

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 66

Country Name: TONGA

TABLE 1: Monthly Rainfall

Station (include data period)	February 2013						
	December 2012 Total	January 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Northern Division							
Niuafoóu	365.5	362.6	314.0	202.7	296.3	237.0	30/43
Niutatoputapu	205.5	573.0	210.2	190.0	273.3	224.0	29/67
Central Division							
Vavaú	119.2	312.8	201.6	182.0	283.8	216.5	26/67
Haápai	17.3	279.6	271.4	135.0	232.0	186.1	52/67
Southern Division							
Nukuálofa	153.2	301.3	287.8	148.3	250.3	214.5	50/69
Fuaámotu	150.8	335.2	550.5	132.3	230.0	177.0	33/34

TABLE 2: Three-monthly Rainfall

December 2012 to February 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #62]

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent, Inconsistent?)
Northern Division							
Niuafoóu	1042.1	727.3	941.7	844.0	28/43	11,24,65(6.8)	Consistent
Niutatoputapu	988.7	640.0	867.0	727.5	49/67	30,36,34(15.9)	Near Consistent
Central Division							
Vavaú	633.6	606.0	907.0	722.5	26/67	36,38,26(27.0)	Consistent
Haápai	568.3	431.0	678.7	575.0	33/67	14,50,36(24.7)	Consistent
Southern Division							
Nukuálofa	742.3	437.7	722.7	545.5	48/69	38,47,15(29.7)	Near Consistent
Fuaámotu	1036.5	422.0	776.6	556.5	31/34	25,51,24(10.1)	Near Consistent

Period: *below normal/normal/above normal

Predictors and Period used for December 2012 to February 2013 Outlooks (refer to OCOF #62): Preditors – SSTa's I@9 Period; Aug – Oct with 1 month lead.

* Forecast is consistent when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is near-consistent when observed and predicted (tercile with the highest probability) differ by only one category (i.e. terciles 1 and 2 or terciles 2 and 3).

Forecast is inconsistent when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

TABLE 3: Seasonal Climate Outlooks using SCOPIC for April to June 2013

Predictors and Period used: SSTa's 1@9 – December 2012 to February 2013

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Northern Division							
Niuafoou	34	476.3	26	650.0	40	-3.5	36.8
Niuaotupapu	35	423.7	34	596.3	31	-4.2	0
Central Division							
Vavau	25	404.7	36	535.2	39	8.4	36.5
Haapai	29	293.3	37	424.3	34	5.4	41.9
Southern Division							
Nukuálofa	26	283.0	37	430.2	37	6.3	52.4
Fuaámotu	23	345.0	38	526.2	39	5.8	43.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2013

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nukuálofa	23.33	259	46.67	414	30.00		

Summary Statements

Rainfall for February 2013:

Northern Division: Normal to above normal.

Central Division: Normal to above normal.

Southern Division: Above Normal.

Accumulated rainfall for December 2012–February 2013, including outlook verification:

Northern Division: Above Normal. Forecast was Near Consistent to Consistent.

Central Division: Normal. Forecast was Consistent

Southern Division: Above Normal. Forecast was Near Consistent.

Outlooks for April–June 2013:

1. SCOPIC:

Northern Division: Normal to above normal.

Central Division: Normal to above normal.

Southern Division: Above Normal.

2. POAMA: Outlook is Normal for Nukuálofa

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$

Exceptional: $X \geq 35$