

Country: Samoa

Part 1: Recent climate

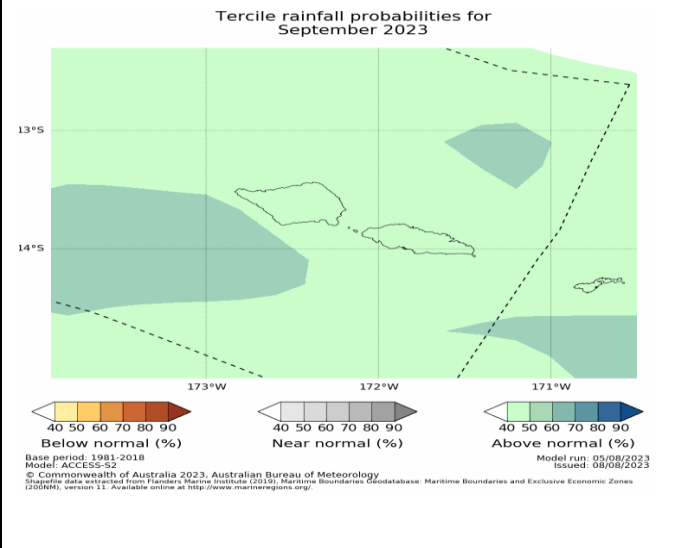
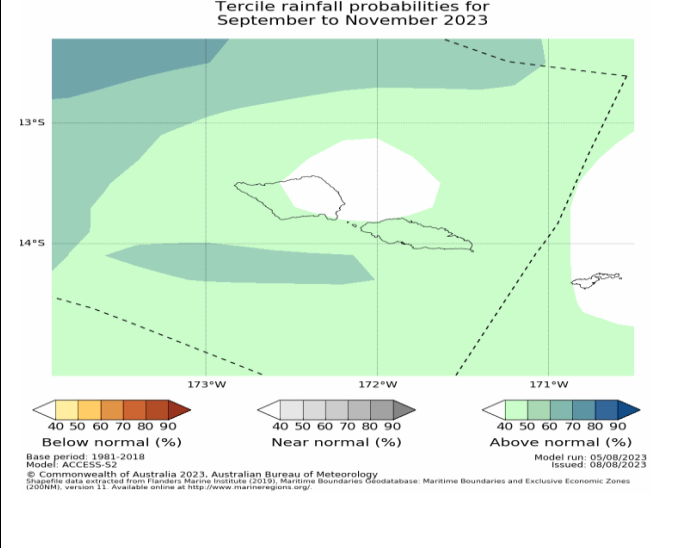
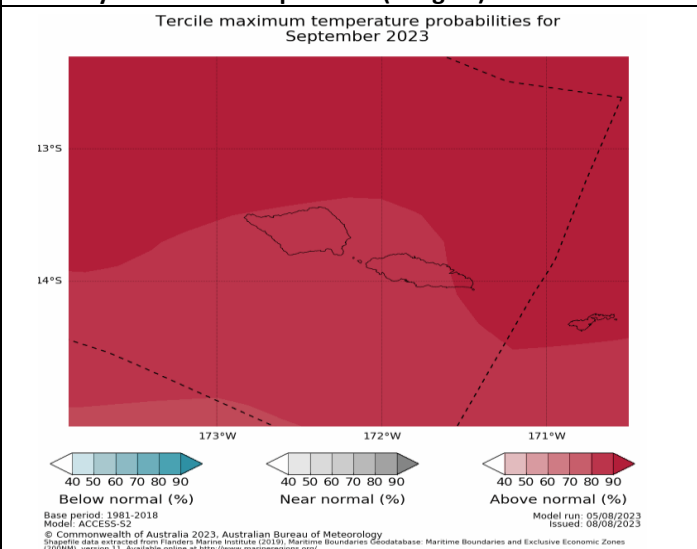
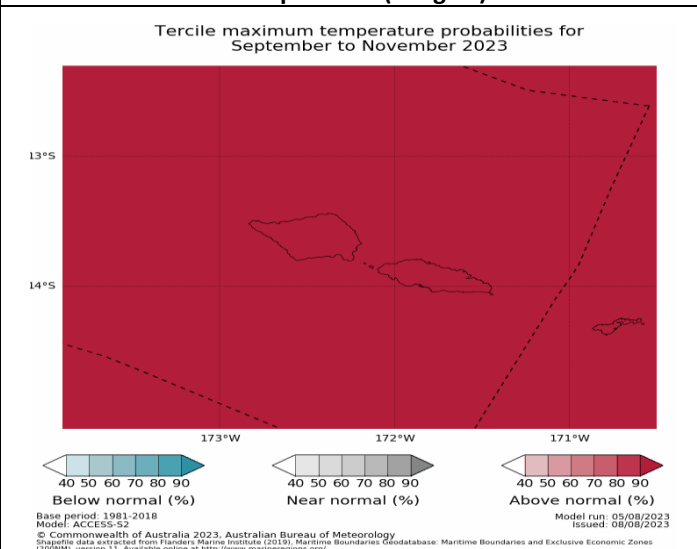
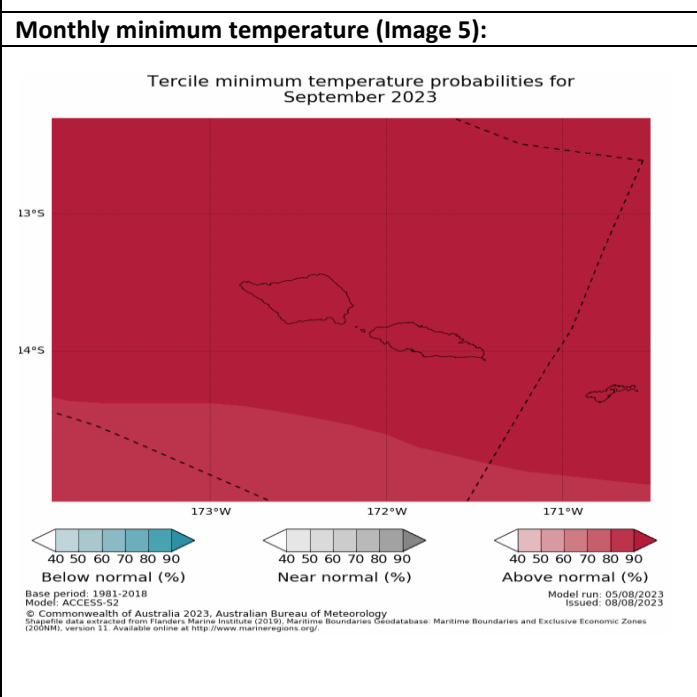
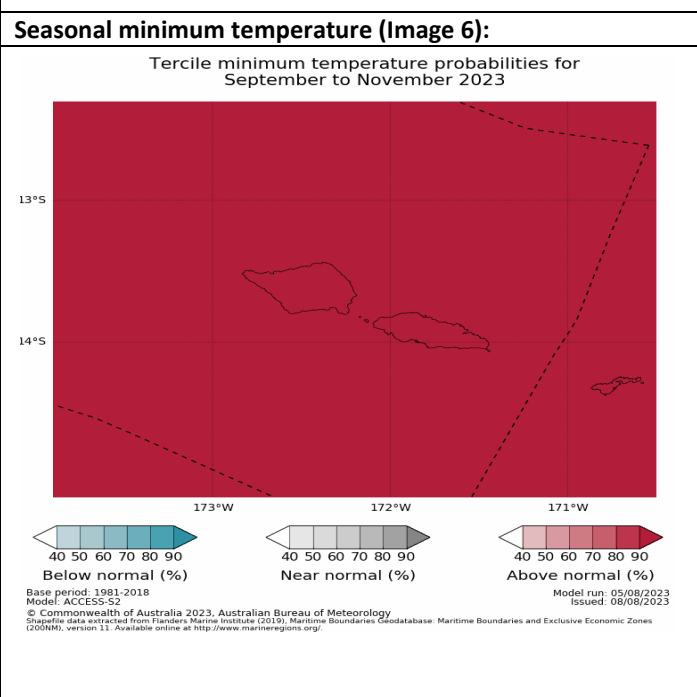
TABLE 1: Monthly Rainfall

Station (include data period)	May-2023	Jun-2023	Jul-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
	Apia (1890-2023)	258.1	131.4	209.3	74.0	130.0	
Afiamalu (1903-2023)	507.6	151.3	268.8	142.2	260.6	207.6	49/72
Nafanua (1965-2023)	376.7	157.2	219.2	90.6	168.6	126.4	42/52
Faleolo (1956-2023)	381.3	111.0	114.0	53.2	103.4	75.0	48/63

TABLE 2: Three-month Total Rainfall for May to July 2023

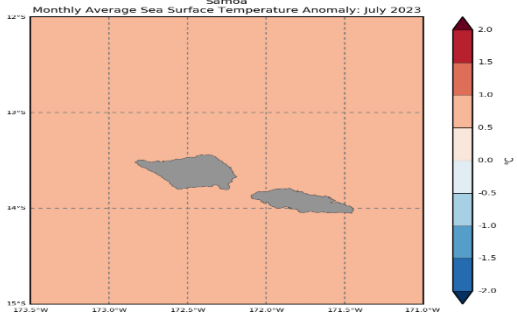
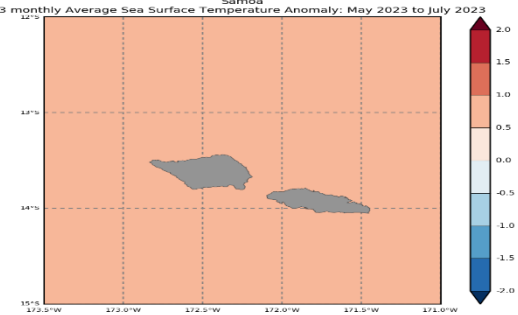
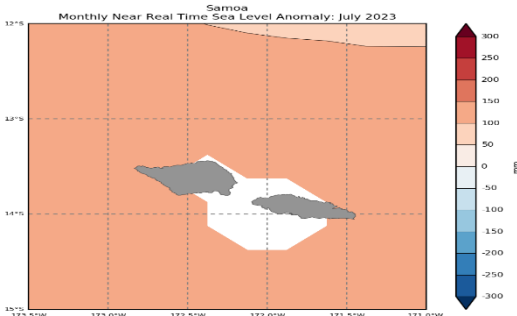
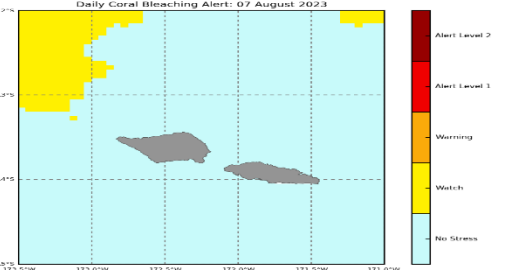
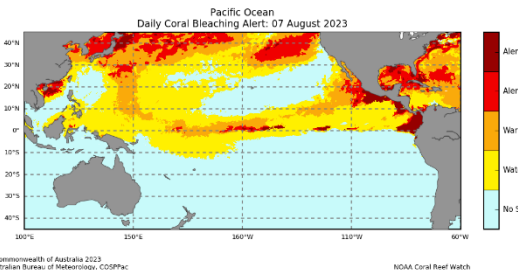
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2023)	598.8	Above normal	337.0	493.9	412.4	113/134
Afiamalu (1903-2023)	927.7	Above normal	625.1	855.6	738.2	54/69
Nafanua (1965-2023)	753.1	Above normal	438.8	634.1	523.6	44/51
Faleolo (1956-2023)	606.3	Above normal	274.6	391.5	311.4	60/61

Part 1i. Monthly and Seasonal Outlooks for September and September to November 2023

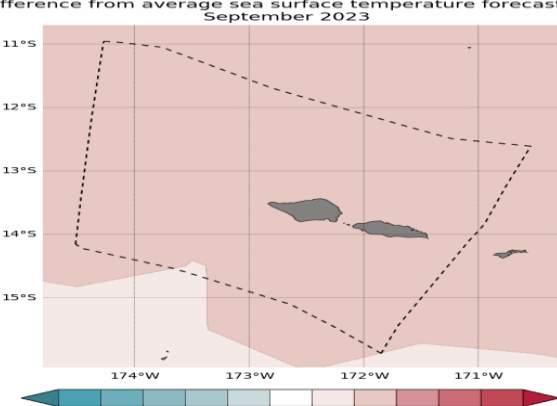
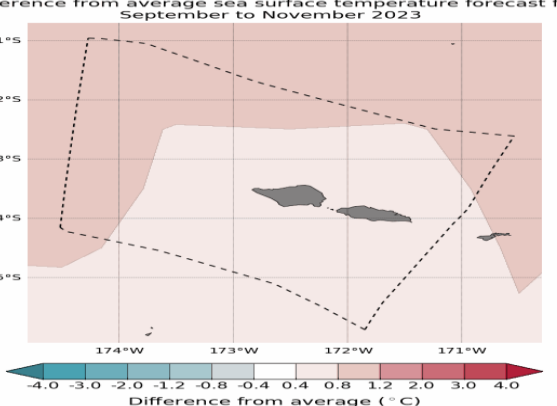
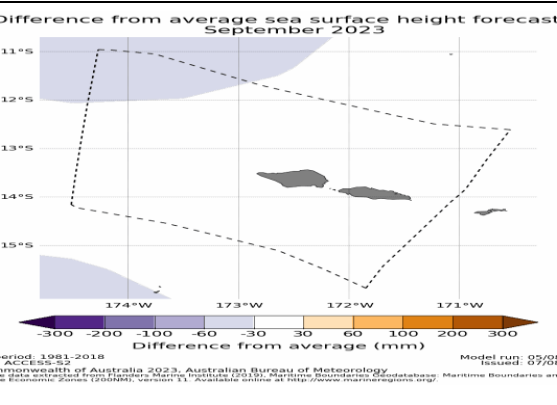
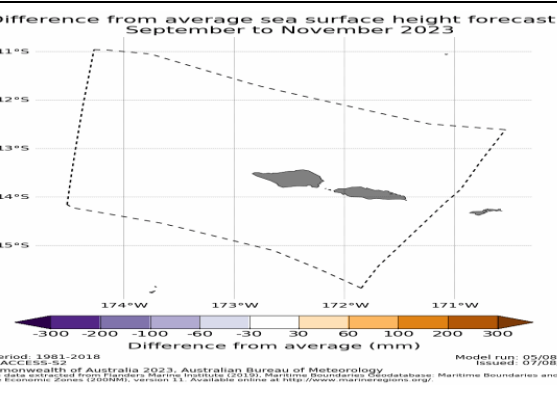
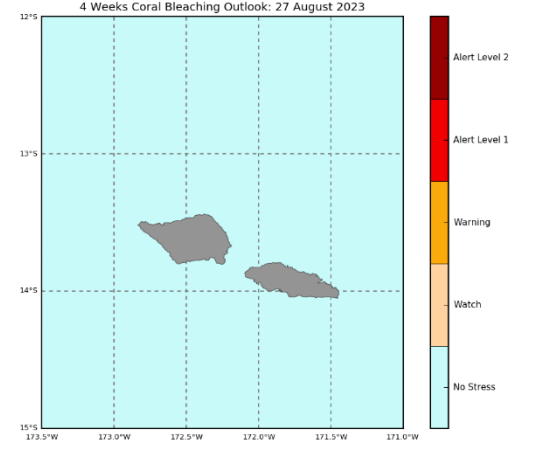
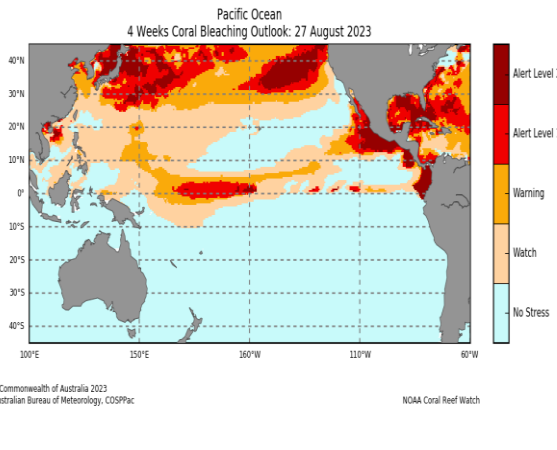
Monthly: September	Seasonal: September to November
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for September 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>	<p>Tercile rainfall probabilities for September to November 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for September 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>	<p>Tercile maximum temperature probabilities for September to November 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for September 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>	<p>Tercile minimum temperature probabilities for September to November 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 <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>

Part 2: Recent Ocean Observation

Monthly/Three months: May and May to July 2023

<div>Monthly: July</div> <div>Sea Surface Temperature (Image 1):</div> <div><p>Samoa</p><p>Monthly Average Sea Surface Temperature Anomaly: July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<div>Last three months: May to July 2023:</div> <div>Sea Surface Temperature (Image 4):</div> <div><p>Samoa</p><p>3 monthly Average Sea Surface Temperature Anomaly: May 2023 to July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>
<div>Sea level (Image 2):</div> <div><p>Samoa</p><p>Monthly Near Real Time Sea Level Anomaly: July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaLands SLA</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Samoa</p><p>Daily Coral Bleaching Alert: 07 August 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 07 August 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>

Part 2i. Monthly and Seasonal Outlooks for September and September to November 2023

Monthly: September	Seasonal: September to November
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for September 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Institute (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/08/2023 Issued: 07/08/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for September to November 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Institute (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/08/2023 Issued: 07/08/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for September 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Institute (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/08/2023 Issued: 07/08/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for September to November 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Institute (2015), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> <p>Model run: 05/08/2023 Issued: 07/08/2023</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Samoa</p> <p>4 Weeks Coral Bleaching Outlook: 27 August 2023</p>  <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Pacific Ocean</p> <p>4 Weeks Coral Bleaching Outlook: 27 August 2023</p>  <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## **Summary Statement**

### **Monthly and last three months: July 2023/May to July 2023 statement**

*Above normal* rainfall was recorded at all stations for July 2023 and for the May to July period.

Faleolo posted its second wettest May to July on record.

## **Part 1i. Monthly and Seasonal Outlooks for September and September to November 2023**

### **Monthly /Seasonal rainfall and temperature Outlook statements**

The rainfall for September is likely to be above normal across Samoa.

The rainfall for September to November is likely to be above normal over the western part of Savaii and the whole of Upolu, while the outlook for the eastern part of Savaii offers little guidance.

Maximum and minimum temperatures during September and averaged over September to November are very likely to be above normal across the country.

## **Part 2: Recent Ocean summary statement**

### **Monthly and last three months: July 2023/May to July 2023**

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

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

July sea levels around Samoa were 100mm to 150mm above normal.

The coral bleaching alert for Samoa shows no thermal stress.

## **Part 2i. Monthly and Seasonal Outlooks for September and September to November 2023**

### **Ocean Variable statement**

September ocean temperatures around Samoa are predicted to be 0.8°C to 1.2°C above normal.

Averaged over September to November, ocean temperatures around Samoa are predicted to be 0.4°C to 1.2°C above normal.

September sea levels around Samoa are predicted to be near normal.

Averaged over September to November, sea levels around Samoa are predicted to be near normal.

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

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

Product	Date: July 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
EAR Watch	10 <sup>th</sup>	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	5 <sup>th</sup>	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	
<b>Total</b>			<b>65</b>	<b>27</b>	<b>38</b>	