

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 133

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2018	Aug-2018	Sep-2018				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2018)	35.8	14.1	208.4	74.0	136.0	106.0	66/80
Rarotonga (1899-2018)	104.9	221.5	36.0	72.3	125.3	94.0	17/120

TABLE 2: Three-month Rainfall for July to September 2018

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 April-May 2018				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	258.3	Below normal	293.0	470.2	341.0	21/80	36	36	28	10	Near- consistent
Rarotonga (1899-2018)	362.4	Normal	251.7	363.7	295.0	78/120	32	35	33	-1	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for November 2018 to January 2019
Predictor and Period used: NINO3.4 for August to September 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	36	577.0	64		23	69
Rarotonga (1899-2018)	57	579.0	43		8	60

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)	13	366.0	41	749.7	46	32	59
Rarotonga (1899-2018)	40	503.7	35	686.9	25	13	44

TABLE 4: Seasonal Climate Outlooks using POAMA2 for November 2018 to January 2019

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	42	530.0	12	892.0	46
Rarotonga	24	451.0	18	661.0	58

Summary Statements

Rainfall for September 2018:

Rainfall in September 2018 was above normal for Penrhyn station, with Rarotonga recording below normal amounts of rainfall.

Accumulated rainfall for July to September 2018, including outlook verification:

Accumulated rainfall for July through to the end of September was below normal in Penrhyn and normal in Rarotonga.

Outlook verification was near-consistent for Penrhyn with moderate skill, and consistent in Rarotonga.

Outlooks for November 2018 to January 2019:

1. SCOPIC:

SCOPIC outlook for November 2018 to January 2019 shows above normal rainfall is the most likely for Penrhyn with normal being the next most likely, while for Rarotonga the outlook favours below normal rainfall, with normal also being the next most likely.

Penrhyn has very high skill in its forecast, and Rarotonga has good skill.

2. POAMA:

POAMA favours above normal rainfall at both Penrhyn and Rarotonga, with below normal being the next most likely to occur. Normal rainfall is the least likely to occur for both stations.

Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Country	Date: September 2018	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: $X \geq 35$