

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 183

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Sep-2022	Oct-2022	Nov-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2022)	110.5	340.8	192.3	183.6	298.4	236.5	47/133
Afiamalu (1903-2022)	111.2	398.8	314.9	304.8	464.4	372.4	26/70
Nafanua (1965-2022)	118.6	298.7	218.5	211.0	316.1	269.4	19/52
Faleolo (1956-2022)	41.1	190.5	197.4	155.9	217.0	176.8	37/61

TABLE 2: Three-month Total Rainfall for September to November 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2022)	643.6	Normal	491.9	685.0	603.4	82/133
Afiamalu (1903-2022)	824.9	Normal	796.7	1093.5	914.4	31/69
Nafanua (1965-2022)	635.8	Normal	590.0	761.7	672.4	22/50
Faleolo (1956-2022)	429.0	Normal	381.4	518.7	459.4	28/59

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

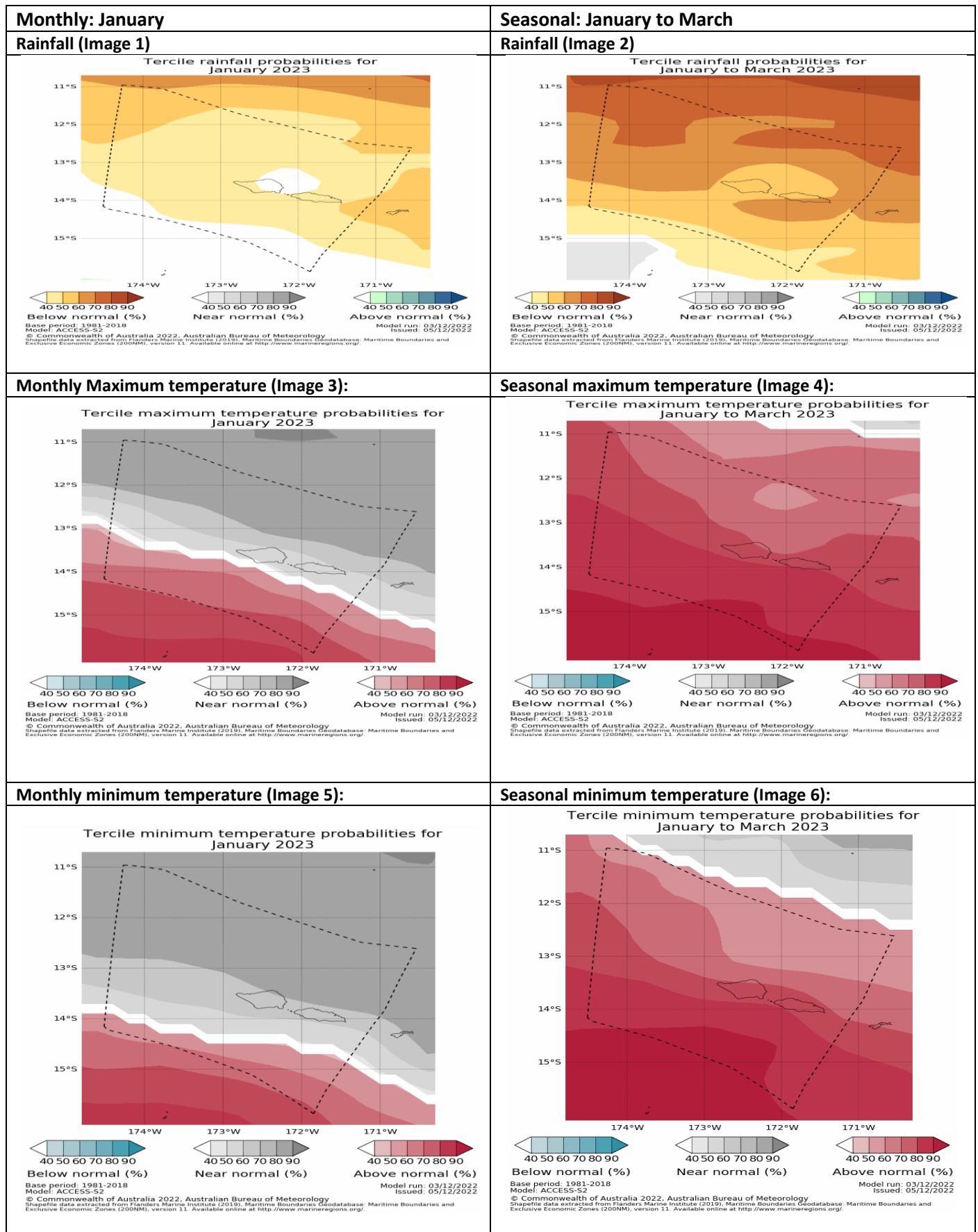
Moderate $5 \leq X < 10$

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 January and January to March 2023



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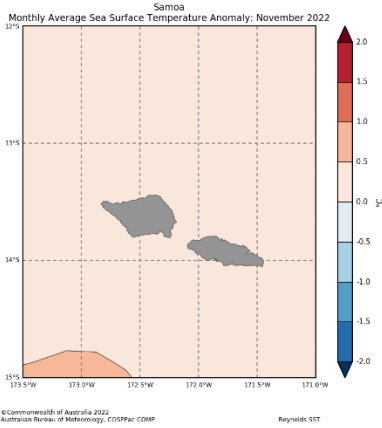
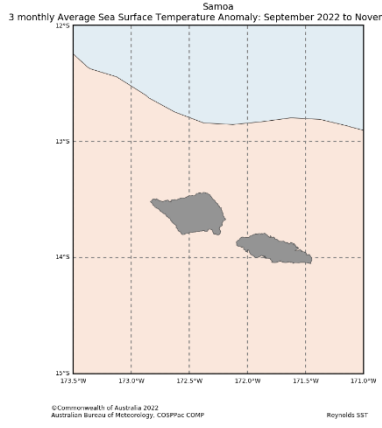
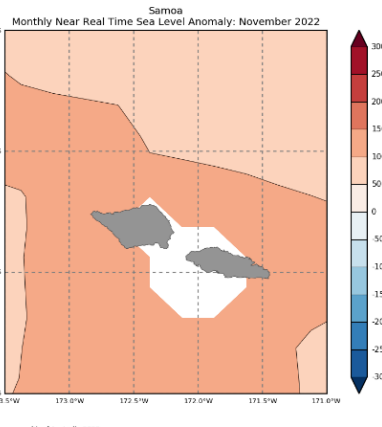
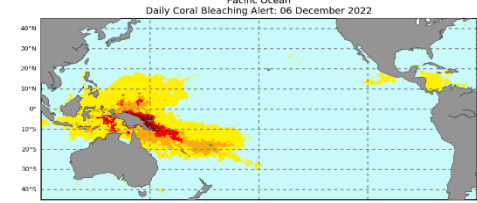
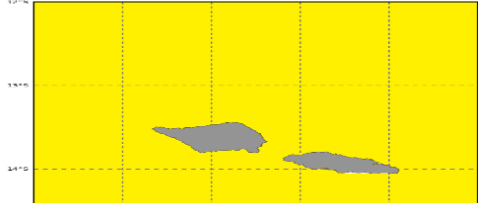
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Part 2: Recent Ocean Observation

Monthly/Three months: November 2022 and September to November 2022

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

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Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly: January	Seasonal: January to March
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<div><p>Difference from average sea surface temperature forecast for January 2023</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Disaggregates data extracted from SeaWiFS Marine Institute (2013). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2006), version 1.1. Available online at http://www.maritime.gov.au</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>	<div><p>Difference from average sea surface temperature forecast for January to March 2023</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Disaggregates data extracted from SeaWiFS Marine Institute (2013). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2006), version 1.1. Available online at http://www.maritime.gov.au</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<div><p>Difference from average sea surface height forecast for January 2023</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Disaggregates data extracted from SeaWiFS Marine Institute (2013). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2006), version 1.1. Available online at http://www.maritime.gov.au</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>	<div><p>Difference from average sea surface height forecast for January to March 2023</p><p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Disaggregates data extracted from SeaWiFS Marine Institute (2013). Maritime Boundaries Database: Maritime Boundaries and Exclusive Economic Zones (2006), version 1.1. Available online at http://www.maritime.gov.au</p><p>Model run: 10/12/2022 Issued: 12/12/2022</p></div>
4-week Coral Bleaching (Image 9):	
<div><p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 01 January 2023</p><p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Samoa 4 Weeks Coral Bleaching Outlook: 01 January 2023</p><p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>NOAA Coral Reef Watch</p></div>

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Summary Statement

Monthly and last three months: November 2022/September to November 2022 statement

The monthly and three monthly rainfall for all stations throughout Samoa was *near-normal*.

Part 1i. Monthly and Seasonal Outlooks for January and January to March 2023

Monthly /Seasonal rainfall and temperature Outlook statements

January rainfall over Samoa is likely to be *below* normal, apart from the northeastern part of Savaii where the outlook January offers little guidance. Rainfall over January to March is likely to be *below normal*.

Minimum and maximum temperatures during January are likely to be *near-normal* throughout Samoa.

Minimum and maximum temperatures averaged over January to March are likely to be *above normal* throughout Samoa.

Part 2: Recent Ocean summary statement

Monthly and last three months: November/September to November 2022

For November and the past three months, September to November, ocean temperatures around Samoa were near-normal, with anomalies between 0°C and +0.5°C.

November sea levels around Samoa were 100mm to 150mm *above normal*. Coral bleaching alert on 'Watch' status for Samoa.

Part 2i. Monthly and Seasonal Outlooks for January and January to March 2023

Ocean Variable statement

The monthly and seasonal sea surface temperature outlook forecasts near normal for the month of January, and the January to March period.

The monthly and seasonal sea level outlook also forecasts near normal sea level height differences.

Coral bleaching outlook forecasts 'Warning' status for Samoa for the next four weeks.

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

Product	Date: November 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Seasonal Climate Outlook	25th	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	25th	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	25th	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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