	Trinidad & Tobago Meteorological Service	**Rainfall and Temperature Outlook for Trinidad and Tobago, 2017 Wet Season & June to August 2017**

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A Wet Season When Every Drop of Rainfall Counts

Key Messages

- ✓ Highest chances for below normal wet season rainfall totals over most areas;
- ✓ Parts of northeast Trinidad have enhanced chances for near normal rainfall;
- ✓ Chances are high for near normal number of extremely wet days (> 25.0 mm), therefore the potential for flooding remains high.
- ✓ June rainfall is favoured to be above normal;
- ✓ July rainfall is favoured to be near normal;
- ✓ August and the months following have enhanced chances for below normal rainfall that are likely to progressively strengthen;
- ✓ JJA period rainfall totals with highest chance of occurring range from about 455-1000 mm in Trinidad and 455-650mm in Tobago;
- ✓ Both day and night temperatures are predicted to be warmer than normal for all of Trinidad and Tobago with possibilities for short-duration hot spells in September and October.

Likely Impacts

- ✓ Near normal to below normal rainfall during the wet season can still cause severe flooding;
- ✓ Increased rainfall combined with recent bushfires, mean faster run-off in hilly areas which increases the risk of flash and riverine flooding, landslips and landslides;
- ✓ Increase in surface water ponding can promote mosquito breeding. This will increase the risk for higher incidences of vector borne diseases;
- ✓ Increased rainfall, mixed with warm and humid conditions tend to promote rapid multiplication of some agricultural pests, diseases and fungal growth.

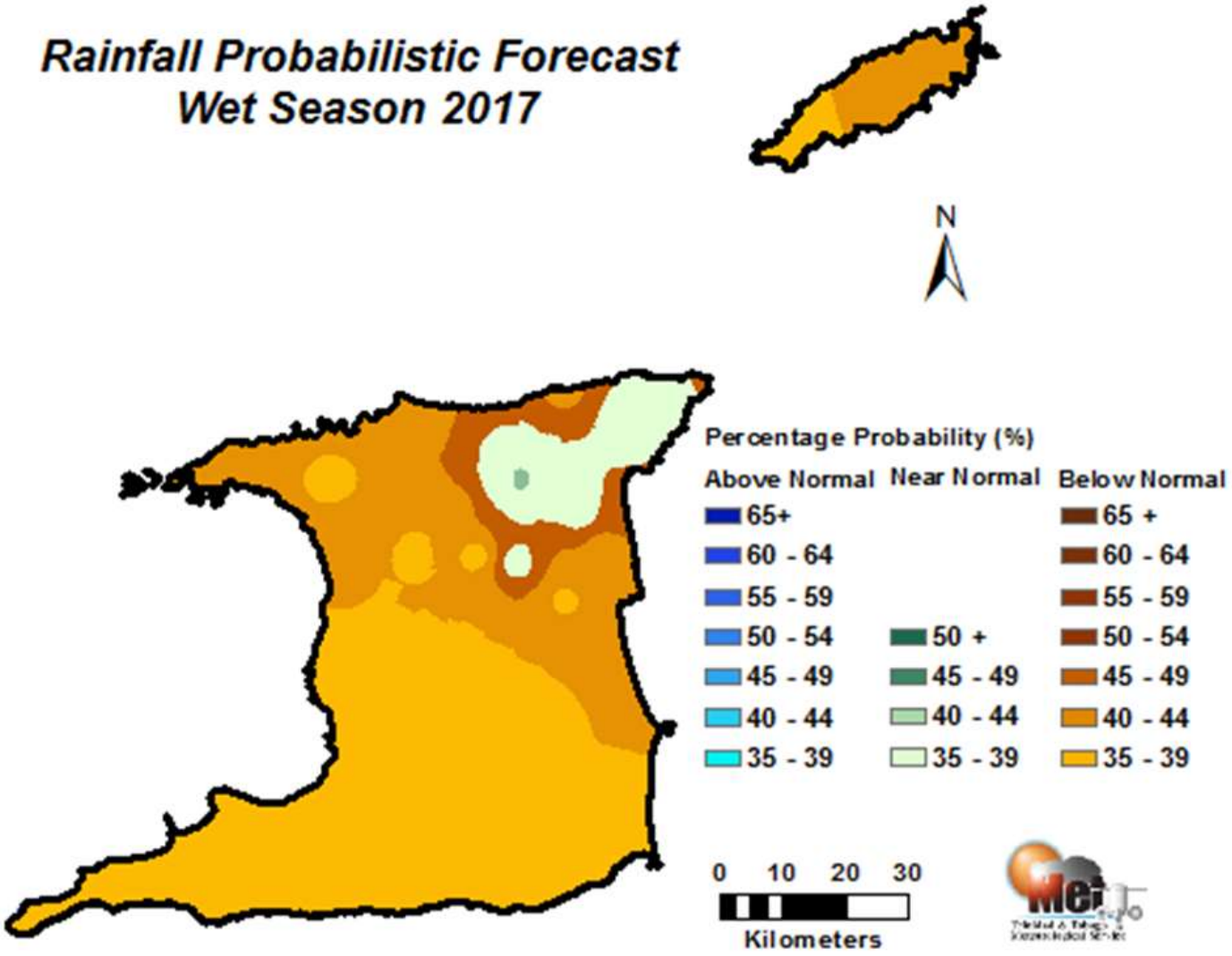

Figure 1: Category of rainfall likely for 2017 Wet Season (June to December) with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above normal rainfall, brown areas show an increased chance for below normal rainfall, 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 Wet Seasons during the historical period used to produce the outlook.

- ✓ Highest chances exist for below normal rainfall totals over most areas;
- ✓ Chances for below normal rainfall are largest in small parts of east Trinidad and most of Tobago;
- ✓ Chances are enhanced for near normal rainfall in large areas of northeast Trinidad;
- ✓ Chances are highest for near normal number of extremely wet days (> 25.0 mm);
- ✓ Expect between 14 -18 extremely wet days in Trinidad and 11-13 in Tobago.

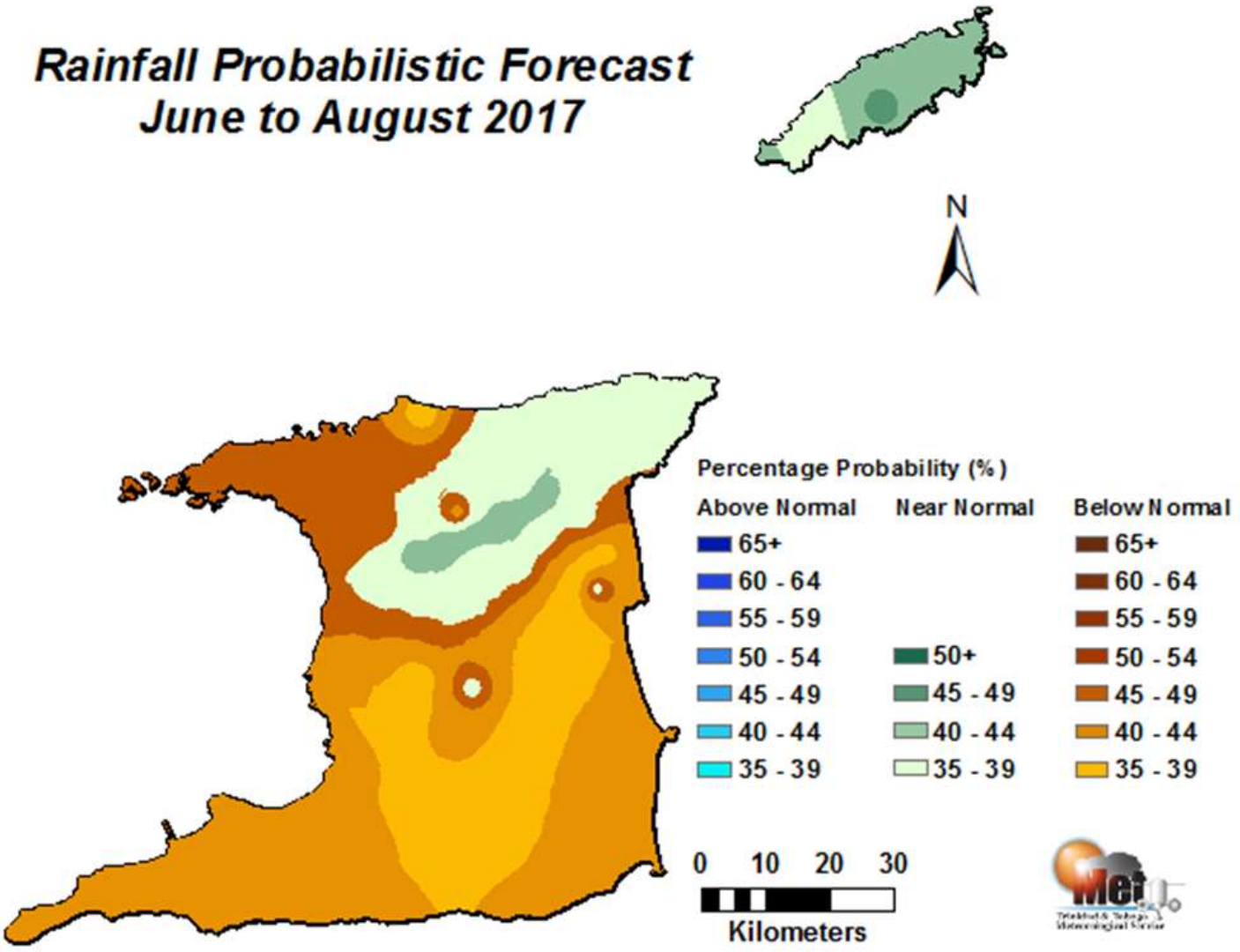

Figure 2: Category of rainfall likely for June to August (JJA) 2017 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above normal rainfall, brown areas show an increased chance for below normal rainfall, while 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 JJA seasons during the historical period used to produce the outlook.

- ✓ JJA has enhanced chances for near- to below-normal rainfall;
- ✓ Large areas of northern Trinidad and all of Tobago have the highest chances for near normal rainfall;
- ✓ Elsewhere chances are enhanced for below normal rainfall;
- ✓ June rainfall is favoured to be above normal;
- ✓ July rainfall is favoured to be near normal;
- ✓ August onward has enhanced probabilities for below normal that are likely to progressively strengthen.

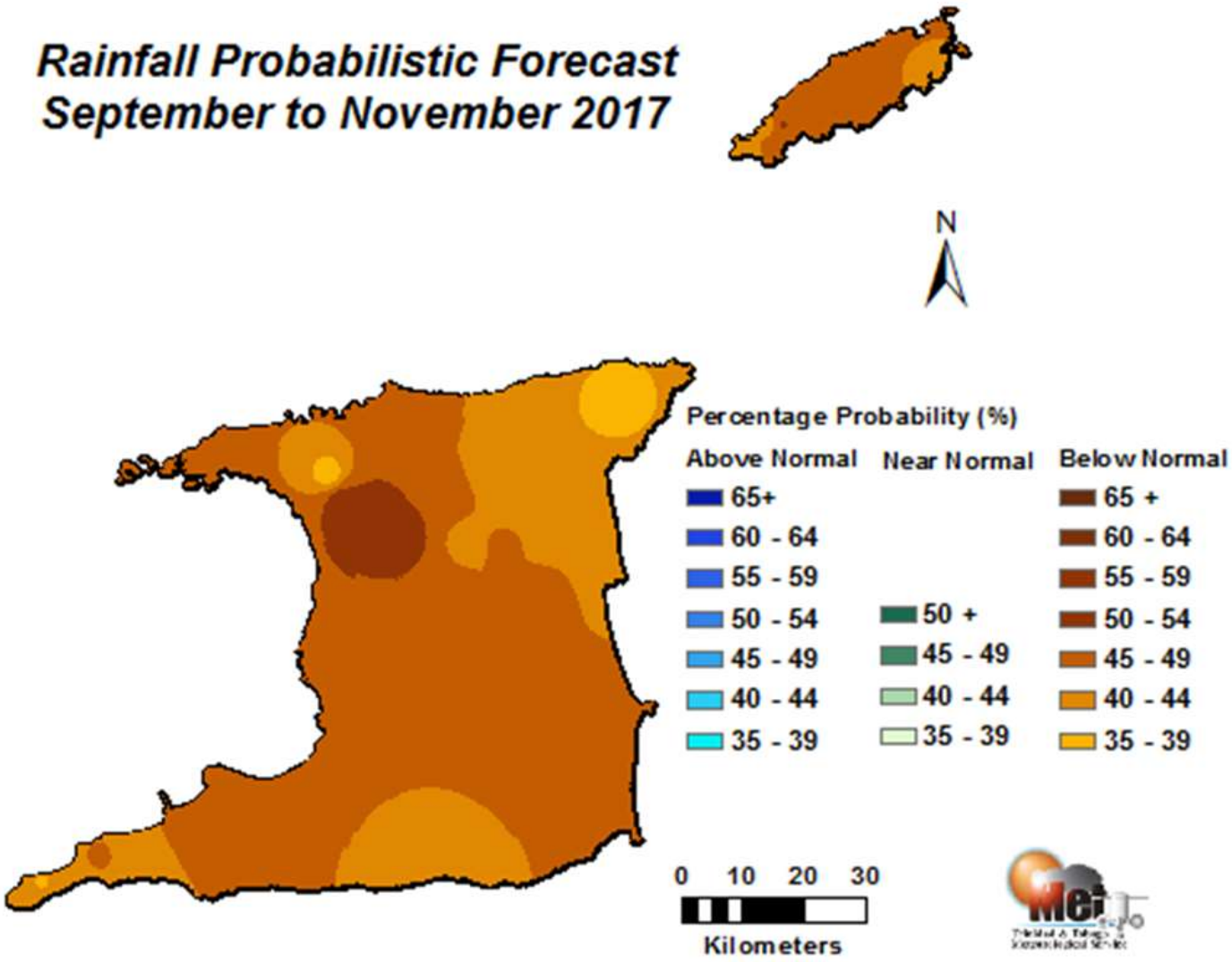

Figure 3: Category of rainfall likely for September to November (SON) 2017 with the highest chance of occurrence expressed as probabilities represented on the map. Blue areas indicate places with an increased chance for above normal rainfall, brown areas show an increased chance for below normal rainfall, 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 SON seasons during the historical period used to produce the outlook.

- ✓ SON season shows increased spatial coverage for chance of below normal rainfall.
- ✓ Chances for below normal rainfall are strongest in west Trinidad

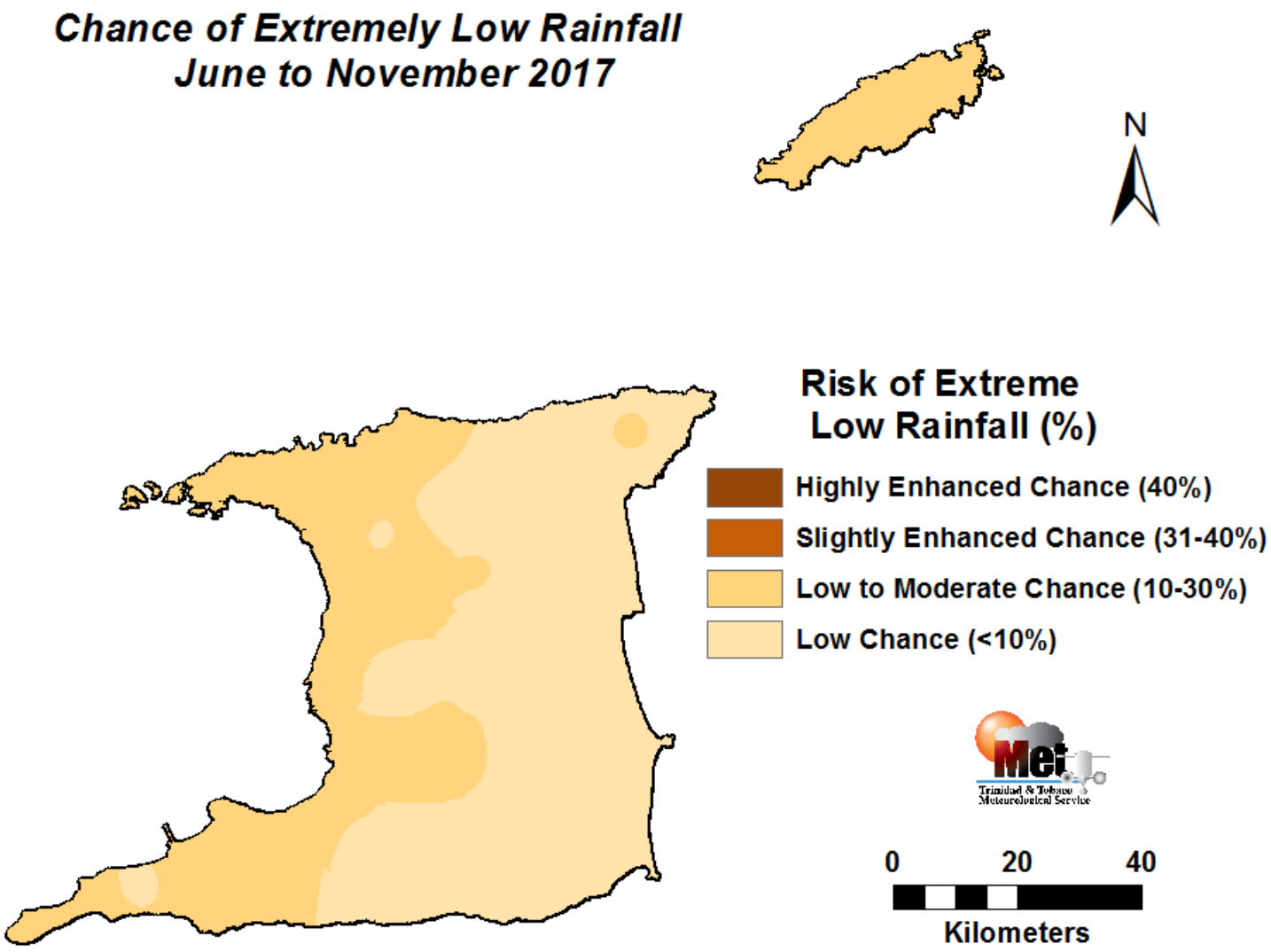

Figure 4: Risk of the wet season being extremely drier than normal (within the lowest 10% on record).

- ✓ The risk of extremely drier than normal conditions is low (less than 10 %) over the eastern half of Trinidad
- ✓ The risk increases on the western half of Trinidad and all of Tobago with a low to moderate (10-30%) chance.

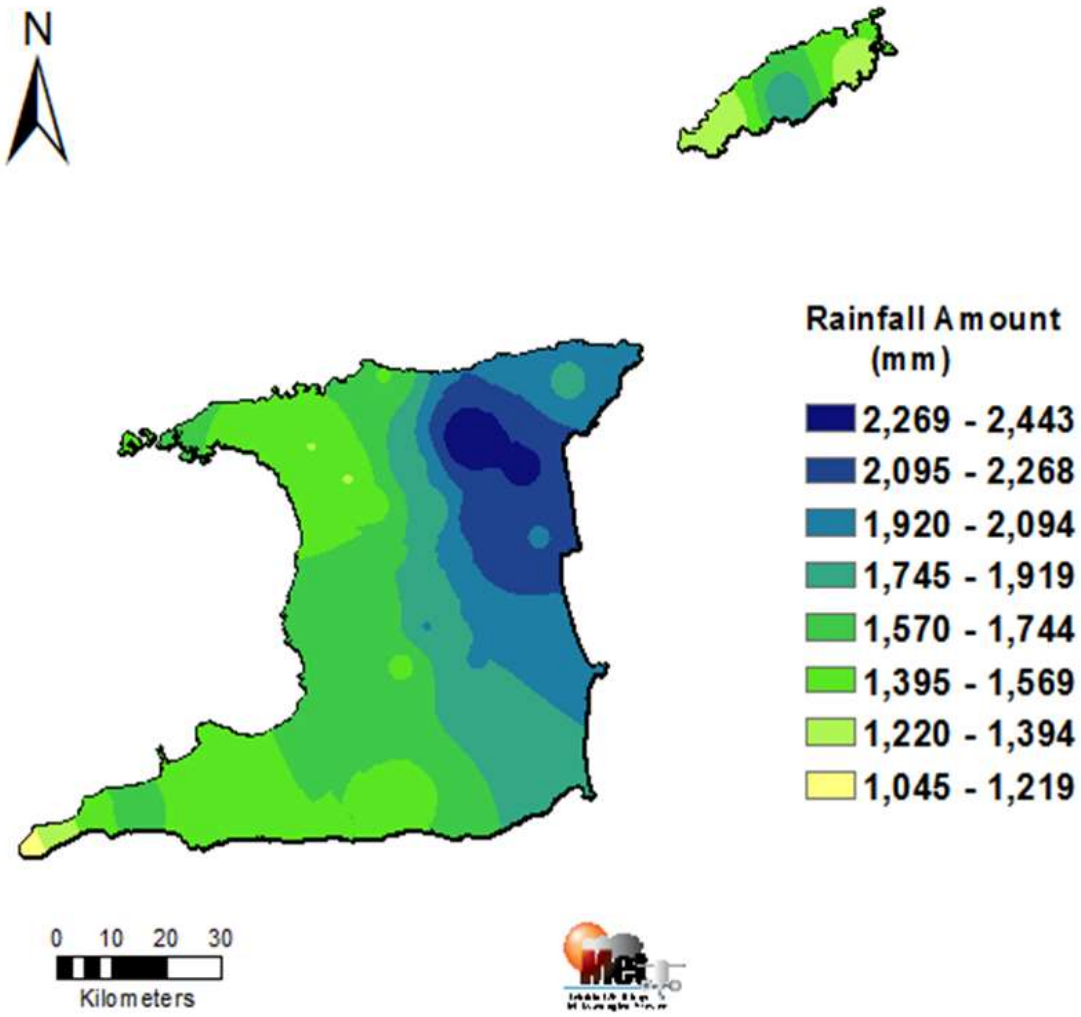

Figure 5: Outlook of possible rainfall accumulated totals for June to December 2017, with the highest chance of occurring.

- ✓ Wet season rainfall with highest chance of occurring, range from about 1050-2440mm in Trinidad and 1250-1900mm in Tobago

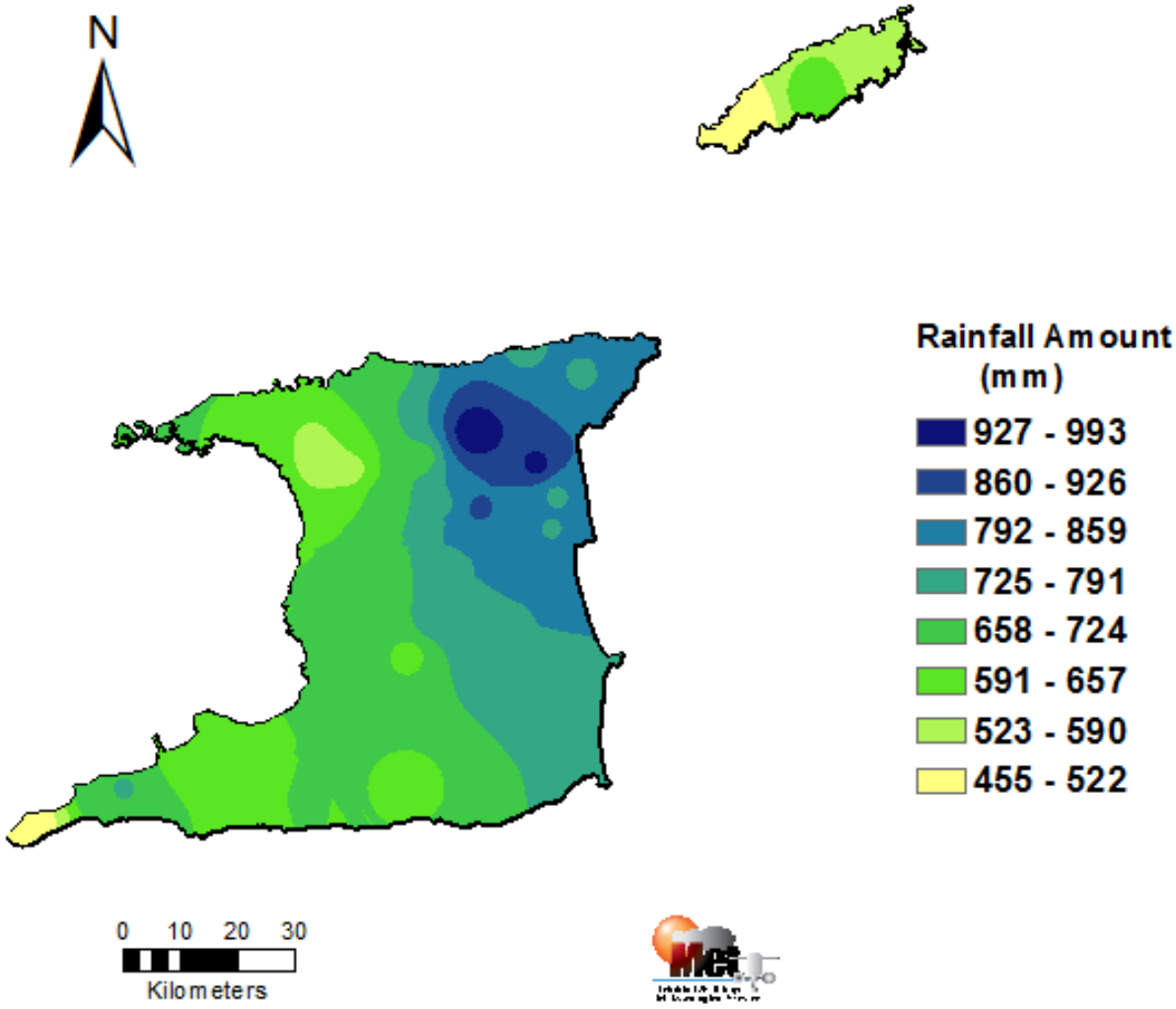

Figure 6: Outlook of possible rainfall accumulated totals for June to August 2017, with the highest chance of occurring.

- ✓ JJA period rainfall with highest chance of occurring range from about 455-1000mm in Trinidad and 455-650mm in Tobago

The Temperature Outlook Favours Warmer than Normal Temperatures for June to December 2017

- ✓ Both day and night temperatures are forecasted to be above normal over Trinidad and Tobago;
- ✓ Chances are high (70%) for mean maximum temperatures near or above 32.5°C in Trinidad and near 31.3 °C in Tobago;
- ✓ Chances are high (80%) for night time minimum temperatures to be warmer than 23.9 °C in Trinidad and 24.7 °C in Tobago;
- ✓ Good chance (60%) for short duration hot spells in September and October (maximum temperature greater than 34.0 °C in Trinidad, greater than 32.0°C in Tobago).

Likely Implications for Near to Below Normal Rainfall and Warmer than Normal Temperatures

- ✓ Increase in rainfall combined with recent bushfires, means faster run-off in hilly areas which increases the risk of flash and riverine flooding, landslips and landslides;
- ✓ Increase in surface water ponding, which increases mosquito breeding sites and the chance for more incidences of vector borne diseases;
- ✓ Increased rainfall will improve water reservoir levels, increase ground water recharge, surface water flows and water availability; however,
- ✓ Water reservoirs in areas with prior rainfall shortage may require extended periods of heavy rainfall to fully recover;
- ✓ Increased rainfall could lead to disruptions in localized travel and increased disruption of outdoor activities;
- ✓ Above normal temperatures can aid more intense showers which will increase the risk for flash floods, especially in the cities and built-up areas;
- ✓ Increased rainfall, mixed with warm and humid conditions tend to promote rapid multiplication of some agricultural pests, diseases and fungal growth.

How Should You Respond? ***Take Early Action!***

Health Sector:

- ✓ Clear bushes, open drainage systems, fumigate in and around residences;
- ✓ Revisit contingency plans to manage spike in vector borne incidences.

Disaster Risk Management Sector:

- ✓ Sensitize communities on the forecast and its negative impacts;
- ✓ Revisit early warning information dissemination channels;
- ✓ Alert communities in low lying areas (flood prone) to act early;
- ✓ Alert at risk residence and communities that are still prone to landslide and slip.

Agriculture & Food Security Sector

- ✓ Practice soil moisture conservation like mulching and trenches;
- ✓ Put in place disease control measures.

Water, Drainage and Energy sector

- ✓ Implement water harvesting, storage and proper usage;
- ✓ Conduct routine de-silting of water channels, canals and reservoirs;
- ✓ Remove dry branches, trees and overhang near electrical wires.

General Public

- ✓ Proper preparation especially for persons in at risk areas;
- ✓ Clean drains and surrounding areas of debris, be sand-bag ready;
- ✓ Conserve, store and manage water in a safe and adequate manner;
- ✓ Be watchful for extreme rainfall events especially on extremely hot days;
- ✓ Take measures to lessen the potential impacts from the expected increased rainfall and warmer than average temperatures.

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.

Climatic Influencers and Context of the Outlook

- ✓ Sea surface temperature (SST) in waters surrounding Trinidad and Tobago is a key climate influencer and are currently warmer than average. SSTs in the Tropical Atlantic Ocean further east of the islands are mostly warmer than average. Climate models surveyed, mostly favour these conditions to persist during much of the wet season.

- ✓ Tropical Pacific Ocean SSTs in the Nino 3.4 region used to monitor El Nino are slightly warmer than average, currently. The latest analysis shows no clear signal as there is little consensus among the climate models surveyed on how warming and atmospheric conditions will progress, going forward. However, the best chance at this time suggests equal chances for ENSO-neutral or El Nino conditions, during the 2017 wet season. ENSO-neutral and El Nino conditions in the past tend to suppress local rainfall, but not always.

- ✓ The North Atlantic Oscillation (NAO) has been in the negative phase since May and is likely to persist in negative phase into June. The overall influence should be positive on local rainfall.

- ✓ The rainfall producing phase of the Madden Julian Oscillation (MJO) is likely to encroach on the region during June and this can have a positive influence on June rainfall, especially during the first two to three weeks.

- ✓ Multiple competing climatic factors are at play which can cancel out each other as there is no dominant signal currently. The current outlook reflects this.