## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 121

**Country Name: Tuvalu** 

**TABLE 1: Monthly Rainfall** 

Station (include data period)			September 2017						
	July 2017 Total	August 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking		
Nanumea	219.8	288.4	96.9	93	176	140	27/76		
Nui	187.0	380.6	80.3	129	209	180	13/72		
Funafuti	207.9	145.7	175.4	163	250	203	34/85		
Niulakita	250.4	73.4	276.8	168	226	192	56/65		

## TABLE 2: Three-monthly Rainfall July to September 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #117]

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	605.1	403	629	514	46/76	9/28/ <b>63</b> [20%]	Near-consistent
Nui	647.9	513	689	602	45/72	8/34/ <b>58</b> [21%]	Near-Consistent
Funafuti	529.0	593	795	702	19/85	8/33/ <b>59</b> [19%]	Inconsistent
Niulakita	600.6	513	713	602	33/65	22/ <b>40</b> /38 [1%]	Consistent

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

Predictors and Period used for July to September 2017 Outlooks (refer to OCOF #117):

NINO3.4 (April-May)

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 November 2017 to January 2018

**Predictors and Period used:** NINO 3.4 (Aug-Sep)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
Nanumea	57%	892	43%	32%	71%
Nui	52%	982	48%	3%	69%
Funafuti	50%	1038	50%	-1%	68%
Niulakita	48%	993	52%	6%	62%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Nanumea	34%	614	43%	999	23%	22%	46%
Nui	34%	840	32%	1111	34%	21%	44%
Funafuti	35%	928	30%	1147	35%	18%	47%
Niulakita	29%	815	37%	1129	34%	1%	43%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November 2017 to January 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)	
Nanumea	58	794	12	1155	30	
Nui	64	673	6	1119	30	
Funafuti	48	897	16	1017	36	
Niulakita	30	712	9	1114	61	

### **Summary Statements**

#### **Rainfall for September 2017:**

Rainfall in September was **below-normal** at Nui station, **normal** at Nanumea and Funafuti, while Niulakita recorded **above-normal** rainfall

#### Accumulated rainfall for July to September 2017, including outlook verification:

Rainfall over the last three months was **normal** at most stations, the exception being Funafuti which recorded **below-normal**.

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

#### Outlooks for November 2017 to January 2018:

#### 1. SCOPIC:

Seasonal rainfall outlooks for Tuvalu for November to January 2018

Nanumea: The outlook shows **normal** as the most likely outcome, with **below-normal** the next most likely. **Above-normal** is the least likely.

Nui, Funafuti and Niulakita: The outlook offers little guidance as the chances of abovenormal, normal and below-normal are similar.

Outlook confidence ranges from moderate to high: There is a high confidence outlook at Nanumea, Nui and Funafuti Stations, while low confidence outlook at Niulakita.

#### 2. POAMA:

Nanumea and Nui: The outlook favours **below-normal** with **above-normal** the next most likely

Funafuti: The outlook shows **below-normal** the most likely outcome, with **above-normal** the next most likely. **Normal** is the least likely.

Niulakita: The outlook favours **above-normal** with **below-normal** the next most likely.

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:  $X \ge 35$