

METEOROLOGICAL DATA FOR 2006

Oakland, NJ

Latitude: 41° 02' 24" N Longitude: 74° 14' 02" W Elevation (Ground): 272 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average		38.6	49.8	64.4	71.0	77.0	84.4	81.6	70.8	61.7	56.1	47.8	63.9
-Daily Maximum		19.4	29.7	39.3	48.2	59.7	64.5	61.3	51.9	40.5	38.9	29.2	43.9
-Daily Minimum		29.0	39.7	51.9	59.6	68.4	74.5	71.4	61.3	51.1	47.5	38.5	53.9
-Monthly Dew Point		13.2	22.0	34.3	47.7	60.0	66.7	61.2	55.1	42.3	39.2	28.1	42.7
Extremes													
-Highest		58.7	74.4	83.4	89.9	91.2	93.4	95.4	81.6	77.9	66.9	70.1	95.4
-Date		16	31	20	29	18	17	2	9	9	1	1	AUG 2
-Lowest		9.3	18.4	28.1	34.3	49.4	54.4	48.2	37.8	26.0	26.0	15.7	9.3
-Date		13	2	7	1	6	7	13	30	27	6	8	FEB 13
DEGREE DAYS													
Heating Base 65°F		824	771	390	195	41	0	5	117	422	517	814	4096
Cooling Base 65°F		0	0	5	41	152	302	215	20	0	0	0	735
SOLAR RADIATION (W/m2)													
NUMBER OF DAYS													
Sunrise to Sunset													
-Clear		21	29	27	30	30	31	31	30	31	30	31	321
-Partly Cloudy		0	1	2	0	0	0	0	0	0	0	0	3
-Cloudy		2	1	1	0	0	0	0	0	0	0	0	4
Precipitation													
.01 inches or more		4	10	12	8	17	15	14	13	13	9	8	123
Snow, Ice pellets													
1.0 inches or more		2	1	0	0	0	0	0	0	0	0	0	3
Thunderstorms		0	0	0	0	0	0	0	0	0	0	0	0
Heavy Fog, visibility													
¼ mile or less		1	0	0	0	0	0	0	0	0	0	0	1
TEMPERATURE:													
-Maximum													
90°F and above		0	0	0	1	1	4	3	0	0	0	0	9
32°F and below		5	2	0	0	0	0	0	0	0	0	1	8
-Minimum													
32°F and below		22	20	8	0	0	0	0	0	6	9	22	87
0°F and below		0	0	0	0	0	0	0	0	0	0	0	0
PRESSURE													
Average		29.997	29.956	29.923	29.841	29.908	29.951	29.963	29.973	29.925	30.059	30.129	29.966
-Monthly													
Extremes													
-Highest		30.38	30.31	30.44	30.35	30.15	30.22	30.22	30.34	30.38	30.53	30.65	30.65
-Date		19	30	29	1	27	7	17	11	6	5	29	DEC 29
-Lowest		29.53	29.36	29.40	29.39	29.56	29.65	29.70	29.54	29.03	29.38	29.32	29.03
-Date		12	14	15	18	10	22	3	24	28	9	26	OCT 28
RELATIVE HUMIDITY (%)													
Average		56.1	53.2	57.6	70.4	80.1	80.2	75.3	83.6	76.0	75.9	68.0	70.6
-Monthly													
-Local Time													
Hour 01		68	64	70	85	89	93	88	94	86	83	76	81
Hour 07		71	63	75	83	88	92	89	96	87	85	78	83
Hour 13		39	38	42	54	69	63	59	64	57	59	54	54
Hour 19		53	50	48	59	75	75	68	84	77	78	68	67
PRECIPITATION													
Water Equivalent													
-Total		0.45	0.62	3.58	3.45	7.94	2.71	4.18	5.29	6.16	4.95	2.75	42.08
-Greatest (24 hrs)		0.24	0.25	1.55	2.47	2.28	0.76	2.14	2.41	2.13	2.60	1.26	2.60
-Date		13-14	12-13	22-23	11-12	2- 3	21	27-28	2- 3	27-28	8	22-23	NOV 8
Snow, Ice pellets													
-Total		16.0	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	18.5
-Greatest (day)		13.6	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	13.6
-Date		12	2	5	1	1	1	1	1	1	22	4	FEB 12
WIND													
Resultant													
-Direction		270	300	328	331	291	253	297	308	267	338	261	293
-Speed		1.4	1.5	1.2	0.5	0.5	0.3	0.4	0.2	0.7	0.7	1.2	0.7
Average Speed		2.8	2.8	2.4	1.2	0.9	0.6	0.8	0.7	1.2	1.5	1.8	1.5
Maximum One-minute													
Average													
-Direction		N	NNW	SW	NW	NNW	W	NNW	N	SW	SSW	SW	SW
-Speed		0	14	15	10	11	8	8	9	14	13	18	18
-Date		6	22	1	22	11	27	21	2	29	16	1	DEC 1
Peak Gust													
-Direction		NNW	NW	NW	WNW	WNW	N	W	E	N	SSE	W	NNW
-Speed		36	32	27	24	23	17	19	23	28	28	31	36
-Date		24	3	4	21	11	16	21	2	25	16	1	FEB 24

MEANS AND EXTREMES*

Oakland, NJ

Latitude: 41° 02' 24" N Longitude: 74° 14' 02" W Elevation (Ground): 272 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average		38.6	49.8	64.4	71.0	77.0	84.4	81.6	70.8	61.7	56.1	47.8	63.9
-Daily Maximum		19.4	29.7	39.3	48.2	59.7	64.5	61.3	51.9	40.5	38.9	29.2	43.9
-Daily Minimum		29.0	39.7	51.9	59.6	68.4	74.5	71.4	61.3	51.1	47.5	38.5	53.9
-Monthly		13.2	22.0	34.3	47.7	60.0	66.7	61.2	55.1	42.3	39.2	28.1	42.7
-Monthly Dew Point													
Extremes													
-Record Highest		58.7	74.4	83.4	89.9	91.2	93.4	95.4	81.6	77.9	66.9	70.1	95.4
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	AUG 2006
-Record Lowest		9.3	18.4	28.1	34.3	49.4	54.4	48.2	37.8	26.0	26.0	15.7	9.3
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	FEB 2006
MEAN DEGREE DAYS													
Heating Base 65°F		824	771	390	195	41	0	5	117	422	517	814	4096
Cooling Base 65°F		0	0	5	41	152	302	215	20	0	0	0	735
MEAN SOLAR RADIATION													
MEAN NUMBER OF DAYS													
Sunrise to Sunset													
-Clear		21.0	29.0	27.0	30.0	30.0	31.0	31.0	30.0	31.0	30.0	31.0	321.0
-Partly Cloudy		0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
-Cloudy		2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Precipitation ≥ .01"													
Snow, Ice plts. ≥ 1.0"		4.0	10.0	12.0	8.0	17.0	15.0	14.0	13.0	13.0	9.0	8.0	123.0
Thunderstorms		2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Heavy Fog, vis. ≤ ¼ mi		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
TEMPERATURE:													
-Maximum													
90°F and above		0.0	0.0	0.0	1.0	1.0	4.0	3.0	0.0	0.0	0.0	0.0	9.0
32°F and below		5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	8.0
-Minimum													
32°F and below		22.0	20.0	8.0	0.0	0.0	0.0	0.0	0.0	6.0	9.0	22.0	87.0
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
PRESSURE													
Average													
-Monthly		29.997	29.956	29.923	29.841	29.908	29.951	29.963	29.973	29.925	30.059	30.129	29.966
Extremes													
-Record Highest		30.38	30.31	30.44	30.35	30.15	30.22	30.22	30.34	30.38	30.53	30.65	30.65
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	DEC 2006
-Record Lowest		29.53	29.36	29.40	29.39	29.56	29.65	29.70	29.54	29.03	29.38	29.32	29.03
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	OCT 2006
RELATIVE HUMIDITY (%)													
Average													
-Monthly		56.1	53.2	57.6	70.4	80.1	80.2	75.3	83.6	76.0	75.9	68.0	70.6
-Local Time													
Hour 01		68	64	70	85	89	93	88	94	86	83	76	81
Hour 07		71	63	75	83	88	92	89	96	87	85	78	83
Hour 13		39	38	42	54	69	63	59	64	57	59	54	54
Hour 19		53	50	48	59	75	75	68	84	77	78	68	67
PRECIPITATION													
Water Equivalent													
-Mean		0.45	0.62	3.58	3.45	7.94	2.71	4.18	5.29	6.16	4.95	2.75	42.08
-Maximum Monthly		0.45	0.62	3.58	3.45	7.94	2.71	4.18	5.29	6.16	4.95	2.75	7.94
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	JUN 2006
-Minimum Monthly		0.45	0.62	3.58	3.45	7.94	2.71	4.18	5.29	6.16	4.95	2.75	0.45
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	FEB 2006
-Greatest (24 hrs)		0.24	0.25	1.55	2.47	2.28	0.76	2.14	2.41	2.13	2.60	1.26	2.60
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	NOV 2006
Snow, Ice pellets													
-Mean		16.0	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	18.5
-Maximum Monthly		16.0	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	16.0
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	FEB 2006
-Minimum Monthly		16.0	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	NOV 2006
-Greatest (day)		13.6	2.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	13.6
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	FEB 2006
WIND													
Resultant													
-Direction		270	300	328	331	291	253	297	308	267	338	261	293
-Speed		1.4	1.5	1.2	0.5	0.5	0.3	0.4	0.2	0.7	0.7	1.2	0.7
Average Speed		2.8	2.8	2.4	1.2	0.9	0.6	0.8	0.7	1.2	1.5	1.8	1.5
Maximum One-minute													
Average													
-Direction		N	NNW	SW	NW	NNW	W	NNW	N	SW	SSW	SW	SW
-Speed		0	14	15	10	11	8	8	9	14	13	18	18
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	DEC 2006
Peak Gust													
-Direction		NNW	NW	NW	WNW	WNW	N	W	E	N	SSE	W	NNW
-Speed		36	32	27	24	23	17	19	23	28	28	31	36
-Year		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	FEB 2006

* Length of record: February 2006 to December 2006

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

SNOWFALL (inches)

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2005-06								16.0	2.5	T	0.0	0.0	18.5
2006-07	0.0	0.0	0.0	0.0	T	T							

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

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							

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

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 Oakland, NJ 07436	2/6/2006	Present	41° 02' 24"	74° 14' 02"	272	30	0	7	7	7	7

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

Station is located in a valley, at elevation 272 feet.
The anemometer is mounted 4' above the
roofline of the house at 30', and the rest of the
sensors are mounted on a pole at a height of 7'.