

## Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the Second Dekad (11th - 20th) of June, 2020

### Definitions used in the forecast and bulletin:

Term	Meaning	
Dekad	10 day rainfall measuring period	
Rain Day	A day with 1.0 mm or more of rainfall amount	
Wet Day	A day with 10.0 mm or more rainfall amount	
Extremely Wet Day	A day with 25.0 mm or more of rainfall amount	
Normal Rainfall	Between 75% and 125% of the average	
Below Normal Rainfall	Rainfall below 75% of the average	
Above Normal Rainfall	Rainfall in excess of 125% of the average	
Much Below Normal Rainfall	Rainfall below 50% of the average	
Much Above Normal Rainfall	Rainfall above 150% of the average	
Scanty Rainfall	Less than 1 mm	
Moderate Rainfall	1-10 mm	
Heavy Rainfall	10-50 mm	
Very Heavy Rainfall	Greater than 50 mm	
Probability of 1-30 %	Low Chance	
Probability of 30-70 %	Moderate Chance	
Probability greater than 70 %	High Chance	
Term	Amount of Rain	Type of day
Scanty Rainfall	Less than 1 mm	Relatively dry day
Moderate Rainfall	1-10 mm	Relatively wet day
Heavy Rainfall	10-50 mm	Wet day
Very Heavy Rainfall	Greater than 50 mm	Excessively wet day

### Weather Assessment for the period (1<sup>st</sup>-9<sup>th</sup>) of June 2020.

During the 1<sup>st</sup> to 9<sup>th</sup> of June, wet days occurred on the 5<sup>th</sup> and 6<sup>th</sup> due to the passage of tropical wave (TW). Otherwise, a mixture of relatively dry days and relatively wet days occurred over Trinidad and Tobago. Rainfall total maps for the period 1<sup>st</sup> to 9<sup>th</sup> of June are located below as figure 1 and figure 2.

### Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

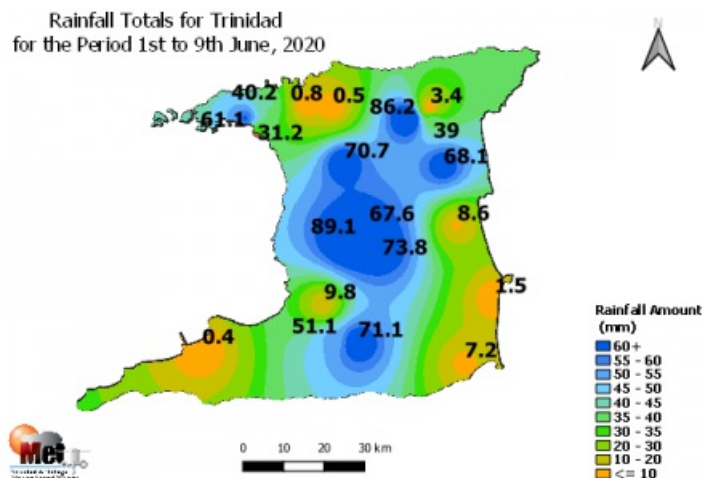


Figure 1. Rainfall map of Trinidad showing measured rainfall totals for varying districts during period 1<sup>st</sup> to 9<sup>th</sup> of June 2020.

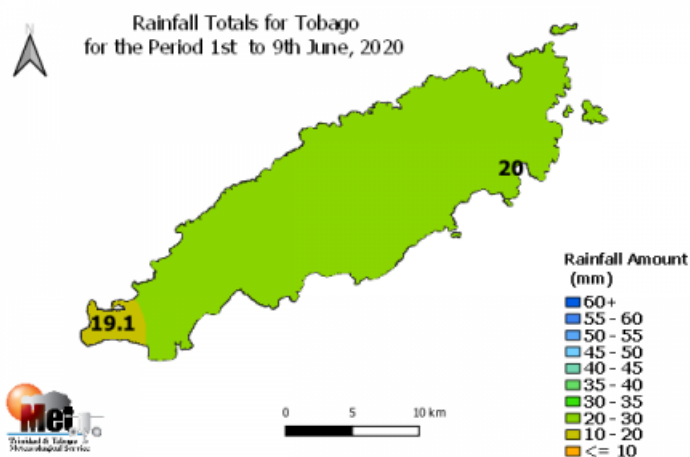


Figure 2. Rainfall map of Tobago showing measured rainfall totals for varying districts during period 1<sup>st</sup> to 9<sup>th</sup> of June 2020.

The observed temperatures (maximum/minimum), average relative humidity (maximum/minimum) and long-term 10-day (10dys) averages for Piarco International Airport and ANR Robinson International Airport during first dekad of June 2020.

### Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

Location	Maximum Temperature °C/ Long term 10 dys average °C	Minimum Temperature °C /Long term 10 dys average °C	Average maximum Relative humidity (%)/ Long term 10 dys average (%)	Average minimum Relative humidity (%)/Long term 10 dys average (%)
Trinidad (Piarco International airport)	33.4/31.5 (1981-2010)	21.8/24.0 (1981-2010)	92/95 (1990-2010)	72/66 (1990-2010)
Tobago (ANR Robinson International airport)	32.2/31.0 (1981-2010)	23.3/24.9 (1981-2010)	86/93 (1990-2010)	71/63 (1990-2010)

Table 1 shows the expected weather conditions during the Second Dekad (11<sup>th</sup>–20<sup>th</sup>) of June 2020, for Trinidad and Tobago.

Table 1.

Days:	Expected weather:
11 <sup>th</sup>	Intermittent cloudy patches with a moderate probability (55%) of brief showers.
12 <sup>th</sup>	Intermittent cloudy patches with a moderate probability (55%) of brief showers.
13 <sup>th</sup>	Intermittent cloudy patches with a moderate probability (55%) of brief showers.
14 <sup>th</sup>	Cloudy periods with a moderate probability (70%) of light to moderate showers.
15 <sup>th</sup>	Cloudy periods with a moderate probability (70%) of light to moderate showers.
16 <sup>th</sup>	Cloudy periods with a moderate probability (70%) of light to moderate showers.
17 <sup>th</sup>	Intermittent cloudy patches with a moderate probability (55%) of brief showers.

### Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

18 <sup>th</sup>	Cloudy periods with a moderate probability (70%) of light to moderate showers.
19 <sup>th</sup>	Cloudy periods with a moderate probability (70%) of light to moderate showers.
20 <sup>th</sup>	Intermittent cloudy patches with a moderate probability (55%) of brief showers.

Table 2 shows the expected temperatures, humidity and dust haze days during the Second dekad of June for Piarco, Trinidad.

**Table 2.**

Day	Maximum Temperature °C	Minimum Temperature °C	Average Relative humidity (%)	Dust Haze Yes/No
11 <sup>th</sup>	32.5	24.0	70	Yes
12 <sup>th</sup>	32.5	24.0	70	Yes
13 <sup>th</sup>	33.0	24.0	70	Yes
14 <sup>th</sup>	30.0	22.0	90	No
15 <sup>th</sup>	30.0	22.0	90	No
16 <sup>th</sup>	31.0	24.0	90	No
17 <sup>th</sup>	32.5	24.0	75	Yes
18 <sup>th</sup>	30.0	23.0	90	No
19 <sup>th</sup>	30.0	23.0	90	No
20 <sup>th</sup>	32.0	24.0	68	Yes

Table 3 shows the expected temperatures, humidity and dust haze days during the Second dekad of June for the ANR Robinson, Tobago.

**Table 3**

**Disclaimer**

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

Day	Maximum Temperature °C	Minimum Temperature °C	Average Relative humidity (%)	Dust Haze Yes/No
11 <sup>th</sup>	31.5	25.0	68	Yes
12 <sup>th</sup>	31.5	25.0	68	Yes
13 <sup>th</sup>	32.0	25.0	75	Yes
14 <sup>th</sup>	30.0	24.0	90	No
15 <sup>th</sup>	30.0	25.0	90	No
16 <sup>th</sup>	31.0	25.0	90	No
17 <sup>th</sup>	31.5	25.0	75	Yes
18 <sup>th</sup>	31.5	24.2	90	No
19 <sup>th</sup>	32.0	24.0	70	No
20 <sup>th</sup>	32.0	24.0	70	Yes

**Trinidad's Mean Daily Rainfall Forecast for the Second Dekad of June (11<sup>th</sup>-20<sup>th</sup>) 2020.**

**Northern & Northwestern areas:**

Moderate chance (60%) of mean daily rainfall up to 6.4 mm.

**North-Eastern and Eastern areas:**

Moderate chance (68%) of mean daily rainfall up to 7.8 mm.

**Central, West-Central and inland areas:**

Moderate chance (60%) of mean daily rainfall up to 4.0 mm.

**South-Eastern areas:**

Moderate chance (68%) of mean daily rainfall up to 8.0 mm.

**Southern areas:**

Moderate chance (60%) of mean daily rainfall up to 5.7 mm.

**Disclaimer**

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

## South-Western areas:

Moderate chance (60%) of mean daily rainfall up to 4.6 mm.

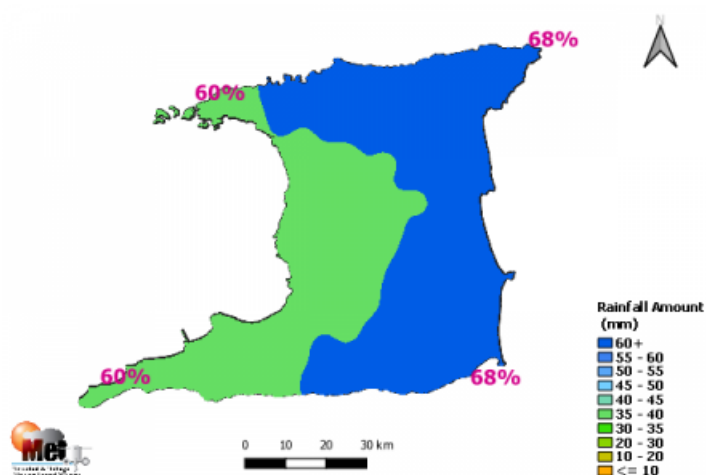


Figure 3. Rainfall map of Trinidad showing possible rainfall totals for varying districts during second dekad of June 2020 and percentage probability of occurrence.

Tobago's Mean Daily Rainfall Forecast for the Second Dekad of June (11<sup>th</sup>-20<sup>th</sup>) 2020.

## Northeastern areas:

Moderate chance (68%) of mean daily rainfall up to 5.5 mm.

## South-Western areas:

Moderate chance (68%) of mean daily rainfall up to 5.3 mm.

## Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

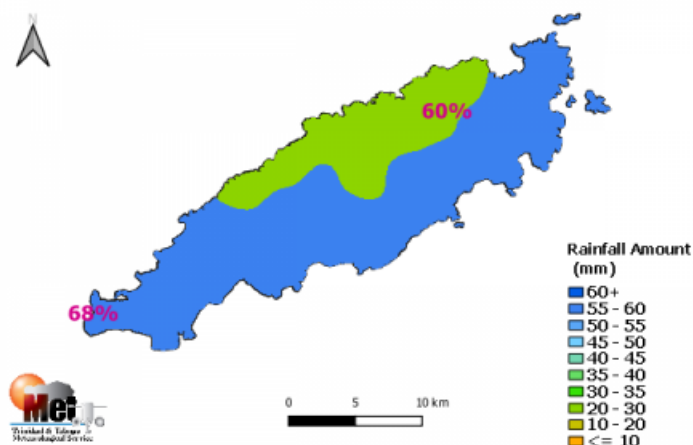


Figure 4. Rainfall map of Tobago showing possible rainfall totals for varying districts during second dekad of June 2020 and percentage probability of occurrence.

## Impacts on Agriculture:

During the second dekad of June 2020, relatively wet days are expected on the 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 17<sup>th</sup> and 20<sup>th</sup>, while wet days are expected on the 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup>. There is a high (80%) probability that the anticipated rainfall will return significant soil moisture across Trinidad and Tobago. Rivers levels are likely to increase as the rainy season progresses, while shrubs and grass-growth will continue at a faster pace. Additionally, with high temperatures, there is a high (75%) probability for insects, pests and warm weather diseases to develop.

## Sun and Moon positions in the sky:

The sun is presently at a latitude of approximately 23.0 degrees North, and with this position, the day length for this dekad will be 12.6 hours. As Trinidad and Tobago is in the heat season, there is a high probability (80%) of intense solar radiation occurring during the second dekad of June 2020, when the sky is generally cloud free. There is also high probability (85%) of heat stress on a variety of plant seedlings and young/sick/elderly animals from direct exposure to solar radiation and high temperatures. Additionally, the third quarter moon phase will be on the 13<sup>th</sup> June 2020. As a result, there will be medium to low moon illumination over crop fields and livestock at night during the dekad.

## Summary

During the second dekad of June 2020, relatively wet days are expected on the 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 17<sup>th</sup> and 20<sup>th</sup>, while wet days are expected on the 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup>. On relatively wet days expect intermittent cloudy patches with a moderate probability (55%) of brief showers and on wet days expect cloudy periods with a moderate probability

## Disclaimer

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.

---

(70%) of light to moderate showers.

**Disclaimer**

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.