

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 148

Country: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2019	Nov-2019	Dec-2019				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2019)	229.2	174.8	489.1	298.0	450.7	373.4	95/129
Afiamalu (1903-2019)	230.7	402.3	808.5	473.1	694.4	546.5	51/67
Nafanua (1965-2019)	221.6	247.8	529.5	343.9	500.1	411.6	34/45
Faleolo (1956-2019)	124.9	151.2	265.3	215.7	318.7	270.2	28/58

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 July-August 2019				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Apia (1890-2019)	893.1	Normal	735.0	914.8	819.6	83/129	38	36	26	3	Near- consistent
Afiamalu (1903-2019)	1441.5	Normal	1209.8	1498.2	1318.0	42/66	41	29	30	6	Near- consistent
Nafanua (1965-2019)	998.9	Normal	789.1	1044.1	944.4	25/44	39	36	25	10	Near- consistent
Faleolo (1956-2019)	541.4	Below normal	563.5	716.6	639.4	19/57	37	36	27	1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for February to April 2020

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2019)	57	930.0	43		3	59
Afiamalu (1903-2019)	46	1456.7	54		0	57
Nafanua (1965-2019)	56	1056.2	44		4	64
Faleolo (1956-2019)	45	633.8	55		1	57

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	828.9	34	1009.4	28	3	43
Afiamalu (1903-2019)	32	1370.6	36	1585.2	32	-1	13
Nafanua (1965-2019)	40	913.0	39	1137.6	21	5	47
Faleolo (1956-2019)	31	591.5	34	696.1	35	-1	41

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Apia	45	795.0	24	1108.0	31

Summary Statements

Rainfall for December 2019:

All stations recorded *above normal* rainfall for December, except for Faleolo, where *normal* rainfall was recorded.

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

Normal rainfall has been recorded for Apia, Afiamalu and Nafanua stations, whereas Faleolo recorded *below normal* rainfall. The outlook was therefore verified to be consistent at Faleolo, and near consistent for the rest of the stations.

Outlooks for February to April 2020:

1. SCOPIC:

The outlook for Nafanua shows a near equal likelihood of *below normal* and *normal* rainfall. For Apia, Afiamalu and Faleolo stations, the outlook offers little guidance as the chances of *above normal*, *normal* and *below normal* are similar.

2. POAMA:

The outlook shows *below normal* as the most likely outcome, with *above normal* the next most likely. *Normal* is the least likely outcome.

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: December 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	08 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	08 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
Ocean Bulletin	08 th	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure,	65	27	38

		Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines			
Total			65	27	38