

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 178

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2022	May-2022	Jun-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2022)	182.5	167.5	121.1	97.1	159.3	128.4	71/133
Afiamalu (1903-2022)	182.4	254.9	124.0	141.8	257.6	171.9	18/69
Nafanua (1965-2022)	205.0	208.2	88.9	107.1	153.3	122.5	11/51
Faleolo (1956-2022)	132.7	118.6	86.6	58.3	115.3	78.4	32/61

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2022)	471.1	Below normal	473.2	666.6	567.2	51/133
Afiamalu (1903-2022)	561.3	Below normal	801.5	990.0	885.1	10/68
Nafanua (1965-2022)	502.1	Below normal	540.4	736.4	679.2	14/50
Faleolo (1956-2022)	337.9	Below normal	343.9	465.6	406.9	19/59

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

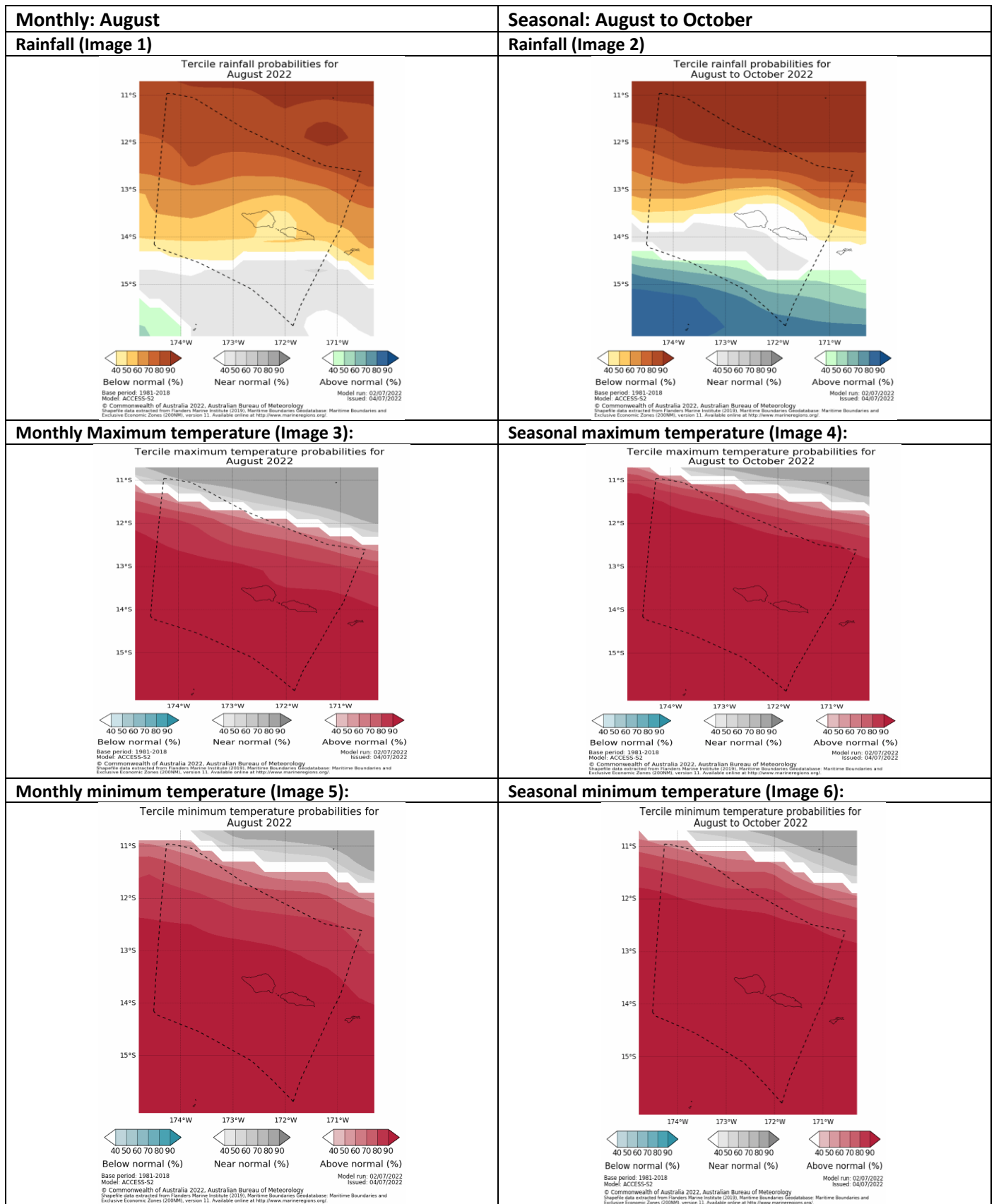
Moderate $5 \leq X < 10$

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 August and August to October 2022



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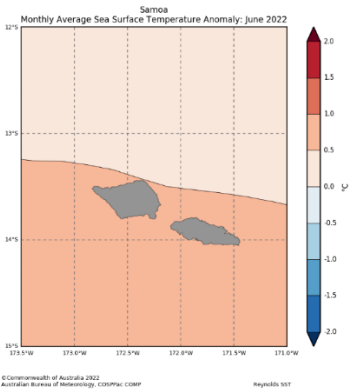
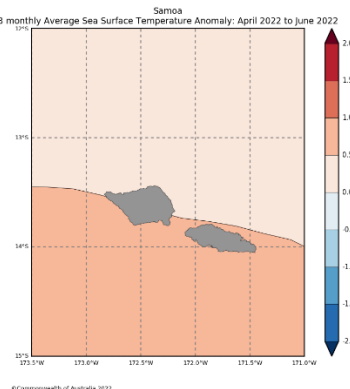
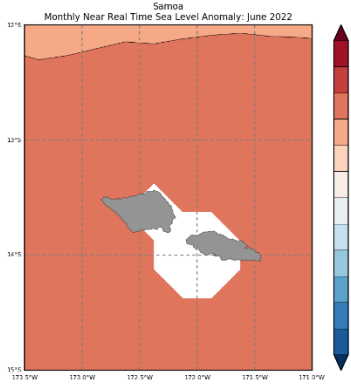
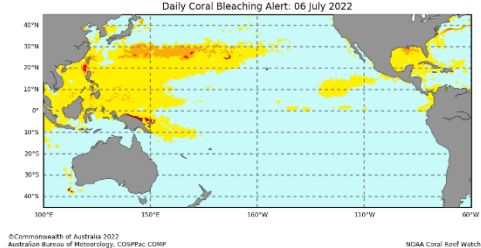
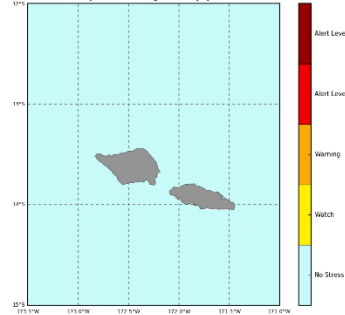
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Part 2: Recent Ocean observations

Monthly: June 2022

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

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

<p>Monthly: August</p>	<p>Seasonal: August to October</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 August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from: Forecasting Marine Conditions (FMC) - Maritime Boundaries, Climatological, Maritime Boundaries and Exclusive Economic Zones (2008M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 16/07/2022 Issued: 16/07/2022</p>	<p>Difference from average sea surface temperature forecast for August to October 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Diagnostic data extracted from: Forecasting Marine Conditions (FMC) - Maritime Boundaries, Climatological, Maritime Boundaries and Exclusive Economic Zones (2008M), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 16/07/2022 Issued: 16/07/2022</p>
<p>Monthly sea level (Image 7):</p>	<p>Seasonal sea level (Image 8):</p>
<p>Difference from average sea surface height forecast for August 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/06/2022 Issued: 12/07/2022</p>	<p>Difference from average sea surface height forecast for August 2022 to October 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/06/2022 Issued: 12/07/2022</p>
<p>4-week Coral Bleaching (Image 9):</p>	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 31 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, CSIRO</p> <p>NOAA Coral Reef Watch</p>	<p>Samoa 4 Weeks Coral Bleaching Outlook: 31 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, CSIRO</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: June 2022/April to June 2022 statement (Highly significant changes)

Normal rainfall was recorded at Apia and Faleolo stations while Afiamalu and Nafanua registered below normal rainfall in May 2022.

Below normal rainfall was recorded at all stations in the past three months across Samoa.

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

Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

The outlook for Samoa for the period of August is likely to be *below normal*. The seasonal outlook for Samoa for the period offers little guidance as the chances of *above normal*, *normal* and *below normal* are similar

The monthly and seasonal temperature outlook for Samoa is very likely to be *above normal*.

Part 2: Recent Ocean summary statement

Monthly and last three months: June/April to June 2022 (Highly significant changes)

For June and past three months, April to June, Samoa experienced above normal SSTs of 0.5°C.

The sea level anomaly for June revealed above normal sea level differences of 150mm to 200mm.

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

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

Ocean Variable statement (Highly significant changes)

The monthly and seasonal outlook for Samoa shows sea surface temperatures are likely to be normal for both August and August to October.

The monthly and seasonal outlook for Samoa shows sea surface heights are likely to be above normal ranging from 30mm to 60mm.

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: June 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
EAR Watch	17th	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	17th	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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