TABLE VI.—*Heights of rivers referred to zeros of gages*—Continued.

Stations.	Distance to mouth of river.	Flood stage on gage.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Tar River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Tarboro, N. C	46	25	6.4	18, 19	1.6	4	3.6	4.8
Greenville, N. C.	21	22	8.5	25	3.3	4	5.3	5.2
Haw River.								
Moncure, N. C.	171	25	14.7	23	8.2	1	9.2	6.5
Cape Fear River.								
Fayetteville, N. C.	112	38	27.7	24	3.9	3	10.0	23.8
Waccamaw River.								
Conway, S. C.	40	7	5.8	31	2.5	18	3.8	3.3
Pedee River.								
Cheraw, S C	149	27	19.2	24	2.9	18	8.0	16.3
Smiths Mills, S. C.	51	16	13.5	31	8.0	23	10.5	5.5
Lynch Creek.								
Effingham, S. C.	35	12	9.4	26	5.3	3, 4	7.2	4.1
Black River.								
Kingstree, S. C.	45	12	9.9	31	6.0	14–16	7.4	3.9
Catawba-Wateree River.								
Mount Holly, N. C.	143	15	3.6	16	1.6	3–6	2.5	2.0
Catawba, S. C	107	11	6.4	23	1.9	15	3.7	4.5
Camden, S. C.	54	24	18.1	20	5.1	16	11.4	13.0
Broad River.								
Blairs, S. C	36	14	5.6	26	0.7	17	2.6	4.9
Saluda River.								
Pelzer, S. C.	109	7	5.2	18, 20	3.0	14	4.1	2.2
Chappels, S. C.	56	14	11.1	9	2.4	1	6.4	8.7
Congaree River.								
Columbia, S. C	52	15	5.9	20	1.3	8	2.8	4.6
Santee River.								
Rimini, S. C	108	10	13.0	29	7.0	17	11.1	6.0
St. Stephens, S. C.	50	10	8.8	31	7.5	19, 20	8.1	1.3
Edisto River.								
Edisto, S. C.	75	6	5.2	10	3.6	17	4.3	1.6
Broad River.								
Carlton, Ga.	30	11	7.9	17	2.4	1, 2	4.3	5.5
Savannah River.								
Calhoun Falls, S. C.	347	15	9.0	9, 16	2.9	1	4.8	6.1
Augusta, Ga.	268	32	21.1	17	7.6	1	13.3	13.5
Oconee River.								
Milledgeville, Ga.	147	25	12.0	19	3.1	7	6.2	8.9
Dublin, Ga	79	30	10.2	23	0.9	2, 3	5.5	9.3
Ocmulgee River.								
Macon, Ga.	203	18	10.5	20	2.3	8	5.2	8.2
Abbeville, Ga.	96	11	8.7	30	2.8	10	5.4	5.9
Flint River.								
Woodbury, Ga.	227	10	3.6	12	0.2	1	1.5	3.4
Montezuma, Ga.	152	20	10.0	26	3.0	1, 2	6.1	7.0
Albany, Ga.	90	20	8.4	19	1.9	2	5.5	6.5
Bainbridge, Ga.	29	22	11.6	20	5.7	4	8.5	5.9
Chattahoochee River.								
Oakdale, Ga	305	18	12.5	19	2.0	5	5.8	10.5
West Point, Ga	239	20	8.6	20	2.5	1, 3	4.9	6.1
Eufaula, Ala	90	40	14.0	21	2.2	3	7.0	11.8
Alaga, Ala.	30	25	16.3	17	4.0	8	10.2	12.3
Coosa River.								
Rome, Ga.	266	30	16.7	19	2.0	12–14	5.6	14.7
Gadsden, Ala.	162	22	17.9	20	2.0	14	7.0	15.9
Lock No. 4, Ala.	113	17	14.9	19	1.7	3, 4	6.1	13.2
Wetumpka, Ala	12	45	27.0	21	5.0	3, 7	13.4	22.0
Tallapoosa River.								
Milstead, Ala.	42	35	18.5	16	2.0	2	7.3	16.5
Alabama River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Montgomery, Ala.	323	35	23.8	21	2.8	3	10.7	21.0
Selma, Ala	246	35	25.6	22	3.3	4	12.5	22.3
Black Warrior River.								
Tuscaloosa, Ala.	90	43	26.8	19	4.8	7, 9	11.2	22.0
Tombigbee River.								
Columbus, Miss	316	33	4.0	19	— 3.0	1, 9–13	—1.3	7.0
Vienna, Ala.	246	42	8.2	20	0.7	13	2.7	7.5
Demopolis, Ala.	168	35	21.3	21	— 1.8	11	6.3	23.1
Pascagoula River.								
Merrill, Miss.	78	20	8.6	24, 25	2.2	8	5.4	6.4
Pearl River.								
Columbia, Miss.	110	14	7.2	21	3.6	7–9	4.3	3.6
Sabine River.								
Logansport, La.	315	25	16.0	31	4.2	11	6.3	11.8
Neches River.								
Rockland, Tex	105	20	8.8	29	1.4	11	3.6	7.4
Beaumont, Tex.	18	10	1.6	2, 20, 30	1.0	8	1.4	0.6
Trinity River.								
Dallas, Tex.	320	25	26.4	31	4.7	6–9	11.5	21.7
Long Lake, Tex.	211	35	19.8	24	4.8	11	11.4	15.0
Riverside, Tex.	112	40	9.8	26	2.2	11	5.9	7.6
Liberty, Tex	20	25	11.5	29	6.5	12	9.0	5.0
Brazos River.								
Kopperl, Tex.	345	21	4.0	22	0.8	10, 11	1.9	3.2
Waco, Tex.	285	24	10.4	23	3.2	11	5.6	7.2
Valley Junction, Tex.	215	40	10.9	21	3.4	8	6.6	7.5
Hempstead, Tex	140	40	13.6	23	4.2	5	7.3	9.4
Booth, Tex	61	39	8.7	13	4.2	28–31	6.0	4.5
Colorado River.								
Ballinger, Tex.	489	21	9.0	16	1.8	1–8, 15, 21–23, 25–28, 31	2.4	7.2
Austin, Tex.	214	18	5.8	19, 20, 22	2.5	3	4.4	3.3
Columbus, Tex.	98	24	15.2	18	7.2	12–14	9.6	8.0
Guadalupe River.								
Gonzales, Tex.	112	22	2.4	18	0.2	1–6	0.5	2.2
Victoria, Tex	35	16	3.3	20	0.9	16	1.5	2.4
Rio Grande River.								
San Marcial, N. Mex.	1,233	14	8.9	20	7.9	2, 28, 29	8.3	1.0
El Paso, Tex.	1,030	14	8.8	19	7.2	31	8.2	1.6
Red River of the North.								
Moorhead, Minn	284	26	12.7	5–7	10.9	26–31	11.7	1.8
Kootenai River.								
Bonners Ferry, Idaho	123	24	15.4	1	7.9	31	12.4	7.5
Pend d'Oreille River.								
Newport, Wash.	86	14	6.2	1–3	2.3	31	4.5	3.9
Snake River.								
Lewiston, Idaho	144	24	7.6	1	2.0	26–31	4.0	5.6
Riparia, Wash.	67	30	7.5	1	2.2	31	4.5	5.3
Columbia River.								
Wenatchee, Wash	473	40	27.0	14–16	22.3	31	24.6	4.7
Umatilla, Oreg.	270	25	12.5	14	9.9	31	11.6	2.6
The Dalles, Oreg.	166	40	19.1	15	14.4	31	17.7	4.7
Willamette River.								
Albany, Oreg.	118	20	3.0	1	1.4	28–31	1.9	1.6
Salem, Oreg	84	20	1.7	1	0.0	28–31	0.5	1.7
Portland, Oreg.	12	15	10.3	6, 7	7.5	31	9.4	2.8
Sacramento River.								
Red Bluff, Cal.	201	28	3.3	6	1.4	30, 31	2.2	1.9
Sacramento, Cal.	64	25	20.5	1, 2	11.7	31	16.3	8.8

(a) 1 day missing.

CLIMATOLOGICAL DATA FOR COSTA RICA.

Communicated by Señor Anastasio Alfaro, director of the Physico-Geographic Institute of San Jose.

APRIL, 1906.

SAN JOSE.

[Altitude, 3835 feet. $\phi = 9^\circ 56' 1.3''$ N. $\lambda = 84^\circ 4' 10.75''$ W. of Greenwich.]

Temperature:	°F.
Mean	68.4
Average of daily maxima	81.9
Average of daily minima	62.2
Highest temperature of the month	87.6
Lowest temperature of the month	58.8
Pressure:	*Inches.*
Mean, corrected for temperature and instrumental error	26.22
Maximum, corrected for temperature and instrumental error	....
Minimum, corrected for temperature and instrumental error	26.07
Mean reduced to standard weight	26.15
Mean reduced to sea level	30.02
Relative humidity:	*Per cent.*
Mean	75.6
Maximum	100.0
Minimum	29.0
Miscellaneous data:	
Rain, inches	4.23
Duration, hours	25 84
Evaporation, for the whole month, inches	....
Maximum	....
Minimum	....
Hours of sunshine	149.73
Average velocity of wind (feet per second)	2 8
Earthquakes, number	7
Average intensity of earthquakes (Rossi-Forel scale)	I

COSTA RICAN RAINFALL STATIONS.

	Inches.
San Juan de Dios de Desamparados	2.79
Santiago	5.94
Puntarenas	2.33
Tuis	14.20
Peralta	22.41
Cañas	1.49
Las Lomas	24.60
Swamp Mouth	2.34
San Carlos	12.81
Nuestro Amo	4.34
Siquirres	1.99
Tres Rios	2.20
Cartago	2.80

Honolulu, T. H., latitude 21° 19′ north, longitude 157° 52′ west; barometer above sea, 38 feet; gravity correction, —0.057 inch, applied. July, 1906.

Day.	Pressure.*		Air temperature.				Moisture.				Wind.				Precipitation.		Clouds.					
							8 a. m.		8 p. m.		8 a. m.		8 p. m.				8 a. m.			8 p. m.		
	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Maximum.	Minimum.	Wet.	Relative humidity.	Wet.	Relative humidity.	Direction.	Velocity.	Direction.	Velocity.	8 a. m.	8 p. m.	Amount.	Kind.	Direction.	Amount.	Kind.	Direction.
1	30.01	30.01	77.6	76.0	82	73	68.4	62	67.5	64	ne.	7	ne.	7	0.00	0.00	6	Cu.	e.	6	Cu.	e.
2	30.04	30.02	77.5	76.2	83	71	69.0	65	68.7	68	ne.	6	ne.	8	T.	T.	1 3	Ci.-s. Cu.	0 e.	3 5	A.-s. Cu.	0 e.
3	30.03	30.01	76.0	75.5	82	71	69.7	73	69.0	72	e.	2	ne.	8	0.01	T.	1 6	Ci.-s. Cu.	0 e.	8 2	Ci.-s. Cu.	0 e.
4	30.01	30.00	77.0	75.5	81	71	69.5	69	68.5	70	e.	4	ne.	5	0.11	0.02	8	Cu.	e.	7 2	A.-s. Cu.	0 e.
5	29.99	30.00	77.0	74.0	82	71	68.5	65	69.0	78	ne.	8	e.	7	0.00	0.03	3 4	Ci. Cu.	sw. e.	2 5	A.-s. Cu.	0 e.
6	30.02	30.01	78.0	77.0	82	69	69.0	63	68.0	63	e.	8	e.	15	0.06	T.	1 4	Ci.-cu. Cu.	0 e.	1 1	Ci.-cu. Cu.	sw. ne.
7	30.01	29.98	79.0	76.5	82	72	69.4	62	68.0	64	e.	5	ne.	10	0.04	T.	3	Cu.	e.	1	S.	e.
8	30.03	30.02	75.0	76.6	82	72	69.0	74	69.0	68	e.	6	ne.	10	0.02	T.	7	Cu.	e.	few.	Cu.	e.
9	30.03	30.02	79.2	75.7	84	74	71.7	69	70.2	76	ne.	4	ne.	3	0.00	0.07	3	Cu.	e.	2 1	S. N.	e. e.
10	30.01	30.00	79.0	77.0	83	73	70.0	64	69.0	67	e.	5	ne.	6	T.	0.00	2	Cu.	e.	few.	S.	e.
11	30.04	30.02	73.5	78.0	83	69	68.0	76	69.0	63	ne.	5	ne.	12	0.08	T.	2 5	Cu. N.	e. e.	few.	S.	e.
12	30.06	30.01	77.5	76.3	81	69	69.0	65	70.0	73	ne.	12	e.	12	0.01	0.28	4	Cu.	e.	1	S.	e.
13	30.03	29.99	78.0	76.2	81	69	68.0	60	69.2	70	ne.	14	e.	21	0.54	0.02	1 5	Ci.-s. Cu.	0 e.	2	S.	e.
14	29.97	29.97	78.0	77.1	83	75	69.4	65	69.1	67	ne.	5	e.	8	0.02	0.00	4	Cu.	e.	2	Cu.	e.
15	30.00	29.99	76.5	76.0	84	72	70.0	72	71.0	78	e.	10	ne.	9	T.	T.	5 3	Cu. N.	e. e.	2 1	Cu. N.	e. e.
16	30.02	29.98	76.0	76.0	82	71	69.0	70	69.0	70	e.	4	e.	8	0.07	0.02	2 2	Cu. N.	e. e.	1 1	S. Cu.-n.	e. e.
17	29.97	29.96	77.5	77.0	82	71	68.4	63	68.5	65	e.	7	ne.	6	0.02	0.00	3	Cu.	e.	1	S.	e.
18	30.01	29.97	79.0	79.0	84	75	70.0	64	72.5	73	ne.	6	ne.	10	0.00	T.	3	Cu.	e.	9 1	S. N.	ne. ne.
19	30.02	30.06	80.5	78.0	84	76	73.0	70	70.0	67	e.	12	e.	6	T.	0.00	2 4	Ci. Cu.	0 e.	1	Cu.	e.
20	30.08	30.06	79.0	77.4	84	76	69.0	60	69.0	65	ne.	14	ne.	12	0.00	0.00	4	Cu.	e.	2 1	Cu. S.	e. ne.
21	30.02	29.93	79.0	76.0	84	75	69.0	60	69.0	70	ne.	6	ne.	15	0.00	0.00	1 4	Ci. Cu.	0 e.	0	0	0
22	29.95	29.91	79.0	75.2	83	71	69.0	60	69.2	74	ne.	3	ne.	9	0.00	0.00	3	Cu.	e.	0	0	0
23	29.96	29.97	79.2	75.0	84	72	69.0	59	70.0	78	ne.	1	ne.	10	0.00	0.00	1	Cu.	e.	0	0	0
24	30.00	30.00	80.0	78.5	85	73	72.5	70	71.0	69	w.	2	ne.	9	0.00	0.00	4	Cu.	e.	0	0	0
25	30.02	30.04	80.5	78.0	85	76	70.0	59	70.3	68	e.	4	ne.	14	0.00	T.	5 1	Ci.-cu. Cu.	s. e.	9	Cu.	e.
26	30.02	30.02	80.0	78.0	84	75	70.0	61	69.0	63	ne.	3	ne.	8	0.00	0.00	1	Cu.	e.	3	Cu.	ne.
27	30.03	30.00	77.0	77.0	84	75	68.5	65	67.5	61	ne.	8	ne.	8	T.	0.00	7	Cu.	e.	3	Cu.	e.
28	30.05	30.07	79.0	77.0	84	74	69.4	62	69.0	67	ne.	8	ne.	8	0.00	0.00	2	Cu.	e.	3	Cu.	ne.
29	30.07	30.06	78.0	77.0	84	74	69.0	63	69.0	67	ne.	2	ne.	14	0.00	0.00	5	Cu.	e.	5	Cu.	e.
30	30.05	30.00	80.0	77.0	84	74	69.0	57	69.0	67	ne.	4	ne.	12	0.00	0.00	4	Cu.	e.	few.	Cu.	e.
31	30.02	30.01	81.0	78.2	85	74	72.0	64	71.2	71	ne.	6	ne.	5	0.00	0.00	1	Cu.	e.	1	Cu.	ne.
Mean	30.018	30.003	78.2	76.7	83.1	72.7	69.5	64.9	69.3	68.9	ne.	6.2	ne.	9.5	0.98	0.44	4.5	Cu.	e.	3.1	Cu.	e.

Observations are made at 8 a. m. and 8 p. m., local standard time, which is that of 157° 30′ west, and is 5h and 30m slower than 75th meridian time. * Pressure values are reduced to sea level and standard gravity.

RAINFALL IN JAMAICA.

Through the kindness of Dr. H. H. Cousins, chemist to the government of Jamaica and now in charge of the meteorological service of that island, we have received the following table.

The rainfall for July was therefore below the average for the whole island. The greatest fall, 15.18 inches, occurred at Bluefields in the southern division; while no rain fell at Ocho Rios in the northern division, also at Plumb Point L. H., Old Harbor and Alligator Pond in the southern division.

Comparative table of rainfall.

[Based upon the average stations only.]

JULY, 1906.

Divisions.	Relative area.	Number of stations.	Rainfall. 1906.	Rainfall. Average.
	Per cent.		*Inches.*	*Inches.*
Northeastern division	25	24	4.41	7.28
Northern division	22	51	2.06	3.23
West-central division	26	22	7.01	7.63
Southern division	27	34	3.28	4.02
Means	100		4.19	5.54