

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### June 2008

Station: Oakland, NJ  
 Latitude: 41° 02' 26" N Longitude: 74° 13' 58" W Elevation (Ground): 272 feet Time Zone: Eastern

Date	Temperature					Humidity	Deg. Days		Precip Ty 1 fog 2 hvy fog 3 thunder 4 ice plt 5 hail 6 glaze 7 duststm 8 smk, hz 9 blw snw	Snow Cvr	Precip		Pressure Adj. to Sea Level			Wind						Sun		
	Maximum	Minimum	Average	Mean	Dew Point		Mean	Heating Base 65°F			Cooling Base 65°F	Water Equivalent	Ice Pellets Snow	Maximum	Minimum	Mean	Avg	Res	Res	Peak			Minute	
																				Speed	Speed		Dir	Speed
1	2	3	4A	4B	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	81.4	61.8	71.6	70.3	55	64	0	7	.....	0	0.00	0.0	29.77	29.63	29.674	1.3	1.0	274	16	N	6	315		
2	79.6	51.9	65.8	65.9	49	58	0	1	.....	0	0.00	0.0	29.90	29.77	29.826	1.0	0.9	319	16	WNW	6	2		
3	82.8	50.4	66.6	67.5	52	63	0	2	.....	0	0.00	0.0	29.92	29.79	29.864	0.6	0.6	225	13	SW	5	232		
4	69.8	57.5	63.7	62.4	59	89	1	0	.....	0	0.52	0.0	29.82	29.73	29.763	0.2	0.1	354	7	N	2	244		
5	72.1	59.3	65.7	65.4	59	80	0	1	.....	0	0.01	0.0	30.12	29.80	29.962	0.4	0.3	18	9	NNE	3	99		
6	80.7	59.2	69.9	66.7	60	79	0	5	.....	0	0.00	0.0	30.17	30.02	30.093	0.6	0.5	205	11	SE	4	175		
7	94.3	59.0	76.7	75.0	66	78	0	12	.....	0	0.06	0.0	30.06	29.87	29.964	0.4	0.4	233	12	SW	5	336		
8	91.0	67.3	79.2	79.1	72	80	0	14	.....	0	0.10	0.0	29.91	29.76	29.848	0.5	0.4	254	11	WSW	4	236		
9	95.1*	68.1	81.6	80.4	70	75	0	17	.....	0	0.00	0.0	29.82	29.74	29.785	0.6	0.5	261	13	W	5	304		
10	94.7	69.4	82.0*	80.8	69	71	0	17	.....	0	0.12	0.0	29.87	29.72	29.802	0.6	0.6	243	19	SW	10	248		
11	88.6	64.8	76.7	76.1	59	59	0	12	.....	0	0.00	0.0	30.05	29.82	29.968	1.1	0.9	327	18	N	6	342		
12	89.0	60.5	74.8	72.8	56	61	0	10	.....	0	0.00	0.0	30.20	30.05	30.142	0.5	0.5	339	9	N	3	332		
13	86.7	53.6	70.1	69.2	54	63	0	6	.....	0	0.00	0.0	30.25	30.05	30.156	0.6	0.5	178	11	SSE	5	157		
14	87.4	60.7	74.1	71.5	65	81	0	9	.....	0	1.37	0.0	30.05	29.79	29.909	0.2	0.1	315	25	WNW	9	273		
15	82.4	66.6	74.5	72.7	68	86	0	10	.....	0	0.09	0.0	29.80	29.71	29.766	0.3	0.1	332	7	NW	3	349		
16	80.7	58.9	69.8	68.6	63	85	0	5	.....	0	0.15	0.0	29.80	29.62	29.730	0.6	0.4	208	22	SSW	10	240		
17	73.9	56.6	65.3	64.1	54	74	0	1	.....	0	0.01	0.0	29.75	29.66	29.690	0.7	0.7	286	13	W	5	305		
18	69.4	49.5*	59.5*	59.3	52	79	5	0	.....	0	0.14	0.0	29.75	29.67	29.704	0.4	0.4	250	11	WNW	5	308		
19	73.2	50.2	61.7	61.4	53	77	3	0	.....	0	0.00	0.0	29.90	29.75	29.815	0.4	0.2	330	9	N	4	354		
20	78.5	50.5	64.5	63.7	55	76	0	0	.....	0	0.21	0.0	30.01	29.90	29.931	0.6	0.5	253	12	NNW	6	5		
21	81.6	55.4	68.5	67.5	57	76	0	4	.....	0	0.05	0.0	30.02	29.92	29.975	0.3	0.3	248	9	WNW	3	16		
22	78.6	58.7	68.6	67.0	64	90	0	4	.....	0	0.24	0.0	29.94	29.84	29.903	0.3	0.1	163	14	ESE	6	194		
23	80.5	65.0	72.8	71.5	67	86	0	8	.....	0	0.02	0.0	29.89	29.81	29.860	0.3	0.2	219	7	SSE	3	232		
24	77.0	61.5	69.3	68.8	57	68	0	5	.....	0	0.09	0.0	30.09	29.86	29.949	1.1	0.9	316	20	N	7	313		
25	81.1	55.4	68.3	68.0	56	70	0	3	.....	0	0.00	0.0	30.16	29.97	30.082	0.5	0.4	281	9	NNE	4	332		
26	79.8	61.5	70.7	69.6	64	84	0	6	.....	0	0.01	0.0	29.97	29.74	29.851	0.3	0.3	231	11	N	5	166		
27	79.8	65.0	72.4	71.0	67	87	0	8	.....	0	0.00	0.0	29.81	29.75	29.788	0.1	0.0	253	4	NNW	2	239		
28	87.0	62.9	75.0	74.5	67	80	0	10	.....	0	0.00	0.0	29.82	29.72	29.770	0.5	0.5	226	12	SW	4	203		
29	81.8	68.6	75.2	73.3	70	89	0	11	.....	0	0.12	0.0	29.80	29.65	29.727	0.1	0.1	174	9	WNW	3	278		
30	81.6	63.1	72.3	71.7	64	78	0	8	.....	0	0.01	0.0	29.74	29.64	29.685	0.4	0.3	273	9	SW	3	5		
Sum	Sum	-----	-----	---	----	Ttl	Ttl	Number of Days		For the month:						---								
2460	1793					9	196			3.32	0.0	30.25	29.62	29.866	0.5	0.3	272	25	WNW	10	240			
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg				
82.0	59.8	70.9	69.9	61	76.2	----	----	≥.01 inch		18	22.50	28.3	13	16	-----	----	----	---	14	16				
Number of Days						Season to Date		Snow, Ice ≥1.0 inch		0	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date							
Max Temperature			Min Temperature			5519	205	Thunder		0	Precipitation		Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog		0	1.46	14-15	0.0	-	0											
4	0	0	0	----	----	Clear		30	Partly Cloudy		0	Cloudy		0										

**NOTES:**

Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.  
 Data in column 4A are (MAX+MIN) ÷ 2, whereas columns 4B, 5, 6, 15, 16, 23 are means via continuous observations for 24 hours.  
 Column 5: Dew point is calculated from temperature and humidity and is continuously averaged for 24 hours.  
 Data in columns 9, 10, 12 are entered manually by the station observer.  
 Columns 17-18: Resultant wind is calculated by the vector sum of continuous wind observations.  
 Column 23: Sunshine index is measured in Watts/m<sup>2</sup> and is continuously averaged for 24 hours.  
 Data in columns 4B, 5, 6, 15, 16, 23 are updated continuously, there by achieving a "true" mean.

## OBSERVATIONS AT 3-HOUR INTERVALS

## June 2008: Oakland, NJ

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind		
							Direction	Speed	Gust							Direction	Speed	Gust							Direction	Speed	Gust
JUN 01																											
01		29.68	0.00	62	61	96	23	0	0		29.77	0.00	62	47	58	05	1	5		29.89	0.00	54	50	87	29	0	0
04		29.66	0.00	63	62	98	23	0	1		29.80	0.00	57	49	77	02	0	2		29.90	0.00	51	49	94	29	0	0
07		29.67	0.00	63	63	100	21	0	3		29.83	0.00	57	50	78	00	0	5		29.91	0.00	52	51	96	29	0	0
10		29.69	0.00	72	57	60	23	1	6		29.85	0.00	66	49	54	35	2	5		29.92	0.00	72	57	60	22	0	2
13		29.68	0.00	78	52	40	27	1	10		29.83	0.00	76	49	39	35	2	7		29.87	0.00	79	52	39	18	2	4
16		29.63	0.00	81	45	28	24	2	14		29.81	0.00	79	44	29	33	2	11		29.82	0.00	82	49	32	22	1	10
19		29.64	0.00	76	53	44	00	0	3		29.82	0.00	76	46	35	01	1	4		29.79	0.00	77	56	49	26	0	1
22											29.89	0.00	60	52	76	29	0	0		29.81	0.00	71	55	57	25	0	2
JUN 02																											
JUN 03																											
JUN 04																											
JUN 05																											
JUN 06																											
JUN 07																											
JUN 08																											
JUN 09																											
JUN 10																											
JUN 11																											
JUN 12																											
JUN 13																											
JUN 14																											
JUN 15																											
JUN 16																											
JUN 17																											
JUN 18																											

## MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.36	0.49	0.67	0.84	1.13	1.26	1.26	1.28	1.28	1.29	1.29	1.29
Ended: Date	14	14	14	14	14	14	14	14	14	14	14	14
Ended: Time	1839	1844	1850	1841	1851	1853	1853	1925	1925	1954	1954	1954

The precipitation amounts may occur at any time during the month. The time indicated is the ending time of the interval. Date and time are not entered for trace amounts.

# OBSERVATIONS AT 3-HOUR INTERVALS

## June 2008: Oakland, NJ

Hour	JUN 19									JUN 20									JUN 21								
	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust
01		29.75	0.00	54	54	100	22	0	1		29.90	0.00	54	53	95	31	0	0		29.97	0.00	59	58	97	25	0	1
04		29.76	0.00	53	53	100	22	0	1		29.91	0.00	52	51	98	31	0	0		29.98	0.00	57	57	100	25	0	0
07		29.81	0.00	52	52	100	22	0	1		29.93	0.00	53	53	98	31	0	0		30.02	0.00	57	57	100	25	0	0
10		29.84	0.00	62	54	74	01	2	5		29.94	0.00	68	54	61	03	1	4		30.02	0.00	66	60	80	20	0	2
13		29.83	0.00	69	51	52	32	0	5		29.94	0.00	75	53	47	24	1	6		29.99	0.00	79	58	50	32	1	5
16		29.82	0.00	73	49	43	34	1	4		29.91	0.00	78	54	43	21	1	5		29.95	0.00	81	52	36	24	0	5
19		29.83	0.00	69	53	57	31	0	0		29.92	0.00	69	59	70	23	0	1		29.92	0.00	77	60	56	28	0	1
22		29.88	0.00	60	55	84	31	0	0		29.97	0.39	63	60	88	19	1	3		29.95	0.00	65	61	88	00	0	0
JUN 22									JUN 23									JUN 24									
01		29.93	0.00	61	60	96	00	0	0		29.89	0.00	66	66	98	03	0	1		29.87	0.00	64	63	97	28	0	2
04		29.91	0.00	59	58	98	00	0	0		29.87	0.00	66	66	100	03	0	0		29.86	0.00	68	55	62	34	1	5
07		29.92	0.00	61	61	99	00	0	0		29.89	0.00	67	67	100	33	0	0		29.92	0.00	63	58	84	25	0	1
10		29.94	0.00	68	65	89	30	0	0		29.88	0.00	72	69	88	31	0	2		29.94	0.00	68	57	67	29	0	5
13		29.89	0.00	72	69	91	30	1	4		29.85	0.00	77	67	71	30	0	4		29.95	0.00	74	56	53	05	1	5
16		29.88	0.00	74	68	81	10	0	4		29.82	0.00	80	67	65	18	1	7		29.95	0.00	75	55	50	25	2	9
19		29.86	0.00	74	65	75	07	1	4		29.81	0.00	79	65	64	19	0	4		29.99	0.00	73	53	50	00	2	7
22		29.90	0.00	67	66	96	03	0	0		29.86	0.00	68	65	92	19	0	0		30.06	0.00	63	57	83	24	0	2
JUN 25									JUN 26									JUN 27									
01		30.11	0.00	60	56	86	27	0	1		29.97	0.00	62	59	91	24	0	0		29.79	0.00	66	65	97	22	0	0
04		30.11	0.00	56	55	95	27	0	1		29.93	0.00	63	61	91	24	0	0		29.75	0.00	65	64	97	22	0	0
07		30.14	0.00	58	57	97	27	0	1		29.92	0.00	64	62	93	24	0	0		29.78	0.00	67	66	98	22	0	0
10		30.14	0.00	71	54	54	35	2	6		29.88	0.00	71	65	82	17	0	1		29.80	0.00	74	65	72	32	0	2
13		30.11	0.00	77	57	50	26	0	7		29.84	0.00	72	67	86	23	1	4		29.81	0.00	73	67	82	16	0	0
16		30.06	0.00	80	54	40	09	1	4		29.78	0.00	78	65	65	29	1	7		29.79	0.00	77	67	73	01	0	1
19		30.01	0.00	76	59	56	27	0	1		29.75	0.00	79	66	65	20	0	6		29.77	0.00	77	69	76	01	0	1
22		30.00	0.00	65	61	86	24	0	0		29.79	0.00	68	66	92	22	0	0		29.81	0.00	70	68	94	05	0	0
JUN 28									JUN 29									JUN 30									
01		29.78	0.00	66	65	97	05	0	0		29.75	0.00	70	68	96	29	0	1		29.67	0.00	68	67	96	28	0	4
04		29.78	0.00	64	63	98	05	0	0		29.73	0.00	69	68	97	29	0	0		29.65	0.00	65	65	99	28	0	1
07		29.81	0.00	65	64	98	05	0	0		29.76	0.00	69	69	98	29	0	0		29.69	0.00	64	64	100	28	0	0
10		29.79	0.00	77	70	77	12	0	2		29.78	0.00	76	67	75	18	1	3		29.70	0.00	73	63	71	25	1	4
13		29.76	0.00	86	70	59	25	2	5		29.77	0.00	79	68	69	21	0	1		29.70	0.00	79	62	56	21	1	5
16		29.73	0.00	84	70	63	11	1	6		29.69	0.00	79	72	77	21	1	2		29.67	0.00	80	62	54	31	1	3
19		29.73	0.00	82	70	67	21	1	3		29.66	0.00	74	73	94	08	0	0		29.67	0.00	76	63	64	25	0	0
22		29.77	0.00	73	70	89	29	0	0		29.68	0.00	70	70	98	18	0	0		29.72	0.00	69	65	87	25	0	0

### WEATHER NOTES

NOTES:  
 Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.  
 Wind Direction: Directions are those from which the wind is blowing, indicated in tens of degrees from true north: i.e., 09 for East, 18 for South, 27 for West, and 00 or 36 for North.  
 Wind Speed: The observed one-minute average speed in miles-per-hour.  
 Wind Gust: The maximum instantaneous wind speed for the 10-minute period preceding the observation.  
 Rainfall Rate: The instantaneous rainfall rate at the time of observation, calculated by timing consecutive 0.01" pulses from the electronic rain gauge and interpolating this rate for one hour.

### SUMMARY BY HOUR

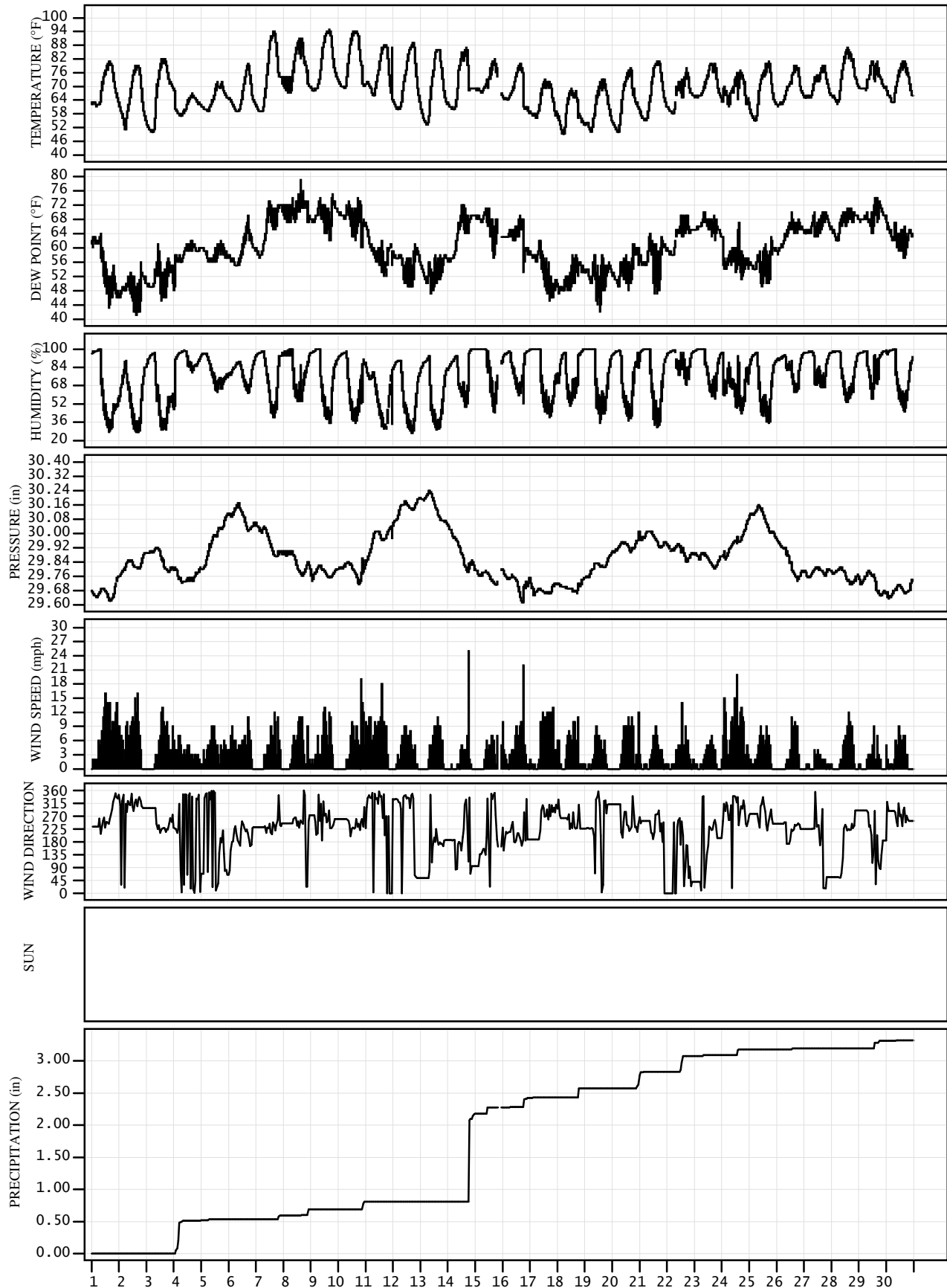
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.871	64	60	90	0.2	32	0.1
04		29.862	62	59	93	0.1	30	0.1
07		29.886	62	60	95	0.1	27	0.0
10		29.891	71	61	71	0.6	34	0.3
13		29.870	78	61	59	1.1	27	0.6
16		29.836	80	60	52	1.1	23	0.6
19		29.833	76	62	64	0.3	35	0.2
22		29.884	67	62	86	0.1	23	0.0

## HOURLY PRECIPITATION (Water Equivalent) June 2008: Oakland, NJ

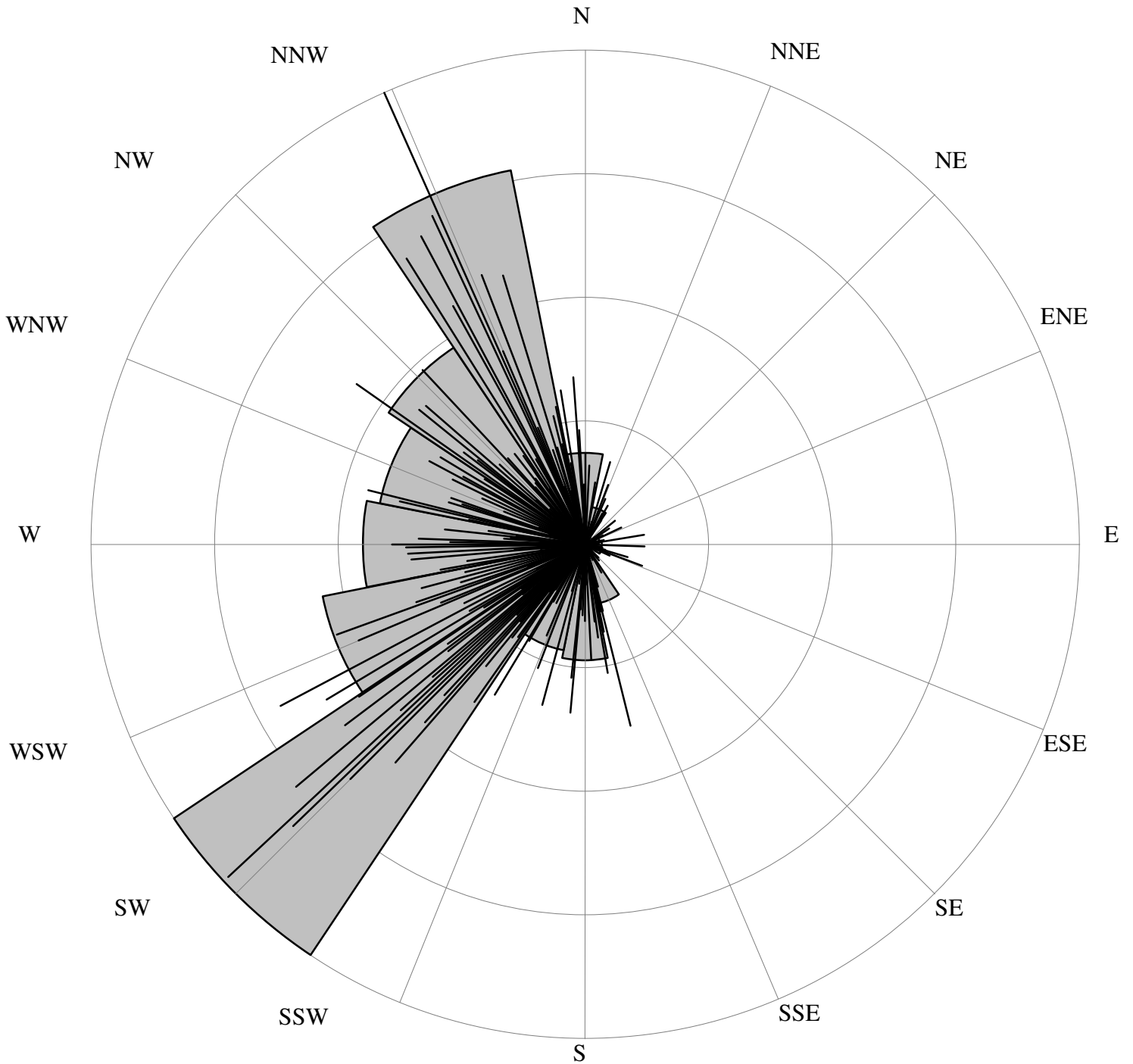
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01																								01	
02																									02
03																									03
04		0.05	0.03	0.12	0.28	0.01	0.01	0.01																0.01	04
05							0.01																		05
06																									06
07																									07
08															0.01				0.05	0.01					08
09																					0.09				09
10																					0.09	0.03			10
11																									11
12																									12
13																									13
14											0.09								1.26	0.03		0.04	0.03	0.01	14
15																									15
16							0.01												0.12	0.01		0.01			16
17			0.01																						17
18																			0.14						18
19																									19
20																					0.04	0.02	0.15		20
21	0.04			0.01																					21
22											0.03	0.11	0.10												22
23																									23
24								0.02					0.07	0.02											24
25																									25
26																									26
27													0.01												27
28																									28
29													0.09					0.03							29
30								0.01																	30
Sum	0.04	0.05	0.04	0.13	0.28	0.01	0.03	0.03	0.01	0.00	0.09	0.03	0.11	0.27	0.02	0.01	0.00	0.03	1.52	0.09	0.01	0.27	0.08	0.17	Sum

During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA  
June 2008: Oakland, NJ



Wind Rose: June 2008  
Oakland, NJ



Maximum direction of wind: 8.3 miles from 336°  
Maximum sector of wind: 79.3 miles from SW  
367.1 total miles of wind