

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 147

Country: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2019	Oct-2019	Nov-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2019)	57.9	229.2	174.8	183.6	299.5	243.8	37/130
Afiamalu (1903-2019)	179.8	230.7	402.3	318.5	465.2	372.4	46/67
Nafanua (1965-2019)	72.0	221.6	247.8	201.7	321.7	281.2	22/49
Faleolo (1956-2019)	69.5	124.9	151.2	155.9	217.0	175.7	18/58

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 June-July 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Apia (1890-2019)	461.9	Below normal	501.4	685.0	605.3	35/130	44	32	24	3	Consistent
Afiamalu (1903-2019)	812.8	Normal	796.7	1093.5	936.0	27/66	41	37	22	3	Near-consistent
Nafanua (1965-2019)	541.4	Below normal	597.5	761.7	675.1	11/47	44	29	27	3	Consistent
Faleolo (1956-2019)	345.6	Below normal	400.8	518.7	468.3	12/56	44	28	28	0	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for January to March 2020

Predictor and Period used: NINO3.4 for October to November 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2019)	61	1089.9	39		8	57
Afiamalu (1903-2019)	58	1791.7	42		5	58
Nafanua (1965-2019)	63	1237.2	37		17	62
Faleolo (1956-2019)	53	784.9	47		-1	55

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)	45	991.1	32	1255.5	23	12	41
Afiamalu (1903-2019)	42	1676.2	33	2053.8	25	8	41
Nafanua (1965-2019)	47	1086.0	24	1611.0	29	17	40
Faleolo (1956-2019)	38	690.3	33	884.2	29	2	38

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Apia	36	975.0	12	1351.0	52

Summary Statements

Rainfall for November 2019:

Apia and Faleolo recorded *below normal* rainfall while Afiamalu and Nafanua recorded *normal* rainfall in the month of November 2019

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

Below normal was the status for all stations with the exception of Afiamalu, where *normal* rainfall activity was recorded. The outlook for this period was verified to be consistent for all stations as well, except at Afiamalu where it was verified to be near-consistent.

Outlooks for January to March 2020:

1. SCOPIC:

The outlook for Apia, Afiamalu and Nafanua shows *below normal* as the most likely, with *normal* the next most likely at Apia and Afiamalu, and *above normal* the next most likely at Nafanua. The outlook for Faleolo shows little guidance as the chances of above normal, normal and below normal are similar.

The confidence of the model varies from low to high.

2. POAMA:

Above normal rainfall is favoured for Apia in the upcoming 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: $X \geq 35$

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

Product	Date: November 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Summary	8 th	RED Cross, Water Authority (SWA), 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
Monthly Climate Briefing	11 th	Samoa Met Office	9	7	2
Ocean Bulletin	27 th	RED Cross, Water Authority (SWA), 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
Seasonal Rainfall Outlook	27 th	RED Cross, Water Authority (SWA), Media,	65	27	38

		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			
Agro-met briefing	26 th	Farmer Association, Samoa MET officers	4	3	1
Total			78	37	41