



Large parts of Trinidad and Tobago are expected to be drier than usual during the 2015 September to November (SON) Period

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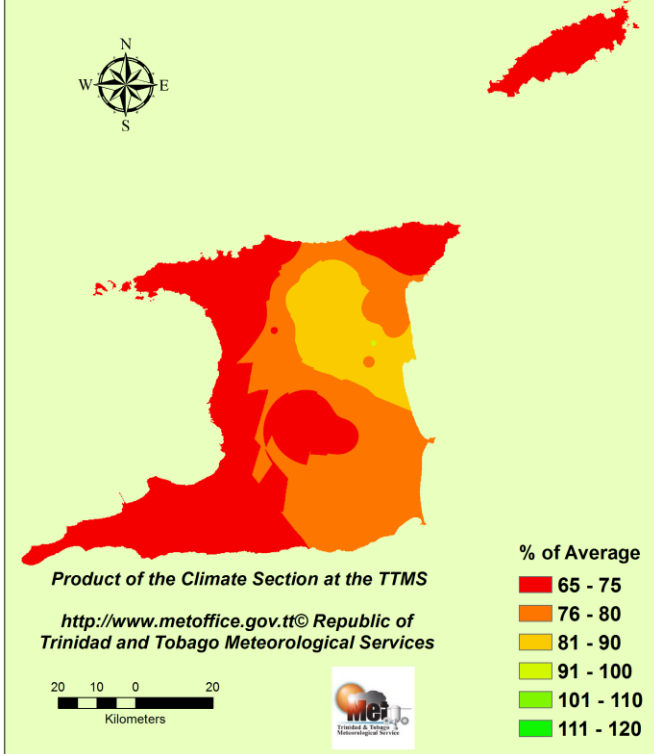
Key Messages

- Shortfall in rainfall is expected to continue into the September to November (SON) period with drier than usual conditions expected to dominate the country resulting in fewer wet days.
- Large parts of Trinidad can expect below average rainfall during SON with a few areas in northeast Trinidad likely to receive near average rainfall totals.
- Rainfall shortfall in Tobago is expected to continue being large across the entire island with below average rainfall totals anticipated for SON.
- In areas where below average rainfall is expected, the percentage of average rainfall is likely to range between 66% and 74% of the long term average (LTA).
- Accumulated rainfall totals for the SON period are likely to range from 300 mm in areas of southwest Trinidad to 940 mm in areas of northeast Trinidad; while in Tobago it is likely to range between 370 mm in south-western areas to 700 mm in north-eastern areas.
- Above average day and night-time temperatures are expected over all of the country.

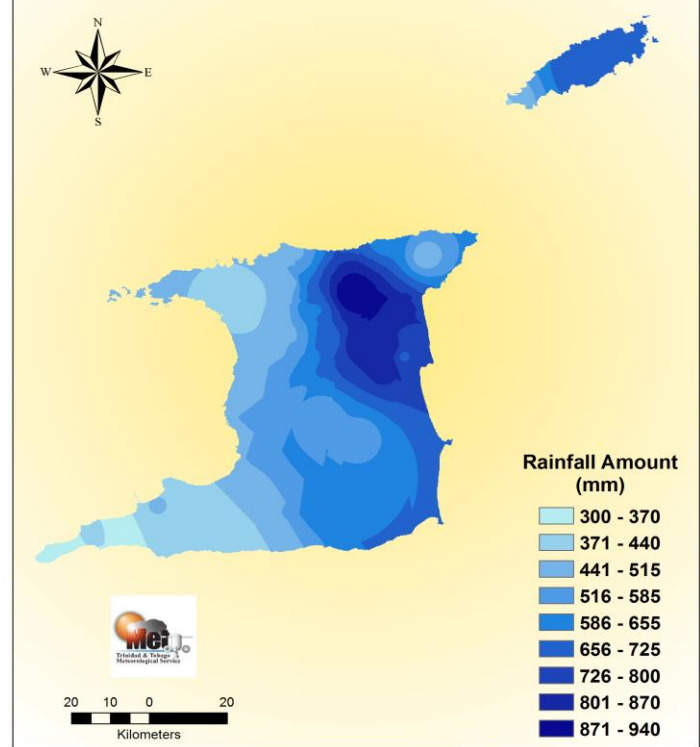
Impacts and Response

- Likely impacts include: further decline in water availability from rainfall in areas where the shortage of rainfall has been large.
- Citizens in general, concerned agencies and ministries are advised to conserve water, adopt appropriate water resource management practices and take measures to reduce the effects of likely impacts.

**Percentage of Average Rainfall
September to November 2015 Outlook**



**Rainfall Totals Outlook
September to November 2015**





Details of the Rainfall and Temperature Outlook for September to November 2015 (SON)

The Trinidad and Tobago Meteorological Service (TTMS) Climate Early Warning (CEW) outlook for the next three months (SON) favours below average rainfall as the most likely category of rainfall performance to dominate across the country but a few areas are still likely to experience near average rainfall. Rainfall performance is expected to be weakest in Tobago, northwest, central and southwest Trinidad. Confidence for this to occur is high (80 %).

- The September to November rainfall outlook indicates that the most frequent odds favour below average rainfall totals to occur in large areas of Trinidad see figure 1 (below average is less than 75 % of the long term average), with fewer wet days than usual. A few areas in north east Trinidad are favoured to receive near average rainfall (near average is 75% to 125 % of the long term average).
- Tobago is expected to continue receiving shortfall in rainfall (figure 1) with below average rainfall totals likely across all areas during the SON period.
- In districts where below average rainfall totals are expected, the percentage of average is expected to range between 66 % and 74 % (figure 1) while in the districts where near average rainfall totals are expected, the percentage of average may range between 75% and 93%.
- The accumulated rainfall totals expected across the country for the period (SON) are likely to range from as low as 300 mm in the Chatham and Iacos districts of southwest Trinidad to 940 mm in the Sangre Grande and Valencia districts of northeast Trinidad.
- Across in Tobago, rainfall accumulations for the three-month period September to November are expected to range between 700 mm the Mount Saint George and Hillsborough areas and 370 mm in the Crown Point and Bon-Accord areas.
- On a monthly basis, all three months are expected to produce shortfalls in rainfall but the month of October is expected to be the driest followed by September. For the month of September, southwest Tobago is expected to receive the lowest rainfall totals ranging between 70mm and 140mm with areas in the northeast can receive between 125 and 240 mm of rainfall; while for the month of October, southwest Trinidad is expected to receive the lowest rainfall totals, ranging between 55 mm to 130 mm.
- Both day and night-time temperatures for September to November are expected to be hotter than average over Trinidad and Tobago.
- The odds are high for SON maximum temperatures to be near 32.9⁰ C and for night minimum temperatures to be near 24.3⁰ C.

Likely Outcomes If Rainfall Shortage Continues

- **Likely to lead to a further decline in water available from rainfall in areas where the shortage of rainfall has been large.**
- **Water sensitive sectors and activities are likely to be negatively affected.**
- **Rainfall shortfall from the first half of the wet season may translate to reduced ground water recovery and recharge rates and flows.**
- **Current growing seasons can be negatively affected.**
- **Hotter than usual temperatures can promote more intense showers which will increase the risk for flash flood occurrence.**
- **Even though drier conditions are favoured, flooding and flash flooding potentials are enhanced.**



How Should You Respond?

- Conserve, store and manage water in a safe and adequate manner. Use water wisely.
- Take measures to harvest rainfall during SON for the anticipated drier periods.
- Be watchful for extreme rainfall events especially on extremely hot days when the winds are light.
- Relevant agencies and ministries are advised to take measures to lessen the impacts from below average to near average rainfall and warmer than average temperatures.
- Seek shade in hotter than usual conditions.
- Be vigilant and visit the Met Office website regularly to keep up to date of local weather changes daily.

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 some distance away from the region can still 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 and climate models agreement:

The intensity of the current El Nino event has increased with a peak expected towards the end of 2015 or in early 2016 (November to January). This event is already the second strongest El Nino event of the last 20 years with the potential of being one of the strongest during the last 35 years. The presence of El Nino affects rainfall negatively in the region.

- ❖ El Nino conditions are often associated with below-average rainfall over Trinidad and Tobago during the second half of the wet season and can lead to higher temperatures locally.
- ❖ Sea surface temperatures (SSTs) in waters surrounding Trinidad and Tobago are warming slowly but remain cooler than average for this time of the year. The cooler waters are expected to influence rainfall negatively.
- ❖ Analysis of the North Atlantic Oscillation (NAO) index shows that it behaved in its usual way, oscillating between positive and negative phases during the month of August. However, it is expected to remain negative during the next fourteen (14) days. A negative NAO index enhances the potential for rainfall near Trinidad and Tobago.
- ❖ During the last 30 days the Madden-Julian Oscillation (MJO) has been weak, had little presence near Trinidad and Tobago and its favourable rainfall phase is currently in the eastern Pacific Ocean. The MJO is expected to strengthen as it approaches the Caribbean region within the next fourteen (14) days. When the MJO favourable rainfall phase is located over the western hemisphere it is often associated with enhanced rainfall occurrence and amounts in Trinidad and Tobago's area.
- ❖ ECMWK, UK MetOffice, NCEP and all the other climate models surveyed are in good agreement with TTMS-CEW outlook for below normal rainfall for SON, which increases confidence.

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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