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1969

MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

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Foreword

Beginning with this issue, CMI is now publishing weather data on a monthly, rather than an annual basis. While initially, a considerable delay will occur between a month-end and publication, it is hoped to reduce this gradually to about six months.

With one exception, all the monthly means and totals provided in the annual issues 1961-68 can be found in the appropriate table of the present format, together with considerably more detail. The exception is that at present no percentages of average monthly rainfall are given; this will be added once updated averages have been computed. A further divergence should be noted between the two formats: upto 1968 a rainy day was defined as one on which .01 inch or more fell, while beginning with January of 1969 this has been altered to include only days with .04 inches or more (i.e. 1 mm).

January, 1969

National Oceanic and Atmospheric Administration

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LIST OF STATIONS

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Trinidad	Centeno.	10 35	61 20	50		x	x		x	x	x	x	x	
	Penal Agr. Stn.	10 10	61 28	25		x	x		x	x	x	x		x
	Piarco Airport.	10 35	61 21	41	x	x	x	x	x	x	x	x		x
	St. Augustine, U.W.I.	10 38	61 24	52		x	x		x	x	x	x	x	x
Tobago	Crown Point Airport.	11 09	60 50	9	x	x	x	x		x	x	x		x
	Louis d 'Or.	11 15	60 34	40		x	x		x	x		x		
Grenada	Mirabeau.	12 08	61 49	450		x	x		x	x	x	x		x
	Mt. Horne.	12 09	61 39	500		x				x				
	Pearls Airport.	12 09	61 37	22	x	x	x			x				
Barbados	Husbands, CMI.	13 08	59 37	370		x	x	x	x	x	x	x	x	x
	Seawell Airport.	13 04	59 29	183	x	x	x	x		x	x			x
St. Vincent	Arnos Vale Airport.	13 09	61 13	30	x	x	x			x				
	Camden Park.	13 10	61 15	15		x	x		x	x	x	x		x
St. Lucia	Beausejour Agr. Stn.	13 45	60 57	75		x	x		x	x	x	x		x
	Roseau, Winban.	13 56	61 02			x				x				x
	Vigie Airport.	14 01	61 00	7	x	x	x	x		x				

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COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Dominica	Melville Hall Airport.	15 33	61 18	43	x	x	x	x		x				x
	Roseau Cent. Livestock Farm.	15 18	61 23	220		x	x		x	x	x	x	x	x
Montserrat	Grove.	16 43	62 13	150		x	x			x				
Antigua	Antigua Sugar Factory.	17 07	61 48	25		x	x		x	x	x	x		x
	Coolidge Airport.	17 08	61 47	26	x	x	x	x		x				
	Dunbars	17 09	61 50	220		x	x			x				
St. Kitts & Nevis	La Guerite	17 18	62 44	160		x	x		x	x	x	x		
Br. Virgin Is.	Beef Is. Airport.	18 26	64 32	25	x	x	x			x				
	Paraquito Bay.	18 25	64 35	50		x	x		x	x				x
Jamaica	Bernard Lodge.	17 58	76 56	55						x	x			
	Bodles.	17 55	77 08	60						x	x			x
	Cedar Valley.	17 59	76 35	1980		x	x		x	x				
	Chapelton, Clarendon Coll.	18 05	77 17	650		x	x			x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Cinchona Hill Gdns.	18 04	76 39	4895		x	x			x				
	Dallas.	17 59	76 42	950		x	x			x				
	Duckenfield.	17 55	76 15	60		x	x			x				
	East Albion Nursery.	17 53	76 35	90		x	x			x				
	Empire Nursery.	18 02	76 39	2130		x	x			x				
	Farm Hill.	18 03	76 38	4020		x	x		x	x		x		
	Frome.	18 18	78 09	90		x	x			x				
	Grove Place.	18 07	77 31	1600		x	x		x	x	x	x		x
	Halls Delight.	18 03	76 40	3020		x	x		x	x		x		
	Hope Gdns.	18 01	76 45	710		x	x			x				
	Irwin.	18 27	77 53	80		x	x			x				
	James Hill.	18 10	77 20	2000		x	x			x				
	Kingston, St. Georges Coll.	17 59	76 47	90		x	x			x				
	Marshalls Pen.	18 03	77 32	2300		x	x	x		x				
	Mason River Field.	18 11	77 16	2300		x	x			x				
	Montego Bay Airport.	18 30	77 55	5	x	x	x	x	x	x		x		x
	Monymusk.	17 48	77 16	30		x	x			x				
	Morant Point L.H.	17 55	76 11	5	x	x	x	x		x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Negril Point L.H.	18 15	78 22	25	x	x	x			x				
	Orange River.	18 15	76 53	950		x	x		x	x	x	x		x
	Palisadoes Airport.	17 56	76 47	10	x	x	x	x	x	x	x	x		x
	Pembroke Hall.	18 18	76 59	700		x	x			x				
	Richmond Est.	18 27	77 15	120		x	x			x				
	Smithfield.	18 24	78 06	925		x	x		x	x	x	x	x	x
	Spanish Town.	18 00	76 56	70		x	x			x				
	Top Mountain.	18 05	76 40	3550						x	x			
	Worthy Park.	18 08	77 09	1250		x	x			x				x
Cayman Is.	Grand Cayman Airport.	19 17	81 22	20	x	x	x	x		x				
Br. Honduras	Belize Airport.	17 32	88 18	17	x	x	x	x		x				x
Guyana	Bartica Potaro Road.	05 37	58 53	400		x	x			x				
	Ebini.	05 34	57 47	60		x	x			x	x			x
	Georgetown Bot. Gdn.	06 48	58 09	5	x	x	x	x	x	x	x	x	x	x
	Hosororo.	08 10	59 48	300		x	x			x				
	Mabaruma	08 12	59 47	185	x	x	x	x		x				

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GUYANA STATIONS CONTD.

COUNTRY	STATION	LAT. °	LAT. 'N	LONG. °	LONG. 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
							MEASUREMENTS TAKEN									
Guyana	Mahaicony Abary R.D.S.	06	28	57	46	5		x	x			x	x			x
	Matthews Ridge.	07	31	60	10	350		x	x			x	x			
	Mazaruni Prison.	06	24	58	39	45		x	x			x				x
	Mon Repos.	06	47	58	03	10		x	x			x				x
	New Amsterdam.	06	15	57	31	5		x	x			x	x			
	Port Kaituma.	07	44	59	33	100		x	x			x				
	Timehri Air-port.	06	30	58	15	95	x	x	x	x		x				
	Timehri Cent. Hort. Stn.	06	31	58	16	95		x	x		x	x	x		x	x
	Wauna.	08	09	59	51	100		x	x		x	x	x	x		x

LIST OF RAINGAUGE STATIONS

(*Denotes a recording raingauge at the station)

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.
Trinidad	Cocal Est.	10 26	61 02	5
	Green Hill, River Est.	10 44	61 33	120
	Guayguayare TLL.	10 08	61 04	25
	La Pastora.	10 44	61 28	300
	Matelot.	10 49	61 07	40
	Navet Damsite.	10 24	61 15	225
	Point Fortin Fil. Pl.	10 11	61 39	25
	Port of Spain, R. Bot. Gdns.	10 40	61 31	130
	Quare Dam, Hollis Res.	10 41	61 12	500
	Waterloo Est.	10 29	61 28	20
Tobago	Castara, Meth. Sch.	11 17	60 42	250
	Hillsborough Dam.	11 13	60 40	800
	Moriah, Pol. Stn.	11 14	60 43	750
	Plymouth, White Rock Est.	11 13	60 46	75
	Scarborough, Bot. Stn.	11 11	60 44	25
	Speyside	11 18	60 32	10
Barbados	Belle, St. M.	13 07	59 35	110
	Castle Grant, St. Jos.	13 11	59 33	1060
	Clifton Hall, St. J.	13 11	59 30	730
	Edgecumbe, St. P.	13 07	59 31	215
	*Haggatts, St. A.	13 14	59 34	75
	Holetown, St. Ja.	13 11	59 38	10
	*Lion Castle, St. T.	13 11	59 35	940
	River, St. P.	13 09	59 27	105

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

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4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10 is also given. The highest speed for any clock hour

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is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE 1- SUMMARY OF OBSERVATIONS AT FIXED HOURS - JANUARY, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths) MEAN AMT	Number of Observations 0	1,2	3-5	6-7	8	9	VISIBILITY (yards) 0-440	440-1,200	1,200-2,200	(No. of Observations) (miles) 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	72·0	70·9	25·3	94	1011·2	0·3	4·7	0	9	7	13	2	0	0	0	0	0	1	0	2	28
			08	74·5	72·8	26·7	92	1012·6	0·9	5·1	0	9	3	18	1	0	0	0	0	0	1	1	3	26
			14	83·5	75·1	26·0	66	1010·7	10·1	6·2	0	0	5	25	1	0	0	0	0	0	0	0	2	29
			20	75·2	72·9	26·4	89	1011·5	0·7	4·4	0	10	8	21	1	0	0	0	0	0	0	0	2	29
	ST AUGUSTINE UWI	52	16	81·4	74·0	25·6	70	1010·3	2·4	5·9	0	2	6	20	3	0								
TOBAGO	CROWN POINT AIRPORT	9	08	79·2	73·7	25·9	76	1013·0	5·1	5·5	0	5	5	18	2	0	0	0	0	0	0	1	5	24
			14	83·6	75·2	25·9	66	1011·1	12·0	5·3	0	6	5	18	2	0	0	0	0	0	0	0	11	20
GRENADA	MIRABEAU	450	08	77·3	73·1	26·0	81																	
	MOUNT HORNE	500	08	76·1	72·2	25·2	82																	
BARBADOS	HUSBANDS CMI	370	09	78·6	73·5	25·9	77																	
BARBADOS	SEAWELL AIRPORT	183	02	75·0	71·3	24·5	83	1012·2	8·4	3·6	0	15	9	4	3	0	0	0	0	0	0	0	0	31
			08	77·4	71·9	24·2	75	1013·8	10·1	5·1	0	6	9	13	3	0	0	0	0	0	0	0	1	30
			14	81·5	73·4	24·4	67	1012·0	11·0	5·3	0	4	9	17	1	0	0	0	0	0	0	0	0	31
			20	76·0	71·6	24·4	80	1012·9	7·8	4·6	0	11	6	11	3	0	0	0	0	0	0	0	1	30
ST VINCENT	CAMDEN PARK	30	08	75·0	71·0	24·5	83	1014·8	6·5															
ANTIGUA	COOLIDGE AIRPORT	26	14	80·0	72·1	23·4	67	1013·2	11·9	4·8	0	5	12	13	1	0	0	0	0	0	0	0	0	31
			20	76·1	70·3	22·8	74	1014·1	9·3	3·7	0	14	7	6	4	0	0	0	0	0	0	0	0	31
	DUNBARS	220	09	78·3	71·6	23·5	71																	
JAMAICA	CEDAR VALLEY	1980	07	63·8	62·8	19·0	95																	
			13	76·9	69·4	21·2	67																	
JAMAICA	DUCKENFIELD	60	07	72·9	69·9	23·7	85																	
			15	81·6	73·6	25·1	67																	
	EAST ALBION NURSERY	90	07	72·4	67·4	21·0	78																	
			13	83·8	72·8	22·7	58																	
	EMPIRE NURSERY	2130	07	62·2	61·1	17·8	96																	
JAMAICA	EMPIRE NURSERY	2130	13	76·5	68·4	20·3	65																	
	FARM HILL	4020	07	60·1	57·7	15·2	87																	
			13	70·5	65·7	19·9	76																	
	HALLS DELIGHT	3020	07	63·6	60·8	17·0	85																	
			13	70·6	65·7	19·5	76																	
JAMAICA	HOPE GARDENS	712	07	65·3	62·7	18·3	86																	
	IRWIN	80	08	77·0	71·8	25·2	79																	
			15	80·3	74·1	26·1	74																	
	KINGSTON ST GEO COLL	90	07	71·8	68·4	22·4	83																	
			15	82·5	74·1	25·0	66																	
JAMAICA	MARSHALLS PEN	2300	07	65·3	63·6	19·4	91		4·4	3·9	0	13	5	9	1	0								
			13	76·4	70·0	22·3	71		7·5	4·7	0	5	10	13	0	0								
	MASON RIVER FIELD	2300	07	62·5	61·8	18·4	97																	
			13	73·3	68·3	21·4	77																	
	MONTEGO BAY AIRPORT	3	01	73·6	70·1	23·8	84	1013·5	3·9	2·3	0	24	2	5	0	0	0	0	0	0	0	0	0	31
JAMAICA	MONTEGO BAY AIRPORT	3	07	72·6	69·4	23·1	85	1013·6	3·9	3·5	0	13	11	7	0	0	0	0	0	0	0	0	0	31
			13	81·6	74·6	26·1	71	1013·4	11·9	4·0	0	10	9	12	0	0	0	0	0	0	0	0	0	31
			19	76·0	71·8	24·8	81	1012·9	4·9	3·7	0	13	10	8	0	0	0	0	0	0	0	0	0	31
	MORANT POINT LH	6	01	77·1	73·7	26·7	85		9·5	4·0	1	8	11	11	0	0								
			07	77·1	73·7	26·3	83		9·4	4·9	0	3	16	12	0	0								

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JANUARY, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MORANT POINT LH	6	13	80·2	75·8	27·9	79		10·0	4·2	0	6	15	10	0	0								
			19	77·2	74·2	25·7	84		9·5	4·2	0	8	12	11	0	0								
	NEGRIL POINT LH	27	01	74·0	69·3	22·5	78	1013·1	2·0	2·8	1	15	11	4	0	0								
			07	72·8	68·5	21·8	80	1013·1	2·0	3·2	0	20	2	6	3	0								
			13	84·8	73·9	23·7	58	1013·1	6·4	4·0	0	12	10	7	2	0								
JAMAICA	NEGRIL POINT LH	27	19	77·5	71·2	23·3	72	1012·6	2·4	3·4	2	14	8	3	4	0								
	PALISADOES AIRPORT	9	01	76·6	71·3	24·0	77	1013·0	5·9	2·1	0	23	6	2	0	0	0	0	0	0	0	0	0	31
			07	74·9	70·4	23·2	79	1013·0	5·7	3·0	0	17	8	6	0	0	0	0	0	0	0	0	0	31
			13	84·8	74·8	25·0	61	1012·7	12·0	3·8	0	11	11	9	0	0	0	0	0	0	0	1	30
			19	80·0	72·9	24·5	70	1012·3	8·7	3·3	0	15	8	8	0	0	0	0	0	0	0	1	0	30
JAMAICA	WORTHY PARK	1250	07	65·5	63·9	19·5	91																	
			15	76·9	69·7	21·5	69																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	73·1	70·3	23·9	86	1015·2	5·8	4·1	0	13	6	7	5	0								
			13	80·2	73·8	25·7	73	1014·8	11·1	4·7	0	9	7	9	6	0								
			19	75·9	71·9	24·9	81	1014·2	8·4	4·1	0	14	6	5	6	0								
BR HONDURAS	BELIZE AIRPORT	17	06	69·3	68·6	23·7	97	1013·7	0·3	4·7	0	9	7	8	4	2	4	0	0	1	1	2	13	9
			12	79·6	73·1	25·1	73	1014·7	6·4	5·1	0	3	12	12	4	0	0	0	0	1	0	0	0	30
			18	75·6	71·7	24·8	82	1012·8	2·9	4·3	0	12	4	14	1	0	0	0	0	0	0	0	0	31
GUYANA	BARTICA POTARO RD	400	08	75·1	73·8	27·9	93																	
			14	85·2	77·1	28·2	68																	
GUYANA	EBINI	60	08	75·2	74·1	28·3	95																	
			14	81·7	76·1	28·3	77																	
	GEORGETOWN BOT GDN	7	08	78·7	75·2	28·2	84	1012·0	4·2	6·0	0	3	7	15	6	0								
			14	81·5	75·9	28·0	76	1009·9	6·6	5·9	0	1	10	19	1	0								
	HOSORORO		08	74·7	73·3	27·2	92																	
GUYANA	HOSORORO		14	81·1	75·0	27·0	76																	
	MAHAICONY *BARY RDS	6	08	76·9	75·5	29·6	94																	
			14	81·6	77·8	30·9	84																	
	MATTHEWS RIDGE		08	73·2	72·1	26·6	96																	
	MAZARUNI PRISON	47	08	75·9	74·0	27·8	91																	
GUYANA	MAZARUNI PRISON	47	14	80·2	75·9	28·5	81																	
	MON REPOS		08	79·1	74·8	27·6	82																	
			14	81·6	75·9	28·1	76																	
	NEW AMSTERDAM	3	08	77·7	75·1	28·4	87																	
			14	83·2	76·3	27·9	72																	
GUYANA	ONVERWAGT		08	79·8	76·8	30·2	87																	
			14	82·5	78·6	31·7	84																	
	TIMEHRI AIRPORT	95	07	72·4	71·9	26·7	98	1010·0	0·8	4·4	2	8	5	8	5	0	0	0	0	1	0	2	7	18
			08	75·6	74·3	28·4	94	1011·7	2·7	6·1	0	1	8	19	3	0	0	0	0	1	0	1	4	25
			14	83·6	76·7	28·3	72	1009·6	8·5	6·8	0	0	1	26	2	0	0	0	0	0	0	0	5	24
GUYANA	TIMEHRI AIRPORT	95	20	75·4	73·9	28·0	93	1010·1	0·6	4·6	0	6	11	9	2	0	0	0	0	0	0	1	4	23
	TIMEHRI CHS		08	75·9	74·6	28·8	94																	
			14	81·6	76·7	29·4	80																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JANUARY, 1969

COUNTRY	STATION	RAINFALL (INCHES)						AIR TEMPERATURE F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DAYS	NUMBER OF DAYS WITH MORE THAN .04	.40	1.00	MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	EXTREMES MIN			THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	6.81	1.19	11	15	6	1											
	GREEN HILL RIVER EST	6.54	2.91	30	12	6	1											
	GUAYAGUAYARE	3.10	1.20	29	5	3	1											
	LA PASTORA	6.69	1.75	30	17	6	1											
	MATELOT	6.69	1.75	30	17	6	1											
TRINIDAD	NAVET DAMSITE	4.52	1.37	30	15	3	1											
	PIARCO AIRPORT	4.31	1.10	25	13	3	1	85.5	69.6	77.6	89	65		185.5				
	POINT FORTIN	10.91	4.50	30	15	6	4											
	PORT OF SPAIN R BOT	5.06	1.62	30	15	5	1											
	QUAREDAM HOLLIS	9.60	2.49	30	17	7	3											
TRINIDAD	ST AUGUSTINE UWI	3.26	1.00	30	12	3	1	85.4	69.2	77.3	89	65	66.4	198.7				
	WATERLOO EST	4.15	1.87	30	11	3	2											
TOBAGO	CASTARA	5.37	1.42	31	14	5	0											
	CROWN POINT AIRPORT	4.02	1.57	30	10	2	2	86.0	72.5	79.3	89	71		226.8				
	HILLSBOROUGH DAM	4.82	1.07	31	18	3	0											
TOBAGO	MORIAH	2.82	.93	29	12	1	0											
	PLYMOUTH WHITE ROCK	2.63	1.44	31	7	2	1											
	SCARBOROUGH BOT STN	4.03	1.43	31	16	4	1											
	SPEYSIDE	9.30	3.44	28	19	6	2											
GRENADA	MIRABEAU	13.88	3.65	28	22	12	6	82.2			85							
GRENADA	MOUNT HORNE	11.36	2.10	28	18	8	4	82.1	70.0	76.1	85	64						
BARBADOS	BELLE ST M	6.27	1.52	31	14	4	2											
	CASTLE GRANT ST JOS	10.04	2.55	29	20	8	3											
	CLIFTON HALL ST J	10.05	3.99	31	14	7	3											
	EDGECUMBE ST P	8.24	2.02	31	18	7	4											
BARBADOS	HAGGATTS ST A	6.45	2.59	29	12	5	2											
	HOLETOWN ST JA	3.94	1.19	31	14	4	0											
	HUSBANDS CWI	4.87	1.13	31	12	6	1	82.8	71.2	77.0	86	69						
	LION CASTLE ST T	7.12	1.36	24														
	RIVER ST P	7.92	2.68	31	13	7	3											
BARBADOS	SEAWELL AIRPORT	6.03	1.57	25	11	5	2	83.6	73.6	78.6	87	70	69.7	229.2				
ST VINCENT	CAMDEN PARK	6.04	1.35	27	15	5	1	83.7	71.2	77.4	86	69						
ST LUCIA	VIGIE AIRPORT							83.1	71.8	77.4	85	69						
ANTIGUA	COOLIDGE AIRPORT	2.99	.59	23	14	3	0	81.8	70.7	76.2	84	64						
	DUNBARS	2.08	.40	23	13	1	0	84.4	71.5	78.0	86	70						
JAMAICA	BERNARD LODGE	3.59	3.17	12	5	1	1	85.6	66.1	75.9	88	62	63.4	264.5				
	CEDAR VALLEY	2.32	.37	6	12	0	0		61.0			58						
	DUCKENFIELD	6.41	1.40	22	10	5	4		70.9			62	69.5					
	EAST ALBION NURSERY	2.00	.72	4	8	3	0	86.9	69.1	78.0	92	67						
	EMPIRE NURSERY	1.95	.42	27	9	1	0	79.5	80.0	69.8	86	57						
JAMAICA	FARM HILL	4.52	1.47	28	13	3	1	71.3	57.4	64.4	77	53						
	HALLS DELIGHT	3.55	.81	28	10	3	0	74.5	59.3	66.9	80	56						
	HOPE GARDENS	1.08	.35	24	6	0	0	85.5	60.7	73.1	88	56						
	IRWIN	4.66	1.57	7	10	3	1	84.2	66.4	75.3	90	63						
	KINGSTON ST.GEORGES	.72	.29	12	5	0	0	86.3	70.8	78.6	89	68						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JANUARY, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.40	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
JAMAICA	MARSHALLS PEN	3·92	·97	14	10	4	0	77·5	60·3	68·9	80	56						
	MASON RIVER FIELD	1·28	·38	6	6	0	0	74·9	60·4	67·6	78	54						
	MONTEGO BAY AIRPORT	·90	·22	6	7	0	0	82·4	69·8	76·1	85	64		214·7				
	MORANT POINT LH	5·07	2·61	22	7	3	1	82·6	69·0	75·8	85	65						
	NEGRIL POINT LH	·48	·35	11	2	0	0	86·8	70·5	78·7	90	68						
JAMAICA	PALISADOES AIRPORT	·39	·21	12	3	0	0	86·2	72·6	79·4	89	69		233·6				
	WORTHY PARK	1·24	·24	2	7	0	0	80·7	61·1	70·9	91	56		177·5				
CAYMAN ISLANDS	GRAND CAYMAN APT	5·12	1·92	22	11	4	1	82·6	70·6	76·6	86	64						
BR HONDURAS	BELIZE AIRPORT	3·67	1·90	1	10	2	1	82·1	67·9	75·0	86	62		219·8				
GUYANA	BARTICA POTARO RD	13·33	6·10	26	23	11	1	87·4	71·3	79·4	92	69						
GUYANA	EBINI	5·36	·65	25	22	2	0	85·4	69·0	77·2	89	65						
	GEORGETOWN BOT GDN	9·26	1·48	3	21	5	4	82·9	74·8	78·9	85	71	71·3	177·8				
	HOSOROKO	7·47	2·10	29	16	7	1	85·1	73·4	79·2	88	67						
	MAHAICONY ABARY RDS	11·19	1·61	3	22	10	4	84·8	73·4	79·1	88	70						
	MATTHEWS RIDGE	7·58	1·38	29	21	7	2	88·6	65·0	76·8	89	60						
GUYANA	MAZARUNI PRISON	7·70	1·81	3	18	7	1	82·3	68·2	75·2	86	64		112·6				
	MON REPOS	6·90	1·07	25	21	8	1	83·2	74·2	78·7	85	71		164·4				
	NEW AMSTERDAM	9·17	2·50	3	21	8	1	84·9	73·9	79·4	87	71						
	ONVERWAGT	8·85	2·14	13	18	6	2	84·9	76·4	80·6	86	71						
	PORT KAITUMA	7·71	2·42	31	15	6	1											
GUYANA	TIMEHRI AIRPORT	9·02	1·28	14	21	7	3	86·4	70·8	78·6	91	67						
	TIMEHRI CHS	9·59	1·28	3	24	12	2	84·3	70·6	77·4	88	67	68·7	104·5				
	WAUNA	5·97	1·19	29	17	5	1											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - JANUARY, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	81	109	5·67	·31	4												
	ST AUGUSTINE UWI	19	35	3·70	·18	13												
JAMAICA	CEDAR VALLEY	64	140	2·40	·31	28												
	EAST ALBION NURSERY	97	242	6·28	·32	29												
	HALLS DELIGHT	74	181	3·01	·21	1												
JAMAICA	PALISADOES AIRPORT	67	141	7·36	·41	25												
GUYANA	GEORGETOWN BOT GDN	87	138	4·19	·21	18												

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - JANUARY, 1969

COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·18	·29	·39	·52	·65	1·09	1·10	1·10
	ST AUGUSTINE UWI		·20	·28	·40	·48	·84	·88	·93
TOBAGO	CROWN POINT AIRPORT	·22	·29	·37	·40	·71	·83	1·03	1·07
BARBADOS	HAGGATTS ST A	·40	·53	·69	·72	·86	·93	1·05	1·06
	LION CASTLE ST T	·21	·27	·37	·48	·50	·52	1·03	1·03
BARBADOS	SEAWELL AIRPORT	·24	·28	·35	·40	·68	·72	·74	1·35
JAMAICA	PALISADOES APT	·04	·06	·06	·07	·21	·21	·21	·21
GUYANA	EBINI	·27	·32	·34	·34	·34	·34	·44	·44
	GEORGETOWN BOT GDN	·22	·31	·35	·55	·75	1·04	1·29	1·35

TABLE V - SUMMARY OF WINDSPEED RECORDS - JANUARY, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LAST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	08	16	13	5	06	28	1440	1	0	0	0	4·4
TOBAGO	CROWN POINT AIRPORT	10	18	13	11	10	26	1315	11	0	0	0	7·2
BARBADOS	SEAWELL AIRPORT	06	20	10	19	08	29	0930	19	0	0	0	10·0
JAMAICA	MONTEGO BAY	07	20	06	30	07	31	0555	30	0	0	0	6·2
	PALISADOES APT	12	24	15	8	11	36	1455	4	3	0	0	9·4
GUYANA	GEORGETOWN BOT GDN	06	14	13	3	05	29	1820	3	0	0	0	7·1

TABLE VI - SUMMARY OF SUNSHINE RECORDS - JANUARY, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	11	55	67	73	65	62	56	54	52	52	41	11	0	185·5	52	10·7	9	2	4	8	10	7	0
	ST AUGUSTINE UWI	0	15	55	70	80	65	69	62	64	54	51	40	16	0	198·7	56	10·7	6	1	3	8	12	7	0
TOBAGO	CROWN POINT AIRPORT	0	12	56	68	79	76	76	74	73	73	71	52	20	0	226·8	63	11·0	9	1	4	4	11	11	0
BARBADOS	SEAWELL AIRPORT	0	5	60	74	80	83	83	78	73	70	63	59	11	0	229·2	65	10·2	2	1	4	2	11	13	0
JAMAICA	MONTEGO BAY	0	2	53	78	76	74	74	73	68	73	64	51	10	0	214·8	62	10·2	24	0	2	9	11	9	0
JAMAICA	MONY MUSK	0	0	50	73	77	85	93	86	87	91	86	61	1	0	245·5	78	9·3	8	0	1	3	12	11	0
	ORANGE RIVER	0	0	43	61	59	64	66	67	59	47	42	23	2	0	165·0	48	8·6	20	1	5	10	15	0	0
	PALISADOES	0	11	66	82	84	85	87	83	72	67	59	48	10	0	233·6	67	10·5	30	0	1	8	12	10	0
GUYANA	GEORGETOWN BOT GDN	0	0	30	61	56	59	72	61	57	63	53	44	19	0	177·8	48	10·3	7	0	7	8	11	5	0
	MAZARUNI PRISON	0	1	20	42	52	44	39	44	40	44	30	18	3	0	112·6	31	8·8	20	1	12	11	7	0	0
GUYANA	MON REPOS	0	5	37	50	52	54	62	54	54	62	50	45	8	0	164·4	45	9·9	7	0	8	8	12	3	0
	TIMEHRI CHS	0	2	27	45	32	29	34	37	38	29	27	25	11	0	104·5	29	9·8	20	0	13	14	3	1	0

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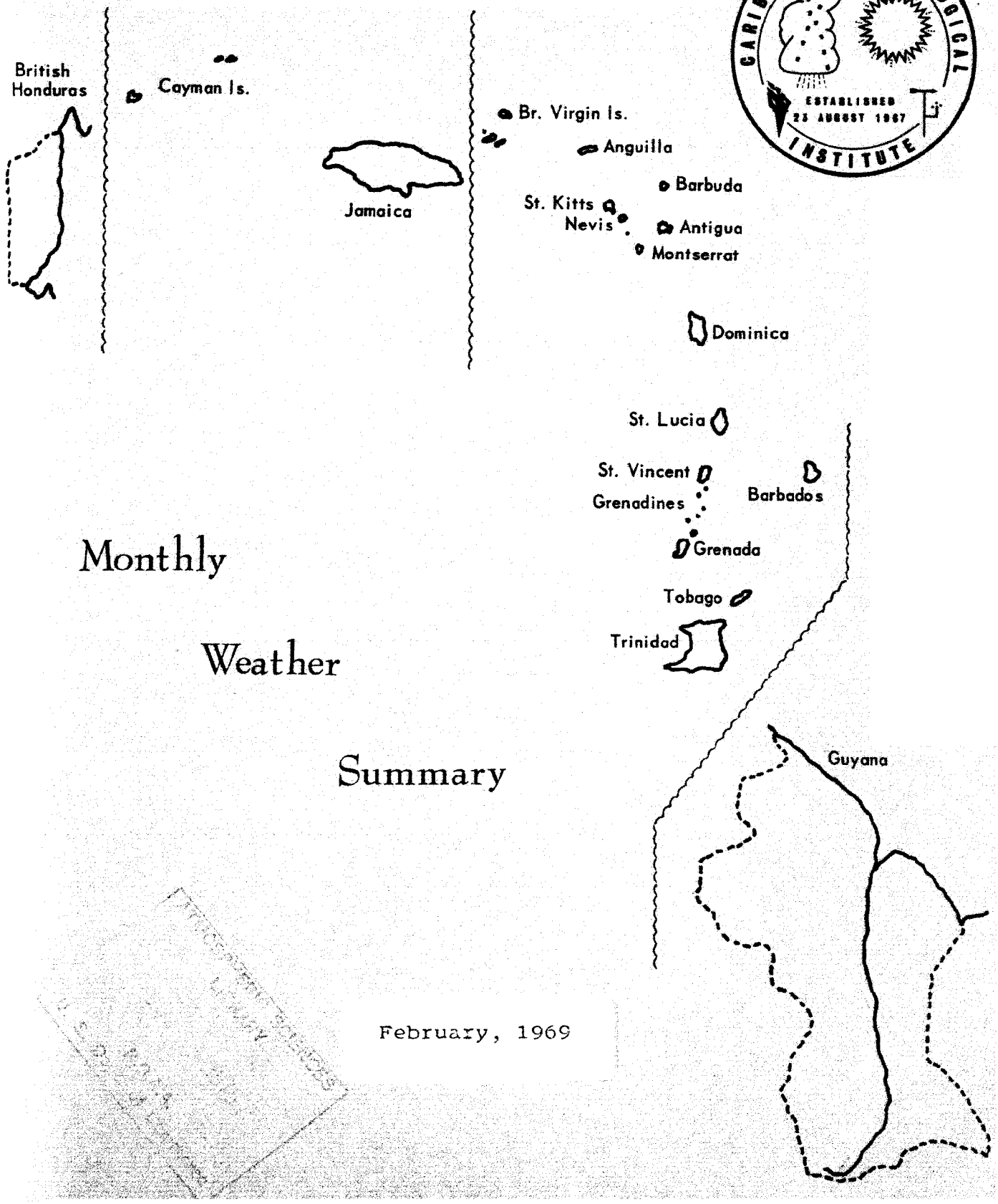

CARIBBEAN METEOROLOGICAL INSTITUTE
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Monthly Weather Summary

February, 1969

MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

February, 1969

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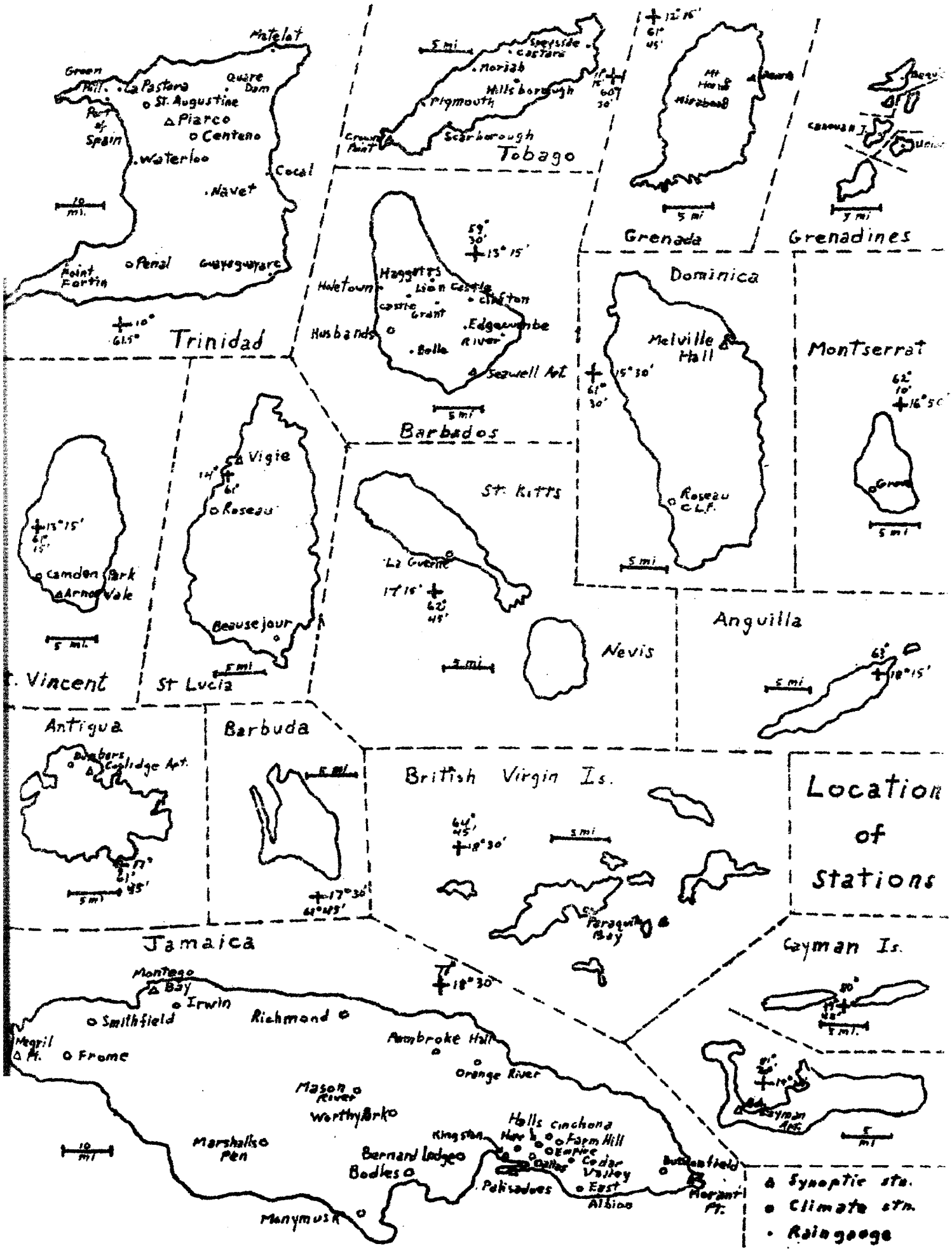
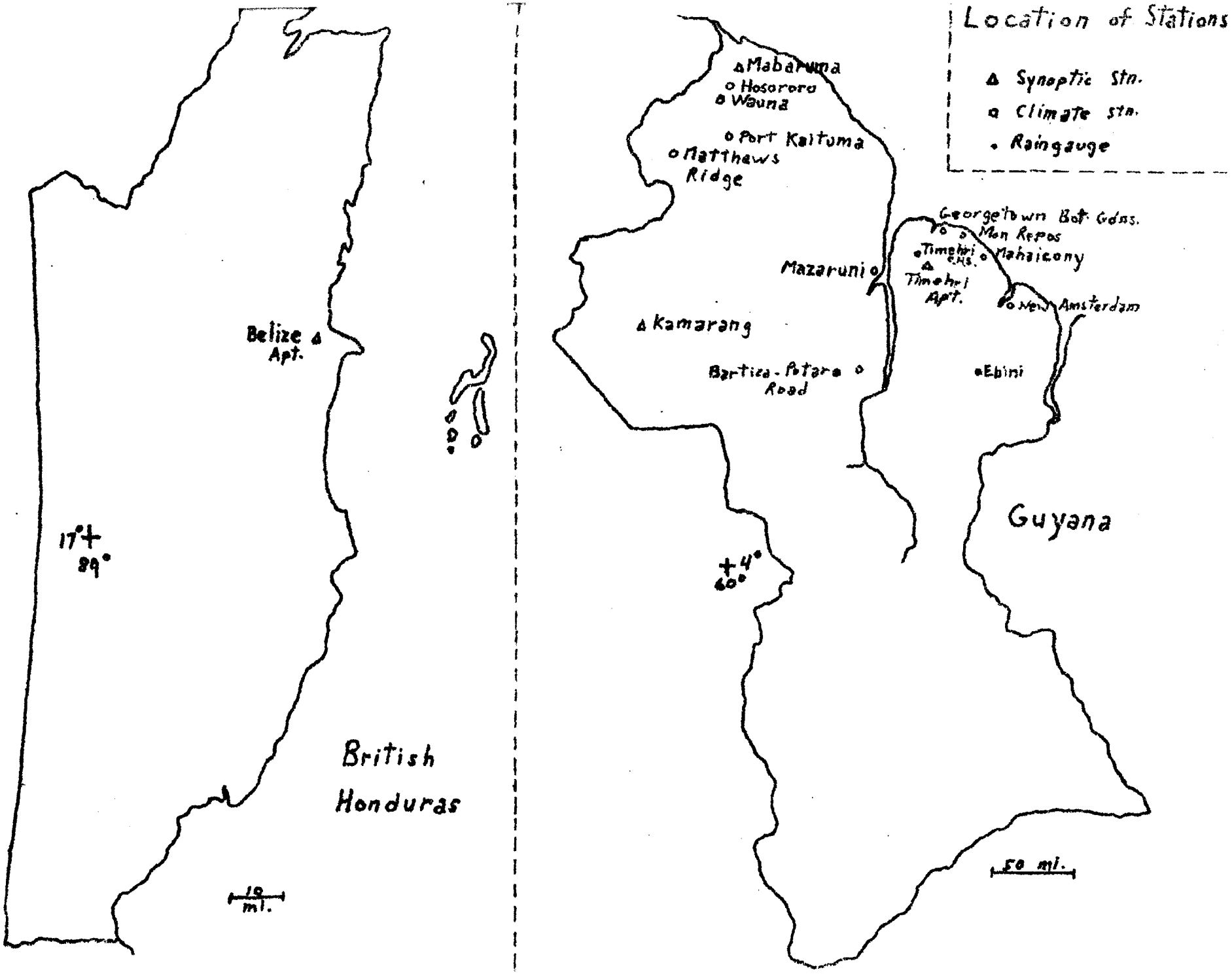

Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Dominica
Montserrat
Barbados
St. Kitts
Nevis
Anguilla
St. Vincent
St Lucia
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Piarco
Centeno
Port of Spain
Waterloo
Cocal
Navet
Penal
Guayaguayare
Point Fortin
Speyside
Castara
Moriah
Hillsborough
Plymouth
Scarborough
Crown Point
Mt Horne
Mirabeau
Canouan I.
Haggatts
Holetown
Lion Castle
Clifton
Castle Grant
Husbands
Edgecumbe River
Belle
Seawell Apt.
Melville Hall
Roseau C.L.F.
Grove
Vigie
Roseau
Beausejour
Camden Park
Arnos Vale
La Guerne
Dumbers
Coolidge Apt.
Paraquita Bay
Montego Bay
Irwin
Smithfield
Richmond
Pembroke Hall
Orange River
Megril Pt.
Frome
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Kingston
Halls
Cinchona
Farm Hill
Empire
Cedar Valley
Palisadoes
East Albion
Buttonfield
Morant Pt.
Monymusk
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica-Potaro Road
Georgetown Bot. Gdns.
Mon Repos
Timehri C.M.S.
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
50 mi.
Belize Apt.
17° 89°
British Honduras
10 mi.
4° 60°

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

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4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

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is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE 1- SUMMARY OF OBSERVATIONS AT FIXED HOURS - FEBRUARY, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	441-1,100	1,101-2,200	(miles): 1/2-2	2-3	3-5	5-10	10 & over
TRINIDAD	PIARCO AIRPORT	41	02	72·5	70·8	25·0	92	1011·5	0·1	4·3	3	6	6	12	1	0	0	0	0	0	0	0	4	24
			08	75·1	72·6	26·2	88	1012·6	2·2	5·1	0	7	4	15	2	0	0	0	0	0	0	0	1	27
			14	85·6	75·0	24·9	59	1010·6	9·8	6·0	0	1	8	18	1	0	0	0	0	0	0	2	1	25
			20	76·3	73·1	25·4	85	1011·4	1·0	5·1	1	4	8	12	3	0	0	0	0	0	0	0	2	26
	ST AUGUSTINE UWI	52	16	85·2	74·3	25·2	65	1010·0	3·0	5·0	2	1	8	13	4	0								
TOBAGO	CROWN POINT AIRPORT	9	08	79·4	73·7	26·1	76	1015·0	5·7	5·8	0	4	4	17	2	0	0	0	0	0	0	0	4	23
			14	83·6	75·2	26·5	67	1011·2	12·3	6·4	0	2	2	22	2	0	0	0	0	0	0	1	5	22
GRENADA	MOUNT HORNE	500	08	76·5	71·3	23·8	77																	
BARBADOS	HUSBANDS CWI	370	09	78·9	72·8	24·8	74		6·7	5·4	0	5	6	15	2	0								
	SEARELL AIRPORT	185	02	74·0	70·8	24·4	85	1012·2	5·6	3·3	0	14	7	6	1	0	0	0	0	0	0	0	0	28
BARBADOS	SEARELL AIRPORT	185	08	77·3	72·5	25·1	78	1013·9	7·7	5·1	0	6	6	13	3	0	0	0	0	0	0	0	1	27
			14	82·3	74·3	25·4	67	1011·7	9·7	5·0	0	4	11	11	2	0	0	0	0	0	0	0	0	28
			20	76·0	71·9	25·0	82	1012·9	5·9	4·2	0	11	4	13	0	0	0	0	0	0	0	0	0	28
ST VINCENT	CAMDEN PARK	20	08	75·0	72·1	25·2	85	1015·2	4·8															
ANTIGUA	COOLIDGE AIRPORT	26	14	81·2	72·7	23·7	65	1012·7	10·3	5·6	0	10	12	4	1	0	0	0	0	1	0	0	0	26
ANTIGUA	COOLIDGE AIRPORT	26	20	75·8	70·7	23·4	77	1013·4	6·3	2·6	0	17	8	2	1	0	0	0	0	0	0	0	0	26
	DUNBARS	220	09	78·7	71·4	23·2	69																	
JAMAICA	CEDAR VALLEY	1980	07	60·1	59·2	16·7	94																	
			13	78·4	70·6	21·5	66																	
	DUCKENFIELD	60	07	70·1	66·8	21·1	84																	
JAMAICA	DUCKENFIELD	160	15	80·5	72·3	23·6	68																	
	EAST ALBION NURSERY	90	07	71·4	64·3	17·3	67																	
			13	85·4	73·2	22·6	54																	
	EMPIRE NURSERY	2130	07	58·6	57·6	15·9	93																	
			13	77·8	68·5	20·0	63																	
JAMAICA	FARM HILL	4020	07	58·5	55·5	13·8	82																	
			13	72·1	69·6	23·7	88																	
	HALLS DELIGHT	3020	07	64·3	59·7	14·9	73																	
			13	73·1	68·1	21·3	76																	
	HOPE GARDENS	712	07	64·0	61·1	17·1	84																	
JAMAICA	IRWIN	80	08	74·9	70·8	24·0	81																	
			15	81·1	72·4	23·4	68																	
	KINGSTON ST GEO COLL	90	07	71·0	66·6	20·5	79																	
			15	82·8	73·3	23·7	82																	
	MARSHALLS PEN	2300	07	65·6	63·2	18·9	87		3·1	2·5	8	12	2	4	2	0								
JAMAICA	MARSHALLS PEN	2300	13	78·5	68·1	19·0	56		5·1	4·8	0	5	12	13	9	0								
	MASON RIVER FIELD	2300	07	61·8	60·8	17·8	96																	
			13	78·1	72·0	24·0	73																	
	MONTEGO BAY AIRPORT	3	01	72·5	68·8	22·4	82	1013·3	3·1	1·7	0	23	2	2	0	0	0	0	0	0	0	0	0	28
			07	71·7	68·4	22·4	85	1013·4	3·6	2·1	0	22	2	3	0	0	0	0	0	0	0	0	0	28
JAMAICA	MONTEGO BAY AIRPORT	3	15	82·5	74·6	25·9	68	1013·1	12·4	2·6	0	18	6	4	0	0	0	0	0	0	0	0	0	28
			19	78·1	71·5	24·2	78	1012·6	5·6	3·9	0	9	9	10	0	0	0	0	0	0	0	0	0	28
	MORANT POINT LH	6	01	76·2	71·5	24·0	78		6·4	2·8	3	10	11	4	0	0								
			13	81·8	74·3	25·9	70		7·0	2·9	0	14	11	3	0	0								
			19	77·6	72·5	24·8	77		6·4	3·5	2	9	9	8	0	0								

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - FEBRUARY, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	NEGRIL POINT LH	27	01	73·1	68·2	21·4	77	1013·0	2·5	1·9	4	18	2	4	0	0								
			07	71·9	67·5	20·9	78	1013·5	2·6	2·3	3	15	7	3	0	0								
			13	84·2	73·0	22·8	57	1013·0	6·5	3·2	0	14	8	4	2	0								
			19	77·4	70·7	22·9	72	1012·3	5·0	3·2	4	13	4	5	2	0								
	PALISADOES AIRPORT	9	01	75·4	70·6	23·4	77	1012·8	3·9	1·3	1	24	2	1	0	0	0	0	0	0	0	0	0	28
JAMAICA	PALISADOES AIRPORT	9	07	73·4	69·2	22·6	80	1013·1	4·1	1·8	1	22	2	3	0	0	0	0	0	0	0	0	1	27
			13	83·8	74·5	25·0	63	1012·6	8·3	2·0	0	22	2	4	0	0	0	0	0	0	0	0	0	28
			19	79·2	73·0	25·2	74	1012·0	7·1	3·5	0	13	8	7	0	0	0	0	0	0	0	0	1	27
	WORTHY PARK	1250	07	60·9	59·8	17·3	94																	
			15	78·1	70·1	21·6	66																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	69·7	67·3	21·8	88	1014·5	5·1	3·3	0	17	4	3	4	0								
			13	80·6	73·0	24·4	68	1014·5	10·1	4·1	1	9	7	9	2	0								
			19	74·9	70·7	23·8	81	1014·0	6·9	2·9	2	14	8	2	2	0								
BR HONDURAS	BELIZE AIRPORT	17	06	70·5	69·4	24·0	94	1012·9	2·0	3·7	0	10	11	5	1	1	1	0	0	0	2	2	12	11
			12	82·9	74·6	25·6	66	1013·7	7·3	4·3	0	4	16	8	0	0	0	0	0	0	0	0	1	27
BR HONDURAS	BELIZE AIRPORT	17	18	77·4	73·0	25·8	81	1011·8	0·8	3·0	0	15	8	3	2	0	0	0	0	0	0	0	3	25
GUYANA	BARTICA POTARO RD	400	08	75·3	73·8	27·9	93																	
			14	86·9	77·7	28·2	65																	
	EBINI	60	08	75·5	74·4	28·6	95																	
			14	85·5	76·7	27·5	65																	
GUYANA	GEORGETOWN BOT GDN	7	08	79·7	75·5	28·3	82	1012·0	5·6	5·5	0	4	7	13	4	0								
			14	82·7	76·2	28·0	73	1010·0	7·0	5·7	0	2	9	15	2	0								
	HOSOROKO		08	76·6	74·2	27·7	89																	
			14	83·5	76·1	27·5	71																	
	LETHEM	270	08	77·9	73·3	25·9	79	1011·6	3·4	5·9	0	0	10	15	5	0								
GUYANA	LETHEM	270	14	88·5	76·1	25·2	55	1009·5	3·3															
	MAHAICONY ABARY RDS	6	08	77·6	76·3	30·4	93																	
			14	82·4	78·2	31·1	82																	
	MATTHEWS RIDGE		08	73·5	73·0	27·3	96																	
			14	84·4	77·0	28·4	71																	
GUYANA	MAZARUNI PRISON	47	08	76·1	74·5	28·5	93																	
			14	82·2	76·0	27·9	74																	
	MON REPOS		08	79·7	74·7	27·2	79																	
			14	83·2	76·8	28·6	74																	
	NEW AMSTERDAM	3	08	79·0	75·4	28·5	84																	
GUYANA	NEW AMSTERDAM	3	14	85·2	76·9	27·9	68																	
	ONVERWAGT		08	82·4	79·5	31·5	83																	
			14	84·0	78·9	31·5	79																	
	TIMEHRI AIRPORT	95	02	72·2	72·4	25·9	97	1010·1	0·2	4·2	1	11	2	10	1	0	1	0	0	0	0	0	13	11
			08	76·5	74·7	28·5	91	1011·7	0·9	5·4	0	3	8	14	3	0	0	0	0	0	1	0	2	25
GUYANA	TIMEHRI AIRPORT	95	14	86·1	76·7	27·3	55	1009·8	9·3	6·3	0	0	7	19	1	0	0	0	0	0	0	0	4	23
			20	76·5	74·3	27·9	90	1010·1	2·3	4·3	1	5	9	9	2	0	0	0	0	0	0	0	4	22
	TIMEHRI CMS		08	75·8	74·6	28·9	95																	
			14	83·2	78·6	31·3	81																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - FEBRUARY, 1969

COUNTRY	STATION	RAINFALL (INCHES) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.10	1.00	AIR TEMPERATURE F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	2·18	·81	27	9	3	0											
	GREEN HILL RIVER EST	1·29	·53	21	6	1	0											
	GUAYAGUAYARE	·99	·41	15	7	0	0											
	LA PASTORA	·91	·40	2	5	0	0											
	WATELOT	4·63	1·91	26	11	4	1											
TRINIDAD	NAVET DAMSITE	1·10	·38	26	5	0	0											
	PIARCO AIRPORT	·64	·28	26	4	0	0	86·9	69·6	78·2	91	65	65·6	203·7				
	POINT FORTIN	1·71	·69	26	9	1	0											
	PORT OF SPAIN R BOT	·57	·21	15	5	0	0											
	QUAREDAM HOLLIS	1·57	·33	26	11	0	0											
TRINIDAD	ST AUGUSTINE UWI	·70	·26	26	5	0	0	86·5	69·3	77·9	90	65	65·8	211·9				
	WATERLOO EST	·85	·35	21	8	0	0											
TOBAGO	CASTARA	4·13	3·33	1	10	1	1											
	CROWN POINT AIRPORT	·35	·14	1	4	0	0	85·0	72·2	78·6	89	69		240·6				
	HILLSBOROUGH DAM	1·12	·43	1	7	1	0											
TOBAGO	MORIAH	3·06	2·51	1	5	2	1											
	PLYMOUTH WHITE ROCK	·60	·47	1	2	1	0											
	SCARBOROUGH BOT STN	·47	·38	1	3	0	0											
	SPEYSIDE	1·40	·83	1	5	1	0											
GRENADA	MOUNT HORNE	5·04	1·21	19	11	5	2	82·4	71·1	76·8	87	67		191·5				
BARBADOS	BELLE ST M	1·29	·56	10	5	1	0											
	CASTLE GRANT ST JOS	3·33	·97	24	11	3	0											
	CLIFTON HALL ST J	1·38	·44	27	6	1	0											
	EDGECUMBE ST P	1·93	·54	22	9	2	0											
	HAGGATTS ST A	1·30	·29	2	9	0	0											
BARBADOS	HOLETOWN ST JA	·98	·45	10	6	1	0											
	HUSBANDS CWI	·59	·29	10	3	0	0	83·5	69·6	76·6	87	65						
	LION CASTLE ST T	1·95	·81	10	8	1	0											
	SEAWELL AIRPORT	1·03	·29	10	7	0	0	83·9	71·4	77·5	87	65	66·8	240·5				
ST VINCENT	CAMDEN PARK	1·51	·43	14	8	1	0	84·7	70·7	77·7	87	67						
ST LUCIA	VIGIE AIRPORT							83·8	70·6	77·2	86	67						
ANTIGUA	COOLIDGE AIRPORT	1·13	·44	11	7	1	0	83·0	70·2	76·6	86	65						
	DUNBARS	1·17	·41	9	6	1	0	85·8	71·2	78·5	90	69						
JAMAICA	BERNARD LODGE	·32	·32	17	1	0	0	87·3	64·5	75·9	90	59	61·9	263·5				
	CEDAR VALLEY	1·09	·40	17	5	1	0		57·7			49						
JAMAICA	DUCKENFIELD	1·17	1·08	27	2	1	1		66·5			58	64·9	252·8				
	EAST ALBION NURSERY	·07	·07	17	1	0	0	86·7	57·0	76·8	91	63						
	EMPIRE NURSERY	·70	·30	6	3	0	0	80·1	57·1	68·6	84	51						
	FARM HILL	1·28	·45	6	5	1	0	72·4	56·8	64·6	75	53						
	HALLS DELIGHT	·94	·60	6	4	1	0	77·6	59·0	68·3	81	55						
JAMAICA	HOPE GARDENS	·34	·20	6	2	0	0	85·8	58·4	72·1	89	54		265·8				
	IRWIN	·00	·00		0	0	0	86·3	64·0	75·2	90	57						
	KINGSTON ST·GEORGES	·03	·02	17	0	0	0	86·2	69·4	77·9	89	65						
	MARSHALLS PEN	·45	·16	6	5	0	0	80·1			82							
	MASON RIVER FIELD	·75	·65	28	2	1	0	78·7	58·9	68·8	82	54						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - FEBRUARY, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.50	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION Hr.	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
JAMAICA	MONTEGO BAY AIRPORT	.86	.86	11	1	1	0	83.9	69.1	76.5	88	67		245.6				
	MORANT POINT LH	.77	.59	28	2	1	0	82.5	71.3	76.9	85	67						
	NEGRIL POINT LH	.29	.19	16	2	0	0	86.7	69.9	78.3	92	66						
	PALISADOES AIRPORT	.52	.37	17	2	0	0	85.8	71.9	78.9	89	66		260.9				
	WORTHY PARK	1.63	.61	26	6	2	0	83.0	57.0	70.5	86	47		186.4				
CAYMAN ISLANDS	GRAND CAYMAN APT	.76	.75	17	1	1	0	82.4	66.2	74.3	85	59						
BR HONDURAS	BELIZE AIRPORT	1.21	.60	4	6	1	0	84.8	69.3	77.0	93	64		248.6				
GUYANA	BARTICA POTARO RD	5.27	1.20	6	15	5	1	89.1	70.7	79.9	92	69						
	EBINI	2.86	.58	5	11	2	0	87.9	70.2	79.1	92	68						
	GEORGETOWN BOT GDN	4.37	2.41	6	15	3	1	83.9	75.9	79.9	86	73	72.0	199.1				
GUYANA	HOSOROKO	4.20	2.41	1	6	3	1	86.6	71.4	79.0	90	68						
	LETHEM	.79	.37	6	3	1	0	91.5	74.4	83.0	95	72						
	MAHAICONY ABARY RDS	4.44	.83	25	14	4	0	85.9	73.9	79.9	88	70						
	MATTHEWS RIDGE	5.67	1.75	1	12	4	1	89.6	67.4	78.6	91	61						
	MAZARUNI PRISON	6.31	1.61	25	14	5	3	84.3	69.3	76.8	90	65						
GUYANA	MON REPOS	4.40	1.80	6	10	3	1	84.7	74.7	79.7	87	73						
	NEW AMSTERDAM	2.80	.94	5	10	2	0	86.0	74.1	80.0	88	73						
	ONVERWAGT	1.51	.68	4	6	1	0	85.4	77.6	81.5	86	74						
	PORT KAITUMA	2.36	.55	10	10	1	0	91.8	72.1	82.0	95	68						
	TIMEHRI AIRPORT	5.35	1.61	4	15	4	1	88.9	70.9	79.9	94	67			1	0	0	0
GUYANA	TIMEHRI CHS	5.50	1.17	1	14	4	2	86.2	70.4	78.3	90	67	69.0	129.8				
	WAUNA	4.45	2.28	1	10	2	2											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - FEBRUARY, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	89	115	6·87	·52	24												
	ST AUGUSTINE UWI	24	47	5·68	·22	23												
JAMAICA	EAST ALBION NURSERY	38	63	7·08	·34	9												
	EMPIRE NURSERY	51	95	3·20	·23	4												
	HALLS DELIGHT	82	180	3·81	·24	23												
JAMAICA	PALISADOES AIRPORT	64	126	7·48	·36	25												
GUYANA	GEORGETOWN BOT GDN	92	126	4·77	·26	16												

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - FEBRUARY, 1969

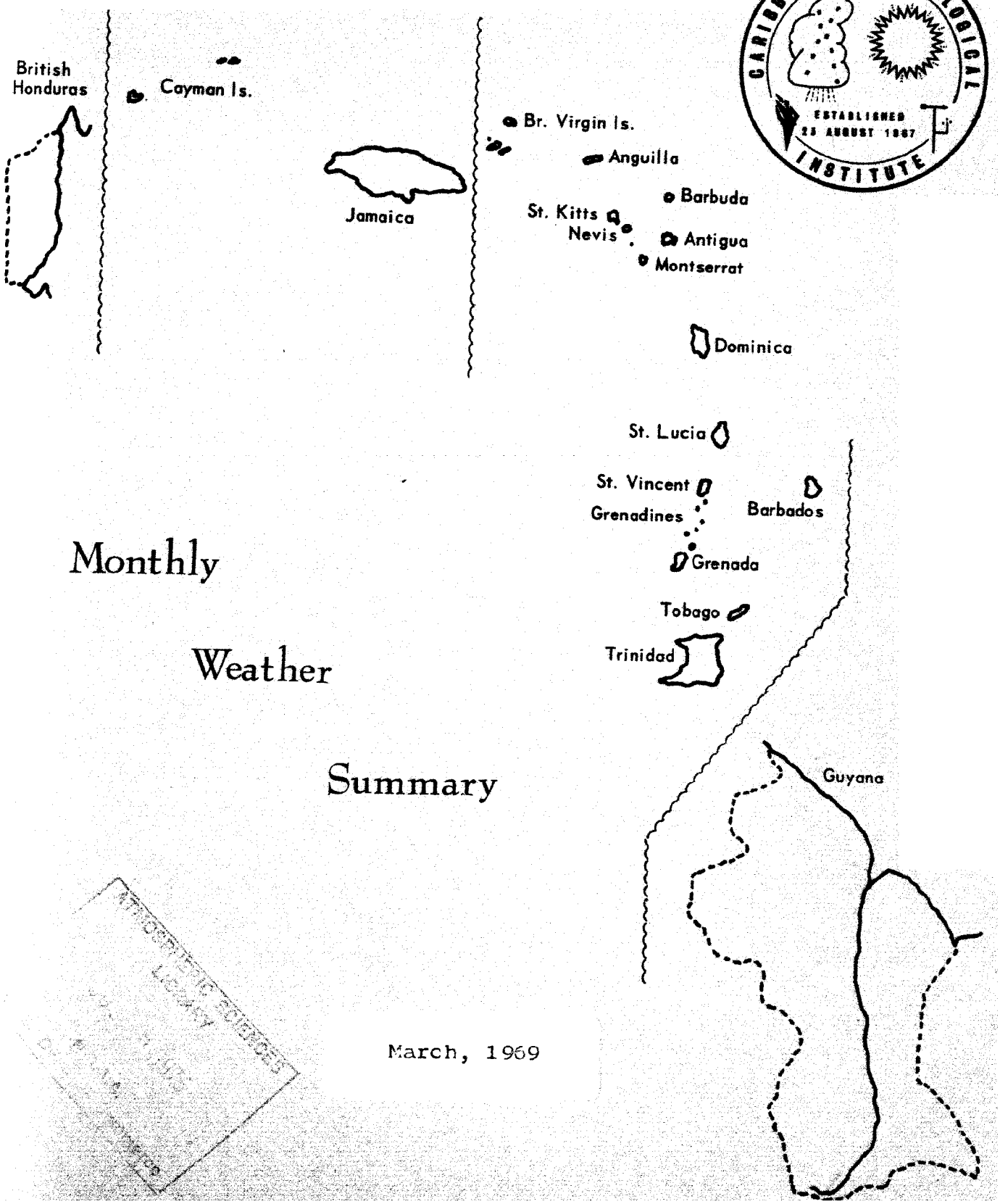
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·13	·15	·15	·15	·15	·19	·27	·39
	ST AUGUSTINE UWI		·09	·13	·24	·25	·25	·26	·26
TOBAGO	CROWN POINT AIRPORT	·07	·07	·07	·10	·17	·19	·20	·25
BARBADOS	HAGGATTS ST A	·15	·15	·18	·19	·20	·20	·20	·22
	LION CASTLE ST T	·28	·30	·45	·56	·77	·80	·80	·80
BARBADOS	SEAWELL AIRPORT	·18	·20	·28	·29	·29	·29	·29	·29
JAMAICA	PALISADOES APT	·09	·20	·25	·34	·37	·37	·37	·37
GUYANA	EBINI	·18	·20	·22	·22	·26	·28	·32	·50
	GEORGETOWN BOT GDN	·55	·64	·90	1·20	1·45	1·60	2·29	2·29

TABLE V - SUMMARY OF WINDSPEED RECORDS - FEBRUARY, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	07	14	13	3	07	28	1150	3	0	0	0	4·5
TOBAGO	CROWN POINT AIRPORT	11	17	10	17	15	25	1320	26	0	0	0	6·8
BARBADOS	SEAWELL AIRPORT	11	16	07	9	12	25	1120	17	0	0	0	7·4
JAMAICA	MONTEGO BAY	08	20	14	1	08	28	1350	1	0	0	0	5·7
	PALISADOES APT	35	23	12	19	35	31	1140	19	0	0	0	6·5
GUYANA	GEORGETOWN BOT GDN	04	13	13	14	07	29	0300	2	0	0	0	7·1

TABLE VI - SUMMARY OF SUNSHINE RECORDS - FEBRUARY, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	21	68	71	70	78	80	74	74	67	61	51	15	0	203·7	52	10·9	15	1	3	4	8	12	8
	ST AUGUSTINE UWI	0	70	71	80	75	77	76	75	69	66	60	53	25	0	211·9	64	11·0	9	1	3	3	7	14	0
TOBAGO	CROWN POINT AIRPORT	0	30	77	80	70	79	83	79	80	83	75	64	27	0	240·6	75	11·3	15	1	1	3	7	16	0
BARBADOS	SEAWELL AIRPORT	0	16	71	81	86	88	86	86	88	84	76	69	29	0	240·5	73	10·9	14	1	1	1	8	17	0
JAMAICA	DUCKENFIELD	0	2	81	86	85	95	95	94	94	91	86	67	1	0	252·8	78	10·5	21	0	0	1	13	14	0
JAMAICA	MONTEGO BAY	0	22	84	88	89	90	91	91	90	80	70	65	17	0	245·6	76	10·6	25	1	0	2	8	17	0
	PALISADOES	0	34	90	96	98	98	95	94	93	90	79	54	13	0	250·9	81	11·0	20	0	0	1	5	22	0
GUYANA	GEORGETOWN BOT GDN	0	0	48	67	71	74	72	68	60	71	71	73	38	0	199·1	59	10·9	21	0	4	7	6	11	0
	MON REPOS	0	14	44	65	70	73	70	61	65	71	72	60	18	0	190·3	57	10·9	16	0	6	3	10	9	0
	TIMEHRI CHS	0	12	39	55	95	46	45	43	47	38	36	33	10	0	129·8	39	10·3	21	1	9	8	7	3	0



CARIBBEAN METEOROLOGICAL INSTITUTE
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Monthly Weather Summary

March, 1969

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MONTHLY WEATHER SUMMARY

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March, 1969

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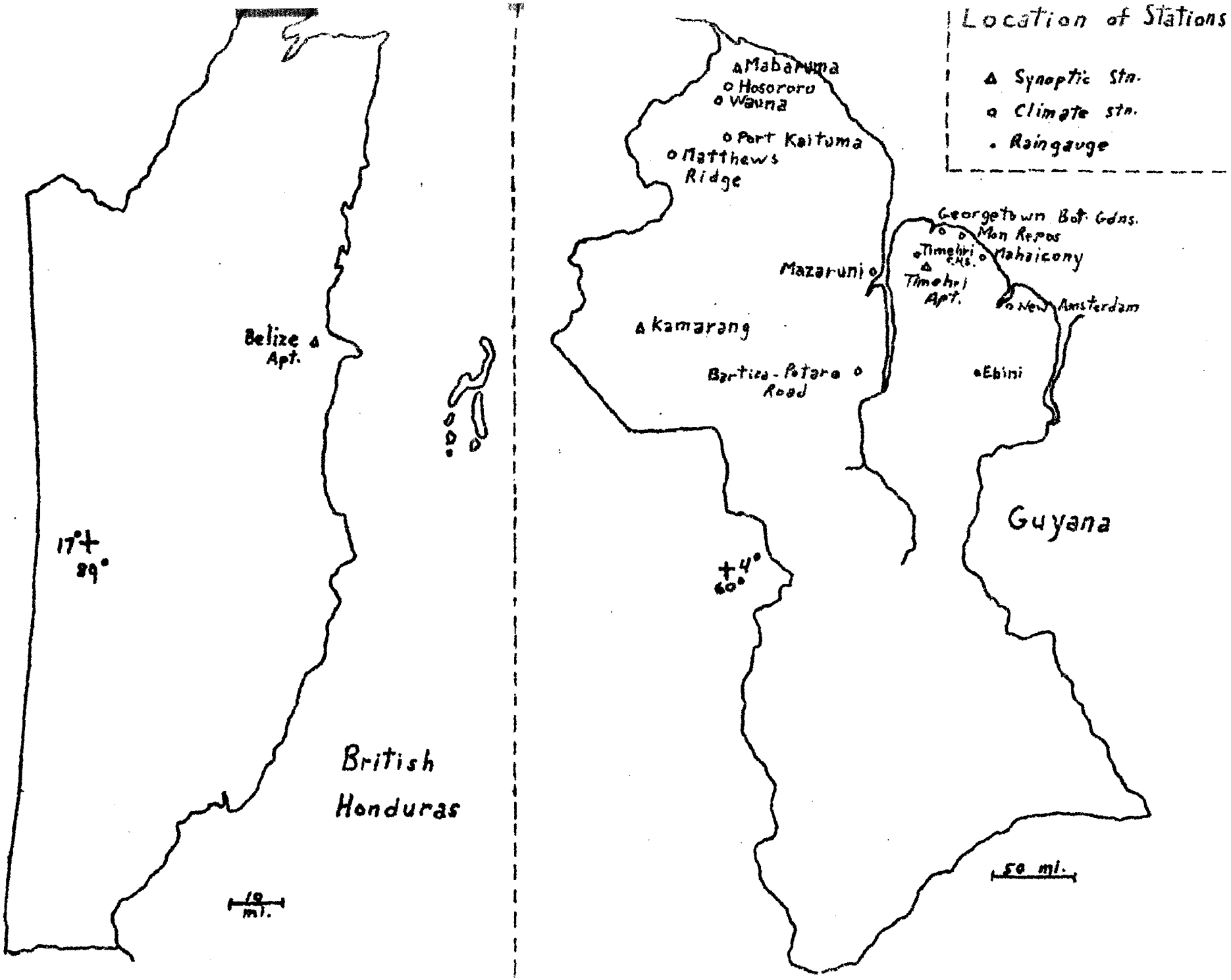
Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Barbados
Dominica
Montserrat
St. Kitts
Nevis
Anguilla
St. Vincent
St Lucia
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Piarco
Centeno
Port of Spain
Waterloo
Cocal
Navet
Penal
Guayaguayare
Point Fortin
Speyside
Castara
Moriah
Hillsborough
Plymouth
Scarborough
Crown Point
Mt Horne
Mirabeau
Canouan I.
Union
Haggatts
Holetown
Lion Castle
Clifton
Castle Grant
Husbands
Edgecumbe
River
Belle
Seawell Apt.
Melville Hall
Roseau C.L.F.
Grove
Vigie
Roseau
Beausejour
Camden Park
Arnos Vale
La Guerne
Dunbars
Coolidge Apt.
Paraquita Bay
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Kingston
Halls
Cinchona
Farm Hill
Empire
Cedar Valley
Palisadoes
East Albion
Buttonfield
Morant Pt.
Manymusk
Cayman Rk.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica - Potaro Road
Georgetown Bot. Gdns.
Mon Repos
Timehri C.M.S.
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
4°
60°
50 mi.
Belize Apt.
17°
89°
British Honduras
10 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

/cont'd

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

/ct'd.....

during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

/ct'd.....

is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE 1- SUMMARY OF OBSERVATIONS AT FIXED HOURS - MARCH, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,200	1,100-2,200	(miles): 1/2-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	74.1	71.9	25.7	89	1012.2	0.3	4.3	0	1	8	20	2	0	0	0	0	0	0	0	6	25
			08	78.2	75.9	26.7	81	1013.9	3.3	4.4	0	12	5	11	3	0	0	0	0	0	0	1	3	27
			14	88.4	75.1	23.9	52	1011.9	10.5	5.3	0	4	11	15	1	0	0	0	0	0	0	1	1	29
			20	78.3	73.9	26.6	80	1012.4	0.9	3.5	0	16	5	9	1	0	0	0	0	0	0	0	2	29
	ST AUGUSTINE UWI	52	16	86.3	75.0	24.7	58	1011.0	4.3	4.1	2	9	14	5	1	0								
TOBAGO	CROWN POINT AIRPORT	9	02	76.4	72.5	25.5	82	1012.2	4.7	4.6	1	8	9	10	3	0	0	0	0	0	0	0	3	28
			08	81.2	74.2	25.7	71	1014.0	9.3	5.2	0	7	5	18	1	0	0	0	0	0	0	1	3	27
			14	86.1	75.8	25.9	61	1012.4	12.7	4.7	0	7	8	15	1	0	0	0	0	0	0	0	3	28
			20	78.9	73.8	26.2	77	1012.7	7.3	3.8	0	12	9	10	0	0	0	0	0	0	0	0	3	26
GRENADA	MOUNT HORNE	500	08	79.4	75.5	28.4	83																	
GRENADA	PEARLS AIRPORT	22	08	80.7	74.4	26.4	74	1013.4	10.1	4.4	0	3	20	6	2	0	0	0	0	0	0	1	1	29
			14	83.9	76.1	27.5	70	1012.4	11.0	3.7	0	10	15	5	1	0	0	0	0	0	0	1	0	30
BARBADOS	HUSBANDS CWI	370	09	82.0	73.1	23.9	64																	
	SEAWELL AIRPORT	183	02	76.7	71.9	24.6	78	1013.3	7.2	2.5	1	18	6	5	1	0	0	0	0	0	0	0	0	31
			08	80.6	73.2	24.5	69	1015.1	9.5	3.2	0	13	14	4	0	0	0	0	0	0	0	0	0	31
BARBADOS	SEAWELL AIRPORT	183	14	85.0	74.8	25.0	61	1013.4	9.9	4.1	0	9	12	10	0	0	0	0	0	0	0	0	0	31
			20	78.1	72.5	24.9	76	1014.2	7.5	3.2	1	13	10	7	0	0	0	0	0	0	0	0	0	31
ST VINCENT	CAMDEN PARK	30	08	78.0	73.0	25.3	77	1015.6	5.1															
ST LUCIA	VIGIE AIRPORT	7	08	80.3	70.8	25.4	71	1014.9	8.4	3.0	0	11	12	2	0	0	0	0	0	0	0	0	2	23
			14	85.5	74.2	23.7	56	1013.4	14.0	3.2	0	5	16	0	0	0	0	0	0	0	0	0	0	21
ANTIGUA	COOLIDGE AIRPORT	26	08	78.4	72.2	24.2	75	1015.9	9.4	3.7	0	7	12	7	0	0	0	0	0	0	0	0	0	26
			14	83.9	73.9	24.3	61	1014.2	11.7	3.4	0	9	16	6	0	0	0	0	0	0	0	0	0	31
			20	77.5	72.3	24.9	77	1015.0	7.8	2.8	1	17	9	4	0	0	0	0	0	0	0	0	3	28
	DUNBARS	220	09	81.8	73.1	24.1	65																	
			15	84.4	73.6	23.5	58																	
JAMAICA	CEDAR VALLEY	1980	07	65.0	63.5	19.3	91																	
			15	81.2	72.1	22.9	63																	
	DALLAS	950	09	77.8	72.2	24.5	75																	
			15	77.8	72.2	24.5	75																	
	DUCKENFIELD	60	08	83.5	74.6	25.4	65																	
JAMAICA	EAST ALBION NURSERY	90	07	75.2	71.4	24.7	83																	
			15	75.8	69.6	22.0	72																	
	EMPIRE NURSERY	2150	07	86.7	75.3	24.9	57																	
			15	63.1	62.0	18.5	94																	
	FARM HILL	4020	07	81.3	71.2	21.7	59																	
JAMAICA	FARM HILL	4020	15	61.7	59.2	16.0	85																	
	HALLS DELIGHT	3020	07	74.8	72.1	25.8	88																	
			15	67.9	63.1	17.7	76																	
	HOPE GARDENS	712	07	75.5	69.5	21.8	72																	
	IRWIN	80	08	68.8	66.5	21.1	88																	
JAMAICA	IRWIN	80	15	85.4	75.8	26.1	63																	
	KINGSTON ST GEO COLL	90	07	75.1	70.9	24.0	81																	
			15	85.1	76.4	27.1	66																	
	MARSHALLS PEN	2300	07	70.6	67.0	20.9	82		5.5	3.5	2	11	10	7	0	1								
			13	81.1	70.2	20.4	56		6.3	5.2	0	3	9	18	0	1								

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - MARCH, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1/2 - 2	2 - 3	3 - 5	5 - 10	10 or more
JAMAICA	MASON RIVER FIELD	2300	07	65·2	64·7	20·7	98																	
			13	80·2	70·9	21·7	62																	
			19	67·5	65·5	20·7	90																	
	MONTEGO BAY AIRPORT	3	01	75·3	71·3	24·3	81	1013·4	2·8	1·9	0	25	4	1	1	0	0	0	0	0	0	0	0	31
			07	73·7	70·5	24·1	85	1013·6	3·5	2·5	0	18	10	3	0	0	0	0	0	0	0	0	0	31
JAMAICA	MONTEGO BAY AIRPORT	3	13	85·2	76·6	27·4	66	1013·1	13·1	2·2	0	20	9	2	0	0	0	0	0	0	0	0	0	31
			19	79·5	74·6	27·2	79	1012·7	5·6	4·5	0	8	10	13	0	0	0	0	0	0	0	0	0	31
	MORANT POINT LH	6	01	77·7	74·1	27·0	83		6·3	3·3	4	11	7	9	0	0								
			07	76·7	73·5	26·9	86		6·1	3·8	1	8	14	8	0	0								
			13	83·4	77·4	29·3	75		5·8	4·2	0	8	12	11	0	0								
JAMAICA	MORANT POINT LH	6	19	79·9	75·4	27·8	80		5·8	4·1	0	10	9	12	0	0								
	NEGRIL POINT LH	27	01	76·2	71·5	24·3	79	1013·2	2·7	2·2	5	15	8	3	0	0								
			07	74·7	70·5	23·6	81	1013·4	3·3	2·3	7	13	6	5	0	0								
			13	85·9	75·6	25·7	61	1013·2	7·1	3·1	0	15	11	5	0	0								
			19	80·5	74·2	26·0	75	1012·4	3·2	4·5	1	9	7	7	7	0								
JAMAICA	ORANGE RIVER	950	08	73·8	71·0	24·8	87																	
			16	79·0	74·7	27·6	82																	
	PALISADOES AIRPORT	9	01	78·7	75·8	29·2	87	1013·1	3·8	2·4	1	21	3	6	0	0	0	0	0	0	0	0	0	31
			07	77·3	74·1	27·4	86	1013·3	3·4	2·5	0	21	6	4	0	0	0	0	0	0	0	0	2	29
			13	85·6	79·4	31·6	75	1012·8	12·8	2·9	0	18	8	5	0	0	0	0	0	0	0	0	0	31
JAMAICA	PALISADOES AIRPORT	9	19	81·9	77·6	30·5	82	1012·3	7·9	3·7	0	13	9	9	0	0	0	0	0	0	0	0	0	31
	WORTHY PARK	1250	07	66·6	65·1	20·5	92																	
			15	82·7	72·8	23·1	60																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	73·2	70·9	24·8	89	1014·4	7·6	3·6	0	15	7	4	5	0	0	0	0	0	0	0	0	31
			13	82·7	75·5	27·0	71	1014·7	11·0	5·0	0	7	9	10	5	0	0	0	0	0	0	0	1	30
CAYMAN ISLANDS	GRAND CAYMAN APT	20																						
BR HONDURAS	BELIZE AIRPORT	17	19	77·4	73·5	26·5	83	1013·9	7·9	4·0	0	17	2	4	8	0	0	0	0	0	0	0	0	31
			06	72·6	71·2	25·6	93	1012·8	4·7	5·7	0	6	6	6	11	0	0	0	1	3	1	3	13	8
			12	81·7	74·6	26·3	71	1013·5	7·8	5·3	0	6	8	8	9	0	0	1	2	0	1	0	5	22
GUYANA	BARTICA POTARO RD	400	18	78·3	74·0	26·7	80	1011·4	5·0	4·7	3	7	5	7	8	0	2	0	1	1	0	1	6	19
			08	76·4	74·7	28·7	93																	
GUYANA	BARTICA POTARO RD	400	14	89·7	77·9	27·5	58																	
	EBINI	60	08	76·0	74·5	28·5	93																	
			14	88·2	76·9	26·6	58																	
	GEORGETOWN BOT GDN	7	08	82·1	76·0	28·0	75	1013·5	6·9	4·6	0	6	13	11	1	0								
			14	85·3	77·2	28·3	68	1011·7	9·2	4·5	0	3	16	10	0	0								
GUYANA	HOSORORO		08	77·1	74·5	28·0	88																	
			14	84·7	76·6	27·6	68																	
	LETHEM	270	08	81·0	74·0	25·5	71	1012·6	5·4	5·7	0	0	11	20	0	0								
			14	90·5	76·0	24·1	49	1010·4	5·4	6·7	0	0	3	22	0	0								
	MABARUMA	185	08	77·1	74·0	27·4	86		2·7	5·0	0	7	8	11	4	0								
GUYANA	MABARUMA	185	14	86·6	76·9	27·2	63		3·9	5·8	0	0	11	16	3	0								
	MAHAICONY ABARY RDS	6	08	77·8	75·8	29·7	91																	
			14	83·3	78·3	30·8	79																	
	MATTHEWS RIDGE		08	74·7	73·2	27·2	92																	
			14	86·4	76·6	27·3	64																	

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - MARCH, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
GUYANA	MAZARUNI PRISON	47	08	77·9	75·1	28·6	88																	
			14	84·0	76·7	28·2	71																	
	MON REPOS		08	82·2	78·7	27·6	74																	
			14	85·4	76·7	27·6	66																	
	NEW AMSTERDAM	3	08	80·8	75·9	28·6	87																	
GUYANA	NEW AMSTERDAM	3	14	86·8	77·1	27·4	63																	
	ONVERWAGT		08	83·8	78·1	30·2	76																	
			14	84·2	79·0	31·5	78																	
	TIMEHRI AIRPORT	95	02	72·6	72·0	26·8	97	1011·2	0·3	4·9	1	5	7	10	4	0	0	0	0	0	0	1	10	16
			08	78·4	75·7	29·1	87	1013·3	2·2	5·6	0	3	10	16	2	0	0	0	0	0	0	0	1	30
GUYANA	TIMEHRI AIRPORT	95	14	88·6	77·4	27·2	60	1010·9	10·0	6·6	0	0	1	24	2	0	0	0	0	0	0	0	2	25
			20	77·2	74·5	27·9	87	1011·3	2·5	5·1	0	5	7	15	2	0	0	0	0	0	0	0	0	27
	TIMEHRI CHS		08	76·6	75·4	29·4	95																	
			14	85·6	77·7	28·7	70																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - MARCH, 1969

COUNTRY	STATION	RAINFALL (INCHES)						AIR TEMPERATURE F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.10	1.00	MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	EXTREMES MIN			THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	2·02	·97	21	5	2	0											
	GREEN HILL RIVER EST	·67	·25	27	4	0	0											
	GUAYAGUAYARE	1·19	·55	28	4	2	0											
	LA PASTORA	1·19	·55	28	4	2	0											
	MATELOT	1·50	·86	30	5	2	0											
TRINIDAD	NAVET DAMSITE	·87	·61	20	3	1	0											
	PIARCO AIRPORT	·42	·22	23	2	0	0	89·9	70·8	80·4	92	67	65·7	270·5				
	POINT FORTIN	·38	·13	28	5	0	0											
	PORT OF SPAIN R BOT	·52	·34	23	2	0	0											
	GUAREDAW HOLLIS	·96	·34	20	5	0	0											
TRINIDAD	ST AUGUSTINE UWI	·61	·40	23	2	1	0	89·4	70·8	80·1	91	67	66·9	291·4				
	WATERLOO EST	·61	·35	23	3	0	0											
TOBAGO	CASTARA	1·35	·51	30	7	1	0											
	CROWN POINT AIRPORT	·44	·21	7	4	0	0	90·8	76·4	83·6	92	73		291·6				
	HILLSBOROUGH DAM	1·52	·97	29	5	1	0											
TOBAGO	MORIAH	·38	·15	28	5	0	0											
	PLYMOUTH WHITE ROCK	·45	·29	28	3	0	0											
	SCARBOROUGH BOT STN	·24	·20	26	2	0	0											
	SPEYSIDE	2·69	1·98	29	7	1	1											
GRENADA	MOUNT HORNE	2·33	1·05	23	6	2	1	85·8	73·4	79·6	88	70		252·5				
GRENADA	PEARLS AIRPORT	1·59	·65	23	6	1	0	84·8	74·4	79·6	86	71						
BARBADOS	BELLE ST M	·29	·08	8	4	0	0											
	CASTLE GRANT ST JOS	·87	·27	14	6	0	0											
	CLIFTON HALL ST J	·41	·19	30	3	0	0											
	EDGECUMBE ST P	·19	·13	30	2	0	0											
BARBADOS	HAGGATTS ST A	·41	·16	14	3	0	0											
	HOLETOWN ST JA	·72	·33	14	5	0	0											
	LION CASTLE ST. T	·94	·41	30	4	0	0											
	RIVER ST P	·35	·11	30	3	0	0											
	SEAWELL AIRPORT	·40	·13	14	4	0	0	86·9	74·5	80·7	90	69	69·7	310·5				
ST VINCENT	CAMDEN PARK	1·28	·64	27	4	2	0	87·4	73·2	80·3	89	69						
ST LUCIA	VIGIE AIRPORT							86·8	73·5	80·2	89	69						
ANTIGUA	COOLIDGE AIRPORT	1·16	1·00	24	3	1	1	85·3	72·6	79·0	90	69						
	DUNBARS	·82	·34	24	5	0	0	88·7	72·9	80·8	93	70						
JAMAICA	BERNARD LODGE	·29	·29	28	1	0	0	89·2	68·5	78·9	91	65	66·7	270·0				
JAMAICA	CEDAR VALLEY	·81	·69	21	2	1	0		62·1			59						
	DALLAS	1·30	1·08	21	2	1	1	85·5			91							
	DUCKENFIELD	·41	·25	28	2	0	0		70·0			63	68·3	228·8				
	EAST ALBION NURSERY	·06	·04	16	1	0	0	88·9	70·6	79·8	93	68						
	EMPIRE NURSERY	·64	·62	21	1	1	0	84·1	61·0	72·6	87	58						
JAMAICA	FARM HILL	·48	·27	20	3	0	0	76·5	60·1	68·3	80	57						
	HALLS DELIGHT	·76	·73	21	1	1	0	80·0	61·8	70·9	86	60						
	HOPE GARDENS	·30	·15	22	3	0	0	89·0	61·8	75·4	91	59		278·8				
	IRWIN	·17	·17	18	1	0	0	89·7	67·3	78·5	96	61						
	KINGSTON ST·GEORGES	·21	·21	21	1	0	0	88·6	72·7	80·6	92	70						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - MARCH, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.40	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
JAMAICA	MARSHALLS PEN	.31	.22	20	2	0	0	82.2			85							
	MASON RIVER FIELD	1.20	.60	31	2	2	0	80.9	62.2	71.6	85	58						
	MONTEGO BAY AIRPORT	.00	.00		0	0	0	85.9	70.2	78.1	92	66		274.9	0	0	0	0
	MORANT POINT LH	.84	.36	28	3	0	0	85.5	72.8	79.1	89	64			0	0	0	0
	NEGRIL POINT LH	.32	.20	29	3	0	0	88.4	71.6	80.0	92	67			0	0	0	0
JAMAICA	ORANGE RIVER	1.24	.50	30	4	1	0	79.5			85			239.7				
	PALISADOES AIRPORT	.11	.06	21	2	0	0	87.3	75.2	81.2	90	73		253.5	0	0	0	0
	WORTHY PARK	.16	.07	1	2	0	0	85.9	62.6	74.2	89	58		203.1				
CAYMAN ISLANDS	GRAND CAYMAN APT	1.79	.64	20	4	2	0	83.6	70.0	76.8	87	58						
BR HONDURAS	BELIZE AIRPORT	9.62	5.49	28	9	4	2	84.3	71.8	78.0	94	65						
GUYANA	BARTICA POTARO RD	3.22	.75	27	3	1	0	91.1	70.7	80.9	93	68						
	EBINI	3.40	.61	26	14	4	0	90.5	70.2	80.4	94	65						
	GEORGETOWN BOT GDN	.87	.36	1	4	0	0	85.9	77.2	81.5	87	72	72.6	267.7				
	HOSOROKO	2.32	1.05	3	5	3	1	89.3	71.0	80.2	93	68						
	LETHEM	.00	.00		0	0	0	93.8	75.6	84.7	96	73						
GUYANA	MABARUMA	2.60	.86	29	8	2	0	88.0	74.6	81.3	90	71						
	MAHAICONY ABARY RDS	2.29	1.18	6	4	2	1	87.9	74.8	81.4	89	73						
	MATTHEWS RIDGE	1.23	.44	31	7	1	0	91.7	68.7	80.2	94	67						
	MAZARUNI PRISON	3.19	.92	23	9	3	0	86.2	69.1	77.6	89	65		107.9				
	MON REPOS	.41	.19	14	5	0	0	86.6	76.5	81.6	88	74						
GUYANA	NEW AMSTERDAM	1.76	.44	6	7	2	0	87.9	74.9	81.4	89	73						
	ONVERWACHT	1.12	.85	8	3	1	0	85.4			86							
	PORT KAITUMA	1.72	.52	2	8	2	0											
	TIMEHRI AIRPORT	3.14	.60	15	11	3	0	90.6	70.5	80.6	94	68			2	0	0	0
	TIMEHRI CHS	2.19	.59	31	12	2	0	88.2	70.2	79.2	91	65	68.6	125.8				
GUYANA	WAUNA	4.10	1.04	23	8	3	1											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - MARCH, 1969

COUNTRY	STATION	RUN OF WIND (m. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	117	149	10·08	·48	20												
	ST AUGUSTINE UWI	37	61	5·81	·25	9												
JAMAICA	CEDAR VALLEY	30	84	6·54	·39	19												
	DUCKENFIELD			5·56	·32	14												
	EAST ALBION NURSERY	47	86	7·77	·41	15												
JAMAICA	HALLS DELIGHT	38	74															
	PALISADOES AIRPORT	88	283	9·37	·41	15												
GUYANA	GEORGETOWN BOT GDN	101	140	7·18	·33	19												
	TIMEHRI CHS	52	76															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - MARCH, 1969

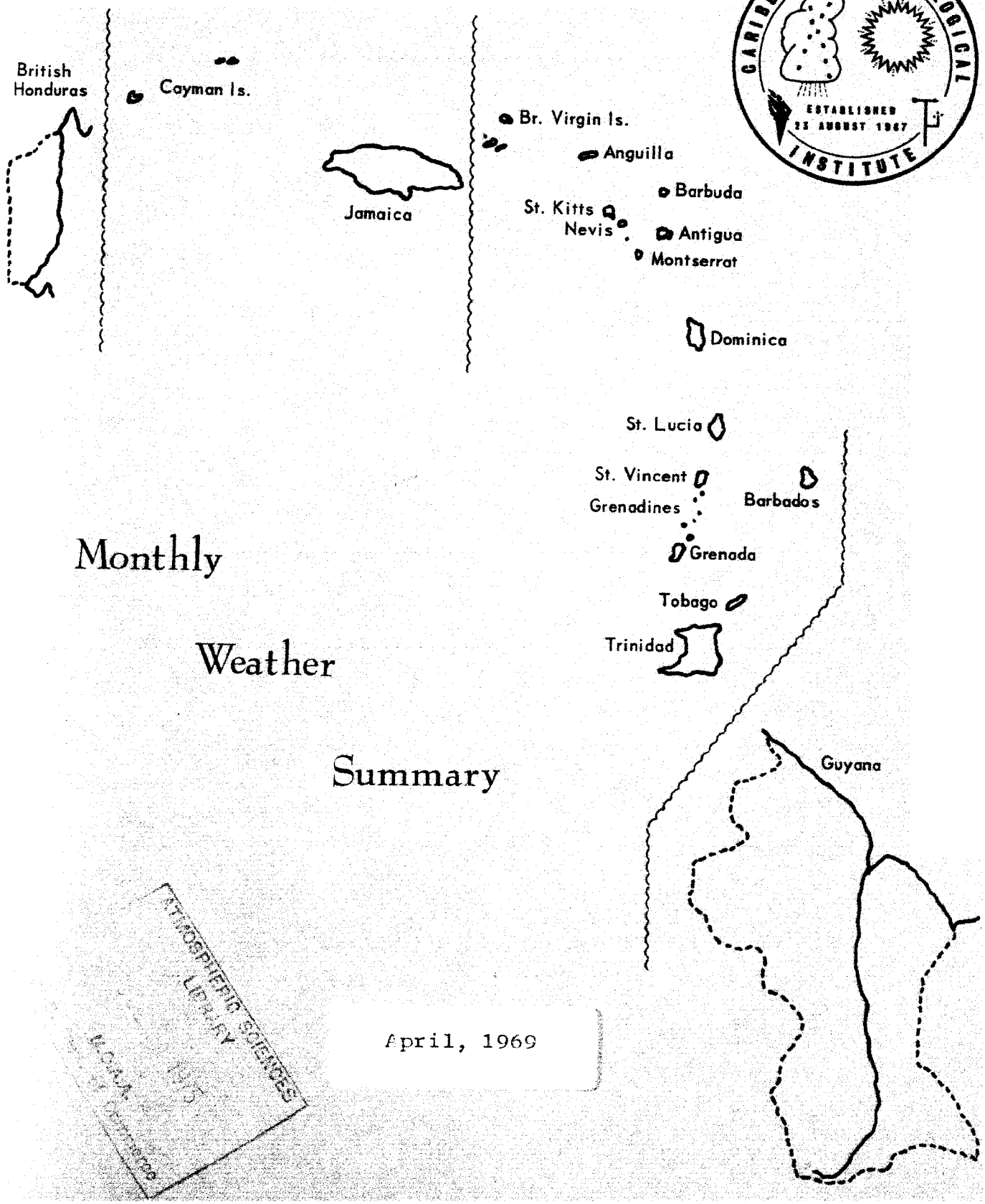
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·05	·09	·13	·18	·18	·18	·18	·20
	ST AUGUSTINE UWI		·09	·14	·16	·25	·25	·26	·26
TOBAGO	CROWN POINT AIRPORT	·07	·14	·14	·14	·14	·14	·15	·15
BARBADOS	HAGGATTS ST A	·24	·24	·24	·24	·24	·24	·28	·28
	LION CASTLE ST T	·07	·11	·15	·22	·26	·29	·33	·33
BARBADOS	SEAWELL AIRPORT	·09	·14	·16	·20	·20	·20	·20	·20
JAMAICA	PALISADOES APT	·02	·04	·06	·06	·06	·06	·06	·06
GUYANA	EBINI	·44	·56	·56	·56	·56	·59	·59	·59
	GEORGETOWN BOT GDN	·14	·20	·27	·27	·32	·32	·32	·32
	MATTHEWS RIDGE	·15	·15	·15	·15	·15	·20	·35	·35

TABLE V - SUMMARY OF WINDSPEED RECORDS - MARCH, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	08	17	11	18	08	31	1115	24	0	0	0	5·0
TOBAGO	CROWN POINT AIRPORT	12	18	12	24	12	25	1110	24	0	0	0	8·2
BARBADOS	SEAWELL AIRPORT	07	15	13	18	07	23	1205	18	0	0	0	8·9
JAMAICA	MONTEGO BAY	07	22	16	29	06	31	1505	29	0	0	0	6·4
	PALISADOES APT	12	25	19	8	13	31	1515	29	0	0	0	6·8
GUYANA	GEORGETOWN BOT GDN	07	13	13	23	07	26	1250	23	0	0	0	7·9

TABLE VI - SUMMARY OF SUNSHINE RECORDS - MARCH, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	29	80	88	88	83	82	85	76	82	82	75	25	0	270·5	72	11·0	16	0	2	3	6	24	0
	ST AUGUSTINE UWI	0	32	86	92	91	84	83	87	91	86	89	86	35	0	291·4	78	11·1	20	0	1	2	6	22	8
TOBAGO	CROWN POINT AIRPORT	0	36	82	86	88	86	82	84	84	80	80	81	41	0	291·6	78	11·5	31	0	3	0	6	22	0
BARBADOS	SEAWELL AIRPORT	0	32	88	96	98	98	96	95	94	91	93	83	37	0	310·5	83	11·3	12	0	0	1	2	28	0
JAMAICA	DUCKENFIELD	0	2	65	68	87	87	83	84	81	75	71	59	15	0	246·7	66	10·6	26	0	1	5	16	9	0
JAMAICA	MONTEGO BAY	0	26	83	88	93	96	98	99	95	83	65	49	12	0	274·9	74	10·7	3	0	0	2	11	18	0
	MONY MUSK	0	5	74	83	89	95	93	96	95	96	89	65	2	0	274·2	73	10·2	1	0	0	1	11	19	0
	ORANGE RIVER	0	16	69	82	82	85	92	86	77	72	58	44	11	0	239·7	64	10·7	9	0	1	6	10	14	0
	PALISADOES	0	29	79	85	85	88	88	89	81	77	62	40	14	0	254·7	68	10·6	1	0	0	6	10	15	0
GUYANA	GEORGETOWN BOT GDN	0	10	63	80	83	80	89	87	96	86	77	74	39	0	267·7	72	11·3	21	0	1	4	9	17	0
GUYANA	MAZARUNI PRISON	0	0	5	29	50	48	42	44	41	40	37	12	0	0	107·9	28	8·7	8	7	9	5	10	0	0
	MON REPOS	0	14	63	76	83	78	86	93	95	86	80	66	27	0	262·6	70	11·1	21	0	1	5	7	18	0
	TIWEHRI CHS	0	1	39	56	48	41	33	39	40	45	43	20	1	0	125·8	36	9·9	8	0	13	6	10	0	0



CARIBBEAN METEOROLOGICAL INSTITUTE
ESTABLISHED 23 AUGUST 1967

Monthly Weather Summary

April, 1969

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MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

April, 1969

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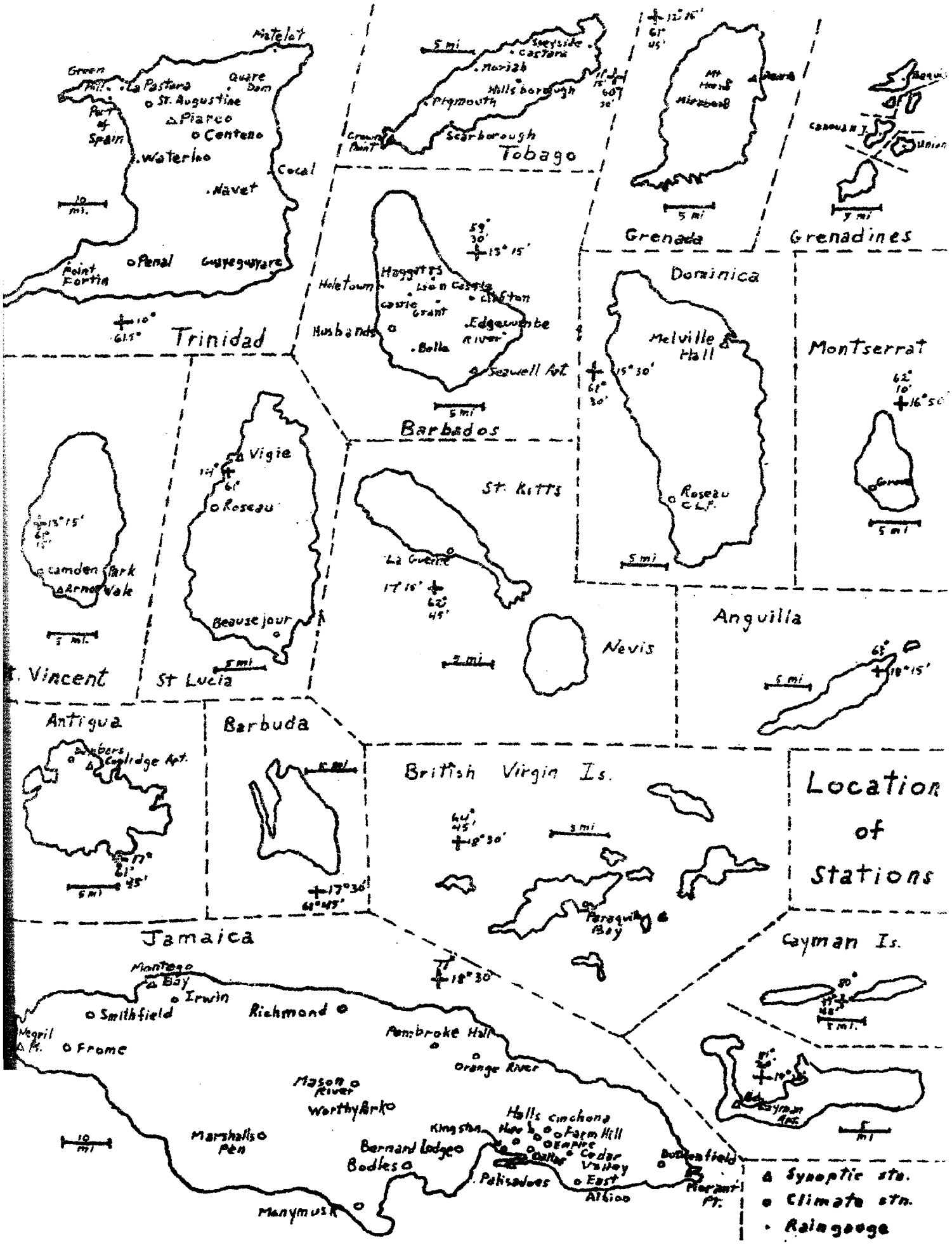
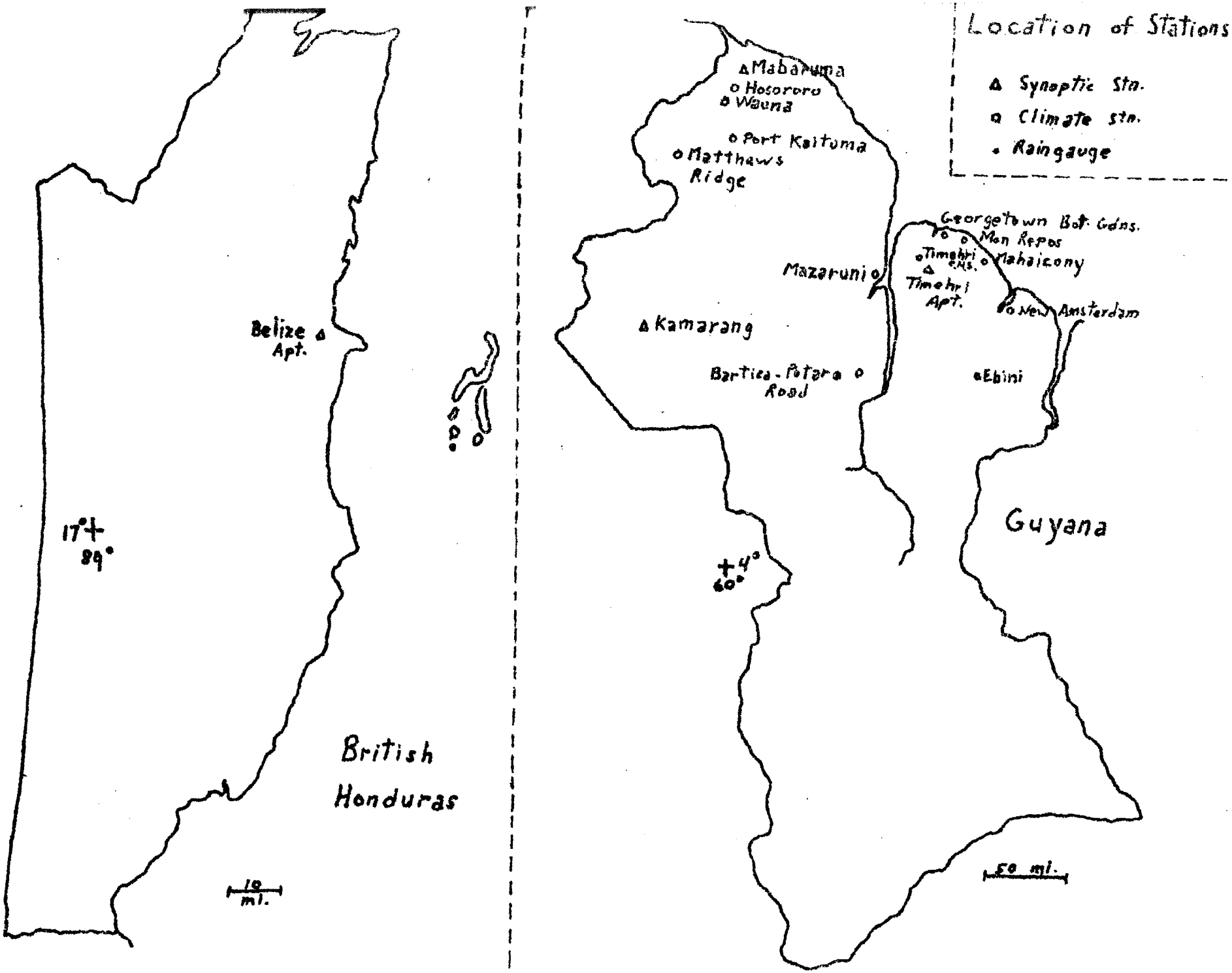

Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Barbados
Dominica
Montserrat
St. Kitts
Nevis
Anguilla
St. Vincent
St Lucia
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Piarco
Centeno
Waterloo
Cocal
Navet
Penal
Guayaguayare
Point Fortin
Speyside
Castara
Moriah
Hillsborough
Plymouth
Scarborough
Crown Point
Mt Horne
Mirabeau
Canouan I.
Union
Holetown
Haggatts
Lion Castle
Clifton
Grant
Husbands
Edgecumbe
Belle
Seawell Apt.
Melville Hall
Roseau C.L.P.
Vigie
Roseau
Beausejour
Camden Park
Arnos Vale
La Guerre
Paraquita Bay
Dambers
Coolidge Apt.
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Kingston
Halls
Cinchona
Farm Hill
Empire
Cedar Valley
Palisadoes
East Albion
Buttonfield
Morant Pt.
Manymusk
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Mabaruma
Hosororo
Waona
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica - Potaro Road
Georgetown Bot. Gdns.
Mon Repos
Timehri
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
4°
60°
50 mi.
Belize Apt.
17°
89°
British Honduras
10 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

/ct'd.....

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

/ct'd.....

during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

/ct'd.....

is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE 1- SUMMARY OF OBSERVATIONS AT FIXED HOURS - April, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	76·2	74·2	27·9	91	1011·4	0·2	4·4	0	11	5	14	0	0	0	0	0	0	0	0	4	26
			08	80·9	76·4	29·1	81	1012·8	3·4	5·1	0	6	7	16	1	0	0	0	0	0	0	0	2	28
			14	90·0	76·8	25·6	54	1010·7	12·4	6·1	0	1	8	20	1	0	0	0	0	0	0	0	2	28
			20	80·3	75·7	28·4	80	1011·4	1·8	4·0	1	10	8	11	0	0	0	0	0	0	0	0	0	30
	ST AUGUSTINE UWI	52	16	87·4	77·7	27·9	63	1010·2	4·0	4·9	0	3	14	11	2	0								
TOBAGO	CROWN POINT AIRPORT	9	02	78·6	75·3	28·3	84	1011·5	4·6	4·9	0	7	6	16	1	0	0	0	0	0	0	0	3	27
			08	83·9	76·7	28·1	71	1013·0	10·1	5·1	0	7	7	16	0	0	0	0	0	0	0	0	0	30
			14	88·1	77·8	28·0	62	1011·4	12·7	5·1	0	6	7	15	2	0	0	0	0	0	0	0	2	28
			20	80·7	75·8	28·2	79	1011·8	5·8	4·7	0	8	5	17	0	0	0	0	0	0	0	0	1	29
GRENADA	MOUNT HORNE	500	08	81·2	76·2	28·6	74																	
GRENADA	PEARLS AIRPORT	22	08	82·9	76·9	29·2	76	1012·5	9·2	4·9	0	4	11	13	1	0	0	0	0	0	0	1	6	22
			14	85·2	78·1	29·8	72	1011·1	10·2	4·7	0	5	14	9	2	0	0	0	0	0	0	0	2	28
BARBADOS	HUSBANDS CWI	370	09	83·2	75·8	27·5	70	1014·4	8·3	5·7	0	0	14	15	1	0	0	0	0	0	0	0	1	19
	SEAWELL AIRPORT	183	02	78·3	74·4	27·2	83	1012·6	7·2	4·4	0	5	17	8	0	0	0	0	0	0	0	0	3	27
			08	81·4	74·8	27·7	76	1014·2	9·6	5·5	0	4	8	18	0	0	0	0	0	0	0	0	1	29
BARBADOS	SEAWELL AIRPORT	183	14	85·5	76·8	27·9	67	1012·5	10·4	5·2	0	3	12	14	1	0	0	0	0	0	0	0	0	30
			20	79·1	74·7	27·2	80	1013·3	7·1	3·6	0	11	11	8	0	0	0	0	0	0	0	0	1	29
ST LUCIA	VIGIE AIRPORT	7	08	81·6	75·6	27·6	75	1014·0	9·3	4·7	0	1	21	5	2	0	0	0	0	0	0	0	2	27
			14	86·4	76·6	26·9	62	1013·0	11·4	5·4	0	1	11	12	2	0	0	0	0	0	0	1	1	24
ANTIGUA	COOLIDGE AIRPORT	26	08	80·7	75·4	27·6	78	1014·6	9·6	4·4	0	4	16	10	0	0	0	0	0	0	0	0	0	30
ANTIGUA	COOLIDGE AIRPORT	26	14	84·3	76·5	27·7	72	1015·3	11·3	4·3	0	6	14	10	0	0	0	0	0	0	0	0	2	28
			20	79·9	75·2	27·8	80	1013·8	9·4	3·5	0	9	18	2	1	0	0	0	0	0	0	0	0	30
	DUNBARS	220	09	82·4	75·8	27·7	73																	
JAMAICA	CEDAR VALLEY	1980	07	79·5	75·5	28·4	83																	
			13	67·3	65·9	21·1	93																	
JAMAICA	DALLAS	950	09	80·7	72·3	23·3	65																	
			15	78·8	73·8	26·2	78																	
	DUCKENFIELD	60	08	82·4	76·3	28·3	75																	
	EAST ALBION NURSERY	90	07	77·3	70·4	22·4	70																	
			13	88·3	76·0	25·2	55																	
JAMAICA	EMPIRE NURSERY	2130	07	67·2	66·4	20·9	92																	
			13	83·5	73·7	22·9	58																	
	FARM HILL	4020	07	63·5	60·5	16·7	83																	
			13	74·3	70·6	24·0	83																	
	HALLS DELIGHT	3020	07	69·5	64·3	18·4	75																	
JAMAICA	HALLS DELIGHT	3020	13	74·8	69·4	22·0	75																	
	HOPE GARDENS	712	07	70·4	68·1	22·4	88																	
	IRWIN	80	08	86·3	77·1	27·5	64																	
			15	82·9	76·2	27·9	73																	
	KINGSTON ST GEO COLL	90	07	76·5	72·8	25·4	82																	
JAMAICA	KINGSTON ST GEO COLL	90	15	85·1	77·8	29·2	71																	
	MARSHALLS PEN	2300	07	71·7	68·5	22·4	65		3·5	3·6	4	11	4	7	0	4								
			13	80·9	73·7	25·4	71		6·3	5·3	0	3	6	20	0	1								
	MASON RIVER FIELD	2300	07	67·9	67·6	22·9	98																	
			13	80·5	72·3	23·2	65																	
JAMAICA	MASON RIVER FIELD	2300	19	69·1	67·8	22·6	93																	
	MONTEGO BAY AIRPORT	301	07	76·9	73·1	26·2	83	1012·7	0·5	2·1	0	23	5	4	0	0	0	0	0	0	0	0	0	30
			13	77·5	74·2	27·3	85	1013·0	2·0	2·5	0	20	5	5	0	0	0	0	0	0	0	0	0	30
			19	86·8	78·3	29·4	68	1012·5	12·7	3·3	0	16	7	7	0	0	0	0	0	0	0	0	0	30
				80·9	76·1	28·7	80	1011·7	4·2	3·5	0	12	12	6	0	0	0	0	0	0	0	0	0	30

TABLE 1 - SUMMARY OF OBSERVATIONS AT FIXED HOURS - April, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1-2	2-3	3-5	5-10	10 or more
JAMAICA	MORANT POINT LH	6	01	78·3	75·0	27·8	84		3·2	3·5	2	7	15	6	0	0								
			07	77·9	74·7	27·5	84		3·3	3·5	0	10	14	6	0	0								
			13	84·5	78·4	30·5	75		2·3	2·9	0	15	12	3	0	0								
			19	80·7	76·6	28·9	81		1·5	3·1	3	12	9	6	0	0								
	NEGRIL POINT LH	27	07	77·4	73·6	26·6	83	1012·9	0·9	2·8	0	19	7	3	1	0								
JAMAICA	NEGRIL POINT LH	27	13	87·9	77·8	28·0	62	1012·5	4·7	4·0	0	9	15	8	0	0								
			19	82·0	75·9	27·8	75	1011·5	1·1	4·1	0	10	11	8	1	0								
	ORANGE RIVER	950	09	75·8	74·1	28·0	92																	
			15	80·4	77·5	31·1	88																	
	PALISADOES AIRPORT	9	01	79·6	74·7	27·2	79	1012·5	0·9	1·9	1	21	7	1	0	0	0	0	0.	0	0	0	0	30
JAMAICA	PALISADOES AIRPORT	9	07	79·7	74·1	26·2	76	1013·0	1·1	2·4	0	22	4	3	1	0	0	0	0	0	0	1	0	29
			13	86·4	77·8	28·6	67	1012·4	10·3	3·1	0	15	10	4	1	0	0	0	0	0	0	0	1	29
			19	82·7	76·5	28·4	74	1011·4	5·7	4·0	0	11	10	9	0	0	0	0	0	0	0	0	0	30
	WORTHY PARK	1250	07	68·4	67·4	22·5	95																	
			15	82·3	73·2	23·8	63																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	76·2	74·3	28·4	92	1013·4	5·1	4·4	0	10	4	3	13	0	0	0	0	0	0	0	0	29
			13	86·1	78·2	29·5	70	1013·9	9·2	4·5	0	6	15	6	3	0	0	0	0	0	0	0	0	30
			19	80·6	76·8	29·7	84	1012·9	5·1	3·4	0	18	4	1	7	0	0	0	0	0	0	0	0	30
BR HONDURAS	BELIZE AIRPORT	17	06	76·5	74·7	28·5	91	1011·1	2·4	4·7	1	4	12	8	0	0	0	0	0	0	0	4	5	15
			12	86·0	78·4	29·9	70	1012·2	8·0	4·6	0	8	9	12	1	0	0	0	0	0	0	0	4	26
BR HONDURAS	BELIZE AIRPORT	17	18	81·3	76·7	29·2	80	1009·7	6·1	3·5	1	8	11	5	1	0	0	0	0	0	0	1	1	6	18
GUYANA	BARTICA POTARO RD	400	08	77·1	74·6	28·2	89																	
			14	88·4	76·7	26·3	57																	
	GEORGETOWN BOT GDN	7	08	81·5	76·9	29·6	81	1012·8	5·2	5·8	0	0	10	17	3	0								
			14	84·7	77·8	29·5	73	1010·6	7·8	5·8	0	1	10	16	3	0								
GUYANA	HOSORORO		08	79·3	76·2	29·4	86																	
			14	65·8	77·4	28·5	68																	
	MABARUMA	185	08	78·7	76·3	29·8	89		2·8	5·5	0	0	19	6	5	0	0	0	0	0	0	1	24	5
			14	86·4	77·2	28·0	66		4·1	5·7	0	0	15	10	4	0	0	0	0	0	0	0	8	21
	MAHAICONY ABARY RDS	6	08	80·2	77·3	30·8	88																	
GUYANA	MAHAICONY ABARY RDS	6	14	83·4	77·9	30·5	78																	
	MATTHEWS RIDGE		08	76·4	74·6	28·5	92																	
			14	86·7	77·0	27·4	64																	
	MAZARUNI PRISON	47	08	77·4	75·1	28·7	89																	
			14	84·4	77·5	29·2	73																	
GUYANA	NON REPOS		08	81·1	76·6	29·2	80																	
			14	84·7	77·5	28·9	71																	
	NEW AMSTERDAM	3	08	81·3	77·1	29·8	82																	
			14	85·3	77·6	28·8	70																	
	ONVERWAGT		08	81·8	79·1	32·6	88																	
GUYANA	ONVERWAGT		14	83·1	80·0	32·5	84																	
	PORT KAITUMA		08	75·3	73·7	27·8	93																	
			14	87·1	77·8	28·4	66																	
	TIMEHRI AIRPORT	95	02	74·3	73·8	28·2	97	1010·5	0·0	5·7	0	4	4	15	4	0	0	0	0	1	0	0	7	19
			08	78·7	76·3	30·0	89	1012·5	2·8	6·5	0	1	4	21	4	0	0	0	0	0	0	2	6	22
GUYANA	TIMEHRI AIRPORT	95	14	87·6	78·1	28·7	63	1010·0	9·1	6·5	0	0	4	20	4	0	0	0	0	0	0	1	1	26
			20	78·2	76·1	29·7	91	1010·4	1·5	5·4	1	4	5	16	2	0	0	0	0	0	0	1	3	24
	TIMEHRI CHS		08	78·4	76·6	30·5	92																	
			14	81·0	77·9	29·2	70																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - April, 1969

COUNTRY	STATION	RAINFALL (INCHES) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.50	1.00	AIR TEMPERATURE F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	1·43	·71	14	5	2	0											
	GREEN HILL RIVER EST	1·26	1·05	13	4	1	1											
	GUAYAGUAYARE	2·52	1·16	28	6	2	1											
	LA PASTORA	·98	·47	11	4	1	0											
	MATELOT	1·72	·55	1	7	2	0											
TRINIDAD	NAVET DAMSITE	1·05	·35	3	7	0	0											
	PIARCO AIRPORT	·86	·32	13	7	0	0	91·6	74·1	82·8	93	71	69·0	255·5				
	POINT FORTIN	2·82	·80	15	7	3	0											
	PORT OF SPAIN R BOT	2·11	1·17	4	5	2	1											
	QUAREDAM HOLLIS	2·96	1·09	13	10	3	0											
TRINIDAD	ST AUGUSTINE UWI	1·38	·66	13	5	1	0	91·1	72·2	81·6	93	69	69·2	280·6				
	WATERLOO EST	·29	·19	3	2	0	0											
TOBAGO	CASTARA	1·56	·33	25	13	0	0											
	CROWN POINT AIRPORT	·44	·21	7	4	0	0	90·8	76·4	83·6	92	73		292·6				
	HILLSBOROUGH DAM	1·75	·61	26	14	1	0											
TOBAGO	MORIAH	·84	·23	26	7	0	0											
	PLYMOUTH WHITE ROCK	4·7	·27	27	4	0	0											
	SCARBOROUGH BOT STN	·25	·12	27	3	0	0											
	SPEYSIDE	1·19	·34	1	8	0	0											
GRENADA	MOUNT HORNE	·88	·30	6	7	0	0	87·2	74·4	80·8	89	71		219·6				
GRENADA	PEARLS AIRPORT	·77	·28	7	5	0	0	86·7	78·3	82·5	89	72						
BARBADOS	BELLE ST M	3·00	·90	26	10	2	0											
	CASTLE GRANT ST JOS	4·16	·59	6	17	3	0											
	CLIFTON HALL ST J	1·86	·80	5	7	1	0											
	EDGECUMBE ST P	3·23	1·11	15	12	3	1											
BARBADOS	HAGGATTS ST A	3·91	2·34	18	12	2	1											
	HOLETOWN ST JA	1·74	·49	6	11	1	0											
	HUSBANDS CWI	2·66	·85	6	10	3	0	87·6	73·8	80·7	91	71						
	LION CASTLE ST T	3·95	·91	6	17	4	0											
	RIVER ST P	1·88	·51	11	8	1	0											
BARBADOS	SEAWELL AIRPORT	2·76	·58	6	12	3	0	87·4	75·9	81·6	91	73	72·5	273·5				
ST LUCIA	VIGIE AIRPORT							89·0	75·4	82·2	92	74						
ANTIGUA	COOLIDGE AIRPORT	3·72	1·02	14	11	3	1	86·1	76·0	81·0	89	73						
	DUNBARS	3·21	·95	14	10	2	0	87·6	74·6	81·1	90	71						
JAMAICA	BERNARD LODGE	·65	·26	24	4	0	0	90·5	69·2	79·9	93	67	67·1	266·4				
JAMAICA	CEDAR VALLEY	4·92	1·08	24	12	6	1		63·8			61						
	DALLAS	6·08	1·88	5	9	5	3	84·2			89							
	DUCKENFIELD	3·76	1·46	3	11	3	1	86·8	70·5	78·6	88	64	67·9	268·2				
	EAST ALBION NURSERY	1·01	·89	24	3	1	0	90·5	71·5	81·0	94	69						
	EMPIRE NURSERY	5·04	·87	15	14	6	0	84·1	62·7	73·4	87	60						
JAMAICA	FARM HILL	5·17	1·30	16	15	6	1	76·3	61·7	69·0	79	59						
	HALLS DELIGHT	5·09	1·47	14	13	5	1	79·1	62·9	71·0	83	61						
	HOPE GARDENS	2·67	·85	5	10	2	0	88·4	64·1	76·2	93	62		253·1				
	IRWIN	5·51	2·73	30	5	3	3	92·5	70·7	81·6	95	67						
	KINGSTON ST·GEORGES	1·46	·70	24	4	1	0	89·3	74·7	82·0	92	72			0	0	0	0

TABLE II - SUMMARY OF DAILY OBSERVATIONS - April, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches)						AIR TEMPERATURE °F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.50	1.00	MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	EXTREMES MIN			THUNDER	FOG	HAIL	GALE
JAMAICA	MARSHALLS PEN	14.83	2.73	30	15	10	6	83.0	63.7	73.4	86	59			9	2	0	0
	MASON RIVER FIELD	7.19	1.76	17	11	7	2	82.6	64.7	73.6	86	60						
	MONTEGO BAY AIRPORT	1.02	.90	24	2	1	0	88.1	73.3	80.7	90	70						
	MORANT POINT LH	4.90	1.50	25	11	3	2	86.7	74.5	80.6	89	68			0	0	0	0
	NEGRIL POINT LH	1.74	.64	5	7	1	0	90.7	74.4	82.5	94	72			5	0	0	0
JAMAICA	ORANGE RIVER	7.31	2.50	2	8	4	4							238.2				
	PALISADOES AIRPORT	1.25	.69	24	5	1	0	88.5	76.9	82.7	91	72		252.4	0	0	0	0
	WORTHY PARK	2.55	1.06	26	10	2	1	87.2	65.1	76.1	91	62		154.0				
CAYMAN ISLANDS	GRAND CAYMAN APT	.47	.34	11	3	0	0	87.5	71.4	79.4	90	67						
BR HONDURAS	BELIZE AIRPORT	1.80	.90	24	3	2	0	87.8	75.8	81.8	93	71		276.2				
GUYANA	BARTICA POTARO RD	5.78	1.98	18	12	4	2	90.6	71.2	80.9	93	70						
	GEORGETOWN BOT GDN	4.06	1.47	29	13	1	1	86.2	76.8	81.5	89	74	72.8	195.7				
	HOSORORO	3.61	1.07	11	8	5	1	90.1	72.7	81.4	94	70						
	MABARUMA	3.62	1.14	11	9	4	1	88.9	77.5	83.2	91	73						
	MAHAICONY ABARY RDS	7.11	1.96	13	9	5	3	87.8	75.4	81.6	89	73						
GUYANA	MATTHEWS RIDGE	6.89	2.84	11	13	5	1	90.0	72.2	81.1	93	71						
	MAZARUNI PRISON	7.48	3.00	28	14	6	2	86.8	71.2	79.0	91	69		124.7				
	MON REPOS	4.92	1.42	29	13	5	1	89.0	78.6	83.8	88	73						
	NEW AMSTERDAM	12.26	3.02	12	15	6	5	87.1	75.9	81.5	89	73						
	ONVERWAGT	7.65	1.90	12	11	6	2	85.1	77.3	81.2	86	74						
GUYANA	PORT KAITUMA	7.54	1.74	9	15	7	2	92.4	70.1	81.3	96	65						
	TIMEHRI AIRPORT	7.26	1.53	29	14	7	3	90.1	72.2	81.2	94	69						
	TIMEHRI CHS	2.60	.47	29	11	3	0	88.1	72.3	80.2	91	70	70.6	109.0				
	WAUNA	2.77	.73	19	8	3	0											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - April, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	125	154	9·21	·41	8												
JAMAICA	ST AUGUSTINE UWI	43	68	5·72	·26	20												
	CEDAR VALLEY	24	37	5·05	·30	7												
	DUCKENFIELD			5·24	·27	9												
	EAST ALBION NURSERY	46	62	7·92	·43	10												
JAMAICA	HALLS DELIGHT	31	76															
	PALISADOES AIRPORT	72	110	8·61	·36	12												
GUYANA	GEORGETOWN BOT GDN	87	122	5·55	·28	26												
	TIMEHRI CHS	47	77															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - April, 1969

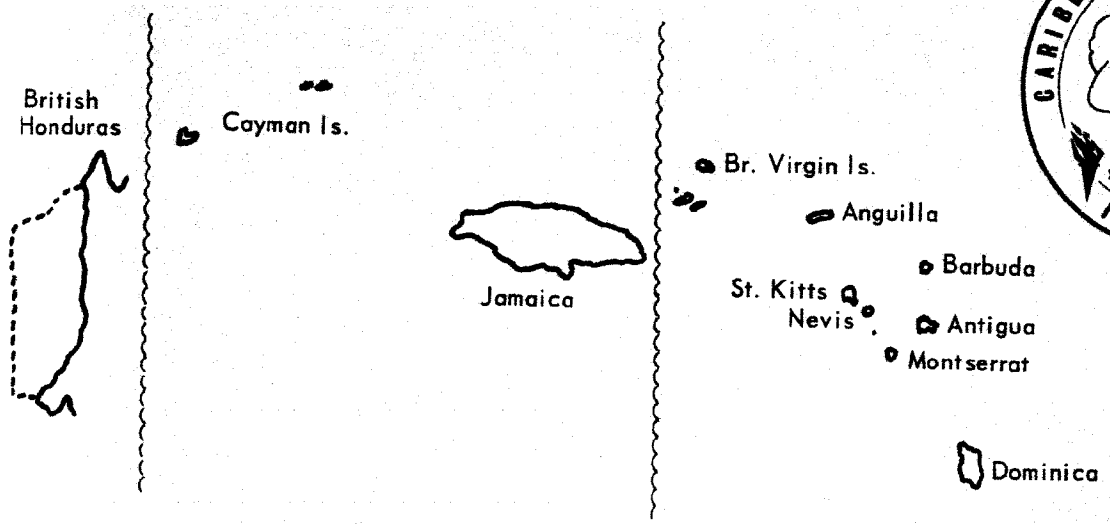
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·09	·13	·15	·27	·30	·31	·31	·31
	ST AUGUSTINE UWI		·32	·46	·59	·61	·63	·63	·63
TOBAGO	CROWN POINT AIRPORT	·09	·18	·20	·20	·20	·21	·21	·21
BARBADOS	HAGGATTS ST A	·49	·87	1·03	1·92	2·18	2·33	2·55	2·62
	LION CASTLE ST T	·24	·30	·33	·34	·37	·49	·85	·85
BARBADOS	SEAWELL AIRPORT	·17	·19	·24	·24	·24	·42	·42	·44
JAMAICA	PALISADOES APT	·05	·10	·13	·21	·40	·52	·69	·69
GUYANA	GEORGETOWN BOT GDN	·23	·29	·35	·61	·81	1·09	1·24	1·45

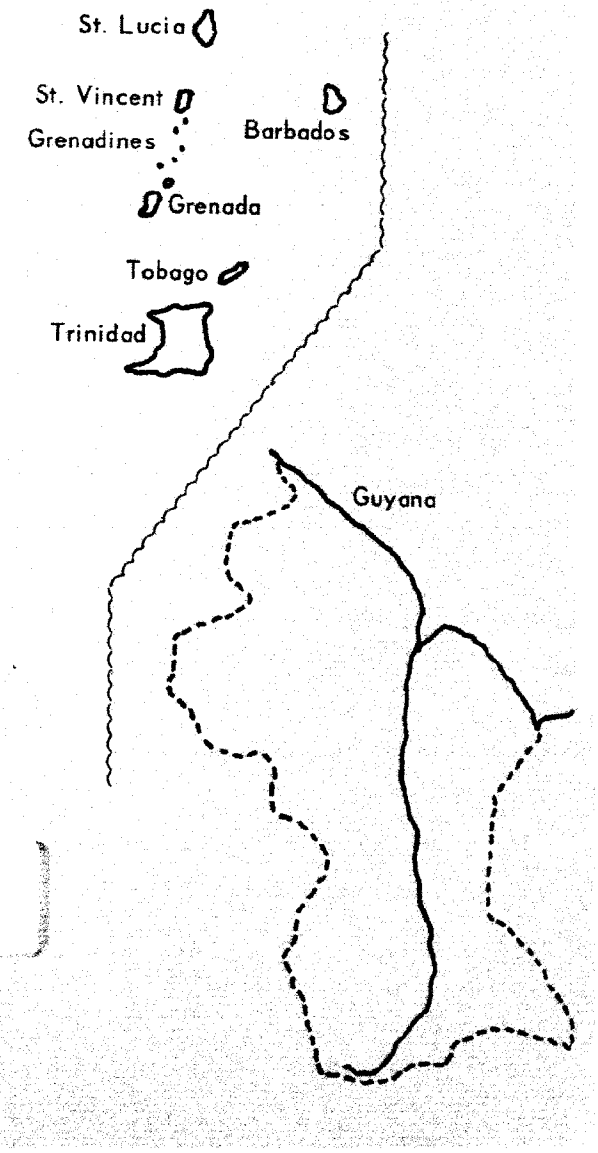
TABLE V - SUMMARY OF WINDSPEED RECORDS - April, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	07	17	13	26	10	27	1310	27	0	0	0	5·4
TOBAGO	CROWN POINT AIRPORT	15	20	11	27	13	26	1240	28	0	0	0	5·1
ANTIGUA	COOLIDGE AIRPORT	11	18	10	2	09	32	2135	4	0	0	0	5·4
JAMAICA	PALISADOES APT	12	18	12	1	12	28	1110	1	0	0	0	4·9
GUYANA	GEORGETOWN BOT GDN	06	13	03	13	05	26	1130	29	0	0	0	7·2

TABLE VI - SUMMARY OF SUNSHINE RECORDS - April, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	30	76	79	85	81	86	82	81	82	74	67	26	0	255·5	69	11·5	28	0	2	5	8	17	0
	ST AUGUSTINE UWI	0	36	87	83	92	91	91	85	88	81	76	81	45	0	280·6	76	11·8	29	0	1	5	5	21	0
TOBAGO	CROWN POINT AIRPORT	0	39	85	91	97	95	94	90	88	88	84	79	45	0	292·6	79	11·4	30	0	0	4	1	25	0
BARBADOS	SEAWELL AIRPORT	0	34	66	76	86	85	83	88	86	86	85	80	44	0	273·5	73	11·5	4	0	1	1	10	16	0
JAMAICA	DUCKENFIELD	0	34	74	75	83	87	91	91	91	89	74	70	35	1	268·2	71	11·5	18	0	1	1	10	18	0
JAMAICA	MONTEGO BAY	0	55	86	97	94	91	90	78	74	66	61	43	35	1	262·4	70	11·6	21	0	0	4	10	16	0
	ORANGE RIVER	0	39	74	78	79	85	79	84	83	72	63	46	17	0	238·2	63	11·0	10	0	1	7	10	12	0
	PALISADOES	0	57	82	87	89	87	87	81	74	65	58	46	50	0	252·4	67	11·6	16	0	2	3	9	16	0
GUYANA	GEORGETOWN BOT GDN	0	10	43	57	59	68	66	68	70	70	57	46	18	0	195·7	52	10·8	21	1	6	5	6	10	0
	MAZARUNI PRISON	0	1	19	49	58	56	52	42	46	42	38	26	1	0	124·7	35	9·4	22	0	11	8	9	1	0
GUYANA	MON REPOS	0	11	37	59	62	68	65	66	71	69	62	42	15	0	188·2	51	10·9	21	0	7	5	9	9	0
	TIMEHRI CHS	0	3	29	38	37	40	33	32	34	36	39	20	2	0	109·0	30	8·1	21	1	13	9	7	0	0





Monthly Weather Summary

May, 1969

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MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

May, 1969

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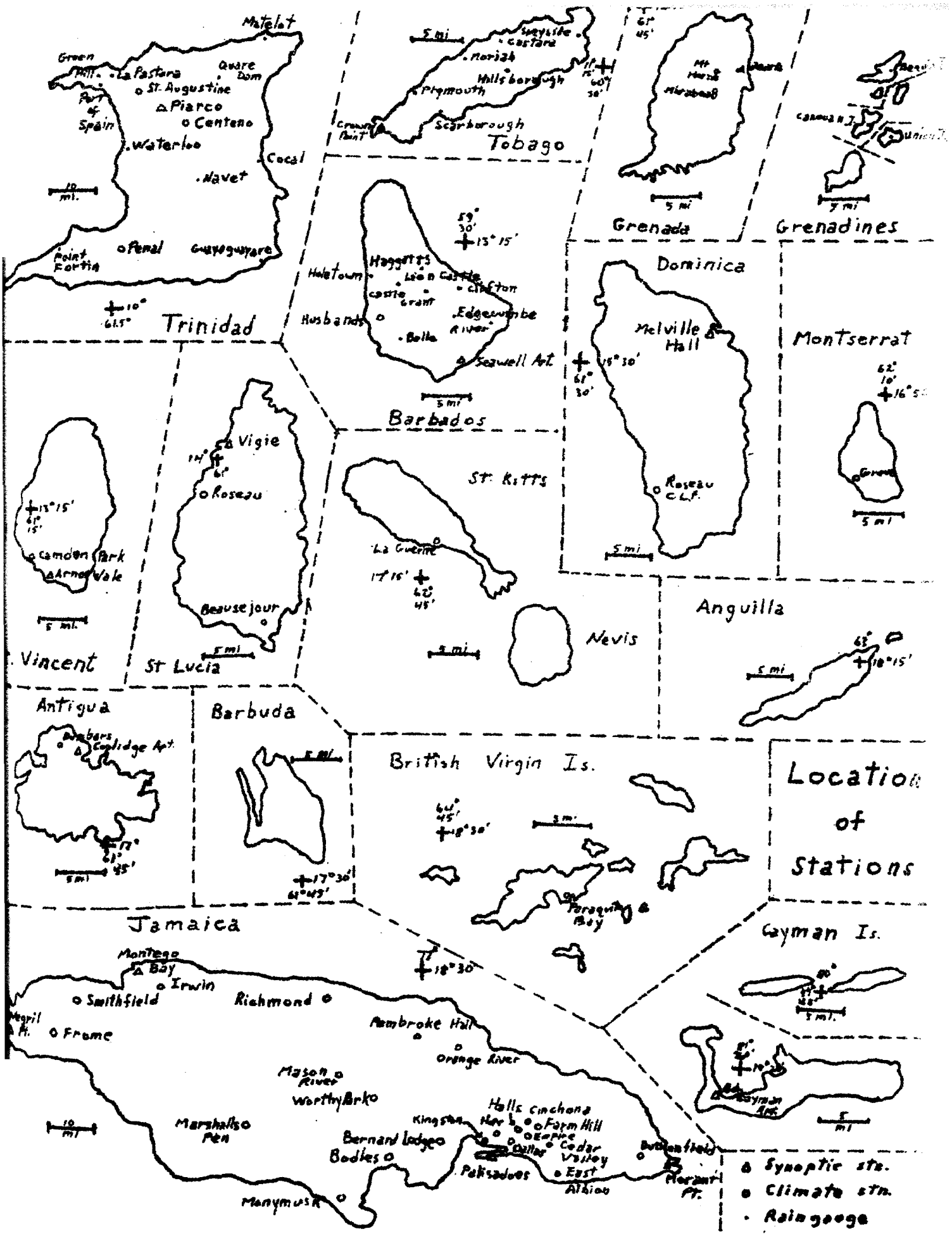
Location of Stations
Trinidad
Tobago
Grenada
Grenadines
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Belle
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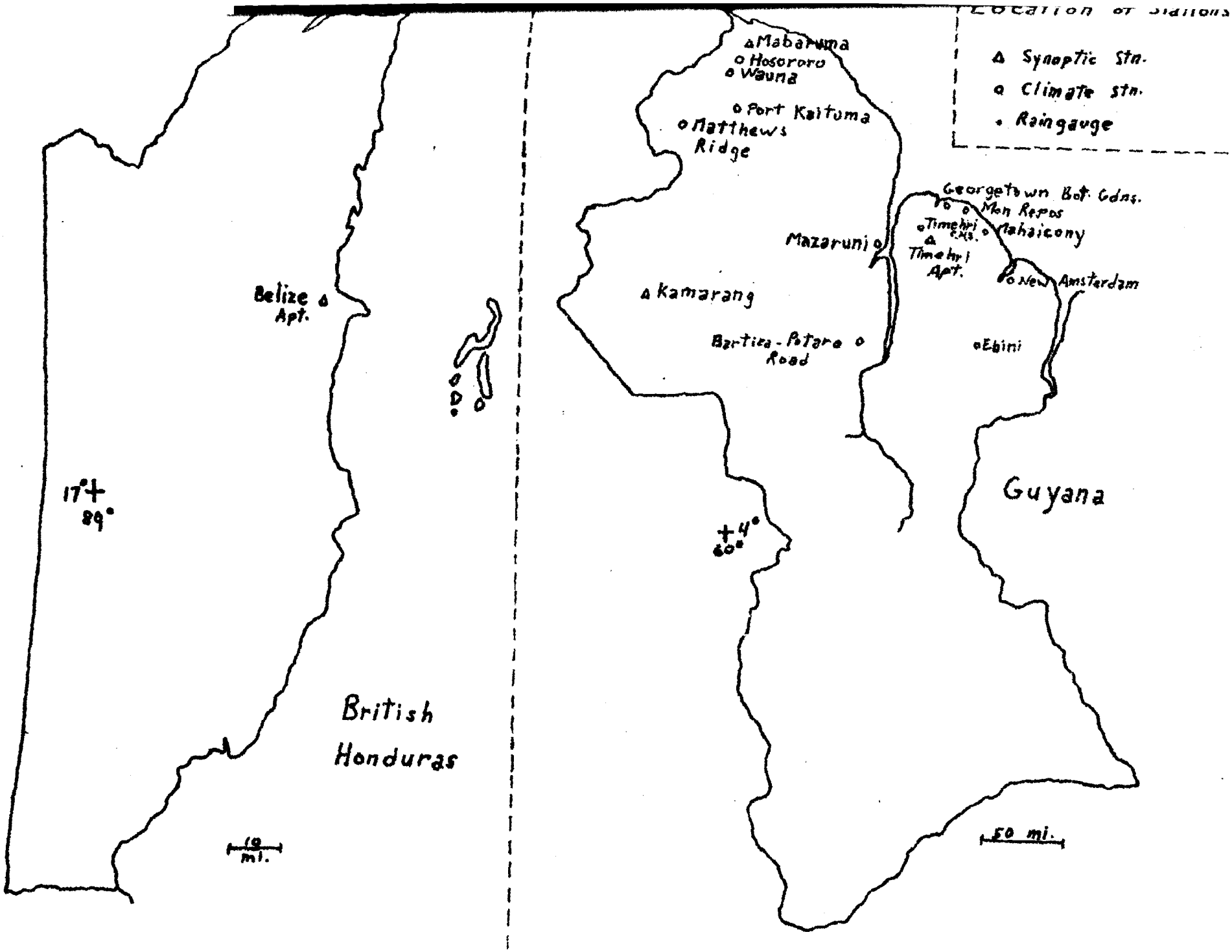
Melville Hall
Roseau C.L.F.
Grove
Vigie
Roseau
Beausejour
Camden Park
Arnot Vale
La Guerne
Dumbars
Coolidge Apt.
Paraquita Bay
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Kingston
Halls
Cinchona
Farm Hill
Empire
Dallas
Cedar Valley
Palisadoes
East Albion
Buttonfield
Morant Pt.
Monymusk
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge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Synoptic Stn.
Climate stn.
Raingauge
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Georgetown Bot. Gdns.
Man Repos
Timehri R.M.S.
Mahaicony
Timehri Apt.
New Amsterdam
Mazaruni
Kamarang
Bartica - Potaro Road
Ebini
Belize Apt.
17°
89°
4°
60°
British Honduras
Guyana
10 mi.
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at <u>that time</u> of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

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4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

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is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE 1- SUMMARY OF OBSERVATIONS AT FIXED HOURS - MAY 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	77·6	75·6	28·9	90	1011·8	0·2	3·6	1	14	6	8	1	0	0	0	0	0	0	1	2	27
			08	82·2	77·2	29·7	78	1013·0	5·5	4·5	0	9	8	14	0	0	0	0	0	0	0	0	6	25
			14	89·6	76·9	25·8	54	1011·1	11·9	5·7	0	1	10	19	1	0	0	0	0	0	1	1	29
			20	80·5	76·5	29·1	82	1012·0	2·7	3·1	0	13	13	5	0	0	0	0	0	0	0	2	29
	ST AUGUSTINE UWI	52	16	87·9	78·8	29·6	66	1010·7	5·1	3·9	0	9	15	6	2	0								
TOBAGO	CROWN POINT AIRPORT	9	02	80·6	76·2	28·9	81	1011·9	9·2	3·5	0	15	8	8	0	0	0	0	0	0	0	0	3	28
			08	84·7	77·2	28·5	70	1013·3	15·1	4·1	0	11	8	12	0	0	0	0	0	0	0	1	30
			14	88·9	78·6	28·8	62	1011·8	14·3	4·2	0	12	7	12	0	0	0	0	0	0	0	2	29
			20	81·8	76·5	28·7	77	1012·3	8·9	3·4	0	15	7	9	0	0	0	0	0	0	0	1	30
GRENADA	MOUNT HORNE	800	08	82·7	76·9	29·0	76																	
BARBADOS	HUSBANDS CMI	370	09	84·6	76·0	26·8	66	1014·2	9·5	4·7	0	0	23	7	0	0	0	0	0	0	0	0	1	18
	SEAWELL AIRPORT	185	02	80·2	75·3	27·8	79	1012·0	10·0	3·4	0	12	12	7	0	0	0	0	0	0	0	0	0	31
			08	83·1	76·2	27·9	72	1013·1	11·2	4·4	0	6	16	9	0	0	0	0	0	0	0	0	0	31
			14	87·0	77·4	29·0	64	1011·9	11·6	4·5	0	5	13	13	0	0	0	0	0	0	0	0	0	31
			20	80·9	75·7	27·9	75	1012·6	9·7	3·8	0	12	12	6	1	0	0	0	0	0	0	0	0	31
ST VINCENT	CAMDEN PARK	30	08	80·0	75·9	28·8	82	1015·7	5·8	5·5	0	0	14	6	4	0								
ST LUCIA	VIGIE AIRPORT	7	08	83·3	76·9	28·7	74	1014·0	10·4	4·6	0	1	18	12	0	0	0	0	0	0	0	0	5	26
			14	87·5	77·4	27·6	62	1012·9	12·5	5·0	0	1	20	8	2	0	0	0	0	0	0	0	4	27
ANTIGUA	COOLIDGE AIRPORT	26	08	80·9	76·2	28·8	80	1014·6	10·7	5·4	0	4	10	11	6	0	0	0	0	1	0	0	4	26
			14	84·4	77·3	28·9	71	1013·8	11·9	5·8	0	0	11	16	4	0	0	0	0	0	0	0	2	29
ANTIGUA	COOLIDGE AIRPORT	26	20	80·2	76·1	28·9	82	1014·2	9·8	4·8	0	3	12	10	4	0	0	1	0	0	0	0	4	26
	DUNBARS	220	09	81·7	76·6	29·0	79																	
			15	82·1	76·9	28·2	78																	
JAMAICA	CEDAR VALLEY	1980	07	71·9	70·2	24·4	91																	
			13	80·5	73·9	25·8	75																	
JAMAICA	DALLAS	950	09	82·5	76·2	28·0	74																	
			15	82·5	76·6	28·8	76																	
	DUCKENFIELD	60	08	82·2	78·1	30·8	82																	
	EAST ALBION NURSERY	90	07	81·1	74·1	25·7	71																	
			13	88·9	77·7	27·8	60																	
JAMAICA	EMPIRE NURSERY	2130	07	68·7	57·2	22·1	92																	
			13	76·7	67·7	19·2	61																	
	FARM HILL	4020	07	66·7	63·9	19·1	86																	
			13	74·4	68·5	21·3	73																	
	HALLS DELIGHT	3020	07	71·9	68·0	21·7	81																	
JAMAICA	HALLS DELIGHT	3020	13	75·9	70·7	23·5	77																	
	HOPE GARDENS	712	07	73·1	70·4	24·1	87																	
	IRWIN	80	08	82·7	78·1	30·7	80																	
			15	84·3	78·6	30·9	77																	
	KINGSTON ST GEO COLL	90	07	81·5	75·9	27·9	76																	
JAMAICA	KINGSTON ST GEO COLL	90	15	85·9	78·5	30·0	71																	
	MARSHALLS PEN	2500	07	70·4	68·4	22·9	90		4·4	3·1	1	17	8	0	0	5								
			13	79·6	72·7	24·4	71		4·7	5·0	0	6	8	12	0	5								
	MASON RIVER FIELD	2300	07	71·2	70·5	25·2	95																	
			13	79·9	74·4	26·5	76																	
JAMAICA	MORANT POINT LH	6	01	80·3	76·3	29·9	85		5·0	3·9	0	9	14	8	0	9								
			07	81·1	77·8	31·0	85		4·8	4·1	1	5	17	8	0	0								
			13	84·7	79·6	32·2	79		6·3	4·7	0	2	19	8	2	0								
			19	81·7	78·0	31·1	84		5·1	5·1	0	3	13	11	4	0								
	NEGRIL POINT LH	27	07	79·9	75·6	28·3	81	1011·5	1·4	3·4	0	19	4	5	3	0								

TABLE 1 - SUMMARY OF OBSERVATIONS AT FIXED HOURS - MAY 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	NEGRIL POINT LH	27	13	88·4	79·2	29·8	65	1011·3	4·5	5·9	0	13	10	3	5	0								
			19	82·7	77·0	29·1	76	1010·2	7·6	5·5	0	4	11	9	7	0								
	PALISADOES AIRPORT	9	01	80·9	75·8	28·3	79	1011·2	1·8	2·7	1	17	7	5	1	0	0	0	1	0	0	0	1	29
			07	82·4	76·4	28·3	75	1011·5	2·1	3·4	0	16	5	7	3	0	0	0	0	0	1	0	1	29
			13	86·7	79·4	30·8	71	1011·1	13·3	4·2	0	9	13	6	3	0	0	0	0	0	0	1	2	28
JAMAICA	PALISADOES AIRPORT	9	19	83·8	77·7	29·7	75	1010·5	6·4	5·5	0	3	10	14	4	0	0	0	0	0	0	0	2	29
	WORTHY PARK	1250	07	72·9	71·3	25·6	93																	
			15	79·8	74·1	26·4	76																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	79·8	77·5	31·3	90	1012·3	4·9	5·0	0	9	6	7	9	0	0	0	0	0	0	0	1	30
			13	87·1	80·3	30·6	70	1012·4	9·3	4·9	0	8	9	6	8	0	0	0	0	0	0	0	0	31
CAYMAN ISLANDS	GRAND CAYMAN APT	20	19	82·7	78·7	31·7	83	1011·6	5·7	4·9	0	11	3	9	8	0	0	0	0	0	0	0	0	31
BR HONDURAS	BELIZE AIRPORT	17	06	77·7	76·0	30·0	92	1012·6	1·7	5·9	1	3	6	15	4	0	0	0	1	0	0	0	7	19
			12	86·7	79·6	31·3	72	1011·0	5·0	5·5	0	3	8	18	2	0	0	0	0	0	0	1	1	29
			18	82·7	78·1	30·8	81	1009·0	4·7	5·4	0	6	3	18	2	0	0	0	0	0	0	1	3	25
GUYANA	BARTICA POTARO RD	400	08	76·6	74·9	28·8	92																	
GUYANA	BARTICA POTARO RD	400	14	85·8	77·1	27·8	67																	
	EBINI	60	08	78·3	76·2	29·9	91																	
			14	83·0	77·0	29·0	76																	
	GEORGETOWN BOT GDN	7	08	80·5	77·2	30·5	86	1013·3	3·9	5·9	0	0	13	14	4	0								
			14	83·6	78·1	30·4	78	1011·1	5·8	5·4	0	3	12	14	2	0								
GUYANA	HOSORORO		08	79·1	76·5	29·5	89																	
			14	83·4	77·4	29·6	77																	
	MABARUMA	185	08	78·6	76·7	30·6	91		2·9	6·1	0	0	11	15	4	0	0	0	0	0	0	0	23	7
			14	84·2	77·5	29·2	74		4·2	6·5	0	0	8	14	9	0	0	0	0	0	0	1	12	18
	MAHAICONY ABARY RDS	6	08	79·3	76·9	30·5	90																	
GUYANA	MAHAICONY ABARY RDS	6	14	81·2	77·6	30·8	85																	
	MATTHEWS RIDGE		08	75·9	74·6	28·7	94																	
			14	81·7	76·5	28·6	78																	
	MAZARUNI PRISON	47	08	77·0	75·3	29·2	92																	
			14	81·8	77·3	29·9	82																	
GUYANA	MON REPOS		08	81·1	77·1	29·9	83																	
			14	84·1	77·6	29·4	74																	
	NEW AMSTERDAM	3	08	79·7	76·7	30·0	87																	
			14	84·7	77·8	29·5	73																	
	ONVERWAGT		08	81·9	79·5	33·3	90																	
GUYANA	ONVERWAGT		14	82·9	79·9	33·4	87																	
	PORT KAITUMA		08	76·8	75·0	28·8	91																	
			14	85·0	77·9	29·5	73																	
	TIMEHRI AIRPORT	95	02	74·8	74·6	29·0	99	1011·1	0·0	5·3	0	4	9	18	0	0	0	0	0	0	1	1	14	15
			08	78·2	76·5	30·2	92	1012·5	2·5	5·8	0	4	6	18	3	0	0	0	0	1	1	2	5	22
GUYANA	TIMEHRI AIRPORT	95	14	83·8	77·5	29·4	76	1010·6	8·2	6·7	0	0	2	26	3	0	0	0	0	0	0	2	5	24
			20	76·8	75·7	29·8	95	1011·2	1·0	5·8	0	5	4	19	3	0	0	0	0	0	0	0	8	23
	TIMEHRI CHS		08	78·5	76·8	30·7	92																	
			14	83·4	78·0	30·4	78																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - MAY 1969

COUNTRY	STATION	RAINFALL (INCHES) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.10	1.00	AIR TEMPERATURE F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DATE WITH THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	2.46	.62	21	9	2	0											
	GREEN HILL RIVER EST	1.93	1.06	20	6	1	1											
	GUAYAGUAYARE	4.99	2.47	20	9	4	2											
	LA PASTORA	2.01	1.20	20	6	1	1											
	MATELOT	4.03	1.15	15	9	3	2											
TRINIDAD	NAVET DAMSITE	4.60	1.71	27	11	4	1											
	PIARCO AIRPORT	3.30	1.41	20	11	3	1	91.8	75.4	83.6	94	71	71.8	284.8				
	POINT FORTIN	2.44	1.51	20	6	1	1											
	PORT OF SPAIN R BOT	.48	.16	21	5	0	0											
	QUAREDAM HOLLIS	8.14	1.32	27	20	4	3											
TRINIDAD	ST AUGUSTINE UWI	2.19	1.05	20	8	1	1	91.9	74.5	83.2	94	70	71.8	301.3				
	WATERLOO EST	2.32	.95	27	8	3	0											
TOBAGO	CASTARA	3.20	.58	27	13	4	0											
	CROWN POINT AIRPORT	1.11	.37	27	10	0	0	91.2	77.8	84.5	93	72		324.0				
	HILLSBOROUGH DAM	2.73	.69	27	9	3	0											
TOBAGO	MORIAH	1.62	.55	28	9	1	0											
	PLYMOUTH WHITE ROCK	1.31	.31	8	10	0	0											
	SCARBOROUGH BOT STN	1.71	.35	31	8	0	0											
	SPEYSIDE	1.76	.39	9	11	0	0											
GRENADA	MOUNT HORNE	2.61	.83	8	9	2	0	88.2	75.8	82.0	91	71		261.4				
BARBADOS	BELLE ST U	1.87	.51	26	16	1	0											
	CASTLE GRANT ST JOS	3.99	1.11	30	13	3	1											
	CLIFTON HALL ST J	3.65	.71	17	12	5	0											
	EDGECUMBE ST P	1.30	.53	23	8	1	0											
	HAGGATTS ST A	1.72	.22	11	11	0	0											
BARBADOS	HOLETOWN ST JA	2.56	1.25	30	11	1	1											
	HUSBANDS CWI	2.87	1.87	23	8	1	1	89.1	74.1	81.6	90	70						
	LION CASTLE ST T	3.86	1.11	30	16	2	0											
	PORTLAND ST PE	2.34	.50	23	10	1	0											
	RIVER ST P	2.23	.63	18	12	2	0											
BARBADOS	SEAWELL AIRPORT	2.79	.62	27	13	3	0	88.9	77.7	83.3	91	73	74.4	295.7				
ST VINCENT	CAMDEN PARK	10.93	2.90	8	17	10	2	87.3	76.1	81.7	89	73						
ST LUCIA	VIGIE AIRPORT							89.4	76.4	82.9	93	74						
ANTIGUA	COOLIDGE AIRPORT	14.01	6.62	18	20	6	5	86.2	75.8	81.0	90	71						
	DUNBARS	14.11	5.85	18	16	7	4	86.0	74.2	80.1	90	71						
JAMAICA	BERNARD LODGE	7.15	2.86	30	9	4	2	91.3			95			229.5				
	CEDAR VALLEY	24.12	6.86	30	13	9	6		67.0			64						
	DALLAS	6.08	1.88	5	9	5	3	84.8			90							
	DUCKENFIELD	25.02	7.12	25	17	10	7	87.7	73.4	80.6	90	68	71.1	196.8				
	EAST ALBION NURSERY	12.99	4.29	30	10	4	4	91.3	74.0	82.7	96	70						
JAMAICA	EMPIRE NURSERY	11.08	3.54	30	8	5	4	83.4	65.2	74.3	88	61						
	FARM HILL	11.05	3.73	30	12	5	4	77.4	64.2	70.8	82	60						
	HALLS DELIGHT	9.88	3.55	30	10	5	3	79.8	65.0	72.4	85	63						
	HOPE GARDENS	8.09	3.17	30	12	6	2	89.3	65.8	77.6	92	63						
	IRWIN	18.07	2.57	2	15	11	6	89.1	72.1	80.6	93	69						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - MAY 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.50	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OR LATE WITH THUNDER	FOG	HAIL	GALE
JAMAICA	KINGSTON ST.GEORGES	3.02	1.35	31	7	3	1	91.3	76.8	84.0	94	74						
	MARSHALLS PEN	18.91	7.39	30	15	11	6	81.7	67.6	74.6	87	62			15	1	1	0
	MASON RIVER FIELD	33.66	8.53	30	22	17	11	80.9	68.1	74.5	84	66						
	MONTEGO BAY AIRPORT	10.52	2.52	14	13	9	5	88.3	74.5	81.4	90	71		252.5	10	0	0	0
	MORANT POINT LH	17.41	3.23	22	14	11	8	87.6	76.0	81.8	90	69			0	0	0	0
JAMAICA	NEGRIL POINT LH	12.42	3.24	29	14	7	5	91.9	75.8	83.9	96	73			23	0	0	0
	PALISADOES AIRPORT	3.62	1.19	31	8	3	1	89.6	78.6	84.1	93	74		220.9	7	0	0	0
	WORTHY PARK	20.39	5.51	30	19	10	6	86.0	68.1	77.1	91	64		155.6				
CAYMAN ISLANDS	GRAND CAYMAN APT	4.41	1.41	22	7	5	3	88.8	74.1	81.4	91	66						
BR HONDURAS	BELIZE AIRPORT	6.68	1.56	20	10	7	7	89.2	76.8	83.0	94	72		221.1	5	0	0	0
GUYANA	BARTICA POTARO RD	9.17	.86	4	23	9	0	89.4	71.4	80.4	93	69						
	EBINI	10.40	1.41	29	24	11	5	88.9	71.4	80.2	93	71		147.0				
	GEORGETOWN BOT GDN	15.47	2.27	3	21	10	8	84.9	76.0	80.4	87	73	72.7	166.8				
	HOSOROBO	8.12	1.44	28	15	8	2	88.6	75.2	80.9	93	70						
	MABARUMA	12.83	3.36	28	18	11	4	87.6	77.6	82.6	92	74						
GUYANA	MAHAICONY FERRY ROS	15.79	2.67	5	19	10	6	87.5	75.1	81.2	89	73						
	MATTHEWS RIDGE	9.03	1.80	2	21	7	1	88.0	72.4	80.2	95	71						
	MAZARUNI PRISON	12.49	1.00	11	27	16	4	85.5	71.5	78.5	89	69		88.1				
	MON REPOS	15.57	3.25	3	20	11	7	85.4	75.7	80.6	88	73		155.4				
	NEW AMSTERDAM	13.64	3.69	3	21	11	4	86.0	75.6	80.8	89	74						
GUYANA	ONVERWAGT	11.26	2.08	9	17	7	4	85.5	75.8	80.6	87	74						
	PORT KAITUMA	9.83	1.43	28	19	11	2	91.4	70.5	81.0	95	68						
	TIMEHRI AIRPORT	14.33	3.31	3	23	14	4	87.2	73.9	80.1	91	71						
	TIMEHRI CHS	12.16	2.93	3	22	12	4	86.6	72.1	79.4	90	70	70.5	102.5	2	3	0	0
	WAUNA	8.10	1.77	28	19	4	3											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - MAY 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	134	162	10·09	·47	17												
	ST AUGUSTINE UWI	46	67	6·07	·27	11												
JAMAICA	CEDAR VALLEY	23	48	4·88	·45	14												
	DUCKENFIELD			4·03	·28	1												
	EAST ALBION NURSERY	41	93															
JAMAICA	HALLS DELIGHT	30	63															
	PALISADOES AIRPORT	89	151															
	WORTHY PARK			5·22	·23	4												
GUYANA	GEORGETOWN BOT GDN	77	117	4·38	·26	1												
	TIMEHRI CHS	47	79															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - MAY 1969

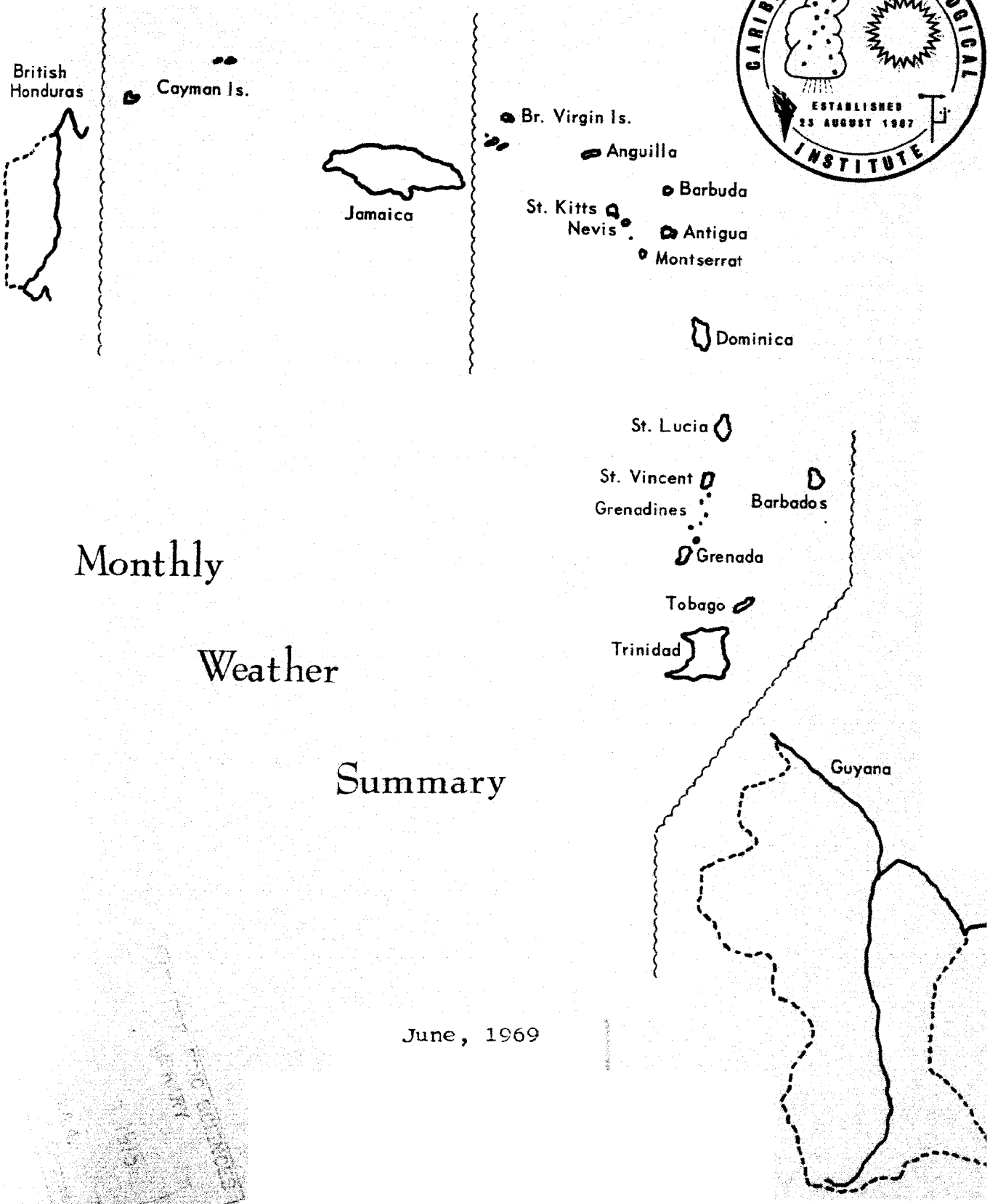
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·13	·22	·30	·48	·92	1·07	1·22	1·39
	ST AUGUSTINE UWI		·20	·30	·60	·85	·95	1·04	1·08
TOBAGO	CROWN POINT AIRPORT	·14	·26	·28	·30	·30	·30	·33	·35
BARBADOS	HAGGATTS ST A	·17	·22	·22	·36	·36	·36	·36	·36
	LION CASTLE ST T	·33	·42	·50	·67	1·07	1·07	1·07	1·07
BARBADOS	SEAWELL AIRPORT	·26	·31	·33	·34	·34	·37	·39	·43
JAMAICA	PALISADOES APT	·26	·43	·53	·62	·62	·62	·76	·97
GUYANA	ESIRI	·36	·48	·61	·94	1·02	1·02	1·07	1·12
	GEORGETOWN BOT GDN	·32	·51	·52	·72	1·37	1·95	2·41	2·41
	MATTHEWS RIDGE	·31	·54	·65	·99	1·59	1·59	1·80	1·80

TABLE V - SUMMARY OF WINDSPEED RECORDS - MAY 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	TIME ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	07	16	15	15	09	27	1435	19	0	0	0	6·4
TOBAGO	CROWN POINT AIRPORT	12	19	09	9	13	35	1012	21	1	0	0	11·2
ANTIGUA	COOLIDGE AIRPORT	10	22	18	22	11	34	1726	22	1	0	0	10·1
JAMAICA	PALISADOES APT	15	23	16	13	10	35	1620	12	1	0	0	6·0
GUYANA	GEORGETOWN BOT GDN	08	12	16	17	06	28	0855	17	0	0	0	6·6

TABLE VI - SUMMARY OF SUNSHINE RECORDS - MAY 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED PERIOD (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	49	80	83	84	91	93	83	84	81	76	70	42	0	284·8	73	11·7	26	0	0	3	8	20	0
	ST AUGUSTINE UWI	0	46	87	87	89	92	93	87	87	84	84	81	56	0	301·3	77	12·0	13	0	0	3	6	22	0
TOBAGO	CROWN POINT AIRPORT	0	57	92	91	97	95	92	95	96	94	93	83	58	0	324·0	83	11·8	13	0	0	0	4	27	0
BARBADOS	SEAWELL AIRPORT	0	41	83	90	86	93	91	92	91	96	93	82	49	1	295·7	78	11·8	2	0	1	0	7	22	0
JAMAICA	DUCKENFIELD	0	55	72	54	74	71	70	70	68	63	52	44	22	0	215·5	55	11·5	18	2	5	2	11	11	0
JAMAICA	MONTEGO BAY	6	73	83	85	89	87	80	74	65	49	26	20	16	1	232·5	58	11·7	7	2	1	2	19	7	0
	MONY MUSK	0	1	10	41	77	69	78	74	64	49	33	16	1	0	156·4	40	8·9	2	2	4	11	14	0	0
	PALISADOES	1	62	79	80	85	80	77	71	61	48	30	24	12	0	219·9	55	11·8	10	2	3	2	16	8	0
GUYANA	EBINI	0	11	29	49	57	58	69	60	52	45	30	24	8	0	147·0	40	10·6	25	0	5	15	9	1	0
	GEORGETOWN BOT GDN	0	3	36	42	53	52	55	46	56	58	63	52	22	0	166·8	43	10·9	1	2	9	7	6	7	0
GUYANA	MAZARUNI PRISON	0	1	23	34	42	39	29	25	24	30	22	17	2	0	88·1	23	8·5	6	4	14	8	5	0	0
	MON REPOS	0	15	37	43	48	48	48	42	54	58	58	48	20	0	155·4	42	10·9	26	1	10	4	7	8	0
	TIMEHRI CHS	0	8	33	42	31	32	29	32	39	37	35	20	4	0	102·5	28	9·9	6	3	13	7	5	2	0



CARIBBEAN METEOROLOGICAL INSTITUTE
ESTABLISHED 23 AUGUST 1967

Monthly Weather Summary

June, 1969

MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

June, 1969

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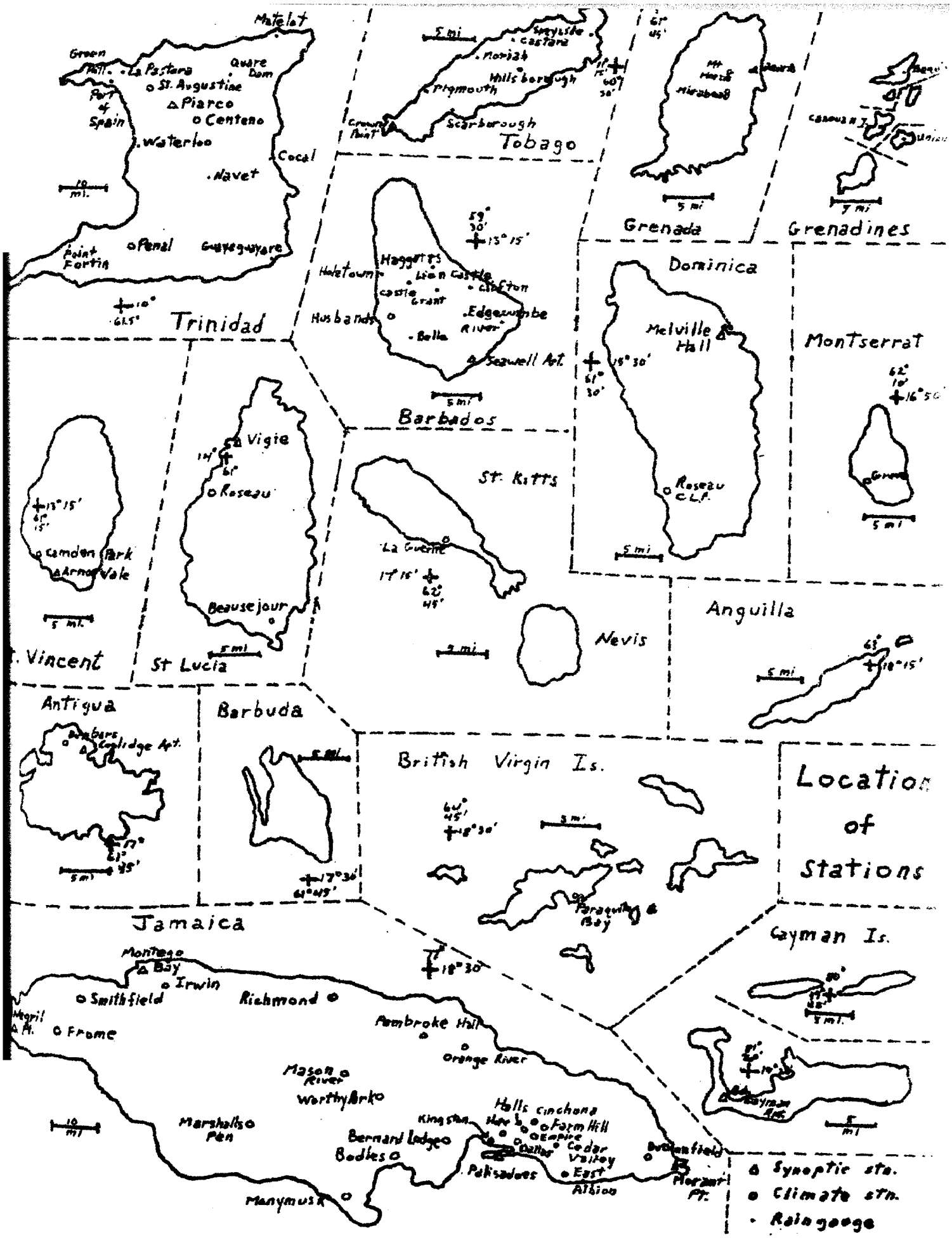
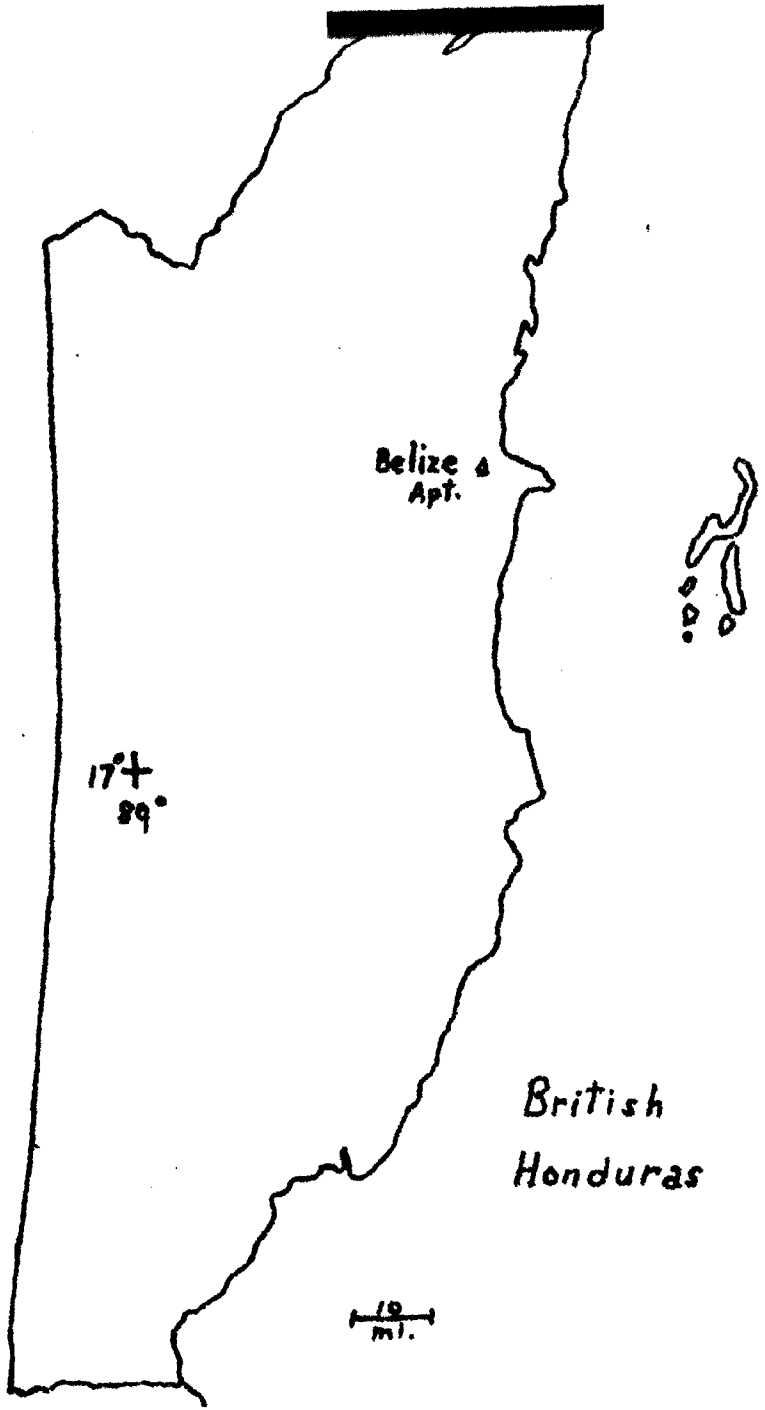
9. Additions and Corrections


Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Barbados
Dominica
Montserrat
St. Kitts
Nevis
Anguilla
St Lucia
Vincent
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Port of Spain
Piarco
Centeno
Waterloo
Cocal
Navet
Penal
Guayaguayare
Point Fortin
Speyside
Castara
Moriah
Hillsborough
Pigmouth
Scarborough
Crown Point
Mt Horse
Mirabeau
Canouan I.
Union
Haggatts
Holetown
Lion Castle
Clifton
Grant
Husbands
Edgecumbe
River
Belle
Seawell Apt.
Melville Hall
Roseau C.L.P.
Vigie
Roseau
Beausejour
Camden Park
Arnos Vale
La Guerne
Bombers
Coolidge Apt.
Paraquita Bay
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Kingston
Halls
Cinchona
Farm Hill
Empire
Dallas
Cedar Valley
Palisadoes
East Albion
Buttonfield
Morant Pt.
Manymusk
Cayman Rk.
Synoptic stn.
Climate stn.
Raingauge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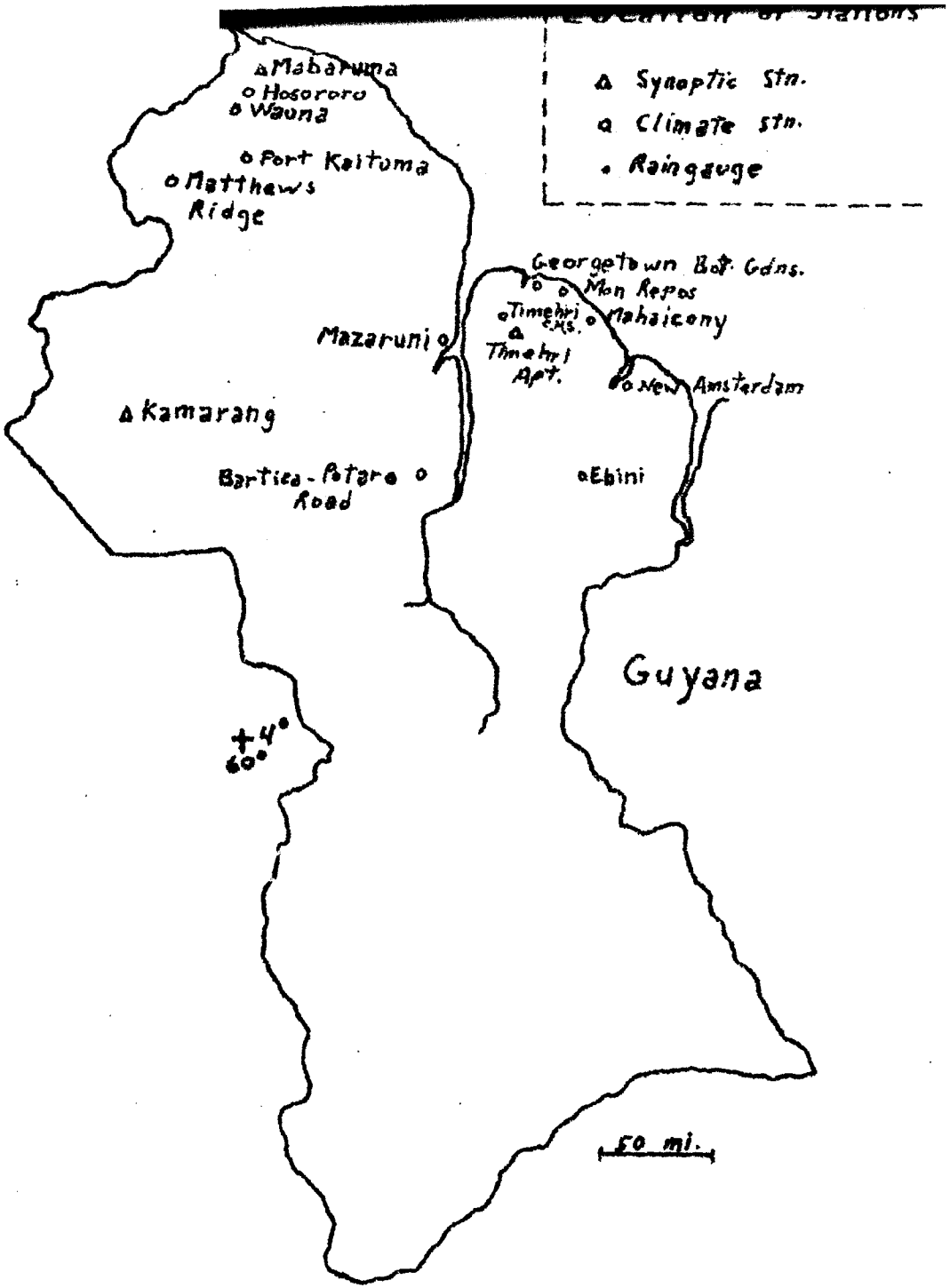
British
Honduras
10
mi.


Synoptic Stn.
Climate Stn.
Raingauge
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews
Ridge
Georgetown Bot. Gdns.
Mon Repos
Timehri
E.M.S.
Mahaicony
Mazaruni
Timehri
Apt.
New Amsterdam
Kamarang
Bartica - Potaro
Road
Ebini
Guyana
4°
60°
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

/ct'd.....

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

/ct'd.....

during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

/ct'd.....

is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JUNE, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	76·5	75·5	29·7	95	1012·3	0·3	5·9	0	2	8	15	5	0	0	0	0	0	0	0	4	26
			08	79·4	77·1	30·8	90	1013·6	3·3	6·4	0	3	3	19	5	0	0	0	1	1	1	1	9	17
			14	84·8	77·8	29·4	72	1012·0	7·4	6·7	0	0	4	21	5	0	0	0	0	0	0	1	6	23
			20	78·9	76·7	30·4	90	1012·5	2·0	5·5	0	6	5	17	2	0	0	0	0	0	0	0	3	27
	ST AUGUSTINE UWI	52	16	83·9	78·6	31·1	78	1011·3	7·3	6·0	0	2	9	11	7	1								
TOBAGO	CROWN POINT AIRPORT	9	02	79·4	76·1	29·5	86	1012·4	7·9	5·5	0	5	7	17	1	0	0	0	1	0	0	0	4	25
			08	81·5	77·4	30·2	82	1013·8	11·2	6·2	0	1	6	20	3	0	0	1	1	0	0	2	4	22
			14	85·0	78·5	30·3	74	1012·5	12·4	5·7	0	3	7	18	2	0	0	0	0	0	0	0	3	27
			20	80·0	76·6	29·7	86	1012·9	7·2	5·5	0	5	6	19	0	0	0	0	0	0	0	0	3	27
GRENADA	MOUNT HORNE	500	08	80·9	77·3	30·7	85																	
GRENADA	PEARLS AIRPORT	22	08	85·0	78·3	30·9	80	1013·2	9·7	5·3	0	2	13	10	5	0	0	0	0	0	1	2	6	21
			14	84·6	79·1	31·3	77	1012·1	9·8	5·3	0	2	14	8	6	0	0	0	0	0	0	1	6	23
BARBADOS	HUSBANDS CMI	570	09	84·0	76·3	27·6	69	1014·5	5·8	4·8	1	0	16	10	2	0	0	0	0	1	0	0	4	16
			15	85·7	76·3	27·0	64	1012·7	8·1	5·1	0	0	7	10	4	0	0	0	0	0	0	2	4	15
	SEAWELL AIRPORT	183	02	80·0	75·7	28·4	81	1012·3	10·6	3·7	0	12	9	9	0	0	0	0	0	0	0	0	0	30
BARBADOS	SEAWELL AIRPORT	183	08	83·3	77·2	28·5	73	1013·6	11·8	4·8	0	2	18	9	1	0	0	0	0	0	0	0	1	29
			14	85·5	77·7	29·0	70	1012·4	12·3	5·1	0	4	11	15	0	0	0	0	0	0	0	0	0	30
			20	80·4	75·8	28·4	80	1013·1	10·0	4·8	0	7	11	12	0	0	0	0	0	0	0	0	0	30
ST VINCENT	ARNOS VALE AIRPORT	30	08	82·3	77·0	29·6	78	1014·2	11·6	4·7	0	3	13	9	1	0	0	0	0	0	0	0	1	25
			14	85·2	78·3	30·1	73	1013·4	11·8	5·0	0	3	10	8	3	0	0	0	0	0	0	1	1	22
ST VINCENT	CAMDEN PARK	30	08	80·2	76·1	28·8	81	1016·0	6·4	5·0														
ST LUCIA	VIGIE AIRPORT	7	08	82·4	77·0	29·2	77	1014·3	8·6	4·8	1	3	12	12	1	0	0	0	0	0	0	0	3	26
			14	85·9	78·1	29·3	69	1013·7	11·3	5·6	0	0	15	11	3	0	0	0	0	0	0	1	8	20
ANTIGUA	COOLIDGE AIRPORT	26	08	82·9	77·3	29·4	77	1015·5	11·0	3·5	0	10	16	4	0	0	0	0	0	0	0	0	0	30
			14	86·3	78·3	29·4	69	1014·9	13·7	4·3	0	3	18	9	0	0	0	0	0	0	0	0	1	29
ANTIGUA	COOLIDGE AIRPORT	26	20	81·9	76·5	28·7	77	1015·3	11·1	3·4	0	12	14	4	0	0	0	0	0	0	0	0	0	30
	DUNBARS	220	09	83·5	77·5	29·6	75																	
			15	83·5	76·9	28·3	72																	
JAMAICA	CEDAR VALLEY	1980	07	73·2	71·8	25·9	93																	
			15	79·4	75·2	27·9	81																	
JAMAICA	DALLAS	950	09	81·4	76·4	28·8	79																	
			15	83·4	77·3	29·3	75																	
	DUCKENFIELD	60	08	83·8	79·3	32·1	81																	
	EAST ALBION NURSERY	90	07	80·8	76·3	29·5	82																	
			15	86·5	78·9	30·3	70																	
JAMAICA	EMPIRE NURSERY	2130	07	70·9	69·8	24·3	94																	
			15	79·4	73·4	25·5	74																	
	FARM HILL	4020	07	66·8	64·9	20·2	90																	
			15	74·9	69·7	22·5	76																	
	HALLS DELIGHT	3020	07	70·7	68·1	22·4	87																	
JAMAICA	HALLS DELIGHT	3020	15	74·6	70·8	24·2	83																	
	HOPE GARDENS	712	07	72·6	69·9	23·8	87																	
	IRWIN	80	08	82·8	78·9	32·0	84																	
			15	85·8	80·4	32·7	77																	
	KINGSTON ST GEO COLL	90	07	80·2	76·6	29·5	84																	

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JUNE, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	KINGSTON ST GEO COLL	90	15	85·9	79·1	30·9	75																	
	MARSHALLS PEN	2300	07	73·6	71·5	25·4	90		6·0	5·7	0	7	3	9	0	11								
			13	79·2	74·4	27·0	79		6·7	6·0	0	2	6	13	0	9								
	MASON RIVER FIELD	2300	07	71·7	70·8	25·4	96																	
			13	78·4	74·1	26·9	81																	
JAMAICA	MASON RIVER FIELD	2300	19	71·8	70·9	25·6	96																	
	MONTEGO BAY AIRPORT	5	01	78·4	74·5	27·7	85	1011·6	0·7	3·1	0	13	11	5	0	0	0	0	0	0	0	0	0	29
			07	79·5	76·0	28·8	84	1012·1	0·9	4·9	0	6	7	13	5	0	0	0	0	0	0	0	0	29
			13	86·5	80·0	31·7	74	1011·5	10·2	5·8	0	3	6	19	2	0	0	0	0	0	0	0	0	30
			19	82·4	78·4	31·4	85	1011·1	2·9	5·9	0	2	6	21	1	0	0	0	0	0	0	0	0	30
JAMAICA	MORANT POINT LH	6	01	82·3	78·9	31·9	85		6·5	5·0	0	2	13	14	1	0								
			07	82·6	79·3	32·2	85		7·5	5·5	0	1	14	13	2	0								
			13	86·5	81·4	33·9	78		7·2	5·1	0	1	14	14	1	0								
			19	82·8	79·1	31·9	83		5·3	5·3	0	1	13	15	1	0								
	NEGRIL POINT LH	27	07	81·2	76·5	28·8	79	1011·5	4·1		0	0	0	0	0	0								
JAMAICA	NEGRIL POINT LH	27	13	87·9	79·8	31·2	69	1011·6	9·5		0	0	0	0	0	0								
			19	83·7	78·1	30·3	77	1010·7	4·8		0	0	0	0	0	0								
	PALISADOES AIRPORT	9	01	81·7	77·6	30·5	83	1011·8	4·7	4·3	0	8	12	7	3	0	0	0	0	0	0	1	1	28
			07	82·6	77·7	30·3	80	1011·8	5·5	5·7	0	4	5	18	3	0	0	0	1	0	0	0	2	27
			13	87·1	80·4	32·3	74	1011·9	12·0	5·8	0	5	3	17	5	0	0	0	1	0	0	1	1	27
JAMAICA	PALISADOES AIRPORT	9	19	84·1	78·8	31·2	78	1011·0	7·2	5·9	0	2	7	17	4	0	0	0	0	0	0	0	1	29
	WORTHY PARK	1250	07	75·9	74·0	27·8	91																	
			15	81·7	75·9	28·0	76																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	81·1	79·2	33·7	93	1011·9	7·8	7·0	0	1	3	6	20	0	0	0	0	0	0	0	3	27
			13	87·2	81·0	33·5	76	1012·3	9·9	6·1	0	4	4	11	11	0	0	0	0	0	0	0	0	30
CAYMAN ISLANDS	GRAND CAYMAN APT	20	19	82·6	79·2	32·8	85	1011·5	7·3	6·0	0	4	6	3	17	0	0	0	0	0	0	0	1	29
OR HONDURAS	BELIZE AIRPORT	17	06	78·3	77·1	31·2	94	1009·5	1·3	6·7	0	2	0	20	5	0	0	0	0	0	0	0	6	21
			12	87·5	81·1	33·2	74	1009·9	4·2	6·5	0	1	3	21	5	0	0	0	0	0	0	0	2	28
			18	83·7	79·0	31·7	80	1008·2	3·9	6·1	0	2	6	19	3	0	0	0	0	0	0	0	1	29
GUYANA	BARTICA POTARO RD	400	08	76·1	74·5	28·5	93																	
GUYANA	BARTICA POTARO RD	400	14	86·3	76·9	27·5	64																	
	ESINI	60	08	78·8	76·2	29·8	89																	
			14	85·0	76·9	27·9	69																	
	GEORGETOWN BOT GDN	7	08	80·0	77·3	30·7	88	1013·4	4·2	5·8	0	1	14	11	4	0	0	0	0	1	12	0	17	0
			14	83·7	77·9	30·1	76	1011·5	6·8	5·4	0	2	13	14	1	0	0	0	0	0	12	0	12	6
GUYANA	MOSORORO		08	78·3	76·4	30·2	91																	
			14	80·0	77·4	30·6	87																	
	MABARUMA	185	08	78·5	76·6	30·5	92		2·8	6·3	0	0	10	14	6	0	0	0	0	0	0	0	11	19
			14	81·2	77·2	30·1	83		2·9	6·5	0	0	7	15	7	0	0	0	0	0	0	0	15	14
	MAHAICONY ABARY RDS	6	08	80·1	77·4	30·0	88																	
GUYANA	MAHAICONY ABARY RDS	6	14	82·2	78·3	31·4	84																	
	MATTHEWS RIDGE		08	75·5	74·5	28·7	95																	
			14	81·7	76·5	28·9	78																	
	MAZARUNI PRISON	47	08	76·4	74·6	28·4	92																	
			14	82·9	77·7	30·1	78																	

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JUNE, 1969

(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
GUYANA	MON REPOS		08	80·7	76·6	29·5	82																	
			14	84·7	77·8	29·4	72																	
	NEW AMSTERDAM	3	08	80·1	77·2	30·8	88																	
			14	85·5	78·3	30·0	72																	
	ONVERWAGT		08	81·5	79·2	33·1	90																	
GUYANA	ONVERWAGT		14	83·3	79·6	32·8	84																	
	PORT KAITUMA		08	76·6	75·2	29·3	94																	
			14	83·5	78·7	31·3	80																	
	ST IGNATIUS		08	78·3	75·1	28·6	86																	
			14	85·8	78·7	30·5	72																	
GUYANA	TIMEHRI AIRPORT	95	02	74·7	72·9	28·0	96	1011·6	0·2	4·9	0	8	6	16	0	0	0	1	0	0	0	3	15	11
			08	77·3	75·9	29·9	93	1012·8	2·1	6·0	0	1	6	20	3	0	0	0	0	0	1	4	5	20
			14	83·1	77·5	29·8	77	1010·9	7·2	6·7	0	0	2	26	2	0	0	0	0	0	0	0	9	21
			20	76·6	75·6	29·9	95	1011·8	3·3	5·7	0	3	6	20	1	0	0	0	0	0	0	0	4	26
	TIMEHRI CHS		08	77·8	76·6	30·7	94																	
GUYANA	TIMEHRI CHS		14	83·3	78·0	30·4	79																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JUNE, 1969

COUNTRY	STATION	RAINFALL (INCHES)						AIR TEMPERATURE F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.50	1.00	MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	EXTREMES MIN			THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	14·85	1·99	15	28	16	3											
	GREEN HILL RIVER EST	6·08	1·02	4	22	7	0											
	GUAYAGUAYARE	13·39	3·07	17	15	11	5											
	LA PASTORA	6·88	1·26	4	18	5	3											
	MATELOT	12·58	1·59	15	22	14	4											
TRINIDAD	NAVET DAMSITE	14·20	1·95	23	29	14	4											
	PIARCO AIRPORT	10·43	1·79	2	28	9	1	87·2	74·8	81·0	90	73	72·9	175·8	0	0	0	0
	POINT FORTIN	9·76	1·96	5	15	7	5											
	PORT OF SPAIN R BOT	3·60	·61	5	17	3	0											
	QUAREDAM HOLLIS	17·08	2·39	2	26	13	5											
TRINIDAD	ST AUGUSTINE UWI	7·54	1·31	2	21	8	1	87·5	73·9	80·7	91	72	72·0	189·0	4	0	0	0
	WATERLOO EST	6·20	·99	6	20	8	0											
TOBAGO	CASTARA	14·02	3·88	4	23	10	4											
	CROWN POINT AIRPORT	9·73	1·96	5	21	7	3	86·5	76·1	81·3	91	73		200·7	2	0	0	0
	HILLSBOROUGH DAM	15·62	4·29	5	20	11	4											
TOBAGO	MORIAH	10·20	2·42	4	23	8	4											
	PLYMOUTH WHITE ROCK	9·37	2·54	4	19	7	3											
	SCARBOROUGH ROT STN	10·67	4·49	4	17	8	1											
	SPEYSIDE	7·62	1·79	5	22	7	2											
GRENADA	MOUNT HORNE	10·07	1·38	16	17	9	3	86·4	74·4	80·4	89	72		177·1				
GRENADA	PEARLS AIRPORT	8·29	1·73	5	21	5	3	86·2	77·2	81·8	88	75						
BARBADOS	BELLE ST M	3·17	·90	10	12	2	0											
	CASTLE GRANT ST JOS	5·25	1·38	13	16	5	1											
	CLIFTON HALL ST J	3·75	1·19	13	14	3	1											
	EDGECUMBE ST P	3·10	·91	13	13	2	0											
BARBADOS	HAGGATTS ST A	4·56	·95	13	16	3	0											
	HOLETOWN ST JA	3·45	1·19	13	15	1	0											
	HUSBANDS CHI	2·85	1·04	13	10	2	1	88·4	75·4	81·9	91	73			0	0	0	0
	LION CASTLE ST T	4·99	1·32	13	15	5	0											
	PORTLAND ST PE	3·92	1·31	16	14	3	1											
BARBADOS	RIVER ST P	3·35	1·21	13	12	2	1											
	SEAWELL AIRPORT	2·79	·60	16	11	3	0	88·1	77·9	83·0	90	75		265·5	0	0	0	0
ST VINCENT	CAMDEN PARK	10·48	1·59	12	19	9	4	87·1	75·4	81·3	89	73						
ST LUCIA	VIGIE AIRPORT							87·5	76·1	81·8	89	73			0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	1·96	·40	15	6	2	0	87·6	78·9	83·3	89	75			0	0	0	0
ANTIGUA	DUNBARS	2·62	·38	9	11	2	0	87·4	76·1	81·8	89	73						
JAMAICA	BERNARD LODGE	12·25	6·45	9	8	5	4	88·7	67·9	78·3	92	65		215·2				
	CEDAR VALLEY	34·67	10·20	8	19	11	8		69·7			66						
	DALLAS	12·68	4·40	8	11	7	5	85·6			90							
	DUCKENFIELD	8·53	2·00	14	22	8	2	88·4	76·2	82·3	90	71	70·6	223·1				
JAMAICA	EMPIRE NURSERY	18·18	8·45	8	14	8	5	82·6	67·0	74·5	86	64						
	FARM HILL	20·43	9·15	8	17	9	4	77·0	64·5	70·7	80	61						
	HALLS DELIGHT	18·83	9·03	8	14	7	5	77·5	65·4	71·5	82	62						
	HOPE GARDENS	11·35	3·25	7	12	7	4	88·3	66·0	77·1	92	64						
	IRWIN	7·92	2·20	6	16	4	4	80·1	72·6	81·4	93	71						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JUNE, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (Inches)						AIR TEMPERATURE °F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.50	1.00	MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	EXTREMES MIN			THUNDER	FOG	HAIL	GALE
JAMAICA	KINGSTON ST-GEORGES	8.23	2.90	8	12	4	4	89.3	76.6	83.0	93	74	66.2					
	MARSHALLS PEN	18.66	4.87	7	15	8	6	80.6	69.4	75.0	86	65			5	2	0	0
	MASON RIVER FIELD	19.63	7.83	8	16	9	4	79.4	69.2	74.3	86	66						
	MONTEGO BAY AIRPORT	4.19	1.25	10	10	3	2	88.2	74.6	81.4	91	73						
	MORANT POINT LH	4.52	1.69	14	13	2	1	88.4	77.8	83.1	89	74			6	0	0	0
JAMAICA	NEGRIL POINT LH	4.38	2.25	8	6	3	2	89.5	77.0	83.2	94	75			21	0	0	0
	PALISADOES AIRPORT	9.16	3.25	10	8	4	4	88.9	78.0	83.4	92	70		182.4	11	0	0	0
	WORTHY PARK	18.02	4.48	9	17	8	5	85.5	69.6	77.6	90	66		137.6				
CAYMAN ISLANDS	GRAND CAYMAN APT.	13.34	3.32	11	18	10	4	89.0	76.2	82.6	93	70			7	0	0	0
BR HONDURAS	BELIZE AIRPORT	11.38	4.58	5	19	6	3	90.2	77.1	83.7	96	71		232.5	8	0	0	0
GUYANA	BARTICA POTARO RD	8.17	1.72	22	18	7	2	89.5	70.9	80.2	92	69						
	EBINI	11.27	1.15	27	23	13	2	89.7			92			183.9				
	GEORGETOWN BOT GDN	7.54	1.46	18	18	5	3	85.2	75.7	80.4	87	74	72.7	156.9	2	0	0	0
	HOSORORO	11.16	1.31	17	26	9	3	85.6	73.4	79.5	91	72						
	MABARUMA	15.75	1.61	23	25	13	6	86.2	77.3	81.7	90	73						
GUYANA	MAHAICONY ABARY RDS	8.47	1.87	18	15	7	2	87.6	75.6	81.6	89	74						
	MATTHEWS RIDGE	8.74	.92	18	25	10	0	86.9	72.2	79.6	91	70						
	MAZARUNI PRISON	9.35	1.50	8	20	9	2	83.0	68.8	75.9	89	61			6	3	0	0
	MON REPOS	5.40	1.00	18	20	4	1	85.9	75.1	80.5	88	73						
	NEW AMSTERDAM	10.22	2.38	17	22	11	1	86.9	74.9	80.9	89	73						
GUYANA	ONVERWAGT	7.77	1.69	24	12	8	2	85.7	77.2	81.5	87	74						
	PORT KAITUMA	11.14	1.14	7	26	12	2	91.3	70.3	80.8	94	69						
	ST IGNATIUS	15.27	3.46	17	20	10	8	88.3	74.3	81.3	91	72		197.2				
	TIMEHRI AIRPORT	8.75	1.49	2	23	8	1	87.0	72.9	79.9					3	4	0	0
	TIMEHRI CHS	8.65	.93	16	23	9	0	87.3	71.7	79.5	90	69	71.6	96.5				
GUYANA	WAUNA	12.59	1.15	23	24	15	2											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - JUNE, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	97	151	5·34	·33	27												
	ST AUGUSTINE UWI	30	53															
JAMAICA	CEDAR VALLEY	24	59															
	EMPIRE NURSERY	26	59															
	FARM HILL	17	71	2·38	·15	15												
JAMAICA	PALISADOES AIRPORT	114	200															
	WORTHY PARK			4·57	·23	6												
GUYANA	EBINI	74	110															
	GEORGETOWN BOT GDN	64	98	4·06	·24	21												
	ONVERWAGT			6·56	·44	2												
GUYANA	TIMEHRI CHS	46	82															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - JUNE, 1969

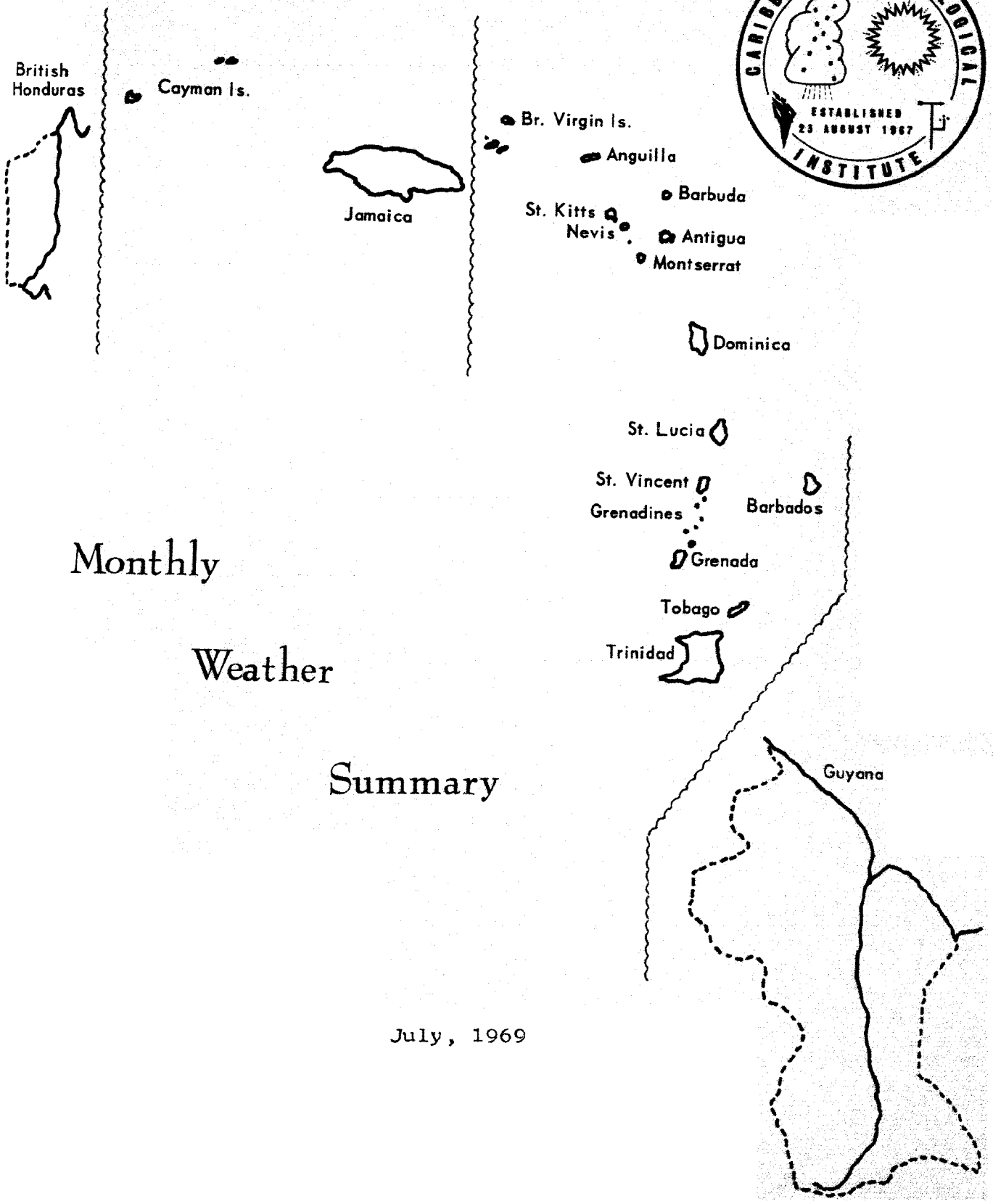
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·19	·35	·49	·54	·56	·60	1·21	1·21
	ST AUGUSTINE UWI		·25	·29	·35	·39	·50	·79	·82
TOBAGO	CROWN POINT AIRPORT	·22	·34	·40	·48	·59	1·00	1·09	1·15
BARBADOS	HASGATTS ST A	·33	·49	·64	·72	·87	1·04	1·04	1·04
	LION CASTLE ST T	·26	·42	·53	·63	·65	·68	·68	·93
BARBADOS	SEAWELL AIRPORT	·28	·40	·41	·47	·47	·47	·56	·60
JAMAICA	PALISADOES APT	·46	·58	1·01	1·37	1·94	2·14	2·77	2·92
GUYANA	EBINI	·36	·56	·96	1·22	1·34	1·56	1·80	1·84
	GEORGETOWN BOT GDN	·26	·38	·51	·66	·83	1·00	1·35	1·35
	MAHAICONY ABARY RDS	·24	·30	·37	·50	·57	1·07	1·19	1·19
GUYANA	MATTHEWS RIDGE	·30	·44	·50	·61	·61	·72	·76	·76

TABLE V - SUMMARY OF WINDSPEED RECORDS - JUNE, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	08	16	13	4	07	32	1300	4	0	0	0	5·1
TOBAGO	CROWN POINT AIRPORT	12	21	21	15	11	35	1605	24	1	0	0	9·5
ANTIGUA	COOLIDGE AIRPORT	10	17	22	6	12	28	2155	11	0	0	0	11·4
JAMAICA	MONTEGO BAY	08	21	13	30	07	30	1210	30	0	0	0	3·7
	PALISADOES APT	12	18	05	8	13	32	1040	24	0	0	0	8·3
GUYANA	GEORGETOWN BOT GDN	06	13	13	13	09	29	1400	17	0	0	0	5·7

TABLE VI - SUMMARY OF SUNSHINE RECORDS - JUNE, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	24	48	45	53	57	62	65	54	44	48	45	36	0	173·8	46	11·6	27	2	7	5	7	9	0
	ST AUGUSTINE UWI	0	23	55	56	59	62	64	66	61	46	52	52	34	1	189·0	50	11·6	27	1	5	8	6	10	0
TOBAGO	CROWN POINT AIRPORT	0	28	53	53	55	62	66	70	71	64	60	49	35	2	200·7	52	11·3	12	1	6	3	11	9	0
BARBADOS	SEAWELL AIRPORT	0	39	79	84	84	85	85	85	77	80	78	68	40	1	265·5	69	11·6	8	0	2	3	5	20	0
JAMAICA	DUCKENFIELD	1	44	66	72	71	77	76	71	66	62	64	48	26	0	223·1	56	11·9	24	0	3	6	9	12	0
JAMAICA	MONTEGO BAY	10	67	71	69	70	74	64	83	0	0	0	0	0	0	129·8	33	6·5	4	2	5	12	11	0	0
	MONY MUSK	0	12	44	55	69	63	61	54	63	59	42	3	0	0	152·9	41	9·5	20	2	5	8	10	4	0
	PALISADOES	0	31	49	56	66	69	67	62	62	61	38	32	19	1	184·8	47	11·4	20	2	4	7	12	5	0
GUYANA	EBINI	0	21	33	57	65	72	66	65	68	56	50	40	22	0	183·9	49	11·1	10	0	4	10	9	7	0
	GEORGETOWN BOT GDN	0	0	32	50	60	62	62	53	50	44	52	42	15	0	156·9	42	10·0	30	1	8	7	11	3	0
GUYANA	MAZARUNI PRISON	0	5	28	36	45	55	48	46	46	36	25	11	1	0	114·8	31	7·6	10	2	7	14	7	0	0
	MON REPOS	0	21	53	61	75	74	66	66	65	61	63	48	23	0	202·4	54	11·2	29	0	5	7	9	9	0
	ST IGNATIUS	0	19	41	49	59	74	72	66	60	63	61	60	31	0	197·2	53	11·9	11	0	7	4	11	8	0
	TIMEHRI CHS	0	12	34	39	40	33	29	25	29	29	27	22	4	0	96·5	25	10·3	30	3	12	11	5	1	0



CARIBBEAN METEOROLOGICAL INSTITUTE
ESTABLISHED 23 AUGUST 1967

Monthly Weather Summary

July, 1969

MONTHLY WEATHER SUMMARY

Prepared and Published by the
Caribbean Meteorological Institute,
Husbands, St. James, Barbados, W.I.

July, 1969

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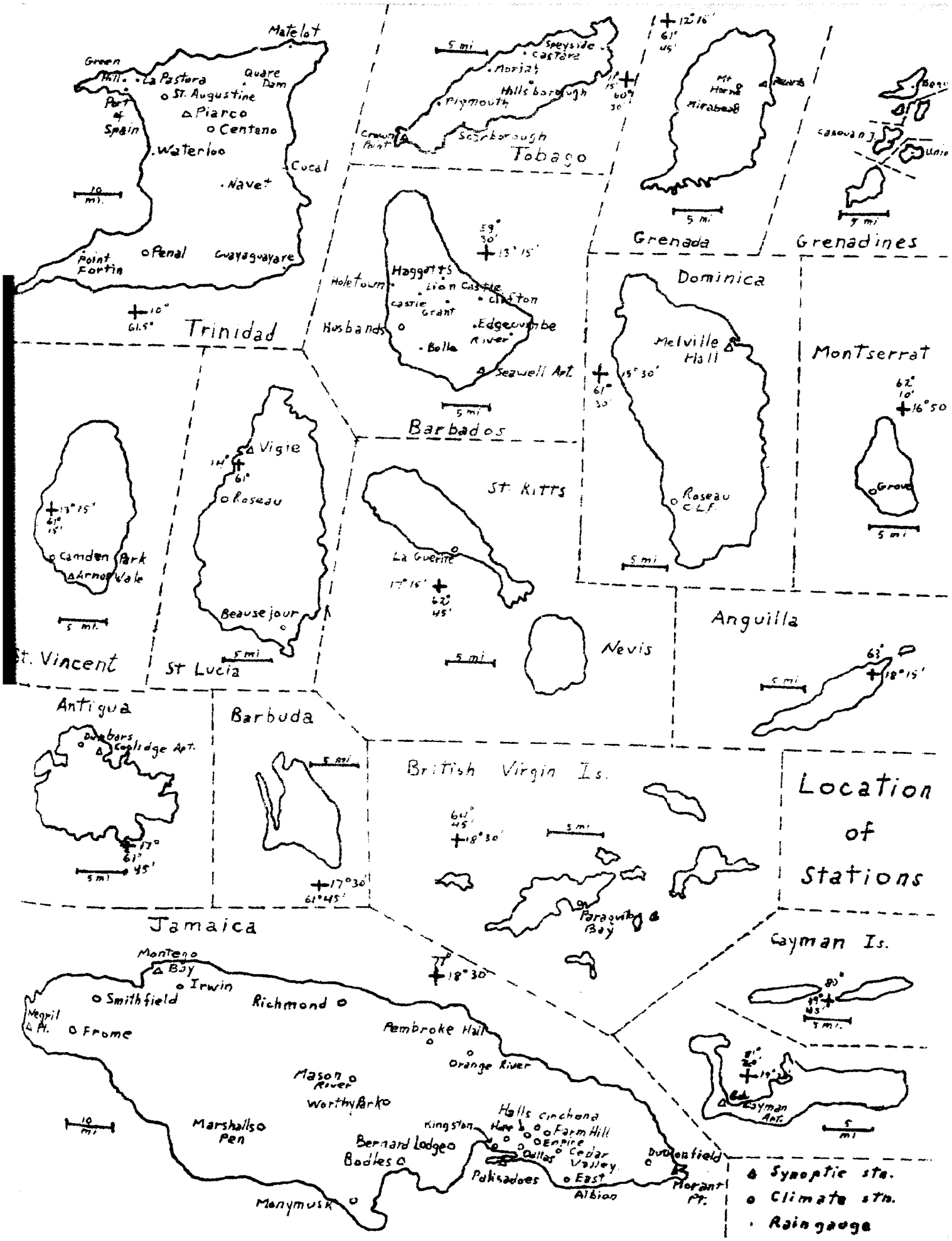
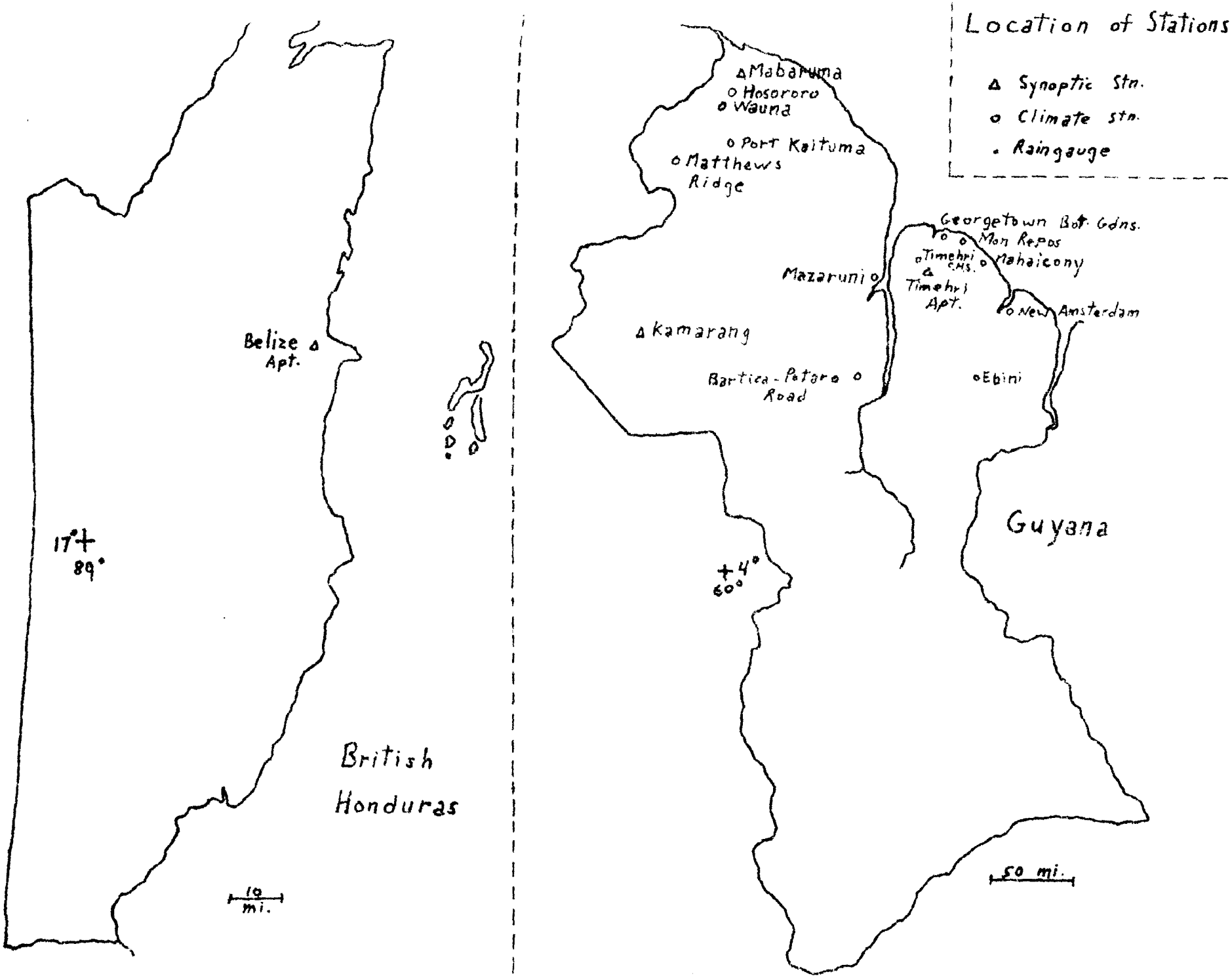

Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Dominica
Montserrat
Barbados
St. Vincent
St Lucia
St. Kitts
Nevis
Anguilla
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Synoptic sta.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Georgetown Bot. Gdns.
Mon Repos
Timehri CHS.
Mahaicony
Timehri Apt.
Mazaruni
New Amsterdam
Kamarang
Bartica - Potaro Road
Ebini
Guyana
Belize Apt.
17°
89°
4°
60°
British Honduras
10 mi.
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

/ct'd.....

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

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is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JULY, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	75·4	74·4	28·5	95	1013·6	0·3	3·9	1	11	8	9	2	0	0	0	0	0	0	0	5	26
			08	78·9	76·2	29·7	88	1014·8	2·2	4·6	0	7	10	13	1	0	0	0	0	0	0	1/	10	20
			14	85·1	77·3	28·5	69	1013·2	8·1	5·9	0	0	11	16	4	0	0	0	0	1	0	2	7	21
			20	78·5	76·0	29·5	89	1013·8	0·8	4·1	1	12	6	12	0	0	0	0	0	0	0	0	3	28
	ST AUGUSTINE UWI	52	15	83·9	78·2	30·5	77	1012·5	2·2	5·5	0	2	11	14	4	0								
TOBAGO	CROWN POINT AIRPORT	9	02	78·1	75·3	28·7	87	1013·8	4·4	5·4	0	3	10	15	2	0	0	0	0	0	0	0	6	25
			08	80·9	77·0	30·0	83	1014·9	7·2	5·0	0	7	8	14	2	0	0	0	1	0	0	2	8	20
			14	84·5	78·5	30·7	76	1013·7	12·0	4·5	0	10	6	13	2	0	0	0	0	0	0	1	7	23
			20	79·2	75·5	28·6	84	1014·1	4·7	4·5	0	13	2	15	1	0	0	0	0	0	0	0	8	23
GRENADA	MOUNT HORNE	500	08	80·5	76·9	30·0	85																	
BARBADOS	HUSBANDS CMI	370	08	80·4	75·9	28·5	81	1015·6	5·6	4·6	0	8	7	14	2	0	0	0	0	0	0	0	5	26
			14	84·5	76·5	27·7	69	1013·9	6·7	5·5	0	2	10	18	1	0	0	0	0	0	0	0	5	26
	SEAWELL AIRPORT	183	02	78·5	75·0	27·9	83	1013·6	8·4	3·9	0	11	9	10	1	0	0	0	0	0	0	0	1	30
			08	82·1	76·4	28·6	76	1014·9	9·6	4·8	0	4	12	15	0	0	0	0	0	0	0	0	1	30
			14	85·7	77·7	28·8	69	1013·8	10·4	4·5	0	4	16	11	0	0	0	0	0	0	0	0	0	31
BARBADOS	SEAWELL AIRPORT	183	20	80·0	75·4	28·0	80	1014·3	8·6	3·4	0	16	7	7	1	0	0	0	0	0	0	0	1	30
ST VINCENT	ARNOS VALE AIRPORT	30	08	82·0	76·9	29·4	79	1015·1	10·5	4·6	0	7	7	10	3	0	0	0	0	0	0	1	1	25
			14	85·8	78·2	29·7	70	1014·2	11·7	5·3	0	5	6	9	3	0	0	0	0	0	0	0	0	23
	CAMDEN PARK	30	08	80·7	76·2	28·9	81	1016·7	6·0	4·7														
ST LUCIA	VIGIE AIRPORT	7	08	81·9	76·4	28·7	77	1016·0	8·1	4·7	0	6	11	11	3	0	0	0	0	0	0	0	12	19
ST LUCIA	VIGIE AIRPORT	7	14	85·8	78·2	29·7	70	1014·2	11·7	5·3	0	2	17	12	0	0	0	0	0	0	0	0	7	24
ANTIGUA	COOLIDGE AIRPORT	26	08	82·6	77·0	29·2	77	1016·7	12·3	3·8	0	9	14	5	3	0	0	0	0	0	0	0	5	26
			14	84·9	78·0	29·5	72	1016·1	12·5	4·4	0	6	17	5	3	0	0	0	0	0	0	0	2	29
			20	81·4	76·8	29·0	79	1015·4	11·9	3·5	0	15	10	6	2	0	0	0	0	0	0	0	6	25
	DUNBARS	220	09	83·0	77·0	29·0	75																	
ANTIGUA	DUNBARS	220	15	84·0	76·7	25·2	71																	
JAMAICA	CEDAR VALLEY	1980	07	73·1	70·7	24·6	88																	
			15	82·5	74·9	26·1	69																	
	DALLAS	950	09	83·0	75·6	27·0	70																	
			15	87·8	77·4	27·3	61																	
JAMAICA	DUCKENFIELD	60	08	84·6	78·9	31·0	78																	
	EAST ALBION NURSERY	90	07	80·9	75·5	27·7	79																	
			13	88·3	78·3	25·5	63																	
	EMPIRE NURSERY	2130	07	69·9	67·4	21·8	88																	
			13	83·8	73·3	23·4	60																	
JAMAICA	FARM HILL	3020	07	66·8	64·3	19·5	87																	
			15	77·7	73·2	25·9	80																	
	HALLS DELIGHT	3020	07	72·6	66·7	19·9	73																	
			13	78·3	71·0	22·8	69																	
	HOPE GARDENS	712	07	75·2	71·4	24·5	82																	
JAMAICA	IRWIN	80	08	83·5	78·1	30·5	78																	
			15	87·5	79·3	30·4	69																	
	KINGSTON ST GEO COLL	90	07	80·4	74·9	27·1	76																	
			15	86·3	78·9	29·1	63																	
	MARSHALLS PEN	2300	07	75·5	72·0	25·2	84		4·8	3·9	2	9	11	4	4	0								
JAMAICA	MARSHALLS PEN	2300	13	81·6	78·0	26·9	72		7·7	5·3	0	4	6	20	1	0								
	MASON RIVER FIELD	2300	07	71·1	69·6	24·5	94																	
			13	82·1	73·9	25·2	68																	
			19	71·4	70·2	24·4	93																	
	MONTEGO BAY AIRPORT	3	01	79·0	74·0	26·5	78	1014·3	2·6	2·5	0	22	3	6	0	0	0	0	0	0	0	0	0	31

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - JULY, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MONTEGO BAY AIRPORT	3	07	80·0	76·1	29·0	83	1014·2	2·1	3·8	0	12	10	8	1	0	0	0	0	0	0	0	0	31
			13	88·6	80·3	31·5	69	1013·5	16·7	4·0	0	13	4	14	0	0	0	0	0	0	1	0	0	30
			19	83·2	78·0	30·6	79	1013·2	5·8	5·0	0	1	16	14	0	0	0	0	0	0	0	0	0	31
	MORANT POINT LH	6	01	83·1	79·1	31·8	82		9·5	3·8	2	4	19	6	0	0								
			07	82·8	78·8	31·3	82		9·6	4·7	0	2	21	8	0	0								
JAMAICA	MORANT POINT LH	6	13	85·8	80·7	33·1	78		9·6	4·4	0	5	15	9	2	0								
			19	84·1	80·0	32·4	81		7·7	4·6	0	4	14	13	0	0								
	NEGRIL POINT LH	27	07	79·0	74·7	27·5	81	1013·5	1·6	3·8	2	10	7	5	3	0								
			13	89·4	79·7	30·4	64	1013·4	4·3	4·8	0	3	13	8	2	0								
			19	82·2	77·1	29·6	79	1013·1	1·8	6·2	0	0	9	9	6	0								
JAMAICA	PALISADOES AIRPORT	9	01	82·0	76·1	28·5	77	1014·1	2·5	2·7	0	18	8	5	0	0	0	0	0	0	0	0	0	31
			07	82·1	76·3	28·3	76	1014·0	1·8	3·6	0	12	10	9	0	0	0	0	0	0	0	0	0	31
			13	89·6	80·6	31·5	66	1013·5	14·6	3·7	0	12	9	9	1	0	0	0	0	0	0	0	1	30
			19	85·6	78·4	29·8	72	1013·1	7·5	3·4	0	12	12	6	1	0	0	0	0	0	0	0	0	31
	WORTHY PARK	1250	07	72·2	70·7	24·9	93																	
JAMAICA	WORTHY PARK	1250	15	82·5	75·6	27·2	72																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	81·2	79·3	33·4	92	1015·0	5·9	6·5	0	3	5	5	18	0	0	0	0	0	0	0	1	30
			13	89·3	81·4	33·1	70	1015·3	10·6	5·5	0	7	7	6	11	0	0	0	0	0	0	0	0	31
			19	83·4	79·7	33·1	85	1014·7	6·3	5·2	0	8	7	4	12	0	0	0	0	0	0	0	0	31
BR HONDURAS	BELIZE AIRPORT	17	06	78·2	76·4	30·2	92	1013·0	2·3	6·3	0	3	2	18	5	0	0	0	0	0	2	1	5	20
BR HONDURAS	BELIZE AIRPORT	17	12	85·6	79·2	31·2	74	1013·9	7·1	6·0	0	1	7	22	1	0	0	0	0	0	0	1	5	25
			18	82·8	77·7	30·2	79	1012·3	5·2	5·4	0	6	5	16	4	0	0	0	0	0	0	0	5	26
GUYANA	BARTICA POTARO RD	400	08	76·5	74·6	28·4	91																	
			14	86·8	77·3	27·8	64																	
	GEORGETOWN BOT GDN	7	08	79·2	76·5	30·0	88	1014·8	2·8	5·0	0	3	15	13	0	0	0	0	0	0	0	0	0	31
GUYANA	GEORGETOWN BOT GDN	7	14	84·5	78·0	29·9	74	1012·6	6·6	4·7	0	3	16	11	0	0	0	0	0	0	0	0	0	30
	HOSOROKO		08	77·7	75·3	29·6	91																	
			14	83·3	78·0	30·4	78																	
	MABARUMA	185	08	78·1	76·0	29·8	91		2·5	6·3	0	0	11	11	9	0	0	0	0	0	0	0	8	23
			14	83·4	77·1	29·1	75		3·3	6·6	0	0	8	13	10	0	0	0	0	0	0	0	9	22
GUYANA	MAHAICONY ABARY ROS	6	08	80·3	77·1	30·4	86																	
			14	84·7	78·9	31·1	76																	
	MATTHEWS RIDGE		08	74·8	73·7	27·9	95																	
			14	82·8	76·1	27·8	73																	
	MAZARUNI PRISON	47	08	75·8	74·0	27·9	91																	
GUYANA	MAZARUNI PRISON	47	14	83·9	77·3	29·1	73																	
	BON REPOS		08	80·0	78·0	28·5	81																	
			14	79·6	76·4	29·7	86																	
	NEW AMSTERDAM	3	08	79·6	76·4	29·7	86																	
			14	86·5	78·4	29·6	69																	
GUYANA	ONVERWAGT		08	82·4	79·2	32·7	87																	
			14	84·0	80·2	33·2	83																	
	PORT KAITUMA		08	76·1	74·8	28·9	94																	
			14	84·7	78·0	29·8	73																	
	TIMEHRI AIRPORT	95	02	73·8	73·5	28·8	98	1013·2	0·0	4·9	0	7	9	14	0	1	0	1	0	0	0	0	13	17
GUYANA	TIMEHRI AIRPORT	95	08	76·4	75·0	29·0	94	1014·2	0·8	4·7	0	6	13	11	1	0	0	0	0	0	0	1	4	26
			14	83·8	77·1	29·0	73	1012·0	6·4	6·6	0	0	4	25	2	0	0	0	0	0	0	1	4	26
			20	75·9	74·9	29·0	95	1013·0	0·7	5·1	0	6	7	16	2	0	0	0	0	0	0	1	8	22
	TIMEHRI CHS		08	77·0	75·3	29·2	92																	
			14	83·8	78·0	30·2	76																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JULY, 1969

COUNTRY	STATION	RAINFALL (INCHES) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.10	1.00	AIR TEMPERATURE F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	12·57	5·90	25	21	9	1											
	GREEN HILL RIVER EST	10·16	2·27	21	25	10	1											
	GUAYAGUAYARE	6·25	2·04	25	13	6	1											
	LA PASTORA	7·40	1·25	14	17	8	1											
	MATELOT	10·82	1·13	14	21	13	2											
TRINIDAD	NAVET DAMSITE	10·15	1·72	16	19	11	2											
	PIARCO AIRPORT	8·99	1·65	16	22	7	2	87·4	73·5	80·4	92	71	71·2	229·8	4	0	0	0
	POINT FORTIN	10·58	1·64	12	23	11	3											
	PORT OF SPAIN R BOT	5·80	1·10	25	17	7	1											
	QUAREDAM HOLLIS	12·69	1·72	25	25	11	3											
TRINIDAD	ST AUGUSTINE UWI	5·98	1·31	15	18	4	1	87·9	72·4	80·1	91	70	70·2	242·0	3	0	0	0
	WATERLOO EST	7·49	1·02	25	18	8	1											
TOBAGO	CASTARA	13·46	3·00	27	23	8	4											
	CROWN POINT AIRPORT	6·84	1·43	14	18	6	1	86·0	75·1	80·5	88	70		248·5	4	0	0	0
	HILLSBOROUGH DAM	12·12	2·20	27	20	12	3											
TOBAGO	HORIAH	7·78	1·50	26	17	9	1											
	PLYMOUTH WHITE ROCK	9·15	2·00	26	21	8	2											
	SCARBOROUGH BOT STN	9·33	3·60	26	16	9	1											
	SPEYSIDE	6·88	1·38	21	21	6	2											
GRENADA	MOUNT HORNE	6·53	1·19	9	18	7	1	89·6	77·2	83·4	88	71		215·1				
BARBADOS	BELLE ST M	5·00	1·00	9	16	4	1											
	CASTLE GRANT ST JOS	7·49	1·00	28	21	8	1											
	CLIFTON HALL ST J	6·72	1·41	14	16	6	2											
	EDGECUMBE ST P	4·10	·65	14	16	4	0											
	HAGGATTS ST A	5·14	·87	2	16	5	0											
BARBADOS	HOLETOWN ST JA	4·31	·53	14	17	3	0											
	HUSBANDS CMI	3·94	·72	14	18	2	0	87·6	74·5	81·0	89	71			0	0	0	0
	LION CASTLE ST T	7·43	1·40	14	21	6	1											
	PORTLAND ST PE	5·28	1·11	2	16	6	1											
	RIVER ST P	4·84	·88	13	16	2	0											
BARBADOS	SEAWELL AIRPORT	4·93	1·22	28	14	4	1	87·8	76·4	82·1	90	71	73·3	265·7	0	0	0	0
ST VINCENT	CAMDEN PARK	10·22	1·08	18	21	11	2	83·8	71·7	77·8	89	72						
ST LUCIA	VIGIE AIRPORT							87·1	75·8	81·5	89	72			0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	5·13	1·57	18	16	3	1	87·0	77·6	82·2	92	72			0	0	0	0
	DUNBARS	5·08	1·26	17	17	5	1	86·9	75·9	81·4	89	71						
JAMAICA	BERNARD LODGE	·00	·00		0	0	0	91·1	66·2	78·6	93	64		286·3				
	CEDAR VALLEY	3·72	·80	20	11	4	0		68·7			65						
	DALLAS	·95	·67	31	2	1	0	89·2	59·6	74·5	93	56						
	DUCKENFIELD	4·03	·82	10	14	5	0	89·2	76·4	82·8	91	73	70·8					
	EAST ALBION NURSERY	2·90	·47	15	12	2	0	89·7	75·0	82·4	93	72						
JAMAICA	EMPIRE NURSERY	·35	·22	11	2	0	0	85·7	68·1	76·9	89	63						
	FARM HILL	1·01	·41	10	9	1	0	80·1	64·0	72·5	86	61						
	HALLS DELIGHT	·54	·17	10	4	0	0	81·2	66·4	73·8	86	65						
	HOPE GARDENS	·78	·65	31	3	1	0	92·5	66·5	79·5	95	64						
	IRWIN	3·02	·70	2	8	3	0	92·3	72·4	82·4	96	69						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - JULY, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	HEAVIEST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .25	.50	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
JAMAICA	KINGSTON ST.GEORGES	.36	.24	31	2	0	0	92.8	77.2	85.0	96	72						
	MARSHALLS PEN	2.76	.76	4	10	3	0	83.3	67.2	75.3	86	62	63.4		10	0	0	0
	MASON RIVER FIELD	4.30	1.39	16	13	4	1	83.2	68.6	83.9	86	66						
	MONTEGO BAY AIRPORT	2.23	.82	7	7	2	0	89.6	75.6	82.6	92	72			9	0	0	0
	MORANT POINT LH	4.50	1.74	10	9	3	1	88.3	79.4	83.9	89	75			7	0	0	0
JAMAICA	NEGRIL POINT LH	7.00	1.35	22	19	7	2	91.6	75.4	83.5	94	73						
	PALISADOES AIRPORT	.39	.21	31	3	0	0	91.6	79.3	85.5	95	76		247.5	8	0	0	0
	WORTHY PARK	6.57	2.07	16	12	5	2	86.9	67.3	77.1	89	62		178.6				
CAYMAN ISLANDS	GRAND CAYMAN APT	6.26	2.08	1	12	5	2	90.4	75.6	83.0	92	69			0	0	0	0
BR HONDURAS	BELIZE AIRPORT	10.49	1.30	30	19	11	3	88.9	76.9	81.6	90	74		244.9	16	0	0	0
GUYANA	BARTICA POTARO RD	9.02	3.12	8	18	7	2	89.7	71.1	80.4	92	69						
	EBINI	7.35	2.32	12	16	6	2							223.3				
	GEORGETOWN BOT GDN	9.55	1.96	13	19	6	4	85.8	74.4	80.1	88	72	71.8	220.3	0	0	0	0
	HOSOROKO	10.89	2.35	12	18	10	4	87.6	72.1	79.9	92	71						
	MABARUMA	8.31	1.61	8	23	7	2	87.4	75.1	81.2	92	70						
GUYANA	MAHAICONY ABARY RDS	7.86	1.60	23	13	6	4	90.1	75.5	82.8	93	74						
	MATTHEWS RIDGE	9.23	1.58	8	22	10	1	87.0	71.6	79.3	90	70						
	MAZARUNI PRISON	7.11	1.70	11	18	6	2	87.1	69.5	78.3	96	68		143.3	13	5	0	0
	MON REPOS	7.82	1.36	11	16	9	2	86.6	74.0	80.3	89	72		250.8				
	NEW. AMSTERDAM	6.50	1.16	30	18	6	1	87.7	74.2	80.9	89	73						
GUYANA	ONVERWAGT	8.85	2.61	13	11	9	3	85.8	76.4	81.1	88	74						
	PORT KAITUMA	8.22	2.64	8	21	7	1	91.0	69.2	80.0	98	68						
	TIMEHRI AIRPORT	14.04	1.94	3	21	12	4	87.9	71.7	79.8	91	70			7	7	0	0
	TIMEHRI CHS	13.18	2.04	3	23	11	4	88.0	70.7	79.4	91	69	70.5	165.2				
	WAUNA	11.58	1.81	20	23	12	3											

TABLE III - SUMMARY OF AGRO-METEOROLOGICAL OBSERVATIONS - JULY, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F										TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth							
									EXTREMES					EXTREMES					
		DAILY MEAN	HIGHEST IN A DAY	TOTAL AMOUNT	HIGHEST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	HIGHEST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	85	113	6.75	.37	18													
	ST AUGUSTINE UWI	34	191																
BARBADOS	HUSBANDS CWI	154	230	7.34	.34	29													
JAMAICA	EAST ALBION NURSERY	41	65	7.39	.39	28													
	EMPIRE NURSERY	32	71	6.13	.30	21													
JAMAICA	FARM HILL	26	87	4.42	.23	4													
	PALISADOES AIRPORT	105	256	9.28	.41	17													
GUYANA	EBINI	76	171																
	GEORGETOWN BOT GDN	59	85																
	TIMEHRI CHS	40	58																

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - JULY, 1969

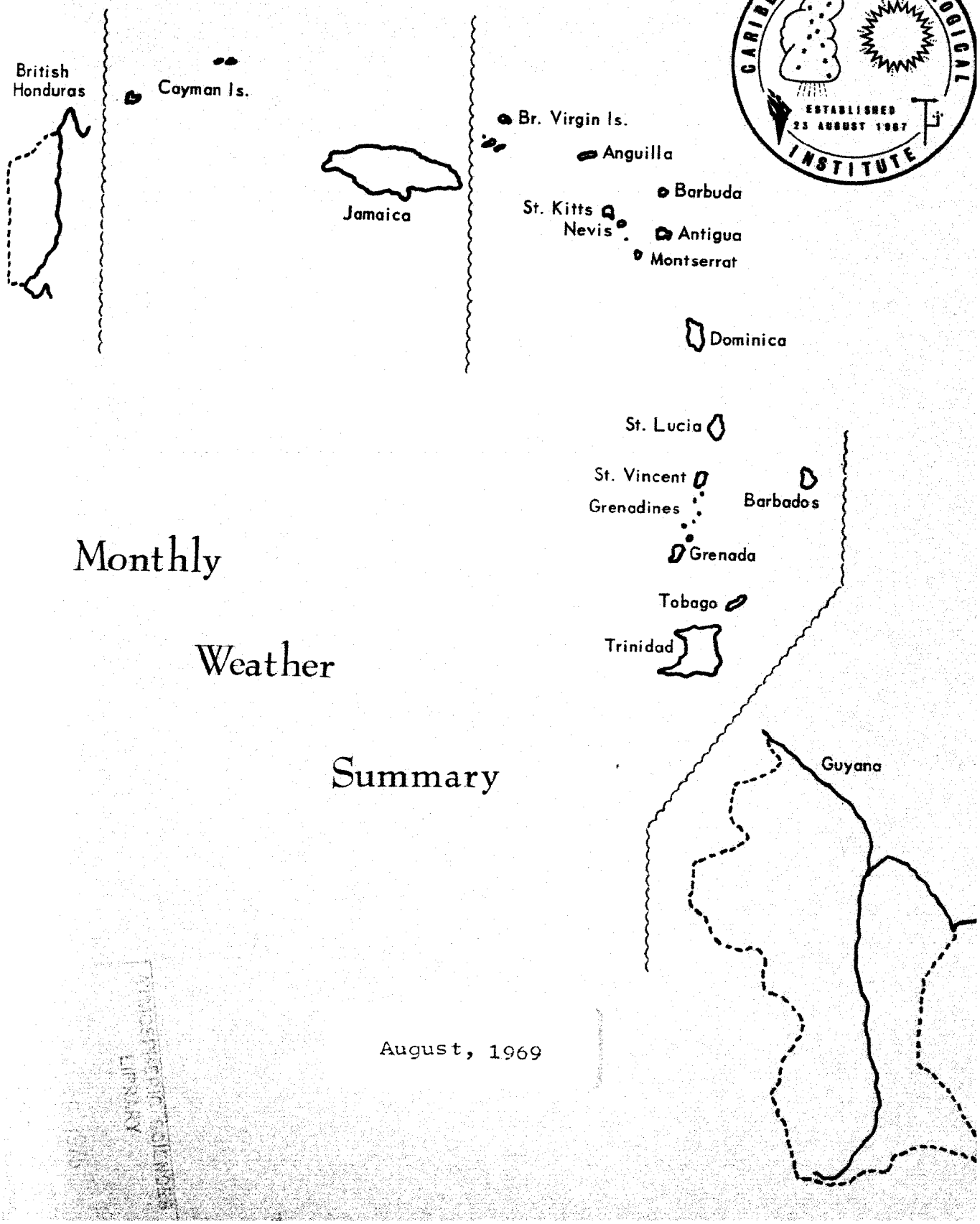
COUNTRY	STATION	MAXIMUM AMOUNT (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	.19	.31	.47	.58	.61	.65	1.28	1.31
	ST AUGUSTINE UWI	.	.35	.48	.64	.86	.89	1.01	1.01
TOBAGO	CROWN POINT AIRPORT	.41	.75	.89	1.17	1.17	1.17	1.43	1.43
BARBADOS	HAGGATTS ST A	.28	.37	.50	.67	.83	.83	.90	.97
	LION CASTLE ST T	.27	.40	.46	.52	.66	.68	1.34	1.40
BARBADOS	SEAWELL AIRPORT	.20	.39	.47	.59	.79	1.00	1.19	1.22
JAMAICA	PALISADOES APT	.08	.14	.19	.19	.19	.21	.21	.21
GUYANA	EBINI	.40	.57	.71	1.37	1.53	1.58	1.61	1.76
	GEORGETOWN BOT GDN	.35	.41	.61	1.00	1.16	1.68	1.96	1.96
	WAHAICONY ABARY RDS	.40	.60	.80	.88	1.06	1.46	1.60	1.60
GUYANA	MATTHEWS RIDGE	.26	.42	.50	.75	.88	.90	.93	.93

TABLE V - SUMMARY OF WINDSPEED RECORDS - JULY, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	08	20	15	15	07	40	1430	15	1	0	0	4·5
TOBAGO	CROWN POINT AIRPORT	10	26	14	15	15	43	1330	15	3	0	0	7·1
ANTIGUA	COOLIDGE AIRPORT	14	21	14	14	11	36	1150	18	2	0	0	11·9
JAMAICA	MONTEGO BAY	08	24	15	21	08	33	1455	21	0	0	0	6·8
	PALISADOES APT	13	20	13	16	12	34	1430	16	1	0	0	7·0
GUYANA	GEORGETOWN BOT GDN	06	11	15	6	06	26	1435	6	0	0	0	5·0

TABLE VI - SUMMARY OF SUNSHINE RECORDS - JULY, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.2-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	33	67	68	66	66	73	65	72	69	65	62	35	0	229·8	59	11·8	3	2	3	3	9	14	0
	ST AUGUSTINE UWI	0	43	74	72	72	70	64	60	67	66	68	59	34	0	242·0	59	11·7	2	1	4	2	9	15	0
TOBAGO	CROWN POINT AIRPORT	0	29	53	71	75	70	75	77	84	84	74	71	38	1	248·5	63	11·7	18	2	3	3	6	17	0
BARBADOS	SEAWELL AIRPORT	0	34	67	71	83	86	75	83	85	89	79	67	36	1	265·7	67	11·7	30	0	3	3	5	19	1
JAMAICA	DUCKENFIELD	0	47	76	81	86	84	75	84	83	83	78	77	40	0	276·8	70	11·5	24	0	1	3	7	20	0
JAMAICA	MONTEGO BAY	16	57	93	93	95	93	95	80	41	24	10	3	2	1	213·4	52	8·9	24	0	0	3	28	0	0
	MONY MUSK	0	28	80	90	95	94	93	96	88	80	69	29	1	0	261·0	64	10·6	28	0	0	1	14	12	0
	PALISADOES	1	35	64	82	81	85	83	81	81	71	66	48	19	0	248·5	61	11·1	12	0	3	3	11	14	0
GUYANA	EBINI	0	28	55	64	75	79	75	81	73	62	57	48	24	0	223·3	58	11·3	26	0	1	10	8	10	0
	GEORGETOWN BOT GDN	0	2	50	63	70	67	74	71	73	70	74	62	33	0	220·3	57	10·8	26	0	2	10	9	10	0
GUYANA	MAZARUNI PRISON	0	5	31	49	53	61	57	45	42	44	40	29	4	0	143·3	37	8·2	25	0	7	14	7	1	0
	MON REPOS	0	34	68	69	71	74	73	72	80	84	81	66	34	0	250·8	65	11·7	26	0	0	9	8	14	0
	TIMEHRI CHS	0	17	57	63	63	63	42	44	46	46	46	37	7	0	165·2	43	10·5	26	0	8	13	5	5	0



CARIBBEAN METEOROLOGICAL INSTITUTE
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Monthly Weather Summary

August, 1969

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MONTHLY WEATHER SUMMARY

Prepared and published by the
Caribbean meteorological Institute
Husbands, St. James, Barbadoes, W.I.

August, 1969

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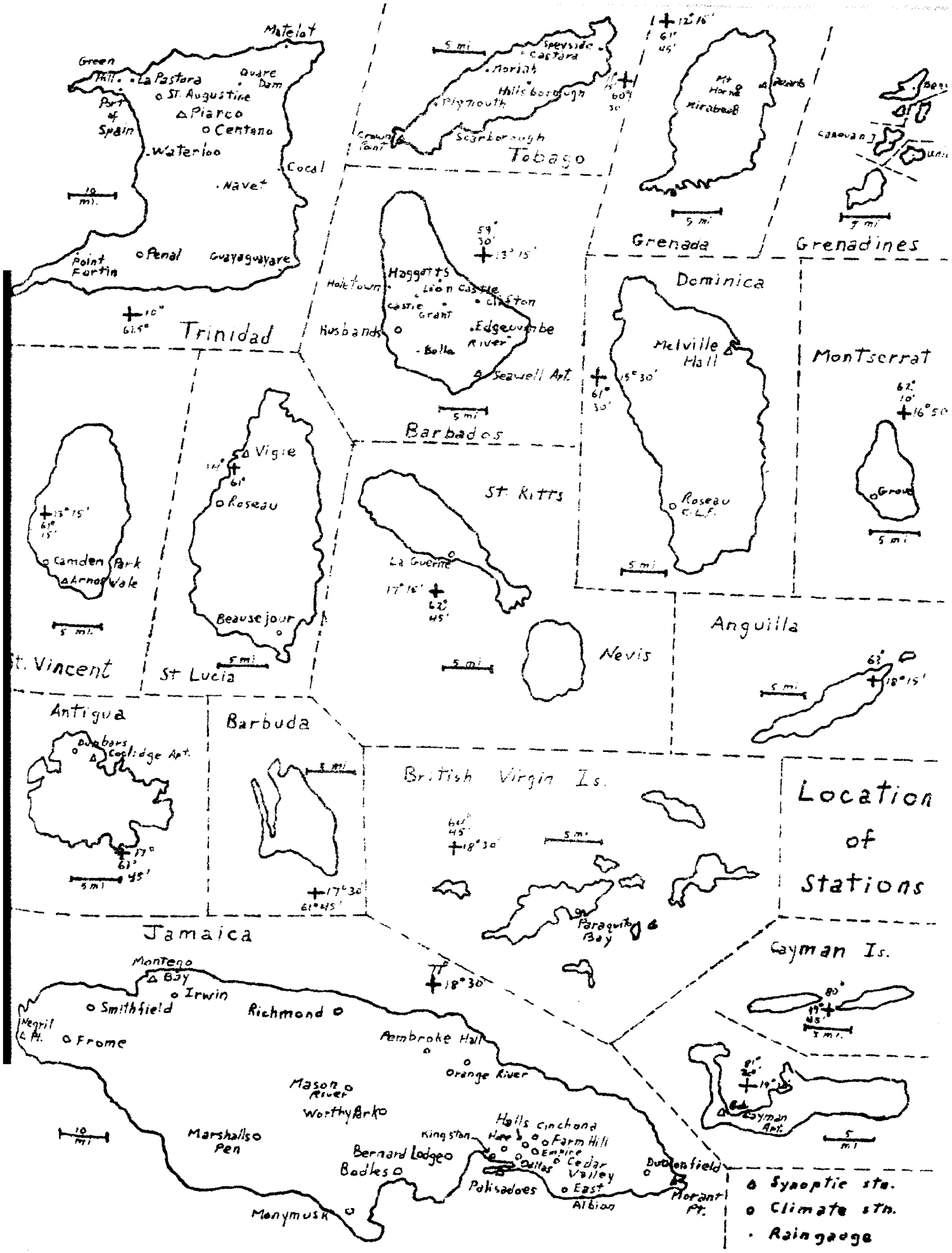
Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Barbados
Dominica
Montserrat
St. Vincent
St Lucia
St. Ritts
Nevis
Anguilla
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Port of Spain
Piarco
Centeno
Waterloo
Cocal
Navet
Point Fortin
Penal
Guayaguayare
Speyside
Castara
Moriah
Hillsborough
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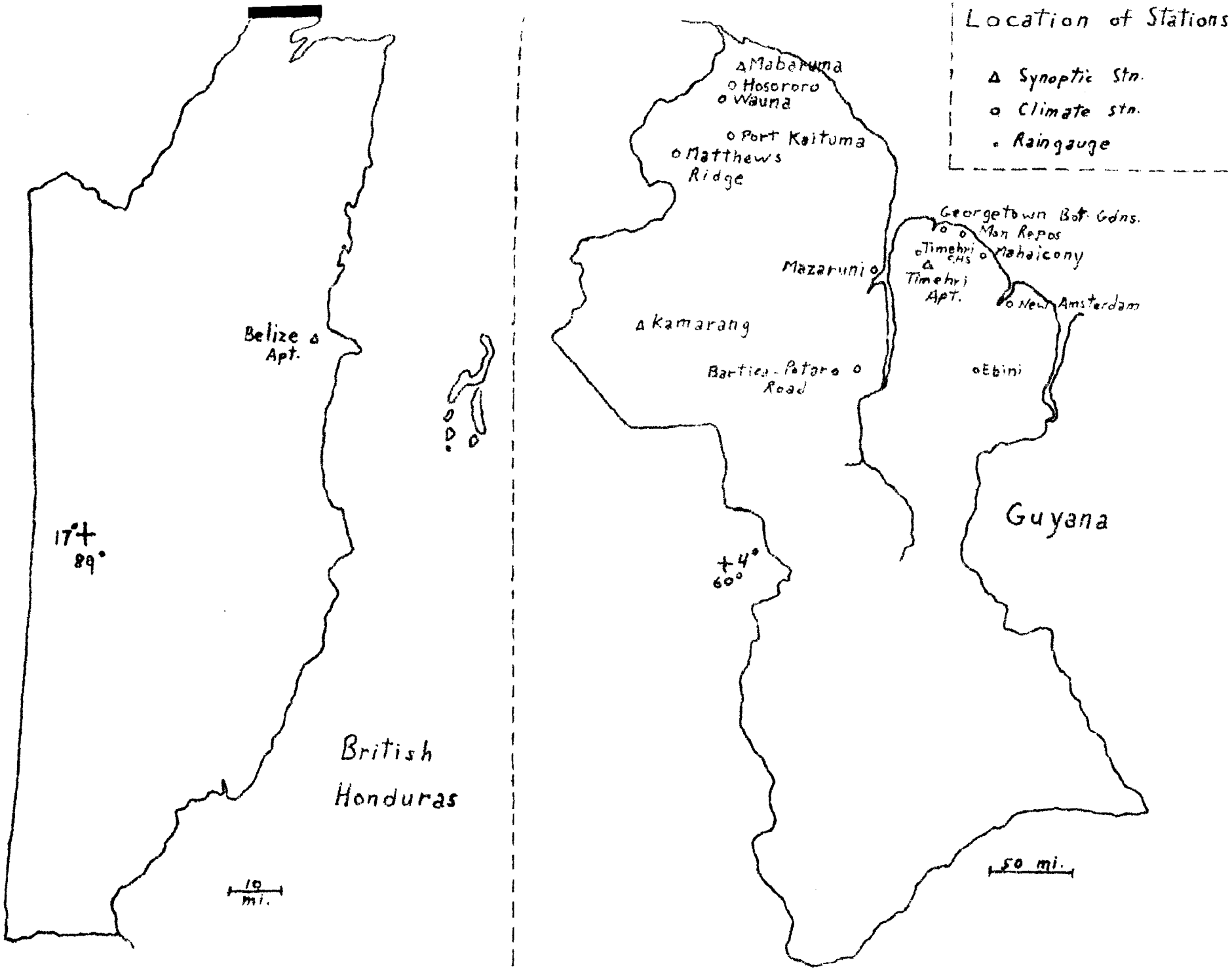
Scarborough
Crown Point
Mt Horne
Mirabeau
Canouan I.
Haggatts
Holetown
Lion Castle
Clifton
Castle Grant
Husbands
Edgecumbe River
Bolla
Seawell Apt.
Melville Hall
Roseau C.L.F.
Grove
Vigie
Roseau
Beausejour
Camden Park
Arnos Vale
La Guerne
Dunbars
Coolidge Apt.
Paraquito Bay
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Monymusk
Kingston
Halls
Cinchona
Farm Hill
Empire
Cedar Valley
Dallas
Palisadoes
East Albion
Dutchfield
Morant Pt.
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Belize Apt.
17°
89°
British Honduras
10 mi.
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica - Potaro Road
4°
60°
Georgetown Bot. Gdns.
Man Repos
Timehri CHS
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

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4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10 is also given. The highest speed for any clock hour

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is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - AUGUST, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	75·0	74·1	28·4	96	1011·6	0·6	4·9	0	8	7	13	3	0	0	1	0	0	0	1	1	28
			08	78·8	76·3	29·7	88	1012·9	0·2	5·0	0	7	6	17	1	0	0	0	1	0	0	0	3	27
			14	85·7	77·6	29·6	75	1011·3	5·0	6·3	0	0	8	18	5	0	0	1	1	0	1	3	4	21
			20	78·5	76·3	29·9	90	1011·8	0·8	4·7	1	8	7	14	1	0	0	0	0	0	0	1	0	30
	ST AUGUSTINE UWI	52	16	82·3	77·0	29·4	78	1010·7	1·4	6·3	0	0	7	20	4	0								
TOBAGO	CROWN POINT AIRPORT	9	02	78·0	75·5	29·0	89	1011·8	3·3	5·3	0	6	8	15	2	0	0	0	0	0	0	1	2	28
			08	82·4	77·7	30·3	80	1012·8	6·7	5·4	0	2	13	15	1	0	0	0	0	0	0	0	2	29
			14	84·2	78·3	30·3	76	1011·6	8·5	5·3	0	4	9	15	3	0	0	0	0	0	0	1	5	25
			20	79·3	76·2	29·3	86	1012·0	3·7	5·3	0	6	4	20	1	0	0	0	0	0	0	0	2	29
GRENADA	MOUNT HORNE	500	08	81·0	78·1	31·9	88																	
BARBADOS	HUSBANDS CWI	370	08	80·5	77·1	30·2	85	1013·4	4·7	5·5	0	1	12	15	3	0	0	0	0	0	0	0	6	25
			14	83·4	77·7	29·8	76	1012·2	6·5	5·9	0	1	9	20	1	0	0	0	0	1	0	2	4	24
	SEAWELL AIRPORT	183	02	78·5	75·3	28·5	86	1011·9	7·9	3·7	0	11	12	8	0	0	0	0	0	0	0	0	0	31
			08	81·7	77·1	29·7	80	1013·0	8·8	5·6	0	2	13	15	1	0	0	0	0	0	0	0	0	31
			14	85·7	78·0	29·4	70	1011·9	10·5	5·3	0	1	17	12	1	0	0	0	0	0	0	0	0	31
BARBADOS	SEAWELL AIRPORT	183	20	79·7	75·7	28·5	82	1012·6	7·8	4·5	0	8	9	14	0	0	0	0	0	0	0	0	0	31
ST VINCENT	ARNOS VALE AIRPORT	50	08	82·9	77·1	29·5	77	1013·0	10·3	4·4	0	6	9	10	0	0	0	0	0	0	0	0	4	21
			14	85·5	78·0	29·5	71	1012·1	10·2	4·8	0	6	5	8	2	0	0	0	0	0	0	0	1	20
	CAMDEN PARK	30	08	79·7	76·5	29·8	86	1015·1	4·8	5·1														
ST LUCIA	VIGIE AIRPORT	7	08	81·9	76·8	29·3	79	1013·5	5·5	4·9	0	5	13	11	2	0	0	0	0	0	0	0	9	22
ST LUCIA	VIGIE AIRPORT	7	14	85·4	77·7	29·1	70	1012·7	9·1	5·6	0	0	16	11	3	0	0	0	0	0	1	0	6	23
DOMINICA	MELVILLE HALL APT	43	09	84·0	77·9	29·9	75	1015·3	9·4	4·2	0	8	11	5	3	0	0	0	0	1	0	0	2	24
			14	83·1	76·2	29·6	76	1014·4	10·3	4·0	0	8	15	5	3	0	0	0	0	0	0	0	6	25
ANTIGUA	COOLIDGE AIRPORT	26	08	82·6	77·3	28·9	76	1014·5	11·5	3·7	0	10	13	5	3	0	0	0	0	0	0	0	2	29
			14	86·0	78·4	29·8	70	1014·1	12·6	4·5	0	3	17	9	2	0	0	0	0	0	0	0	0	31
ANTIGUA	COOLIDGE AIRPORT	26	20	81·6	76·8	29·3	80	1014·3	11·4	3·1	0	12	16	2	1	0	0	0	0	0	0	1	0	30
	DUNBARS	220	09	84·0	77·5	29·4	74																	
JAMAICA	CEDAR VALLEY	1980	07	71·5	69·5	23·8	90																	
			13	81·2	74·2	25·9	71																	
	DALLAS	950	09	80·2	74·5	26·7	75																	
JAMAICA	DALLAS	950	15	84·2	76·8	28·2	71																	
	DUCKENFIELD	60	08	82·2	78·0	31·1	83																	
	EAST ALBION NURSERY	90	07	80·4	74·3	26·7	75																	
			13	86·9	78·4	29·5	67																	
	EMPIRE NURSERY	2130	07	68·[illegible]	66·5	21·6	92																	
JAMAICA	EMPIRE NURSERY	2130	13	83·[illegible]	72·9	23·2	61																	
	FARM HILL	4020	07	65·8	62·4	17·8	82																	
			13	79·4	71·9	23·4	68																	
	HALLS DELIGHT	3020	07	71·6	66·8	20·2	77																	
			13	77·2	70·9	23·1	72																	
JAMAICA	HOPE GARDENS	712	07	74·6	71·2	24·5	84																	
	IRWIN	80	08	81·9	77·5	30·1	91																	
			15	85·3	79·4	31·6	76																	
	KINGSTON ST GEO COLL	90	07	78·9	74·4	27·0	80																	
			15	86·9	78·6	29·5	69																	
JAMAICA	MARSHALLS PEN	2300	07	73·5	70·3	23·7	85		6·0	4·1	0	15	4	7	3	2								
			13	81·0	72·9	24·0	67		9·9	5·1	0	6	6	13	6	0								
	MASON RIVER FIELD	2300	07	70·5	69·5	24·1	94																	
			13	80·2	73·6	25·1	71																	
	MONTEGO BAY AIRPORT	3	01	77·9	73·1	25·1	77	1012·3	1·5	3·5	0	14	9	7	1	0	0	0	0	0	0	0	0	31

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - AUGUST, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MONTEGO BAY AIRPORT	3	07	78·2	74·1	27·1	76	1012·1	2·0	4·5	0	10	6	13	2	0	0	0	0	0	0	0	1	30
			13	84·5	79·4	30·8	76	1012·1	12·0	5·0	0	7	7	15	2	0	0	0	0	0	0	0	0	31
			19	81·0	76·7	29·6	82	1011·4	2·5	5·6	0	3	11	12	5	0	0	0	0	0	0	0	0	31
	MORANT POINT LH	6	01	83·0	78·2	30·7	80		4·5	4·0	3	7	12	7	2	0	0	0	0	0	0	0	0	31
			07	81·6	77·8	30·5	83		5·6	5·0	0	3	15	12	1	0	0	0	0	0	0	0	0	31
JAMAICA	MORANT POINT LH	6	13	86·1	80·3	32·1	76		4·3	5·0	0	6	10	12	3	0	0	0	0	0	0	0	0	31
			19	83·2	78·8	31·2	80		3·3	4·7	0	5	11	12	3	0	0	0	0	0	0	0	0	31
	NEGRIL POINT LH	27	07	77·5	74·1	27·3	85	1012·0	1·3	4·7	0	10	6	5	10	0	0	0	0	0	0	0	0	31
			13	88·4	79·6	30·5	67	1012·2	5·7	5·2	0	7	6	13	5	0	0	0	0	0	0	0	0	31
			19	81·3	77·0	29·7	82	1011·0	2·4	6·5	0	2	6	9	13	0	0	0	0	0	0	0	0	31
JAMAICA	PALISADOES AIRPORT	9	01	80·8	76·4	28·9	81	1012·3	1·5	3·1	1	15	10	3	2	0	0	0	0	0	0	0	0	31
			07	81·0	75·7	28·0	78	1012·1	1·7	3·9	0	11	9	10	1	0	0	1	0	0	0	0	1	30
			13	84·5	80·1	31·6	78	1012·1	12·4	4·9	0	6	12	9	4	0	0	0	0	0	0	0	1	30
			19	84·0	78·1	30·0	76	1011·5	5·0	4·9	0	7	9	10	5	0	0	0	0	0	0	0	1	30
	WORTHY PARK	1250	07	72·1	70·4	24·7	92																	
JAMAICA	WORTHY PARK	1250	15	81·3	74·8	26·5	73																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	80·0	77·7	31·5	90	1012·7	5·5	6·5	0	4	3	5	19	0	0	0	0	0	0	0	1	30
			13	87·2	80·1	31·9	72	1013·3	9·5	6·0	0	4	5	10	12	0	0	0	1	0	0	0	0	30
			19	82·7	78·3	31·2	82	1012·2	6·9	6·7	0	2	4	6	19	0	0	0	0	0	0	1	0	30
BR HONDURAS	BELIZE AIRPORT	17	06	77·4	76·0	30·1	94	1010·1	1·4	6·8	0	0	3	17	6	1	0	1	0	0	0	1	5	20
BR HONDURAS	BELIZE AIRPORT	17	12	85·0	79·2	31·4	76	1010·9	5·2	6·8	0	0	2	27	2	0	0	0	0	0	0	0	2	29
			18	82·6	78·0	30·7	81	1009·0	3·9	6·6	0	0	5	21	4	0	0	0	0	0	0	0	3	27
GUYANA	BARTICA POTARO RD	400	08	76·4	74·7	28·6	92																	
			14	87·1	77·3	27·5	63																	
	EBINI	60	08	77·8	75·6	29·3	90																	
GUYANA	EBINI	60	14	88·4	77·5	27·3	60																	
	GEORGETOWN BOT GDN	7	08	79·4	76·7	30·2	88	1013·2	3·1	4·9	0	3	13	15	0	0	0	0	0	0	0	8	18	5
			14	85·5	78·8	30·6	73	1010·8	5·8	4·1	0	7	15	8	1	0	0	0	0	0	0	1	15	15
	HOSORORO		08	77·1	75·3	29·1	92																	
			14	82·9	77·5	29·9	78																	
GUYANA	WABARUMA	185	08	77·0	75·3	29·2	92		2·6	6·2	0	0	10	15	6	0	0	0	0	0	0	1	4	26
			14	83·6	77·4	29·4	75		4·1	6·3	0	0	6	21	4	0	0	0	0	0	0	0	3	28
	MAHAICONY ABARY RDS	6	08	78·3	74·9	28·0	85																	
			14	83·6	75·3	26·2	67																	
	MATTHEWS RIDGE		08	75·0	73·7	27·8	94																	
GUYANA	MATTHEWS RIDGE		14	82·5	76·1	28·2	74																	
	MAZARUNI PRISON	47	08	76·1	74·7	28·7	93																	
			14	85·4	78·0	29·4	71																	
	MON REPOS		08	79·4	75·9	29·0	85																	
			14	86·3	78·2	29·3	68																	
GUYANA	NEW AMSTERDAM	3	08	80·2	76·7	29·9	85																	
			14	86·8	78·4	29·4	68																	
	PORT KAITUMA		08	74·7	73·6	27·8	95																	
			14	86·4	78·9	30·5	71																	
	TIMEHRI AIRPORT	95	02	73·9	73·4	27·9	98	1011·5	0·0	4·0	0	9	11	9	1	0	0	1	0	1	0	0	15	13
GUYANA	TIMEHRI AIRPORT	95	08	77·2	75·3	29·1	91	1012·5	1·3	4·8	0	7	8	15	1	0	0	0	0	0	0	1	5	25
			14	84·4	77·3	28·8	71	1010·5	6·4	6·5	0	0	5	23	2	0	0	1	0	0	0	1	1	27
			20	76·7	75·4	29·4	94	1011·0	0·4	4·0	0	9	11	10	0	0	0	0	0	0	0	0	4	26
	TIMEHRI CHS		08	76·9	75·7	29·8	94																	
			14	85·0	76·1	29·6	72																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - AUGUST, 1969

COUNTRY	STATION	RAINFALL (INCHES) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .01	.40	1.00	AIR TEMPERATURE F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO. OF DAYS WITH THUNDER	FOG	HAIL	GALE
TRINIDAD	COCAL EST	9.36	1.94	13	20	7	3											
	GREEN HILL RIVER EST	11.46	2.23	21	22	8	3											
	GUAYAGUAYARE	8.65	2.76	15	15	8	2											
	LA PASTORA	13.83	1.84	21	23	14	5											
	MATELOT	11.58	2.75	7	15	9	3											
TRINIDAD	NAVET DAMSITE	12.47	2.38	13	25	12	4											
	PIARCO AIRPORT	16.95	3.46	13	21	13	6	87.8	73.4	80.6	91	71	71.6	188.8	14	1	0	0
	POINT FORTIN	8.19	1.92	21	15	7	4											
	PORT OF SPAIN R BOT	8.97	1.28	21	19	9	2											
	QUAREDAM HOLLIS	15.49	1.92	25	24	17	5											
TRINIDAD	ST AUGUSTINE UWI	14.38	2.05	13	22	15	4	87.7	72.3	80.0	90	70	70.7	200.9	12	0	0	0
	WATERLOO EST	15.93	1.71	15	20	13	6											
TOBAGO	CASTARA	10.69	1.65	2	27	7	3											
	CROWN POINT AIRPORT	4.63	.87	23	20	4	0	86.7	75.2	80.9	89	72		235.7	4	0	0	0
	HILLSBOROUGH DAM	19.71	1.73	23	21	10	2											
TOBAGO	MORIAH	8.60	1.83	10	23	7	1											
	PLYMOUTH WHITE ROCK	5.15	1.09	14	17	5	1											
	SCARBOROUGH BOT STN	8.81	3.12	1	18	8	1											
	SPEYSIDE	11.99	3.17	10	21	8	4											
GRENADA	MOUNT HORNE	16.61	4.31	28	15	9	8	87.0	74.5	80.8	89	72		200.9				
BARBADOS	BELLE ST M	8.24	2.32	25	21	8	1											
	CASTLE GRANT ST JOS	9.23	1.19	25	21	9	2											
	CLIFTON HALL ST J	6.78	1.17	3	19	5	1											
	EDGECUMBE ST P	5.76	.84	18	19	7	0											
	HAGGATTS ST A	6.58	1.02	6	19	6	1											
BARBADOS	HOLETOWN ST JA	11.38	3.22	16	21	8	4											
	HUSBANDS CMI	11.43	4.96	25	20	5	2	87.0	74.6	80.8	88	73			0	0	0	0
	LION CASTLE ST T	10.07	1.24	16	23	10	2											
	RIVER ST P	4.90	.80	16	19	5	0											
	SEAWELL AIRPORT	5.74	.93	4	22	3	0	87.5	76.1	81.7	90	72	73.4	255.6	0	0	0	0
ST VINCENT	CAMDEN PARK	11.05	2.10	17	17	12	3	88.3	74.6	81.4	89	72						
ST LUCIA	VIGIE AIRPORT							87.4	75.5	81.5	89	73			0	0	0	0
DOMINICA	MELVILLE HALL APT	8.67	3.03	10	16	4	2	86.8	75.8	81.3	89	72			0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	2.60	1.14	11	9	3	1	87.2	78.3	82.7	90	73			0	0	0	0
	DUNBARS	3.28	1.19	10	9	2	1	87.9	76.7	82.3	91	74						
JAMAICA	BERNARD LODGE	3.93	1.69	13	5	3	2	90.1			95			249.9				
	CEDAR VALLEY	15.34	4.52	13	14	7	4	82.8	67.4	75.1	88	63						
	DALLAS	9.07	2.43	13	11	6	4	86.2			93							
	DUCKENFIELD	10.58	3.67	31	10	6	4	89.1	73.7	81.4	92	70	67.7	215.3				
	EAST ALBION NURSERY	7.78	1.78	13	9	4	2	89.5	73.3	81.4	93	70						
JAMAICA	EMPIRE NURSERY	8.97	3.24	13	12	6	3	84.1	65.3	74.7	91	62						
	FARM HILL	13.76	5.51	13	15	5	4	81.1	64.3	72.7	88	59						
	HALLS DELIGHT	7.69	3.36	13	10	5	2	80.2	65.4	72.8	85	64						
	HOPE GARDENS	8.38	1.75	13	10	7	3	91.1			95							
	IRWIN	8.23	1.55	13	17	6	3	90.7	71.7	81.2	93	70						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - AUGUST, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN .04	.50	1.00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH THUNDER	FOG	HAIL	GALE
JAMAICA	KINGSTON ST.GEORGES	3.93	1.60	31	7	3	2	91.6	76.0	83.8	96	74						
	MARSHALLS PEN	8.56	3.66	13	13	6	2	82.7	67.5	75.1	88	63	63.8		16	1	1	0
	MASON RIVER FIELD	11.34	2.88	13	14	8	3											
	MONTEGO BAY AIRPORT	3.11	.82	13	11	2	0	88.0	74.3	81.5	91	73		205.2	9	0	0	0
	MORANT POINT LH	8.99	4.10	31	8	4	2	88.3	77.5	82.9	90	73			4	0	0	0
JAMAICA	NEGRIL POINT LH	8.54	2.03	15	10	7	4	90.3	74.8	82.6	94	73						
	PALISADOES AIRPORT	5.18	2.12	31	8	3	3	89.8	77.9	83.9	95	73		208.7	10	0	0	0
	WORTHY PARK	8.07	3.59	13	10	6	2	86.5	66.6	76.1	89	62		163.1				
CAYMAN ISLANDS	GRAND CAYMAN APT	8.81	4.28	14	15	6	2	89.7	76.1	82.9	92	72			4	0	0	0
BR HONDURAS	BELIZE AIRPORT	8.41	1.76	24	18	8	1	88.2	76.3	82.2	94	70			13	1	0	0
GUYANA	BARTICA POTARO RD	8.57	1.24	1	18	9	2	89.9	70.6	80.3	93	68						
	EBINI	8.17	1.73	12	12	7	3							251.3				
	GEORGETOWN BOT GDN	12.44	3.82	21	18	9	3	86.5	74.7	80.6	90	72	72.1	241.6	0	0	0	0
	HOSOROKO	10.83	1.38	3	18	10	4	88.5	72.3	80.4	92	70						
	MABARUMA	12.09	1.73	16	28	11	4	88.0	76.4	82.2	92	71						
GUYANA	MAHAICONY ABARY RDS	8.97	1.66	17	19	9	3	85.4	74.3	79.9	86	71		280.2				
	MATTHEWS RIDGE	7.06	1.40	9	24	4	1	87.3	71.5	79.4	90	70						
	MAZARUNI PRISON	7.16	1.90	4	16	7	2	87.3	70.1	78.7	90	68		184.6	9	7	0	0
	MON REPOS	7.53	1.77	17	14	7	2	87.5	74.5	81.0	90	71		247.4				
	NEW AMSTERDAM	9.60	3.10	11	15	7	2	88.3	74.0	81.2	90	72						
GUYANA	PORT KAITUMA	7.49	1.44	28	20	6	2	91.7	69.4	80.6	95	68						
	TIMEHRI AIRPORT	13.92	2.94	21	20	11	5	88.7	71.8	80.3	92	70			13	7	0	0
	TIMEHRI CHS	12.34	1.75	2	18	11	6	89.4	70.8	80.1	92	69	70.5	179.1				
	WAUNA	10.48	1.45	6	28	11	2											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - AUGUST, 1969

COUNTRY	STATION	RUN OF WIND (n. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									TOTAL RADIATION (langleys)		
							At 2 inch Depth					At 4 inch Depth						
									EXTREMES					EXTREMES				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	MAX	DATE	MIN	MEAN MAX	MEAN MIN	MAX	MIN	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	64	96	6·58	·36	7												
	ST AUGUSTINE UWI	15	38	3·10	·22	3												
BARBADOS	HUSBANDS CMI	121	207	6·77	·30	27												
JAMAICA	EAST ALBION NURSERY	32	76	7·35	·37	25												
	PALISADOES AIRPORT	98	168	8·75	·41	24												
GUYANA	EBINI	68	105															
	GEORGETOWN BOT GDN	47	73	5·61	·29	30												
	MAHAICONY ABARY RDS	94	151															
	TIMEHRI CHS	41	70															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - AUGUST, 1969

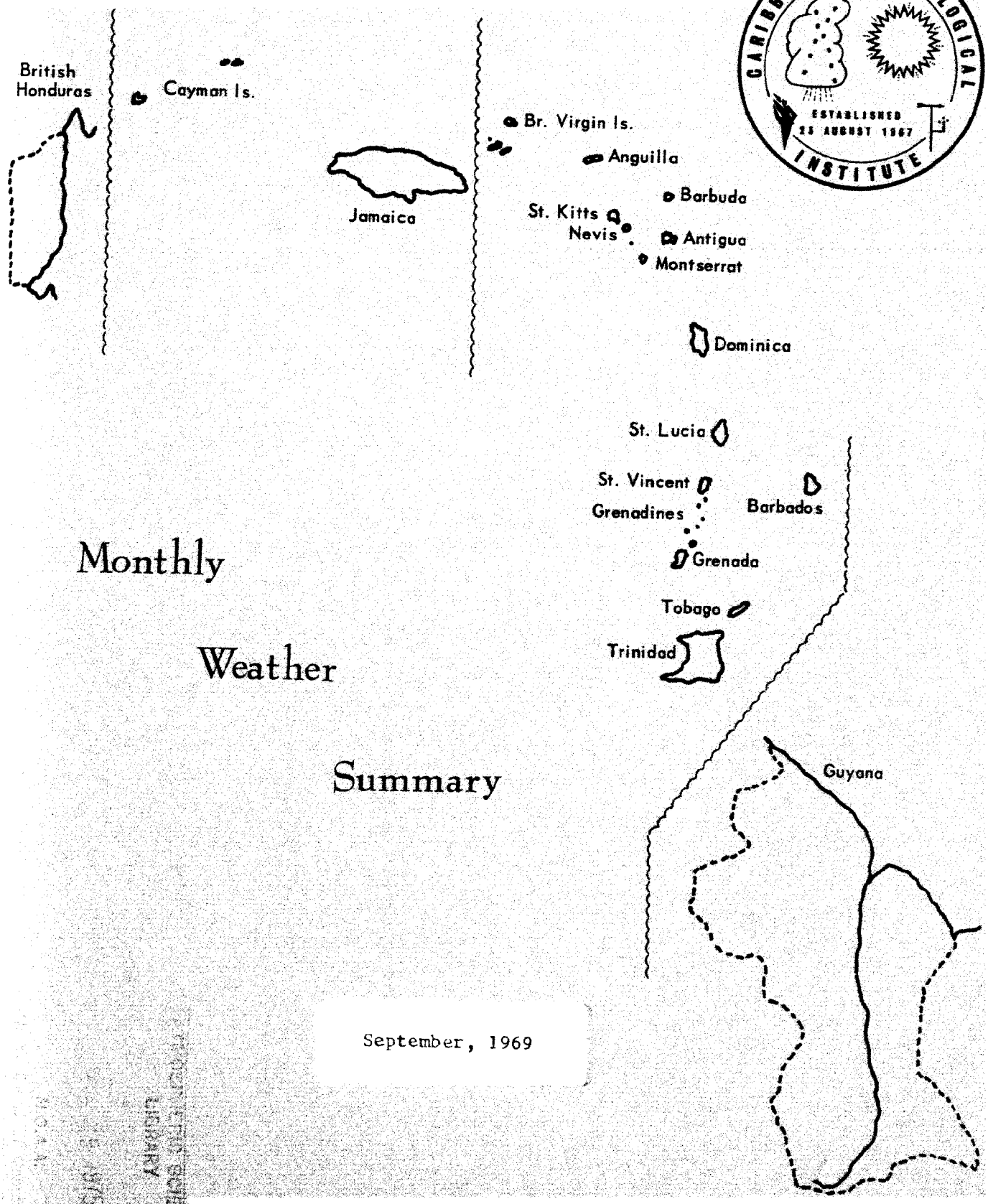
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·37	·55	·75	1·09	1·31	1·66	2·11	3·43
	ST AUGUSTINE UWI		·50	·60	·79	1·01	1·19	1·71	1·95
TOBAGO	CROWN POINT AIRPORT	·33	·41	·54	·57	·59	·83	·87	·87
BARBADOS	HAGGATTS ST A	·33	·49	·58	·74	·76	·76	1·05	1·07
	HUSBANDS CMI	·48	·64	·80	·94	1·37	2·38	4·91	4·96
BARBADOS	LION CASTLE ST T	·32	·52	·60	·78	·83	1·21	1·23	1·23
	SEAWELL AIRPORT	·20	·39	·56	·67	·67	·67	·92	·92
JAMAICA	PALISADOES APT	·21	·33	·36	·43	·49	·52	1·27	1·60
GUYANA	EBINI	·28	·50	·80	1·14	1·49	1·51	1·58	1·72
	GEORGETOWN BOT GDN	·41	·69	·86	1·43	2·25	3·82	3·82	3·82
GUYANA	MAHAICONY ABARY RDS	·42	·60	·78	1·20	1·28	1·28	1·47	1·47
	MATTHEWS RIDGE	·40	·50	·65	1·00	1·32	1·36	1·40	1·40

TABLE V - SUMMARY OF WINDSPEED RECORDS - AUGUST, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
TRINIDAD	PIARCO AIRPORT	08	14	12	29	12	29	0915	6	0	0	0	2·9
TOBAGO	CROWN POINT AIRPORT	13	20	11	12	14	44	1040	12	1	0	0	5·8
ANTIGUA	COOLIDGE AIRPORT	10	24	21	8	10	36	2010	8	2	0	0	11·3
JAMAICA	MONTEGO BAY	12	18	08	31	12	41	0820	31	3	0	0	5·2
	PALISADOES APT	06	18	15	2	06	28	1455	2	0	0	0	4·5
BR HONDURAS	BELIZE AIRPORT	09	15	09	9	11	31	0815	8	0	0	0	3·4
GUYANA	GEORGETOWN BOT GDN	12	12	11	7	12	27	0040	12	0	0	0	4·2

TABLE VI - SUMMARY OF SUNSHINE RECORDS - AUGUST, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NO OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	45	74	72	67	54	45	48	56	50	39	41	17	0	188·8	49	11·3	20	0	4	10	11	6	0
	ST AUGUSTINE UWI	0	48	79	78	74	64	47	44	44	50	49	48	23	0	200·9	52	12·0	20	0	5	6	14	6	0
TOBAGO	CROWN POINT AIRPORT	0	38	73	74	80	76	69	69	67	57	58	55	43	0	235·7	61	11·2	20	0	4	5	8	14	0
BARBADOS	SEAWELL AIRPORT	0	27	64	77	89	89	82	88	83	74	66	60	23	1	255·6	66	11·9	9	1	0	5	10	15	0
JAMAICA	DUCKENFIELD	0	14	56	65	65	71	79	84	81	76	67	62	24	0	215·3	60	10·9	26	2	2	2	12	13	0
JAMAICA	MONTEGO BAY	0	51	84	82	77	75	77	68	64	50	25	23	7	0	205·2	52	11·0	27	2	3	4	16	6	0
	PALISADOES	0	41	65	75	76	77	77	72	59	50	41	26	14	0	208·7	53	11·4	24	2	4	7	8	10	0
GUYANA	EBINI	0	26	65	80	88	88	88	83	78	69	55	57	33	0	251·3	66	11·4	6	0	2	4	13	12	0
	GEORGETOWN BOT GDN	0	27	63	68	66	61	66	65	78	79	84	79	43	0	241·6	53	11·4	27	0	1	7	11	12	0
	MAHAICONY ABARY RDS	0	35	65	69	84	85	81	84	93	89	90	78	51	0	280·2	73	11·7	10	0	0	4	10	17	0
GUYANA	MAZARUNI PRISON	0	9	39	64	72	72	74	73	61	54	40	32	4	0	184·6	48	10·0	7	0	3	13	12	3	0
	MON REPOS	0	26	57	66	69	69	65	72	80	81	87	77	48	1	247·4	65	11·4	2	0	1	8	9	13	0
	TIMEHRI CHS	0	22	58	61	59	63	61	52	49	50	51	41	12	0	179·1	47	10·9	30	0	3	16	8	4	0



CARIBBEAN METEOROLOGICAL INSTITUTE
ESTABLISHED 25 AUGUST 1967

Monthly Weather Summary

September, 1969

MONTHLY WEATHER SUMMARY

Prepared and published by the
Caribbean Meteorological Institute
Husbands, St. James, Barbados, W.I.

September, 1969

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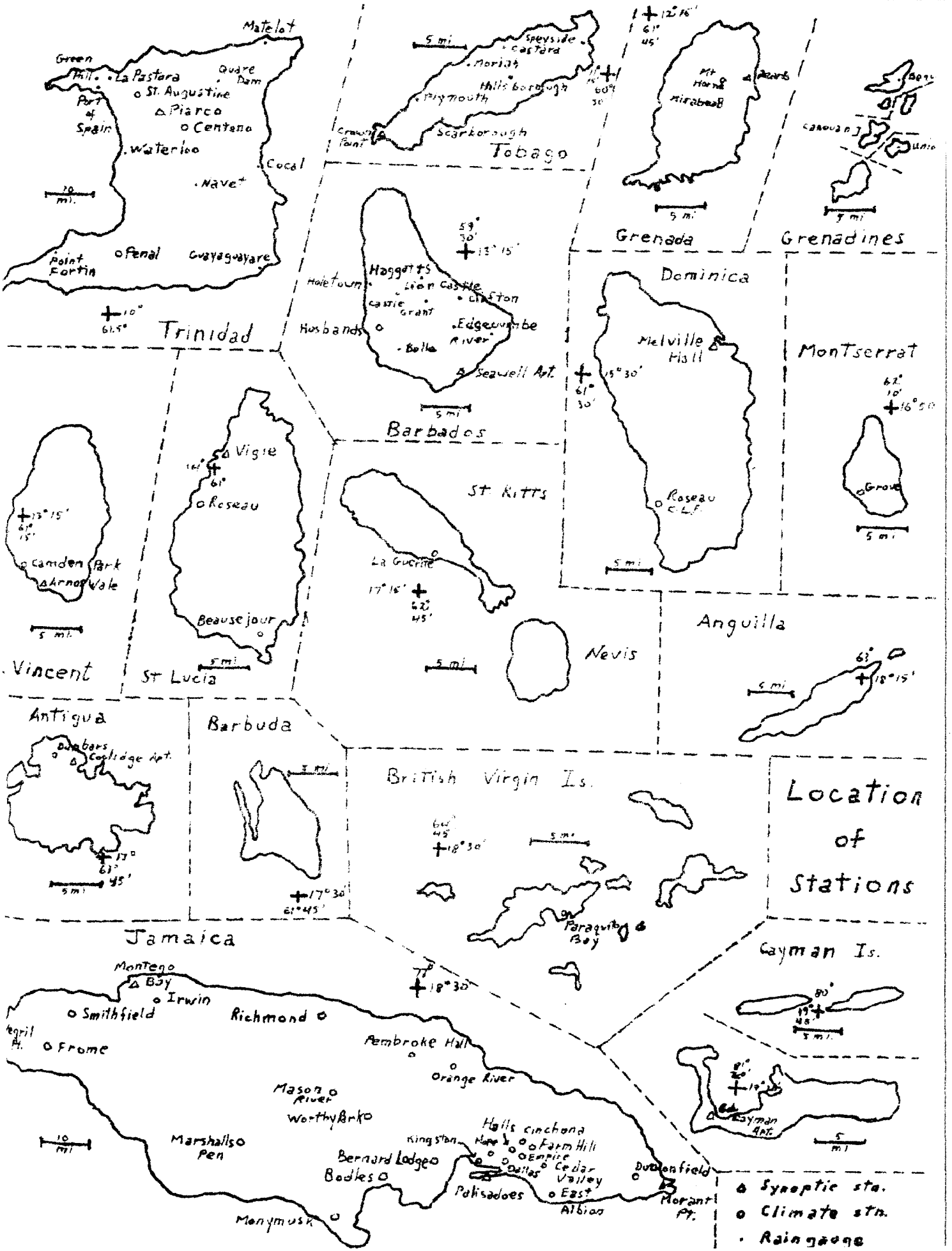
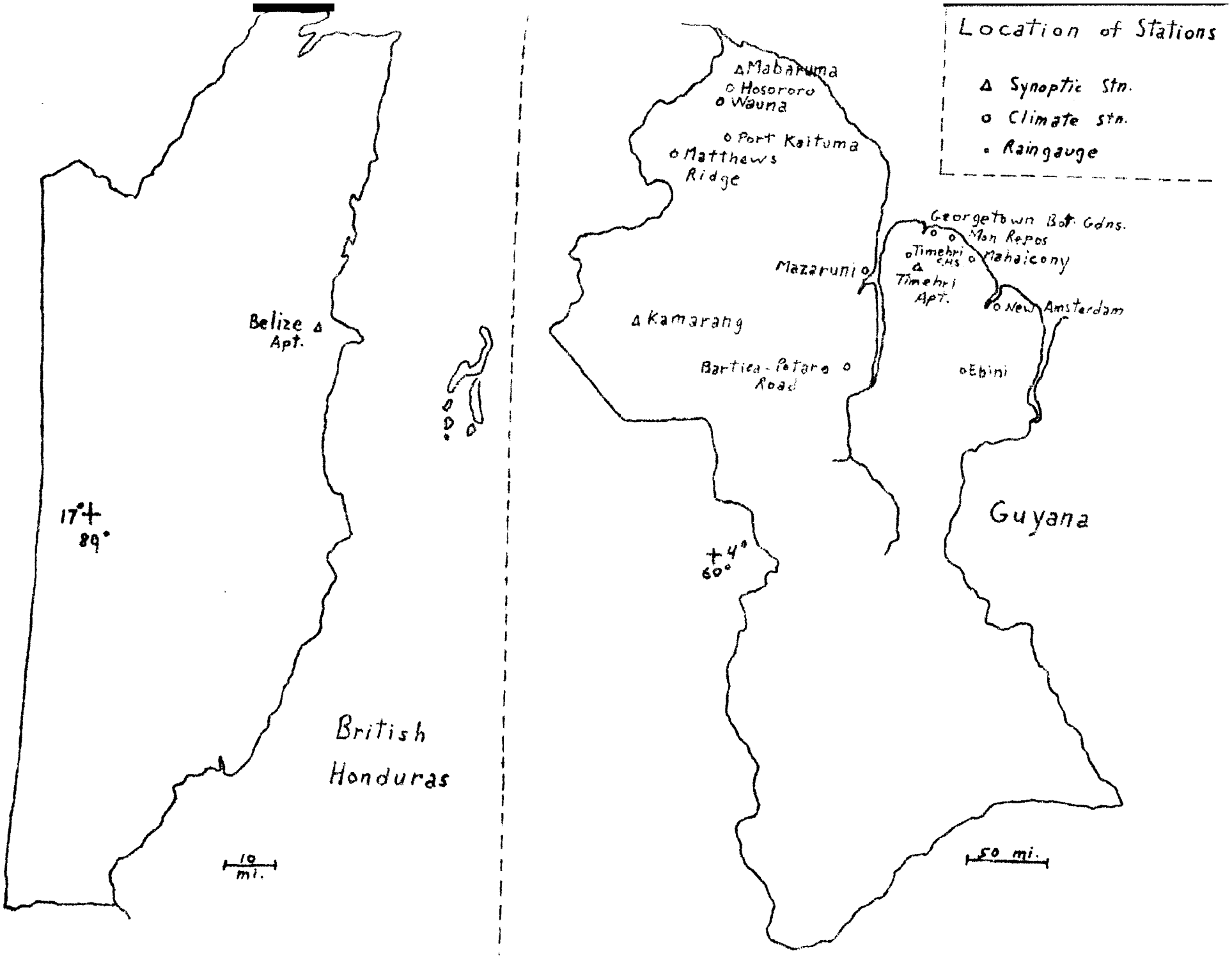
9. Additions and Corrections


Location of Stations
Trinidad
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Port of Spain
Piarco
Centeno
Waterloo
Cocal
Navet
Point Fortin
Penal
Guayaguayare
Tobago
Speyside
Castara
Moriah
Hillsborough
Plymouth
Scarborough
Crown Point
Grenada
Mt Horne
Mirabeau
Grenadines
Canouan
Union
Barbados
Haggatts
Holetown
Lion Castle
Clifton
Castle Grant
Husbands
Edgecumbe
River
Belle
Seawell Apt.
Dominica
Melville Hall
Roseau C.L.F.
Montserrat
Grove
St Ritts
La Guerne
Nevis
Anguilla
Vincent
Camden Park
Arnos Vale
St Lucia
Vigie
Roseau
Beausejour
Antigua
Dunbars
Coolidge Apt.
Barbuda
British Virgin Is.
Paraquito Bay
Jamaica
Montego Bay
Irwin
Smithfield
Frome
Richmond
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Monymusk
Kingston
Halls
Cinchona
Farm Hill
Empire
Dallas
Cedar Valley
Palisadoes
East Albion
Dunlonfield
Morant Pt.
Cayman Is.
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Belize Apt.
17°
89°
British Honduras
10 mi.
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica-Potaro Road
4°
60°
Georgetown Bot. Gdns.
Man Repos
Timehri CHS
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at <u>that time</u> of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

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4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

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during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10 is also given. The highest speed for any clock hour

/ct'd.....

is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - SEPTEMBER, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	75·3	74·3	28·5	95	1010·6	0·0	4·6	4	5	7	12	2	0	0	0	0	0	0	0	3	27
			08	79·6	76·6	30·0	87	1012·3	1·1	5·3	0	7	4	18	1	0	0	0	0	0	0	0	3	27
			14	85·2	77·7	29·1	70	1010·2	5·6	6·2	0	0	7	21	2	0	0	1	0	0	1	1	3	24
			20	78·7	76·3	29·9	89	1010·8	0·7	5·0	2	3	7	17	1	0	0	0	0	0	0	0	1	29
	ST AUGUSTINE UWI	52	16	83·9	77·4	29·3	74	1009·8	1·5	6·0	0	2	7	14	7	0								
				•	•	•																		
TOBAGO	CROWN POINT AIRPORT	9	02	78·8	75·7	28·9	86	1010·7	4·9	5·8	0	4	4	20	2	0	0	0	0	0	0	0	1	29
			08	82·5	77·6	30·1	79	1012·3	7·4	5·4	0	6	4	18	2	0	0	0	1	0	0	1	4	24
			14	85·3	78·8	30·9	75	1010·6	9·2	5·8	0	4	4	21	1	0	0	0	0	0	0	0	5	25
			20	79·6	76·2	29·3	85	1011·1	4·7	5·7	1	5	3	19	2	0	0	0	0	0	0	0	2	28
GRENADA	MOUNT HORNE	500	08	81·2	78·1	31·4	87																	
				•	•	•																		
BARBADOS	HUSBANDS CMI	370	08	80·6	77·3	30·6	86	1013·0	4·8	5·3	0	3	11	14	2	0	0	0	0	1	0	0	5	24
			14	82·8	77·9	30·4	79	1011·1	6·5	6·5	0	0	6	21	3	0	0	0	2	0	0	1	4	23
	SEAWELL AIRPORT	183	02	77·9	75·1	28·4	87	1010·8	5·8	3·5	0	14	9	6	1	0	0	0	0	0	0	0	0	30
			08	81·6	77·0	29·6	80	1012·6	6·6	5·1	0	2	15	11	2	0	0	0	0	0	0	0	0	30
			14	84·6	77·7	29·4	72	1010·8	8·5	5·7	0	2	11	15	2	0	0	0	0	0	0	0	1	29
				•	•	•																		
BARBADOS	SEAWELL AIRPORT	183	20	79·1	75·8	29·0	86	1011·7	6·3	4·7	0	6	10	13	1	0	0	0	0	0	0	0	0	30
ST VINCENT	ARNOS VALE AIRPORT	30	08	82·8	77·3	29·6	77	1012·3	8·7	3·9	0	12	4	9	0	0	0	0	0	0	0	0	1	24
			14	87·4	78·7	29·8	67	1011·2	9·5	4·5	0	4	9	7	0	0	0	0	0	0	0	0	0	20
	CAMDEN PARK	30	08	80·6	76·9	29·8	83	1015·0	7·1	4·1														
ST LUCIA	VIGIE AIRPORT	7	08	82·2	76·8	29·2	78	1012·6	3·6	4·8	0	4	13	10	3	0	0	0	0	0	0	0	5	25
				•	•	•																		
ST LUCIA	VIGIE AIRPORT	7	14	85·8	77·4	28·4	67	1011·1	7·9	5·8	0	3	8	15	4	0	0	0	0	0	0	1	1	28
DOMINICA	MELVILLE HALL APT	43	09	84·0	79·2	30·6	77	1013·8	4·4	4·7	0	3	13	11	0	0	0	0	0	0	0	0	1	26
			14	84·6	78·7	31·0	76	1012·5	7·0	5·4	0	1	12	14	1	0	0	0	0	0	0	0	0	28
ANTIGUA	COOLIDGE AIRPORT	26	08	82·3	77·4	30·3	80	1013·0	8·4	5·0	0	1	20	8	1	0	0	0	0	0	0	0	0	30
			14	86·2	78·3	29·6	69	1011·9	10·8	5·5	0	0	13	16	1	0	0	0	0	0	0	0	0	30
				•	•	•																		
ANTIGUA	COOLIDGE AIRPORT	26	20	81·1	76·8	29·6	82	1012·5	7·8	5·1	0	1	16	10	3	0	0	0	0	0	0	0	0	30
	DUNBARS	220	09	83·9	78·0	30·2	76																	
			15	85·0	78·0	29·6	72																	
JAMAICA	CEDAR VALLEY	1980	07	70·4	68·7	23·2	91																	
			13	81·3	75·5	27·6	76																	
				•	•	•																		
JAMAICA	DALLAS	950	09	80·7	76·2	28·9	81																	
			15	83·4	77·4	29·5	77																	
	DUCKENFIELD	60	08	80·9	77·7	31·1	86																	
	EAST ALBION NURSERY	90	07	78·4	73·8	26·6	80																	
			13	87·4	79·3	30·5	69																	
				•	•	•																		
JAMAICA	EMPIRE NURSERY	2130	07	67·5	66·6	21·8	95																	
			13	81·5	74·3	25·8	70																	
	FARM HILL	4020	07	65·9	62·6	18·0	83																	
			13	77·3	69·6	21·3	67																	
	HALLS DELIGHT	3020	07	72·7	67·6	21·0	77																	
				•	•	•																		
JAMAICA	HALLS DELIGHT	3020	13	78·0	71·2	23·3	71																	
	HOPE GARDENS	712	07	72·4	69·0	22·8	84																	
	IRWIN	80	08	82·2	77·9	30·8	82																	
			15	86·0	79·7	31·9	75																	
	KINGSTON ST GEO COLL	90	07	78·1	74·3	27·3	83																	
				•	•	•																		
JAMAICA	KINGSTON ST GEO COLL	90	15	85·6	78·9	30·8	74																	
	MARSHALLS PEN	2300	07	77·1	73·2	24·2	76		2·5	4·0	0	13	8	7	2	0								
			13	81·7	74·5	25·8	70		5·6	5·2	0	4	7	19	0	0								
	MONTEGO BAY AIRPORT	3	01	77·4	73·8	26·8	84	1011·4	1·7	3·0	0	17	7	5	1	0	0	0	0	0	0	0	1	29
			07	78·7	75·0	28·0	84	1011·1	2·1	4·6	0	9	6	12	3	0	0	0	0	0	0	0	0	30

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - SEPTEMBER, 1969
(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MONTEGO BAY AIRPORT	3	13	87.6	80.0	31.5	75	1010.8	11.1	4.2	0	10	10	8	2	0	0	0	0	0	0	0	0	30
			19	80.4	76.6	29.6	64	1010.3	2.1	5.6	0	3	6	20	1	0	0	0	0	0	0	0	1	29
	MORANT POINT LH	6	01	80.6	77.4	30.3	85		3.0	3.8	1	11	9	8	1	0	0	0	0	0	0	0	0	30
			07	80.0	77.0	29.6	86		4.2	4.4	0	6	14	7	3	0	0	0	0	0	0	0	0	30
			13	85.9	80.5	32.7	78		4.2	4.2	0	9	16	9	0	0	0	0	0	0	0	0	0	30
JAMAICA	MORANT POINT LH	6	19	82.4	78.0	31.2	83		3.3	3.9	0	9	12	7	2	0	0	0	0	0	0	0	0	30
	NEGRIL POINT LH	27	07	77.6	74.3	27.6	85	1010.8	1.1	4.6	0	10	7	8	5	0	0	0	0	0	0	0	0	29
			13	88.6	79.8	30.8	67	1010.9	4.6	4.9	0	5	11	12	2	0	0	0	0	0	0	0	0	28
			19	81.4	77.2	30.1	82	1010.0	1.8	5.6	0	6	6	8	10	0	0	0	0	0	0	0	0	28
	PALISADOES AIRPORT	9	01	80.5	76.1	28.7	81	1011.1	0.6	2.6	0	19	5	5	1	0	0	0	0	0	0	0	0	30
JAMAICA	PALISADOES AIRPORT	9	07	81.3	76.5	28.5	78	1011.0	1.3	3.9	0	11	8	10	1	0	0	0	0	0	0	0	1	29
			13	88.3	79.6	30.2	66	1010.6	9.1	4.6	0	10	6	14	0	0	0	0	0	0	0	0	0	30
			19	83.5	77.7	29.8	76	1010.0	2.6	4.2	0	8	13	7	2	0	0	0	0	0	0	1	0	29
	WORTHY PARK	1250	07	71.8	70.1	24.5	92																	
			15	81.5	75.5	27.5	75																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	78.9	76.8	30.6	91	1011.8	3.9	6.3	0	2	4	21	3	0	0	0	0	0	0	0	T	29
			13	87.4	79.9	31.6	71	1012.1	8.2	6.0	0	2	8	12	8	0	0	0	0	0	0	4	26
			19	11.7	78.1	31.4	85	1011.2	3.4	6.3	0	3	3	20	4	0	0	0	0	0	0	0	30
BR HONDURAS	BELIZE AIRPORT	17	06	77.1	75.9	30.0	94	1009.8	1.9	6.7	0	0	3	17	3	0	0	0	0	0	0	1	9	13
			12	85.7	79.6	31.8	76	1010.3	5.4	6.5	0	0	3	25	2	0	0	0	0	0	0	2	28
BR HONDURAS	BELIZE AIRPORT	17	18	81.5	77.7	30.8	84	1008.3	3.5	6.8	0	0	4	19	5	0	0	0	0	1	0	1	4	23
GUYANA	BARTICA POTARO RD	400	08	77.3	75.2	29.9	90																	
			14	89.7	77.5	27.1	57																	
	EBINI	60	08	79.5	76.2	29.4	85																	
			14	90.4	77.0	25.7	55																	
GUYANA	GEORGETOWN BOT GDN	7	08	82.9	78.2	30.8	80	1012.5	3.4	4.8	0	2	20	8	0	0	0	0	0	0	0	0	14	16
			14	86.5	78.0	29.0	67	1009.9	7.0	4.2	0	11	7	12	0	0	0	0	0	0	0	0	2	28
	HOSORORO		08	79.8	77.1	31.2	90																	
			14	83.4	78.4	31.1	80																	
	MABARUMA	185	08	79.0	76.2	29.5	87		2.3	5.4	0	6	8	8	8	0	0	0	0	0	0	1	18	11
GUYANA	MABARUMA	185	14	86.6	79.0	30.4	70		3.1	5.7	0	0	6	19	5	0	0	0	0	1	0	2	8	19
	MATTHEWS RIDGE		08	75.7	74.5	28.6	94																	
			14	86.5	76.9	27.5	64																	
	MAZARUNI PRISON	47	08	77.3	75.3	29.2	91																	
			14	86.4	78.1	29.2	68																	
GUYANA	MON REPOS		08	83.4	77.2	29.1	75																	
			14	87.7	78.9	29.9	67																	
	NEW AMSTERDAM	3	08	82.0	77.4	30.1	81																	
			14	88.2	78.7	29.3	64																	
	PORT KAITUMA		08	75.7	74.2	28.3	93																	
GUYANA	PORT KAITUMA		14	88.3	79.6	30.6	67																	
	TIMEHRI AIRPORT	95	02	74.1	73.8	28.3	98	1010.2	0.0	3.7	3	9	8	9	0	0	0	1	0	2	0	0	17	9
			08	79.5	76.8	30.2	88	1011.8	3.8	4.5	0	9	6	15	0	0	0	0	0	0	0	0	1	29
			14	87.6	77.8	28.3	63	1009.2	8.5	6.1	0	0	9	21	0	0	0	0	0	0	0	3	27
			20	76.9	75.5	29.5	93	1010.1	1.0	4.8	2	4	10	13	1	0	0	0	0	0	0	0	8	22
GUYANA	TIMEHRI CMS		08	79.8	77.5	31.3	90																	
			14	86.9	78.4	31.1	71																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - SEPTEMBER, 1969

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN ·04	·40	1·00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER HEARD	FOG	HAIL	GALE
TRINIDAD	COCAL EST	9·77	3·24	8	14	7	3											
	GREEN HILL RIVER EST	5·23	·99	6	14	4	0											
	GUAYAGUAYARE	6·89	1·32	11	14	7	3											
	LA PASTORA	5·01	1·06	6	16	5	1											
	MATELOT	11·99	2·85	17	17	6	4											
TRINIDAD	NAVET DAMSITE	9·61	1·39	11	17	11	4											
	PIARCO AIRPORT	8·69	1·36	22	15	9	3	89·3	73·5	81·4	92	70	70·5	207·6	10	0	0	0
	POINT FORTIN	4·86	·79	23	17	4	0											
	PORT OF SPAIN R BOT	4·16	·87	28	15	4	0											
	QUAREDAM HOLLIS	11·86	3·36	29	19	8	3											
TRINIDAD	ST AUGUSTINE UWI	6·59	1·16	15	15	7	2	89·0	72·4	80·7	92	69	70·4	211·4	6	0	0	0
	WATERLOO EST	5·37	1·67	28	11	4	2											
TOBAGO	CASTARA	18·01	4·80	7	20	10	7											
	CROWN POINT AIRPORT	7·78	2·11	29	12	5	3	87·0	75·6	81·3	88	72		231·8	7	0	0	0
	HILLSBOROUGH DAM	17·44	2·71	24	21	12	6											
TOBAGO	MORIAH	13·76	2·57	29	20	12	5											
	PLYMOUTH WHITE ROCK	10·63	2·50	29	17	9	3											
	SCARBOROUGH BOT STN	11·81	2·11	29	14	8	5											
	SPEYSIDE	9·20	1·86	15	18	7	4											
GRENADA	MOUNT MORNE	11·90	2·45	16	13	8	5	87·8	74·3	81·0	90	70		187·6				
BARBADOS	BELLE ST M	7·50	1·32	15	17	7	2											
	CASTLE GRANT ST JOS	11·04	1·75	23	20	8	4											
	CLIFTON HALL ST J	7·35	2·60	23	18	6	1											
	EDGECUMBE ST P	7·84	2·03	15	21	6	1											
	HAGGATTS ST A	6·28	1·96	23	17	5	2											
BARBADOS	HOLETOWN ST JA	5·08	·90	15	16	5	0											
	HUSBANDS CMI	8·91	1·64	21	18	5	4	86·2	73·4	79·8	89	70			6	0	0	0
	RIVER ST P	7·92	1·96	15	18	6	2											
	SEAWELL AIRPORT	8·44	1·93	12	20	6	3	87·0	75·0	81·0	91	72	71·8	225·7	0	0	0	0
ST VINCENT	CAMDEN PARK	7·39	1·84	16	13	5	3	88·3	75·2	81·8	90	72						
ST LUCIA	VIGIE AIRPORT							88·2	74·9	81·6	91	70			7	0	0	0
DOMINICA	MELVILLE HALL APT	13·38	3·18	24	22	10	3	86·3	74·5	80·4	89	71		168·6	0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	3·69	·91	17	18	2	0	87·8	77·4	82·6	90	73			0	0	0	0
	DUNBARS	4·47	1·55	27	16	2	1	88·9	75·9	82·4	94	73						
JAMAICA	BERNARD LODGE	4·73	3·70	20	5	1	1	89·9	68·7	79·3	92	63		227·7				
JAMAICA	CEDAR VALLEY	10·50	2·24	20	17	9	4	83·4	67·3	75·4	86	65						
	DALLAS	6·35	4·42	20	5	2	2	84·4			92							
	DUCKENFIELD	6·39	1·34	18	13	6	1	88·5	73·3	80·9	91	70	67·1	197·0				
	EAST ALBION NURSERY	5·69	2·54	19	12	2	2	88·6	72·4	80·5	91	64						
	EMPIRE NURSERY	7·93	2·37	20	11	4	2	83·9	65·3	74·6	86	63						
JAMAICA	FARM HILL	7·43	2·10	3	17	7	3	78·8	61·6	70·2	81	61						
	HALLS DELIGHT	7·26	2·17	20	12	5	3	80·1	65·3	72·7	86	63						
	HOPE GARDENS	7·45	2·84	20	10	4	2	88·8	63·6	76·2	94	61						
	IRWIN	7·35	1·56	29	11	7	3	91·0	71·6	81·3	93	70						
	KINGSTON ST·GEORGES	5·09	3·80	20	7	2	1	90·6	75·6	83·1	93	72						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - SEPTEMBER, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (inches)						AIR TEMPERATURE °F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN			MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES				THUNDER HEARD	FOG	HAIL	GALE
					·04	·40	1·00				MAX	MIN						
JAMAICA	MARSHALLS PEN	3·63	1·02	6	15	2	1	83·0	66·4	74·7	86	63	62·9		12	1	0	0
	MONTEGO BAY AIRPORT	3·22	·96	19	9	4	0	88·8	71·9	82·0	91	73			15	0	0	0
	MORANT POINT LH	6·80	2·00	18	8	6	3	88·2	76·4	82·3	89	72			8	0	0	0
	NEGRIL POINT LH	2·54	1·00	30	9	3	1	91·3	75·2	83·3	94	74						
	PALISADOES AIRPORT	4·93	4·77	20	2	1	1	89·9	78·7	84·3	92	73		207·3	15	0	0	0
JAMAICA	WORTHY PARK	4·20	1·31	24	10	5	1	86·7	66·3	76·5	89	62		156·8				
CAYMAN ISLANDS	GRAND CAYMAN APT	9·18	4·33	1	14	5	2	89·6	75·2	82·4	92	60			0	0	0	0
BR HONDURAS	BELIZE AIRPORT	16·38	3·90	2	16	10	6	87·8	75·9	81·8	91	73			6	0	0	0
GUYANA	BARTICA POTARO RD	3·66	1·01	29	11	6	2	91·9	70·3	81·1	96	68						
	EBINI	2·45	·99	5	7	2	0	92·6			95			230·3				
GUYANA	GEORGETOWN BOT GDN	2·06	1·52	4	1	1	1	87·8	76·4	82·1	90	73	71·5	267·1	2	0	0	0
	HOSORORO	5·11	·94	4	16	5	0	90·4	73·1	81·8	93	72						
	MABARUMA	7·40	1·50	11	20	6	2	90·0	76·7	83·4	93	73						
	MATTHEWS RIDGE	5·16	1·76	10	13	3	1	89·3	72·4	80·8	93	70						
	WAZARUNI PRISON	6·60	1·50	8	18	6	1	88·3	70·7	79·5	92	68		163·5	11	7	0	0
GUYANA	MON REPOS	·29	·25	4	1	0	0	88·9	76·7	82·8	91	74						
	NEW AMSTERDAM	2·61	1·45	21	10	2	1	89·6	75·0	82·3	91	73						
	PORT KAITUMA	7·85	1·04	4	20	9	1	92·6	69·6	81·1	95	68						
	TIMEHRI AIRPORT	5·12	2·21	4	12	4	1	90·6	69·1	81·5	93	70			6	5	0	0
	TIMEHRI CHS	4·08	2·26	4	9	2	1	91·0	70·6	80·8	94	68	71·2	179·5				
GUYANA	WAUNA	10·56	1·77	23	20	9	4											

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - SEPTEMBER, 1969

COUNTRY	STATION	RUN OF WIND (½ miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F At 2 inch Depth					At 4 inch Depth				TOTAL RADIATION (langleys)		
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	EXTREMES MAX	DATE	MIN	MEAN MAX	MEAN MIN	EXTREMES MAX	MIN	TOTAL FOR MONTH	MOST IN A DAY	LEAST IN A DAY
TRINIDAD	PIARCO AIRPORT	73	117	6·34	·34	22												
	ST AUGUSTINE UWI	21	46	3·86	·20	25												
BARBADOS	HUSBANDS CMI	109	171															
JAMAICA	EAST ALBION NURSERY	24	68	5·86	·33	8												
	FARM HILL	13	105	2·84	·16	29												
	PALISADOES AIRPORT	69	132	7·75	·35	7												
GUYANA	EBINI	79	108															
	GEORGETOWN BOT GDN	62	101	6·89	·31	8												
	TIMEHRI CHS	48	65															

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - SEPTEMBER, 1969

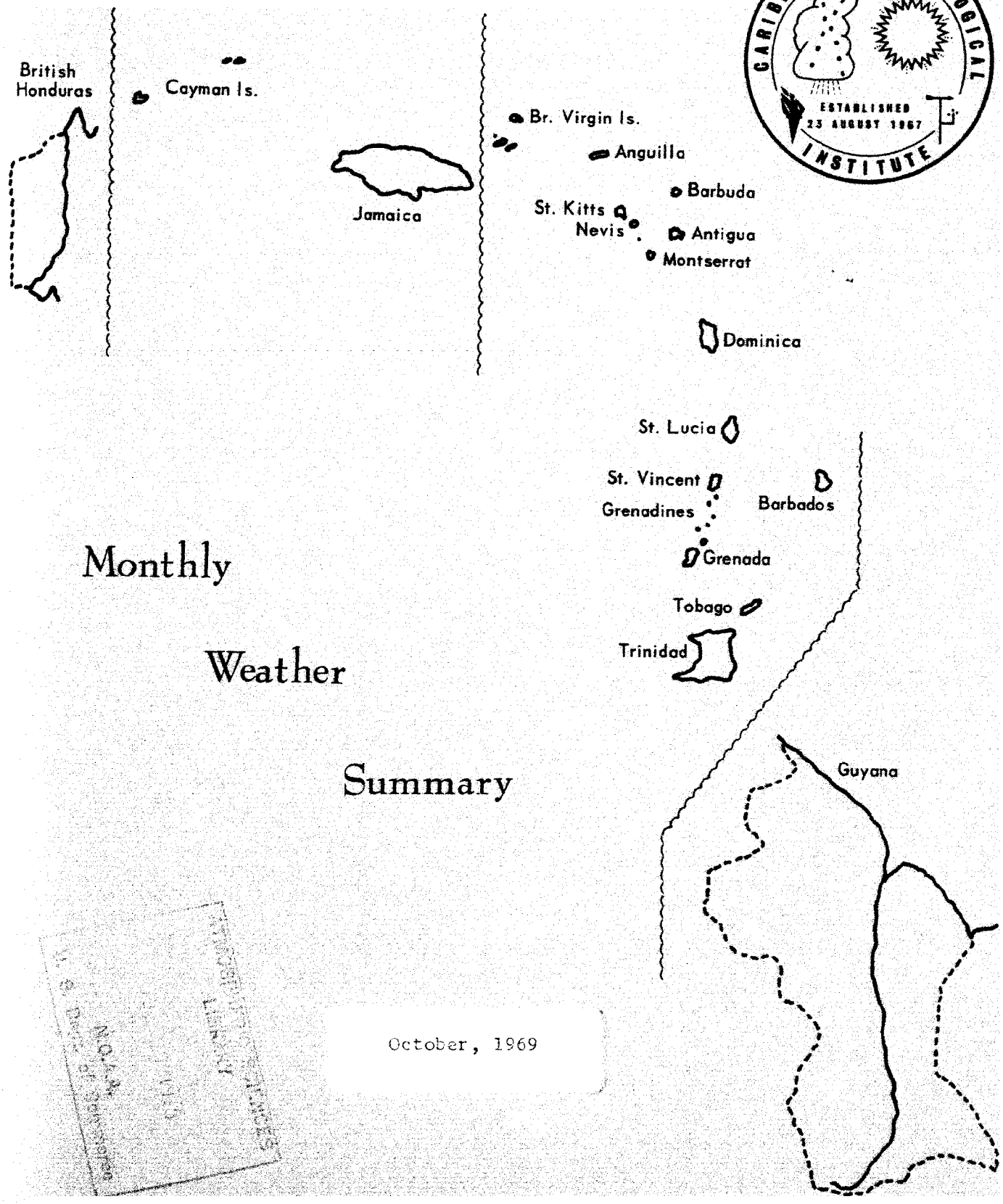
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY. DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	·32	·51	·87	1·27	1·36	1·36	1·36	1·36
	ST AUGUSTINE UWI		·45	·50	·80	1·05	1·13	1·13	1·13
TOBAGO	CROWN POINT AIRPORT	·39	·59	·63	·79	1·45	2·23	2·28	2·28
BARBADOS	HAGGATTS ST A	·34	·45	·50	·73	·84	·87	2·08	2·20
	HUSBANDS CMI	·48	[illegible]	·82	1·04	1·65	2·24	2·40	2·40
BARBADOS	LION CASTLE ST T	·47	[illegible]	·64	·70	·72	·73	·78	1·05
JAMAICA	PALISADOES APT	·37	·74	·81	1·20	1·82	2·58	4·73	4·76
GUYANA	EBINI	·28	·40	·48	·72	·72	·94	·94	·94
	GEORGETOWN BOT GDN	·30	·47	·54	·54	·75	·77	1·34	1·52
	MATTHEWS RIDGE	·26	·30	·40	·62	·84	·90	1·76	1·76

TABLE V - SUMMARY OF WINDSPEED RECORDS - SEPTEMBER, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	38	47	63	
TRINIDAD	PIARCO AIRPORT	10	14	13	6	10	30	1255	10	0	0	0	3·3
TOBAGO	CROWN POINT AIRPORT	19	16	15	16	20	31	1455	16	0	0	0	6·5
ANTIGUA	COOLIDGE AIRPORT	11	17	23	15	08	33	1745	15	0	0	0	8·5
JAMAICA	MONTEGO BAY	07	19	14	5	06	27	1245	5	0	0	0	4·0
	PALISADOES APT	13	16	16	9	08	29	1540	3	0	0	0	3·4
BR HONDURAS	BELIZE AIRPORT	03	16	18	2	04	35	1730	2	1	0	0	3·2
GUYANA	GEORGETOWN BOT GDN	10	13	12	29	11	25	1145	29	0	0	0	8·8

TABLE VI - SUMMARY OF SUNSHINE RECORDS - SEPTEMBER, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NOS OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	36	77	81	82	72	69	64	49	48	49	44	15	0	207·6	56	11·0	14	0	4	8	8	10	0
	ST AUGUSTINE UWI	0	23	77	86	86	78	68	69	51	55	52	50	16	0	211·4	58	11·0	19	0	4	5	13	8	0
TOBAGO	CROWN POINT AIRPORT	0	32	72	75	78	81	78	80	73	68	61	57	27	0	231·8	64	11·5	14	0	5	4	8	13	0
BARBADOS	SEAWELL AIRPORT	0	30	72	70	73	71	73	72	68	67	69	58	28	0	225·7	62	11·2	9	3	4	1	4	18	0
DOMINICA	MELVILLE HALL APT	0	3	41	54	63	74	72	61	58	60	46	31	4	0	168·6	46	10·7	1	3	2	11	11	3	0
JAMAICA	PALISADOES	0	33	73	81	85	83	83	72	63	46	33	26	13	0	207·3	57	11·3	21	0	4	4	15	7	0
GUYANA	EBINI	0	9	53	76	89	87	92	87	82	77	59	44	13	0	230·3	63	11·3	8	0	1	4	17	8	0
	GEORGETOWN BOT GDN	0	26	80	83	84	89	89	91	92	90	75	65	27	0	267·1	73	11·2	26	0	0	3	10	14	0
	MAZARUNI PRISON	0	3	13	60	78	80	68	66	61	54	43	18	0	0	163·5	45	8·8	24	0	7	9	14	0	0
	TIMEHRI CHS	0	2	63	73	67	65	68	61	56	52	49	44	4	0	179·5	49	9·6	8	0	5	8	14	3	0



Monthly Weather Summary

October, 1969

MONTHLY WEATHER SUMMARY

Prepared and published by the
Caribbean Meteorological Institute
Husbands, St. James, Barbados, W.I.

October, 1969

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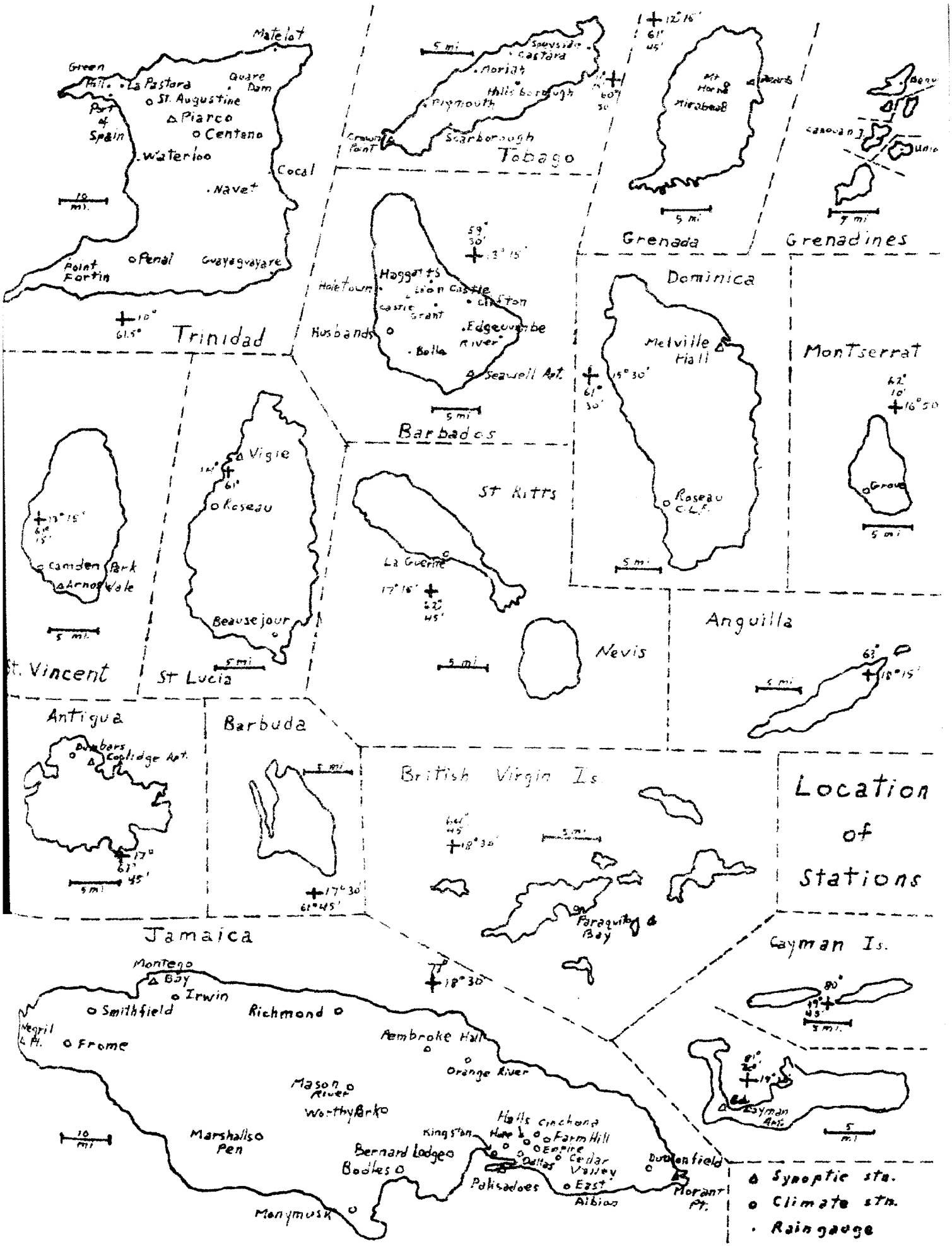
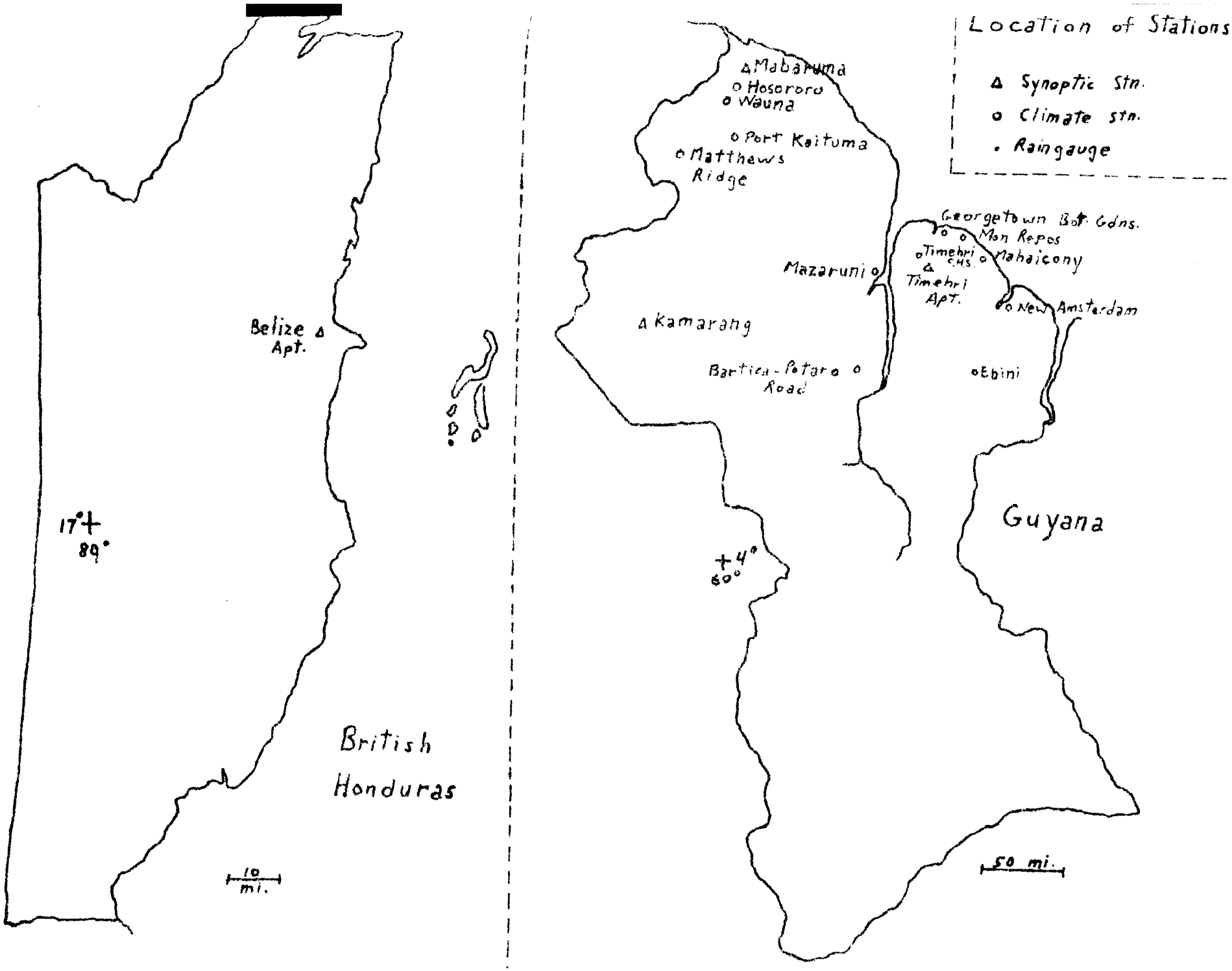

Location of Stations
Trinidad
Tobago
Grenada
Grenadines
Barbados
Dominica
Montserrat
St. Vincent
St Lucia
St Ritts
Nevis
Anguilla
Antigua
Barbuda
British Virgin Is.
Jamaica
Cayman Is.
Matelot
Green Hill
La Pastora
Quare Dam
St. Augustine
Port of Spain
Piarco
Centeno
Waterloo
Cocal
Navet
Point Fortin
Penal
Guayaguayare
Speyside
Castara
Moriah
Hillsborough
Plymouth
Crown Point
Scarborough
Mt Horne
Mirabeau
Canouan I.
Union
Haggatts
Holetown
Leon Castle
Clifton
Castle Grant
Husbands
Edgecumbe
River
Bella
Seawell Apt.
Melville Hall
Roseau C.L.F.
Grove
Vigie
Roseau
Camden Park
Arnos Vale
Beausejour
La Guerite
Dumbars
Coolidge Apt.
Paraquito Bay
Montego Bay
Irwin
Smithfield
Richmond
Negril Pt.
Frome
Pembroke Hall
Orange River
Mason River
Worthy Park
Marshalls Pen
Bernard Lodge
Bodles
Monymusk
Kingston
Halls
Cinchona
Hope
Farm Hill
Empire
Dallas
Cedar Valley
Palisadoes
East Albion
Dunlonfield
Morant Pt.
Cayman Apt.
Synoptic stn.
Climate stn.
Raingauge


Location of Stations
Synoptic Stn.
Climate stn.
Raingauge
Belize Apt.
17°
89°
British Honduras
10 mi.
Mabaruma
Hosororo
Wauna
Port Kaituma
Matthews Ridge
Mazaruni
Kamarang
Bartica-Potaro Road
4°
60°
Georgetown Bot. Gdns.
Mon Repos
Timehri CHS.
Mahaicony
Timehri Apt.
New Amsterdam
Ebini
Guyana
50 mi.

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The maps show the approximate location of the stations, including some that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time. A complete station list is published in the January issue each year.

2. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

3. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

4. Local Standard Time (LST) in British Hondruas is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

5. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

6. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

/ct'd.....

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eights), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as, for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain) is present in the air.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. The mean of the 30 or 31 daily values is given in the table.

5. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days

/ct'd.....

during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

2. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the month is given in the table together with the maximum daily loss during the month and the date on which it occurred.

3. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

4. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observtion is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour

/ct'd.....

is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations' latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed; provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - OCTOBER, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	74.6	73.6	27.9	96	1009.7	0.5	4.1	2	9	10	9	1	0	0	1	0	0	0	0	0	30
			08	79.6	76.5	30.0	87	1011.5	1.9	4.3	0	10	8	11	2	0	0	0	0	0	0	1	3	27
			14	84.6	77.1	28.6	70	1009.6	7.1	6.1	0	3	5	20	3	0	0	2	1	0	0	4	6	18
			20	77.9	75.9	29.7	91	1010.5	0.9	4.7	1	7	7	14	2	0	0	0	0	0	0	0	0	31
	ST AUGUSTINE UWI	52	16	83.3	77.1	29.0	75	1009.3	1.2	6.2	0	2	6	16	7	0								
TOBAGO	CROWN POINT AIRPORT	9	02	78.3	75.1	28.4	86	1010.0	4.9	5.3	0	5	9	17	0	0	0	0	0	0	0	0	3	28
			08	83.3	77.7	29.8	77	1011.6	8.4	4.9	0	8	6	16	1	0	0	0	0	0	0	0	1	30
			14	84.8	78.4	36.4	75	1009.8	9.5	5.3	0	5	10	18	0	0	0	0	0	0	0	0	3	28
			20	79.5	75.9	28.9	84	1010.9	5.8	5.2	0	7	7	15	2	0	0	0	1	0	0	0	1	29
GRENADA	MOUNT HORNE	500	08	81.3	77.6	30.8	84																	
BARBADOS	HUSBANDS CHI	370	08	80.1	76.6	29.9	85	1012.4	5.5	4.5	0	6	12	13	0	0	0	0	0	0	0	1	1	29
			14	82.1	77.1	29.6	79	1010.3	7.1	6.1	0	0	8	21	2	0	0	0	0	0	0	0	2	29
	SEAWELL AIRPORT	183	02	77.8	74.9	28.4	87	1010.2	7.1	3.8	0	11	11	7	2	0	0	0	0	0	0	0	0	31
			08	81.8	76.6	29.0	78	1011.9	7.4	4.8	0	3	14	14	0	0	0	0	0	0	0	0	0	31
			14	85.0	77.8	29.4	72	1010.0	8.7	5.3	0	2	13	13	2	0	0	0	0	0	0	0	1	30
BARBADOS	SEAWELL AIRPORT	183	20	79.2	75.2	28.4	84	1011.5	6.8	4.9	0	5	12	13	1	0	0	0	0	0	0	0	0	31
ST VINCENT	ARNOS VALE AIRPORT	30	08	82.8	77.0	29.4	77	1011.7	8.6	3.2	0	14	7	6	0	0	0	0	0	0	0	0	0	27
			14	85.9	78.0	29.2	69	1010.2	10.0	4.0	0	4	7	10	1	0	0	0	0	0	0	0	1	21
ST LUCIA	VIGIE AIRPORT	7	08	82.1	76.6	28.8	77	1011.9	3.1	4.1	0	9	13	9	0	0	0	0	0	0	0	0	3	28
			14	84.4	76.9	28.3	70	1010.5	6.5	5.7	0	1	13	13	4	0	0	0	0	0	1	0	3	27
DOMINICA	MELVILLE HALL APT	43	14	84.0	77.9	29.9	75	1010.4	6.0	4.4	0	3	18	10	0	0	0	0	0	0	0	0	1	30
ANTIGUA	COOLIDGE AIRPORT	26	08	81.8	76.7	29.1	78	1012.5	6.0	3.8	0	9	14	7	1	0	0	0	0	0	0	0	0	31
			14	86.2	77.6	29.6	67	1011.1	9.2	4.0	0	3	23	5	0	0	0	0	0	0	0	0	0	31
			20	79.6	75.5	28.3	82	1012.2	4.8	3.5	0	12	11	7	1	0	0	0	0	0	0	1	30
	DUNBARS	220	09	84.0	77.5	29.4	91																	
ANTIGUA	DUNBARS	220	15	85.2	77.4	28.6	69																	
JAMAICA	CEDAR VALLEY	1980	07	68.6	67.7	22.7	95																	
			15	79.1	74.8	27.5	81																	
	CINCHONA GARDENS	4897	09	64.0	61.5	17.4	86																	
			16	65.9	64.6	20.1	89																	
JAMAICA	DALLAS	950	09	78.9	75.6	28.7	85																	
			15	81.2	76.3	28.7	79																	
	DUCKENFIELD	60	08	79.5	77.1	30.8	90																	
	EAST ALBION NURSERY	90	07	77.2	73.0	25.2	81																	
			13	85.8	78.7	30.4	72																	
JAMAICA	EMPIRE NURSERY	2330	07	67.0	66.1	21.6	96																	
	FARM HILL	4020	07	66.3	65.3	18.6	84																	
			13	75.8	69.7	22.1	72																	
	HALLS DELIGHT	3020	07	72.4	65.7	19.9	73																	
			13	74.3	69.1	22.1	76																	
JAMAICA	HOPE GARDENS	712	07	70.7	67.8	22.0	96																	
	IRWIN	80	05	60.9	77.3	30.5	84																	
			15	84.1	78.8	31.3	78																	
	KINGSTON ST GEO COLL	90	07	77.2	73.6	26.7	84																	
			15	84.7	78.3	30.3	75																	
JAMAICA	MARSHALLS PEN	2300	07	72.1	70.4	24.7	92		1.8	4.1	3	12	5	2	0	9								
			13	79.7	73.5	25.5	74		2.7	5.4	0	5	8	11	0	7								
	MONTEGO BAY AIRPORT	3	01	77.3	76.5	27.4	89	1010.4	0.9	3.4	0	15	8	4	3	0	0	0	0	0	0	0	0	30
			07	77.2	74.1	27.5	86	1010.3	0.9	3.8	0	12	10	8	1	0	0	0	0	0	0	0	0	31
			13	85.5	78.7	30.4	73	1009.8	7.7	4.2	0	10	8	12	1	0	0	0	0	0	0	1	0	30

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - OCTOBER, 1969

(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MONTEGO BAY AIRPORT	3	19	80.2	76.1	29.3	84	1009.7	2.2	5.1	0	6	8	13	4	0	0	0	0	0	0	0	1	30
	MORANT POINT LH	6	01	79.1	76.5	30.2	89		3.7	3.8	2	5	19	3	1	0	0	0	0	0	0	0	0	31
			07	80.0	76.1	30.9	88		3.2	4.4	0	4	19	8	0	0	0	0	0	0	0	0	0	31
			13	85.4	80.3	33.1	80		3.6	4.8	0	4	13	12	2	0	0	0	0	0	0	0	0	31
			19	81.9	78.8	31.5	85		3.1	4.2	1	8	11	9	2	0	0	0	0	0	0	0	0	31
JAMAICA	NEGRIL POINT LH	27	07	77.3	74.5	27.8	87	1010.1	2.1	4.8	0	9	5	10	6	0	0	0	0	0	0	0	0	27
			13	87.1	79.2	30.6	76	1009.7	5.0	5.2	0	5	11	7	7	0	0	0	0	0	0	0	0	29
			19	80.0	76.0	29.7	85	1008.8	2.0	5.0	0	7	9	5	9	0	0	0	0	0	0	0	0	26
	PALISADOES AIRPORT	9	01	79.7	75.5	28.3	82	1010.2	1.4	3.7	0	16	3	9	3	0	0	0	0	0	0	1	1	29
			07	80.2	75.2	27.6	75	1010.2	3.1	4.3	0	11	7	12	1	0	0	0	0	0	0	0	0	31
JAMAICA	PALISADOES AIRPORT	9	13	87.3	78.7	29.8	67	1009.7	11.2	4.8	0	7	9	13	2	0	0	0	0	0	0	0	0	31
			19	82.0	76.1	28.1	75	1009.7	6.5	4.3	0	12	7	10	2	0	0	0	1	0	1	0	1	28
	WORTHY PARK	1250	07	70.3	69.1	24.0	94																	
			13	81.9	75.2	26.9	73																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	77.1	75.4	29.4	92	1008.9	4.0	6.7	0	3	4	3	21	0	0	0	0	0	0	0	4	27
CAYMAN ISLANDS	GRAND CAYMAN APT	20	13	84.6	78.4	30.6	75	1009.1	7.5	5.7	0	5	7	9	10	0	0	0	0	0	0	0	10	21
			19	79.9	76.7	30.2	87	1008.6	4.4	6.3	0	5	4	1	21	0	0	0	0	0	0	0	5	26
BR HONDURAS	BELIZE AIRPORT	17	06	75.1	74.4	28.6	96	1009.9	0.4	5.9	0	4	3	13	4	3	3	0	1	1	0	3	12	7
			12	85.3	78.1	29.6	71	1010.3	3.4	5.8	0	2	7	20	2	0	0	0	0	0	0	0	5	26
			18	81.0	76.9	29.9	83	1008.5	0.9	5.0	0	5	11	14	1	0	0	0	0	0	0	0	4	27
GUYANA	BARTICA POTARO RD	400	08	79.3	76.8	30.4	89																	
			14	87.2	78.2	29.0	66																	
	EBINI	60	08	77.1	75.3	29.1	91																	
			14	90.6	80.4	30.7	63																	
	GEORGETOWN BOT GDN	7	08	86.0	77.7	28.7	68	1009.1	7.2	4.5	0	2	10	16	3	0	0	0	0	1	0	0	18	12
GUYANA	GEORGETOWN BOT GDN	7	14	82.8	77.5	31.5	82	1011.8	5.0	5.6	0	9	9	11	2	0	0	0	0	0	0	0	8	23
	HOSOROO		08	82.4	77.0	29.4	78																	
			14	87.6	78.3	28.9	65																	
	MABARUMA	165	08	78.4	75.0	29.6	89		1.7	4.7	0	4	19	5	2	0	0	0	0	0	0	0	14	17
			14	86.9	77.6	28.2	65		2.4	6.2	0	0	7	22	2	0	0	0	0	0	0	0	2	29
GUYANA	MATTHEWS RIDGE		08	82.5	76.6	28.7	76																	
			14	86.0	77.4	28.2	67																	
	MAZARUNI PRISON	47	08	78.6	76.2	29.7	89																	
			14	87.6	78.0	28.6	64																	
	MON REPOS		08	75.6	74.3	28.3	94																	
GUYANA	MON REPOS		14	87.8	77.6	28.0	62																	
	NEW AMSTERDAM	3	08	78.9	76.7	30.3	90																	
			14	85.9	78.6	30.3	72																	
	PORT KAITUMA		08	78.9	75.6	28.8	85																	
			14	91.2	76.5	24.9	50																	
GUYANA	TIMEHRI AIRPORT	95	02	73.5	73.1	27.7	98	1009.4	0.0	4.5	5	5	4	16	1	0	0	2	0	0	0	0	13	16
			08	79.3	76.0	29.2	95	1011.3	3.9	5.6	0	4	6	21	0	0	0	0	0	0	0	0	2	29
			14	87.6	76.8	26.7	60	1008.4	8.6	6.1	0	2	5	24	0	0	0	0	0	0	0	1	30
			20	76.9	74.9	28.6	90	1009.7	0.3	5.3	0	7	5	19	0	0	0	0	0	0	0	3	28
	TIMEHRI CHS		08	78.4	75.5	28.9	87																	
GUYANA	TIMEHRI CHS		14	90.4	78.5	28.1	58																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - OCTOBER, 1969

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN ·04	·40	1·00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER HEARD	FOG	HAIL	GALE
TRINIDAD	COCAL EST	4·72	1·44	4	13	4	1											
	GREEN HILL RIVER EST	5·43	·98	28	16	6	0											
	GUAYAGUAYARE	1·79	·77	1	5	2	0											
	LA PASTORA	6·68	3·57	19	11	3	1											
	MATELOT	4·69	1·45	14	10	3	1											
TRINIDAD	NAVET DAMSITE	9·58	3·19	25	16	4	3											
	PIARCO AIRPORT	8·35	2·08	4	14	8	3	88·7	73·1	80·9	91	71	70·0	218·9	0	0	0	0
	POINT FORTIN	2·50	·64	17	9	2	0											
	PORT OF SPAIN R BOT	5·49	1·24	14	15	4	2											
	QUAREDAM HOLLIS	8·32	1·41	4	18	8	5											
TRINIDAD	ST AUGUSTINE UWI	9·48	1·63	14	14	9	3	88·8	72·1	80·4	92	69	69·7	226·1	6	0	0	0
	WATERLOO EST	5·51	1·58	4	13	6	1											
TOBAGO	CASTARA	9·07	2·50	12	14	7	3											
	CROWN POINT AIRPORT	5·87	1·58	23	15	4	3	86·9	75·5	81·2	90	71		254·2	6	0	0	0
	HILLSBOROUGH DAM	8·33	1·59	22	17	9	2											
TOBAGO	MORIAH	5·24	·70	29	19	5	0											
	PLYMOUTH WHITE ROCK	5·60	1·09	5	14	5	1											
	SCARBOROUGH BOT STN	6·68	1·00	24	16	8	1											
	SPEYSIDE	7·91	1·14	4	22	6	1											
GRENADA	MOUNT HORNE	7·55	2·10	25	13	6	3	87·5	74·5	81·0	90	71		228·4				
BARBADOS	BELLE ST M	7·71	1·36	20	19	9	1											
	CASTLE GRANT ST JOS	7·52	1·50	20	23	7	2											
	CLIFTON HALL ST J	7·40	1·68	20	19	7	2											
	EDGECUMBE ST P	4·82	·93	20	14	4	0											
	HAGGATTS ST A	4·29	1·42	14	11	2	2											
BARBADOS	HOLETOWN ST JA	4·52	1·00	20	15	5	1											
	HUSBANDS CMI	7·06	1·05	20	19	9	1	85·7	73·5	79·5	87	70			4	0	0	0
	LION CASTLE ST T	7·20	1·80	20	20	7	1											
	RIVER ST P	6·03	1·82	20	17	4	1											
	SEAWELL AIRPORT	6·32	1·31	1	17	6	1	87·4	74·5	80·9	92	69	71·9	247·6	0	0	0	0
ST LUCIA	VIGIE AIRPORT							87·6	74·1	80·8	90	71			10	0	0	0
DOMINICA	MELVILLE HALL APT	18·75	1·57	9	22	14	9	86·1	76·2	81·1	88	72		192·3	0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	6·76	2·85	1[illegible]	11	3	3	87·2	76·1	81·7	91	72			0	0	0	0
	DUNBARS	6·39	2·21	14	10	4	2	89·0	74·6	81·8	93	72						
JAMAICA	BERNARD LODGE	7·09	1·53	16	11	5	5	89·1	69·0	79·0	93	66		236·4				
JAMAICA	CEDAR VALLEY	19·83	4·26	10	17	10	7	82·0	64·0	73·0	87	61						
	CINCHONA GARDENS	14·84	3·95	16	17	9	5	72·2										
	DALLAS	10·12	2·57	16	14	6	4	84·3			90							
	DOCKENFIELD	13·32	4·55	16	16	7	5	87·5	72·1	79·8	90	69	68·7	204·6				
	EAST ALBION NURSERY	11·09	2·50	15	16	6	4	88·7	71·8	80·3	91	68						
JAMAICA	EMPIRE NURSERY	13·25	2·96	16	16	7	5	80·2	64·4	72·3	85	63						
	FARM HILL	12·20	3·15	16	17	7	4	77·1	62·5	69·9	82	59						
	HALLS DELIGHT	10·46	2·79	16	12	6	4	79·0	64·5	71·8	83	62						
	HOPE GARDENS	9·44	2·12	16	15	8	2	88·2	62·4	75·3	91	61		220·5				
	IRWIN	8·04	1·80	30	17	7	4	90·0	71·3	80·7	93	68						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - OCTOBER, 1969

(CONTINUED)

COUNTRY	STATION	RAINFALL (inches)						AIR TEMPERATURE °F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN			MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES				THUNDER HEARD	FOG	HAIL	GALE
					·04	·40	1·00				MAX	MIN						
JAMAICA	KINGSTON ST·GEORGES	7·24	1·94	16	10	6	3	89·0	74·5	81·8	92	71						
	MARSHALLS PEN	8·99	2·53	17	14	5	3	81·6	66·3	73·9	86	60	63·5		13	0	0	0
	MONTEGO BAY AIRPORT	4·52	·81	28	13	5	0	87·7	73·6	80·6	90	72		211·5	8	0	0	0
	MORANT POINT LH	15·21	3·28	16	14	9	5	87·7	73·7	80·7	89	70			9	0	0	0
	NEGRIL POINT LH	7·76	1·66	1	18	6	2	89·5	74·6	82·1	94	72			28	0	0	0
JAMAICA	PALISADOES AIRPORT	8·83	1·96	16	7	7	5	89·0	76·9	82·9	92	73		243·9	14	0	0	0
	WORTHY PARK	9·57	3·66	20	13	5	3	86·0	66·6	76·3	90	64						
CAYMAN ISLANDS	GRAND CAYMAN APT	13·63	4·23	16	15	8	6	87·0	71·1	79·1	90	66			0	0	0	0
BR HONDURAS	BELIZE AIRPORT	5·23	1·28	20	11	7	2	88·0	74·8	81·4	91	72			0	0	0	0
GUYANA	BARTICA POTARO RD	5·05	1·50	10	7	4	2	93·1	70·6	81·9	95	68						
GUYANA	EDINI	3·01	1·67	12	6	3	1	93·0	71·7	82·3	98	69		257·2				
	GEORGETOWN BOT GDN	3·69	1·45	13	7	2	1	87·7	76·4	82·1	91	72	69·2	251·0	7	0	0	0
	HOSOROO	4·42	·94	27	11	6	0	90·1	72·7	81·4	92	70						
	MABARUMA	3·73	·98	27	11	3	0	90·2	72·9	81·6	93	70			3	7	0	0
	MATTHEWS RIDGE	7·24	3·57	12	12	4	1	89·7	72·1	80·9	97	70						
GUYANA	MAZARUNI PRISON	3·86	1·20	8	7	5	1	90·1	72·7	81·4	94	68		195·2	6	4	0	0
	MON REPOS	·77	·29	17	6	0	0	85·2	74·3	79·8	90	71						
	NEW AMSTERDAM	4·76	2·26	16	5	4	2	89·0	75·2	82·1	92	72						
	PORT KAITUMA	4·53	2·04	12	7	3	1	93·7	69·6	81·6	95	68						
	TIMEHRI AIRPORT	3·80	1·40	13	10	2	1	90·8	71·1	80·9	94	69			9	3	0	0
GUYANA	TIMEHRI CHS	3·04	1·25	13	9	3	1	90·9	69·9	80·4	94	68	69·3	195·8				

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - OCTOBER, 1969

COUNTRY	STATION	RUN OF WIND (Kn. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F							
							At 8 inch Depth				At 4 inch Depth			
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	EXTREMES MAX	DATE	MIN	MEAN MAX	MEAN MIN	EXTREMES MAX	MIN
TRINIDAD	PIARCO AIRPORT	75	170	5.96	.42	14									
	ST AUGUSTINE UWI	22	49	4.09	.20	7									
BARBADOS	HUSBANDS CMI	104	196	5.55	.30	14									
JAMAICA	EAST ALBION NURSERY	22	53	6.11	.30	19									
GUYANA	EBINI	83	108	8.51	.40	5									
	GEORGETOWN BGT GDN	69	101	6.40	.29	7									
	TIMEHRI CHS	52	82												

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - OCTOBER, 1969

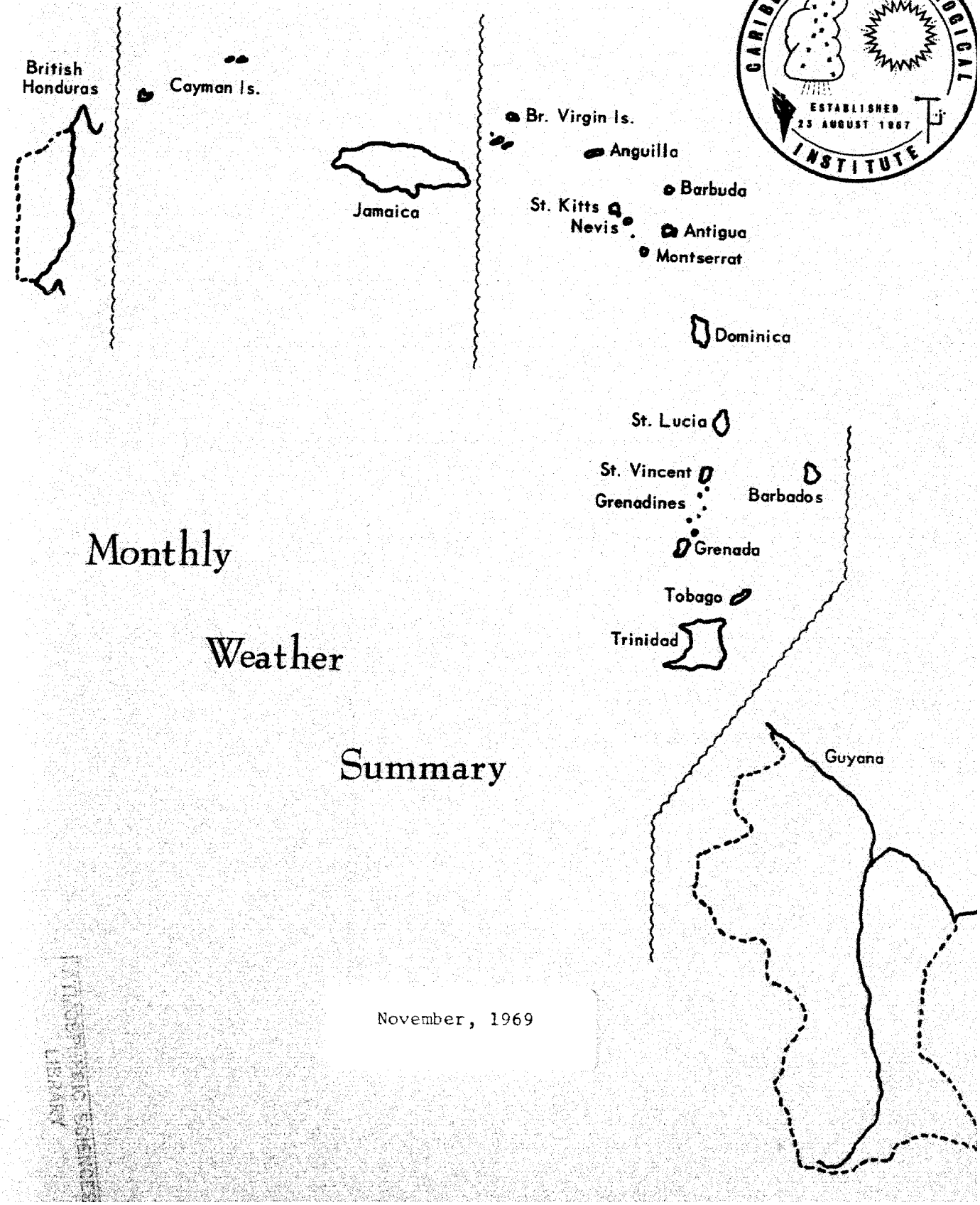
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	.40	.67	.95	1.50	1.86	1.94	2.07	2.07
	ST AUGUSTINE UWI		.60	.80	1.40	1.75	1.87	1.92	1.92
TOBAGO	CROWN POINT AIRPORT	.37	.55	.64	.91	1.01	1.21	1.44	1.55
BARBADOS	HAGGATTS ST A	.43	.60	.69	.98	1.05	1.23	1.43	1.59
	HUSBANDS CMI	.29	.45	.52	.56	.66	.72	.80	.93
		.	.	.	.	.	.	.	.
BARBADOS	LION CASTLE ST T	.56	.89	.99	1.34	1.41	1.56	1.66	1.78
JAMAICA	PALISADOES APT	.28	.48	.76	1.00	1.11	1.17	1.63	1.96
GUYANA	EDINI	.32	.50	.61	1.22	1.64	1.65	1.67	1.67
	GEORGETOWN BOT GDN	.31	.74	.91	1.11	1.37	1.45	1.45	1.45
	MATTHEWS RIDGE	.25	.39	.54	.54	.54	.54	.75	.75

TABLE V - SUMMARY OF WINDSPEED RECORDS - OCTOBER, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	35	47	63	
TRINIDAD	PIARCO AIRPORT	06	18	15	2	07	29	1405	2	0	0	0	3.6
TOBAGO	CROWN POINT AIRPORT	12	20	13	17	12	28	1300	17	0	0	0	7.2
ANTIGUA	COOLIDGE AIRPORT	12	17	12	1	12	29	2250	17	0	0	0	6.2
JAMAICA	MONTEGO BAY	07	8	08	19	09	27	1955	7	0	0	0	3.1
	PALISADOES APT	12	20	14	16	11	36	1430	17	4	0	0	6.1
BR HONDURAS	BELIZE AIRPORT	26	9	10	18	01	28	1710	17	0	0	0	1.6
GUYANA	GEORGETOWN BOT GDN	05	14	16	25	06	31	1400	7	0	0	0	6.8

TABLE VI - SUMMARY OF SUNSHINE RECORDS - OCTOBER, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NOS OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	32	81	86	84	78	71	57	56	54	42	47	21	0	218·9	61	11·2	8	1	2	9	8	11	0
	ST AUGUSTINE UWI	0	24	80	90	89	81	72	59	57	57	47	49	24	0	226·1	61	11·2	8	1	2	7	11	10	0
TOBAGO	CROWN POINT AIRPORT	0	30	80	87	80	78	79	73	74	69	68	69	35	0	254·2	69	11·3	15	1	1	2	12	15	0
BARBADOS	SEAWELL AIRPORT	0	17	72	77	77	84	86	82	81	74	70	59	21	0	247·6	67	10·8	26	0	4	4	8	15	0
DOMINICA	MELVILLE HALL APT	0	7	45	59	72	81	74	65	63	60	51	39	4	0	192·3	53	10·3	15	2	2	10	13	4	0
JAMAICA	MONTEGO BAY	0	70	73	83	85	82	79	64	62	53	41	33	7	0	211·5	58	10·9	7	1	1	8	13	8	0
	PALISADOES	0	22	78	86	83	85	88	86	80	74	66	42	9	0	243·9	67	10·7	2	0	2	3	8	12	0
GUYANA	EBINI	0	12	64	85	91	90	88	90	89	78	66	56	20	0	257·2	69	10·6	22	0	2	2	14	13	0
	GEORGETOWN BOT GDN	0	25	81	79	80	73	81	80	79	74	80	60	14	0	251·0	68	11·1	7	0	2	4	8	17	0
	MAZARUNI PRISON	0	1	19	55	78	80	77	79	83	70	55	31	2	0	195·2	53	9·4	23	0	4	7	17	3	0
GUYANA	TIMEHRI CHS	0	2	61	76	76	72	68	69	63	53	38	30	10	2	195·8	53	11·3	28	0	4	10	12	5	0



Monthly Weather Summary

November, 1969

MONTHLY WEATHER SUMMARY

Prepared and published by the
Caribbean Meteorological Institute
Husbands, St. James, Barbados, W.I.

November, 1969

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LIST OF STATIONS

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Trinidad	Centeno.	10 35	61 20	50		x	x		x	x	x	x	x	
	Penal Agr. Stn.	10 10	61 28	25		x	x		x	x	x	x		x
	Piarco Airport.	10 35	61 21	41	x	x	x	x	x	x	x	x		x
	St. Augustine, U.W.I.	10 38	61 24	52		x	x		x	x	x	x	x	x
Tobago	Crown Point Airport.	11 09	60 50	9	x	x	x	x		x	x	x		x
	Louis d 'Or.	11 15	60 34	40		x	x		x	x		x		
Grenada	Mirabeau.	12 08	61 49	450		x	x		x	x	x	x		x
	Mt. Horne.	12 09	61 39	500		x				x				
	Pearls Airport.	12 09	61 37	22	x	x	x			x				
Barbados	Husbands, CMI.	13 08	59 37	370		x	x	x	x	x	x	x	x	x
	Seawell Airport.	13 04	59 29	183	x	x	x	x		x	x			x
St. Vincent	Arnos Vale Airport.	13 09	61 13	30	x	x	x			x				
	Camden Park.	13 10	61 15	15		x	x		x	x	x	x		x
St. Lucia	Beausejour Agr. Stn.	13 45	60 57	75		x	x		x	x	x	x		x
	Roseau, Winban.	13 56	61 02			x				x				x
	Vigie Airport.	14 01	61 00	7	x	x	x	x		x				

/ct'd.....

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Dominica	Melville Hall Airport.	15 33	61 18	43	x	x	x	x		x				x
	Roseau Cent. Livestock Farm.	15 18	61 23	220		x	x		x	x	x	x	x	x
Montserrat	Grove.	16 43	62 13	150		x	x			x				
Antigua	Antigua Sugar Factory.	17 07	61 48	25		x	x		x	x	x	x		x
	Coolidge Airport.	17 08	61 47	26	x	x	x	x		x				
	Dunbars	17 09	61 50	220		x	x			x				
St. Kitts & Nevis	La Guerite	17 18	62 44	160		x	x		x	x	x	x		
Br. Virgin Is.	Beef Is. Airport.	18 26	64 32	25	x	x	x			x				
	Paraquito Bay.	18 25	64 35	50		x	x		x	x				x
Jamaica	Bernard Lodge.	17 58	76 56	55						x	x			
	Bodles.	17 55	77 08	60						x	x			x
	Cedar Valley.	17 59	76 35	1980		x	x		x	x				
	Chapelton, Clarendon Coll.	18 05	77 17	650		x	x			x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Cinchona Hill Gdns.	18 04	76 39	4895		x	x			x				
	Dallas.	17 59	76 42	950		x	x			x				
	Duckenfield.	17 55	76 15	60		x	x			x				
	East Albion Nursery.	17 53	76 35	90		x	x			x				
	Empire Nursery.	18 02	76 39	2130		x	x			x				
	Farm Hill.	18 03	76 38	4020		x	x		x	x		x		
	Frome.	18 18	78 09	90		x	x			x				
	Grove Place.	18 07	77 31	1600		x	x		x	x	x	x		x
	Halls Delight.	18 03	76 40	3020		x	x		x	x		x		
	Hope Gdns.	18 01	76 45	710		x	x			x				
	Irwin.	18 27	77 53	80		x	x			x				
	James Hill.	18 10	77 20	2000		x	x			x				
	Kingston, St. Georges Coll.	17 59	76 47	90		x	x			x				
	Marshalls Pen.	18 03	77 32	2300		x	x	x		x				
	Mason River Field.	18 11	77 16	2300		x	x			x				
	Montego Bay Airport.	18 30	77 55	5	x	x	x	x	x	x		x		x
	Monymusk.	17 48	77 16	30		x	x			x				
	Morant Point L.H.	17 55	76 11	5	x	x	x	x		x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Negril Point L.H.	18 15	78 22	25	x	x	x			x				
	Orange River.	18 15	76 53	950		x	x		x	x	x	x		x
	Palisadoes Airport.	17 56	76 47	10	x	x	x	x	x	x	x	x		x
	Pembroke Hall.	18 18	76 59	700		x	x			x				
	Richmond Est.	18 27	77 15	120		x	x			x				
	Smithfield.	18 24	78 06	925		x	x		x	x	x	x	x	x
	Spanish Town.	18 00	76 56	70		x	x			x				
	Top Mountain.	18 05	76 40	3550						x	x			
	Worthy Park.	18 08	77 09	1250		x	x			x				x
Cayman Is.	Grand Cayman Airport.	19 17	81 22	20	x	x	x	x		x				
Br. Honduras	Belize Airport.	17 32	88 18	17	x	x	x	x		x				x
Guyana	Bartica Potaro Road.	05 37	58 53	400		x	x			x				
	Ebini.	05 34	57 47	60		x	x			x	x			x
	Georgetown Bot. Gdn.	06 48	58 09	5	x	x	x	x	x	x	x	x	x	x
	Hosororo.	08 10	59 48	300		x	x			x				
	Mabaruma	08 12	59 47	185	x	x	x	x		x				

/ct'd.....

GUYANA STATIONS CONTD.

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Guyana	Mahaicony Abary R.D.S.	06 28	57 46	5		x	x			x	x			x
	Matthews Ridge.	07 31	60 10	350		x	x			x	x			
	Mazaruni Prison.	06 24	58 39	45		x	x			x				x
	Mon Repos.	06 47	58 03	10		x	x			x				x
	New Amsterdam.	06 15	57 31	5		x	x			x	x			
	Port Kaituma.	07 44	59 33	100		x	x			x				
	Timehri Air-port.	06 30	58 15	95	x	x	x	x		x				
	Timehri Cent. Hort. Stn.	06 31	58 16	95		x	x		x	x	x		x	x
	Wauna.	08 09	59 51	100		x	x		x	x	x	x		x

LIST OF RAINGAUGE STATIONS

(*Denotes a recording raingauge at the station)

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.
Trinidad	Cocal Est.	10 26	61 02	5
	Green Hill, River Est.	10 44	61 33	120
	Guayguayare TLL.	10 08	61 04	25
	La Pastora.	10 44	61 28	300
	Matelot.	10 49	61 07	40
	Navet Damsite.	10 24	61 15	225
	Point Fortin Fil. Pl.	10 11	61 39	25
	Port of Spain, R. Bot. Gdns.	10 40	61 31	130
	Quare Dam, Hollis Res.	10 41	61 12	500
	Waterloo Est.	10 29	61 28	20
Tobago	Castara, Meth. Sch.	11 17	60 42	250
	Hillsborough Dam.	11 13	60 40	800
	Moriah, Pol. Stn.	11 14	60 43	750
	Plymouth, White Rock Est.	11 13	60 46	75
	Scarborough, Bot. Stn.	11 11	60 44	25
	Speyside	11 18	60 32	10
Barbados	Belle, St. M.	13 07	59 35	110
	Castle Grant, St. Jos.	13 11	59 33	1060
	Clifton Hall, St. J.	13 11	59 30	730
	Edgecumbe, St. P.	13 07	59 31	215
	*Haggatts, St. A.	13 14	59 34	75
	Holetown, St. Ja.	13 11	59 38	10
	*Lion Castle, St. T.	13 11	59 35	940
	River, St. P.	13 09	59 27	105

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The station list includes some stations that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a listed station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time.

2. At synoptic stations, station elevation refers to the height of the barometer cistern above mean sea level; at other stations, it refers to the height above mean sea level of the ground on which the raingauge stands.

3. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

4. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

5. Local Standard Time (LST) in British Honduras is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

6. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

7. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

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2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour pressure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eighths), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as,for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain)is present in the air. Again, the total number of observations in these eight columns will be equal to the number of days in the month unless an observation was missed.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

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2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. As it will cool through overnight radiation loss, generally lower temperatures than those from the screened thermometers will be observed. The mean of the 30 or 31 daily values is given in the table.

5. All stations for which monthly sunshine totals are given here will normally have entries in Table VI as well.

6. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. This table gives summaries of additional daily observations of importance primarily to agriculture.

2. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. Hence both the "daily mean" and "most in a day" figures refer to the climate day rather than the calendar day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

3. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the

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month is given in the table together with the maximum daily loss during the month and the date on which it occurred. Both these last entries refer to the climate day.

4. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

5. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observation is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

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4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations'latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed;provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - NOVEMBER, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	75·1	74·2	28·4	96	1009·5	1·2	4·2	3	9	4	11	3	0	0	0	0	0	0	2	5	23
			08	78·6	76·1	29·6	87	1011·6	2·0	4·5	0	11	5	11	3	0	0	1	1	0	1	1	3	23
			14	84·9	77·5	28·9	70	1008·5	7·3	6·0	0	1	8	17	4	0	0	0	0	0	1	2	3	24
			20	77·5	75·7	28·9	90	1010·6	0·9	4·4	3	6	8	8	5	0	0	0	0	0	0	1	4	25
	ST AUGUSTINE UWI	52	16	82·7	76·7	28·7	75	1009·6	1·1	5·9	0	0	10	14	6	0								
TOBAGO	CROWN POINT AIRPORT	9	02	77·7	75·2	28·7	89	1008·7	6·3	4·8	0	8	7	13	2	0	0	0	0	0	0	0	4	26
			08	81·6	77·0	29·7	81	1010·8	7·8	4·8	0	7	8	14	1	0	0	0	0	0	0	0	5	25
			14	84·4	78·0	29·9	74	1008·9	10·2	4·8	0	7	10	11	2	0	0	0	0	0	0	0	4	26
			20	79·2	75·7	28·9	85	1010·2	6·5	4·9	0	7	7	13	3	0	0	0	0	0	0	0	3	27
GRENADA	MOUNT HORNE	500	08	80·4	76·3	28·7	81																	
BARBADOS	HUSBANDS CWI	370	08	80·2	75·7	28·3	80	1012·5	6·0	4·8	0	8	7	13	1	1	0	0	1	0	1	1	2	25
			14	82·9	76·1	27·7	72	1010·4	8·1	5·8	0	0	10	19	0	1	0	0	1	0	0	2	0	27
	SEAWELL AIRPORT	183	02	77·9	74·3	27·3	84	1010·3	8·7	3·8	0	12	9	8	0	1	0	0	0	0	0	0	1	29
			08	79·8	76·3	28·5	82	1012·2	10·0	4·7	0	4	13	12	1	0	1	0	0	0	0	0	0	29
			14	85·0	77·3	28·7	70	1010·2	11·5	5·1	0	4	11	14	1	0	0	0	0	0	0	0	1	29
BARBADOS	SEAWELL AIRPORT	183	20	79·0	75·0	27·9	83	1011·8	9·6	4·3	0	8	12	9	1	0	0	0	0	0	0	0	0	30
ST LUCIA	VIGIE AIRPORT	7	08	81·6	76·3	28·6	78	1012·1	4·7	5·0	0	2	13	10	0	0	0	0	0	0	0	0	3	22
			14	84·8	76·5	27·6	67	1010·2	7·5	5·5	0	2	8	12	0	0	0	0	0	0	0	0	0	22
DOMINICA	MELVILLE HALL APT	43	14	82·2	77·1	29·5	79	1012·4	5·6	5·4	0	2	11	14	2	0	0	0	0	0	0	0	6	23
ANTIGUA	COOLIDGE AIRPORT	26	08	79·6	75·2	28·0	81	1013·4	9·2	4·7	0	4	12	13	1	0	0	0	0	0	0	0	1	29
ANTIGUA	COOLIDGE AIRPORT	26	14	82·9	75·9	27·4	71	1011·7	10·9	4·7	0	4	12	13	1	0	0	0	0	0	0	0	0	30
			20	78·9	74·1	26·6	79	1013·1	8·8	4·2	0	10	10	7	3	0	0	0	0	0	0	0	0	30
	DUNBARS	220	09	81·2	76·0	28·3	78																	
			15	81·4	75·3	27·2	74																	
JAMAICA	CEDAR VALLEY	1980	07	67·1	66·0	21·3	94																	
JAMAICA	CEDAR VALLEY	1980	13	77·9	72·7	25·2	77																	
	CINCHONA GARDENS	4897	08	62·0	59·9	16·9	89																	
			16	64·9	62·6	18·9	90																	
	DALLAS	950	09	76·5	74·1	27·7	89																	
			15	80·8	76·4	29·2	81																	
JAMAICA	DUCKENFIELD	60	08	79·4	74·8	27·3	80																	
	EAST ALBION NURSERY	90	07	75·6	70·6	23·5	78																	
			13	84·2	75·7	26·6	67																	
	EMPIRE NURSERY	2130	07	66·9	65·4	20·6	92																	
			13	78·5	72·7	24·8	75																	
JAMAICA	FARM HILL	4020	07	65·3	62·2	17·8	83																	
			13	74·5	68·6	21·2	73																	
	HALLS DELIGHT	3020	07	69·8	65·0	19·0	76																	
			13	74·2	69·4	22·5	78																	
	HOPE GARDENS	712	07	68·0	65·3	20·1	86																	
JAMAICA	IRWIN	80	08	79·2	75·9	29·1	85																	
			15	82·2	76·8	29·1	78																	
	KINGSTON ST GEO COLL	90	07	75·0	72·0	25·4	86																	
			15	83·5	76·6	28·2	72																	
	MARSHALLS PEN	2300	07	69·4	67·2	22·0	90		1·8	4·0	1	9	9	8	3	0								
JAMAICA	MARSHALLS PEN	2300	13	79·5	71·8	23·3	68		4·2	5·3	0	4	7	16	3	0								
	MONTEGO BAY AIRPORT	3	01	77·0	73·1	26·1	82	1011·6	4·1	4·2	0	9	10	10	1	0	0	0	0	0	0	0	0	30
			07	77·4	73·1	26·0	81	1011·9	6·4	4·8	0	7	6	17	0	0	0	0	0	0	0	0	0	30
			13	82·8	76·2	28·1	73	1011·5	10·4	4·8	0	7	7	14	2	0	0	0	0	0	0	0	0	30
			19	78·8	74·4	27·1	81	1011·3	5·0	4·6	0	6	11	11	2	0	0	0	0	0	0	0	1	29

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - NOVEMBER, 1969

(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MORANT POINT LH	6	01	80·3	76·8	30·0	85		9·0	4·4	0	5	15	8	2	0	0	0	0	0	0	0	0	30
			07	80·0	76·7	29·9	86		7·6	4·9	0	3	13	11	3	0	0	0	0	0	0	0	0	30
			13	82·4	78·8	31·9	83		8·2	5·1	0	2	13	13	2	0	0	0	0	0	0	0	0	30
			19	80·7	77·1	30·3	85		8·6	4·3	0	8	13	10	2	0	0	0	0	0	0	0	0	30
	NEGRIL POINT LH	27	07	77·0	72·6	25·2	79	1011·7	3·4	4·6	0	10	7	8	5	0								
JAMAICA	NEGRIL POINT LH	27	13	86·2	76·5	27·3	64	1011·2	7·2	5·0	0	5	12	8	5	0								
			19	79·4	74·2	26·5	78	1010·9	5·9	3·7	0	12	9	5	4	0								
	PALISADOES AIRPORT	9	01	78·7	73·4	25·8	77	1010·9	4·6	3·7	0	13	8	7	2	0	0	0	0	0	0	0	0	30
			07	77·4	72·8	25·5	79	1011·3	4·4	5·1	0	8	5	14	3	0	0	0	0	0	0	0	0	30
			13	86·3	76·4	26·8	63	1010·6	7·7	5·7	0	3	6	19	2	0	0	0	0	0	0	0	0	30
JAMAICA	PALISADOES AIRPORT	9	19	81·0	74·3	26·8	74	1010·7	5·4	5·2	0	6	8	15	3	0	0	0	0	0	0	0	0	30
	WORTHY PARK	1250	07	70·8	68·2	22·9	89																	
			15	79·7	74·3	26·7	77																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	74·6	71·5	25·3	87	1013·9	7·2	5·5	1	7	3	5	14	0	0	0	0	0	0	0	1	29
			13	83·8	76·0	27·3	69	1013·7	10·2	5·1	0	8	5	12	5	0	0	0	0	0	0	0	0	30
CAYMAN ISLANDS	GRAND CAYMAN APT	20	19	77·7	73·4	26·3	81	1013·4	7·1	5·5	0	9	3	2	16	0	0	0	0	0	0	0	2	28
BR HONDURAS	BELIZE AIRPORT	17	06	70·5	69·6	24·5	96	1014·8	1·9	5·6	0	4	7	12	6	0	0	0	1	0	1	5	11	11
			12	81·8	75·0	26·7	72	1014·7	4·6	5·3	0	3	10	14	5	0	0	0	0	0	0	0	5	25
			18	76·5	72·6	25·7	83	1013·4	2·8	4·9	0	10	4	11	4	0	0	0	0	0	0	2	8	19
GUYANA	BARTICA POTARO RD	400	08	78·4	75·9	29·4	89																	
GUYANA	BARTICA POTARO RD	400	14	90·7	79·7	29·7	60																	
	EBINI	60	08	79·7	75·8	28·8	83																	
			14	91·7	76·1	23·8	47																	
	GEORGETOWN BOT GDN	7	08	83·1	77·4	29·6	76	1011·7	5·2	5·6	0	1	12	15	2	0	0	0	0	0	0	0	13	17
			14	86·2	77·8	28·6	67	1009·1	8·5	4·3	0	8	10	11	0	0	0	0	0	0	0	0	3	26
GUYANA	HOSORORO		08	78·5	76·4	30·0	90																	
			14	83·9	78·1	30·4	77																	
	MAHAICONY ABARY RDS	6	14	88·6	79·4	30·2	65																	
	MATTHEWS RIDGE		08	75·3	74·3	28·5	95																	
			14	85·7	77·0	27·8	66																	
GUYANA	MAZARUNI PRISON	47	08	79·5	76·8	30·3	88																	
			14	88·0	77·6	28·0	62																	
	MON REPOS		08	82·3	76·4	28·4	75																	
			14	86·7	77·3	28·0	65																	
	NEW AMSTERDAM	3	08	82·4	76·9	29·2	77																	
GUYANA	NEW AMSTERDAM	3	14	88·4	78·8	29·2	64																	
	PORT KAITUMA		08	76·3	74·6	28·6	93																	
			14	88·5	79·6	30·7	67																	
	TIMEHRI AIRPORT	95	02	73·8	73·5	28·0	98	1009·0	0·0	4·6	5	4	5	14	2	0	0	0	1	1	0	1	14	13
			08	79·9	76·6	29·7	85	1011·2	3·2	5·2	0	5	10	12	3	0	0	0	0	0	0	0	0	30
GUYANA	TIMEHRI AIRPORT	95	14	88·6	77·2	26·8	59	1008·3	9·4	6·0	0	1	9	20	0	0	0	0	0	0	0	0	1	29
			20	76·6	74·9	28·8	92	1009·7	1·1	6·2	0	3	3	23	1	0	0	0	0	0	0	0	4	26
	TIMEHRI CHS		08	79·5	77·1	30·8	90																	
			14	87·1	77·8	28·4	68																	
	WAUNA		08	77·0	75·8	30·0	95																	
GUYANA	WAUNA		14	83·7	77·3	29·6	79																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - NOVEMBER, 1969

COUNTRY	STATION	RAINFALL (Inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN ·04	·40	1·00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER (HEARD)	FOG	HAIL	GALE
TRINIDAD	COCAL EST	16·50	4·60	15	17	12	7											
	GREEN HILL RIVER EST	7·56	1·89	15	13	6	3											
	GUAYAGUAYARE	12·03	3·59	13	14	8	4											
	LA PASTORA	7·24	2·16	15	12	6	2											
	MATELOT	16·38	1·85	15	19	14	8											
TRINIDAD	NAVET DAMSITE	13·99	2·80	15	20	12	5											
	PIARCO AIRPORT	10·35	2·40	15	17	8	4	87·5	73·2	80·3	91	68	70·2	181·0	8	0	0	0
	POINT FORTIN	7·55	2·04	13	14	5	3											
	PORT OF SPAIN R BOT	10·67	2·00	6	17	8	6											
	QUAREDAM HOLLIS	18·64	4·06	15	20	12	7											
TRINIDAD	ST AUGUSTINE UWI	7·67	2·06	15	14	6	2	87·7	72·0	79·8	91	67	69·4	190·2	3	0	0	0
	WATERLOO EST	8·93	2·00	15	14	9	4											
TOBAGO	CASTARA	13·45	1·61	15	22	12	4											
	CROWN POINT AIRPORT	7·04	1·89	20	17	5	1	87·3	74·9	81·1	90	70		215·9	2	0	0	0
	HILLSBOROUGH DAM	13·01	2·51	27	18	12	4											
TOBAGO	MORIAH	9·42	2·08	27	16	8	3											
	PLYMOUTH WHITE ROCK	8·46	1·41	16	15	7	4											
	SCARBOROUGH BOT STN	8·67	1·50	27	12	9	4											
	SPEYSIDE	11·83	1·57	30	17	12	5											
GRENADA	MOUNT HORNE	8·53	1·58	16	16	8	3	86·8	73·9	80·4	90	72		210·2				
BARBADOS	BELLE ST M	4·76	2·22	27	12	1	1											
	CASTLE GRANT ST JOS	10·00	1·60	23	19	11	3											
	CLIFTON HALL ST J	9·03	2·00	5	17	7	2											
	EDGECUMBE ST P	4·83	1·33	27	18	3	1											
	HAGGATTS ST A	6·17	2·00	23	16	5	1											
BARBADOS	HOLETOWN ST JA	5·34	1·15	23	16	4	1											
	HUSBANDS CMI	5·61	1·96	27	13	5	1	86·0	73·2	79·7	89	71			1	0	0	0
	LION CASTLE ST T	7·13	2·06	23	16	5	1											
	RIVER ST P	3·73	·96	27	10	3	0											
	SEAWELL AIRPORT	5·72	1·23	27	12	7	2	87·5	74·7	81·1	91	71		250·7	0	0	0	0
ST LUCIA	VIGIE AIRPORT							86·7	73·9	80·3	89	72			0	0	0	0
DOMINICA	MELVILLE HALL APT	22·92	8·47	22	24	10	5	83·5	72·8	78·1	87	69		115·6	0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	5·54	3·55	3	13	1	1	84·4	75·1	79·8	87	71			0	0	0	0
	DUNBARS	4·92	2·35	3	12	2	1	85·1	74·1	79·6	90	72						
JAMAICA	BERNARD LODGE	2·33	1·14	15	7	1	1	88·2	69·3	78·7	92	64		197·2				
JAMAICA	CEDAR VALLEY	7·49	2·52	15	16	6	2	80·4	62·1	71·3	83	57						
	CINCHONA GARDENS	18·63	6·10	16	20	9	5	73·6	49·5	61·5	80	44						
	DALLAS	3·88	1·16	15	13	3	2	82·5	54·4	68·5	86	49						
	DUCKENFIELD	17·95	5·18	14	15	6	5	84·3	73·1	78·6	88	68	68·0	152·4				
	EAST ALBION NURSERY	4·31	2·10	13	6	2	2	87·1	70·4	78·8	90	66						
JAMAICA	EMPIRE NURSERY	5·73	2·03	16	9	5	1	81·0	64·7	72·9	84	60						
	FARM HILL	14·91	4·28	16	12	6	5	75·3	60·9	68·1	80	58						
	HALLS DELIGHT	10·26	2·98	16	13	7	4	78·4	63·4	70·9	84	60						
	HOPE GARDENS	3·34	1·43	15	8	4	1	86·2	60·6	73·4	89	58						
	IRWIN	6·59	3·10	2	11	6	1	85·7	70·6	78·2	92	66						
JAMAICA	KINGSTON ST·GEORGES	3·67	1·32	15	9	3	2	87·2	73·1	80·2	90	70						
	MARSHALLS PEN	1·57	·35	26	8	0	0	80·3	65·2	72·8	84	58	61·1		2	3	1	0
	MONTEGO BAY AIRPORT	3·20	1·36	2	11	2	1	84·4	74·1	79·3	87	71		178·7				
	MORANT POINT LH	18·92	5·24	15	13	9	4	84·6	73·8	79·2	87	70						

TABLE II - SUMMARY OF DAILY OBSERVATIONS - NOVEMBER, 1969
(CONTINUED)

COUNTRY	STATION	RAINFALL (Inches)						AIR TEMPERATURE °F					MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH			
		TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN			MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES				THUNDER HEARD	FOG	HAIL	GALE
					·04	·40	1·00				MAX	MIN						
	ORANGE RIVER	7·15	2·74	16	17	6	1	84·3	66·7	75·5	89	60						
JAMAICA	PALISADOES AIRPORT	3·23	1·98	15	3	2	2	87·9	75·7	81·8	91	72		187·9	6	0	0	0
	WORTHY PARK	3·62	·92	15	11	3	0	83·0	65·1	74·1	87	57		143·5				
CAYMAN ISLANDS	GRAND CAYMAN APT	1·87	·36	16	10	0	0	84·5	71·3	77·9	88	60			0	0	0	0
BR HONDURAS	BELIZE AIRPORT	7·59	1·51	25	13	6	4	83·8	70·0	76·9	89	63		199·2	1	3	0	0
GUYANA	BARTICA POTARO RD	1·99	·53	18	8	2	0	93·3	71·6	82·5	96	67						
GUYANA	EBINI	1·00	·70	15	4	1	0	94·1	71·9	83·0	97	70		250·5				
	GEORGETOWN BOT GDN	2·10	1·20	15	5	2	1	87·1	77·5	82·3	88	74	72·9	266·8	2	0	0	0
	HOSORORO	6·92	1·05	9	18	6	1	89·3	72·7	81·0	94	71						
	MAHAICONY ABARY RDS	·17	·10	16	2	0	0	90·6	76·9	83·7	92	71		290·4				
	MATTHEWS RIDGE	5·76	1·74	24	12	4	1	87·9	71·7	79·7	91	69						
GUYANA	MAZARUNI PRISON	4·66	1·40	16	8	4	2	89·5	73·8	81·7	92	71		209·4	7	3	0	0
	MON REPOS	·76	·36	28	4	0	0	88·2	77·5	82·9	89	72		271·2				
	NEW AMSTERDAM	·01	·01	12	0	0	0	89·8	76·0	82·9	92	74						
	PORT KAITUMA	8·63	1·75	29	12	5	4	91·8	69·7	80·7	96	68						
	TIMEHRI AIRPORT	3·45	1·28	16	4	3	2	91·1	71·1	81·7	94	68			0	0	0	0
GUYANA	TIMEHRI CHS	3·35	1·17	30	6	3	1	91·1	70·1	80·6	94	68	69·8	201·1				
	WAUNA	7·89	1·32	9	15	8	3	88·5	70·6	79·6	93	67						

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - NOVEMBER, 1969

COUNTRY	STATION	RUN OF WIND (in miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F									
							At 2 inch Depth					At 4 inch Depth				
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	EXTREMES MAX	DATE	MIN	MEAN MAX	MEAN MIN	EXTREMES MAX	MIN
TRINIDAD	PIARCO AIRPORT	81	113	5·45	·46	16									
	ST AUGUSTINE UWI	28	49												
BARBADOS	HUSBANDS CMI	121	225				80·5	76·5	100	5	72	86·1	78·7	93	74
JAMAICA	EAST ALBION NURSERY	22	49	5·41	·31	18										
	ORANGE RIVER	40	81				85·5	67·8	94	4	51	82·4	68·7	96	56
JAMAICA	PALISADOES AIRPORT	39	90	6·02	·34	10									
GUYANA	EBINI	98	133	8·50	·35	10									
	GEORGETOWN BOT GDN			6·42	·28	7									
	MAHAICONY ABARY RDS	148	220												
	TIMEHRI CHS	52	82												
GUYANA	WAUNA	34	60												

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - NOVEMBER, 1969

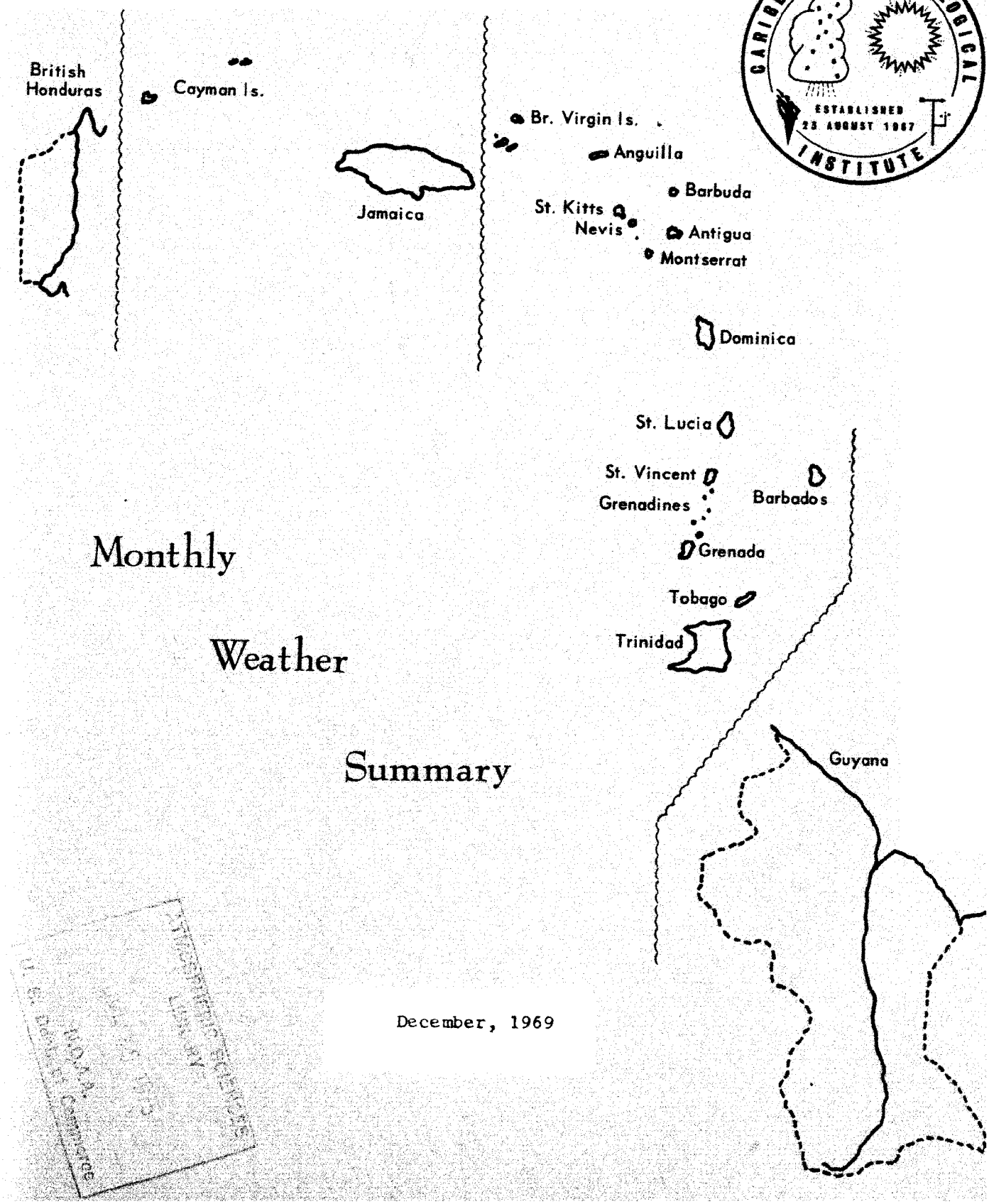
COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	•21	•39	•58	•79	•97	1•28	1•50	1•84
	ST AUGUSTINE UWI		•23	•33	•50	1•00	1•08	1•09	1•45
TOBAGO	CROWN POINT AIRPORT	•21	•38	•44	•52	•89	1•13	1•36	1•36
BARBADOS	HUSBANDS CMI	•25	•49	•66	•80	•96	1•09	1•75	1•80
	LION CASTLE ST T	•36	•40	•42	•44	•52	•60	1•21	1•62
JAMAICA	PALISADOES APT	•30	•35	•43	•63	•89	1•23	1•88	1•98
GUYANA	MATTHEWS RIDGE	•29	•47	•48	•64	•92	1•67	1•74	1•74

TABLE V - SUMMARY OF WINDSPEED RECORDS - NOVEMBER, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	[illegible]	47	63	
TRINIDAD	PIARCO AIRPORT	09	16	12	10	08	27	1105	10	0	0	0	4•2
TOBAGO	CROWN POINT AIRPORT	12	22	03	16	12	35	0815	16	0	0	0	7•5
ANTIGUA	COOLIDGE AIRPORT	10	20	12	16	08	34	0240	16	1	0	0	9•7
JAMAICA	MONTEGO BAY	08	24	05	18	08	28	0345	18	0	0	0	6•7
	PALISADOES APT	12	21	04	15	12	36	0350	15	1	0	0	6•8
BR HONDURAS	BELIZE AIRPORT	33	12	15	20	34	26	1410	20	0	0	0	2•6

TABLE VI - SUMMARY OF SUNSHINE RECORDS - NOVEMBER, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NOS OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	24	50	56	63	64	64	58	57	51	43	42	21	0	181·0	51	11·2	2	2	6	6	3	12	0
TOBAGO	CROWN POINT AIRPORT	0	19	60	65	63	69	73	64	60	50	43	47	21	0	190·2	55	11·1	1	3	4	7	5	11	0
GRENADA	MIRABEAU	0	24	59	68	76	75	70	73	66	70	59	57	24	0	215·9	62	11·3	2	2	4	6	4	14	0
BARBADOS	SEAWELL AIRPORT	0	9	76	85	87	87	93	86	78	78	77	58	19	0	250·7	72	10·9	1	1	0	5	6	18	0
DOMINICA	MELVILLE HALL APT	0	2	26	39	51	58	56	43	34	29	21	13	1	0	115·6	33	9·8	10	6	7	8	8	1	0
JAMAICA	MONTEGO BAY	0	17	50	60	59	63	64	72	68	67	46	33	23	0	175·7	48	9·8	4	0	4	11	9	6	0
	ORANGE RIVER	0	0	46	71	75	72	67	62	54	59	44	26	3	0	173·9	51	10·1	4	0	6	8	13	3	0
	PALISADOES	0	10	55	62	75	80	74	77	68	53	48	28	1	0	187·9	55	10·2	13	1	5	6	12	6	0
GUYANA	EDINI	0	11	59	81	95	96	95	91	89	81	67	57	13	0	250·5	70	10·7	7	0	0	5	12	13	0
	GEORGETOWN BOT GDN	0	8	78	84	88	92	96	95	92	89	84	71	11	0	266·8	75	10·4	10	0	1	2	7	20	0
GUYANA	MAHAICONY ABARY RDS	0	17	76	90	96	98	95	98	98	95	89	81	34	0	290·4	82	10·9	2	0	0	1	7	22	0
	MAZARUNI PRISON	0	3	44	70	82	87	87	83	75	64	65	39	0	0	209·4	59	9·9	6	0	3	5	19	3	0
	MON REPOS	0	18	64	81	87	95	96	97	93	91	90	70	23	0	271·2	76	10·6	5	0	2	1	6	21	0
	TIMEHRI CHS	0	4	70	76	71	81	73	68	69	67	54	30	7	0	201·1	57	10·8	2	0	2	7	17	4	0



Monthly Weather Summary

December, 1969

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5. Table III: Summary of agrometeorological observations

6. Table IV: Summary of rainfall intensity records

7. Table V: Summary of wind speed records

8. Table VI: Summary of sunshine records

9. Additions and Corrections

LIST OF STATIONS

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Trinidad	Centeno.	10 35	61 20	50		x	x		x	x	x	x	x	
	Penal Agr. Stn.	10 10	61 28	25		x	x		x	x	x	x		x
	Piarco Airport.	10 35	61 21	41	x	x	x	x	x	x	x	x		x
	St. Augustine, U.W.I.	10 38	61 24	52		x	x		x	x	x	x	x	x
Tobago	Crown Point Airport.	11 09	60 50	9	x	x	x	x		x	x	x		x
	Louis d 'Or.	11 15	60 34	40		x	x		x	x		x		
Grenada	Mirabeau.	12 08	61 42	450		x	x		x	x	x	x		x
	Mt. Horne.	12 09	61 39	500		x				x				
	Pearls Airport.	12 09	61 37	22	x	x	x			x				
Barbados	Husbands, CMI.	13 08	59 37	370		x	x	x	x	x	x	x	x	x
	Seawell Airport.	13 04	59 29	183	x	x	x	x		x	x			x
St. Vincent	Arnos Vale Airport.	13 09	61 13	30	x	x	x			x				
	Camden Park.	13 10	61 15	15		x	x		x	x	x	x		x
St. Lucia	Beausejour Agr. Stn.	13 45	60 57	75		x	x		x	x	x	x		x
	Roseau, Winban.	13 56	61 02			x				x				x
	Vigie Airport.	14 01	61 00	7	x	x	x	x		x				

/ct'd.....

MEASUREMENTS TAKEN

COUNTRY	STATION	LAT.	LONG.	ALT.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
		o 'N	o 'W	ft.										
Dominica	Melville Hall Airport.	15 33	61 18	43	x	x	x	x		x				x
	Roseau Cent. Livestock Farm.	15 18	61 23	220		x	x		x	x	x	x	x	x
Montserrat	Grove.	16 43	62 13	150		x	x			x				
Antigua	Antigua Sugar Factory.	17 07	61 48	25		x	x		x	x	x	x		x
	Coolidge Airport.	17 08	61 47	26	x	x	x	x		x				
	Dunbars	17 09	61 50	220		x	x			x				
St. Kitts & Nevis	La Guerite	17 18	62 44	160		x	x		x	x	x	x		
Br. Virgin Is.	Beef Is. Airport.	18 26	64 32	25	x	x	x			x				
	Paraquito Bay.	18 25	64 35	50		x	x		x	x				x
Jamaica	Bernard Lodge.	17 58	76 56	55						x	x			
	Bodles.	17 55	77 08	60						x	x			x
	Cedar Valley.	17 59	76 35	1980		x	x		x	x				
	Chapelton, Clarendon Coll.	18 05	77 17	650		x	x			x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. o 'N	LONG. o 'W	ALT. ft.	Synop Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Cinchona Hill Gdns.	18 04	76 39	4895		x	x			x				
	Dallas.	17 59	76 42	950		x	x			x				
	Duckenfield.	17 55	76 15	60		x	x			x				
	East Albion Nursery.	17 53	76 35	90		x	x			x				
	Empire Nursery.	18 02	76 39	2130		x	x			x				
	Farm Hill.	18 03	76 38	4020		x	x		x	x		x		
	Frome.	18 18	78 09	90		x	x			x				
	Grove Place.	18 07	77 31	1600		x	x		x	x	x	x		x
	Halls Delight.	18 03	76 40	3020		x	x		x	x		x		
	Hope Gdns.	18 01	76 45	710		x	x			x				
	Irwin.	18 27	77 53	80		x	x			x				
	James Hill.	18 10	77 20	2000		x	x			x				
	Kingston, St. Georges Coll.	17 59	76 47	90		x	x			x				
	Marshalls Pen.	18 03	77 32	2300		x	x	x		x				
	Mason River Field.	18 11	77 16	2300		x	x			x				
	Montego Bay Airport.	18 30	77 55	5	x	x	x	x	x	x		x		x
	Monymusk.	17 48	77 16	30		x	x			x				
	Morant Point L.H.	17 55	76 11	5	x	x	x	x		x				

/ct'd.....

JAMAICA STATIONS CONTD.

COUNTRY	STATION	LAT. ° 'N	LONG. ° 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
					MEASUREMENTS TAKEN									
Jamaica	Negril Point L.H.	18 15	78 22	25	x	x	x			x				
	Orange River.	18 15	76 53	950		x	x		x	x	x	x		x
	Palisadoes Airport.	17 56	76 47	10	x	x	x	x	x	x	x	x		x
	Pembroke Hall.	18 18	76 59	700		x	x			x				
	Richmond Est.	18 27	77 15	120		x	x			x				
	Smithfield.	18 24	78 06	925		x	x		x	x	x	x	x	x
	Spanish Town.	18 00	76 56	70		x	x			x				
	Top Mountain.	18 05	76 40	3550						x	x			
	Worthy Park.	18 08	77 09	1250		x	x			x				x
Cayman Is.	Grand Cayman Airport.	19 17	81 22	20	x	x	x	x		x				
Br. Honduras	Belize Airport.	17 32	88 18	17	x	x	x	x		x				x
Guyana	Bartica Potaro Road.	05 37	58 53	400		x	x			x				
	Ebini.	05 34	57 47	60		x	x			x	x			x
	Georgetown Bot. Gdn.	06 48	58 09	5	x	x	x	x	x	x	x	x	x	x
	Hosororo.	08 10	59 48	300		x	x			x				
	Mabaruma	08 12	59 47	185	x	x	x	x		x				

/ct'd.....

GUYANA STATIONS CONTD.

COUNTRY	STATION	LAT. °	LAT. 'N	LONG. °	LONG. 'W	ALT. ft.	Synop. Obs.	Temp.	Humidity	Wind sp.& dir.	Daily wind mileage	Rainfall	Rainfall intens.	Evap.	Soil temp.	Sunshine
							MEASUREMENTS TAKEN									
Guyana	Mahaicony Abary R.D.S.	06	28	57	46	5		x	x			x	x			x
	Matthews Ridge.	07	31	60	10	350		x	x			x	x			
	Mazaruni Prison.	06	24	58	39	45		x	x			x				x
	Mon Repos.	06	47	58	03	10		x	x			x				x
	New Amsterdam.	06	15	57	31	5		x	x			x	x			
	Port Kaituma.	07	44	59	33	100		x	x			x				
	Timehri Air-port.	06	30	58	15	95	x	x	x	x		x				
	Timehri Cent. Hort. Stn.	06	31	58	16	95		x	x		x	x	x		x	x
	Wauna.	08	09	59	51	100		x	x		x	x	x	x		x

NOTES ON THE OBSERVATIONS AND SUMMARIES

GENERAL

1. The station list includes some stations that are in the process of being established and others from which returns are sometimes delayed. Thus in any particular month summaries for a listed station may not appear in the tables. It is expected that supplementary tables, incorporating previously missed observations, will be added from time to time.

2. At synoptic stations, station elevation refers to the height of the barometer cistern above mean sea level; at other stations, it refers to the height above mean sea level of the ground on which the raingauge stands.

3. Thermometers are exposed in louvred wooden screens with their bulbs approximately 4 feet above the ground. Forced ventilation of the wet and dry bulb thermometers is not generally used.

4. At most stations the raingauge has its rim 1 foot above the ground but in Guyana this height is generally one metre. Most of the standard gauges are 5 inches in diameter; the recording gauges, usually of the tilting-syphon or natural-syphon types, are either 5 or 8 inches in diameter.

5. Local Standard Time (LST) in British Honduras is 6 hours behind Greenwich Mean Time (GMT); in Jamaica and the Cayman Islands, it is 5 hours behind, and in the rest of the countries, it is 4 hours behind. For some of the daily observations the unit of time is the calendar day; for others, it is the 24-hour period commencing at the time of the morning observation on that date and called the "climate day".

6. In each summary table, stations are arranged in alphabetical order within countries. The countries are arranged in geographical order commencing with Trinidad, then moving northwards and westwards along the island chain through Jamaica and the Cayman Islands to British Honduras, and concluding with Guyana.

7. A blank space indicates that data are not available, or were considered unreliable.

TABLE I

1. This table gives summaries of observations made at fixed hours, LST. At synoptic stations these are the main synoptic reporting hours (00, 06, 12 and 18h GMT). At other stations they are the one or two hours at which observations are made each day.

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2. The mean dry bulb and wet bulb temperatures are the averages of the 30 or 31 (28 or 29 for February) daily values as measured at that time of day. The mean vapour prssure is similarly the average of the 30 or 31 computed daily values. On the other hand, the mean relative humidity is computed as the ratio of the mean vapour pressure to the saturation vapour pressure at the mean dry bulb temperature.

3. Barometric pressure is generally measured only at synoptic stations. The values given are the means of the 30 or 31 daily observations at that time, each reduced to mean sea level before being averaged.

4. The observation hour windspeed is generally read from an indicator, but at some stations it is taken from the anemograph chart. The average of the 30 or 31 daily values is given in this table. They must be considered as indicating only the mean speed during the month for a particular time of day, and a mean daily windspeed should not in general be calculated from them. This is particularly true of stations with only one or two hourly observation times, and at those where the four synoptic hour values indicate a significant diurnal effect.

5. Cloud cover is observed at synoptic stations and reported as the fraction of the sky (in eighths) that is occupied by cloud. The mean amount given here is the average of the 30 or 31 daily reports for that time of day. The number of days on which the sky was clear at that time of day (0 eighths), mostly clear (1, 2), partly cloudy (3-5) mostly cloudy (6, 7) or overcast (8) is given in the following columns. An entry in the column headed "9" would indicate an observation for which the sky was either partially or wholly obscured (as,for instance, by fog). It should be noted that the total number of observations in the six columns will be equal to the number of days in the month, unless an observation was missed.

6. Visibility is reported from the synoptic stations in terms of the number of miles (or yards) at which objects are clearly distinguishable. This is customarily "10 or more miles" unless some obscuring material (usually haze, smoke, fog or rain)is present in the air. Again, the total number of observations in these eight columns will be equal to the number of days in the month unless an observation was missed.

TABLE II

1. This table gives summaries of the usual daily observations. All stations listed in Table I should also have entries here. In addition, stations observing only rainfall and/or temperature extremes, will be included in Table II but not in Table I.

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2. The rainfall data are from the standard raingauges at each station. The observation is taken in the morning usually at 12h GMT (i.e. at 6 to 8 A.M. LST) and is entered to the previous day. The "climate day" thus terminates at the time of the following morning's observation and not at midnight. The most rain in a day, the date on which it occurred, and the number of days with amounts exceeding .04, .40 and 1 inch, all refer to the "climate day".

3. Maximum and minimum temperatures are read in the morning, with the maximum being entered to the previous day. As indicated, the mean daily temperature given in this table is the average of mean maximum and mean minimum temperatures. The highest maximum and lowest minimum observed during the month are also given.

4. The grass minimum temperature is found from a thermometer exposed to the atmosphere at a height of 2 inches above the ground. As it will cool through overnight radiation loss, generally lower temperatures than those from the screened thermometers will be observed. The mean of the 30 or 31 daily values is given in the table.

5. All stations for which monthly sunshine totals are given here will normally have entries in Table VI as well.

6. At synoptic and a few other stations, the observer is asked to note the occurrence of thunder, fog, hail or gale (i.e. a mean windspeed in excess of 34 knots). The total number of calendar days during the month with such occurrences is given here. It should be emphasized that unless the station is manned continuously, these events, particularly thunder, are likely to be under-counted.

TABLE III

1. This table gives summaries of additional daily observations of importance primarily to agriculture.

2. The wind mileage data are from totalizing cup anemometers set 6 feet above the ground. The counters are read at the morning observation hour and are entered to the previous day. Hence both the "daily mean" and "most in a day" figures refer to the climate day rather than the calendar day. It should be noted that, as the mean hourly windspeeds calculated from these values would refer to a 6 foot height, they will be significantly lower than those means that may appear for the same stations in Table V.

3. Evaporation is usually measured using a Class A pan, a metal container 4 feet in diameter and 10 inches deep, which is exposed on a wooden platform just above the ground. The water depth in the pan is maintained at between 7 and 8 inches, with changes in the level being measured at each morning's observation. The total water loss for the

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month is given in the table together with the maximum daily loss during the month and the date on which it occurred. Both these last entries refer to the climate day.

4. Soil temperature extremes are read in the morning; the maxima being entered to the previous day. The mean maximum, mean minimum and extremes are given for the two depths that are most frequently instrumented at the various stations.

5. Radiation measurements are mostly from Gunn-Bellani pyranometers that are read in the morning and are entered to the previous day. While the most and least in a day will refer to the climate day, there will be little difference for solar radiation between climate and calendar days as the morning observation is generally taken shortly after sunrise.

TABLE IV

1. This table gives maximum rainfall amounts during specified periods of time, as determined from the charts of recording raingauges.

2. It is important to note that, presently, the measurement of maximum amounts at some stations is confined to single 24-hour periods (the climate, or rainfall day) while at others two daily charts may be combined when necessary for the determination of maximum amounts. These two procedures are likely to produce divergent results only for the 6 and 12 hourly periods, with the former method tending to under-record these maximum amounts.

TABLE V

1. This table gives mean windspeeds and details of the highest winds recorded at stations possessing anemographs. These figures normally relate to heights of between 30 and 60 feet above the ground.

2. For each hour during the month a mean windspeed to the nearest knot is read off the chart. The prevailing wind direction to the nearest 10° is also given. The highest speed for any clock hour is given in this table, together with the corresponding direction and time and date of occurrence.

3. The direction, speed and occurrence time of the highest gust during the month is also given. While response characteristics of the different anemographs in use varies, this will generally represent the speed over a 2-5 second averaging time.

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4. The number of hours during the month in which one or more gusts occur that exceed 33, 47 and 63 knots (i.e. Beaufort force 7, 9 and 11 respectively), are given in the next three columns. These values correspond to 38, 55 and 72 miles per hour.

5. The average of all the hourly anemograph values during the month is given in the last column. At stations where the diurnal effect is relatively small, this figure and the average of the four windspeed entries for synoptic stations in Table I should be reasonably close.

TABLE VI

1. This table gives summaries of the hourly and daily amounts of sunshine, measured by Campbell-Stokes sunshine recorders. The time scale produced by the recorder and used here is centred on solar noon and is referred to as local apparent time (LAT). Except for the Cayman Islands, local apparent time does not differ from the local standard time by more than ± 10 minutes on average.

2. During each hour the amount of direct sunshine is measured in tenths of an hour. The mean duration figures given here are the averages of the 30 or 31 daily values for that hour; as they are in hundredths, they can also be considered as giving directly the percentage of time that the sun shone for each hour during the day.

3. The total duration in hours will be equal to the sum of the previous columns times the number of days in the month. It is also expressed as a percentage of the maximum amount possible, based on the stations'latitude and the season.

4. The most sunshine in any day and the date of occurrence are given; where two or more days are tied for maximum, only the earlier date is listed.

5. The number of days with sunshine amounts in different ranges is given in the last part of the table. The sum of the entries here should equal the number of days in the month. Where they do not, it indicates that one or more values have been missed;provided that fewer than 6 days are missing, the monthly total duration will have been adjusted to represent the whole month.

JM/jb

C.M.I.

January, 1970.

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - DECEMBER, 1969

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6,7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
TRINIDAD	PIARCO AIRPORT	41	02	74·0	72·9	27·1	94	1010·7	0·4	3·7	2	9	11	9	0	0	0	0	0	0	0	0	1	30
			08	76·9	74·9	28·7	91	1012·6	1·7	4·5	0	9	10	11	1	0	0	1	1	0	0	0	3	26
			14	84·2	76·9	28·3	71	1010·3	7·8	6·0	0	0	10	19	2	0	0	1	1	0	0	0	3	26
			20	76·8	74·8	28·6	91	1011·4	1·0	4·1	0	8	13	9	1	0	0	0	0	0	0	0	0	31
	ST AUGUSTINE UWI	52	16	82·8	75·9	27·6	72	1010·3	1·5	5·4	0	0	15	16	0	0								
TOBAGO	CROWN POINT AIRPORT	9	02	76·4	74·0	27·6	89	1010·9	4·2	4·9	0	5	12	13	1	0	0	0	0	0	0	0	1	30
			08	81·1	76·4	28·9	80	1012·7	5·9	4·4	0	9	11	9	2	0	0	0	0	0	0	0	1	30
			14	83·9	77·5	29·5	74	1010·7	10·1	4·5	0	7	11	11	2	0	0	0	0	0	0	0	1	30
			20	77·4	74·4	27·7	86	1011·8	4·9	4·9	0	5	16	11	1	0	0	0	0	0	0	1	0	30
GRENADA	MOUNT HORNE	500	08	78·5	75·4	28·8	87																	
BARBADOS	HUSBANDS CWI	370	08	78·6	74·5	27·3	82	1013·9	5·8	5·0	0	5	10	14	1	0	0	0	0	1	0	1	1	27
			14	80·7	74·7	26·7	75	1011·5	7·3	6·0	0	1	4	25	0	0	0	0	0	1	0	0	2	27
	SEAWELL AIRPORT	183	02	76·5	73·6	27·0	87	1011·4	6·2	3·3	0	14	13	4	0	0	0	0	0	0	0	0	0	31
			08	79·2	74·9	27·6	81	1013·4	7·8	5·2	0	1	14	15	1	0	0	0	0	0	0	0	0	31
			14	82·8	76·3	28·0	73	1011·2	8·9	5·4	0	2	10	19	0	0	0	0	0	0	0	0	0	31
BARBADOS	SEAWELL AIRPORT	183	20	77·4	74·1	27·3	85	1012·5	6·3	4·3	0	5	15	11	0	0	0	0	0	0	0	0	0	31
ST LUCIA	VIGIE AIRPORT	7	08	78·6	74·4	27·1	81	1013·3	5·2	5·0	0	4	13	11	2	0	0	0	0	0	0	2	5	23
			14	83·0	75·6	26·9	69	1011·4	9·3	5·6	0	1	11	16	1	0	0	0	0	0	0	0	1	28
DOMINICA	MELVILLE HALL APT	43	14	82·0	75·6	27·5	74	1013·4	8·4	4·4	0	3	17	7	1	0	0	0	0	0	0	0	3	27
ANTIGUA	COOLIDGE AIRPORT	25	08	77·7	73·4	26·1	81	1014·4	7·5	3·6	0	12	12	6	1	0	0	0	0	0	0	0	0	31
ANTIGUA	COOLIDGE AIRPORT	26	14	82·7	74·9	26·0	68	1012·9	10·8	3·9	0	7	17	7	0	0	0	0	0	0	0	0	0	31
			20	77·5	72·9	25·6	79	1014·1	8·2	3·3	0	13	13	4	1	0	0	0	0	0	0	0	0	31
	DUNBARS	220	09	80·7	74·9	27·1	76																	
			15	81·6	74·3	25·9	70																	
JAMAICA	BODLES	60	07	69·7	68·2	22·7	92																	
JAMAICA	BODLES	60	13	78·7	70·5	24·4	73																	
	CEDAR VALLEY	1930	07	64·7	63·7	19·7	95																	
			13	76·8	71·8	24·3	77																	
	CINCHONA GARDENS	4897	08	59·2	57·5	16·1	94																	
			16	64·1	62·2	18·4	90																	
JAMAICA	DALLAS	950	09	73·3	71·6	25·8	92																	
			15	78·9	73·6	25·9	77																	
	DUCKENFIELD	60	08	78·2	73·4	26·1	81																	
	EAST ALBION NURSERY	90	07	73·7	68·9	21·9	77																	
			13	83·9	74·7	25·6	64																	
JAMAICA	EMPIRE NURSERY	2130	07	64·5	63·2	19·2	93																	
			13	76·7	71·0	23·3	75																	
	FARM HILL	4020	07	63·8	60·7	16·5	82																	
			13	76·2	70·4	24·3	79																	
	HALLS DELIGHT	3020	07	67·5	62·9	17·5	76																	
JAMAICA	HALLS DELIGHT	3020	13	74·0	68·3	21·2	74																	
	HOPE GARDENS	712	07	68·5	65·4	18·5	78																	
	IRWIN	80	08	74·2	71·6	25·3	87																	
			15	80·0	74·6	26·9	77																	
	MARSHALLS PEN	2300	07	64·4	63·9	19·1	93		2·7	2·5	7	16	7	1	0	0								
JAMAICA	MARSHALLS PEN	2300	13	78·5	70·7	20·7	62		3·5	4·2	4	3	9	15	0	0								
	MONTEGO BAY AIRPORT	3	01	75·5	71·3	24·5	81	1013·6	4·2	3·5	0	15	4	11	1	0	0	0	0	0	0	0	1	30
			07	74·7	70·8	23·9	82	1013·9	4·4	4·5	0	9	9	10	3	0	0	0	0	0	0	0	0	31
			13	81·5	74·2	25·7	70	1013·2	9·9	4·5	0	10	7	13	1	0	0	0	0	0	0	0	0	31
			19	77·4	72·7	25·2	79	1013·3	4·3	3·9	0	13	6	11	1	0	0	0	0	0	0	0	0	31

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS - DECEMBER, 1959

(CONTINUED)

COUNTRY	STATION	HEIGHT ABOVE MSL ft	HOUR LST	MEAN TEMPERATURE AND HUMIDITY: DRY BULB °F	WET BULB °F	VAPOUR PRESS mb	REL HUM %	MEAN PRESSURE REDUCED TO MSL mb	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eighths): MEAN AMT	Number of Observations: 0	1,2	3-5	6-7	8	9	VISIBILITY (No. of Observations) (yards): 0-440	440-1,100	1,100-2,200	(miles): 1½-2	2-3	3-5	5-10	10 or more
JAMAICA	MORANT POINT LH	6	01	78.9	75.0	27.8	83		10.0	4.2	0	7	13	10	1	0								
			07	78.3	74.5	27.8	84		9.5	4.9	0	5	11	14	1	0								
			13	81.5	76.8	29.5	80		9.5	5.3	0	2	12	17	0	0								
			19	79.3	75.2	28.2	82		10.0	4.8	0	6	13	7	5	0								
	PALISADOES AIRPORT	9	01	75.3	70.4	23.2	78	1012.9	4.1	3.5	0	15	6	10	0	0	0	0	0	0	0	0	0	31
JAMAICA	PALISADOES AIRPORT	9	07	75.0	70.5	23.5	79	1013.2	3.8	3.5	0	14	9	8	0	0	0	0	0	0	0	0	0	31
			13	83.7	74.8	25.4	64	1012.6	6.8	4.6	0	11	5	14	1	0	0	0	0	0	0	0	0	31
			19	77.8	71.9	24.4	75	1012.6	5.8	4.2	0	10	9	9	3	0	0	0	0	0	1	0	1	29
	SMITHFIELD	925	08	73.8	70.1	23.4	82																	
	WORTHY PARK	1250	07	68.1	66.1	21.1	90																	
JAMAICA	WORTHY PARK	1250	15	77.7	71.5	23.2	71																	
CAYMAN ISLANDS	GRAND CAYMAN APT	20	07	72.0	68.7	22.7	85	1015.6	6.8	5.1	0	11	3	5	13	0	0	0	0	0	0	0	2	28
			13	81.2	73.4	24.7	68	1015.3	9.7	4.8	0	8	8	10	5	0	0	0	0	0	0	0	1	30
			19	75.0	70.7	23.4	79	1015.1	6.9	5.4	0	7	8	0	16	0	0	0	0	0	0	0	0	31
BR HONDURAS	BELIZE AIRPORT	17	06	68.2	66.9	22.1	94	1014.7	1.9	4.1	1	7	12	5	1	2	1	1	0	1	1	1	15	10
BR HONDURAS	BELIZE AIRPORT	17	12	81.3	75.4	24.7	68	1015.5	5.1	4.3	0	9	9	10	1	0	0	0	0	0	0	0	0	29
			18	75.4	71.1	24.1	80	1013.9	2.2	3.8	0	12	7	8	2	0	0	0	0	0	0	6	23
GUYANA	BARTICA POTARO RD	400	08	78.4	76.3	29.8	90																	
			14	88.4	78.5	28.7	63																	
	EBINI	60	08	78.2	76.0	29.7	90																	
GUYANA	EBINI	60	14	88.3	76.3	25.7	55																	
	GEORGETOWN BOT GDN	7	08	81.2	77.3	30.2	83	1012.2	4.3	5.7	0	1	11	17	2	0	0	0	0	0	0	0	10	21
			14	84.5	77.9	29.8	74	1009.7	7.9	5.4	0	1	12	15	1	0	0	0	0	0	0	6	23
	HOSOROO		08	76.4	75.0	29.1	94																	
			14	82.3	77.4	29.9	79																	
GUYANA	MATTHEWS RIDGE		08	74.9	74.1	29.4	96																	
			14	83.1	76.0	27.5	71																	
	MAZARUNI PRISON	47	08	78.5	76.1	29.7	89																	
			14	83.8	77.2	29.0	73																	
	MON REPOS		08	80.5	76.0	28.7	81																	
GUYANA	MON REPOS		14	84.0	77.1	28.6	72																	
	NEW AMSTERDAM	3	08	80.6	76.7	29.6	83																	
			14	87.1	78.4	29.4	67																	
	PORT KAITUMA		08	76.1	74.9	29.0	94																	
			14	83.6	78.2	30.5	78																	
GUYANA	TIMEHRI AIRPORT	95	02	73.7	73.4	28.0	99	1009.9	0.0	4.8	5	2	6	17	1	0	0	0	0	0	0	2	19	10
			08	77.8	75.9	29.6	91	1011.8	1.9	6.3	0	1	5	24	1	0	0	0	0	0	0	0	4	27
			14	83.9	77.8	29.7	75	1009.2	8.0	6.8	0	0	0	31	0	0	0	0	0	0	0	0	2	29
			20	76.0	75.1	29.3	96	1010.2	0.7	6.1	0	1	9	19	2	0	0	1	0	0	0	0	2	28
	TIMEHRI CHS		08	77.7	76.1	30.0	93																	
GUYANA	TIMEHRI CHS		14	84.2	77.8	29.8	75																	
	WAUNA		08	75.3	74.7	29.1	97																	
			14	81.1	77.4	30.4	84																	

TABLE II - SUMMARY OF DAILY OBSERVATIONS - DECEMBER, 1959

COUNTRY	STATION	RAINFALL (inches) TOTAL AMOUNT	MOST IN A DAY	DATE	NUMBER OF DAYS WITH MORE THAN ·04	·40	1·00	AIR TEMPERATURE °F MEAN MAX A	MEAN MIN B	MEAN ½(A+B)	EXTREMES MAX	MIN	MEAN GRASS MIN °F	TOTAL SUNSHINE DURATION hr	NO OF DAYS WITH THUNDER HEARD	FOG	HAIL	GALE
TRINIDAD	PIARCO AIRPORT	4·67	1·37	21	13	4	1	87·0	72·0	79·5	89	67	68·3	208·8	4	1	0	0
	ST AUGUSTINE UWI	4·71	·98	10	13	4	0	87·5	71·2	79·3	89	69	69·1	214·3	2	0	0	0
TOBAGO	CROWN POINT AIRPORT	3·26	1·30	21	10	2	1	86·4	74·0	80·2	88	71		262·0	0	0	0	0
GRENADA	MOUNT HORNE	9·39	2·01	21	16	9	4							223·2				
BARBADOS	HUSBANDS CMI	6·43	1·61	19	14	4	2	84·0	72·7	78·4	87	69		240·3	2	0	0	0
BARBADOS	SEAWELL AIRPORT	6·49	1·63	19	14	5	3	85·1	73·6	79·4	87	69	71·4	241·6	0	0	0	0
ST LUCIA	VIGIE AIRPORT							85·0	72·7	78·9	88	69			0	0	0	0
DOMINICA	MELVILLE HALL APT	11·00	1·82	8	16	5	5	82·6	75·9	78·3	85	70		177·9	0	0	0	0
ANTIGUA	COOLIDGE AIRPORT	1·03	·56	21	4	1	0	83·6	73·8	78·7	85	67			0	0	0	0
	DUNBARS	1·19	·60	21	4	1	0	85·5	73·9	79·7	89	70						
JAMAICA	BERNARD LODGE	3·60	1·80	1	4	2	2	87·0	67·1	77·1	89	60		241·2				
	BODLES	1·94	·62	1	7	2	0	86·0	60·7	73·4	89	55						
	CEDAR VALLEY	6·24	1·72	24	10	6	3	79·4	59·3	69·3	82	54						
	CINCHONA GARDENS	8·93	2·35	17	13	7	4	70·0	45·4	58·2	77	43						
	DUCKENFIELD	9·46	3·40	20	9	5	4	83·0	72·4	77·7	87	67	67·0	174·9				
JAMAICA	EAST ALBION NURSERY	5·59	2·14	19	3	2	2	85·2	69·9	77·5	89	64						
	EMPIRE NURSERY	2·15	·73	20	6	3	0	80·2	61·2	70·7	83	56						
	FARM HILL	5·81	1·43	16	11	6	2	74·5	58·7	66·6	77	55						
	HALLS DELIGHT	4·00	1·63	16	10	4	1	77·4	61·7	69·5	81	53						
	HOPE GARDENS	1·77	1·20	20	4	1	1	85·4	58·0	71·7	87	53						
JAMAICA	IRWIN	2·86	1·10	19	9	2	1	83·9	67·6	75·8	90	59						
	MARSHALLS PEN	7·11	3·01	24	8	4	2	79·9	62·7	71·3	96	57	58·1		5	0	0	0
	MORANT POINT LH	7·47	2·79	20	5	5	4	82·9	74·5	78·7	85	70			4	0	0	0
	ORANGE RIVER	11·96	6·85	16	13	4	4	80·4	62·1	71·1	84	50		148·1				
	PALISADOES AIRPORT	4·36	2·47	7	5	2	2	86·3	73·9	80·1	88	70		206·5	2	0	0	0
JAMAICA	SMITHFIELD	1·97	·85	25	4	2	0	79·5	69·5	74·5	85	65		196·4				
	WORTHY PARK	4·02	1·27	22	8	4	2	81·9	62·6	72·3	85	56		177·1				
CAYMAN ISLANDS	GRAND CAYMAN APT	1·11	·75	11	3	1	0	82·4	69·0	75·7	87	58			0	0	0	0
BR HONDURAS	BELIZE AIRPORT	·66	·33	31	3	0	0	83·5	67·6	75·5	87	61		246·5	0	5	0	0
GUYANA	BARTICA POTARO RD	3·86	1·20	14	8	5	1	91·1	71·5	81·4	95	70						
GUYANA	EBINI	3·01	·88	16	9	3	0	91·3	72·5	81·9	94	71		226·4				
	GEORGETOWN BOT GDN	7·42	2·57	27	12	6	2	85·9	75·8	80·9	89	74	71·8	216·3	1	0	0	0
	HOSORORO	11·70	2·18	29	22	10	3	87·3	72·5	79·9	90	70						
	MATTHEWS RIDGE	4·15	·63	23	19	3	0	88·6	71·7	79·2	90	70						
	MAZARUNI PRISON	9·36	1·43	28	20	11	1	85·8	73·4	80·1	90	71		154·8	2	1	0	0
GUYANA	MON REPOS	4·91	·98	23	14	5	0	85·8	75·7	80·8	88	73		223·2				
	NEW AMSTERDAM	6·66	1·69	28	14	4	3	88·4	75·0	81·7	90	73						
	PORT KAITUMA	9·54	1·23	29	22	11	1	88·7	70·0	79·3	92	68						
	TIMEHRI AIRPORT	11·48	5·50	25	20	5	2	87·6	70·9	79·3	90	68			3	2	0	0
	TIMEHRI CMS	10·96	6·37	25	17	5	1	87·2	70·3	78·7	90	69	71·2	144·7				
GUYANA	WAUNA	11·90	2·57	29	24	12	2	86·5	70·3	78·4	90	68		181·9				

TABLE III - SUMMARY OF AGROMETEOROLOGICAL OBSERVATIONS - DECEMBER, 1969

COUNTRY	STATION	RUN OF WIND (m. miles)		EVAPORATION (inches)			SOIL TEMPERATURES °F								
							At 2 inch Depth					At 4 inch Depth			
		DAILY MEAN	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	MEAN MAX	MEAN MIN	EXTREMES MAX	DATE	MIN	MEAN MAX	MEAN MIN	EXTREMES MAX	MIN
TRINIDAD	PIARCO AIRPORT	80	123	5.45	.37	16									
	ST AUGUSTINE UWI	20	42												
TOBAGO	CROWN POINT AIRPORT			5.77	.27	16									
BARBADOS	HUSBANDS CMI	107	172				86.7	75.5	90	17	72	82.8	75.5	85	74
JAMAICA	BODLES	72	177	5.75	.30	17	.	.				.	.		
	ORANGE RIVER	38	65	3.42	.29	29	84.0	65.5	89	9	50	82.2	65.8	88	52
	SMITHFIELD	71	122	3.48	.18	12	81.0	69.3	87	18	65	79.5	71.0	87	67
GUYANA	EBINI	93	120	7.62	.39	15									
	GEORGETOWN BOT GDN	67	90												
	TIMEHRI CMS	46	72												
	WAUNA	30	58												

TABLE IV - SUMMARY OF RAINFALL INTENSITY RECORDS - DECEMBER, 1969

COUNTRY	STATION	MAXIMUM AMOUNTS (inches) IN RAINFALL DAY DURING SPECIFIED PERIODS OF TIME							
		5 mins	10 mins	15 mins	30 mins	1 hour	2 hours	6 hours	12 hours
TRINIDAD	PIARCO AIRPORT	.26	.33	.35	.42	.67	1.21	1.30	1.37
	ST AUGUSTINE UWI		.47	.68	.92	.92	.92	.92	.92
TOBAGO	CROWN POINT AIRPORT	.21	.33	.38	.47	.47	.49	.95	1.20
BARBADOS	HUSBANDS CMI	.25	.39	.51	.81	1.05	1.20	1.33	1.60
JAMAICA	PALISADOES APT	.16	.32	.40	.60	.78	1.49	2.47	2.47
GUYANA	ERINI	.28	.51	.63	.88	.88	.88	.85	.88

TABLE V - SUMMARY OF WINDSPEED RECORDS - DECEMBER, 1969

COUNTRY	STATION	HIGHEST HOURLY WIND				HIGHEST GUST				NO OF HOURS WITH GUSTS EXCEEDING			MEAN WIND SPEED
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	35	47	58	
TRINIDAD	PIARCO AIRPORT	07	16	09	16	07	31	0810	16	0	0	0	4.3
TOBAGO	CROWN POINT AIRPORT	10	17	15	15	10	39	1225	15	1	0	0	6.0
ANTIGUA	COOLIDGE AIRPORT	13	20	21	21	13	30	2040	21	0	0	0	9.0
JAMAICA	MONTEGO BAY	02	18	23	12	03	26	2350	12	0	0	0	5.8
	PALISADOES APT	08	23	15	24	09	34	1410	24	1	0	0	7.1

TABLE VI - SUMMARY OF SUNSHINE RECORDS - DECEMBER, 1969

COUNTRY	STATION	MEAN DURATION (hundredths of an hour) DURING SPECIFIED HOURS (Local Apparent Time)														TOTAL DURATION (hours)	PERCENT OF POSSIBLE	MOST IN A DAY	DATE	NOS OF DAYS WITH AMOUNTS WITHIN THE RANGES (hours)					
		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19					NIL	0.1-3.0	3.1-6.0	6.1-9.0	9.1-12.0	More than 12
TRINIDAD	PIARCO AIRPORT	0	14	62	74	78	73	72	69	60	50	56	52	13	0	208·8	59	10·1	19	0	4	6	11	10	0
	ST AUGUSTINE UWI	1	14	69	69	70	78	77	72	61	47	38	55	18	0	214·3	60	11·0	26	0	3	6	13	9	0
TOBAGO	CROWN POINT AIRPORT	0	17	76	88	83	84	90	85	81	83	81	58	19	0	262·0	73	11·0	6	0	0	4	12	15	0
BARBADOS	SEAWELL AIRPORT	0	2	54	70	79	85	92	84	74	77	76	71	16	0	241·6	68	10·3	30	0	2	5	11	13	0
DOMINICA	MELVILLE HALL APT	0	0	47	62	73	73	71	72	68	59	33	14	0	0	177·9	51	9·7	28	5	1	7	17	1	0
JAMAICA	MONTEGO BAY	0	0	33	48	57	69	70	70	74	61	54	42	3	0	180·2	52	9·9	28	2	7	3	12	7	0
	ORANGE RIVER	0	0	34	60	62	54	65	56	51	41	37	17	2	0	148·1	43	9·5	4	0	11	7	11	2	0
	PALISADOES	0	3	65	76	80	75	73	77	73	58	47	35	3	0	206·5	60	10·2	6	1	5	3	13	6	0
GUYANA	EBINI	0	9	40	79	82	86	85	82	70	67	57	33	13	0	226·4	60	10·4	11	0	1	8	14	7	0
	GEORGETOWN BOT GDN	0	8	61	64	69	78	83	75	69	68	66	57	6	0	216·3	59	9·9	1	0	4	5	15	7	0
GUYANA	MAZARUNI PRISON	0	2	29	57	63	67	66	56	49	49	40	23	0	0	154·8	42	8·2	19	0	6	13	12	0	0
	MON REPOS	0	15	51	65	68	81	83	78	72	68	65	58	16	0	223·2	61	10·5	17	0	5	2	12	12	0
	TIMEHRI CHS	0	5	60	57	53	59	55	44	41	55	32	22	4	0	144·7	40	8·5	17	0	6	17	8	0	0
	WAUNA	0	20	58	71	66	71	74	64	55	39	33	28	7	0	181·9	50	9·0	23	0	4	13	12	2	0