

Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 128 Summary Report

Date: Wednesday 16 May 2018

Time: Australian Eastern Standard Time at 11:00AM (01:00 UTC)

Chair: Cook Islands

Apologies: Tuvalu, Solomon Islands

Main purpose for the OCOF:

- To provide a regular forum for the 11 participating PIC NMSs to discuss the current ENSO status, recent one and three-month rainfall, drought (if present) and their seasonal climate outlooks with other countries and the COMP (Bureau of Meteorology and SPREP) project team.

In addition, it serves as an online training forum for recent SCOPIC* development and gives the project team and the NMSs an opportunity to discuss other project related matters.

Agenda:

1. Brief introduction of PIC participants, SPREP and Bureau of Meteorology teams.
2. Brief report on current ENSO status.
3. Each NMS report on their past one and three months' rainfall in relation to the current ENSO situation (include ranking and verification), and their three-month outlooks. Wherever appropriate NMS to report on their drought status.
4. Round-table discussion: addressing general concerns/queries on outlooks and SCOPIC*.
5. Feedback on COSPPac products and services.
6. Country statements with regards to drought or drought-like conditions, drought module issues/concerns.
7. The next OCOF will be held on 13 June 2018 (TBC). To be chaired by Fiji.

Participants:

The Forum was attended by 21 climate officers (10 female) from 9 partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Arieta Baleisolomone, Jasneel Chandra

Kiribati: Kamaitia Rubetaake

Niue: Clemencia Sioneholo, Rossy Mitiepo, Robert Togiamana and Floyd Viliamu

Papua New Guinea: Kisolet Posanau, Kila Kila, Nanao Bouauka and Gabriel Tuno

Republic of Marshall Islands: Nover Juria and Samson Kanenko

Samoa: Kotoni Faasau, Junior Lepale, Vaueli Sua, Mattaniah Salesa and Nuutofi Palemia

Solomon Islands:

Tonga: Seluvaia Finaulahi

Tuvalu:

Vanuatu: Moira Yerta

* Seasonal Climate Outlooks in the Pacific Island Countries: climate prediction software developed under the PI-CPP.

Australian Aid Project: Climate and Oceans Support Program in the Pacific (COSPPac)

Australia: Grant Beard

SPREP: Philip Malsale

OCOF tables were received from 11 participating countries before the meeting.

Observations and Verification of February to April 2018 outlooks:

Observed rainfall for the one and three-month periods ending April 2018 were discussed for each PIC. This month, several countries experienced extreme rainfall as shown in the following table:

Station	Period	Rainfall Amount (mm)	Rainfall Rank	Year of record
Penrhyn	April	39.2	2	79
Rarotonga	April	329.0	109	120
Rarotonga	Feb - Apr	1003.1	114	120
Penang Mill, Fiji	April	522.7	104	107
Lautoka Mill, Fiji	April	453.3	110	119
Nadi Airport, Fiji	April	344.4	70	76
Vunsea, Fiji	April	490.5	64	71
Lautoka Mill, Fiji	Feb - Apr	1299.1	116	118
Nadi Airport, Fiji	Feb - Apr	1286.6	68	75
Viwa, Fiji	Feb - Apr	1109.1	34	36
Vunesia, Fiji	Feb - Apr	1130.2	79	82
Labasa Airport, Fiji	Feb - Apr	1499.7	57	61
Beru, Kiribati	April	5.3	5	64
Tarawa, Kiribati	April	29.2	5	69
Butaritari, Kiribati	Feb - Apr	210.1	4	79
Tarawa, Kiribati	Feb - Apr	62.7	4	69
Majuro, Marshall Islands	Feb - Apr	1235.0	63	64
Kwajalein, Marshall Islands	Feb - Apr	807.9	69	74
Afiamalu, Samoa	April	923.9	65	65
Nafanua, Samoa	April	563.9	44	48
Apria, Samoa	April	487.5	125	129
Faleolo, Samoa	April	362.9	55	57
Afiamalu, Samoa	Feb - Apr	2513.1	63	63
Nafanua, Samoa	Feb - Apr	1662.3	44	46
Apria, Samoa	Feb - Apr	1645.2	128	129
Faleolo, Samoa	Feb - Apr	1192.5	57	57
Lata, Solomon Islands	April	583.9	43	43
Auki, Solomon Islands	Feb - Apr	768.2	4	57
Lata, Solomon Islands	Feb - Apr	1736.5	42	43
Ha'apai, Tonga	April	432.1	69	72

Australian Aid Project: Climate and Oceans Support Program in the Pacific (COSPPac)

Fua'amotu, Tonga	April	519.5	38	39
Fua'amotu, Tonga	Feb - Apr	1234.7	39	39
Nuku'alofa, Tonga	Feb - Apr	1189.7	73	73
Nanumea, Tuvalu	April	42	2	78
Pekoa, Vanuatu	April	90.3	3	48
Bauerfield, Vanuatu	April	55.0	2	46
Port Vila, Vanuatu	April	72.5	5	66
Pekoa, Vanuatu	Feb - Apr	335.1	2	48
Port Vila, Vanuatu	Feb - Apr	532.0	7	66

[Note: The above data may not have undergone quality control]

Validation of forecasts with observed rainfall for the February to April 2018 period showed 24 consistent, 16 near-consistent and 8 inconsistent outlooks (48 stations across 11 countries).

A summary of results (C-consistent, NC-Near Consistent, I-Inconsistent, N/A-not available) for each country is as follows:

Cook Islands (2C); Fiji (6C, 6NC); Kiribati (3C); RMI (2C), Niue (1NC); PNG (no April rainfall records) Samoa (2C, 1NC, 1In); Solomon Islands (4C, 1NC, 2In) Tonga (3C, 2NC, 1In), Tuvalu (1C, 2NC, 1In) and Vanuatu (4NC, 3In).

Overall: 23C, 17NC, 8In.

June to August 2018 Outlooks:

SCOPIC outlooks: Seventeen percent of the 60 stations have their highest probability in tercile 1, 12% in tercile 2 and 20% in tercile 3. Seventeen percent have near-equal probabilities in two terciles and 35% had near-equal probabilities in three terciles.

POAMA outlooks: 88% of the 48 stations have their highest probability in tercile 1, 6% in tercile 2 and 6% in tercile 3. There are no instances of near-equal probabilities in either two or three terciles.

We'd expect SCOPIC to have a fairly wide distribution of outlooks because we're in the ENSO transition season when the skills of statistics outlooks is at minimum. In contrast POAMA is very emphatic in its predictions tercile 1 in most countries; at only two sites in PNG and one in the Solomon Islands does POAMA have its highest probability in tercile 3.

Other matters:

Observed Rainfall and Validation

Country	April 2018	February to April 2018	Verification[†] for February to April 2018 outlooks
Cook Islands	Below normal and above normal	Below normal and above normal	Consistent
Fiji	Normal to Above normal	Below normal to above normal	Consistent to Near-consistent
Kiribati	Below normal and above normal	Below normal and normal	Consistent
RMI	Above normal	Above normal	Consistent
Niue	Normal	Normal	Near-consistent
Papua New Guinea	<i>No April rainfall data</i>		
Samoa	Above normal	Above normal	Mixed - Consistent to Inconsistent
Solomon Islands	Below normal to above normal	Below normal to above normal	Mixed - Consistent to Inconsistent
Tonga	Normal and above normal	Below normal to above normal	Mixed - Consistent to Inconsistent
Tuvalu	Below normal and normal	Below normal and normal	Mixed - Consistent to Inconsistent
Vanuatu	Normal to above normal	Below normal and normal	Near-consistent to inconsistent

[†] 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).