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WOODS HOLE OCEANOGRAPHIC INSTITUTION

REFERENCE NO. 63-19

A DESCRIPTION OF THE WEATHER

OF THE

ISLAND OF BARBADOS, W.I.

WOODS HOLE, MASSACHUSETTS

WOODS HOLE OCEANOGRAPHIC INSTITUTION

Woods Hole, Massachusetts

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A Description of the Weather of the Island of
Barbados, W.I.

by

C. C. Skeete
Director of Agriculture
Barbados, W. I.

May 1963

For limited distribution only.

Approved for Distribution

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Foreword

Mr. Cecil C. Skeete's ancestors settled on the Island of Barbados in 1631. Through a keen interest in the behavior of the atmosphere and its effect on the Island, the Skeete family developed a tradition of weather watching. Detailed notes and diaries have been handed down to Mr. Cecil C. Skeete who, in turn, has kept his own records since 1915.

A degree in the Natural Sciences from Cambridge University, England has provided the author with the necessary background in which to couch his keen interest in atmospheric phenomena. He in no way pretends to be a meteorologist, but in this work performs the valuable task of setting down in an orderly and complete form, the month by month weather of a tropical island over a considerable period of time. This provides a valuable background for the research worker in this field. Indeed, detailed statistical analyses of the data which Mr. Skeete has set out will lead to a better understanding of the meteorology of this region.

Michael Garstang

Research Associate

Woods Hole Oceanographic Institution.

Introduction.

This book contains an historical account of the weather in Barbados during the sixty-year period from 1901 to 1960. No attempt is made to present a scientific commentary on the weather.

The descriptive account of the weather recorded in this book is very largely that of rainfall; but other factors, which together with rainfall determine the "weather", are also mentioned when relevant information is available.

The details are taken from the writer's personal weather diaries, where available, and from the diaries of the late Ernest Murray Skeete and Elliot Lloyd Skeete in some of those years in the period when the writer was too immature or not in the Island. Additional notes have also been obtained from other sources. Mention is made at the beginning of each chapter, in the section containing the month-to-month description of the weather, of the source or sources from which the details have been obtained. Details of the Island's rainfall and of the records of atmospheric pressure, wind velocity, temperature and sunshine, taken at Codrington Agricultural Station in the parish of St. Michael, are reproduced from published reports with the permission of the Ministry of Agriculture.

Explanatory Notes and List of Abbreviations.

Before attempting to read the contents of this book it is important to study the following explanatory notes and list of abbreviations.

The explanation of the terms used to describe intensity and quantity of rainfall is as follows:-

"light shower"	- rainfall totalling up to 0.10 in.
"moderate shower"	- rainfall totalling from approximately 0.10 in. to 0.25 in.
"moderately heavy shower"	- rainfall totalling from approximately 0.25 in. to 0.40 in.
"fairly heavy shower"	- rainfall totalling approximately 0.40 in. to 0.75 in.
"heavy shower"	- rainfall totalling approximately 0.75 in. to 1.25 in.
"heavy rain"	- rainfall totalling approximately 1.25 in to 3.00 in.
"very heavy rain"	- rainfall totalling approximately 3.00 in. to 6.00 in.

In the above classification the expressions "shower" and "rain" relate to falls of short duration; less than one hour in respect of "showers" and not more than four hours in respect of "rain". Special mention would be made of rainfall totals in excess of 6.00 in. in 12 or 24 hour periods.

The terms used to describe wind velocity are those in standard use as follows:-

"light air"	- approximately 1 - 3 miles per hour
"light breeze"	- approximately 4 - 7 miles per hour
"gentle breeze"	- approximately 8 - 12 miles per hour
"moderate breeze"	- approximately 13 - 18 miles per hour
"fresh breeze"	- approximately 19 - 24 miles per hour
"strong breeze"	- approximately 25 - 31 miles per hour

In the chapters recording month by month descriptions of the weather abbreviations have been adopted for words and expressions frequently repeated. These abbreviations are explained in the following notes.

In the first line of the description of the weather in each year and each month, the letter R is followed by a number, then by a colon, then by another number and the letters pca. The letter R and the first number indicate the Island's average rainfall in inches for the year or month in question; the second number and the letters pca indicate what percentage of the average for the 114-year period 1847 to 1960 the actual total of the year or month represents. In the second line of the month by month descriptions of the weather, the maximum and minimum rainfall totals in inches and the situation of the stations recording such totals are stated after the letters MMT which mean "maximum and minimum totals".

All rainfall measurements and barometric readings are recorded in inches. Unless otherwise stated, all barometer readings are those taken at 3.00 p.m. and corrected to mean sea level.

List of Abbreviations.

E/W	- easterly wave
L.	- lightning
LCR.	- local convectional raincloud
LPA.	- low pressure area
MMT.	- maximum and minimum totals
P.	- atmospheric pressure
pca.	- per cent of the average
R.	- rainfall
T.	- thunder
T.storm	- thunder storm

Chapter 1.

The Nature of the Weather in Barbados.

1. General Observations.

The Island of Barbados, situated between $13^{\circ} 02' N$ and $13^{\circ} 20' N$ and $59^{\circ} 25' W$ and $59^{\circ} 39' W$ lies within the belt of the "Easterlies" which traverse the southern part of the North Atlantic Ocean on the south side of "The Azores" high pressure area. It is a low-lying island with a maximum elevation of 1100 ft. The surface is relatively smooth and an upland plateau above the 600 ft. contour forms about one third of the total area.

The weather at Barbados is broadly determined by the conditions which prevail within the belt of the "Easterlies" or "Trade Winds" as they are often called. The variations in the general type of weather which occur within the period of a year are the result of the effect of the annual change in the position of the sun (in relation to the surface of the earth) and of conditions in the atmosphere at specific latitudes. The sun is 'overhead' at the equator on 21st March, at the Tropic of Cancer ($22\frac{1}{2}^{\circ} N$) on the 21st June, and again at the equator on 21st September. It is 'overhead' at Barbados about the middle of May, going north, and about the last week of July, returning south. During the six-month period from September 21st to March 21st the sun is 'overhead' south of the equator reaching the most southerly overhead position at the Tropic of Capricorn on December 21st. The variations in the general type of weather at Barbados are accordingly annually "seasonal" and may broadly be classified into a "dry season" and a "wet season", and a "cool season" and a "warm season".

The "dry season" at Barbados normally falls within the period from the middle of December to the end of May; and the "wet season" from the beginning of June to the middle of December. On average, approximately 23% of the total annual rainfall falls in the "dry season" and 77% in the "wet season". The percentages of the total claimed by the "dry season" and the "wet season" in any one year are, of course, seldom identical with the average; and moreover it is by no means uncommon to have "wet" spells in the dry season and "dry" spells in the wet season. Records show that in some years there have been large deviations from the average.

The "cool season" normally falls within the three month period from December to February. The warmest months of the "warm season" vary from year to year, the warmest months being usually those with low rainfall and high average daily sunshine. Wind velocity also shows a "seasonal" variation, the months of highest average wind velocity being May, June and July and the months with the lowest average wind velocity being August, September, October and November.

A large part of the total rainfall in Barbados falls in "showers" which may last for a minute or two or for half an hour totalling up to 1.00 or 1.50 inches. Hence in the sections of this book dealing with month by month descriptions of the weather very frequent reference is made to "showers". Moreover, these "showers" very often fall over a very limited area of the Island, for example over a relatively narrow belt of land as the shower cloud is blown over the Island by the wind. During each year there are usually several occasions, however, on which rain continues to fall for one, two or several consecutive hours; rainfall of this type is not included within the expression "showers".

During the normal "dry season" the rain falls in light, moderate or occasionally moderately heavy showers over local areas. Occasionally abnormal conditions develop in the dry season which cause heavy rains to fall fairly generally over the Island.

The weather in the normal "wet season" is largely determined by the frequency or infrequency of "Easterly Waves" or other type of low pressure area. The pre-trough area of the Easterly Wave is usually dry and the post-trough area usually wet (if the wave is moving more slowly than the basic current) with moderate or heavy showers and sometimes heavy prolonged rain.

Only once during the period 1901 - 1960 have hurricane force winds been experienced on the Island (Hurricane "Janet", September 22nd 1955), but almost every year on one or more occasions the local weather is slightly or moderately influenced by cyclonic storms passing at some distance, up to several hundred miles, from the Island. However, from time to time the Island has been affected by the incipient stages of cyclonic disturbances of less than hurricane force or which have indeed later developed into hurricanes. On many of these occasions, but not all, fairly heavy showers or prolonged rain falls on the Island.

2. Rainfall.

Statistics are available giving the average monthly and annual rainfall totals at a number of stations in the Island from 1847 to 1960.

The Island's average monthly rainfall during the 114-year period from 1847 to 1960 is as follows:-

January	3.37 inches	
February	2.20	"
March	1.93	"
April	2.34	"
May	3.21	"
June	5.41	"
July	6.26	"
August	7.31	"
September	7.65	"
October	7.89	"
November	7.74	"
December	4.77	"
Total	60.08	"

In the table in Appendix I the Island's average annual rainfall totals are placed in the respective categories within which they fall. Various groupings of the figures can, no doubt, be suggested, but the following grouping, although beginning arbitrarily at 1851 is interesting -

Island's average for 26 years	1851 - 1876	56.97 inches
" " " 27 "	1877 - 1903	68.51 "
" " " 27 "	1904 - 1930	54.29 "
" " " 28 "	1931 - 1958	61.45 "

In Appendix II the Island's average monthly and annual totals for each year of the 60-year period 1901 - 1960 are recorded together with the percentage each total represents of the average for the respective month and year during the 114-year period 1847 - 1960.

Periods of heavy rain and severe drought are indicated in the following statistics -

Highest rainfall totals in inches in

(i) 2 consecutive months

<u>1938</u>	<u>1901</u>	<u>1886</u>
Oct. 10.42	Jun. 15.52	Jul. 13.80
Nov. <u>28.09</u>	Jul. <u>19.50</u>	Aug. <u>18.47</u>
38.51	35.02	32.27

(ii) 3 consecutive months

<u>1938</u>	<u>1901</u>	<u>1886</u>
Sep. 10.58	Jul. 19.50	Jul. 13.80
Oct. 10.42	Aug. 12.44	Aug. 18.47
Nov. <u>28.09</u>	Sep. <u>16.50</u>	Sep. <u>12.65</u>
49.09	48.44	44.92

(iii) 4 consecutive months

<u>1901</u>	<u>1938</u>	<u>1886</u>
Jun. 15.52	Aug. 8.81	Aug. 18.47
Jul. 19.50	Sep. 10.58	Sep. 12.65
Aug. 12.44	Oct. 10.42	Oct. 9.73
Sep. <u>16.50</u>	Nov. <u>28.09</u>	Nov. <u>14.30</u>
63.96	57.90	55.15

(iv) 5 consecutive months

<u>1901</u>	<u>1886</u>	<u>1938</u>
Jun. 15.52	Jul. 13.80	Aug. 8.81
Jul. 19.50	Aug. 18.47	Sep. 10.58
Aug. 12.44	Sep. 12.65	Oct. 10.42
Sep. 16.50	Oct. 9.73	Nov. 28.09
Oct. <u>6.34</u>	Nov. <u>14.30</u>	Dec. <u>6.89</u>
70.30	68.95	64.79

Lowest rainfall totals in inches in

(i) 2 consecutive months

<u>1924</u>	<u>1952</u>	<u>1928</u>
Mar. 0.14	Jan. 0.65	Apr. 0.77
Apr. <u>0.95</u>	Feb. <u>0.58</u>	May <u>0.51</u>
1.09	1.23	1.28

(ii) 3 consecutive months

<u>1958</u>	<u>1934</u>	<u>1862</u>
Feb. 1.04	Feb. 1.09	Feb. 1.12
Mar. 0.52	Mar. 0.58	Mar. 0.31
Apr. <u>0.82</u>	Apr. <u>0.83</u>	Apr. <u>1.12</u>
2.36	2.50	2.55

(iii) 4 consecutive months

<u>1958</u>	<u>1955</u>	<u>1925</u>
Jan. 1.37	Feb. 1.68	Feb. 1.44
Feb. 1.04	Mar. 0.65	Mar. 1.09
Mar. 0.52	Apr. 0.62	Apr. 0.83
Apr. <u>0.82</u>	May <u>1.07</u>	May <u>0.89</u>
3.73	4.02	4.25

(iv) 5 consecutive months

<u>1955</u>	<u>1925</u>	<u>1941</u>
Jan. 2.49	Jan. 2.47	Jan. 1.46
Feb. 1.68	Feb. 1.44	Feb. 0.48
Mar. 0.65	Mar. 1.09	Mar. 1.50
Apr. 0.62	Apr. 0.83	Apr. 1.55
May <u>1.07</u>	May <u>0.89</u>	May <u>1.91</u>
6.51	6.72	6.90

Local Convictional Rain.

The expression "local convictional rain" is herein used to denote a type of rain cloud which develops under particular local conditions. In this book the abbreviation "LCR" is used for the expression "local convictional raincloud" in the singular and "LCR's" in the plural.

This particular type of rain cloud merits special mention because it develops over parts of the Island on the average of 15 to 20 days in the year, and in some years on as many as 30 days, and makes a very considerable contribution to the total annual rainfall, especially in certain districts.

(a) Nature and Formation.

The chief characteristics of this type of rain cloud are its extreme localisation, that is its relatively very small area of precipitation, its high rate of precipitation and its formation during the day-time only. Leaving out of consideration for the purposes of this book the possible and probable influence of upper air conditions, the chief

factors on which the formation of the LCR is dependent appear to be low wind velocity, sufficient duration of sunshine to heat the surface air and at least a moderately high humidity. Days of low wind velocity with bright sunshine are usually hot or apparently hot days and consequently the local use of the alternative expression "Heat Rain" to denote this particular type of rain cloud is justified.

The time of formation of LCR's within the year is mainly from August to November because the chief determining factors occur at the same time on more frequent days during those months. Occasionally, however, conditions are favourable for the development of LCR's on days in other months of the year.

The time of formation of a LCR within the day is dependent on sunshine intensity and duration sufficient to warm the surface air and set up convectional currents. The position of initial formation of the LCR is dependent on the direction of motion of the main air current at surface level.

The usual procedure in the formation of the LCR in Barbados is as follows. Sunshine warms the lowest levels of the air: the heated air rises: the moisture in the air condenses in its cooler surroundings at higher levels to form cumulus cloud. This cumulus cloud drifts slowly with the main air current and tends to amass on that side of the Island opposite to the quarter from which the main air current is moving. This process usually continues for about two or three hours, that is until about 10 a.m. or 11 a.m. by which time conditions in the amassed cumulus cloud have reached the stage of precipitation. Rain begins to fall over a small area, usually not more than one or two square miles in extent. The cloud has now reached the cumulo-nimbus stage, and provided no unfavourable conditions have subsequently set in, the formation and extension of the cumulo-nimbus proceeds at a great pace: heavy torrential rain falls over

the original or closely adjoining area of development. Usually within one to one and a half hours after the beginning of precipitation, the cumulo-nimbus develops into a temporary thunder storm, but it is observed that thunder rarely accompanies such convectional rains in months other than August, September and October.

Associated with the development of the thunderstorm phase, a mass of high cloud, alto-stratus and eventually cirro-stratus extends from the cumulo-nimbus. Provided the sunshine is not obscured by this cloud in the upper air on the side from which the main air current is moving, continuous formation of cumulus developing into cumulo-nimbus proceeds in that direction. Consequently the building of new cumulus and extension of the cumulo-nimbus on the side from which the main air current is moving has the effect to an observer, stationed on that side, of the main cloud moving towards him against the wind. In as much as the main current is usually in these instances from the east or south-east, the convectional rain cloud appears to move from west or north-west, hence the name "Westerly rain" which is locally given to this type of rain.

It frequently happens, however, that the circumstances do not favour extension from the original area of precipitation, and consequently heavy rain continues to fall over a small area.

It is usual, after the formation of the cumulo-nimbus has been in progress for the period of about an hour, for secondary conditions to develop. There is now an outward rush of cooler air from the main rain cloud at low levels for a distance of about three or four miles. This air current invariably overcomes the main air current at surface level, while cumulus clouds already formed and at higher levels, continue to drift towards the main rain cloud. The effect of this local

air current is to cause further convection some three or four miles distant from the main cloud, especially on the side from which the main air current is travelling, where the development of further cumulus and cumulo-nimbus takes place as a secondary LCR.

The development and redevelopment of local convectional rains proceeds on any day until one or the other of the factors responsible for such development is removed. The influence of the sun is usually the first factor to be removed, at least temporarily, by the formation of high cloud causing shady conditions. If there is renewed sunshine while it is still strong enough to set up convectional currents, the entire process will be recommenced and completed for a second time in a day - and, very occasionally, for a third time.

(b) Distribution.

As already indicated the position of initial formation is dependent on the direction of motion of the main air current. But the strength of this current, or otherwise the magnitude of the wind velocity is also a factor determining the position of development.

With average wind velocity of five miles per hour or less, initial development tends to occur inland. With average velocities of approximately five to ten miles per hour, initial development tends to take place over the coast opposite to the direction from which the wind is blowing. Finally, with wind velocities exceeding ten miles per hour, initial development takes place, if at all, over the sea at approximately five to fifteen miles from the coast opposite to the direction from which the wind is blowing. It is noteworthy that in the case of the lowest wind velocities, altitude of the land plays an important part in determining the position of development.

In general, the position of initial development of convectional rains relative to the direction of the wind, is as follows:-

<u>Wind Direction</u>	<u>Area of Initial Development.</u>
East	Northern St. Michael, St. James, and western St. Thomas.
Southeast	Northern St. Michael, southwestern St. Thomas, St. James, St. Peter and southern St. Lucy.
South	With intermediate wind velocities St. Lucy, eastern St. Peter and western St. Andrew; with low wind velocities, eastern St. James, St. Thomas, St. Joseph and St. George hills.
Southwest	St. Joseph, St. John, eastern St. George and northern St. Philip.
West	St. Philip and eastern St. John.
Northwest	Eastern Christ Church and Christ Church ridge, and southern St. Philip.
North	Christ Church, southern St. George, and southern St. Michael.
Northeast	Western Christ Church, St. Michael and southern St. George.

There are so many and variable factors influencing the secondary development of convectional rains that no approximate position of development can be suggested.

It is noteworthy that, in as much as the general wind current rarely moves from west or northwest, heat rain cloud development seldom occurs over St. Philip and eastern Christ Church. These districts are, however, occasionally reached by rain of secondary development. In contrast, however, in as much as the main air current frequently moves from points between east and south, the parishes of St. James, St. Thomas, St. Peter and St. Lucy are those in which this type of rain most frequently develops.

Rainfall Map.

The rainfall map reproduced as Appendix IV was prepared by the writer in 1930 based on rainfall records during the 40-year period 1890 - 1929.

Wind Direction and Velocity.

It has already been stated that the Island of Barbados lies within the belt of "Easterlies" or "Trade Winds". Consequently, wind direction is most frequently between ENE and E and wind from this direction is regarded as normal throughout the greater part of the year. There are, however, short periods in the year when wind from a different direction would be regarded as normal in respect of those particular periods.

From the middle of December to the end of March the wind blows with great regularity and few exceptions from ENE or from points N or E of ENE; in January the direction tends more to NE and in March more to E. Not infrequently during these months there are one or two short periods of two or three days duration each when there are calms or winds of low velocity and variable direction. In April and May wind direction is mainly E but tends to shift more frequently to ESE. In June and July when the greatest daily wind velocities are experienced, wind direction usually varies between ENE and ESE and backs to NE and shifts to SE as Easterly Waves approach, pass over and move away. During the months of August to November average wind velocity is at its lowest and wind direction is often between ESE and SSE, but backs to NE or NNE with the approach of some Easterly Waves and shifts to SSE and S as the troughs pass over. Wind conditions normal to the month of November sometimes extend into the first part of December, but otherwise conditions in December more closely resemble those normal to the month of January.

It is seldom that the main or regional wind currents at Barbados blow from SW, W or NW, except when influenced by a cyclonic disturbance.

On a few days in the year, when steady "trade winds" are blowing, wind velocity between the hours of 6 a.m. and 6 p.m. will average 20 to 24 miles per hour and between 6 p.m. and 6 a.m. 15 miles per hour; during such days wind gusts of up to 30 miles per hour are usually experienced. Wind gusts of 35 to 50 miles per hour are occasionally experienced. when the weather is under the influence of an Easterly Wave. Gusts estimated 50 to 60 miles per hour have occurred on only three or four occasions during the 60-year period under review. Greatest wind velocities experienced on the Island during hurricane "Janet" in 1955 were estimated at approximately 110 miles per hour in southern coastal districts.

The following statistics are taken from the records at Codrington Agricultural Station, St. Michael: (wind velocity in miles per hour)

Month	58-year monthly averages 1903-1960	Highest recorded average for each month	Lowest recorded average for each month
January	11.0	14.4 in 1913, 1921	6.6 in 1958
February	11.3	17.8 " 1910	7.2 " 1960
March	11.6	16.7 " 1921	7.9 " 1951
April	11.4	17.2 " 1921	7.0 " 1927
May	11.8	15.4 " 1908, 1914	7.1 " 1958
June	12.6	18.4 " 1921	7.5 " 1958
July	11.3	17.8 " 1920	7.5 " 1927
August	8.8	13.4 " 1914	5.5 " 1958
September	7.5	10.5 " 1920	4.6 " 1927
October	7.3	10.1 " 1931	4.8 " 1948, 1957
November	8.1	13.0 " 1920	5.6 " 1947, 1950
December	9.9	14.4 " 1922	7.4 " 1927, 1958 1960

Temperature.

Temperature in the small Island of Barbados is largely determined by the temperature of the winds constantly blowing from over the surrounding ocean. At the latitude of Barbados changes in ocean temperature are relatively slight throughout the year and consequently changes in air temperature over the Island are correspondingly slight.

Air temperature on the Island is influenced only slightly by season, but within the season by wind velocity and rainfall. Lower average temperature is experienced from December to March, coinciding with the period when the sun is south of the equator and the annual minimum surface temperature of the surrounding ocean is reached. It might be expected that average maximum air temperature would be experienced in July, August and September when surface temperature of the surrounding ocean is likely to be at its maximum, but average maximum temperature occurs in May and June. The month of May and the early part of the month of June normally cover the final third of the period of the dry season when there are many days with the greatest number of sunshine hours. As the dry season advances and sunshine becomes more intense, the surface of the land becomes considerably hotter than that of the surrounding ocean causing an increase in the air temperature locally over the Island. When the rainy season begins in the middle or latter half of June and continues during the months of July to October, the surface of the land is kept moist and cooler than in May. Whenever, however, there is a prolonged dry spell during the normally wetter months, it is always reflected in increased air temperature.

The highest temperatures occur when conditions in the hotter months of the year are such that there is a relatively slow air current

drawn over the Island from several hundred miles in the SE, SSE or S (assuming steady state conditions). The lowest temperatures are recorded, almost without exception, on cloudless nights of very low wind velocity. The land surface cools much more rapidly than the surrounding ocean surface and cools the surface layer of air. This cooled air remains stationary or is only very slowly pushed away by the incoming air current of low velocity from over the ocean.

The temperature in the highest parts of the Island is usually about 4° - 6° F lower than the temperature in the lowlands and coastal districts. Temperature rarely exceeds 92° F or falls below 60° F in any part of the Island.

The following statistics are taken from the records at Codrington Agricultural Station, St. Michael, approximately 180 ft. above sea level and are expressed in degrees Fahrenheit:-

Average maximum and minimum monthly temperature during
the 58-year period from 1903 to 1960.

Month	Average maximum	Average minimum
January	82.9	69.9
February	83.3	69.6
March	84.5	70.3
April	85.7	71.7
May	86.7	73.4
June	86.3	74.2
July	86.0	74.0
August	86.4	73.8
September	86.3	73.4
October	85.7	73.0
November	84.8	72.6
December	83.4	71.3

Sunshine.

The following statistics are taken from the records at Codrington Agricultural Station, St. Michael. No records were taken before 1929.

Sunshine hours per month, 1929-1960

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Daily Average	8.4	8.9	8.8	8.8	8.7	8.3	8.5	8.7	7.6	7.3	7.5	8.2
Greatest total	311	296	320	300	318	312	314	304	216	276	266	291
Year	1959	1940	1958	1953	1941	1934	1954	1930	1959	1946	1960	1931
Smallest total	162	177	228	226	201	207	228	239	186	194	144	207
Year	1937	1951	1940	1938	1944	1944	1933	1932	1953	1929	1938	1949

Lightning and Thunder.

In the following table statistics relating to the frequency of lightning and thunder are recorded. In column L, the number of days (24-hour periods) in which lightning was seen, but thunder not heard are recorded. In column T, the number of days (24-hour periods) in which thunder was heard are recorded. No statistics are available for the years 1901-1908, 1922 and 1942-1949. Incomplete statistics are available for the years 1909-1921, 1923 and 1935-1941. A fairly high degree of accuracy may be attached to the figures recorded for the years 1915-1919, 1924-1934 and 1950-1960.

	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sep.		Oct.		Nov.		Dec.		Total	
Year	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T
1909	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0	0	0	0		
1910	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1911	0	0	0	0	0	0	0	0	0	5	0	1	0	2	1	6	0	5	0	12	0	6	1	1		
1912	0	0	0	0	0	0	0	0	0	0	0	2	2	3	1	1	0	0	1	4	4	2	0	0		
1913	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	2	6	0	1	0	0		
1914	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	2	2	7	1	4	0	3	1	3		
1915	0	1	0	0	0	0	2	1	0	1	1	4	0	0	0	4	4	8	6	6	2	7	3	0	18	32
1916	0	1	0	0	0	0	0	0	1	4	3	7	2	9	3	11	6	11	5	11	1	1	0	0	21	55
1917	0	0	0	0	0	0	0	1	0	0	3	6	3	9	2	8	6	13	1	5	2	1	0	2	16	45
1918	0	0	0	0	0	0	0	0	1	1	0	1	2	2	1	7	6	6	4	3	3	1	1	0	18	21
1919	2	1	0	0	0	0	1	2	0	1	3	4	6	3	5	10	5	5	5	6	9	4	0	1	37	40
1920	2	0	0	0	0	0	0	0	1	0	0	0	1	2	1	3	4	5	1	5	0	6	0	0		
1921	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
1923	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	3	3	8	3	6	1	3	3	2		
1924	0	0	0	0	0	0	0	0	1	0	0	2	3	2	4	5	3	4	1	5	5	1	0	0	16	21
1925	0	0	2	1	0	0	0	0	0	0	5	1	4	0	3	5	3	6	5	4	3	4	0	0	25	21
1926	0	0	0	0	0	0	0	0	0	0	2	1	3	4	2	6	7	13	4	12	1	6	1	0	20	42
1927	0	0	0	0	0	1	2	1	0	1	2	7	0	2	0	7	4	4	5	12	2	4	0	0	15	39
1928	0	0	0	0	0	0	0	0	0	0	1	4	1	1	1	7	7	8	2	11	2	5	1	1	15	37
1929	0	0	0	0	0	0	0	1	0	1	0	2	2	6	1	8	2	11	6	9	1	8	0	1	12	47
1930	0	0	0	0	0	0	0	0	1	0	3	1	2	2	1	7	3	8	7	6	4	5	0	0	21	29
1931	0	0	0	0	0	0	0	1	1	2	4	6	6	7	5	4	4	14	2	8	5	3	0	0	27	45
1932	0	0	0	0	0	1	1	1	1	1	4	2	4	7	7	10	5	18	16	11	3	9	0	0	41	60
1933	0	0	0	0	0	0	0	1	1	1	1	3	2	9	4	9	2	10	7	9	2	7	0	0	19	49
1934	0	0	0	0	0	0	0	0	1	2	0	0	3	2	3	3	4	9	4	7	*3	*4	*1	*2	*19	*29
1935	0	0	0	0	0	0	0	0	1	1	0	0	6	1	1	4	1	8	3	5	0	5	0	0		
1936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0		
1937	0	0	0	0	0	0	0	0	0	0	1	0	2	3	1	1	3	13	0	10	2	4	0	2		
1938	0	0	0	0	0	0	0	0	1	0	2	2	1	1	3	3	2	5	2	10	0	0	0	1		
1939	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	1	1	3	0	1	0	0		
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	2	0	0	0	2	0	0		
1941	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	4	1	2	0	4	0	4	0	1		

* possibly incomplete

	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sep.		Oct.		Nov.		Dec.		Total	
Year	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T
1849													0	1	1	5	4	6	2	3	4	0	1	0		
1850	0	0	0	0	0	0	0	0	0	2	2	1	2	5	4	10	6	7	4	11	3	4	1	0	22	40
1851	1	0	1	1	0	0	0	0	1	0	2	5	2	6	1	9	8	10	3	3	0	4	1	3	20	41
1852	0	0	0	0	0	0	0	0	0	0	1	4	0	4	7	4	5	11	4	8	3	5	0	1	20	37
1853	0	0	0	0	0	0	0	0	2	1	4	2	2	9	0	5	2	9	3	2	2	7	0	3	15	38
1854	1	1	0	0	0	0	0	0	0	2	3	2	7	3	5	4	6	10	8	7	3	5	0	1	33	35
1855	0	0	0	0	0	0	0	0	0	0	0	5	3	5	2	9	12	14	3	16	3	5	2	1	25	55
1856	1	2	0	1	0	0	0	0	0	2	2	3	1	9	1	7	2	1	3	7	1	2	0	1	11	35
1857	0	0	0	0	0	0	0	0	0	0	4	1	3	5	0	8	3	6	4	14	1	9	0	2	15	45
1858	0	0	0	0	0	1	0	1	2	6	2	4	6	5	2	3	0	8	1	5	1	0	0	0	14	33
1859	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	5	3	5	0	10	1	2	0	0	7	23
1860	0	0	0	0	0	0	0	0	1	0	0	1	0	11	1	4	5	10	4	3	0	3	0	1	11	33

The Weather : Month by Month.

January.

The month of January falls within the normal "cool season". Average maximum temperature is 82.9°F. and average minimum temperature is 69.9°F. Average daily sunshine is 8.5 hours. Average wind velocity is 11.0 miles per hour. Average wind velocity in individual months has varied from a maximum of 14.4 miles per hour in 1913 and 1921 to a min. of 6.6 miles per hour in 1958. Wind direction is seldom from any other point than between NE and E. A spell of 3 - 4 days of very low wind velocity is not uncommon. The Islands's average rainfall for January during the period 1847 to 1960 is 3.37 inches; the highest average total was 11.23 inches in 1880 and the lowest 0.65 in. in 1952. Local convectional rainclouds develop occasionally but not frequently; totals

exceeding 10 inches in one day from this type of raincloud were recorded in 1909 and 1915. Thunder is seldom heard. Only once in the period 1901 - 1960 was the local weather influenced in the month of January by a cyclonic storm and that was in 1955.

February.

The month of February also falls within the normal "cool season". Average maximum temperature is 83.3°F and the average minimum temperature is 69.6°F. Average daily sunshine is 8.9 hours. Average wind velocity is 11.3 miles per hour. Average wind velocity in individual months has varied from a maximum of 17.8 miles per hour in 1910 to 7.2 miles per hour in 1960. Wind direction varies between ENE and ESE, but is more frequently N of E. The Island's average rainfall for February during the period 1847 to 1960 is 2.20 inches; the highest average total was 14.35 inches in 1951 and the lowest 0.27 inches in 1878; the average total for the month has exceeded 3.00 inches in only 16 years in this period. The development of local convectional rainclouds in February is infrequent but not rare. The weather in February 1951 was a remarkable departure from normal. Thunder is very rare in February. There is no record of the local weather having been influenced by a cyclonic storm in the month of February during the period 1901 - 1960.

March.

The "cool season" usually comes to an end in March and the air becomes noticeably warmer. Average maximum temperature is 84.5°F and the average minimum temperature is 70.3°F. Average daily sunshine is 8.8 hours. Average wind velocity is 11.6 miles per hour. Average wind velocity in individual months has varies from a maximum of 16.7 miles per hour in 1921 to a minimum of 7.9 miles per hour in 1951. Wind direction varies

between ENE and ESE, but occasionally shifts to SE. March is on the average the driest month in the year and the Island's average rainfall for this month during the period 1847 to 1960 is 1.93 inches; the highest average total was 5.54 inches in 1897 and the lowest 0.12 inches in 1936; the average total for the month has exceeded 3.00 inches in only 16 years in this period. The development of LCR's in March is uncommon and no great total of rainfall from this type of cloud has been recorded in this month. Like February, thunder is very rarely heard in this month, but thunderstorms occurred during the night of the 3rd of March 1932. There is no record of the local weather having been influenced by a cyclonic storm in the month of March during the period 1901 to 1960.

April.

The weather becomes slightly warmer in April and wind velocity is usually less variable than in the previous three months. Average maximum temperature is 85.7° F and the average minimum temperature is 71.7° F. Average daily sunshine is 8.8 hours. Average wind velocity is 11.4 miles per hour. Average wind velocity in individual months has varied from a maximum of 17.2 miles per hour in 1921 to 7.0 miles per hour in 1927. Wind direction is mainly E but tends to be S of E more often than N of E and not infrequently shift to SE. The Island's average rainfall for the month during the period 1847 to 1960 is 2.34 inches; the highest average total was 9.51 inches in 1896 and the lowest 0.28 inches in 1920. The development of LCR's is not frequent but not uncommon; fairly heavy rainfall from this type of cloud has very occasionally been recorded in April. Thunder is not often heard in April. There is no record of the local weather having been influenced by a cyclonic storm in the month of April during the period 1901 to 1960.

May.

May is on the average the warmest month in the year, although during the wet season when humidity is higher, the weather appears to be warmer. Average maximum temperature is 86.7° F and average minimum temperature is 73.4° F. Average daily sunshine is 8.7 hours. Average wind velocity is 11.8 miles per hour. Average wind velocity in individual months has varied from a maximum of 15.4 miles per hour in 1908 and 1914 to a minimum of 7.1 miles per hour in 1958. Wind direction varies between ENE and SE and tends to be S of E more often than N of E. Rainfall in May is very variable; it is frequently a dry month, but in 15% of the years May has been a wet month. The Island's average rainfall for May during the period 1847 to 1960 is 3.21 inches; the highest average total was 13.44 inches in 1910 and the lowest 0.43 inches in 1898. Like April, the development of LCR's is not frequent but not uncommon; a maximum total of 6.00 inches was recorded from this type of cloud in parts of St. Lucy on the 18th May 1936. Remarkable departures from the normal weather of May occurred in 1910, when rainfall totals of 27.00 inches were recorded in the hills of St. Peter, and in 1958 when totals of 21.50 inches were recorded in parts of St. Thomas. It is usual to have a little thunder in May and occasionally there has been a thunderstorm. There is no record of the local weather having been influenced by a cyclonic storm in the month of May during the period 1901 to 1960. There was, however, a very unusual gale on the 3rd of May 1915, when it is probable that gusts of 50-60 miles per hour were experienced.

June.

The normal "rainy season" usually begins sometime in June, but in those years when it is delayed, June is a very dry month. On average,

June is the windiest month of the year and because of the greater rainfall than in May average maximum temperature is normally a little less. The succession of low pressure areas, now generally referred to as "Easterly Waves", normally begins in June; these are usually accompanied by moderate to heavy showers often with lightning and thunder. Average maximum temperature is 86.3° F. and average minimum temperature is 74.2° F. Average daily sunshine is 8.3 hours. Average wind velocity is 12.6 miles per hour. Average wind velocity in individual months has varied from a maximum of 18.4 miles per hour in 1921 to a minimum of 7.5 miles per hour in 1958. Wind direction varies between ENE and ESE. The Island's average rainfall for June during the period 1847 to 1960 is 5.41 inches; the highest average total was 15.52 inches in 1901 and the lowest 1.48 inches in 1935. The development of LCR's is very uncommon in June. The local weather was influenced, but only slightly, by a cyclonic storm in the month of June on one occasion only, the 27th of June 1933, during the period 1901-1960.

July.

The windy conditions of June often continue during the first half of July and then the 4-month period of lower wind velocity begins. Average maximum temperature is 86.0° F and the average minimum temperature is 74.0° F. Average daily sunshine is 8.5 hours. Average wind velocity is 11.3 miles per hour. Average wind velocity in individual months has varied from a maximum of 17.8 miles per hour in 1920 to a minimum of 7.5 miles per hour in 1927. Wind direction varies between ENE and ESE, but tends to back to NE on the approach of an Easterly Wave and to shift to SE or SSE as the trough passes over. The Island's average rainfall for July during the period 1847 to 1960 is 6.26 inches; the highest average total was 19.50 inches in 1901 and the lowest 2.27 inches in 1847. The development of LCR's is not very common in July, but they do occur in

months of subnormal wind velocity. The local weather is occasionally influenced by cyclonic storms in the month of July. The centre of a well developed hurricane passes about 100 miles north of the Island on the 22nd of July 1926.

August.

The highest daily maximum temperatures of the year are usually reached in spells of dry weather accompanied by a southerly air current in the month of August. Average maximum temperature is 86.4°F and average minimum temperature is 73.8°F . Average daily sunshine is 8.7 hours. Average wind velocity is 8.8 miles per hour. Average wind velocity in individual months has varied from a maximum of 13.4 miles per hour in 1914 to 5.5 miles per hour in 1958. Wind direction is normally between E and ESE when the weather is not under the influence of an Easterly Wave or other low pressure system, but often varies from NNE to SSE and S with the passing of Easterly Waves; and backs and shifts around the compass when under the influence of a cyclonic disturbance. The Island's average rainfall for August during the period 1847 to 1960 is 7.31 inches; the highest average total was 18.47 inches in 1886 and the lowest 2.31 inches in 1947. It is seldom that a month of August passes without the development of at least one LCR over some part of the Island, and in some months this type of cloud develops on as many as five days; total falls at individual stations are often as much as 5.00 or 6.00 inches. Heavy rain or heavy showers often accompany Easterly Waves or fall when the local weather is influenced by passing cyclonic storms. Thunderstorms are sometimes frequent and severe. It is usual but not invariable that at some time in the month the local weather is influenced, even if only very slightly, by a passing cyclonic storm.

September.

Weather conditions in general in September do not differ very appreciably from those in August. Wind velocity is, however, lower and wind direction tends to be more frequently SE and S. It is very unusual for a month of September to pass without the local weather being influenced by passing cyclonic storms. The lower wind velocity tends to cause the more frequent development of heavy local convectional rains. Average maximum temperature is 86.3°F and average minimum temperature is 73.4°F. Average daily sunshine is 7.6 hours, since sunshine duration is restricted by more frequent overcast skies. Average wind velocity is 7.5 miles per hour. Average wind velocity in individual months has varied from a maximum of 10.5 miles per hour in 1920 to 4.6 miles per hour in 1927. Wind direction is usually more variable in September than in any other month. The Island's average rainfall for September during the period 1847 to 1960 is 7.65 inches; the highest average total was 20.46 inches in 1898 (the month in which the Island experienced a hurricane) and the lowest 2.21 inches in 1912.

October.

October is the most reliable month in the year for rain and is rarely a dry month. Although average maximum temperature is lower than in August or September, days of low wind velocity and high humidity cause them to appear to be unusually warm. Average maximum temperature is 85.7°F and average minimum temperature is 73.4°F. Average daily sunshine is 7.3 hours. Average wind velocity is 7.3 miles per hour. Average wind velocity in individual months has varied from a maximum of 10.1 miles per hour in 1931 to a minimum of 4.8 miles per hour in 1948 and 1957. Like September, wind direction tends to be variable. Heavy local convectional rains and thunderstorms are relatively frequent. The Island's

average rainfall for October during the period 1847 to 1960 is 7.89 inches; the highest average total was 13.52 inches in 1950 and the lowest was 2.77 inches in 1946. The local weather is only occasionally influenced by cyclonic storms. (The developing stages of a hurricane passed not far from the Island in October 1954 and the severe hurricane of 1780 struck the Island on October 10th).

November.

Average rainfall in November is little less than that of October, but there have been great variations from very wet to very dry Novembers. Wind velocity is also more variable. Average maximum temperature is 84.8°F and the average minimum temperature is 72.6°F. Average daily sunshine is 7.5 hours. Average wind velocity is 8.1 miles per hour. Average wind velocity in individual months has varied from a maximum of 13.0 miles per hour in 1920 to 5.6 miles per hour in 1947 and 1950. Wind direction tends to vary on days of low wind velocity, but the stronger breezes blow from between E and NE. Heavy local convectional rains and heavy rains from other causes, together with thunderstorms, are not uncommon in November. The Island's average rainfall for November during the period 1847 to 1960 was 7.74 inches; the highest average total was 28.09 inches in 1938 and the lowest was 1.42 inches in 1849. Only three occasions have been recorded during the period 1901 to 1960 on which the local weather has been influenced by cyclonic storms in the month of November.

December.

The rainy season usually comes to an end before the middle of December, but not infrequently the month of December is wet and very heavy rains have fallen during the latter half of the month (eg. Christmas Day 1917; Boxing Day 1951). Wind velocity increases and wind direction is normally between NE and E, only occasionally does the wind shift to S.

Average maximum temperature is 83.4°F and average minimum temperature is 71.3°F. Average daily sunshine is 8.2 hours. Average wind velocity is 9.9 miles per hour. Average wind velocity in individual months has varied from a maximum of 14.4 miles per hour in 1922 to a minimum of 7.4 miles per hour in 1927, 1958 and 1960. The Island's average rainfall for December during the period 1847 to 1960 is 4.77 inches; the highest average total was 13.55 inches in 1889 and the lowest 0.99 inches in 1931. Thunder is infrequent but not uncommon in December. There is no record of the local weather having been influenced by a cyclonic disturbance in December during the period 1901 to 1960.

Chapter 2.

A Summary of Incidents of Special Interest.

Year	Date	Notes.
1901	July 5	"Jordan's flood": gales, severe thunderstorms and very heavy rain: max. total of 18.80 in. recorded in the parish of St. Peter in one day. The greatest total in one day on record.
"	August 20	Gales and very heavy rain in southwestern part of the Island; 10 in. recorded in Bridgetown.
"		The average rainfall for the Island, calculated from the returns from 194 stations, was 91.89 in. in 1901 and was the greatest average for the Island in any year in the 114-year period 1847-1960.
1902		The weather at Barbados was not at any time influenced by a cyclonic disturbance during this year.
1903	March	The greatest average total rainfall for the Island in the month of March during the period 1901-1960 was registered in this month, namely 5.51 in.

Year	Date	Notes
1903	November	The smallest average total rainfall for the Island in the month of November during the period 1901 - 1960 was registered in this month, namely 2.85 in.
"	December	The greatest average total rainfall for the Island in the month of December during the period 1901 - 1960 was registered in this month, namely 9.97 in.
"	December 19	Heavy rains occurred over the Island on the 19th, with max. total of 6.00 - 6.50 in. at some stations in St. Peter.
1904	April	The greatest average total rainfall for the Island in the month of April during the period 1901 - 1960 was registered in this month, namely 7.78 in.
"		A 24-hour total of 6.75 in. was recorded on the 26th April at a station on the border of St. Philip and St. John.
"		Like 1902, the weather at Barbados was not at any time influenced by a cyclonic disturbance during this year.
1905		No tropical disturbance of appreciable intensity passed near to the Island during this year.
1906		A well-defined dry season from January to May followed by a well-defined wet season from June to December.
1907		A marked absence of storms in the Caribbean during this year.
1908		The weather in December was abnormal. December was the only month in this year in which the Island's average rainfall exceeded the monthly average.

Year	Date	Notes
1909	January 8 & 9	Unusually heavy local convectional rains developed over St. Joseph and parts of adjoining parishes; max. totals of 10.00 in. in 4 hours on the 8th and 4.50 in. on the 9th were recorded in parts of St. Joseph.
1910	May	The Island's average rainfall for this month was the greatest for the month of May in the 114-year period from 1847 - 1960. The greatest total rainfall for the month at any one station was 27.00 in., recorded in the hills of St. Peter. A marked absence of storms in the eastern Caribbean this year.
1911	February	High total rainfall for the month. A marked absence of storms in the eastern Caribbean this year.
1912	September	The Island's average rainfall for this month was the lowest recorded in the month of September in the 114-year period from 1847 - 1960. The Island's monthly rainfall exceeded the average in one month only, October, this year. Local convectional rains made an important contribution to total rainfall in some districts.
1913	January	Rainfall this month was well above average. P was abnormally low in May and August.
1914	December 8	Very heavy rain, especially in eastern coastal districts where 8.00 in. were recorded, was accompanied by a gale from ESE.
1915		Average P was low in the months of January, March and April.
"	January 26	Unusually heavy LCR in St. Peter and St. Lucy.

Year	Date	Notes
1915	April	The average total rainfall for this month was the second highest recorded for the month of April in the 114-year period 1847 - 1960.
"	May 3	A gale blew the Speightstown schooner "Margaret" to Martinique.
"	June	Average P was low.
"	October	Frequent LCR's.
1916	May	Fairly heavy LCR's in the early part of the month.
"	July	Above average number of LCR's.
"	August	Severe thunderstorm during the night of the 30th.
"	November	Very rainy during the first 12 days of the month.
1917	March 13.	An unusually heavy rain for the month of March, totals varying from 1.00 to 3.50 in.
"	July	The average total rainfall for this month (12.44 in.) was the second largest for the month of July during the period 1901 - 1960; the largest total (19.50 in.) was in July 1901.
"	December	Unusually heavy rains occurred on and in the vicinity of the Island from the 23rd to 25th; totals for the 3 days exceeded 10.00 in. in parts of St. Andrew, St. Thomas and St. Peter.
1918	August 22	The small cyclonic storm which struck the Island on this day was probably the next most severe storm to hurricane "Janet" (of September 1955) in the period 1901 - 1960.
"		There was a fairly high incidence of LCR's during the year which contributed substantially to the total rainfall in some districts. Fairly heavy LCR's developed early in January and in the 3rd week of December.

Year	Date	Notes
1918	September 13	There was the most unusual occurrence of a LCR developing during the night.
1919	January	Like 1918 January opened with a series of LCR's.
"	February 13	A fairly heavy shower moved over the Island from the most unusual direction of NW.
"	June	One of the 4 driest Junes in the period 1901-1960.
"	August 25	Very heavy rain fell fairly generally over the Island, but especially in parts of St. Thomas and and St. Michael which include the catchment area of the Constitution River in Bridgetown. Totals of 7.00 - 10.00 in. were recorded in this area resulting in one of the greatest floods in the Constitution area in the 60-year period in review. The water level rose to such a height over Queen's Park that only the spherical tops of the gate pillars of the "Governor's Gate" remained uncovered by water. It is noteworthy that on this occasion only 1.00 - 1.50 in. fell over a considerable area of the parishes of St. George, St. John, St. Philip and Christ Church.
"	August	Severe thunderstorms occurred on the nights of the 7th and 18th.
"	October, November	There were periods of very high lightning frequency.
1920	April	The average total rainfall for this month was the lowest recorded for the month of April in the 114-year period 1847 - 1960.
"	July, September	High wind velocity.
"		There were no cyclonic storms in the eastern Caribbean in 1920.

Year	Date	Notes
1920	November 12	A very spectacular display of lightning.
1921	March, April & June	The windiest months of March, April and June in the period 1903 - 1960.
"	September 8	Gale force winds blew while a cyclonic storm passed S of the Island.
1923	August - November	Persistently low rainfall.
"	December	Abnormal weather conditions. Light winds and fairly heavy rains.
1924	March	A very dry month. No rain fell in some parts of the Island.
"	August	The local weather was slightly influenced by two passing cyclonic storms.
"	September 6	The Crane Hotel was struck by lightning and set on fire.
1925	February	Unusually low wind velocity.
"		Complete absence of cyclonic storms in the Caribbean.
"	September 11	Heavy rains in parts of St. Michael.
"	October 29	Heavy rains in parts of St. Joseph.
1926	April	The second driest April in the period 1901-1960. There was practically no rain in some districts.
"	May	The average max. temperature for this month, 88.7°F, was the highest recorded for May during the period 1903 - 1960.
"	June	The average max. temperature for this month, 88.1°F, was the highest recorded for the month of June in the period 1903 -1960.

Year	Date	Notes
1926	September	A month of interesting weather. There were several fairly heavy LCR's.
"	November	Several heavy LCR's. Heavy rain on the Crane coast on the night of the 28th.
1927		There was practically no dry season this year. Rainfall totals were 210 and 276% of the averages for March and April respectively.
"	March	Heavy rain on the 9th with max. totals up to 3.50 in. in some districts.
"	April	The weather in this month was very abnormal and more typical of September and October. The average daily wind velocity was the lowest recorded for the month of April. Heavy rains fell over limited areas on several days and the month's rainfall was very unevenly distributed over the Island.
"	June	There was a fairly high incidence of thunder for the month of June.
"	July	The average daily wind velocity was the lowest recorded for the month of July.
"	September	<p>The weather during this month was of great interest. The average daily wind velocity was the lowest recorded for the month of September.</p> <p>There was an unusually large number of LCR's and, as a consequence, there was a great difference in the month's total rainfall at different places. On two days total rainfall from LCR's amounted to 6.00 in.</p>
"	October 15	A severe thunderstorm.

Year	Date	Notes
1927	November	The weather during this month was very interesting. Very heavy LCR's on the 14th and 15th.
"		There were 3 occasions during this year, namely on the 22nd of September and the 13th and 24th of October, when there was the otherwise rare occurrence of a lightning flash striking an object several miles distant from the point at which the nearest rain was falling from the thunderstorm cloud.
1928	May	The average total rainfall for this month was the lowest recorded for the month of May during the period 1901 - 1960.
"	November	The first and 9th days of this month were 2 days of unusually heavy rain. On each day the greatest amount of rain fell in parts of St. Michael where max. totals of 8.00 in. were recorded on the 1st and 10.00 in. on the 9th.
1929	September 3	Cloud level was down to 500/600 ft.
"	September 8	A total rainfall of 6.00 in. was recorded from a LCR in the hills of St. Peter.
"	October	There was a high incidence of LCR's during this month.
1930		The Island's average rainfall this year (38.44 in.) was the lowest recorded in the 114-year period 1847-1960. The average rainfall in 1947 was almost as low at 38.80 in. Rainfall was below average each month of the year.
"	September 12	A max. total of 6.50 in. was recorded in a LCR over St. Lucy.
"	October	A remarkable absence of general or islandwide rains.

Year	Date	Notes
1930	November	There was interesting weather this month and the weather on the 16th was of special interest.
1931		The wettest year since 1901.
"	February 15	A fairly heavy LCR developed over some districts and there was the very unusual occurrence of 2.50 in. falling from this type of cloud in southeastern districts in the month of February.
"	June	After 19 consecutive months of sub-average rainfall (from November 1929 to May 1931 with the exception of one month, April 1931, when the rainfall total was only slightly above average) this month began the wettest 6-month period since 1916.
"	September	A month of heavy local rains. Severe thunderstorms on the 15th.
"	December	After the wet 6-month period from June to November, this month was the driest December in the 114-year period from 1847 - 1960.
1932	February	Low minimum temperature from 17th to 21st.
"	March	Abnormal weather during the first week. A series of thunderstorms during the night of the 3rd. 2 LCR's formed over parts of the Island during the month.
"	May	Abnormal weather on the 4th to 6th.
"	July 5	Strong gusts of wind.
"	August 3	An unusually heavy LCR over northwestern coastal districts. Max. total of 8.50 in. recorded at a place in western St. Lucy.
"	September	Frequent and heavy LCR's over the Island.

Year	Date	Notes
1932	September 20	A "whirlwind" of unusual size caused damage to sugar cane and buildings.
"	September	A severe thunderstorm.
"	November	An unusually large number of LCR's.
1933	June 26-27	Very strong "trade winds".
"	October	Heavy rains on several days this month.
1934	June	The driest June, except June 1935, in the period 1901 - 1960.
"	August	Wind direction was seldom S of E.
"	September 7	Very unusual rainfall distribution.
"	November 23-30	A hurricane moved in a very unusual course. Very rough sea on the N coast.
"	November 30	A remarkable display of distant lightning.
1935	May	This was the wettest month of May since 1910. Total rainfall this month exceeded the average for the month of May for the first time since 1918.
"	June	The average total rainfall for this month was the lowest recorded for the month of June in the 114-year period from 1847 - 1960.
1936	March	This month's average total rainfall was the lowest recorded in any month in the 114-year period from 1847 - 1960.
"	May 18	A very heavy LCR in northern districts.
"	December	During the last week of this month the weather over the eastern Caribbean, including Barbados, became influenced by unusual conditions causing overcast skies and fairly frequent rain which persisted for several weeks.

Year	Date	Notes
1937	January	The second wettest January in the 114-year period from 1847 - 1960. Abnormal weather conditions. The drift of cold air over the Caribbean from the NW continued and caused overcast skies and rainy spells. The lowest record of sunshine hours for the month of January.
"	August	A very dry month in southeastern districts.
1937	September	Frequent LCR's: this type of raincloud developed over parts of the Island on at least 12 days this month.
1938		The Island's average total rainfall this year was the third highest on record.
"	August - September	Some fairly large rainfall totals recorded from LCR's.
"	October	A very rainy spell began on the 24th and continued until near the end of November.
"	November	The Island's average total rainfall for this month was the highest recorded for any month in the 114-year period from 1847 - 1960. Monthly totals exceeded 25.00 in. over the greater part of the Island. A rainfall total of 25.00 in. was recorded in parts of St. Thomas and other upland districts during the 8-day period from the 16th - 23rd, the greatest total on any one day in this period being 8.00 in. recorded in the hills of St. Peter.
1939	February 21	Unusually heavy rain for the month of February.
"	April	High average wind velocity.
1940	March	The average total rainfall this month was the

Year	Date	Notes
		second highest for March in the period from 1901 - 1960. 7.00 in fell in the first 5 days of the month in parts of St. Thomas.
1940		March was the only month in which the rainfall total exceeded the average.
1941	September 14	Heavy LCR with severe thunderstorm.
"	October 14 - 15	Heavy rain with severe thunderstorms.
1942	April 29	Very heavy rain, unusual in the month of April.
"	November 4	P fell to the unusually low level of 29.68.
1943	May 1	Fairly heavy rain in St. Thomas.
"	September	The local weather was at no time during this month influenced by a passing tropical disturbance.
"	October 10-11	Very heavy rain associated with the passing of the incipient stages of a hurricane.
"	December 6	Heavy rain in parts of St. Joseph and St. Andrew with max. totals up to 7.50 in.
1944	February	Low minimum temperatures.
"	May	A rainy month with totals well above average.
"	July 23	Rainfall totals up to 5.00 in. were recorded.
"	September 30	Exceptionally heavy rain especially in north-eastern St. Philip where it is claimed that about 13.00 in. fell in about 4 hours at one place.
"	November	Heavy rains with totals of 3.50 - 5.00 in. on 4 days during the month.
1945	April	More than double average rainfall.
"	May	The third consecutive wet month of May.
1946	January 7-9	Low minimum temperature.
"	April 22	Unusually heavy rain in northern parishes.

Year	Date	Notes
1946	October	The Island's average rainfall for this month, 2.77 in., was the lowest recorded for the month of October during the 114-year period 1847-1960.
"		There were no cyclonic disturbances in the eastern Caribbean this year.
1947	March	Highest recorded average P for March.
"	June 16	Very heavy rain, especially in St. Thomas.
"	August	The Island's average rainfall for this month was the lowest recorded for the month of Aug. during the 114-year period from 1847 - 1960.
"	November	The Island's average rainfall for this month was the lowest recorded for the month of November in the 60-year period 1901 - 1960. The average wind velocity this month was the lowest on record for the month of November.
1948	March 17	Unusually heavy rain for the month of March.
"	September	A procession of LPA's.
"	September 25	Very heavy rain and severe thunderstorm especially in northern parishes.
"	October	Lowest average wind velocity on record (equal to that in October 1957).
"	October 21-22	Heavy LCR's over northern parishes.
1949	January	Unusually low minimum temperatures.
"	August 31	Very heavy rain during the night with max. totals exceeding 10.00 in. in some districts. Flooding occurred in the "Constitution River" estuary of Bridgetown.
"	September 20	A spectacular electrical storm accompanied by heavy rain during the night; totals varied from

Year	Date	Notes
		8.50 in. in northern parishes to 1.50 in. at some places in St.Philip.
"	December	A period of very low wind velocity during the middle of the month.
1950	January 5	Max. temperature on this day was 75.5°F, the lowest max. ever recorded.
"	August	The weather during this month was influenced on 3 occasions by passing cyclonic storms.
"	August 18	Very heavy LCR; max. total of 5.25 in. fell in less than 2 hours.
"	October	A month of interesting weather. The Island's average rainfall this month, 13.52 in., was the highest recorded for October in the 114-year period from 1847 - 1960.
"	October 10	Another very heavy LCR; max. totals of 4.00 - 5.00 in. were recorded in 1½ - 2 hours.
"	October 22	Rapid convection resulting in heavy rain and a severe thunderstorm was caused by a remarkable convergence of strong NE and SE winds over the central part of the Island.
"	November	The weather during this month was very interesting. Average wind velocity this month, equaling that of November 1947, was the lowest recorded for the month of November.
1951		The Island's average rainfall for this year, calculated from the returns from 69 stations, was 90.24 in, the second highest annual average (highest in 1901) in the 114-year period.
"	January 3-5	Unusually low minimum temperatures between 62°F and 63°F.

Year	Date	Notes
1951	January 31	Types of cumulonimbus clouds uncommon in the month of January.
"	February	The Island's average rainfall for this month constituted the greatest departure from the normal of the average rainfall of any month in the 114-year period from 1847 - 1960 and was by far the highest average rainfall for the month of Feb.
"	February 12-23	The period of 12 days from the 12th to the 23rd produced what was probably the most abnormal or unseasonable weather of the current century and possibly of the 114 years under record.
"	March	The average wind velocity this month, 7.9 miles per hour, was 69% of the average for March and the lowest average recorded for the month of March.
"	April	The average rainfall during this month was the second highest for April during the period 1901-1960. The wind velocity was low.
"	April 2	Very heavy LCR, a little under 5.00 in. recorded in 50 minutes.
"	June	Remarkable mistiness caused by volcanic dust from Cape Verde Islands.
"	August	High frequency of LPA's.
"	December 26	Very heavy rain especially in northern parishes; 8.00 in. recorded at places in St. Peter.
1952	January- February	These were two very dry months. The average rainfall in January was the lowest recorded for the month of January in the 114-year period, 1847-1960.
"	April 1	A fairly heavy LCR formed over parts of St. James.

Year	Date	Notes
1952	September 29 October 2	Heavy LCR's formed over northern parishes on 4 consecutive days and a total of 14.00 in. for the 4 days was recorded at one place in northern St. Peter.
"	October 15	Exceptionally heavy rain; it is claimed that 6.00 in. fell in 50 minutes at a station in St. Thomas.
"	December 1	Very heavy LCR over a small area in eastern St. Michael and western St. George valley.
1953	February 20-23.	Unusually strong "trade winds".
"	March 5-8	Another 4 day period of strong winds.
"	April 11	Heavy rain along southwestern coastal strip at night.
"	June 30	Squalls and thunderstorms.
"	July 16	Marine Hotel struck by lightning.
"	September 26	Heavy rain; max. totals of 5.75 - 6.00 in. in western St. Peter.
"	October 8	Heavy LCR over a relatively small area; max. totals of 5.00 in. recorded in northeastern outskirts of Bridgetown.
"	November 4	Very heavy rain especially over northeastern coastal districts where max. totals of 7.50 in. were recorded.
"	December	Some interesting "unseasonal" weather during this month.
1954	January	The weather during the last week of the month was unusual for the month of January.
"	July	The total number of sunshine hours was 314.1

Year	Date	Notes
		with a daily average of 10.1 hours, the highest daily average for the month of July on record (1929 - 1960).
1954	August	The Island's average rainfall this month was the second lowest for August in the 114-year period from 1847 - 1960, the lowest average being 2.31 in. in 1947.
"	October 5	A developing hurricane passed within 100 miles south of the Island.
"	October 7-8	Heavy rains during the night of the 7th and day of the 8th with totals exceeding 7.00 in. in northern parishes and in parts of St. Thomas and St. James.
"	November	There was a remarkable absence of LCR's.
"	December 31	A minimum temperature of 61.5°F was recorded.
1955	January	The weather at the beginning of the month was influenced by hurricane "Alice" travelling in a WSW or SW direction through the Leeward Islands.
"	January 4	A heavy LCR developed over a small area in eastern St. John.
"	February	There was a slow shifting of wind direction from E through S and W to N and NE during the last week of the month, with subnormal P. These conditions possibly resulted from the P pattern set up by the W-to-E movement of a storm in mid-Atlantic and caused the development of LCR's over very small areas on the 21st and 22nd.
"	September 4	Heavy LCR over northern districts.
"	September 22	Hurricane "Janet" at Barbados. This was the only hurricane to strike the Island in the 60-

Year	Date	Notes
		year period under review. See Appendix III.
1955	October 30	Heavy rain in southeastern districts.
"	December 27-30	A type of weather unusual in December.
1956	January 3-8	Unusually low P.
"	January 10-14	Heavy LCR's developed on the 10th, 11th and 14th over very small areas.
"	February 3-4	Unusually heavy rain for the month of February.
"	April 11	Unusual weather conditions.
"	June 15	Gale winds, estimated at 50 - 60 miles per hour, accompanied by an active E/W. It is claimed that the wind velocity over some northern districts was greater in this E/W than the max. velocity reached in hurricane "Janet" in that area.
"	August	There was an unusually high frequency of E/W's during this month.
"	August 10-11	An unusual and unexplained occurrence took place when hurricane "Betsy" was passing north of the Island. Recording instruments at Three Houses (E coast) and Rockley (SW coast) recorded that the wind shift was from N through E to S and SW instead of from N through NW and W to SW as would be expected when the centre of a cyclonic storm passes to the N of the Island.
"	September	There was a marked infrequency of E/W's and an absence of cyclonic disturbances.
"	November 2-6	Hurricane "Greta" travelled on an unusual course.
1957		The year was notable for the small number of hurricanes which developed in the Caribbean.

Year	Date	Notes
		The local weather was at no time influenced by a cyclonic disturbance. There was a remarkable absence of E/W's, none being recorded during the month of September; of the 7 observed for the year, only 2 were well defined.
1957	March	The mean min. temperature of 68.1°F was the lowest for the month of March since 1911.
"	August 21-30	A period of almost max. sunshine.
"	September-October.	An unusually high incidence of LCR's.
"	October	The daily average wind velocity of 4.8 miles per hour was equal to that of October 1948 and the lowest recorded for the month of October.
1958	January - April	Total average rainfall for the first 4 months was only 3.75 in., the lowest average recorded in the 114-year period 1847 - 1960.
"	January 24-28	Period of unusually low wind velocity.
"	February	The mean max. temperature for the month, 85.4°F was the highest recorded in the month of February during the period of records 1903 - 1960.
"	February 24 & 28	Unusual local rains in February.
"	March	The total number of hours of sunshine, 319.9 hours, was the highest in any one month during the period that records have been kept, 1929-1960. The mean max. temperature, 87.3°F, and the mean minimum temperature, 71.9°F, recorded this month were the highest recorded in the month during the period 1903 - 1960.

Year	Date	Notes
1958	April	The mean max. temperature for this month, 88.8°F, was the highest recorded for any month in the period of records 1903 -1960.
"	May	Average total rainfall this month, 12.11 in., was the second highest average total for the month of May in the 114-year period 1847-1960.
"	May 20, 29-30	Unusually heavy and very localised rains.
"	July 3-4	Strong squalls with gusts of 50 miles per hour.
"	August	The 24-hour daily mean wind velocity this month, 5.5 miles per hour, was the lowest recorded for the month of August in the period of records 1903 - 1960.
1959		The Island's average rainfall this year, 47.94 in., was below average for the first time since 1952 and was the lowest average since 1947.
"	September	LCR's were responsible for a very large proportion of the total rainfall for the month.
"	October	There was a marked absence of LCR's.
"	December	The 24-hour daily mean wind velocity this month was 6.3 miles per hour and was the lowest mean recorded for the month of December during the period 1903 - 1960.
1960	February	The 24-hour daily mean wind velocity was 7.2 miles per hour and was the lowest mean recorded for the month of February in the period 1903-1960.
"	November	One of the driest Novembers on record.
"	December 5-6	Abnormal weather conditions.

Chapter 3.

List of Occasions on which the Weather at Barbados was
Influenced by Tropical Disturbances, Storms or Hurricanes
during the period 1901 - 1960.

Year	Date	Nature of Disturbance & Effect on Local Weather
1901	July 5	Tropical disturbance passed N of the Island. Exceptionally heavy rains accompanied by severe thunderstorms.
1903	August 7-8	Tropical disturbance passed N of the Island with little effect on local weather.
1905	September 6	A disturbance of minor intensity passed near to the Island with little effect on local weather.
1906	August 31	A hurricane passed some 250 miles N of the Island with little effect on local weather; moderately heavy showers occurred over northern districts.
"	September 16-17	A hurricane passed some 200-250 miles N of the Island with little effect on local weather.
"	October 13-16	A disturbance of minor intensity passed near to the Island with little effect on local weather.
1908	September 7-8	A tropical disturbance in its initial stages of formation passed S of the Island.
"	September 24-25	A tropical storm passed about 200 miles N of the Island causing heavy rains in some districts.
1909	July 13- 14	Local weather influenced by the initial stages of a hurricane centred some 100-150 miles S of the Is- land. Thunderstorm and strong gusts from S & SE.
"	July 30	Tropical disturbance passed some 100 miles S of the Island. Fairly heavy rain moved in from SW & W into Central districts; max. totals of 3.00 in. recorded in coastal districts of St. James.

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
1909	August 21	Local weather influenced by a hurricane located E of Dominica. There was little effect except moderately heavy showers in some districts on 22nd.
"	September 10	A tropical storm passed about 150-200 miles N of the Island. Fairly heavy rains over the Island from the 9th to the 11th.
"	November 27-29	A tropical disturbance passed near the Island to the NE causing fairly heavy rains on 4 consecutive days.
1915	August 9-11	The centre of a well developed hurricane passed about 100 miles N of the Island on the 10th. Heavy rains fell especially on western coasts.
"	September 21	The centre of a hurricane passed about 100 miles N of the Island during the night of the 21st. Heavy rains fell in almost all districts.
1916	July 11	A tropical disturbance appears to have been initiated within 100 miles E of the Island. Fairly heavy showers with thunder but no strong winds.
"	August 12-13	The centre of a tropical disturbance appears to have passed S of the Island during the night of the 12th. Strong blustery SE winds but only moderate showers.
"	August 28	The centre of a fully developed hurricane passed about 150 miles N of the Island.
"	September 7	The centre of a tropical storm passed some 200 miles N of the Island.
"	September 21	The centre of a tropical disturbance passed about 300-400 miles N of the Island.
"	October 6	The centre of a tropical storm passed about 100-150 miles N of the Island.

Year	Date	Nature of Disturbance & Effect on Local Weather
1917	August 31	A tropical disturbance centred some 500 miles N of the Island had only slight effect on the local weather.
"	September 20	The local weather was influenced by the initial stages of a hurricane, the centre of which passed about 200 miles N of the Island. There were no strong winds, but fairly heavy rain and a thunderstorm.
1918	August 1	The centre of a cyclonic storm passed probably within 150 miles of the Island. There was rain generally over the Island and gusty SE winds.
"	August 22	The centre of a small storm passed a few miles S of the Island causing a short gale and gusts estimated at about 60 miles per hour. There was rain generally over the Island.
"	September 8	The centre of the incipient stages of a cyclonic storm passed N of the Island. The wind increased to fresh breeze S on the morning of the 9th and fairly heavy rain fell in some districts.
1919	August 7	The centre of a mild cyclonic storm passed N of the Island. There was fairly heavy rain and a severe thunderstorm.
"	September 1	The centre of a storm, which subsequently developed into a severe hurricane, passed some 250 - 300 miles N of the Island. There was little rain on the Island and winds were light.
1921	September 8	The centre of a small cyclonic storm passed S of the Island causing gale force winds and rough seas on the S and SW coasts, but there was little rain.
1922	September 14	The centre of a cyclonic storm passed about 200 miles N of the Island with little effect on local weather.

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
1924	August 16-17	The centre of a cyclonic storm passed about 100 miles N of the Island. There were fairly heavy showers, but winds were light.
"	August 27	The centre of a cyclonic storm passed about 150 miles N of the Island. This storm had little effect on the local weather.
1926	July 22	The centre of a hurricane passed about 100 miles N of the Island. Fairly heavy rain fell on the Island, but there were no strong winds.
"	July 31	The centre of a mild cyclonic disturbance appears to have passed some 300-400 miles N of the Island.
"	September 6-8	The weather was slightly influenced by a cyclonic storm, the centre of which passed about 600 miles N of the Island on the 7th.
"	September 12-14	The centre of a cyclonic storm passed about 250-300 miles N of the Island on the 13th.
1927	August 20-21	The weather was slightly influenced by a cyclonic storm passing some 300-400 miles N of the Island.
"	September 25	The local weather was possibly influenced by a cyclonic storm situated some 600 miles N of the Island.
"	October 28	A LPA with a very weak circulation passed over or N of the Island.
1928	August 7	A mild cyclonic disturbance appears to have passed N of the Island. There were several thunderstorms in the vicinity of the Island.
"	September 11	The centre of a great hurricane passed about 150 miles to the N of the Island. The characteristic colouring of the clouds at sunset was well demonstrated. There was little rain and no strong winds were experienced over the Island.

Year	Date	Nature of Disturbance & Effect on Local Weather
1929	September 18-20	The weather was slightly influenced by the incipient stages of a cyclonic storm which was located N of Puerto Rico on the 22nd.
1930	September 1	The weather was slightly influenced by a small hurricane centred some 200 miles N of the Island.
1931	July 21- 23	A small cyclonic disturbance passed some 150 miles S of the Island.
"	August 15	A tropical disturbance in its formative stage passed about 150 miles N of the Island.
"	September 6	A tropical disturbance passed S of the Island causing gusty winds and heavy rains.
"	September 8-9	The centre of a cyclonic storm passed about 200 miles N of the Island. Winds were light over the Island and a fairly heavy LCR developed. (This disturbance developed into a hurricane over Puerto Rico)
1932	August 23- 24	The weather was slightly influenced by the incipient stages of a disturbance which passed N of the Island.
"	August 28	The weather may have been very slightly influenced by a cyclonic storm far to the N.
"	September 23-25	The weather was very slightly influenced by the incipient stages of a hurricane which was located N of the Leeward Islands on the 25th.
"	October 30 - November 1	The local weather was influenced by a cyclonic storm (which later became a severe hurricane further W in the Caribbean) as it passed some 250 miles N and NW of the Island on a southwesterly course.
1933	June 27	A hurricane passed over the southern coast of Trinidad. Barbados weather was only very slightly influenced.

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
1933	July 13	A cyclonic disturbance of slight intensity passed N of the Island. There were very light winds over the Island and fairly heavy local rain.
"	July 24	A cyclonic storm passed N of the Island with little influence on the local weather.
"	August 15	A mild cyclonic disturbance passed S of the Island with little influence on local weather.
"	September 7-8	A tropical storm in its incipient stages passed 200-300 miles N of the Island. There were light winds and fairly heavy local rains.
1934	August 20	The weather was very slightly influenced by a very mild disturbance.
"	September 15-16	A cyclonic storm of moderate intensity passed about 200 miles N of the Island displaying typical cloud formations and causing rough seas on the NE and N coasts.
"	November 24-26	A hurricane in the Atlantic moved on a very unusual course into the Caribbean and influenced the local weather during the last week of November; the sea was very rough on the N coast on the 25th and 30th, but the local weather remained mainly fine.
1935	August 16-17	The local weather was slightly influenced by a hurricane which was located some 400 miles N of the Island on the 18th.
"	September 21	It is probable that the local weather was associated with the incipient stages of a disturbance which was located in the central Caribbean on the 23rd.
1936	September 10-11	The local weather was only slightly influenced by a hurricane centred about 450 miles N of Barbados.

Year	Date	Nature of Disturbance & Effect on Local Weather
1937	September 7-9	The local weather was slightly influenced by a tropical storm passing N of the Island.
"	September 13-16	The local weather was slightly influenced by a tropical storm which was centred about 200 miles NE of the Leeward Islands on the 14th. Light winds and heavy LCR's with thunderstorms.
"	September 20-22	The weather was slightly influenced by another tropical storm centred about 800 miles E of the Island on the 20th travelling northwestwards. Rough seas on eastern and northeastern coasts; light winds; fairly heavy LCR with thunderstorm.
1938	August 7-8	A minor tropical disturbance passed about 300 miles N of the Island with little influence on the local weather.
"	August 9	A small disturbance passed S of the Island and N of Trinidad with slight influence on the local weather.
"	September 17-18	The local weather was only slightly influenced by a hurricane passing some 400 miles N of the Island.
1939	August 6-7	The weather was slightly influenced by a small tropical disturbance which passed N of the Island.
"	October 12.	The weather was slightly influenced by a hurricane which was subsequently located N of the Leeward Islands. A fairly strong SW wind blew during the night.
1940	August 3-5	The weather was slightly influenced by a hurricane which was located E of Puerto Rico on the 5th. There was a moderate gale from the ENE during the night of the 3rd.
"	September 8-9	The weather was slightly influenced by a tropical storm which passed N of the Island and was located ENE of Puerto Rico on the 10th - 11th. There were rough seas on the NE coast on the 8th & 9th,

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
		but local winds were light and there was very little rain on the Island.
1941	September 23	A tropical disturbance passes S of the Island, a strong breeze blew from S and SSW and there were fairly heavy showers.
1942	August 20-21	The weather was slightly influenced by the incipient stages of a tropical disturbance passing some 50 miles N of the Island.
"	September 15	The weather was slightly influenced by a tropical disturbance centred some 50-100 miles N of the Island.
1943	August 19	The weather was slightly influenced by a hurricane, the centre of which passed about 200 miles N of the Island.
"	October 10	The weather was influenced by the incipient stages of a hurricane which passed N of the Island. Rain fell steadily through the night of the 10th and until noon on the 11th and max. totals of 8.00 in. were recorded in parts of St. Thomas and St. James. There were no strong winds.
1944	July 23-24	The weather was influenced by a tropical storm passing N of the Island. There were fairly strong winds from the S. Heavy rain fell generally over the Island with totals up to 5.00 in.
"	August 16-17	A storm passed S of the Island centred over the Grenadine Islands. There were gusty winds up to 40 miles per hour but little rain on the Island. Heavy seas on the S and SW coasts.
"	September 9	A great hurricane passed some 450-500 miles N of the Island. Winds were light and there was no rain on the Island.

Year	Date	Nature of Disturbance & Effect on Local Weather
1944	September 30	A minor tropical disturbance developed NE of the Island and caused exceptionally heavy rain.
1945	August 1-2	The weather was slightly influenced by a small tropical disturbance passing N of the Island.
"	August 15-16	A minor tropical disturbance developed NE of the Island and influenced the local weather only very slightly.
"	September 7-8	The local weather was very slightly influenced by the incipient stages of a small tropical disturbance centred some 300 miles N of the Island.
"	September 11-12	The weather was slightly influenced by a tropical disturbance far to the N of the Island.
1947	September 11-12	The weather was very slightly influenced by a hurricane, the centre of which passed about 300 miles N of the Island.
"	October 14-15	The weather was very slightly influenced by the incipient stages of a hurricane which was located E of Puerto Rico on the 16th.
1948	August 31	A small cyclonic storm passed N of the Island and influenced the weather slightly. Fairly heavy rain fell in some districts.
"	September 10-11	A hurricane passed several hundred miles N of the Island with only slight influence on the local weather.
1949	August 30-September 1	The weather was influenced by a mild cyclonic disturbance, the centre of which passed over or just N of the Island during the morning of the 31st. Very heavy rain with max. totals exceeding 10.00 in. in some districts, fell during the night and gale winds blew for 2-3 hours from SSE and SE during the latter half of the night.

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
1949	September 19-20	The weather was influenced by a cyclonic disturbance, the centre of which passed about 200-250 miles N of the Island. Heavy rain fell during the night of the 20th accompanied by a spectacular electrical storm.
1950	August 11-12	The weather was mildly influenced by the incipient stages of a hurricane, the centre of which passed about 300-400 miles N of the Island.
"	August 19-21	The weather was influenced by a hurricane, the centre of which passed about 300 miles N of the Island and later seriously affected the Leeward Islands. Fairly heavy rain and severe thunderstorms from the SW and S were experienced locally.
"	August 29-31	The centre of a hurricane passed about 150-200 miles N of the Island during the morning of the 31st. The local weather was only slightly influenced.
1951	August 15	The centre of a hurricane passed about 200 miles N of the Island during the morning; the winds were light but heavy rain fell in some districts.
"	September 1-2	The centre of a tropical storm passed about 200 miles N of the Island between midnight on the 1st and 3 a.m. on the 2nd. There was heavy rain during the morning of the 2nd with wind gusts from the S up to 40 miles an hour.
1952	August 25	A tropical disturbance passed about 450 miles N of the Island influencing the local weather very slightly.
"	September 26	A hurricane passed about 300 miles N of the Island with little effect on the local weather.
1953	September 1-2	The local weather was slightly influenced by a

Year	Date	Nature of Disturbance & Effect on Local Weather
		hurricane passing about 300-400 miles N of the Island.
1953	September 13-14	The local weather was slightly influenced by the incipient stages of a tropical storm centred probably within 150 miles N of the Island.
1954	October 5	The centre of hurricane "Hazel", then in its developing stage, passed between 50 and 100 miles S of the Island between 6 and 8 a.m. There was continuous light and moderate rain for several hours with squalls of 30-40 and sometimes 40-50 miles per hour. There was only slight "ground swell" from the S.
"	December 31	The weather was slightly influenced by the LPA NE of the Leeward Islands which later developed into hurricane "Alice" of 1955.
1955	January 1-3	The weather was influenced by hurricane "Alice" situated near the Leeward Islands. Hurricanes at this time of the year are most uncommon and this one travelled in a very unusual course.
"	August 3-5	The weather was slightly influenced by hurricane "Connie" which passed several hundred miles N of the Island.
"	September 10-15	The local weather was probably under the influence of hurricane "Ione" which passed far to the N of the Island.
"	September 22	Hurricane "Janet" at Barbados. A description of this hurricane is recorded in Appendix III.
1956	August 10-11	The weather was slightly influenced by hurricane "Betsy", the centre of which passed about 140 miles N of the Island in the early morning of the 11th.

Year	Day of Month	Nature of Disturbance & Effect on Local Weather
1956	November 2-6	The weather was appreciably influenced by an extensive LPA which developed into hurricane "Greta" N of Puerto Rico. Moderately heavy showers and thunderstorms were experienced locally.
1958	August 15	Hurricane "Cleo" passed several hundred miles N of the Island with little effect on the weather except the usual change in wind direction.
"	September 5	The weather was slightly influenced by hurricane "Fifi", the centre of which passed about 300 miles N of the Island.
"	September 24	The weather was influenced by hurricane "Ilsa" the centre of which passed about 300 miles N of the Island. Fairly heavy general rains fell over the Island.
1959	August 17-18	The centre of tropical storm "Edith" passed about 120 miles N of the Island soon after midnight on the 17th. A fairly heavy LCR developed in some districts during the afternoon of the 17th; winds were very light.
"	November 26-28	A LPA with a weak circulation centred E of the Leeward Islands on the 27th slightly influenced the local weather.
1960	July 9-10	The weather was influenced by the incipient stages of hurricane "Abby" as it passed not far N of the Island during the night of the 9th. It is estimated that at no time did wind gusts exceed 40 miles per hour on the Island. Fairly heavy rain, with a moderate thunderstorm, fell in some districts.
"	September 3-4	The weather was slightly influenced by hurricane "Donna", the centre of which passed about 300 miles N of Barbados during the night of the 3rd.

Chapter 4.

1949 - 1960.

The writer was resident in the Island from June 1949 to the end of the period. Detailed information has been taken from his personal weather diaries, except during periods of his absence from the Island from May to September 1953, July 27 to August 18, 1957, May to September 1958 and other very short periods when information has been taken from notes recorded by Mr. E. A. Reece of Three Houses Factory.

1949.

R 60.89 : 101 pca

Rainfall totals at individual stations ranged from 85.00 in the highlands of St. Thomas to 42.50 in southern St. James.

Rainfall was unevenly distributed throughout the year. With the exception of the month of June when the rainfall was a little above average, the rainfall during the first 7 months was well below average. Rainfall in August, September and October was well above average. Very heavy rain fell during the nights of the 31st August and 20th September. Rainfall in November and December was again well below average.

The weather was influenced by 2 cyclonic disturbances.

January.

R 1.25 : 37 pca

MMT : 3.10 in the highlands of St. Thomas to 0.50 in parts of St. Michael and St. Lucy.

A month of very low wind velocity, the daily average being 66% of the average for January for the period 1903 - 1960. The winds were extremely light from the 10th to the 20th, blowing from NE or sometimes variable locally. During this period minimum temperatures were unusually

low, the lowest minimum being 60.5°F during the night of the 11th.

There were light showers in all districts, and sometimes moderate to moderately heavy showers, from the 3rd to the 8th. No appreciable rain fell between the 9th and the 21st when the winds were light. There were moderate and moderately heavy very local showers in parts of St. Thomas and some northern districts on the 23rd and 31st.

February.

R 1.04 : 47 pca

MMT : 2.00 in the highlands of St. Thomas to less than 0.50 in eastern districts of St. Philip and St. John and in southern St. James.

The wind was fairly steady at moderate to fresh breeze between E and NE. There were light and occasionally moderate local showers throughout the first 3 weeks and then the weather was dry.

March.

R 1.37 : 71 pca

MMT : 2.75 in the highlands of St. Thomas to less than 0.75 in parts of St. Michael and southern St. James.

A well defined LPA passed over on the 9th with P falling from 29.89 on the 7th to 29.80 on the 9th and rising to 29.89 on the 11th. The wind was light and variable in direction from the 8th to the 10th and the weather was dry. With the exception of a moderately heavy local shower in parts of St. Thomas and in some northern districts on the 3rd, there was no appreciable rain during the first half of the month. Light and moderate showers fell in almost all districts from the 16th to 28th.

April.

R 1.43 : 61 pca

MMT : 2.40 in the highlands of St. Joseph to less than 0.75 in western Christ Church, southern St. James and in some northeastern coastal districts.

P was considerably above average during the month. The wind was steady at moderate to fresh breeze E. There were light and moderate showers, but daily totals exceeded 0.50 in. on the 13th only.

May.

R 1.96 : 61 pca

MMT : 3.75 in the highlands of St. Thomas to less than 1.00 in southeastern coastal districts and coastal districts of St. Peter.

Persistently windy with velocity often increasing to fresh breeze E. There were light and occasional moderate local showers during the first half of the month. Moderate to fairly heavy showers fell during the night of the 17th when max. totals of 1.00 in. were recorded in the hills of St. Peter. There were also moderately heavy showers in some districts, especially in the S and SW, on the 23rd, 29th and 30th.

June.

R 6.13 : 113 pca

MMT : 10.00 in northeastern St. Joseph to 2.25 in southern St. James.

P was fairly high throughout the month. The wind was steady at moderate to fresh breeze E. The first 11 days were fine and dry with many hours of sunshine; except for moderate local showers on the 8th. A small LPA passed over on the 13th and totals of 1.00 - 1.75 in. of rain fell in the southern half of the Island during the night of the 12th and on the 13th. The trough of another LPA passed over on the 18th and there were general rains, with rising P, from the 19th to 21st; the rain was especially heavy in northern parishes on the 19th when max. totals of 3.75 - 4.00 in. were recorded in parts of St. Peter and St. Andrew. P was high from the 21st to 25th and mainly fine and sunny weather prevailed. There were fairly heavy showers in St. Thomas and St. James on the 27th with max. totals of 1.00 - 1.25 in.

July.

R 2.95 : 47 pca

MMT : 4.75 in the highlands of St. Thomas to less than 1.50 in the northeastern hills of St. Peter.

The wind was persistently moderate to fresh breeze E during the first half of the month, but there were some days during the second half when the wind moderated to gentle breeze. There were fairly frequent light and moderate local showers during the first half of the month. A slight fall in P on the 11th to the lowest reading for the month was accompanied by very little rain. Another slight fall in P on the 17th was accompanied by moderately heavy to fairly heavy showers on the 18th when max. totals of 1.00 in. were recorded in parts of St. Philip and St. Peter; wind velocity moderated to gentle breeze on the 18th and a LCR with occasional thunder developed off the coast of St. Peter. Light and moderate local showers fell on the 22nd, 23rd and 25th. The wind moderated to light to gentle breeze ESE on the 26th and a moderate LCR formed off the northwestern coast. There were moderate to moderately heavy showers during the night of the 29th, otherwise the weather was mainly fair during the last week of the month.

August.

R 13.45 : 184 pca

MMT : 19.00 in coastal districts of St. John to 8.00 in western St. Peter.

Rainfall totals recorded at many stations for this month are less than they should be since raingauges were in many instances too small to measure the unusually large amount of rain which fell during the night of the 31st.

P remained above 29.90 during the first 18 days of the month. The wind was steady at moderate and occasionally moderate to fresh breeze E

from the 1st to the 15th. The weather was generally fair from the 1st to 13th except for moderate local showers on the 6th and 7th. Heavy rain moved over southern and southwestern districts during the night of the 14th when max. totals of 3.50 - 4.00 in. were recorded at places in St. Michael, while little or no rain fell in eastern, northeastern and northern districts. P was very steady from the 15th to 21st and the weather was fine, sunny and dry except for a moderately heavy shower over some southeastern and southern districts on the 20th when max. totals of 0.75 - 1.00 in. were recorded. The wind was light breeze on the 16th and 17th. The wind backed to moderate breeze NE and ENE during the latter half of the 21st and P fell from 29.90 on the 21st to 29.83 on the 22nd as the trough of a LPA passed over the Island; P rose again to 29.91 by the 24th. The wind was light to gentle breeze NE on the 22nd and a small LCR developed over southwestern coastal districts. The LPA developed a weak circulation and the very light breeze backed slowly through NW, W and SW during the night of the 22nd. No rain accompanied this LPA and dry conditions prevailed on the 23rd and 24th as the wind increased in velocity and backed through S and SE to E. A change to showery and rainy conditions was initiated on the 25th. Frequent distant lightning was observed during the night of the 24th when the wind was moderate breeze ENE. Moderately heavy to fairly heavy unevenly distributed showers fell on the 25th with occasional thunder; the wind shifted to fresh to strong breeze SE and ESE with the showers. The wind was light to gentle breeze SE and ESE on the 26th and a moderate LCR formed off the northwestern coast with occasional thunder, some rain falling on coastal areas of St. Lucy; also on the 26th fairly heavy showers moved in locally over southeastern and eastern coastal districts with occasional thunder when max. totals of 1.75 - 2.00 in.

were recorded very locally in coastal districts of St. Philip, but the rain did not move inland. P began falling slowly on the 27th from 29.94 on the 26th. The wind was light to gentle breeze NE on the 27th and cloud formations indicated an area of fairly heavy rain some 100 - 200 miles NE of the Island; a moderate LCR developed off the southwestern coast and fairly heavy showers moved in very locally over northeastern coastal districts of St. Joseph. During the latter half of the night of the 27th moderately heavy showers with occasional thunder moved over the Island with the wind moderate breeze ENE. During the morning of the 28th, with surface wind gentle breeze ESE and SE, an area of fairly heavy rain situated NE of the Island gradually developed southwestwards and spread over the Island fairly generally during midday and early afternoon accompanied by local thunderstorms; max. totals of 1.25 - 1.50 in. were recorded at some places. By the 29th P had fallen to 29.86 and weather conditions were generally unsettled in the vicinity of the Island. Fairly heavy showers moved in on the 29th over southeastern districts where max. totals of 1.00 in. were recorded, but little or no rain fell in central and northern districts; there was a little local thunder and frequent distant lightning was seen during the night. By the 30th the local weather had come under the influence of a small cyclonic disturbance centred some 200 - 250 miles ESE of the Island. P fell to 29.81 by 3 p.m. The wind backed to NE during the afternoon and there were moderately heavy and fairly heavy showers accompanied by moderate squalls. The sky cleared of low cloud during the night when the wind was light breeze NE and NNE, but much thin cirrostratus persisted. The weather during the 31st was of great interest and its description is recorded in some detail. During the early morning of the 31st there was much thick cirrostratus in the eastern sky with some strands of cirrus radiating from the E; the wind continued

gentle breeze NE and there were some moderate local showers. The wind moderated to almost calm after 9.30 a.m. and general indications during the next few hours were that the centre of an ill-defined tropical disturbance passed over the Island between 9.30 a.m. and noon with P falling to 29.74 at 9 a.m. The wind became gentle breeze SW after noon and at 3 p.m. P was 29.76. During the afternoon dark steel-grey masses of strato-nimbus and nimbostratus filled the eastern and southeastern sky indicating an area of heavy rain some 50 - 100 miles SE of the Island, but only occasional light rain fell on the Island. Heavy rain gradually developed nearer the Island to the SE and S during the late afternoon, and moderately heavy rain began falling on the Island from 5.30 p.m. onwards with the wind gentle to moderate breeze SSW and SW. Local thunderstorms with rain of increasing intensity occurred during the evening. Lightning became very frequent after 8 p.m. and very heavy rain fell between 10 p.m. and midnight with the wind increasing to gale force from SE and persisting at fresh to strong breeze SE for several hours after midnight as the rain gradually moderated to a drizzle by daylight of next morning. Raingauges at several stations overflowed, but max. totals of 10.00 in. during the night were registered at places in St. Joseph, St. John, St. Thomas and St. George; min. totals of 5.00 -6.00 in. were registered in northern districts.

September.

R 11.13 : 145 pca

MMT : 21.50 in western St. Lucy, to 4.50 in southeastern coastal districts.

On the 1st the local weather continued to be under the influence of the tropical disturbance which passed over the Island on the previous day. P increased to 29.83 and there were fairly heavy showers with squalls from S and SSW gusting to 35 - 40 miles per hour during the afternoon; the heaviest rain fell in parts of St. Michael

and coastal districts of St. James where max. totals of 2.50 in. were recorded. There was frequent distant lightning in the W during the evening. Conditions became fair on the 2nd when the wind was gentle to moderate breeze SE. The wind backed to light breeze NE on the 3rd and a moderately heavy LCR formed over southwestern coastal districts during the afternoon and fairly heavy local showers fell during the night. There were moderately heavy showers over southern and central districts on the 4th with P falling to 29.82 and the wind shifting to light breeze ESE and SE. P was above 29.90 from the 5th to the 11th and wind velocity was low. Light LCR's formed over northern and northeastern districts on the 5th and 6th; the wind was S on the 5th and SE on the 6th. Moderately heavy local showers fell in northern districts during the nights of the 7th and 8th. It was fair on the 9th and 10th, but LCR's with thunder formed over the sea to the W of the Island on the 11th and 12th; light to moderate local showers fell inland. P fell to 29.85 on the 12th and slowly increased to 29.98 on the 17th. Fairly frequent showers fell during this period. The wind was ESE and SE on the 13th and there were fairly heavy showers and occasional thunder; max. totals of 1.00 - 1.25 in. were recorded at places in St. Thomas. Fairly heavy rain clouds persisted in the vicinity of the Island on the 14th and frequent distant lightning was seen during the night. The wind was light to gentle breeze ESE and SE on the 15th and a fairly heavy LCR with thunder formed over northern parishes and moderate rain spread southeastwards. There was another LCR mainly over St. Peter, St. James, St. Thomas and St. George on the 16th. The wind backed to E on the 17th and a LCR formed over the sea to the W of the Island. P began falling on the 18th as the weather came under the influence of a tropical disturbance developing some 200 miles NE of the Island. The wind was gentle to moderate breeze NE and increased to strong breeze when local

moderately heavy showers fell during the evening; occasional distant lightning was seen. The wind was light breeze ENE & NE on the 19th moderating at surface to almost calm in the afternoon and evening, but there were indications of upper air movement from the N. P fell to 29.84 on the 19th & 20th. Distant lightning was seen during the early part of the night of the 19th and fairly heavy local rain moved to the Island with a light breeze from SW during the latter half of the night; max. totals of 1.00-1.50 in. were recorded at places in St. George. The sky was thickly overcast in the north and west during the morning of the 20th and the wind increased to gentle breeze S & SSE. Very heavy rain developed W of the Island during the afternoon of the 20th, the rain gradually spreading eastwards and southeastwards to envelop the Island. A severe thunderstorm passed along the W coast between 5 & 6 p.m. After 6.30 p.m. heavy rain with an unusually severe electrical storm moved on to the Island from the SW, with lightning averaging 30 flashes to the minute for considerable periods. The rain moderated after 10 p.m., but light rain continued until midnight. Max. totals of 8.50 in. were recorded in parts of St. Peter & St. Lucy, while only 1.50 in. was recorded at places in St. Philip. P rose rapidly to 29.94 on the 21st with fair weather and the wind moderate breeze ESE. The arrival of a small LPA on the 22nd caused P to fall to 29.90 and the wind to back to ENE. P increased to 29.96 on the 23rd and the wind shifted to gentle breeze ESE; moderate showers fell over the southern half of the Island but there was heavy rain over the northern half, especially during the night when there were local thunderstorms; max. totals of 4.25-4.50 in. were recorded in the hills of St. Peter. The trough of a well-defined LPA passed over on the 27th with P falling to 29.80, but there was little rain during the last week of the month except moderately heavy local showers on the 25th.

October.

R 13.31 : 169 pca

MMT : 18.85 in southern St. George to 8.75 in coastal districts of St. Michael and St. James.

P rose from 29.83 on the 1st to 29.93 on the 2nd and the wind shifted from NE to S; wind velocity was very low and a fairly heavy LCR formed over various districts on the 1st and 2nd; max. totals over 2.00 in. were recorded in St. George on the 1st and over 1.00 in. in St. Lucy on the 2nd. There was fairly heavy rain in almost all districts during the night of the 5th and morning of the 6th; max. totals of 4.00 in. were recorded in St. John. A LPA with a weak and indefinite circulation passed over the Island on the 11th and 12th. P fell from 29.95 on the 9th to 29.84 on the 11th. The wind was light to gentle breeze NE to N during the 11th, backing to NW and W during the evening before becoming dead calm. Fairly heavy showers fell in all districts during the day and night of the 11th and there was occasional thunder; max. totals of 2.00 in. were recorded at places in St. Peter. The wind was light to gentle breeze SW throughout the day and night of the 12th when fairly heavy showers developed especially over the northern and northeastern districts and there were local showers with thunder during the night. It was mainly fair with only a few moderate local showers from the 13th to the 15th, but the 16th and 17th were unsettled with frequent thunder showers and much distant lightning although there was only moderate rain on the Island. Moderately heavy to fairly heavy showers fell generally on the 20th with max. totals of 1.00 - 1.25 in. in parts of St. Michael and St. George. There were further moderate local showers on the 21st and 22nd, especially over northern districts; the weather was then fairer with only a few local showers from the 23rd to 26th. Wind velocity increased on the 24th and by the 26th

and 27th was moderate to fresh breeze E. A very wet spell began during the early morning of the 26th and much distant lightning was visible before sunrise. There were frequent showers and rain on the 27th and 28th with very little sunshine; only a little distant lightning was observed. Max. totals of 2.50 in. were recorded in parts of St. George on the 27th and in St. Lucy on the 28th. It was mainly fair on the 29th. During the morning of the 30th a heavy LCR developed over the sea to the north of the Island, the wind being gentle breeze SE to S; during the afternoon heavy rain moved in from the SE & S and spread generally over the Island; max. totals of 4.00-4.25 in. were recorded at places on the Christ Church ridge and in southern St. George. It was fair on the 31st.

November.

R 3.36 : 43 pca

MMT : 5.75 in the highlands of St. Thomas to less than 2.00 in parts of St. Michael, Christ Church, St. Philip & southern St. James.

The month began with a well-defined LPA with a weak circulation, but mainly dry conditions prevailed. P fell from 29.93 on the 1st to 29.79 on the 2nd & 3rd and rose to 29.88 on the 4th. Air movement was very slight from the NE & N on the 1st; during the 2nd the air drift backed slowly through NW & W and to SW during the night. Wind velocity increased to gentle breeze S & SSE on the 3rd. The sky gradually became overcast with high cloud from SW to E on the 4th, and by late afternoon and evening fairly heavy showers moved in from SE with a little lightning; max. totals of 1.75 in. were recorded in coastal districts of St. Philip and at places in St. Peter. Fair to fine weather prevailed from the 5th to 12th with the wind increasing to gentle to moderate breeze E & ENE; a few light local showers fell. P fell slowly from 29.93 on

the 9th to 29.81 on the 12th and the wind shifted to E & SE on the 12th and 13th and there were local moderately heavy showers on the 13th. It was mainly fair to fine from the 14th to 18th, except for a few light or moderate local showers. Fairly heavy rainclouds were visible in the far distance to NE & N on the 16th, and during the evening there was very frequent lightning in that quarter. An area of heavy rainclouds persisted some 100-150 miles E to SE of the Island on the 17th and very frequent lightning was observed in that direction during the night of the 17th. P fell from 29.85 on the 16th to 29.79 on the 18th; the wind backed to gentle to moderate breeze ENE on the 16th and 17th and shifted to ESE & SE from the 18th to the 20th as the P increased to 29.87. There were moderate and moderately heavy local showers on the 19th & 20th. Very frequent distant lightning was seen in the W & NW during the evening of the 19th. Wind velocity increased on the 21st and was maintained throughout the remaining days of the month, the direction being E on the 20th & 21st and ENE from the 23rd to 30th. There were moderate and moderately heavy showers in almost all districts from the 22nd to 25th, but there were also long bright intervals. It was generally fine, with only a few light local showers, from the 26th to the end of the month,

December.

R 3.51 : 73 pea

MMT : 6.00 in the highlands of St. Thomas to 2.00 in coastal districts of St. Michael, St. James and St. John.

P this month was well below average for December and average wind velocity for the month was 83% of the average for December; there was a period of very low wind velocity from the 13th to 21st.

It was fair to fine during the first two days, but an area of rain moving over from S or SW reached the Island on the early morning

of the 3rd and showery weather continued until midday on the 4th; max. totals of 2.00 in. were recorded in parts of St. Peter but less than 1.00 in. in St. James and St. George. The wind was mainly moderate breeze ENE during the first week. Further moderate and moderately heavy local showers fell on the 7th & 8th and then, except for moderate local showers on the 11th, there was a fair spell until the 16th. The wind backed to NE on the 11th and 12th and moderated. From the 13th to 17th wind velocity was very low and wind direction varied between NE & NNW. P fell from 29.88 on the 10th to 29.73 on the 13th and increased to 29.84 by the 16th. A small LCR developed over parts of St. John on the 14th when the wind was light breeze NNW & NW. There was fairly frequent light rain and drizzle on the 17th when max. totals of 0.50 in. were recorded at places in St. Lucy. P began falling again on the 17th and fell to 29.77 on the 18th & 19th with the wind shifting slowly to E & SE and later to SW. Small LCR's developed off the coast of St. Lucy on the 18th and 20th and partly over coastal districts of St. Lucy on the 19th. Distant lightning was observed during the night of the 18th. Visibility was unusually good on the 19th & 20th. The wind continued light breeze SW on the 20th and backed to NE & ENE on the 21st, continuing from the latter direction until the end of the month and increasing in velocity from the 22nd to moderate and occasionally moderate to fresh breeze NE & ENE. Light and moderate showers fell in almost all districts from the 21st to 25th. It was generally fine during the last week of the month, except for occasional drizzles and light local showers; the wind moderated again on the 31st.

1950.

R 79.67 : 132 pca

Rainfall totals at individual stations ranged from 122.00 in the highlands of St. Thomas to 59.00 in southeastern coastal districts.

Rainfall was well above average in seven months of the year; January, March and May in the normal "dry" season and June, August, October and November in the normal "wet" season.

Three passing tropical disturbances influenced the local weather slightly, all in the month of August.

There were several very heavy LCR's during the months August to November and two or three severe thunderstorms.

Very interesting weather was experienced during the months of October and November.

January.

R 6.06 : 180 pca

MMT : 11.00 in the highlands of St. Thomas to 2.30 in parts of Christ Church.

During the first six days the wind was moderate and sometimes fresh to strong breeze ENE & NE. It was fair during the first three days but became unsettled and showery during the evening of the 4th and moderately heavy local showers fell during the night; max. totals of 0.75-1.00 in. were recorded at places in St. John. Moderate rain and drizzle fell persistently on the 5th; there was no sunshine recorded and it was an unusually cool day; the max. temperature for the day, 75.5°F, was the lowest max. ever recorded; max. rainfall totals for the day of up to 2.00 in. were recorded in parts of St. Peter. There were further moderate showers and light dripping rain on the 6th when max. totals of 1.25-1.50 in. were recorded in parts of St. John. P fell from 29.89 on the 5th

to 29.83 on the 7th and rose to 29.95 by the 9th. The LPA produced a marked change in the weather. The sky gradually became very clear on the 7th and the wind backed to light to gentle breeze NNE & N. Fair weather continued on the 8th with the wind light to gentle breeze between NNW & WNW. On the 9th the wind continued light to gentle breeze but began shifting back to ENE and a spell of unsettled weather with light and moderate showers began and continued to the 18th, the wind being moderate and fresh breeze ENE & E. Max. falls of between 0.75 & 1.00 in. were recorded in some districts on the 11th & 12th and on the 18th. There was a fine spell from the 19th to 22nd with the wind moderate to fresh breeze ENE & E. There was another spell of unsettled weather from the 23rd to the end of the month, with frequent light and moderate showers in all districts; the wind continued moderate to fresh breeze ENE & NE. During the last three days of the month the showers were heavier but unevenly distributed; max. totals of 1.00-1.25 in. were recorded in parts of St. Thomas and St. George on the 29th & 31st and 0.75 in. in St. James and St. Peter on the 30th.

February.

R 1.95 : 89 pca

MMT : 3.70 in the highlands of St. Thomas to a little less than 1.00 in southwestern St. James and coastal districts of St. Joseph.

The weather was unsettled during the first four days; the sky was overcast and there was no sunshine on the 1st and 3rd. The wind was mainly fresh to strong breeze E on the 1st & 2nd, then moderating. There were frequent drizzles and in some districts moderately heavy rain during the night of the 1st when max. totals of 0.75 in were recorded in parts of St. George and St. Thomas. The weather became fair on the 4th after moderately heavy showers passed S of the Island. It was fair

to fine from the 5th to 14th with the wind mainly moderate breeze ENE. A small LCR formed over the sea to the W on the 13th. A moderately heavy shower fell during the night of the 15th over the southern half of the Island when max. totals of 0.75 in. were recorded on the Christ Church ridge and at places in St. George. It was fair from the 16th to 21st with wind velocity gradually moderating until the wind was light to gentle breeze E on the 21st. Moderate local showers fell over some northern districts from the 22nd to 24th, and in St. Thomas & St. James on the 25th. Wind velocity increased to fresh to strong breeze E during the last week of the month. There were moderately heavy to fairly heavy unevenly distributed showers on the 27th when max. totals of 0.75-1.00 in. were recorded in some southeastern and southern coastal districts.

March.

R 2.86 : 148 pca

MMT : 5.70 in the highlands of St. Thomas to 1.20 in northern St. Philip and coastal districts of St. Joseph.

P was fairly high throughout the month falling slightly below 29.90 on two days only. Wind velocity was above average, persistently increasing daily to moderate and fresh breeze and sometimes strong breeze between E & ENE. Rainfall was well distributed throughout the month and there were few days without some rain. Max. totals of over 0.75 in. were registered in some districts on the 5th and 20th.

April.

R 1.17 : 50 pca

MMT : 3.00 in the hills of St. George to less than 0.50 in northern St. Michael, northern St. Peter and coastal districts of St. Philip and St. Joseph.

P was fairly high during the first two weeks and then fell rapidly from 29.97 on the 13th to 29.81 on the 16th, continuing below 29.90 during

the remainder of the month. Wind velocity was normal and wind direction varied between ENE & ESE.

There were light and moderate showers in all districts from the 2nd to 5th; a max. total of 0.75 in. was recorded in coastal districts of southeastern St. Philip on the 3rd, otherwise only light and occasional moderate local showers fell during the remainder of the month. There was no rain associated with the fall in P on the 16th. Wind velocity moderated temporarily to gentle breeze on the 20th and a moderate LCR formed over the sea to the W of the Island. The wind increased to strong breeze ESE from the 25th to 28th.

May.

R 6.56 : 204 pca

MMT : 10.60 in the highlands of St. Thomas to 3.25 in coastal districts of St. James.

The wind was fresh to strong breeze during the first eight days, shifting from ENE on the 1st, 2nd and morning of the 3rd to ESE on the 3rd & 4th. There was frequent drizzle and moderately heavy rain during the night of the 2nd and the 3rd, with totals varying from 0.50 in. in southern and southwestern districts to 3.00 in. in parts of St. Peter. It was fair from the 4th to 9th except for a local moderately heavy shower during the night of the 7th. Wind velocity began moderating on the 9th & 10th and direction backed to NE & NNE. The sky was thickly overcast on the 10th and 11th and there was little or no sunshine. There were moderate local showers especially in northeastern districts during the night of the 10th. P began falling on the 11th from 29.91 on the 10th to 29.85 on the 13th. Wind velocity was unusually low and wind direction variable; a light to moderate LCR formed over parts of St. Philip and St. John with a light air drift varying between WNW & WSW.

Conditions were mainly fair on the 12th & 13th with wind velocity increasing slowly to gentle to moderate breeze E & ESE. A moderate LCR formed off the W coast of St. Peter on the 13th. P rose to 29.87 on the 14th and to 29.90 on the 15th. Another moderately heavy LCR developed off the coast of St. Peter on the 14th and then the sky became increasingly overcast with medium and high clouds; it was almost calm. There was continuous light or moderate rain from midnight on the 14th to the morning of the 15th; max. totals of 2.25 in. were recorded in parts of St. George. Moderately heavy to fairly heavy local showers fell in southern and southwestern districts on the 15th when max. totals of 1.00-1.25 in. were recorded in southern coastal districts of Christ Church. P fell slowly to 29.86 on the 19th and increased slowly to 29.93 on the 22nd. It was mainly fair from the 16th to 18th with the wind fresh breeze E on the 16th, moderating on the 17th & 18th and becoming light to gentle breeze SE & S on the 19th. Fairly heavy showers fell over the northern half of the Island during the morning of the 19th when max. totals of 1.25 in. were recorded at places in St. Andrew. During the 20th a belt of rain gradually advanced from the S with the wind blowing a moderate to fresh breeze E & ESE, and during the night fairly heavy rain spread generally over the Island and max. totals of 1.75-2.00 in. were recorded in some districts. Thunder was occasionally audible during the night of the 20th and again during the morning of the 21st as further fairly heavy showers fell with max. totals of 1.50 in. at places in St. John. Generally fair weather developed on the 22nd and persisted throughout the remainder of the month with the wind increasing to moderate and sometimes fresh breeze to strong breeze E.

June.

R 10.99 : 203 pca

MMT : 18.50 in the highlands of St. Thomas to 7.75 in parts of St. Philip.

The trough of a LPA passed over the Island on the 4th with P falling from 29.94 on the 1st to 29.87 on the 3rd & 4th and increasing to 29.94 on the 6th. The wind was fresh to strong breeze ENE on the 1st to 3rd, shifting to ESE on the 4th and moderating to gentle breeze. Moderately heavy local showers fell on the 1st, especially over northern districts. There were fairly heavy showers generally over the Island during the night of the 3rd becoming heavy with a little thunder in St. James, where max. totals of 2.75-3.00 in. were registered. Frequent moderately heavy and sometimes fairly heavy showers fell throughout the day and night of the 4th; max. totals of 4.50 in. were recorded in parts of St. Michael, but only a little over 1.00 in fell in northern coastal districts. Overcast conditions continued on the 5th and further moderately heavy showers fell with max. totals of 0.75-1.00 in. in parts of St. Michael. P remained a little above 29.90 from the 6th to 10th with mainly fair weather. P then fell to 29.88 on the 11th when another small LPA passed over the Island. The wind was fresh to strong breeze ENE from the 7th to 9th and moderated to moderate to fresh breeze ESE on the 10th and ESE & SE on the 11th. Light and moderate local showers fell during the night of the 10th and heavier showers during the night of the 11th when distant lightning was observed and max. totals of 2.00 in. were recorded in the hills of St. Peter. P rose to 29.94 on the 12th and fairer weather prevailed from the 12th to 21st, with wind velocity increasing to fresh and strong breeze E from the 17th to 22nd. There were moderate local showers, especially during the night of the 16th and some distant

lightning was observed during the night of the 17th. P remained above 29.90 but fell slightly to 29.88 on the 22nd; the wind backed to ENE on the 21st, shifted to E on the 22nd and to ESE on the 23rd. The weather was showery from the 22nd to 25th, with max. totals reaching 1.25 in. in parts of St. John and St. George on the 23rd and 1.25-1.50 in. in southern Christ Church on the 25th. It was fair to fine during the last five days of the month, except for occasional light or moderate very local showers.

July.

R 3.37 : 54 pca

MMT : 6.50 in the highlands of St. Thomas to less than 2.00 in northern St. Michael, southern St. James and in parts of St. Peter.

P was high during the first five days, increasing to 29.98 on the 5th, then falling to 29.90 on the 7th & 8th and rising to 30.00 by the 10th. There were moderately heavy showers on the 2nd accompanied by distant lightning and a little thunder associated with a very slight fall in P; the wind shifted very temporarily from ENE to ESE with the showers. Otherwise it was mainly fair from the 3rd to 6th. The wind increased to fresh to strong breeze E & ENE on the 7th & 8th, and showery conditions prevailed from the 7th to 10th with the wind moderating to gentle to moderate breeze E & ESE. Distant lightning was observed during the night of the 7th and occasional thunder accompanied local showers on the 9th. P remained high from the 10th to 16th with the wind backing to ENE & NE. Moderate and moderately heavy showers fell generally on the 14th & 15th, with occasional thunder on the 14th and frequent thunder in the morning of the 15th. P fell rapidly from 29.98 on the 16th to 29.88 on the 17th and rose to 29.95 on the 19th & 20th. The wind shifted to light to gentle breeze SE on the 18th and varied between ESE & E from the 19th to 23rd. Only light or moderate local showers were associated with this LPA. There

was another slight fall in P on the 22nd and moderate local showers fell on the 22nd & 23rd. P fell steadily from 29.98 on the 24th to 29.87 on the 29th and the weather was mainly fair to fine from the 24th to 28th. The wind backed to ENE on the 28th and moderated to gentle breeze NNE & NE on the morning of the 29th. Showers fell in all districts on the 29th as the trough of a LPA passed over; the heaviest showers fell in southern districts where max. totals of 1.25 in. were recorded at some places; there was a little thunder. The wind shifted to ESE & SE during the afternoon of the 29th and conditions became fair during the night and continued fair during the last two days of the month.

August.

R 10.01 : 137 pca

MMT : 15.75 in the highlands of St. Thomas to 5.00 in northeastern St. Peter and parts of St. Lucy.

The weather during this month was influenced by passing tropical disturbances on three occasions.

P increased from 29.90 on the 1st to 29.95 on the 3rd, fell to 29.90 on the 5th and remained steady from the 5th to 8th. Except for moderate local showers on the 7th, there was little rain during the first eight days. The weather continued dry on the 9th, but P began falling and the wind backed to ENE and began moderating. P fell to 29.85 on the 10th and rose very slightly to 29.86 by the 12th. Some moderate local showers fell on the 10th; the existence of an area of cirrus extending on the horizon from ESE to NNE became very apparent at sunset on the 10th and frequent distant lightning was observed in the NE during the first half of the night. These conditions were associated with the incipient stages of a tropical disturbance centred some 200-300 miles NE of the Island, which by the 12th had developed into a hurricane some 300-400

miles N of the Island. The northern and northwestern sky was thickly overcast with cirrostratus and some cumulonimbus on the 11th. There were local variable light breezes in the morning and the wind became light breeze SW in the afternoon; a moderately heavy LCR developed over parts of St. John in the morning and over northeastern coastal districts in the afternoon; max. totals of 1.50-1.75 in. were recorded at some places in St. John. The wind was light breeze S on the 12th and a LCR developed over and off the northern end of the Island with occasional thunder; max. totals of 1.50 in. were recorded in coastal districts of St. Lucy. P fell to 29.83 on the 13th and 14th and rose to 29.86 on the 15th. There were a few moderate local showers on the 13th. P fell slightly on the 16th and increased again to 29.86 on the 17th. The wind increased to moderate breeze ENE & NE on the 16th and heavier types of rainclouds appeared in the vicinity of the Island. During the night of the 16th fairly heavy rain moved in over eastern, southeastern and southern districts and max. totals of 2.50 in. were recorded in northeastern coastal districts of St. Philip; some distant lightning was observed in the southwest. The wind shifted to ESE & SE on the 17th and a moderately heavy LCR formed off the coast of St. Peter; later in the afternoon a fairly heavy local shower moved in over the northeastern coast and a max. total of 1.00 in. was recorded at places in St. Andrew. P fell to 29.80 on the 18th and the wind became light breeze NE but often variable locally or calm. Heavy rainclouds persisted in the vicinity of the Island and conditions were very favourable for the development of a LCR. Very heavy rain of this type developed over especially northwestern St. Michael and southern St. James where 5.25 in. fell in less than two hours; moderately heavy falls occurred in some other districts. Only a little thunder accompanied this heavy rain. P rose rapidly to 29.87 on the 19th, but the

wind continued light breeze ENE or variable locally and another LCR developed, especially over parts of St. George and St. Philip, where max. totals of 2.25 in. were recorded. P fell from 29.87 on the 19th to 29.80 on the 21st and increased to 29.88 on the 23rd. During the night of the 19th the weather came under the influence of the incipient stages of a hurricane centred some 300 miles ENE of the Island. (This hurricane later affected the Leeward Islands and Antigua especially). The wind was light breeze N during the night of the 19th and by sunrise of the 20th low cloud was moving slowly from WSW and there was much cirrus and cirrostratus low down in the sky from ESE through NE to NW with a convergence of cirrus into the NNE. The wind continued mainly WSW & W during the day of the 20th and backed to S by evening. From midnight on the 20th to sunrise on the 21st fairly heavy showers moved in from S & SW and spread over the Island, generally, accompanied by severe thunderstorms; max. totals of 3.00-3.25 in. were recorded at places in St. James and St. George. Very unsettled conditions continued on the 21st and further fairly heavy showers and thunderstorms moved over the Islands from SW & SSW; the rain was heaviest in southern districts where max. totals of 4.00 in. were recorded. Unsettled weather continued on the 22nd & 23rd and fairly heavy rainclouds persisted in the vicinity of the Island with occasional short thunderstorms. The wind backed to SE on the 22nd and a moderately heavy local shower moved over parts of St. Philip and St. John in the afternoon and max. totals of 0.75-1.00 in. were recorded. There were further fairly heavy local showers on the 23rd, especially in St. John, St. Thomas and St. James where max. totals of 1.25 in. were recorded. There was a slight fall in P on the 24th with the wind backing to gentle to moderate breeze ENE & NE. It was mainly fair from the 24th to 27th except for a few light or moderate local showers. By the 28th P

had risen to 29.92; the weather was unsettled and there was much rain to the S of the Island; occasional moderately heavy showers with thunder moved over the Island locally, mainly from SE & S, and max. totals of 1.25 in. were recorded in the hills of St. George. During the night of the 28th the wind backed to light air NE and by the morning of the 29th the weather was under the influence of a hurricane centred about 500 miles ENE of the Island. P began falling on the 29th and had fallen to 29.85 by the 31st. The wind was mainly light breeze NE & ENE during the 29th and moderately heavy very local showers passed over the Island in the late afternoon and evening. During the morning of the 30th a distant mass of cirrostratus and cirrus became obvious in the ESE through E to NE, with a marked convergence of cirrus to ENE. A LCR with occasional thunder formed over the sea to the SW of the Island during midday and locally over some southwestern districts during the afternoon. Heavy distant rain clouds began appearing in NE & N during the late afternoon and thunderstorms approached the northeastern coast. The wind was light air to light breeze backing to N & NNW during the late afternoon. Much distant lightning was seen in the NE & N during the early part of the night. The wind continued backing slowly during the first half of the night and was light breeze W by midnight. The centre of the hurricane passed about 150-200 miles N of the Island during the morning of the 31st. The northern and northwestern sky was thickly overcast with a dark mass of cirrostratus and altostratus during the early morning of the 31st, when the wind gradually backed from W to SW at a gentle breeze. The weather gradually became fairer except for an isolated fairly heavy shower which moved over parts of St. James, St. Thomas and St. Andrew from SSW. There was very frequent distant lightning in the NW and W during the night while the centre of the hurricane passed a little N of Antigua.

September.

R 7.24 : 94 pca

MMT : 11.60 in southeastern St Thomas to a little less than 4.50 in southwestern St. Michael and parts of St. Philip.

Fair weather prevailed over the Island during the first four days as the hurricane moved away into the western Caribbean. P rose slightly during the first three days to 29.89 and the wind backed slowly from gentle breeze S on the 1st to light to gentle breeze ESE & SE by the 3rd. P fell slightly to 29.87 on the 4th & 5th and the wind backed to light breeze NE & NNE on the 4th. Heavy distant rain clouds appeared in various directions during the day of the 4th and a LCR developed inland over small areas with a max. total of 1.75 in. northeastern St. Michael. Occasional distant lightning was seen in the NE during the evening. It was unsettled on the 5th with many cumulonimbus formations in the vicinity of the Island; several moderate and some fairly heavy showers developed over the Island during the day and the first half of the night with occasional thunder; max. totals of 2.25 in. were recorded in parts of St. Michael. P fell to 29.85 on the 8th, increased slowly to 29.87 on the 11th and then rapidly to 29.95 on the 13th. The weather was fair to fine from the 6th to the 10th in spite of the slight fall and rise in P from the 7th to 9th and the windshift from ENE & NE on the 7th to ESE & SE on the 9th. Wind velocity was low on the 7th & 8th and LCR's formed over the sea to the W of the Island; a LCR of slight intensity developed over the W coast of St. Peter on the 9th. It was fine over the Island on the 10th, but distant rain clouds began developing in the SE & S and there was frequent distant lightning in that quarter during the first half of the night. After 4.30 a.m. of the 11th, fairly heavy rain moved in over northeastern and northern districts where max. totals of 1.25-

1.50 in. were recorded. Several thundershowers of small area and uneven distribution passed over the Island on the 11th with the wind continuing light breeze ESE, totals of 2.00-2.25 in. were recorded in parts of St. Peter but little or no rain fell in some other districts; there was frequent distant lightning to the W of the Island during the night. It was brilliantly fine over the Island on the 12th with the wind light to gentle breeze SE, while rain clouds moved away to the W and some further rain clouds developed in the far distance to the S where lightning was observed in the evening. It was fair over the Island on the 13th and the wind backed to ENE & NE during the night. P fell to 29.91 on the 14th & 15th and conditions became unsettled in the area. A moderately heavy shower and moderate thunderstorm moved in over parts of St. Lucy during the afternoon of the 14th when the wind was NE & ENE; this shower was followed by further moderately heavy showers over eastern coastal districts. Frequent lightning was seen to the SW of the Island during the latter half of the night. It was fair on the 15th with the wind increasing to gentle to moderate breeze ESE & SE. P rose to 29.96 on the 17th and moderate and moderately heavy very local showers moved over the Island on the 16th & 17th accompanied by occasional short local thunderstorms; there was frequent distant lightning in various directions during the evening of the 17th. P fell from 29.96 on the 17th to 29.87 on the 22nd. The wind increased to moderate breeze ESE on the 18th & 19th, with slightly misty conditions and local moderate showers on the 18th and generally fair and bright conditions on the 19th. Mainly dry weather prevailed on the 20th & 21st with the wind gentle to moderate breeze E & ESE. Distant cirrostratus and cirrus appeared in the eastern sky in the late afternoon and the wind backed to light breeze ENE. There was a steel grey mass of cirrostratus low down in the sky

from ENE through SE to SW in the morning of the 22nd and a marked convergence of cirrus to the SSE; the wind was gentle breeze ENE & NE. The sky became overcast with high cloud during the day and moderately heavy to fairly heavy rain developed locally during the night when max. totals of 1.00 in. were recorded in parts of St. Andrew. P rose to 29.92 on the 23rd and the wind shifted to ESE, SE & S. Several moderately heavy and fairly heavy showers fell in all districts on the 23rd when max. totals of 2.50 in. were recorded at places in St. George and St. James. P fell slowly to 29.85 on the 26th & 27th. It was fair on the 24th with the wind gentle to moderate breeze ESE; but the wind backed to light breeze NE on the 25th and a fairly heavy LCR with a little thunder formed mainly over the Christ Church ridge, parts of St. George and St. Michael and coastal districts of St. James; max. totals of 2.50 in. were recorded in St. George's valley. The wind shifted to light to gentle breeze ESE & SE on the 26th and moderately heavy unevenly distributed showers drifted slowly over the Island with max. totals of 1.25-1.50 in. in the hills of St. George. The wind continued light to gentle breeze SE & SSE on the 27th and a moderately heavy LCR formed off the northwestern to northeastern coasts with some rain falling inland; a max. total of 1.00 in. was recorded in St. Peter. P rose to 29.91 on the 29th. The wind was light to gentle breeze SE & SSE on the 28th and a LCR formed over the sea to the N of the Island and several thundershowers developed near the Island from the SE to NE. A fairly heavy LCR developed off the W coast on the 29th accompanied by a moderate thunderstorm, but little or no rain fell on the Island. The weather became generally fair on the 30th with P falling and the wind gentle breeze ESE.

October.

R 13.52 : 171 pca

MMT : 22.00 in southwestern St. John to 5.50 in central Christ Church.

The weather during this month was very interesting.

The Island's average rainfall this month was the highest recorded for October in the 114-year period from 1847 - 1960.

Rainfall was very unevenly distributed over the Island.

P rose abruptly from 29.89 on the 1st to 29.97 on the 2nd and then fell steadily to 29.82 on the 7th. The wind was mainly gentle to moderate breeze E & ESE from the 1st to 6th and increased to fresh breeze E on the 7th. It was fair with only occasional light and moderate local showers during the first week. P increased to 29.85 on the 8th and then fell slowly to 29.81 on the 11th, and there followed a period of interesting weather during the remainder of the month. Wind velocity was low and direction variable; there was frequent thunder and several heavy LCR's. The wind backed to moderate to fresh breeze ENE on the 8th and to light breeze NE on the 9th. There was evidence on the 8th of distant heavy rain clouds in the SE & E and on the 9th these clouds also developed to ENE & NE of the Island; only light or moderate very local showers developed over the Island; distant lightning was visible in the ENE & E in the early part of the night. The wind was light breeze SSE in the morning of the 10th and slowly shifted through SE to WSW; during the latter half of the morning a fairly heavy LCR with occasional thunder developed over parts of St. Andrew, St. Joseph, western St. John and St. George hills and during the afternoon heavy rain moved in from SW over parts of St. Michael and St. James passing into central districts; max. totals of 4.75-5.00 in. were recorded in St. George hills. The wind was light breeze ESE & SE on the 11th and a heavy LCR developed

during mid-morning over parts of St. James and St. Peter and in the afternoon over parts of St. Michael and St. George; max. totals of 5.00 in. in St. James and 4.00 in. in St. George were recorded in $1\frac{1}{2}$ - 2 hours; in the meanwhile much cumulonimbus developed near the Island to the S & SW and moderately heavy rain fell over southwestern coasts during the evening with frequent lightning and thunder. P rose from 29.81 on the 11th to 29.92 on the 14th and the wind backed from S on the 12th to ENE & NE by the evening of the 14th. It was generally overcast throughout the day on the 12th with the wind light breeze S. Fairly heavy rain moved over eastern Christ Church and St. Philip during the morning and max. totals of 2.00 in. were recorded; there was only light rain in the other districts. There were very local thundershowers during the night over small areas, while a prolonged thunderstorm moved slowly off the southern and southwestern coasts for two or three hours after midnight. The weather continued unsettled and rainy in the vicinity of the Island during the morning of the 13th; a fairly heavy local shower with occasional thunder moved over and max. totals of 1.00 in. were recorded in parts of St. John; fairer conditions developed during the afternoon with the wind increasing to gentle to moderate breeze ESE & SE. It was fair to fine on the 14th & 15th while P fell rapidly to 29.80 on the 15th. The wind backed to gentle to moderate breeze NE & ENE on the 15th & 16th and P continued to fall to 29.77 on the 16th. During the day of the 16th fairly heavy cumulonimbus on the horizon from SE to SW and after midnight there were several local thunderstorms and max. totals of 1.00 in. were recorded in parts of Christ Church. P rose temporarily to 29.81 on the 17th and fell again to 29.77 on the 18th & 19th. Frequent thunderstorms continued to develop in the vicinity of the Island on the 17th; one or two very local moderate showers fell over the Island with the wind gentle

breeze ENE. It was fair on the 18th with the wind light breeze SE or variable in direction locally during the morning, but backing to NE & NNE late in the afternoon; fairly heavy rain clouds persisted within sight from the Island and a moderate LCR developed off the northwestern coast during midday. The wind was very light from the NE to N on the 19th and a heavy LCR formed over the sea to the SW during the latter half of the morning and moderate rain fell over southwestern districts during the early afternoon. P began rising on the 20th and continued to rise to 29.90 on the 23rd. Wind velocity was unusually low on the 20th, the air drift being from W & WSW, and unsettled conditions with rain clouds visible in various directions in the vicinity of the Island; a heavy LCR developed over northern & northeastern St. Philip toward midday and in other small areas during the afternoon; max. totals of 3.50-4.00 in. were recorded at places in northern St. Philip; there was frequent distant lightning at night. The wind was light breeze S & SSW on the 21st and a fairly heavy LCR formed off the northeastern coast with some rain falling nearby inland. Thunderstorms developed over small areas of the Island during the night and max. totals of 1.50 in. were recorded in parts of St. Michael. The wind was light breeze SSE during the morning of the 22nd and a heavy LCR formed over northeastern and central districts before 10 a.m. There was then the uncommon occurrence between 10 and 11 a.m. of a remarkable convergence developing between strong SE winds over eastern and central districts, gusting to 45-50 miles per hour, and a strong NE wind over southwestern districts which resulted in heavy rain and a severe thunderstorm; this was followed by a calm spell. Another LCR formed over central districts with thunder after midday and there were heavy thundershowers off the eastern coast during the latter part of the afternoon; max. totals of 4.50 in. for the

day were recorded at places in St. Thomas. The wind increased to gentle to moderate breeze SE on the 23rd and a LCR formed over the sea to the NW; moderately heavy local showers with thunder fell during the night. The trough of a LPA passed over during the late afternoon of the 24th; P fell to 29.82 and the wind was moderate breeze ENE & NE in the morning shifting to ESE towards evening; moderately heavy local showers fell during the night especially over St. Peter where totals of 1.00 in. were recorded. P rose slightly on the 25th, but fell to 29.80 on the 26th & 27th. There were moderate local showers with occasional thunder on the 25th. It was fair on the 26th, but further heavy local showers developed towards morning of the 27th when max. totals of 1.50-1.75 in. were recorded at places in St. Peter. Heavy rain spread generally over the Island on the 27th with the wind varying between ESE & SSE; max. totals of 4.00-4.25 in. were recorded in eastern St. Philip, St. John and St. Andrew. It was fair on the 28th and P began rising to 29.87 on the 29th when fairly heavy local showers moved in from SSE over parts of St. George and western St. Philip where max. totals of 1.25-1.50 in. were recorded. P fell again to 29.80 on the 30th & 31st and the weather was fair until the night of the 31st when moderately heavy and fairly heavy showers especially in St. James where max. totals of 1.50-2.00 in. were recorded.

November.

R 11.26 : 145 pea

MMT : 16.00 in eastern St. Michael to 7.75 in western St. Peter.

The weather during this month was very interesting.

P this month was well below average for the month of November.

Average wind velocity this month, equalling that of November 1947, was the lowest recorded for the month of November.

It was generally fair during the first four days with the wind light to gentle breeze E & ESE. A LPA with a deep trough influenced

the weather from the 5th to 9th and wind velocity was unusually low during this period. P fell from 29.86 on the 4th to 29.81 on the 5th, continued to fall rapidly to 29.74 on the 6th, remained steady at 29.72 on the 7th & 8th before rising to 29.78 on the 9th. The air drift on the 5th was mainly from ENE backing to N in the late afternoon; a fairly heavy LCR formed over parts of St. James, St. Michael, St. George and St. Thomas with max. totals of 1.50-2.00 in. It was almost calm on the 6th, but there was a slight air drift from between W & SW; a fairly heavy LCR developed especially over the eastern half of the Island from St. Philip to St. Lucy and max. totals of 2.25-2.50 in. were recorded. There was a persistent light breeze from the W on the 7th and moderate local showers moved in over St. Michael from the W in the late afternoon. Wind velocity increased to light to gentle breeze SW on the 8th and a fairly heavy isolated shower moved over the eastern half of Christ Church and St. Philip where max. totals of 1.00 in. were recorded. Very similar conditions obtained on the 9th. P rose rapidly to 29.85 on the 10th and then to 29.87 on the 11th. It was mainly fair over the Island during these two days. The wind continued light to gentle breeze SE & SSE on the 10th and a LCR with occasional thunder formed off the coast of St. Peter. The wind backed to E & ENE on the 11th and increased to gentle to moderate breeze NE & ENE on the 12th when P fell rapidly again to 29.80 and there were light showers and drizzles. Showery conditions continued on the 13th with falling P; max. totals of 1.00-1.25 in. were recorded in southwestern Christ Church. P fell to 29.77 on the 14th; the wind was moderate breeze E and there was an isolated moderate shower in parts of St. Andrew and St. Peter. P rose temporarily on the 15th and fell again to 29.76 on the 17th and wind velocity moderated to light breeze. Fairly heavy showers fell over the northern part of the

Island on the 17th and max. totals of 1.25-1.50 in. were recorded at places in St. Joseph and St. Andrew. P increased rapidly to 29.84 on the 19th. Moderate very local showers fell on the 18th with the wind gentle breeze ESE. Wind velocity was very low on the 19th with the drift from NE until late afternoon when it shifted to SE & SSE. The weather was unusually warm and sultry on the 19th and rain clouds developed in various directions in the vicinity of the Island; a heavy LCR with a little thunder formed mainly over the southwestern part of the Island and max. totals of 3.75 in. were recorded at places in St. Michael. P fell from 29.84 on the 19th to 29.75 on the 23rd and rose slightly to 29.76 on the 24th. It was very sultry on the 20th with a light air drift from SE; a fairly heavy LCR formed somewhat surprisingly over southwestern districts (suggesting an air movement from NE at a higher level) and max. totals of 2.00-2.50 in. were recorded at places in St. Michael. Visibility was excellent during this period of low pressure. The weather was sultry again and unsettled on the 21st; the wind increased to light to gentle breeze ESE & SE and a heavy LCR formed over coastal districts of St. James and then extended into northern St. Michael and southwestern St. Thomas; max. totals of 3.75-4.00 in. were recorded in parts of St. James. Fairly heavy very local showers fell over southeastern districts during the night of the 21st. With the wind continuing light to gentle breeze ESE on the 22nd, a moderately heavy LCR developed off the coast of St. Peter; moderately heavy to fairly heavy very local showers fell over northeastern districts with max. totals of 1.75 in. at places in St. Andrew. The weather continued very unsettled and showery on the 23rd & 24th with the wind increasing to gentle to moderate breeze ENE. The showers became heavier during the night of the 24th when occasional distant lightning was seen; max. totals of 1.50-

1.75 in. were recorded in parts of St. Thomas. P fell rapidly to 29.70 on the 25th and then rose steadily to 29.87 on the 30th. There was a very wet spell from the 25th to 28th and moderate local showers fell during the last two days of the month. It was persistently rainy over the southern and southwestern part of the Island during the first half of the day of the 25th with the wind gentle to moderate breeze ENE while conditions remained fair in northeastern and northern districts; max. totals of 3.00 in. were recorded in parts of St. Michael and Christ Church. There was further fairly heavy rain during the night of the 26th when max. totals of 2.00-2.25 in. were recorded at places in St. Thomas, but again there was only light rain in northeastern districts. The wind continued gentle breeze ENE on the 27th and fairly heavy showers fell especially in the S and SW; max. totals of 1.75 in. were recorded in Christ Church. The wind was light breeze E on the 28th shifting to ESE in the afternoon; fairly heavy rain with occasional thunder spread generally over the Island but was heaviest in the northern half of the Island where totals of 3.75-4.00 in. were recorded in St. Lucy. Fairer conditions developed during the last two days of the month with the wind increasing to gentle and moderate breeze SE & ESE.

December.

R 4.68 : 98 pca

MMT : 8.50 in the highlands of St. Thomas to 1.25 in northeastern districts of St. Lucy.

Distant lightning was seen in the southeast during the night of the 1st and there were fairly heavy showers generally over the Island on the 2nd when max. totals of 2.00 in. were recorded in parts of St. Thomas and St. Andrew. After a few local showers during the morning of the 3rd a fair to fine spell set in and continued, in spite of some

variation in P, until the 10th. The wind was mainly gentle to moderate breeze ENE, moderating to light breeze NE on the 8th. There was a moderately heavy local shower over parts of St. John and St. Thomas on the 11th. P was steady at about 29.86 from the 9th to the 18th and rose to 29.89 on the 19th & 20th. There were frequent showers in all districts from the 13th to 19th with the wind gentle to moderate and sometimes moderate to fresh breeze varying between ENE & ESE; there were max. totals of 1.50 in. in St. Thomas on the 13th and 1.00-1.25 in. in parts of St. Michael on the 19th. The weather became mainly fair to fine from the 20th to the end of the month, except for a few local showers and for a moderately heavy shower in St. Thomas and St. James on the 29th.

1951.

R 90.24 : 150 pca

Rainfall totals at individual stations ranged from 136.00 in the highlands of St. Thomas to 64.00 in southwestern St. Michael and parts of St. Philip.

The Island's average rainfall this year was the second highest in the 114-year period 1847 - 1960, the highest was in 1901.

Very abnormal and "unseasonal" weather was experienced at intervals during the first four months. Rainfall conditions in February were particularly abnormal. Monthly rainfall was below average in only three months of the year.

The weather was slightly influenced by passing tropical storms on two occasions.

January.

R 3.45 : 102 pca

MMT : 6.00 in the highlands of St. Thomas to less than 2.00 in northern St. Peter, parts of St. Lucy and northeastern coastal districts of St. Philip.

The weather was occasionally abnormal during this month.

There were very local moderate showers during the night of the 1st over northern coastal districts and during the night of the 2nd over eastern districts of St. John and St. Philip. P rose very slowly from 29.86 on the 3rd to 29.88 on the 9th. During that week there was a period of very low wind velocity, the main air drift being from N & NE, but there were often calm spells or periods of light winds of variable direction locally. The weather was brilliantly fine from the 3rd to 6th with excellent visibility. Minimum temperatures were unusually low during the nights of the 3rd, 4th & 5th at between 62°F and 63°F. The fine calm spell began breaking up on the 8th with the arrival of warmer air. A moderate LCR developed over the sea to the W of the Island on the 9th and very local moderate showers fell in some districts during the night with max. totals of 0.75 in. in St. Philip; lightning was seen from distant rain clouds in the SW. Wind velocity gradually increased to gentle to moderate breeze ENE. There were further light local showers on the 10th. P rose to 29.94 on the 12th, fell to 29.90 on the 13th and then rose rapidly to 29.99 on the 16th. The wind was mainly gentle to moderate breeze between NE & E. Moderately heavy and fairly heavy showers moved in over northeastern districts during the night of the 13th and spread on to the hills; max. totals of 1.50 in. were recorded at places in St. Joseph. There was frequent moderate rain throughout the day on the 14th and max. totals of 2.00 in. were recorded in the hills of St. George, but very little rain fell in coastal districts of St. Lucy and St. Philip. There was a dry spell from the 16th to 22nd as P fell slowly from 29.99 to 29.86. The wind was fairly steady at moderate to fresh breeze ENE. P remained steady from the 22nd to 25th, but conditions became unsettled by the 25th when shower clouds of a heavier

type than normally seen in the month of January developed in the vicinity of the Island; moderate and moderately heavy showers fell generally over the Island on the 25th and max. totals of 1.50 in. were recorded in southwestern St. George and parts of Christ Church. P rose to 29.92 on the 26th and to 29.94 on the 28th; drizzles and light showers fell on the 26th and moderate local showers on the 28th. It was fair on the 29th & 30th, but on the 31st moderately heavy cumulonimbus shower clouds with streaming altostratus and cirrostratus heads, unusual in January, were developing near the Island; moderately heavy showers fell over eastern and southern districts during the night of the 31st.

February.

R 14.35 : 652 pca

MMT : 24.25 in the highlands of St. Thomas to 6.75 in parts of Christ Church.

The weather during this month was exceptionally interesting.

The Island's average rainfall for this month constituted the greatest departure from the normal of the average rainfall of any month in the 114-year period from 1847 to 1960. The Island's average rainfall total for this month was by far the highest for the month of February in the 114-year period, the next highest for the month of February being 6.60 in 1911.

The first three days of the month were very windy with the velocity increasing to fresh to strong breeze ENE as P fell from 29.93 on the 1st to 29.84 on the 3rd; there were local light and moderate showers. P rose to 29.91 on the 5th, while wind velocity moderated very abruptly to light breeze NE on the 4th with occasional calm spells or very light winds on the 5th. A moderate LCR formed over the sea to the W of the Island on the 4th. On the 5th a moderately heavy LCR formed over northern parishes during the latter half of the morning and spread to other areas

locally during the afternoon; max. totals of 1.50 in. were recorded in parts of St. Lucy. P remained steady at 29.91 on the 6th and fell slightly to 29.89 on the 7th; moderate local showers fell on the 6th & 7th with the wind gentle breeze NE & ENE. P rose to 29.94 on the 9th and fell slightly to 29.93 on the 10th. The wind shifted to E & ESE on the 8th, then backed to E & ENE on the 9th to 11th increasing to moderate and moderate to fresh breeze. Fairly heavy cumulonimbus developed on the southwestern and westsouthwestern horizon during the 8th, but the weather over the Island was mainly fair from the 8th to 11th becoming unsettled during the night of the 11th as P fell fairly rapidly to 29.86. The period of twelve days from the 12th to 23rd produced what was probably the most abnormal weather of the current century and possibly of the 114 years under record. P decreased and increased again three times during this period. P continued to fall slightly on the 12th to 29.85 and rose to 29.91 on the 13th, remained almost steady on the 14th & 15th and fell to 29.84 on the 16th. P then rose steadily to 29.92 on the 19th and fell steadily to 29.82 on the 22nd and rose to 29.89 on the 23rd. The wind moderated to gentle to moderate breeze ENE & E on the 12th and moderately heavy rain clouds began developing in the vicinity of the Island; fairly heavy rain fell in all districts except some southern and southwestern areas with max. totals of 2.25 in. in parts of St. Andrew; distant lightning was observed at night. From the 13th to 18th wind velocity was low at light to gentle breeze varying between E & SE from the 13th to 16th and between E & NE on the 17th & 18th. Light and moderate rain fell intermittently over the whole Island throughout the day on the 13th being heaviest in northern parishes where max. totals of 3.25-3.50 in. were recorded. Cumulonimbus formation continued in the vicinity of the Island on the 14th with the tops of the clouds rising to great

heights (a most uncommon occurrence in the month of February). Heavy showers fell during the day, except in eastern coastal districts, and moderate rain continued at night; max. totals of 3.00-3.25 in. were recorded in parts of St. Michael and St. Peter. The sky continued to be thickly overcast on the 15th and cumulonimbus developed under a pall of altostratus and cirrostratus; fairly heavy rain fell in all districts but the heaviest rain was in eastern and northeastern districts where max. totals of 4.00 in. were recorded. The sky was less thickly overcast on the morning of the 16th and there was temporary dull sunshine sufficient to cause the formation of a LCR off the W coast of St. Peter. Fairly heavy cumulonimbus began developing in various directions within sight of the Island and moderately heavy showers moved over the Island locally during the afternoon; max. totals only reached 1.00 in. on the 16th. Very moist conditions obtained on the 17th with very low wind velocity, the wind being light breeze NE in the morning but later in the day the cloud drift was from SW. During the latter part of the morning a LCR formed over northwestern coastal districts of St. Michael and over parts of St. James; between noon and 3 p.m. a heavy LCR (typical of October-November) developed inland over parts of St. James, St. Thomas, St. George and St. Michael; max. totals of 3.00-3.50 were recorded. After 3 p.m. fairly heavy rain moved in from S and spread unevenly over the Island and during the evening heavy rain developed over eastern districts where 3.00-3.50 in. were recorded. There was very little change on the 18th, very moist conditions continuing. A fairly heavy LCR developed very unevenly, at first over northern parishes and later over some central and southern districts; max. totals of 2.00-2.50 in. were recorded; steady moderate rain fell during the latter half of the night. Wind velocity increased on the 19th to gentle to moderate breeze NE &

NNE and for several hours the Island was covered with low cumulostrato-nimbus causing light to moderate rain and in some districts mere drizzles; max. totals of 1.00-1.25 in. were registered at places in St. John; fairer conditions developed during the night. The wind increased to moderate to fresh breeze ENE & NE on the 20th and fairer conditions prevailed over the Island, but heavy rain clouds associated with much cirrostratus could be seen on the horizon from SE to SW. The sky continued partially overcast with much cumulostratus during the 21st, but there were only occasional drizzles. It was fair over the Island on the 22nd, but heavy distant rain clouds were visible on the southern horizon; the wind continued moderate breeze ENE. There was much cumulonimbus to the S & SW of the Island in the early morning of the 23rd; the wind was gentle to moderate breeze ENE & NE and gradually moderated as the morning advanced. By midday cumulonimbus had formed nearer the SW and W coast and occasional thunder was audible; during the early part of the afternoon fairly heavy rain fell very unevenly over the Island and max. totals of 2.50 in. were recorded at places in St. Thomas. The sky rapidly cleared during the late afternoon and by evening the sky was almost cloudless. The rainy spell was now over. The last five days of the month were almost rainless, but partly overcast conditions persisted with the wind gentle to moderate breeze E & ENE.

March.

R 2.28 : 118 pca

MMT : 5.50 in central St. John to less than 0.60 in western districts of St. Michael, St. James and St. Peter.

In some respects abnormal weather conditions continued.

Average P for the month was below normal and average wind velocity for the month, 7.9 miles per hour, was 69% of the average for March and the lowest average recorded for the month of March. In some districts

there was little appreciable rain during the month.

The first nine days were almost rainless. P varied between 29.87 and 29.83 during the first twelve days. From the 1st to 4th the wind was gentle to moderate breeze NE backing to NNE. Wind velocity was low from the 5th to 12th; the main air drift was from between NNE & NNW, with local breezes, from the 5th to 8th, shifted to NE on the 9th & 10th, to E on the 11th and backed to NE & N on the 12th. During these days of low wind velocity local convection caused the formation of cumulus and cumulostratus over local areas, but only light local drizzles of rain fell. There was a change on the 10th with moister air moving in and the wind increasing occasionally to gentle breeze E, a moderate LCR formed off the southwestern coast of St. James and cumulonimbus began developing in the southeastern quadrant. The latter clouds moved on to the Island locally during the early part of the night causing fairly heavy rain in parts of St. Philip, St. George, St. John, St. Joseph and St. Andrew; max. totals of 1.75-2.00 in. were recorded in St. Andrew. A type of weather unusual in the month of March, was experienced on the 11th. A mass of moist air moved towards the Island from the SE with much cumulonimbus and cumulostratonimbus associated with much altostratus and cirrostratus in the S & SW, the wind was light breeze NE to E; a moderate LCR developed very unevenly over small areas with max. totals of 0.50-1.00 in., while very local moderately heavy showers fell during the night especially in parts of St. Philip and St. John. Conditions became fair over the Island on the 12th, but distant cumulonimbus were visible. The sky continued partly overcast but conditions were otherwise fair on the 13th & 14th with wind velocity increasing to gentle to moderate breeze NNE & NE. It was fair or fine from the 15th to 22nd with the wind varying between moderate and fresh breeze NE & ENE. P fell slowly

from 29.92 on the 18th & 19th to 29.83 on the 23rd and then rose to 29.90 on the 25th & 26th. Light and moderate showers fell generally on the 23rd & 24th and locally on the 25th with the wind shifting slightly to E & ENE. P fell on the 27th to 29.85 with wind moderating and backing to gentle breeze NE. P rose slightly to 29.89 on the 29th and fell again to 29.86 on the 31st. Wind velocity was very low during the last four days of the month and the wind backed to light breeze between NE & N on the 28th & 29th. It was fair to fine from the 26th to 28th. In the early morning of the 29th there was much cumulostratonimbus over the sea from NE through E to SSE and later in the morning fairly heavy rain moved in over eastern and southeastern coastal districts; max. totals of 1.75 in. were recorded at places in St. Philip and St. John. The wind shifted to light to gentle breeze S & SSW on the 30th and a moderate LCR formed over the sea off the northern end of the Island and a moderately heavy local shower fell over parts of the St. Peter hills and St. Andrew. There was much cumulonimbus off the southern coast at sunrise on the 31st and, with the wind light breeze S, these clouds moved in over coastal areas of Christ Church where max. totals of 1.25 in. were registered; the rain did not move further inland. A very hot and sultry day developed and by midday a moderate LCR had formed over central districts and parts of St. Andrew and St. Michael; max. totals of 1.00 in. were recorded in northeastern St. Michael.

April.

R 7.50 : 320 pea

MMT : 15.30 in the highlands of St. James to 3.75 in the southwestern lowlands of St. James.

The average rainfall during this month was the second highest for April during the period 1901 - 1960. The average wind velocity this

month, 8.1 miles per hour, was 71% of the average for April and the lowest but one on record for the month of April.

The unusual weather at the end of March continued at the beginning of this month. The wind was light breeze E or variable locally in direction on the 1st and a light LCR formed in western districts. During the afternoon cumulonimbus were seen to be developing to the NE of the Island and during the evening very heavy rain moved in over north-eastern St. Philip and parts of St. John and St. Joseph and northern parishes; more than 5.00 in. were recorded in parts of St. Peter while no rain fell in St. Michael and Christ Church and coastal districts of St. James. The very light breeze from ESE & E continued on the 2nd and a very heavy LCR developed over unusually small areas, a little under 5.00 in. being recorded in 50 minutes at a place in St. Thomas.

The writer recorded in his diary on the 2nd that he had never seen such unusual weather in any year, that there was some resemblance to the conditions which obtained in 1910 & 1927 but that the conditions in those years were not as abnormal as in 1951. P rose from 29.88 on the 1st to 29.91 on the 2nd and continued steady until the 10th; rose to 29.94 on the 11th and then was remarkably steady at a little above 29.90 from the 12th to 27th. The wind was light to gentle and occasionally gentle breeze between E & ESE from the 3rd to 11th. There was little rain on the Island from the 3rd to 7th, but up to the 5th fairly heavy distant rain clouds were visible from the Island. It was generally fair to fine from the 8th to 16th with only occasional light or moderate local showers. The wind backed to E on the 12th & 13th and to E & ENE from the 14th to 16th increasing in velocity to moderate and occasionally fresh breeze. There was a spell of persistently showery weather from the 17th to 27th. Wind velocity gradually moderated from moderate to

fresh breeze on the 17th to light to gentle breeze on the 21st and increased again to moderate to fresh breeze on the 24th & 25th. Wind direction was mainly between ENE & ESE from the 17th to 22nd and then steady at E from the 23rd to 27th. Max. totals exceeded 1.00 in. in southeastern districts and parts of St. Andrew on the 18th and in St. Philip and St. George on the 20th. The 21st was the wettest day of the period when 1.75-2.00 in. were recorded in parts of Christ Church and southwestern St. Michael. Showers were less heavy and more local from the 22nd to 26th, but max. totals exceeded 1.00 in. in parts of St. John on the 27th. The wind moderated to light to gentle breeze ESE & SE during the last three days of the month. An area of fairly heavy rain clouds moved away to the southwest on the 28th & 29th and little rain fell on the Island. The weather continued unsettled in the vicinity of the Island on the 30th.

May.

R 2.07 : 64 pca

MMT : 4.65 in southeastern St. Thomas to 0.50 in parts of St. Philip and southern St. George.

Showers were well distributed throughout the month and daily totals seldom exceeded 0.50 in. Wind velocity was low at 71% of the average for May. The wind was gentle breeze ESE & SE from the 1st to 5th with fair weather except for a few local moderate showers during the night of the 1st. Fairly heavy distant cumulonimbus was visible from the Island on the 3rd & 4th. There was a slight decrease in P on the 7th increasing again quickly on the 8th; moderate local showers fell on the 6th to 9th. Throughout the remainder of the month the wind varied between E & SE, mainly gentle to moderate breeze but occasionally moderate to fresh breeze. There were moderately heavy local showers on the

24th & 27th coinciding with slight falls in P. Distant lightning was observed during the night of the 27th.

June.

R 7.39 : 136 pca

MMT : 11.25 in the highlands of St. Thomas to 3.75 in southeastern St. Philip.

P fell from 29.93 on the 1st to 29.88 on the 2nd and rose to 29.96 on the 3rd & 4th. The trough of a LPA or E/W passed over on the 2nd. The wind backed to N of E during the afternoon of the 1st and although conditions were mainly fine throughout the 1st distant lightning became visible in the E by 3 a.m. of the 2nd and some moderate showers with thunder fell before sunrise. There were fairly frequent thundershowers during the day of the 2nd, with the wind gentle breeze SE & ESE, followed by fairly heavy rain and a moderate thunderstorm during the night; max. totals of 2.00-2.25 in. were recorded at places in St. Michael. Further fairly heavy showers with occasional thunder fell on the 3rd when the wind continued at light to gentle breeze SE & ESE. A small LPA passed over on the 6th & 7th without any appreciable rain. It was mainly fair and windy from the 9th to 20th with E & ESE winds and only occasional light and moderate showers except for a few moderately heavy showers on the 18th. Two small LPA's passed over on the 14th & 17th respectively with the usual windshift but little rain; occasional distant lightning was seen. (Although in no way associated with or influencing the local weather, it is noteworthy that volcanic dust from Cape Verde Islands caused very unusual mistiness from the 17th to 19th). Another LPA passed over on the 20th & 21st with P falling from 29.95 on the 19th to 29.91 on the 20th and rising to 29.92 on the 21st and 29.95 on the 22nd. Moderate and moderately heavy local showers fell on the 20th & 21st

with a little thunder on the 21st; the wind shifted from ENE during the afternoon of the 20th to ESE & SE on the 21st & 22nd. There was fairly heavy rain generally over the Island on the 22nd with occasional thunder; max. totals of 4.00-4.25 in. were recorded in parts of St. Peter. Further moderate showers fell on the 23rd. P fell rapidly to 29.88 on the 25th and rose to 29.92 on the 26th with the wind shifting from ENE on the 25th to ESE on the 26th. A fairly heavy local shower moved in over southeastern St. Philip on the morning of the 26th when max. totals of 1.00-1.25 in. were recorded, but little rain fell further inland. Moderate and moderately heavy local showers fell during the night of the 27th. ("Mistiness" caused by volcanic dust from the Cape Verde Islands was again very apparent from the 25th to 29th). The weather was fair to fine during the last three days of the month.

July.

R 6.03 : 96 pca

MMT : 11.50 in the highlands of St. Thomas to 3.00 in central Christ Church.

P increased from 29.90 on the 1st to 29.94 on the 3rd. Fairly heavy showers with occasional thunder fell on the 2nd. A small LPA passed over on the 4th with only a few moderate local showers. Another small LPA passed over on the 7th and moderate local showers fell on the 8th, 9th and 10th accompanied by a little thunder on the 10th. P rose from 29.93 on the 9th to 29.96 on the 13th and then fell slowly to 29.89 on the 17th. It was mainly fair to fine from the 11th to 17th with the wind gentle to moderate and moderate breeze E & ESE. The wind backed to ENE on the 16th and shifted to ESE on the 17th & 18th. P rose to 29.93 on the 18th and 29.94 on the 19th. Moderately heavy showers fell in almost all districts on the 18th & 19th and max. totals of

1.25-1.50 in. were recorded in parts of St. Thomas. P fell very slightly on the 20th and then rose to 29.99 on the 22nd. It was fair on the 20th but distant lightning was seen in the E during the night. Moderately heavy local showers with occasional thunder fell on the 21st and fairly heavy showers on the 22nd when max. totals of 1.00-1.25 in. were recorded at places in St. John. P fell steadily from 29.99 on the 22nd to 29.88 on the 28th. The wind shifted from moderate breeze ENE on the 23rd to light to gentle breeze SSE on the 24th; moderately heavy to fairly heavy showers with occasional thunder fell in all districts and max. totals of 1.00-1.25 in. were recorded in southwestern districts. The wind increased to moderate breeze on the 25th and backed in the afternoon to ENE & E; fairly heavy showers with occasional thunder fell in the morning of the 26th with the wind light breeze ENE, conditions became fair to fine in the afternoon with the wind shifting to SE; max. totals of 1.00-1.50 in. were recorded in northeastern St. Philip and parts of St. John. The wind backed again to NE on the 27th and shifted to SE on the 29th as P rose to 29.94; local moderate showers fell from the 27th to 29th and then conditions became fine.

August.

R 12.89 : 176 pca

MMT : 17.00 in northeastern St. Andrew to 7.25 in northern St. Michael.

There were frequent LPA's or E/W's during the month causing frequent changes in wind direction and velocity.

A small LPA passed over on the 2nd. The wind was gentle breeze ENE on the 1st and shifted to light to gentle breeze ENE & SSE on the 2nd; there was little rain over the Island but small LCR's formed over the sea. It was fair to fine from the 3rd to 5th with P increasing from 29.88 on the 2nd to 29.97 from the 4th to 6th. There were many

cumulonimbus rain clouds near the Island on the 6th, especially to the S & SW, but there was little rain on the Island except in northeastern districts where totals of 1.00-1.50 in. were recorded. Conditions became fine on the 7th with the wind backing to E & ENE by evening as P fell to 29.90. P continued to fall to 29.89 on the 8th as the rain belt of the LPA approached the Island with the wind backing to NNE.

There was frequent lightning during the evening from ESE to S and fairly heavy rain, with very frequent and almost continuous thunder, fell in all districts from midnight until near sunrise of next morning.

Further fairly heavy rain fell unevenly in both northern and southern districts on the 9th as the trough of the LPA passed over the Island about midday with the wind shifting to ESE & SE and P rising to 29.93; max. totals of 2.00-2.25 in. were recorded at places in St. Peter in the morning and 2.00-2.25 in. very locally in Christ Church at night.

This was a well developed E/W. P fell slowly to 29.87 on the 12th and rose to 29.91 on the 14th as a small LPA passed over; the wind backed to ENE on the 11th and shifted to ESE on the 12th & 13th. There were light and moderate local showers between the 10th and 12th. The weather was mainly fine and clear over the Island on the 13th while a mass of heavy rain clouds and thunderstorms were visible some 100-150 miles to the NE. During the morning of the 14th the weather came under the influence of the incipient stages of a hurricane centred some 400 miles E of the Island. P fell to 29.87 on the 15th and rose to 29.92 on the 16th. There was much cirrostratus low down in the eastsoutheastern and eastern sky in the early morning of the 14th gradually moving towards the zenith as the wind backed to gentle breeze NE & NNE. By midnight the sky was fairly generally overcast with nimboaltostratus and nimbo-cumulostratus; the wind was calm air NNE and there was very little rain.

At dawn on the 15th the sky was heavily overcast from the E to S with cumulostratonimbus and stratonimbus passing upwards into nimboaltostratus and thick cirrostratus; the wind was light air NNW increasing after 7.30 a.m. to light breeze NW and by 8.15 a.m. to WNW & W, varying between W & SW during the latter part of the morning. Heavy rain moved in over northwestern St. Michael and St. James after 8.30 a.m. and increased in intensity over the hills and St. Andrew where totals of 3.75-4.00 in. were recorded. At 6 p.m. the hurricane was centred over the S end of Dominica and its influence on the local weather was soon lost. Light and moderate local showers fell on the 16th with the wind E & ESE. P fell to 29.88 on the 17th and to 29.86 on the 18th, with the wind increasing to fresh breeze NE & ENE on the 17th and moderating to light breeze E & ESE to SE on the 18th. After 4 a.m. on the 18th heavy showers with thunderstorms moved in with the wind mainly gentle breeze NE & ENE, but between 5.30 and 6 a.m. a local squall with gusts up to 35 miles per hour accompanied a shower. The trough of the LPA passed about 3 p.m. with the wind shifting to ESE & SE. Rain continued during the morning of the 18th with a little more thunder; max. totals of 3.00 in. were recorded in southwestern districts and less than 0.50 in. in southern coastal districts and in parts of St. Andrew. P rose only a little on the 19th and fell again to 29.85 on the 21st, with the wind backing to NE & NNE on the 20th and shifting to SE & SSE on the 21st. The trough of the E/W passed over about 8 a.m. on the 21st. Distant rain clouds and lightning were seen in the E during the night of the 20th. Fairly heavy rain moved in from the SE on the morning of the 21st and fell in all districts with moderately frequent thunder; max. totals of 2.00 in. were recorded in southern coastal districts; the sky cleared and conditions became fine during the afternoon and evening.

P rose to 29.89 on the 22nd and fell to 29.84 on the 24th as another E/W passed over. The wind backed to ENE on the 23rd increasing to fresh breeze ENE on the morning of the 24th as the rainy belt approached from the SE & ESE. The trough passed over about 10 a.m. with the wind shifting and moderating to gentle to moderate breeze ESE. There were fairly frequent showers and occasional thunder during the morning with max. totals of 1.50-1.75 in. in southern districts. P rose to 29.90 on the 25th; a very local fairly heavy shower developed over St. John and St. George hills during the night with max. totals of 1.00-1.25 in. at places in St. George. P fell slightly on the 26th as a small LPA passed over; the wind backed to ENE in the morning and showery weather developed in the afternoon with the wind gentle breeze ESE; heavy showers fell during the afternoon and at night with thunder and max. totals of 3.25-3.75 in. were recorded in parts of Christ Church and other southwestern districts. P continued to fall slightly to 29.86 from the 27th to 29th and then more rapidly on the 30th to 29.82, rising on to 29.89 on the 31st as yet another LPA passed over. The wind backed to NE & ENE on the 29th & 30th. Moderate local showers fell on the S coast during the night of the 27th. The weather was fair from the 28th to 30th, with a local moderate shower falling in southern districts on the 30th and much cirrus and cirrostratus developing. The wind was light to gentle breeze S on the 31st and a heavy LCR developed over parts of St. Joseph and St. Andrew with max. totals of 3.75-4.00 in. During the late afternoon fairly heavy local rain moved into parts of St. Michael from the SSW and max. totals of 1.25-1.50 in. were recorded.

September.

R 10.46 : 136 pca

MMT : 16.00 in the highlands of St. Thomas to 7.25 in parts of St. Michael and Christ Church.

Average wind velocity for the month was low at 76% of the average for September.

On the morning of the 1st the local weather came under the influence of a tropical storm some 300-400 miles ENE of the Island. P fell to 29.84 on the 1st and rose to 29.90 on the 2nd. The morning of the 1st was hot and sultry with the wind light breeze NE while heavy rain clouds developed some 100-150 miles from the Island between ESE & ENE. A moderate LCR formed over and off the southwestern coast towards mid-day. During the afternoon isolated moderately heavy showers moved in from NE over relatively small areas. During the late afternoon the wind backed to N and then to NNW towards sunset. The wind increased during the first half of the night to gentle breeze NNW & NW, blowing in irregular puffs. There was fairly frequent distant lightning in ESE & SE and occasional drizzle or light rain over the Island. Between 1.45 and 3.45 a.m. on the 2nd the wind gradually backed through W to SW increasing in velocity with showers to moderate and moderate to fresh breeze. After 5 a.m. the wind increased to strong breeze S and heavy rain fell between 5.15 and 6 a.m. accompanied by wind gusts of 35-40 miles an hour. There was persistent moderate and light rain with occasional thunder throughout the first half of the day of the 2nd, with the wind gradually backing to SE & ESE; the sky remained overcast throughout the remainder of the day but no further rain fell. (This tropical storm developed into a hurricane at Martinique on the 2nd with winds up to 115 miles an hour). Max. rainfall totals exceeded 2.50 in. in all districts and totals of over 5.00 in. were recorded in parts of St. Thomas and St. James. P fell to 29.84 again on the 3rd and remained at that level until the 7th as the weather came under the influence of another tropical storm passing about 400-500 miles NE & N of the Island.

on the 5th & 6th. The wind backed to ENE & NE on the 3rd and 4th, moderating to light breeze on the 4th. The wind was light breeze between SW & S on the 5th and a moderately heavy LCR formed over parts of St. John, St. Joseph and St. Andrew, with max. totals of 1.50 in. in St. John. It was mainly fine over the Island on the 6th & 7th with the wind light to gentle breeze SSE & SE, while fairly heavy rain clouds persisted within sight of the Island especially in the S & SW; a moderate LCR formed over the sea to the NW on the 7th. There were frequent thundershowers in the vicinity of the Island and occasionally over the Island throughout the day of the 8th, with the wind gentle breeze ESE & SE backing to E in the afternoon as P rose to 29.88; frequent distant lightning was seen in various directions during the night. The weather was fair on the 9th & 10th with P remaining steady at 29.88 and the wind increasing to moderate and fresh breeze ENE. The wind moderated to light breeze E on the 11th and there were moderately heavy to fairly heavy showers with thunder in all districts; max. totals of 1.75 in. were recorded in the St. George hills. P fell to 29.86 on the 12th and rose to 29.90 by the 15th. The wind was light breeze SSE & S on the 12th and a moderately heavy LCR with thunder developed off the E coast of St. Lucy. The wind continued light breeze S in the morning of the 13th, backing later to gentle breeze SE & ESE; a moderately heavy LCR formed off the W coast of St. Lucy during midday and several fairly heavy thundershowers moved over the Island with very unevenly distributed rain; max. totals of 2.00 in. were recorded in northern St. Philip, but very little rain fell in northern districts. There were indications of a small E/W passing over on the 14th; the wind was gentle breeze ENE & NE during the morning with showers and shifted to ESE & SE during the afternoon when conditions became fair after further showers; max. totals

of 1.25-1.50 in. were recorded in southern coastal districts. It was fair on the 15th with the wind light breeze ESE & SE in the morning backing to ENE & NE in the afternoon. P fell to 29.84 on the 17th and another small E/W passed over during the morning of the 18th when there were moderate local showers. The wind became light breeze S on the 18th and a moderately heavy LCR formed over the sea to the N of the Island. P fell to 29.82 on the 19th and rose abruptly to 29.93 on the 20th. It was mainly fair over the Island on the 19th, but rain clouds persisted in the vicinity of the Island; the wind increased to moderate breeze E & ESE. There were fairly heavy showers in all districts on the 20th with occasional thunder and the sky became thickly overcast; max. totals of 1.50-1.75 in. were recorded at places in St. John. P fell again to 29.87 on the 21st & 22nd and rose to 29.91 on the 23rd. Frequent showers passed to the SW of the Island on the 21st. On the 22nd the wind was gentle breeze E & ENE in the morning, shifting after noon to ESE and later to SSE; a moderate LCR formed off the W coast of St. Peter. During the night of the 22nd there was fairly heavy local rain over St. George hills and parts of St. John, St. Joseph and St. Andrew, with max. totals of 1.50 in. in St. John. It was unsettled during the day and night of the 23rd and moderately heavy showers fell and there was occasional thunder; max. totals of 1.50 in. were recorded in the St. George hills. P fell slightly on the 24th and then rapidly to 29.85 on the 25th & 26th, rising to 29.90 during the last four days of the month. Moderately heavy to fairly heavy very local showers fell on the 24th & 25th with the wind backing to ENE & E during the afternoon of the 25th. It was fair on the 26th. The wind shifted to ESE & SE on the 27th and fairly heavy local showers moved over parts of St. John and northeastern and northern districts; max. totals of 1.75 in. were recorded at

places in St. Peter; during the afternoon there was a thunderstorm off the coast of St. Joseph and St. Andrew. It was fairly thickly overcast on the 28th with the wind light breeze SE & ESE; further very local moderate showers fell and max. totals of 0.75-1.00 in. were recorded at places in St. Thomas. It was fairer on the 29th, but moderately heavy local showers fell in the early morning of the 30th.

October.

R 4.37 : 55 pea

MMT : 7.00 in the hills of St. George to a little less than 2.00 in coastal districts of St. Michael and in parts of St. Philip.

Wind velocity was very low during the first five days. A moderate LCR with thunder developed over western coastal districts on the 1st. The trough of a small LPA passed over during midday of the 2nd with P falling to 29.82; the wind shifted from light to gentle breeze E & ENE on the 1st and morning of the 2nd to ESE later on the 2nd when a moderately heavy LCR formed off the western coast of St. James. There was persistent distant lightning in the SE & S during the night. P rose to 29.86 on the 3rd. There were heavy distant rain clouds in the SSE & S during the early morning of the 3rd; the wind was light breeze ESE in the early morning shifting later to SE & SSE; a LCR with thunder formed over leeward parishes and max. totals of 1.75-2.00 in. were recorded at places in St. James; a fairly heavy shower moved in over coastal districts of St. Philip, St. John and St. Andrew during the early afternoon. There was fairly heavy local rain over parts of Christ Church and southeastern St. George during the morning of the 4th when max. totals of 1.25 in. were recorded at places in St. George; a small LCR formed off the coast of St. James later in the day. There was another fall in P to 29.82 on the 6th and an increase to 29.92 on the 8th to 10th; this was followed by another LPA on the 11th & 12th, P falling

to 29.85 on the 12th and rising to 29.92 on the 13th. No heavy rain fell during this period. There were moderate and occasionally moderately heavy very local showers, especially in parts of St. Peter on the 8th, 9th & 10th and in St. Andrew on the 13th; the wind was gentle to moderate breeze E & ESE. P fell to 29.83 on the 15th and remained steady until the 19th. A small LCR developed over parts of St. James on the 18th when max. totals of 0.75-1.00 in. were recorded, otherwise it was mainly fine from the 14th to 21st. P rose slightly on the 20th & 21st and then decreased to a little above 29.80 from the 23rd to 27th. The wind varied between ENE & E from the 21st to 23rd and then shifted to SE & S and moderated from the 25th to 28th. Moderate local showers fell on the 22nd and 24th. There were fairly heavy local showers during the night of the 26th with max. totals of 1.00-1.25 in. at places in St. John. P began increasing on the 28th and increased to 29.92 on the 30th. On the 28th, with the wind light breeze S, a LCR with thunder formed over northern districts and secondary clouds developed later in other parts of the Island during an almost calm spell in the afternoon; max. totals of 2.75-3.00 in. were recorded in parts of St. Peter. The wind increased to gentle to moderate breeze ENE & E from the 29th to 31st. Rain clouds were frequent in the vicinity of the Island during the last three days of the month, but only very local moderate and moderately heavy showers moved on to the Island.

November.

R 10.80 : 139 pca

MMT : 14.10 in the highlands of St. Thomas to 6.75 in parts of St. Michael and western St. Lucy.

A month of frequent but not very heavy rainfall. There was no day without some rain.

Two or three small LPA's appeared to pass over the Island during the first week with wind shifts from ENE to ESE & SSE. There were moderately heavy and fairly heavy showers every day from the 1st to 7th with thunder audible on four days; P was a little below 29.84. Max. totals exceeded 1.00 in. in some districts on six of the first seven days and max. totals of 2.50 in were recorded in St. Thomas on the 2nd and in St. Peter on the 4th. Showers were less heavy from the 8th to 12th with P above 29.86; the wind was mainly gentle to moderate breeze E and there were several bright periods. P fell from 29.89 on the 10th to 29.83 on the 14th, rose slightly to 29.84 on the 15th and remained steady until the 18th. Fairly heavy showers fell during the night of the 13th especially in parts of the southern half of the Island where totals of 2.00 in. were recorded at some places; moderately heavy local showers fell on the 14th & 15th. The weather was fair from the 16th to 23rd with only occasional light and moderate local showers over the Island, but conditions were unsettled in the vicinity of the Island. P was steady at a little above 29.80 from the 22nd to 27th and the wind was mainly ENE & NE a moderate breeze at first then moderating. Moderately heavy to fairly heavy unevenly distributed showers fell on the 24th, 25th & 26th, with max. totals of 2.00 in. in southeastern St. George on the 26th when the wind moderated to light to gentle breeze SE temporarily. During the latter half of the night of the 28th and the morning of the 29th heavy rain fell very locally, possibly caused by the existence of a convergence zone over or near the Island. Totals of 2.00 in. were recorded in southwestern coastal districts and in northeastern districts during the night of the 28th, while during the morning of the 29th 3.50 in. fell in northeastern coastal districts of St. Philip and in parts of St. John. The last day of the month was fine as P rose to 29.92.

December.

R 8.65 : 181 pca

MMT : 15.00 in the highlands of St. Thomas to 5.00 in parts of St. Michael.

P fell from 29.94 on the 2nd to 29.87 on the 4th and rose to 29.89 by the 6th. On the 2nd the sky was thickly overcast and there was fairly frequent rain over the southern and central parts of the Island with an ENE wind; max. totals of 2.50 in. were recorded in southwestern districts. It was mainly fair from the 3rd to 6th, but there was a moderately heavy local shower over northeastern coastal districts during the early morning of the 7th. P fell again to 29.85 on the 7th and 29.84 on the 8th. The wind was light to gentle breeze SE & SSE on the 7th; fairly heavy rain moved in over coastal districts of St. John, St. Joseph and St. Andrew during the morning and max. totals of 2.25-2.50 in. were recorded at places in St. Andrew; there was little rain elsewhere on the Island. The wind was light breeze NNE & NE on the 8th and a very local moderate LCR formed for a short time over parts of St. Michael. The NE wind slowly shifted to E on the 9th & 10th. Fairly heavy rain moved in locally over northeastern St. Philip on the morning of the 10th and max. totals of 1.25-1.50 in. were recorded. P continued rising to 29.93 by the 14th. It was generally fair on the 11th & 12th but on the 13th the wind shifted to gentle breeze SE & ESE and there were local moderate showers with occasional thunder; frequent lightning was seen in various directions during the evening. The wind backed to moderate breeze ENE on the 14th and there were some moderate local showers. P fell to 29.88 on the 15th and the weather became unsettled. There was much evidence of distant rain clouds to the S & SW; during the night there was frequent lightning and towards dawn on the 16th

thunder was audible from fairly heavy rain clouds off the southwestern coast. It was fair on the 16th as P rose again, but moderately heavy showers fell in some districts on the 17th & 18th as P fell to 29.88. Distant lightning was seen occasionally in the N during the night of the 17th. It was fine during daylight hours from the 19th to 21st, but moderate local showers fell during the nights of the 20th & 21st. P varied a little above or below 29.90 from the 19th to 28th and a showery period began on the 22nd and continued until the 28th. A type of cumulonimbus rain cloud, heavier than usual in late December, appeared on the 22nd at first in the WNW & NW and later in ENE & E. (It was ascertained that there was heavy rain in St. Lucia). Light and moderate local showers fell on the 22nd to 24th with the wind varying between NE & E. The weather became very unsettled and the sky overcast during the afternoon of the 25th and the wind shifted to moderate breeze ESE. Fairly continuous light to moderate rain fell on the hills from about 4 p.m. to 9 p.m., with max. totals of 2.00 in. in parts of St. Thomas, but very little rain fell over the lowlands and coastal districts. Unsettled conditions continued during the morning of the 26th and fairly heavy distant rain clouds were visible in various directions; the wind increased to moderate breeze ESE. Rain developed over eastern and central districts by midday while conditions in southwestern districts remained fair. Heavy rain moved in over northern and central districts after 1.30 p.m. while little rain fell in southwestern districts, but rain clouds gradually developed southwards over the Island and by 2.30 p.m. rain was falling over the entire Island; there was occasional thunder in southern districts. Rain continued lightly over southern and southwestern districts but heavy rain fell over northern parishes throughout the afternoon and evening and continued until near midnight; max. totals of 8.00 in. were recorded at

places in St. Peter while totals of only 1.00-1.50 in. were recorded in St. Michael and Christ Church. Unsettled and rainy conditions continued on the 27th & 28th with very little sunshine; the rain was generally light and often only a drizzle, but max. totals of 1.00-1.50 were recorded at places in Christ Church and St. Andrew on the 27th and 1.50-1.75 in. in St. Lucy on the 28th while little rain fell in southwestern districts. The clouds gradually dispersed on the 29th as P increased to 29.97 and the weather became generally fine.

1952.

R 51.57 : 86 pca

Rainfall totals at individual stations ranged from 76.00 in the highlands of St. Thomas to 38.00 in coastal districts of Christ Church and northeastern St. Andrew.

This was the only year in the 11-year period from 1948 to 1958 in which the Island's rainfall was below average.

January and February were exceptionally dry months and August was a very dry month in some districts.

There were several heavy LCR's during the year, especially on April 1st and December 1st and on four consecutive days from September 29th to October 2nd.

A very heavy rain on October 15th caused flooding in the Constitution River in Bridgetown.

January.

R 0.65 : 19 pca

MMT : 1.65 in southeastern St. Thomas to less than 0.50 over a wide area.

This month's rainfall was the lowest recorded in the month of January in the 114-year period from 1847 - 1960.

Average wind velocity was 6.6 miles per hour, the lowest average (equal to 1958) recorded for the month of January.

P was below 29.90 during the first week and the wind was light to gentle breeze ENE & NE; a moderate LCR formed over the sea to the W on the 2nd, otherwise the weather was generally fine and dry. P rose on the 8th & 9th to 29.97 and the wind shifted to gentle to moderate breeze E & ESE. P decreased slowly to 29.91 by the 17th and wind velocity also slowly moderated to light to gentle breeze ENE & E from the 13th to 18th. There were occasional light and moderate very local showers between the 8th and 13th and a small LCR formed off the southwestern coast on the 17th. The wind increased to moderate breeze ENE on the 22nd to 24th and then moderated again during the last week and shifted to E & ESE from the 28th to 30th. There were only occasional very light local showers.

February.

R 0.58 : 26 pca

MMT : A little over 1.00 in the lowlands of St. Andrew and in southeastern St. Thomas to less than 0.40 over the greater part of the Island.

P was steady at between 29.90 and 29.93 during the first eighteen days. Wind velocity was variable, being light during the first four days and very light on the 11th, otherwise the wind was moderate breeze increasing to fresh breeze on the 16th & 17th. There was a moderately heavy local shower over parts of St. Andrew, St. Thomas and St. James during the night of the 1st, and over eastern districts during the night of the 5th, otherwise only light and occasional moderate very local showers fell during the month. P began falling on the 19th with the wind backing to NE. P fell to 29.87 on the 20th and rose to 29.91 on the 22nd with the wind shifting to ESE & E. It was partially overcast on the 22nd and light showers fell. It was mainly fair and dry during the last week of the month with P falling to 29.84 on the 27th and rising to 29.93 on the 28th.

March.

R 2.64 : 136 pea

MMT : 4.85 in the highlands of St. Thomas to a little less than 1.25 in northern St. Michael and the lowlands of St. Andrew.

Except for local moderate showers on two or three days, the first nineteen days of the month were dry. During this period P was a little below 29.90 from the 2nd to 8th, increased to 29.99 on the 11th and then fell and remained at a little above 29.90 from the 12th to 16th, and increased again to 29.96 on the 19th. Wind velocity varied considerably being moderate to fresh breeze from the 1st to 4th and then moderating to gentle or light breeze from the 5th to 9th. The wind was light breeze NE on the 6th and a moderate LCR formed over southwestern coastal districts and over the sea to the SW. As P rose on the 9th there were light and moderate showers in almost all districts with the wind gentle to moderate breeze ESE. P fell from 29.96 on the 19th to 29.90 on the 21st, rose slowly to 29.94 on the 24th and fell to 29.89 on the 27th. There was a showery spell from the 20th to 25th with the wind backing from E on the 20th to NE on the 21st and increasing to fresh breeze; the wind shifted to moderate breeze E from the 22nd to 28th. During the 21st the wind shifted from NE to ESE as the trough of a LPA passed over; overcast and showery conditions prevailed with max. totals of 1.25-1.50 in. in southwestern districts. There were further showers on the 22nd with max. totals of 0.75 in. in some districts. The weather continued unsettled and showery from the 23rd to 25th and max. totals varied each day between 0.30-0.50 in. It was mainly fine from the 26th to 30th. P fell to 29.84 by the 31st and the wind moderated during the last three days and was light breeze ESE or variable locally on the 31st when a moderate but very local LCR developed over small areas of St. James and St. Michael.

April.

R 2.84 : 121 pca

MMT : 6.00 in central St. James to 0.50 in northeastern St. Peter.

On the 1st the light ESE breeze of the previous day continued and another fairly heavy LCR developed over parts of St. James where max. totals of 3.25-3.50 in. were recorded. P rose steadily from 29.87 on the 1st to 29.96 on the 5th. Wind velocity increased to moderate to fresh breeze E & ESE by the 3rd and moderated to gentle to moderate breeze E by the 6th. Fairly heavy showers fell during the night of the 3rd especially in central districts where max. totals of 1.75-2.00 in. were recorded, but little rain fell in northern parishes. P fell on the 6th to 29.93 and continued falling slowly to 29.87 on the 10th. There were moderate and moderately heavy showers in all districts on the 6th and locally on the 7th with wind moderate breeze E & ENE, max. totals of 1.00 in. were recorded in parts of St. Michael and St. James. P rose slightly to 29.91 on the 13th and was then steady at a little below 29.90 from the 14th to 23rd. There were occasional light and moderate local showers between the 14th and 19th with the wind mainly gentle to moderate breeze E & ESE. The wind moderated to gentle breeze ESE on the 20th & 21st and a small LCR formed off the W coast of St. Peter on the 21st, otherwise it was mainly dry from the 20th to 25th; the wind increased to fresh to strong breeze ESE & E on the 23rd. Light and moderate local showers fell during the three days from the 26th to 28th with P increasing to 29.96 on the 28th and falling to 29.88 by the 30th. There were moderately heavy showers during the night of the 30th with max. totals of 0.75 in. at places in St. George.

May.

R 3.04 : 95 pca

MMT : 4.80 in central St. John to 1.70 in western districts of St.

James and St. Lucy.

There were moderate to fairly heavy local showers on the 1st with the wind gentle to moderate breeze SE & SSE; max. totals of 1.50 in. were recorded in the hills of St. Peter. The wind backed to gentle breeze ENE by the 4th and a small LCR formed off the northwestern coast of St. Michael. The wind shifted to ESE, SE and gentle breeze S by the 6th when a moderate LCR formed over and off the western coast of St. Peter. From the 6th to 20th P varied slightly between 29.91 & 29.95 and occasional light and moderate very local showers fell. The wind continued light to gentle breeze ESE on the 7th & 8th and moderate LCR's formed off the northwestern coast. The wind moderated to light to gentle breeze ESE again on the 12th to 14th and a small LCR formed off the coast of St. James on the 13th. Local moderate and moderately heavy showers fell on the 13th & 14th, otherwise the weather was mainly fine until the 19th. The wind backed to fresh breeze E on the 17th & 18th and to moderate breeze ENE on the 19th. P rose from 29.92 on the 20th to 29.94 on the 21st and then fell steadily to 29.84 on the 25th. A showery period developed from the 20th to 28th. The wind moderated to gentle breeze E & ENE on the 20th and to light breeze E & ESE on the 21st. Moderately heavy showers began during the latter half of the night of the 20th and continued during the 21st as the trough of a small E/W passed over with the wind shifting to ESE; max. totals up to 2.25 in. were recorded in parts of St. Philip. There were moderately heavy showers over St. Peter and northeastern districts during the 23rd & 24th with the wind gentle breeze varying between E & SE from the 23rd to 27th. Only light local showers fell during the last week of the month as the wind increased to moderate to fresh breeze ESE & E.

June.

R 5.38 : 100 pca

MMT : 7.60 in parts of St. John and southern St. Thomas to 2.50 in southeastern coastal districts.

P fell from 29.95 on the 1st to 29.91 on the 2nd and rose to 29.96 by the 4th. Moderate and moderately heavy very local showers fell on the 1st & 2nd, especially in parts of St. John and St. Andrew. It was fine on the 3rd with the wind gentle to moderate breeze ESE & SE, but there was a marked convergence of cirrus into the ESE at sunset. There was evidence of fairly heavy distant rain clouds to the SE of the Island during the morning of the 4th and the wind backed to moderate breeze ENE & E. The wind shifted to ESE during the afternoon when a fairly heavy shower with thunder moved in over the Island; max. totals of 1.25 in. were recorded in parts of St. Michael and St. Andrew. P fell steadily from 29.96 on the 4th to 29.90 on the 7th and rose to 29.96 on the 9th; the wind was mainly fresh breeze E and the weather was generally fair to fine from the 5th to 8th. The wind backed to ENE on the 9th and fairly heavy showers fell during the night of the 9th and very locally during the morning of the 10th. There was frequent lightning during the night of the 9th with occasional distant thunder. The weather became fair again from the 11th to 16th, except for occasional very local moderate showers; P rose slightly from the 11th to 14th, fell to 29.89 on the 15th and rose to 29.99 by the 18th. The wind backed to ENE during the night of the 17th when fairly heavy showers fell especially in central and northern parishes; max. totals of 1.50-1.75 in. were recorded in parts of St. John. Moderate local showers fell during the night of the 18th with the wind shifting to ESE & SE. There was a showery period from the 21st to 25th; P fell slowly from 29.98 on the 20th to 29.93 on

the 24th and rose to 29.96 on the 25th to 27th. Moderate showers fell in almost all districts and fairly heavy showers in parts of St. George and St. Peter on the 21st & 22nd; the wind shifted from fresh to strong breeze ENE on the 21st to ESE on the 22nd and a little thunder was heard on the 21st. Another small E/W passed over on the 23rd & 24th with moderate showers. The wind was gentle breeze E & ESE on the 25th with clear sky, but heavy distant rain clouds of a type more common in August and September could be seen; a moderately heavy shower fell locally with a little thunder. There were further moderately heavy local showers on the 28th and 29th.

July.

R 5.67 : 91 pca

MMT : 8.50 in central St. John to 3.00 in southern St. James.

There was no marked change in the weather during the first half of the month. After mainly fair weather during the first four days, a well-defined E/W passed over between the 5th & 7th with very slight fall in P. The wind backed to fresh to strong breeze ENE & NE on the 5th; the trough of the wave passed over near dawn on the morning of the 6th with the wind shifting to strong breeze ESE and then moderating later to gentle breeze S. There were fairly heavy showers during the afternoon of the 6th and max. totals of 1.50 in. were recorded at places in eastern St. Philip. The wind continued gentle breeze SE & ESE on the 7th and there were further moderately heavy and fairly heavy showers; max. totals of 1.50 in. were recorded in northern St. Philip and parts of St. John. It was fair from the 8th to 12th, except for moderate showers on the 10th, and the wind was mainly moderate breeze E & ESE. During the afternoon of the 14th and on the 15th the wind backed to ENE & NE. P rose from 29.93 on the 14th & 15th to 29.98 on the 16th as another E/W passed over, the wind shifting to light breeze SE & ESE. There were

moderately heavy unevenly distributed showers each day from the 14th to 17th, with thundershowers on the 15th and frequent lightning during the night. The wind backed to moderate and fresh breeze ENE on the 18th & 19th and P fell from 29.97 on the 18th to 29.93 on the 19th & 20th. The wind shifted to ESE on the 20th & 21st, but only light showers were associated with this small E/W. The weather continued fair from the 22nd to 26th although another LPA passed over on the 24th. P rose from 29.91 on the 24th to 29.97 on the 26th and then fell to 29.92 on the 27th and 29.90 on the 29th. There was a windshift from gentle breeze ENE & NE on the 27th to ESE & SE on the 28th. Moderately heavy showers with occasional thunder began during the latter half of the night of the 26th and there were fairly frequent moderately heavy showers during the 27th with moderate thunderstorms developing as these shower clouds moved away to the W of the Island; max. totals of 1.25-1.50 in. were recorded in the hills of St. George. The wind was light to gentle breeze SE on the 28th when a moderate LCR formed off the northern end of the Island and a few very local moderate showers passed over the Island. P rose to 29.96 on the 30th & 31st. Fairly heavy rain passes S of the Island on the 29th but there was little further rain over the Island during the last two days of the month.

August.

R 3.47 : 47 pca

MMT : A little over 7.00 in the highlands of St. Thomas and in southern St. Lucy to a little less than 1.25 in eastern St. John and less than 2.00 over a large part of St. Philip.

P fell from 29.93 on the 1st to 29.87 on the 4th and rose to 29.92 on the 6th. The wind backed to E & ENE on the 4th and shifted to ESE & SE on the 5th. There was little rain associated with this E/W, except for local moderate showers over southern and southwestern districts on

the 3rd, one of which developed into a short but severe thunderstorm off the western coast of St. Michael. P fell slightly on the 7th and rose to 29.94 on the 8th; the wind was E & ENE and moderate local showers fell during the evening of the 8th. P fell again to 29.90 on the 10th and rose to 29.97 on the 12th. The wind shifted from ENE on the 9th to ESE & SE on the 10th & 11th. A moderately heavy local shower fell during the night of the 10th. Many moderately heavy rain clouds were visible from the Island on the 11th & 12th, but only moderate local showers fell on the 12th; several flashes of distant lightning were seen during the night of the 12th. A very shallow E/W passed over on the 13th & 14th with the wind shifting from gentle to moderate breeze ENE to light breeze SE & SSE. A moderate LCR with occasional thunder formed over the sea to the W on the 14th. P fell slowly from 29.95 on the 14th to 29.92 on the 18th and then to 29.89 on the 19th & 20th. Wind velocity was low and several LCR's formed during the latter half of the month. It was fair from the 15th to 17th. The wind was light breeze NE & ENE on the 18th and a small LCR formed near the coast of St. Michael and moderately heavy local showers fell during the evening when max. totals of 0.75-1.00 in. were recorded in northwestern St. Philip and parts of St. George. P rose slightly to 29.91 on the 21st & 22nd and was steady at 29.88 from the 23rd to 25th. The wind was gentle to moderate breeze E & ENE on the 22nd & 23rd and light breeze S & SSW on the 24th & 25th. The weather was fine from the 19th to 23rd and light breeze S & SSW on the 24th & 25th. The weather was fine from the 19th to 23rd with good visibility. A slight change began on the 23rd when a moderate LCR developed off the coast of St. James. It was very warm on the 24th with the wind light breeze SSW & SW; a moderately heavy LCR developed over small areas and max. totals of 1.50-1.75 in. were recorded in southwestern St. Thomas and southern

St. James; very distant lightning was seen in the ENE & NE during the night. Very distant heavy rain clouds associated with cirrostratus were observed in the NE & N in the morning of the 25th at which time there was a tropical disturbance centred some 450 miles N of the Island. The wind continued light breeze SSW & SW on the 25th and a LCR formed off the northeastern coast during midday; fairly heavy very local rain fell in southeastern districts of St. John during the late afternoon with max. totals of 2.50 in. and there was also moderately heavy rain over central St. Thomas towards sunset. P fell to 29.84 on the 26th and rose to 29.89 by the 28th. The wind increased to light to gentle breeze S on the 26th and a moderately heavy LCR fell over western coastal districts of St. Peter and St. Lucy. The wind continued gentle breeze S on the 27th and a moderately heavy LCR formed off the northern end of the Island; there was a very local moderate shower over parts of St. Thomas and St. James during the night; distant lightning was observed in the ENE during the latter half of the night. Fairly heavy distant rain clouds appeared in the E & NE in the morning of the 28th; there was an almost inappreciable air drift from NE during the morning which caused a LCR to develop over southwestern districts towards midday; during the afternoon the wind shifted to gentle breeze SSW & SW and a fairly heavy LCR with occasional thunder formed over parts of St. Thomas and St. James and max. totals of 1.75-2.00 in. were recorded at places in St. Thomas. P fell again to 29.85 on the 30th and rose to 29.88 on the 31st. It was almost calm during the early morning of the 29th while the sky was thickly overcast from N to E was altostratus and thick cirrostratus; the wind became light to gentle breeze SE during midmorning and later light breeze S; a heavy LCR formed over parts of St. Lucy and St. Peter and max. totals of 3.25-3.50 in. were recorded at places in St. Lucy. The wind continued light to gentle

breeze SE & S on the 30th and there were many fairly heavy rain clouds in the vicinity of the Island; a fairly heavy LCR formed off the northwestern coast before noon and persisted throughout the afternoon; moderate and moderately heavy very local showers fell in some districts during the afternoon and evening. A moderately heavy shower moved in over southern and southwestern coastal districts of Christ Church during the morning of the 31st with occasional thunder; the wind became light to gentle breeze SSE and a fairly heavy LCR formed off the northern end of the Island and persisted throughout the afternoon.

September.

R 7.21 : 94 pea

MMT : 11.50 in northern St. Peter to 5.00 in coastal districts of St. Michael.

P varied very slightly between 29.80 and 29.00 during the first eleven days, but three small E/W's passed over during that period. The wind was gentle breeze SE during the afternoon of the 1st, but backed during the afternoon to ENE thus ending an 8-day period of southerly winds. A moderate LCR formed off the western coast during the day and there was moderately heavy rain over southern districts during the first half of the night. The wind shifted to ESE & SE on the 2nd and the weather became fairer after a few very local light or moderate showers on the 2nd & 3rd. It was fine from the 4th to 6th with the wind backing to ENE & E on the 5th and shifting to ESE on the 6th. The wind was light breeze ESE on the 7th and a moderately heavy LCR with thunder formed over the coast of St. James and later over small areas in southwestern districts; max. totals of 1.50 in. were recorded in St. James. It was fine over the Island on the 8th & 9th but a LCR formed each day off the coast of St. Michael with the wind light to gentle breeze ENE. The wind was light breeze ESE during the first half of the day of the 10th

and a moderately heavy LCR with occasional thunder formed mainly over coastal districts of St. James and St. Michael and max. totals of 2.00 in. were recorded. The wind backed to light breeze ENE during the afternoon and distant lightning became visible during the evening; during the latter half of the night several thunderstorms developed off the southwestern coast. The surface wind was very light on the morning of the 11th but the cloud drift was from the SE suggesting the passing of another E/W; heavy showers moved in over eastern parishes during the morning accompanied by a severe thunderstorm; max. totals of 2.50 in. were recorded in coastal districts of St. Philip; the rain was unevenly distributed and only moderate rain fell in St. Thomas and St. James. P rose to 29.92 on the 12th and fell to 29.85 on the 14th to 16th. It was unsettled on the 12th and several thundershowers passed just off the southwestern coast with the wind light to gentle breeze SE; a fairly heavy LCR formed off the northern end of the Island. There were a few very local moderate showers on the 14th & 15th and a moderate LCR formed off the W coast of St. Michael on the 14th. The wind was moderate breeze ESE on the 15th but backed to ENE in the afternoon. It was unsettled on the 16th with frequent shower clouds in various directions and a few moderate local showers on the Island; but the wind was gentle to moderate breeze ESE and distant lightning was seen in various directions during the night. P rose to 29.88 on the 17th; there were further thundershowers during the morning with the wind ESE; a LCR formed over coastal districts of St. James and later on central Christ Church where max. totals of 2.00 in. were recorded. The wind backed to NE during the late afternoon of the 17th and a showery or rainy spell followed as P fell to 29.82 on the 20th and rose to 29.87 on the 21st. Several E/W's appear to have passed over between the 17th and 21st. The wind shifted temporarily to ESE du-

ring the morning of the 18th and backed to ENE & NE in the afternoon as heavy distant rain clouds approached from northeastern, eastern and southeastern quarters. During the latter half of the night fairly heavy unevenly distributed rain moved over the Island accompanied by a severe thunderstorm and a squall from NE. There were frequent thundershowers on the 19th as the wind shifted to E & ENE; max. totals of 1.50 in. were recorded at places in St. Thomas. Conditions were very unsettled on the morning of the 20th with the wind shifting to ESE & SE; a small LCR formed off the St. James coast during midday but dissipated as the wind backed to NE in the early afternoon. Towards sunset moderate rain moved on to the Island with the wind shifting to E with squalls up to 30 miles per hour. There was unevenly distributed rain during the evening as the wind shifted to ESE & SE; max. totals of 1.00 in. were recorded in parts of St. Thomas and St. James; frequent distant lightning was seen in SE to SW during the night. There was a squall from the SSW early in the morning of the 21st, and fairly heavy showers moved generally over the Island from the SW & WSW during the afternoon increasing into heavy rain with frequent thunder in eastern parishes; max. totals of 3.50 in. were recorded at places in St. Philip. P rose to 29.90 on the 23rd and then fell slowly to 29.86 on the 27th. It was fine over the Island on the 22nd, but there was a very unsettled area W of the Island extending from SW to NW; this unsettled area was probably associated with the initial stages of a hurricane which passed S of Puerto Rico on the 23rd. It was fair locally on the 23rd & 24th except for a few light local showers; the wind was gentle breeze E. It was fine on the 25th with the wind backing to NE towards evening as the weather came under the influence of a tropical disturbance some 400-500 miles ENE of the Island. With a light N breeze on the 26th a LCR formed over small areas in Christ Church and southwestern districts and max. totals of 1.50 in. were recorded in Christ Church.

By the evening of the 26th the hurricane was centred about 350 miles NE of the Island. It was brilliantly fine over the Island throughout the 27th with the wind light breeze SW backing to SSW in the afternoon. P rose to 29.89 on the 28th and 29th and fell to 29.82 on the 30th. The wind was light breeze E & ENE in the morning of the 28th but later shifted to SSE & S; a moderate LCR formed off the coast of St. Peter and was then blown inland causing moderately heavy very local rain. Fairly heavy showers moved in from the S on the 29th increasing in intensity in northern parishes and max. totals of 2.25-2.50 in. were recorded at places in St. Peter; a fairly heavy LCR with thunder formed off the northern end of the Island. The wind continued light breeze SE & S on the 30th; a heavy LCR with occasional thunder developed over parts of St. Peter and St. Lucy and was joined by fairly heavy showers moving in narrow courses across the Island; max. totals of 4.25-4.50 in. were recorded in northern St. Peter.

October.

R 9.07 : 115 pca

MMT : 14.50 in the highlands of St. Thomas to 5.40 in southeastern coastal districts.

P rose rapidly from 29.83 on the 1st to 29.94 on the 4th. The wind was light breeze varying between SE & S during the first three days. These conditions caused the development of heavy LCR's with thunder on the 1st & 2nd over northern parishes, but especially over parts of St. Peter and St. Lucy where max. totals of 4.25-4.50 in. were recorded at places in St. Lucy on the 1st and 5.50-5.75 in. at places in northern St. Peter on the 2nd. Thus there were four consecutive days, from 29th September to 2nd October, on which heavy LCR's developed, especially over northern parishes, and a total of 14.00 in. for the four days was recorded at one place in northern St. Peter. Very local moderately heavy showers moved in from the S & SSW over some southern and central districts

on the 1st & 2nd. It was fine on the 3rd with the wind continuing light breeze S & SE and backing to E towards sunset. The wind increased to gentle breeze ENE on the 4th and a few very local moderate showers fell. P fell rapidly on the 5th to 29.85 and continued to fall slowly to 29.82 on the 8th. There were local thundershowers in the vicinity of the Island on the 5th with the wind gentle breeze ENE but there was little rain over the Island. Moderate and moderately heavy local showers fell during the day of the 6th, especially over the northern half of the Island, with the wind backing to gentle to moderate breeze ENE & NE. Distant lightning was seen in the SE during the latter half of the night and a severe thunderstorm developed off the SE & S coast during the morning of the 7th, but conditions remained mainly fair over the Island with the wind shifting from NE to E. The wind was light to gentle breeze E on the 8th; it was fair over the Island but a moderate LCR formed off the northwestern coast of St. Michael. P rose slightly on the 9th and then fell to 29.81 on the 11th. There were several small LCR's in various districts on the 9th with the wind drift from ENE. The wind drift was from SE on the 10th and a LCR formed mainly over parts of St. George and western St. Philip with max. totals of 1.00-1.25 in. at places in western St. Philip. Conditions on the 11th suggested the existence of a LPA to the NE of the Island; the wind was light air NW backing to WNW & W; a fairly heavy LCR formed during the morning over parts of St. Philip with max. totals of 1.50-2.00 in.; an isolated LCR also formed over the St. Peter hills where totals of 2.25 in. were recorded; the sky cleared temporarily during midday but a further LCR formed off the southeastern coast in the late afternoon and developed into a severe thunderstorm during the evening. The wind gradually backed from SW in the morning of the 12th, as P began rising, to E by evening of the 13th. A fairly heavy LCR formed on the

12th over parts of St. Joseph and St. Andrew with max. totals of 2.50 in.; during the latter half of the night a succession of moderately heavy thundershowers moved over some southeastern and southern districts. P continued rising to 29.90 on the 15th & 16th. The day of the 13th was bright and fine, but some moderately heavy showers fell during the night and max. totals of 1.00 in. were recorded in southern St. George. The wind was light to gentle breeze ENE & NE on the 14th and a small LCR with thunder formed off the coast at Bridgetown towards midday; by noon there was a moderately heavy local shower over parts of St. John and St. George where max. totals of 1.00 in. were recorded. Between 4 a.m. and 6 a.m. of the 15th heavy cumulonimbus and a thunderstorm developed off the coast of St. John. Between 6 a.m. and 8 a.m. of the 15th a very unusually heavy rain accompanied by a thunderstorm spread over the Island from E probably caused by a convergence zone of NE & SE air currents. At one place in St. Thomas 6.00 in. fell in 50 minutes, probably the heaviest rainfall at any time during the period under review. Totals between 2.50 and 4.00 in. were recorded over the greater part of the Island and 6.50-7.00 in. in parts of St. Thomas. The rain began over northeastern St. Philip at 6.15 a.m. with a squall with gusts up to 58 miles per hour. The rain moderated after 8.30 a.m., with light rain and drizzle continuing until about 11 a.m. The area of heavy rain appeared to move away to the SE during midday and afternoon as conditions became fair over the Island with the wind gentle breeze ENE; distant lightning was observed in the SE at night. (This rain caused the greatest flooding in the Constitution River in Bridgetown since the 31st August 1949). The morning of the 16th was bright and fair, but fairly heavy local showers with a short severe thunderstorm moved in from ENE during the afternoon. Three LPA's passed over during the latter half of the month without any further heavy rains,

but there were fairly frequent moderate and occasionally moderately heavy local showers. P fell steadily to 29.84 on the 19th and rose to 29.90 on the 21st & 22nd; the wind shifted from ENE to ESE in the usual manner. The wind moderated to gentle breeze ENE in the morning of the 22nd and then shifted to E & ESE; moderately heavy local showers with thunder fell in some districts and a fairly heavy LCR formed several miles to the W of the Island. P fell steadily again to 29.83 on the 25th and then rose slightly to 29.85 by the 27th. There were moderate local showers with the wind moderate breeze E on the 23rd & 24th and it was fine on the 25th & 26th. P rose to 29.89 on the 28th to 30th and then fell rapidly to 29.82 on the 31st. Conditions were mainly unsettled during the last five days in the vicinity of the Island, but only local moderate showers developed over the Island.

November.

R 7.48 : 96 pca

MMT : 11.50 in central St. John to 3.50 in northeastern St. Lucy.

P rose from 29.82 on the 31st October to 29.87 on the 2nd and fell to 29.78 on the 4th. Moderate local showers fell during the night of the 1st. The 2nd & 3rd were unsettled and showery; max. totals of 1.25-1.50 in. were recorded in parts of St. Thomas on the 2nd. The wind was E on the 1st & 2nd but shifted to light to gentle breeze SE & S on the 3rd to 5th. P rose to 29.82 on the 5th and to 29.88 on the 6th & 7th and the wind backed to ENE on the 6th. The weather was generally fair from the 4th to 14th with the wind moderate breeze E & ENE from the 6th to 14th. There was temporary fall in P on the 9th but it rose to 29.86 on the 10th and then fell steadily to 29.76 on the 19th. A period of unsettled and showery weather began on the 17th with wind velocity moderating and the wind shifting to light to gentle breeze SE & ESE. There were very local fairly heavy showers on the 17th when max. totals of 1.00-

1.25 in. were recorded in the hills of St. George and in parts of St. Thomas; a moderate LCR formed off the W coast of St. Lucy. There was a procession of moderately heavy local showers during the 18th with a little thunder; max. totals of 2.50-2.75 in. were recorded in parts of St. Thomas. The wind was gentle breeze S & SSW on the 19th and there were isolated moderately heavy showers, totals of 0.75 in. being recorded in northeastern districts. P rose to 29.81 on the 20th and varied between 29.79 and 29.83 from the 21st to 28th. Wind velocity was very low from the 22nd to 26th, mainly between SE & SW with variable local breezes. It was fair on the 20th but unsettled on the 21st with fairly heavy very local showers accompanied by a moderate thunderstorm during the night; max. totals of 1.00-1.25 in. were recorded in the hills of St. Peter and in parts of St. Andrew. There was fairly general moderate rain over the Island during the morning of the 22nd, and later in the day a very local fairly heavy LCR with fairly frequent thunder developed over southern St. Thomas and spread to northern and eastern St. George. It was fair on the 23rd, but moderately heavy showers developed over southwestern districts towards morning of the 24th. There was persistent moderate but unevenly distributed rain on the 24th with occasional thunder; max. totals of 2.50 in. in parts of St. John. The weather continued very unsettled in the vicinity of the Island on the 25th, but little rain fell on the Island. It was fairly generally overcast on the 26th with light rain falling in almost all districts, but the rain was heavier in St. Peter where max. totals of 1.25-1.50 in. were recorded; there was occasional thunder. Unsettled conditions continued on the 27th with much cumulonimbus visible from the Island; fairly heavy showers developed over some areas and max. totals of 1.25-1.50 in. were recorded in places in western St. James. Moderate rain fell fairly generally over the Island

during the morning of the 28th; the sky continued overcast throughout the day; the air drift was from S in the morning but shifted later to W & NW and through N to NE. The cloud ceiling was less than 1000 ft. during the late afternoon so that the upland districts were enveloped in fog. P rose to 29.85 on the 29th & 30th. It was fair over the Island on the 29th with the wind light to gentle breeze S; but unsettled conditions continued in the area surrounding the Island and fairly heavy distant rain clouds could be seen in various directions; frequent distant lightning was seen during the night. Wind velocity was very low on the 30th with the drift from ESE; fairly heavy distant rain clouds persisted in various directions; three LCR's formed and dissipated in succession between 10 a.m. and 4 p.m., mainly over parts of St. Michael, St. James and St. Thomas and max. totals of 2.50-3.00 in. were recorded.

December.

R 3.54 : 74 pca

MMT : 7.00 in eastern St. Michael to less than 1.50 in southeastern coastal districts.

The variation in the rainfall totals was due to a heavy LCR in eastern St. Michael on the 1st.

P rose from 29.81 on the 1st to 29.88 on the 3rd. Rain clouds persisted in the area surrounding the Island on the 1st; wind velocity was very low and the air drift was from the NE; these conditions caused a heavy LCR to develop very locally over southern and central St. Michael and western St. George valley with max. totals up to 5.00 in. in eastern St. Michael while there was no rain in northern and northwestern St. Michael. Very local moderately heavy showers moved in over eastern and southern districts during the evening of the 1st with the wind increasing to gentle breeze ENE & NE. It was generally overcast with much altostratus on the 2nd; the wind was light to gentle breeze E & ESE and a fairly

heavy shower moved in over the northern half of the Island with max. totals of 1.25-1.50 in. in parts of St. Peter. P fell again to 29.81 on the 5th & 6th and rose to 29.90 by the 8th. It was fair on the 3rd & 4th and the wind increased to moderate breeze E & ENE. The trough of a small E/W passed over during the morning of the 5th and the wind shifted to E & ESE; fairly heavy distant cumulonimbus developed N & NE of the Island during the morning and midday; moderately heavy and fairly heavy showers fell locally after 5.30 p.m. and during the night with occasional thunder; max. totals of 1.75 in. were recorded at places in St. Thomas. There was a spell of fair weather from the 6th to 13th with some brilliantly fine days. P rose to 29.90 by the 8th and then fell to 29.81 by the 10th and rose to 29.85 by the 12th & 13th. The wind was moderate breeze E and backed to light to gentle breeze NE & ENE on the 11th & 12th. P was steady between 29.85 and 29.88 from the 13th to 29th. There were moderate and moderately heavy showers during the three days from the 13th to 15th, especially in the northern half of the Island and max. totals of 2.50 in. for the three days were recorded in parts of St. Peter; the wind was moderate breeze NE & ENE. Except for occasional very local light or moderate showers, there was no further appreciable rain during the month; the wind was mainly gentle to moderate breeze between NE & ENE.

1953.

R 66.18 : 110 pca

Rainfall totals at individual stations ranged from 103.50 in the highlands of St. Thomas to 50.00 in southern St. James.

With the exception of October, rainfall in the normal "rainy season" was well above average. There were several heavy falls of rain in various districts; the heavy rain over southwestern coastal districts on April 11th being very unusual for that time of the year.

There were short periods of unusually strong "trade" winds in February and March.

Passing cyclonic disturbances had little effect on the local weather.

January.

R 3.35 : 100 pea

MMT : 6.10 in the highlands of St. Thomas to 1.50 in western St. Lucy.

There were fairly heavy showers during the first week. P fell from 29.97 on the 1st to 29.90 on the 2nd and increased to 29.97 by the 4th. The wind backed to NE on the 1st and early part of the 2nd and shifted to ENE & E during the afternoon of the 2nd and to ESE on the morning of the 3rd as the trough of a LPA passed over. Moderate rain fell for several hours during the latter half of the night of the 2nd especially in southeastern districts where max. totals of 1.00-1.25 in. were recorded. The wind backed to NE on the 4th and an area of rain spread over the Island from the SE; max. totals of 1.25 in. were recorded in parts of St. John and St. Thomas. P fell slightly on the 5th and increased again on the 6th & 7th to 29.97. The wind shifted temporarily to ESE on the 5th with only light to moderate very local showers, but backed to NE & ENE on the 6th with moderately heavy to fairly heavy showers falling during the night; max. totals of 1.00- 1.25 in. were recorded in parts of St. Thomas. P was a little above or below 29.90 from the 8th to 14th and fell from 29.93 on the 14th to 29.87 on the 16th. The wind was mainly ENE & E backing to NE & ENE on the 15th to 17th. There were moderately heavy local showers on the 8th, 11th and 15th and moderately heavy to fairly heavy showers on the 18th when P rose to 29.97. The remainder of the month was mainly fair to fine, with occasional light or moderate showers and the wind varying between E & NE.

February.

R 2.11 : 96 pca

MMT : 3.65 in the highlands of St. Thomas to 0.80 in parts of St. Michael.

It was fair during the first four days but moderately heavy to fairly heavy showers fell in all districts on the 5th when max. totals of 1.25-1.50 in. were recorded at places in St. Andrew. There was little change in P during the first seven days and the wind was mainly NE & ENE. P fell to 29.88 on the 7th and rose to 29.92 on the 9th and remained steady between the 10th and 15th. It was fair to fine with only occasional light or moderate local showers from the 7th to 17th. P was fairly constant at 29.94 from the 17th to 20th with the wind moderate breeze ENE & NE. There were light or moderate showers in almost all districts from the 18th to 22nd. P was unusually high, above 30.00, from the 21st to 23rd, increasing to 30.04 on the 22nd. During this period of high P there were four consecutive days from the 20th to 23rd of unusually strong winds averaging 21 miles per hour from 6 a.m. to 6 p.m. on the 21st to 23rd and gusting to 35 miles per hour; wind direction was NE & ENE on the 20th & 21st, E on the 22nd and ENE & NE on the 23rd. It was mainly fair during the last week of the month with normal ENE & NE winds.

March.

R 2.04 : 105 pca

MMT : 4.25 in the highlands of St. Thomas to less than 0.75 in northern St. Michael and southern St. James.

P fell slowly from 29.89 on the 1st to 29.86 on the 4th and rose to 29.97 on the 6th & 7th. Moderately heavy showers fell in all districts during the night of the 3rd, with max. totals slightly exceeding 0.50 in. There was another four day spell of strong winds from the 5th to 8th with the wind strong breeze ENE gusting up to 30 miles an hour. P varied considerably from the 8th to 19th between 29.97 and 29.87. There were lo-

cal light and moderate showers from the 4th to 19th, becoming moderately heavy in some districts on the 15th. P was fairly steady from the 19th to 27th, falling slightly on the 28th and rising to 29.94 on the 30th. Light and moderate showers fell in all districts from the 22nd to 28th.

April.

R 0.91 : 39 pca

MMT : 4.50 in southwestern coastal districts to less than 0.50 in other districts of the southern half of the Island.

Somewhat unusual weather was experienced during the first half of the month. P fell from 29.92 during the first three days to 29.85 on the 6th and rose slightly to 29.86 on the 7th & 8th. The wind was moderate breeze E & ESE from the 1st to 5th and moderated to gentle breeze ESE & SE on the 6th & 7th. A moderately heavy to fairly heavy shower moved in over parts of St. John, St. Joseph and St. Andrew during the morning of the 7th and max. totals of 0.75 in. were recorded at places in St. John while no rain fell in other districts. P fell to 29.81 on the 9th & 10th and rose to 29.82 on the 11th. The wind backed to ENE during the evening of the 8th, but shifted to light breeze SE & S on the 9th & 10th. The 11th was an unusually warm day; wind velocity was very low with an air drift from the E; weather conditions became unsettled in the vicinity of the Island with moderate rain clouds developing in various directions; there were some local drizzles on the Island during the afternoon and distant lightning was seen in the SE & SSE during the early part of the night. During the second half of the night of the 11th heavy rain fell in a narrow coastal strip along the southwestern coast from Hastings to Fontabelle extending inland as far as The Pine and Belleville; max. totals of 4.00 in. were recorded in the Hastings area.

There was also fairly heavy rain over another narrow strip extending from the northern boundary of St. John to Holetown across the

central hills and max. totals of 1.90 in. were recorded in the highlands of St. James. There was no appreciable rain in other districts. The wind increased to moderate breeze E on the 12th and to fresh breeze E & ESE on the 13th. P varied slightly above or below 29.90 from the 12th to 16th and then rose to 29.97 on the 18th. Wind velocity varied between moderate and fresh breeze ENE & ESE during the remainder of the month. P was fairly steady between 29.92 and 29.94 from the 19th to 30th. The weather was fine from the 13th to 21st. There were a few light and moderate very local showers during the last week of the month, but otherwise the weather was fair to fine.

May.

R 2.44 : 76 pca

MMT : 4.30 in the highlands of St. Thomas and in western St. Peter to less than 1.25 in southern St. James and northeastern St. Andrew.

Two small E/W's passed over on the 2nd and 6th respectively. There was a moderately heavy local shower on the 2nd and moderate local showers fell on the 6th; otherwise the weather was fair to fine with the wind mainly moderate to fresh breeze E. P fell from 29.94 on the 7th to 29.87 from the 9th to 11th. The wind began moderating on the 10th and 11th and the wind was gentle to moderate breeze E & ENE from the 12th to 18th shifting to ESE on the 19th and morning of the 20th. P was a little above 29.90 from the 12th to 17th. A fairly heavy LCR with thunder formed over western coastal districts on the 15th with the wind gentle breeze E; max. totals of 2.25-2.50 in. were recorded in parts of St. Peter. Average daily sunshine was unusually low from the 12th to 20th. An area of fairly heavy rain passed SW of the Island on the 16th and a moderate LCR formed off the western coast on the 17th. P fell to 29.88 on the 18th & 19th. There were fairly heavy showers during the night of the 18th, especially in southeastern districts where max. totals of 1.25-1.50 in. were recorded; occasional lightning was seen during the night. Heavy

rain passed to the S of the Island on the 19th and frequent distant lightning was seen in the SW at night. These heavy thunder clouds could be seen in the far distance in the W on the 20th as P rose to 29.90. The wind was moderate and fresh breeze E & ENE from the 21st to the end of the month, except when it was gentle to moderate breeze on the 25th & 30th. The weather was generally fair from the 21st to the end of the month with only occasional light or moderate local showers.

June.

R 5.28 : 97 pca

MMT : 9.30 in the highlands of St. Thomas to 2.75 in parts of St. Lucy.

The trough of a small E/W passed over during the night of the 1st accompanied by fairly heavy showers in most districts; distant lightning was seen; max. totals of 2.25-2.50 in. were recorded at places in St. Thomas. P rose from 29.94 on the 1st to 29.96 on the 2nd and was fairly steady at about 29.92 from the 3rd to the 10th; the wind was mainly ENE & E increasing from gentle breeze on the 5th to moderate to fresh breeze on the 9th & 10th. It was generally fair to fine from the 3rd to 10th. P rose to 29.97 on the 12th and fell slowly to 29.89 on the 16th and then rose to 29.96 on the 19th. There were light and moderate very local showers from the 11th to 14th. The trough of an E/W passed over during the night of the 15th and frequent distant lightning was seen; max. totals of 1.25 in. were recorded in parts of St. Peter. It was fair to fine from the 16th to 20th. P fell to 29.93 on the 20th and rose to 29.95 from the 21st to 23rd. Fairly heavy rain passed S of the Island during the night of the 20th. P fell to 29.90 on the 24th and rose to 29.95 on the 26th. Fairly heavy thundershowers were observed on the southern horizon on the 24th and distant lightning was seen at night; there were a few moderate local showers during the night. There was heavy rain with thunder to the E & N of the Island on the 25th, but only local moderately heavy showers

fell on the Island. Very heavy rain with a thunderstorm passed near to the S of the Island during the morning of the 30th, and during the afternoon heavy rain accompanied by a thunderstorm and squalls up to 40 miles per hour moved over the Island; max. totals of 2.00-3.00 in. were recorded in northeastern St. Philip and parts of St. John and St. Thomas.

July.

R 9.25 : 152 pca

MMT : 15.50 in the highlands of St. Thomas to 6.00 in parts of St. Lucy.

This was a month of frequent moderately heavy and fairly heavy showers in almost all districts. There were two very shallow P waves or LPA's during the first seven days, associated with windshifts from ENE to ESE and moderately heavy local showers during the night of the 3rd and with fairly heavy showers and thunder on the 7th accompanied by squalls from ESE gusting up to 43 miles per hour; max. totals of 1.75 in. were recorded at places in St. Peter. P fell from 29.97 on the 8th to 29.93 on the 10th and rose to 29.99 on the 12th & 13th. There were, however, only very local moderately heavy showers over the Island associated with this wave. P fell slowly to 29.96 on the 16th and then rapidly to 29.87 on the 17th, rising to 29.88 on the 18th. The trough of a small E/W passed over during the morning of the 15th with moderate showers and gusts up to 31 miles per hour. There were further thundershowers on the 16th (during one of these the Marine Hotel was struck by lightning); max. totals of 1.00 in. were recorded in parts of St. Thomas. The trough of a well-defined E/W passed over during the night of the 17th accompanied by fairly heavy showers with thunder; max. totals of 1.50 in. were recorded in parts of St. Thomas and St. Peter. There were fairly heavy showers over the central hills during the morning of the 18th. The weather continued unsettled on the 19th when there were fairly heavy thundershowers in the vicinity of the Island, especially to the E of the Island; some showers

moved over the Island with squalls from ESE gusting up to 50 miles per hour; max. totals of 1.00-1.25 in. were recorded in parts of St. Michael; lightning was seen during the night in heavy rain clouds situated to the SE & S of the Island. P was very variable during the next ten days. The wind moderated to gentle and gentle to moderate breeze ENE on the 23rd and E on the 24th to 26th. Unevenly distributed fairly heavy showers fell on the 23rd & 24th with thunder on the 23rd. It was fair from the 25th to 27th; but a fairly heavy LCR formed off the coast of St. James on the 26th. P fell from 29.95 on the 26th to 29.89 on the 28th and rose to 30.00 on the 30th. This LPA was accompanied by a moderate and fresh breeze ENE on the 27th & 28th which moderated to ESE, & SE on the 29th. There were moderately heavy showers during the latter half of the night of the 28th and distant lightning was seen in the S. Fairly heavy showers with thunder fell on the 29th and max. totals of 2.00-2.50 in. were recorded at places in St. Thomas. Rainy conditions during the second half of this LPA with heavy rain passing to the S of the Island on the 30th and then heavy rain with thunder spreading over the Island, especially over southwestern districts where max. totals of 2.00-3.00 in. were recorded; there was frequent lightning during the night. Further thundershowers fell in all districts during the 31st and max. totals of 1.00 in. were recorded in southeastern districts.

August.

R 8.74 : 120 pca

MMT : 11.75 in northern St. Peter to 6.00 in northeastern St. Joseph.

P was high during the first three days with the wind moderate breeze ENE & NE; it was generally fair except for a moderately heavy shower with thunder over and off the northern end of the Island during the night of the 1st. P fell from 29.98 on the 3rd to 29.88 on the 5th and rose to 30.00 on the 7th. There were fairly heavy showers in south-

eastern districts during the afternoon of the 5th with the wind gentle to moderate breeze ENE; max. totals of 1.00-1.25 in. were recorded in parts of St. Philip. The trough of an E/W passed over during the night of the 6th accompanied by heavy rain and thunder; max. totals of 5.00 in. were recorded in coastal districts of St. John. The wind was light breeze SSW to SSE on the 7th and fairly heavy rain fell along eastern coastal districts where max. totals of 1.50 in. were recorded. P fell again to 29.93 on the 9th; the wind backed to NE & ENE on the 8th, shifted to E & ESE on the 9th and to light to gentle breeze SE on the 10th as P rose slightly. A LCR with thunder developed over some western and northern districts on the 10th and fairly heavy local showers fell during the night. As P rose on the 12th & 13th the wind shifted to ESE & SSE. Heavy rain passed S of the Island on the 12th and fairly heavy local rain fell over northern districts during the night when max. totals of 1.50 in. were recorded at places in the northern hills of St. Peter. An area of heavy rain gradually moved away to the SW & W of the Island on the 13th with the weather becoming fair from the 14th to 16th. P fell slowly from 29.97 on the 13th to 29.87 on the 19th & 20th while the wind was steady at gentle to moderate breeze ENE & E. Unevenly distributed moderate showers fell on the 17th & 18th, with max. totals of 1.50 in parts of St. Philip on the 17th. It was mainly fair from the 19th to 22nd. A LPA area passed S of the Island on the 23rd with P falling to 29.82 and the wind backing to NE & NNE; heavy rain with thunder passed S of the Island but only moderate showers fell on the Island. There were moderately heavy showers on the 24th when the wind shifted to SE & ESE. The weather was generally fair during the last week of the month, with the wind gentle to moderate breeze varying between E & NE. There were moderately heavy local showers over some northern districts during the night of the 30th.

September.

R 11.15 : 146 pca

MMT : 19.15 in the highlands of St. Thomas and in western St. Peter to
6.75 in parts of southern St. George, Christ Church and St. Philip.

On the 1st the weather came under the influence of a hurricane centred some 500 miles ENE of the Island. P fell from 29.90 on the 1st to 29.76 on the 2nd & 3rd and rose to 29.85 on the 4th. It was mainly fine over the Island on the 1st with the wind increasing to moderate to fresh breeze NNE & NE. By the morning of the 2nd there was much cirrostratus in the eastern and northeastern sky; the wind backed to gentle to moderate breeze NNW and several moderately heavy unevenly distributed showers moved over the Islands with occasional thunder; conditions became fine at night with the wind light breeze NW & W. Moderate local showers fell on the 3rd with the wind gentle breeze SW & SSW. It was fair to fine on the 4th as the hurricane moved away westwards and the wind was moderate breeze SE & SSE. The wind backed to NE on the 5th as P fell again to 29.81. The trough of an E/W passed over during the afternoon of the 6th. Moderate and fairly heavy local showers fell during the afternoon and night of the 6th with the wind shifting to SE & SSE; max. totals of 1.50 in. were recorded at places in St. Thomas. (It would appear that a tropical storm developed on this wave further west in the Caribbean and was located SE of Puerto Rico on the 8th). P rose steadily from 29.82 on the 6th to 29.90 on the 11th & 12th. The wind backed from SSE & SE on the morning of the 7th to ENE by evening and moderately heavy showers fell during the night. There were heavy showers with thunder during the afternoon of the 8th when the wind was E & ESE and further heavy showers with a thunderstorm fell over northern parishes at night; max. totals of 3.00-3.25 in. were recorded in parts of St. Peter. It was fair and misty over the Island on the 9th with the wind increasing to moderate to fresh breeze ENE & NE; distant heavy rain

clouds were visible in the N & S. Very local moderate and moderately heavy showers fell on the 10th. The wind was light to gentle breeze ESE & E on the 11th with warm and sultry weather; a moderately heavy LCR formed off the coast of St. James towards midday and moderately heavy local showers fell over parts of St. Thomas and St. Peter during the night. There was a further moderately heavy local shower over parts of St. Peter on the 12th when the wind was light to gentle breeze ENE. P fell from 29.90 on the 12th to 29.81 on the 13th and increased to 29.86 on the 14th. Weather conditions were somewhat confused on the 13th; the indications were that a very small depression with a closed circulation passed S of the Island during the morning causing fairly heavy local showers with thunder, with the wind shifting from E in the morning to SSE & S by midday. It was calm during the first half of the night of the 13th, but after 1.30 a.m. there was a moderately heavy local shower with the wind gentle to moderate breeze NW as the weather came under the influence of the incipient stages of another tropical storm not far to the NE of the Island; the wind backed during the remainder of the night to SW & SSW with occasional local showers. The wind increased to moderate to fresh breeze S on the 14th and the weather became mainly fair over the Island as the storm clouds moved away to the NW. Fair to fine conditions continued on the 15th & 16th with P fairly steady at 29.90 from the 15th to 18th, but fell very slightly on the 16th and increasing again on the 17th. Very thundery conditions developed in association with this very shallow wave on the 17th and several short but severe thunderstorms occurred over or near the Island during the afternoon and evening with the wind shifting to SE; max. totals of 1.50 in. were recorded at places in St. Thomas. It was fair on the 18th but became unsettled on the 19th with P falling and the wind backing to gentle to moderate breeze NE & ENE; distant light-

ning was seen in the SE at night. There were fairly heavy showers generally over the Island on the 20th with P falling to 29.81 and the wind varying between ENE & ESE; there were heavy distant rain clouds in the S and SW and frequent lightning was observed in that quarter during the night. (The existence of a LPA E of Trinidad was reported). The sky was thickly overcast in the S & SW during the morning of the 21st and there was heavy rain with thunder in that direction; some moderate and moderately heavy showers moved over parts of the Island from ESE; conditions became fair during the night and P rose on the 22nd with fair conditions continuing. The wind backed to ENE & NE on the 23rd and local moderately heavy showers fell during the night. P fell again on the 24th to 29.81 and rose steadily to 29.89 on the 27th. The wind shifted only temporarily to ESE on the 24th and backed again to ENE during the afternoon of the same day. There were isolated moderate showers on the 24th & 25th and the weather continued unsettled with much medium and high cloud. Frequent moderately heavy and fairly heavy rain fell during the morning of the 26th when cloud drift was from SE & ESE; the rain increased westwards and northwestwards until there was an area of very heavy rain with occasional thunder, W and NW of the Island and also over northern parishes; max. totals of 5.75-6.00 in. were recorded at places in western St. Peter. It was fair on the 27th & 28th with the wind backing to gentle breeze ENE & E. P fell slowly from 29.89 on the 27th to 29.83 on the 30th. The wind was light breeze NE & ENE during the morning of the 29th; isolated moderately heavy showers with occasional thunder fell during the morning; the wind shifted to ESE & SE after noon and a moderate LCR formed over the sea to the NW and over some northwestern coastal districts. Wind velocity was low and direction variable locally on the 30th and a fairly heavy LCR developed over parts of St. James, St. Michael, St. George and St. Thomas

and max. totals of 2.50 in. were recorded in parts of St. Thomas.

October.

R 4.93 : 62 pca

MMT : 7.80 in the highlands of St. James to 2.40 in central St. Philip.

P rose from 29.92 on the 1st to 29.96 on the 6th and fell to 29.82 on the 9th. The wind was mainly light breeze SE & ESE during the first three days. The weather was unsettled on the 1st with moderately heavy cumulonimbus forming over the sea in various directions and some showers moving on to parts of the Island; a moderate LCR formed over parts of St. Peter where totals of 0.75-1.00 in. were recorded; a thunderstorm developed in heavy distant rain clouds SW of the Island. Moderately heavy showers moved very unevenly over the Island on the 2nd. Conditions were fine over the Island on the 3rd. The wind backed to light breeze NE or was variable locally during the 4th; fine conditions continued from the 5th to the 7th with the wind gentle breeze ENE & NE; moderate LCR's formed off the western coast on the 5th & 7th. The wind was light breeze NE on the 8th and a heavy LCR developed very locally over parts of St. Michael, southwestern St. George and Christ Church; max. totals of 5.00 in. were recorded in northeastern outskirts of Bridgetown. P rose on the 9th & 10th to 29.86; the wind continued light breeze and shifted to SE & S during the afternoon of the 9th. A moderate LCR formed over southwestern districts in small areas on the 9th; off the northwestern coast on the 10th and off the southwestern coast on the 11th as the wind backed to ENE & NE. It was fine over the Island on the 12th & 13th as P increased to 29.90 on the 13th but distant rain clouds were visible; the wind was light to gentle breeze ENE & E. P began falling on the 14th and continued to fall to 29.83 on the 16th and rose to 29.87 on the 17th. The wind was light breeze ENE on the 14th and there were frequent light and moderate local showers and a little thunder. Further local

moderate and moderately heavy showers fell on the 16th when max. totals of 1.00-1.25 in. were recorded in parts of St. Thomas. It was unsettled with moderate and moderately heavy local showers from the 17th to 21st. P fell to 29.79 on the 20th and was fairly steady until the 24th and rose to 29.85 on the 25th & 26th. The wind was gentle breeze ESE & SE from the 20th to 23rd. Light and moderate local showers fell on the 20th & 21st, but it was generally fine on the 22nd & 23rd. The wind increased to moderate breeze E on the 25th & 26th and backed to ENE during the evening of the 26th when there were local moderate showers. P fell to 29.81 on the 27th and rose to 29.84 on the 28th and the wind shifted to ESE on the 27th & 28th. The weather was unsettled during the night of the 27th when distant lightning was observed in the S and some local moderate showers fell on the Island; several thundershowers were near the Island on the 28th. Wind velocity gradually moderated from the 27th to the end of the month and was unusually low on the 30th & 31st backing in direction to ENE & NE and becoming variable in coastal districts. It was generally overcast and very humid on the 31st but little rain fell on the Island.

November.

R 10.18 : 131 pea

MMT : 14.65 in southeastern St. Thomas to 5.60 in northwestern coastal districts of St. Peter.

P rose slightly on the 2nd to 29.86, then fell to 29.82 by the 4th and rose to 29.85 by the 6th & 7th. The sky was fairly thickly overcast with altostratus and cirrostratus during the first four days and there was little sunshine. The wind was light to gentle breeze ENE on the morning of the 1st, backed to ENE during the afternoon, continued unchanged on the 2nd and became light breeze ENE on the 3rd. Very little rain fell on the Island during the 1st and 2nd, but thundershowers developed near the Island on the 1st and frequent lightning was seen during the evening of the 2nd. A fairly

heavy LCR with a moderate thunderstorm developed off the northwestern coast of St. Michael on the 3rd. During the evening of the 3rd frequent lightning was seen in distant rain clouds in the SE & E and by 4 a.m. of the morning of the 4th heavy rain moved on to parts of the Island with the wind backing to gentle to moderate breeze NE; there was further heavy rain later in the morning of the 4th with the wind increasing to moderate to fresh breeze NE. The rain was especially heavy over northeastern coastal districts where 7.50 in. were recorded, but only 0.50 in. was recorded in western St. Philip. During midday of the 4th the trough of an E/W passed over with the wind shifting to E and then later in the afternoon to SE & SSE when fair conditions began developing. It was fine on the 5th & 6th with the wind gentle to moderate breeze ESE. It was brilliantly fine on the 7th with the wind backing to gentle breeze NE, except that a small LCR formed some 5 to 10 miles off the southwestern coast. P fell to 29.79 on the 8th with the wind moderate breeze ENE & E during the morning, shifting to E & ESE by midday; distant cumulonimbus were forming in various directions; the wind increased to moderate to fresh breeze ESE during the late afternoon when moderately heavy showers had developed near the Island; local moderate showers fell during the first half of the night; max. totals of 3.75-4.00 in. were recorded at places in St. Michael and St. Thomas but very little rain fell in northeastern coastal districts. The wind continued gentle breeze ESE to SE on the 9th and the weather was unsettled and the sky overcast; there was much rain near the Island; fairly heavy rain moved in over southeastern coastal districts during the evening and max. totals of 1.50 in. were recorded; distant lightning was seen in the NE. P rose slightly to 29.82 on the 10th; there was heavy rain in eastern and northeastern coastal districts during the morning of the 10th with cloud drift from SSE; max. totals of 2.75-3.00 in. were recorded in northeastern St. Lucy; the sky continued

overcast during the remainder of the 10th and further fairly heavy showers moved in over eastern districts after midnight when max. totals of 1.25-1.50 in. were recorded in eastern St. Philip. It was fairer over the Island on the 11th, but an area of heavy rain persisted some 40-60 miles NE of the Island. P rose to 29.85 on the 13th & 14th and the wind backed to ENE on the 12th and shifted to ESE on the 13th & 14th. There was much cumulonimbus near the Island on the 13th, but conditions were fair and bright over the Island. On the morning of the 14th a fairly heavy shower with a little thunder moved in very locally over southeastern districts and into southwestern St. George where 1.00 in. was recorded; conditions were then fairer over the Island but much cumulonimbus persisted in the vicinity of the Island. The wind was light to gentle breeze mainly from ESE from the 15th to 21st and P rose and fell slightly during that period. A LCR with thunder formed off the western coast on the 15th, and a fairly heavy but very local shower moved across central Christ Church and eastern St. George during the afternoon. Conditions were mainly fine over the Island from the 16th to 21st, but LCR's formed over the sea to the NW of the Island on the 19th, 20th & 21st accompanied by thunder on the 20th and 21st. The weather became more unsettled on the 21st with the wind shifting to SE & SSE; moderately heavy and fairly heavy cumulonimbus formed in various directions within sight of the Island. It was unsettled and generally overcast on the 22nd and there was a moderately heavy shower and thunderstorm between 11 a.m. and noon over St. John and central districts; during the evening fairly heavy rain fell over eastern and southern districts with max. totals of 2.00 in. in parts of St. Philip, but no rain fell in northern parishes. P fell again to 29.83 on the 23rd and the wind velocity was very low, the air drift being mainly from S with local variable breezes in coastal districts; the weather was dry. P rose steadily after the 23rd to 29.90 on the 27th. The wind

was ESE on the 24th & 25th, increasing in velocity and backing to E during the latter half of the 26th; the weather was bright and fine. There was a moderately heavy to fairly heavy local shower on the 27th. P fell to 29.82 by the 29th. After a fair day on the 28th the weather became unsettled and showery on the 29th & 30th with the wind moderate breeze E & ESE; max. totals of 1.25 in. were recorded at places in St. Thomas on the 29th.

December.

R 5.53 : 115 pca

MMT : 10.75 in the highlands of St. Thomas to 2.50 in southern St. James.

The weather during this month was very interesting.

Rainfall was very unevenly distributed even within parishes. Two well-defined LPA's moved over the Island during the first half of the month. Somewhat atypical weather was experienced.

P was steady at 29.85 from the 1st to the 4th with the wind gentle to moderate breeze varying between ESE & ENE. It was fair to fine except on the 2nd when very local moderately heavy showers fell over small areas especially in St. Thomas and the central hills. P fell steadily to 29.77 on the 7th and the wind backed slowly from the 5th to 7th through NE & N to NNW decreasing in velocity to light to gentle breeze. The weather continued fine from the 5th to 7th except for local light showers on the 6th. P rose rapidly from 29.77 on the 7th to 29.88 on the 9th & 10th. The wind was light breeze or calm on the 8th, from NE in the early morning then from W and backing through S to SE during the afternoon; the weather continued mainly fair and dry. It was fairly generally overcast with alto-clouds on the 9th and the wind was gentle breeze SE; moderately heavy to fairly heavy showers moved over parts of the Island especially over northern parishes where max. totals of 1.00 in. were recorded. There were further moderate local showers on the 10th as the wind backed to gentle to moderate

breeze E. P began falling on the 11th and continued to fall to 29.76 on the 13th. It was fair to fine on the 11th & 12th with the wind backing to NE & NNE and moderating in velocity. A moderate LCR formed off the coast of St. Michael on the 12th. There was a mass of fairly heavy rain clouds some 15 to 25 miles off the Island from WNW through N to NE on the morning of the 13th when it was almost dead calm. At this stage the trough of the LPA was presumably passing over the Island; by 9 a.m. the wind became light to gentle breeze SE. It was a warm and sultry morning and cumulonimbus development was progressing in various directions. Fairly heavy rain developed over St. Thomas and leeward parishes during midday with occasional thunder; then the wind shifted to light breeze SSE and heavy rain developed over eastern St. Philip and spread southwards along the SE coast; max. totals of 4.75 in. were recorded at places on the SE coast of St. Philip while little rain fell in the western half of that parish; heavy rain persisted N of the Island throughout the afternoon and then the sky cleared at night. P rose rapidly to 29.85 on the 14th and the wind increased to gentle to moderate breeze ESE and backed later to E; conditions were unsettled during the morning of the 14th and moderately heavy local rain and a moderate thunderstorm moved in over southern and southeastern districts with cloud drift from SW; it was fair during the afternoon but further thundershowers developed near the Island during the latter half of the night. The "unseasonal" weather continued on the 15th with P rising further to 29.86; heavy rain clouds of a type more common in the months of August and September were visible on the southern horizon with every indication of a severe thunderstorm in that area; it was partially overcast but fair during the afternoon, but there were fairly heavy showers with a moderate thunderstorm over the Island during the first half of the night; max. totals of 3.50-4.00 in. were recorded at places in St. Peter. Further moderately heavy

to fairly heavy local showers fell on the 16th, especially in eastern districts and parts of St. Thomas where max. totals of 1.25 in. were recorded. Fair conditions set in on the 17th, with P gradually rising and wind velocity increasing while wind direction was fairly steady at E to ENE. There were very local moderate showers during the nights of the 22nd and 24th. By the 25th P was 29.90 and the wind had backed to gentle to moderate breeze NE. P fell to 29.87 on the 27th and rose to 29.92 on the 29th. It was mainly bright and fine from the 25th to 28th, but drizzles and light rain fell on the 29th & 30th with the wind increasing to moderate to fresh breeze ENE.

1954.

R 61.97 : 103 pea

Rainfall totals at individual stations ranged from 101.00 in the highlands of St. Thomas to 42.00 in southeastern coastal districts.

Rainfall was well above average in January, April and October and well below average in July and August.

The Island narrowly escaped the effects of a 'young' hurricane on October 5th.

Heavy LCR's were very uncommon during the year.

January.

R 4.84 : 144 pea

MMT : 7.50 in the highlands of St. Thomas and in northern St. Peter to 1.50 in central St. Philip.

Rainfall was very uneven over the Island and P varied appreciably during the month.

The wind was light breeze ESE on the 1st and very local moderate showers fell especially over northern districts. P rose slightly to 29.97 on the 2nd and then fell rapidly to 29.86 by the 5th and rose to 29.89 on the 6th. The wind increased to moderate to fresh breeze ENE on the 2nd and

backed to NE & ENE on the 3rd. There were moderately heavy showers in the early morning of the 3rd and occasional showers throughout the day; max. totals of 0.75-1.00 in. were recorded in parts of St. Thomas and northern parishes. It was generally fair to fine from the 4th to the 8th with the wind moderate breeze E & ENE, except for moderate local showers in eastern and northeastern districts during the latter half of the night of the 6th. Moderate local showers fell on the 9th and frequent moderate showers on the 10th, especially over the hills and northern part of the Island; max. totals of 1.50 in. were recorded in the hills of St. Peter while little rain fell in the southern half of the Island. P rose slowly from 29.90 on the 9th to 29.94 on the 14th, fell again to 29.89 on the 16th and rose to 29.98 by the 19th. The wind continued moderate to fresh breeze between E & ENE. There were moderately heavy showers over the hills and parts of St. James on the 14th, but otherwise the weather was fair to fine. P fell again on the 20th & 21st to 29.91; fairly frequent showers fell during the night of the 20th and on the 21st; max. totals of 1.00-1.25 in. were recorded at places in the northern parishes. It was fair from the 22nd to 24th with the wind shifting to ESE. P fell from 29.93 on the 24th to 29.88 on the 25th and to 29.85 on the 26th to 28th and the weather during the final week was somewhat unusual for the time of year. Wind velocity moderated from the 26th to the end of the month and backed to NE & NNE on the 26th and to NNW & NW on the 27th & 28th. The sky became generally overcast on the 25th with medium and low cloud and it was an unusually muggy day; distant lightning was observed during the night and there were moderate local showers towards sunrise of the next morning. The sky on the 26th was mainly overcast with a very confused collection of cloud types and there was a marked difference in direction of movement of the clouds at low and medium levels. Fairly heavy rain developed very unevenly over the Island and was heaviest in the

central hills and northern parishes and there was occasional thunder; max. totals of 2.75-3.00 in. were recorded at places in St. Peter. The sky continued to be generally overcast with medium level cloud on the 27th when there was very little sunshine and only light local rain. The sky became clearer on the 28th and there was more sunshine; a moderate LCR formed over southwestern St. Thomas and parts of St. George and St. Michael and max. totals of 0.50-1.00 in. were recorded. The wind increased to gentle breeze NE & ENE on the 29th to 31st and the weather was mainly fine.

February.

R 2.50 : 114 pea

MMT : 4.90 in the highlands of St. Thomas to less than 1.00 in southwestern Christ Church.

The wind shifted slowly from NE & ENE on the 1st to ESE on the 5th. P rose from 29.90 on the 2nd to 29.98 on the 7th. It was mainly fair to fine from the 1st to 7th except for occasional very local showers, especially over Christ Church and St. George. P varied slightly between the 8th & 13th and then fell steadily to 29.89 on the 16th. The weather was unsettled between the 9th and 14th with occasional moderate and moderately heavy local showers, but there were some fine periods; the wind was moderate to fresh breeze between ESE & ENE. There was frequent light rain and drizzle throughout the night of the 15th and during the day of the 16th with the wind increasing to fresh breeze ENE; max. totals of 2.00 in. were recorded in parts of St. Thomas but less than 0.50 in. fell in southeastern districts. Max. temperature on the 16th was down to 79°F. P rose slightly on the 17th and then fell to 29.87 from the 18th to 20th. Slightly unsettled conditions with occasional light and moderate local showers continued from the 18th to 20th. It was mainly fine and dry during the last week of the month in spite of some P variation.

March.

R 1.83 : 95 pea

MMT : 3.75 in the highlands of St. Thomas to 0.60 in southeastern districts.

There were light and moderate local showers from the 3rd to 5th with the wind moderate to fresh breeze E & ENE. P was a little above 29.90 from the 2nd to 7th, fell to 29.88 on the 9th and rose to 29.93 on the 12th. It was mainly fine and dry from the 6th to 23rd except for moderate local showers on the 9th. P varied between 29.94 & 29.88 and the wind varied between moderate breeze ENE & ESE, except from the 17th to 19th when the wind moderated to gentle breeze. The wind backed from E & ENE on the 24th to NE on the 25th & 26th and then shifted to ESE & SE by the 27th. P fell from 29.93 on the 24th to 29.88 on the 25th and then rose to 29.98 by the 31st. The weather was unsettled and showery during the last week of the month. The wind moderated to gentle breeze on the 27th & 28th and moderately heavy LCR's formed just off the W coast of St. Michael and St. James each day. There were moderately heavy to fairly heavy local showers during the nights of the 28th and 30th with max. totals of 1.00 in. in parts of St. George on the 28th and 0.50 in. in St. Thomas on the 30th.

April.

R 4.06 : 173 pea

MMT : 7.75 in the highlands of St. Thomas and in central St. John to less than 2.00 in southeastern coastal districts of Christ Church.

A small E/W passed over during the first four days. P fell from 29.93 on the 1st to 29.92 on the 3rd and rose to 29.95 on the 5th. The wind was moderate breeze ENE & NE on the 1st & 2nd and shifted to fresh breeze ESE & E on the 3rd and 4th. Fairly heavy showers fell during the night of the 2nd and max. totals of 1.00-1.25 in. were recorded in parts of St. Thomas and St. John. P fell to 29.88 on the 7th and slowly rose to 29.94 on the 15th. The weather was unsettled and windy with light showers

from the 3rd to the 5th and the showers became moderate and moderately heavy during the night of the 6th and morning of the 7th. It was fair from the 8th to the 10th and then some very local moderate showers fell during the night of the 10th. It was slightly unsettled with some bright intervals on the 11th; the wind was moderate breeze ENE. The wind increased to fresh breeze ENE from the 12th to 14th. Moderate local showers fell on the 12th and fairly heavy local showers during the latter half of the night; max. totals of 1.25-1.50 in. were recorded in parts of St. Thomas and St. John. It was partly overcast with medium and high cloud from the 13th to 15th and conditions were unsettled with occasional light showers. P fell from 29.94 on the 15th to 29.89 on the 17th & 18th and rose to 29.92 on the 19th. Moderate and moderately heavy showers fell in all districts from the 16th to 18th with the wind moderate and fresh breeze ENE & E. P fell rapidly to 29.84 on the 21st and rose to 29.90 on the 22nd and remained fairly steady until the 27th, then fell to 29.86 on the 28th and rose to 29.90 on the 30th. The wind was mainly moderate to fresh breeze E & ESE. The weather was slightly unsettled with a few very local moderate showers on the 23rd, otherwise the last week of the month was fair and dry.

May.

R 2.28 : 71 pca

MMT : 3.80 in western St. John to 1.10 in coastal districts of St. James and St. Peter.

More than 75% of the month's rain fell on three days from the 27th to 29th. In some districts rain was recorded on only three days.

Wind velocity was low at the beginning of the month. The wind was light breeze NE on the 2nd and a small LCR formed over southwestern districts. Velocity increased steadily until it was fresh breeze E on the 7th & 8th. P varied considerably between 29.93 and 29.85 during the first half of the month without any well-defined indications of E/W's. The sky was mainly

overcast from the 2nd to 5th with cirrostratus and high altostratus and then the weather was fine and dry until the 18th. P was steady at about 29.87 from the 16th to 22nd. Some very local moderate showers fell between the 19th and 21st especially in St. Thomas. It was fine and dry again from the 22nd to 26th. P increased to 29.91 on the 26th and then fell slightly on the 27th & 28th as a very small E/W passed over, and then increased to 29.97 by the 30th. The weather became unsettled on the 27th when shower clouds appeared in various directions but especially in the SE & S; moderate local showers fell on the hills during the latter half of the night. Fairly heavy rain with occasional thunder spread over most of the Island on the 28th and max. totals of 2.50 in. were recorded at places in Christ Church. There were further moderately heavy local showers during the morning of the 29th with occasional thunder and then conditions became fair to fine.

June.

R 4.95 : 91 pca

MMT : 7.20 in the highlands of St. Thomas to less than 3.00 in western St. James and northern St. Michael.

The month began with dry, windy and slightly misty weather, with E & ENE winds. Showery conditions developed during the evening of the 4th and light to moderate showers were general but heavier in southern districts during the night of the 5th when max. totals of 1.00-1.25 in. were recorded in parts of Christ Church. Conditions were generally fair to fine and dry from the 6th to 15th except for occasional local light showers. The wind was mainly ESE from the 7th to 12th and velocity was below average. There were indications that a small E/W passed over on the 16th; the wind was steady at E on the 14th & 15th and shifted to ESE on the 16th. There were fairly heavy showers during the night of the 16th and morning of the 17th when totals exceeding 1.00 in. were recorded in most districts. P was fairly high from the 17th to 23rd and the weather was mainly fair and dry.

Windy conditions set in on the 21st and continued until the 24th on which day the average wind velocity for the 12-hour period 6 a.m. to 6 p.m. reached the high level of 20.2 miles per hour. The wind backed on the 24th & 25th to ENE, shifted to ESE during the night of the 25th and blew from that direction during the remaining days of the month. The trough of an E/W passed over during the night of the 25th-26th. The weather was showery from the 25th to 28th, with heaviest showers on the 26th when max. totals of 1.50-2.00 in. were recorded in some southeastern districts. The last two days of the month were fine and dry, except for a few light scattered showers.

July.

R 4.18 : 67 pca

MMT : 6.50 in the highlands of St. Thomas to 2.00 in coastal districts of St. James.

There were frequent light and moderate showers throughout the month and no heavy rains. The total number of sunshine hours was 314.1 with a daily average of 10.1 hours, the highest daily average for July on record (1929 - 1960).

The first four days of the month were mainly fine except for an isolated shower during the night of the 2nd; P was fairly high and the wind increased to fresh breeze E on the 3rd & 4th. There were local moderate & moderately heavy showers generally over the Island on the 5th & 6th. P fell slowly from 29.95 on the 4th to 29.88 on the 9th and then increased again on the 10th. The wind backed from E to ENE on the 9th and shifted to ESE on the 10th, the windshift being probably associated with a small E/W. There was another small E/W on the 14th-15th; the wind was ENE & E on the 14th and ESE on the 15th and there were scattered moderate showers. The weather was bright and sunny with only occasional showers during the latter half of the month. P fell rapidly from a little below 29.90 on the 26th to about 29.80 on the 28th and rose to 29.90 by the 30th; the wind backed

to NE & NNE on the 28th and shifted through E to S on the morning of the 29th; this was a rainless E/W. The weather was fine at the end of the month.

August.

R 2.84 : 39 pca

MMT : 5.75 in the highlands of St. Thomas to less than 1.50 in southern St. James and some coastal districts of St. Joseph and St. Andrew.

There were no island-wide rains during the month, showers were very local. There was a marked absence of heavy LCR's.

The Island's average rainfall this month was the second lowest for August in the 114-year period from 1847-1960, the lowest average being 2.31 in. in 1947.

A shallow E/W passed over on the 1st & 2nd causing light showery weather with the wind ENE & NE on the 1st shifting to ESE & SE on the 2nd. Mainly fair to fine weather followed from the 3rd to 6th. P fell from 29.92 on the 4th to 29.83 on the 6th and then increased again remaining above 29.90 from the 7th to 15th. Wind velocity was low on the 7th & 8th and wind direction was ENE on the 7th and ESE on the 8th. Light to moderate LCR's formed over coastal areas of St. Michael on the 7th and off the coast of St. Peter on the 8th. Moderate local showers fell during the early morning of the 9th and then a spell of fair weather set in and continued until the 19th with only occasional very local or isolated light and moderate showers. P fell from 29.91 on the 15th to 29.81 on the 20th. The wind shifted from NE & ENE on the 14th to ESE & SE on the 15th; local thundershowers formed near the Island but there was no appreciable rain on the Island. A period of slightly unsettled conditions followed from the 20th to 28th, but the days were fair and sunny and the majority of the showers fell at night. Wind velocity was low on the 21st & 22nd. A moderate LCR formed over southwestern coastal districts on the 21st and the heaviest showers of the month fell in the evening of the 22nd over a narrow strip from the SE coast to the

central hills when max. totals of 1.25-1.50 in. were recorded in parts of St. Thomas. From the night of the 27th the weather was influenced by a shallow depression ENE of the Island. P fell slowly until the 29th. Moderately heavy rain fell on coastal districts of St. Philip during the night of the 27th. During the 28th the wind was light and backed from NE to NNW; the weather was sultry and the sky in the E and SE was thickly overcast with cirrostratus and altostratus; the night of the 28th was calm as the LPA passed N of the Island. The wind was light breeze WSW in the morning of the 29th and backed to SSW & S by afternoon, but conditions were dry over the Island. P rose rapidly on the 30th & 31st. Conditions were mainly fine on the 30th with a slightly stronger breeze from S which backed to E by the 31st. There were local moderately heavy showers towards midday of the 31st when max. totals of 1.00 in. were recorded at places in St. Thomas; a LCR formed over the sea to the W of St. James during the early afternoon.

September.

R 9.55 : 125 pca

MMT : 15.00 in western St. Peter to 4.00 in eastern St. Philip.

At the beginning of the month the weather was influenced by an extensive shallow LPA the trough of which passed over the Island early on the 3rd. P fell from 29.89 on the 1st to 29.80 on the 2nd and increased to 29.93 by the 4th. The weather was showery in the first half of the LPA and some of the heaviest rains of the month fell during the second half; max. totals of over 5.00 in. were recorded at places in the hills of St. Peter on the 3rd. Further moderately heavy showers fell on the 4th. (This LPA later developed into hurricane "Edna" further W in the Caribbean). P remained high from the 4th to 8th with a sunny spell from the 5th to 7th and higher wind velocities. Conditions were unsettled and showery on the 8th & 9th. Two small E/W's passed over between the 9th and 13th; moderately

heavy showers fell in some districts and a LCR formed off the coast of St. James on the 12th. The wind shifted from NE on the 11th to E on the 12th when the sky became overcast with high cloud and fairly frequent lightning was seen in the S & SSW during the night. The trough of the second E/W passed over during the morning of the 13th; the wind shifted to SE and continued from that direction until the 15th. There were only light and moderate showers on the Island while this wave was passing over. Another shallow E/W influenced the weather from the 18th to 20th, the trough passing over during the morning of the 19th. A moderately heavy LCR developed off the coast of St. Michael with the NE air drift on the 18th. Heavy rains, accompanied by a moderate thunderstorm, fell in all districts except the coastal districts of St. Philip during the second half of the wave; max. totals of 3.00 in. were recorded in parts of St. Thomas. Another small E/W followed immediately with the wind backing to ENE by the afternoon of the 20th; no heavy rains accompanied this wave but it was characterised by a dark grey sky of altostratus and nimbus during the afternoon and evening of the 21st with occasional thunder. There was a fair spell from the 22nd to 25th, during which period the wind shifted from ENE on the 23rd to ESE on the 25th corresponding with a slight fall and rise in P. Wind velocity was low on the 26th and conditions apparently favoured rapid convection; a heavy LCR formed with great rapidity between 9.30 and 10.00 a.m. off the coast of St. James and developed into a local thunderstorm with an unusually strong down-rush of cool air. The LCR developed inland over southern St. James, southern St. Thomas and parts of St. George and extended into central St. Philip with max. totals of 4.50-5.00 in. The month ended with a further small E/W which began on the 27th when moderate LCR's formed off the coasts of St. Michael and St. James. Masses of heavy cumulonimbus appeared on the eastern horizon on the 28th, but only moderate showers fell on the Island

and conditions were generally fine by the 30th.

October.

R 12.70 : 161 pca

MMT : 21.75 in the highlands of St. Thomas to 8.00 in parts of St. Michael.

The first three days of the month were bright and mainly fine, with the wind gentle breeze ESE backing to N of E by the morning of the 3rd and gradually increasing in velocity; P was falling slowly. A marked convergence of strands of cirrus and cirrostratus towards the ESE was observed just before sunset on the 2nd. Fair conditions persisted throughout the day of the 4th with the wind increasing to moderate breeze ENE; the sky, however, became increasingly overcast with cirrostratus as the day advanced and a moderate breeze continued in the evening. P continued to fall slowly. By midnight of the 4th the wind backed to NE & NNE and increased to fresh to strong breeze and weather conditions became very noticeably under the influence of the incipient stage of hurricane "Hazel" which was probably centred at that time about 100 miles SE to SSE of the Island. There were frequent light showers accompanied by gusts of wind between 30 & 40 miles per hour from NNE & NE between midnight and 3 a.m., with the wind shifting gradually towards E, and light rain becoming almost continuous as dawn approached. It is estimated that the centre of the young hurricane was due S of the Island between 6 and 8 a.m. on the 5th, during which period there were intermittent squalls from the E & ESE. From dawn on the 5th there was persistent light driving rain, becoming heavier for about an hour during midmorning when strong winds blew from ESE & SE, frequently exceeding 30 miles per hour, and probably reaching 40 to 50 miles per hour at times. After midday the wind shifted to SSE and by 3 p.m. began moderating and gradually decreased and backed to ESE by 6 p.m.; it was calm in the evening. Light rain and drizzle persisted until 6 p.m., by which time the direct influence

of the passing hurricane had ceased and P was rising rapidly from the 3 p.m. reading of 29.76. It is noteworthy that there was no "ground swell" in the sea in advance of the passing of this hurricane; during the day of the 5th the surface of the sea became choppy and in the afternoon a slight "ground swell" became apparent from a southerly direction. Unsettled and overcast conditions followed on the 6th with intermittent moderate showers and light rain, the main air current being from ESE backing to E by evening. Conditions were bright but slightly unsettled on the 7th with the wind increasing to moderate breeze and backing to to ENE. During the 7th the weather came under the influence of a shallow LPA E of the Island and rainy conditions developed from about 10 p.m.; heavy rains fell over the northern part of the Island and totals up to 6.00 in. were recorded at places in the N of St. Lucy by 6 a.m. of the 8th. Thickly overcast and rainy conditions continued on the 8th. It seems likely that two E/W's passed over the Island during the morning, the wind shifting to ESE & SE between 6 and 8 a.m., backing to ENE between 8 and 10 a.m. and then shifting again to ESE & SE shortly after midday. Rain fell frequently throughout the day and was very heavy and persistent in St. Thomas and St. James where max. totals of 7.00-7.50 in. were recorded. Fairer conditions set in on the 9th and continued for three days. There was a considerable display of distant lightning in the N & NW during the night of the 9th as the LPA moved away. The wind was mainly gentle to moderate breeze SE & ESE during these days. P began rising on the 12th; isolated fairly heavy cumulonimbus clouds developed near the Island during the afternoon and one of these clouds moved in over the southeastern corner of the Island at sundown, passing inland over a narrow area and causing rainfall of 1.50-1.75 in. very locally. There followed a spell of dull overcast skies for nearly a week, sunnier and brighter conditions developing again on the 19th. Conditions during this period were persis-

tently unsettled with local showers every day and night, frequently of a thundery type. P fell slowly from 29.91 on the 14th to 29.83 on the 18th & 19th and then rose to approximately 29.88 from the 20th to 22nd; daily average wind velocity also decreased until the 19th, wind direction varying between ESE & ENE. Conditions continued slightly unsettled but generally fairer from the 20th to 23rd. P fell slightly again on the 25th & 26th with generally fine weather except for a gradually increasing number of distant rainclouds at first in the SW and later in S & SE. Conditions became unsettled by the evening of the 26th and local showers and drizzles fell during the night; wind direction was ENE on the 25th and E on the 26th. Indications of an E/W were more apparent on the morning of the 27th, and throughout the day there was a continuous procession of rainclouds passing to the S of the Island and forming nearer as the day advanced with the wind E & ESE. By 3 p.m. light to moderate rain reached the Island and fell intermittently throughout the evening and night. Unsettled conditions continued on the 28th & 29th as P rose and moderately heavy showers fell in some districts. It was fine on the 30th, but local showers fell on the 31st with the wind backing to ENE.

November.

R 7.80 : 99 pea

MMT : 13.90 in the highlands of St. Thomas to 3.80 in northeastern coastal districts of St. Lucy.

There were indications that the weather on the 1st & 2nd was influenced by a shallow E/W. P fell from 29.88 on the 31st October to 29.83 on the 1st and rose to 29.89 on the 3rd; the weather was showery with the wind shifting from NE & ENE through E to ESE. It was bright and sunny on the 3rd & 4th, but moderate local showers fell during the night of the 4th. P fell to 29.85 on the 5th & 6th when there were further local showers, totals between 1.50 & 2.50 in. being recorded in parts of St. Thomas and St.

James on the 6th. The 7th was a day of fairly heavy rain to NW & W of the Island, but only light or moderate local showers fell on the Island, wind direction varied slightly between E & ESE on these three days. The period from the 8th to 15th was generally fair to fine, except for light or moderate local showers during the night of the 10th; the wind was mainly E until the 13th when it began backing and was ENE & NE by the 15th. P was relatively low during the latter half of the month. Although there were many bright and fair to fine periods, the weather gradually became unsettled during the 16th to 18th with occasional very local showers; the wind shifted slowly from NE & ENE to E. There were frequent moderate showers over the Island beginning during the night of the 19th and continuing until the 21st; the heaviest rain of the month fell during the night of the 19th when max. totals of 3.00 in. were recorded at places on the Christ Church ridge. There were some very local showers on the 22nd, but fair conditions set in on that day and continued until the 25th. P rose to 29.83 on the 23rd and fell slowly to 29.76 on the 27th. The wind was mainly ENE & NE from the 21st to 26th and shifted to E on the 27th & 28th. Conditions were unsettled and showery on the 26th & 27th and max. totals of over 2.00 in. were recorded in parts of St. John on the 27th. The last three days of the month were fair and windy with increasing P.

December.

R 4.44 : 93 pca

MMT : 7.60 in the highlands of St. Thomas to 2.30 in southern St. James.

Two LPA's passed over the Island during the first week. P fell from 29.83 on the 1st to 29.77 on the 2nd and rose to 29.83 on the 4th, fell again to 29.78 on the 6th and rose to 29.82 on the 7th. The 1st was a fine day with the wind gentle breeze NE; cirrus clouds formed a conspicuous pattern across the southeastern sky during the afternoon. The weather was un-

settled and showery on the 2nd & 3rd with the wind gradually shifting through E to SE and moderating. The wind backed to ENE on the 4th and shifted to SE on the 5th & 6th with further unsettled and showery weather; a heavier type of rain cloud developed some 10 miles off the northeastern coast during the night of the 5th and a little thunder was heard. Fairer conditions set in on the 7th with increasing P and wind velocity and the weather became generally fair to fine by the 10th. Slightly unsettled conditions prevailed from the 11th to 20th with occasional light to moderate showers, and after two fine days on the 17th & 18th heavier showers fell on the 19th & 20th. The wind remained fairly steady at moderate breeze ENE moderating between the 19th and 22nd, with cool nights on the 20th & 21st. Generally fair conditions set in from the 21st onwards with velocity increasing on the 23rd & 24th, but the wind was relatively light from the 25th to the end of the month and gradually backed towards NE & NNE. These conditions induced cooler weather with relatively low night temperatures. The weather of the last two days of the month was probably influenced by a closed LPA centred NE of the Leeward Islands which later developed into hurricane "Alice", the first burricane of 1955. The last day of the month was fine but slightly hazy, with a light breeze from NE & NNE and the unusually low minimum temperature of 61.5° F during the night.

1955.

R 62.48 : 104 pca

Rainfall totals at individual stations ranged from 91.70 in the highlands of St. Thomas to 50.00 in parts of St. Philip and St. Michael.

Rainfall in the normal "dry season" was well below average, but "wet season" rainfall was above average except in the month of August.

The most outstanding event of the year was the hurricane "Janet" which struck the Island on September 22nd.

LCR's were fairly frequent in the month of September and also occurred, somewhat unusually, in the months of January and February.

January.

R 2.49 : 74 pea

MMT : 5.00 in eastern St. John to 1.25 in parts of St. Michael.

The weather at the beginning of the month was influenced by hurricane "Alice" travelling in a WSW or SW direction through the Leeward Islands. P and wind velocity were accordingly unusually low during the first week; P fell from 29.82 on the 1st, 2nd to 29.79 on the 3rd & 4th and rose to 29.88 by the 6th; wind direction was NW, W & WSW on the 1st and varied between SW & SE from the 2nd to 5th. Fine weather with cool nights was experienced on the 1st and 2nd, but unsettled conditions, with light and moderate showers, developed on the arrival of warm moist air on the 3rd. A LCR formed during midday on the 3rd very locally over parts of St. Peter where up to 1.00 in. was recorded. During the night of the 3rd heavy rain fell locally in the hills of St. Peter and St. James where max. totals of 1.50-2.00 in. were recorded. Conditions on the 3rd, 4th & 5th were unusually hot for January and were more typical of August-September weather; fairly heavy showers fell on some southern coastal districts during the morning of the 4th, and in the afternoon a heavy LCR developed over a small area in the eastern districts of St. John where max. totals of up to 4.00 in. were recorded. During the night of the 5th the southerly air current was replaced by a northeasterly current and mainly fair conditions set in, although some distant rain clouds were observed on the southern horizon until the 8th. The weather was mainly fine and dry from the 9th to 17th with fairly high P and fairly constant wind direction at E & ESE; wind velocity was low from the 12th to 15th. The wind backed to NE & ENE on the 18th and frequent light showers fell. It was fine again from the 19th to

21st, with the wind shifting to E & ESE on the 19th & 20th and backing to NE on the 21st and moderating to light breeze. The 22nd was a day of light or moderate rain and drizzle and little sunshine; rain was heaviest on the hills and in southeastern districts where 1.00-1.50 in. were recorded. Fair and windy conditions set in during the night of the 22nd and continued until the 25th with occasional slightly unsettled periods; wind direction was fairly constant at ENE. P fell from 29.99 on the 24th to 29.85 on the 26th and rose to 29.95 by the 29th. The wind backed to NNE & NE on the 26th and the conditions which prevailed during the 26th to 28th closely resembled those normally associated with an E/W; there were light and moderate showers and the wind shifted to ESE on the 27th & 28th. The last two days of the month were mainly fine.

February.

R 1.68 : 76 pca

MMT : 4.00 in the highlands of St. Thomas to 0.25 in northern St. Philip.

The first five days were mainly fair with occasional light showers and gentle to moderate breeze E & ENE. P varied slightly above or below 29.90 during the first nine days and then rose to 29.96 on the 12th. Moderately heavy local showers fell during the night of the 5th with max. totals of 0.50-0.75 in. in parts of St. Thomas and St. John. Cooler, windy conditions developed on the 6th & 7th with fairly frequent light showers; the wind backed to ENE & NE. The weather was fine from the 8th to 12th; wind velocity moderated slightly and direction remained constant between E & ENE. Slightly unsettled conditions began during the night of the 13th and continued until the 18th, with stronger winds between ENE & E and partially overcast skies. P began falling on the 17th and remained below 29.90 until the 26th, falling to 29.81 on the 21st. There was a period of relatively light winds from the 20th to 27th when wind direction changed

slowly from ESE on the 20th, through S, W & NW on the 21st & 22nd, remained between NW & N from the 23rd to 26th and shifted to NNE & NE on the 27th & 28th as velocity increased again. Noticeably humid conditions developed during the night of the 20th, and the southerly wind current on the 21st caused the formation, at an unusual time of the year, of a LCR over the hills of St. Peter where max. totals of up to 2.00 in. were recorded; this was followed by a similar development over the coastal districts of St. Philip during the afternoon of the 22nd as wind direction shifted from SW to NW; max. totals of 1.50-2.00 in. were recorded at places in eastern St. Philip. It was fine and dry from the 23rd to 26th while a northerly air current persisted; minimum night temperatures were relatively low, a minimum of 63.0°F being recorded during the night of the 26th. Wind velocity increased on the 27th & 28th, P rose slightly above 29.90 and conditions were generally fair to fine and dry.

March.

R 0.65 : 34 pca

MMT : 1.75 in southern St. Thomas to less than 0.50 over the greater part of the Island.

It was fine on the 1st but slightly unsettled conditions with light showers and cool NE winds from the 2nd to 4th, moderate showers falling over the northern end of the Island on the 3rd and over the hills on the 4th. It was fine from the 5th to 8th, but moderate local showers fell during the night of the 8th and light showers on the 9th. Fairly windy conditions prevailed from the 6th to 11th with ENE winds. P fell rapidly to 29.84 on the 12th and wind velocity moderated on the 12th & 13th, but except for a local moderate shower over the central hills during the night of the 12th the weather was mainly fair to fine and dry from the 13th to the end of the month. Wind direction was fairly constant at ENE but shifted to E from the 27th to 29th and to ESE on the 30th; wind velocity was steady at moderate

breeze. The weather was pleasantly cool during the first three weeks, becoming appreciably warmer during the last week.

April.

R 0.62 : 26 pca

MMT : 1.35 in the highlands of St. James to less than 0.50 over a wide area of the Island.

Appreciable falls of rain were recorded on very few days, the greatest falls recorded being between 0.50 & 1.00 in. on the 4th & 6th in very small areas. In some districts less than 0.20 in. was recorded.

It was generally fair during the first two days with an increasing amount of cirrostratus. The sky was persistently partially overcast and there were very local moderate and moderately heavy showers during the mornings of the 3rd & 4th, max. totals of 0.75 in. being recorded on the 4th at places in St. Joseph. Wind direction shifted from ENE & E on the 1st & 2nd to E on the 3rd to 5th with a moderate breeze during these days. Wind velocity fell appreciably during the 6th to light to gentle breeze and backed during the latter half of the day to ENE & NE. A moderate LCR developed over southwestern coastal districts of St. James after midday on the 6th and spread to coastal districts of St. Michael where max. totals of 1.00 in. were recorded very locally in Bridgetown. The weather was windy but mainly fine from the 7th to 15th except for occasional light local showers; wind direction was mainly E. The weather was very dry in all districts from the 16th to the end of the month except for a local moderate shower in central and northern districts during the night of the 25th. There was a period with partially overcast skies and dull weather from the 17th to 22nd and the wind was persistently from ESE & SE from the 19th to 24th. The wind backed to ENE & NE on the 25th and conditions became clear with good visibility. The weather was bright and sunny during the remainder of the month, with windy conditions on the 28th & 29th, wind direction varying

between ENE & ESE. There were occasional local drizzles during the last two days of the month.

May.

R 1.07 : 33 pca

MMT : 2.30 in central St. John to 0.25 in southern St. James.

The first four days were bright and sunny with ESE winds and occasional light to moderate very local showers at night. P was below average, falling to 29.84 on the 4th. Slightly unsettled conditions persisted until the 14th; showers were generally light and unevenly distributed, but nearly 0.50 in. was recorded in the eastern hills during the morning of the 8th. Bright, sunny weather with strong E winds prevailed from the 15th to 22nd, with a day-time average velocity of between 21 & 22 miles per hour on the 19th & 21st. Early morning light to moderate showers were widespread on the 20th, the showers being heaviest in southern coastal districts where totals up to 0.50 in. were recorded. Conditions were fine and dry from the 22nd to 24th. The 25th was cloudy over the southern half of the Island, and showers totalling up to 0.50 in. fell in parts of Christ Church during the evening while no rain fell in central and northern districts. The weather was dry and windy during the remainder of the month with E & ESE winds with only occasional light very local showers.

June.

R 7.87 : 145 pca

MMT : 13.00 in the highlands of St. Thomas to 3.35 in southern Christ Church.

The weather was bright and sunny during the first five days with the wind moderate breeze E on the 1st shifting to SE & S on the 2nd, possibly under the influence of a very small LPA, and then constant at ESE for several days. Occasional light local showers fell during the first three days, but moderately heavy showers fell during the nights of the 4th & 5th; max.

totals of 1.00 in. were recorded at places in St. Joseph on the night of the 4th. P fell to 29.85 on the 5th and rose very slowly to 29.93 on the 13th. Conditions were slightly unsettled from the 6th to 8th; moderate showers fell on the 7th, especially over northern districts where max. totals of 1.00 in. were recorded. It was bright and generally fine on the 9th. There were moderate local showers on the 10th and then fair but windy conditions from the 11th to 13th, the wind backing to ENE during the afternoon of the 13th. P fell slightly from the 13th to 16th. Unsettled weather developed on the 14th with moderate showers in some districts during the day; there was a short thunderstorm during the evening with fairly heavy rain especially over parts of St. John where max. totals of up to 2.00 in. were recorded. Conditions were mainly fair from the 15th to 17th, although local showers fell at night in some districts. P rose to 29.94 on the 18th; the weather was overcast and dull with moderately heavy showers in some districts; the wind shifted to ESE and moderated. On the 19th P fell to 29.88 and the wind backed to ENE and increased to fresh breeze; conditions were fair during the day but became unsettled in the afternoon with local light and moderate showers; some lightning was seen during the first part of the night; heavy showers fell after midnight with squalls exceeding 30 miles per hour; distant thunder was occasionally heard. Fairer weather prevailed from the 20th to 23rd as P rose to 29.96; the wind was moderate to fresh breeze E; occasional light to moderate showers fell, but fairly heavy showers with thunder fell over the central districts in the early morning of the 24th. P fell to 29.85 on the 26th and rose to 29.92 on the 27th. The weather was unsettled and showery, with occasional thunder, from the 24th to the end of the month, the showers being very unevenly distributed over the Island.

July.

R 7.13 : 114 pca

MMT : 11.75 in parts of St. Peter and St. Andrew to 4.00 in southeastern coastal districts, central St. Philip and western St. James.

The month began with showery weather and bright sunny periods under the influence of a succession of small E/W's, the troughs of which passed over on the 1st, the 3rd-4th and the 5th-6th respectively. Rain was heaviest in northern districts where totals of over 4.00 in. were recorded at some places in the first four days. Occasional thunder accompanied the showers. Wind direction varied from ENE & NE to ESE & SE during the first week, and became constant at approximately E from the 8th to 19th. Wind velocity was fairly high during the first nine days and then gradually moderated. Conditions were mainly fair from the 7th to 19th with fairly high average sunshine and only light to moderate local showers from time to time. A well-defined E/W passed over the Island on the 20th; except for moderately heavy showers in northern districts there was unusually little rain associated with this wave; P fell from 29.96 on the 19th to 29.91 on the 20th. Wind velocity on the 20th was low and direction varied from N & NNE in the morning to SSE in the late afternoon. There was a fair to fine spell from the 21st to 28th with only occasional light local showers. A very small E/W passed over on the 24th. The 25th & 26th were windy, misty days and visibility improved on the 27th & 28th as wind velocity moderated again. An unusually calm spell began on the night of the 28th and continued throughout the remaining days of the month. P rose gradually from 29.88 on the 28th to 29.93 on the 31st. Wind direction was variable at surface locally, but the main air drift was from NE on the 29th, N during the early part of the day of the 30th and then SW after a calm period, and finally SSW on the 31st. These conditions caused the formation of LCR's in various districts on the 29th, 30th & 31st. There were also isolated fairly heavy showers over very

local areas during the nights of the 30th & 31st under almost calm conditions.

August.

R 6.31 : 86 pca

MMT : 9.50 in northern St. Peter to 4.25 in eastern St. John.

The spell of calm weather during the last three days of July continued during the first two days of this month and fairly heavy LCR's developed; max. totals of 3.00-3.50 in. were recorded in southwestern districts on the 1st and in parts of St. James and southwestern St. Thomas on the 2nd. A small E/W passed over the Island during the morning of the 3rd causing heavy showers over southeastern and southern districts with local squalls on the S coast. During the afternoon of the 3rd the local weather came under the influence of hurricane "Connie" when it was centred at about 16°N 46°W; P began falling and the wind backed to N by evening; there was a light shower over western districts during the night. The sky was mainly overcast with high cloud on the 5th as the gentle breeze backed through NW to W; P fell to 29.77. Brighter weather followed on the 6th as the hurricane moved away and P rose rapidly; the wind was gentle to moderate breeze SW & SSW during the morning, backing later to SSW & S. A SE breeze persisted on the 7th and there were local moderate showers during the afternoon. On the 8th the wind backed to NE during the afternoon and velocity decreased and as a result a moderately heavy LCR formed over a small area in southwestern districts. During the night of the 8th a small E/W, (on which hurricane "Diane" later formed), passed over the Island. The wind was light on the 9th varying between ESE & SSE; a LCR formed over northern districts and parts of St. Joseph. The weather was mainly fair from the 10th to 16th with the wind light to gentle breeze between SSE & SSW on the 10th & 11th, between ESE & SSE on the 12th to 14th and backing to E on the 15th & 16th. There were occasional local showers especially on the morning of the

11th and at midday on the 13th. A spell of unsettled weather began on the 17th and continued until the 23rd with occasional thundery showers. A small E/W passed over on the 19th when fairly heavy showers fell in most districts. P fell on the 21st & 22nd and the wind backed to ENE & NE; showers fell in all districts. The wind was light breeze S on the 23rd and a LCR developed over the northern end of the Island; max. totals of 3.00 -3.50 in. were recorded in parts of St. Peter and St. Lucy. The weather was fair to fine from the 24th to 30th with the wind mainly gentle breeze E & ESE; a local moderate shower fell in southeastern districts during the night of the 28th. The wind backed to ENE & NE on the 30th & 31st and thundery showers developed on the 31st.

September.

R 10.68 : 140 pca

MMT : 19.00 in the highlands of St. Thomas to 6.00 in northeastern districts.

The most outstanding event of this month was the occurrence of hurricane "Janet" at Barbados on the 22nd, the only hurricane to strike this Island in the 60-year period under review. The weather during this month was also of particular interest because of the large number of LCR's which developed over the Island and the relatively large number of occasions on which lightning struck objects on the Island.

An E/W influenced the weather during the first few days. The ENE wind on the last day of August continued during the morning of the 1st and shifted later in the day to E. During the next three days the wind varied between ESE & SSE with low velocity. There were heavy local showers with thunderstorms on the 1st and light and moderate local showers on the 2nd & 3rd. A heavy LCR developed mainly over northern districts on the 4th and max. totals up to 6.00 in. were recorded at places in St. Peter. A fairer spell with higher P and stronger E and ENE winds followed from the 6th to

9th with occasional light and moderate local showers becoming heavier on the 9th. The wind shifted to SE & SSE on the 10th and a LCR fell over coastal districts of St. James and St. Peter during the afternoon. P began falling on the 10th and remained low until the 15th, during which period the weather was influenced by a slow cyclonic movement possibly associated with hurricane "Ione" passing far to the N of the Island. Except for isolated showers, conditions were fair on the 11th as the wind backed to NE; the sky became increasingly overcast with cirrus and then cirrostratus which tended to converge to E early in the afternoon and then later to ENE. Conditions were very unsettled on the 12th with the sky persistently overcast with altostratus and cirrostratus; the wind was N & NNE during the first half of the day and towards evening the air drift was WNW; fairly heavy distant rain clouds developed in the northern half of the sky and there were a few moderately heavy very local showers over the Island. Overcast conditions continued on the 13th with the wind gradually backing from NW to SW; there were occasional fairly heavy local showers during the day and heavy rains from SW during the night when max. totals of 3.50-4.00 in. were recorded in some districts. Further heavy rain moved in over Christ Church and St. Philip from SSW on the 14th and totals up to 2.50 in. were recorded at some places. P rose from 29.80 on the 15th to 29.88 on the 17th. Light S winds continued on the 15th with local showers in southeastern districts. The weather was fair to fine from the 16th to 18th with the wind backing to SE & ESE on the 16th and to E & ENE on the 17th & 18th and increasing to gentle to moderate breeze. P fell again on the 18th & 19th as a small E/W passed over; LCR's with thunderstorms developed over northern districts on the 19th when the wind was light breeze SE & S and mainly over parts of St. Joseph on the 20th when the wind was light breeze SSW. P rose again on the 20th & 21st until the weather came under the influence of hurricane "Janet", the description

of which is separately recorded in Appendix III . There were local moderate showers on the morning of the 23rd, after which the weather became fair with slowly rising P; wind direction continued between SSE & ESE and backed to ENE by the evening of the 25th. P rose to 29.88 on the 26th and 27th and fell again to 29.77 on the 29th. Very light winds prevailed from the 26th to 30th, apparently under the influence of a very weak cyclonic circulation, varying between E & NE during the 26th to 28th and backing through NW & W to SW on the 28th & 29th. LCR's developed each day from the 26th to 29th inclusive, being heaviest on the 28th & 29th when max. totals of 2.00-3.00 in. were recorded at some places. Conditions were fairer on the 30th with little rain on the Island.

October.

R 9.78 : 124 pca

MMT : 15.50 in the highlands of St. Thomas to 7.00 in coastal districts of St. John.

Rainfall was very unevenly distributed during the month. Rain fell every day of the month and thunder was frequently heard. Although heavy rain fell in small areas on several days, there was no day on which heavy rain fell generally over the Island.

The wind was mainly light to gentle breeze E during the first week. Rainfall totals of 1.00 in. or a little over were recorded at some places on four of the first eight days, and totals up to 3.00 in. were recorded in parts of St. Thomas and St. James on the 3rd. P fell to 29.80 on the 8th and continued relatively low for the remainder of the month. The 9th to 17th was a period of frequent but less heavy showers, although totals of 0.75-1.00 in. were recorded on three days. The wind increased to moderate breeze ESE on the 9th, backed to NE on the 10th and shifted to S on the 11th as the trough of a small E/W passed over. The wind backed to ENE & E on the 14th & 15th and then shifted to S on the 16th as P fell to 29.75 on

the 15th and rose to 29.82 on the 17th & 18th. There was a period of very low wind velocity from the 16th to 20th. Daily rainfall totals seldom exceeded 0.50 in. from the 18th to 24th, except on the 18th when totals of 1.50 in. were recorded very locally in parts of Christ Church. Wind velocity was low during the last six days of the month and wind direction was mainly from S. Heavy local rain fell on the 26th when max. totals of 3.00 in. were recorded at places in St. Thomas and St. James. The 30th was a day of very unstable (and apparently complex) conditions causing very unevenly distributed rainfall; totals of 5.00-6.00 in. were recorded in southeastern districts of St. Philip and in parts of St. Lucy, while in some other districts only 0.50 in. was recorded.

November.

R 9.45 : 122 pca

MMT : 12.25 in southeastern St. Thomas and in parts of St. Peter to 6.00 in parts of St. Michael.

The weather was mainly bright and sunny during the first four days of the month, except for local moderate showers over the southeastern corner of the Island on the morning of the 3rd. P was low at 29.76 on the 1st, rose to 29.86 on the 3rd and then began falling again. Wind direction was generally E. A period of unsettled and showery weather began on the 5th and continued until the 16th. P was constant at a little above 29.80 during this period, except on the 10th when it fell to 29.77 and on the 14th to 29.70; P rose to 29.80 by the 18th. The showery spell began with a LCR over northern districts of St. Michael on the 5th when max. totals of 1.00-1.50 in. were recorded over a small area. Showery conditions developed over almost all districts on the morning of the 6th and unevenly distributed showers fell every day until the 16th. Max. totals of between 1.00 & 2.00 in. were recorded at some places on the 6th, 7th & 8th, and over 3.00 in. in parts of Christ Church and southwestern districts on the 9th. Sho-

wers were scattered and less heavy on the 10th, 11th & 12th, but falls of 1.00-1.50 in. were recorded at some places on the 13th & 15th. The weather was bright and sunny from the 17th to 24th. P was a little below 29.80 from the 17th to 23rd and rose to 29.82 on the 24th. The wind was mainly light to gentle breeze ENE on the 17th and 18th and backed to NE from the 19th to 22nd. Wind velocity was unusually low on the 20th. There were local moderate showers during the nights of the 19th & 23rd, otherwise there was little rain during the period from the 17th to 24th. There was a conspicuous convergence of cirrostratus towards SSE on the 24th and another showery period began that night and continued until the 30th. Showers were very irregularly distributed and max. totals of between 1.00 & 2.00 in. were recorded at some places on the 25th & 28th. Wind direction was mainly N of E on the 24th & 25th and ESE on the 26th to 28th with low velocity. It was fine on the 30th with wind moderate to fresh breeze E.

December.

R 4.75 : 100 pca

MMT : 6.50 in western St. Peter to 2.20 in central St. Philip.

P rose slowly during the first seven days from 29.84 on the 2nd to 29.87 on the 7th and was high from the 8th to 10th at a little over 29.90. The weather was fair and sunny during the first ten days, although light to moderate local showers fell every day and were widely distributed on the 7th; the wind was gentle breeze ENE & E. P fell rapidly on the 11th to 29.85 and showers spread generally over the Island, but were heaviest in southeastern districts where max. totals of 1.00-1.50 in. were recorded. The weather was fine from the 12th to 18th. P rose to 29.89 on the 14th, fell slightly on the 15th and rose to 29.90 on the 18th; gentle to moderate E winds prevailed; there were moderate and moderately heavy showers during the early morning of the 18th. P fell rapidly to 29.81 on the 20th and rose

to 29.87 on the 23rd. Bright and sunny weather continued with only occasional light to moderate local showers; gentle to moderate E winds continued, but velocity was relatively low on the 20th & 21st. The wind backed to gentle to moderate breeze ENE from the 23rd to 25th. P was low during the last week of the month, falling to 29.78 on the 27th, rising slightly on the 28th and falling to 29.76 on the 30th. Wind velocity was relatively low. Wind direction shifted frequently between ENE & ESE during the last six days of the month. Very local moderate and moderately heavy showers fell during the nights of the 25th & 26th; otherwise mainly fine conditions prevailed until the night of the 27th when a spell of weather of a type unusual in December began. During the first half of the night of the 27th fairly frequent distant lightning was seen in the NE & NNE; there was a heavy dew that night and a marked tendency for a columnar type of cumulus to form. The day of the 28th was mainly fair over the Island but a fairly heavy type of cumulonimbus was developing in various directions. There was rain in almost all districts during the evening of the 28th, being heaviest in southern and southwestern districts where max. totals of 1.00-1.50 in. were recorded; thunder was occasionally heard. It was overcast and sultry on the 29th with abnormally low wind velocity; rain fell in all districts during the afternoon and max. totals of up to 3.00 in. were recorded at places in St. Joseph and 2.00-2.50 in. in southwestern districts. Unsettled conditions continued until the 30th, with fairly heavy rain in the vicinity of the Island but little further rain on the Island. It was fine again on the 31st.

1956.

R 65.59 : 109 pca

Rainfall totals at individual stations ranged from 104.00 in the highlands of St. Thomas to 46.00 in southern St. James and northeastern

coastal districts.

Rainfall in January, February and April was well above average.

Rainfall was appreciably below average only in May, August and November.

Strong gale winds were experienced on the 15th of June.

The number of LCR's which developed in January was unusually large for that month.

January.

R 6.29 : 187 pca

MMT : 10.40 in the hills of St. George and in western St. Thomas to 3.40 in southern St. Michael.

The month began with unsettled weather conditions which became abnormal on some days during the first half of the month. P continued to rise on the 1st & 2nd after the period of low P during the last days of December. Wind direction was mainly E at relatively low velocity. There were moderate local showers during the night of the 1st, and heavy but very local showers on the 2nd when nearly 2.00 in. were recorded very locally in the hills of St. George; distant lightning was seen in the SE and S during the same night. P began falling rapidly on the 3rd and a period of unusually low P followed from the 3rd to 8th reaching the lowest 3 p.m. reading of 29.695 on the 6th. The wind backed to NNE on the 3rd, shifted gradually to ENE by the 5th and backed again to NNE & N by the 7th & 8th; wind velocity continued to be relatively low, except for a temporary increase on the 5th & 7th. Conditions were unsettled and the sky overcast from the 3rd to 6th, with very unevenly distributed rainfall over the Island. Showers were heaviest during the night of the 4th when max. totals of 1.00-2.00 in. were recorded at some places in St. James. The weather was fine and dry on the 7th & 8th with rising P. Wind velocity increased temporarily to fresh breeze NNE & N on the 7th. P rose rapidly to 29.83 on the 9th and then fluctuated slightly above and below 29.80 from the 10th to 15th. Wind velocity was abnormally low during

this period; wind direction was mainly ENE & NE from the 9th to 11th and ESE to SSE from the 12th to 15th and variable locally on some days. The 9th was overcast and sunless, with local showers. Conditions favoured the development of LCR's from the 10th to 14th. Heavy local rain fell over an area from southwestern St. Thomas to eastern St. George on the 10th and max. totals of 2.25 in. were recorded; and in St. James on the 11th where max. totals of 4.50 in. were recorded at some places; the rains on these two days were accompanied by thunder. Little rain fell on the Island on the 12th & 13th, but fairly heavy rain clouds of a thundery type could be seen in various directions, and LCR's developed off the northwestern coast each afternoon. There were local fairly heavy showers in southern districts during the morning of the 14th, followed by clear sky and brilliant sunshine with the wind light breeze SSE. During the early part of the afternoon a heavy LCR developed over a small area in St. Peter where max. totals of 3.25 in. were recorded. There was rain generally over the Island on the 15th with a slow wind drift from ESE or SE; totals were least in northern districts and greatest in parts of St. Thomas, St. Joseph and St. John where 2.50 to 3.00 in. were recorded. Fair conditions set in from the night of the 15th and persisted until the 22nd. P rose to 29.95 on the 17th and was then steady at a little below 29.90 until the 25th. Wind increased to gentle breeze ESE on the 16th & 17th and then backed to ENE & E. There were local light and moderate showers from the 23rd to 26th; then mainly fair weather again until the night of the 30th. P rose steadily to 29.93 on the 29th and then fell to 29.90 on the 31st. Wind direction continued between E & ENE for the remainder of the month, increasing slightly in velocity between the 25th & 28th and then moderating again to a low velocity on the 31st. There was fairly heavy unevenly distributed rain on the 31st; little rain falling in northern and eastern coastal districts, but max. totals

of 2.25 in. were recorded at some places in central districts.

February.

R 3.65 : 166 pca

MMT : 7.00 in the highlands of St. Thomas to 1.50 in coastal districts of St. John.

The weather was unsettled with frequent showers during the first eight days, with the exception of the 6th. Showers were moderately heavy in some districts during the night of the 3rd and heavy rain fell over southern districts during the afternoon of the 4th, especially in parts of Christ Church and southern St. Michael where max. totals of 2.50-3.00 in. were recorded. Wind direction was mainly between E & ENE; winds were gentle at first increasing to fresh breeze on the 6th. P was constant at a little above 29.86 from the 9th to 20th. The 9th to 12th were almost rainless days in all districts, but scattered showers were frequent from the 13th to 20th. Wind direction was constant at approximately ENE, varying between gentle to moderate and moderate to fresh breeze. P fell on the 21st & 22nd to 29.83, remained at about 29.85 on the 23rd & 24th and then rose to a little over 29.90 during the last days of the month. The wind shifted to ESE & SE from the 22nd to the morning of the 24th with relatively low velocity, and backed to ENE & NE by the 26th with increasing velocity and shifted to E by the end of the month. The weather was unsettled during the last week with frequent widespread showers which became moderate in some districts on the 26th & 28th.

March.

R 1.82 : 94 pca

MMT : 3.90 in the highlands of St. Thomas to less than 0.75 in southern St. James and in parts of St. Lucy.

P varied only a little above or below 29.90 from the 1st to 19th except on the 5th & 6th when it fell to 29.87. Light showers fell in some

districts almost every day, especially in the upland districts. Max. totals of 0.30-0.50 in. were recorded at a few places during the night of the 3rd, on the 14th and during the night of the 15th. Wind direction was constant between ENE & E, shifting to ESE on the 15th, 18th & 19th. Wind velocity was irregular. P fell rapidly from 29.93 on the 19th to 29.83 on the 21st and remained below 29.90 for the remainder of the month, except on the 27th. The period from the 17th to 29th was mainly dry, but some local moderate showers fell on the 21st & 24th. The wind was gentle to moderate breeze E but backed to ENE on the 28th and shifted to E on the 29th and to ESE on the 30th & 31st; velocity increased to moderate to fresh breeze on the 31st. Moderate showers fell in some districts on the 30th and during the night of the 31st.

April.

R 3.65 : 156 pca

MMT : 7.10 in the highlands of St. Thomas to 1.50 in southern Christ Church.

P fell very slowly from 29.92 on the 1st to 29.85 on the 8th. The weather was mainly fair with occasional light local showers, becoming moderate on the morning of the 7th. The sky was frequently partially overcast with altocumulus cloud; moderate to fresh E winds prevailed. P rose slowly to 29.87 on the 11th while wind velocity moderated and wind direction shifted to ESE; the weather was dry except for light local showers. P fell rapidly to 29.82 on the 12th & 13th, with the wind at its lowest velocity for the month on the 13th shifting in direction to SE & S. The weather at Barbados on the 11th appears to have been influenced by the unusual occurrence of a cold upper trough extending as far SE as Barbados. There were moderately heavy isolated showers in the early morning of the 12th with the wind light breeze E which shifted to SE during the day. It was mainly overcast with light to moderate showers over the Island at intervals, while

the eastern boundary of a persistent area of rain was situated some 10 to 25 miles S & SW of the Island. Fairly heavy local showers fell during the early morning of the 13th, followed by heavy rain over parts of St. Michael and the leeward parishes during the first half of the day; max. totals of 3.50-4.00 in. were recorded at some places in St. James; eastern and south-eastern districts remained dry. P rose rapidly to 29.88 on the 14th and to 29.90 on the 16th; then fell again to 29.83 on the 18th and rose to 29.90 by the 21st. The week of the 14th to 21st was mainly fine and dry, with light to moderate ESE winds backing to E. P remained steady for the remainder of the month at about 29.90, with wind velocity increasing to fresh breeze and direction varying between E & ENE from the 22nd to 27th and steady at E from the 28th to 30th. The 30th was a day of strong winds averaging approximately 25 miles per hour for several hours during the day. A showery spell developed on the afternoon of the 22nd and continued until the 28th; showers were heaviest on the 24th when max. totals of 1.00-1.50 in. were recorded in some districts. The last two days of the month were fine and dry.

May.

R 2.03 : 63 pca

MMT : 3.20 in the hills of St. George and southern St. Thomas to 1.00 in northern St. Michael, southern St. James & northeastern St. Lucy.

With the exception of the 1st & 7th, the first nine days of the month were showery and windy. P fell on the 3rd and remained below average for the month until the 9th, the lowest reading during this period being 29.83 on the 8th. Max. rainfall totals during this period were 0.50 in. during the night of the 2nd and in the morning of the 4th. Wind frequently increased to fresh breeze E. There was a dry spell from the 10th to 15th with wind velocity moderating and wind direction constant at E & ESE; there was an increasing amount of cloud, with total hours of sunshine falling to 1.2 hours on the 15th. The Island came under the influence of moister air on the 15th

and a LCR with thunder developed off the coast of St. James and St. Peter after midday. There were unevenly distributed moderately heavy showers during the night of the 16th, when max. totals of 1.25 in. were recorded in parts of St. Andrew and Christ Church but little or no rain fell in central districts. P rose to 29.95 on the 17th and remained fairly high until the 25th. A windy spell followed from the 17th to 25th, with wind direction fairly constant at E. There were a few light showers during the period from the 17th to 20th, and a fairly heavy shower with thunder on the morning of the 21st when max. totals of up to 1.00 in. were recorded in central districts. The last ten days of the month were dry, sunny and fairly windy, wind direction being mainly E until the 30th & 31st when the wind shifted to ESE.

June.

R 6.59 : 122 pca

MMT : 11.60 in the highlands of St. Thomas to 4.25 in northern St. Philip and southern St. Lucy.

The first fourteen days of the month were in general sunny, windy and dry. Light or moderate showers fell each day or night from the 10th to 14th but were very unevenly distributed; totals ranged between 0.50-1.00 in. for the fourteen-day period. P varied a little above or below 29.90 from the 1st to 9th, rose to 29.93 on the 10th and then fell slowly to 29.86 on the 15th. Wind direction was E to ESE and there was frequent mistiness and haziness. An active E/W passed over the Island on the 15th with fairly heavy rain and showers accompanied by thunder and gale-force E winds with maximum gusts of 50-60 miles per hour; heaviest rains fell in parts of St. John where max. totals of 2.50 in. were recorded. Fairly heavy rain was again widespread on the 16th and max. totals of 2.00-2.25 in. were recorded at some places; the wind shifted to ESE, SE & SSE and moderated to a gentle breeze. A fairer period followed from the 17th to 24th with P rising and

remaining at a fairly high level, reaching the unusually high 3.00 p.m. reading of 30.007 on the 23rd. The wind was mainly moderate breeze E, shifting to ESE on the 22nd & 23rd. Moderate and moderately heavy showers fell over small areas during the night of the 19th and on the 22nd. P fell to 29.93 on the 25th and remained fairly constant for the last five days of the month. There was a windy spell from the 26th to 29th, the wind increasing to fresh and strong breeze E. There were unevenly distributed moderate and moderately heavy showers from the 26th to 30th; max. totals of 1.25 in. were recorded in the central hills during the night of the 27th.

July.

R 6.35 : 101 pca

MMT : 11.00 in the highlands of St. Thomas to a little less than 3.00 in parts of St. Lucy.

P was persistently high during the first half of the month and the weather was relatively dry. There were some unevenly distributed showers; some districts recorded a total of less than 1.00 in. in the first sixteen days and the wettest districts recorded 2.00 in. The usual windy conditions prevailed; wind direction varied between E & ENE. A marked change in the weather was initiated on the 15th with the arrival of a rapid succession of three E/W's which moved over the Island between the 17th and 21st. Fairly heavy showers were widespread between the 17th & 20th, with a max. total of 2.00-2.50 in. in some districts during the early morning of the 19th. Wind direction varied between NE & S during these five days and velocity fell rapidly after the 15th and remained low until the 24th. The 22nd & 23rd were fine, dry days. A small E/W passed over on the 24th-25th causing moderate showers. The last six days of the month were windy, with mainly E to ENE winds. There were fairly heavy showers in central districts during the night of the 27th when totals up to 1.50 in. were recorded at some places; and on the night of the 28th moderately heavy showers fell in some

districts. The 29th & 30th were dry and misty. The weather came under the influence of the first phase of another E/W on the 31st, the wind backed to ENE & NE and was gusty at times; P fell appreciably and there were moderately heavy showers during the night when max. totals of 1.00 in. were recorded in some districts.

August.

R 10.55 : 144 pca

MMT : 16.00 in the highlands of St. Thomas to 5.50 in parts of St. Michael and Christ Church.

The weather on the 1st was under the influence of an E/W, the trough of which passed over during the morning; the wind was light to gentle breeze E & ENE in the early morning and shifted to ESE & SE after midday; showers were widespread and heavy over small areas, the greatest total for the day being nearly 2.50 in. in northern St. Michael; a moderate thunderstorm occurred over southwestern and western districts during the afternoon. P continued to fall to 29.83 on the 2nd as another E/W passed over. The wind backed to ENE during the night of the 1st and remained N of E throughout the 2nd; the showers accompanying this wave were only moderate and were unevenly distributed. The weather on the 3rd was bright with light local showers and gentle ESE winds as P rose again. Conditions were slightly unsettled and windy on the 4th, but only light showers fell. P began falling on the 5th as another E/W approached; the weather was mainly fine, but misty and thin cirrostratus had spread over from the S & SE by sunset; wind velocity decreased to gentle breeze ENE backing to NE during the night. Fair conditions were maintained during the day of the 6th with P falling to 29.85; the sky became increasingly overcast during the late afternoon and evening and moderate and fairly heavy showers fell at intervals during the latter half of the night; max. totals of 1.25 in. were recorded at places in the hills of St. Peter. The trough of the E/W passed over during the morning

of the 7th with the wind shifting to ESE and local moderately heavy showers fell. Rainy conditions prevailed generally over the Island throughout the afternoon with occasional thunder, followed by a thunderstorm in the late afternoon and evening centred mainly over northeastern districts where max. totals up to 4.00 in. were recorded. P rose rapidly on the 8th and fairer conditions set in with only light local showers and wind gentle breeze SE or ESE. The morning of the 10th was overcast and rainy with the wind light breeze NE & ENE and falling P. During the afternoon of the 10th the weather came under the influence of hurricane "Betsy" centred some 300 miles ENE of the Island. The centre of the hurricane passed about 140 miles N of the Island between 3 and 5 a.m. of the 11th, and the day was mainly fair with wind gentle to moderate breeze SSW & S. Fairly heavy showers moved across small areas of the Island in the afternoon and early evening from S to N. Fairer conditions set in on the 12th as P rose to 29.95 on the 13th. The weather was generally fair to fine on the 14th, 15th & 16th; wind velocity was very low on the 14th from NE & NNE with P falling slightly on the 15th as a squally E/W with a weak circulation passed over the Leeward Islands. The wind shifted to ESE & SE during the afternoon of the 16th, but backed again at sunset to ENE as another small E/W approached. There were isolated small thundershowers on the morning of the 17th as the wind shifted to ESE & SE. The weather was fair to fine from the 18th to 20th with only occasional very local showers. P fell slowly to 29.87 on the 21st and there were thundery showers associated with a small E/W the trough of which passed over during the night of the 21st. Conditions were unsettled on the 22nd with the wind light breeze SE and heavy unevenly distributed showers; max. totals of 1.75 to 2.00 in. were recorded in central districts. The weather was fine on the 23rd with the wind backing to ENE and increasing in velocity to moderate breeze occasionally. The weather on the 24th & 25th suggested the passing

of two small E/W's on consecutive days, with conditions favouring the development of a fairly heavy LCR over parts of St. James and St. Peter during the afternoon of the 25th; showery weather with rising P followed on the 26th. There were moderately heavy local showers during the night of the 27th, followed by fairly heavy but unevenly distributed rain on the 28th when max. totals of 2.50-3.00 in. were recorded in central districts and less than 0.25 in. in parts of St. Lucy. The last three days of the month were mainly fair to fine.

September.

R 4.56 : 60 pca

MMT : 9.00 in southeastern districts to less than 2.25 in northeastern coastal districts.

With the exception of moderate very local showers on the 2nd & 4th, and only very occasional light local showers on other days, the first nine days of the month were mainly fine and dry. P was fairly steady at a little below 29.90, but began falling after the 8th. The wind seldom exceeded a gentle breeze and varied in direction between E & SE. The spell of dry weather was only temporarily and partially broken from the 10th to 13th. On the 10th a LCR developed over parts of St. Peter and St. Lucy and over coastal districts of St. Michael; max. totals of 0.75 to 1.00 in. were recorded in northwestern coastal districts of St. Michael. Moderately heavy showers fell locally during the night of the 12th, being heaviest in eastern and southeastern districts where max. totals of 0.75-1.00 in. were recorded. Further moderately heavy showers fell over eastern districts during the morning of the 13th and in most districts except the north during the night. There was another dry spell from the 14th to 25th during which period only occasional light and moderate local showers fell. P was fairly steady at a little below 29.85 except on the 20th & 21st when it rose to nearly 29.90. Wind direction varied only slightly N or S of E and wind velocity was light

to gentle breeze except for three days from the 19th to 21st when velocity increased to moderate to fresh breeze. On the 26th the weather came under the influence of a LPA with weak circulations around one or two centres. The wind backed to NE during the night of the 25th and continued between N & NE until late afternoon when it shifted through E to S within half an hour accompanied by heavy rain, especially in eastern and southeastern districts. A thunderstorm occurred between 5.30 and 7 p.m. after which the wind backed again to N. A second ill-defined centre appears to have passed over the Island between 9.30 and 10.30 p.m. with little further rain; the wind shifted to SE by 11 p.m. and continued to blow from a point between SE & S throughout the night and the following day. During the passing of this LPA between 4.00 and 5.00 in. of rain were recorded at places in southeastern districts while less than 1.00 in. was recorded at the northern end of the Island. P rose rapidly on the 27th & 28th and the weather became mainly fair except for occasional very local moderate showers over eastern and northern districts. Wind velocity was low during the last two days of the month, and light or moderate LCR's formed over the sea to the W of the Island on the 29th and over small areas in western and southwestern districts on the 30th.

October.

R 9.10 : 115 pca

MMT : 15.00 in the highlands of St. James to 5.00 in northern St. Michael.

The weather was mainly fair during the first five days except for isolated very local showers; there was one fairly heavy shower over a small area in the Hastings district on the morning of the 3rd when a little over 1.00 in. was recorded. Wind velocity was low, varying in direction from E & ESE on the 1st to S on the 2nd and SE on the 3rd. Wind velocity increased to gentle to moderate breeze between ENE & ESE on the 5th to 7th. There was

heavy rain over eastern and northern districts during the night of the 5th when max. totals up to 3.00 in. were recorded. P fell slowly from the 6th to 9th. The weather was fair on the 6th, 7th & 8th except for occasional light or moderate showers. There was heavy rain fairly generally over the Island during the night of the 9th and the morning of the 10th associated with the passing of an E/W; max. totals of 3.00-3.50 in. were recorded at some places. Wind velocity was low from the 10th to the 13th and direction varied between SE & S; conditions favoured the development of LCR's and max. totals of 3.50-4.00 in. were recorded in coastal districts of St. James on the 11th. P rose rapidly on the 13th & 14th and then fell slowly to the 18th; wind velocity increased slightly from the 14th to 18th and direction varied between E & ENE; there was little rain during this period except moderate local showers on the 16th. There was a period of light winds from the 19th to 22nd and direction varied between ESE & S. LCR's developed over the sea on the 19th & 21st and inland on the 20th when 2.50-3.00 in. were recorded in parts of St. Peter. Unsettled and showery conditions prevailed from the 22nd to the end of the month. Showers were unevenly distributed and totals between 1.00 and 2.00 in. were recorded on the 22nd, 25th & 31st; wind direction varied between E & SE.

November.

R 6.10 : 79 pca

MMT : 9.50 in western St. Peter to 2.60 in southwestern Christ Church.

The first day of the month was dry over the Island except for some light local showers in the late afternoon; P was 29.81 and the wind was mainly light to gentle breeze ESE. From the 2nd to the 6th the weather was influenced by a very extensive LPA which had developed between the Greater Antilles and the Bahamas and spread southeastwards over the Lesser Antilles. By the morning of the 4th the centre of a very deep cyclonic depression had been located some 350 miles NNW of Puerto Rico and by evening of the same

day the depression was recognised as hurricane "Greta", with wind velocity exceeding 100 miles per hour at the centre, then some 225 miles NNW of San Juan. During this day the centre of the hurricane travelled in an east-southeasterly direction, but during that night it turned northeastwards and then northwards and moved away from the Antilles at an unusually rapid rate. This LPA caused a strong flow of air from S to N over the Lesser Antilles, especially Barbados and the Windward Islands, from the 2nd until the 6th. P fell from 29.81 on the 1st to the unusually low 3.00 p.m. reading of 29.66 and then rose rapidly again on the 4th, 5th & 6th to 29.91 on the 7th. No appreciable rain fell on the 2nd & 3rd, but after midnight on the 3rd thunderstorms were observed in the far distance in the SW. The weather was fair over the Island during the morning of the 4th, but towards midday and throughout the afternoon a procession of thunderstorms passes on the western and northwestern sides of the Island moving along in a SSW air stream. During the late afternoon the thundershowers spread temporarily over the Island causing max. records of rainfall of 1.00-1.50 in. at some places. Conditions were fair and dry during the night of the 4th and the day of the 5th, but between 6.00 and 7.00 p.m. on the 5th a severe thunderstorm developed a few miles off the northwestern coast of the Island; there was unevenly distributed rain during that night and max. totals of 1.00-1.50 in. were recorded in northern parishes. The 6th was generally fair and dry. By the 7th the hurricane had ceased to influence the local weather and the wind had backed to ENE. Heavy local showers moved across parts of the Island, especially over St. Andrew, St. Peter and St. James, during the late morning and midday of the 7th and max. totals of 1.50 in. were recorded. A succession of sunny days followed from the 8th to 13th, with ENE winds increasing in velocity up to moderate to fresh breeze on the 13th; there were occasional unevenly distributed light and moderate showers during this period; P fell from 29.88

on the 9th to 29.77 on the 11th. Conditions suggested the passing of a small E/W on the 14th & 15th. There were fairly heavy unevenly distributed showers on the 14th & 15th, max. totals of 1.00-1.50 in. were recorded at some places. Fairer but windy conditions prevailed on the 16th & 17th as P rose, although there were some light and moderate showers; the wind was E on the 16th and backed to E & ENE on the 17th. P fell to 29.81 on the 18th & 19th and rose to 29.86 on the 20th. There were cloudy skies and frequent showers during the three days from the 18th to 20th, especially on the 20th when max. totals of a little over 2.00 in. were recorded in some eastern districts. P fell slowly to 29.79 on the 24th and rose slowly to 29.89 on the 29th. The wind backed from ENE on the 21st to NNE & N on the 24th and shifted slowly back to E by the 27th. During this period wind velocity was low, and whereas conditions were generally fine on the 21st to 23rd and light and moderate very local showers fell on the 24th, conditions favoured the development of LCR's over very small areas on the 25th when a max. total of 2.50 in. was recorded at a place in northeastern St. Michael. Local rains also fell during the morning of the 26th when totals exceeding 1.00 in. were recorded at places on the boundary of St. Philip and St. John. Mainly fair weather with only occasional light local showers prevailed during the last four days of the month, with wind direction E on the 27th and varying between NNE & ENE on the 28th to 30th.

December.

R 4.90 : 103 pca

MMT : 8.40 in the highlands of St. Thomas to 1.75 in southern St. James.

The first seven days of the month were mainly bright and sunny with occasional light or moderate very local showers. P rose from 29.86 on the 1st to 29.92 on the 3rd and then fell to 29.84 by the 6th and continued with little change above or below 29.84 until the 22nd. The wind was light or

gentle breeze on the 1st, 2nd & 5th and moderate breeze on the 3rd, 4th & 7th and was mainly E in direction. A period of fairly persistent showery weather began during the night of the 8th and continued until the 21st, except for fine days on the 16th to 18th & 20th. During this period rainfall was very unevenly distributed. Moderately heavy rain fell very locally during the night of the 8th and max. totals of 1.50 in. were recorded in coastal districts of St. James. Rainfall totals of 1.00-1.50 in. were also recorded in various districts on the 10th, 12th, 13th, 14th & 19th. Wind direction varied between ENE & ESE up to the 17th and between E & NE for the remainder of the month. Wind velocity was low from the 8th to 13th, but a windy spell began on the 14th and continued until the end of the month. P rose slowly from 29.82 on the 22nd to 29.97 on the 30th. Mainly fair to fine weather prevailed from the 22nd to the end of the month, but occasional light and moderate local showers fell and a total of 0.50 in. was recorded in parts of St. James during the night of the 31st.

1957.

R 66.16 : 110 pca

Rainfall totals at individual stations ranged from 98.00 in the highlands of St. Thomas to 42.00 in southwestern coastal districts.

Rainfall was well above average in January, April, October and November. May, June and September were relatively dry months.

The local weather was at no time during the year influenced by cyclonic storms.

The low wind velocity experienced during the month of October favoured frequent development of LCR's which made an important contribution to the total rainfall for the month.

January.

R 5.41 : 160 pea

MMT : 8.50 in the highlands of St. Thomas and in parts of St. John to
3.50 in northern and eastern St. Philip.

This was a month of unusually frequent showers; rainfall was recorded on each day of the month in some parts of the Island and on 28 days in almost all districts. It was fine on the 1st with the wind gentle to moderate breeze E by N, but local moderate showers developed over the hills and northern districts during the night. P fell from 29.89 on the 1st to 29.85 on the 2nd and the wind shifted to E by S. The weather became unsettled with frequent light local showers and drizzles. The wind backed to ENE on the 3rd & 4th and increased during the evening of the 4th as P rose again to 29.91. The 5th & 6th were windy days, wind direction varying between E & ENE. P remained fairly constant from the 4th to 8th at approximately 29.90. Showers were occasionally moderate locally over the hills and northern districts on the 5th & 6th, but less frequent and lighter on the 7th & 8th when wind velocity also moderated. P increased to 29.95 on the 9th and a spell of three fairly windy days began with ENE winds. The 12th was generally bright and fair but local showers developed during the night. The 13th was unsettled with generally overcast skies, but there were occasional bright intervals; wind velocity was relatively low and the wind shifted to SE for a few hours during midday; occasional light showers and drizzles fell. P rose steadily to 30.01 on the 19th; the weather was generally fair to fine during daylight hours on the 14th to 19th, but light local showers fell each night. Wind direction varied between E & ENE. Wind velocity was relatively low from the 13th to 15th, but increased during the period from the 16th to 21st. P fell steadily from the 19th to 29.93 on the 23rd. The 20th, 21st & 22nd were sunny days with more than 10 hours sunshine each day, but light local showers fell each night. The fall in P was accompanied

by a change in the weather, with wind velocity moderating on the 23rd & 24th. Moderate local showers fell during the night of the 22nd. Rainy conditions prevailed from midnight on the 23rd until the early morning hours of the 25th, during which period more than 1.00 in. fell in all districts and max. totals of about 4.00 in. were recorded in northeastern upland districts. There was little sunshine on the 24th & 25th. P rose gradually to 30.02 on the 27th. Wind velocity also increased rapidly after the 24th and the last week of the month was windy with E & ENE winds. The 26th & 27th were sunny days, but there were occasional light local showers. The 28th was a day of frequent showers and drizzles, continuing into the night with strong gusty winds; max. totals of 1.00 in. were recorded in some districts. The last three days of the month continued to be showery with P remaining fairly constant at a little above or below 30.00.

February.

R 2.07 : 94 pca

MMT : 4.60 in the highlands of St. Thomas to a little less than 1.00 in northern St. Michael, southern St. James and some northeastern districts.

The showery weather of January continued during the first week of this month. Showers were frequent but generally light, except on the night of the 2nd when totals of 0.50-1.00 in. were recorded in several districts. P was high at the beginning of the month and fell slowly from 29.99 on the 1st to 29.93 on the 6th; then increased on the 7th & 8th. The wind was moderate to fresh breeze E throughout the first ten days. P fell slightly from the 8th to 13th and the weather was dry from the 8th to 15th with slightly reduced wind velocity, wind direction remaining constant at E. There was moderate to moderately heavy rain during the night of the 16th when max. totals of 0.75-1.00 in. were recorded in some districts. There were occasional light to moderate unevenly distributed showers from the 17th to 23rd

with moderate to fresh ENE winds from the 17th to 19th, moderating to light to gentle breeze ESE & SE on the 22nd & 23rd. P fell from 29.93 on the 18th to 29.86 on the 22nd, rose slightly to 29.88 on the 23rd but fell to 29.85 on the 25th. The 24th was a rainless day with wind velocity increasing again and backing to ENE. There were light showers during the last four days of the month with rising P and winds shifting to E.

March.

R 1.47 : 76 pca

MMT : 2.60 in western St. Peter to less than 1.00 in southwestern districts.

P fell from 29.93 on the 1st to 29.84 on the 3rd, began rising on the 4th to 29.96 on the 6th. The wind was ENE on the 1st and shifted to E on the 2nd & 3rd. Light and moderate showers fell during the latter half of the night of the 2nd and morning of the 3rd, especially over the upland districts and leeward parishes. The weather was generally fair to fine and dry from the 4th to 10th; the wind was ENE from the 4th to 7th and then shifted to E. P fell slowly to 29.86 by the 12th. The 11th was a day of unsettled weather with light winds, variable in direction locally, the main drift of low clouds being from E. There was frequent light to moderate rain during midday and early afternoon, max. totals being about 0.65 in. Overcast conditions and light winds continued until the latter half of the 12th, but there was no further rain. Dry conditions prevailed from the 13th to 17th, with bright sunny weather. Wind direction was mainly NE & ENE on the 14th to 16th, shifting to E by the 17th. Conditions changed on the 18th with the wind shifting to ESE & E and increasing in velocity; there were moderate island-wide showers during the night of the 18th. Dry and mainly fine conditions set in again on the 19th and continued until the 25th. The 19th was a day of unusually strong SE winds, averaging 14.9 miles per hour between 6 a.m. and 6 p.m. P rose to 29.95 on the 20th & 21st, fell to

29.90 on the 23rd and rose to 29.96 on the 26th and remained fairly constant at that level for the remainder of the month. The wind was light to gentle breeze SE & ESE from the 20th to 24th and backed to ENE on the 25th. There were unevenly distributed moderate and moderately heavy showers during the night of the 26th and further light to moderate showers on the 27th. The last four days of the month were mainly fine and dry with E & ESE winds.

April.

R 4.51 : 192 pca

MMT : 6.75 in the highlands of St. Thomas to 2.50 in southwestern Christ Church.

P was fairly constant during the first week at about 29.94. The weather was slightly unsettled during the first two days, with light showers and bright periods. It was fine from the 3rd to 5th with the wind increasing to moderate and fresh breeze E & ESE from the 1st to 4th and backing to ENE on the 5th. It was fair on the 6th and the wind fresh to strong breeze ENE, but the southern, southeastern and eastern sky gradually became overcast with cirrostratus as the day advanced; the sky became entirely overcast during the night as the cloud ceiling became lower; there was drizzle and light rain towards morning of the 7th. Light and moderate showers fell generally at frequent intervals throughout the day and night of the 7th, with the wind gentle to moderate breeze ESE; max. totals of 2.50 in. were recorded in some districts. Conditions became fine during the 8th as P rose to 29.98, and the weather was mainly fair to fine from the 8th to 12th, except during the night of the 11th when moderately heavy showers fell in some districts. P fell to 29.89 on the 10th and rose to 29.98 on the 13th; the wind was mainly E & ESE, backing to ENE during the afternoon of the 11th. A period of unsettled and light showery weather began on the 13th and continued until the 21st, with occasional moderate local showers and heavier localised rain during the night of the 20th and throughout the 21st, when

max. totals of 1.00-1.25 in. were recorded in some districts. The wind was E from the 13th to 17th, then backed to ENE and moderated to low velocity from the 21st to 23rd. P fell slowly from 29.85 on the 27th and rose to 29.92 by the 30th. The 22nd to 25th were fair days but were characterised by the presence of much cirrus and cirrostratus spreading from S; there was an increasing amount of medium cloud on the 25th. (From the 24th to 26th the weather was influenced by an upper trough). An area of fairly heavy rain was located S, SE & E of the Island throughout the morning of the 26th, but with some rain falling over eastern districts where max. totals of 1.00 in. were recorded, but little rain spread inland; thickly overcast conditions persisted throughout the day. The last four days of the month were mainly fair, but very local showers fell during the nights of the 28th and 30th; wind direction was E & ESE.

May.

R 2.28 : 71 pca

MMT : 4.75 in the eastern uplands of St. John to 0.60 in some southwestern districts.

The weather was mainly fair to fine from the 1st to 13th. There were occasional drizzles or very local light showers; wind direction was fairly constant between E & ESE, but backed to a little N of E on the 11th and continued from that direction until the morning of the 13th. There was an increasing amount of high cloud on the 12th & 13th causing partially overcast conditions. Occasional light showers fell on the 12th & 13th, followed by moderately heavy but very local showers on the 14th to 17th; max. totals of 0.50-0.75 in. were recorded in parts of St. Thomas and St. James during the nights of the 14th & 15th. Showers fell in all districts on the 16th and totals varied from 2.00 in. in parts of St. John to less than 0.25 in. in parts of Christ Church; E winds prevailed at slightly reduced velocity. There was a spell of fair to fine and sunny weather from the 18th

to 25th, with E & ESE winds increasing slightly in velocity. P fell from 29.94 on the 24th to 29.85 on the 27th. Very local moderate showers fell during the night of the 25th. During the night of the 26th there was fairly heavy local rain in parts of St. Andrew, St. Peter, St. Thomas and St. James and max. totals of 1.60 in. were recorded at places in St. Andrew; little or no rain fell in southern and southwestern districts. P rose to 29.92 on the 30th and fell slightly on the 31st. Conditions were fair and sunny from the 28th to the end of the month, with only occasional light local showers; wind direction varied between ENE & ESE, moderating slightly in velocity. On the 30th the sky became partially overcast with thin cirrostratus, and there was evidence of thick cirrostratus in the far distance to the S & SW; the wind backed to ENE. On the 31st there were indications of a moist belt of air approaching from the S or SE; there was an increasing amount of alto-clouds in SE & S and shower clouds developed nearer the Island in this quarter with the wind backing to ENE & NE in the late afternoon while conditions became temporarily fairer. Fairly heavy rain fell locally over the northern half of the Island during the night of the 31st when max. totals exceeding 2.00 in. were recorded in the hills of St. Andrew; only a light shower fell in southern districts.

June.

R 2.78 : 51 pca

MMT : 4.75 in the hills of St. Peter to less than 1.00 in parts of St. Michael.

The moist belt of air which approached the Island from S or SE on the last day of May caused further moderately heavy but unequally distributed showers, accompanied by a little thunder in most parts of the Island except southeastern and southern districts on the 1st; max. totals of 1.50-2.00 in. were recorded in northeastern districts. Wind velocity was relatively low on the 1st & 2nd; wind direction was ENE on the morning of the 1st and then

shifted to ESE. The 2nd was a fair day but further moderately heavy local showers fell on the 3rd, especially in northeastern districts where max. totals of 1.00 in. were recorded. A period of dry weather followed from the afternoon of the 3rd to the 10th, with only occasional very light local showers. Windy conditions prevailed from the 3rd to 8th, with wind direction varying a little N or S of E. There was much persistent high and medium cloud on the 6th, 7th & 8th causing low daily sunshine totals. From the 8th to 21st there was a period of subnormal wind velocity and the 6 a.m. to 6 p.m. average exceeded 12.5 miles per hour on one day only. P fell slowly from 29.96 on the 10th to 29.89 on the 15th, rose to 29.96 on the 17th and remained fairly high at a little above or below 29.95 until the 27th. Conditions became unsettled on the 11th and there were local moderate showers in some districts on the 11th & 12th; distant lightning was observed in the W as the showery area moved away. Wind shifted to ESE on the 11th and to SE on the 12th, backing to E with fair to fine conditions on the 13th & 14th. Light to moderate local showers fell in some districts on the 15th & 16th. There was a dry spell from the 17th to 27th while P remained high. During this period there were clear skies and daily sunshine totals exceeded 10 hours. An area of rainy weather developed on the 25th and passed some 100-200 miles S of the Island between the 26th & 29th, moving away to the W. Distant lightning was seen in the S during the nights of the 25th, 26th & 28th. Windy conditions began during the night of the 25th and continued during the last days of the month, direction being mainly E. P fell slightly on the 25th, but increased again to 29.99 by the 30th. There were moderate local showers during the night of the 28th and the morning of the 29th in some districts, otherwise the dry weather continued.

July.

R 7.37 : 117 pca

MMT : 11.20 in the highlands of St. Thomas to 4.00 in southeastern St. Philip.

The month began with high P at 30.003 on the 2nd & 3rd, then falling fairly rapidly to 29.90 on the 6th. There were fairly heavy local showers with thunder on the 3rd; otherwise conditions were mainly fair and dry during the first eight days. Wind direction varied inappreciably from E, but wind velocity was relatively high on the 4th, 7th & 8th. P rose on the 7th & 8th to 29.93 while an area of rain passed within sight S of the Island; mainly dry weather continued over the Island. P fell slowly from the 9th to 29.86 on the 12th, rose rapidly to 29.91 on the 13th and fell slowly again to 29.86 on the 17th. The 9th to 17th was a period of showery weather with fairly heavy rain on the morning of the 13th when max. totals of 3.00 in. were recorded in northeastern districts. Wind direction continued to be mainly E, but velocity was variable. P rose on the 18th and remained above 29.90 for the remainder of the month except on the 29th & 30th. Wind velocity tended to be lower during the latter half of the month, wind direction varying between E & ENE. The 18th to 21st was mainly dry, with only occasional light showers. P fell slightly on the 20th & 21st as a small E/W approached and rose on the 22nd as the wave passed over. There were moderate showers over the N end of the Island on the 22nd with a little thunder, and moderately heavy local showers during the night of the 23rd when nearly 1.00 in. was recorded at some places in St. Michael. The trough of a small E/W passed over during the night of the 25th accompanied by light and moderate showers only. P fell rapidly after the 28th to 29.85 on the 30th and rose to 29.92 on the 31st. There were widespread moderate showers on the 29th & 30th and light showers on the 31st.

August.

R 1.65 : 104 pca

MMT : 12.30 in the highlands of St. Thomas to 4.00 in coastal districts of St. Michael.

It was fair on the 1st but windy and slightly misty with the wind

moderate to fresh breeze ENE. P fell slowly from 29.92 on the 1st to 29.87 on the 5th. Unevenly distributed light and moderate showers fell on the 2nd, 3rd & 4th and light local showers on the 5th to 8th, while above average sunshine was recorded during this period. P rose rapidly to 29.94 on the 7th and fell equally rapidly to 29.86 on the 8th, 9th & 10th. There were moderately heavy showers in some districts on the 9th & 10th with lower wind velocity; wind direction varied between ENE & ESE. Occasional thunder was heard on the 10th. P was fairly steady from the 11th to 20th. The trough of a shallow E/W passed over during the morning of the 13th. The day of the 12th was fair to fine with a bluish haze; the wind increased to fresh breeze ENE in the afternoon. Cirrostratus appeared in the E & ESE in the late afternoon and advanced rapidly during the evening. By 10 p.m. distant lightning was visible in the ESE & SE. Between midnight and 8 a.m. of next morning there was a persistent thunderstorm accompanied by widespread intermittent showers and heavy rain in northern parishes where max. totals of 4.00-5.00 in. were recorded. The wind moderated on the 13th and shifted to SSE & S. Fair and dry conditions followed after this wave; the 14th, 15th & 16th were rainless days but fairly windy with E winds. Occasional light local showers fell on the 17th. The trough of another shallow E/W passed over during the early morning of the 19th. The wind backed to ENE & NE during the afternoon and evening of the 18th and conditions became unsettled with scattered light and moderate showers. Distant lightning was seen and one roll of thunder heard during the evening of the 18th. There was a light ESE & SE breeze on the morning of the 19th; sunny conditions obtained over the southern half of the Island while the northern half remained overcast. During midday a LCR developed over parts of St. Michael, St. James and St. Thomas and max. totals of 3.00 in were recorded at some places. Brighter weather with SE winds prevailed on the 20th, but a fairly heavy shower moved across parts

of Christ Church, St. Michael and St. James during midmorning and max. totals of nearly 1.00 in. were recorded. P rose to 29.93 on the 21st and to 29.95 on the 22nd with fair weather except for very local moderate showers during the night of the 21st. P fell again to about 29.90 on the 23rd & 24th. There was almost maximum possible sunshine every day from the 21st to 30th. The wind was light breeze S & SSW on the 23rd and a very heavy LCR of short duration fell over the northeastern hills when 2.00 in. were recorded in less than half an hour. Winds remained light on the 24th but backed to NE; there was no rain over the Island. P rose rapidly to 29.97 on the 25th and to 29.98 on the 26th. Conditions were fine on the 25th; light to moderate showers fell on the 26th with wind direction ENE. P fell rapidly to 29.89 on the 27th and there were some indications that the trough of a small E/W passed over during the morning of the 27th with the wind shifting to E & ESE. Local light and moderate showers fell on the 27th, 28th & 29th, with P falling slightly to 29.88 on the 29th and rising to 29.92 on the 31st. Sultry, unsettled conditions developed towards evening of the 30th with fairly frequent lightning E of the Island during the early part of the night. Occasional light and moderate showers fell from midnight onwards. A fairly severe thunderstorm accompanied by heavy rain passed over the Island during the morning of the 31st; the day was overcast with occasional further light rain and distant thunder; the wind was light breeze ESE.

September.

R 3.78 : 49 pca

MMT : 7.00 in the hills of St. George to less than 2.00 in coastal districts of St. Michael.

P was fairly high during the first four days and the weather mainly fair with above average E winds; occasional very local light and moderate showers fell over the hills and eastern districts; it was slightly misty on the 1st

and 2nd but clear and fine on the 4th. P began falling on the 5th and continued fairly steady between 29.88 & 29.86 until the 12th. The wind backed to ENE & NE on the morning of the 5th and moderately heavy unevenly distributed showers fell; max. totals of up to 1.75 in. were recorded in the central hills. An area of rainy weather passed to the S & SW of the Island on the 6th & 7th, with only light local showers falling on the Island; the wind was E from the 6th to 8th at above average velocity. There was a spell of fine weather from the 8th to 13th, broken only on the 9th & 11th for short periods by LCR's; wind velocity was low and direction from ESE & SE but often variable in coastal districts. Visibility was generally good and conditions were brilliantly fine on the 10th & 11th. P rose to 29.92 on the 13th and fell slightly on the 14th & 15th. Conditions became unsettled during the night of the 14th and fairly widespread moderate showers fell during the latter half of the night followed by fairly heavy very local showers on the 15th when max. totals exceeding 1.00 in. were recorded in some coastal districts of St. Philip; the wind was light breeze E & ENE. It was mainly fair to fine on the 16th & 17th with only occasional light local showers. P fell to 29.81 on the 19th. Light showers fell fairly generally on the 18th and fairly heavy but very local showers during the nights of the 19th & 20th; max. totals of 1.50 in. were recorded in some districts each night while no rain fell in other districts. P rose slowly to 29.89 by the 24th and the wind continued at light breeze E & ESE. The weather on the 21st was remarkable for the amount and persistency of rain clouds in almost all directions around the Island, but no rain developed over the Island. Light to moderate local showers fell during the night of the 21st, and the weather was then mainly fair from the 22nd to 25th. P fell to 29.84 on the 25th and rose slowly again to 29.88 on the 28th. There were unevenly distributed fairly heavy showers during the nights of the 26th & 27th with max. totals up to

1.50 in. It was fine during the day of the 28th, but light local showers developed during the night. P began falling on the 29th and the wind backed to ENE but continued light to gentle breeze; moderately heavy showers fell during the morning especially in central and southwestern districts. Conditions were fair over the Island on the 30th as cirrostratus appeared in the SE & S and the wind backed to NE & NNE with the approach of an E/W.

October.

R 12.04 : 153 pca

MMT : 17.75 in the highlands of St. Thomas to 7.50 in northern St. Philip.

The trough of an E/W passed over towards midday on the 1st. P rose slowly from 29.82 on the 1st to 29.86 on the 5th. The weather was showery and the sky overcast during the first four days. Showers were heaviest in eastern & northeastern coastal districts where max. totals of nearly 2.00 in. were recorded on the 2nd, but showers were light in southwestern and western districts. The wind was light to gentle breeze ENE during the morning of the 1st and then shifted to E & ESE. P fell to 29.81 on the 6th. The 6th & 7th were bright days but moderately heavy showers fell during the night of the 6th. P rose slightly on the 7th & 8th and fell to 29.83 on the 9th. Wind velocity was low on the 8th from E & ESE and a moderate LCR formed over coastal districts of St. James; there were also moderately heavy local showers during the night of the 8th. P rose rapidly to 29.90 on the 11th and remained fairly steady until the 13th. Mainly fair to fine conditions set in on the 9th and continued on the 10th, 11th & 12th, but small LCR's formed on these days over the sea to the W of the Island. Conditions changed during midday of the 12th with upper clouds moving from the N and a light surface breeze varying between ENE & NNE. The 13th, 14th & 15th were days of very low wind velocity, the main air drift varying between ESE & S, but local surface winds blew off the sea all around the Island during daytime

each day. Heavy LCR's with thunder developed each day; max. totals exceeding 2.00 in. were recorded in some districts each day and a total of 4.00 in. was recorded at places in St. Thomas on the 15th. P fell to 29.81 on the 15th and was fairly steady at about 29.83 from the 16th to 18th. P rose to 29.90 on the 21st and then fell to about 29.79 on the 23rd & 24th. There was a fair to fine spell from the 16th to 21st, except for occasional light to moderate very local showers. The wind was S on the 16th and mainly ESE from the 17th to 19th, and backed to NE & NNE on the 20th & 21st. The main air drift shifted on the 22nd to SSW and to SW & WSW on the 23rd & 24th; surface wind was light and occasionally variable locally. A heavy LCR developed over the northern end of the Island, accompanied by a thunderstorm, on the 22nd; on the 23rd heavy showers moved in over most districts from SW and max. totals of 2.50 in. were recorded in parts of St. Thomas and St. Andrew. It was fair to fine on the 24th. P rose rapidly from 29.79 on the 24th to 29.90 on the 25th; the wind backed to light breeze S & SE and a heavy LCR developed over northern and central districts; max. totals exceeding 3.00 in. were recorded in parts of St. Peter. There was a marked change in the weather as upper air direction changed from S to N at about midday on the 25th. P continued to rise to 29.93 on the 26th. Wind direction was NE & ENE on the 26th and light to moderate showers fell during the day and night. The 27th was a fine day with the wind increasing at times to moderate breeze NE; P fell rapidly to 29.83 and by evening light showery conditions had developed which continued during the night. P continued to fall as the trough of a deep E/W approached, and rainy conditions developed generally over the Island. P fell to 29.73 on the 29th, the trough of the wave passed over the Island towards midday as the cloud drift changed from N to S and surface wind became light breeze SW & SSW. There was fairly heavy rain in the hills and northern districts during the morning of the 29th. P rose slightly on

the 30th & 31st. Wind velocity increased to moderate breeze S & SSW on the 30th, with occasional heavy showers. Rainy conditions set in during the early morning of the 31st and continued until afternoon and max. totals of 2.00 to 3.00 in. were recorded over a large area of the Island.

November.

R 13.31 : 172 pca

MMT : 18.50 in the highlands of St. Thomas to 8.50 in central Christ Church.

The weather at the beginning of the month was influenced by a LPA over the eastern Caribbean which developed into a weak cyclonic disturbance over the northern Leeward Islands. P was low and constant at 29.78 during the first three days of the month. Winds were light from S & SSW. Heavy cumulonimbus clouds developed throughout the area, and during the first half of the night of the 1st heavy rain fell over relatively small areas of the Island; totals over 3.00 in. were recorded in parts of Christ Church while no rain fell in nearby districts. There was further heavy rain during the morning of the 2nd, especially over southern and eastern districts where max. totals of 2.50-3.00 in. were recorded. Fairer conditions developed on the 3rd as wind velocity increased to gentle breeze S. P rose rapidly on the 4th & 5th to 29.91 on the 6th. The weather was bright and fair on the 4th & 5th with the wind gradually backing through SE to E. Showery conditions developed again on the 6th and moderately heavy showers fell in some districts. P decreased slightly on the 7th and increased on the 8th. Wind varied between E & ENE and increased to gentle to moderate breeze on the 7th and moderated to light breeze on the 8th. Fairly frequent moderate and moderately heavy showers were widespread on these two days and max. totals of 1.00-1.50 in. were recorded each day. Another LPA influenced the weather during the next six days. P fell to 29.79 on the 11th & 12th and rose to 29.97 by the 16th. The wind was light, varying between ENE & E from the 9th

to 11th and between E & SE from the 12th to 14th. The 9th & 10th were fair days, but local showers developed during the latter half of the night of the 10th. Heavy LCR's, unaccompanied by lightning, developed on the 11th & 12th and max. totals of 2.00-3.00 in. were recorded. The weather was fair and dry on the 13th & 14th, but conditions changed noticeably in the early morning of the 15th when the wind backed to NE; fairly heavy showers fell in most districts during the night of the 15th and morning of the 16th. The 16th & 17th were fairly bright but windy days. P began falling again on the 17th and the weather became slightly unsettled. Rainy conditions were widespread on the 18th & 19th; there was very little sunshine and the wind moderated to light to gentle breeze E. There was a moderately severe thunderstorm over parts of St. Philip and St. John during the evening of the 18th. Max. totals between 4.00 and 5.00 in. were recorded in some districts on the 18th and up to 2.00 in. on the 19th. Conditions were temporarily fairer on the 20th, but continued unsettled, and there were further fairly heavy unevenly distributed showers during the night of the 20th and the morning of the 21st. P fluctuated slightly between the 21st & 28th. The weather became mainly fair on and after the 21st, except for occasional light local showers. Conditions were fine on the 25th and 26th, becoming slightly unsettled with occasional showers during the last four days of the month. Wind direction was constant between ENE & E during the last ten days of the month and average velocity gradually increased.

December.

R 3.49 : 73 pca

MMT : 5.00 in western St. John to 1.60 in southeastern St. Philip.

The first four days of the month were mainly fair, except for occasional light local showers especially on the morning of the 2nd. The wind was gentle breeze E and backed to light to gentle breeze ENE & NE on

the 5th when there were showers in all districts; the heaviest showers were in eastern districts and the central hills where max. totals up to 1.00 in. were recorded. Further very local moderate showers fell on the 6th, but conditions became fair on the 7th as P decreased. The wind increased to gentle to moderate breeze NE on the 7th, but moderated as a period of relatively low wind velocity and calm spells developed from the 8th to 11th. P fell to 29.84 on the 9th and rose steadily to 29.95 on the 12th. The wind backed to NNE during the night of the 8th and morning of the 9th and moderately heavy showers fell over the parishes of St. John and St. Joseph. The wind was light breeze S, or variable in direction locally with calm spells, on the 9th & 10th. A moderate LCR developed over northern St. Michael and parts of St. James and St. Thomas on the 9th and max. totals of 1.00-1.50 in. were recorded. A small LCR formed over the sea off the northern end of the Island on the 10th as the S & SSW air drift continued, but conditions were mainly fair over the Island. The wind continued at light to gentle breeze but shifted to ESE on the 11th as P increased. There were moderately heavy local showers during the day on the 11th, especially over northeastern districts where max. totals up to 1.00 in. were recorded; further moderately heavy unevenly distributed showers fell during the night. A showery spell continued from the 12th to 15th with the wind increasing to moderate breeze E & ENE. Showers were heaviest on the 12th when over 1.00 in. was recorded in some districts; otherwise showers were only light to moderate. P remained fairly steady at 29.90 or a little less during the next ten days; wind direction was constant between E & ENE, varying in velocity between gentle to moderate breeze. Fine conditions prevailed from the 16th to 18th, and except for local moderate showers on the 19th & 20th, the remainder of the month was mainly dry. Wind direction remained constant between E & ENE and velocity increased slightly towards the end of the month.

1958.

R 63.38 : 105 pca

Rainfall totals at individual stations ranged from 90.00 in the highlands of St. Thomas to 40.00 in southern St. James.

A year of considerable extremes.

The period from January to April was the driest period of four consecutive months in the 114-year period from 1847 to 1960. This dry weather resulted in record max. mean temperatures in March and April and the highest total number of sunshine hours in March recorded in any month during the period of records from 1929 to 1960.

Following on the four dry months, the month of May was the second wettest in the 114-year period 1847-1960. Rainfall continued well above average in June and July, but was well below average in October & November.

January.

R 1.37 : 41 pca

MMT : 3.40 in the highlands of St. Thomas to less than 1.00 in parts of St. Michael, Christ Church and St. Philip.

Light and occasionally moderate showers fell during the first week. The wind was moderate to fresh breeze ENE & E during the first four days and then moderated to gentle breeze. There was a period of low wind velocity from the 10th to 15th; wind direction was E at first and then backed to ENE & NE. Local light to moderate showers fell on the 8th & 14th, otherwise the weather was fair to fine. P was low from the 14th to 17th, falling to 29.80 on the 15th. Moderate local showers fell during the morning of the 16th. The latter half of the month was mainly fair to fine, except for a few light showers. There was a period of unusually low wind velocity from the 24th to 28th, the 26th being a day of almost absolute calm except for occasional light local breezes of variable direction. Towards the end of the month the days became warmer and the night cooler; a maximum of 87°F was recorded on the 27th and a minimum of 64.5°F during the night of the 31st.

February.

R 1.04 : 47 pea

MMT : 3.25 in southeastern coastal districts to less than 1.00 throughout the greater part of the Island including the highlands of St. Thomas.

P rose rapidly from 29.87 on the 1st to 30.01 on the 4th and 5th.

The weather was fine and dry. The wind was light to gentle breeze E on the 1st & 2nd and backed to ENE & NE and became light and variable locally with calm spells on the 4th. P fell slowly to 29.89 on the 9th and dry weather continued except for a local moderate shower over parts of the upland districts during the night of the 8th. The wind was gentle to moderate breeze E & ESE from the 6th to 8th. P remained constant at about 29.90 from the 9th to 16th and fine dry weather continued. Slight P changes followed but the weather continued fair to fine except for drizzles and light local showers on the 16th & 17th. The 23rd & 24th were days of low wind velocity or calm spells; the main air drift was from ENE or E. A very light LCR developed over parts of St. James during the afternoon of the 23rd. There was an increasing amount of cirrus and thin cirrostratus in the late afternoon and early evening in the E & S; after midnight there was fairly heavy local rain over parts of St. Joseph and St. Andrew where max. totals of 1.30 in. were recorded. Increasing amounts of cumulus and stratocumulus cloud formed during the morning of the 24th and moderate local rain developed over western Christ Church and parts of St. Michael before noon; after noon a moderately heavy LCR developed over southwestern districts of Christ Church and spread eastwards into central districts of the parish and max. totals of 1.50 in. were recorded. Wind velocity increased to gentle to moderate breeze ENE & NE on the 26th & 27th; there were light local showers and then the weather became generally fine during the first half of the night of the 27th. During the early morning of the 28th a small area of

fairly heavy rain moved in over the S coast of the Island and totals of 2.00-2.50 in. were recorded in coastal districts. Further fairly heavy rain developed later the same morning over eastern and some inland districts; the wind was light breeze variable in direction in the morning and ENE in the afternoon; the weather became fine again during the night.

March.

R 0.52 : 27 pca

MMT : 2.00 in the highlands of St. James to less than 0.40 over the greater part of the Island.

The weather was generally fine during the first three days with the wind gentle to moderate breeze ENE & E. Light and moderate showers fell in some districts during the night of the 4th and one or two flashes of distant lightning was seen in the NE. P was fairly steady at about 29.90 for two weeks from the 5th to 19th. Moderate and moderately heavy local rain fell in some upland districts during the night of the 6th, otherwise fair to fine and dry conditions prevailed until the 20th. Wind direction was fairly constant at between E & ESE until the 18th when the wind backed to ENE. Sunshine totals were persistently high during this period. There was only slight variation in P during the remainder of the month. Moderate showers fell in some districts during the night of the 23rd and there were light local showers during the nights of the 24th, 26th & 27th. Otherwise fair to fine dry weather continued with almost maximum possible sunshine totals until the end of the month. Wind velocity increased occasionally to moderate to fresh breeze E on the 25th & 27th; the wind shifted to ESE & SE during the last four days of the month and moderated to gentle to moderate breeze.

April

R 0.82 : 35 pca

MMT : 2.15 in coastal districts of St. James to less than 0.25 in St. Philip.

The severe drought of the first three months of this year was continued during this month. As a consequence of the dry conditions daily maximum temperature became increasingly high. The mean maximum temperature for this month, 88.8°F, was the highest recorded in any month in the period 1903-1960.

P was fairly high during the first two days but fell to 29.83 on the 4th. The sky was somewhat hazy from the 2nd to 4th, with increasing cloud on the 5th and rough seas on the northeastern coast. Cloud formations suggested that an area of rainy weather was passing S of the Island. The weather was mainly fine from the 6th to 23rd with little rain falling in any district; the wind was gentle to moderate breeze E and occasionally ESE. During this period P varied between 29.86 and 29.92. A moderate LCR developed over coastal districts of St. James and St. Michael and max. totals of 1.00-1.25 in. were recorded at some places. Light LCR's also developed over parts of St. James and St. Michael on the 25th & 26th. The 27th was overcast and cloudy and there were occasional local drizzles. P began falling on the 23rd and reached the lowest 3 p.m. reading for the month at 29.83 on the 29th. The sky was partially overcast on the 28th and the wind backed to ENE and on the 29th distant cumulonimbus rain clouds were observed on the horizon. Moderate to moderately heavy showers fell during the afternoon of the 30th in southern coastal districts where max. totals of 1.00 in. were recorded, but only light showers moved inland. Weather conditions indicated that the trough of an E/W passed over during the night of the 30th when there were further showers and a little thunder. The long drought was now broken.

May.

R 12.11 : 377 pea

MMT : 21.50 in southern St. Thomas to 6.00 in northern St. Philip.

The Island's average rainfall total for this month was the second highest for the month of May in the 114-year period 1847 - 1960.

Average wind velocity for this month, 7.1 miles per hour, was the lowest recorded in the month of May during the period of records 1903-1960.

The first five days of the month were cloudy and rainy. Moderately heavy but unevenly distributed showers fell on the 1st, especially in the southern half of the Island where max. totals up to 1.25 in. were recorded. Light to moderate local showers fell during the period from the 2nd to 5th. P varied between 29.87 and 29.91 from the 6th to 12th; winds were light to gentle breeze and occasionally moderate breeze between ENE & ESE. P fell to 29.84 on the 14th and the wind backed to ENE during the night of the 13th. The trough of an E/W passed over the Island during the evening of the 14th. Heavy but unevenly distributed rain, accompanied by a thunderstorm, fell during the night of the 14th; max. totals up to 5.50 in. were recorded in the hills of St. George while there was little rain in the extreme N end of the Island. P rose to 29.89 by the 19th while the wind was gentle to moderate breeze ESE. P fell again to 29.85 by the 21st. The trough of another E/W passed over during the evening of the 20th and very heavy rain fell over a remarkably small area extending over southern St. Thomas, northwestern St. George & northeastern St. Michael; a max. total of 7.00-7.25 in. was recorded at a place in southern St. Thomas while places a few miles E in St. John recorded less than 0.25 in. Lightning was observed to the S of the Island during the night of the 20th and there were further showers with thunder passing S of the Island on the morning of the 21st but little rain fell on the Island. The weather was mainly fair from the 22nd to 25th, but there were occasional moderate and moderately heavy showers in some districts. The wind was light to gentle breeze ESE & SE from the 21st to 27th, very light and variable on the 28th and light to gentle breeze between SE &

SW from the 29th to 31st. A small LCR developed off the W coast on the 26th. A fairly heavy LCR developed mainly over parts of St. James, St. Peter & St. Lucy on the 27th and a max. total of nearly 3.00 in. was recorded in the highlands of St. James. Another heavy LCR developed on the 28th, with occasional thunder; the rain was more widespread than on the previous day; heaviest rains fell in parts of St. Joseph and St. John where max. totals between 3.50 and 4.00 in. were recorded. Conditions continued to favour the development of heavy very local rain on the 29th, but while no LCR formed during the day time there was heavy rain over a small area of central Christ Church during the night when a max. total of 3.00 in. was recorded; no appreciable rain fell in any other parish. A LCR formed over the sea to the NE during midday of the 30th and during that night there was fairly heavy rain mainly over parts of St. Joseph and central districts with max. totals of 2.00 in.; there was thunder and frequent lightning during the night. Rainy conditions with some thunder continued during the first half of the day of the 31st when max. totals of 2.50-2.75 in. were recorded at some places in St. Joseph, and then conditions became fair at night.

June.

R 8.85 : 163 pca

MMT : 12.75 in the hills of St. Peter to 5.50 in central Christ Church.

The first four days of the month were fair as P fell to 29.82 on the 2nd and rose to 29.91 on the 4th. The trough of a shallow E/W passed over on the 5th as P fell to 29.88. During the night of the 5th moderately heavy rain fell in most districts accompanied by a prolonged thunderstorm of moderate intensity; totals of 1.00 to 2.00 in. were recorded. The wind shifted to ESE on the 6th and continued gentle to moderate breeze ESE & SE until the 9th when it backed to E with P rising to 29.91. By the 12th the wind had backed to ENE and cirrus and cirrostratus appeared in the SE. A shallow

E/W passed over on the 12th with local showers in the afternoon and moderate rain with thunder during the night; heaviest showers in southern and southwestern districts with max. totals of 1.25-1.50 in. in parts of Christ Church. Moderate to moderately heavy rain fell in most districts on the 14th during the evening and night accompanied by thunder. Fair conditions prevailed from the 15th to 17th and a few light showers fell on the 18th & 19th. Wind direction was E to ENE during these five days with P rising to 29.99 on the 18th. From the 20th to 24th the wind was moderate breeze E to SE and local showers fell each day and night. P fell to 29.93 on the 25th & 26th and there were moderately heavy showers. The 27th was fair but moderate showers fell on the 28th as a small E/W passed over. A heavy LCR formed mainly over parts of St. Peter and St. Andrew on the 29th and there were fairly heavy local showers during the night; max. totals of 5.00-5.25 in. were recorded in some coastal districts of St. Peter. Moderately heavy to fairly heavy showers fell over the northern end of the Island on the 30th with totals of 1.00 in. at some places in St. Lucy.

July.

R 9.36 : 156 pca

MMT : 15.00 in the highlands of St. Thomas to 6.25 in northeastern St. Joseph.

A month of frequent showers with rain falling every day except on the 30th.

A well-defined E/W passed over on the 3rd. The wind backed to ENE towards midday and moderate showers fell during the afternoon accompanied by squalls with gusts over 40 miles per hour. Very unsettled weather continued on the 4th and moderately heavy showers fell accompanied by squalls exceeding 50 miles per hour in eastern and southeastern districts. Fairer conditions were experienced from the 5th to 8th, but further showers fell on the 9th becoming heavy in some districts where totals of 1.25-1.50 in.

were recorded in some districts on the 12th, 13th & 14th with occasional thunder. Showers were light or moderate from the 15th to 19th, but another E/W passed over on the 20th with moderately heavy to fairly heavy rain in most districts; max. totals of 2.00-2.50 in. were recorded in parts of Christ Church. Light to moderately heavy showers fell on most days during the remainder of the month and there was occasional thunder with showers on the 26th, 27th & 28th.

August.

R 7.87 : 107 pca

MMT : 13.00 in the highlands of St. James to 4.50 in the northeastern hills of St. Peter.

The first six days were fair and warm with the wind gentle to moderate breeze between E & SE. The wind backed to ENE on the 7th and there were local showers and occasional thunder. A shallow E/W passed over on the 8th with the wind shifting to ESE; moderate showers fell during the night especially in southwestern districts. It was mainly fair from the 9th to 11th, but moderately heavy showers fell locally in some districts during the nights. The wind was gentle and occasionally moderate breeze between E & NE from the 9th to 11th and shifted to light breeze ESE & SE on the 12th when a heavy LCR developed over St. Peter and St. Andrew and spread later to other districts; max. totals of 4.00-4.50 in. were recorded in parts of St. Peter. During midday on the 14th the weather came under the influence of hurricane "Cleo" centred several hundred miles ENE of the Island; the wind backed from SE during the morning to NE at midday and a heavy ocean swell became evident on the E & SE coasts; P fell to 29.84. The 15th was a warm day with the wind light breeze N & NNE. Almost calm during the night of the 15th and morning of the 16th, but the wind became gentle breeze SSE & SE during the afternoon of the 16th. There was little or no rain on the Island while this hurricane passed far to the N. The wind con-

tinued SE & SSE on the 17th and a moderately heavy shower passed over eastern and northeastern coastal districts and became fairly heavy over the northern end of the Island where max. totals up to 1.75 in. were recorded; there was occasional thunder. Moderately heavy and fairly heavy showers with thunder fell especially over western districts of the Island on the 18th, the wind continuing gentle breeze SE; max. totals of 2.00-2.50 in. were recorded at some places; a moderate thunderstorm occurred during the night. P fell from 29.91 on the 19th to 29.85 on the 20th and the trough of an E/W passed over during the afternoon of the 20th; moderate to moderately heavy showers fell in all districts. There were moderate local showers on the 21st & 22nd and moderately heavy showers on the 24th, otherwise conditions were fair until the 28th. P fell from 29.89 on the 22nd to 29.85 on the 27th and rose to 29.92 on the 29th. Moderately heavy and fairly heavy showers fell in all districts on the 29th; the wind was very light from S in the morning and a moderate LCR formed over parts of St. Thomas, St. Joseph and St. Andrew with secondary clouds developing over southwestern districts in the afternoon. The wind was NE & NNE during the night of the 29th and shifted through E to S during the morning of the 30th as the trough of an E/W passed over. There was frequent moderate to fairly heavy rain during the day of the 30th with max. totals of 3.50-3.75 in. in parts of St. Thomas and St. James, but very little rain in Christ Church and St. Lucy.

September.

R 6.85 : 90 pca

MMT : 10.00 in the highlands of St. Thomas to 4.25 in southwestern Christ Church.

There were moderate showers each night in some districts from the 1st to 4th, the days being mainly fair and dry with wind gentle breeze E. P fell rapidly from 29.88 on the 3rd to 29.75 on the 5th when the local weather came under the influence of hurricane "Fifi", the centre of which passed

about 300 miles N of the Island; there were moderate showers in almost all districts and a marked convergence of cirrus and cirrostratus into the ENE. Conditions were mainly fair from the 6th to 10th except for occasional local showers. P rose to 29.91 on the 7th, but fell to 29.86 by the 9th. There was a spell of showery or rainy weather from the 11th to 17th with P varying between 29.86 & 29.93. Rain was heaviest on the 12th & 13th when a small E/W passed over the Island; max. totals of 1.50-2.00 in. were recorded in some districts each day. Further heavy showers fell on the 16th when totals of 1.50 in. were recorded at some places. P fell slowly from 29.93 on the 17th to 29.84 on the 21st. Bright and fair weather prevailed from the 18th to 22nd, except for the formation of a LCR over parts of St. Peter during the afternoon of the 21st when totals of 1.00 in. were recorded. Conditions then became influenced by an E/W the trough of which appeared to pass over the Island during the morning of the 24th. Heavy local showers fell during the night of the 23rd with occasional thunder, the wind blowing from NE & NNE. There was fairly general rain during the morning of the 24th; max. totals of 2.50-3.00 in. were recorded in some eastern districts; the wind backed to N & NNW as the weather came under the influence of hurricane "Ilsa" centred some 300 miles NE of the Island. P was constant at 29.80 from the 24th to 26th and rose to 29.84 during the last four days of the month. The wind was gentle breeze S on the 25th & 26th and gradually backed to ENE by the 29th, and the weather was generally fair to fine. Conditions were unsettled on the 30th with squally showers and winds varying between ENE & ESE.

October.

R 4.71 : 60 pca

MMT : 7.50 in western St. Peter to 2.50 in southeastern coastal districts.

P rose slowly from 29.87 on the 1st to 29.92 on the 7th. There were

islandwide showers on the 1st & 2nd totalling up to a max. of about 1.50 in. The wind was moderate and sometimes fresh breeze E & ESE and the sky was persistently overcast, and there was no sunshine on the 2nd. There was a bright sunny period from the 3rd to 7th with the wind gentle breeze between E & SE up to the 6th and backing to ENE & NE on the 7th. P began falling on the 7th and continued to fall to 29.79 on the 11th. There were widespread showers during the night of the 8th when max. totals of 1.00-1.25 in. were recorded in several districts. The trough of an E/W passed over the Island during the early morning of the 9th with rain squalls and gusts over 30 miles per hour. The weather was unsettled and the sky overcast on the 9th and further gusty showers fell during both the day and night. Partially overcast conditions continued on the 10th & 11th, with occasional local light or moderate showers. The wind shifted to SE on the 10th but backed to ENE by the evening of the 11th. P rose slightly on the 12th & 13th but decreased again to 29.82 on the 14th and then rose to 29.88 by the 18th. Conditions were mainly fair on the 13th & 14th, except for very local light and moderate showers with wind ESE & E. There were squally showers on the 15th & 16th with gusts reaching 40 miles per hour; max. totals of approximately 2.00 in. were recorded in some districts during the two days. Drier weather set in on the 17th and except for moderate local showers during the night of the 18th, continued until the 23rd with P decreasing again from the 19th to 29.80 on the 22nd & 23rd; the wind was mainly light to gentle breeze varying between ENE & ESE. P began increasing again on the 24th and continued increasing to 29.93 on the 30th. Moderate and fairly heavy local showers moved across some districts from SE during the afternoon of the 24th with a max. total of 1.00 in. recorded in St. James; otherwise mainly fair weather with only light local showers prevailed until the end of the month.

November.

R 3.97 : 51 pea

MMT : 5.60 in southwestern St. John to 2.00 in coastal districts of St. Peter and St. James.

The first two days of the month were bright, sunny and windy with moderate local showers at night. P fell from 29.86 on the 1st to 29.81 on the 3rd, when a small E/W passed over the Island causing unsettled and showery conditions. The weather continued unsettled with occasional light and moderate showers from the 4th to 7th. The wind moderated to light breeze NE on the 8th and a LCR developed during the afternoon over western and southwestern coastal districts where max. totals of 1.00-1.50 in. were recorded. It was mainly fine on the 9th and 10th, except for moderate local showers during the night of the 9th; the wind was light breeze NE & ENE. Fine, dry conditions continued on the 11th & 12th. A LCR formed over the sea to the W of St. James on the 13th and during that night fairly heavy rain fell in some districts and max. totals of 1.25-1.50 in. were recorded in parts of St. Joseph. It was fine and dry again from the 14th to 16th. Wind velocity was very low on the 17th and a small LCR developed between noon and 1 p.m. especially over southern St. Michael where 1.00 in. was recorded. The wind gradually increased in velocity after the 17th and became moderate to fresh breeze on the 22nd to 25th and shifted from ENE on the 18th & 19th to E on the 20th to 25th. Small LCR's formed over the sea on the 18th & 19th, otherwise conditions were generally fair from the 18th to 24th, except for a moderate local shower in northern districts during the night of the 21st and light local showers on the 22nd & 23rd. The weather became unsettled in the early morning of the 25th with local squally showers; it was fair again in the afternoon, but an area of fairly heavy rain passed to the S of the Island and distant lightning was observed in the SW in the evening. P fell from 29.93 on the 24th to 29.85 on the 28th and was steady at 29.87 on the

29th & 30th. There were occasional light and moderate showers on the 26th to 29th with the wind backing to NE on the 26th and moderating and shifting to E & ENE on the 27th to 30th. The last day of the month was unsettled with frequent light rain and showers; max. totals of 0.50-0.75 in. were recorded in almost all districts.

December.

R 5.89 : 123 pea

MMT : 8.20 in the highlands of St. James to 2.25 in southwestern Christ Church.

The first four days of the month were generally fine with good visibility; the wind was gentle breeze E & ENE. The weather became unsettled in the early morning of the 5th and continued slightly unsettled until the morning of the 8th, with occasional moderate showers in the upland districts and light showers generally. The weather was generally fine from the 9th to 12th with the wind gentle to moderate breeze E & ENE. Unsettled conditions developed on the 13th and fairly frequent light and moderate showers fell on the 14th, 15th & 16th with the wind increasing to moderate and fresh breeze E. P had been varying between 29.86 and 29.93 during the month and decreased again to 29.86 on the 17th with fair weather prevailing on that day and on the 18th. A period of heavier showers began during the night of the 19th and continued until the 23rd with P rising slowly to 29.91 on the 22nd. Max. totals of 3.00 in. were recorded on the 20th in the northern and central hills and 1.50-2.00 in. during the night of the 22nd and morning of the 23rd. P decreased very slowly during the remainder of the month from 29.89 on the 23rd to 29.84 on the 31st. The weather was fair and sunny with only light showers from the 24th to 27th with the wind gentle breeze E & ENE. Conditions were unsettled with light and moderate local showers from the 28th to 30th, becoming fine on the 31st.

1959.

R 47.94 : 79 pca

Rainfall totals at individual stations ranged from 70.50 in the highlands of St. Thomas to 31.00 in southwestern St. James.

Rainfall was well above average during the normal "dry season" from February to May. June was a very dry month, and, with the exception of October, rainfall in the normal "wet season" was well below average.

Passing cyclonic disturbances had little influence on the local weather.

The average wind velocity in December was the lowest recorded for the month of December.

January.

R 2.39 : 71 pca

MMT : 3.85 in southeastern St. Thomas and the highlands of St. Joseph to 0.50 in coastal districts of Christ Church & St. Michael.

The first week was mainly fair to fine and sunny with the wind seldom more than gentle breeze between ENE & NE. P fell rapidly on the 8th & 9th to 29.84 and then rose to 29.97 on the 12th. Although daily sunshine totals continued to be high, showers were fairly frequent and widespread during the second week of the month; max. totals of 0.30-0.50 in. were recorded on the night of the 8th and 0.50-0.75 in. on the night of the 13th. Wind velocity increased slightly and direction was mainly between ENE & E. Sunny weather prevailed from the 14th to 18th with only occasional light showers. P rose to 29.95 on the 19th and remained above 29.90 for the remainder of the month. The wind increased to fresh breeze ENE & E on the 19th & 20th and there were further light showers. Moderate showers fell during the nights of the 21st & 24th when max. totals of 0.30-0.50 in. were recorded; otherwise there were bright sunny days with occasional light showers. Wind velocity moderated temporarily from the 26th to 28th but direction remained constant at ENE & E.

February.

R 3.44 : 156 pca

MMT : 5.70 in the highlands of St. Thomas to 1.50 in northeastern districts.

P was fairly constant between 29.92 and 29.94 during the first four days and then rose to 30.00 on the 5th and remained very high at a little above or below 30.00 until the 14th. There were frequent light and occasional moderate showers. Wind varied in direction between E & NE and increased to fresh breeze between the 4th & 7th. P fell to a little above or below 29.90 on the 17th, 18th & 19th, when there were heavier showers totalling up to 2.00 in. for the three days. The wind shifted from NE on the 16th to ESE on the 19th and velocity decreased to gentle to moderate breeze. P rose on the 20th & 21st and was fairly constant at about 29.96 to 29.98 for the remainder of the month. The wind backed to NE & ENE on the 20th and shifted to E & ESE on the 22nd & 23rd. There were further moderate and sometimes moderately heavy showers during the three days from the 20th to 22nd, with continuing but lighter showers during the last week of the month.

March.

R 2.45 : 127 pca

MMT : 5.25 in the highlands of St. Thomas to 1.00 in coastal districts of St. Michael.

The frequent light showery weather experienced in February continued during this month, but max. daily totals tended to be less than in February. P varied between 29.92 and 29.95 during the first five days and then fell to 29.87 on the 9th. Except for moderate showers in northern districts on the 1st, showers were light during the first five days. Windy conditions prevailed from the 2nd to 4th; mainly E winds increasing to fresh to strong breeze on the 4th. The wind moderated to gentle to moderate breeze between ENE & ESE during the next week; light showers fell in all districts but moderately heavy showers fell in parts of St. Thomas, St. James and northern St.

Michael on the 12th. P rose after the 12th to 30.00 on the 15th & 16th and remained high until the 24th. Showery conditions continued; moderately heavy showers with max. totals of about 0.50 in. were recorded on the 13th & 17th. The wind backed to NE on the 16th and remained between ENE & E until the 21st, varying in velocity. Conditions were drier during the last week of the month except for a moderate local shower in northern St. George and parts of St. Thomas during the night of the 30th. Wind velocity was gentle to moderate breeze and wind direction tended to shift to ESE.

April.

R 3.17 : 135 pea

MMT : 6.85 in central St. John to 1.25 in southeastern St. Philip and northeastern St. Peter.

P was fairly constant during the first half of the month at a little below 29.90. Wind velocity was gentle to moderate breeze for the first nine days, direction varying between E & ESE. The 1st & 2nd were generally dry. Moderately heavy local showers fell on the 3rd and max. totals of 0.75 in. were recorded in some districts. A period of fairly frequent and widespread light showers followed from the 4th to 14th, with moderate showers on the 9th. There was a period of dry weather from the 15th to 23rd, with little or no rain recorded in any district. P rose slightly on the 16th and fell to 29.86 on the 19th to 21st. Wind velocity increased to fresh breeze on the 10th & 11th and averaged a moderate breeze from the 12th to 26th, except on the 18th & 19th when winds were lighter; wind direction was constant at E & ESE. P varied between 29.87 and 29.94 during the remainder of the month. There were showers on the 24th & 25th with max. totals of 0.75 in. in some districts. The 26th & 27th were dry. The weather during the last three days of the month was somewhat abnormal. The wind was light and frequently variable locally, being mainly E on the 28th, ENE & NE on the 29th and SE & SSE on the 30th. LCR's developed over some dis-

tricts on the 28th & 29th. A moderate LCR developed over parts of St. James, southwestern St. Thomas and the northern half of St. Michael on the 28th and max. totals of 1.50 in. were recorded. On the 29th the LCR spread irregularly over a wider area, but was heaviest in parts of St. John and St. Philip where totals of over 3.00 in. and up to 2.50 in. were recorded respectively. There were also fairly heavy local rains during the early morning of the 29th and the night of the 30th; totals between 1.00 and 1.50 in. were recorded on each occasion. A LCR developed over the sea to the NW on the 30th.

May.

R 4.55 : 140 pca

MMT : 8.00 in the highlands of St. Thomas to 2.00 in southwestern Christ Church.

The period of abnormally rainy weather experienced at the end of April came to an end on the 1st of May when there were further moderately heavy showers in some districts of the Island; max. totals of 0.75-1.00 in. were recorded at places in southern St. Michael. Generally fair conditions set in by the evening of the 1st and mainly fine dry weather prevailed until the morning of the 9th. P fell from 29.91 on the 1st to 29.81 on the 4th and then rose gradually to 29.89 on the 9th. The wind was E on the 1st and shifted to SE & SSE on the 3rd & 4th and backed gradually to E again by the 8th. Wind velocity increased from gentle to moderate breeze during the first three days to fresh breeze during the five days from the 6th to 10th. Unsettled conditions developed on the 9th when there were light to moderate local showers with fresh to strong ESE winds during the day, followed by moderate and fairly heavy rain in all districts during the night with the wind moderating to light or gentle breeze; max. totals of over 2.00 in. were recorded in parts of St. John and eastern districts of St. Lucy. Further moderate and moderately heavy showers fell in some districts on the

10th accompanied by strong ESE winds; generally fair conditions set in by evening. P rose from 29.88 on the 10th to 29.98 on the 13th and then fell slowly to 29.90 on the 21st. Fairly frequent light and moderate local showers fell during this period, becoming moderately heavy in some districts on the 13th, 16th & 18th. Wind direction varied between ENE & ESE, becoming mainly E after the 17th. Wind velocity increased to fresh breeze on the 17th & 19th. P rose to 29.97 on the 23rd and fell slowly to 29.87 on the 31st. The sky became generally overcast with thick cirrostratus on the 21st and this state of the sky persisted on the 22nd & 23rd, when there was little or no sunshine; the sky gradually cleared on the 24th. Light local showers continued during the last week of the month with E winds moderating during the last four days. The weather became unsettled on the 31st with heavier types of shower clouds appearing in various directions; moderately heavy showers fell in parts of St. Thomas and northern districts, and distant lightning was observed in the NW during the night.

June.

R 1.91 : 35 pca

MMT : 3.20 in the highlands of St. Thomas and central St. John to 0.75 in coastal districts of St. Michael.

P increased from 29.90 on the 1st to 29.95 on the 3rd and fell to 29.88 on the 5th. There was evidence of moderately heavy rain passing at considerable distance to the S of the Island on the 1st, while conditions were fair over the Island. Moderate local showers were widespread during the afternoon of the 2nd and early morning of the 4th; max totals of 0.50 in. were recorded in some districts. The sky was persistently overcast with thin cirrostratus and windy misty conditions prevailed. The wind was mainly E increasing at times to fresh to strong breeze. P rose to 29.98 on the 9th and remained high for the remainder of the month. Except for local moderate showers on the 10th, 16th & 24th and occasional

light showers or drizzles on other days, the weather was dry and windy until the 26th; wind direction varied only slightly N or S of E. Persistently strong winds were experienced on the 16th to 18th, and on the 26th average velocity for the 12-hour period from 6 a.m. to 6 p.m. was 21 miles per hour. The sky was frequently overcast with thin cirrostratus and visibility was seldom good. There was a change on the 28th and the trough of a small E/W passed over during the night of the 28th; moderately heavy rain fell in some northern districts where max. totals up to 1.50 in. were recorded. The wind backed to ENE on the 28th and shifted to ESE on the 29th, and velocity moderated to light to gentle breeze. Conditions became mainly fair to fine again on the 30th.

July.

R 3.72 : 60 pea

MMT : 6.15 in the highlands of St. Thomas to 1.75 in coastal districts of St. Michael and southwestern Christ Church.

P was high at the beginning of the month increasing to 30.050 on the 2nd. A few light to moderate showers fell on the 1st, otherwise conditions were fair to fine with the wind increasing at times to moderate to fresh breeze E & ESE. P fell to 29.93 on the 4th & 5th and there were light and moderate local showers; the wind backed to N of E on the 4th and shifted to S of E on the 5th and moderated to gentle breeze. Distant lightning was seen during the evening of the 5th. The weather was fair from the 6th to 9th, with the wind fresh to strong breeze E & ESE on the 6th but moderating during the next three days to moderate breeze E & ENE. P rose to 29.97 on the 6th and varied between 29.95 and 29.93 from the 7th to 25th except on the 14th when it fell to 29.90. Rain was recorded every day from the 10th to the 20th, and totals exceeded 0.50 in. (but were less than 1.00 in.) in some districts on the 13th, 15th & 18th. There were strong E & ENE winds on the 11th & 12th, and mainly gentle to moderate winds from the 13th to

25th; wind varied in direction between ENE & ESE. Small E/W's passed over on the 15th, 16th, 17th & 20th with little influence on the local weather. The 21st was generally fine and rainless, and there were only light scattered showers during the remainder of the month, except on the 23rd when up to 0.50 in. was recorded in some districts. P was fairly constant at about 29.90 during the last five days of the month. Very windy conditions prevailed from the 26th to 29th, wind direction being mainly E.

August.

R 3.07 : 42 pca

MMT : 5.70 in the E hills of St. John to 1.00 in coastal districts of St. James.

P fell slowly during the first week from 29.95 on the 1st to 29.90 on the 8th. There were occasional light and moderate showers in almost all districts, but conditions were generally bright and sunny. The wind increased to fresh breeze E on the 2nd & 3rd and moderated on the 4th to 8th. The trough of a small E/W passed over during the afternoon of the 5th with little influence on the local weather. P rose to 29.96 on the 10th and fell slowly to 29.88 on the 14th. Except for light local showers on the 13th & 14th, the weather from the 9th to 16th was generally fine, sunny and windy. Wind direction was mainly E & ENE but backed to gentle breeze NE on the 16th. An apparently complex and confused situation developed during the 16th & 17th. There was a considerable amount of distant cirrus and cirrostratus in the NE sky during the 16th with cirrus "pointers" to the NE during the afternoon. P fell to 29.87 on the 16th and the wind backed to N & NNE during the night, moderating to almost calm. The weather during the early morning of the 17th suggested that a small E/W was passing over, the wind shifting to light breeze SE by 8 a.m. Between 10 a.m. and noon a LCR developed over parts of St. Peter and St. James. After noon the weather probably came under the influence of the storm "Edith" and the wind shifted to

light breeze W by 2 p.m. The LCR spread eastwards and became heavy in parts of St. John and extended in the late afternoon and early evening into some coastal areas of St. Philip. The SW air stream associated with the storm "Edith" became evident by 3 a.m. on the 18th; the wind gradually backed through S & SE to E by the night of the 18th, with fair weather developing as P rose rapidly. There were light or moderate local showers in most districts from the 19th to 23rd with the wind shifting from gentle breeze ENE on the 19th to SE on the 21st & 22nd and back to E on the 23rd. P fell slightly on the 24th & 25th and sharply to 29.84 on the 26th. The 25th & 26th were fine days with the wind fresh breeze E. The wind moderated on the 27th becoming almost calm at night when very local rain fell in parts of St. John and max. totals of 1.25 in. were recorded at some places. The wind was light breeze SE to SW on the 28th and variable locally and P was down to 29.83; a LCR developed mainly over parts of St. James, St. Peter, St. Lucy and St. Andrew and a max. total of 2.50 in. was recorded at a place in St. Lucy; the weather became fine during the night with the wind light air NE & NNE. The trough of a weak E/W passed over the Island about 10.30 a.m. on the 29th, with no appreciable rain falling on the Island; P rose to 29.87 by 3 p.m. An area of fairly heavy rain passed S of the Island during midday and afternoon of the 30th and P fell to 29.84; the wind backed to ENE in the morning and shifted to ESE in the afternoon increasing in velocity to strong breeze, with max. gusts probably exceeding 35 miles per hour. Little rain fell on the Island. The last day of the month was dry and windy with the wind fresh breeze E.

September.

R 5.35 : 70 pca

MMT : 10.25 in southwestern coastal districts of St. Thomas to 2.50 in southwestern St. James.

LCR's were largely responsible for a very large proportion of the to-

tal rainfall for the month.

Hurricanes "Gracie", "Flora" and "Hannah" developed over the Atlantic Ocean, but all too far N to influence the weather at Barbados.

Conditions were mainly fair and dry on the 1st as a weak E/W approached the Island. P fell slightly on the 2nd as the trough passed over. The wind was light breeze NE & ENE on the 1st and on the morning of the 2nd and shifted to ESE during the afternoon of the 2nd. A moderate LCR developed over parts of St. Michael and southern St. James during midday on the 2nd. The weather was mainly fine on the 3rd with the wind gentle breeze ESE, but moderate and moderately heavy local showers fell during the morning of the 4th. There were some indications that the trough of a weak E/W passed over during the night of the 4th, but there were only light showers. Very local moderate showers fell during the night of the 7th and on the 8th, and very local moderately heavy showers during the nights of the 11th & 12th. P fell slowly to 29.84 on the 15th. The weather came under the influence of an E/W on the 14th with the wind light breeze NE; the trough passed over the Island at about 1 a.m. during the night of the 14th. A heavy LCR developed over southwestern districts on the 14th accompanied by a short thunderstorm and max. totals of 4.50 in. were recorded at places in southern St. Michael. The wind was light breeze SE & S on the 15th; moderate local showers fell in eastern districts in the morning and a LCR fell over northwestern coastal districts in the afternoon. There were only light to moderate local showers during the period from the 16th to 24th. P rose to 29.88 on the 16th and fell to 29.81 on the 16th to 24th. P rose to 29.88 on the 16th and fell to 29.81 on the 18th and a weak E/W passed over during the morning of the 19th. The wind was light to gentle breeze NE on the 17th & 18th and shifted to SE & S on the 19th. Fair weather with isolated cumulonimbus clouds in various directions prevailed from the 20th to 24th with the wind light to

gentle breeze ESE; only light local showers fell. P rose to nearly 29.90 on the 23rd & 24th and fell to 29.86 on the 25th. An unusually heavy LCR developed on the 25th over southwestern districts with the wind light breeze NE; max. totals of 6.50 in. were recorded in the Rockley area of western Christ Church. P began rising again on the 26th to 29.89 on the 27th. The wind continued light to gentle breeze ESE & SE; there were isolated moderate to fairly heavy local showers on the 26th and a LCR developed over leeward parishes; max. totals of 3.00 in. were recorded in the coastal districts of St. Peter. The wind backed to NNE during the night of the 26th and shifted to ENE during the morning of the 27th when heavy rain spread over St. Philip, Christ Church and southern parts of St. George and St. Michael; max. totals of 4.00 in. were recorded in eastern districts of St. Philip. The wind shifted to ESE about 10 a.m. on the 27th, and later to SSE, suggesting the passing of a trough of an E/W, but there were no significant P changes. Conditions continued to be unsettled in the vicinity of the Island during the 29th & 30th; rain clouds were visible in various directions but there was little rain on the Island except a few very local moderately heavy showers during the nights. The wind was light to gentle breeze ESE & SE and there was no appreciable change in P.

October.

R 10.19 : 130 pca.

MMT : 13.00 in the highlands of St. Thomas to 6.25 in coastal districts of St. Michael.

P was fairly high during the first four days rising from 29.88 on the 1st to 29.91 on the 4th. The wind was mainly light breeze ENE on the 1st and there were isolated local showers and thundery shower clouds in various directions. There were some indications that the trough of a small E/W passed over the Island during the morning of the 2nd. There were light and moderate showers over the Island while heavy rain passed to the S during

the morning; the wind shifted to ESE by 10.30 a.m. and to SSE after noon. The 3rd & 4th were bright, sunny days with the wind gentle breeze E & ENE; there were local showers during the morning of the 5th. P fell slowly from 29.87 on the 5th to 29.82 on the 9th. There was fairly heavy rain over the northern end of the Island during the night of the 6th and max. totals of 1.00 in. were recorded at some places. The sky was generally overcast throughout the day of the 7th with cirrostratus and altostratus; there was light to moderate rain during the evening, wind being gentle or gentle to moderate breeze E. There was little rain over the Island on the 8th & 9th, although conditions in the area were unsettled; heavy rain passed S of the Island on the 9th and the sky was frequently partially overcast with altostratus and cirrostratus. A large area of unstable weather conditions was reported to be situated E of the Island. The weather was showery on the 10th, with heavy rain passing S of the Island; the wind was gentle to moderate breeze E & ESE. The morning of the 11th was fair over the Island and the wind was fresh to strong breeze E & ENE; showery conditions with squalls of 35-40 miles per hour developed during the afternoon; P fell to 29.80 and during the evening the wind shifted to ESE and rainy windy weather persisted generally over the Island during the night; max. totals of 5.00 in. were recorded at some places in the upland districts and not less than 2.50 in. in any district. The windy, rainy weather was probably caused by an E/W or a convergence zone. P rose to 29.85 on the 12th; there was little further rain but the sky remained generally overcast throughout the day and there was no sunshine. The weather was bright and sunny on the 13th as P fell again to 29.80. P rose slowly on the 14th and then rapidly on the 15th to 29.91 and continued to rise to 29.95 on the 17th. There were light and moderate local showers in all districts, with fairly heavy showers on the night of the 15th; the wind was generally moderate breeze ESE at first,

backing later to E. A spell of dry, sunny weather prevailed from the 18th to 22nd as P fell slowly to 29.87; the wind moderated and became light breeze E on the 20th to 22nd. Unsettled conditions developed during the night of the 22nd; distant lightning was visible in the ENE & SE during the first half of the night, and there was fairly heavy rain in northeastern districts toward next morning. Confused conditions developed on the morning of the 23rd, and an apparent convergence of ENE & ESE winds locally over St. Andrew caused heavy rains accompanied by a thunderstorm in that parish; totals up to 3.50 in. were recorded in a relatively short time. Fairly heavy rain moved in over southern districts towards midday, and fine conditions developed generally after noon. Unsettled conditions continued during the 24th to 27th with frequent thunderstorms near the Island and sometimes over coastal districts. P fell to 29.86 on the 24th to rise to 29.90 on the 27th; moderately heavy showers fell in all districts; the wind was light to gentle breeze E & ESE. P fell to 29.84 on the 30th and rose to 29.86 on the 31st. A small E/W influenced the weather during the last four days of the month, the trough passing over the Island during the morning of the 30th. The wind was generally light breeze backing to ENE & NE on the 28th and shifting to ESE on the 30th and to SE on the 31st; only light or moderate local showers fell.

November.

R 4.84 : 62 pca

MMT : 7.75 in the highlands of St. Thomas to 2.50 in southeastern coastal districts.

P rose slightly during the first three days to 29.92 and fell to 29.82 by the 6th. The weather during the first five days was generally fair to fine except for local light to moderate showers during the nights of the 1st & 2nd. The wind was light breeze SE & ESE on the 1st and gradually increased to moderate breeze by the 4th and backed to E. The weather from

the 5th to 12th was influenced by two LPA's the troughs of which passed over the Island on the 6th & 10th. There were fairly widespread moderate showers on the 6th to 8th and further local moderate showers over northern districts on the 9th. The wind backed to E & ENE temporarily on the 6th and then varied between E & ESE on the 7th & 8th, being mainly gentle to moderate breeze. P rose slightly on the 7th & 8th and then fell to 29.79 on the 10th when the wind backed to gentle breeze ENE & E and an area of rain and showers approached the Island from the S. During the night of the 10th the wind shifted to ESE and fairly heavy rain fell in some districts with occasional thunder; max. totals of 2.50 in. were recorded in some southern and western districts. P rose rapidly during the night of the 10th and continued to rise to 29.87 on the 14th. After further moderate local showers on the 11th, the weather became generally fair from the 12th to 17th. P began falling on the 15th and the trough of a LPA passed over on the 17th when the P was 29.78. The wind backed to NE on the 15th, shifted to ENE on the 16th and to ESE by the afternoon of the 17th. Fairly general moderate to fairly heavy showers fell on the 18th to 20th as P rose to 29.88 on the 21st. The wind shifted to SE & SSE on the 18th and backed to ESE on the 19th and E on the 20th, being mainly light to gentle breeze. There was a slight rise and fall in P on the 14th & 25th respectively. The weather was fair to fine on the 21st to 23rd with the wind backing to ENE & E on the 22nd & 23rd. Moderate local showers fell during the night of the 24th. P began falling on the 26th and fell to 29.78 on the 28th under the influence of a LPA with a weak circulation centred some 300 miles N of the Island. The 25th, 26th & 27th were generally fine and dry. The wind increased to moderate breeze E on the 25th, but backed to NE on the 26th and to N & NNE on the 27th, moderating to light breeze. The wind shifted to light breeze S & SSE on the 28th and a LCR developed over northern districts and max. totals

of 3.00 were recorded at some stations. P rose rapidly during the night of the 28th and was at 29.92 on the 30th. The sky was partially overcast on the 29th but the weather was dry; the wind increased to fresh breeze SSE. On the 30th there appeared to be a convergence of ENE & ESE air current causing unsettled and showery conditions; during the afternoon the wind increased to fresh breeze ESE and fairly heavy showers fell over northern districts where max. totals of 1.50 in. were recorded.

December.

R 2.86 : 60 pca

MMT : 5.00 in southeastern St. Thomas to 1.00 in coastal districts of St. Michael.

P was fairly high on the 1st at 29.92, fell rapidly to 29.83 on the 3rd and rose slowly to 29.89 on the 8th. Moderate and moderately heavy showers fell in the eastern and southern parts of the Island during the afternoon of the 1st and then the weather became generally fair during the night with gentle E & ENE winds. Except for moderate local showers during the night of the 5th, the weather from the 2nd to 8th was generally fair to fine with the wind gentle breeze E. P fell slightly from the 9th to 14th. Moderate to fairly heavy showers fell in all districts on the 9th and then there was a spell of generally fair weather from the 10th to 21st. P rose from 29.84 on the 15th to 29.89 on the 20th. Wind velocity was persistently low and wind direction varied between ESE & ENE from the 10th to 16th, backed to NE on the 17th and 18th and shifted to E & SE on the 19th and 20th. P fell slightly from the 21st to 24th, increased a little on the 25th, fell to 29.83 on the 27th and finally rose to 29.90 on the 31st. Moderate and moderately heavy showers fell generally over the Island during the early morning of the 23rd and then conditions were fair until the 28th. Wind velocity continued to be low and direction was fairly constant at E from the 21st to 24th, shifting to SE & SSE on the 25th and 26th and backing again to ENE & NE on the 27th

and 28th. There were moderate to fairly heavy showers on the 28th, 29th and 30th, especially in central districts where a max. total of 1.00 in. was recorded at some places. The weather became fair and breezy on the 31st with the wind moderate breeze E and ESE.

The 24-hour daily mean wind velocity this month was 6.3 miles per hour and was the lowest mean recorded for the month of December during the period 1903 - 1960.

1960.

R 50.35 : 84 pca

Rainfall totals at individual stations ranged from 72.00 in the highlands of St. Thomas to 31.50 in northwestern coastal districts of St. Michael.

Rainfall was appreciably above average in March and July and less than half average in September and November.

The first hurricane of the year developed within 50 miles to the N of the Island on the 9th July.

There were remarkably few thunderstorms during the year.

The month of November was one of the driest on record in southwestern districts and total rainfall between the middle of August and the end of the year was much below average in southwestern districts

January.

R 2.66 : 80 pca

MMT : 6.00 in the E hills of St. John to 1.25 in northwestern St. Lucy.

The trough of a small LPA passed over the Island during the morning of the 3rd. Conditions were generally fine but misty on the 1st, with the wind moderate breeze E. Light to moderate local showers fell in some eastern and southeastern districts on the morning of the 2nd. The wind gradually moderated to gentle and light breeze on the 2nd, 3rd & 4th, backed to ENE & NE during the night of the 2nd and morning of the 3rd and shifted to ESE &

SE during midday and afternoon of the 3rd. There were widespread light and occasionally moderate showers during the evening of the 2nd and morning of the 3rd and then conditions became generally fine. Wind velocity increased during the 5th & 6th to moderate breeze on the 7th and conditions were mainly fine from the 4th to 7th. The wind moderated to gentle breeze ENE on the 8th & 9th. Except for very local moderate showers over central districts, the 8th was mainly fair; isolated specimens of a fairly heavy type of cumulonimbus were, however, observed in the distance. The weather on the 9th was somewhat abnormal; fairly heavy showers moved very unevenly across the Island in the morning and max. totals exceeding 1.00 in. were recorded at places in St. Peter while only light drizzles fell in southwestern districts; the wind moderated to almost calm. There was a bright and fair spell during midday, but further cumulonimbus approached the Island from E during the early afternoon with moderate rain spreading slowly over the Island after 3 p.m.; the evening was fair locally but unsettled, and fairly heavy rain fell again in some districts by midnight; max. totals of 3.00-3.75 in. were recorded in parts of St. John. Wind velocity increased after the rain to fresh breeze ENE on the 10th. P fell to 29.88 on the 11th and continued fairly constant at a little above or below 29.90 until the 20th. There was a period of relatively low wind velocity from the 11th to 21st, wind direction being mainly ENE but sometimes backing to NE. The weather was generally fair to fine during this period. P was above 29.90 from the 21st to 26th and wind velocity increased to moderate breeze E and to fresh breeze on the 24th and 26th. The four days from the 21st to 24th were fine and dry. The 25th was partially overcast with light showers, becoming mainly fair again on the 26th. P fell slowly after the 26th to 29.85 on the 31st. Wind velocity moderated again to gentle to moderate breeze E during the last four days of the month. Local drizzles and light showers fell on the 27th, 28th & 31st, otherwise the weather was generally fair to fine.

February.

R 2.36 : 107 pca

MMT : 3.90 in the highlands of St. Thomas to less than 1.00 in coastal districts of St. James.

The 24-hour daily mean wind velocity was 7.2 miles per hour and was the lowest mean recorded for the month of February in the period 1903 - 1960.

The weather on the 1st was under the influence of an "induced trough" (according to professional reports). There was general rain over the Island at intervals during the day and night of the 1st and totals varied from 0.75 in. to 2.50 in., the heaviest rain falling on the Christ Church ridge; the wind was gentle to moderate breeze between E & SE. The weather was generally fair to fine from the 2nd to 13th, except for local moderate showers during the night of the 5th. Wind velocity was fairly low, varying between ENE & SE. Very local moderate showers fell on the 14th, 15th & 16th. The weather was very dry from the 17th to 27th. Wind velocity continued to be relatively low and varied in direction between ENE & ESE. There were widespread showers on the 28th with total rainfall exceeding 1.00 in. in some northern districts. The last day of the month was fine with the wind increasing to fresh breeze E.

March.

R 2.55 : 132 pca

MMT : 3.90 in the highlands of St. Thomas to less than 1.50 in parts of Christ Church and St. Philip.

The weather was mainly fine during the first week; the wind backed to ENE & NE on the 2nd, 3rd & 4th and shifted and increased to fresh breeze E by the 6th. Moderate showers fell in the uplands and northern districts during the night of the 7th. P fell from 29.89 on the 9th to 29.82 on the 11th and rose to 29.92 on the 14th. The sky was frequently partially overcast during this period with cumulostratus and altocumulostratus; there was little rain during this period of lower P except a few local moderate showers, especially in St. Peter, on the 10th. Wind velocity was low from the 11th to

15th, seldom exceeding gentle breeze; wind direction changed slowly from E on the 11th to S and SSE on the 13th and then backed to E again by the 15th. P fell slightly to 29.87 on the 16th and increased to 29.93 on the 19th. There were a few very local moderate showers during the night of the 15th followed by a showery spell in all districts from the 17th to 21st; max. totals of a little over 1.00 in. were recorded at places in St. Lucy on the 19th. Wind velocity increased to moderate and fresh breeze ENE & E on the 18th, 19th & 20th and moderated on the 21st. P varied frequently between 29.94 and 29.86 during the remainder of the month. The weather was mainly fine from the 22nd to 25th with gentle to moderate ESE & SE winds. Wind velocity increased to fresh breeze E & ENE on the 26th & 27th and there were showers in all districts from the 26th to 29th; max. totals of 0.50-0.75 in. were recorded on the 27th. The wind was gentle to moderate breeze between ENE & ESE during the last four days of the month. There were further showers on the 31st, especially in the southern half of the Island where max. totals up to 0.75 in. were recorded.

April.

R 1.51 : 64 pca

MMT : 2.25 in the highlands of St. Thomas and hills of St. Peter and St. George to 0.50 in parts of Christ Church and St. Philip.

P was steady at about 29.90 and conditions were mainly fair to fine during the first ten days; except for a moderately heavy local shower over parts of Christ Church during the morning of the 6th, there was no appreciable rain during this period. Wind direction changed from E & ESE during the first three days to ENE & NE during the next three days, and was then steady at E & ENE. P fell to 29.84 on the 12th and increased to 29.90 by the 14th; there were generally light and locally moderate showers from the 12th to 14th. P fell again to 29.81 on the 16th and remained fairly steady at about 29.83 until the 20th. The wind was moderate to fresh breeze ENE &

E from the 15th to 17th, and then moderated to gentle breeze E on the 20th when a small LCR developed over the sea to the W of St. James; a few light local showers fell during the night of the 18th. P varied between 29.90 and 29.82 during the remainder of the month. From the 21st to the end of the month the wind was gentle or gentle to moderate breeze varying between E & SE. There were showers in all districts during the night of the 24th and max. totals of 0.75-1.00 in. were recorded at places in St. Thomas. Further light showers fell during the morning of the 25th; otherwise conditions were generally fair to fine.

May.

R 1.91 : 60 pca

MMT : 3.70 in southwestern St. Andrew to 0.75 in southwestern St. James.

It was fine during the first two days with the wind gentle to moderate breeze SE & ESE on the 1st, ESE & E on the 2nd and ENE by afternoon of the 3rd. P rose from 29.82 on the 1st to 29.86 on the 4th. There were light and moderate local showers over eastern and central hills during the morning of the 3rd, and local moderately heavy showers over southeastern districts during the evening of the 3rd when max. totals of 0.50 in. were recorded at places in Christ Church. It was generally fair on the 4th. P fell to 29.79 on the 6th and the wind shifted to gentle breeze ESE on the 5th and S & SSE on the 6th. There were moderately heavy local showers during the night of the 5th in parts of St. Joseph and northern parishes with max. totals of 0.60 in. It was fair from the 6th to 9th but often overcast with medium and high cloud. P rose to 29.86 on the 9th & 10th and the wind slowly backed from SSE to ESE increasing in velocity. On the 10th frequent light and moderate showers fell during the greater part of the day; max. totals of 1.00 in. were recorded at some places, but only light showers fell in northern St. Peter and St. Lucy. P remained fairly steady from the 11th to 17th and the

wind was gentle to moderate breeze varying between ENE & ESE. There were light to moderate showers in upland districts during the nights of the 15th and 16th, and moderately heavy local showers in the same districts and in southwestern coastal districts during the nights of the 17th. Except for a slight fall on the 18th, P remained steady at about 29.86 until the 23rd and then rose to about 29.92 on the 24th to 26th. The wind was mainly E in direction increasing occasionally to fresh breeze on the 18th & 19th and then moderating again. It was generally fair to fine with little or no rain from the 18th to 26th; it was partially overcast with high cloud from the 20th to 22nd and then became fine. P fell to 29.87 on the 27th & 28th and the wind shifted to ESE. There were light and moderate unevenly distributed showers during the night of the 27th, with fairly frequent distant lightning in the N during the latter half of the night. Light and moderate rain spread generally over the Island on the 28th and the sky remained overcast all day; max. totals of 1.00 in. were recorded at some places. It was mainly fair during the last three days of the month, with P rising slightly to 29.93 on the 29th and falling to 29.87 on the 30th.

June.

R 4.84 : 90 pea

MMT : 7.50 in the highlands of St. Thomas to 2.75 in southeastern coastal districts.

P varied only slightly between 29.86 and 29.90 during the first ten days and, except for moderate and moderately heavy local showers on the 5th and light local occasional showers otherwise, the weather during the first 10 days was generally fair to fine with total hours of sunshine exceeding 10 hours each day; the wind was mainly gentle to moderate and moderate breeze between E & SE. P rose to 29.96 on the 12th, fell to 29.88 on the 14th and rose to 29.95 on the 16th. There was a showery spell from the 11th to 17th; moderate showers were general on the 11th & 16th and unevenly distributed on other

days; a little thunder was heard during the evening of the 16th. Max. daily totals sometimes exceeded 0.50 in. The wind continued to be mainly gentle to moderate breeze varying between E & SE, except during the morning of the 16th when it backed temporarily to NE and shifted to SE again by midday. P fell to 29.92 on the 17th and remained steady until the 20th, increased to 29.94 on the 21st and fell to 29.87 on the 23rd. There was a windy spell from the 17th to 23rd with velocity increasing to fresh and strong breeze at times, varying in direction between E & ENE. It was generally fair from the 18th to 20th and then moderately heavy showers developed in some districts on the morning of the 21st followed by moderately heavy showers in all districts later in the day; max. totals of 1.50-1.75 in. were recorded at some places. It was fair and windy on the 22nd but became unsettled on the 23rd with occasional light showers accompanied by short squalls gusting up to 30-35 miles per hour. P rose to 29.93 on the 24th; the wind shifted from ENE & E on the 23rd to ESE on the 24th and moderated to gentle to moderate breeze. There were showers in all districts during the early morning and day of the 24th and max. totals of up to 2.00 in. were recorded in parts of St. Thomas. Except for moderate local showers in some districts during the night of the 27th, the last six days of the month were mainly fair to fine.

July.

R 8.94 : 143 pca

MMT : 14.50 in western St. Thomas and southern St. Lucy to 5.00 in parts of Christ Church and St. Philip.

P was high at 29.99 on the 1st, but decreased fairly rapidly to 29.87 on the 4th. There were light showers during the night of the 1st in all districts except in northern districts where moderately heavy showers fell accompanied by a little thunder; the wind increased to moderate to fresh breeze E during the morning and backed to ENE in the afternoon. There were light showers over southern districts during the morning of the 2nd, followed by fairly

heavy showers in the evening, especially in parts of St. Andrew and St. Peter where max. totals of 1.00-1.50 in. were recorded. It was fair to fine and slightly misty on the 3rd, with local moderate showers towards next morning. P increased during the 5th to 29.93 on the 6th. The trough of the LPA apparently passed over during the afternoon of the 5th when the wind shifted to ESE & SE; moderate showers fell in some districts from clouds moving from SE. Windy conditions continued on the 6th & 7th, the wind backing to ENE on the 6th with fair to fine weather and to ENE & NE on the 7th when light and moderate showers fell in some districts. Conditions were unsettled on the 8th with P decreasing slightly to 29.91; there were occasional light and moderate local showers during the day but during the latter half of the night moderately heavy showers fell in some districts and max. totals of 1.00 in. were recorded. The sky was partially overcast with cirrus during the morning of the 9th and a heavier type of cumulonimbus became visible; the wind increased to gentle to moderate breeze E during the morning; there were light local showers and occasional short intervals of sunshine. P decreased a little further to 29.90 and the sky became increasingly overcast during the afternoon with altocumulus and cumulostratus, and much cumulonimbus developed from N through E to S; the wind was light to gentle breeze E & ENE. Rain spread fairly generally over the Island between 4 and 6 p.m. and was fairly heavy in some districts; max. totals of 1.50-1.75 in. were recorded at places in St. Thomas. During the afternoon it was noticed that the sea on the E & SE coasts was unusually rough. After sunset the weather became influenced by the incipient stages of hurricane "Abby", the centre of which at 7 p.m. was apparently not far to the ENE of the Island. The wind backed after 7 p.m. to NNE and increased to moderate to fresh breeze. The sky continued overcast during the evening with altostratus and cirrostratus of varying thickness; by 10 p.m. the most thickly overcast section of the sky was in the NE. Between 10 p.m. and mid-

night there was occasional light rain as the wind backed through N, NW & W, blowing a gentle to moderate breeze; after midnight the wind became gentle breeze SW. The centre of the developing hurricane passed N of the Island between 11 p.m. and midnight. The wind continued a light breeze during the second half of the night, backing slowly to S. Fairly heavy rain fell between 5 and 6 a.m. of the 10th, with the wind strong breeze SSE gusting up to about 40 miles per hour and accompanied by a moderate thunderstorm; max. totals of 1.50-2.00 in. were recorded in some districts. The sky was thickly overcast especially in the W & NW, but began clearing in the southern section after 8 a.m. when the wind was moderate breeze SE; by afternoon the sky was generally clear. P rose slightly on the 11th & 12th and the weather was mainly fair to fine. P fell slightly on the 13th and the wind backed to E & ENE in the afternoon. There was some evidence that the trough of a LPA passed over the Island during the latter half of the night of the 13th. The morning of the 14th was fine with wind a light breeze E & ESE; at midday a LCR developed off the coast of St. James and intensified during the afternoon with fairly frequent thunder; this cloud spread inland over coastal districts of St. James and St. Peter between 2 and 3 p.m. and max. totals of 2.50 in. were recorded at places in St. James. A fairly heavy shower developed over parts of St. John and St. George during the late afternoon and became a heavy shower over southern St. Thomas and northern St. Michael. The wind backed to gentle to moderate and moderate breeze NE & ENE on the 15th and 16th with fair but slightly hazy weather as P decreased to 29.86 on the 17th. The trough of a LPA passed over the Island about midday on the 17th and the wind shifted temporarily to ESE. There were a few moderate very local showers on the 17th with a little thunder. The weather was fair to fine and dry from the 18th to 21st as P increased to 29.94 on the 19th; the wind was gentle to moderate breeze E. P decreased to 29.88 on the 22nd and

the wind backed to ENE from midday on the 20th to midday on the 22nd when the trough of a shallow LPA passed over the Island and the wind shifted to ESE. There were moderate showers in all districts on the 22nd with occasional thunder. Further showers fell on the 23rd with occasional thunder and max. totals of 1.25 in. were recorded at places in St. Lucy. Light and moderate local showers fell on the 24th & 28th. The troughs of two small LPA's passed over during the nights of the 25th & 27th respectively. The wind shifted to light to gentle breeze SE & SSE on the 26th and backed to ENE on the 27th; P variation was only slight. P decreased from 29.97 on the 28th to 29.93 on the 30th and increased to 29.95 on the 31st. The wind increased to moderate to fresh breeze NE & ENE on the 29th & 30th and then moderated to light breeze SSE to SSW on the 31st. The trough of the LPA passed over during the early afternoon of the 31st. There was fairly heavy rain in parts of St. Joseph, St. Thomas and northern parishes after midnight on the 30th and max. totals of 2.00 in. were recorded at places in St. Lucy. A fairly heavy LCR developed over parts of St. James, St. Peter and St. Lucy on the 31st when max. totals of 3.00 in. were recorded in parts of St. Peter.

August.

R 7.80 : 107 pca

MMT : 11.75 in the highlands of St. Thomas to 5.00 in southwestern Christ Church.

A LPA passed over between the 1st & 5th but change of wind direction and other weather conditions did not clearly determine the time when the trough passed over. The wind increased to moderate to fresh breeze E & ENE on the 2nd and moderated to gentle breeze E & ESE during the night of the 2nd and continued thus on the 3rd & 4th. There were moderate local showers during the night of the 1st, otherwise mainly fine conditions prevailed during the first four days. P fell slightly on the 7th and rose slightly on the 8th and remained steady until the 15th. The wind backed to ENE & NE on the 5th, 6th

& 7th and increased to moderate to fresh breeze on the 6th & 7th. Moderately heavy showers accompanied by a short thunderstorm fell during the night of the 5th in all districts except the northern parishes, and there were a few light to moderate local showers on the 6th & 7th. The trough of a small LPA passed over the Island at about 10 a.m. on the 8th with the wind shifting to light to gentle breeze ESE & SE. Fairly heavy rain spread over the Island immediately after the trough passed over and max. totals of 2.25-2.50 in. were recorded in parts of St. John. The wind backed to ENE & E on the afternoon of the 8th as another shallow LPA approached; conditions were mainly fair on the 9th with the wind moderate breeze E & ENE, but widespread heavy rain fell on the 10th with the wind light breeze E & ENE backing to N & NNW during the afternoon, then shifting to E & SE between 8.30 and 9.30 p.m. as the trough passed over the Island. Rainfall totals for the day varied from 2.00 in. in parts of Christ Church and St. Michael to over 3.50 in. in parts of St. Lucy. There were fairly heavy local showers mainly over the upland districts on the 11th when max. totals up to 1.50 in. were recorded at places in St. Thomas. The weather was mainly fair from the 12th to 17th with a few very local light and moderate showers; there was some evidence of a very shallow LPA passing over during the night of the 15th, the wind shifting from ENE & NE on the 15th to ESE & SE on the 16th. P fell to 29.87 on the 18th, increasing a little on the 19th and rapidly on the 20th to 29.98. There were fairly heavy showers shortly before sunrise and during the morning of the 19th and max. totals of 1.50-2.00 in. were recorded in some districts. A moderate thunderstorm passed near the southwestern coast during the early morning of the 20th. P was fairly constant at a little above 29.90 from the 22nd to 26th. There were moderate local showers in parts of St. Joseph and St. Thomas on the 21st and in all districts on the 24th & 25th; otherwise the weather became fair and dry during the remainder of the

month. The wind varied between ENE & NE from the 21st to 30th except for a short period on the 25th when it shifted to E & ESE as a very small LPA passed over. Wind velocity increased to fresh breeze on the 23rd & 24th. (Reports were received of gales of over 50 miles per hour in Grenada during the night of the 23rd). There was some evidence that the trough of a shallow LPA passed over during the early morning of the 31st; the wind shifted to E & ESE and P decreased fairly rapidly to 29.83.

September.

R 3.66 : 48 pca

MMT : 6.75 in southwestern coastal districts of St. Peter to 1.60 in parts of southern St. Michael and southeastern Christ Church.

P rose from 29.83 on the 31st August to 29.86 on the 1st and 29.89 on the 2nd. There were moderately heavy local showers on the 1st over some eastern and northeastern coastal districts with the wind gentle breeze SE backing by evening to light breeze ESE & E. A heavy shower drifted slowly over parts of St. Thomas and northern parishes during the early morning of the 2nd and max. totals of 1.25 in. were recorded at places in St. Peter; the wind was light air E in the early morning, increased to light breeze ENE during the day, and became calm air NE or almost dead calm in the late afternoon and evening. Conditions were fine and dry over the Island during the day of the 3rd as the local weather became influenced by hurricane "Donna" then centred some 300-400 miles ENE of the Island. P fell only slightly to 29.87 at 3 p.m. The wind was light breeze NE in the early morning and backed to N & NNW by late afternoon and evening. By 9 a.m. on the 3rd cirrostratus became visible low down on the northeastern horizon, and during the day gradually became more evident between E & N. By 10 p.m. there was fairly well-defined convergence of short cirrus plumes low down in the eastern to northnorthwestern sky converging into NE & NNE. During the night there was a drift of air from NW at first backing through W to SW

by morning of the 4th; there was a moderately heavy very local shower in parts of western Christ Church during the night and a little thunder was heard from clouds off the southwestern coast. At sunrise on the 4th the northwestern sky was thickly overcast with nimbus and nimboaltostratus, which gradually thinned and moved away northwestwards as the day advanced. The wind was light to moderate breeze SSE during the day of the 4th and moderated to light breeze SE & ESE by evening. Fine, dry conditions prevailed over the Island as the hurricane moved away through the Leeward Islands and Greater Antilles during the 4th & 5th. P increased to 29.92 on the 5th and fell to 29.85 on the 7th & 8th. Except for a few very local light or moderate showers, the weather was dry from the 6th to 9th. The wind backed to ENE & NE on the 6th & 7th and moderated to light to gentle breeze, and shifted to ESE & SE during the morning of the 8th as the trough of a small LPA passed over the Island. Small LCR's with a little thunder developed off the coasts of St. Michael and St. James respectively on the 7th & 8th. The wind continued light breeze SE on the 9th as P rose to 29.89 and backed to ENE in the evening and continued thus during the 10th; light and moderate showers fell very locally. P fell to 29.84 on the 11th; the wind backed during the day to NE & NNE and was N & NNE during the early part of the night. The trough of an E/W passed over the Island between 10 p.m. and midnight with the wind becoming light breeze SSW. There was fairly heavy rain with occasional thunder over central and northern districts during the latter half of the night of the 11th when max. totals of 1.00-1.25 in. were recorded in parts of St. Peter and St. Lucy. P rose on the 12th and remained a little above 29.90 from the 13th to 15th. There were unevenly distributed moderate showers with occasional thunder on the 12th as the wind continued light breeze S & SSE. There was a moderately heavy shower over eastern St. John and coastal districts of St. Joseph with a little thunder soon after sunrise

on the 13th; otherwise conditions were generally fair on the 13th & 14th. The wind backed to E & ESE on the 13th & 14th and to ENE & NE on the 15th. A LCR formed off the southwestern coast on the 15th and a little rain fell on coastal strips. P fell to 29.85 on the 16th and the trough of a LPA passed over the Island about 10 a.m. with the wind shifting from NE & ENE to SE; a heavy LCR with occasional thunder developed over the sea to the W of the Island; and during the evening fairly heavy rain clouds from which fairly frequent lightning was seen developed to the NE & N of the Island; there was moderate local rain over coastal districts of St. Joseph and St. John. P decreased a little further to 29.82 on the 17th and the wind was mainly light breeze SE but varied in direction in coastal districts; small LCR's developed over several areas of the Island during midday and afternoon and max. totals of 2.00-2.25 in. were recorded in parts of St. Andrew. P rose to 29.93 by the 19th and then fell slowly to 29.83 by the 22nd; the wind continued between SE & E increasing slightly in velocity. Moderately heavy local showers fell during the night of the 18th and on the 21st. It was mainly fine from the 21st to 24th. The wind backed to ENE & NE on the 24th and shifted to ESE during the morning of the 25th; there was little P change. Wind velocity was very low on the 25th and a LCR developed over parts of St. Michael, St. James, St. Peter and St. Thomas, with max. totals of 1.75-2.00 in. in parts of St. James. P increased slowly to 29.93 by the 30th; the wind backed to E & ENE after the 26th and shifted to ESE during the 29th when frequent rain clouds developed near the Island but only light local showers fell on the Island.

October.

R 6.29 : 80 pca

MMT : 10.00 in the northeastern highlands of St. Thomas and southwestern St. Andrew to 2.70 in eastern St. Philip.

A small LPA area passed over during the afternoon of the 1st. Un-

evenly distributed moderate to fairly heavy showers fell during the night of the 1st and on the 2nd; max. totals of nearly 1.00 in. were recorded in parts of St. Thomas on the 1st and 0.75 in. at places in St. Peter on the 2nd. The trough of another small LPA passed over the Island during the early morning of the 5th; the wind was light breeze on the 4th varying between NNW & NE with calm spells; during the morning of the 5th the wind shifted to ESE and later to ESE & SE. Distant lightning was seen in the ESE during the evening of the 4th, and there were a few light and moderate local showers during the morning of the 5th. By morning of the 6th the weather was under the influence of another approaching LPA. P decreased from 29.87 on the 5th to 29.83 on the 6th and rose to 29.90 on the 7th. The wind was light air NE with calm spells during the morning of the 6th and shifted to light breeze SSW towards midday. A LCR developed over small areas of Christ Church while the air drift was from NE and over parts of St. James, St. Thomas and St. Joseph when the wind shifted to S; max. totals of 1.50-1.75 in. were recorded at places in St. Joseph. A moderately heavy to fairly heavy shower moved in from SE over eastern districts and on to central and northern districts during the evening of the 6th. The wind increased to gentle to moderate breeze E on the 7th and to fresh breeze ENE on the 8th, 9th and morning of the 10th. P fell from 29.89 on the 8th to 29.82 on the 10th and increased to 29.88 on the 11th. There were light and moderate very local showers on the 7th, 8th & 9th, followed by heavier unevenly distributed showers on the 10th. The wind shifted to light or gentle breeze SE & ESE on the morning of the 11th, and after a calm spell of about two hours backed to NNE & NE and increased to moderate breeze, continuing thus until about 7 p.m. There was a further short calm spell between 7 and 8 p.m. and the wind then shifted to gentle to moderate breeze SE & SSE suggesting that a trough passed over between 7 and 8 p.m.; there were moderate showers in some southeastern and

eastern districts, but little rain elsewhere. It was mainly fair from the 12th to 15th with the wind increasing to moderate breeze E & ENE. P fell from 29.90 on the 12th to 29.83 on the 14th, remained constant for four days and increased to 29.88 on the 18th. There was a showery spell from the 16th to 20th and max. totals of 1.00-1.50 in. were recorded in some districts on each day of the 17th, 18th & 19th. There was occasional thunder on the 17th. The wind was light breeze SE on the 18th and morning of the 19th and then backed to E & ENE and increased in velocity during the next seven days. P was variable between 29.89 and 29.82 from the 18th to 30th and increased rapidly to 29.92 on the 31st. The weather was mainly fair to fine from the 21st to 29th with only occasional light local showers. On the 30th the wind shifted to ESE & SE and decreased in velocity, a procession of moderate showers passed over southwestern coastal districts where max. totals of 1.25 in. were recorded. The wind was light breeze SSE on the 31st and moderately heavy rain fell over the northern end of the Island.

November.

R 3.11 : 40 pca

MMT : 6.25 in northeastern St. Lucy to 0.50 in western coastal districts of St. Michael.

Rainfall was very unevenly distributed during the month and over the Island. In most districts of the Island more than 80% of the month's total rainfall fell on the 6th, 7th & 17th.

The total number of 266.7 hours of sunshine this month was the highest total recorded for the month of November in the 31 years from 1929 to 1960 in which sunshine records have been made.

P was high at the beginning of the month increasing to 29.96 on the 3rd and then decreased slowly to 29.90 on the 6th & 7th. The southerly air flow which prevailed at the end of October continued during the first two days of this month with a gentle breeze SSE & S. The wind backed to light

breeze NE and was variable locally as P decreased. The weather was fine and dry during the first four days. Surface wind was light to gentle breeze be- E & SE on the 5th & 6th, but medium cloud movement continued from NE. Light and moderate very local showers fell during the nights of the 4th & 5th. A moderately heavy LCR developed off the northwestern coast of St. Michael during midday on the 6th and a little thunder was audible from this cloud; and moderately heavy but unevenly distributed showers passed over the Island. Moderately heavy local showers fell during the early morning of the 7th with the low clouds moving slowly from the N. The trough of a LPA passed over the Island between 7 and 7.30 a.m. on the 7th and the wind shifted to light breeze S backing to SSE & SE later in the morning and increasing in velocity. Fairly heavy showers, accompanied by squalls of over 30 miles per hour and occasional thunder, fell in almost all districts between 10 a.m. and midday and max. totals of 1.50 in. were recorded at places in St. Peter. P increased to 29.93 on the 8th and then decreased slowly to 29.83 on the 12th. During this period the wind increased to moderate breeze and sometimes fresh breeze E & ENE with generally fair to fine weather prevailing. P increased slightly on the 13th and then decreased to the lowest level during the month at 29.79 on the 16th. The wind shifted to ESE & E on the 13th & 14th and moderated slightly. There was a moderately heavy local shower in parts of the northern half of the Island during the night of the 13th. The wind backed to moderate breeze E on the 15th and to gentle breeze ENE on the 16th. Fair conditions continued on the 15th, but light local showers fell in southwestern districts on the 16th and developed into a LCR off the southwestern coast with occasional thunder during the afternoon. The trough of a LPA probably passed over the Island during the first half of the night of the 16th when conditions were fine and calm. P began rising slowly on the 17th and the wind shifted to light breeze SSE. A heavy LCR developed over parts of St. Peter and St.

Lucy during midday of the 17th and max. totals of 4.50-5.00 in. were recorded at some places. During the afternoon and evening heavy showers moved in very locally over coastal districts of St. Philip, St. John and St. Joseph and max. totals of 2.50-3.00 in. were recorded. P continued to increase until the 23rd when it was 29.91. The wind slowly backed from SSE on the 17th to E & ENE on the 23rd and gradually increased in velocity. P slowly decreased during the last week of the month to 29.81 on the 30th. Wind direction remained fairly constant at ENE & E, but velocity increased to moderate and fresh breeze from the 24th to 27th and then moderated during the last three days of the month. Except for moderate local showers on the 23rd & 24th, dry and fair to fine weather prevailed during the last week of the month.

December.

R 4.64 : 97 pca

MMT : 7.60 in southwestern coastal districts of St. Peter to less than 2.00 in. in southeastern coastal districts.

P increased from 29.81 on the 30th November to 29.85 on the 2nd and the wind shifted to moderate breeze SE & ESE. A very unevenly distributed moderately heavy to fairly heavy shower passed over between 9.30 and 11 a.m. on the 1st followed by generally fair to fine conditions after midday; max. totals of 1.00 in. were recorded at places in Christ Church and St. Thomas. Further moderate and moderately heavy local showers fell on the 2nd. P fell to 29.79 on the 3rd and rose to 29.81 on the 4th. The weather became generally fair and dry with the wind gentle breeze ESE veering to SE and moderating in velocity; warm and hazy conditions developed during the afternoon of the 4th. The weather continued dry over the Island on the 5th as P decreased again to 29.78, but became warmer and sultry by evening; the sky was partially overcast with cirrus streamers and became increasingly overcast by evening with cirrostratus and patches of alto-clouds; some distant

cumulonimbus became visible in the SSE; the wind was mainly gentle breeze S & SSE. By 1.30 a.m. of the 6th fairly heavy rain was moving over the eastern half of the Island with the wind light breeze SSW & SW; and by 3 a.m. the rain moved in generally over the Island from SW accompanied by a few rolls of thunder. Heavy rain fell over the northern half of the Island and max. totals of 4.50 in. were recorded at places in St. Peter while only 0.75 in. was recorded in southwestern coastal districts. By 6 a.m. of the 6th the wind had shifted to NNW. The rain ceased by 7 a.m. and as the sky slowly cleared wind velocity increased so that by midday the wind was fresh to strong breeze N gusting to 30 miles per hour. Further drizzle fell over the hills during the afternoon with the wind gradually moderating and shifting to NE. P rose steadily during the next four days to 29.93 on the 10th. The sky continued to be mainly overcast on the 7th, but dry weather prevailed from the 7th to the 12th, becoming fine after the 7th. The wind slowly shifted from NNE on the 7th to ENE on the 12th, increasing to moderate to fresh breeze. P fell to 29.86 on the 12th, remained steady for three days, increased to 29.95 on the 16th and varied slightly above or below 29.94 until the 23rd when it increased to 29.97. Wind direction was constant between NE & ENE from the 12th to 23rd. There were moderate showers in some districts on the 13th & 14th and during the night of the 23rd; otherwise the weather was generally fine except for occasional local drizzles. P decreased to 29.84 on the 26th and rose to 29.90 on the 29th. The wind backed to NNE & NE on the 24th & 25th, increased in velocity to strong breeze with gusts of over 30 miles per hour on the 24th and moderated on the 25th. There were moderately heavy local showers on the 24th, 26th & 28th, but in some districts there was no rain. The wind shifted to E & ESE during the last four days of the month.

Appendix I.

Barbados Rainfall 1847-1960.

Average totals in inches from a number of stations in the Island for each year from 1847 to 1960. In the subjoined Table an x is placed against each year in the category within which the average total falls.

Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more	Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more	Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more
1847		x				1873		x				1899		x			
1848			x			1874			x			1900			x		
1849		x				1875			x			1901					x
1850				x		1876		x				1902			x		
1851			x			1877					x	1903				x	
1852			x			1878				x		1904			x		
1853				x		1879				x		1905		x			
1854		x				1880				x		1906				x	
1855					x	1881				x		1907		x			
1856		x				1882		x				1908	x				
1857			x			1883			x			1909			x		
1858		x				1884			x			1910			x		
1859		x				1885		x				1911			x		
1860			x			1886				x		1912	x				
1861				x		1887			x			1913			x		
1862			x			1888			x			1914	x				
1863	x					1889				x		1915				x	
1864			x			1890		x				1916				x	
1865				x		1891				x		1917				x	
1866			x			1892					x	1918			x		
1867				x		1893					x	1919		x			
1868	x					1894		x				1920	x				
1869		x				1895					x	1921	x				
1870			x			1896					x	1922		x			
1871	x					1897				x		1923	x				
1872		x				1898				x		1924		x			

Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more	Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more	Year	44 or less	45 to 54	55 to 64	65 to 74	75 or more
1925		x				1937		x				1949			x		
1926		x				1938					x	1950					x
1927			x			1939	x					1951					x
1928			x			1940		x				1952		x			
1929			x			1941		x				1953				x	
1930	x					1942		x				1954			x		
1931				x		1943			x			1955			x		
1932				x		1944				x		1956				x	
1933				x		1945			x			1957				x	
1934	x					1946		x				1958			x		
1935				x		1947	x					1959		x			
1936			x			1948				x		1960		x			

Appendix II.

In this Table R means rainfall in inches and pca means per cent of the average for the 114-year period 1847-1960.

Month	1901		1902		1903		1904		1905		1906	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	3.15	93	2.01	60	2.93	87	6.65	197	3.22	95	1.73	51
Feb.	1.06	48	0.76	35	1.43	65	2.04	93	1.81	82	1.50	68
Mar.	1.06	55	1.52	78	5.51	285	3.09	160	3.89	201	1.37	71
Apr.	1.99	85	0.84	36	2.75	118	7.78	322	1.67	71	1.64	70
May	2.52	80	6.46	201	1.87	58	1.89	59	2.44	76	1.38	43
June	15.52	287	7.31	135	4.88	90	3.48	64	7.74	143	11.91	220
July	19.50	311	7.21	115	7.71	123	4.93	79	6.50	104	7.28	116
Aug.	12.44	170	6.20	84	11.48	157	9.26	126	7.13	97	8.17	112
Sep.	16.50	216	5.03	66	7.05	92	7.21	94	5.32	70	11.48	150
Oct.	6.34	80	4.36	55	8.99	114	5.97	76	4.56	58	9.68	123
Nov.	4.08	53	6.07	78	2.85	37	4.22	54	7.59	98	8.34	108
Dec.	7.73	162	8.28	173	9.97	209	2.86	60	2.72	57	6.22	130
Total	91.89	153	56.05	93	67.42	112	59.38	99	54.59	91	70.70	117

Month	1907		1908		1909		1910		1911		1912	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	1.77	52	2.01	60	5.67	170	2.27	67	2.43	72	3.00	89
Feb.	2.96	134	1.46	66	2.18	100	1.93	88	6.60	300	1.47	67
Mar.	1.14	59	1.61	83	0.77	40	2.88	149	1.66	86	1.51	78
Apr.	1.34	60	2.00	85	3.87	165	2.62	112	3.94	168	1.34	57
May	1.93	60	1.18	36	0.94	29	13.44	419	3.65	113	0.83	26
June	5.34	99	4.48	83	8.21	152	5.72	105	6.01	111	3.29	61
July	6.40	102	4.99	80	6.05	96	5.82	93	2.72	43	3.60	157
Aug.	5.54	76	3.93	54	6.95	95	6.52	90	8.12	111	3.79	45
Sep.	5.03	66	6.29	82	8.01	104	6.59	86	8.29	108	2.21	29
Oct.	7.39	94	5.00	63	4.43	56	6.98	88	6.10	77	8.58	109
Nov.	5.34	69	2.87	37	7.72	100	3.15	41	6.74	87	7.15	92
Dec.	3.50	74	8.96	188	2.81	59	2.78	59	3.04	63	4.72	100
Total	47.68	79	44.78	74	57.61	96	60.70	101	59.30	98	41.49	69

Month	1913		1914		1915		1916		1917		1918	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	6.98	207	1.30	38	2.38	70	2.73	81	2.96	85	3.16	94
Feb.	2.02	92	1.91	87	1.74	80	2.39	109	2.44	111	2.36	107
Mar.	2.54	132	1.64	85	1.76	91	2.60	134	4.14	214	2.05	106
Apr.	2.41	106	0.93	40	7.07	302	3.22	137	1.01	43	2.40	103
May	1.94	60	1.34	41	3.26	101	3.26	112	2.12	66	4.73	148
June	4.16	77	4.58	84	9.11	168	5.41	100	5.80	107	5.97	110
July	7.40	118	3.39	54	7.34	117	5.63	90	12.44	200	4.41	70
Aug.	6.00	82	2.90	40	7.38	101	11.10	152	6.43	88	7.24	99
Sep.	4.58	60	8.97	117	11.59	151	7.01	92	7.87	103	11.86	155
Oct.	9.67	122	5.17	65	7.21	91	11.79	149	7.71	98	8.01	102
Nov.	5.50	71	4.51	58	5.20	67	12.46	161	3.92	51	5.58	72
Dec.	3.60	76	8.23	172	4.07	85	2.23	47	9.92	207	4.04	85
Total	56.80	94	44.87	74	68.11	113	70.19	117	66.76	111	61.81	103

Month	1919		1920		1921		1922		1923		1924	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	2.60	77	4.40	130	1.09	32	2.30	68	2.85	84	2.69	80
Feb.	1.79	81	2.34	106	1.53	70	4.60	209	2.30	104	2.01	91
Mar.	0.96	49	1.75	91	2.67	138	3.17	164	1.68	87	0.14	7
Apr.	0.88	37	0.28	12	0.94	40	1.44	61	1.37	59	0.95	40
May	2.14	67	1.15	36	2.04	63	0.76	24	0.70	22	1.79	56
June	1.91	35	2.01	37	2.73	50	5.11	94	2.78	51	5.42	100
July	4.37	70	5.58	89	5.40	86	4.37	70	4.90	80	9.92	158
Aug.	14.56	200	3.19	43	4.46	61	5.32	73	4.19	57	10.20	139
Sep.	5.11	67	5.95	78	4.64	61	12.04	157	4.38	57	5.30	70
Oct.	5.57	71	5.90	75	7.10	90	3.10	40	4.09	52	6.63	84
Nov.	6.01	77	8.17	105	4.54	58	8.76	113	3.93	51	4.70	61
Dec.	5.53	116	1.74	36	3.59	75	3.53	74	7.82	164	3.49	73
Total	51.43	85	42.46	71	40.72	67	54.50	91	40.99	68	53.24	88

Month	1925		1926		1927		1928		1929		1930	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	2.47	73	3.62	107	3.69	109	3.67	109	1.61	48	2.64	80
Feb.	1.44	65	1.72	78	1.39	63	1.67	76	2.28	104	1.30	59
Mar.	1.09	56	1.47	76	4.05	210	2.34	121	0.85	44	0.47	24
Apr.	0.83	35	0.48	20	6.46	276	0.77	33	0.65	26	2.20	94
May	0.89	27	0.94	30	2.79	87	0.51	16	2.74	85	0.87	27
June	3.61	67	5.25	97	6.50	120	3.19	59	3.19	59	4.30	80
July	3.56	57	4.53	72	4.08	65	5.49	88	7.09	113	5.88	94
Aug.	7.32	100	7.78	106	3.07	42	7.58	104	7.10	97	3.24	44
Sep.	8.53	111	6.30	82	8.19	107	3.76	49	9.74	127	5.25	69
Oct.	9.66	122	9.27	117	8.60	109	9.36	120	7.25	92	3.92	50
Nov.	6.79	88	10.26	132	11.15	144	15.01	194	10.35	134	5.15	66
Dec.	1.29	27	2.96	62	4.05	85	3.86	81	3.18	66	3.22	67
Total	47.48	79	54.58	91	64.02	106	57.21	95	56.03	93	38.44	64

Month	1931		1932		1933		1934		1935		1936	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	2.39	71	4.31	128	4.30	128	3.09	91	4.36	129	1.74	51
Feb.	1.48	67	1.15	52	2.01	91	1.09	50	2.43	110	1.18	54
Mar.	1.03	53	2.40	124	1.12	58	0.58	30	1.97	102	0.12	6
Apr.	2.51	107	2.65	113	2.05	87	0.83	35	1.90	81	1.78	76
May	1.84	57	2.21	69	2.00	62	3.09	96	5.14	160	3.67	114
June	12.12	224	4.50	83	4.50	83	1.72	32	1.48	27	9.45	175
July	10.57	170	4.42	71	10.20	163	4.03	64	9.59	153	12.00	191
Aug.	6.95	95	7.42	101	10.64	145	3.90	53	9.03	123	6.25	85
Sep.	12.40	162	7.59	99	9.82	128	5.99	78	8.69	113	5.63	73
Oct.	8.96	113	6.76	85	11.88	150	4.87	62	9.12	115	7.57	95
Nov.	12.15	157	10.88	140	11.23	145	4.61	60	11.14	144	6.64	86
Dec.	0.99	21	7.58	159	4.95	104	5.90	124	4.84	101	4.19	87
Total	73.39	122	61.87	101	74.70	124	39.70	66	69.69	116	60.22	100

Month	1937		1938		1939		1940		1941		1942	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	9.70	288	3.26	96	2.34	70	2.32	70	1.46	43	2.17	64
Feb.	1.65	75	2.49	113	3.34	152	0.44	20	0.48	22	1.72	80
Mar.	1.33	68	2.02	104	1.28	66	5.46	283	1.50	77	1.07	55
Apr.	2.01	86	1.19	51	0.87	37	0.56	24	1.55	66	4.10	175
May	1.26	39	3.46	108	0.79	24	1.11	34	1.91	60	1.06	33
June	2.86	53	4.37	81	3.03	56	2.54	47	3.02	56	4.23	78
July	3.56	57	6.79	108	3.97	63	5.50	88	4.72	75	7.41	118
Aug.	3.78	52	8.81	120	4.63	63	6.50	90	5.11	70	4.63	63
Sep.	5.81	76	10.58	138	3.79	50	6.17	80	10.08	132	5.55	72
Oct.	8.57	108	10.42	132	8.25	104	6.07	76	8.15	103	6.91	87
Nov.	8.37	108	28.09	362	9.02	116	7.18	93	7.61	98	9.81	126
Dec.	5.30	111	6.89	144	2.53	53	1.89	40	3.40	71	4.64	97
Total	88.37	147	43.84	73	45.74	76	48.99	82	53.30	89	57.39	95

Month	1943		1944		1945		1946		1947		1948	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	2.83	84	1.48	44	0.84	25	4.03	120	3.66	109	3.01	90
Feb.	1.08	49	1.25	57	1.28	58	2.12	96	1.39	63	1.30	60
Mar.	2.68	139	0.94	48	0.59	31	0.78	40	0.66	34	2.83	146
Apr.	2.24	96	2.01	86	4.96	212	3.60	154	1.23	53	0.57	24
May	4.31	134	6.64	207	6.37	198	3.42	106	1.11	34	2.91	91
June	4.03	74	3.44	63	5.33	98	3.41	63	7.53	140	5.15	95
July	3.74	60	12.00	192	5.38	86	5.30	85	7.99	126	9.54	152
Aug.	4.78	65	7.41	101	10.29	141	5.65	77	2.31	31	10.34	141
Sep.	5.82	76	9.28	121	7.62	100	5.91	77	2.85	37	11.72	153
Oct.	10.75	136	10.35	131	4.57	58	2.77	35	5.09	64	7.49	95
Nov.	7.19	93	8.96	115	6.89	89	3.89	50	2.70	35	10.53	136
Dec.	7.94	166	5.57	117	2.55	53	5.77	121	2.88	47	4.42	93
Total	57.39	95	69.33	115	56.67	94	46.65	77	38.80	64	69.81	116

Month	1949		1950		1951		1952		1953		1954	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	1.25	37	6.06	180	3.45	102	0.65	19	3.35	100	4.84	144
Feb.	1.04	47	1.95	89	14.35	652	0.58	26	2.11	96	2.50	114
Mar.	1.37	71	2.86	148	2.28	118	2.64	136	2.04	105	1.83	95
Apr.	1.43	61	1.17	50	7.50	320	2.84	121	0.91	39	4.06	173
May	1.96	61	6.56	204	2.07	64	3.04	95	2.44	76	2.28	71
June	6.13	113	10.99	203	7.39	136	5.38	100	5.28	97	4.95	91
July	2.95	47	3.37	54	6.03	96	5.67	91	9.52	152	4.18	67
Aug.	13.45	184	10.01	137	12.89	176	3.47	47	8.74	120	2.84	39
Sep.	11.13	145	7.24	94	10.46	136	7.21	94	11.15	146	9.55	125
Oct.	13.31	169	13.52	171	4.37	55	9.07	115	4.93	62	12.70	161
Nov.	3.36	43	11.26	145	10.80	139	7.48	96	10.18	131	7.80	99
Dec.	3.51	73	4.68	98	8.65	181	3.54	74	5.53	115	4.44	93
Total	60.89	101	79.67	132	90.24	150	51.57	86	66.18	110	61.97	103

Month	1955		1956		1957		1958		1959		1960	
	R	pca	R	pca	R	pca	R	pca	R	pca	R	pca
Jan.	2.49	74	6.29	187	5.41	160	1.37	41	2.39	71	2.66	80
Feb.	1.68	76	3.65	166	2.07	94	1.04	47	3.44	156	2.36	107
Mar.	0.65	34	1.82	94	1.47	76	0.52	27	2.45	127	2.55	132
Apr.	0.62	26	3.65	156	4.51	192	0.82	35	3.17	135	1.51	64
May.	1.07	33	2.03	63	2.28	71	12.11	377	4.55	140	1.91	60
June	7.87	145	6.59	122	2.78	51	8.85	163	1.91	35	4.84	90
July	7.13	114	6.35	101	7.37	117	9.36	156	3.72	60	8.94	143
Aug.	6.31	86	10.55	144	7.65	104	7.87	107	3.07	42	7.80	107
Sep.	10.68	140	4.56	60	3.78	49	6.85	90	5.35	70	3.66	48
Oct.	9.78	124	9.10	115	12.04	153	4.71	60	10.19	130	6.29	80
Nov.	9.45	122	6.10	79	13.31	172	3.97	51	4.84	62	3.11	40
Dec.	4.75	100	4.90	103	3.49	73	5.89	123	2.86	60	4.64	97
Total	62.48	104	65.59	109	66.16	110	63.38	105	47.94	79	50.35	84

Appendix III.

Hurricane "Janet" at Barbados.

September 22nd 1955.

1. Introductory.

After a period of 57 years, since the hurricane of 10th September 1898, Barbados was visited by another hurricane on 22nd September 1955. This hurricane was named "Janet" in accordance with the annual system of identification of West Indian hurricanes adopted by the Hurricane Warning Service of the United States Weather Bureau.

In some respects hurricane "Janet" fairly closely resembled the hurricane of 1898, but the intensity of both hurricanes must be classified as moderate in comparison with the hurricanes of 1831 and 1780 as described in Schomburgk's History of Barbados.

For some days before the 22nd September, the meteorological stations at San Juan, Puerto Rico, and Piarco, Trinidad, had known that an Easterly Wave had been moving across the Atlantic in approximately an east-west direction towards the eastern Caribbean. It was, however, not known at these stations until nearly midnight on the 21st September that a "closed area", initiating a cyclonic storm or hurricane, had formed on this Easterly Wave. It is estimated that the hurricane was formed about midday on the 21st September.

Local weather observers had regarded with some suspicion the condition of the weather at Barbados on the 21st, but it was not until 1.30 a.m. on the 22nd that the first message of warning was received in Barbados from the meteorological station at Piarco, Trinidad. The official hurricane warning system was immediately put into operation.

The earliest warning messages indicated that the centre of the hurricane would pass some 50 miles north of Barbados. Later indications were

that the centre would pass nearer the Island and by 9.30 a.m. on the 22nd it appeared from local observations that the centre of the hurricane would pass very near to the Island if not directly over it. Ultimately, the centre of the hurricane did in fact actually pass some 15 miles to the south of the Island. It subsequently became evident that "Janet" displayed an abnormal and unexpected feature of West Indian hurricanes in its approach to the eastern end of the chain of Islands, in that it was travelling on a course slightly south of west. It had not been unreasonable to expect, from such information as was available as to the position of the centre at midnight on the night of the 21st-22nd, that the centre would pass north of the Island. The public had accordingly been warned to expect the winds to back from north through west to south, when in fact they shifted from north through east to south.

"Janet" was a young and relatively small hurricane when it reached Barbados. Winds of hurricane force were experienced for a period of only 2 to $2\frac{1}{2}$ hours, and were mainly confined to the southern half of the Island. It is unlikely that wind velocity exceeded 60 miles per hour in the northern parishes, but it is estimated that maximum gusts on the southern coastal districts approximated to 110-115 miles per hour. The period of greatest violence occurred between 11.00 a.m. and 1.00 p.m., and the wind velocity diminishes rapidly after 1.15 p.m.

Perhaps the most remarkable characteristic of hurricane "Janet" was the fact that there was very little rain; the highest maximum for the whole period of the storm amounted to only $2\frac{1}{2}$ inches in southern coastal districts. Consequently there was no flooding.

The facts that hurricane "Janet" occurred in daylight, its period of hurricane force winds lasted only 2 hours, and there was little rain, were in large measure responsible for the relatively small loss of life and da-

mage to property.

In the following sections a descriptive account is recorded of the condition of the weather at Barbados immediately before, during and immediately after the hurricane, together with brief notes on the behaviour of the sea and the consequence of the hurricane.

2. Precursory signs: and a description of the weather of the two preceding days.

(Unless otherwise stated all figures are taken from the records at Codrington Agricultural Station).

As early as Tuesday 20th September the nature of the cirrus and cirrostratus cloud formations far away to the ESE of the Island led the keenest observers to suspect that there may be an area of disturbed weather developing at a distance of some 300 miles to the east or east-southeast of the Island.

In other respect the weather of the 20th was not abnormal for a September day. It was fine and calm in the morning; there was a light to gentle SSW wind during the day. These conditions caused the development of moderate local convectional rains during midday and early afternoon. Conditions became fine again in the late afternoon and continued thus during the evening and night, with no clouds and no appreciable air movement. There was an abnormally heavy dew after midnight. Pressure had risen from 29.818 in. at 3.00 p.m. on the 19th to 29.851 in. at 3.00 p.m. on the 20th.

At sunset that evening the presence of a mass of cirrostratus far away in the ESE & E was confirmed by its pale mauvy-pink reflection, so frequently observed when an Easterly Wave or other system of unsettled weather is approaching the Island, but is yet some 200 to 300 miles distant. This particular feature of the weather, although only noticed by the keenest observers, was such, however, as to excite their interest and impress on them

the importance of observing cloud formations far away in the E & ESE sky between 5.00 and 6.00 a.m. next morning, in order to take advantage of the silhouette caused by the sun in the background just before and at sunrise.

The keen observer had not been led astray by over-enthusiasm, for there low down in the sky between SE & ENE was the clearly-defined silhouette of a mass of cirrostratus with cirrus "tails" or short streamers very markedly converging to a point in the ESE. At this stage the cirrus streamers rose no higher than about one tenth of the distance from the horizon to the zenith. As the morning grew older, these cirrostratus and cirrus clouds drew nearer the Island, rose higher in the sky and were a conspicuous white colour in the sunshine.

The presence and nature of these cloud formations were considered by local observers to be an indication of some system of unsettled weather, probably an Easterly Wave, but not impossibly the early stages of development of a cyclonic disturbance. In the absence of other confirmatory features of the weather, no one could venture to forecast what developments would take place in the coming 24 or 36 hours. A constant and careful watch was warranted.

The morning of the 21st was sunny and calm. There was little low cloud, and apart from cirrostratus and cirrus in the eastern and east-south-eastern sections, there were isolated patches of cirrostratus in the south-western and western sky. After 8.30 a.m. a light sea breeze developed, but conditions continued fine over the Island while the mass of cirrostratus and cirrus in the ESE & E expanded, spreading into the ENE & NE sections by the middle of the morning. Cumulonimbus clouds also became apparent in the far distant E & ENE sky. P, however, continued to rise, and at 9.00 a.m. the barometer reading was 29.940 in. (Three Houses 29.970 in.) as compared with 29.907 in. at 9.00 a.m. on the 20th (Three Houses 29.935 in.).

Towards midday cumulus clouds began to gather over southern districts of the Island, indicating slight air movement from the N. (At this time the wind at Codrington Agricultural Station was light breeze NW & WNW, probably a local "sea breeze". (At Three Houses it was light breeze NNE). Moderate rain began falling over southern districts about 1.00 p.m. from cumulonimbus clouds formed from local convectional air currents, but between 1.30 and 2.00 p.m. wind became light breeze N & NNE (Three Houses 8 m.p.h. N), and these clouds were pushed over southwestern coastal districts where they soon dissipated. The early afternoon was sultry, with a light breeze from N & NNE; a few more showers developed over southwestern coastal districts from local convectional cumulonimbus clouds. In the meanwhile, the sky from SE through E to NE & N had become grey with thick cirrostratus associated with cumulonimbus and nimbostratus, and it was now obvious that an area of unsettled weather was moving towards the Island. The existence of a closed cyclonic area could not, however, be forecast with any degree of certainty at this stage. After 4.15 p.m. wind velocity increased to light to gentle breeze N & NNE (Three Houses 5 m.p.h. N), and any remaining local convectional clouds over southwestern districts were blown out to sea. During the late afternoon (i.e., 4.30 p.m. to sunset) and early evening (sunset to 9.00 p.m.) the sky was less threatening in appearance. The cirrostratus thinned and the sky partially cleared over the Island, but at sunset thick cirrostratus associated with cumulonimbus was visible low down in the distant sky from SE through ESE to ENE. The wind continued light breeze N. Fair weather conditions prevailed over the Island during the first half of the night, with wind light breeze N, occasionally increasing to light to gentle breeze, and sometimes backing to NNW. (At Three Houses between 5.00 and 7.00 p.m. the wind was 5 m.p.h. NW). Some stars were visible, but it was apparent that the eastern section of the sky was overcast. Frequent distant lightning was observed in the ENE sec-

tion. During the afternoon P had continued to rise slightly, being 29.869 in. at 3.00 p.m. (Three Houses 29.90 in.) as compared with 29.851 in. (Three Houses 29.88 in.) at 3.00 p.m. on the 20th; moreover, there was no abnormal barometer change during the evening.

Thus as the evening grew into night, there were no marked indications by which a local observer could forecast with confidence the onset of a hurricane by midday of the 22nd.

3. Description of the weather during the approach and passage of the hurricane.

The first half of the night of the 21st-22nd had been fair over the Island; there was little or no low cloud; stars were visible except in the eastern quarter which was apparently overcast with medium or high cloud. P had remained mainly constant, without the normal rise between the hours of 6.00 and 10.00 p.m. Wind velocity had been fairly constant between 6.00 p.m. and 11.00 p.m., averaging 4.8 miles per hour (at Codrington Agricultural Station), but increased to 6.5 miles per hour between 11.00 p.m. and midnight; wind direction had been steady at N & NW. (Wind velocity at Three Houses averaged 9 miles per hour between 7.00 and 9.00 p.m., and 12 miles per hour between 9.00 and 10.00 p.m., increasing to 14-15 miles per hour between 11.00 p.m. and midnight; wind direction had also been steady at N & NNW).

The barometer readings became slightly unsteady after midnight, the reading at midnight being 29.84 in. (Three Houses 29.88 in.). By 1.00 a.m. of the 22nd the sky was almost entirely overcast, that is, no stars were visible, but the cloud types could not be distinguished owing to darkness (the moon having set before midnight). Wind velocity between midnight and 3.00 a.m. was fairly constant, averaging 7.8 miles per hour; direction was maintained at N and occasionally NNW. (The effect of the approaching hurricane was already more noticeable at Three Houses, where wind velocity

averaged 16-17 miles per hour between midnight and 1.00 a.m., and 18-20 miles per hour between 1.00 and 3.00 a.m., with a maximum gust of 29 miles per hour at 2.32 a.m.; wind direction was maintained at NNW).

There was light rain between 1.20 and 1.40 a.m. - this was the first rain of the hurricane at Codrington. There were occasional very light showers between 1.45 and 3.45 a.m., and then between 3.50 and 4.20 a.m. there was moderate rain with wind velocity increasing temporarily to gentle to moderate breeze NNE. (Three Houses averaging 20-21 miles per hour N). There was now occasional lightning and thunder just audible in the eastern quarter. Wind velocity between 3.00 and 4.00 a.m. averaged 10.8 miles per hour. At 4.00 a.m. the barometer reading was 29.78 in. (Three Houses 29.79 in.). Showers were light but fairly frequent between 4.20 and 6.00 a.m.; wind during this period was gentle and gentle to moderate breeze NNE & N, the average velocity increasing gradually, being 11.6 miles per hour between 4.00 and 5.00 a.m., and 13.0 miles per hour between 5.00 and 6.00 a.m. (Average wind velocity at Three Houses was 22-23 miles per hour between 4.00 and 5.00 a.m., and 26-27 miles per hour between 5.00 and 6.00 a.m., with the highest gust during this period of 41 miles per hour at 5.15 a.m.; wind direction was mainly NNW).

It was apparent at 5.15 a.m., by the light of dawn, that the sky was completely overcast with a more or less uniform pall of low altostratus, under which low "soft-looking" cumulus clouds were passing across from N to S, here and there developing into ill-defined cumulonimbus causing light showers; the sky at this time was noticeably darker in the eastern and south-eastern sections, presumably due to the greater thickness of the cloud formations in those directions. The barometer reading was 29.76 in. at 5.00 a.m. and 29.75 in. at 6.00 a.m. (Three Houses 29.77 in. and 29.75 in. respectively).

Light and occasionally light to moderate rain became more frequent between 6.00 and 8.00 a.m.; there was only occasional thunder. Wind velocity continued to increase gradually, averaging 15.5 miles per hour between 6.00 and 7.00 a.m., and 18.5 miles per hour between 7.00 and 8.00 a.m. Wind direction was maintained fairly steadily at NNE & N. At 8.00 a.m., the barometer reading was 29.715 in. There was no marked change in the general overcast condition of the sky during this period. (At Three Houses wind velocity averaged 29-30 miles per hour between 6.00 and 7.00 a.m., with a maximum gust of 44 miles per hour at 6.11 a.m., and 32-33 miles per hour between 7.00 and 8.00 a.m., with a maximum gust of 54 miles per hour at 7.33 a.m. Wind direction was maintained fairly steadily at N. At 8.00 a.m. the barometer reading was 29.72 in.).

At 8.50 a.m. wind direction was NNE (Three Houses N), but it backed at 9.00 a.m. to N with the onset of a fairly heavy shower. After this shower had passed the eastern sky appeared to be relatively darker; wind velocity continued to increase gradually and direction was mainly NNE & N. Average velocity between 8.00 and 9.00 a.m. was 20.4 miles per hour, and between 9.00 and 10.00 a.m. 22.8 miles per hour. (At Three Houses the average wind velocity between 8.00 and 9.00 a.m. was 33-34 miles per hour, and between 9.00 and 10.00 a.m. was 36-37 miles per hour, with a maximum gust of 61 miles per hour at 9.43 a.m.; wind direction continued at between N & NNW).

The general condition of the sky, especially in the darker area in the eastern section, and the direction of the wind in the next half hour, suggested that the centre of the hurricane would pass very near to the Island, if not actually over it. There was little change in the condition of the sky in the next hour or two. Average wind velocity between 10.00 and 11.00 a.m. increased to 27.4 miles per hour; individual gusts became stronger. (At Three Houses 49-50 miles per hour with a gust of 79 miles per hour at

10.49 a.m.) There was light rain between 9.30 and 10.20 a.m.; increasing to moderate rain between 10.20 and 10.30 a.m. By 11.00 a.m. wind direction was NNE & NE, and gusts at Codrington were now estimated at 60-70 miles per hour. Average wind velocity increased to 42.5 miles per hour between 11.00 a.m. and noon as direction shifted to NE. There was moderate rain about 11.45 to 11.50 a.m., with gusts of hurricane force, wind direction shifting to NE & ENE. Light rain or drizzle continued until about 12.45 p.m. Highest wind velocities, probably not exceeding 90 miles per hour, were experienced at Codrington between 11.30 a.m. and 12.30 p.m. as the wind shifted from ENE through E to ESE. (At Three Houses average wind velocity between 10.00 and 11.00 a.m. was 49-50 miles per hour, with a maximum gust of 79 miles per hour at 10.49 a.m., with wind direction now NNE; and average velocity was 56-60 miles per hour between 11.00 a.m. and noon, with a maximum gust of a little over 100 miles per hour at 11.53 a.m., wind direction shifting through NE to NE/ENE. Wind velocity began decreasing at Three Houses after noon, and the average velocity between noon and 1.00 p.m. was 40-43 miles per hour, with a maximum gust of 76 miles per hour at 12.11 p.m., with wind direction now E/ESE.)

At about noon the eastern sky became noticeably "brighter", that is, the eastern sky was then less heavily overcast and more light was coming through at that point. This area of less dense cloud passed into SE, S and then SW between noon and 12.45 p.m., coinciding with the shift in wind direction. It is confidently assumed that this area of less dense cloud marked the position of the centre of the hurricane.

The lowest barometer reading at Codrington was 29.25 in. at approximately 12.25 p.m.; at Three Houses the lowest reading was 29.42 in. at 11.45 a.m.

The light rain or drizzle which had been falling between noon and 1.00 p.m. ceased entirely by 1.15 p.m. Average wind velocity between noon

and 1.00 p.m. was 37.6 miles per hour. After 1.00 p.m. wind velocity moderated rapidly, and by 1.30 p.m. maximum gusts were estimated at only about 35-40 miles per hour from SE. (At Three Houses a gust of 47 miles per hour was recorded at 1.45 p.m. from SE). Wind velocity continued to slacken and by 2.30 p.m. was only a moderate to fresh breeze from S. (At Three Houses it was now averaging 26 miles per hour from SSE).

Overcast conditions prevailed throughout the afternoon, with a considerable amount of low cumulus cloud under a pall of altostratus and cirrostratus. By 3.00 p.m. the barometer reading was 29.660 in. (Three Houses 29.670 in.). Wind moderated to gentle to moderate breeze S & SSE by sundown. The night was fair but partially overcast; some stars were visible; wind was mainly light to gentle breeze SSE.

4. The weather during the two days immediately after the hurricane.

The sky was overcast at sunrise on the 23rd with altostratus and cirrostratus; there were small patches of blue sky. There was fairly heavy rain a few miles off the coast from E to SSW; wind was light breeze S. There was moderate rain over southern districts from about 7.15 a.m., with a heavier shower spreading into the central districts between 8.00 and 8.15 a.m., with one roll of thunder. The weather became fairer after 8.30 a.m., although mainly overcast with cumulostratus under a pall of altostratus and cirrostratus. Wind increased to gentle to moderate breeze SSE. It continued mainly fair and dry throughout the remainder of the day; fairly generally overcast with high clouds, which gradually thinned as the day advanced. There was some sunshine between 12.30 and 2.30 p.m., but overcast and dull again during late afternoon. Wind backed in late afternoon to SE & ESE and the sky partially cleared during the evening. Distant lightning was visible in S during the evening. A fair night with wind light breeze ESE; continuing partially overcast with medium to high clouds.

There was rain off the southern coast at sunrise on the 24th, but conditions were mainly fair over the Island. Wind was light to gentle breeze S in the early morning. The sky was partially overcast with altostratus and cirrostratus, but a fair day followed, with wind mainly gentle breeze SSE & SE. Very little cloud remained by evening. A fine night with the wind light breeze ESE.

5. Condition of the sea before and during the hurricane.

The sea along the Maxwells Coast on Tuesday the 20th and Wednesday the 21st was calm. A resident on the east coast near East Point Lighthouse noticed on Wednesday definite swells far out to sea. At Maxwells Coast, the sea was calm and quiet during the first half of Wednesday night, but by 3.30 a.m. on the morning of the 22nd a light surf could be heard. By 6.00 a.m. that morning it was slightly disturbed, but there were no definite swells or waves. By 8.45 a.m. large waves were breaking beyond the reef and sweeping in to shore to break again. On Bow Bells reef, southwest of South Point Lighthouse, huge waves could be observed. As far as the eye could see towards the horizon there were large swells.

Off the Crane Coast the sea was reported as breaking hard from day-break. At Rockley the sea did not become rough until about noon, with large waves breaking several hundred yards from the shore. In Carlisle Bay at 8 a.m. the surface was choppy from the effects of the northerly wind.

After the passage of the centre of the hurricane, the sea at Maxwells was completely churned up, of a light brownish colour, with large breakers, and masses of spray blowing inland; the waves, however, did not appear any larger than at 8.45 a.m. At Hastings, waves washed through the Hotel Royal into the roadway, and to the east of the Hotel, depositing large quantities of sand in the yards of several premises and in the road; while water and

sand was splashed into the Hastings Hotel. At 4.30 p.m. the sea was breaking heavily against the pierhead in Bridgetown and washing over the end of it, as well as over the northern side of the wharf near Canary Street and DaCosta's warehouse. By midnight the wash from the swells entering the Careenage swept past Nelson's statue in Trafalgar Square.

On Friday the 23rd, the sea had moderated somewhat, especially on the south coast, but was still breaking over the end of the pierhead and on the northern side of the wharf, and running into Canary Street.

In Oistins a large amount of sand was deposited on the roadway between the Almshouse and the Police Station. No damage was sustained along the Maxwells Coast from the sea.

The damage caused by the sea was amazingly small and may give a false sense of security from the effects of a real hurricane sea. The reasons for the small extent of this damage are:-

- (1) It was low tide when the severest portion of the hurricane was raging.
- (2) The hurricane was a small, fast-moving one and lasted for only three hours, and the direction of the strongest winds during the hurricane was not such as to cause the sea to be blown on to the low-lying residential areas on the south and west coasts.
- (3) The sea, therefore, did not build up to such intensity as would be the case with a fully developed, slow-moving hurricane, and
- (4) There was hardly any storm wave, or rise in the level of the sea, which is usually caused by the distant hurricane winds pushing the water ahead of them.

6. Consequences of the hurricane.

Details of the effect of the hurricane on various aspects of the life and activities of the community will be found in official records. The following brief notes are intended to give only an indication of the effects

of the hurricane on some of the more important aspects of the life and activities of the community.

(i) Loss of life.

Thirty-five persons are known to have been killed by the hurricane. Approximately half of this number were killed in a building which was being used as a shelter. Of the remainder, one was killed in a chattel house and the others in the open.

Loss of life among domestic animals was negligible. There was little evidence of damage to bird life. It is not known exactly where or how wild birds protected themselves, but soon after the hurricane and gale force winds subsided the birds returned to their normal habitats.

(ii) Damage to dwelling houses, other buildings, roads and public utility services.

Approximately 8,100 small dwelling houses were rendered uninhabitable and about 20,000 persons were homeless. The majority of the latter were in the thickly populated parish of St. Michael. Some 15,000 small dwelling houses were repaired by Government agency. It is estimated that 200 larger dwelling houses were seriously damaged. Relatively little damage was done to other larger buildings, such as sugar factories, warehouses, schools, and Churches. The steeple of St. Martin's Church was, however, blown down.

Road surfaces were undamaged, only temporarily blocked by fallen trees and wreckage. The majority of highways were open within 24 to 48 hours. Telephone and electricity supply poles and wires were blown down and broken. These services were re-instated with commendable speed. Gas supplies were only briefly interrupted. Damage to water supplies was very small, only a few service pipes being damaged by uprooted trees.

(iii) Crops and vegetation.

One of the most remarkable features of the hurricane was the blis-

tering effect, on almost all types of vegetation, of the sea spray blown over the Island by the hurricane winds. There was evidence of stripping and breaking of leaves by the physical action of the wind, but the blistering effect of the sea spray in the drying and subsequent fall of the leaves of a very large proportion of the Island's vegetation resulted in a most unusual and somewhat weird spectacle. The absence of shade normally provided by trees was very noticeable. A new growth of leaves followed within two or three weeks.

The overall damage to the sugar cane crop was unexpectedly small. Owing to the severe drought experienced earlier in the year, the ratoon canes were still relatively low, especially in the southern parishes where winds were strongest. In some cases individual canes in the more advanced plant-cane fields were broken off, but in most cases the canes were blown almost parallel to the ground surface. Some canes soon resumed a partially erect position, but others backrooted and their growing ends turned upwards. It is reported that the reduction of the 1955-56 cane crop resulting from hurricane damage is estimated at a figure not exceeding five per cent.

Ground provision crops such as yams, cowpeas and pigeon peas and all garden vegetable crops suffered severely or were completely destroyed in many parts of the southern parishes. Fruit trees in the latter districts also suffered severe damage. The majority of breadfruit trees in exposed positions in the southern half of the Island were also badly broken or uprooted.

Among ornamental trees, the most seriously damaged or uprooted species was the locally named "Pride of India" (*Peltophorum Vogelianum*), while the ubiquitous "Flamboyant" (*Delonix (Poinciana) Regia*) offered remarkable resistance. The tops of many cabbage palms were completely blown off, while a large number survived with only one or two leaves remaining from a normal crown of about twenty leaves.

(iv) Fishing boats and shipping.

Twenty-three sail-type fishing boats were lost or completely destroyed, and thirty-six damaged. Sixteen small "pot" boats were lost and ten damaged. More than 300 fish pots were reported lost.

There was no serious damage to shipping. A small motor vessel, the "Everdene", sank in the Careenage, and a small yacht and a schooner were damaged in the Careenage. A schooner sank off Pelican Island.

BARBADOS.

MEAN ANNUAL RAINFALL.

*Topographic Map of
Barbados*