

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

January 2010

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	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1	40.1	29.4	34.7	33.8	30	87	30	0	.....	0	0.14	0.1	29.99	29.72	29.865	0.9	0.7	322	25	NNW	13	321	
2	31.2	14.3	22.8	22.7	13	66	42	0	.....	0	0.00	0.0	29.73	29.63	29.676	6.7	6.5	324	38	W	16	285	
3	20.2	15.0	17.6	17.1	7	66	47	0	.....	0	0.00	0.1	29.66	29.46	29.551	7.0	6.9	314	33	WNW	19	291	
4	28.9	17.5	23.2	21.2	11	64	41	0	.....	0	0.00	0.0	29.77	29.64	29.711	3.4	3.0	308	24	NNW	11	330	
5	28.7	18.3	23.5	23.2	13	65	41	0	.....	0	0.01	0.0	29.77	29.68	29.719	3.3	2.0	319	29	NNW	13	348	
6	32.4	23.9	28.2	27.1	17	65	37	0	.....	0	0.01	0.0	29.79	29.67	29.720	4.3	3.5	315	29	WNW	15	314	
7	36.0	27.9	31.9	31.1	23	72	33	0	.....	0	0.00	0.0	29.92	29.76	29.855	3.1	2.6	308	24	NNE	13	338	
8	32.4	19.9	26.2	27.2	21	78	39	0	.....	0	0.04	1.0	29.90	29.65	29.758	2.0	1.8	317	26	NNW	14	334	
9	28.0	13.8	20.9	20.8	7	55	44	0	.....	0	0.00	0.0	30.20	29.90	30.059	3.2	3.1	346	22	WNW	13	357	
10	26.8	11.1	18.9	18.0	4	56	46	0	.....	0	0.00	0.0	30.29	30.18	30.223	1.8	1.3	354	16	NNW	10	288	
11	30.3	14.3	22.3	24.4	12	58	43	0	.....	0	0.00	0.0	30.19	30.07	30.122	1.2	0.8	238	14	WNW	6	342	
12	33.2	21.4	27.3	27.0	16	63	38	0	.....	0	0.00	0.0	30.16	29.98	30.061	3.2	3.1	324	30	NNW	13	312	
13	35.2	20.1	27.7	26.2	17	67	37	0	.....	0	0.00	0.0	30.23	30.11	30.163	1.5	1.3	305	23	W	9	299	
14	41.1	16.0	28.5	26.9	19	76	36	0	.....	0	0.00	0.0	30.27	30.17	30.212	0.5	0.4	202	11	WSW	6	239	
15	48.7	19.1	33.9	33.7	26	74	31	0	.....	0	0.00	0.0	30.23	30.06	30.133	1.8	1.6	300	18	WNW	10	297	
16	49.0	27.5	38.3	37.8	28	70	26	0	.....	0	0.00	0.0	30.21	30.07	30.149	1.6	1.5	275	18	WNW	9	226	
17	36.9	24.9	30.9	31.8	29	91	34	0	.....	0	0.47	0.0	30.12	29.55	29.952	1.3	1.3	39	19	NNE	9	38	
18	50.1	31.0	40.5	39.7	35	83	24	0	.....	0	0.03	0.0	29.94	29.52	29.735	3.0	2.9	1	20	N	11	346	
19	40.8	28.2	34.5	34.7	32	91	30	0	.....	0	0.00	0.0	29.94	29.82	29.884	0.3	0.3	236	7	SW	4	214	
20	40.5	23.7	32.1	31.7	25	78	32	0	.....	0	0.00	0.0	30.08	29.87	29.949	1.4	1.3	331	20	N	11	342	
21	41.8	19.8	30.8	29.0	22	77	34	0	.....	0	0.00	0.0	30.26	30.07	30.162	0.3	0.1	85	7	NNW	4	265	
22	42.3	22.1	32.2	31.5	21	67	33	0	.....	0	0.00	0.0	30.12	29.87	29.984	1.1	1.0	16	15	N	8	355	
23	40.6	21.5	31.0	28.9	19	68	33	0	.....	0	0.00	0.0	30.30	30.11	30.238	0.7	0.5	47	10	NNE	4	333	
24	38.7	19.6	29.2	30.1	28	90	35	0	.....	0	0.12	0.0	30.26	29.85	30.108	0.2	0.2	51	5	NE	2	58	
25	57.8*	37.7	47.8*	51.0	49	92	17	0	.....	0	1.76	0.0	29.85	29.14	29.448	5.0	4.2	196	35	SSE	19	188	
26	45.3	28.3	36.8	38.3	26	61	28	0	.....	0	0.00	0.0	29.84	29.41	29.631	3.8	3.7	253	24	SSW	13	238	
27	38.0	27.2	32.6	32.2	20	60	32	0	.....	0	0.00	0.0	30.14	29.84	30.028	3.3	3.0	272	20	SSW	11	229	
28	40.3	17.3	28.8	29.3	19	67	36	0	.....	0	0.07	1.5	30.17	29.82	30.027	3.6	2.8	281	28	NW	15	231	
29	21.9	13.2	17.5	16.8	1	49	47	0	.....	0	0.00	0.0	30.32	30.16	30.248	4.6	4.6	308	28	WSW	14	293	
30	18.8	9.9	14.3*	14.6	-0	51	50	0	.....	0	0.00	0.0	30.31	30.01	30.186	2.4	2.1	350	22	WNW	11	286	
31	29.4	9.4*	19.4	19.3	4	51	46	0	.....	0	0.00	0.1	30.13	30.00	30.076	1.5	0.7	298	16	W	10	223	
Sum	Sum	-----	-----	---	----	Ttl	Ttl						For the month:										---	
1125	643					1122	0		Number of Days	2.65	2.8	30.32	29.14	29.956	2.5	1.7	310	38	W	19	188			
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip	Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg				
36.3	20.8	28.5	28.3	19	69.6	----	----		≥.01 inch	9	2.65	17.5	29	25	-----	----	----	---	2	25				
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	2	Greatest in 24 Hours and Dates				Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date											
Max Temperature			Min Temperature			3223	0	Thunder	0	Precipitation		Snow, Ice Plts												
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	1.82	24-25	1.5	28	0												
0	12	30	0	----	----	Clear	31	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

January 2010: 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
JAN 01																											
01		29.98	0.00	30	28	94	04	0	0		29.70	0.00	30	22	72	32	8	18		29.61	0.00	15	5	63	28	10	20
04		29.94	0.00	30	29	95	04	0	0		29.68	0.00	28	21	75	33	9	16		29.55	0.00	15	4	61	33	10	21
07		29.93	0.00	30	28	95	04	0	0		29.65	0.00	27	19	71	35	7	16		29.49	0.00	16	6	64	31	7	23
10		29.90	0.00	33	32	95	15	0	2		29.68	0.00	25	13	62	03	1	16		29.50	0.00	18	8	65	32	13	22
13		29.83	0.00	39	33	78	33	1	6		29.64	0.00	23	13	66	34	5	18		29.47	0.00	18	11	71	33	5	24
16		29.82	0.00	38	32	77	31	2	4		29.68	0.00	21	9	59	31	7	26		29.53	0.00	17	11	78	33	7	27
19		29.79	0.00	35	31	87	24	0	3		29.72	0.00	15	4	61	32	9	23		29.61	0.00	18	8	64	33	11	16
22		29.74	0.00	35	30	82	25	1	10		29.69	0.00	14	4	63	32	7	20		29.65	0.00	18	8	63	31	2	12
JAN 02																											
JAN 03																											
JAN 04																											
JAN 05																											
JAN 06																											
JAN 07																											
JAN 08																											
JAN 09																											
JAN 10																											
JAN 11																											
JAN 12																											
JAN 13																											
JAN 14																											
JAN 15																											
JAN 16																											
JAN 17																											
JAN 18																											

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.06	0.10	0.15	0.18	0.22	0.31	0.37	0.45	0.54	0.62	0.72	0.86
Ended: Date	25	25	25	25	25	25	25	25	25	25	25	25
Ended: Time	1130	1134	1139	1141	1146	1208	1223	1237	1256	1258	1141	1201

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

January 2010: Oakland, NJ

Hour	JAN 19									JAN 20									JAN 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	29.92	0.00	31	30	95	30	0	1	29.87	0.00	30	29	94	00	0	3	30.09	0.00	25	22	90	03	0	0			
04	29.91	0.00	29	28	96	30	0	0	29.88	0.00	26	25	95	01	0	1	30.14	0.00	22	20	93	03	0	1			
07	29.92	0.00	30	29	96	30	0	0	29.92	0.00	24	23	95	28	0	0	30.19	0.00	20	18	93	03	0	0			
10	29.92	0.00	34	33	96	29	0	1	29.94	0.00	36	27	71	29	4	13	30.25	0.00	32	26	80	19	0	2			
13	29.85	0.00	40	35	83	23	0	1	29.92	0.00	40	25	56	35	3	14	30.17	0.00	40	22	49	33	1	4			
16	29.84	0.00	39	37	90	23	0	0	29.96	0.00	37	25	61	31	1	9	30.15	0.00	40	22	47	28	0	2			
19	29.85	0.00	40	35	83	23	2	5	30.02	0.00	32	25	73	01	0	4	30.15	0.00	29	23	78	26	0	0			
22	29.87	0.00	33	31	91	17	0	2	30.06	0.00	31	25	79	33	0	7	30.16	0.00	25	22	85	26	0	0			
JAN 22									JAN 23									JAN 24									
01	30.06	0.00	26	22	85	12	0	1	30.12	0.00	29	21	71	05	1	7	30.24	0.00	20	17	87	20	0	1			
04	29.98	0.00	24	22	90	12	0	0	30.18	0.00	23	19	83	35	0	0	30.24	0.00	21	19	90	20	0	0			
07	29.97	0.00	22	20	91	12	0	0	30.25	0.00	23	19	86	04	1	4	30.23	0.00	24	21	85	06	0	1			
10	29.96	0.00	34	23	62	04	1	5	30.30	0.00	29	19	64	07	1	4	30.18	0.00	31	26	82	01	0	4			
13	29.89	0.00	40	19	41	33	5	12	30.23	0.00	38	20	47	01	1	5	30.09	0.00	33	30	89	04	1	4			
16	29.93	0.00	40	20	45	03	3	7	30.24	0.00	40	17	40	27	0	3	30.03	0.04	34	33	95	05	1	3			
19	30.01	0.00	34	20	57	05	0	2	30.29	0.00	27	20	74	20	0	0	29.99	0.00	36	35	96	05	0	3			
22	30.08	0.00	30	20	66	05	0	2	30.27	0.00	23	18	82	20	0	0	29.93	0.00	37	36	97	05	0	1			
JAN 25									JAN 26									JAN 27									
01	29.82	0.00	41	40	97	23	2	5	29.43	0.00	44	34	67	25	1	12	29.85	0.00	28	20	72	28	3	7			
04	29.71	0.00	50	50	97	19	6	20	29.48	0.00	39	32	75	27	1	5	29.91	0.00	30	18	60	22	3	17			
07	29.58	0.06	53	52	95	21	5	34	29.56	0.00	38	28	67	23	4	7	29.99	0.00	29	19	65	24	2	10			
10	29.43	0.24	54	53	94	18	9	28	29.61	0.00	40	26	58	28	7	16	30.05	0.00	35	22	58	25	2	13			
13	29.23	0.24	56	55	95	18	6	15	29.63	0.00	41	24	51	24	7	15	30.04	0.00	36	21	53	26	5	16			
16	29.19	0.00	57	55	92	20	1	9	29.68	0.00	40	22	49	24	10	20	30.07	0.00	36	19	50	29	2	18			
19	29.32	0.00	48	46	93	23	1	6	29.77	0.00	37	19	49	26	9	15	30.12	0.00	30	20	66	25	0	2			
22	29.40	0.00	48	40	75	26	4	13	29.82	0.00	31	20	64	18	1	2	30.14	0.00	31	19	61	21	2	7			
JAN 28									JAN 29									JAN 30									
01	30.13	0.00	31	18	58	24	5	10	30.17	0.00	17	-1	45	33	3	11	30.28	0.00	14	1	55	28	9	22			
04	30.11	0.00	26	19	74	23	0	0	30.21	0.00	15	1	52	33	4	13	30.29	0.00	13	0	56	33	2	10			
07	30.06	0.00	29	22	75	24	3	6	30.27	0.00	13	0	55	31	5	16	30.28	0.00	10	-3	54	35	1	6			
10	30.00	0.00	30	28	92	25	0	2	30.31	0.00	17	0	48	31	4	16	30.26	0.00	12	-4	47	34	1	11			
13	29.88	0.00	36	31	82	20	3	7	30.23	0.00	22	4	46	29	2	15	30.18	0.00	16	0	48	33	1	12			
16	29.84	0.00	38	27	66	26	7	21	30.24	0.00	20	1	42	32	8	22	30.13	0.00	19	1	45	02	2	5			
19	30.05	0.00	27	15	60	31	4	13	30.27	0.00	17	3	52	30	1	12	30.09	0.00	16	1	51	04	3	9			
22	30.14	0.00	19	1	46	33	4	14	30.29	0.00	15	2	55	29	1	16	30.04	0.00	16	1	52	02	2	11			
JAN 31																											
01	30.00	0.00	15	1	54	05	3	9																			
04	30.04	0.00	13	0	57	02	1	5																			
07	30.10	0.00	10	-0	64	02	0	1																			
10	30.13	0.00	18	0	46	34	1	5																			
13	30.08	0.00	27	4	37	27	4	10																			
16	30.06	0.00	29	6	36	24	2	7																			
19	30.09	0.00	23	7	51	24	0	1																			
22	30.09	0.00	20	8	60	22	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

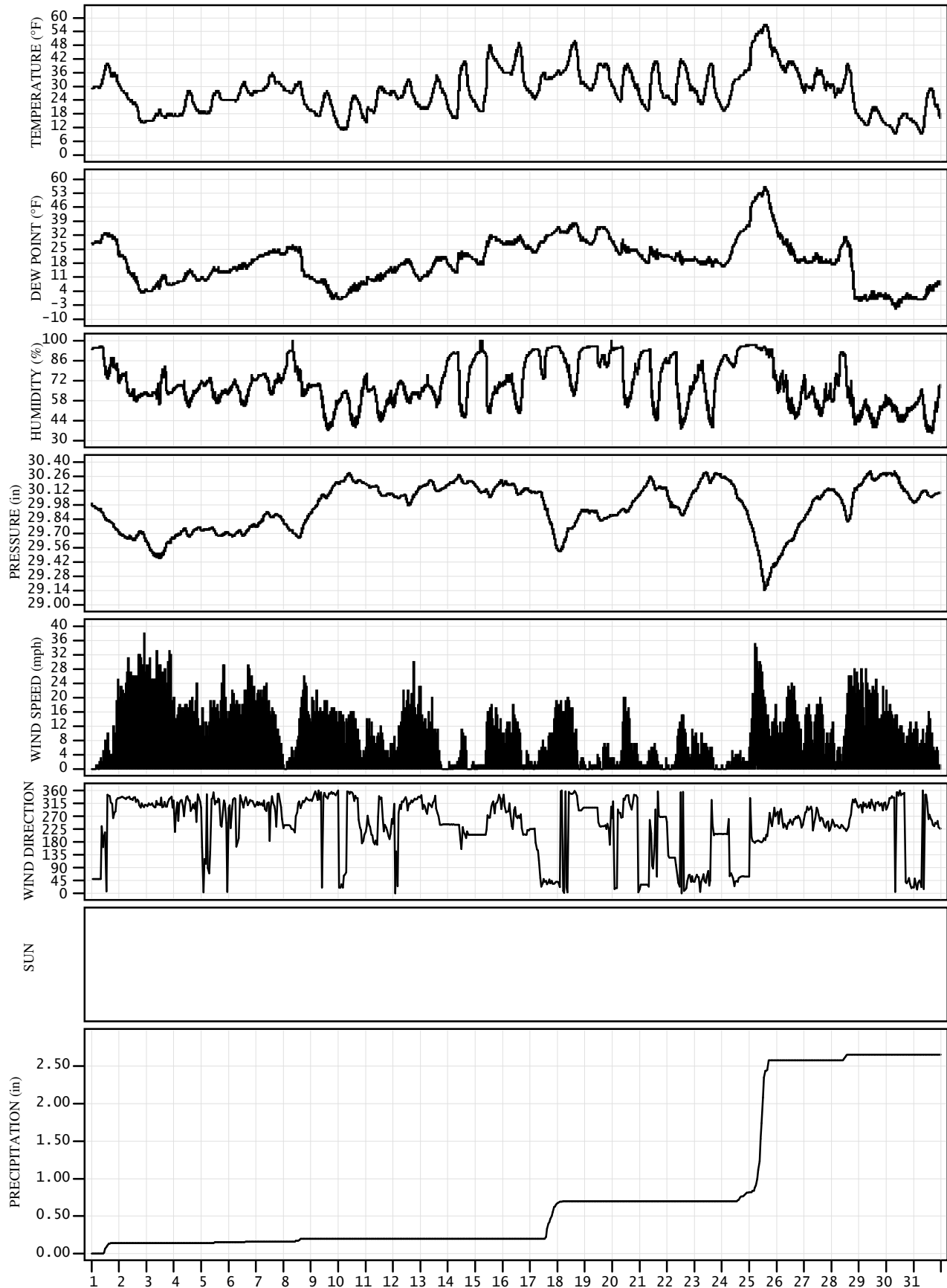
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.954	25	18	74	2.4	31	1.5
04		29.957	24	18	77	1.9	33	1.2
07		29.971	24	18	78	2.0	30	1.3
10		29.985	29	20	70	2.9	31	1.7
13		29.921	34	21	60	3.0	30	1.8
16		29.923	34	21	60	2.8	30	1.9
19		29.963	29	19	68	2.8	31	2.1
22		29.975	26	18	72	1.7	32	0.9

HOURLY PRECIPITATION (Water Equivalent) January 2010: Oakland, NJ

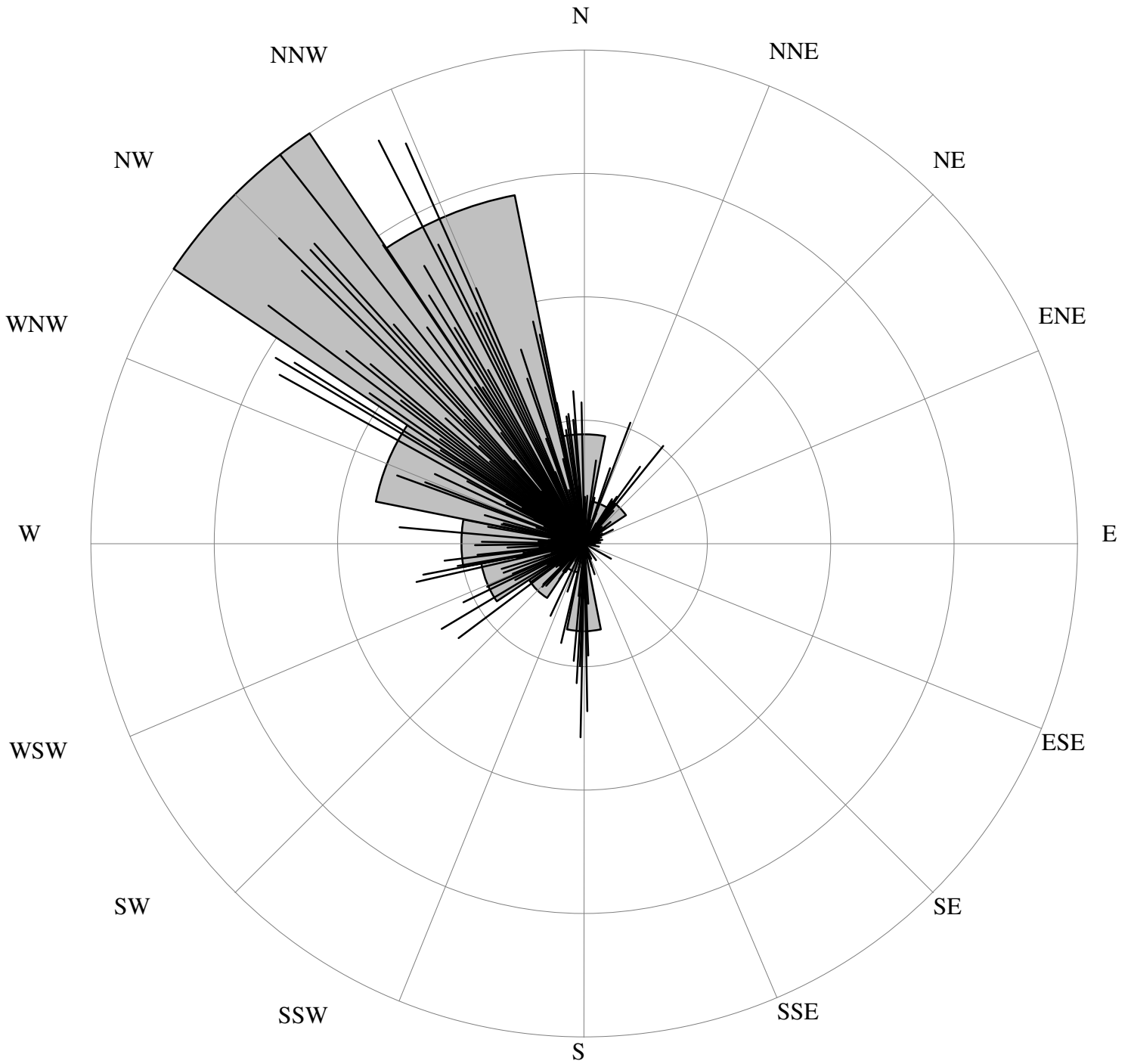
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date	
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12		
01											0.01	0.05	0.03	0.02	0.02		0.01								01	
02																										02
03																										03
04																										04
05												0.01														05
06															0.01											06
07																										07
08											0.01			0.01	0.02											08
09																										09
10																										10
11																										11
12																										12
13																										13
14																										14
15																										15
16																										16
17														0.02	0.11	0.07	0.02	0.04	0.04	0.05	0.07	0.01	0.02	0.02		17
18	0.01	0.01			0.01																					18
19																										19
20																										20
21																										21
22																										22
23																										23
24														0.01	0.01	0.03	0.01		0.01	0.01	0.02	0.01		0.01	24	
25			0.02		0.04	0.03	0.09	0.12	0.11	0.30	0.21	0.34	0.27	0.09	0.01	0.01	0.13								25	
26																										26
27																										27
28											0.02	0.02	0.02	0.01											28	
29																										29
30																										30
31																										31
Sum	0.01	0.01	0.02	0.00	0.05	0.03	0.09	0.12	0.11	0.30	0.25	0.42	0.32	0.16	0.17	0.11	0.17	0.04	0.05	0.06	0.09	0.02	0.02	0.03	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
January 2010: Oakland, NJ



Wind Rose: January 2010
Oakland, NJ



Maximum direction of wind: 44.8 miles from 322°
Maximum sector of wind: 541.3 miles from NW
1871.7 total miles of wind