

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 132

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Jun-2018	Jul-2018	Aug-2018				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2018)	20.0	35.8	14.1	78.3	150.1	117.5	1/81
Rarotonga (1899-2018)	66.3	104.9	221.5	70.3	125.0	93.0	111/120

TABLE 2: Three-month Rainfall for June to August 2018

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 March-April 2018				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	69.9	Below normal	257.0	540.0	370.4	1/80	48	34	18	14	Consistent
Rarotonga (1899-2017)	392.7	Above normal	254.0	364.9	298.0	89/120	33	32	35	-1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for October to December 2018

Predictor and Period used: NINO3.4 for July to August 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	38	495.1	62		22	64
Rarotonga (1899-2017)	58	459.5	42		12	63

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)	15	377.0	41	624.0	44	27	58
Rarotonga (1899-2017)	42	406.3	34	543.3	24	18	47

**TABLE 4: Seasonal Climate Outlooks using POAMA2
for October to December 2018**

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	55	467.0	27	766.0	18
Rarotonga	30	304.0	12	530.0	58

Summary Statements

Rainfall for August 2018:

Below normal rainfall was recorded in Penrhyn and it was the driest August on record, while Rarotonga had a wet month recording its 10th wettest August in 120 years of record.

Accumulated rainfall for June to August 2018, including outlook verification:

Penrhyn accumulated rainfall for June to August 2018 was below normal, with this being the driest ever June to August period in Penrhyn's history. Rarotonga recorded above normal amounts of rainfall for the same period.

Outlook verification was consistent in both Penrhyn and Rarotonga with high to very low skills respectively.

Outlooks for October to December 2018:

1. SCOPIC:

SCOPIC outlook for October to December 2018 shows a near-equal likelihood of above normal and rainfall for Penrhyn. Rarotonga's outlook shows below normal rainfall as the most likely outcome, with normal amounts being the next most likely to occur.

Penrhyn has very high confidence in its forecast, and Rarotonga has high confidence.

2. POAMA:

POAMA favours below normal rainfall for Penrhyn, with normal the next most likely, while the outlook for Rarotonga favours above normal amounts of rainfall, with below normal being the next most likely to occur.

Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Country	Date	Stakeholder	Total Number of Participants	Number of male	Number of female

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: $X \geq 35$