Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 108 Summary Report

Date: Tuesday 13 September 2016

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

Chair: Bureau of Meteorology

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 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 and the Bureau team.
- 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. Next meeting (Tuesday 11 October TBC) and Chair (Kiribati).

Participants:

The Forum was attended by 22 climate officers (13 female) from 10 partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Bipendra Prakash, Swastika Prasad Kiribati: Kamaitia Rubetaake and Mauna Eria

Niue: Rossy Mitiepo, Mellisa Douglas

Papua New Guinea: Nanao Bouauka, Kila Kila Republic of Marshall Islands: Nover Juria

Samoa: Junior Lepale, Faapisa Aiono, Tile Tofaeono, Vaulei Su'a and two guests from Tokelau

(Meleka Mativa and Solonaima Mei)

Solomon Islands: Noel Sanau and Lloyd Tahani Tonga: Seluvaia Finaulahi, Uinita Vea and Mele Lakai

Tuvalu:

Vanuatu: Melinda Natapei

The Bureau team: Grant Smith and Simon McGree

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

OCOF tables were received from eleven participating countries before the meeting. **Observations and Verification of June to August 2016 outlooks**:

Observed rainfall for the one and three-month periods ending August 2016 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, Cook Islands	Jun-Aug	879.6	71	78
Butaritati, Kiribati	Jun-Aug	421.5	5	73
Kiritimati, Kiribati	Jun-Aug	19.1	8	92
Majuro, Marshall Islands	Jun-Aug	664.0	6	63
Port Moresby, PNG	Aug	100.6	116	119
Nuku'alofa, Tonga	Aug	306.7	70	72
Fua'amotu, Tonga	Aug	297.2	35	37
Vava'u, Tonga	Jun-Aug	683	67	70
Ha'apai, Tonga	Jun-Aug	593.2	69	69
Nuku'alofa, Tonga	Jun-Aug	766.2	72	72
Fua'amotu, Tonga	Jun-Aug	892.9	37	37
Niulakita, Tuvalu	Jun-Aug	63.0	5	64
Sola, Vanuatu	Jun-Aug	334.8	3	41
Pekoa, Vanuatu	Jun-Aug	211.3	8	46
Penang Mill, Fiji	Aug	200.8	104	107
Lautoka Mill, Fiji	Aug	210.0	109	117
Nadi Airport, Fiji	Aug	197.0	72	75
Yasawa-i-Rara, Fiji	Aug	167.4	59	63
Laucala Bay (Suva), Fiji	Aug	407.5	73	75
Nausori Airport, Fiji	Aug	387.7	58	60
Tokotoko (Navua), Fiji	Aug	463.1	68	71
Vunisea, Fiji	Aug	226.9	73	80
Labasa Airport, Fiji	Aug	210.2	61	61
Nabouwalu, Fiji	Aug	366.0	96	97

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

Validation of forecasts with observed rainfall for the June to August period showed 19 consistent, 14 near-consistent and 20 inconsistent outlooks (53 stations across 11 countries).

A summary of results (C-consistent, NC-Near Consistent, I-Inconsistent, NA-not available) for each country for the June to August 2016 outlook is as follows:

Cook Islands (1C, 1NC); Fiji (4NC, 8I); Kiribati (1C, 1NC, 3I); Niue (1C); PNG (2C, 5NC, 1I); RMI (2C); Samoa (4I); Solomon Islands (2C, 3NC, 1I); Tonga (3NC, 3I); Tuvalu (3C, 1NC) and Vanuatu (7C).

Overall: 19C, 14NC, 20l.

October to December 2016 Outlooks:

SCOPIC outlooks: Nil percent of the 60 stations outlooks had the highest probabilities in tercile 1, 22% in tercile 2 and 20% in tercile 3. The remaining 58% had either near equal probabilities in two terciles, near equal probabilities in three terciles or a mixed outlook.

POAMA outlooks: Ten percent of the 49 station outlooks favoured tercile 1, 10% tercile 2 and 68% tercile 3. The remaining 12% had either near equal probabilities in two terciles, near equal probabilities in three terciles or a mixed outlook.

Other Discussion

Simon McGree responded to questions on significant differences between the SCOPIC and POAMA outlooks for the PICs – differences are normal for the neutral period.

The partner countries were also reminded about the definition of mixed outlooks (near equal below and above normal probabilities), near climatology outlooks (where probabilities for below average, average and above average are within 28% and 39%) and near equal two category outlooks (where above normal and normal or normal and below normal probabilities are within 3% of each other).

Simon also let the partner countries representatives know that the final version of SCOPIC 4 was being developed. The PICSs were asked to forward information on bugs they detected in SCOPIC 4 to the Bureau of Meteorology.

Observed Rainfall and Validation

Country	August 2016	June to August 2016	Verification [†] for June to August 2016 outlooks
Cook Islands	Normal to above normal	Normal to above normal	Consistent and near consistent
Fiji	Above normal	Normal to above normal	Near consistent to inconsistent
Kiribati	Below normal to above normal	Below normal to normal	Consistent to inconsistent
Niue	Normal	Below normal	Consistent
Papua New Guinea	Below normal to above normal	Below normal to above normal	Consistent to inconsistent
RMI	Below normal to normal	Below normal to normal	Consistent
Samoa	Above normal	Above normal	Inconsistent
Solomon Islands	Below normal to above normal	Below normal to above normal	Consistent to inconsistent
Tonga	Normal to above normal	Below normal to above normal	Near consistent to inconsistent

[†] Forecast is <u>consistent</u> when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is <u>near-consistent</u> 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 <u>inconsistent</u> when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

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Tuvalu	Below normal to normal	Normal to above normal	Near consistent to consistent
Vanuatu	Below normal to above normal	Below normal	Consistent