

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the Second Ten days of August (11th -20th) 2017

Term		Meaning
Dekad		10 day rainfall measuring period
Rain Day		A day with 1.0 mm or more of rainfall amount
Wet Day		A day with 10.0 mm or more of rainfall amount
Extremely Wet Day		A day with 25.0 mm or more of rainfall amount
Normal Rainfall		Between 75% and 125% of the average
Below Normal Rainfall		Rainfall below 75% of the average
Above Normal Rainfall		Rainfall in excess of 125 % of the average
Much below Normal Rainfall		Rainfall below 50% of the average
Much above Normal Rainfall		Rainfall above 150% of the average
Scanty Rainfall		Less than 1 mm
Moderate Rainfall		1-10 mm
Heavy Rainfall		10-50 mm
Very heavy Rainfall		Greater than 50 mm
Probability of 1-30 %		Low Chance
Probability of 30-70 %		Moderate Chance
Probability greater than 70%		High Chance
Term	Amount of Rain	Type of day
Scanty Rainfall	Less than 1 mm	Relatively dry day
Moderate Rainfall	1-10 mm	Relatively wet day
Heavy Rainfall	10-50 mm	Wet day
Very heavy Rainfall	Greater than 50 mm	Excessively wet day

Definitions used in the forecast and bulletin

Weather Assessment for the First Ten Days (Dekad) of August $(01^{st} - 10^{th})$ 2017

Weather conditions for agriculture were mostly favourable during the first ten days of August in Trinidad and Tobago. Trinidad experienced mixed conditions with heavy rainfall on the 1st, 3rd, 4th and 9th accounting for most of the ten-day rainfall totals on the island. Preliminary ten-day rainfall at Piarco was close to 125.0mm, but based on observations, totals were higher at other locations. Wet conditions also dominated the majority of days in Tobago with moderate to heavy rainfall <u>Disclaimer</u>



occurring on most days at various districts across the island. The period, 1st to 8th was particularly wet and accounted for most of the ten-day rainfall totals in the island. Moderate to heavy rainfall produced as a much as 22.9 mm of rainfall on the 6th in the Crown Point area. Preliminary ten-day rainfall total at Crown Point amounted close to 70.0mm and based on observations, similar rainfall amounts were observed elsewhere on the island.

At the same time, maximum day temperatures at Piarco soared above 33.0°C on eight of the ten days to peak at 34.9°C on the 8th; while night minimum temperatures fluctuated between 22.8°C and 24.3°C. Across at Crown Point, maximum day temperatures remained above 30.0°C on eight of the ten days to peak at 33.0°C on the 9th, while night minimum temperatures were above 25.0°C for seven out of the ten days.

The wet and humid conditions would have been favourable for some bacterial, fungal and viral crop diseases to flourish. At the same time, the soggy fields in Trinidad would have reduced soil oxygen, increased the loss of nitrogen and other important nutrients, which can negatively affect fruit quality and crop yields. Meanwhile, these conditions would have reduced the need for irrigation, improved water flow and levels in streams and ponds, while providing good opportunities for water harvesting, where needed.

Expected Weather for the Second Ten days of August $(11^{th} - 20^{th})$ 2017 and Likely Impact on Agriculture

Moderate chances exist for mixed conditions during the second ten days of August, across large areas of Trinidad and Tobago. The most favourable likelihood is for areas in northern Trinidad, and southwest Tobago to receive the heaviest downpours. Farmers should expect wetter conditions on the 11th, 13th, 14th, 15th and 17th to 18th. Drier conditions are in the forecast for the 12th and 16th but pockets of moderate rainfall can still be experienced. Overall there is a 65% chance for ten-day rainfall totals between 40.0mm and 75.0mm in Trinidad, while in Tobago a 70% chance exists for ten-day rainfall totals between 50.0mm and 75.0mm.

During the forecast period, day-time temperatures are expected to be slightly warmer than normal for all of Trinidad and Tobago. Expect day-time temperatures to peak between 31.0°C and 34.5°C on most days in Trinidad and between 30.0°C and 32.0°C in Tobago. Night-time temperatures are expected to be on the cool side, varying between 23.0°C and 26.0°C on both islands but the valleys and foothills of the northern range, other hilly areas in Trinidad and northern areas of Tobago can expect slightly cooler night temperatures (between 22.0°C and 23.0°C). Conditions favours all stages of crop growth and development but the mixture of warm and moist conditions is also favourable for rapid multiplication of some crop pests, diseases and fungi. In the heaviest showers,

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Preliminary Rainfall and Temperature Outlook for Last Ten Days of August

The outlook indicates more wet than dry days during the last ten days of August. Temperatures are forecasted to peak near 33.0°C.

Trinidad's Mean Daily Rainfall Forecast for the Second Dekad of August (11th -20th) 2017

Northern & North-Western areas:

Moderate chance (65%) of mean daily rainfall up to 7.5mm.

North-Eastern and Eastern areas:

Moderate chance (65%) of mean daily rainfall up to 7.5mm.

<u>Central, West-Central and inland areas</u>:

Moderate chance (65%) of mean daily rainfall up to 5.0mm.

South-Eastern areas:

Moderate chance (65%) of mean daily rainfall up to 5.0mm.

Southern areas:

Moderate chance (65%) of mean daily rainfall up to 4.0 mm.

South-Western areas:

Moderate chance (65%) of mean daily rainfall up to 6.5mm

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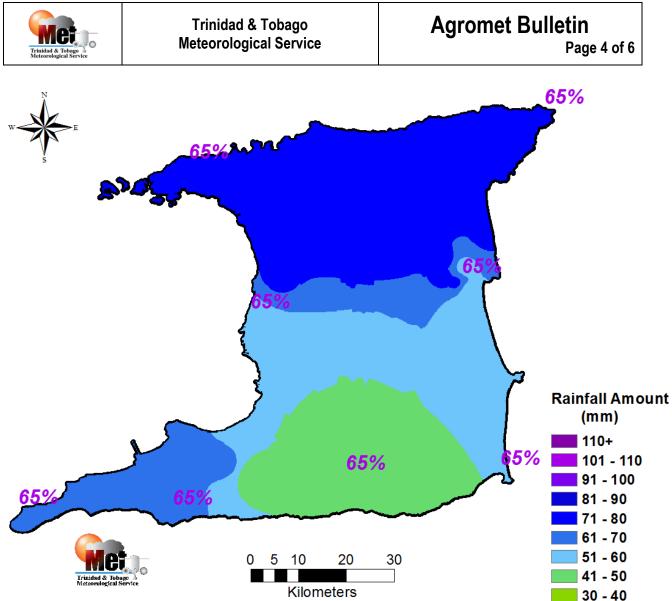


Figure 1. Rainfall Map of Trinidad showing possible rainfall totals for varying districts during the second dekad of August, 2017 and possible probability of occurrence.

Tobago's Mean Daily Rainfall Forecast for the Second Dekad of August (11th - 20th) 2017 North-Eastern areas:

Moderate chance 70%) of mean daily rainfall up to 5.0mm.

South-Western areas:

Moderate chance (70%) of mean daily rainfall up to 7.5mm.

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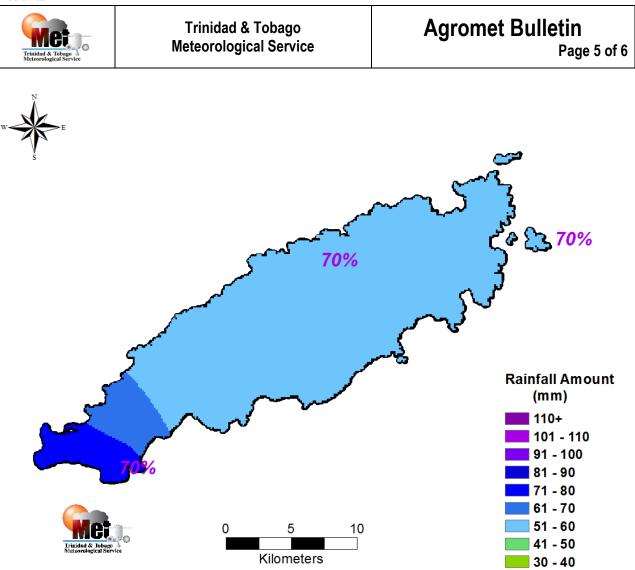


Figure 2. Rainfall Map of Tobago showing possible rainfall totals for varying districts during the second dekad of August, 2017 and possible probability of occurrence

Temperatures

Trinidad's: Temperature Forecasts for the Second Ten Days of August (11th – 20th) 2017

Moderate chance (70%) of daily maximum temperatures exceeding 32.0° C, peaking near 33.0° C. Moderate chance (70%) of daily minimum night temperatures remaining above 23.0° C.

Tobago's: Temperature Forecasts for the Second Ten Days of August (11th - 20th) 2017

Moderate chance (70%) of daily maximum temperatures exceeding 30.0 ^oC, peaking near 32.0 °C. Moderate chance (70%) of daily minimum night temperatures remaining above 24.0 °C.

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The weather forecast for the second ten days of August $(11^{th} - 20^{th})$ 2017 favours weather that will be beneficial to agriculture in most areas. Moderate to heavy rainfall is expected on most days with possible daily totals in excess of 7.5mm on at least four days. There is a 65% chance for possible ten-day rainfall totals between 40.0 and 75.0 mm across Trinidad and between 50mm and 75.0mm for Tobago. Temperatures are set to peak near 34.5° C in Trinidad and near 32.0° C in Tobago. Farmers should watch out for soggy conditions and possible flooding in low-lying fields on days with heavy rainfall. Based on expected moist and hot conditions, chances are enhanced for rapid multiplication of some agricultural pests, diseases and fungi.

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