Pacific Islands - Online Climate Outlook Forum (OCOF) No. 102

Country Name: COOK ISLANDS

TABLE 1: Monthly Rainfall

Station (include data period)			February 2016				
	December 2015 Total	January 2016 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
RAROTONGA	21.4	71.5	**53.2**	162.0	243.0	214.0	7/118
PENRHYN	199.0	480.8	**288.8**	100.3	289.7	187.8	52/78

TABLE 2: Three-monthly Rainfall
December 2015 to February 2016

[Please note that the data used in this verification should be sourced from table 3 of OCOF #98]

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?
RAROTONGA	**146.1**	557.7	763.3	673.5	7/118	**63**/30/7 8.3%	Consistent
PENRHYN	**968.6**	366.1	839.5	628	52/78	0/10/**90** 44.1%	Consistent

Period:*below normal/normal/above normal

Predictors and Period used for December to February 2016 Outlooks (refer to OCOF #98):

October – December 2015 NINO3.4 SST Anomalies

*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 April to June 2016

Predictors and Period used: NINO3.4 (October – December)

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
RAROTONGA	94.4%	424.0	5.6%		21.1%	63.6%
PENRHYN	18.5%	381.0	81.5%		6.6%	65.6%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
RAROTONGA	85.9%	373.0	10.0%	487.7	4.1%	17.4%	57.6%
PENRHYN	8.6%	314.0	13.2%	520.9	78.1%	10.9%	40.6%

TABLE 4: Seasonal Climate Outlooks using POAMA2 for April to June 2016

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)		
RAROTONGA	95.0%	407	5.0%	475	0.0%		
PENRHYN	5.0%	370	5.0%	576	90.0%		

Summary Statements

Rainfall for February 2016:
Below normal rainfall was recorded in Rarotonga, while Penrhyn had normal rainfall during the month of Feb.

Accumulated rainfall for December to February 2016, including outlook verification:
For the period of December to February the accumulated rainfall was well below normal for Rarotonga, but was the opposite for Penrhyn station having above normal rainfall for that same period.

SCOPIC outlook verification for the last three months was consistent for both the Penrhyn and Rarotonga stations. Skill levels were exceptional for Penrhyn and just moderate for Rarotonga.

Outlooks for April to June 2016:

1. SCOPIC:

Rarotonga seasonal rainfall outlook for April to June 2016 favours below normal rainfall with normal being the next most likely outcome. At Penrhyn station the outlook favours above normal rainfall conditions with normal rainfall the next most likely outcome. Confidence in the outlook for this period is high for Rarotonga and good for Penrhyn.

2. POAMA:

The most likely outcome for Rarotonga is below normal rainfall, while above normal rainfall is the most likely outcome for Penrhyn.

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			