Pacific Islands - Online Climate Outlook Forum (OCOF) No. 117

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)			May 2017						
	March 2017 Total	April 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking		
Nanumea	247.3	206.4	276.4	154	234	203	59/77		
Nui	363.5	413.6	403.5	151	213	185	67/72		
Funafuti	281.6	611	276.4	181	254	214	62/85		
Niulakita	199.9	573.7	125.5	176	249	210	13/65		

TABLE 2: Three-monthly Rainfall March to May 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #113]

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	730.1	550	881	772	37/77	41 /38/21 [22%]	Near- consistent
Nui	1180.6	597	829	699	64/72	38 /36/26	Inconsistent
Funafuti	1169.0	678	902	799	74/85	38 /36/26 [8%]	Inconsistent
Niulakita	899.1	681	915	829	41/65	38 /31/31 [5%]	Near- consistent

<u>Period</u>:*below normal/normal/above normal

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).

Predictors and Period used for March 2017 to May 2017 Outlooks (refer to OCOF #113):

TABLE 3: Seasonal Climate Outlooks using SCOPIC for July to September 2017

Predictors and Period used: Nino 3.4 (April-May)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
Nanumea	22%	514	78%	19%	67%
Nui	18%	602	82%	22%	69%
Funafuti	20%	702	80%	20%	66%
Niulakita	42%	602	58%	01%	59%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	9%	403	28%	629	63%	20%	51%
Nui	8%	513	34%	689	58%	21%	51%
Funafuti	8%	593	33%	795	59%	19%	49%
Niulakita	22%	513	40%	713	38%	1%	44%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2017

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)	
Nanumea	36	405	49	705	15	
Nui	21	533	67	729	12	
Funafuti	43	671	18	859	39	
Niulakita	30	492	21	709	49	

Summary Statements

Rainfall for May 2017:

Rainfall in May 2017 was **above-normal** at Nanumea, Nui and Funafuti. **Below-normal** rainfall was recorded at Niulakita

Accumulated rainfall for March to May 2017, including outlook verification:

Rainfall over the last three months was **normal** at Nanumea and Niulakita, while Funafuti and Nui recorded **above-normal** rainfall.

The SCOPIC outlooks for the last three months were near-consistent at Nanumea and Niulakita, and inconsistent at Nui and Funafuti stations.

Outlooks for July to September 2017:

1. SCOPIC:

The seasonal rainfall outlook for July to Sept 2017 shows the most likely outcome is **above-normal**, with **normal** the next most likely at Nanumea, Nui and Funafuti. Niulakita shows a near equal likelihood of **above-normal** and **normal** rainfall, with **below-normal** rainfall the least likely.

2. POAMA:

Nanumea and Nui; Normal rainfall is favoured with below-normal rainfall the next most likely.

Funafuti; below-normal rainfall is favoured with above-normal rainfall the next most likely.

Niulakita; Above-normal rainfall is favoured with below-normal rainfall the next most likely.

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

Very Low: X < 0.0 Low: $0 \le X < 5$ Moderate $5 \le X < 10$ Good: $10 \le X < 15$ High: $15 \le X < 25$

Very High: $25 \le X < 35$ Exceptional: $X \ge 35$