

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 182

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2022	Sep-2022	Oct-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2022)	89.2	113.6	274.8	67.3	167.8	111.5	107/118

TABLE 2: Three-month Total Rainfall for August to October 2022

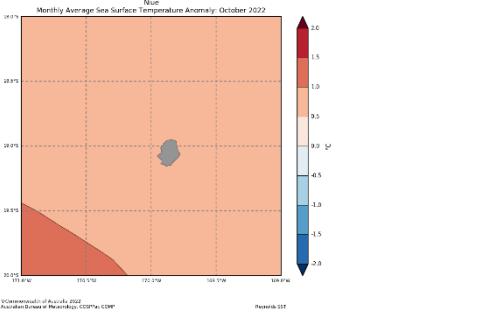
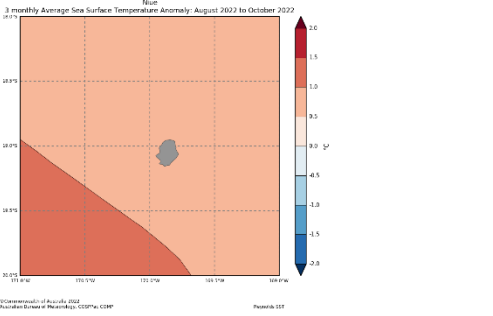
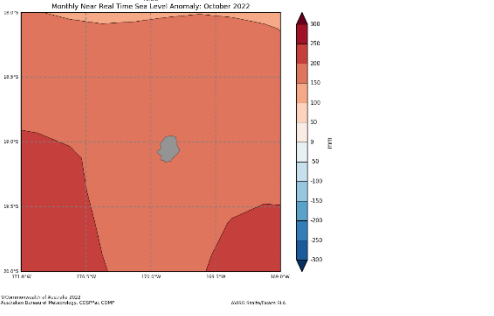
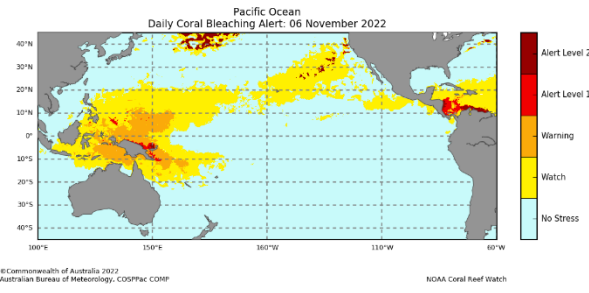
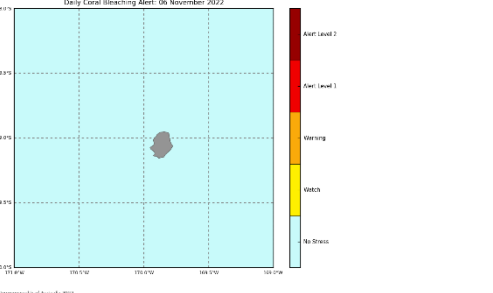
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2022)	477.6	Above normal	255.5	446.4	341.8	90/113

Part 1i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

<p>Monthly: December</p> <p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for December 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>	<p>Seasonal: December to January</p> <p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for December 2022 to February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>
<p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for December 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>	<p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for December 2022 to February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>
<p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for December 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>	<p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for December 2022 to February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1961-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Model run: 05/11/2022 Issue: 07/11/2022</p>

Part 2: Recent Ocean Observation

Monthly/Three months: October 2022 and August to October 2022

Monthly: October	Last three months: August to October 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac, CSIRO</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac, CSIRO</p>
<p>Sea level (Image 2):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac, CSIRO</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac, CSIRO</p> <p>NOAA Coral Reef Watch</p>	 <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac, CSIRO</p> <p>NOAA Coral Reef Watch</p>

Part 2i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Monthly: December	Seasonal: December to February
<p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for December 2022</p> <p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Boundary data from the International Hydrographic Organization (IHO), National Oceanic and Atmospheric Administration (NOAA), and other sources Data source: J. Smith (2022), version 1.0, available online at https://www.bom.gov.au/marine</p>	<p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for December 2022 to February 2023</p> <p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Boundary data from the International Hydrographic Organization (IHO), National Oceanic and Atmospheric Administration (NOAA), and other sources Data source: J. Smith (2022), version 1.0, available online at https://www.bom.gov.au/marine</p>
<p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for December 2022</p> <p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Boundary data from the International Hydrographic Organization (IHO), National Oceanic and Atmospheric Administration (NOAA), and other sources Data source: J. Smith (2022), version 1.0, available online at https://www.bom.gov.au/marine</p>	<p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for December 2022 to February 2023</p> <p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Boundary data from the International Hydrographic Organization (IHO), National Oceanic and Atmospheric Administration (NOAA), and other sources Data source: J. Smith (2022), version 1.0, available online at https://www.bom.gov.au/marine</p>
<p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 November 2022</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, CORF NOAA Coral Reef Watch</p>	<p>4-week Coral Bleaching (Image 10):</p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 November 2022</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAR, CORF NOAA Coral Reef Watch</p>

Summary Statement

Monthly and last three months: October 2022/August to October 2022 statement

Hanan Airport's monthly rainfall for October was above normal, as was the total for the last three months.

Part 1i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Monthly /Seasonal rainfall and temperature Outlook statements

The outlook for Niue for December shows above normal rainfall is the most likely outcome. Rainfall for December to February 2023 is also likely to be above normal.

Maximum and minimum temperatures during December are very likely to be above normal.

Maximum and minimum temperatures averaged over December to February are very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: October/August to October 2022

October ocean temperatures around Niue were 0.5 to 1.0°C above normal.

Averaged over August to October, ocean temperatures around Niue were 0.5 to 1.0°C above normal.

October sea levels around Niue were up to 200mm above normal.

Coral bleaching is on 'No Stress' status for Niue.

Part 2i. Monthly and Seasonal Outlooks for December 2022 and December 2022 to February 2023

Ocean Variable statement

The monthly and seasonal SST outlook for December and December to February predicts near normal temperatures of utmost 1.2 degrees Celsius in the far south. Above normal sea level anomaly was also predicted to be up to 100 mm in the far south.

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: October 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	07/10/2022	<ul style="list-style-type: none"> Private Sector Government Officials Government staff Stakeholders 	60	20	40
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total			60	20	40