

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 130

Country: COOK ISLANDS

TABLE 1: Monthly Rainfall

TABLE 1: Monthly Rainfall

Station (include data period)	Apr-2018	May-2018	Jun-2018				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2018)	39.2	50.8	20.0	96.3	166.1	127.4	2/80
Rarotonga (1899-2018)	329.1	139.6	66.3	67.7	114.2	93.0	39/120

Present rainfall totals to 1 decimal place

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

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

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 Jan-Feb 2018				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	110.0	Below normal	316.5	523.5	385.0	1/78	46	37	17	15	Consistent
Rarotonga (1899-2017)	535.0	Above normal	373.0	484.3	424.0	88/120	25	34	41	3	Consistent

Enter rainfall totals to 1 decimal place
* Verification data should be sourced from Table 3 of OCOF #126.
round probabilities to whole numbers

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

Predictor and Period used: NINO3.4 for May to June 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	46	350.7	54		10	62
Rarotonga (1899-2017)	48	337.0	52		0	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 (1937-2018)	31	291.3	33	438.7	36	6	39
Rarotonga (1899-2017)	36	268.3	29	391.3	35	4	49

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

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	30	308.0	40	473.0	30
Rarotonga	27	251.0	15	372.0	58

Summary Statements

Rainfall for June 2018:

Rainfall was below normal for both stations in the Cook Islands.

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

Accumulated rainfall for April to June was well below normal for Penrhyn with this being the driest April to June on record, above normal rainfall was recorded in Rarotonga.

Outlook verification was consistent at both Penrhyn and Rarotonga stations, with good to low confidence in the forecast respectively.

Outlooks for August to October 2018:

1. SCOPIC:

Outlook for August to October 2018 for both Penrhyn and Rarotonga stations offers little guidance as the chances for above normal, normal and below normal are all similar.

Confidence in the outlook is moderate for Penrhyn and low for Rarotonga.

2. POAMA:

Poama favours normal amounts of rainfall as the most likely for Penrhyn, with below and above normal both having the same likelihood to occur as the next most likely. Rarotonga favours above normal is the most likely outcome, with below normal being the next most likely to occur.

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: $X \geq 35$