

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 125

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)			January 2018				
	November 2017 Total	December 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	182.5	423.6	251.6	251.6	410.1	340.8	26/78
Nui	217.9	324.4	189.2	257.3	455.7	356.9	11/73
Funafuti	195.2	492.9	189.2	311.6	480.2	408.9	6/86
Niulakita	297.2	288.8	134.3	299.0	437.0	364.8	5/65

**TABLE 2: Three-monthly Rainfall
November 2017 to January 2018**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #121]

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	857.7	614.0	999.0	892.2	36/76	34/43/23 22%	Consistent
Nui	731.5	840.0	1111.0	982.2	19/70	34/32/34 21%	Near-consistent
Funafuti	877.3	928.0	1147.0	1038.2	21/85	35/30/35 18%	Near-consistent
Niulakita	720.3	815.0	1129.0	993.0	14/62	29/37/34 1%	Near-consistent

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 November 2017 to January 2018 Outlooks (refer to OCOF #121):

TABLE 3: Seasonal Climate Outlooks using SCOPIC for March to May 2018

Predictors and Period used: Nino3.4 Dec 2017 to Jan 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	69	770.3	31		19.1	65.7
Nui	66	705.0	34		14.7	70.1
Funafuti	60	792.0	40		6.5	58.2
Niulakita	51	831.8	49		-1.4	53.8

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	48	554.4	37	880.5	15	20.6	55.2
Nui	42	603.2	36	838.4	22	7.7	49.3
Funafuti	43	681.3	33	911.3	24	6.4	44.8
Niulakita	44	691.3	27	914.0	29	4.5	24.6

TABLE 4: Seasonal Climate Outlooks using POAMA2 for March to May 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	64	756	27	997	9		
Nui	70	707	24	940	6		
Funafuti	64	788	21	1034	15		
Niulakita	58	724	15	940	27		

Summary Statements

Rainfall for January 2018:

Normal rainfall was recorded at Nanumea in the Northern division.

Below normal was recorded at Nui, Funafuti and Niulakita stations

Accumulated rainfall for November 2017 to January 2018, including outlook verification:

Normal rainfall was recorded at Nanumea, below normal rainfall was recorded at Nui, Funafuti and Niulakita. Verification for the outlook during this seasonal period was Consistent for Nanumea and near-consistent at the remaining sites.

Outlooks for March to May 2018:

1. SCOPIC:

The outlook for the season shows below-normal rainfall as the most likely outcome for all stations. The next most likely is normal for Nanumea, Nui and Funafuti; above-normal is the least most likely.

At Niulakita above-normal and normal rainfall are about as equally likely.

Confidence in the outlook is high for Nanumea, moderate for Nui and Funafuti, and low confidence for Niulakita.

2. POAMA:

POAMA favours below-normal across the country.

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: $X \geq 35$