



**Rainfall and Temperature Outlook for Trinidad and Tobago
August to October 2015 (ASO)**

Near-Average Rainfall Expected Over Trinidad and Tobago During ASO

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Key Messages

- Rainfall in August to October (ASO) is likely to be near normal in Trinidad and Tobago, while some areas in the northwest of Trinidad may experience below normal.
- In Trinidad, the percentage of average rainfall is likely to range between 86 % and 117 % of the long term average (LTA). While in Tobago, the percentage of average rainfall is likely to range between 88 % and 96 % of the long term average (LTA).
- Total rainfall amounts for ASO are likely to range between 419.0.0 mm in north-western Trinidad and 968.0 mm in north-eastern Trinidad. Rainfall amounts in Tobago are likely to range from 450.0 to 750.0mm.
- Warmer than average normal day and night-time temperatures are expected over all of the country.

Impacts and Response

- Likely impacts include: slight increase in ground water recharge, slight increase in surface water flow and water availability.
- The public, concerned agencies and ministries are advised to continue to conserve water and take measures to optimize on the effects of likely impacts.

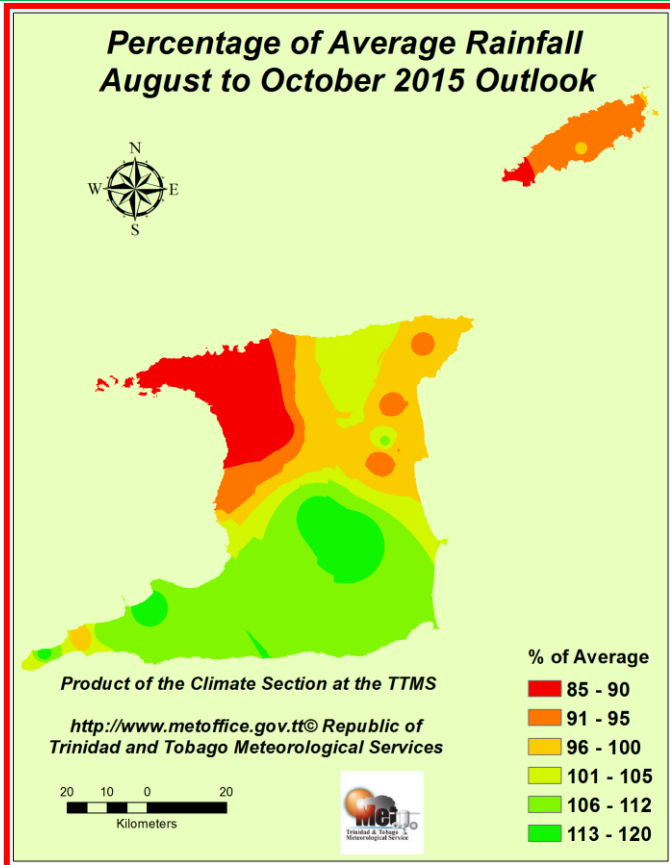


Figure 1.

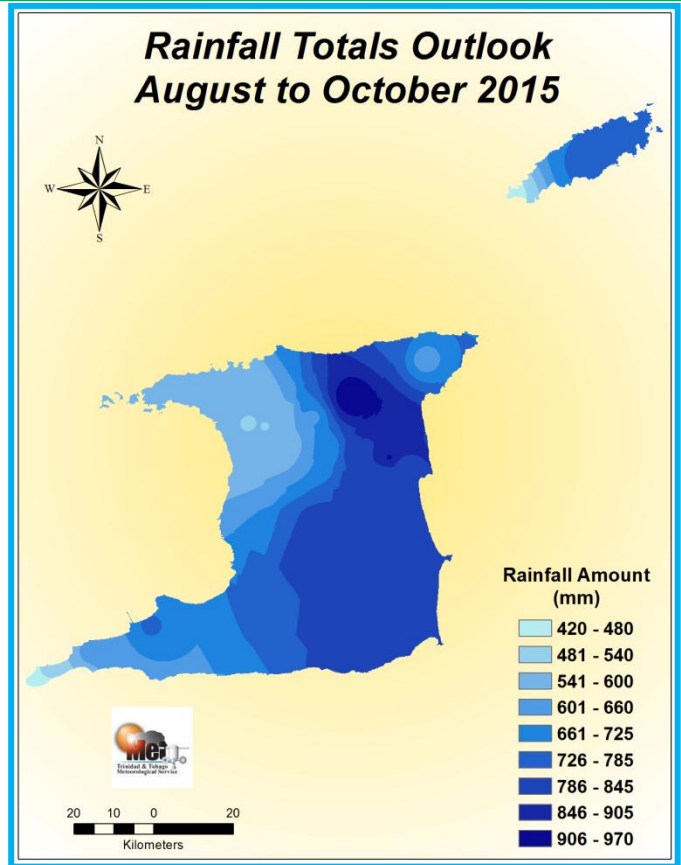


Figure 2.



Details of the Rainfall and Temperature Outlook for August to October 2015 (ASO)

- The Trinidad and Tobago Meteorological Service (TTMS) Climate Early Warning (CEW) outlook for the period ASO 2015 favours near average rainfall across the country. Rainfall performance is likely to be strongest in northeast Trinidad and weakest in southwest Trinidad. Rainfall performance in northeast Tobago is expected to be strongest, while in southwest it is likely to be weaker.
- The ASO rainfall outlook shows the highest and most frequent odds favour near average rainfall totals (near average rainfall is 75 % to 125 % of the long term average-LTA) to occur over the country, see figure 1. Although the forecast is for near average, some areas in the north-western and south-western parts of Trinidad and south-western parts of Tobago may experience below normal during the period (below average is less than 75% of the long term average-LTA).
- In districts where near average rainfall totals are likely to occur, the percentage of average rainfall is expected to range between 86% and 117% of the LTA in Trinidad and between 88% and 96% in Tobago (figure 1).
- On a monthly scale, rainfall in the month of August and October is expected to be near average in the country, while in September it is expected to be below average.
- Total rainfall amounts for ASO are likely to range from as low as 419 mm in north-western Trinidad to 968 mm in some districts in north-eastern Trinidad, while total rainfall amounts in Tobago during the period are likely to range from 450 mm in south-western areas to 750 mm in north eastern areas (figure 2).
- Hotter than average normal day and night temperatures are expected for all of the country during August to October 2015. Maximum temperatures are expected to average near 32.2⁰ C and range between 31.2⁰ C and 33.2⁰ C over the period. Minimum temperatures are expected to average near 24.7⁰ C and range between 24.1⁰ C and 25.2⁰ C in most areas.

Preliminary Outlook September to November 2015:

- Near average.

Likely Outcome

Likely impacts of near average rainfall and warmer than average temperatures include:

- Greening of pastures and some trees.
- Slight increase in ground water recharge.
- Slight increase in surface water flow and water availability.
- Increased risk of vector borne illnesses.
- Increased risk of pest and diseases.
- Slight reduction in the duration and occurrence of consecutive very hot days.

How Should You Respond?

- The public is advised to conserve, store and manage water in a sustainable manner.
- Farming communities are encouraged to use methods that would reduce the impact of pest and diseases.
- Relevant agencies and ministries are advised to take measures to mitigate the potential impacts from near average and warmer than average temperatures.



Climatic Influences on Outlook

The seasonal rainfall and temperature outlook considered the understanding that local and regional Sea Surface Temperatures (SST) changes, along with SST conditions external to the region can provide useful guidance for short and long term seasonal rainfall outlook for Trinidad and Tobago. The seasonal outlook employed a method which combined output from dynamical models, statistical models, and local expert analysis, judgment and knowledge of the climate system.

Current Climatic Influences :

- ❖ Waters east of Trinidad and Tobago started warming during April to July 2015, while sea surface temperature (SST) anomalies remained negative. Forecasted SSTs for waters east of the islands favour for the most part, near average to below average SSTs for the ASO season.
- ❖ Towards the beginning of July 2015 indicators used to monitor the El Nino-Southern Oscillation (ENSO) in Central Tropical Pacific Ocean showed El Nino conditions strengthened and are likely to continue for the August to October 2015 period. SSTs in the Central tropical Pacific were above average and are forecasted to maintain El Nino conditions for the ASO season. El Nino conditions in the Central tropical Pacific tend to influence rainfall performance negatively in Trinidad and Tobago's vicinity.
- ❖ Due to the strength, impacts associated with El Nino are anticipated. The El Nino signals would negatively influence the region and will continue beyond ASO in the vicinity of Trinidad and Tobago.
- ❖ Assessment of the North Atlantic Oscillation (NAO) index shows that part of the first week in August will be in a negative phase and is forecasted to become positive as it nears the middle of August. When in its positive phase, the NAO tends to enhance the northeast trade winds, leading to cooler sea surface temperatures and reduced rainfall in the vicinity of Trinidad and Tobago.
- ❖ Current analysis of the Madden Julian oscillation (MJO) shows that during the last week of July it was in a phase which did not enhance rainfall near Trinidad and Tobago. The MJO is not expected to influence rainfall significantly during the first two weeks of the month and will continue to be in a phase that is unfavourable to rainfall in Trinidad and Tobago for the remainder of August.
- ❖ Several dynamical climate models surveyed are in good agreement with the TTMS statistical climate model forecast and local expert analysis for near average rainfall, as most likely for the AMJ period in the vicinity of Trinidad and Tobago. This increases the TTMS's confidence in the outlook.

For more information feel free to contact the Climate Section @ Telephone: 1-868-669-5465; E-Mail: dirmet@metoffice.gov.tt , or visit our website www.metoffice.gov.tt

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