

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 76

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	December 2013						
	October 2013 Total	November 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	95.8	5.8	217.5	202.5	343.7	296.4	27/73
Nui	176.9	119.9	278.1	265.9	420.1	309.6	27/68
Funafuti	324.8	221.3	499.1	309.7	430.0	354.5	66/81
Niulakita	495.0	210.6	346.7	232.5	346.3	289.3	41/61

**TABLE 2: Three-monthly Rainfall
October to December 2013**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #71]

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?)
Nanumea	319.1	544.1	755.2	647.5	15/73	56%/34%/10% [25.9%]	Consistent
Nui	574.9	714.8	919.5	865.3	18/63	46%/30%/24% [6.6%]	Consistent
Funafuti	1045.2	809.3	1007.2	887.6	59/81	33%/35%/32% [-1.5%]	Near Consistent
Niulakita	1052.3	729.0	944.7	824.5	47/61	37%/32%/31% [-1.1%]	Inconsistent

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).

**Predictors and Period used for October to December 2013 Outlooks (refer to OCOF #72):
SOI values June to August**

TABLE 3: Seasonal Climate Outlooks using SCOPIC for February to April 2014

Predictors and Period used: SOI values OCTOBER – DECEMBER

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	56%	830.3	44%		16.5%	64.4%
Nui	54%	821.3	46%		14.1%	69.1%
Funafuti	55%	926.1	45%		12.0%	69.1%
Niulakita	50%	924.0	50%		-1.7%	31.1%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	34%	618.2	34%	992.0	32%	23.9%	41.1%
Nui	34%	713.1	35%	978.0	31%	21.0%	54.4%
Funafuti	36%	807.0	31%	1047.7	33.0%	8.5%	42.0%
Niulakita	34%	851.0	33%	1013.4	33%	-1.7%	1.6%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for Feb-April 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
Nui	67%	798.0	28%	1126	5%		
Funafuti	64%	907.0	21%	1086	15%		

Summary Statements

Rainfall for December 2013:

- Nanumea total rainfall for Dec is normal
- Nui total rainfall for Dec is Normal
- Funafuti total rainfall for Dec is above normal
- Niulakita total rainfall for Dec is above normal

Accumulated rainfall for September–November 2013, including outlook verification:

- Nanumea is below normal with verification Outlook of Consistent
- Nui is below normal rainfall with verification outlook of consistent
- Funafuti is above normal rainfall with verification of near consistent
- Niulakita is above normal rainfall with verification of inconsistent

Outlooks for February – April 2014:

1. SCOPIC:

For this period all stations

- Nanumea: LEPS score 23.9: High skills to predict Below Normal to Normal rainfall
- Nui: LEPS score 21.0 High skills to predict Normal rainfall
- Funafuti: LEPS score 8.5 Moderate Skills to predict Below Normal rainfall

- Niulakita: LEPS Score -1.7 Very low skills to predict close to climatology

2. POAMA:

Predictions for 2 stations

- Nui is below normal rainfall with probabilities of 66.7% with rainfall less than 789mm.
- Funafuti is below Normal with probabilities of 63.6% with rainfall less than 907mm

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: $X \geq 35$