Pacific Islands - Online Climate Outlook Forum (OCOF) No. 128

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)			April 2018				
	February 2018 Total	March 2018 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
PENRHYN	254.8	66.0	**39.2**	104.8	182.7	129.3	**2/79**
RAROTONGA	383.0	291.0	**329.1**	136.3	235.3	185.2	**109/120**

TABLE 2: Three-monthly Rainfall
February to April 2018

[Please note that the data used in this verification should be sourced from table 3 of OCOF #124]

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	**360.0**	444.0	727.0	584.0	17/78	**47**/29/24 12.9%	Consistent
RAROTONGA	**1003.1**	572.0	725.0	661.0	**114/120**	23/37/**40** 6.4%	Consistent

Period:*below normal/normal/above normal

Predictors and Period used for February to April 2018 Outlooks (refer to OCOF #124):

NINO3.4 SST Anomalies November – December 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 June to August 2018

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
PENRHYN	**70**	370.4	30		19.8	68.7
RAROTONGA	47	298.0	**53**		-0.9	51.5

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
PENRHYN	**48**	257.0	34	540.0	18	14.1	41.8
RAROTONGA	**33**	254.0	**32**	364.9	**35**	-1.5	22.1

TABLE 4: Seasonal Climate Outlooks using POAMA2 for June to August 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
PENRHYN	**94**	288	5	568	1		
RAROTONGA	**49**	255	24	370	27		

Summary Statements

Rainfall for April 2018:
Penrhyn received below normal amounts of rainfall during the month of April, this was the 2nd driest April on record. Rarotonga received above normal amounts of rainfall and was the 10 highest April rainfall on record

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

SCOPIC outlook verification for said period was consistent at both Penrhyn and Rarotonga stations, with good to moderate confidence respectively.

Outlooks for June to August 2018:

1. SCOPIC:
Outlook for the upcoming months of June to August 2018, shows below normal rainfall as the most likely outcome for Penrhyn with normal being the next most likely. The outlook for Rarotonga is mixed with similar chances for below normal, normal and above normal.

Confidence in the outlook is good for Penrhyn and very 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			