

Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 106 Summary Report

Date: Tuesday 12 July 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 9 August - TBC) and Chair (Cook Is).

Participants:

The Forum was attended by 20 climate officers from ten partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Bipen Prakash, Arieta Baleisolomone and Swastika Devi

Kiribati:

Niue: Mellisa Douglas and Hingano Laufoli

Papua New Guinea: Agnes Diap, Ruth Apuqahe and Kisolet Posanau

Republic of Marshall Islands: Nover Juria and Samson Kanenko

Samoa: Junior Lepale, Faapisa Aiono and Tile Tofaeono

Solomon Islands: Max Sitai and Lloyd Tahani

Tonga: Mele Lakai

Tuvalu: Eli Ene and Niko Iona

Vanuatu: Melinda Natapei

The Bureau team: Grant Smith, Simon McGree and Elise Chandler

OCOFC tables were received from eleven participating countries before the meeting.

* 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)

Observations and Verification of April to June 2016 outlooks:

Observed rainfall for the one and three-month periods ending June 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 Is.	June	479	77	78
Rarotonga, Cook Is.	June	159	6	118
Penrhyn, Cook Is.	Apr-Jun	883	72	78
Ono-i-lau, Fiji	Apr-June	735	61	66
Labasa, Fiji	Apr-Jun	653	56	60
Butaritari, Kiribati	June	103	4	78
Kiritimati, Kiribati	June	0	4	92
Butaritari, Kiribati	Apr-Jun	419	4	77
Beru, Kiribati	Apr-Jun	885	59	60
Wewak, PNG	Jun	306	55	61
Majuro, RMI	Apr-Jun	519	5	62
Afiamalu, Samoa	Apr-Jun	1312	59	62
Nafanua, Samoa	Apr-Jun	1204	44	44
Apia, Samoa	Apr-Jun	1121	127	127
Faleolo, Samoa	Apr-Jun	638	49	53
Auki, Solomon Is.	June	54	3	54
Honiara, Solomon Is.	June	30	6	62
Vava'u, Tonga	June	330	65	70
Ha'apai, Tonga	June	387	70	70
Nuku'alofa, Tonga	June	435	72	72
Fua'amotu, Tonga	June	564	37	37
Ha'apai, Tonga	Apr-Jun	935	68	69
Nuku'alofa, Tonga	Apr-Jun	855	71	72
Fua'amotu, Tonga	Apr-Jun	1079	37	37
Nanumea, Tuvalu	June	361	70	76
Niulakita, Tuvalu	June	437	61	64
Nanumea, Tuvalu	Apr-Jun	1140	76	76
Niulakita, Tuvalu	Apr-Jun	1090	62	64
Sola, Vanuatu	Apr-Jun	533	1	42
Lemap, Vanuatu	Apr-Jun	313	4	55

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

Validation of forecasts with observed rainfall for the April to June (OCOF #102) period showed 22 consistent, 11 near-consistent and 23 inconsistent outlooks (56 stations across eleven countries).

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

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Cook Islands (2C); Fiji (2C, 5NC, 5I); Kiribati (4C, 1I); Niue (1C); PNG (1C, 5I); RMI (2C); Samoa (4I); Solomon Islands (1C, 4NC, 2I); Tonga (2NC, 4I); Tuvalu (3C, 1I) and Vanuatu (6C, 1I).

Overall: 22C, 11NC, 23I.

August to October 2016 Outlooks:

Sixty-seven percent of the 60 stations outlooks had the highest probabilities in tercile 1, 5% in tercile 2 and 20% in tercile 3. The remaining 8% had either near equal probabilities in two terciles, near equal probabilities in three terciles or a mixed outlook.

POAMA outlooks: Thirty-four percent of the 47 station outlooks favoured tercile 1, 15% tercile 2 and 36% tercile 3. The remaining 15% had either near equal probabilities in two terciles, near equal probabilities in three terciles or a mixed outlook.

ENSO summary for the June 2016 OCOF

ENSO Status

The tropical Pacific is neutral, that is neither El Niño nor La Niña. Temperatures below and at the ocean surface are cooler than normal and have been so since April 2016. Similarly atmospheric indicators of ENSO are all firmly neutral and have remained steady over previous weeks.

ENSO Outlook

The tropical Pacific cooled rapidly in the second quarter of 2016 but the pace of cooling has slowed over the previous few months. Five of eight climate models are suggesting a possible La Niña formation by September. It is expected that the model forecasts will become clearer over the coming months, with the current consensus forecast being for weak La Niña conditions to develop.

For more information please see:

COSPPac monthly climate bulletin at <http://www.bom.gov.au/cosppac/comp/bulletin/index.shtml>

Bureau of Meteorology ENSO wrapup at <http://www.bom.gov.au/climate/enso/>

Other Discussion

No other discussion during the teleconference.

Observed Rainfall and Validation

Country	June 2016	April to June 2016	Verification[†] for April to June 2016 outlooks
Cook Islands	Below normal to above normal	Below normal to normal	Consistent
Fiji	Below normal to normal	Below normal to above normal	Inconsistent to near consistent (consistent at 2 stations)
Kiribati	Normal to below normal	Above normal (below normal at Butaritari)	Consistent (inconsistent at Butaritari)
Niue	Below normal	Below normal	Consistent
Papua New Guinea	Normal to above normal	Above normal (below normal at Madang and Port Moresby)	Inconsistent (consistent at Madang)
RMI	Below normal to normal	Below normal	Consistent
Samoa	Below normal to normal (above normal at Nafanua)	Above normal	Inconsistent
Solomon Islands	Below normal (normal at Munda and Taro)	Normal to above normal (below normal at Lata)	Inconsistent to near consistent (consistent at Munda)
Tonga	Above normal (normal at Niufo'ou)	Above normal	Inconsistent to near consistent
Tuvalu	Above normal (normal at Nui)	Above normal (normal at Nui)	Consistent (inconsistent at Nui)
Vanuatu	Below normal (normal at Pekoa and Whitegrass)	Below normal	Consistent (near consistent at Bauerfield)

[†] 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).