QC
986
.P22
M66
1918-1970
(Incomp)

Incomplete file. Library lacks:

1918: every month except October
1919: " " " January
1920-21
1922: every month except August
1923-30
1931: March, May
1933
~~1934: January~~
1937
1938: Jan-Feb., Apr.-July, Sept., Dec.
1939: Feb.-Nov.
1944: Dec.
1946: Oct.
1947: ~~June~~
1948: Oct.-Dec.
1949-
1950-1953
1954: Jan.-Aug. + Dec.

LIBRARY
JAN 17 1955
WEATHER BUREAU

LIBRARY
N.O.A.A.
U.S. Dept. of Commerce

National Oceanic and Atmospheric Administration

Climate Database Modernization Program

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages
Faded or light ink
Binding intrudes into the text

This document has been imaged through the NOAA Climate Database Modernization Program. To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or www.reference@nodc.noaa.gov.

LASON
Imaging Subcontractor
12200 Kiln Court
Beltsville, MD 20704-1387
March 28, 2002

MR 58784

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone.; Month October 1918. 191

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (INCHES)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER	CHARACTER OF DAY
	MAX.	MIN.	MEAN				
1	81	72	76	.[illegible]276	2.68	83.6	Cloudy
2	85	74	80	.137	220	82.7	Cloudy
3	85	75	80	.138	.46	83.9	PtCldy
4	82	74	78	.118	1.15	83.5	Cloudy
5	85	74	80	.119	0	82.2	Cloudy
6	84	76	80	.157	.64	82.8	Cloudy
7	84	76	80	.079	.78	83.8	PtCldy
8	85	77	81	.079	.85	83.7	Cloudy
9	86	75	80	.090	.54	84.2	Cloudy
10	84	75	80	.146	.08	82.8	Cloudy
11	85	76	80	.118	.08	83.4	Cloudy
12	86	73	80	.059	1.68	84.3	Cloudy
13	85	74	80	.075	.64	83.8	Cloudy
14	79	72	75	.114	.56	82.2	Cloudy
15	82	73	78	.087	1.85	80.9	Cloudy
16	82	73	78	.071	2.31	80.8	Cloudy
17	79	75	77	.086	5.47	79.7	Cloudy
18	82	74	78	.040	1.70	79.6	Cloudy
19	82	73	78	.039	2.08	79.5	Cloudy
20	81	76	78	.080	.44	78.8	Cloudy
21	83	74	78	.039	1.75	80.6	Cloudy
22	86	75	80	.079	.03	81.0	Cloudy
23	89	75	82	.075	T	82.5	PtCldy
24	85	76	80	.122	.22	82.4	Cloudy
25	84	76	80	.106	.05	82.3	Cloudy
26	86	75	80	.083	0	81.7	Cloudy
27	87	74	80	.126	.81	81.9	Cloudy
28	86	74	80	.098	.02	82.6	Cloudy
29	87	74	80	.150	0	82.2	PtCldy
30	89	75	82	.146	0	82.4	Clear
31	86	76	81	.177	0	83.3	PtCldy
	2612	2311	2460	3.309	27.07	- -	
MEAN	84.3	74.5	79.4	.107	- -	82.2	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

Mean 29.832 ; highest 29.890 date 2"

Lowest 29.769 date 13"

TEMPERATURE

Highest 89 date 23" ; lowest 72 date 1"

Greatest daily range 14 date 30"

Mean for this month in:

1906		1910	79	1914	80	1918	79	
1907	79	1911	79	1915	81	1919		
1908	79	1912	79	1916	80	1920		
1909	79	1913	80	1917	79	1921		

Mean of this month for 12 years 79

Absolute maximum for this month for 12 years 91

Absolute minimum for this month for 12 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of ..... years

EVAPORATION

Total this month 3.309 inches

Average daily .107 inches

PRECIPITATION

Total this month 27.07

Greatest precipitation in 24 hours 7.56 date 16-17

Total precipitation this month in:

1885	7.99	1894	12.40	1903	10.04	1912	17.65	
1886	14.33	1895	16.46	1904	8.14	1913	18.63	
1887	19.51	1896	13.98	1905	13.45	1914	22.16	
1888	- -	1897	5.83	1906	13.34	1915	21.96	
1889	- -	1898	11.38	1907	21.99	1916	17.59	
1890	21.77	1899	15.09	1908	10.96	1917	7.87	
1891	17.48	1900	16.33	1909	19.31	1918	27.07	
1892	6.69	1901	12.65	1910	15.65	1919		
1893	12.28	1902	14.24	1911	16.53	1920		

Average of this month for 49 years 14.89

Total from January 1, 19 18 to date 109.14

Average from January 1, to date 96.01

Excess (+) or deficiency (—) from January 1, 19 18 to date as compared with average of corresponding period + 13.13

WIND

Prevailing direction West

Total movement 5576 miles

Average hourly velocity 7.6 miles per hour

Maximum velocity (for five minutes) 36 miles per hour from East on 1st

WEATHER

Number of clear days 1

Number of partly cloudy days 5

Number of cloudy days 25

Days on which .01 inch or more, of rain occurred 25

MISCELLANEOUS PHENOMENA

(DATES OF)

Auroras None

Halos: Solar None observed.

Halos: Lunar None observed.

Fogs: Light None observed.

Fogs: Dense None.

Thunderstorms 1-4,6-8,12-23,incl,25,27,31.

Earthquakes None observed.

Tidal Waves None.

87373

4066

THE PANAMA CANAL

MR 58784

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone. ; Month January 1919. 191

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	Evaporation (inches)	Precipitation (inches)	Temperature of Sea Water	Character of Day
83	77	80	.196	.06	80.3	PtCldy
83	75	79	.177	.14	80.0	PtCldy
83	74	78	.110	T	81.2	PtCldy
83	75	79	.166	.17	81.5	PtCldy
81	77	79	.216	.01	81.0	PtCldy
83	77	80	.216	.03	80.9	PtCldy
83	78	80	.217	.02	80.3	PtCldy
84	77	80	.208	.01	80.0	PtCldy
83	78	80	.185	.01	80.0	Cloudy
82	76	79	.178	.12	80.0	Cloudy
82	74	78	.157	.56	80.0	Cloudy
81	74	78	.118	.15	79.8	Cloudy
82	75	78	.079	.13	79.3	Cloudy
82	77	80	.130	0	79.5	PtCldy
83	75	79	.185	.03	79.4	PtCldy
83	77	80	.197	.06	80.2	PtCldy
83	77	80	.138	T	80.5	Cloudy
82	76	79	.114	.04	80.8	PtCldy
82	78	80	.197	0	80.5	PtCldy
81	76	78	.154	0	81.0	PtCldy
83	78	80	.185	0	81.5	Clear
83	76	80	.220	0	81.5	PtCldy
83	78	80	.134	.02	81.9	Clear
82	78	80	.221	.03	81.7	PtCldy
82	79	80	.236	0	81.2	PtCldy
83	78	80	.256	T	81.0	Cloudy
83	78	80	.177b	.01	81.2	PtCldy
82	78	80	.217	T	81.0	PtCldy
80	75	78	.197	.20	80.2	Cloudy
83	79	81	.126	T	79.8	Clear
83	78	80	.189	.02	80.0	PtCldy
2556	2377	2463	5.476	1.82	- - -	
82.5	76.7	79.5	.177	- - -	80.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL, INCHES)

Mean 29.860; highest 30.010 date 5th

Lowest 29.730 date 31st

TEMPERATURE

Highest 84 date 8th; lowest 74 date 12th

Greatest daily range 9 date 5th

Mean for this month in:

1906		1910	78	1914	81	1918	78
1907		1911	78	1915	82	1919	80
1908	80	1912	82	1916	81	1920	
1909	77	1913	81	1917	79	1921	

Mean of this month for 12 years 80

Absolute maximum for this month for 12 years 88

Absolute minimum for this month for 12 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of years

EVAPORATION

Total this month 5.476 inches

Average daily .177 inches

PRECIPITATION

Total this month 1.82

Greatest precipitation in 24 hours .68 date 11-12

Total precipitation this month in:

1885	.87	1894	5.35	1903	1.00	1912	.28
1886	2.13	1895	3.86	1904	7.02	1913	6.71
1887	2.01	1896	4.02	1905	8.42	1914	1.35
1888	- -	1897	3.42	1906	1.47	1915	3.41
1889	.63	1898	5.04	1907	2.47	1916	2.33
1890	7.24	1899	6.93	1908	3.84	1917	1.10
1891	2.52	1900	6.06	1909	10.51	1918	3.28
1892	.98	1901	1.28	1910	2.94	1919	1.82
1893	1.73	1902	19.20	1911	.99	1920	

Average of this month for 49 years 3.81

Total from January 1, 19 19 to date 1.82

Average from January 1, to date 3.81

Excess (+) or deficiency (—) from January 1, 19 19 to date as compared with average of corresponding period -1.99

WIND

Prevailing direction North

Total movement 11359 miles

Average hourly velocity 15.3 miles per hour

Maximum velocity (for five minutes) 32 miles per hour from North on 12th

WEATHER

Number of clear days 3

Number of partly cloudy days 20

Number of cloudy days 8

Days on which .01 inch, or more, of rain occurred 20

MISCELLANEOUS PHENOMENA

(DATES OF)

Auroras None.

Halos: Solar None observed.

Halos: Lunar None observed.

Fogs: Light None observed.

Fogs: Dense None.

Thunderstorms None observed.

Earthquakes None observed.

Tidal Waves None.

066-2

THE PANAMA CANAL

MR 77936

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C.Z. ; Month August, 1922

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	Evaporation (inches)	Precipitation (inches)	Temperature of Sea Water	Character of Day
88	80	84		0	83	Pt.Cldy.
88	79	84		0	82	Pt.Cldy.
88	76	82		.17	82	Cloudy
83	76	80		.02	81	Cloudy
88	77	82		.08	81	Pt.Cldy.
89	80	84		0	82	Clear
90	79	84		0	82	Cloudy
85	76	80		.05	83	Cloudy
86	78	82		.02	84	Cloudy
84	76	80		.76	83	Cloudy
86	75	80		.34	82	Cloudy
86	78	82		.07	82	Cloudy
84	77	80		.26	82	Cloudy
85	75	80		2.87	82	Cloudy
87	75	81		.93	81	Cloudy
87	76	82		T	82	Cloudy
87	75	81		0	83	Pt.Cldy.
86	75	80		.10	83	Cloudy
86	74	80		3.53	83	Pt.Cldy.
86	77	82		.54	84	Pt.Cldy.
85	79	82		.04	83	Cloudy
89	74	82		3.15	83	Cloudy
87	74	80		.05	82	Cloudy
87	75	81		.36	83	Cloudy
87	74	80		.14	82	Cloudy
89	75	82		.24	83	Pt.Cldy.
91	75	83		T	84	Cloudy
89	76	82		.03	84	Pt.Cldy.
84	75	80		T	83	Cloudy
84	76	80		.48	82	Cloudy
87	76	82		.30	82	Cloudy
2688	2363	2524		14.53		
86.7	76.2	81.4			82.5	

NOTE—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

Mean 29.844; highest 29.940 date 5th

Lowest 29.740 date 20th

TEMPERATURE

Highest 91 date 27th; lowest 74 date 25th

Greatest daily range 16 date 27th

Mean for this month in:

1906		1911	79.8	1916	80.7	1921	80.6
1907	79.4	1912	80.2	1917	78.8	1922	81.4
1908	78.8	1913	79.8	1918	80.0	1923	
1909	78.7	1914	81.0	1919	80.8	1924	
1910	78.4	1915	80.6	1920	80.7	1925	

Mean of this month for 16 years 80.9

Absolute maximum for this month for 16 years 91

Absolute minimum for this month for 16 years 71

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 16 years plus 1.

EVAPORATION

Total this month ——— Average daily ——— inches

PRECIPITATION

Total this month 14.53

Greatest precipitation in 24 hours 3.89 date 19 - 20

Total precipitation this month in:

1885	20.32	1895	14.13	1905	15.01	1915	12.89
1886	12.20	1896	15.51	1906	18.31	1916	8.34
1887	16.89	1897	17.24	1907	18.89	1917	15.79
1888		1898	10.91	1908	16.89	1918	18.85
1889		1899	14.80	1909	15.42	1919	6.77
1890	20.51	1900	17.00	1910	14.93	1920	23.04
1891	15.98	1901	12.51	1911	11.60	1921	18.45
1892	15.98	1902	5.78	1912	9.87	1922	14.53
1893	15.12	1903	14.25	1913	17.91	1923	
1894	23.03	1904	11.14	1914	16.01	1924	

Average of this month for 52 years 15.06

Total from January 1, 19 22 to date 46.70

Average from January 1, to date 67.68

Excess (+) or deficiency (—) from January 1, 19 ... to date as compared with average of corresponding period -20.98

WIND

Prevailing direction west Total movement 7011 miles

Average hourly velocity 9.4 miles per hour

Maximum velocity (for five minutes) 31 miles per hour

from SW on 22nd

(WEATHER No. of days)

Clear 1 Pt. Cloudy 8 Cloudy 22

Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Solar None

Halos: Lunar None

Fogs: Light None

Fogs: Deuse None

Thunderstorms 8,10,11,12,13,14,15,16,19,22,24,28,30,31

Earthquakes ———

Tidal Waves ———

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal; Month January, 1927.

TEMPERATURE (Degrees Fahrenheit) AX	MIN.	MEAN Bihourly	Sunshine EVAPORATION (INCHES) Percent.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
84	76	81	44	.35	81	Pt.Cldy.
86	79	81	76	.04	81	Pt.Cldy.
87	78	82	87	.20	81	Pt.Cldy.
85	79	81	84	.08	81	Pt.Cldy.
87	74	80	93	0	80	Clear
85	74	79	80	.40	81	Pt.Cldy.
86	78	81	93	.01	82	Pt.Cldy.
86	79	81	94	0	81	Pt.Cldy.
85	77	81	95	T	82	Pt.Cldy.
86	76	80	88	.17	82	Pt.Cldy.
86	75	80	96	.11	82	Clear
86	77	81	97	0	82	Clear
86	80	82	88	0	82	Clear
86	80	82	75	T	82	Pt.Cldy.
86	80	82	80	.01	82	Pt.Cldy.
86	78	81	63	.14	81	Pt.Cldy.
86	80	81	86	0	81	Clear
86	79	82	67	T	81	Pt.Cldy.
86	81	82	53	0	81	Pt.Cldy.
86	80	82	79	0	81	Pt.Cldy.
86	80	82	83	0	82	Pt.Cldy.
86	77	81	63	.17	81	Pt.Cldy.
86	76	81	76	.84	81	Pt.Cldy.
86	79	81	85	T	81	Pt.Cldy.
86	79	81	92	T	81	Clear
85	77	80	64	.01	80	Pt.Cldy.
86	79	81	72	0	80	Pt.Cldy.
86	79	81	67	0	80	Pt.Cldy.
86	79	81	44	0	80	Pt.Cldy.
86	79	81	73	.06	80	Pt.Cldy.
86	79	81	77	0	80	Pt.Cldy
*2661	2428	--	--	3.01	--	
85.8	78.3	81.1	78	----	81.1	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

Mean 29.857; highest 29.980 date 21st

Lowest 29.760 date 12th

TEMPERATURE

Highest 87 date 5th; lowest 74 date 5th

Greatest daily range 13 date 5th

Bihourly Mean for this month in:

1906		1913	80.5	1920	80.7	1927	80.2
1907		1914	80.4	1921	80.3	1928	80.6
1908	79.9	1915	81.7	1922	79.9	1929	80.3
1909	77.9	1916	80.6	1923	79.6	1930	79.9
1910	77.9	1917	78.4	1924	80.1	1931	81.1
1911	78.9	1918	78.4	1925	79.3	1932	
1912	81.1	1919	79.8	1926	80.5	1933	

Mean of this month for 24 years 79.9

Absolute maximum for this month for 24 years 86

Absolute minimum for this month for 24 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 24 years +1.2

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Total this month 2.01 (6, 7,

Greatest precipitation in 24 hours 0.41 date (22, 23

Total precipitation this month in:

1885	.87	1897	3.42	1909	10.61	1921	1.31
1886	2.13	1898	5.04	1910	2.94	1922	6.85
1887	2.01	1899	6.93	1911	.99	1923	1.98
1888	.63	1900	6.06	1912	.26	1924	.61
1889		1901	1.28	1913	6.71	1925	3.66
1890	7.24	1902	19.80	1914	1.35	1926	.70
1891	2.52	1903	1.00	1915	3.41	1927	4.60
1892	.96	1904	7.02	1916	2.35	1928	1.71
1893	1.73	1905	8.48	1917	1.10	1929	.81
1894	5.35	1906	1.47	1918	3.28	1930	2.46
1895	3.86	1907	2.47	1919	1.82	1931	2.01
1896	4.02	1908	5.64	1920	.81	1932	

Average of this month for 61 years 3.50

Total from January 1, 1927 to date 31 2.01

Average from January 1, to date 3.50

Excess (+) or deficiency (—) from January 1, 1927 to date as compared with average of corresponding period 31 -1.49

WIND

Prevailing direction North Total movement 10397 miles

Average hourly velocity 14.0 miles per hour

Maximum velocity (for five minutes) 30 miles per hour from NW on 22d

(WEATHER No. of days)

Clear 6 Pt. Cloudy 25 Cloudy 0

Days on which .01 inch, or more, of rain occurred 14

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; **Month** February, 1931

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Sunshine (Evaporation) Per cent	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
87	79	82	72	0	80	Pt.Cldy.
87	80	82	79	T	80	"
87	80	82	78	0	81	"
85	77	80	60	.06	81	"
86	75	80	36	.19	80	Cloudy
85	78	80	75	0	80	Pt.Cldy.
84	78	80	36	.13	79	Cloudy
86	77	81	70	.17	80	Pt.Cldy.
86	78	81	53	.06	80	"
87	78	82	81	0	80	"
85	79	81	51	0	81	"
86	78	81	81	.03	80	Clear
86	77	81	48	.01	80	Pt.Cldy.
87	79	82	75	.0	80	"
86	76	81	76	.20	80	"
85	75	80	70	.01	80	Clear
87	73	80	100	0	81	Clear
88	74	80	65	T	82	Pt.Cldy.
86	75	80	97	0	82	Clear
85	74	80	96	0	82	"
86	77	81	92	0	82	"
86	78	81	50	.07	81	Pt.Cldy
8	79	81	20	T	81	"
83	80	82	49	T	80	Cloudy
86	80	82	56	0	82	Pt.Cldy
86	80	82	42	T	82	Pt.Cldy
87	79	82	55	.01	81	Cloudy
86	80	82	41	.03	81	"
2406	2178	* -	-	0.97	* -	
86.9	77.8	80.9	64	-	80.7	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

* Mean 29.858 ; highest 29.980 date 15th
Lowest 29.740 date 9th

TEMPERATURE

Highest 87 date 3d ; lowest 73 date 17th
Greatest daily range 14 date 17th
Bihourly Mean for this month in:

1906		1913	79.6	1920	80.4	1927	79.3
1907		1914	80.5	1921	79.8	1928	81.1
1908	79.9	1915	81.2	1922	81.2	1929	80.4
1909	79.1	1916	79.4	1923	79.4	1930	80.1
1910	78.0	1917	78.8	1924	79.6	1931	80.9
1911	78.4	1918	79.0	1925	79.4	1932	
1912	80.3	1919	80.1	1926	80.6	1933	

Mean of this month for 24 years 79.9
Absolute maximum for this month for 24 years 89
Absolute minimum for this month for 24 years 69
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 24 years +1.0

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 0.97
Greatest precipitation in 24 hours 0.21 date 15,16
Total precipitation this month in:

1885	0.59	1897	0.04	1909	1.92	1921	1.63
1886	5.00	1898	0.35	1910	3.58	1922	.71
1887	0.67	1899	6.49	1911	1.81	1923	.69
1888	1.58	1900	0.33	1912	1.81	1924	5.80
1889	-	1901	0.94	1913	1.75	1925	.73
1890	1.02	1902	0.59	1914	1.32	1926	1.78
1891	0.51	1903	0.35	1915	12.37	1927	3.81
1892	2.01	1904	0.47	1916	1.96	1928	0.71
1893	3.82	1905	1.13	1917	.45	1929	0.56
1894	1.65	1906	1.14	1918	.67	1930	0.75
1895	1.39	1907	1.37	1919	.36	1931	0.97
1896	1.30	1908	1.08	1920	.54	1932	

Average of this month for 31 years 1.57
Total from January 1, 19 31 to date 2.98
Average from January 1, to date 5.07
Excess (+) or deficiency (—) from January 1, 19 31 to date as compared with average of corresponding period - 2.09

WIND

Prevailing direction North Total movement 9080 miles
Average hourly velocity 13.5 miles per hour
Maximum velocity (for five minutes) 29 miles per hour
from N on 5th

(WEATHER No. of days)

Clear 6 Pt. Cloudy 17 Cloudy 8
Days on which .01 inch, or more, of rain occurred 12

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. A.; Month April 1931, 782

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Sunshine (hours) percent	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
87	78	82	45	.04	80.2	Cloudy
88	81	83	59	.01	80.6	Pt.Cldy
89	81	83	58	.13	80.5	"
88	81	84	43	0	81.1	"
87	79	82	13	.06	80.7	Cloudy
87	80	82	26	.04	80.4	Pt.Cldy
88	80	83	37	T	80.2	"
88	80	83	29	.03	79.8	"
89	81	83	56	.01	80.0	"
88	79	82	0	0	80.2	"
89	80	83	95	0	80.3	"
87	80	82	07	.19	80.3	"
87	77	82	76	.12	81.0	"
88	76	82	82	.02	80.6	"
88	78	82	91	0	81.6	"
88	78	80	79	.53	82.2	"
88	80	83	66	0	82.2	Cloudy
84	75	79	23	.63	81.8	"
88	76	82	73	.07	80.9	Pt.Cldy
88	80	82	85	T	81.1	"
87	80	83	94	0	80.9	Clear
85	79	81	43	.15	80.2	Cloudy
88	79	83	89	.01	80.4	Pt.Cldy
88	78	83	82	.26	80.6	"
88	79	83	80	.32	81.1	"
85	79	81	31	.97	80.3	Cloudy
88	81	84	71	0	80.5	Pt.Cldy
88	81	84	58	.17	81.2	Cloudy
88	81	84	70	.05	81.7	"
89	79	84	79	.56	82.3	Pt.Cldy
*2620	2375	-	-	4.30	-	
87.3	79.2	82.8	64	-	80.8	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

Mean *29.836 highest 29.960 date 13th

Lowest 29.730 date 28th

TEMPERATURE

Highest 89 date 3-4th lowest 75 date 18

Greatest daily range 12 date 19

Bihourly Mean for this month in:

1906		1913	80.4	1920	81.9	1927	81.3		
1907		1914	81.1	1921	80.8	1928	82.2		
1908	80.1	1915	81.2	1922	81.8	1929	81.3		
1909	80.6	1916	81.6	1923	80.7	1930	80.4		
1910	79.6	1917	79.4	1924	81.0	1931	82.5		
1911	79.9	1918	79.9	1925	81.0	1932			
1912	82.1	1919	80.4	1926	81.7	1933			

Mean of this month for 24 years 81.0

Absolute maximum for this month for 24 years 93

Absolute minimum for this month for 24 years 72

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 24 years *1.5

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 4.30

Greatest precipitation in 24 hours 1.17 date 25-26

Total precipitation this month in:

1885	1.34	1897	3.74	1909	3.58	1921	7.43
1886	1.66	1898	4.72	1910	3.30	1922	2.11
1887	10.33	1899	0.43	1911	3.06	1923	1.21
1888	-	1900	0.75	1912	0.75	1924	10.86
1889	-	1901	1.50	1913	2.68	1925	5.47
1890	2.09	1902	4.48	1914	4.12	1926	0.34
1891	0.51	1903	1.65	1915	10.42	1927	6.93
1892	5.00	1904	11.46	1916	6.25	1928	0.86
1893	8.07	1905	2.23	1917	1.97	1929	0.69
1894	2.16	1906	4.23	1918	5.34	1930	6.36
1895	21.73	1907	1.06	1919	10.96	1931	4.30
1896	9.02	1908	1.27	1920	1.72	1932	

Average of this month for 61 years 4.29

Total from January 1, 19 31 to date 11.76

Average from January 1, to date 10.91

Excess (+) or deficiency (—) from January 1, 1931 to date as compared with average of corresponding period 51 + 0.85

WIND

Prevailing direction North Total movement 9013 miles

Average hourly velocity 12.5 miles per hour

Maximum velocity (for five minutes) 26 miles per hour from NW on 23d

(WEATHER No. of days)

Clear 1 Pt. Cloudy 21 Cloudy 8

Days on which .01 inch, or more, of rain occurred 21

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 27-28-29-30

Fogs: Light None

Fogs: Dense None

Thunderstorms 25-26-28

Earthquakes None

1066-5

MR 19178—Panama Canal—3-12-30—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; **Month** June, **1931.**

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Sunshine Per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
89	77	82	17	.73	84.2	Cloudy
84	76	79	0	.57	83.8	Cloudy
84	76	79	7	0	83.7	Cloudy
87	77	81	9	.08	83.7	Cloudy
89	77	83	81	T	83.4	Pt.Cldy.
84	76	81	5	0	84.2	Cloudy
90	77	84	45	0	84.2	Pt.Cldy.
91	78	82	48	1.16	83.5	Cloudy
88	77	81	28	.17	83.8	Cloudy
88	78	81	31	.22	83.6	Cloudy
87	79	81	37	.26	84.2	Pt.Cldy.
90	79	83	51	1.10	84.0	Cloudy
85	78	81	17	.02	84.2	Cloudy
86	77	81	13	.41	83.8	Cloudy
90	79	82	19	.23	82.8	Cloudy
85	76	80	15	1.54	82.2	Cloudy
87	76	80	43	.09	82.5	Cloudy
88	77	80	44	.56	83.0	Cloudy
87	76	81	32	.16	82.5	Cloudy
88	77	81	38	.04	82.5	Cloudy
87	79	82	49	0	83.2	Cloudy
85	78	79	10	.64	82.4	Cloudy
85	77	81	8	.01	82.5	Cloudy
91	77	83	84	.02	82.6	Pt.Cldy.
90	79	83	44	T	83.2	Cloudy
91	78	84	42	0	83.8	Pt.Cldy.
91	76	82	46	.78	84.5	Cloudy
88	76	81	30	.01	84.0	Cloudy
89	77	82	67	0	83.6	Cloudy
87	78	80	33	.44	83.4	Cloudy
2651	2318	* ----	----	9.26	* ----	
87.7	77.3	82.8	55	----	83.4	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL: INCHES)

(Bi-hourly)
Mean 29.845 ; highest 29.950 date 3d
Lowest 29.710 date 27th

TEMPERATURE

Highest 91 date 24 ; lowest 76 date 27th
Greatest daily range 15 date 27th
Bihourly Mean for this month in:

1906		1913	80.0	1920	80.4	1927	79.9
1907		1914	80.2	1921	79.7	1928	79.6
1908	78.5	1915	80.6	1922	80.1	1929	80.1
1909	78.2	1916	79.9	1923	80.5	1930	80.7
1910	78.9	1917	78.5	1924	79.2	1931	81.2
1911	79.2	1918	79.8	1925	81.0	1932	
1912	79.9	1919	80.8	1926	80.1	1933	

Mean of this month for 24 years 80.1
Absolute maximum for this month for 24 years 92
Absolute minimum for this month for 24 years 68
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 24 years +1.1

EVAPORATION

Total this month ---- Average daily ---- inches

PRECIPITATION

Total this month 9.26
Greatest precipitation in 24 hours 1.59 date 15-16
Total precipitation this month in:

1885	16.51	1897	18.82	1909	17.49	1921	15.18
1886	16.38	1898	16.38	1910	13.63	1922	8.30
1887	16.50	1899	6.41	1911	15.58	1923	15.17
1888	----	1900	11.65	1912	15.90	1924	16.49
1889	----	1901	11.06	1913	11.81	1925	13.77
1890	17.24	1902	7.00	1914	16.30	1926	31.23
1891	7.99	1903	10.91	1915	16.06	1927	13.74
1892	16.97	1904	15.83	1916	14.28	1928	16.22
1893	12.52	1905	8.10	1917	14.37	1929	15.98
1894	12.24	1906	14.09	1918	8.56	1930	9.40
1895	9.25	1907	15.89	1919	12.06	1931	9.26
1896	8.50	1908	10.53	1920	13.29	1932	

Average of this month for 61 years 13.69
Total from January 1, 1931 to date 36.75
Average from January 1, to date 37.09
Excess (+) or deficiency (—) from January 1, 1931 to date as compared with average of corresponding period +1.64

WIND

Prevailing direction S E Total movement 4187 miles
Average hourly velocity 5.8 miles per hour
Maximum velocity (for five minutes) 22 miles per hour
from N W on 1st

(WEATHER No. of days)

Clear 0 Pt. Cloudy 5 Cloudy 25
Days on which .01 inch, or more, of rain occurred 22

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 27
Fogs: Light None
Fogs: Dense None
Thunderstorms 1,8,9,11,12,13,14,15,16,17,18,22
Earthquakes 27

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month JULY, 1931., 192 1931.

TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	Sunshine EVAPORATION (INCHES) per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
89	77	82	56	.64	82.8	Pt.Cldy.
84	77	79	5	.78	82.1	Cloudy
88	75	81	12	2.29	82.1	Cloudy
87	77	81	17	.09	82.8	Cloudy
86	77	80	18	.26	82.8	Cloudy
88	76	80	31	.08	83.0	Cloudy
86	75	80	10	.01	81.7	Cloudy
86	76	80	31	.47	81.9	Cloudy
91	76	82	52	0	82.8	Pt.Cldy.
89	78	82	46	.02	83.7	Pt.Cldy.
90	78	83	33	0	84.0	Pt.Cldy.
88	78	82	10	.06	83.4	Cloudy
84	75	78	0	.15	82.3	Cloudy
89	74	82	55	0	81.8	Pt.Cldy.
84	77	80	0	.41	81.7	Cloudy
89	76	81	44	.34	81.3	Pt.Cldy.
89	75	79	29	.16	82.0	Cloudy
89	75	81	35	.80	81.8	Cloudy
85	76	80	2	.06	81.8	Cloudy
87	74	79	10	.87	81.3	Cloudy
86	74	80	20	0	81.0	Cloudy
89	76	80	30	.98	81.5	Cloudy
88	76	80	4	.80	81.6	Cloudy
90	75	79	22	.07	82.0	Cloudy
86	74	78	9	1.22	81.8	Cloudy
87	74	78	15	2.96	81.4	Cloudy
86	75	80	25	.05	81.4	Cloudy
88	77	80	50	.04	81.7	Cloudy
88	76	79	54	.48	81.9	Cloudy
88	76	81	53	0	82.8	Cloudy
89	76	82	98	0	84.1	Pt.Cldy.
2713	2382	—	—	13.36	—	
87.5	76.8	80.2	38	—	82.3	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL: INCHES)

Mean 29.825*; highest 29.94 5th
Lowest 29.72 date 27th.

TEMPERATURE

Highest 91 date 9th; lowest 74 date 20
Greatest daily range 15 date 24
Bihourly Mean for this month in:

1906		1913	80.4	1920	80.2	1927	80.0
1907		1914	81.9	1921	80.1	1928	81.4
1908	75.2	1915	80.1	1922	81.5	1929	80.8
1909	75.0	1916	79.4	1923	80.6	1930	81.6
1910	77.0	1917	78.6	1924	79.5	1931	80.2
1911	81.0	1918	80.5	1925	79.9	1932	
1912	80.4	1919	80.1	1926	80.5	1933	

Mean of this month for 24 years 80.1
Absolute maximum for this month for 24 years 91
Absolute minimum for this month for 24 years 70
Average daily excess. (+) deficiency (—) of this month as compared with mean of 24 years + 0.1

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Total this month 13.36
Greatest precipitation in 24 hours 3.42 date 25-26.
Total precipitation this month in:

1885	22.99	1897	14.06	1909	12.83	1921	10.49
1886	11.10	1898	21.89	1910	21.07	1922	4.40
1887	17.05	1899	27.66	1911	14.58	1923	10.33
1888		1900	16.81	1912	13.13	1924	20.83
1889		1901	9.94	1913	15.13	1925	21.08
1890	10.24	1902	16.61	1914	10.74	1926	16.15
1891	14.02	1903	15.73	1915	20.72	1927	18.64
1892	21.77	1904	14.21	1916	10.44	1928	10.29
1893	11.50	1905	9.07	1917	13.58	1929	18.57
1894	19.10	1906	19.23	1918	10.36	1930	8.99
1895	17.09	1907	17.86	1919	13.60	1931	13.36
1896	13.58	1908	14.76	1920	17.58	1932	

Average of this month for 31 years 18.62
Total from January 1, 19 61 to date 32.09
Average from January 1, to date 31
Excess (+) or deficiency (—) from January 1, 19 32.71 to date as compared with average of corresponding period + 0.62

WIND

Prevailing direction SE; Total movement 4125 miles
Average hourly velocity 5.5 miles per hour
Maximum velocity (for five minutes) 24 miles per hour
from SE on 16th

(WEATHER No. of days)

Clear 0; Pt. Cloudy 7; Cloudy 24
Days on which .01 inch, or more, of rain occurred 25

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 24
Fogs: Light none
Fogs: Dense 1,2,5,6,7,8,10,11,12,13,14,15,
Thunderstorms none 16,17,18,20,24,25,
Earthquakes 27, 28, 29, 30.

4066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; **Month** August, 1931, **193**

	TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Evaporation / Sunshine For 24 hours Period Ending 8 a.m. Per Cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	79	82	35	.66	84.4	Cloudy
2	88	78	80	38	.20	84.5	Cloudy
3	87	77	80	25	0	84.4	Cloudy
4	85	75	81	42	.43	83.8	Cloudy
5	88	78	83	37	.05	83.8	Cloudy
6	90	74	80	31	1.43	84.0	Cloudy
7	88	74	82	66	0	84.1	Cloudy
8	86	77	82	33	.26	84.3	Cloudy
9	88	78	81	26	1.13	83.9	Cloudy
10	86	76	81	40	.21	83.8	Cloudy
11	88	77	80	0	.10	82.8	Cloudy
12	86	76	80	23	0	82.9	Cloudy
13	87	75	82	53	2.74	83.7	Cloudy
14	86	77	80	30	1.82	84.2	Cloudy
15	88	80	82	26	.12	83.2	Cloudy
16	81	76	79	0	.11	83.6	Cloudy
17	86	76	80	41	0	83.4	Cloudy
18	87	78	82	43	0	83.9	Cloudy
19	90	79	83	51	.01	84.8	Cloudy
20	90	79	84	50	.17	85.2	Pt.Cldy
21	88	79	83	28	.19	84.8	Cloudy
22	90	79	84	54	.20	84.9	Cloudy
23	82	77	79	0	.25	84.1	Cloudy
24	84	75	79	6	.47	83.5	Cloudy
25	86	77	80	9	1.57	82.9	Cloudy
26	86	78	80	12	.89	81.9	Cloudy
27	82	75	79	0	.84	82.2	Cloudy
28	88	77	81	37	2.51	85.2	Cloudy
29	86	77	79	6	.46	85.1	Cloudy
30	85	77	80	11	.72	82.9	Cloudy
31	85	76	80	55	0	82.5	Cloudy
	2685	2366	* ---	---	17.52	* ---	---
	86.6	77.0	80.9	29	---	83.7	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.834 highest 29.940 date 3rd
Lowest 29.730 date 16th

TEMPERATURE

Highest 90 date 22nd ; lowest 74 date 6th
Greatest daily range 16 date 6th
Bihourly Mean for this month in:

1906		1913	79.7	1920	79.7	1927	80.2
1907	79.4	1914	80.2	1921	79.9	1928	79.5
1908	79.3	1915	80.4	1922	80.3	1929	79.9
1909	77.8	1916	79.0	1923	80.3	1930	81.0
1910	78.6	1917	78.4	1924	79.8	1931	80.9
1911	79.9	1918	80.2	1925	80.9	1932	
1912	79.9	1919	80.8	1926	79.7	1933	

Mean of this month for 25 years 79.8
Absolute maximum for this month for 25 years 91
Absolute minimum for this month for 25 years 71
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 26 years +1.1

EVAPORATION

Total this month ---- Average daily ---- inches

PRECIPITATION

Total this month 17.52
Greatest precipitation in 24 hours 3.68 date 13-14
Total precipitation this month in:

1885	20.32	1897	17.24	1909	15.42	1921	18.45
1886	12.20	1898	10.91	1910	14.93	1922	14.53
1887	16.89	1899	14.80	1911	11.60	1923	15.35
1888	—	1900	17.00	1912	9.87	1924	7.48
1889	—	1901	12.51	1913	17.91	1925	7.71
1890	20.51	1902	5.78	1914	16.01	1926	20.84
1891	15.98	1903	14.25	1915	12.89	1927	26.65
1892	15.96	1904	11.14	1916	8.34	1928	24.49
1893	15.12	1905	15.01	1917	15.79	1929	23.78
1894	23.05	1906	18.31	1918	18.85	1930	14.35
1895	14.13	1907	18.89	1919	6.77	1931	17.52
1896	15.51	1908	16.89	1920	23.04	1932	

Average of this month for 61 years 15.42
Total from January 1, 19 31 to date 69.61
Average from January 1, to date 66.13
Excess (+) or deficiency (—) from January 1, 19 ..... to date as compared with average of corresponding period - 1.48

WIND

Prevailing direction West Total movement 5090 miles
Average hourly velocity 6.8 miles per hour
Maximum velocity (for five minutes) 26 miles per hour
from W on 6th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 1 Cloudy 30
Days on which .01 inch, or more, of rain occurred .....

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms 1,2,4,5,6,8,9,10,13,14,15,16, [redacted] 17,19,20,21,22,25,26,28,29.

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month September, 1931

TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	Sunshine Evaporation (inches) Per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
88	77	80	0	.12	82.0	Cloudy
84	75	78	17	.06	81.8	Cloudy
91	75	79	55	.40	83.0	Pt.Cldy.
88	76	78	13	.36	83.8	Cloudy
86	75	80	56	.01	83.7	Cloudy
89	77	81	20	.03	83.6	Cloudy
89	76	81	45	T	83.8	Pt.Cldy.
86	77	79	35	T	83.9	Cloudy
87	75	79	29	1.80	84.2	Cloudy
90	75	81	81	.30	84.7	Pt.Cldy.
82	76	79	5	.02	84.6	Cloudy
84	75	78	11	1.68	83.2	Cloudy
88	75	80	62	0	83.5	Pt.Cldy.
89	75	81	87	0	83.7	Pt.Cldy.
87	76	80	45	.01	84.8	Pt.Cldy.
86	76	80	33	.03	84.5	Cloudy
89	76	82	79	0	85.2	Pt.Cldy.
89	76	82	55	.80	85.7	Pt.Cldy.
85	77	80	36	0	85.5	Cloudy
89	76	82	97	0	84.9	Clear
88	77	82	81	T	84.9	Pt.Cldy.
88	76	82	58	.19	85.2	Cloudy
90	77	82	52	.03	85.8	Cloudy
81	77	79	0	.80	85.2	Cloudy
86	77	85	69	.10	85.2	Cloudy
88	77	82	44	.28	85.4	Cloudy
84	78	80	4	1.01	84.2	Cloudy
90	75	79	35	.32	84.2	Cloudy
90	75	79	34	.27	84.6	Cloudy
87	75	80	41	T	84.5	Cloudy
2615	2332	* —	—	8.24	* —	
87.2	76.1	80.2	46	—	84.5	

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

Mean * 29.835; highest 29.960 date 26th

Lowest 29.710 date 9th

TEMPERATURE

Highest 91 date 3rd; lowest 75 date 13th

Greatest daily range 16 date 3rd

Bihourly Mean for this month in

1906		1913	79.7	1920	80.0	1927	79.5		
1907	78.6	1914	79.6	1921	80.1	1928	80.3		
1908	78.3	1915	80.5	1922	79.4	1929	80.2		
1909	78.2	1916	79.4	1923	80.0	1930	81.0		
1910	77.9	1917	79.2	1924	79.9	1931	80.2		
1911	80.4	1918	79.7	1925	80.0	1932			
1912	79.5	1919	79.7	1926	79.9	1933			

Mean of this month for 25 years 79.5

Absolute maximum for this month for 25 years 94

Absolute minimum for this month for 25 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years +0.6

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Total this month 8.24

Greatest precipitation in 24 hours 1.80 date 9th

Total precipitation this month in

1885	17.64	1897	17.20	1909	16.53	1921	11.21		
1886	7.52	1898	10.24	1910	12.05	1922	12.75		
1887	15.75	1899	16.55	1911	11.62	1923	12.31		
1888	--	1900	9.37	1912	12.23	1924	9.00		
1889	--	1901	11.88	1913	9.90	1925	8.17		
1890	22.90	1902	11.06	1914	14.80	1926	10.46		
1891	17.65	1903	11.61	1915	15.85	1927	17.32		
1892	16.26	1904	15.66	1916	10.41	1928	15.46		
1893	9.92	1905	6.80	1917	17.67	1929	7.90		
1894	18.76	1906	12.48	1918	15.34	1930	10.86		
1895	12.09	1907	11.72	1919	11.74	1931	8.24		
1896	12.84	1908	11.57	1920	5.81	1932			

Average of this month for 51 years 12.30

Total from January 1, 19 31 to date 77.85

Average from January 1, to date 80.45

Excess (+) or deficiency (—) from January 1, 19 31 to date as compared with average of corresponding period - 2.60

WIND

Prevailing direction SE Total movement 3886 miles

Average hourly velocity 5.4 miles per hour

Maximum velocity (for five minutes) 24 miles per hour

from NW on 28th

(WEATHER No. of days)

Clear 1 Pt. Cloudy 9 Cloudy 20

Days on which .01 inch, or more, of rain occurred 21

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 5, 5, 10, 11, 12, 22, 24, 25, 26, 27,

Thunderstorms ~~None~~ 28, 29, 30.

Earthquakes

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month October, 1931, 1932

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Sunshine (Percent)	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
86	76	80	9	.59	84.2	Cloudy
85	77	81	1	.63	84.7	Cloudy
86	77	80	6	.10	84.4	Cloudy
88	77	80	19	.29	84.1	Cloudy
88	76	82	48	.83	84.7	Cloudy
81	77	79	5	0	84.9	Cloudy
90	76	82	68	0	84.3	Pt.Cldy
90	76	81	51	.03	85.3	Pt.Cldy
89	76	82	72	.05	86.0	Pt.Cldy
90	77	81	29	.06	85.8	Cloudy
89	77	81	66	0	85.7	Pt.Cldy
87	75	84	54	1.89	86.3	Pt.Cldy
84	76	80	1	2.32	85.7	Cloudy
89	78	82	27	.19	84.9	Cloudy
90	77	82	58	.01	85.1	Cloudy
91	78	84	66	0	85.4	Pt.Cldy
87	78	81	16	0	86.0	Cloudy
90	77	81	48	.13	86.0	Pt.Cldy
90	77	80	41	.89	85.9	Cloudy
89	76	81	62	2.90	85.6	Cloudy
89	75	80	38	3.11	84.7	Cloudy
87	77	81	42	.04	85.4	Cloudy
87	78	80	12	.46	85.7	Cloudy
90	74	79	24	.51	85.2	Cloudy
86	74	80	42	.02	85.4	Cloudy
86	76	80	44	.77	85.3	Cloudy
88	77	80	31	.18	85.4	Cloudy
86	76	80	8	2.77	85.1	Cloudy
88	77	79	19	1.39	85.0	Cloudy
81	75	77	0	.07	85.0	Cloudy
89	75	79	35	.19	85.0	Cloudy
2716	2368	* -	-	20.42	* -	
87.6	76.4	80.6	34	-	85.2	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL: INCHES)

Mean *29.809, highest 29.920 date 1st
Lowest 29.700 date 17th

TEMPERATURE

Highest 91 date 16 lowest 74 date 25
Greatest daily range 16 date 24
Bihourly Mean for this month in:

1906 -	1913 79.4	1920 79.2	1927 79.1
1907 77.8	1914 79.2	1921 79.3	1928 79.9
1908 77.4	1915 79.6	1922 79.1	1929 79.7
1909 77.9	1916 78.7	1923 78.8	1930 79.4
1910 77.7	1917 78.4	1924 79.5	1931 80.6
1911 79.2	1918 78.9	1925 80.0	1932
1912 78.5	1919 79.5	1926 79.7	1933

Mean of this month for 25 years 79.0
Absolute maximum for this month for 25 years 95
Absolute minimum for this month for 25 years 70
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years + 1.6

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 20.42
Greatest precipitation in 24 hours 6.01 date 20-21st
Total precipitation this month in:

1885 7.99	1897 5.83	1909 19.31	1921 8.27
1886 14.33	1898 11.38	1910 15.65	1922 13.87
1887 19.61	1899 15.09	1911 16.53	1923 42.17
1888 -	1900 16.53	1912 17.65	1924 21.56
1889 -	1901 12.65	1913 18.63	1925 16.49
1890 21.77	1902 14.24	1914 22.16	1926 15.31
1891 17.48	1903 10.04	1915 21.86	1927 13.12
1892 6.69	1904 8.14	1916 17.59	1928 18.02
1893 12.28	1905 13.45	1917 7.87	1929 13.74
1894 12.40	1906 13.34	1918 27.07	1930 7.26
1895 16.46	1907 21.99	1919 21.94	1931 20.42
1896 13.98	1908 10.96	1920 17.16	1932

Average of this month for 62 years 15.46
Total from January 1, 19 31 to date 98.27
Average from January 1, to date 95.90
Excess (+) or deficiency (—) from January 1, 1931 to date as compared with average of corresponding period + 2.37

WIND

Prevailing direction SE Total movement 4352 miles
Average hourly velocity 5.8 miles per hour
Maximum velocity (for five minutes) 25 miles per hour
from N on 12th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 7 Cloudy 24
Days on which .01 inch, or more, of rain occurred 26

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None /24.26.27.28/
Thunderstorms 1.2.5.8.9.10.12.13.14.20.21/
Earthquakes None

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month NOVEMBER, 1926.

TEMPERATURE (Degrees Fahrenheit)			Sunshine percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
AX	MIN.	MEAN Bihourly				
86	76	80	8	0	84.6	Cloudy
84	76	79	3	T.	84.2	"
86	75	80	15	.09	83.9	"
82	75	77	0	1.90	83.6	"
86	74	79	53	.09	83.8	"
88	76	80	22	.90	83.8	"
80	75	77	0	6.78	81.9	"
77	72	75	0	6.05	79.7	"
81	74	77	5	.64	78.9	"
79	75	77	0	.80	79.8	"
86	76	80	18	.61	79.2	"
81	75	77	4	.50	80.8	"
83	74	77	0	.91	81.0	"
80	74	76	2	.19	81.0	"
86	74	80	33	.06	81.3	"
87	76	81	85	.07	82.0	Pt Cldy
88	77	82	99	.08	82.6	CLEAR
86	75	80	.82	T.	82.9	Pt Cldy
86	75	80	55	.16	83.6	"
84	74	79	48	.27	83.8	"
85	74	80	68	.04	84.1	"
84	75	79	29	.15	83.8	"
84	75	80	45	.72	83.5	"
85	75	81	85	.18	82.9	"
85	75	78	5	.71	82.2	Cloudy
78	75	76	0	4.10	80.2	"
78	72	75	0	2.65	80.3	"
88	75	79	9	.23	81.0	"
84	75	77	13	.38	81.6	"
84	73	76	11	1.32	81.1	"
2506	2340*	---	---	30.31	---	
83.5	74.7	78.0	25%	---	82.1	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL: INCHES)

Mean 29.816 highest 29.920 date 2d

Lowest 29.680 date 12th

TEMPERATURE

Highest 88 date 6th; lowest 72 date 8th

Greatest daily range 12 date 6th

Bihourly Mean for this month is:

1906	---	1913	78.7	1920	79.8	1927	79.0
1907	78.4	1914	79.8	1921	79.8	1928	78.4
1908	77.2	1915	79.0	1922	78.5	1929	80.4
1909	75.0	1916	78.6	1923	79.6	1930	81.2
1910	77.5	1917	77.6	1924	78.3	1931	78.5
1911	78.9	1918	79.9	1925	79.2	1932	
1912	78.3	1919	79.7	1926	78.7	1933	78.9

Mean of this month for 25 years 82

Absolute maximum for this month for 25 years 88

Absolute minimum for this month for 25 years 69

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years -0.6

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Total this month 30.31

Greatest precipitation in 24 hours 7.09 date 6-7

Total precipitation this month is:

1885	24.17	1897	25.16	1909	42.80	1921	19.96
1886	21.89	1898	12.28	1910	30.04	1922	15.65
1887	31.81	1899	14.49	1911	15.81	1923	22.18
1888	---	1900	20.28	1912	21.81	1924	30.29
1889	---	1901	32.73	1913	15.75	1925	22.95
1890	19.49	1902	12.18	1914	18.35	1926	29.39
1891	19.49	1903	28.30	1915	22.33	1927	28.35
1892	26.30	1904	26.35	1916	14.08	1928	17.20
1893	17.20	1905	17.92	1917	20.49	1929	8.99
1894	23.56	1906	26.64	1918	14.25	1930	16.94
1895	20.47	1907	15.37	1919	8.63	1931	30.31
1896	15.63	1908	31.72	1920	21.27	1932	

Average of this month for 31 years 21.22

Total from January 1, 1926 to date 128.58

Average from January 1, to date 31 117.12

Excess (+) or deficiency (—) from January 1, 1926 to date as compared with average of corresponding period + 11.46

WIND

Prevailing direction West Total movement 8345 miles

Average hourly velocity 8.8 miles per hour

Maximum velocity (for five minutes) 37 miles per hour

from W. on 8th

(WEATHER No. of days)

Clear 1 Pt. Cloudy 8 Cloudy 21

Days on which .01 inch, or more, of rain occurred 27

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Lunar None.

Fogs: Light None.

Fogs: Dense None.

Thunderstorms None.

Earthquakes

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month December, 1927

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Sunshine (INCHES) Per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	74	78	22	.04	81.5	Pt Cldy
87	74	79	57	.09	82.0	"
85	75	79	49	.01	82.5	"
84	76	79	41	.93	82.8	Cloudy
85	75	80	76	T	83.0	"
88	76	79	39	.56	83.0	"
84	75	79	41	.02	82.8	"
86	76	81	67	0	82.2	"
86	77	81	56	0	82.0	"
86	79	81	31	.62	82.0	"
87	80	82	76	0	82.5	Pt Cldy
87	79	82	77	0	82.7	Cloudy
87	78	82	91	0	82.0	Pt Cldy
87	80	83	75	0	82.0	"
87	78	82	95	0	81.5	Clear
87	78	82	97	.06	82.0	Pt Cldy
83	77	80	26	.57	82.0	Cloudy
87	79	82	82	T	81.2	Pt Cloudy
87	79	82	72	.01	81.2	Pt Cldy
86	78	82	59	0	81.0	Pt Cldy
87	79	82	72	T	80.7	Cloudy
86	79	82	96	0	80.4	Clear
86	79	82	81	T	81.0	Pt Cldy
87	79	82	90	0	80.6	Clear
86	79	82	91	0	80.9	Clear
86	78	81	69	0	81.0	Pt Cldy
85	77	81	76	.25	80.3	Clear
83	76	81	80	.21	79.2	Cloudy
83	79	80	38	.01	79.7	Pt Cldy
85	77	81	75	.07	80.1	Pt Cldy
85	77	81	74	.02	81.0	Clear
2697	2402	*	—	5.47	*	
86.7	77.5	80.8	66	—	81.5	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

Mean* 29.824; highest 29.950 date 26th

Lowest 29.690 date 11th

TEMPERATURE

Highest 87 date 14th lowest 74 date 24

Greatest daily range 13 date 24

Bihourly Mean for this month in:

1906	----	1913	79.6	1920	80.7	1927	80.1
1907	79.9	1914	81.4	1921	80.0	1928	79.7
1908	78.1	1915	80.6	1922	79.7	1929	80.4
1909	78.8	1916	79.7	1923	80.2	1930	81.6
1910	78.0	1917	78.3	1924	79.6	1931	80.9
1911	81.7	1918	81.1	1925	81.0	1932	
1912	80.2	1919	80.2	1926	79.5	1933	

Mean of this month for 25 years 80.0

Absolute maximum for this month for 25 years 89

Absolute minimum for this month for 25 years 66

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years +0.9

EVAPORATION

Total this month ---- Average daily ---- inches

PRECIPITATION

Total this month 5.47

Greatest precipitation in 24 hours .94 date 3-4

Total precipitation this month in:

1885	25.51	1897	12.90	1909	34.38	1921	6.50
1886	22.72	1898	7.95	1910	15.20	1922	7.20
1887	13.85	1899	9.04	1911	2.65	1923	5.12
1888	----	1900	4.13	1912	11.47	1924	8.84
1889	----	1901	5.41	1913	6.55	1925	6.04
1890	19.06	1902	7.10	1914	6.98	1926	7.60
1891	4.25	1903	15.75	1915	9.45	1927	16.70
1892	11.30	1904	7.02	1916	5.71	1928	10.45
1893	30.94	1905	9.50	1917	11.66	1929	7.67
1894	25.18	1906	15.64	1918	1.90	1930	7.86
1895	15.71	1907	9.36	1919	7.37	1931	5.47
1896	18.66	1908	9.07	1920	8.06	1932	

Average of this month for 61 years 10.89

Total from January 1, 1927 to date 136.06

Average from January 1, to date 136.01

Excess (+) or deficiency (—) from January 1, 1927 to date as compared with average of corresponding period + 4.04

WIND

Prevailing direction North Total movement 7806 miles

Average hourly velocity 10.6 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from E on 11th

(WEATHER No. of days)

Clear 6 Pt. Cloudy 14 Cloudy 11

Days on which .01 inch, or more, of rain occurred 15

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 19-21

Fogs: Light None

Fogs: Dense None

Thunderstorms 5, 6, 7, 8, 9, 10

Earthquakes None

4066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month January, 1932.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (INCHES) Pct. Poss. 24 hours	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	79	82	62	0	81.3	Pt.Cldy.
85	80	82	72	0	81.5	Pt.Cldy.
86	80	82	68	0	81.3	Clear
87	80	82	59	.02	81.2	Pt.Cldy.
86	79	82	60	0	81.0	Pt.Cldy.
86	80	81	74	.06	80.6	Pt.Cldy.
85	78	80	41	T	80.5	Cloudy
85	76	80	91	0	80.5	Clear
85	75	79	96	0	80.2	Clear
85	74	79	95	T	80.1	Clear
85	71	78	84	0	80.9	Clear
85	78	81	19	0	81.2	Cloudy
87	80	82	42	0	80.8	Pt.Cldy.
86	78	81	42	.08	81.0	Cloudy
85	77	81	45	.05	80.0	Cloudy
85	76	81	70	.01	80.8	Pt.Cldy.
88	77	81	70	0	80.5	Pt.Cldy.
85	78	80	26	.07	80.5	Cloudy
85	79	81	25	0	80.8	"
87	76	81	26	.01	81.1	"
86	76	81	48	.15	81.2	"
85	76	80	29	.11	80.8	"
86	78	81	26	T	80.4	"
86	76	81	22	.08	80.8	"
86	75	79	25	.41	80.6	"
85	78	81	38	.02	81.3	Pt.Cldy.
85	75	80	74	.06	81.0	" "
86	77	81	84	.01	80.8	" "
86	77	81	90	.08	80.0	" "
86	75	78	62	.10	80.5	" "
86	76	81	92	.14	81.2	Clear
2625	2388	* —	—	1.44	* —	
85.6	77.0	80.8	58	—	80.8	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean *29.941; highest 29.960 date 12
Lowest 29.760 date 8

TEMPERATURE

Highest 87 date 4-13; lowest 71 date 11
Greatest daily range 14 date 11
Bihourly Mean for this month in:

1906		1913	80.5	1920	80.7	1927	80.2
1907		1914	80.4	1921	80.3	1928	80.6
1908	79.9	1915	81.7	1922	79.9	1929	80.3
1909	77.9	1916	80.6	1923	79.6	1930	79.9
1910	77.9	1917	78.4	1924	80.1	1931	81.1
1911	78.9	1918	78.4	1925	79.8	1932	80.6
1912	81.1	1919	79.6	1926	80.5	1933	

Mean of this month for 25 years 79.9
Absolute maximum for this month for 25 years 88
Absolute minimum for this month for 25 years 70
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years + 0.7

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Total this month 1.44
Greatest precipitation in 24 hours .41 date 25
Total precipitation this month in:

1885	.87	1897	3.48	1909	10.61	1921	1.31
1886	2.13	1898	5.04	1910	2.94	1922	6.85
1887	2.01	1899	6.85	1911	.22	1923	1.96
1888	.83	1900	6.06	1912	.28	1924	.61
1889		1901	1.28	1913	6.71	1925	3.66
1890	7.24	1902	10.80	1914	1.35	1926	.70
1891	2.52	1903	1.00	1915	5.41	1927	4.60
1892	.28	1904	7.08	1916	2.33	1928	1.71
1893	1.78	1905	8.42	1917	1.10	1929	.81
1894	5.35	1906	1.47	1918	3.28	1930	2.46
1895	3.66	1907	2.47	1919	1.88	1931	2.01
1896	4.08	1908	3.84	1920	.51	1932	1.44

Average of this month for 32 years 3.47
Total from January 1, 1932 to date 1.44
Average from January 1, to date 3.47
Excess (+) or deficiency (—) from January 1, 1932 to date as compared with average of corresponding period — 2.03

WIND

Prevailing direction North Total movement 9627 miles
Average hourly velocity 13.2 miles per hour
Maximum velocity (for five minutes) 24 miles per hour
from — on 31

(WEATHER No. of days)

Clear 6 Pt. Cloudy 13 Cloudy 12
Days on which .01 inch, or more, of rain occurred 17

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 14
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

066–5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month February, 1932.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	HOURS SUNSHINE (INCHES) For 24 hours Period Ending 7:30 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	78	80	78	.12	80.3	Ptcldy
85	78	81	81	0	80.2	"
86	78	81	81	0	80.0	"
86	78	81	76	0	80.2	"
86	79	81	70	0	80.2	"
85	78	80	65	.02	80.4	"
84	77	79	36	.03	80.0	"
85	77	80	36	.02	79.8	Cloudy
85	77	80	65	.02	80.2	Ptcldy
85	77	80	60	.15	79.5	"
85	78	80	73	0	80.0	"
86	77	80	64	.05	80.0	"
86	75	80	95	0	79.8	Clear
86	78	81	85	.03	80.3	"
85	77	80	91	.02	79.6	Pt cldy
85	78	80	90	0	79.4	"
85	78	80	73	0	79.5	Clear
86	74	80	87	0	80.2	"
86	77	81	100	0	81.1	"
86	78	81	88	0	81.5	"
85	78	81	52	0	81.4	Ptcldy
86	78	81	85	0	80.4	Clear
86	78	81	96	0	80.4	"
84	78	80	24	.06	80.7	Ptcldy
86	78	81	71	T	80.9	Clear
86	78	81	75	0	80.2	"
81	75	77	25	.20	80.0	Cloudy
83	77	79	21	.02	79.8	Clear
83	78	79	51	.21	80.2	Ptcldy
2467	2242	* -	-	0.95	* -	
85.1	77.3	80.3	69	-	80.2	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.884; highest 29.990 date 20
Lowest 29.770 date 11

TEMPERATURE

Highest 86 date 22; lowest 73 date 27
Greatest daily range 12 date 18
Bihourly Mean for this month in:

1906		1913	79.6	1920	80.4	1927	79.3
1907		1914	80.5	1921	79.8	1928	81.1
1908	79.9	1915	81.2	1922	81.2	1929	80.4
1909	79.1	1916	79.4	1923	79.4	1930	80.1
1910	78.0	1917	78.8	1924	79.6	1931	80.9
1911	78.4	1918	79.0	1925	79.4	1932	80.3
1912	80.3	1919	80.1	1926	80.6	1933	

Mean of this month for 25 years 79.9
Absolute maximum for this month for 25 years 89
Absolute minimum for this month for 25 years 69
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years +0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 0.95
Greatest precipitation in 24 hours .23 date 28-29
Total precipitation this month in:

1885	0.59	1897	0.04	1909	1.92	1921	1.65
1886	5.00	1898	0.35	1910	3.56	1922	.71
1887	0.67	1899	6.49	1911	1.91	1923	.69
1888	1.56	1900	0.53	1912	1.81	1924	2.80
1889	-	1901	0.94	1913	1.75	1925	.73
1890	1.02	1902	0.59	1914	1.32	1926	1.78
1891	0.51	1903	0.35	1915	12.37	1927	3.21
1892	2.01	1904	0.47	1916	1.96	1928	0.71
1893	3.82	1905	1.13	1917	.45	1929	0.56
1894	1.65	1906	1.14	1918	.87	1930	0.79
1895	1.89	1907	1.37	1919	.56	1931	0.97
1896	1.30	1908	1.08	1920	.54	1932	0.95

Average of this month for 62 years 1.56
Total from January 1, 19 32 to date 2.39
Average from January 1, to date 5.03
Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period -2.64

WIND

Prevailing direction N Total movement 10754 miles
Average hourly velocity 15.5 miles per hour
Maximum velocity (for five minutes) 28 miles per hour
from N on 1st

(WEATHER No. of days)

Clear 11 Pt. Cloudy 16 Cloudy 2
Days on which .01 inch, or more, of rain occurred 13

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month March, 1932

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	SUNSHINE (HOURS AND TENTHS) PER CENT Bihourly Readings 7 a.m. to 7 p.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	76	79	49	0	79.6	Clear
84	72	78	81	0	79.4	Pt Cldy
85	73	79	86	0	80.5	Clear
90	72	80	82	0	81.3	Clear
91	73	80	81	0	82.5	Clear
90	73	80	92	0	81.9	Clear
86	73	80	100	T	81.8	Clear
85	73	79	93	0	82.0	Pt Cldy
84	74	78	28	.30	82.0	Cloudy
88	78	81	58	.01	82.6	Pt Cldy
87	78	82	62	1.43	83.2	Pt Cldy
87	80	82	56	.09	83.6	Pt Cldy
87	79	82	93	0	83.8	Pt Cldy
86	79	82	79	.08	83.7	Pt Cldy
96	75	80	40	.35	82.3	Pt Cldy
86	76	81	61	.05	82.0	Pt Cldy
86	79	82	84	0	82.2	Clear
87	78	82	63	0	82.9	Cloudy
87	78	83	74	T	83.3	Pt Cldy
86	79	82	56	0	83.0	Pt Cldy
85	74	81	77	0	82.7	Pt Cldy
86	80	82	60	0	82.8	Pt Cldy
86	78	81	32	.31	82.6	Cloudy
87	79	82	82	.01	81.9	Pt Cldy
87	78	82	95	.01	82.8	Clear
86	79	82	100	.T	82.8	Clear
87	79	82	98	0	82.8	Clear
85	79	81	46	0	82.4	Pt Cldy
86	78	81	39	.13	81.7	Cloudy
85	79	81	25	.02	81.0	Cloudy
86	78	82	58	T	81.2	Pt Cldy
2580	2380	* -	-	2.69	* -	
86.5	76.8	81.0	69	-	82.2	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.864 highest 30.00 date 25
Lowest 29.710 date 5

TEMPERATURE

Highest 91 date 5 lowest 72 date 2
Greatest daily range 18 date 5
Bihourly Mean for this month in:

1906		1913	80.7	1920	80.9	1927	81.3
1907		1914	80.7	1921	81.1	1928	81.1
1908	79.8	1915	82.1	1922	81.4	1929	80.8
1909	79.7	1916	80.2	1923	79.8	1930	81.1
1910	78.1	1917	78.8	1924	81.0	1931	81.7
1911	78.8	1918	79.2	1925	80.2	1932	81.0
1912	81.5	1919	80.0	1926	80.5	1933	

Mean of this month for 25 years 80.5
Absolute maximum for this month for 25 years 92
Absolute minimum for this month for 25 years 67
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years +0.5

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 2.69
Greatest precipitation in 24 hours 1.44 date 10-11
Total precipitation this month in:

1885	0.85	1897	0.28	1909	1.65	1921	0.98
1886	9.19	1898	1.58	1910	5.46	1922	0.92
1887	0.47	1899	1.26	1911	1.41	1923	0.36
1888	1.26	1900	1.06	1912	0.66	1924	0.71
1889	-	1901	1.57	1913	0.79	1925	0.31
1890	2.01	1902	2.33	1914	0.91	1926	0.43
1891	1.50	1903	0.96	1915	1.71	1927	1.27
1892	3.96	1904	1.65	1916	2.68	1928	2.42
1893	1.81	1905	0.52	1917	0.76	1929	2.59
1894	.36	1906	1.42	1918	0.41	1930	1.07
1895	2.09	1907	2.16	1919	0.61	1931	4.46
1896	2.01	1908	3.53	1920	1.08	1932	2.69

Average of this month for 63 years 1.57
Total from January 1, 19 32 to date 5.08
Average from January 1, to date 6.60
Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period -1.52

WIND

Prevailing direction N Total movement 8796 miles
Average hourly velocity 11.6 miles per hour
Maximum velocity (for five minutes) 27 miles per hour
from N on 14

(WEATHER No. of days)

Clear 10 Pt. Cloudy 16 Cloudy 5
Days on which .01 inch, or more, of rain occurred 12

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month April, 1932.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	76	80	25	.37	81.7	Cloudy
86	78	82	40	.25	81.3	"
86	79	81	26	.06	81.8	Pt.Cldy.
86	77	82	42	.08	81.8	" "
87	77	81	35	.17	81.9	" "
87	80	82	39	.12	82.0	Cloudy
86	80	82	7	.02	81.9	"
87	78	82	25	.11	82.0	"
86	79	81	36	.29	82.9	"
86	77	81	17	0	83.7	"
87	80	85	66	0	84.0	Pt.Cldy.
88	80	82	24	.01	84.2	Cloudy
85	77	80	0	T	83.2	"
86	80	83	24	.01	83.1	Pt.Cldy.
87	79	82	20	.10	82.3	Cloudy
88	80	83	15	T	82.6	Pt.Cldy.
87	79	82	2	.06	82.8	Cloudy.
86	80	83	13	.27	83.6	"
91	78	81	10	.02	84.0	"
91	78	83	2	0	83.8	"
88	78	83	46	T	84.4	Pt.Cldy.
88	80	84	76	.01	84.8	Cloudy
88	81	84	85	0	84.9	Pt.Cldy.
89	78	82	64	0	84.9	"
88	77	81	56	.04	84.2	"
91	76	82	77	.02	84.2	"
92	77	82	72	0	84.2	"
89	77	83	86	0	83.9	"
89	78	84	64	0	84.7	Cloudy
86	78	82	48	.22	86.0	"
2682	2382	* —	—	2.25	* —	
87.7	78.4	82.1	38	—	83.4	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) * 29.801 highest 29.940 date 2

Mean 29.690 Lowest 29.422 date

TEMPERATURE

Highest 92 date 27; lowest 76 date 1

Greatest daily range 15 date 26

Bihourly Mean for this month in:

1906	—	1913	80.4	1920	81.9	1927	81.3
1907	—	1914	81.1	1921	80.8	1928	82.2
1908	80.1	1915	81.2	1922	81.8	1929	81.5
1909	80.5	1916	81.6	1923	80.7	1930	80.4
1910	79.6	1917	79.4	1924	81.0	1931	82.5
1911	79.9	1918	79.9	1925	81.0	1932	82.1
1912	82.1	1919	80.4	1926	81.7	1933	

Mean of this month for 25 years 81.6

Absolute maximum for this month for 25 years 95

Absolute minimum for this month for 25 years 72

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 25 years +1.1

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Total this month 2.25

Greatest precipitation in 24 hours .44 date 1-2

Total precipitation this month in:

1885	1.34	1897	3.74	1909	3.56	1921	7.45
1886	1.88	1898	4.72	1910	3.50	1922	2.11
1887	10.63	1899	0.45	1911	3.06	1923	1.81
1888	—	1900	0.75	1912	0.75	1924	10.85
1889	—	1901	1.50	1913	2.69	1925	5.47
1890	2.99	1902	4.44	1914	4.12	1926	0.34
1891	0.51	1903	1.65	1915	10.42	1927	6.95
1892	5.00	1904	11.46	1916	6.25	1928	0.86
1893	8.07	1905	2.28	1917	1.87	1929	0.67
1894	2.16	1906	4.23	1918	5.34	1930	6.86
1895	21.75	1907	1.06	1919	10.96	1931	4.30
1896	9.02	1908	1.27	1920	1.72	1932	2.25

Average of this month for 32 years 4.82

Total from January 1, 1932 to date 7.31

Average from January 1, to date 10.82

Excess (+) or deficiency (—) from January 1, 1932 to date as compared with average of corresponding period 32 -3.51

WIND

Prevailing direction North Total movement 7895 miles

Average hourly velocity 11.0 miles per hour

Maximum velocity (for five minutes) 25 miles per hour from N on 14

(WEATHER No. of days)

Clear 0 Pt. Cloudy 13 Cloudy 17

Days on which .01 inch, or more, of rain occurred 19

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 15-17-28-30

Earthquakes None

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 192[illegible]

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Sunshine Evaporation (inches) per cent	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
86	75	79	19	2.96	85.2	cloudy
80	75	76	4	.85	83.7	cloudy
85	75	79	23	.21	85.3	cloudy
85	76	79	38	.71	84.0	cloudy
89	75	81	56	.13	84.0	ptcldy
90	77	81	74	.01	84.6	"
84	76	81	50	.01	84.9	"
87	76	81	45	.02	84.3	"
87	77	82	54	.18	83.4	cloudy
83	77	80	42	.54	83.2	"
87	77	82	64	.01	84.8	ptcldy
83	76	80	1	.13	84.4	cloudy
87	77	80	21	1.48	83.2	"
85	77	80	0	T	84.1	"
86	75	82	44	T	84.5	ptcldy
88	76	83	36	0	84.4	"
89	77	82	47	0	84.0	"
86	75	78	6	1.48	84.5	cloudy
91	76	81	48	.07	84.7	"
88	77	81	67	.05	85.1	ptcldy
90	66	82	35	T	85.5	"
88	77	82	49	T	85.5	"
90	78	84	52	.61	84.8	"
90	76	85	41	3.03	85.5	cloudy
83	78	80	0	.11	85.2	"
90	79	84	53	.45	85.3	clear
88	79	82	35	.43	85.8	cloudy
85	78	80	0	5.35	84.6	"
87	77	81	5	T	85.0	"
87	77	82	7	0	85.0	"
86	77	85	38	0	85.3	clear
[illegible]	[illegible]	[illegible]	[illegible]	18.55	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL, INCHES)

Mean [illegible] highest [illegible] date 18

Lowest [illegible] date [illegible]

TEMPERATURE

Highest 91 date 19 lowest 75 date 26

Greatest daily range [illegible] date 19

Bihourly Mean for this month:

1906 [illegible]	1913 79.1	1920 81.6	1927 79.8
1907 [illegible]	1914 [illegible]	1921 80.4	1928 81.6
1908 78.3	1915 81.8	1922 81.0	1929 80.7
1909 79.2	1916 80.6	1923 80.8	1930 81.3
1910 78.9	1917 79.9	1924 80.5	1931 81.3
1911 78.8	1918 79.7	1925 81.9	1932 81.0
1912 81.6	1919 81.3	1926 [illegible]	1933 [illegible]

Mean of this month for [illegible] years 80.5

Absolute maximum for this month for 25 years 35

Absolute minimum for this month for 28 years 71

Average daily excess, (+) or deficiency (—) of this month as compared with mean of [illegible] years [illegible]

EVAPORATION

Total this month [illegible] Average daily [illegible] inches

PRECIPITATION

Total this month 16.66

Greatest precipitation in 24 hours 5.32 date 27.28

Total precipitation this month in:

1885 [illegible]	1897 [illegible]	1909 12.09	1921 9.06
1886 [illegible]	1898 [illegible]	1910 17.15	1922 11.18
1887 [illegible]	1899 [illegible]	1911 [illegible]	1923 [illegible]
1888 [illegible]	1900 6.19	1912 [illegible]	1924 [illegible]
1889 9.76	1901 11.10	1913 17.76	1925 [illegible]
1890 [illegible]	1902 14.74	1914 7.75	1926 14.11
1891 [illegible]	1903 11.06	1915 [illegible]	1927 12.78
1892 [illegible]	1904 [illegible]	1916 [illegible]	1928 10.07
1893 [illegible]	1905 10.07	1917 [illegible]	1929 [illegible]
1894 [illegible]	1906 [illegible]	1918 [illegible]	1930 17.71
1895 [illegible]	1907 [illegible]	1919 [illegible]	1931 [illegible]
1896 [illegible]	1908 [illegible]	1920 [illegible]	1932 [illegible]

Average of this month for [illegible] years [illegible]

Total from January 1, 19[illegible] to date [illegible]

Average from January 1, to date [illegible]

Excess (+) or deficiency (—) from January 1, 19[illegible] to date as compared with average of corresponding period [illegible]

WIND

Prevailing direction [illegible] movement 4386 miles

Average hourly velocity [illegible] 24 miles per hour

Maximum velocity (for five minutes) 40 miles per hour

from [illegible] on [illegible]

(WEATHER No. of days)

Clear 2 Pt. Cloudy 12 Cloudy 17

Days on which .01 inch, or more, of rain occurred [illegible]

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 19

Fogs: Light None

Fogs: Dense 1-8-15-15-18-20-21-23-24-26-[illegible]

Thunderstorms None [illegible]

Earthquakes [illegible]

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z.; Month June, 1932

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Sunshine Evaporation (inches) percent	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
81	76	80	0	1.97	85.2	cloudy
86	77	82	10	.06	84.3	"
84	75	78	18	.39	83.9	"
89	75	82	97	0	84.8	clear
90	81	84	44	.01	85.1	cloudy
87	75	80	39	.30	84.9	"
92	75	82	82	0	84.3	ptcldy
89	77	81	39	T	84.7	"
87	77	81	53	.13	84.6	cloudy
83	76	79	23	.01	84.3	"
87	77	82	31	T	84.4	"
89	76	81	35	.76	84.9	"
90	77	81	21	2.08	85.4	"
85	74	79	7	.69	85.1	"
85	74	80	12	.01	85.9	"
86	75	79	13	1.34	83.9	"
84	74	78	0	.98	82.6	"
89	76	82	69	0	84.2	ptcldy
85	76	80	6	.48	84.1	cloudy
88	76	81	67	T	84.8	"
86	76	80	34	.01	84.8	"
85	77	79	23	.10	84.1	"
85	75	80	25	0	85.9	"
87	76	80	46	.94	84.5	"
89	75	81	83	.80	84.9	Ptcldy
86	75	81	11	.65	85.0	cloudy
84	75	79	0	1.15	84.0	"
85	76	80	20	.08	85.9	"
88	73	79	21	1.16	85.8	"
83	73	79	47	.31	83.3	"
2601	2295	*	—	14.56	*	
86.7	75.7	80.8	32	—	84.4	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

Mean * highest 29.920 date 15

Lowest 29.720 date 25

TEMPERATURE

Highest 92 date 7 lowest 73 date 30

Greatest daily range 17 date 7

Bihourly Mean for this month in:

1906		1913	80.0	1920	80.4	1927	79.9
1907		1914	80.2	1921	79.7	1928	79.8
1908	78.5	1915	80.8	1922	80.1	1929	80.1
1909	78.2	1916	79.9	1923	80.5	1930	80.7
1910	78.9	1917	78.5	1924	79.2	1931	81.2
1911	79.2	1918	79.8	1925	81.0	1932	80.2
1912	79.9	1919	80.8	1926	80.1	1933	

Mean of this month for 25 years 80.1

Absolute maximum for this month for 25 years 92

Absolute minimum for this month for 25 years 88

Average daily excess. (+) or deficiency (—) of this month as compared with mean of 25 years +0.1

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Total this month 14.36

Greatest precipitation in 24 hours 2.77 date 13-14

Total precipitation this month in:

1885	18.51	1897	15.62	1909	17.49	1921	15.18
1886	16.38	1898	16.38	1910	13.63	1922	8.30
1887	16.30	1899	6.41	1911	15.08	1923	15.17
1888	—	1900	11.85	1912	15.90	1924	16.49
1889	—	1901	11.06	1913	11.81	1925	13.77
1890	17.24	1902	7.00	1914	16.30	1926	31.23
1891	7.99	1903	10.91	1915	16.06	1927	15.74
1892	16.97	1904	15.83	1916	14.28	1928	16.22
1893	12.32	1905	8.10	1917	14.37	1929	18.98
1894	12.24	1906	14.09	1918	8.56	1930	9.60
1895	9.25	1907	16.89	1919	12.06	1931	9.26
1896	8.50	1908	10.83	1920	13.29	1932	14.36

Average of this month for 32 years 13.70

Total from January 1, 19 32 to date 38.22

Average from January 1, to date 37.12

Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period +1.10

WIND

Prevailing direction SE Total movement 3679 miles

Average hourly velocity 5.1 miles per hour

Maximum velocity (for five minutes) 30 miles per hour from NE on 16th

(WEATHER No. of days)

Clear 1 Pt. Cloudy 4 Cloudy 25

Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 1,3,4,5,6,8,9,11,12,13,14,16,17,

Thunderstorms None 18,20,21,22,24,25,27,29,30

Earthquakes

1066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; **Month** [illegible], **193** 2

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION Sunshine For 24 hours Period Per Cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	75	80	27	.06	84.0	Cloudy
86	77	80	38	.52	83.9	"
87	75	79	32	.93	83.9	"
88	76	82	67	.02	84.1	Pt.Cldy
85	77	80	13	.22	85.0	Cloudy
83	76	79	0	.08	82.9	"
89	76	81	44	1.72	83.5	"
86	76	79	41	.49	84.3	"
89	76	80	35	.91	84.0	"
89	76	81	42	.13	84.2	"
88	76	82	54	.57	84.6	"
88	76	82	30	.02	84.3	"
87	81	83	49	.31	84.0	"
89	80	84	29	.05	84.2	"
89	81	84	95	T	84.0	Pt.Cldy
87	79	82	31	.77	84.2	Cloudy
87	76	81	40	.09	83.4	"
86	77	82	35	1.18	83.8	"
87	74	79	7	3.45	84.0	"
88	75	78	0	.09	84.0	"
88	75	82	71	T	83.5	Pt.Cldy
86	77	85	71	.02	84.2	"
82	75	78	3	2.11	83.5	Cloudy
86	75	81	29	.08	85.0	"
84	75	80	12	.16	83.0	"
85	75	80	8	.46	82.6	"
84	77	80	10	.16	82.4	"
85	77	81	14	.81	82.0	"
79	74	77	0	1.00	81.7	"
86	75	79	24	0	82.5	"
85	75	80	11	.98	82.8	"
2672	2367	*	—	17.45	*	
86.2	76.4	80.6	31	—	83.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL, INCHES)

(Bi-hourly) 29.82 Highest 29.92 6 date

Mean 29.75 Highest 11 date

Lowest date

TEMPERATURE

Highest 86 date 15th ; lowest 75 date 20th

Greatest daily range date

Bihourly Mean for this month 80.4 80.2 80.0

1906	1913 81.9	1920 80.1	1927 81.4		
1907 78.2	1914 80.1	1921 81.6	1928 80.8		
1908 78.0	1915 79.4	1922 80.8	1929 81.6		
1909 77.0	1916 78.8	1923 79.5	1930 80.2		
1910 81.0	1917 80.5	1924 79.9	1931 80.6		
1911 80.4	1918 80.1	1925 80.5	1932		
1912	1919 [illegible]	1926	1933 80.1		

Mean of this month for [illegible] years 91

Absolute maximum for this month for 25 years 90

Absolute minimum for this month for [illegible] years

Average daily excess, (+) or deficiency (—) of this month as compared with mean of [illegible] years +0.8

EVAPORATION

Total this month Average daily inches

PRECIPITATION

Total this month 17.45 8.96 18 - 19

Greatest precipitation in 24 hours date

Total precipitation this month in

1885 11.10	1897 [illegible]	1909	12.83	1921	10.46		
1886 17.00	1898 [illegible]	1910	21.07	1922	4.40		
1887	1899 16.61	1911	14.68	1923	10.55		
1888	1900 9.94	1912	19.13	1924	20.83		
1889 10.24	1901 16.81	1913	15.13	1925	21.06		
1890 14.02	1902 16.73	1914	10.74	1926	18.15		
1891 21.77	1903 14.81	1915	20.72	1927	16.84		
1892 11.50	1904 9.07	1916	10.44	1928	10.29		
1893 19.10	1905 19.83	1917	13.56	1929	18.67		
1894 17.30	1906 17.66	1918	10.36	1930	8.99		
1895 15.58	1907 14.76	1919	15.60	1931	15.36		
1896	1908 [illegible]	1920	17.58	1932	17.45		

Average of this month for 30 years 30.67

Total from January 1, 19 to date 32.77

Average from January 1, to date 32

Excess (+) or deficiency (—) from January 1, 19 +2.77 to date as compared with average of corresponding period

WIND

5441

Prevailing direction [illegible] movement miles

Average hourly velocity 31 miles per hour

Maximum velocity (for five minutes 26th miles per hour

from on

(WEATHER No. of days)

Clear 0 Pt. Cloudy 4 Cloudy 27

Days on which .01 inch. or more, of rain occurred 28

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 4, 5, 6, 7, 8, 9, 11, 13, 16, 18, 19,

Thunderstorms None 22, 23, 24, 25, 26, 28, 29.

Earthquakes

4066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month August, 1932.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (INCHES) For 24 hours Ending 8 a.m. Per Cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
89	77	82	54	.40	82.2	Pt.Cldy.
89	74	78	18	2.37	81.8	Cldy.
84	75	79	0	.01	81.5	Cldy.
84	77	79	3	1.45	81.8	Cldy.
85	76	80	11	.02	82.0	Cldy.
87	78	82	40	.70	82.0	Cldy.
86	77	79	17	.40	82.6	Cldy.
82	77	78	6	.03	82.5	Cldy.
87	75	78	37	.12	82.0	Cldy.
85	76	80	23	.05	82.2	Cldy.
88	77	80	22	.40	82.4	Cldy.
86	74	79	41	.07	82.7	Pt.Cldy.
88	75	81	15	.02	83.4	Pt.Cldy.
85	76	80	9	.21	82.9	Cldy.
86	76	82	60	.08	83.4	Pt.Cldy.
88	77	82	44	.09	83.8	Pt.Cldy.
88	77	82	10	.03	84.4	Cldy.
84	76	79	0	1.35	83.2	Cldy.
90	75	79	40	.12	83.3	Cldy.
88	75	78	10	.22	82.9	Cldy.
87	74	78	21	.84	83.5	.Cldy.
88	76	81	23	T	83.6	Pt. Cldy.
86	75	81	13	1.39	83.8	Cldy.
88	75	80	19	1.05	83.9	Cldy.
86	74	77	2	.58	84.2	Cldy.
88	74	81	45	0	83.8	Pt.Cldy.
85	76	80	0	0	84.5	Cldy.
88	74	81	36	T	84.7	Pt.Cldy.
87	78	81	7	0	84.7	Cldy.
89	77	80	41	.07	84.4	Pt.Cldy.
89	75	81	25	.05	84.5	Pt.Cldy.
2660	2345	* -	-	12.10	* -	
86.8	75.7	80.0	22	—	83.8	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.888 highest 29.960 date 27
Lowest 29.740 date 3

TEMPERATURE

Highest 90 date 19; lowest 74 date 2
Greatest daily range 15 date 19

Bihourly Mean for this month in

1906	79.4	1913	80.9	1920	79.9	1927	79.5
1907	78.3	1914	80.4	1921	80.3	1928	79.9
1908	77.8	1915	79.0	1922	80.3	1929	81.0
1909	78.6	1916	78.4	1923	79.8	1930	80.9
1910	79.9	1917	80.2	1924	80.9	1931	80.0
1911	79.9	1918	80.8	1925	79.7	1932	
1912		1919	26	1926		1933	79.8

Mean of this month for 25 years 91
Absolute maximum for this month for 26 years 71
Absolute minimum for this month for years
Average daily excess, (+) deficiency (—) of this month as compared with mean of 26 years 80.2

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 12.10; 2.51; 1 & 2
Greatest precipitation in 24 hours date

Total precipitation this month

1885	20.32	1897	17.24	1909	15.42	1921	18.45
1886	12.20	1898	10.91	1910	14.93	1922	14.53
1887	16.89	1899	14.80	1911	11.60	1923	15.35
1888	-	1900	17.00	1912	9.67	1924	7.42
1889	20.51	1901	12.51	1913	17.91	1925	7.71
1890	15.98	1902	5.78	1914	16.01	1926	20.84
1891	15.96	1903	14.25	1915	12.89	1927	26.65
1892	15.18	1904	11.14	1916	8.54	1928	24.49
1893	25.03	1905	15.01	1917	15.79	1929	23.78
1894	14.13	1906	18.21	1918	18.85	1930	14.36
1895	15.51	1907	16.89	1919	6.77	1931	17.52
1896		1908	62	1920	25.04	1932	12.10
						1933	15.37

Average of this month for 32 years 67.77
Total from January 1, 19 to date 68.14
Average from January 1, to date 32
Excess (+) or deficiency (—) from January 1, 19 -0.18 as compared with average of corresponding period

WIND

Prevailing direction SE; total movement 4391 miles
Average hourly velocity 5.9; 28 miles per hour
Maximum velocity (for five minutes 38 from 21st on) miles per hour

(WEATHER — No. of days)

Clear 0; Pt. Cloudy 10; Cloudy 21

Days on which .01 inch, or more, of rain occurred 26

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense 2, 4, 9, 10, 11, 12, 16, 17, 18, 19, 22,
Thunderstorm None (23, 25, 26, 30 and 31.
Earthquakes

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

1066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C.Z. ; Month September, 1932.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (means) Period Ending 7 a.m. percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	78	81	4	0	84.1	cloudy
89	77	83	58	0	84.2	ptcldy
90	77	82	59	.08	84.7	"
93	77	81	60	.04	84.8	"
85	76	80	12	0	84.3	cloudy
88	78	82	67	0	84.8	ptcldy
90	78	83	40	.16	84.8	cloudy
87	78	82	21	.13	85.0	"
87	78	81	30	.09	85.0	"
87	78	82	55	0	84.5	"
90	79	83	53	.18	84.9	"
83	78	80	0	.63	84.0	"
81	71	78	2	2.24	82.8	"
87	73	79	18	T	82.6	"
87	75	81	55	T	83.4	ptcldy
88	77	83	59	0	84.7	"
90	79	85	89	0	84.5	"
87	79	82	8	.53	84.6	cloudy
83	78	80	0	.51	82.8	"
83	75	78	4	0	82.7	"
87	74	80	43	0	82.4	ptcldy
88	76	82	79	.01	83.2	clear.
85	76	80	30	1.07	84.1	cloudy
85	75	79	28	.18	83.5	"
88	76	80	48	.96	83.0	"
85	77	79	7	.01	82.8	"
83	75	78	0	.31	82.0	"
89	75	79	45	.03	82.2	"
87	75	79	43	T	82.1	ptcldy
89	75	80	64	.01	82.4	ptcldy
2608	2291	*	-	7.15	*	-
86.9	76.4	80.7	36	-	83.7	

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.829 highest 29.950 date 1

Lowest 29.720 date 11

TEMPERATURE

Highest 93 date 4 lowest 71 date 13

Greatest daily range 16 date 4

Bihourly Mean for this month in:

1906	-	1913	79.7	1920	80.0	1927	79.5
1907	78.6	1914	79.6	1921	80.1	1928	80.3
1908	78.3	1915	80.5	1922	79.4	1929	80.2
1909	78.2	1916	79.4	1923	80.0	1930	81.0
1910	77.9	1917	79.2	1924	79.9	1931	80.2
1911	80.4	1918	79.7	1925	80.0	1932	80.7
1912	79.5	1919	79.7	1926	79.9	1933	-

Mean of this month for 26 years 79.7

Absolute maximum for this month for 26 years 94

Absolute minimum for this month for 26 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years plus 1.0

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 7.15

Greatest precipitation in 24 hours 2.74 date 12, 13

Total precipitation this month in:

1885	17.44	1897	17.20	1909	16.33	1921	11.21
1886	7.52	1898	10.24	1910	12.05	1922	12.73
1887	15.73	1899	16.55	1911	11.62	1923	12.31
1888	-	1900	9.37	1912	12.23	1924	9.00
1889	-	1901	11.88	1913	9.90	1925	8.17
1890	22.90	1902	11.06	1914	14.80	1926	10.45
1891	17.48	1903	11.61	1915	13.85	1927	17.32
1892	16.26	1904	15.86	1916	10.41	1928	15.48
1893	9.92	1905	6.50	1917	17.87	1929	7.90
1894	18.78	1906	12.48	1918	15.34	1930	10.88
1895	12.09	1907	11.72	1919	11.74	1931	8.24
1896	12.84	1908	11.57	1920	6.81	1932	7.15

Average of this month for 32 years 12.22

Total from January 1, 19 62 to date 774.92

Average from January 1, to date 80.36

Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period -5.44

WIND

Prevailing direction SE Total movement 4140 miles

Average hourly velocity 5.8 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from E on 13

(WEATHER No. of days)

Clear 1 Pt. Cloudy 10 Cloudy 19

Days on which .01 inch, or more, of rain occurred 18

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Lunar 6, 10, 13, 14

Fogs: Light none

Fogs: Dense none 28.

Thunderstorms 2-4-8-9-11-12-13-15-19-21-23-26-

Earthquakes none

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

4066-5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month October, 1932

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	SUNSHINE (HOURS) For 24 hours Period	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
90	74	79	52	1.37	83.8	Cloudy
86	75	79	28	0	84.2	Cloudy
85	75	78	32	1.09	84.1	Cloudy
88	75	79	18	.51	83.3	Cloudy
87	76	80	0	1.81	83.1	Cloudy
85	75	79	32	.71	83.8	Cloudy
91	76	80	69	0	84.4	Pt.Cldy.
89	76	81	94	0	84.8	Clear
90	75	79	48	1.39	84.8	Pt.Cldy.
89	75	79	65	.02	84.5	Pt.Cldy.
82	75	78	1	T.	83.9	Cloudy
86	75	80	36	0	83.9	Cloudy
89	76	82	82	0	83.7	Pt.Cldy.
87	76	81	62	T.	83.6	Pt.Cldy.
88	75	79	9	.87	84.0	Cloudy
87	75	80	49	0	84.2	Pt.Cldy.
89	76	81	87	0	84.4	Pt.Cldy.
91	77	81	53	.34	83.9	Pt.Cldy.
90	76	80	64	.68	84.3	Pt.Cldy.
87	76	80	20	.73	85.0	Cloudy
84	75	77	8	1.62	83.8	Cloudy
90	74	80	81	T.	83.5	Pt.Cldy.
90	77	82	79	.50	85.0	Pt.Cldy.
89	77	82	64	.30	85.2	Pt.Cldy.
89	78	80	14	1.86	84.8	Cloudy
85	74	79	19	.20	84.5	Cloudy
89	76	79	35	.63	85.0	Cloudy
85	74	79	14	.19	84.3	Cloudy
86	75	80	46	.15	84.4	Cloudy
85	75	79	3	T.	84.6	Cloudy
82	75	78	0	1.88	83.6	Cloudy
27 12	2339*	--	--	16.75	* - -	
87.5	75.8	79.6	41	- -	84.2	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE

(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.823 highest 29.960 date 13

Lowest 29.690 date 20

TEMPERATURE

Highest 91 date 7; lowest 74 date 22

Greatest daily range 16 date 22

Bihourly Mean for this month in:

1906	-	1913	79.4	1920	79.2	1927	79.1		
1907	77.3	1914	79.2	1921	79.3	1928	79.9		
1908	77.4	1915	79.6	1922	79.1	1929	79.7		
1909	77.9	1916	78.7	1923	78.8	1930	79.4		
1910	77.7	1917	78.4	1924	79.5	1931	80.6		
1911	79.2	1918	78.9	1925	80.0	1932	79.6		
1912	78.5	1919	79.5	1926	79.7	1933			

Mean of this month for 26 years 79.1

Absolute maximum for this month for 26 years 95

Absolute minimum for this month for 26 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 26 years +0.5

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 16.75

Greatest precipitation in 24 hours 2.35 date 20-21

Total precipitation this month in:

1885	7.99	1897	5.83	1909	19.31	1921	8.27		
1886	14.33	1898	11.38	1910	15.65	1922	13.87		
1887	19.61	1899	15.09	1911	16.53	1923	42.17		
1888	- -	1900	16.33	1912	17.65	1924	21.56		
1889	- -	1901	12.65	1913	16.63	1925	16.49		
1890	21.77	1902	14.24	1914	22.16	1926	15.31		
1891	17.48	1903	10.04	1915	21.86	1927	13.12		
1892	6.69	1904	8.14	1916	17.59	1928	18.02		
1893	12.28	1905	13.45	1917	7.87	1929	13.74		
1894	12.40	1906	13.34	1918	27.07	1930	7.26		
1895	16.46	1907	21.99	1919	21.94	1931	20.42		
1896	13.98	1908	10.96	1920	17.16	1932	16.75		

Average of this month for 65 years 15.48

Total from January 1, 1932 to date 91.67

Average from January 1, to date 95.84

Excess (+) or deficiency (—) from January 1, 1932 to date as compared with average of corresponding period -4.17

WIND

Prevailing direction SE Total movement 4352 miles

Average hourly velocity 5.8 miles per hour

Maximum velocity (for five minutes) 24 miles per hour from S on 9

(WEATHER No. of days)

Clear 1 Pt. Cloudy 12 Cloudy 18

Days on which .01 inch, or more, of rain occurred 20

MISCELLANEOUS PHENOMENA

(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 1, 3, 8, 9, 10, 15, 18, 19, 20, 21, 24, 25, 27, 29, & 31.

Earthquakes

4066-4

THE PANAMA CANAL

MR 4699—Panama Canal—3-28-27—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month November, 1928.

TEMPERATURE (Degrees Fahrenheit) AX	MIN.	MEAN Bihourly	EVAPORATION (INCHES)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
83	74	76	3	2.57	80.1	Cloudy
86	74	80	78	.07	83.2	Pt.Cldy
88	75	79	22	.87	83.6	Cloudy
91	75	81	57	.11	84.2	Pt.Cldy
87	76	81	7	0	83.7	Cloudy
85	77	79	25	0	83.2	Cloudy
84	76	79	47	0	82.8	Pt.Cldy
85	77	79	69	0	82.6	Pt.Cldy
86	75	79	30	.73	82.0	Cloudy
80	75	77	0	2.88	81.8	Cloudy
85	79	82	46	0	81.7	Pt.Cldy
85	80	81	60	0	81.3	Cloudy
82	76	80	3	.75	80.7	Cloudy
86	76	80	58	.91	80.5	Cloudy
88	77	83	81	.26	80.2	Pt.Cldy
81	75	78	5	1.41	80.0	Cloudy
85	74	78	66	.52	80.4	Cloudy
87	74	78	61	1.07	81.5	Cloudy
84	73	79	84	.10	82.3	Pt.Cldy
81	76	78	19	.85	82.4	Cloudy
85	75	78	28	3.63	81.6	Cloudy
84	74	78	42	.40	81.3	Cloudy
80	75	78	0	6.25	80.2	Cloudy
85	75	80	49	3.30	80.2	Cloudy
81	75	78	11	.38	79.6	Cloudy
86	77	81	28	.64	81.0	Cloudy
83	75	80	43	1.33	80.8	Cloudy
80	74	77	0	3.68	80.3	Cloudy
78	72	75	0	5.40	78.0	Cloudy
79	73	76	16	1.04	76.5	Cloudy
2632				37.13		
84.1	75.8	79.0	34		81.3	

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL: INCHES)

Mean 29.825 highest 29.950 date 20

Lowest 29.637 date 7

TEMPERATURE

Highest 91 date 4 lowest 72 date 29

Greatest daily range 16 date 4

Bihourly Mean for this month in:

1906	—	1913	78.7	1920	79.8	1927	79.0
1907	78.4	1914	79.5	1921	79.3	1928	78.4
1908	77.2	1915	79.0	1922	78.5	1929	80.4
1909	75.9	1916	78.5	1923	79.8	1930	81.2
1910	77.5	1917	77.6	1924	78.3	1931	78.5
1911	78.9	1918	79.9	1925	79.2	1932	79.0
1912	78.5	1919	79.7	1926	78.7	1933	

Mean of this month for 26 years 78.9

Absolute maximum for this month for 26 years 92

Absolute minimum for this month for 26 years 69

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 26 years +0.1

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Total this month 37.13

Greatest precipitation in 24 hours 9.19 date 23-24

Total precipitation this month in:

1885	24.17	1897	22.16	1909	42.50	1921	19.96
1886	21.89	1898	12.26	1910	30.04	1922	15.65
1887	53.81	1899	14.49	1911	15.81	1923	22.16
1888	—	1900	20.28	1912	21.81	1924	30.29
1889	—	1901	32.75	1913	15.75	1925	22.95
1890	19.49	1902	12.18	1914	18.35	1926	29.39
1891	19.49	1903	28.30	1915	22.33	1927	28.36
1892	26.30	1904	26.33	1916	14.06	1928	17.20
1893	17.80	1905	17.92	1917	30.49	1929	8.99
1894	23.86	1906	26.64	1918	14.25	1930	16.94
1895	20.47	1907	15.37	1919	6.63	1931	30.31
1896	15.63	1908	31.72	1920	21.27	1932	37.15

Average of this month for 62 years 21.48

Total from January 1, 19 32 to date 128.80

Average from January 1, to date 117.32

Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period +11.48

WIND

Prevailing direction N Total movement 7864 miles

Average hourly velocity 10.9 miles per hour

Maximum velocity (for five minutes) 34 miles per hour from NW on 29

(WEATHER No. of days)

Clear 0 Pt. Cloudy 7 Cloudy 23

Days on which .01 inch, or more, of rain occurred 24

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 3,9,10,18,21,22,23,24,25

Thunderstorms None

Earthquakes

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

066–5

THE PANAMA CANAL

MR 19178—Panama Canal—3-12-30—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month December, 1932

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (Inches) For 24 hours Period Ending per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
81	75	78	31	.39	77.3	Cloudy
83	76	80	42	.02	78.8	Pt.Cldy.
86	74	80	66	0	79.7	Cloudy
82	75	78	22	.20	79.7	Cloudy
84	77	80	66	0	79.5	Pt. Cldy.
84	76	80	35	.64	80.1	Cloudy
86	77	82	36	1.49	79.8	Cloudy
84	77	80	28	.16	79.8	Cloudy
85	79	82	55	.23	79.9	Pt.Cldy
82	78	80	4	.05	79.4	Cloudy
85	77	81	62	.19	79.3	Pt.Cldy.
85	76	80	56	.23	80.0	Pt.Cldy.
86	74	80	62	.10	80.3	Pt.Cly.
85	76	80	100	.11	80.9	Clear
86	77	82	59	.02	81.1	Pt.Cldy.
85	77	81	86	.10	80.8	Pt.Cldy.
86	77	82	84	.08	81.3	Pt.Cldy.
85	76	80	64	.37	80.8	Pt.Cldy.
85	75	80	100	.03	80.6	Clear
86	75	80	72	.42	80.4	Pt.Cldy.
86	74	80	76	.15	80.6	Pt.Cldy.
87	76	82	98	T.	80.8	Pt.Cldy.
84	76	80	10	.28	81.0	Cloudy
80	75	78	0	.03	80.0	Cloudy
81	75	78	2	1.69	79.2	Cloudy
83	75	79	8	.42	79.7	Cloudy
85	74	80	81	.06	79.8	Pt.Cldy.
86	78	82	69	.01	80.4	Pt.Cldy.
86	77	82	94	.01	80.3	Pt.Cldy.
85	75	80	47	.03	80.0	Pt.Cldy.
84	75	80	67	.13	79.8	Pt.Cldy.
2618	2354	* -	-	7.64	* -	
84.5	75.9	79.5	54	-	80	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE
(REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.837 highest 29.980 date 15
Lowest 29.729 date 22

TEMPERATURE

Highest 87 date 22; lowest 74 date 13
Greatest daily range 12 date 13
Bihourly Mean for this month in:

1906 -	1913 79.6	1920 80.7	1927 80.1
1907 79.9	1914 81.4	1921 80.0	1928 79.7
1908 78.1	1915 80.6	1922 79.7	1929 80.4
1909 76.8	1916 79.7	1923 80.2	1930 81.6
1910 78.0	1917 78.3	1924 79.6	1931 80.9
1911 81.7	1918 81.1	1925 81.0	1932 79.5
1912 80.2	1919 80.2	1926 79.5	1933

Mean of this month for 26 years 79.9
Absolute maximum for this month for 26 years 89
Absolute minimum for this month for 26 years 66
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 26 years -0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Total this month 7.64
Greatest precipitation in 24 hours 2.11 date 25-26
Total precipitation this month in:

1885 25.51	1897 10.99	1909 4.36	1921 6.59
1886 22.72	1898 7.95	1910 15.20	1922 7.20
1887 13.85	1899 9.04	1911 2.63	1923 5.12
1888 -	1900 4.13	1912 11.47	1924 8.84
1889 -	1901 5.41	1913 6.55	1925 6.04
1890 19.06	1902 7.10	1914 5.56	1926 7.60
1891 4.25	1903 15.75	1915 9.45	1927 16.70
1892 11.30	1904 7.02	1916 6.71	1928 16.43
1893 30.94	1905 9.50	1917 11.66	1929 7.87
1894 25.12	1906 15.64	1918 1.90	1930 7.86
1895 15.71	1907 9.36	1919 7.57	1931 3.47
1896 18.66	1908 9.07	1920 2.06	1932 7.64

Average of this month for 62 years 10.84
Total from January 1, 19 32 to date 136.44
Average from January 1, to date 128.16
Excess (+) or deficiency (—) from January 1, 19 32 to date as compared with average of corresponding period +8.28

WIND

Prevailing direction North Total movement 7582 miles
Average hourly velocity 10.2 miles per hour
Maximum velocity (for five minutes) 27 miles per hour
from West on 6th

(WEATHER No. of days)

Clear 2 Pt. Cloudy 18 Cloudy 11
Days on which .01 inch, or more, of rain occurred 28

MISCELLANEOUS PHENOMENA
(DATES OF)

Halos: Lunar 9th
Fogs: Light None
Fogs: Dense None
Thunderstorms 20-23-25
Earthquakes None

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month January, 1934

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (INCHES) For 24 hours Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
84	73	78	72	.93	82.2	Pt.cldy
84	73	78	74	.94	82.4	Pt.cldy
85	73	77	54	.42	82.2	cldy
82	73	77	67	0	82.5	Pt.cldy
85	72	78	92	.09	83.0	Pt.cldy
85	77	80	98	0	82.4	clear
85	78	81	86	0	82.3	clear
86	76	80	98	.02	81.9	clear
85	75	80	91	0	81.8	pt.cldy
85	76	79	98	0	82.0	clear
84	76	80	86	.04	82.1	clear
84	73	79	73	.19	81.6	pt.cldy
85	76	79	56	0	82.0	pt.cldy
84	78	80	67	T	81.0	pt.cldy
85	76	80	79	.10	80.8	pt.cldy
85	78	80	89	0	80.9	clear
85	76	80	64	.04	80.8	pt.cldy
85	75	80	62	1.05	80.2	pt.cldy
85	76	80	71	0	80.0	pt.cldy
85	78	81	91	0	80.8	clear
85	77	80	74	.03	80.8	pt.cldy
85	78	80	74	T	81.0	pt.cldy
84	77	80	80	.02	80.5	pt.cldy
84	77	80	68	.02	80.2	pt.cldy
84	77	79	39	.05	79.9	cldy
84	78	80	71	0	80.2	pt.cldy
84	77	79	95	T	79.7	clear
84	77	79	69	0	79.8	pt.cldy
84	77	79	73	0	79.4	pt.cldy
84	77	80	84	0	79.6	clear
84	77	80	89	0	80.0	clear
2619	2357	* -	-	3.94	* -	
84.5	76.0	79.5	77	-	81.1	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.880 highest 30.010 date 12

Lowest 29.770 date 19

TEMPERATURE

Highest 86 date 8 lowest 72 date 5

Greatest daily range 13 date 8

Bihourly Mean for this month in:

1906		1915	81.7	1924	80.1	1933	80.1
1907		1916	80.6	1925	79.5	1934	79.5
1908	79.9	1917	78.4	1926	80.5	1935	
1909	77.9	1918	78.4	1927	80.2	1936	
1910	77.9	1919	79.8	1928	80.6	1937	
1911	78.9	1920	80.7	1929	80.3	1938	
1912	81.1	1921	80.3	1930	79.9	1939	
1913	80.5	1922	79.9	1931	81.1	1940	
1914	80.4	1923	79.6	1932	80.5	1941	

Mean of this month for 27 years 79.9

Absolute maximum for this month for 27 years 88

Absolute minimum for this month for 27 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years -0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 1.13 date 1-2

Total precipitation this month in:

1885	.87	1899	6.93	1913	6.71	1927	4.60
1886	2.13	1900	6.06	1914	1.35	1928	1.71
1887	2.01	1901	1.28	1915	3.41	1929	.81
1888	.43	1902	19.20	1916	2.33	1930	2.46
1889	-	1903	1.00	1917	1.10	1931	2.01
1890	7.24	1904	7.02	1918	3.28	1932	1.44
1891	2.52	1905	8.42	1919	1.62	1933	2.10
1892	.98	1906	1.47	1920	.61	1934	3.94
1893	1.73	1907	2.47	1921	1.31	1935	
1894	5.35	1908	3.84	1922	6.85	1936	
1895	3.08	1909	10.61	1923	1.98	1937	
1896	4.02	1910	2.94	1924	.61	1938	
1897	3.42	1911	.99	1925	3.66	1939	
1898	5.04	1912	.25	1926	.70	1940	

Average of this month for 64 years 3.46

Total from January 1, 19 34 to date 3.94

Average from January 1, to date 3.46

Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period +0.48

WIND

Prevailing direction N Total movement 9011 miles

Average hourly velocity 12.1 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from NE on 21

(WEATHER No. of days)

Clear 10 Pt. Cloudy 19 Cloudy 2

Days on which .01 inch, or more, of rain occurred 14

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense none

Thunderstorms none

Earthquakes none

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month February, 1934

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sun Shine (HOURS) per cent Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
84	76	79	76	.04	79.9	Pt.cldy.
84	76	79	69	.06	80.4	Pt.cldy.
84	77	80	86	0	81.1	Clear
84	77	79	95	0	80.5	Pt.cldy
85	76	79	77	T	80.2	Pt.cldy
84	77	79	87	0	80.1	Clear
84	78	79	100	0	79.6	Clear
85	75	80	92	0	80.2	Pt.cldy
84	77	79	95	0	81.2	Clear
85	77	80	81	0	80.7	Pt.cldy
85	78	80	81	.01	80.7	Pt.cldy
85	78	80	89	0	80.6	Pt.cldy
84	78	80	92	T	80.1	Pt.cldy
83	75	80	65	.13	80.0	Pt.cldy
84	77	79	67	0	79.6	Pt.cldy
83	77	79	100	0	79.7	Clear
84	77	79	95	0	79.6	Clear
84	77	79	76	0	80.3	Clear
84	77	79	82	0	79.6	Pt.cldy
84	76	79	96	.06	79.7	Clear
84	77	80	97	0	79.5	Clear
85	76	80	95	.03	79.7	Clear
85	76	80	9	.13	79.2	Cloudy
86	75	80	60	.09	79.8	Pt.cldy
85	78	80	75	0	79.8	Pt.cldy
84	78	80	100	0	80.7	Clear
86	77	81	97	0	81.1	Clear
85	78	80	76	0	80.8	Pt.cldy
2363	2144	* -	-	.55	* -	
84.4	76.8	79.6	88	---	80.2	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.937; highest 30.060 date 14
Lowest 29.850 date 2

TEMPERATURE

Highest 86 date 24; lowest 75 date 7
Greatest daily range 12 date 8
Bihourly Mean for this month in:

1906		1915	81.2	1924	79.6	1933	80.2
1907		1916	79.4	1925	79.4	1934	79.6
1908	79.9	1917	78.8	1926	80.6	1935	
1909	79.1	1918	79.0	1927	79.3	1936	
1910	78.0	1919	80.1	1928	81.1	1937	
1911	78.4	1920	80.4	1929	80.4	1938	
1912	80.3	1921	79.8	1930	80.1	1939	
1913	79.6	1922	81.2	1931	80.9	1940	
1914	80.5	1923	79.4	1932	80.3	1941	

Mean of this month for 27 years 79.9
Absolute maximum for this month for 27 years 89
Absolute minimum for this month for 27 years 69
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years -0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours .22 date 23-24
Total precipitation this month in:

1885	.59	1899	6.49	1913	1.75	1927	3.21
1886	5.00	1900	.33	1914	1.32	1928	.71
1887	.67	1901	.94	1915	12.37	1929	.56
1888	1.58	1902	.89	1916	1.96	1930	.75
1889	---	1903	.35	1917	.45	1931	.97
1890	1.02	1904	.47	1918	.67	1932	.95
1891	.51	1905	1.13	1919	.36	1933	.08
1892	2.01	1906	1.14	1920	.54	1934	.55
1893	3.82	1907	1.37	1921	1.68	1935	
1894	1.65	1908	1.08	1922	.71	1936	
1895	1.59	1909	1.92	1923	.69	1937	
1896	1.80	1910	3.58	1924	2.80	1938	
1897	.04	1911	1.61	1925	.73	1939	
1898	.38	1912	1.81	1926	1.78	1940	

Average of this month for 64 years 1.62
Total from January 1, 19 34 to date 4.49
Average from January 1, to date 4.98
Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period - 3.49

WIND

Prevailing direction North Total movement 8740 miles
Average hourly velocity 13.0 miles per hour
Maximum velocity (for five minutes) 24 miles per hour from N on 28

(WEATHER No. of days)

Clear 12 Pt. Cloudy 15 Cloudy 1
Days on which .01 inch, or more, of rain occurred 8

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month March, 1934

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (inches) Sunshine Past 24 hours Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	77	81	89	.03	80.4	Clear
85	78	81	88	0	80.5	Clear
85	77	80	91	0	80.6	Pt cldy
85	76	80	96	0	80.8	Clear
85	77	80	78	0	80.8	Clear
85	78	80	76	0	80.5	Pt cldy
85	78	80	81	0	80.3	Clear
85	77	80	72	T	79.7	Pt cldy
85	77	80	100	0	79.7	Clear
84	77	80	75	0	79.8	Pt cldy
85	77	80	68	.04	80.1	Pt cldy
85	74	80	82	.02	80.8	Pt cldy
86	78	81	92	0	80.7	Clear
85	77	80	100	.01	80.2	Clear
85	77	80	80	.03	80.3	Pt cldy
84	75	80	61	.58	80.8	Pt cldy
86	79	81	88	.12	80.6	Pt cldy
85	78	80	61	T	80.8	Pt cldy
85	76	80	93	.03	80.7	Clear
84	76	79	74	.15	80.9	Pt cldy
85	78	81	98	.01	80.8	Clear
85	78	81n	100	0	80.6	Clear
85	78	81	100	0	80.5	Clear
86	78	81	93	0	81.2	Clear
85	74	81	89	.06	81.4	Clear
85	78	81	89	0	81.6	Clear
86	78	81	90	0	80.8	Clear
85	77	80	89	.01	80.8	Clear
85	78	80	78	.01	80.3	Pt cldy
85	77	80	85	0	79.7	Pt cldy
86	77	81	85	T	80.4	Clear
2637	2390	* -	-	1.10	* -	
85.1	77.1	80.4	84	-	80.5	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

*hhr

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.890 highest 30.000 date 9

Lowest 29.800 date 15

TEMPERATURE

Highest 86 date 31 ; lowest 74 date 25

Greatest daily range 11 date 28

Bihourly Mean for this month in:

1906		1915	82.1	1924	81.0	1933	80.5
1907		1916	80.2	1925	80.3	1934	80.4
1908	79.8	1917	78.8	1926	80.5	1935	
1909	79.7	1918	79.2	1927	81.3	1936	
1910	78.1	1919	80.0	1928	81.1	1937	
1911	78.8	1920	80.9	1929	80.8	1938	
1912	81.5	1921	81.1	1930	81.1	1939	
1913	80.7	1922	81.4	1931	81.7	1940	
1914	80.7	1923	79.8	1932	81.0	1941	

Mean of this month for 27 years 80.5

Absolute maximum for this month for 27 years 92

Absolute minimum for this month for 27 years 67

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years - 0.1

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours .61 date 15.16

Total precipitation this month in:

1885	.55	1899	1.26	1913	.79	1927	1.27
1886	9.17	1900	1.06	1914	.91	1928	2.42
1887	.47	1901	1.67	1915	1.71	1929	2.59
1888	1.26	1902	2.35	1916	2.68	1930	1.07
1889		1903	.96	1917	.76	1931	4.48
1890	2.01	1904	1.65	1918	.41	1932	2.69
1891	1.50	1905	.62	1919	.61	1933	1.41
1892	5.96	1906	1.42	1920	1.08	1934	1.10
1893	1.81	1907	2.16	1921	.98	1935	
1894	.35	1908	3.65	1922	.92	1936	
1895	2.09	1909	1.85	1923	.36	1937	
1896	2.01	1910	5.46	1924	.71	1938	
1897	.85	1911	2.41	1925	.31	1939	
1898	1.58	1912	.66	1926	.43	1940	

Average of this month for 65 years 1.56

Total from January 1, 19 34 to date 5.59

Average from January 1, to date 6.54

Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period - .95

WIND

Prevailing direction N Total movement 10980 miles

Average hourly velocity 14.8 miles per hour

Maximum velocity (for five minutes) 25 miles per hour from NW on 18

(WEATHER No. of days)

Clear 18 Pt. Cloudy 13 Cloudy 0

Days on which .01 inch, or more, of rain occurred 13

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 17

Earthquakes None

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month April, 1934.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending Midnight	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	75	81	76	.07	80.8	PtCldy
86	78	81	84	T	80.6	PtCldy
86	77	81	79	.02	81.2	PtCldy
86	79	82	91	0	81.4	Clear
86	78	82	100	0	81.3	Clear
86	79	82	82	0	81.4	Clear
87	80	82	47	.02	81.4	Cloudy
86	79	81	80	.04	81.3	PtCldy
86	79	82	86	.01	81.4	Pt Cldy
87	79	82	82	0	81.9	Clear
85	80	81	5	.08	82.3	PtCldy
87	76	81	35	.14	81.7	Cloudy
86	77	81	59	.02	81.8	PtCldy
86	72	82	48	.08	82.5	PtCldy
86	79	82	85	.01	82.8	PtCldy
88	78	82	62	.36	83.4	PtCldy
87	74	81	47	3.31	83.2	Cloudy
87	77	82	77	.02	84.2	PtCldy
86	80	83	41	0	84.4	PtCldy
87	78	82	38	.26	83.5	Cloudy
86	79	82	69	0	83.4	PtCldy
85	79	82	27	.05	83.0	Cloudy
87	80	82	31	0	83.0	Cloudy
83	77	80	16	.84	82.5	Cloudy
86	77	82	75	.28	82.6	Cloudy
87	80	83	85	0	83.2	PtCldy
87	79	83	86	0	83.3	PtCldy
87	80	83	87	0	83.4	PtCldy
87	80	83	83	0	83.6	PtCldy
86	80	82	58	0	83.0	Cloudy
2580	2362	*	---	5.48	*	
86.0	78.8	81.9	59	---	82.4	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.886; highest 29.970 date 1

Lowest 29.780 date 4

TEMPERATURE

Highest 88 date 16; lowest 74 date 17

Greatest daily range 13 date 17

Bihourly Mean for this month in:

1906		1915	81.2	1924	81.0	1933	82.2
1907		1916	81.6	1925	81.0	1934	81.9
1908	80.1	1917	79.4	1926	81.7	1935	
1909	80.5	1918	79.9	1927	81.5	1936	
1910	79.6	1919	80.4	1928	82.2	1937	
1911	79.9	1920	81.9	1929	81.5	1938	
1912	82.1	1921	80.8	1930	80.4	1939	
1913	80.4	1922	81.6	1931	82.5	1940	
1914	81.1	1923	80.7	1932	82.1	1941	

Mean of this month for 27 years 81.1

Absolute maximum for this month for 27 years 88

Absolute minimum for this month for 27 years 72

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years +0.8

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 3.57 date 16-17

Total precipitation this month in:

1885	1.34	1899	.48	1913	2.69	1927	6.95
1886	1.59	1900	.75	1914	4.12	1928	.96
1887	10.65	1901	1.80	1915	10.42	1929	.67
1888	---	1902	6.46	1916	6.25	1930	6.85
1889	---	1903	1.65	1917	1.87	1931	4.30
1890	2.99	1904	11.46	1918	5.34	1932	2.83
1891	.51	1905	2.88	1919	10.95	1933	.35
1892	5.00	1906	4.23	1920	1.72	1934	5.48
1893	8.07	1907	1.08	1921	7.45	1935	
1894	2.16	1908	1.27	1922	2.11	1936	
1895	21.73	1909	3.56	1923	1.21	1937	
1896	9.02	1910	3.30	1924	10.55	1938	
1897	3.74	1911	3.06	1925	5.47	1939	
1898	4.72	1912	.75	1926	.34	1940	

Average of this month for 6.4 years 4.21

Total from January 1, 1934 to date 11.07

Average from January 1, to date 10.75

Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period +0.32

WIND

Prevailing direction E Total movement 8651 miles

Average hourly velocity 12.0 miles per hour

Maximum velocity (for five minutes) 24 miles per hour from E on 1

(WEATHER No. of days)

Clear 4 Pt. Cloudy 17 Cloudy 9

Days on which .01 inch, or more, of rain occurred 17

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 27

Fogs: Light None

Fogs: Dense None

Thunderstorms 12, 17, 20, 24

Earthquakes None

MR 33839—Panama Canal—3-3-33—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 1934, 193

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	[illegible]	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
87	80	82	40	T	82.8	Cloudy
85	80	80	37	.21	82.5	Cloudy
87	77	81	51	.14	82.6	Cloudy
88	78	83	63	.30	83.8	Pt.cldy
87	81	83	26	0	84.0	Cloudy
88	80	84	69	0	83.6	Pt.cldy
88	80	84	54	0	83.7	Cloudy
86	80	82	11	.15	83.4	Cloudy
86	79	82	18	.32	83.8	Cloudy
87	80	81	26	.97	83.2	Cloudy
81	74	76	0	3.89	81.5	Cloudy
90	74	80	60	.10	82.4	Cloudy
87	75	81	66	0	83.9	Pt.cldy
87	76	80	50	.04	84.4	Cloudy
84	77	80	17	1.21	83.2	Cloudy
87	76	81	46	.39	83.2	Cloudy
88	74	82	97	0	84.7	Clear
88	76	82	98	0	85.2	Clear
90	76	82	90	0	85.8	Pt.cldy
88	77	81	26	0	85.6	Cloudy
89	76	80	40	.50	84.2	Cloudy
90	76	79	46	.61	83.8	Pt.cldy
88	75	81	54	0	83.6	Cloudy
88	76	81	41	1.66	84.4	Cloudy
86	75	81	56	0	84.6	Cloudy
84	77	80	1	.09	85.0	Cloudy
87	76	81	30	T	84.8	Pt.cldy
88	76	79	2	.65	83.0	Cloudy
84	78	78	10	1.41	82.2	Cloudy
85	73	79	35	0	82.9	Cloudy
88	76	81	35	0	83.0	Cloudy
2691	2324*	-	-	11.94	* -	
86.8	76.9	80.8	41	-	83.7	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.843; highest 29.950 date 14th

Lowest 29.720 date 26th

TEMPERATURE

Highest 90 date 22; lowest 75 date 30

Greatest daily range 16 date 12

Bihourly Mean for this month in:

1906		1915	81.6	1924	80.5	1933	81.2
1907		1916	80.3	1925	81.9	1934	80.8
1908	78.5	1917	78.9	1926	82.0	1935	
1909	79.2	1918	79.7	1927	79.8	1936	
1910	78.9	1919	81.3	1928	81.6	1937	
1911	78.8	1920	81.6	1929	80.7	1938	
1912	81.6	1921	80.4	1930	81.3	1939	
1913	79.1	1922	81.0	1931	81.5	1940	
1914	81.4	1923	80.6	1932	81.0	1941	

Mean of this month for 27 years 80.6

Absolute maximum for this month for 27 years 88

Absolute minimum for this month for 27 years 71

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years + 0.2

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 4.19 date 10-11

Total precipitation this month in:

1885	7.91	1899	13.90	1913	22.60	1927	14.11
1886	15.15	1900	12.25	1914	17.76	1928	12.78
1887	10.28	1901	6.19	1915	7.75	1929	10.07
1888	—	1902	11.10	1916	9.88	1930	14.21
1889	—	1903	14.74	1917	12.11	1931	17.71
1890	9.76	1904	11.06	1918	19.28	1932	16.55
1891	25.00	1905	22.96	1919	6.95	1933	8.18
1892	18.08	1906	10.07	1920	5.48	1934	11.94
1893	5.58	1907	6.55	1921	13.61	1935	
1894	9.85	1908	22.49	1922	6.88	1936	
1895	16.77	1909	7.21	1923	11.18	1937	
1896	16.46	1910	12.09	1924	14.86	1938	
1897	16.34	1911	17.13	1925	8.25	1939	
1898	12.85	1912	18.05	1926	15.73	1940	

Average of this month for 84 years 12.48

Total from January 1, 19 34 to date 25.01

Average from January 1, to date 23.23

Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period + 0.82

WIND

Prevailing direction E Total movement 5126 miles

Average hourly velocity 6.9 miles per hour

Maximum velocity (for five minutes) 20 miles per hour

from E on 6th

(WEATHER No. of days)

Clear 2 Pt. Cloudy 6 Cloudy 23

Days on which .01 inch, or more, of rain occurred 17

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 1, 2, 3, 10, 11, 13, 14, 15, 21, 22, 24, 25, 26, 28 & 29

Thunderstorms None

Earthquakes

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

56-0

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month June, 1934.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (HRS) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
90	77	82	71	0	83.0	cldy
89	78	82	45	0	83.5	cldy
87	77	80	22	.43	83.2	cldy
85	75	78	9	2.01	82.3	cldy
86	75	80	21	.18	81.9	cldy
84	75	79	35	.05	82.0	cldy
91	76	82	87	0	83.3	ptcldy
88	76	81	62	.07	83.1	cldy
90	76	82	44	0	84.0	cldy
89	76	81	35	0	84.2	ptcldy
88	76	81	66	.37	84.2	ptcldy
88	76	81	33	0	84.4	ptcldy
91	77	83	62	0	84.5	ptcldy
90	78	83	41	T	84.3	ptcldy
88	77	83	44	.06	84.9	ptcldy
86	75	79	8	.06	85.2	cldy
89	76	79	18	.42	83.8	cldy
90	75	79	12	1.18	83.6	cldy
88	75	78	16	1.12	83.8	cldy
86	75	80	16	.12	83.8	cldy
88	80	83	37	0	83.8	cldy
86	81	84	37	.05	83.8	cldy
88	81	83	40	0	83.8	cldy
88	80	83	36	.77	83.9	cldy
84	78	81	25	T	83.7	cldy
88	78	82	40	.03	83.7	cldy
82	74	79	0	1.35	83.8	cldy
80	74	77	0	1.34	82.5	cldy
88	77	83	79	.30	82.8	ptcldy
87	80	83	37	T	83.7	ptcldy
2688	2304	* -	-	9.89	* -	
87.6	76.8	81.1	37	-	83.6	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL: INCHES)

(Bi-hourly)

Mean 29.837; highest 29.950 date 18

Lowest 29.720 date 6

TEMPERATURE

Highest 91 date 15; lowest 74 date 28

Greatest daily range 15 date 7

Bihourly Mean for this month in:

1906 -	1915	80.8	1924	79.2	1933	80.5
1907 -	1916	79.9	1925	81.0	1934	81.1
1908	78.5	1917	78.5	1926	80.1	1935 -
1909	78.2	1918	79.6	1927	79.9	1936
1910	78.9	1919	80.8	1928	79.6	1937
1911	79.2	1920	80.4	1929	80.1	1938
1912	79.9	1921	79.7	1930	80.7	1939
1913	80.0	1922	80.1	1931	81.2	1940
1914	80.2	1923	80.5	1932	80.2	1941

Mean of this month for 47 years 80.1

Absolute maximum for this month for 47 years 92

Absolute minimum for this month for 47 years 69

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years +1.0

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 2.57 date 27.28

Total precipitation this month in:

1885	16.61	1899	6.61	1913	11.81	1927	13.74
1886	14.38	1900	11.65	1914	16.30	1928	16.22
1887	18.50	1901	11.05	1915	16.01	1929	18.96
1888	-	1902	7.00	1916	14.38	1930	9.40
1889	-	1903	10.91	1917	14.37	1931	9.26
1890	17.24	1904	15.83	1918	8.56	1932	14.36
1891	7.99	1905	8.10	1919	18.08	1933	15.86
1892	16.97	1906	14.08	1920	13.89	1934	9.89
1893	12.32	1907	16.59	1921	15.18	1935	
1894	12.84	1908	10.63	1922	8.30	1936	
1895	8.85	1909	17.49	1923	15.17	1937	
1896	8.80	1910	13.63	1924	18.42	1938	
1897	16.82	1911	15.58	1925	13.77	1939	
1898	15.36	1912	15.90	1926	21.23	1940	

Average of this month for 44 years 15.68

Total from January 1, 19...34 to date 32.90

Average from January 1, to date 30.91

Excess (+) or deficiency (—) from January 1, 19...34 to date as compared with average of corresponding period -4.01

WIND

Prevailing direction SE Total movement 5046 miles

Average hourly velocity 7.0 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from SW on 19

(WEATHER No. of days)

Clear 0 Pt. Cloudy 9 Cloudy 21

Days on which .01 inch, or more, of rain occurred 18

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 3, 9, 14, 15, 17, 18, 19, 20, 24, 25, 27, (25)

Earthquakes None

"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

50-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month July, 1934

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine (INCHES) Percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	80	83.5	68	0	84.2	Pt Cldy.
87	79	82.2	21	.05	83.8	Cloudy
86	77	80.5	55	.60	83.9	Cloudy
85	78	78.3	21	1.20	84.0	Cloudy
83	78	77.8	0	.08	83.5	Cloudy
88	77	80.0	32	.01	82.9	Cloudy
89	76	80.6	60	.01	83.2	Pt.Cldy.
87	76	80.9	28	0	83.4	Pt.Cldy.
88	78	83.2	84	.27	83.0	Pt.Cldy.
88	78	82.8	31	0	84.0	Cloudy
87	76	80.4	26	.05	83.3	Cloudy
89	76	81.2	45	.04	83.2	Pt.Cldy.
89	77	81.2	20	0	82.9	Cloudy
85	76	80.2	6	0	83.0	Cloudy
84	76	78.8	0	1.28	82.8	Cldy
82	75	79.1	0	.76	82.0	Cloudy
86	78	82.3	54	.30	82.5	Pt.Cldy
87	80	82.8	48	.09	83.0	Cloudy
88	79	83.7	53	.07	83.0	Pt.Cldy
87	77	82.2	53	.40	83.3	Cloudy
83	76	78.8	0	.01	82.2	Cloudy
87	76	80.8	28	.04	82.8	Cloudy
85	74	79.7	8	.66	82.2	Cloudy
82.	74	77.8	2	1.83	81.3	Cloudy
87	75	80.9	51	.03	82.4	Cloudy
85	77	79.9	15	.10	82.9	Cloudy
87	79	82.8	50	.01	82.6	Cloudy
88	81	83.8	41	0	82.6	Pt Cldy
87	80	83.0	8	0	82.8	Cloudy
89	79	83.0	33	T	83.2	Cloudy
87	75	80.2	30	1.41	83.6	Cloudy
2683	2386	*80146	—	9.21	*80884	
84.5	77.0	81.0	30	—	83.0	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.846; highest 29.910 date 5

Lowest 29.750 date 9

TEMPERATURE

Highest 89 date 30; lowest 75 date 31

Greatest daily range 14 date 31

Bihourly Mean for this month in:

1906		1915	80.1	1924	79.3	1933	80.0
1907		1916	79.4	1925	79.9	1934	81.0
1908	78.2	1917	78.6	1926	80.3	1935	
1909	78.0	1918	80.5	1927	80.0	1936	
1910	77.0	1919	80.1	1928	81.4	1937	
1911	81.0	1920	80.2	1929	80.8	1938	
1912	80.4	1921	80.1	1930	81.6	1939	
1913	80.4	1922	81.5	1931	80.2	1940	
1914	81.2	1923	80.8	1932	80.6	1941	

Mean of this month for 27 years 80.1

Absolute maximum for this month for 27 years 91

Absolute minimum for this month for 27 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 27 years +0.9

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 2.10 date 23-24

Total precipitation this month in:

1885	22.90	1899	27.68	1913	15.13	1927	18.64
1886	11.10	1900	16.81	1914	10.74	1928	10.29
1887	17.05	1901	9.94	1915	20.72	1929	18.67
1888	—	1902	16.81	1916	10.44	1930	8.99
1889	—	1903	16.73	1917	13.58	1931	13.36
1890	10.24	1904	14.21	1918	10.36	1932	17.45
1891	14.02	1905	9.07	1919	15.60	1933	9.88
1892	21.77	1906	19.31	1920	17.69	1934	9.81
1893	11.80	1907	17.28	1921	10.49	1935	
1894	18.10	1908	14.78	1922	6.40	1936	
1895	17.09	1909	18.82	1923	10.35	1937	
1896	13.88	1910	21.07	1924	20.63	1938	
1897	14.06	1911	14.88	1925	21.08	1939	
1898	21.89	1912	15.15	1926	16.15	1940	

Average of this month for 64 years 15.46

Total from January 1, 19 34 to date 48.11

Average from January 1, to date 32.37

Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period — 10.26

WIND

Prevailing direction E Total movement 5629 miles

Average hourly velocity 7.8 miles per hour

Maximum velocity (for five minutes) 30 miles per hour from E N on 25

(WEATHER No. of days)

Clear 0 Pt. Cloudy 8 Cloudy 23

Days on which .01 inch, or more, of rain occurred 25

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 3, 4, 15, 16, 17, 20, 23, 24, 26, 31

Earthquakes 17, 18

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; **Month** August, **1934.**

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) Sunshine Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
83	73	78	0	.12	82.6	Cloudy
83	75	78	0	.41	82.2	Cloudy
83	74	79	6	1.65	81.5	Cloudy
86	76	80	16	.06	81.9	Cloudy
86	77	81	30	.10	82.5	Cloudy
90	78	84	64	.01	83.3	Pt.Cldy.
86	77	81	16	.64	83.6	Cloudy
88	82	84	62	0	84.0	Pt. Cloudy
86	79	80	9	9	83.4	Cloudy
87	79	83	41	.03	84.1	Pt Cloudy
89	80	84	44	.02	85.3	Pt Cloudy
88	81	84	26	.0	85.0	Cloudy
86	75	80	8	1.47	84.5	Cloudy
83	75	78	4	.38	83.2	Cloudy
86	75	78	17	.29	83.3	Cloudy
85	76	79	5	.22	82.9	Cloudy
88	77	81	25	.45	83.0	Cloudy
38	80	83	65	T	83.4	PtCldy
87	81	84	58	T	84.5	PtCldy
89	80	83	26	.03	84.6	Cloudy
88	77	82	30	.05	84.4	Cloudy
87	78	81	32	1.18	84.2	Cloudy
84	76	80	6	.30	84.3	PtCldy
87	75	79	10	3.41	83.3	Cloudy
87	75	78	2	.33	83.3	Cloudy
90	74	80	40	0	83.3	Cloudy
90	75	81	44	0	83.7	PtCldy
86	76	81	29	1.45	84.3	Cloudy
85	77	80	0	.95	83.3	Cloudy
88	76	81	33	.04	83.4	PtCldy
88	76	82	38	.05	84.1	Cloudy
687	2383	* --	--	13.86	* ----	
6.7	76.9	80.9	25	----	83.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.862; highest 29.913 date 3
Lowest 29.733 date 22

TEMPERATURE

Highest 90 date 27; lowest 73 date 1
Greatest daily range 16 date 26
Bihourly Mean for this month in:

1906	----	1915	80.4	1924	79.8	1933	80.1
1907	79.4	1916	79.0	1925	80.9	1934	80.9
1908	78.3	1917	78.4	1926	79.7	1935	
1909	77.8	1918	80.2	1927	80.2	1936	
1910	78.6	1919	80.8	1928	79.5	1937	
1911	79.9	1920	79.7	1929	79.9	1938	
1912	79.9	1921	79.9	1930	81.0	1939	
1913	79.7	1922	80.3	1931	80.9	1940	
1914	80.9	1923	80.3	1932	80.0	1941	

Mean of this month for 28 years 79.9
Absolute maximum for this month for 28 years 91
Absolute minimum for this month for 28 years 71
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years +1.0

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 3.43 date 24
Total precipitation this month in:

1885	20.32	1899	14.80	1913	17.91	1927	26.63
1886	12.20	1900	17.00	1914	16.01	1928	24.49
1887	16.89	1901	12.51	1915	12.89	1929	23.78
1888	------	1902	5.78	1916	8.34	1930	14.35
1889	------	1903	14.25	1917	15.79	1931	17.52
1890	20.51	1904	11.14	1918	18.85	1932	12.10
1891	15.98	1905	15.01	1919	6.77	1933	8.27
1892	15.88	1906	18.31	1920	23.04	1934	13.86
1893	15.12	1907	18.89	1921	18.45	1935	
1894	23.03	1908	16.89	1922	14.53	1936	
1895	14.13	1909	15.42	1923	15.35	1937	
1896	15.51	1910	14.93	1924	7.42	1938	
1897	17.24	1911	11.60	1925	7.71	1939	
1898	10.91	1912	9.87	1926	20.84	1940	

Average of this month for 64 years 15.24
Total from January 1, 1934 to date 55.97
Average from January 1, to date 67.61
Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period -11.64

WIND

Prevailing direction N Total movement 5527 miles
Average hourly velocity 7.4 miles per hour
Maximum velocity (for five minutes) 24 miles per hour from N.W. on 9th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 9 Cloudy 22
Days on which .01 inch, or more, of rain occurred 25

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 23
Fogs: Light None
Fogs: Dense 1,3,4,9,13,14,20,21,22,23,24,28,
Thunderstorms None (29,30,31
Earthquakes 10th

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month SEPTEMBER, 1934.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending 8 a. m. Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	78	82	.47	.15	85.0	Cldy.
87	80	82	10	.42	85.0	Cldy.
86	77	79	8	.63	84.0	Cldy.
87	77	81	22	.59	83.8	Cldy.
86	70	79	14	3.12	83.6	Cldy.
83	71	77	0	.27	83.0	Cldy.
86	75	80	25	.16	83.0	Cldy.
85	76	80	49	T.18	82.5	Pt.Cldy.
86	76	80	12	.16	83.0	Cldy.
86	75	78	20	.66	82.5	Cldy.
87	75	80	45	.08	82.6	Pt.Cldy.
85	75	79	11	2.86	83.2	Cldy.
87	76	81	30	3.10	83.1	Cldy.
83	73	78	4	1.71	82.3	Cldy.
86	73	80	27	0	82.5	Cldy.
86	75	82	47	0	83.5	Pt.Cldy.
89	76	82	54	1.06	84.3	Cldy.
87	77	80	27	.09	84.2	Cldy.
84	76	80	8	.19	84.2	Cldy.
84	79	82	8	.51	84.0	Cldy.
86	77	82	20	.66	83.8	Cldy.
83	75	78	0	.76	82.2	Cldy.
85	75	78	19	.45	83.2	Cldy.
90	75	81	21	0	83.1	Cldy.
88	76	78	26	.51	83.3	Cldy.
87	74	79	31	.96	83.3	Cldy.
87	75	80	42	T	83.5	Cldy.
84	77	80	2	.15	83.3	Cldy.
87	76	82	35	.04	83.7	Cldy.
88	78	80	7	.21	83.6	Cldy.
2692	2266	*	---	21.80	*	
86.4	75.5	79.9	216	---	83.4	

T—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.883; highest 29.940 date 5

Lowest 29.730 date 9

TEMPERATURE

Highest 90 date 24; lowest 70 date 5

Greatest daily range 18 date 5

Bihourly Mean for this month in:

1906		1915	80.5	1924	79.9	1933	79.7
1907	78.6	1916	78.4	1925	80.0	1934	79.9
1908	78.3	1917	79.2	1926	79.9	1935	
1909	78.2	1918	79.7	1927	79.5	1936	
1910	77.9	1919	79.7	1928	80.5	1937	
1911	80.4	1920	80.0	1929	80.2	1938	
1912	79.5	1921	80.1	1930	81.0	1939	
1913	78.7	1922	79.4	1931	80.2	1940	
1914	79.6	1923	80.0	1932	80.7	1941	

Mean of this month for 28 years 79.7

Absolute maximum for this month for 28 years 94

Absolute minimum for this month for 28 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years + 0.2

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 4.48 date 13-14

Total precipitation this month in:

1885	17.44	1899	16.85	1913	9.90	1927	17.38
1886	7.52	1900	6.37	1914	14.80	1928	15.46
1887	15.66	1901	11.88	1915	13.86	1929	7.90
1888	---	1902	11.06	1916	10.41	1930	10.80
1889	---	1903	11.61	1917	17.67	1931	8.34
1890	22.99	1904	13.86	1918	15.34	1932	7.15
1891	17.48	1905	6.80	1919	11.74	1933	9.11
1892	16.26	1906	12.48	1920	6.81	1934	21.80
1893	9.91	1907	11.78	1921	11.81	1935	
1894	18.78	1908	11.57	1922	12.75	1936	
1895	12.09	1909	16.35	1923	15.81	1937	
1896	16.84	1910	13.05	1924	9.00	1938	
1897	17.10	1911	11.61	1925	8.17	1939	
1898	10.24	1912	12.23	1926	10.46	1940	

Average of this month for 64 years 12.51

Total from January 1, 1934 to date 77.27

Average from January 1, to date 76.92

Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period — 8.65

WIND

Prevailing direction West Total movement 4039 miles

Average hourly velocity 5.6 miles per hour

Maximum velocity (for five minutes) 38 miles per hour

from NW on 12

(WEATHER No. of days)

Clear 0 Pt. Cloudy 3 Cloudy 27

Days on which .01 inch, or more, of rain occurred

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 20

Fogs: Light None

Fogs: Dense None

Thunderstorms 1, 2, 4, 5, 6, 8, 9, 12, 13, 14, 17, 18, 20.

Earthquakes None. 21, 25, 26, 28, 30.

MR 33839—Panama Canal—3-3-33—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month October, 1934. , 193

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending 8 a. m. Sunshine *	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER. BIHOURLY MEAN	CHARACTER OF DAY
89	78	82	19	.07	83.5	Cloudy
87	77	80	28	.02	83.8	Cloudy
89	76	81	57	T	84.2	Cloudy
88	75	79	8	.08	84.6	Cloudy
86	74	77	25	1.66	83.8	Cloudy
87	74	78	18	.09	83.5	Pt.Cldy
86	75	79	29	.04	83.8	Pt.Cldy
87	76	80	12	.06	83.5	Cloudy
81	74	78	0	.86	84.0	Cloudy
89	74	79	18	.02	83.4	Pt.Cldy
87	76	81	35	T	83.8	Pt.Cldy
85	76	79	1	.55	84.7	Cloudy
88	75	81	22	0	83.8	Cloudy
85	75	79	10	2.42	84.2	Cloudy
83	75	78	5	1.05	83.8	Cloudy
86	74	80	16	.24	84.3	Cloudy
87	75	80	7	.08	84.8	Cloudy
88	74	79	13	1.17	85.0	Cloudy
84	74	78	15	0	83.6	Cloudy
81	74	76	0	.62	83.2	Cloudy
80	74	80	3	0	82.9	Pt.Cldy
86	73	80	2	.24	83.0	Cloudy
82	74	77	1	1.89	82.5	Cloudy
84	74	77	5	.98	82.6	Cloudy
87	74	79	19	T	83.3	Cloudy
87	75	81	10	.82	83.8	Pt.Cldy
85	76	80	2	1.08	84.3	Cloudy
87	76	81	8	.09	83.8	Cloudy
86	74	78	2	1.82	83.2	Cloudy
85	74	79	7	.40	82.8	Cloudy
82	73	77	0	1.64	82.9	Cloudy
2660	2318	*	-	17.49	*	-
85.8	74.8	79.0	19%	-	83.7	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.855 ; highest 29.980 date 31

Lowest 29.720 date 12

TEMPERATURE

Highest 89 date 3 ; lowest 73 date 14

Greatest daily range 15 date 10

Bihourly Mean for this month in:

1906		1915	79.6	1924	79.5	1933	79.6
1907	77.3	1916	76.7	1925	80.0	1934	79.0
1908	77.4	1917	78.4	1926	79.7	1935	
1909	77.9	1918	76.9	1927	79.1	1936	
1910	77.7	1919	79.5	1928	79.9	1937	
1911	79.2	1920	79.2	1929	79.7	1938	
1912	78.5	1921	79.3	1930	79.4	1939	
1913	79.4	1922	76.1	1931	80.6	1940	
1914	79.2	1923	78.8	1932	79.6	1941	

Mean of this month for 28 years 79.1

Absolute maximum for this month for 28 years 95

Absolute minimum for this month for 28 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years -0.1

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours ..... date .....

Total precipitation this month in:

1885	7.99	1899	15.09	1913	16.65	1927	13.18
1886	14.33	1900	16.33	1914	22.16	1928	15.08
1887	19.61	1901	12.85	1915	21.86	1929	13.74
1888	-	1902	14.24	1916	17.59	1930	7.26
1889	-	1903	10.04	1917	7.87	1931	20.42
1890	21.77	1904	8.14	1918	27.07	1932	16.75
1891	17.48	1905	13.45	1919	21.94	1933	19.84
1892	6.60	1906	13.34	1920	17.16	1934	17.49
1893	12.88	1907	21.99	1921	8.27	1935	
1894	13.40	1908	10.96	1922	13.87	1936	
1895	10.46	1909	19.31	1923	42.17	1937	
1896	13.98	1910	15.65	1924	21.56	1938	
1897	5.85	1911	16.55	1925	15.40	1939	
1898	11.86	1912	17.66	1926	15.31	1940	

Average of this month for 65 years 15.57

Total from January 1, 1934 to date 94.76

Average from January 1, to date 95.50

Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period -0.74

WIND

Prevailing direction SE Total movement 3620 miles

Average hourly velocity 4.9 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from NW on 27

(WEATHER No. of days)

Clear 0 Pt. Cloudy 6 Cloudy 25

Days on which .01 inch, or more, of rain occurred .....

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 3-8-9-13-15-24-25-26-27-29-31

Thunderstorms None

Earthquakes .....

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month November, 1934.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	74	77	* 52	.40	82.9	cldy
88	75	80	38	.21	83.7	cldy
88	76	80	45	.02	83.7	cldy
87	75	81	59	.05	83.8	ptcldy
88	77	82	64	.32	84.1	cldy
81	74	76	0	2.77	84.1	cldy
85	75	78	40	4.98	82.9	cldy
85	76	79	30	.20	83.2	cldy
80	75	76	3	.25	82.2	cldy
88	75	80	48	.15	82.8	cldy
87	74	77	12	.62	83.6	cldy
80	74	76	8	.19	83.2	cldy
83	75	78	2	.13	82.3	cldy
88	75	79	44	.56	82.4	cldy
83	76	79	3	2.17	82.3	cldy
79	75	75	0	7.54	80.9	cldy
81	73	74	0	3.85	81.4	cldy
87	74	79	66	0	82.3	ptcldy
87	75	79	51	.45	82.7	cldy
86	75	81	56	.17	83.0	cldy
86	76	80	46	.14	83.8	ptcldy
86	75	80	53	.74	83.6	cldy
85	75	77	12	.21	83.2	cldy
83	73	77	29	.61	82.3	cldy
83	73	78	12	.24	82.5	cldy
86	79	81	69	0	82.8	ptcldy
84	72	77	38	1.31	82.8	cldy
84	73	77	18	.44	82.3	cldy
78	73	78	38	.07	82.7	ptcldy
84	74	79	29	.04	82.7	ptcldy
2637	2239	* -	-	26.81	* -	-
84.6	74.6	78.4	38	-	82.9	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.861; highest 29.940, date 1st
Lowest 29.750, date 29th

TEMPERATURE

Highest 88, date 5; lowest 72, date 27
Greatest daily range 15, date 1

Bihourly Mean for this month in:

1906		1915 79.0	1924 78.3	1933 77.9	
1907 78.4		1916 78.6	1925 79.2	1934 78.4	
1908 77.2		1917 77.6	1926 78.7	1935	
1909 75.9		1918 79.9	1927 79.0	1936	
1910 77.5		1919 79.7	1928 78.4	1937	
1911 78.9		1920 79.8	1929 80.4	1938	
1912 78.5		1921 79.8	1930 81.2	1939	
1913 78.7		1922 78.5	1931 78.5	1940	
1914 79.8		1923 79.8	1932 79.0	1941	

Mean of this month for 28 years 78.8
Absolute maximum for this month for 28 years 92
Absolute minimum for this month for 28 years 69
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years -0.4

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours ..... date .....

Total precipitation this month in:

1885 24.17		1899 14.49	1913 16.75	1927 28.35	
1886 21.89		1900 20.28	1914 18.35	1928 17.20	
1887 31.89		1901 32.75	1915 22.33	1929 8.99	
1888 —		1902 12.18	1916 14.08	1930 15.94	
1889 —		1903 26.30	1917 20.49	1931 30.31	
1890 19.49		1904 26.35	1918 14.25	1932 37.13	
1891 19.49		1905 17.92	1919 6.65	1933 43.06	
1892 26.30		1906 26.64	1920 21.27	1934 28.81	
1893 17.80		1907 18.37	1921 19.96	1935	
1894 25.66		1908 31.72	1922 18.63	1936	
1895 20.47		1909 42.30	1923 22.16	1937	
1896 15.43		1910 30.06	1924 30.29	1938	
1897 22.16		1911 18.81	1925 28.95	1939	
1898 12.28		1912 21.81	1926 29.39	1940	

Average of this month for 54 years 21.95
Total from January 1, 19 ..... to date 123.57
Average from January 1, to date 117.43
Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period T 6.14

WIND

Prevailing direction W Total movement 4538 miles
Average hourly velocity 6.3 miles per hour
Maximum velocity (for five minutes) 27 miles per hour
from NE on 11

(WEATHER No. of days)

Clear 0 Pt. Cloudy 6 Cloudy 24
Days on which .01 inch, or more, of rain occurred 28

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none
Fogs: Light none
Fogs: Dense 2, 4 & 8
Thunderstorms none
Earthquakes .....

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month December, 1934.

TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	Sunshine For 24 hours Period Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	74	80	57	.04	83.1	ptcldy
87	76	82	84	.36	83.5	clear
88	80	83	100	.0	83.4	"
88	78	83	100	.03	83.7	"
86	76	81	81	.55	84.1	ptcldy
87	75	80	55	.30	83.6	"
88	77	82	49	.06	84.0	"
86	78	81	4	.36	83.8	cldy
87	77	82	27	.25	83.0	"
79	76	78	0	2.84	81.9	"
86	77	81	30	.81	82.2	"
79	75	77	0	5.30	82.0	"
78	73	76	0	.76	81.3	"
79	74	76	0	1.72	79.2	"
86	74	79	8	.53	79.4	"
85	76	80	26	.11	80.6	"
85	79	81	25	.10	80.8	"
81	74	78	2	1.30	80.2	"
84	74	79	18	.06	80.3	"
86	73	79	57	0	81.3	ptcldy
85	75	80	15	T	81.9	cldy
87	75	80	91	0	81.4	clear
86	78	81	100	0	82.3	"
87	77	81	100	0	82.2	"
85	75	80	79	.01	82.7	ptcldy
86	79	81	60	0	83.0	cldy
86	79	81	68	0	82.8	"
85	77	80	81	.04	82.2	"
86	79	82	64	.01	81.9	ptcldy
86	78	81	66	.02	81.8	"
86	78	81	65	.01	81.6	"
5379	367	*		15.65	*	
3.176	80.2	48			82.9	

T—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.841; highest 29.980 date 13; Lowest 29.720 date 4

TEMPERATURE

Highest 88 date 7; lowest 73 date 13

Greatest daily range 14 date 15

Bihourly Mean for this month is: 80.6

1906	79.9	1915	79.7	1924	81.0	1933	80.2
1907	78.1	1916	78.3	1925	79.5	1934	
1908	76.8	1917	81.1	1926	80.1	1935	
1909	78.0	1918	80.2	1927	79.7	1936	
1910	81.7	1919	80.7	1928	80.4	1937	
1911	80.2	1920	80.0	1929	81.5	1938	
1912	79.6	1921	79.7	1930	80.9	1939	
1913	81.4	1922	80.2	1931	79.5	1940	
1914		1923		1932		1941	

Mean of this month for 28 years 79.9

Absolute maximum for this month for 28 years 89

Absolute minimum for this month for 28 years 66

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years +0.3

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 5.34 date 12-13

Total precipitation this month is:

1885	25.81	1899	9.04	1913	6.55	1927	16.70
1886	22.72	1900	4.15	1914	8.08	1928	16.43
1887	13.33	1901	5.41	1915	9.48	1929	?.87
1888	—	1902	?.10	1916	8.71	1930	?.86
1889	—	1903	18.75	1917	11.66	1931	3.47
1890	19.06	1904	?.02	1918	1.90	1932	?.64
1891	4.25	1905	9.50	1919	7.37	1933	18.46
1892	11.30	1906	15.64	1920	2.06	1934	15.66
1893	20.94	1907	9.56	1921	6.50	1935	
1894	25.12	1908	9.07	1922	7.20	1936	
1895	15.71	1909	34.28	1923	5.12	1937	
1896	18.66	1910	15.20	1924	8.84	1938	
1897	18.90	1911	2.65	1925	6.04	1939	
1898	?.95	1912	11.47	1926	?.60	1940	

Average of this month for 54 years 11.03

Total from January 1, 1934 to date 150.23

Average from January 1, to date 120.46

Excess (+) or deficiency (—) from January 1, 1934 to date as compared with average of corresponding period 54 +10.77

WIND

Prevailing direction N Total movement 7379 miles

Average hourly velocity 9.9 miles per hour

Maximum velocity (for five minutes) 54 miles per hour from NW on 14

(WEATHER No. of days)

Clear 6 Pt. Cloudy 9 Cloudy 16

Days on which .01 inch, or more, of rain occurred 15

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense 5-6-8-10-12

Thunderstorms none

Earthquakes

MR 33839—Panama Canal—3-3-33—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JANUARY, 1933.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
83	74	79	28	1.40	81.6	cldy
81	75	78	16	1.42	81.3	cldy
86	78	81	20	.03	81.0	ptcldy
85	79	81	83	T	81.2	ptcldy
85	78	81	78	T	81.0	ptcldy
83	77	80	78	.08	80.8	ptcldy
83	78	80	84	0	80.7	ptcldy
83	77	80	84	.01	80.0	ptcldy
84	77	80	70	.03	80.0	ptcldy
85	77	80	95	0	80.3	ptcldy
85	76	80	97	.09	80.3	ptcldy
85	75	80	84	.04	80.3	ptcldy
83	78	80	29	.16	80.0	cldy
83	78	80	34	.03	79.3	cldy
83	75	79	36	.80	79.0	cldy
83	78	81	74	.01	79.0	ptcldy
85	77	81	82	.11	79.2	cldy
85	78	81	80	.02	79.5	clear
85	79	81	92	0	80.3	clear
86	79	81	95	0	80.8	clear
85	78	80	100	0	80.6	clear
85	78	81	95	0	80.2	ptcldy
85	74	79	46	.59	80.0	cldy
83	74	78	70	.15	79.9	ptcldy
84	75	78	90	0	80.2	ptcldy
81	75	77	32	.41	79.9	cldy
83	75	79	96	.46	79.0	clear
82	74	78	85	.16	78.8	clear
83	75	79	81	0	79.4	ptcldy
83	76	78	91	0	79.3	clear
83	72	78	89	.11	79.2	ptcldy
698	2365	*	-	5.81	*	
83.8	78.4	79.8	71	-	80.1	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.881; highest 30.070 date 29

Lowest 29.750 date 19

TEMPERATURE

Highest 86 date 3; lowest 72 date 31

Greatest daily range 11 date

Bihourly Mean for this month in:

1906		1915	81.7	1924	80.1	1933	80.1
1907		1916	80.6	1925	79.3	1934	79.6
1908	79.9	1917	78.4	1926	80.5	1935	79.6
1909	77.9	1918	78.4	1927	80.2	1936	
1910	77.9	1919	79.8	1928	80.6	1937	
1911	78.9	1920	80.7	1929	80.5	1938	
1912	81.1	1921	80.3	1930	79.9	1939	
1913	80.5	1922	79.9	1931	81.1	1940	
1914	80.4	1923	79.6	1932	80.6	1941	

Mean of this month for 28 years 79.9

Absolute maximum for this month for 28 years 86

Absolute minimum for this month for 28 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years -0.3

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 1.42 date 2

Total precipitation this month in:

1885	.87	1899	6.93	1913	6.71	1927	4.60
1886	2.13	1900	5.06	1914	1.35	1928	1.71
1887	2.01	1901	1.28	1915	3.41	1929	.81
1888	.63	1902	19.20	1916	2.35	1930	2.46
1889	-	1903	1.00	1917	1.10	1931	2.01
1890	7.24	1904	7.02	1918	3.26	1932	1.44
1891	2.52	1905	8.42	1919	1.82	1933	2.10
1892	.98	1906	1.47	1920	.81	1934	3.94
1893	1.75	1907	2.47	1921	1.31	1935	5.81
1894	8.58	1908	3.84	1922	6.85	1936	
1895	3.86	1909	10.81	1923	1.98	1937	
1896	4.02	1910	2.94	1924	.61	1938	
1897	3.42	1911	.99	1925	3.66	1939	
1898	5.04	1912	.28	1926	.70	1940	

Average of this month for 55 years 3.49

Total from January 1, 19 to date 5.81

Average from January 1, to date 3.49

Excess (+) or deficiency (—) from January 1, 19 35 to date as compared with average of corresponding period +2.32

WIND

Prevailing direction North Total movement 10644 miles

Average hourly velocity 14.5 miles per hour

Maximum velocity (for five minutes) 32 miles per hour

from NW on 31st

(WEATHER No. of days)

Clear 7 Pt. Cloudy 16 Cloudy 8

Days on which .01 inch, or more, of rain occurred 20

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense none

Thunderstorms none

Earthquakes

"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

6-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month February, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Sunshine %	Precipitation	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
83	74	79	85	.05	78.8	Pt.cldy
82	74	77	56	.27	78.4	Cldy
82	76	78n	81	0	78.2	Pt.cldy.
83	76	78	68	.01	78.5	Cldy
82	76	79	95	0	78.8	Clear
81	76	78	69	0	78.2	Pt.cldy.
82	76	78	40	.01	77.8	Pt.cldy.
86	76	80	88	.02	78.3	Pt.cldy.
85	77	89	96	0	78.5	Clear
83	75	78	47	.51	79.2	Pt.cldy.
85	73	79	100	0	79.2	Clear
84	75	80	86	.14	80.2	Pt.cldy.
85	76	80	81	.61	81.2	Pt.cldy.
86	76	81	93	.08	81.0	Pt.cldy.
83	76	79	83	0	80.0	Clear
85	73	79	100	0	80.8	Clear
85	70	78	100	0	81.3	Clear
84	77	80	71	.10	81.9	Pt.cldy.
83	73	78	81	.41	81.0	Pt.cldy.
86	77	80	75	.15	80.8	Pt.cldy.
85	75	79	77	.32	80.0	Pt.cldy.
85	76	80	84	.02	79.8	Pt.cldy.
85	77	80	71	0	79.8	Clear
85	78	81	86	0	80.2	Clear
85	78	81	63	.05	80.6	Pt.cldy.
84	79	81	61	0	81.1	Pt.cldy.
84	77	81	71	.03	81.2	Pt.cldy.
85	76	80	70	32	81.0	Pt.cldy.
2353	2118	*	—	3.10	*	—
84.0	75.6	78.4	78	—	79.9	

n—Trace indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)
Mean 29.930; highest 30.060 date 5
Lowest 29.780 date 25

TEMPERATURE

Highest 86 date 20; lowest 70 date 17
Greatest daily range 15 date 17
Bihourly Mean for this month in:

1906	—	1915	81.2	1924	79.6	1933	80.2
1907	—	1916	79.4	1925	79.4	1934	79.6
1908	79.9	1917	78.8	1926	80.6	1935	79.4
1909	79.1	1918	79.0	1927	79.3	1936	
1910	78.0	1919	80.1	1928	81.1	1937	
1911	78.4	1920	80.4	1929	80.4	1938	
1912	80.3	1921	79.8	1930	80.1	1939	
1913	79.6	1922	81.2	1931	80.9	1940	
1914	80.5	1923	79.4	1932	80.3	1941	

Mean of this month for 28 years 79.9
Absolute maximum for this month for 28 years 89
Absolute minimum for this month for 28 years 69
Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years — 0.5

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours .69 date 13-14
Total precipitation this month in:

1885	0.59	1899	6.49	1913	1.75	1927	3.21
1886	5.00	1900	0.33	1914	1.32	1928	0.71
1887	0.67	1901	0.94	1915	12.37	1929	0.56
1888	1.58	1902	0.59	1916	1.96	1930	0.75
1889	—	1903	0.35	1917	0.45	1931	0.97
1890	1.02	1904	0.47	1918	0.67	1932	0.95
1891	0.51	1905	1.13	1919	0.36	1933	0.08
1892	2.01	1906	1.14	1920	0.54	1934	0.55
1893	3.82	1907	1.37	1921	1.63	1935	3.10
1894	1.65	1908	1.08	1922	0.71	1936	
1895	1.89	1909	1.92	1923	0.69	1937	
1896	1.30	1910	3.58	1924	2.80	1938	
1897	0.04	1911	1.81	1925	0.73	1939	
1898	0.35	1912	1.81	1926	1.78	1940	

Average of this month for 65 years 1.54
Total from January 1, 19 35 to date 8.91
Average from January 1, to date 8.03
Excess (+) or deficiency (—) from January 1, 1935 to date as compared with average of corresponding period + 3.88

WIND

Prevailing direction North Total movement 9371 miles
Average hourly velocity 13.9 miles per hour
Maximum velocity (for five minutes) 28 miles per hour from N on 21

(WEATHER No. of days)

Clear 8 Pt. Cloudy 18 Cloudy 2
Days on which .01 inch, or more, of rain occurred

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Fogs: Light
Fogs: Dense
Thunderstorms
Earthquakes

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month March, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (inches) For 24 hour period Ending 8 a.m.	Sunshine per cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
84	78	80		78	.17	80.1	Pt.Cldy.
85	77	80		54	.02	81.0	Pt.Cldy.
85	79	81		66	.01	81.0	Pt.Cldy.
85	78	81		66	.04	81.0	Pt.Cldy.
85	79	81		74	0	82.2	Clear
85	79	81		74	0	82.0	Pt.Cldy.
85	78	81		56	.01	81.8	Cloudy
86	78	81		87	.03	81.2	Clear
86	77	81		88	.23	81.8	Pt.Cldy.
86	78	81		78	.01	81.5	Pt.Cldy.
86	79	81		98	0	81.4	Clear
85	78	80		54	.01	81.1	Cloudy
85	78	80		70	0	81.5	Pt.Cldy.
86	78	81		74	T	81.1	Pt.Cldy.
86	77	80		71	T	80.8	Pt.Cldy.
86	77	80		98	T	81.2	Clear
86	77	81		93	.01	81.8	Clear
86	78	81		87	0	81.7	Pt.Cldy.
86	78	81		80	T	81.0	Pt.Cldy.
86	76	80		96	.09	80.7	Pt.Cldy.
85	77	80		90	.08	80.2	Pt.Cldy.
86	78	81		94	0	80.0	Clear
86	77	81		98	.01	80.0	Clear
85	78	81		98	0	80.0	Clear
84	78	80		97	T	79.8	Clear
86	76	80		90	.03	80.0	Pt.Cldy.
85	78	81		86	T	80.7	Pt.Cldy.
86	78	81		75	0	81.7	Pt.Cldy.
86	79	81		80	.06	81.8	Cloudy
86	78	81		98	0	81.8	Clear
86	78	81		99	.01	82.2	Clear
[illegible]					0.80		
[illegible]						81.3	

T—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.886; highest 30.080 date 14

Lowest 29.780 date 4

TEMPERATURE

Highest 86 date 2; lowest 76 date 26

Greatest daily range 9 date 9

Bihourly Mean for this month in:

1906	1915 82.1	1924 81.0	1933 80.6		
1907	1916 80.2	1925 80.8	1934 80.4		
1908 79.8	1917 78.8	1926 80.6	1935 80.8		
1909 79.7	1918 79.2	1927 81.8	1936		
1910 78.1	1919 80.0	1928 81.1	1937		
1911 78.8	1920 80.2	1929 80.8	1938		
1912 81.6	1921 81.1	1930 81.1	1939		
1913 80.7	1922 81.4	1931 81.7	1940		
1914 80.7	1923 79.0	1932 81.0	1941		

Mean of this month for 28 years 80.6

Absolute maximum for this month for 28 years 92

Absolute minimum for this month for 28 years 67

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years +0.3

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours .85 date 8-9

Total precipitation this month in:

1885 .56	1899 1.26	1913 .79	1927 1.27
1886 2.17	1900 1.06	1914 .91	1928 2.42
1887 .47	1901 1.67	1915 1.71	1929 2.50
1888 1.26	1902 2.53	1916 2.68	1930 1.07
1889	1903 .96	1917 .76	1931 4.48
1890 2.01	1904 1.65	1918 .41	1932 2.09
1891 1.80	1905 .62	1919 .61	1933 1.11
1892 3.08	1906 1.42	1920 1.08	1934 1.10
1893 1.81	1907 2.16	1921 .06	1935 0.80
1894 .35	1908 3.68	1922 .02	1936
1895 2.00	1909 1.86	1923 .56	1937
1896 2.01	1910 5.46	1924 .71	1938
1897 .28	1911 1.41	1925 .81	1939
1898 1.58	1912 .66	1926 .48	1940

Average of this month for 66 years 1.54

Total from January 1, 1935 to date 2.71

Average from January 1, to date 2.57

Excess (+) or deficiency (—) from January 1, 1935 to date as compared with average of corresponding period +0.14

WIND

Prevailing direction N Total movement 11202 miles

Average hourly velocity 15.2 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from N on 10

(WEATHER No. of days)

Clear 11 Pt. Cloudy 17 Cloudy 3

Days on which .01 inch, or more, of rain occurred 16

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month April, 1936

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	~~HYGROMETRIC (INCOME) For 24 hours Ended 8 a. m.~~ %	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	76	80	89	.52	80.9	Cldy
85	78	81	98	0	81.4	Clear
85	78	81	78	.01	81.3	Pt.cldy
86	78	81	85	0	81.4	Pt.cldy
85	77	81	97	0	81.4	Pt.cldy
85	74	80	100	0	81.3	Clear
85	72	79	100	0	81.7	Clear
86	78	80	98	0	82.5	Pt.cldy
86	77	81	70	0	82.4	Pt.cldy
84	79	80	87	0	82.1	Cldy
84	76	80	88	.04	82.3	Cldy
85	78	81	98	0	81.8	Clear
86	78	81	94	.01	81.8	Pt.cldy
86	77	80	74	.26	81.8	Pt.cldy
85	77	81	78	.30	81.2	Cldy
85	79	82	76	0	81.5	Cldy
85	78	81	82	.06	81.7	Cldy
84	79	81	84	.08	81.3	Cldy
86	79	81	88	.01	81.0	Pt.cldy
85	79	81	90	.02	81.3	Pt.cldy
87	78	82	85	0	81.8	Pt.cldy
87	78	82	81	0	82.3	Pt.cldy
88	78	82	78	0	82.0	Cldy
87	80	83	92	0	82.0	Clear
86	79	82	88	T	84.0	Pt.cldy
87	78	82	94	0	82.3	Pt.cldy
86	79	82	89	0	84.1	Cldy
86	78	82	47	.01	82.3	Cldy
87	78	82	91	0	82.0	Pt.cldy
86	79	83	44	.00	82.3	Cldy
[illegible]	[illegible]	*	-	1.87	*	
[illegible]	77.6	81.2	78	-	82.3	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly [illegible] highest [illegible] date 6

Mean [illegible]; highest [illegible] date [illegible]

Lowest [illegible] date [illegible]

TEMPERATURE

Highest 88 date 28; lowest 78 date 7

Greatest daily range 12 date 7

Bihourly Mean for this month in:

1906		1915	81.3	1924	81.0	1933	82.3
1907		1916	81.6	1925	81.0	1934	81.9
1908	80.1	1917	78.4	1926	81.7	1935	81.2
1909	80.5	1918	78.9	1927	81.3	1936	
1910	78.6	1919	80.4	1928	82.2	1937	
1911	78.9	1920	81.9	1929	81.3	1938	
1912	82.1	1921	80.6	1930	80.4	1939	
1913	80.4	1922	81.9	1931	82.5	1940	
1914	81.1	1923	80.7	1932	82.1	1941	

Mean of this month for 28 years [illegible] 81.1

Absolute maximum for this month for 28 years 86

Absolute minimum for this month for 28 years 78

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years 26.1

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 0.80 date 20

Total precipitation this month in:

1885	1.26	1899	.45	1913	2.00	1927	6.98
1886	1.08	1900	.75	1914	1.18	1928	.06
1887	10.68	1901	1.80	1915	10.43	1929	.07
1888	-	1902	6.08	1916	6.35	1930	6.85
1889	-	1903	1.00	1917	1.87	1931	4.30
1890	2.00	1904	11.48	1918	5.20	1932	2.23
1891	.31	1905	2.38	1919	10.06	1933	.35
1892	5.00	1906	4.38	1920	1.72	1934	5.48
1893	6.07	1907	1.30	1921	7.48	1935	1.67
1894	2.16	1908	1.27	1922	2.11	1936	
1895	11.73	1909	3.50	1923	1.21	1937	
1896	3.08	1910	3.30	1924	10.55	1938	
1897	2.74	1911	2.06	1925	5.47	1939	
1898	4.78	1912	.78	1926	.90	1940	

Average of this month for 28 years 4.18

Total from January 1, 19[illegible] to date [illegible] 11.58

Average from January 1, to date 10.75 28

Excess (+) or deficiency (—) from January 1, 19[illegible] to date as compared with average of corresponding period. [illegible]

WIND

Prevailing direction North Total movement 8866 miles

Average hourly velocity 11.8 miles per hour

Maximum velocity (for five minutes) 27 miles per hour

from [illegible] on 14

(WEATHER No. of days)

Clear 8 Pt. Cloudy 14 Cloudy 11

Days on which .01 inch, or more, of rain occurred [illegible]

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms [illegible]

Earthquakes None

"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 1933

TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	[illegible]	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
87	73	82	795	.02	82.7	Pt. cldy.
84	75	80	88	1.41	81.6	cldy.
85	74	80	48	3.32	81.4	cldy.
84	77	80	46	.18	81.4	cldy.
86	77	82	80	.07	82.6	clear
87	76	82	80	.86	83.0	Pt. cldy.
86	77	82	86	.01	83.2	Pt. cldy.
89	76	82	78	.02	84.6	Pt. cldy.
84	76	80	86	.01	84.0	cldy.
86	75	78	88	1.92	83.7	cldy.
89	75	80	82	1.30	83.8	Pt. cldy.
87	74	80	80	0	84.4	cldy.
85	75	81	84	.35	84.2	cldy.
84	75	73	88	1.85	82.3	cldy.
87	76	82	86	0	81.6	Pt. cldy
86	77	82	58	.16	83.4	cldy.
88	77	82	74	.82	84.2	cldy.
87	76	82	71	T	84.9	Pt. cldy.
88	79	84	86	0	83.0	Pt. cldy.
89	76	80	85	2.78	84.8	cldy.
86	76	78	81	1.14	84.2	cldy.
88	75	79	67	.08	83.8	Pt. cldy.
87	76	81	74	.11	83.5	Pt. cldy.
86	76	81	88	.02	84.0	cldy.
84	77	81	47	0	84.4	cldy.
86	81	83	66	0	84.6	cldy.
88	77	79	17	.00	83.6	cldy.
87	76	83	76	0	83.8	Pt. cldy.
89	76	81	84	.07	83.6	Pt. cldy.
84	76	79	88	1.88	83.2	cldy.
84	77	80	88	0	83.3	cldy.
[illegible]	[illegible]	*	-	-	17.16	*	-
86.5	76.5	80.5	80	-	83.5	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.845; highest 29.900 date 8

Lowest 29.740 date 17

TEMPERATURE

Highest 90 date 29; lowest 74 date 3

Greatest daily range 14 date 11

Bihourly Mean for this month in:

1906		1915	81.6	1924	80.5	1933	81.8
1907		1916	80.6	1925	81.0	1934	80.8
1908	78.8	1917	78.9	1926	82.0	1935	80.6
1909	78.8	1918	78.7	1927	78.8	1936	
1910	78.0	1919	81.8	1928	81.6	1937	
1911	78.8	1920	81.0	1929	80.7	1938	
1912	81.6	1921	80.4	1930	81.5	1939	
1913	78.1	1922	81.0	1931	81.5	1940	
1914	81.4	1923	80.8	1932	81.0	1941	

Mean of this month for 38 years 80.6

Absolute maximum for this month for 38 years 95

Absolute minimum for this month for 38 years 71

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 38 years + 0.8

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 4.48 date 2.5

Total precipitation this month in:

1885	7.81	1899	13.80	1913	23.60	1927	14.11
1886	15.15	1900	12.85	1914	17.76	1928	13.78
1887	10.88	1901	6.19	1915	7.76	1929	10.07
1888	-	1902	11.10	1916	9.38	1930	14.21
1889	-	1903	14.74	1917	12.11	1931	17.71
1890	8.78	1904	11.06	1918	19.86	1932	16.85
1891	22.00	1905	26.60	1919	6.78	1933	8.12
1892	13.85	1906	10.07	1920	5.48	1934	11.64
1893	6.85	1907	6.35	1921	13.61	1935	17.16
1894	9.85	1908	22.40	1922	8.88	1936	
1895	16.77	1909	7.81	1923	11.18	1937	
1896	16.04	1910	12.09	1924	14.04	1938	
1897	16.34	1911	17.13	1925	8.35	1939	
1898	13.85	1912	13.08	1926	13.72	1940	

Average of this month for 38 years 13.56

Total from January 1, 19 to date 35.74

Average from January 1, to date 35.50

Excess (+) or deficiency (—) from January 1, 19 to date as compared with average of corresponding period + 0.24

WIND

Prevailing direction north Total movement 5196 miles

Average hourly velocity 7.9 miles per hour

Maximum velocity (for five minutes) 22 miles per hour

from 1 on 3

(WEATHER No. of days)

Clear 1 Pt. Cloudy 12 Cloudy 18

Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

[illegible] 1, 9, 10, 11, 14, 15, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Earthquakes None

E.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal; Month June, 1933

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	[illegible] Sunshine %	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
89	76	81	74	.01	82.8	Pt.Cldy.
88	78	80	48	.02	83.2	Cloudy
89	76	83	91	.28	84.0	Pt.Cldy.
84	77	79	10	.09	84.2	Cloudy
88	76	80	72	2.35	83.4	Cloudy
84	76	78	27	1.05	83.8	Cloudy
87	75	80	39	.42	83.2	Cloudy
88	75	81	56	.20	83.6	Pt.Cldy.
88	78	83	85	.05	84.6	Pt.Cldy.
86	77	82	67	2.78	83.4	Pt.Cldy.
84	77	79	11	1.77	84.4	Cloudy
84	76	80	36	0	84.0	Cloudy
90	76	82	76	.07	84.0	Cloudy
82	74	78	17	.33	83.2	Cloudy
86	74	81	73	0	83.6	Pt.Cldy.
87	77	82	75	0	84.6	Pt.Cldy.
86	75	81	40	.13	83.3	Cloudy
82	75	80	70	0	84.3	Cloudy
84	77	78	42	.06	84.0	Pt.Cloudy
88	75	79	60	.19	83.5	Cloudy
82	76	79	7	.04	83.4	Cloudy
85	76	80	46	.08	83.2	Cloudy
85	77	81	38	.01	83.1	Cloudy
88	76	78	10	.27	83.2	Cloudy
87	75	81	69	0	83.7	Pt.Cldy.
86	74	80	68	1.55	84.4	Cloudy
82	76	79	22	.44	84.2	Cloudy
87	75	81	66	.13	84.3	Pt.Cldy.
82	76	78	3	1.71	83.7	Cloudy
86	76	79	20	2.46	83.1	Cloudy
2676	2276	* -	-	16.36	* -	
86.9	76.8	80.1	67	-	83.8	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.947; highest 29.950 date 24

Lowest 29.750 date 10

TEMPERATURE

Highest 90 date 12; lowest 74 date 26

Greatest daily range 14 date 15

Bihourly Mean for this month in:

1906 -	1915	80.6	1924	79.2	1933	80.6
1907 -	1916	79.2	1925	81.0	1934	81.1
1908	78.5	1917	78.5	1926	80.1	1935	80.1
1909	78.2	1918	79.2	1927	79.2	1936	
1910	78.9	1919	80.8	1928	79.6	1937	
1911	79.2	1920	80.4	1929	80.1	1938	
1912	79.2	1921	79.7	1930	80.7	1939	
1913	80.0	1922	80.1	1931	81.2	1940	
1914	80.2	1923	80.5	1932	80.2	1941	

Mean of this month for 28 years 80.1

Absolute maximum for this month for 28 years 92

Absolute minimum for this month for 28 years 68

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 28 years 0

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 3.55 date 5-6

Total precipitation this month in:

1885	16.61	1899	6.41	1913	11.81	1927	14.74
1886	16.38	1900	11.68	1914	16.30	1928	16.22
1887	16.80	1901	11.06	1915	16.01	1929	18.96
1888	-	1902	7.00	1916	14.28	1930	9.40
1889	-	1903	10.91	1917	14.37	1931	9.28
1890	17.24	1904	15.83	1918	8.96	1932	14.36
1891	7.29	1905	8.10	1919	12.08	1933	16.36
1892	16.97	1906	14.09	1920	15.89	1934	9.89
1893	12.52	1907	16.89	1921	15.16	1935	16.36
1894	12.24	1908	10.83	1922	8.20	1936	
1895	9.28	1909	17.49	1923	15.17	1937	
1896	8.50	1910	13.68	1924	16.49	1938	
1897	15.28	1911	15.52	1925	13.77	1939	
1898	15.38	1912	15.90	1926	21.23	1940	

Average of this month for 43 years 13.72

Total from January 1, 19 33 to date 46.00

Average from January 1, to date 27.02

Excess (+) or deficiency (—) from January 1, 19 33 to date as compared with average of corresponding period Plus 7.98

WIND

Prevailing direction West Total movement 4052 miles

Average hourly velocity 5.6 miles per hour

Maximum velocity (for five minutes) 23 miles per hour from N. on 8th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 10 Cloudy 20

Days on which .01 inch, or more, of rain occurred 25

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 11-14

Fogs: Light None

Fogs: Dense None

Thunderstorms 5, 6, 7, 10, 11, 14, 17, 19, 20, 25

Earthquakes None / 24, 26, 27, 28, 29, 30

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

066-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month July, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) TOT. 24 hours PAN Sunshine percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	77	81	36	.35	82.6	cldy
86	78	82	60	.51	83.7	"
86	73	79	60	1.40	83.4	"
82	75	79	6	.98	82.4	"
82	75	78	14	1.94	83.0	"
87	75	79	29	.72	82.1	"
89	74	81	78	.75	82.8	"
87	74	78	45	.05	82.3	"
87	75	81	71	T	82.4	ptcldy
83	76	79	15	2.32	82.3	cldy
90	74	80	40	.11	82.8	"
88	76	83	79	0	83.5	ptcldy
88	80	84	71	.10	83.8	"
85	81	82	55	.01	83.0	cldy
87	79	82	21	.24	83.0	"
84	75	78	13	2.04	81.6	"
86	74	78	27	1.15	81.6	"
82	74	78	1	.12	81.2	"
85	75	80	37	2.48	81.6	"
85	74	77	17	2.09	82.1	"
77	75	76	0	1.39	80.8	"
86	75	80	58	.04	80.7	"
86	75	81	75	0	81.8	clear
85	76	80	31	.66	82.1	cldy
87	77	82	67	1.44	82.2	ptcldy
86	77	79	8	.35	83.2	cldy
89	78	82	74	1.82	83.3	cldy
89	77	80	43	1.02	82.7	ptcldy
90	77	82	48	.80	82.4	"
86	77	81	54	.09	83.1	cldy
82	76	79	9	1.26	82.9	"
-	-	-	-	35.25	* -	
5.7	78.6	80.1	36	-	82.6	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.827; highest 29.950 date 12

Lowest 29.720 date 27

TEMPERATURE

Highest 90 date 11; lowest 73 date 3

Greatest daily range 16 date 11

Bihourly Mean for this month in:

1906	78.2	1915	80.1	1924	79.3	1933	80.0
1907		1916	79.4	1925	79.9	1934	81.0
1908	78.2	1917	78.6	1926	80.3	1935	80.1
1909	78.0	1918	80.5	1927	80.0	1936	
1910	77.0	1919	80.1	1928	81.4	1937	
1911	81.0	1920	80.2	1929	80.8	1938	
1912	80.4	1921	80.1	1930	81.6	1939	
1913	80.4	1922	81.5	1931	80.2	1940	
1914	81.9	1923	80.8	1932	80.6	1941	

Mean of this month for 26 years 80.1

Absolute maximum for this month for 26 years 91

Absolute minimum for this month for 26 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 26 years 0

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 2.66 date 20.21

Total precipitation this month in:

1885	22.99	1899	27.88	1913	15.13	1927	18.64
1886	11.10	1900	16.81	1914	10.74	1928	10.29
1887	17.05	1901	9.94	1915	20.72	1929	15.67
1888	-	1902	16.81	1916	10.44	1930	8.99
1889	-	1903	16.75	1917	13.88	1931	13.36
1890	10.24	1904	14.21	1918	10.38	1932	17.45
1891	14.02	1905	9.07	1919	13.80	1933	9.88
1892	21.77	1906	19.23	1920	17.88	1934	9.21
1893	11.80	1907	17.86	1921	10.49	1935	26.23
1894	19.10	1908	14.76	1922	4.40	1936	
1895	17.09	1909	18.83	1923	10.38	1937	
1896	13.88	1910	21.07	1924	20.63	1938	
1897	14.06	1911	14.58	1925	21.08	1939	
1898	21.89	1912	13.13	1926	16.15	1940	

Average of this month for 35 years 15.63

Total from January 1, 1935 to date 71.23

Average from January 1, to date 52.86

Excess (+) or deficiency (—) from January 1, 1935 to date as compared with average of corresponding period +18.37

WIND

Prevailing direction west Total movement 4900 miles

Average hourly velocity 6.8 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from N on 4

(WEATHER No. of days)

Clear 1 Pt. Cloudy 6 Cloudy 24

Days on which .01 inch, or more, of rain occurred 28

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense 1,2,3,4,5,6,7,8,9,10,11,14,15,

Thunderstorms 16,19,20,21,23,24,25,26,27,28,

Earthquakes 29,30,31 none

T.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

000-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month AUGUST, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	[illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
80	76	78	1	.06	81.1	Cloudy
87	75	80	42	.06	81.4	Cloudy
88	74	81	69	1.30	82.5	Pt Cldy
85	74	80	30	T	83.4	Cloudy
87	75	81	66	T	83.5	Pt Cldy
87	78	82	46	.67	84.0	Cloudy
86	75	78	38	1.99	83.2	Cloudy
83	71	77	51	1.15	82.7	Cloudy
86	75	80	60	0	82.4	Pt Cldy
87	75	81	76	0	83.8	Pt Cldy
85	76	79	37	1.05	84.2	Pt Cldy
85	77	81	39	.19	82.8	Cloudy
79	75	77	0	.86	82.2	Cloudy
89	74	79	37	.17	81.8	Cloudy
88	75	80	79	0	82.2	Pt Cldy
90	75	81	75	0	82.0	Pt Cldy
86	78	81	46	.45	82.7	Cloudy
89	76	79	36	.60	82.6	Cloudy
86	74	78	40	1.96	82.2	Pt Cldy
86	75	79	61	.04	82.2	Pt Cldy
87	75	80	57	.46	82.4	Pt Cldy
87	75	80	42	.54	82.8	Cloudy
85	76	79	87	1.78	83.0	Cloudy
86	76	79	41	.08	82.8	Cloudy
82	74	78	21	.06	82.8	Cloudy
87	75	79	47	.01	82.5	Cloudy
88	75	78	66	.68	82.8	Cloudy
87	75	80	68	0	82.6	Pt Cldy
91	75	82	81	0	82.9	Pt Cldy
90	77	81	59	.57	83.9	Pt Cldy
84	77	80	5	.19	83.6	Cloudy
2634	2353	*	———	14.72	*	
84.9	75.9	79.8	48	———	82.7	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.850 highest 29.940 date 8

Lowest 29.750 date 16

TEMPERATURE

Highest 91 date 29; lowest 71 date 8

Greatest daily range 15 date 29

Bihourly Mean for this month in:

1906		1915	80.4	1924	79.8	1933	80.1
1907	79.4	1916	79.0	1925	80.9	1934	80.9
1908	78.3	1917	78.4	1926	79.7	1935	79.6
1909	77.8	1918	80.2	1927	80.2	1936	
1910	78.6	1919	80.8	1928	79.5	1937	
1911	79.9	1920	79.7	1929	79.8	1938	
1912	79.9	1921	79.9	1930	81.0	1939	
1913	79.7	1922	80.3	1931	80.9	1940	
1914	80.9	1923	80.3	1932	80.0	1941	

Mean of this month for 29 years 79.9

Absolute maximum for this month for 29 years 91

Absolute minimum for this month for 29 years 71

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years -0.3

EVAPORATION

Total this month ——— Average daily ——— inches

PRECIPITATION

Greatest precipitation in 24 hours 2.56 date 6-7

Total precipitation this month in:

1885	20.32	1899	14.80	1913	17.91	1927	26.63
1886	12.20	1900	17.00	1914	16.01	1928	24.49
1887	16.89	1901	12.51	1915	12.89	1929	23.76
1888	— —	1902	5.76	1916	8.54	1930	14.35
1889	— —	1903	14.25	1917	15.79	1931	17.52
1890	20.51	1904	11.14	1918	18.85	1932	12.10
1891	15.98	1905	15.01	1919	6.77	1933	8.27
1892	15.98	1906	18.31	1920	23.04	1934	13.86
1893	15.12	1907	18.69	1921	18.45	1935	14.72
1894	25.03	1908	16.89	1922	14.55	1936	
1895	14.13	1909	15.42	1923	15.36	1937	
1896	15.51	1910	14.95	1924	7.42	1938	
1897	17.24	1911	11.60	1925	9.71	1939	
1898	10.91	1912	9.87	1926	20.54	1940	

Average of this month for 65 years 15.25

Total from January 1, 1935 to date 66.25

Average from January 1, to date 67.88

Excess (+) or deficiency (—) from January 1, 1935 to date as compared with average of corresponding period + 18.07

WIND

Prevailing direction S E Total movement 4372 miles

Average hourly velocity 5.9 miles per hour

Maximum velocity (for five minutes) 22 miles per hour from N E on 7

(WEATHER No. of days)

Clear 0 Pt. Cloudy 13 Cloudy 18

Days on which .01 inch, or more, of rain occurred

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 1,3,6,7,12,13,19,21,22,23,24,27

Earthquakes None (26,30,31

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month September, 1935.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	Evaporation (inches) Sunshine Period [illegible] m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
90	76	82	85	0	82.8	ptcldy
89	76	81	56	0	83.2	cldy
87	77	82	63	0	83.7	ptcldy
89	77	82	56	.10	83.8	cldy
85	76	81	28	.52	83.7	cldy
85	76	80	44	1.00	83.0	cldy
82	75	78	9	.54	83.1	cldy
84	72	77	16	.21	81.2	cldy
86	71	80	66	.40	81.9	ptcldy
84	77	79	16	.63	82.0	cldy
89	75	82	67	2.25	82.9	ptcldy
86	76	80	1	2.80	83.2	cldy
85	76	79	16	1.90	82.3	cldy
87	77	82	45	.09	82.3	cldy
88	77	82	44	.04	82.7	cldy
88	79	84	66	.96	83.2	cldy
90	77	82	46	1.77	84.1	cldy
80	75	77	0	.43	83.7	cldy
88	74	81	70	0	83.5	cldy
87	76	81	59	.51	83.6	cldy
84	72	78	21	3.80	82.3	cldy
88	75	80	64	.01	81.8	cldy
90	75	78	51	.02	82.4	cldy
88	75	79	71	.11	82.2	cldy
89	75	78	55	.34	82.2	cldy
89	76	78	38	3.06	82.1	ptcldy
88	75	80	85	T	81.7	ptcldy
88	77	81	77	0	81.8	cldy
90	77	80	53	.01	81.8	ptcldy
90	75	80	64	.02	81.6	cldy
2615	2267	*	-	21.31	*	
87.2	75.6	80.1	47	-	82.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.816; highest 29.940 date 23; Lowest 29.700 date 17

TEMPERATURE

Highest 90 date 17; lowest 71 date 9

Greatest daily range 19 date 17

Bihourly Mean for this month in:

1906	78.6	1915	80.5	1924	79.9	1933	79.7
1907	78.3	1916	79.4	1925	80.0	1934	79.9
1908	78.2	1917	79.2	1926	79.9	1935	80.1
1909	78.2	1918	79.7	1927	79.5	1936	
1910	77.9	1919	79.7	1928	80.3	1937	
1911	80.4	1920	80.0	1929	80.2	1938	
1912	79.5	1921	80.1	1930	81.0	1939	
1913	79.7	1922	79.4	1931	80.2	1940	
1914	79.6	1923	80.0	1932	80.7	1941	

Mean of this month for 29 years 79.7

Absolute maximum for this month for 29 years 94

Absolute minimum for this month for 29 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years +0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 4.35 date 12-13

Total precipitation this month in:

1885	17.66	1899	15.85	1913	9.90	1927	17.32
1886	7.52	1900	9.37	1914	14.80	1928	15.46
1887	15.66	1901	11.86	1915	13.85	1929	7.90
1888	-	1902	11.06	1916	10.41	1930	10.88
1889	22.99	1903	11.61	1917	17.67	1931	8.24
1890	17.65	1904	15.86	1918	15.34	1932	7.15
1891	15.26	1905	5.80	1919	11.74	1933	9.11
1892	9.92	1906	12.48	1920	6.81	1934	21.30
1893	18.76	1907	11.72	1921	11.21	1935	21.31
1894	12.09	1908	11.87	1922	12.75	1936	
1895	12.84	1909	16.33	1923	12.31	1937	
1896	17.20	1910	12.08	1924	9.00	1938	
1897	10.24	1911	11.62	1925	8.17	1939	
1898		1912	12.25	1926	10.45	1940	12.45

Average of this month for 38 years 107.26

Total from January 1, 19 35 to date 80.35

Average from January 1, to date 38

Excess (+) or deficiency (—) from January 1, 19 35 to date as compared with average of corresponding period +26.95

WIND

Prevailing direction west Total movement 4654 miles

Average hourly velocity 25 miles per hour

Maximum velocity (for five minutes) 41 miles per hour from NE on 21

(WEATHER No. of days)

Clear 0 Pt. Cloudy 7 Cloudy 23

Days on which .01 inch, or more, of rain occurred 24

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 2-3-4-7-8-9-11-12-13-14-15-18-

Thunderstorms 20-21-24-26

Earthquakes None

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month October, 1935.

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	PRECIPITATION Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
88	76	81	64	0	82.3	cldy
90	75	80	47	2.24	82.6	"
85	76	79	48	.14	82.8	"
88	76	81	62	.07	82.3	"
86	75	79	42	.42	83.0	"
88	75	79	42	0	82.4	"
87	75	81	95	0	83.4	clear
88	76	81	92	0	83.6	"
88	76	79	56	1.40	84.0	ptcldy
87	76	81	61	0	84.0	"
88	76	80	40	.25	83.8	cloudy
84	75	78	80	T	83.4	"
87	74	79	48	T	83.2	ptcldy
86	75	78	18	.27	83.4	cldy
88	75	79	56	.44	83.4	"
88	75	80	60	T	83.7	"
86	75	79	61	.24	84.2	"
89	75	79	71	.06	84.2	ptcldy
85	76	79	82	.04	83.9	cldy
84	75	79	48	.06	83.1	"
91	75	81	68	0	83.4	clear
89	76	80	66	.17	83.8	ptcldy
89	75	80	58	.17	83.8	"
89	76	81	87	T	84.0	clear
91	76	82	93	T	84.4	"
87	77	81	90	0	84.8	ptcldy
89	77	81	82	0	84.4	"
84	77	78	14	.50	83.3	cldy
86	76	78	26	.21	83.0	"
89	74	79	66	1.53	83.2	ptcldy
86	76	79	51	T	83.7	cldy
2708	2342	*	*	8.90	*	
87.4	75.5	79.7	65	-	83.5	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.812; highest 29.980 date 10

Lowest 29.680 date 26

TEMPERATURE

Highest 91 date 25; lowest 74 date 30

Greatest daily range 16 date 21

Bihourly Mean for this month in:

1906 -	1915 79.6	1924 79.5	1933 79.6
1907 77.3	1916 78.7	1925 80.0	1934 79.0
1908 77.4	1917 78.4	1926 79.7	1935 79.7
1909 77.5	1918 78.9	1927 79.1	1936 -
1910 77.7	1919 79.5	1928 79.9	1937 -
1911 79.2	1920 79.2	1929 79.7	1938 -
1912 78.9	1921 79.3	1930 79.4	1939 -
1913 78.4	1922 79.1	1931 80.5	1940 -
1914 79.2	1923 78.8	1932 79.6	1941 -

Mean of this month for 29 years 79.1

Absolute maximum for this month for 29 years 95

Absolute minimum for this month for 29 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years + 0.6

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 2.24 date 2

Total precipitation this month in:

1885 7.99	1899 15.09	1913 18.65	1927 15.12
1886 14.35	1900 16.35	1914 22.15	1928 18.02
1887 19.61	1901 12.65	1915 21.86	1929 15.74
1888 -	1902 14.84	1916 17.89	1930 7.25
1889 -	1903 10.04	1917 7.87	1931 20.42
1890 21.77	1904 8.14	1918 27.07	1932 15.75
1891 17.48	1905 13.45	1919 21.94	1933 19.84
1892 5.59	1906 13.34	1920 17.18	1934 17.49
1893 12.28	1907 21.99	1921 8.27	1935 8.90
1894 12.40	1908 10.96	1922 13.87	1936
1895 15.46	1909 19.31	1923 42.17	1937
1896 13.98	1910 15.68	1924 21.56	1938
1897 5.85	1911 16.33	1925 16.48	1939
1898 11.38	1912 17.65	1926 15.81	1940

Average of this month for 56 years 15.48

Total from January 1, 19 116.15 to date

Average from January 1, to date 96.81 36

Excess (+) or deficiency (—) from January 1, 19 +20.35 to date as compared with average of corresponding period

WIND

Prevailing direction SE Total movement 4072 miles

Average hourly velocity 5.5 miles per hour

Maximum velocity (for five minutes) 24 miles per hour

from SW on 12

(WEATHER No. of days)

Clear 6 Pt. Cloudy 8 Cloudy 17

Days on which .01 inch, or more, of rain occurred 17

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 10

Fogs: Light NONE

Fogs: Dense 3-4-5-9-11-18-30

Thunderstorms NONE

Earthquakes

MR 33839—Panama Canal—3-3-33—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month November, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	SUNSHINE (PER CENT) For 24 hours Ending 8 p. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
87	75	80	88	.11	83.4	ptcldy
84	76	78	25	1.41	83.9	cldy
81	75	78	3	4.32	82.8	cldy
82	75	78	15	1.14	82.3	cldy
80	76	77	0	2.69	81.0	cldy
86	76	80	47	.04	80.8	cldy
88	76	80	53	1.08	81.3	cldy
82	75	77	8	1.26	82.2	cldy
84	76	78	18	.40	82.2	cldy
84	75	79	35	.16	83.0	cldy
87	76	78	27	1.63	82.8	cldy
81	76	78	3	.67	83.0	cldy
79	74	76	1	5.41	81.6	cldy
86	73	80	60	.11	81.6	cldy
83	74	78	6	1.70	81.8	cldy
84	74	80	8	.94	80.5	cldy
79	73	76	0	5.30	79.2	cldy
80	73	76	0	2.98	77.8	cldy
78	75	76	3	2.41	77.1	cldy
83	74	77	22	1.38	79.5	cldy
78	74	76	0	2.38	79.2	cldy
78	73	75	0	1.35	79.0	cldy
80	74	75	8	1.78	79.0	cldy
86	73	77	55	.19	79.4	cldy
85	74	78	38	.03	80.4	ptcldy
87	73	79	75	0	80.8	ptcldy
85	73	78	81	.17	81.1	clear
86	74	80	96	.29	82.0	clear
86	77	81	61	0	82.0	ptcldy
85	76	80	22	1.40	82.2	cldy
2494	2238	*	-	42.73	*	
83.1	74.6	77.9	29	-	81.1	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.846; highest 29.990 date 25

Lowest 29.740 date 5

TEMPERATURE

Highest 88 date 7; lowest 73 date 18

Greatest daily range 14 date 26

Bihourly Mean for this month in:

1906		1915	79.0	1924	78.3	1933	77.9
1907	78.4	1916	78.6	1925	79.2	1934	78.4
1908	77.2	1917	77.6	1926	78.7	1935	77.9
1909	75.9	1918	79.9	1927	79.0	1936	
1910	77.5	1919	79.7	1928	78.4	1937	
1911	78.9	1920	79.8	1929	80.4	1938	
1912	78.5	1921	79.8	1930	81.2	1939	
1913	78.7	1922	78.5	1931	78.5	1940	
1914	79.8	1923	79.8	1932	79.0	1941	

Mean of this month for 29 years 78.8

Absolute maximum for this month for 29 years 92

Absolute minimum for this month for 29 years 69

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years -0.9

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 5.65 date 12-13

Total precipitation this month in:

1885	24.17	1899	14.49	1913	16.75	1927	28.35
1886	21.89	1900	20.28	1914	18.35	1928	17.20
1887	31.81	1901	32.73	1915	22.33	1929	8.99
1888	-	1902	12.18	1916	14.08	1930	16.94
1889	-	1903	28.30	1917	20.49	1931	30.31
1890	19.49	1904	26.33	1918	14.23	1932	37.13
1891	19.49	1905	17.92	1919	6.63	1933	43.06
1892	26.30	1906	26.64	1920	21.27	1934	28.81
1893	17.80	1907	15.37	1921	19.96	1935	42.73
1894	23.66	1908	31.72	1922	15.63	1936	
1895	20.47	1909	42.50	1923	22.16	1937	
1896	15.63	1910	30.04	1924	30.29	1938	
1897	22.16	1911	15.81	1925	22.95	1939	
1898	12.28	1912	21.81	1926	29.39	1940	

Average of this month for 65 years 22.25

Total from January 1, 19 35 to date 158.89

Average from January 1, to date 118.06

Excess (+) or deficiency (—) from January 1, 1935 to date as compared with average of corresponding period +40.83

WIND

Prevailing direction N Total movement 5860 miles

Average hourly velocity 8.1 miles per hour

Maximum velocity (for five minutes) 31 miles per hour from NW on 17

(WEATHER No. of days)

Clear 2 Pt. Cloudy 4 Cloudy 24

Days on which .01 inch, or more, of rain occurred

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense none

Thunderstorms 4, 6, 7, 11

Earthquakes 29

006-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month December, 1935

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	SUNSHINE (Hours) For 24 hours 0330 Ending 8 a. m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	79	81	48	.03	81.9	pteldy
80	74	78	0	4.63	80.8	eldy
81	72	80	0	1.23	79.8	eldy
80	76	78	0	1.18	79.6	eldy
80	74	78	0	4.01	79.9	eldy
86	79	81	58	.02	79.4	pteldy
87	78	81	69	.04	80.4	clear
86	78	81	62	.01	80.4	pteldy
83	75	80	7	.56	80.2	eldy
85	76	80	54	.03	80.2	pteldy
85	78	81	27	0	81.2	pteldy
84	76	80	28	.01	81.3	eldy
86	78	81	60	0	81.2	pteldy
85	79	81	57	.01	80.9	"
85	79	81	72	0	80.8	"
85	78	81	91	.06	81.3	clear
85	75	81	84	.32	81.0	pteldy
83	76	80	51	.16	81.0	eldy
85	78	81	74	0	81.0	clear
85	76	80	47	.06	80.9	pteldy
85	77	80	33	T	80.9	"
83	77	80	19	.09	80.3	eldy
84	77	80	50	.31	79.7	pteldy
85	75	80	57	.17	80.3	teldy
84	76	80	76	T	80.4	clear
86	77	80	35	.06	80.5	cloudy
85	77	81	63	.01	81.2	pteldy
85	77	80	64	.02	81.5	"
85	79	81	51	0	82.2	clear
85	79	81	66	0	81.7	pteldy
86	79	81	70	0	81.8	"
2613	2288	*	-	15.02	*	
84.3	77.0	80.8	47	-	80.8	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly) Mean 29.883; highest 29.960 date 20

Lowest 29.780 date 13

TEMPERATURE

Highest 87 date 7; lowest 72 date 3

Greatest daily range 10 date 17

Bihourly Mean for this month is:

1906	79.9	1915	80.6	1924	79.6	1933	78.4
1907		1916	79.7	1925	81.0	1934	80.2
1908	78.1	1917	78.5	1926	79.5	1935	80.3
1909	76.8	1918	81.1	1927	80.1	1936	
1910	78.0	1919	80.2	1928	79.2	1937	
1911	81.7	1920	80.7	1929	80.4	1938	
1912	80.2	1921	80.0	1930	81.6	1939	
1913	79.6	1922	79.7	1931	80.9	1940	
1914	81.4	1923	80.2	1932	79.8	1941	

Mean of this month for 29 years 79.9

Absolute maximum for this month for 29 years 89

Absolute minimum for this month for 29 years 66

Average daily excess, (+) or deficiency (—) of this month as compared with mean of years -0.4

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 5.63 date 2-3

Total precipitation this month in:

1885	25.51	1899	9.04	1913	6.55	1927	16.70
1886	22.72	1900	4.13	1914	8.88	1928	15.43
1887	13.38	1901	5.41	1915	9.45	1929	7.87
1888	-	1902	7.10	1916	5.71	1930	7.86
1889	-	1903	15.75	1917	11.66	1931	3.47
1890	19.06	1904	7.02	1918	1.90	1932	7.64
1891	4.25	1905	9.80	1919	7.37	1933	18.46
1892	11.30	1906	15.64	1920	2.06	1934	15.66
1893	30.94	1907	9.36	1921	6.80	1935	13.02
1894	25.12	1908	5.07	1922	7.28	1936	
1895	15.71	1909	34.38	1923	5.12	1937	
1896	18.66	1910	15.20	1924	8.84	1938	
1897	18.80	1911	2.62	1925	6.04	1939	
1898	7.95	1912	11.47	1926	7.60	1940	

Average of this month for 55 years 11.06

Total from January 1, 19 36 to date 171.91

Average from January 1, to date 139.12 35

Excess (+) or deficiency (—) from January 1, 19 35 to date as compared with average of corresponding period +42.79

WIND

Prevailing direction N Total movement 9507 miles

Average hourly velocity 12.8 miles per hour

Maximum velocity (for five minutes) 31 miles per hour

from NW on 2

(WEATHER, No. of days)

Clear 5 Pt. Cloudy 17 Cloudy 9

Days on which .01 inch, or more, of rain occurred 22

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar none

Fogs: Light none

Fogs: Dense none

Thunderstorms 2,4,5

Earthquakes none

MR 33839—Panama Canal—3-3-33—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal; Month January, 1936

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	~~Sunshine~~ EVAPORATION (Inches) ~~Possible Period~~ Percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
86	79	81	78	0	82.0	Clear
84	77	80	43	.06	81.8	Cloudy
85	77	80	98	0	81.5	Pt Cldy
84	78	80	86	.02	81.7	Clear
84	76	80	98	0	82.0	Clear
85	78	81	92	0	81.8	Pt Cldy
85	78	81	92	0	81.8	Clear
85	77	80	97	.01	82.0	Clear
85	78	81	71	.08	81.7	Pt Cldy
85	78	80	79	.05	81.5	Clear
84	78	80	85	0	81.6	Pt Cldy
83	75	79	40	.64	81.5	Cloudy
84	75	79	67	.14	81.2	Cloudy
84	79	80	79	T	82.2	Pt Cldy
85	78	80	75	0	82.2	Pt Cldy
85	78	81	69	0	82.2	Pt Cldy
85	79	81	78	0	82.4	Pt Cldy
85	79	81	85	0	82.8	Pt Cldy
84	77	80	81	.11	82.3	Pt Cldy
86	79	81	73	T	82.4	Pt Cldy
84	78	80	83	.11	81.8	Pt Cldy
84	77	80	82	.09	81.7	Cloudy
84	78	80	85	.18	81.3	Cloudy
85	78	81	74	0	81.9	Pt Cldy
86	78	81	79	.04	82.3	Pt Cldy
85	79	81	72	T	82.2	Pt Cldy
85	79	81	77	0	82.0	Pt Cldy
84	77	81	73	T	82.1	Pt Cldy
85	80	81	82	.01	81.7	Pt Cldy
85	79	81	73	0	81.2	Pt Cldy
85	80	81	82	0	81.5	Pt Cldy
2521	2416	*	---	1.54	*	
85.5	77.9	80.8	76	---	81.9	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.835; highest 29.960 date 12

Lowest 29.700 date 30

TEMPERATURE

Highest 86 date 20; lowest 75 date 12

Greatest daily range 9 date 15

Bihourly Mean for this month in:

1906		1915	81.7	1924	80.1	1933	80.1
1907		1916	80.6	1925	79.5	1934	79.5
1908	79.8	1917	78.4	1926	80.5	1935	79.6
1909	77.9	1918	78.4	1927	80.2	1936	80.6
1910	77.9	1919	79.8	1928	80.6	1937	
1911	78.9	1920	80.7	1929	80.5	1938	
1912	81.1	1921	80.3	1930	79.9	1939	
1913	80.5	1922	79.9	1931	81.1	1940	
1914	80.4	1923	79.6	1932	80.6	1941	

Mean of this month for 29 years 79.9

Absolute maximum for this month for 29 years 86

Absolute minimum for this month for 29 years 70

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years 40.7

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 0.64 date 12

Total precipitation this month in:

1885	.87	1899	6.93	1913	5.71	1927	4.60
1886	2.13	1900	6.06	1914	1.56	1928	1.71
1887	2.01	1901	1.28	1915	3.41	1929	.81
1888	.65	1902	19.80	1916	2.35	1930	2.46
1889		1903	1.00	1917	1.10	1931	2.01
1890	7.84	1904	7.02	1918	5.28	1932	1.44
1891	2.52	1905	8.42	1919	1.82	1933	2.10
1892	.98	1906	1.47	1920	.51	1934	3.94
1893	1.73	1907	2.47	1921	1.31	1935	5.81
1894	6.80	1908	3.04	1922	6.85	1936	1.54
1895	3.86	1909	10.81	1923	1.96	1937	
1896	4.08	1910	2.24	1924	.61	1938	
1897	8.42	1911	.95	1925	3.66	1939	
1898	5.04	1912	.28	1926	.70	1940	

Average of this month for 66 years 3.46

Total from January 1, 19 36 to date 1.54

Average from January 1, to date 3.46

Excess (+) or deficiency (—) from January 1, 19 36 to date as compared with average of corresponding period -1.92

WIND

Prevailing direction N Total movement 2566 miles

Average hourly velocity 12.9 miles per hour

Maximum velocity (for five minutes) 24 miles per hour

from N on 20th

(WEATHER No. of days)

Clear 6 Pt. Cloudy 20 Cloudy 5

Days on which .01 inch, or more, of rain occurred 13

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

06-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month February, 1936, 193

TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
85	78	81	53	.01	81.8	cloudy
85	78	80	9	.08	81.0	cloudy
83	78	80	30	0	81.0	pt.cldy
85	78	81	74	0	80.5	pt.cldy
86	79	81	56	T.	81.3	Pt.cldy
86	75	80	100	.01	82.0	clear
85	73	79	71	0	81.9	clear
86	75	80	84	0	82.5	pt.cldy
85	78	81	75	0	82.8	clear
85	74	80	99	0	82.4	clear
84	73	78	86	0	82.9	pt.cldy
85	71	78	100	0	82.2	clear
86	71	79	85	0	82.2	clear
85	73	79	100	0	83.3	clear
85	72	79	100	0	83.5	clear
85	73	79	100	0	83.8	clear
85	73	79	100	0	83.8	clear
86	73	79	100	0	83.9	clear
86	74	80	56	T	84.3	pt.cldy
85	76	81	90	0	83.3	clear
86	79	81	88	0	82.8	clear
86	78	81	92	0	82.1	clear
86	78	81	87	.02	81.9	pt.cldy
86	78	81	67	.01	81.2	pt.cldy
87	78	82	91	T	81.3	clear
85	79	81	84	0	81.2	clear
85	78	81	82	0	81.3	clear
85	78	81	73	T	81.3	clear
84	78	80	75	0	81.1	clear
2471	2201	* -	-	.15	* -	
85.8	75.9	80.2	80	-	82.2	

T. indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.882; highest 30.023 date 12

Lowest 29.740 date 4

TEMPERATURE

Highest 87 date 25; lowest 21 date 12

Greatest daily range 15 date 13

Bihourly Mean for this month in:

1906	1915 81.2	1924 79.6	1933 80.2
1907	1916 79.4	1925 79.4	1934 79.6
1908 79.9	1917 78.8	1926 80.6	1935 79.4
1909 79.1	1918 79.0	1927 79.3	1936 80.1
1910 78.0	1919 80.1	1928 81.1	1937
1911 78.4	1920 80.4	1929 80.4	1938
1912 80.3	1921 79.8	1930 80.1	1939
1913 79.6	1922 81.2	1931 80.9	1940
1914 80.5	1923 79.4	1932 80.3	1941

Mean of this month for 29 years 79.9

Absolute maximum for this month for 29 years 89

Absolute minimum for this month for 29 years 69

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 29 years + 0.2

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours .08 date 2

Total precipitation this month in:

1885 .59	1899 6.49	1913 1.75	1927 3.21
1886 5.00	1900 .53	1914 1.32	1928 .71
1887 .67	1901 .94	1915 12.37	1929 .56
1888 1.58	1902 .59	1916 1.96	1930 .75
1889 —	1903 .35	1917 .45	1931 .97
1890 1.02	1904 .47	1918 .67	1932 .95
1891 .51	1905 1.13	1919 .36	1933 .08
1892 2.01	1906 1.14	1920 .54	1934 .55
1893 3.82	1907 1.37	1921 1.63	1935 3.10
1894 1.65	1908 1.08	1922 .71	1936 .15
1895 1.89	1909 1.92	1923 .69	1937
1896 1.30	1910 3.58	1924 2.80	1938
1897 .04	1911 1.81	1925 .73	1939
1898 .35	1912 1.81	1926 1.78	1940

Average of this month for 66 years 1.58

Total from January 1, 1936 to date 1.67

Average from January 1, to date 4.98

Excess (+) or deficiency (—) from January 1, 1936 to date as compared with average of corresponding period - 3.31

WIND

Prevailing direction N Total movement 7808 miles

Average hourly velocity 11.2 miles per hour

Maximum velocity (for five minutes) 27 miles per hour from N on 23

(WEATHER No. of days)

Clear 19 Pt. Cloudy 8 Cloudy 2

Days on which .01 inch, or more, of rain occurred 5

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

6-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z. ; Month March, 193 6

Day	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	EVAPORATION (Sums) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	77	80	98	0	81.6	Clear
2	84	71	78	88	0	80.7	Clear
3	86	72	79	85	T	81.3	Pt.Cldy
4	85	77	81	68	.01	81.9	Pt.Cldy
5	86	79	81	58	.01	82.0	Pt.Cldy
6	86	78	81	53	.06	82.0	Cloudy
7	85	74	79	47	.34	81.6	Cloudy
8	86	78	81	52	T	80.8	Cloudy
9	85	76	81	88	0	81.5	Pt.Cldy
10	85	78	81	90	0	82.6	Pt.Cldy
11	86	79	82	48	0	83.0	Pt.Cldy
12	86	77	82	55	.15	83.0	Pt.Cldy
13	86	79	82	70	.02	82.5	Pt.Cldy
14	85	78	81	71	T	82.2	Pt.Cldy
15	85	79	81	71	.01	82.1	Pt.Cldy
16	85	79	81	52	0	82.0	Pt.Cldy
17	87	78	82	84	0	82.2	Pt.Cldy
18	86	76	81	81	.01	82.3	Pt.Cldy
19	86	79	82	76	.04	83.2	Pt.Cldy
20	85	79	82	35	.18	83.0	Cloudy
21	86	78	81	66	.02	82.4	Cloudy
22	85	79	81	60	.05	82.2	Pt.Cldy
23	86	79	81	63	.01	81.5	Pt.Cldy
24	87	79	82	90	0	81.8	Pt.Cldy
25	86	79	82	89	0	82.2	Pt.Cldy
26	86	78	81	100	0	82.5	Clear
27	86	79	82	100	0	82.6	Clear
28	86	79	82	80	0	83.5	Clear
29	85	76	81	72	0	83.2	Pt.Cldy
30	86	80	82	49	0	83.6	Cloudy
31	87	79	83	75	0	83.8	Pt.Cldy
	2655	2402	*	-	.87	*	
	85.6	77.6	81.1	71	-	82.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean ____; highest 29.960 date 28

Lowest 29.750 16

TEMPERATURE

Highest 87 date 17; lowest 71 date 2

Greatest daily range 14 date 3

Bihourly Mean for this month in:

1906		1915	82.1	1924	81.0	1933	80.5
1907		1916	80.2	1925	80.3	1934	80.4
1908	79.8	1917	78.8	1926	80.5	1935	80.8
1909	79.7	1918	79.7	1927	81.3	1936	81.1
1910	78.1	1919	80.0	1928	81.1	1937	
1911	78.8	1920	80.9	1929	80.8	1938	
1912	81.5	1921	81.1	1930	81.1	1939	
1913	80.7	1922	81.4	1931	81.7	1940	
1914	80.7	1923	79.8	1932	81.0	1941	

Mean of this month for 29 years 80.5

Absolute maximum for this month for 29 years 92

Absolute minimum for this month for 26 years 67

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 29 years +0.6

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours ____ date ____

Total precipitation this month in:

1885	.55	1899	1.26	1913	.79	1927	1.27
1886	9.17	1900	1.06	1914	.91	1928	2.42
1887	.47	1901	1.67	1915	1.71	1929	2.59
1888	1.26	1902	2.33	1916	2.58	1930	1.07
1889	-	1903	.96	1917	.76	1931	4.48
1890	2.01	1904	1.65	1918	.41	1932	2.69
1891	1.50	1905	.62	1919		1933	
1892	3.98	1906	1.42	1920	.61	1934	1.11
1893	1.81	1907	2.16	1921	1.08	1935	1.10
1894	.35	1908	3.53	1922	.98	1936	.80
1895	2.09	1909	1.85	1923	.92	1937	.87
1896	2.01	1910	5.46	1924	.36	1938	
1897	.28	1911	1.41	1925	.71	1939	
1898	1.58	1912	.66	1926	.31	1940	

Average of this month for 67 years .43

Total from January 1, 1936 to date 1.53

Average from January 1, to date 2.54

Excess (+) or deficiency (−) from January 1, 1936 to date 6.51

compared with average of corresponding period -3.97

WIND

Prevailing direction N Total movement 9504 miles

Average hourly velocity 12.8 miles per hour

Maximum velocity (for five minutes) ____ miles per hour

from N on 24 7

(WEATHER No. of days)

Clear 5 Pt. Cloudy 20 Cloudy 6

Days on which .01 inch, or more, of rain occurred 13

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 31

Fogs: Light

Fogs: Dense (Haze) 16-18-31

Thunderstorms None

Earthquakes None

66-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, ---Cristobal, C. Z.---; Month ---April---, 1936

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	86	76	81	88	.01	82.8	Pt.Cldy
2	86	77	81	69	0	82.9	Pt.Cldy
3	86	78	81	61	.10	83.3	Cloudy
4	87	79	82	64	0	83.2	Cloudy
5	86	78	82	75	.01	82.8	Pt.Cldy
6	86	79	82	97	0	83.1	Pt.Cldy
7	87	79	82	91	.06	83.2	Clear
8	86	76	82	94	.23	82.2	Clear
9	86	80	82	64	0	81.8	Pt.Cldy
10	86	79	81	83	T	81.2	Pt.Cldy
11	83	78	81	46	.23	81.0	Cloudy
12	83	77	80	57	.56	80.6	Cloudy
13	85	76	80	41	.57	80.6	Cloudy
14	84	78	80	27	1.03	80.4	Cloudy
15	86	79	82	68	.02	80.7	Pt.Cldy
16	86	79	82	87	0	81.0	Pt.Cldy
17	86	80	82	68	0	81.7	Cloudy
18	87	79	82	83	0	83.7	Pt.Cldy
19	84	79	81	12	.09	83.2	Cloudy
20	86	79	82	45	.06	82.0	Cloudy
21	85	80	82	53	0	81.8	Cloudy
22	86	79	82	57	.27	81.8	Pt.Cldy
23	88	77	82	85	.02	82.6	Pt.Cldy
24	85	79	82	79	.01	82.9	Pt.Cldy
25	85	80	82	72	0	83.3	Pt.Cldy
26	85	80	82	68	0	83.1	Pt.Cldy
27	87	79	82	80	.02	82.8	Pt.Cldy
28	85	80	82	57	T	82.7	Pt.Cldy
29	87	79	82	77	0	82.5	Clear
30	85	79	82	81	0	82.3	Pt.Cldy
	2570	2367	*	-	3.89	* 29595	
	85.7	78.9	81.6	68	-	82.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.857; highest 29.960 date 6th

Lowest 29.740 date 17th

TEMPERATURE

Highest 88 date 23d; lowest 76 date 13th

Greatest daily range 11 date 23d

Bihourly Mean for this month in:

1906	-	1915	81.2	1924	81.0	1933	82.2
1907	-	1916	81.6	1925	81.0	1934	81.9
1908	80.1	1917	79.4	1926	81.7	1935	81.2
1909	80.5	1918	79.9	1927	81.3	1936	81.6
1910	79.6	1919	80.4	1928	82.2	1937	
1911	79.9	1920	81.9	1929	81.3	1938	
1912	82.1	1921	80.8	1930	80.4	1939	
1913	80.4	1922	81.6	1931	82.5	1940	
1914	81.1	1923	80.7	1932	82.1	1941	

Mean of this month for 29 years 81.1

Absolute maximum for this month for 29 years 93

Absolute minimum for this month for 29 years 72

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 29 years +0.5

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 1.04 date 13th-14th

Total precipitation this month in:

1885	1.34	1899	0.43	1913	2.69	1927	6.93
1886	1.58	1900	0.76	1914	4.12	1928	0.86
1887	10.63	1901	1.50	1915	10.42	1929	0.67
1888	-	1902	4.46	1916	6.25	1930	6.85
1889	-	1903	1.65	1917	1.87	1931	4.30
1890	2.99	1904	11.46	1918	5.34	1932	2.23
1891	0.51	1905	2.28	1919	10.95	1933	0.35
1892	5.00	1906	4.23	1920	1.72	1934	5.84
1893	8.07	1907	1.06	1921	7.43	1935	1.87
1894	2.16	1908	1.27	1922	2.11	1936	3.29
1895	21.73	1909	3.56	1923	1.21	1937	
1896	9.02	1910	3.30	1924	10.85	1938	
1897	3.74	1911	3.06	1925	5.47	1939	
1898	4.72	1912	0.75	1926	0.34	1940	

Average of this month for 66 years 4.16

Total from January 1, 1936 to date 5.83

Average from January 1, to date 10.67

Excess (+) or deficiency (−) from January 1, 1936 to date as compared with average of corresponding period -4.84

WIND

Prevailing direction North Total movement 9646 miles

Average hourly velocity 13.4 miles per hour

Maximum velocity (for five minutes) 28 miles per hour from NW on 12th

(WEATHER No. of days)

Clear 3 Pt. Cloudy 17 Cloudy 10

Days on which .01 inch, or more, of rain occurred 16

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 14-19-23-28

Earthquakes

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month MAY, 1936

	TEMPERATURE (Degrees Fahrenheit)			Sunshine (HOURS) For 24 hours	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly	Sunshine recorder			
1	85	79	82	77	0	82.4	PtCldy
2	86	78	82	78	.08	82.7	PtCldy
3	86	78	82	51	.09	82.6	Cldy
4	81	74	78	0	3.51	82.2	Cldy
5	81	75	79	0	.19	81.2	Cldy
6	85	76	80	46	T	81.2	PtCldy
7	86	75	81	77	.02	82.3	PtCldy
8	86	76	81	84	.07	83.3	PtCldy
9	85	78	81	51	.05	83.6	PtCldy
10	88	77	83	74	.01	84.7	Cldy
11	86	78	82	69	0	85.2	Cldy
12	86	79	84	76	0	85.4	PtCldy
13	82	78	79	0	2.25	84.9	Cldy
14	85	77	80	26	.08	85.8	Cldy
15	87	76	82	78	0	85.1	PtCldy
16	86	76	81	18	.24	83.8	Cldy
17	85	77	80	30	.26	83.4	Cldy
18	86	77	80	37	.01	82.8	PtCldy
19	88	77	83	55	.31	83.6	Cldy
20	83	78	80	0	.79	83.8	Cldy
21	79	77	78	0	2.80	82.6	Cldy
22	85	77	80	25	.60	81.6	PtCldy
23	86	75	79	42	.57	82.7	Cldy
24	86	76	82	52	T	83.8	PtCldy
25	88	78	82	81	0	84.2	Cldy
26	90	78	84	76	.38	85.2	PtCldy
27	89	78	83	50	.29	85.8	PtCldy
28	92	80	83	36	0	85.9	Cldy
29	90	78	83	39	0	85.0	Cldy
30	88	78	81	30	.26	84.6	Cldy
31	88	77	81	0	0	84.0	Cldy
	2663	2391	* -	-	12.86	* -	
	85.9	77.1	81.1	48	-	83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.811; highest 29.940 date 5th

Lowest 29.690 date 27th

TEMPERATURE

Highest 92 date 28; lowest 74 date 4th

Greatest daily range 12 date 26th

Bihourly Mean for this month in:

1906		1915	81.6	1924	80.5	1933	81.2
1907		1916	80.6	1925	81.9	1934	80.8
1908	78.5	1917	78.9	1926	82.0	1935	80.8
1909	79.2	1918	79.7	1927	79.8	1936	81.1
1910	78.9	1919	81.3	1928	81.6	1937	
1911	78.8	1920	81.6	1929	80.7	1938	
1912	81.6	1921	80.4	1930	81.3	1939	
1913	79.1	1922	81.0	1931	81.5	1940	
1914	81.4	1923	80.8	1932	81.0	1941	

Mean of this month for 29 years 80.6

Absolute maximum for this month for 29 years 95

Absolute minimum for this month for 29 years 71

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 29 years + 0.5

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 3.59 date 20-21

Total precipitation this month in:

1885	7.21	1899	13.90	1913	22.60	1927	14.11
1886	13.15	1900	12.25	1914	17.76	1928	12.72
1887	10.28	1901	6.19	1915	7.75	1929	10.07
1888	-	1902	11.10	1916	9.38	1930	14.21
1889	-	1903	14.74	1917	12.11	1931	17.71
1890	9.76	1904	11.06	1918	19.26	1932	16.55
1891	23.00	1905	22.96	1919	6.95	1933	8.12
1892	18.03	1906	10.07	1920	5.48	1934	11.94
1893	6.56	1907	6.33	1921	13.61	1935	17.16
1894	9.86	1908	22.49	1922	8.66	1936	12.86
1895	16.77	1909	7.21	1923	11.18	1937	
1896	16.46	1910	12.09	1924	14.86	1938	
1897	16.34	1911	17.15	1925	8.23	1939	
1898	12.85	1912	12.03	1926	13.73	1940	

Average of this month for 66 years 12.56

Total from January 1, 19 36 to date 18.69

Average from January 1, to date 23.23

Excess (+) or deficiency (−) from January 1, 19 36 to date as compared with average of corresponding period -4.54

WIND

Prevailing direction North Total movement 4994 miles

Average hourly velocity 6.7 miles per hour

Maximum velocity (for five minutes) 23 miles per hour from North on 4th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 13 Cloudy 18

Days on which .01 inch, or more, of rain occurred 21

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 14,17,19,20,21,22,25,27,30

Earthquakes None

MR 43091—Panama Canal—2-25-35—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month June, 1936

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	[illegible] Sunshine%	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
89	77	81	35	.25	83.8	Cloudy
92	78	83	60	3.21	84.0	Pt.Cldy.
93	76	82	54	0	83.7	Pt.Cldy.
88	78	81	34	0	84.1	Cloudy
91	77	83	67	0	84.3	Pt.Cldy.
85	78	80	11	.16	84.3	Cloudy
87	76	81	33	.27	83.9	Cloudy
84	76	79	4	.06	83.9	Cloudy
90	76	80	40	.18	84.3	Cloudy
85	76	80	3	2.03	84.6	Cloudy
86	75	79	22	.97	84.2	Cloudy
81	75	77	0	.06	84.0	Cloudy
87	75	80	36	0	83.4	Cloudy
85	76	80	8	0	83.6	Cloudy
92	77	81	48	.15	83.8	Pt.Cldy.
90	77	82	65	0	84.0	Pt.Cldy.
89	78	82	48	T	84.4	Pt.Cldy.
85	77	81	25	.06	84.3	Cloudy
89	77	81	37	.44	84.2	Pt.Cldy.
86	76	79	6	.33	84.2	Cloudy
86	75	79	25	.02	83.9	Cloudy
88	76	82	34	T	83.4	Pt.Cldy.
89	77	83	76	0	84.1	Pt.Cldy.
90	81	84	62	T	85.0	Pt.Cldy.
87	79	82	1	.03	84.4	Cloudy
89	78	82	2	0	84.4	Cloudy
88	76	83	25	1.26	84.0	Pt.Cldy.
90	75	81	29	.16	84.3	Cloudy
87	78	82	14	.29	84.3	Cloudy
87	77	79	12	.70	83.8	Cloudy
—	—	* —	—	10.87	* —	
87.8	76.8	81.0	31	- -	84.1	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.825; highest 29.940 date 18

Lowest 29.720 date 4

TEMPERATURE

Highest 93 date 3; lowest 75 date 12

Greatest daily range 17 date 3

Bihourly Mean for this month in:

1906 —	1915	80.8	1924	79.2	1933	80.8
1907 —	1916	79.9	1925	81.0	1934	81.1
1908	78.5	1917	78.5	1926	80.1	1935	80.1
1909	78.2	1918	79.8	1927	79.9	1936	81.0
1910	78.9	1919	80.8	1928	79.6	1937	
1911	79.2	1920	80.4	1929	80.1	1938	
1912	79.9	1921	79.7	1930	80.7	1939	
1913	80.0	1922	80.1	1931	81.2	1940	
1914	80.2	1923	80.5	1932	80.2	1941	

Mean of this month for 29 years 80.2

Absolute maximum for this month for 29 years 93

Absolute minimum for this month for 29 years 68

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 29 years +0.8

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 3.21 date 2

Total precipitation this month in:

1885	16.61	1899	6.41	1913	11.81	1927	15.74
1886	16.36	1900	11.65	1914	16.30	1928	16.22
1887	16.50	1901	11.05	1915	16.01	1929	18.96
1888	— —	1902	7.00	1916	14.26	1930	9.40
1889	— —	1903	10.91	1917	14.57	1931	9.26
1890	17.24	1904	15.83	1918	8.56	1932	14.26
1891	7.89	1905	8.10	1919	12.09	1933	15.88
1892	16.97	1906	14.09	1920	13.29	1934	9.89
1893	12.32	1907	16.89	1921	15.18	1935	16.26
1894	12.24	1908	10.53	1922	8.50	1936	10.87
1895	9.26	1909	17.42	1923	15.17	1937	
1896	8.60	1910	13.63	1924	16.49	1938	
1897	16.82	1911	15.56	1925	13.77	1939	
1898	16.36	1912	15.90	1926	21.23	1940	

Average of this month for 56 years 13.67

Total from January 1, 19 36 to date 29.26

Average from January 1, to date 36.90

Excess (+) or deficiency (−) from January 1, 19 36 to date as compared with average of corresponding period -7.64

WIND

Prevailing direction SE Total movement 4302 miles

Average hourly velocity 6.0 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from W on 27

(WEATHER No. of days)

Clear 0 Pt. Cloudy 11 Cloudy 19

Days on which .01 inch, or more, of rain occurred 19

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 2-3-5-6-7-10-15-17-19-20-24-25-26-27-28-29

Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z.; Month July, 1936

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
90	75	81	30	.09	83.6	Cldy
86	78	81	3	.18	84.3	Cldy
85	77	81	10	.10	85.2	Cldy
90	76	82	25	.25	85.0	Cldy
85	77	80	7	.57	85.0	Cldy
81	72	77	5	3.05	84.0	Cldy
88	76	80	15	.04	84.5	Cldy
87	75	80	33	.08	85.2	Cldy
87	76	81	18	0	85.2	Cldy
89	77	81	10	.28	85.3	Cldy
89	75	79	37	.56	84.8	Pt cldy
86	75	81	25	0	84.8	Cldy
85	76	81	5	0	84.2	Cldy
86	77	81	10	T	84.0	Cldy
88	78	81	22	.09	84.4	Cldy
85	76	80	14	1.06	84.8	Cldy
84	75	80	13	.34	85.0	Cldy
90	77	84	59	0	85.3	Pt cldy
90	75	80	37	1.07	86.2	Cldy
85	78	81	3	.69	85.2	Cldy
87	75	79	10	1.36	84.7	Cldy
86	75	80	35	.37	85.0	Cldy
88	76	82	45	0	85.3	Pt cldy
91	78	82	37	.59	85.6	Cldy
87	77	82	71	1.81	85.3	Cldy
89	77	82	61	.46	85.7	Pt cldy
88	78	82	37	.58	85.9	Cldy
84	77	81	36	T	85.1	Cldy
90	76	81	43	.05	85.4	Cldy
89	76	81	45	.76	84.8	Cldy
86	75	80	55	3.39	84.2	Cldy
-	-	* -	-	18.72	* -	
89.1	76.1	80.8	25			

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.831; highest 29.945 date 9

Lowest 29.720 date 4

TEMPERATURE

Highest 91 date 24 lowest 72 date 6

Greatest daily range 17 date 19

Bihourly Mean for this month in:

1906	1915 80.1	1924 79.3	1933 80.0
1907	1916 79.4	1925 79.9	1934 81.0
1908 78.2	1917 78.6	1926 80.3	1935 80.1
1909 78.0	1918 80.5	1927 80.0	1936 80.8
1910 77.0	1919 80.1	1928 81.4	1937
1911 81.0	1920 80.2	1929 80.8	1938
1912 80.4	1921 80.1	1930 81.6	1939
1913 80.4	1922 81.5	1931 80.2	1940
1914 81.9	1923 80.8	1932 80.6	1941

Mean of this month for 29 years 80.1

Absolute maximum for this month for 29 years 91

Absolute minimum for this month for 29 years 70

Average daily excess. (+) or deficiency (−) of his month as compared with mean of 29 years +0.7

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 3.58 date 30-31

Total precipitation this month in:

1885 22.89	1899 27.68	1913 15.15	1927 18.64
1886 11.10	1900 16.81	1914 10.74	1928 10.29
1887 17.05	1901 9.94	1915 20.72	1929 18.67
1888 -	1902 16.81	1916 10.44	1930 8.99
1889 -	1903 16.73	1917 13.58	1931 13.36
1890 10.84	1904 14.81	1918 10.36	1932 17.45
1891 14.08	1905 9.07	1919 13.60	1933 9.88
1892 21.77	1906 19.23	1920 17.56	1934 9.21
1893 11.50	1907 17.86	1921 10.49	1935 26.23
1894 18.10	1908 14.76	1922 4.40	1936 18.72
1895 17.09	1909 12.85	1923 10.33	1937
1896 13.58	1910 21.07	1924 20.65	1938
1897 14.06	1911 14.58	1925 21.08	1939
1898 21.89	1912 13.13	1926 16.15	1940

Average of this month for 66 years 15.67

Total from January 1, 19 36 to date 47.98

Average from January 1, to date 52.57

Excess (+) or deficiency (−) from January 1, 19 36 to date as compared with average of corresponding period - 4.59

WIND

Prevailing direction SE Total movement 4187 miles

Average hourly velocity 5.6 miles per hour

Maximum velocity (for five minutes) 24 miles per hour

from NW on 19

(WEATHER No. of days)

Clear 0 Pt. Cloudy 4 Cloudy 27

Days on which .01 inch, or more, of rain occurred 24

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 28

Fogs: Light None

Fogs: Dense None

Thunderstorms 1-2-4-5-6-7-10-11-15-16-19-20-2

Earthquakes None 25-24-26-27-29-30-31

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

MR 43091—Panama Canal—2-25-35—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone ; Month August, 1936

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Sunshine %	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
87	76	80	38	.14	84.9	Cloudy
82	76	79	0	.02	84.3	Cloudy
87	74	80	63	.54	84.8	Cloudy
81	74	78	0	.18	84.2	Cloudy
81	76	79	19	.05	83.9	Cloudy
86	77	82	65	.11	83.5	Pt.cloudy
87	79	83	63	.30	84.0	Pt.cloudy
86	80	82	58	.45	84.3	Cloudy
86	78	81	47	1.47	84.8	Cloudy
80	75	78	0	3.69	83.2	Cloudy
83	76	79	16	.02	84.0	Cloudy
87	75	81	70	T.	84.3	Pt.cloudy
87	80	83	48	.15	84.8	Pt.cloudy
86	79	82	46	.07	84.1	Cloudy
86	77	82	73	T.	84.8	Pt.cloudy
89	78	83	46	.28	85.4	Pt.cloudy
87	76	82	30	.55	84.7	Cloudy
83	78	81	6	.19	84.5	Cloudy
84	76	79	27	.58	83.5	Cloudy
89	75	79	27	1.86	83.4	Cloudy
84	75	79	25	0	83.4	Cloudy
89	76	81	60	.25	84.2	Cloudy
84	77	80	15	.08	85.0	Cloudy
90	75	81	41	0	84.5	Cloudy
87	76	80	37	.20	84.7	Pt.cloudy
87	77	82	69	.24	85.2	Pt.cloudy
90	77	83	63	.65	85.6	Pt.cloudy
90	79	85	38	.02	86.0	Cloudy
86	77	81	29	.27	86.2	Cloudy
85	78	80	0	.45	85.6	Cloudy
84	77	80	8	1.05	84.0	Cloudy
--	--	*	---	15.78	* ---	
86.0	76.7	80.8	37	---	84.5	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly) Mean 29.825; highest 29.980 date 4
Lowest 29.715 date 29

TEMPERATURE

Highest 90 date 28; lowest 74 date 4
Greatest daily range 15 date 24
Bihourly Mean for this month in:

1906	--	1915	80.4	1924	79.8	1933	80.1
1907	79.4	1916	79.0	1925	80.9	1934	80.9
1908	78.3	1917	78.4	1926	79.7	1935	79.6
1909	77.8	1918	80.2	1927	80.2	1936	80.8
1910	78.6	1919	80.8	1928	79.5	1937	
1911	79.2	1920	79.7	1929	79.9	1938	
1912	79.2	1921	79.9	1930	81.0	1939	
1913	79.7	1922	80.3	1931	80.2	1940	
1914	80.2	1923	80.3	1932	80.0	1941	

Mean of this month for 30 years 79.9
Absolute maximum for this month for 30 years 91
Absolute minimum for this month for 30 years 71
Average daily excess, (+) or deficiency (−) of his month as compared with mean of 30 years + 0.2

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 5.16 date 9-10
Total precipitation this month in:

1885	20.22	1899	14.80	1913	17.21	1927	26.45
1886	12.20	1900	17.00	1914	16.01	1928	24.49
1887	16.89	1901	12.81	1915	12.89	1929	25.78
1888	---	1902	5.78	1916	8.24	1930	14.56
1889	---	1903	14.25	1917	15.72	1931	17.52
1890	20.51	1904	11.14	1918	12.85	1932	12.10
1891	15.98	1905	15.01	1919	6.77	1933	8.27
1892	15.99	1906	18.31	1920	25.04	1934	13.86
1893	15.12	1907	18.89	1921	18.45	1935	14.72
1894	25.03	1908	16.89	1922	14.53	1936	15.78
1895	14.15	1909	15.42	1923	15.35	1937	
1896	15.51	1910	14.93	1924	7.42	1938	
1897	17.24	1911	11.80	1925	7.71	1939	
1898	10.91	1912	9.87	1926	20.84	1940	

Average of this month for 66 years 15.21
Total from January 1, 19 36 to date 61.76
Average from January 1, to date 67.78
Excess (+) or deficiency (−) from January 1, 19 36 to date as compared with average of corresponding period - 6.02

WIND

Prevailing direction West Total movement 5005 miles
Average hourly velocity 6.7 miles per hour
Maximum velocity (for five minutes) 30 miles per hour from North on 17th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 9 Cloudy 22
Days on which .01 inch, or more, of rain occurred 27

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms 1-3-5-6-8-9-10-14-17-19-20-27-29-30-31
Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month September, 1936

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	EVAPORATION (INCHES)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	77	80	2	.00	84.2	Cloudy
2	86	76	79	24	.10	85.0	Cloudy
3	87	75	79	38	.25	84.0	Cloudy
4	85	75	78	25	.42	83.8	Cloudy
5	86	74	80	34	.17	83.5	Pt.Cldy.
6	88	74	80	45	.26	83.2	Cloudy
7	81	75	78	11	.09	82.7	Cloudy
8	86	75	81	91	.00	82.8	Clear
9	89	75	82	48	.00	83.6	Pt.Cldy.
10	87	76	81	19	1.90	84.2	Cloudy
11	83	76	79	00	1.46	84.0	Cloudy
12	89	75	82	48	.00	84.7	Pt.Cldy.
13	89	77	81	49	.65	84.9	Cloudy
14	81	77	79	10	1.33	84.2	Cloudy
15	85	77	80	32	.56	83.8	Cloudy
16	91	77	81	60	.03	84.7	Pt.Cldy.
17	88	76	81	55	.74	85.0	Pt.Cldy.
18	85	75	78	25	.22	85.0	Cloudy
19	84	75	79	66	.00	84.8	Cloudy
20	91	75	78	57	1.19	84.5	Pt.Cldy.
21	89	74	80	69	.54	84.2	Pt.Cldy.
22	84	77	80	16	.08	84.5	Cloudy
23	85	76	79	31	.01	84.1	Cloudy
24	85	75	81	51	.00	83.9	Cloudy
25	83	74	77	11	3.45	83.5	Cloudy
26	89	74	81	65	.00	83.5	Pt.Cldy.
27	88	76	82	67	.18	84.7	Pt.Cldy.
28	82	77	79	2	.30	84.8	Cloudy
29	86	75	80	60	.65	84.6	Pt.Cldy.
30	88	76	81	69	.02	84.8	Cloudy
	---	---	* ---	--	14.58	* ----	
	86.3	75.5	79.8	39	---	84.2	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly) Mean 29.842, highest 29.975, date 26
Lowest 29.720, date 13

TEMPERATURE

Highest 91, date 20; lowest 74, date 25
Greatest daily range 16, date 20

Bihourly Mean for this month in:

1906 ----	1915 80.5	1924 79.9	1933 79.7
1907 78.6	1916 79.4	1925 80.0	1934 79.9
1908 78.3	1917 79.2	1926 79.9	1935 80.1
1909 78.2	1918 79.7	1927 79.5	1936 79.8
1910 77.9	1919 79.7	1928 80.3	1937
1911 80.4	1920 80.0	1929 80.2	1938
1912 79.5	1921 80.1	1930 81.0	1939
1913 79.7	1922 79.4	1931 80.2	1940
1914 79.6	1923 80.0	1932 80.7	1941

Mean of this month for 30 years 79.7
Absolute maximum for this month for 30 years 88 94
Absolute minimum for this month for 30 years 70
Average daily excess, (+) or deficiency (−) of his month as compared with mean of 30 years + 0.1

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 3.45 date 25

Total precipitation this month in:

1885 17.44	1899 16.55	1913 9.90	1927 17.32
1886 7.52	1900 9.37	1914 14.80	1928 15.46
1887 15.63	1901 11.88	1915 13.65	1929 7.50
1888 ----	1902 11.06	1916 10.41	1930 10.88
1889 ----	1903 11.61	1917 17.67	1931 8.24
1890 22.99	1904 13.86	1918 15.34	1932 7.15
1891 17.48	1905 6.80	1919 11.74	1933 9.11
1892 16.26	1906 12.48	1920 8.61	1934 21.30
1893 9.98	1907 11.72	1921 11.21	1935 21.31
1894 18.78	1908 11.57	1922 12.73	1936 14.58
1895 12.09	1909 16.35	1923 12.31	1937
1896 12.84	1910 12.05	1924 9.00	1938
1897 17.20	1911 11.62	1925 8.17	1939
1898 10.24	1912 12.25	1926 10.45	1940

Average of this month for 66 years 12.48
Total from January 1, 19 36 to date 76.34
Average from January 1, to date 80.26
Excess (+) or deficiency (−) from January 1, 19 36 to date as compared with average of corresponding period -3.92

WIND

Prevailing direction SE Total movement 3830 miles
Average hourly velocity 5.3 miles per hour
Maximum velocity (for five minutes) 24 miles per hour from E on 25th

(WEATHER No. of days)

Clear 1 Pt. Cloudy 10 Cloudy 19
Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms 2-3-4-5-6-7-10-11-12-13-14-16-
Earthquakes None 17-20-21-22-25-27-28-31

"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

4066-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal; Month October, 1936.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	[illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	75	78	22	.39	85.0	Cldy.
2	88	74	81	30	0	85.1	Pt.Cldy.
3	90	77	82	76	1.57	85.7	Cldy.
4	88	75	78	30	.41	85.8	Cldy.
5	86	75	78	32	.02	86.0	Cldy.
6	88	75	80	76	0	84.8	Pt.Cldy.
7	86	77	81	72	.04	84.6	Cldy.
8	88	77	80	19	.08	84.5	Cldy.
9	84	76	79	58	.08	84.8	Pt.Cldy.
10	87	76	80	18	0	85.8	Cldy.
11	88	76	79	38	2.08	84.4	Cldy.
12	89	76	81	69	.18	84.8	Pt.Cldy.
13	89	76	81	48	.26	85.1	Pt.Cldy.
14	86	75	80	0	.34	85.0	Cldy.
15	88	77	80	40	.06	84.6	Cldy.
16	90	75	77	4	.78	84.0	Cldy.
17	89	74	78	60	.18	84.4	Pt.Cldy.
18	86	75	77	19	.31	84.4	Cloudy
19	90	76	78	36	.08	84.8	Cldy.
20	85	75	79	48	0	84.0	Pt.Cldy.
21	89	75	79	55	0	84.8	Pt.Cldy.
22	89	75	80	31	.38	84.4	Pt.Cldy.
23	86	76	79	60	.02	84.8	Cldy.
24	87	75	80	68	.02	84.6	Pt.Cldy.
25	89	75	80	68	0	85.8	Pt.Cldy.
26	87	77	80	49	1.29	85.9	Cldy.
27	86	76	80	16	.04	85.0	Cldy.
28	86	75	80	16	.07	85.0	Cldy.
29	86	74	78	9	1.11	84.8	Cldy.
30	86	75	78	21	.82	85.0	Cldy.
31	86	75	78	11	.78	84.7	Cldy.
---	---	---	*	---	11.86	*	
86.9	75.5	79.4	41	---	---	84.7	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean [illegible]; highest [illegible] date [illegible]

Lowest [illegible] date [illegible]

TEMPERATURE

Highest [illegible] date [illegible]; lowest [illegible] date [illegible]

Greatest daily range [illegible] date [illegible]

Bihourly Mean for this month in:

1906	---	1915	[illegible]	1924	[illegible]	1933	[illegible]
1907	[illegible]	1916	[illegible]	1925	[illegible]	1934	[illegible]
1908	[illegible]	1917	[illegible]	1926	[illegible]	1935	[illegible]
1909	[illegible]	1918	[illegible]	1927	[illegible]	1936	[illegible]
1910	[illegible]	1919	[illegible]	1928	[illegible]	1937	
1911	[illegible]	1920	[illegible]	1929	[illegible]	1938	
1912	[illegible]	1921	[illegible]	1930	[illegible]	1939	
1913	[illegible]	1922	[illegible]	1931	[illegible]	1940	
1914	[illegible]	1923	[illegible]	1932	[illegible]	1941	

Mean of this month for [illegible] years [illegible]

Absolute maximum for this month for [illegible] years [illegible]

Absolute minimum for this month for [illegible] years [illegible]

Average daily excess, (+) or deficiency (—) of this month as compared with mean of [illegible] years [illegible]

EVAPORATION

Total this month [illegible] Average daily [illegible] inches

PRECIPITATION

Greatest precipitation in 24 hours [illegible] date [illegible]

Total precipitation this month in:

1885	[illegible]	1899	[illegible]	1913	[illegible]	1927	[illegible]
1886	[illegible]	1900	[illegible]	1914	[illegible]	1928	[illegible]
1887	[illegible]	1901	[illegible]	1915	[illegible]	1929	[illegible]
1888	---	1902	[illegible]	1916	[illegible]	1930	[illegible]
1889	---	1903	[illegible]	1917	[illegible]	1931	[illegible]
1890	[illegible]	1904	[illegible]	1918	[illegible]	1932	[illegible]
1891	[illegible]	1905	[illegible]	1919	[illegible]	1933	[illegible]
1892	[illegible]	1906	[illegible]	1920	[illegible]	1934	[illegible]
1893	[illegible]	1907	[illegible]	1921	[illegible]	1935	[illegible]
1894	[illegible]	1908	[illegible]	1922	[illegible]	1936	[illegible]
1895	[illegible]	1909	[illegible]	1923	[illegible]	1937	
1896	[illegible]	1910	[illegible]	1924	[illegible]	1938	
1897	[illegible]	1911	[illegible]	1925	[illegible]	1939	
1898	[illegible]	1912	[illegible]	1926	[illegible]	1940	

Average of this month for [illegible] years [illegible]

Total from January 1, 19[illegible] to date [illegible]

Average from January 1, to date [illegible]

Excess (+) or deficiency (—) from January 1, 19[illegible] to date as compared with average of corresponding period [illegible]

WIND

Prevailing direction S E Total movement [illegible] miles

Average hourly velocity [illegible] miles per hour

Maximum velocity (for five minutes) [illegible] miles per hour from [illegible] on [illegible]

(WEATHER No. of days)

Clear 0 Pt. Cloudy 11 Cloudy [illegible]

Days on which .01 inch, or more, of rain occurred [illegible]

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 1

Fogs: Light None

Fogs: Dense [illegible]

Thunderstorms [illegible]

Earthquakes [illegible]

4066-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month November, 193 4

DATE	TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Ending 8 a.m. Sunshine %	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	89	75	80	40	.86	84.4	Cloudy
2	85	75	79	5	2.99	84.8	Cloudy
3	86	76	78	12	.57	84.0	Cloudy
4	82	75	77	3	.16	83.8	Cloudy
5	86	74	79	79	0	84.8	Clear
6	86	75	80	89	0	85.0	Pt.Cldy
7	87	75	81	81	0	85.4	Clear
8	87	78	82	80	.56	86.4	Clear
9	86	77	81	45	.43	85.8	Pt.Cldy
10	86	76	82	75	.85	85.0	Pt.Cldy
11	81	75	78	12	5.85	84.2	Cloudy
12	89	75	81	91	0	84.6	Pt.Cldy
13	86	78	80	27	.45	84.6	Cloudy
14	88	77	81	59	.03	84.5	Cloudy
15	87	75	79	44	3.38	84.1	Cloudy
16	87	75	80	58	1.19	84.3	Cloudy
17	89	75	79	67	.06	85.0	Cloudy
18	86	75	79	56	.18	84.9	Cloudy
19	85	75	78	67	.03	85.0	Pt.Cldy
20	84	74	80	49	.78	84.8	Cloudy
21	85	76	78	38	2.18	84.8	Cloudy
22	84	75	79	28	.22	84.0	Cloudy
23	86	75	82	94	T	84.8	Clear
24	88	78	83	87	.07	85.1	Clear
25	85	80	82	43	.07	85.0	Pt.Cldy
26	86	80	83	70	.07	85.0	Pt.Cldy
27	80	77	79	8	1.07	84.8	Cloudy
28	85	76	80	21	.38	85.0	Cloudy
29	85	74	80	28	1.24	85.1	Clear
30	86	75	80	97	.07	85.3	Clear
	*				25.11	*	
	75.8	78.8	80.0	51		84.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.815; highest 30.015 date 26

Lowest 29.710 date 14

TEMPERATURE

Highest 89 date 12; lowest 75 date 4

Greatest daily range 14 date 12

Bihourly Mean for this month in:

1906	—	1915	78.0	1924	78.3	1933	77.9
1907	78.4	1916	78.6	1925	78.2	1934	78.4
1908	77.8	1917	77.6	1926	78.7	1935	77.8
1909	78.9	1918	79.9	1927	78.0	1936	80.0
1910	77.5	1919	78.7	1928	78.4	1937	
1911	78.9	1920	7918	1929	80.4	1938	
1912	78.6	1921	79.6	1930	81.2	1939	
1913	78.7	1922	78.5	1931	78.5	1940	
1914	78.8	1923	79.8	1932	79.0	1941	

Mean of this month for 30 years 78.8

Absolute maximum for this month for 30 years 92

Absolute minimum for this month for 30 years 69

Average daily excess. (+) or deficiency (—) of this month as compared with mean of 30 years +1.2

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 5.85 date 11

Total precipitation this month in:

1885	24.17	1899	14.48	1913	18.75	1927	28.85
1886	21.89	1900	20.88	1914	18.35	1928	17.80
1887	31.81	1901	32.73	1915	22.33	1929	8.99
1888	—	1902	18.18	1916	14.08	1930	16.94
1889	—	1903	28.30	1917	20.48	1931	30.31
1890	19.48	1904	24.33	1918	14.23	1932	37.13
1891	19.48	1905	17.92	1919	4.63	1933	45.06
1892	26.20	1906	26.44	1920	21.27	1934	28.51
1893	17.89	1907	13.37	1921	19.96	1935	42.75
1894	23.66	1908	31.78	1922	15.63	1936	23.11
1895	20.47	1909	42.50	1923	28.16	1937	
1896	15.63	1910	30.04	1924	20.28	1938	
1897	22.16	1911	18.81	1925	22.95	1939	
1898	12.28	1912	21.61	1926	29.39	1940	

Average of this month for 44 years 22.86

Total from January 1, 19 34 to date 110.61

Average from January 1, to date 117.94

Excess (+) or deficiency (—) from January 1, 19 34 to date as compared with average of corresponding period -7.13

WIND

Prevailing direction W Total movement 4780 miles

Average hourly velocity 6.6 miles per hour

Maximum velocity (for five minutes) 30 miles per hour

from N on 24

(WEATHER No. of days)

Clear 7 Pt. Cloudy 7 Cloudy 16

Days on which .01 inch, or more, of rain occurred 25

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar N. O. N. O.

Fogs: Light N. O. N. O.

Fogs: Dense N. O. N. O.

Thunderstorms 1-8-11-12-13-15-18-19-21-21

Earthquakes N. O. N. O.

4066-6

THE PANAMA CANAL

MR 33839—Panama Canal—3-3-33—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month December, 1936

TE	TEMPERATURE (Degrees Fahrenheit) MAX	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending 8 a. m. Sunshine %	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	75	80	99	.0	83.8	Clear
2	87	76	81	91	T.	84.0	Pt.cldy.
3	86	75	81	95	.01	83.8	Clear
4	88	79	82	84	.02	83.9	Pt.cldy.
5	88	79	83	97	.0	84.0	Clear
6	87	80	83	92	.0	83.8	Clear
7	86	81	83	69	T.	83.2	Pt.cldy.
8	87	80	82	79	.02	82.8	Pt.cldy.
9	85	79	81	28	.12	82.6	Pt.cldy.
10	86	77	81	46	.22	82.0	Cldy.
11	85	73	79	47	.04	82.0	Pt.cldy.
12	85	76	80	89	.10	82.3	Pt.cldy.
13	85	73	79	81	.13	83.0	Clear
14	84	74	78	59	.37	83.0	Pt.cldy.
15	83	74	79	86	.02	82.4	Pt.cldy.
16	88	75	80	98	.17	82.7	Clear
17	84	75	80	85	.16	82.8	Clear
18	84	74	80	97	.0	82.8	Clear
19	86	75	81	78	.0	83.2	Clear
20	85	77	81	54	.18	83.0	Pt.cldy.
21	86	77	80	66	.25	82.0	Pt.cldy.
22	84	76	80	44	.82	82.0	Cldy.
23	85	77	81	72	.05	81.8	Pt.cldy.
24	87	79	82	92	.0	82.3	Clear
25	85	79	81	85	.0	82.4	Pt.cldy.
26	86	77	81	79	.03	82.0	Pt.cldy.
27	86	76	80	93	.12	81.8	Clear
28	86	75	80	73	.06	81.8	Clear
29	85	74	79	64	.39	81.0	Pt.cldy.
30	83	74	80	93	.22	81.3	Clear
31	84	73	79	87	.03	82.2	Clear
	-	-	* -	-	3.53	* -	
	85.5	76.3	80.5	78	-	82.6	

NOTE.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time. *Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bi-hourly)

Mean 29.853; highest 29.990 date 15

Lowest 29.740 date 7

TEMPERATURE

Highest 88 date 5; lowest 73 date 13

Greatest daily range 12 date 1

Bihourly Mean for this month in:

1906 -	1915	80.6	1924	79.6	1933	78.4
1907	79.9	1916	79.7	1925	81.0	1934	80.2
1908	78.1	1917	78.3	1926	79.5	1935	80.3
1909	76.8	1918	81.1	1927	80.1	1936	80.5
1910	78.0	1919	80.2	1928	79.7	1937	
1911	81.7	1920	80.7	1929	80.4	1938	
1912	80.2	1921	80.0	1930	81.6	1939	
1913	80.6	1922	79.7	1931	80.9	1940	
1914	81.4	1923	80.2	1932	79.5	1941	

Mean of this month for 30 years 79.9

Absolute maximum for this month for 30 years 89

Absolute minimum for this month for 30 years 66

Average daily excess, (+) or deficiency (—) of this month as compared with mean of 30 years + 0.6

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours .92 date 21-22

Total precipitation this month in:

1885	25.51	1899	9.04	1913	6.55	1927	16.70
1886	22.72	1900	4.13	1914	8.88	1928	16.43
1887	13.33	1901	5.41	1915	9.45	1929	7.87
1888	-	1902	7.28	1916	5.71	1930	7.86
1889	-	1903	15.75	1917	11.66	1931	3.47
1890	19.06	1904	7.02	1918	1.90	1932	7.64
1891	4.25	1905	9.50	1919	7.37	1933	18.46
1892	11.30	1906	15.64	1920	2.06	1934	15.66
1893	30.44	1907	9.56	1921	6.50	1935	15.02
1894	25.15	1908	9.07	1922	7.80	1936	5.55
1895	15.71	1909	34.38	1923	5.18	1937	
1896	18.46	1910	15.20	1924	8.84	1938	
1897	18.90	1911	2.63	1925	6.04	1939	
1898	7.95	1912	11.47	1926	7.60	1940	

Average of this month for 66 years 10.95

Total from January 1, 19 36 to date 114.34

Average from January 1, to date 128.89

Excess (+) or deficiency (—) from January 1, 1936 to date as compared with average of corresponding period - 14.55

WIND

Prevailing direction N Total movement 807.8 miles

Average hourly velocity 10.9 miles per hour

Maximum velocity (for five minutes) 27 miles per hour

from NE on 10

(WEATHER No. of days)

Clear 14 Pt. Cloudy 15 Cloudy 2

Days on which .01 inch, or more, of rain occurred 22

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month March, 1938.

	TEMPERATURE (Degrees Fahrenheit)			Sunshine	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean Bihourly				
1	84	76	79	98 %	0	80.1	Pt.Cldy.
2	79	72	77	30	.69	79.0	Cloudy
3	84	77	80	88	0	79.4	Pt.Cldy.
4	84	77	80	91	0	79.8	Clear
5	85	77	79	72	0	80.0	Pt.Cldy.
6	84	72	79	98	0	81.4	Clear
7	85	75	79	83	.06	81.7	Pt.Cldy.
8	85	78	80	88	0	81.7	Clear
9	84	75	80	93	0	81.1	Clear
10	84	75	80	92	.10	81.2	Pt.Cldy.
11	85	77	80	98	T.	81.3	Clear
12	86	74	80	94	0	82.1	Pt.Cldy.
13	86	77	81	81	0	82.8	Pt.Cldy.
14	86	78	81	96	0	83.3	Clear
15	85	78	81	86	0	82.8	Clear
16	85	77	80	74	.01	83.0	Pt.Cldy.
17	85	78	80	91	0	83.2	Clear
18	85	79	81	82	0	83.2	Pt.Cldy.
19	84	76	80	62	.56	82.5	Pt.Cldy.
20	85	78	81	86	T.	82.1	Pt.Cldy.
21	85	76	81	87	.16	82.0	Clear
22	86	77	81	76	.02	82.5	Clear
23	85	78	80	76	0	82.5	Pt.Cldy.
24	85	78	80	73	T.	82.7	Pt.Cldy.
25	85	78	81	89	0	82.8	Clear
26	85	78	80	92	0	82.8	Pt.Cldy.
27	85	78	81	86	0	82.2	Pt.Cldy.
28	85	77	81	47	.05	82.0	Cloudy
29	86	79	81	75	T.	82.4	Pt.Cldy.
30	86	79	81	70	.03	82.9	Pt.Cldy.
31	85	78	81	63	T.	83.3	Cloudy
	-	-	*-	-	1.68	*-	
	84.8	76.9	80.2	81	-	81.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.891; highest 30.050 date 1

Lowest 29.780 date 21

TEMPERATURE

Highest 86 date 14; lowest 72 date 6

Greatest daily range 12 date 12

Bihourly Mean for this month in:

1905	-	1915	82.1	1924	81.0	1933	80.5
1907	-	1916	80.2	1925	80.3	1934	80.4
1908	79.8	1917	78.8	1926	80.5	1935	80.8
1909	79.7	1918	79.2	1927	81.3	1936	81.1
1910	78.1	1919	80.0	1928	81.1	1937	81.2
1911	78.8	1920	80.9	1929	80.8	1938	80.2
1912	81.5	1921	81.1	1930	81.1	1939	
1913	80.7	1922	81.4	1931	81.7	1940	
1914	80.7	1923	79.8	1932	81.0	1941	

Mean of this month for 31 years 80.5

Absolute maximum for this month for 31 years 92

Absolute minimum for this month for 31 years 67

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 31 years -0.3

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 0.69 date 2

Total precipitation this month in:

1885	.55	1899	1.26	1913	.79	1927	1.27
1886	9.17	1900	1.06	1914	.91	1928	2.42
1887	.47	1901	1.67	1915	1.71	1929	2.59
1888	1.26	1902	2.33	1916	2.68	1930	1.07
1889		1903	.96	1917	.76	1931	4.48
1890	2.01	1904	1.65	1918	.41	1932	2.69
1891	1.50	1905	.62	1919	.61	1933	1.11
1892	3.98	1906	1.42	1920	1.08	1934	1.10
1893	1.81	1907	2.16	1921	.98	1935	.80
1894	.35	1908	3.53	1922	.92	1936	.87
1895	2.09	1909	1.85	1923	.36	1937	.32
1896	2.01	1910	5.46	1924	.71	1938	1.68
1897	.28	1911	1.41	1925	.31	1939	
1898	1.58	1912	.66	1926	.43	1940	

Average of this month for 69 years 1.52

Total from January 1, 1938 to date 5.06

Average from January 1, to date 6.48

Excess (+) or deficiency (−) from January 1, 1938 to date as compared with average of corresponding period -1.42

WIND

Prevailing direction North Total movement 10634 miles

Average hourly velocity 14.3 miles per hour

Maximum velocity (for five minutes) 28 miles per hour from North on 14th

(WEATHER No. of days)

Clear 11 Pt. Cloudy 17 Cloudy 3

Days on which .01 inch, or more, of rain occurred 9

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month AUGUST, 1938

	TEMPERATURE (Degrees Fahrenheit)			~~Evaporation (inches) For 24 hours Period Ending 8 a.m.~~ Sunshine %	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean Bihourly				
1	86	74	80	64	.09	83.9	Cloudy
2	87	76	80	37	.04	84.4	Cloudy
3	85	74	78	25	2.57	84.2	Cloudy
4	86	74	79	34	1.13	84.0	Cloudy
5	86	74	79	61	2.05	83.9	Cloudy
6	82	75	77	20	1.60	82.8	Cloudy
7	83	75	77	26	1.04	81.8	Cloudy
8	89	75	79	49	.74	82.6	Cloudy
9	86	75	78	27	.05	83.4	Cloudy
10	84	75	77	25	2.44	82.8	Cloudy
11	85	73	78	93	.02	82.8	Pt.Cldy
12	88	76	80	50	.01	82.7	Cloudy
13	87	74	81	96	.26	82.6	Clear
14	87	75	80	57	.37	83.6	Cloudy
15	86	77	79	27	.50	83.1	Cloudy
16	89	74	77	40	1.08	82.8	Cloudy
17	85	74	79	65	1.63	83.4	Pt.Cldy
18	87	75	80	49	.55	82.8	Cloudy
19	85	75	79	58	.68	82.2	Cloudy
20	89	77	80	60	.03	82.9	Cloudy
21	89	74	81	73	0	83.8	Pt.Cldy
22	82	74	79	16	.75	84.2	Cloudy
23	87	76	81	56	.14	82.6	Pt.Cldy
24	89	76	82	65	.42	82.5	Pt.Cldy
25	89	76	81	63	.04	83.5	Cloudy
26	88	75	78	55	1.61	83.2	Cloudy
27	86	74	80	58	.07	82.9	Cloudy
28	79	74	77	0	1.48	82.2	Cloudy
29	86	75	80	53	.03	82.8	Pt.Cldy
30	90	77	81	45	.04	84.0	Cloudy
31	84	77	79	24	.86	84.0	Cloudy
	--	--	* --	--	22.32	* ----	
	86.2	74.9	79.8	46		83.2	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.843; highest 29.965 date 15

Lowest 29.720 date 28

TEMPERATURE

Highest 90 date 30; lowest 73 date 11

Greatest daily range 15 date 21

Bihourly Mean for this month in:

1906	1915 80.4	1924 79.8	1933 80.1
1907 79.4	1916 79.0	1925 80.9	1934 80.9
1908 78.5	1917 78.4	1926 79.7	1935 79.6
1909 77.8	1918 80.2	1927 80.2	1936 80.8
1910 78.6	1919 80.8	1928 79.5	1937 80.9
1911 79.9	1920 79.7	1929 79.9	1938 79.3
1912 79.9	1921 79.9	1930 81.0	1939
1913 79.7	1922 80.3	1931 80.9	1940
1914 80.9	1923 80.3	1932 80.0	1941

Mean of this month for 32 years 79.9

Absolute maximum for this month for 32 years 91

Absolute minimum for this month for 32 years 71

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 32 years -0.6

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 2.59 date 8-3

Total precipitation this month in:

1885 20.32	1899 14.20	1913 17.91	1927 26.63
1886 12.20	1900 17.00	1914 16.01	1928 24.49
1887 16.99	1901 12.51	1915 12.89	1929 23.78
1888 ------	1902 5.78	1916 8.34	1930 14.35
1889 ------	1903 14.25	1917 15.79	1931 17.52
1890 20.51	1904 11.14	1918 18.85	1932 12.10
1891 15.98	1905 15.01	1919 6.77	1933 8.27
1892 15.98	1906 18.31	1920 23.04	1934 13.86
1893 15.18	1907 18.89	1921 18.45	1935 14.72
1894 23.05	1908 16.89	1922 14.55	1936 13.78
1895 14.13	1909 15.42	1923 15.35	1937 13.26
1896 15.51	1910 14.93	1924 7.42	1938 22.32
1897 17.24	1911 11.60	1925 7.71	1939
1898 10.91	1912 9.87	1926 20.84	1940

Average of this month for 68 years 15.28

Total from January 1, 1938 to date 86.65

Average from January 1, to date 68.21

Excess (+) or deficiency (−) from January 1, 1938 to date as compared with average of corresponding period + 18.42

WIND

Prevailing direction West Total movement 4592 miles

Average hourly velocity 6.2 miles per hour

Maximum velocity (for five minutes) 24 miles per hour

from W. on 16

(WEATHER No. of days)

Clear 1 Pt. Cloudy 6 Cloudy 24

Days on which .01 inch, or more, of rain occurred 20

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 1-2-3-4-6-8-13-14-15-16-17-18-

Earthquakes 9 /21-22-23-24-26-27-28-30.

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

066-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, Canal Zone ; Month October , 1938

	TEMPERATURE (Degrees Fahrenheit)			Sunshine (hours)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly				
1	84	75	79	55	.09	85.0	Cloudy
2	87	75	81	65	0	85.5	Pt.Cldy.
3	89	77	81	60	.62	84.4	Cloudy
4	86	76	80	24	.70	84.5	Cloudy
5	85	76	81	38	.45	84.2	Cloudy
6	87	77	82	62	.28	84.5	Cloudy
7	85	77	79	17	1.12	84.7	Cloudy
8	89	74	78	26	5.82	85.8	Cloudy
9	86	75	80	63	0	85.5	Cloudy
10	88	76	81	82	0	84.5	Pt.Cldy
11	85	77	79	22	.31	84.5	Cloudy
12	84	74	78	56	.06	85.8	Pt.Cldy.
13	85	74	79	56	0	82.9	Pt.Cldy
14	88	75	80	50	.52	85.5	Cloudy
15	88	74	80	75	.55	84.7	Pt.Cldy
16	91	74	80	60	.19	85.4	Pt.Cldy
17	90	75	80	62	.65	85.0	Cloudy
18	84	76	79	36	.78	84.6	Cloudy
19	85	75	79	42	.13	84.5	Cloudy
20	87	75	79	40	1.09	85.4	Cloudy
21	89	74	80	55	T	84.1	Pt.Cldy
22	85	76	81	60	0	84.8	Pt.Cldy
23	85	76	79	30	.85	84.8	Cloudy
24	89	75	79	30	.39	84.5	Pt.Cldy
25	84	74	78	55	0	84.2	Cloudy
26	86	75	79	58	.02	84.5	Pt.Cldy
27	88	75	79	51	.46	84.5	Cloudy
28	82	74	76	16	.79	83.8	Cloudy
29	87	73	77	45	1.21	85.8	Cloudy
30	84	75	80	40	.48	85.9	Cloudy
31	86	74	79	64	1.70	85.8	Cloudy
960	2388	*	---	---	17.26	*	---
86.5	75.1	79.8	47	---	---	84.1	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.859; highest 29.960 date 26

Lowest 29.730 date 14

TEMPERATURE

Highest 91 date 16; lowest 73 date 29

Greatest daily range 17 date 16

Bihourly Mean for this month in:

1906	1915 79.6	1924 79.5	1933 79.6
1907 77.3	1916 78.7	1925 80.0	1934 79.0
1908 77.4	1917 78.4	1926 79.7	1935 79.7
1909 77.9	1918 78.9	1927 79.1	1936 79.4
1910 77.7	1919 79.5	1928 79.9	1937 79.9
1911 79.2	1920 79.2	1929 79.7	1938 79.5
1912 78.5	1921 79.3	1930 79.4	1939
1913 79.4	1922 79.1	1931 80.6	1940
1914 79.2	1923 78.8	1932 79.6	1941

Mean of this month for 32 years 79.1

Absolute maximum for this month for 32 years 95

Absolute minimum for this month for 32 years 70

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 32 years +0.4

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours 4.02 date 7-8

Total precipitation this month in:

1885 7.99	1899 15.09	1913 18.63	1927 15.12
1886 14.35	1900 16.33	1914 28.18	1928 18.02
1887 19.61	1901 12.65	1915 21.86	1929 13.74
1888	1902 14.24	1916 17.59	1930 7.24
1889	1903 10.04	1917 7.87	1931 20.43
1890 21.77	1904 8.14	1918 27.07	1932 16.78
1891 17.48	1905 13.45	1919 21.94	1933 19.84
1892 6.89	1906 15.34	1920 17.16	1934 17.49
1893 12.88	1907 21.99	1921 8.57	1935 8.90
1894 12.40	1908 10.96	1922 13.87	1936 11.36
1895 18.48	1909 19.31	1923 42.17	1937 16.58
1896 13.98	1910 15.48	1924 21.56	1938 17.26
1897 5.88	1911 16.35	1925 16.49	1939
1898 11.58	1912 17.65	1926 15.31	1940

Average of this month for 69 years 15.46

Total from January 1, 1938 to date 114.39

Average from January 1, to date 96.15

Excess (+) or deficiency (−) from January 1, 1938 to date as compared with average of corresponding period + 18.24

WIND

Prevailing direction South Total movement 4173 miles

Average hourly velocity 5.6 miles per hour

Maximum velocity (for five minutes) 21 miles per hour

from NW on 29

(WEATHER No. of days)

Clear 0 Pt. Cloudy 10 Cloudy 21

Days on which .01 inch, or more, of rain occurred 24

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms [11] 4,5,6,7,8,11,13,15,18,23,24

Earthquakes None

e.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month NOVEMBER, 1938

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	[illegible] Sunshine	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	87	75	80	40	.12	84.4	Cloudy
2	87	75	79	42	.96	84.0	"
3	85	75	79	26	3.39	83.8	"
4	88	75	80	56	.22	83.6	"
5	87	74	79	55	.96	83.8	"
6	85	75	80	54	0	84.0	Pt.Cldy
7	89	76	81	75	0	83.8	"
8	85	76	78	34	.66	83.7	Cloudy
9	88	75	80	79	.04	84.1	Pt.Cldy
10	82	75	78	15	.07	84.2	Cloudy
11	86	75	80	85	.16	83.7	Pt.Cldy
12	87	75	80	85	.01	84.6	"
13	86	75	80	56	.25	85.0	"
14	89	76	81	59	0	85.2	"
15	86	77	79	19	.42	85.2	Cloudy
16	82	75	78	28	.03	84.2	"
17	89	76	79	44	.08	84.3	Pt.Cldy
18	85	74	80	60	.24	84.4	"
19	87	76	82	68	0	84.5	Cloudy
20	89	74	78	65	.36	84.0	"
21	85	74	78	64	.65	84.0	"
22	85	74	78	37	.94	84.5	"
23	86	75	80	45	1.70	84.8	"
24	83	76	79	15	.40	84.3	"
25	84	75	80	25	.95	84.7	"
26	87	74	79	66	.45	83.1	Pt.Cldy
27	88	74	77	24	2.76	82.7	Cloudy
28	81	74	76	21	.94	82.4	"
29	81	73	76	22	1.83	82.9	"
30	85	74	80	59	.95	82.5	Pt.Cldy
	—	—	* —	—	18.90	* —	
	85.6	75.0	78.1	48	—	84.0	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.823; highest 29.970 date 29

Lowest 29.700 date 7

TEMPERATURE

Highest 89 date 14; lowest 73 date 29

Greatest daily range 15 date 20

Bihourly Mean for this month is 79.6 78.3 77.9

1905	78.4	1915	78.6	1924	79.2	1933	78.4
1907	77.2	1916	77.6	1925	78.7	1934	77.8
1908	75.9	1917	79.9	1926	79.0	1935	80.0
1909	77.5	1918	79.7	1927	78.4	1936	78.9
1910	78.9	1919	79.8	1928	80.4	1937	79.1
1911	78.5	1920	79.8	1929	81.2	1938	
1912	78.7	1921	76.5	1930	78.5	1939	
1913	79.8	1922	79.8	1931	79.0	1940	
1914		1923	82	1932		1941	78.8

Mean of this month for 32 years 78

Absolute maximum for this month for 32 years 89

Absolute minimum for this month for years

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 32 years +0.5

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 3.95 date 3-4

Total precipitation this month is 24.17 14.69 14.75 28.35

1885	21.89	1899	20.88	1913	18.38	1927	17.80
1886	51.81	1900	32.75	1914	22.35	1928	6.99
1887		1901	12.18	1915	14.08	1929	14.94
1888		1902	26.30	1916	20.49	1930	30.51
1889	19.49	1903	26.25	1917	14.23	1931	37.15
1890	19.49	1904	17.92	1918	6.85	1932	43.76
1891	25.30	1905	26.64	1919	21.27	1933	28.81
1892	17.80	1906	15.37	1920	19.96	1934	42.75
1893	25.86	1907	31.72	1921	15.63	1935	25.11
1894	20.47	1908	42.50	1922	22.16	1937	25.23
1895	15.63	1909	30.04	1923	30.29	1938	18.90
1896	28.16	1910	15.81	1924	28.95	1939	
1897	18.89	1911	21.81	1925	29.59	1940	
1898		1912	28	1926		1941	22.22

Average of this month for 36 years 133.29

Total from January 1, 19 — to date 118.37

Average from January 1, to date 38

Excess (+) or deficiency (−) from January 1, 19 — to date as compared with average of corresponding period +14.92

WIND

Prevailing direction West Total movement 4841 miles

Average hourly velocity 6.7 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from North on 25th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 11 Cloudy 19

Days on which .01 inch, or more, of rain occurred 26

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 1, 3, 4, 8, 17, 24

Thunderstorms None

Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

066-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month January, 1939

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	[illegible] Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	79	81	100 %	0	82.0	Clear
2	85	78	81	81	.02	82.0	"
3	84	77	80	97	0	81.7	"
4	86	79	81	75	0	81.9	Pt Cldy
5	85	78	81	89	.01	81.6	Clear
6	86	79	81	97	0	81.8	"
7	84	78	81	74	0	81.3	Pt Cldy
8	85	76	80	71	.05	80.9	"
9	85	77	80	98	0	80.1	Clear
10	85	77	80	97	T	80.0	"
11	85	77	81	97	T	79.5	"
12	85	78	81	97	0	79.5	"
13	84	79	81	49	.06	79.7	Pt Cldy
14	85	77	80	55	.03	79.9	Cloudy
15	86	77	80	65	0	81.0	"
16	85	79	81	66	.05	81.2	"
17	85	79	81	67	.13	81.0	Pt Cldy
18	84	79	81	59	0	81.3	"
19	83	78	80	56	0	81.0	Cloudy
20	84	78	80	55	.01	80.6	"
21	83	77	80	70	.11	80.2	Pt Cldy
22	85	78	80	84	T	80.3	"
23	84	76	80	72	T	79.8	"
24	84	78	80	84	0	79.6	"
25	83	77	79	44	.01	79.6	Cloudy
26	83	76	80	65	.01	78.9	Pt Cldy
27	84	77	80	75	0	78.5	"
28	84	77	80	92	0	79.2	Clear
29	83	78	79	89	0	79.2	"
30	84	77	80	70	.01	80.8	Pt Cldy
31	83	78	80	66	0	80.6	"
Total	2616	2406	—	—	.68	* —	
Mean	84.4	77.6	80.8	76	—	80.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)
Mean 29.873; highest 29.990 date 25
Lowest 29.780 date 14

TEMPERATURE

Highest 86 date 3; lowest 75 date 29
Greatest daily range 9 date 3
Bihourly Mean for this month in:

1906	79.9	1915	81.7	1924	80.1	1933	80.1
1907	79.9	1916	80.6	1925	79.3	1934	79.5
1908	77.9	1917	78.4	1926	80.5	1935	79.5
1909	77.9	1918	78.4	1927	80.2	1936	80.6
1910	78.9	1919	79.5	1928	80.6	1937	80.4
1911	81.1	1920	80.7	1929	80.3	1938	80.4
1912	80.5	1921	80.3	1930	79.9	1939	80.3
1913	80.4	1922	79.9	1931	81.1	1940	
1914		1923	79.5	1932	80.6	1941	

Mean of this month for 32 years 80.0
Absolute maximum for this month for 32 years 88
Absolute minimum for this month for 32 years 70
Average daily excess, (+) or deficiency (−) of his month as compared with mean of 32 years +0.3

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours .14 date 16 - 17
Total precipitation this month in:

1885	.87	1899	6.95	1913	6.71	1927	4.60
1886	2.13	1900	6.06	1914	1.36	1928	1.71
1887	2.01	1901	1.28	1915	3.41	1929	.81
1888	.63	1902	19.20	1916	2.35	1930	2.46
1889		1903	1.00	1917	1.10	1931	2.01
1890	7.24	1904	7.02	1918	5.28	1932	1.44
1891	2.62	1905	8.42	1919	1.88	1933	2.10
1892	.98	1906	1.47	1920	.61	1934	3.94
1893	1.73	1907	2.47	1921	1.31	1935	5.81
1894	5.35	1908	3.84	1922	5.85	1936	1.54
1895	3.85	1909	10.81	1923	1.98	1937	4.20
1896	4.02	1910	2.94	1924	.61	1938	2.87
1897	3.42	1911	.99	1925	3.66	1939	.48
1898	5.04	1912	.28	1926	.70	1940	

Average of this month for 39 years 3.41
Total from January 1, 19 — to date .48
Average from January 1, to date 3.41
Excess (+) or deficiency (−) from January 1, 19 39 to date as compared with average of corresponding period -2.93

WIND

Prevailing direction North Total movement 10867 miles
Average hourly velocity 14.2 miles per hour
Maximum velocity (for five minutes) 26 miles per hour from N on 22

(WEATHER No. of days)

Clear 11 Pt. Cloudy 14 Cloudy 6
Days on which .01 inch, or more, of rain occurred 12

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

066-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month December, 1939

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	EVAPORATION (INCHES) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				Sunshine %			
1	87	80	83.1	69	.00	83.0	Pt.cldy
2	88	81	83.6	75	.00	83.6	Cloudy
3	87	81	83.1	58	.00	83.4	Cloudy
4	87	78	81.2	18	.10	83.4	Cloudy
5	85	77	80.6	22	.68	83.4	Cloudy
6	82	72	79.2	28	4.81	82.2	Cloudy
7	83	79	81.0	20	.07	81.9	Cloudy
8	87	78	81.8	52	.01	82.8	Cloudy
9	86	75	81.3	76	.45	82.9	Pt.cldy
10	85	78	81.2	53	.02	82.8	Pt.cldy
11	84	75	79.6	41	.81	82.7	Cloudy
12	83	73	78.0	31	.49	82.2	Cloudy
13	84	74	78.8	53	3.32	82.0	Cloudy
14	82	75	78.8	32	.19	81.9	Cloudy
15	82	74	78.3	23	.57	82.4	Cloudy
16	82	75	77.5	38	.92	82.0	Cloudy
17	84	74	77.5	36	.64	82.2	Cloudy
18	85	75	79.0	66	.02	81.8	Cloudy
19	85	75	77.8	43	.46	81.6	Cloudy
20	83	76	79.2	54	.13	82.1	Cloudy
21	84	78	79.7	21	.29	81.2	Cloudy
22	84	79	80.4	29	.12	82.4	Cloudy
23	84	78	80.7	37	.01	82.0	Cloudy
24	86	79	81.6	66	.00	82.6	Cloudy
25	85	75	80.6	61	.44	83.2	Cloudy
26	86	77	80.9	66	.01	82.9	Pt.cldy
27	85	75	80.2	45	.04	82.2	Cloudy
28	88	77	80.1	34	.81	82.2	Cloudy
29	84	78	80.6	59	.00	82.6	Cloudy
30	83	77	79.2	16	.28	82.8	Cloudy
31	85	74	77.1	22	1.39	82.2	Cloudy
	2625	2372	*		17.08	*306.80	
	84.7	76.5	80.0	43	-	82.5	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.850; highest 29.960 date 29

Lowest 29.740 date 1

TEMPERATURE

Highest 88 date 2; lowest 72 date 6

Greatest daily range 11 date 31

Bihourly Mean for this month in:

1906		1915	80.6	1924	79.6	1933	78.4
1907	79.9	1916	79.7	1925	81.0	1934	80.2
1908	78.1	1917	78.3	1926	79.5	1935	80.3
1909	76.8	1918	81.1	1927	80.1	1936	80.5
1910	78.0	1919	80.2	1928	79.7	1937	78.9
1911	81.7	1920	80.7	1929	80.4	1938	79.0
1912	80.2	1921	80.0	1930	81.6	1939	80.0
1913	79.6	1922	79.7	1931	80.9	1940	
1914	81.4	1923	80.2	1932	79.5	1941	

Mean of this month for 33 years 79.9

Absolute maximum for this month for 33 years 89

Absolute minimum for this month for 33 years 66

Average daily excess (+) or deficiency (−) of this month as compared with mean of 33 years +0.1

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 5.15 date 5-6

Total precipitation this month in:

1885	25.51	1899	9.04	1913	6.55	1927	16.70
1886	22.72	1900	4.13	1914	8.88	1928	16.43
1887	13.33	1901	5.41	1915	9.45	1929	7.87
1888		1902	7.10	1916	5.71	1930	7.86
1889		1903	15.75	1917	11.66	1931	3.47
1890	19.06	1904	7.02	1918	1.90	1932	7.64
1891	4.25	1905	9.50	1919	7.37	1933	18.46
1892	11.30	1906	15.64	1920	2.06	1934	15.66
1893	30.94	1907	9.36	1921	6.50	1935	13.02
1894	25.12	1908	9.07	1922	7.20	1936	3.53
1895	15.71	1909	34.38	1923	5.12	1937	32.94
1896	18.66	1910	15.20	1924	8.84	1938	29.29
1897	18.90	1911	2.63	1925	6.04	1939	17.08
1898	7.95	1912	11.47	1926	7.60	1940	

Average of this month for 69 years 11.62

Total from January 1, 1939 to date 126.52

Average from January 1, to date 39 129.86

Excess (+) or deficiency (−) from January 1, 1939 to date as compared with average of corresponding period -3.34

WIND

Prevailing direction N Total movement 6973 miles

Average hourly velocity 9.4 miles per hour

Maximum velocity (for five minutes) 35 miles per hour from W on 6

(WEATHER No. of days)

Clear 0 Pt. Cloudy 4 Cloudy 27

Days on which .01 inch, or more, of rain occurred 26

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense 4, 5, 6, 16, 31

Thunderstorms None

Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

MR 43091—Panama Canal—2-25-35—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month January, 1940

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m. % Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	74	78.2	38	.02	81.7	Cloudy
2	85	76	79.2	36	.07	81.8	"
3	85	75	79.4	68	.12	82.4	"
4	85	73	79.5	91	0	83.0	Clear
5	84	76	79.0	63	.32	82.9	Cloudy
6	85	75	79.6	48	1.02	82.8	"
7	87	76	81.2	80	0	83.5	Pt Cldy
8	85	78	80.7	42	.06	84.5	Cloudy
9	86	78	81.2	91	0	84.0	Pt Cldy
10	85	80	81.4	73	.01	84.0	Pt Cldy
11	85	79	81.1	73	.01	83.5	Pt Cldy
12	85	79	81.2	74	0	83.3	Pt Cldy
13	85	79	80.9	79	0	82.9	Clear
14	85	79	81.0	78	0	83.0	"
15	86	79	81.5	66	.02	82.5	Pt Cldy
16	85	77	80.8	68	.01	82.1	"
17	85	77	80.9	79	.01	81.4	"
18	85	76	80.8	88	0	81.0	"
19	85	74	80.2	81	0	80.8	"
20	86	79	81.6	74	.02	81.3	"
21	86	79	81.8	78	0	81.5	"
22	86	80	82.0	78	0	81.7	"
23	85	79	81.5	68	0	81.9	"
24	81	74	79.7	5	.59	81.4	Cloudy
25	85	79	81.1	81	0	81.2	Pt Cldy
26	84	78	80.7	83	0	81.1	Clear
27	84	78	80.2	68	0	80.6	Pt Cldy
28	83	75	78.8	30	.09	79.8	Cloudy
29	82	75	78.4	61	.06	79.8	"
30	84	77	79.9	88	0	80.6	Clear
31	83	77	80.0	70	.24	80.9	Pt Cldy
	2626	2390	2499.9		2.67	*305.15	
	84.7	77.1	80.4	68		82.0	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly) Mean 29.887; highest 30.030 date 28

Lowest 29.750 date 13

TEMPERATURE

Highest 87 date 7; lowest 73 date 4

Greatest daily range 12 date 4

Bihourly Mean for this month in:

1906	1915 81.7	1924 80.1	1933 80.1
1907	1916 80.6	1925 79.3	1934 79.5
1908 79.9	1917 78.4	1926 80.5	1935 79.6
1909 77.9	1918 78.4	1927 80.2	1936 80.6
1910 77.9	1919 79.8	1928 80.6	1937 80.4
1911 78.9	1920 80.7	1929 80.3	1938 80.4
1912 81.1	1921 80.3	1930 79.9	1939 80.3
1913 80.5	1922 79.9	1931 81.1	1940 80.4
1914 80.4	1923 79.6	1932 80.6	1941

Mean of this month for 33 years 80.0

Absolute maximum for this month for 33 years 88

Absolute minimum for this month for 33 years 70

Average daily excess. (+) or deficiency (−) of his month as compared with mean of 33 years +0.4

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 1.02 date 6

Total precipitation this month in:

1885 .87	1899 6.93	1913 6.71	1927 4.60
1886 2.13	1900 6.06	1914 1.35	1928 1.71
1887 2.01	1901 1.28	1915 3.41	1929 .81
1888 .63	1902 19.20	1916 2.33	1930 2.46
1889 --	1903 1.00	1917 1.10	1931 2.01
1890 7.24	1904 7.02	1918 3.28	1932 1.44
1891 2.52	1905 8.42	1919 1.82	1933 2.10
1892 .98	1906 1.47	1920 .51	1934 3.94
1893 1.73	1907 2.47	1921 1.31	1935 5.81
1894 5.35	1908 3.84	1922 6.85	1936 1.54
1895 3.86	1909 10.61	1923 1.98	1937 4.20
1896 4.02	1910 2.94	1924 .61	1938 2.27
1897 3.42	1911 .99	1925 3.66	1939 .48
1898 5.04	1912 .28	1926 .70	1940 2.67

Average of this month for 70 years 2.40

Total from January 1, 1940 to date 2.67

Average from January 1, to date 2.40

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period +.73

WIND

Prevailing direction N Total movement 9658 miles

Average hourly velocity 13.0 miles per hour

Maximum velocity (for five minutes) 30 miles per hour from N on 28

(WEATHER No. of days)

Clear 5 Pt. Cloudy 17 Cloudy 9

Days on which .01 inch, or more, of rain occurred 16

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month February, 1940

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	For 24 hours Period Ending 8 a.m. % Sunshine	Precipitation (Inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	85	75	80.6	85	.22	81.3	Pt.Cldy.
2	84	75	80.1	86	.05	81.4	Pt.Cldy.
3	84	75	79.8	65	.36	81.5	Pt.Cldy.
4	84	76	80.1	74	.05	81.7	Pt.Cldy.
5	85	79	81.1	80	0	81.9	Pt.Cldy.
6	82	77	78.9	8	.18	81.1	Cloudy
7	83	78	80.4	58	.08	81.2	Pt.Cldy.
8	85	79	81.3	64	0	81.5	Pt.Cldy.
9	85	79	81.2	60	0	82.0	Pt.Cldy.
10	85	79	81.2	66	0	82.1	Pt.Cldy.
11	85	79	81.2	64	0	82.2	Pt.Cldy.
12	85	79	81.1	69	.01	81.8	Pt.Cldy.
13	86	79	81.4	70	.02	81.4	Pt.Cldy.
14	85	79	81.3	67	.04	81.6	Cloudy
15	86	80	81.9	74	0	82.4	Clear
16	85	78	81.4	73	.01	82.8	Pt.Cldy.
17	87	79	81.3	67	0	83.2	Pt.Cldy.
18	86	80	81.9	57	0	83.2	Cloudy
19	86	79	81.8	79	0	83.3	Pt.Cldy.
20	86	79	81.8	73	0	83.2	Pt.Cldy.
21	86	75	81.2	61	.10	82.8	Pt.Cldy.
22	84	76	79.9	42	.26	82.7	Cloudy
23	82	76	79.3	40	.27	81.8	Cloudy
24	84	78	80.2	31	T	81.5	Cloudy
25	85	79	81.1	53	0	81.6	Pt.Cldy.
26	85	78	81.1	67	0	81.8	Pt.Cldy.
27	83	77	80.0	45	.04	81.0	Pt.Cldy.
28	86	78	81.2	68	.03	81.3	Pt.Cldy.
29	85	78	80.8	76	.07	81.8	Pt.Cldy.
30							
31							
	2459	2258	*2813	215.9	1.83	*28524	
	84.8	77.9	80.9	63		82.0	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)
Mean 29.864 ; highest 30.020 date 22
Lowest 29.740 date 10

TEMPERATURE

Highest 87 date 17 ; lowest 75 date 2
Greatest daily range 11 date 21
Bihourly Mean for this month in:

1906	79.9	1915	81.2	1924	79.6	1933	80.2
1907	77.1	1916	79.4	1925	79.4	1934	79.6
1908	78.0	1917	78.8	1926	80.6	1935	79.4
1909	78.4	1918	79.0	1927	79.3	1936	80.1
1910	80.3	1919	80.1	1928	81.1	1937	81.0
1911	79.6	1920	80.4	1929	80.4	1938	79.9
1912	80.5	1921	79.8	1930	80.1	1939	79.2
1913	79.4	1922	81.2	1931	80.9	1940	80.9
1914	80.3	1923	79.4	1932	80.3	1941	

Mean of this month for 33 years 79.9
Absolute maximum for this month for 33 years 89
Absolute minimum for this month for 33 years 69
Average daily excess, (+) or deficiency (−) of his month as compared with mean of 33 years +1.0

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours .30 date 3
Total precipitation this month in:

1885	.59	1899	6.49	1913	1.75	1927	3.21
1886	5.00	1900	.33	1914	1.32	1928	.71
1887	.67	1901	.94	1915	12.37	1929	.56
1888	1.58	1902	.59	1916	1.96	1930	.75
1889	--	1903	.35	1917	.45	1931	.97
1890	1.02	1904	.47	1918	.67	1932	.95
1891	.51	1905	1.13	1919	.36	1933	.08
1892	2.01	1906	1.14	1920	.54	1934	.55
1893	3.82	1907	1.37	1921	1.63	1935	3.10
1894	1.65	1908	1.08	1922	.71	1936	.13
1895	1.89	1909	1.92	1923	.69	1937	.46
1896	1.30	1910	3.58	1924	2.80	1938	1.11
1897	.04	1911	1.81	1925	.73	1939	.50
1898	.35	1912	1.81	1926	1.78	1940	1.83

Average of this month for 70 years 1.49
Total from January 1, 1940 to date 4.50
Average from January 1, to date 4.89
Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period -0.39

WIND

Prevailing direction N Total movement 9879 miles
Average hourly velocity 14.2 miles per hour
Maximum velocity (for five minutes) 32 miles per hour from N on 22

(WEATHER No. of days)

Clear 1 Pt. Cloudy 22 Cloudy 6
Days on which .01 inch, or more, of rain occurred 17

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None
Halos: Solar None
Fogs: Light None
Fogs: Dense None
Thunderstorms None
Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 43091—Panama Canal—2-25-35—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z. ; Month March, 1940

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Total 24 hours Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	85	78	80.7	83	.02	82.8	Pt.Cldy
2	86	76	80.9	81	.0	82.5	Pt.Cldy
3	85	79	81.0	83	.0	82.8	Pt.Cldy
4	85	78	80.8	89	.0	82.5	Pt.Cldy
5	86	78	80.7	100	.0	82.6	Clear
6	85	75	79.8	84	.0	83.0	Clear
7	85	76	80.5	87	.0	83.1	Clear
8	84	72	78.8	94	.0	82.6	Clear
9	85	76	80.2	54	.04	82.3	Pt. Cldy
10	86	72	81.2	75	.0	82.6	Pt.Cldy
11	86	77	80.4	38	.06	82.4	Cloudy
12	86	80	82.2	72	.0	82.2	Cloudy
13	85	79	81.7	68	.0	82.3	Pt.Cldy
14	86	80	82.1	64	.0	82.4	Cloudy
15	86	78	82.0	60	.06	81.8	Pt.Cldy
16	86	79	81.8	54	.01	82.0	Cloudy
17	86	80	82.1	60	.07	82.3	Pt.Cldy
18	86	80	82.1	76	.0	82.6	Pt.Cldy
19	85	79	81.8	62	.01	82.5	Pt.Cldy
20	86	79	82.4	75	.0	83.5	Pt.Cldy
21	88	80	82.8	71	.0	84.2	Cloudy
22	87	80	83.0	60	00	84.4	Pt.Cldy
23	82	77	79.8	0	.35	83.8	Cloudy
24	87	77	81.8	69	.01	83.0	Cloudy
25	88	79	82.6	77	.0	84.5	Pt.Cldy
26	87	80	82.5	72	.0	84.2	Pt.Cldy
27	85	79	81.7	61	.0	83.8	Pt.Cldy
28	87	80	82.4	76	.0	83.7	Pt.Cldy
29	87	80	82.7	75	.0	83.8	Pt.Cldy
30	87	80	82.4	71	.0	84.4	Pt.Cldy
31	87	80	82.4	80	.0	84.1	Clear
	2662	2480	*30322	374.5	.63	*30898	
	85.9	78.4	81.5	70		83.1	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.843 ; highest 29.980 date 1

Lowest 29.730 date 22

TEMPERATURE

Highest 88 date 25 ; lowest 72 date 8

Greatest daily range 12 date 8

Bihourly Mean for this month in:

1906		1915	82.1	1924	81.0	1933	80.5
1907		1916	80.2	1925	80.3	1934	80.4
1908	79.8	1917	78.8	1926	80.5	1935	80.8
1909	79.7	1918	79.2	1927	81.3	1936	81.1
1910	78.1	1919	80.0	1928	81.1	1937	81.2
1911	78.8	1920	80.9	1929	80.8	1938	80.2
1912	81.5	1921	81.1	1930	81.1	1939	79.7
1913	80.7	1922	81.4	1931	81.7	1940	81.5
1914	80.7	1923	79.8	1932	81.0	1941	

Mean of this month for 33 years 80.5

Absolute maximum for this month for 33 years 92

Absolute minimum for this month for 33 years 67

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 33 years +1.0

EVAPORATION

Total this month --- Average daily --- inches

PRECIPITATION

Greatest precipitation in 24 hours .36 date 23-24

Total precipitation this month in:

1885	.58	1899	1.26	1913	.79	1927	1.27
1886	9.17	1900	1.06	1914	.91	1928	2.42
1887	.47	1901	1.67	1915	1.71	1929	2.59
1888	1.26	1902	2.55	1916	2.68	1930	1.07
1889	---	1903	.95	1917	.76	1931	2.48
1890	2.01	1904	1.85	1918	.41	1932	2.69
1891	1.50	1905	.62	1919	.61	1933	1.11
1892	3.98	1906	1.42	1920	1.08	1934	1.10
1893	1.81	1907	2.16	1921	.98	1935	.80
1894	.35	1908	3.53	1922	.92	1936	.87
1895	2.09	1909	1.85	1923	.36	1937	.32
1896	2.01	1910	5.46	1924	.71	1938	1.68
1897	.28	1911	1.41	1925	.31	1939	.64
1898	1.58	1912	.66	1926	.43	1940	.63

Average of this month for 71 years 1.49

Total from January 1, 19 40 to date 5.13

Average from January 1, to date 6.38

Excess (+) or deficiency (−) from January 1, 19 40 to date as compared with average of corresponding period -1.25

WIND

Prevailing direction N Total movement 9389 miles

Average hourly velocity 12.6 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from N on 9

(WEATHER No. of days)

Clear 5 Pt. Cloudy 19 Cloudy 7

Days on which .01 inch, or more, of rain occurred 9

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

MR 55420—Panama Canal—8-5-37—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month April, 1940

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (Inches) % Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly				
1	87	80	82.5	69	0	83.7	Pt.Cldy.
2	85	79	81.4	35	.02	83.7	Cloudy
3	87	78	82.1	61	.10	83.2	Pt.Cldy.
4	87	80	82.3	70	0	82.6	Pt.Cldy.
5	88	80	82.4	62	T	83.4	Pt.Cldy.
6	88	80	83.0	79	0	83.9	Pt.Cldy.
7	87	80	82.5	67	0	84.0	Cloudy
8	87	80	82.6	55	0	84.2	Pt.Cldy.
9	87	80	82.9	66	0	84.5	Pt.Cldy.
10	89	81	83.2	76	T	84.0	Pt.Cldy.
11	87	80	83.0	89	0	84.1	Clear
12	87	78	82.6	81	.18	83.1	Pt.Cldy.
13	86	79	81.7	84	0	82.5	Clear
14	86	79	81.5	85	0	82.4	Pt.Cldy.
15	87	76	81.6	79	.02	82.5	Pt.Cldy.
16	88	80	82.4	77	0	83.2	Pt.Cldy.
17	86	80	82.2	74	T	82.4	Pt.Cldy.
18	87	77	81.7	69	0	82.5	Pt.Cldy.
19	87	76	81.3	52	0	82.7	Cloudy
20	88	80	83.1	67	0	82.8	Pt.Cldy.
21	87	80	82.4	84	0	83.0	Pt.Cldy.
22	86	76	81.5	95	T	83.4	Pt.Cldy.
23	86	80	82.2	37	.01	83.4	Cloudy
24	82	78	80.0	0	1.11	82.8	Cloudy
25	88	78	82.0	48	0	83.3	Cloudy
26	87	81	83.4	66	.35	84.6	Cloudy
27	88	80	83.4	77	.01	84.8	Cloudy
28	88	79	83.5	75	.01	85.2	Pt.Cldy.
29	88	81	83.7	65	.02	85.9	Cloudy
30	88	81	83.7	74	0	85.7	Cloudy
	2609	2377	2966.2	--	1.83	* --	
	87.0	79.2	82.4	69	--	83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly) 29.856

Mean 29.750 ; highest 29.970 date 13

Lowest 29.520 date 25

TEMPERATURE

Highest 89 date 10 ; lowest 76 date 15

Greatest daily range 13 date 10

Bihourly Mean for this month: 82.4

1906	--	1915	81.2	1924	81.0	1933	82.2
1907	--	1916	81.6	1925	81.0	1934	81.9
1908	80.1	1917	79.4	1926	81.7	1935	81.2
1909	80.5	1918	79.9	1927	81.3	1936	81.6
1910	79.6	1919	80.4	1928	82.2	1937	82.2
1911	79.9	1920	81.9	1929	81.3	1938	80.7
1912	82.1	1921	80.8	1930	80.4	1939	81.1
1913	80.4	1922	81.8	1931	82.5	1940	82.4
1914	81.1	1923	80.7	1932	82.1	1941	81.2

Mean of this month for 33 years 93

Absolute maximum for this month for 33 years 72

Absolute minimum for this month for 33 years

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 33 years +1.2

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 1.11 date 24

Total precipitation this month in:

1885	1.34	1899	.43	1913	2.69	1927	6.93
1886	1.58	1900	.75	1914	4.12	1928	.86
1887	10.63	1901	1.50	1915	10.42	1929	.67
1888	--	1902	4.46	1916	6.25	1930	6.85
1889	2.99	1903	11.46	1917	1.87	1931	4.30
1890	.51	1904	2.28	1918	5.34	1932	2.23
1891	5.00	1905	4.23	1919	10.95	1933	.35
1892	8.07	1906	1.06	1920	1.72	1934	5.48
1893	2.16	1907	1.27	1921	7.43	1935	1.87
1894	21.73	1908	3.56	1922	2.11	1936	3.29
1895	9.02	1909	3.30	1923	1.21	1937	1.65
1896	3.74	1910	3.06	1924	10.85	1938	6.25
1897	4.72	1911	.75	1925	5.47	1939	1.00
1898		1912		1926	.34	1940	1.83

Average of this month for 40 years 4.80

Total from January 1, 1940 to date 8.96

Average from January 1, to date 11.18

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period -4.22

WIND

Prevailing direction N Total movement 8651 miles

Average hourly velocity 12.0 miles per hour

Maximum velocity (for five minutes) 23 miles per hour

from N on 10

(WEATHER No. of days)

Clear 2 Pt. Cloudy 18 Cloudy 10

Days on which .01 inch, or more, of rain occurred 10

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 24th

Earthquakes None

66-6

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month MAY, 1940

DE	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	Sunshine ~~Evaporation (Inches) For 24 hours Period~~ Per Cent	Precipitation (Inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	89	82	84	69	0	85.8	Pt.Cldy
2	89	79	83	54	.91	85.5	Cloudy
3	87	78	82	14	.33	84.9	Cloudy
4	84	75	78	17	2.24	83.8	Cloudy
5	86	75	80	30	.14	83.3	Cloudy
6	88	77	82	78	0	83.3	Pt.Cldy
7	87	80	84	66	0	83.2	Cloudy
8	87	79	83	64	.43	85.8	Pt.Cldy
9	88	81	84	51	0	84.5	Cloudy
10	88	80	84	74	.07	85.5	Cloudy
11	88	80	84	78	.01	85.7	Pt.Cldy
12	87	77	81	11	.95	85.2	Cloudy
13	88	81	84	54	.01	84.3	Cloudy
14	88	82	84	37	0	84.7	Cloudy
15	89	83	84	62	0	84.8	Cloudy
16	88	80	83	58	.19	84.0	Cloudy
17	88	81	83	74	0	84.3	Pt.Cldy
18	88	81	82	42	.13	83.7	Cloudy
19	87	76	82	81	0	83.8	Pt.Cldy
20	88	76	82	54	.29	84.1	Pt.Cldy
21	88	77	83	68	0	84.6	Pt.Cldy
22	88	78	83	39	.02	86.0	Cloudy
23	89	78	82	51	.05	86.0	Cloudy
24	92	77	83	79	.01	85.7	Cloudy
25	90	79	85	78	0	86.4	Pt.Cldy
26	90	82	86	65	.02	86.8	Pt.Cldy
27	85	80	83	11	.36	85.6	Cloudy
28	89	79	82	27	1.78	85.1	Cloudy
29	91	77	81	37	.13	85.7	Cloudy
30	91	77	82	62	2.81	86.3	Pt.Cldy
31	88	77	80	16	.14	85.2	Cloudy
	2733	2444	*	--	11.00	*	--
	88.2	78.8	82.6	53	--	84.9	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.826 ; highest 29.980 date 5

Lowest 29.710 date 14

TEMPERATURE

Highest 92 date 24 ; lowest 75 date 5

Greatest daily range 15 date 24

Bihourly Mean for this month in:

1906	--	1915	81.6	1924	80.5	1933	81.2
1907	--	1916	80.6	1925	81.9	1934	80.8
1908	78.5	1917	78.9	1926	82.0	1935	80.8
1909	79.2	1918	79.7	1927	79.8	1936	81.1
1910	78.9	1919	81.3	1928	81.6	1937	80.9
1911	78.8	1920	81.6	1929	80.7	1938	80.2
1912	81.6	1921	80.4	1930	81.3	1939	82.0
1913	79.1	1922	81.0	1931	81.3	1940	82.6
1914	81.4	1923	80.8	1932	81.0	1941	

Mean of this month for 33 years 80.7

Absolute maximum for this month for 33 years 95

Absolute minimum for this month for 33 years 71

Average daily excess, (+) or deficiency (−) of his month as compared with mean of 35 years +1.9

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 2.95 date 30-31

Total precipitation this month in:

1885	7.91	1899	13.90	1913	22.60	1927	14.11
1886	13.15	1900	12.25	1914	17.76	1928	12.72
1887	10.28	1901	6.19	1915	7.75	1929	10.07
1888	--	1902	11.10	1916	9.38	1930	14.21
1889	--	1903	14.74	1917	12.11	1931	17.71
1890	9.76	1904	11.06	1918	19.26	1932	16.55
1891	23.00	1905	22.96	1919	6.95	1933	8.12
1892	18.03	1906	10.07	1920	5.48	1934	11.94
1893	6.58	1907	8.33	1921	13.61	1935	17.16
1894	9.85	1908	22.49	1922	8.88	1936	12.86
1895	16.77	1909	7.21	1923	11.18	1937	20.29
1896	16.46	1910	12.09	1924	14.88	1938	18.74
1897	16.34	1911	17.13	1925	8.23	1939	6.28
1898	12.83	1912	12.03	1926	13.73	1940	11.00

Average of this month for 70 years 12.57

Total from January 1, 1940 to date 17.96

Average from January 1, to date 23.75

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period -5.79

WIND

Prevailing direction N Total movement 6841 miles

Average hourly velocity 9.2 miles per hour

Maximum velocity (for five minutes) 27 miles per hour from NW on 16

(WEATHER No. of days)

Clear 0 Pt. Cloudy 11 Cloudy 20

Days on which .01 inch, or more, of rain occurred 21

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 2, 3, 12, 23, 31

Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month June 1940, 193

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (INCHES) Atlantic Balboa Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly				
1	87	77	81	40	.0	85.6	Cloudy
2	89	77	82	53	.07	85.8	Cloudy
3	89	78	83	51	T	85.8	Pt.Cldy
4	89	79	83	56	.26	86.0	Cloudy
5	88	78	81	35	1.85	85.8	Cloudy
6	89	77	79	30	1.22	84.9	Cloudy
7	91	76	81	56	.49	84.7	Cloudy
8	88	78	82	54	.42	85.8	Cloudy
9	89	77	82	46	.38	86.4	Cloudy
10	87	79	81	16	.41	85.5	Cloudy
11	84	79	81	23	2.26	85.5	Cloudy
12	83	77	80	0	1.38	85.0	Cloudy
13	87	78	82	29	.0	85.0	Cloudy
14	89	77	83	82	.0	85.5	Pt.Cldy
15	87	77	81	33	2.35	85.7	Cloudy
16	85	75	77	11	1.17	84.7	Cloudy
17	88	75	80	33	.0	84.4	Cloudy
18	88	76	82	53	.0	84.7	Cloudy
19	86	77	82	20	.44	84.7	Cloudy
20	87	77	81	37	.06	84.0	Cloudy
21	84	78	80	9	.20	84.0	Cloudy
22	88	77	82	26	.01	84.5	Cloudy
23	89	77	82	52	.10	84.5	Pt.Cldy
24	90	78	83	33	.32	85.2	Cloudy
25	88	79	84	46	.42	85.5	Cloudy
26	87	79	83	29	.25	85.4	Cloudy
27	88	79	83	25	.28	85.4	Cloudy
28	89	83	85	46	.0	85.0	Cloudy
29	86	82	83	22	.05	85.0	Cloudy
30	89	81	84	70	.02	85.5	Pt.Cldy
31							
	2628	2337	*	-	14.41	*	
	87.6	77.9	81.8	37	-	85.2	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.828; highest 29.920 date 17

Lowest 29.730 date 10

TEMPERATURE

Highest 91 date 7; lowest 75 date 17

Greatest daily range 15 date 7

Bihourly Mean for this month in:

1905		1915	80.8	1924	79.2	1933	80.5
1907		1916	79.9	1925	81.0	1934	81.1
1908	78.5	1917	78.5	1926	80.1	1935	80.1
1909	78.2	1918	79.8	1927	79.9	1936	81.0
1910	78.9	1919	80.8	1928	79.6	1937	80.3
1911	79.2	1920	80.4	1929	80.1	1938	79.6
1912	79.9	1921	79.7	1930	80.7	1939	80.6
1913	80.0	1922	80.1	1931	81.2	1940	81.8
1914	80.2	1923	80.5	1932	80.2	1941	

Mean of this month for 33 years 80.1

Absolute maximum for this month for 33 years 93

Absolute minimum for this month for 33 years 68

Average daily excess. (+) or deficiency (−) of his month as compared with mean of 33 years +1.7

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 2.35 date 15-16

Total precipitation this month in:

1885	16.61	1899	6.41	1913	11.81	1927	13.74
1886	16.38	1900	11.65	1914	16.30	1928	16.22
1887	16.50	1901	11.05	1915	16.01	1929	18.96
1888		1902	7.00	1916	14.28	1930	9.40
1889		1903	10.91	1917	14.37	1931	9.26
1890	17.24	1904	15.85	1918	8.56	1932	14.36
1891	7.99	1905	8.10	1919	12.08	1933	15.88
1892	16.97	1906	14.09	1920	13.29	1934	9.89
1893	12.32	1907	16.89	1921	15.18	1935	16.26
1894	12.24	1908	10.53	1922	8.30	1936	10.57
1895	9.25	1909	17.49	1923	15.17	1937	26.91
1896	8.50	1910	13.63	1924	16.49	1938	18.01
1897	18.82	1911	15.58	1925	13.77	1939	12.60
1898	16.38	1912	15.90	1926	31.23	1940	14.41

Average of this month for 40 years 13.92

Total from January 1, 19 40 to date 32.37

Average from January 1, to date 37.67 36.95

Excess (+) or deficiency (−) from January 1, 19 40 to date as compared with average of corresponding period −5.30 −4.58

WIND

Prevailing direction N Total movement 4856 miles

Average hourly velocity 6.7 miles per hour

Maximum velocity (for five minutes) 22 miles per hour

from N on 28

(WEATHER No. of days)

Clear 0 Pt. Cloudy 4 Cloudy 26

Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar 0

Fogs: Light 0

Fogs: Dense 0

Thunderstorms 5,6,10,11,12,14,15,19,26,27

Earthquakes 0

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JULY, 1940

	TEMPERATURE (Degrees Fahrenheit)			[illegible] For 24 hours Ending [illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly				
1	90	82	85	69	0	86.0	Pt. Cldy
2	89	82	85	48	0	85.4	Cloudy
3	89	81	84	56	0	85.1	Cloudy
4	89	82	85	68	T	85.9	Cloudy
5	89	83	85	50	0	85.8	Cloudy
6	88	83	85	57	0	85.8	Cloudy
7	86	78	82	20	.05	85.0	Cloudy
8	84	81	82	0	.05	85.0	Cloudy
9	89	82	84	66	0	85.7	Cloudy
10	89	81	84	45	.20	86.2	Cloudy
11	89	82	84	50	0	86.1	Cloudy
12	89	82	85	68	0	85.6	Cloudy
13	89	82	84	67	0	85.4	Cloudy
14	86	78	81	8	.42	84.7	Cloudy
15	79	74	77	0	81	82.8	Cloudy
16	81	74	78	0	3.10	83.2	Cloudy
17	86	76	80	36	.04	83.3	Cloudy
18	84	74	80	9	1.93	83.2	Cloudy
19	84	74	77	18	.70	82.8	Cloudy
20	84	73	78	27	.32	83.4	Cloudy
21	88	78	83	73	0	83.7	Cloudy
22	87	75	81	21	.49	83.6	Cloudy
23	86	76	80	23	1.56	84.0	Cloudy
24	82	76	78	13	1.19	83.0	Cloudy
25	83	75	77	10	2.26	83.0	Cloudy
26	87	75	81	63	0	82.9	Pt. Cldy
27	88	77	82	46	.20	83.1	Cloudy
28	86	76	80	22	.42	82.5	Cloudy
29	87	75	80	20	.71	82.5	Cloudy
30	88	77	79	26	.70	83.2	Cloudy
31	86	76	81	50	.65	83.5	Cloudy
	2681	2420	30322	—	15.90	*31336	
	86.5	78.1	81.5	37	—	84.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.842 ; highest 29.970 date 25

Lowest 29.700 date 3

TEMPERATURE

Highest 90 date 1 ; lowest 73 date 20

Greatest daily range 12 date 29

Bihourly Mean for this month in:

1906		1915	80.1	1924	79.3	1933	80.0
1907		1916	79.4	1925	79.9	1934	81.6
1908	78.2	1917	78.6	1926	80.3	1935	80.1
1909	78.0	1918	80.5	1927	80.0	1936	80.8
1910	77.0	1919	80.1	1928	81.4	1937	81.1
1911	81.0	1920	80.2	1929	80.8	1938	79.6
1912	80.4	1921	80.1	1930	81.6	1939	81.3
1913	80.1	1922	81.5	1931	80.2	1940	81.5
1914	81.9	1923	80.8	1932	80.6	1941	

Mean of this month for 33 years 80.2

Absolute maximum for this month for 33 years 91

Absolute minimum for this month for 33 years 70

Average daily excess. (+) or deficiency (−) of his month as compared with mean of 33 years +1.3

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 3.27 date 15-16

Total precipitation this month in:

1885	22.77	1899	27.68	1913	15.13	1927	18.64
1886	11.10	1900	16.81	1914	10.74	1928	10.29
1887	17.05	1901	9.94	1915	20.72	1929	18.67
1888	—	1902	16.61	1916	10.44	1930	8.97
1889	—	1903	16.73	1917	13.58	1931	13.56
1890	10.24	1904	14.21	1918	10.36	1932	17.45
1891	14.62	1905	9.67	1919	13.60	1933	9.88
1892	21.77	1906	19.23	1920	17.58	1934	9.21
1893	11.58	1907	17.86	1921	10.49	1935	26.23
1894	19.10	1908	14.76	1922	4.40	1936	18.72
1895	17.09	1909	12.63	1923	10.33	1937	9.50
1896	13.58	1910	21.07	1924	20.63	1938	22.25
1897	14.06	1911	14.58	1925	21.08	1939	6.67
1898	21.89	1912	13.13	1926	16.15	1940	15.90

Average of this month for 70 years 15.55

Total from January 1, 19 40 to date 48.27

Average from January 1, to date 52.90

Excess (+) or deficiency (−) from January 1, 19 40 to date as compared with average of corresponding period -4.23

WIND

Prevailing direction N Total movement 6308 miles

Average hourly velocity 8.5 miles per hour

Maximum velocity (for five minutes) 25 miles per hour

from NW on 23

(WEATHER No. of days)

Clear 0 Pt. Cloudy 2 Cloudy 29

Days on which .01 inch, or more, of rain occurred 19

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 2,10,14,15,16,18,19,22,23,24,29,30,31

Earthquakes None

MR 55420—Panama Canal—8-5-37—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month August, 1940

	TEMPERATURE (Degrees Fahrenheit) Max	Min.	Mean Bihourly	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	88	79	82.9	81	.03	84.1	Pt.Cldy
2	88	81	83.7	62	.01	85.0	Cloudy
3	88	81	83.2	40	.07	84.5	Cloudy
4	85	77	79.6	19	1.35	83.9	Cloudy
5	81	75	77.8	3	1.50	82.8	Cloudy
6	82	75	78.1	2	1.67	81.8	Cloudy
7	86	77	80.3	21	.05	82.5	Cloudy
8	88	76	81.8	86	.0	83.8	Pt.Cldy
9	87	75	78.3	40	2.78	84.6	Cloudy
10	88	75	80.5	50	.01	83.9	Cloudy
11	88	78	81.6	38	.23	84.5	Cloudy
12	83	78	79.4	0	.28	83.8	Cloudy
13	87	77	80.5	28	.14	82.6	Cloudy
14	83	74	79.5	16	1.52	82.2	Cloudy
15	89	76	82.2	52	1.85	82.9	Cloudy
16	88	78	82.3	44	.35	84.1	Cloudy
17	82	75	78.8	0	.18	83.8	Cloudy
18	86	77	81.5	39	.01	82.7	Cloudy
19	88	81	83.5	76	.02	83.9	Pt.Cloudy
20	89	79	83.1	51	.68	85.1	Cloudy
21	79	73	77.7	0	.78	83.7	Cloudy
22	90	77	79.8	31	.75	82.8	Cloudy
23	81	76	78.2	0	.91	82.0	Cloudy
24	85	75	80.0	40	.49	82.0	Cloudy
25	89	77	82.8	76	.47	82.5	Pt.Cldy.
26	88	77	81.6	31	.79	83.3	Cloudy
27	84	78	80.7	0	.30	82.4	Cloudy
28	81	75	78.1	0	1.82	81.7	Cloudy
29	86	76	80.2	33	.0	82.9	Cloudy
30	87	77	81.8	51	.0	83.7	Cloudy
31	88	82	84.2	67	.0	84.2	Cloudy
	2662	2388	3004.4		19.04	*	
Means	85.9	77.0	80.8	35		83.3	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.831; highest 29.940 date 13

Lowest 29.730 date 20

TEMPERATURE

Highest 90 date 22; lowest 74 date 21

Greatest daily range 13 date 10

Bihourly Mean for this month in:

1905		1915	80.4	1924	79.8	1933	80.1
1907	79.4	1916	79.0	1925	80.9	1934	80.9
1908	78.3	1917	78.4	1926	79.7	1935	79.6
1909	77.8	1918	80.2	1927	80.2	1936	80.8
1910	78.6	1919	80.8	1928	79.5	1937	80.9
1911	79.9	1920	79.7	1929	79.9	1938	79.3
1912	79.9	1921	79.9	1930	81.0	1939	81.2
1913	79.7	1922	80.3	1931	80.9	1940	80.8
1914	80.9	1923	80.3	1932	80.0	1941	

Mean of this month for 34 years 80.0

Absolute maximum for this month for 34 years 91

Absolute minimum for this month for 34 years 71

Average daily excess. (+) or deficiency (−) of this month as compared with mean of 34 years +0.8

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 2.78 date 9

Total precipitation this month in:

1885	20.32	1899	14.80	1913	17.91	1927	26.63
1886	12.20	1900	17.00	1914	16.01	1928	24.49
1887	16.89	1901	12.51	1915	12.89	1929	23.78
1888		1902	5.78	1916	8.34	1930	14.35
1889		1903	14.25	1917	15.79	1931	17.52
1890	20.51	1904	11.14	1918	18.85	1932	12.10
1891	15.98	1905	15.01	1919	6.77	1933	8.27
1892	15.98	1906	18.31	1920	22.04	1934	13.86
1893	15.12	1907	18.89	1921	18.45	1935	14.72
1894	23.03	1908	16.89	1922	14.53	1936	13.78
1895	14.13	1909	15.42	1923	15.35	1937	13.26
1896	15.51	1910	14.93	1924	7.42	1938	22.32
1897	17.24	1911	11.60	1925	7.71	1939	11.66
1898	10.91	1912	9.87	1926	20.84	1940	19.04

Average of this month for 70 years 15.29

Total from January 1, 1940 to date 67.31

Average from January 1, to date 67.79

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period -.48

WIND

Prevailing direction N Total movement 5902 miles

Average hourly velocity 7.9 miles per hour

Maximum velocity (for five minutes) 29 miles per hour

from N on 9

(WEATHER No. of days)

Clear 0 Pt. Cloudy 4 Cloudy 27

Days on which .01 inch. or more, of rain occurred 27

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 3,5,9,12,13,14,15,16,20,22,23,

Earthquakes None - 26,27, 28.

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

66-6

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month September, 1940

	TEMPERATURE (Degrees Fahrenheit)			(INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN Bihourly				
1	87	81	83.6	51	.22	84.6	Cloudy
2	88	76	81.3	49	2.07	85.3	Cloudy
3	88	76	80.6	51	.14	85.1	Cloudy
4	85	76	79.5	10	.14	84.8	Cloudy
5	88	75	80.6	52	0	84.0	Pt.Cldy.
6	88	76	81.9	79	0	84.4	Pt.Cldy.
7	87	77	81.8	59	.01	84.3	Cloudy
8	88	77	81.3	44	0	84.2	Cloudy
9	89	77	80.5	45	.91	84.0	Cloudy
10	89	77	81.9	73	0	83.9	Pt.Cldy.
11	89	78	81.3	50	1.74	83.6	Cloudy
12	88	77	83.2	61	.18	83.5	Cloudy
13	83	77	80.4	0	1.13	83.2	Cloudy
14	85	76	79.8	15	1.47	82.2	Cloudy
15	87	76	82.4	63	0	83.8	Cloudy
16	85	77	80.0	24	.15	84.3	Cloudy
17	85	76	78.1	19	.38	84.0	Cloudy
18	86	76	79.5	48	0	84.3	Cloudy
19	87	77	81.2	54	0	84.2	Cloudy
20	89	76	80.8	45	.26	84.1	Cloudy
21	88	77	81.2	66	0	84.3	Pt.Cldy.
22	88	77	82.1	67	1.42	85.0	Pt.Cldy.
23	89	77	81.5	64	.35	84.8	Cloudy
24	86	77	81.2	39	.09	85.5	Cloudy
25	89	78	81.4	52	.03	85.8	Cloudy
26	87	78	78.8	27	.65	85.3	Cloudy
27	88	76	80.0	44	.06	85.1	Cloudy
28	88	77	81.7	55	0	85.0	Cloudy
29	87	75	79.7	39	2.37	85.2	Cloudy
30	86	75	80.8	25	0	85.1	Cloudy
	-	-	-	-	-	-	-
	2617	2301	*29137	-	13.77	*303.91	
	87.2	76.7	80.9	45		84.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.811; highest 29.910 date 24

Lowest 29.710 date 27

TEMPERATURE

Highest 89 date 11; lowest 75 date 29

Greatest daily range 13 date 20

Bihourly Mean for this month in:

1906		1915	80.5	1924	79.9	1933	79.7
1907	78.6	1916	79.4	1925	80.0	1934	79.9
1908	78.3	1917	79.2	1926	79.9	1935	80.1
1909	78.2	1918	79.7	1927	79.5	1936	79.8
1910	77.9	1919	79.7	1928	80.3	1937	80.1
1911	80.4	1920	80.0	1929	80.2	1938	80.0
1912	79.5	1921	80.1	1930	81.0	1939	79.6
1913	79.7	1922	79.4	1931	80.2	1940	80.9
1914	79.6	1923	80.0	1932	80.7	1941	

Mean of this month for 34 years 79.8

Absolute maximum for this month for 34 years 94

Absolute minimum for this month for 34 years 70

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 34 years +1.1

EVAPORATION

Total this month -- Average daily -- inches

PRECIPITATION

Greatest precipitation in 24 hours 2.58 date 13-14

Total precipitation this month in:

1885	17.44	1899	16.55	1913	9.90	1927	17.32
1886	7.52	1900	9.37	1914	14.80	1928	15.46
1887	15.63	1901	11.88	1915	13.85	1929	7.90
1888	-	1902	11.06	1916	10.41	1930	10.88
1889	-	1903	11.61	1917	17.67	1931	8.24
1890	22.99	1904	13.86	1918	15.34	1932	7.15
1891	17.48	1905	6.80	1919	11.76	1933	9.11
1892	16.26	1906	12.48	1920	6.81	1934	21.30
1893	9.92	1907	11.72	1921	11.21	1935	21.31
1894	18.78	1908	11.57	1922	12.73	1936	14.58
1895	12.09	1909	16.33	1923	12.31	1937	14.09
1896	12.81	1910	12.05	1924	9.00	1938	10.50
1897	17.20	1911	11.62	1925	8.17	1939	16.91
1898	10.24	1912	12.23	1926	10.45	1940	13.77

Average of this month for 70 years 12.56

Total from January 1, 1940 to date 81.08

Average from January 1, to date 80.35

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period +.73

WIND

Prevailing direction NE Total movement 4122 miles

Average hourly velocity 5.7 miles per hour

Maximum velocity (for five minutes) 20 miles per hour from NE on 29th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 5 Cloudy 25

Days on which .01 inch, or more, of rain occurred 20

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 2,7,11,13,14,20,22,26,29

Earthquakes None

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month OCTOBER, 1940

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	EVAPORATION (INCHES) For 24 hours Period Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	90	77	79.8	45	.21	85.0	Cloudy
2	87	76	79.3	29	.05	84.9	Cloudy
3	85	76	78.8	33	.23	85.0	Cloudy
4	85	76	79.8	33	.17	85.0	Cloudy
5	85	77	80.2	66	0	84.6	Cloudy
6	85	77	79.8	32	0	84.4	Cloudy
7	86	78	81.2	72	0	84.0	Cloudy
8	89	77	81.2	64	.12	84.4	Cloudy
9	85	75	79.5	31	.88	83.9	Cloudy
10	86	75	79.6	25	1.74	83.0	Cloudy
11	87	75	78.4	21	1.10	83.0	Cloudy
12	82	75	75.8	5	2.10	82.8	Cloudy
13	87	75	80.1	52	.67	82.5	Cloudy
14	89	77	80.7	33	.02	83.0	Cloudy
15	88	76	81.8	56	.72	83.2	Cloudy
16	87	75	81.2	68	.11	83.9	Cloudy
17	86	77	80.8	42	.60	85.0	Cloudy
18	78	75	76.7	0	3.36	83.8	Cloudy
19	82	75	78.4	14	.16	80.8	Cloudy
20	85	74	79.2	35	.13	82.0	Cloudy
21	85	76	80.1	38	.97	82.0	Cloudy
22	86	75	79.8	40	0	82.2	Cloudy
23	86	77	80.1	50	0	82.0	Cloudy
24	90	76	80.7	83	1.02	82.7	Pt.Cldy.
25	89	76	80.2	57	.06	83.4	Cloudy
26	86	75	77.9	22	.51	82.9	Cloudy
27	84	76	78.2	19	.62	81.8	Cloudy
28	86	75	80.2	66	.22	81.7	Cloudy
29	87	76	81.3	67	.17	83.1	Cloudy
30	85	78	80.9	21	.17	83.8	Cloudy
31	87	74	79.8	48	.17	84.2	Cloudy
	2665	2352	2965*	-	16.28	31006	
	86.0	75.9	79.8	41	-	83.3	

Note—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.833 ; highest 29.940 date 18

Lowest 29.730 date 2

TEMPERATURE

Highest 90 date 24 ; lowest 74 date 20

Greatest daily range 14 date 24

Bihourly Mean for this month in:

1906		1915	79.6	1924	79.5	1933	79.6
1907	77.3	1916	78.7	1925	80.0	1934	79.0
1908	77.4	1917	78.4	1926	79.7	1935	79.7
1909	77.9	1918	78.9	1927	79.1	1936	79.4
1910	77.7	1919	79.5	1928	79.9	1937	79.9
1911	79.2	1920	79.2	1929	79.7	1938	79.5
1912	78.5	1921	79.3	1930	79.4	1939	79.5
1913	79.4	1922	79.1	1931	80.6	1940	79.8
1914	79.2	1923	78.8	1932	79.6	1941	-

Mean of this month for 34 years 79.2

Absolute maximum for this month for 34 years 95

Absolute minimum for this month for 34 years 70

Average daily excess, (+) or deficiency (−) of this month as compared with mean of 34 years +0.6

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 3.39 date 17-18

Total precipitation this month in:

1885	7.99	1899	15.09	1913	18.63	1927	13.12
1886	14.33	1900	16.33	1914	22.16	1928	18.02
1887	19.61	1901	12.65	1915	21.86	1929	13.74
1888		1902	14.24	1916	17.59	1930	7.26
1889		1903	10.04	1917	7.87	1931	20.42
1890	21.77	1904	8.14	1918	27.07	1932	16.75
1891	17.48	1905	13.45	1919	21.94	1933	19.84
1892	6.69	1906	13.34	1920	17.16	1934	17.49
1893	12.28	1907	21.59	1921	8.27	1935	8.90
1894	12.40	1908	10.96	1922	13.87	1936	11.36
1895	16.46	1909	19.31	1923	42.17	1937	16.58
1896	13.98	1910	15.65	1924	21.56	1938	17.26
1897	5.83	1911	16.53	1925	16.49	1939	17.52
1898	11.38	1912	17.65	1926	15.31	1940	16.28

Average of this month for 71 years 15.50

Total from January 1, 1940 to date 97.38

Average from January 1, to date 95.58

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period +1.80

WIND

Prevailing direction S Total movement 5359 miles

Average hourly velocity 7.2 miles per hour

Maximum velocity (for five minutes) 27 miles per hour from S on 18th

(WEATHER No. of days)

Clear 0 Pt. Cloudy 1 Cloudy 30

Days on which .01 inch, or more, of rain occurred 26

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 1, 2, 12, 24, 26, 29, 31

Earthquakes None

2066-6

THE PANAMA CANAL

MR 55420—Panama Canal—8-5-37—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal; Month NOVEMBER, 1940

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bihourly	EVAPORATION (INCHES) Period ending 8 a.m. Sunrise	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	77	81.3	54	.01	84.1	Cloudy
2	87	79	8.3	65	1.00	83.8	Pt.Cldy.
3	88	82	84.0	80	0	84.0	Cloudy
4	87	80	82.3	77	0	84.8	Pt.Cldy.
5	84	75	79.2	30	.76	83.5	Cloudy
6	85	75	78.0	53	1.04	82.8	Cloudy
7	86	75	79.2	57	.47	83.5	Cloudy
8	87	74	78.0	64	2.14	83.8	Cloudy
9	86	74	79.6	71	.04	84.1	Cloudy
10	83	75	78.8	27	1.41	84.8	Cloudy
11	83	76	79.2	24	6.28	83.4	Cloudy
12	79	75	77.2	0	1.99	82.8	Cloudy
13	81	75	76.3	02	1.22	82.3	Cloudy
14	80	71	77.3	21	.82	81.3	Cloudy
15	84	73	77.1	50	.54	83.3	Cloudy
16	84	74	78.8	45	.19	83.8	Cloudy
17	81	75	77.0	0	.63	83.1	Cloudy
18	87	75	78.1	45	T	82.9	Cloudy
19	88	76	80.2	61	0	83.5	Pt.Cldy.
20	84	76	78.8	10	.36	83.2	Cloudy
21	87	75	80.6	68	0	82.9	Pt.Cldy.
22	85	76	80.2	46	.10	84.2	Cloudy
23	89	76	80.5	46	.46	84.8	Cloudy
24	85	76	78.2	26	.71	84.6	Cloudy
25	83	75	77.5	4	.23	84.0	Cloudy
26	88	74	79.2	49	.02	83.4	Cloudy
27	87	76	81.8	78	0	83.5	Cloudy
28	87	78	82.7	46	.46	84.0	Cloudy
29	88	78	83.1	78	0	84.1	Pt.Cldy.
30	89	80	83.3	65	.03	85.0	Cloudy
	2559	2276	*28691	-	20.091	*30130	
	85.3	75.9	79.7	46	-	83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.819; highest 29.940 date 17

Lowest 29.710 date 20

TEMPERATURE

Highest 89 date 30; lowest 71 date 14

Greatest daily range 14 date 26

Bihourly Mean for this month in:

1906		1915	79.0	1924	78.3	1933	77.9
1907	78.4	1916	78.6	1925	79.2	1934	78.4
1908	77.2	1917	77.6	1926	78.7	1935	77.8
1909	75.9	1918	79.9	1927	79.0	1936	80.0
1910	77.5	1919	79.7	1928	78.4	1937	78.9
1911	78.9	1920	79.8	1929	80.4	1938	79.1
1912	78.5	1921	79.8	1930	81.2	1939	79.6
1913	78.7	1922	78.5	1931	78.5	1940	79.7
1914	79.8	1923	79.8	1932	79.0	1941	

Mean of this month for 34 years 78.9

Absolute maximum for this month for 34 years 92

Absolute minimum for this month for 34 years 69

Average daily excess. (+) or deficiency (−) of his month as compared with mean of 34 years +0.8

EVAPORATION

Total this month - Average daily - inches

PRECIPITATION

Greatest precipitation in 24 hours 7.51 date 10-11

Total precipitation this month in:

1885	24.17	1899	14.9	1913	16.75	1927	28.35
1886	21.89	1900	20.28	1914	18.35	1928	17.20
1887	31.81	1901	32.73	1915	22.33	1929	8.99
1888	-	1902	12.18	1916	14.08	1930	16.94
1889	-	1903	28.30	1917	20.49	1931	30.31
1890	19.49	1904	26.33	1918	14.23	1932	37.13
1891	19.49	1905	17.92	1919	6.63	1933	43.06
1892	26.30	1906	26.64	1920	21.27	1934	28.81
1893	17.80	1907	15.37	1921	19.96	1935	42.73
1894	23.66	1908	31.72	1922	15.63	1936	23.11
1895	20.47	1909	42.50	1923	22.16	1937	23.23
1896	15.63	1910	30.04	1924	30.29	1938	18.90
1897	22.16	1911	15.81	1925	22.95	1939	35.18
1898	12.28	1912	21.81	1926	24.39	1940	20.91

Average of this month for 70 years 22.39

Total from January 1, 19 40 to date 118.27

Average from January 1, to date 117.97

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period +30

WIND

Prevailing direction N Total movement 5476 miles

Average hourly velocity 7.6 miles per hour

Maximum velocity (for five minutes) 26 miles per hour

from N W on 14 & 17

(WEATHER No. of days)

Clear 0 Pt. Cloudy 5 Cloudy 25

Days on which .01 inch, or more, of rain occurred 23

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms 22, 25

Earthquakes None

MR 55420—Panama Canal—8-5-37—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SUBSECTION OF HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month December, 1940

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bihourly	% Sunshine For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	88	81	83.2	72	0	80.0	Cloudy
2	87	81	82.8	51	0	80.0	Cloudy
3	88	80	82.6	73	T	79.6	Cloudy
4	88	80	82.8	76	.04	79.9	Pt.Cldy.
5	86	78	81.8	67	.32	79.9	Pt.Cldy
6	86	79	82.1	68	.03	80.6	Pt.Cldy
7	86	79	82.1	68	0	80.5	Pt.Cldy
8	83	75	79.5	37	1.07	80.1	Pt.Cldy
9	83	76	78.8	22	1.89	79.5	Cloudy
10	86	78	81.8	72	0	81.3	Cloudy
11	87	80	82.6	71	0	83.0	Pt.Cldy
12	87	81	82.9	71	0	83.0	Pt.Cldy
13	86	81	82.6	34	T	83.6	Cloudy
14	87	80	82.8	67	0	84.0	Pt.Cldy
15	86	81	82.6	64	.02	83.2	Pt.Cldy
16	86	81	82.2	35	.01	82.7	Cloudy
17	86	80	82.2	56	.01	82.3	Cloudy
18	86	80	82.4	48	0	82.8	Cloudy
19	86	77	81.5	75	.02	82.8	Cloudy
20	86	76	80.1	49	.01	82.5	Cloudy
21	85	76	80.2	85	0	83.2	Clear
22	86	76	80.0	76	0	84.7	Pt.Cldy
23	86	76	80.8	74	0	85.4	Pt.Cldy
24	86	78	81.6	66	.03	85.4	Pt.Cldy
25	87	78	82.1	72	0	85.8	Pt.Cldy
26	89	75	81.3	72	0	84.6	Pt.Cldy
27	87	78	81.2	45	.06	84.8	Cloudy
28	87	78	82.2	72	.07	84.1	Pt.Cldy
29	86	78	82.2	50	.46	84.8	Pt.Cldy
30	86	80	82.5	34	.07	84.1	Cloudy
31	87	78	82.0	66	.14	83.8	Pt.Cldy
	2676	2435	*30426	—	4.25	*30743	
	86.3	78.5	81.8	61	—	82.6	

ATMOSPHERIC PRESSURE (REDUCED TO SEA LEVEL; INCHES)

(Bihourly)

Mean 29.815; highest 29.950 date 19

Lowest 29.670 date 26

TEMPERATURE

Highest 89 date 26; lowest 75 date 8

Greatest daily range 14 date 26

Bihourly Mean for this month in:

1905		1915	80.6	1924	79.6	1933	78.4
1907	79.9	1916	79.7	1925	81.0	1934	80.2
1908	78.1	1917	78.3	1926	79.5	1935	80.3
1909	76.8	1918	81.1	1927	80.1	1936	80.5
1910	78.0	1919	80.2	1928	79.7	1937	78.9
1911	81.7	1920	80.7	1929	80.4	1938	79.0
1912	80.2	1921	80.0	1930	81.6	1939	80.0
1913	79.6	1922	79.7	1931	80.9	1940	81.8
1914	81.4	1923	80.2	1932	79.5	1941	

Mean of this month for 34 years 79.9

Absolute maximum for this month for 34 years 89

Absolute minimum for this month for 34 years 66

Average daily excess (+) or deficiency (−) of his month as compared with mean of 34 years +1.9

EVAPORATION

Total this month — Average daily — inches

PRECIPITATION

Greatest precipitation in 24 hours 2.90 date 8-9

Total precipitation this month in:

1885	25.51	1899	9.04	1913	6.55	1927	16.70
1886	22.72	1900	4.13	1914	8.88	1928	16.43
1887	13.33	1901	5.41	1915	9.45	1929	7.87
1888	—	1902	7.10	1916	5.71	1930	7.86
1889	—	1903	15.75	1917	11.66	1931	3.47
1890	19.06	1904	7.02	1918	1.90	1932	7.64
1891	4.25	1905	9.50	1919	7.37	1933	18.46
1892	11.30	1906	15.64	1920	2.06	1934	15.66
1893	30.94	1907	9.36	1921	6.50	1935	13.02
1894	25.12	1908	9.07	1922	7.20	1936	3.53
1895	15.71	1909	34.38	1923	5.12	1937	32.64
1896	18.66	1910	15.20	1924	8.84	1938	29.29
1897	18.90	1911	2.63	1925	6.04	1939	17.08
1898	7.95	1912	11.47	1926	7.60	1940	4.25

Average of this month for 70 years 11.52

Total from January 1, 1940 to date 122.52

Average from January 1, to date 129.76

Excess (+) or deficiency (−) from January 1, 1940 to date as compared with average of corresponding period -7.24

WIND

Prevailing direction N Total movement 8411 miles

Average hourly velocity 11.3 miles per hour

Maximum velocity (for five minutes) 27 miles per hour from N on 31

(WEATHER No. of days)

Clear 1 Pt. Cloudy 17 Cloudy 13

Days on which .01 inch, or more, of rain occurred 16

MISCELLANEOUS PHENOMENA (DATES OF)

Halos: Lunar None

Fogs: Light None

Fogs: Dense None

Thunderstorms None

Earthquakes —

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Sum and Mean of Bihourly values.

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month JANUARY, 1941

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (INCHES) Period ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN	Sunshine			
1	87	78	82	66	T	82.8	Cloudy
2	86	77	82	77	1.04	82.1	Pt.Cldy
3	87	80	84	70	0	82.9	Pt.Cldy
4	86	79	82	78	0	82.8	Pt.Cldy
5	83	74	78	9	.81	82.2	Cloudy
6	85	73	79	76	0	81.9	Cloudy
7	86	77	82	53	.01	82.5	Cloudy
8	86	80	83	70	0	83.4	Pt.Cldy
9	86	80	83	77	0	84.0	Pt.Cldy
10	82	77	80	31	.01	82.2	Cloudy
11	80	73	76	0	.93	81.5	Cloudy
12	83	77	80	62	0	81.0	Pt.Cldy
13	84	77	80	78	0	79.8	Pt.Cldy
14	81	78	80	3	T	79.0	Cloudy
15	85	78	82	36	.01	79.8	Cloudy
16	85	79	82	50	0	81.2	Cloudy
17	85	77	81	66	0	81.6	Cloudy
18	86	79	82	63	.05	82.8	Cloudy
19	86	80	83	0	0	82.9	Cloudy
20	86	78	82	78	.03	82.2	Pt.Cldy
21	86	80	83	73	0	82.2	Pt.Cldy
22	86	80	83	65	.02	82.0	Pt.Cldy
23	86	79	82	49	.02	812	Cloudy
24	86	80	83	59	0	81.2	Cloudy
25	87	79	83	74	.23	81.8	Pt.Cldy
26	85	80	82	62	T	81.8	Pt.Cldy
27	86	79	82	65	0	81.8	Pt.Cldy
28	85	78	82	68	T	81.6	Pt.Cldy
29	85	78	82	52	.02	81.3	Cloudy
30	85	79	82	79	0	80.8	Pt.Cldy
31	83	76	80	14	.07	80.9	Cloudy
	2635	2419	2527	-	3.25	3043	
	85.0	78.0	81.5	55	-	81.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.880
Highest 30.040 Date 12th
Lowest 29.770 Date 16th

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly
Monthly mean 81.1
Highest 87 Date 25th
Lowest 73 Date 6th
Greatest daily range 12 Date 6th
Mean for this month for 34 years 80.0
Maximum for this month for 34 years 88
Minimum for this month for 34 years 70
Average excess or deficiency of this month compared with a mean of 34 years +1.1

PRECIPITATION
(Inches)

Total for this month 3.25
Greatest amount in 24 hours 1.04 Date 2d
Average for this month for 71 years 3.40
Total from January 1, 1941 to date 3.25
Average from January 1 to date 3.40
Accumulated excess or deficiency from January 1 to date compared with average -.15

Total precipitation in this month in:

1906	1.47	1917	1.10	1928	1.71	1939	.48
1907	3.47	1918	3.28	1929	.81	1940	2.67
1908	3.84	1919	1.82	1930	2.46	1941	3.25
1909	10.61	1920	.51	1931	2.01	1942	
1910	2.94	1921	1.31	1932	1.44	1943	
1911	.99	1922	6.85	1933	2.10	1944	
1912	.28	1923	1.98	1934	3.94	1945	
1913	6.71	1924	.61	1935	5.21	1946	
1914	1.35	1925	3.66	1936	1.54	1947	
1915	3.41	1926	.70	1937	4.20	1948	
1916	2.33	1927	4.60	1938	2.27	1949	

WIND

Prevailing direction N
Total movement 10370 miles
Average hourly velocity 13.9 miles per hour
Maximum velocity for five minutes 36 miles per hour from N on 10th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 74.9
Sunshine, percentage of possible 55
Number of days clear 0 Partly cloudy 15 Cloudy 16
Number of days with .01 inch rain or more 13

DATES

Fogs, light 17th
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes -

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month February, 1941

	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Bi-hourly Relative Humidity Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	80	77	78.6	27	.14	79.8	Cloudy
2	85	77	81.7	55	0	80.2	Cloudy
3	86	80	82.0	70	0	81.0	Pt.Cldy.
4	86	80	81.9	67	0	81.3	Pt.Cldy.
5	86	79	81.3	63	0	81.4	Pt.Cldy.
6	86	77	81.7	66	.03	81.4	Cloudy
7	86	78	81.5	81	0	82.4	Clear
8	86	77	80.8	80	0	82.9	Clear
9	90	76	80.8	82	.30	82.6	Clear
10	85	74	78.9	42	.94	83.0	Cloudy
11	85	79	81.0	55	.36	83.2	Cloudy
12	85	78	81.0	52	.04	83.0	Cloudy
13	82	76	79.3	13	.10	82.2	Cloudy
14	86	78	81.6	53	.24	82.3	Cloudy
15	84	77	80.3	38	.10	82.2	Cloudy
16	85	78	81.0	36	.21	82.0	Cloudy
17	85	78	81.0	60	.02	81.3	Pt.Cloudy
18	85	80	81.5	71	0	82.2	Pt.Cldy.
19	86	77	82.1	52	.12	82.2	Cloudy
20	86	79	82.9	63	.02	82.0	Pt.Cldy.
21	87	80	83.1	62	0	82.0	Pt.Cldy.
22	87	80	82.5	67	.13	82.2	Pt.Cldy.
23	87	79	82.1	44	0	82.7	Cloudy
24	87	80	82.8	76	0	82.6	Pt.Cldy.
25	86	80	81.5	37	T	82.5	Cloudy
26	86	78	81.9	67	0	83.6	Pt.Cldy.
27	85	79	81.6	41	.32	83.2	Cloudy
28	85	80	81.6	58	0	83.0	Pt.Cldy.
29							
30							
31							
	2396	2191	2738		2.87	276.08	
	85.6	78.2	81.4	56	-	82.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.853
Highest 29.950 Date 4
Lowest 29.760 Date 2

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly 81.4
Monthly mean
Highest 90 Date 9
Lowest 74 Date 10
Greatest daily range 14 Date 9
Mean for this month for 34 years 80.0
Maximum for this month for 34 years 90
Minimum for this month for 34 years 69
Average excess or deficiency of this month compared with a mean of 34 years + 1.4

PRECIPITATION
(Inches)

Total for this month 2.87
Greatest amount in 24 hours 1.04 Date 9-10
Average for this month for 41 years 6.12
Total from January 1, 19 71 to date 4.91
Average from January 1 to date 1.51
Accumulated excess or deficiency from January 1 to date compared with average -1.21

Total precipitation in this month in:

1906	1.04	1917	.45	1928	.71	1939	.50
1907	1.37	1918	.67	1929	.56	1940	2.87
1908	1.09	1919	.36	1930	.75	1941	
1909	1.92	1920	.54	1931	.97	1942	
1910	5.56	1921	1.63	1932	.95	1943	
1911	1.81	1922	.71	1933	.08	1944	
1912	1.81	1923	.69	1934	.55	1945	
1913	1.75	1924	2.80	1935	3.10	1946	
1914	1.82	1925	.73	1936	.13	1947	
1915	12.37	1926	1.78	1937	.46	1948	
1916	1.96	1927	3.21	1938	1.11	1949	

WIND

Prevailing direction N
Total movement 8897 miles
Average hourly velocity 13.2 (true) 26 miles per hour
Maximum velocity for five minutes 15 miles per hour from on

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation 80.4 inches
Relative humidity, bihourly mean, percent 56
Sunshine, percentage of possible 8 11 14
Number of days clear 11 Partly cloudy 15 Cloudy 14
Number of days with .01 inch rain or more

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 9-10
Thunderstorms -
Earthquakes

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL ; Month MARCH, 1941

Day	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	For 24 hours Period Ending 8 a.m. Sunshine	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	84	76	80.2	41	.21	83.0	Cloudy
2	82	74	78.7	8	.18	81.8	Cloudy
3	82	78	79.8	1	.04	80.7	Cloudy
4	87	78	81.8	62	.07	80.2	Pt.cldy
5	87	80	82.7	61	0	81.3	Pt.cldy
6	87	80	82.7	68	0	81.5	Pt.cldy
7	86	79	81.8	64	.03	81.6	Pt.cldy
8	85	75	80.2	66	0	81.5	Pt.cldy
9	87	77	81.9	80	0	82.7	Pt.cldy
10	86	75	81.2	72	.42	82.9	Pt.cldy
11	86	79	81.9	78	.01	82.9	Pt.cldy
12	86	78	81.7	78	0	82.6	Pt.cldy
13	86	80	82.2	88	0	82.0	Pt.cldy
14	86	78	81.4	79	.05	81.5	Pt.cldy
15	87	77	81.8	90	.12	81.7	Pt.cldy
16	86	79	81.7	87	0	81.5	Pt.cldy
17	87	77	81.8	82	.18	81.8	Pt.cldy
18	87	80	82.7	71	0	81.7	Pt.cldy
19	87	80	82.5	68	0	82.0	Cloudy
20	87	81	82.8	82	0	82.2	Pt.cldy
21	86	80	82.4	75	0	82.4	Cloudy
22	87	80	82.5	83	0	82.7	Pt.cldy
23	87	80	82.4	86	0	83.2	Pt.cldy
24	87	80	82.2	86	0	83.6	Pt.cldy
25	88	80	82.3	93	0	83.5	Pt.cldy
26	87	75	81.1	95	0	83.4	Pt.cldy
27	85	77	81.4	78	0	83.1	Cloudy
28	87	80	82.8	88	0	83.4	Pt.cldy
29	87	80	82.6	97	0	83.4	Pt.cldy
30	87	79	82.1	85	0	83.5	Pt.cldy
31	83	76	79.2	15	.96	82.6	Cloudy
	2669	2428	30598	—	2.27	30622	
	86.1	78.3	81.7	71	—	82.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.856

Highest 30.050 Date 2

Lowest 29.730 Date 20

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly

Monthly mean 81.7

Highest 88 Date 25

Lowest 74 Date 2

Greatest daily range 12 Date 26

Mean for this month for 34 years 80.6

Maximum for this month for 34 years 92

Minimum for this month for 34 years 67

Average excess or deficiency of this month compared with a mean of 34 years + 1.1

PRECIPITATION
(Inches)

Total for this month 2.27

Greatest amount in 24 hours .97 Date 31 - 1

Average for this month for 34 years 1.50

Total from January 1, 1941 to date 8.39

Average from January 1 to date 6.41

Accumulated excess or deficiency from January 1 to date compared with average * + 1.98

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .83
1908 3.33	1919 .61	1930 1.07	1941 2.27
1909 1.89	1920 1.08	1931 4.48	1942
1910 5.46	1921 .98	1932 2.69	1943
1911 1.41	1922 .92	1933 1.11	1944
1912 .66	1923 .36	1934 1.10	1945
1913 .79	1924 .71	1935 .80	1946
1914 .91	1925 .31	1936 .87	1947
1915 1.71	1926 .43	1937 .32	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction North

Total movement 10361 miles

Average hourly velocity 13.9 29 miles per hour

Maximum velocity for five minutes 30 (True Vel) miles per hour from E on 1 & 2

MISCELLANEOUS

Total evaporation for this month — inches

Average daily evaporation — inches

Relative humidity, bihourly mean, percent 75.6

Sunshine, percentage of possible 71

Number of days clear 0 Partly cloudy 24 Cloudy 7

Number of days with .01 inch rain or more 11

DATES

Fogs, light None

Fogs, dense None

Halos, lunar 8th

Thunderstorms None

Earthquakes 9th & 10th

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month April, 1941

	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				Sunshine			
1	86	77	81.8	62	.01	82.2	Cloudy
2	86	79	82.2	66	0	83.5	Cloudy
3	87	78	82.1	87	0	83.3	Pt.Cldy.
4	88	78	82.6	81	0	84.2	Pt.Cldy.
5	88	78	82.5	76	0	84.8	Cloudy
6	87	80	82.8	91	0	85.2	Pt.Cldy.
7	87	80	82.4	64	.02	84.8	Cloudy
8	89	78	82.3	76	T	84.0	Cloudy
9	88	80	83.1	92	T	85.4	Cloudy
10	88	81	83.4	75	0	85.4	Cloudy
11	86	80	82.7	36	T	85.0	Cloudy
12	86	81	82.8	78	0	84.0	Cloudy
13	88	80	83.2	93	0	83.7	Pt.Cldy.
14	87	80	83.0	86	0	83.6	Clear
15	87	79	81.8	78	.01	83.0	Cloudy
16	87	79	82.5	77	.04	82.8	Pt.Cldy.
17	88	80	83.0	91	.01	82.5	Pt.Cldy.
18	88	80	83.8	90	.02	82.4	Clear
19	88	81	83.5	81	0	82.8	Pt.Cldy.
20	88	81	83.5	81	.23	83.2	Pt.Cldy.
21	88	81	84.2	89	T	83.3	Pt.Cldy.
22	88	82	84.1	85	0	84.2	Pt.Cldy.
23	88	81	84.2	85	.01	85.1	Pt.Cldy.
24	88	82	84.1	78	.01	85.0	Cloudy
25	88	82	84.4	82	0	84.7	Cloudy
26	87	82	83.5	69	0	85.0	Cloudy
27	89	82	84.2	81	0	83.7	Cloudy
28	88	81	83.3	60	0	83.7	Cloudy
29	94	79	81.4	77	T	84.2	Pt.Cldy.
30	92	78	83.5	77	0	84.5	Cloudy
31	-	-	-	-	-	-	-
	2637	2400	2990		.36	302.31	
	87.9	80.0	83.1	78	-	84.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.820
Highest 29.950 Date 15
Lowest 29.690 Date 27

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 83.1
Highest 94 Date 29
Lowest 77 Date 1
Greatest daily range 15 Date 29
Mean for this month for 34 years 81.2
Maximum for this month for 34 years 94
Minimum for this month for 34 years 72
Average excess or deficiency of this month compared with a mean of 34 years + 1.9

PRECIPITATION
(Inches)

Total for this month .36
Greatest amount in 24 hours .23 Date 20th
Average for this month for 41 years 4.03
Total from January 1, 1941 to date 8.75
Average from January 1 to date 10.44
Accumulated excess or deficiency from January 1 to date compared with average - 1.69

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.00
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.95	1930 6.85	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942
1910 5.30	1921 7.43	1932 2.23	1943
1911 3.06	1922 2.11	1933 .35	1944
1912 .75	1923 1.21	1934 5.48	1945
1913 2.69	1924 10.85	1935 1.87	1946
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 .34	1937 1.65	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction N
Total movement 8493 miles
Average hourly velocity 11.8 miles per hour
Maximum velocity for five minutes 24 miles per hour from N on 17th

MISCELLANEOUS

Total evaporation for this month —
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 78.9
Sunshine, percentage of possible 78
Number of days clear 2 Partly cloudy 13 Cloudy 15
Number of days with .01 inch rain or more 9

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 5th
Thunderstorms 29th
Earthquakes None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 1941

	TEMPERATURE (Degrees Fahrenheit)			For 24 hours Period Ending 8 a.m. sunshine	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean				
1	94	79	82.1	59	.04	85.0	Cloudy
2	85	78	80.5	54	.07	84.7	Cloudy
3	89	77	83.0	93	0	84.4	Clear
4	90	79	83.7	69	0	85.4	Pt.cldy.
5	88	79	81.8	61	.11	85.2	Cloudy
6	83	78	81.0	32	0	85.0	Cloudy
7	89	77	83.7	97	0	84.5	Clear
8	90	79	84.6	85	.09	85.6	Cloudy
9	89	80	83.6	37	0	86.0	Cloudy
10	91	79	81.7	54	.02	85.2	Cloudy
11	86	78	81.6	70	.11	85.0	Cloudy
12	89	81	84.5	75	T	84.2	Cloudy
13	91	79	84.2	65	0	84.4	Cloudy
14	90	80	84.7	82	.20	85.4	Cloudy
15	90	80	84.7	74	.26	85.8	Pt.cldy.
16	90	82	85.3	74	.01	86.0	Cloudy
17	90	83	85.8	76	0	86.2	Pt.cldy.
18	88	82	84.3	65	.27	86.0	Cloudy
19	90	83	85.3	73	.10	86.1	Cloudy
20	89	82	84.3	58	0	86.0	Cloudy
21	90	79	82.5	46	.27	85.4	Cloudy
22	86	79	82.1	47	.07	84.9	Cloudy
23	85	81	82.8	22	.12	85.0	Cloudy
24	87	79	83.1	20	1.57	84.9	Cloudy
25	82	74	78.1	29	5.62	83.5	Cloudy
26	86	74	79.9	56	0	83.3	Cloudy
27	87	78	82.4	79	0	84.0	Cloudy
28	90	79	84.6	87	0	83.8	Pt.cldy.
29	90	82	84.9	81	0	85.0	Cloudy
30	86	79	82.2	19	.01	84.6	Cloudy
31	88	81	83.4	40	.03	84.0	Cloudy
Totals	2738	2460	3594	-	8.97	31618	
Means	88.3	79.4	83.1	62	-	85.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.796
Highest 29.900 Date 6
Lowest 29.690 Date 24

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 83.1
Highest 94 Date 1
Lowest 74 Date 25
Greatest daily range 15 Date 1
Mean for this month for 32 years 80.8
Maximum for this month for 34 years 95
Minimum for this month for 34 years 71
Average excess or deficiency of this month compared with a mean of 34 years +2.3

PRECIPITATION
(Inches)

Total for this month 8.97
Greatest amount in 24 hours 6.82 Date 24 & 25
Average for this month for 41 years 12.52
Total from January 1, 1941 to date 17.72
Average from January 1 to date 22.96
Accumulated excess or deficiency from January 1 to date compared with average -5.24

Total precipitation in this month in:

1906	10.07	1917	12.11	1928	12.72	1939	6.28
1907	6.33	1918	19.26	1929	10.07	1940	11.00
1908	22.49	1919	6.95	1930	14.21	1941	8.97
1909	7.21	1920	5.48	1931	17.71	1942	
1910	12.09	1921	13.61	1932	16.55	1943	
1911	17.13	1922	8.88	1933	8.12	1944	
1912	12.03	1923	11.18	1934	11.94	1945	
1913	22.60	1924	14.86	1935	17.16	1946	
1914	17.76	1925	8.23	1936	12.86	1947	
1915	7.75	1926	13.73	1937	20.99	1948	
1916	9.38	1927	14.11	1938	12.74	1949	

WIND

Prevailing direction N
Total movement 5430 miles
Average hourly velocity 7.3 miles per hour
Maximum velocity for five minutes 20 miles per hour from N on 16

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 83.5
Sunshine, percentage of possible 62
Number of days clear 2 Partly cloudy 4 Cloudy 25
Number of days with .01 inch rain or more 18

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1, 20, 21, 22, 23, 24, 25, 30 (8
Earthquakes None

MR 74990—Panama Canal—11-10-40—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month June, 1941

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean Bi H	Sunshine % ~~Duration (hours) For 24-hour Period Ending 8 a.m.~~	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	88	79	82	44	.41	84.7	Cloudy
2	87	80	82	38	.19	84.3	Cloudy
3	88	80	82	52	.33	84.7	Cloudy
4	89	78	83	93	0	85.4	Pt.Cldy.
5	89	79	84	75	0	86.5	Pt.Cldy.
6	90	82	86	93	.03	87.0	Pt.Cldy.
7	90	80	85	63	.56	86.9	Cloudy
8	90	77	83	65	1.06	86.0	Cloudy
9	87	78	81	49	.13	85.5	Cloudy
10	85	77	80	54	0	85.4	Cloudy
11	89	76	83	87	0	86.3	Pt.Cldy.
12	92	77	83	82	0	86.1	Pt.Cldy.
13	90	79	84	64	.56	86.7	Cloudy
14	88	77	82	56	1.20	86.2	Cloudy
15	89	77	82	54	0	85.7	Cloudy
16	87	78	81	62	.01	85.2	Cloudy
17	84	78	81	33	.02	84.9	Cloudy
18	84	76	80	25	.44	84.2	Cloudy
19	88	80	84	71	.02	84.5	Cloudy
20	89	80	83	66	.02	84.6	Cloudy
21	89	80	84	62	0	85.0	Cloudy
22	87	80	83	59	.22	85.4	Cloudy
23	81	76	79	1	2.54	84.3	Cloudy
24	80	76	78	0	3.31	83.8	Cloudy
25	84	76	80	48	0	84.0	Cloudy
26	87	77	82	52	.01	83.7	Cloudy
27	88	82	84	67	0	84.0	Cloudy
28	88	81	84	50	.06	84.4	Cloudy
29	87	80	83	48	.09	84.5	Cloudy
30	90	77	82	66	.34	84.2	Cloudy
31							
	2624	2353	—	—	11.55		
	87.5	78.4	82.4	56	—	85.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.842
Highest 29.930 Date 8
Lowest 29.760 Date 14

TEMPERATURE
(Degrees Fahrenheit)

Bi hourly
Monthly mean 82.4
Highest 92 Date 12
Lowest 76 Date 18
Greatest daily range 15 Date 12
Mean for this month for 34 years 80.1
Maximum for this month for 34 years 93
Minimum for this month for 34 years 68
Average excess or deficiency of this month compared with a mean of 34 years +2.3

PRECIPITATION
(Inches)

Total for this month 11.55
Greatest amount in 24 hours 4.03 Date 23-24
Average for this month for 13.88 years 71
Total from January 1, 1941 to date 29.27
Average from January 1 to date 36.84
Accumulated excess or deficiency from January 1 to date compared with average -7.57 -7.57

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942
1910 13.63	1921 15.18	1932 14.36	1943
1911 15.58	1922 8.30	1933 15.88	1944
1912 15.90	1923 15.17	1934 9.89	1945
1913 11.81	1924 16.49	1935 16.26	1946
1914 16.30	1925 13.77	1936 10.57	1947
1915 16.01	1926 31.23	1937 26.91	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction N
Total movement 5363 miles
Average hourly velocity 7.4 miles per hour
Maximum velocity for five minutes 2.1 miles per hour from W on 18

MISCELLANEOUS

Total evaporation for this month —— inches
Average daily evaporation —— inches
Relative humidity, bihourly mean, percent 84.8
Sunshine, percentage of possible 56 ~~54~~
Number of days clear 0 Partly cloudy 5 Cloudy 25
Number of days with .01 inch rain or more 21

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 7, 12, 14, 16, 18, 20, 22, 23, 24,
~~Earthquakes~~ 29, 30

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C.Z. ; Month July 1941, 194

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	[illegible]	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	87	77	81	50	.23	84.0	Cloudy
2	87	77	81	61	.52	84.4	Cloudy
3	88	79	84	71	.06	84.5	Cloudy
4	88	82	85	81	.02	85.4	Cloudy
5	89	81	84	63	0	85.8	Cloudy
6	88	81	84	60	.06	84.1	Cloudy
7	82	75	77	0	2.12	83.4	Cloudy
8	87	77	81	0	.03	84.1	Cloudy
9	91	75	80	56	1.11	84.4	Cloudy
10	88	77	82	64	.28	85.0	Cloudy
11	82	76	78	6	.44	85.2	Cloudy
12	86	75	80	57	.01	85.0	Cloudy
13	83	77	80	16	1.40	84.2	Cloudy
14	82	76	78	10	.63	83.2	Cloudy
15	86	76	80	32	1.25	82.8	Cloudy
16	86	75	80	51	.36	83.2	Cloudy
17	87	76	80	31	1.69	83.0	Cloudy
18	85	76	79	37	.92	82.7	Cloudy
19	82	74	79	37	1.30	82.8	Cloudy
20	87	75	81	43	0	82.3	Cloudy
21	85	78	81	30	.18	82.4	Cloudy
22	89	76	81	37	1.12	82.6	Cloudy
23	85	78	80	22	.15	83.1	Cloudy
24	88	77	81	40	.91	82.2	Cloudy
25	86	77	79	20	2.62	82.4	Cloudy
26	84	78	79	15	.22	82.2	Cloudy
27	87	76	82	67	2.89	82.1	Cloudy
28	88	80	84	72	.01	83.6	PtCloudy
29	86	79	81	20	.28	83.7	Cloudy
30	87	79	82	38	.04	83.7	Cloudy
31	87	79	83	63	.04	83.8	Cloudy
	2673	2394	-	-	20.89	-	
	86.2	77.2	80.9	40		83.6	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.839
Highest 29.940 Date 9
Lowest 29.730 Date 5

TEMPERATURE
Bi-hourly (Degrees Fahrenheit)

Monthly mean 80.9
Highest 91. Date 9
Lowest 74 Date 19
Greatest daily range 16 Date 9
Mean for this month for 34 years 80.3
Maximum for this month for 34 years 91
Minimum for this month for 34 years 73
Average excess or deficiency of this month compared with a mean of 34 years +0.6

PRECIPITATION
(Inches)

Total for this month 20.89
Greatest amount in 24 hours 2.89 Date 27
Average for this month for 71 years 15.63
Total from January 1, 1941 to date 50.16
Average from January 1 to date 52.47
Accumulated excess or deficiency from January 1 to date compared with average -2.31

Total precipitation in this month in:

1906	10.23	1917	13.58	1928	10.29	1939	6.67
1907	17.86	1918	10.36	1929	18.67	1940	15.90
1908	14.76	1919	13.60	1930	8.99	1941	20.89
1909	12.83	1920	17.98	1931	13.36	1942	
1910	21.37	1921	10.49	1932	17.45	1943	
1911	14.88	1922	4.40	1933	9.88	1944	
1912	13.13	1923	10.33	1934	9.21	1945	
1913	15.13	1924	20.63	1935	26.23	1946	
1914	10.74	1925	21.08	1936	18.71	1947	
1915	20.72	1926	16.15	1937	9.50	1948	
1916	10.44	1927	18.64	1938	22.25	1949	

WIND

Prevailing direction West
Total movement 5346 miles
Average hourly velocity 7.2 miles per hour
Maximum velocity for five minutes 24 miles per hour from North on 22

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 87.8
Sunshine, percentage of possible 40
Number of days clear 0 Partly cloudy 1 Cloudy 30
Number of days with .01 inch rain or more 29

DATES

Fogs, light none
Fogs, dense none
Halos, lunar none
Thunderstorms 1, 2, 3, 7, 8, 9, 10, 14, 15, 16, 19, 21, 23, 24, 25, 27, 28, 29

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month AUGUST, 1941

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine (HOURS) For 24 hours ended 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	81	83.2	50	.01	84.3	Cloudy
2	89	81	82.7	44	.04	84.8	Cloudy
3	87	78	81.6	45	.76	83.7	Cloudy
4	86	78	82.3	59	.43	84.3	Cloudy
5	88	79	82.2	40	T	84.5	Cloudy
6	86	80	82.1	44	.28	84.3	Cloudy
7	86	78	80.6	25	.45	83.8	Cloudy
8	86	77	81.3	45	1.25	82.8	Cloudy
9	88	81	83.8	71	T	84.5	Cloudy
10	88	78	82.4	36	2.19	84.9	Cloudy
11	90	78	82.4	50	.38	84.0	Cloudy
12	85	78	80.8	38	.11	84.2	Cloudy
13	82	76	78.5	0	.56	83.7	Cloudy
14	85	75	79.7	41	.49	82.9	Cloudy
15	85	74	79.3	31	.58	83.4	Cloudy
16	81	74	77.8	9	2.78	82.0	Cloudy
17	87	77	81.3	53	0	82.0	Cloudy
18	87	78	81.5	30	.04	83.0	Cloudy
19	90	78	80.8	32	.04	83.2	Cloudy
20	86	77	80.0	30	.74	82.2	Cloudy
21	90	77	81.3	40	.18	82.6	Cloudy
22	89	77	82.3	62	.32	83.3	Pt.cldy.
23	87	78	81.4	49	.76	83.8	Cloudy
24	87	76	81.8	97	0	84.1	Pt.cldy.
25	88	79	82.9	47	.35	85.1	Cloudy
26	88	79	83.2	47	.01	85.0	Cloudy
27	81	76	79.3	0	.23	84.3	Cloudy
28	88	74	78.6	45	1.28	83.8	Cloudy
29	90	75	80.1	39	.35	82.8	Cloudy
30	83	78	79.6	3	.77	83.0	Cloudy
31	84	74	78.9	17	1.57	82.2	Cloudy
	2685	2399	-	-	16.95	-	
	86.6	77.4	81.1	39	-	83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.834
Highest 29.940 Date 19th
Lowest 29.730 Date 4th

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly
Monthly mean 81.1
Highest 90 Date 21-29
Lowest 74 Date 31
Greatest daily range 15 Date 29
Mean for this month for 35 years 80.0
Maximum for this month for 35 years 91
Minimum for this month for 35 years 71
Average excess or deficiency of this month compared with a mean of 35 years +1.1

PRECIPITATION
(Inches)

Total for this month 16.95
Greatest amount in 24 hours 3.22 Date 15-16
Average for this month for 41 years 15.31
Total from January 1, 1941 to date 67.17
Average from January 1 to date 67.78
Accumulated excess or deficiency from January 1 to date compared with average -0.67

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 16.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.35	1941 16.95
1909 15.42	1920 23.04	1931 17.52	1942
1910 14.93	1921 18.45	1932 12.10	1943
1911 11.60	1922 14.33	1933 8.27	1944
1912 9.87	1923 15.95	1934 13.86	1945
1913 17.91	1924 7.42	1935 14.72	1946
1914 16.01	1925 7.71	1936 13.78	1947
1915 12.89	1926 20.84	1937 13.26	1948
1916 8.34	1927 26.63	1938 22.32	1949

WIND

Prevailing direction West
Total movement 5621 miles
Average hourly velocity 7.6 miles per hour
Maximum velocity for five minutes 24 miles per hour from North on 16th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation 86.9 inches
Relative humidity, bihourly mean, percent 79
Sunshine, percentage of possible 0
Number of days clear 2 Partly cloudy 27 Cloudy 29
Number of days with .01 inch rain or more

DATES

Fogs, light none
Fogs, dense none
Halos, lunar none
Thunderstorms 1-3-6-7-10-11-12-13-19-20-21-25-27-28-29-30-31
Earthquakes none
Water temperature Max: 89°
Min: 81°

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month September, 1941

	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	77	80	34	0	82.1	Cloudy
2	81	76	79	0	2.42	81.8	Cloudy
3	83	75	79	18	T	82.5	Cloudy
4	87	76	80	40	2.90	81.8	Cloudy
5	86	73	79	33	4.58	82.2	Cloudy
6	89	78	82	39	1.77	82.3	Cloudy
7	85	78	81	60	.14	82.8	Cloudy
8	84	75	80	42	1.44	83.2	Cloudy
9	86	78	81	37	.60	83.0	Cloudy
10	86	76	80	39	.10	82.7	Pt.Cldy.
11	89	76	79	74	1.48	83.4	Pt.Cldy.
12	90	75	80	56	0	83.2	Cloudy
13	87	76	80	48	.08	83.5	Cloudy
14	90	75	78	44	.45	82.8	Cloudy
15	86	75	80	88	T	83.5	Cloudy
16	90	77	81	79	1.55	84.4	Cloudy
17	88	76	81	79	.43	84.6	Cloudy
18	88	76	82	79	0	85.3	Cloudy
19	91	78	82	63	0	85.4	Pt.Cldy.
20	89	77	81	62	.84	85.9	Cloudy
21	88	77	81	98	.01	85.8	Pt.Cldy.
22	89	76	82	69	0	85.0	Pt.Cldy
23	88	78	82	79	0	84.9	Pt.Cldy.
24	88	78	82	59	.18	85.2	Cloudy
25	91	77	81	48	.05	85.8	Cloudy
26	89	77	82	64	0	86.3	Pt.Cldy.
27	88	77	81	77	.05	86.2	Pt.Cldy.
28	90	78	83	96	0	86.0	Clear
29	90	79	84	69	.02	85.5	Pt.Cldy.
30	89	80	83	66	.67	86.9	Cloudy
31	-	-	-	-	-	-	-
	2630	2300	-	-	19.76	-	
	87.7	76.7	80.9	58		84.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.813
Highest 29.910 Date 25
Lowest 29.694 Date 16

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.9
Highest 91 Date 25
Lowest 73 Date 5
Greatest daily range 13 Date 14
Mean for this month for 35 years 79.8
Maximum for this month for 35 years 94
Minimum for this month for 35 years 70
Average excess or deficiency of this month compared with a mean of 35 years + 1.1

PRECIPITATION
(Inches)

Total for this month 19.76
Greatest amount in 24 hours 7.48 Date 4 & 5
Average for this month for 71 years 12.66
Total from January 1, 1941 to date 86.87
Average from January 1 to date 80.44
Accumulated excess or deficiency from January 1 to date compared with average + 6.43

Total precipitation in this month in:

1906	12.48	1917	17.67	1928	15.46	1939	16.91
1907	11.72	1918	15.34	1929	7.90	1940	13.77
1908	11.57	1919	11.74	1930	10.88	1941	19.76
1909	16.93	1920	6.81	1931	8.24	1942	—
1910	12.65	1921	11.21	1932	7.15	1943	—
1911	11.62	1922	12.73	1933	9.11	1944	—
1912	12.23	1923	12.31	1934	21.30	1945	—
1913	9.90	1924	9.00	1935	21.31	1946	—
1914	14.80	1925	8.19	1936	14.58	1947	—
1915	13.85	1926	10.45	1937	14.09	1948	—
1916	10.41	1927	17.32	1938	10.50	1949	—

WIND

Prevailing direction South
Total movement 4139 miles
Average hourly velocity 5.7 miles per hour
Maximum velocity for five minutes 29 miles per hour from NW on 5

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 85.2
Sunshine, percentage of possible 58
Number of days clear 1 Partly cloudy 9 Cloudy 20
Number of days with .01 inch rain or more 20

DATES

Fogs, light —
Fogs, dense —
Halos, lunar —
Thunderstorms 2, 4, 5, 6, 8, 10, 11, 12, 14, 15, 16, 22, 24, 27, 30
~~Earthquakes~~ (15)

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month OCTOBER, 194[illegible]

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	79	82	40	.83	87.0	Cloudy
2	81	76	78	0	.29	85.2	Cloudy
3	91	76	83	68	.06	85.7	Pt.Cldy.
4	91	76	80	69	1.16	86.3	Cloudy
5	90	77	80	46	.51	85.9	Cloudy
6	82	77	81	0	25	85.2	Cloudy
7	85	74	79	4	2.13	83.4	Cloudy
8	81	75	78	27	.22	83.2	Cloudy
9	90	76	82	68	0	83.8	Pt.Cldy.
10	90	77	83	91	0	85.2	Pt.Cldy.
11	86	77	82	38	.41	86.2	Cloudy
12	82	76	79	0	1.05	85.4	Cloudy
13	81	76	79	0	.94	83.4	Cloudy
14	80	76	78	0	5.31	82.3	Cloudy
15	87	79	82	77	.10	82.6	Pt.Cldy.
16	85	77	82	91	0	83.9	Pt.Cldy.
17	85	76	80	69	1.98	84.9	Cloudy
18	85	78	82	34	1.00	84.1	Cloudy
19	87	79	83	42	.46	83.8	Cloudy
20	85	79	81	29	.28	83.4	Cloudy
21	88	78	82	36	1.76	83.5	Cloudy
22	85	76	81	50	.44	84.3	Cloudy
23	87	76	82	54	.38	84.5	Cloudy
24	84	78	81	50	.23	84.6	Cloudy
25	86	77	82	66	0	84.7	Cloudy
26	89	77	80	34	.35	84.8	Cloudy
27	89	77	81	61	1.18	85.3	Cloudy
28	87	76	80	46	.07	85.0	Cloudy
29	85	75	78	26	3.92	83.8	Cloudy
30	90	75	79	38	.32	84.5	Cloudy
31	86	75	80	73	0	84.7	Pt.Cldy.
[illegible]	[illegible]	2376	29[illegible]	-	25.37	[illegible]	
[illegible]	86.1	76.6	80.4	83	-	84.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.[illegible]

Highest 29.[illegible] Date [illegible]

Lowest 29.750 Date 16

TEMPERATURE
(Degrees Fahrenheit)

[illegible]

Monthly mean 80.4

Highest [illegible] Date [illegible]

Lowest [illegible] Date [illegible]

Greatest daily range 13 Date [illegible]

Mean for this month for [illegible] years [illegible]

Maximum for this month for [illegible] years [illegible]

Minimum for this month for [illegible] years [illegible]

Average excess or deficiency of this month compared with a mean of 35 years +1.2

PRECIPITATION
(Inches)

Total for this month 25.37

Greatest amount in 24 hours 5.66 Date [illegible]

Average for this month for [illegible] years [illegible]

Total from January 1, 194[illegible] to date [illegible]

Average from January 1 to date [illegible]

Accumulated excess or deficiency from January 1 to date compared with average [illegible]

Total precipitation in this month in:

1906 [illegible]	1917 [illegible]	1928 18.02	1939 17.32
1907 [illegible]	1918 [illegible]	1929 [illegible]	1940 [illegible]
1908 [illegible]	1919 [illegible]	1930 [illegible]	1941 25.37
1909 [illegible]	1920 [illegible]	1931 [illegible]	1942
1910 [illegible]	1921 [illegible]	1932 [illegible]	1943
1911 [illegible]	1922 [illegible]	1933 [illegible]	1944
1912 [illegible]	1923 [illegible]	1934 [illegible]	1945
1913 [illegible]	1924 [illegible]	1935 [illegible]	1946
1914 [illegible]	1925 [illegible]	1936 [illegible]	1947
1915 [illegible]	1926 [illegible]	1937 [illegible]	1948
1916 17.99	1927 [illegible]	1938 [illegible]	1949

WIND

Prevailing direction W

Total movement 4925 miles

Average hourly velocity 6.6 miles per hour

Maximum velocity for five minutes 32 miles per hour from [illegible] on 4th

MISCELLANEOUS

Total evaporation for this month - inches

Average daily evaporation [illegible] inches

Relative humidity, bihourly mean, percent [illegible]

Sunshine, percentage of possible [illegible]

Number of days clear 0 Partly cloudy 6 Cloudy 25

Number of days with .01 inch rain or more [illegible]

DATES

Fogs, light [illegible]

Fogs, dense [illegible]

Halos, lunar 1,4,6,7,11,12,13,14,18,27,29,30

Thunderstorms -

Earthquakes

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month November, 1941

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] (INCHES) For 24 hours Period Ending 8 a.m. [illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	75	78.9	38	.14	85.0	Cloudy
2	87	75	80.1	70	0	85.2	Pt.Cldy.
3	90	76	80.2	66	0	84.8	Pt.Cldy.
4	86	75	80.6	84	0	84.8	Pt.Cldy.
5	86	76	80.9	72	0	85.0	Pt.Cldy.
6	87	76	81.8	69	0	85.5	Pt.Cldy.
7	86	80	82.8	46	.09	84.8	Cloudy
8	84	74	80.2	15	.59	83.0	Cloudy
9	82	76	78.8	8	1.12	83.7	Cloudy
10	84	75	79.1	47	.16	83.2	Cloudy
11	81	74	76.7	17	2.89	83.6	Cloudy
12	86	74	80.2	93	0	84.4	Clear
13	86	76	81.0	74	.20	85.1	Cloudy
14	82	76	78.5	4	4.46	83.8	Cloudy
15	85	77	79.6	17	.04	82.8	Cloudy
16	88	77	80.6	50	.27	83.5	Cloudy
17	86	77	81.5	56	T	84.5	Cloudy
18	87	80	82.4	31	.07	85.0	Cloudy
19	87	79	82.0	68	.28	85.0	Cloudy
20	87	75	81.6	70	.92	83.8	Cloudy
21	86	76	80.2	63	.67	83.9	Cloudy
22	85	76	81.2	55	.14	84.0	Pt.Cldy.
23	87	77	82.3	78	.86	84.2	Pt.Cldy.
24	87	77	81.3	38	4.17	84.1	Cloudy
25	87	77	80.0	21	.53	83.3	Cloudy
26	81	78	79.7	0	2.70	82.3	Cloudy
27	81	77	79.3	0	.91	81.9	Cloudy
28	80	75	78.1	0	2.65	81.2	Cloudy
29	87	78	81.3	52	.16	82.4	Cloudy
30	84	77	79.8	36	.05	82.2	Cloudy
31	-	-	-	-	-	-	-
	2558	2291	-	[illegible]	24.07	-	
	85.3	76.4	80.4	45	-	83.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.816
Highest 29.970 Date 3
Lowest 29.700 Date 22

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.4
Highest 90 Date 3
Lowest 74 Date 11
Greatest daily range 14 Date 3
Mean for this month for 35 years 78.9
Maximum for this month for 35 years 92
Minimum for this month for 35 years 69
Average excess or deficiency of this month compared with a mean of 35 years +1.5

PRECIPITATION
(Inches)

Total for this month 24.07
Greatest amount in 24 hours 4.51 Date 13-14
Average for this month for 71 years 22.41
Total from January 1, 1941 to date 136.11
Average from January 1 to date 118.49
Accumulated excess or deficiency from January 1 to date compared with average -17.62

Total precipitation in this month in:

1906 26.64	1917 20.49	1928 17.80	1939 35.18
1907 15.37	1918 14.23	1929 8.99	1940 20.91
1908 31.72	1919 6.63	1930 16.94	1941 24.07
1909 42.90	1920 21.27	1931 20.31	1942
1910 20.34	1921 19.96	1932 27.13	1943
1911 15.81	1922 15.63	1933 43.08	1944
1912 24.81	1923 22.16	1934 28.81	1945
1913 16.73	1924 20.38	1935 42.13	1946
1914 18.99	1925 22.95	1936 25.11	1947
1915 22.33	1926 29.37	1937 21.28	1948
1916 14.08	1927 28.35	1938 18.90	1949

WIND

Prevailing direction E
Total movement 5376 miles
Average hourly velocity 7.5 miles per hour
Maximum velocity for five minutes 27 miles per hour from SE on 8th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.3
Sunshine, percentage of possible 45
Number of days clear 1 Partly cloudy 7 Cloudy 22
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 8,9,11,14,21,24,26
Thunderstorms None
Earthquakes

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month DECEMBER, 1941

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				Sunshine			
1	86	75	79.5	60	.54	82.1	Cloudy
2	86	75	77.8	41	1.32	82.4	Cloudy
3	87	75	79.1	60	.26	82.9	Cloudy
4	85	76	79.9	61	0	83.7	Pt.Cldy.
5	84	79	80.8	26	.04	83.5	Cloudy
6	87	79	82.6	79	.02	83.2	Pt.Cldy.
7	87	81	82.8	61	0	83.7	Pt.Cldy.
8	87	80	82.8	78	.01	83.8	Pt.Cldy.
9	87	81	83.4	73	0	84.0	Pt.Cldy.
10	87	81	83.1	27	0	85.0	Cloudy
11	88	79	83.2	73	0	84.1	Cloudy
12	87	81	82.6	37	.01	85.0	Cloudy
13	81	77	79.2	1	.48	83.3	Cloudy
14	82	76	78.1	0	1.20	82.6	Cloudy
15	81	75	77.9	18	.10	82.8	Cloudy
16	86	75	78.4	64	2.08	82.8	Cloudy
17	87	76	80.6	76	0	83.9	Pt.Cldy.
18	87	78	82.0	83	0	84.8	Pt.Cldy.
19	87	79	82.9	76	T	85.0	Pt.Cldy.
20	86	80	82.9	54	0	84.3	Pt.Cldy.
21	86	79	81.8	42	.03	84.0	Cloudy
22	87	80	82.9	70	0	83.5	Pt.Cldy.
23	86	80	82.3	65	T	83.3	Pt.Cldy.
24	85	79	82.0	78	0	83.4	Pt.Cldy.
25	86	79	81.8	65	.02	84.3	Pt.Cldy.
26	86	79	82.5	66	0	84.4	Pt.Cldy.
27	87	80	83.1	75	0	83.9	Pt.Cldy.
28	87	80	82.4	61	0	83.0	Pt.Cldy.
29	86	81	82.7	77	T	83.0	Pt.Cldy.
30	86	80	82.2	53	T	83.0	Pt.Cldy.
31	87	79	82.8	66	0	83.0	Pt.Cldy.
	2664	2434	2303.9	---	6.11	2577.8	
	85.9	78.5	81.5	56		83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.821

Highest 29.940 Date 3

Lowest 29.710 Date 8

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.5

Highest 88 Date 11

Lowest 75 Date 3

Greatest daily range 12 Date 3

Mean for this month for 35 years 80.0

Maximum for this month for 35 years 89

Minimum for this month for 35 years 66

Average excess or deficiency of this month compared with a mean of 35 years +1.5

PRECIPITATION
(Inches)

Total for this month 6.11

Greatest amount in 24 hours 2.13 Date 15-16

Average for this month for 71 years 11.44

Total from January 1, 1941 to date 142.22

Average from January 1 to date 129.93

Accumulated excess or deficiency from January 1 to date compared with average +12.29

Total precipitation in this month in:

1906	15.64	1917	11.66	1928	10.43	1939	17.08
1907	9.36	1918	1.90	1929	7.87	1940	4.25
1908	9.07	1919	7.37	1930	7.86	1941	6.11
1909	34.38	1920	2.06	1931	3.47	1942	
1910	15.20	1921	0.50	1932	7.04	1943	
1911	2.61	1922	7.20	1933	18.46	1944	
1912	11.47	1923	5.12	1934	15.66	1945	
1913	6.55	1924	8.84	1935	13.02	1946	
1914	8.88	1925	6.04	1936	3.53	1947	
1915	9.45	1926	7.60	1937	32.94	1948	
1916	5.71	1927	10.70	1938	29.29	1949	

WIND

Prevailing direction N

Total movement 7424 miles

Average hourly velocity 10.0 miles per hour

Maximum velocity for five minutes 21 miles per hour from NE on 19

MISCELLANEOUS

Total evaporation for this month ---- inches

Average daily evaporation ---- inches

Relative humidity, bihourly mean, percent 81.3

Sunshine, percentage of possible 56

Number of days clear 0 Partly cloudy 19 Cloudy 12

Number of days with .01 inch rain or more 13

DATES

Fogs, light None

Fogs, dense None

Halos, lunar 5th

Thunderstorms 15th

Earthquakes None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month January, 1942

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bihourly MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				Sunshine			
1	86	80	82.4	63	0	83.0	Pt.Cldy.
2	86	78	82.3	74	0	82.4	Pt.Cldy.
3	87	80	82.5	68	0	83.4	Cloudy
4	86	80	82.8	73	0	84.2	Pt.Cldy.
5	87	81	83.0	78	0	83.9	Pt.Cldy.
6	86	80	82.2	82	0	83.2	Pt.Cldy.
7	86	79	82.2	73	.01	83.3	Pt.Cldy.
8	87	80	82.1	67	T	82.8	Pt.Cldy.
9	87	80	82.4	77	T	83.0	Pt.Cldy.
10	86	80	81.8	76	0	82.5	Pt.Cldy.
11	87	80	82.5	74	0	83.4	Pt.Cldy.
12	85	79	81.6	58	.04	82.8	Cloudy
13	86	79	82.1	80	.01	82.3	Pt.Cldy.
14	87	79	82.5	84	0	82.7	Pt.Cldy.
15	86	80	82.3	85	0	82.5	Pt.Cldy.
16	87	78	82.2	80	T	82.5	Pt.Cldy.
17	86	77	81.4	72	.09	82.6	Pt.Cldy.
18	87	80	82.2	79	0	83.3	Pt.Cldy.
19	87	80	82.5	68	0	82.4	Pt.Cldy.
20	87	80	82.7	54	0	82.9	Cloudy
21	87	80	83.2	74	0	83.1	Pt.Cldy.
22	86	81	82.4	77	0	82.9	Pt.Cldy.
23	86	74	80.5	21	.66	82.8	Cloudy
24	84	76	80.2	60	.06	82.0	Pt.Cldy.
25	85	77	80.9	72	.24	81.9	Pt.Cldy.
26	87	80	82.5	74	.01	82.3	Pt.Cldy.
27	87	79	81.8	49	T	82.8	Pt.Cldy.
28	86	78	81.8	67	0	82.4	Pt.Cldy.
29	81	78	79.3	1	.38	82.2	Cloudy
30	85	79	81.9	65	.02	82.2	Cloudy
31	86	80	82.7	75	0	83.0	Pt.Cldy.
	2671	2452	30527	-	1.52	30801	
	86.2	79.1	82.0	6.8	-	82.8	

T indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.877
Highest 30.030 Date 23
Lowest 29.740 Date 31

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly

Monthly mean 82.0
Highest 86 Date 28
Lowest 74 Date 23
Greatest daily range 12 Date 23
Mean for this month for 35 years 80.1
Maximum for this month for 35 years 88
Minimum for this month for 35 years 70
Average excess or deficiency of this month compared with a mean of 35 years +1.9

PRECIPITATION
(Inches)

Total for this month 1.52
Greatest amount in 24 hours .66 Date 23
Average for this month for 72 years 3.37
Total from January 1, 1942 to date 1.52
Average from January 1 to date 3.37
Accumulated excess or deficiency from January 1 to date compared with average -1.85

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .83	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.84	1921 1.11	1932 1.44	1943
1911 .99	1922 6.85	1933 2.10	1944
1912 .28	1923 1.98	1934 3.94	1945
1913 6.71	1924 .61	1935 2.81	1946
1914 1.35	1925 3.66	1936 1.54	1947
1915 3.41	1926 .70	1937 4.20	1948
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction N
Total movement 99.36 miles
Average hourly velocity 13.4 miles per hour
Maximum velocity for five minutes 31 miles per hour from N on 23

MISCELLANEOUS

Total evaporation for this month ——— inches
Average daily evaporation ——— inches
Relative humidity, bihourly mean, percent 76.5
Sunshine, percentage of possible 68
Number of days clear 0 Partly cloudy 25 Cloudy 6
Number of days with .01 inch rain or more 10

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes

87373

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C.Z.; Month February, 1942

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	8-1-hr MEAN	%Sunshine			
1	85	79	81.9	51	.02	83.0	Cloudy
2	86	80	81.8	56	.03	82.8	Pt.Cldy.
3	88	80	82.6	77	0	82.8	Pt.Cldy.
4	87	80	82.0	59	0	82.6	Pt.Cldy.
5	86	77	81.5	73	.03	82.3	Pt.Cldy.
6	86	77	81.5	73	.02	82.0	Pt.Cldy
7	87	78	80.8	65	.21	82.3	Pt.Cldy
8	85	79	81.6	69	0	82.8	Pt.Cldy
9	85	79	81.8	70	.11	83.3	Pt.Cldy
10	85	79	81.7	68	0	83.6	Pt.Cldy
11	86	78	81.7	69	.01	83.4	Pt.Cldy
12	87	75	82.0	61	.04	83.0	Cloudy
13	85	78	81.9	67	.08	83.2	Pt.Cldy
14	85	78	81.2	53	.03	82.7	Cloudy
15	85	79	82.1	75	0	82.4	Cloudy
16	86	79	81.8	59	0	83.4	Cloudy
17	86	80	81.9	61	0	83.5	Pt.Cldy
18	86	80	82.2	73	T	83.8	Pt. Cldy
19	86	80	82.3	82	0	83.2	Clear
20	87	80	82.5	67	0	83.2	Pt.Cldy
21	86	79	81.8	43	.07	82.9	Pt.Cldy
22	87	78	81.9	82	.01	83.5	Pt.Cldy
23	85	77	81.7	85	0	83.2	Pt.Cldy
24	88	74	80.7	98	0	83.2	Clear
25	88	76	82.1	78	0	84.4	Pt.Cldy
26	87	80	82.4	70	0	84.3	Pt.Cldy
27	86	77	81.4	66	0	84.1	Pt.Cldy
28	85	80	82.4	57	.03	84.0	Pt.Cldy
	2411	2196	2749½	-	.69	2794.9	
	86.1	78.4	81.8	68	-	83.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.817
Highest 29.970 Date 28
Lowest 29.710 Date 24

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (B.H.M.) 81.8
Highest 88 Date 24
Lowest 74 Date 24
Greatest daily range 14 Date 24
Mean for this month for 35 years 80.0
Maximum for this month for 35 years 90
Minimum for this month for 35 years 69
Average excess or deficiency of this month compared with a mean of 35 years +1.8

PRECIPITATION
(Inches)

Total for this month .69
Greatest amount in 24 hours .21 Date 7
Average for this month for 72 years 1.50
Total from January 1, 1942 to date 2.2
Average from January 1 to date 4.87
Accumulated excess or deficiency from January 1 to date compared with average -2.66

Total precipitation in this month in:

1906 1.14	1917 .45	1928 .71	1939 .50
1907 1.37	1918 .67	1929 .56	1940 1.83
1908 1.08	1919 .36	1930 .75	1941 2.87
1909 1.92	1920 .54	1931 .97	1942 .69
1910 3.58	1921 1.63	1932 .95	1943
1911 1.81	1922 .71	1933 .08	1944
1912 1.01	1923 .69	1934 .55	1945
1913 1.75	1924 2.80	1935 3.10	1946
1914 1.32	1925 .73	1936 .13	1947
1915 12.37	1926 1.78	1937 .46	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction N
Total movement 8142 miles
Average hourly velocity 12.1 miles per hour
Maximum velocity for five minutes 23 miles per hour from N on 4

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 79.2
Sunshine, percentage of possible 68
Number of days clear 2 Partly cloudy 21 Cloudy 5
Number of days with .01 inch rain or more 13

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 28
Thunderstorms None
Earthquakes (Felt) None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z. ; Month March, 1942

	TEMPERATURE (Degrees Fahrenheit)			EVAPORATION (INCHES) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	24-H MEAN	Sunshine			
1	86	80	82.7	74	0	84.4	Pt.cloudy
2	87	80	82.6	78	0	84.6	Clear
3	85	80	82.0	81	0	84.0	Pt.cloudy
4	86	80	81.8	62	0	83.3	Cloudy
5	87	76	80.3	31	1.61	82.5	cloudy
6	85	78	81.2	38	.32	82.8	cloudy
7	86	78	81.5	42	.01	82.2	cloudy
8	87	78	80.7	28	.24	82.4	cloudy
9	85	79	81.1	38	.25	83.2	cloudy
10	85	76	81.7	62	.08	82.8	cloudy
11	85	77	81.3	73	.23	83.8	pt.cldy.
12	85	76	81.2	58	.23	83.4	pt.cldy.
13	87	79	81.7	63	.23	83.7	cloudy
14	86	78	81.5	57	0	83.3	cloudy
15	86	80	82.5	52	0	84.5	pt.cldy.
16	86	80	82.5	42	.01	84.4	pt.cldy.
17	85	80	82.1	14	0	85.0	cloudy
18	87	79	82.3	76	0	84.8	pt.cldy.
19	86	81	82.8	57	T	85.0	pt.cldy.
20	87	80	83.0	64	.03	85.0	pt.cldy.
21	86	81	83.2	60	0	85.2	cloudy
22	86	81	82.8	38	T	84.7	cloudy
23	85	80	82.3	39	0	84.7	cloudy
24	85	77	81.0	11	.03	84.7	cloudy
25	85	80	82.2	75	0	84.2	pt.cldy.
26	86	77	81.9	39	.01	84.1	cloudy
27	86	80	82.3	69	0	84.3	pt.cldy.
28	86	81	82.6	72	0	84.3	pt.cldy.
29	85	80	81.6	79	T	83.7	cloudy
30	86	80	82.5	92	.01	83.4	cloudy
31	85	80	81.8	85	.01	83.2	cloudy
	2660	2452	80.89	-	3.30	31219	
	85.8	79.1	82.0	57	-	83.9	

ts. "T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.829
Highest 29.970 Date 4
Lowest 29.720 Date 27

TEMPERATURE
(Degrees Fahrenheit)

8; Hourly
Monthly mean 82.0
Highest 87 Date 13
Lowest 76 Date 12
Greatest daily range 11 Date 5
Mean for this month for 35 years 80.6
Maximum for this month for 35 years 92
Minimum for this month for 35 years 67
Average excess or deficiency of this month compared with a mean of 35 years +1.4

PRECIPITATION
(Inches)

Total for this month 3.30
Greatest amount in 24 hours 1.84 Date 5-6
Average for this month for 73 years 1.53
Total from January 1, 1942 to date 5.51
Average from January 1 to date 6.40
Accumulated excess or deficiency from January 1 to date compared with average -.89

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .03
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943
1911 1.41	1922 .92	1933 1.11	1944
1912 .66	1923 .36	1934 1.10	1945
1913 .79	1924 .71	1935 .80	1946
1914 .91	1925 .31	1936 .87	1947
1915 1.71	1926 .43	1937 .32	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction N
Total movement 8809 miles
Average hourly velocity 11.8 miles per hour
Maximum velocity for five minutes 23 miles per hour from N on 10

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 80.4
Sunshine, percentage of possible 57
Number of days clear 1 Partly cloudy 12 Cloudy 18
Number of days with .01 inch rain or more 15

DATES

Fogs, light None
Fogs, dense none
Halos, lunar none
Thunderstorms none
Earthquakes 1

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month April, 1942

TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
			Sunshine			
85	80	81.8	.93	.01	83.3	Cloudy
86	78	82.1	.73	.29	83.8	Cloudy
87	78	82.2	93	.12	84.0	Cloudy
85	78	81.4	85	.05	84.0	Cloudy
86	80	82.3	89	T	84.0	Cloudy
86	81	82.9	95	0	84.0	Pt. Cldy.
86	81	82.8	84	T	83.8	Pt. Cldy.
86	81	83.2	87	0	84.7	Pt. Cldy.
86	81	83.1	81	0	84.8	Cloudy
87	81	83.2	93	0	84.7	Pt. Cldy.
87	80	83.2	86	0	84.0	Pt. Cldy.
87	78	81.1	79	.49	83.4	Cloudy
85	78	80.8	52	.01	82.1	Cloudy
88	77	82.2	80	.04	82.8	Cloudy
86	77	80.0	45	T	83.8	Cloudy
84	77	80.0	51	.88	84.0	Cloudy
81	76	78.8	0	.58	83.6	Cloudy
88	77	81.8	69	.16	83.4	Cloudy
87	76	81.5	84	0	83.7	Pt. Cldy.
89	80	82.5	57	T	83.8	Pt. Cldy.
87	77	81.2	48	42	82.7	Cloudy
85	75	78.6	35	2.32	82.9	Cloudy
81	76	78.1	8	1.35	82.2	Cloudy
86	77	80.0	57	1.31	82.1	Cloudy
88	79	82.3	69	.03	83.5	Cloudy
85	78	81.2	29	.05	83.2	Cloudy
88	80	83.2	78	0	82.5	Pt. Cldy.
86	80	82.5	100	0	82.6	Clear
89	80	83.4	81	0	82.4	Pt. Cldy.
87	76	81.0	65	.22	82.8	Cloudy
-	-	-	-	-	-	-
2584	2353	2938	-	8.33	30029	
86.1	78.4	81.6	68	-	83.4	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.854
Highest 29.960 Date 12
Lowest 29.760 Date 18

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly Monthly mean 81.6
Highest 89 Date 29
Lowest 75 Date 22
Greatest daily range 11 Date 18
Mean for this month for 35 years 81.2
Maximum for this month for 35 years 94
Minimum for this month for 35 years 72
Average excess or deficiency of this month compared with a mean of 35 years 40.4

PRECIPITATION
(Inches)

Total for this month 8.33
Greatest amount in 24 hours 2.99 Date 21 - 22
Average for this month for 72 years 4.09
Total from January 1, 1942 to date 13.84
Average from January 1 to date 10.49
Accumulated excess or deficiency from January 1 to date compared with average + 3.35

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.00
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.85	1930 6.85	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.23	1943
1911 3.08	1922 2.11	1933 .35	1944
1912 .75	1923 1.21	1934 5.48	1945
1913 2.69	1924 10.85	1935 1.87	1946
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 .34	1937 1.62	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction N
Total movement 7483 miles
Average hourly velocity 10.4 miles per hour
Maximum velocity for five minutes 22 miles per hour from N on 5

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 80.7
Sunshine, percentage of possible 68
Number of days clear 1 Partly cloudy 9 Cloudy 20
Number of days with .01 inch rain or more 17

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 16, 21, 23
Earthquakes None

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

Mean temp. 82.2

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 1942

	TEMPERATURE (Degrees Fahrenheit)			For 24 hours Ended 8 a.m. Sunshine	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean				
1	87	75	81.7	68	.08	82.4	Cloudy
2	87	79	82.4	75	0	83.3	Pt.Cldy
3	88	77	82.8	66	0	84.3	Cloudy
4	86	78	82.5	77	.44	84.7	Pt.Cldy
5	89	77	83.0	78	.15	84.7	Pt.Cldy
6	88	77	82.7	69	.11	84.3	Cloudy
7	88	78	82.7	65	.66	84.0	Cloudy
8	83	79	81.2	24	.78	84.3	Cloudy
9	84	76	78.5	16	.71	83.2	Cloudy
10	89	76	82.0	74	0	83.9	Pt.Cldy
11	89	77	80.8	61	0	85.0	Cloudy
12	88	77	81.4	54	0	84.7	Cloudy
13	88	78	80.5	38	.07	84.5	Cloudy
14	89	77	82.7	74	0	84.2	Pt.Cldy
15	90	77	80.9	56	1.53	83.9	Cloudy
16	88	77	81.9	91	.01	83.9	Cloudy
17	90	76	83.2	76	.80	85.1	Pt.Cldy
18	88	76	78.9	61	.98	85.4	Cloudy
19	84	76	79.5	28	.04	84.1	Cloudy
20	90	77	82.7	77	.05	84.2	Cloudy
21	86	76	80.5	37	.92	84.5	Cloudy
22	89	78	83.0	73	.33	85.1	Cloudy
23	85	77	80.0	29	.04	84.9	Cloudy
24	88	77	81.2	48	.13	85.0	Cloudy
25	87	77	81.7	63	.03	84.7	Cloudy
26	86	78	81.1	51	.05	84.7	Cloudy
27	90	78	82.7	71	.18	84.8	Cloudy
28	89	80	83.8	71	.04	85.2	Cloudy
29	87	76	80.2	41	.60	85.8	Cloudy
30	88	76	80.2	54	.22	85.8	Cloudy
31	90	77	82.6	63	0	85.9	Cloudy
	2718	2390	30347	—	8.95	31449	
	87.7	77.1	81.6	59	—	84.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.823
Highest 29.920 Date 5
Lowest 29.700 Date 28

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.6
Highest 90 Date 27
Lowest 75 Date 1
Greatest daily range 14 Date 17
Mean for this month for 35 years 80.8
Maximum for this month for 35 years 95
Minimum for this month for 35 years 71
Average excess or deficiency of this month compared with a mean of 35 years - 0.8

PRECIPITATION
(Inches)

Total for this month 8.95
Greatest amount in 24 hours 1.78 Date 17-18
Average for this month for 72 years 12.47
Total from January 1, 1942 to date 22.79
Average from January 1 to date 22.96
Accumulated excess or deficiency from January 1 to date compared with average - .17

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943
1911 17.13	1922 8.88	1933 8.12	1944
1912 12.03	1923 11.10	1934 11.94	1945
1913 22.60	1924 14.86	1935 17.16	1946
1914 17.76	1925 8.23	1936 12.86	1947
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction SE
Total movement 4727 miles
Average hourly velocity 6.4 miles per hour
Maximum velocity for five minutes 24 miles per hour from NW on 5th

MISCELLANEOUS

Total evaporation for this month ——— inches
Average daily evaporation ——— inches
Relative humidity, bihourly mean, percent 83.8
Sunshine, percentage of possible 59
Number of days clear 0 Partly cloudy 6 Cloudy 25
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 9, 22, 29
Earthquakes None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JUNE, 1942.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine (HOURS) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	91	79	83.8	69	0	86.0	Pt. Cldy.
2	90	79	84.0	67	0	85.9	Pt. Cldy.
3	86	76	81.0	38	.70	86.1	Cloudy
4	87	76	78.8	.24	2.37	85.0	Cloudy
5	87	75	80.3	58	T	85.1	Cloudy
6	91	78	81.6	66	0	85.5	Pt. Cldy.
7	89	77	81.8	69	.48	85.1	Pt. Cldy.
8	90	77	79.4	30	.94	84.9	Cloudy
9	90	76	81.2	66	.30	84.2	Pt. Cldy.
10	88	77	81.8	50	0	84.6	Cloudy
11	87	77	80.4	65	2.10	85.0	Cloudy
12	86	76	77.2	18	.35	84.8	Cloudy
13	88	76	80.8	54	.01	83.8	Cloudy
14	87	77	80.2	53	0	84.0	Cloudy
15	85	77	80.9	67	0	84.1	Cloudy
16	85	76	80.4	34	0	85.0	Cloudy
17	86	75	79.8	37	.20	84.4	Cloudy
18	90	77	82.8	71	.02	84.1	Pt. Cldy.
19	85	78	81.0	8	.43	84.0	Cloudy
20	89	76	80.5	48	1.22	84.0	Cloudy
21	85	76	79.5	23	.37	83.4	Cloudy
22	87	76	80.5	48	.19	84.5	Cloudy
23	87	77	82.0	31	.08	85.0	Cloudy
24	82	76	79.0	0	.11	84.0	Cloudy
25	87	78	81.1	37	.43	83.5	Cloudy
26	89	77	80.3	38	1.27	83.0	Cloudy
27	85	75	79.8	.14	2.39	82.5	Cloudy
28	86	76	79.5	.36	1.87	82.4	Cloudy
29	86	76	80.2	.51	1.24	82.8	Cloudy
30	86	75	79.8	.37	1.52	83.4	Cloudy
31							
	2617	2297	2903	6 -	18.59	30361	
MEAN	87.2	76.6	80.7	44	-	84.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.839
Highest 29.940 Date 16
Lowest 29.710 Date 24

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.7
Highest 91 Date 1
Lowest 75 Date 30
Greatest daily range 17 Date 9
Mean for this month for 35 years 80.2
Maximum for this month for 35 years 93
Minimum for this month for 35 years 68
Average excess or deficiency of this month compared with a mean of 35 years + 0.5

PRECIPITATION
(Inches)

Total for this month 18.59
Greatest amount in 24 hours 2.69 Date 3-4
Average for this month for 72 years 13.95
Total from January 1, 1942 to date 41.38
Average from January 1 to date 36.91
Accumulated excess or deficiency since January 1 to date compared with average + 4.47

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942 18.59
1910 13.63	1921 15.18	1932 14.36	1943
1911 15.58	1922 8.30	1933 15.88	1944
1912 15.90	1923 13.17	1934 9.89	1945
1913 11.81	1924 16.49	1935 16.26	1946
1914 16.30	1925 13.77	1936 10.57	1947
1915 16.01	1926 31.23	1937 26.91	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction SE
Total movement 4033 miles
Average hourly velocity 5.6 miles per hour
Maximum velocity for five minutes 25 miles per hour from NW on 20

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.7
Sunshine, percentage of possible 44
Number of days clear 6 Partly cloudy 6 Cloudy 24
Number of days with .01 inch rain or more 22

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 23
Thunderstorms 3-4-8-9-11-19-22-24-25-26-27-/3 to
Earthquakes None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month July, 1942.

	TEMPERATURE (Degrees Fahrenheit)			[illegible] For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean	Sunshine			
1	85	76	79.8	30	.97	83.2	Cloudy
2	86	77	80.8	27	.59	83.4	Cloudy
3	85	73	77.4	20	4.40	83.3	Cloudy
4	88	75	78.8	56	.46	83.3	Cloudy
5	87	76	81.8	67	.01	83.3	Cloudy
6	86	79	82.1	58	0	83.2	Cloudy
7	88	78	81.3	48	.83	83.8	Cloudy
8	86	76	80.3	25	5.48	83.6	Cloudy
9	86	78	81.1	31	.24	84.0	Cloudy
10	88	77	80.2	52	.30	84.5	Cloudy
11	83	76	77.9	13	.63	83.6	Cloudy
12	86	76	80.0	44	.02	83.2	Cloudy
13	89	74	80.8	67	.04	84.0	Pt.Cldy.
14	88	76	81.5	62	.12	83.7	Cloudy
15	86	79	82.4	45	.12	84.8	Cloudy
16	86	79	81.6	63	.03	84.8	Cloudy
17	89	78	82.8	67	1.08	84.8	Cloudy
18	87	80	83.2	77	0	85.8	Cloudy
19	86	81	83.2	67	0	85.3	Pt.Cldy.
20	84	78	80.5	25	.21	83.7	Cloudy
21	83	75	79.3	22	.21	83.6	Cloudy
22	84	78	80.7	29	.79	83.3	Cloudy
23	86	77	80.8	39	.27	84.0	Cloudy
24	87	77	80.9	60	.03	84.5	Cloudy
25	82	77	79.2	67	.09	84.9	Cloudy
26	85	77	80.9	40	.08	83.2	Cloudy
27	87	77	81.3	50	.06	83.7	Cloudy
28	87	79	83.3	66	.20	84.0	Cloudy
29	86	78	81.1	22	.08	83.6	Cloudy
30	89	77	81.6	62	.18	83.9	Cloudy
31	87	77	81.3	52	.09	84.5	Cloudy
	2672	2391	3007	1448	17.35	31230	
	86.2	77.1	80.9	47	--	83.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.855
Highest 29.970 Date 13
Lowest 29.750 Date 29

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly Monthly mean 80.9
Highest 89 Date 17
Lowest 73 Date 3
Greatest daily range 15 Date 13
Mean for this month for 35 years 80.3
Maximum for this month for 35 years 91
Minimum for this month for 35 years 70
Average excess or deficiency of this month compared with a mean of 35 years + 0.6

PRECIPITATION
(Inches)

Total for this month 17.35
Greatest amount in 24 hours 6.22 Date 7-8
Average for this month for 72 years 15.65
Total from January 1, 1942 to date 58.73
Average from January 1 to date 52.56
Accumulated excess or deficiency from January 1 to date compared with average + 6.17

Total precipitation in this month in:

1906	19.23	1917	13.38	1928	10.29	1939	6.67
1907	17.86	1918	10.36	1929	18.67	1940	15.90
1908	14.76	1919	13.60	1930	8.99	1941	20.89
1909	12.83	1920	17.58	1931	13.36	1942	17.35
1910	21.07	1921	10.49	1932	17.15	1943	
1911	14.58	1922	4.40	1933	9.88	1944	
1912	13.13	1923	10.33	1934	9.21	1945	
1913	15.13	1924	20.63	1935	20.23	1946	
1914	10.74	1925	21.08	1936	18.72	1947	
1915	20.72	1926	16.15	1937	9.50	1948	
1916	10.44	1927	18.64	1938	22.25	1949	

WIND

Prevailing direction W
Total movement 5287 miles
Average hourly velocity 7.1 miles per hour
Maximum velocity for five minutes 24 miles per hour from SW on 3

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 86.7
Sunshine, percentage of possible 47
Number of days clear 0 Partly cloudy 2 Cloudy 29
Number of days with .01 inch rain or more 28

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1-2-3-4-7-8-10-11-22-27-29-30
Earthquakes None

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month August, 1942

	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Bi-H Mean	EVAPORATION (inches) For 24 hours ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	76	80.5	46	.16	85.4	Cloudy
2	85	76	79.4	27	.11	84.9	Cloudy
3	89	76	80.7	70	.02	84.6	Cloudy
4	84	76	79.0	26	1.66	83.7	Cloudy
5	88	74	81.2	74	0	83.8	Pt.cloudy
6	87	77	82.8	56	.43	84.0	cloudy
7	86	77	79.3	20	.98	83.8	cloudy
8	86	74	79.5	50	.36	83.5	cloudy
9	87	73	78.9	45	0	84.0	cloudy
10	89	77	81.8	70	T	84.5	pt.cloudy
11	81	75	78.1	0	2.58	84.1	cloudy
12	88	75	81.2	58	T	84.2	cloudy
13	81	74	78.1	3	1.11	82.8	cloudy
14	88	75	79.2	49	.03	82.9	cloudy
15	88	74	81.2	87	T	83.8	pt.cldy.
16	88	75	81.4	81	0	85.0	pt.cldy.
17	88	78	81.3	37	.21	85.7	cloudy
18	84	77	79.5	29	1.26	84.5	cloudy
19	86	76	79.2	37	.24	83.8	cloudy
20	87	75	81.2	66	0	83.3	pt.cldy.
21	87	77	80.9	39	.40	83.8	cloudy
22	83	75	78.6	10	.57	84.8	cloudy
23	86	76	78.4	28	.15	84.0	cloudy
24	90	75	81.0	72	0	84.0	cloudy
25	93	76	82.7	83	0	84.5	pt.cldy.
26	90	77	80.8	72	T	84.5	pt.cldy.
27	90	77	80.6	41	.11	84.5	cloudy
28	90	77	81.0	45	.05	84.0	pt.cldy.
29	89	76	80.6	56	.25	84.5	cloudy
30	88	77	80.2	33	.05	84.7	cloudy
31	90	75	81.8	76	.01	85.2	pt.cldy.
	2702	2346	-	-	10.74	-	
Mean	87.2	75.7	80.3	48	-	84.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.846
Highest 29.940 Date 14
Lowest 29.750 Date 1

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly
Monthly mean 80.3
Highest 93 Date 25
Lowest 73 Date 9
Greatest daily range 17 Date 25
Mean for this month for 36 years 80.0
Maximum for this month for 36 years 93
Minimum for this month for 36 years 71
Average excess or deficiency of this month compared with a mean of 36 years + 0.3

PRECIPITATION
(Inches)

Total for this month 10.74
Greatest amount in 24 hours 2.58 Date 11
Average for this month for 72 years 15.25
Total from January 1, 1942 to date 69.47
Average from January 1 to date 67.81
Accumulated excess or deficiency from January 1 to date compared with average + 1.66

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.35	1941 16.95
1909 15.48	1920 23.04	1931 17.52	1942 10.74
1910 [illegible]	1921 18.45	1932 12.10	1943
1911 11.60	1922 14.53	1933 8.57	1944
1912 9.87	1923 15.35	1934 13.86	1945
1913 17.91	1924 7.42	1935 14.72	1946
1914 16.01	1925 7.71	1936 13.78	1947
1915 12.89	1926 20.84	1937 13.26	1948
1916 8.94	1927 26.63	1938 22.32	1949

WIND

Prevailing direction south
Total movement 4500 miles
Average hourly velocity 6.0 miles per hour
Maximum velocity for five minutes 22 miles per hour from north on 6

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.2
Sunshine, percentage of possible 48
Number of days clear 0 Partly cloudy 9 Cloudy 22
Number of days with .01 inch rain or more 21

DATES

Fogs, light none
Fogs, dense none
Halos, lunar none
Thunderstorms 1-2-7-8-11-13-14-17-18-19-20-21-22-27-28-29
Earthquakes none

16

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, Cristobal, C. Z. ; Month September, 194

	TEMPERATURE (Degrees Fahrenheit)			Evaporation (Tanks) For 24 hours Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
	Max.	Min.	Mean				
1	87	77	80.6	62	3.40	84.7	Cloudy
2	84	77	80.3	22	2.11	84.0	Cloudy
3	89	74	80.1	59	1.63	84.4	Cloudy
4	89	75	77.8	37	.70	84.8	Cloudy
5	89	75	79.8	58	1.28	82.8	Cloudy
6	81	76	78.6	2	1.07	83.0	Cloudy
7	87	75	81.2	77	0	82.8	Pt.Cldy
8	85	79	81.5	18	.29	83.0	Cloudy
9	89	78	81.8	45	.13	82.9	Cloudy
10	87	78	80.9	66	.33	83.5	Cloudy
11	86	75	78.7	44	1.03	83.6	Cloudy
12	87	79	77.6	52	.18	83.1	Cloudy
13	90	75	82.5	86	0	83.0	Pt.Cldy
14	85	77	80.7	32	.06	83.1	Cloudy
15	86	77	80.7	24	.76	83.3	Cloudy
16	89	75	79.7	48	T	84.7	Cloudy
17	86	74	77.9	45	.51	83.7	Cloudy
18	87	75	79.2	48	.69	83.6	Cloudy
19	90	75	79.4	57	2.32	83.6	Cloudy
20	88	76	80.0	47	1.18	84.4	Cloudy
21	89	76	79.8	64	.08	84.3	Pt.Cldy
22	89	77	81.6	41	T	84.5	Cloudy
23	89	79	82.3	49	0	85.4	Cloudy
24	87	78	80.2	46	.01	85.1	Cloudy
25	88	76	79.8	43	1.99	84.8	Cloudy
26	88	76	78.9	41	.38	84.2	Cloudy
27	81	72	75.5	8	.85	83.0	Cloudy
28	84	74	76.8	23	.53	82.2	Cloudy
29	88	74	79.4	51	.02	82.6	Cloudy
30	89	75	80.9	88	.09	84.0	Pt.Cldy
	2613	2279	2872.7	-	21.62	301.45	
	87.1	76.0	79.8	46	-	83.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.834
Highest 29.950 Date 6
Lowest 29.720 Date 21

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.8
Highest 90 Date 19
Lowest 72 Date 27
Greatest daily range 15 Date 3
Mean for this month for 36 years 79.8
Maximum for this month for 36 years 94
Minimum for this month for 36 years 70
Average excess or deficiency of this month compared with a mean of 36 years 0.0

PRECIPITATION
(Inches)

Total for this month 21.62
Greatest amount in 24 hours 4.21 Date 1-2
Average for this month for 72 years 12.79
Total from January 1, 1940 to date 21.62
Average from January 1 to date 80.60
Accumulated excess or deficiency from January 1 to date compared with average 10.49

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 11.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.13	1920 6.81	1931 8.24	1942 21.62
1910 12.05	1921 11.21	1932 7.12	1943
1911 11.62	1922 12.73	1933 9.11	1944
1912 12.23	1923 12.31	1934 21.30	1945
1913 9.90	1924 9.00	1935 21.31	1946
1914 14.80	1925 8.17	1936 14.58	1947
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction SW
Total movement 3671 miles
Average hourly velocity 5.1 miles per hour
Maximum velocity for five minutes 24 miles per hour from W on 27

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 86.8
Sunshine, percentage of possible 46
Number of days clear 0 Partly cloudy 4 Cloudy 26
Number of days with .01 inch rain or more 25

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 1-2-3-5-8-9-10-11-12-14-19-21-22
Thunderstorms None
Earthquakes

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month October, 1942

	TEMPERATURE (Degrees Fahrenheit)			[illegible] Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
	MAX.	MIN.	MEAN*				
1	85	76	78.6	29	.62	84.0	Cloudy
2	89	76	80.2	42	.44	83.9	Cloudy
3	89	75	82.8	90	.02	84.5	Pt.Cldy
4	83	74	78.9	7	1.46	84.4	Cloudy
5	82	76	78.8	2	.32	83.2	Cloudy
6	81	76	77.6	2	.68	82.5	Pt.Cldy
7	86	75	78.5	42	.18	82.8	Cloudy
8	89	75	79.7	62	0	83.9	Cloudy
9	87	74	77.6	44	3.13	84.8	Cloudy
10	86	74	77.4	45	.29	84.9	Cloudy
11	89	75	79.5	58	.49	85.0	Cloudy
12	87	75	79.2	54	.38	85.0	Cloudy
13	87	75	79.9	34	1.24	84.2	Cloudy
14	83	75	78.2	17	4.78	83.8	Cloudy
15	81	74	77.4	2	3.51	82.8	Cloudy
16	83	74	76.4	32	.29	82.0	Cloudy
17	83	74	78.3	40	T	82.4	Cloudy
18	85	76	78.1	18	.25	82.0	Cloudy
19	89	74	78.9	45	T	82.4	Cloudy
20	88	75	79.2	46	.16	83.0	Cloudy
21	89	75	79.5	67	1.22	83.0	Pt.Cldy
22	87	75	79.4	51	.03	83.4	Cloudy
23	85	76	79.6	33	.75	84.0	Cloudy
24	85	76	79.5	31	.66	83.2	Cloudy
25	81	75	77.2	16	4.04	81.6	Cloudy
26	87	75	79.2	64	1.02	83.0	Cloudy
27	88	75	79.5	59	T	83.0	Cloudy
28	89	75	79.1	43	T	83.2	Cloudy
29	89	75	80.9	76	.25	84.0	Pt.Cldy
30	82	76	78.6	8	1.85	82.9	Cloudy
31	83	75	77.8	25	3.59	81.2	Cloudy
	2657	2326	-	-	31.65	-	
MN	85.7	75.0	78.9	38	-	83.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time. * Bihourly Mean

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.837
Highest 29.960 Date 13
Lowest 29.720 Date 11

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean* 78.9
Highest 89 Date 28
Lowest 74 Date 16
Greatest daily range 15 Date 19
Mean for this month for 36 years 79.2
Maximum for this month for 36 years 95
Minimum for this month for 36 years 70
Average excess or deficiency of this month compared with a mean of 36 years - 0.3

PRECIPITATION
(Inches)

Total for this month 31.65
Greatest amount in 24 hours 5.01 Date 14-15
Average for this month for 73 years 15.86
Total from January 1, 1942 to date 122.74
Average from January 1 to date 96.46
Accumulated excess or deficiency from January 1 to date compared with average + 26.28

Total precipitation in this month in:

1906 13.34	1917 7.87	1928 18.02	1939 17.52
1907 21.99	1918 27.07	1929 13.74	1940 16.28
1908 10.96	1919 21.94	1930 7.26	1941 25.17
1909 19.31	1920 17.16	1931 20.42	1942 31.65
1910 15.65	1921 8.27	1932 16.75	1943
1911 16.53	1922 13.87	1933 19.84	1944
1912 17.65	1923 42.17	1934 17.49	1945
1913 18.63	1924 21.56	1935 8.96	1946
1914 22.16	1925 16.49	1936 11.36	1947
1915 21.86	1926 15.31	1937 16.58	1948
1916 17.59	1927 13.12	1938 17.26	1949

WIND

Prevailing direction West
Total movement 3467 miles
Average hourly velocity 4.7 miles per hour
Maximum velocity for five minutes 23 miles per hour from SW on 14

MISCELLANEOUS

Total evaporation for this month --- inches
Average daily evaporation --- inches
Relative humidity, bihourly mean, percent 87.2
Sunshine, percentage of possible 38
Number of days clear 0 Partly cloudy 4 Cloudy 27
Number of days with .01 inch rain or more 26

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 22
Thunderstorms 1-13-14-15-23-25-26-30-31
Earthquakes None Felt

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month NOVEMBER, 1942.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine ~~REGISTRATION~~ Percent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	75	79	49	.06	82.6	Cloudy
2	87	75	80	60	.02	82.8	Cloudy
3	83	77	79	25	.15	83.0	Cloudy
4	87	76	78	31	.67	83.7	Cloudy
5	82	76	78	42	.12	83.0	Cloudy
6	85	75	80	59	.06	82.8	Cloudy
7	84	74	78	51	.53	83.1	Cloudy
8	91	74	80	88	0	84.5	Clear
9	88	75	80	83	.05	85.0	Pt.Cldy.
10	83	76	79	26	.37	84.6	Cloudy
11	81	75	78	18	.79	83.1	Cloudy
12	89	75	80	62	0	83.3	Cloudy
13	87	75	80	72	0	83.8	Cloudy
14	87	76	81	76	.17	83.6	Cloudy
15	85	75	80	47	1.96	83.2	Cloudy
16	87	76	80	39	.02	84.0	Cloudy
17	87	76	80	33	.03	84.3	Cloudy
18	91	77	83	74	0	85.3	Pt.Cldy.
19	89	77	81	64	.18	85.5	Cloudy
20	85	77	80	56	1.25	84.8	Cloudy
21	88	74	81	77	1.03	84.8	Pt.Cldy.
22	88	77	81	79	.01	84.9	Pt.Cldy.
23	88	78	83	66	T	84.8	Pt.Cldy.
24	84	76	79	45	1.72	84.3	Cloudy
25	80	74	76	0	2.35	83.8	Cloudy
26	85	75	78	29	.56	81.9	Cloudy
27	87	74	80	65	.04	83.2	Cloudy
28	85	75	80	60	.06	83.4	Pt.Cldy.
29	85	75	80	61	.40	83.6	Cloudy
30	90	74	80	68	T	83.7	Pt.Cldy.
31							
SUM	2585	2264			12.60		
MEAN	86.1	75.5	798	54		83.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.827
Highest 29.930 Date 20
Lowest 29.700 Date 15

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hr. Monthly mean 79.8
Highest 91 Date 8
Lowest 74 Date 8
Greatest daily range 17 Date 8
Mean for this month for 36 years 78.9
Maximum for this month for 36 years 92.0
Minimum for this month for 36 years 69
Average excess or deficiency of this month compared with a mean of 36 years + 0.9

PRECIPITATION
(Inches)

Bi-hourly
Total for this month 12.60
Greatest amount in 24 hours 3.83 Date 24-25
Average for this month for 72 years 22-28
Total from January 1, 1942 to date 135.34
Average from January 1 to date 118.74
Accumulated excess or deficiency from January 1 to date compared with average + 16.60

Total precipitation in this month in:

1906	26.64	1917	20.49	1928	17.20	1939	35.18
1907	15.37	1918	14.23	1929	8.99	1940	20.91
1908	31.72	1919	6.63	1930	16.94	1941	24.07
1909	42.50	1920	21.27	1931	30.31	1942	12.60
1910	30.04	1921	19.96	1932	37.13	1943	
1911	15.81	1922	15.63	1933	43.06	1944	
1912	21.81	1923	22.16	1934	28.81	1945	
1913	16.75	1924	30.29	1935	42.73	1946	
1914	18.35	1925	22.95	1936	23.11	1947	
1915	22.33	1926	24.39	1937	23.23	1948	
1916	14.08	1927	28.35	1938	18.90	1949	

WIND

Prevailing direction W
Total movement 4827 miles
Average hourly velocity 6.7 miles per hour
Maximum velocity for five minutes 21 miles per hour from NW on 25

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 83.4
Sunshine, percentage of possible 54
Number of days clear 1 Partly cloudy 7 Cloudy 22
Number of days with .01 inch rain or more 24

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 3, 17, 19, 25
Earthquakes None
—

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month December, 1942

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] Per Cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	73	79.7	71	0	83.9	Cloudy
2	90	75	81.0	78	0	84.2	Pt. Cldy
3	88	77	81.8	66	0	84.8	Cloudy
4	87	76	81.6	74	0	84.8	Cloudy
5	82	75	79.1	23	3.22	83.3	Cloudy
6	88	75	80.6	57	.05	82.5	Cloudy
7	88	76	80.8	56	T	83.5	Cloudy
8	85	77	80.2	27	.02	83.8	Cloudy
9	86	76	79.6	43	.35	83.5	Cloudy
10	87	75	78.1	49	.92	83.5	Cloudy
11	86	74	78.8	57	.61	83.8	Cloudy
12	88	75	79.8	67	0	84.2	Pt. Cldy
13	88	75	80.6	79	0	84.8	Pt. Cldy
14	86	76	79.7	36	.49	84.7	Cloudy
15	88	76	80.8	69	.63	84.0	Pt. Cldy
16	83	76	78.7	7	.24	84.2	Cloudy
17	81	75	77.5	2	2.11	83.7	Cloudy
18	78	74	76.2	2	7.67	82.2	Cloudy
19	85	74	78.0	26	2.45	80.8	Cloudy
20	89	75	80.8	72	T	82.3	Pt. Cldy
21	81	76	78.1	22	.33	81.9	Cloudy
22	86	74	79.2	76	.98	82.4	Cloudy
23	88	75	80.2	78	0	83.3	Pt. Cldy
24	87	73	79.4	81	0	84.5	Pt. Cldy
25	88	75	80.7	62	.01	84.7	Cloudy
26	83	75	77.2	21	2.05	83.6	Cloudy
27	85	76	80.2	73	T	82.6	Pt. Cldy
28	87	75	80.5	62	.15	83.6	Cloudy
29	87	74	79.8	62	1.43	83.4	Cloudy
30	86	74	80.9	84	0	83.8	Clear
31	86	76	80.5	83	.04	84.2	Clear
	2664	2328			23.75		
MEAN	86.0	75.1	79.7	54		83.6	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.860

Highest 29.970 Date 10

Lowest 29.730 Date 31

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.5

Highest 90 Date 2

Lowest 73 Date 1

Greatest daily range 15 Date 2

Mean for this month for 36 years 80.0

Maximum for this month for 36 years 90

Minimum for this month for 36 years 66

Average excess or deficiency of this month compared with a mean of 36 years + 0.5

PRECIPITATION
(Inches)

Total for this month 23.75

Greatest amount in 24 hours 8.18 Date 18 - 19

Average for this month for 72 years 11.61

Total from January 1, 1942 to date 139.09

Average from January 1 to date 130.35

Accumulated excess or deficiency from January 1 to date compared with average 28.74

Total precipitation in this month in:

1906 15.81	1917 11.86	1928 16.43	1939 17.08
1907 9.36	1918 1.90	1929 7.87	1940 4.23
1908 9.07	1919 7.37	1930 7.86	1941 6.11
1909 [illegible]	1920 2.08	1931 5.47	1942 23.75
1910 15.20	1921 6.20	1932 7.61	1943
1911 2.65	1922 7.20	1933 [illegible]	1944
1912 [illegible]	1923 5.12	1934 [illegible]	1945
1913 [illegible]	1924 [illegible]	1935 13.02	1946
1914 [illegible]	1925 [illegible]	1936 [illegible]	1947
1915 5.71	1926 16.70	1937 [illegible]	1948
1916	1927	1938 29.29	1949

WIND

Prevailing direction W

Total movement 4731 miles

Average hourly velocity 6.4 miles per hour

Maximum velocity for five minutes 24 miles per hour from [illegible] on 14

MISCELLANEOUS

Total evaporation for this month [illegible] inches

Average daily evaporation [illegible] inches

Relative humidity, bihourly mean, percent 82.6

Sunshine, percentage of possible 34

Number of days clear 8 Partly cloudy 2 Cloudy 21

Number of days with .01 inch rain or more 19

DATES

Fogs, light 24

Fogs, dense 24

Haloe, lunar None

Thunderstorms None

Earthquakes [illegible]

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month January, 1943

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m. Per Cent	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	77	82.2	85	T	84.0	Clear
2	86	78	82.0	63	0	84.0	Pt.Cldy.
3	85	80	82.7	58	T	84.6	Cloudy
4	85	80	82.0	61	.05	84.0	Pt.Cldy.
5	85	76	80.8	71	.19	83.1	Pt.Cldy.
6	85	78	81.2	78	.06	82.7	Pt.Cldy.
7	85	78	81.4	76	.03	82.0	Pt.Cldy
8	85	79	81.6	74	0	82.2	Pt.Cldy
9	85	77	81.2	66	.05	82.2	Pt.Cldy
10	86	79	81.5	74	T	82.8	Pt.Cldy
11	84	78	81.2	75	.09	82.3	Pt.Cldy
12	84	78	81.0	63	0	81.8	Pt.Cldy
13	84	76	80.5	81	.07	80.9	Clear
14	86	75	79.3	73	.01	81.2	Cloudy
15	87	74	79.3	61	.24	82.6	Pt.Cldy
16	86	77	80.5	66	.29	82.8	Pt.Cldy
17	85	79	81.2	76	0	83.2	Pt.Cldy
18	85	80	80.9	52	T	83.8	Cloudy
19	84	78	81.2	80	.02	83.0	Clear
20	85	77	80.5	57	.02	82.6	Pt.Cldy
21	84	76	80.7	89	T	82.2	Clear
22	87	78	81.0	83	0	81.2	Clear
23	84	74	79.3	81	.08	81.5	Pt.Cldy
24	84	73	77.8	57	.27	81.6	Cloudy
25	85	72	78.1	69	.22	82.3	Pt.Cldy
26	84	74	78.5	76	0	82.2	Pt.Cldy
27	88	73	79.2	75	.30	82.8	Pt.Cldy
28	86	74	80.4	85	.08	83.1	Clear
29	85	76	80.7	82	.11	84.0	Pt.Cldy
30	85	79	81.5	76	T	84.0	Pt.Cldy
31	85	79	81.1	64	T	83.5	Pt.Cldy
	2640	2382	--	--	2.18	--	
MEAN	85.2	76.8	80.7	72	--	82.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.875
Highest 30.020 Date 24
Lowest 29.720 Date 1

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly
Monthly mean 80.7
Highest 88 Date 27
Lowest 72 Date 25
Greatest daily range 15 Date 27
Mean for this month for 36 years 80-1
Maximum for this month for 36 years 88
Minimum for this month for 36 years 70
Average excess or deficiency of this month compared with a mean of 36 years +0.6

PRECIPITATION
(Inches)

Total for this month 2.18
Greatest amount in 24 hours .38 Date 27-28
Average for this month for 73 years 3.36
Total from January 1, 1943 to date 2.18
Average from January 1 to date 3.36
Accumulated excess or deficiency from January 1 to date compared with average -1.18

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944
1912 .28	1923 1.98	1934 3.94	1945
1913 6.71	1924 .61	1935 5.81	1946
1914 1.35	1925 3.66	1936 1.54	1947
1915 3.41	1926 .70	1937 4.20	1948
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction N
Total movement 8906 miles
Average hourly velocity 12.0 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 6

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 76.1
Sunshine, percentage of possible 72
Number of days clear 6 Partly cloudy 21 Cloudy 4
Number of days with .01 inch rain or more 18

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 0
Earthquakes --

MR 74990—Panama Canal—11-10-40—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL; Month FEBRUARY, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] Bi-Hrly. Shine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	79	81	78	T	83.5	Pt.cldy
2	84	78	81	57	0	82.8	Cloudy
3	84	77	80	84	.01	82.0	Pt.Cldy
4	84	76	80	48	.59	82.0	Pt.Cldy
5	84	78	81	81	0	81.3	Pt.Cldy
6	85	78	81	82	0	81.9	Pt.Cldy
7	84	78	80	80	T	81.5	Pt.Cldy
8	84	78	81	92	T	81.2	Clear
9	84	78	80	85	0	81.0	Clear
10	84	78	81	100	0	80.6	Pt.cldy
11	84	79	81	81	0	80.6	Pt.cldy
12	84	78	81	67	T	80.7	Pt.cldy
13	84	77	81	60	.12	80.2	Cldy.
14	84	78	81	72	.02	79.6	Pt.cldy
15	84	74	81	81	.03	79.8	Pt.cldy
16	84	77	80	65	.06	80.2	Pt.cldy
17	84	77	81	69	.02	79.9	Pt.cldy
18	84	77	81	80	.13	79.8	Pt.cldy
19	79	73	77	19	.48	79.5	Cloudy
20	83	75	79	86	.20	79.7	Pt.cldy
21	84	74	80	72	.16	80.1	Pt.cldy
22	84	75	80	79	.01	80.5	Pt.cldy
23	84	75	79	43	T	81.1	Cloudy
24	85	78	81	59	.03	81.5	Cloudy
25	84	78	81	94	.01	81.9	Clear
26	84	79	81	64	.02	81.6	Pt.cldy
27	84	75	81	61	.36	81.5	Pt.cldy
28	83	74	80	46	.33	81.7	Cloudy
29							
30							
31							
SUM	2347	2151	---	---	2.58	---	
MEAN	83.8	76.8	80.4	71	---	81.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.896
Highest 30.020 Date 17
Lowest 29.790 Date 5

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.4
Highest 85 Date 24
Lowest 73 Date 19
Greatest daily range 10 Date 21
Mean for this month for 36 years 80.0
Maximum for this month for 36 years 90
Minimum for this month for 36 years 69
Average excess or deficiency of this month compared with a mean of 36 years + 0.4

PRECIPITATION
(Inches)

Total for this month 2.58
Greatest amount in 24 hours .67 Date 27-28
Average for this month for 73 years 1.51
Total from January 1, 1943 to date 4.76
Average from January 1 to date 4.87
Accumulated excess or deficiency from January 1 to date compared with average - .11

Total precipitation in this month in:

1906 1.14	1917 .45	1928 .71	1939 .50
1907 1.37	1918 .67	1929 .56	1940 1.83
1908 1.08	1919 .36	1930 .75	1941 2.87
1909 1.92	1920 .54	1931 .97	1942 .69
1910 3.58	1921 1.63	1932 .95	1943 2.58
1911 1.81	1922 .71	1933 .08	1944
1912 1.81	1923 .69	1934 .55	1945
1913 1.75	1924 2.80	1935 3.10	1946
1914 1.32	1925 .73	1936 .13	1947
1915 12.37	1926 1.78	1937 .46	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction N
Total movement 10662 miles
Average hourly velocity 15.9 miles per hour
Maximum velocity for five minutes 31 miles per hour from NE on 15th

MISCELLANEOUS

Total evaporation for this month ----- inches
Average daily evaporation ----- inches
Relative humidity, bihourly mean, percent 72.4
Sunshine, percentage of possible 71
Number of days clear 3 Partly cloudy 19 Cloudy 6
Number of days with .01 inch rain or more 17

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 0
Earthquakes 0

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month March, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] % Sunshine	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	76	81	81	.05	81.6	Pt.cldy
2	84	78	81	72	.13	82.1	Pt.cldy
3	87	76	81	67	.40	82.8	Cloudy
4	84	78	81	97	.01	82.8	Pt.cldy
5	85	78	81	100	0	82.3	Clear
6	85	76	81	88	0	82.2	Pt.cldy
7	85	74	80	82	0	82.7	Pt.cldy
8	84	78	81	83	0	83.8	Pt.cldy
9	84	79	81	98	0	83.8	Pt.cldy
10	85	78	81	95	T	83.2	Pt.cldy
11	84	79	81	92	T	83.3	Clear
12	84	78	81	94	.05	83.0	Pt.cldy
13	84	78	81	98	0	82.6	Clear
14	84	78	81	95	0	82.4	Pt.cldy
15	84	79	81	84	0	82.5	Pt.cldy
16	84	79	81	98	0	82.4	Clear
17	84	77	81	98	T	82.2	Clear
18	84	78	81	75	T	82.4	Pt.cldy
19	87	76	81	83	.01	81.9	Pt.cldy
20	87	76	81	76	T	82.3	Pt.cldy
21	84	77	81	64	T	83.0	Cloudy
22	89	78	82	83	0	82.8	Pt.cldy
23	84	78	81	77	.01	83.1	Pt.cldy
24	85	78	81	61	0	82.8	Pt.cldy
25	85	79	81	86	0	82.8	Pt.cldy
26	85	79	82	92	0	82.2	Pt.cldy
27	86	79	82	65	0	81.8	Cloudy
28	88	79	83	81	0	82.8	Pt.cldy
29	85	77	81	59	.48	83.0	Cloudy
30	85	79	82	87	.01	82.6	Pt.cldy
31	86	80	82	56	T	82.4	Pt.cldy
	2635	2412	—	—	1.15	—	
MEAN	85.0	77.8	81.2	83	—	82.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.884
Highest 30.020 Date 9
Lowest 29.760 Date 26

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.2
Highest 89 Date 22
Lowest 74 Date 7
Greatest daily range 11 Date 22
Mean for this month for 36 years 80.6
Maximum for this month for 36 years 92
Minimum for this month for 36 years 67
Average excess or deficiency of this month compared with a mean of 36 years + 0.6

PRECIPITATION
(Inches)

Total for this month 1.15
Greatest amount in 24 hours .48 Date 29
Average for this month for 74 years 1.52
Total from January 1, 1943 to date 5.91
Average from January 1 to date 6.39
Accumulated excess or deficiency from January 1 to date compared with average - 0.48

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .63
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .92	1933 1.11	1944
1912 .66	1923 .36	1934 1.10	1945
1913 .79	1924 .71	1935 .80	1946
1914 .91	1925 .31	1936 .87	1947
1915 1.71	1926 .43	1937 .32	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction North
Total movement 9884 miles
Average hourly velocity 13.3 miles per hour
Maximum velocity for five minutes 26 miles per hour from N on 25

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 73.2
Sunshine, percentage of possible 83
Number of days clear 5 Partly cloudy 22 Cloudy 4
Number of days with .01 inch rain or more 9

DATES

Fogs, light 19th
Fogs, dense None
Halos, lunar None
Thunderstorms 3rd
Earthquakes None
--

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month APRIL, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] (INCHES) Sunshine*	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	80	81.5	96	0	82.7	Pt.Cldy.
2	87	79	81.9	73	T	82.3	Pt.Cldy.
3	85	80	82.1	94	0	83.3	Pt.Cldy
4	86	80	82.0	96	0	83.2	Clear
5	86	77	80.6	69	.09	83.3	Cloudy
6	86	79	81.2	59	.09	82.7	Cloudy
7	85	77	80.9	50	.21	82.6	Cloudy
8	87	80	82.4	64	0	82.5	Pt.Cldy.
9	86	76	80.5	28	.04	82.8	Cloudy
10	88	77	81.8	51	T	83.0	Pt.Cldy
11	87	78	82.2	89	0	84.2	Clear
12	86	80	82.2	80	0	84.7	Pt.Cldy
13	87	80	82.6	88	0	84.2	Pt.Cldy
14	87	81	83.2	93	.05	84.3	Pt.Cldy
15	86	80	82.8	80	.02	84.2	Pt.Cldy
16	85	79	82.0	52	.01	84.0	Pt.Cldy
17	85	79	81.8	85	0	83.3	Pt.Cldy
18	87	78	82.2	100	0	82.9	Clear
19	88	78	82.2	100	0	83.9	Clear
20	86	80	82.8	85	0	84.2	Pt.Cldy
21	85	81	82.3	41	.18	84.0	Cloudy
22	88	80	82.1	51	.01	83.9	Cloudy
23	84	79	81.0	25	T	83.7	Cloudy
24	89	76	80.0	23	T	83.2	Cloudy
25	90	75	81.5	94	T	84.2	Cloudy
26	85	76	78.0	21	.59	84.8	Cloudy
27	85	75	78.2	33	1.68	83.2	Pt.Cldy
28	89	75	81.3	64	.01	83.3	Pt.Cldy
29	85	76	80.4	74	.48	84.1	Pt.Cldy
30	78	75	76.9	2	.46	83.8	Cloudy
31							
SUM	2582	2346	-	-	3.92	-	
MEAN	86.1	78.2	81.4	65	-	83.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.869
Highest 29.970 Date 4
Lowest 29.750 Date 10

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.4
Highest 90 Date 25
Lowest 75 Date 27
Greatest daily range 15 Date 25
Mean for this month for 36 years 81.2
Maximum for this month for 36 years 94
Minimum for this month for 36 years 72
Average excess or deficiency of this month compared with a mean of 36 years + 0.2

PRECIPITATION
(Inches)

Total for this month 3.92
Greatest amount in 24 hours 2.25 Date 26-27
Average for this month for 43 years 4.09
Total from January 1, 19 73 to date 9.85
Average from January 1 to date 9.83
Accumulated excess or deficiency from January 1 to date compared with average - 0.65

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.00
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.92	1930 6.82	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.78	1943 3.92
1911 3.06	1922 2.11	1933 .22	1944
1912 .75	1923 1.21	1934 5.48	1945
1913 2.69	1924 10.85	1935 1.87	1946
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 .34	1937 1.85	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction North
Total movement 7842 miles
Average hourly velocity 10.9 miles per hour
Maximum velocity for five minutes 22 miles per hour from NW on 15th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 77.8
Sunshine, percentage of possible 65
Number of days clear 4 Partly cloudy 15 Cloudy 11
Number of days with .01 inch rain or more 14

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 21 - 26
Earthquakes None

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month MAY, 1943

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	74	78.1	38	.53	82.8	pt cldy
2	86	75	79.8	44	.14	83.6	cldy
3	84	76	79.4	23	.77	84.4	cldy
4	81	77	79.0	0	.39	83.8	cldy
5	82	76	79.2	9	.81	82.2	cldy
6	88	76	81.8	62	0	83.2	pt cldy
7	86	75	80.8	23	.07	83.8	cldy
8	87	79	83.0	62	.02	84.5	cldy
9	84	78	80.3	5	.01	84.5	cldy
10	86	79	83.0	96	T	84.4	pt cldy
11	89	80	83.5	80	0	85.3	pt cldy
12	89	75	80.2	42	2.82	85.3	cldy
13	91	76	82.4	74	0	84.7	pt cldy
14	89	78	82.8	65	1.10	85.2	pt cldy
15	87	78	82.3	86	.35	86.8	pt cldy
16	87	77	80.2	66	.11	87.6	pt cldy
17	88	76	81.2	89	0	86.8	pt cldy
18	88	76	82.1	81	.23	87.5	pt cldy
19	87	78	82.7	48	.10	87.8	cldy
20	87	77	82.2	20	.70	86.8	cldy
21	86	76	80.2	13	2.36	85.3	cldy
22	84	77	79.7	10	.66	84.8	cldy
23	81	75	77.9	1	2.63	84.0	cldy
24	84	75	76.8	11	1.45	84.4	cldy
25	83	75	78.2	33	T	84.2	cldy
26	89	75	81.2	44	0	83.2	cldy
27	87	78	83.0	100	T	84.3	clear
28	86	81	83.3	75	0	85.0	pt cldy
29	85	76	80.0	75	.82	85.0	cldy
30	86	75	79.5	61	T	84.8	cldy
31	86	76	79.2	48	.20	84.8	cldy
	2667	2375	-	-	16.27	-	
MEAN	86.0	76.6	80.7	48	-	84.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.827
Highest 29.940 Date 31
Lowest 29.730 Date 6

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-Hourly) 80.7
Highest 91 Date 13
Lowest 74 Date 1
Greatest daily range 15 Date 13
Mean for this month for 36 years 80.8
Maximum for this month for 36 years 95
Minimum for this month for 36 years 71
Average deficiency of this month compared with a mean of 36 years - 0.1

PRECIPITATION
(Inches)

Total for this month 16.27
Greatest amount in 24 hours 2.95 Date 21-22
Average for this month for 73 years 12.52
Total from January 1, 1943 to date 26.10
Average from January 1 to date 23.00
Accumulated deficiency from January 1 to date compared with average + 3.10

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943 16.27
1911 17.23	1922 8.88	1933 8.12	1944
1912 12.03	1923 11.18	1934 11.94	1945
1913 22.60	1924 14.86	1935 17.16	1946
1914 17.76	1925 8.23	1936 12.86	1947
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction North
Total movement 5491 miles
Average hourly velocity 7.4 miles per hour
Maximum velocity for five minutes 27 miles per hour from SW on 12

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 83.5
Sunshine, percentage of possible 48
Number of days clear 1 Partly cloudy 11 Cloudy 19
Number of days with .01 inch rain or more 21

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None OBS
Thunderstorms 1-2-3-6-7-14-16-19-20-21-22-23-29
Earthquakes Felt 2nd Intensity II MMS. / 30-31

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

tation, CRISTOBAL, C. Z. ; Month JUNE, 1943

TE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	77	80.3	70	.29	84.7	Cloudy
2	85	77	80.6	65	.04	84.8	Cloudy
3	85	73	78.0	50	1.26	84.5	Cloudy
4	87	77	80.3	75	T	84.3	Cloudy
5	83	76	78.9	44	T	84.8	Cloudy
6	87	76	79.6	62	.01	83.8	Pt.Cldy
7	88	76	81.6	78	T	84.2	Cloudy
8	89	77	82.2	80	T	85.2	Cloudy
9	87	76	80.0	38	.89	85.2	Cloudy
10	88	76	81.6	60	.12	85.3	Pt.Cldy
11	87	77	81.2	48	.27	85.3	Cloudy
12	87	78	81.8	66	.21	85.7	Cloudy
13	85	76	80.0	.47	.15	86.0	Cloudy
14	81	75	78.2	29	.01	85.0	Cloudy
15	88	76	81.1	60	T	85.9	Pt.Cldy
16	86	77	79.5	44	.45	86.2	Cloudy
17	82	76	78.7	8	.25	85.3	Cloudy
18	83	76	79.2	21	T	84.8	Cloudy
19	84	76	80.6	17	.48	84.1	Cloudy
20	88	80	82.8	62	.02	84.2	Pt.Cldy
21	84	76	79.4	15	.18	84.0	Cloudy
22	80	76	78.2	0	2.52	82.9	Cloudy
23	84	74	79.1	11	.76	83.5	Cloudy
24	86	76	79.9	2	1.20	82.9	Cloudy
25	85	76	79.0	13	1.98	83.2	Cloudy
26	84	75	78.9	4	.47	83.0	Cloudy
27	86	73	80.2	37	.01	83.3	Cloudy
28	88	73	79.4	16	T	82.8	Cloudy
29	85	76	79.2	24	.52	83.4	Cloudy
30	79	74	76.3	1	1.09	82.6	Cloudy
31							
	2554	2277	-	-	12.18	-	
AN	85.1	75.9	79.8	38	-	84.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.852
Highest 29.960 Date 18
Lowest 29.750 Date 27

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly

Monthly mean 79.8
Highest 89 Date 8
Lowest 73 Date 3
Greatest daily range 15 Date 28
Mean for this month for 36 years 80.1
Maximum for this month for 36 years 93
Minimum for this month for 36 years 68
Average excess or deficiency of this month compared with a mean of 36 years - 0.3

PRECIPITATION
(Inches)

Total for this month 12.18
Greatest amount in 24 hours 2.52 Date 21-22
Average for this month for 73 years 13.92
Total from January 1, 1943 to date 38.28
Average from January 1 to date 36.92
Accumulated excess ~~deficiency~~ from January 1 to date compared with average + 1.36

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942 18.59
1910 13.63	1921 15.18	1932 14.36	1943 12.18
1911 15.58	1922 8.30	1933 15.88	1944
1912 15.80	1923 15.17	1934 9.89	1945
1913 11.81	1924 16.49	1935 16.26	1946
1914 16.30	1925 13.77	1936 10.57	1947
1915 16.01	1926 31.23	1937 20.61	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction West
Total movement 4656 miles
Average hourly velocity 6.5 miles per hour
Maximum velocity for five minutes 25 miles per hour from NW on 27

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 84.2
Sunshine, percentage of possible 38
Number of days clear 0 Partly cloudy 4 Cloudy 26
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 9
Thunderstorms 1-2-3-7-9-11-13-15-16-20-21-22-23-25-26-27-29
Earthquakes

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month JULY, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (Inches) Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	73	78.5	65	0	82.4	Pt.Cldy.
2	85	74	79.8	50	T	82.7	Cloudy
3	85	76	80.3	50	.14	83.0	Cloudy
4	86	76	78.9	29	.94	82.7	Cloudy
5	83	76	78.9	16	.60	82.6	Cloudy
6	84	76	80.0	42	.07	82.6	Cloudy
7	88	80	82.4	60	.03	83.0	Cloudy
8	87	79	82.2	71	.16	83.6	Cloudy
9	85	79	82.3	91	.22	84.3	Cloudy
10	88	77	81.8	63	1.91	84.3	Pt.Cldy.
11	86	78	82.3	87	.18	84.8	Pt.Cldy.
12	86	81	83.2	86	0	85.1	Pt.Cldy.
13	87	81	83.2	62	T	85.5	Cloudy
14	88	79	83.0	52	T	84.7	Cloudy
15	83	72	78.8	23	.27	84.8	Cloudy
16	86	75	80.0	26	2.03	84.1	Cloudy
17	86	78	82.2	57	.02	83.9	Cloudy
18	86	80	82.9	69	.01	84.5	Pt.Cldy.
19	90	80	82.7	54	.15	84.5	Cloudy
20	85	77	80.9	56	.17	84.3	Cloudy
21	83	76	79.1	15	.41	83.8	Cloudy
22	80	76	78.0	0	.96	82.9	Cloudy
23	84	76	79.5	35	.33	82.0	Cloudy
24	87	79	82.1	61	.0	83.5	Cloudy
25	80	72	76.1	2	1.73	82.8	Cloudy
26	86	73	79.0	64	0	82.8	Cloudy
27	83	77	79.4	27	.01	82.4	Cloudy
28	83	78	80.2	46	.01	81.8	Cloudy
29	86	76	80.5	50	.07	82.1	Cloudy
30	85	76	79.4	44	.01	81.8	Cloudy
31	90	77	82.3	67	.01	82.8	Pt.Cldy.
	2647	2383	-	-	10.44	-	
MEAN	85.4	76.9	80.6	49	-	83.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.856
Highest 29.970 Date 27
Lowest 29.720 Date 20

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly
Monthly mean 80.6
Highest 90 Date 19
Lowest 72 Date 15
Greatest daily range 13 Date 26
Mean for this month for 36 years 80.3
Maximum for this month for 36 years 91
Minimum for this month for 36 years 70
Average excess of this month compared with a mean of 36 years + 0.3

PRECIPITATION
(Inches)

Total for this month 10.44
Greatest amount in 24 hours 2.09 Date 10-11
Average for this month for 73 years 15.58
Total from January 1, 1943 to date 48.72
Average from January 1 to date 52.50
Accumulated or deficiency from January 1 to date compared with average - 3.78

Total precipitation in this month in:

1906 19.23	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.36	1929 18.67	1940 15.90
1908 14.76	1919 13.60	1930 8.99	1941 20.89
1909 12.83	1920 17.58	1931 13.36	1942 17.35
1910 21.07	1921 16.49	1932 17.45	1943 10.44
1911 14.58	1922 4.40	1933 9.88	1944
1912 13.13	1923 10.33	1934 9.21	1945
1913 15.13	1924 20.63	1935 26.23	1946
1914 10.74	1925 21.08	1936 18.72	1947
1915 20.72	1926 16.15	1937 9.50	1948
1916 10.44	1927 18.64	1938 22.25	1949

WIND

Prevailing direction NORTH
Total movement 6390 miles
Average hourly velocity 8.6 miles per hour
Maximum velocity for five minutes 28 miles per hour from S.E. on 15

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.1
Sunshine, percentage of possible 49
Number of days clear 0 Partly cloudy 6 Cloudy 25
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 4-10-14-16-20-21-22-23-25-27
Earthquakes None

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month AUGUST, 1943

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) Bi-Hourly	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	77	82.2	70	.34	83.8	Pt.Cldy
2	85	75	79.7	13	.74	83.7	Cloudy
3	85	77	80.5	50	T	81.8	Cloudy
4	90	80	82.5	54	.09	82.6	Cloudy
5	85	77	79.0	19	.38	82.7	Cloudy
6	85	76	79.1	41	1.22	82.5	Cloudy
7	87	76	80.1	62	.02	82.8	Cloudy
8	87	76	79.4	39	T	83.8	Cloudy
9	90	75	81.8	82	0	84.5	Clear
10	87	79	82.1	54	.13	85.0	Cloudy
11	87	77	81.7	54	.50	85.1	Cloudy
12	86	70	78.8	40	4.39	84.3	Cloudy
13	87	77	82.5	85	.11	83.7	Pt.Cldy
14	81	74	78.2	5	1.98	83.5	Cloudy
15	83	76	79.7	35	.33	83.3	Cloudy
16	87	76	82.0	98	.28	83.8	Pt.Cldy
17	88	79	81.9	40	.80	85.3	Cloudy
18	80	75	78.1	14	1.77	84.0	Cloudy
19	78	74	76.4	0	.30	82.8	Cloudy
20	86	75	79.2	51	0	83.2	Pt.Cldy
21	86	75	79.8	44	.02	83.6	Pt.Cldy
22	85	75	80.1	48	2.07	84.2	Cloudy
23	87	76	81.1	65	.81	84.4	Cloudy
24	86	78	81.2	36	.22	84.5	Cloudy
25	85	77	79.1	34	.77	83.5	Cloudy
26	84	71	77.8	42	1.08	83.2	Cloudy
27	85	75	79.8	86	.03	83.1	Cloudy
28	87	75	80.5	65	.02	83.2	Pt.Cldy
29	84	76	79.8	36	.23	84.3	Pt.Cldy
30	88	77	82.2	60	T	84.5	Pt.Cldy
31	88	77	80.6	53	1.37	85.2	Cloudy
	2654	2353	-	-	20.00	-	
MEAN	85.6	75.9	80.2	47	-	83.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.848
Highest 29.950 Date 6
Lowest 29.750 Date 13

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly

Monthly mean 80.2
Highest 90 Date 4 & 9
Lowest 70 Date 12
Greatest daily range 16 Date 12
Mean for this month for 37 years 80.00
Maximum for this month for 37 years 93
Minimum for this month for 37 years 70
Average excess or deficiency of this month compared with a mean of 37 years +0.2

PRECIPITATION
(Inches)

Total for this month 20.00
Greatest amount in 24 hours 4.74 Date 11-12
Average for this month for 43 years 15.31
Total from January 1, 1943 to date 68.72
Average from January 1 to date 67.81
Accumulated excess or deficiency from January 1 to date compared with average +0.91

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.35	1941 16.95
1909 15.42	1920 23.04	1931 17.52	1942 10.74
1910 14.93	1921 18.45	1932 12.10	1943 20.00
1911 11.60	1922 14.35	1933 8.27	1944
1912 9.87	1923 15.35	1934 13.86	1945
1913 17.91	1924 7.42	1935 14.72	1946
1914 16.01	1925 7.71	1936 13.78	1947
1915 12.89	1926 20.84	1937 13.26	1948
1916 8.34	1927 26.63	1938 22.32	1949

WIND

Prevailing direction Northwest
Total movement 5135 6.9 miles
Average hourly velocity miles per hour
Maximum velocity for five minutes 37 miles per hour from 8 on 12

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 84.4
Sunshine, percentage of possible 47
Number of days clear 1 Partly cloudy 8 Cloudy 22
Number of days with .01 inch rain or more 26

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 8-9-10
Thunderstorms 2-3-5-6-8-10-11-12-14-17-18-19-21-22-23-24-25-28-29-31
Earthquakes

(20)

66-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month SEPTEMBER, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	SUNSHINE	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	76	80.8	46	.13	85.5	Cloudy
2	87	74	79.0	67	.74	85.5	Cloudy
3	86	75	80.0	67	T	85.1	Cloudy
4	89	76	80.8	64	.05	84.7	Cloudy
5	88	77	81.7	77	.05	84.8	Cloudy
6	90	78	82.2	49	.11	85.4	Cloudy
7	86	77	80.7	34	0	85.1	Cloudy
8	88	78	82.2	55	2.04	85.5	Cloudy
9	85	75	79.3	23	.85	84.7	Cloudy
10	85	77	80.3	21	.59	84.2	Cloudy
11	89	76	80.7	85	1.20	84.3	Cloudy
12	89	76	80.4	79	.69	85.6	Cloudy
13	89	76	80.2	56	1.00	85.5	Cloudy
14	89	77	81.9	57	0	85.0	Cloudy
15	89	76	82.8	61	.13	86.0	Pt.Cldy.
16	88	74	81.3	34	.14	86.2	Cloudy
17	88	76	81.6	74	.01	86.0	Cloudy
18	91	76	81.6	66	.05	86.5	Cloudy
19	88	77	80.9	57	.48	86.3	Cloudy
20	88	77	80.0	57	.07	86.2	Cloudy
21	89	76	81.1	47	T	85.9	Cloudy
22	88	78	82.6	86	T	85.8	Cloudy
23	87	78	81.2	50	.49	86.4	Cloudy
24	82	76	78.9	5	.77	85.1	Cloudy
25	90	75	80.3	60	T	84.2	PtCldy.
26	90	76	81.6	82	.18	85.5	PtCldy.
27	85	77	80.7	55	.04	85.5	Cloudy
28	87	74	78.2	40	.47	84.8	Cloudy
29	90	75	81.3	92	0	85.0	Cloudy
30	91	76	80.7	68	.23	85.2	PtCldy.
31	-	-	-	-	-	-	
	2639	2285	-	-	10.51	-	
MEAN	88.0	76.2	80.8	57		85.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.833

Highest 29.940 Date 26

Lowest 29.710 Date 10

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly

Monthly mean 80.8

Highest 91 Date 18

Lowest 71 Date 2

Greatest daily range 15 Date 29

Mean for this month for 37 years 79.8

Maximum for this month for 37 years 94

Minimum for this month for 37 years 70

Average excess or deficiency of this month compared with a mean of 37 years + 1.0

PRECIPITATION
(Inches)

Total for this month 10.51

Greatest amount in 24 hours 2.04 Date 8

Average for this month for 43 years 12.75

Total from January 1, 1943 to date 79.23

Average from January 1 to date 80.56

Accumulated excess or deficiency from January 1 to date compared with average - 1.33

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 8.24	1942 21.62
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.62	1922 12.73	1933 9.11	1944
1912 12.23	1923 12.31	1934 21.30	1945
1913 9.90	1924 9.00	1935 21.31	1946
1914 14.80	1925 8.17	1936 14.58	1947
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction South

Total movement 4282 miles

Average hourly velocity 5.9 miles per hour

Maximum velocity for five minutes 25 miles per hour from NE on 13

MISCELLANEOUS

Total evaporation for this month - inches

Average daily evaporation - inches

Relative humidity, bihourly mean, percent 84.0

Sunshine, percentage of possible 57

Number of days clear 0 Partly cloudy 4 Cloudy 26

Number of days with .01 inch rain or more 23

DATES

Fogs, light None

Fogs, dense None

Halos, lunar 10

Thunderstorms 1-2-4-6-8-9-10-11-12-13-16-18-19-20-22-23-26-28-30

(19)

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month OCTOBER, 1943

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	91	76	81.8	85	.22	86.3	Pt.Cldy
2	90	76	80.0	57	0	86.7	Cloudy
3	84	77	79.8	62	0	86.7	Cloudy
4	89	77	81.2	48	T	85.4	Cloudy
5	88	76	80.7	55	.75	85.1	Pt.Cldy
6	90	76	82.2	70	.55	85.6	Pt.Cldy
7	87	76	81.0	80	.78	86.0	Cloudy
8	90	76	79.9	57	.25	86.1	Pt.Cldy
9	88	76	80.2	59	0	86.0	Pt.Cldy
10	92	76	82.2	72	0	85.7	Cloudy
11	86	76	80.8	47	0	85.2	Cloudy
12	87	77	79.6	38	.50	84.7	Cloudy
13	89	75	81.5	86	T	84.4	Pt.Cldy
14	91	76	81.6	79	0	85.3	Pt.Cldy
15	90	76	80.8	61	0	85.0	Cloudy
16	86	75	78.8	44	.38	84.7	Cloudy
17	88	78	80.3	63	.02	84.4	Cloudy
18	88	76	79.7	50	.40	84.1	Cloudy
19	91	76	79.9	64	.50	84.0	Pt.Cldy
20	82	76	78.7	19	0	83.4	Cloudy
21	90	76	80.5	67	0	83.6	Pt.Cldy
22	84	76	79.5	70	0	84.2	Cloudy
23	86	76	78.0	37	.70	83.8	Cloudy
24	80	74	77.1	11	1.16	82.6	Cloudy
25	88	76	79.6	48	.01	82.9	Cloudy
26	89	76	80.6	63	0	83.0	Cloudy
27	79	75	77.5	0	.32	82.8	Cloudy
28	79	74	76.0	0	1.53	82.0	Cloudy
29	88	74	81.8	80	.14	81.7	Pt.Cldy
30	80	75	78.0	3	2.02	81.1	Cloudy
31	86	76	79.9	56	T	82.2	Cloudy
	2696	2351	—	—	10.23	—	
MEAN	87.0	75.8	80.0	53	—	84.3	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.823
Highest 29.950 Date 9
Lowest 29.660 Date 22

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-hourly) 80.0
Highest 92 Date 10
Lowest 74 Date 24
Greatest daily range 16 Date 10
Mean for this month for 37 years 79.2
Maximum for this month for 37 years 95
Minimum for this month for 37 years 70
Average excess or [illegible] of this month compared with a mean of 37 years +0.8

PRECIPITATION
(Inches)

Total for this month 10.23
Greatest amount in 24 hours 2.02 Date 30
Average for this month for 74 years 15.78
Total from January 1, 1943 to date 89.46
Average from January 1 to date 96.34
Accumulated [illegible] or deficiency from January 1 to date compared with average -6.88

Total precipitation in this month in:

1906 13.34	1917 7.87	1928 18.02	1939 17.52
1907 21.99	1918 27.07	1929 13.74	1940 16.28
1908 10.96	1919 21.94	1930 7.26	1941 25.17
1909 19.31	1920 17.16	1931 20.42	1942 31.65
1910 15.65	1921 8.27	1932 16.75	1943 10.23
1911 16.53	1922 13.87	1933 19.84	1944
1912 17.65	1923 42.17	1934 17.49	1945
1913 18.63	1924 21.56	1935 8.90	1946
1914 22.16	1925 16.49	1936 11.36	1947
1915 21.86	1926 15.31	1937 16.58	1948
1916 17.99	1927 13.12	1938 17.26	1949

WIND

Prevailing direction South
Total movement 4896 miles
Average hourly velocity 6.6 miles per hour
Maximum velocity for five minutes 26 miles per hour from NW on 30

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 82.2
Sunshine, percentage of possible 53
Number of days clear 0 Partly cloudy 10 Cloudy 21
Number of days with .01 inch rain or more 17

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 7-8-10
Thunderstorms 1-4-5-8-13
[illegible]
Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL; Month NOVEMBER, 1943.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi-H MEAN	Sunshine (HOURS)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	82	75	76.7	16	1.33	81.8	Cloudy
2	88	75	77.8	38	.93	81.2	Cloudy
3	85	74	77.7	47	0	81.4	Pt.Cldy.
4	83	73	77.0	34	.34	81.3	PtCldy.
5	87	74	79.1	68	.19	82.2	Pt.Cldy
6	88	75	78.9	59	.74	82.6	Pt.Cldy
7	88	75	78.0	39	.23	82.8	Cloudy
8	88	75	80.2	77	1.68	82.8	Cloudy
9	85	76	79.1	32	.52	83.2	Cloudy
10	86	74	78.5	46	1.03	82.9	Cloudy
11	86	77	81.7	64	.24	83.4	Pt.Cldy
12	85	77	80.7	52	.40	83.2	Cloudy
13	84	76	78.9	34	.73	82.2	Cloudy
14	84	75	79.8	62	.26	82.6	Cloudy
15	87	77	80.1	45	.63	83.4	Cloudy
16	90	76	82.1	82	0	83.8	Pt.Cldy.
17	88	77	82.2	65	0	84.8	Pt.Cldy
18	88	75	82.3	47	.96	84.9	Pt.Cldy.
19	84	73	78.4	32	3.18	83.2	Cloudy
20	80	73	75.9	0	4.40	81.1	Cloudy
21	85	74	77.7	31	.17	80.8	Cloudy
22	86	73	79.1	77	.14	81.8	Pt.Cldy.
23	84	73	78.2	32	.41	82.2	Pt.Cldy.
24	85	78	80.8	72	0	81.8	Pt.Cldy.
25	83	76	78.6	23	.49	81.7	Cloudy
26	83	75	78.0	34	.81	81.6	Cloudy
27	82	75	77.7	16	1.17	80.9	Cloudy
28	84	75	79.6	49	.52	81.1	Cloudy
29	86	77	81.5	86	.02	81.8	Pt.Cldy.
30	86	78	82.1	82	.17	82.8	Pt.Cldy.
31							
	2560	2256	-	-	21.69	-	
MEAN	85.3	75.2	79.3	48	-	82.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.838
Highest 29.970 Date 25-26
Lowest 29.730 Date 16

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly
Monthly mean 79.3
Highest 90 Date 16
Lowest 73 Date 19
Greatest daily range 14 Date 16
Mean for this month for 37 years 79.0
Maximum for this month for 37 years 92
Minimum for this month for 37 years 69
Average excess of this month compared with a mean of 37 years + 0.3

PRECIPITATION
(Inches)

Total for this month 21.69
Greatest amount in 24 hours 6.37 Date 19-20
Average for this month for 73 years 22.27
Total from January 1, 1943 to date 111.15
Average from January 1 to date 118.61
Accumulated excess or deficiency from January 1 to date compared with average - 7.46

Total precipitation in this month in:

1906 26.64	1917 20.49	1928 17.20	1939 35.18
1907 15.37	1918 14.23	1929 8.99	1940 20.91
1908 31.72	1919 6.63	1930 16.94	1941 24.07
1909 42.50	1920 21.27	1931 30.31	1942 12.60
1910 30.04	1921 19.96	1932 37.13	1943 21.69
1911 15.81	1922 15.63	1933 43.06	1944
1912 21.81	1923 22.16	1934 28.81	1945
1913 16.75	1924 30.29	1935 42.73	1946
1914 18.35	1925 22.95	1936 23.11	1947
1915 22.33	1926 29.39	1937 23.23	1948
1916 14.08	1927 28.35	1938 18.90	1949

WIND

Prevailing direction Northwest
Total movement 5025 miles
Average hourly velocity 7.0 miles per hour
Maximum velocity for five minutes 26 miles per hour from NW on 19

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.2
Sunshine, percentage of possible 48
Number of days clear 0 Partly cloudy 13 Cloudy 17
Number of days with .01 inch rain or more 26

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 3,5,7,10,14,15,19,23
Earthquakes None Felt.

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month DECEMBER, 1943

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				Sunshine %			
1	86	77	82.2	75	.05	83.1	cloudy
2	84	78	80.2	28	.08	82.6	cloudy
3	85	76	81.3	80	0	82.2	clear
4	86	78	82.5	84	.14	82.2	pt.cldy
5	86	79	81.5	60	T	82.0	pt.cldy
6	86	77	82.0	99	.02	81.6	clear
7	86	77	81.8	100	T	82.0	clear
8	85	78	81.8	67	T	81.8	pt.cldy
9	87	80	82.8	90	.01	82.2	pt.cldy
10	86	81	82.4	72	0	82.0	cloudy
11	81	75	77.2	2	2.51	81.5	cloudy
12	78	75	75.8	4	.87	80.0	cloudy
13	85	74	78.2	68	.25	79.4	cloudy
14	86	76	79.8	66	0	80.7	cloudy
15	86	76	80.5	71	T	81.6	cloudy
16	86	76	81.3	83	0	81.1	clear
17	86	74	78.8	62	.92	81.2	cloudy
18	79	72	75.2	3	3.18	80.5	cloudy
19	76	72	73.8	0	4.66	79.1	cloudy
20	82	72	78.4	42	1.28	77.8	cloudy
21	83	76	79.1	89	.02	76.3	pt.cloudy
22	81	76	78.0	55	.04	76.7	cloudy
23	82	75	77.2	44	.80	77.8	cloudy
24	85	74	79.9	95	0	79.3	clear
25	85	75	80.5	90	.03	80.7	cloudy
26	86	77	80.7	91	0	81.2	pt.cldy
27	84	76	79.7	68	.04	81.5	pt.cldy
28	84	77	80.3	78	0	81.3	pt.cldy
29	84	78	80.7	100	0	82.0	clear
30	84	73	78.8	64	.18	81.4	pt.cldy
31	84	75	80.2	75	T	81.8	pt.cldy
	2604	2355	-	-	15.08	-	
MEAN	84.0	76.0	79.8	65	-	80.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.860
Highest 30.060 Date 19
Lowest 29.730 Date 5

TEMPERATURE
Bi-Hourly (Degrees Fahrenheit)

Monthly mean 79.8
Highest 87 Date 9
Lowest 72 Date 20
Greatest daily range 12 Date 17
Mean for this month for 37 years 80.0
Maximum for this month for 37 years 90
Minimum for this month for 37 years 66
Average excess or deficiency of this month compared with a mean of 37 years -0.2

PRECIPITATION
(Inches)

Total for this month 15.08
Greatest amount in 24 hours 5.96 Date 18-19
Average for this month for 43 years 11.66
Total from January 1, 1943 to date 126.23
Average from January 1 to date 130.27
Accumulated excess or deficiency from January 1 to date compared with average -4.04

Total precipitation in this month in:

1906 15.94	1917 11.66	1928 16.43	1939 17.08
1907 9.38	1918 1.90	1929 7.87	1940 2.25
1908 9.07	1919 7.37	1930 7.86	1941 6.11
1909 24.38	1920 2.06	1931 3.47	1942 23.75
1910 13.20	1921 6.50	1932 7.64	1943 15.08
1911 2.63	1922 7.20	1933 18.46	1944
1912 11.47	1923 5.12	1934 15.66	1945
1913 6.55	1924 8.84	1935 13.02	1946
1914 8.88	1925 8.04	1936 3.53	1947
1915 9.45	1926 7.60	1937 32.94	1948
1916 5.71	1927 16.70	1938 29.29	1949

WIND

Prevailing direction Northeast
Total movement 8477 miles
Average hourly velocity 11.4 miles per hour
Maximum velocity for five minutes 37 miles per hour from NW on 19

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 80.3
Sunshine, percentage of possible 65
Number of days clear 7 Partly cloudy 11 Cloudy 13
Number of days with .01 inch rain or more 18

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 3-5
Thunderstorms 2-14
Earthquakes None

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C.Z. ; Month JANUARY, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	80.2	98	0	81.8	Clear
2	84	76	80.3	97	0	82.1	Clear
3	84	76	80.2	75	T	82.0	Pt.Cldy
4	84	76	80.3	65	.08	82.1	Cloudy
5	83	76	80.0	46	.17	81.8	Cloudy
6	84	78	80.2	88	.01	81.2	Pt.Cldy
7	84	77	80.5	83	.10	80.9	Pt.Cldy
8	82	78	80.3	34	0	81.3	Cloudy
9	84	79	80.9	77	0	81.1	Pt.Cldy
10	84	80	81.4	73	.03	82.0	Cloudy
11	84	80	81.3	70	0	82.7	Pt.Cldy
12	85	79	81.4	84	0	82.5	Clear
13	85	75	80.3	90	0	81.8	Clear
14	85	79	80.7	75	0	82.8	Pt.Cldy
15	88	78	81.2	77	.03	83.2	PtCldy
16	85	78	80.8	94	0	82.4	Pt.Cldy
17	85	78	81.0	93	0	81.7	Pt.Cldy
18	85	77	80.7	70	.10	81.2	Pt.Cldy
19	83	74	79.1	51	.18	80.3	Pt.Cldy
20	84	76	80.3	80	.02	80.0	Pt.Cldy
21	83	76	79.9	83	T	79.7	Pt.Cldy
22	84	78	80.4	85	0	79.8	Pt.Cldy
23	85	78	80.6	85	.04	79.8	Clear
24	83	79	80.6	59	0	80.2	Pt.Cldy
25	85	75	78.8	77	.15	79.7	Pt.Cldy
26	84	76	79.9	97	.15	80.2	Clear
27	84	76	80.3	96	0	80.3	Pt.Cldy
28	84	76	80.0	99	.13	80.8	Clear
29	84	77	80.2	99	02	80.6	Clear
30	84	78	80.5	86	0	80.1	Pt.Cldy
31	83	77	79.4	52	.02	80.2	Cloudy
	2609	2391	-	-	1.23	-	
MEAN	84.2	77.1	80.4	79		81.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.883
Highest 30.000 Date 21
Lowest 29.750 Date 10

TEMPERATURE
(Degrees Fahrenheit)

Bi-hourly
Monthly mean 804
Highest 88 Date 15
Lowest 74 Date 19
Greatest daily range 10 Date 25
Mean for this month for 37 years 80.1
Maximum for this month for 37 years 88
Minimum for this month for 37 years 70
Average excess of this month compared with a mean of 37 years +0.3

PRECIPITATION
(Inches)

Total for this month 1.23
Greatest amount in 24 hours 0.30 Date 25-26
Average for this month for 74 years
Total from January 1, 1944 to date 1.23
Average from January 1 to date 3.33
Accumulated deficiency from January 1 to date compared with average -2.10

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944 1.23
1912 .28	1923 1.98	1934 3.94	1945
1913 6.71	1924 .61	1935 5.81	1946
1914 1.35	1925 3.66	1936 1.54	1947
1915 3.41	1926 .70	1937 .20	1948
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction Northeast
Total movement 10520 miles
Average hourly velocity 14.1 miles per hour
Maximum velocity for five minutes 32 miles per hour from NW on 18

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 75.7
Sunshine, percentage of possible 79
Number of days clear 8 Partly cloudy 18 Cloudy 5
Number of days with .01 inch rain or more 15

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None Felt

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL ; Month FEBRUARY, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean 24 hr.	Sunshine Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	83	75	80	63	.17	80.0	Cloudy
2	82	76	79	19	.42	80.0	Cloudy
3	83	75	80	60	1.85	79.7	Cloudy
4	84	78	80	58	.03	79.4	Pt.Cldy
5	84	74	80	73	.18	79.4	Pt.Cldy
6	84	78	80	81	0	78.6	Pt.Cldy
7	84	77	80	85	.09	79.1	Pt.Cldy
8	84	78	80	95	.01	79.5	Clear
9	84	78	80	81	0	79.3	Pt.Cldy
10	83	78	80	76	0	79.4	Pt.Cldy
11	84	79	80	83	0	79.8	Pt.Cldy
12	84	78	80	75	0	79.8	Pt.Cldy
13	84	78	81	77	0	80.0	Pt.Cldy
14	84	79	81	87	T	79.7	Clear
15	84	77	80	84	0	80.2	Pt.Cldy
16	84	78	80	88	T	81.0	Pt.Cldy
17	84	78	80	68	.08	80.8	Pt.Cldy
18	83	79	80	92	0	80.6	Clear
19	84	79	80	65	T	80.9	Pt.Cldy
20	84	78	81	100	0	80.8	Clear
21	84	79	81	97	0	80.2	Pt.Cldy
22	84	77	80	72	.01	80.6	Pt.Cldy
23	84	78	80	82	0	80.7	Clear
24	83	77	80	66	0	81.0	Cloudy
25	83	78	80	87	0	80.7	Clear
26	83	78	80	84	0	79.9	Pt.Cldy
27	83	78	80	77	0	79.7	Clear
28	84	76	80	72	.12	79.8	Pt.Cldy
29	84	78	80	84	0	80.1	Pt.Cldy
30							
31							
	2426	2249	-	-	2.96	-	
MEAN	83.7	77.6	80.2	77	-	80.0	

Note.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.900
Highest 30.000 Date 1
Lowest 29.800 Date 3

TEMPERATURE
Bi. Hr.
(Degrees Fahrenheit)

Monthly mean 80.2
Highest 84 Date 8
Lowest 74 Date 2
Greatest daily range 10 Date 2
Mean for this month for 37 years 80.0
Maximum for this month for 37 years 90
Minimum for this month for 37 years 69
Average excess or deficiency of this month compared with a mean of 37 years +0.2

PRECIPITATION
(Inches)

Total for this month 2.96
Greatest amount in 24 hours 2.27 Date 2 & 3
Average for this month for 44 years 4.19
Total from January 1, 1944 to date 4.86
Average from January 1 to date 74 years 1.53
Accumulated excess or deficiency from January 1 to date compared with average -.67

Total precipitation in this month in:

1906 1.14	1917 .45	1928 .71	1939 .50
1907 1.37	1918 .67	1929 .56	1940 1.83
1908 1.08	1919 .36	1930 .75	1941 2.87
1909 1.92	1920 .54	1931 .97	1942 .69
1910 3.58	1921 1.63	1932 .95	1943 2.58
1911 1.81	1922 .71	1933 .08	1944 2.96
1912 1.81	1923 .69	1934 .55	1945
1913 1.75	1924 2.80	1935 3.10	1946
1914 1.32	1925 .73	1936 .13	1947
1915 12.37	1926 1.78	1937 .46	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction Northeast
Total movement 11024 miles
Average hourly velocity 15.8 miles per hour
Maximum velocity for five minutes 25 miles per hour from NE on 4th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 74.6
Sunshine, percentage of possible 77
Number of days clear 7 Partly cloudy 18 Cloudy 4
Number of days with .01 inch rain or more 10

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month March, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine (Hours)	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	77	80	76	T	80.3	pt.cldy.
2	83	78	80	35	0	80.8	cldy
3	83	77	80	92	.02	80.5	pt.cldy
4	85	79	81	93	0	80.8	pt.cldy
5	86	79	81	62	0	81.4	pt.cldy
6	85	79	81	72	0	81.6	pt.cldy
7	86	79	81	92	.01	81.7	pt.cldy
8	84	79	80	68	0	81.9	cldy
9	83	76	80	68	.11	81.1	cldy
10	83	78	80	68	T	80.9	pt.cldy
11	83	76	80	82	.02	81.0	pt.cldy
12	83	76	80	80	.01	80.2	pt.cldy
13	83	78	80	83	.01	79.8	pt.cldy
14	83	77	80	83	0	80.4	pt.cldy
15	83	77	79	93	0	80.5	pt.cldy
16	84	77	80	100	0	80.4	pt.cldy
17	87	78	81	98	0	80.8	pt.cldy
18	85	78	81	98	0	81.2	pt.cldy
19	88	77	82	96	0	82.1	clear
20	88	75	81	84	0	82.5	pt.cldy
21	86	79	82	89	0	83.2	pt.cldy
22	84	79	81	88	0	83.3	pt.cldy
23	84	78	80	100	0	82.6	clear
24	86	78	81	91	0	82.2	clear
25	86	78	81	82	0	82.4	pt.cldy
26	85	79	81	80	0	82.0	pt.cldy
27	85	79	81	88	0	81.8	clear
28	84	79	81	70	T	81.4	pt.cldy
29	85	79	81	82	0	82.2	pt.cldy
30	85	78	81	79	0	83.2	pt.cldy
31	85	78	81	89	0	83.7	pt.cldy
	2624	2414	-	-	.18	-	
MEAN	84.6	77.9	80.8	83	-	81.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.885
Highest 30.010 Date 22
Lowest 29.790 Date 7

TEMPERATURE
(Bi-Hourly Degrees Fahrenheit)

Monthly mean 80.6
Highest 88 Date 19
Lowest 75 Date 20
Greatest daily range 13 Date 28
Mean for this month for 37 years 80.6
Maximum for this month for 37 years 88
Minimum for this month for 37 years 67
Average excess or deficiency of this month compared with a mean of 37 years 0.0

PRECIPITATION
(Inches)

Total for this month 0.18
Greatest amount in 24 hours 0.11 Date 9
Average for this month for 75 years 1.51
Total from January 1, 1944 to date 4.37
Average from January 1 to date 6.37
Accumulated excess or deficiency from January 1 to date compared with average -2.00

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .61	1929 2.39	1940 .63
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .62	1933 1.11	1944 .18
1912 .86	1923 .56	1934 1.10	1945
1913 .79	1924 .71	1935 .80	1946
1914 1.91	1925 .73	1936 .92	1947
1915 2.66	1926 1.27	1937 1.68	1948
1916	1927	1938	1949

WIND

Prevailing direction Northeast
Total movement 10,118 miles
Average hourly velocity 13.6 miles per hour
Maximum velocity for five minutes 25 miles per hour from NE on 9

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation 74.0 inches
Relative humidity, bihourly mean, percent 83
Sunshine, percentage of possible 23
Number of days clear 5 Partly cloudy 6 Cloudy 3
Number of days with .01 inch rain or more 6

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month APRIL, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	SUNSHINE For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	80.0	99	0	82.6	Clear
2	84	78	80.8	78	.02	82.1	PtCldy
3	86	78	81.8	70	T	81.6	Cldy
4	81	77	79.8	31	.31	80.8	Cldy
5	86	78	81.8	85	.01	80.8	PtCldy
6	85	80	81.8	63	T	81.0	Cldy
7	85	80	81.8	84	0	81.0	PtCldy
8	85	80	81.2	60	0	81.7	Cldy
9	85	80	82.0	83	0	82.4	Clear
10	87	78	82.0	93	0	82.5	PtCldy
11	88	78	82.7	99	0	83.8	Clear
12	89	79	83.1	92	0	84.4	Clear
13	87	79	82.5	94	0	83.8	Clear
14	85	80	82.2	90	0	83.4	Clear
15	87	81	82.6	43	T	83.0	Cldy
16	88	81	83.3	76	.03	83.4	Cldy
17	86	80	82.4	81	0	83.5	Cldy
18	83	78	80.8	35	.38	83.1	Cldy
19	82	77	80.4	23	.16	82.1	Cldy
20	85	80	81.4	67	0	81.3	PtCldy
21	86	79	81.9	85	0	82.0	PtCldy
22	85	79	81.4	94	0	82.3	Clear
23	87	79	81.9	96	0	82.4	PtCldy
24	86	79	81.7	82	0	83.4	Cldy
25	85	78	81.7	83	0	83.1	PtCldy
26	85	76	80.9	65	.82	82.0	PtCldy
27	85	76	80.9	53	.48	82.4	Cldy
28	79	74	76.5	0	5.14	81.1	Cldy
29	78	75	76.8	4	1.19	80.8	Cldy
30	84	75	80.0	79	.39	81.3	Cldy
31	—	—	—	—	—	—	—
MEAN	84.9	78.2	81.3	70	8.93	82.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.861
Highest 29.960 Date 28
Lowest 29.710 Date 8

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.3
Highest 89 Date 12
Lowest 74 Date 28
Greatest daily range 10 Date 11-12
Mean for this month for 37 years 81.2
Maximum for this month for 37 years 94
Minimum for this month for 37 years 72
Average excess of this month compared with a mean of 37 years +0.1

PRECIPITATION
(Inches)

Total for this month 8.93
Greatest amount in 24 hours 5.32 Date 28.29
Average for this month for 74 years 4.15
Total from January 1, 1944 to date 13.30
Average from January 1 to date 10.52
Accumulated excess or deficiency from January 1 to date compared with average +2.78

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 0.86	1939 1.00
1907 1.06	1918 5.34	1929 0.67	1940 1.83
1908 1.27	1919 10.95	1930 6.85	1941 0.36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.23	1943 3.92
1911 3.06	1922 2.11	1933 0.35	1944 8.93
1912 0.75	1923 1.21	1934 5.48	1945
1913 2.69	1924 10.85	1935 1.87	1946
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 0.34	1937 1.65	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction Northeast
Total movement 8882 miles
Average hourly velocity 12.3 miles per hour
Maximum velocity for five minutes 27 miles per hour from NE on 7

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 77.9
Sunshine, percentage of possible 70
Number of days clear 7 Partly cloudy 9 Cloudy 14
Number of days with .01 inch rain or more 11

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 4-27-28-29
Earthquakes None

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month MAY, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	79.4	60	.63	81.4	cloudy
2	85	75	80.6	96	.95	82.2	pt.cldy
3	85	79	81.7	78	0	82.5	pt.cldy
4	85	79	81.1	78	T	83.0	pt.cldy
5	81	76	77.8	21	.68	82.3	Cloudy
6	86	77	81.2	69	.15	82.5	Cloudy
7	81	75	78.2	29	.42	82.4	Cloudy
8	83	74	78.8	59	1.01	81.3	Cloudy
9	84	75	81.0	96	.15	82.1	pt.cldy
10	85	80	81.9	85	T	81.8	pt.cldy
11	81	75	77.4	34	.79	82.0	Cloudy
12	83	73	77.7	58	3.73	80.8	Cloudy
13	79	73	76.5	23	5.17	80.2	Cloudy
14	82	75	78.0	45	.81	79.5	Cloudy
15	82	76	77.8	41	1.03	79.8	Cloudy
16	83	77	78.7	22	.08	80.5	Cloudy
17	84	76	79.3	42	1.64	80.9	Cloudy
18	86	79	81.8	81	0	81.9	pt. Cloudy
19	85	80	82.2	94	0	82.9	Clear
20	85	76	80.8	48	.15	82.8	Cloudy
21	81	77	78.8	42	2.55	81.4	Cloudy
22	81	75	78.8	44	2.88	80.9	Cloudy
23	81	74	77.8	47	1.38	80.3	Cloudy
24	86	76	79.2	41	.05	81.6	Cloudy
25	88	75	81.2	71	0	82.7	pt.cldy
26	89	78	82.6	71	T	83.2	pt.cldy
27	88	79	82.9	70	.02	84.3	Cloudy
28	85	78	80.6	54	.08	83.9	Cloudy
29	80	75	78.0	15	.60	82.8	Cloudy
30	88	76	80.3	64	.02	82.6	Cloudy
31	87	76	79.7	69	.46	83.7	pt.cldy
	--	--	--	------	25.43		
MEAN	84.1	76.3	79.8	55	--	81.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.865
Highest 29.950 Date 6
Lowest 29.770 Date 25

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.8
Highest 89 Date 26
Lowest 73 Date 12 - 13
Greatest daily range 13 Date 25
Mean for this month for 37 years 80.8
Maximum for this month for 37 years 95
Minimum for this month for 37 years 71
Average excess or deficiency of this month compared with a mean of 37 years -1.0

PRECIPITATION
(Inches)

Total for this month 25.43
Greatest amount in 24 hours 5.32 Date 21-22
Average for this month for 74 years 12.69
Total from January 1, 1944 to date 38.73
Average from January 1 to date 23.21
Accumulated excess or deficiency from January 1 to date compared with average 15.52

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943 16.27
1911 17.13	1922 8.88	1933 8.12	1944 25.43
1912 12.03	1923 11.18	1934 11.94	1945
1913 22.60	1924 14.86	1935 17.16	1946
1914 17.76	1925 8.23	1936 12.86	1947
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction Northeast
Total movement 6907 miles
Average hourly velocity 9.3 miles per hour
Maximum velocity for five minutes 24 miles per hour from NE on 3

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 84.1
Sunshine, percentage of possible 55
Number of days clear 1 Partly cloudy 9 Cloudy 21
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 15,16,17,21,28
Earthquakes
None felt

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JUNE, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	75	79.2	65	.09	84.8	Cloudy
2	86	76	80.7	64	.01	83.7	Cloudy
3	90	77	82.2	75	0	83.8	Cloudy
4	88	78	82.8	100	.16	84.5	PtCldy
5	88	78	82.9	56	0	85.5	PtCldy
6	90	79	83.2	77	0	85.4	PtCldy
7	88	77	81.4	61	0	84.8	Cloudy
8	88	78	80.8	59	.03	83.8	Cloudy
9	83	76	78.5	3	.28	83.0	Cloudy
10	82	76	78.0	6	.09	82.4	Cloudy
11	87	76	78.5	17	.08	82.2	Cloudy
12	85	75	79.8	43	.10	82.5	Cloudy
13	88	77	81.1	70	.02	82.8	Cloudy
14	90	78	82.2	48	.11	84.0	Cloudy
15	86	77	80.4	53	T	83.8	Cloudy
16	89	76	79.6	52	.23	84.1	Cloudy
17	88	76	80.0	52	0	83.7	Cloudy
18	87	76	79.3	52	.16	84.3	Cloudy
19	88	75	79.5	52	T	84.7	Cloudy
20	88	76	80.4	69	T	84.8	Cloudy
21	92	76	82.2	64	T	85.0	PtCldy
22	86	76	79.9	46	.19	84.7	Cloudy
23	86	75	78.2	29	.40	84.3	Cloudy
24	87	75	80.3	61	.09	84.4	Cloudy
25	86	78	81.2	52	.07	85.5	Cloudy
26	81	75	78.8	13	1.25	83.8	Cloudy
27	88	77	82.2	59	.30	82.9	PtCldy
28	87	79	82.8	57	.28	84.5	Cloudy
29	89	76	81.2	71	1.51	85.0	Cloudy
30	86	71	78.9	44	.86	84.8	Cloudy
31	-	-	-	-	-	-	-
MAN	-	-	-	-	6.31	-	
	87.2	76.3	80.5	52		84.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.834
Highest 29.950 Date 18
Lowest 29.710 Date 14

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.5
Highest 92 Date 21
Lowest 71 Date 30
Greatest daily range 16 Date 21
Mean for this month for 37 years 80.2
Maximum for this month for 37 years 93
Minimum for this month for 37 years 68
Average excess or deficiency of this month compared with a mean of 37 years + 0.3

PRECIPITATION
(Inches)

Total for this month 6.31
Greatest amount in 24 hours 1.66 Date 28-29
Average for this month for 74 years 13.82
Total from January 1, 1944 to date 45.04
Average from January 1 to date 37.03
Accumulated excess or deficiency from January 1 to date compared with average + 8.01

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942 18.59
1910 13.63	1921 15.18	1932 14.36	1943 12.18
1911 15.58	1922 8.30	1933 15.88	1944 6.31
1912 15.90	1923 15.17	1934 9.89	1945
1913 11.81	1924 16.49	1935 16.26	1946
1914 16.30	1925 13.77	1936 10.57	1947
1915 16.01	1926 31.23	1937 26.91	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction South
Total movement 4100 miles
Average hourly velocity 5.7 miles per hour
Maximum velocity for five minutes 26 miles per hour from SE on 30

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 81.9
Sunshine, percentage of possible 52
Number of days clear 0 Partly cloudy 5 Cloudy 25
Number of days with .01 inch rain or more 21

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 12 days
Earthquakes None felt

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JULY, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	Sunshine Evaporation (inches) For 24-hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	82	77	79.4	29	.47	84.6	Cloudy
2	88	77	82.1	56	.18	84.5	Cloudy
3	85	77	79.7	25	.87	84.8	Cloudy
4	85	77	80.6	50	.10	84.7	Cloudy
5	87	79	82.3	86	0	84.3	Pt.cldy
6	86	74	79.4	45	1.36	83.9	Cloudy
7	82	75	77.9	18	.89	83.2	Cloudy
8	86	76	79.8	39	.36	83.4	Cloudy
9	85	78	81.6	34	0	83.5	Cloudy
10	82	76	79.6	13	.22	82.6	Cloudy
11	87	79	82.2	53	.01	83.2	Cloudy
12	88	79	83.1	84	T	83.3	pt.cldy
13	88	79	83.4	74	.40	83.7	pt.cldy
14	89	78	82.8	68	.06	84.3	pt.cldy
15	85	77	80.9	71	.12	83.5	Cloudy
16	87	78	81.5	59	.01	84.2	Cloudy
17	86	76	80.8	58	1.56	84.5	Cloudy
18	86	78	81.0	63	.74	84.2	Cloudy
19	87	80	83.5	88	.10	84.4	pt.cldy
20	86	78	82.0	60	.37	84.2	Cloudy
21	88	77	82.1	74	.24	84.3	pt.cldy
22	83	78	81.2	18	1.18	84.7	Cloudy
23	85	79	82.1	39	.63	83.8	Cloudy
24	88	75	79.2	48	1.62	83.5	Cloudy
25	85	76	78.4	41	.17	83.4	Cloudy
26	85	75	78.8	38	.05	83.0	Cloudy
27	90	75	82.2	82	0	83.4	pt.cldy
28	87	79	82.1	54	.11	84.4	pt.cldy
29	88	77	81.6	63	0	84.5	pt.cldy
30	88	77	81.9	62	0	85.4	Cloudy
31	88	78	82.8	83	T	85.0	Pt.cldy
MEAN	86.2	77.2	81.1	52	11.82	84.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.852
Highest 29.940 Date 7 & 14
Lowest 29.730 Date 31

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly
Monthly mean 81.1
Highest 90 Date 27
Lowest 74 Date 6
Greatest daily range 15 Date 27
Mean for this month for 37 years 80.3
Maximum for this month for 37 years 91
Minimum for this month for 37 years 70
Average excess or deficiency of this month compared with a mean of 37 years +0.8

PRECIPITATION
(Inches)

Total for this month 11.82
Greatest amount in 24 hours 1.76 Date 24-25
Average for this month for 44 years 14 15.53
Total from January 1, 1944 to date 58.86
Average from January 1 to date 52.56
Accumulated excess or deficiency from January 1 to date compared with average +4.30
Total precipitation in this month in

1906 19.23	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.36	1929 18.67	1940 15.90
1908 14.76	1919 13.80	1930 8.99	1941 20.89
1909 12.83	1920 17.58	1931 13.36	1942 17.35
1910 21.07	1921 10.49	1932 17.45	1943 10.44
1911 14.58	1922 4.40	1933 9.88	1944 11.82
1912 13.13	1923 10.93	1934 9.21	1945
1913 15.13	1924 20.63	1935 26.23	1946
1914 10.74	1925 21.08	1936 18.72	1947
1915 20.72	1926 16.15	1937 9.30	1948
1916 10.44	1927 18.64	1938 22.25	1949

WIND

Prevailing direction Northeast
Total movement 5216 miles
Average hourly velocity 7.0 miles per hour
Maximum velocity for five minutes 24 miles per hour from NE on 5

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation 83.4 inches
Relative humidity, bihourly mean, percent 52
Sunshine, percentage of possible 10
Number of days clear 0 Partly cloudy 21 Cloudy 24
Number of days with .01 inch rain or more

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 14 days
Earthquakes None

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month AUGUST, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	89	78	82.6	64	.41	86.1	Pt.Cldy
2	86	78	79.9	21	.10	85.2	Cloudy
3	84	74	79.2	42	.52	84.8	Cloudy
4	85	74	79.6	45	T	84.2	Cloudy
5	87	76	80.5	65	.34	84.7	Cloudy
6	84	74	78.7	38	1.57	83.7	Cloudy
7	81	75	78.9	2	1.51	82.1	Cloudy
8	85	77	80.0	51	.51	82.6	Cloudy
9	84	75	79.0	34	.96	83.6	Cloudy
10	84	75	79.2	35	.01	83.8	Cloudy
11	87	75	80.5	59	.02	84.3	Cloudy
12	84	76	79.8	39	.03	84.2	Cloudy
13	87	76	80.0	23	.45	83.9	Cloudy
14	85	77	79.5	27	.29	82.8	Cloudy
15	85	76	80.2	38	1.04	82.6	Cloudy
16	84	78	80.5	52	.55	83.5	Cloudy
17	87	75	80.9	76	1.48	84.6	Pt.Cldy
18	86	77	80.4	59	.51	85.0	Pt.Cldy
19	85	76	79.4	31	.10	84.2	Cloudy
20	87	77	81.1	72	T	83.8	Cloudy
21	87	76	80.8	52	.34	84.3	Cloudy
22	85	75	79.0	52	.60	84.4	Cloudy
23	91	74	79.7	66	.01	84.8	Cloudy
24	87	75	78.4	47	1.35	84.4	Cloudy
25	87	75	81.4	87	0	84.4	Pt.Cldy
26	87	77	82.4	49	.86	85.5	Cloudy
27	84	77	79.3	12	.57	84.5	Cloudy
28	82	74	78.1	13	3.64	83.1	Cloudy
29	88	75	81.6	91	0	83.4	Pt.Cldy
30	88	77	82.0	67	.34	85.8	Pt.Cldy
31	83	76	77.4	22	.29	85.5	Cloudy
	-	-	-	-	18.40	-	
MEAN	85.6	75.8	80.0	46	-	84.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.844
Highest 29.940 Date 12
Lowest 29.730 Date 17

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly
Monthly mean 80.0
Highest 91 Date 23
Lowest 74 Date 23 & 28
Greatest daily range 17 Date 23
Mean for this month for 38 years 80.0
Maximum for this month for 38 years 93
Minimum for this month for 38 years 70
Average excess or deficiency of this month compared with a mean of 38 years ± 0.0

PRECIPITATION
(Inches)

Total for this month 18.40
Greatest amount in 24 hours 3.91 Date 27 & 28
Average for this month for 74 years 15.35
Total from January 1, 1944 to date 75.26
Average from January 1 to date 67.91
Accumulated excess from January 1 to date compared with average +7.35

Total precipitation in this month in:

1906	18.31	1917	15.79	1928	24.49	1939	11.66
1907	18.89	1918	18.85	1929	23.78	1940	19.04
1908	16.89	1919	6.77	1930	14.35	1941	16.95
1909	15.42	1920	23.04	1931	17.52	1942	10.74
1910	14.93	1921	18.45	1932	12.10	1943	20.00
1911	11.60	1922	14.53	1933	8.27	1944	18.40
1912	9.87	1923	15.35	1934	13.86	1945	
1913	17.91	1924	7.42	1935	14.72	1946	
1914	16.01	1925	7.71	1936	13.78	1947	
1915	12.89	1926	20.84	1937	13.26	1948	
1916	8.34	1927	26.63	1938	22.32	1949	

WIND

Prevailing direction South
Total movement 4557 miles
Average hourly velocity 6.1 miles per hour
Maximum velocity for five minutes 22 miles per hour from NE on 5

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.0
Sunshine, percentage of possible 46
Number of days clear 0 Partly cloudy 6 Cloudy 25
Number of days with .01 inch rain or more 27

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 2-4-6-7-8-9-13-14-15-16-17-23
24-26-27-30 (16 days)

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month September, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	75	80.6	80	0	85.0	Pt.cldy
2	88	77	81.5	78	.01	84.7	Pt.cldy
3	87	77	82.2	76	0	84.7	Pt.cldy
4	86	75	81.1	67	.75	85.4	Cloudy
5	90	77	82.3	88	0	85.1	Pt.cldy
6	87	77	81.2	60	T	85.8	Cloudy
7	89	77	81.2	55	.07	85.5	Pt.cldy
8	86	77	80.8	63	.14	85.4	Cloudy
9	85	77	80.1	49	.30	85.2	Cloudy
10	87	77	79.2	52	.03	85.0	Cloudy
11	90	75	80.8	72	0	85.0	pt.cldy
12	92	75	82.2	95	.01	85.2	pt.cldy
13	92	77	82.2	84	.12	85.7	Pt. cldy
14	89	77	81.2	61	.19	84.8	Cloudy
15	85	76	79.5	20	0	85.0	Cloudy
16	86	75	78.6	49	.18	84.7	pt.cldy
17	89	75	81.2	89	0	84.8	Pt.cldy
18	90	77	79.8	48	.09	85.8	Pt.cldy
19	89	74	80.5	75	.73	84.8	pt.cldy
20	89	77	81.4	86	0	84.7	pt.cldy
21	88	77	81.9	86	0	85.0	Pt.cldy
22	90	77	82.2	69	0	85.1	Cloudy
23	91	77	82.3	83	.45	84.9	Pt.cldy
24	86	76	80.5	56	.16	84.2	Cloudy
25	89	76	81.0	74	.43	83.9	Pt.cldy
26	89	76	81.8	56	T	84.0	Cloudy
27	87	78	82.0	37	.52	84.0	Cloudy
28	88	78	81.8	47	.88	84.9	Cloudy
29	85	77	80.2	46	.08	84.8	Cloudy
30	88	76	80.8	74	.11	85.2	Pt.cldy
31							
	—	—	—	—	4.40	—	
MEAN	88.1	76.5	81.1	66	—	84.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.846
Highest 29.940 Date 7
Lowest 29.740 Date 28

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly
Monthly mean 81.1
Highest 92 Date 12
Lowest 74 Date 19
Greatest daily range 17 Date 18
Mean for this month for 38 years 79.9
Maximum for this month for 38 years 94
Minimum for this month for 38 years 70
Average excess or deficiency of this month compared with a mean of 38 years +1.2

PRECIPITATION
(Inches)

Total for this month 4.40
Greatest amount in 24 hours .78 Date 18-19
Average for this month for 44 years 12.64
Total from January 1, 1944 to date 74 Average 77.66
Average from January 1 to date 80.55
Accumulated excess or deficiency from January 1 to date compared with average -5.89

Total precipitation in this month in:

1906 12.48	1917 17.87	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 8.24	1942 21.62
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.62	1922 12.73	1933 9.11	1944 4.40
1912 12.23	1923 12.31	1934 21.30	1945
1913 9.90	1924 9.00	1935 21.31	1946
1914 14.80	1925 8.17	1936 14.58	1947
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction South
Total movement 4147 miles
Average hourly velocity 5.8 miles per hour
Maximum velocity for five minutes 23 miles per hour from South on 21

MISCELLANEOUS

Total evaporation for this month ——— inches
Average daily evaporation 2.0 inches
Relative humidity, bihourly mean, percent 80.0
Sunshine, percentage of possible 66
Number of days clear 0 Partly cloudy 17 Cloudy 13
Number of days with .01 inch rain or more 19

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 18, 23, 27, & 30
Earthquakes

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month OCTOBER, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (Inches) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	76	81.1	55	T	85.9	Pt. Cldy
2	86	77	81.2	52	.94	85.8	Cloudy
3	88	76	79.5	54	3.00	85.5	Cloudy
4	87	77	79.7	62	.38	85.5	Cloudy
5	86	76	79.8	64	.69	85.0	Cloudy
6	84	77	80.0	42	.06	84.0	Cloudy
7	84	75	79.2	56	.25	84.3	Cloudy
8	88	75	77.8	52	.29	84.8	Cloudy
9	87	74	80.1	79	0	84.6	Pt.Cldy
10	83	76	78.2	19	.54	84.2	Cloudy
11	82	75	77.5	11	.58	83.5	Cloudy
12	88	75	78.5	38	.92	83.3	Cloudy
13	87	74	78.8	47	1.42	84.0	Cloudy
14	85	75	77.7	47	.18	84.2	Cloudy
15	86	74	78.9	64	0	84.7	Cloudy
16	88	74	78.0	45	1.45	84.5	Cloudy
17	88	74	79.0	64	0	84.9	Pt.Cldy
18	90	75	80.2	42	0	83.9	Pt.Cldy
19	90	75	81.7	96	0	83.7	Pt.Cldy
20	86	76	80.0	48	1.43	85.3	Cloudy
21	87	75	80.4	66	1.31	85.0	Cloudy
22	84	76	79.0	58	.33	83.9	Cloudy
23	79	75	76.8	6	1.34	82.7	Cloudy
24	87	74	78.6	61	.92	82.6	Cloudy
25	83	75	78.5	42	.29	83.4	Cloudy
26	87	74	79.1	67	T	83.5	Cloudy
27	83	76	77.7	46	.47	83.1	Cloudy
28	84	74	77.7	60	.23	82.9	Cloudy
29	83	73	76.8	44	2.97	82.6	Cloudy
30	84	75	77.9	56	.06	83.0	Cloudy
31	84	75	77.9	46	.10	83.3	Cloudy
	-	-	-	-	20.15	-	
MEAN	85.7	75.1	78.9	51	- -	84.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.823
Highest 29.930 Date 16
Lowest 29.710 Date 3

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-Hourly) 78.9
Highest 90 Date 19
Lowest 73 Date 29
Greatest daily range 15 Date 19
Mean for this month for 38 years 79.2
Maximum for this month for 38 years 95
Minimum for this month for 38 years 70
Average excess or deficiency of this month compared with a mean of 38 years -0.3

PRECIPITATION
(Inches)

Total for this month 20.15
Greatest amount in 24 hours 3.07 Date 2 & 3
Average for this month for 75 years 15.84
Total from January 1, 1944 to date 99.81
Average from January 1 to date 96.39
Accumulated excess from January 1 to date compared with average + 3.42

Total precipitation in this month in:

1906 13.34	1917 7.87	1928 18.02	1939 17.52
1907 21.99	1918 27.07	1929 13.74	1940 16.28
1908 10.96	1919 21.94	1930 7.26	1941 25.17
1909 19.31	1920 17.16	1931 20.42	1942 31.65
1910 15.65	1921 8.27	1932 16.75	1943 10.23
1911 16.53	1922 13.87	1933 19.84	1944 20.15
1912 17.65	1923 42.17	1934 17.49	1945
1913 18.63	1924 21.56	1935 8.90	1946
1914 22.16	1925 16.49	1936 11.36	1947
1915 21.86	1926 15.31	1937 16.58	1948
1916 17.59	1927 13.12	1938 17.26	1949

WIND

Prevailing direction SOUTH
Total movement 4953 miles
Average hourly velocity 6.7 miles per hour
Maximum velocity for five minutes 27 miles per hour from NW on 22

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 84.4
Sunshine, percentage of possible 51
Number of days clear 0 Partly cloudy 5 Cloudy 26
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 26th
Thunderstorms 4-6-10-21-25-26
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month NOVEMBER, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible] %	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	77.7	31	.34	83.3	Cloudy
2	83	75	78.7	56	.01	83.6	Cloudy
3	89	76	80.8	82	.01	83.5	Pt. cldy.
4	88	75	80.8	94	0	82.8	Clear
5	84	76	79.6	52	.39	83.0	Pt. cldy.
6	83	76	79.2	27	1.61	83.9	Cloudy
7	86	77	81.2	40	.10	82.7	Cloudy
8	84	76	79.3	44	1.52	82.2	Cloudy
9	78	72	75.8	0	3.79	83.2	Cloudy
10	85	75	79.2	67	T	84.1	Pt. Cldy
11	86	75	80.2	93	0	84.1	Pt. Cldy
12	83	76	78.6	43	.39	83.2	Cloudy
13	87	75	78.6	47	2.30	82.8	Cloudy
14	84	74	77.3	38	1.24	82.8	Cloudy
15	83	74	77.8	74	.33	82.4	Pt. Cldy
16	86	71	78.3	83	.26	83.2	Pt. Cldy
17	84	73	78.6	63	.70	83.4	Pt. Cldy
18	85	74	79.9	67	.02	83.7	Pt. Cldy
19	85	74	79.2	80	.15	84.1	Pt. Cldy
20	85	74	80.1	96	.13	83.3	Clear
21	85	76	80.8	96	T	83.9	Clear
22	85	78	81.9	68	.05	83.7	Pt. Cldy
23	85	76	81.0	65	1.66	83.7	Pt. Cldy
24	84	77	81.2	38	.27	83.7	Cloudy
25	86	78	81.8	53	.31	83.0	Cloudy
26	86	79	82.3	73	T	82.7	Pt. Cldy
27	86	80	81.9	70	0	83.1	Cloudy
28	87	77	81.8	73	0	82.4	Pt. Cldy
29	85	78	80.9	63	.11	83.1	Pt. Cldy
30	85	75	81.2	83	.72	83.9	Pt. Cldy
31	-	-	-	-	-	-	-
	-	-	-	-	16.41	-	
MEAN	84.9	75.6	79.8	62	-	83.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.822
Highest 29.990 Date 19
Lowest 29.690 Date 2

TEMPERATURE
Bi-Hourly (Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.8
Highest 89 Date 3
Lowest 71 Date 16
Greatest daily range 15 Date 16
Mean for this month for 38 years 79.0
Maximum for this month for 38 years 92
Minimum for this month for 38 years 69
Average excess of this month compared with a mean of 38 years 40.8

PRECIPITATION
(Inches)

Total for this month 16.41
Greatest amount in 24 hours 4.06 Date 8-9
Average for this month for 74 years 22.19
Total from January 1, 1944 to date 116.22
Average from January 1 to date 118.58
Accumulated deficiency from January 1 to date compared with average - 2.36

Total precipitation in this month in:

1906 26.64	1917 20.49	1928 17.20	1939 35.18
1907 15.37	1918 14.23	1929 8.99	1940 20.91
1908 31.72	1919 6.63	1930 16.94	1941 24.07
1909 42.50	1920 21.27	1931 30.31	1942 12.60
1910 30.04	1921 19.96	1932 37.13	1943 21.69
1911 15.81	1922 15.63	1933 43.06	1944 16.41
1912 21.81	1923 22.16	1934 28.81	1945
1913 16.75	1924 30.29	1935 42.73	1946
1914 18.35	1925 22.95	1936 23.11	1947
1915 22.33	1926 29.39	1937 23.23	1948
1916 14.08	1927 28.35	1938 18.90	1949

WIND

Prevailing direction Northeast
Total movement 6982 miles
Average hourly velocity 9.6 miles per hour
Maximum velocity for five minutes 32 miles per hour from NE on 30

MISCELLANEOUS

Total evaporation for this month - - inches
Average daily evaporation - - inches
Relative humidity, bihourly mean, percent 82.9
Sunshine, percentage of possible 62
Number of days clear 3 Partly cloudy 15 Cloudy 12
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 7 - 8 - 9
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone ; Month December, 1944

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 Hour Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	75	81.0	69	67	82.8	Cloudy
2	85	77	80.8	74	.18	83.0	pt.cldy
3	85	79	81.8	84	.05	83.0	clear
4	85	79	81.8	90	0	82.5	pt.cldy
5	85	76	80.1	62	1.13	81.8	pt.cldy
6	85	75	80.2	96	.03	82.1	clear
7	85	77	80.5	63	.11	82.7	pt.cldy
8	85	78	81.7	62	.04	81.8	pt.cldy
9	85	75	80.2	59	.06	81.8	cloudy
10	84	76	80.6	30	.40	82.0	cloudy
11	85	79	81.9	95	.01	81.7	pt.cldy
12	84	74	79.5	37	.89	82.0	cloudy
13	82	73	78.3	15	2.82	81.2	cloudy
14	77	73	74.8	0	10.80	78.8	cloudy
15	83	72	78.0	60	3.08	79.1	cloudy
16	84	75	79.4	62	.45	79.6	pt.cldy
17	83	77	79.5	72	.04	79.9	pt.cldy
18	85	78	81.1	93	.01	81.1	clear
19	85	78	80.9	83	.04	81.2	clear
20	82	76	79.8	51	.46	80.5	cloudy
21	82	77	79.6	59	.31	79.4	cloudy
22	83	78	80.1	53	.47	79.6	cloudy
23	83	78	79.4	40	.11	80.0	cloudy
24	84	75	79.4	95	.07	79.7	pt.cloudy
25	85	78	80.3	85	T	79.8	ptcldy
26	85	78	80.4	83	.08	80.1	ptcldy
27	85	77	80.2	95	.02	80.0	pt.cldy
28	84	77	80.0	98	.03	80.0	clear
29	85	77	80.5	100	0	79.4	clear
30	85	77	80.3	91	0	80.2	clear
31	84	78	80.1	100	0	81.0	clear
	—	—	—	—	22.36	—	
MEAN	84.0	76.5	80.1	69	—	80.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.838
Highest 29.990 Date 14
Lowest 29.710 Date 6

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.1
Highest 85 Date 3
Lowest 72 Date 15
Greatest daily range 11 Date 15
Mean for this month for 38 years 80.0
Maximum for this month for 38 years 90
Minimum for this month for 38 years 66
Average excess or deficiency of this month compared with a mean of 38 years + 0.1

PRECIPITATION
(Inches)

Total for this month 22.36
Greatest amount in 24 hours 13.50 Date 14-15
Average for this month for 74 years 11.80
Total from January 1, 1944 to date 138.58
Average from January 1 to date 130.38
Accumulated excess or deficiency from January 1 to date compared with average + 8.20

Total precipitation in this month in:

1906 15.64	1917 11.66	1928 16.43	1939 17.08
1907 9.36	1918 1.90	1929 7.87	1940 4.25
1908 9.07	1919 7.37	1930 7.86	1941 6.11
1909 34.38	1920 2.06	1931 3.47	1942 23.75
1910 15.20	1921 6.50	1932 7.64	1943 15.08
1911 2.63	1922 7.20	1933 18.46	1944 22.36
1912 11.47	1923 5.12	1934 15.66	1945
1913 6.55	1924 8.84	1935 13.02	1946
1914 8.68	1925 6.04	1936 3.53	1947
1915 9.45	1926 7.60	1937 32.94	1948
1916 5.71	1927 16.70	1938 29.29	1949

WIND

Prevailing direction Northeast
Total movement 9590 miles
Average hourly velocity 13.3 miles per hour
Maximum velocity for five minutes 31 miles per hour from NE on 14

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 81.4
Sunshine, percentage of possible 69
Number of days clear 8 Partly cloudy 12 Cloudy 11
Number of days with .01 inch rain or more 26

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None
None

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JANUARY, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) Pan 8 hours Sunk 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	78	80.2	66	0	81.0	PtCldy
2	84	77	80.5	92	.04	80.9	PtCldy
3	84	78	80.6	77	.03	80.3	PtCldy
4	84	78	80.3	82	.01	80.3	PtCldy
5	83	75	79.6	85	T	79.5	Clear
6	84	75	79.8	90	T	79.2	PtCldy
7	84	73	78.1	84	0	79.4	PtCldy
8	87	71	78.2	87	0	80.6	PtCldy
9	84	72	78.1	79	T	80.8	PtCldy
10	83	77	79.8	97	.03	81.0	PtCldy
11	83	73	79.6	91	.01	80.4	Clear
12	84	78	80.2	99	0	79.9	Clear
13	86	75	80.2	100	T	79.7	Clear
14	87	74	80.7	97	.01	80.2	PtCldy
15	87	74	80.1	100	.03	80.8	Clear
16	84	77	80.7	91	0	81.8	Clear
17	84	78	80.6	91	0	81.6	Clear
18	83	75	79.2	68	.24	80.9	PtCldy
19	84	78	80.2	86	0	80.2	PtCldy
20	83	77	80.3	74	.01	80.1	PtCldy
21	83	78	80.3	73	.01	79.8	PtCldy
22	84	79	80.2	71	.01	80.1	Cldy
23	83	78	79.8	76	.03	80.0	Cldy
24	84	75	79.8	80	.25	80.3	PtCldy
25	83	75	79.5	61	.17	79.9	Cldy
26	84	76	79.0	69	.04	79.1	PtCldy
27	81	74	77.6	35	.71	78.9	Cldy
28	84	75	80.2	90	.17	79.0	PtCldy
29	84	79	80.6	74	0	79.7	PtCldy
30	83	77	80.1	70	.09	80.8	Cldy
31	83	79	80.2	72	0	80.4	PtCldy
	-	-	-	-	1.89	-	
MEAN	82.9	76.1	79.8	81	-	80.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.901
Highest 30.060 Date 11
Lowest 29.770 Date 28

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.8
Highest 87 Date 8
Lowest 71 Date 8
Greatest daily range 16 Date 8
Mean for this month for 38 years 80.1
Maximum for this month for 38 years 88
Minimum for this month for 38 years 70
Average ~~excess or~~ deficiency of this month compared with a mean of 38 years - 0.3

PRECIPITATION
(Inches)

Total for this month 1.89
Greatest amount in 24 hours 0.86 Date 27-28
Average for this month for 75 years 3.31
Total from January 1, 1945 to date 1.89
Average from January 1 to date 3.31
Accumulated ~~excess or~~ deficiency from January 1 to date compared with average - 1.42

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944 1.23
1912 .28	1923 1.98	1934 3.94	1945 1.89
1913 6.71	1924 .61	1935 5.81	1946
1914 1.35	1925 3.66	1936 1.24	1947
1915 3.41	1926 .70	1937 4.20	1948
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction Northeast
Total movement 10467 miles
Average hourly velocity 14.1 miles per hour
Maximum velocity for five minutes per hour from 26 miles North on 24

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 74.7
Sunshine, percentage of possible 81
Number of days clear 7 Partly cloudy 19 Cloudy 5
Number of days with .01 inch rain or more 18

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C.Z. ; Month February, 194_

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN Bi-H	EVAPORATION (Tanks) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	77	80.2	77	.12	80.2	Pt.Cldy
2	82	78	79.5	78	.09	80.1	Cloudy
3	83	77	79.8	92	0	80.1	Pt.Cldy
4	83	78	80.0	93	0	79.5	Pt.Cldy
5	84	78	80.2	86	0	79.2	Clear
6	84	77	80.5	97	.01	80.2	Clear
7	84	78	80.5	79	.01	80.6	Clear
8	84	78	80.6	82	0	81.1	Pt.Cldy
9	84	78	79.8	81	T	80.7	Clear
10	84	76	80.4	89	.06	81.2	Clear
11	84	78	80.2	88	0	80.8	Clear
12	84	78	80.4	92	0	80.7	Clear
13	84	78	80.2	93	0	80.8	Clear
14	84	75	80.2	92	.05	80.6	Clear
15	84	79	80.4	85	0	81.1	Clear
16	84	78	80.2	81	T	80.9	Pt.Cldy
17	84	74	80.1	75	28	80.9	Pt.Cldy
18	84	77	80.0	88	0	81.0	Pt.Cldy
19	84	79	80.6	86	0	80.3	Pt.Cldy
20	84	78	80.4	85	0	80.1	Pt.Cldy
21	84	78	80.4	76	.01	79.9	Pt.Cldy
22	84	77	79.7	78	T	80.8	Pt.Cldy
23	84	78	79.9	89	0	81.0	Pt.Cldy
24	84	78	80.7	92	0	81.0	Pt.Cldy
25	84	76	79.8	73	.87	80.4	Pt.Cldy
26	83	75	79.6	87	.07	80.2	Pt.Cldy
27	83	78	80.1	95	0	80.3	Pt.Cldy
28	84	78	79.9	80	T	80.5	Pt.Cldy
29							
30							
31							
	2346	2167	--	--	.87	--	
MEAN	83.8	77.4	80.2	85	--	80.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.891
Highest 30.040 Date 4
Lowest 29.780 Date 17

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.2
Highest 84 Date 28
Lowest 74 Date 17
Greatest daily range 10 Date 17
Mean for this month for 38 years 80.0
Maximum for this month for 38 years 90
Minimum for this month for 38 years 69
Average excess or deficiency of this month compared with a mean of 38 years +0.2

PRECIPITATION
(Inches)

Total for this month .87
Greatest amount in 24 hours .28 Date 17
Average for this month for 75 years 1.53
Total from January 1, 1945 to date 2.76
Average from January 1 to date 4.84
Accumulated excess or deficiency from January 1 to date compared with average -2.08

Total precipitation in this month in:

1906 1.14	1917 .45	1928 .71	1939 .50
1907 1.37	1918 .67	1929 .56	1940 1.83
1908 1.08	1919 .36	1930 .75	1941 2.87
1909 1.92	1920 .54	1931 .97	1942 .69
1910 3.58	1921 1.63	1932 .95	1943 2.58
1911 1.81	1922 .71	1933 .08	1944 2.96
1912 1.81	1923 .69	1934 .55	1945 .87
1913 1.75	1924 2.80	1935 3.10	1946
1914 1.32	1925 .73	1936 .13	1947
1915 12.37	1926 1.78	1937 .46	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction Northeast
Total movement 11076 miles
Average hourly velocity 16.5 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 24

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 73.8
Sunshine, percentage of possible 85
Number of days clear 10 Partly cloudy 17 Cloudy 1
Number of days with .01 inch rain or more 10

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes

1066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month MARCH, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	78	80.2	79	.02	81.1	Pt.Cldy
2	84	78	80.2	81	0	81.1	Pt.Cldy
3	83	78	80.1	76	0	81.2	Pt.Cldy
4	84	78	80.1	89	.01	80.8	Pt.Cldy
5	83	77	79.8	92	0	81.2	Pt.Cldy
6	84	77	80.1	79	.06	80.8	Pt.Cldy
7	84	78	80.2	93	T	81.1	Pt.Cldy
8	84	78	80.2	86	0	81.4	Clear
9	84	78	79.8	82	0	81.5	Clear
10	84	78	79.8	85	0	81.8	Pt.Cldy
11	84	75	79.6	68	.15	81.4	Cldy.
12	84	78	80.2	79	0	81.3	Pt.Cldy
13	84	79	80.2	70	0	81.4	Cldy.
14	84	78	80.5	79	T	81.8	Pt.Cldy
15	85	78	81.0	82	T	82.3	Pt.Cldy
16	82	78	79.4	37	T	82.8	Cldy.
17	84	78	80.3	76	T	82.1	Pt.Cldy
18	84	77	80.1	79	T	82.2	Pt.Cldy
19	83	77	79.7	67	.06	81.6	Pt.Cldy
20	84	77	80.3	72	.03	81.4	Pt.Cldy
21	86	78	80.9	74	.06	81.6	Pt.Cldy
22	84	78	80.6	83	.03	82.4	Clear
23	84	78	80.2	77	.01	82.3	Pt.Cldy
24	85	78	80.7	82	T	82.4	Pt.Cldy
25	84	78	80.4	84	0	82.7	Pt.Cldy
26	84	75	79.7	100	0	82.7	Clear
27	84	75	79.7	89	0	82.7	Pt.Cldy
28	84	78	80.7	90	0	82.4	Clear
29	85	77	80.5	73	0	81.8	Pt.Cldy
30	85	78	80.4	84	0	82.4	Pt.Cldy
31	85	78	81.1	94	0	81.8	Clear
	—	—	—	—	0.43	—	
MEAN	84.0	77.9	80.2	80	—	81.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.872
Highest 29.990 Date 24
Lowest 29.760 Date 12

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.2
Highest 86 Date 21
Lowest 75 Date 27
Greatest daily range 9 Date 27
Mean for this month for 38 years 80.6
Maximum for this month for 38 years 92
Minimum for this month for 38 years 67
Average excess or deficiency of this month compared with a mean of 38 years -0.4

PRECIPITATION
(Inches)

Total for this month 0.43
Greatest amount in 24 hours 0.15 Date 11
Average for this month for 76 years 1.49
Total from January 1, 19 45 to date 3.19
Average from January 1 to date 6.33
Accumulated deficiency from January 1 to date compared with average -3.14

Total precipitation in this month in:

1906 1.42	1917 .79	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .63
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .92	1933 1.11	1944 0.18
1912 .66	1923 .36	1934 1.10	1945 0.43
1913 .79	1924 .71	1935 .80	1946
1914 .91	1925 .31	1936 .87	1947
1915 1.71	1926 .43	1937 .22	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction Northeast
Total movement 11271 miles
Average hourly velocity 15.1 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 3

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 76.2
Sunshine, percentage of possible 80
Number of days clear 6 Partly cloudy 22 Cloudy 3
Number of days with .01 inch rain or more 9

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month April, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	77	81.5	100	0	82.3	Clear
2	85	80	81.3	75	T	82.8	Cloudy
3	85	80	80.8	90	0	83.8	Clear
4	85	79	81.2	81	0	83.2	Clear
5	85	79	80.9	80	0	82.9	Pt.Cldy.
6	84	74	80.1	75	.42	82.5	Pt.Cldy.
7	83	77	80.0	77	.14	82.2	Pt.Cldy.
8	84	76	80.2	86	.14	82.6	Pt.Cldy.
9	84	77	80.6	92	.04	82.8	Pt.Cldy.
10	87	78	81.0	81	.16	82.7	Pt.Cldy.
11	86	78	80.3	59	.38	82.7	Cloudy
12	84	79	80.9	74	T	82.8	Pt.Cldy.
13	85	79	80.8	83	0	82.2	Cloudy
14	85	78	80.8	85	0	82.6	Pt.Cldy.
15	87	77	80.2	80	T	82.7	Pt.Cldy.
16	86	75	79.8	79	0	83.2	Pt.Cldy.
17	85	75	80.2	94	0	84.1	Clear
18	85	79	81.7	86	0	84.3	Clear
19	86	80	81.8	86	0	84.0	Pt.Cldy.
20	86	78	81.8	73	.11	83.9	Pt.Cldy.
21	85	78	81.6	87	.11	83.3	Pt.Cldy.
22	85	80	82.1	78	T	83.5	Pt.Cldy.
23	86	80	81.8	74	0	83.5	Cloudy
24	86	77	80.7	60	.01	83.2	Cloudy
25	85	78	81.1	38	.20	84.0	Cloudy
26	85	79	80.9	70	T	83.7	Pt.Cldy.
27	85	77	81.4	84	0	82.9	Pt.Cldy.
28	86	79	81.8	84	.04	83.5	Pt.Cldy.
29	88	76	81.9	91	0	83.5	Pt.Cldy.
30	87	78	80.7	65	.15	84.7	Cloudy
31							
	-	-	-	-	1.90	-	
MEAN	85.4	77.8	81.6	79	-	83.2	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.869
Highest 30.000 Date 7
Lowest 29.760 Date 23

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 81.0
Highest 88 Date 29
Lowest 74 Date 6
Greatest daily range 13 Date 29
Mean for this month for 38 years 81.2
Maximum for this month for 38 years 94
Minimum for this month for 38 years 72
Average ~~excess or~~ deficiency of this month compared with a mean of ____ years -0.2

PRECIPITATION
(Inches)

Total for this month 1.90
Greatest amount in 24 hours .42 Date 6
Average for this month for 45 years 4.12
Total from January 1, 1945 to date 5.09
Average from January 1 to date 10.45
Accumulated excess or deficiency from January 1 to date compared with average -5.36

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.00
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.95	1930 6.85	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.23	1943 3.92
1911 3.06	1922 2.11	1933 .35	1944 8.93
1912 .75	1923 1.21	1934 5.48	1945
1913 2.69	1924 10.85	1935 1.87	1946
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 .32	1937 .92	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction NE
Total movement 9294 miles
Average hourly velocity 12.9 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 6

MISCELLANEOUS

Total evaporation for this month -
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 78.5
Sunshine, percentage of possible 79
Number of days clear 7 Partly cloudy 18 Cloudy 5
Number of days with .01 inch rain or more 12

DATES

Fogs, light None
Fogs, dense "
Halos, lunar "
Thunderstorms 24
Earthquakes "

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone ; Month May, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	Evaporation (inches) Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	85	79	80.7	38	.06	84.0	Cloudy
2	84	77	80.7	22	.35	83.3	Cloudy
3	82	76	78.7	22	.43	82.2	Cloudy
4	82	76	79.0	8	.79	81.7	Cloudy
5	81	77	78.6	11	.64	81.1	Cloudy
6	85	76	80.8	81	.02	81.2	pt.cldy
7	84	79	81.1	71	0	81.6	Pt.cldy
8	85	78	81.0	70	.03	81.9	pt.cldy
9	87	78	82.1	90	0	82.4	pt.cldy
10	85	77	80.8	68	T	83.0	Cloudy
11	87	76	80.9	84	.10	82.6	pt.cldy
12	87	78	82.1	86	0	83.2	pt.cldy
13	89	76	80.7	77	.17	83.2	pt.cldy
14	90	76	81.3	84	0	83.8	pt.cldy
15	88	76	81.8	82	0	84.1	pt.cldy
16	88	76	80.8	78	.74	84.8	Cloudy
17	89	76	79.4	54	.45	84.7	Cloudy
18	89	76	81.2	71	0	84.6	pt.cldy
19	85	76	78.2	25	.03	84.2	Cloudy
20	87	75	78.9	44	.21	82.7	Cloudy
21	89	76	80.9	78	2.31	83.2	pt.cldy
22	88	77	79.8	35	.01	84.4	Cloudy
23	90	75	79.8	63	.42	84.2	Cloudy
24	90	76	81.6	80	0	85.0	Cloudy
25	89	77	81.3	63	0	84.6	Cloudy
26	88	76	79.2	51	.04	84.5	Cloudy
27	90	76	81.7	75	.10	84.2	Cloudy
28	87	74	80.4	44	1.23	83.8	Cloudy
29	89	77	81.7	67	0	83.9	pt.cldy
30	87	77	80.8	66	T	84.4	pt.cldy
31	85	77	80.2	43	.01	84.8	Cloudy
	—	—	—	—	8.15	—	
MEAN	86.7	76.9	80.5	59	—	83.5	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.861
Highest 29.960 Date 6
Lowest 29.750 Date 15

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.5
Highest 90 Date 24
Lowest 74 Date 28
Greatest daily range 15 Date 23
Mean for this month for 38 years 80.8
Maximum for this month for 38 years 95
Minimum for this month for 38 years 71
Average excess or deficiency of this month compared with a mean of 38 years -0.3

PRECIPITATION
(Inches)

Total for this month 8.15
Greatest amount in 24 hours 2.32 Date 21 - 22
Average for this month for 45 years 12.63
Total from January 1, 1945 to date 13.24
Average from January 1 to date 23.08
Accumulated excess or deficiency from January 1 to date compared with average - 9.84

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943 16.27
1911 17.13	1922 8.88	1933 8.12	1944 25.43
1912 12.03	1923 11.18	1934 11.94	1945 8.15
1913 22.60	1924 14.86	1935 17.16	1946
1914 17.76	1925 8.23	1936 12.86	1947
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction North
Total movement 5829 miles
Average hourly velocity 7.8 miles per hour
Maximum velocity for five minutes 23 miles per hour from North on 3rd

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation 81.4 inches
Relative humidity, bihourly mean, percent 59
Sunshine, percentage of possible 0
Number of days clear 13 Partly cloudy 20 Cloudy 18
Number of days with .01 inch rain or more 4-16-21-23-27

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month June, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	77	79.6	35	.79	84.0	Cloudy
2	88	76	81.8	68	0	84.4	Pt.cldy
3	87	78	82.2	71	.01	85.2	Pt.cldy
4	87	79	83.4	96	T	85.7	Pt.cldy
5	87	80	83.8	96	.12	85.2	Clear
6	87	81	84.0	72	.15	85.3	Cloudy
7	87	81	82.4	45	.16	85.1	Cloudy
8	87	81	83.3	34	.01	85.1	Cloudy
9	87	79	82.7	57	.12	85.2	Cloudy
10	84	77	79.9	32	.30	84.8	Cloudy
11	84	78	79.9	43	.70	84.5	Cloudy
12	88	77	80.4	54	.03	84.8	Cloudy
13	87	77	81.6	70	.04	84.1	Cloudy
14	86	78	81.8	72	.06	84.8	Cloudy
15	89	78	83.5	76	T	85.3	Pt.cldy
16	86	78	81.9	41	.05	86.2	Cloudy
17	88	76	79.8	56	.35	85.2	Cloudy
18	89	75	81.2	53	0	84.4	Cloudy
19	92	77	83.4	68	0	84.6	Cloudy
20	91	78	84.5	99	0	85.4	pt.cldy
21	86	78	82.4	56	.12	85.8	Cloudy
22	88	77	81.2	66	0	85.0	pt.cldy
23	90	77	81.4	60	.02	85.1	Cloudy
24	88	77	81.2	55	T	84.5	ptcldy
25	86	78	81.3	67	.57	84.5	Cloudy
26	87	80	83.6	87	.12	84.2	Clear
27	84	76	79.5	27	1.47	84.2	Cloudy
28	90	75	81.4	70	T	84.4	Cloudy
29	88	76	80.3	37	.79	85.2	Cloudy
30	84	74	79.1	30	.64	84.7	Cloudy
31	—	—	—	—	—	—	—
	—	—	—	—	6.62	—	
MEAN	87.2	77.6	81.8	60	—	84.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.822
Highest 29.920 Date 24
Lowest 29.710 Date 8

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 81.8
Highest 92 Date 19
Lowest 74 Date 30
Greatest daily range 15 Date 28
Mean for this month for 38 years 80.2
Maximum for this month for 38 years 93
Minimum for this month for 38 years 68
Average excess or deficiency of this month compared with a mean of 38 years + 1.6

PRECIPITATION
(Inches)

Total for this month 6.62
Greatest amount in 24 hours 1.47 Date 27
Average for this month for 75 years 13.73
Total from January 1, 1945 to date 19.86
Average from January 1 to date 36.81
Accumulated excess or deficiency from January 1 to date compared with average - 16.95

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 15.29	1931 9.26	1942 18.59
1910 13.63	1921 15.18	1932 14.36	1943 12.18
1911 15.58	1922 8.30	1933 15.88	1944 6.31
1912 15.90	1923 15.17	1934 9.89	1945 6.62
1913 11.81	1924 16.49	1935 16.26	1946
1914 16.30	1925 13.77	1936 10.57	1947
1915 16.01	1926 31.23	1937 26.91	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction NE
Total movement 5551 miles
Average hourly velocity 7.7 miles per hour
Maximum velocity for five minutes 23 miles per hour from NE on 6

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 81.7
Sunshine, percentage of possible 60
Number of days clear 2 Partly cloudy 7 Cloudy 21
Number of days with .01 inch rain or more 21

DATES

Fogs, light —
Fogs, dense —
Halos, lunar —
Thunderstorms 1-7-8-9-12-16-17-27-29-30
Earthquakes —

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, CANAL ZONE ; Month JULY , 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	SUNSHINE For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	76	79.3	25	1.07	84.6	Cloudy
2	86	75	79.0	52	1.60	83.7	Cloudy
3	84	75	79.0	29	.11	83.2	Cloudy
4	84	77	79.6	21	.54	83.0	Cloudy
5	86	78	82.2	96	.51	83.6	Clear
6	83	77	79.0	11	.03	83.0	Cloudy
7	86	75	81.2	50	.76	83.6	Cloudy
8	86	80	82.6	85	T	84.2	Pt. Cldy
9	87	76	81.6	54	.40	84.2	Cloudy
10	85	77	81.5	71	.02	84.8	Cloudy
11	86	79	82.5	90	0	85.0	Pt. Cldy
12	87	80	83.2	62	T	85.2	Pt. Cldy
13	87	79	83.2	72	T	84.7	Pt. Cldy
14	88	77	80.8	47	.22	85.0	Cloudy
15	87	76	80.5	58	.02	83.7	Cloudy
16	86	77	80.4	52	.13	84.5	Pt. Cldy
17	89	78	83.5	79	0	84.4	Pt. Cldy
18	87	78	80.7	40	.14	84.5	Cloudy
19	86	73	79.1	45	2.24	83.8	Cloudy
20	82	75	77.4	22	.46	83.2	Cloudy
21	85	75	79.8	32	2.80	82.9	Cloudy
22	87	75	80.3	57	.51	83.0	Cloudy
23	85	77	79.6	36	.35	84.1	Cloudy
24	84	76	80.0	22	.15	83.7	Cloudy
25	81	75	77.9	0	2.45	82.5	Cloudy
26	86	75	79.2	50	1.88	82.4	Cloudy
27	85	76	79.2	54	.90	82.8	Cloudy
28	88	74	78.4	68	.79	83.1	Cloudy
29	86	75	80.2	62	.61	84.3	Cloudy
30	84	76	79.7	53	1.47	84.1	Cloudy
31	85	76	80.1	46	.05	83.7	Cloudy
	-	-	-	-	19.81	-	
MEAN	85.6	76.4	80.4	49	-	83.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.844
Highest 29.920 Date 9-21-24
Lowest 29.750 Date 11

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.4
Highest 89 Date 17
Lowest 73 Date 19
Greatest daily range 12 Date 28
Mean for this month for 38 years 80.3
Maximum for this month for 38 years 91
Minimum for this month for 38 years 70
Average excess or deficiency of this month compared with a mean of 38 years 40.1

PRECIPITATION
(Inches)

Total for this month 19.81
Greatest amount in 24 hours 3.90 Date 25.26
Average for this month for 75 years 15.99
Total from January 1, 1945 to date 39.67
Average from January 1 to date 52.40
Accumulated excess or deficiency from January 1 to date compared with average -12.73

Total precipitation in this month in:

1906 19.23	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.26	1929 18.67	1940 15.90
1908 14.76	1919 13.60	1930 8.99	1941 20.89
1909 12.83	1920 17.58	1931 13.26	1942 17.35
1910 21.07	1921 10.49	1932 17.45	1943 10.44
1911 14.28	1922 4.40	1933 9.88	1944 11.82
1912 13.43	1923 10.33	1934 9.21	1945 19.81
1913 15.13	1924 20.63	1935 26.29	1946
1914 10.74	1925 21.08	1936 18.72	1947
1915 20.72	1926 16.15	1937 9.90	1948
1916 10.44	1927 18.61	1938 22.25	1949

WIND

Prevailing direction Northeast
Total movement 5613 miles
Average hourly velocity 7.5 miles per hour
Maximum velocity for five minutes 25 miles per hour from SW on 19

MISCELLANEOUS

Total evaporation for this month [illegible] inches
Average daily evaporation [illegible] inches
Relative humidity, bihourly mean, percent 84.7
Sunshine, percentage of possible 49
Number of days clear 1 Partly cloudy 6 Cloudy 24
Number of days with .01 inch rain or more 26

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1, 2, 3, 4, 6, 10, 11, 16, 18, 19, 20, 21, 22, 23, 29
Earthquakes
Thunderstorms (cont'd) 26, 27, 28, 30.

4066-8

THE PANAMA CANAL

MR 99476--Panama Canal--11-17-43--500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month August, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	87	78	80.9	52	1.67	83.6	Pt.cldy
2	86	78	80.4	44	.06	83.7	Cldy
3	85	76	79.1	32	.67	83.3	Cloudy
4	85	76	79.6	33	.13	82.9	Cloudy
5	85	75	79.8	67	1.94	83.1	Pt.cldy
6	85	77	80.3	55	.19	82.6	Cloudy
7	82	75	79.3	18	2.10	82.4	Cloudy
8	86	76	78.4	45	.60	82.5	Cloudy
9	86	75	80.8	64	0	83.6	Pt.cldy
10	88	77	82.0	75	T	83.9	Pt.cldy
11	84	76	79.5	22	2.22	83.3	Cloudy
12	87	76	80.9	44	.19	82.6	Cloudy
13	86	78	81.1	28	.17	83.5	Cloudy
14	86	79	82.6	68	.29	84.3	Cloudy
15	79	76	77.8	0	1.19	82.4	Cloudy
16	83	74	77.8	26	.56	82.0	Cloudy
17	89	74	79.5	58	.86	82.9	Pt.cldy
18	88	75	79.8	64	.04	84.3	Pt.cldy
19	86	75	79.9	52	1.29	84.2	Cloudy
20	82	75	78.6	33	.38	84.3	Cloudy
21	89	75	80.2	60	.91	83.9	Cloudy
22	91	76	82.8	92	T	83.8	Pt.cldy
23	86	77	80.5	37	.45	83.7	Cloudy
24	85	75	78.8	38	.57	83.3	Cloudy
25	88	76	80.6	83	.31	83.5	Pt.cldy
26	83	75	77.6	19	.33	83.3	Cloudy
27	86	75	79.2	45	.20	83.2	Cloudy
28	87	76	81.1	77	.15	83.8	Pt.cldy
29	89	77	81.5	67	.04	84.8	Pt.cldy
30	88	76	79.8	56	.15	85.1	Cloudy
31	89	76	81.2	71	T	84.7	Pt.cldy
	—	—	—	—	17.66	—	
MEAN	86.0	76.0	80.1	49	—	83.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.846
Highest 29.950 Date 5
Lowest 29.740 Date 11

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.1
Highest 91 Date 22
Lowest 74 Date 16
Greatest daily range 15 Date 22
Mean for this month for 39 years 80.0
Maximum for this month for 39 years 93
Minimum for this month for 39 years 70
Average excess of this month compared with a mean of 39 years + 0.1

PRECIPITATION
(Inches)

Total for this month 17.66
Greatest amount in 24 hours 2.22 Date 11
Average for this month for 45 years 15.38
Total from January 1, 1945 to date 57.33
Average from January 1 to date 67.78
Accumulated deficiency from January 1 to date compared with average - 10.45

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.95	1941 16.95
1909 15.42	1920 23.04	1931 17.52	1942 10.74
1910 14.93	1921 18.45	1932 12.16	1943 20.60
1911 11.60	1922 14.53	1933 8.27	1944 18.40
1912 9.87	1923 13.35	1934 13.86	1945 17.66
1913 17.91	1924 7.42	1935 14.72	1946
1914 16.01	1925 7.71	1936 13.78	1947
1915 12.89	1926 20.84	1937 15.26	1948
1916 8.34	1927 26.63	1938 22.32	1949

WIND

Prevailing direction Northwest
Total movement 4701 miles
Average hourly velocity 6.3 miles per hour
Maximum velocity for five minutes 26 miles per hour from NW on 15

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 85.3
Sunshine, percentage of possible 49
Number of days clear 0 Partly cloudy 11 Cloudy 20
Number of days with .01 inch rain or more

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1-2-3-7-8-11-13-15-16-17-18-19-21-23-24-26-28

6066-8

MR 99476—Panama Canal—11-17-43—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month SEPTEMBER, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (Inches) For 24 hours Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	89	77	82.3	67	.08	85.5	Pt. Cldy
2	90	77	83.1	85	.03	85.8	Pt. Cldy
3	90	78	83.5	78	.05	86.0	Pt. Cldy
4	90	78	83.9	86	0	86.2	Pt. Cldy
5	86	74	79.2	21	.78	86.8	Cloudy
6	88	76	79.2	34	.03	85.1	Cloudy
7	84	76	79.1	54	.47	84.8	Cloudy
8	87	76	81.9	84	.09	84.7	Pt. Cldy
9	87	80	82.2	48	.12	85.2	Pt. Cldy
10	86	78	80.9	30	.13	85.4	Cloudy
11	90	76	81.9	81	.16	86.4	Cloudy
12	89	78	83.5	83	0	86.8	Cloudy
13	88	78	82.7	43	.24	85.9	Cloudy
14	83	74	79.0	30	3.54	84.8	Cloudy
15	84	74	77.2	30	.41	84.0	Cloudy
16	88	74	79.9	69	.09	84.3	Pt. Cldy
17	90	76	81.8	80	T	84.2	Pt. Cldy
18	88	77	81.7	61	1.12	85.9	Cloudy
19	84	78	80.5	30	.56	84.2	Cloudy
20	89	78	80.6	60	.02	84.5	Cloudy
21	84	77	79.9	13	T	85.0	Cloudy
22	87	73	80.2	69	1.83	84.5	Cloudy
23	81	75	79.2	29	.13	84.4	Cloudy
24	88	76	79.6	40	.10	84.0	Cloudy
25	90	75	80.8	72	.05	84.4	Cloudy
26	90	77	81.8	82	.02	85.1	Pt. Cldy
27	90	78	82.9	100	0	85.1	Clear
28	90	77	82.3	74	0	85.0	Pt. Cldy
29	92	78	82.4	73	T	84.5	Cloudy
30	85	76	78.4	23	1.53	84.2	Cloudy
31	-	-	-	-	-	-	-
	-	-	-	-	11.58	-	
MAN	87.6	76.5	81.1	58	-	85.1	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.831
Highest 29.920 Date 15-16-17
Lowest 29.680 Date 29

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 81.1
Highest 92 Date 29
Lowest 73 Date 22
Greatest daily range 15 Date 25
Mean for this month for 39 years 79.9
Maximum for this month for 39 years 84
Minimum for this month for 39 years 70
Average excess or [illegible] of this month compared with a mean of 39 years + 1.2

PRECIPITATION
(Inches)

Total for this month 11.58
Greatest amount in 24 hours 3.63 Date 14-15
Average for this month for 75 years 12.63
Total from January 1, 1945 to date 68.91
Average from January 1 to date 80.41
Accumulated excess or [illegible] from January 1 to date compared with average - 11.50

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 8.24	1942 21.69
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.62	1922 12.73	1933 9.11	1944 4.40
1912 12.23	1923 12.31	1934 21.30	1945 11.58
1913 9.90	1924 9.00	1935 21.31	1946
1914 14.80	1925 8.17	1936 14.58	1947
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction South
Total movement 4395 miles
Average hourly velocity 6.1 miles per hour
Maximum velocity for five minutes 23 miles per hour from E on 5

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 82.6
Sunshine, percentage of possible 58
Number of days clear 1 Partly cloudy 10 Cloudy 19
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1-2-5-6-8-10-11-14-17-18-19-[illegible]
[illegible] 23-24-30

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

866-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month October, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (Inches) Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	91	75	81.5	71	0	84.5	Cldy
2	94	77	82.7	86	.91	85.8	Pt.cldy
3	89	76	79.7	81	.12	86.2	Pt.cldy
4	92	76	81.8	84	T	85.5	Pt.cldy
5	88	76	79.5	47	.17	85.2	Cloudy
6	85	76	78.7	44	.70	84.6	Cloudy
7	82	75	77.4	36	.08	84.5	Cloudy
8	83	74	77.2	37	.59	84.0	Cloudy
9	83	74	76.4	35	.22	83.6	Cloudy
10	90	74	79.6	78	0	84.9	Pt.cldy
11	91	74	80.4	88	0	85.7	Pt.cldy
12	89	75	80.8	78	0	85.3	Pt.cldy
13	88	75	81.0	70	0	85.2	Pt.cldy
14	83	75	78.4	28	.77	85.1	Cloudy
15	87	75	77.7	47	1.18	84.2	Cloudy
16	82	75	77.0	30	1.76	84.2	Cloudy
17	88	74	79.2	71	.45	84.8	Pt.cldy
18	90	75	81.6	81	T	85.8	Pt.cldy
19	86	77	80.9	80	.26	86.6	Pt.cldy
20	84	73	79.2	40	2.42	86.0	Cloudy
21	81	76	77.9	17	2.83	85.2	Cloudy
22	84	76	78.3	28	.35	85.0	Cloudy
23	84	75	77.1	23	.84	84.7	Cloudy
24	86	75	78.9	50	1.40	85.5	Cloudy
25	[illegible]	77	82.4	80	0	85.5	Pt.cldy
26	85	77	79.8	16	.26	85.2	Cloudy
27	87	75	79.5	68	.28	84.9	Cloudy
28	84	76	78.5	50	.23	85.0	Cloudy
29	84	75	78.8	57	.01	85.3	Cloudy
30	87	76	80.2	74	T	84.6	Pt.cldy
31	86	75	78.8	48	2.50	84.8	Cloudy
	---	---	---	---	18.33	---	
MEAN	86.5	75.3	79.4	56	---	85.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.847
Highest 29.970 Date 29
Lowest 29.740 Date 25

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.4
Highest 94 Date 2
Lowest 73 Date 29
Greatest daily range 17 Date 2
Mean for this month for 39 years 79.2
Maximum for this month for 39 years 93
Minimum for this month for 39 years 70
Average excess of this month compared with a mean of 39 years + 0.2

PRECIPITATION
(Inches)

Total for this month 18.33
Greatest amount in 24 hours 2.86 Date 20-21
Average for this month for 76 years 15.87
Total from January 1, 1945 to date 87.21
Average from January 1 to date 96.28
Accumulated deficiency from January 1 to date compared with average - 9.04

Total precipitation in this month in:

1906 13.34	1917 7.87	1928 16.02	1939 17.52
1907 21.99	1918 27.07	1929 13.74	1940 16.28
1908 10.96	1919 21.94	1930 7.26	1941 25.17
1909 19.31	1920 17.16	1931 20.42	1942 31.65
1910 15.65	1921 8.27	1932 16.75	1943 10.23
1911 16.53	1922 13.87	1933 19.84	1944 20.15
1912 17.85	1923 42.17	1934 17.49	1945 18.33
1913 18.63	1924 21.56	1935 8.99	1946
1914 22.16	1925 16.49	1936 11.36	1947
1915 21.86	1926 15.31	1937 16.28	1948
1916 17.59	1927 13.12	1938 17.26	1949

WIND

Prevailing direction South
Total movement 4802 miles
Average hourly velocity 6.5 miles per hour
Maximum velocity for five minutes 25 miles per hour from NW on 20

MISCELLANEOUS

Total evaporation for this month --- inches
Average daily evaporation --- inches
Relative humidity, bihourly mean, percent 83.8
Sunshine, percentage of possible 56
Number of days clear 0 Partly cloudy 12 Cloudy 19
Number of days with .01 inch rain or more 22

DATES

Fogs, light NONE
Fogs, dense NONE
Halos, lunar ---
Thunderstorms 2-5-6-15-21-22-24-27-28
Earthquakes

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month November, 1945.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (Tanks) Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	75	80.0	64	.06	85.9	Pt.cldy
2	86	75	79.8	66	.18	86.5	Cloudy
3	86	75	79.6	37	.85	85.6	Cloudy
4	88	76	80.6	52	.03	85.9	Cloudy
5	83	76	78.2	25	.35	86.0	Cloudy
6	86	73	78.7	58	.50	85.3	Cloudy
7	80	75	77.2	18	.44	83.1	Cldy
8	85	74	78.7	59	1.13	82.8	Pt.cldy
9	86	75	78.8	58	.03	83.4	Cloudy
10	81	74	77.7	29	.78	82.8	Cloudy
11	85	77	79.9	65	.03	83.2	Cloudy
12	83	75	77.8	35	.91	83.3	Cloudy
13	85	76	79.2	32	1.55	84.0	Cloudy
14	89	77	81.5	79	.91	84.5	Cloudy
15	87	74	80.1	51	4.15	84.8	Cloudy
16	84	75	79.5	46	2.38	84.5	Cloudy
17	84	75	78.4	62	1.05	84.6	Cloudy
18	82	75	78.1	60	.31	84.6	Cloudy
19	87	75	80.1	64	.11	84.6	Cloudy
20	88	75	80.2	61	.39	84.7	Pt.cldy
21	86	75	79.5	85	.75	85.0	Pt.cldy
22	86	76	80.8	73	.12	85.5	Pt.cldy
23	86	77	81.8	85	.02	86.0	Pt.cldy
24	86	75	80.1	81	.45	85.8	Pt.cldy
25	86	76	80.9	94	.15	85.8	Clear
26	85	74	78.6	30	2.38	85.2	Cloudy
27	82	76	78.2	45	.69	82.9	Cloudy
28	81	75	78.0	34	.52	83.8	Cloudy
29	78	74	76.5	2	1.48	83.7	Cloudy
30	81	74	77.4	34	1.59	82.8	Cloudy
31							
	—	—	—	—	24.29	—	
MEAN	84.7	75.1	79.8	53	—	84.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.833
Highest 29.940 Date 3 & 16
Lowest 29.720 Date 8

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.2
Highest 89 Date 14
Lowest 73 Date 6
Greatest daily range 13 Date 1 & 6
Mean for this month for 39 years 79.0
Maximum for this month for 39 years 92
Minimum for this month for 39 years 69
Average excess or deficiency of this month compared with a mean of 39 years + 0.2

PRECIPITATION
(Inches)

Total for this month 24.29
Greatest amount in 24 hours 5.05 Date 15-16
Average for this month for 75 years 22.22
Total from January 1, 1945 to date 111.53
Average from January 1 to date 118.50
Accumulated excess or deficiency from January 1 to date compared with average - 6.97

Total precipitation in this month in:

1906 26.84	1917 20.49	1928 17.20	1939 35.18
1907 15.27	1918 14.23	1929 8.99	1940 20.91
1908 31.72	1919 6.63	1930 16.94	1941 24.97
1909 42.50	1920 21.27	1931 30.31	1942 12.60
1910 30.04	1921 19.96	1932 37.13	1943 21.69
1911 15.81	1922 15.63	1933 43.06	1944 18.41
1912 21.81	1923 22.16	1934 28.81	1945 24.29
1913 16.75	1924 30.29	1935 42.72	1946
1914 18.35	1925 22.95	1936 23.11	1947
1915 22.35	1926 29.39	1937 23.23	1948
1916 14.08	1927 28.35	1938 18.90	1949

WIND

Prevailing direction Northwest
Total movement 5395 miles
Average hourly velocity 7.5 miles per hour
Maximum velocity for five minutes 26 miles per hour from SW on 15

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 85.4
Sunshine, percentage of possible 53
Number of days clear 1 Partly cloudy 7 Cloudy 22
Number of days with .01 inch rain or more 30

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 3-14-15-16-17-18-26-28
Earthquakes

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone ; Month December, 1945

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi.H. MEAN	EVAPORATION (INCHES) Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	80	73	75.4	14	4.25	83.2	Cloudy
2	83	75	78.3	38	1.69	83.5	Cloudy
3	80	74	76.8	1	2.16	83.2	Cloudy
4	79	74	75.8	0	4.47	79.8	Cloudy
5	76	72	74.5	0	3.94	79.8	Cloudy
6	80	74	76.8	0	.34	79.1	Cloudy
7	85	75	80.2	71	.09	79.2	Cloudy
8	83	74	79.2	53	.45	79.4	Pt.Cldy.
9	85	77	80.2	77	T	80.2	Clear
10	85	75	80.0	78	0	81.6	Pt.Cldy.
11	86	78	81.4	85	.03	82.0	Pt.Cldy.
12	85	78	81.3	87	.13	81.9	Pt.Cldy.
13	85	79	81.1	84	.02	82.2	Pt.Cldy.
14	87	78	81.8	70	.11	82.3	Pt.Cldy.
15	87	79	81.7	71	.01	82.6	Pt.Cldy.
16	84	80	81.2	71	.01	82.2	Pt.Cldy.
17	85	79	81.7	78	.01	82.2	Pt.Cldy.
18	85	79	81.2	61	0	82.3	Cloudy
19	85	78	79.9	42	.16	82.0	Cloudy
20	79	73	77.3	11	2.03	81.6	Cloudy
21	85	77	80.9	91	0	81.9	Pt.Cldy.
22	84	77	80.6	79	.29	82.2	Pt.Cldy.
23	85	77	81.0	100	.01	83.1	Pt.Cldy.
24	83	76	79.9	61	.14	82.9	Pt.Cldy.
25	84	75	80.2	92	0	82.5	Clear
26	84	76	80.6	63	0	82.8	Cloudy
27	85	79	81.5	78	T	83.0	Pt.Cldy.
28	86	79	81.7	85	T	83.2	Pt.Cldy.
29	88	79	81.6	70	0	83.1	Pt.Cldy.
30	84	75	78.3	33	.25	83.1	Cloudy
31	87	76	80.5	80	T	83.0	Cloudy
	-	-	-	-	20.59	-	
MEAN	83.6	76.5	79.8	59	-	82.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.852
Highest 29.970 Date 5
Lowest 29.740 Date 28

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.8
Highest 88 Date 29
Lowest 72 Date 5
Greatest daily range 11 Date 31
Mean for this month for 39 years 80.0
Maximum for this month for 39 years 89
Minimum for this month for 39 years 66
Average deficiency of this month compared with a mean of 39 years -0.2

PRECIPITATION
(Inches)

Total for this month 20.59
Greatest amount in 24 hours 4.85 Date 4 - 5
Average for this month for 75 years 11.92
Total from January 1, 1945 to date 132.12
Average from January 1 to date 130.42
Accumulated excess or deficiency from January 1 to date compared with average +1.70

Total precipitation in this month in:

1906 15.64	1917 11.66	1928 16.43	1939 17.08
1907 9.36	1918 1.90	1929 7.87	1940 4.25
1908 9.07	1919 7.37	1930 7.86	1941 6.11
1909 24.38	1920 2.06	1931 3.47	1942 23.75
1910 15.20	1921 6.20	1932 7.64	1943 15.08
1911 2.63	1922 7.20	1933 18.46	1944 22.36
1912 11.47	1923 5.12	1934 15.66	1945 20.59
1913 6.22	1924 8.84	1935 13.02	1946
1914 8.88	1925 6.04	1936 3.53	1947
1915 9.45	1926 7.60	1937 12.94	1948
1916 5.71	1927 16.70	1938 29.29	1949

WIND

Prevailing direction North
Total movement 8562 miles
Average hourly velocity 11.5 miles per hour
Maximum velocity for five minutes 31 miles per hour from North on 5

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 81.5
Sunshine, percentage of possible 59
Number of days clear 2 Partly cloudy 16 Cloudy 13
Number of days with .01 inch rain or more 21

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 2 - 4 - 20
Earthquakes None felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, CANAL ZONE ; Month JANUARY, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) Max.	Min.	Mean	EVAPORATION (INCHES) Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	76	80.0	59	.25	83.5	Pt.Cldy
2	86	74	79.0	82	.23	83.1	Pt. Cldy
3	87	73	78.7	76	.65	83.4	Pt.Cldy
4	84	75	79.6	99	.01	84.2	Clear
5	85	74	80.2	81	.50	84.3	Pt.Cldy
6	84	74	79.4	72	0	84.1	Pt.Cldy
7	88	77	81.3	99	0	85.1	Clear
8	86	75	80.5	73	.15	84.3	Pt.Cldy
9	84	75	79.4	100	0	84.6	Clear
10	84	75	80.1	94	0	84.5	Clear
11	84	77	80.3	100	0	83.4	Clear
12	84	76	80.4	89	.10	82.9	Pt.Cldy
13	85	79	81.1	62	.01	83.2	Cloudy
14	84	79	81.1	61	0	83.3	Cloudy
15	85	79	81.2	97	0	82.8	Clear
16	85	79	81.3	86	0	83.2	Pt.Cldy
17	84	79	81.7	79	T	83.3	Pt. Cldy
18	85	80	81.4	74	0	83.4	Pt.Cldy
19	84	76	80.6	88	.07	82.8	Pt.Cldy
20	84	78	80.6	76	T	82.9	Pt.Cldy
21	84	78	80.7	84	.02	82.6	Pt.Cldy
22	85	79	81.2	87	0	82.6	Clear
23	84	78	80.8	79	T	82.5	Pt.Cldy
24	84	78	80.6	80	.01	82.7	Pt.Cldy
25	83	76	80.3	85	.01	82.8	Pt.Cldy
26	83	78	80.3	77	T	82.6	Pt.Cldy
27	84	77	80.2	80	.02	81.7	Pt;Cldy
28	84	78	80.7	79	T	82.1	Pt.Cldy
29	83	78	80.2	69	T	82.3	Cloudy
30	84	77	80.0	63	.03	81.6	Pt.Cldy
31	83	77	80.3	81	.02	80.8	Pt. Cldy
	-	-	-	-	2.08	-	
MEAN	84.4	76.9	80.4	80		83.1	

Note.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.875
Highest 30.000 Date 3 & 18
Lowest 29.750 Date 31

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.4
Highest 88 Date 7
Lowest 73 Date 3
Greatest daily range 14 Date 3
Mean for this month for 39 years 80.1
Maximum for this month for 39 years 88
Minimum for this month for 39 years 70
Average excess [redacted] of this month compared with a mean of 39 years +0.3

PRECIPITATION
(Inches)

Total for this month 2.08
Greatest amount in 24 hours .82 Date 2-3
Average for this month for 76 years 3.29
Total from January 1, 1946 to date 2.08
Average from January 1 to date 3.29
Accumulated [redacted] or deficiency from January 1 to date compared with average -1.21

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.32
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944 1.23
1912 .88	1923 1.98	1934 3.94	1945 .89
1913 6.71	1924 .61	1935 5.81	1946 2.08
1914 1.35	1925 3.86	1936 1.54	1947
1915 3.41	1926 .70	1937 4.20	1948
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction Northeast
Total movement 946.0 miles
Average hourly velocity 12.7 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 29

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 75.6
Sunshine, percentage of possible 80
Number of days clear 7 Partly cloudy 21 Cloudy 3
Number of days with .01 inch rain or more 13

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL ; Month FEBRUARY, 1946

Sunshine

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi.-hr. MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
				per cent			
1	83	76	80	61	.03	81.7	Pt.Cldy.
2	83	76	80	72	.05	81.8	Pt.Cldy.
3	83	77	80	69	.04	82.1	Pt.Cldy.
4	83	77	80	85	T	81.6	Pt.Cldy.
5	83	77	80	81	T	81.4	Pt.Cldy.
6	84	78	80	70	0	81.3	Pt.Cldy.
7	83	78	80	72	0	80.9	Pt.Cldy.
8	84	78	80	82	0	80.6	Clear
9	84	77	80	82	.06	81.2	Pt.Cldy.
10	83	77	80	80	T	81.8	Pt.Cldy.
11	83	76	80	79	.01	81.7	Clear
12	82	76	79	36	.13	81.8	Cloudy
13	83	77	80	65	.02	81.2	Cloudy
14	83	76	80	64	.02	81.0	Cloudy
15	84	78	80	69	.03	81.2	Pt.Cldy.
16	83	75	79	60	.06	81.2	Pt.Cldy.
17	83	76	79	92	.05	81.0	Pt.Cldy.
18	83	77	79	77	.02	80.6	Clear
19	83	76	79	61	.19	80.6	Pt.Cldy.
20	83	76	79	85	.03	81.2	Clear
21	83	78	80	76	0	81.7	Pt.Cldy.
22	84	78	80	71	0	81.4	Pt.Cldy.
23	83	77	80	90	T	81.6	Clear
24	83	77	80	92	0	81.9	Clear
25	83	76	79	82	T	82.2	Pt.Cldy.
26	85	75	80	85	T	82.4	Pt.Cldy.
27	87	78	81	50	0	82.9	Pt.Cldy.
28	87	77	81	61	.01	83.6	Pt.Cldy.
29							
30							
31							
TOTAL	2338	2150	-	-	0.75	-	
MEAN	83.5	76.8	79.7	73	-	81.6	

Note.—"T" indicates trace of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.875
Highest 30.000 Date 21
Lowest 29.750 Date 13

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.7
Highest 87 Date 28
Lowest 75 Date 16
Greatest daily range 10 Date 28
Mean for this month for 39 years 80.0
Maximum for this month for 39 years 90
Minimum for this month for 39 years 69
Average excess or deficiency of this month compared with a mean of 39 years - 0.3

PRECIPITATION
(Inches)

Total for this month 0.75
Greatest amount in 24 hours 0.21 Date 18-19
Average for this month for 76 years 1.52
Total from January 1, 1946 to date 2.33
Average from January 1 to date 4.81
Accumulated excess or deficiency from January 1 to date compared with average - 1.98

Total precipitation in this month in:

1906	1.14	1917	.45	1928	.71	1939	.50
1907	1.37	1918	.67	1929	.56	1940	1.83
1908	1.08	1919	.36	1930	.75	1941	2.87
1909	1.92	1920	.54	1931	.97	1942	.69
1910	3.58	1921	1.63	1932	.95	1943	2.58
1911	1.81	1922	.71	1933	.08	1944	2.96
1912	1.81	1923	.69	1934	.55	1945	.87
1913	1.75	1924	2.80	1935	3.10	1946	.75
1914	1.32	1925	.73	1936	.13	1947	
1915	12.37	1926	1.78	1937	.46	1948	
1916	1.96	1927	3.21	1938	1.11	1949	

WIND

Prevailing direction NE
Total movement 10,724 miles
Average hourly velocity 16.0 miles per hour
Maximum velocity for five minutes 28 miles per hour from NE on 4

MISCELLANEOUS

Total evaporation for this month --- inches
Average daily evaporation --- inches
Relative humidity, bihourly mean, percent 75.1
Sunshine, percentage of possible 73
Number of days clear 6 Partly cloudy 19 Cloudy 3
Number of days with .01 inch rain or more 15

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None
-

066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month March, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi-hrly MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	78	80		.02	84	Pt.Cldy.
2	85	77	80		0	83	Pt.Cldy.
3	83	78	80		0	83	Pt.Cldy.
4	84	76	80		.03	83	Pt.Cldy.
5	83	76	79		.02	82	Pt.Cldy.
6	83	78	80		0	82	Pt.Cldy.
7	83	77	80		.01	83	Pt.Cldy.
8	84	77	80		.02	82	Pt.Cldy.
9	83	78	80		0	83	Pt.Cldy.
10	83	78	80		T	83	Pt.Cldy.
11	83	76	79		.07	82	Pt.Cldy.
12	83	74	79		.05	82	Pt.Cldy.
13	84	76	80		T	82	Pt.Cldy.
14	86	78	81		0	83	Cloudy
15	88	78	81		0	84	Pt.Cldy.
16	85	78	81		0	84	Pt.Cldy.
17	84	78	80		0	85	Pt.Cldy.
18	82	78	80		.02	83	Cloudy
19	84	78	80		0	82	Cloudy
20	83	74	79		.20	82	Cloudy
21	83	78	79		T	82	Cloudy
22	84	78	80		.01	82	Cloudy
23	81	76	79		0	82	Pt.Cldy.
24	82	76	79		.13	81	Cloudy
25	81	77	79		.08	82	Cloudy
26	84	78	80		.02	82	Cloudy
27	85	77	80		.01	82	Cloudy
28	85	78	80		.08	82	Cloudy
29	82	77	79		.03	82	Cloudy
30	86	78	81		0	83	Pt.Cldy.
31	86	78	80		0	84	Cloudy
					.80		
MEAN	83.7	77.2	79.8			82.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.878
Highest 30.010 Date 3
Lowest 29.780 Date 20

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.8
Highest 88 Date 15
Lowest 74 Date 20
Greatest daily range 9 Date 20
Mean for this month for 39 years 80.6
Maximum for this month for 39 years 92
Minimum for this month for 39 years 67
Average excess or deficiency of this month compared with a mean of 39 years -0.8

PRECIPITATION
(Inches)

Total for this month .80
Greatest amount in 24 hours .20 Date 20
Average for this month for 77 years 1.48
Total from January 1, 1946 to date 3.03
Average from January 1 to date 6.29
Accumulated excess or deficiency from January 1 to date compared with average -2.66

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .63
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.48	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .92	1933 1.11	1944 .18
1912 .66	1923 .36	1934 1.10	1945 .43
1913 .79	1924 .71	1935 .80	1946 .80
1914 .91	1925 .31	1936 .87	1947
1915 1.71	1926 .43	1937 .32	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction W
Total movement 10,947 miles
Average hourly velocity 14.7 miles per hour
Maximum velocity for five minutes 25 miles per hour from W on 19

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 75.8
Sunshine, percentage of possible 68
Number of days clear 0 Partly cloudy 18 Cloudy 13
Number of days with .01 inch rain or more 16

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month April, 194

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN B.H.	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	77	80		0	84	Clear
2	84	78	80		0	84	Clear
3	85	78	80		.01	84	Pt.Cldy.
4	85	78	81		0	84	Pt.Cldy.
5	85	79	81		0	84	Pt.Cldy.
6	85	78	81		.03	84	Pt.Cldy.
7	85	78	81		.02	85	Pt.Cldy.
8	85	77	81		.01	85	Pt.Cldy.
9	85	78	81		T	85	Pt.Cldy.
10	84	79	81		0	84	Pt.Cldy.
11	85	79	81		T	84	Pt.Cldy.
12	85	77	82		.13	84	Pt.Cldy.
13	84	79	81		.01	84	Cloudy
14	85	79	82		.01	84	Pt.Cldy.
15	85	79	81		0	84	Pt.Cldy.
16	85	79	81		T	84	Pt.Cldy.
17	87	78	82		.02	84	Pt.Cldy.
18	85	78	81		.04	84	Pt.Cldy.
19	84	77	81		.02	84	Pt.Cldy.
20	84	78	81		.01	83	Pt.Cldy.
21	86	78	81		.04	84	Pt.Cldy.
22	84	77	81		.01	84	Pt.Cldy.
23	85	79	81		0	84	Pt.Cldy.
24	85	78	81		T	84	Cloudy
25	87	79	82		0	85	Pt.Cldy.
26	87	79	82		.06	85	Pt.Cldy.
27	86	78	82		.07	84	Cloudy
28	86	80	82		0	85	Pt.Cldy.
29	85	78	82		.04	85	Cloudy
30	85	78	81		.02	84	Pt.Cldy.
31							
SUM	2553	2347	-	-	.55	-	
MEAN	85.1	78.2	81.1	-	-	84.2	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.879
Highest 29.980 Date 1
Lowest 29.780 Date 30

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 81.1
Highest 87 Date 17
Lowest 77 Date 22
Greatest daily range 9 Date 17
Mean for this month for 39 years 81.2
Maximum for this month for 39 years 94
Minimum for this month for 39 years 72
Average excess or deficiency of this month compared with a mean of 39 years = 0.1

PRECIPITATION
(Inches)

Total for this month .55
Greatest amount in 24 hours .13 Date 12
Average for this month for 76 years 4.07
Total from January 1, 1946 to date 4.18
Average from January 1 to date 10.36
Accumulated excess or deficiency from January 1 to date compared with average = 6.18

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.09
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.95	1930 6.85	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.23	1943 3.92
1911 3.06	1922 2.11	1933 .35	1944 8.93
1912 .75	1923 1.21	1934 5.48	1945 1.90
1913 2.69	1924 10.85	1935 1.87	1946 .55
1914 4.12	1925 5.47	1936 3.29	1947
1915 10.42	1926 .34	1937 1.65	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction NE
Total movement 1061.8 miles
Average hourly velocity 14.7 miles per hour
Maximum velocity for five minutes 27 miles per hour from NE on 23 rd

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 76.8
Sunshine, percentage of possible 76
Number of days clear 2 Partly cloudy 24 Cloudy 4
Number of days with .01 inch rain or more 17

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None

1066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month May, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) Bi-H. MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	79	82	-	0	84	Cloudy
2	85	79	82		0	84	Cloudy
3	86	80	82		0	84	Cloudy
4	83	77	81		0	85	Pt.Cldy.
5	86	80	82		T	86	Pt.Cldy.
6	85	81	82		.01	85	Pt.Cldy.
7	85	80	82		0	85	Pt.Cldy.
8	85	80	82		0	84	Cloudy
9	84	80	81		0	84	Pt.Cldy.
10	84	80	81		.01	85	Pt.Cldy.
11	85	80	82		.01	85	Pt.Cldy.
12	84	80	82		.01	85	Pt.Cldy.
13	86	80	82		T	85	Pt.Cldy.
14	83	75	80		.20	85	Cloudy
15	84	76	80		1.23	85	Cloudy
16	83	77	80		.07	85	Cloudy
17	83	76	79		.11	85	Cloudy
18	85	75	80		0	84	Cloudy
19	84	78	81		.01	85	Pt.Cldy.
20	85	77	81		.93	85	Cloudy
21	82	77	80		.15	84	Cloudy
22	83	71	77		1.74	83	Cloudy
23	85	74	79		.07	83	Pt.Cldy.
24	85	76	79		.17	84	Pt.Cldy.
25	84	76	80		.06	84	Cloudy
26	85	77	81		0	84	Cloudy
27	85	77	81		T	85	Pt.Cldy.
28	83	77	80		.60	85	Cloudy
29	85	77	80		T	85	Pt.Cldy.
30	90	78	83		0	85	Pt.Cldy.
31	90	76	83		0	85	Pt.Cldy.
	-	-	-	-	5.38	-	
MEAN	84.7	77.6	80.8	-	-	84.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.836
Highest 29.950 Date 10
Lowest 29.740 Date 28 *
* and other dates

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.8
Highest 90 Date 31
Lowest 71 Date 22
Greatest daily range 14 Date 31
Mean for this month for 39 years 80.8
Maximum for this month for 39 years 90
Minimum for this month for 39 years 71
Average excess or deficiency of this month compared with a mean of 39 years + 0.0

PRECIPITATION
(Inches)

Total for this month 5.38
Greatest amount in 24 hours 1.74 Date 22
Average for this month for 76 years 12.54
Total from January 1, 1946 to date 9.56
Average from January 1 to date 22.90
Accumulated excess or deficiency from January 1 to date compared with average - 13.34

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943 16.27
1911 17.13	1922 8.88	1933 8.12	1944 25.43
1912 12.03	1923 11.18	1934 11.94	1945 8.15
1913 22.60	1924 14.86	1935 17.16	1946 5.38
1914 17.76	1925 8.23	1936 12.80	1947
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction North
Total movement 6230 miles
Average hourly velocity 8.4 miles per hour
Maximum velocity for five minutes 24 miles per hour from NE on 8

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 83.3
Sunshine, percentage of possible 60
Number of days clear 0 Partly cloudy 17 Cloudy 14
Number of days with .01 inch rain or more 16

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 15 - 22 - 26
Earthquakes None felt

66-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, ~~Cristobal, Canal Zone~~ ; Month ~~June~~, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi-H MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	79	82	---	0	85	Cloudy
2	84	79	81	---	.80	85	Cloudy
3	80	74	78	---	.90	85	Cloudy
4	84	75	80	---	T	85	Cloudy
5	83	78	82	---	.20	85	Cloudy
6	87	80	82	---	.03	85	Cloudy
7	83	78	81	---	.20	85	Cloudy
8	84	78	80	---	.05	85	Cloudy
9	81	70	76	---	1.65	84	Cloudy
10	84	73	79	---	.01	85	Cloudy
11	86	77	82	---	0	85	Pt.Cldy.
12	85	80	82	---	.27	85	Cloudy
13	83	77	80	---	1.06	84	Cloudy
14	85	78	82	---	.04	84	Pt.Cldy.
15	84	80	82	---	.01	85	Cloudy
16	84	77	81	---	.11	84	Cloudy
17	82	76	79	---	.52	83	Cloudy
18	84	76	80	---	1.83	83	Cloudy
19	83	75	79	---	1.07	84	Cloudy
20	81	78	80	---	.03	83	Cloudy
21	84	77	80	---	.15	83	Cloudy
22	85	81	82	---	0	84	Cloudy
23	85	80	82	---	0	84	Pt.Cldy.
24	86	78	81	---	.13	84	Cloudy
25	82	76	80	---	.22	84	Cloudy
26	85	78	81	---	T	84	Pt.Cldy.
27	85	80	82	---	.23	85	Cloudy
28	84	80	82	---	.01	86	Cloudy
29	86	77	81	---	.11	85	Cloudy
30	85	78	82	---	.7	86	Pt.Cldy.
Mo.							
Total	2520	2323	---	---	9.63	---	
Mean	84.0	77.4	80.6	---	---	84.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.839
Highest 29.950 Date 10
Lowest 29.720 Date 24

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.6
Highest 87 Date 6
Lowest 70 Date 9
Greatest daily range 11 Date 10
Mean for this month for 39 years 80.2
Maximum for this month for 39 years 93
Minimum for this month for 39 years 68
Average excess or deficiency of this month compared with a mean of 39 years + 0.4

PRECIPITATION
(Inches)

Total for this month 9.63
Greatest amount in 24 hours 2.15 Date 17-18
Average for this month for 76 years 13.67
Total from January 1, 1946 to date 19.19
Average from January 1 to date 36.57
Accumulated excess or deficiency from January 1 to date compared with average - 17.38

Total precipitation in this month in:

1906	14.09	1917	14.37	1928	16.22	1939	12.60
1907	16.89	1918	8.56	1929	18.96	1940	14.41
1908	10.53	1919	12.08	1930	9.40	1941	11.55
1909	17.49	1920	13.29	1931	9.26	1942	18.39
1910	13.63	1921	15.18	1932	14.36	1943	12.18
1911	15.58	1922	8.30	1933	15.88	1944	6.31
1912	15.90	1923	15.17	1934	9.89	1945	6.62
1913	11.81	1924	16.49	1935	16.26	1946	9.63
1914	16.30	1925	13.77	1936	10.57	1947	
1915	16.01	1926	31.23	1937	26.91	1948	
1916	14.28	1927	13.74	1938	18.01	1949	

WIND

Prevailing direction NE
Total movement 5668 miles
Average hourly velocity 7.9 miles per hour
Maximum velocity for five minutes 23 miles per hour from N on 19

MISCELLANEOUS

Total evaporation for this month --- inches
Average daily evaporation --- inches
Relative humidity, bihourly mean, percent 86.0
Sunshine, percentage of possible 50
Number of days clear 0 Partly cloudy 5 Cloudy 25
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 2,3,5,7,16,17,18,19,20,28,29
Earthquakes None

066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, Canal Zone; Month July, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	80	82		0	86	Pt.Cldy
2	83	76	79		.25	85	Cloudy
3	81	74	78		1.25	84	Cloudy
4	83	75	80		0	84	Pt.Cldy
5	84	80	82		0	86	Pt.Cldy
6	84	80	82		T	86	Pt.Cldy
7	86	77	80		.62	86	Cloudy
8	82	75	78		.37	86	Cloudy
9	83	79	81		0	85	Cloudy
10	80	76	78		.42	83	Cloudy
11	84	78	82		.05	84	Pt.Cldy
12	85	80	82		T	83	Pt.Cldy
13	85	81	82		0	83	Pt.Cldy
14	85	81	82		0	84	Pt.Cldy
15	86	76	80		.44	83	Cloudy
16	83	76	79		.07	83	Cloudy
17	84	78	81		.02	83	Cloudy
18	83	76	79		.19	84	Cloudy
19	82	76	79		T	82	Cloudy
20	82	77	80		.98	83	Cloudy
21	83	76	80		.21	84	Cloudy
22	83	76	79		.65	84	Cloudy
23	82	73	77		1.87	83	Cloudy
24	84	72	78		2.29	82	Cloudy
25	83	76	78		.38	82	Cloudy
26	85	76	80		0	82	Cloudy
27	85	76	80		.28	83	Pt.Cldy
28	84	76	80		.16	83	Cloudy
29	84	75	78		1.55	84	Cloudy
30	83	74	78		0	84	Cloudy
31	84	78	81		.26	83	Cloudy
	---	---	---		12.31	---	
MEAN	83.5	76.7	79.8		---	83.8	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.840
Highest 29.940 Date 28
Lowest 29.750 Date 1-6

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.8
Highest 86 Date 7
Lowest 72 Date 27
Greatest daily range 12 Date 24
Mean for this month for 39 years 80.3
Maximum for this month for 39 years 91
Minimum for this month for 39 years 70
Average excess or deficiency of this month compared with a mean of 39 years -0.5

PRECIPITATION
(Inches)

Total for this month 12.31
Greatest amount in 24 hours 3.36 Date 23-24
Average for this month for 76 years 13.54
Total from January 1, 1946 to date 31.50
Average from January 1 to date 52.11
Accumulated excess or deficiency from January 1 to date compared with average -20.61

Total precipitation in this month in:

1906 19.23	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.36	1929 18.67	1940 15.98
1908 14.78	1919 13.60	1930 8.97	1941 20.89
1909 12.83	1920 17.50	1931 13.86	1942 17.35
1910 21.07	1921 10.49	1932 17.43	1943 10.44
1911 14.38	1922 4.40	1933 9.88	1944 11.82
1912 13.83	1923 10.33	1934 9.21	1945 12.31
1913 15.23	1924 20.63	1935 26.23	1946
1914 10.74	1925 21.08	1936 18.72	1947
1915 20.72	1926 16.15	1937 9.50	1948
1916 10.44	1927 18.84	1938 22.25	1949

WIND

Prevailing direction Northeast
Total movement 6962 miles
Average hourly velocity 8.8 miles per hour
Maximum velocity for five minutes 24 miles per hour from W on 24

MISCELLANEOUS

Total evaporation for this month - - - inches
Average daily evaporation - - - inches
Relative humidity, bihourly mean, percent 87.2
Sunshine, percentage of possible 36
Number of days clear 0 Partly cloudy 9 Cloudy 22
Number of days with .01 inch rain or more 20

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 6,7,10,15,17,20,21,22,23,24
Earthquakes None

1066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, CANAL ZONE; Month AUGUST, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi.Hr. MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	80	82	--	0	83	Pt.Cldy
2	85	80	82		0	84	Pt.Cldy
3	83	77	80		.06	84	Cloudy
4	79	75	78		.41	82	Cloudy
5	79	70	75		2.22	82	Cloudy
6	80	72	77		0	81	Cloudy
7	81	75	78		.14	82	Cloudy
8	84	77	81		.15	82	Cloudy
9	83	77	79		.20	82	Cloudy
10	79	77	78		.26	81	Cloudy
11	80	74	78		.68	81	Cloudy
12	84	77	80		0	81	Cloudy
13	84	79	81		.16	83	Cloudy
14	86	80	82		T	83	Pt.Cldy
15	81	79	80		.02	82	Cloudy
16	83	76	80		.20	83	Cloudy
17	84	80	82		.01	83	Pt.Cldy
18	86	78	82		0	84	Cloudy
19	81	72	78		.83	82	Cloudy
20	83	76	80		.31	82	Cloudy
21	85	77	80		T	83	Cloudy
22	83	77	80		0	84	Pt.Cldy
23	84	76	80		.14	84	Pt.Cldy
24	82	77	80		.12	84	Cloudy
25	84	75	79		1.61	83	Cloudy
26	80	74	77		4.24	82	Cloudy
27	83	74	79		.09	83	Cloudy
28	84	78	80		0	84	Pt.Cldy
29	83	76	81		0	84	Pt.Cldy
30	84	81	82		T	84	Pt.Cldy
31	84	78	82		1.43	84	Cloudy
	--	--	--		13.28	--	
MEAN	82.7	76.6	79.8			82.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.845
Highest 29.970 Date 5
Lowest 29.740 Date 18

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 79.8
Highest 86 Date 18
Lowest 70 Date 5
Greatest daily range 9 Date 5-19-25
Mean for this month for 40 years 80.0
Maximum for this month for 40 years 93
Minimum for this month for 40 years 70
Average ~~excess~~ or deficiency of this month compared with a mean of 40 years -- 0.2

PRECIPITATION
(Inches)

Total for this month 13.28
Greatest amount in 24 hours 5.76 Date 25-26
Average for this month for 76 years 15.36
Total from January 1, 1946 to date 44.78
Average from January 1 to date 67.47
Accumulated ~~excess~~ or deficiency from January 1 to date compared with average -22.69

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.35	1941 16.95
1909 15.42	1920 23.04	1931 17.52	1942 10.74
1910 14.93	1921 18.45	1932 12.10	1943 20.00
1911 11.60	1922 14.53	1933 8.27	1944 18.40
1912 9.87	1923 15.35	1934 13.86	1945 17.66
1913 17.91	1924 7.42	1935 14.72	1946 13.28
1914 16.01	1925 7.71	1936 13.78	1947
1915 12.89	1926 20.84	1937 13.26	1948
1916 8.34	1927 26.63	1938 22.32	1949

WIND

Prevailing direction NW
Total movement 6423 miles
Average hourly velocity 8.6 miles per hour
Maximum velocity for five minutes 26 miles per hour from N on 5

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 87.1
Sunshine, percentage of possible 52
Number of days clear 0 Partly cloudy 9 Cloudy 22
Number of days with .01 inch rain or more 20

DATES

Fogs, light None
Fogs, dense "
Halos, lunar "
Thunderstorms 3, 7, 15, 19, 21, 23, 25, 2
Earthquakes --

066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month SEPTEMBER, 1946

TE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	Bi Hr MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	82	79	80		.05	83	Cloudy
2	84	76	80		.01	84	Cloudy
3	84	77	80		1.67	84	Cloudy
4	81	75	78		1.07	83	Cloudy
5	83	76	79		.05	83	Cloudy
6	85	75	80		T	84	Pt.Cldy
7	83	76	80		1.27	85	Cloudy
8	83	77	80		T	85	Cloudy
9	84	77	80		.70	84	Cloudy
10	84	77	80		.07	83	Cloudy
11	83	77	79		1.48	84	Cloudy
12	81	72	76		.70	83	Cloudy
13	82	73	79		.0	82	Cloudy
14	81	76	79		.55	83	Cloudy
15	80	75	79		.09	83	Cloudy
16	81	73	78		.43	82	Cloudy
17	84	72	77		.50	82	Cloudy
18	84	73	79		.0	82	Pt.Cldy
19	84	76	79		.03	84	Pt.Cldy
20	83	75	77		.24	83	Cloudy
21	88	75	81		T	82	Pt.Cldy
22	85	77	81		.0	84	Pt.Cldy
23	84	76	79		.47	84	Cloudy
24	82	78	79		.05	84	Cloudy
25	85	77	82		.0	83	Cloudy
26	82	74	77		2.40	82	Cloudy
27	84	74	79		.01	83	Pt.Cldy
28	85	75	79		2.02	84	Cloudy
29	84	75	78		.26	83	Cloudy
30	86	76	79		.0	84	Cloudy
31							
	-	-	-	-	14.12	-	
AN	83.4	75.5	79.1	-	-	83.3	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.814
Highest 29.940 Date 18
Lowest 29.690 Date 24

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.1
Highest 88 Date 21
Lowest 72 Date 12
Greatest daily range 13 Date 21
Mean for this month for 40 years 79.9
Maximum for this month for 46 years 94
Minimum for this month for 40 years 70
Average ~~excess~~ or deficiency of this month compared with a mean of 40 years -0.8

PRECIPITATION
(Inches)

Total for this month 14.12
Greatest amount in 24 hours 2.68 Date 3-4
Average for this month for 76 years 12.64
Total from January 1, 1946 to date ~~59.90~~ 58.90
Average from January 1 to date 80.11
Accumulated ~~excess~~ or deficiency from January 1 to date compared with average -21.21

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 3.24	1942 21.62
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.62	1922 12.73	1933 9.11	1944 4.40
1912 12.23	1923 12.31	1934 21.30	1945 11.58
1913 9.90	1924 9.00	1935 21.31	1946 14.12
1914 14.80	1925 8.17	1936 14.58	1947
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction Northwest
Total movement 4600 miles
Average hourly velocity 6.4 miles per hour
Maximum velocity for five minutes 26 miles per hour from North on 12th

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 87.4
Sunshine, percentage of possible 49
Number of days clear 0 Partly cloudy 6 Cloudy 24
Number of days with .01 inch rain or more 22

DATES

Fogs, light —
Fogs, dense —
Halos, lunar —
Thunderstorms 3, 7, 12, 14, 15, 16, 23, 24, and 28
Earthquakes —

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL; Month NOVEMBER, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	76	81	--	0	84	Pt.Cldy.
2	85	77	81		1.35	85	Pt.Cldy.
3	84	77	81		.54	85	Cloudy
4	84	77	78		1.35	85	Cloudy
5	84	73	79		.83	84	Cloudy
6	83	76	80		.07	84	Cloudy
7	84	76	80		.56	84	Cloudy
8	83	78	81		.03	84	Cloudy
9	84	77	79		1.25	84	Cloudy
10	82	74	78		5.55	84	Cloudy
11	81	75	77		4.08	84	Cloudy
12	81	75	77		.13	82	Cloudy
13	81	73	77		.40	82	Cloudy
14	84	74	79		.04	82	Cloudy
15	85	74	80		0	83	Pt.Cldy.
16	85	74	80		0	84	Pt.Cldy.
17	82	75	80		.37	84	Pt.Cldy.
18	83	76	80		.11	84	Pt.Cldy.
19	82	74	80		.55	83	Pt.Cldy.
20	82	74	78		.30	83	Pt.Cldy.
21	81	74	77		.64	84	Cloudy
22	80	74	78		.30	83	Cloudy
23	78	73	75		4.95	81	Cloudy
24	80	73	76		.73	81	Cloudy
25	86	73	78		0	82	Pt.Cldy.
26	90	74	80		T	83	Pt.Cldy.
27	85	75	79		T	84	Pt.Cldy.
28	83	75	79		0	84	Cloudy
29	84	75	81		.30	84	Pt.Cldy.
30	84	75	80		1.11	83	Pt.Cldy.
31							
	2495	2242	--	--	35.54	--	
MEAN	83.2	74.7	78.9	--	--	83.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.822
Highest 29.870 Date 17
Lowest 29.700 Date 1

TEMPERATURE
(Degrees Fahrenheit)

Bi-Hourly Monthly mean 78.9
Highest 90 Date 26
Lowest 71 Date 13
Greatest daily range 16 Date 26
Mean for this month for 40 years 79.0
Maximum for this month for 40 years 82
Minimum for this month for 40 years 69
Average deficiency of this month compared with a mean of 40 years -0.1

PRECIPITATION
(Inches)

Total for this month 35.54
Greatest amount in 24 hours 5.41 Date 10-11
Average for this month for 76 years 22.26
Total from January 1, 1946 to date 98.88
Average from January 1 to date 118.25
Accumulated deficiency from January 1 to date compared with average -19.44

Total precipitation in this month in:

1906 2644	1917 20.40	1928 17.20	1939 22.18
1907 15.37	1918 14.23	1929 6.27	1940 [illegible]
1908 31.72	1919 6.63	1930 16.76	1941 [illegible]
1909 [illegible]	1920 [illegible]	1931 [illegible]	1942 [illegible]
1910 [illegible]	1921 [illegible]	1932 [illegible]	1943 [illegible]
1911 15.81	1922 [illegible]	1933 [illegible]	1944 [illegible]
1912 [illegible]	1923 [illegible]	1934 [illegible]	1945 [illegible]
1913 [illegible]	1924 [illegible]	1935 [illegible]	1946 [illegible]
1914 [illegible]	1925 [illegible]	1936 [illegible]	1947
1915 [illegible]	1926 [illegible]	1937 [illegible]	1948
1916 [illegible]	1927 [illegible]	1938 [illegible]	1949

WIND

Prevailing direction NW
Total movement 4580 miles
Average hourly velocity 6.4 miles per hour
Maximum velocity for five minutes 22 miles per hour from N on 10

MISCELLANEOUS

Total evaporation for this month -- inches
Average daily evaporation -- inches
Relative humidity, bihourly mean, percent 83.3
Sunshine, percentage of possible 56
Number of days clear 0 Partly cloudy 13 Cloudy 17
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 6-7-8-11-28-29
Earthquakes None felt

4066-7

THE PANAMA CANAL

MR 74990—Panama Canal—11-10-40—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month DECEMBER, 1946

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	80		.61	84	Pt.Cldy
2	83	76	80		.36	84	Pt.Cldy
3	84	76	81		1.44	85	Cloudy
4	86	77	82		.16	84	Cloudy
5	83	75	79		4.30	83	Cloudy
6	82	72	77		2.84	81	Cloudy
7	79	75	78		1.45	81	Cloudy
8	81	75	79		2.07	80	Cloudy
9	81	71	76		3.91	80	Cloudy
10	78	74	75		.99	80	Cloudy
11	80	74	76		1.14	81	Cloudy
12	84	74	79		.01	82	Cloudy
13	83	75	79		.14	83	Pt.Cldy
14	83	77	80		.19	83	Pt.Cldy
15	82	77	78		1.01	83	Cloudy
16	80	74	77		.13	82	Cloudy
17	81	75	79		.30	83	Cloudy
18	83	75	79		.02	83	Cloudy
19	80	77	78		4.48	82	Cloudy
20	84	74	80		.12	82	Pt.Cldy
21	82	74	79		.04	82	Pt.Cldy
22	84	77	81		.01	83	Pt.Cldy
23	85	79	82		0	83	Pt.Cldy
24	84	75	81		.01	82	Pt.Cldy
25	84	77	82		.04	83	Pt.Cldy
26	85	80	82		.08	83	Pt.Cldy
27	85	79	82		.04	83	Pt.Cldy
28	86	78	82		0	83	Pt.Cldy
29	84	80	82		0	83	Pt.Cldy
30	83	79	82		T	83	Cloudy
31	84	78	82		0	83	Cloudy
	2569	2352	—		26.71	—	
MEAN	82.9	75.9	79.6		—	82.5	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.773
Highest 29.866 Date 22
Lowest 29.686 Date 11

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.6
Highest 86 Date 28
Lowest 71 Date 7
Greatest daily range 10 Date 9
Mean for this month for 40 years 80.0
Maximum for this month for 40 years 82
Minimum for this month for 40 years 76
Average deficiency of this month compared with a mean of 40 years - 0.4

PRECIPITATION
(Inches)

Total for this month 26.71
Greatest amount in 24 hours 5.81 Date 8-9
Average for this month for 76 years 12.12
Total from January 1, 1946 to date 126.52
Average from January 1 to date 130.97
Accumulated excess or deficiency from January 1 to date compared with average - 3.85

Total precipitation in this month in:

1906 15.61	1917 11.66	1928 16.43	1939 17.08
1907 7.38	1918 1.90	1929 7.87	1940 4.25
1908 9.07	1919 7.57	1930 7.86	1941 6.11
1909 34.38	1920 2.66	1931 2.47	1942 23.73
1910 15.80	1921 6.20	1932 7.67	1943 15.68
1911 2.63	1922 7.20	1933 18.76	1944 28.36
1912 11.47	1923 5.12	1934 15.66	1945 20.79
1913 6.33	1924 6.84	1935 11.62	1946 26.71
1914 8.68	1925 6.05	1936 2.53	1947
1915 9.45	1926 7.60	1937 22.95	1948
1916 5.71	1927 10.70	1938 29.29	1949

WIND

Prevailing direction NE
Total movement 6736 miles
Average hourly velocity 9.1 miles per hour
Maximum velocity for five minutes 24 miles per hour from NE on 29

MISCELLANEOUS

Total evaporation for this month —— inches
Average daily evaporation —— inches
Relative humidity, bihourly mean, percent 84.1
Sunshine, percentage of possible 37
Number of days clear 0 Partly cloudy 13 Cloudy 18
Number of days with .01 inch rain or more 20

DATES

Fogs, light None
Fogs, dense None
Halos, lunar 2, 17, 18, 19
Thunderstorms None this month.
Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

8066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z.; Month JANUARY, 1947.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	78	82		.04	82	Pt.Cldy
2	84	75	80		T	82	Pt.Cldy
3	84	75	80		.01	82	Pt.Cldy
4	83	78	80		0	82	Clear
5	82	74	78		0	83	Clear
6	84	74	79		.01	83	Pt.Cldy
7	83	77	80		.02	84	Pt.Cldy
8	84	80	82		0	84	Cloudy
9	84	78	81		.02	84	Pt.Cldy
10	84	77	80		.12	83	Pt.Cldy
11	84	79	82		T	83	Cloudy
12	84	78	81		T	82	Cloudy
13	84	78	81		T	83	Pt.Cldy
14	84	79	82		0	83	Pt.Cldy
15	84	78	81		T	82	Pt.Cldy
16	84	77	80		0	82	Pt.Cldy
17	84	78	81		0	82	Cloudy
18	84	78	81		0	82	Pt.Cldy
19	83	78	80		0	83	Pt.Cldy
20	83	78	80		0	83	Pt.Cldy
21	83	78	80		0	82	Pt.Cldy
22	83	74	78		.04	82	Pt.Cldy
23	83	75	79		.01	82	Pt.Cldy
24	82	77	80		.01	83	Pt.Cldy
25	82	76	79		0	83	Pt.Cldy
26	83	78	80		0	83	Pt.Cldy
27	83	77	80		0	83	Pt.Cldy
28	83	77	80		T	83	Pt.Cldy
29	83	75	79		.09	84	Pt.Cldy
30	82	77	80		T	84	Pt.Cldy
31	83	76	80		T	85	Pt.Cldy
	2585	2387	-	-	.37	-	
MEAN	83.4	77.0	80.2	-	-	82.9	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.845
Highest 30.000 Date 22
Lowest 29.740 Date 14

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.2
Highest 85 Date 1
Lowest 74 Date 5
Greatest daily range 10 Date 6
Mean for this month for 40 years 80.5
Maximum for this month for 40 years 88
Minimum for this month for 40 years 70
Average excess or deficiency of this month compared with a mean of 40 years -0.3

PRECIPITATION
(Inches)

Total for this month 0.37
Greatest amount in 24 hours .12 Date 10
Average for this month for 47 years 3.25
Total from January 1, 1947 to date 0.37
Average from January 1 to date 3.25
Accumulated excess or deficiency from January 1 to date compared with average -2.88

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944 1.23
1912 .28	1923 1.98	1934 3.94	1945 1.89
1913 6.71	1924 .61	1935 5.81	1946 2.08
1914 1.35	1925 3.66	1936 1.54	1947 .37
1915 3.41	1926 .70	1937 4.20	1948 -
1916 2.33	1927 4.60	1938 2.27	1949 -

WIND

Prevailing direction NE
Total movement 9608 miles
Average hourly velocity 12.9 miles per hour
Maximum velocity for five minutes 25 miles per hour from NE on 14

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 80.4
Sunshine, percentage of possible 20
Number of days clear 2 Partly cloudy 25 Cloudy 4
Number of days with .01 inch rain or more 10

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms None
Earthquakes None Felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, CANAL ZONE; Month FEBRUARY, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	78	81		T	83	Pt.Cldy
2	83	79	81		T	82	Pt.Cldy
3	83	78	80		T	83	Pt.Cldy
4	80	77	78		.18	83	Pt.Cldy
5	82	78	80		T	82	Pt.Cldy
6	80	73	76		.14	80	Pt.Cldy
7	82	75	78		.88	80	Pt.Cldy
8	83	78	80		0	82	Pt.Cldy
9	82	79	80		0	82	Pt.Cldy
10	82	78	78		T	82	Pt.Cldy
11	82	74	78		.05	82	Pt.Cldy
12	83	77	80		.01	82	Pt.Cldy
13	82	78	80		0	82	Pt.Cldy
14	81	78	80		0	82	Pt.Cldy
15	81	74	78		.27	82	Cloudy
16	81	70	76		.12	82	Pt.Cldy
17	81	74	78		.04	81	Cloudy
18	82	74	78		0	80	Pt.Cldy
19	82	73	78		0	80	Pt.Cldy
20	82	72	77		0	82	Pt.Cldy
21	90	73	82		0	83	Pt.Cldy
22	87	73	80		0	84	Pt.Cldy
23	82	74	78		0	84	Pt.Cldy
24	82	74	78		0	84	Pt.Cldy
25	85	75	80		.09	85	Pt.Cldy
26	84	79	82		0	84	Pt.Cldy
27	85	78	82		T	84	Pt.Cldy
28	84	79	82		0	83	Pt.Cldy
29							
30							
31							
	2317	2122	-	-	1.78	-	
MEAN	82.7	75.8	79.3	-	-	82.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.871
Highest 29.980 Date 15
Lowest 29.760 Date 28

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.3
Highest 90 Date 21
Lowest 70 Date 16
Greatest daily range 17 Date 21
Mean for this month for 40 years 80.5
Maximum for this month for 40 years 90
Minimum for this month for 40 years 69
Average deficiency of this month compared with a mean of 40 years -1.2

PRECIPITATION
(Inches)

Total for this month 1.78
Greatest amount in 24 hours .99 Date 6 - 7
Average for this month for 77 years 1.52
Total from January 1, 1947 to date 2.15
Average from January 1 to date 4.77
Accumulated deficiency from January 1 to date compared with average -2.62

Total precipitation in this month in:

1906 1.14	1917 .45	1928 .71	1939 .50
1907 1.37	1918 .67	1929 .56	1940 1.83
1908 1.08	1919 .36	1930 .75	1941 2.87
1909 1.92	1920 .54	1931 .97	1942 .77
1910 3.58	1921 1.63	1932 .72	1943 2.26
1911 1.81	1922 .71	1933 .08	1944 2.96
1912 1.81	1923 .69	1934 .55	1945 .87
1913 1.75	1924 2.80	1935 3.10	1946 .75
1914 1.32	1925 .73	1936 .13	1947 1.78
1915 12.37	1926 1.78	1937 .46	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction North
Total movement 8795 miles
Average hourly velocity 13.1 miles per hour
Maximum velocity for five minutes 26 miles per hour from N on 15

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 81.4
Sunshine, percentage of possible 77
Number of days clear 0 Partly cloudy 26 Cloudy 2
Number of days with .01 inch rain or more 9

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None felt.

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month March, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	79	81		0	83	Pt.Cldy.
2	83	77	80		T	83	Pt.Cldy.
3	84	77	80		.01	84	Pt.Cldy.
4	84	78	81		.03	84	Cloudy
5	84	76	80		.06	83	Pt.Cldy.
6	85	76	80		.04	82	Pt.Cldy.
7	83	79	81		0	82	Pt.Cldy.
8	82	77	80		.06	80	Pt.Cldy.
9	84	77	80		0	83	Pt.Cldy.
10	83	78	80		0	83	Pt.Cldy.
11	83	79	81		.07	82	Cloudy
12	84	77	80		0	82	Pt.Cldy.
13	84	79	82		0	82	Pt.Cldy.
14	84	79	82		0	82	Pt.Cldy.
15	83	79	81		0	83	Pt.Cldy.
16	83	79	81		0	84	Pt.Cldy.
17	83	79	81		.01	84	Pt.Cldy.
18	84	78	81		0	84	Pt.Cldy.
19	84	77	80		0	84	Pt.Cldy.
20	83	76	80		0	83	Pt.Cldy.
21	84	78	81		0	84	Pt.Cldy.
22	84	78	81		0	83	Pt.Cldy.
23	83	76	80		T	83	Pt.Cldy.
24	82	75	78		.05	83	Pt.Cldy.
25	83	77	80		.01	83	Pt.Cldy.
26	85	78	82		T	83	Pt.Cldy.
27	84	79	82		0	82	Pt.Cldy.
28	82	79	80		0	81	Pt.Cldy.
29	83	78	82		T	82	Pt.Cldy.
30	83	78	82		0	81	Pt.Cldy.
31	84	76	80		.03	83	Pt.Cldy.
	2587	2408	-	-	.37	-	
MEAN	83.5	77.7	80.6	-	-	82.8	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.889
Highest 30.040 Date 22
Lowest 29.760 Date 13

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.6
Highest 85 Date 26
Lowest 75 Date 24
Greatest daily range 9 Date 6
Mean for this month for 40 years 81.1
Maximum for this month for 40 years 92
Minimum for this month for 40 years 67
Average deficiency of this month compared with a mean of 40 years - 0.5

PRECIPITATION
(Inches)

Total for this month .37
Greatest amount in 24 hours .10 Date 5-6
Average for this month for 78 years 1.47
Total from January 1, 1947 to date 2.52
Average from January 1 to date 6.24
Accumulated deficiency from January 1 to date compared with average -3.72

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.16	1918 .41	1929 2.59	1940 .63
1908 3.53	1919 .61	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .92	1933 1.11	1944 .18
1912 .66	1923 .36	1934 1.10	1945 .43
1913 .79	1924 .71	1935 .80	1946 .80
1914 .91	1925 .31	1936 .87	1947 .37
1915 1.71	1926 .43	1937 .32	1948
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction N
Total movement 9971 miles
Average hourly velocity 13.4 miles per hour
Maximum velocity for five minutes 24 miles per hour from NE on 26

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 82.9
Sunshine, percentage of possible 73
Number of days clear 0 Partly cloudy 29 Cloudy 2
Number of days with .01 inch rain or more 10

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None
Earthquakes None Felt

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

1066-8

THE PANAMA CANAL

MR 9947o—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, CANAL ZONE; Month APRIL, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	75	79		0	84.	PtCldy
2	84	77	80		.27	84	PtCldy
3	84	77	80		0	84	PtCldy
4	84	79	82		0	85	PtCldy
5	84	77	80		T	84	PtCldy
6	85	78	82		T	84	PtCldy
7	84	78	81		0	84	PtCldy
8	84	79	82		0	83	PtCldy
9	84	79	82		0	83	PtCldy
10	83	77	81		.04	84	PtCldy
11	84	79	82		0	84	PtCldy
12	84	79	82		0	84	PtCldy
13	84	79	82		0	84	PtCldy
14	85	79	82		0	84	PtCldy
15	85	80	82		0	84	PtCldy
16	84	79	82		0	84	PtCldy
17	84	79	82		0	84	PtCldy
18	84	79	82		0	84	PtCldy
19	84	78	81		0	83	PtCldy
20	85	78	82		0	83	PtCldy
21	85	79	82		0	83	PtCldy
22	84	78	81		.02	83	Cloudy
23	86	78	82		.11	83	PtCldy
24	85	79	82		.02	84	PtCldy
25	84	78	81		0	83	PtCldy
26	85	79	82		0	83	PtCldy
27	84	78	81		.01	83	PtCldy
28	83	77	80		T	82	PtCldy
29	83	74	78		6.21	83	Cloudy
30	84	74	79		0	83	~~Cloudy~~ Pt. Cldy
31							
	2525	2339			6.68		
MEAN	84.2	78.0	81.1	-		83.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.870
Highest 29.970 Date 28
Lowest 29.750 Date 11

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.1
Highest 86 Date 23
Lowest 74 Date 29
Greatest daily range 16 Date 30
Mean for this month for 40 years 81.2
Maximum for this month for 40 years 94
Minimum for this month for 40 years 72
Average deficiency of this month compared with a mean of 40 years -0.6

PRECIPITATION
(Inches)

Total for this month 6.68
Greatest amount in 24 hours 6.21 Date 29
Average for this month for 77 years 4.11
Total from January 1, 1947 to date 9.20
Average from January 1 to date 10.35
Accumulated deficiency from January 1 to date compared with average -1.15

Total precipitation in this month in:

1906 4.23	1917 1.87	1928 .86	1939 1.00
1907 1.06	1918 5.34	1929 .67	1940 1.83
1908 1.27	1919 10.95	1930 6.85	1941 .36
1909 3.56	1920 1.72	1931 4.30	1942 8.33
1910 3.30	1921 7.43	1932 2.23	1943 3.92
1911 3.06	1922 2.11	1933 .35	1944 8.93
1912 .75	1923 1.21	1934 5.48	1945 1.90
1913 2.69	1924 10.85	1935 1.87	1946 0.55
1914 4.12	1925 5.47	1936 3.29	1947 6.68
1915 10.42	1926 .34	1937 1.65	1948
1916 6.25	1927 6.93	1938 6.25	1949

WIND

Prevailing direction NE
Total movement 10,094 miles
Average hourly velocity 14.0 miles per hour
Maximum velocity for five minutes 25 miles per hour from NE on 17

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 82.6
Sunshine, percentage of possible 70
Number of days clear 0 Partly cloudy 28 Cloudy 2
Number of days with .01 inch rain or more 7

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms None 29 TH
Earthquakes None Felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month May, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	79	82		.0	83	Cloudy
2	85	74	80		.41	83	Pt.Cldy
3	83	77	80		.0	83	Pt.Cldy
4	84	77	80		.03	83	Cloudy
5	84	77	80		.06	83	Cloudy
6	83	78	80		.0	82	Cloudy
7	83	77	80		.04	83	Cloudy
8	83	78	80		.01	83	Cloudy
9	85	78	82		.02	84	Cloudy
10	82	78	80		.04	83	Cloudy
11	83	78	80		.01	83	Pt.Cldy
12	85	80	82		.0	84	Pt.Cldy
13	86	78	82		.18	84	Cloudy
14	84	78	81		.01	84	Cloudy
15	83	75	79		1.05	84	Cloudy
16	85	78	82		.03	84	Cloudy
17	85	80	82		.0	84	Pt.Cldy
18	85	76	80		.15	83	Cloudy
19	85	78	82		.21	84	Cloudy
20	84	77	80		.04	83	Cloudy
21	84	77	80		.05	83	Pt.Cldy
22	84	76	80		T	84	Pt.Cldy
23	81	75	78		1.53	84	Cloudy
24	81	75	78		.01	82	Cloudy
25	83	76	80		.35	82	Cloudy
26	83	75	79		1.40	83	Cloudy
27	85	77	81		.0	84	Pt.Cldy
28	85	78	82		.51	85	Cloudy
29	83	74	80		.93	84	Cloudy
30	83	75	78		.05	85	Cloudy
31	84	76	80		.11	84	Cloudy
	2599	2385	-		7.23	-	
MEAN	83.8	76.9	80.4		-	83.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.856
Highest 29.940 Date 26
Lowest 29.760 Date 2

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.4
Highest 86 Date 13
Lowest 74 Date 2
Greatest daily range 11 Date 2
Mean for this month for 40 years 81.5
Maximum for this month for 40 years 92
Minimum for this month for 40 years 71
Average excess or deficiency of this month compared with a mean of 40 years -1.1

PRECIPITATION
(Inches)

Total for this month 7.23
Greatest amount in 24 hours 1.74 Date 25 - 26
Average for this month for 77 years 12.47
Total from January 1, 19__ to date 16.43
Average from January 1 to date 22.82
Accumulated excess or deficiency from January 1 to date compared with average - 6.39

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.28
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 6.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.69	1921 13.61	1932 16.55	1943 16.27
1911 17.13	1922 8.88	1933 8.12	1944 25.43
1912 12.03	1923 11.18	1934 11.94	1945 8.15
1913 22.60	1924 14.86	1935 17.16	1946 5.38
1914 17.76	1925 8.23	1936 12.86	1947 7.23
1915 7.75	1926 13.73	1937 20.99	1948
1916 9.38	1927 12.11	1938 12.74	1949

WIND

Prevailing direction N
Total movement 7220 miles
Average hourly velocity 9.7 miles per hour
Maximum velocity for five minutes 25 miles per hour from N on 29

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 84.0
Sunshine, percentage of possible 52
Number of days clear 0 Partly cloudy 8 Cloudy 23
Number of days with .01 inch rain or more 24

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 28 & 31
Earthquakes None felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month June, 1947.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	76	80		.12	84	Cloudy
2	84	77	80		.10	84	Cloudy
3	84	75	80		.22	85	Cloudy
4	88	76	82		.36	85	Cloudy
5	83	76	80		0	84	Cloudy
6	85	77	81		.02	84	Cloudy
7	85	77	81		.59	84	Cloudy
8	84	76	80		.56	84	Cloudy
9	89	76	82		0	84	Pt.Cldy.
10	85	77	81		0	84	Pt.Cldy.
11	84	77	80		.04	85	Cloudy
12	88	76	82		.12	84	Pt.Cldy.
13	86	76	81		.01	84	Pt.Cldy.
14	88	77	82		.29	84	Cloudy
15	85	76	80		.29	84	Cloudy
16	80	74	77		.14	84	Cloudy
17	82	72	77		.81	84	Cloudy
18	81	73	77		.18	83	Cloudy
19	82	75	78		0	84	Cloudy
20	86	76	81		.09	84	Cloudy
21	84	75	80		0	84	Pt.Cldy.
22	79	77	78		.24	84	Cloudy
23	84	74	79		.56	84	Cloudy
24	85	74	80		.37	84	Cloudy
25	86	75	80		0	85	Pt.Cldy.
26	86	79	82		.22	85	Cloudy
27	80	75	78		.10	84	Cloudy
28	83	75	79		3.74	83	Cloudy
29	87	76	82		.10	83	Cloudy
30	86	78	82		.16	84	Cloudy
31							
TOT	2533	2273	—		9.37	—	
MEAN	84.4	75.8	80.1		—	84.1	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.832
Highest 29.920 Date 18
Lowest 29.730 Date 29

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.1
Highest 89 Date 9
Lowest 72 Date 17
Greatest daily range 13 Date 9
Mean for this month for 40 years 81.0
Maximum for this month for 40 years 93
Minimum for this month for 40 years 68
Average excess or deficiency of this month compared with a mean of 40 years -0.9

PRECIPITATION
(Inches)

Total for this month 9.37
Greatest amount in 24 hours 3.84 Date 28-29
Average for this month for 47 years 13.61 77
Total from January 1, 1947 to date 25.80
Average from January 1 to date 36.44
Accumulated excess or deficiency from January 1 to date compared with average -10.64

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942 18.99
1910 13.63	1921 15.18	1932 14.36	1943 12.18
1911 15.58	1922 8.30	1933 15.88	1944 6.31
1912 15.90	1923 15.17	1934 9.89	1945 6.62
1913 11.81	1924 16.49	1935 16.26	1946 9.63
1914 16.30	1925 13.77	1936 10.77	1947 9.37
1915 16.01	1926 31.23	1937 26.91	1948
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction South
Total movement 3971 miles
Average hourly velocity 5.5 miles per hour
Maximum velocity for five minutes 21 miles per hour from NE on 29

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 88.3
Sunshine, percentage of possible 37
Number of days clear 0 Partly cloudy 6 Cloudy 24
Number of days with .01 inch rain or more 24

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 4-11-15-16-17-22-23-24-26-28
Earthquakes None felt.

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

066-8

THE PANAMA CANAL

MR 99476—Panama Canal— 11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month July, 1947

DAY	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	80	75	78		1.07	84	Cldy
2	84	74	79		.87	84	Cldy
3	82	74	78		.71	84	Cldy
4	87	75	81		.27	83	Cldy
5	87	73	80		1.25	84	Cldy
6	85	75	80		0	84	PtCldy
7	83	76	80		0	84	Cldy
8	84	77	80		.53	85	PtCldy
9	86	79	82		0	85	PtCldy
10	85	80	82		0	86	Cldy
11	86	80	83		0	86	Cldy
12	86	80	83		.03	86	Cldy
13	82	77	80		.11	85	Cldy
14	84	77	80		.04	86	PtCldy
15	86	80	83		0	86	PtCldy
16	84	77	80		.68	86	Cldy
17	81	74	78		.13	85	Cldy
18	85	78	82		.24	84	Cldy
19	86	80	83		0	85	PtCldy
20	84	77	80		1.32	85	Cldy
21	83	73	78		1.35	84	Cldy
22	81	76	78		.06	84	Cldy
23	83	74	78		.24	84	Cldy
24	83	75	79		.69	84	Cldy
25	84	72	78		2.02	84	Cldy
26	81	74	78		.94	83	Cldy
27	83	74	78		.02	82	PtCldy
28	86	75	80		.10	84	Cldy
29	86	75	80		T	84	Cldy
30	83	76	80		.05	84	Cldy
31	82	74	78		0	84	Cldy
TOT	2602	2356	—		12.72	—	
MEAN	83.9	76.0	80.0			84.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.841
Highest 29.940 Date 24
Lowest 29.750 Date 10

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Same) 80.0
Highest 87 Date 5
Lowest 72 Date 25
Greatest daily range 14 Date 5
Mean for this month for 40 years 80.9
Maximum for this month for 40 years 91
Minimum for this month for 40 years 70
Average excess or deficiency of this month compared with a mean of 40 years -0.9

PRECIPITATION
(Inches)

Total for this month 12.72
Greatest amount in 24 hours 2.65 Date 20-21
Average for this month for 77 years 15.51
Total from January 1, 1947 to date 38.52
Average from January 1 to date 51.95
Accumulated deficiency from January 1 to date compared with average -13.43

Total precipitation in this month in:

1906 19.23	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.36	1929 18.67	1940 15.90
1908 14.76	1919 13.60	1930 6.99	1941 20.89
1909 13.83	1920 17.58	1931 13.36	1942 17.35
1910 21.07	1921 16.49	1932 17.45	1943 16.24
1911 14.58	1922 4.40	1933 9.88	1944 11.82
1912 13.13	1923 10.33	1934 9.41	1945 19.81
1913 15.13	1924 20.63	1935 26.23	1946 12.31
1914 10.74	1925 21.08	1936 18.72	1947 12.72
1915 19.72	1926 16.15	1937 9.50	1948
1916 10.44	1927 18.64	1938 22.25	1949

WIND

Prevailing direction South
Total movement 4925 miles
Average hourly velocity 6.6 miles per hour
Maximum velocity for five minutes 23 miles per hour from N on 25

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 88.3
Sunshine, percentage of possible 39
Number of days clear 0 Partly cloudy 7 Cloudy 24
Number of days with .01 inch rain or more 22

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 2, 5, 8, 10, 15, 22, 24, 29
Earthquakes None felt

RECEIVED OCT 29 1947 WEATHER BUREAU

1066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month AUGUST, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	75	79		.15	85	Pt.Cldy.
2	86	76	81		.87	84	Cldy.
3	85	74	80		1.27	85	Cldy.
4	81	70	76		5.29	84	Cldy.
5	81	74	78		.42	84	Cldy.
6	84	74	79		.02	84	Cldy.
7	86	73	80		1.53	85	Cldy.
8	84	70	77		1.84	85	Cldy.
9	80	73	78		.29	83	Cldy.
10	86	73	80		.01	84	Pt.Cldy.
11	83	75	79		0	85	Pt.Cldy.
12	86	79	82		.15	85	Pt.Cldy.
13	85	76	80		.15	85	[illegible].Cldy.
14	85	76	80		.24	84	Cldy.
15	85	78	82		T	85	Cldy.
16	85	75	80		.46	85	Cldy.
17	84	80	82		T	85	Cldy.
18	85	80	82		0	85	Cldy.
19	85	79	82		.03	85	Cldy.
20	85	80	82		.24	85	Cldy.
21	84	78	81		.39	85	Cldy.
22	86	76	81		.04	85	Cldy.
23	84	76	80		.33	84	Cldy.
24	84	78	81		.56	83	Cldy.
25	85	76	80		.80	84	Cldy.
26	82	77	80		.19	85	Cldy.
27	84	73	78		1.81	84	Cldy.
28	84	75	80		.02	84	Cldy.
29	84	75	80		0	84	Pt.Cldy.
30	85	78	82		0	85	Cldy.
31	85	81	83		0	85	Pt.Cldy.
TOTAL	2611	2353	—	—	17.10	—	
MEAN	84.2	75.9	80.0	—	—	84.6	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.841
Highest 29.960 Date 29
Lowest 29.710 Date 19

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.0
Highest 86 Date 10
Lowest 70 Date 8
Greatest daily range 14 Date 8
Mean for this month for 41 years 80.7
Maximum for this month for 41 years 93
Minimum for this month for 41 years 70
Average [illegible] or deficiency of this month compared with a mean of 41 years -0.7

PRECIPITATION
(Inches)

Total for this month 17.10
Greatest amount in 24 hours 5.92 Date 3-4
Average for this month for 77 years 15.38
Total from January 1, 1947 to date 222.62
Average from January 1 to date 217.33
Accumulated [illegible] deficiency from January 1 to date compared with average - 11.71

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.71	1930 14.35	1941 16.92
1909 15.42	1920 23.06	1931 17.32	1942 10.74
1910 14.93	1921 18.45	1932 12.10	1943 20.00
1911 11.69	1922 14.53	1933 8.27	1944 18.49
1912 9.89	1923 15.32	1934 13.86	1945 17.66
1913 17.91	1924 7.42	1935 14.72	1946 13.28
1914 16.01	1925 7.71	1936 13.78	1947 17.10
1915 12.89	1926 20.84	1937 13.26	1948
1916 8.34	1927 20.63	1938 22.32	1949

WIND

Prevailing direction NE
Total movement 5541 miles
Average hourly velocity 7.4 miles per hour
Maximum velocity for five minutes 27 miles per hour from N on 4

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 88.0
Sunshine, percentage of possible 39
Number of days clear 0 Partly cloudy 6 Cloudy 25
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 3, 7, 8, 13, 14, 15, 20, 21, 22
Earthquakes None [illegible] 14 — 7:23, 22, 27

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month September, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	74	79		1.78	85	Cloudy
2	84	74	79		.09	84	Cloudy
3	85	76	80		.20	84	Cloudy
4	83	75	79		.07	84	Cloudy
5	84	74	79		.0	84	Clear
6	82	75	78		2.18	84	Cloudy
7	84	73	78		1.80	84	Cloudy
8	82	71	76		1.01	84	Cloudy
9	79	74	76		1.04	82	Cloudy
10	82	74	78		.01	82	Cloudy
11	83	75	79		.28	83	Cloudy
12	84	75	80		1.16	83	Cloudy
13	87	75	81		1.45	84	Pt. Cldy.
14	83	74	78		.27	84	Cloudy
15	85	74	80		.97	83	Cloudy
16	82	77	80		.04	84	Cloudy
17	84	75	80		.09	84	Cloudy
18	84	76	80		.25	85	Cloudy
19	80	76	78		.22	84	Cloudy
20	86	75	80		.49	84	Cloudy
21	88	75	82		0	83	Clear
22	90	77	84		0	84	Pt. Cldy.
23	84	76	80		.29	84	Cloudy
24	85	75	80		0	84	Cloudy
25	85	76	80		.29	84	Cloudy
26	84	77	80		.24	85	Cloudy
27	84	77	80		.05	85	Cloudy
28	85	77	81		0	84	Cloudy
29	85	77	81		.10	84	Cloudy
30	84	75	80		.15	85	Cloudy
31							
TOTAL	2521	2254	-	-	14.52	-	
MEAN	84.0	75.1	79.6	-	-	84.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.859
Highest 29.950 Date 16
Lowest 29.740 Date 26

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Normal) 79.6
Highest 90 Date 22
Lowest 71 Date 8
Greatest daily range 13 Date 22
Mean for this month for 41 years 80.9
Maximum for this month for 41 years 94
Minimum for this month for 41 years 70
Average excess or deficiency of this month compared with a mean of 41 years - 1.3

PRECIPITATION
(Inches)

Total for this month 14.52
Greatest amount in 24 hours 2.75 Date 7-8
Average for this month for 77 years 12.67
Total from January 1, 1947 to date 70.14
Average from January 1 to date 80.00
Accumulated excess or deficiency from January 1 to date compared with average - 9.86

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 8.24	1942 21.68
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.82	1922 12.79	1933 9.11	1944 4.40
1912 12.23	1923 12.31	1934 21.30	1945 11.58
1913 9.90	1924 9.00	1935 21.31	1946 14.12
1914 14.80	1925 8.17	1936 14.58	1947 14.52
1915 13.85	1926 10.45	1937 14.09	1948
1916 10.41	1927 17.32	1938 10.90	1949

WIND

Prevailing direction S
Total movement 4205 miles
Average hourly velocity 5.8 miles per hour
Maximum velocity for five minutes 27 (true) miles per hour from S W on 1 st

MISCELLANEOUS

Total evaporation for this month —— inches
Average daily evaporation —— inches
Relative humidity, bihourly mean, percent 86.8
Sunshine, percentage of possible 36
Number of days clear 2 Partly cloudy 3 Cloudy 26
Number of days with .01 inch rain or more 25

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1,3,6,7,8,9,11,12,13,14,23,25,26,29
Earthquakes None Felt

3066-8

MR 99476—Panama Canal—11-17-43—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month October, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	77	82		.0	86	Pt.Cldy.
2	87	78	82		.01	86	Cloudy
3	88	75	82		.96	86	Cloudy
4	86	75	80		1.00	85	Cloudy
5	81	73	77		5.15	84	Cloudy
6	83	73	78		.92	83	Cloudy
7	87	74	80		.19	83	Cloudy
8	87	75	81		T	83	Cloudy
9	90	76	80		.10	84	Pt.Cldy.
10	84	76	80		.04	84	Cloudy
11	82	75	78		T	84	Cloudy
12	82	76	79		.10	84	Cloudy
13	84	75	80		.04	84	Cloudy
14	83	75	79		.66	83	Cloudy
15	80	75	78		.78	83	Cloudy
16	87	74	80		.33	84	Pt.Cldy.
17	85	75	80		.10	85	Pt.Cldy.
18	84	75	80		T	85	Pt.Cldy.
19	89	75	82		.26	85	Pt.Cldy.
20	84	75	80		.23	84	Cloudy
21	84	75	80		1.92	84	Cloudy
22	86	75	80		0	84	Cloudy
23	90	75	82		1.22	84	Pt.Cldy.
24	83	75	79		.02	85	Cloudy
25	83	75	79		.57	84	Cloudy
26	85	75	80		0	84	Pt.Cldy.
27	87	76	82		.02	85	Cloudy
28	85	76	80		.15	85	Cloudy
29	84	76	80		1.15	85	Cloudy
30	84	75	80		.54	84	Cloudy
31	84	75	80		1.25	85	Cloudy
SU.	2635	2330	—		17.71	—	
MEAN	85.0	75.2	80.1		—	84.4	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.825
Highest 29.950 Date 20
Lowest 29.710 Date 3

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.1
Highest 90 Date 23
Lowest 73 Date 5
Greatest daily range 15 Date 23
Mean for this month for 41 years 80.5
Maximum for this month for 41 years 95
Minimum for this month for 41 years 70
Average excess or deficiency of this month compared with a mean of 41 years -0.4

PRECIPITATION
(Inches)

Total for this month 17.71
Greatest amount in 24 hours 5.53 Date 4-5
Average for this month for 78 years 15.89
Total from January 1, 1947 to date 87.85
Average from January 1 to date 95.89
Accumulated excess or deficiency from January 1 to date compared with average -8.04

Total precipitation in this month in:

1906	13.34	1917	7.87	1928	18.02	1939	17.52
1907	21.99	1918	27.07	1929	13.74	1940	16.28
1908	10.96	1919	21.94	1930	7.26	1941	25.17
1909	19.31	1920	17.16	1931	20.42	1942	31.66
1910	15.65	1921	8.27	1932	16.75	1943	10.23
1911	16.53	1922	13.87	1933	19.84	1944	20.15
1912	17.65	1923	42.17	1934	17.49	1945	18.33
1913	18.63	1924	21.56	1935	8.90	1946	15.37
1914	22.16	1925	16.49	1936	11.36	1947	17.71
1915	21.86	1926	15.31	1937	16.58	1948	
1916	17.59	1927	13.12	1938	17.26	1949	

WIND

Prevailing direction South
Total movement 4281 miles
Average hourly velocity 5.8 miles per hour
Maximum velocity for five minutes 23 miles per hour from NE on 3

MISCELLANEOUS

Total evaporation for this month ——— inches
Average daily evaporation ——— inches
Relative humidity, bihourly mean, percent 86.2
Sunshine, percentage of possible 42
Number of days clear 0 Partly cloudy 8 Cloudy 23
Number of days with .01 inch rain or more 25

DATES

Fogs, light 18
Fogs, dense none
Halos, lunar none
Thunderstorms 2,3,4,5,16,21,23,29,30
Earthquakes none felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-45—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month NOVEMBER, 1947

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	86	76	81		.14	85	Cloudy
2	84	77	80		.10	85	Cloudy
3	84	77	80		.04	85	Cloudy
4	86	73	80		1.48	85	Cloudy
5	81	74	78		2.29	85	Cloudy
6	86	77	82		.15	85	Cloudy
7	86	76	81		1.84	85	Cloudy
8	84	75	80		0	85	Cloudy
9	85	76	80		.25	85	Clear
10	86	76	81		T	85	PtCldy
11	85	76	80		0	85	Clear
12	85	73	79		.86	86	PtCldy
13	84	75	80		.14	86	PtCldy
14	85	75	80		.38	86	Cloudy
15	87	76	82		.10	86	Cloudy
16	88	77	82		.01	86	Cloudy
17	83	75	79		.12	86	Cloudy
18	85	76	80		.01	85	Cloudy
19	85	76	80		.33	85	PtCldy
20	85	76	80		T	86	Cloudy
21	84	75	80		1.69	86	Cloudy
22	82	75	78		.99	85	Cloudy
23	85	76	80		.07	85	PtCldy
24	85	75	80		.62	85	Cloudy
25	82	74	78		0	85	PtCldy
26	84	74	79		.07	85	PtCldy
27	88	75	82		.74	85	Cloudy
28	83	73	78		0	83	Clear
29	83	72	78		.01	85	Clear
30	84	74	79		0	85	Clear
31							
TOT.	2540	2259	-	-	12.43	-	
MEAN	84.7	75.3	80.0	-	-	85.2	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.825
Highest 29.960 Date 29
Lowest 29.720 Date 14

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.0
Highest 88 Date 27
Lowest 72 Date 29
Greatest daily range 13 Date 27
Mean for this month for 41 years 79.7
Maximum for this month for 41 years 92
Minimum for this month for 41 years 69
Average excess or deficiency of this month compared with a mean of 41 years 0.3

PRECIPITATION
(Inches)

Total for this month 12.43
Greatest amount in 24 hours 2.46 Date 21-22
Average for this month for 77 years 22.14
Total from January 1, 1947 to date 100.28
Average from January 1 to date 118.03
Accumulated excess or deficiency from January 1 to date compared with average -17.75

Total precipitation in this month in:

1906 26.64	1917 20.49	1928 17.20	1939 35.18
1907 15.37	1918 14.23	1929 8.99	1940 29.91
1908 31.72	1919 6.63	1930 16.94	1941 24.97
1909 42.90	1920 21.27	1931 30.31	1942 12.60
1910 30.04	1921 19.96	1932 37.13	1943 21.69
1911 15.81	1922 15.63	1933 43.06	1944 16.41
1912 21.81	1923 22.16	1934 28.81	1945 24.29
1913 16.75	1924 30.29	1935 42.73	1946 25.54
1914 18.35	1925 22.95	1936 23.11	1947 12.43
1915 22.33	1926 29.39	1937 23.23	1948
1916 14.08	1927 28.35	1938 18.90	1949

WIND

Prevailing direction S
Total movement 4127 miles
Average hourly velocity 5.7 miles per hour
Maximum velocity for five minutes 23 miles per hour from N.W. on 19

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 86.3
Sunshine, percentage of possible 55
Number of days clear 5 Partly cloudy 7 Cloudy 18
Number of days with .01 inch rain or more 23

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 4,5,6,7,12,13,15,17,18,21,24.
Earthquakes 9

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

1948

066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month December, 1947

TE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	73	79		T	85	Pt.Cldy.
2	83	75	79		.03	85	Pt.Cldy.
3	83	73	78		.63	85	Pt.Cldy.
4	85	77	81		T	86	Pt.Cldy.
5	86	78	82		.05	86	Pt.Cldy.
6	82	77	80		.02	85	Cloudy
7	84	75	80		.82	85	Cloudy
8	81	72	76		2.87	84	Cloudy
9	78	73	76		2.30	84	Cloudy
10	85	74	80		.12	84	Cloudy
11	86	75	80		0	84	Cloudy
12	86	74	80		0	85	Clear
13	85	76	80		11	85	Cloudy
14	85	76	80		T	84	Pt.Cldy.
15	83	76	80		.10	84	Pt.Cldy.
16	85	80	82		0	85	Pt.Cldy.
17	85	79	82		.04	84	Pt.Cldy.
18	85	79	82		0	84	Pt.Cldy.
19	85	79	82		0	84	Pt.Cldy.
20	83	79	81		0	84	Pt.Cldy.
21	85	76	80		0	84	Clear
22	83	74	78		.36	84	Pt.Cldy.
23	83	74	78		.34	85	Cloudy
24	83	75	79		.95	84	Cloudy
25	84	75	80		.70	83	Pt.Cldy.
26	84	76	80		0	84	Cloudy
27	85	73	79		2.13	83	cloudy
28	85	77	81		.04	83	Cloudy
29	84	80	82		.01	83	Pt.Cldy.
30	84	77	80		0	82	Pt.Cldy.
31	81	74	78		.70	81	Cloudy
M	[illegible]	—			12.32	—	
AN	83.7	75.8	79.8			84.2	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.813
Highest 29.940 Date 21
Lowest 29.690 Date 14

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (1) [illegible] 79.8
Highest 86 Date 5
Lowest 72 Date 8
Greatest daily range 12 Date 1
Mean for this month for 41 years 80.3
Maximum for this month for 41 years 89
Minimum for this month for 41 years 66
Average [illegible] deficiency of this month compared with a mean of 41 years -0.5

PRECIPITATION
(Inches)

Total for this month 12.32
Greatest amount in 24 hours 3.41 Date 8-9
Average for this month for 77 years 12.12
Total from January 1, 1947 to date 112.49
Average from January 1 to date 130.13
Accumulated [illegible] deficiency from January 1 to date compared with average - 17.55

Total precipitation in this month in:

1906 15.61	1917 11.66	1928 16.43	1939 17.98
1907 9.56	1918 1.80	1929 7.87	1940 [illegible]
1908 9.07	1919 7.27	1930 [illegible]	1941 [illegible]
1909 14.58	1920 2.06	1931 [illegible]	1942 23.73
1910 15.20	1921 6.90	1932 [illegible]	1943 15.08
1911 2.63	1922 [illegible]	1933 [illegible]	1944 [illegible]
1912 11.47	1923 [illegible]	1934 [illegible]	1945 [illegible]
1913 [illegible]	1924 [illegible]	1935 [illegible]	1946 [illegible]
1914 [illegible]	1925 [illegible]	1936 [illegible]	1947 12.32
1915 [illegible]	1926 [illegible]	1937 [illegible]	1948
1916 [illegible]	1927 [illegible]	1938 [illegible]	1949

WIND

Prevailing direction NE
Total movement 6972 miles
Average hourly velocity 9.6 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 26

MISCELLANEOUS

Total evaporation for this month — inches
Average daily evaporation — inches
Relative humidity, bihourly mean, percent 83.6
Sunshine, percentage of possible 61
Number of days clear 2 Partly cloudy 16 Cloudy 13
Number of days with .01 inch rain or more 19

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 6, 7, 8
Earthquakes None Felt

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month January, 1948

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) [illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	75	80		.02	82	Pt.Cldy.
2	84	75	80		0	83	Clear
3	84	78	81		0	84	Clear
4	84	79	82		0	84	Cloudy
5	82	76	79		.08	83	Cloudy
6	84	77	80		0	82	Pt.Cldy.
7	84	78	81		0	82	Cloudy
8	84	79	82		.05	82	Cloudy
9	84	78	81		.09	82	Pt.Cldy.
10	84	77	80		T	82	Pt.Cldy.
11	82	75	78		.10	82	Pt.Cldy.
12	83	79	81		.02	82	Pt.Cldy.
13	83	80	82		.01	83	Pt.Cldy.
14	83	79	81		.01	83	Pt.Cldy.
15	83	79	81		0	82	Cloudy
16	84	76	80		.05	82	Pt.Cldy.
17	82	79	80		0	82	Pt.Cldy.
18	83	74	78		T	82	Clear
19	84	76	80		.01	83	Pt.Cldy.
20	82	75	78		.11	82	Cloudy
21	82	79	80		0	81	Pt.Cldy.
22	82	78	80		0	81	Clear
23	87	74	80		0	81	Clear
24	82	72	77		0	82	Clear
25	82	77	80		.06	83	Pt.Cldy.
26	83	76	80		.22	82	Cloudy
27	85	75	80		0	83	Clear
28	85	77	81		0	82	Cloudy
29	84	79	82		0	84	Pt.Cldy.
30	84	80	82		0	84	Cloudy
31	84	80	82		0	84	Cloudy
Sum	2587	2391	-	-	.83	-	
Mean	83.5	77.1	80.3	-	-	82.5	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th Meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.844
Highest 29.990 Date 20
Lowest 29.740 Date 13

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 80.3
Highest 87 Date 23
Lowest 72 Date 24
Greatest daily range 13 Date 23
Mean for this month for 41 years 80.5
Maximum for this month for 41 years 88
Minimum for this month for 41 years 70
Average [illegible] deficiency of this month compared with a mean of 41 years - 0.2

PRECIPITATION
(Inches)

Total for this month 0.83
Greatest amount in 24 hours .28 Date 25 - 26
Average for this month for 78 years 3.22
Total from January 1, 1948 to date .83
Average from January 1 to date 3.22
Accumulated [illegible] deficiency from January 1 to date compared with average - 2.39

Total precipitation in this month in:

1906 1.47	1917 1.10	1928 1.71	1939 .48
1907 2.47	1918 3.28	1929 .81	1940 2.67
1908 3.84	1919 1.82	1930 2.46	1941 3.25
1909 10.61	1920 .51	1931 2.01	1942 1.52
1910 2.94	1921 1.31	1932 1.44	1943 2.18
1911 .99	1922 6.85	1933 2.10	1944 1.23
1912 .28	1923 1.98	1934 3.94	1945 1.89
1913 6.71	1924 .61	1935 5.81	1946 2.08
1914 1.35	1925 3.66	1936 1.54	1947 .37
1915 3.41	1926 .70	1937 4.20	1948 .83
1916 2.33	1927 4.60	1938 2.27	1949

WIND

Prevailing direction N
Total movement 9656 miles
Average hourly velocity 13.0 miles per hour
Maximum velocity for five minutes 26 miles per hour from N on 15th

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 79.4
Sunshine, percentage of possible 68
Number of days clear 7 Partly cloudy 14 Cloudy 10
Number of days with .01 inch rain or more 13

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms None
Earthquakes None felt

MAR 15 1948 WEATHER BUREAU

066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month FEBRUARY, 194[illegible]

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	[illegible]	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	84	80	82		.01	83	Cloudy
2	84	77	80		.02	83	Pt.Cldy.
3	84	78	81		.07	83	Cloudy
4	85	79	82		.02	83	Cloudy
5	84	80	82		0	83	Pt.Cldy.
6	84	80	82		0	82	Pt.Cldy.
7	84	80	82		T	82	Cloudy
8	84	79	82		0	82	Pt.Cldy.
9	82	80	81		0	81	Pt.Cldy.
10	84	79	82		0	82	Pt.Cldy.
11	84	77	80		T	82	Pt.Cldy.
12	84	80	82		0	82	Pt.Cldy.
13	84	79	82		0	82	Clear
14	83	79	81		0	82	Pt.Cldy.
15	84	79	82		0	82	Pt.Cldy.
16	83	79	81		0	82	Cloudy
17	83	79	81		.01	81	Pt.Cldy.
18	83	77	80		T	81	Clear
19	83	78	80		0	81	Pt.Cldy.
20	83	78	80		0	82	Clear
21	83	76	80		0	82	Pt.Cldy.
22	83	73	78		0	81	Pt.Cldy.
23	83	75	79		0	82	Clear
24	83	78	80		0	82	Clear
25	83	78	80		0	81	Clear
26	82	74	78		.01	81	Pt.Cldy.
27	83	78	80		0	81	Clear
28	84	77	80		0	81	Clear
29	83	78	80		0	82	Pt.Cldy.
30							
31							
TOT	24.20	2264	—		.14	—	
MEAN	83.4	78.1	80.8		—	82.0	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.872

Highest 29.970 Date 25

Lowest 29.760 Date 3

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean [illegible] 80.8

Highest 85 Date 1

Lowest 75 Date 22

Greatest daily range 10 Date 22

Mean for this month for 41 years 80.5

Maximum for this month for 41 years 90

Minimum for this month for 41 years 69

Average excess [illegible] of this month compared with a mean of 41 years +0.3

PRECIPITATION
(Inches)

Total for this month 0.14

Greatest amount in 24 hours 0.09 Date 2-3

Average for this month for 78 years 1.50

Total from January 1, 19[illegible] to date .77

Average from January 1 to date 4.72

Accumulated [illegible] deficiency from January 1 to date compared with average -3.75

Total precipitation in this month in:

1906 [illegible]	1917 .45	1928 .71	1939 .00
1907 [illegible]	1918 .87	1929 .56	1940 1.83
1908 [illegible]	1919 .36	1930 .75	1941 2.57
1909 [illegible]	1920 .26	1931 .47	1942 .00
1910 [illegible]	1921 1.63	1932 .08	1943 2.06
1911 [illegible]	1922 .76	1933 .55	1944 .87
1912 [illegible]	1923 .09	1934 .52	1945 .75
1913 [illegible]	1924 2.00	1935 3.16	1946 1.76
1914 [illegible]	1925 .42	1936 .36	1947 .14
1915 12.57	1926 1.78	1937 .00	1948
1916 1.96	1927 3.21	1938 1.11	1949

WIND

Prevailing direction [illegible]

Total movement 16534 miles

Average hourly velocity 15.1 miles per hour

Maximum velocity for five minutes [illegible] miles per hour from [illegible] on 15

MISCELLANEOUS

[illegible] inches

[illegible] inches

Relative humidity, bihourly mean, percent 75.8

Sunshine, percentage of possible 76

Number of days clear 8 Partly cloudy 5 Cloudy 5

Number of days with .01 inch rain or more

DATES

Fogs, light None

Fogs, dense None

Halos, lunar None

Thunderstorms None felt.

Earthquakes

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month March, 1948

TE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	78	80		0	82	Cloudy
2	83	78	80		0	82	Cloudy
3	83	78	80		0	82	PtCldy
4	83	79	81		0	82	Cloudy
5	83	79	81		0	82	Cloudy
6	84	79	82		0	82	Clear
7	84	79	82		0	82	PtCldy
8	83	77	80		.42	82	Cloudy
9	83	78	80		0	83	Cloudy
10	83	77	80		T	82	PtCldy
11	82	78	80		0	82	Cloudy
12	83	77	80		.02	82	Cloudy
13	82	78	80		.02	82	Cloudy
14	82	74	78		.12	82	PtCldy
15	82	77	80		T	81	PtCldy
16	83	78	80		0	81	Cloudy
17	83	79	81		0	81	PtCldy
18	83	78	80		0	81	Cloudy
19	82	76	79		0	81	Cloudy
20	83	77	80		0	81	PtCldy
21	83	75	79		T	81	PtCldy
22	83	78	80		0	81	PtCldy
23	83	76	80		.01	82	PtCldy
24	83	76	80		0	82	Cloudy
25	83	78	80		0	82	Cloudy
26	84	78	81		.01	82	PtCldy
27	83	78	80		.01	82	Cloudy
28	82	79	80		0	82	Cloudy
29	81	78	80		.29	82	Cloudy
30	81	77	79		.31	82	Cloudy
31	82	78	80		0	83	Cloudy
UM	2565	2407	-	-	1.21	-	
AN	82.7	77.6	80.2	-	-	81.7	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.862
Highest 29.980 Date 20
Lowest 29.730 Date 31

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.2
Highest 84 Date 26
Lowest 74 Date 14
Greatest daily range 8 Date 14
Mean for this month for 41 years 81.1
Maximum for this month for 41 years 92
Minimum for this month for 41 years 67
Average excess or deficiency of this month compared with a mean of 41 years -0.9

PRECIPITATION
(Inches)

Total for this month 1.21
Greatest amount in 24 hours .58 Date 29-30
Average for this month for 79 years 1.47
Total from January 1, 1948 to date 2.18
Average from January 1 to date 6.19
Accumulated excess or deficiency from January 1 to date compared with average -4.01

Total precipitation in this month in:

1906 1.42	1917 .76	1928 2.42	1939 .64
1907 2.10	1918 .41	1929 2.59	1940 .63
1908 3.33	1919 .81	1930 1.07	1941 2.27
1909 1.85	1920 1.08	1931 4.48	1942 3.30
1910 5.46	1921 .98	1932 2.69	1943 1.15
1911 1.41	1922 .92	1933 1.11	1944 .18
1912 .66	1923 .36	1934 1.10	1945 .43
1913 .79	1924 .71	1935 .80	1946 .80
1914 .91	1925 .31	1936 .87	1947 .37
1915 1.71	1926 .43	1937 .32	1948 1.21
1916 2.68	1927 1.27	1938 1.68	1949

WIND

Prevailing direction NE
Total movement 11327 miles
Average hourly velocity 15.2 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 13

MISCELLANEOUS

Total evaporation for this month inches
Average daily evaporation inches
Relative humidity, bihourly mean, percent 78.1
Sunshine, percentage of possible 59
Number of days clear 1 Partly cloudy 11 Cloudy 19
Number of days with .01 inch rain or more 9

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 0 None Felt
Earthquakes

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month April, 1948

Date	Temperature (Degrees Fahrenheit) Max.	Min.	Mean	Evaporation (inches) For 24 hours Period Ending 8 a.m.	Precipitation (inches)	Temperature of Sea Water, Bihourly Mean	Character of Day
1	83	78	80	-	0	84	Pt. Cldy
2	82	80	81		0	84	Clody
3	85	77	81		.06	84	Pt. Cldy
4	83	78	80		0	84	Cloudy
5	83	77	80		0	83	Pt Cldy
6	83	77	80		0	83	Pt Cldy
7	83	79	81		0	83	Pt Cldy
8	83	77	80		T	82	Pt Clyd
9	83	76	80		.09	82	Cloudy
10	83	77	80		.04	82	Pt Cldy
11	84	79	82		0	83	Pt Cldy
12	84	78	81		0	82	Pt Cldy
13	84	79	82		0	82	Pt Cldy
14	84	78	81		0	82	Pt Cldy
15	84	79	82		0	82	Pt Cldy
16	83	78	80		T	82	Pt Cldy
17	82	78	80		0	83	Pt Clyd
18	81	78	80		0	82	Pt Cldy
19	83	78	80		0	82	Pt Cldy
20	83	78	80		0	82	Cloudy
21	83	77	80		.03	83	Pt Cldy
22	83	75	79		T	83	Pt Cldy
23	85	76	80		0	84	Pt Cldy
24	85	78	82		.05	84	Cloudy
25	84	80	82		0	84	Pt Cldy
26	85	79	82		.01	84	Cloudy
27	85	79	82		.10	84	Pt Cldy
28	83	79	81		0	84	Cloudy
29	81	76	78		.55	83	Cloudy
30	83	75	79		.44	83	Cloudy
31							
Sum	2500	2333	-	-	1.57	-	
Mean	83.3	77.8	80.6	-	-	83.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.878
Highest 30.000 Date 4
Lowest 29.740 Date 26

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.6
Highest 85 Date 27
Lowest 75 Date 30
Greatest daily range 9 Date 23
Mean for this month for 41 years 81.7
Maximum for this month for 41 years 94
Minimum for this month for 41 years 72
Average excess or deficiency of this month compared with a mean of 41 years - 1.1

PRECIPITATION
(Inches)

Total for this month 1.57
Greatest amount in 24 hours .75 Date 29 & 30
Average for this month for 78 years 4.08
Total from January 1, 1948 to date 3.75
Average from January 1 to date 10.27
Accumulated excess or deficiency from January 1 to date compared with average - 6.52

Total precipitation in this month in:

1906	4.23	1917	1.87	1928	.86	1939	1.00
1907	1.06	1918	5.34	1929	.67	1940	1.83
1908	1.27	1919	10.95	1930	6.85	1941	0.36
1909	3.56	1920	1.72	1931	4.30	1942	8.33
1910	3.30	1921	7.43	1932	2.23	1943	3.92
1911	3.06	1922	2.11	1933	.32	1944	8.93
1912	0.75	1923	1.21	1934	5.48	1945	1.90
1913	2.69	1924	10.85	1935	1.87	1946	0.55
1914	4.12	1925	5.47	1936	3.29	1947	6.08
1915	10.42	1926	0.34	1937	1.65	1948	1.57
1916	6.25	1927	6.93	1938	6.25	1949	

WIND

Prevailing direction N
Total movement 9791 miles
Average hourly velocity 13.6 miles per hour
Maximum velocity for five minutes 26 miles per hour from NE on 15th

MISCELLANEOUS

Total evaporation for this month ____ inches
Average daily evaporation ____ inches
Relative humidity, bihourly mean, percent 80.0
Sunshine, percentage of possible 62
Number of days clear 0 Partly cloudy 22 Cloudy 8
Number of days with .01 inch rain or more 9

DATES

Fogs, light NONE
Fogs, dense "
Halos, lunar "
Thunderstorms "
Earthquakes " Felt

4066-8

THE PANAMA CANAL

MR 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z. ; Month May, 1948

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	81	77	79		.16	82	Cloudy
2	82	76	79		.83	83	Pt.Cldy.
3	85	80	82		0	84	Pt.Cldy.
4	83	76	80		.97	84	Cloudy
5	84	78	81		0	84	Pt.Cldy.
6	85	80	82		0	85	Pt.Cldy.
7	85	79	82		.15	85	Pt.Cldy.
8	86	78	82		.09	85	Cloudy
9	82	77	80		.43	83	Cloudy
10	81	75	78		1.00	82	Cloudy
11	82	75	78		1.10	82	Cloudy
12	85	76	80		0	83	Cloudy
13	84	78	81		T	85	Pt.Cldy.
14	84	81	82		T	86	Pt.Cldy.
15	85	81	83		0	85	Cloudy
16	86	81	84		0	85	Cloudy
17	82	77	80		.87	85	Cloudy
18	85	77	81		.39	84	Cloudy
19	85	77	81		.08	85	Cloudy
20	85	77	81		.15	85	Pt.Cldy.
21	86	76	82		.18	85	Cloudy
22	87	77	82		0	84	Cloudy
23	87	79	83		0	84	Pt.Cldy.
24	87	75	81		.18	84	Cloudy
25	86	75	82		.19	83	Cloudy
26	87	76	82		.03	84	Cloudy
27	87	75	81		0	84	Pt.Cldy.
28	85	78	82		0	86	Cloudy
29	85	75	80		.43	85	Cloudy
30	86	75	80		.06	85	Cloudy
31	86	75	80		T	84	Cloudy
SUM	2630	2392	-		7.29		
MEAN	84.8	77.2	81.0		-	84.1	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.825
Highest 29.900 Date 6
Lowest 29.740 Date 15

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 81.0
Highest 88 Date 21
Lowest 75 Date 30
Greatest daily range 13 Date 25
Mean for this month for 41 years 81.4
Maximum for this month for 41 years 94
Minimum for this month for 41 years 72
Average deficiency of this month compared with a mean of 41 years - 0.4

PRECIPITATION
(Inches)

Total for this month 7.29
Greatest amount in 24 hours 1.10 Date 11
Average for this month for 78 years 12.40
Total from January 1, 1948 to date 11.04
Average from January 1 to date 22.67
Accumulated deficiency from January 1 to date compared with average - 11.63

Total precipitation in this month in:

1906 10.07	1917 12.11	1928 12.72	1939 6.26
1907 6.33	1918 19.26	1929 10.07	1940 11.00
1908 22.49	1919 8.95	1930 14.21	1941 8.97
1909 7.21	1920 5.48	1931 17.71	1942 8.95
1910 12.09	1921 13.61	1932 16.55	1943 16.27
1911 17.13	1922 8.88	1933 8.12	1944 25.43
1912 12.03	1923 11.16	1934 11.94	1945 8.15
1913 22.80	1924 14.86	1935 17.16	1946 5.38
1914 17.76	1925 8.23	1936 12.86	1947 7.23
1915 7.75	1926 13.73	1937 20.99	1948 7.29
1916 9.38	1927 14.11	1938 12.74	1949

WIND

Prevailing direction NE
Total movement 6342 miles
Average hourly velocity 8.6 miles per hour
Maximum velocity for five minutes 24 miles per hour from S on 22

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 84.0
Sunshine, percentage of possible 34
Number of days clear 0 Partly cloudy 10 Cloudy 21
Number of days with .01 inch rain or more 18

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 1 - 17,18,24,26
Earthquakes None felt

066-8

MR 99476—Panama Canal—11-17-43—500

THE PANAMA CANAL

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, Cristobal, C. Z.; Month June, 1948

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	88	77	82		0	84	Cloudy
2	89	77	83		0	83	Cloudy
3	86	76	81		.53	83	Cloudy
4	84	76	80		.95	83	Pt.Cldy
5	82	76	78		1.10	84	Cloudy
6	85	75	80		.04	84	Cloudy
7	85	76	80		0	84	Pt.Cldy
8	85	77	81		0	84	Pt.Cldy
9	85	79	82		.03	86	Cloudy
10	89	74	82		1.03	85	Cloudy
11	84	75	80		.42	85	Cloudy
12	85	75	80		.01	85	Cloudy
13	85	77	81		0	85	Pt.Cldy
14	86	75	80		.79	84	Cloudy
15	86	75	80		.69	85	Cloudy
16	83	75	79		0	85	Cloudy
17	86	79	82		.41	85	Pt.Cldy
18	83	76	80		.46	85	Cloudy
19	84	77	80		.11	84	Cloudy
20	82	77	80		.01	84	Cloudy
21	82	78	80		.18	83	Cloudy
22	83	77	80		.11	85	Cloudy
23	85	77	81		.56	84	Pt.Cldy
24	86	78	82		.05	85	Pt.Cldy
25	86	80	83		T	86	Cloudy
26	82	76	79		T	86	Cloudy
27	83	76	80		.74	84	Cloudy
28	80	77	78		.02	84	Cloudy
29	84	75	80		.44	83	Cloudy
30	82	75	78		.66	84	Cloudy
31							
SUM	2535	2290	-	-	9.34	-	
MEAN	84.5	76.3	80.4	-	-	84.3	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.844
Highest 29.960 Date 3
Lowest 29.690 Date 25

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.4
Highest 89 Date 10
Lowest 73 Date 5
Greatest daily range 12 Date 2
Mean for this month for 41 years 81.0
Maximum for this month for 41 years 93
Minimum for this month for 41 years 68
Average deficiency of this month compared with a mean of 41 years - 0.6

PRECIPITATION
(Inches)

Total for this month 9.34
Greatest amount in 24 hours 1.82 Date 4-5
Average for this month for 78 years 13.56
Total from January 1, 1948 to date 20.38
Average from January 1 to date 36.23
Accumulated excess or deficiency from January 1 to date compared with average - 15.85

Total precipitation in this month in:

1906 14.09	1917 14.37	1928 16.22	1939 12.60
1907 16.89	1918 8.56	1929 18.96	1940 14.41
1908 10.53	1919 12.08	1930 9.40	1941 11.55
1909 17.49	1920 13.29	1931 9.26	1942 18.59
1910 13.63	1921 15.18	1932 14.36	1943 12.10
1911 15.28	1922 6.30	1933 15.88	1944 6.31
1912 19.90	1923 15.17	1934 9.89	1945 6.62
1913 11.81	1924 16.42	1935 16.26	1946 9.63
1914 16.30	1925 13.77	1936 10.57	1947 9.37
1915 16.61	1926 31.23	1937 26.91	1948 9.34
1916 14.28	1927 13.74	1938 18.01	1949

WIND

Prevailing direction NW
Total movement 45.73 miles
Average hourly velocity 6.4 miles per hour
Maximum velocity for five minutes 20 miles per hour from NW on 23

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 85.0
Sunshine, percentage of possible 19.
Number of days clear 0 Partly cloudy 7 Cloudy 23
Number of days with .01 inch rain or more 22

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 11-15-16
Earthquakes None felt

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

1066-S

THE PANAMA CANAL

MR 99476—Panama Canal - 11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

Station, CRISTOBAL, C. Z. ; Month JULY , 1948

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	83	77	80		.05	84	Cloudy
2	83	72	78		2.01	84	Cloudy
3	82	73	78		.12	84	Cloudy
4	85	77	81		1.07	84	Pt.Cldy.
5	84	73	78		.91	84	Cloudy
6	82	75	78		1.71	84	Cloudy
7	85	76	80		.10	84	Cloudy
8	85	77	81		.01	85	Cloudy
9	83	76	80		.72	84	Cloudy
10	84	76	80		.69	84	Cloudy
11	82	76	79		.07	84	Cloudy
12	84	77	80		.23	84	Pt.Cldy.
13	84	75	80		2.14	85	Cloudy
14	90	75	82		.03	84	Pt.Cldy.
15	84	77	80		.03	84	Pt.Cldy.
16	81	77	79		.07	84	Cloudy
17	82	76	79		T	84	Cloudy
18	84	76	80		T	84	Pt.Cldy.
19	87	81	84		0	85	Cloudy
20	85	77	81		T	84	Cloudy
21	87	75	81		2.33	85	Cloudy
22	86	76	81		0	84	Cloudy
23	84	75	80		.01	84	Cloudy
24	83	74	78		.07	83	Cloudy
25	84	76	80		.69	84	Cloudy
26	84	74	79		.69	84	Cloudy
27	80	72	76		1.72	83	Cloudy
28	84	76	80		.17	83	Cloudy
29	83	75	79		.02	83	Cloudy
30	85	79	82		.16	83	Pt.Cldy.
31	86	80	83		T	84	Pt.Cldy.
SUM	2605	2351			15.82		
MEAN	84.0	75.8	79.9			84.0	

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.836 1019.4
Highest 29.930 Date 29
Lowest 29.730 Date 1

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean 79.9
Highest 90 Date 14
Lowest 72 Date 27
Greatest daily range 15 Date 14
Mean for this month for 41 years 80.9
Maximum for this month for 41 years 91
Minimum for this month for 41 years 70
Average deficiency of this month compared with a mean of 41 years - 1.0

PRECIPITATION
(Inches)

Total for this month 15.82
Greatest amount in 24 hours 2.37 Date 12-13
Average for this month for 78 years 15.51
Total from January 1, 1948 to date 36.20
Average from January 1 to date 51.74
Accumulated deficiency from January 1 to date compared with average - 15.54

Total precipitation in this month in:

1906 1923	1917 13.58	1928 10.29	1939 6.67
1907 17.86	1918 10.36	1929 18.67	1940 15.90
1908 14.76	1919 13.60	1930 8.99	1941 20.89
1909 12.83	1920 17.58	1931 13.36	1942 17.35
1910 21.07	1921 10.49	1932 17.45	1943 10.44
1911 14.58	1922 4.40	1933 9.88	1944 11.82
1912 13.13	1923 10.33	1934 9.21	1945 19.81
1913 15.13	1924 20.63	1935 26.23	1946 12.31
1914 10.74	1925 21.08	1936 18.72	1947 12.72
1915 20.72	1926 16.15	1937 9.50	1948 15.82
1916 10.44	1927 18.64	1938 22.25	1949

WIND

Prevailing direction S
Total movement 5018 miles
Average hourly velocity 6.7 miles per hour
Maximum velocity for five minutes 23 miles per hour from SW on 21st

MISCELLANEOUS

Total evaporation for this month inches
Average daily evaporation inches
Relative humidity, bihourly mean, percent 87.4
Sunshine, percentage of possible 14
Number of days clear 0 Partly cloudy 7 Cloudy 24
Number of days with .01 inch rain or more 25

DATES

Fogs, light 0
Fogs, dense 0
Halos, lunar 0
Thunderstorms 1 - 2-4-6-11-21-23-25-26
Earthquakes None felt

THE PANAMA CANAL

MK 99476—Panama Canal—11-17-43—500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

ation, CRISTOBAL, C. Z. ; Month AUGUST , 1948.

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	82	77	80		.07	84	Cloudy
2	82	77	80		.04	84	Cloudy
3	85	76	80		.88	85	Pt.Cldy
4	81	75	78		.04	84	Cloudy
5	82	72	77		.93	84	Cloudy
6	84	74	79		.01	83	Cloudy
7	84	74	79		0	84	Pt.Cldy
8	82	74	78		.41	84	Cloudy
9	82	76	79		.45	83	Cloudy
10	83	75	79		.29	83	Cloudy
11	83	75	79		.01	84	Pt.Cldy
12	84	77	80		.13	84	Pt.Cldy
13	86	79	82		.01	85	Clear
14	85	81	83		T	86	Pt.Cldy
15	86	75	80		1.76	85	Cloudy
16	84	75	80		.96	84	Cloudy
17	84	78	81		.02	83	Cloudy
18	86	80	83		.01	83	Pt.Cldy
19	85	79	82		.31	84	Cloudy
20	84	76	80		.34	84	Cloudy
21	80	74	77		.72	83	Cloudy
22	87	75	81		.08	82	Pt.Cldy
23	83	75	79		0	83	Pt.Cldy
24	81	75	78		.68	84	Cloudy
25	84	75	80		.02	82	Clear
26	86	75	80		T	84	Cloudy
27	85	74	80		0	84	Clear
28	86	77	82		.38	84	Pt.Cldy
29	87	80	84		0	85	Cloudy
30	82	75	78		1.97	84	Cloudy
31	83	75	79		0	84	Pt.Cldy
*	2598	2355	-	-	11.52	-	
MEAN	83.8	76.0	79.9		-	83.7	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.836
Highest 29.940 Date 23
Lowest 29.740 Date 17

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (XXXX 79.9
Highest 87 Date 22
Lowest 72 Date 5
Greatest daily range 12 Date 22
Mean for this month for 42 years 80.7
Maximum for this month for 42 years 93
Minimum for this month for 42 years 70
Average XXXXX deficiency of this month compared with a mean of 42 years -0.8

PRECIPITATION
(Inches)

Total for this month 11.52
Greatest amount in 24 hours 1.97 Date 15 & 16
Average for this month for 78 years 15.33
Total from January 1, 1948 to date 47.72
Average from January 1 to date 67.07
Accumulated XXXX deficiency from January 1 to date compared with average - 19.35

Total precipitation in this month in:

1906 18.31	1917 15.79	1928 24.49	1939 11.66
1907 18.89	1918 18.85	1929 23.78	1940 19.04
1908 16.89	1919 6.77	1930 14.35	1941 16.95
1909 15.42	1920 23.04	1931 17.52	1942 10.74
1910 14.93	1921 18.45	1932 12.10	1943 20.00
1911 11.60	1922 14.53	1933 8.27	1944 18.40
1912 9.87	1923 15.35	1934 13.86	1945 17.66
1913 17.91	1924 7.42	1935 14.72	1946 13.28
1914 16.01	1925 7.71	1936 13.78	1947 17.10
1915 12.89	1926 20.84	1937 13.26	1948 11.52
1916 8.34	1927 26.63	1938 22.32	1949

WIND

Prevailing direction N.E.
Total movement 5221 miles
Average hourly velocity 7.0 miles per hour
Maximum velocity for five minutes 34 miles per hour from W on 15

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 86.0
Sunshine, percentage of possible 27
Number of days clear 3 Partly cloudy 10 Cloudy 18
Number of days with .01 inch rain or more 24

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 3; 12; 15; 16; 21; 26; 28
Earthquakes None Felt

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

Weather Bureau Library

4066-8

THE PANAMA CANAL

MR 99476---Panama Canal---11-17-43---500

DEPARTMENT OF OPERATION AND MAINTENANCE—SECTION OF METEOROLOGY AND HYDROGRAPHY

MONTHLY METEOROLOGICAL SUMMARY

ation, Cristobal, C. Z. ; Month September , 1948

DATE	TEMPERATURE (Degrees Fahrenheit) MAX.	MIN.	MEAN	EVAPORATION (INCHES) For 24 hours Period Ending 8 a.m.	PRECIPITATION (INCHES)	TEMPERATURE OF SEA WATER, BIHOURLY MEAN	CHARACTER OF DAY
1	85	78	82		T	84	Cloudy
2	84	76	80		.43	83	Cloudy
3	86	76	81		.01	84	Pt.Cldy
4	87	77	82		.22	84	Pt.Cldy
5	85	77	81		.39	86	Cloudy
6	86	76	81		.102	86	Cloudy
7	85	76	80		.01	85	Cloudy
8	89	76	82		.15	84	Cloudy
9	84	74	79		2.38	83	Cloudy
10	79	74	76		.39	83	Cloudy
11	84	74	79		.155	82	Cloudy
12	86	75	80		.01	83	Cloudy
13	84	75	80		.09	83	Cloudy
14	82	74	78		.11	84	Cloudy
15	83	77	80		.82	83	Cloudy
16	83	75	79		.91	84	Cloudy
17	86	75	80		.05	83	Pt.Cldy
18	84	77	80		.05	84	Cloudy
19	86	76	81		.36	84	Pt.Cldy
20	90	76	83		0	84	Pt.Cldy
21	88	77	82		T	85	Pt.Cldy
22	88	77	82		.29	86	Pt.Cldy
23	87	76	82		.08	86	Cloudy
24	90	76	83		.26	85	Cloudy
25	90	75	83		.75	84	Pt.Cldy
26	84	76	80		.18	84	Cloudy
27	89	76	82		.47	84	Pt.Cldy
28	86	75	80		.08	84	Cloudy
29	89	76	82		.03	84	Cloudy
30	82	75	78		.26	84	Cloudy
31							
*	2571	2274			11.35		
MEAN	85.7	75.8	80.8			84.1	

ATMOSPHERIC PRESSURE
(Inches, reduced to sea level)

Bihourly mean 29.813
Highest 29.950 Date 13
Lowest 29.700 Date 27

TEMPERATURE
(Degrees Fahrenheit)

Monthly mean (Bi-H.) 80.8
Highest 90 Date 20
Lowest 74 Date 11
Greatest daily range 14 Date 20
Mean for this month for 42 years 80.9
Maximum for this month for 42 years 94
Minimum for this month for 42 years 70
Average excess or deficiency of this month compared with a mean of 42 years - 0.1

PRECIPITATION
(Inches)

Total for this month 11.35
Greatest amount in 24 hours 2.55 Date 9,10
Average for this month for 78 years 12.65
Total from January 1, 1948 to date 59.07
Average from January 1 to date 79.72
Accumulated [redacted] deficiency from January 1 to date compared with average - 20.65

Total precipitation in this month in:

1906 12.48	1917 17.67	1928 15.46	1939 16.91
1907 11.72	1918 15.34	1929 7.90	1940 13.77
1908 11.57	1919 11.74	1930 10.88	1941 19.76
1909 16.33	1920 6.81	1931 8.24	1942 21.62
1910 12.05	1921 11.21	1932 7.15	1943 10.51
1911 11.62	1922 12.73	1933 9.11	1944 4.40
1912 12.23	1923 12.31	1934 21.30	1945 11.58
1913 9.90	1924 9.00	1935 21.51	1946 14.12
1914 14.80	1925 8.17	1936 14.58	1947 14.52
1915 13.85	1926 10.45	1937 14.09	1948 11.35
1916 10.41	1927 17.32	1938 10.50	1949

WIND

Prevailing direction S
Total movement 3994 miles
Average hourly velocity 5.5 miles per hour
Maximum velocity for five minutes 24 miles per hour from N on 7

MISCELLANEOUS

Total evaporation for this month - inches
Average daily evaporation - inches
Relative humidity, bihourly mean, percent 86.4
Sunshine, percentage of possible 27
Number of days clear 0 Partly cloudy 9 Cloudy 21
Number of days with .01 inch rain or more 27

DATES

Fogs, light None
Fogs, dense None
Halos, lunar None
Thunderstorms 6, 9, 15, 21, 22, 23, 24, 26, 27
Earthquakes None felt

Note.—"T" indicates traces of precipitation (less than 0.01 inch). All data in 75th meridian time.

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** SEPTEMBER 1954

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	78	82	86	8	.42
2	82	76	79	88	10	2.70
3	80	74	77	87	10	[illegible]
4	85	74	80	82	6	.02
5	84	75	80	82	8	0
6	83	77	80	85	9	.40
7	87	75	81	85	7	.36
8	87	76	82	86	8	.02
9	85	75	80	84	7	.10
10	83	77	80	86	9	.09
11	85	73	79	86	7	1.31
12	87	75	81	83	7	0
13	88	76	82	82	6	0
14	86	76	81	82	8	T
15	89	76	82	85	8	.11
16	88	76	82	87	8	.68
17	87	76	82	88	9	.06
18	86	76	81	86	8	0
19	84	77	80	86	8	0
20	84	77	80	89	9	.01
21	84	72	78	88	8	1.90
22	87	74	80	81	8	0
23	86	75	80	82	3	0
24	84	76	80	85	8	.10
25	84	76	80	88	9	0
26	90	75	82	79	4	0
27	84	78	81	86	8	.01
28	84	77	80	84	8	.40
29	82	75	78	90	10	1.56
30	83	75	79	89	9	.19
31						
Sum	2553	2269			235	10.66
Mean	85.1	75.6	80.4	85.2	7.8	

TOTAL RAINFALL FOR THIS MONTH IN:

19	45	11.58	19	50	10.25
19	46	14.12	19	51	10.16
19	47	14.52	19	52	9.76
19	48	11.35	19	53	12.27
19	49	[illegible]	19	54	10.66

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.828

Departure from normal -.04

Highest 29.950 Date 2

Lowest 29.720 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4

Departure from normal -.04

Highest 90 Date 26

Lowest 72 Date 21

RAINFALL
(Inches)

Total 10.66

Departure from normal -1.84

Greatest in 24 hours 2.86

Date 1 and 2

WIND

Average hourly velocity 5.2 mph.

Prevailing direction [illegible]

Maximum for five minutes 25

mph. from the [illegible] on the 11

SUNSHINE

Average number hours per day 5.5

Percentage of possible 45

NUMBER OF DAYS

Clear 1

Partly Cloudy 7

Cloudy 22

.01 inch of rain or more 20

Thunderstorms 13

Light fog 0

Dense fog 0

Number of hours with rain 66

MR 41983—Panama Canal—11-28-50—300

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

LIBRARY NOV 24 1954 WEATHER BUREAU

Station: CRISTOBAL, C. Z. **Month:** OCTOBER 1954

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	75	80	85	6	.02
2	84	75	80	84	10	0
3	86	75	80	80	8	0
4	82	76	79	84	9	0
5	86	75	80	88	8	.37
6	84	74	79	88	8	.23
7	85	75	80	85	7	.02
8	84	75	80	83	4	0
9	79	75	77	88	10	.51
10	85	74	80	82	7	.05
11	87	75	81	76	7	.05
12	85	75	80	76	3	T
13	87	74	80	78	4	T
14	86	74	80	78	5	0
15	89	76	82	77	4	0
16	85	75	80	86	8	.24
17	85	75	80	86	8	1.10
18	86	74	80	82	7	.27
19	88	75	82	83	6	.20
20	82	74	78	86	8	.12
21	85	75	80	88	7	.63
22	80	73	76	90	10	.62
23	82	74	78	88	9	.69
24	87	74	80	84	7	.07
25	84	74	79	87	9	.71
26	82	74	78	89	9	.11
27	81	73	77	90	9	1.65
28	83	74	78	90	7	.24
29	84	75	78	88	7	1.38
30	83	75	79	90	8	.40
31	83	76	80	88	8	.08
Sum	2614	2323	--	--	-	9.76
Mean	84.3	74.6	79.4	84.8	7.3	---

TOTAL RAINFALL FOR THIS MONTH IN:

1945	18.33	1950	13.74
1946	15.37	1951	19.15
1947	17.71	1952	21.12
1948	15.11	1953	18.41
1949	17.72	1954	9.76

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.842

Departure from normal + .014

Highest 29.95 Date 26

Lowest 29.71 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4

Departure from normal - .09

Highest 89 Date 15

Lowest 73 Date 27

RAINFALL
(Inches)

Total 9.76

Departure from normal - 6.17

Greatest in 24 hours 1.71

Date 26 & 27

WIND

Average hourly velocity 6.2 mph.

Prevailing direction S

Maximum for five minutes 24

mph. from the W on the 27

SUNSHINE

Average number hours per day 6.1

Percentage of possible 5.1

NUMBER OF DAYS

Clear 1

Partly Cloudy 14

Cloudy 16

.01 inch of rain or more 23

Thunderstorms 5

Light fog 0

Dense fog 0

Number of hours with rain 88

MR 41983—Panama Canal—11-28-50—300

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

DEC 17 1954
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER, 1954

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	77	80	87	7	.33
2	86	78	82	86	7	0
3	79	75	77	93	10	3.49
4	85	77	81	85	7	.08
5	86	80	83	83	4	0
6	84	78	81	78	3	0
7	81	73	77	91	10	1.06
8	82	71	76	89	7	.87
9	85	75	80	86	6	1.22
10	82	75	78	94	10	2.46
11	79	74	76	94	10	1.44
12	85	74	80	90	8	.01
13	82	76	79	89	9	.07
14	81	75	78	90	8	.05
15	82	75	78	87	9	1.41
16	83	76	80	89	5	.05
17	83	75	79	84	6	.01
18	82	75	78	88	7	.02
19	81	74	78	90	7	1.36
20	77	73	74	94	10	4.39
21	80	72	76	90	8	.95
22	82	74	78	89	9	1.71
23	83	74	78	88	7	.07
24	82	74	78	85	5	0
25	81	73	77	90	9	2.70
26	80	72	76	91	9	.96
27	82	73	78	90	7	.06
28	83	75	79	90	8	.10
29	82	73	78	91	10	2.51
30	80	75	78	92	10	.12
31						
Sum	2460	2330	-	-	232	27.50
Mean	82.1	74.6	78.4	88.7	7.7	

TOTAL RAINFALL FOR THIS MONTH IN:

19 45	24.49	19 50	39.12
19 46	25.54	19 51	10.62
19 47	12.43	19 52	20.76
19 48	22.40	19 53	21.87
19 49	26.65	19 54	27.50

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.847
Departure from normal - .018
Highest 29.96 Date 24
Lowest 29.75 Date 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.4
Departure from normal - 1.2
Highest 86 Date 5
Lowest 71 Date 20

RAINFALL
(Inches)

Total 27.50
Departure from normal + 5.08
Greatest in 24 hours 5.59
Date 19 and 20

WIND

Average hourly velocity 7.3 mph.
Prevailing direction E
Maximum for five minutes 24
mph. from the NE on the 5

SUNSHINE

Average number hours per day 5.0
Percentage of possible 43

NUMBER OF DAYS

Clear 1
Partly Cloudy 13
Cloudy 16
.01 inch of rain or more 26
Thunderstorms 4
Light fog 0
Dense fog 0

Number of hours with rain 172

MR 41983—Panama Canal—11-28-50—300

4066-11

THE PANAMA CANAL
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** January, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	82	77	80	75	7	0
2	82	75	78	76	5	T
3	81	73	77	83	8	.52
4	80	72	76	85	9	1.11
5	81	73	77	78	3	.22
6	81	75	78	79	3	0
7	81	77	79	81	9	0
8	81	75	78	81	10	.03
9	82	75	78	85	10	.46
10	83	78	80	84	9	0
11	83	78	80	86	9	T
12	84	74	79	83	4	0
13	80	69	74	87	10	2.50
14	82	72	77	85	10	.53
15	80	74	77	88	10	1.47
16	81	78	80	86	10	T
17	81	74	78	89	10	1.44
18	82	74	78	90	9	.60
19	82	74	78	84	10	.61
20	81	74	78	75	9	.27
21	82	72	77	75	9	.33
22	81	70	76	79	6	.43
23	82	75	78	83	5	T
24	83	75	79	84	3	T
25	83	75	79	80	3	T
26	83	77	80	74	6	T
27	83	78	80	77	4	0
28	81	75	78	82	7	.02
29	81	76	78	84	7	0
30	80	77	78	86	5	.01
31	81	73	77	87	10	.63
Sum	2539	2314	-	-	229	11.18
Mean	81.6	74.6	78.1	82.3	7.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

1946	2.08	1951	.89
1947	.37	1952	3.86
1948	.83	1953	6.85
1949	.88	1954	1.38
1950	.87	1955	11.18

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.891
Departure from normal + .023
Highest 30.02 Date 21
Lowest 29.76 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.1
Departure from normal - 2.3
Highest 84 Date 12
Lowest 69 Date 13

RAINFALL
(Inches)

Total 11.18
Departure from normal + 7.92
Greatest in 24 hours 2.50
Date 13

WIND

Average hourly velocity 11.9 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the NE on the 12

SUNSHINE

Average number hours per day 5.2
Percentage of possible 44

NUMBER OF DAYS

Clear 4
Partly Cloudy 10
Cloudy 17
.01 inch of rain or more 17
Thunderstorms 1
Light fog 0
Dense fog 0
Number of hours with rain 90

MH 41983—Panama Canal—11-28-50—300

FEB 25 1955
WEATHER BUREAU
106 340
M06.1/728.8
P18Tma
1955-

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: February 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	75	79	85	8	.31
2	83	75	79	85	4	.21
3	83	76	80	86	5	0
4	83	76	80	89	5	T
5	84	77	80	88	4	.23
6	83	79	81	83	4	0
7	83	79	81	83	5	.07
8	83	76	80	87	8	0
9	84	78	81	84	4	.31
10	84	79	82	80	5	T
11	83	76	80	82	6	0
12	83	79	81	74	5	0
13	83	75	79	75	8	.07
14	82	76	80	76	8	.01
15	82	76	80	78	7	0
16	83	77	80	76	8	.02
17	83	76	80	77	6	T
18	82	79	80	81	8	.03
19	81	79	80	80	8	.01
20	84	76	81	80	5	0
21	83	79	81	79	5	0
22	82	76	80	79	6	0
23	85	77	81	80	7	.02
24	84	76	81	74	4	0
25	83	74	78	65	6	.17
26	84	76	80	64	8	.31
27	83	77	80	72	3	0
28	83	76	80	74	5	.02
29						
30						
31						
Sum	2326	2178		2162	165	1.79
Mean	83.1	77.8	80.3	79.2	5.9	

TOTAL RAINFALL FOR THIS MONTH IN:

19[illegible]	.75	19[illegible]	5.62
19[illegible]	1.[illegible]	19[illegible]	.93
19[illegible]	.[illegible]	19[illegible]	2.01
19[illegible]	.[illegible]	19[illegible]	1.[illegible]
19[illegible]	3.[illegible]	19[illegible]	1.[illegible]

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.858

Departure from normal -.026

Highest 29.97 Date 25

Lowest 29.75 Date 9

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3

Departure from normal + 0.0

Highest 85 Date 23

Lowest 74 Date 25

RAINFALL
(Inches)

Total 1.79

Departure from normal + .22

Greatest in 24 hours .33

Date 25th and 26th

WIND

Average hourly velocity 14.9 mph.

Prevailing direction NE

Maximum for five minutes 28

mph. from the NE on the 26

SUNSHINE

Average number hours per day 7.1

Percentage of possible 60

NUMBER OF DAYS

Clear 1

Partly Cloudy 19

Cloudy 8

.01 inch of rain or more 14

Thunderstorms 0

Light fog 0

Dense fog 0

Number of hours with rain 25

APR 14 1955 WEATHER BUREAU

MR 41983—Panama Canal—11-28-50—300

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal **Month:** March, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	76	80	75	4	.03
2	83	77	80	71	4	0
3	82	78	80	70	7	0
4	83	78	80	71	8	0
5	83	77	80	71	8	0
6	82	78	80	72	9	T
7	82	77	80	70	7	0
8	82	77	80	75	7	0
9	83	78	80	68	7	0
10	83	77	80	68	6	0
11	83	78	80	72	7	0
12	83	78	80	71	3	0
13	83	78	80	70	7	0
14	83	77	80	72	8	0
15	82	75	78	74	8	.20
16	83	76	80	76	7	.01
17	82	77	80	80	8	.03
18	83	78	80	80	7	0
19	83	77	80	78	6	0
20	83	78	80	80	7	0
21	83	78	80	81	9	0
22	83	76	80	82	7	.01
23	84	77	80	83	8	.01
24	83	76	80	83	8	0
25	83	77	80	83	8	.01
26	83	78	80	86	5	0
27	81	77	79	84	10	.02
28	81	74	78	83	98	.16
29	80	76	78	84	10	.04
30	80	77	78	84	10	T
31	81	73	77	83	10	.81
Sum	2556	2384	-	-	228	1.33
Mean	82.5	76.9	79.7	76.7	7.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

1946	.80	1951	.60
1947	.37	1952	.03
1948	1.21	1953	1.75
1949	.48	1954	.67
1950	2.17	1955	1.33

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.858
Departure from normal -.016
Highest 29.95 Date 31
Lowest 29.74 Date 26

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.7
Departure from normal -1.2
Highest 84 Date 23
Lowest 73 Date 31

RAINFALL
(Inches)

Total 1.33
Departure from normal -.10
Greatest in 24 hours .81
Date 31

WIND

Average hourly velocity 16.5 mph.
Prevailing direction NE
Maximum for five minutes 29
mph. from the NE on the 26

SUNSHINE

Average number hours per day 5.9
Percentage of possible 49

NUMBER OF DAYS

Clear 1
Partly Cloudy 15
Cloudy 15
.01 inch of rain or more 11
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 26

LIBRARY APR 28 1955 WEATHER BUREAU

MR 41983—Panama Canal—11-28-50—300

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL Month: APRIL, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	73	76	74	8	0
2	81	78	76	82	6	0
3	82	74	78	80	3	0
4	82	76	79	82	6	0
5	83	77	80	80	5	0
6	83	78	80	75	3	0
7	83	75	79	78	6	.10
8	83	77	80	77	8	T
9	83	76	80	83	5	.07
10	82	78	80	81	4	T
11	83	78	80	81	8	T
12	83	77	80	78	6	0
13	82	77	80	77	3	.01
14	83	77	80	77	6	.03
15	83	78	80	80	6	0
16	83	79	81	77	5	0
17	82	74	78	78	6	.07
18	83	75	79	79	6	.11
19	83	77	80	80	6	.05
20	84	79	82	79	3	0
21	84	79	82	79	3	0
22	83	79	81	79	5	0
23	83	78	80	79	3	0
24	84	77	80	81	3	0
25	82	77	80	83	6	0
26	89	76	82	81	3	0
27	90	77	84	75	4	0
28	90	77	84	77	3	0
29	85	78	80	83	3	0
30	84	80	82	80	3	0
31						
Sum	2505	2303			145	.44
Mean	83.5	76.8	80.2	79.1	4.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1946	.55	1951	8.48
1947	6.48	1952	6.97
1948	1.57	1953	2.38
1949	8.02	1954	4.89
1950	4.86	1955	.44

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.850

Departure from normal - .006

Highest 29.96 Date 1

Lowest 29.70 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2

Departure from normal - 1.3

Highest 90 Date 27

Lowest 72 Date 2

RAINFALL
(Inches)

Total .44

Departure from normal - 3.64

Greatest in 24 hours .18

Date 17-18

WIND

Average hourly velocity 13.6 mph.

Prevailing direction NE

Maximum for five minutes 26

mph. from the NE on the 6

SUNSHINE

Average number hours per day 9.2

Percentage of possible 74

NUMBER OF DAYS

Clear 11

Partly Cloudy 16

Cloudy 3

.01 inch of rain or more 7

Thunderstorms 0

Light fog 0

Dense fog 0

Number of hours with rain 13

MR 41983—Panama Canal—11-28-50—300

MAY 18 1955

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone. Month: May 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	82	80	81	80	3	0
2	83	73	78	83	8	1.10
3	80	73	76	86	10	1.53
4	81	72	76	87	8	2.62
5	78	72	74	88	8	.68
6	80	72	76	84	9	1.48
7	80	73	76	89	9	3.85
8	82	78	80	82	8	.16
9	83	79	81	83	8	.16
10	84	79	82	85	7	0
11	85	80	82	82	5	0
12	84	79	82	85	5	.02
13	83	77	80	84	6	T
14	84	80	82	81	4	0
15	82	78	80	83	8	.01
16	83	78	80	83	6	.07
17	83	79	81	83	8	.01
18	83	77	80	82	8	.01
19	84	78	81	82	3	0
20	86	77	82	83	4	0
21	85	80	82	80	7	.05
22	85	80	82	83	7	.07
23	85	79	82	84	5	0
24	80	76	78	89	10	.26
25	83	75	79	86	8	T
26	85	75	80	82	4	.05
27	83	76	80	83	7	0
28	83	76	80	84	5	.19
29	83	77	80	85	6	.37
30	84	78	81	83	7	.05
31	83	76	80	88	8	1.09
Sum	2549	2361	[illegible]	[illegible]	211	13.43
Mean	82.9	76.2	79.8	84.0	6.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1946	5.38	1951	11.08
1947	7.83	1952	15.70
1948	7.29	1953	8.45
1949	11.83	1954	12.44
1950	7.83	1955	13.43

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.849

Departure from normal + .014

Highest 29.98 Date 5

Lowest 29.71 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8

Departure from normal — 1.5

Highest 86 Date 20

Lowest 71 Date 3

RAINFALL
(Inches)

Total 13.43

Departure from normal + 1.11

Greatest in 24 hours 4.65

Date 6 - 7

WIND

Average hourly velocity 9.5 mph.

Prevailing direction N

Maximum for five minutes 24

mph. from the NE on the 11

SUNSHINE

Average number hours per day 6.9

Percentage of possible 55

NUMBER OF DAYS

Clear 2

Partly Cloudy 14

Cloudy 15

.01 inch of rain or more 22

Thunderstorms 2

Light fog 0

Dense fog 0

Number of hours with rain 96

MR 41983—Panama Canal—11-28-50—300

4864-11

THE PANAMA CANAL
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	75	80	87	7	1.72
2	88	75	82	84	8	.32
3	85	75	80	89	7	.67
4	83	75	79	85	8	0
5	84	76	80	84	3	.03
6	83	76	80	85	6	0
7	87	74	80	84	6	.02
8	85	77	81	85	8	.02
9	85	76	80	89	8	.17
10	84	75	80	88	9	.79
11	83	75	79	86	9	.47
12	83	75	79	85	8	.46
13	82	75	78	86	9	.07
14	86	74	80	88	10	1.91
15	83	75	79	89	10	.18
16	86	75	80	86	10	.02
17	89	74	82	78	4	0
18	85	75	80	79	2	0
19	86	77	82	80	10	0
20	84	78	81	84	10	T
21	85	77	81	87	10	T
22	84	76	80	82	7	.01
23	84	78	81	86	8	.08
24	84	74	79	86	9	.41
25	83	73	78	86	9	1.06
26	84	75	80	86	8	.40
27	84	75	80	88	10	1.37
28	82	76	79	88	9	.30
29	84	75	80	89	8	.24
30	83	75	79	89	8	.18
31						
Sum	2534	2261	----	----	238	10.90
Mean	84.5	75.4	80.0	85.7	7.9	----

TOTAL RAINFALL FOR THIS MONTH IN:

1946	9.63	1951	10.84
1947	9.37	1952	18.12
1948	9.34	1953	5.93
1949	12.72	1954	15.13
1950	13.84	1955	10.90

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.844
Departure from normal +.008
Highest 29.93 Date 14
Lowest 29.76 Date 21

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal +0.9
Highest 89 Date 17
Lowest 73 Date 25

RAINFALL
(Inches)

Total 10.90
Departure from normal -2.57
Greatest in 24 hours 1.72
Date 1st

WIND

Average hourly velocity 5.7 mph
Prevailing direction S
Maximum for five minutes 19
mph from the E W on the 26

SUNSHINE

Average number hours per day 6.8
Percentage of possible 54

NUMBER OF DAYS

Clear 2
Partly Cloudy 6
Cloudy 22
.01 inch of rain or more 23
Thunderstorms 19
Light fog 0
Dense fog 0
Number of hours with rain 89

LIBRARY
JUL 26 1955
WEATHER BUREAU

MR 41983—Panama Canal—11-28-50—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** July, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	74	80	91	8	.09
2	83	75	79	90	8	.05
3	85	76	80	86	5	0
4	86	73	80	89	5	2.96
5	83	74	78	89	7	.14
6	85	76	80	87	7	0
7	84	76	80	88	8	.21
8	84	76	80	89	9	.12
9	84	75	80	91	9	.95
10	84	75	80	87	6	.01
11	89	76	82	85	6	.27
12	84	75	80	90	7	.55
13	83	76	80	87	9	.14
14	84	78	81	88	8	.01
15	84	77	80	90	8	.30
16	82	74	78	89	9	.14
17	86	75	80	85	9	.02
18	86	75	80	88	8	.06
19	83	78	80	89	7	.02
20	83	76	80	90	9	.03
21	79	76	78	92	10	1.25
22	84	75	80	91	8	.26
23	85	77	81	86	3	0
24	80	74	77	90	10	.33
25	81	74	78	92	9	.73
26	81	75	78	91	9	.04
27	84	75	80	90	8	.16
28	84	75	80	88	9	0
29	85	74	0	86	8	.15
30	83	77	0	89	7	0
31	84	75	0	94	9	.59
Sum	2598	2339		2749	242	9.58
Mean	83.8	75.5	79.6	88.7	7.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1946	12.31	1951	12.85
1947	12.72	1952	20.88
1948	15.82	1953	17.95
1949	12.61	1954	17.24
1950	17.22	1955	9.58

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.847
Departure from normal - .003
Highest 29.93 Date 21
Lowest 29.75 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 1.1
Highest 89 Date 11
Lowest 73 Date 4

RAINFALL
(Inches)

Total 9.58
Departure from normal - 5.93
Greatest in 24 hours 3.06
Date 4 and 5

WIND

Average hourly velocity 5.6 mph.
Prevailing direction S
Maximum for five minutes 22
mph. from the W on the 4

SUNSHINE

Average number hours per day 6.0
Percentage of possible 48

NUMBER OF DAYS

Clear 1
Partly Cloudy 9
Cloudy 21
.01 inch of rain or more 26
Thunderstorms 15
Light fog 0
Dense fog 0

Number of hours with rain 91

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone Month: August 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	72	78	92	9	.16
2	83	73	77	91	8	.04
3	82	73	78	89	7	.25
4	83	75	79	89	7	.10
5	84	75	80	90	6	.54
6	81	74	78	93	10	2.48
7	83	74	78	90	7	1.30
8	86	72	79	85	7	.09
9	88	76	82	83	7	0
10	84	76	80	87	6	.74
11	81	75	78	91	10	.61
12	88	76	82	85	7	.12
13	84	77	80	88	5	.20
14	86	77	80	87	7	0
15	84	73	78	86	7	1.31
16	86	73	80	89	9	1.19
17	82	74	78	89	8	.67
18	83	75	79	86	8	.06
19	82	75	78	88	9	0
20	86	75	80	83	7	0
21	83	78	80	90	9	.51
22	84	75	80	86	8	.33
23	82	76	79	89	10	.67
24	84	76	80	88	7	.01
25	86	76	81	90	8	1.21
26	88	76	82	88	6	.34
27	86	75	80	86	6	.01
28	88	75	82	84	7	.20
29	86	75	80	89	7	.07
30	89	75	82	81	3	0
31	87	77	82	85	7	T
Sum	2620	2323		87.7	7.4	
Mean	84.5	75.0	79.8			13.41

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.857
Departure from normal - .005
Highest 29.95 Date 8
Lowest 29.70 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 0.7
Highest 89 Date 30
Lowest 72 Date 5

RAINFALL
(Inches)

Total 13.41
Departure from normal - 1.95
Greatest in 24 hours 3.40
Date 6 & 7

WIND

Average hourly velocity 5.3 mph.
Prevailing direction E
Maximum for five minutes 29
mph. from the E on the 16

SUNSHINE

Average number hours per day 5.9
Percentage of possible 48

NUMBER OF DAYS

Clear 1
Partly Cloudy 19
Cloudy 11
.01 inch of rain or more 25
Thunderstorms 17
Light fog 0
Dense fog 0
Number of hours with rain 108

TOTAL RAINFALL FOR THIS MONTH IN:

1946	15.28	1951	12.95
1947	17.30	1952	20.31
1948	11.58	1953	11.99
1949	15.60	1954	19.43
1950	14.77	1955	13.41

LIBRARY SEP 28 1955 WEATHER BUREAU

16-69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: September, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	88	77	82	83	3	.05
2	86	76	81	88	8	.01
3	87	75	81	84	3	0
4	87	78	80	88	8	.72
5	84	74	79	85	3	0
6	89	75	82	85	7	.02
7	83	75	79	90	8	.22
8	86	74	80	84	10	.10
9	84	75	80	88	6	0
10	84	75	80	86	9	.26
11	85	75	80	89	9	.23
12	88	75	82	80	8	0
13	87	75	81	85	8	.06
14	83	75	79	86	8	.04
15	86	75	80	84	10	0
16	88	75	82	82	10	0
17	89	77	83	78	7	0
18	86	76	81	84	9	.06
19	85	75	80	86	10	.60
20	83	75	79	87	8	.06
21	86	75	80	83	3	0
22	86	77	80	84	5	.11
23	87	77	82	81	3	0
24	87	76	82	83	4	0
25	87	75	81	85	3	0
26	88	76	82	83	5	0
27	89	78	84	82	6	0
28	85	75	80	85	3	.13
29	87	75	81	86	4	.47
30	89	76	83	83	7	0
31						
Sum	2582	2263	-	-	169	3.14
Mean	86.2	75.4	80.8	84.3	6.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

1946	14.12	1952	10.16
1947	14.38	1953	9.75
1948	11.35	1954	12.27
1949	9.64	1955	10.46
1950	10.85	1955	3.14

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.838

Departure from normal +.068

Highest 29.95 Date 9

Lowest 29.74 Date 24

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8

Departure from normal +0

Highest 89 Date 17

Lowest 72 Date 4

RAINFALL
(Inches)

Total 3.14

Departure from normal - 9.85

Greatest in 24 hours .72

Date 4

WIND

Average hourly velocity 5.8 mph.

Prevailing direction S

Maximum for five minutes 28

mph. from the SW on the 1

SUNSHINE

Average number hours per day 7.6

Percentage of possible 48

NUMBER OF DAYS

Clear 6

Partly Cloudy 10

Cloudy 14

.01 inch of rain or more 16

Thunderstorms 9

Light fog 0

Dense fog 0

Number of hours with rain 42

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal **Month:** October, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	87	75	81	87	8	.87
2	84	76	80	87	8	.09
3	85	75	80	84	6	.01
4	85	76	80	87	8	.06
5	88	77	82	81	5	0
6	88	77	82	84	8	.05
7	85	76	80	87	8	.09
8	85	76	80	87	9	.78
9	90	76	83	81	7	0
10	89	76	82	81	6	.04
11	86	76	81	84	5	.03
12	85	76	80	85	8	0
13	87	76	82	84	8	.18
14	85	77	81	86	7	.10
15	79	75	77	92	10	.46
16	84	75	80	88	7	.07
17	87	75	81	84	7	0
18	87	76	82	79	7	0
19	87	76	82	85	9	0
20	85	73	79	89	8	5.46
21	83	71	77	86	7	.62
22	86	74	80	87	6	.39
23	87	74	80	85	8	2.13
24	84	75	80	83	7	0
25	86	74	80	83	8	.01
26	86	73	80	84	7	.15
27	87	74	80	82	8	.03
28	84	75	80	85	8	.48
29	87	75	81	86	7	1.53
30	82	75	78	86	8	.01
31	82	74	78	85	7	.35
Sum	2652	2329	-	-	230	13.99
Mean	85.5	75.1	80.3	84.9	7.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

19 46	15.37	1951	19.15
19 47	17.71	1952	21.12
19 48	15.11	1953	18.41
19 49	17.72	1954	9.76
19 50	13.74	1955	13.99

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.842
Departure from normal + .014
Highest 29.95 Date 18
Lowest 29.72 Date 12

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3
Departure from normal 0
Highest 90 Date 9
Lowest 71 Date 21

RAINFALL
(Inches)

Total 13.99
Departure from normal - 1.92
Greatest in 24 hours 5.98
Date 20-21

WIND

Average hourly velocity 6.1 mph.
Prevailing direction S
Maximum for five minutes 29
mph. from the W on the 20

SUNSHINE

Average number hours per day 7.2
Percentage of possible 61

NUMBER OF DAYS

Clear 0
Partly Cloudy 15
Cloudy 16
.01 inch of rain or more 24
Thunderstorms 5
Light fog 0
Dense fog 0
Number of days with rain 78

RECEIVED NOV 25 1955 METEOROLOGICAL BRANCH

MR 69126—Panama Canal—7-19-55—300

4066-11

THE PANAMA CANAL

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER, 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	74	80	87	8	.31
2	84	75	80	88	8	.29
3	85	74	80	85	6	.22
4	83	75	79	87	7	.40
5	83	75	79	85	7	.24
6	84	75	80	88	7	1.90
7	82	75	78	86	7	0
8	82	77	80	88	8	.67
9	84	75	80	87	7	.27
10	83	77	80	88	9	.22
11	82	76	79	88	8	.20
12	84	75	80	86	7	.42
13	85	77	81	87	9	.84
14	86	74	80	86	6	1.70
15	84	74	79	86	7	.15
16	87	73	80	82	3	.04
17	80	75	78	88	9	.91
18	83	75	79	82	9	.60
19	80	74	77	87	10	1.89
20	83	75	79	85	7	.47
21	83	74	78	86	8	.35
22	84	76	80	82	7	.51
23	83	73	78	86	8	2.02
24	83	74	80	86	9	.69
25	79	74	76	88	9	1.46
26	83	72	78	89	10	3.08
27	82	75	78	87	8	.12
28	83	75	79	86	8	.27
29	80	74	77	88	9	.80
30	78	74	76	90	10	2.91
31						
Sum	2487	2241	-	-	235	23.95
Mean	82.9	74.7	78.8	86.5	7.8	-

TOTAL RAINFALL FOR THIS MONTH IN:

1946	25.54	1951	10.62
1947	12.43	1952	20.76
1948	22.40	1953	21.87
1949	36.65	1954	27.50
1950	39.12	1955	23.95

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.827
Departure from normal -.002
Highest 29.95 Date 25
Lowest 29.70 Date 10

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal -0.8
Highest 87 Date 16
Lowest 72 Date 26

RAINFALL
(Inches)

Total 23.95
Departure from normal +1.51
Greatest in 24 hours 3.71
Date 29 & 30

WIND

Average hourly velocity 6.6 mph.
Prevailing direction S
Maximum for five minutes 28
mph. from the NW on the 26

SUNSHINE

Average number hours per day 5.7
Percentage of possible 49

NUMBER OF DAYS

Clear 1
Partly Cloudy 11
Cloudy 18
.01 inch of rain or more 29
Thunderstorms 15
Light fog 0
Dense fog 0

Number of hours with rain 180

HR 41983—Panama Canal—11-28-50—300

1966-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: DECEMBER 1955

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	79	74	76	88	9	.24
2	84	74	79	85	8	.02
3	83	75	79	82	3	0
4	81	74	78	86	8	2.51
5	82	75	78	85	8	.30
6	81	75	78	83	7	0
7	82	74	78	80	3	0
8	81	73	76	83	7	.26
9	84	74	79	81	6	1.29
10	84	76	80	80	6	.31
11	85	78	82	80	6	.07
12	83	77	80	81	8	0
13	83	74	78	84	6	.40
14	81	75	78	87	9	.56
15	83	76	80	77	6	.10
16	83	74	78	82	5	.02
17	80	74	77	89	10	1.23
18	85	76	80	85	5	.09
19	83	78	80	85	7	.14
20	82	74	78	83	8	.68
21	79	72	76	89	10	1.47
22	79	72	76	91	10	1.46
23	80	70	75	91	10	1.17
24	81	73	77	88	8	.33
25	83	75	79	82	6	0
26	83	75	79	81	6	.05
27	82	72	77	86	8	.76
28	83	75	79	83	8	.17
29	83	76	80	82	6	.01
30	83	77	80	83	5	.15
31	82	73	78	85	8	.41
Sum	2547	2307	-	-	220	14.20
Mean	82.2	74.5	78.4	84.1	7.1	-

TOTAL RAINFALL FOR THIS MONTH IN:

1946	26.71	1951	11.14
1947	12.32	1952	19.97
1948	4.32	1953	9.11
1949	15.86	1954	10.43
1950	19.77	1955	14.20

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.853
Departure from normal +.015
Highest 29.93 Date 24
Lowest 29.74 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.4
Departure from normal -1.8
Highest 85 Date 18
Lowest 70 Date 23

RAINFALL
(Inches)

Total 14.20
Departure from normal +1.99
Greatest in 24 hours 2.79
Date 4 & 5

WIND

Average hourly velocity 8.5 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the NE on the 31

SUNSHINE

Average number hours per day 6.5
Percentage of possible 56

NUMBER OF DAYS

Clear 2
Partly Cloudy 14
Cloudy 15
.01 inch of rain or more 26
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 135

MR 69126—Panama Canal—7-19-55—300

FEB 16 1956

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: [illegible] C. Z. Month: [illegible], 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sum	[illegible]	[illegible]			[illegible]	[illegible]
Mean	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

TOTAL RAINFALL FOR THIS MONTH IN:

19[illegible]	[illegible]	19[illegible]	[illegible]
19[illegible]	[illegible]	19[illegible]	[illegible]
19[illegible]	[illegible]	19[illegible]	[illegible]
19[illegible]	[illegible]	19[illegible]	[illegible]
19[illegible]	[illegible]	19[illegible]	[illegible]

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean [illegible]
Departure from normal [illegible]
Highest [illegible] Date [illegible]
Lowest [illegible] Date [illegible]

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean [illegible]
Departure from normal [illegible]
Highest [illegible] Date [illegible]
Lowest [illegible] Date [illegible]

RAINFALL
(Inches)

Total [illegible]
Departure from normal [illegible]
Greatest in 24 hours [illegible]
Date [illegible]

WIND

Average hourly velocity [illegible] mph.
Prevailing direction [illegible]
Maximum for five minutes [illegible]
mph. from the [illegible] on the [illegible]

SUNSHINE

Average number hours per day [illegible]
Percentage of possible [illegible]

NUMBER OF DAYS

Clear [illegible]
Partly Cloudy [illegible]
Cloudy [illegible]
.01 inch of rain or more [illegible]
Thunderstorms [illegible]
Light fog [illegible]
Dense fog [illegible]

Number of hours with rain [illegible]

MR 69126—Panama Canal—7-19-55—300

FEB 16 [illegible]

1066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** February 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	81	73	77	89	9	.20
2	82	77	80	84	4	0
3	82	75	78	84	4	0
4	81	78	80	84	6	0
5	81	75	78	85	7	.10
6	82	77	80	85	6	.57
7	83	78	80	82	3	0
8	83	76	80	82	3	0
9	82	77	80	83	3	.01
10	81	75	78	83	8	.01
11	83	75	79	82	4	0
12	82	76	79	82	7	.08
13	83	79	81	77	4	0
14	84	75	80	80	6	.10
15	83	78	80	79	7	0
16	83	77	80	80	8	.05
17	83	79	81	82	7	0
18	84	79	82	83	6	0
19	83	78	80	81	7	0
20	84	78	81	82	4	0
21	82	79	80	83	7	0
22	82	75	78	84	8	.05
23	82	74	78	81	6	.04
24	82	78	80	83	6	0
25	83	79	81	84	7	.01
26	83	78	80	82	8	T
27	84	77	80	81	6	.11
28	85	77	81	79	3	0
29	82	75	80	81	8	.09
30						
31						
Sum	2395	2227	-	-	172	1.42
Mean	82.6	76.8	79.7	82.3	5.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	1.78	1952	.93
1948	.14	1953	2.01
1949	.32	1954	1.72
1950	3.97	1955	1.79
1951	5.62	1956	1.42

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.840
Departure from normal - .043
Highest 29.98 Date 29
Lowest 29.75 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.7
Departure from normal - .06
Highest 85 Date 28
Lowest 73 Date 1

RAINFALL
(Inches)

Total 1.42
Departure from normal - .15
Greatest in 24 hours .59
Date 5 & 6

WIND

Average hourly velocity 13.4 mph.
Prevailing direction NE
Maximum for five minutes 26
mph. from the NE on the 19

SUNSHINE

Average number hours per day 8.0
Percentage of possible 67%

NUMBER OF DAYS

Clear 4
Partly Cloudy 19
Cloudy 6
.01 inch of rain or more 13
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 24

MR 69126—Panama Canal—7-19-55—300

1066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY MAY 15 1956 WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: MARCH 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	75	79	80	8	.15
2	83	72	78	79	6	.17
3	83	77	80	82	3	0
4	83	79	81	80	9	0
5	83	78	80	80	3	.01
6	83	76	80	81	5	.01
7	83	76	80	81	8	0
8	83	77	80	82	6	0
9	83	78	80	78	5	0
10	83	72	78	79	8	.68
11	83	77	80	76	4	0
12	82	77	80	76	3	0
13	82	77	80	76	3	0
14	83	77	80	77	4	0
15	82	77	80	76	3	0
16	81	78	80	77	4	0
17	81	75	78	79	3	0
18	82	74	78	80	5	.09
19	82	77	80	81	7	.03
20	82	74	78	81	6	.16
21	83	78	80	81	5	.06
22	81	74	78	83	8	.26
23	83	73	78	82	8	.23
24	82	74	78	82	10	.79
25	83	78	80	81	4	.01
26	81	74	78	82	9	1.68
27	84	77	80	84	5	.02
28	84	77	80	84	4	T
29	84	78	81	85	8	.07
30	84	79	82	81	6	0
31	81	79	80	83	7	.01
Sum	2559	2364	—	—	177	4.43
Mean	82.5	76.3	79.4	80.3	5.7	—

TOTAL RAINFALL FOR THIS MONTH IN:

19	47	.37	19	52	.03
19	48	1.21	19	53	1.79
19	49	.46	19	54	.67
19	50	2.17	19	55	1.33
19	51	.60	19	56	4.43

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.877
Departure from normal + .003
Highest 30.00 Date 13
Lowest 29.75 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 1.5
Highest 84 Date 30
Lowest 72 Date 10

RAINFALL
(Inches)

Total 4.43
Departure from normal +2.97
Greatest in 24 hours 1.70
Date 26 - 27

WIND

Average hourly velocity 14.7 mph.
Prevailing direction N
Maximum for five minutes 26
mph. from the NE on the 1

SUNSHINE

Average number hours per day 8.1
Percentage of possible 67

NUMBER OF DAYS

Clear 6
Partly Cloudy 16
Cloudy 9
.01 inch of rain or more 17
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 38

MR 69126—Panama Canal—7-19-55—300

6966-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: APRIL, 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	77	80	86	9	.05
2	84	78	81	89	6	.02
3	84	78	81	86	5	T
4	84	79	82	86	6	.01
5	84	79	82	84	9	0
6	83	79	81	81	5	0
7	83	79	81	80	6	0
8	83	79	81	81	5	0
9	83	79	81	84	5	0
10	83	78	80	85	5	0
11	86	73	80	87	8	0
12	87	77	82	88	7	0
13	84	76	80	89	8	.21
14	82	74	78	88	10	1.07
15	83	76	80	87	6	0
16	86	74	80	90	6	0
17	84	76	80	84	3	0
18	84	76	80	82	8	.48
19	85	78	82	77	7	.03
20	85	80	82	73	7	0
21	85	80	82	75	7	.01
22	85	77	81	78	8	.04
23	85	77	81	81	8	.10
24	87	80	84	81	5	0
25	86	79	82	80	4	0
26	83	76	80	78	5	.14
27	84	77	80	82	9	.15
28	85	78	82	76	4	0
29	84	76	80	76	9	.08
30	85	79	82	78	5	0
31						
Sum	2530	2386	-	-	195	2.39
Mean	84.3	77.5	80.9	82.2	6.5	-

TOTAL RAINFALL FOR THIS MONTH IN:

1947	6.68	1952	6.97
1948	1.57	1953	2.38
1949	2.07	1954	4.89
1950	4.86	1955	.44
1951	8.48	1956	2.39

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal -.016
Highest 29.95 Date 12
Lowest 29.74 Date 16

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.9
Departure from normal - 0.6
Highest 87 Date 12
Lowest 74 Date 6

RAINFALL
(Inches)

Total 2.39
Departure from normal - 1.67
Greatest in 24 hours 1.07
Date 14

WIND

Average hourly velocity 12.6 mph.
Prevailing direction E
Maximum for five minutes 29
mph. from the NE on the 24

SUNSHINE

Average number hours per day 7.6
Percentage of possible 62

NUMBER OF DAYS

Clear 1
Partly Cloudy 19
Cloudy 10
.01 inch of rain or more 13
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 33

MR 69126—Panama Canal—7-19-55—300

4066-12

NAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MAY 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	81	84	78	5	0
2	86	81	84	82	5	0
3	85	80	82	79	8	.01
4	86	77	82	81	9	.19
5	85	78	82	89	9	.26
6	84	77	80	89	10	.63
7	82	74	78	92	10	.18
8	78	73	76	97	10	2.69
9	79	72	76	85	9	1.03
10	82	72	77	84	10	.01
11	82	77	80	84	10	.70
12	87	79	83	86	8	0
13	83	76	80	88	9	.05
14	83	74	78	91	8	.14
15	84	74	79	85	8	.01
16	83	76	80	84	10	.53
17	80	76	78	85	9	.97
18	84	76	80	82	5	0
19	80	74	77	94	10	6.08
20	83	74	78	89	9	1.68
21	83	74	78	90	10	0
22	85	75	80	90	9	.30
23	84	74	79	87	8	1.31
24	86	74	80	84	10	0
25	87	77	82	83	8	.02
26	82	77	80	85	10	.22
27	84	77	80	85	10	.09
28	85	75	80	82	9	T
29	84	76	80	84	10	.19
30	84	77	80	86	9	.12
31	80	74	77	88	10	.86
Sum	2586	2352			274	18.27
Mean	83.4	75.8	79.6	86.0	8.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	7.23	1952	15.70
1948	7.29	1953	8.45
1949	11.23	1954	12.44
1950	7.23	1955	13.43
1951	11.[illegible]	1956	18.27

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839

Departure from normal +.003

Highest 29.95 Date 25

Lowest 29.73 Date 8

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6

Departure from normal -1.6

Highest 87 Date 25

Lowest 72 Date 10

RAINFALL
(Inches)

Total 18.27

Departure from normal +5.88

Greatest in 24 hours 6.08

Date 19

WIND

Average hourly velocity 7.1 mph.

Prevailing direction N

Maximum for five minutes 24

mph. from the NW on the 10

SUNSHINE

Average number hours per day 3.4

Percentage of possible 27

NUMBER OF DAYS

Clear 0

Partly Cloudy 3

Cloudy 28

.01 inch of rain or more 24

Thunderstorms 5

Light fog 0

Dense fog 0

Number of hours with rain 132

JUN 25 1956 WEATHER BUR

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** JUNE 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	81	75	78	86	10	.33
2	83	74	78	89	10	3.15
3	82	74	78	92	10	1.97
4	83	73	78	91	10	.11
5	81	76	78	91	10	.16
6	90	75	82	83	9	0
7	87	76	82	88	9	0
8	87	76	82	82	8	0
9	85	75	80	90	8	.21
10	87	75	81	84	9	.03
11	86	76	81	87	10	.20
12	84	76	80	85	10	0
13	80	76	78	90	10	.81
14	85	75	80	83	7	.05
15	84	75	81	82	10	T
16	86	77	80	84	9	.18
17	88	76	82	84	9	.05
18	83	74	78	87	9	.10
19	84	74	79	84	9	.03
20	83	75	79	85	8	.03
21	83	75	79	84	9	.15
22	85	76	80	83	8	.10
23	83	75	79	85	10	.09
24	80	75	78	88	10	.63
25	82	74	78	89	10	.79
26	86	75	80	86	10	.13
27	87	80	84	79	6	0
28	85	77	81	84	8	.05
29	83	78	80	85	10	.03
30	82	76	79	89	10	.36
31						
Sum	2526				275	9.74
Mean	84.2	75.6	79.8	85.8	9.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	9.57	1952	10.32
1948	9.36	1953	4.93
1949	12.72	1954	15.13
1950	13.44	1955	10.90
1951	10.66	1956	9.74

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.863
Departure from normal +.027
Highest 29.95 Date 18
Lowest 29.78 Date 2

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal -1.0
Highest 90 Date 6
Lowest 73 Date 4

RAINFALL
(Inches)

Total 9.74
Departure from normal -3.69
Greatest in 24 hours 3.44
Date 2 and 3

WIND

Average hourly velocity 6.2 mph.
Prevailing direction E
Maximum for five minutes 26
mph. from the NW on the 2

SUNSHINE

Average number hours per day 4.0
Percentage of possible 31

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 28
.01 inch of rain or more 24
Thunderstorms 14
Light fog 0
Dense fog 0

Number of hours with rain 85

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** JULY 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	76	80	87	10	1.21
2	83	72	78	90	10	.59
3	78	74	76	92	10	1.20
4	85	74	80	83	6	.62
5	82	74	78	87	9	.20
6	83	73	78	82	7	0
7	84	76	80	87	8	.92
8	83	74	78	89	9	.69
9	86	74	80	84	5	0
10	82	78	80	85	10	.14
11	82	75	78	86	10	.79
12	82	73	78	87	10	2.12
13	82	73	78	89	10	1.16
14	85	75	80	86	9	.09
15	85	76	80	88	10	.66
16	83	75	79	88	10	.33
17	83	76	80	91	10	.22
18	84	72	78	87	6	1.65
19	84	76	80	85	8	0
20	82	74	78	88	9	.91
21	80	74	77	88	10	1.27
22	83	75	79	82	8	.01
23	84	75	80	83	9	.08
24	81	73	77	89	10	.71
25	82	72	77	84	6	0
26	85	78	82	83	5	0
27	83	75	79	85	10	.05
28	81	72	76	86	9	.70
29	84	76	80	87	8	.56
30	85	77	81	86	10	2.17
31	80	71	76	90	10	5.72
Sum	2589	2308			272	24.77
Mean	82.9	74.5	78.7	86.6	8.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	12.72	1952	20.88
1948	15.82	1953	17.95
1949	12.61	1954	17.24
1950	17.22	1955	9.58
1951	12.85	1956	24.77

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.870

Departure from normal + .025

Highest 29.98 Date 4

Lowest 29.77 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.7

Departure from normal -2.0

Highest 86 Date 9

Lowest 71 Date 31

RAINFALL
(Inches)

Total 24.77

Departure from normal + 9.15

Greatest in 24 hours 6.55

Date 30 - 31

WIND

Average hourly velocity 7.5 mph.

Prevailing direction N

Maximum for five minutes 24

mph. from the N on the 31

SUNSHINE

Average number hours per day 4.3

Percentage of possible 34

NUMBER OF DAYS

Clear 0

Partly Cloudy 6

Cloudy 25

.01 inch of rain or more 26

Thunderstorms 23

Light fog 0

Dense fog 0

Number of hours with rain 145

APR

MR 69126—Panama Canal—7-19-55—300

1966-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: AUGUST 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	79	82	80	4	0
2	83	76	80	85	4	.87
3	80	75	78	89	10	1.99
4	82	74	78	86	4	.47
5	83	79	81	87	7	0
6	85	80	82	86	9	.02
7	85	76	80	82	1	.03
8	85	78	82	84	5	.01
9	84	76	80	90	10	.73
10	83	76	80	89	10	.44
11	81	75	78	90	10	1.53
12	83	75	79	87	8	1.17
13	83	75	79	86	7	0
14	83	75	79	88	9	.90
15	82	75	78	89	10	1.04
16	86	75	80	87	8	.09
17	83	76.5	79	86	6	0
18	84	77	80	89	9	.34
19	83	74	78	86	9	.41
20	83	78	80	84	5	.07
21	82	75	78	90	10	.60
22	80	73	76	88	10	1.60
23	83	75	79	88	9	.15
24	83	75	79	90	10	2.29
25	83	73	78	83	5	0
26	84	74	79	86	6	.68
27	82	75	78	88	9	.32
28	81	74	78	86	8	0
29	83	76	80	87	9	.03
30	87	74	80	84	6	0
31	84	75	80	85	7	0
Sum	2580	2340	-	-	8.36	14.86
Mean	83.2	75.5	79.4	86.5	7.6	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.858
Departure from normal - .016
Highest 29.94 Date 22
Lowest 29.75 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal -1.1
Highest 87 Date 30
Lowest 73 Date 22

RAINFALL
(Inches)

Total 14.86
Departure from normal + .50
Greatest in 24 hours 2.86
Date 2-3

WIND

Average hourly velocity 7.8 mph.
Prevailing direction E
Maximum for five minutes 24
mph. from the NE on the 1

SUNSHINE

Average number hours per day 5.8
Percentage of possible 47

NUMBER OF DAYS

Clear 1
Partly Cloudy 11
Cloudy 19
.01 inch of rain or more 23
Thunderstorms 19
Light fog 0
Dense fog 0

Number of hours with rain 85

TOTAL RAINFALL FOR THIS MONTH IN:

19[illegible]	17.10	19 52	20.31
19[illegible]	11.52	19 53	11.99
19[illegible]	15.00	19 54	10.43
19[illegible]	16.77	19 55	13.41
19[illegible]	18.23	19 56	14.86

MR 69126—Panama Canal—7-19-55—300

APR 19 1957

108 340

4066–12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: Sept. 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	77	82	83	6	0
2	86	74	80	83	7	.05
3	82	74	78	88	10	1.56
4	84	77	80	87	7	.06
5	85	75	80	88	8	.10
6	84	73	78	88	9	.46
7	83	75	79	89	8	.16
8	87	74	80	82	7	0
9	81	76	78	90	9	.29
10	84	75	80	85	7	.25
11	84	73	78	87	8	2.03
12	82	74	78	89	8	1.11
13	84	76	80	89	8	.18
14	84	75	80	89	9	.70
15	83	75	79	88	9	.36
16	84	76	80	85	7	.08
17	83	77	80	87	10	.12
18	84	76	80	83	4	.45
19	84	75	80	85	8	.01
20	84	75	80	83	3	0
21	83	75	79	88	9	.74
22	83	75	79	90	9	1.72
23	85	76	80	85	8	.30
24	84	75	80	85	9	T
25	86	75	80	85	7	T
26	86	75	80	85	7	T
27	84	75	80	85	6	.30
28	80	76	77	87	10	.03
29	83	76	80	91	10	.41
30	86	75	80	81	6	0
31						
Sum						11.70
Mean						

TOTAL RAINFALL FOR THIS MONTH IN:

19		19	
19		19	
19		19	
19		19	
19		19	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.833

Departure from normal + .003

Highest 29.96 Date 9

Lowest 29.75 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4

Departure from normal - 1.4

Highest 86 Date 25

Lowest 72 Date 22

RAINFALL
(Inches)

Total 11.70

Departure from normal - 0.68

Greatest in 24 hours 2.42

Date 11

WIND

Average hourly velocity 5.5 mph.

Prevailing direction E

Maximum for five minutes 24

mph. from the NW on the 3

SUNSHINE

Average number hours per day 5.5

Percentage of possible 45

NUMBER OF DAYS

Clear 1

Partly Cloudy 11

Cloudy 18

.01 inch of rain or more 23

Thunderstorms 21

Light fog 0

Dense fog 0

Number of hours with rain 95

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** OCTOBER 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	76	80	83	5	0
2	85	77	81	82	4	0
3	85	75	80	86	9	.60
4	84	72	78	88	9	.96
5	81	73	77	86	10	T
6	83	76	80	82	10	T
7	85	73	79	87	7	.94
8	84	74	79	86	9	0
9	79	74	76	89	10	.21
10	85	74	80	86	9	.51
11	85	74	80	85	9	.25
12	84	74	79	89	10	.49
13	86	74	80	84	10	.60
14	87	74	80	79	8	.01
15	82	75	78	84	7	.08
16	85	76	80	85	6	.09
17	82	72	77	90	9	3.12
18	82	74	78	87	9	.04
19	82	74	78	90	10	.89
20	89	74	82	80	8	.0
21	88	74	81	82	8	.0
22	83	75	79	86	8	.02
23	82	74	78	84	7	.03
24	82	75	78	87	10	.62
25	81	72	76	91	10	1.49
26	86	74	80	88	9	1.10
27	84	74	79	87	8	.05
28	89	73	81	84	8	1.69
29	86	73	80	77	6	T
30	88	74	81	81	8	1.34
31	84	75	80	86	9	.53
Sum	2612	2298			259	15.66
Mean	84.3	74.1	79.2	85.2	8.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	17.71	1952	21.12
1948	15.11	1953	18.41
1949	17.72	1954	9.76
1950	13.74	1955	13.99
1951	19.15	1956	15.66

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.837
Departure from normal -.009
Highest 29.93 Date 17
Lowest 29.73 Date 31

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal -1.1
Highest 89 Date 20
Lowest 72 Date 17

RAINFALL
(Inches)

Total 15.66
Departure from normal -.25
Greatest in 24 hours 3.19
Date 16-17

WIND

Average hourly velocity 5.5 mph.
Prevailing direction S
Maximum for five minutes 26
mph. from the N on the 17

SUNSHINE

Average number hours per day 5.8
Percentage of possible 49

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 24
.01 inch of rain or more 23
Thunderstorms 11
Fog log 0
Dense fog 0
Number of hours with rain 93

LIBRARY
MAR 13 1957
WEATHER BUREAU

MR 6[illegible]6—Panama Canal—7-19-55—300

1066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** NOVEMBER 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	75	80	87	10	.01
2	82	74	78	88	10	T
3	86	73	80	82	7	0
4	87	74	80	79	6	0
5	86	74	80	71	[illegible]	.47
6	78	73	76	90	10	2.31
7	82	73	78	82	6	.14
8	83	77	80	79	5	.07
9	84	75	80	88	9	.19
10	83	75	79	89	9	.81
11	80	73	76	92	10	4.43
12	84	75	80	86	10	.11
13	84	74	79	89	10	2.47
14	81	72	76	92	10	2.70
15	82	74	78	86	10	.13
16	80	74	77	87	10	.39
17	82	74	78	86	5	.02
18	81	75	78	88	10	.14
19	81	75	78	90	10	2.37
20	81	75	78	90	10	.20
21	84	75	80	86	8	0
22	82	76	79	89	8	1.02
23	82	72	77	89	10	3.22
24	79	72	76	90	10	1.01
25	81	72	76	92	10	1.[illegible]
26	80	71	76	90	9	.[illegible]
27	79	71	75	94	10	.96
28	81	71	76	89	7	2.49
29	80	72	76	96	8	.57
30	81	72	76	90	9	1.43
31						
Sum	2460	2208			263	29.72
Mean	82.0	73.6	77.8	87.4	8.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	12.43	1952	20.76
1948	22.40	1953	21.87
1949	36.65	1954	27.50
1950	39.12	1955	23.95
1951	10.62	1956	29.72

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean .852

Departure from normal + .023

Highest 29.99 Date 23

Lowest 29.71 Date 19

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 77.8

Departure from normal - 1.7

Highest 87 Date 4

Lowest 71 Date 26

RAINFALL
(Inches)

Total 29.72

Departure from normal + 7.20

Greatest in 24 hours 5.04

Date 13-14

WIND

Average hourly velocity 6.7 mph.

Prevailing direction W

Maximum for five minutes 37

mph. from the NW on the 23

SUNSHINE

Average number hours per day 3.8

Percentage of possible 32

NUMBER OF DAYS

Clear 0

Partly Cloudy 7

Cloudy 23

.01 inch of rain or more 26

Thunderstorms 11

Light fog 0

Dense fog 0

Number of hours with rain 168

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** DECEMBER 1956

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	81	71	76	91	9	.27
2	86	75	80	82	6	.01
3	85	76	80	82	4	.18
4	84	78	81	85	6	.05
5	86	79	82	83	5	.02
6	87	79	83	84	7	.0
7	84	78	81	86	9	.0
8	85	76	80	85	8	.61
9	85	77	81	83	8	.02
10	84	75	80	84	7	.19
11	82	74	78	89	9	1.76
12	87	74	80	84	8	.13
13	85	76	80	87	9	1.05
14	86	75	80	85	4	.0
15	81	75	78	93	10	.17
16	78	75	76	94	10	.16
17	82	74	78	92	10	.84
18	85	75	80	87	6	.22
19	84	78	81	83	4	.05
20	85	75	80	82	2	.01
21	84	75	80	86	7	.01
22	85	76	80	80	4	.0
23	84	79	82	80	4	.0
24	85	76	80	87	7	.10
25	84	76	80	79	3	.01
26	85	78	80	80	4	.0
27	83	77	80	86	4	.0
28	83	76	80	83	5	.05
29	85	76	80	82	4	.03
30	83	74	78	83	6	.74
31	83	77	80	78	8	.03
Sum	2600	2378			197	6.71
Mean	83.9	76.6	80.0	84.7	6.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1947	12.32	1952	19.97
1948	4.32	1953	9.11
1949	15.66	1954	10.43
1950	10.37	1955	14.20
1951	12.34	1956	6.71

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.840

Departure from normal +.002

Highest 29.96 Date 30

Lowest 29.73 Date 14

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0

Departure from normal -0.2

Highest 87 Date 12

Lowest 71 Date 1

RAINFALL
(Inches)

Total 6.71

Departure from normal -5.44

Greatest in 24 hours 1.81

Date 10-11

WIND

Average hourly velocity 11.4 mph.

Prevailing direction NE

Maximum for five minutes 25

mph. from the NE on the 10

SUNSHINE

Average number hours per day 7.9

Percentage of possible 60

NUMBER OF DAYS

Clear 2

Partly Cloudy 18

Cloudy 11

.01 inch of rain or more 24

Thunderstorms 0

Light fog 0

Heavy fog 0

Number of hours with rain 6

LIBRARY MAR 14 1957 WEATHER BUREAU

126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

Rec'd. O/C

FEB 12 1957

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: January 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	79	81	82	8	T
2	83	78	81	79	10	0
3	82	77	78	85	9	.09
4	83	76	80	78	6	0
5	83	75	79	85	5	.15
6	83	79	81	81	3	0
7	83	78	80	82	6	.02
8	83	78	80	80	6	.07
9	85	77	81	82	5	.03
10	84	78	81	80	6	.07
11	85	80	82	76	6	T
12	84	74	76	80	7	.30
13	80	77	80	78	6	.06
14	83	79	79	78	4	T
15	82	78	78	79	4	.16
16	82	79	80	82	4	0
17	84	78	80	81	6	.03
18	82	77	80	77	3	0
19	84	77	80	78	5	T
20	83	77	80	78	5	0
21	82	77	80	78	8	T
22	82	77	80	78	6	T
23	82	78	80	77	5	T
24	82	79	80	78	4	T
25	83	78	80	78	6	0
26	82	78	80	78	4	0
27	82	78	80	79	3	0
28	82	77	80	79	5	T
29	82	77	80	79	6	T
30	82	77	80	79	4	0
31	81	79	79	79	9	T
Sum	2568	2417			172	1.06
Mean	82.8	78.0	80.5	79.9	5.5	

TOTAL RAINFALL FOR THIS MONTH IN:

19 [illegible]	[illegible]	19 [illegible]	6.85
19 [illegible]	[illegible]	19 [illegible]	1.38
19 [illegible]	[illegible]	19 [illegible]	11.13
19 [illegible]	[illegible]	19 [illegible]	10.25
19 [illegible]	[illegible]	19 57	1.06

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.879
Departure from normal +.010
Highest 29.91 Date 24
Lowest 29.80 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal -.7
Highest 85 Date 9
Lowest 72 Date 12

RAINFALL
(Inches)

Total 1.06
Departure from normal -2.25
Greatest in 24 hours .30
Date 12th

WIND

Average hourly velocity 15.4 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 11

SUNSHINE

Average number hours per day 7.7
Percentage of possible 64

NUMBER OF DAYS

Clear 4
Partly Cloudy 22
Cloudy 5
.01 inch of rain or more 10
Thunderstorms 0
[illegible] 0
Dense fog 0
Number of hours with rain 28

LIBRARY
WEATHER BUREAU

MR 69126 — Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: February 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	[illegible]	[illegible]	[illegible]	[illegible]	4	0
2	[illegible]	[illegible]	[illegible]	[illegible]	6	T
3	[illegible]	[illegible]	[illegible]	[illegible]	8	T
4	[illegible]	[illegible]	[illegible]	[illegible]	9	.02
5	[illegible]	[illegible]	[illegible]	[illegible]	7	.02
6	[illegible]	[illegible]	[illegible]	[illegible]	5	0
7	[illegible]	[illegible]	[illegible]	[illegible]	4	0
8	[illegible]	[illegible]	[illegible]	[illegible]	3	T
9	[illegible]	[illegible]	[illegible]	[illegible]	7	0
10	[illegible]	[illegible]	[illegible]	[illegible]	4	.03
11	[illegible]	[illegible]	[illegible]	[illegible]	6	0
12	[illegible]	[illegible]	[illegible]	[illegible]	6	.09
13	[illegible]	[illegible]	[illegible]	[illegible]	8	.02
14	[illegible]	[illegible]	[illegible]	[illegible]	9	.03
15	[illegible]	[illegible]	[illegible]	[illegible]	9	.14
16	[illegible]	[illegible]	[illegible]	[illegible]	8	.03
17	[illegible]	[illegible]	[illegible]	[illegible]	4	.02
18	[illegible]	[illegible]	[illegible]	[illegible]	8	T
19	[illegible]	[illegible]	[illegible]	[illegible]	9	T
20	[illegible]	[illegible]	[illegible]	[illegible]	8	.02
21	[illegible]	[illegible]	[illegible]	[illegible]	4	0
22	[illegible]	[illegible]	[illegible]	[illegible]	3	0
23	[illegible]	[illegible]	[illegible]	[illegible]	3	0
24	[illegible]	[illegible]	[illegible]	[illegible]	3	0
25	[illegible]	[illegible]	[illegible]	[illegible]	4	0
26	[illegible]	[illegible]	[illegible]	[illegible]	3	0
27	[illegible]	[illegible]	[illegible]	[illegible]	3	0
28	[illegible]	[illegible]	[illegible]	[illegible]	5	0
29						
30						
31						
Sum	[illegible]	[illegible]		[illegible]	160	.39
Mean	[illegible]	[illegible]	[illegible]	[illegible]	5.7	

TOTAL RAINFALL FOR THIS MONTH IN:

19[illegible]	[illegible]	19[illegible]	[illegible]
19[illegible]	[illegible]	19[illegible]	2.72
19[illegible]	[illegible]	19[illegible]	1.77
19[illegible]	[illegible]	19[illegible]	1.12
19[illegible]	[illegible]	19[illegible]	.39

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean [illegible]

Departure from normal [illegible]

Highest 29.95 Date 24

Lowest 29.75 Date 26

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.4

Departure from normal -1.7

Highest [illegible] Date 27

Lowest 71 Date 25

RAINFALL
(Inches)

Total .39

Departure from normal -1.16

Greatest in 24 hours .15

Date 15 & 16

WIND

Average hourly velocity [illegible] mph.

Prevailing direction [illegible]

Maximum for five minutes [illegible]

mph. from the [illegible] on the 5

SUNSHINE

Average number hours per day 7.7

Percentage of possible 65

NUMBER OF DAYS

Clear 6

Partly Cloudy 13

Cloudy 9

.01 inch of rain or more 10

Thunderstorms 0

Light fog 0

Dense fog 0

Number of hours with rain [illegible]

MR 69126—Panama Canal—7-19-55—300

1066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** March 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	79	81	80	4	.0
2	83	76	80	78	6	.03
3	82	73	78	80	6	.01
4	83	72	78	80	2	.0
5	86	73	80	77	2	.0
6	86	74	81	78	4	.0
7	84	74	79	80	6	.0
8	83	75	79	78	4	.02
9	82	74	78	78	7	.03
10	83	79	81	75	3	.0
11	84	77	80	77	5	.02
12	83	76	80	78	3	.0
13	85	79	82	80	6	T
14	84	79	82	78	5	.0
15	84	78	81	78	3	.0
16	83	77	80	78	6	.01
17	84	73	78	79	3	.33
18	82	73	78	77	3	.0
19	82	74	78	79	3	.0
20	84	75	80	80	3	.0
21	85	77	81	80	7	.01
22	85	72	78	80	7	.0
23	89	75	82	77	10	.0
24	91	76	84	82	9	.0
25	86	77	82	86	9	.0
26	86	80	83	83	7	T
27	85	79	82	83	6	.01
28	84	78	81	80	6	.0
29	84	78	81	85	6	T
30	84	79	82	86	9	.0
31	83	78	80	86	7	T
Sum	2614	2369			167	.47
Mean	84.4	76.1	80.2	79.9	5.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	1.21	1953	1.75
1949	.46	1954	.67
1950	2.17	1955	1.33
1951	.60	1956	1.43
1952	.03	1957	0.47

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.865
Departure from normal -.009
Highest 29.99 Date 2
Lowest 29.75 Date 24

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal - 0.7
Highest 91 Date 24
Lowest 72 Date 4

RAINFALL
(Inches)

Total .47
Departure from normal - .98
Greatest in 24 hours .34
Date 16 & 17

WIND

Average hourly velocity 11.2 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 2

SUNSHINE

Average number hours per day 6.7
Percentage of possible 72

NUMBER OF DAYS

Clear 9
Partly Cloudy 18
Cloudy 4
.01 inch of rain or more 9
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 13

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** April 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	78	82	81	5	0
2	84	79	82	79	4	0
3	84	79	82	79	5	0
4	84	77	80	80	3	0
5	84	78	81	79	3	0
6	85	79	82	77	3	0
7	85	79	82	78	3	0
8	84	79	82	82	5	0
9	85	78	82	82	6	T
10	84	77	80	81	5	T
11	84	78	81	82	5	0
12	83	79	81	82	7	T
13	85	79	82	79	8	0
14	85	79	82	79	3	0
15	83	79	81	78	6	0
16	84	78	81	78	7	0
17	84	76	80	79	5	T
18	84	76	80	81	8	.07
19	84	78	81	82	8	T
20	84	78	81	80	3	0
21	84	78	81	79	4	0
22	83	78	80	79	4	0
23	83	78	80	80	8	0
24	83	78	80	80	5	0
25	83	77	80	80	5	0
26	83	78	80	80	4	0
27	83	77	80	80	3	.01
28	83	77	80	81	2	0
29	83	79	81	82	4	0
30	83	79	81	82	5	0
31						
Sum	2515	2342			146	.08
Mean	83.8	78.1	81.0	79.9	49	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	1.97	1953	2.38
1949	2.87	1954	4.29
1950	4.26	1955	.44
1951	8.48	1956	2.39
1952	6.97	1957	.08

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.851

Departure from normal - .004

Highest 29.95 Date 14

Lowest 29.73 Date 27

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.0

Departure from normal - 0.5

Highest 85 Date 1

Lowest 76 Date 18

RAINFALL
(Inches)

Total .08

Departure from normal - 3.93

Greatest in 24 hours .07

Date 18

WIND

Average hourly velocity 13.2 mph.

Prevailing direction N

Maximum for five minutes 24

mph. from the NE on the 10

SUNSHINE

Average number hours per day 9.7

Percentage of possible 79

NUMBER OF DAYS

Clear 8

Partly Cloudy 18

Cloudy 4

.01 inch of rain or more 2

Thunderstorms 0

Light fog 0

Dense fog 0

Number of hours with rain 2

Rec'd: O/C

MR 69126—Panama Canal—7-19-55—300

MAY 20 1957

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MAY 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	80	82	82	6	T
2	84	79	82	82	6	.11
3	87	80	84	81	6	.0
4	84	80	82	82	8	.0
5	83	80	82	83	9	.0
6	84	80	82	84	10	.02
7	86	81	84	82	9	.01
8	83	77	80	83	9	.05
9	83	79	81	82	8	.0
10	84	79	82	83	4	.0
11	84	73	78	84	10	2.57
12	89	73	81	82	6	.01
13	90	75	82	81	8	.01
14	85	76	80	82	10	T
15	89	76	82	81	6	.03
16	85	76	80	84	9	.12
17	92	76	84	78	6	.08
18	94	77	86	79	2	.0
19	94	77	86	76	3	.0
20	90	77	84	81	8	.01
21	87	78	82	81	5	.0
22	87	78	82	83	5	.0
23	87	80	84	82	7	.08
24	84	74	79	87	10	.72
25	83	74	78	85	9	.50
26	83	78	80	84	10	.03
27	84	75	80	86	10	.03
28	88	75	82	85	8	1.36
29	86	75	80	89	10	.20
30	86	75	80	88	9	.10
31	86	74	80	88	8	.12
Sum	2676	2387			234	6.16
Mean	86.3	77.0	81.6	82.8	7.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	7.29	1953	8.45
1949	11.23	1954	12.44
1950	7.23	1955	13.43
1951	11.08	1956	18.27
1952	15.70	1957	6.16

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.814
Departure from normal -.021
Highest 29.92 Date 11
Lowest 29.71 Date 3

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.6
Departure from normal +0.3
Highest 94 Date 18
Lowest 73 Date 12

RAINFALL
(Inches)

Total 6.16
Departure from normal -6.15
Greatest in 24 hours 2.57
Date 11

WIND

Average hourly velocity 8.2 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the SW on the 15

SUNSHINE

Average number hours per day 7.3
Percentage of possible 58

NUMBER OF DAYS

Clear 2
Partly Cloudy 10
Cloudy 19
.01 inch of rain or more 20
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 59

AUG 2 5

MR 69126—Panama Canal—7-19-55—300

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE - 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	76	80	88	5	.15
2	84	75	80	88	4	.04
3	85	79	82	87	5	.0
4	85	81	83	88	8	.0
5	85	72	78	90	10	1.79
6	87	75	81	95	9	T
7	86	77	82	83	3	.0
8	85	77	81	87	3	T
9	86	80	83	86	7	.0
10	83	79	81	88	9	.0
11	84	81	82	87	9	.11
12	86	79	82	87	8	.10
13	83	77	80	88	10	1.09
14	85	77	81	87	6	.0
15	85	75	80	89	9	.83
16	85	74	80	84	7	.0
17	84	77	80	88	8	.02
18	86	79	82	88	9	.93
19	84	76	80	89	9	3.61
20	84	77	80	87	9	1.15
21	84	78	81	88	7	.36
22	86	82	84	87	7	.0
23	86	80	83	88	6	.08
24	86	82	84	87	8	T
25	85	74	80	88	10	.05
26	86	80	83	87	7	.0
27	88	78	83	85	7	.05
28	86	72	79	88	10	.79
29	85	73	79	86	10	.19
30	85	75	80	87	5	.53
31						
Sum	2554	2317		---	224	11.87
Mean	85.1	77.2	81.2	87.0	7.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	8.34	1953	5.93
1949	12.72	1954	15.13
1950	13.84	1955	10.90
1951	10.84	1956	9.74
1952	18.12	1957	11.87

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean .815

Departure from normal -.021

Highest 29.91 Date 7

Lowest 29.72 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2

Departure from normal +0.4

Highest 88 Date 27

Lowest 72 Date 5

RAINFALL
(Inches)

Total 11.87

Departure from normal -1.42

Greatest in 24 hours 4.50

Date 18 - 19

WIND

Average hourly velocity 6.8 mph.

Prevailing direction N

Maximum for five minutes 26

mph. from the SW on the 5

N 25

SUNSHINE

Average number hours per day 6.5

Percentage of possible 51

NUMBER OF DAYS

Clear 2

Partly Cloudy 12

Cloudy 18

.01 inch of rain or more 18

Thunderstorms 11

Light fog 0

Dense fog 0

Number of hours with rain 57

LIBRARY AUG 2 - 1957 WEATHER BUREAU

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** July - 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	76	81	85	10	.0
2	85	78	82	87	10	.01
3	85	80	82	86	9	.0
4	87	80	84	85	2	.0
5	86	81	84	86	9	.01
6	86	80	83	85	5	.0
7	86	81	84	84	9	.0
8	86	79	82	86	10	.07
9	87	81	84	86	9	.0
10	85	79	82	87	10	.04
11	81	76	78	89	10	.51
12	83	78	80	88	10	.02
13	83	76	80	88	8	.32
14	87	79	83	86	4	.08
15	84	79	82	88	7	.47
16	83	78	80	89	10	.99
17	80	72	76	89	10	1.11
18	85	75	80	88	7	2.09
19	85	80	82	87	6	.0
20	84	74	79	88	10	1.59
21	84	71	78	90	9	2.00
22	87	74	80	83	9	.0
23	83	75	79	88	6	.0
24	85	79	82	85	4	.02
25	85	80	82	84	8	.0
26	82	75	78	88	10	.34
27	83	75	79	87	9	.10
28	80	74	77	86	10	.92
29	83	78	80	84	10	.19
30	85	76	80	83	5	.18
31	85	80	82	85	6	.03
Sum	2616	2399		--	251	11.09
Mean	84.4	77.4	80.9	86.4	8.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	15.82	1953	17.95
1949	12.61	1954	17.24
1950	17.22	1955	9.58
1951	12.85	1956	24.77
1952	20.88	1957	11.09

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.808

Departure from normal - .036

Highest 29.89 Date 27

Lowest 29.71 Date 9

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.9

Departure from normal +0.2

Highest 87 Date 22

Lowest 71 Date 21

RAINFALL
(Inches)

Total 11.09

Departure from normal -4.47

Greatest in 24 hours 3.09

Date 17-18

WIND

Average hourly velocity 8.9 mph.

Prevailing direction NE

Maximum for five minutes 24

mph. from the NE on the 21

SUNSHINE

Average number hours per day 5.5

Percentage of possible 44

NUMBER OF DAYS

Clear 1

Partly Cloudy 9

Cloudy 21

.01 inch of rain or more 21

Thunderstorms 8

Light fog 0

Dense fog 0

Number of hours with rain 76

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** August 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	81	82	84	8	.17
2	84	70	77	84	10	3.24
3	82	73	78	87	10	2.05
4	84	75	80	86	9	.77
5	85	76	80	86	7	.23
6	85	80	82	84	7	.14
7	86	78	82	85	6	.26
8	86	81	84	84	8	.05
9	82	74	78	87	10	.11
10	83	75	79	85	8	.43
11	86	77	82	86	9	.51
12	86	80	83	85	6	.07
13	86	81	84	85	7	.02
14	86	81	84	84	9	0
15	86	81	84	86	8	T
16	84	76	80	87	10	.67
17	84	75	80	87	10	.11
18	84	76	80	86	10	1.94
19	81	76	78	90	10	1.17
20	86	77	82	87	8	1.61
21	84	79	82	88	10	.03
22	82	77	80	88	10	.56
23	86	78	82	87	8	T
24	85	77	81	88	8	.09
25	86	79	82	88	8	.55
26	85	74	80	88	9	1.95
27	82	74	78	89	10	2.12
28	82	74	78	88	10	.01
29	82	74	78	90	10	.95
30	83	74	78	90	10	.80
31	80	72	76	90	10	.58
Sum	2607	2375			273	21.19
Mean	84.1	76.6	80.4	86.7	8.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	11.52	1953	11.59
1949	15.60	1954	19.43
1950	16.77	1955	13.41
1951	12.95	1956	14.86
1952	20.31	1957	21.19

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.817
Departure from normal -.025
Highest 29.90 Date 18
Lowest 29.73 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal -0.1
Highest 86 Date 14
Lowest 70 Date 2

RAINFALL
(Inches)

Total 21.19
Departure from normal +5.77
Greatest in 24 hours 4.04
Date 26 - 27

WIND

Average hourly velocity 8.8 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NW on the 30

SUNSHINE

Average number hours per day 4.8
Percentage of possible 39

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 28
Thunderstorms 15
Light fog 8
Dense fog 0
Number of hours with rain 115

MR 75168

LIBRARY
WEATHER BUREAU

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** SEPTEMBER 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	73	78	88	7	T
2	85	77	81	87	8	.10
3	84	76	80	88	9	.13
4	83	75	79	88	7	0
5	85	76	80	87	9	.08
6	85	76	80	87	10	.99
7	85	75	80	85	5	.0
8	86	78	82	87	7	.08
9	84	76	80	87	10	.03
10	87	75	81	90	10	.13
11	84	76	80	85	5	T
12	85	77	81	83	5	0
13	83	78	80	88	10	.37
14	85	79	82	87	10	.26
15	85	77	81	87	8	0
16	86	78	82	86	9	T
17	84	73	78	88	10	.46
18	86	74	80	89	10	1.31
19	80	75	78	90	10	.46
20	89	75	82	83	7	1.63
21	88	76	82	85	7	0
22	85	75	80	84	7	.70
23	88	74	81	85	10	.34
24	85	76	80	85	4	.09
25	84	76	80	89	10	.90
26	79	74	76	91	10	1.32
27	83	75	79	89	9	.09
28	84	75	80	89	7	0
29	83	77	80	87	10	.27
30	81	73	77	92	10	1.74
31						
Sum	2534	2270			250	11.48
Mean	84.5	75.7	80.1	87.2	8.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	11.35	1953	12.27
1949	9.64	1954	10.66
1950	10.25	1955	3.14
1951	10.16	1956	11.70
1952	9.76	1957	11.48

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.811
Departure from normal -.019
Highest 92 Date 6
Lowest 71 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.1
Departure from normal -0.7
Highest 89 Date 20
Lowest 73 Date 17

RAINFALL
(Inches)

Total 11.48
Departure from normal -0.89
Greatest in 24 hours 1.85
Date 29-39

WIND

Average hourly velocity 5.8 mph.
Prevailing direction NW
Maximum for five minutes 27
mph. from the NW on the 26

SUNSHINE

Average number hours per day 5.0
Percentage of possible 41

NUMBER OF DAYS

Clear 0
Partly Cloudy 11
Cloudy 19
.01 inch of rain or more 21
Thunderstorms 13
Light fog 0
Dense fog 0

Number of hours with rain 96

MR 75168

4066-12

Climat

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

Rec'd. O/C

DEC 17 1957

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. Month: OCTOBER 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	88	74	81	86	10	0
2	86	76	81	89	8	0
3	87	74	80	86	10	.17
4	88	76	82	88	9	.01
5	87	77	82	86	6	0
6	84	74	79	91	10	1.45
7	85	74	80	88	8	0
8	85	75	80	89	8	.02
9	86	75	80	88	8	.88
10	84	74	79	91	10	.61
11	85	75	80	88	8	.38
12	85	75	80	86	9	.21
13	82	76	79	88	10	0
14	87	75	81	86	8	.01
15	84	78	81	88	8	.04
16	83	75	79	90	8	.89
17	86	74	77	92	10	1.26
18	85	74	80	88	8	.49
19	81	75	78	89	9	.15
20	84	76	80	86	8	.15
21	83	77	80	89	10	.09
22	84	77	80	88	8	.03
23	85	77	81	89	10	.73
24	84	76	80	87	8	.01
25	89	75	82	82	4	0
26	87	77	82	84	6	T
27	84	76	80	87	10	1.18
28	83	77	80	90	10	.82
29	85	76	81	89	10	.98
30	84	75	80	87	6	.03
31	83	75	79	87	7	0
Sum	2628	2340			262	8.39
Mean	84.8	75.5	80.2	87.7	8.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	13.11	1953	18.41
1949	17.78	1954	9.76
1950	13.78	1955	13.99
1951	19.15	1956	15.66
1952	22.38	1957	8.39

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.824
Departure from normal: -.004
Highest: 93 Date: 21
Lowest: 72 Date: 2

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.2
Departure from normal: -0.1
Highest: 89 Date: 25
Lowest: 74 Date: 1

RAINFALL
(Inches)

Total: 8.39
Departure from normal: -7.43
Greatest in 24 hours: 1.45
Date: 6

WIND

Average hourly velocity: 5.8 mph.
Prevailing direction: E
Maximum for five minutes: 26
mph. from the [redacted] on the 3

SUNSHINE

Average number hours per day: 3.6
Percentage of possible: 30

NUMBER OF DAYS

Clear: 0
Partly Cloudy: 5
Cloudy: 26
.01 inch of rain or more: 23
Thunderstorms: 4
Light fog: 0
Dense fog: 0

Number of hours with rain: 67

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** NOVEMBER, 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	75	80	86	5	0
2	83	75	79	89	6	.60
3	83	74	78	90	8	3.39
4	83	77	80	86	6	1.45
5	83	75	79	90	10	1.43
6	86	77	82	87	9	4.93
7	82	74	78	95	10	5.47
8	85	77	81	94	10	1.51
9	87	81	84	88	10	T
10	86	78	82	87	9	.38
11	87	77	82	90	10	.42
12	85	79	82	89	10	.10
13	85	80	82	87	7	0
14	84	77	80	92	9	.21
15	84	77	80	91	9	0
16	84	79	82	90	10	.26
17	87	78	82	87	6	0
18	86	80	83	87	6	0
19	85	78	82	89	9	.64
20	84	77	80	90	9	.10
21	87	79	83	86	10	0
22	85	80	82	82	7	0
23	84	74	79	89	10	2.35
24	83	75	79	89	10	.11
25	83	75	79	89	9	T
26	81	75	78	90	10	.06
27	84	76	80	90	8	.08
28	84	76	80	90	9	.45
29	83	76	80	91	10	1.13
30	84	76	80	91	10	2.87
31						
Sum	2531	2307			261	27.94
Mean	84.4	76.9	80.6		8.7	

TOTAL RAINFALL FOR THIS MONTH IN:

19	48	22.40	19	53	21.87
19	49	36.63	19	54	27.50
19	50	39.12	19	55	23.95
19	51	10.62	19	56	29.72
19	52	20.76	19	57	27.94

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.803

Departure from normal - .026

Highest 89 Date 17

Lowest 69 Date 13

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6

Departure from normal + 1.1

Highest 87 Date 9

Lowest 74 Date 23

RAINFALL
(Inches)

Total 27.94

Departure from normal + 5.35

Greatest in 24 hours 10.39

Date 6-7

WIND

Average hourly velocity 8.6 mph.

Prevailing direction [illegible]

Maximum for five minutes 28

mph. from the [illegible] on the 11

SUNSHINE

Average number hours per day 3.4

Percentage of possible 29

NUMBER OF DAYS

Clear 0

Partly Cloudy 7

Cloudy 23

.01 inch of rain or more 21

Thunderstorms 5

Light fog 0

Dense fog 0

Number of hours with rain 205

LIBRARY
DEC 31 1957
WEATHER BUREAU

MR 75168

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: DECEMBER, 1957

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	76	81	88	8	.78
2	86	79	82	86	8	.06
3	85	80	82	86	10	.07
4	85	80	82	84	10	0
5	85	75	80	80	8	T
6	86	75	80	81	5	1.11
7	85	79	82	82	5	0
8	84	75	80	81	4	0
9	83	76	80	79	6	.02
10	82	75	78	87	8	.75
11	82	74	78	82	7	.06
12	83	73	78	81	8	.35
13	84	73	78	83	6	.50
14	85	79	82	86	7	.04
15	84	79	82	89	6	.13
16	84	78	81	89	8	.37
17	82	76	79	90	10	1.01
18	84	79	82	86	5	0
19	84	76	80	88	8	1.36
20	82	80	81	88	6	.01
21	85	79	82	86	8	.05
22	85	79	82	86	7	T
23	85	80	82	85	6	.02
24	84	79	82	85	9	.06
25	82	76	79	87	4	.11
26	84	78	81	87	5	.04
27	84	75	80	85	3	.09
28	83	79	81	85	6	.0
29	84	79	82	85	7	.01
30	84	78	81	85	7	.01
31	85	80	82	84	6	0
Sum	2606	2399			211	7.01
Mean	84.1	77.4	80.8	85.0	6.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1948	4.32	1953	9.11
1949	15.86	1954	10.43
1950	19.77	1955	14.20
1951	11.14	1956	6.71
1952	19.97	1957	7.01

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.845
Departure from normal + .007
Highest 90 Date 12
Lowest 73 Date 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal + 0.6
Highest 86.0 Date 6
Lowest 72.8 Date 13

RAINFALL
(Inches)

Total 7.01
Departure from normal - 5.08
Greatest in 24 hours 1.36
Date 19

WIND

Average hourly velocity 13.6 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the N on the 10

SUNSHINE

Average number hours per day 5.4
Percentage of possible 47

NUMBER OF DAYS

Clear 1
Partly Cloudy 18
Cloudy 12
.01 inch of rain or more 21
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 78

LIBRARY JAN 28 1958 WEATHER BUREAU

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: JANUARY, 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	79	82	85	8	T
2	84	79	82	85	6	0
3	82	78	80	85	6	T
4	81	74	78	85	10	.90
5	82	75	78	86	8	.26
6	85	79	82	83	4	.02
7	82	80	81	84	4	0
8	83	75	79	83	9	.08
9	81	74	78	84	10	.53
10	83	76	80	82	10	.18
11	82	76	79	84	8	.18
12	80	74	77	86	10	3.04
13	84	78	81	82	6	.01
14	84	79	82	80	6	T
15	82	79	80	81	4	0
16	83	77	80	80	5	.24
17	84	77	80	80	3	0
18	81	73	77	86	10	.92
19	80	74	77	89	10	.17
20	83	77	80	87	6	.01
21	83	78	80	85	6	.01
22	83	79	81	85	7	0
23	83	78	80	85	6	T
24	83	75	79	83	4	0
25	83	77	80	84	4	0
26	84	77	80	89	5	0
27	83	76	80	88	6	0
28	84	77	80	83	9	.01
29	84	74	79	83	9	0
30	84	77	80	85	8	0
31	84	77	80	81	6	.13
Sum	2568	2378			213	6.69
Mean	82.8	76.7	79.8	84.1	6.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	.88	1954	1.38
1950	.87	1955	11.18
1951	.89	1956	10.25
1952	3.26	1957	1.06
1953	6.85	1958	6.69

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.854
Departure from normal -.014
Highest 30.030 Date 9
Lowest 29.730 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 0.5
Highest 85 Date 6
Lowest 73 Date 18

RAINFALL
(Inches)

Total 6.69
Departure from normal + 3.34
Greatest in 24 hours 3.05
Date 12 - 13

WIND

Average hourly velocity 12.0 mph.
Prevailing direction N
Maximum for five minutes 30
mph. from the NE on the 9

SUNSHINE

Average number hours per day 7.6
Percentage of possible 65

NUMBER OF DAYS

Clear 1
Partly Cloudy 17
Cloudy 13
.01 inch of rain or more 16
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 73

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone Month: February 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	78	80	78	4	
2	84	78	81	76	3	.01
3	83	72	78	88	8	1.82
4	82	73	78	90	10	.36
5	83	75	79	87	7	.14
6	82	78	80	87	3	
7	83	77	80	91	9	.01
8	81	79	80	90	6	.02
9	83	80	82	85	4	T
10	84	79	82	80	2	
11	83	79	81	80	3	
12	83	79	81	82	8	
13	85	79	82	82	8	
14	82	78	80	80	8	T
15	81	78	80	88	10	.33
16	83	77	80	84	9	.38
17	84	76	80	83	9	.12
18	84	80	82	81	7	T
19	84	80	82	80	6	.01
20	84	79	82	89	10	.01
21	83	78	80	89	10	.02
22	84	76	80	87	3	.09
23	82	77	80	86	3	.02
24	84	79	82	84	6	
25	84	79	82	82	3	.01
26	84	79	82	80	2	
27	92	75	84	72	9	
28	85	76	80	80	2	
29						
30						
31						
Sum	2339	2173			172	3.35
Mean	83.5	77.6	80.6	83.6	6.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	.38	1954	1.72
1950	3.77	1955	1.79
1951	5.62	1956	1.62
1952	.93	19	.39
1953	2.01	19	3.35

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.870

Departure from normal -.012

Highest 30.000 Date 4

Lowest 29.720 Date 27

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6

Departure from normal +0.3

Highest 92 Date 27

Lowest 72 Date 3

RAINFALL
(Inches)

Total 3.35

Departure from normal +1.78

Greatest in 24 hours 1.94

Date 3 & 4

WIND

Average hourly velocity 14.0 mph.

Prevailing direction N

Maximum for five minutes 33

mph. from the N on the 3

SUNSHINE

Average number hours per day 8.4

Percentage of possible 71

NUMBER OF DAYS

Clear 9

Partly Cloudy 7

Cloudy 12

.01 inch of rain or more 15

Thunderstorms 0

Light fog 0

Dense fog 0

Number of hours with rain 46

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: March 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	84	80	82	81	7	0
2	85	80	82	80	2	0
3	85	77	81	81	5	0
4	83	76	80	85	10	4.19
5	84	79	82	86	9	T
6	85	79	82	87	6	.01
7	86	80	83	88	7	.01
8	84	78	81	89	7	0
9	83	79	81	88	6	0
10	85	80	82	84	10	0
11	84	81	82	84	9	T
12	84	80	82	82	9	0
13	83	80	82	85	10	0
14	83	80	82	84	10	0
15	83	78	80	87	9	.20
16	84	81	82	82	4	0
17	84	80	82	82	7	T
18	82	79	80	86	9	.12
19	84	80	82	88	10	0
20	84	80	82	84	10	T
21	82	77	80	85	10	.20
22	85	75	80	79	4	.78
23	85	78	82	82	5	.06
24	84	81	82	86	8	.03
25	84	80	82	84	6	.01
26	89	77	83	82	3	0
27	84	78	81	82	7	0
28	84	81	82	81	5	0
29	86	80	83	82	3	T
30	85	79	82	78	2	0
31	85	80	82	83	7	0
Sum	2612	2453			216	5.61
Mean	84.3	79.1	81.7	83.7	7.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	.48	1954	.67
1950	2.17	1955	1.33
1951	.40	1956	4.43
1952	.09	1957	.47
1953	1.71	1958	5.61

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.820
Departure from normal - .053
Highest 29.90 Date 22
Lowest 29.79 Date 26

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.7
Departure from normal +0.8
Highest 89 Date 26
Lowest 75 Date 22

RAINFALL
(Inches)

Total 5.61
Departure from normal +4.11
Greatest in 24 hours 4.19
Date 4

WIND

Average hourly velocity 11.8 mph.
Prevailing direction N
Maximum for five minutes 28
mph. from the N on the 21

SUNSHINE

Average number hours per day 9.2
Percentage of possible 76

NUMBER OF DAYS

Clear 4
Partly Cloudy 14
Cloudy 13
.01 inch of rain or more 10
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 25

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: April 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	81	83	83	5	0
2	86	81	84	83	2	0
3	84	78	81	81	9	0
4	85	77	81	84	9	0
5	86	76	81	86	8	0
6	85	81	83	82	8	0
7	83	75	79	84	10	1.60
8	84	75	80	89	10	.56
9	84	76	80	88	10	.78
10	85	80	82	84	9	.05
11	87	80	84	80	3	0
12	86	81	84	79	6	T
13	85	81	83	75	5	T
14	85	80	82	77	8	0
15	84	81	82	82	8	0
16	85	78	82	79	3	0
17	84	81	82	72	5	0
18	85	78	82	73	4	.03
19	85	80	82	74	5	0
20	83	80	82	83	10	.01
21	82	78	80	89	10	.28
22	86	77	82	88	10	.07
23	84	75	80	90	10	.61
24	86	77	82	79	7	T
25	86	81	84	75	4	0
26	86	81	84	76	5	0
27	87	80	84	76	3	0
28	86	81	84	77	4	T
29	85	77	81	84	7	.66
30	83	77	80	86	10	.43
31						
Sum	2547	2364			207	5.10
Mean	84.9	78.8	81.8	81.2	6.9	

TOTAL RAINFALL FOR THIS MONTH IN:

19		19	
19 49	2.07	19 54	4.29
19 50	4.26	19 55	.44
19 51	8.48	19 56	2.39
19 52	6.97	19 57	.08
19 53	2.38	19 58	5.10

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.831

Departure from normal -.024

Highest 96 Date 17

Lowest 69 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.8

Departure from normal +0.3

Highest 87 Date 11

Lowest 75 Date 7

RAINFALL
(Inches)

Total 5.10

Departure from normal +1.07

Greatest in 24 hours 1.96

Date 7-8

WIND

Average hourly velocity 11.7 mph.

Prevailing direction W

Maximum for five minutes 26

mph. from the NW on the 8

SUNSHINE

Average number hours per day 10.5

Percentage of possible 85

NUMBER OF DAYS

Clear 4

Partly Cloudy 11

Cloudy 15

.01 inch of rain or more 11

Thunderstorms 4

Light fog 0

Dense fog 0

Number of hours with rain 47

MR 75168

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** May 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	86	78	82	78	9	.51
2	86	79	82	77	4	.06
3	86	78	82	80	6	0
4	86	77	82	86	6	.12
5	84	80	82	88	7	.03
6	84	79	82	89	10	.83
7	85	75	80	92	10	1.44
8	86	77	82	86	8	T
9	85	80	82	87	6	.02
10	87	83	85	87	8	0
11	86	82	84	87	10	0
12	87	79	83	87	9	T
13	86	80	83	87	5	.02
14	85	76	80	88	8	.50
15	84	74	79	91	10	1.35
16	85	76	80	85	7	T
17	88	77	82	82	10	0
18	88	78	83	86	9	.21
19	87	78	82	83	6	0
20	90	78	84	83	5	0
21	90	77	84	81	8	0
22	89	79	84	83	7	0
23	90	77	84	81	5	0
24	86	78	82	86	9	.01
25	88	78	83	87	9	.20
26	87	77	82	89	9	.15
27	89	76	82	88	8	0
28	85	76	80	87	9	.36
29	86	76	81	90	10	.76
30	86	76	81	88	9	T
31	84	77	80	87	10	T
Sum	2661	2433			246	6.57
Mean	86.5	77.8	82.2		7.9	

TOTAL RAINFALL FOR THIS MONTH IN:

19 49	11.23	19 54	12.44
19 50	7.23	19 55	13.43
19 51	11.08	19 56	14.27
19 52	15.70	19 57	6.16
19 53	8.45	19 58	6.57

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.794
Departure from normal -0.04
Highest 29.89 Date 31
Lowest 29.67 Date 24

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 82.2
Departure from normal +0.9
Highest 90 Date 21
Lowest 74 Date 15

RAINFALL
(Inches)

Total 6.57
Departure from normal -5.68
Greatest in 24 hours 1.71
Date 6-7

WIND

Average hourly velocity 7.1 mph.
Prevailing direction S
Maximum for five minutes 22
mph. from the N on the 29

SUNSHINE

Average number hours per day 8.6
Percentage of possible 69

NUMBER OF DAYS

Clear 0
Partly Cloudy 11
Cloudy 20
.01 inch of rain or more 16
Thunderstorms 8
Light fog 0
Dense fog 0
Number of hours with rain 63

LIBRARY JUN 24 1958 WEATHER BUREAU

MR 75168

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUL 25 1958
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** June 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	90	78	84	81	6	.03
2	86	78	82	81	8	.09
3	86	76	81	80	6	.09
4	85	79	82	86	10	.35
5	83	75	79	88	10	1.45
6	84	79	82	88	9	.02
7	85	76	80	85	4	0
8	86	82	84	86	8	.34
9	85	75	80	87	9	1.68
10	86	75	80	86	10	.01
11	85	78	82	82	8	0
12	90	79	84	76	6	0
13	86	77	82	83	9	.05
14	81	76	78	87	10	.59
15	86	77	82	83	8	.23
16	87	78	82	84	10	.05
17	88	78	83	81	10	.04
18	86	74	80	85	9	.31
19	86	77	82	85	10	.43
20	83	75	79	88	10	.36
21	86	77	82	81	7	.25
22	90	75	82	81	7	.39
23	88	75	82	89	9	.71
24	87	76	82	86	9	T
25	86	77	82	85	8	0
26	88	83	86	83	7	0
27	88	80	84	84	9	0
28	87	81	84	86	7	0
29	86	81	84	89	9	.03
30	85	77	81	90	10	.35
31						
Sum	2585	2324	2457	2536	252	7.85
Mean	86.2	77.5	81.9	84.5	8.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	12.72	1954	15.13
1950	13.84	1955	10.90
1951	10.84	1956	9.74
1952	18.12	1957	11.67
1953	5.93	1958	7.85

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.809
Departure from normal -.026
Highest 91 Date 14
Lowest 70 Date 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.6
Departure from normal +0.9
Highest 90 Date 12
Lowest 74 Date 18

RAINFALL
(Inches)

Total 7.85
Departure from normal -5.50
Greatest in 24 hours 1.80
Date 4 & 5

WIND

Average hourly velocity 6.0 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the SE on the 9

SUNSHINE

Average number hours per day 6.5
Percentage of possible 51

NUMBER OF DAYS

Clear 0
Partly Cloudy 8
Cloudy 22
.01 inch of rain or more 23
Thunderstorms 13
Light fog 0
Dense fog 0

Number of hours with rain 57

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

WEATHER BUREAU AUG 25 1958

Station: Cristobal, Canal Zone Month: July, 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	76	80	90	10	.70
2	85	78	82	90	10	.01
3	82	78	80	91	10	.05
4	85	78	82	90	10	.03
5	85	76	80	89	8	.58
6	84	74	79	90	10	.73
7	85	75	80	89	10	.57
8	84	78	81	90	10	.61
9	84	78	81	91	10	1.01
10	85	76	80	90	10	.13
11	84	75	80	90	10	1.53
12	87	75	81	90	10	.05
13	85	77	81	89	8	.11
14	87	75	81	88	7	.96
15	84	79	82	89	10	.38
16	85	77	81	88	10	1.03
17	86	76	81	82	9	.03
18	84	76	80	89	10	2.43
19	84	76	80	85	9	0
20	84	78	81	84	9	.51
21	82	72	77	89	10	3.71
22	82	75	78	86	10	.02
23	84	75	80	90	9	.02
24	84	75	80	92	8	.40
25	85	77	81	92	8	.13
26	83	76	80	93	10	.65
27	83	76	80	94	10	.32
28	83	73	78	94	10	.57
29	85	77	81	91	10	.54
30	82	73	78	88	10	1.12
31	85	75	80	78	6	.10
Sum	2610	2355			291	19.03
Mean	84.2	76.0	80.1	89.0	9.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	12.61	1954	17.24
1950	17.22	1955	9.58
1951	12.85	1956	24.77
1952	20.88	1957	11.09
1953	17.95	1958	19.03

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.820

Departure from normal -.023

Highest 29.91 Date 24

Lowest 29.72 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.1

Departure from normal -0.6

Highest 87 Date 12

Lowest 72 Date 21

RAINFALL
(Inches)

Total 19.03

Departure from normal +3.43

Greatest in 24 hours 3.73

Date 21 & 22

WIND

Average hourly velocity 5.8 mph.

Prevailing direction W

Maximum for five minutes 26

mph. from the NW on the 11

SUNSHINE

Average number hours per day 4.7

Percentage of possible 37

NUMBER OF DAYS

Clear 0

Partly Cloudy 2

Cloudy 29

.01 inch of rain or more 30

Thunderstorms 21

Light fog 0

Dense fog 0

Number of hours with rain 131

MR 75168

4066-12

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: August, 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	82	77	80	93	10	.13
2	83	75	79	92	9	.23
3	83	76	80	93	10	.40
4	82	73	78	94	10	3.92
5	80	75	78	92	10	.28
6	83	76	80	88	10	.17
7	84	76	80	86	8	T
8	81	76	78	89	10	.08
9	83	75	79	88	10	.12
10	84	74	79	83	6	T
11	81	76	78	89	10	.32
12	83	75	79	90	8	.21
13	84	77	80	88	9	.09
14	85	76	80	88	9	.08
15	85	76	[illegible]	88	8	.01
16	85	77	81	85	9	.37
17	83	76	80	88	10	.17
18	80	75	78	90	10	1.69
19	82	77	80	88	10	.05
20	85	81	83	85	6	.07
21	84	78	81	86	10	.06
22	82	76	79	88	10	0
23	86	75	80	88	8	.31
24	85	75	80	86	10	.21
25	85	76	80	85	8	1.66
26	84	78	81	86	10	.01
27	85	78	82	87	10	1.01
28	84	75	80	86	9	.38
29	83	76	80	89	10	.01
30	83	75	79	89	3	0
31	85	78	82	88	6	.72
Sum	2584	2359			278	12.76
Mean	83.4	76.1	79.8	88.2	9.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	15.60	1954	19.43
1950	18.77	1955	13.41
1951	22.95	1956	14.86
1952	28.31	1957	21.19
1953	11.59	1958	12.76

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.827
Departure from normal - .014
Highest .94 Date 11
Lowest .72 Date 27

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal -0.7
Highest 86 Date 23
Lowest 73 Date 4

RAINFALL
(Inches)

Total 12.76
Departure from normal -2.63
Greatest in 24 hours 1.69
Date 18

WIND

Average hourly velocity 5.5 mph.
Prevailing direction W
Maximum for five minutes 23
mph. from the SW on the 22

SUNSHINE

Average number hours per day 5.0
Percentage of possible 40

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 27
.01 inch of rain or more 27
Thunderstorms 18
Light fog 0
Dense fog 0

Number of hours with rain 115

MR 75168

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
OCT 21 1958
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: September 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	83	79	81	91	10	.91
2	84	77	80	91	10	.55
3	85	78	82	87	10	.08
4	86	78	82	88	10	.09
5	86	76	81	87	8	.02
6	84	76	80	82	10	0
7	85	75	80	80	5	0
8	86	76	81	86	9	1.07
9	86	77	82	91	10	.29
10	85	77	81	92	9	1.31
11	85	77	81	91	9	0
12	84	75	80	89	9	.05
13	88	73	80	86	8	1.27
14	85	75	80	82	6	T
15	87	75	81	80	5	0
16	86	77	82	85	6	.12
17	86	78	82	88	10	T
18	87	78	82	85	4	0
19	86	77	82	87	10	.57
20	82	76	79	90	10	.10
21	78	74	76	91	10	1.30
22	87	73	80	81	8	0
23	84	76	80	84	8	T
24	85	76	80	87	9	.05
25	84	72	78	90	10	1.63
26	85	75	80	88	10	0
27	84	72	78	86	8	3.42
28	84	75	80	90	8	.47
29	85	74	80	86	10	.85
30	82	76	79	89	10	1.61
31						
Sum	2544	2273				
Mean	84.8	75.8	80.3	87.1	8.6	15.76

TOTAL RAINFALL FOR THIS MONTH IN:

1949	9.44	1954	10.66
1950	10.25	1955	3.14
1951	10.16	1956	11.70
1952	9.76	1957	11.48
1953	12.27	1958	15.76

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.809
Departure from normal - .020
Highest .91 Date 12
Lowest .68 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3
Departure from normal -0.5
Highest 88 Date 13
Lowest 72 Date 25

RAINFALL
(Inches)

Total 15.76
Departure from normal +3.35
Greatest in 24 hours 3.89
Date 27-28

WIND

Average hourly velocity 4.9 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the W on the 8

SUNSHINE

Average number hours per day 6.8
Percentage of possible 56

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 25
.01 inch of rain or more 20
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 93

81459—5-58—300

4066-12

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, Canal Zone Month: October, 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Mean Relative Humidity (Percent)	Daytime Cloudiness (Tenths)	Total Rainfall (Inches)
1	85	73	79	85	10	1.19
2	86	75	80	87	10	.82
3	84	76	80	86	10	0
4	91	74	82	84	4	.97
5	90	77	84	81	5	0
6	87	77	82	85	6	0
7	89	75	82	81	7	0
8	85	77	81	84	4	0
9	85	75	80	83	9	.69
10	88	77	82	83	8	0
11	84	73	78	82	5	1.22
12	85	75	80	83	8	.62
13	86	77	82	83	7	1.13
14	84	77	80	87	10	.40
15	84	76	80	90	10	1.86
16	86	75	80	86	10	.39
17	86	77	82	86	10	0
18	88	76	82	83	6	T
19	87	74	80	88	8	1.69
20	87	76	82	84	10	T
21	91	77	84	82	6	.01
22	84	76	80	85	8	.11
23	82	76	79	93	10	2.03
24	87	77	82	89	10	1.12
25	85	75	80	90	10	5.96
26	84	76	80	84	8	2.28
27	83	76	80	90	10	2.73
28	82	76	79	89	10	.02
29	84	77	80	92	10	.46
30	86	77	82	92	10	.66
31	86	77	82	91	10	.18
Sum	2661	2352	-	-	259	26.14
Mean	85.8	75.9	80.8	86.1	8.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

1949	17.72	1954	9.76
1950	11.74	1955	13.99
1951	19.15	1956	15.20
1952	21.12	1957	8.39
1953	18.41	1958	26.14

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.809
Departure from normal -.019
Highest .92 Date 8
Lowest .68 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal +0.5
Highest 91 Date 21
Lowest 73 Date 11

RAINFALL
(Inches)

Total 26.14
Departure from normal +10.20
Greatest in 24 hours 5.81
Date 24-25

WIND

Average hourly velocity 6.0 mph.
Prevailing direction S
Maximum for five minutes 32
mph. from the SW on the 4

SUNSHINE

Average number hours per day 7.1
Percentage of possible 59

NUMBER OF DAYS

Clear 0
Partly Cloudy 9
Cloudy 22
.01 inch of rain or more 22
Thunderstorms 16
Light fog 0
Dense fog 0

Number of hours with rain 116

DEC 29 1958
Rec'd. O/C
NOV 28 1958

81459—5-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** November 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	77	80	96	79	88	.13
2	87	76	82	100	72	87	1.58
3	87	79	83	96	70	86	.05
4	86	77	82	97	69	81	0
5	81	75	78	95	77	89	.42
6	82	76	79	96	73	86	T
7	81	73	77	96	77	88	.61
8	84	73	78	96	71	87	.27
9	86	74	80	95	62	80	.07
10	86	74	80	97	71	89	2.29
11	83	75	79	96	72	87	.87
12	86	76	81	94	68	81	.01
13	85	76	80	92	70	81	T
14	85	75	80	97	72	87	.06
15	81	76	78	98	79	89	.21
16	83	75	79	100	78	91	.48
17	84	75	80	98	76	91	1.65
18	84	75	80	97	74	88	0
19	83	75	79	97	72	87	0
20	86	76	81	99	74	85	.35
21	83	75	79	100	79	92	1.62
22	84	78	81	96	77	88	T
23	84	73	78	100	74	91	1.43
24	83	74	78	100	89	95	1.39
25	81	73	77	100	83	94	.31
26	82	74	78	100	84	91	.19
27	84	75	80	100	74	88	.30
28	86	79	81	91	73	80	T
29	86	76	81	100	72	80	.20
30	87	81	84	91	72	82	0
31							
Sum	2523	2266		2910	2233		14.57
Mean	84.1	75.5	79.8	97.0	74.4	87.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1949	36.65	1954	27.50
1950	[illegible]	1955	23.95
1951	[illegible]	1956	29.72
1952	[illegible]	1957	27.94
1953	21.87	1958	14.57

LIBRARY
DEC 20 1958
WEATHER BUREAU

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.817
Departure from normal -.012
Highest .95 Date 6
Lowest .68 Date 22

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal +0.3
Highest 87 Date 30
Lowest 73 Date 7

RAINFALL
(Inches)

Total 14.57
Departure from normal -7.92
Greatest in 24 hours 2.81
Date 23 & 24

WIND

Average hourly velocity 7.4 mph.
Prevailing direction NE
Maximum for five minutes 23
mph. from the NE on the 29

SUNSHINE

Average number hours per day 4.9
Percentage of possible 42

NUMBER OF DAYS

Clear 2
Partly Cloudy 8
Cloudy 20
.01 inch of rain or more 22
Thunderstorms 12
Light fog 0
Dense fog 0

Number of hours with rain 93

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** December, 1958

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	78	82	98	83	93	.37
2	82	76	79	100	85	95	T
3	85	76	80	98	75	89	0
4	83	77	80	95	71	80	T
5	83	77	80	93	73	82	.18
6	84	75	80	100	81	86	.46
7	84	77	80	98	73	82	.26
8	84	76	80	93	73	85	.04
9	85	79	82	89	73	81	0
10	84	76	80	95	76	85	0
11	82	75	78	100	88	94	1.42
12	83	74	78	100	74	88	0
13	84	76	80	95	71	84	.01
14	86	79	82	99	73	85	.35
15	85	80	82	90	73	81	0
16	82	77	80	100	78	89	.20
17	83	80	82	100	84	94	.05
18	85	79	82	97	79	90	T
19	84	75	80	100	82	93	1.85
20	86	79	82	98	76	85	.10
21	85	77	81	83	58	74	.04
22	84	74	79	99	66	81	.29
23	85	78	82	97	70	80	.18
24	84	78	81	95	76	83	.11
25	85	76	80	95	72	81	.25
26	84	72	78	96	81	87	1.37
27	85	79	82	95	74	84	0
28	85	78	82	94	71	80	.01
29	84	77	80	95	70	78	.09
30	85	77	81	94	67	82	.01
31	84	79	82	87	72	80	0
Sum	2609	2386		2962	2318		7.64
Mean	84.2	77.0	80.6	95.5	74.8	84.9	

TOTAL RAINFALL FOR THIS MONTH IN:

19 49	15.86	19 54	10.43
19 50	19.77	19 55	14.20
19 51	11.14	19 56	6.71
19 52	19.97	19 57	7.01
19 53	9.21	19 58	7.64

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.846
Departure from normal + .008
Highest .96 Date 13
Lowest .75 Date 31

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal + 0.4
Highest 86 Date 20
Lowest 72 Date 26

RAINFALL
(Inches)

Total 7.64
Departure from normal − 4.40
Greatest in 24 hours 1.94
Date 19 & 20

WIND

Average hourly velocity 10.7 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the E on the 22

SUNSHINE

Average number hours per day 5.5
Percentage of possible 47

NUMBER OF DAYS

Clear 1
Partly Cloudy 9
Cloudy 21
.01 inch of rain or more 21
Thunderstorms 3
Light fog 0
Dense fog 0

Number of hours with rain 66

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JANUARY 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	78	82	93	68	81	0
2	83	74	78	95	75	88	T
3	85	74	80	94	62	82	T
4	83	74	78	94	72	85	T
5	84	79	82	94	72	89	.03
6	85	78	82	92	65	76	.02
7	84	78	81	90	65	76	T
8	83	77	80	84	66	74	T
9	84	77	80	92	75	82	.05
10	84	78	81	92	70	78	0
11	84	76	80	88	69	77	.13
12	84	80	82	83	68	75	T
13	84	78	81	84	69	77	0
14	84	79	82	85	65	75	.02
15	84	78	81	84	68	79	T
16	84	79	82	84	72	79	0
17	82	77	80	87	78	82	.07
18	84	80	82	85	76	80	.02
19	85	79	82	85	69	76	.03
20	84	78	81	85	72	80	0
21	83	79	81	85	73	81	0
22	83	74	78	85	74	82	.83
23	84	77	80	83	70	79	T
24	84	75	80	86	64	76	.03
25	83	72	77	84	68	77	.30
26	81	74	78	87	82	85	.15
27	83	73	78	91	81	86	1.45
28	84	79	82	87	72	80	T
29	84	79	82	86	72	81	.02
30	84	79	82	85	70	78	0
31	84	80	82	85	76	82	T
Sum	2596	2395		2713	2168		3.13
Mean	83.7	77.3	80.5	87.5	70.6	79.5	

TOTAL RAINFALL FOR THIS MONTH IN:

19 50	.87	19 55	11.38
19 51	.09	19 56	10.25
19 52	3.18	19 57	1.06
19 53	6.88	19 58	6.69
19 54	1.38	19 59	3.13

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.868
Departure from normal .000
Highest 30.01 Date 24
Lowest 29.75 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.5
Departure from normal + 0.2
Highest 85 Date 3
Lowest 73 Date 27

RAINFALL
(Inches)

Total 3.13
Departure from normal - .22
Greatest in 24 hours 1.60
Date 26 & 27

WIND

Average hourly velocity 13.2 mph.
Prevailing direction NE
Maximum for five minutes 28
mph. from the NE on the 13

SUNSHINE

Average number hours per day 7.9
Percentage of possible 68

NUMBER OF DAYS

Clear 5
Partly Cloudy 23
Cloudy 3
.01 inch of rain or more 14
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 26

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** FEBRUARY 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	80	82	85	65	77	T
2	85	80	82	89	65	74	.0
3	84	79	82	78	66	75	.0
4	82	79	80	89	71	78	.0
5	82	76	79	80	76	78	.0
6	84	80	82	83	79	81	.0
7	83	78	80	84	73	80	.01
8	82	77	80	84	70	80	.0
9	83	78	80	83	75	81	.0
10	83	79	81	83	78	81	.0
11	83	79	81	83	78	81	.0
12	82	77	80	84	80	82	.01
13	82	78	80	83	80	82	.0
14	82	78	80	83	78	81	.0
15	82	78	80	84	75	81	T
16	83	77	80	83	72	80	T
17	82	78	80	83	79	81	.0
18	82	76	79	83	75	81	.0
19	83	74	78	88	74	83	.0
20	82	73	78	85	69	80	.0
21	83	78	80	86	75	82	.0
22	83	78	80	86	76	83	.0
23	83	78	80	86	75	83	.0
24	83	76	80	86	82	84	.01
25	83	79	81	89	75	84	.0
26	83	78	80	88	73	82	T
27	82	78	80	88	78	84	.01
28	83	79	81	89	76	85	.0
29							
30							
31							
Sum	2,318	2,178		2,357	2,088		.04
Mean	82.8	77.8	80.3	84.2	74.6	80.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	3.97	1955	1.79
1951	5.62	1956	1.42
1952	.93	1957	.39
1953	2.01	1958	3.35
1954	1.72	1959	.04

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.891
Departure from normal +.009
Highest 30.00 Date 22
Lowest 29.76 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3
Departure from normal 0.0
Highest 85 Date 2
Lowest 73 Date 20

RAINFALL
(Inches)

Total .04
Departure from normal -1.52
Greatest in 24 hours .01
Date 7th

WIND

Average hourly velocity 15.1 mph.
Prevailing direction N
Maximum for five minutes 28
mph. from the NE on the 7th

SUNSHINE

Average number hours per day 7.7
Percentage of possible 65%

NUMBER OF DAYS

Clear 5
Partly Cloudy 17
Cloudy 6
.01 inch of rain or more 4
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 4

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MARCH 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	79	80	90	80	86	T
2	84	79	82	86	59	79	0
3	83	78	80	87	69	79	0
4	82	78	80	91	77	84	.03
5	83	78	80	89	71	82	T
6	82	78	80	89	81	87	T
7	83	78	80	90	75	84	.08
8	84	79	82	87	70	80	T
9	83	77	80	88	73	79	0
10	82	78	80	85	67	77	0
11	81	79	80	85	74	81	.01
12	83	78	80	85	71	81	.01
13	84	79	82	83	70	79	0
14	83	79	81	82	67	76	T
15	81	78	80	84	72	80	0
16	83	79	81	84	75	81	0
17	83	79	81	84	70	81	0
18	84	79	82	83	71	78	0
19	82	78	80	82	66	76	0
20	81	78	80	83	75	80	T
21	82	78	80	84	74	81	0
22	81	79	80	83	78	82	T
23	82	78	80	85	78	82	.03
24	83	78	80	83	75	79	0
25	82	78	80	85	74	80	.06
26	83	76	80	84	76	80	.18
27	84	79	82	82	74	80	0
28	84	78	81	83	77	81	T
29	83	79	81	83	67	78	0
30	85	78	82	80	73	77	T
31	84	77	80	82	72	79	T
Sum	2566	2426		2631	2249		.40
Mean	82.8	78.3	80.6	84.9	72.5	80.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	2.17	1955	1.33
1951	.60	1956	4.43
1952	.03	1957	.47
1953	1.75	1958	5.61
1954	.67	1959	.40

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.881
Departure from normal + .008
Highest 30.00 Date 19
Lowest 29.76 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal -0.3
Highest 85 Date 30
Lowest 76 Date 26

RAINFALL
(Inches)

Total .40
Departure from normal -1.09
Greatest in 24 hours .24
Date 25 - 26

WIND

Average hourly velocity 14.4 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the N on the 9

SUNSHINE

Average number hours per day 7.3
Percentage of possible 61

NUMBER OF DAYS

Clear 1
Partly Cloudy 15
Cloudy 15
.01 inch of rain or more 7
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 10

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** APRIL 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	80	75	79	0
2	83	78	80	84	77	81	T
3	85	77	81	85	78	82	0
4	84	79	82	84	70	79	0
5	83	79	81	85	68	78	0
6	84	79	82	91	76	83	0
7	84	76	80	96	73	82	.10
8	84	77	80	95	76	85	.04
9	85	78	82	95	78	86	.08
10	85	78	82	93	71	84	.07
11	85	80	82	91	76	84	.06
12	82	79	80	92	83	88	.07
13	83	80	82	91	85	89	T
14	85	80	82	90	78	87	T
15	83	76	80	92	84	88	.34
16	85	79	82	90	81	87	.36
17	85	80	82	88	81	86	0
18	84	80	82	88	81	86	T
19	85	80	82	87	77	85	.01
20	83	79	81	88	80	86	.04
21	84	80	82	88	76	84	0
22	84	76	80	88	67	80	0
23	83	76	80	100	75	87	1.30
24	85	76	80	97	72	81	.12
25	84	79	82	85	67	76	0
26	84	77	80	99	73	80	.12
27	85	78	82	93	69	80	.10
28	85	80	82	89	76	83	.01
29	84	78	81	93	76	84	.01
30	82	75	78	92	77	88	1.13
31							
Sum	2521	2348		2709	2276		3.96
Mean	84.0	78.3	81.2	90.3	75.9	83.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	4.26	1955	.44
1951	8.48	1956	2.39
1952	6.97	1957	.08
1953	2.38	1958	5.10
1954	4.29	1959	3.96

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.841
Departure from normal -.014
Highest 29.960 Date 4
Lowest 29.740 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2
Departure from normal - 0.3
Highest 85 Date 14
Lowest 75 Date 30

RAINFALL
(Inches)

Total 3.96
Departure from normal -0.07
Greatest in 24 hours 1.42
Date 23 & 24

WIND

Average hourly velocity 12.8 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the NE on the 15

SUNSHINE

Average number hours per day 6.7
Percentage of possible 54

NUMBER OF DAYS

Clear 2
Partly Cloudy 11
Cloudy 17
.01 inch of rain or more 17
Thunderstorms 2
Light fog 0
Dense fog 0

Number of hours with rain 43

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MAY 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	76	80	90	76	87	.02
2	82	76	79	89	77	84	.46
3	84	78	81	86	78	81	0
4	83	77	80	91	71	84	.05
5	79	74	76	95	88	92	1.55
6	79	74	76	95	77	91	1.32
7	83	72	78	96	80	90	1.26
8	85	78	82	91	62	84	0
9	82	75	78	95	79	88	1.07
10	83	77	80	93	81	89	.25
11	85	78	82	92	80	86	0
12	85	79	82	92	80	88	.03
13	85	80	82	92	85	88	0
14	86	80	83	91	77	86	0
15	86	81	84	89	79	84	0
16	86	81	84	88	76	82	T
17	86	81	84	87	77	83	0
18	86	80	83	86	78	82	0
19	85	79	82	92	81	85	.05
20	85	81	83	88	77	82	.01
21	86	80	83	85	77	82	T
22	87	80	84	85	70	82	0
23	82	76	79	91	80	84	.01
24	83	72	78	95	84	91	2.00
25	86	76	81	94	81	89	.53
26	85	76	80	92	80	89	1.77
27	85	79	82	93	85	90	.42
28	84	75	80	94	84	90	2.67
29	84	77	80	94	73	89	.41
30	82	76	79	93	86	91	0
31	86	78	82	93	81	89	0
Sum	2609	2402		2827	2440		13.88
Mean	84.2	77.5	80.8	91.2	78.7	86.5	

TOTAL RAINFALL FOR THIS MONTH IN:

19		19	
19 50	7.23	19 55	13.43
19 51	11.08	19 56	18.27
19 52	15.70	19 57	6.16
19 53	8.45	19 58	6.57
54	12.44	59	13.88

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.841
Departure from normal +.007
Highest 29.940 Date 7
Lowest 29.750 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal -0.5
Highest 87 Date 22
Lowest 72 Date 7

RAINFALL
(Inches)

Total 13.88
Departure from normal +1.61
Greatest in 24 hours 3.01
Date 27-28

WIND

Average hourly velocity 9.3 mph.
Prevailing direction N
Maximum for five minutes 21
mph. from the NW on the 9

SUNSHINE

Average number hours per day 6.5
Percentage of possible 52

NUMBER OF DAYS

Clear 0
Partly Cloudy 9
Cloudy 22
.01 inch of rain or more 18
Thunderstorms 4
Light fog 0
Dense fog 0
Number of hours with rain 84

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	92	82	88	.53
2	85	77	81	93	82	91	.65
3	83	75	79	95	90	93	1.24
4	84	76	80	95	84	93	1.20
5	85	78	82	94	85	92	.16
6	85	76	80	96	77	91	0
7	88	75	82	93	68	87	.01
8	87	76	82	94	74	90	.44
9	84	76	80	94	75	89	.58
10	83	76	80	93	85	90	.03
11	86	77	82	93	78	90	.41
12	84	73	78	93	85	91	.52
13	84	78	81	93	77	91	.06
14	85	77	81	93	74	86	0
15	84	75	80	93	77	88	0
16	83	76	80	93	82	90	.45
17	86	75	80	93	75	87	0
18	85	77	81	93	74	85	0
19	81	76	78	93	83	92	.11
20	85	75	80	94	77	91	.44
21	84	74	79	95	81	92	.10
22	86	74	80	95	77	89	0
23	82	74	78	94	87	93	.35
24	86	81	84	94	83	89	0
25	86	80	83	93	82	88	0
26	84	76	80	94	85	91	.43
27	85	77	81	95	77	91	.09
28	81	70	76	96	90	94	1.37
29	84	74	79	96	81	92	.11
30	85	76	80	95	83	93	T
31							
Sum	2533	2279		2817	2410		9.28
Mean	84.4	76.0	80.2	93.9	80.3	90.2	

TOTAL RAINFALL FOR THIS MONTH IN:

19 50	13.84	19 55	10.90
19 51	10.84	19 56	9.74
19 52	18.12	19 57	11.87
19 53	5.93	19 58	7.85
19 54	15.13	19 59	9.28

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.836
Departure from normal +.001
Highest 93 Date 19
Lowest 73 Date 17

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal -0.6
Highest 88 Date 7
Lowest 70 Date 28

RAINFALL
(Inches)

Total 9.28
Departure from normal -4.02
Greatest in 24 hours 1.66
Date 3 & 4

WIND

Average hourly velocity 5.4 mph.
Prevailing direction SE
Maximum for five minutes 24
mph. from the NE on the 23

SUNSHINE

Average number hours per day 4.2
Percentage of possible 34

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 21
Thunderstorms 16
Light fog 0
Dense fog 0

Number of hours with rain 85

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL C. Z. **Month:** JULY 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	77	80	95	87	94	.01
2	85	80	82	94	84	90	0
3	86	81	84	92	81	88	.01
4	86	78	82	92	82	88	.12
5	86	81	84	90	78	85	0
6	85	77	81	95	81	87	.14
7	84	74	79	95	85	91	.83
8	80	74	77	95	85	93	1.94
9	86	77	82	94	82	90	.01
10	85	81	83	94	75	85	0
11	83	75	79	96	84	92	.57
12	81	76	78	95	89	93	.69
13	81	76	78	95	86	92	.53
14	83	75	79	94	85	91	1.42
15	84	74	79	94	79	87	.38
16	81	76	78	96	86	92	.23
17	83	78	80	95	88	93	.34
18	83	78	80	96	89	95	.13
19	84	78	81	96	91	94	.03
20	84	76	80	97	90	93	2.21
21	84	79	82	94	87	92	.10
22	85	78	82	94	82	91	.11
23	84	76	80	93	82	90	.55
24	84	77	80	94	85	91	.10
25	84	74	79	96	90	94	4.14
26	84	78	81	95	90	94	.06
27	80	75	78	95	91	94	.60
28	82	74	78	95	88	93	.15
29	82	76	79	95	83	91	.01
30	83	75	79	95	86	92	0
31	86	76	81	95	83	90	T
Sum	2592	2380		2931	2634		15.41
Mean	83.6	76.8	80.2	94.5	85.0	89.8	

TOTAL RAINFALL FOR THIS MONTH IN:

19			19	55	9.58
19	50	17.22	19	56	24.77
19	51	12.85	19	57	11.09
19	52	20.88	19	58	19.03
19	53	17.95	19	59	15.41
	54	27.24			

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.844
Departure from normal +.001
Highest 29.94 Date 2
Lowest 29.77 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal -0.4
Highest 86 Date 4
Lowest 74 Date 8

RAINFALL
(Inches)

Total 15.41
Departure from normal -.19
Greatest in 24 hours 4.14
Date 25

WIND

Average hourly velocity 8.3 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 15

SUNSHINE

Average number hours per day 5.2
Percentage of possible 41

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 26
Thunderstorms 15
Light fog 0
Dense fog 0

Number of hours with rain 106

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** AUGUST 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	79	82	94	84	91	.14
2	84	77	80	97	89	93	.71
3	83	77	80	95	84	92	.36
4	79	72	75	97	84	90	1.41
5	86	74	80	95	81	91	.57
6	87	74	80	95	76	91	0
7	83	75	79	95	86	92	.02
8	84	80	82	95	87	91	0
9	86	80	83	94	83	88	0
10	84	81	82	91	87	90	0
11	85	76	80	93	84	92	.15
12	84	75	80	96	89	94	.72
13	83	74	78	96	84	93	.03
14	83	75	79	96	88	95	.21
15	85	76	80	97	89	94	.83
16	85	76	80	96	85	93	.20
17	82	75	78	97	94	95	.48
18	85	79	82	96	86	91	T
19	84	79	82	95	84	90	.16
20	84	78	81	94	84	88	0
21	84	74	79	95	83	89	.89
22	83	74	78	95	86	92	.08
23	85	77	81	94	84	89	0
24	84	79	82	92	86	90	.12
25	86	80	83	92	85	91	.42
26	82	78	80	95	84	89	.14
27	83	77	80	92	85	89	.55
28	81	71	76	96	90	92	1.50
29	84	76	80	94	85	90	.01
30	82	76	79	94	90	93	.87
31	84	75	80	95	89	93	.61
Sum	2600	2368		2938	2655		11.18
Mean	83.9	76.4	80.2	94.8	85.6	91.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	16.77	1955	13.41
1951	12.95	1956	14.86
1952	20.31	1957	21.19
1953	11.57	1958	12.76
1954	19.15	1959	11.18

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.841
Departure from normal ..... .000
Highest ..... 29.93 Date 3
Lowest ..... 29.74 Date 25

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal ..... -0.3
Highest ..... 87 Date 6
Lowest ..... 71 Date 28

RAINFALL
(Inches)

Total 11.18
Departure from normal ..... -9.67
Greatest in 24 hours 2.05
Date ..... 27&28

WIND

Average hourly velocity ..... 7.3 ..... mph.
Prevailing direction ..... N
Maximum for five minutes 25
mph. from the ..... N ..... on the 4

SUNSHINE

Average number hours per day 5.2
Percentage of possible 42

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 24
Thunderstorms 16
Light fog 0
Dense fog 0

Number of hours with rain 107

83379—A-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** SEPTEMBER 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	75	80	94	87	92	1.77
2	88	73	80	94	76	88	0
3	85	74	80	94	80	90	1.29
4	84	76	80	94	83	88	.03
5	86	80	83	94	84	88	.01
6	86	78	82	92	83	87	.25
7	84	76	80	94	89	92	1.30
8	85	74	80	95	88	92	1.08
9	82	76	79	94	84	90	.83
10	80	75	78	97	85	89	1.39
11	82	73	78	97	86	93	.37
12	84	76	80	97	85	93	.10
13	83	73	78	99	87	96	1.04
14	84	74	79	99	85	92	0
15	86	75	80	99	80	93	.12
16	83	74	78	96	85	93	.30
17	83	74	78	97	86	91	.01
18	83	75	79	96	86	93	.58
19	82	75	78	98	86	94	1.00
20	84	75	80	97	87	93	.93
21	82	75	78	97	91	96	1.89
22	81	75	78	97	92	95	.70
23	83	74	78	97	87	91	0
24	85	75	80	95	83	87	.61
25	84	76	80	92	78	88	2.01
26	83	75	79	95	86	92	.24
27	84	78	81	96	86	91	.18
28	82	76	79	98	92	96	1.75
29	82	76	79	98	85	90	.86
30	84	75	80	92	84	91	.70
31							
Sum	2508	2256		2874	2556		21.34
Mean	83.6	75.2	79.4	95.8	85.2	91.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	10.25	1955	3.14
1951	10.16	1956	11.70
1952	9.76	1957	11.48
1953	12.27	1958	15.76
1954	10.66	1959	21.34

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.833
Departure from normal: +.004
Highest: 29.94 Date: 28
Lowest: 29.72 Date: 22

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 79.4
Departure from normal: -1.3
Highest: 88 Date: 2
Lowest: 73 Date: 11

RAINFALL
(Inches)

Total: 21.34
Departure from normal: +8.83
Greatest in 24 hours: 2.21
Date: 9 & 10

WIND

Average hourly velocity: 6.1 mph.
Prevailing direction: NW
Maximum for five minutes: 24
mph. from the N on the 5

SUNSHINE

Average number hours per day: 5.1
Percentage of possible: 42

NUMBER OF DAYS

Clear: 0
Partly Cloudy: 5
Cloudy: 25
.01 inch of rain or more: 27
Thunderstorms: 22
Light fog: 0
Dense fog: 0

Number of hours with rain: 134

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** OCTOBER 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	81	75	78	93	86	90	.72
2	83	74	78	92	84	89	0
3	84	75	80	92	79	84	0
4	84	77	80	94	84	90	.03
5	83	75	79	94	84	89	.90
6	83	74	78	95	84	92	.78
7	86	75	80	95	81	90	T
8	87	75	81	93	80	89	.22
9	84	75	80	94	82	89	0
10	85	76	80	94	83	88	0
11	80	76	78	94	92	93	.20
12	83	76	80	95	87	93	.19
13	85	76	80	94	81	90	.03
14	85	74	80	96	77	93	.70
15	83	74	78	96	77	88	.01
16	87	77	82	90	65	80	0
17	88	76	82	91	61	83	0
18	84	77	80	91	76	88	.12
19	87	76	82	91	66	85	0
20	89	76	82	91	60	83	.01
21	84	75	80	89	70	84	.01
22	84	75	80	92	69	84	0
23	86	76	81	90	73	84	.11
24	87	73	80	94	68	87	3.81
25	85	74	80	95	71	88	.34
26	83	74	78	90	73	85	0
27	90	75	82	95	60	85	.41
28	84	75	80	95	70	84	.01
29	86	75	80	96	72	87	.16
30	86	75	80	96	75	88	.75
31	85	75	80	93	70	88	.72
Sum	2631	2331		2890	2340		10.23
Mean	84.9	75.2	80.0	93.2	75.5	87.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	13.74	1955	13.99
1951	19.15	1956	15.66
1952	21.12	1957	8.39
1953	18.41	1958	26.14
1954	9.76	1959	10.23

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.826
Departure from normal -.002
Highest 29.94 Date 17
Lowest 29.70 Date 8

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.3
Highest 90 Date 27
Lowest 73 Date 24

RAINFALL
(Inches)

Total 10.23
Departure from normal -5.65
Greatest in 24 hours 4.15
Date 24 - 25

WIND

Average hourly velocity 5.2 mph.
Prevailing direction S
Maximum for five minutes 20
mph. from the SW on the 14

SUNSHINE

Average number hours per day 6.3
Percentage of possible 53

NUMBER OF DAYS

Clear 2
Partly Cloudy 6
Cloudy 23
.01 inch of rain or more 21
Thunderstorms 16
Light fog 0
Dense fog 0
Number of hours with rain 63

LIBRARY
DEC 3 - 1959
WEATHER BUREAU

83375—11-58—300

1966
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** NOVEMBER 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	75	78	94	78	88	1.05
2	84	75	80	95	76	91	.82
3	83	74	78	94	76	89	.10
4	87	78	82	92	72	83	0
5	87	76	82	93	74	87	.12
6	84	76	80	96	81	89	.90
7	82	71	76	97	68	91	1.46
8	81	72	76	98	85	93	1.77
9	82	75	78	97	75	91	.90
10	83	76	80	94	76	85	.92
11	83	74	78	94	77	89	.98
12	84	74	79	95	76	88	.61
13	79	74	76	95	83	91	.68
14	81	74	78	96	78	90	.30
15	82	76	79	98	79	88	1.10
16	84	75	80	92	69	85	.21
17	83	74	78	95	69	86	.44
18	81	75	78	96	75	90	.43
19	83	74	78	100	69	87	0
20	89	74	82	94	52	80	0
21	82	75	78	97	75	88	.06
22	82	75	78	97	79	87	T
23	81	76	78	97	86	91	1.27
24	85	76	80	94	72	86	.54
25	86	76	81	95	69	84	T
26	85	76	80	92	68	83	.08
27	83	75	79	98	75	88	.90
28	85	78	82	93	62	75	.01
29	84	78	81	92	69	81	.03
30	85	75	80	96	66	83	.26
31							
Sum	2500	2252		2856	2209		15.94
Mean	83.3	75.1	79.2	95.2	73.6	86.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	39.12	1955	23.95
1951	10.62	1956	29.72
1952	20.76	1957	27.94
1953	21.87	1958	14.57
1954	27.50	1959	15.94

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.832
Departure from normal +.003
Highest 29.940 Date 22
Lowest 29.660 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal -0.3
Highest 89 Date 20
Lowest 71 Date 7

RAINFALL
(Inches)

Total 15.94
Departure from normal -12.96
Greatest in 24 hours 2.38
Date 7 & 8

WIND

Average hourly velocity 6.6 mph.
Prevailing direction NE
Maximum for five minutes 26
mph. from the N on the 29

SUNSHINE

Average number hours per day 5.0
Percentage of possible 42

NUMBER OF DAYS

Clear 1
Partly Cloudy 9
Cloudy 20
.01 inch of rain or more 25
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 131

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** December 1959

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly means	Total Rainfall (Inches)
1	85	79	82	86	65	76	0
2	84	76	80	98	72	81	.05
3	84	71	78	100	79	91	4.51
4	84	75	80	98	76	87	.35
5	84	73	78	95	78	89	1.57
6	81	73	77	98	80	88	2.41
7	83	73	78	95	84	90	1.34
8	84	74	79	97	76	84	.56
9	84	78	81	88	75	81	.01
10	85	79	82	89	67	81	.02
11	84	78	81	87	68	78	0
12	83	75	79	88	81	86	.26
13	83	76	80	89	76	84	T
14	87	77	82	87	74	83	.01
15	85	75	80	90	74	83	.30
16	85	75	80	91	76	85	.60
17	83	75	79	90	81	86	.28
18	85	80	82	88	81	85	T
19	85	80	82	89	76	84	0
20	85	79	82	87	69	77	T
21	84	77	80	85	69	77	0
22	83	75	79	86	69	79	.10
23	80	76	78	86	75	83	.53
24	81	72	76	98	83	92	2.47
25	84	77	80	97	88	93	.75
26	84	80	82	93	79	86	0
27	84	77	80	94	82	88	.25
28	84	78	81	89	81	86	.01
29	85	78	82	90	81	86	.32
30	81	75	78	91	86	88	1.53
31	81	73	77	96	88	93	3.91
Sum	2594	2359		2835	2389		22.14
Mean	83.7	76.1	79.9	91.5	77.1	84.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1950	19.77	1955	14.20
1951	11.14	1956	6.71
1952	19.97	1957	7.01
1953	9.11	1958	7.64
1954	10.43	1959	22.14

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.823
Departure from normal -.015
Highest 29.92 Date 7
Lowest 29.71 Date 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.9
Departure from normal -0.3
Highest 87 Date 14
Lowest 71 Date 3

RAINFALL
(Inches)

Total 22.14
Departure from normal +9.99
Greatest in 24 hours 4.78
Date 30-31

WIND

Average hourly velocity 12.0 mph.
Prevailing direction N
Maximum for five minutes 31
mph. from the N on the 6

SUNSHINE

Average number hours per day 6.1
Percentage of possible 53

NUMBER OF DAYS

Clear 1
Partly Cloudy 13
Cloudy 17
.01 inch of rain or more 23
Thunderstorms 5
Light fog 0
Dense fog 0

Number of hours with rain 117

83375—11-58—300

M06.1/728.8
P18 Tma

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JANUARY 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	78	80	95	87	92	.01
2	83	76	80	96	84	91	.09
3	81	75	78	93	84	89	.54
4	84	80	82	90	77	83	0
5	84	79	82	89	75	84	0
6	84	80	82	88	75	81	T
7	84	76	80	85	70	79	T
8	85	77	81	82	71	79	T
9	85	75	80	85	70	79	T
10	84	75	80	95	72	81	.24
11	84	77	80	85	75	81	T
12	84	78	81	83	76	81	0
13	85	78	82	83	72	80	0
14	83	78	80	86	73	81	T
15	81	75	78	86	82	83	.33
16	84	76	80	85	78	81	.42
17	84	80	82	82	76	80	0
18	85	79	82	82	77	80	0
19	84	77	80	84	78	81	.06
20	85	80	82	82	69	78	0
21	83	76	80	88	72	79	.09
22	83	80	82	82	66	73	0
23	83	73	78	77	62	72	.58
24	84	76	80	84	71	78	.16
25	83	79	81	82	78	81	T
26	84	78	81	85	76	80	0
27	84	80	82	85	73	78	0
28	84	78	81	89	71	79	T
29	84	77	80	90	70	77	.08
30	82	78	80	85	71	76	T
31	82	75	78	90	74	83	.10
Sum	2592	2399		2673	2305		2.70
Mean	83.6	77.4	80.5	86.2	74.4	80.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	.89	19 56	10.25
1952	3.26	19 57	1.06
1953	6.85	19 58	6.69
1954	1.38	19 59	3.13
1955	11.18	19 60	2.70

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.876
Departure from normal: +.008
Highest: 30.00 Date: 22
Lowest: 29.77 Date: 19

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.5
Departure from normal: +0.2
Highest: 85 Date: 8
Lowest: 73 Date: 23

RAINFALL
(Inches)

Total: 2.70
Departure from normal: -.64
Greatest in 24 hours: .68
Date: 23 & 24

WIND

Average hourly velocity: 13.0 mph.
Prevailing direction: NE
Maximum for five minutes: 25
mph. from the NE on the 21

SUNSHINE

Average number hours per day: 8.3
Percentage of possible: 71

NUMBER OF DAYS

Clear: 7
Partly Cloudy: 14
Cloudy: 10
.01 inch of rain or more: 12
Thunderstorms: 0
Light fog: 0
Dense fog: 0
Number of hours with rain: 29

LIBRARY
FEB 20 1960
WEATHER BUREAU

82275—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** FEBRUARY 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
	84	77	80	87	67	78	.02
1	83	77	80	86	67	78	.02
2	82	72	77	89	67	79	T
3	82	73	78	89	72	82	0
4	83	73	78	88	70	81	0
5	81	73	77	90	70	79	0
6	82	76	79	87	73	78	.09
7	83	78	80	93	67	79	.01
8	85	75	80	93	63	78	0
9	83	72	78	90	70	81	0
10	85	74	80	90	68	84	0
11	82	74	78	91	77	84	0
12	84	75	80	94	77	83	.15
13	81	78	80	89	69	78	.04
14	84	74	79	90	70	80	.19
15	84	79	82	90	70	76	T
16	84	79	82	85	73	79	T
17	84	79	82	87	73	81	0
18	85	79	82	87	78	83	.04
19	85	79	82	87	77	84	.02
20	85	80	82	87	76	83	.01
21	83	79	81	87	80	85	0
22	83	79	81	87	74	83	0
23	85	79	82	85	69	81	0
24	83	75	79	85	76	81	0
25	84	76	80	84	77	82	0
26	84	79	82	85	73	80	0
27	84	77	80	87	76	81	.02
28	84	79	82	84	75	81	0
29							
30							
31							
Sum	2421	2219		2553	2094		.61
Mean	83.5	76.5	80.0	88.0	72.2	80.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	5.62	1956	1.42
1952	.93	1957	.39
1953	2.01	1958	3.35
1954	1.72	1959	.04
1955	1.79	1960	.61

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.867
Departure from normal: - .015
Highest: 29.99 Date: 14
Lowest: 29.76 Date: 9

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.0
Departure from normal: -0.3
Highest: 85 Date: 20
Lowest: 72 Date: 10

RAINFALL
(Inches)

Total: .61
Departure from normal: -.94
Greatest in 24 hours: .19
Date: 15

WIND

Average hourly velocity: 11.6 mph.
Prevailing direction: N
Maximum for five minutes: 26
mph. from the N on the 14

SUNSHINE

Average number hours per day: 9.5
Percentage of possible: 80%

NUMBER OF DAYS

Clear: 8
Partly Cloudy: 15
Cloudy: 6
.01 inch of rain or more: 11
Thunderstorms: 0
Light fog: 0
Dense fog: 0

Number of hours with rain: 18

83375—11-58—300

4866
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MARCH 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	85	78	81	0
2	85	80	82	82	68	78	T
3	84	80	82	84	79	81	0
4	84	80	82	84	77	80	0
5	84	78	81	84	69	77	.01
6	83	75	79	81	70	76	.05
7	84	76	80	80	68	75	.09
8	84	78	81	80	67	74	.02
9	84	75	80	82	71	75	.30
10	82	76	79	82	71	77	.38
11	81	73	77	92	81	85	1.02
12	83	76	80	85	74	80	0
13	83	77	80	83	76	79	.03
14	85	80	82	81	74	78	0
15	84	79	82	83	76	79	T
16	85	79	82	83	76	79	.06
17	83	79	81	82	76	79	0
18	84	77	80	92	73	83	T
19	83	74	78	90	77	84	.02
20	85	80	82	85	72	77	T
21	85	80	82	81	67	74	0
22	85	73	79	94	66	81	.34
23	81	72	76	93	78	89	1.13
24	81	73	77	94	83	90	1.19
25	84	76	80	92	76	84	.05
26	85	80	82	89	82	86	0
27	85	81	83	89	73	80	0
28	85	80	82	83	68	76	0
29	84	79	82	82	72	78	0
30	83	80	82	83	74	79	0
31	84	77	80	86	76	80	.04
Sum	2596	2402		2646	2288		4.73
Mean	83.7	77.5	80.6	85.4	73.8	79.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	.60	1956	4.43
1952	.03	1957	.47
1953	1.75	1958	5.61
1954	.67	1959	.40
1955	1.33	1960	4.73

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.877
Departure from normal +.004
Highest 29.98 Date 8
Lowest 29.76 Date 17

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal - 0.3
Highest 85 Date 21
Lowest 72 Date 23

RAINFALL
(Inches)

Total 4.73
Departure from normal +3.21
Greatest in 24 hours 1.45
Date 22 & 23

WIND

Average hourly velocity 13.0 mph.
Prevailing direction N
Maximum for five minutes 28
mph. from the N on the 7

SUNSHINE

Average number hours per day 8.7
Percentage of possible 72

NUMBER OF DAYS

Clear 4
Partly Cloudy 16
Cloudy 11
.01 inch of rain or more 15
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 57

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** APRIL 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	77	80	85	78	82	0
2	84	80	82	85	77	82	0
3	83	77	80	88	77	83	0
4	83	76	80	92	78	85	2.65
5	85	79	82	88	75	80	.02
6	85	79	82	89	74	81	.01
7	84	74	79	95	71	78	.28
8	84	79	82	82	69	77	0
9	82	76	79	92	80	86	.54
10	84	75	80	91	78	85	.64
11	82	76	79	90	80	87	1.47
12	84	77	80	90	80	85	.31
13	85	79	82	86	73	80	T
14	83	80	82	88	80	84	.07
15	85	75	80	89	79	86	.16
16	83	74	78	96	79	89	1.99
17	85	80	82	91	74	83	.07
18	84	77	80	88	73	79	T
19	82	74	78	91	80	85	1.37
20	84	80	82	86	77	82	0
21	83	80	82	92	80	85	.05
22	84	77	80	90	79	84	.02
23	84	80	82	86	80	84	0
24	85	78	82	87	79	84	T
25	92	76	84	87	56	77	0
26	87	76	82	86	71	82	0
27	85	77	81	88	78	84	0
28	85	80	82	87	77	84	T
29	85	78	82	92	82	88	.11
30	85	75	80	93	81	89	.62
31							
Sum	2530	2321		2670	2295		10.38
Mean	84.3	77.4	80.8	89.0	76.5	83.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	8.48	1956	2.39
1952	6.97	1957	.08
1953	2.38	1958	5.10
1954	4.29	1959	3.96
1955	.44	1960	10.38

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal -.015
Highest 29.97 Date 5
Lowest 29.74 Date 25

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal -0.7
Highest 92 Date 25
Lowest 74 Date 16

RAINFALL
(Inches)

Total 10.38
Departure from normal +0.28
Greatest in 24 hours 2.65
Date 4

WIND

Average hourly velocity 10.8 mph.
Prevailing direction W
Maximum for five minutes 24
mph. from the W on the 6

SUNSHINE

Average number hours per day 8.6
Percentage of possible 70

NUMBER OF DAYS

Clear 3
Partly Cloudy 13
Cloudy 14
.01 inch of rain or more 17
Thunderstorms 5
Light fog 0
Dense fog 0

Number of hours with rain 65

83375—11-58—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Crist bal. C.Z. **Month:** ag-1-60

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	75	82	90	65	83	.0
2	87	76	82	91	72	85	.21
3	82	75	78	93	86	90	1.33
4	84	76	80	91	82	88	.70
5	87	76	82	92	78	88	1.8
6	84	76	80	92	80	88	.41
7	80	75	78	96	80	92	4.38
8	84	76	80	92	77	87	.01
9	84	75	80	91	76	86	.15
10	84	75	80	91	82	88	.73
11	84	76	80	91	82	88	.0
12	83	76	80	91	84	88	.11
13	83	75	79	93	82	89	1.54
14	84	75	80	92	80	88	.10
15	81	75	78	93	84	90	3.12
16	84	77	80	93	82	90	.09
17	82	77	80	94	88	91	.58
18	84	76	80	92	83	90	.39
19	82	76	79	94	84	91	.07
20	85	76	80	94	81	89	2.57
21	86	76	81	92	79	89	.0
22	86	75	80	92	73	86	.04
23	84	77	80	91	80	86	T
24	85	78	82	94	82	89	.01
25	86	78	82	94	67	86	T
26	93	77	85	95	51	84	T
27	88	77	82	99	66	88	.0
28	89	78	84	98	60	87	.84
29	85	78	82	92	76	88	.51
30	84	72	78	95	60	90	2.33
31	81	76	84	92	54	80	.0
Sum	2633	2356		2880	2378		24.18
Mean	84.9	76.0		92.9	76.7	87.8	

TOTAL RAINFALL FOR THIS MONTH IN:

51	11.08	196	18.27
52	15.20	197	6.16
53	8.45	198	6.57
54	12.44	199	13.86
55	13.43	180	24.18

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.824
Departure from normal -.008
Highest 29.92 Date 4
Lowest 29.70 Date 27

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal -0.9
Highest 93 Date 26
Lowest 72 Date 30

RAINFALL
(Inches)

Total 24.18
Departure from normal +11.78
Greatest in 24 hours 6.69
Date 6/7

WIND

Average hourly velocity 5.4 mph.
Prevailing direction NW
Maximum for five minutes 19
mph. from the N on the 6

SUNSHINE

Average number hours per day 6.5
Percentage of possible 57

NUMBER OF DAYS

Clear 0
Partly Cloudy 3
Cloudy 28
.01 inch of rain or more 23
Thunderstorms 19
Light fog 0
Dense fog 0

Number of hours with rain 106

88659—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: June 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	78	83	91	70	86	.07
2	86	78	82	92	70	87	.18
3	86	76	81	92	75	86	.01
4	88	77	82	91	63	85	.0
5	85	76	80	93	70	89	2.22
6	86	75	82	91	57	79	.0
7	89	77	83	90	58	80	.0
8	88	78	83	92	62	84	.01
9	8	76	82	93	53	76	.0
10	86	77	82	89	62	80	.0
11	87	76	82	91	60	77	.0
12	85	83	84	97	76	81	.0
13	87	72	80	96	70	86	1.80
14	85	76	80	96	1	86	.42
15	86	74	80	94	7	90	.11
16	87	74	80	92	62	82	T
17	87	71	79	94	60	83	4.07
18	86	73	80	93	62	87	.15
19	89	76	78	96	88	92	.21
20	88	74	81	96	58	84	.0
21	86	77	82	98	74	90	.72
22	87	81	84	96	80	89	.0
23	85	72	78	98	85	95	1.52
24	87	75	81	97	59	86	.05
25	84	76	80	95	70	85	.0
26	86	78	82	98	71	87	.06
27	85	78	82	93	73	86	.07
28	82	76	79	94	66	86	.18
29	84	75	80	94	71	86	T
30	86	76	81	97	73	88	.30
31							
Sum	2581	2281		2809	2038		12.65
Mean	86.0	76.0	81.0	93.6	67.9	85.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	10.84	1956	9.74
1952	18.12	1957	11.87
1953	5.93	1958	7.85
1954	15.13	1959	9.28
1955	10.90	1960	12.65

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.835
Departure from normal .000
Highest 29.94 Date 12
Lowest 29.73 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.0
Departure from normal + 0.1
Highest 89 Date 9
Lowest 71 Date 17

RAINFALL
(Inches)

Total 12.65
Departure from normal + .65
Greatest in 24 hours 4.22
Date 17 & 18

WIND

Average hourly velocity 6.1 mph.
Prevailing direction S
Maximum for five minutes 36
mph. from the SW on the 13

SUNSHINE

Average number hours per day 7.4
Percentage of possible 59

NUMBER OF DAYS

Clear 1
Partly Cloudy 4
Cloudy 25
.01 inch of rain or more 18
Thunderstorms 14
Light fog 0
Dense fog 0

Number of hours with rain 66

Rec'd. JUL 14 1960

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

Rec'd. O/C
AUG 19 1960

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C.Z. **Month:** July, 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	78	81	93	80	89	.07
2	83	77	80	94	80	88	.21
3	85	78	82	94	77	88	.51
4	84	75	80	98	77	90	1.15
5	82	76	79	94	81	89	0
6	84	77	80	97	79	88	.35
7	85	76	80	97	81	92	1.00
8	85	75	80	94	73	85	.0
9	85	78	82	90	69	82	.05
10	83	76	80	91	77	88	.28
11	84	76	80	94	72	85	.15
12	82	76	7[illegible]	91	64	84	.37
13	86	75	80	92	59	84	.01
14	86	75	80	92	69	85	T
15	87	76	82	93	61	81	0
16	88	75	8[illegible]	94	57	80	0
17	8[illegible]	76	81	94	71	86	T
18	86	78	82	94	64	84	.08
19	83	77	80	93	78	88	.82
20	83	78	80	92	76	90	.14
21	84	75	80	91	76	89	.50
22	84	78	81	91	66	83	.08
23	83	74	78	94	78	89	1.86
24	84	77	80	92	85	90	.26
25	85	76	80	94	74	87	.66
26	84	75	80	93	72	87	.37
27	81	76	78	93	76	87	.18
28	86	75	80	92	67	82	0
29	84	77	80	93	74	87	.29
30	82	72	77	99	82	92	.83
31	85	74	80	97	67	84	.0
Sum	2613	2357		2900	2262		10.92
Mean	84.3	76.0	80.2	93.5	73.0	86.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	12.85	1956	24.77
1952	20.88	1957	11.09
1953	17.95	1958	19.03
1954	17.24	1959	15.41
1955	9.58	1960	10.92

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.850
Departure from normal +.007
Highest 29.97 Date 31
Lowest 29.76 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.21
Departure from normal -0.4
Highest 88 Date 16
Lowest 72 Date 30

RAINFALL
(Inches)

Total 10.92
Departure from normal -4.63
Greatest in 24 hours 1.93
Date 23 and 24

WIND

Average hourly velocity 6.1 mph.
Prevailing direction NW
Maximum for five minutes 22
mph. from the N on the 30

SUNSHINE

Average number hours per day 7.1
Percentage of possible 57

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 23
Thunderstorms 19
Light fog 0
Dense fog 0

Number of hours with rain 91

88650—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
SEP 14 1960
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** AUGUST 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	76	80	94	68	85	.12
2	85	79	82	96	70	83	.06
3	85	82	84	92	79	87	T
4	85	76	80	96	80	91	1.53
5	86	76	81	94	70	87	.22
6	84	77	80	94	70	89	.29
7	85	77	81	96	74	90	.60
8	83	77	80	93	76	90	.15
9	85	77	81	94	76	90	.29
10	84	77	80	93	76	90	.13
11	78	73	76	93	86	91	1.01
12	85	76	80	92	64	84	.02
13	86	75	80	92	61	83	.01
14	86	76	81	91	62	78	0
15	86	75	80	92	59	82	0
16	84	76	80	94	72	86	0
17	86	78	82	95	63	89	.09
18	85	76	80	93	72	85	0
19	86	77	82	94	70	84	.03
20	84	70	77	95	76	92	1.31
21	85	75	80	94	67	86	.02
22	85	77	81	94	72	88	.16
23	85	77	81	94	70	87	T
24	86	75	80	96	73	89	2.09
25	84	77	80	96	78	90	1.17
26	82	77	80	96	73	91	.15
27	87	76	82	93	60	82	.01
28	84	76	80	97	66	87	.13
29	80	74	77	95	82	92	1.30
30	88	74	81	94	59	82	.10
31	89	78	84	93	53	77	0
Sum	2627	2362		2915	2177		10.99
Mean	84.7	76.2	80.4	94.0	70.2	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1951	12.95	1956	14.86
1952	20.31	1957	21.19
1953	11.89	1958	12.76
1954	19.43	1959	11.18
1955	13.61	1960	10.99

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.836
Departure from normal -.005
Highest 29.94 Date 12
Lowest 29.72 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal -0.1
Highest 89 Date 31
Lowest 70 Date 20

RAINFALL
(Inches)

Total 10.99
Departure from normal -4.31
Greatest in 24 hours 2.42
Date 24 & 25

WIND

Average hourly velocity 6.6 mph.
Prevailing direction S
Maximum for five minutes 22
mph. from the NW on the 6 & 20

SUNSHINE

Average number hours per day 6.8
Percentage of possible 55

NUMBER OF DAYS

Clear 0
Partly Cloudy 9
Cloudy 22
.01 inch of rain or more 24
Thunderstorms 15
Light fog 0
Dense fog 0

Number of hours with rain 93

88650—3-60—800

4966
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** SEPTEMBER 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	81	76	78	97	80	89	T
2	88	75	82	97	59	83	0
3	84	77	80	97	82	90	0
4	83	75	79	97	87	92	1.35
5	81	73	77	98	84	94	.45
6	85	73	79	96	64	84	0
7	84	76	80	96	61	83	0
8	85	76	80	94	62	79	0
9	86	75	80	91	65	85	.14
10	85	74	80	91	62	83	0
11	87	76	82	97	63	87	.02
12	85	75	80	97	74	87	T
13	85	74	80	100	68	87	1.71
14	82	75	78	94	83	90	.81
15	86	74	80	94	64	85	.04
16	84	77	80	94	70	85	.19
17	86	77	82	94	70	87	.01
18	85	77	81	96	71	89	.35
19	86	76	81	98	77	92	.03
20	85	75	80	100	73	91	1.36
21	81	77	79	95	76	86	.83
22	87	73	80	95	68	85	.26
23	88	75	82	95	62	86	0
24	87	77	82	95	60	83	T
25	81	75	78	95	87	92	.23
26	82	74	78	96	82	91	T
27	85	75	80	95	66	86	0
28	85	76	80	96	66	87	.23
29	83	76	80	95	68	85	.51
30	84	77	80	91	70	85	T
31							
Sum	2536	2261		2868	2124		8.42
Mean	84.5	75.4	80.0	95.6	70.8	86.9	

TOTAL RAINFALL FOR THIS MONTH IN:

19 51	10.16	19 56	11.70
19 52	9.76	19 57	11.48
19 53	12.27	19 58	15.96
19 54	10.66	19 59	21.34
19 55	9.14	19 60	8.42

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal +.010
Highest 29.94 Date 5
Lowest 29.74 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.7
Highest 88 Date 2
Lowest 73 Date 5

RAINFALL
(Inches)

Total 8.42
Departure from normal -4.04
Greatest in 24 hours 2.18
Date 20 - 21

WIND

Average hourly velocity 5.6 mph.
Prevailing direction NW
Maximum for five minutes 23
mph. from the N on the 13

SUNSHINE

Average number hours per day 7.0
Percentage of possible 57

NUMBER OF DAYS

Clear 1
Partly Cloudy 10
Cloudy 19
.01 inch of rain or more 17
Thunderstorms 15
Light fog 0
Dense fog 0

Number of hours with rain 71

89650—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: [illegible] C. Z. **Month:** [illegible] 1960

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	73	80	98	77	87	.15
2	87	74	80	95	69	89	1.01
3	84	76	80	98	73	87	.02
4	84	74	79	91	67	82	.24
5	82	74	78	90	81	88	.41
6	81	73	77	93	72	87	.19
7	85	74	80	96	73	89	1.26
8	83	76	80	95	83	91	.44
9	83	75	79	94	83	91	.43
10	87	74	80	94	55	85	.40
11	84	76	80	93	75	84	1.01
12	84	76	80	95	77	89	.46
13	83	74	78	95	76	89	.31
14	86	76	81	95	70	90	.15
15	81	75	80	94	67	88	T
16	84	75	80	93	74	85	.02
17	83	77	80	93	70	87	.41
18	83	76	80	96	75	88	1.30
19	83	75	79	97	83	90	1.59
20	85	72	78	97	75	91	5.75
21	84	74	79	95	70	89	.10
22	82	75	81	91	61	80	0
23	80	75	82	93	48	77	0
24	80	75	82	92	52	83	.21
25	84	75	80	96	69	86	.15
26	83	72	78	95	74	85	.75
27	83	73	78	96	71	84	.74
28	84	75	80	93	60	86	.11
29	80	75	82	93	43	77	.57
30	80	75	82	91	57	76	0
31	86	77	82	93	55	84	.04
Sum	2431	2322		2908	2143		19.31
Mean	84.9	74.9	79.9	93.8	69.1	86.0	

TOTAL RAINFALL FOR THIS MONTH IN:

19 51	19.15	19 56	15.46
19 53	21.12	19 57	8.39
19 53	16.41	19 58	26.14
19 54	9.76	19 59	10.23
19 55	13.99	19 60	19.31

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean [illegible]
Departure from normal [illegible]
Highest [illegible] Date 30
Lowest [illegible] Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.9
Departure from normal -0.4
Highest [illegible] Date 23
Lowest 72 Date 20

RAINFALL
(Inches)

Total 19.31
Departure from normal +3.40
Greatest in 24 hours 5.75
Date 19-20

WIND

Average hourly velocity 5.6 mph.
Prevailing direction S
Maximum for five minutes 34
mph. from the [illegible] on the 7

SUNSHINE

Average number hours per day 5.0
Percentage of possible 47

NUMBER OF DAYS

Clear 1
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 27
Thunderstorms 18
Light fog 0
Dense fog 0

Number of hours with rain 110

88859—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: BALBOA, C. Z. Month: [illegible]

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	76	80	93	64	85	T
2	87	76	82	94	55	84	.05
3	83	75	79	96	64	84	.32
4	84	76	80	96	75	86	.18
5	87	79	83	98	68	82	.12
6	83	75	79	97	80	89	.56
7	80	72	76	98	85	89	1.71
8	83	73	78	94	74	86	.76
9	81	73	77	96	85	90	1.85
10	83	74	78	99	78	90	1.63
11	82	76	79	95	79	90	.41
12	82	74	78	95	78	90	.88
13	83	74	78	94	77	88	1.71
14	82	73	78	94	76	85	.01
15	85	78	82	93	64	80	.19
16	84	73	78	98	75	90	4.88
17	83	75	79	97	76	88	.69
18	83	76	80	94	69	87	.21
19	84	75	80	96	78	90	.38
20	87	75	81	96	56	89	1.52
21	83	74	78	95	75	92	1.82
22	85	74	80	95	64	84	0
23	84	75	80	95	80	87	0
24	87	82	84	92	73	84	T
25	86	80	83	92	75	82	T
26	85	74	80	98	80	88	.43
27	84	74	79	96	66	87	2.84
28	80	75	78	90	86	89	3.88
29	83	75	79	92	74	88	T
30	79	74	76	96	89	93	2.99
31							
Sum	2507	2255		2854	2220		32.04
Mean	83.6	75.2	79.4	95.1	74.0	87.2	

TOTAL RAINFALL FOR THIS MONTH IN:

19 51	10.62	19 56	29.72
19 52	20.76	19 57	27.94
19 53	21.87	19 58	14.57
19 54	27.50	19 59	15.94
19 55	23.95	19 60	32.04

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.841
Departure from normal +.012
Highest 30.00 Date 3
Lowest 29.71 Date 24

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 0.1
Highest 87 Date 5
Lowest 72 Date 7

RAINFALL
(Inches)

Total 32.04
Departure from normal + 0.51
Greatest in 24 hours 4.05
Date 27 & 28

WIND

Average hourly velocity 6.5 mph.
Prevailing direction W
Maximum for five minutes 23
mph. from the NW on the 8

SUNSHINE

Average number hours per day 5.9
Percentage of possible 51

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 24
.01 inch of rain or more 24
Thunderstorms 11
Light fog 0
Dense fog 0

Number of hours with rain 149

88650—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

LIBRARY FEB 14 1961 WEATHER BUREAU

Station: RIOTOBAL, C. Z. **Month:** JANUARY 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	77	80	96	86	92	0
2	83	79	81	94	83	87	.05
3	84	79	82	95	79	86	0
4	83	77	80	100	80	90	.08
5	85	78	82	99	68	82	.10
6	86	79	82	87	68	82	0
7	84	78	81	87	75	81	0
8	84	76	80	83	73	80	0
9	84	76	80	85	72	80	.02
10	84	80	82	83	66	76	T
11	84	78	81	83	72	78	0
12	84	79	82	85	71	78	.02
13	82	78	80	88	77	83	.03
14	83	78	80	85	72	79	.03
15	84	79	82	79	70	76	0
16	83	79	81	88	69	78	0
17	84	80	82	92	68	77	T
18	84	77	80	90	66	74	.01
19	83	78	80	84	61	74	.01
20	82	77	80	88	60	81	.03
21	82	75	78	89	66	74	.03
22	83	78	80	86	61	74	.04
23	84	77	80	88	67	77	.02
24	83	79	81	85	63	75	.02
25	84	79	82	85	68	78	0
26	83	78	80	85	70	80	0
27	84	78	81	85	62	76	T
28	84	77	80	85	66	78	.08
29	84	78	81	84	65	76	.08
30	83	79	81	83	66	76	0
31	83	77	80	88	64	77	.03
Sum	2590	2417		2714	2154		.68
Mean	83.5	78.0	80.8	87.5	69.5	79.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	3.26	1957	1.06
1953	6.85	1958	6.69
1954	1.38	1959	3.13
1955	11.18	1960	2.70
1956	10.25	1961	.68

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.868
Departure from normal .000
Highest 30.02 Date 22
Lowest 29.72 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal -0.5
Highest 86 Date 6
Lowest 75 Date 21

RAINFALL
(Inches)

Total .68
Departure from normal -2.63
Greatest in 24 hours .18
Date 2 & 5

WIND

Average hourly velocity 13.6 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the N on the 22

SUNSHINE

Average number hours per day 10.3
Percentage of possible 89

NUMBER OF DAYS

Clear 16
Partly Cloudy 14
Cloudy 1
.01 inch of rain or more 17
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 28

88550—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

LIBRARY
MAR 20 1961
WEATHER BUREAU

Station: CRISTOBAL CANAL ZONE **Month:** FEBRUARY 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	82	64	71	0
2	83	78	80	80	53	66	0
3	83	75	79	82	64	75	T
4	83	73	78	90	74	81	0
5	83	73	78	87	65	80	0
6	83	77	80	88	64	76	.10
7	84	78	81	80	65	76	0
8	84	77	80	82	66	76	T
9	83	79	81	79	61	71	0
10	83	78	80	82	63	74	0
11	84	75	80	88	61	73	0
12	84	79	82	79	61	71	0
13	84	79	82	81	63	76	.01
14	84	79	82	80	65	75	0
15	84	79	82	81	72	78	0
16	84	78	81	81	65	75	.02
17	84	79	82	80	61	72	0
18	84	79	82	79	67	75	0
19	83	79	81	80	76	79	0
20	83	79	81	80	68	77	0
21	83	79	81	80	68	77	0
22	83	79	81	80	67	77	0
23	84	79	82	82	66	77	0
24	83	79	81	87	69	80	T
25	83	78	80	90	75	81	.01
26	83	76	80	88	69	79	.05
27	83	79	81	82	66	76	0
28	82	79	80	84	76	81	.03
29							
30							
31							
Sum	2334	2180		2314	1854		.22
Mean	83.4	77.9	80.6	82.6	66.2	75.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	.93	1957	.39
1953	2.01	1958	3.35
1954	1.72	1959	.04
1955	1.79	1960	.61
1956	1.42	1961	.22

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.877
Departure from normal -.005
Highest 30.02 Date 4
Lowest 29.74 Date 22

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal +0.3
Highest 84 Date 14
Lowest 73 Date 4

RAINFALL
(Inches)

Total .22
Departure from normal -1.31
Greatest in 24 hours .10
Date 6

WIND

Average hourly velocity 13.7 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the N on the 26

SUNSHINE

Average number hours per day 10.3
Percentage of possible 87

NUMBER OF DAYS

Clear 5
Partly Cloudy 17
Cloudy 6
.01 inch of rain or more 6
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 9

88659—3-60—300

4966
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

LIBRARY
APR 26 1961
WEATHER BUREAU

Station: CRISTOBAL, CANAL ZONE **Month:** MARCH 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	84	73	80	0
2	84	79	82	82	67	76	.01
3	84	77	80	85	72	78	.04
4	84	79	82	81	71	78	T
5	84	79	82	81	70	77	T
6	83	78	80	80	70	76	T
7	83	80	82	80	71	77	0
8	84	79	82	80	66	75	0
9	84	76	80	82	53	68	T
10	83	78	80	79	56	68	0
11	82	79	80	80	65	73	0
12	83	78	80	81	74	77	0
13	83	76	80	81	73	79	.37
14	83	76	80	86	73	80	.01
15	84	79	82	79	62	72	0
16	83	76	80	83	57	71	0
17	83	72	78	90	56	75	0
18	84	74	79	85	65	78	0
19	83	77	80	85	67	78	0
20	83	79	81	80	65	76	0
21	83	79	81	81	60	75	0
22	84	78	81	84	60	76	T
23	84	78	81	82	64	74	.04
24	83	79	81	81	65	76	T
25	84	77	80	90	65	74	.03
26	85	79	82	81	59	72	0
27	83	79	81	81	64	76	.01
28	84	78	81	82	74	79	.24
29	83	79	81	81	71	79	0
30	84	79	82	84	76	81	0
31	85	77	81	90	70	82	T
Sum	2589	2412		2561	2054		.75
Mean	83.5	77.8	80.6	82.6	66.3	76.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	.03	1957	.47
1953	1.75	1958	5.61
1954	.67	1959	.40
1955	1.33	1960	4.73
1956	4.43	1961	.75

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.853
Departure from normal -.020
Highest 30.00 Date 10th
Lowest 29.70 Date 4th

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal -0.3
Highest 85 Date 31st
Lowest 72 Date 17th

RAINFALL
(Inches)

Total .75
Departure from normal -.76
Greatest in 24 hours .38
Date 13-14

WIND

Average hourly velocity 12.6 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 2d

SUNSHINE

Average number hours per day 10.3
Percentage of possible 85

NUMBER OF DAYS

Clear 6
Partly Cloudy 19
Cloudy 6
.01 inch of rain or more 8
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 11

89650—3-60—800

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MAY 11 1961
Rec'd. O/C
WEATHER BUREAU
MAY 11 1961

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** APRIL 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	88	77	82	85	60	80	0
2	86	77	82	92	72	84	.16
3	84	80	82	86	67	77	0
4	84	75	80	95	65	81	.50
5	85	74	80	86	57	77	0
6	84	78	81	85	63	74	T
7	84	78	81	89	77	82	.01
8	85	81	83	85	80	83	0
9	84	81	82	85	82	83	0
10	84	81	82	83	65	76	0
11	84	80	82	84	72	78	T
12	85	80	82	84	73	80	0
13	84	77	80	86	64	75	0
14	85	78	82	86	63	71	.04
15	85	79	82	82	63	72	.02
16	84	80	82	89	66	77	T
17	83	75	79	96	76	82	.09
18	84	77	80	88	62	75	0
19	85	80	82	82	61	74	0
20	84	80	82	81	56	66	0
21	85	79	82	80	60	69	0
22	83	74	78	92	79	86	.68
23	82	74	78	90	81	88	0
24	83	76	80	90	77	86	.06
25	84	77	80	91	80	86	.07
26	84	76	80	92	80	88	.05
27	86	77	82	91	66	87	.55
28	86	77	82	90	64	79	T
29	83	78	80	88	77	83	.03
30	86	81	84	86	67	77	.01
31							
Sum	2533	2337		2619	2075		2.27
Mean	84.4	77.9	81.2	87.3	69.2	79.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	6.97	1957	.08
1953	2.38	1958	5.10
1954	4.29	1959	3.96
1955	.44	1960	10.38
1956	2.39	1961	2.27

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.848
Departure from normal -.006
Highest 29.95 Date 23
Lowest 29.74 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2
Departure from normal -0.3
Highest 88 Date 1
Lowest 74 Date 5

RAINFALL
(Inches)

Total 2.27
Departure from normal -1.81
Greatest in 24 hours .68
Date 22

WIND

Average hourly velocity 10.9 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 28

SUNSHINE

Average number hours per day 8.5
Percentage of possible 69

NUMBER OF DAYS

Clear 4
Partly Cloudy 12
Cloudy 14
.01 inch of rain or more 13
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 33

53660—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUN 13 1961
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: MAY 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	80	83	87	73	82	.01
2	85	80	82	85	76	83	0
3	86	79	82	86	69	80	0
4	85	80	82	85	74	80	0
5	86	80	83	86	66	76	0
6	85	80	82	82	67	73	0
7	85	80	82	86	68	76	0
8	86	80	83	85	67	77	0
9	84	80	82	86	74	82	.01
10	85	78	82	88	67	81	.17
11	84	76	80	90	76	86	1.04
12	82	77	80	88	83	87	.15
13	81	77	79	92	87	90	.30
14	84	78	81	91	74	82	.03
15	84	76	80	90	76	84	.29
16	82	76	79	95	84	88	1.32
17	86	80	83	89	71	80	.03
18	85	80	82	92	69	82	0
19	83	74	78	93	83	90	2.33
20	84	77	80	90	82	87	0
21	85	80	82	87	81	85	0
22	85	79	82	87	79	84	.03
23	85	79	82	85	72	81	T
24	85	80	82	92	78	85	T
25	82	73	78	95	86	89	2.91
26	86	79	82	89	62	83	0
27	84	78	81	88	63	84	0
28	86	78	82	89	71	84	.09
29	86	81	84	88	67	81	T
30	84	75	80	96	74	87	.72
31	82	78	80	91	84	88	.01
Sum	2618	2428		2753	2303		9.44
Mean	84.5	78.3	81.4	88.8	74.3	83.2	

TOTAL RAINFALL FOR THIS MONTH IN:

19 52	15.70	19 57	6.16
19 53	8.45	19 58	6.57
19 54	12.44	19 59	13.88
19 55	13.43	19 60	24.18
19 56	18.27	19 61	9.44

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.849
Departure from normal +.014
Highest 29.94 Date 11
Lowest 29.76 Date 8

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.4
Departure from normal +0.1
Highest 86 Date 5
Lowest 73 Date 25

RAINFALL
(Inches)

Total 9.44
Departure from normal -2.93
Greatest in 24 hours 2.91
Date 25

WIND

Average hourly velocity 10.0 mph.
Prevailing direction E
Maximum for five minutes 24
mph. from the NE on the 19

SUNSHINE

Average number hours per day 4.4
Percentage of possible 35

NUMBER OF DAYS

Clear 1
Partly Cloudy 9
Cloudy 21
.01 inch of rain or more 16
Thunderstorms 10
Light fog 0
Dense fog 0

Number of hours with rain 61

88630—3-60—800

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUL 10 1961
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: JUNE 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	75	80	92	76	87	.56
2	84	78	81	95	83	89	.14
3	84	77	80	96	84	91	.02
4	85	80	82	93	75	84	.05
5	82	76	79	93	85	89	.08
6	83	75	79	95	84	91	.89
7	80	75	78	94	91	93	1.42
8	86	75	80	93	63	85	.17
9	89	76	82	90	59	83	.21
10	88	76	82	91	64	86	.64
11	78	74	76	91	88	90	.43
12	83	74	78	91	76	88	.19
13	88	74	81	92	57	85	1.35
14	83	75	79	92	80	86	.05
15	83	76	80	89	77	86	.61
16	84	74	79	92	77	87	1.20
17	83	77	80	91	86	88	0
18	84	79	82	91	83	86	.03
19	85	78	82	93	76	84	.13
20	85	80	82	91	77	84	0
21	85	77	81	93	79	87	T
22	79	73	76	100	87	92	.92
23	83	74	78	92	66	84	.06
24	82	78	80	93	77	86	.26
25	85	78	82	91	75	86	.16
26	85	76	80	92	80	87	.15
27	84	77	80	92	83	88	.05
28	85	78	82	91	82	87	.10
29	83	76	80	97	72	87	.08
30	84	71	78	94	62	82	.18
31							
Sum	2517	2284		2780	2296		10.13
Mean	83.9	76.1	80.0	92.7	76.6	87.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	18.12	1957	11.87
1953	5.95	1958	7.85
1954	15.13	1959	9.28
1955	10.90	1960	12.65
1956	8.84	1961	10.13

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal +.004
Highest 29.94 Date 7
Lowest 29.74 Date 12

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.8
Highest 89 Date 9
Lowest 71 Date 30

RAINFALL
(Inches)

Total 10.13
Departure from normal -3.13
Greatest in 24 hours 1.79
Date 15 & 16

WIND

Average hourly velocity 6.9 mph.
Prevailing direction N
Maximum for five minutes 31
mph. from the SE on the 30th

SUNSHINE

Average number hours per day 2.7
Percentage of possible 22

NUMBER OF DAYS

Clear 0
Partly Cloudy 1
Cloudy 29
.01 inch of rain or more 27
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 124

88850—3-60—300

4066
Rev. 10-58

4

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
AUG 11 1961
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JULY 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	77	80	92	86	90	.62
2	86	80	83	92	75	87	0
3	83	78	80	92	79	88	.14
4	81	74	78	92	85	90	.68
5	83	74	78	92	82	89	.06
6	79	75	77	92	86	91	.27
7	84	74	79	92	70	87	.02
8	82	76	79	92	83	88	.30
9	81	77	79	92	85	89	.32
10	84	77	80	92	71	88	.08
11	83	75	79	93	72	88	1.06
12	84	74	79	91	70	85	0
13	83	75	79	92	80	89	.78
14	81	75	78	92	70	85	.23
15	82	75	78	90	76	85	.18
16	84	75	80	92	69	83	.30
17	82	76	79	91	78	87	.02
18	83	75	79	91	69	85	.07
19	84	76	80	91	72	88	.10
20	85	74	80	92	57	85	T
21	83	76	80	91	73	87	.01
22	84	76	80	93	73	84	.02
23	84	76	80	93	72	86	T
24	85	77	81	93	72	83	0
25	87	75	81	95	73	84	2.69
26	86	78	82	92	70	82	T
27	85	70	78	96	74	89	1.40
28	87	73	80	94	61	89	.25
29	83	74	78	93	76	85	0
30	83	76	80	93	72	87	.21
31	85	77	81	93	76	87	.17
Sum	2588	2340		2861	2307		9.98
Mean	83.5	75.5	79.5	92.3	74.4	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	20.88	1957	11.09
1953	17.95	1958	19.03
1954	17.24	1959	15.41
1955	9.58	1960	10.92
1956	24.77	1961	9.98

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.856
Departure from normal +.012
Highest 29.94 Date 14
Lowest 29.75 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.5
Departure from normal -1.1
Highest 87 Date 28
Lowest 70 Date 27

RAINFALL
(Inches)

Total 9.98
Departure from normal -5.51
Greatest in 24 hours 2.69
Date 25

WIND

Average hourly velocity 5.3 mph.
Prevailing direction NW
Maximum for five minutes 23
mph. from the NW on the 27

SUNSHINE

Average number hours per day 2.4
Percentage of possible 19

NUMBER OF DAYS

Clear 0
Partly Cloudy 3
Cloudy 28
.01 inch of rain or more 24
Thunderstorms 11
Light fog 0
Dense fog 0

Number of hours with rain 95

88830—3-60—800

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** AUGUST 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	80	82	91	77	87	.41
2	85	72	78	92	70	88	.71
3	83	75	79	91	69	84	.41
4	84	77	80	89	82	87	.17
5	84	77	80	89	83	87	T
6	85	75	80	91	70	87	1.27
7	80	75	78	90	86	89	.40
8	82	76	79	91	77	85	.06
9	84	77	80	88	74	84	.48
10	86	80	83	87	71	82	0
11	85	80	82	90	59	79	0
12	82	76	79	88	80	86	.56
13	81	75	78	91	80	87	.77
14	84	76	80	89	76	84	0
15	85	78	82	90	74	85	.01
16	87	79	83	88	64	83	.22
17	83	75	79	89	79	86	.22
18	85	77	81	90	66	83	.02
19	86	78	82	89	73	83	.04
20	85	77	81	91	79	85	.30
21	83	73	78	92	76	86	1.66
22	85	77	81	88	72	85	.20
23	85	77	81	92	84	88	.24
24	86	78	82	95	81	88	.37
25	81	73	77	98	82	91	.93
26	85	74	80	92	60	83	.05
27	82	77	80	90	83	87	.08
28	82	77	80	90	83	88	.28
29	84	77	80	90	72	84	T
30	83	75	79	90	77	87	.32
31	84	72	78	91	63	84	.16
Sum	2601	2365		2802	2322		10.34
Mean	83.9	76.3	80.1	90.4	74.9	85.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	20.31	1957	21.19
1953	11.89	1958	12.76
1954	19.43	1959	11.18
1955	13.41	1960	10.91
1956	14.86	1961	10.34

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.852
Departure from normal: +.011
Highest: .94 Date: 12
Lowest: .77 Date: 31

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.1
Departure from normal: -0.4
Highest: 87 Date: 16
Lowest: 72 Date: 31

RAINFALL
(Inches)

Total: 10.34
Departure from normal: -4.90
Greatest in 24 hours: 1.66
Date: 21

WIND

Average hourly velocity: 7.0 mph.
Prevailing direction: NW
Maximum for five minutes: 22
mph. from the NE on the 11

SUNSHINE

Average number hours per day: 3.2
Percentage of possible: 26

NUMBER OF DAYS

Clear: 9
Partly Cloudy: 7
Cloudy: 15
.01 inch of rain or more: 26
Thunderstorms: 21
Light fog: 0
Dense fog: 0

Number of hours with rain: 100

PANAMA
SEP 8 1961
WEATHER BUREAU

89659—8-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** SEPTEMBER 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	75	78	94	77	89	.60
2	83	73	78	93	72	89	1.63
3	83	74	78	93	73	88	.20
4	85	74	80	89	64	82	0
5	88	76	82	87	61	78	0
6	89	76	82	87	61	77	0
7	87	74	80	89	66	82	.16
8	84	77	80	88	75	83	.01
9	85	77	81	89	70	82	0
10	85	76	80	89	74	83	T
11	83	76	80	90	74	85	.92
12	85	76	80	89	67	83	0
13	84	77	80	90	74	85	.61
14	82	77	80	89	79	85	T
15	81	75	78	89	83	88	.17
16	85	72	78	90	71	87	1.15
17	84	75	80	89	70	85	.18
18	83	74	78	89	74	85	T
19	83	74	78	88	76	85	.09
20	82	75	78	90	74	82	1.30
21	80	74	77	93	83	87	1.99
22	83	74	78	89	74	83	0
23	83	76	80	88	60	82	.10
24	85	75	80	87	67	84	.43
25	83	74	78	90	74	86	.48
26	85	76	80	90	76	86	.25
27	85	75	80	93	80	88	1.11
28	81	76	78	94	84	90	1.84
29	84	76	80	88	76	84	.01
30	84	77	80	90	74	85	.07
31							
Sum	2516	2256		2693	2183		12.90
Mean	83.9	75.2	79.6	89.8	72.8	84.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	9.26	1957	11.48
1953	12.27	1958	15.76
1954	10.66	1959	21.34
1955	3.14	1960	8.42
1956	11.70	1961	12.90

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 20.837
Departure from normal +.007
Highest 29.94 Date 16
Lowest 29.70 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal -1.1
Highest 89 Date 6
Lowest 72 Date 16

RAINFALL
(Inches)

Total 12.90
Departure from normal +0.43
Greatest in 24 hours 2.79
Date 20 & 21

WIND

Average hourly velocity 5.9 mph.
Prevailing direction S
Maximum for five minutes 30
mph. from the W on the 27

SUNSHINE

Average number hours per day 5.3
Percentage of possible 43

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 24
.01 inch of rain or more 21
Thunderstorms 13
Light fog 0
Dense fog 0

Number of hours with rain 89

88859—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	87	75	81	88	59	80	.53
2	85	75	80	90	62	82	.03
3	86	75	80	89	59	82	0
4	86	75	80	90	60	78	.56
5	82	74	78	91	65	85	1.12
6	86	75	80	88	57	81	.06
7	85	74	80	89	58	84	.09
8	88	74	81	89	41	78	0
9	88	72	80	93	49	78	2.98
10	83	75	79	91	62	85	.07
11	84	73	78	91	65	86	.37
12	86	73	80	90	49	79	0
13	84	75	80	90	63	82	.69
14	85	76	80	91	60	82	.04
15	84	74	79	89	65	79	1.25
16	83	75	79	87	62	76	.02
17	83	75	79	88	63	78	1.09
18	82	74	78	89	68	82	.29
19	81	74	78	92	69	89	2.24
20	84	74	79	91	72	84	0
21	86	78	82	88	63	75	.06
22	85	75	80	99	50	82	1.50
23	80	74	77	97	79	91	2.65
24	82	74	78	95	69	89	.67
25	84	76	80	95	57	84	.11
26	79	73	76	95	82	91	2.40
27	79	74	76	99	87	95	1.51
28	79	73	76	99	89	97	.08
29	80	74	77	97	78	91	1.48
30	82	76	79	92	74	86	.07
31							
Sum	2508	2235		2752	1936		21.94
Mean	83.6	74.5	79.0	91.7	64.5	83.8	

TOTAL RAINFALL FOR THIS MONTH IN:

19 52	20.96	19 57	27.94
19 53	21.87	19 58	14.97
19 54	27.58	19 59	15.94
19 55	23.93	19 60	32.04
19 56	20.72	19 61	21.94

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.851
Departure from normal +.022
Highest 29.95 Date 26
Lowest 29.73 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.0
Departure from normal -0.5
Highest 88 Date 9
Lowest 72 Date 9

RAINFALL
(Inches)

Total 21.94
Departure from normal -0.58
Greatest in 24 hours 4.15
Date 22&23

WIND

Average hourly velocity 6.7 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the NE on the 25

SUNSHINE

Average number hours per day 5.1
Percentage of possible 44

NUMBER OF DAYS

Clear 0
Partly Cloudy 14
Cloudy 16
.01 inch of rain or more 26
Thunderstorms 4
Light fog 0
Dense fog 0

Number of hours with rain 113

89659—3-60—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: December 1961

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	81	74	78	92	68	90	.89
2	83	74	78	91	67	84	.35
3	80	75	78	92	81	89	.71
4	82	73	78	91	84	90	1.75
5	83	73	78	91	81	89	2.68
6	84	78	81	91	82	86	0
7	84	78	81	90	80	86	T
8	85	79	82	92	80	86	.15
9	84	75	80	95	82	89	.54
10	85	76	80	92	69	87	.08
11	82	75	78	91	69	86	.03
12	84	75	80	89	65	84	0
13	83	75	79	89	71	84	0
14	86	75	80	90	60	78	.50
15	85	79	82	85	68	77	0
16	85	77	81	87	68	80	0
17	86	77	82	91	58	79	0
18	84	76	80	87	66	82	.04
19	82	77	80	88	77	85	.18
20	83	77	80	87	70	83	.10
21	85	77	81	87	60	82	0
22	82	75	78	91	67	82	.52
23	82	74	78	88	67	78	T
24	82	75	78	87	66	83	.33
25	84	78	81	88	66	77	.08
26	84	80	82	87	65	75	.01
27	84	79	82	87	65	73	.01
28	83	80	82	82	64	72	T
29	84	79	82	82	64	72	T
30	84	78	81	89	70	96	.01
31	85	80	82	83	77	81	0
Sum	2590	2373		2752	2177		8.96
Mean	83.5	76.5	80.0	88.8	70.2	81.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1952	19.97	1957	7.01
1953	9.11	1958	7.64
1954	10.43	1959	22.14
1955	14.20	1960	29.18
1956	6.71	1961	8.96

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.852
Departure from normal +.013
Highest 29.960 Date 31
Lowest 29.760 Date 17

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.1
Highest 86 Date 14
Lowest 73 Date 4

RAINFALL
(Inches)

Total 8.96
Departure from normal -3.34
Greatest in 24 hours 4.18
Date 4 & 5

WIND

Average hourly velocity 9.1 mph.
Prevailing direction NE
Maximum for five minutes 21
mph. from the SE on the 9

SUNSHINE

Average number hours per day 6.4
Percentage of possible 55

NUMBER OF DAYS

Clear 4
Partly Cloudy 13
Cloudy 14
.01 inch of rain or more 19
Thunderstorms 3
Light fog 0
Dense fog 0

Number of hours with rain 89

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** January 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	79	80	91	70	79	0
2	80	73	76	100	87	93	1.05
3	84	76	80	99	76	88	.14
4	84	77	80	97	66	84	.01
5	83	76	80	97	89	93	.19
6	84	77	80	93	77	87	.01
7	84	77	80	100	79	91	0
8	84	79	82	100	61	77	T
9	83	77	80	83	62	72	0
10	83	76	80	83	62	72	0
11	81	76	78	91	59	77	T
12	83	74	78	86	64	76	.10
13	84	76	80	84	66	77	.01
14	84	77	80	85	72	81	.13
15	83	78	80	86	78	82	T
16	83	77	80	85	66	78	.05
17	85	74	80	92	70	81	.35
18	85	80	82	83	65	75	T
19	84	78	81	82	72	81	.01
20	85	77	81	82	67	79	.04
21	84	80	82	82	77	81	0
22	84	80	82	83	64	75	0
23	85	80	82	83	69	80	T
24	84	78	81	82	62	75	.01
25	84	79	82	82	75	80	.02
26	84	79	82	82	72	78	0
27	84	78	81	78	72	77	0
28	83	79	81	78	67	74	0
29	83	77	80	81	67	75	.03
30	83	75	79	83	68	74	.12
31	83	77	80	80	67	74	.02
Sum	2589	2396		2693	2168		2.29
Mean	83.5	77.3	80.4	86.9	69.9	79.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	6.85	1958	6.69
1954	1.38	1959	3.13
1955	11.18	1960	2.70
1956	10.25	1961	.68
1957	1.06	1962	2.29

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.888
Departure from normal +.019
Highest 29.99 Date 2 & 29
Lowest 29.76 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal +0.1
Highest 85 Date 20
Lowest 73 Date 2

RAINFALL
(Inches)

Total 2.29
Departure from normal -1.01
Greatest in 24 hours 1.12
Date 2 & 3

WIND

Average hourly velocity 14.1 mph.
Prevailing direction NE
Maximum for five minutes 25
mph. from the NE on the 23

SUNSHINE

Average number hours per day 7.6
Percentage of possible 65

NUMBER OF DAYS

Clear 5
Partly Cloudy 19
Cloudy 7
.01 inch of rain or more 17
Thunderstorms 0
Light fog 0
Dense fog 0
Number of days with rain 18

LIBRARY
FEB 16 1962
WEATHER BUR

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** FEBRUARY 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	78	81	81	55	69	.04
2	83	78	80	76	61	70	.02
3	83	76	80	82	66	74	.04
4	82	79	80	80	75	77	0
5	83	79	81	78	69	74	0
6	81	77	79	78	70	75	.01
7	82	76	79	79	71	76	.12
8	83	79	81	76	71	74	0
9	83	79	81	76	66	73	0
10	82	76	79	79	66	75	0
11	83	76	80	79	66	73	.11
12	83	79	81	77	64	70	T
13	83	78	80	77	65	70	T
14	82	76	79	79	59	68	T
15	83	76	80	79	64	72	.01
16	83	78	80	79	67	74	0
17	82	77	80	83	74	80	.17
18	82	78	80	82	80	81	.06
19	84	79	82	81	73	79	0
20	84	78	81	83	74	78	.01
21	84	79	82	80	73	78	T
22	84	79	82	78	70	74	0
23	84	79	82	81	71	76	T
24	84	79	82	80	77	79	0
25	84	79	82	78	74	76	T
26	83	78	80	74	69	72	0
27	84	78	81	82	63	73	0
28	83	78	80	83	63	72	0
29	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—
Sum	2325	2181		2220	1916		.59
Mean	83.0	77.9	80.4	79.3	68.4	74.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	2.01	1958	3.35
1954	1.72	1959	.04
1955	1.79	1960	.61
1956	1.42	1961	.22
1957	.39	1962	.59

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.887
Departure from normal +.005
Highest 30.030 Date 7
Lowest 29.770 Date 21

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal +0.1
Highest 84 Date 24
Lowest 76 Date 14

RAINFALL
(Inches)

Total .59
Departure from normal -.93
Greatest in 24 hours .17
Date 17

WIND

Average hourly velocity 14.2 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 14

SUNSHINE

Average number hours per day 10.2
Percentage of possible 86

NUMBER OF DAYS

Clear 6
Partly Cloudy 20
Cloudy 2
.01 inch of rain or more 10
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 17

LIBRARY
MAR 15 1962
WEATHER BUREAU

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MARCH 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	82	64	74	0
2	83	78	80	85	64	72	0
3	83	78	80	80	64	74	0
4	82	75	78	84	62	74	0
5	82	76	79	83	64	76	0
6	81	78	80	80	63	69	0
7	82	77	80	92	64	75	.01
8	82	74	78	95	54	67	.03
9	82	73	78	84	57	70	0
10	83	78	80	86	60	75	0
11	83	78	80	91	72	82	.22
12	84	79	82	85	67	80	0
13	83	79	81	87	70	81	T
14	83	78	80	87	63	78	0
15	84	78	81	82	71	77	0
16	84	79	82	88	62	77	0
17	84	79	82	87	68	77	0
18	84	79	82	84	66	75	0
19	82	76	79	91	72	80	.03
20	83	79	81	84	67	77	0
21	82	77	80	91	67	81	.13
22	82	75	78	88	74	81	0
23	84	74	79	90	63	82	0
24	89	75	82	90	53	81	0
25	87	75	81	89	56	81	0
26	82	75	78	90	72	82	T
27	84	79	82	92	58	74	.04
28	84	75	80	95	65	74	.26
29	83	77	80	90	70	81	T
30	83	79	81	90	76	83	T
31	85	79	82	86	72	81	0
Sum	2582	2390		2708	2020		.72
Mean	83.3	77.1	80.2	87.4	65.2	77.2	

TOTAL RAINFALL FOR THIS MONTH IN:

19 53	1.75	19 58	5.61
19 54	.67	19 59	.40
19 55	1.33	19 60	4.73
19 56	4.43	19 61	.75
19 57	.47	19 62	.72

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.874
Departure from normal +.001
Highest 29.99 Date 8
Lowest 29.76 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal -0.6
Highest 89 Date 24
Lowest 73 Date 9

RAINFALL
(Inches)

Total .72
Departure from normal -.78
Greatest in 24 hours .30
Date 27 & 28

WIND

Average hourly velocity 12.1 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 28

SUNSHINE

Average number hours per day 10.4
Percentage of possible 81

NUMBER OF DAYS

Clear 6
Partly Cloudy
Cloudy 3
.01 inch of rain or more 7
Thunderstorms
Light fog 0
Dense fog

LIBRARY
APR 17 1962
WEATHER BUREAU

Number of hours with rain 11

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** APRIL 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	80	82	87	74	82	0
2	84	80	82	87	73	81	0
3	84	80	82	86	70	80	0
4	84	77	80	92	71	81	.05
5	84	78	81	87	70	80	0
6	84	78	81	92	75	84	.13
7	85	79	82	91	76	84	0
8	85	79	82	88	77	84	0
9	84	80	82	86	76	82	0
10	85	80	82	84	69	78	0
11	85	80	82	83	70	78	0
12	84	80	82	86	73	79	T
13	84	79	82	82	72	78	0
14	85	79	82	82	70	76	0
15	84	79	82	82	69	77	0
16	83	76	80	84	69	76	.37
17	82	77	80	82	64	78	.26
18	83	78	80	83	70	75	T
19	83	77	80	84	66	74	.01
20	83	77	80	83	68	77	.01
21	80	76	78	86	74	83	.15
22	82	75	78	85	72	80	.56
23	83	74	78	84	69	78	.54
24	85	79	82	88	70	78	.02
25	84	78	81	87	72	78	0
26	85	77	81	86	73	80	T
27	82	74	78	88	69	81	.13
28	82	75	78	88	68	78	0
29	82	73	78	87	65	77	0
30	84	74	79	86	63	76	0
31	—	—	—	—	—	—	—
Sum	2508	2328		2576	2117		2.23
Mean	83.6	77.6	80.6	85.9	70.6	79.3	

TOTAL RAINFALL FOR THIS MONTH IN:

19	53	2.38	19	58	5.10
19	54	4.29	19	59	3.96
19	55	.44	19	60	10.38
19	56	2.39	19	61	2.27
19	57	.08	19	62	2.23

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.872
Departure from normal: +.018
Highest: 29.98 Date: 3
Lowest: 29.75 Date: 7

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.6
Departure from normal: -0.9
Highest: 85 Date: 8
Lowest: 73 Date: 29

RAINFALL
(Inches)

Total: 2.23
Departure from normal: -1.83
Greatest in 24 hours: 1.01
Date: 22 & 23

WIND

Average hourly velocity: 12.1 mph.
Prevailing direction: NE
Maximum for five minutes: 25
mph. from the N on the 17

SUNSHINE

Average number hours per day: 10.0
Percentage of possible: 81

NUMBER OF DAYS

Clear: 1
Partly Cloudy: 21
Cloudy: 8
.01 inch of rain or more: 11
Thunderstorms: 0
Light fog: 0
Dense fog: 0
Number of days with rain: 35

MAY 10 1962
WEATHER BU

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY JUN 13 1962 WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C.Z. **Month:** MAY 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	75	80	83	57	73	.0
2	83	77	80	81	58	72	.0
3	85	75	80	81	55	72	.0
4	85	78	82	84	63	79	.0
5	82	74	78	94	78	88	1.84
6	83	77	80	94	70	84	.04
7	83	75	79	94	72	82	.20
8	80	74	77	94	76	88	5.06
9	80	75	78	92	80	87	1.49
10	79	75	77	94	86	91	2.64
11	84	75	80	93	82	90	.92
12	85	77	81	92	77	85	.0
13	82	75	78	94	72	90	.93
14	81	77	79	94	85	91	.58
15	83	78	80	92	74	86	.03
16	80	74	77	94	81	89	1.54
17	82	74	78	93	74	87	.17
18	81	76	78	92	80	87	T
19	83	75	79	94	77	88	.30
20	83	75	79	94	79	90	1.03
21	82	75	78	94	80	90	.15
22	85	78	82	95	80	89	.23
23	84	79	82	94	78	88	.01
24	85	79	[illegible]	92	80	89	.03
25	83	78	80	93	82	91	.10
26	82	76	79	96	82	90	2.16
27	80	74	77	94	80	91	.53
28	85	74	80	95	67	88	2.20
29	84	75	80	94	70	89	.22
30	83	76	80	98	80	90	3.35
31	84	76	80	94	80	89	.30
Sum	2565	2351		2857	2335		23.05
Mean	82.7	75.8	79.2	92.2	75.3	86.6	

TOTAL RAINFALL FOR THIS MONTH IN:

19 53	8.45	19 58	6.57
19 54	12.44	19 59	13.88
19 55	13.48	19 60	24.18
19 56	10.27	19 61	9.44
19 57	6.16	19 62	23.05

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.857
Departure from normal +.022
Highest 29.95 Date 4
Lowest 29.76 Date 16

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal -2.0
Highest 85 Date 24
Lowest 74 Date 16

RAINFALL
(Inches)

Total 23.05
Departure from normal +10.57
Greatest in 24 hours 5.11
Date 8 & 9

WIND

Average hourly velocity 8.1 mph.
Prevailing direction N
Maximum for five minutes 28
mph. from the NW on the 9

SUNSHINE

Average number hours per day 7.6
Percentage of possible 61

NUMBER OF DAYS

Clear 1
Partly Cloudy 7
Cloudy 23
.01 inch of rain or more 25
Thunderstorms 9
Light fog 0
Dense fog 0

Number of hours with rain 147

95635—11-61—300

Rec'd. O/C
JUN 11 1962

Climatology

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: JUNE 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	75	80	94	78	90	.15
2	84	79	82	96	82	92	.33
3	80	75	78	95	84	92	.27
4	86	77	82	95	69	87	.02
5	84	75	80	100	76	89	.88
6	82	74	78	97	66	89	.42
7	85	74	80	96	64	88	.04
8	87	76	82	96	60	87	.0
9	86	75	80	94	62	85	.0
10	85	76	80	93	65	87	.0
11	84	76	80	94	70	85	.0
12	85	77	81	94	66	84	.0
13	84	75	80	94	72	88	.48
14	87	76	82	92	58	86	.13
15	86	76	81	93	60	84	.27
16	85	75	80	94	65	86	.59
17	87	75	81	92	61	83	.10
18	84	75	80	92	64	85	T
19	85	77	81	92	57	81	T
20	83	77	80	92	75	86	.01
21	82	76	79	94	77	87	.25
22	84	75	80	94	73	85	.0
23	84	76	80	94	73	89	.28
24	80	74	77	94	76	89	.10
25	80	74	77	93	73	85	T
26	85	75	80	92	58	85	.18
27	83	75	79	93	70	86	.02
28	83	76	80	92	73	86	.08
29	83	72	78	95	72	87	2.02
30	85	77	81	92	70	86	.0
31							
Sum	2525	2265		2818	2069		6.62
Mean	84.2	75.5	79.8	93.9	69.0	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	5.93	1958	7.85
1954	15.13	1959	9.28
1955	10.90	1960	12.65
1956	9.74	1961	10.13
1957	11.87	1962	6.62
19		19	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.855
Departure from normal +.019
Highest 29.94 Date 18
Lowest 29.76 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal -1.0
Highest 87 Date 17
Lowest 72 Date 29

RAINFALL
(Inches)

Total 6.62
Departure from normal -6.57
Greatest in 24 hours 2.08
Date 28th & 29th

WIND

Average hourly velocity 5.7 mph.
Prevailing direction SE
Maximum for five minutes 23
mph. from the NW on the T

SUNSHINE

Average number hours per day 10.0
Percentage of possible 79

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 25
.01 inch of rain or more 20
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 59

95835—11-61—300

Rec'd. O/C

JUL 17 1962

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JULY 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	75	80	94	70	87	3.08
2	83	77	80	94	72	87	.35
3	80	75	78	94	88	92	2.50
4	78	74	76	99	84	92	4.44
5	83	75	79	92	78	90	.25
6	82	72	77	98	75	91	1.50
7	82	74	78	96	84	92	.04
8	85	75	80	92	74	85	.0
9	84	79	82	90	72	82	T
10	84	75	80	93	74	89	.77
11	85	78	82	92	80	88	.49
12	82	76	79	95	81	90	1.22
13	83	77	80	94	79	89	.21
14	83	77	80	92	80	88	.26
15	82	78	80	93	74	88	.08
16	82	76	79	93	76	88	1.27
17	85	79	82	92	65	78	.01
18	81	78	80	94	78	86	.08
19	85	76	80	92	72	85	.01
20	81	77	79	92	87	90	.57
21	85	78	82	91	72	84	.13
22	83	74	78	92	73	87	2.10
23	83	77	80	91	72	86	T
24	84	75	80	93	72	80	1.62
25	80	77	78	92	76	86	.11
26	83	75	79	92	75	87	.13
27	84	78	81	92	76	86	T
28	81	74	78	93	82	89	1.85
29	82	76	79	92	76	88	1.20
30	84	77	80	91	73	84	.07
31	94	79	82	90	78	85	.0
Sum	2568	2363		2880	2368		24.34
Mean	82.8	76.2	79.5	92.9	76.4	87.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	17.95	1958	19.03
1954	17.24	1959	15.41
1955	9.38	1960	10.92
1956	24.77	1961	9.98
1957	11.09	1962	24.34

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.852
Departure from normal + .008
Highest 94 Date 28
Lowest 77 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.5
Departure from normal -1.1
Highest 85.4 Date 17
Lowest 71.6 Date 6

RAINFALL
(Inches)

Total 24.34
Departure from normal 8.76
Greatest in 24 hours 6.22
Date 3 & 4th

WIND

Average hourly velocity 7.0 mph.
Prevailing direction W
Maximum for five minutes 23
mph. from the SW on the 4

SUNSHINE

Average number hours per day 7.3
Percentage of possible 57

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 26
Thunderstorms 21
Light fog 0
Dense fog 0

Number of hours with rain 118

95835—11-61—300

Rec'd. O/C
AUG 9 1962

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: August 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	81	83	91	74	84	0
2	84	78	81	95	77	86	0
3	83	72	78	98	80	90	5.08
4	84	74	79	97	77	92	.51
5	83	74	78	96	76	88	.53
6	87	76	82	98	71	91	.11
7	80	75	78	98	81	93	.70
8	82	76	79	96	80	91	.11
9	83	74	78	96	71	89	.13
10	83	74	78	94	73	86	.19
11	85	72	78	96	68	87	2.04
12	83	74	78	94	70	87	1.17
13	83	75	79	94	66	86	.41
14	78	74	76	96	75	92	1.65
15	84	75	80	94	71	88	.08
16	84	74	79	93	65	85	.04
17	84	75	80	93	73	85	.12
18	84	77	80	93	78	88	.28
19	84	76	80	96	75	89	2.74
20	80	74	77	98	70	82	.23
21	84	78	81	94	72	85	.04
22	85	78	82	94	68	84	0
23	83	77	80	92	69	82	.06
24	83	76	80	93	70	85	.22
25	84	76	80	90	65	82	0
26	84	76	80	91	63	81	.02
27	83	76	80	92	73	87	.91
28	84	75	80	91	62	79	T
29	89	76	82	90	52	80	.09
30	84	75	80	92	58	77	0
31	84	76	80	94	72	83	.55
Sum	2590	2339		2919	2195		18.01
Mean	83.5	75.5	79.5	94.2	70.8	86.0	

TOTAL RAINFALL FOR THIS MONTH IN:

19	53	11.59	19	58	12.76
19	54	19.43	19	59	11.18
19	55	13.41	19	60	10.91
19	56	14.86	19	61	10.34
19	57	21.19	19	62	18.01

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.871
Departure from normal: +.029
Highest: 29.96 Date: 5
Lowest: 29.76 Date: 31

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 79.5
Departure from normal: -1.0
Highest: 87 Date: 6
Lowest: 72 Date: 3

RAINFALL
(Inches)

Total: 18.01
Departure from normal: +2.74
Greatest in 24 hours: 5.08
Date: 3

WIND

Average hourly velocity: 6.5 mph.
Prevailing direction: NW
Maximum for five minutes: 24
mph. from the NW on the 11

SUNSHINE

Average number hours per day: 7.2
Percentage of possible: 58

NUMBER OF DAYS

Clear: 0
Partly Cloudy: 6
Cloudy: 25
.01 inch of rain or more: 25
Thunderstorms: 20
Light fog: 0
Dense fog: 0

Number of hours with rain: 122

95635—11-61—300

SEP 21 1962

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
OCT 23 1962
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** September 1962

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	85	77	81	92	70	88	.70
2	85	76	80	92	67	83	T
3	85	78	82	92	70	82	.36
4	86	78	82	86	67	81	.16
5	84	76	80	91	64	83	.76
6	85	77	81	92	65	82	0
7	84	78	81	92	72	87	.05
8	84	77	80	92	72	88	.46
9	82	71	76	94	76	88	.45
10	84	75	80	94	65	82	1.00
11	85	74	80	91	63	81	.55
12	87	77	82	89	58	83	.01
13	85	77	81	92	73	85	.34
14	85	75	80	91	69	85	.63
15	88	75	82	98	59	87	.03
16	88	75	82	98	58	86	0
17	84	76	80	98	72	86	0
18	84	76	80	98	70	83	0
19	82	74	78	97	78	91	1.74
20	88	76	82	94	56	79	0
21	88	75	82	91	50	74	0
22	88	78	83	96	57	83	.74
23	88	78	83	94	50	82	.27
24	84	78	81	95	64	85	0
25	83	77	80	98	78	89	.88
26	86	75	80	98	71	89	1.63
27	82	77	80	97	78	90	.75
28	82	77	80	96	72	89	.53
29	81	76	78	96	80	90	.25
30	84	76	80	98	70	94	.85
31	---	---	---	---	---	---	---
Sum	2546	2285		2822	2014		13.14
Mean	84.9	76.2	80.5	94.1	67.1	85.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	12.27	1958	15.76
1954	10.66	1959	21.34
1955	3.14	1960	8.42
1956	11.70	1961	12.90
1957	11.48	1962	13.14

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.836
Departure from normal +.006
Highest 29.95 Date 9
Lowest 29.74 Date 19

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.5
Departure from normal -0.2
Highest 88 Date 20
Lowest 71 Date 9

RAINFALL
(Inches)

Total 13.14
Departure from normal +0.67
Greatest in 24 hours 1.74
Date 19

WIND

Average hourly velocity 5.2 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the NE on the 9

SUNSHINE

Average number hours per day 6.2
Percentage of possible 51

NUMBER OF DAYS

Clear 1
Partly Cloudy 6
Cloudy 23
.01 inch of rain or more 22
Thunderstorms 20
Light fog 1
Dense fog 0

Number of hours with rain 88

95835—11-61—300

4966
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
NOV 2 1962
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** October 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	75	80	98	62	90	.60
2	88	74	81	96	50	84	.56
3	89	75	82	92	51	80	T
4	90	76	83	90	48	75	0
5	86	77	82	94	62	86	.73
6	81	75	78	96	77	90	2.12
7	84	76	80	94	70	85	.01
8	84	79	82	96	68	86	.82
9	83	76	80	92	68	82	.28
10	84	76	80	95	62	83	.36
11	83	74	78	91	64	81	.80
12	85	74	80	92	60	84	.20
13	86	74	80	92	54	82	.05
14	84	74	79	91	60	84	T
15	83	75	79	92	66	84	.02
16	84	75	80	97	66	87	T
17	85	75	80	97	66	91	1.38
18	88	75	82	96	56	88	T
19	83	75	79	96	70	85	0
20	82	77	80	96	73	85	.09
21	83	77	80	97	72	86	1.08
22	86	76	81	100	72	87	1.35
23	85	75	80	98	74	88	0
24	86	77	82	97	69	84	T
25	83	74	78	100	74	88	1.02
26	82	74	78	100	71	86	.04
27	82	74	78	100	74	88	.68
28	85	76	80	96	64	87	.05
29	83	76	80	96	71	84	0
30	84	75	80	97	62	84	0
31	84	76	80	97	69	87	T
Sum	2621	2337		2961	2025		11.64
Mean	84.5	75.4	80.0	95.5	65.3	85.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1953	18.41	1958	26.14
1954	9.76	1959	10.23
1955	13.99	1960	19.31
1956	15.66	1961	15.42
1957	8.39	1962	11.64

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.846
Departure from normal +.018
Highest 29.96 Date 29
Lowest 29.74 Date 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.3
Highest 90 Date 4
Lowest 74 Date 3

RAINFALL
(Inches)

Total 11.64
Departure from normal -4.22
Greatest in 24 hours 2.78
Date 5 & 6

WIND

Average hourly velocity 5.1 mph.
Prevailing direction S
Maximum for five minutes 26
mph. from the NW on the 26

SUNSHINE

Average number hours per day 6.8
Percentage of possible 59

NUMBER OF DAYS

Clear 0
Partly Cloudy 3
Cloudy 28
.01 inch of rain or more 20
Thunderstorms 16
Light fog 0
Dense fog 0

Number of hours with rain 61

95635—11-61—800

M06.1/72P.8
D187ma

4066
Rev. 10-58

LIBRARY
DEC 18 1962
WEATHER BUREAU

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** NOVEMBER 1962

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	74	80	100	66	88	3.54
2	83	74	78	100	72	85	.52
3	82	73	78	100	72	84	2.60
4	80	74	77	98	76	86	.54
5	81	74	78	98	76	91	.48
6	84	74	79	97	69	86	.09
7	85	76	80	96	73	86	.01
8	83	77	80	100	77	90	1.05
9	83	74	78	100	78	89	1.36
10	86	74	80	98	77	89	.81
11	82	77	80	96	77	89	.28
12	84	76	80	97	72	89	.49
13	83	77	80	94	69	83	.13
14	84	77	80	98	66	78	.01
15	81	74	78	100	75	91	.51
16	80	74	77	100	84	94	3.48
17	80	74	77	100	81	94	1.29
18	79	73	76	100	87	96	3.61
19	84	76	80	97	77	92	.95
20	85	75	80	97	71	89	.13
21	85	75	80	96	67	86	0
22	86	75	80	96	63	86	.25
23	85	72	78	94	63	78	0
24	87	78	82	88	61	76	T
25	85	76	80	94	70	82	1.02
26	79	74	76	94	75	87	.38
27	83	73	78	94	69	86	.06
28	83	73	78	93	68	86	.40
29	82	73	78	93	70	86	.32
30	80	73	76	94	74	84	1.04
31	---	---	---	---	---	---	---
Sum	2490	2239		2902	2175		25.35
Mean	83.0	74.6	78.8	96.7	72.5	86.8	

TOTAL RAINFALL FOR THIS MONTH IN:

19 53	21.87	19 58	14.57
19 54	27.30	19 59	15.94
19 55	23.95	19 60	32.04
19 56	23.72	19 61	21.94
19 57	27.94	19 62	25.35

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.853
Departure from normal +.023
Highest 29.95 Date 4
Lowest 29.74 Date 12

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal -0.7
Highest 87 Date 24
Lowest 72 Date 23

RAINFALL
(Inches)

Total 25.35
Departure from normal +2.80
Greatest in 24 hours 4.06
Date 1 & 2

WIND

Average hourly velocity 6.6 mph.
Prevailing direction N
Maximum for five minutes 30
mph. from the N on the 14

SUNSHINE

Average number hours per day 5.3
Percentage of possible 45

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 24
.01 inch of rain or more 27
Thunderstorms 4
Light fog 0
Dense fog 0

Number of hours with rain 144

95835—11-61—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: JANUARY 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	71	77	97	78	86	.36
2	82	74	78	94	68	80	0
3	82	75	78	87	70	78	0
4	82	79	80	87	72	81	0
5	84	73	78	95	72	82	.02
6	81	75	78	95	80	86	1.62
7	80	74	77	93	68	84	.53
8	80	72	76	96	76	91	2.99
9	80	74	77	94	69	82	.29
10	82	73	78	97	80	88	1.11
11	82	78	80	92	82	86	T
12	84	80	82	89	78	85	0
13	82	77	80	91	78	82	0
14	83	78	80	96	74	84	.07
15	83	78	80	87	70	79	0
16	84	77	80	90	78	81	.24
17	83	76	80	90	74	82	T
18	85	77	81	88	71	80	0
19	83	78	80	88	78	83	0
20	83	77	80	88	76	84	0
21	83	75	79	90	75	84	.08
22	84	79	82	88	77	84	0
23	84	79	82	88	75	82	0
24	84	79	82	85	72	79	0
25	84	78	81	87	71	80	0
26	84	75	80	90	69	79	.15
27	84	75	80	86	72	80	0
28	84	74	80	88	75	83	0
29	84	79	82	87	75	82	T
30	83	78	80	88	78	83	T
31	83	78	80	84	68	78	.01
Sum	2569	2369		2779	2287		7.05
Mean	82.9	76.4	79.6	90.3	73.9	82.5	

TOTAL RAINFALL FOR THIS MONTH IN:

19 50	1.38	19 59	3.13
19 51	11.18	19 60	2.70
19 52	10.45	19 61	.68
19 57	1.68	19 62	2.39
19 58	4.69	19 63	7.05

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.885

Departure from normal +.016

Highest .96 Date 14

Lowest .81 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6

Departure from normal - 0.7

Highest 85 Date 18

Lowest 71 Date 1

RAINFALL
(Inches)

Total 7.05

Departure from normal +3.71

Greatest in 24 hours 2.76

Date 7 & 8

WIND

Average hourly velocity 13.4 mph.

Prevailing direction NE

Maximum for five minutes 26

mph. from the N on the 7

SUNSHINE

Average number hours per day 9.0

Percentage of possible 77

NUMBER OF DAYS

Clear 16

Partly Cloudy 12

Cloudy 4

.01 inch of rain or more 12

Thunderstorms 3

Lightning 3

Dense fog 0

Number of hours with rain 63

LIBRARY FEB 18 1963 WEATHER BUREAU

8—11-62—300

4866
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: MARCH 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	98	78	86	
2	84	79	82	95	80	88	T
3	83	79	81	97	74	86	.01
4	84	79	82	94	79	89	
5	83	79	81	95	86	92	.01
6	83	79	81	95	78	88	
7	83	78	80	90	80	86	
8	84	80	82	90	78	85	T
9	84	77	80	89	76	84	.06
10	83	77	80	88	74	82	.01
11	83	78	80	89	75	83	.01
12	83	79	81	88	76	82	
13	83	79	81	85	77	81	
14	83	79	81	84	71	79	
15	83	79	81	87	72	79	
16	84	79	82	87	75	81	
17	83	79	81	91	75	84	T
18	83	79	81	95	78	87	
19	83	79	81	95	83	89	.09
20	83	79	81	94	76	85	T
21	82	78	80	88	70	79	T
22	83	79	81	91	76	84	.01
23	83	78	80	91	67	78	.01
24	83	76	80	95	68	78	.17
25	83	79	81	88	71	81	T
26	83	78	80	90	73	82	
27	83	79	81	89	72	80	
28	82	78	80	83	72	78	
29	82	77	80	82	68	76	
30	82	78	80	80	71	76	
31	83	78	80	81	68	75	
Sum	2575	2433		2784	2317		.38
Mean	83.1	78.5	80.8	89.8	74.7	82.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1954	.67	1959	.80
1955	1.33	1960	4.73
1956	4.43	1961	.75
1957	.47	1962	.72
1958	5.61	1963	.38

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.872
Departure from normal -.001
Highest 29.96 Date 24
Lowest 29.78 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal 0.0
Highest 84.5 Date 4
Lowest 75.8 Date 24

RAINFALL
(Inches)

Total .38
Departure from normal -1.11
Greatest in 24 hours .18
Date 23 & 24

WIND

Average hourly velocity 14.2 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the N on the 24

SUNSHINE

Average number hours per day 9.5
Percentage of possible 79

NUMBER OF DAYS

Clear 3
Partly Cloudy 18
Cloudy 10
.01 inch of rain or more 9
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 15

LIBRARY
APR 19 1963
WEATHER BUREAU

16-62-300

4866
Rev. 10-58

11

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: May 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	76	79	90	73	82	
2	83	76	80	91	71	81	.01
3	82	77	80	90	76	82	
4	82	73	78	90	70	81	.23
5	84	79	82	86	65	80	
6	82	77	80	91	79	86	.15
7	83	77	80	92	80	86	.05
8	82	75	78	90	78	86	.22
9	83	78	80	88	73	79	
10	84	77	80	91	73	83	.16
11	84	75	80	89	73	88	.06
12	84	78	81	90	71	81	.30
13	84	80	82	89	72	83	.02
14	85	76	80	90	70	83	1.78
15	82	77	80	94	80	89	.17
16	83	75	79	94	80	91	.76
17	83	77	80	94	84	91	.22
18	81	77	79	94	81	90	.23
19	82	79	78	95	85	93	4.16
20	79	76	78	94	88	92	1.60
21	83	78	80	92	80	88	T
22	83	79	81	94	81	88	.02
23	83	79	81	94	83	88	.01
24	85	78	82	94	78	89	.05
25	82	75	78	95	83	91	1.89
26	82	77	80	93	79	87	.02
27	82	76	79	93	75	87	.07
28	87	75	81	92	62	88	1.02
29	83	75	79	92	66	83	.02
30	83	77	80	89	64	80	
31	85	78	82	89	69	81	T
Sum	2572	2377		2839	2330		13.22
Mean	83.0	76.7	79.8	91.6	75.2	85.6	

TOTAL RAINFALL FOR THIS MONTH IN:

19		19	
19		19	
19		19	
19		19	
19		19	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.856
Departure from normal +.021
Highest 29.98 Date 9
Lowest 29.75 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 1.4
Highest 87 Date 28
Lowest 73 Date 4

RAINFALL
(Inches)

Total 13.22
Departure from normal +.73
Greatest in 24 hours 4.16
Date 19

WIND

Average hourly velocity 8.2 mph.
Prevailing direction N
Maximum for five minutes 23
mph. from the SW on the 20

SUNSHINE

Average number hours per day 9.2
Percentage of possible 65

NUMBER OF DAYS

Clear 3
Partly Cloudy 12
Cloudy 16
.01 inch of rain or more 20
Thunderstorms 10
Light fog 0
Dense fog 0
Number of hours with rain 11

LIBRARY
JUN 12 1963
Rec'd. O/C
WEATHER BUREAU
JUN 12 1963

8—11-62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUL 17 1963
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: JUNE 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	90	68	78	.01
2	83	78	80	89	70	80	.04
3	80	76	78	89	80	85	2.89
4	83	76	80	93	73	87	.84
5	83	76	80	90	76	86	0
6	83	79	81	94	80	88	T
7	84	79	82	96	83	90	.81
8	85	77	81	96	77	90	.10
9	87	76	82	95	58	83	0
10	84	77	80	96	70	91	.21
11	85	75	80	96	63	90	2.10
12	82	75	78	96	71	91	1.45
13	83	75	79	96	67	85	.01
14	83	74	78	97	76	88	T
15	83	76	80	97	75	91	.14
16	81	77	79	96	79	90	.15
17	84	76	80	96	66	87	0
18	86	77	82	98	72	89	.09
19	85	80	82	96	80	90	.02
20	85	77	81	96	70	86	.03
21	83	77	80	96	72	88	0
22	86	77	82	96	75	88	.01
23	83	77	80	96	78	90	.21
24	85	77	81	97	80	92	.20
25	81	77	79	96	82	92	.05
26	82	74	78	99	74	90	.38
27	83	79	81	96	76	88	T
28	82	75	78	99	80	92	1.60
29	80	73	76	100	83	94	2.01
30	82	75	78	97	80	90	.06
31	---	---	---	---	---	---	---
Sum	2508	2296		2864	2234		13.61
Mean	83.3	76.5	79.9	95.5	74.5	88.3	

TOTAL RAINFALL FOR THIS MONTH IN:

19 50	15.13	19 59	9.28
19 55	10.90	19 60	12.65
19 56	9.79	19 61	10.13
19 57	11.09	19 62	6.62
19 58	7.05	19 63	13.61

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.845
Departure from normal + 0.009
Highest 30.00 Date 14
Lowest 29.74 Date 22

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.9
Departure from normal - 0.9
Highest 87 Date 9
Lowest 73 Date 29

RAINFALL
(Inches)

Total 13.61
Departure from normal + .42
Greatest in 24 hours 3.01
Date 28 & 29

WIND

Average hourly velocity 6.0 mph.
Prevailing direction NW
Maximum for five minutes 23
mph. from the N on the 28

SUNSHINE

Average number hours per day 5.7
Percentage of possible 45

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 23
Thunderstorms 19
Light fog 0
Dense fog 0

Number of hours with rain 93

8—11—62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

LIBRARY
SEP 14 1963
WEATHER BUREAU

Station: CRISTOBAL, C. Z. **Month:** JULY 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	75	79	97	80	92	.24
2	81	75	78	97	80	92	.20
3	83	75	79	98	70	90	0
4	83	78	80	97	77	91	.12
5	83	77	80	97	81	92	.07
6	79	77	78	97	85	95	.09
7	83	75	79	98	80	92	.03
8	83	76	80	98	76	91	.03
9	82	76	79	96	82	91	.13
10	83	74	78	100	70	89	1.04
11	84	74	79	96	74	91	.16
12	83	77	80	97	78	90	.11
13	85	75	80	98	62	87	1.32
14	82	77	80	96	77	91	.19
15	83	78	80	95	70	83	.12
16	79	76	78	95	75	88	.44
17	83	75	79	92	65	84	.01
18	84	75	80	92	64	81	0
19	84	78	81	92	66	83	.02
20	85	77	81	94	69	88	.17
21	83	74	78	93	75	87	.25
22	84	76	80	93	66	83	0
23	82	77	80	92	76	86	0
24	84	75	80	93	70	86	.41
25	83	77	80	92	75	86	.41
26	85	76	80	92	70	86	.52
27	84	78	81	94	73	87	.73
28	84	76	80	94	73	85	.31
29	84	77	80	94	69	84	.08
30	84	73	78	95	75	85	.56
31	79	74	76	97	84	91	1.18
Sum	2571	2353		2951	2287		8.94
Mean	82.9	75.9	79.4	95.2	73.8	87.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1954	17.24	1959	15.41
1955	9.58	1960	10.92
1956	24.77	1961	9.98
1957	11.09	1962	24.34
1958	19.03	1963	8.94

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.847
Departure from normal .003
Highest 95 Date 13
Lowest 78 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal -1.2
Highest 85 Date 13
Lowest 73 Date 30

RAINFALL
(Inches)

Total 8.94
Departure from normal -6.57
Greatest in 24 hours 1.29
Date 12 & 13

WIND

Average hourly velocity 6.2 mph.
Prevailing direction N
Maximum for five minutes 29
mph. from the N on the 10

SUNSHINE

Average number hours per day 6.0
Percentage of possible 48

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 27
Thunderstorms 23
Light fog 0
Dense fog 0

Number of hours with rain 102

8—11-62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
SEP 20 1963
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: August 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	74	77	95	78	92	.76
2	83	74	78	95	72	90	.06
3	82	74	78	95	76	90	.04
4	82	74	78	95	68	86	T
5	84	79	82	96	78	98	.55
6	84	78	81	95	76	89	.05
7	84	77	80	94	74	87	.09
8	83	76	80	96	75	90	.27
9	84	75	80	95	76	89	.01
10	83	77	80	95	78	88	.01
11	84	78	81	95	76	86	.18
12	86	79	82	95	72	88	1.19
13	85	76	80	94	76	89	1.09
14	85	77	81	95	77	88	.01
15	87	82	84	90	69	84	.01
16	84	80	82	94	77	87	T
17	83	77	80	94	76	88	.44
18	80	74	77	95	79	89	1.36
19	80	75	78	92	75	87	.04
20	85	74	80	92	65	84	.01
21	82	76	79	91	73	85	T
22	82	75	78	91	73	86	.03
23	83	77	80	95	78	86	1.07
24	84	78	81	89	70	83	T
25	83	76	80	95	72	86	1.77
26	84	78	81	92	74	88	1.30
27	83	75	79	91	78	87	.43
28	83	76	80	91	72	84	.01
29	83	76	80	92	78	86	.22
30	83	76	80	93	76	87	2.62
31	82	77	80	91	79	86	.08
Sum	2580	2370		2898	2316		13.70
Mean	83.2	76.5	79.8	93.5	74.7	87.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1954	19.43	1959	11.18
1955	13.41	1960	10.91
1956	14.86	1961	10.34
1957	21.19	1962	18.01
1958	12.76	1963	13.70

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.836
Departure from normal -.006
Highest 94 Date 21st
Lowest 72 Date 31st

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal -0.6
Highest 87 Date 15th
Lowest 24 Date 3d

RAINFALL
(Inches)

Total 13.70
Departure from normal -1.56
Greatest in 24 hours 2.68
Date 29 - 30th

WIND

Average hourly velocity 7.4 mph.
Prevailing direction NW
Maximum for five minutes 22
mph. from the NE on the 18th

SUNSHINE

Average number hours per day 4.9
Percentage of possible 40

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 27
Thunderstorms 14
Light fog 0
Dense fog 0

Number of hours with rain 104

8—11—62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUL 1 0 1964
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: NOVEMBER 1963

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	76	79	94	74	86	.39
2	82	73	78	96	76	90	3.03
3	83	74	78	92	74	89	1.17
4	85	75	80	92	64	85	.17
5	88	74	81	90	58	80	.11
6	86	75	80	88	62	80	.01
7	86	75	80	94	64	86	.74
8	89	75	82	94	68	85	.56
9	84	77	80	93	69	84	.14
10	85	75	80	94	70	85	.01
11	80	74	77	95	78	89	1.90
12	80	73	76	95	80	90	.89
13	81	74	78	94	75	90	2.06
14	81	73	77	95	71	89	1.50
15	82	73	78	98	73	91	1.09
16	79	73	76	96	88	94	3.91
17	83	74	78	96	76	92	.47
18	84	76	80	94	72	86	.02
19	83	75	79	93	74	85	.16
20	84	73	78	93	74	85	1.27
21	79	76	78	94	89	91	.65
22	82	74	78	93	77	88	.42
23	84	74	79	94	67	87	.60
24	82	74	78	94	73	88	0
25	83	74	78	93	70	84	0
26	84	75	80	92	59	77	0
27	83	74	78	90	59	75	.04
28	81	74	78	93	70	82	.64
29	85	76	80	92	72	82	.06
30	85	76	80	90	69	82	.71
31	---	---	---	---	---	---	---
Sum	2495	2234		2801	2145		22.72
Mean	83.2	74.5	78.8	93.4	71.5	85.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1954	27.90	1959	15.99
1955	23.95	1960	32.04
1956	29.72	1961	21.94
1957	27.94	1962	25.35
1958	14.37	1963	22.72

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.852
Departure from normal +.022
Highest 30.00 Date 15
Lowest 29.74 Date 9

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal - 0.7
Highest 89 Date 8
Lowest 73 Date 14

RAINFALL
(Inches)

Total 22.72
Departure from normal +.17
Greatest in 24 hours 4.85
Date 15 & 16

WIND

Average hourly velocity 6.3 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the NE on the 30

SUNSHINE

Average number hours per day 7.4
Percentage of possible 60

NUMBER OF DAYS

Clear 3
Partly Cloudy 7
Cloudy 20
.01 inch of rain or more 27
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 127

8—11-62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
APR 3 1964
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: January 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	72	76	92	75	84	.09
2	83	75	79	90	72	82	.08
3	84	77	80	91	74	84	.15
4	83	79	81	90	84	87	.16
5	85	76	80	89	78	86	0
6	85	80	82	88	78	85	.13
7	82	80	81	88	83	87	T
8	83	79	81	88	80	86	0
9	83	79	81	90	83	88	
10	82	80	82	90	81	86	.01
11	83	79	81	89	80	85	.01
12	83	80	82	89	82	87	0
13	82	80	81	90	80	86	
14	81	77	79	93	79	85	.02
15	83	79	81	86	68	78	0
16	82	79	80	83	78	81	
17	82	78	80	86	76	81	
18	83	78	80	84	73	80	.02
19	83	79	81	84	75	81	T
20	83	80	82	84	73	79	0
21	83	79	81	81	73	77	
22	82	78	80	84	69	76	
23	82	78	80	82	68	77	
24	83	79	81	80	68	75	
25	82	79	80	82	73	78	
26	83	79	81	82	73	79	
27	83	80	82	82	76	80	
28	83	79	81	82	78	79	T
29	82	77	80	85	69	75	.02
30	83	76	80	86	68	77	.05
31	83	79	81	82	72	78	
Sum	2565	2389		2666	2330		.79
Mean	82.7	78.4	80.5	86.0	75.2	81.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	11.18	1960	2.70
1956	10.35	1961	.68
1957	1.06	1962	2.39
1958	6.69	1963	7.05
1959	3.13	1964	.79

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.872
Departure from normal + .003
Highest 30.000 Date 17
Lowest 29.750 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.5
Departure from normal +0.2
Highest 85 Date 5
Lowest 72 Date 1

RAINFALL
(Inches)

Total .79
Departure from normal -2.57
Greatest in 24 hours .16
Date 4

WIND

Average hourly velocity 13.4 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the NW on the 14

SUNSHINE

Average number hours per day 10.5
Percentage of possible 90

NUMBER OF DAYS

Clear 7
Partly Cloudy 20
Cloudy 4
.01 inch of rain or more 11
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 20

8—11-62—300

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MAY 8 1964

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, Canal Zone Month: February 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	81	76	79	
2	83	78	80	82	73	78	
3	83	79	81	81	72	78	
4	82	79	80	80	77	79	
5	82	78	80	83	76	80	.01
6	81	75	78	82	77	80	
7	82	77	80	82	75	79	
8	83	80	82	81	75	79	
9	82	79	80	82	75	79	
10	82	79	80	81	73	77	T
11	82	74	78	82	73	78	.07
12	83	77	80	83	72	77	.06
13	83	75	79	83	74	78	.03
14	81	77	79	80	73	77	
15	83	75	79	82	74	78	.02
16	82	79	80	80	75	79	
17	83	79	81	82	77	79	.05
18	82	78	80	82	77	80	
19	82	74	78	83	76	79	
20	82	80	81	81	74	78	
21	81	80	80	83	77	81	
22	82	80	81	82	77	80	
23	83	80	82	81	73	79	T
24	83	77	80	86	76	79	.36
25	83	79	81	80	77	79	
26	83	78	80	82	74	79	.03
27	82	80	81	81	71	79	
28	84	79	82	81	78	80	
29	82	79	80	84	78	80	.02
30	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---
Sum	2389	2263		2373	2177		.65
Mean	82.4	78.0	80.2	81.8	75.1	78.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	1.79	1960	.61
1956	1.48	1961	.28
1957	.39	1962	.39
1958	3.35	1963	6.39
1959	.04	1964	.65

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.897
Departure from normal - .035
Highest 95 Date 29
Lowest 73 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal - 0.1
Highest 84 Date 28
Lowest 74 Date 19

RAINFALL
(Inches)

Total .65
Departure from normal -.91
Greatest in 24 hours .36
Date 24

WIND

Average hourly velocity 12.4 mph.
Prevailing direction N
Maximum for five minutes 23
mph. from the N on the 12

SUNSHINE

Average number hours per day 10.6
Percentage of possible 59

NUMBER OF DAYS

Clear 2
Partly Cloudy 21
Cloudy 6
.01 inch of rain or more 9
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 13

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

LIBRARY
JUL 10 1964
WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: April 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	87	73	80	.02
2	83	78	80	84	73	79	T
3	83	79	81	86	76	81	0
4	83	79	81	86	79	83	0
5	83	80	82	86	80	83	0
6	83	80	82	86	73	80	T
7	83	78	80	91	70	80	T
8	82	80	81	94	76	84	.01
9	83	80	82	89	77	83	0
10	83	78	80	98	78	85	.01
11	84	79	82	96	77	87	.01
12	84	77	80	99	78	87	T
13	84	78	81	100	76	86	.31
14	83	76	80	96	77	86	.65
15	84	77	80	93	74	86	.01
16	82	76	79	96	78	86	.45
17	84	77	80	95	76	86	.30
18	84	77	80	96	79	86	.05
19	83	78	80	94	83	88	.03
20	84	78	81	94	82	88	T
21	82	79	80	95	88	91	.05
22	83	76	80	97	76	92	.04
23	84	76	80	97	75	93	.29
24	84	75	80	98	76	96	1.13
25	85	75	80	98	68	90	.03
26	88	76	82	97	60	86	T
27	88	76	82	95	59	86	0
28	83	76	80	98	80	91	0
29	84	78	81	97	77	89	T
30	86	76	81	98	63	86	0
31	---	---	---	---	---	---	---
Sum	2512	2337		2886	2257		3.39
Mean	83.7	77.8	80.6	93.6	75.2	86.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	.44	1960	10.38
1956	2.30	1961	2.27
1957	.88	1962	2.83
1958	5.10	1963	2.88
1959	3.96	1964	3.39

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.861
Departure from normal +.006
Highest 29.98 Date 9
Lowest 29.72 Date 21

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal -0.8
Highest 88.0 Date 26
Lowest 75.2 Date 24 & 25

RAINFALL
(Inches)

Total 3.39
Departure from normal -.04
Greatest in 24 hours 1.17
Date 23 & 24

WIND

Average hourly velocity 11.8 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 17 & 18

SUNSHINE

Average number hours per day 10.6
Percentage of possible 86

NUMBER OF DAYS

Clear 3
Partly Cloudy 13
Cloudy 14
.01 inch of rain or more 16
Thunderstorms 2
Light fog 0
Dense fog 0

Number of hours with rain 40

8—11-62—300

Panama

6856
Rev 10-56

LIBRARY
SEP 4 1964
WEATHER BUREAU

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL , C.Z. Month: JUNE 1964

Date	Air Temperature (Deg F.) Max	Min	Mean	Relative Humidity (Percent) Max	Min	Bihourly mean	Total Rainfall (Inches)
1	88	76	82	100	54	87	.33
2	85	75	80	100	58	84	.0
3	87	75	81	100	52	86	1.35
4	83	76	80	96	65	82	.0
5	85	74	80	100	58	84	2.00
6	84	76	80	92	64	86	.02
7	84	75	80	95	60	85	.04
8	87	76	82	98	58	88	.19
9	85	75	80	98	61	88	.19
10	86	75	80	97	56	87	.07
11	86	74	80	96	52	88	.92
12	89	74	82	94	44	78	.0
13	83	77	80	96	67	84	.17
14	83	77	80	97	64	84	.17
15	84	72	78	96	66	86	1.00
16	83	72	78	97	55	75	T
17	82	77	80	96	61	81	.16
18	84	76	80	98	70	88	.43
19	85	76	80	100	70	87	.68
20	79	74	76	98	76	89	1.19
21	83	74	78	98	64	78	.14
22	82	74	78	99	64	85	2.01
23	87	75	81	96	54	81	.68
24	86	76	81	92	60	81	.0
25	84	74	79	100	68	86	2.35
26	81	76	78	96	74	88	.13
27	82	75	78	96	74	89	.60
28	84	75	80	98	58	86	1.79
29	83	76	80	97	67	83	.35
30	85	74	80	96	66	86	.64
31							
Sum	2529	2251		2912	1860		17.58
Mean	84.3	75.0	79.6	97.1	62.0	84.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	10.90	1960	12.65
1956	9.74	1961	10.13
1957	11.87	1962	6.62
1958	7.85	1963	13.61
1959	9.28	1964	17.58

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.844
Departure from normal + .008
Highest 29.95 Date 1
Lowest 29.75 Date 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 1.2
Highest 89 Date 12
Lowest 72 Date 16

RAINFALL
(Inches)

Total 17.58
Departure from normal +4.34
Greatest in 24 hours 2.69
Date 22 & 23

WIND

Average hourly velocity 5.5 mph
Prevailing direction S
Maximum for five minutes 21
mph from the [illegible] on the 5

SUNSHINE

Average number hours per day 8.7
Percentage of possible 69

NUMBER OF DAYS

Clear 0
Partly Cloudy 12
Cloudy 18
.01 inch of rain or more 25
Thunderstorms 19
Light fog 0
Dense fog 0

Number of hours with rain 109

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: August 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	76	79	100	71	91	.79
2	84	74	79	100	80	93	.59
3	82	75	78	100	81	95	1.02
4	81	75	78	100	58	80	.45
5	84	77	80	90	60	74	3.00
6	84	73	78	95	58	84	.98
7	84	73	78	95	60	83	.04
8	84	75	80	94	72	86	0
9	85	80	82	99	71	80	T
10	84	80	82	94	71	81	.56
11	83	78	80	94	69	84	.04
12	82	72	77	97	76	90	3.29
13	84	75	80	94	62	79	T
14	82	75	78	94	67	82	0
15	82	75	78	100	71	91	.10
16	81	74	78	100	75	91	1.54
17	84	74	79	96	64	88	.40
18	84	74	79	100	72	94	2.14
19	83	73	78	100	67	85	0
20	83	76	80	99	70	85	T
21	86	80	83	95	66	81	0
22	84	77	80	100	69	92	1.01
23	84	75	80	100	61	92	.76
24	80	73	76	100	74	90	.81
25	84	75	80	97	61	88	.72
26	86	76	81	98	54	88	.07
27	86	75	80	96	52	86	.21
28	82	75	78	96	60	85	.02
29	84	76	80	99	69	89	.03
30	87	75	81	100	54	81	0
31	83	75	79	97	66	86	.23
Sum	2588	2336		3019	2061		18.80
Mean	83.5	75.4	79.4	97.4	66.5	86.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	13.41	1960	10.91
1956	14.86	1961	10.34
1957	21.19	1962	18.01
1958	12.76	1963	13.70
1959	11.18	1964	18.80

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.844
Departure from normal +.002
Highest 29.93 Date 25
Lowest 29.72 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal -1.0
Highest 87.2 Date 30
Lowest 71.9 Date 12

RAINFALL
(Inches)

Total 18.80
Departure from normal +3.51
Greatest in 24 hours 3.31
Date 11 & 12

WIND

Average hourly velocity 5.8 mph.
Prevailing direction S
Maximum for five minutes 21
mph. from the SW on the 2

SUNSHINE

Average number hours per day 6.9
Percentage of possible 55

NUMBER OF DAYS

Clear 0
Partly Cloudy 3
Cloudy 28
.01 inch of rain or more 23
Thunderstorms 11
Light fog 1
Dense fog 0

Number of hours with rain 106

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** OCTOBER 1964

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	87	75	81	95	50	83	.18
2	86	73	80	100	55	86	1.21
3	87	75	81	100	56	86	.02
4	87	76	82	100	56	86	0
5	85	77	81	100	64	82	0
6	84	78	81	100	74	86	.92
7	84	75	80	99	70	91	.47
8	84	73	78	99	61	82	.30
9	84	73	78	99	68	91	.23
10	84	76	80	99	69	90	.36
11	89	74	82	99	54	87	.17
12	86	76	81	99	60	84	0
13	86	76	81	98	56	81	0
14	81	75	78	98	74	87	T
15	85	74	80	99	57	91	1.31
16	86	74	80	99	56	88	.53
17	83	73	78	99	68	89	.03
18	80	75	78	99	73	90	.22
19	84	74	79	99	63	90	.42
20	83	73	78	98	62	89	.75
21	83	73	78	98	60	84	.08
22	83	74	78	98	72	89	.18
23	83	74	78	98	69	89	.69
24	84	73	78	99	70	89	.99
25	82	74	78	99	75	93	.73
26	83	74	78	98	68	87	T
27	83	75	79	96	66	89	.43
28	84	74	79	98	72	89	.04
29	80	74	77	96	77	93	.50
30	83	72	78	98	69	92	.70
31	83	74	78	98	72	89	.32
Sum	2606	2306		3054	2016		11.78
Mean	84.1	74.4	79.2	98.5	65.0	87.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	13.99	1960	19.31
1956	15.66	1961	15.42
1957	8.39	1962	11.64
1958	26.14	1963	6.34
1959	10.23	1964	11.78

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal +0.011
Highest 29.97 Date 14
Lowest 29.74 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal -1.1
Highest 89 Date 11
Lowest 72 Date 30

RAINFALL
(Inches)

Total 11.78
Departure from normal - 3.94
Greatest in 24 hours 1.59
Date 23-24

WIND

Average hourly velocity 5.5 mph.
Prevailing direction S
Maximum for five minutes 2.2
mph. from the W on the 7

SUNSHINE

Average number hours per day 7.3
Percentage of possible 61

NUMBER OF DAYS

Clear 0
Partly Cloudy 9
Cloudy 22
.01 inch of rain or more 25
Thunderstorms 9
Light fog 0
Dense fog 0

Number of hours with rain 31

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: NOVEMBER 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	75	79	98	66	85	.11
2	80	74	77	96	72	87	.50
3	77	73	75	97	86	94	.20
4	81	74	78	96	70	90	.32
5	80	74	77	98	76	92	.53
6	83	74	78	98	68	88	.01
7	87	74	80	98	57	82	0
8	88	75	82	96	60	85	T
9	84	76	80	98	72	91	.74
10	85	75	80	100	68	89	2.09
11	85	76	80	98	73	88	1.53
12	83	76	80	99	75	89	1.13
13	83	74	78	96	75	90	.15
14	85	74	80	96	69	87	.53
15	84	76	80	97	68	86	1.25
16	85	77	81	98	66	81	.38
17	81	77	79	96	74	86	.05
18	81	73	77	95	74	86	.13
19	83	75	79	96	74	88	0
20	84	75	80	96	74	88	0
21	82	76	79	96	76	91	.55
22	84	73	78	96	76	92	1.83
23	82	76	79	95	50	92	.17
24	82	76	79	96	77	89	.02
25	83	74	78	96	76	86	0
26	84	76	80	95	74	81	0
27	84	80	82	97	69	78	0
28	80	73	76	94	76	87	1.59
29	79	72	76	94	78	86	.18
30	80	72	76	96	76	87	.37
31	---	---	---	---	---	---	---
Sum	2482	2245		2887	2175		14.36
Mean	82.7	74.8	78.8	96.2	72.5	87.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	23.95	1960	32.04
1956	29.72	1961	21.94
1957	27.94	1962	25.35
1958	14.57	1963	22.72
1959	15.94	1964	14.36

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.821
Departure from normal - .009
Highest 29.92 Date 13
Lowest 29.72 Date 19

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal - 0.7
Highest 88 Date 8
Lowest 72 Date 30

RAINFALL
(Inches)

Total 14.36
Departure from normal - 8.11
Greatest in 24 hours 3.35
Date 10 & 11

WIND

Average hourly velocity 7.2 mph.
Prevailing direction NW
Maximum for five minutes 24
mph. from the NW on the 29

SUNSHINE

Average number hours per day 4.6
Percentage of possible 39

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 23
.01 inch of rain or more 23
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 135

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: DECEMBER 1964

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	90	72	76	96	72	85	.22
2	92	74	78	94	75	86	.16
3	93	75	79	94	77	89	.30
4	94	75	80	94	76	91	.20
5	94	77	80	94	72	88	T
6	85	78	82	92	67	80	0
7	85	77	81	94	66	81	.02
8	83	76	80	91	67	81	0
9	84	75	80	94	64	80	.01
10	83	74	78	94	74	85	.13
11	83	75	79	94	72	85	.02
12	81	73	77	92	78	87	0
13	94	75	80	93	68	85	.05
14	85	77	81	90	68	81	0
15	83	77	80	90	63	75	.01
16	84	75	80	92	64	77	.01
17	85	78	82	88	68	79	.01
18	94	79	82	88	69	79	T
19	84	77	80	90	67	79	.01
20	84	73	78	92	67	80	.17
21	83	75	79	91	68	80	.03
22	82	75	78	86	67	79	0
23	83	71	77	94	68	85	0
24	82	73	78	94	80	87	0
25	82	72	77	94	74	85	0
26	81	73	77	93	81	88	0
27	83	73	78	94	70	84	.04
28	82	74	78	94	64	76	.08
29	81	76	78	93	64	77	.02
30	83	73	78	90	66	79	.04
31	85	76	80	89	68	81	0
Sum	2577	2323		2858	2164		2.03
Mean	83.1	74.9	79.0	92.2	69.8	82.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1955	14.20	1960	29.18
1956	6.71	1961	8.96
1957	7.01	1962	17.85
1958	7.64	1963	3.90
1959	22.14	1964	2.03

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.849
Departure from normal +.009
Highest 29.96 Date 28
Lowest 29.76 Date 7

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.0
Departure from normal - 1.1
Highest 85 Date 7, 14, 17
Lowest 80 Date 1

RAINFALL
(Inches)

Total 2.03
Departure from normal -10.12
Greatest in 24 hours .72
Date 1

WIND

Average hourly velocity 9.8 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 20

SUNSHINE

Average number hours per day 9.1
Percentage of possible 79

NUMBER OF DAYS

Clear 9
Partly Cloudy 14
Cloudy 8
.01 inch of rain or more 19
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 36

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: FEBRUARY 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	74	77	88	73	80	.42
2	82	77	80	84	72	80	.01
3	82	77	80	87	71	78	.02
4	83	76	80	86	71	81	.02
5	83	78	80	84	74	81	0
6	82	77	80	86	77	82	.01
7	82	77	80	86	70	82	0
8	82	78	80	88	79	84	0
9	82	75	78	92	75	83	.02
10	82	77	80	91	72	81	.04
11	81	75	78	87	70	78	.15
12	82	78	80	85	74	80	0
13	81	78	80	86	77	82	T
14	81	76	78	86	76	82	0
15	81	78	80	85	74	79	0
16	82	78	80	83	75	79	.01
17	82	79	80	85	75	81	0
18	81	78	80	86	74	83	0
19	83	77	80	87	70	84	0
20	83	76	80	86	76	83	0
21	82	76	79	90	74	80	T
22	80	75	78	90	80	84	.64
23	82	78	80	85	78	83	0
24	82	78	80	86	78	83	0
25	82	78	80	85	78	82	0
26	82	76	79	88	73	79	.08
27	81	77	79	82	59	72	0
28	81	77	79	82	72	78	0
29	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---
Sum	2289	2154		2416	2067		1.42
Mean	81.8	76.9	79.4	86.3	73.8	80.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1956	1.42	1961	.22
1957	.39	1962	.59
1958	3.35	1963	6.39
1959	.04	1964	.65
1960	.61	1965	1.42

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.826
Departure from normal - .055
Highest 29.97 Date 26
Lowest 29.72 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 0.9
Highest 83.4 Date 19
Lowest 73.8 Date 1

RAINFALL
(Inches)

Total 1.42
Departure from normal - .09
Greatest in 24 hours .64
Date 22

WIND

Average hourly velocity 14.3 mph.
Prevailing direction NE
Maximum for five minutes 26
mph. from the NE on the 26 & 27

SUNSHINE

Average number hours per day 9.3
Percentage of possible 79

NUMBER OF DAYS

Clear 7
Partly Cloudy 17
Cloudy 4
.01 inch of rain or more 11
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 22

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: APRIL 1965

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	81	78	80	84	74	79	T
2	82	78	80	86	78	82	.01
3	82	77	80	85	73	80	.05
4	80	77	78	83	71	76	0
5	81	77	79	86	72	78	.02
6	82	78	80	84	70	75	0
7	82	78	80	86	68	76	0
8	83	77	80	94	68	76	T
9	82	78	80	88	70	78	0
10	82	74	78	99	71	83	.43
11	81	78	80	84	72	78	0
12	81	76	78	90	69	79	.03
13	81	78	80	87	63	74	0
14	81	77	79	90	63	73	.05
15	81	78	80	83	60	79	0
16	82	73	78	93	60	81	0
17	82	73	78	93	70	80	0
18	81	78	80	84	65	76	0
19	82	78	80	88	66	76	0
20	82	78	80	98	76	86	.09
21	83	76	80	98	77	86	1.48
22	83	80	82	90	72	82	0
23	83	80	82	89	75	82	T
24	83	79	81	90	65	76	0
25	83	72	78	94	65	76	.06
26	82	77	80	88	68	79	0
27	83	79	81	88	74	81	T
28	83	79	81	88	70	79	0
29	84	80	82	84	67	76	0
30	82	79	80	92	69	81	T
31	---	---	---	---	---	---	---
Sum	2460	2320		2666	2081		2.22
Mean	82.0	77.3	79.6	88.9	69.4	78.2	

TOTAL RAINFALL FOR THIS MONTH IN:

19 56	2.39	19 61	2.27
19 57	.08	19 62	2.23
19 58	5.10	19 63	2.28
19 59	3.96	19 64	3.39
19 60	10.38	19 65	2.22

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.388
Departure from normal +.033
Highest 29.97 Date 18
Lowest 29.80 Date 23

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 1.8
Highest 84 Date 29
Lowest 72 Date 25

RAINFALL
(Inches)

Total 2.22
Departure from normal -1.79
Greatest in 24 hours 1.57
Date 20 & 21

WIND

Average hourly velocity 13.1 mph.
Prevailing direction N
Maximum for five minutes 23
mph. from the N on the 9

SUNSHINE

Average number hours per day 10.2
Percentage of possible 82

NUMBER OF DAYS

Clear 8
Partly Cloudy 16
Cloudy 6
.01 inch of rain or more 9
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 17

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MAY 1965

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	83	76	80	96	73	82	.12
2	84	78	81	89	70	82	0
3	84	77	80	92	77	85	.06
4	83	80	82	91	81	85	.14
5	84	80	82	92	82	86	.05
6	83	79	81	92	82	88	0
7	83	77	80	96	72	83	.17
8	83	74	78	90	79	86	2.90
9	81	74	78	92	83	90	.51
10	83	76	80	93	78	88	.45
11	82	73	78	96	85	90	3.08
12	83	79	81	92	75	87	.02
13	82	74	78	97	76	91	.33
14	83	75	79	98	75	86	0
15	83	78	80	100	69	92	T
16	84	75	80	100	75	88	1.14
17	83	79	81	94	76	87	.06
18	85	79	82	96	72	85	.11
19	85	79	82	94	75	88	0
20	84	80	82	94	70	84	0
21	84	80	82	95	75	90	.02
22	85	78	82	96	78	92	.80
23	80	76	78	96	88	93	.29
24	84	76	80	92	70	87	.01
25	84	78	81	90	79	85	0
26	85	78	82	90	70	83	T
27	91	77	84	91	52	79	T
28	86	73	80	93	74	87	1.29
29	88	74	81	91	61	86	.54
30	85	76	82	97	76	88	.01
31	84	75	80	98	76	90	0
Sum	2601	2383		2913	2324		12.10
Mean	83.9	76.9	80.4	93.9	75.0	86.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1956	18.27	1961	9.44
1957	6.16	1962	23.05
1958	6.57	1963	13.22
1959	13.88	1964	9.39
1960	24.18	1965	12.10

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.823
Departure from normal - .012
Highest 29.92 Date 13
Lowest 29.70 Date 25

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal - 0.8
Highest 91 Date 27
Lowest 73 Date 11

RAINFALL
(Inches)

Total 12.10
Departure from normal - 0.35
Greatest in 24 hours 3.53
Date 10 & 11

WIND

Average hourly velocity 8.9 mph.
Prevailing direction N
Maximum for five minutes 32
mph. from the NE on the 16

SUNSHINE

Average number hours per day 7.4
Percentage of possible 59

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 25
.01 inch of rain or more 21
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 75

4066.
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JUNE 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	98	87	92	.06
2	85	82	84	92	76	86	T
3	83	80	82	94	82	89	.02
4	85	78	82	94	84	91	.64
5	86	80	83	94	78	87	T
6	83	76	80	92	72	87	.08
7	81	76	78	93	89	92	1.16
8	84	77	80	92	64	82	T
9	81	76	78	90	74	85	0
10	84	76	80	90	70	81	T
11	83	76	80	96	84	89	.39
12	86	78	82	91	60	81	0
13	83	76	80	90	75	86	0
14	83	77	80	91	76	83	T
15	84	81	82	93	76	85	.01
16	84	78	81	93	80	89	.08
17	83	76	80	94	80	90	.04
18	81	71	76	98	87	92	2.89
19	84	77	80	94	79	87	.02
20	84	73	78	94	77	89	.03
21	83	74	78	93	77	87	.45
22	83	77	80	95	79	89	.31
23	84	78	81	95	80	90	T
24	81	73	77	99	79	94	.70
25	81	78	80	97	88	94	.42
26	83	76	80	96	79	89	.21
27	83	77	80	96	77	87	.11
28	82	76	79	92	80	88	.03
29	82	74	78	95	76	87	1.40
30	84	78	81	92	68	87	.12
31	---	---	---	---	---	---	---
Sum	2497	2304		2813	2333		9.17
Mean	83.2	76.8	80.0	93.8	77.8	87.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1956	9.74	1961	10.13
1957	11.87	1962	6.62
1958	7.85	1963	13.61
1959	9.28	1964	12.58
1960	12.65	1965	9.17

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.832
Departure from normal -.004
Highest 29.93 Date 28
Lowest 29.74 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.8
Highest 86 Date 5
Lowest 71 Date 18

RAINFALL
(Inches)

Total 9.17
Departure from normal -4.03
Greatest in 24 hours 2.93
Date 17 - 18

WIND

Average hourly velocity 6.6 mph.
Prevailing direction N
Maximum for five minutes 27
mph. from the NW on the 24

SUNSHINE

Average number hours per day 5.5
Percentage of possible 43

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 24
.01 inch of rain or more 21
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 74

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: JULY 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	73	78	97	81	91	4.03
2	82	76	79	100	94	97	2.45
3	83	74	78	100	70	93	.15
4	82	77	80	97	71	86	.10
5	84	80	82	89	77	84	0
6	85	79	82	88	73	83	0
7	84	78	81	88	72	80	0
8	85	80	82	94	80	86	0
9	85	80	82	94	76	86	0
10	85	81	83	91	76	83	0
11	85	81	83	88	78	84	0
12	85	81	83	89	79	86	0
13	85	81	83	91	77	85	.12
14	85	81	83	89	78	83	0
15	85	81	83	90	80	87	.01
16	85	80	82	89	80	85	T
17	85	80	82	90	80	86	0
18	85	79	82	90	75	85	0
19	84	79	82	90	76	85	T
20	85	80	82	88	80	86	0
21	85	81	83	88	77	83	0
22	85	81	83	84	74	81	0
23	83	70	76	91	82	86	1.50
24	84	77	80	92	82	89	.10
25	83	80	82	92	90	91	T
26	83	78	80	93	88	90	.03
27	85	80	82	92	78	86	T
28	84	74	79	92	77	85	.02
29	81	74	78	96	92	93	.64
30	83	76	80	97	86	92	.39
31	83	76	80	95	76	91	.25
Sum	2606	2428		2844	2455		9.79
Mean	84.1	78.3	81.2	91.7	79.2	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

19 56	24.77	19 61	9.98
19 57	11.09	19 62	24.34
19 58	19.03	19 63	8.94
19 59	15.41	19 64	18.68
19 60	10.92	19 65	9.79

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.817
Departure from normal - 0.026
Highest 29.94 Date 31st
Lowest 29.71 Date 19th

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2
Departure from normal + 0.6
Highest 85.4 Date 18th & 22d
Lowest 70.3 Date 23d

RAINFALL
(Inches)

Total 9.79
Departure from normal -5.70
Greatest in 24 hours 5.25
Date 1st & 2d

WIND

Average hourly velocity 9.3 mph.
Prevailing direction N
Maximum for five minutes 29
mph. from the S on the 23d

SUNSHINE

Average number hours per day 6.7
Percentage of possible 53

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 24
.01 inch of rain or more 13
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 49

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: AUGUST 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	75	79	96	78	88	.70
2	84	75	80	93	76	88	0
3	84	74	79	96	88	93	.17
4	82	77	80	96	77	88	.77
5	83	76	80	88	78	83	.17
6	80	73	76	98	74	84	1.52
7	83	78	80	96	75	87	.34
8	82	76	79	96	79	91	.26
9	82	76	79	96	73	84	0
10	84	74	79	97	74	86	.89
11	82	77	80	95	81	86	.45
12	82	76	79	100	76	88	1.05
13	85	76	80	93	68	86	.11
14	81	75	78	96	83	90	.04
15	82	74	78	100	75	89	3.91
16	84	80	82	90	73	83	.06
17	81	77	79	95	84	92	.33
18	83	72	78	96	74	89	2.81
19	83	76	80	94	63	89	.39
20	83	76	80	94	70	83	.05
21	84	76	80	96	76	90	.85
22	82	78	80	100	88	94	.39
23	82	78	80	100	76	87	1.53
24	83	76	80	91	74	85	.14
25	83	76	80	91	76	84	.02
26	83	72	78	92	71	87	.36
27	84	76	80	94	80	86	.04
28	82	76	79	94	70	84	.07
29	81	76	78	98	86	92	.34
30	83	74	78	100	74	91	1.67
31	82	77	80	93	81	89	.88
Sum	2562	2368		2956	2307		20.31
Mean	82.6	75.7	79.2	95.4	76.4	87.6	

TOTAL RAINFALL FOR THIS MONTH IN:

19 56	14.86	19 61	10.34
19 57	21.19	19 62	18.01
19 58	12.76	19 63	13.70
19 59	11.18	19 64	18.80
19 60	10.91	19 65	20.31

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.829
Departure from normal -.013
Highest 29.94 Date 6
Lowest 29.70 Date 24

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal - 1.2
Highest 85 Date 13
Lowest 72 Date 18

RAINFALL
(Inches)

Total 20.31
Departure from normal + 4.97
Greatest in 24 hours 3.93
Date 14 & 15

WIND

Average hourly velocity 6.5 mph.
Prevailing direction W
Maximum for five minutes 23
mph. from the W on the 6

SUNSHINE

Average number hours per day 5.1
Percentage of possible 41

NUMBER OF DAYS

Clear 0
Partly Cloudy 1
Cloudy 30
.01 inch of rain or more 29
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 120

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: NOVEMBER 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	81	77	79	96	72	83	.11
2	82	75	78	100	70	87	.18
3	81	73	77	100	76	89	3.53
4	81	76	78	100	72	87	.92
5	83	76	80	100	74	87	1.28
6	79	75	77	100	75	90	.31
7	84	75	80	100	68	89	.36
8	81	75	78	100	72	91	.44
9	79	72	76	100	80	94	1.50
10	83	75	79	100	74	88	.12
11	81	75	78	100	79	91	1.75
12	84	78	81	100	71	87	.08
13	87	80	84	97	64	82	.03
14	86	79	82	100	62	78	.94
15	86	76	81	95	59	77	.26
16	84	75	80	95	60	81	.39
17	83	75	79	100	73	91	.88
18	80	74	77	100	78	94	3.04
19	85	76	80	100	74	90	.36
20	80	73	76	100	78	91	1.09
21	83	76	80	97	64	84	.17
22	84	75	80	97	67	88	.23
23	80	75	78	100	72	92	.51
24	79	74	76	100	73	91	1.40
25	85	74	80	96	58	82	.02
26	82	75	78	98	69	86	.99
27	80	74	78	96	78	87	.71
28	82	76	79	97	67	86	1.61
29	82	75	78	96	70	83	2.98
30	83	76	80	100	76	90	.79
31	---	---	---	---	---	---	---
Sum	2470	2262		2968	2122		25.76
Mean	82.3	75.4	78.8	98.7	70.7	87.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1956	20.72	1961	21.96
1957	27.96	1962	25.35
1958	14.57	1963	22.72
1959	15.94	1964	14.36
1960	32.09	1965	25.76

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.817
Departure from normal - 0.013
Highest 29.93 Date 23
Lowest 29.70 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal - 0.7
Highest 87 Date 13
Lowest 72 Date 9

RAINFALL
(Inches)

Total 25.73
Departure from normal + 3.23
Greatest in 24 hours 3.75
Date 28 & 29

WIND

Average hourly velocity 8.0 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 14

SUNSHINE

Average number hours per day 3.2
Percentage of possible 27

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 28
.01 inch of rain or more 30
Thunderstorms 4
Light fog 0
Dense fog 0

Number of hours with rain 209

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** DECEMBER 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	75	78	98	88	94	.91
2	83	78	80	98	77	88	.48
3	83	77	80	96	76	90	.06
4	81	76	78	97	80	92	.28
5	79	73	76	96	75	91	.83
6	79	72	76	96	78	90	1.45
7	81	73	77	96	75	87	.09
8	83	75	79	95	73	85	.04
9	84	79	82	92	69	82	0
10	83	77	80	96	65	88	.47
11	82	76	79	95	71	87	.09
12	82	74	78	95	73	87	1.30
13	84	77	80	95	66	83	.12
14	84	76	80	92	66	80	0
15	84	77	80	92	66	81	.12
16	85	79	82	92	74	85	0
17	85	77	81	96	72	85	.07
18	86	79	82	100	73	90	0
19	84	78	81	100	65	82	0
20	83	76	80	97	74	86	.02
21	83	74	78	100	60	76	.88
22	84	80	82	96	70	84	0
23	84	79	82	100	67	83	.04
24	85	79	82	91	64	77	T
25	83	74	78	98	60	74	.23
26	83	76	80	96	60	76	.04
27	84	77	80	86	56	70	.03
28	83	80	82	78	58	68	0
29	83	79	81	91	71	80	.03
30	84	79	82	94	66	80	.01
31	85	79	82	92	68	80	.03
Sum	2576	2380		2936	2159		7.62
Mean	83.1	76.8	80.0	94.7	69.5	83.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1956	6.71	1961	8.96
1957	7.01	1962	17.85
1958	7.69	1963	3.50
1959	22.14	1964	2.03
1960	29.18	1965	7.62

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.808
Departure from normal -.031
Highest 29.92 Date 21
Lowest 29.69 Date 19

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.1
Highest 86 Date 18
Lowest 72 Date 6

RAINFALL
(Inches)

Total 7.62
Departure from normal -4.49
Greatest in 24 hours 1.52
Date 5 & 6

WIND

Average hourly velocity 10.9 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the N on the 21

SUNSHINE

Average number hours per day 7.4
Percentage of possible 63

NUMBER OF DAYS

Clear 4
Partly Cloudy 12
Cloudy 15
.01 inch of rain or more 23
Thunderstorms 2
Light fog 0
Dense fog 0

Number of hours with rain 80

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JANUARY 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	80	82	98	74	82	0
2	83	77	80	93	70	88	.01
3	81	77	79	94	70	88	.09
4	83	79	81	93	79	89	.05
5	84	80	82	92	79	89	0
6	84	80	82	92	79	87	0
7	84	80	82	88	68	80	0
8	84	79	82	91	68	80	T
9	85	80	82	87	64	77	0
10	85	80	82	94	65	83	0
11	84	78	81	97	68	83	.14
12	83	78	80	94	66	86	.22
13	83	76	80	97	68	80	.04
14	83	79	81	90	67	79	.01
15	83	76	80	95	64	78	0
16	82	79	80	90	69	79	.01
17	82	78	80	96	72	83	.11
18	83	79	81	88	67	80	0
19	83	78	80	94	72	82	.07
20	84	80	82	91	76	84	.01
21	84	80	82	90	70	83	T
22	83	80	82	91	80	86	0
23	83	80	82	91	77	82	T
24	83	80	82	85	69	78	0
25	83	80	82	86	72	81	0
26	84	80	82	87	75	82	0
27	83	80	82	96	65	73	.01
28	84	77	80	90	64	74	.08
29	84	80	82	93	73	85	0
30	83	77	80	93	71	84	.24
31	84	78	81	92	70	81	.02
Sum	2585	2445		2838	2191		1.11
Mean	83.4	78.9	81.2	91.5	70.7	82.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	1.06	1962	2.29
1958	6.69	1963	7.05
1959	3.13	1964	.24
1960	2.70	1965	4.82
1961	.68	1966	1.11

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.802
Departure from normal - .066
Highest 29.98 Date 27
Lowest 29.68 Date 22

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2
Departure from normal + 0.9
Highest 85.0 Date 9 & 10
Lowest 75.6 Date 13

RAINFALL
(Inches)

Total 1.11
Departure from normal - 2.20
Greatest in 24 hours .24
Date 30

WIND

Average hourly velocity 12.4 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the NE on the 31

SUNSHINE

Average number hours per day 9.0
Percentage of possible 77

NUMBER OF DAYS

Clear 0
Partly Cloudy 22
Cloudy 9
.01 inch of rain or more 15
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 32

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: FEBRUARY 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	80	82	92	83	88	.02
2	84	80	82	92	70	83	0
3	82	75	78	90	70	82	.10
4	83	75	79	86	60	74	0
5	83	73	78	86	58	72	.27
6	83	78	80	86	66	74	0
7	84	79	82	92	70	83	.16
8	85	81	83	88	70	85	0
9	85	79	82	89	69	84	0
10	85	79	82	89	80	86	0
11	85	77	81	88	60	81	0
12	83	77	80	95	64	80	T
13	83	79	81	85	60	73	T
14	83	77	80	87	60	72	0
15	83	80	82	87	69	80	0
16	83	80	82	89	72	81	0
17	84	79	82	89	68	79	0
18	83	78	80	86	69	78	0
19	84	78	81	88	74	81	0
20	84	80	82	90	71	81	0
21	83	80	82	87	74	81	0
22	84	79	82	88	72	83	0
23	84	80	82	88	73	83	0
24	84	80	82	86	75	83	0
25	84	79	82	88	73	82	0
26	84	78	81	90	70	81	.02
27	83	79	81	86	73	81	0
28	83	78	80	86	62	74	T
29	---	---	---	---	---	---	---
30							
31							
Sum	2342	2197		2673	1935		.57
Mean	83.6	78.5	81.1	88.3	69.1	80.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	.39	1962	.59
1958	3.35	1963	6.39
1959	.04	1964	.65
1960	.61	1965	1.42
1961	.22	1966	.57

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.835
Departure from normal -.045
Highest 29.99 Date 5
Lowest 29.71 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.1
Departure from normal + 0.8
Highest 85.2 Date 8
Lowest 73.2 Date 5

RAINFALL
(Inches)

Total .57
Departure from normal -.98
Greatest in 24 hours .27
Date 5

WIND

Average hourly velocity 14.2 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the N on the 5

SUNSHINE

Average number hours per day 10.7
Percentage of possible 90

NUMBER OF DAYS

Clear 7
Partly Cloudy 20
Cloudy 1
.01 inch of rain or more 5
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 11

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MARCH 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	80	82	79	66	74	0
2	84	79	82	87	66	76	T
3	84	78	81	79	62	74	0
4	82	78	80	80	66	74	0
5	83	78	80	85	66	75	0
6	81	72	76	94	68	85	2.13
7	83	76	80	87	60	73	.04
8	83	79	81	87	64	73	0
9	82	78	80	90	62	73	0
10	83	77	80	89	59	71	T
11	82	78	80	87	66	74	.01
12	82	78	80	86	66	74	0
13	82	78	80	86	69	76	0
14	82	78	80	88	72	80	0
15	82	78	80	92	78	86	0
16	83	80	82	92	69	82	0
17	83	78	80	95	68	80	T
18	83	80	82	86	70	78	0
19	83	78	80	93	68	78	0
20	82	78	80	94	74	80	0
21	83	78	80	84	64	74	0
22	83	78	80	85	64	75	0
23	83	78	80	92	71	81	.04
24	83	78	80	88	68	79	0
25	84	76	80	88	71	79	.26
26	83	77	80	89	74	82	0
27	82	77	80	92	80	85	.01
28	83	80	82	88	76	84	0
29	83	79	81	88	72	82	0
30	83	78	80	89	76	85	.08
31	82	79	80	91	80	85	.06
Sum	2564	2417		2730	2135		2.63
Mean	82.7	78.0	80.4	88.1	68.9	78.3	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	.47	1962	.72
1958	5.61	1963	.38
1959	.40	1964	.55
1960	4.73	1965	.08
1961	.75	1966	2.63

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.842
Departure from normal - .030
Highest 29.97 Date 6
Lowest 29.70 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3
Departure from normal - 0.5
Highest 84 Date 3
Lowest 72 Date 6

RAINFALL
(Inches)

Total 2.63
Departure from normal + 1.15
Greatest in 24 hours 2.13
Date 6

WIND

Average hourly velocity 14.4 mph
Prevailing direction N
Maximum for five minutes 25
mph from the NE on the 3

SUNSHINE

Average number hours per day 9.9
Percentage of possible 82

NUMBER OF DAYS

Clear 3
Partly Cloudy 18
Cloudy 10
.01 inch of rain or more 8
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 30

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. Month: June 1965

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	87	78	82	96	58	84	.35
2	85	77	81	92	63	82	.0
3	87	76	82	91	52	78	.0
4	88	78	83	90	58	76	.0
5	89	78	84	96	55	82	.14
6	90	77	84	98	57	80	.08
7	86	77	82	98	60	83	.01
8	85	76	80	98	63	85	T
9	84	74	79	100	78	88	.02
10	85	77	81	95	68	87	.03
11	85	77	81	95	67	87	.09
12	83	76	80	100	70	92	.50
13	85	74	80	100	57	78	.0
14	85	78	82	98	66	85	.12
15	86	79	82	97	63	84	.03
16	90	73	76	92	69	83	.51
17	83	75	79	94	66	82	.84
18	85	75	80	100	67	91	.05
19	84	76	80	100	66	88	.29
20	85	76	80	100	57	82	.31
21	88	76	82	89	50	69	.0
22	89	76	82	100	47	79	.0
23	90	76	83	100	46	81	.0
24	87	78	82	100	58	87	.10
25	87	77	82	100	61	90	.16
26	90	76	83	98	47	75	.0
27	85	77	81	100	68	88	.06
28	85	77	81	100	57	85	.0
29	87	76	82	98	58	80	.88
30	86	77	82	98	64	83	.0
31							
Sum	2581	2283		2911	1816		3.38
Mean	86.0	76.1	81.2	97.0	60.5	83.5	

TOTAL RAINFALL FOR THIS MONTH IN:

19	57	11.87	19	62	6.62
19	58	7.85	19	63	13.61
19	59	9.28	19	64	17.58
19	60	12.65	19	65	9.17
19	61	10.13	19	66	3.38

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.933
Departure from normal -.005
Highest 29.96 Date 8
Lowest 29.76 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.2
Departure from normal +.4
Highest 90.1 Date 26
Lowest 73.1 Date 16

RAINFALL
(Inches)

Total 3.38
Departure from normal -3.71
Greatest in 24 hours .58
Date 15 & 16

WIND

Average hourly velocity 6.2 mph.
Prevailing direction SE
Maximum for five minutes 27
mph. from the SW on the 8

SUNSHINE

Average number hours per day 9.1
Percentage of possible 64

NUMBER OF DAYS

Clear 1
Partly Cloudy 10
Cloudy 19
.01 inch of rain or more 19
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 52

4066
Rev. 10-58

Form 607

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C. Z. Month: July 1966

AUG 15 1966 WEATHER BUREAU

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	78	82	100	61	78	1.11
2	84	76	80	100	74	93	.51
3	85	74	80	98	55	78	.25
4	82	77	80	98	69	85	T
5	82	76	79	100	76	90	2.30
6	83	77	80	98	75	92	1.25
7	86	76	81	100	54	86	.09
8	86	76	81	92	67	84	.0
9	86	75	80	96	64	82	.29
10	85	75	80	100	63	92	2.20
11	87	76	82	100	57	84	.12
12	88	76	82	98	53	83	.22
13	83	75	79	95	64	81	.02
14	82	76	79	95	67	85	.14
15	83	77	80	95	73	86	.08
16	86	78	82	99	71	85	.34
17	85	80	82	99	70	83	.0
18	84	79	82	100	80	91	.38
19	82	77	80	98	75	89	.06
20	83	76	80	98	78	90	.31
21	83	77	80	99	70	93	1.20
22	81	76	78	98	62	86	.01
23	85	76	80	98	67	85	.31
24	83	80	82	97	79	87	.03
25	83	79	81	98	78	90	.55
26	85	72	78	98	62	85	.56
27	86	74	80	98	58	88	.21
28	84	77	80	98	65	86	.02
29	85	77	81	96	72	86	.12
30	85	77	81	100	59	86	1.02
31	81	77	79	98	79	89	.14
Sum	2608	2372		3037	2097		13.84
Mean	84.1	76.5	80.3	98.0	67.6	86.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	11.09	1962	24.34
1958	19.03	1963	8.94
1959	15.41	1964	18.68
1960	10.92	1965	9.79
1961	9.98	1966	13.84

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.822
Departure from normal -.021
Highest 29.93 Date 21
Lowest 29.73 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.3
Departure from normal -0.3
Highest 88 Date 12
Lowest 72 Date 26

RAINFALL
(Inches)

Total 13.84
Departure from normal -1.63
Greatest in 24 hours 2.49
Date 9 & 10

WIND

Average hourly velocity 6.7 mph.
Prevailing direction NW
Maximum for five minutes 33
mph. from the N on the 4th

SUNSHINE

Average number hours per day 6.6
Percentage of possible 52

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 24
.01 inch of rain or more 28
Thunderstorms 14
Light fog 0
Dense fog 0

Number of hours with rain 111

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

ATMOSPHERIC SCIENCES LIBRARY
SEP 21 1966
E. S. S. A.
U. S. Dept. of Commerce

Station: CRISTOBAL, C. Z. Month: AUGUST 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	77	80	98	68	85	0
2	84	77	80	100	77	89	.13
3	85	78	82	100	66	89	.50
4	85	77	81	100	68	88	.50
5	85	75	80	100	70	94	2.24
6	83	73	78	100	75	91	.86
7	89	77	83	100	47	83	.36
8	82	73	78	97	74	88	.45
9	82	73	78	97	65	81	T
10	84	76	80	98	64	81	.12
11	85	79	82	91	66	82	T
12	84	78	81	94	63	82	.14
13	84	76	80	91	65	84	.24
14	81	75	78	92	72	85	.31
15	83	76	80	93	62	86	.10
16	82	76	79	93	65	78	.07
17	84	76	80	96	67	84	.22
18	84	75	80	100	68	84	1.28
19	84	77	80	100	66	88	.04
20	85	77	81	100	60	79	0
21	85	76	80	100	66	86	1.43
22	86	73	80	100	64	88	3.68
23	84	74	79	100	72	90	2.58
24	82	74	78	100	68	84	.63
25	86	76	81	100	62	84	1.63
26	83	73	78	100	57	81	1.15
27	81	75	78	100	63	79	.92
28	82	76	79	100	53	78	.16
29	83	76	80	100	60	75	.02
30	83	78	80	100	60	78	.17
31	83	73	78	100	60	79	.33
Sum	2596	2345		3040	2013		20.26
Mean	83.7	75.6	79.6	98.1	64.9	83.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	21.19	1962	18.01
1958	12.76	1963	13.70
1959	11.18	1964	18.80
1960	10.91	1965	20.31
1961	10.34	1966	20.26

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.842
Departure from normal: .000
Highest: 29.95 Date: 26th
Lowest: 29.74 Date: 6th

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 79.6
Departure from normal: -0.8
Highest: 89 Date: 7th
Lowest: 73 Date: 6 & 31st

RAINFALL
(Inches)

Total: 20.26
Departure from normal: +4.86
Greatest in 24 hours: 6.22
Date: 22d & 23d

WIND

Average hourly velocity: 6.3 mph.
Prevailing direction: NW
Maximum for five minutes: 24
mph. from the NW on the 19th

SUNSHINE

Average number hours per day: 5.6
Percentage of possible: 45

NUMBER OF DAYS

Clear: 0
Partly Cloudy: 3
Cloudy: 28
.01 inch of rain or more: 27
Thunderstorms: 16
Light fog: 0
Dense fog: 0

Number of hours with rain: 172.2

4066
Rev. 10-58

ATMOSPHERIC SCIENCES
LIBRARY
NOV 2 1966
E. S. S. A.
U. S. Dept. of Commerce

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** SEPTEMBER 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	75	78	100	64	84	.03
2	84	75	80	100	54	76	0
3	84	79	82	97	60	81	.11
4	83	76	80	100	58	83	.10
5	86	75	80	96	43	75	0
6	83	76	80	100	60	80	T
7	84	76	80	99	53	81	.90
8	83	77	80	100	64	85	.56
9	79	73	76	100	57	82	2.23
10	84	75	80	100	56	88	.05
11	84	74	79	100	55	80	.01
12	84	75	80	99	65	76	.50
13	82	76	79	100	56	83	.84
14	88	75	82	95	39	70	0
15	88	75	82	100	47	82	.08
16	85	73	79	100	64	82	0
17	86	78	82	100	60	83	.14
18	84	78	81	100	61	86	.15
19	84	76	80	96	53	86	.57
20	89	76	82	95	45	70	T
21	87	75	81	98	50	75	0
22	84	74	79	100	66	92	4.54
23	83	75	79	100	76	92	.63
24	88	76	82	100	62	90	.02
25	84	76	80	100	77	92	.92
26	82	78	80	100	71	93	.27
27	83	76	80	100	80	92	.59
28	85	76	80	100	68	94	.09
29	87	77	82	100	62	88	.03
30	86	76	81	98	62	86	0
31	---	---	---	---	---	---	----
Sum	2535	2272		2973	1788		13.36
Mean	84.5	75.7	80.1	99.1	59.6	83.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	11.48	1962	13.14
1958	15.26	1963	11.22
1959	21.34	1964	13.56
1960	8.42	1965	14.12
1961	12.90	1966	13.36

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean: 29.831
Departure from normal: + .002
Highest: 29.92 Date: 25
Lowest: 29.74 Date: 4

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean: 80.1
Departure from normal: - 0.5
Highest: 89 Date: 20
Lowest: 73 Date: 9

RAINFALL
(Inches)

Total: 13.36
Departure from normal: + 0.86
Greatest in 24 hours: 5.17
Date: 22 & 23

WIND

Average hourly velocity: 6.0 mph.
Prevailing direction: S
Maximum for five minutes: 26
mph. from the: SE on the: 24

SUNSHINE

Average number hours per day: 6.3
Percentage of possible: 51

NUMBER OF DAYS

Clear: 2
Partly Cloudy: 8
Cloudy: 20
.01 inch of rain or more: 22
Thunderstorms: 11
Light fog: 0
Dense fog: 0

Number of hours with rain: 93

4066
Rev. 10-58

Panama 607

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
NOV 18 1966
U.S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: OCTOBER 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	87	76	82	94	60	85	.03
2	85	75	80	98	64	88	.04
3	86	75	80	92	60	80	0
4	88	76	82	96	52	80	T
5	86	77	82	96	61	83	.02
6	84	75	80	94	67	82	0
7	87	76	82	97	60	82	0
8	86	75	80	96	63	84	0
9	78	75	76	100	84	93	4.82
10	84	75	80	100	70	87	.38
11	85	75	80	96	60	83	0
12	85	76	80	94	63	83	.02
13	87	75	81	98	60	88	.36
14	88	75	82	99	59	87	.45
15	86	74	80	100	63	86	.12
16	84	73	78	100	67	92	.76
17	84	73	78	100	70	91	.02
18	85	74	80	99	67	91	.09
19	88	74	81	99	52	82	0
20	88	75	82	97	54	82	0
21	84	75	80	97	67	84	.23
22	83	74	78	99	75	87	.08
23	84	75	80	99	68	86	.33
24	84	76	80	100	68	85	.41
25	85	76	80	100	69	85	.50
26	82	76	79	99	75	91	.92
27	87	75	81	100	58	84	.05
28	89	75	82	100	57	84	.48
29	83	75	79	100	80	90	.09
30	80	75	78	100	85	94	2.21
31	81	72	76	100	79	92	2.49
Sum	2633	2323		3039	2037		14.90
Mean	84.9	74.9	79.9	98.0	65.7	86.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	8.39	1962	11.64
1958	26.14	1963	6.34
1959	10.23	1964	11.78
1960	19.31	1965	23.70
1961	15.42	1966	14.90

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.814
Departure from normal - .014
Highest 29.96 Date 20
Lowest 29.70 Date 31

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.9
Departure from normal - 0.4
Highest 89 Date 28
Lowest 72 Date 31

RAINFALL
(Inches)

Total 14.90
Departure from normal - .89
Greatest in 24 hours 4.84
Date 9 & 10

WIND

Average hourly velocity 6.5 mph.
Prevailing direction S
Maximum for five minutes 26
mph. from the SW on the 7

SUNSHINE

Average number hours per day 6.1
Percentage of possible 52

NUMBER OF DAYS

Clear 0
Partly Cloudy 9
Cloudy 22
.01 inch of rain or more 23
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 94

4044
Rev. 10-58

Pan 604

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES
LIBRARY
DEC 12 1966
F&S 66A
U.S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	74	80	100	60	90	.07
2	82	74	78	100	57	84	.02
3	81	74	78	99	69	87	4.82
4	81	73	77	99	81	95	9.15
5	83	74	78	98	78	92	.19
6	80	73	76	99	85	94	2.22
7	83	73	78	98	62	90	2.00
8	82	76	79	98	77	88	.45
9	84	75	80	98	64	88	.68
10	85	74	80	98	67	87	.67
11	83	75	79	97	62	82	.26
12	82	73	78	96	71	86	.55
13	81	73	77	96	64	86	.40
14	83	74	78	96	64	80	1.27
15	82	73	78	94	64	79	.59
16	81	74	78	94	67	80	.39
17	82	74	78	92	66	76	.26
18	82	73	78	93	70	79	.58
19	84	75	80	98	73	86	.67
20	85	79	82	97	70	80	T
21	82	76	79	99	74	82	.42
22	82	74	78	99	72	86	.63
23	81	75	78	99	80	90	1.71
24	79	73	76	94	80	90	3.63
25	80	73	76	96	70	90	1.21
26	84	76	80	94	65	81	.05
27	83	74	78	94	70	82	0
28	85	78	82	92	66	75	.08
29	81	73	77	99	67	89	2.02
30	80	74	77	96	62	75	.09
31	---	---	---	---	---	---	-----
Sum	2469	2229		2902	2077		35.08
Mean	82.3	74.3	78.3	96.7	69.2	84.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	27.95	1962	25.35
1958	14.57	1963	22.72
1959	15.94	1964	14.36
1960	32.04	1965	25.78
1961	21.94	1966	35.08

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.870
Departure from normal + .040
Highest 29.94 Date 13
Lowest 29.74 Date 26

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.3
Departure from normal - 1.2
Highest 86 Date 1
Lowest 73 Date 12

RAINFALL
(Inches)

Total 35.08
Departure from normal + 12.45
Greatest in 24 hours 10.68
Date 3 & 4

WIND

Average hourly velocity 9.4 mph.
Prevailing direction N
Maximum for five minutes 34
mph. from the N on the 3

SUNSHINE

Average number hours per day 4.5
Percentage of possible 38

NUMBER OF DAYS

Clear 0
Partly Cloudy 10
Cloudy 20
.01 inch of rain or more 28
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 183

4066
Rev. 10-58

Pam Gop

ATMOSPHERIC SCIENCES
LIBRARY
JAN 26 1967
E. S. S. A.
U. S. Dept. of Commerce

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** DECEMBER 1966

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	72	76	100	78	95	3.11
2	84	73	78	99	73	95	.77
3	80	74	77	99	86	96	1.08
4	84	73	78	99	70	88	1.02
5	82	77	80	97	77	90	.22
6	81	74	78	100	80	94	1.55
7	81	75	78	100	79	93	.38
8	79	73	76	100	79	94	.83
9	84	73	78	99	66	89	0
10	83	73	78	99	66	92	.01
11	80	73	76	98	77	93	1.57
12	83	73	78	97	70	85	.14
13	83	77	80	89	64	76	.12
14	82	76	79	92	62	75	.02
15	83	78	80	90	68	78	T
16	84	78	81	95	62	78	T
17	82	77	80	92	68	79	.01
18	80	75	78	97	74	83	.02
19	79	74	76	94	72	87	.23
20	81	74	78	96	68	87	.72
21	80	73	76	95	64	81	.05
22	80	74	77	92	74	85	.11
23	82	75	78	94	74	85	
24	81	76	78	94	72	81	.16
25	81	72	76	97	81	88	1.70
26	83	77	80	92	76	85	T
27	84	78	81	92	68	84	.01
28	82	76	79	92	70	82	.05
29	83	76	80	88	74	83	0
30	84	78	81	90	69	82	0
31	83	77	80	90	78	84	.02
Sum	2538	2324		2948	2239		13.90
Mean	81.9	75.0	78.4	95.1	72.2	86.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1957	7.01	1962	17.85
1958	7.64	1963	3.50
1959	22.14	1964	2.03
1960	29.18	1965	7.62
1961	8.96	1966	13.90

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.825
Departure from normal .000
Highest 29.92 Date 14
Lowest 29.74 Date 2

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.4
Departure from normal - 1.7
Highest 84 Date 4
Lowest 72 Date 25

RAINFALL
(Inches)

Total 13.90
Departure from normal + 1.77
Greatest in 24 hours 3.36
Date 1 & 2

WIND

Average hourly velocity 9.9 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the N on the 20

SUNSHINE

Average number hours per day 5.9
Percentage of possible 51

NUMBER OF DAYS

Clear 2
Partly Cloudy 11
Cloudy 18
.01 inch of rain or more 24
Thunderstorms 1
Light fog 0
Dense fog 0

Number of hours with rain 110

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU

METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JANUARY 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	79	81	88	80	85	T
2	82	79	80	88	80	84	0
3	83	78	80	88	77	83	0
4	82	78	80	87	74	81	0
5	83	77	80	90	70	81	.07
6	85	79	82	85	60	76	0
7	84	78	81	83	70	80	T
8	82	78	80	87	74	81	T
9	82	79	80	84	72	80	T
10	83	79	81	85	74	80	T
11	83	79	81	86	70	78	.01
12	84	80	82	88	69	79	0
13	83	78	80	89	65	76	0
14	83	77	80	86	66	78	T
15	82	78	80	90	74	82	0
16	83	78	80	93	70	81	T
17	82	78	80	87	66	76	0
18	83	78	80	90	69	78	0
19	84	77	80	87	71	80	.01
20	84	78	81	85	71	80	0
21	84	78	81	85	66	78	.01
22	83	77	80	83	68	77	.01
23	83	76	80	82	71	76	.04
24	83	78	80	81	70	75	0
25	83	78	80	84	70	80	0
26	83	77	80	89	74	82	.06
27	83	76	80	90	74	84	.24
28	82	78	80	95	85	89	.07
29	81	76	78	95	81	87	.38
30	83	79	81	94	73	85	.01
31	82	77	80	94	68	80	.02
Sum	2570	2415		2718	2222		.93
Mean	82.9	77.9	80.4	87.7	71.7	80.5	

ATMOSPHERIC SCIENCES LIBRARY FEB 15 1967 U.S. Dept. of Commerce

TOTAL RAINFALL FOR THIS MONTH IN:

1958	6.69	1963	7.05
1959	3.13	1964	.74
1960	2.70	1965	4.82
1961	.68	1966	1.11
1962	2.29	1967	.93

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.842
Departure from normal -0.025
Highest 29.96 Date 18
Lowest 29.74 Date 27

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal +0.1
Highest 85 Date 6
Lowest 76 Date 29

RAINFALL
(Inches)

Total .93
Departure from normal -2.35
Greatest in 24 hours .45
Date 28 & 29

WIND

Average hourly velocity 14.0 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 16

SUNSHINE

Average number hours per day 9.5
Percentage of possible 81

NUMBER OF DAYS

Clear 7
Partly Cloudy 20
Cloudy 4
.01 inch of rain or more 12
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 29

4066
Rev. 10-58

Pam box

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
MAR 16 1967
E. S. S. A.
U. S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** FEBRUARY 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	78	80	88	68	79	
2	83	78	80	91	72	80	
3	83	77	80	86	72	82	
4	83	78	80	88	68	79	T
5	82	76	79	90	72	79	.15
6	82	78	80	82	68	75	T
7	82	77	80	83	77	80	
8	82	78	80	82	66	75	
9	82	76	79	92	66	74	.09
10	82	77	80	90	66	77	.04
11	82	74	78	90	65	75	
12	81	75	78	87	65	75	
13	82	77	80	84	68	77	
14	82	78	80	84	68	75	
15	82	75	78	92	68	77	.02
16	81	76	78	86	68	76	
17	83	77	80	87	70	78	T
18	83	77	80	87	72	78	
19	82	77	80	90	76	83	.11
20	82	79	80	90	76	85	T
21	82	78	80	90	73	83	.01
22	83	76	80	89	72	83	
23	81	77	79	88	74	82	
24	83	77	80	94	68	78	
25	82	78	80	83	70	78	
26	82	78	80	82	66	74	T
27	82	76	79	83	60	75	
28	82	76	79	86	70	78	T
29	--	--	--	--	--	--	--
30							
31							
Sum	2301	2154		2444	1944		.42
Mean	82.2	76.9	79.6	87.3	69.4	78.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	3.35	1963	6.39
1959	.04	1964	.65
1960	.61	1965	1.42
1961	.22	1966	.57
1962	.59	1967	.42

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.878
Departure from normal - .002
Highest 30.03 Date 14
Lowest 29.79 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 0.7
Highest 83 Date 24
Lowest 74 Date 11

RAINFALL
(Inches)

Total .42
Departure from normal - 1.12
Greatest in 24 hours .15
Date 5

WIND

Average hourly velocity 14.5 mph.
Prevailing direction N
Maximum for five minutes 25
mph. from the N on the 15

SUNSHINE

Average number hours per day 10.1
Percentage of possible 85

NUMBER OF DAYS

Clear 6
Partly Cloudy 19
Cloudy 3
.01 inch of rain or more 6
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 10

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
AUG 29 1967
E. S. S. A.
U. S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MARCH 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	77	80	83	66	78	0
2	82	78	80	85	74	80	T
3	83	78	80	85	70	77	.01
4	82	75	78	88	73	79	.04
5	82	79	80	85	74	80	0
6	82	78	80	84	77	81	0
7	83	76	80	84	74	80	0
8	83	80	82	83	71	78	0
9	83	79	81	87	70	79	T
10	83	80	82	82	67	77	0
11	83	78	80	83	63	74	T
12	83	78	80	83	68	75	0
13	82	76	79	83	68	75	.04
14	82	76	79	85	64	74	.02
15	80	75	78	86	71	78	.13
16	80	76	78	83	60	74	T
17	80	77	78	81	66	74	T
18	80	76	78	82	65	76	.09
19	80	76	78	84	68	76	.09
20	81	77	79	81	67	76	.01
21	82	76	79	83	62	73	.02
22	81	75	78	84	66	76	.01
23	83	78	80	80	68	75	0
24	81	76	78	84	68	75	.06
25	83	77	80	79	67	73	0
26	81	77	79	78	71	75	0
27	82	78	80	80	72	76	0
28	83	78	80	80	58	73	0
29	82	75	78	83	66	75	0
30	82	75	78	87	64	78	0
31	82	78	80	84	68	76	T
Sum	2539	2388		2579	2106		.52
Mean	81.9	77.0	79.4	83.2	67.9	76.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	5.61	1963	.38
1959	.40	1964	.55
1960	4.73	1965	.08
1961	.75	1966	2.63
1962	.72	1967	.52

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.889
Departure from normal + 0.016
Highest 30.06 Date 19
Lowest 29.76 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 1.4
Highest 83 Date 8 & 11
Lowest 75 Date 15 & 30

RAINFALL
(Inches)

Total .52
Departure from normal - .95
Greatest in 24 hours .13
Date 15

WIND

Average hourly velocity 14.6 mph.
Prevailing direction N
Maximum for five minutes 27
mph. from the N on the 24

SUNSHINE

Average number hours per day 9.5
Percentage of possible 79

NUMBER OF DAYS

Clear 3
Partly Cloudy 22
Cloudy 6
.01 inch of rain or more 11
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 17

Panama 606

6066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** APRIL 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	77	80	86	70	79	.38
2	83	77	80	88	74	79	.60
3	82	79	80	85	77	82	.19
4	83	80	82	86	76	81	.0
5	84	78	81	86	72	81	.01
6	84	78	81	84	58	82	.04
7	84	78	81	91	66	80	.0
8	85	78	82	94	64	82	T
9	84	78	81	90	71	82	.01
10	83	79	81	91	68	81	.02
11	84	78	81	88	73	82	.0
12	83	79	81	88	73	85	.0
13	84	79	82	91	80	86	.0
14	83	79	81	89	73	84	.0
15	85	77	81	92	72	86	T
16	84	78	81	94	67	83	.01
17	84	78	81	90	72	85	T
18	82	77	80	90	69	84	.0
19	82	78	80	90	66	81	.0
20	83	74	78	88	68	83	.0
21	85	76	80	90	58	82	.0
22	84	75	80	92	68	83	.0
23	84	74	79	92	67	83	.0
24	85	79	81	90	64	81	.0
25	83	79	81	92	70	80	.0
26	83	78	80	92	66	80	.11
27	82	76	79	88	77	83	.50
28	80	75	78	93	82	88	.82
29	83	77	80	92	70	81	.09
30	82	75	78	88	70	80	.16
31							
Sum	2499	2323	---	2690	2101	---	2.94
Mean	83.3	77.4	80.4	89.7	70.0	81.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	5.10	1963	2.28
1959	3.96	1964	3.39
1960	10.38	1965	2.22
1961	2.27	1966	6.48
1962	2.23	1967	2.94

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.863
Departure from normal + .008
Highest 29.98 Date 21
Lowest 29.74 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal - 1.0
Highest 85 Date 8
Lowest 74 Date 20

RAINFALL
(Inches)

Total 2.94
Departure from normal - 1.09
Greatest in 24 hours .62
Date 2d and 3d

WIND

Average hourly velocity 12.9 mph.
Prevailing direction NE
Maximum for five minutes 43
mph. from the NE on the 28

SUNSHINE

Average number hours per day 6.7
Percentage of possible 5.5

NUMBER OF DAYS

Clear 1
Partly Cloudy 15
Cloudy 14
.01 inch of rain or more 13
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 44

Panama Log

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
AUG 29 1967
E. S. S. A.
U. S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: MAY 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	75	78	90	72	82	.04
2	83	78	80	86	73	82	0
3	84	78	81	88	73	83	0
4	84	80	82	86	72	79	0
5	84	77	80	94	66	79	.04
6	84	78	81	94	72	85	.01
7	84	79	82	94	79	88	.02
8	84	77	80	93	78	87	0
9	86	79	82	92	65	86	.01
10	85	79	82	91	74	86	T
11	81	75	78	96	80	85	.62
12	83	76	80	96	81	89	3.09
13	82	75	78	96	80	91	.14
14	83	79	81	94	76	88	0
15	83	79	81	96	83	91	0
16	83	77	80	99	80	94	.04
17	82	77	80	98	84	91	.45
18	85	79	82	94	71	84	T
19	83	77	80	94	72	82	.11
20	84	78	81	90	67	78	0
21	83	75	79	98	74	88	1.97
22	84	78	81	94	79	90	.85
23	85	79	82	93	80	88	T
24	85	80	82	93	68	84	.01
25	84	80	82	90	75	84	0
26	85	78	82	93	76	84	.01
27	84	80	82	90	78	86	.01
28	83	80	82	90	83	87	T
29	84	80	82	89	77	85	.02
30	83	76	80	89	73	85	.30
31	84	76	80	90	78	88	0
Sum	2593	2414		2870	2339		7.74
Mean	83.6	77.9	80.8	92.6	75.5	85.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	6.57	1963	13.22
1959	13.88	1964	9.39
1960	24.18	1965	12.10
1961	9.44	1966	15.44
1962	23.05	1967	7.74

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.848
Departure from normal +0.013
Highest 29.96 Date 17
Lowest 29.74 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal - 0.4
Highest 86 Date 9
Lowest 75 Date 21

RAINFALL
(Inches)

Total 7.74
Departure from normal - 4.70
Greatest in 24 hours 3.23
Date 12 & 13

WIND

Average hourly velocity 11.6 mph.
Prevailing direction NE
Maximum for five minutes 27
mph. from the NE on the 1

SUNSHINE

Average number hours per day 5.1
Percentage of possible 41

NUMBER OF DAYS

Clear 1
Partly Cloudy 10
Cloudy 20
.01 inch of rain or more 18
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 61

Pam Box

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
AUG 30 1967
E. S. S. A.
U.S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	75	78	95	87	92	1.18
2	83	75	79	92	81	90	.15
3	83	73	78	92	74	90	.43
4	83	74	78	93	78	90	.21
5	85	75	80	92	62	85	.21
6	84	74	79	94	72	87	1.18
7	87	76	82	92	60	83	.0
8	88	76	82	90	57	78	.0
9	85	73	79	96	66	84	.80
10	83	76	80	94	79	88	.12
11	86	75	80	94	61	86	.13
12	84	75	80	94	71	87	.0
13	84	76	80	96	82	89	,05
14	85	78	82	96	72	92	,35
15	85	75	80	97	62	93	1.10
16	85	74	80	96	66	87	,0
17	87	75	81	94	53	82	T
18	85	76	80	90	67	87	.85
19	83	75	79	92	70	84	2.05
20	83	75	79	92	72	86	.0
21	84	74	79	91	75	87	.07
22	80	72	76	94	78	87	3.73
23	85	76	80	96	73	89	1.30
24	81	78	80	96	75	88	.03
25	84	76	80	98	75	89	1.18
26	81	75	78	99	75	94	1.04
27	83	77	80	98	75	90	.57
28	82	77	80	97	75	87	.03
29	84	74	79	99	67	88	1.20
30	84	77	80	98	66	88	.10
31							
Sum	2516	2257	-----	2837	2126	-----	18.06
Mean	83.9	75.2	79.6	94.6	70.9	87.5	-----

TOTAL RAINFALL FOR THIS MONTH IN:

1958	7.85	1963	13.61
1959	9.28	1964	17.58
1960	12.65	1965	9.17
1961	10.13	1966	3.38
1962	6.62	1967	18.06

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.833
Departure from normal -.003
Highest 29.92 Date 9
Lowest 29.74 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal -1.2
Highest 87.4 Date 7
Lowest 72.0 Date 22

RAINFALL
(Inches)

Total 18.06
Departure from normal +4.91
Greatest in 24 hours 4.97
Date 22 & 23

WIND

Average hourly velocity 5.9 mph.
Prevailing direction S
Maximum for five minutes 25
mph. from the SW on the 2d & 9th

SUNSHINE

Average number hours per day 3.4
Percentage of possible 27

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 23
.01 inch of rain or more 24
Thunderstorms 11
Light fog 0
Dense fog 0

Number of hours with rain 116

Panama Canal

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. Month: JUL 1967

Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Min.	Mean	Max	Min.	Hourly mean	
	80	82	100	72	88	.02
	76	80	98	74	90	.46
	75	78	96	70	88	.18
	74	78	98	68	88	1.18
	77	80	98	68	85	T
	76	80	97	64	88	1.64
	77	80	96	76	89	.21
	75	80	100	76	94	.56
81	75	78	98	80	92	.11
81	74	78	96	79	91	.06
85	78	82	94	69	83	.04
84	76	80	96	76	87	.40
84	77	80	97	69	77	.26
81	76	78	99	70	94	3.74
84	75	80	96	70	90	.02
80	75	78	99	84	91	1.42
79	76	78	97	80	91	.08
84	76	80	95	63	88	.10
83	78	80	98	73	90	.44
83	72	78	100	74	91	1.71
85	76	80	96	66	91	.68
82	75	78	97	69	92	.25
80	74	77	99	82	90	.30
83	77	80	99	80	90	.15
84	80	82	94	77	86	.09
86	75	80	98	78	90	.60
85	77	81	95	66	89	.20
85	78	82	95	82	89	.06
85	79	82	95	80	89	.60
80	74	77	94	81	91	.96
83	76	80	94	75	87	T
2572	2359		3004	2291		16.52
83.0	76.1	79.6	96.9	73.9	88.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	19.03	1963	8.94
1959	15.41	1964	18.68
1960	10.92	1965	9.79
1961	9.98	1966	13.84
1962	24.34	1967	16.52

AIR PRESSURE
(Inches reduced to sea level)

Hourly mean 29.840
Departure from normal -.003
Highest 29.96 Date 31
Lowest 29.74 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal -0.9
Highest 86 Date 26
Lowest 72 Date 20

RAINFALL
(Inches)

Total 16.52
Departure from normal +1.04
Greatest in 24 hours 3.13
Date 14th

WIND

Average hourly velocity 7.8 mph.
Prevailing direction NW
Maximum for five minutes 22
mph. from the W on the 6th

SUNSHINE

Average number hours per day 1.8
Percentage of possible 14

NUMBER OF DAYS

Clear	0
Partly Cloudy	2
Cloudy	29
.01 inch of rain or more	29
Thunderstorms	13
Light fog	0
Dense fog	0
Number of hours with rain	126

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75th MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** AUGUST 1967

	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	85	79	82	94	74	83	.41
2	85	81	83	88	74	84	0
3	85	80	82	91	75	86	.02
4	83	75	79	94	80	90	.53
5	84	75	80	94	78	90	T
6	84	80	82	92	78	88	0
7	84	80	82	92	64	85	0
8	82	75	78	94	77	88	.15
9	80	75	78	94	84	90	T
10	84	73	78	96	74	86	0
11	86	75	80	92	61	82	0
12	86	80	83	92	66	82	.17
13	82	73	78	97	82	93	1.12
14	83	76	80	96	80	91	.05
15	81	75	78	98	88	95	.60
16	86	77	82	98	76	88	.11
17	85	76	80	96	82	91	.51
18	85	77	81	96	76	88	.02
19	85	76	80	96	77	87	.60
20	83	76	80	96	76	89	.21
21	81	77	79	96	70	88	.62
22	84	74	79	94	70	84	T
23	84	76	80	94	60	83	0
24	82	75	78	95	84	88	.34
25	84	75	80	95	72	86	.70
26	80	74	77	96	74	88	.77
27	83	74	78	92	68	84	0
28	85	76	80	90	68	82	.03
29	85	81	83	92	75	83	.02
30	84	74	79	94	80	88	1.55
31	84	75	80	95	72	89	.03
Sum	2594	2365		2919	2315		8.56
Mean	83.7	76.3	80.0	94.2	74.7	87.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	12.76	1963	13.70
1959	11.18	1964	18.80
1960	10.91	1965	20.31
1961	10.34	1966	20.26
1962	18.01	1967	8.56

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.837
Departure from normal -.005
Highest 94 Date 18
Lowest 70 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -0.4
Highest 86 Date 12 & 16
Lowest 73 Date 10

RAINFALL
(Inches)

Total 8.56
Departure from normal -6.77
Greatest in 24 hours 1.57
Date 29 & 30

WIND

Average hourly velocity 7.8 mph.
Prevailing direction N
Maximum for five minutes 22
mph. from the N on the 1

SUNSHINE

Average number hours per day 2.6
Percentage of possible 21

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 21
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 89

Pam Book

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** SEPTEMBER 1967

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	85	78	82	95	68	88	.44
2	81	74	78	99	76	89	1.04
3	81	76	78	94	77	90	.09
4	83	75	79	94	71	88	.49
5	83	77	80	97	74	88	1.62
6	84	77	80	97	78	90	.62
7	84	75	80	94	72	90	.07
8	83	75	79	96	78	92	.49
9	82	74	78	98	78	94	1.76
10	82	76	79	96	68	87	.93
11	83	75	79	94	72	85	0
12	84	76	80	93	68	85	T
13	85	73	79	94	68	83	0
14	90	76	83	96	44	79	0
15	90	77	84	96	52	80	0
16	91	75	83	98	44	77	0
17	85	76	80	94	70	83	0
18	84	79	82	94	70	84	T
19	82	71	76	98	76	90	2.16
20	86	74	80	94	53	82	0
21	83	76	80	94	69	80	0
22	86	73	80	98	63	88	1.05
23	91	76	84	94	44	78	0
24	86	75	80	94	59	84	.88
25	85	77	81	94	70	82	0
26	85	78	82	92	68	86	T
27	86	76	81	94	70	85	0
28	88	77	82	94	60	83	0
29	90	76	83	93	50	77	0
30	88	76	82	99	58	86	.31
31							
Sum	2556	2269		2857	1968		11.95
Mean	85.2	75.6	80.4	95.2	65.6	85.1	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	15.76	1963	11.22
1959	21.34	1964	13.56
1960	8.42	1965	14.12
1961	12.90	1966	13.36
1962	13.14	1967	11.95

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.842
Departure from normal + .012
Highest 29.94 Date 21
Lowest 29.70 Date 14

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal - 0.2
Highest 91 Date 16 & 23
Lowest 71 Date 19

RAINFALL
(Inches)

Total 11.95
Departure from normal - .54
Greatest in 24 hours 2.69
Date 9 & 10

WIND

Average hourly velocity 6.0 mph.
Prevailing direction S
Maximum for five minutes 23
mph. from the NW on the 22

SUNSHINE

Average number hours per day 6.2
Percentage of possible 51

NUMBER OF DAYS

Clear 2
Partly Cloudy 6
Cloudy 22
.01 inch of rain or more 14
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 67

4066
Rev. 10-58

Pan Box

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** OCTOBER 1967

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	84	74	79	100	63	87	.0
2	82	75	78	100	78	96	.45
3	83	74	78	100	70	87	T
4	86	74	80	97	48	86	T
5	85	75	80	99	76	89	.31
6	85	77	81	98	74	88	.09
7	86	77	82	98	70	90	.20
8	83	76	80	99	75	92	1.63
9	83	76	80	100	70	94	.93
10	86	74	80	99	58	84	0
11	86	76	81	98	65	83	.02
12	85	76	80	100	63	80	.30
13	86	78	82	92	62	83	.26
14	85	75	80	100	66	83	.52
15	81	73	77	100	76	88	3.15
16	84	74	79	100	70	85	.10
17	85	75	80	94	70	86	T
18	84	77	80	96	70	88	.14
19	82	75	78	96	68	91	1.09
20	85	73	79	96	66	89	.04
21	84	75	80	98	70	87	.12
22	82	74	78	98	70	89	1.00
23	85	75	80	96	61	88	1.40
24	84	74	79	96	63	88	.10
25	84	72	78	98	60	92	3.82
26	82	74	78	98	72	91	.25
27	84	74	79	94	66	82	.59
28	84	74	79	94	72	84	0
29	84	75	80	98	74	91	.66
30	84	75	80	97	72	92	.61
31	83	73	78	100	80	93	1.06
Sum	2606	2319	--	3029	2118	--	18.84
Mean	84.1	74.8	79.4	97.7	68.3	87.9	--

TOTAL RAINFALL FOR THIS MONTH IN:

1958	26.14	1963	6.34
1959	10.23	1964	11.78
1960	19.31	1965	23.70
1961	15.42	1966	14.90
1962	11.64	1967	18.84

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.827
Departure from normal - .001
Highest 29.94 Date 4 & 27
Lowest 29.72 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 0.9
Highest 86 Date 4 & 13
Lowest 72 Date 25

RAINFALL
(Inches)

Total 18.84
Departure from normal + 3.02
Greatest in 24 hours 3.82
Date 25

WIND

Average hourly velocity 5.5 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the NW on the 31

SUNSHINE

Average number hours per day 5.4
Percentage of possible 46

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 27
.01 inch of rain or more 25
Thunderstorms 17
Light fog 0
Dense fog 0

Number of hours with rain 91

Pan Box

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER 1967

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	73	78	100	68	90	.07
2	84	74	79	97	65	89	.13
3	86	74	80	98	59	80	T
4	82	78	80	100	72	89	1.66
5	83	74	78	98	70	87	.21
6	84	75	80	100	68	88	.72
7	83	74	78	100	70	92	3.27
8	83	75	79	98	72	87	.13
9	83	75	79	100	73	93	1.02
10	79	73	76	100	88	96	5.31
11	83	73	78	98	66	85	.04
12	81	73	77	94	72	87	5.49
13	79	75	77	97	66	86	.55
14	84	75	80	94	59	82	0
15	82	75	78	91	48	82	0
16	84	75	80	91	68	85	.02
17	84	75	80	100	71	85	.70
18	84	78	81	100	68	88	.61
19	82	74	78	97	73	90	1.27
20	82	74	78	98	78	91	1.74
21	83	74	78	96	72	91	.45
22	81	74	78	98	72	89	.57
23	83	73	78	98	60	83	.10
24	83	73	78	94	57	78	.19
25	81	74	78	94	76	89	1.34
26	83	74	78	100	74	90	1.09
27	81	75	78	94	70	87	.94
28	82	74	78	93	76	88	.03
29	84	73	78	94	70	85	0
30	86	76	81	92	67	84	T
31							
Sum	2482	2232		2904	2068		27.65
Mean	82.7	74.4	78.6	96.8	68.9	87.2	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.823
Departure from normal - .007
Highest 29.94 Date 16
Lowest 29.71 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.6
Departure from normal - 0.8
Highest 86 Date 3+
Lowest 73 Date 1+

RAINFALL
(Inches)

Total 27.65
Departure from normal + 4.97
Greatest in 24 hours 5.72
Date 9 & 10

WIND

Average hourly velocity 6.1 mph.
Prevailing direction W
Maximum for five minutes 21
mph. from the NE on the 30

SUNSHINE

Average number hours per day 4.2
Percentage of possible 35

NUMBER OF DAYS

Clear	0
Partly Cloudy	8
Cloudy	22
.01 inch of rain or more	25
Thunderstorms	6
Light fog	0
Dense fog	0
Number of hours with rain	151

TOTAL RAINFALL FOR THIS MONTH IN:

1958	14.57	1963	22.72
1959	15.94	1964	14.36
1960	32.04	1965	25.78
1961	21.94	1966	35.08
1962	25.35	1967	27.65

ATMOSPHERIC SCIENCES
LIBRARY
DEC 11 1967
E S S A
U. S. Dept. of Commerce

Pan Br

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** DECEMBER 1967

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	84	76	80	96	70	83	.08
2	82	76	79	94	78	88	.17
3	86	78	82	96	65	85	.03
4	84	78	81	96	70	87	2.72
5	83	76	80	94	81	91	.81
6	80	76	78	94	85	91	.14
7	83	74	78	94	69	88	1.05
8	83	73	78	96	77	91	1.61
9	83	76	80	99	74	90	1.49
10	88	76	82	96	62	88	.27
11	83	77	80	96	78	89	.29
12	79	73	76	96	81	92	.20
13	82	74	78	97	79	91	.39
14	85	75	80	96	64	80	0
15	83	76	80	98	68	81	.04
16	83	74	78	99	73	90	.25
17	84	73	78	94	67	83	0
18	85	75	80	94	70	81	.06
19	83	75	79	94	73	87	.04
20	83	76	80	94	80	87	.34
21	84	77	80	94	67	82	.11
22	83	79	81	90	58	77	0
23	85	77	81	88	61	77	.02
24	84	76	80	90	66	78	.14
25	83	78	80	95	65	79	0
26	82	77	80	96	68	88	.09
27	82	78	80	92	71	84	0
28	83	77	80	93	68	81	.06
29	83	78	80	86	66	76	.04
30	83	79	81	84	60	78	0
31	84	77	81	86	62	74	0
Sum	2582	2360		2907	2176		10.44
Mean	83.3	76.1	79.7	93.8	70.2	84.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1958	7.64	1963	3.50
1959	22.14	1964	2.03
1960	29.18	1965	7.62
1961	8.96	1966	13.90
1962	17.85	1967	10.44

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.845
Departure from normal + .006
Highest 29.98 Date 26
Lowest 29.70 Date 10

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.7
Departure from normal - 0.4
Highest 88 Date 10
Lowest 73 Date 17

RAINFALL
(Inches)

Total 10.44
Departure from normal - 1.67
Greatest in 24 hours 2.72
Date 4

WIND

Average hourly velocity 9.5 mph.
Prevailing direction NE
Maximum for five minutes 24
mph. from the NE on the 21 & 24

SUNSHINE

Average number hours per day 6.8
Percentage of possible 58

NUMBER OF DAYS

Clear 1
Partly Cloudy 15
Cloudy 15
.01 inch of rain or more 24
Thunderstorms 3
Light fog 0
Dense fog 0
Number of hours with rain 67

ATMOSPHERIC SCIENCES LIBRARY
JAN 16 1968
E. S. S. A.
U. S. Dept. of Commerce

Pan Bot

4066
Rev. 10-58

ATMOSPHERIC SCIENCES

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JANUARY 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	78	81	88	62	78	0
2	84	77	80	90	60	78	T
3	84	79	82	87	73	83	0
4	83	78	80	86	70	78	0
5	82	79	80	79	65	72	0
6	84	78	81	80	70	78	0
7	83	78	80	83	70	77	0
8	82	78	80	83	70	77	.04
9	83	79	81	80	66	76	.01
10	82	77	80	82	74	78	T
11	82	76	79	82	58	75	0
12	82	78	80	84	66	76	.01
13	82	77	80	90	70	79	T
14	82	77	80	88	67	79	0
15	82	78	80	90	72	82	0
16	82	78	80	99	78	87	.03
17	82	79	80	90	65	77	0
18	82	77	80	90	63	73	.02
19	81	77	79	82	66	73	.03
20	82	76	79	90	66	72	.03
21	82	77	80	85	60	74	0
22	82	78	80	86	68	75	0
23	81	77	79	94	64	77	T
24	81	76	78	98	69	79	T
25	82	77	80	87	68	78	.0
26	83	77	80	89	66	75	0
27	83	76	80	99	66	79	.03
28	82	79	80	95	69	76	0
29	82	77	80	86	70	76	.01
30	83	77	80	86	63	76	T
31	82	76	79	84	58	70	T
Sum	2553	2401	--	2712	2072	--	.21
Mean	82.4	77.5	80.0	87.5	66.8	76.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	3.13	1964	.74
1960	2.70	1965	4.82
1961	.68	1966	1.11
1962	2.29	1967	.93
1963	7.05	1968	.21

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.866
Departure from normal - .001
Highest 29.95 Date 19
Lowest 29.78 Date 10

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal - 0.3
Highest 84 Date 2
Lowest 76 Date 20

RAINFALL
(Inches)

Total .21
Departure from normal -3.04
Greatest in 24 hours .05
Date 8 & 9

WIND

Average hourly velocity 14.2 mph.
Prevailing direction NE
Maximum for five minutes 25
mph. from the NE on the 6

SUNSHINE

Average number hours per day 9.7
Percentage of possible 83

NUMBER OF DAYS

Clear 8
Partly Cloudy 22
Cloudy 1
.01 inch of rain or more 8
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 15

ATMOSPHERIC SCIENCES LIBRARY
FEB 14 1968
E. S. S. A.
U. S. Dept. of Commerce

Pan Am

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** FEBRUARY 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	75	78	86	58	70	.0
2	82	76	79	84	66	75	.0
3	81	73	77	92	70	81	.08
4	82	75	78	85	58	73	.02
5	82	74	78	87	59	74	.01
6	81	76	78	85	63	73	.0
7	81	76	78	92	66	81	.07
8	82	73	78	94	65	78	.06
9	81	78	80	84	66	76	.0
10	81	76	78	84	62	75	.0
11	79	75	77	88	80	84	.10
12	81	78	80	86	78	83	.0
13	82	77	80	88	64	83	.0
14	82	77	80	86	68	80	.0
15	82	77	80	88	66	74	.03
16	80	75	78	84	72	79	.22
17	83	77	80	84	77	82	.01
18	81	78	80	87	80	85	.01
19	81	78	80	88	85	87	.01
20	82	77	80	91	72	84	.01
21	83	74	78	87	54	82	.34
22	82	76	79	89	69	81	.11
23	88	74	81	88	55	76	.0
24	87	74	80	88	58	84	.0
25	83	77	80	88	66	80	T
26	82	77	80	94	72	82	.02
27	79	75	77	96	70	82	.22
28	80	73	76	92	69	83	.25
29	81	76	78	91	70	81	.0
30							
31							
Sum	2373	2197		2556	1958		1.57
Mean	81.8	75.8	78.8	88.1	67.5	79.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	.04	1964	.65
1960	.61	1965	1.42
1961	.22	1966	.57
1962	.59	1967	.42
1963	6.39	1968	1.57

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.887
Departure from normal + .007
Highest 30.00 Date 26 & 27
Lowest 29.77 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal - 1.4
Highest 88 Date 23
Lowest 73 Date 28

RAINFALL
(Inches)

Total 1.57
Departure from normal + .03
Greatest in 24 hours .42
Date 27 & 28

WIND

Average hourly velocity 13.0 mph.
Prevailing direction N
Maximum for five minutes 32
mph. from the NE on the 8

SUNSHINE

Average number hours per day 8.6
Percentage of possible 73

NUMBER OF DAYS

Clear 7
Partly Cloudy 9
Cloudy 13
.01 inch of rain or more 17
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 40

1674

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MARCH 1968

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	81	75	78	87	66	76	.02
2	83	78	80	87	65	74	0
3	81	76	78	91	65	78	.01
4	81	77	79	90	66	79	T
5	82	79	80	88	63	76	0
6	82	77	80	93	66	77	T
7	82	77	80	84	62	75	0
8	82	76	79	84	54	73	0
9	82	76	79	85	60	69	.08
10	81	76	78	83	60	72	0
11	81	74	78	88	69	77	0
12	82	75	78	86	70	79	0
13	82	79	80	82	66	73	0
14	82	73	78	88	66	78	.61
15	82	76	79	92	58	76	.24
16	83	80	82	86	69	77	0
17	82	76	79	84	60	74	.18
18	82	76	79	84	63	72	.03
19	82	76	79	82	63	73	.12
20	81	73	77	92	64	79	.40
21	82	76	79	94	75	82	.09
22	82	76	79	90	79	85	.39
23	84	79	82	90	76	85	.01
24	83	80	82	88	70	76	0
25	82	78	80	81	66	74	0
26	80	75	78	89	76	82	.10
27	83	79	81	85	73	80	.01
28	83	77	80	86	75	81	.14
29	82	76	79	84	69	78	.03
30	83	76	80	80	72	78	.02
31	82	79	80	80	73	79	T
Sum	2542	2376		2683	2079		2.48
Mean	82.0	76.6	79.3	86.5	67.1	77.1	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.902
Departure from normal + .029
Highest 30.02 Date 4
Lowest 29.79 Date 25

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.3
Departure from normal - 1.5
Highest 84 Date 23
Lowest 73 Date 14

RAINFALL
(Inches)

Total 2.48
Departure from normal + 1.00
Greatest in 24 hours .61
Date 14

WIND

Average hourly velocity 14.8 mph.
Prevailing direction N
Maximum for five minutes 32
mph. from the N on the 14

SUNSHINE

Average number hours per day 9.0
Percentage of possible 75

NUMBER OF DAYS

Clear	2
Partly Cloudy	18
Cloudy	11
.01 inch of rain or more	17
Thunderstorms	0
Light fog	0
Dense fog	0
Number of observations	42

TOTAL RAINFALL FOR THIS MONTH IN:

19 59	.40	19 64	.55
19 60	4.73	19 65	.08
19 61	.75	19 66	2.63
19 62	.72	19 67	.52
19 63	.38	19 68	2.48

ATMOSPHERIC SCIENCES
LIBRARY
APR 10 1968
E S S A

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** April 1968

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	82	78	80	82	74	79	.05
2	82	77	80	82	75	79	.03
3	82	78	80	80	75	79	0
4	82	78	80	83	72	80	0
5	82	79	80	86	78	82	T
6	84	76	80	90	75	84	.40
7	84	78	81	93	71	85	0
8	83	79	81	94	70	88	T
9	83	79	81	96	70	86	T
10	82	77	80	91	70	80	0
11	82	78	80	90	65	79	0
12	81	76	78	91	55	74	.02
13	82	76	79	77	60	70	0
14	82	77	80	83	57	69	0
15	81	76	78	86	60	72	0
16	82	75	78	87	64	72	0
17	82	74	78	90	64	74	0
18	82	76	79	85	54	68	0
19	82	75	78	84	53	64	0
20	82	77	80	74	56	63	0
21	83	77	80	86	60	74	.02
22	83	79	81	85	67	76	0
23	82	80	81	82	62	74	0
24	82	75	78	92	60	73	0
25	83	78	80	79	60	69	T
26	82	79	80	83	63	75	0
27	84	78	81	87	66	77	0
28	83	77	80	92	73	83	T
29	83	79	81	95	81	87	.01
30	84	78	81	92	76	84	0
31							
Sum	2473	2319		2597	1986		.53
Mean	82.4	77.3	79.8	86.6	66.2	76.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	3.96	1964	3.39
1960	10.38	1965	2.22
1961	2.27	1966	6.49
1962	2.23	1967	2.94
1963	2.28	1968	.53

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.886
Departure from normal + 0.30
Highest 29.99 Date 13
Lowest 29.75 Date 7

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 1.6
Highest 84 Date 7
Lowest 74 Date 17

RAINFALL
(Inches)

Total .53
Departure from normal - 3.46
Greatest in 24 hours .40
Date 6

WIND

Average hourly velocity 12.7 mph.
Prevailing direction NE
Maximum for five minutes 25
mph. from the NE on the 3 & 7

SUNSHINE

Average number hours per day 9.6
Percentage of possible 78

NUMBER OF DAYS

Clear 5
Partly Cloudy 11
Cloudy 14
.01 inch of rain or more 6
Thunderstorms 0
Light fog 0
Dense fog 0
Number of hours with rain 8

ATMOSPHERIC SCIENCES
LIBRARY
MAY 15 1968
E. S. S. A.
U. S. Dept. of Commerce

Pan Box

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C.Z. **Month:** May 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	78	80	88	76	85	T
2	83	75	79	90	82	86	.88
3	82	77	80	91	83	87	.06
4	84	78	81	92	84	89	0
5	83	77	80	92	83	88	0
6	81	77	79	92	78	89	.02
7	80	75	78	96	82	90	1.99
8	82	76	79	92	77	87	.05
9	83	74	78	94	70	87	T
10	83	74	78	94	58	87	.11
11	84	76	80	92	57	85	.03
12	84	77	80	92	78	85	0
13	84	76	80	90	71	86	.33
14	81	78	80	90	84	87	.03
15	81	74	78	92	82	87	.43
16	83	74	78	92	73	84	.01
17	83	77	80	93	72	86	.02
18	88	77	82	90	58	82	0
19	86	76	81	90	63	82	T
20	84	76	80	89	74	84	T
21	84	77	80	87	65	82	.66
22	87	77	82	86	57	77	0
23	84	75	80	86	73	82	0
24	86	79	82	87	74	81	.03
25	86	80	83	87	70	83	.15
26	85	74	80	92	66	88	1.82
27	87	77	82	92	62	85	.34
28	87	75	81	88	65	80	0
29	85	77	81	89	80	85	.32
30	80	74	77	94	88	92	1.47
31	85	75	80	94	66	81	.13
Sum	2598	2362		2813	2251		8.88
Mean	83.8	76.2	80.0	90.7	72.6	85.2	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	13.88	1964	9.39
1960	24.18	1965	12.10
1961	9.44	1966	15.44
1962	23.05	1967	7.74
1963	13.22	1968	8.88

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.843
Departure from normal +.007
Highest 94 Date 19
Lowest 73 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.0
Departure from normal -1.1
Highest 88 Date 18
Lowest 74 Date 9 + 10

RAINFALL
(Inches)

Total 8.88
Departure from normal -3.52
Greatest in 24 hours 2.01
Date 6 + 7

WIND

Average hourly velocity 6.4 mph.
Prevailing direction S
Maximum for five minutes 22
mph. from the W on the 2

SUNSHINE

Average number hours per day 8.1
Percentage of possible 65

NUMBER OF DAYS

Clear 0
Partly Cloudy 15
Cloudy 16
.01 inch of rain or more 20
Thunderstorms 5
Light fog 0
Dense fog 0
Number of hours with rain 68

ATMOSPHERIC SCIENCES LIBRARY
E. S. S. A.
U. S. Dept. of Commerce

- Bm

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** June, 1968

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	82	74	78	94	72	86	.03
2	86	74	80	94	58	84	.0
3	85	77	81	92	60	84	.0
4	84	76	80	92	64	86	.02
5	83	74	78	94	68	88	.30
6	84	73	78	97	56	85	1.75
7	86	73	80	96	55	83	.0
8	84	75	80	95	70	86	.0
9	85	75	80	93	62	83	.0
10	85	76	80	94	72	88	.08
11	85	76	80	94	71	88	.65
12	83	76	80	92	70	86	.03
13	88	76	82	92	53	78	.04
14	83	76	80	98	74	89	.10
15	85	77	81	98	68	88	.63
16	85	79	82	95	62	83	.14
17	80	71	76	94	71	89	2.47
18	84	75	80	92	58	80	T
19	82	78	80	92	70	84	.14
20	82	79	80	94	78	86	.03
21	86	76	81	96	65	85	.23
22	80	73	76	95	72	86	.27
23	84	76	80	91	58	82	.0
24	84	76	80	90	58	81	.28
25	85	75	80	93	67	86	.14
26	83	74	78	95	78	92	.86
27	85	75	80	96	68	87	.10
28	83	75	79	96	74	85	.04
29	84	74	79	96	72	86	.94
30	82	75	78	96	78	93	2.34
31							
Sum	2517	2259		2826	2002		11.61
Mean	83.9	75.3	79.6	94.2	66.7	85.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	9.28	1964	17.58
1960	12.65	1965	9.17
1961	10.13	1966	3.38
1962	6.62	1967	18.06
1963	13.61	1968	11.61

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.862
Departure from normal +.026
Highest 29.95 Date 6
Lowest 29.76 Date 21

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal -1.1
Highest 88 Date 13
Lowest 71 Date 17

RAINFALL
(Inches)

Total 11.61
Departure from normal -1.52
Greatest in 24 hours 2.88
Date 6/30 & 7/1

WIND

Average hourly velocity 4.8 mph.
Prevailing direction S
Maximum for five minutes 23
mph. from the SE on the 22nd

SUNSHINE

Average number hours per day 6.7
Percentage of possible 53

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 28
.01 inch of rain or more 23
Thunderstorms 15
Light fog 0
Dense fog 0
Number of hours with rain 83

ATMOSPHERIC SCIENCES
LIBRARY
JUL 10 1968
E. S. S. A.
U. S. Dept. of Commerce

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, Canal Zone **Month:** July, 1968

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	80	74	77	96	78	90	.72
2	81	75	78	95	64	87	.23
3	88	74	81	96	55	79	T
4	83	75	79	95	72	89	.38
5	83	75	79	95	70	87	.58
6	84	75	80	95	67	86	0
7	80	74	77	96	79	91	1.10
8	83	76	80	98	71	88	1.36
9	83	76	80	98	74	88	.60
10	82	77	80	98	67	89	.11
11	84	72	78	98	62	87	.62
12	84	74	79	99	74	87	.07
13	86	77	82	96	60	77	0
14	82	75	78	99	79	89	2.04
15	83	75	79	98	76	91	2.89
16	82	75	78	98	72	89	.38
17	81	75	78	98	75	91	.36
18	80	75	78	98	67	86	.24
19	80	72	76	98	76	88	2.09
20	83	77	80	97	71	86	.41
21	80	74	77	97	77	90	.79
22	84	76	80	96	70	81	.04
23	81	74	78	98	77	90	1.61
24	84	76	80	96	75	84	.09
25	84	78	81	96	74	85	.03
26	82	79	80	96	77	88	.64
27	84	77	80	98	76	88	1.07
28	85	81	83	92	78	87	T
29	84	80	82	98	80	88	0
30	84	79	82	99	82	93	.01
31	84	78	81	99	80	93	1.03
Sum	2568	2350		3006	2255		
Mean	82.8	75.8	79.3	97.0	72.7	87.5	19.49

TOTAL RAINFALL FOR THIS MONTH IN:

1959	15.41	1964	18.68
1960	10.92	1965	9.79
1961	9.98	1966	13.84
1962	24.34	1967	16.52
1963	8.94	1968	19.49

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.852
Departure from normal +.009
Highest 29.95 Date 21
Lowest 29.74 Date 26

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.3
Departure from normal -1.2
Highest 88 Date 3
Lowest 72 Date 19

RAINFALL
(Inches)

Total 19.49
Departure from normal +3.97
Greatest in 24 hours 2.14
Date 7 & 8

WIND

Average hourly velocity 6.8 mph
Prevailing direction N
Maximum for five minutes 26
mph. from the NW on the 15

SUNSHINE

Average number hours per day 3.8
Percentage of possible 46

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 26
Thunderstorms 11
Light fog 0
Dense fog 0

Number of hours with rain 124

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: Cristobal, C.Z. **Month:** August 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	76	80	97	76	90	.08
2	78	75	76	98	74	90	1.09
3	82	77	80	94	78	86	.19
4	82	73	78	98	75	89	3.60
5	82	78	80	98	69	91	1.23
6	82	75	78	98	70	92	.63
7	82	74	78	97	76	91	.03
8	83	75	79	96	72	87	.21
9	83	79	81	94	73	83	0
10	84	76	80	97	72	84	1.42
11	85	79	82	94	70	86	.02
12	83	78	80	94	70	89	.34
13	85	76	80	94	74	85	0
14	85	82	84	88	69	80	.01
15	85	78	82	94	74	88	.07
16	84	76	80	96	71	87	.25
17	83	77	80	94	74	88	.23
18	84	76	80	94	71	88	.01
19	82	76	79	94	80	88	.16
20	80	73	76	94	80	90	.38
21	82	75	78	95	79	89	.10
22	82	78	80	96	78	87	.17
23	84	78	81	94	74	85	.01
24	84	77	80	97	77	89	.26
25	81	77	79	94	78	88	.04
26	82	75	78	90	71	84	.24
27	80	76	78	90	76	86	1.46
28	81	75	78	90	69	85	.42
29	83	75	79	89	66	81	.90
30	82	75	78	93	72	86	.12
31	83	74	78	95	68	87	T
Sum	2561	2364		2926	2276		13.67
Mean	82.6	76.3	79.4	94.4	73.4	87.1	

TOTAL RAINFALL FOR THIS MONTH IN:

19 59	11.18	1964	18.80
19 60	10.91	1965	20.31
19 61	10.34	1966	20.26
19 62	18.01	1967	8.56
19 63	13.70	1968	13.67

ATMOSPHERIC SCIENCES LIBRARY
U. S. A.
Department of Commerce

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.857
Departure from normal +0.015
Highest 29.96 Date 2
Lowest 29.76 Date 17

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal - 1.0
Highest 85 Date 13 & 14
Lowest 73 Date 4

RAINFALL
(Inches)

Total 13.67
Departure from normal - 1.64
Greatest in 24 hours 3.62
Date 4 & 5

WIND

Average hourly velocity 6.3 mph.
Prevailing direction NW
Maximum for five minutes 26
mph. from the NW on the 4

SUNSHINE

Average number hours per day 5.1
Percentage of possible 41

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 28
Thunderstorms 11
Light fog 0
Dense fog 0
Number of hours with rain 115

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** SEPTEMBER 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	87	75	81	94	60	85	.43
2	84	75	80	94	71	88	.83
3	81	77	79	93	77	88	.99
4	82	76	79	93	74	86	.28
5	83	75	79	93	70	84	.47
6	85	75	80	92	70	85	.67
7	84	75	80	92	73	89	.24
8	80	76	78	96	79	90	1.90
9	82	74	78	96	73	84	0
10	82	75	78	98	78	91	1.92
11	84	74	79	96	74	86	.03
12	82	79	80	93	74	84	.08
13	83	76	80	95	77	90	T
14	81	76	78	96	86	93	.23
15	86	74	80	96	68	90	.03
16	87	75	81	96	62	88	1.37
17	85	75	80	96	64	86	0
18	88	74	81	96	58	87	.22
19	83	75	79	97	68	86	.26
20	84	76	80	94	76	88	.31
21	82	78	80	94	81	89	.18
22	80	75	77	95	84	93	.19
23	89	75	77	96	55	81	0
24	90	75	77	96	60	83	.03
25	84	77	80	93	78	84	.10
26	84	77	80	95	74	86	.60
27	86	78	82	96	68	88	.29
28	85	77	81	96	73	90	1.48
29	84	75	79	96	76	88	1.10
30	81	75	78	97	80	90	.72
31	--	--	--	--	--	--	----
Sum	2518	2269		2850	2161		14.95
Mean	83.9	75.6	79.8	95.0	72.0	87.2	

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.825
Departure from normal - 0.005
Highest 29.93 Date 11
Lowest 29.71 Date 25

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 0.8
Highest 90 Date 24
Lowest 74 Date 11

RAINFALL
(Inches)

Total 14.95
Departure from normal + 2.43
Greatest in 24 hours 1.95
Date 10 & 11

WIND

Average hourly velocity 5.3 mph.
Prevailing direction W
Maximum for five minutes 24
mph. from the NW on the 29

SUNSHINE

Average number hours per day 5.6
Percentage of possible 46

NUMBER OF DAYS

Clear 0
Partly cloudy 5
Cloudy 25
.01 inch of rain or more 26
Thunderstorms 11
Light fog 0
Dense fog 0
Temperatures with rain 83

TOTAL RAINFALL FOR THIS MONTH IN:

19 59	21.34	19 64	3.56
19 60	8.42	19 65	4.12
19 61	12.90	19 66	3.36
19 62	13.14	19 67	1.95
19 63	11.22	19 68	14.95

ATMOSPHERIC SCIENCES LIBRARY
OCT 20 1968
E. S. S. A.
U. S. Dept. of Commerce

4066
Rev. 1-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C.Z. **Month:** OCTOBER 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	81	74	78	95	74	88	.26
2	85	73	79	96	70	91	.89
3	82	74	78	96	82	89	.17
4	84	77	80	94	76	88	.68
5	83	75	79	96	65	88	1.23
6	82	79	80	94	80	87	.21
7	84	76	80	94	78	87	.32
8	83	78	80	92	80	89	.09
9	84	72	78	94	74	89	1.44
10	85	74	80	96	71	89	.05
11	87	76	82	96	59	85	0
12	86	76	81	93	66	84	0
13	87	75	81	90	60	77	0
14	88	75	82	92	63	81	.01
15	89	77	83	92	64	78	0
16	88	76	82	92	58	83	T
17	86	75	80	92	63	84	.04
18	85	75	80	94	77	87	.15
19	81	73	77	95	74	90	.32
20	82	75	78	94	74	90	.35
21	84	75	80	93	64	89	.27
22	85	76	80	94	72	88	T
23	85	75	80	95	69	84	.41
24	85	74	80	94	71	85	1.55
25	84	75	80	94	75	89	1.36
26	83	74	78	94	69	86	.48
27	83	75	79	94	73	91	1.10
28	83	75	79	93	75	89	.47
29	84	75	80	96	75	89	1.05
30	83	77	80	95	78	87	0
31	85	75	80	94	72	86	0
Sum	2616	2331		2913	2201		12.90
Mean	84.4	75.2	79.8	94.0	71.0	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	10.23	1964	11.78
1960	19.31	1965	23.70
1961	15.42	1966	14.90
1962	11.64	1967	18.84
1963	6.34	1968	12.90

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.815
Departure from normal -.012
Highest 29.96 Date 26
Lowest 29.70 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal -0.3
Highest 89 Date 15
Lowest 72 Date 9

RAINFALL
(Inches)

Total 12.90
Departure from normal -2.89
Greatest in 24 hours 2.77
Date 24 & 25

WIND

Average hourly velocity 5.8 mph.
Prevailing direction 5
Maximum for five minutes 27
mph. from the N on the 19

SUNSHINE

Average number hours per day 6.2
Percentage of possible 52

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 24
.01 inch of rain or more 23
Thunderstorms 10
Light fog 0
Dense fog 0

Number of hours with rain 86

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** NOVEMBER 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	77	81	92	74	86	0
2	84	76	80	92	70	85	.06
3	86	76	81	91	74	85	.25
4	84	77	80	91	76	88	1.37
5	86	75	80	92	74	88	.35
6	83	76	80	94	81	87	.31
7	85	73	79	99	75	90	1.05
8	80	72	76	98	83	90	1.06
9	83	76	80	92	74	87	.10
10	90	75	82	93	56	84	0
11	85	76	80	90	71	83	.10
12	86	75	80	94	72	83	.72
13	85	78	82	93	76	85	.41
14	83	75	79	95	75	88	.89
15	84	74	79	96	76	88	.88
16	83	72	78	96	75	87	1.75
17	84	75	80	96	73	89	.10
18	86	74	80	94	62	82	0
19	84	75	80	94	72	85	.08
20	84	75	80	96	68	87	.55
21	84	75	80	94	69	78	.69
22	83	75	79	98	70	86	.77
23	81	77	79	92	74	83	.04
24	79	75	77	96	77	89	.16
25	83	75	79	94	67	88	.09
26	84	76	80	95	65	86	1.03
27	84	75	80	96	76	87	.07
28	83	76	80	94	77	86	.39
29	86	76	81	92	68	81	0
30	85	75	80	96	76	88	.11
31	--	--	--	--	--	--	----
Sum	2522	2257		2825	2176		13.38
Mean	84.1	75.2	79.6	94.2	72.5	86.0	

TOTAL RAINFALL FOR THIS MONTH IN:

19 59	15.94	19 64	14.36
19 60	32.04	19 65	25.78
19 61	21.94	19 66	15.08
19 62	25.35	19 67	27.65
19 63	22.72	19 68	13.38

ATMOSPHERIC SCIENCES LIBRARY
DEC 19 1968
E. S. S. A.
U. S. Dept. of Commerce

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.832
Departure from normal + 0.002
Highest 29.94 Date 24
Lowest 29.72 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal + 0.2
Highest 90 Date 10
Lowest 72 Date 16

RAINFALL
(Inches)

Total 13.38
Departure from normal - 9.21
Greatest in 24 hours 2.61
Date 15 & 16

WIND

Average hourly velocity 6.3 mph.
Prevailing direction W
Maximum for five minutes 24
mph. from the NW on the 20

SUNSHINE

Average number hours per day 7.0
Percentage of possible 60

NUMBER OF DAYS

Clear 1
Partly Cloudy 6
Cloudy 23
.01 inch of rain or more 26
Thunderstorms 7
Lightning 0
Dense fog 0

Number of hours with rain 113

Pan Bap

4066
Rev. 10-58

96 1/728.8
187 m

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** DECEMBER 1968

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	76	80	95	70	86	.32
2	84	74	79	94	70	85	.26
3	83	75	79	95	63	82	.95
4	83	75	79	97	70	85	.09
5	81	75	78	97	64	82	.38
6	83	73	78	90	62	77	.06
7	84	79	82	94	74	82	.14
8	85	79	82	92	74	85	.06
9	85	79	82	93	73	82	.03
10	83	74	78	96	75	84	.96
11	83	80	82	92	72	80	.04
12	84	76	80	90	70	79	T
13	85	78	82	92	72	83	
14	84	77	80	94	82	86	.01
15	83	79	81	88	77	83	T
16	84	79	82	91	78	84	.04
17	84	80	82	89	75	83	.02
18	84	80	82	90	80	86	
19	84	80	82	88	80	84	
20	85	79	82	88	77	83	
21	84	80	82	88	79	83	T
22	83	79	81	88	79	82	.02
23	83	78	80	83	71	78	
24	82	77	80	83	67	77	T
25	83	77	80	83	72	77	T
26	84	78	81	81	63	74	.02
27	85	76	80	83	76	80	.03
28	84	78	81	84	77	81	.02
29	84	79	82	81	73	78	
30	84	79	82	80	74	78	
31	84	78	81	83	74	78	.03
Sum	2594	2406		2762	2263		3.48
Mean	83.7	77.6	80.6	89.1	73.0	81.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1959	22.14	1964	2.03
1960	29.18	1965	7.62
1961	8.96	1966	13.90
1962	17.85	1967	10.44
1963	3.50	1968	3.48

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.837
Departure from normal - 0.002
Highest 29.96 Date 24
Lowest 29.72 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal + 0.5
Highest 85 Date 8
Lowest 73 Date 6

RAINFALL
(Inches)

Total 3.48
Departure from normal -8.54
Greatest in 24 hours 1.03
Date 3 & 4

WIND

Average hourly velocity 10.9 mph.
Prevailing direction NE
Maximum for five minutes 32
mph. from the NE on the 15

SUNSHINE

Average number hours per day 7.7
Percentage of possible 67

NUMBER OF DAYS

Clear 5
Partly Cloudy 17
Cloudy 9
.01 inch of rain or more 19
Thunderstorms 0
Light fog 0
Dense fog 1

Number of hours with rain 42

Bnf

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JANUARY 1969

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	79	82	80	77	79	
2	84	76	80	83	71	76	.02
3	84	78	81	85	76	82	
4	84	76	80	89	84	87	.23
5	83	75	79	89	82	86	
6	84	75	80	90	81	86	.21
7	83	80	82	87	74	83	
8	84	79	82	86	70	78	
9	82	79	80	86	68	76	T
10	83	79	81	84	72	78	
11	83	80	82	85	72	78	
12	83	79	81	84	76	80	T
13	83	78	80	87	72	79	.02
14	82	75	78	87	72	81	.42
15	83	79	81	87	74	78	.02
16	83	79	81	85	77	81	
17	82	76	79	88	77	82	.11
18	83	80	82	86	79	81	
19	82	77	80	92	81	88	.02
20	83	77	80	92	76	87	
21	82	76	79	92	80	88	.48
22	82	75	78	90	81	86	
23	83	75	79	88	68	79	
24	83	77	80	86	67	76	.05
25	82	77	80	85	72	78	.09
26	83	77	80	85	72	76	.02
27	84	78	81	84	68	77	.18
28	83	75	79	85	76	81	.34
29	84	78	81	85	77	81	.11
30	84	74	79	84	74	80	.22
31	83	77	80	79	57	66	
Sum	2575	2395		2669	2303		2.54
Mean	83.1	77.3	80.2	86.1	74.3	80.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	2.70	1965	4.82
1961	.68	1966	1.11
1962	2.29	1967	.98
1963	7.05	1968	.21
1964	.74	1969	2.54

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.183
Departure from normal -0.54
Highest 29.93 Date 19
Lowest 29.70 Date 2

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.2
Departure from normal -0.1
Highest 84.2 Date 1
Lowest 74.1 Date 30

RAINFALL
(Inches)

Total 2.54
Departure from normal - .70
Greatest in 24 hours .48
Date 21

WIND

Average hourly velocity 12.2 mph.
Prevailing direction N
Maximum for five minutes 34
mph. from the NE on the 29 & 30

SUNSHINE

Average number hours per day 8.1
Percentage of possible 70

NUMBER OF DAYS

Clear 1
Partly Cloudy 22
Cloudy 8
.01 inch of rain or more 16
Thunderstorms 1
Light fog 0
Dense fog 0
Number of hours with rain 35

ATMOSPHERIC SCIENCES LIBRARY
FEB 10 1969
E. S. S. A.
U. S. Dept. of Commerce

4066
Rev. 10-58

Pan Bay

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

ATMOSPHERIC SCIENCES LIBRARY
MAR 17 1969
E. S. S. A.
U. S. Dept. of Commerce

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** FEBRUARY 1969

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	74	78	76	54	63	.07
2	83	78	80	75	68	72	
3	81	79	80	75	72	74	T
4	85	77	81	76	68	74	.03
5	82	76	79	81	69	74	.05
6	82	79	80	78	72	76	.04
7	82	75	78	79	74	76	T
8	83	76	80	80	74	77	.01
9	83	78	80	79	76	78	.03
10	83	79	81	78	67	72	
11	83	77	80	76	65	71	.03
12	83	77	80	75	68	72	
13	82	75	78	74	68	72	T
14	83	77	80	80	74	77	.14
15	83	77	80	80	74	79	.01
16	82	75	78	83	71	78	
17	83	77	80	87	73	79	.01
18	83	78	80	84	68	74	.06
19	83	76	80	84	67	72	.03
20	83	77	80	78	66	73	.02
21	83	77	80	77	60	74	
22	83	76	80	82	70	79	.02
23	85	78	82	82	69	80	
24	84	79	82	82	68	78	
25	82	78	80	81	64	77	
26	82	78	80	81	70	74	
27	83	78	80	75	70	73	
28	81	75	78	81	68	77	.47
29	--	--	--	--	--	--	---
30							
31							
Sum	2317	2156		2219	1927		1.02
Mean	82.7	77.0	79.8	79.2	68.8	74.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	.61	1965	1.42
1961	.22	1966	.57
1962	.59	1967	.42
1963	6.39	1968	1.57
1964	.65	1969	1.02

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.829
Departure from normal -.050
Highest 29.96 Date 7
Lowest 29.72 Date 16 & 28

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.8
Departure from normal - 0.3
Highest 85 Date 4 & 23
Lowest 74 Date 1

RAINFALL
(Inches)

Total 1.02
Departure from normal -.52
Greatest in 24 hours .47
Date 28-1

WIND

Average hourly velocity 13.4 mph.
Prevailing direction N
Maximum for five minutes 32
mph. from the N on the 2

SUNSHINE

Average number hours per day 8.9
Percentage of possible 76

NUMBER OF DAYS

Clear 3
Partly Cloudy 18
Cloudy 7
.01 inch of rain or more 15
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 29

6066
Rev. 10-68

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** MARCH 1969

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	83	75	79	84	76	80	T
2	82	79	80	80	70	76	
3	84	74	79	87	64	76	
4	85	76	80	86	73	79	
5	84	78	81	86	78	83	.15
6	82	76	79	90	86	89	1.66
7	84	77	80	91	78	85	.01
8	86	80	83	90	64	78	
9	85	77	81	87	82	85	
10	84	78	81	86	74	80	.04
11	85	81	83	76	64	69	
12	84	80	82	76	67	74	T
13	85	80	82	79	64	73	
14	85	79	82	85	72	79	.01
15	85	79	82	81	70	76	.11
16	83	80	82	80	67	76	
17	84	80	82	84	64	75	
18	85	80	82	80	72	76	
19	84	79	82	78	64	72	
20	85	80	82	94	80	88	T
21	85	80	82	94	68	78	
22	85	82	84	80	66	77	
23	84	80	82	81	77	80	T
24	84	81	82	86	79	83	.01
25	85	80	82	85	66	76	T
26	84	80	82	81	65	74	
27	83	77	80	90	78	82	.01
28	84	78	81	87	63	73	.06
29	85	80	82	79	61	71	
30	85	80	82	80	65	73	
31	84	80	82	80	74	78	
Sum	2612	2446		2603	2191		2.06
Mean	84.3	78.9	81.6	84.0	70.7	77.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	4.73	1965	1.05
1961	.75	1966	2.63
1962	.72	1967	.52
1963	.38	1968	2.48
1964	.55	1969	2.06

ATMOSPHERIC SCIENCES LIBRARY
APR 1 1969
E. S. S. A.
U. S. Dept. of Commerce

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.839
Departure from normal - .033
Highest 29.99 Date 13
Lowest 29.70 Date 3

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.6
Departure from normal - 0.8
Highest 86 Date 8
Lowest 74 Date 3

RAINFALL
(Inches)

Total 2.06
Departure from normal + .58
Greatest in 24 hours 1.67
Date 6 & 7

WIND

Average hourly velocity 12.1 mph.
Prevailing direction N
Maximum for five minutes 26
mph. from the N on the 5

SUNSHINE

Average number hours per day 9.2
Percentage of possible 76

NUMBER OF DAYS

Clear 1
Partly Cloudy 20
Cloudy 10
.01 inch of rain or more 9
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 21

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** APRIL 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	84	79	82	78	68	73	0
2	85	79	82	84	70	78	.03
3	84	78	81	85	64	74	T
4	84	78	81	88	71	78	T
5	85	78	82	88	72	81	.08
6	86	79	82	97	64	76	.08
7	85	81	83	80	67	75	0
8	85	81	83	80	63	72	0
9	85	80	82	88	71	79	0
10	85	80	82	86	69	81	0
11	84	80	82	93	72	81	.02
12	84	80	82	93	73	80	0
13	85	77	81	96	59	83	.05
14	85	79	82	88	65	76	0
15	84	81	82	84	66	74	0
16	84	78	81	90	66	78	.43
17	84	76	80	91	68	84	0
18	86	77	82	97	68	84	0
19	87	78	82	96	66	84	T
20	85	80	82	98	75	84	.02
21	85	82	84	96	79	88	.02
22	85	78	82	94	70	86	.01
23	85	76	80	97	75	90	.12
24	90	77	84	97	53	89	.31
25	88	75	82	97	63	83	0
26	86	77	82	98	66	85	0
27	86	82	84	95	72	84	0
28	86	80	83	95	70	84	.04
29	85	82	84	90	70	81	0
30	86	80	83	82	71	84	T
31	--	--	--	--	--	--	---
Sum	2558	2368		2721	2046		1.21
Mean	85.3	78.9	82.1	90.7	68.2	80.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	10.38	1965	2.22
1961	2.27	1966	6.49
1962	2.23	1967	2.94
1963	2.28	1968	.53
1964	3.39	1969	1.21

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.828
Departure from normal - .027
Highest 29.94 Date 8
Lowest 29.70 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 82.1
Departure from normal +0.7
Highest 90 Date 24
Lowest 75 Date 25

RAINFALL
(Inches)

Total 1.21
Departure from normal - 2.75
Greatest in 24 hours .43
Date 16

WIND

Average hourly velocity 11.0 mph.
Prevailing direction N
Maximum for five minutes 22
mph. from the NE on the 6

SUNSHINE

Average number hours per day 8.8
Percentage of possible 71

NUMBER OF DAYS

Clear 2
Partly Cloudy 18
Cloudy 10
.01 inch of rain or more 12
Thunderstorms 1
Light fog
Dense fog 0

Number of hours with rain 22

ATMOSPHERIC SCIENCES LIBRARY
E. S. S. A.
U. S. Dept. of Commerce

3466
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MAY 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	86	79	82	96	68	80	.35
2	86	81	84	90	70	80	.02
3	85	78	82	93	64	79	0
4	86	75	80	96	64	80	0
5	94	77	86	95	43	78	0
6	87	78	82	94	66	84	0
7	87	81	84	92	70	82	0
8	86	82	84	88	76	82	0
9	85	73	79	96	62	85	1.24
10	85	74	80	98	72	91	.09
11	85	75	80	98	68	81	0
12	84	80	82	95	80	85	.54
13	86	74	80	98	78	89	4.16
14	84	74	79	98	80	92	3.18
15	87	77	82	98	64	88	.24
16	85	74	80	98	70	86	.43
17	86	76	81	93	71	85	0
18	86	78	82	97	72	88	.37
19	84	75	80	97	80	92	1.63
20	83	77	80	98	80	92	2.13
21	84	77	80	98	81	87	1.82
22	85	77	81	94	79	88	T
23	84	76	80	98	74	90	.93
24	85	78	82	96	74	86	0
25	85	79	82	95	77	87	0
26	85	75	80	96	77	90	1.78
27	82	77	80	94	82	90	.32
28	86	76	81	95	68	85	.04
29	86	78	82	93	74	87	.31
30	89	78	84	92	58	83	.72
31	91	76	84	92	50	76	0
Sum	2659	2385	-	2951	2192	-	20.30
Mean	85.8	76.9	81.4	95.2	70.7	85.4	-

TOTAL RAINFALL FOR THIS MONTH IN:

1960	24.18	1965	12.10
1961	9.44	1966	15.44
1962	23.05	1967	7.74
1963	13.22	1968	8.88
1964	9.39	1969	20.30

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.803
Departure from normal - 0.032
Highest 29.91 Date 9
Lowest 29.69 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.4
Departure from normal + 0.3
Highest 94 Date 5
Lowest 73 Date 9

RAINFALL
(Inches)

Total 20.30
Departure from normal + 7.82
Greatest in 24 hours 7.28
Date 13 & 14

WIND

Average hourly velocity 7.3 mph.
Prevailing direction N
Maximum for five minutes 23
mph. from the NE on the 26

SUNSHINE

Average number hours per day 6.6
Percentage of possible 53

NUMBER OF DAYS

Clear 2
Partly Cloudy 6
Cloudy 23
.01 inch of rain or more 19
Thunderstorms 10
Light fog 0
Dense fog 0

Number of hours with rain 99

4866
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	84	79	82	90	73	85	.01
2	91	75	83	93	54	82	1.16
3	87	77	82	91	68	84	.05
4	84	77	80	90	69	84	.02
5	85	77	81	90	68	82	0
6	86	78	82	90	70	82	T
7	89	79	84	90	61	81	0
8	90	79	84	90	58	80	.03
9	86	78	82	90	61	79	T
10	92	78	85	88	47	72	0
11	87	77	82	90	64	82	.82
12	91	77	84	90	49	75	0
13	89	79	84	88	56	78	.02
14	88	79	84	91	58	80	T
15	88	78	83	94	65	83	T
16	89	78	84	96	60	87	.22
17	89	77	83	95	60	84	.01
18	85	76	80	96	71	90	.72
19	81	76	78	96	80	91	.32
20	86	77	82	95	59	82	0
21	85	77	81	95	74	87	.08
22	86	76	81	95	76	90	.72
23	87	78	82	96	69	86	.58
24	86	77	82	94	73	86	.06
25	84	75	80	94	80	89	.11
26	85	75	80	94	74	87	.32
27	85	79	82	94	78	89	.01
28	84	76	80	96	71	89	.41
29	82	78	80	96	74	88	0
30	82	78	80	95	68	87	.02
31	--	--	--	--	--	--	----
Sum	2593	2320		2782	1988		5.69
Mean	86.4	77.3	81.8	92.7	66.3	84.0	

SMITHSONIAN SCIENCES LIBRARY
JUL 11 1969
U. S. Department of Commerce

TOTAL RAINFALL FOR THIS MONTH IN:

1960	12.65	1965	9.17
1961	10.13	1966	3.38
1962	6.62	1967	18.06
1963	13.61	1968	11.61
1964	17.58	1969	5.69

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.805
Departure from normal - .031
Highest 29.90 Date 9
Lowest 29.68 Date 15

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 81.8
Departure from normal + 1.0
Highest 92 Date 10
Lowest 75 Date 26

RAINFALL
(Inches)

Total 5.69
Departure from normal - 7.37
Greatest in 24 hours 1.16
Date 2

WIND

Average hourly velocity 5.3 mph.
Prevailing direction SE
Maximum for five minutes 24
mph. from the NW on the 22

SUNSHINE

Average number hours per day 6.8
Percentage of possible 54

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 19
Thunderstorms 11
Light fog 0
Dense fog 0

Number of hours with rain 50

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JULY 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	84	78	81	95	74	85	.25
2	82	77	80	95	80	88	.02
3	86	76	81	96	68	84	.06
4	85	77	81	95	74	84	.16
5	86	75	80	97	76	91	2.17
6	84	76	80	96	78	88	.03
7	85	76	80	96	76	90	.26
8	86	75	80	96	71	85	T
9	83	77	80	97	75	87	1.50
10	85	78	82	96	74	88	.79
11	82	76	79	95	74	90	.08
12	85	75	80	98	73	86	.34
13	87	78	82	97	73	85	.50
14	87	79	83	97	67	89	.24
15	85	75	80	96	70	88	2.71
16	86	75	80	98	68	88	.10
17	82	77	80	97	72	84	.06
18	86	78	82	96	75	85	.12
19	85	75	80	97	75	88	1.08
20	85	83	84	93	80	86	T
21	86	82	84	93	74	88	0
22	84	80	82	96	80	87	.01
23	85	81	83	93	76	88	.01
24	85	73	79	98	76	87	1.70
25	85	78	82	93	66	86	.16
26	86	80	83	91	71	83	.03
27	85	78	82	92	75	86	.15
28	86	72	79	94	68	85	.88
29	86	73	80	92	67	83	.45
30	82	75	78	92	76	87	.01
31	84	75	80	94	71	86	.08
Sum	2630	2383		2951	2273		13.95
Mean	84.8	76.9	80.8	95.2	73.3	86.6	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	10.92	1965	9.79
1961	9.98	1966	13.84
1962	24.34	1967	16.52
1963	8.94	1968	19.49
1964	18.68	1969	13.95

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.821
Departure from normal - .022
Highest 29.94 Date 8
Lowest 29.72 Date 20

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal + 0.3
Highest 87 Date 14
Lowest 72 Date 28

RAINFALL
(Inches)

Total 13.95
Departure from normal - 1.56
Greatest in 24 hours 2.82
Date 14 & 15

WIND

Average hourly velocity 7.5 mph.
Prevailing direction W
Maximum for five minutes 24
mph. from the SW on the 15

SUNSHINE

Average number hours per day 5.3
Percentage of possible 42

NUMBER OF DAYS

Clear	0
Partly Cloudy	2
Cloudy	29
Precipitation .01 inch or more	28
Thunderstorms	11
Light fog	0
Dense fog	0
Number of hours with rain	110

ATMOSPHERIC SCIENCES LIBRARY
AUG 15 1969
E. S. S. A.
U. S. Dept. of Commerce

4066
Rev. 10-58 Pr Boy

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: Cristobal, C. Z. **Month:** August, 1969

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	74	80	98	70	92	1.40
2	84	74	79	98	77	88	T
3	84	75	80	96	78	90	1.79
4	84	75	80	94	77	89	.01
5	84	77	80	94	74	86	0
6	86	77	82	96	74	87	.67
7	85	71	78	98	69	90	5.05
8	80	76	78	96	82	88	.38
9	88	74	81	96	53	87	1.71
10	85	75	80	96	74	89	.02
11	84	76	80	96	75	88	.61
12	84	78	81	95	74	89	.01
13	85	75	80	96	70	88	.08
14	87	76	82	96	56	85	.90
15	87	77	82	96	60	83	.04
16	86	77	82	92	61	83	0
17	87	76	82	92	57	82	.02
18	88	78	83	92	55	81	0
19	87	77	82	93	60	86	.03
20	83	77	80	95	76	89	.57
21	85	76	80	94	65	88	.02
22	85	75	80	94	72	88	.44
23	86	76	81	97	72	89	.17
24	86	77	82	96	66	87	0
25	85	78	82	97	67	88	.87
26	85	72	78	97	73	92	1.47
27	88	74	81	97	61	87	.48
28	86	75	80	98	67	86	1.32
29	84	74	79	96	68	89	1.35
30	83	77	80	97	75	91	.63
31	87	77	82	98	66	85	.17
Sum	2644	2346		2966	2124		20.21
Mean	85.3	75.7	80.5	95.7	68.5	87.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	10.91	1965	20.31
1961	10.34	1966	20.26
1962	18.01	1967	8.56
1963	13.70	1968	13.67
1964	18.80	1969	20.21

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.818
Departure from normal - .023
Highest 29.91 Date 15
Lowest 29.70 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.5
Departure from normal + 0.1
Highest 88 Date 18
Lowest 71 Date 7

RAINFALL
(Inches)

Total 20.21
Departure from normal + 4.85
Greatest in 24 hours 5.45
Date 6 & 7

WIND

Average hourly velocity 55 mph.
Prevailing direction S
Maximum for five minutes 25
mph. from the NW on the 6

SUNSHINE

Average number hours per day 5.8
Percentage of possible 47

NUMBER OF DAYS

Clear 0
Partly Cloudy 6
Cloudy 25
[illegible] inch of rain or more 26
Thunderstorms [illegible]
Light fog 0
Dense fog 0
Number of hours with rain 92

ATMOSPHERIC SCIENCES LIBRARY
SEP 15 1969
E. S. S. A.
U. S. Dept. of Commerce

By

4866
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** SEPTEMBER 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	88	79	84	95	61	86	0
2	90	74	82	97	55	85	1.79
3	92	78	85	94	48	80	0
4	86	77	82	94	72	83	0
5	86	79	82	95	74	85	.36
6	85	76	80	95	65	86	0
7	84	73	78	98	78	90	.48
8	90	76	83	94	58	82	.03
9	86	77	82	96	72	88	0
10	84	78	81	97	80	92	2.44
11	83	79	81	97	82	91	1.02
12	84	73	78	97	76	88	2.99
13	85	79	82	95	75	86	.09
14	83	76	80	98	76	89	1.74
15	87	71	79	97	71	90	1.63
16	81	76	78	92	76	87	0
17	83	75	79	95	75	91	.44
18	85	76	80	97	66	90	.04
19	82	74	78	98	80	95	1.54
20	88	76	82	98	58	87	.09
21	86	75	80	98	60	83	T
22	87	77	82	92	60	78	0
23	90	76	83	94	52	81	0
24	85	77	81	96	70	86	0
25	83	75	79	95	69	90	.03
26	85	74	80	94	58	86	.03
27	85	74	80	94	68	86	T
28	86	73	80	97	62	88	3.30
29	88	73	80	96	61	85	.10
30	89	77	83	94	58	82	.21
31	---	---	---	---	---	---	---
Sum	2576	2273		2869	2016		18.35
Mean	85.9	75.8	80.8	95.6	67.2	86.6	

TOTAL RAINFALL FOR THIS MONTH IN:

19 60	8.42	19 65	14.12
19 61	12.90	19 66	13.36
19 62	13.14	19 67	11.95
19 63	11.22	19 68	14.95
19 64	13.56	19 69	18.35

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.794
Departure from normal - .035
Highest 29.89 Date 23
Lowest 29.67 Date 5

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.8
Departure from normal + 0.2
Highest 92 Date 3
Lowest 71 Date 15

RAINFALL
(Inches)

Total 18.35
Departure from normal +5.77
Greatest in 24 hours 3.40
Date 28 & 29th

WIND

Average hourly velocity 6.4 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the SE on the 2 & 22

SUNSHINE

Average number hours per day 6.2
Percentage of possible 51

NUMBER OF DAYS

Clear 0
Partly Cloudy 7
Cloudy 23
.01 inch of rain or more 19
Thunderstorms 12
Light fog 0
Dense fog 0

Number of hours with rain 77

4664
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** NOVEMBER 1969

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	89	74	82	97	61	85	0
2	86	76	81	96	66	85	.01
3	85	76	80	94	68	83	T
4	84	75	80	96	72	87	2.37
5	87	76	82	93	62	85	.17
6	83	75	79	92	71	84	.49
7	84	74	79	94	70	86	1.06
8	82	74	78	96	72	91	1.17
9	80	73	76	97	65	84	.44
10	82	74	78	94	65	80	.16
11	84	75	80	95	59	73	.61
12	82	74	78	97	70	84	.82
13	84	74	79	97	70	89	2.19
14	83	77	80	94	74	86	LIB
15	83	76	80	94	73	85	.29
16	83	74	78	94	72	86	.11
17	81	76	78	97	83	92	1.52
18	83	76	80	95	70	84	.05
19	81	76	78	94	74	86	.02
20	79	74	76	96	76	87	.38
21	83	73	78	96	72	86	.07
22	84	74	79	96	66	88	.11
23	84	75	80	96	73	90	.68
24	88	74	81	95	57	85	.77
25	90	78	84	95	48	83	.01
26	83	77	80	96	77	92	.38
27	84	75	80	96	71	88	.03
28	84	75	80	96	72	85	T
29	85	75	80	95	74	87	.70
30	82	75	78	95	74	87	1.20
31	--	--	--	--	--	--	----
Sum	2512	2250		2858	2077		15.81
Mean	83.7	75.0	79.4	95.3	69.2	85.8	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	32.04	1965	25.78
1961	21.94	1966	35.08
1962	25.35	1967	27.65
1963	22.72	1968	13.38
1964	14.36	1969	15.81

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.802
Departure from normal -.027
Highest 29.93 Date 27
Lowest 29.65 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.4
Departure from normal 0
Highest 90 Date 25
Lowest 73 Date 9

RAINFALL
(Inches)

Total 15.81
Departure from normal -6.71
Greatest in 24 hours 2.49
Date 4 & 5

WIND

Average hourly velocity 7.0 mph.
Prevailing direction S
Maximum for five minutes 24
mph. from the NW on the 9

SUNSHINE

Average number hours per day 6.0
Percentage of possible 51

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 26
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 128

ATMOSPHERIC SCIENCES LIBRARY RECEIVED U. S. Dept. of Commerce

Dr B4

4066
Rev. 10-68

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL **Month:** DECEMBER 1969

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	81	75	78	94	78	89	.40
2	82	75	78	94	72	88	1.16
3	83	75	79	94	72	86	.35
4	82	75	78	94	70	85	.48
5	81	79	80	84	67	76	T
6	82	79	80	92	71	80	0
7	83	76	80	95	67	81	.02
8	84	79	82	92	76	85	1.12
9	83	80	82	88	74	82	.03
10	81	76	78	92	76	86	.04
11	84	75	80	92	73	85	.01
12	85	79	82	87	59	74	T
13	85	76	80	96	58	74	.18
14	82	76	79	96	64	77	.03
15	82	73	78	98	86	94	3.84
16	83	75	79	97	89	95	.50
17	79	74	76	97	74	92	.55
18	81	72	76	97	68	91	5.34
19	84	75	80	96	73	83	T
20	82	74	78	96	76	89	1.15
21	81	77	79	93	79	87	T
22	81	76	78	95	72	89	.04
23	81	76	78	95	76	87	T
24	81	79	80	94	87	90	.01
25	83	80	82	93	80	88	.06
26	84	80	82	93	78	86	0
27	83	77	80	91	74	82	.01
28	85	78	82	95	67	80	.03
29	86	80	83	84	60	75	0
30	85	80	82	90	66	81	0
31	84	77	80	92	71	82	0
Sum	2563	2378		2886	2253		15.35
Mean	82.7	76.7	79.7	93.1	72.7	84.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1960	29.18	1965	7.62
1961	8.96	1966	13.90
1962	17.85	1967	10.44
1963	3.50	1968	3.48
1964	2.03	1969	15.35

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.826
Departure from normal -.013
Highest 29.93 Date 4
Lowest 29.74 Date 18

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.7
Departure from normal -0.4
Highest 86 Date 29
Lowest 72 Date 18

RAINFALL
(Inches)

Total 15.35
Departure from normal +3.29
Greatest in 24 hours 5.34
Date 18

WIND

Average hourly velocity 11.2 mph.
Prevailing direction N
Maximum for five minutes 29
mph. from the N on the 3d

SUNSHINE

Average number hours per day 6.0
Percentage of possible 52

NUMBER OF DAYS

Clear 2
Partly Cloudy 11
Cloudy 18
.01 inch of rain or more 21
Thunderstorms 5
Light fog 0
Dense fog 0

Number of hours with rain 93

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JANUARY 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	77	80	90	75	84	.0
2	83	77	80	90	73	83	.13
3	83	79	81	87	76	82	T
4	84	77	80	93	75	85	.01
5	83	80	82	92	76	83	.03
6	84	80	82	88	75	83	0
7	84	80	82	89	76	83	0
8	85	79	82	91	78	85	.01
9	83	76	80	95	80	87	.24
10	82	72	77	93	77	88	2.57
11	79	75	77	94	81	90	1.40
12	82	75	78	92	68	86	.06
13	81	71	76	94	78	91	4.29
14	81	72	76	92	74	86	.06
15	81	74	78	97	70	83	0
16	81	75	78	90	61	74	0
17	81	69	75	97	58	82	0
18	83	71	77	96	62	80	0
19	83	74	78	96	66	81	0
20	82	75	78	96	72	82	T
21	84	76	80	96	74	83	.13
22	83	76	80	94	64	81	.15
23	83	77	80	90	70	78	0
24	83	77	80	94	73	81	.01
25	85	80	82	90	66	78	0
26	84	81	82	96	72	80	T
27	82	77	80	96	82	90	T
28	84	77	80	93	70	84	0
29	85	79	82	88	64	84	0
30	84	78	81	89	65	77	.02
31	84	78	81	88	68	78	.10
Sum	2570	2364		2866	2219		9.21
Mean	82.9	76.3	79.6	92.5	71.6	83.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	.68	1966	1.11
1962	2.29	1967	.93
1963	7.05	1968	.21
1964	.74	1969	2.54
1965	4.82	1970	9.21

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.859
Departure from normal -.007
Highest 30.02 Date 20
Lowest 29.69 Date 6

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 0.7
Highest 85 Date 29
Lowest 69 Date 17

RAINFALL
(Inches)

Total 9.21
Departure from normal + 5.91
Greatest in 24 hours 4.35
Date FEB 17 1970 13 & 14

ATMOSPHERIC SCIENCES LIBRARY
FEB 17 1970
E.S.S.A.
U. S. Dept. of Commerce

WIND

Average hourly velocity 11.1 mph.
Prevailing direction N
Maximum for five minutes 32
mph. from the N on the 9

SUNSHINE

Average number hours per day 8.2
Percentage of possible 70

NUMBER OF DAYS

Clear 3
Partly Cloudy 14
Cloudy 14
.01 inch of rain or more 15
Thunderstorms 3
Light fog 0
Dense fog 0

Number of hours with rain 76

Jan 64

4966
Rev. 10-68

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** FEBRUARY 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	84	78	81	89	64	76	.07
2	83	78	80	88	72	80	.07
3	82	76	79	88	72	81	.03
4	84	73	78	89	68	77	.10
5	84	79	82	84	63	72	.01
6	83	76	80	89	62	74	.08
7	84	75	80	86	64	77	.13
8	83	76	80	85	67	76	.33
9	81	74	78	86	70	79	.44
10	80	77	78	86	73	78	.06
11	82	76	79	86	72	81	.18
12	83	79	81	88	81	85	0
13	83	79	81	88	82	86	0
14	84	79	82	88	80	84	0
15	83	79	81	88	81	86	0
16	83	79	81	88	80	86	0
17	83	79	81	88	80	85	0
18	83	77	80	90	74	82	T
19	82	77	80	84	68	80	0
20	83	74	78	90	70	81	.48
21	83	78	80	86	66	73	
22	83	78	80	90	68	79	.04
23	82	78	80	87	76	82	T
24	83	76	80	87	75	82	.07
25	82	79	80	82	72	78	0
26	83	79	81	83	76	79	0
27	83	78	80	80	66	74	T
28	84	78	81	81	67	73	T
29	---	---	---	---	---	---	---
30							
31							
Sum	2320	2164		2424	2003		2.09
Mean	82.9	77.3	80.1	86.6	71.5	79.4	

ATMOSPHERIC SCIENCES LIBRARY MAR 1970 E.S.S.A. U.S. Dept. of Commerce

TOTAL RAINFALL FOR THIS MONTH IN:

19 61	.22	19 66	.57
19 62	.59	19 67	.42
19 63	6.39	19 68	1.57
19 64	.65	19 69	1.02
19 65	1.42	19 70	2.09

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.861
Departure from normal - .018
Highest 29.99 Date 10
Lowest 29.71 Date 14

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.1
Departure from normal - 0.1
Highest 84 Date 1
Lowest 73 Date 4

RAINFALL
(Inches)

Total 2.09
Departure from normal + .55
Greatest in 24 hours .48
Date 20

WIND

Average hourly velocity 14.9 mph.
Prevailing direction N
Maximum for five minutes 27
mph. from the N on the 8

SUNSHINE

Average number hours per day 9.3
Percentage of possible 79

NUMBER OF DAYS

Clear 0
Partly Cloudy 18
Cloudy 10
.01 inch of rain or more 14
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 41

4066
Rev. 10-68

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MARCH 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	82	78	80	80	69	74	.03
2	82	77	80	81	67	74	.04
3	83	78	80	78	66	73	
4	83	77	80	78	70	74	
5	83	74	78	85	76	82	
6	83	75	79	86	76	82	
7	83	74	78	91	72	85	
8	85	73	79	92	58	83	
9	83	75	79	90	75	83	
10	83	78	80	88	76	84	T
11	83	77	80	90	76	86	.14
12	87	75	81	89	68	82	
13	83	75	79	90	78	85	.36
14	82	75	78	93	81	87	.31
15	83	79	81	84	64	74	.04
16	83	80	82	81	62	72	
17	84	79	82	84	71	79	T
18	84	79	82	84	73	80	T
19	84	79	82	84	68	78	.02
20	83	79	81	85	75	79	.03
21	84	80	82	82	73	79	
22	84	80	82	82	80	81	
23	82	79	80	84	74	81	.01
24	84	80	82	86	68	80	.01
25	83	76	80	92	76	87	.20
26	85	78	82	91	69	83	
27	84	76	80	*92	*78	86	.25
28	84	82	83	*92	72	82	
29	84	80	82	88	64	82	
30	83	79	81	90	70	85	.23
31	84	79	82	90	71	82	
Sum	2587	2405		2682	2216		1.72
Mean	83.5	77.6	80.6	86.5	71.5	80.8	

ATMOSPHERIC SCIENCES LIBRARY
APR 21 1970
U. S. Dept. of Commerce
E. S. S. A

TOTAL RAINFALL FOR THIS MONTH IN:

1961	.75	1966	2.63
1962	.72	1967	.52
1963	.38	1968	2.48
1964	.55	1969	2.06
1965	.08	1970	1.72

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.835
Departure from normal - .037
Highest 29.96 Date 15
Lowest 29.73 Date 30

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal - 0.2
Highest 87 Date 12
Lowest 73 Date 8

RAINFALL
(Inches)

Total 1.72
Departure from normal + .23
Greatest in 24 hours .67
Date 13 & 14

WIND

Average hourly velocity 11.0 mph.
Prevailing direction N
Maximum for five minutes 24
mph. from the N on the 15

SUNSHINE

Average number hours per day 8.1
Percentage of possible 67

NUMBER OF DAYS

Clear 2
Partly Cloudy 11
Cloudy 18
.01 inch of rain or more 14
Thunderstorms 2
Light fog 0
Dense fog 0

Number of hours with rain 30

Estimated

Rm B4

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** APRIL 1970

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	85	79	82	87	72	80	0
2	85	82	84	82	66	76	.02
3	84	82	83	83	68	79	0
4	85	80	82	85	72	80	0
5	84	80	82	86	62	77	0
6	84	81	82	90	79	85	T
7	86	81	84	90	76	84	.01
8	82	79	80	92	86	90	6.85
9	80	77	78	92	84	90	6.85
10	82	77	80	90	74	85	T
11	84	76	80	89	72	85	.03
12	86	77	82	91	75	86	0
13	87	79	83	89	74	84	0
14	87	79	83	88	65	78	0
15	86	78	82	88	67	78	0
16	86	82	84	86	66	77	0
17	85	81	83	86	64	74	T
18	85	79	82	90	64	75	.14
19	83	78	80	91	75	85	.29
20	85	82	84	88	75	82	0
21	85	82	84	86	67	78	0
22	86	82	84	90	67	80	T
23	85	82	84	86	70	80	0
24	85	82	84	88	74	82	0
25	85	80	82	90	69	82	0
26	84	78	81	92	75	84	0
27	84	79	82	87	75	84	.21
28	83	78	80	88	82	85	.25
29	85	78	82	89	80	85	0
30	86	80	83	91	79	85	.10
31	--	--	--	--	--	--	--
Sum	2539	2390		2650	2174		14.75
Mean	84.6	79.7	82.2	88.3	72.5	81.9	

ATMOSPHERIC SCIENCES LIBRARY
U. S. A. Dept. of Commerce
E. S. S. A.

TOTAL RAINFALL FOR THIS MONTH IN:

19 61	2.27	19 66	6.49
19 62	2.23	19 67	2.94
19 63	2.28	19 68	0.53
19 64	3.39	19 69	1.21
19 65	2.22	19 70	14.75

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.830
Departure from normal - .025
Highest 29.95 Date 17
Lowest 29.73 Date 1

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 82.2
Departure from normal + 0.8
Highest 87 Date 13 & 14
Lowest 76 Date 11

RAINFALL
(Inches)

Total 14.75
Departure from normal + 10.68
Greatest in 24 hours 11.00
Date 8 & 9

WIND

Average hourly velocity 11.3 mph.
Prevailing direction N
Maximum for five minutes 29
mph. from the NE on the 8

SUNSHINE

Average number hours per day 9.0
Percentage of possible 73

NUMBER OF DAYS

Clear 1
Partly Cloudy 13
Cloudy 16
.01 inch of rain or more 10
Thunderstorms 2
Light fog 0
Dense fog 0

Number of hours with rain 49

4664
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** MAY 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	85	80	82	89	76	86	.01
2	84	80	82	88	75	82	.0
3	85	78	82	86	73	81	.02
4	85	80	82	90	82	86	.79
5	85	81	83	88	74	82	.01
6	85	78	82	88	72	80	.21
7	85	79	82	87	74	81	.01
8	83	79	81	85	74	80	.01
9	85	80	82	84	72	80	.01
10	85	80	82	85	76	81	.03
11	84	79	82	85	78	82	.19
12	84	78	81	86	78	83	.77
13	81	76	78	95	80	88	.55
14	86	79	82	96	70	92	.45
15	82	74	78	98	89	95	5.08
16	80	74	77	99	89	96	.86
17	82	76	79	99	81	95	.43
18	84	76	80	97	73	90	.06
19	85	76	80	100	72	94	2.62
20	87	75	81	100	62	88	.08
21	85	74	80	95	71	85	0
22	83	79	81	94	76	84	.01
23	84	77	80	93	80	88	.03
24	82	76	79	96	84	90	4.14
25	83	80	82	93	81	88	.35
26	81	74	78	97	83	92	2.04
27	84	72	78	96	75	91	1.71
28	86	75	80	96	70	85	T
29	83	76	80	95	74	86	.10
30	82	76	79	95	79	88	.21
31	83	78	80	94	80	90	.27
Sum	2598	2395		2869	2373		21.05
Mean	83.8	77.3	80.6	92.5	76.5	86.7	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	9.44	1966	15.44
1962	23.05	1967	7.74
1963	13.22	1968	8.88
1964	9.39	1969	20.30
1965	12.10	1970	21.05

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.847
Departure from normal + .012
Highest 29.97 Date 6th
Lowest 29.74 Date 10th & 31st

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.6
Departure from normal - 0.5
Highest 87 Date 20th
Lowest 72 Date 27th

RAINFALL
(Inches)

Total 21.05
Departure from normal + 8.48
Greatest in 24 hours 5.10
Date 15th & 16th

WIND

Average hourly velocity 8.6 mph.
Prevailing direction N
Maximum for five minutes 22
mph. from the N on the 10

SUNSHINE

Average number hours per day 6.1
Percentage of possible 49

NUMBER OF DAYS

Clear 1
Partly Cloudy 5
Cloudy 25
.01 inch of rain or more 28
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 114

ATMOSPHERIC SCIENCES LIBRARY
JUN 16 1970
U. S. Dept. of Commerce

Pam Bog

4066
Rev. 10-58

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** JUNE 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	77	78	95	86	91	.15
2	81	74	78	100	86	92	3.09
3	84	80	82	98	84	89	.01
4	84	80	82	94	85	89	.21
5	85	81	83	94	83	88	T
6	85	81	83	90	73	82	0
7	82	78	80	94	82	88	.57
8	85	80	82	92	78	87	.01
9	82	76	79	96	82	90	.50
10	86	75	80	95	76	89	T
11	88	77	82	97	64	88	T
12	84	76	80	95	72	86	0
13	81	75	78	97	82	90	1.19
14	83	75	79	98	81	92	.07
15	84	77	80	100	82	93	.49
16	84	76	80	100	82	94	.89
17	85	76	80	100	82	92	0
18	85	77	81	98	79	86	0
19	85	81	83	91	76	82	0
20	83	78	80	91	78	86	.01
21	82	77	80	96	80	89	.34
22	82	78	80	94	80	89	T
23	81	76	78	96	74	90	.27
24	84	76	80	96	77	88	.59
25	86	77	82	96	76	86	0
26	84	78	81	95	78	90	.18
27	84	76	80	96	78	88	0
28	85	80	82	92	74	84	.01
29	82	72	77	96	80	88	.70
30	82	74	78	95	74	88	.45
31							
Sum	2509	2314		2867	2364		9.73
Mean	83.6	77.1	80.4	95.6	78.8	88.4	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	10.13	1966	3.38
1962	6.62	1967	18.06
1963	13.61	1968	11.61
1964	17.58	1969	5.69
1965	9.17	1970	9.73

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.838
Departure from normal + .003
Highest 29.98 Date 26
Lowest 29.72 Date 3

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.4
Departure from normal + 0.3
Highest 88 Date 11
Lowest 72 Date 29

RAINFALL
(Inches)

Total 9.73
Departure from normal -3.29
Greatest in 24 hours 3.09
Date 2

ATMOSPHERIC SCIENCES LIBRARY
JUN
E S
U. S. Dept. of Commerce

WIND

Average hourly velocity 6.5 mph.
Prevailing direction N
Maximum for five minutes 22
mph. from the W on the 2

SUNSHINE

Average number hours per day 6.2
Percentage of possible 49

NUMBER OF DAYS

Clear 1
Partly Cloudy 4
Cloudy 25
.01 inch of rain or more 19
Thunderstorms 6
Light fog 0
Dense fog 0

Number of hours with rain 69

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY
75TH MERIDIAN TIME

Station: CRISTOBAL, C. Z. **Month:** JULY 1970

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	89	75	82	93	60	81	0
2	83	77	80	94	75	86	0
3	84	73	78	96	75	88	1.48
4	85	77	81	94	80	87	.04
5	85	81	83	93	79	86	.36
6	85	81	83	91	75	83	.07
7	86	81	84	91	76	84	T
8	84	74	79	96	76	88	1.47
9	85	76	80	92	72	85	.07
10	86	76	81	93	68	85	.78
11	85	76	80	92	72	85	.05
12	85	75	80	95	74	89	.05
13	85	76	80	96	78	88	0
14	84	76	80	96	84	92	.79
15	81	78	80	94	82	90	.03
16	82	77	80	94	72	86	.04
17	86	74	80	95	69	85	.77
18	83	75	79	94	74	87	.24
19	81	73	77	95	77	89	.93
20	85	75	80	94	65	84	T
21	83	76	80	95	75	89	.14
22	84	77	80	96	76	88	0
23	85	75	80	96	77	89	4.63
24	85	76	80	98	80	90	.83
25	81	72	76	98	84	93	5.02
26	83	73	78	95	77	90	1.28
27	85	76	80	94	66	86	.02
28	83	75	79	92	74	85	.03
29	84	77	80	96	74	84	.52
30	84	74	79	96	74	87	0
31	86	75	80	96	68	84	0
Sum	2612	2352		2930	2308		19.64
Mean	84.3	75.9	80.1	94.5	74.5	86.9	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	9.98	1966	13.84
1962	24.34	1967	16.52
1963	8.94	1968	19.49
1964	18.68	1969	13.95
1965	9.79	1970	19.64

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.850
Departure from normal +.007
Highest 29.96 Date 28
Lowest 29.74 Date 16

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 80.1
Departure from normal - 0.4
Highest 89 Date 1
Lowest 72 Date 25

RAINFALL
(Inches)

Total 19.64
Departure from normal +4.09
Greatest in 24 hours 5.76
Date 24 & 25 th

WIND

Average hourly velocity 5.7 mph.
Prevailing direction S
Maximum for five minutes 29
mph. from the NW on the 25

SUNSHINE

Average hours per day 6.7
Percentage of possible 53

ATMOSPHERIC SCIENCES LIBRARY
AUG 17 1970
E. S. S. A.
U. S. Dept. of Commerce

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 23
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 83

Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** AUGUST 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	86	75	80	93	68	86	.89
2	83	74	78	92	73	85	0
3	83	76	80	97	76	89	.01
4	85	77	81	96	78	91	.28
5	82	78	80	96	82	89	.01
6	79	72	76	97	82	92	1.37
7	84	76	80	97	74	85	0
8	85	76	80	98	74	91	.54
9	83	74	78	100	77	91	.02
10	85	75	80	98	78	88	0
11	84	77	80	97	78	89	.10
12	82	73	78	95	79	87	1.32
13	81	75	78	99	82	93	.26
14	87	74	80	99	66	87	0
15	82	73	78	97	78	88	.78
16	81	76	78	96	81	89	.24
17	82	76	79	97	79	90	.25
18	80	77	78	99	78	93	.86
19	84	75	80	98	78	87	.33
20	84	76	80	95	80	88	.55
21	83	77	80	96	80	90	.68
22	83	76	80	96	80	90	.21
23	83	74	78	97	77	89	1.95
24	80	76	78	94	78	89	.02
25	83	76	80	93	74	86	T
26	84	75	80	94	73	87	T
27	84	74	79	96	78	92	.36
28	83	74	78	99	76	89	.03
29	87	75	81	98	71	91	.15
30	85	75	80	98	75	91	.43
31	83	75	79	95	78	88	.38
Sum	2580	2332		2992	2381		12.02
Mean	83.2	75.2	79.2	96.5	76.8	89.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	10.34	1966	20.26
1962	18.01	1967	8.56
1963	13.70	1968	13.67
1964	18.80	1969	20.21
1965	20.31	1970	12.02

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.826
Departure from normal -.015
Highest 29.94 Date 3
Lowest 29.71 Date 29

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.2
Departure from normal -1.2
Highest 87 Date 14
Lowest 72 Date 6

ATMOSPHERIC SCIENCES LIBRARY
SEP 30 1970
U. S. Dept. of Commerce

RAINFALL
(Inches)

Total 12.02
Departure from normal -3.31
Greatest in 24 hours 2.09
Date 22 & 23

WIND

Average hourly velocity 4.0 mph.
Prevailing direction S
Maximum for five minutes 22
mph. from the NW on the 17

SUNSHINE

Average number hours per day 5.2
Percentage of possible 42

NUMBER OF DAYS

Clear 0
Partly Cloudy 2
Cloudy 29
.01 inch of rain or more 25
Thunderstorms 21
Light fog 0
Dense fog 0
Number of hours with rain 100

Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** OCTOBER 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	80	73	76	97	80	89	.69
2	83	73	78	96	74	92	.40
3	80	75	78	96	83	92	1.45
4	82	75	78	98	82	92	.58
5	81	76	78	100	86	94	.37
6	84	75	80	98	78	86	0
7	85	77	81	95	72	86	.07
8	85	76	80	95	74	89	.16
9	89	75	82	96	62	86	1.14
10	81	75	78	96	78	89	.01
11	85	75	80	94	68	85	.03
12	84	77	80	94	76	85	T
13	84	78	81	94	79	89	.47
14	80	76	78	96	80	91	.83
15	86	74	80	99	74	88	.40
16	83	76	80	100	82	95	.42
17	85	75	80	100	76	90	.90
18	85	76	80	96	74	89	.83
19	81	75	78	96	82	89	.18
20	83	75	79	97	78	91	.72
21	83	73	78	95	77	88	.24
22	85	73	79	96	70	88	.03
23	86	74	80	94	65	84	0
24	90	76	83	92	60	78	0
25	85	76	80	93	68	84	0
26	82	75	78	93	80	90	1.19
27	83	73	78	94	75	86	0
28	86	75	80	96	72	88	.02
29	87	75	81	98	70	87	T
30	85	75	80	97	76	90	.26
31	83	75	79	99	78	88	.41
Sum	2601	2327		2980	2329		11.80
Mean	83.9	75.1	79.6	96.1	75.1	88.4	

TOTAL RAINFALL FOR THIS MONTH IN:

19 61	15.42	19 66	14.90
19 62	11.64	19 67	18.84
19 63	6.34	19 68	12.90
19 64	11.78	19 69	11.01
19 65	23.70	19 70	11.80

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.809
Departure from normal - .018
Highest 29.94 Date 31
Lowest 29.68 Date 13

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 79.6
Departure from normal - 0.7
Highest 90 Date 24
Lowest 73 Date 27

RAINFALL
(Inches)

Total 11.80
Departure from normal - 3.91
Greatest in 24 hours 1.45
Date 3

WIND

Average hourly velocity 5.5 mph.
Prevailing direction S
Maximum for five minutes 29
mph. from the SE on the 23

SUNSHINE

Average number hours per day 5.4
Percentage of possible 45

NUMBER OF DAYS

Clear 0
Partly Cloudy 5
Cloudy 26
.01 inch of rain or more 24
Thunderstorms 8
Light fog 0
Dense fog 0

Number of hours with rain 98

Bak

4066
Rev. 10-58

PANAMA CANAL COMPANY
ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE Month: NOVEMBER 1970

Date	Air Temperature (Deg. F.)			Relative Humidity (Percent)			Total Rainfall (Inches)
	Max.	Min.	Mean	Max.	Min.	Bihourly mean	
1	82	76	79	97	72	87	1.07
2	80	75	78	96	85	93	.40
3	84	74	79	100	76	89	.58
4	79	74	76	96	80	90	2.60
5	78	72	75	97	87	93	6.92
6	78	72	75	96	74	90	1.07
7	81	72	76	98	82	90	.01
8	80	76	78	100	86	92	1.91
9	85	74	80	97	68	87	.57
10	85	75	80	94	71	86	0
11	88	75	82	91	64	81	0
12	87	75	81	89	57	79	0
13	86	75	80	90	62	83	T
14	87	76	82	92	68	87	T
15	82	76	79	96	82	91	0
16	82	75	78	98	84	93	.08
17	78	74	76	100	84	94	4.11
18	80	73	76	99	85	92	1.51
19	82	74	78	99	80	92	.29
20	83	73	78	98	78	90	.10
21	82	73	78	98	82	92	.38
22	82	73	78	100	65	84	.03
23	82	78	80	87	72	80	0
24	82	78	80	90	74	81	0
25	81	74	78	96	70	79	.16
26	80	73	76	95	76	86	1.56
27	81	73	77	94	74	85	.95
28	81	71	76	97	80	91	4.92
29	78	74	76	98	84	93	1.35
30	82	73	78	98	72	89	1.64
31	--	--	--	--	--	--	----
Sum	2458	2226		2876	2274		32.21
Mean	81.9	74.2	78.0	95.9	75.8	88.0	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	21.94	1966	35.08
1962	25.35	1967	27.65
1963	22.72	1968	13.38
1964	14.36	1969	15.81
1965	25.78	1970	32.21

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.836
Departure from normal + .007
Highest 29.94 Date 1
Lowest 29.74 Date 13

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.0
Departure from normal - 1.4
Highest 88 Date 11
Lowest 71 Date 28

RAINFALL
(Inches)

Total 32.21
Departure from normal + 9.59
Greatest in 24 hours 6.95
Date 5 & 6

WIND

Average hourly velocity 8.7 mph.
Prevailing direction NW
Maximum for five minutes 34
mph. from the NW on the 17

SUNSHINE

Average number hours per day 5.6
Percentage of possible 48

NUMBER OF DAYS

Clear 0
Partly Cloudy 4
Cloudy 26
.01 inch of rain or more 22
Thunderstorms 0
Light fog 0
Dense fog 0

Number of hours with rain 180

Unit Rep
4044
Rev. 10-68

PANAMA CANAL COMPANY

ENGINEERING AND CONSTRUCTION BUREAU
METEOROLOGICAL AND HYDROGRAPHIC BRANCH

MONTHLY METEOROLOGICAL SUMMARY

75TH MERIDIAN TIME

Station: CRISTOBAL, CANAL ZONE **Month:** DECEMBER 1970

Date	Air Temperature (Deg. F.) Max.	Min.	Mean	Relative Humidity (Percent) Max.	Min.	Bihourly mean	Total Rainfall (Inches)
1	78	73	76	97	84	93	2.58
2	79	72	76	97	87	93	2.79
3	78	73	76	97	90	95	1.96
4	81	74	78	97	84	95	.87
5	80	73	76	97	82	92	.12
6	80	74	77	97	82	92	.11
7	81	75	78	97	80	89	.23
8	80	74	77	97	86	94	2.38
9	79	75	77	99	90	95	.62
10	82	77	80	96	84	93	1.25
11	82	75	78	96	80	93	.64
12	85	75	80	96	72	89	0
13	84	79	82	96	81	92	.13
14	84	81	82	94	85	90	0
15	84	81	82	94	84	90	T
16	81	76	78	96	86	93	.51
17	80	75	78	95	84	92	.07
18	80	76	78	95	86	91	.82
19	83	78	80	92	74	84	0
20	85	78	82	90	68	81	0
21	84	75	80	90	72	83	T
22	85	76	80	88	66	80	0
23	82	75	78	90	80	88	T
24	81	76	78	93	83	89	.87
25	80	73	76	92	80	91	1.04
26	81	75	78	95	81	89	1.34
27	81	75	78	94	71	86	.32
28	83	79	81	90	79	84	0
29	84	80	82	91	75	86	T
30	83	78	80	91	80	86	0
31	83	76	80	89	80	87	0
Sum	2533	2352		2918	2496		18.65
Mean	81.7	75.9	78.8	94.1	80.5	89.5	

TOTAL RAINFALL FOR THIS MONTH IN:

1961	8.96	1966	13.90
1962	17.85	1967	10.44
1963	3.50	1968	3.48
1964	2.03	1969	15.35
1965	7.62	1970	18.65

AIR PRESSURE
(Inches reduced to sea level)

Bihourly mean 29.790
Departure from normal - 0.048
Highest 29.90 Date 1
Lowest 29.66 Date 11

AIR TEMPERATURE
(Degrees Fahr.)

Monthly mean 78.8
Departure from normal - 1.3
Highest 85 Date 22
Lowest 72 Date 2

RAINFALL
(Inches)

Total 18.65
Departure from normal + 6.53
Greatest in 24 hours 3.72
Date 2 & 3

WIND

Average hourly velocity 8.0 mph.
Prevailing direction N
Maximum for five minutes 27
mph. from the N on the 1

SUNSHINE

Average number hours per day 5.3
Percentage of possible 46

NUMBER OF DAYS

Clear 3
Partly Cloudy 9
Cloudy 19
.01 inch of rain or more 19
Thunderstorms 7
Light fog 0
Dense fog 0

Number of hours with rain 161

87373