

Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 127 Summary Report

Date: Wednesday 18 April 2018

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

Chair: Republic of Marshall Islands

Apologies: Tuvalu, Tonga, Cook 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 16 May 2018 (TBC). To be chaired by Cook Islands

Participants:

The Forum was attended by 24 climate officers (8 female) from 10 partner PIC NMSs.

Cook Islands:

Fiji: Bipen Prakash, Arieta Baleisolomone, Jasneel Chandra

Kiribati: Kamaitia Rubetaake and Mauna Eria

Niue: Robert Togiamana and Floyd Viliamu

Papua New Guinea: Kisolet Posanau and Kila Kila

Republic of Marshall Islands: Nover Juria and Samson Kanenko

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

Solomon Islands: Max Sitai and Lloyd Tahani

Tonga:

Tuvalu:

Vanuatu: Melinda Natapei

* 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 January to March 2018 outlooks:

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

Station	Period	Ranfall Amount (mm)	Rainfall Rank	Year of record
Rarotonga	Jan - Mar	383.0	96	120
Viwa, Fiji	March	572.4	36	36
Viwa, Fiji	Jan - Mar	1028.2	31	36
Butaritari, Kiribati	March	28.7	3	81
Kirimati, Kiribati	March	5.7	3	93
Tarawa, Kiribati	March	7.1	4	69
Butaritari, Kiribati	Jan - Mar	298.7	8	80
Kirimati, Kiribati	Jan - Mar	10.2	2	92
Tarawa, Kiribati	Jan - Mar	70.9	6	69
Majuro, Marshall Islands	March	572.5	63	64
Kwajalein, Marshall Islands	March	395.1	70	74
Majuro, Marshall Islands	Jan - Mar	1183.4	62	64
Kwajalein, Marshall Islands	Jan - Mar	869.1	73	74
Port Moresby, PNG	March	623.8	101	126
Wewak, PNG	Jan - Mar	296.6	5	62
Kavieng, PNG	Jan - Mar	1248.2	74	82
Port Moresby, PNG	Jan - Mar	778.2	117	130
Nafanua, Samoa	March	252.3	8	46
Faleolo, Samoa	Jan - Mar	1108.2	52	57
Henderson, Solomon Islands	Jan - Mar	1242	42	44
Honiara, Solomon Islands	Jan - Mar	1242	59	63
Fua'amotu, Tonga	March	392.7	36	39
Nuku'alofa, Tonga	March	356.3	67	74
Nuku'alofa, Tonga	Jan - Mar	1192.4	73	74
Funafuti, Tuvalu	March	93	2	86
Whitegrass, Vanuatu	March	417.8	45	47

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

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

Validation of forecasts with observed rainfall for the January to March 2018 period showed 24 consistent, 22 near-consistent and 10 inconsistent outlooks (56 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 (1C, 1NC); Fiji (5C, 6NC, 1In); Kiribati (3C, 1NC); RMI (2C), Niue (1NC); PNG (2C, 3NC, 2In); Samoa (3C, 1NC); Solomon Islands (3C, 3NC, 1In) Tonga (3C, 2NC, 1In), Tuvalu (2C, 1In) and Vanuatu (4NC, 3In).

Overall: 24C, 22NC, 10In.

May to July 2018 Outlooks:

SCOPIC outlooks: 13% of the 60 stations have their highest probability in tercile 1, 12% in tercile 2 and 50% in tercile 3. Ten percent have near-equal probabilities in two terciles and 15% had near-equal probabilities in three terciles.

POAMA outlooks: 85% of the 48 stations have their highest probability in tercile 1, 6% in tercile 2 and 8% in tercile 3. Zero percent have near-equal probabilities in two terciles, while 0% have near-equal probabilities in 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.

Other matters:

Observed Rainfall and Validation

Country	March 2018	January to February 2018	Verification[†] for January to February 2018 outlooks
Cook Islands	Below normal and above normal	Below normal and above normal	Consistent
Fiji	Below normal to Above normal	Below normal to above normal	Consistent to inconsistent
Kiribati	Below normal to above normal	Below normal and normal	Consistent to near-consistent
RMI	Above normal	Above normal	Consistent
Niue	Normal	Normal	Near-consistent
Papua New Guinea	Below normal to above normal	Below normal to above normal	Consistent to inconsistent
Samoa	Below normal to normal	Above normal	Consistent and near-consistent
Solomon Islands	Below normal to above normal	Below normal to above normal	Consistent to inconsistent
Tonga	Below normal to above normal	Below normal to above normal	Consistent to inconsistent
Tuvalu	Below normal and normal	Below normal and above normal	Consistent and inconsistent
Vanuatu	Normal to above normal	Below normal to normal	Near-consistent and 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).