



# **Ozone Season Summary**

Sunil Kumar

TAC Meeting, COG

July 9, 2007



# Ozone Season Summary

**May 2007**

## Peak Ozone Concentrations

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1	2	3	4	5
		68	66	46	56	57
6	7	8	9	10	11	12
53	51	62	51	48	72	75
13	14	15	16	17	18	19
54	59	73	63	49	35	59
20	21	22	23	24	25	26
66	54	78	71	72	80	91
27	28	29	30	31		
73	70	82	89	86		

Date	# of Monitors Exceeding	Highest Monitor	Highest Concentration (ppb)
5/26/07	1	Prince George's EC	91
5/30/07	5	Frederick Co	89
5/31/07	2	Ashburn	86



# Ozone Season Summary

**June 2007**

## Peak Ozone Concentrations

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					<b>80</b>	<b>75</b>
3	4	5	6	7	8	9
<b>34</b>	<b>51</b>	<b>53</b>	<b>50</b>	<b>83</b>	<b>81</b>	<b>68</b>
10	11	12	13	14	15	16
<b>60</b>	<b>71</b>	<b>56</b>	<b>54</b>	<b>37</b>	<b>48</b>	<b>57</b>
17	18	19	20	21	22	23
<b>69</b>	<b>100</b>	<b>88</b>	<b>59</b>	<b>75</b>	<b>52</b>	<b>57</b>
24	25	26	27	28	29	30
<b>72</b>	<b>74</b>	<b>83</b>	<b>81</b>			

Date	# of Monitors Exceeding	Highest Monitor	Highest Concentration (ppb)
6/18/07	11	Southern Maryland	100
6/19/07	3	Aurora Hills	88



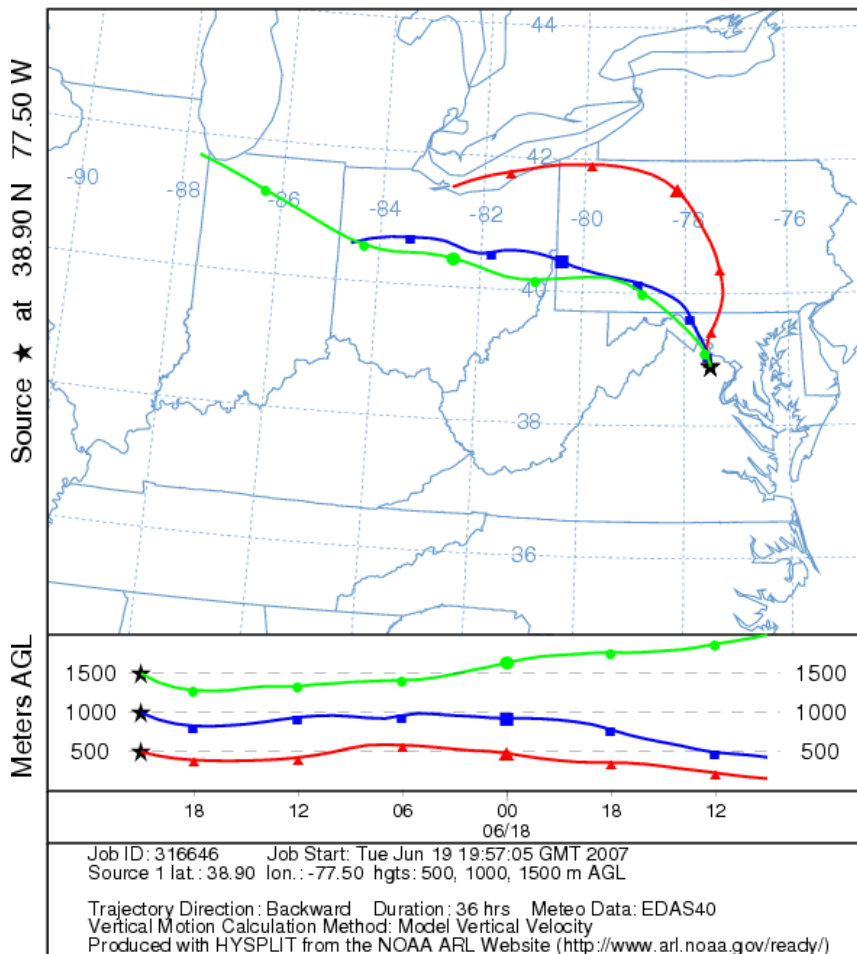
## 2007 8-Hour Ozone Exceedances

Date	# of Monitor Exceeding	Monitor(s)	Highest Concentration (ppbv)
5/26/2007	1	PGC Equestrian Center	91
5/30/2007	5	McMillan Reservoir	86
		River_T	87
		Frederick Co	89
		HU-Beltsville	86
		Aurora Hills	85
5/31/2007	2	Ashburn	86
		Frederick Co	85
6/18/2007	11	Ashburn	87
		Aurora Hills	85
		Annandale	88
		Franconia	90
		Frederick Co	85
		Mt Vernon	95
		McMillan Reservoir	93
		PGC Equestrian Center	97
		River_T	90
		Southern Maryland Takoma Park	100
6/19/2007	3	Ashburn	86
		Aurora Hills	88
		Mt Vernon	85

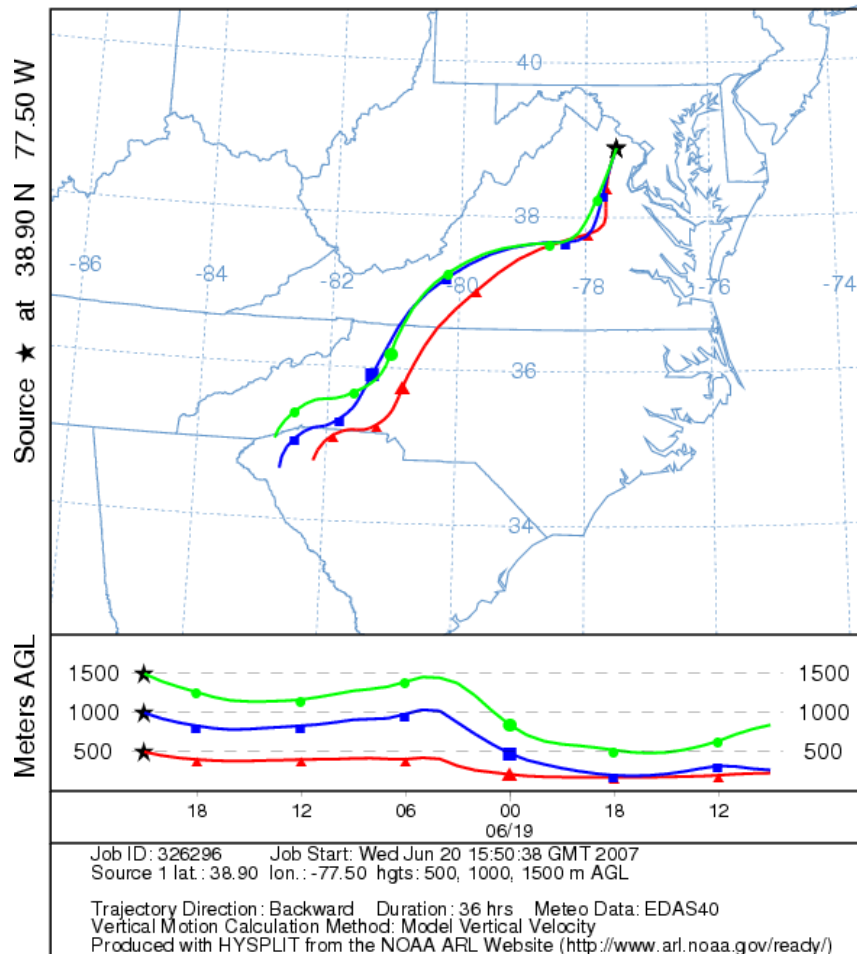


# Ozone Episode: June 18 – June 19, 2007

NOAA HYSPLIT MODEL  
Backward trajectories ending at 21 UTC 18 Jun 07  
EDAS Meteorological Data



NOAA HYSPLIT MODEL  
Backward trajectories ending at 21 UTC 19 Jun 07  
EDAS Meteorological Data

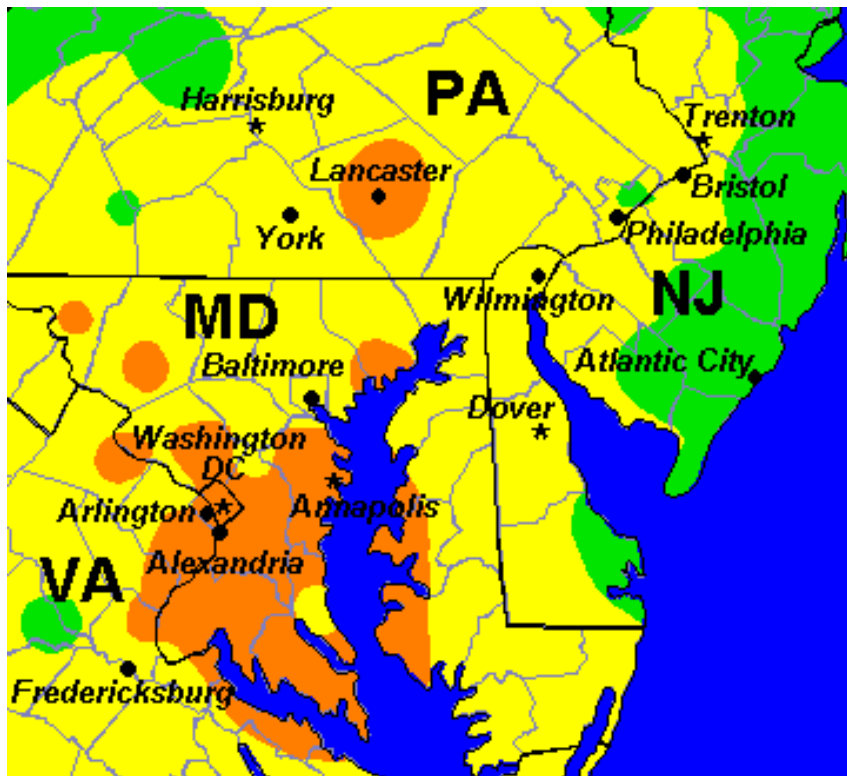




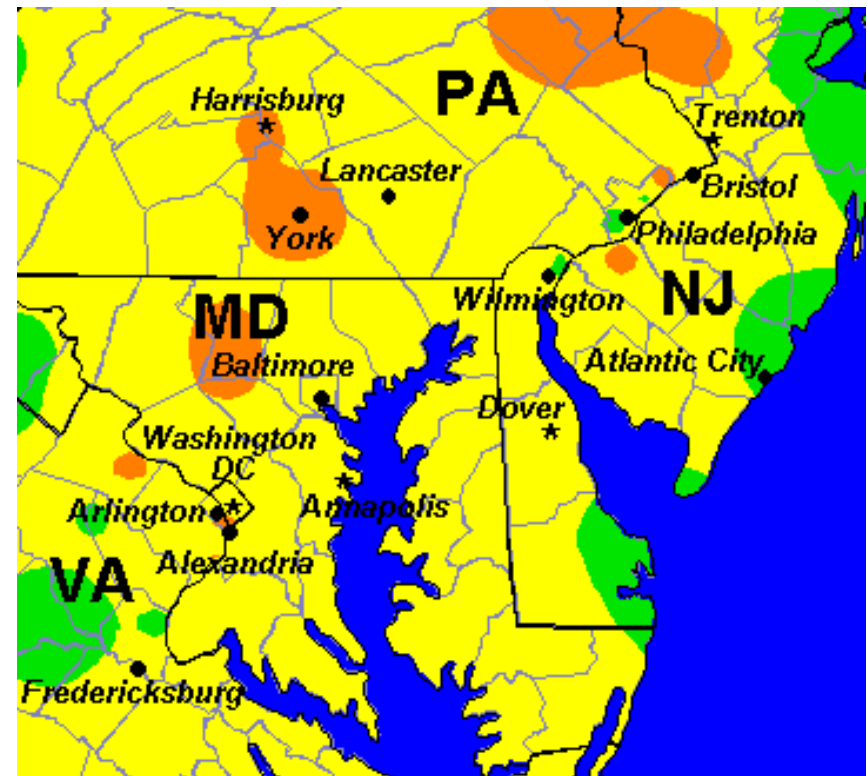
# Ozone Maps: June 18 – June 19, 2007

## Peak Air Quality Index

(Based on 8-hour ozone standard)



June 18, 2007



June 19, 2007



# Daily Peak Fine Particle Concentrations

## 24-Hour PM2.5 Concentrations

### MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1	2	3	4	5
		6	12	5	6	8
6	7	8	9	10	11	12
3	3	5	7	8	13	19
13	14	15	16	17	18	19
4	6	15	17	10	8	8
20	21	22	23	24	25	26
12	9	12	7	8	16	32
27	28	29	30	31		
29	21	16	20	20		

### JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					25	22
3	4	5	6	7	8	9
3	8	8	10	19	23	8
10	11	12	13	14	15	16
13	19	13	9	7	9	14
17	18	19	20	21	22	23
21	38	44	12	10	8	8
24	25	26	27	28	29	30
17	22	32	29			

Maximum 24-Hour PM2.5 concentration occurred on June 19.

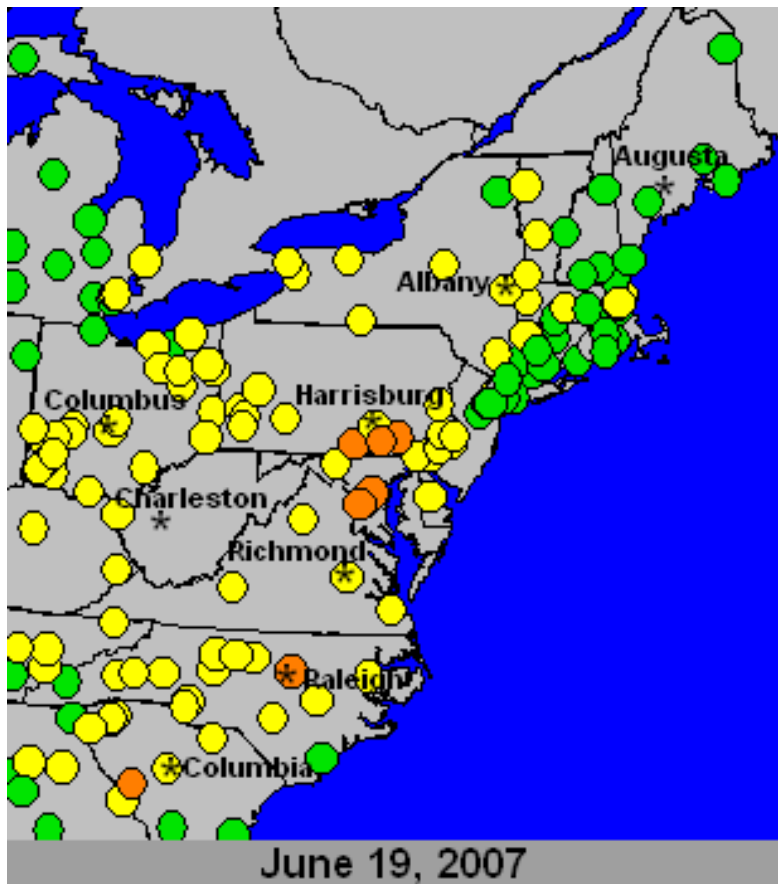
Concentrations reached 44 ug/m<sup>3</sup>



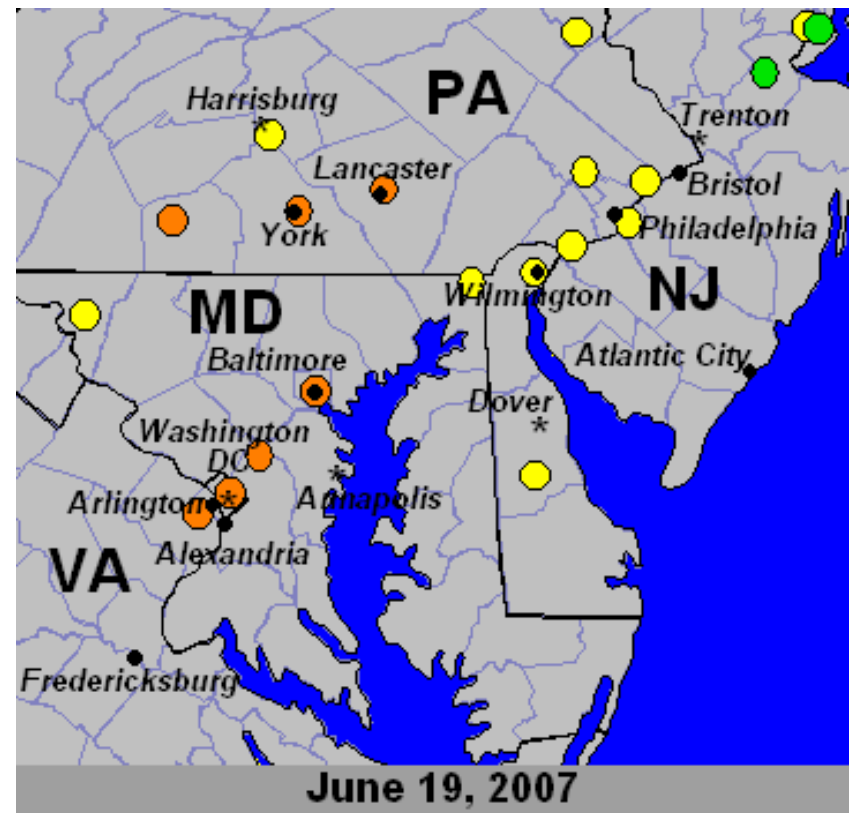
# PM2.5 Maps: June 19, 2007

## Peak Air Quality Index

(Based on 24-hour particle standard)



East Domain



Mid-Atlantic Domain