

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 91

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	March 2015						
	January 2015 Total	February 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-Mar 2015)	426.6	206.4	398.4	146.3	270.9	222.6	67/77
Rarotonga (1929-Mar 2015)	353.3	42.9	375.0	159.3	269.7	211.0	75/87

**TABLE 2: Three-monthly Rainfall
January 2015 to March 2015**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #87]

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent, Inconsistent?)
Penrhyn	1031.4	464.2	784.5	600.0	61/77	8:39:53	Consistent
Rarotonga	771.2	593.0	764.3	678.0	61/87	42:29:29	Inconsistent

Period: *below normal/normal/above normal

Predictors and Period used for January to March 2015 Outlooks (refer to OCOF #87):
NINO 3.4 (Oct – Nov)

* Forecast is consistent when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is near-consistent when observed and predicted (tercile with the highest probability) differ by only one category (i.e. terciles 1 and 2 or terciles 2 and 3).

Forecast is inconsistent when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

**TABLE 3: Seasonal Climate Outlooks using SCOPIC for
May to July 2015**

Predictors and Period used: NINO 3.4 SSTA (Feb-Mar)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	32	351	68		17.3	70.3
Aitutaki	57	296	43		2.6	53.1
Rarotonga	59	345	41		4.0	58.5

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	16	284.8	36	478.1	48	18.4	57.8
Aitutaki	39	212.1	30	355.4	31	0.2	34.4
Rarotonga	39	303.0	34	405.3	27	1.7	33.8

**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
May to July 2015**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	12	311	83	555	5		
Aitutaki	46		30		24		
Rarotonga	36	318	40	432	24		

Summary Statements

Rainfall for March 2015:

Penrhyn and Rarotonga experienced above normal rainfall for the month of March with 398.4mm of rainfall recorded for Penrhyn and 375.0mm rainfall recorded for Rarotonga.

Accumulated rainfall for January to March 2015, including outlook verification:

Penrhyn and Rarotonga rainfall for the period Jan-Mar was above normal. Outlook verification was consistent forecast for Penrhyn, inconsistent forecast for Rarotonga.

As of 1 April 2015, no drought alerts exist for Penrhyn and Rarotonga at the 3-,6- and 12-month timescales.

Outlooks for May to July 2015:

1. SCOPIC: Penrhyn seasonal rainfall outlook for May to July 2015 shows that most likely outcome is above normal. Rarotonga and Aitutaki outlook shows that the most likely outcome is near climatology.

Confidence in the outlooks during this period is high for Penrhyn, very low for Aitutaki and low for Rarotonga.

2. POAMA: the mostly likely rainfall outcome for Penrhyn and Rarotonga is normal, below normal for Aitutaki.

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: $X \geq 35$