

Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 104 Summary Report

Date: Tuesday 10 May 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 14 June - TBC) and Chair (Tuvalu).

Participants:

The Forum was attended by 15 climate officers from seven partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Bipen Prakash, Arieta Baleisolomone, Yogesh Maharaj, Swastika Devi

Kiribati: Mauna Eria

Niue: Rossy Mitiepo, Mellisa Douglas, Clemencia Sioneholo, Hingano Laufoli

Papua New Guinea:

Republic of Marshall Islands:

Samoa: Junior Lepale, Faapisa Aiono

Solomon Islands: Lloyd Tahani, Max Norman, Noel Sanau

Tonga: Mele Lakai

Tuvalu:

Vanuatu:

The Bureau team: Grant Smith and Elise Chandler

OCOFC tables were received from eight 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 February to April 2016 outlooks:

Observed rainfall for the one and three-month periods ending April 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
Rarotonga, Cook Is.	Apr	52	10	118
Rarotonga, Cook Is.	Apr	243	2	117
Penang, Fiji	Apr	552	100	106
Lautoka, Fiji	Apr	434	112	117
Nadi, Fiji	Apr	500	73	74
Ono-i-lau, Fiji	Apr	577	68	69
Labasa, Fiji	Apr	607	59	61
Nabouwalu, Fiji	Apr	554	94	98
Rotuma, Fiji	Apr	572	103	104
Beru, Kiribati	Apr	598	62	62
Kanton, Kiribati	Apr	273	56	59
Kiritimati, Kiribati	Apr	448	84	90
Tarawa, Kiribati	Feb-Apr	1769	67	67
Beru, Kiribati	Feb-Apr	1469	61	61
Kanton, Kiribati	Feb-Apr	993	56	59
Kiritimati, Kiribati	Feb-Apr	1266	88	90
Hanan, Niue	Apr	46	5	67
Afiamalu, Samoa	Apr	750	62	63
Nafanua, Samoa	Apr	586	44	46
Apia, Samoa	Apr	650	127	127
Faleolo, Samoa	Apr	397	55	55
Auki, Solomon Is.	Apr	384	50	55
Henderson, Solomon Is.	Apr	317	38	42
Munda, Solomon Is.	Apr	448	50	55
Auki, Solomon Is.	Feb-Apr	1335	51	55
Henderson, Solomon Is.	Feb-Apr	1509	42	42
Nanumea, Tuvalu	Apr	449	71	75
Nanumea, Tuvalu	Feb-Apr	1649	74	74

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

Validation of forecasts with observed rainfall for the February to April (OCOF #100) period showed 14 consistent, 13 near-consistent and 13 inconsistent outlooks (40 stations across eight countries).

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

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

Overall: 14C, 13NC, 13I.

June to August 2016 Outlooks:

Sixty percent of the 43 stations outlooks had the highest probabilities in tercile 1, 9% in tercile 2 and 21% in tercile 3. The remaining 10% had either near equal probabilities in two terciles, near equal probabilities in three terciles or a mixed outlook.

POAMA outlooks: Sixty-eight percent of the 31 station outlooks favoured tercile 1, 6% tercile 2 and 26% tercile 3.

ENSO summary for the May 2016 OCOF

ENSO Status

The 2015-16 El Niño is in its last stages. Temperatures below the ocean surface are now largely cooler than normal, and while warm anomalies remain at the ocean surface, these have been steadily cooling.

ENSO Outlook

The 2015-16 El Niño has been steadily declining since its peak in November/December. Climate models suggest the El Niño will continue to weaken during the southern winter months (Jun-Aug). By September, models show a large spread between ENSO neutral and La Niña scenarios, it is expected that the model forecasts will become clearer over the coming month.

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, largely due to a poor connection

Observed Rainfall and Validation

Country	April 2016	February to April 2016	Verification[†] for February to April 2016 outlooks
Cook Islands	Below normal to normal	Below normal to normal	Near consistent to consistent
Fiji	Above normal (normal in the central division)	Below normal to above normal	Inconsistent (two stations near consistent and three consistent)
Kiribati	Above normal (below normal at Butaritari)	Above normal (below normal at Butaritari)	Consistent (inconsistent at Butaritari)
Niue	Below normal	Below normal	Consistent
Papua New Guinea			
RMI			
Samoa	Above normal	Above normal (normal at Afiamalu)	Inconsistent (near consistent at Afiamalu and consistent at Faleolo)
Solomon Islands	Normal to above normal	Normal to above normal (below normal at Kirakira and Taro)	Inconsistent to near consistent (consistent at Kirakira)
Tonga	Above normal (normal at Vava'u, below normal at Ha'apai)	Normal to above normal (below normal at Niuatoputapu)	Near consistent (Consistent at Niuatoputapu)
Tuvalu	Above normal	Normal to above normal	Consistent
Vanuatu			

[†] 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).