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Trinidad and Tobago Dry/Wet Spell Monitor and Outlook by End of May 2017

Little to No Concern for Impactful Dryness by End of May

3-Month Outlook (short-term):

- ❖ The Dry Spell Outlook for the three-month period ending May 2017 maintains little to no concerns for impactful drying across Trinidad and Tobago when compared with concerns two to four months ago.
- ❖ Taking into account rainfall from January to early April 2017 and the Standardized Precipitation Index (SPI) outlook for three months ending May 2017, the Trinidad and Tobago Meteorological Service continues to see no short-term dry-spell or drought concerns developing for Trinidad and Tobago by the end of May (see figure 1).
- ❖ The outlook favours a continuation of positive SPIs over most of Trinidad apart from small negative SPIs in the southwestern half of the island where the concern for impactful dryness remains small (see figure 1).
- ❖ The outlook continues to show improved conditions for Tobago as the recent strengthening of positive SPIs are expected to persist to the end of May (see figure 1).
- ❖ As such, the chance for extreme or unusual dryness (i.e. SPIs values less than -1.25) indicated by below normal percentages, remains relatively small for both islands by the end of May 2017 (see figure 2).

Standardized Precipitation Index

The Standardized Precipitation Index (SPI) is used by Trinidad and Tobago Meteorological Service (TTMS) to monitor and estimate dryness and wetness on different timescales. It is a measure of relative dryness and wetness compared to the long term average rainfall for a particular timescale. A negative SPI reflects a rainfall shortfall and hence relative dryness. In general, dryness impacts are expected locally, when the value of the 3-month SPI lies around -1.0. As the SPI value becomes less than -1.0, the severity of impacts increases. For Trinidad and Tobago, extreme or unusual dryness is taken to occur when negative SPIs is lower than -1.25. Negative SPIs are used to characterise the severity of the dryness and as such, dry spells and drought categories. A positive SPI reflects a rainfall surplus and hence relative wetness.

Figure 1

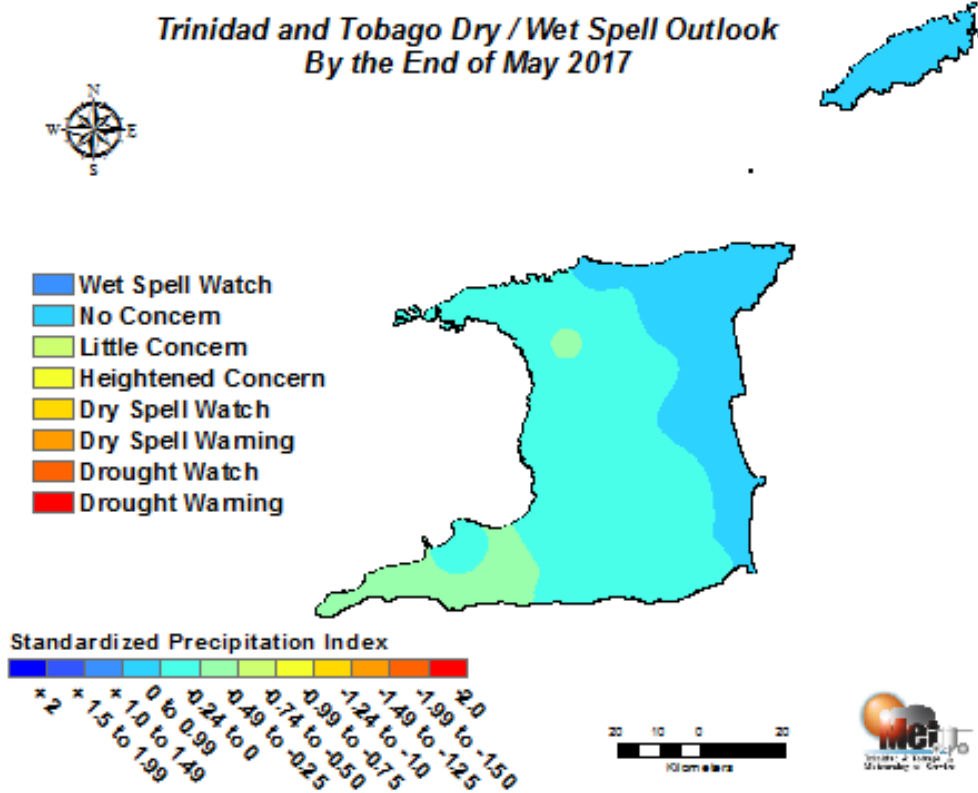
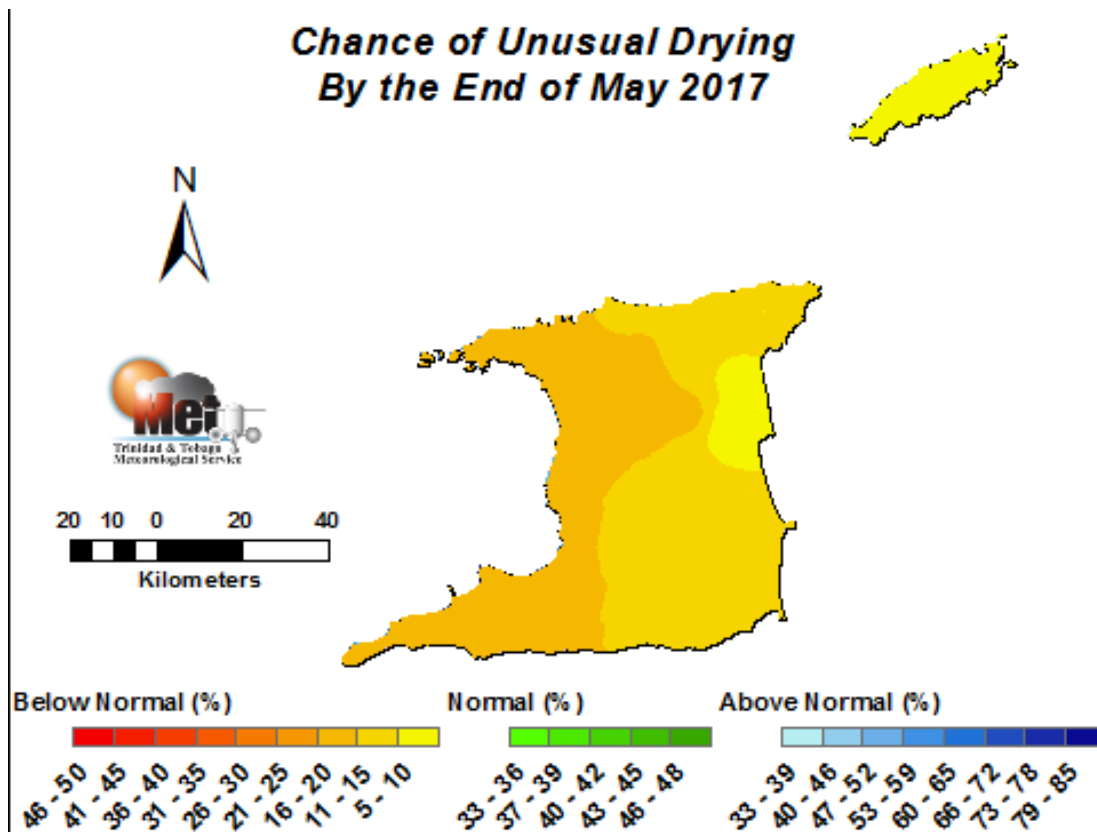


Figure 2



Longer-term (12-Month) Dryness Assessment:

- ❖ The longer-term dryness assessment based on 12-month SPIs used observation for April 2016 to March 2017 at selected stations. During the period most of Trinidad received rainfall amounts that when categorized as SPIs, show little to no concern for impactful dryness. Rainfall amounts in Tobago were less favourable over the period, resulting in impactful dryness concerns in all areas (Figure 2). In general, dryness impacts are expected if the 12-month SPI is less than -1.0 (very dry or worse). Dryness impacts based on 12-month SPIs may include reduced stream-flows, reservoir levels, and groundwater levels.

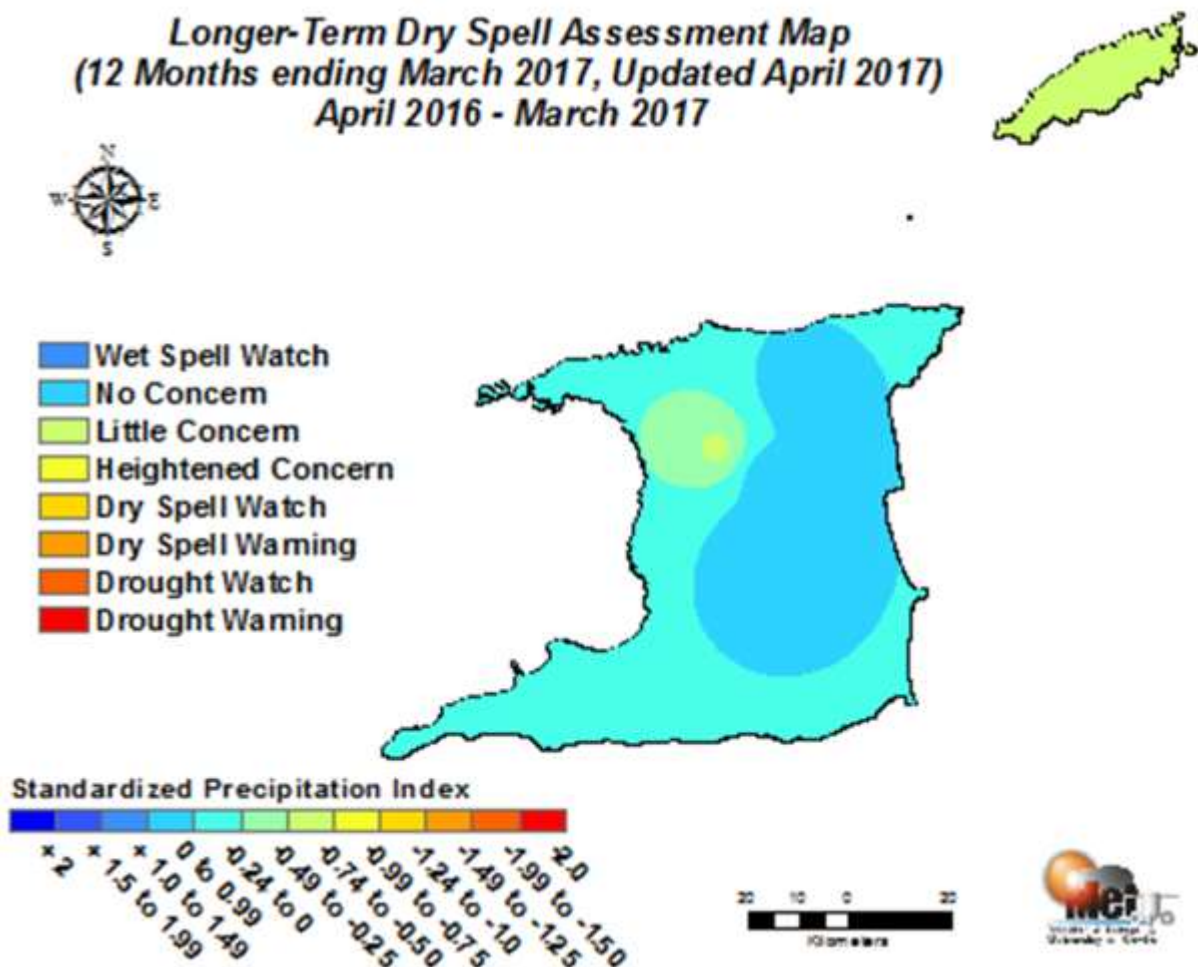


Figure 3