Pacific Islands - Online Climate Outlook Forum (OCOF) No. 117

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)			May 2017				
	March 2017 Total	April 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
PENRHYN	250.6	289.0	**159.2**	93.4	180.3	126.3	46/79
RAROTONGA	101.2	244.4	**113.6**	96.0	196.0	141.8	48/119

TABLE 2: Three-monthly Rainfall
March 2017 to May 2017

[Please note that the data used in this verification should be sourced from table 3 of OCOF #113]

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	**698.8**	385.0	612.6	486.8	56/77	**39**/37/24 5.6%	Inconsistent
RAROTONGA	**459.2**	518.3	654.6	581.5	30/119	26/34/**40** 5.2%	Inconsistent

Period:*below normal/normal/above normal

Predictors and Period used for March 2017 to May 2017 Outlooks (refer to OCOF #113):

NINO3.4 SST Anomalies Nov 2016 – Jan 2017

*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 2017

Predictors and Period used: NINO3.4 SST Anomalies March – May 2017

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
PENRHYN	25	342.0	75		20%	69.7%
RAROTONGA	49	296.5	51		-1.5%	26.9%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
PENRHYN	17	294.3	31	470.5	52	15.2%	48.5%
RAROTONGA	38	255.0	24	364.0	38	-1.8%	20.9%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for July to September 2017

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
PENRHYN	24	254	49	522	27		
RAROTONGA	40	238	33	368	27		

Summary Statements

Rainfall for May 2017:
During the month of May 2017, both Penrhyn and Rarotonga stations recorded normal rainfall.

Accumulated rainfall for March to May 2017, including outlook verification:
Accumulated rainfall for the period of March through to the end of May 2017 was above normal for Penrhyn, and below normal at Rarotonga.

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

Outlooks for July to September 2017:

1. SCOPIC:
Rainfall forecast for the upcoming months of July to September 2017 favours above normal at Penrhyn with normal being the next most likely to occur. Meanwhile Rarotonga's outlook is mixed, with below normal and above normal equally likely; normal is the least likely.

Confidence in the outlook high at Penrhyn and very low at Rarotonga.

2. POAMA:
Outlook from POAMA indicates normal rainfall for Penrhyn as the most likely, while below normal rainfall is the most likely for Rarotonga.

NB: The X LEPS % score has been categorised as follows:

Very Low: X < 0.0	Low: 0 ≤ X < 5	Moderate 5 ≤ X < 10	Good: 10 ≤ X < 15	High: 15≤ X < 25
Very High: 25 ≤X < 35	Exceptional: X ≥ 35			