Pacific Islands - Online Climate Outlook Forum (OCOF) No. 126

Country Name: Cook Islands

TABLE 1: Monthly Rainfall

Station (include data period)			February 2018				
	December 2017 Total	January 2018 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
PENRHYN	190.6	96.8	**254.8**	102.0	293.0	199.0	47/80
RAROTONGA	292.3	212.0	**383.0**	161.0	243.0	214.0	108/120

TABLE 2: Three-monthly Rainfall
December 2017 to February 2018
[Please note that the data used in this verification should be sourced from table 3 of OCOF #122]

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	**542.2**	434.0	844.0	638.0	33/80	33/**45**/22 (40.2)	Consistent
RAROTONGA	**887.3**	557.0	757.0	668.0	100/119	27/36/**37** 11.0)	Consistent

Period:*below normal/normal/above normal

Predictors and Period used for December 2017 to February 2018 Outlooks (refer to OCOF #122):   NINO3.4 SST Anomalies September – October 2017

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*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 2018

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

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS	Hit-rate
PENRHYN	66	385.0	34		13.6%	68.2%
RAROTONGA	39	424.0	61		7.0%	57.4%

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	67%ile rainfall (mm)	Above Normal (prob)	LEPS	Hit-rate
PENRHYN	46	316.5	37	523.5	17	14.9%	50.0%
RAROTONGA	25	373.0	34	484.3	41	3.1%	36.8%

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

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	67%ile rainfall (mm)	Upper Tercile (prob)		
PENRHYN	88	370.0	7	576.0	5		
RAROTONGA	43	403.0	24	475.0	33		

Summary Statements

Rainfall for February 2018:
Normal rainfall for Penhryn and above normal rainfall recorded for Rarotonga.

Accumulated rainfall for December 2017 to February 2018, including outlook verification:
Rainfall was normal for Penrhyn and above normal for Rarotonga

Consistent verification for both Penrhyn and Rarotonga, with exceptional to good skill respectively.

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

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

2. POAMA:
The POAMA outlook favours below-normal rainfall for both stations while above-normal is the next mostly outcome for Rarotonga for the coming three months.

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