Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 114 Summary Report

Date: Tuesday 21 March 2017

Time: Australian Eastern Daylight Time 12:00PM (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 (Thursday 20 April TBC) to be chaired by Tuvalu.

Participants:

The Forum was attended by 15 climate officers (6 female) from 8 partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Bipen Prakash, Arieta Baleisolomone

Kiribati: (Kamaitia Rubetaake and Mauna Eria were ready to participate but the phone connection failed)

Niue: Rossy Mitiepo, Robert Togiamana, Floyd Viliamu

Papua New Guinea: Kisolel Posanau, Ruth Apuqahe, Gabriel Tuno

Republic of Marshall Islands: Not available due to faulty comms.

Samoa: Junior Lepale, Tile Tofaeono, Faapisa Aiono

Solomon Islands: Noel Sanau, Helen Sikaiyo (from Melbourne)

Tonga: Sione Tu'ungafasi

Australia: Grant Beard, Simon McGree, Grant Smith (Bureau of Meteorology), Noel Sanau, Helen Sikaiyo (visiting Melbourne from Solomon Islands)

OCOF tables were received from 8 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 December 2016 to February 2017 outlooks:

Observed rainfall for the one and three-month periods ending February 2017 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
Butaritari, Kiribati	Dec-Feb	278	5	76
Hanan Airport, Niue	Feb	461	64	67
Hanan Airport, Niue	Dec-Feb	1037	61	67
Nadzab, PNG	Feb	46	2	43
Kavieng, PNG	Feb	467	80	87
Nafanua, Samoa	Feb	641	42	45
Kwajalein, Marshall Islands	Dec-Feb	634	65	71
Auki, Solomon Islands	Feb	530	49	56
Taro, Solomon Islands	Dec-Feb	1024	34	38
Niuafo'ou, Tonga	Feb	528	42	44
Niuatoputapo, Tonga	Feb	694	70	70
Niuatoputapo, Tonga	Dec-Feb	1217	62	65
Vava'u, Tonga	Feb	926	71	71
Vava'u, Tonga	Dec-Feb	1207	65	69
Ha'apai, Tonga	Feb	498	71	71
Ha'apai, Tonga	Dec-Feb	951	68	70

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

Validation of forecasts with observed rainfall for the December to February period showed 25 consistent, 15 near-consistent and only 2 inconsistent outlooks (42 stations across 9 countries).

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

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

Overall: 25C, 15NC, 2I.

April to June 2017 Outlooks:

SCOPIC outlooks: Reflecting the time of year when statistical outlooks have less skill, 78% of the 49 station outlooks had near-equal probabilities in three terciles, while 16% had near-equal probabilities in two terciles. Two stations had the highest probability in tercile 2 and one had the highest probability in tercile 3.

POAMA outlooks: Eight countries provided completed POAMA tables this month: Cook Islands, Kiribati, RMI, Niue, PNG, Samoa, Solomon Islands and Tonga. 47% of the 30 stations outlooks had the highest probabilities in tercile 1, 13% in tercile 2 and 37% in tercile 3. Three percent had near-equal probabilities in three terciles or near-equal probabilities in two terciles.

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

Other matters:

Observed Rainfall and Validation

Country	February 2017	December 2016 to February 2017	Verification [†] for December 2016 to February 2017 outlooks	
Cook Islands	Above normal	Normal	Near-consistent	
Fiji	Above normal	Above normal	Mainly Consistent	
Kiribati	Below normal to normal	Below normal	Consistent	
RMI	Above normal	Above normal	Consistent and near-consistent	
Niue	Above normal	Above normal	Consistent	
Papua New Guinea	Mix of below normal, normal and above normal totals	Mostly normal to above normal	Mainly consistent and near- consistent	
Samoa	Mainly above normal	Above normal	Consistent	
Solomon Islands	Mainly above normal.	Normal to above normal.	Consistent or near-consistent.	
Tonga	Above normal	Above normal (North, Central); normal (South)	Consistent to near-consistent	
Tuvalu				
Vanuatu				

 $^{^{\}dagger}$ 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).