Pacific Islands - Online Climate Outlook Forum (OCOF) No. 106

Country Name: Tuvalu

TABLE 1: Monthly Rainfall

Station (include data period)			June 2016				
	April 2016 Total	May 2016 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Nanumea	449.0	330.1	360.8	133.9	205.6	169.9	70/76
Nui	93.9	207.7	176.0	147.3	218.4	173.2	37/71
Funafuti	300.2	311.9	244.2	163.3	265.5	216.3	51/84
Niulakita	310.4	342.5	437.2	142.5	251.5	196.7	61/64

TABLE 2: Three-monthly Rainfall
April to June 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	1139.9	531.0	742.1	624.2	76/76	2/8/90 [21%]	Consistent
Nui	477.6	524.5	724.0	583.6	21/71	7/13/80 [8%]	In Consistent
Funafuti	856.3	616.7	786.7	698.5	67/84	1/12/87 [28%]	Consistent
Niulakita	1090.1	572.0	727.8	624.0	62/64	11/37/52 [5%]	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 April to June 2016 Outlooks (refer to OCOF #102):

TABLE 3: Seasonal Climate Outlooks using SCOPIC for August to October 2016

Predictors and Period used: Nino 3.4

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Nanumea	17%	505.0	83%		25%	70%
Nui	13%	567.2	87%		31%	70%
Funafuti	18%	672.4	82%		24%	70%
Niulakita	39%	679.0	61%		2%	62%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	6%	362.0	23%	611.0	71%	30%	62%
Nui	6%	497.8	40%	497.8	54%	24%	58%
Funafuti	16%	597.1	25%	799.5	59%	13%	53%
Niulakita	28%	575.7	29%	829.1	41%	-0.2%	38%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for August to October 2016

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Nanumea	27	428	36	636	37		
Nui	18	530	45	637	37		
Funafuti							
Niulakita	21	490	9	799	70		

Summary Statements

Rainfall for June 2016:
Rainfall in June 2016 was above normal rainfall for Nanumea and Niulakita stations, while normal rainfall for Nui and Funafuti stations. Niulakita stations recorded the highest from all station for June 2016

Accumulated rainfall for April to June 2016, including outlook verification:
Rainfall over the last months was above normal rainfall for all the four meteorological stations.

The SCOPIC outlooks for the last three months were consistent for all stations except Nui stations was inconsistent.

Outlooks for August to October 2016:

1. SCOPIC:
Seasonal rainfall outlooks for Tuvalu for August to October 2016: All stations are predicted as above normal rainfall is the most likely outcome with normal rainfall the next most likely.

A very high confidence outlook for Nanumea, high confidence for Nui station. Funafuti the capital with good confidence, while Niulakita has outlook of very low confidence.

2. POAMA:

For the three meteorological stations Nanumea, Funafuti and Niulakita, above normal rainfall is favoured with below normal rainfall the next most likely for Funafuti and Niulakita, while normal rainfall the most likely for Nanumea station.

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: $X \geq 35$			