

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 173

Country:

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2021	Dec-2021	Jan-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2022)	144.4	395.8	310.3	342.4	488.2	389.1	36/133
Afiamalu (1903-2022)	469.3	522.7	842.2	577.0	860.0	699.0	48/69
Nafanua (1965-2022)	237.9	477.6	446.1	354.7	710.7	447.5	24/48
Faleolo (1956-2022)	180.6	286.6	237.9	214.6	358.1	288.3	26/62

TABLE 2: Three-month Total Rainfall for November 2021 to January 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2022)	850.5	Below normal	950.1	1214.1	1085.4	34/131
Afiamalu (1903-2022)	1834.2	Normal	1542.7	2074.9	1832.4	35/67
Nafanua (1965-2022)	1161.6	Above normal	1091.3	1091.3	1337.6	18/45
Faleolo (1956-2022)	705.1	Normal	704.3	902.3	800.2	21/60

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

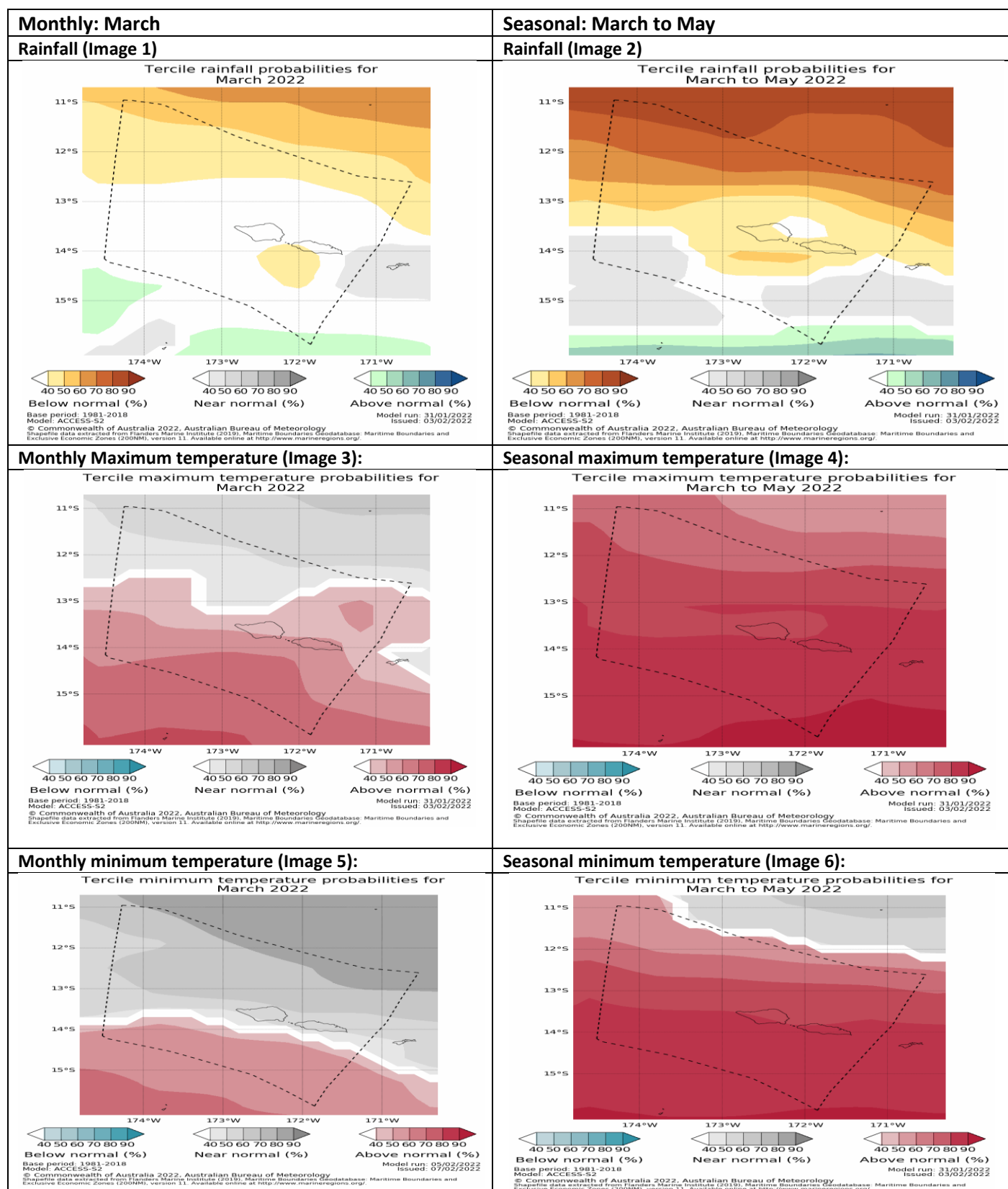
Moderate $5 \leq X < 10$

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 March and March to May 2022



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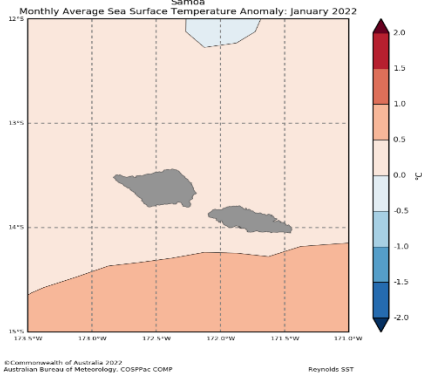
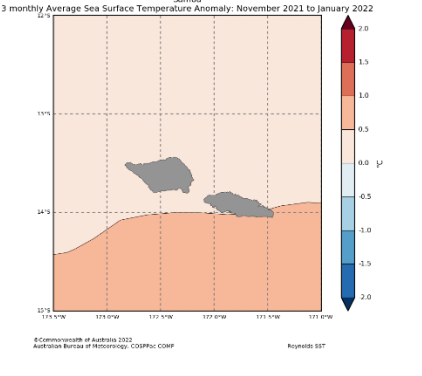
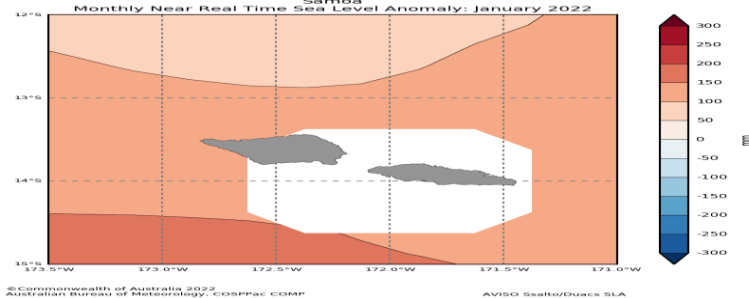
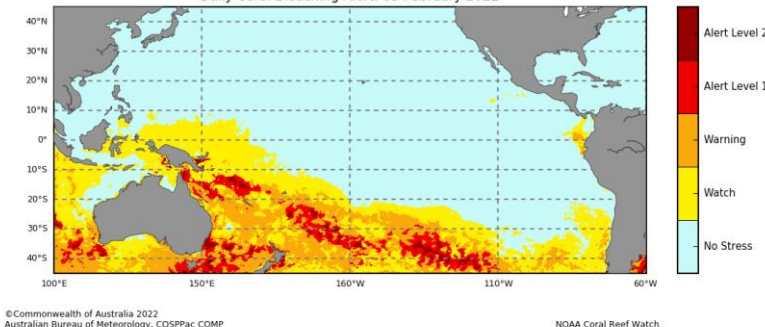
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Part 2: Recent Ocean summary statement

Monthly: January 2022

Monthly: January	Last three months: November 2021 to January 2022:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
<div><p>Samoa</p><p>Monthly Average Sea Surface Temperature Anomaly: January 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>Reynolds SST</p></div>	<div><p>Samoa</p><p>3 monthly Average Sea Surface Temperature Anomaly: November 2021 to January 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>Reynolds SST</p></div>
Sea level (Image 2):	
<div><p>Samoa</p><p>Monthly Near Real Time Sea Level Anomaly: January 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>AVISO SeaWiFS/Duacs SLA</p></div>	
Daily coral bleaching alert (Image 3):	
<div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 05 February 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p><p>NOAA Coral Reef Watch</p></div>	

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Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Monthly: March	Seasonal: March to May
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for March 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 1.1. Available online at http://www.marine-geo.org/</p> <p>Model run: 05/02/2022 Issued: 07/02/2022</p>	<p>Difference from average sea surface temperature forecast for March to May 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 1.1. Available online at http://www.marine-geo.org/</p> <p>Model run: 05/02/2022 Issued: 07/02/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for March 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/01/2022 Issued: 02/02/2022</p>	<p>Difference from average sea surface height forecast for March 2022 to May 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/01/2022 Issued: 02/02/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 February 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	

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Summary Statement

Monthly and last three months: January 2022/November 2021 to January 2022 statement (Highly significant changes)

Near normal rainfall was recorded at Afiamalu, Nafanua and Faleolo while *below normal* rainfall was registered for Apia.

Above normal rainfall was recorded at Nafanua, below normal at Apia and normal rainfall at Afiamalu and Faleolo during the last three months.

Part 1i. Monthly and Seasonal Outlooks for March and March to May 2022

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

The monthly rainfall outlook is likely for *below normal* rainfall for the south western side of Upolu and offers little guidance for the whole of Samoa as the chances of above normal, normal and below normal are similar. The seasonal rainfall outlook shows *likely below normal* rainfall for the whole of Samoa and offers little guidance for the north eastern side of Savai'i

Above normal maximum temperatures are likely across Samoa for March 2022. The seasonal outlook shows *above normal* maximum temperatures very likely for Samoa for March to May 2022.

Near normal minimum temperatures are likely to occur across Samoa for March 2022. The seasonal outlook also shows *above normal* minimum temperatures very likely for Samoa for March to May 2022.

Part 2: Recent Ocean summary statement

Monthly and last three months: January/November 2021 to January 2022 (Highly significant changes)

Sea Surface temperatures (SSTs) in the Samoa region experienced a slight warming in the last three months.

Sea Level Anomaly (SLA) showed normal conditions for Upolu and the eastern part of Savaii and a slight increase of 100mm-150mm for the rest of Savaii in January 2022.

As warmer SSTs were observed in recent months, the Coral Bleach Alert is now at a *watch* level for the Samoa region.

Part 2i. Monthly and Seasonal Outlooks for March and March to May 2022

Ocean Variable statement (Highly significant changes)

Sea Surface temperatures (SST) for Samoa is anticipated to be normal for the rest of the island in March 2022. It is forecasted that Samoa is expected to continue with near normal SST conditions in the upcoming three-month period March to May 2022.

As warmer SSTs were observed in recent months, the Coral Bleach Alert will remain at *watch* level for the Samoa region.

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

Product	Date: January 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total					

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