

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 174

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Dec-2021	Jan-2022	Feb-2022				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2022)	476.3	386.3	594.9	199.4	280.9	237.7	116/117

TABLE 2: Three-month Total Rainfall for December 2021 to February 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2022)	1457.5	Above normal	612.3	838.7	689.3	115/117

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

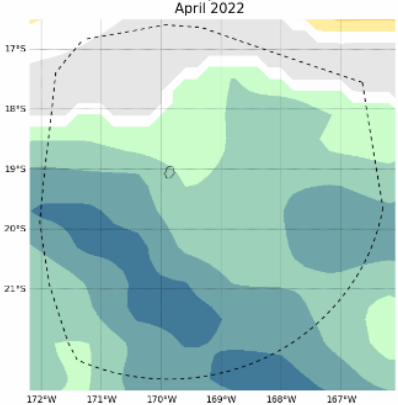
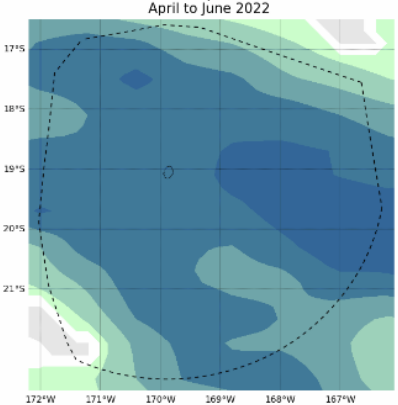
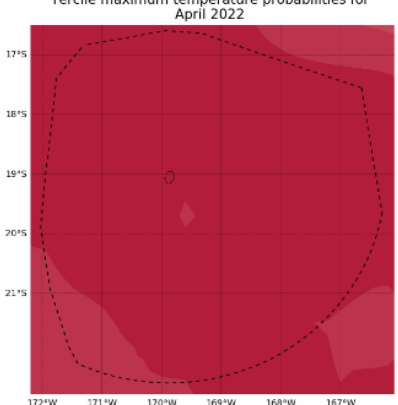
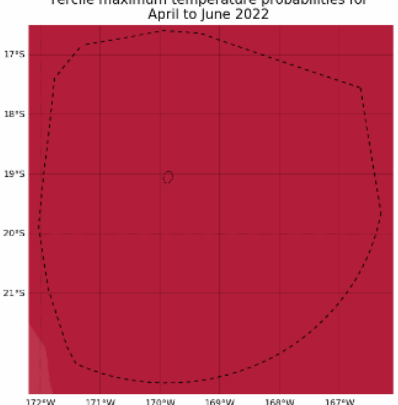
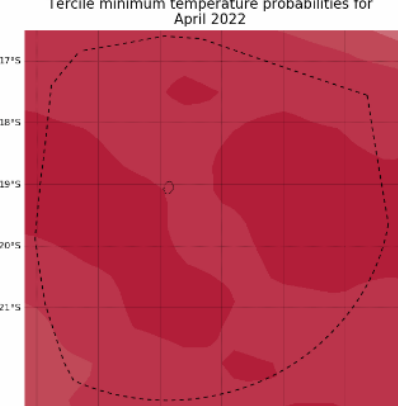
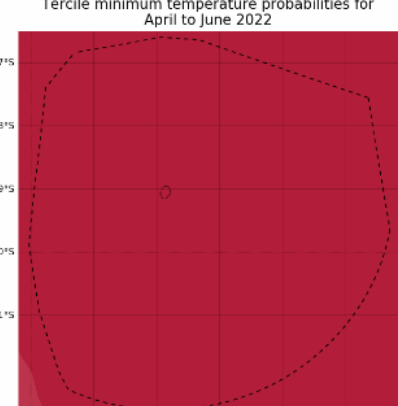
Moderate $5 \leq X < 10$

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 April and April to June 2022

Monthly: April	Seasonal: April to June
Rainfall (Image 1)	Rainfall (Image 2)
<p>Tercile rainfall probabilities for April 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>	<p>Tercile rainfall probabilities for April to June 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>
Monthly Maximum temperature (Image 3):	Seasonal maximum temperature (Image 4):
<p>Tercile maximum temperature probabilities for April 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>	<p>Tercile maximum temperature probabilities for April to June 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>
Monthly minimum temperature (Image 5):	Seasonal minimum temperature (Image 6):
<p>Tercile minimum temperature probabilities for April 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>	<p>Tercile minimum temperature probabilities for April to June 2022</p>  <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapfile data extracted from Marine Waters Boundary (2019), Marine Boundaries, Geodatabase, Marine Boundaries and Exclusive Economic Zones (2019), version 2.1. Available online at http://www.mar.nmfs.gov.au Model run: 05/03/2022 Issued: 07/03/2022</p>

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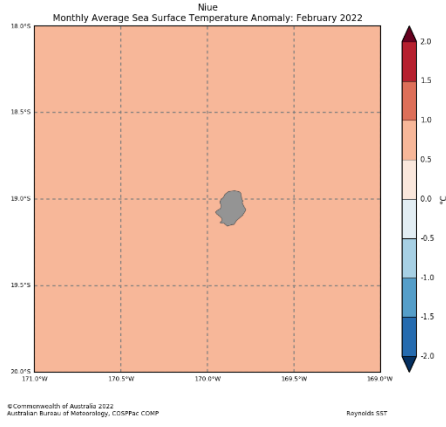
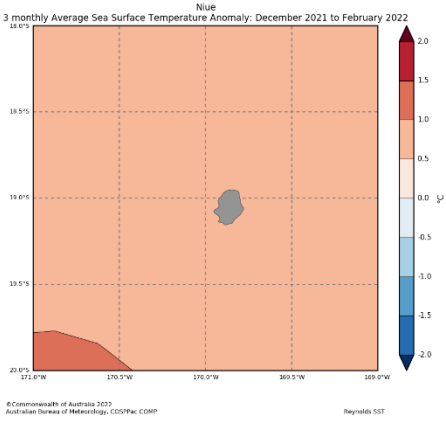
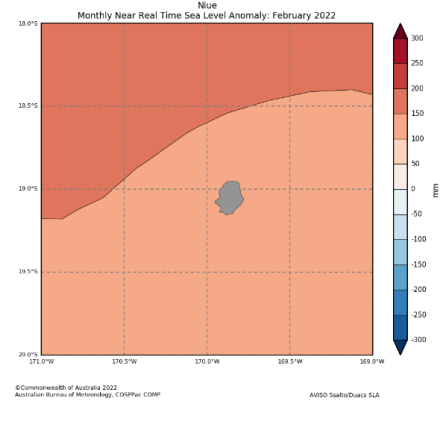
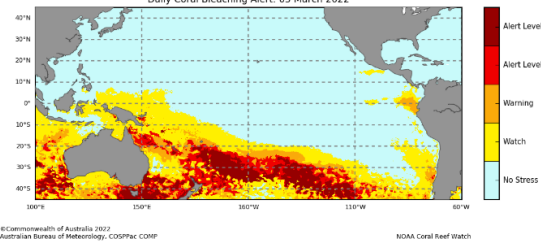
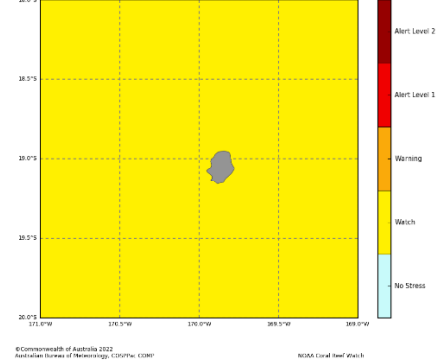
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Part 2: Recent Ocean summary statement

Monthly: February 2022

<p>Monthly: February</p>  <p>Monthly Average Sea Surface Temperature Anomaly: February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p>	<p>Last three months: December 2021 to February 2022:</p>  <p>3 monthly Average Sea Surface Temperature Anomaly: December 2021 to February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p>
<p>Sea level (Image 2):</p>  <p>Monthly Near Real Time Sea Level Anomaly: February 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 05 March 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p>	 <p>Niue Daily Coral Bleaching Alert: 07 March 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPac CORP</p>

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Part 2i. Monthly and Seasonal Outlooks for April and April to June 2022

Monthly: April	Seasonal: April to June
Monthly sea surface temperature (Image 5): <p>Difference from average sea surface temperature forecast for April 2022</p> <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/</p> <p>Model run: 12/03/2022 Issued: 14/03/2022</p>	Seasonal sea surface temperature (Image 6): <p>Difference from average sea surface temperature forecast for April to June 2022</p> <p>Base period: 1981-2018 Model: ACCESS-52 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.maritimerregions.org/</p> <p>Model run: 12/03/2022 Issued: 14/03/2022</p>
Monthly sea level (Image 7): <p>Difference from average sea surface height forecast for April 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-52 Base Period: 1981-2018</p> <p>Model Run: 28/02/2022 Issued: 09/03/2022</p>	Seasonal sea level (Image 8): <p>Difference from average sea surface height forecast for April to June 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-52 Base Period: 1981-2018</p> <p>Model Run: 28/02/2022 Issued: 09/03/2022</p>
4-week Coral Bleaching (Image 9): <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 27 March 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAC COMP</p> <p>NOAA Coral Reef Watch</p>	<p>Niue 4 Weeks Coral Bleaching Outlook: 03 April 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPAC COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: February 2022/December 2021 to February 2022 statement (Highly significant changes)

Hanan Airports monthly and last three months rainfall was above normal. The station recorded its second (Third) wettest February (December to February) in 117 years.

Part 1i. Monthly and Seasonal Outlooks for April and April to June 2022

Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

The rainfall outlook for Niue for April is likely to be above normal while rainfall for April to June 2022 is very likely to be above normal. Maximum and Minimum monthly and seasonal temperatures are very likely to be above normal.

Part 2: Recent Ocean summary statement

Monthly and last three months: February/December 2021 to February 2022 (Highly significant changes)

For February and the last three months, the Sea surface temperature shows warmer conditions experienced in Niue with maximum temperature of 1.0 degrees Celsius.

The sea level anomaly experienced for the month of February is above average at a 50 – 100mm range.

Coral bleaching alert status is on 'Watch'.

Part 2i. Monthly and Seasonal Outlooks for April and April to June 2022

Ocean Variable statement (Highly significant changes)

The outlook for Niue shows a significant temperature difference of up to 1.2 degrees Celsius warmer than average for April and over the months April to June.

The sea level anomaly forecast shows near normal conditions for April. The seasonal forecast shows an above normal sea level difference of 30-60mm for the months of April to June.

Coral bleaching outlook has a "Warning" alert status for Niue.

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

Product	Date: February 2022	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin		<ul style="list-style-type: none"> General public Government officials Village council Private sector Stakeholders 	50 15 20 20 30	20 10 10 5 15	30 5 10 15 15
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
Total			135	60	75

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