# **Seasonal Prediction Project (SPP)**

# Pacific Islands – Ocean and Climate Outlook Forum No. 199 Summary Report

Date: Tuesday 16 April 2024

Time: Australian Eastern Standard Time at 11:00AM (01:00 UTC)

Host: SPREP
Chair: SPREP
Apologies:

#### Main purpose for the OCOF:

- To provide a regular forum for the 14 participating PIC NMSs to discuss the current ENSO status, recent one and three-month rainfall, drought (if present), their seasonal climate outlooks and stakeholders' engagement with other countries and the SPP (Bureau of Meteorology and SPREP) project team.
- In addition, it serves as an online training forum for recent ACCESS development and gives the project team and the NMSs an opportunity to discuss other project-related matters.

#### Agenda:

- 1. Brief introduction of PIC participants, SPREP, SPC and Bureau of Meteorology teams.
- 2. 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), their three-month outlooks and their stakeholders engagement. Wherever appropriate NMS to report on their drought status.
- Round-table discussion: addressing general concerns/queries on outlooks and SCOPIC, CliKp and ACCESS-S
- 5. Feedback on COSPPac products and services.
- 6. Country statements with regards to drought or drought-like conditions, drought module issues/concerns.
- 7. The next OCOF will be held on 16 May 2024.

#### Participants:

The OCOF 199 was attended by 85 climate officers (46 female) from 15 partner PIC NMSs.

## Cook Islands:

Fiji: Jasneel Chandra, and Shweta Shiwangni

FSM (Chuuk): Boyd Mackensie

FSM (Pohnpei):

Kiribati: Mwata Keariki

Niue:

Papua New Guinea:

Palau: Kiku Mochimaru

Republic of Marshall Islands: Samson Kaneko Samoa: Mattaniah Salesa, and Emannuel

Etimani



#### **Solomon Islands:**

Tokelau: Mile Fonua

Tonga:

Tuvalu: Kaani Kalepo, Elifaleti Ene, Simoea

Tiute, and Mele Katea

Vanuatu:

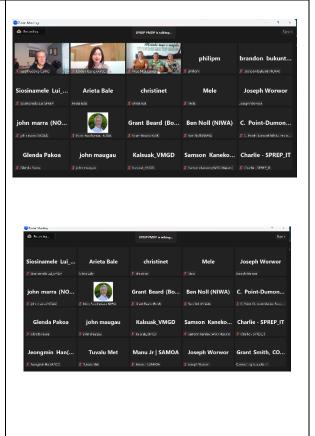
Australia: Grant Beard, Grant Smith, and Elise

Chandler

NOAA:

SPREP: Philip Malsale and Siosina Lui

SPC: Moleni Tu'uholoaki, and Merana Kitione



OCOF tables were received from 11 participating countries before the meeting.

#### **Observations of January to March 2024**:

Observed rainfall for the one and three-month periods ending March 2024 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	Years of record
Penang, Fiji	March	839.2	110	115
Lautoka, Fiji	March	907.1	122	124
Nadi, Fiji	March	988.6	81	81
Laucala Bay, Fiji	March	721.8	82	83
Nausori, Fiji	March	759.3	66	68
Tokotoko, Fiji	March	875.0	80	80
Lakeba, Fiji	March	540.7	72	74
Vunesia, Fiji	March	621.9	87	88
On-i-Lai, Fiji	March	418.9	70	77
Labasa Airport, Fiji	March	859.1	86	68
Savusavu, Fiji	March	554.2	64	66
Penang, Fiji	Jan-Mar	1914.1	109	115
Lautoka, Fiji	Jan-Mar	1727.9	120	124
Nadi, Fiji	Jan-Mar	1729.4	77	81
Laucala Bay, Fiji	Jan-Mar	1849.3	83	83
Nausori, Fiji	Jan-Mar	1474.5	67	68
Tokotoko, Fiji	Jan-Mar	1940.0	78	78
Lakeba, Fiji	Jan-Mar	1575.0	73	73
Vunesia, Fiji	Jan-Mar	1548.3	87	87

Labasa Airport, Fiji	Jan-Mar	1733.0	61	65
Savusavu, Fiji	Jan-Mar	1398.4	61	61
Nafanua, Samoa	March	131.5	5	52
Faleolo, Samoa	March	94.7	5	63
Vava'u, Tonga	March	758.5	77	78
Ha' apai, Tonga	March	567.6	77	78
Fua' amotu, Tonga	March	637.6	45	45
Nuku' alofa, Tonga	March	739.0	80	80
Fua' amotu, Tonga	Jan-Mar	846.9	45	45
Nuku' alofa, Tonga	Jan-Mar	924.5	80	80
Pekoa, Vanuatu	March	842.0	53	54
Bauerfield, Vanuatu	March	746.6	50	52
Whitegrass, Vanuatu	March	399.3	48	53
Sola, Vanuatu	Jan-Mar	1436.4	47	51
Pekoa, Vanuatu	Jan-Mar	1724.1	54	54
Bauerfield, Vanuatu	Jan-Mar	1380.1	48	52

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

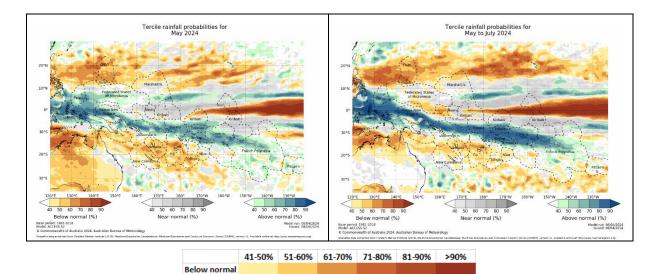
Near-normal Above normal

## May to July 2024 Outlooks:

#### ACCESS-S outlooks:

The three-month ACCESS-S rainfall outlook for **May-July 2024** is quite different from recent outlooks. A relatively thin band where above normal is likely or very likely, stretches east-southeast from southern Palau across PNG, the Solomon Islands, Tuvalu, the southern Phoenix Is, Rotuma, Wallis and Futuna, Tokelau, Samoa, American Samoa, the northern Cook Is, far southern Line Islands, and central French Polynesia.

Below normal is likely or very likely, in northern Palau, Guam, CNMI, northwest FSM, northern RMI, New Caledonia, Vanuatu, most of Fiji, Tonga, Niue, some of the southern Cook Is, and in patches scattered across French Polynesia, and Pitcairn Islands.



Арі	ril to June 20	024	
	ACCESS-S	C3S	CLIKP
Cook Is North			
Cook Is South			
Fiji West			
Fiji Central			
Fiji East			
Fiji North			
Fiji Rotuma			
FSM West			
FSM Central			
FSM East			
Kiribati West			
Kiribati Central			
Kiribati East			
RMI North			
RMI Central			
RMI South			
Nauru			
Niue			
Palau			
PNG Momase			
PNG Is			
PNG South			
PNG Highlands			
Samoa			
Solomon Is West			
Solomon Is Central			
Solomon Is East			
Tonga North			
Tonga Central			
Tonga South			
Tuvalu North			
Tuvalu Central			
Tuvalu South			
Vanuatu North			
Vanuatu South			

	Apr-Jun 2024	May-Jul 2024
	ACCESS-S	
Cook Is North		
Cook Is South		
Fiji West		
Fiji Central		
Fiji East		
Fiji North		
Fiji Rotuma		
FSM West		
FSM Central		
FSM East		
Kiribati West		
Kiribati Central		
Kiribati East		
RMI North		
RMI Central		
RMI South		
Nauru		
Niue		
Palau		
PNG Momase		
PNG Is		
PNG South		
PNG Highlands		
Samoa		
Solomon Is West		
Solomon Is Central		
Solomon Is East		
Tonga North		
Tonga Central		
Tonga South		
Tuvalu North		
Tuvalu Central		
Tuvalu South		
Vanuatu North		
Vanuatu South		

#### Other matters Discussed:

- El Niño event has been present since September 2023, and near its end. Climate model outlooks suggest a return to neutral ENSO later in the southern autumn of 2024.
- NMHS presented on El Nino impacts during the last six months
- A regional climate statement developed to help NMHS develop their national outlook.
- OCOF 200 will be hosted by SPREP via zoom together on the 16 May 2024

#### **Observed Rainfall**

Country	March 2024	January to March 2024
Cook Islands	No report	No report
Fiji	Mostly above normal	Mostly above normal
FSM (Chuuk)	Below normal	Below normal
FSM (Pohnpei)	No report	No report
Kiribati	Above normal	Above normal
RMI	Below normal	Below normal and above normal
Nauru	No report	No report
Niue	Normal	Above normal
Palau	Below normal	Normal
Papua New Guinea	Normal and above normal	Normal and above normal
Samoa	Below normal	Below normal

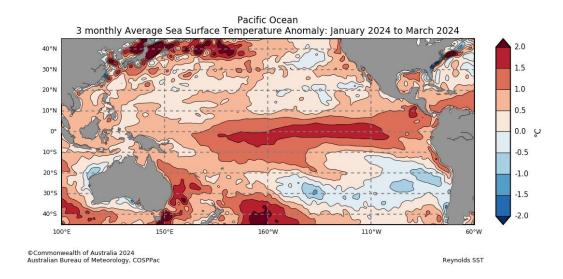
Solomon Islands	No report	No report
Tonga	Below normal and above normal	Below normal to above normal
Tuvalu	Below normal to above normal	Below normal to above normal
Vanuatu	Above normal	Mostly above normal

#### **Ocean Conditions**

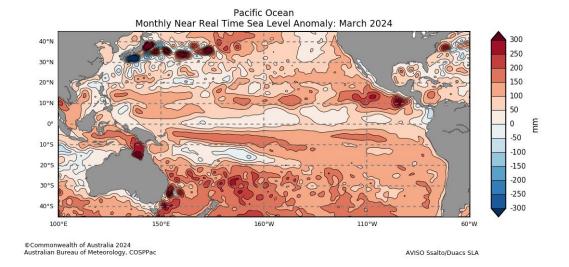
## **Observations from January to March 2024**

Sea surface temperature:

Three-monthly SST anomalies showed above normal temperatures up to 3.0°C in the eastern coastline of Australia, 2.0°C in Kiribati (central Line Islands, Gilbert Islands, and Phoenix Islands) and New Caledonia, and 1.5°C in Tuvalu, Samoa, Tokelau, Palau, FSM, Marshall Islands, PNG, Cook Islands and Nauru. Near normal to above normal (0 to 1°C) temperatures were observed for the rest of the COSPPac countries. Compared with the December 2023 to February 2024 SST anomaly pattern, near-equatorial SSTs greater than 2.0°C above normal temperature extents have contracted.



March sea level was generally near-normal in Palau and near-normal to above normal (up to 200mm) over majority of the COSPPac with patches of 300mm in the eastern coastline of Australia, southern Fiji, southern Tonga, southern Niue and southern Cook Islands.

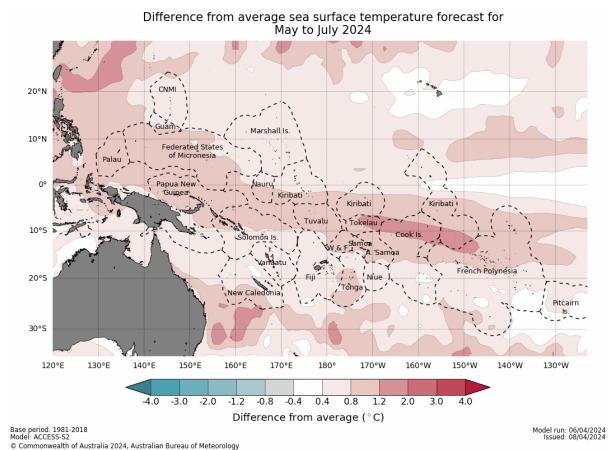


### May to July 2024 Outlooks:

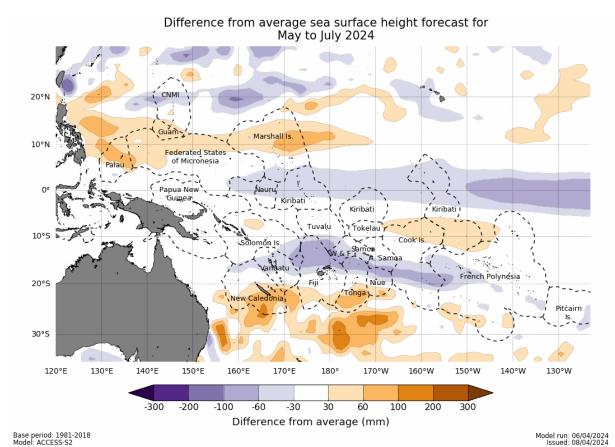
Sea surface temperature outlook: SSTs generally are forecast to be above normal in the majority of the COSPPac countries with a few patches of near-normal temperature in some of the countries. In particular, SSTs are predicted to be up to 2°C in Tokelau, Cook Island, Line Islands and French Polynesia, between 0.4 to 1.2°C in FSM, Nauru, PNG, Solomon Islands, Tonga, New Caledonia, French Polynesia, Samoa, Phoenix Islands, Guam and Gilbert Islands, and 0.4 to 0.8°C in the Marchall Islands, CNMI, Fiji, Niue, Pitcairn Islands and Vanuatu.

Sea level outlook: Sea level is forecast to be near-normal in most parts of the COSPPac countries. Near-normal sea levels are forecast for PNG, near-normal to below normal in Kiribati, Samoa,,Gilbert Islands, Phoenix Islands, Nauru, Vanuatu and Pitcairn Islands, near-normal to above normal (up to 100mm) in Palau and FSM, below normal, near-normal and above normal in Tonga, CNMI, Marshall Islands, Line Islands, Solomon Islands, Fiji, Tonga, Niue, New Caledonia, Cook Islands and French Polynesia. Note that this outlook does not include trends of sea level rise.

Coral Bleaching Outlook: For the four weeks outlook to 28 April, "Alert Levels 1 and 2" and surrounded by "Warning" areas are forecast for PNG, Kiribati (phoenix and Line Islands), Solomon Islands, Fiji, Niue, northern Cooks, Samoa, Tonga, French Polynesia. southeastern coastline of Australia and Cook Islands, . The remaining countries are predicted to experience "watch" or no thermal stress".

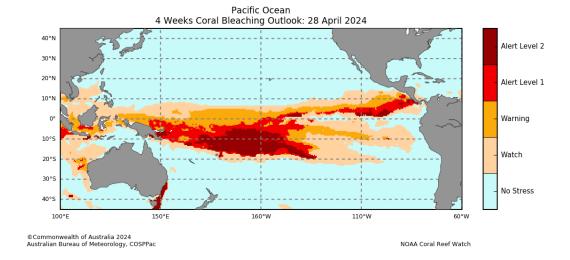


Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/



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Shapefile data extracted from Flanders Marine institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/



# **Observed Conditions**

SST: sea surface temperature anomaly

SLA: sea level anomaly BN: Below Normal NN: Near Normal AN: Above Normal

Country	Februar	y 2024
Country	SST	SLA
Cook Islands	AN, NN,BN	AN, NN
Fiji	AN, NN	AN, NN
FSM (Chuuk)	AN, NN	NN, AN
FSM (Pohnpei)	AN, NN	AN, NN
Kiribati	AN	AN
Marshall Islands	AN, NN	AN, NN
Nauru	AN	AN
Niue	AN, NN	AN, NN
Palau	AN, NN	BN, NN
Papua New Guinea	AN, NN	AN, NN
Samoa	AN	NN
Solomon Islands	AN, NN	NN
Tonga	AN, NN	AN,NN
Tuvalu	AN	AN, NN
Vanuatu	AN, NN	AN, NN

# Country Stakeholder Engagement- Evaluations of how effective countries engage with their stakeholders

Country	Date March	Stakeholder	Total Number of Participants	Number of male	Number of female
	2024				
Cook Islands	March	No report			
Fiji - Climate Summary	07 March	General public	140	106	34
Fiji - EAR Watch	13 March	Humanitarian partners	122	96	26
Fiji - Climate Outlook	28 March	General public	124	93	31
Fiji - Climate Outlook for Monasavu	29 March	Energy Fiji Limited	13	13	-
Fiji - Ocean Outlook	20 March	A number of key ocean related stakeholders	36	29	7
Fiji - Sugarcane rainfall outlook	05 March	Sugarcane Industry stakeholders	77	60	17
Fiji -ENSO update	25 March	General Public	142	116	26
Fiji - Meteorological data request	01-31 March	A range of stakeholders	64	60	4
FSM (Chuuk) - Climate Bulletin	March	DEOC, DECCEM, CPUC, UN, IOM, Chuuk State Gov., CWC, DOE, EPA	15	8	7
FSM (Chuuk) - EAR Watch	March	DEOC, DECCEM, CPUC, UN, IOM, Chuuk State Gov., CWC, DOE, EPA	15	8	7
FSM (Chuuk) – Ocean Outlook	March	DEOC, DECCEM, CPUC, UN, IOM, Chuuk State Gov., CWC, DOE, EPA	15	8	7
FSM (Pohnpei) – Climate bulletin	March	No Report			
Kiribati – Climate bulletin	13 March	Government and Non-Government Organisations and public subscribed to the products.	158	70	88

Kiribati – EAR Watch	13 March	Drought committee members	62	35	27
Kiribati – Media release	13 March	KMS Media and KMS Staffs	53	23	30
Kiribati - Ocean Outlook	13 March	Government and Non-Government Organisations and public subscribed to the products.	158	70	88
Kiribati – National Climate Outlook Forum	18 March	Mayors, Clerks, Key stakeholders & Outer Island Observers.	55	35	20
Kiribati – Climate data request	1-31 March	Abaiang Council, Student and Vodafone	3		3
Marshall Island	March	No report			
Nauru	March	No report			
Niue - Monthly Climate briefing	March	Niue Meteorological Services staff Australian Bureau of Meteorology staff UNEP CIS-Pac 5 staff	209	96	113
Palau Sector- based Climate Services and Coordination Workshop, Sea Level Training: How to Access Information, Understand it, and Inform Decision- making	1 March	Kiribati MET, Solomon Island MET, Tuvalu MET, NIWA, WSO Palau, Ministry of Health (MOH), Environmental Health, Bureau of Cultural and Historical Preservation (BCHP), Palau Land and Resource Information System Office (PALARIS), Palau Community College (PCC), Ministry of Agriculture, Fisheries, and the Environment (MAFE), Office of Climate Change (OCC), NOAA Regional Climate Services Director, Pacific Region, UHSLC Associate Director, Pacific RISA Project Specialist, NOAA Joint Archive for Sea Level Data Manager, and UHSLC Research Scientist and APEC Climate Center (APCC).	24	12	12
Palau-Monthly Rainfall and 24- Hour Average Temperature Data graphic	4 March	WSO Palau and social media	18+	13+	5+
Palau-Island Climate Update	7 March (updated on 12th)	WSO Palau and social media	17+	12+	5+
Palau-EAR Watch	11 March	WSO Palau and social media	14+	10+	4+
Palau-APCC Outlook Tailored for Palau	11 March	WSO Palau and social media	14+	10+	4+

Palau-PEAC Outlook Tailored for Palau	11 March	WSO Palau and social media	16+	11+	5+
Palau-Tailored Ocean and Climate Outlook for Palau	13 March	WSO Palau and social media	15+	11+	4+
Palau-Climate and Ocean Bulletin	14 March	WSO Palau and social media	14+	10+	4+
Palau-Climate data request by APCC for WSO Palau 2018 to 2023 and background. Date request in Feb. 20 but request fulfilled in March	14 March	WSO Palau, APCC, Palau PMU	5	1	4
Palau-Climate News, post on Feb 2024 Climate Drivers for Palau, Daily Rainfall, Significant event, and Monthly Rainfall Average 24-hr Max, Min and Mean Temperatures across Manual and Automated Stations and ENSO Update	15 March	WSO Palau and social media.	14+	10+	4+
Palau-Climate Story: ENSO Update and Monthly Rainfall and stats in Standard and Metric units across all stations.	18 March	WSO Palau and social media.	27+	18+	9+
Palau - 2023 Climate data request: Raining Seasons Per hour, per day, per month.  For the month of May to December as the raining	18 March	WSO Palau and Palau Solar	2	0	2
Palau -Water Task Force Meeting on potential Drought	26 March	WSO Palau, NEMO and NEC	28	19	9

Palau -Gov Talk Show on potential Drought	27 March	WSO Palau, NEMO, PPUC, ECO Paradise (Gov radio)	3+	2+	1+
PNG - Drought Update	26 March	NGOs, Consultants, Construction Companies, Govt Agencies, Companies, General public	215	177	38
PNG - Weekly Ok Tedi Climate Briefing	15 March	OK Tedi Mine	10	9	1
PNG – Climate data request	1-31 March	NGOS, Consultants, schools, construction Companies, Govt Agencies, Companies	6	5	1
Samoa – EAR Watch	4 March	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa – Seasonal rainfall Outlook	7 March	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa- Ocean Outlook	4 March	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa - Climate summary	4 February	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Solomon Islands	March	No report			
Tonga – Climate Bulletin	3 March	Government ministries. NGOs, Media, Private Sector	155	118	37

Tonga – Ocean Outlook	3 March	Government ministries. NGOs, Media, Private Sector	155	118	37
Tuvalu – Climate Bulletin	23 March	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	41+	23	18
Tuvalu – EAR Watch	23 March	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	41+	23	18
Tuvalu – Ocean Outlook	23 March	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	41+	23	18
Tuvalu - Monthly Climate briefing	23 March	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	41+	23	18
Tuvalu – Rainfall and Ocean Outlook video Platform via social media	25 March	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	41+	23	18
Vanuatu	March	No engagement			
		Total	2,678	1,715	984

Note: The stakeholder data above may not total up due to lack of data from NMS or no participation.

The discussion can be found in the link below.

Link: <a href="https://sprep.zoom.us/rec/share/hrb7iH2pizZXKCXahDn-fg8u70hZTHyG07MilhRostnOCuk4RTQFNHT1ovVCEV5J.zygCwKFW7z0XNKxd">https://sprep.zoom.us/rec/share/hrb7iH2pizZXKCXahDn-fg8u70hZTHyG07MilhRostnOCuk4RTQFNHT1ovVCEV5J.zygCwKFW7z0XNKxd</a>

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