

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 69

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	May 2013						
	March 2013 Total	April 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-May2013)	102.2	60.4	122.7	92.1	182.7	126.0	36/75
Rarotonga (1899-May2013)	42.6	63.2	92.3	96.7	197.3	146.5	38/115

TABLE 2: Three-monthly Rainfall March to May 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #65]

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	285.3	389.0	675.0	483.0	11/74	20/38/42 (7.3%)	Inconsistent
Rarotonga	198.1	522.0	656.3	585.5	2/115	43/36/20 (4.6%)	Consistent

Period: *below normal/normal/above normal

Predictors and Period used for March to May 2013 Outlooks (refer to OCOF #65):

SSTa's 1&9 (Nov-Jan)

* 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 July to September 2013

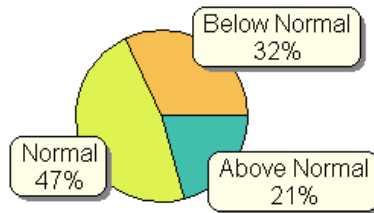
Predictors and Period used: SSTa's 1&9 (Mar-May)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	52%	341.0	48%		8.7%	54.8%
Rarotonga	53%	295.0	47%		-2.9%	46.9%

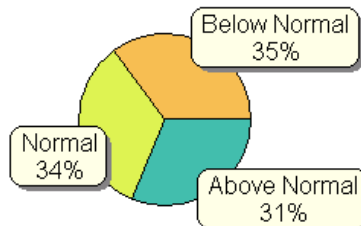
Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	32%	295.0	47%	471.0	21%	12.4%	48.4%
Rarotonga	35%	253.3	34%	364.3	31%	-3.1%	29.7%

Outlook for Jul-Sep 2013 Predictands (3mth Totals)
Using 3mth avg SSTa's 1 and 9 (Mar-May) (1mths lead)
Predictor Values: EOF1 = 0.65, EOF9 = 1.31

Penrhyn Rainfall rainfall (mm) (62 years)
T1:295.0 mm T2:471.0 mm
LEPS=12.4% Hit-rate=48.4%



Rarotonga Rainfall rainfall (mm) (64 years)
T1:253.3 mm T2:364.3 mm
LEPS=-3.1% Hit-rate=29.7%



**TABLE 4: Seasonal Climate Outlooks using POAMA2 for
July to September 2013**

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Rarotonga	33%	238	36%	368	30%		

Summary Statements

Rainfall for May 2013:

Normal rainfall recorded for Penrhyn.
Below normal for Rarotonga.

Accumulated rainfall for March–May 2013, including outlook verification:

As for the last 3-months, below normal recorded for Penrhyn (moderate skill) inconsistent forecast. Consistent forecast for Rarotonga

Outlooks for July–September 2013:

1. SCOPIC:

Normal for Penrhyn (good skill) and below normal to normal for Rarotonga (very low skill).

2. POAMA:

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: $X \geq 35$