

Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 1 of 12

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the First 15-Day Period (1st-15th) of January, 2024

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 Rainfa	I	Rainfall below 50% of the average				
Much Above Normal Rainfa	II	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 (01st-15th) of January 2024

Date	Weather	Temperature	Heat Real	Day Moisture (Relative	Wind
,	•	611.1	_1		

<u>Disclaimer</u>



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 2 of 12

		1			Feel	(Humidity)	
01 st	40% chance of showers	Less than 3.0 mm of rainfall is possible	Partly cloudy with a shower or two	Warm Max/Min Temperatures °C 30.0/23.0	Feels like 31-35°C	55-80%	Moderate northeasterly 15 km/h Gust 25 km/h
02 nd	40% chance of showers	Less than 3.0 mm of rainfall is possible	Partly cloudy with a shower or two	Warm Max/Min Temperatures °C 31.0/23.0	Feels like 32-35°C	60-80%	Moderate easterly 15 km/h Gust 25 km/h
03 rd	40% chance of showers	Less than 3.0 mm of rainfall is possible	Partly cloudy with a shower or two	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 33-36°C	55-80%	Moderate east to east- southeasterly 15 km/h Gust 25 km/h
04 th	40% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudy with a shower or two	Warm Max/Min Temperatures °C 31.0/22.0 Disclaimer	Feels like 32-35°C	55-85%	Moderate to strong easterly 25 km/h Gust 35 km/h



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 3 of 12

05 th	40% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudy with a shower or two	Warm Max/Min Temperatures °C 31.0/22.0	Feels like 32-35°C	55-85%	Moderate easterly 15 km/h Gust 25 km/h
06 th	30% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a light shower	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 33-35°C	50-80%	Moderate easterly 15 km/h Gust 25 km/h
07 th	40% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudiness with light showers	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 33-35°C	55-85%	Moderate to strong easterly to east-northeasterly 25 km/h Gust 35 km/h
08 th	40% chance of showers	Less than 5.0 mm of rainfall is possible	Partly cloudy to cloudy with showers	Warm Max/Min Temperatures °C 32.0/22.0 Disclaimer	Feels like 33-35°C	55-85%	Moderate easterly 15 km/h Gust 25 km/h



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 4 of 12

09 th	30% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a shower	Warm	Feels like	50-80%	Moderate easterly to east- southeasterly 15 km/h
		·		Max/Min Temperatures °C 32.0/22.0	33-36°C		Gust 25 km/h
10 th	20% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a shower	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 34-36°C	45-75%	Moderate easterly 15 km/h Gust 25 km/h
11 th	40% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a shower	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 33-35°C	50-80%	Moderate easterly 15 km/h Gust 25 km/h
12 th	30% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a shower	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 33-35°C	50-80%	Moderate to strong easterly 25 km/h Gust 35 km/h

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 5 of 12

13 th	30% chance of showers	Less than 3.0 mm of rainfall is possible	Patchy cloudiness with a shower	Max/Min Temperatures °C 32.0/22.0	Feels like 33-35°C	50-80%	Moderate east to east- northeasterly 15 km/h Gust 25 km/h
14 th	20% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with light showers	Max/Min Temperatures °C 32.0/22.0	Feels like 34-36°C	45-75%	Moderate easterly 15 km/h Gust 25 km/h
15 th	20% chance of showers	Less than 1.0 mm of rainfall is possible	Partly cloudy with light showers	Warm Max/Min Temperatures °C 32.0/22.0	Feels like 34-36°C	45-75%	Moderate easterly 15 km/h Gust 25 km/h

Disclaimer

Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 6 of 12

Trinidad Rainfall Forecast for the 15-Day period of January (01st - 15th) 2024.

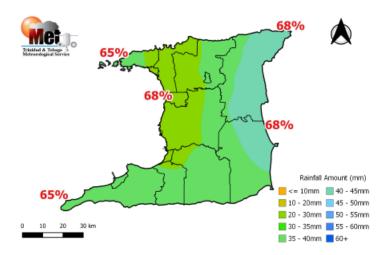


Figure 1. Rainfall map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the 15-day period (01st - 15th) January 2024 and percentage probability of occurrence.

Eastern, and North-Eastern areas

Moderate chance (68%) of mean daily rainfall up to 4.5 mm.

South-Eastern areas

Moderate chance (68%) of mean daily rainfall up to 4.5 mm.

Southern areas

Moderate chance (65%) of mean daily rainfall up to 3.8 mm.

South-Western areas

Moderate chance (65%) of mean daily rainfall up to 3.8 mm.

Central, West-Central, and inland areas

Moderate chance (68%) of mean daily rainfall up to 2.0 mm.

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 7 of 12

Northern, North-Western areas

Moderate chance (65%) of mean daily rainfall up to 3.8 mm.

Tobago Rainfall Forecast for the 15-Day period of January (01st - 15th) 2024.

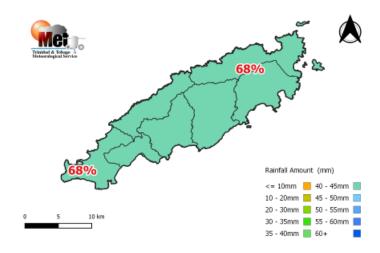


Figure 2. Rainfall map of Tobago showing expected mean rainfall totals for districts across Tobago during the 15-day period (01st – 15th) January 2024 and percentage probability of occurrence.

North-Eastern areas

Moderate chance (68%) of mean daily rainfall up to 4.5 mm.

South-Western areas

Moderate chance (68%) of mean daily rainfall up to 4.5 mm.

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 8 of 12

Sun and Moon Positions in the Sky January (01st - 15th) 2024.

The sun is presently at 22.8 degrees South latitude and with this position, the day-length or number of sunlight hours in Trinidad and Tobago from January 01 st 2024 will be 11 hours and 31 minutes, increasing slightly to 11 hours and 34 minutes by 15th of January 2024.

The moon's phases are, third quarter on January 03rd 2024, new moon on January 11th 2024, first quarter on January 17th 2024 and full moon on January 25th 2024.

Summary of Expected Weather:

Low to Moderate rainfall amounts are expected during the fifteen days.

Relatively dry days are expected on the 14^{th} and 15^{th} with less than 1.0 mm of rainfall expected, while on other days less than 5.0 mm is expected.

Trinidad and Tobago:

Relatively dry days are expected on the 14^{th} and 15^{th} with less than 1.0 mm of rainfall, while on other days less than 5.0 mm is expected. The daily rainfall totals are forecast to range between 1.0 mm to 4.5 mm across different farmlands over the islands. The fifteen-day rainfall totals ranging between 10.0 mm and 45.0 mm in Trinidad, and around 45.0 mm in Tobago.

Temperatures & Winds:

The maximum temperatures are expected to become warm, with daily temperatures ranging between 31.0°C to 32.0°C throughout the period. However, temperatures are expected to have a real-feel or feels-like between 32.0°C to 36.0°C on most days. The minimum temperatures will range between 23.0°C to 22.0°C during most nights/early mornings, dropping lower in rural areas and valleys.

In general, mostly moderate winds, between northeasterly to southeasterly, with an average speed of 15-25 km/h, are expected. Low to moderate rainfall totals, mostly moderate wind speeds, warm days, and warm feels-like temperatures will sustain average evapotranspiration rates in crops ranging between 3.0 to 8.0 mm per day.

Moisture levels:

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 9 of 12

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-50s to low-80s, in terms of percentage.

Highlighted Possible Impacts on Agriculture:

During this first 15-day (01st – 15th) forecast period of January 2024, expect mostly sunny to partly cloudy periods at times. Mostly light showery events, sometimes moderate in a few areas, will produce some wet periods during the forecast period. Therefore, rescheduling of irrigation days on fields to maintain optimal soil moisture would be necessary on days that will have low rainfall. There is a low (20%) chance of heat stress in young livestock, newly germinated and transplanted seedlings onto fields. There is a low (25%) probability for flash and riverine flooding episodes. River levels will be low to moderate at times during the forecast period. There is also a low probability (28%) chance for fungi spread, insect pests and warm/moist weather diseases to develop in crop beds.

Weather Assessment for the period December (15th - 31st) 2023.

Mostly relatively dry rainfall days recorded at both Piarco and Crown Point for the period, with a couple of relatively wet days being the 29^{th} at Piarco and the 31^{st} at Crown Point. One wet day of heavy rainfall was recorded at Piarco on the 23^{rd} . The rainfall totals maps for the period, 15^{th} to 31^{st} of December for Trinidad and Tobago are located below as figure 1 and figure 2.

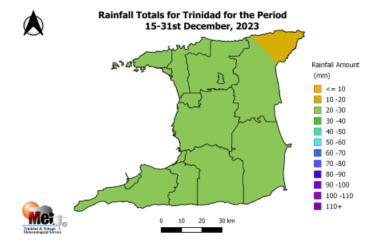


Figure 1. Rainfall map of Trinidad showing measured rainfall totals for varying districts during period 15th to 31st of December 2023.

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 10 of 12

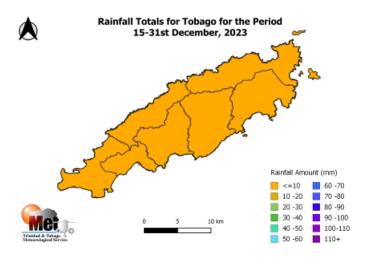


Figure 2. Rainfall map of Tobago showing measured rainfall totals for varying districts during period 15th to 31st of December 2023.

Temperatures:

Temperatures for Trinidad were cool to warm during the period 15th to 31st of December, 2024, with the minimum nighttime temperature falling to 22.4°C and the maximum daytime temperature rising to 33.0°C, in Trinidad.

Similarly, Tobago temperatures were cool to warm during the period $15^{\,\text{th}}$ to $31^{\,\text{st}}$ of December, 2024, with the minimum nighttime temperature falling to $23.9^{\,\text{o}}\text{C}$ and the maximum daytime temperature rising to $32.5^{\,\text{o}}\text{C}$.

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 11 of 12

Summary

Summary of Expected Weather:

Low to Moderate rainfall amounts are expected during the fifteen days.

Relatively dry days are expected on the 14^{th} and 15^{th} with less than 1.0 mm of rainfall expected, while on other days less than 5.0 mm is expected.

Trinidad and Tobago:

Relatively dry days are expected on the 14th and 15th with less than 1.0 mm of rainfall, while on other days less than 5.0 mm is expected. The daily rainfall totals are forecast to range between 1.0 mm to 4.5 mm across different farmlands over the islands. The fifteen-day rainfall totals ranging between 10.0 mm and 45.0 mm in Trinidad, and around 45.0 mm in Tobago.

Temperatures & Winds:

The maximum temperatures are expected to become warm, with daily temperatures ranging between 31.0°C to 32.0°C throughout the period. However, temperatures are expected to have a real-feel or feels-like between 32.0°C to 36.0°C on most days. The minimum temperatures will range between 23.0°C to 22.0°C during most nights/early mornings, dropping lower in rural areas and valleys.

In general, mostly moderate winds, between northeasterly to southeasterly, with an average speed of 15-25 km/h, are expected. Low to moderate rainfall totals, mostly moderate wind speeds, warm days, and warm feels-like temperatures will sustain average evapotranspiration rates in crops ranging between 3.0 to 8.0 mm per day.

Moisture levels:

Disclaimer



Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: synop@metoffice.gov.tt Website: www.metoffice.gov.tt

F750.04.05

Page 12 of 12

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-50s to low-80s, in terms of percentage.

Highlighted Possible Impacts on Agriculture:

During this first 15-day (01st – 15th) forecast period of January 2024, expect mostly sunny to partly cloudy periods at times. Mostly light showery events, sometimes moderate in a few areas, will produce some wet periods during the forecast period. Therefore, rescheduling of irrigation days on fields to maintain optimal soil moisture would be necessary on days that will have low rainfall. There is a low (20%) chance of heat stress in young livestock, newly germinated and transplanted seedlings onto fields. There is a low (25%) probability for flash and riverine flooding episodes. River levels will be low to moderate at times during the forecast period. There is also a low probability (28%) chance for fungi spread, insect pests and warm/moist weather diseases to develop in crop beds.

Disclaimer