

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 146

Country: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2019	Sep-2019	Oct-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2019)	46.9	57.9	229.2	152.0	257.3	199.9	87/130
Afiamalu (1903-2019)	160.4	179.8	230.7	267.4	417.3	352.8	21/68
Nafanua (1965-2019)	27.8	72.0	221.6	179.2	341.0	238.3	22/48
Faleolo (1956-2019)	35.5	69.5	124.9	125.9	191.8	155.3	20/58

TABLE 2: Three-month Rainfall for August to October 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 May-June 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Apia (1890-2019)	334.0	Below normal	367.6	529.1	438.2	36/130	49	26	25	4	Consistent
Afiamalu (1903-2019)	570.9	Below normal	603.2	832.5	724.8	20/65	44	30	26	2	Consistent
Nafanua (1965-2019)	321.4	Below normal	471.8	595.2	535.1	10/47	42	29	29	-1	Consistent
Faleolo (1956-2019)	229.9	Below normal	281.8	421.8	351.8	13/56	44	28	28	1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for December 2019 to February 2020**Predictor and Period used: NINO3.4 for September to October 2019**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2019)	57	1126.5	43		8	56
Afiamalu (1903-2019)	57	1963.7	43		9	62
Nafanua (1965-2019)	60	1360.0	40		20	64
Faleolo (1956-2019)	56	868.4	44		4	61

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)	42	943.5	33	1340.2	25	15	49
Afiamalu (1903-2019)	40	1703.9	36	2257.7	24	12	45
Nafanua (1965-2019)	41	1188.2	31	1643.8	28	27	55
Faleolo (1956-2019)	37	766.1	32	948.5	31	1	36

TABLE 4: Seasonal Climate Outlooks using POAMA2 for December 2019 to February 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Apia	18	892.0	18	1361.0	64

Summary Statements

Rainfall for October 2019:

Below normal rainfall was recorded at Afiamalu and Faleolo station, while Apia and Nafanua recorded *Normal* rainfall in October.

Accumulated rainfall for August to October 2019, including outlook verification:

Below normal rainfall was recorded for all stations, and the outlook issued in July was verified to be consistent for all stations as well.

Outlooks for December 2019 to February 2020:

1. SCOPIC:

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

The confidence of the model varies from low to very high.

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: $0 \leq X < 5$

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: October 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Tropical Cyclone Briefing	24 th	MNRE	15	7	8
Disaster Advisory Committee Briefing	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	40	20	20
Total			55	27	28