

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 78

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	February 2014						
	December 2013 Total	January 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-Feb 2014)	244.8	215.2	153.6	98.4	293.0	187.8	34/76
Rarotonga (1899-Feb 2014)	35.5	228.6	52.5	166.0	243.0	214.0	5/116

TABLE 2: Three-monthly Rainfall December 2013 to February 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #74]

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	613.6	364.4	837.2	628.0	36/74	45/36/19 (29.1%)	Near consistent
Rarotonga	316.6	558.3	769.7	680.5	7/115	10/83/7 (7.1%)	Near consistent

Period: *below normal/normal/above normal

Predictors and Period used for December 2013 to February 2014 Outlooks (refer to OCOF #74):

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 2014

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	57%	383.0	43%		11.3%	65.1%
Rarotonga	40%	428.0	60%		10.0%	62.5%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	28%	323.3	53%	512.7	19%	9.2%	47.6%
Rarotonga	23%	379.0	44%	493.0	33%	4.2%	42.2%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	94%	500	5%	850	1%		
Rarotonga	52%	453	18%	581	30%		

Summary Statements

Rainfall for February 2014:

Normal rainfall was recorded for Penrhyn and below normal for Rarotonga

Accumulated rainfall for December 2013 to February 2014, including outlook verification:

Normal for Penrhyn (very high skill) near consistent forecast. Below normal for Rarotonga (moderate skill) near consistent forecast.

Outlooks for April-June 2014:

1. SCOPIC: The seasonal rainfall outlook for April to Jun 2014 shows the most likely outcome for Penrhyn is Normal, with Below Normal the next most likely. Confidence in the Penrhyn outlook is moderate. The outlook shows the most likely outcome for Rarotonga is Normal, with Above Normal the next most likely. Confidence in the Rarotonga outlook is low.

2. POAMA: Favours Below normal for Penrhyn and Rarotonga.

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: $X \geq 35$