

Quebec Wildfire PM2.5 Exceedances: an Exceptional Event

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Presented at the NESCAUM MAC meeting, October 28, 2010

May 30 to June 1 (Sun-Tues):

(Monday was Labor Day)

Wildfires ~150 miles north of Montreal

Rapid transport SSE

Multiple 24-h PM_{2.5} exceedances in Region-I states



Region 1: EPA New England

You are here: [EPA Home](#) [EPA New England](#) [Air / Pollutants](#) [Fine Particulate](#) 2009 PM 2.5 Exceedances

2010 PM 2.5 Exceedances

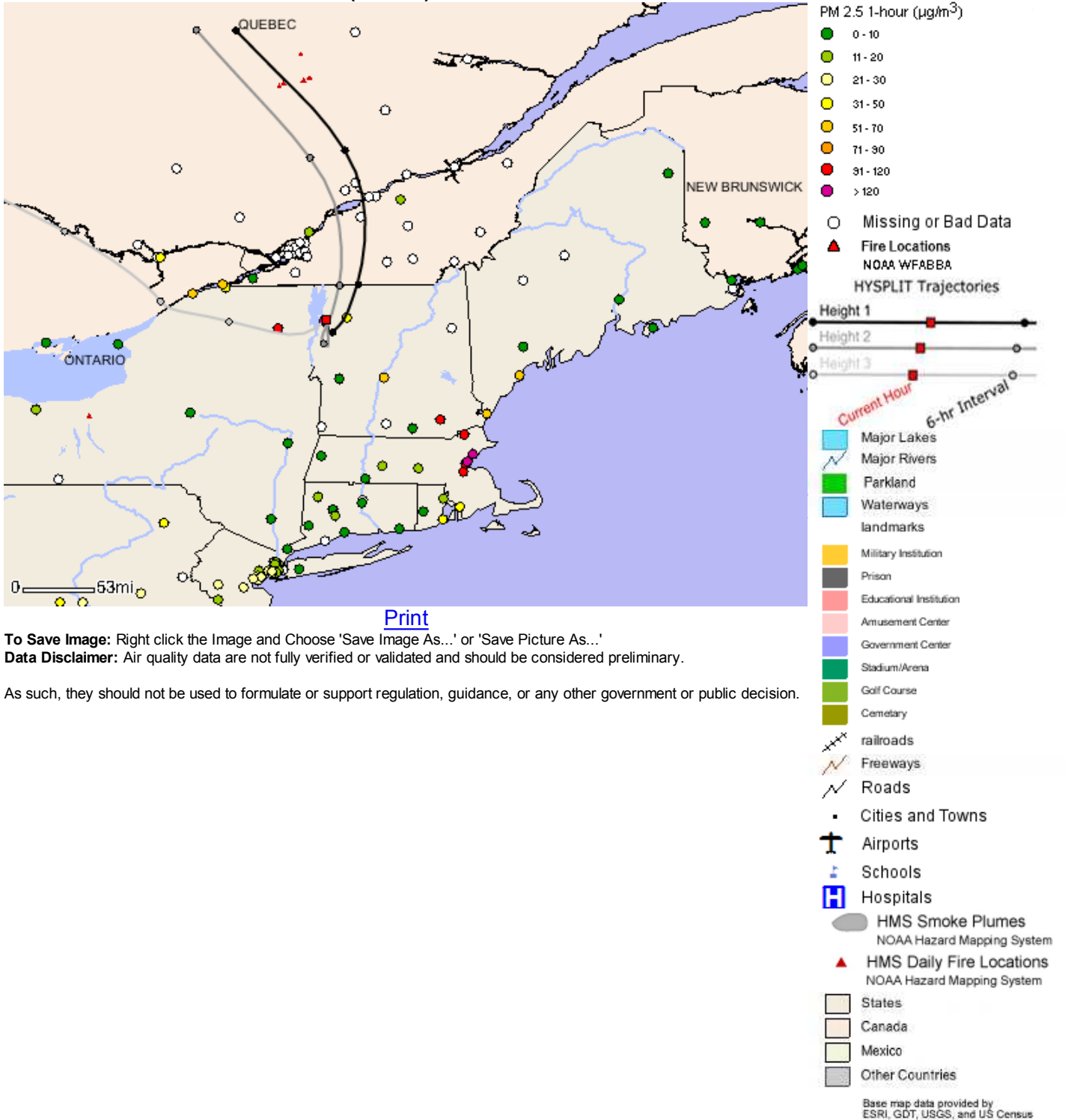
(Through September 28, 2010)

Below are the exceedances of the 35.5 ug/m³ 24-hour average PM 2.5 standard and the dates they occurred for each continuous PM 2.5 monitor in New England. Data from these monitors are not used for official purposes such as determining if an areas meets the PM 2.5 standard. All data are preliminary and subject to change.

- [Connecticut](#)
- [Maine](#)
- [Massachusetts](#)
- [New Hampshire](#)
- [Rhode Island](#)
- [Vermont](#)

Connecticut			top
Monitor Location	Date	Concentration (ug/m3)	
Bridgeport	1/01/10	38.7	Daily PM 2.5 AQI
Maine			top
Monitor Location	Date	Concentration (ug/m3)	
Lewiston	06/01/10	44.1	Daily PM 2.5 AQI
Presque Isle	06/01/10	35.7	
Lewiston	05/31/10	69.6	Daily PM 2.5 AQI
Portland	05/31/10	44.5	
Massachusetts			top
Monitor Location	Date	Concentration (ug/m3)	
Blue Hill	5/31/10	37.3	Daily PM 2.5 AQI
Boston - North End	5/31/10	60	
Boston - Roxbury	5/31/10	51.3	
Fall River	5/31/10	39.3	
Haverhill	5/31/10	63.6	
Lynn	5/31/10	64.8	
Springfield	1/24/10	38.1	
New Hampshire			top
Monitor Location	Date	Concentration (ug/m3)	
Manchester	05/31/10	60.3	Daily PM 2.5 AQI
Portsmouth	05/31/10	58.4	
Rhode Island			top
Monitor Location	Date	Concentration (ug/m3)	
None			
Vermont			top
Monitor Location	Date	Concentration (ug/m3)	
Burlington	05/31/10	87.8	Daily PM 2.5 AQI
Underhill	05/31/10	38.9	

AIRNow-Tech: PM2.5 (UG/M3) for 05/31/2010 13:00 EST

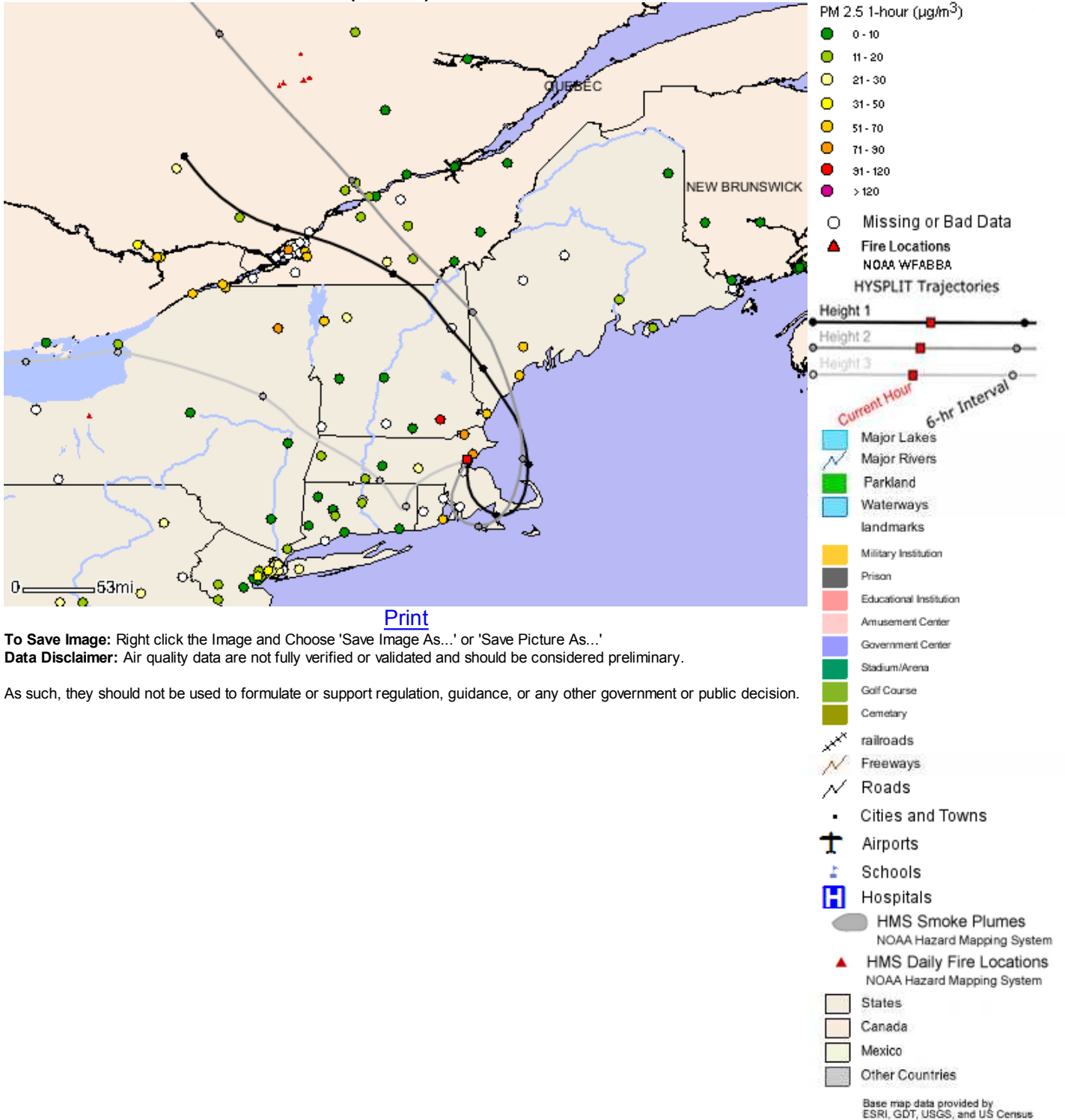


To Save Image: Right click the Image and Choose 'Save Image As...' or 'Save Picture As...'

Data Disclaimer: Air quality data are not fully verified or validated and should be considered preliminary.

As such, they should not be used to formulate or support regulation, guidance, or any other government or public decision.

AIRNow-Tech: PM2.5 (UG/M3) for 05/31/2010 18:00 EST

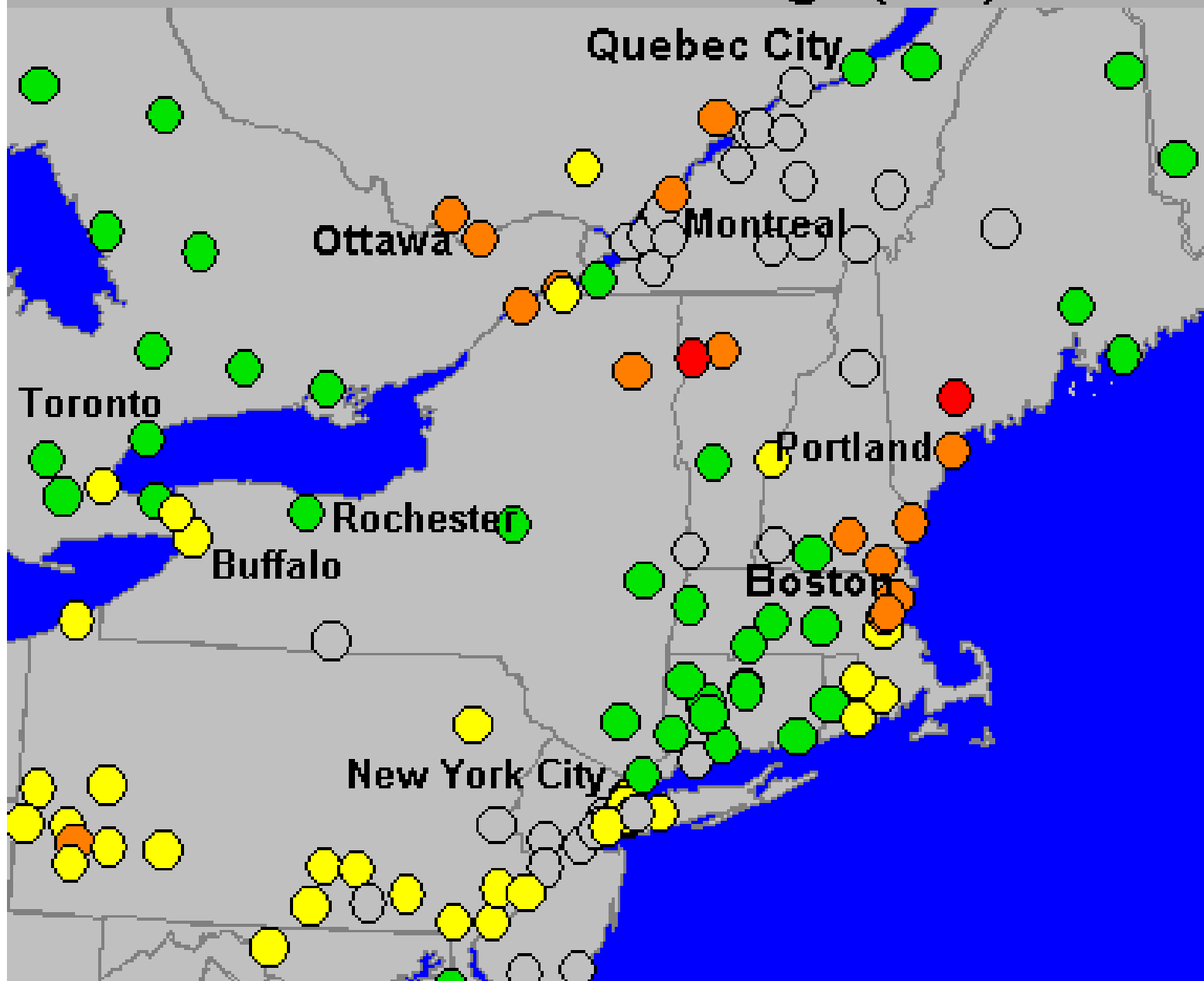


To Save Image: Right click the Image and Choose 'Save Image As...' or 'Save Picture As...'

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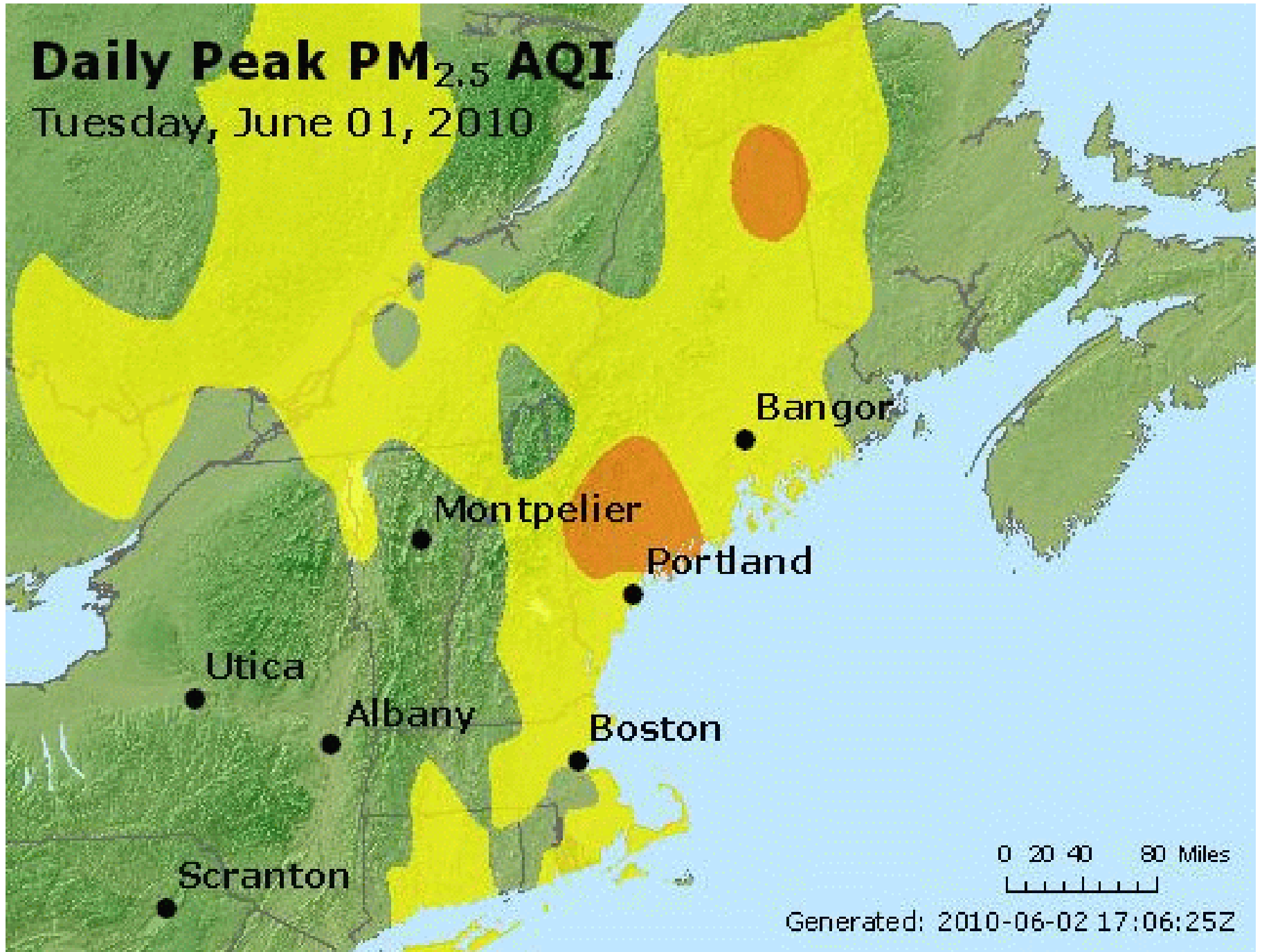
24-hour PM2.5 Average (AQI)



May 31, 2010

Daily Peak PM_{2.5} AQI

Tuesday, June 01, 2010



Time-resolved PM animation:

31-May 3-hour running average

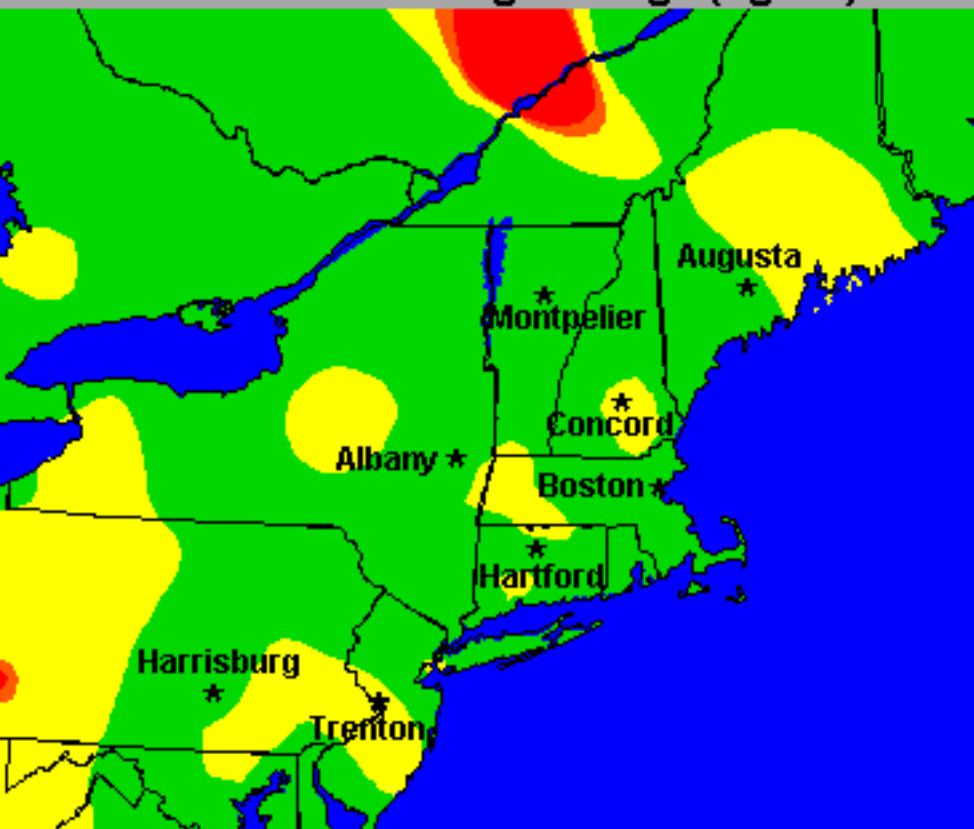
PM_{2.5} concentration map:

Colors are “AQI”;

red = 65

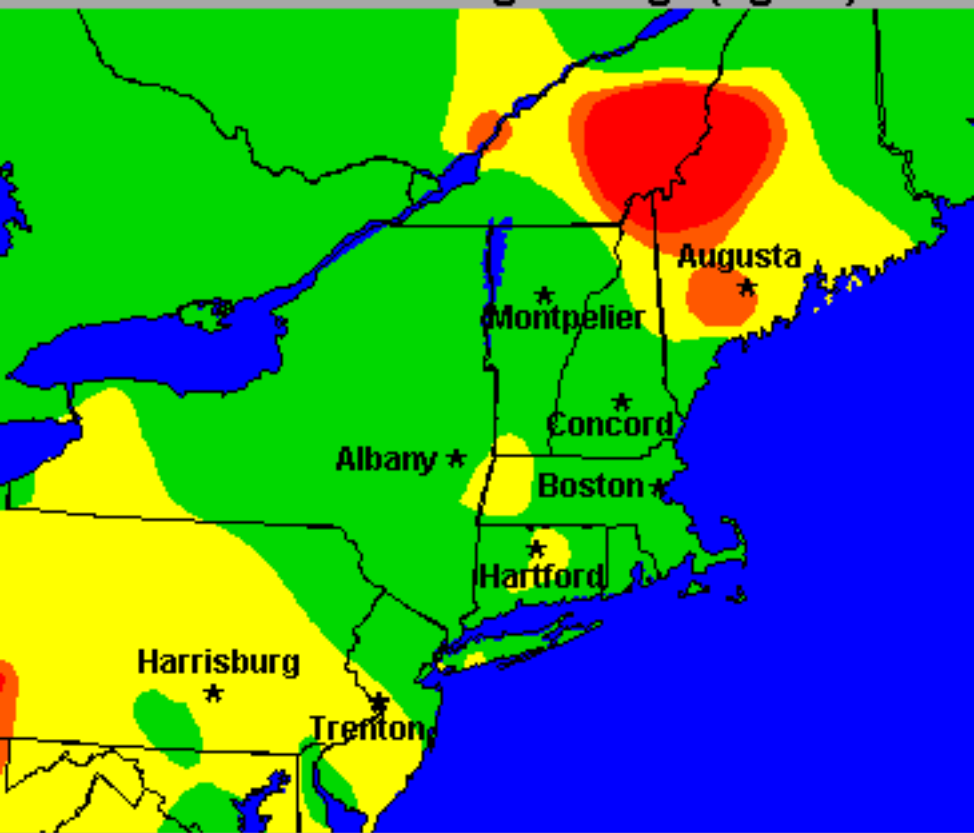
purple = 150 $\mu\text{g}/\text{m}^3$

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



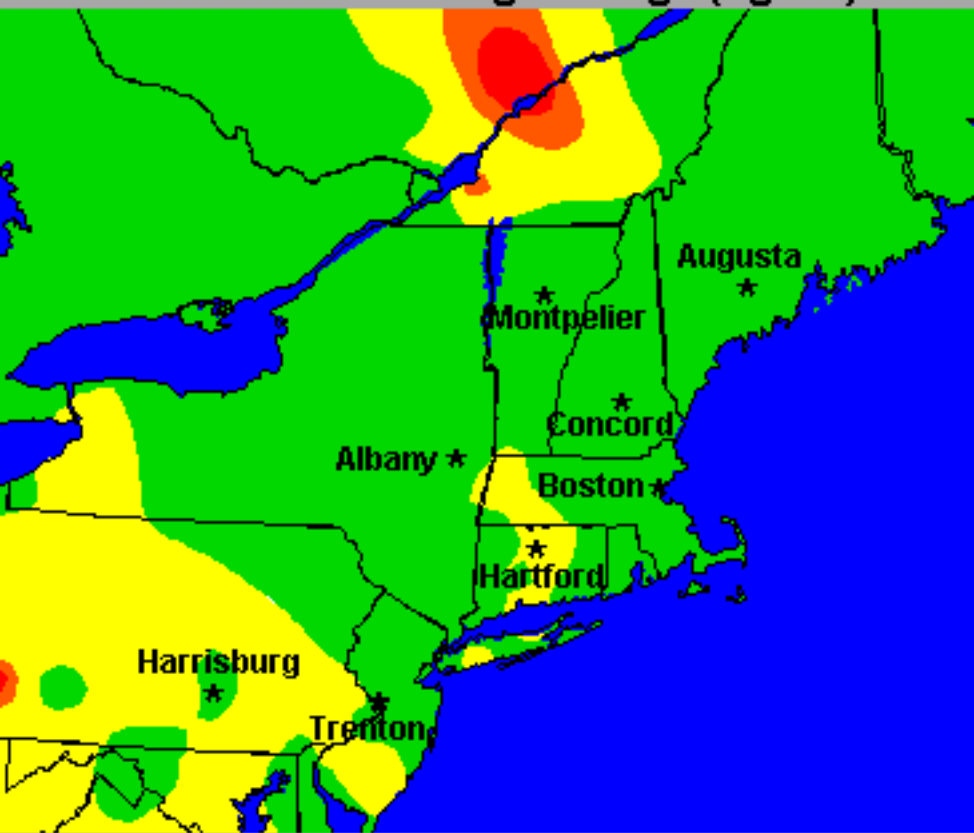
May 31, 2010 12:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



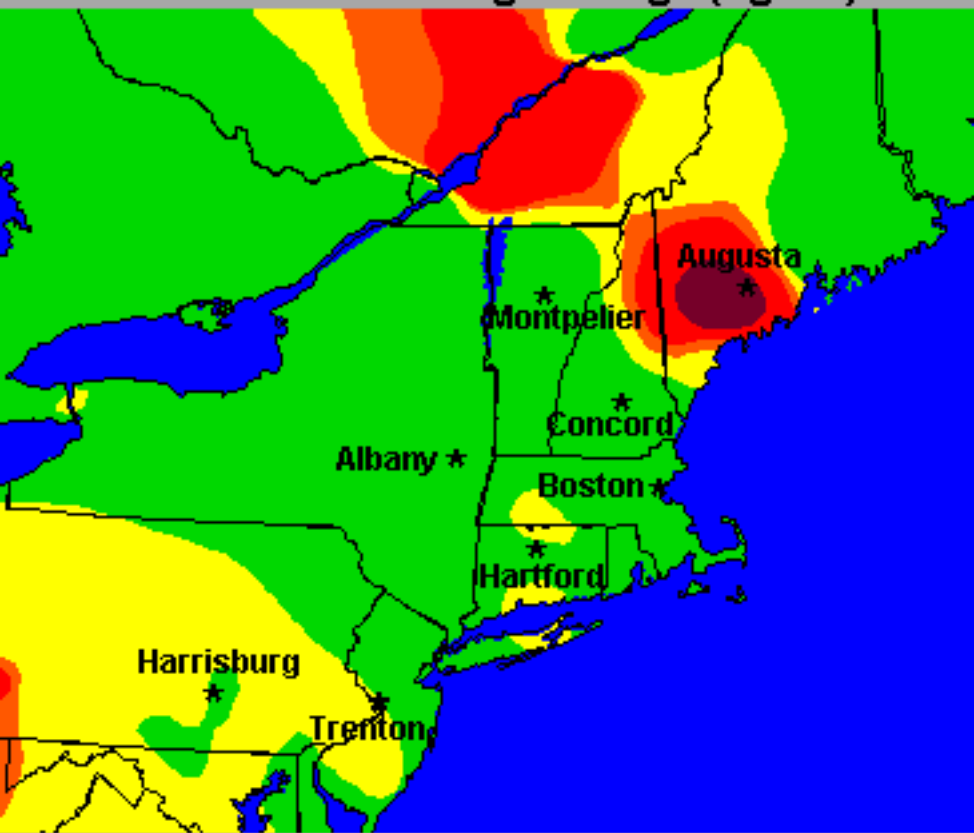
May 31, 2010 1:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



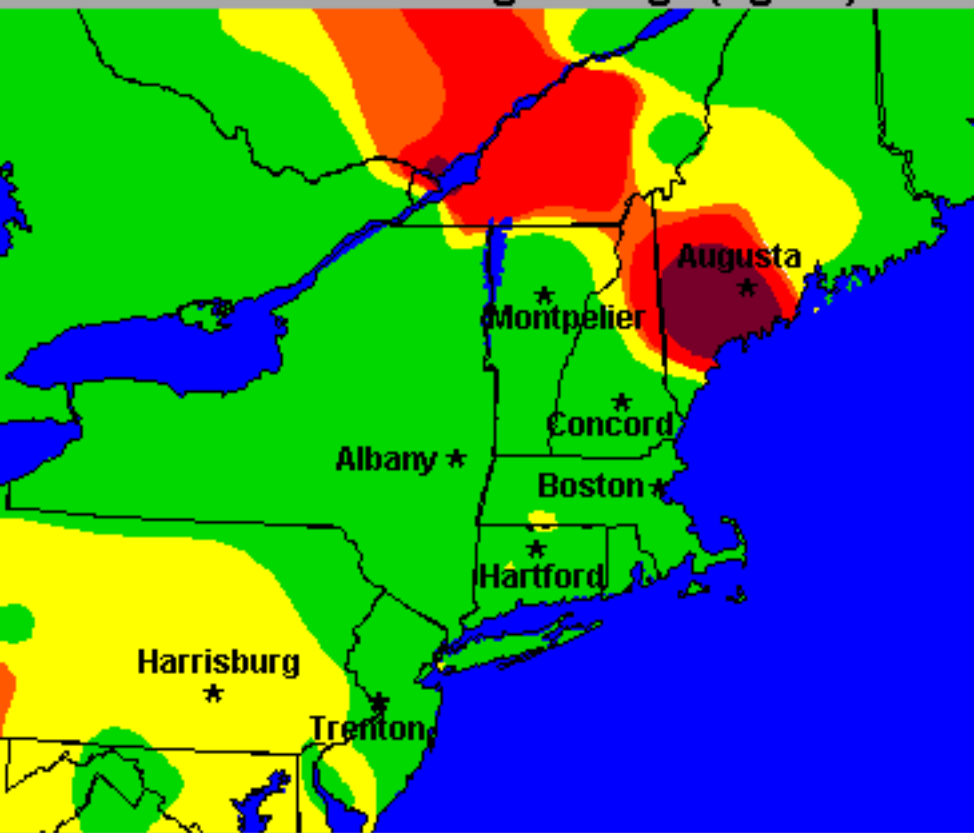
May 31, 2010 2:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



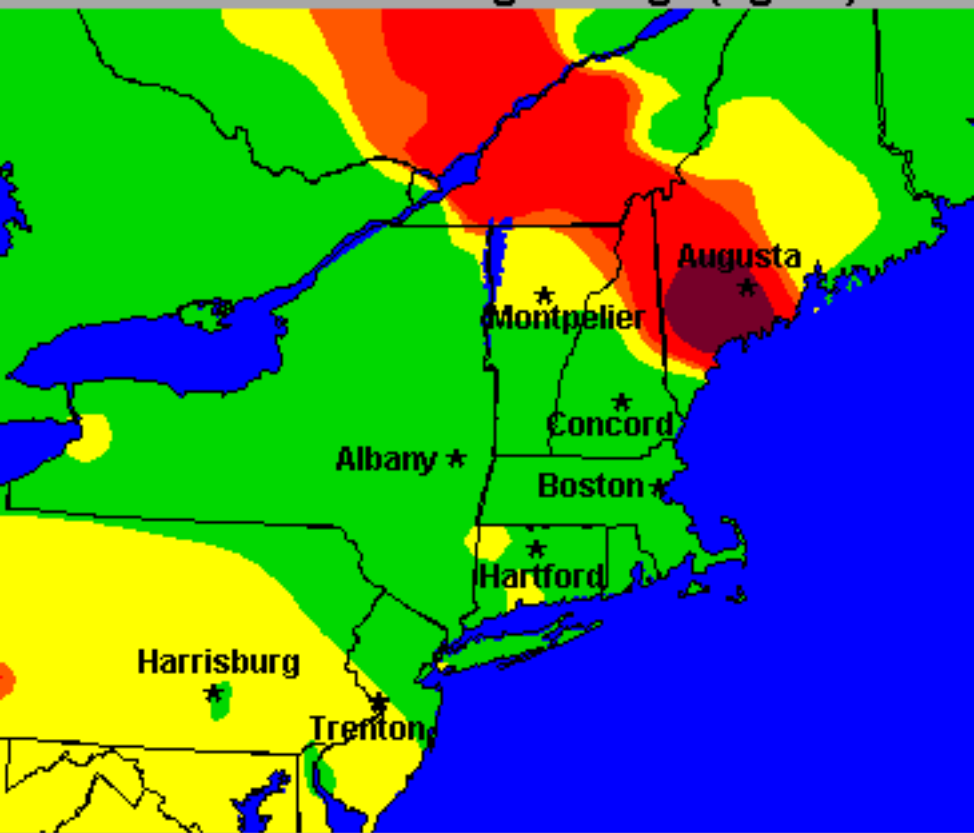
May 31, 2010 3:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



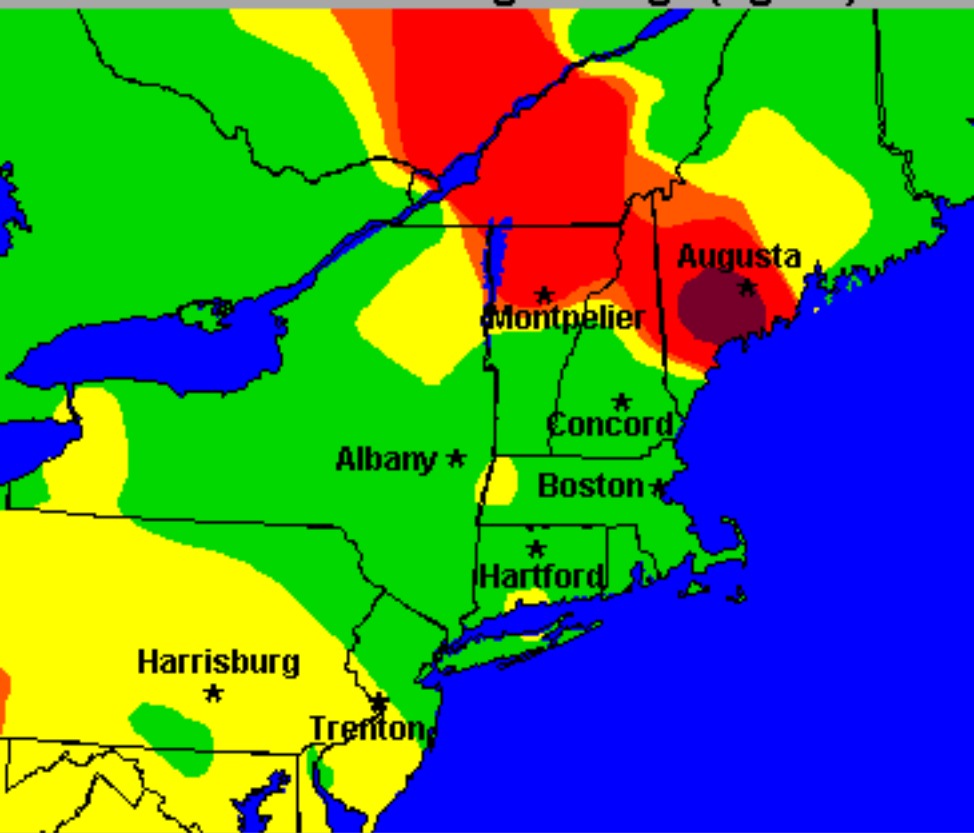
May 31, 2010 4:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



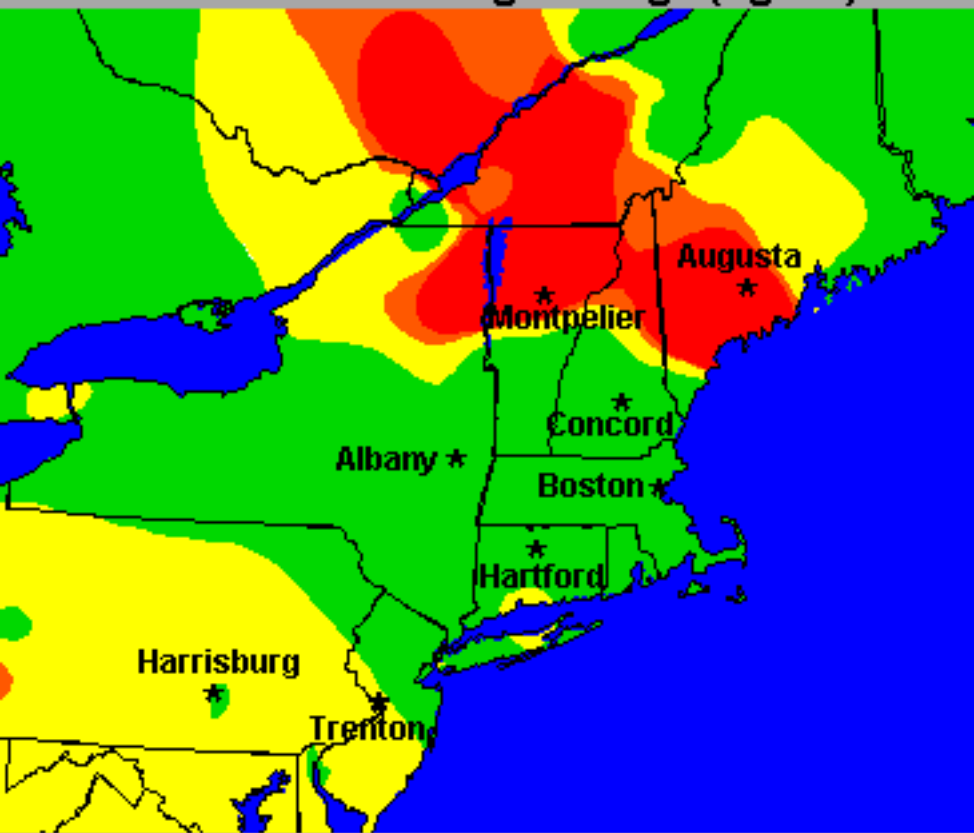
May 31, 2010 5:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



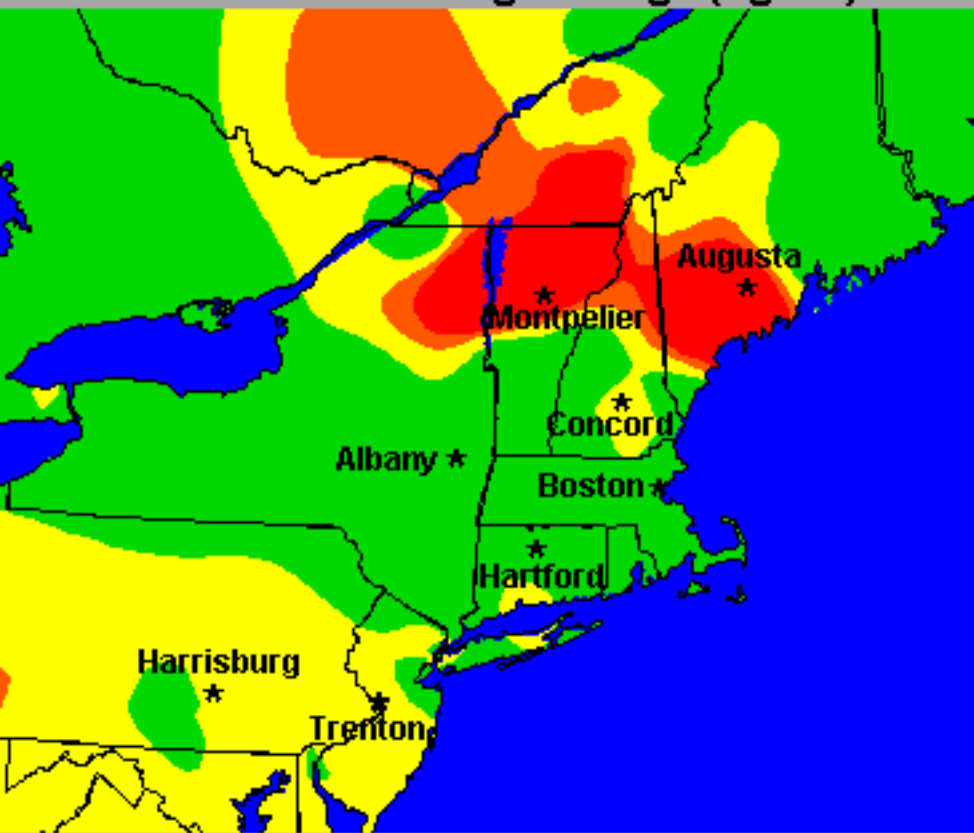
May 31, 2010 6:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



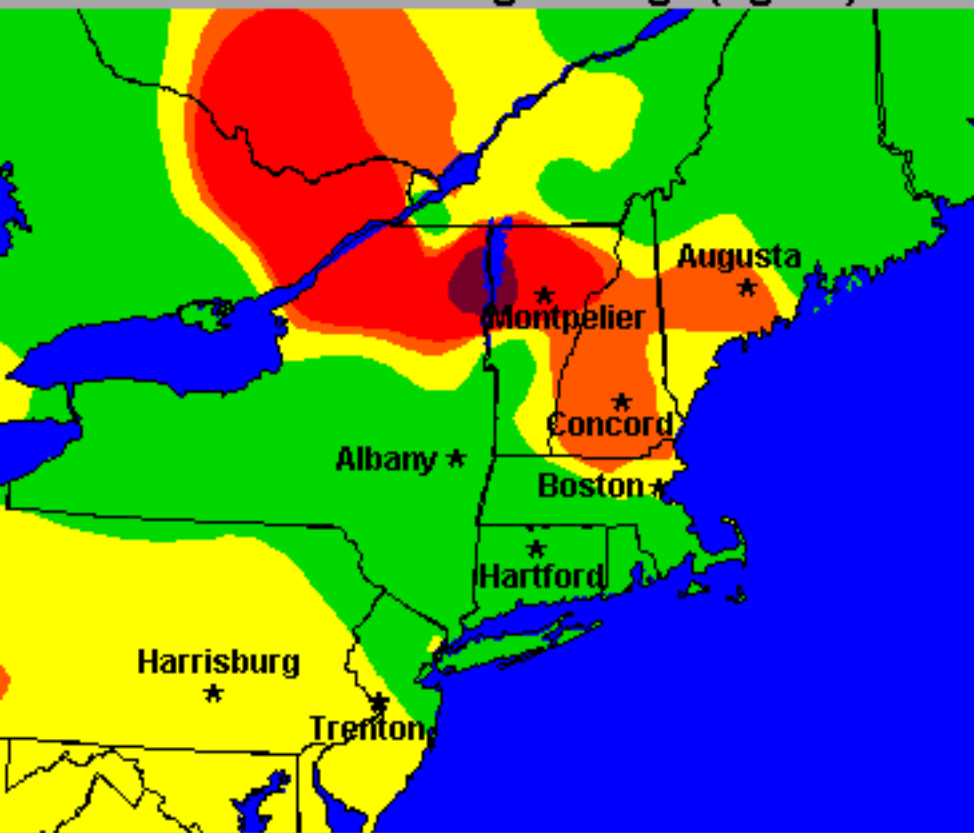
May 31, 2010 7:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



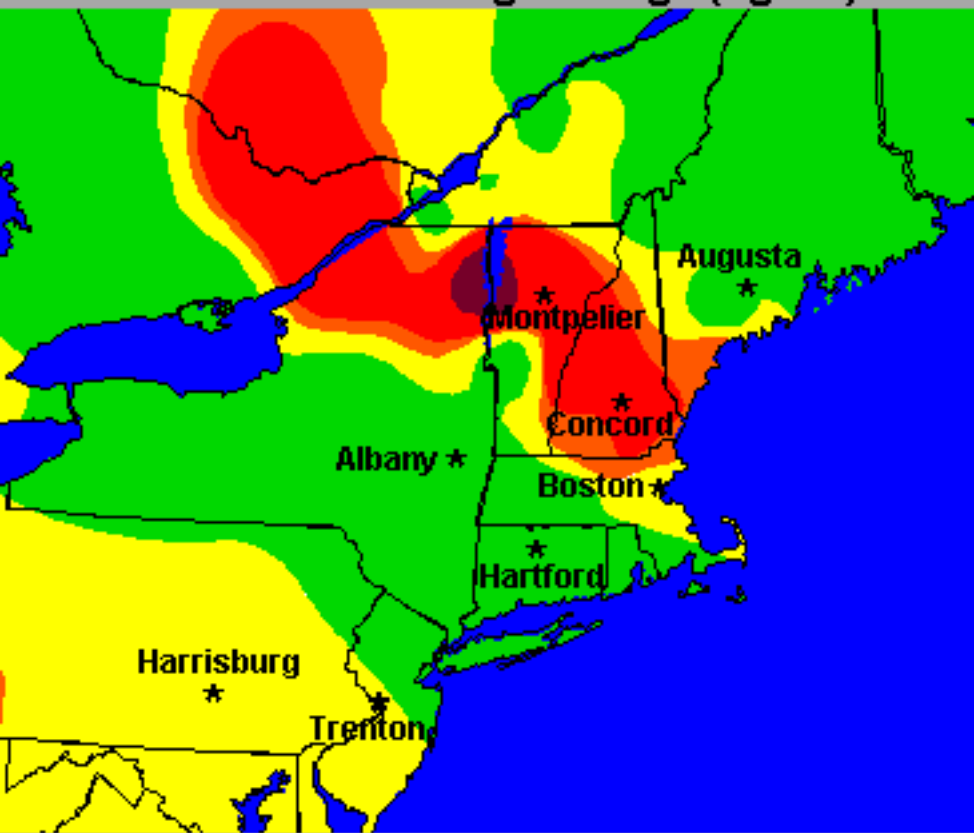
May 31, 2010 8:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



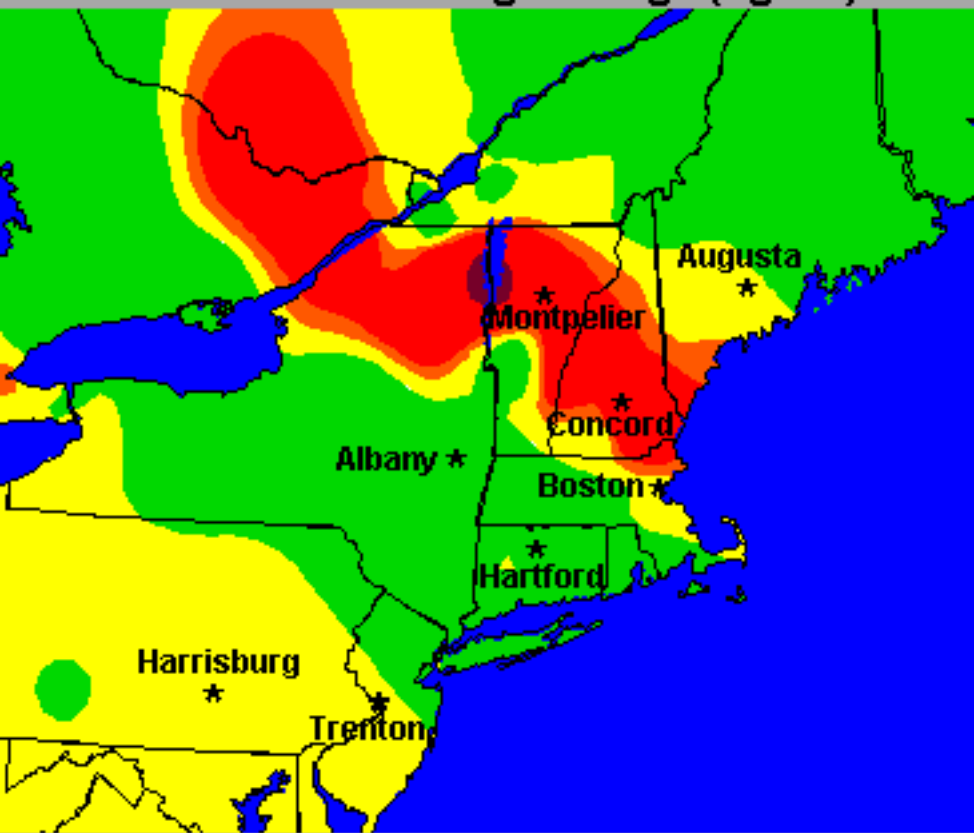
May 31, 2010 9:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



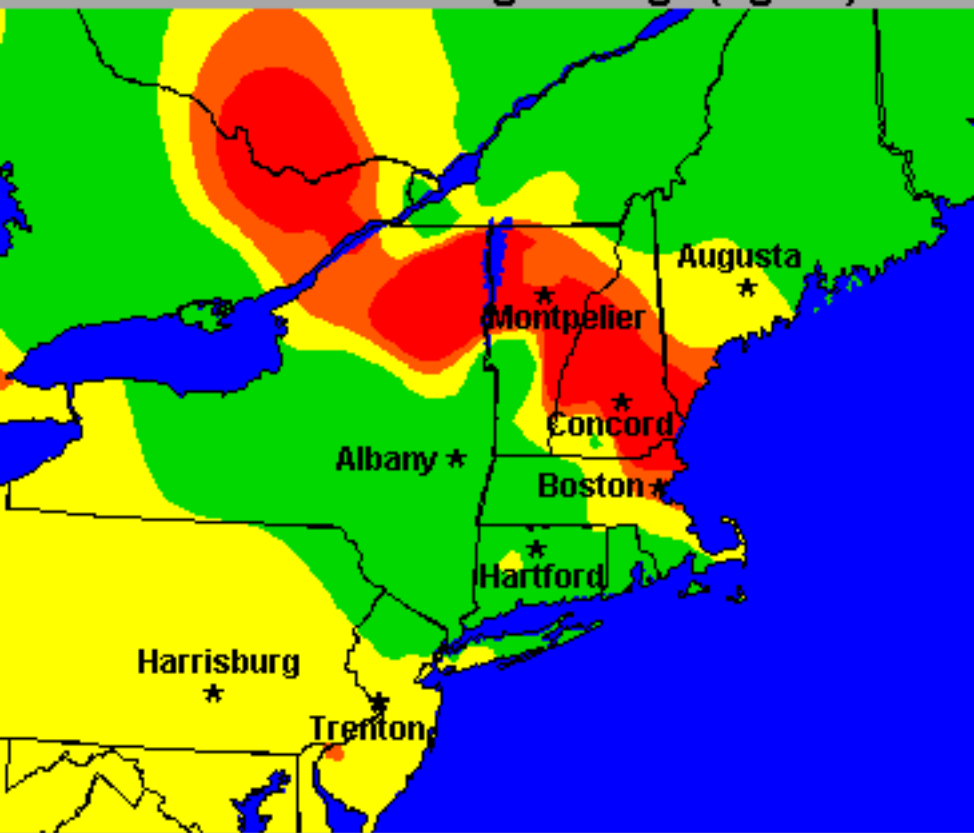
May 31, 2010 10:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



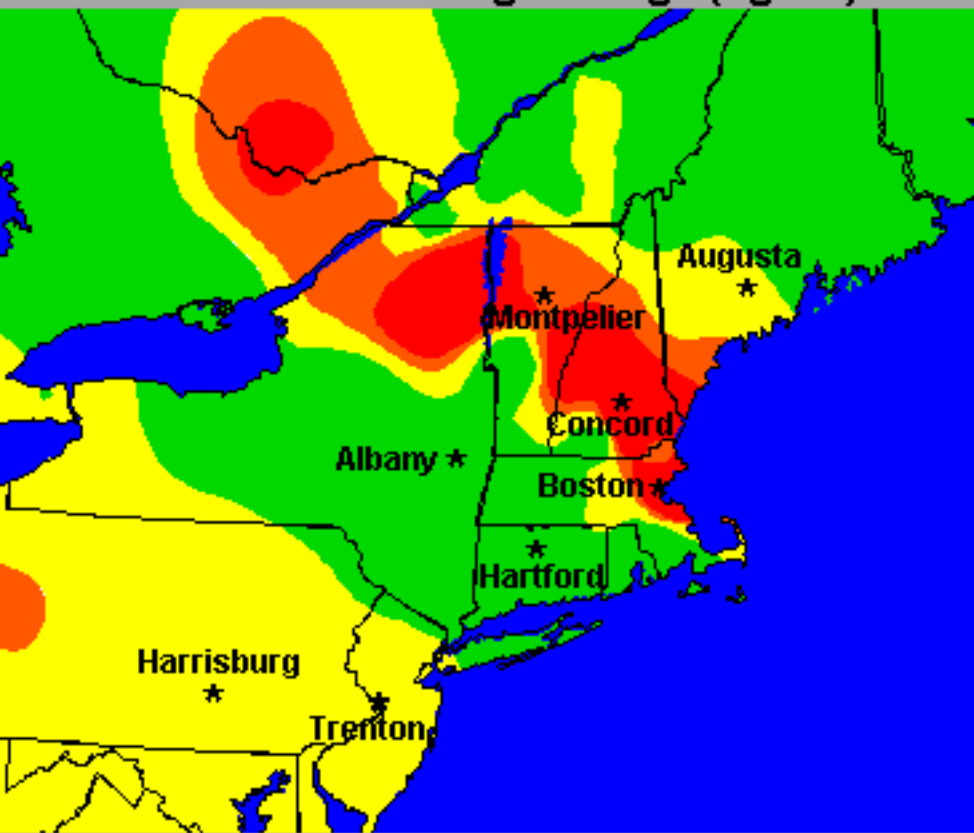
May 31, 2010 11:00 am EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



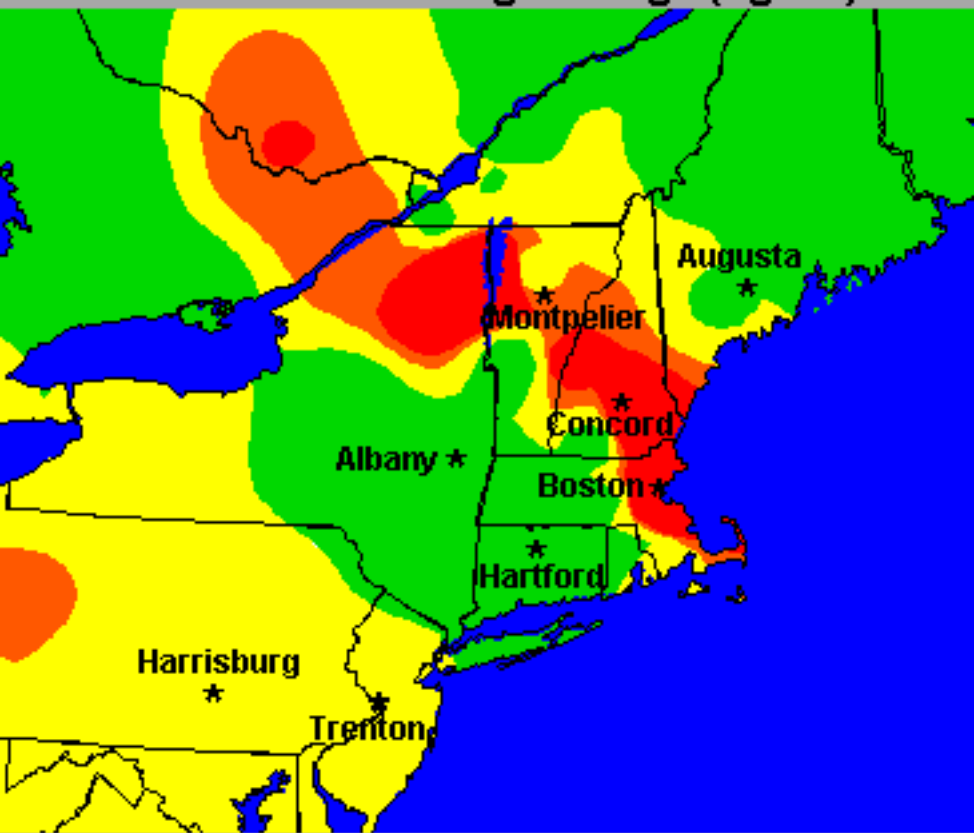
May 31, 2010 12:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



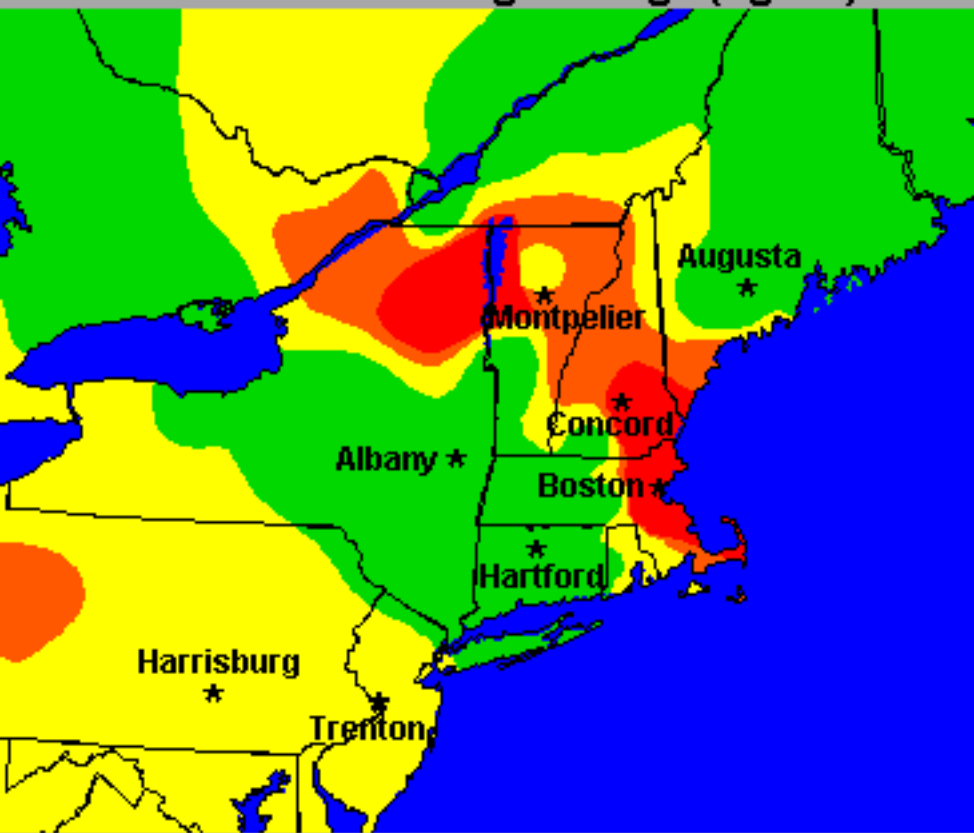
May 31, 2010 1:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



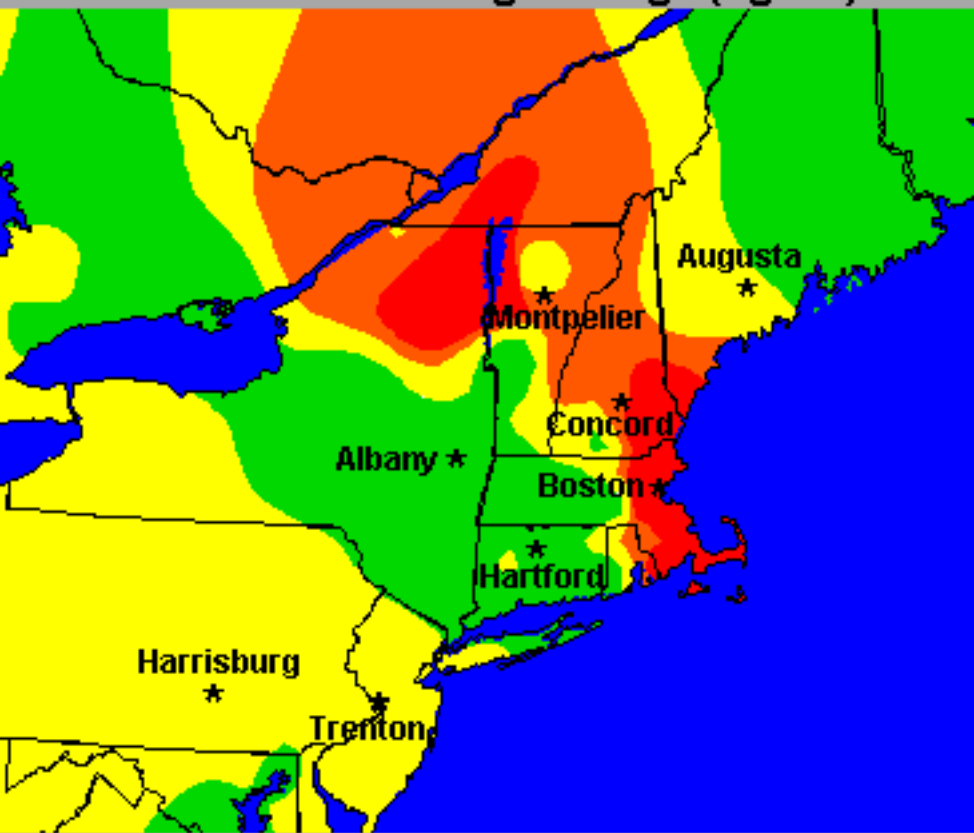
May 31, 2010 2:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



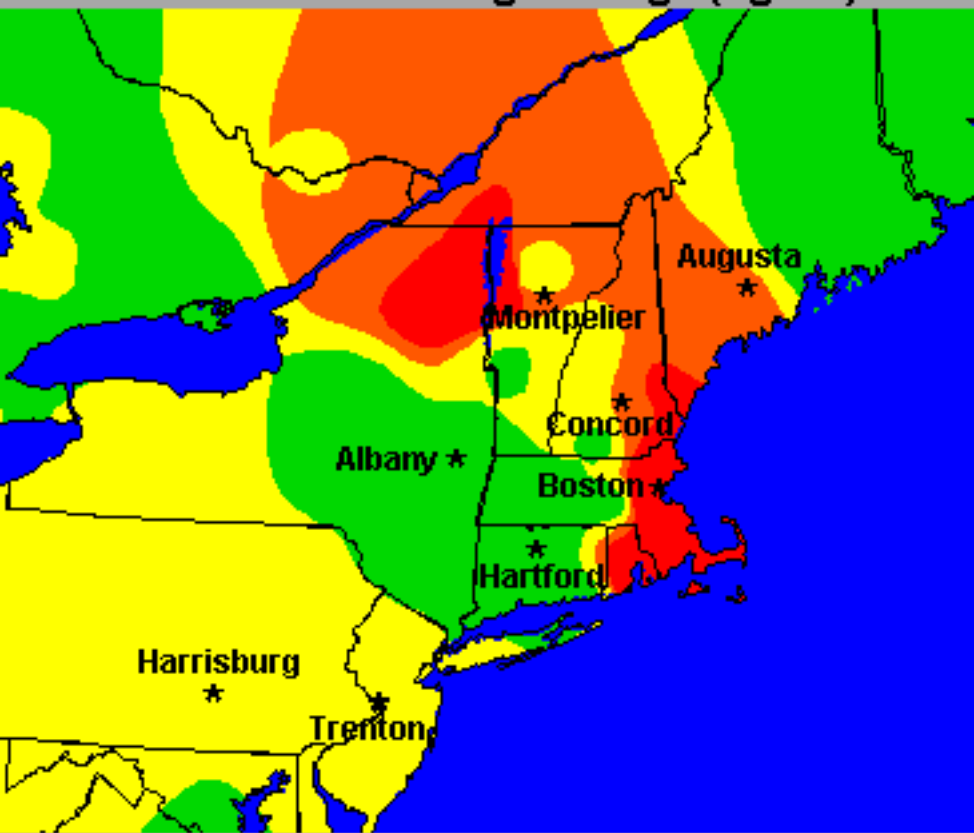
May 31, 2010 3:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



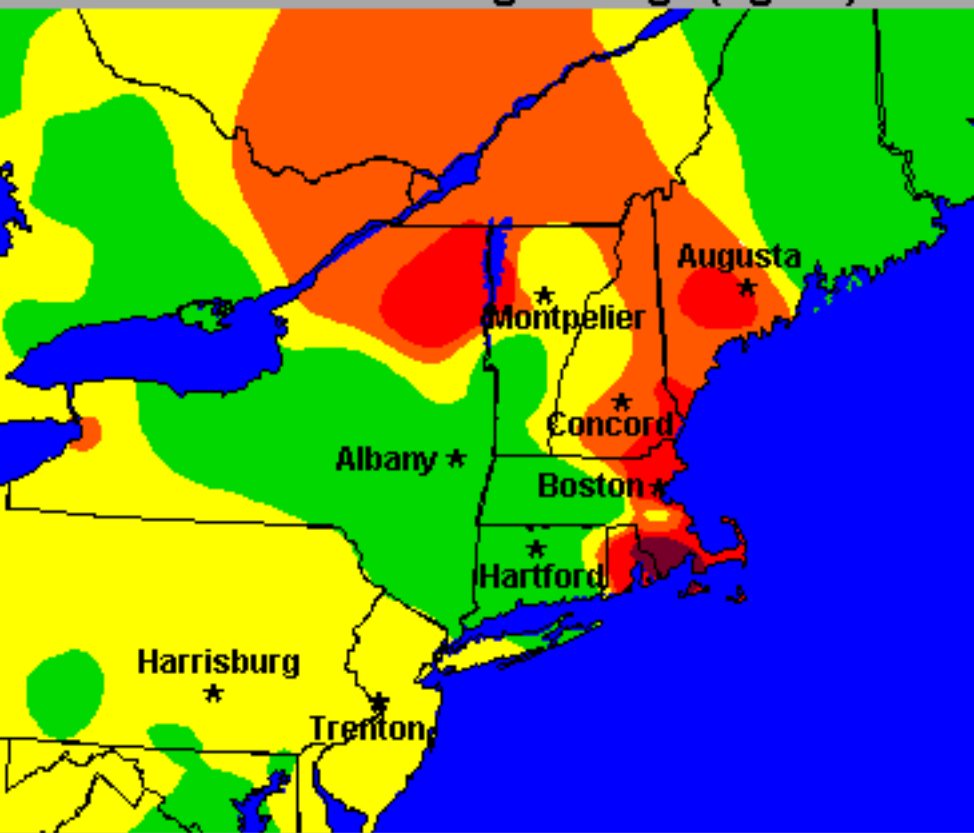
May 31, 2010 4:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



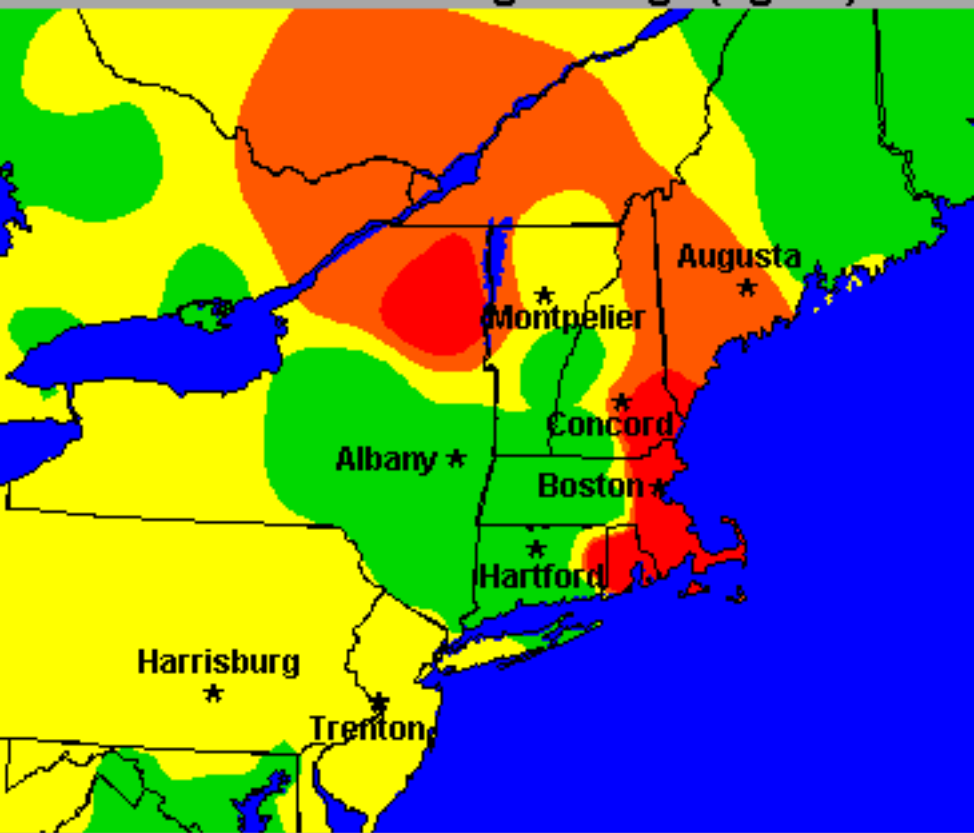
May 31, 2010 5:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



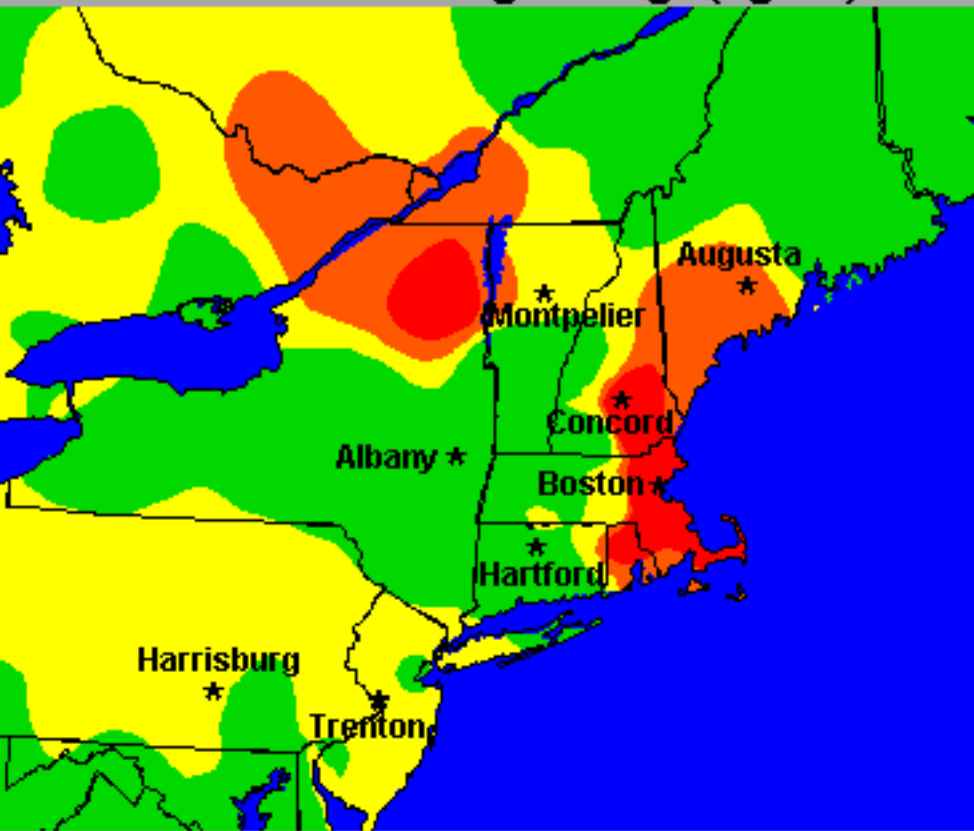
May 31, 2010 6:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



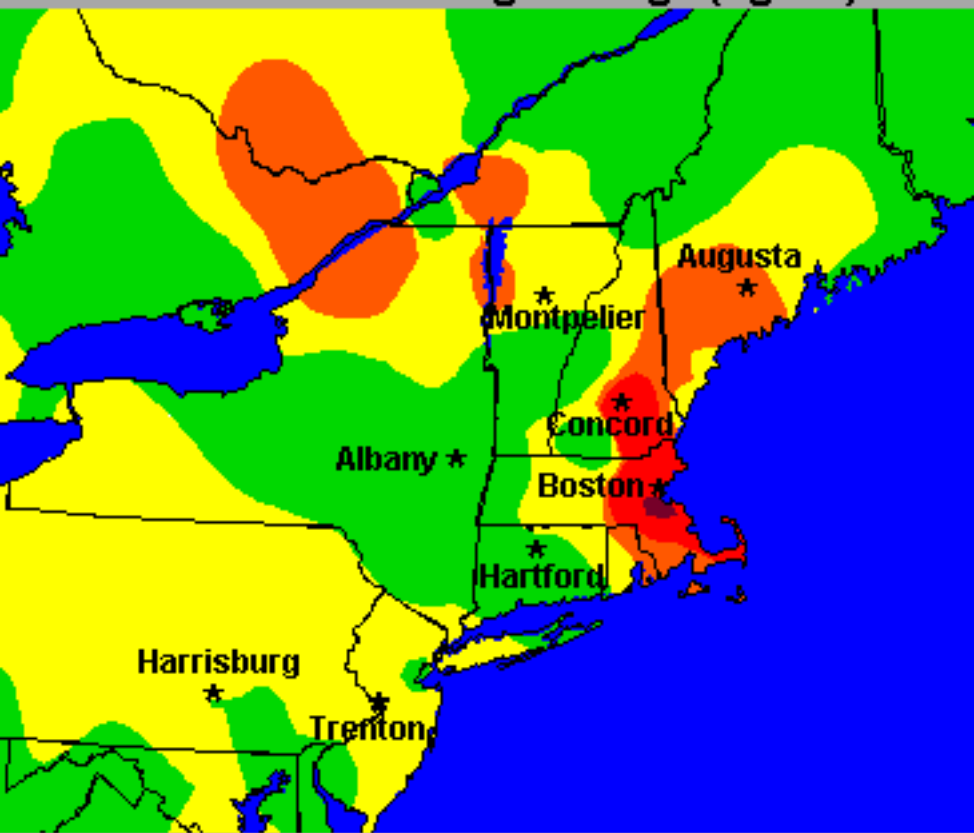
May 31, 2010 7:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



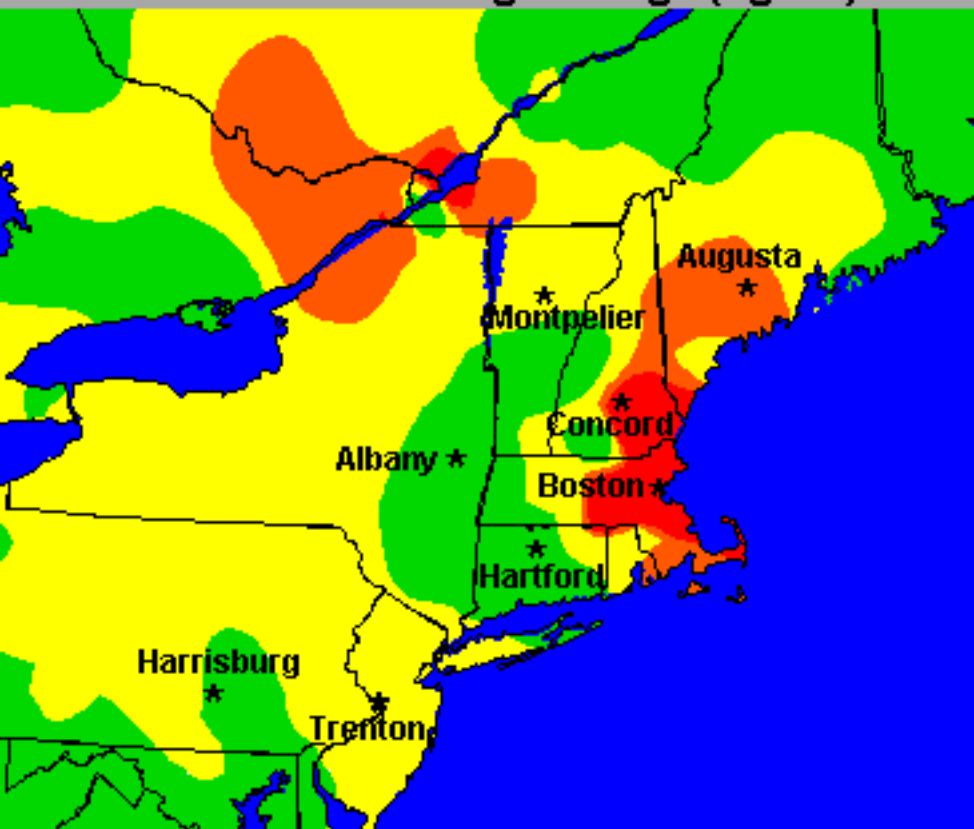
May 31, 2010 8:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



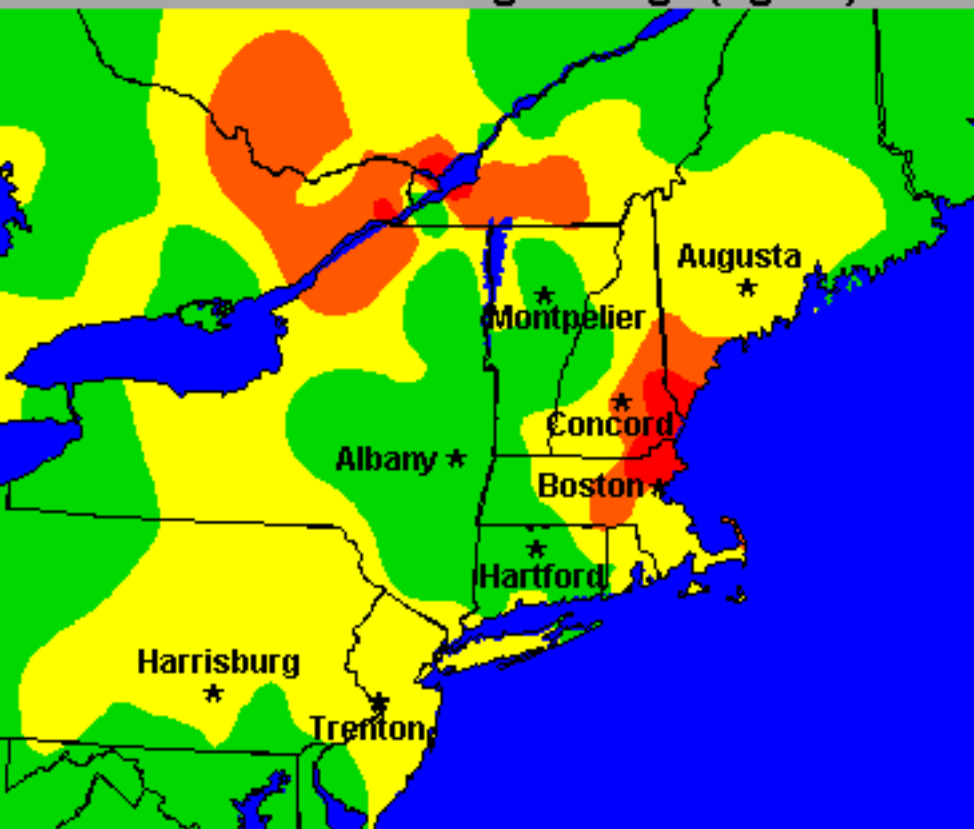
May 31, 2010 9:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)



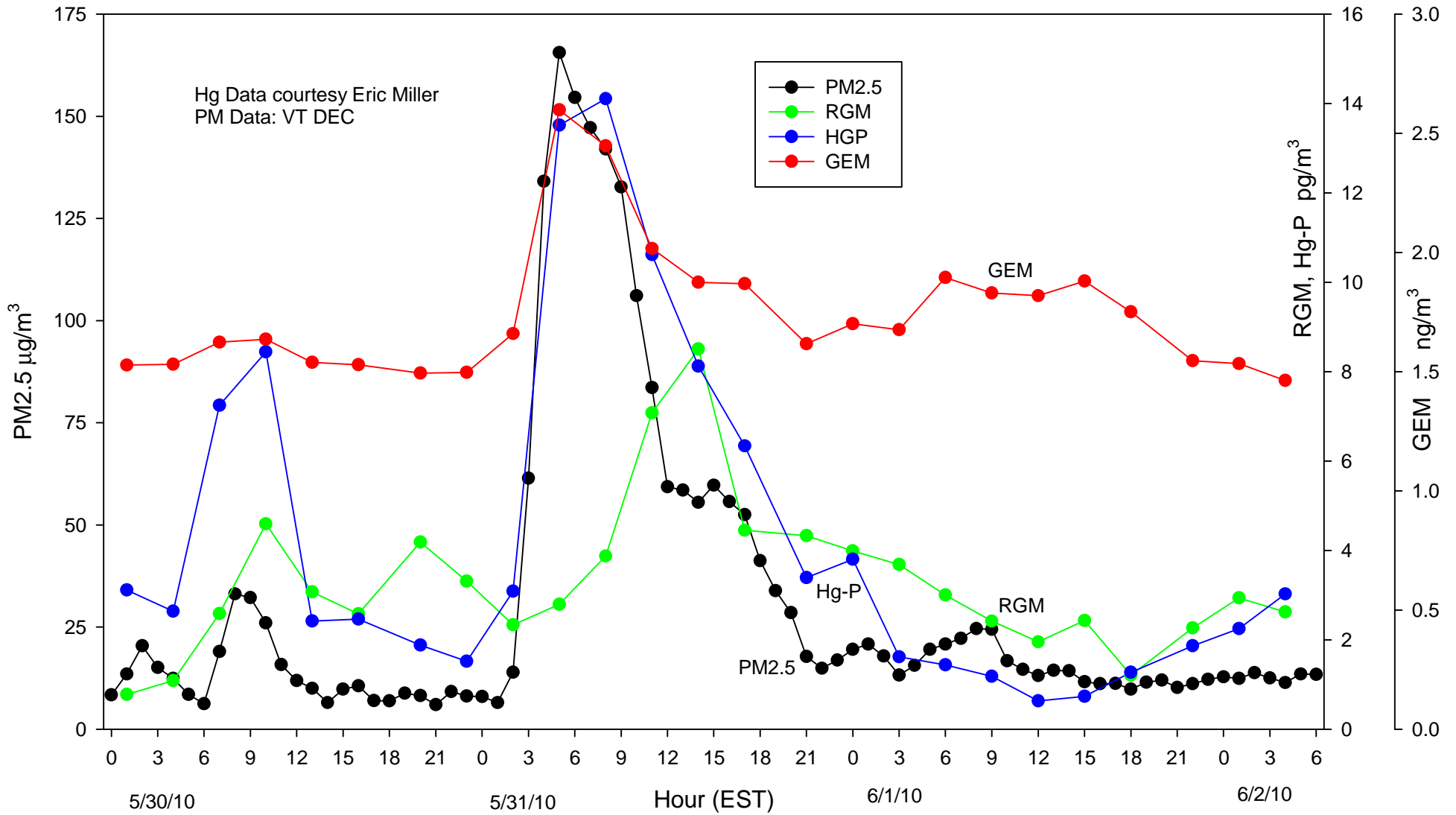
May 31, 2010 10:00 pm EDT

PM2.5 3-hr Running Average ($\mu\text{g}/\text{m}^3$)

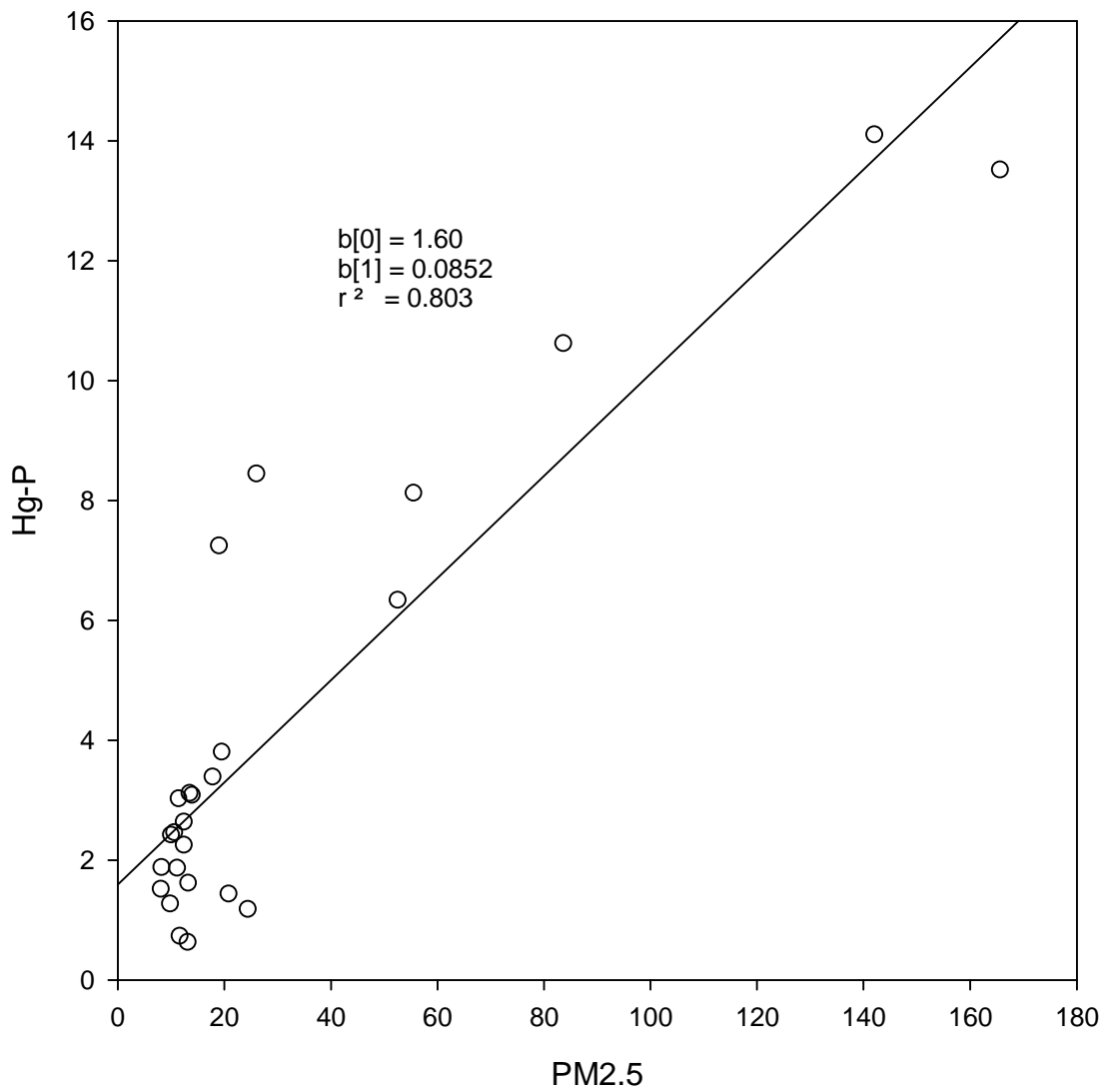


May 31, 2010 11:00 pm EDT

Underhill VT, May 30 - June 2, 2010
Quebec Wildfire Event Hg and PM2.5



Underhill VT, May 30 - June 2, 2010
Quebec Wildfire Event



Exceptional Event Process for PM_{2.5} exceedances?