Seasonal Prediction Project (SPP)

Pacific Islands – Ocean and Climate Outlook Forum No. 195 Summary Report

Date: Thursday 14 December 2023

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

Host: Australian Bureau of Meteorology

Chair: Solomon Islands
Apologies: Samoa

Main purpose for the OCOF:

- To provide a regular forum for the 12 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 18 January 2024 and is to be chaired by Tonga.

Participants:

The OCOF 195 was attended by 19 climate officers (10 female) from 9 partner PIC NMSs.

Cook Islands:

Fiji: Jasneel Chandra, and Arieta Baleisolomone

FSM (Chuuk): Boyd Mackensie

FSM (Pohnpei):

Kiribati: Kamaitia Rubetaake, Tekaatu Uribano, and Miriam Kataunati

Niue: Jedaiah Tukuitonga, Heleena

Togoakilo

Papua New Guinea:

Palau: Maria Ngemaes, Kiku Mochimaru, and

Maylene



Republic of Marshall Islands: Samson

Kaneko Samoa:

Solomon Islands: Max Sitai

Tokelau: Tonga:

Tuvalu: Kaani Kalepo, Leiti Setefano, Faoliu

Teakau, Simoea Tiute

Vanuatu: Joseph Worwor and John Mangau Australia: Grant Beard and Grant Smith

NOAA:

SPREP: Philip Malsale **SPC**: Judith Giblin

OCOF tables were received from 10 participating countries before the meeting.

Observations of September to November 2023:

Observed rainfall for the one and three-month periods ending November 2023 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
Penrhyn – Cook Islands	November	11.3	3	125
Nadi Airport, Fiji	November	41.1	9	81
Tokotoko, Fiji	November	763.0	74	78
Lakeba, Fiji	Sept-Nov	177	8	73
Udu Point, Fiji	Sept-Nov	149.3	4	73
Beru, Kiribati	November	454.1	66	67
Tarawa, Kiribati	November	298.9	70	77
Arorae, Kiribati	November	402.4	57	57
Beru, Kiribati	Sept-Nov	893.3	63	66
Arorae, Kiribati	Sept-Nov	822.9	51	56
Tarawa, Kiribati	Sept-Nov	928.2	74	77
Kwajalein,	November	448.3	75	79
NauruRMI	Sept-Nov	1464.8	81	81
Pohnpei, FSM	November	670.3	72	74
Kosrae. FSM	November	670.3	50	54
Pohnpei, FSM	Sept-Nov	1490.2	70	74
Auki, Solomon Is.	November	467.0	60	60
Henderson, Solomon Is.	November	422.2	48	49
Honiara, Solomon Is.	November	465.7	67	67
Kirakira, Solomon Is.	August	358.0	57	62
Auki, Solomon Is.	Sept-Nov	1043.1	60	60
Henderson, Solomon Is.	Sept-Nov	647.5	47	49
Honiara, Solomon Is.	Sept-Nov	678.9	65	66
Kirakira, Solomon Is.	Sept-Nov	1124.8	48	53
Lata, Solomon Islands	Sept-Nov	1482.8	46	49
Pekoa, Vanuatu	November	33.7	3	53
Aneityum, Vanuatu	November	25.2	4	72

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

January to March 2024 Outlooks:

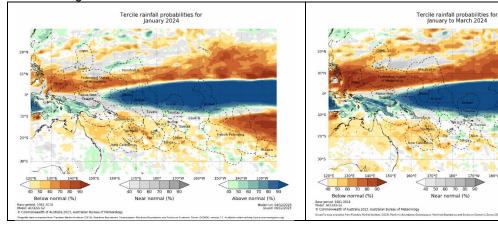
ACCESS-S outlooks:

The Bureau's El Niño Alert continues, with positive Indian Ocean Dipole likely passed its peak. El Niño continues in the tropical Pacific. Climate model forecasts indicate some further warming of central to eastern Pacific SSTs is possible, with SSTs remaining above El Niño thresholds early into the second quarter of 2024.

The three-month ACCESS-S rainfall outlook for **January-March 2024** shows rainfall anomalies consistent with a mature El Niño. A region where above normal is very likely affects equatorial regions stretching from PNG in the west, western Solomon Islands southeastern FSM, across Nauru, the far southern Marshall Islands, Kiribati (Gilbert Is, Phoenix Is and much of the Line Is), Tuvalu, northern Wallis and Futuna, Tokelau, northern American Samoa, the northern Cook Is, and parts of French Polynesia and Pitcairn Islands. Above normal is also likely or very likely in northern and eastern Fiji and central Tonga.

Wrapping around the equatorial wet zone are regions where below normal is likely or very likely, affecting





	41-50%	51-60%	61-70%	71-80%	81-90%	>90%
Below normal						
Near-normal						
Above normal						

December 2023 to February 2024						
А	CCESS-	C35	CLIKP			
Cook Is North						
Cook Is South						
Fiji Vest						
Fiji Central						
Fiji East						
Fiji North						
Fiji Rotuma						
FSM Vest						
FSM Central						
FSM East						
Kiribati ∀est						
Kiribati Centra						
Kiribati East						
RMI North						
RMI Central						
RMI South						
Nauru						
Niue						
Palau						
PNG Momase						
PNG Is						
PNG South						
PNG Highland	5					
Samoa						
Solomon Is ¥e	est					
Solomon Is Ce	entral					
Solomon Is Ea	st					
Tonga North						
Tonga Central						
Tonga South						
Tuvalu North						
Tuvalu Centra						
Tuvalu South						
Yanuatu North						
Yanuatu South						

	Dec-Feb 23/24	Jan-Mar 2024
	ACCESS-S	
Cook Is North		
Cook Is South		
Fiji ₩est		
Fiji Central		
Fiji East		
Fiji North		
Fiji Rotuma		
FSM West		
FSM Central		
FSM East		
Kiribati ₩est		
Kiribati Central		
Kiribati East		
RMI North		
RMI Central		
RMI South		
Nauru		
Niue		
Palau		
PNG Momase		
PNG Is		
PNG South		
PNG Highlands		
Samoa		
Solomon Is We:		
Solomon Is Cer	ntral	
Solomon Is Eas	t	
Tonga North		
Tonga Central		
Tonga South		
Tuvalu North		
Tuvalu Central		
Tuvalu South		
Vanuatu North		
Vanuatu South		

Other matters Discussed:

- El Niño continue and may have passed its peak.
- OCOF 196 will be hosted by SPREP via zoom on the 18 January 2024 and Tonga to be the chair.
- NMHS were encouraged to document El Niño impacts and develop a database for impacts.

Observed Rainfall

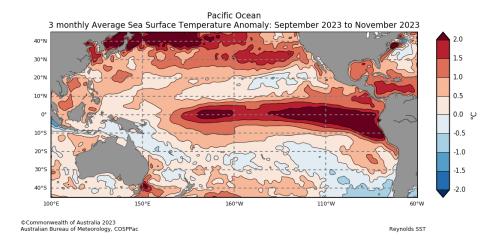
Country	November 2023	September to November 2023
Cook Islands	Below normal and above normal	Below normal and normal
Fiji	Mostly below normal and normal	Mostly below normal and normal
FSM (Chuuk)	Above normal	Above normal
FSM (Pohnpei)	Above normal	Above normal
Kiribati	Mostly above normal	Above normal
RMI	Normal and above normal	Below normal and normal
Nauru	Above normal	Above normal
Niue	No report	
Palau	Normal	Normal
Papua New Guinea	No report	
Samoa	No report	
Solomon Islands	Mostly above normal	Mostly above normal
Tonga	Normal and above normal	Below normal and above normal
Tuvalu	Normal and above normal	Above normal
Vanuatu	Below normal	Below normal and normal

Ocean Conditions

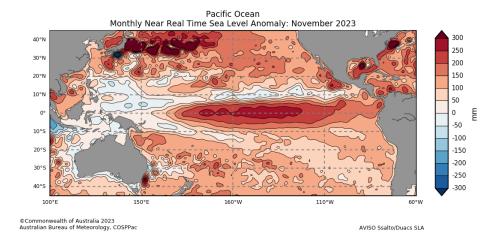
Observations of September to November 2023

Sea surface temperature:

Three-monthly SST anomalies show near normal temperatures along two regions. The first region spanning the 10° North latitude over Palau and parts of FSM and RMI. The second region spans southeastward from PNG to southern Cook Islands. The remaining COSPPac countries experiencing above normal temperatures. Above normal temperatures up to 2.0°C persisted in central Line Islands, Gilbert Islands, and northern Phoenix Islands of Kiribati, northern Tuvalu, and Nauru. Compared with the August to October 2023 SST anomaly pattern, near-equatorial SSTs up to 2.0°C above normal were observed further west into the central Pacific Ocean.



November sea level was generally 50mm to 200m above normal over three regions of the Pacific Ocean. The first region is along the 10° North latitude spanning over northern RMI. The second region is along the near-equatorial region stretching from Nauru to central Line Islands of Kiribati. The third region spans southeastward from PNG to southern Cook Islands. Anomalies above +200mm were observed in northern and central Line, northern Phoenix and Gilbert Islands of Kiribati. Patches of +200mm were also observed in southern PNG, southern Solomon, Vanuatu, Fiji, Tonga, Niue and southern Cook Islands. Near normal sea level anomalies were observed in Palau, FSM, southern RMI, northern PNG, northeastern Solomon Islands and southern Tuvalu.

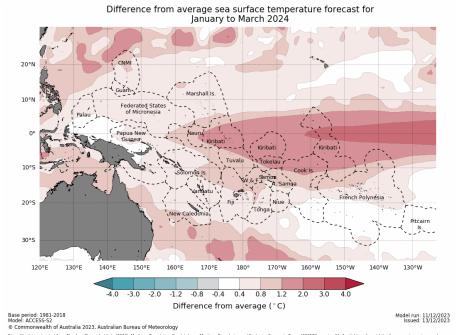


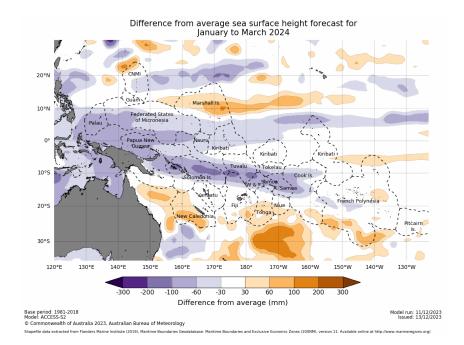
January to March 2024 Outlooks:

Sea surface temperature outlook: SSTs are forecast to be 0.4 to 3.0 °C affecting countries along the near-equatorial region. Above normal SSTs of 1.2 to 3.0 °C are forecast for Nauru, Kiribati, and northern Cook Islands. Near-normal SSTs are forecast for southern Palau, parts of PNG, and southern Cook Islands.

Sea level outlook: Sea level is forecast to be 30-100mm above normal over central RMI, far southern Fiji, Tonga, southern Niue and far southern Cook Islands. Sea levels forecast to be 30 to 200mm below normal in PNG, Palau, FSM, southern RMI, Nauru, Gilbert and northern Line Islands of Kiribati, northeastern Solomon, southern Tuvalu, Samoa, and northern Cook Islands. Remaining countries are forecast to have near-normal sea levels. Note that this outlook does not include trends of sea level rise.

Coral Bleaching Outlook: For the four weeks outlook to 7 January, "Alert Levels 1 and 2" forecast for Kiribati (Gilbert, northern Phoenix, and northern to central Line Islands), and northeastern Tuvalu. Broad region of 'Warning' areas surrounding the 'Alert 1 and 2' regions, forecast for Nauru, northeastern Solomon, and parts of PNG. 'Watch' status affects southern FSM, PNG, Solomon Islands, Samoa and northern Fiji. The remaining countries are predicted to experience "no thermal stress".





Pacific Ocean 4 Weeks Coral Bleaching Outlook: 07 January 2024 Alert Level 2 20°N Alert Level 1 10°N Warning 10°5 Watch 20°5 ©Commonwealth of Australia 2023 Australian Bureau of Meteorology, COSPPac NOAA Coral Reef Watch

Observed Conditions

SST: sea surface temperature anomaly

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

Country	November 2023				
Country	SST	SLA			
Cook Islands	AN, NN	AN			
Fiji	AN, NN	AN			
FSM (Chuuk)	NN, AN	NN			
FSM (Pohnpei)	AN, NN	BN			
Kiribati	AN	AN			
Marshall Islands	AN	AN, NN			
Nauru	AN	AN			
Niue	NN	AN			
Palau	AN	AN			
Papua New Guinea	NN, BN	AN, NN			
Samoa	AN	AN			
Solomon Islands	NN	AN, NN			
Tonga	AN, NN	AN			
Tuvalu	AN	AN, NN			
Vanuatu	NN, AN	AN			

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

Country	Date November	Stakeholder	Total Number of Participants	Number of male	Number of female
Cook Islands – EAR Watch	2023 November	Red Cross, Island Council and Executive Officers, To Tatou Vai, etc.	39		
Cook Islands – Monthly Climate briefing	November	Climate Change	8		
Cook Islands – Climate data request	November	Ministry of Marine Resources	1		
Fiji - Climate Summary	08 November	General public	140	106	34
Fiji - EAR Watch	09 November	Humanitarian partners	122	96	26
Fiji - Climate Outlook	30 November	General public	124	93	31
Fiji - Climate Outlook for Monasavu	30 November	Energy Fiji Limited	13	13	-
Fiji - Ocean Outlook	20 November	A number of key ocean related stakeholders	36	29	7
Fiji – Sugarcane rainfall outlook	31 November	Sugarcane Industry stakeholders	77	60	17
Fiji - ENSO Update	21 November	General Public	142	116	26
Fiji - Sugarcane Farmers Engagement Workshop	20-30 November	Fiji Sugar Corporation, Sugar Research Institute of Fiji, Sector Assistants, Field Officers, Farm Advisors and Farmers	177	139	38
Fiji - Meteorological data request	01-30 November	A range of stakeholders	35	27	9
FSM (Chuuk) - EAR Watch	20 November	DCO	5	2	3

FSM (Chuuk) -	08 November	DCO	5	2	3
FSM (Pohnpei) – Climate and Ocean bulletin	November	Pohnpei Municipal Gov't, Kosrae Municipal Gov't, Pohnpei and Kosrae DCO, Dept Of Education, Red Cross, Fisheries, Environmental Protection Agency, DECEM, Mayors, Dept. Of Public Safety, Pohnpei Utility Corporation, Tourism, Fisheries.	52	43	9
FSM (Pohnpei) – EAR Watch	November	Pohnpei Municipal Gov't, Kosrae Municipal Gov't, Pohnpei and Kosrae DCO, Dept Of Education, Red Cross, Fisheries, Environmental Protection Agency, DECEM, Mayors, Dept. Of Public Safety, Pohnpei Utility Corporation, Tourism, Fisheries.	52	43	9
Kiribati - Climate bulletin	13 November	Government and Non-Government Organisations and public subscribed to the products.	158	70	88
Kiribati - Ocean Bulletin	13 November	Government and Non-Government Organisations and public subscribed to the products.	158	70	88
Kiribati - Media release	13 November	KMS Media and KMS Staffs	53	23	30
Kiribati – EAR Watch	15 November	Drought Committee Members	62	35	27
Kiribati -Climate Data Request	1-30 November	Students and regional organisation	2	1	1
Marshall Island – Climate briefing	17 November	Office of the Chief Secretary and the National Disaster Management Office	5	3	2
Nauru	November	No engagement			
Niue	November	No report			
Palau -	November	No engagement			
PNG	November	No report			
Samoa	November	No report			

Solomon Islands – Climate bulletin	November	Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Glodridge Mining, Ministry of Mines and Energy, MEHRD, Forestry, Ministry of Health, Solomon Water, MECDM, Live and Learn, Tourism, Maritime Service, People with Disability, MID, Ministry of Fisheries, Sol Tuna Ltd, UN Women, Council of Women, Community Representatives	58	46	12
Solomon Islands – EAR Watch	November	Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Glodridge Mining, Ministry of Mines and Energy, MEHRD, Forestry, Ministry of Health, Solomon Water, MECDM, Live and Learn, Tourism, Maritime Service, People with Disability, MID, Ministry of Fisheries, UN Women, Council of Women.	53	39	14
Solomon Islands - Ocean Bulletin	November	Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Glodridge Mining, Ministry of Mines and Energy, MEHRD.	14	9	5
Solomon Islands - Climate Training	November	SIMS officers and trainees	21	16	5
Tonga	November	No report			
Tuvalu – Climate Bulletin	27 November	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	42	23	19
Tuvalu – EAR Watch	27 November	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	42	23	19
Tuvalu – Ocean Outlook	27 November	MET Staff Disaster Dept TRC TuCAN Agriculture All Civil Servants All Kaupule Secretary	42	23	19
Vanuatu -National Climate Outlook Forum	30 October - 03 November	Department of Agriculture, Department of Local Authorities, Vanuatu Rainfall Collectors, TK Champions, VMGD	84	63	21

Vanuatu -National Cyclone Seasonal Outlook	03 November	VBTC as a news story, and they ran it on VBTC Facebook Online News, TBV News, Radio Vanuatu News, Paradise 98 FM News, Femme Pawa 99 FM News, and Radio Vanuatu Online News. Daily Post, Buzz FM (nightly news, 3 Nov).			
Vanuatu – Climate and Ocean Update	10 November	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media- Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), General Public (Website and VMGD Call-Center). Facebook	206	104	102
Vanuatu – Climate Update	22 November	Website			
Vanuatu – Ocean Update	21 November	Website			
		Total	1,635	1,317	664

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