

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 176

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2022	Mar-2022	Apr-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2022)	761.7	198.7	182.5	165.1	273.0	220.4	45/133
Afiamalu (1903-2022)	1054.5	310.2	182.4	287.2	393.1	342.7	10/69
Nafanua (1965-2022)	774.3	235.6	205.0	179.2	307.8	240.3	22/52
Faleolo (1956-2022)	397.2	93.8	132.7	138.1	191.1	158.5	18/61

TABLE 2: Three-month Total Rainfall for February to April 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2022)	1142.9	Above normal	830.7	1012.4	935.9	106/133
Afiamalu (1903-2022)	1547.1	Normal	1374.7	1607.3	1461.9	42/67
Nafanua (1965-2022)	1214.9	Above normal	917.6	1160.0	1069.3	35/50
Faleolo (1956-2022)	623.7	Normal	592.0	715.0	644.0	27/61

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 June and June to August 2022

Monthly: June	Seasonal: June to August
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>	<p>Tercile rainfall probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>	<p>Tercile maximum temperature probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>	<p>Tercile minimum temperature probabilities for June to August 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Esri's Marine Boundary (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2004), version 11. Available online at http://www.marine.org.au</p>

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Part 2: Recent Ocean summary statement

Monthly: April 2022

Monthly: April	Last three months: February to April 2022:
<div>Sea Surface Temperature (Image 1):</div> <div><p>Samoa</p><p>Monthly Average Sea Surface Temperature Anomaly: April 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>Reynolds SST</p></div>	<div>Sea Surface Temperature (Image 4):</div> <div><p>Samoa</p><p>3 monthly Average Sea Surface Temperature Anomaly: February 2022 to April 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>Reynolds SST</p></div>
<div>Sea level (Image 2):</div> <div><p>Samoa</p><p>Monthly Near Real Time Sea Level Anomaly: April 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>AVISO SeaWiFS/SeaWiFS SLA</p></div>	
<div>Daily coral bleaching alert (Image 3):</div> <div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 04 May 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Samoa</p><p>Daily Coral Bleaching Alert: 04 May 2022</p><p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>

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Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Monthly: June	Seasonal: June to August
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for June 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 Database: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>	<p>Difference from average sea surface temperature forecast for June to August 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 Database: Maritime Boundaries and Exclusive Economic Zones (EZZs), version 1.1. Available online at http://www.marine.gov.au</p> <p>Model run: 14/05/2022 Issued: 16/05/2022</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for June 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>	<p>Difference from average sea surface height forecast for June 2022 to August 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 15/04/2022 Issued: 21/04/2022</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 29 May 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAC CORF</p> <p>NOMA Coral Reef Watch</p>	<p>Samoa 4 Weeks Coral Bleaching Outlook: 29 May 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAC CORF</p> <p>NOMA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: April 2022/February to April 2022 statement (Highly significant changes)

Below normal rainfall was recorded for Afiamalu and Faleolo station, while Apia and Nafanua recorded normal rainfall for the month of April.

The February to April 2022 season registered above normal rainfall for Apia and Nafanua, with the rest registering normal rainfall.

Part 1i. Monthly and Seasonal Outlooks for June and June to August 2022

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

The rainfall outlook for Samoa for the period June and season June to August 2022 is likely to be normal

Minimum and maximum temperature outlook for Samoa for the period June and season June to August 2022 is very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: April/February to April 2022 (Highly significant changes)

For the month of April 2022 and past three months from February to April, Samoa experienced normal SST conditions, with significant above average SST of 0.5 - 1 degrees located in south and southwestern part of Samoa.

The monthly sea level anomaly of April reveals that Samoa experienced above average sea surface height differences of 100-150mm, with significant anomalies of 150-200mm located north of Samoa.

Coral bleaching Alert is on 'Watch' status.

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2022

Ocean Variable statement (Highly significant changes)

The outlook for Samoa shows sea surface temperatures are likely to be normal for both the monthly (June) and seasonal (June to August 2022) outlook period.

The outlook for Samoa shows above normal sea level differences of 60mm to 100mm for the monthly (June) and above normal sea level differences of 30mm to 60mm for seasonal (June to August 2022) outlook period.

Coral bleaching outlook is on 'Watch' for Samoa in the next four weeks.

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

Product	Date: April 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	05 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
EAR Watch	05 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
Monthly Climate Briefing	02 nd	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	65	27	38

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		Technology, Disaster Managers, Marines			
Ocean Outlook	05 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
Climate data request	-	-	-	-	-
Total			65	27	38

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