



Date of Issue: 07/02/2023

Near-Normal to Below-Normal Rainfall for February to April 2023:

Key Messages

- ✓ January produced near-normal rainfall amounts in Tobago but below-normal rainfall amounts in Trinidad;
- ✓ High chances exist for near-normal to below-normal rainfall totals during February to April (FMA) period;
- ✓ Moderate (65%) chance for relatively wet days (less than 10.0 mm) during February month;
- ✓ February has a moderate (65%) chance for above the climatological rainfall normal;
- ✓ March and April have the highest chances for below the climatological rainfall normal;
- ✓ FMA period rainfall totals with highest chance of occurring range between 110.0 - 314.0 mm in Trinidad and between 96.0 - 201.0 mm in Tobago;
- ✓ Both day and night temperatures are predicted to be mostly average for most of Trinidad and Tobago with moderate (40%) probabilities for very short-duration hot spells in April 2023;
- ✓ The probability for FMA rainfall totals to be in the lowest 10% of all dry season rainfall is low (<10%);
- ✓ Moderate chance (60%) for below-normal mean temperatures in southern parts of Trinidad;
- ✓ The FMA 2023 seasonal temperature outlook indicates mostly normal seasonal mean, maximum and minimum temperatures are likely. There is still a moderate probability that a few cool nights/early mornings can occur during February to March with temperatures falling below 20.0 °C

Likely Impacts

- ✓ The dry season conditions usually result in reduced water recharge rates and stream flows. This can negatively impact surface water availability;
- ✓ Dry season conditions usually lead to an increase in the need to collect and store water in tanks and containers. This can increase breeding areas for mosquitoes if not secured tightly.
- ✓ Dry season conditions will increase the chances of bush, forest and landfill fires, especially in March and April. This will likely reduce air quality and negatively affect persons with existing respiratory and other ailments.

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Early Actions & Preparedness

- Review household water plan. Conserve, store and manage water safely and adequately.
- Sensitize vulnerable communities on negative impacts of the forecast and actions to be taken.
- Raise awareness on dry season agriculture pest and disease control measures and bushfires risk.
- Ramp-up contingency plans to mitigate the possible occurrence of landfill fires.
- Review contingency plans to manage dry season spikes in vector-borne diseases such as gastroenteritis and leptospirosis; and dust/smoke-related respiratory ailments.

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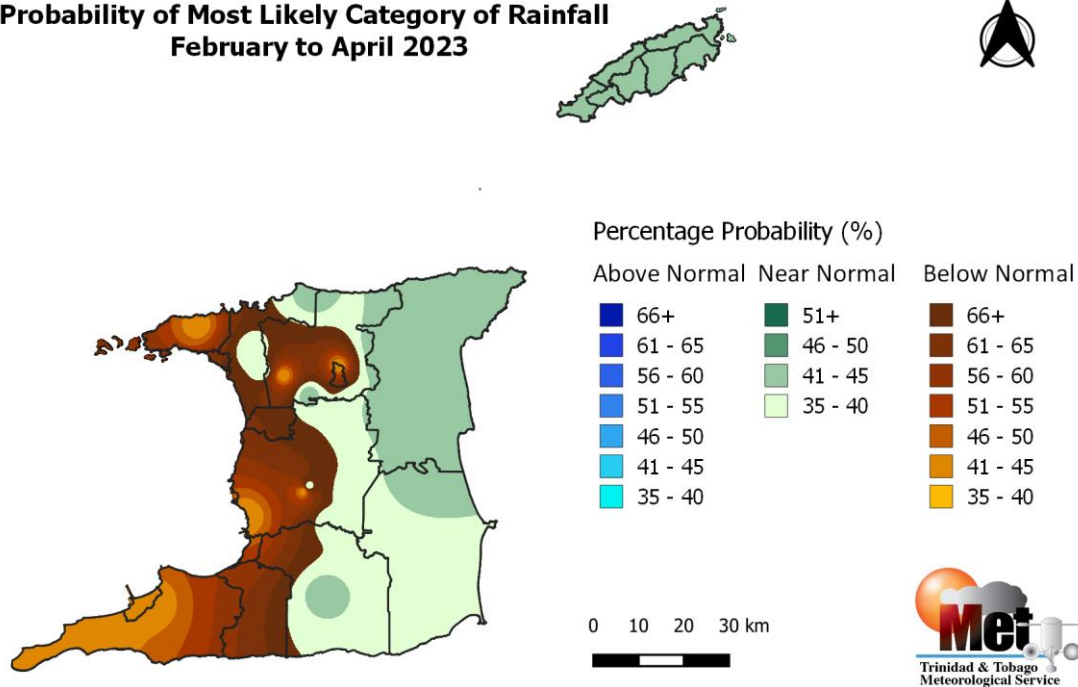
**Probability of Most Likely Category of Rainfall
February to April 2023**


Figure 1: Category of rainfall likely for FMA (February to April) 2023 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above-normal rainfall, brown areas show an increased chance for below-normal rainfall, while green areas show an increased chance for near-normal rainfall. Normal is defined by the rainfall that was observed in middle one-third of the FMA period rainfall totals during the historical period used to produce the outlook.

- ✓ Moderate (60%) probability exists for near-normal rainfall in eastern Trinidad, and Tobago; while a moderate (60%) probability exists for below-normal rainfall totals over western parts of Trinidad during the FMA period;

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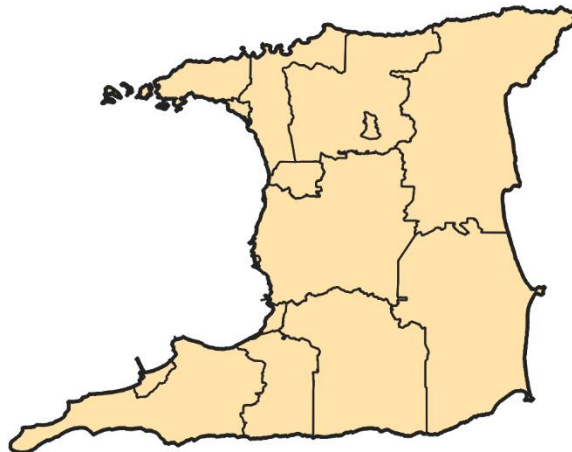
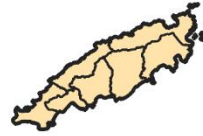


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Probability of FMA 2023 Rainfall Totals being in the Lowest 10% of the Historical Record



Risk of Extreme Low Rainfall (%)

- Highly Enhanced Chance (40%)
- Slightly Enhanced Chance (31-40%)
- Moderate Chance (10- 30%)
- Low Chance (<10%)

0 10 20 30 km



Figure 2: Risk of the FMA 2023 being extremely drier than normal (within the lowest 10% on record).

- ✓ The risk of extremely drier than normal conditions is low (< 10%) over both islands;
- ✓ High (70%) chance of an increase in dryness in March and April 2023.

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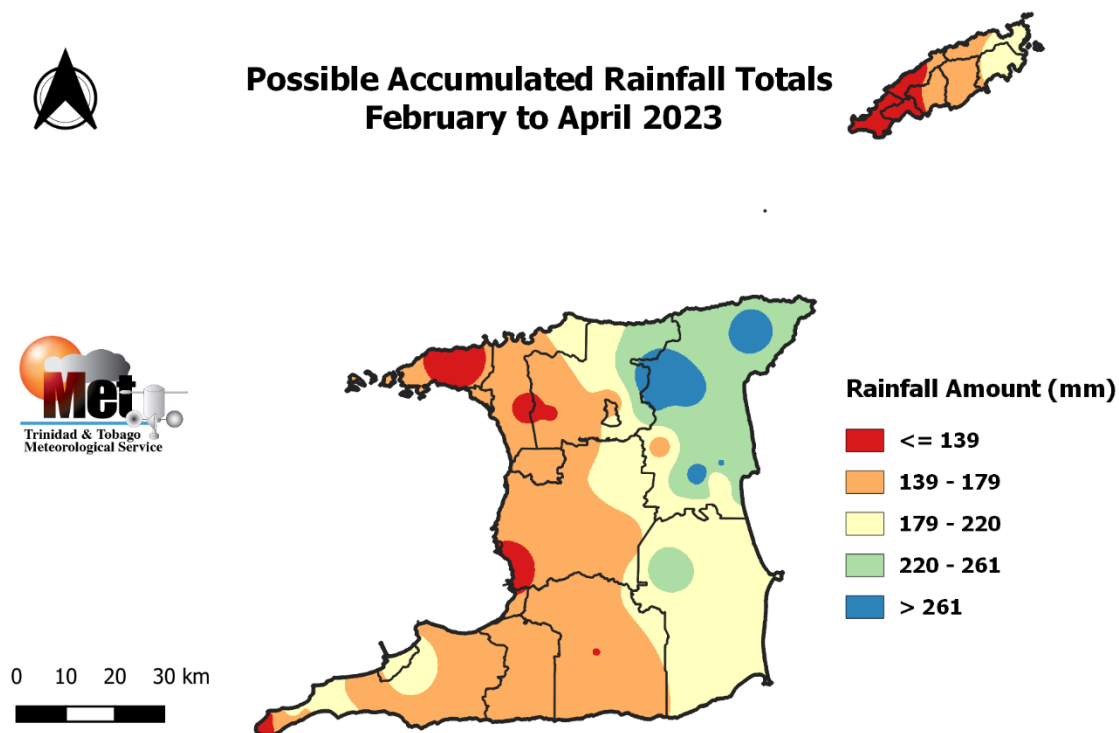


Figure 3: Outlook of possible rainfall accumulated totals for February to April 2023, with the highest chance of occurring.

- ✓ Rainfall totals with the highest chance of occurring range between 110.0 - 314.0 mm in Trinidad and between 96.0 - 201.0 mm in Tobago;

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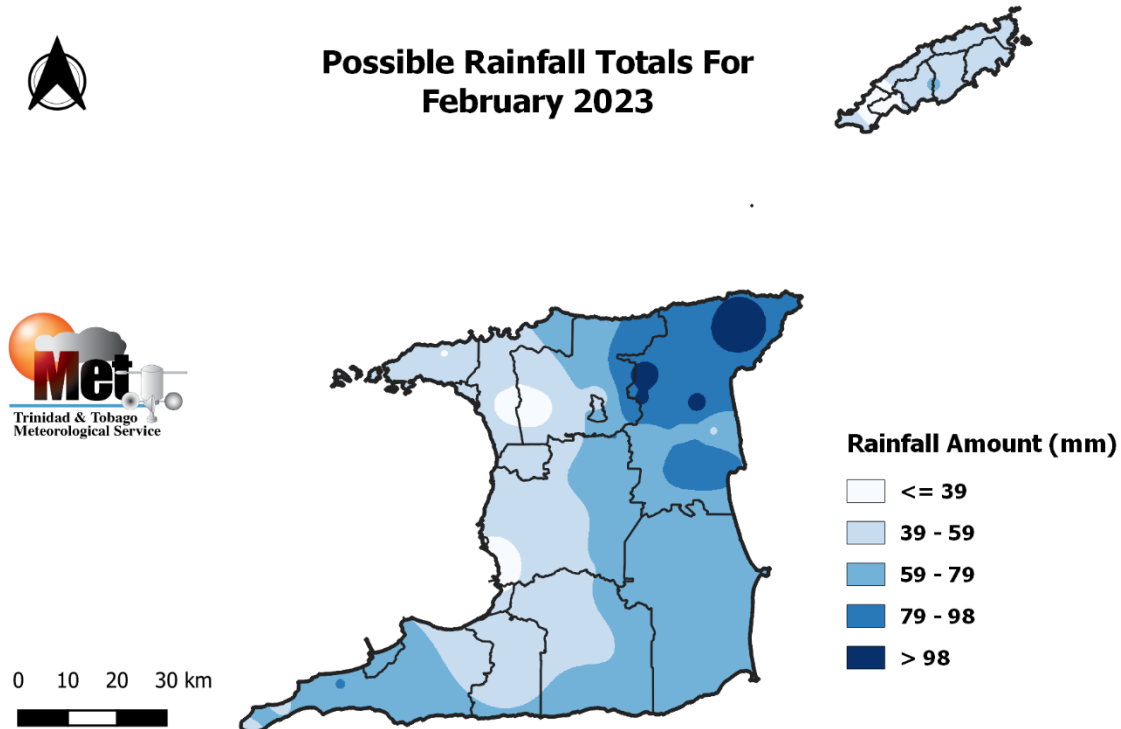


Figure 4: Outlook of possible rainfall accumulated totals for February 2023, with the highest chance of occurring.

- ✓ Accumulated rainfall in February with the highest chance of occurring range from 18.7-119.0 mm in Trinidad and 26.4 - 60.3 mm in Tobago.

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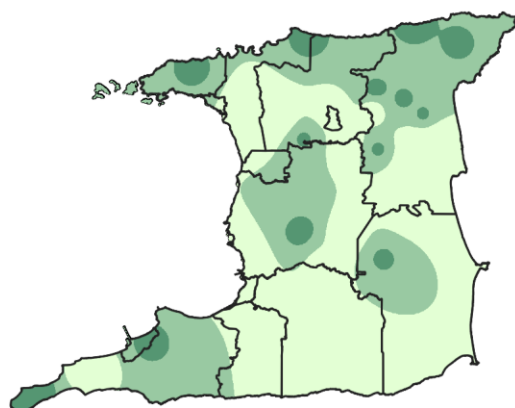


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Probability of Most Likely Category of Rainfall May to July 2023



Percentage Probability (%)

Above Normal Near Normal Below Normal

66+	51+	66+
61 - 65	46 - 50	61 - 65
56 - 60	41 - 45	56 - 60
51 - 55	35 - 40	51 - 55
46 - 50		46 - 50
41 - 45		41 - 45
35 - 40		35 - 40

0 10 20 30 km



Figure 5: Category of rainfall likely for MJJ (May to July) 2023 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above-normal rainfall, brown areas show an increased chance for below-normal rainfall, while green areas show an increased chance for near-normal rainfall. Normal is defined by the rainfall that was observed in middle one-third of the MJJ period rainfall totals during the historical period used to produce the outlook.

- ✓ May to July (MJJ) rainfall totals are likely to be near normal over Trinidad and Tobago;
- ✓ May will be the driest while July will be the wettest of the three months;

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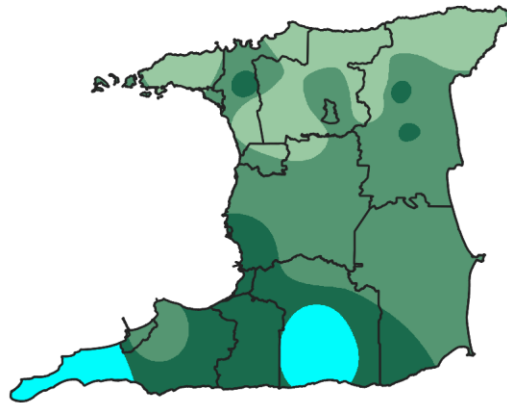


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Maximum & Minimum Temperatures Seasonal Climate Outlook February to April 2023



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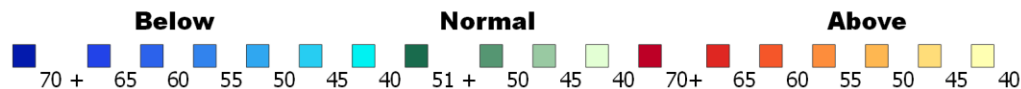


Figure 6: The map shows the colour-coded category (below-normal, above-normal, and near-normal) of mean temperatures that is most likely to occur across Trinidad and Tobago for the February to April (FMA) period 2023. The colour-coded bar-graph with the numbers to the right gives the likelihood for each forecast category to occur.

The Temperature Outlook Favours Mostly Normal Temperatures for February to April 2023

- ✓ Both daytime and night temperatures are likely to be warm as average over the majority of both islands;
- ✓ Moderate probability for some parts of southern Trinidad to be just below normal mean Temperature;
- ✓ A reasonably good chance (65%) exists for very short duration hot spells in April (maximum temperature greater than 34.0 °C in Trinidad, greater than 32.5 °C in Tobago);

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How Should You Respond?

Take Early Action!

Early Actions & Preparedness

- Review household water plan. Conserve, store and manage water safely and adequately.
- Sensitize vulnerable communities on the negative impacts of the forecast and actions to be taken
- Raise awareness on dry season agriculture pest and disease control measures and bushfires risk.
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Be vigilant and visit the Met Service website regularly to keep up to date on local weather changes daily at www.metoffice.gov.tt or download our mobile app on Google Play Store or Apple iStore.

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Climatic Influencers and Context of the Outlook

- ✓ Currently, sea surface temperatures (SSTs) in waters surrounding Trinidad and Tobago and further east of the islands are slightly warmer than average. Climate models surveyed show that these conditions will become normal to below normal during the latter half of February and onwards.
- ✓ Presently, the La Niña is weakening and can transition to ENSO neutral state by the end of February-beginning of March 2023. La Niña conditions generally have been associated with the enhancement of local rainfall, but not always.
- ✓ During December, a negative index of the North Atlantic Oscillation (NAO) was observed and it slowly shifted to a positive index in January 2023. It is forecast to remain in a weak positive phase in February with the overall influence being a small positive impact on local rainfall.
- ✓ Models indicate that the Madden Julian Oscillation (MJO) signal is not in our region and is likely to not have any influence on February's rainfall.

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