Pacific Islands - Online Climate Outlook Forum (OCOF) No. 110

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)	August 2016 Total	September 2016 Total	October 2016				
			Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	184.4	66.9	46.2	95.1	192.5	137.7	9/75
Nui	188.9	31.8	91.2	144.0	221.0	184.0	9/71
Funafuti	224.0	161.4	292.8	201.9	291.4	246.6	56/84
Niulakita	63.0	167.7	292.1	211.9	312.4	262.0	41/64

TABLE 2: Three-monthly Rainfall
August to October 2016
[Please note that the data used in this verification should be sourced from table 3 of OCOF #106]

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	297.5	362.0	611.0	505.0	19/75	10/28/62	Inconsistent
Nui	311.9	497.8	711.7	567.2	8/71	9/41/50	Inconsistent
Funafuti	678.2	597.1	799.5	672.4	44/84	19/28/53	Near Consistent
Niulakita	522.8	575.7	829.1	679.0	19/64	30/30/46	Near Consistent

Period:*below normal/normal/above normal

Predictors and Period used for August to October 2016 Outlooks (refer to OCOF #106):

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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 2016 to February 2017

Predictors and Period used: NINO 3.4

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	73%	966.8	27%		31%	71%
Nui	57%	1066.8	43%		3%	52%
Funafuti	53%	1133.9	47%		-0.1%	69%
Niulakita	38%	1003.5	62%		14%	56%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	**51%**	766.1	42%	1122.4	7%	36%	61%
Nui	39%	869.8	30%	1209.3	31%	2%	36%
Funafuti	37%	1000.2	29%	1240.1	34%	-0.9%	46%
Niulakita	27%	854.2	30%	1157.4	**42%**	7%	44%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for December 2016 to February 2017

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	**76**	838	15	1130	9		
Nui	**76**	695	12	1262	12		
Funafuti	**73**	930	15	1151	12		
Niulakita	**61**	789	12	1099	27		

Summary Statements

Rainfall for October 2016:
Rainfall in October was **below normal** rainfall for Nanumea and Nui stations while Niulakita received **norma**l rainfall and Funafuti above normal rainfall.

Accumulated rainfall for August to October 2016, including outlook verification:

Rainfall over the last three months was **normal** at Funafuti and below normal at Nanumea, Nui and Niulakita.

The SCOPIC outlooks for the last three months were **inconsistent** for Nanumea and Nui, while **near consistent** for Funafuti and Niulakita

Outlooks for December 2016 to February 2017:
1. SCOPIC:
At Nanumea, below normal rainfall is the most likely outcome with normal rainfall the next most likely

The outlook for Nui and Funafuti offers little guidance for the coming season as the chances of above normal, normal and below normal rainfall are similar

At Niulakita above normal rainfall is the most likely outcome with normal rainfall the next most likely.

Outlook confidence: Nanumea with very high confidence, low confidence for Nui, Funafuti with very low confidence while Niulakita with moderate confidence.

2. POAMA:

For Nanumea and Funafuti below normal rainfall is favoured with normal rainfall the next most likely.

Nui, below normal rainfall is favoured with similar chances for normal rainfall and above normal rainfall are the next most likely

Niulakita, below normal rainfall is favoured with above normal rainfall the next most 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