



## Climate Summary

December 2017

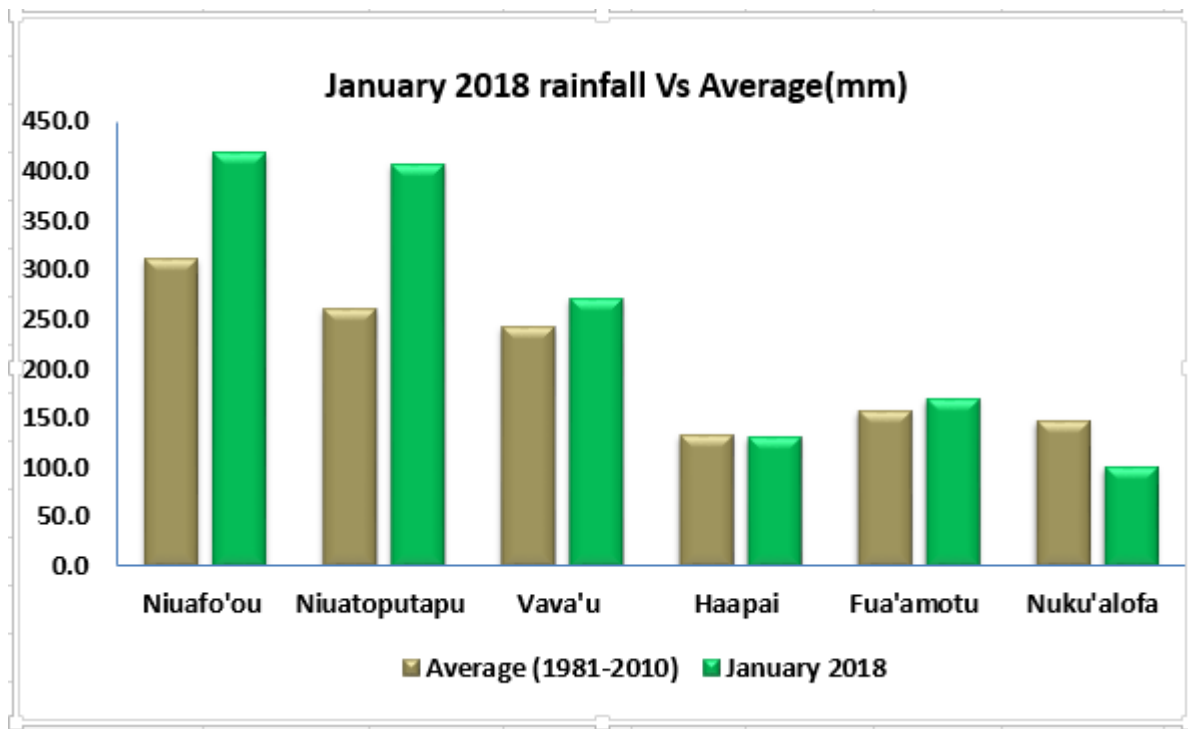
### METEOROLOGY DIVISION

Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications

#### Climate in brief.

December's rainfall was above normal in the Niuas, Vava'u and Fua'amotu. Normal rainfall in Ha'apai and below normal in Nuku'alofa. Refer to Graph1 below.

Cooler than average temperatures were experienced across the country except in Ha'apai where it was warmer than average. The average temperature in December was 25.7°C which was 0.6°C warmer than average from Tonga's 6 station). Refer Table 1. Highest maximum temperature was 32.4°C recorded in Niuafu'ou on the 15<sup>th</sup> and the lowest minimum temperature was 17.0°C in Fua'amotu on the 22<sup>nd</sup>. Refer Table 2.



Graph 1. January 2018 rainfall Vs Average for Tonga.

## Summary of Temperatures (°C)

**Table 1. Summary of 2017 Temperatures**

| Stations    | Mean Maximum Temp | Mean Minimum Temp | 2017 Mean Temperature °C | Average (Normal) Temperature (1981-2010) °C | Departure from normal °C |
|-------------|-------------------|-------------------|--------------------------|---|--------------------------|
| Niuafoóu    | 30.0              | 22.4              | 26.2                     | 27.2  | -1.0                     |
| Niutopotupu | 30.1              | 23.9              | 27.0                     | 27.5  | -0.5                     |
| Vava'u      | 28.6              | 21.9              | 25.3                     | 26.3  | -1.0                     |
| Ha'apai     | 28.6              | 23.7              | 26.1                     | 25.7  | +0.4                     |
| Fua'amotu   | 28.7              | 21.0              | 24.8                     | 25.3  | -0.5                     |
| Nuku'alofa  | 28.6              | 21.0              | 24.8                     | 26.0  | -1.2                     |

**Table 2. Summary of Temperatures**

| Stations                | December 2017 Temperature °C |                | December Temperature from start of record °C |                |
|-------------------------|------------------------------|----------------|--|----------------|
|                         | Highest Maximum              | Lowest Minimum | Highest Maximum                              | Lowest Minimum |
| Niuafo'ou (1974-2017)   | <b>32.4</b>                  | 20.2           | 35.0   | 18.4           |
| Niutopotupu (1958-2017) | 31.5                         | 21.4           | 34.4   | 16.2           |
| Vava'u.(1951-2017)      | 30.3                         | 17.5           | 34.2   | 15.8           |
| Ha'apai. (1961-2017)    | 30.1                         | 21.0           | 33.7   | 16.0           |
| Fua'amotu. (1980-2017)  | 30.5                         | <b>17.0</b>    | 32.4   | 13.4           |
| Nuku'alofa. (1949-2017) | 31.0                         | 17.4           | 32.6   | 14.3           |

**Table 3. Summary of December rainfall 2017**

| Stations    | December 2017 Total Rainfall (mm) | Normal (1981-2010) (mm) | % Normal | Highest December rainfall from start of record (mm) | Number of day with rain | Highest 1-Day Rainfall (mm) | Highest 1-Day Rainfall From start of record (mm) |
|-------------|-----------------------------------|-------------------------|----------|---|-------------------------|-----------------------------|--|
| Niuafo'ou   | 419.4                             | 311.6                   | 36       | 608.0   | 23                      | 65.6                        | 165.4  |
| Niutopotupu | 407.5                             | 260.6                   | 40       | 721.0   | 21                      | 140.1                       | 262.0  |
| Vava'u      | 271.4                             | 244.0                   | 31       | 658.0   | 16                      | 97.8                        | 232.6  |
| Ha'apai     | 131.6                             | 133.4                   | 16       | 613.0   | 10                      | 45.6                        | 216.1  |
| Fua'amotu   | 170.5                             | 159.0                   | 16       | 391.0   | 11                      | 97.0                        | 230  |
| Nuku'alofa  | 101.5                             | 146.9                   | 12       | 783.0   | 17                      | 28.2                        | 183.5  |