

## 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:  $X \geq 35$