

## Pacific Islands - Online Climate Outlook Forum (OCOF) No. 89

**Country Name:** Cook Islands

**TABLE 1: Monthly Rainfall**

Station (include data period)	January 2015						
	November 2014 Total	December 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn	89.2	247.8	426.6	114.0	301.4	173.0	34/76
Rarotonga	192.6	235.9	353.3	160.8	288.7	214.0	5/86

**TABLE 2: Three-monthly Rainfall  
November 2014 to January 2015**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #85]

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	763.6	370	739	577	53/77	16/44/40 (29.5)	Near consistent
Rarotonga	781.8	502	689	585	68/86	36/35/29 (8.0)	Inconsistent

Period: \*below normal/normal/above normal

Predictors and Period used for November 2014 to January 2015 Outlooks (refer to OCOF #85): August – September NINO3.4 SSTA

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\* 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  
March to May 2015**

**Predictors and Period used: NINO3.4 (2 months, December-January)**

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Rarotonga	41%	510	35%	652	24%	4.5	35.9%
Penrhyn	27%	381	29%	654.2	45%	8	42.9%
Aitutaki	37%	393.3	39%	633.2	24%	3.6	42.9%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Rarotonga	48%	546	24%	695	27%		
Penrhyn	15%	615	55%	1146	30%		

## **Summary Statements**

### **Rainfall for January 2015:**

Penrhyn experienced above normal rainfall for the month of January with 426.6mm, and also Rarotonga experienced above normal rainfall for the period with the amount of 353.3mm recorded.

### **Accumulated rainfall for November 2014 to January 2015, including outlook verification:**

Penrhyn and Rarotonga rainfall for the period Nov to Jan was above normal. Outlook verification was near consistent forecast for Penrhyn (very high skill), inconsistent forecast for Rarotonga (moderate skill)

### **Outlooks for February to April 2015:**

**1. SCOPIC:** Penrhyn seasonal rainfall outlook for Feb to Apr 2015 shows that the most likely outcome is above normal with normal rainfall the next most likely. Rarotonga outlook shows that the most likely outcome is below normal with normal rainfall the next most likely and for Aitutaki shows that the most likely outcome is normal to below normal. Confidence in the outlooks during this period is low for Penrhyn and Aitutaki, moderate for Rarotonga.

**2. POAMA:** the most likely rainfall outcome for Penrhyn is normal and the most likely rainfall outcome for Rarotonga is below 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:  $X \geq 35$