

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 206

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2024	Sep-2024	Oct-2024				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2024)	51.4	91.7	237.0	147.2	237.3	184.0	90/135
Afiamalu (1903-2024)	99.8	291.9	409.5	245.5	417.3	340.6	47/73
Nafanua (1965-2024)	57.6	146.9	321.7	186.8	334.1	241.0	35/53
Faleolo (1956-2024)	46.2	166.3	303.2	126.0	191.1	155.2	59/63

TABLE 2: Three-month Total Rainfall for August to October 2024

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2024)	380.1	Normal	366.0	529.4	436.0	49/135
Afiamalu (1903-2024)	801.2	Normal	596.2	831.8	728.8	44/70
Nafanua (1965-2024)	526.2	Normal	464.8	603.1	521.1	27/52
Faleolo (1956-2024)	515.7	Above normal	274.9	422.1	350.7	52/61

Part 1i. Monthly and Seasonal Outlooks for December and December to February 2025

Monthly: December	Seasonal: December to February
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for December 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for December 2024 to February 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for December 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for November 2024 to January 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 05/10/2024 Issued: 07/10/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for December 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for December 2024 to February 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 07/11/2024</p> <p>© Commonwealth of Australia 2024. Bureau of Meteorology, supported by CSIRO.</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>

Part 2: Recent Ocean Observation

Monthly/Three months: October 2024 and August to October 2024

<p>Monthly: October 2024</p>	<p>Last three months: August to October 2024:</p>
<p>Sea Surface Temperature Anomaly (Image 1):</p>	<p>Sea Surface Temperature Anomaly (Image 4):</p>
<p>Sea level anomaly (Image 2):</p>	
<p>Daily coral bleaching alert (Image 3):</p>	

Part 2i. Monthly and Seasonal Outlooks for December and December to February 2025

Monthly: December	Seasonal: December to February
Monthly sea surface temperature anomaly (Image 5):	Seasonal sea surface temperature anomaly (Image 6):
<p>Difference from average sea surface temperature forecast for December 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 06/11/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>ESZ border V1.1 (Henderson Marine Institute, 2019)</p>	<p>Difference from average sea surface temperature forecast for December 2024 to February 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 06/11/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>ESZ border V1.1 (Henderson Marine Institute, 2019)</p>
Monthly sea level anomaly (Image 7):	Seasonal sea level anomaly (Image 8):
<p>Difference from average sea surface height forecast for December 2024</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 06/11/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>ESZ border V1.1 (Henderson Marine Institute, 2019)</p>	<p>Difference from average sea surface height forecast for December 2024 to February 2025</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 04/11/2024 Issued: 06/11/2024</p> <p>© Commonwealth of Australia 2024, Bureau of Meteorology, supported by COSPPac</p> <p>ESZ border V1.1 (Henderson Marine Institute, 2019)</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 17 November 2024</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Samoa 4 Weeks Coral Bleaching Outlook: 08 December 2024</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>©Commonwealth of Australia 2024 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: October 2024/August to October 2024 statement

The rainfall for October and the past three months was *normal* for Apia, Afiamalu and Nafanua while Faleolo recorded *above normal* rainfall. Faleolo recorded its fifth wettest October in 63 years.

Part 1i. Monthly and Seasonal Outlooks for December and December to February 2025

Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for December is likely to be near normal over Samoa

The outlook for December to February is likely to be below normal over the western part of Upolu and offers little guidance for Savaii and the eastern part of Upolu.

Maximum and minimum temperatures during December and averaged over December to February are likely to be *above normal* over Samoa.

Part 2: Recent Ocean summary statement

Monthly and last three months: October 2024/August to October 2024

October sea surface temperatures (SSTs) around Samoa's main Island were utmost 1.0°C above normal.

Averaged over August to October, sea surface temperatures around Samoa's main Island were 0 to 0.5°C near normal

October sea levels around Samoa were 50 to 100mm above normal

A coral bleaching 'Watch' status is currently in effect north of Samoa as of November.

Part 2i. Monthly and Seasonal Outlooks for December and December to February 2025

Ocean Variable statement

December and averaged over December to February, sea surface temperatures around Samoa's main island are likely to be 0.4 to 0.8°C above normal.

December and averaged over December to February, sea levels around Samoa are predicted to be 60 to 100mm below normal.

Coral Bleaching outlook indicates a watch status for the next 4 weeks .

IN BRIEF for Teleconference

- Rainfall was near normal for October and August to October, except Faleolo where rainfall was above normal for both periods.
- The rainfall outlook generally indicates normal conditions for December, with below normal conditions to little guidance for the total rainfall from December to February
- SSTs were near normal to above normal for October and August to October. The outlook shows above normal SSTs for the next one and three months.
- Sea levels were above normal for October. Below normal sea levels are predicted for December and December to February.

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

Product	Date: October 2024	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
EAR Watch	7th	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	No comments
Ocean Outlook	7th	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	No comments
Monthly Tropical Cyclone Update	15 November 2024	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	No comments
Total			65	27	38	