

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 141

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Mar-2019	Apr-2019	May-2019				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2019)	57.8	83.0	100.0	101.9	186.3	126.3	29/81
Rarotonga (1899-2019)	378.5	157.1	254.5	112.7	197.7	149.0	104/121

**TABLE 2: Three-month Rainfall for March to May 2019**

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 December 18 -January 19				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2019)	240.8	Below normal	400.0	676.0	501.4	7/79	24	31	45	7	Inconsistent
Rarotonga (1899-2019)	790.1	Above normal	493.8	619.3	554.0	110/121	45	32	23	8	Inconsistent

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

Predictor and Period used: NINO3.4 for April to May 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2019)	25	342.0	75		12	63
Rarotonga (1899-2019)	54	294.0	46		-1	54

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)	17	293.7	22	439.9	61	10	49
Rarotonga (1899-2019)	37	250.0	29	349.0	34	-1	36

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	58	254.0	21	522.0	21
Rarotonga	30	238.0	40	368.0	30

## **Summary Statements**

### **Rainfall for May 2019:**

Rainfall for May 2019 was below normal for Penrhyn and above normal for Rarotonga.

### **Accumulated rainfall for March to May 2019, including outlook verification:**

Accumulated rainfall for March to May 2019 was below normal at Penrhyn and above normal for Rarotonga station. Penrhyn recorded its seventh-driest March-May on record, while Rarotonga recorded the twelfth-wettest March-May on record.

Outlook verification was inconsistent for both Penrhyn and Rarotonga, with moderate skill also for both stations.

### **Outlooks for July to September 2019:**

#### **1. SCOPIC:**

Rainfall Outlook for Penrhyn favours above normal rainfall, while outlook for Rarotonga offers little guidance as the chances of above normal, normal and below normal are similar.

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

#### **2. POAMA:**

POAMA favours below normal for Penrhyn. At Rarotonga, the outlook shows Normal as the most likely outcome, with equal chances for above and below normal being the next most likely.

**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**

<b>Product</b>	<b>Date: May 2019</b>	<b>Stakeholder</b>	<b>Total Number of Participants</b>	<b>Number of male</b>	<b>Number of female</b>
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Bulletin					
Drought and EAR Watch training					
<b>Total</b>					