

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 66

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	February 2013						
	December 2012 Total	January 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-Feb 2013)	97.7	383.7	40.5	100.0	293.0	189.7	5/75
Rarotonga (1899-Feb 2013)	128.2	382.8	76.7	172.0	246.0	215.0	8/115

TABLE 2: Three-monthly Rainfall December 2012 to February 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #62]

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	521.9	362.3	839.5	633.0	30/73	8/39/ 53 (29.1%)	Near consistent
Rarotonga	587.7	557.7	773.3	687.0	44/114	15/ 81 /4 (7.1%)	Consistent

Period: *below normal/normal/above normal

Predictors and Period used for December 2012 to February 2013 Outlooks (refer to OCOF #62):

SSTa's 1&9 (Aug-Oct)

* 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 April to June 2013

Predictors and Period used: SSTa's 1&9 (Dec-Feb)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	45%	385.0	55%		11.9%	64.5%
Rarotonga	51%	428.5	49%		10.0%	63.5%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	24%	325.8	48%	518.4	28%	8.3%	46.8%
Rarotonga	30%	380.3	42%	493.7	28%	4.1%	42.9%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2013

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Rarotonga	37%	403	26%	475	37%		

Summary Statements

Rainfall for February 2013:

Below normal for both groups.

Accumulated rainfall for December 2012–February 2013, including outlook verification:

For the last 3-months near consistent forecast for Penrhyn, recorded rainfall was normal (very high skill). Consistent forecast for Rarotonga (moderate skill)

Outlooks for April–June 2013:

1. SCOPIC: normal rainfall for both sectors. Moderate skill for Penrhyn and low skill for Rarotonga.

2. POAMA: Inconsistent outlook.

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: $15 \leq X < 5$

Very High: $25 \leq X < 35$

Exceptional: $X \geq 35$