

LOCAL CLIMATOLOGICAL DATA

Monthly Summary September 2006

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	Dir	Speed	Dir
1	2	3	4A	4B	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1	66.1	54.5	60.3	60.0	55	86	4	0	.....	0	0.14	0.0	30.24	30.14	30.202	1.2	1.1	47	14	WNW	5	59	
2	62.4	55.7	59.1	58.9	58	96	6	0	.....	0	2.35	0.0	30.17	29.99	30.068	3.0	3.0	37	23	E	9	15	
3	73.2	55.3	64.3	65.6	60	83	1	0	.....	0	0.13	0.0	30.03	29.97	30.003	1.1	0.8	238	12	SW	5	217	
4	73.0	53.5	63.3	61.7	55	81	1	0	.....	0	0.00	0.0	30.08	30.01	30.031	0.9	0.7	299	14	N	6	314	
5	68.8	55.6	62.2	61.2	59	91	2	0	.....	0	0.15	0.0	30.08	29.94	30.024	0.0	0.0	57	4	SW	1	230	
6	72.3	56.6	64.5	63.2	59	87	0	0	.....	0	0.01	0.0	30.02	29.91	29.943	0.3	0.2	279	7	WSW	4	319	
7	76.5	52.2	64.4	63.3	57	84	0	0	.....	0	0.00	0.0	30.08	30.00	30.034	0.3	0.3	322	9	W	3	320	
8	79.9	53.5	66.7	65.4	59	82	0	2	.....	0	0.00	0.0	30.09	29.98	30.033	0.3	0.3	236	9	S	4	229	
9	81.6*	56.6	69.1*	67.8	59	77	0	5	.....	0	0.00	0.0	30.03	29.94	29.994	0.5	0.4	241	9	WSW	4	343	
10	70.8	57.8	64.3	62.6	55	78	0	0	.....	0	0.00	0.0	30.25	30.03	30.138	0.6	0.6	9	10	NNW	4	346	
11	67.4	48.0	57.7	57.3	47	69	7	0	.....	0	0.00	0.0	30.34	30.25	30.298	0.8	0.8	26	12	NNW	5	90	
12	67.6	41.5	54.5	53.3	44	75	10	0	.....	0	0.00	0.0	30.30	30.15	30.233	0.4	0.4	46	10	NNW	4	187	
13	66.4	45.5	56.0	56.0	52	86	9	0	.....	0	0.01	0.0	30.15	29.98	30.050	0.2	0.1	222	9	WSW	3	142	
14	64.5	58.3	61.4	62.3	61	97	3	0	.....	0	0.77	0.0	29.99	29.94	29.965	0.2	0.1	188	7	SW	3	129	
15	65.2	62.7	64.0	63.6	63	99	1	0	.....	0	1.17	0.0	30.05	29.94	29.985	0.6	0.6	11	11	N	3	357	
16	75.8	59.0	67.4	66.0	62	88	0	3	.....	0	0.03	0.0	30.10	30.01	30.051	0.5	0.5	356	9	NW	4	24	
17	76.7	55.4	66.1	64.3	60	88	0	1	.....	0	0.00	0.0	30.02	29.86	29.941	0.3	0.2	333	8	NNW	3	352	
18	80.3	57.5	68.9	65.2	62	89	0	4	.....	0	0.00	0.0	29.90	29.79	29.851	0.2	0.2	215	5	WNW	2	206	
19	75.3	58.3	66.8	66.5	63	88	0	2	.....	0	0.00	0.0	29.80	29.64	29.700	0.3	0.2	258	10	W	4	304	
20	68.6	54.7	61.6	60.8	50	69	3	0	.....	0	0.00	0.0	29.85	29.65	29.706	1.2	1.0	257	14	NNW	6	316	
21	66.4	45.2	55.8	54.1	44	72	9	0	.....	0	0.00	0.0	30.14	29.85	30.007	0.9	0.6	301	11	NNW	5	214	
22	68.6	41.3	54.9	54.0	47	81	10	0	.....	0	0.00	0.0	30.20	30.05	30.136	0.4	0.4	220	10	SSW	4	166	
23	71.3	52.2	61.8	62.8	60	91	3	0	.....	0	0.01	0.0	30.05	29.75	29.874	0.4	0.4	226	9	WNW	3	216	
24	77.2	57.6	67.4	68.0	63	85	0	3	.....	0	0.00	0.0	29.75	29.54	29.631	1.0	1.0	226	17	SW	7	217	
25	69.8	51.0	60.4	59.5	51	75	4	0	.....	0	0.00	0.0	29.86	29.66	29.762	0.8	0.6	285	13	W	6	266	
26	70.1	46.5	58.3	56.3	47	75	6	0	.....	0	0.00	0.0	30.02	29.85	29.931	0.7	0.6	281	12	SW	6	210	
27	71.6	42.8	57.2	56.1	51	85	7	0	.....	0	0.00	0.0	30.02	29.90	29.967	0.3	0.2	187	6	SSW	3	210	
28	71.8	48.9	60.4	61.2	54	80	4	0	.....	0	0.06	0.0	29.91	29.66	29.806	0.9	0.8	179	16	SE	6	166	
29	63.1	41.6	52.4	55.1	50	83	12	0	.....	0	0.43	0.0	30.00	29.60	29.756	1.3	1.2	292	19	N	7	339	
30	61.5	37.8*	49.6*	50.0	46	87	15	0	.....	0	0.03	0.0	30.14	30.00	30.085	0.2	0.1	221	14	SSW	4	189	
Sum	Sum	-----	-----	---	----	Ttl	Ttl	Number of Days		For the month:						---								
2124	1557					117	20			5.29	0.0	30.34	29.54	29.973	0.7	0.2	303	23	E	9	15			
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg				
70.8	51.9	61.3	60.7	55	83.6	----	----	≥.01 inch	13	28.22	0.0	11	24	-----	----	----	---	2	2					
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			122	735	Thunder	0	Precipitation		Snow, Ice Plts												
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	2.41	2- 3	0.0	-	0												
0	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/m² 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.

OBSERVER NOTES:

Tropical Depression Ernesto impacted the area on the 2nd of the month. The rest of the month was fairly cool, dry, and tranquil.

OBSERVATIONS AT 3-HOUR INTERVALS

September 2006: Oakland, NJ

Hour	SEP 19									SEP 20									SEP 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		29.78	0.00	61	60	98	20	0	0		29.67	0.00	61	56	82	34	0	1		29.87	0.00	55	43	64	23	2	9
04		29.75	0.00	58	58	98	20	0	0		29.66	0.00	59	52	78	29	1	3		29.92	0.00	48	44	85	21	0	2
07		29.72	0.00	62	61	99	29	0	1		29.68	0.00	55	50	83	23	0	2		29.99	0.00	46	43	88	01	0	1
10		29.72	0.00	70	64	82	24	1	4		29.71	0.00	62	49	62	27	3	8		30.04	0.00	56	43	63	01	3	10
13		29.68	0.00	75	67	76	30	0	1		29.68	0.00	65	51	61	21	1	3		30.02	0.00	62	41	45	02	1	11
16		29.65	0.00	72	66	82	31	3	10		29.67	0.00	67	49	52	30	4	10		30.02	0.00	63	44	50	34	1	5
19		29.65	0.00	69	66	90	18	0	0		29.74	0.00	61	48	64	20	1	3		30.06	0.00	55	49	83	34	0	0
22		29.67	0.00	65	59	81	02	1	3		29.82	0.00	57	48	71	30	1	5		30.12	0.00	47	46	94	34	0	0
SEP 22									SEP 23									SEP 24									
01		30.15	0.00	45	43	96	34	0	0		30.04	0.00	53	51	96	14	0	0		29.74	0.00	62	62	98	21	0	0
04		30.14	0.00	43	41	96	34	0	0		29.98	0.00	55	54	94	14	0	0		29.69	0.00	61	61	99	21	0	0
07		30.19	0.00	41	41	97	34	0	0		29.93	0.00	59	57	93	22	1	2		29.64	0.00	65	65	99	21	0	0
10		30.19	0.00	54	49	82	34	0	0		29.88	0.00	62	59	90	22	1	5		29.61	0.00	74	69	83	22	2	7
13		30.16	0.00	67	48	51	17	2	7		29.83	0.00	66	62	87	24	0	4		29.59	0.00	76	66	71	21	4	12
16		30.11	0.00	68	49	50	21	1	7		29.79	0.00	70	65	83	25	1	5		29.55	0.00	77	64	65	23	2	16
19		30.09	0.00	59	53	80	14	0	0		29.80	0.00	69	66	90	21	0	0		29.59	0.00	71	59	66	22	0	4
22		30.08	0.00	54	52	92	14	0	0		29.80	0.00	66	65	96	21	0	0		29.64	0.00	60	57	90	22	0	2
SEP 25									SEP 26									SEP 27									
01		29.66	0.00	58	55	90	18	0	2		29.86	0.00	51	49	92	14	0	1		30.02	0.00	46	44	95	36	0	1
04		29.68	0.00	57	53	89	16	0	1		29.85	0.00	49	47	94	14	0	0		30.00	0.00	43	42	96	36	0	0
07		29.75	0.00	55	52	88	18	0	2		29.90	0.00	48	46	94	14	0	2		30.01	0.00	43	42	97	36	0	0
10		29.79	0.00	63	50	63	31	2	5		29.95	0.00	62	49	63	29	2	7		30.01	0.00	59	53	80	09	0	3
13		29.79	0.00	65	47	53	35	3	7		29.95	0.00	67	48	49	29	3	6		29.96	0.00	67	52	59	25	1	4
16		29.76	0.00	68	47	47	33	1	5		29.94	0.00	69	46	43	30	1	5		29.92	0.00	69	55	62	15	0	3
19		29.79	0.00	59	53	81	26	0	0		29.97	0.00	57	49	76	36	0	0		29.91	0.00	63	58	82	08	0	0
22		29.85	0.00	52	50	94	26	0	0		30.01	0.00	49	47	92	36	0	0		29.92	0.00	56	55	94	08	0	0
SEP 28									SEP 29									SEP 30									
01		29.91	0.00	55	53	96	08	0	1		29.66	0.19	61	60	96	20	0	3		30.01	0.00	41	40	96	34	0	0
04		29.88	0.00	51	50	97	08	0	0		29.63	0.00	60	59	98	24	0	3		30.04	0.00	41	40	97	34	0	0
07		29.89	0.00	50	49	98	08	0	0		29.63	0.00	59	59	99	23	0	1		30.11	0.00	38	37	97	34	0	0
10		29.87	0.00	64	60	87	13	1	6		29.68	0.00	54	50	88	01	3	9		30.14	0.00	51	46	81	28	1	2
13		29.81	0.00	70	53	54	17	4	16		29.76	0.00	56	47	72	01	2	12		30.12	0.00	61	46	58	25	1	3
16		29.74	0.00	69	51	53	16	4	10		29.79	0.00	60	45	57	35	2	5		30.09	0.00	57	50	78	28	0	1
19		29.69	0.00	65	56	73	00	1	6		29.90	0.00	50	45	83	34	0	0		30.09	0.00	54	52	92	17	0	0
22		29.69	0.00	66	59	79	16	3	5		29.97	0.00	44	42	95	34	0	0		30.08	0.00	54	53	97	15	0	1

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		29.982	56	54	94	0.1	25	0.0
04		29.970	54	53	95	0.1	34	0.1
07		29.986	54	53	96	0.2	9	0.2
10		29.989	62	56	82	1.3	35	0.4
13		29.976	68	56	66	1.7	31	0.4
16		29.950	69	56	65	1.1	31	0.3
19		29.953	63	57	81	0.3	6	0.2
22		29.979	58	55	91	0.2	25	0.0

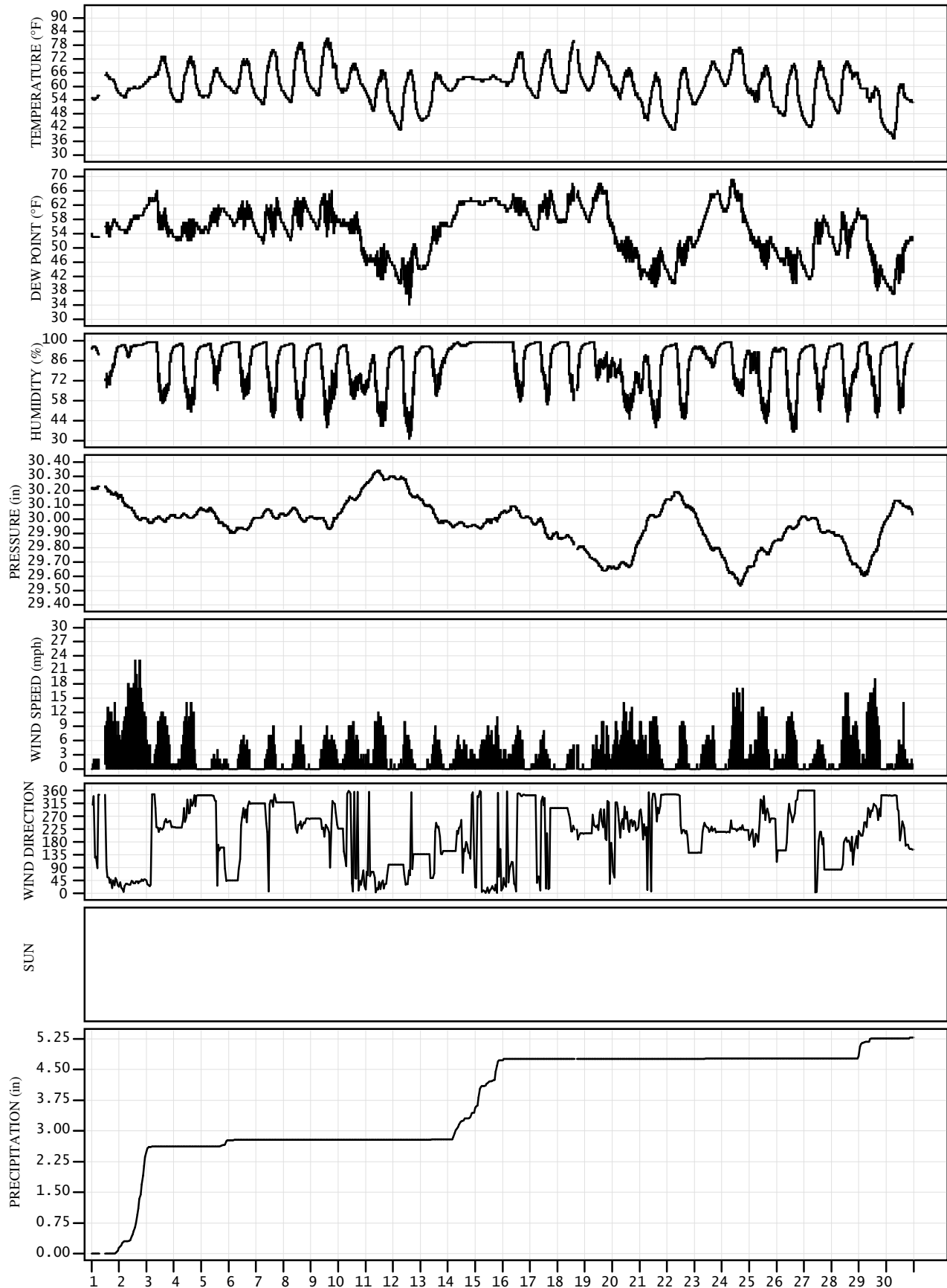
HOURLY PRECIPITATION (Water Equivalent) September 2006: Oakland, NJ

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	0.03	0.03	0.05	0.04	0.01				0.01	0.01	0.10	0.04	0.09	0.09	0.11	0.20	0.16	0.23	0.10	0.24	0.01	0.02	0.04	0.07	02	
03	0.08	0.04			0.01															0.23	0.23	0.22	0.13		03	
04																									04	
05																	0.01	0.01	0.01		0.02	0.08	0.02		05	
06					0.01																				06	
07																									07	
08																									08	
09																									09	
10																									10	
11																									11	
12																									12	
13										0.01															13	
14					0.06	0.10	0.06	0.05	0.04	0.05	0.06	0.03	0.01	0.01	0.05				0.01	0.02	0.09	0.01	0.01	0.11	14	
15	0.04	0.02	0.20	0.20	0.05	0.02	0.01		0.01	0.04	0.02	0.03	0.01		0.01	0.01	0.02	0.19	0.16	0.10	0.02		0.01	0.01	15	
16	0.03																								16	
17																									17	
18																									18	
19																									19	
20																									20	
21																									21	
22																									22	
23										0.01															23	
24																									24	
25																									25	
26																									26	
27																									27	
28																									28	
29	0.23	0.06	0.04		0.01	0.01				0.07	0.01													0.06	29	
30																					0.03				0.03	30
Sum	0.41	0.15	0.29	0.24	0.15	0.13	0.07	0.05	0.06	0.19	0.19	0.10	0.11	0.10	0.17	0.21	0.19	0.43	0.28	0.36	0.40	0.34	0.29	0.38	Sum	

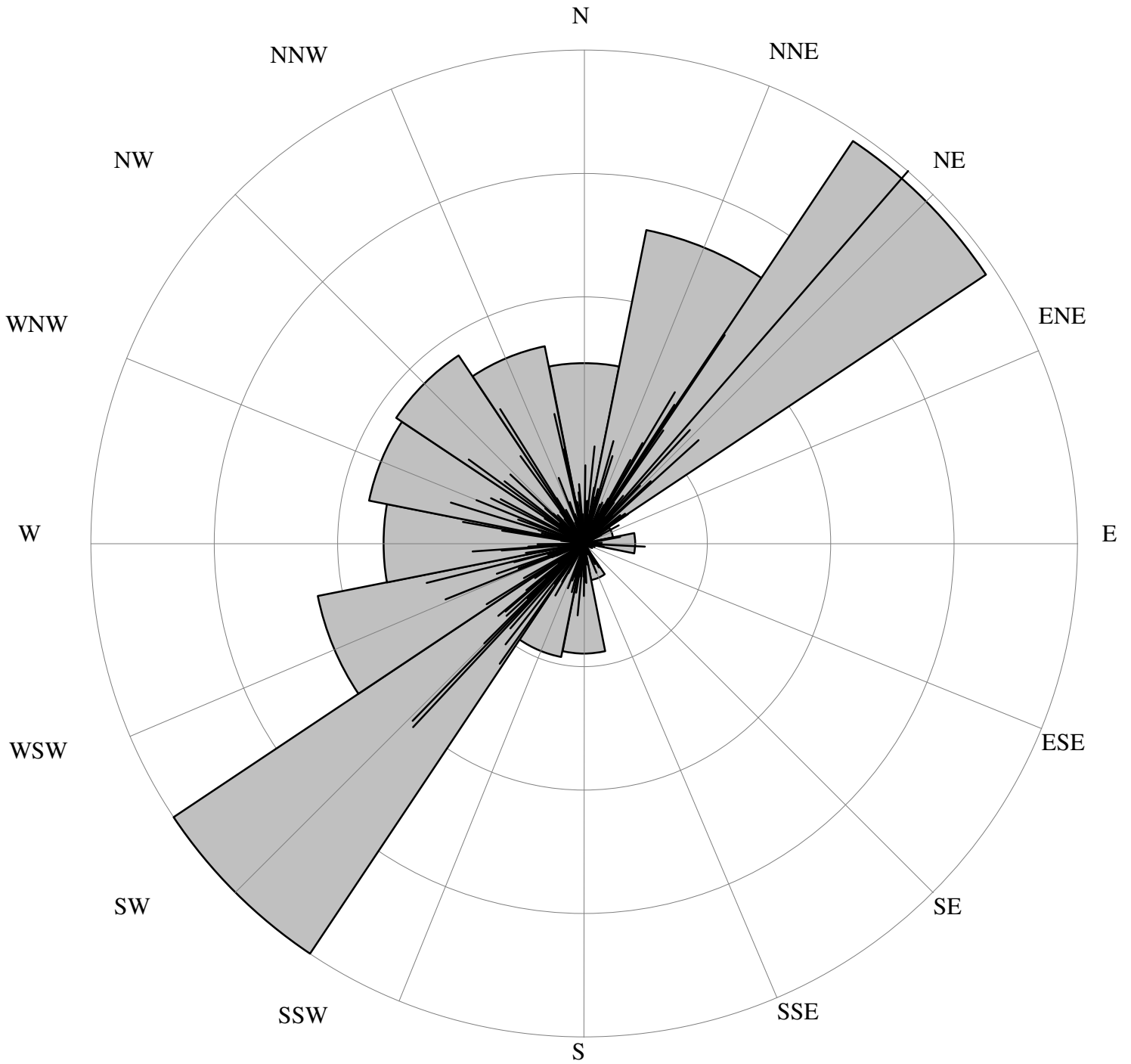
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

September 2006: Oakland, NJ



Wind Rose: September 2006
Oakland, NJ



Maximum direction of wind: 21.4 miles from 41°
Maximum sector of wind: 79.2 miles from SW
473.9 total miles of wind