

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 94

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	June 2015						
	April 2015 Total	May 2015 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-Jun 2015)	49.9	53.1	36.0	97.3	166.1	128	6/77
Rarotonga (1899-Jun 2015)	139.1	140.5	87.2	67.7	113.3	97	40/87

**TABLE 2: Three-monthly Rainfall
April to June 2015**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #90]

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	139.0	316.5	523.5	383	2/75	19/35/46 (14.2%)	Inconsistent
Rarotonga	366.8	375	484.3	423.5	27/87	38/34/28 (1.6)	Consistent

Period: *below normal/normal/above normal

Predictors and Period used for April to June 2015 Outlooks (refer to OCOF #90):

Jan to Feb Nino3.4 SST anomalies extended (1mths lead)

* 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 August to October 2015

Predictors and Period used: May to June Nino3.4 SST anomalies extended (1mths lead)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	12	359	88		17.5	63.5
Rarotonga	60	334	40		0.3	59.4

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penryn	7	296.1	19	440.7	74	12.9	42.9
Rarotonga	61	277	14	385	25	2.7	46.9

TABLE 4: Seasonal Climate Outlooks using POAMA2 for August to October 2015

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	24	308	40	473	36		
Rarotonga	18	251	77	372	5		

Summary Statements

Rainfall for June 2015:

Penrhyn experienced below normal rainfall for the month of June with 36.0mm, and normal rainfall for Rarotonga for the same period with the amount of 87.2mm recorded.

Accumulated rainfall for April to June 2015, including outlook verification:

As for the last 3-months, below normal rainfall was recorded for Penrhyn and Rarotonga. Outlook verification was inconsistent forecast for Penrhyn (good skill), consistent forecast for Rarotonga (low skill)

Outlooks for August to October 2015:

- 1. SCOPIC:** Penrhyn seasonal rainfall outlook for Aug-Oct shows that the most likely outcome is above normal (good skill). Rarotonga outlook shows that the most likely outcome is below normal (low skill).
- 2. POAMA:** the most likely rainfall outcome for Penrhyn and Rarotonga is normal.

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: $X \geq 35$