Pacific Islands - Online Climate Outlook Forum (OCOF) No. 127

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)			March 2018				
	January 2018 Total	February 2018 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
PENRHYN	96.8	254.8	**66.0**	147.0	269.8	222.6	9/80
RAROTONGA	212.0	383.0	**291.0**	158.0	277.0	211.0	82/120

TABLE 2: Three-monthly Rainfall
January to March 2018

[Please note that the data used in this verification should be sourced from table 3 of OCOF #123]

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	**417.6**	478.0	838.0	621.0	19/80	**46**/37/17 (32.1)	Consistent
RAROTONGA	**886.0**	595.0	785.0	695.0	96/120	26/**37**/**37** (3.4)	Near-Consistent

Period:*below normal/normal/above normal

Predictors and Period used for January to March 2018 Outlooks (refer to OCOF #123):
NINO3.4 SST Anomalies October – November 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 May to July 2018

Predictors and Period used: NINO3.4 SST Anomalies February – March 2018

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
PENRHYN	68	350.4	32		14.9	67.2
RAROTONGA	42	342.0	58		2.3	58.8

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
PENRHYN	49	281.3	36	478.1	15	15.5	50.7
RAROTONGA	23	286.7	35	405.3	42	4.5	33.8

TABLE 4: Seasonal Climate Outlooks using POAMA2 for May to July 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
PENRHYN	95	311	5	555	0		
RAROTONGA	42	318	34	432	24		

Summary Statements

Rainfall for March 2018:
Penrhyn received below normal amounts of rainfall during the month of March, whilst Rarotonga received above normal amounts of rainfall.

Accumulated rainfall for January to March 2018, including outlook verification:
Accumulated rainfall for the 3 month period of January to March 2018 was below normal for Penrhyn station, and above normal rainfall for Rarotonga.

SCOPIC outlook verification for said period was consistent at Penrhyn and near-consistent for Rarotonga, with very high to low confidence respectively.

Outlooks for May to July 2018:

1. SCOPIC:
Outlook for the upcoming months of May to July 2018, indicates below normal rainfall as the most likely outcome for Penrhyn with normal being the next most likely. The outlook for Rarotonga indicates above normal as the most likely outcome with normal amount of rainfall as the next most likely.

Confidence in the outlook is High for Penrhyn and low for Rarotonga.

2. POAMA:
The POAMA outlook favours below-normal rainfall for the coming three months at both sites.

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			