

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 76

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)	December 2013						
	October 2013 Total	November 2013 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Penrhyn (1937-Dec2013)	343.7	164.2	244.8	103.7	243.8	156.0	51/75
Rarotonga (1899-Dec2013)	154.1	48.6	35.5	145.0	258.7	191.5	5/115

TABLE 2: Three-monthly Rainfall October to December 2013

[Please note that the data used in this verification should be sourced from table 3 of OCOF #72]

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	752.7	363.8	614.0	489.5	57/75	61/29/10 (19.9%)	Inconsistent
Rarotonga	238.2	407.7	546.0	481.5	11/115	21/50/29 (8.5%)	Near Consistent

Period: *below normal/normal/above normal

Predictors and Period used for October to December 2013 Outlooks (refer to OCOF #72):

SSTa's 1&9(Jun-Aug)

* 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 February to April 2014

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
Penrhyn	57%	539.2	43%		16.9%	68.3%
Rarotonga	45%	666.0	55%		3.1%	57.8%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
Penrhyn	28%	443.0	42%	727.3	30%	15.5%	52.4%
Rarotonga	28%	577.1	40%	727.4	32%	1.5%	40.6%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
Penrhyn	39%	615	46%	1146	15%		
Rarotonga	21%	546	55%	695	24%		

Summary Statements

Rainfall for December 2013:

Above normal for Penrhyn, below normal rainfall recorded for Rarotonga

Accumulated rainfall for October–December 2013, including outlook verification:

Above normal rainfall was recorded for Penrhyn (high skill) inconsistent forecast. Below normal rainfall for Rarotonga (moderate skill) near consistent forecast.

Outlooks for February-April 2014:

Climate outlook for the next 3-months in SCOPIC & POAMA model, normal for both groups.

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: $X \geq 35$