

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 188

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Feb - 2023	Mar-2023	Apr-2023				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2023)	325.6	270.2	170.3	182.5	270.3	220.7	42/134
Afiamalu (1903-2023)	608.0	721.0	365.9	279.9	388.9	331.3	43/70
Nafanua (1965-2023)	381.0	392.0	215.8	180.6	306.1	238.9	25/53
Faleolo (1956-2023)	292.0	269.8	129.9	135.8	190.7	158.1	18/62

TABLE 2: Three-month Total Rainfall for February to April 2023

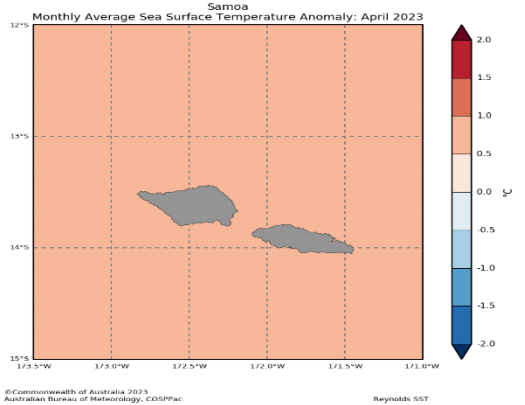
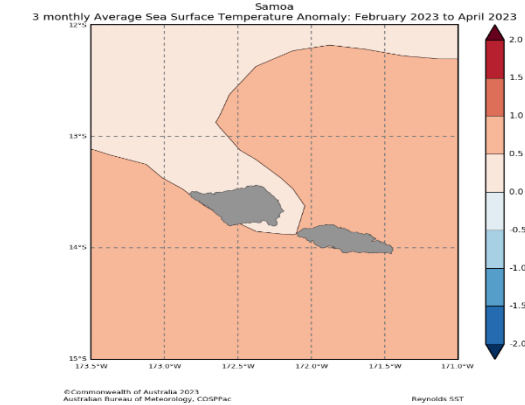
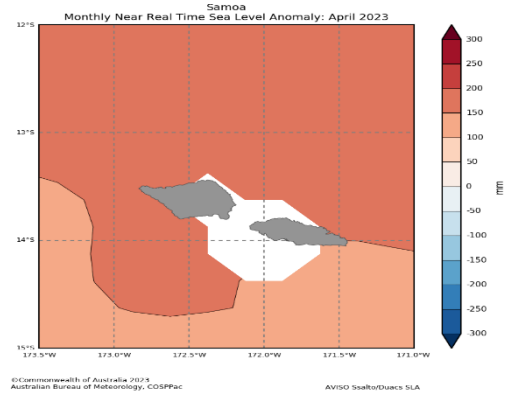
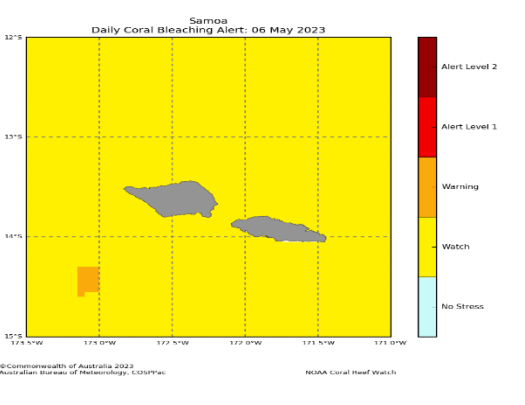
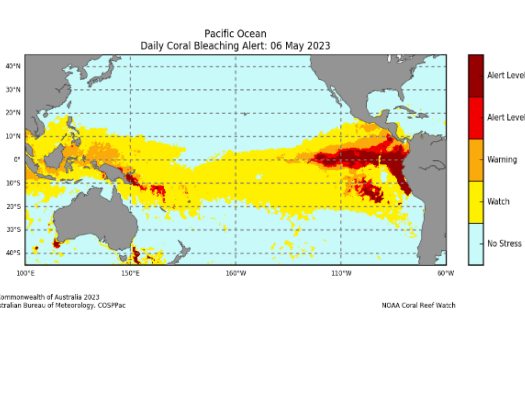
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2023)	766.1	Below normal	823.4	1043.4	935.0	32/134
Afiamalu (1903-2023)	1694.9	Above normal	1313.4	1585.2	1454.6	52/68
Nafanua (1965-2023)	988.8	Normal	928.9	1171.8	1079.4	21/51
Faleolo (1956-2023)	691.7	Normal	592.3	712.9	636.4	39/62

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2023

Monthly: June	Seasonal: June to August
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.maritimerregions.org/</p>

Part 2: Recent Ocean Observation

Monthly/Three months: April and February to April 2023

<p>Monthly: April</p>	<p>Last three months: February to April 2023:</p>
<p>Sea Surface Temperature (Image 1):</p>  <p>Monthly Average Sea Surface Temperature Anomaly: April 2023</p> <p>Samoa</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>3 monthly Average Sea Surface Temperature Anomaly: February 2023 to April 2023</p> <p>Samoa</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Monthly Near Real Time Sea Level Anomaly: April 2023</p> <p>Samoa</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO SeaLar/Ouacs SLA</p>	<p></p>
<p>Daily coral bleaching alert (Image 3):</p>  <p>Daily Coral Bleaching Alert: 06 May 2023</p> <p>Samoa</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	 <p>Pacific Ocean Daily Coral Bleaching Alert: 06 May 2023</p> <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2023

Monthly: June	Seasonal: June to August
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.marineregions.org/</p> <p>Model run: 13/05/2023 Issued: 16/05/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.marineregions.org/</p> <p>Model run: 13/05/2023 Issued: 16/05/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for June 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.marineregions.org/</p> <p>Model run: 13/05/2023 Issued: 16/05/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for June to August 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology 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.marineregions.org/</p> <p>Model run: 13/05/2023 Issued: 16/05/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Samoa 4 Weeks Coral Bleaching Outlook: 28 May 2023</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>	<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 28 May 2023</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: April 2023/February to April 2023 statement

Normal rainfall was recorded at Afiamalu and Nafanua in April, while Faleolo and Apia received *below normal* rainfall.

February to April rainfall was *above normal* at Afiamalu, *near-normal* at Nafanua and Faleolo, and *below normal* at Apia.

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2023

Monthly /Seasonal rainfall and temperature Outlook statements

Samoa's June rainfall is likely to be below normal, and for June to August it is very likely to be below normal.

Maximum and minimum temperatures during June are very likely to be above normal across the country, as they also are averaged over June to August.

Part 2: Recent Ocean summary statement

Monthly and last three months: April 2023/February to April 2023

April ocean temperatures around Samoa's main island were 0.5 to 1.0°C above normal.

Averaged over February to April, ocean temperatures around Samoa were 0.5 to 1.0°C above normal.

April sea levels around Samoa were 100mm to 200mm above normal.

There is a coral bleaching watch over Samoa.

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2023

Ocean Variable statement

June ocean temperatures around Samoa are predicted to be 0.4°C to 0.8°C above normal.

Averaged over June to August, ocean temperatures around Samoa are predicted to be 0.4°C to 0.8°C above normal.

June sea levels around Samoa are likely to be near normal with exception of southern Samoa predicted to be 30mm to 60mm above normal.

Averaged over June to August, sea levels around Samoa are predicted to be near normal.

There is a coral bleaching *watch* for Samoa for the next four weeks.

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

Product	Date: April 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
EAR Watch and EAR workshop	24 th – 28 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	31 st	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	