

**AUSAID PROJECT  
PACIFIC ISLANDS – CLIMATE PREDICTION PROJECT  
(PI-CPP)**

**Pacific Islands - Online Climate Outlook Forum No. 26  
Summary Report**

**Date:** Wednesday, 11<sup>th</sup> November 2009.

**Time:** Aust Eastern Standard Time 1115 (GMT 0015)

**Main purpose for the PICOF:**

- To provide a regular forum for the ten participating PIC NMSs to discuss the current ENSO status and their seasonal climate outlooks with the PI-CPP project team.

In addition it will serve as the online training forum on the latest SCOPIC\* developments and will give the project team and the NMSs an opportunity to discuss other project related matters/concerns.

**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 1 and 3 months rainfall in relation to the current ENSO situation (include ranking and verification). Wherever appropriate NMS to report on their drought status.
4. Each NMS to report on their three-month outlooks (tercile and median). Are the outlooks are what to expect during the current climatic conditions?
5. Round-table discussion: addressing general concerns/queries on outlooks, ENSO status and SCOPIC.

**Participants:**

**15** climate officers from **8**PIC NMSs participated in the forum: Simon McGree, Arieta Baleisolomone, Bipendra Prakash, and Swastika Devi (**Fiji**), Mele Lakai and Sione Tu'ungafasi(**Tonga**), Luteru Tauvale (**Samoa**), Lloyd Tahani (**Solomon Islands**), Elifaleti, Ene and Kilateli Epu (**Tuvalu**), Rition Kabunateiti (**Kiribati**), Turi Tutai and Nga Rauraa (**Cook Islands**) and Melinda Natapei and Philip Malsale (**Vanuatu**).

Kilateli Epu (**Tuvalu**) chaired the forum.

The Bureau team: Janita Pahalad (Project Team Leader, co-Chair), Dr Andrew Watkins (National Climate Centre), and Dr Yahya Abawi (Project Risk Management Specialist, BoM).

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

### **Summary of the Discussion:**

Rainfall for October 2009 and August to October 2009 period, and seasonal rainfall outlooks for December 2009 to February 2010 period with 1 month lead for each PIC were discussed. NMSs chose either SSTa1 or SSTa 1 and 9 or SOI for August to October as their predictors (some chose 1 month period for their predictors or different predictor combination).

Rainfall for August to October was generally consistent with the outlooks and the outlooks for December 2009 to February 2010 are generally consistent with a presence of an El Niño.

### ENSO Update:

Central equatorial Pacific Ocean temperatures have continued to warm over the past two weeks, and are now at their highest levels since at least the El Niño event of 2002. Similarly, the 30-day Southern Oscillation Index is lower than at any time since 2005. Leading climate models suggest tropical ocean temperatures will remain above El Niño thresholds into the first quarter of 2010.

A sustained weakening of the Trade Winds during October and early November enabled central Pacific equatorial temperatures to rise up to 2°C above normal. However, average to stronger than average Trade Winds currently over the western Pacific may curtail any further warming during the next fortnight. The distribution of tropical cloud has similarities to the patterns observed in the 2002 and 2006 El Niño events.

In Brief: Most recent (11/11/2009) data:

- The tropical Pacific Ocean sea surface has continued to warm in central and eastern areas, with a typical El Niño pattern clearly present. The central Pacific has now warmed to a level that has not been observed since the 2002 El Niño.
- The sub-surface water of the tropical Pacific has also continued to warm, with temperatures as much as 6°C above normal in some regions.
- The latest approximate 30-day SOI value is -15; the monthly value for October was also -15. The SOI has recently stabilised after a rapid fall in value through October.
- Following a sustained weakening of the Trade Winds during October, a pulse of average or stronger than average Trades is developing in the western Pacific.
- Cloudiness near the date-line has been slightly below average in recent weeks. However, cloudiness to the west of the date-line has been consistently above average, as also occurred during the 2006 El Niño and to a lesser extent in the 2002 event.
- Most leading international computer models surveyed by the Bureau predict that El Niño conditions will persist throughout the southern hemisphere summer.

Relevant web pages:

BoM ENSO Wrap Up - <http://www.bom.gov.au/climate/enso/>

BoM model survey - <http://www.bom.gov.au/climate/ahead/ENSO-summary.shtml>

IRI model summary -

[http://iri.columbia.edu/climate/ENSO/currentinfo/SST\\_table.html](http://iri.columbia.edu/climate/ENSO/currentinfo/SST_table.html)

**TABLE 1: Past Rainfall**

<b>Country</b>	<b>October 2009</b>	<b>August to October 2009</b>	<b>Outlooks Issued for August to October 2009 (skill level)</b>
<b>Cook Islands</b>	Southern: above normal	Southern: normal	Climatology (very low)
<b>Fiji</b>	Normal to below normal except above normal in Ono-I-Lau and Rotuma	Normal to above normal except below normal in Matei	Generally climatology (Low)
<b>Kiribati</b>	Above normal	Above normal	Above normal (good)
<b>Niue</b>	Below normal	Below normal	Below normal (low)
<b>Papua New Guinea</b>	Generally normal to above normal except below normal for Wewak	Normal to above normal except below normal for Nadzab	New Guinea Islands: normal to above normal (low) Momose: normal to below normal (good) Southern: climatology (low)
<b>Samoa</b>	Normal to below normal	Normal for Apia and Afiamalu Below normal for Nafanua Above normal for Falelolo	Climatology (very low)
<b>Solomon Islands</b>	Normal to above normal except below normal for Taro	Normal to above normal	Normal to above normal (very low to low)
<b>Tonga</b>	Below normal except normal for Fua'amotu	Northern and Central: below normal Southern: above normal	Above normal for Niufo'ou Normal for Vava'u and Nuku'alofa Normal to below normal for Ha'apai Normal to above normal for Fua'amotu (low to very low)
<b>Tuvalu</b>	Above normal except normal for Funafuti	Above normal except normal for Funafuti	Normal to below normal except climatology for Niulakita

			(good except low for Niulakita)
<b>Vanuatu</b>	Northern: normal to except above normal for Sola Southern: Below normal except normal for Whitegrass	Northern: varied from below normal to above normal Southern: Below normal	Northern; normal to above normal Southern: normal to below normal (good to very good)

**TABLE 2: Rainfall Outlooks for December 2009 to February 2010 (Derived from SCOPIC)**

<b>Country</b>	<b>Rainfall outlook</b>	<b>Skill Level</b>
<b>Cook Islands</b>	Southern: normal Northern: above normal	Low Very Good
<b>Fiji (using SOI)</b>	Climatology for Central Division and below normal elsewhere	Very low for Central Division and moderate to good skill elsewhere
<b>Kiribati</b>	Above normal	Very good
<b>Niue</b>	Above normal	Good
<b>Papua New Guinea</b>	Wewak and Kavieng: above normal Madang and Misima: normal with low skill. Elsewhere: below normal	Low to very low
<b>Samoa</b>	Below normal except normal to below normal for Faleolo	Good to very good except low for Faleolo
<b>Solomon Islands</b>	Generally normal to below normal except climatology for Munda	Moderate to good except very low for Munda
<b>Tonga</b>	Normal to below normal	Good to very good
<b>Tuvalu</b>	Above normal for Nanumea and Funafuti Normal to above normal for Nui Normal to below normal for Niulakita	Very good for Nanumea, and moderate for Niulakita, low for Nui and very low for Funafuti
<b>Vanuatu</b>	Generally below normal except above normal for Pekoa	Low to moderate

**See individual outlooks reports for more information on each country.**

**Tropical Cyclone Information and Outlooks**

See the following links

South Pacific Seasonal Outlook for Tropical Cyclone:

<http://www.bom.gov.au/climate/ahead/south-pacific/tc.html>

Tropical cyclone information: [http://www.bom.gov.au/cgi-bin/silo/cyclones\\_sh.cgi](http://www.bom.gov.au/cgi-bin/silo/cyclones_sh.cgi)