

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 224

Country: **Cook Islands**

Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

| Station (include data period) | Feb-2026   | Mar-2026   | Apr-2026      |         |         |        | Rank  |
|-------------------------------|------------|------------|---------------|---------|---------|--------|-------|
|                               |            |            | Total (mm)    | 33%tile | 67%tile | Median |       |
|                               | Total (mm) | Total (mm) | Rainfall (mm) |         |         |        |       |
| Penrhyn (1937-2026)           | 61.6       | 120.2      | 49.8          | 102.6   | 185.3   | 130.5  | 8/87  |
|                               |            |            |               |         |         |        |       |
| Rarotonga (1899-2026)         | 271.9      | 235.0      | 49.7          | 145.0   | 241.0   | 196.0  | 8/128 |

**TABLE 2: Three-month Total Rainfall for February to April 2026**

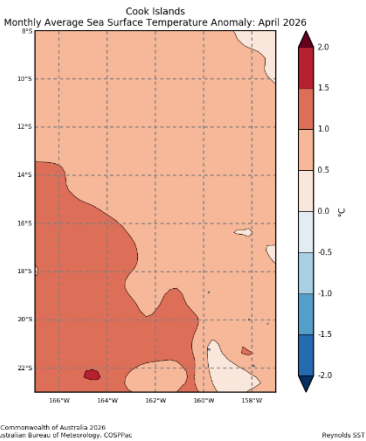
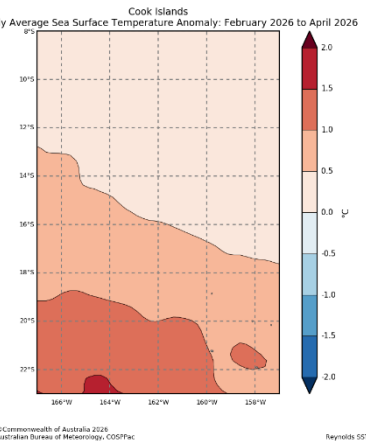
| Station               | Three-month Total |              | 33%tile | 67%tile | Median | Rank   |
|-----------------------|-------------------|--------------|---------|---------|--------|--------|
|                       | Rainfall (mm)     |              |         |         |        |        |
| Penrhyn (1937-2026)   | 231.6             | Below normal | 450.0   | 710.1   | 560.2  | 7/86   |
|                       |                   |              |         |         |        |        |
| Rarotonga (1899-2026) | 556.6             | Below normal | 557.0   | 690.6   | 629.0  | 35/128 |

# Part 1i. Monthly and Seasonal Outlooks for June and June to August 2026

| <b>Monthly: June 2026</b><br><b>Rainfall (Image 1)</b>   | <b>Seasonal: June to August 2026</b><br><b>Rainfall (Image 2)</b>  |
|--|--|
| <p style="text-align: center;">Tercile rainfall probabilities for June 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>            | <p style="text-align: center;">Tercile rainfall probabilities for June to August 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p>            |
| <b>Monthly Maximum temperature (Image 3):</b>  | <b>Seasonal maximum temperature (Image 4):</b>   |
| <p style="text-align: center;">Tercile maximum temperature probabilities for June 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p> | <p style="text-align: center;">Tercile maximum temperature probabilities for June to August 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p> |
| <b>Monthly minimum temperature (Image 5):</b>  | <b>Seasonal minimum temperature (Image 6):</b>   |
| <p style="text-align: center;">Tercile minimum temperature probabilities for June 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p> | <p style="text-align: center;">Tercile minimum temperature probabilities for June to August 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p style="text-align: center;">Below normal (%) Near normal (%) Above normal (%)</p> <p style="text-align: center;">--- EEZ border V11 (Flanders Marine Institute, 2019).</p> |

## Part 2: Recent Ocean Observation

### Monthly/Three months: April and February to April 2026

| Monthly: April 2026  | Last three months: February to April 2026  |
|--|--|
| <b>Sea Surface Temperature Anomaly (Image 1):</b>  | <b>Sea Surface Temperature Anomaly (Image 4):</b>  |
|  <p>Cook Islands<br/>Monthly Average Sea Surface Temperature Anomaly: April 2026</p> <p>©Commonwealth of Australia 2026<br/>Australian Bureau of Meteorology, COSIPac</p> <p>Reynolds SST</p> |  <p>Cook Islands<br/>3 monthly Average Sea Surface Temperature Anomaly: February 2026 to April 2026</p> <p>©Commonwealth of Australia 2026<br/>Australian Bureau of Meteorology, COSIPac</p> <p>Reynolds SST</p> |
| <b>Sea level anomaly (Image 2):</b>  |  |
|  |  |
| <b>National daily coral bleaching alert (Image 3):</b>   | <b>Pacific daily coral bleaching alert (Image 5):</b>  |
|  |  |

Part 2i. Monthly and Seasonal Outlooks for June and June to August 2026

|   |   |
|---|---|
| <p><b>Monthly: June 2026</b></p>  | <p><b>Seasonal: June to August 2026</b></p>   |
| <p><b>Monthly sea surface temperature anomaly (Image 5):</b></p>  | <p><b>Seasonal sea surface temperature anomaly (Image 6):</b></p>   |
| <p>Difference from average sea surface temperature forecast for June 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p>© Commonwealth of Australia 2026. Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p> | <p>Difference from average sea surface temperature forecast for June to August 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p>© Commonwealth of Australia 2026. Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p> |
| <p><b>Monthly sea level anomaly (Image 7):</b></p>  | <p><b>Seasonal sea level anomaly (Image 8):</b></p>   |
| <p>Difference from average sea surface height forecast for June 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p>© Commonwealth of Australia 2026. Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>      | <p>Difference from average sea surface height forecast for June to August 2026</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>Model run: 04/05/2026<br/>Issued: 06/05/2026</p> <p>© Commonwealth of Australia 2026. Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>      |
| <p><b>National 4-week Coral Bleaching Outlook (Image 9):</b></p>  | <p><b>Pacific 4-week Coral Bleaching Outlook (Image 10):</b></p>  |

## Summary Statement

### Monthly and last three months: April/February to April 2026 statement

The rainfall for April and for the past 3-months of Feb – April 2026 were **below normal** over both Penrhyn and Rarotonga stations. This April was the 8<sup>th</sup> driest in history for both stations, and the 7<sup>th</sup> driest Feb – April period on record for Penrhyn.

### Part 1i. Monthly and Seasonal Outlooks for June and June to August 2026

#### Monthly/Seasonal rainfall and temperature Outlook statements

The rainfall for June and June to August 2026 very likely to be **below normal** over central and northern Cook Islands, including Penrhyn. While the southern Cook Islands including Rarotonga indicates a near-normal rainfall outlook.

Maximum and minimum temperatures during June 2026 are likely to be **above normal** over all the Cook Islands.

Maximum and minimum temperatures averaged over June to August 2026 follows the same monthly pattern for Penrhyn and the northern coasts, and near-normal for the southern coasts including Rarotonga.

### Part 2: Recent Ocean summary statement

#### Monthly and last three months: April/February to April 2026

April sea surface temperatures (SSTs) around Penrhyn were 0.5 to 1.0°C above normal and 0.0 to 0.5°C above normal around Rarotonga.

Averaged over February to April 2026, sea surface temperatures around Penrhyn were 0.0 to 0.5°C above normal and 0.5 to 1.0°C above normal around Rarotonga.

April sea levels around **(insert your country)** were X to Y mm (above normal/near-normal/below normal). **No Maps**

A coral bleaching [Watch/Alert Level 1/Alert Level 2/Alert Levels 1 and 2] status is/are currently in effect for [insert which part of your country] as of [date]. **No Maps**

### Part 2i. Monthly and Seasonal Outlooks for June and June to August 2026

#### Ocean Variable statement

June 2026 sea surface temperatures around Penrhyn are predicted to be 0.4 to 0.8°C above normal and 0.8 to 1.2°C above normal for Rarotonga.

Averaged over June to August 2026, sea surface temperatures around both Penrhyn and Rarotonga station are predicted to be 0.4 to 0.8°C above normal.

June 2026 sea levels around all Cook Island waters are predicted to be -30 to 30 mm near-normal.

Averaged over June to August 2026, sea levels around Penrhyn are predicted to be -60 to -30 mm below normal and -30 to 30 mm near-normal around Rarotonga.

Coral Bleaching outlook indicates [Watch/Alert Level 1/Alert Level 2/Alert Levels 1 and 2] status for the next 12 weeks. **No Maps**

## In brief for Teleconference

- Rainfall was below normal for both April 2026 and the February to April 2026 period over Penrhyn and Rarotonga stations. April 2026 ranked as the 8th driest April on record for both stations, while the February to April period was the 7th driest on record for Penrhyn.
- The rainfall outlook generally indicates below-normal rainfall is most likely over the northern and central Cook Islands, including Penrhyn, during June 2026 and the June to August 2026 season. Near-normal rainfall conditions are expected over the southern Cook Islands, including Rarotonga.
- SSTs were near-normal to above normal during April 2026 and the February to April 2026 period. The outlook indicates above-normal SSTs are likely for both the next one-month and three-month periods around Penrhyn and Rarotonga.
- Sea levels during April 2026 were generally near-normal around the Cook Islands. Near-normal sea levels are predicted for June 2026 across all Cook Islands waters, while below-normal sea levels are forecast around Penrhyn during the June to August 2026 period.
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**TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders (April 2026)**

| <i>Product</i>                  | <i>Stakeholder</i>  | <i>Total Number of Participants</i> | <i>Number of Male</i> | <i>Number of Female</i> | <i>Disability</i> | <i>Age group</i> | <i>Comments (If there are comments from you Stakeholders)</i> |
|---------------------------------|---|-------------------------------------|-----------------------|-------------------------|-------------------|------------------|---|
| <b>Climate Bulletin</b>         |   |                                     |                       |                         |                   |                  |   |
| <b>EAR Watch</b>                | Climate Change, Red Cross, Island Council and Executive Officers, To Tatou Vai, etc | 53                                  | ?                     | ?                       | ?                 | ?                | Just thanks from some stakeholders.                           |
| <b>Monthly Climate Briefing</b> |   |                                     |                       |                         |                   |                  |   |
| <b>Ocean Outlook</b>            | Climate Change, Red Cross, Island Council and Executive Officers, To Tatou Vai, etc | 53                                  | ?                     | ?                       | ?                 | ?                |   |
| <b>Climate data request</b>     | To Tatou Vai, and MMR   | 5                                   | 2                     | 3                       | ?                 | ?                |   |
| <b>Outreach programs</b>        | TRAK  |                                     |                       |                         |                   |                  |   |
| <b>Total</b>                    |   |                                     |                       |                         |                   |                  |   |

| <b>Stakeholder category</b>                          | <b>Do your products reach this group? (Y/N)</b> | <b>Tailored product? (Y/N)</b> |
|--|---|--------------------------------|
| <b>Agriculture sector</b>                            |   |                                |
| <b>Disaster Risk Reduction sector</b>                |   |                                |
| <b>Energy sector</b>                                 |   |                                |
| <b>Health sector</b>                                 |   |                                |
| <b>Water sector</b>                                  |   |                                |
| <b>Fisheries and Aquaculture sector</b>              |   |                                |
| <b>Tourism sector</b>                                |   |                                |
| <b>Maritime sector</b>                               |   |                                |
| <b>Research &amp; education sector</b>               |   |                                |
| <b>Women's [ ] organisations</b>                     |   |                                |
| <b>National disability organisations</b>             |   |                                |
| <b>Community based organisations (e.g. councils)</b> |   |                                |
| <b>Products offered in local dialects/ languages</b> |   |                                |

