

## Rainfall and Temperature Outlook for Trinidad and Tobago, April to June 2023

Key words: below-normal (“less than usual”), near-normal (“usual”) or above-normal (“More than usual”)

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### Rainfall and Temperature Outlook for Trinidad and Tobago, April to June 2023.

Near Normal to Below Normal Rainfall is Expected for April to June

2023.

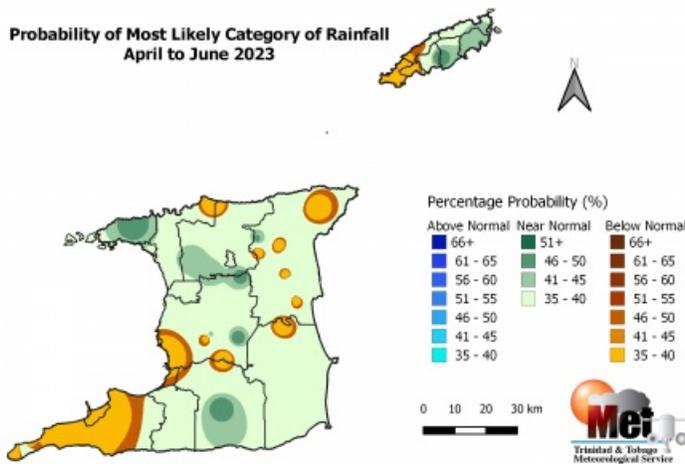


Figure 1: Category of rainfall likely for AMJ (April to June) 2023 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above normal rainfall, brown areas show an increased chance for below normal rainfall, while 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 AMJ period rainfall totals during the historical period used to produce the outlook.

- Moderate probability exist for below normal rainfall totals over some parts of Trinidad and Tobago during AMJ;
- Chances are moderate (65%) for the lower than normal number of extremely wet days (> 25.0 mm) for AMJ; i.e. expect between 4 - 7 extremely wet days in Trinidad and 3-5 in Tobago during the period.

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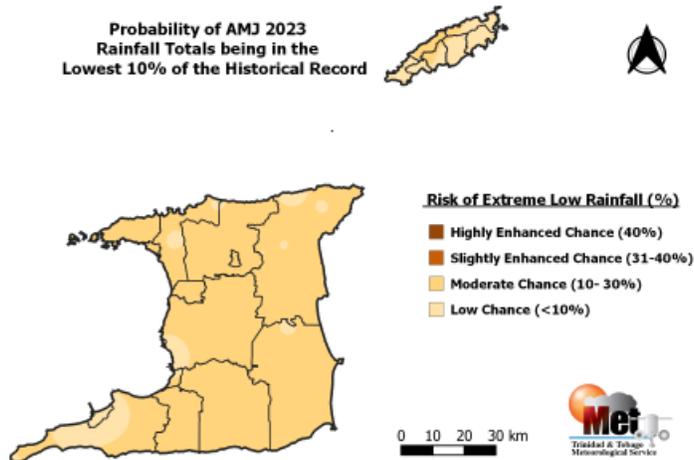


Figure 2: Risk of the AMJ 2023 being extremely drier than normal (within the lowest 10% on record).

- The risk of extremely drier than normal conditions is moderate (13-24%) over both islands;
- High (70%) chance of dryness likely to occur in April and May.

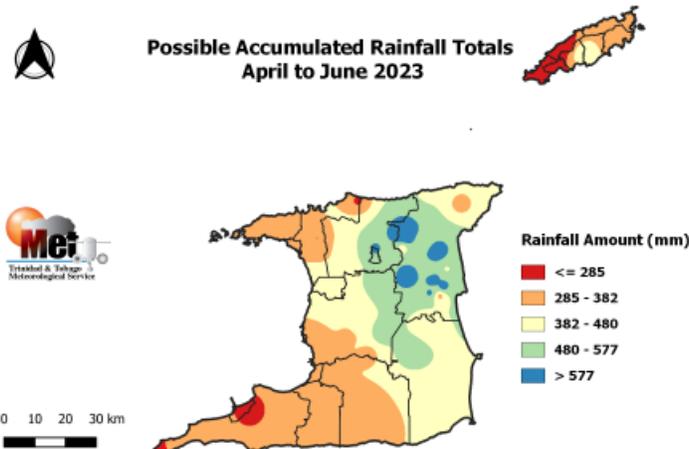


Figure 3: Outlook of possible rainfall accumulated totals for April to June, with the highest chance of occurring.

- Largest rainfall accumulated totals for AMJ are likely to be as high as 706 mm in areas such as North Oropouche, Valencia, Sangre Grande and Plum Mitán in Northeast and east Trinidad; and near 483 mm in Goodwood, Mt. Saint George and environs in southeast Tobago.

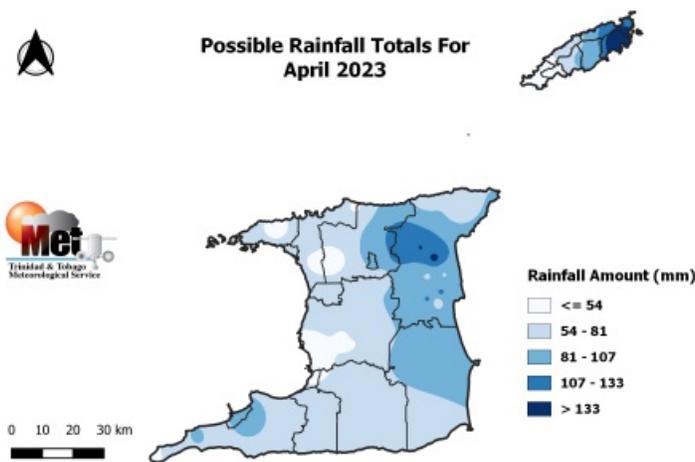


Figure 4: Outlook of possible rainfall accumulated totals for April 2023, with the highest chance of occurring.

- April rainfall with highest chance of occurring ranges from about 32-140 mm in Trinidad and 26-160 mm in Tobago.

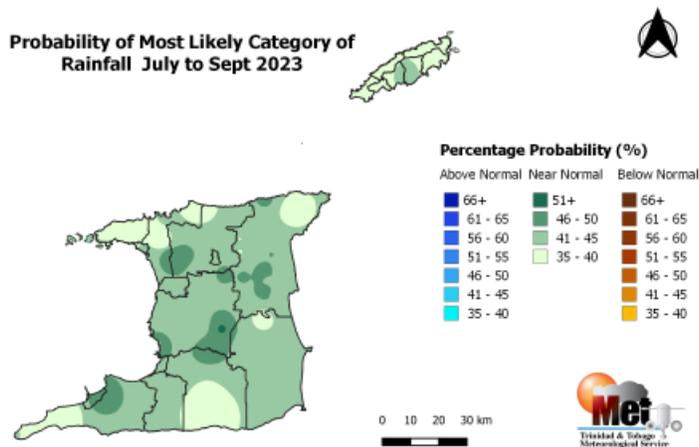


Figure 5: Category of rainfall likely for July to September (JAS) 2023 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above-normal rainfall, brown areas show an increased chance for below-normal rainfall, 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 JAS period rainfall totals during the historical period used to produce the outlook.

- July to September (JAS) rainfall totals are likely to be near normal over of Trinidad and Tobago;
- Some dryness likely to occur during September.

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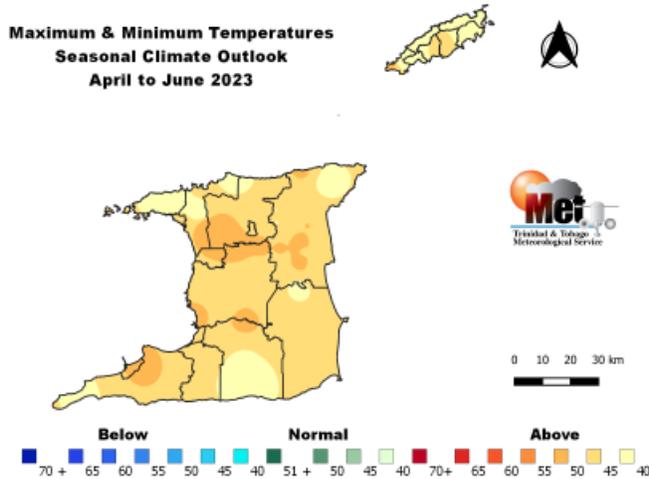


Figure 6: The map shows the colour-coded category (below-normal, above-normal, and near-normal) of mean temperatures that is most likely to occur across Trinidad and Tobago for the April to June (AMJ) period 2023. The colour-coded bar-graph with the numbers to the right gives the likelihood for each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

#### The Temperature Outlook Favours Slightly Above Normal Temperatures for April to June 2023.

- Both daytime and night temperatures are likely to be warmer than average over both islands;
- Chances of warmer than average days are highest in Trinidad where there is a 56% chance of warmer than average days in north western areas, while there is a 51% chance for south western Tobago;
- Chances of warmer than average nights are highest in Trinidad where there is 52% chance, while Tobago has a 48% chance;
- A moderate chance (65%) exist for short duration hot spells in May and June (maximum temperature greater than 34.0°C in Trinidad, greater than 33.0°C in Tobago);
- Historically, the end of April is the start of the heat season where maximum temperatures can get as high as 35.0°C in Trinidad and as high as 34.0°C in Tobago.

#### 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.
- 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.

#### **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 about average. Climate models surveyed mostly favour these average conditions to persist during April to May and shift to above average in June.
- ENSO neutral conditions is favoured during AMJ 2023 and possible transition to El Niño Phase by end of September 2023. El Niño conditions generally have been associated with the reduction of local rainfall, but not always.
- During the last week of March, a strong negative phase of the North Atlantic Oscillation (NAO) was observed and is forecasted to slowly transition to weak negative phase that will continue into April. The overall influence should be a small positive impact on local rainfall.

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- Models indicate that the Madden Julian Oscillation (MJO) signal was strong and negative during the last week of March, and is likely encroach and develop over the region. This will have negatively influence April's rainfall.