

## Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the First 15-Day Period (1st-15th) of May, 2023

### 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 Bulletin for Farmers and Livestock Producers of Trinidad and Tobago for the 15-day period(1<sup>st</sup>-15<sup>th</sup>) of May 2023.

Date	Weather	Temperature	Heat Real Feel	Day Moisture (Relative) (Humidity)	Wind

### 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.

Issue date: 2023-05-01

1 <sup>st</sup>	 25% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower or two	<b>Warm</b>  Max/Min Temperatures °C 33.0/24.0	Feels like 33-40°C	47-62%	 Moderate easterly 20 km/h Gust 30 km/h
2 <sup>nd</sup>	 25% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower or two	<b>Warm</b>  Max/Min Temperatures °C 32.0/24.5	Feels like 32-39°C	57-61%	 Moderate easterly 20 km/h Gust 30 km/h
3 <sup>rd</sup>	 20% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower	<b>Warm</b>  Max/Min Temperatures °C 33.0/24.0	Feels like 33-40°C	46-60%	 Moderate easterly 20 km/h Gust 30 km/h
4 <sup>th</sup>	 20% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower	<b>Warm</b>  Max/Min Temperatures °C 33.0/24.0	Feels like 33-40°C	46-60%	 Moderate easterly 20 km/h Gust 30 km/h
5 <sup>th</sup>	 20% chance	Less than 1.0 mm of rainfall is possible	Partly cloudy to cloudy with a	<b>Warm</b>  Max/Min Temperatures °C 33.0/24.0	Feels like 33-40°C		 Weak south-easterly 10 km/h















## 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.

	of showers	possible	shower	Max/Min Temperatures °C 31.0/25.0	33- 40°C	46-65%	Gust 20 km/h
6 <sup>th</sup>	 20% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower	<b>Warm</b>  Max/Min Temperatures °C 31.0/25.0	Feels like 33- 40°C	46-65%	 Weak south- easterly 10 km/h Gust 20 km/h
7 <sup>th</sup>	 65% chance of showers	Less than 9.0 mm of rainfall is possible	Partly cloudy with showers	<b>Warm</b>  Max/Min Temperatures °C 33.0/25.5	Feels like 33- 35°C	55-68%	 Weak south- easterly 10 km/h Gust 20 km/h
8 <sup>th</sup>	 25% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower	<b>Warm</b>  Max/Min Temperatures °C 33.0/25.0	Feels like 33- 40°C	55-60%	 Moderate easterly 20 km/h Gust 30 km/h
9 <sup>th</sup>	 25% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with a shower	<b>Warm</b>  Max/Min Temperatures °C 33.0/25.0	Feels like 33- 40°C	55-60%	 Moderate easterly 20 km/h Gust 30 km/h
				<b>Warm</b>			




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.

10 <sup>th</sup>	 55% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudy with showers	 Max/Min Temperatures °C 33.0/24.0	Feels like 33-40°C	46-65%	Moderate easterly 20 km/h Gust 30 km/h
11 <sup>th</sup>	 65% chance of showers	Less than 9.0 mm of rainfall is possible	Partly cloudy with showers	<b>Warm</b>  Max/Min Temperatures °C 33.5/25.0	Feels like 31-35°C	55-65%	 Weak south-easterly 10 km/h Gust 20 km/h
12 <sup>th</sup>	 65% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudy with showers	<b>Very Warm</b>  Max/Min Temperatures °C 34.0/25.0	Feels like 34-42°C	46-65%	 Weak south-easterly 10 km/h Gust 20 km/h
13 <sup>th</sup>	 20% chance of showers	Less than 1.0 mm of rainfall is possible	Patchy cloudiness with a shower	<b>Very Warm</b>  Max/Min Temperatures °C 34.0/25.0	Feels like 32-38°C	51-65%	 Moderate easterly 20 km/h Gust 30 km/h
14 <sup>th</sup>	 65% chance	Less than 9.0 mm of rainfall is possible	Partly cloudy with showers	<b>Very Warm</b>  Max/Min Temperatures °C 34.0/25.0	Feels like		 Moderate easterly 20 km/h

## 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.

	of showers	possible		Max/Min Temperatures °C 34.0/25.0	32- 38°C	51-68%	Gust 30 km/h
15 <sup>th</sup>	 65% chance of showers	Less than 9.0 mm of rainfall is possible	Partly cloudy with showers	<b>Very Warm</b>  Max/Min Temperatures °C 34.0/25.0	Feels like 32- 38°C	51-68%	 Moderate easterly 20 km/h  Gust 30 km/h

Trinidad Rainfall Forecast for the 15-Day period of May (1<sup>st</sup> – 15<sup>th</sup>) 2023.

### 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.

Issue date: 2023-05-01

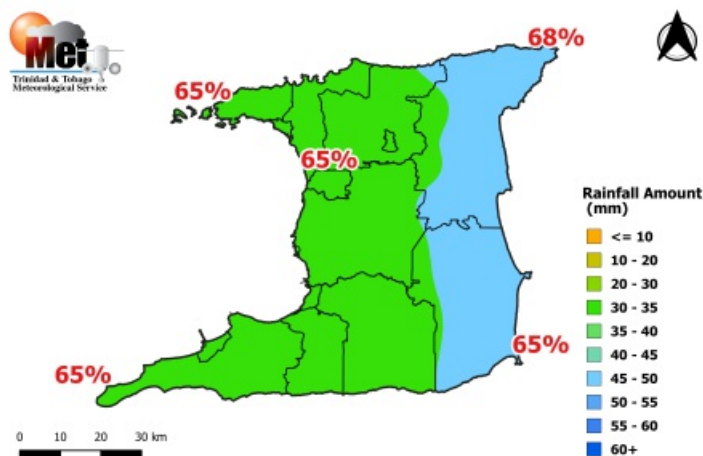


Figure 1. Rainfall map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the 15-day period (1<sup>st</sup>-15<sup>th</sup>) May 2023 and percentage probability of occurrence.

### Eastern, and North-Eastern areas

Moderate chance (68%) of mean daily rainfall up to 4.8 mm.

### South-Eastern areas

Moderate chance (65%) of mean daily rainfall up to 4.6 mm.

### Southern areas

Moderate chance (65%) of mean daily rainfall up to 3.3 mm.

### South-Western areas

Moderate chance (65%) of mean daily rainfall up to 3.0 mm.

### Central, West-Central, and inland areas

Moderate chance (65%) of mean daily rainfall up to 3.0 mm.

### Northern, North-Western areas

Moderate chance (65%) of mean daily rainfall up to 3.0 mm.

### **Tobago Rainfall Forecast for the 15-Day period of May (1<sup>st</sup> – 15<sup>th</sup>) 2023.**

### 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.

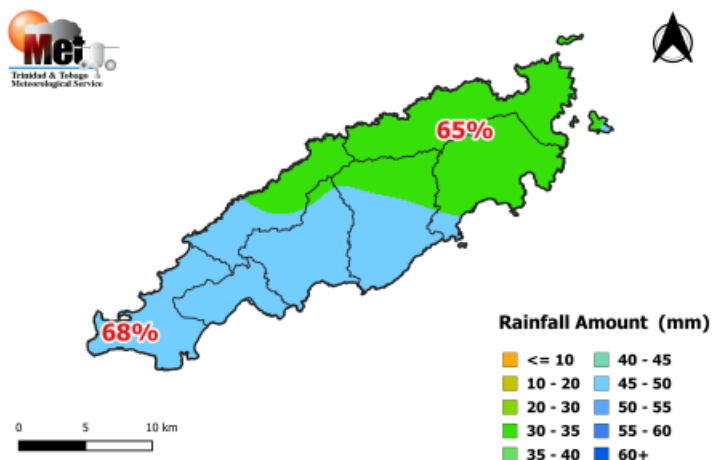


Figure 2. Rainfall map of Tobago showing expected mean rainfall totals for districts across Tobago during the 15-day period (1<sup>st</sup>-15<sup>th</sup>) May 2023 and percentage probability of occurrence.

### North-Eastern areas

Moderate chance (65%) of mean daily rainfall up to 3.0 mm.

### South-Western areas

Moderate chance (68%) of mean daily rainfall up to 4.7 mm.

### Sun and Moon Positions in the Sky May (1<sup>st</sup> – 15<sup>th</sup>) 2023.

The sun is presently at 14.25 degrees North latitude and with this position, the day-length or number of sunlight hours in Trinidad and Tobago from May 1<sup>st</sup> will be 12 hours and 30 minutes, increasing slightly to 12 hours and 37 minutes by 15<sup>th</sup> May 2023. According to the moon's phases, the 2<sup>nd</sup>-4<sup>th</sup> of May are good days for planting aboveground crops, while 5<sup>th</sup> (Full Moon Phase), 8<sup>th</sup>-9<sup>th</sup> and 13<sup>th</sup>-14<sup>th</sup> of May are good days for planting below ground crops. However, 1<sup>st</sup>, 6<sup>th</sup>-7<sup>th</sup>, 10<sup>th</sup>-12<sup>th</sup> (Third Quarter Phase) and 15<sup>th</sup> of May are poor planting days. These days should be used for removing weeds, clearing land and ploughing fields.

### Highlighted Possible Impacts on Agriculture:

During this first 15-day forecast period of (1<sup>st</sup>-15<sup>th</sup>) May 2023, expect similar conditions to occur as compared to the second 15-day forecast period of April. Some drying out of soils will occur in certain areas across both islands during the first seven days followed by wetter conditions during the second eight days. Therefore, frequent irrigation of fields will be necessary during the first seven days to maintain soil moisture. In addition, stronger winds may hamper fertilizer 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.

insecticide spraying routines. Trinidad and Tobago is moving into its heat season. Therefore, very warm days are expected, there is a moderate probability (68%) chance of heat stress in young livestock, newly germinated and transplanted seedlings onto fields. There is also a moderate probability (60%) chance for fungi spread, insect pests and warm weather diseases to develop in crop beds.

## Weather Assessment for the period April (16<sup>th</sup>-28<sup>th</sup>) 2023.

Moderate to high amounts of rainfall occurred during the 24<sup>th</sup>-27<sup>th</sup> April resulting in wide spread wetting of soils and some flooding over Trinidad and Tobago. The rainfall totals maps for the period, 16<sup>th</sup> to 28<sup>th</sup> of April for Trinidad and Tobago are located below as figure 1 and figure 2.

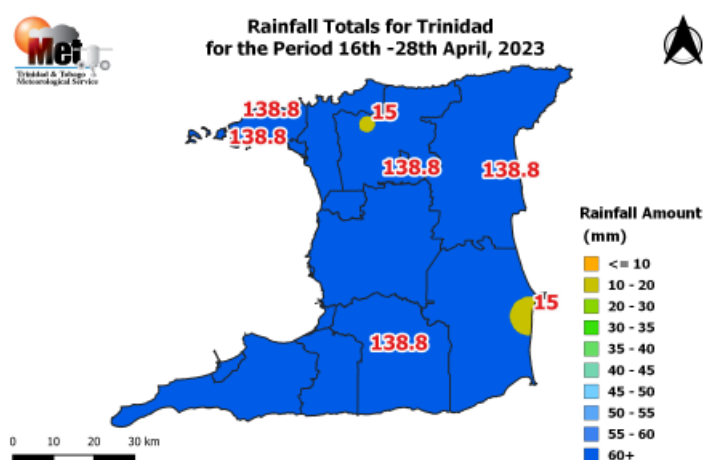
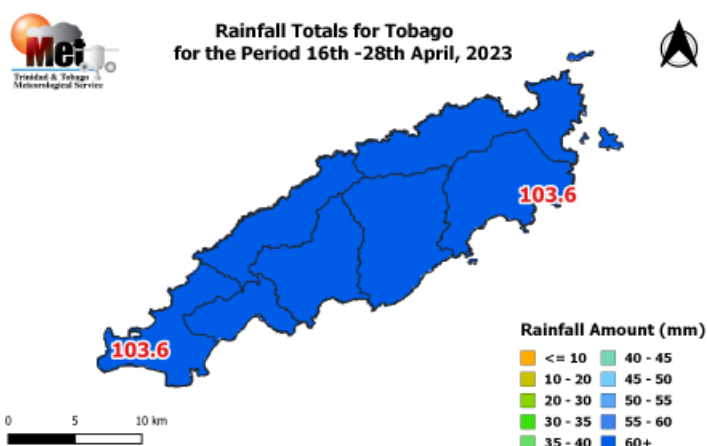


Figure 1. Rainfall map of Trinidad showing measured rainfall totals for varying districts during the period 16<sup>th</sup> to 28<sup>th</sup> of April 2023.



### 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 measured rainfall totals for varying districts during the period 16<sup>th</sup> to 28<sup>th</sup> of April 2023.**

#### **Temperatures:**

Temperatures were cool to warm during the period 16<sup>th</sup> to 25<sup>th</sup> of April, with the minimum nighttime temperature falling to 22.6 °C and the maximum daytime temperature rising to 33.2 °C, in Trinidad.

Similarly, Tobago temperatures were cool to warm during the period 16<sup>th</sup> to 25<sup>th</sup> of April, with the minimum nighttime temperature falling to 23.1 °C and the maximum daytime temperature rising to 31.7 °C.

#### **Summary**

##### **Summary of Expected Weather:**

**Low to moderate rainfall amounts are expected during the fifteen days.**

Relatively wet days with rainfall amounts less than 9.0 mm are expected during the 7<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> while relative dry days with rainfall less than 1.0 mm are expected on the 1<sup>st</sup>-6<sup>th</sup>, 8<sup>th</sup>-9<sup>th</sup> and 13<sup>th</sup> of May 2023.

##### **Trinidad and Tobago:**

Relatively wet days with rainfall amounts less than 9.0 mm are expected during the 7<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> while relative dry days with rainfall less than 1.0 mm are expected on the 1<sup>st</sup>-6<sup>th</sup>, 8<sup>th</sup>-9<sup>th</sup> and 13<sup>th</sup> of May 2023. The daily rainfall totals are forecast to range between 0.0 mm to 9.0 mm across different farmlands across the islands, especially along the eastern coastal areas of Trinidad and western areas of Tobago with fifteen-day rainfall totals ranging between 30.0 mm and 50.0 mm in Trinidad and Tobago.

##### **Temperatures & Winds:**

The maximum temperatures are expected to remain warm to very warm, with daily temperatures ranging between 31.0°C to 34.0°C throughout the period. However, temperatures are expected to have a real-feel or feels-like between 31.0°C to 42.0°C on most days. The minimum temperatures will range between 23.5°C to 25.5°C during most nights/early mornings, dropping lower in rural areas and valleys.

In general, mostly easterly winds of an average speed of 20 km/h are expected, however, gusts can range between 30-50 km/h. Low to moderate rainfall totals, mostly moderate speeds, warmer days, and warmer feels-like temperatures will sustain average evapotranspiration rates in crops ranging between 4.0 to 12.0 mm per day.

##### **Moisture levels:**

Over the fifteen-day period across Trinidad and Tobago, moisture levels are expected to be low to moderate, with average daytime relative humidity values in the mid-40s to upper-60s, in terms of percentage.

#### **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.