

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 139

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2019	Feb-2019	Mar-2019				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2019)	220.8	234.8	57.8	145.7	271.9	222.6	6/81
Rarotonga (1899-2019)	231.5	151.6	378.5	137.0	242.0	195.3	102/121

TABLE 2: Three-month Rainfall for January to March 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 October-November 2018				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2019)	513.4	Normal	486.0	859.7	691.0	33/81	4	39	57	31	Near- consistent
Rarotonga (1899-2019)	761.6	Above normal	525.7	725.4	646.0	75/121	47	27	26	4	Inconsistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2019

Predictor and Period used: NINO3.4 for February to March 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2019)	24	357.0	76		19	69
Rarotonga (1899-2019)	60	340.0	40		1	55

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)	12	284.9	31	490.8	57	16	52
Rarotonga (1899-2019)	46	302.7	35	394.0	19	5	35

TABLE 4: Seasonal Climate Outlooks using POAMA2 for May to July 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	33	311.0	27	555.0	40
Rarotonga	82	318.0	13	432.0	5

Summary Statements

Rainfall for March 2019:

Rainfall for March 2019 was below normal for Penrhyn, this was the 6th driest March in Penrhyn on record. Rarotonga station recorded above normal rainfall.

Accumulated rainfall for January to March 2019, including outlook verification:

Accumulated rainfall for January to March 2019 was normal at Penrhyn and above normal for Rarotonga station.

Outlook verification was near-consistent for Penrhyn with very high skill and inconsistent for Rarotonga with low skill respectively in its forecast.

Outlooks for May to July 2019:

1. SCOPIC:

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

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

2. POAMA:

POAMA shows above normal as the most likely outcome for Penrhyn, with below normal as the next most likely outcome. Normal is the least likely to occur. Rarotonga favours below normal as the most likely outcome.

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

Product	Date: March 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	16.03.2019	MoT (Ministry of Transport)	18	13	5
		ICI			
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total			18	13	5

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: $X \geq 35$