

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 80

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	April 2014						
	February 2014 Total	March 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn 1937-Apr 2014	153.6	71	58.8	106.6	176.7	130.0	7/76
Rarotonga 1899-Apr 2014	52.5	229.8	90.8	139.0	237.0	192.0	21/116

TABLE 2: Three-monthly Rainfall February to April 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #76]

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	283.4	443.0	727.3	539.2	11/75	28/ 42 /30 (15.5%)	Near Consistent
Rarotonga	373.1	577.1	727.4	666.0	11/116	28/ 40 /32 (1.5%)	Near Consistent

Period: *below normal/normal/above normal

Predictors and Period used for February to April 2014 Outlooks (refer to OCOF #76):
SSTa's 1&9 (Oct-Dec)

* 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 June to August 2014

Predictors and Period used: Cook Islands using SSTa's 1&9 (Feb-Apr)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	60%	401.6	40%		16.7%	65.1%
Rarotonga	38%	298.0	62%		0.9%	61.5%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	26%	264.0	52%	541.3	22%	13.0%	49.2%
Rarotonga	32%	254.0	20%	371.0	48%	-1.3%	36.9%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	52	311	43	555	5		
Rarotonga	6	318	82	432	12		

Summary Statements

Rainfall for April 2014:

Below normal for Penrhyn and Rarotonga.

Accumulated rainfall for February to April 2014, including outlook verification:

As for the 3-months, near consistent forecast for both groups, high skill for Penrhyn and low skill for Rarotonga.

Outlooks for June-August 2014:

- SCOPIC:** SCOPIC outlook for the next 3-months shows the most likely outcome is normal for Penrhyn (good skill), and above normal for Rarotonga (very low skill).
- POAMA:** POAMA outlook for the next 3-months shows the most likely outcome is below normal for Penrhyn, and normal rainfall for 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: $X \geq 35$