

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 145

Country: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2019	Aug-2019	Sep-2019				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2019)	370.6	46.9	57.9	93.3	172.3	120.8	20/130
Afiamalu (1903-2019)	497.1	160.4	179.8	116.4	217.6	151.4	37/67
Nafanua (1965-2019)	404.7	27.8	72.0	104.7	175.0	151.4	9/47
Faleolo (1956-2019)	205.0	35.5	69.5	54.8	112.3	80.9	26/57

TABLE 2: Three-month Rainfall for July to September 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 April-May 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Apia (1890-2019)	475.4	Above normal	251.9	423.3	343.6	100/130	38	32	30	-1	Inconsistent
Afiamalu (1903-2019)	837.3	Above normal	504.2	669.2	587.3	55/65	32	43	25	-1	Near-consistent
Nafanua (1965-2019)	504.5	Above normal	334.9	477.5	392.5	32/47	36	32	32	-3	Near-consistent
Faleolo (1956-2019)	310.0	Normal	202.6	335.3	261.2	35/55	48	32	20	3	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for November 2019 to January 2020
Predictor and Period used: NINO3.4 for August to September 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2019)	57	1055.7	43		6	59
Afiamalu (1903-2019)	57	1774.2	43		6	58
Nafanua (1965-2019)	62	1294.9	38		19	64
Faleolo (1956-2019)	54	793.9	46		1	54

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2019)	38	955.7	33	1205.0	29	3	38
Afiamalu (1903-2019)	39	1484.2	38	1993.1	23	9	34
Nafanua (1965-2019)	42	1083.4	33	1490.6	25	18	45
Faleolo (1956-2019)	37	697.0	31	897.6	32	-1	28

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November 2019 to January 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Apia	24	935.0	12	1213.0	64

Summary Statements

Rainfall for September 2019: Below normal rainfall was recorded for Apia and Nafanua, while Afiamalu and Faleolo observed normal rainfall.

Accumulated rainfall for July to September 2019, including outlook verification:

All stations received above normal rainfall, except for Faleolo which recorded normal rainfall. The outlook verification for Apia was inconsistent, while it was near-consistent at Afiamalu, Nafanua and Faleolo.

The confidence of the model ranged from very low to high

Outlooks for November 2019 to January 2020:

1. SCOPIC:

The outlook for Nafanua shows below normal as the most likely outcome, with normal the next most likely. Above normal is the least likely.

The outlook for Afiamalu shows a near-equal likelihood of below normal and normal rainfall.

The outlook for Apia and Faleolo offers little guidance as the chances of above normal, normal and below-normal are similar.

2. POAMA:

Above normal rainfall is favoured for Apia for the November to January period.

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: $X \geq 35$

Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: September 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	30 th	RED Cross, Water Authority, Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
EAR Watch	30th	Disaster Managers, RED Cross, Water Authority, Ministry of Health	35	25	10
Monthly Climate Briefing	30th	RED Cross, Water Authority, Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Ocean Bulletin	30th	Maritime, Shipping Corporation, Fire Emergency Services,	30	15	15
Total					