

Country: Samoa

Part 1: Recent climate

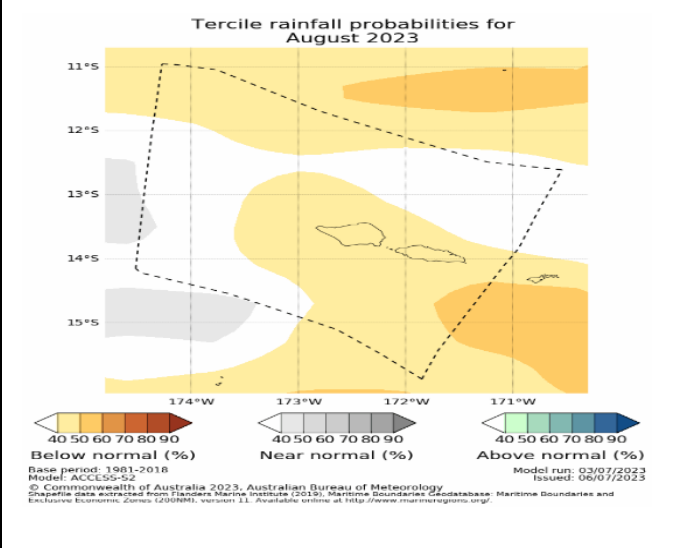
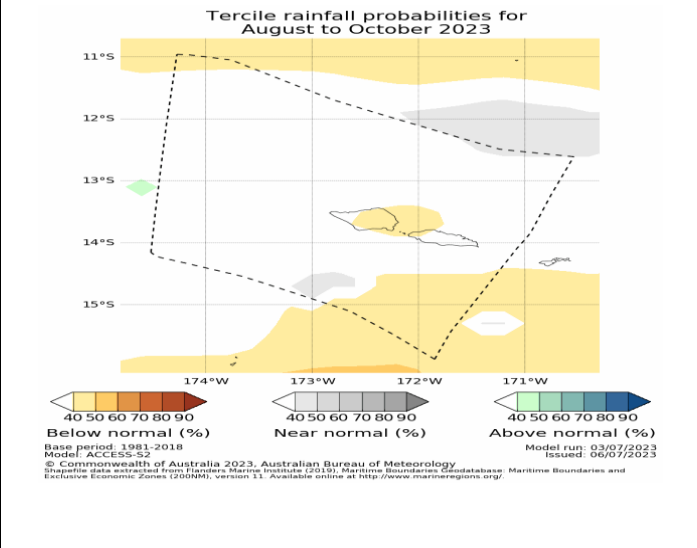
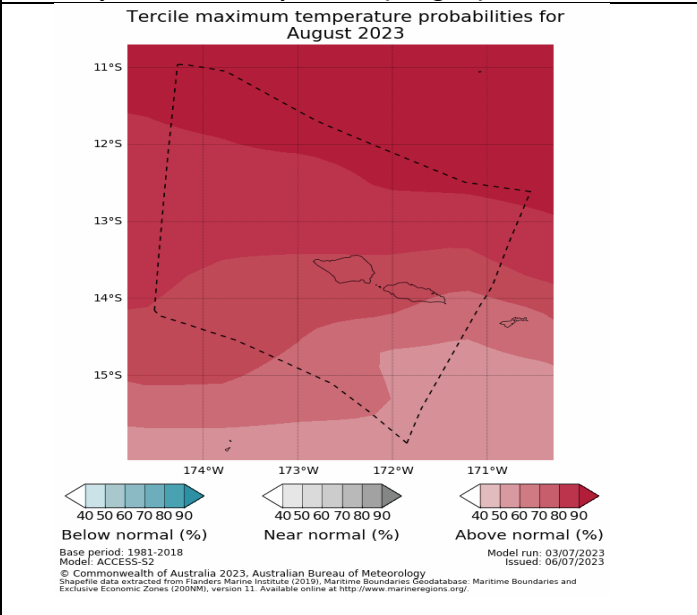
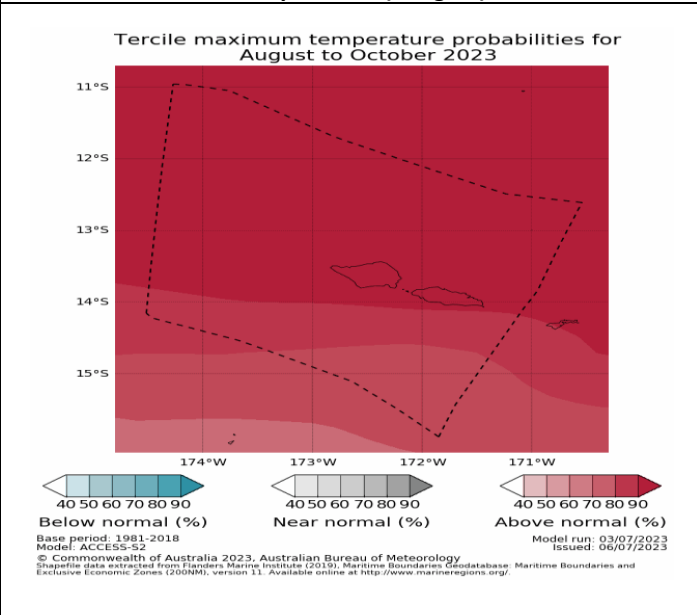
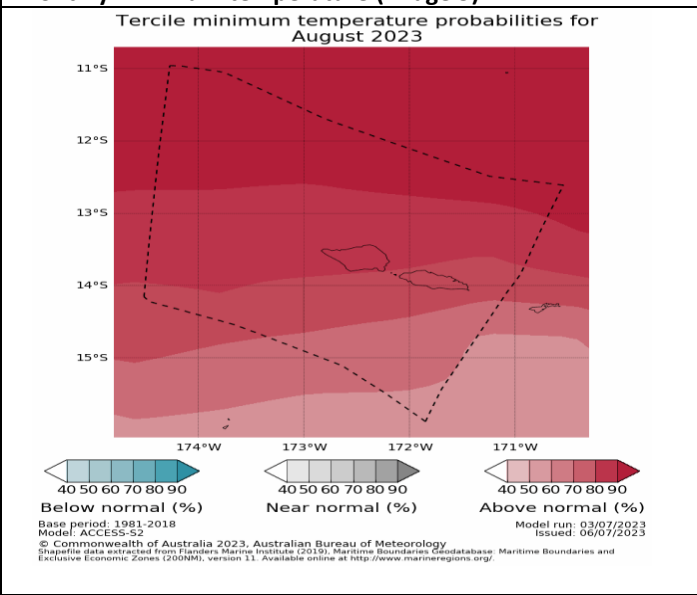
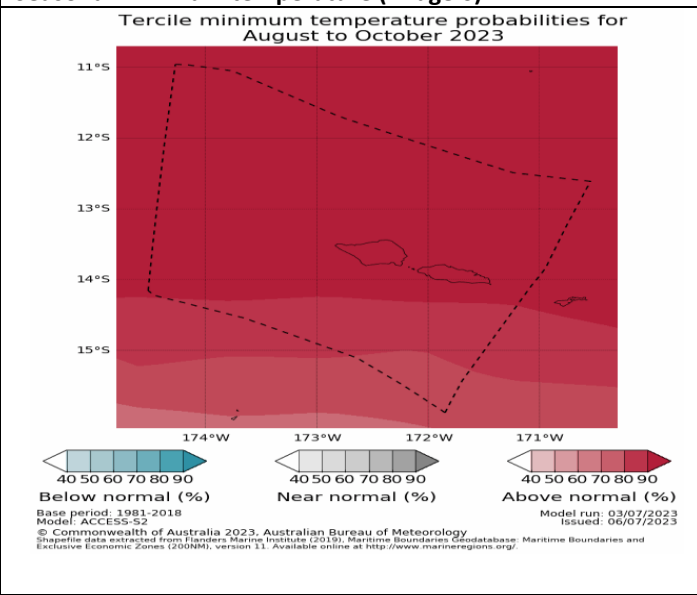
TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2023	May-2023	Jun-2023				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2023)	170.3	258.1	131.4	88.1	147.3	119.0	79/134
Afiamalu (1903-2023)	365.9	507.6	151.3	136.0	247.8	168.9	27/70
Nafanua (1965-2023)	215.8	376.7	157.2	103.5	152.4	120.2	36/52
Faleolo (1956-2023)	129.9	381.3	111.0	58.4	115.1	80.0	41/62

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

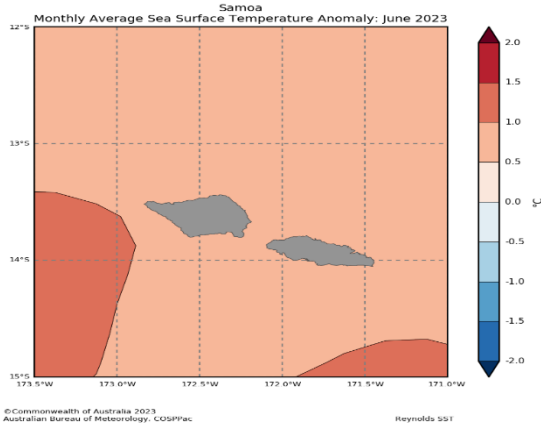
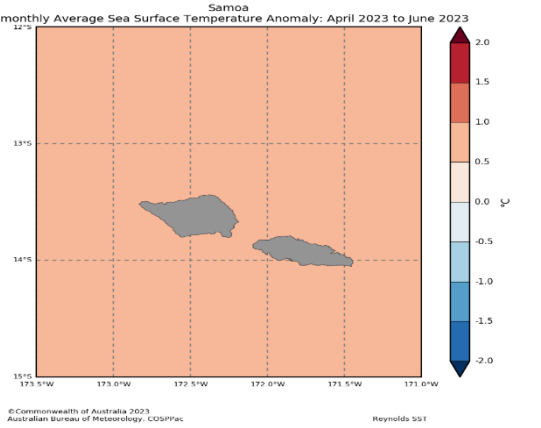
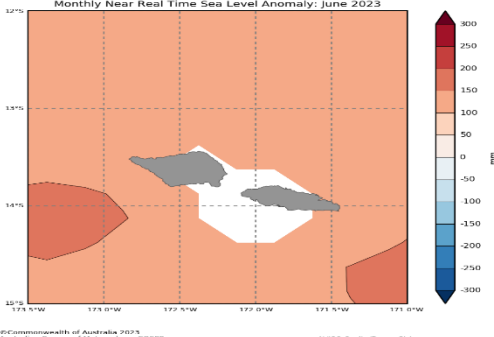
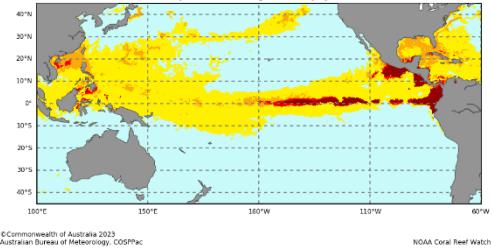
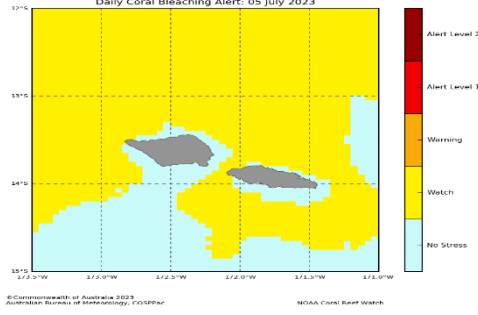
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2023)	559.8	Normal	457.0	651.3	545.0	70/134
Afiamalu (1903-2023)	1024.8	Above normal	756.2	973.7	869.7	51/69
Nafanua (1965-2023)	749.7	Above normal	524.3	735.1	676.0	35/51
Faleolo (1956-2023)	622.2	Above normal	343.4	463.8	400.1	54/60

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

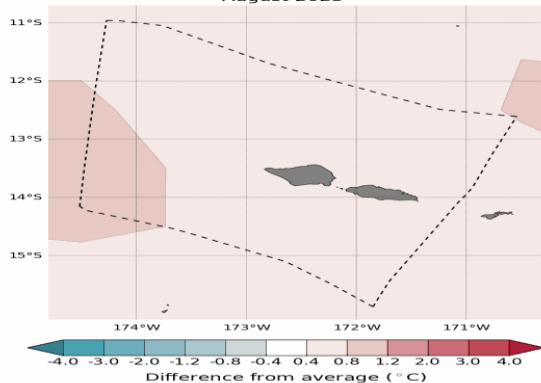
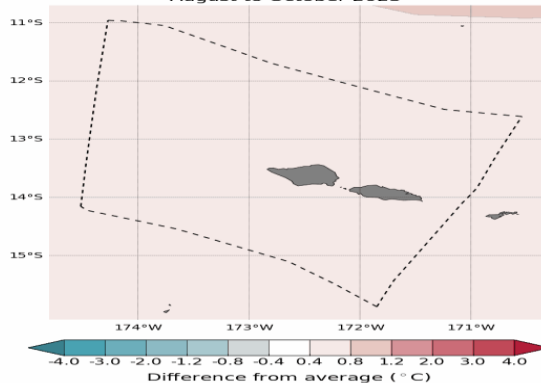
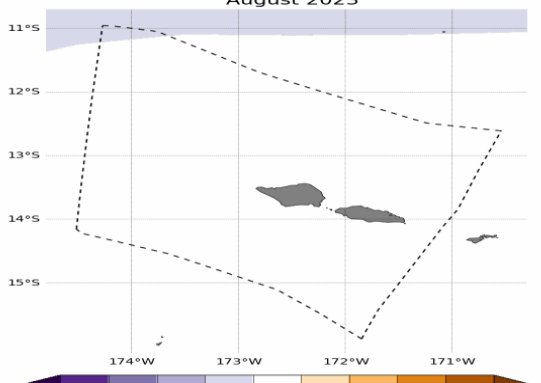
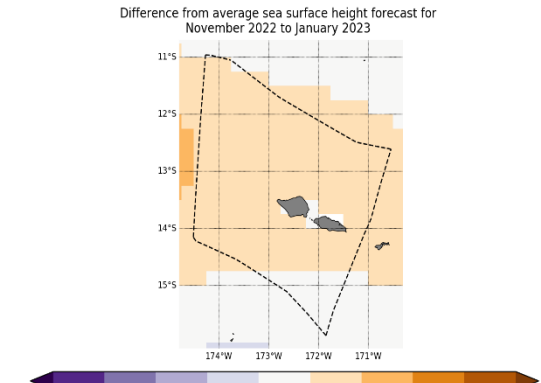
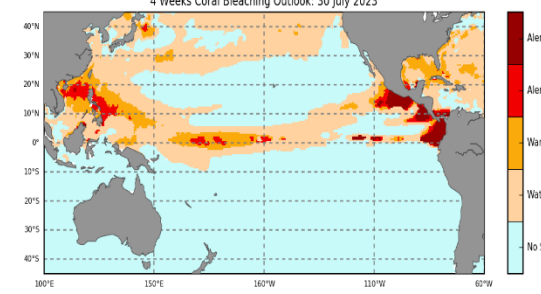
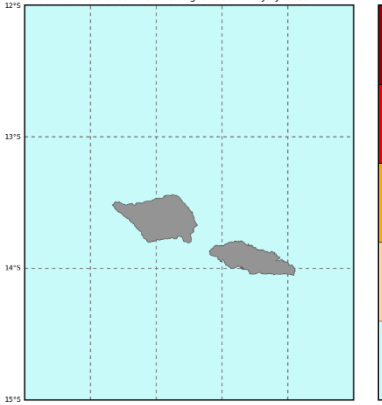
Monthly: August	Seasonal: August to October
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for August 2023</p>  <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute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

Part 2: Recent Ocean Observation

Monthly/Three months: April and April to June 2023

<div>Monthly: June</div> <div>Sea Surface Temperature (Image 1):</div> <div><p>Monthly Average Sea Surface Temperature Anomaly: June 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>	<div>Last three months: April to June 2023:</div> <div>Sea Surface Temperature (Image 4):</div> <div><p>3 monthly Average Sea Surface Temperature Anomaly: April 2023 to June 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>Monthly Near Real Time Sea Level Anomaly: June 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>AVISO Scito/Duacs SLA</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Pacific Ocean Daily Coral Bleaching Alert: 05 July 2023</p><p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Samoa Daily Coral Bleaching Alert: 05 July 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 August and August to October 2023

Monthly: August	Seasonal: August to October
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for August 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 (2019). Maritime Boundaries (database: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimergions.org/">http://www.maritimergions.org/</a></p> <p>Model run: 03/07/2023 Issued: 05/07/2023</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for August to October 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 (2019). Maritime Boundaries (database: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimergions.org/">http://www.maritimergions.org/</a></p> <p>Model run: 03/07/2023 Issued: 05/07/2023</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for August 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 (2019). Maritime Boundaries (database: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimergions.org/">http://www.maritimergions.org/</a></p> <p>Model run: 03/07/2023 Issued: 05/07/2023</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for November 2022 to January 2023</p>  <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/09/2022 Issued: 05/10/2022</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 30 July 2023</p>  <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Samoa 4 Weeks Coral Bleaching Outlook: 30 July 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: June 2023/April to June 2023 statement

*Above normal* rainfall was recorded at Nafanua while Apia, Afiamalu and Faleolo received *normal* rainfall for June 2023.

Afiamalu, Nafanua and Faleolo experienced *above normal* rainfall over the past three months, while Apia received *normal rainfall* conditions. Faleolo recorded its 7<sup>th</sup> wettest April to June on record.

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

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for August is likely to be below normal.

The rainfall for August to October is likely to be below normal over the eastern part of Savaii and the far western part of Upolu while the outlook for rest of Samoa offers little guidance.

Maximum and minimum temperatures during August are very likely to be above normal

Maximum and minimum temperatures averaged over August to October are very likely to be above normal

## Part 2: Recent Ocean summary statement

### Monthly and last three months: June 2023/April to June 2023

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

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

June 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 August and August to October 2023

### Ocean Variable statement

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

Averaged over August to October, ocean temperatures around Samoa are predicted to be 0.8°C to 1.2°C above normal.

August sea levels around Samoa are predicted to be normal.

Averaged over August to October, sea levels around Samoa are predicted to be 30mm to 60mm above normal.

The 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: June 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	
TK workshop	27 <sup>th</sup> , 28 <sup>th</sup> 30 <sup>th</sup>	Samoa Met	25	20	5	
Total			<b>90</b>	<b>47</b>	<b>43</b>	