

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 112

Country Name: SAMOA

TABLE 1: Monthly Rainfall

Station (include data period)	December 2016						
	September 2016 Total	October 2016 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Afiamalu	241.8	372.4	834.2	434.6	656.8	531.5	51/64
Apia	135.1	111.6	560.3	278.3	428.2	364.0	108/126
Nafanua	112.7	156.5	757.3	327.4	462.4	393.7	40/42
Faleolo	228.6	232.6	382.7	207.1	307.7	263.6	47/55

TABLE 2: Three-monthly Rainfall October to December 2016

[Please note that the data used in this verification should be sourced from table 3 of OCOF #108]

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	1448.4	1160.5	1448.0	1266.3	37/58	29/ 36 /35 (7.2)	Near consistent
Apia	807.0	716.8	909.7	819.3	60/126	30/ 35 / 35 (5.7)	Near consistent
Nafanua	1026.5	781.3	1044.1	906.3	27/41	30/ 35 / 35 (10.7)	Near consistent
Faleolo	843.9	542.9	700.2	619.0	46/54	33/33/ 34 (0.3)	Consistent

Period: *below normal/normal/above normal

Predictors and Period used for October to December 2016 Outlooks (refer to OCOF #107):

Nino 3.4 values from June to August 2016

* 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).

TABLE 3: Seasonal Climate Outlooks using SCOPIC for February to April 2017

Predictors and Period used: Nino 3.4 SST Anomalies of November to December 2016

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Afiamalu	52	1425.5	48		-1.3%	54.5%
Apia	44	925.0	56		2.1%	57.6%
Nafanua	43	1052.2	57		1.9%	59.1%
Faleolo	56	628.5	44		1.0%	52.7%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Afiamalu	31	1238.7	34	1547.1	35	-1.8%	23.5%
Apia	27	803.0	38	1017.0	35	0.9%	48.5%
Nafanua	24	913.0	41	1127.4	35	2.0%	43.2%
Faleolo	36	590.9	30	691.5	34	-1.9%	38.2%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Apia	58	892	6	1361	36		

Summary Statements

Rainfall for December 2016:

“Above normal” was recorded across all stations.

Accumulated rainfall for September to November 2016, including outlook verification:

Afiamalu and Faleolo recorded ‘above normal’ rainfall whereas Nafanua and Apia registered ‘normal’ rainfall.

The outlook issued was ‘near consistent’ for all stations.

Outlooks for February to April 2017:

1. SCOPIC:

The outlook for Afiamalu shows near equal likelihood of ‘above normal’ and ‘normal’ rainfall. The outlook for Faleolo is mixed, with similar chances for ‘below normal’ with ‘above normal’ totals. ‘Normal’ rainfall is the most likely outcome for Apia and Nafanua station with ‘above normal’ the next most likely.

The confidence of the model varies from ‘very low to low’.

2. POAMA:

“Below 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: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$

Exceptional: $X \geq 35$