Pacific Islands - Online Climate Outlook Forum (OCOF) No. 102

Country Name: TUVALU

TABLE 1: Monthly Rainfall

Station (include data period)	December 2015 Total	January 2016 Total	February 2016				
			Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
NANUMEA	648.4	308.7	685.6	160.2	299.7	260.0	74 of 76
NUI	504.4	66.2	420.9	226.1	330.2	276.5	56 of 71
FUNAFUTI	520.1	78.9	329.3	267.3	425.1	360.9	40 of 84
NIULAKITA		260.0	317.0	257.6	380.5	325.1	32 of 64

TABLE 2: Three-monthly Rainfall
December 2015 to February 2016
[Please note that the data used in this verification should be sourced from table 3 of OCOF #97]

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	1642.7	735.9	1109.9	961.0	73 of 75	1/2/97	consistent
						37.0%	
NUI	991.5	859.6	1192.2	1065.5	28 of 70	2/64/34	Consistent
						-11.9%	
FUNAFUTI	928.3	995.9	1236.8	1126.1	20 of 83	3/18/79	In consistent
						-6.9%	
NIULAKITA		851.7	1155.0	999.0		24/61/15	
						-1.4%	

Period:*below normal/normal/above normal

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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
April to June 2016

Predictors and Period used: Nino 3.4

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
NANUMEA	5%	624.2	95%		22.4%	69.7%
NUI	11%	583.6	89%		13.9%	72.7%
FUNAFUTI	18%	698.5	82%		7.5%	69.7%
NIULAKITA	53%	624.0	47%		-2.9	39.4

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
NANUMEA	4%	531.0	15%	742.1	81%	15.4%	42.4%
NUI	12%	524.5	21%	724.0	67%	7.0%	60.6%
FUNAFUTI	4%	616.7	30%	786.7	66%	14.4%	48.5%
NIULAKITA	18%	572.0	43%	727.8	39%	-0.4%	30.3%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for
April to June 2016

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
NANUMEA	12%	626	30%	891	58%		
NUI	9%	559	33%	809	58%		
FUNAFUTI	49%	638	9%	829	42%		
NIULAKITA	73%	565	12%	648	15%		

Summary Statements

Rainfall for February 2016:

- Above normal rainfall was recorded at northern and central Station (Nanumea and Niulkaita).

- Normal rainfall was recorded at southern stations (Funafuti and Niulakita)

Accumulated rainfall for December to February 2016, including outlook verification:
- Rainfall over the last three months was above normal in the northern Island (Nanumea) -
- Normal rainfall was recorded at Nui station in the central division.
- Below normal rainfall collected at Funafuti in the southern division.

The SCOPIC verification for the last three months was inconsistent at Funafuti. Two station with consistent verification for central and northern division. The outlook for Niulakita could not be verified due to missing data.

Outlooks for April to June 2016:
1. **SCOPIC:**
   – Predicts Above normal rainfall is the most likely outcome for Nanumea, Nui and Funafuti with normal rainfall is the next most likely.
   – Normal rainfall is the most likely outcomes for Niulakita with above normal rainfall is the next likely.

   Confidence in the outlook is good skills for Nanumea and Funafuti. Moderate skills for Nui and very low skills for Niulakita.

2. **POAMA:**

   - Predicts Above normal rainfall at Nanumea and Nui, below normal rainfall at Funafuti and Niulakita.

Overall outlook for April to June is normal to above normal rainfall for the Tuvalu Groups.

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