Pacific Islands - Online Climate Outlook Forum (OCOF) No. 144

Country: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2019	Jul-2019	Aug-2019				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2019)	85.8	116.2	86.6	79.5	142.3	117.0	34/82
Rarotonga (1899-2019)	45.2	48.5	139.1	74.7	119.0	100.0	86/121

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 March -April 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2019)	288.6	Normal	257.0	532.7	383.8	33/81	10	31	59	13	Near-consistent
Rarotonga (1899-2019)	232.8	Below normal	248.0	364.8	300.0	27/121	37	34	29	0	Consistent

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2019)	34	493.6	66		19	63
Rarotonga (1899-2019)	62	450.0	38		12	67

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)	14	384.7	38	635.7	48	27	57
Rarotonga (1899-2019)	44	355.7	32	525.6	24	16	49

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	61	467.0	27	766.0	12
Rarotonga	39	304.0	9	530.0	52

Summary Statements

Rainfall for August 2019:

Rainfall for the month of August 2019 was normal in Penrhyn, while Rarotonga had an above normal amount of rainfall.

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

Accumulated rainfall for the period of June to August 2019 was normal at Penrhyn and below normal at Rarotonga.

Outlook verification was near-consistent for Penrhyn with good skill in its forecast. Rarotonga's verification was consistent, even though historically its skill is low for this three-month period.

Outlooks for October to December 2019:

1. **SCOPIC:**
The rainfall Outlook for Penrhyn shows above normal as the most likely with normal being the next most likely outcome, while Rarotonga's outlook shows below normal rainfall as the most likely outcome, with normal the next most likely; above normal is the least likely.

Forecast confidence is very high at Penrhyn and high at Rarotonga.

2. **POAMA:**
The POAMA outlook is the reverse of SCOPIC: it favours below normal for Penrhyn and above normal 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

Product	Date: August 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	10.08.2019	MoT	20	14	6
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Total			20	14	6