

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 88

Country Name: TUVALU

TABLE 1: Monthly Rainfall

Station (include data period)	December 2014						
	October 2014 Total	November 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	91.8	61.6	210.6	205.3	340.1	294.6	27/74
Nui	113.4	136.6	247.9	265.9	418.7	308.6	19/69
Funafuti	287.1	308.9	330.7	310.9	431.9	355.9	33/82
Niulakita	196.6	209.4	106.8	233.7	346.7	289.5	4/62

TABLE 2: Three-monthly Rainfall October to December 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #84]

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	364.0	538.3	755.0	629.0	17/74	20/39/41 22.0%	Inconsistent
Nui	497.9	710.9	917.0	822.1	10/69	25/38/37 14.0%	Near consistent
Funafuti	926.7	809.6	1008.1	887.8	45/82	26/37/37 6.0%	Consistent
Niulakita	512.8	731.6	960.0	827.0		34/34/32 -2.0%	Consistent

Period: *below normal/normal/above normal

Predictors and Period used for October to December 2014 Outlooks (refer to OCOF #84):
Nino 3.4 for July to September

* 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 February to April 2015

Predictors and Period used: NINO 3.4 SST Anomalies October to December 2014

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	32%	830.3	68%		22.2%	64.5%
Nui	43%	817.1	57%		2.4%	59.4%
Funafuti	23%	927.1	77%		31.4%	75.0%
Niulakita	50%	923.5	50%		-3.4%	0.0%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	8%	618.2	45%	992.0	47%	32.2%	58.1%
Nui	24%	705.2	37%	976.0	39%	6.1%	43.8%
Funafuti	10%	808.5	47%	1045.8	43%	16.0%	53.1%
Niulakita	31%	829.7	38%	1010.9	31%	-2.5%	18.8%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for February to April 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	12%	810	70%	1106	18%		
Nui	9%	798	76%	1126	15%		
Funafuti	15%	907	39%	1086	46%		

Summary Statements

Rainfall for November 2014:

- Below normal rainfall recorded at Nui and Niulakita. Normal rainfall observed at Nanumea and Funafuti.

Accumulated rainfall for September to November 2014, including outlook verification:

- Below normal rainfall recorded at Nanumea, Nui and Niulakita with inconsistent verification for Nanumea and near consistent for Nui. Consistent verification for Niulakita while at Funafuti normal rainfall was observed which was consistent.

Outlooks for February to April 2015:

1. SCOPIC:

- For Nanumea and Nui there is a near equal chance of normal and above normal rainfall. The most likely outcome for Funafuti is normal rainfall with above normal the next most likely. At Niulakita, there is a near equal chance of below normal, normal and above normal rainfall. The skill of the outlook for Niulakita is very low, very high skill for Nanumea, moderate for Nui and high for Funafuti.

2. POAMA:

- Poama favours normal rainfall at Nanumea and Nui and above normal rainfall at Funafuti. Overall prediction comparing Scopic and POAMA:
- Normal to above normal rainfall generally favoured for northern and central Tuvalu and for southern Tuvalu a near equal chance of below normal, normal and above normal rainfall for the upcoming three months.

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: $X \geq 35$