

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 111

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)	November 2016						
	September 2016 Total	October 2016 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
PENRHYN	69.2	96.2	60.2	98.4	183	142	26/78
RAROTONGA	227.2	66.1	191.4	63.3	137.7	91	41/118

**TABLE 2: Three-monthly Rainfall
September to November 2016**

[Please note that the data used in this verification should be sourced from table 3 of OCOF #107]

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	225.6	323	488	389.9	25/77	15/35/ 50 31.9%	Inconsistent
RAROTONGA	484.7	298.7	431.7	358	93/118	41 /32/27 5.3%	Inconsistent

Period: *below normal/normal/above normal

Predictors and Period used for September to November 2016 Outlooks (refer to OCOF #106): NINO3.4 SST Anomalies May – July 2016

* 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
January to March 2017**

Predictors and Period used: NINO3.4 SST Anomalies September – October 2016

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
PENRHYN	72	612	28		32.6%	72.7%
RAROTONGA	44	699.5	56		3.0%	54.5%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
PENRHYN	50	473.4	35	843.3	15	33.5%	59.1%
RAROTONGA	26	597	37	786	37	2.6%	27.3%

Summary Statements

Rainfall for November 2016:

For the month of November 2016, rainfall conditions were below normal for Penrhyn and above normal for Rarotonga.

Accumulated rainfall for September to November 2016, including outlook verification:

Accumulated rainfall for the period of September through to the end of November of 2016, was well below normal for Penrhyn station. While at Rarotonga above normal rainfall was recorded.

SCOPIC outlook verification for the past three months was inconsistent for both Penrhyn and Rarotonga stations. Skill or confidence in the forecast was very high for Penrhyn and moderate for Rarotonga.

Outlooks for January to March 2017:

1. SCOPIC:

Rainfall forecast for the upcoming months of January 2017 to March 2017 favours below normal rainfall conditions with a 50% probability and normal rainfall the next most likely for Penrhyn. Rarotonga is has an equal likelihood for above normal to normal rainfall with below normal rainfall the least likely to occur for Rarotonga.

There is a very high confidence in the outlook from the models for Penrhyn, but the confidence in Rarotonga's outlook is quite low.

2. POAMA:

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: $X \geq 35$