

	Trinidad & Tobago Meteorological Service	Agromet Bulletin Page 1 of 6
---	---	--

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the First Ten days of October (1st - 10th) 2017

Definitions used in the forecast and bulletin

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

Weather Assessment for the Last Ten Days (Dekad) of September (21st – 30th) 2017

Weather conditions were mixed during the dekad, with rainfall varying from moderate to heavy across Trinidad and Tobago. Heavy rainfall was experienced on the 21st, 25th, 26th, 28th and 29th with the heaviest amount occurring on 28th. This rainfall total accounted for most of the ten-day rainfall totals in both islands. Preliminary ten-day rainfall at Piarco was close to 116.0 mm, while at Brasso Venado, Guayaguayare and other locations ten-day totals were similar or higher. Across in Tobago,

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

	Trinidad & Tobago Meteorological Service	Agromet Bulletin Page 2 of 6
---	---	--

moderate to heavy conditions were experienced and generated close to 68.0 mm of rainfall over the ten days at Crown Point. At the same time, maximum day temperatures at Piarco soared above 33°C on five days to peak at 34.6°C on the 22nd; while night minimum temperatures remained relatively warm, fluctuating between 23.0°C and 25.0°C. Across at Crown Point, maximum day temperatures climbed above 31.0°C on five days to peak at 32.1°C on the 27th; while night minimum temperatures remained above 25.0°C on most of nights.

The mixed conditions would have provided some relief from the drier days in between. However, these conditions would have been favourable for some bacterial, fungal and viral crop diseases to flourish. At the same time, soggy fields tend to cause reduction in soil oxygen, increase in loss of soil nitrogen and other important nutrients, which can negatively affect fruit quality and crop yields. Also, high air temperature has been associated with reduction in some crop shoots growth which in turn reduces root growth; meanwhile relatively warm night temperatures would help promote leafy growth in some plants. 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 First Ten days of October (1st –10th) 2017 and Likely Impact on Agriculture

Mostly wet conditions are expected for the first dekad of October across Trinidad and Tobago. Concerns as it relates to frequent rainfall occurrence during the current wet season remains high. The latest weather forecast for agriculture shows more wet days than dry days in the forecast for the period across the twin islands. Farmers can expect to see an increase in moisture and cloudiness throughout the dekad with the islands experiencing light to heavy rainfall. The heaviest rainfall occurrences are likely on 6th to 9th days of the dekad. Daily rainfall totals for the dekad are expected to peak near 75.0 mm in the northern part of Trinidad. The moisture is likely to bring rainfall on each day with average daily totals between 5.0 mm and 7.5 mm. Overall, there is a 65% chance for ten-day rainfall totals to range between 50.0 mm and 75.0 mm.

On the drier days, farmers should expect temperatures to peak around 33.0 °C in Trinidad and average near 32.0 °C during daylight hours. Across in Tobago, temperatures are expected to peak around 31.5°C and average near 30.0 °C. Nighttime minimum temperatures are expected to remain above 24.0 °C in Trinidad and above 25.0 °C in Tobago on most nights. Wind speeds will remain light to moderate (up to 8 meters per second) at 2.0 meters from the surface, but can get particularly strong (in excess of 10 meters per second) during moderate to heavy rainfall events.

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.



These conditions have the potential to lead to soggy fields, which are not favourable for heavy machine fieldwork. In addition, soggy agriculture fields have the potential to reduce soil oxygen, increase the loss of nitrogen and other important nutrients, as well as, cause crop disease infections to increase. Together, these conditions can affect crop yields negatively in the long run. Flooding potential in low lying crop fields are high for the second half of the dekad and may affect harvesting of mature crops.

Preliminary Rainfall and Temperature Outlook for Second Ten Days of October

The outlook indicates mixed conditions during the first half of the second dekad and a wet end to the second dekad of October with the potential for flooding being high.

Trinidad's Mean Daily Rainfall Forecast for the First Ten Days of October (1st – 10th) 2017

Northern & Northwestern 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.

Central, West-Central and inland areas:

Moderate chance (65%) of mean daily rainfall up to 6.0mm.

South-Eastern areas:

Moderate chance (65%) of mean daily rainfall up to 6.0mm.

Southern areas:

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

South-Western areas:

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

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

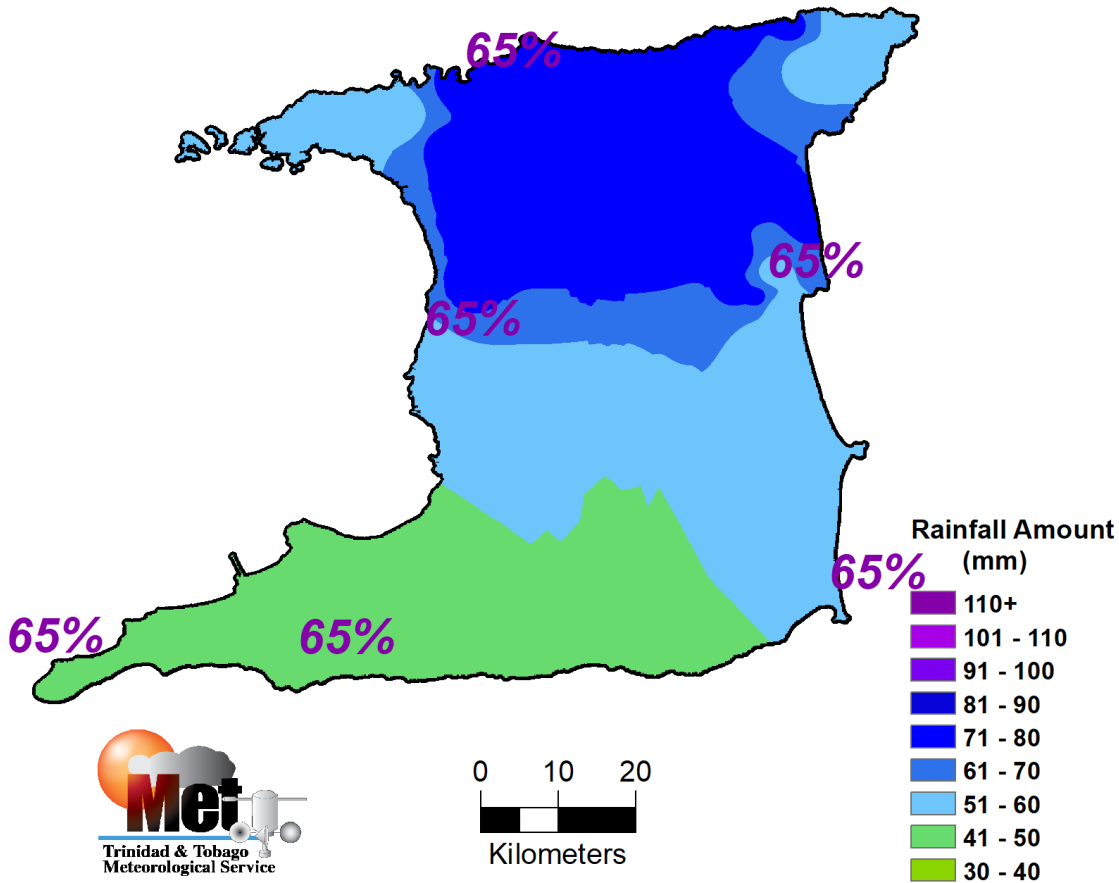


Figure 1. Rainfall Map of Trinidad showing possible rainfall totals for varying districts during the first dekad of October, 2017 and possible probability of occurrence.

Tobago's Mean Daily Rainfall Forecast for the First Dekad of October (1st -10th) 2017

Northeastern areas:

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

South-Western areas:

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

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

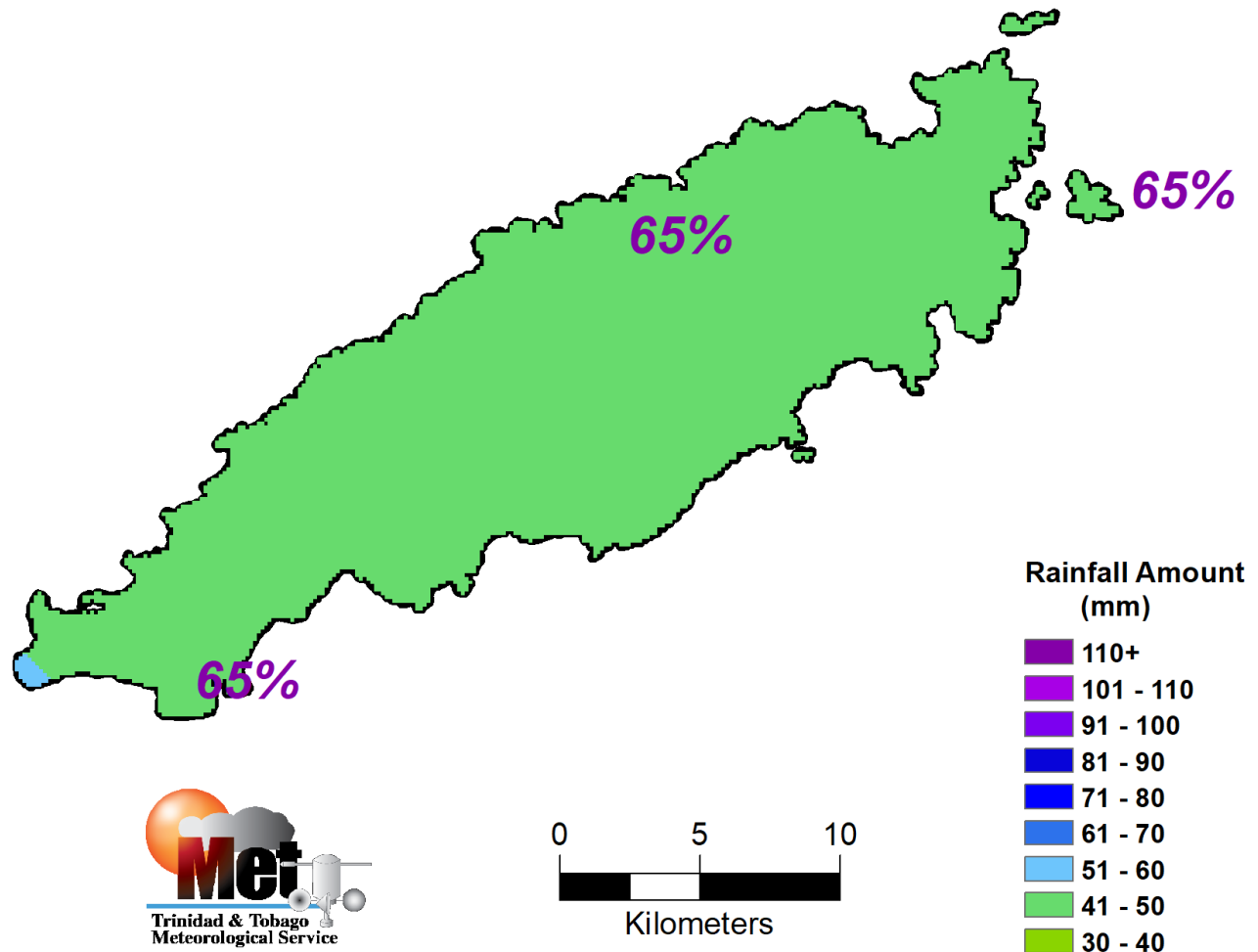


Figure 2. Rainfall Map of Tobago showing possible rainfall totals for varying districts during the first dekad of October, 2017 and possible probability of occurrence

Temperatures

Trinidad's: Temperature Forecasts for the First Ten Days of October (1st – 10th) 2017

Moderate chance (70%) of daily maximum temperatures exceeding 32.5°C, peaking near 33.0°C.
Moderate chance (70%) of daily minimum night temperatures remaining above 23.5°C.

Tobago's: Temperature Forecasts for the First Ten Days of October (1st - 10th) 2017

Moderate chance (70%) of daily maximum temperatures exceeding 31.5 °C, peaking near 32.5°C.
Moderate chance (70%) of daily minimum night temperatures remaining above 25.0°C.

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.



Summary

Mostly wet conditions are expected for the first dekad of October across Trinidad and Tobago. The heaviest rainfall occurrences on 6th to 9th day of the dekad. Overall, there is a 65% chance for ten-day rainfall totals to range between 50.0 mm and 75.0 mm. Day-time maximum temperatures are set to peak between 32.0°C and 33.0°C on most days in Trinidad and between 31.0°C and 32.0°C in Tobago. Night-time temperatures are expected to remain warm and vary between 24.0°C and 26.0°C on both islands. Humidity values during daylight hours are expected to be relatively high (above 65%) on average while wind speeds will remain light to moderate (up to 8 meters per second). Farmers should watch out for excessive wet days which can affect harvesting and fertilizer application and washout. Flooding potential in low lying crop fields are high for the extremely wet days.

Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.