Pacific Islands - Online Climate Outlook Forum (OCOF) No. 142

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2019	May-2019	Jun-2019				Rank
	Total (mm)	Total (mm)	Total (mm)	33%tile	67%tile	Median	
			Rainfall (mm)				
Penrhyn (1937-2019)	83.0	100.0	85.8	101.1	171.9	130.7	24/81
Rarotonga (1899-2019)	157.1	254.5	45.2	63.0	114.0	90.0	25/121

TABLE 2: Three-month Rainfall for April to June 2019

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 January -February 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2019)	268.8	Below normal	322.0	536.0	402.0	15/79	17	33	50	16	Inconsistent
Rarotonga (1899-2019)	456.8	Normal	382.1	483.7	424.0	71/121	41	35	24	5	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for August to October 2019
Predictor and Period used: NINO3.4 for May to June 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2019)	28	341.0	72		12	66
Rarotonga (1899-2019)	62	311.0	38		2	58

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)	22	293.0	25	432.1	53	7	46
Rarotonga (1899-2019)	51	250.3	20	374.3	29	3	42

TABLE 4: Seasonal Climate Outlooks using POAMA2 for August to October 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	55	308.0	36	473.0	9
Rarotonga	36	251.0	18	372.0	46

Summary Statements

Rainfall for June 2019:

Rainfall for June 2019 was below normal for both Penrhyn and Rarotonga.

Accumulated rainfall for April to June 2019, including outlook verification:

Accumulated rainfall for April to June 2019 was below normal at Penrhyn and normal at Rarotonga, while the outlook verification was inconsistent at Penrhyn with high skill. Rarotonga was near-consistent with low skill in its forecast.

Outlooks for August to October 2019:

1. **SCOPIC:**
The rainfall Outlook for Penrhyn favours above normal, with normal being the next most likely outcome, while for Rarotonga below normal rainfall is favoured, with above normal the next most likely; normal is the least likely.

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

2. **POAMA:**
POAMA favours below normal rainfall for Penrhyn, with normal being the next most likely. At Rarotonga, above normal is the most likely outcome, with below normal the next most likely; normal is the least likely outcome.

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

Product	Date: June 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin		MoT and ICI			
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total					