

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 134

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2018	Sep-2018	Oct-2018				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2018)	14.1	208.4	76.2	98.0	183.0	137.0	18/80
Rarotonga (1899-2018)	221.5	36.0	86.6	64.7	136.3	91.0	55/120

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 May-June 2018				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	298.7	Normal	291.3	438.7	350.7	30/79	31	33	36	6	Near-consistent
Rarotonga (1899-2017)	344.1	Normal	268.3	391.3	337.0	65/120	36	29	35	4	Near-consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for December 2018 to February 2019

Predictor and Period used: NINO3.4 for September to October 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	20	633.0	80		29	69
Rarotonga (1899-2017)	70	673.0	30		16	69

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)	3	438.0	33	841.7	64	41	62
Rarotonga (1899-2017)	49	557.7	33	763.0	18	11	41

TABLE 4: Seasonal Climate Outlooks using POAMA2 for December 2018 to February 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	30	608.0	15	1027.0	55
Rarotonga	36	543.0	12	719.0	52

Summary Statements

Rainfall for October 2018:

Rainfall for October was below normal for Penrhyn station and normal for Rarotonga station.

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

Accumulated rainfall for August through to the end of October was normal in both Penrhyn and Rarotonga stations.

Outlook verification was near-consistent also for both Penrhyn and Rarotonga stations with moderate to low skill respectively.

Outlooks for December 2018 to February 2019:

1. SCOPIC:

SCOPIC outlook for December 2018 to February 2019 favours above normal rainfall for Penrhyn with normal being the next most likely. Rarotonga’s outlook shows below normal rainfall as the most likely, with normal being the next most likely to occur.

Penrhyn has exceptional skill in its forecast, and Rarotonga has good skill.

2. POAMA:

POAMA’s outlook for December 2018 to February 2019 favours above normal rainfall for both Penrhyn and Rarotonga stations, with below normal also being the next most likely at both stations. Normal rainfall is the least most likely to occur.

Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Country	Date: October 2018	Stakeholder	Total Number of Participants	Number of male	Number of female
Cook Island		MoT staff – Ministry of Transport	18	14	4
		ICI – Infrastructure Cook Islands	?	?	?

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: $X \geq 35$