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

Country Name: Samoa

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		
Afiamalu	120.5	360.7	101.4	117.3	218.6	157.9	18/65		
Nafanua	142.8	251.1	72.0	105.2	176.0	154.8	9/45		
Apia	104.1	284.2	90.6	94.5	173.0	122.0	42/128		
Faleolo	26.7	142.7	25.6	55.6	116.2	82.1	7/55		

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)?
Afiamalu	582.6	475.9	671.0	589.8	30/63	37 /36/27 (-1.7)	Near- consistent
Nafanua	466.5	313.4	497.6	392.4	27/45	35/ 36 /29 (-2.5)	Consistent
Apia	478.9	251.0	423.0	343.6	101/128	37 /33/30 (-1.9)	Inconsistent
Faleolo	195.0	207.6	358.2	275.8	17/53	49 /29/22 (-0.5)	Consistent

Period:*below normal/normal/above normal

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

Nino 3.4 indices from March to May 2017.

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 value from August to September 2017.

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
Afiamalu	56	1761.9	44	11.3%	67.9%
Nafanua	54	1294.9	46	13.2%	67.5%
Apia	55	1055.7	45	9.5%	60.6%
Faleolo	53	791.8	47	2.4%	63.6%

Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
39	1458.6	38	1969.2	23	12.0%	44.6%
34	1085.3	36	1472.0	30	18.1%	60.0%
36	956.9	34	1200.8	30	4.2%	48.5%
36	696.8	32	893.0	32	2.8%	23.6%
	Normal (prob) 39 34 36	Normal (prob) rainfall (mm) 39 1458.6 34 1085.3 36 956.9	Normal (prob) rainfall (mm) Normal (prob) 39 1458.6 38 34 1085.3 36 36 956.9 34	Normal (prob) rainfall (mm) Normal (prob) rainfall (mm) 39 1458.6 38 1969.2 34 1085.3 36 1472.0 36 956.9 34 1200.8	Normal (prob) rainfall (prob) Normal (prob) rainfall (prob) Normal (prob) 39 1458.6 38 1969.2 23 34 1085.3 36 1472.0 30 36 956.9 34 1200.8 30	Normal (prob) rainfall (prob) Normal (prob) Normal (prob) LEPS 39 1458.6 38 1969.2 23 12.0% 34 1085.3 36 1472.0 30 18.1% 36 956.9 34 1200.8 30 4.2%

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)	
Apia	33	935	9	1213	58	

Summary Statements

Rainfall for September 2017: "Below-normal" rainfalls were recorded for all stations.

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

Afiamalu and Nafanua observed "normal" rainfall whereas "above-normal" was received at Apia. Faleolo recorded "below-normal" rainfall.

The outlook verification for Nafanua and Faleolo was "consistent", for Afiamalu it was "near-consistent", while it was inconsistent at Apia.

Outlooks for November 2017 to January 2018:

1. SCOPIC:

- The outlook for Afiamalu shows a near equal likelihood of "below-normal" and "normal".
- The outlook for the other sites offers little guidance for the coming season as the chances of below-normal, normal and above-normal are similar.

The confidence of the model is "low to high".

POAMA: "Above-normal" rainfall is favoured for Apia for the next season.

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: $X \ge 35$