

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 131

Country: COOK ISLANDS (Penrhyn and Rarotonga)

TABLE 1: Monthly Rainfall

Station (include data period)	May-2018	Jun-2018	Jul-2018				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)	Rainfall (mm)				
Penrhyn (1937-2018)	50.8	20.0	35.8	78.3	157.7	116.0	13/82
Rarotonga (1899-2018)	139.6	66.3	104.9	58.0	122.0	88.0	74/120

**TABLE 2: Three-month Rainfall for May to July 2018**

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities* based on NINO3.4 Feb-Mar 2018				Verification: Consistent, Near- consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Penrhyn (1937-2018)	106.6	Below normal	281.3	478.1	350.4	3/79	49	36	15	16	Consistent
Rarotonga (1899-2017)	310.8	Normal	286.7	405.3	342.0	49/120	23	35	42	5	Near- consistent

**TABLE 3: Seasonal Climate Outlooks using SCOPIC for September to November 2018**  
**Predictor and Period used: NINO3.4 for June to July 2018**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Penrhyn (1937-2018)	31	379.9	69		32	76
Rarotonga (1899-2017)	55	358.0	45		3	57

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)	20	314.1	35	485.3	45	25	53
Rarotonga (1899-2017)	40	298.3	32	434.3	28	6	43

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for September to November 2018**

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)
Penrhyn	61	325.0	24	643.0	15
Rarotonga	36	297.0	12	404.0	52

## Summary Statements

### Rainfall for July 2018:

Below normal rainfall was recorded in Penrhyn, while Rarotonga had normal amounts of rainfall for July 2018.

### Accumulated rainfall for May to July 2018, including outlook verification:

Penrhyn accumulated rainfall for May to July 2018 was below normal, with this being the 3<sup>RD</sup> driest May to July period in Penrhyn's history. Rarotonga recorded normal amounts of rainfall for the same period.

Outlook verification was consistent in Penrhyn and near-consistent for Rarotonga with high to moderate skills respectively.

### Outlooks for September to November 2018:

#### 1. SCOPIC:

SCOPIC outlook for September to November 2018 favours above normal rainfall for Penrhyn with normal being the next most likely, and Rarotonga's outlook shows below normal rainfall as the most likely, with normal amounts being the next most likely to occur.

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

#### 2. POAMA:

POAMA favours below normal rainfall for Penrhyn, with normal the next most likely and Rarotonga favours above normal amounts of rainfall with normal being the next most likely as well.

### Stakeholder Engagement- Evaluations of how effective we engage with stakeholders

Country	Date	Stakeholder	Total Number of Participants	Number of male	Number of female
Cook Islands	After OCOF Teleconference	Watsan – ICI	Whole Watsan group	?	?
	Same as above	Marine Resources - MMR	Ministry heads	?	?
	Same as above	EMCI	Head of ministry	1	
	Same as above	MoT	Whole Ministry	?	?
	Same as above	Climate Change - OPM	Climate Change	?	?

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:  $X \geq 35$