

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 151

Country: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2020	Feb-2020	Mar-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2020)	199.8	301.8	152.6	145.0	271.4	216.3	31/82
Rarotonga (1899-2020)	241.3	279.7	329.4	137.5	246.0	195.7	94/122

TABLE 2: Three-month Rainfall for January to March 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 October-November 2019				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2020)	654.2	Normal	490.0	854.0	662.0	44/82	9	42	49	31	Near- consistent
Rarotonga (1899-2020)	850.4	Above normal	533.0	726.2	647.5	92/122	41	31	28	5	Inconsistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2020

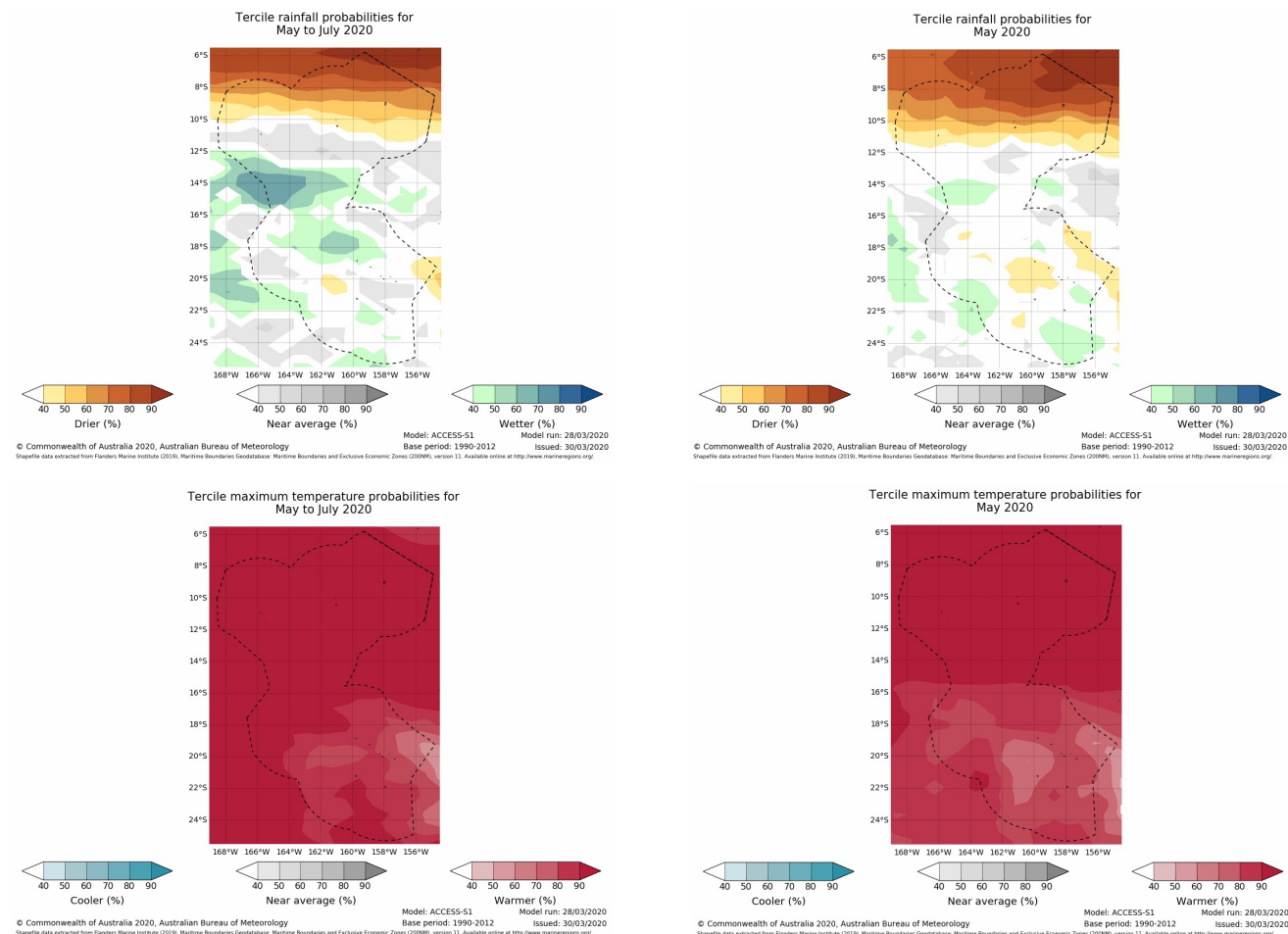
Predictor and Period used: NINO3.4 for February to March 2020

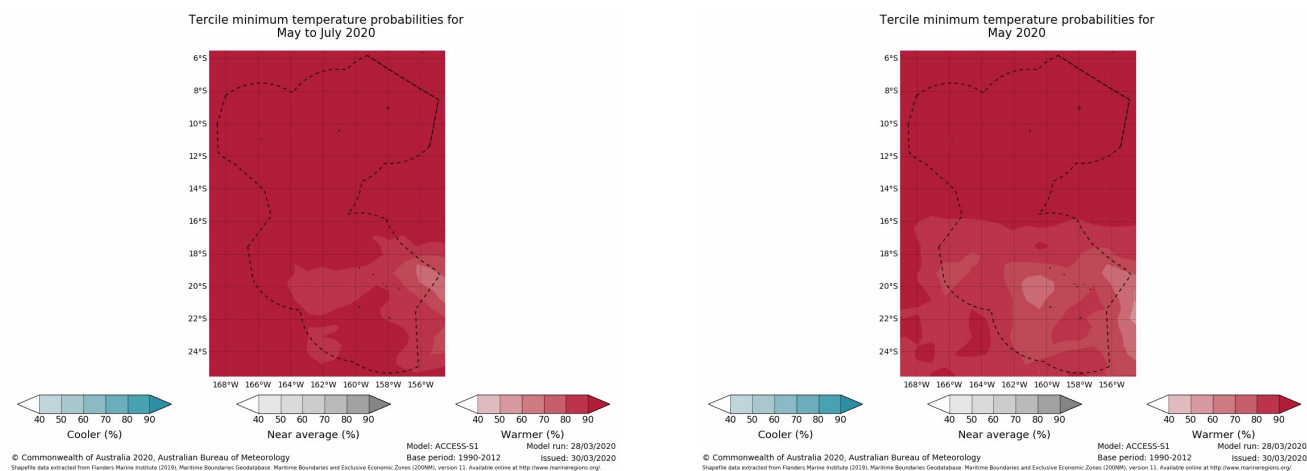
Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2020)	36	351.0	64		15	70
Rarotonga (1899-2020)	55	341.0	45		1	56

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2020)	19	287.4	36	488.6	45	16	49
Rarotonga (1899-2020)	40	303.0	36	392.0	24	5	36

Monthly and Seasonal Climate Outlooks using ACCESS-S for April to June 2020

The maps are provided in the PowerPoint document labelled ACCESS-S outlooks_2020-03-19





Summary Statements

Rainfall for March 2020:

Rainfall for March 2020 was normal for Penrhyn and above normal for Rarotonga.

Accumulated rainfall for January to March 2020, including outlook verification:

Accumulated rainfall for the period of January to March 2020 was normal for Penrhyn and above normal for Rarotonga

The outlooks issued in December 2019 were verified as Near-consistent for Penrhyn with very high skill, and Inconsistent at Rarotonga with low skill.

Outlooks for May to July 2020:

1. SCOPIC:

The rainfall outlook for Penrhyn shows above normal as the most likely outcome, with normal the next most likely; below normal is the least likely. Rarotonga's outlook shows below normal as the most likely outcome, with normal the next most likely; above normal as the least likely to occur.

Forecast confidence is high for Penrhyn and low for Rarotonga.

2. ACCESS-S:

Seasonal rainfall:

The outlook for Penrhyn shows a 50-60% chance of drier than normal. Rarotonga's outlook offers little guidance as the chances of wetter, near average and drier are similar.

Seasonal maximum and minimum temperatures:

A warmer than average season is strongly favoured at both Penrhyn and Rarotonga, during both the day and overnight.

Monthly rainfall:

The one-month outlook for for Penrhyn shows a 70-80% chance of being drier than normal, while Rarotonga's outlook offers little guidance as the chances for wetter, near average and drier are similar.

Monthly maximum and minimum temperatures:

Warmer than average days and nights during May are favoured at both Penrhyn (80-90% chance) and Rarotonga (60-70% chance).

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: $X \geq 35$

Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: March 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total					