

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 72

Country Name: TUVALU

TABLE 1: Monthly Rainfall

Station (include data period)	August 2013						
	June 2013 Total	July 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea 73 years	85.8	n/a	n/a				Out of date
Nui 68 years	159.9	92.4	52.2	141.2	257.0	180.3	2 of 68
Funafuti 81 years	210.8	288.3	190.5	183.8	288.2	214.9	30 of 81
Niulakita 61 years	418.1	172.6	222.9	138.9	235.9	192.3	33 of 61

TABLE 2: Three-monthly Rainfall June to August 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #67]

Period: *below normal/normal/above normal

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification ¹ (Consistent, Near-consistent, Inconsistent?)
Nanumea							
Nui	304.5mm	506.3	723.6	646.0	7 of 68	46%/30%/24% [6.6%]	Consistent
Funafuti	689.6mm	581.1	838.7	719.5	36 of 81	33%/35%/32% [-1.5%]	Consistent
Niulakita	813.6mm	520.0	737.2	575.4	47 of 61	37%/32%/31% [-1.1%]	Inconsistent

Predictors and Period used for June to August 2013 Outlooks (refer to OCOF #67):

Predictors used: SOI values
Period used: February – April

¹Forecast 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
October to December 2013**

Predictors and Period used: SOI VALUES

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea						
Nui	60.6%	865.3	39.4%		6.0%	58.2%
Funafuti	52.5%	887.6	47.5%		-0.9%	53.8%
Niulakita	52.4%	824.5	47.6%		-1.3%	46.7%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea							
Nui	46.3%	714.8	29.7%	919.5	24.0%	6.6%	43.3%
Funafuti	33.2%	809.3	35.2%	1007.2	31.6%	-1.5%	26.3%
Niulakita	36.9%	729.0	31.8%	944.7	31.3%	-1.1%	21.7%

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
October to December 2013**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Funafuti [TUVALU]	43.3%	802	36.7%	949	20.0%		

Summary Statements

Rainfall for August 2013: Below normal rainfall for Nui in the central division and normal rainfall for Funafuti and Niulakita in the southern division.

Accumulated rainfall for June – August 2013: Below normal rainfall received at Nui with consistent in verification.

Normal rainfall collected at Funafuti with consistent in verification.

Above normal rainfall at Niulakita with in consistent.

Outlooks for October – December 2013:

1. SCOPIC: Below normal rainfall for Nui and Niulakita and normal to below normal rainfall for Funafuti.

Very low skills for Funafuti and Niulakita with moderate skills for Nui.

2. POAMA: Predict Below normal rainfall for Tuvalu during October to December period.

Drought

Using the 4 month SPI method and the outcome that Nui is currently experiencing drought, and the most severe amongst all recorded. The drought has been prolonged from the last 40 months which start on Apr 2010.

Funafuti is experiencing drought too which affected from the past two months. No warning for Niulakita.

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: $X \geq 35$