OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made nearly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological observations at Honolulu.

APRIL, 1899.

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

Pressure is corrected for temperature and reduced to sea level, and the gravity correction, —0.06, has been 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 12, or Beaufort scale. Two directions of wind, or values of wind force or amounts of cloudiness, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours is now given as measured at 1 p. m. Greenwich time on the respective dates.

The rain gauge, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.	Temperature.		During twenty-four hours preceding 1 p. m., Greenwich time, or 2:30 a. m., Honolulu time, of the respective dates. ‖									
				Temperature.		Means.		Wind.				Sea-level pressures.	
		Dry bulb.	Wet bulb.	Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.	Total rainfall.	Average cloudiness.	Maximum.	Minimum.
	*	†	†			‡	‡		§				
1	30.00	72	63.5	80	72	62.0	62	ne.	3	0.00	3	30.13	30.03
2	29.98	69	64.5	81	71	60.7	62	ne.	3-1	0.00	2	30.06	29.96
3	29.98	70	64	80	67	62.3	70	ne.	3-1	0.01	2	30.04	29.96
4	29.96	71	65	81	68	62.3	66	ne.	2	0.04	4	30.03	29.96
5	29.96	72	65	79	68	63.7	72	ne-nne.	2-4	0.01	3	30.03	29.95
6	29.95	71	65	80	70	61.7	65	ne.	2-4	0.08	4	30.03	29.94
7	29.98	68	64	79	69	63.3	69	nne.	4	0.13	6	30.03	29.94
8	30.06	68	63	74	66	58.0	64	nne.	0-6	0.04	5-2	30.06	29.95
9	30.05	68	60	73	66	60.0	71	ne-n.	5-2	0.12	8	30.12	30.04
10	30.08	70	63	76	66	55.7	58	nne.	5	0.00	4	30.15	30.07
11	30.05	70	63.5	79	69	58.7	63	ne.	4	0.04	5	30.15	30.07
12	30.07	70	65	79	66	61.5	67	ne.	3	0.01	3	30.12	30.03
13	30.05	72	64	80	68	62.7	69	ne.	3	0.01	4	30.13	30.06
14	30.05	71	64	81	70	58.5	58	nne.	3	0.07	2	30.11	30.03
15	30.06	71	63.5	78	67	61.0	65	ne.	3-5	0.16	7	30.11	30.04
16	30.10	72	65	79	67	60.5	62	ne.	5	0.01	5	30.14	30.06
17	30.08	71	64.5	77	70	61.7	68	ne.	4	0.06	5	30.15	30.07
18	30.00	71	64	79	69	60.7	64	ne.	4-5	0.01	4	30.12	30.01
19	30.00	71	63.5	80	70	60.7	63	nne.	4	0.00	3	30.05	29.98
20	29.98	62	61	79	70	62.0	69	ne.	3	0.15	3-8	30.06	29.98
21	29.91	61	58.5	81	61	62.3	73	w.	1-0	0.00	2-6-0	30.03	29.95
22	29.89	63	61	79	59	60.0	74	w-s.	1-0	0.00	0-6	29.97	29.87
23	29.85	64	62	78	61	60.7	73	sw.	1-0	0.00	3	29.93	29.84
24	29.85	71	66	80	61	61.7	71	sw-s.	1-0	0.01	2	29.90	29.83
25	29.93	71	67	82	65	64.3	70	se.	1	0.06	8-3	29.98	29.88
26	29.98	69	67	82	69	66.0	74	nne-s.	3-0	0.00	6	30.03	29.95
27	29.98	72	68	81	66	66.5	75	se.	1-0	0.00	9	30.04	29.97
28	29.99	71	69	80	67	67.3	77	e-s.	1-3-0	0.05	8	30.05	29.95
29	30.00	69	66.5	79	67	66.7	76	se.	1-0	0.00	8	30.02	29.96
30	30.04	70	67	82	66	66.0	74	sw-e.	1	0.00	3-8	40.07	30.00
Sums	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.07	.....	.....	.....
Means.	29.995	69.3	64.2	79.3	67.0	62.0	68.1	.....	2.6	....	4.7	30.061	29.978
Departure	0.000	.....	.....	.....	.....	—1.3	—3.5	.....	.....	—1.94	.....	.....	.....

Mean temperature for April, 1899 (6+2+9)÷3=72.7°; normal is 72.8°. Mean pressure for April is 30.015; normal is 30.018.

*This pressure is as recorded at 1 p. m., Greenwich time. †These temperatures are observed at 6 a. m., local, or 4:30 p. m., Greenwich time. ‡These values are the means of (6+9+2+9)÷4. §Beaufort scale.

‖Possibly this record is for 9 a. m., Honolulu time.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of the Central Meteorologico-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the *Boletin Mensual*. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for April, 1899.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
	Feet.	Inch.	°F.	°F.	°F.	%	Inch.		
Colima	1,600	28.26	92.8	54.1	78.1	65	T.	sw.	sw.
Culiacán Rosales (E. d. S.)	112	29.73	93.2	53.6	77.9	54	.....	w.	n.
Durango (Seminario)	6,243	27.96	91.4	38.1	66.2	35	.....	sw.	w.
Leon (Guanajuato)	5,934	24.27	92.1	45.3	70.2	29	0.04	sw.	sw.
Linares (N. Leon)	1,188	28.67	102.2	50.0	74.3	59	1.97	sse.	sse.
Mexico (Obs. Cent.)	7,472	23.04	87.6	39.2	63.5	39	0.12	nw.	sw.
Morelia (Seminario)	6,401	23.95	86.9	46.6	65.8	48	T.	sw.	w.
Puebla (Col. Cat.)	7,112	23.33	84.2	39.2	66.0	60	0.38	e.	wsw.
Queretaro	6,070	24.18	94.6	43.2	67.6	39	0.18	e.	.....
S. Isidro (H. de Guanajuato)	.....	.....	82.4	62.6	.....	.....	T.	w.	.....
Siloa	6,063	24.25	87.4	52.9	71.2	45	T.	sw.	w.
Tuxpan	19	30.03	105.4	54.0	77.9	42	0.79	e.	s.
Zapotlan (Seminario)	5,078	25.09	87.6	45.1	70.7	61	0.01	so.	w.

LONG-RANGE WEATHER FORECASTING IN CANADA.

By JAMES GUN, Durham, Ontario, Canada.

In the concluding portion of a very interesting article on Recent Science in the March number of the Nineteenth Century, Prince Kropotkin asks the question, whether it is possible to foretell the weather several days, or maybe weeks, in advance. Popular wisdom, he adds, has always said yes to this question, and remarks, that—

> When the Greeks say that the autumn and winter months are months of gales, or the Northwest Canadians predict a spell of warm and dry weather after a snowstorm of short duration has blown early in autumn, or the Russian peasants remark that, when the first snow has fallen upon an already frozen ground, the snow will lie late in the spring, that the spring will be cool, there is scientific observation in such prophecies, and that recent researches have decided in favor of these practical observers.

I take the liberty of bringing before your readers another weather period. The opinion of the early Canadian settlers, and one that would seem to deserve further investigation, was that the general direction of the wind at the equinoxes (in consequence the general state of the weather as to heat and moisture, cloud and sunshine, etc.) indicated the general condition of the weather during the following three months, respectively.

As a contribution to the elucidation of what modicum of truth there may be in this method of forecasting the weather by the Canadian voyageurs, I have tabulated below, the direction of the wind at the equinoxes from 1895 downward, and the number of days following such equinox, during which the wind blew in the same general direction. Temperature and precipitation might be given also, but at this time I will refrain from troubling your readers with any further details.

Equinoxes.		No. of days the same wind prevailed during the next three months.
Date.	Direction of wind.	
1895.		
March 21	se.	50
Sept. 22	sw.	65
1896		
March 21	nw.	27
Sept. 22	n.	23
1897.		
March 21	ne.	45
Sept. 22	se.	34
1898.		
March 21	se.	50
Sept. 22	sw.	58

NOTE.—The figures given in this table seem to show that during ninety days following the March equinox the prevailing wind was that required by the rule on 172 out of 360 oc-