

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 81

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	May 2014						
	March 2014 Total	April 2014 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-May 2014)	71	58.8	135.2	92.8	180.3	125.0	41/76
Rarotonga (1899-May 2014)	229.8	90.8	119.0	96.0	197.0	144.0	49/116

TABLE 2: Three-monthly Rainfall March to May 2014

[Please note that the data used in this verification should be sourced from table 3 of OCOF #77]

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	265.0	386.3	654.2	481.5	10/75	22/ 49 /29 (7.3%)	Near Consistent
Rarotonga	439.6	520.1	655.0	582.0	24/116	41 / 41 /18 (4.6%)	Near Consistent

Period: *below normal/normal/above normal

Predictors and Period used for March to May 2014 Outlooks (refer to OCOF #77):

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 2014

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%	342.0	48%		11.3%	57.1%
Rarotonga	53%	295.0	47%		-3.0%	44.6%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	35%	297.3	48%	474.3	17%	11.5%	46.0%
Rarotonga	35%	255.0	36%	364.0	29%	-3.0	29.2%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2014

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	18%	288	58%	568	24%		
Rarotonga	9%	255	85%	370	6%		

Summary Statements

Rainfall for May 2014:

Normal rainfall was recorded for both Penrhyn and Rarotonga.

Accumulated rainfall for March to May 2014, including outlook verification:

Below normal rainfall was recorded for both stations, with a near consistent forecast for Penrhyn (moderate skills), and a near consistent forecast for Rarotonga (low skill).

Outlooks for July-September 2014:

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