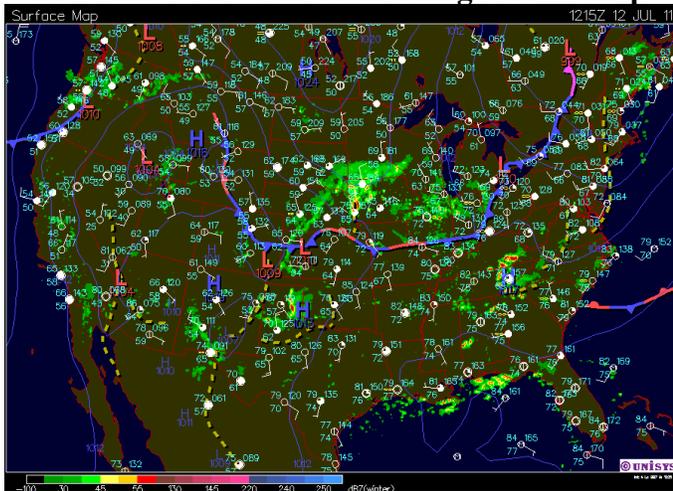


FIGURE J-54: 7/12/11 evening surface map

FIGURE J-55: 7/12/2011 evening 850mb

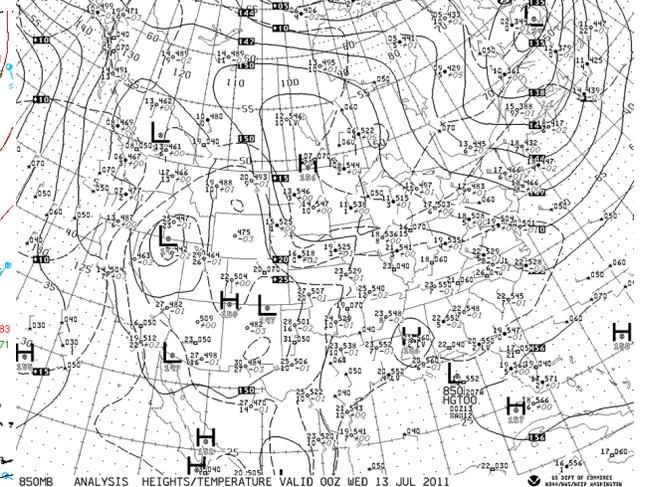
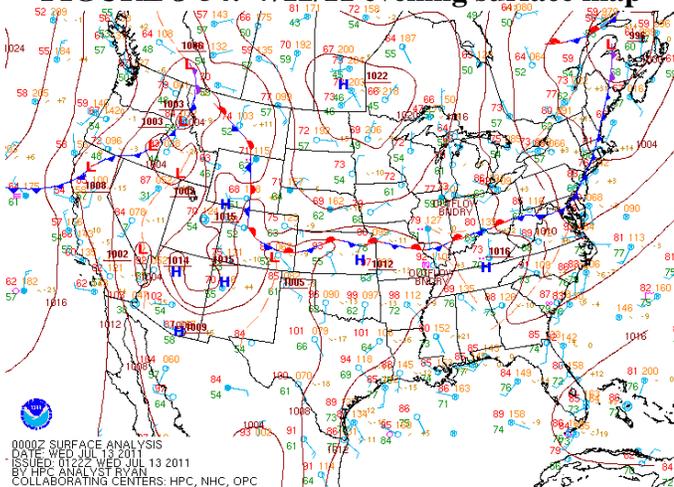


FIGURE J-56: 7/17/11 peak 8-hour ozone map (Bermuda High event)

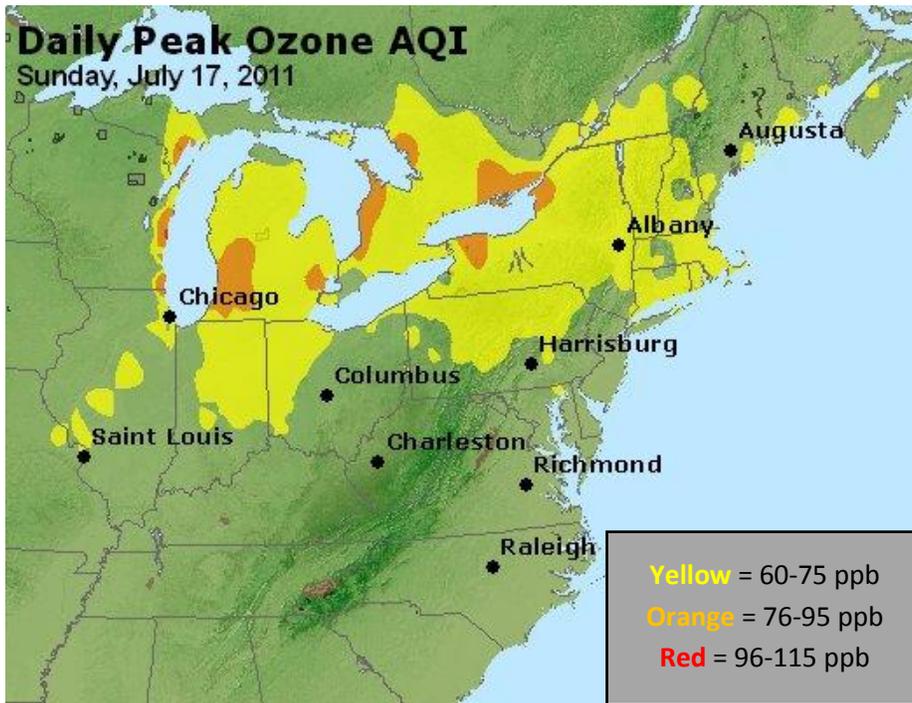


FIGURE J-57: 7/17/11 morning surface map

FIGURE J-58: 7/17/2011 morning 850mb

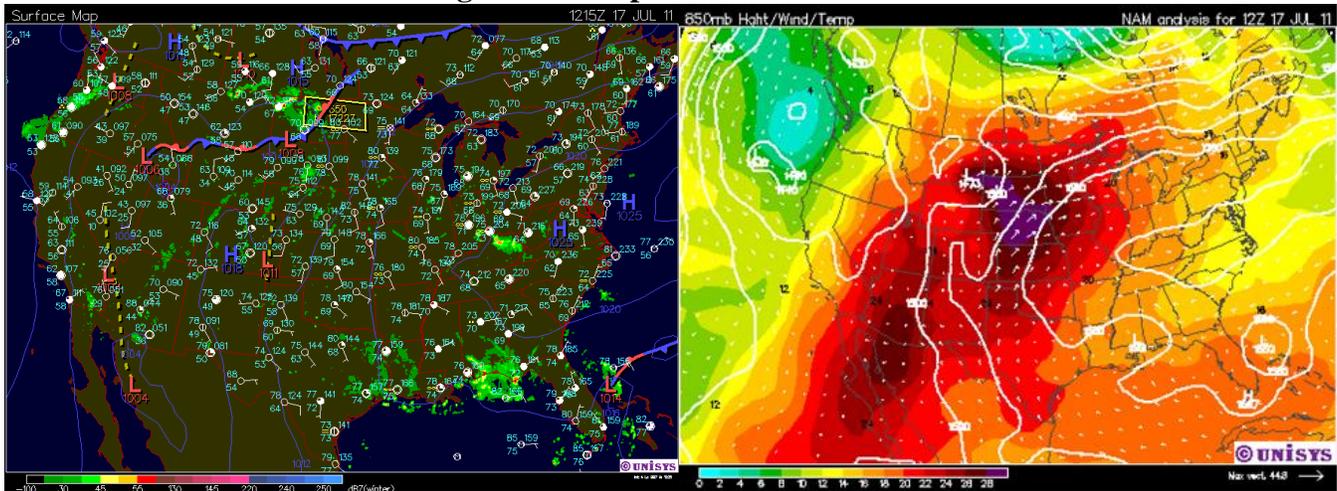


FIGURE J-59: 7/17/11 evening surface map

FIGURE J-60: 7/17/2011 evening 850mb

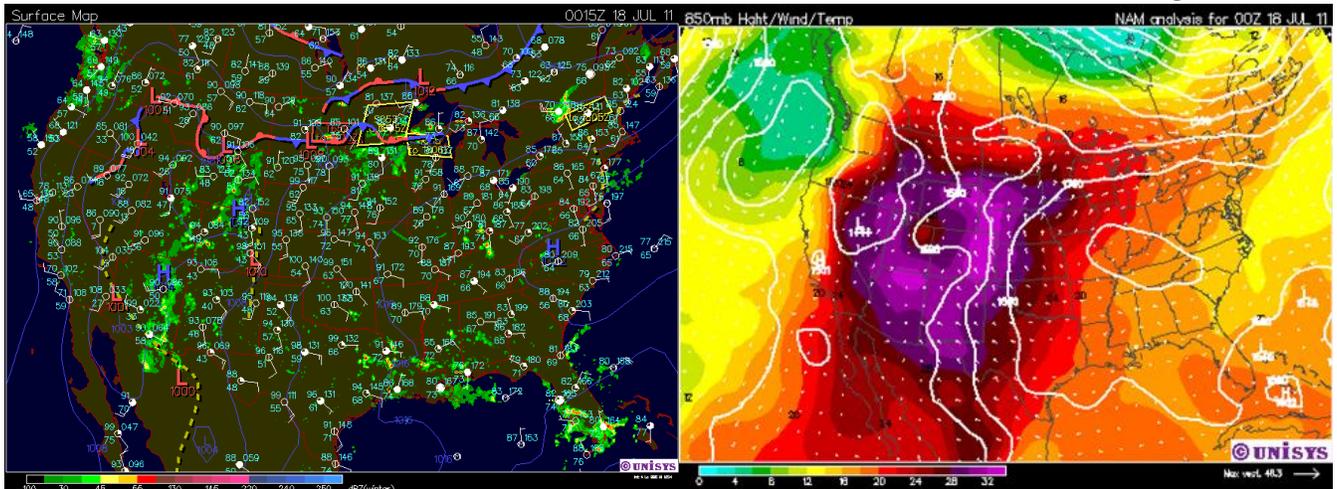


FIGURE J-61: 7/18/11 peak 8-hour ozone map (Bermuda High event)

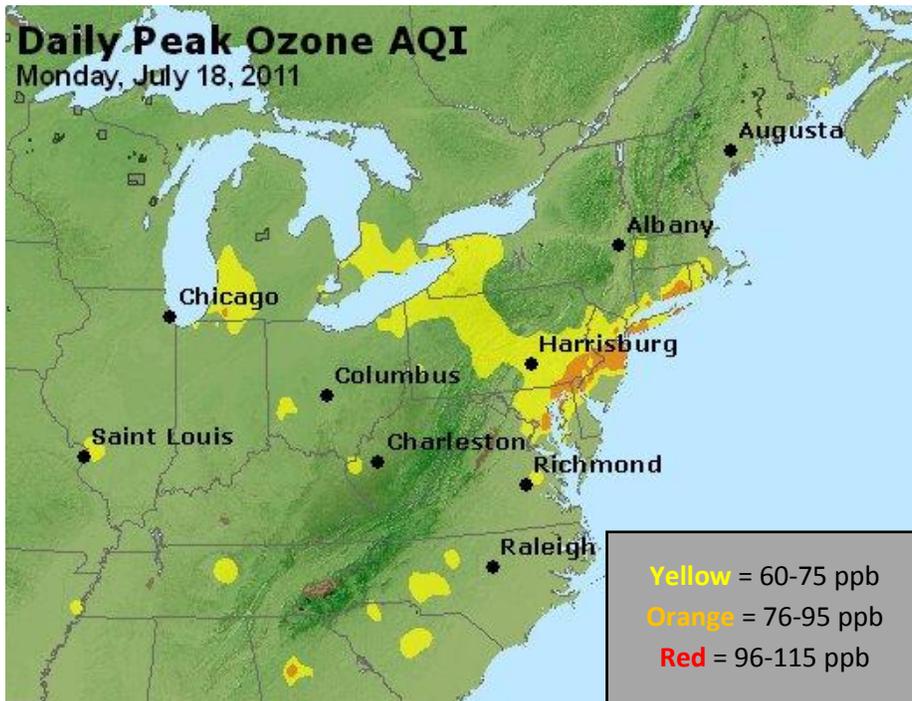


FIGURE J-62: 7/18/11 morning surface map

FIGURE J-63: 7/18/2011 morning 850mb

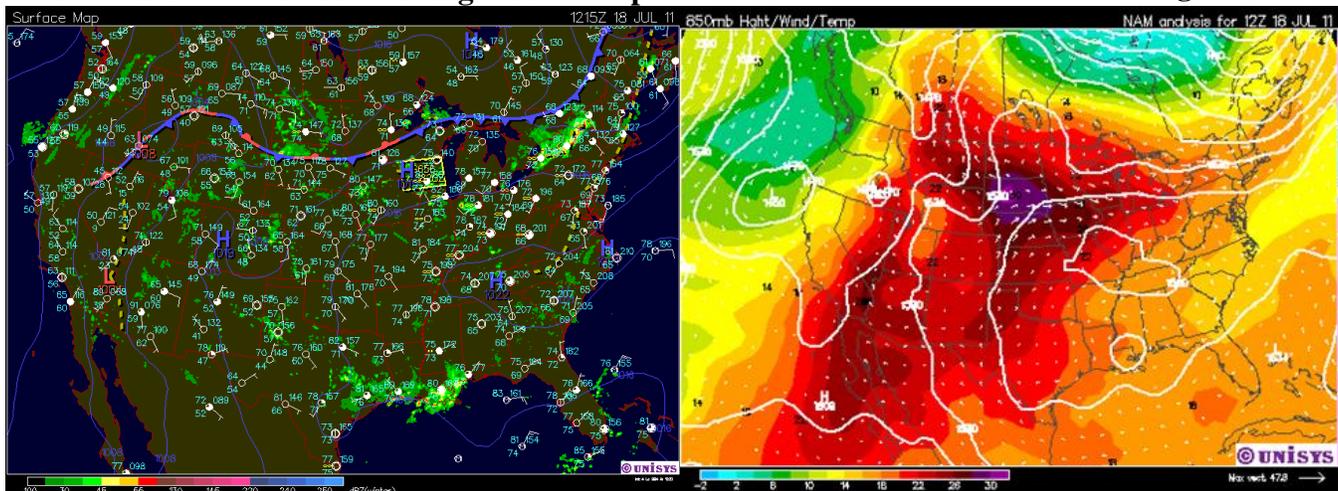


FIGURE J-64: 7/18/11 evening surface map

FIGURE J-65: 7/18/2011 evening 850mb

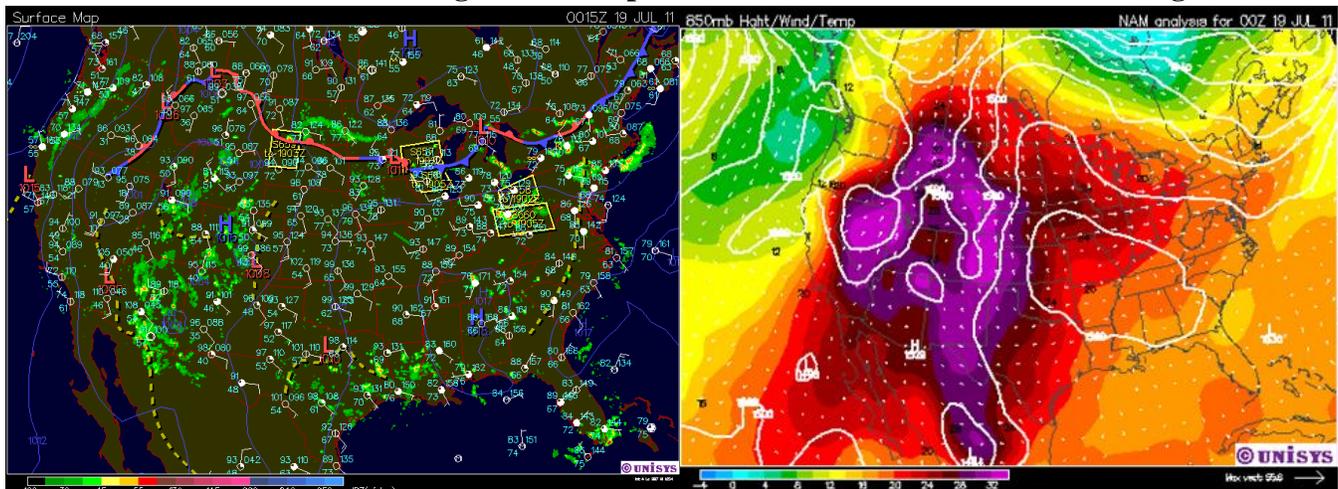


FIGURE J-66: 7/19/11 peak 8-hour ozone map (Bermuda High event)

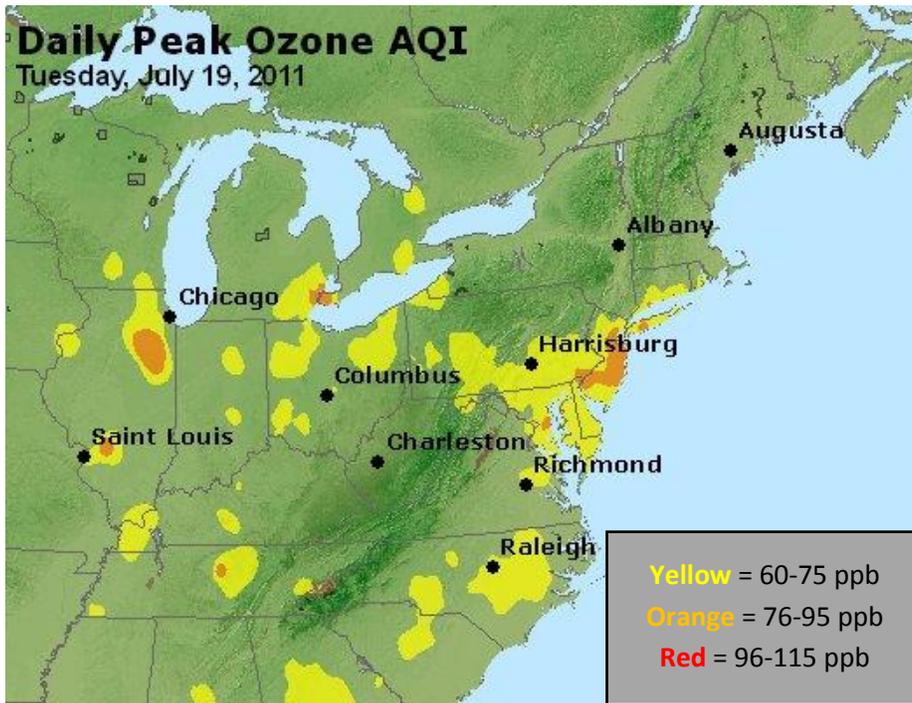


FIGURE J-67: 7/19/11 morning surface map

FIGURE J-68: 7/19/2011 morning 850mb

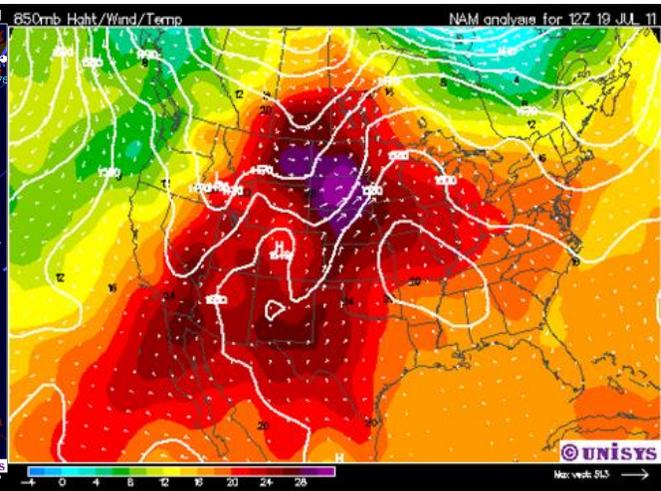
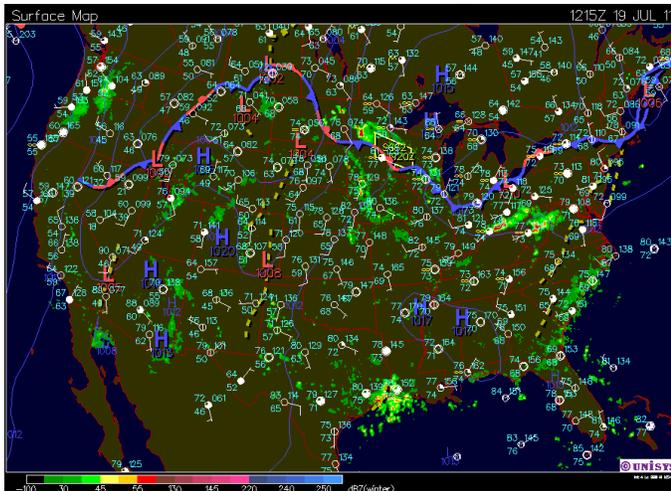


FIGURE J-69: 7/19/11 evening surface map

FIGURE J-70: 7/19/2011 evening 850mb

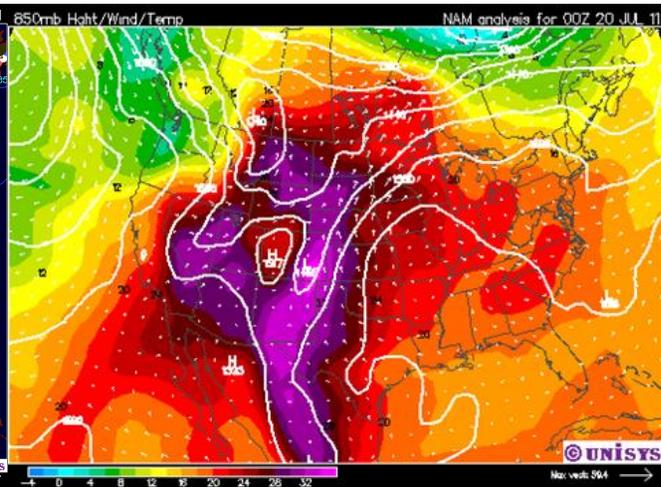
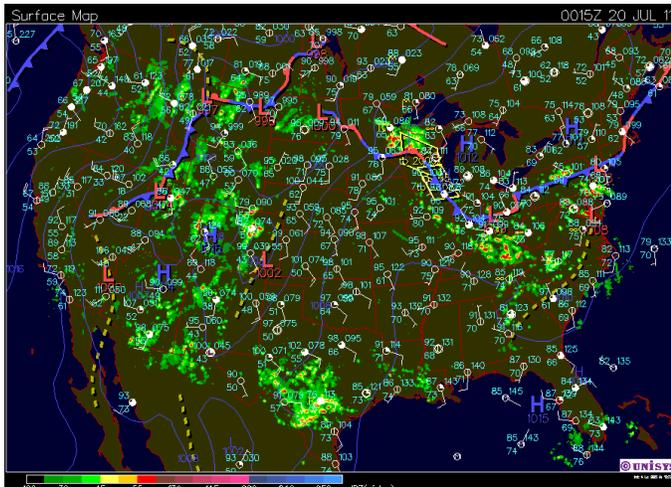


FIGURE J-71: 7/20/11 peak 8-hour ozone map (Bermuda High event)

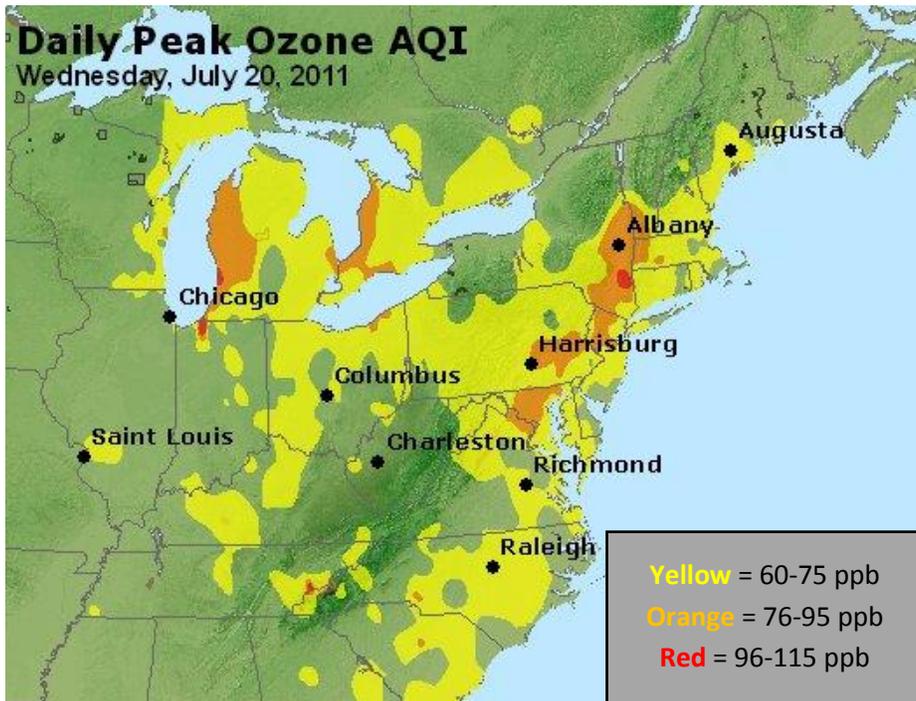


FIGURE J-72: 7/20/11 morning surface map

FIGURE J-73: 7/20/2011 morning 850mb

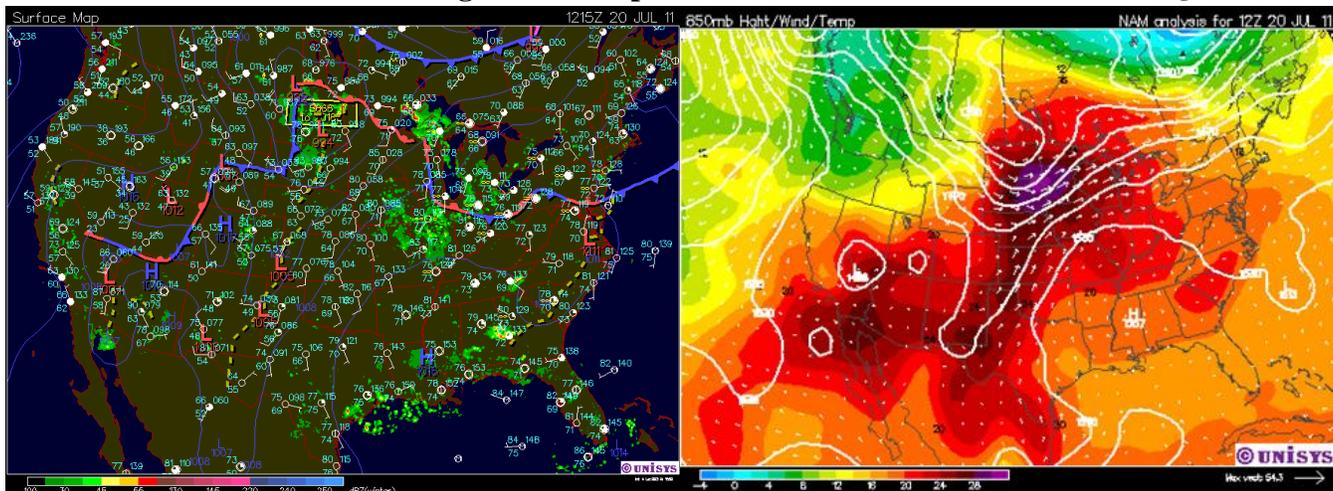


FIGURE J-74: 7/20/11 evening surface map

FIGURE J-75: 7/20/2011 evening 850mb

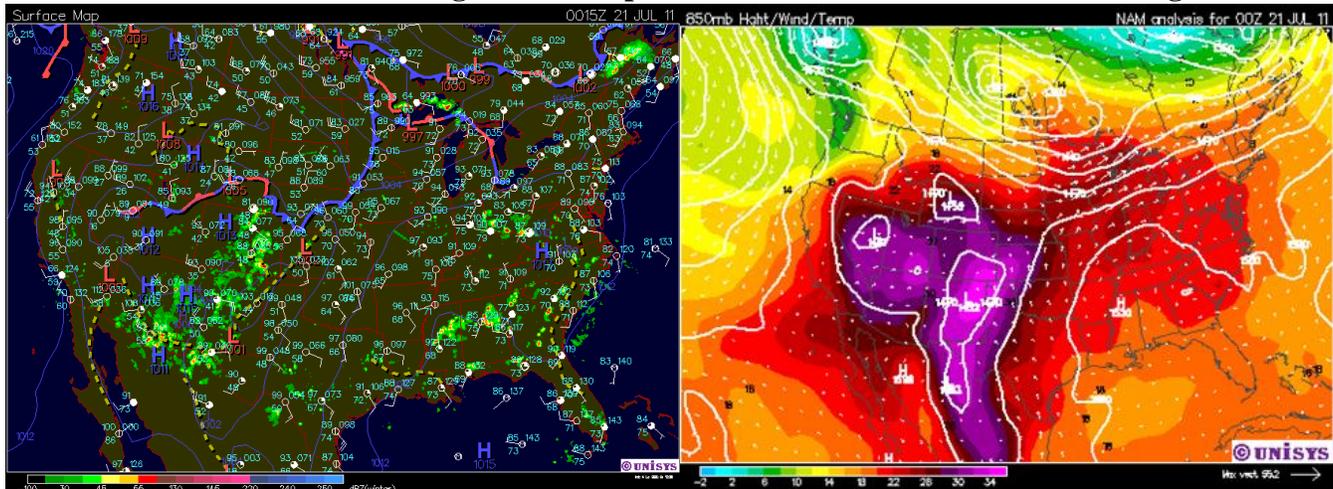


FIGURE J-76: 7/21/11 peak 8-hour ozone map (Bermuda High event)

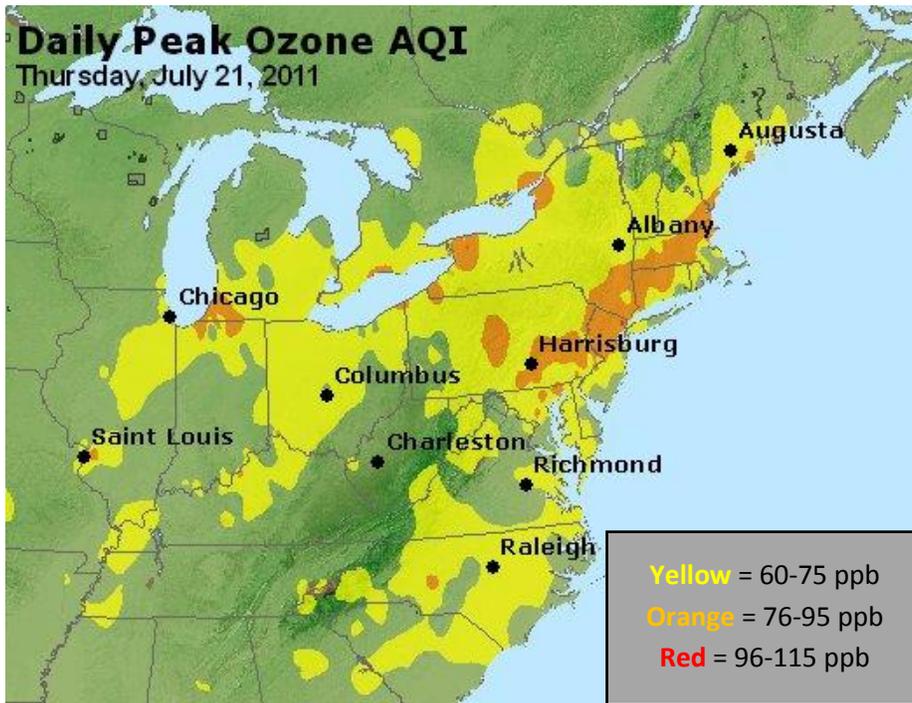


FIGURE J-77: 7/21/11 morning surface map

FIGURE J-78: 7/21/2011 morning 850mb

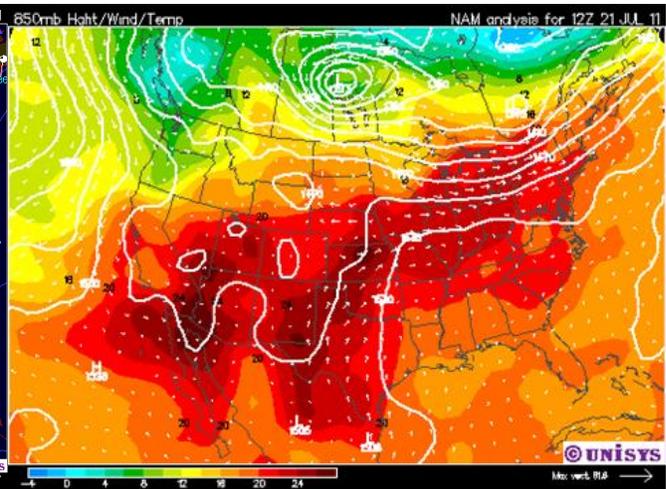
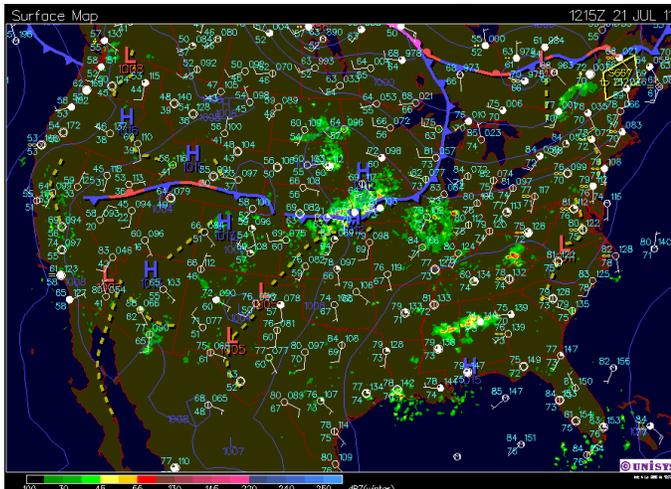


FIGURE J-79: 7/21/11 evening surface map

FIGURE J-80: 7/21/2011 evening 850mb

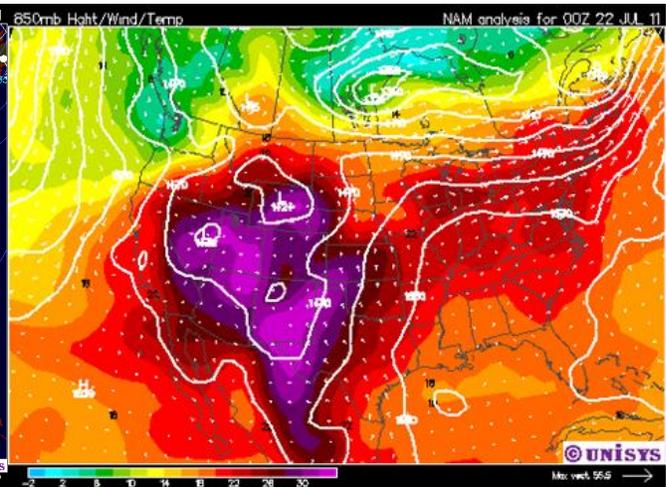
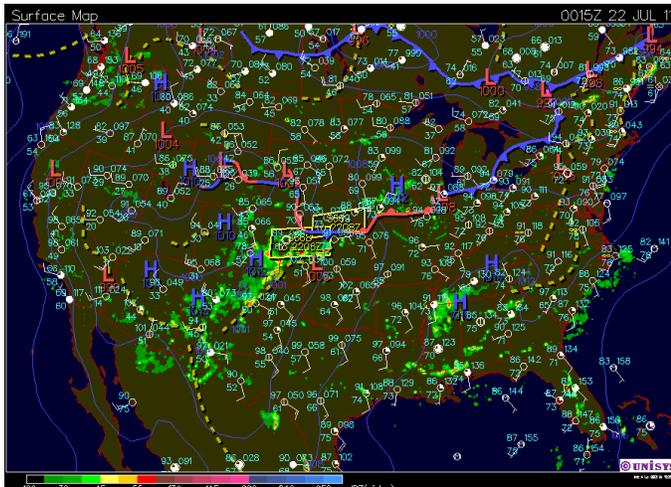


FIGURE J-81: 7/22/11 peak 8-hour ozone map (Bermuda High event)

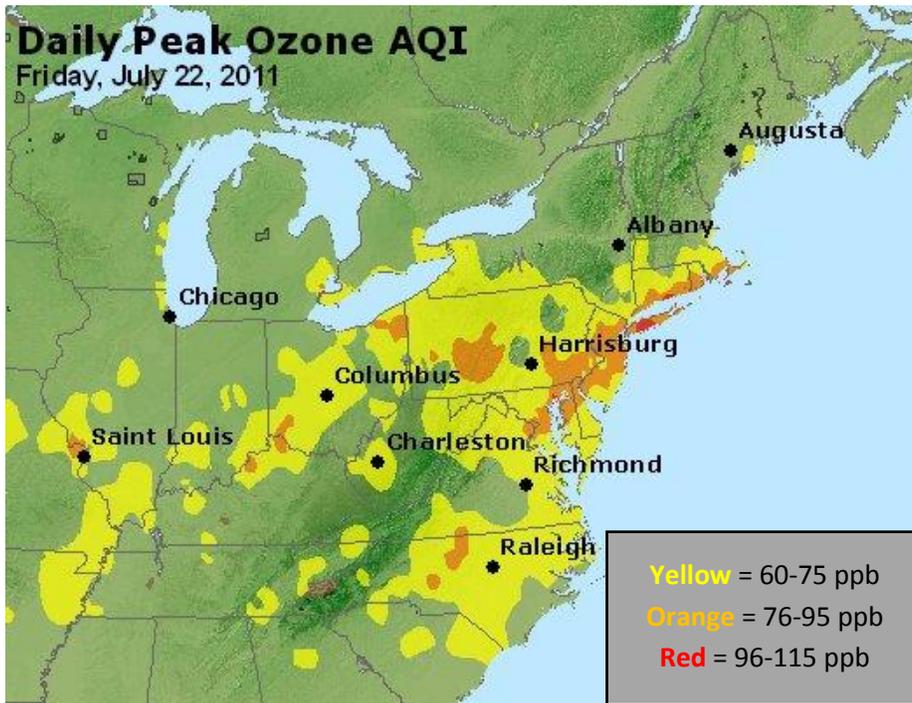


FIGURE J-82: 7/22/11 morning surface map

FIGURE J-83: 7/22/2011 morning 850mb

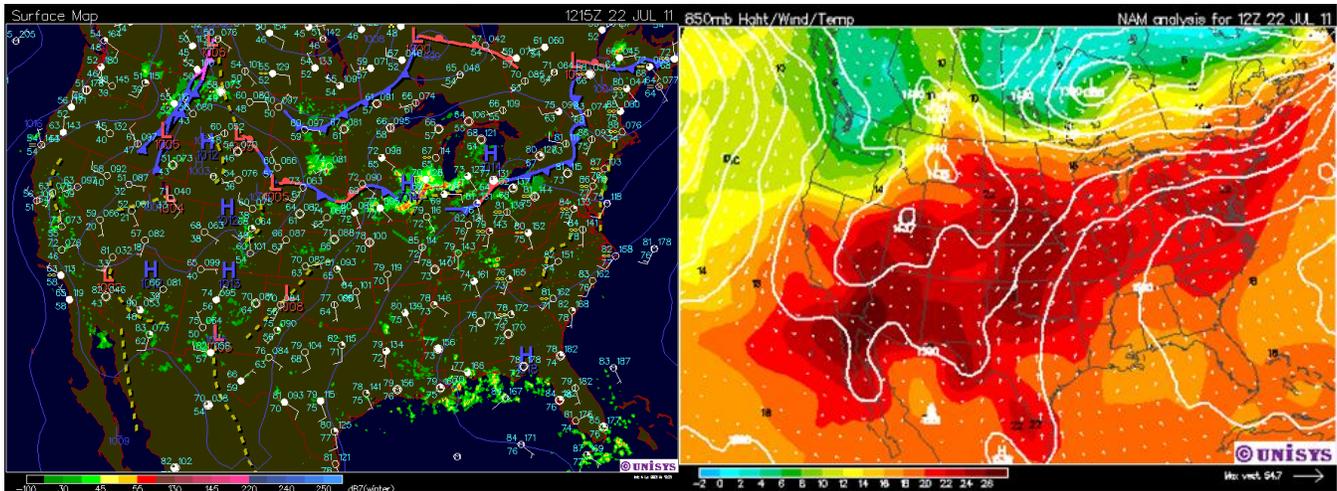


FIGURE J-84: 7/22/11 evening surface map

FIGURE J-85: 7/22/2011 evening 850mb

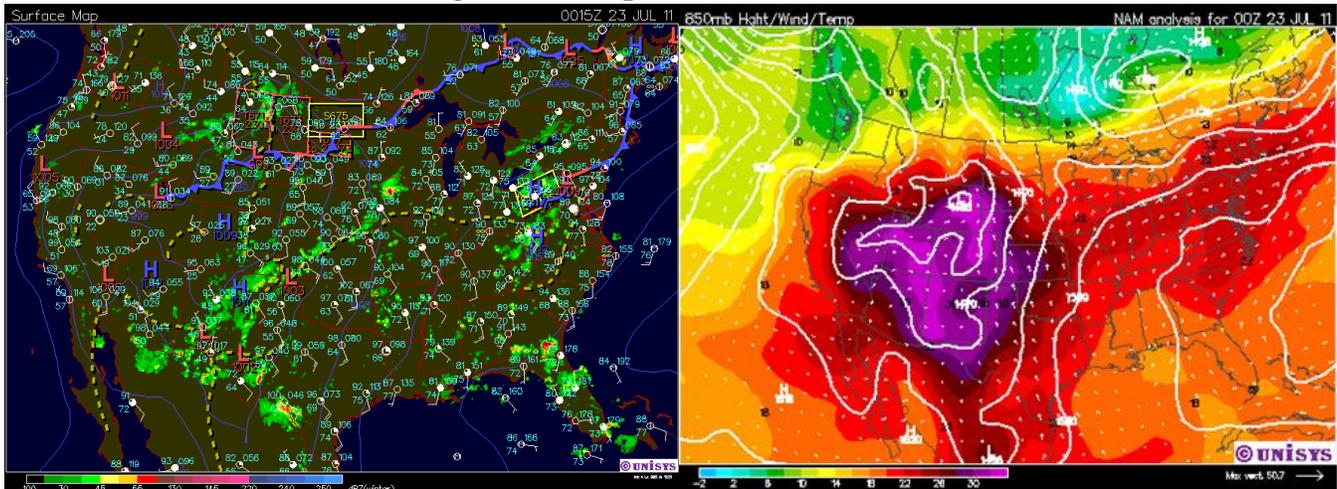


FIGURE J-86: 7/23/11 peak 8-hour ozone map (Bermuda High event)

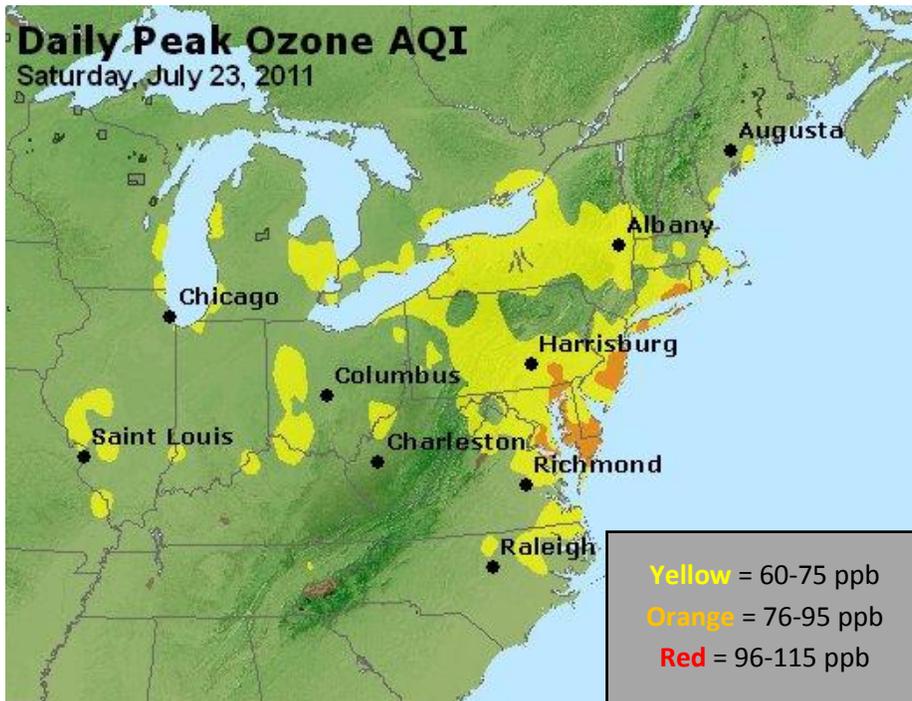


FIGURE J-87: 7/23/11 morning surface map

FIGURE J-88: 7/23/2011 morning 850mb

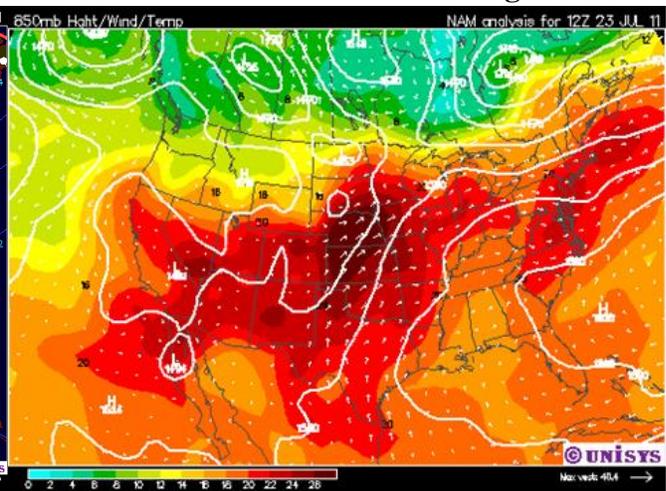
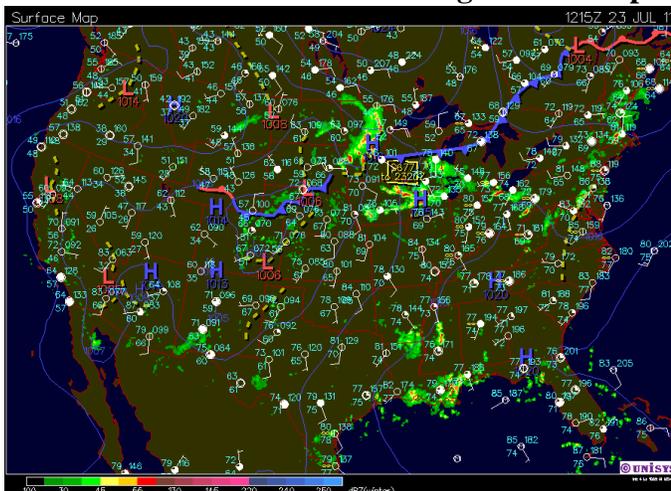


FIGURE J-89: 7/23/11 evening surface map

FIGURE J-90: 7/23/2011 evening 850mb

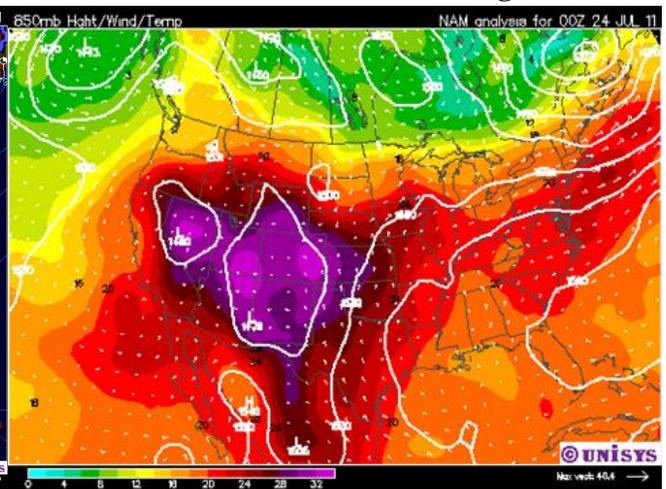
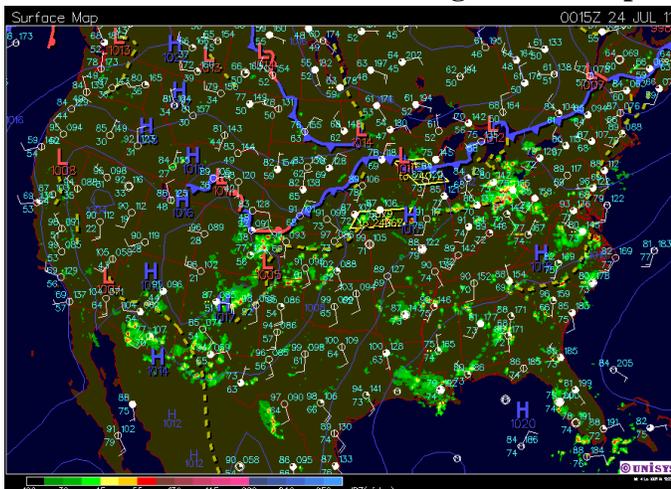


FIGURE J-91: 7/24/11 peak 8-hour ozone map (Bermuda High event)

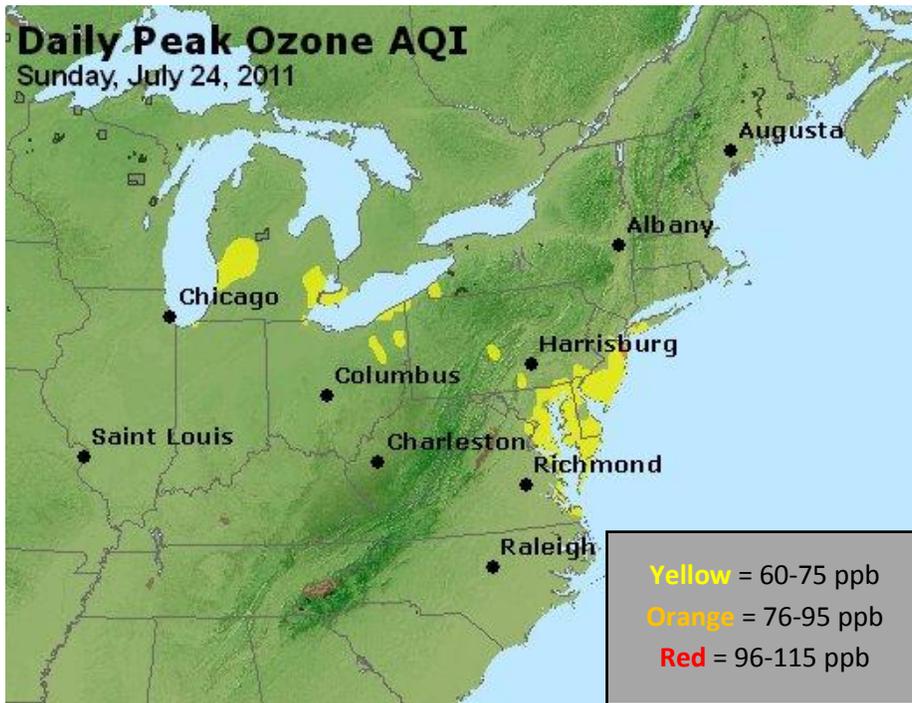


FIGURE J-92: 7/24/11 morning surface map

FIGURE J-93: 7/24/2011 morning 850mb

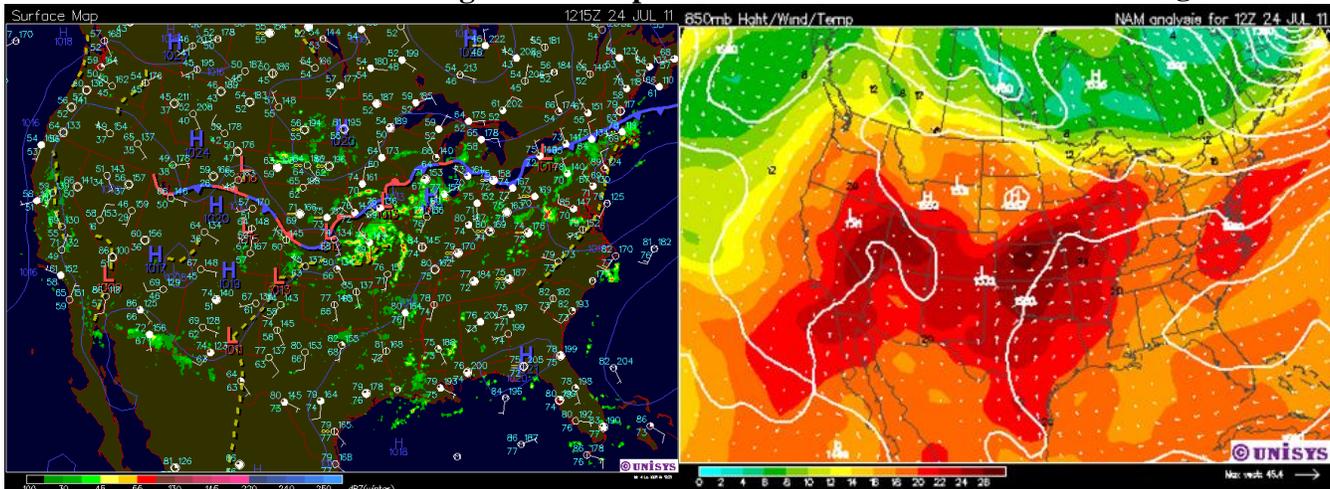


FIGURE J-94: 7/24/11 evening surface map

FIGURE J-95: 7/24/2011 evening 850mb

