

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 220

Country: Cook Islands

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Oct-2025	Nov-2025	Dec-2025				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2026)	279.6	128.6	135.2	106.3	245.8	182.0	39/88
Rarotonga (1899-2026)	10.4	47.4	139.6	134.0	253.7	213.0	42/127

TABLE 2: Three-month Total Rainfall for October to December 2025

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Penrhyn (1937-2026)	543.4	Normal	364.8	614.0	471.9	54/87
Rarotonga (1899-2026)	197.4	Below normal	355.7	522.7	450.0	6/127

# Part 1i. Monthly and Seasonal Outlooks for February and February to April 2026

Monthly: February 2026	Seasonal: February to April 2026
<p><b>Rainfall (Image 1)</b></p> <p>Tercile rainfall probabilities for February 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Rainfall (Image 2)</b></p> <p>Tercile rainfall probabilities for February to April 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>Monthly Maximum temperature (Image 3):</b></p>	<p><b>Seasonal maximum temperature (Image 4):</b></p>
<p>Tercile maximum temperature probabilities for February 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Tercile maximum temperature probabilities for February to April 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>
<p><b>Monthly minimum temperature (Image 5):</b></p>	<p><b>Seasonal minimum temperature (Image 6):</b></p>
<p>Tercile minimum temperature probabilities for February 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p>Tercile minimum temperature probabilities for February to April 2026</p> <p>Base period: 1981-2018 Model run: 17/01/2026 Model: ACCESS-S2 Issued: 19/01/2026</p> <p>Below normal (%) Near normal (%) Above normal (%)</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>

# Part 2: Recent Ocean Observation

## Monthly/Three months: December and October to December 2025

Monthly: December 2025	Last three months: October to December 2025
<p><b>Sea Surface Temperature Anomaly (Image 1):</b></p> <p>Cook Islands Monthly Sea Surface Temperature Anomalies: December 2025</p> <p>© Pacific Community (SPC) 2025 Reynolds</p>	<p><b>Sea Surface Temperature Anomaly (Image 4):</b></p> <p>Cook Islands Seasonal Sea Surface Temperature Anomalies : Oct 2025 - Dec 2025</p> <p>© Pacific Community (SPC) 2025 Reynolds</p>
<p><b>Sea level anomaly (Image 2):</b></p> <p>Cook Islands Monthly Sea Level Anomaly: December 2025</p> <p>© Pacific Community (SPC) 2025. Based using E.U. Copernicus Marine Service Information: <a href="https://doi.org/10.48670/moi-00149">https://doi.org/10.48670/moi-00149</a></p>	
<p><b>National daily coral bleaching alert (Image 3):</b></p> <p>Cook Islands 4 Weeks Coral Bleaching Outlook: 04 January 2026</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>	<p><b>Pacific daily coral bleaching alert (Image 5):</b></p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 04 January 2026</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch</p>

# Part 2i. Monthly and Seasonal Outlooks for February and February to April 2026

Monthly: February 2026	Seasonal: February to April 2026
<p><b>Monthly sea surface temperature anomaly (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for February 2026</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 17/01/2026 Issued: 19/01/2026</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Seasonal sea surface temperature anomaly (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for February to April 2026</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 17/01/2026 Issued: 19/01/2026</p> <p>© Commonwealth of Australia 2025 Australian 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>Difference from average sea surface height forecast for February 2026</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 17/01/2026 Issued: 19/01/2026</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, supported by COSPPac</p> <p>--- EEZ border V11 (Flanders Marine Institute, 2019).</p>	<p><b>Seasonal sea level anomaly (Image 8):</b></p> <p>Difference from average sea surface height forecast for February to April 2026</p> <p>Base period: 1981-2018 Model: ACCESS-S2 Model run: 17/01/2026 Issued: 19/01/2026</p> <p>© Commonwealth of Australia 2025 Australian 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>4 Weeks Coral Bleaching Outlook: 04 January 2026</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>	<p><b>Pacific 4-week Coral Bleaching Outlook (Image 10):</b></p> <p>4 Weeks Coral Bleaching Outlook: 04 January 2026</p> <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2025 Australian Bureau of Meteorology, COSPPac</p> <p>NOAA Coral Reef Watch</p>

## Summary Statement

### Monthly and last three months: December 2025/October to December 2025 statement

The December 2025 rainfall was normal for both Penrhyn and Rarotonga, while rainfall recorded for October to December 2025 period was normal for Penrhyn and below normal for Rarotonga.

## Part 1i. Monthly and Seasonal Outlooks for February and February to April 2026

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall outlook for February 2026, indicating a strong likelihood of below-normal rainfall in the northern Cook Islands including Penrhyn, and normal to above-normal rainfall in the southern islands like Rarotonga. The three-month rainfall outlook for February to April 2026, reinforces the same general pattern: drier-than-normal conditions in the central and north, and wetter-than-normal conditions in the south.

Maximum and minimum temperatures during February 2026 and averaged over February to April 2026 are very likely to be above normal over majority of the country, with the exception Penrhyn and Rakahanga showing near normal conditions for one month.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: December 2025/October to December 2025

December and averaged over October to December, sea surface temperatures (SSTs) around the Cook Islands were –0.4 to 0.4°C near-normal to 0.4 to 0.8°C above normal.

December sea levels around the Cook Islands were ranging from –30 to 30mm near-normal up to 200mm above normal. A coral bleaching Watch is currently in effect for central and northern Cook Islands as of 04<sup>th</sup> January 2026.

## Part 2i. Monthly and Seasonal Outlooks for February and February to April 2026

### Ocean Variable statement

February 2026 Sea surface temperatures around majority of the Cooks waters including Penrhyn are forecast to be near-normal, with some islands including Rarotonga are predicted to be 0.4 to 0.8°C above normal. Averaged over February to April 2026 all Cook Islands waters are predicted to be above normal with some being up to 1.2°C above normal.

February 2026 sea levels around majority of Cook Island waters including Rarotonga are predicted to be below normal by 60mm to 100mm and near normal for Penrhyn. Averaged over January to March 2026, sea levels for majority of the waters including both Rarotonga and Penrhyn waters are predicted to be ranging from 30 to 200mm below normal.

A coral bleaching Watch is currently in effect for central and northern Cook Islands as of 04<sup>th</sup> January 2026.

## In brief for Teleconference

- Rainfall was normal last month and below normal for the past 3-months, for Rarotonga.
- The rainfall outlook generally indicates below normal likely for northern Cooks including Penrhyn in February and February to April 2026, with the rest including Rarotonga very likely to be above normal.
- Sea surface temperatures (SSTs) for December and October to December were near-normal to above normal. SSTs are predicted to be near-normal to above normal for the next one and three months.
- Sea levels were above normal for December around the Cook Islands. Sea Levels outlook shows below normal to near normal most likely for the next one and three months.

**TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders (November 2025)**

Product	Stakeholder	Total Number of Participants	Number of Male	Number of Female	Disability	Comments (If there are comments from you Stakeholders)
Climate Bulletin						
EAR Watch	Climate Change, Red Cross, Island Council and Executive Officers, To Tatou Vai, etc	53	?	?	?	
Monthly Climate Briefing						
Ocean Outlook						
Climate data request	To Tatou Vai, and MMR	5	2	3	?	
Total		58	2	3	?	

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