Mexican data for July, 1898.

Stations.	Altitude.	Mean barometer.	Temperature. Max.	Temperature. Min.	Temperature. Mean.	Relative humidity.	Precipitation.	Prevailing direction. Wind.	Prevailing direction. Cloud.
	Feet.	*Inch.*	° *F.*	° *F.*	° *F.*	%	*Inch.*		
Durango (Seminario)	6,243	24.07	82.4	51.8	68.5	51	5.77	....	e
Leon (Guanajuato)..	5,934	24.32	84.4	55.4	67.1	66	9.41	ese.	e., ne.
Linares (New Leon)..	1,188	28.69	102.2	69.8	84.2	63	0.08	se.	se.
Magdalena (Sonora).	2,618	......	95.9	72.0	86.0	......	7.72	s.	n., ne.
Mexico (Obs. Cent.)..	7,472	23.09	76.5	52.5	61.5	68	4.88	nw.	ne.
Morelia (Seminario)..	6,401	23.99	78.8	52.2	64.2	74	6.75	ssw., sw.	e.
Oaxaca	5,164	25.09	88.0	53.1	69.6	72	4.44	nw.	e.
Saltillo	5,399	24.89	92.3	59.0	74.7	77	3.70	sw.	n.
Tuxpan (Vera Cruz).	....	30.19	96.8	70.2	82.4	79	2.93	e.	n., w.
Zacatecas	8,015	22.53	77.0	48.2	60.4	59	5.74	e.	e.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, a copy of the daily record at Honolulu is communicated to the Weather Bureau in advance of its official publication, and is herewith printed, as a special contribution, for the convenience of those who are studying the relations of the storms and weather of the United States to those of adjacent countries, with a view to long-range, seasonal predictions.

Meteorological observations at Honolulu.

JULY, 1898.

July, 1898.	Pressure at sea level. 7 a. m.	Pressure at sea level. 3 p. m.	Pressure at sea level. 9 p. m.	Temperature. 6 a. m.	Temperature. 2 p. m.	Temperature. 9 p. m.	Temperature. Maximum.	Temperature. Minimum.	Relative humidity. 7 a. m.	Relative humidity. 2 p. m.	Relative humidity. 9 p. m.	Wind. Direction.	Wind. Force.	Cloudiness.	Rain measured at 6 a. m.
1	30.02	29.98	30.04	68	82	76	83	66	74	62	74	nne.	2-0	2	0.07
2	30.05	30.04	30.08	74	84	78	85	69	67	64	75	e-ne.	3	3-8	0.00
3	30.10	30.05	30.12	75	80	75	81	75	67	63	78	ene-nne.	4	8	0.00
4	30.10	30.04	30.09	75	76	74	80	71	74	78	80	ne.	2	6	0.04
5	30.06	29.99	30.04	72	81	74	81	70	82	58	70	ene-n.	3-0	6-2	0.11
6	30.04	30.02	30.07	67	82	76	83	66	74	53	70	ne.	3	3	0.02
7	30.06	30.04	30.09	73	82	75	83	71	70	58	74	ene-ne.	3	2-5	0.03
8	30.09	30.06	30.09	72	81	74	82	71	74	61	78	ne.	2-4	6-3	0.12
9	30.09	30.08	30.08	73	82	76	82	70	70	62	70	ne.	3-1	4-2	0.16
10	30.08	30.03	30.08	72	81	76	82	71	80	61	68	nne.	2-4	5	0.04
11	30.06	30.01	30.06	73	79	74	82	71	70	68	74	nne.	3-4	5-7	0.03
12	30.08	30.04	30.11	73	81	76	81	72	82	61	70	ne.	3	5	0.04
13	30.11	30.07	30.10	74	80	76	81	72	74	64	70	ene.	5	5	0.19
14	30.10	30.05	30.10	74	75	77	79	72	81	82	63	nne.	5	6	0.10
15	30.07	30.01	30.03	75	80	75	81	74	70	57	70	nne.	5-3	4	0.03
16	30.02	29.96	30.00	74	80	76	83	72	72	64	74	ne.	3	3	0.02
17	30.03	29.98	30.03	74	80	77	81	73	82	68	72	ene.	4-5	4	0.08
18	30.04	29.99	30.05	74	81	74	82	74	70	58	78	ne.	4-3	3	0.03
19	30.04	29.98	30.04	72	82	75	83	69	82	58	76	ne.	3	2-6	0.11
20	30.03	29.98	30.02	72	81	77	83	71	82	61	71	ne.	3	5	0.05
21	30.04	29.99	30.04	72	84	76	85	71	77	61	80	ene-ne.	3	3	0.00
22	30.02	29.99	30.04	76	79	76	82	73	74	70	70	ene.	3-4	3-8	0.04
23	30.05	30.02	30.06	75	78	76	83	74	74	73	76	ne.	5	3	0.02
24	30.07	30.02	30.04	75	81	75	82	73	78	61	74	ne.	5-6	2	0.09
25	30.08	30.03	30.07	75	81	76	83	73	70	60	70	nne.	3-5	3	0.01
26	30.07	30.01	30.03	75	81	76	82	74	70	60	68	ene.	4-5	3-5	0.00
27	30.02	29.97	30.04	74	82	76	82	71	74	56	70	nne.	4	3	0.13
28	30.04	29.99	30.06	75	80	77	83	73	70	61	68	ne.	4	4	0.00
29	30.04	29.97	30.04	76	81	75	83	75	70	60	82	ne.	3-0	8-5-10	0.00
30	30.04	29.97	30.04	74	81	78	83	72	82	67	73	ne.	1-4	5-10	0.06
31	30.03	30.00	30.07	76	82	78	83	74	76	65	73	ne.	3-4	10-6-10	0.01
	30.06	30.01	30.06	73.5	80.6	75.8	82.2	71.7	72.6	63.0	72.9	....	3-4	4.8	1.63

The station is at 21° 18′ N., 157° 50′ W.; altitude 50 feet.

Pressure is corrected for temperature and reduced to sea level, but the gravity correction, —0.06, is still to be applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 10. Two directions of wind, or values of wind force, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours is given as measured at 6 a. m. on the respective dates.

The rain gauge, 8 inches in diameter, is 1 foot above ground. Thermometer, 8 feet above ground. Ground is 50 feet above sea level.

Monthly mean temperature (6 + 2 + 9) ÷ 3 is 76.6, and the normal mean is ——. The normal rainfall for July is ——.

OBSERVATIONS AT RIVAS, NICARAGUA.

The records contributed for many years by Dr. Earl Flint, at Rivas, Nicaragua, include barometric readings. His present station is at 11° 26′ N., 85° 47′ W. The observations at 7:17 a. m., local time are simultaneous with Greenwich 1 p. m. The altitude of his barometer is 36 meters above sea level, but uatil the barometer has been compared with a standard it seems hardly necessary to publish the daily readings. The wind force is recorded on the Beaufort scale, 0–12. When cloudiness is less than $\frac{1}{10}$, the letter "F," or "Few," is recorded.

His station is situated on the western shore of Lake Nicaragua, not far from the eastern end of the western division of the Nicaragua Canal. The volcano Ometepe, on an island in Lake Nicaragua, is about 10 miles northeast of his station. Mr. Flint's records occasionally mention the presence of clouds in the early morning on the summit of this mountain.

Observations at Rivas, Nicaragua, June, 1898.

OBSERVATIONS AT 7 A. M. LOCAL (8 A. M. EASTERN STANDARD) TIME.

Date.	Temperature. Air.	Temperature. Dew-point.	Wind. Direction.	Wind. Force.	Upper clouds. Kind.	Upper clouds. Amount.	Upper clouds. Direction from.	Lower clouds. Kind.	Lower clouds. Amount.	Lower clouds. Direction from.	Daily rainfall.
	°	°									
1	78	74	ne.	0	c.	1	sw.	ks.	1	ne.	0.00
2	75	73	nw.	0	cs.	3	sw.	....	.....	....	0.00
3	79	72	se.	0	cs.	1	se.	ks.	1	se.	0.00
4	78.5	72	se.	1	cs.	5	....	ks.	1	se.	0.00
5	79	75	ne.	0	ck.	1	ne.	....	.....	....	0.00
6	80	74	ne.	0	....	.....	....	ks.	10	ne.	0.00
7	78	74	ne.	0	....	.....	....	ks.	10	ne.	0.04
8	81	76	se.	0	....	.....	....	ks.	10	se.	0.13
9	81	76	se.	0	c².	10	se.	....	.....	....	0.15
10	80	76	se.	0	....	.....	....	ks.	10	se.	0.40
11	82	77	ne.	1	c.	Few	ne.	....	.....	....	0.00
12	79	74	se.	0	....	.....	....	ks.	5	se.	0.00
13	80	74	ne.	0	....	.....	....	ks.	10	ne.	0.16
14	79	72	se.	2	ck.	8	se.	ks.	8	se.	0.00
15	78	72	se.	1	ck.	10	sw.	....	.....	....	0.06
16	79.5	72	se.	1	cs; ck.	7	se.	....	.....	....	0.00
17	75.5	73	sw.	1	....	.....	....	n.	10	sw.	1.16
18	77	74	sw.	0	....	.....	....	ks.	10	se.	3.98
19	76	74	se.	0	ck.	10	se.	....	.....	....	1.26
20	77	73	se.	0	ck.	5	se.	....	.....	....	1.67
21	76	73	sw.	0	ck.	10	sw.	....	.....	....	0.00
22	74	72	sw.	0	ck.	10	sw.	....	.....	....	3.22
23	74	72	sw.	0	ck.	10	sw.	....	.....	....	0.40
24	75	74	s.	0	ck.	10	s.	....	.....	....	0.40
25	77	73	sw.	0	ck.	10	sw.	....	.....	....	0.30
26	76	74	se.	0	cs.	10	se.	....	.....	....	0.00
27	75.5	73	sw.	0	....	.....	....	n.	10	sw.	4.72
28	74	70	sw.	0	....	.....	....	n.	10	sw.	1.18
29	75	73	sw.	0	....	.....	....	ks.	10	....	0.00
30	77	73	nw.	0	cs.	10	....	ks.	10	....	0.00
Means	77.9	.....	.....	.....	....	.....	....	....	.....	....	18.95

OBSERVATIONS AT 8 P. M. LOCAL (9 P. M. EASTERN STANDARD) TIME.

Date.	Temperature. Air.	Temperature. Dew-point.	Wind. Direction.	Wind. Force.	Upper clouds. Kind.	Upper clouds. Amount.	Upper clouds. Direction from.	Lower clouds. Kind.	Lower clouds. Amount.	Lower clouds. Direction from.
	°	°								
1	79	73	se.	0	c.	3	se.	....	.....	....
2	79	75	se.	0	c.	2	se.	ks.	2	se.
3	82	74	se.	1	c.	5	se.	....	.....	....
4	81	76	se.	1	c.	3	se.	....	.....	....
5	84	77	e.	0	....	.....	....	ks.	8	e.
6	81	78	se.	0	....	.....	....	ks.	4	se.
7	82	77	se.	0	ck	2	se.	....	.....	....
8	80	77	se.	0	....	.....	....	ks.	10	se.
9	80	76	se.	1	....	.....	....	ks.	10	se.
10	81	78	n.	0	....	.....	....	ks.	10	n.
11	80	74	se.	0	....	.....	....	ks.	0	se.
12	80	76	se.	0	....	.....	....	ks¹	.....	se.
13	77	73	se.	2	ck¹.	.....	se.	....	.....	....
14	78	71	se.	2-3	ck.	10	se.	....	.....	....
15	79	72	se.	0	ck¹.	.....	se.	....	.....	....
16	81	78	se.	0	ck.	5	se.	....	.....	....
17	78	75	sw.	0	....	.....	....	ks.	10	sw.
18	78	78	sw.	0	....	.....	....	ks.	10	sw.
19	78	77	se.	0	....	.....	....	ks.	10	sw.
20	75	74	se.	0	....	.....	....	n.	10	se.
21	75	75	sw.	0	....	.....	....	n.	10	sw.
22	75	75	sw.	0	....	.....	....	n.	10	sw.
23	78	78	s.	0	....	.....	....	n.	10	sw.
24	76	73	s.	0	....	.....	....	n.	10	sw.
25	76	73	nw.	1	....	.....	....	n.	10	nw.
26	75	75	sw.	1	....	.....	....	n.	10	sw.
27	74	71	sw.	0	....	.....	....	n.	10	sw.
28	75	75	sw.	0	....	.....	....	n.	10	sw.
29	77	73	se.	0	....	.....	....	ks.	5	se.
30	77	73	se.	0	....	.....	....	n.	10	se.
Means	78.4	.....	.....	.....	....	.....	....	....	.....	....