Pacific Islands - Online Climate Outlook Forum (OCOF) No. 137

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Nov-2018	Dec-2018	Jan-2019				
	Total (mm)	Total (mm)	Total (mm)	33%tile	67%tile	Median	Rank
			Rainfall (mm)				
Penrhyn (1937-2018)	68.2	90.2	220.8	114.0	301.4	173.0	46/81
Rarotonga (1899-2018)	5.7	246.4	231.5	176.3	280.3	213.0	69/121

TABLE 2: Three-month Rainfall for November 2018 to January 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 August-September 2018				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	379.2	Normal	366.0	749.7	577.0	30/81	13	41	46	31	Near-consistent
Rarotonga (1899-2017)	483.6	Below normal	503.7	686.9	579.0	37/120	40	35	25	14	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for March to May 2019
Predictor and Period used: NINO3.4 for December 2018 to January 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	39	501.4	61		7	61
Rarotonga (1899-2017)	66	554.0	34		13	65

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 (1937-2018)	24	400.0	31	676.0	45	7	40
Rarotonga (1899-2017)	45	493.8	32	619.3	23	8	41

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	**55**	500.0	27	850.0	18
Rarotonga	**52**	453.0	15	581.0	33

Summary Statements

Rainfall for January 2019:

Rainfall for January 2019 was normal for both Penrhyn and Rarotonga station.

Accumulated rainfall for November 2018 to January 2019, including outlook verification:

Accumulated rainfall for November 2018 to January 2019 was normal amounts at Penrhyn and below normal for Rarotonga. Verification for Penrhyn was near-consistent with very high skill and Rarotonga was consistent with good skill in its forecast.

Outlooks for March to May 2019:

1. **SCOPIC:**

The Outlook for Penrhyn shows above normal rainfall as the most likely outcome, with normal as the next most likely. Below normal is the least likely.

The outlook for Rarotonga shows below normal as the most likely outcome, with normal as the next most likely. Above normal is the least likely.

2. **POAMA:**

POAMA favours below normal rainfall for both Penrhyn and Rarotonga station. Normal is next most likely for Penrhyn and above normal is the next most likely for Rarotonga.

NB: The X LEPS % score has been categorised as follows:

Very Low: X < 0.0   Low: 0 ≤ X < 5   Moderate: 5 ≤ X < 10   Good: 10 ≤ X < 15   High: 15≤ X < 25   Very High: 25 ≤X < 35   Exceptional: X ≥ 35

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

Country	Date: Jan 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Cook Islands		MoT (Ministry of Transport)	18	14	4
		ICI – Water works	?	?	?