Ozone Season Summary

2008

Sunil Kumar

MWAQC Meeting, COG

September 24, 2008

Ozone Season Summary (2008)

Peak 8-Hour Ozone Concentrations (ppb)

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
				59	72	57
4	5	6	7	8	9	10
58	61	74	75	57	38	48
11	12	13	14	15	16	17
48	45	53	57	59	49	58
18	19	20	21	22	23	24
51	44	41	51	47	41	49
25	26	27	28	29	30	31
56	66	51	50	68	74	44

JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
57	60	67	50	82	71	81
8	9	10	11	12	13	14
54	73	85	74	102	94	74
15	16	17	18	19	20	21
60	57	57	50	52	60	80
22	23	24	25	26	27	28
67	66	56	66	72	62	54
29	30					
53	49					

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1	2	3	4	5
		50	64	74	64	58
6	7	8	9	10	11	12
52	61	72	40	64	75	76
13	14	15	16	17	18	19
69	64	85	92	112	97	66
20	21	22	23	24	25	26
69	70	69	62	53	69	67
27	28	29	30	31		
55	73	89	73	57		

AUGUST

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					75	59
3	4	5	6	7	8	9
51	57	61	65	61	47	50
10	11	12	13	14	15	16
55	47	58	71	62	63	56
17	18	19	20	21	22	23
60	68	77	66	80	71	51
24	25	26	27	28	29	30
50	78	49	56	43	27	61
31						
57						

SEPTEMBER

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
	57	71	87	82	62	32
7	8	9	10	11	12	13
49	67	37	42	46	30	42
14	15	16	17	18	19	20
43	46					
21	22	23	24	25	26	27
28	29	30				

*** Analysis is based on draft data until September 15, 2008. Data is subject to change.**

2008 Ozone Exceedances

Date	# of Monitors Exceeding	Highest Monitor	Highest Concentration (ppb)
6/5/08	1	Annandale	82
6/7/08	1	Prince George's EC	81
6/10/08	5	Rockville	85
6/12/08	**13**	**Lewinsville**	**102**
6/13/08	10	Rockville	94
6/21/08	5	Beltsville	80
7/12/08	1	Fredrick	76
7/15/08	4	Mt. Vernon	85
7/16/08	12	Mt. Vernon	92
7/17/08	**15**	**Aurora Hills**	**112**
7/18/08	**13**	**Beltsville**	**97**
7/29/08	5	Ashburn	89

Date	# of Monitors Exceeding	Highest Monitor	Highest Concentration (ppb)
8/19/08	2	S. Maryland	77
8/21/08	1	Ashburn	80
8/25/08	1	Prince George's EC	78
9/3/08	7	Calvert Co.	87
9/4/08	6	Frederick	82

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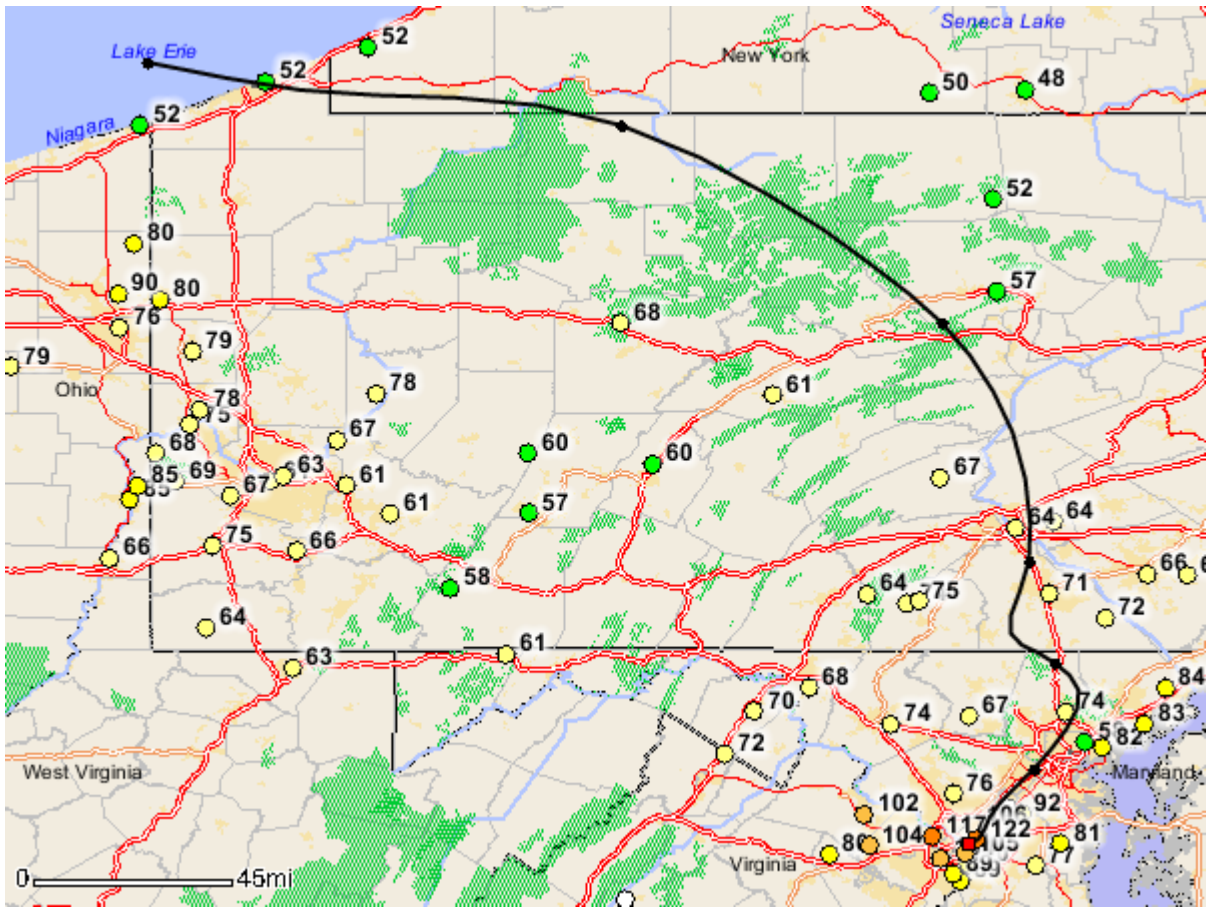
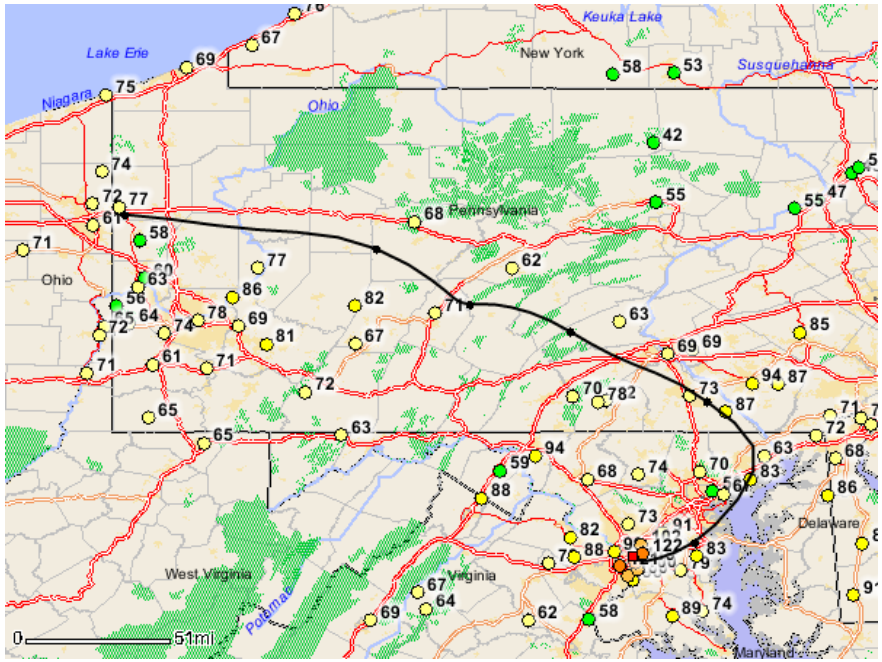
Wind Trajectories (Code Red Days)

NOAA HYPLIT MODEL
36-Hour Backward Trajectory ending at 3 PM June 12, 2008
EDAS Meteorological Data

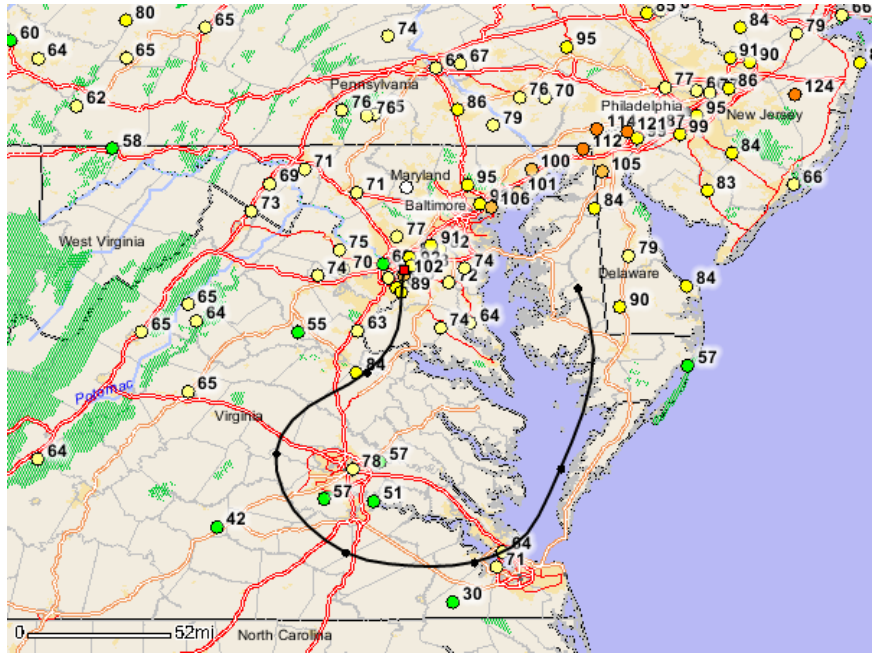


Wind Trajectories (Code Red Days)

NOAA HYPLIT MODEL
Backward Trajectory ending at 3 PM July 17, 2008
EDAS Meteorological Data



NOAA HYPLIT MODEL
Backward Trajectory ending at 3 PM July 18 2008
EDAS Meteorological Data



Daily Peak Fine Particle Concentrations (2008)

24-Hour PM2.5 Concentrations (ug/m3)

(TEOM)

3 Exceedances under

the New 2006 Standard:

June 14 – 35.8 ug/m3

July 18 – 38.2 ug/m3

July 29 – 39.0 ug/m3

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MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
				15.4	18.3	21.4
4	5	6	7	8	9	10
13.7	11.4	16.0	19.0	19.2	7.8	5.2
11	12	13	14	15	16	17
7.6	3.9	4.2	8.2	15.8	11.0	8.4
18	19	20	21	22	23	24
10.5	8.2	7.7	8.7	8.0	5.2	5.7
25	26	27	28	29	30	31
7.8	16.0	19.4	6.8	9.6	17.8	18.4

JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
10.6	9.0	16.3	12.9	15.2	34.3	34.2
8	9	10	11	12	13	14
20.6	23.7	27.1	9.4	17.5	28.8	35.8
15	16	17	18	19	20	21
13	15.9	12.1	9	13.4	14.8	19.3
22	23	24	25	26	27	28
19.7	13.2	11.5	19.1	23.7	19.3	13.5
29	30					
9.7	10.7					

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1	2	3	4	5
		8.3	15.5	20.7	21.6	25.9
6	7	8	9	10	11	12
22.0	15.8	17.2	14.4	15.4	25.2	34.5
13	14	15	16	17	18	19
16.2	13.5	28.4	31.7	34.7	38.2	15.1
20	21	22	23	24	25	26
18.7	21.2	13.9	12.6	13.0	16.1	23.2
27	28	29	30	31		
23.3	31.5	39.0	29.5	25.0		

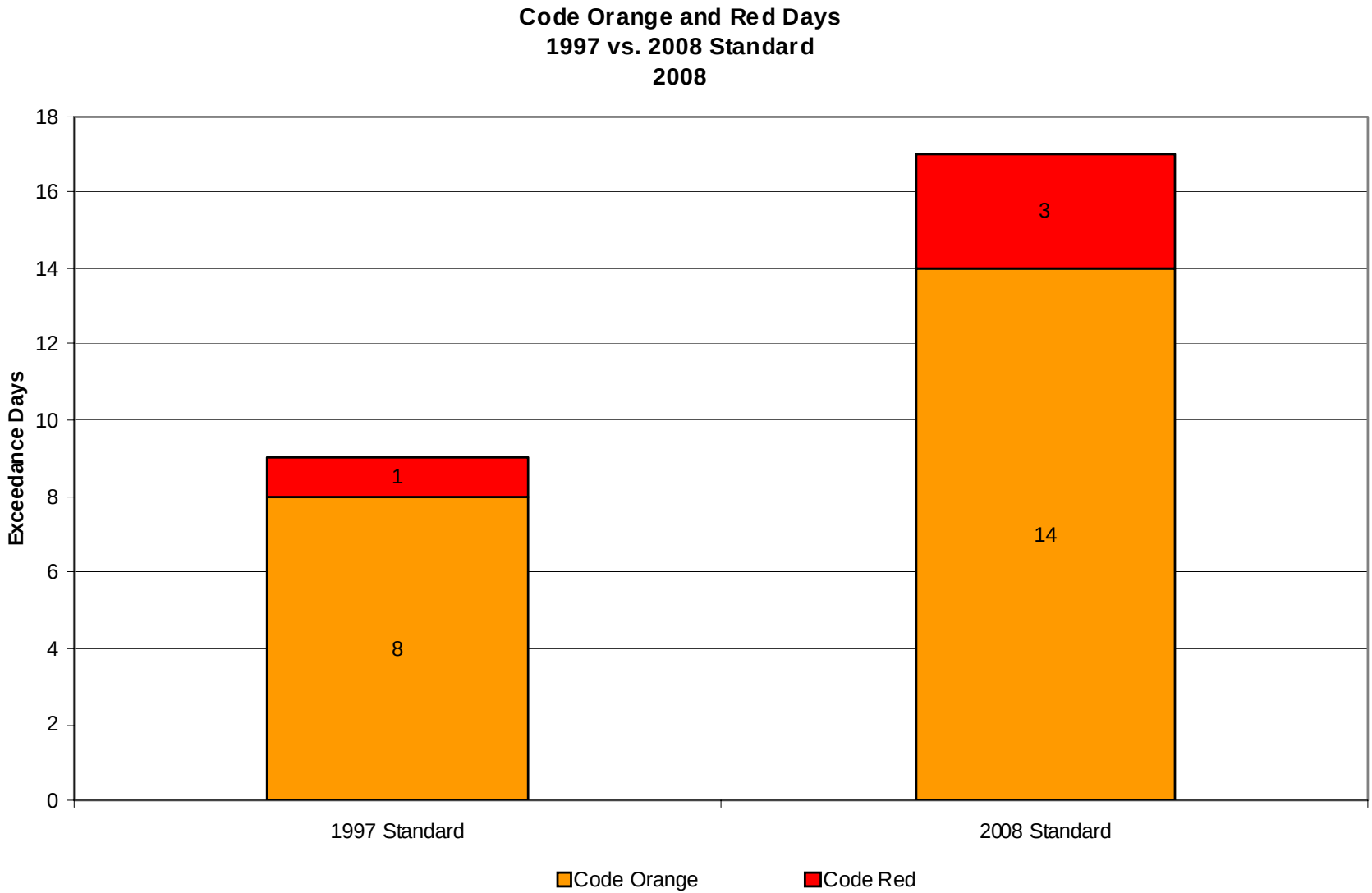
AUGUST

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					26.3	17.1
3	4	5	6	7	8	9
10.0	20.5	28.2	23.6	17.3	12.5	6.2
10	11	12	13	14	15	16
14.1	8.6	13.7	17.8	18.1	21.5	14.6
17	18	19	20	21	22	23
13.6	25.5	22.7	10.0	10.9	7.8	6.7
24	25	26	27	28	29	30
6.4	14.2	8.9	9.0	7.1	6.6	23.5
31						
15.3						

SEPTEMBER

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
	10.7	10.1	22.2	25.6	12.8	6.3
7	8	9	10	11	12	13
10.9	18.8	16.5	4.7	7.2	8.6	11.4
14	15	16	17	18	19	20
13.2	7.9					
21	22	23	24	25	26	27
28	29	30				

Comparison of Orange and Red Days - Ozone



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