

# Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the First Dekad (1<sup>st</sup> -10<sup>th</sup>) of March 2018.

**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 Third Dekad (21<sup>st</sup> – 28<sup>th</sup>) of February 2018.

Days 22<sup>nd</sup>, 24<sup>th</sup> and 25<sup>th</sup> of the third dekad turned out to be relatively wet days over most of the country, with some areas in south and southeastern areas that experienced wetter conditions. The tenday rainfall total recorded at Piarco Trinidad, was 6.0 mm, was well within expected range of 0.0 mm to 10.0 mm. El Reposo and other northeastern districts had the expected rainfall amounts. El Reposo reported 14.4 mm well within the 10.0 mm to 20.0 mm range forecasted. Central districts of Carapichiama, Preysal and Couva had rainfall totals of 1.7 mm, 8.1 mm and 7.6 mm respectively, and they were well inside of the 0.0 mm to 10.0 mm range forecasted. Similarly, southern districts such as Princes Town, Penal and San Fernando had rainfall totals of 12.5 mm, 12.8 mm and 7.1 mm respectfully, slightly above the upper limit of 10.0 mm. However, Chatham and other southwestern districts had significant rainfall amounts. Chatham had 43.7 mm very much above the expected

### <u>Disclaimer</u>

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.



amount of 10.0 mm. Northern districts of Tunapuna had rainfall totals of 9.9 mm, well within the expected rainfall amount. However, northwestern districts such as West Moorings and Carenage had 39.9 mm and 25.9 mm, well outside of the 0.0 mm to 10.0 mm range forecasted.

Similarly, Tobago had significantly more rainfall amounts than expected. ANR Robinson airport had a rainfall amount of 40.9 mm, which was well above the forecasted range of 0.0 mm to 10.0 mm. Neighboring districts such as Bethel, Mount Pleasant and Buccoo experienced similar rainfall amounts as well. Likewise, Mount Moriah had rainfall totals of 32.0 mm and was above the expected amount forecasted.

Temperatures continued to be cool in Trinidad and Tobago. Trinidad's maximum temperature went up to 30.4 <sup>o</sup>C, which was less than the expected maximum temperature of 32.4 <sup>o</sup>C. At the same time Tobago's maximum got up to 30.7 <sup>o</sup>C, well within the range expected. Conversely, lowest temperatures recorded were 19.6 <sup>o</sup>C in Trinidad and 22.4 <sup>o</sup>C in Tobago. In both cases they were lower than expected. The average humidity for both islands remained in the mid-sixties but went up to low nineties during rainfall events. The mostly sunny and relatively dry conditions must have warranted frequent irrigation of crops. While the relatively wet to wet days on the 22<sup>nd</sup>, 24<sup>th</sup> and 25<sup>th</sup> may not have needed frequent irrigation.

## Expected Weather for First Dekad (1<sup>st</sup> – 10<sup>th</sup>) of March 2018 and Likely Impact on Agriculture.

The forecast for the first dekad of March indicates that farmers can expect similar amounts of rainfall as compared to the third dekad of February. During days 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> of the dekad, farmers should expect relatively wet to wet days. However, during 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> expect relatively dry days. The ten-day period totals forecast to range between 25.0 mm and 40.0 mm in Trinidad and forecast to range between 23.0 mm and 40.0 mm in Tobago.

The average daily temperatures across Trinidad and Tobago are likely to range between 25.4 <sup>o</sup>C and 27.0 <sup>o</sup>C. Expect the highest maximum temperature over the dekad to peak near 31.4 <sup>o</sup>C in Trinidad, while the lowest night to early morning minimum temperature could dip below 19.8 <sup>o</sup>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 31.1 <sup>o</sup>C, while the lowest minimum temperature will be dip below 21.0 <sup>o</sup>C, mostly during relatively cloud free nights.

For both Trinidad and Tobago, the daytime relative humidity (RH) is likely to range between 48% and 69%. However, during relatively wet to wet days, RH percentage values will range around 70% to 93%. At the same time, wind speeds are expected to range between 20 km/h and 36 km/h. In addition, evaporation rates are expected to range between 3.6 mm/day and 9.4 mm/day, but can be slightly more during warmer and windier periods, but slightly less during wet days.

Mostly relatively dry conditions over this dekad, will definitely increase the need for frequent irrigation. But during days: 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> of the dekad, relatively wet to wet conditions are likely

### **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.



resulting in the possible significant reduction in the frequency of irrigation. The expected mostly relatively dry and windy conditions will be unfavourable for some agricultural insect pests, fungi and diseases to develop and thrive. Moreover, the expected daytime wind speeds, together with the funneling effect of wind along narrow paths and undulating landscapes, may affect seedlings negatively by causing seedlings' stems and leaves to be damaged. In addition, strong winds may hamper some types of fertilizer application and crops' ability to retain flowers.

## Trinidad's Mean Daily Rainfall Forecast for the First Dekad of March (1<sup>st</sup>-10<sup>th</sup>) 2018.

## Northern & Northwestern areas:

Moderate chance (66%) of mean daily rainfall up to 3.6 mm.

### North-Eastern and Eastern areas:

Moderate chance (68%) of mean daily rainfall up to 4.0 mm.

## Central, West-Central and inland areas:

Moderate chance (63%) of mean daily rainfall up to 3.0 mm.

### South-Eastern areas:

Moderate chance (68%) of mean daily rainfall up to 4.0 mm.

### Southern areas:

Moderate chance (67%) of mean daily rainfall up to 3.7 mm.

#### South-Western areas:

Moderate chance (66%) of mean daily rainfall up to 3.6 mm.

#### <u>Disclaimer</u>

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.

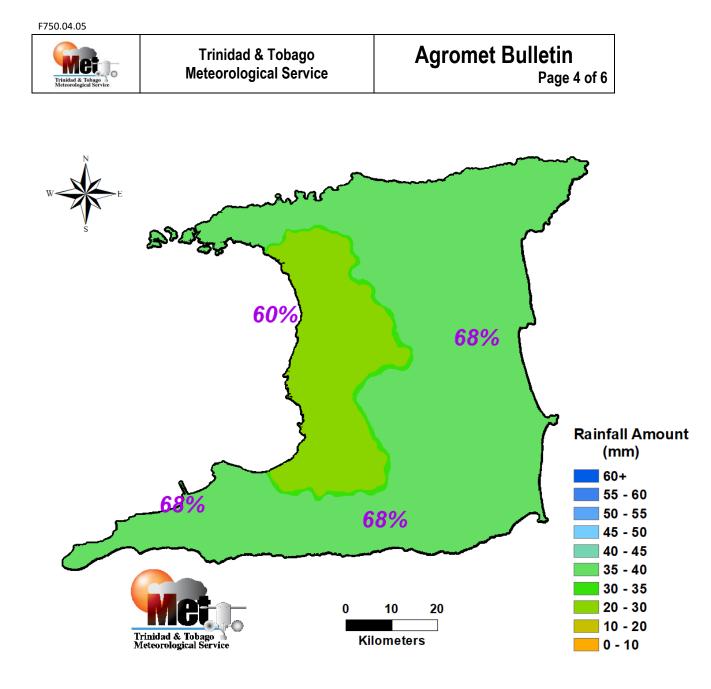


Figure 1. Rainfall Map of Trinidad showing possible rainfall totals for varying districts during first dekad of March 2018 and percentage probability of occurrence.

#### <u>Disclaimer</u>

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.



# Tobago's Mean Daily Rainfall Forecast for the First Dekad of March (1<sup>st</sup>-10<sup>th</sup>) 2018.

### Northeastern areas:

Moderate chance (68%) of mean daily rainfall up to 4.0 mm.

#### South-Western areas:

Moderate chance (66%) of mean daily rainfall up to 3.5 mm.

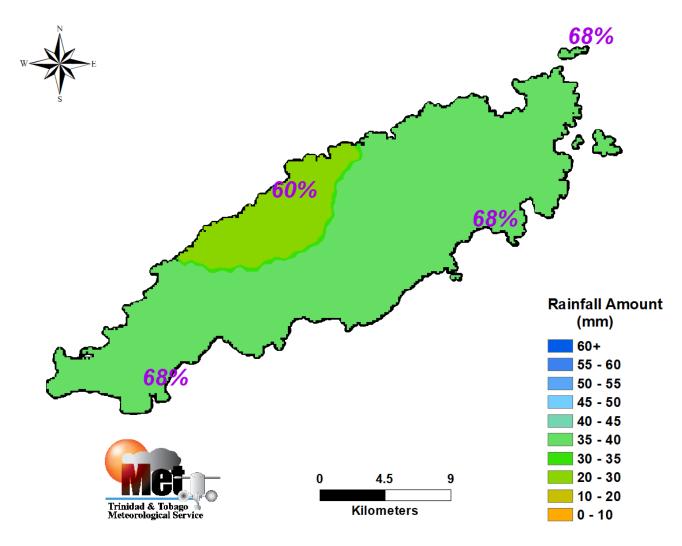


Figure 2. Rainfall Map of Tobago showing possible rainfall totals for varying districts during first dekad of March 2018 and percentage probability of occurrence.

#### <u>Disclaimer</u>

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.



## Temperatures:

## Trinidad's Temperature Forecast for the First Dekad of March (1<sup>st</sup>-10<sup>th</sup>) 2018.

Moderate chance (70%) of daily maximum temperatures to exceed 30.4 °C, peaking near 31.4 °C.

Moderate chance (70%) of daily minimum temperatures to be below 21.6  $^{0}$ C, dropping as low as 19.8  $^{0}$ C.

## **Tobago's Temperature Forecast for the First Dekad of March (1<sup>st</sup> -10<sup>th</sup>) 2018.**

Moderate chance (70%) of daily maximum temperatures to exceed 30.3 °C, peaking near 31.1 °C.

Moderate chance (70%) of daily minimum temperatures to be below 22.9 °C, dropping as low as

21.0 °C.

## Summary:

The outlook for the first dekad of March calls for mostly dry and windy conditions except for days 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> of dekad where farmers can expect relatively wet to wet days. Overall, temperatures are expected to be cool with average temperatures ranging between 25.8 °C and 27.0 °C in both islands. The highest maximum temperatures are likely to reach 31.4 °C in Trinidad and 31.1 °C in Tobago. While, the lowest minimum temperatures are likely reach 19.8 °C in Trinidad and 21.0 °C in Tobago. Dry conditions are expected to continue into the months of April and first part of May. Opportunities for water harvesting are diminishing, hence any opportunity to harvest and store rainwater should be undertaken, while irrigation processes continue.

#### **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.