

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 77

Country Name: TONGA

TABLE 1: Monthly Rainfall

Station (include data period)	January 2014						
	November 2013 Total	December 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Northern Division							
Niuafoóu	272.6	385.9	351.3	219.3	377.3	262.0	23/44
Niuaatoputapu	212.0	458.1	220.1	210.0	296.3	245.7	26/68
Central Division							
Vavaú	118.8	328.3	381.5	172.7	299.3	239.0	52/68
Haápai	32.9	161.8	375.6	123.0	259.0	183.0	59/68
Southern Division							
Nukuálofa	173.0	233.8	421.5	124.0	250.0	188.0	64/70
Fuaámotu	210.0	251.8	348.8	132.0	273.0	193.0	26/35

TABLE 2: Three-monthly Rainfall

November 2013 to January 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #73]

Predictors and Period used: SSTa's 1@9 –July to September 2013

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	1009.8	708.0	1001.5	820.0	25/43	18, 27, 55 (4.5)	Consistent
Niuaatoputapu	890.2	613.0	864.0	754.0	45/67	14, 22, 64 (12.2)	Consistent
Central Division							
Vavaú	828.6	491.7	813.0	650.0	47/67	6, 30, 64 (29.7)	Consistent
Haápai	570.3	317.8	580.5	457.5	44/67	5, 25, 70 (26.0)	Near Consistent
Southern Division							
Nukuálofa	828.3	346.0	565.0	439.5	65/70	7, 23, 70 (29.1)	Consistent
Fuaámotu	810.6	383.3	593.9	456.0	29/34	3, 19, 78 (29.4)	Consistent

Period: *below normal/normal/above normal

* 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 March 2014 to May 2014

Predictors and Period used: SSTa's 1@9 – November 2013 to January 2014

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Northern Division						
Niuafoóu	28	770.5	72		3.1	57.5
Niuaotoputapu	61	629.0	39		2.5	47.4
Central Division						
Vavaú	51	706.8	49		1.2	51.6
Haápai	58	544.0	42		2.3	57.1
Southern Division						
Nukuálofa	55	481.0	45		0.6	54.7
Fuaámotu	35	506.7	65		9.5	60.6

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Northern Division							
Niuafoóu	27	653	16	808	57	3.1	42.5
Niuaotoputapu	39	568.7	24	743.7	37	-3.3	21.1
Central Division							
Vavaú	39	583.2	37	810.0	24	0.5	35.9
Haápai	36	442.7	49	606.9	15	3.0	42.9
Southern Division							
Nukuálofa	44	440.8	24	547.3	32	0.4	31.3
Fuaámotu	7	424.7	65	576.0	28	4.9	51.5

TABLE 4: Seasonal Climate Outlooks using POAMA2 for March 2014 to March 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nukuálofa	15	361	52	503	33		

Summary Statements

Rainfall for January 2014:

Northern Division: Normal.

Central Division: Above Normal.

Southern Division: Above Normal.

Accumulated rainfall for November 2013 – January 2014, including outlook verification:

Northern Division: Above normal, forecast was Consistent.

Central Division: Normal for Ha'apai and Above normal for Vava'u, forecast was Near Consistent to Consistent.

Southern Division: Above normal, forecast was Consistent.

Outlooks for March 2014-May2014:

1. SCOPIC:

Northern Division: Above normal in Niuafou'ou with low skill, Below normal for Niuatoputapu with very low skill.

Central Division: Below normal for Vava'u, Normal for Ha'apai with low skill.

Southern Division: Below normal for Nuku'alofa and Normal for Fua'amotu with low skill.

2. POAMA: Outlook for Nuku'alofa is Normal.

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: $X \geq 35$