Pacific Islands - Online Climate Outlook Forum (OCOF) No. 122

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	August 2017 Total	September 2017 Total	October 2017				
			Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	219.8	96.9	141.8	93.7	190.5	135.0	42 of 76
Nui	380.6	80.3	169.7	142.0	220.1	182.9	31 of 72
Funafuti	145.7	175.4	342.6	202.2	292.9	251.5	68 of 85
Niulakita	73.4	276.8	405.9	212.3	312.4	265.6	54 of 65

TABLE 2: Three-monthly Rainfall
August to October 2017
[Please note that the data used in this verification should be sourced from table 3 of OCOF #118]

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	458.5	344.1	608.0	503.4	42 of 76	7%/23%/70%	Near Consistent
						(26%)	
Nui	630.6	473.3	703.8	567.0	46 of 72	7%/35%/58%	Near Consistent
						(22%)	
Funafuti	663.7	597.2	799.0	673.0	41 of 85	15%/26%/59%	Near Consistent
						(15%)	
Niulakita	756.1	573	829	663	40 of 65	29%/30%/41%	Near Consistent
						(1%)	

Period:*below normal/normal/above normal

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*Forecast is <u>consistent</u> when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is <u>near-consistent</u> 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 <u>inconsistent</u> 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
December 2017 to February 2018

Predictors and Period used: NINO 3.4 for September – October 2017

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	58%	961.0	42%		31.3%	71.6%
Nui	52%	1065.5	48%		3.9%	60.0%
Funafuti	51%	1126.1	49%		-0.4%	50.7%
Niulakita	46%	1012.0	54%		10.9%	66.1%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	39%	745.9	44%	1116.4	17%	34.1%	59.7%
Nui	35%	859.6	33%	1192.2	32%	1.1%	24.6%
Funafuti	35%	995.1	31%	1238.5	34%	1.0%	44.8%
Niulakita	31%	886.5	34%	1163	35%	7.5%	43.5%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for
December 2017 to February 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	46%	838	15%	1130	39%		
Nui	46%	695	21%	126.2	33%		
Funafuti	36%	930	18%	1151	46%		
Niulakita	24%	789	9%	1099	67%		

Summary Statements:

Rainfall for October 2017:

- Normal rainfall was recorded at Nanumea and Nui Station
- Above normal rainfall was recorded at Funafuti and Niulakita.

Accumulated rainfall for August to October 2017, including outlook verification:

- All stations recorded normal rainfall with verification of near consistent. SCOPIC predicted all stations to above normal for these 3 months

Outlooks for December 2017 to February 2018:
1. SCOPIC:
- The outlook offers little guidance as the chance of above normal, normal, and below normal are the same for Nui, Funafuti and Niulakita.
- The outlook for December to February 2018 for Nanumea shows normal as the most likely outcome, with below normal the next most likely. Above normal is the least likely.
- Confidence in the outlook is very high for Nanumea, Moderate for Niulakita and low for Nui and Funafuti.

2. POAMA:
- The outlook for Nanumea and Nui for 2018 shows below normal as the most likely outcome, with above normal the next most likely. Normal is the least likely.
- The outlook for Funafuti and Niulakita for 2018 shows above normal as the most likely outcome, with below normal the next most likely. Normal is the least likely.

NB: The X LEPS % score has been categorised as follows:

Very Low: X < 0.0   Low: 0 ≤ X < 5   Moderate 5 ≤ X < 10   Good: 10 ≤ X < 15   High: 15≤ X < 25

Very High: 25 ≤X < 35   Exceptional: X ≥ 35