

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

February 2009

Station: Oakland, NJ

Latitude: 41° 02' 28" N Longitude: 74° 13' 52" W Elevation (Ground): 280 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	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	49.4	17.3	33.4	32.0	20	62	32	0	.....	0	0.10	0.0	30.01	29.83	29.922	1.9	1.9	230	26	SSW	16	236	
2	51.5	24.8	38.1	36.2	25	70	26	0	.....	0	0.00	0.0	29.99	29.87	29.937	1.5	1.2	358	16	NNW	9	348	
3	32.6	22.4	27.5	29.4	25	83	37	0	.....	0	0.07	2.2	29.93	29.68	29.800	1.9	1.9	14	17	NW	9	2	
4	28.2	7.9*	18.1	19.2	5	55	47	0	.....	0	0.02	0.0	30.19	29.84	30.018	2.2	2.1	337	20	NNW	12	351	
5	21.6	8.2	14.9*	14.2	-1	52	50	0	.....	0	0.00	0.0	30.44	30.19	30.309	2.7	2.4	321	27	WNW	13	357	
6	29.6	10.7	20.2	18.5	6	59	44	0	.....	0	0.00	0.0	30.44	30.34	30.400	1.0	1.0	223	9	SW	5	236	
7	46.2	8.4	27.3	26.9	19	73	38	0	.....	0	0.00	0.0	30.42	29.96	30.244	0.9	0.8	217	14	SW	9	193	
8	55.8	31.0	43.4	40.2	29	67	21	0	.....	0	0.02	0.0	30.23	29.90	30.025	2.7	2.2	306	25	W	14	243	
9	44.1	25.9	35.0	34.3	22	62	30	0	.....	0	0.00	0.0	30.42	30.22	30.344	1.8	1.6	291	19	NW	10	293	
10	47.1	26.1	36.6	35.9	30	78	28	0	.....	0	0.00	0.0	30.40	30.06	30.218	0.4	0.2	171	13	SSW	8	184	
11	63.1	31.6	47.3*	44.2	38	81	17	0	.....	0	0.03	0.0	30.06	29.43	29.841	0.7	0.5	178	12	SSE	7	158	
12	52.5	38.7	45.6	45.2	34	66	19	0	.....	0	0.06	0.0	29.64	29.27	29.413	8.2	7.7	269	40	WSW	22	270	
13	41.5	28.3	34.9	37.2	18	46	30	0	.....	0	0.00	0.0	30.02	29.63	29.848	5.6	5.4	316	31	WSW	16	284	
14	39.8	25.8	32.8	32.2	14	48	32	0	.....	0	0.00	0.0	30.01	29.83	29.931	2.7	2.3	314	24	W	14	303	
15	39.8	25.7	32.8	32.3	14	47	32	0	.....	0	0.00	0.0	30.12	29.92	30.039	3.6	3.5	343	26	N	13	343	
16	39.2	22.6	30.9	30.7	14	51	34	0	.....	0	0.00	0.0	30.22	30.11	30.143	2.2	2.1	352	17	N	10	342	
17	39.9	19.7	29.8	28.7	13	54	35	0	.....	0	0.00	0.0	30.28	30.15	30.213	1.2	1.0	347	14	NW	8	359	
18	37.8	17.5	27.6	28.7	24	84	37	0	.....	0	0.28	0.0	30.16	29.45	29.855	0.9	0.7	154	23	SSW	12	213	
19	48.4	22.9	35.7	37.1	28	72	29	0	.....	0	0.14	0.0	29.67	29.34	29.433	4.2	3.8	271	33	NNW	17	287	
20	31.5	20.4	25.9	25.8	8	46	39	0	.....	0	0.00	0.0	29.99	29.66	29.766	6.6	6.6	273	31	SW	16	273	
21	40.3	22.7	31.5	30.2	14	51	33	0	.....	0	0.00	0.0	30.25	29.99	30.172	2.8	2.4	264	20	W	10	221	
22	36.4	24.9	30.7	31.4	25	78	34	0	.....	0	0.08	0.0	30.19	29.80	29.969	1.9	1.7	312	29	NW	13	307	
23	31.9	22.0	26.9	26.5	10	49	38	0	.....	0	0.00	0.0	30.20	29.94	30.075	6.2	6.0	309	30	N	16	293	
24	35.5	18.9	27.2	26.2	9	49	37	0	.....	0	0.00	0.0	30.42	30.20	30.296	3.6	3.1	323	22	W	12	346	
25	42.2	19.7	31.0	29.2	11	50	34	0	.....	0	0.00	0.0	30.49	30.38	30.422	1.0	0.8	199	11	SW	7	217	
26	42.7	25.3	34.0	32.0	26	79	31	0	.....	0	0.03	0.0	30.38	30.25	30.322	0.5	0.5	242	11	SW	6	235	
27	63.2*	26.3	44.8	44.4	38	82	20	0	.....	0	0.07	0.0	30.25	29.85	30.001	2.6	2.4	214	31	SSW	18	202	
28	47.9	27.5	37.7	34.5	21	58	27	0	.....	0	0.00	0.0	30.23	29.89	30.148	3.5	3.1	349	24	N	13	350	
Sum	Sum	-----	-----	---	----	Ttl	Ttl						For the month:										---	
1180	623					911	0	Number of Days		0.90	2.2	30.49	29.27	30.040	2.7	1.8	298	40	WSW	22	270			
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	----	Date	Date	Avg				
42.1	22.3	32.2	31.5	19	62.5	----	----	≥.01 inch	11	2.48	28.3	25	12	-----	----	----	----	12	12					
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	1	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date									
Max Temperature			Min Temperature			4416	0	Thunder	0	Precipitation			Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	0.42	18-19	2.2	3	0					-							
0	5	27	0	----	----	Clear	28	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.

OBSERVATIONS AT 3-HOUR INTERVALS

February 2009: Oakland, NJ

Hour	FEB 01									FEB 02									FEB 03								
	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	29.99	0.00	23	9	55	21	3	9	29.95	0.00	26	24	90	16	0	0	29.92	0.00	32	29	86	05	0	2			
04	29.94	0.00	23	11	60	26	0	3	29.93	0.00	25	24	93	16	0	1	29.86	0.00	32	28	86	01	1	4			
07	29.92	0.00	18	12	77	21	0	1	29.93	0.00	28	26	91	22	0	0	29.83	0.00	31	28	89	03	2	5			
10	29.93	0.00	32	17	55	21	6	10	29.95	0.00	41	31	67	03	1	2	29.77	0.00	32	27	84	03	2	8			
13	29.84	0.05	46	24	42	23	6	13	29.88	0.00	51	19	28	29	4	7	29.69	0.00	31	27	87	33	2	6			
16	29.87	0.00	49	28	44	21	3	14	29.91	0.00	45	24	44	35	1	6	29.72	0.00	29	25	86	00	2	5			
19	29.93	0.00	37	28	70	16	0	0	29.97	0.00	39	27	64	33	5	11	29.78	0.00	26	22	83	02	1	7			
22	29.94	0.00	30	26	86	16	0	0	29.97	0.00	34	29	83	00	1	11	29.83	0.00	26	17	68	06	1	5			
FEB 04									FEB 05									FEB 06									
01	29.84	0.00	22	9	58	01	1	2	30.20	0.00	11	-2	55	35	6	15	30.44	0.00	11	0	60	22	3	5			
04	29.90	0.00	14	7	75	06	0	0	30.24	0.00	8	-1	65	22	1	3	30.41	0.00	13	1	56	19	1	5			
07	29.97	0.00	9	4	82	33	0	0	30.29	0.00	10	-1	60	34	4	10	30.41	0.00	15	3	58	22	0	2			
10	30.04	0.00	19	4	50	34	4	13	30.33	0.00	15	-1	50	10	3	10	30.43	0.00	19	5	54	21	1	3			
13	30.01	0.00	26	4	38	34	5	13	30.29	0.00	21	1	41	27	6	18	30.38	0.00	25	9	50	24	1	4			
16	30.04	0.00	27	4	37	34	5	11	30.30	0.00	20	1	43	33	4	21	30.34	0.00	30	9	41	25	3	6			
19	30.12	0.00	22	3	45	35	3	9	30.36	0.00	16	-1	47	12	1	2	30.39	0.00	21	12	68	16	0	1			
22	30.17	0.00	16	3	56	32	2	13	30.41	0.00	13	-1	53	28	3	5	30.41	0.00	15	9	78	11	0	0			
FEB 07									FEB 08									FEB 09									
01	30.40	0.00	11	8	85	11	0	0	29.95	0.00	38	32	80	18	0	1	30.25	0.00	34	19	55	34	1	6			
04	30.41	0.00	10	7	88	11	0	0	29.93	0.00	33	31	90	09	0	0	30.28	0.00	32	20	62	01	0	6			
07	30.40	0.00	9	6	87	11	0	0	29.92	0.00	33	31	94	09	0	1	30.34	0.00	27	20	76	23	1	3			
10	30.35	0.00	26	17	67	29	0	2	29.92	0.00	56	42	59	23	8	23	30.40	0.00	36	23	58	24	2	10			
13	30.22	0.00	40	24	52	21	5	13	30.00	0.00	48	32	54	00	6	14	30.38	0.00	41	22	47	25	3	9			
16	30.14	0.00	45	27	49	22	4	10	30.09	0.00	44	25	48	29	7	13	30.34	0.00	43	22	42	25	5	15			
19	30.09	0.00	36	29	74	19	0	0	30.15	0.00	39	24	53	33	1	14	30.38	0.00	33	23	67	35	0	0			
22	30.00	0.00	37	31	78	21	1	5	30.20	0.00	33	21	60	30	1	4	30.38	0.00	29	24	80	01	0	2			
FEB 10									FEB 11									FEB 12									
01	30.38	0.00	30	25	81	01	0	1	30.04	0.00	38	34	86	22	1	3	29.39	0.00	40	38	95	20	2	3			
04	30.34	0.00	29	25	86	07	0	1	30.00	0.00	34	32	90	02	0	1	29.31	0.00	40	39	96	18	0	0			
07	30.33	0.00	26	24	89	06	0	1	30.00	0.00	32	30	94	18	0	1	29.31	0.00	51	38	63	26	14	25			
10	30.30	0.00	38	27	65	01	1	2	30.00	0.00	48	39	71	22	3	5	29.33	0.00	51	35	54	27	11	31			
13	30.16	0.00	44	33	64	14	4	11	29.84	0.00	61	48	62	24	3	7	29.36	0.00	48	33	55	23	11	36			
16	30.11	0.00	46	36	68	31	0	2	29.74	0.00	61	47	61	17	4	9	29.44	0.00	46	32	58	27	7	26			
19	30.10	0.00	38	34	85	06	0	0	29.67	0.00	44	40	86	08	1	2	29.54	0.00	45	30	55	32	7	21			
22	30.08	0.00	36	33	87	06	0	0	29.54	0.00	38	37	94	06	0	2	29.62	0.00	42	27	54	26	10	19			
FEB 13									FEB 14									FEB 15									
01	29.66	0.00	41	28	59	31	7	20	30.00	0.00	27	13	55	29	1	5	29.93	0.00	32	16	51	32	5	13			
04	29.69	0.00	41	28	59	32	10	22	30.00	0.00	26	14	60	30	6	17	29.98	0.00	29	10	45	34	6	15			
07	29.76	0.00	38	25	59	30	10	22	29.97	0.00	26	13	56	31	4	16	30.03	0.00	26	16	66	32	4	8			
10	29.84	0.00	38	19	46	30	5	19	29.94	0.00	30	13	50	19	1	8	30.06	0.00	32	16	51	35	7	17			
13	29.85	0.00	40	13	33	35	3	16	29.91	0.00	37	16	41	32	1	4	30.05	0.00	38	13	35	35	6	13			
16	29.92	0.00	39	11	31	28	2	17	29.84	0.00	40	14	35	29	1	5	30.03	0.00	39	12	33	33	3	7			
19	29.99	0.00	33	10	38	33	2	13	29.88	0.00	35	15	44	24	2	4	30.10	0.00	32	12	44	30	0	4			
22	30.02	0.00	29	11	46	27	3	13	29.90	0.00	35	17	47	31	3	10	30.10	0.00	31	13	47	34	7	14			
FEB 16									FEB 17									FEB 18									
01	30.12	0.00	28	11	48	35	4	7	30.22	0.00	26	14	58	04	1	10	30.15	0.00	21	15	77	26	0	0			
04	30.12	0.00	26	12	55	34	1	5	30.26	0.00	23	13	65	31	0	7	30.08	0.00	19	14	84	26	0	0			
07	30.15	0.00	23	14	67	00	2	5	30.27	0.00	20	12	71	34	0	1	30.04	0.00	18	14	87	26	0	1			
10	30.16	0.00	30	17	58	07	1	10	30.27	0.00	29	13	51	05	2	7	29.99	0.00	33	24	70	04	2	3			
13	30.12	0.00	37	17	44	35	7	13	30.21	0.00	37	12	36	33	2	7	29.87	0.00	37	27	67	14	2	11			
16	30.12	0.00	38	15	39	34	3	6	30.17	0.00	40	12	32	21	1	4	29.74	0.04	34	32	90	16	2	11			
19	30.17	0.00	35	16	46	34	4	9	30.16	0.00	29	13	52	26	0	0	29.59	0.19	32	31	94	05	1	2			
22	30.19	0.00	30	14	51	33	2	5	30.16	0.00	25	15	65	26	0	0	29.49	0.00	34	33	95	04	0	1			

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.02	0.04	0.04	0.05	0.07	0.09	0.13	0.13	0.16	0.18	0.19	0.19
Ended: Date	08	18	18	18	19	19	19	19	18	18	18	18
Ended: Time	1023	2019	1857	1914	0153	0203	0224	0224	2019	2041	2056	2056

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

February 2009: Oakland, NJ

Hour	FEB 19									FEB 20									FEB 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		29.42	0.00	35	33	96	03	0	1		29.66	0.00	23	6	48	30	4	19		30.01	0.00	26	11	52	22	4	13
04		29.37	0.00	35	34	96	03	0	0		29.66	0.00	22	5	49	27	4	25		30.08	0.00	25	11	56	26	2	6
07		29.38	0.00	38	37	97	20	1	4		29.69	0.00	21	3	47	26	7	23		30.17	0.00	23	12	63	25	1	5
10		29.39	0.00	46	36	68	23	2	10		29.73	0.00	24	6	45	24	9	19		30.23	0.00	32	16	52	32	4	14
13		29.34	0.00	48	33	55	24	6	12		29.72	0.00	29	8	42	30	5	26		30.22	0.00	38	15	39	22	9	15
16		29.36	0.00	45	26	47	22	8	18		29.76	0.00	31	10	41	24	8	25		30.18	0.00	40	13	33	14	3	9
19		29.50	0.00	33	15	46	26	9	25		29.88	0.00	29	12	47	26	8	14		30.22	0.00	31	15	51	21	0	0
22		29.62	0.00	26	7	43	25	10	18		29.95	0.00	28	10	48	24	6	16		30.22	0.00	26	17	68	21	0	1
FEB 22									FEB 23									FEB 24									
01		30.17	0.00	25	19	77	20	0	0		29.95	0.00	27	12	53	33	4	10		30.21	0.00	22	9	57	33	7	17
04		30.12	0.00	27	22	81	21	0	0		29.99	0.00	25	12	56	30	6	15		30.22	0.00	21	9	58	34	7	16
07		30.06	0.00	28	23	81	06	0	1		30.04	0.00	25	10	54	24	7	12		30.27	0.00	19	7	60	27	4	9
10		29.97	0.00	36	30	80	07	0	2		30.07	0.00	29	10	44	35	5	21		30.32	0.00	25	9	49	34	8	17
13		29.86	0.00	36	34	93	07	0	0		30.07	0.00	31	11	43	29	1	20		30.29	0.00	31	11	43	34	10	22
16		29.80	0.00	36	33	89	01	0	3		30.08	0.00	30	8	40	29	8	26		30.30	0.00	34	11	37	35	7	12
19		29.86	0.00	34	24	66	31	6	20		30.16	0.00	25	9	50	33	11	21		30.34	0.00	30	10	42	18	1	10
22		29.91	0.00	31	17	56	28	8	24		30.19	0.00	22	8	54	30	5	20		30.39	0.00	26	9	48	15	3	5
FEB 25									FEB 26									FEB 27									
01		30.41	0.00	23	9	55	35	0	6		30.38	0.00	26	20	78	19	0	0		30.23	0.00	27	25	92	28	0	0
04		30.42	0.00	20	11	66	23	0	1		30.34	0.00	27	22	81	19	0	0		30.16	0.00	27	25	94	33	0	1
07		30.47	0.00	20	11	68	26	0	0		30.36	0.00	28	23	81	07	0	0		30.09	0.00	29	28	94	33	0	1
10		30.48	0.00	31	9	40	19	3	5		30.36	0.00	33	28	83	22	0	2		30.03	0.00	44	40	85	01	0	2
13		30.42	0.00	38	8	28	17	4	9		30.32	0.00	37	29	73	22	5	8		29.94	0.00	61	46	57	19	6	26
16		30.39	0.00	42	10	26	24	5	10		30.29	0.00	43	30	62	26	3	5		29.85	0.00	61	44	54	20	7	18
19		30.39	0.00	32	14	47	19	0	1		30.29	0.00	33	28	83	28	0	0		29.89	0.00	53	49	87	23	3	14
22		30.39	0.00	27	18	69	19	0	0		30.26	0.00	30	27	89	28	0	1		29.87	0.00	48	47	95	20	0	1
FEB 28																											
01		29.92	0.00	46	45	96	23	5	15																		
04		30.03	0.00	34	27	76	13	2	12																		
07		30.13	0.00	30	22	72	02	4	14																		
10		30.22	0.00	33	20	57	00	5	15																		
13		30.18	0.00	39	20	47	34	5	11																		
16		30.21	0.00	37	17	45	05	3	9																		
19		30.22	0.00	31	11	42	35	1	6																		
22		30.20	0.00	29	11	46	01	2	6																		

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

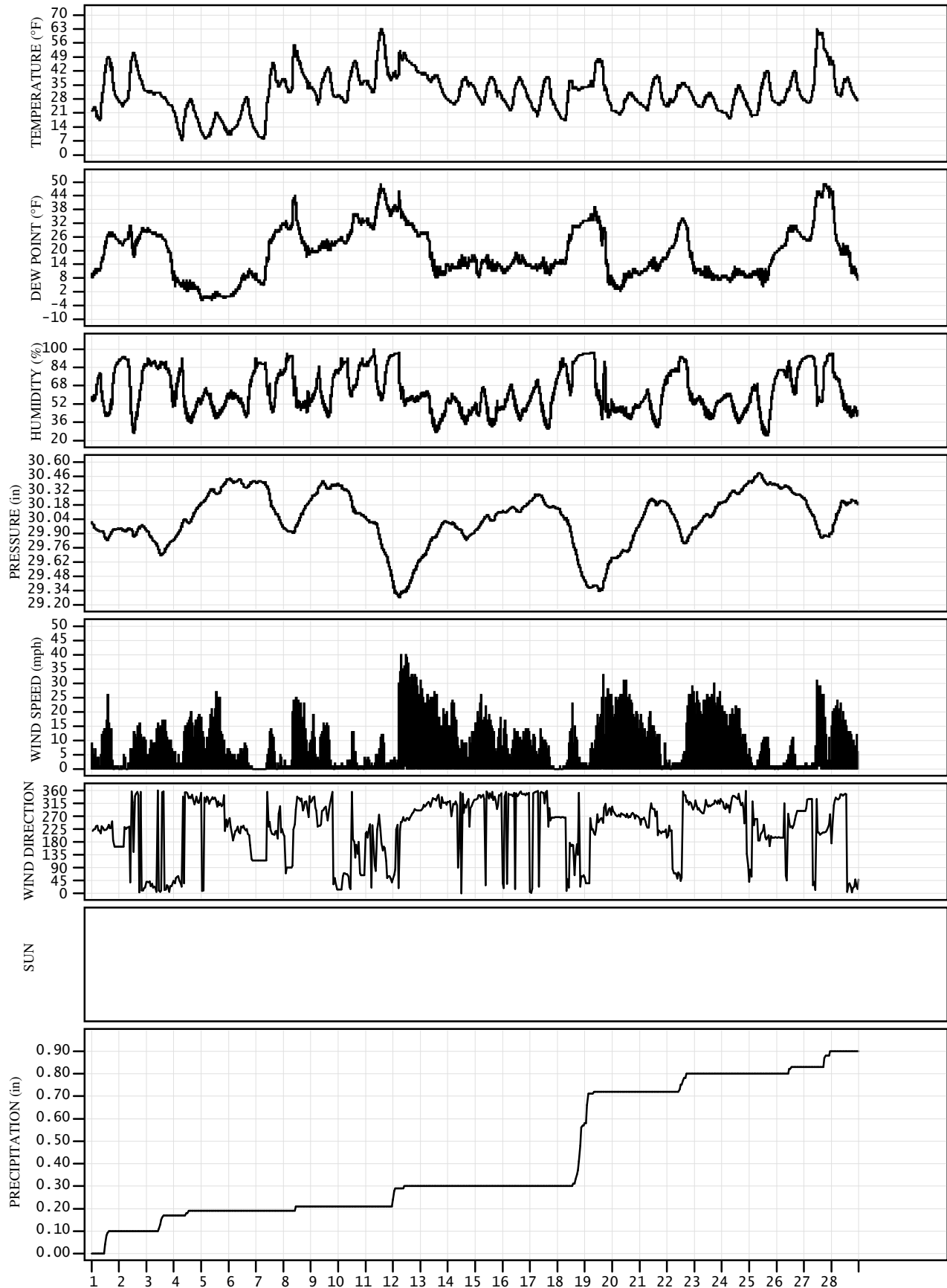
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		30.042	28	18	69	2.1	30	1.3
04		30.039	26	18	72	1.7	32	1.3
07		30.054	25	18	74	2.3	29	1.7
10		30.066	33	20	59	3.4	30	1.5
13		30.016	39	21	50	4.6	28	2.1
16		30.003	40	21	48	3.9	27	2.2
19		30.040	33	20	60	2.4	31	1.7
22		30.051	29	19	66	2.4	29	1.7

HOURLY PRECIPITATION (Water Equivalent)
February 2009: Oakland, NJ

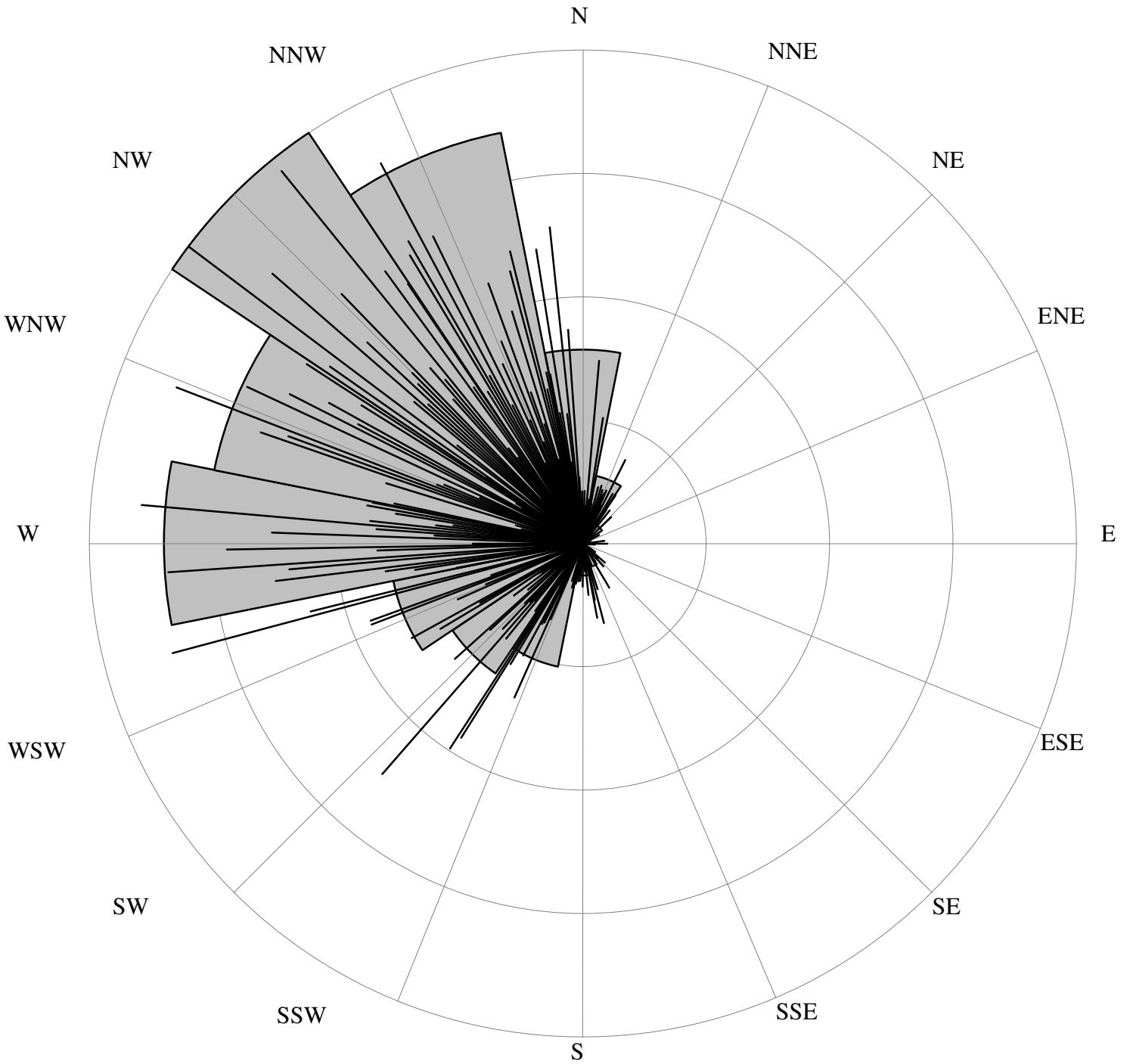
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01												0.04	0.04	0.01	0.01										01
02																									02
03												0.01	0.02	0.02	0.01	0.01									03
04												0.01	0.01	0.01											04
05																									05
06																									06
07																									07
08												0.02													08
09																									09
10																									10
11																									11
12	0.04	0.01								0.01														0.03	12
13																									13
14																									14
15																									15
16																									16
17																									17
18														0.01		0.02	0.02	0.02	0.04	0.07	0.08	0.01		0.01	18
19		0.08	0.05						0.01																19
20																									20
21																									21
22												0.01	0.02		0.02	0.01		0.02							22
23																									23
24																									24
25																									25
26												0.02		0.01											26
27																	0.04	0.01					0.02		27
28																									28
Sum	0.04	0.09	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.07	0.08	0.08	0.05	0.03	0.02	0.04	0.06	0.05	0.07	0.08	0.01	0.02	0.04	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
February 2009: Oakland, NJ



Wind Rose: February 2009
Oakland, NJ



Maximum direction of wind: 32.0 miles from 307°
Maximum sector of wind: 347.1 miles from NW
1790.6 total miles of wind