

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 180

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2022	Jul-2022	Aug-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2022)	121.1	158.5	156.2	68.4	158.9	99.5	97/133
Afiamalu (1903-2022)	124.0	131.0	259.9	136.1	225.9	180.8	53/69
Nafanua (1965-2022)	88.9	126.4	206.7	68.2	137.5	90.8	42/51
Faleolo (1956-2022)	86.6	69.4	69.7	52.0	111.3	91.2	28/61

TABLE 2: Three-month Total Rainfall for June to August 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2022)	435.8	Normal	312.8	447.3	383.4	97/133
Afiamalu (1903-2022)	514.9	Below normal	523.1	677.2	609.2	24/67
Nafanua (1965-2022)	422.0	Normal	321.1	503.5	408.5	28/51
Faleolo (1956-2022)	225.7	Normal	207.8	359.9	289.9	24/59

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

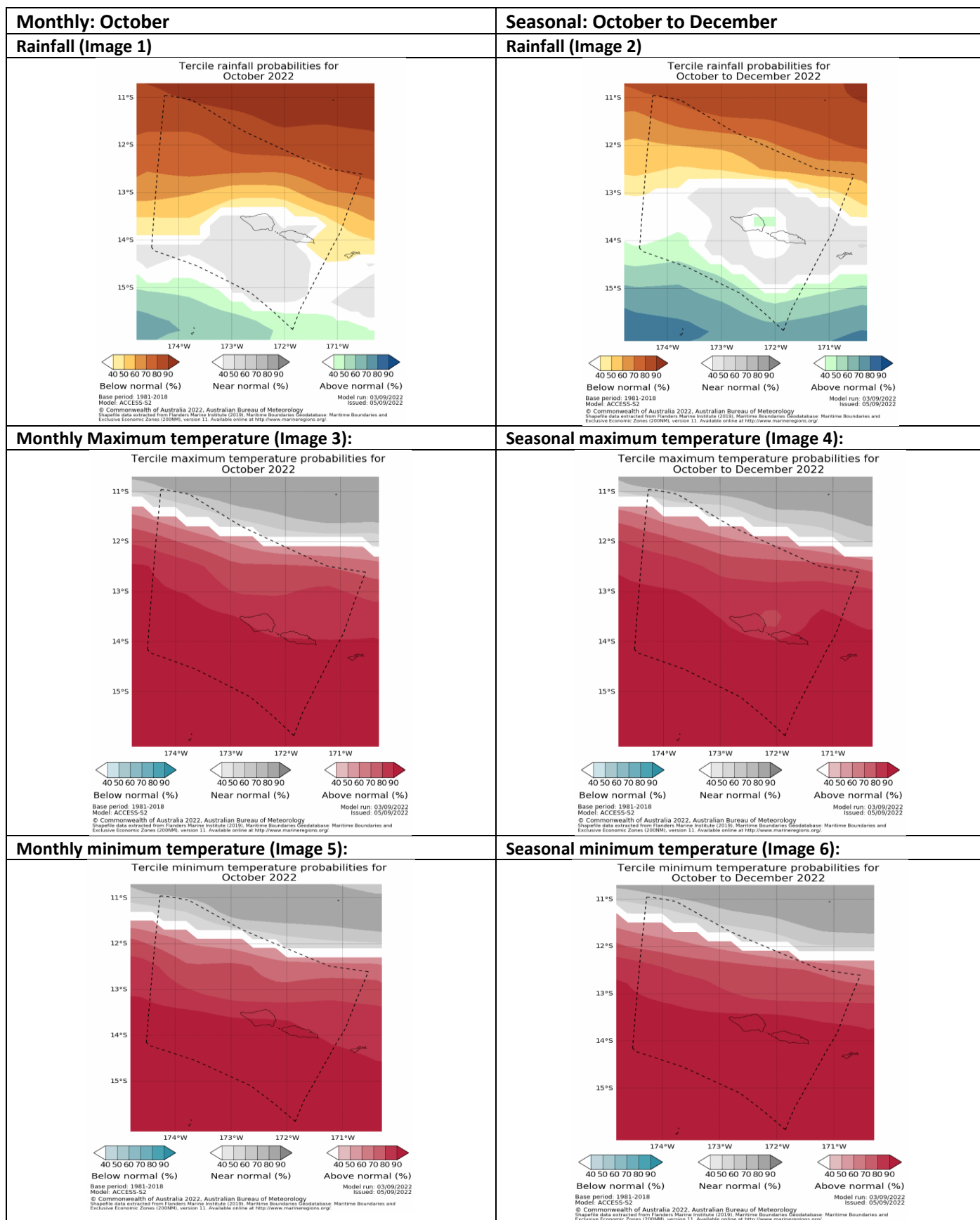
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2022



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Part 2: Recent Ocean Observation

Monthly/Three months: August 2022 and June to August 2022

Monthly: August	Last three months: June to August 2022:
<p>Sea Surface Temperature (Image 1):</p> <p>Samoa Monthly Average Sea Surface Temperature Anomaly: August 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, COMF Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p> <p>Samoa 3 monthly Average Sea Surface Temperature Anomaly: June 2022 to August 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, COMF Reynolds SST</p>
<p>Sea level (Image 2):</p> <p>Samoa Monthly Near Real Time Sea Level Anomaly: August 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, COMF AVISO SeaWiFS SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p> <p>Pacific Ocean Daily Coral Bleaching Alert: 06 September 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, COMF NOAA Coral Reef Watch</p>	<p>Samoa Daily Coral Bleaching Alert: 06 September 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, COMF NOAA Coral Reef Watch</p>

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Part 2i. Monthly and Seasonal Outlooks for October and October to December 2022

<p>Monthly: October</p>	<p>Seasonal: October to December</p>
<p>Monthly sea surface temperature (Image 5):</p>	<p>Seasonal sea surface temperature (Image 6):</p>
<p>Difference from average sea surface temperature forecast for October 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from: Tropical Marine Hydrodynamics (TMOD) - Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marine.gov.au</p> <p>Model run: 05/09/2022 Issued: 07/09/2022</p>	<p>Difference from average sea surface temperature forecast for October to December 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from: Tropical Marine Hydrodynamics (TMOD) - Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 11. Available online at http://www.marine.gov.au</p> <p>Model run: 10/09/2022 Issued: 12/09/2022</p>
<p>Monthly sea level (Image 7):</p>	<p>Seasonal sea level (Image 8):</p>
<p>Difference from average sea surface height forecast for October 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/08/2022 Issued: 06/09/2022</p>	<p>Difference from average sea surface height forecast for October 2022 to December 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/08/2022 Issued: 06/09/2022</p>
<p>4-week Coral Bleaching (Image 9):</p>	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 02 October 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac CORP</p> <p>NOAA Coral Reef Watch</p>	<p>Samoa 4 Weeks Coral Bleaching Outlook: 02 October 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac CORP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: August 2022/June to August 2022 statement

Normal rainfall was recorded at the Apia and Faleolo stations, while Afiamalu and Nafanua registered *above normal rainfall* in August 2022.

Normal rainfall was recorded at the Apia, Nafanua and Faleolo stations, while Afiamalu registered *below normal rainfall* for June to August.

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2022

Monthly /Seasonal rainfall and temperature Outlook statements

The October outlook for Samoa shows *near-normal* rainfall is the most likely outcome for much of Samoa, apart from the far eastern side of Upolu where the outlook offers little guidance. The October to December outlook for some of the western part of Upolu and the eastern part of Savaii offers little guidance, but for the eastern side of Upolu and the western part of Savaii, rainfall is likely to be *near-normal*. *Above normal* rainfall is projected for the northeastern part of Savaii.

Maximum and minimum temperatures averaged over October and October to December are very likely to be *above normal* across Samoa.

Part 2: Recent Ocean summary statement

Monthly and last three months: August/June to August 2022

For August and the past three months, June to August, majority of Samoa experienced normal SSTs, with utmost 1 °C above average for southern waters.

Samoa experienced above normal sea level anomaly for August with utmost 150mm above average.

Coral bleaching alert status is 'No Stress' for Samoa.

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2022

Ocean Variable statement

The monthly and seasonal sea surface temperature outlook for Samoa are likely to be near normal for both October and October to December, with SST ranges of -0.4 to 0.8 °C.

The monthly and seasonal sea surface height outlook for Samoa are likely to be normal ranging within -30mm to 30mm.

The outlook for Samoa shows no thermal stress for the next four weeks.

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TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: August 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	30th	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
EAR Watch	30th	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 Outlook	30th	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
Total			65	27	38

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