Pacific Islands - Online Climate Outlook Forum (OCOF) No. 124

Country Name: TUVALU

TABLE 1: Monthly Rainfall

Station (include data period)			December 2017						
	October 2017 Total	November 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking		
NANUMEA	141.8	182.5	423.6	209.4	343.7	294.6	60 of 76		
NUI	169.7	217.9	324.4	265.9	421.1	309.6	38 of 70		
FUNAFUTI	342.6	195.2	492.9	310.9	431.9	354.5	66 of 85		
NIULAKITA	405.9	297.2	288.8	232.5	347.1	289.5	31 of 64		

TABLE 2: Three-monthly Rainfall October to December 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #120]

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	747.9	535	755	630	50 of 76	33/44/23	Consistent
						33	
NUI	712.0	711	921	841	25 of 70	33/34/33	Near Consistent
						6	
FUNAFUTI	1030.7	810	1008	895	60 of 85	33/34/33	Near Consistent
						-1.1	
NIULAKITA	991.9	732	995	825	46 of 63	34/33/33	Near Consistent
						0	

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

Predictors and Period used for October to December 2017 Outlooks (refer to OCOF #120):

^{*}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 February to April 2018

Predictors and Period used: NINO 3.4 November -December 2017

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
NANUMEA	66	823.9	34	18.4	64.2
NUI	57	820.6	43	3.0	56.7
FUNAFUTI	63	928.1	37	15.4	65.7
NIULAKITA	46	924.0	54	0.8	52.3

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
NANUMEA	57	631.6	27	991.0	16	37.2	59.7
NUI	42	705.2	32	976.0	26	9.5	50.7
FUNAFUTI	47	819.7	20	1045.8	33	12.0	52.2
NIULAKITA	31	829.7	33	1014.3	36	-0.6	33.8

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)	
NANUMEA	70	810	24	1106	6	
NUI	70	798	24	1126	6	
FUNAFUTI	55	907	18	1086	27	
NIULAKITA	27	878	6	1076	67	

Summary Statements

Rainfall for December 2017:

Normal rainfall was recorded at Nui and Niulakita stations.

Above normal rainfall was recorded at Nanumea and Funafuti stations.

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

Above normal rainfall was recorded at Funafuti station

Normal rainfall was recorded at Nanumea, Nui and Niulakita.

Outlook verification was consistent at Nanumea and near- consistent at the remaining three stations.

Outlooks for February to April 2018:

1. SCOPIC:

- The outlook for the season February to April at Nanumea and Nui shows, below normal rainfall is the mostly likely outcome, with normal rainfall is the next most likely. Above normal rainfall is the least likely outcome.
- As for Funafuti, below normal rainfall is the most likely outcome for the season, with above normal rainfall is the next most likely. Normal rainfall is the least likely outcome.
- For Niulakita, the outlook offers little guidance as the chances of below normal, normal and above normal rainfall are similar.
- Outlook confidence for the season (Feb Apr 2018), is moderate for Nui and Niulakita stations, exceptional for Nanumea and good for Funafuti.

2. POAMA:

- Outlook for the season at Nanumea, Nui and Funafuti favours below-normal rainfall, with normal the next most likely at Nanumea and Nui, while above-normal rainfall is the next most likely outcome at Funafuti.
- Out look at Niualkita favours above-normal with below-normal the next most likely outcome. Normal is the least likely outcome.

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: $X \ge 35$