

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 152

Country: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	Feb-2020	Mar-2020	Apr-2020				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2020)	301.8	152.6	40.8	106.1	185.3	130.5	3/81
Rarotonga (1899-2020)	279.7	329.4	227.9	140.0	244.4	194.5	80/122

TABLE 2: Three-month Rainfall for February to April 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 November-December 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2020)	495.2	Normal	462.5	727.3	585.2	34/80	17	41	42	15	Near-consistent
Rarotonga (1899-2020)	837.0	Above normal	532.0	689.6	629.0	107/122	41	30	29	5	Inconsistent

- *Note:* Table was taken from SCOPIC due to OCOF #148 not being done by the Cook Islands Met, so figures here will differ.

TABLE 3: Seasonal Climate Outlooks using SCOPIC for June to August 2020

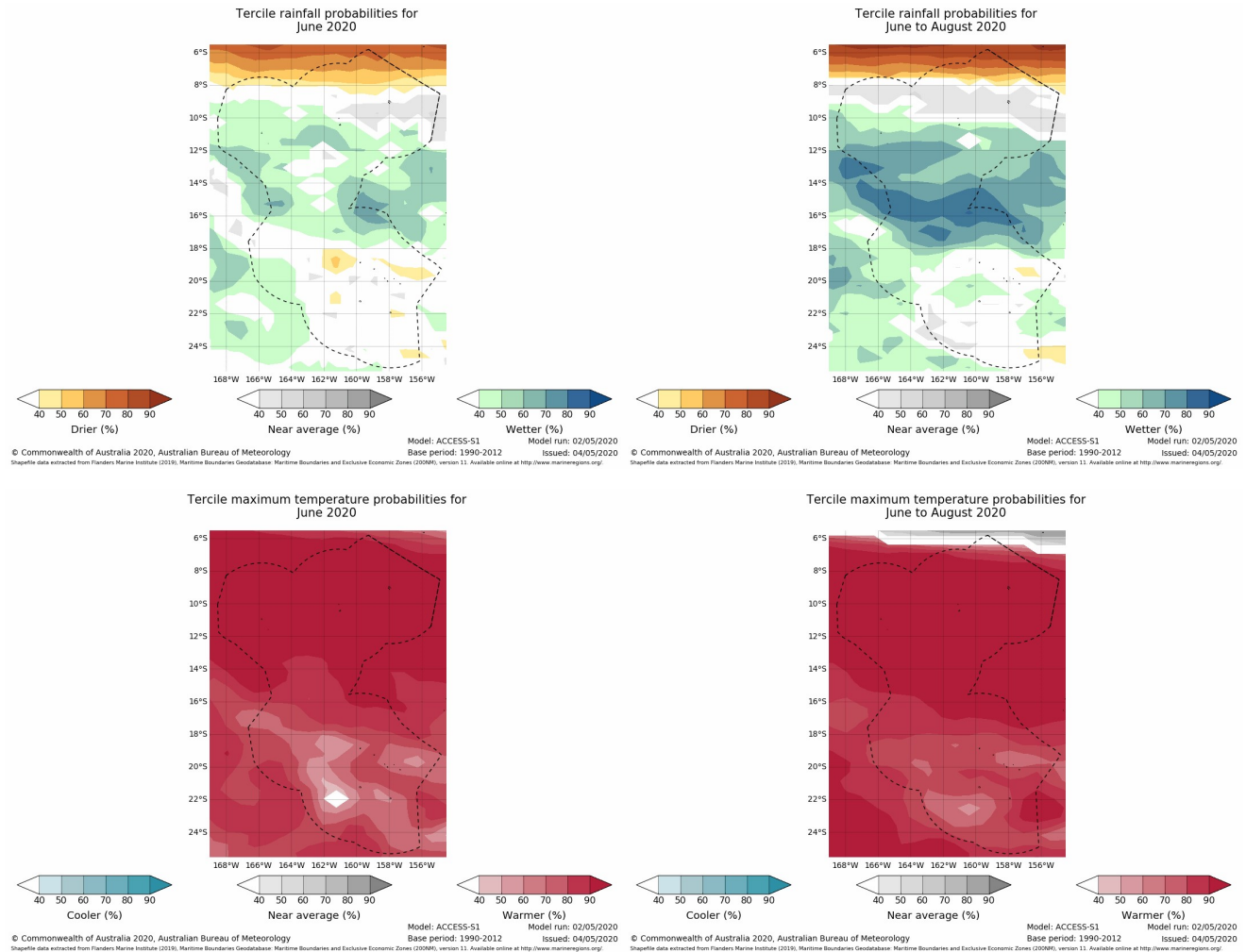
Predictor and Period used: NINO3.4 for March to April 2020

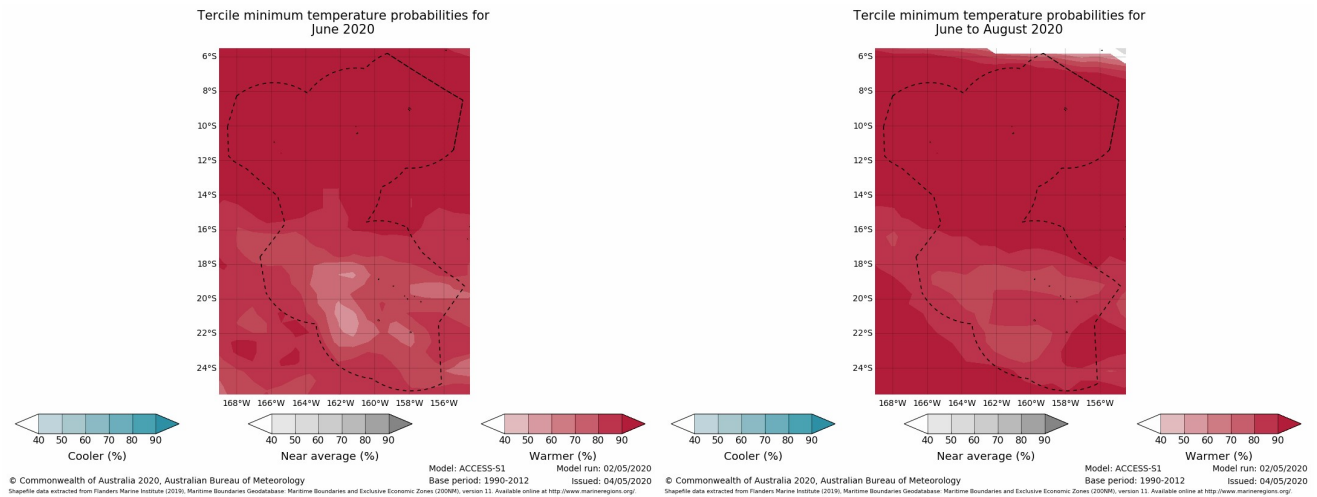
Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2020)	28	370.4	72		18	68
Rarotonga (1899-2020)	55	297.5	45		0	53

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)	15	257.0	36	531.3	49	13	40
Rarotonga (1899-2020)	41	246.0	30	364.7	29	0	30

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

The maps are provided in the PowerPoint document labelled ACCESS-S outlooks_2020-04





Summary Statements

Rainfall for April 2020:

Rainfall for the month of April 2020 was below normal for Penrhyn and normal for Rarotonga. Penrhyn recorded its third driest April on record.

Accumulated rainfall for February to April 2020, including outlook verification:

Accumulated rainfall for the period of February to April 2020 was normal for Penrhyn and above normal for Rarotonga

The verification of the outlook issued in January was near-consistent for Penrhyn, and inconsistent at Rarotonga.

Outlooks for June to August 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 good for Penrhyn and very low for Rarotonga.

2. ACCESS-S:

Seasonal rainfall:

The outlook for Penrhyn shows a 40-50% chance of near 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 Penrhyn shows a 40-50% chance of being near 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 June are favoured at both Penrhyn ($\geq 90\%$ 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: April 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		Ministry of Transport	24	16	8
EAR Watch		Cook Islands Met	12	9	3
Monthly Climate Briefing					
Ocean Bulletin					
Total			36	25	11