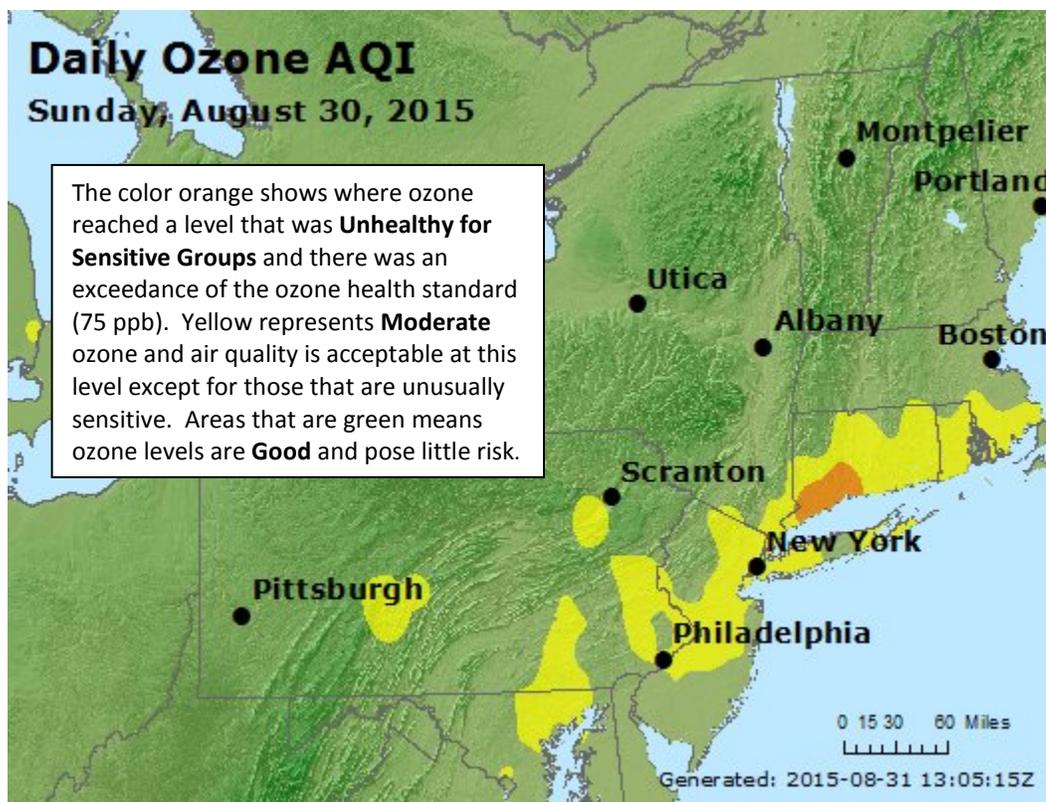


## Ozone National Ambient Air Quality Health Standard Exceedances on August 30, 2015

### Exceedances Locations and Levels

On Sunday, August 30, 2015, exceedances of the 8-hour average National Ambient Air Quality Standard (NAAQS) for ozone (75 ppb) were recorded at two (2) stations in Connecticut: Westport station with a concentration of 85 ppb and New Haven with a concentration of 80 ppb. The highest 1-hour average ozone concentration recorded on August 31, 2015 in Connecticut was 102 ppb at the Westport station, which is below the 1-hour NAAQS of 120 ppb. The Connecticut monitoring stations were the only sites that had exceedances in the 5 states that make up the Air Quality Control Region that includes New Jersey. Figure 1 shows the ozone AQI across the region for August 30.

**Figure 1. Ozone Air Quality Index for August 30, 2015**



Source: [www.airnow.gov](http://www.airnow.gov)

For ozone terminology definitions see NJDEP Air Quality Planning's Glossary and Acronyms webpage: <http://nj.gov/dep/baqp/glossary.html>

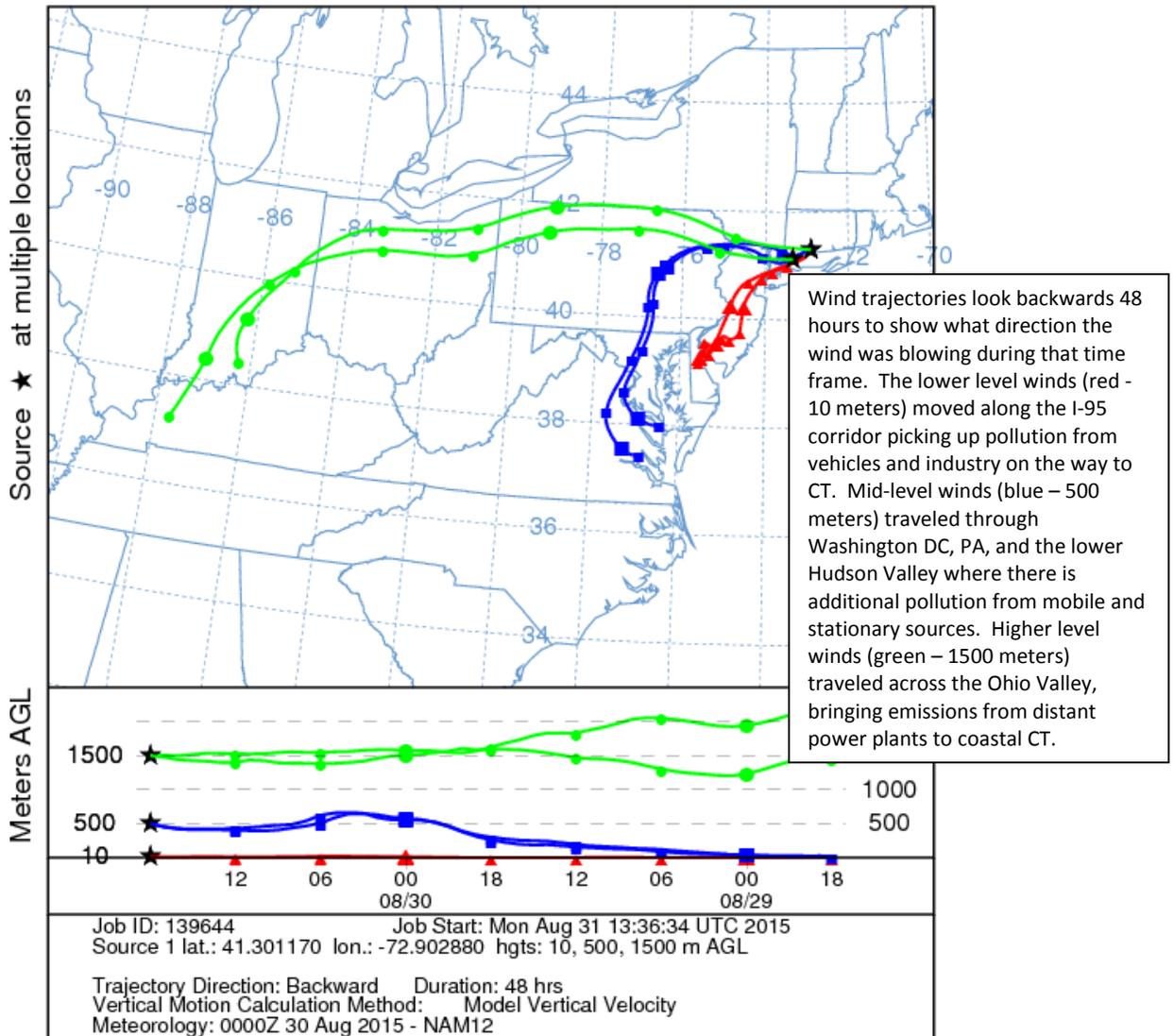
### Weather

Meteorological data from Sikorsky Memorial Airport in Stratford, CT showed temperatures reached 86°F while winds were from the southwest with an average wind speed of 8 mph. Skies were sunny. Sufficient sunlight, combined with warmer temperatures and southwest winds are features commonly seen with an ozone episode.

**Where Did the Air Pollution that Caused Ozone Come From?**

Figure 2 shows the back trajectories for the 2 monitored exceedances on August 30. Figure 2 illustrates where the winds came from during the 48 hours preceding the high ozone levels at monitor locations. Low level winds (red lines) carried pollutants from cars, trucks, and industry up the I-95 Corridor and through New York City into coastal Connecticut. Mid-level winds (blue lines) came up through Washington DC, Pennsylvania, and the lower Hudson Valley, bringing additional pollution from motor vehicles, industry, and power plants to the monitoring stations in Connecticut. Higher level winds (green lines) traveled across the Ohio Valley, picking up emissions from distant coal fired power plants and transporting them into coastal Connecticut. The combination of these winds caused air pollution from a variety of mobile and stationary sources to be transported into the areas of coastal Connecticut that experienced high ozone on August 30.

**Figure 2. 48-hour Back Trajectories for August 30, 2015**  
 NOAA HYSPLIT MODEL  
 Backward trajectories ending at 1800 UTC 30 Aug 15  
 NAM Meteorological Data



**How is Smog Created?**

Ground-level ozone, also known as smog, is an air pollutant known to cause a number of health effects and negatively impact air quality and the environment in the state of New Jersey. Smog is formed when oxides of nitrogen (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight. Smog can irritate any set of lungs, but those with lung-related deficiencies should take extra precautions on bad ozone days.

**Find Out About Air Quality Every Day**

The “What’s Your Air Quality Today?” page at <http://www.nj.gov/dep/cleanairnj/> tells you how to sign up to receive notifications and find out when your local air has reached unhealthy ozone levels.