

## TONGA METEOROLOGICAL SERVICE



# Monthly Climate Summary

July 2018 Climate Summary:

Issued: 10 August 2018

## Climate in brief.

Rainfall was above average in Niuatoputapu and Vava'u and below average elsewhere in the country. Very dry conditions in Fua'amotu and Nuku'alofa as they recorded their lowest July rainfall since its record started. (Refer to Graph below). The average temperature for July was 24.0°C which was 0.6°C warmer than average. Highest maximum temperature was 32.5°C on the 19th in Niuafou'u and the lowest minimum temperature was 14.0°C in Fua'amotu on the 24th.

**Table 1. Near-record or record high or low annual average temperature departures for July 2018**

Station	Mean air Temperature °C	Departure from normal °C	Year records began	Rank & Comments
<b>Mean temperature</b>				
Niuafou'u	25.9	+0.2	1971	19/46
Niuatoputapu	25.9	+0.1	1958	23/60
Vava'u	22.8	-0.2	1949	50/69
Ha'apai	24.1	+1.3	1961	5/56 (5 <sup>th</sup> highest)
Fua'amotu	22.4	+1.0	1980	5 <sup>th</sup> highest
Nuku'alofa	22.7	+0.9	1949	6 <sup>th</sup> highest
<b>Mean maximum temperature</b>				
Niuafou'u	29.4	+0.7	1971	10 <sup>th</sup> Highest
Niuatoputapu	28.1	-0.8	1949	5 <sup>th</sup> Lowest
Vava'u	26.2	-0.2	1956	14 <sup>th</sup> highest
Ha'apai	26.4	+0.7	1962	12 <sup>th</sup> highest
Fua'amotu	25.9	+1.2	1980	3 <sup>rd</sup> highest
Nuku'alofa	26.6	+1.4	1949	5/65 (5 <sup>th</sup> highest)
<b>Mean minimum temperature</b>				
Niuafou'u	22.0	-0.2	1971	9 <sup>th</sup> lowest
Niuatoputapu	23.6	+0.8	1950	6 <sup>th</sup> highest
Vava'u	19.5	-0.1	1953	18/65
Ha'apai	21.8	+1.3	1961	6 <sup>th</sup> highest
Fua'amotu	18.9	+0.8	1980	7 <sup>th</sup> highest
Nuku'alofa	18.9	+0.5	1945	11 <sup>th</sup> highest

**Table 2. Near-record or record high or low annual temperature extremes for July 2018**

Stations	Temperature °C	Date of occurrence	Year records began	Comments
<b>Highest extreme maximum temperatures</b>				
Niuafoóu	32.5	19 <sup>th</sup>	1971	3 <sup>rd</sup> highest
Niuaotoputapu	29.9	25 <sup>th</sup>	1958	5 <sup>th</sup> lowest
Vava'u	28.5	17 <sup>th</sup>	1957	10 <sup>th</sup> lowest
Ha'apai	29.3	3 <sup>rd</sup>	1961	6 <sup>th</sup> highest
Fua'amotu	27.9	16 <sup>th</sup>	1980	10 <sup>th</sup> highest
Nuku'alofa	28.4	17 <sup>th</sup>	1949	8 <sup>th</sup> highest
<b>Lowest extreme minimum temperatures</b>				
Niuafoóu	23.0	22 <sup>nd</sup>	1971	10 <sup>th</sup> highest
Niuaotoputapu	21.4	20 <sup>th</sup>	1958	10 <sup>th</sup> highest
Vava'u	14.5	24 <sup>th</sup>	1957	2 <sup>nd</sup> lowest
Ha'apai	19.2	23 <sup>rd</sup>	1961	6 <sup>th</sup> Highest
Fua'amotu	14.0	27 <sup>th</sup>	1980	2 <sup>nd</sup> highest
Nuku'alofa	14.5	27 <sup>th</sup>	1949	11 <sup>th</sup> highest

**Table 3: Record of rainfall totals for July 2018**

Stations	Rainfall total (mm)	Percentage of normal	Year records began	Rank & Comments
<b>High records or near-records</b>				
Niuafoóu	96.4	85	1971	27/47
Niuaotoputapu	112.6	137	1947	30/71
Vava'u	109.5	117	1947	27/71
Ha'apai	60.0	66	1947	42/71
Fua'amotu	12.5	11	1980	Lowest
Nuku'alofa	16.0	16	1945	Lowest

**Table 4: Record or near-record high extreme 1-day rainfall totals that occurred in July 2018.**

Stations	1-day extreme rainfall (mm)	Date	Year records began	Comments
<b>High records or near-records</b>				
Niuafoóu	18.4	30 <sup>th</sup>	1971	2 <sup>nd</sup> lowest
Niuaotoputapu	32.3	27 <sup>th</sup>	1950	4 <sup>th</sup> lowest
Vava'u	39.2	7 <sup>th</sup>	1995	3 <sup>rd</sup> lowest
Ha'apai	46.0	4 <sup>th</sup>	1953	low
Fua'amotu	3.2	25 <sup>th</sup>	1981	6 <sup>th</sup> highest
Nuku'alofa	9.6	24 <sup>th</sup>	1982	5 <sup>th</sup> highest