

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 177

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2022	Apr-2022	May-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Hanan Airport (1905-2022)	408.5	236.1	138.8	81.8	164.9	130.6	71/116

TABLE 2: Three-month Total Rainfall for March to May 2022

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Hanan Airport (1905-2022)	783.4	Above normal	545.6	765.9	606.6	86/116

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

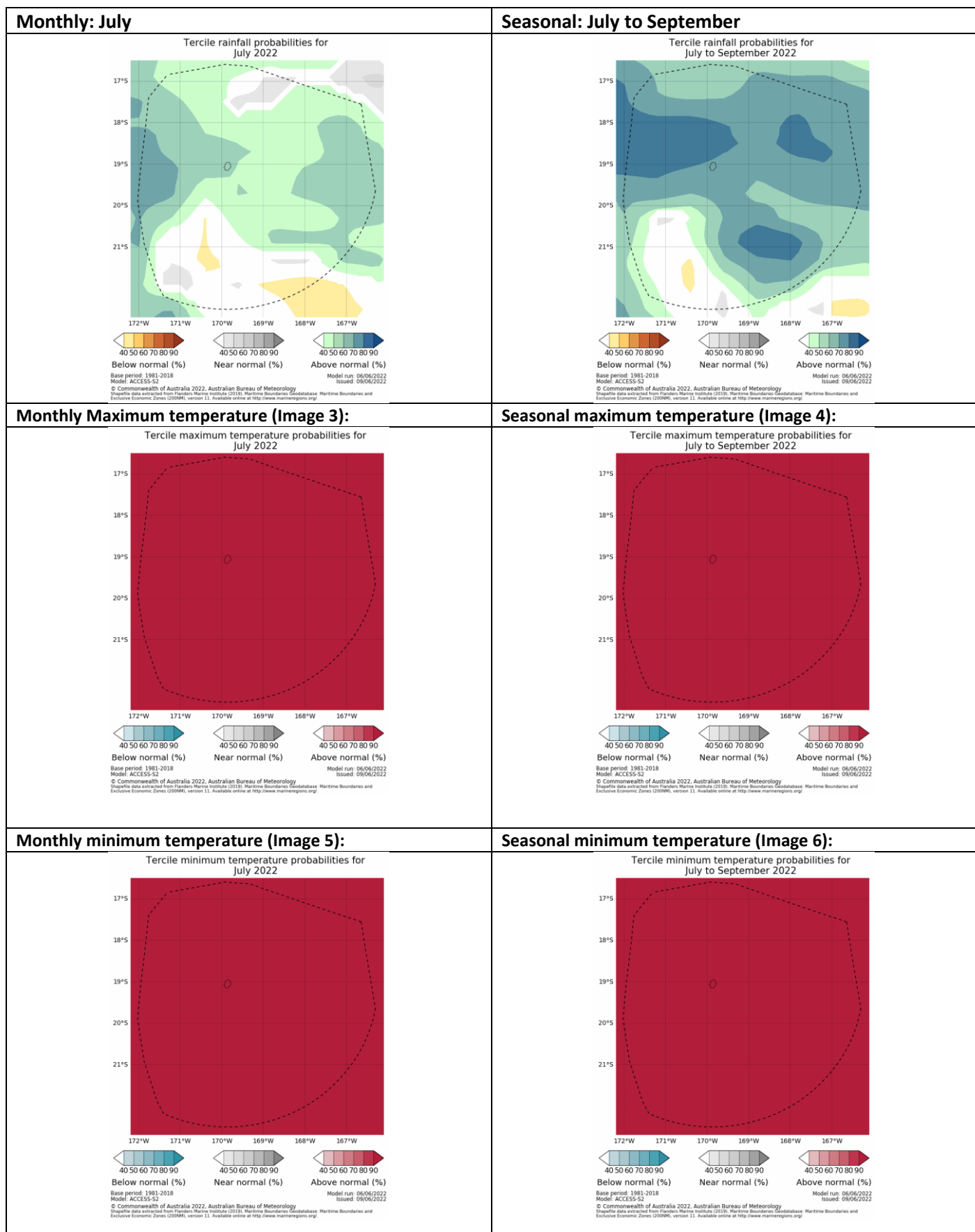
Moderate $5 \leq X < 10$

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 July and July to September 2022

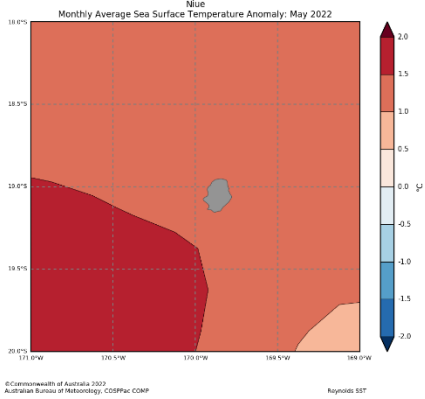
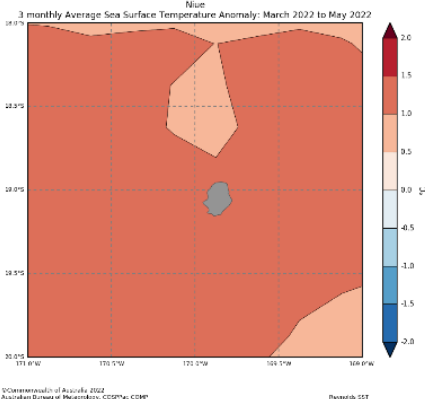
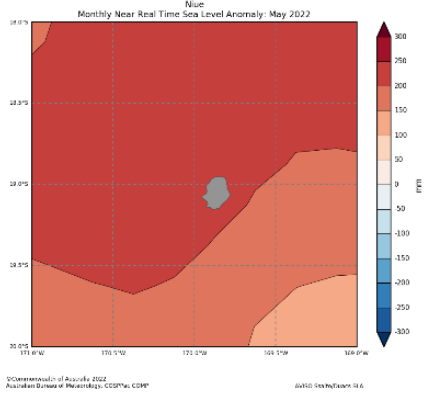
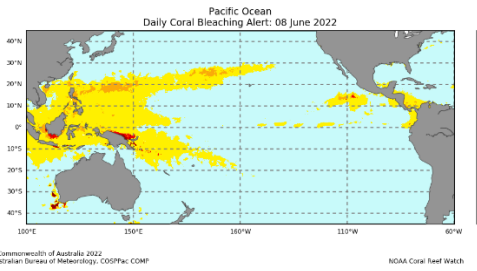
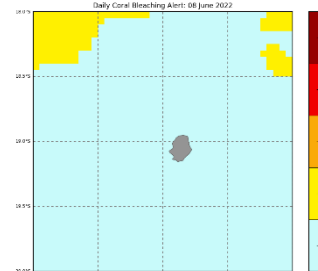


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Part 2: Recent Ocean summary statement

Monthly: May 2022

Monthly: May	Last three months: March to May 2022:
<p>Sea Surface Temperature (Image 1):</p>  <p>Monthly Average Sea Surface Temperature Anomaly: May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/Sea-DOAP</p> <p>Reynolds SST</p>	<p>Sea Surface Temperature (Image 4):</p>  <p>3 monthly Average Sea Surface Temperature Anomaly: March 2022 to May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/Sea-DOAP</p> <p>Reynolds SST</p>
<p>Sea level (Image 2):</p>  <p>Monthly Near Real Time Sea Level Anomaly: May 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/Sea-DOAP</p> <p>AVISO Sea Surface Top</p>	
<p>Daily coral bleaching alert (Image 3):</p>  <p>Pacific Ocean Daily Coral Bleaching Alert: 08 June 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/Sea-DOAP</p> <p>NOAA Coral Reef Watch</p>	 <p>Niue Daily Coral Bleaching Alert: 08 June 2022</p> <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, CSIRO/Sea-DOAP</p> <p>NOAA Coral Reef Watch</p>

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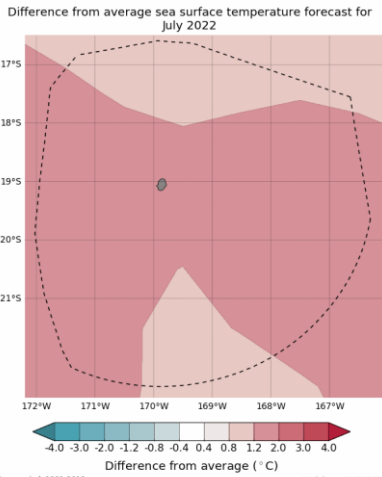
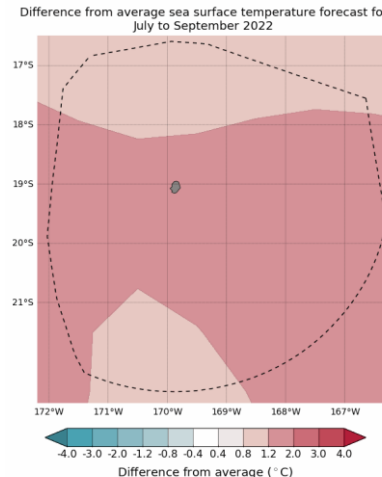
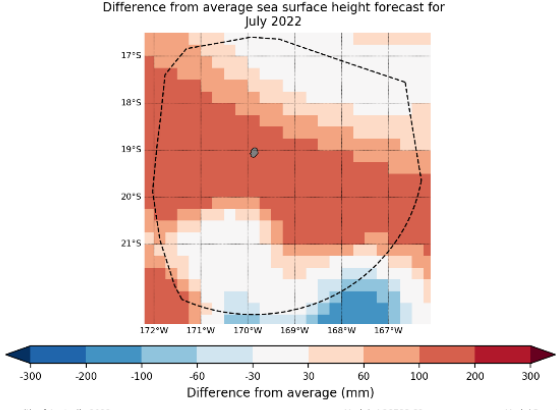
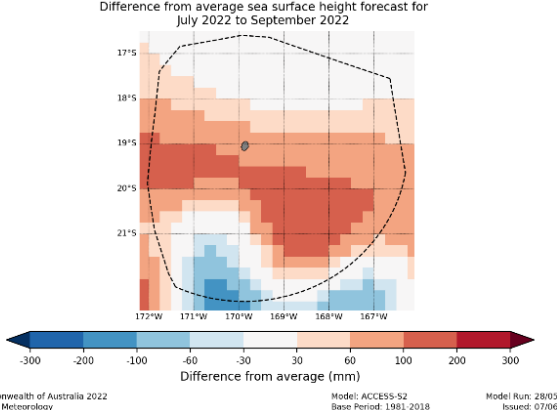
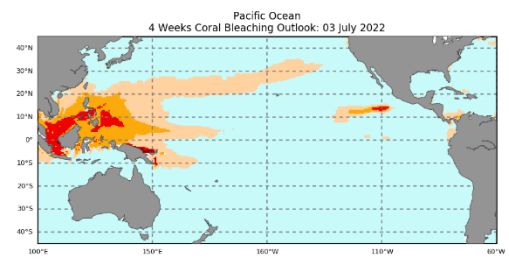
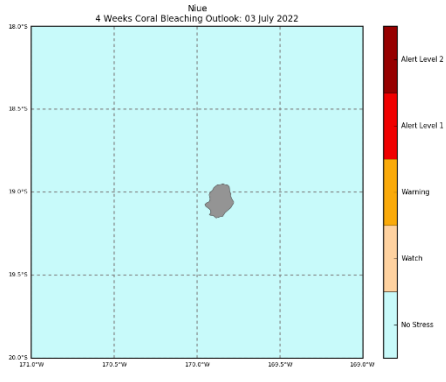
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Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022

Monthly: July	Seasonal: July to September
<p>Monthly sea surface temperature (Image 5):</p>  <p>Difference from average sea surface temperature forecast for July 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Fisheries Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marine.gov.au</p> <p>Model run: 11/06/2022 Issued: 13/06/2022</p>	<p>Seasonal sea surface temperature (Image 6):</p>  <p>Difference from average sea surface temperature forecast for July to September 2022</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Fisheries Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marine.gov.au</p> <p>Model run: 11/06/2022 Issued: 13/06/2022</p>
<p>Monthly sea level (Image 7):</p>  <p>Difference from average sea surface height forecast for July 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>	<p>Seasonal sea level (Image 8):</p>  <p>Difference from average sea surface height forecast for July 2022 to September 2022</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018</p> <p>Model Run: 28/05/2022 Issued: 07/06/2022</p>
<p>4-week Coral Bleaching (Image 9):</p>  <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>	<p>4-week Coral Bleaching (Image 9):</p>  <p>Niue 4 Weeks Coral Bleaching Outlook: 03 July 2022</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSPPac COMP</p> <p>NOAA Coral Reef Watch</p>

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Summary Statement

Monthly and last three months: May 2022/March to May 2022 statement (Highly significant changes)

Hanan Airports monthly rainfall for May was normal. Last three month's rainfall was above normal.

Part 1i. Monthly and Seasonal Outlooks for July and July to September 2022

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

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

Part 2: Recent Ocean summary statement

Monthly and last three months: May/March to May 2022 (Highly significant changes)

For May and the last three months, the sea surface temperature anomaly shows warmer conditions experienced in Niue with maximum temperature difference of 1.0 – 1.5 degrees Celsius.

Above normal sea level anomaly were also observed in the month of May ranging from 200-250 mm.

Coral bleaching is on 'No Stress' status.

Part 2i. Monthly and Seasonal Outlooks for July and July to September 2022

Ocean Variable statement (Highly significant changes)

The outlook for Niue shows a significant temperature difference of up to 2.0 degrees Celsius warmer than average for July and over the months July to September.

The sea level anomaly forecast shows above normal conditions for July with 100-200 mm sea level height difference. The seasonal forecast shows an above normal sea level difference of 60-200mm for the months of July to September.

Coral bleaching outlook has a "No stress" alert status for Niue.

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

Product	Date: May 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	31/05/2022	<ul style="list-style-type: none"> Private Sector Government Officials Government staff 	50	20	30
EAR Watch					
Monthly Climate Briefing	10/05/2022	Village council reps	25	9	16
	17/05/2022	Stakeholders Government Officials Private sector Niue High School Students	25	5	20
Ocean Outlook					
Climate data request					
Total			100	34	66

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