

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 168

Country:

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2021	Jul-2021	Aug-2021				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Apia (1890-2021)	121.5	96.4	166.1	68.3	155.2	97.6	103/132
Afiamalu (1903-2021)	224.8	301.2	245.0	134.3	223.2	178.6	48/68
Nafanua (1965-2021)	132.6	100.1	156.9	68.1	132.1	89.3	37/50
Faleolo (1956-2021)	56.2	32.1	47.8	52.9	112.1	91.9	19/60

TABLE 2: Three-month Total Rainfall for June to August 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Apia (1890-2021)	384.0	Normal	307.2	448.1	382.7	80/132
Afiamalu (1903-2021)	771.0	Above normal	522.1	674.3	608.2	50/66
Nafanua (1965-2021)	389.6	Normal	297.5	504.3	413.4	23/50
Faleolo (1956-2021)	136.1	Below normal	209.6	364.0	292.5	7/58

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 October and October to December 2021

Monthly	Seasonal
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for October 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for October to December 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for October 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for October to December 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for October 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for October to December 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Base period: 1990-2012 Model: ACCESS-S1 Model run: 30/08/2021 Issued: 02/09/2021</p>

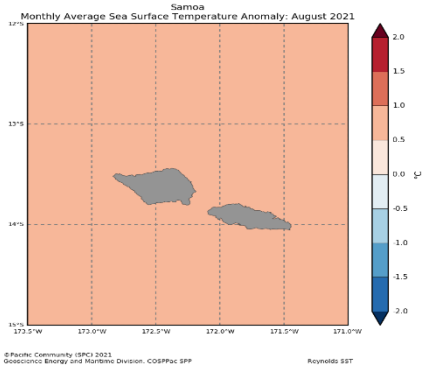
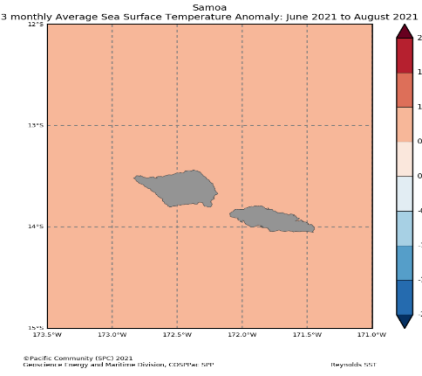
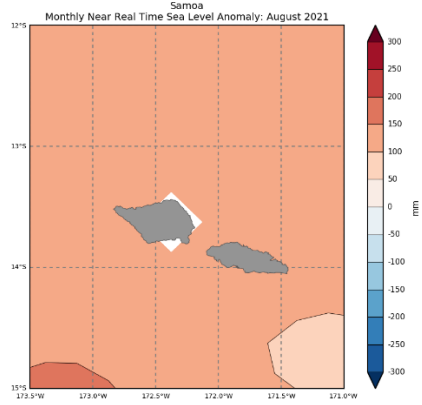
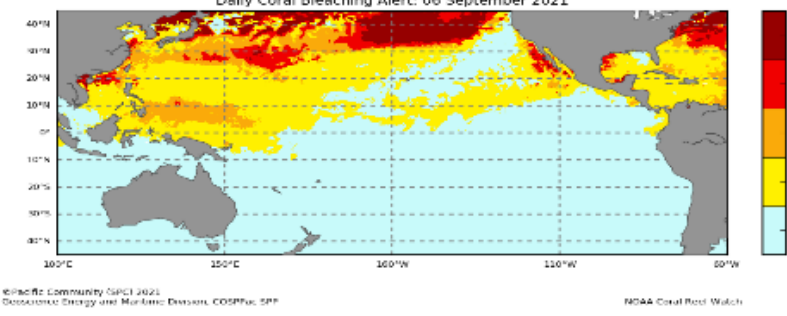
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Part 2: Recent Ocean summary statement

Monthly: August 2021

Monthly: August	Last three months: June to August 2021:
<p>Sea Surface Temperature (Image 1):</p>  <p>Samoa Monthly Average Sea Surface Temperature Anomaly: August 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>Samoa 3 monthly Average Sea Surface Temperature Anomaly: June 2021 to August 2021</p> <p>© Pacific Community (SPC) 2021 Climate Service Energy and Maritime Division, COSPPac SPP Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Samoa Monthly Near Real Time Sea Level Anomaly: August 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP AVISO SeaLevelDucks SLA</p>	
<p>Daily coral bleaching alert (Image 3):</p>	
 <p>Pacific Ocean Daily Coral Bleaching Alert: 06 September 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP NOAA Coral Reef Watch</p> <ul style="list-style-type: none"> Alert Level 2 Alert Level 1 Warning Watch No Stresses 	

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Part 2i. Monthly and Seasonal Outlooks for October and October to December 2021

Monthly: October	Seasonal: October to December
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for October 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Reanalysis data are sourced from: European Centre for Medium-Range Weather Forecasts (ECMWF), National Centers for Environmental Prediction (NCEP), National Oceanic and Atmospheric Administration (NOAA), and the Japanese Meteorological Agency (JMA). Model: ACCESS-S1 Model run: 04/09/2021 Base period: 1990-2012 Issued: 06/09/2021</small></p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for October to December 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Reanalysis data are sourced from: European Centre for Medium-Range Weather Forecasts (ECMWF), National Centers for Environmental Prediction (NCEP), National Oceanic and Atmospheric Administration (NOAA), and the Japanese Meteorological Agency (JMA). Model: ACCESS-S1 Model run: 04/09/2021 Base period: 1990-2012 Issued: 06/09/2021</small></p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for October 2021</p> <p>© Commonwealth of Australia 2021, Bureau of Meteorology <small>Model: ACCESS-S1 Model run: 27/08/2021 Base Period: 1990-2012 Issued: Map not issued</small></p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for October 2021 to December 2021</p> <p>© Commonwealth of Australia 2021, Bureau of Meteorology <small>Model: ACCESS-S1 Model Run: 27/08/2021 Base Period: 1990-2012 Issued: Map not issued</small></p>
<p>4-week Coral Bleaching (Image 9):</p>	
<p style="text-align: center;">Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 October 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p style="text-align: right;">NOAA Coral Reef Watch</p>	

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Summary Statement

Monthly and last three months: August 2021/June to August statement

Above normal rainfall recorded at Apia, Afiamalu and Nafanua. Below normal rainfall was received at Faleolo.

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

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2021

Monthly /Seasonal rainfall and temperature Outlook statements

The monthly rainfall outlook shows most of the western side of Savai'i and the far eastern side of Upolu very likely to be near normal. The outlook offers little guidance for the rest of Upolu and the eastern side of Savai'i. The seasonal rainfall outlook shows *above normal* rainfall is likely for the whole of Savai'i and the far western side of Upolu, and *near normal* rainfall for the far eastern side of Upolu. Little guidance is projected the rest of Upolu.

Above normal maximum and minimum temperatures are very likely across Samoa for October and the October to December period.

Part 2: Recent Ocean summary statement

Monthly and last three months: August/June to August 2021

The Samoa region experienced a slight warmer than average Sea Surface Temperatures for August, with both islands observing SSTs ranging from 0.5°C-1.0°C, increase from average. Most of the Samoan islands experienced a slight elevation of 100mm-150mm in August 2021, with a small zone in the southwest indicating an increase of up to 250mm from normal. For the three-month period June to August 2021, the Samoa region observed a 0.5°C-1.0°C increase in SSTs in comparison to its average.

Although warmer SSTs were observed in recent months, the Coral Bleach Alert remains at No Stress levels for the Samoa region.

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2021

Ocean Variable statement

Sea Surface temperatures for Samoa is anticipated to be slightly warmer in October 2021. A slight warming of SSTs is forecasted for Samoa in the upcoming three-month period September to October 2021.

The sea surface height outlook for Samoa forecasts the northern waters of the islands to experience near average Sea Level, while the rest is forecasted to experience a slight elevation of 0.03m-0.1m for October 2021. For the October to December 2021 outlook, Sea level is expected to be near average conditions for the northern coast, with the rest of Samoa expecting a 0.06m-0.1m above normal.

The outlook for Samoa shows there are no coral bleaching alerts.

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

Product	Date: August 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
CREWS Project	3 rd – 5 th	Red Cross, SFESA, Sataua Village response team	60	12	18
Climate Bulletin	06 th	Health/Fire Emergency/ Disaster Management/Tourism/ Electric Power Corporation/Media Outlets/Agriculture/Samoa Water Authority/Environment and Conservation/Fisheries	60	12	18
EAR Watch	06 th	Health/Fire Emergency/ Disaster Management/Tourism/ Electric Power Corporation/Media Outlets/Agriculture/Samoa Water Authority/Environment and Conservation/Fisheries	60	12	18
Monthly Climate Briefing	06 th	Health/Fire Emergency/ Disaster Management/Tourism/ Electric Power Corporation/Media Outlets/Agriculture/Samoa Water Authority/Environment and Conservation/Fisheries	60	12	18
Ocean Bulletin	06 th	Health/Fire Emergency/ Disaster Management/Tourism/ Electric Power Corporation/Media Outlets/Agriculture/Samoa Water Authority/Environment and Conservation/Fisheries	60	12	18
Total			300	60	90

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