

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 192

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2023	Jul-2023	Aug-2023				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2023)	278.7	283.8	247.7	55.5	104.9	86.9	109/116

TABLE 2: Three-month Total Rainfall for June to August 2023

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2023)	810.2	Above normal	226.1	333.3	279.5	115/116

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

Monthly: October	Seasonal: October to December
<p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>	<p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Diagnostic Model's Version 2023.0.0. Marine Boundaries: Seabedtopography, Marine Boundaries and Exclusive Economic Zone (2008), version 11. Available online at http://www.marine.gov.au</p>

Part 2: Recent Ocean Observation

Monthly/Three months: June and June to August 2023

Monthly: August	Last three months: June to August 2023:
<p>Sea Surface Temperature (Image 1):</p> <p>Monthly Average Sea Surface Temperature Anomaly: August 2023</p> <p>Niue</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p> <p>3 monthly Average Sea Surface Temperature Anomaly: June 2023 to August 2023</p> <p>Niue</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p> <p>Monthly Near Real Time Sea Level Anomaly: August 2023</p> <p>Niue</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>AVISO SeaWiFS/QuikSCAT SJA</p>	
<p>Daily coral bleaching alert (Image 3):</p> <p>Pacific Ocean Daily Coral Bleaching Alert: 06 September 2023</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Niue Daily Coral Bleaching Alert: 07 August 2023</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2023

Monthly: October	Seasonal: October to December
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Expert Weather Outlook (2023). Marine Resources Queensland, Queensland Marine Resources and Fisheries (2023). Version 1.1. Available online at http://www.marine.gov.au</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Expert Weather Outlook (2023). Marine Resources Queensland, Queensland Marine Resources and Fisheries (2023). Version 1.1. Available online at http://www.marine.gov.au</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for October 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Expert Weather Outlook (2023). Marine Resources Queensland, Queensland Marine Resources and Fisheries (2023). Version 1.1. Available online at http://www.marine.gov.au</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for October to December 2023</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Diagnostic data extracted from Expert Weather Outlook (2023). Marine Resources Queensland, Queensland Marine Resources and Fisheries (2023). Version 1.1. Available online at http://www.marine.gov.au</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 01 October 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p>Niue</p> <p>4 Weeks Coral Bleaching Outlook: 01 October 2023</p> <p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: August 2023/June to August 2023 statement

Hanan Airport's August and June to August rainfall was normal.

Part 1i. Monthly and Seasonal Outlooks for October and October to December 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The outlook for Niue for October and October to December offers little guidance for the main island as the chances of above normal, normal, and below normal are similar. However, below normal rainfall is likely over large parts of the northeast of the EEZ for both periods, while Niue's southern EEZ is likely to have above normal rainfall for October to December.

Part 2: Recent Ocean summary statement

Monthly and last three months: August 2023/June to August 2023

August ocean temperatures around Niue were below normal 0.5 to 1.0°C below normal.

Averaged over June to August, ocean temperatures were near normal

August sea levels around were 50mm to 100mm above normal.

Coral bleaching reveals no stress for Niue.

Part 2i. Monthly and Seasonal Outlooks for October and October to December 2023

Ocean Variable statement

The monthly, October, sea surface temperature around the main island is predicted to be above normal ranging from 0.4 to 0.8 degrees.

The seasonal sea surface temperature outlook, October to December, indicates above normal SST ranging from 0.4 to 0.8 degrees.

Monthly and seasonal sea levels are forecasted to be near normal around Niue, increasing to 30 to 60mm above normal.

Coral bleaching outlook for the next four weeks reveals no thermal stress for Niue.

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

Product	Date: August 2023	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Comments (If there are comments from you Stakeholders)
Climate Bulletin		Private Sector, Government Officials, Government staff, Stakeholders	50	20	30	
EAR Watch						
Monthly Climate Briefing						
Ocean Outlook						
Climate data request						
Total			50	20	30	