

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2022	Nov-2022	Dec-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2022)	274.8	47.7	153.5	130.7	222.0	149.4	57/118

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

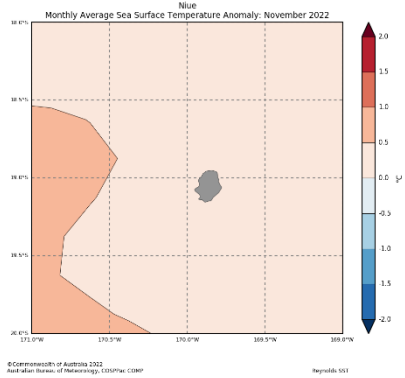
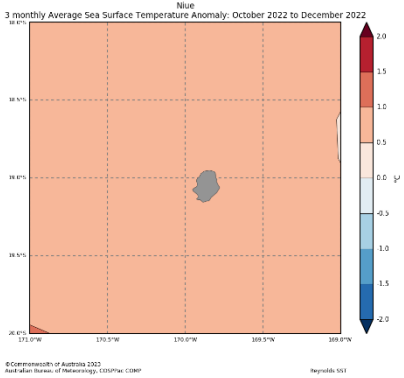
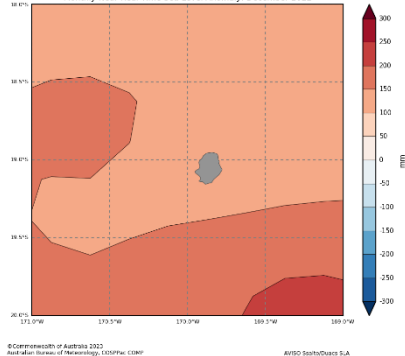
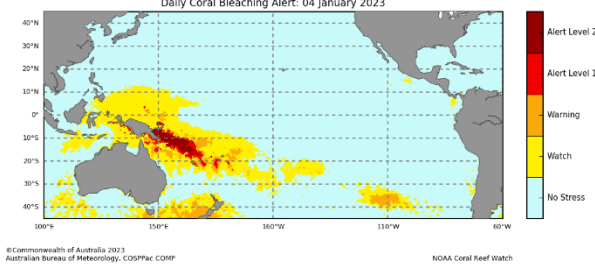
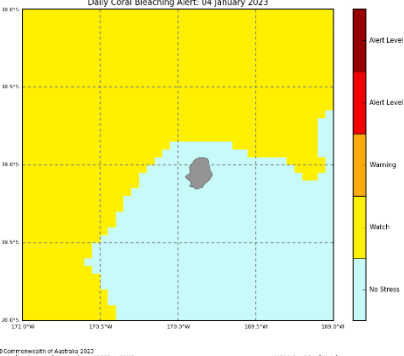
Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2022)	476.0	Normal	387.9	575.9	452.6	60/117

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

Monthly: February		Seasonal: February to April	
Rainfall (Image 1)		Rainfall (Image 2)	
<p>Tercile rainfall probabilities for February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>		<p>Tercile rainfall probabilities for February to April 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>	
Monthly Maximum temperature (Image 3):		Seasonal maximum temperature (Image 4):	
<p>Tercile maximum temperature probabilities for February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>		<p>Tercile maximum temperature probabilities for February to April 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>	
Monthly minimum temperature (Image 5):		Seasonal minimum temperature (Image 6):	
<p>Tercile minimum temperature probabilities for February 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>		<p>Tercile minimum temperature probabilities for February to April 2023</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACC55-52 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Rearranged from extended River Explorer Marine Outlook 2023, Marine Outlook Quarterly Marine Outlook and Outlook Economic Series (2019), version 1.1. Available online at http://www.marineexplorer.org</p>	

Part 2: Recent Ocean Observation

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

Monthly: December	Last three months: October to December 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p> <p>AVISO SeaLevel S.A</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPac CORP</p> <p>NOAA Coral Reef Watch</p>	 <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p> <p>NOAA Coral Reef Watch</p>

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

Monthly: February	Seasonal: February to April
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<div><p>Difference from average sea surface temperature forecast for February 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Reanalysis data extracted from European Marine Forecast (2017), Marine Research, Queensland, Maritime Services and Exclusive Economic Zones (2018), version 1.1. Available online at http://www.marine.gov.au</p><p>Model run: 02/01/2023 Issued: 04/01/2023</p></div>	<div><p>Difference from average sea surface temperature forecast for February to April 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Reanalysis data extracted from European Marine Forecast (2017), Marine Research, Queensland, Maritime Services and Exclusive Economic Zones (2018), version 1.1. Available online at http://www.marine.gov.au</p><p>Model run: 02/01/2023 Issued: 04/01/2023</p></div>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<div><p>Difference from average sea surface height forecast for February 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Reanalysis data extracted from European Marine Forecast (2017), Marine Research, Queensland, Maritime Services and Exclusive Economic Zones (2018), version 1.1. Available online at http://www.marine.gov.au</p><p>Model run: 02/01/2023 Issued: 04/01/2023</p></div>	<div><p>Difference from average sea surface height forecast for February to April 2023</p><p>Base period: 1981-2018 Model: ACCESS-2 © Commonwealth of Australia 2023, Australian Bureau of Meteorology Reanalysis data extracted from European Marine Forecast (2017), Marine Research, Queensland, Maritime Services and Exclusive Economic Zones (2018), version 1.1. Available online at http://www.marine.gov.au</p><p>Model run: 02/01/2023 Issued: 04/01/2023</p></div>
4-week Coral Bleaching (Image 9):	
<div><p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 29 January 2023</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>	<div><p>Niue 4 Weeks Coral Bleaching Outlook: 29 January 2023</p><p>© Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPac COMP</p><p>NOAA Coral Reef Watch</p></div>

Summary Statement

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

Hanan Airport's rainfall for December was normal, as it also was for the last three months.

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

Monthly /Seasonal rainfall and temperature Outlook statements

Niue's February rainfall, as well as the February to April rainfall, are likely to be above normal.

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

Part 2: Recent Ocean summary statement

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

December ocean temperatures were above normal by 0.5 to 1°C

Averaged over October to December, ocean temperatures were above normal by up to 1.0°C.

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

Coral bleaching is on 'Watch' status for Niue.

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

Ocean Variable statement

The monthly sea surface temperature around the main island is predicted to be near-normal within 0.4 degrees.

The seasonal sea surface temperature outlook, February to April, 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 60 to 100 mm above normal in the far south of the EEZ.

Coral bleaching outlook for the next four weeks reveals 'Watch' status for Niue.

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

Product	Date: December 2022	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin	22/12/2022	<ul style="list-style-type: none"> • Private Sector • Government Officials • Government staff • Stakeholders 	50	20	30
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total			50	20	30