

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 143

Country: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	May-2019	Jun-2019	Jul-2019				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2019)	100.0	85.8	116.2	78.2	146.4	108.0	44/83
Rarotonga (1899-2019)	254.5	45.2	48.5	58.0	108.0	89.0	33/121

TABLE 2: Three-month Rainfall for May to July 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 February -March 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2019)	302.0	Normal	284.9	490.8	357.0	31/80	12	31	57	16	Near-consistent
Rarotonga (1899-2019)	348.2	Normal	302.7	394.0	340.0	65/121	46	35	19	5	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2019
 Predictor and Period used: NINO3.4 for June to July 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2019)	17	370.0	83		30	75
Rarotonga (1899-2019)	60	355.0	40		4	61

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 (1937-2019)	10	316.2	28	488.0	62	26	55
Rarotonga (1899-2019)	45	287.5	30	399.7	25	4	39

TABLE 4: Seasonal Climate Outlooks using POAMA2 for September to November 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	39	325.0	39	643.0	22
Rarotonga	39	297.0	22	404.0	39

Summary Statements

Rainfall for July 2019:

Rainfall for the month of July 2019 was normal at Penrhyn, while Rarotonga had below normal amounts of rainfall.

Accumulated rainfall for May to July 2019, including outlook verification:

Accumulated rainfall for the period of May to July 2019 was normal for both stations in the Cook Islands.

Outlook verification was near-consistent for both stations, with Penrhyn showing high skill in its forecast and Rarotonga showed low confidence.

Outlooks for September to November 2019:

1. SCOPIC:

Rainfall Outlook for Penrhyn favours above normal, while Rarotonga shows below normal rainfall as the most likely outcome, with normal the next most likely; above normal is the least likely.

Penrhyn has very high confidence in its forecast, and Rarotonga shows a low confidence.

2. POAMA:

POAMA shows an equal likelihood of below normal and normal rainfall for Penrhyn; above normal is the least likely. Rarotonga's outlook is mixed as it shows an equal likelihood of above or below normal rainfall; normal is the least likely outcome.

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: July 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	No engagements last month due to my being away for medical reasons				
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total					