

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 163

Country: Samoa

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2021	Feb-2021	Mar-2021				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2021)	635.1	664.7	254.6	265.7	361.5	308.8	36/132
Afiamalu (1903-2021)	993.2	1024.2	274.6	397.0	587.9	513.5	14/69
Nafanua (1965-2021)	850.9	759.7	312.4	299.4	390.0	341.6	19/49
Faleolo (1956-2021)	344.6	540.6	116.0	180.5	243.7	213.6	9/60

TABLE 2: Three-month Rainfall for January to March 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 October-November 2020				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Apia (1890-2021)	1554.4	Above normal	1002.3	1253.8	1093.3	116/132	15	37	48	11	Consistent
Afiamalu (1903-2021)	2292.0	Above normal	1565.7	2023.2	1806.1	49/67	19	37	45	7	Consistent
Nafanua (1965-2021)	1923.0	Above normal	1090.8	1621.5	1270.2	42/47	7	52	41	14	Near-consistent
Faleolo (1956-2021)	1001.2	Above normal	693.6	891.5	789.6	47/60	25	35	40	1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2021

Predictor and Period used: NINO3.4 for February to March 2021

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Apia (1890-2021)	46	455.0	54		-1	48
Afiamalu (1903-2021)	40	743.6	60		2	49
Nafanua (1965-2021)	50	528.6	50		-2	17
Faleolo (1956-2021)	41	331.0	59		2	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 (1890-2021)	28	392.7	37	527.1	35	0	35
Afiamalu (1903-2021)	18	649.4	46	855.6	36	4	49
Nafanua (1965-2021)	33	461.3	38	653.0	29	-3	29
Faleolo (1956-2021)	31	274.6	26	392.7	43	0	38

TABLE 4: Monthly and Seasonal Climate Outlooks using ACCESS-S for May to July 2021

Monthly rainfall	Seasonal rainfall
<p style="text-align: center;">Tercile rainfall probabilities for May 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>	<p style="text-align: center;">Tercile rainfall probabilities for May to July 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>
<p style="text-align: center;">Tercile maximum temperature probabilities for May 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>	<p style="text-align: center;">Tercile maximum temperature probabilities for May to July 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>
<p style="text-align: center;">Tercile minimum temperature probabilities for May 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>	<p style="text-align: center;">Tercile minimum temperature probabilities for May to July 2021</p> <p style="text-align: center;"> Below normal (%) Near normal (%) Above normal (%) </p> <p style="font-size: small;"> © Commonwealth of Australia 2021, Australian Bureau of Meteorology Model: ACCESS-S1 Model run: 03/04/2021 Base period: 1990-2012 Issued: 05/04/2021 <small>Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marinegovernor.org/</small> </p>

Summary Statements

Rainfall for March 2021: Rainfall was *below normal* for most stations, apart from Nafanua which recorded *normal* rainfall.

Accumulated rainfall for January to March 2021, including outlook verification: Rainfall was *above normal* across the country. The outlook issued in December was verified as *Consistent* at Apia, Afiamalu and Faleolo and *Near-Consistent* at Nafanua.

Outlooks for May to July 2021:

1. SCOPIC:

The outlook for Afiamalu shows *normal* as the most likely outcome, with *above normal* as the next most likely. *Below normal* is the least likely.

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

2. ACCESS-S:

Monthly rainfall: *Near-normal* is the most likely outcome for Samoa for May.

Monthly maximum temperature and minimum temperatures: May is most likely to have *above normal* temperatures across Samoa.

Seasonal rainfall: The outlook offers little guidance across Samoa for the May to July period.

Seasonal maximum temperature and minimum temperatures: The outlook shows *above normal* is the most likely outcome for Samoa for the May to July 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: March 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Summary	16 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			
EAR Watch	16 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			
Ocean Bulletin	16 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	-	-	-
Climate Outlook	16 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	-	-	-
Total			-	-	-

