

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 169

Country: Niue

Part 1: Recent climate

TABLE 1: Monthly Rainfall

| Station (include data period) | Jul-2021 | Aug-2021 | Sep-2021 | | | | |
|-------------------------------|------------|------------|---------------|---------|---------|--------|--------|
| | | | Total (mm) | 33%tile | 67%tile | Median | Rank |
| | Total (mm) | Total (mm) | Rainfall (mm) | | | | |
| Hanan Airport (1905-2021) | 201.5 | 132.2 | 204.0 | 58.8 | 139.2 | 93.4 | 97/113 |
| | | | | | | | |

TABLE 2: Three-month Total Rainfall for July to September 2021

| Station | Three-month Total | | 33%tile | 67%tile | Median | Rank |
|---------|---------------------------|-------|--------------|---------|--------|------|
| | Rainfall (mm) | | | | | |
| | Hanan Airport (1905-2021) | 537.7 | Above normal | 254.8 | 378.5 | |
| | | | | | | |

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 November and November 2021 to January 2022

| Monthly | Seasonal |
|---|---|
| <p>Tercile rainfall probabilities for November 2021</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> | <p>Tercile rainfall probabilities for November 2021 to January 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> |
| Monthly Maximum temperature (Image 3): | Seasonal maximum temperature (Image 4): |
| <p>Tercile maximum temperature probabilities for November 2021</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> | <p>Tercile maximum temperature probabilities for November 2021 to January 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> |
| Monthly minimum temperature (Image 5): | Seasonal minimum temperature (Image 6): |
| <p>Tercile minimum temperature probabilities for November 2021</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> | <p>Tercile minimum temperature probabilities for November 2021 to January 2022</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p> |

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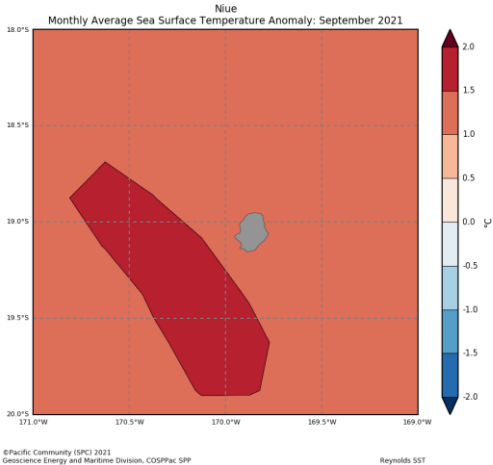
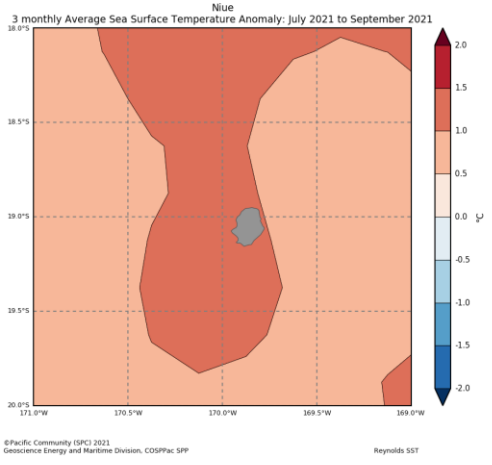
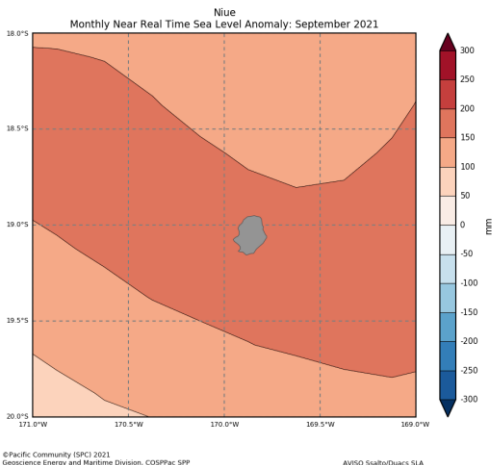
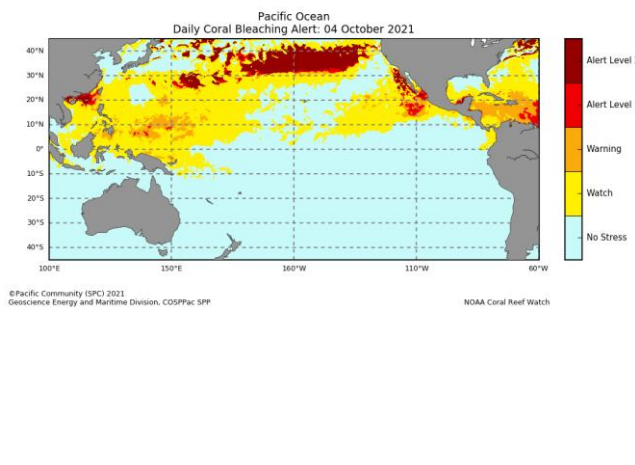
Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

Part 2: Recent Ocean summary statement

Monthly: September 2021

| Monthly: September | Last three months: July to September 2021: |
|---|--|
| Sea Surface Temperature (Image 1): | Sea Surface Temperature (Image 4): |
|  |  |
| Sea level (Image 2): | Daily coral bleaching alert (Image 3): |
|  |  |

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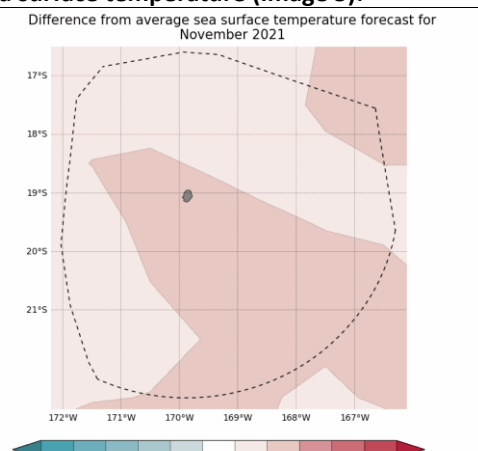
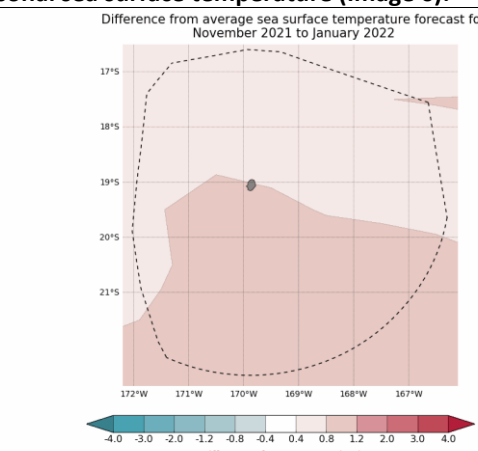
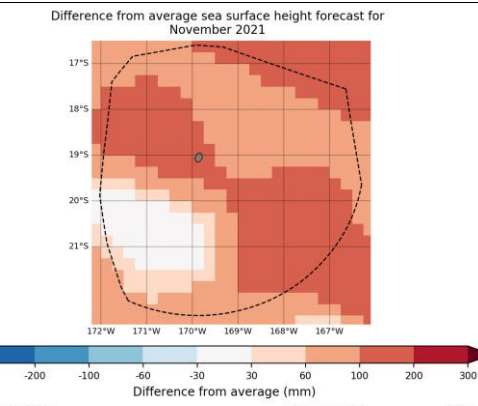
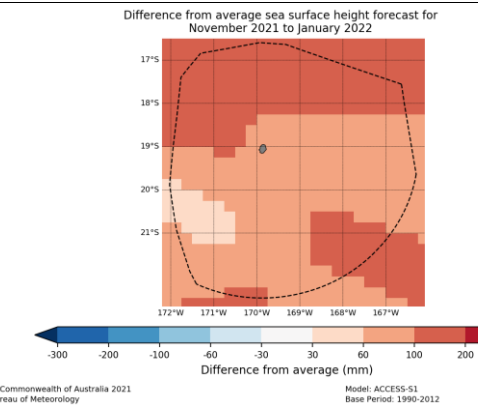
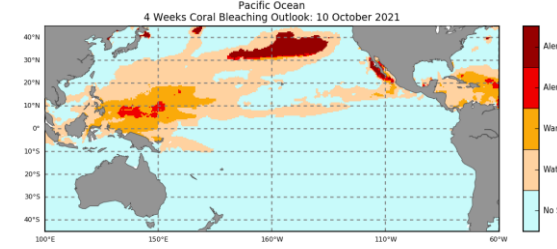
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Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

| | |
|--|--|
| <p>Monthly: November</p> <p>Monthly sea surface temperature (Image 5):</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2000M), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p> | <p>Seasonal: November to January</p> <p>Seasonal sea surface temperature (Image 6):</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology Shapfile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (2000M), version 11. Available online at http://www.maritimeregions.org/</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p> |
| <p>Monthly sea level (Image 7):</p>  <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S1 Base Period: 1990-2012 Model Run: 27/09/2021 Issued: Map not issued</p> | <p>Seasonal sea level (Image 8):</p>  <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S1 Base Period: 1990-2012 Model Run: 27/09/2021 Issued: Map not issued</p> |
| <p>4-week Coral Bleaching (Image 9):</p>  <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>NOAA Coral Reef Watch</p> | |

Summary Statement

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

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Monthly and last three months: September 2021/July to September statement (Highly significant changes)

Hanan Airports monthly and last three months: September 2021/ July to September rainfall was above normal. The July to September rainfall was the 12th wettest on record.

Part 1i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

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

The rainfall outlook for Niue for November and November 2021 to January 2022 is 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: September/July to September 2021 (Highly significant changes)

The Sea surface temperature for the month of September shows warmer conditions experienced in Niue with maximum temperature of 2.0 degrees Celsius. Sea level for the month of September was higher than normal, with a maximum sea level of 200mm.

Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 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 November and over the months November to January.

Sea surface height is predicted to be up to 200mm above average in November 2021.

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

| Product | Date: September 2021 | Stakeholder | Total Number of Participants | Number of males | Number of females |
|--------------------------|--|---|------------------------------------|-------------------------|--------------------------|
| Climate Bulletin | 22 Sep 2021 NCO | General public Government officials Village council Private sector Stakeholders | 40 10 10 20 20 | 20 5 5 5 10 | 20 5 5 15 10 |
| EAR Watch | | | | | |
| Monthly Climate Briefing | 07 Sep 2021 Radio Program 14 Sep 2021 28 Sep 2021 School Careers | General public Government officials Government all staff Niue High School Students | 60 6 15 28 | 30 4 5 12 | 30 2 10 16 |
| Ocean Outlook | | | | | |
| Climate data request | | | | | |
| Total | | | 209 | 96 | 113 |

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