

METEOROLOGICAL DATA FOR 2008

Oakland, NJ

Latitude: 41° 02' 28" N Longitude: 74° 13' 52" W Elevation (Ground): 280 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average													
-Daily Maximum	39.7	39.3	48.9	63.9	68.6	82.0	84.4	79.8	74.3	61.5	49.4	40.7	61.0
-Daily Minimum	23.5	22.4	29.2	40.2	44.9	59.8	63.3	58.0	55.0	39.1	33.4	24.8	41.1
-Monthly	31.6	30.8	39.0	52.1	56.7	70.9	73.9	68.9	64.7	50.3	41.4	32.7	51.1
-Monthly Dew Point	19.2	21.4	23.9	36.1	44.1	60.8	64.1	58.8	57.1	40.9	33.1	24.8	40.4
Extremes													
-Highest	63.1	65.2	59.8	85.9	85.3	95.1	94.0	85.1	90.3	75.8	68.2	62.7	95.1
-Date	9	18	3	18	27	9	20	1	4	16	15	15	JUN 9
-Lowest	9.7	8.3	21.0	22.2	28.7	49.5	54.5	47.6	41.3	25.6	20.1	9.3	8.3
-Date	3	11	30	3	1	18	11	20	20	24	22	22	FEB 11
DEGREE DAYS													
Heating Base 65°F	1029	982	792	378	256	9	0	7	89	445	696	990	5673
Cooling Base 65°F	0	0	0	0	9	196	283	134	88	0	0	0	710
SUNSHINE													
NUMBER OF DAYS													
Sunrise to Sunset													
-Clear	31	29	31	30	31	30	31	31	30	31	30	31	366
-Partly Cloudy	0	0	0	0	0	0	0	0	0	0	0	0	0
-Cloudy	0	0	0	0	0	0	0	0	0	0	0	0	0
Precipitation													
.01 inches or more	11	17	14	10	17	18	10	8	9	8	11	15	148
Snow, Ice pellets													
1.0 inches or more	2	3	0	0	0	0	0	0	0	0	0	4	9
Thunderstorms	0	1	0	0	0	0	0	0	0	0	0	0	1
Heavy Fog, visibility													
¼ mile or less	0	0	0	0	0	0	0	0	0	0	0	1	1
TEMPERATURE:													
-Maximum													
90°F and above	0	0	0	0	0	4	4	0	1	0	0	0	9
32°F and below	7	7	0	0	0	0	0	0	0	0	1	7	22
-Minimum													
32°F and below	25	25	24	7	1	0	0	0	0	8	17	25	132
0°F and below	0	0	0	0	0	0	0	0	0	0	0	0	0
PRESSURE													
Average													
-Monthly	30.061	29.948	29.993	30.027	29.792	29.866	29.885	29.889	30.049	30.066	30.026	30.096	29.975
Extremes													
-Highest	30.68	30.53	30.67	30.51	30.19	30.25	30.13	30.31	30.44	30.60	30.57	30.66	30.68
-Date	21	29	30	3	1	13	16	22	23	23	2	23	JAN 21
-Lowest	29.39	29.19	29.09	29.37	29.27	29.62	29.52	29.58	29.46	29.21	29.33	29.33	29.09
-Date	30	26	8	12	18	16	31	8	6	28	16	12	MAR 8
RELATIVE HUMIDITY (%)													
Average													
-Monthly	63.6	70.4	60.8	61.0	68.5	76.2	76.1	75.9	81.1	76.6	74.7	73.9	71.6
-Local Time													
Hour 01	71	75	69	72	80	90	91	91	92	87	82	79	82
Hour 07	75	78	74	81	86	94	93	94	94	90	86	83	86
Hour 13	50	60	48	45	52	57	57	56	63	54	60	65	56
Hour 19	60	71	55	49	60	69	67	68	80	78	74	73	67
PRECIPITATION													
Water Equivalent													
-Total	2.01	5.88	4.83	2.54	3.92	3.32	3.13	3.86	8.18	2.25	4.07	5.65	49.64
-Greatest (24 hrs)	0.58	1.79	1.62	1.02	1.31	1.46	1.31	1.80	4.19	0.84	1.37	3.24	4.19
-Date	10-11	13	7-8	28	9-10	14-15	23-24	6	6	27-28	15-16	11-12	SEP 6
Snow, Ice pellets													
-Total	3.5	14.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	T	T	15.8	33.7
-Greatest (day)	2.0	6.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	T	T	8.3	8.3
-Date	17	22	1	1	1	1	1	1	1	28	18	19	DEC 19
WIND													
Resultant													
-Direction	277	279	293	332	312	269	244	298	328	297	287	284	289
-Speed	1.1	1.0	1.2	0.5	0.4	0.3	0.3	0.3	0.2	0.4	0.8	1.2	0.6
Average Speed	1.7	1.7	2.2	1.8	1.1	0.5	0.5	0.5	0.5	0.8	1.5	2.1	1.3
Maximum One-minute													
Average													
-Direction	SW	SW	SW	NNW	NNW	WSW	S	WSW	N	N	W	W	SW
-Speed	17	16	20	16	11	10	7	9	10	9	16	18	20
-Date	30	19	8	2	13	16	13	2	6	30	16	7	MAR 8
Peak Gust													
-Direction	NNW	SSW	SSW	NW	NNE	WNW	SSE	W	N	S	NW	W	W
-Speed	33	30	33	31	22	25	17	21	26	31	32	34	34
-Date	2	19	8	2	22	14	13	2	6	25	16	25	DEC 25

MEANS AND EXTREMES*

Oakland, NJ

Latitude: 41° 02' 28" N Longitude: 74° 13' 52" W Elevation (Ground): 280 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average													
-Daily Maximum	40.3	36.9	49.3	61.8	71.7	79.6	83.5	80.4	73.9	64.1	51.2	42.3	61.2
-Daily Minimum	24.3	19.4	28.3	38.9	47.0	58.9	63.1	60.1	53.4	43.1	34.7	26.7	41.5
-Monthly	32.3	28.2	38.8	50.3	59.3	69.2	73.3	70.3	63.6	53.6	42.9	34.5	51.4
-Monthly Dew Point	20.7	14.8	22.8	34.4	45.8	59.6	64.2	61.1	56.3	45.0	34.4	25.7	40.4
Extremes													
-Record Highest	70.1	65.2	75.4	86.3	89.9	95.1	95.1	95.4	90.3	87.4	68.2	70.1	95.4
-Year	2007	2008	2007	2007	2006	2008	2007	2006	2008	2007	2008	2006	AUG 2006
-Record Lowest	5.4	5.6	8.1	22.2	28.7	44.1	48.5	47.6	37.8	25.6	20.1	9.3	5.4
-Year	2007	2007	2007	2008	2008	2007	2007	2008	2006	2008	2008	2008	JAN 2007
MEAN DEGREE DAYS													
Heating Base 65°F	1006	975	801	432	201	26	3	12	93	361	653	936	5500
Cooling Base 65°F	0	0	0	2	35	163	270	183	61	15	0	0	729
MEAN SUNSHINE													
MEAN NUMBER OF DAYS													
Sunrise to Sunset													
-Clear	31.0	26.0	30.3	29.0	30.7	30.0	31.0	31.0	30.0	31.0	30.0	31.0	361.0
-Partly Cloudy	0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
-Cloudy	0.0	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Precipitation ≥ .01"													
	11.5	10.7	13.0	11.7	10.3	15.3	12.3	11.7	9.7	11.0	11.0	14.7	142.8
Snow, Ice plts. ≥ 1.0"	2.0	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.3	8.7
Thunderstorms	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Heavy Fog, vis. ≤ ¼ mi	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7
TEMPERATURE:													
-Maximum													
90°F and above	0.0	0.0	0.0	0.0	0.3	2.3	3.3	2.0	0.3	0.0	0.0	0.0	8.3
32°F and below	7.5	9.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.0	23.5
-Minimum													
32°F and below	24.5	25.0	22.0	7.3	0.3	0.0	0.0	0.0	0.0	5.0	13.3	25.3	122.8
0°F and below	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRESSURE													
Average													
-Monthly	30.032	29.946	30.016	29.928	29.897	29.893	29.914	29.931	30.032	30.006	30.035	30.099	29.978
Extremes													
-Record Highest	30.72	30.53	30.74	30.51	30.45	30.25	30.22	30.31	30.46	30.60	30.57	30.66	30.74
-Year	2007	2008	2008	2008	2007	2008	2006	2008	2007	2008	2008	2008	MAR 2007
-Record Lowest	29.39	29.18	29.09	28.60	29.27	29.35	29.52	29.58	29.46	29.03	29.33	29.02	28.60
-Year	2008	2007	2008	2007	2008	2007	2008	2008	2008	2006	2008	2007	APR 2007
RELATIVE HUMIDITY (%)													
Average													
-Monthly	64.9	60.7	58.4	60.8	67.0	76.6	77.3	77.9	81.6	77.8	74.4	72.1	70.8
-Local Time													
Hour 01	72	69	68	73	81	89	91	90	93	88	81	78	81
Hour 07	75	71	72	79	83	90	92	93	95	89	85	81	84
Hour 13	52	47	43	45	49	60	59	61	61	59	60	60	55
Hour 19	62	59	53	51	57	70	70	72	82	78	75	72	67
PRECIPITATION													
Water Equivalent													
-Mean	2.52	2.54	2.86	4.76	2.95	4.95	4.02	3.89	4.99	4.71	4.07	4.70	46.96
-Maximum Monthly	3.03	5.88	4.83	8.15	3.92	7.94	6.21	4.18	8.18	6.16	4.95	5.70	8.18
-Year	2007	2008	2008	2007	2008	2006	2007	2006	2008	2006	2006	2007	SEP 2008
-Minimum Monthly	2.01	0.45	0.62	2.54	1.49	3.32	2.71	3.64	1.51	2.25	3.19	2.75	0.45
-Year	2008	2006	2006	2008	2007	2008	2006	2007	2007	2008	2007	2006	FEB 2006
-Greatest (24 hrs)	1.25	1.79	1.92	4.22	2.47	2.28	1.61	2.14	4.19	2.44	2.60	3.24	4.22
-Year	2007	2008	2007	2007	2006	2006	2007	2006	2008	2007	2006	2008	APR 2007
Snow, Ice pellets													
-Mean	3.3	12.7	4.0	T	0.0	0.0	0.0	0.0	0.0	T	0.0	8.1	28.1
-Maximum Monthly	3.5	16.0	9.3	T	0.0	0.0	0.0	0.0	0.0	T	1.0	15.8	16.0
-Year	2008	2006	2007	2006	2006	2006	2006	2006	2006	2008	2007	2008	FEB 2006
-Minimum Monthly	3.0	8.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0
-Year	2007	2007	2008	2008	2006	2006	2006	2006	2006	2006	2006	2006	MAY 2007
-Greatest (day)	2.0	13.6	9.0	T	0.0	0.0	0.0	0.0	0.0	T	1.0	8.3	13.6
-Year	2008	2006	2007	2006	2006	2006	2006	2006	2006	2008	2007	2008	FEB 2006
WIND													
Resultant													
-Direction	275	275	295	323	312	281	255	299	310	281	300	278	288
-Speed	1.2	1.3	1.3	0.9	0.4	0.3	0.3	0.3	0.2	0.5	0.7	1.1	0.7
Average Speed	1.9	2.5	2.4	2.2	1.2	0.7	0.6	0.6	0.6	0.9	1.4	1.8	1.4
Maximum One-minute													
Average													
-Direction	SW	NNW	SW	NNW	W	NNW	W	NW	N	SW	W	W	SW
-Speed	17	18	20	17	15	11	8	10	10	14	16	18	20
-Year	2008	2007	2008	2007	2007	2006	2007	2007	2008	2006	2008	2008	MAR 2008
Peak Gust													
-Direction	NNW	NNW	WNW	NNW	W	WNW	NW	NNW	N	S	NW	W	NNW
-Speed	33	36	33	34	35	25	19	24	26	31	32	34	36
-Year	2008	2006	2007	2007	2007	2008	2007	2007	2008	2008	2008	2008	FEB 2006

* Length of record: February 2006 to December 2008

Oakland, NJ

PRECIPITATION (inches)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
2006		0.45	0.62	3.58	3.45	7.94	2.71	4.18	5.29	6.16	4.95	2.75	42.08
2007	3.03	1.29	3.12	8.15	1.49	3.60	6.21	3.64	1.51	5.71	3.19	5.70	46.64
2008	2.01	5.88	4.83	2.54	3.92	3.32	3.13	3.86	8.18	2.25	4.07	5.65	49.64

SNOWFALL (inches)

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2005-06				0.0	T	T	3.0	16.0	2.5	T	0.0	0.0	18.5
2006-07	0.0	0.0	0.0	0.0	T	9.4	3.5	8.1	9.3	T	0.0	0.0	20.4
2007-08	0.0	0.0	0.0	0.0	1.0	T		14.1	0.3	0.0	0.0	0.0	28.3
2008-09	0.0	0.0	0.0	T	T	15.8							

Oakland, NJ

TEMPERATURE °F

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
2006		29.0	39.7	51.9	59.6	68.4	74.5	71.4	61.3	51.1	47.5	38.5	53.9
2007	33.0	24.7	37.7	47.0	61.6	68.4	71.5	70.5	64.9	59.3	39.8	32.4	50.9
2008	31.6	30.8	39.0	52.1	56.7	70.9	73.9	68.9	64.7	50.3	41.4	32.7	51.1

HEATING DEGREE DAYS: Base 65°F

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2005-06								824	771	390	195	41	2221
2006-07	0	5	117	422	517	814	982	1120	840	529	151	29	5526
2007-08	10	24	74	215	746	1004	1029	982	792	378	256	9	5519
2008-09	0	7	89	445	696	990							

Oakland, NJ

COOLING DEGREE DAYS: Base 65°F

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
2006		0	0	5	41	152	302	215	20	0	0	0	735
2007	0	0	0	0	55	140	225	199	76	46	0	0	741
2008	0	0	0	0	9	196	283	134	88	0	0	0	710

STATION LOCATION AND INSTRUMENTATION Oakland, NJ

Location	Occupied from	Occupied to	Latitude North	Longitude West	Elevation Above (ft)						
					Sea Level	Ground					
						Wind	Sun	Temp	Humidity	Rain	Barometer
6 Apache Drive 651 Ramapo Valley Road Oakland, NJ 07436	2/6/06		41° 02' 28"	74° 13' 52"	280	39	0	7	7	7	16

INSTRUMENTATION DETAIL

Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.

Davis Vantage Pro, Vantage Pro Plus, Vantage Pro2, Vantage Pro2 Plus

Wind:

Electronic sensors:

Large cups: Instantaneous speed to 120 mph and direction to nearest 7°, greater of 2 mph or ±5%.

Small cups: Instantaneous speed to 175 mph and direction to nearest 7°, greater of 3 mph or ±5%.

Temperature:

Electronic sensor: -40° to 140°F, ±1°F.

Humidity:

Electronic sensor: 0 to 100% RH, ±3%.

Barometer:

Electronic sensor: 26.00 to 32.00 inches Hg, ±0.05".

Rainfall:

6.5-inch diameter electronic tipping bucket rain gauge. Resolution 0.01", ±4%.

Sunshine:

Electronic sensor: 0 to 1600 W/m², 5%.

UV:

Electronic sensor: 0 to 16 Index, 8%.

Snow, ice pellets, glaze and other meteorological phenomenon not recorded by the Weather Computer are manually observed and recorded in the station record.

OBSERVER NOTES

As of 11/3, all data now comes from a new station of the exact same model as the previous station. The original station was located at 6 Apache Drive; the new station is located at 651 Ramapo Valley Road.