

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 105

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	May 2016						
	March 2016 Total	April 2016 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	513.9	449.0	330.1	153.3	229.9	200.9	67/76
Nui	146.8	93.9	207.7	150.6	213.4	182.2	42/71
Funafuti	312.1	300.2	311.9	179.5	251.5	213.4	68/84
Niulakita	150.7		342.5	175.1	247.0	208.0	53/64

TABLE 2: Three-monthly Rainfall March to May 2016

[Please note that the data used in this verification should be sourced from table 3 of OCOF #101]

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	1293.0	550.0	880.5	770.3	1/76	7/36/57 [15]	Consistent
Nui	448.0	609.4	830.6	705.0	11/71	7/31/62 [11]	Inconsistent
Funafuti	924.0	674.5	893.4	790.5	58/84	13/40/47	Consistent
Niulakita		677.5	915.5	831.8	56/63	6/44/50	

Period: *below normal/normal/above normal

Predictors and Period used for March to May 2016 Outlooks (refer to OCOF #101):

* 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 July to September 2016

Predictors and Period used: NINO3.4

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	33%	513.9	67%		10%	65%
Nui	30%	599.4	70%		15%	69%
Funafuti	29%	693.9	71%		15%	64%
Niulakita	33%	607.0	67%		10%	62%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	11%	402.7	34%	629.7	55%	22%	58%
Nui	12%	509.1	40%	688.7	48%	13%	53%
Funafuti	15%	591.3	36%	804.0	49%	12%	47%
Niulakita	18%	514.2	41%	716.2	41%	8%	41%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2016

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	27	405	45	705	28		
Nui	24	533	48	729	28		
Funafuti	6	671	30	859	64		
Niulakita	12	492	9	709	79		

Summary Statements

Rainfall for May 2016:

Rainfall in May was **above normal rainfall** for all stations except Nui stations reported **normal rainfall**

Accumulated rainfall for March to May 2016, including outlook verification:

Rainfall over the last three month was **above normal rainfall** for Nanumea and Funafuti with **consistent** while Nui recorded **normal rainfall** with **inconsistent**. Niulakita wasn't received April total rainfall

Outlooks for July to September 2016:

- 1. SCOPIIC:** For all meteorological stations, above normal rainfall is the most likely outcome with normal rainfall the next most likely.
Outlook confidence: Good confidence outlook for Nui and Funafuti stations. Nanumea with **high** confidence outlook while Niulakita with **moderate** confidence outlook for the next three months

- 2. POAMA:** For Nanumea and Nui, normal rainfall is favoured with above normal rainfall the next most likely. POAMA predict Funafuti for the next three month, above normal rainfall is favoured with normal rainfall the next most likely, while Niulakita; above normal rainfall is favoured with below normal rainfall the next most likely

OUTLOOK FOR TUVALU: Normal to above normal rainfall predict for all Tuvalu islands for July – Sep 2016.

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: $X \geq 35$