Pacific Islands - Online Climate Outlook Forum (OCOF) No. 120

Country Name: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)			August 2017					
	June 2017 Total	July 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	
Afiamalu	354.2	120.5	360.7	100.0	217.2	169.5	57/62	
Nafanua	206.9	142.8	251.7	68.2	148.8	94.6	38/42	
Apia	162.4	104.1	284.2	60.1	131.6	84.3	123/128	
Faleolo	145.0	26.7	142.7	61.5	119.5	93.5	43/56	

TABLE 2: Three-monthly Rainfall June to August 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #116]

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	835.4	507.4	669.1	574.8	51/60	46 /28/26 (9.1)	Inconsistent
Nafanua	601.4	295.8	494.6	403.6	35/42	37 /29/24 (-1.6)	Inconsistent
Apia	550.7	247.0	407.0	344.0	111/128	36/36/ 28 (0.3)	Near Consistent
Faleolo	314.4	208.7	355.9	287.3	30/54	39 /35/26 (2.8)	Near Consistent

Period:*below normal/normal/above normal

<u>Predictors and Period used for June to August 2017 Outlooks (refer to OCOF #116)</u>: **Nino 3.4 indices from March to April 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 October to December 2017

<u>Predictors and Period used</u>: Nino 3.4 value from July to August 2017.

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)	LEPS	Hit-rate
Afiamalu	50	1266.3	50	4.2%	60.8%
Nafanua	47	903.8	53	23.7%	73.7%
Apia	50	817.7	50	2.2%	61.2%
Faleolo	49	611.6	51	8.9%	70.4%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Afiamalu	31	1129.0	35	1498.2	34	6.6%	49.0%
Nafanua	30	781.3	37	1026.5	33	14.5%	51.4%
Apia	31	718.2	35	900.7	34	3.9%	50.7%
Faleolo	35	548.1	33	696.6	32	5.2%	42.6%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)	
Apia	21	713.0	9	865.0	69	

Summary Statements

Rainfall for August 2017: "Above normal" rainfall was recorded across all stations.

Accumulated rainfall for June to August 2017, including outlook verification:

"Above normal" rainfall was recorded for all stations except Faleolo received 'normal' rainfall.

The outlook verification was "inconsistent" for Afiamalu and Nafanua stations whereas Faleolo and Apia recorded 'near consistent" forecast

Outlooks for October to December 2017:

1. SCOPIC:

The rainfall outlook for Afiamalu, Nafanua, Faleolo and Apia station shows a near equal likelihood of above normal and normal rainfall.

Model confidence ranges from low to good.

2. POAMA:

Above normal rainfall is favoured for Apia in the coming 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: $X \ge 35$