

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 129

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	May 2018						
	March 2018 Total	April 2018 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	246.4	42.0	55.7	154.2	242.7	206.0	2/78
Nui	179.4	106.8	112.0	151.5	214.9	185.7	15/73
Funafuti	93.0	151.1	230.5	183.4	256.0	215.1	49/86
Niulakita	246.7	176.7	344.2	174.0	247.9	208.0	56/66

TABLE 2: Three-monthly Rainfall March to May 2018

[Please note that the data used in this verification should be sourced from table 3 of OCOF #125]

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	344.1	554.4	880.5	770.3	7/78	48/37/15 [22.3]	Consistent
Nui	398.2	603.2	838.4	705.0	10/73	42/36/22 [7.6]	Consistent
Funafuti	474.6	681.3	911.3	792.0	6/86	43/33/24 [9.3]	Consistent
Niulakita	767.6	691.3	914.0	831.8	28/66	44/27/29 [4.9]	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 March to May 2018 Outlooks (refer to OCOF #125):

NINO3.4 SST Anomalies for December 2017-January 2018

TABLE 3: Seasonal Climate Outlooks using SCOPIC for July to September 2018

Predictors and Period used: NINO3.4 SST Anomalies for April-May 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	57	542.1	43		21	71
Nui	56	606.0	44		24	69
Funafuti	56	693.9	44		20	66
Niulakita	52	600.6	48		0.3	65

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	36	405.0	40	628.8	24	22	48
Nui	34	528.3	38	688.5	28	24	46
Funafuti	35	589.6	38	785.9	27	18	47
Niulakita	35	514.7	33	707.0	32	1	44

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	79	405	12	705	9		
Nui	76	533	18	729	6		
Funafuti	64	671	15	859	21		
Niulakita	39	492	21	709	40		

Summary Statements

Rainfall for May 2018:

Rainfall was **below normal** at Nanumea and Nui, **normal** at Funafuti, while Niulakita recorded **above normal** rainfall. Nanumea recorded the second driest May on Record.

Accumulated rainfall for March to May 2018, including outlook verification:

Rainfall over the last three months was below normal at Nanumea, Nui and Funafuti, while Niulakita recorded normal rainfall in the last three months. Forecast was consistent at Nanumea, Nui and Funafuti, while near-consistent at Niulakita. Funafuti and Nanumea stations recorded their 6th and 7th driest March-May periods on record respectively.

Outlooks for July to September 2018:

1. SCOPIC:

The outlook for July to September 2018 for Nanumea, shows **normal** is the most likely outcome, with **below-normal** the next most likely. **Above-normal** rainfall is the least likely.

The Funafuti outlook, shows a near-equal likelihood of **below-normal** and **normal** rainfall. **Above-normal** is the least likely.

The outlooks for Nui and Niulakita offer little guidance as the chances of **below-normal**, **normal** and **above-normal** rainfall are similar.

Outlook confidence ranges from low to high. For Nanumea, Nui and Funafuti, there is a high outlook confidence, while low confidence for Niulakita.

2. POAMA:

The outlook favours below normal rainfall for Nanumea, Nui and Funafuti while the outlook is mixed for Niulakita as it shows a near-equal likelihood of above normal and below-normal rainfall, with normal being the least likely.

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: $X \geq 35$