

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the Second Dekad (11th - 20th) of May, 2019

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 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 First Dekad (1st – 10th) of May, 2019.

Trinidad and Tobago experienced mixed conditions with useful rainfall throughout the dekad. As of the 9th May, 2019, the preliminary results of rainfall amounts for Trinidad, showed that north-eastern and eastern areas had rainfall totals as follows: North Oropouche (34.6 mm), Navet (31.0 mm) and Sangre Grande (29.4 mm) were generally above the forecasted range of 10.0 mm to 20.0 mm. However, northern areas such as Piarco (9.7 mm), Caura (0.0 mm) and St Anns (5.4 mm) had rainfall amounts mostly within the range 0.0 mm to 10.0 mm. Additionally, north-western areas of Trinidad such as Moka (10.6 mm) and Diamond Vale (8.2 mm) were mostly within expected range of 0.0 mm to 10.0 mm.

Conversely, central areas had rainfall totals as follows: Arena (17.4 mm), Mamoral (15.6 mm), Flanagin Town (13.8 mm), Tamana (18.4 mm), which were mostly above the range forecasted of 0.0 mm to 10.0 mm. Similarly, southern-western

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.

areas had the following rainfall amounts: Point Fortin (18.6 mm), Barrackpore (26.4 mm) were above the range forecasted of 0.0 mm to 10.0 mm. Likewise, south-eastern areas had the following rainfall amounts: CatsHill (34.4 mm) and Guayaguayare (43.8 mm) and Mayaro (66.5 mm) were above the range forecasted of 10.0 mm to 20.0 mm.

Tobago had experienced some rainfall, western areas such as Crown Point had rainfall totals of 10.3 mm, which was slightly above the forecasted amount of 0.0 mm to 10.0 mm for south-western Tobago.

Trinidad's temperature was generally inside of the expected range, the maximum temperature went up to 32.9 °C, which was within the expected high range of 32.6 °C to 33.7 °C. At the same time Tobago's maximum got up to 31.0 °C, below the expected high range of 31.2 °C to 32.1 °C. Conversely, lowest temperatures recorded were 22.8 °C in Trinidad and 24.2 °C in Tobago. In Trinidad's case, the minimum temperature was within the expected minimum range of 23.9 °C to 22.7 °C. Similarly, the minimum temperature was within the expected minimum range of 24.7 °C to 23.3 °C for Tobago. The average humidity for Trinidad was in the low seventies to mid-eighties while Tobago was in the upper sixties to mid-seventies, throughout the dekad.

Expected Weather for Second Dekad (11th – 20th) of May 2019 and Likely Impact on Agriculture.

The forecast for the second dekad of May indicates that farmers can expect similarly mix conditions as compared to the first dekad of May, 2019. Relatively wet days: on 11th, 15th, 19th and 20th; and relatively dry days: 12th, 13th, 14th, 16th, 17th and 18th. During relatively wet days, expect during mostly early mornings or late afternoons patchy cloudy to cloudy conditions, with light to moderate rainfall over most areas; while during relatively dry days, expect few cloudy patches with a possible light shower of rainfall. Trinidad's ten-day period rainfall totals, forecast to range between 20.0 mm and 40.0 mm, while Tobago's ten-day period rainfall totals, forecast to range between 20.0 mm and 30.0 mm.

The average daily temperatures across Trinidad and Tobago are likely to range between 27.7 °C and 28.5 °C. Expect the highest maximum temperature over the dekad to peak near 33.6 °C in **Trinidad**, while the lowest night to early morning minimum temperature could dip below 23.1 °C. Especially along the foothills and valleys during relatively cloud-free nights. Likewise, during the dekad, in **Tobago**, the highest maximum temperature will peak near 32.7 °C, while the lowest minimum temperature will dip below 23.7 °C, mostly during relatively cloud-free nights.

For both Trinidad and Tobago, the daytime relative humidity (RH) is likely to range between 68% and 79%. However, during relatively wet days, RH percentage values will range around 80% to 85%. At the same time, wind speeds are expected to range between 30 km/h and 55 km/h but can gust to 60 km/h. In addition, evaporation rates are expected to range between 5.0 mm/day and 15.0 mm/day.

There is also a moderate (80%) probability of visitation of Saharan dust/haze that will occasionally reduce visibility to less than 10.0 km, particularly during days: 12th, 13th, 14th, 16th, 17th and 18th.

Impacts on Agriculture:

Due to the existing dry conditions at the is time, more frequent irrigation may be warranted during the dekad. Additionally, the combination of winds, dry vegetation/foliage and hot temperatures, there is a high probability (90%) of an increase frequency of bush and forest fires at this time. Farmer should be more vigilant to protect, crops, livestock and

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.

property at this time.

Sun, Moon and bright objects in the sky:

The sun is presently at latitude of 17.0 degrees' north latitude, and with this position, the day length for this dekad will be 12.5 to 12.6 hours. Less frequent episodes of intense solar radiation will occur during this dekad when the sky is generally cloud free. There is high probability (80%) of heat stress on certain variety plant seedlings and young animals from direct exposure to solar radiation and high temperatures. Additionally, the moon first quarter phase will be on the 11th, follow by full moon on the 18th of May. A gradual increase in intensity of moonlight over crop fields and livestock, with culmination on the 18th where the moon's brightness will be the greatest. As the sun sets in the west, planets: Mercury, Venus, Mars, Jupiter and Saturn will be seen in the evening sky.

Trinidad's Mean Daily Rainfall Forecast for the Second Dekad of May (11th –20th) 2019.

Northern & Northwestern areas:

Moderate chance (63%) of mean daily rainfall up to 2.2 mm.

North-Eastern and Eastern areas:

Moderate chance (68%) of mean daily rainfall up to 3.5 mm.

Central, West-Central and inland areas:

Moderate chance (63%) of mean daily rainfall up to 2.2 mm.

South-Eastern areas:

Moderate chance (67%) of mean daily rainfall up to 3.5 mm.

Southern areas:

Moderate chance (64%) of mean daily rainfall up to 2.7 mm.

South-Western areas:

Moderate chance (62%) of mean daily rainfall up to 2.2 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.

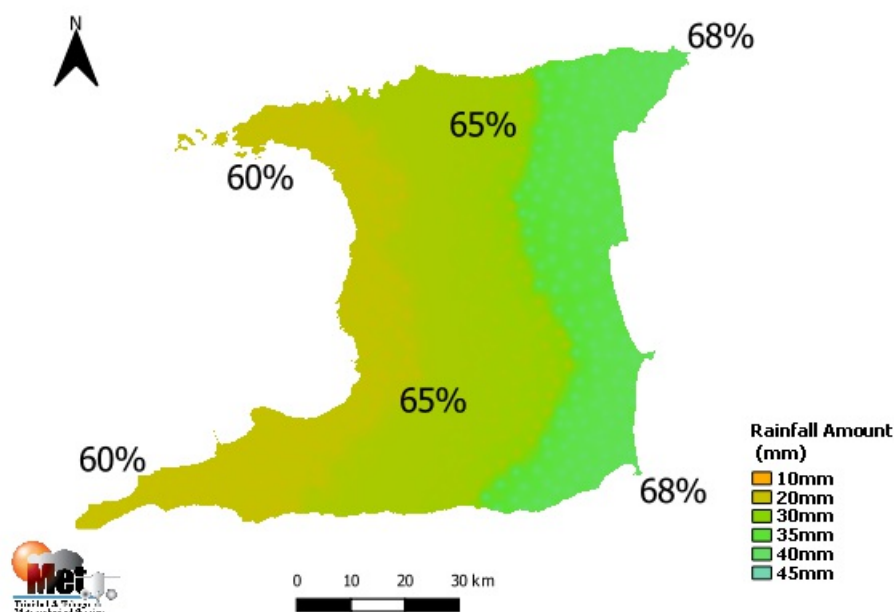


Figure 1. Rainfall Map of Trinidad showing possible rainfall totals for varying districts during second dekad of May 2019 and percentage probability of occurrence.

Tobago's Mean Daily Rainfall Forecast for the Second Dekad of May (11th–20th) 2019.

Northeastern areas:

Moderate chance (68%) of mean daily rainfall up to 3.0 mm.

South-Western areas:

Moderate chance (65%) of mean daily rainfall up to 2.2 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.

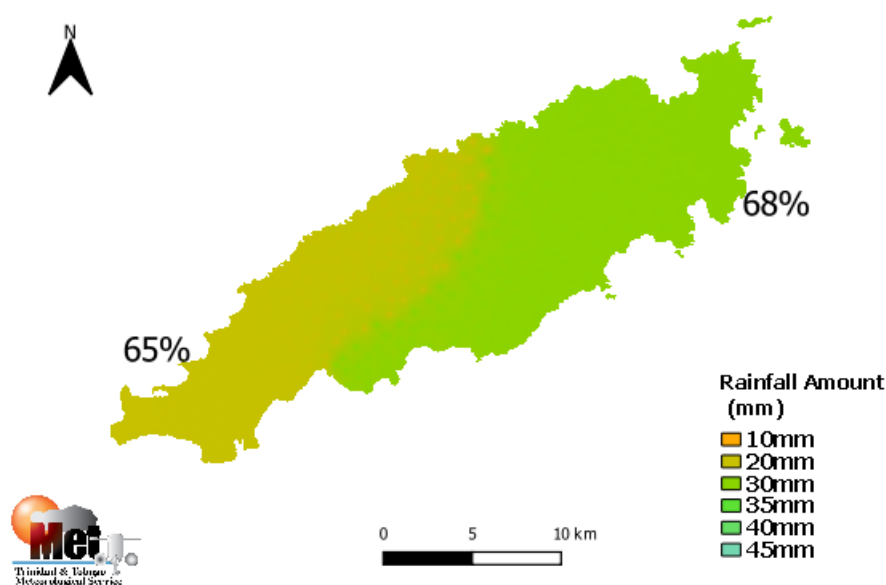


Figure 2. Rainfall Map of Tobago showing possible rainfall totals for varying districts during second dekad of May 2019 and percentage probability of occurrence.

Temperatures:

Trinidad's Temperature Forecast for the second Dekad of May (11th–20th) 2019.

Moderate chance (70%) of daily maximum temperatures to exceed 32.3 °C, peaking near 33.6 °C.

Moderate chance (70%) of daily minimum temperatures to be below 24.2 °C, dropping as low as 23.1 °C.

Tobago's Temperature Forecast for the Second Dekad of May (11th–20th) 2019.

Moderate chance (70%) of daily maximum temperatures to exceed 31.3 °C, peaking near 32.7 °C.

Moderate chance (70%) of daily minimum temperatures to be below 25.0 °C, dropping as low as 23.7 °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.

The forecast for the second dekad of May indicates that farmers can expect similarly mix conditions as compared to the first dekad of May, 2019. Relatively wet days: on 11th, 15th, 19th and 20th; and relatively dry days: 12th, 13th, 14th, 16th, 17th and 18th. During relatively wet days, expect during mostly early mornings or late afternoons patchy cloudy to cloudy conditions, with light to moderate rainfall over most areas; while during relatively dry days, expect few cloudy patches with a possible light shower of rainfall. Trinidad's ten-day period rainfall totals, forecast to range between 20.0 mm and 40.0 mm, while Tobago's ten-day period rainfall totals, forecast to range between 20.0 mm and 30.0 mm.

The average daily temperatures across Trinidad and Tobago are likely to range between 27.7 °C and 28.5 °C. Expect the highest maximum temperature over the dekad to peak near 33.6 °C in **Trinidad**, while the lowest night to early morning minimum temperature could dip below 23.1 °C. Especially along the foothills and valleys during relatively cloud-free nights. Likewise, during the dekad, in **Tobago**, the highest maximum temperature will peak near 32.7 °C, while the lowest minimum temperature will dip below 23.7 °C, mostly during relatively cloud-free nights.

Summary

The forecast for the second dekad of May indicates that farmers can expect similarly mix conditions as compared to the first dekad of May, 2019. Relatively wet days: on 11th, 15th, 19th and 20th; and relatively dry days: 12th, 13th, 14th, 16th, 17th and 18th. During relatively wet days, expect during mostly early mornings or late afternoons patchy cloudy to cloudy conditions, with light to moderate rainfall over most areas; while during relatively dry days, expect few cloudy patches a possible light rainfall. Trinidad's ten-day period rainfall totals, forecast to range between 20.0 mm and 40.0 mm, while Tobago's ten-day period rainfall totals, forecast to range between 20.0 mm and 30.0 mm. The average daily temperatures across Trinidad and Tobago are likely to range between 27.7 °C and 28.5 °C. Expect the highest maximum temperature over the dekad to peak near 33.6 °C in Trinidad, while the lowest night to early morning minimum temperature could dip below 23.1 °C. Especially along the foothills and valleys during relatively cloud-free nights. Likewise, during the dekad, in Tobago, the highest maximum temperature will peak near 32.7 °C, while the lowest minimum temperature will dip below 23.7 °C, mostly during relatively cloud-free nights.

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.