Seasonal Prediction Project (SPP)

Pacific Islands – Ocean and Climate Outlook Forum No. 179 Summary Report

Date: Thursday 18 August 2022

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

Host: SPREP
Chair: Palau
Apologies:

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 COMP (Bureau of Meteorology and SPREP) 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, 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.
- 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. The next OCOF will be held on 13 September and is to be chaired by RMI.

Participants:

The Forum was attended by 20 climate officers (10 female) from 11 partner PIC NMSs.

Cook Islands: Bates Manea

Fiji: Jasneel Chnadra

Kiribati: Mwata Keariki and Kamaiti Rubetaake

Niue: Raquel Tanaki and Julyn Motusa

Papua New Guinea: Kila Kila and Nanao Bouauka

Palau: Kiku Mochimaru

Republic of Marshall Islands: Samson Kanenko

Samoa: Taumeasina Fomai, Kotoni Faasau, Emannuel Etimani and Junior Lepale

Solomon Islands: Max Sitai

Tonga:

Tuvalu: Simoea Tiute, Leiti Tausi, Voita and Niko Iona

Vanuatu: John Ruben

Australia: Grant Beard and Grant Smith

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

OCOF tables were received from 12 participating countries before the meeting.

Observations of May to July 2022:

Observed rainfall for the one and three-month periods ending July 2022 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
Lautoka, Fiji	July	0.0	1	122
Vunisea, Fiji	July	17.3	3	85
Udu Point, Fiji	July	282.9	72	73
Lakeba, Fiji	May-July	105.4	3	70
Arorae, Kiribati	July	20.9	3	56
Arorae, Kiribati	May-July	56.9	1	55
Majuro, RMI	May-July	640.9	5	68
Nadzab, PNG	July	25.0	4	48
Kavieng PNG	July	92.2	7	97
Momote, PNG	May-July	465.0	7	73
Kavieng, PNG	May-July	276.6	1	91
Henderson, Solomon Islands	July	31.2	4	48
Honiara, Solomon Islands	July	22.9	5	67
Lata, Solomon Islands	July	134.4	3	48
Munda, Solomon Islands	July	49.5	1	61
Taro, Solomon Islands	July	201.5	4	44
Henderson, Solomon Islands	May-July	149.1	3	47
Munda, Solomon Islands	May-July	394.5	3	61
Taro, Solomon Islands	May-July	526.1	1	43
Fua'amotu, Tonga	July	22.5	3	43
Nuku'alofa, Tonga	July	20.5	4	78
Fua'amotu, Tonga	May-July	77.0	1	43
Nuku'alofa, Tonga	May-July	86.0	1	78
Nanumea, Tuvalu Nui, Tuvalu, Tuvalu	July July	28.3 56.5	1	81 77
Funafuti, Tuvalu	July	87.4	5	90
Nanumea, Tuvalu	May-July	119.7	1	81

Bauerfield, Vanuatu	July	272.7	50	50
Port Vila, Vanuatu	July	266.0	69	70
Aneityum, Vanuatu	July	277.0	67	71
Bauerfield, Vanuatu	May-July	819.1	49	50
Port Vila, Vanuatu	May-July	783.5	66	69
Whitegrass, Vanuatu	May-July	575.5	50	50
Aneityum, Vanuatu	May-July	1032.9	69	70

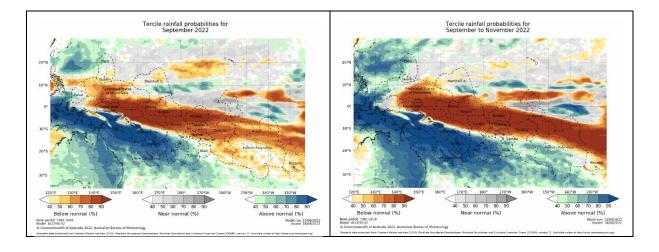
[Note: The above data may not have undergone quality control]

September to November 2022 Outlooks:

ACCESS-S outlooks:

The ACCESS-S for September to November shows a typical La Niña pattern, with a large region where below normal rainfall is very likely stretching from FSM and northern PNG in the west, to northern French Polynesia and Pitcairn Island in the east. To the southwest of this region, the ACCESS model shows the opposite signal, that is, moderate to high chances for above average rainfall in a band stretching southeast from Palau across most of PNG, the main islands of the Solomon Islands, New Caledonia, Vanuatu, Fiji, Tonga, Niue, the southern half of the Cook Islands, and southern French Polynesia. Above normal is also favoured for central RMI.

Blank (white) cells indicate the chance is <40% in all categories – so it could be "little guidance" (e.g. 30/36/34), or near-equal in two categories (e.g. 39/37/24).



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

September to Nov	ombor 2022
September to No.	ACCESS-S
Cook Is North	ACCE35-5
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:

- OCOF 180 will be hosted by SPREP via zoom on the 13 September 2022
- Change OCOF to 2nd week of the month
- Kiribati requested for weekly update of drought monitoring
- Countries requested for ACCESS-S verification maps

Observed Rainfall

Country	July 2022	May to July 2022
Cook Islands	Below normal	Normal
Fiji	Mostly normal to below normal	Mostly normal to below normal
Kiribati	Mixed - below normal, normal and above normal	Mainly below normal

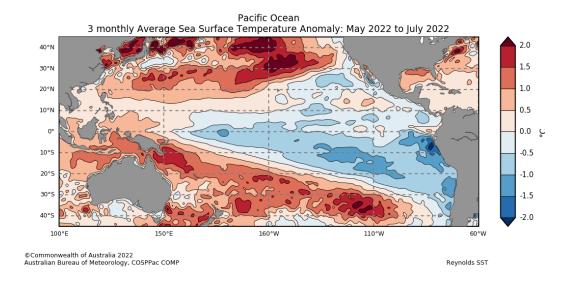
RMI	Normal	Below normal and above normal
Niue	Below normal	Normal
Palau	Normal	Above normal
Papua New Guinea	Mixed - below normal, normal and above normal normal normal	
Samoa	Mixed - below normal, normal and above normal	Normal to below normal
Solomon Islands	Below normal	Below normal
Tonga	Normal to below normal	Below normal
Tuvalu	Below normal	Below normal
Vanuatu	Mostly above normal	Above normal

Ocean Conditions

Observations of May to July 2022

Sea surface temperature:

Three monthly SST shows cooler conditions along the central equatorial regions including Nauru, southern Marshall Islands, northern Tuvalu, Kiribati and northern Cook Islands. Near normal conditions observed along 10 degrees North latitude and over northern Marshall Islands, FSM, southern Tuvalu, and central Cook Islands. Warmer than normal conditions persisted in the remainder partner countries stretching from Palau to southern Cook Islands, with significant SST anomalies above 1.5°C located in the Solomon Sea.



Sea level remained higher than normal for most of the countries from May to July, with significant sea level anomalies above 200mm located from the Solomon Sea to eastern Fiji, with patches over southern Tonga, Niue and southern Cook Islands

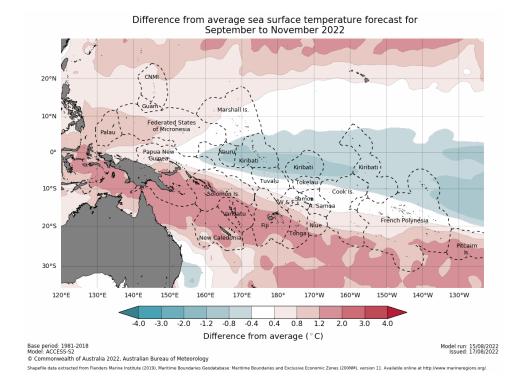
September to November 2022 Outlooks:

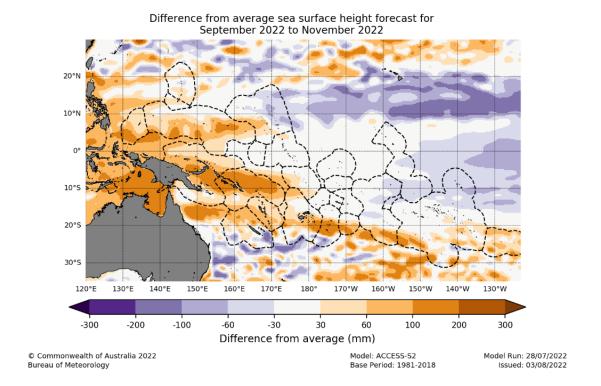
Sea surface temperature outlook: Equatorial zones east of Nauru is forecasted to have cooler than normal conditions with temperature range of -0.4 to -0.8 °C. Marshall Islands, central and southern Tuvalu, central Cook Islands are favoured to be neutral. Warm conditions are predicted in the western

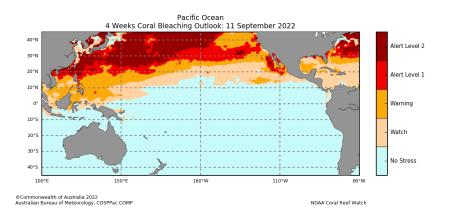
and remainder of the partner countries. Significant temperatures of 1.2 to 2.0 °C are located southeastward from PNG.

Sea level outlook: Sea level is forecasted to be higher than normal for countries near or in the Western Warm Pool (southern Palau, southern FSM, southwestern RMI, PNG, Solomon Islands, Vanuatu, Fiji, and Tonga), ranging from 30 to 300 mm in the western Pacific, with significant sea level anomalies of 100-300mm in the Bismarck Sea, Solomon Sea to east of Solomon Islands, and Tonga. Pools of below average sea levels is predicted in northeastern RMI, central and northern Cook Islands and Kiribati (southern Line Islands). Note that this outlook does not include trends of sea level rise.

Coral Bleaching Outlook: 4 weeks coral bleaching outlook indicates 'Alert 1' predicted for parts of PNG, and Palau, with 'Warning' for western FSM. 'Watch' status for remainder of FSM, and northern Solomon Islands. The remaining countries are predicted to experience no thermal stress.







Observed Conditions

SST: sea surface temperature anomaly

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

Coral Bleaching: (No Stress, Watch, Warning, Alert1, Alert2)

Country		July	, 2022
	SST	SLA	СВ

Cook Islands	BN, AN	AN	No Stress	
Fiji	AN	AN	No Stress	
Kiribati	BN	AN	No Stress	
Marshall Islands	BN, NN	AN	No Stress	
Niue	AN	AN	No Stress	
Palau	AN	AN	Watch & Warning	
Papua New Guinea	AN, NN	AN	Alert 1-2	
Samoa	NN, AN	AN	No Stress	
Solomon Islands	AN	AN	No Stress & Watch	
Tonga	AN	AN, NN	No Stress	
Tuvalu	NN	AN	No Stress	
Vanuatu	AN	AN	No Stress	

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

Country	Date July	Stakeholder	Total Number of Participants	Number of male	Number of female
	2022				
Cook Islands – Climate Bulletin	July	Ministry of Transport	29	17	12
Cook Islands - EAR Watch	July	C.I Govt. Stakeholders Public			
Cook Islands – Monthly Climate briefing	July	Climate Change	8	2	6
Cook Islands- Climate data request	July	MMR (Ministry of Marine Resources)	1		1
Fiji-Climate Summary	07 July	General public	140	106	34
Fiji-EAR Watch	12 July	Humanitarian partners	122	96	26
Fiji-Climate Outlook	29 July	General public	124	93	31
Fiji -Climate Outlook for Monasavu	29 July	Energy Fiji Limited	13	13	-

Fiji – Sugarcane Climate Outlook	29 July	Sugar Industry stakeholders	77	60	17
Fiji-Meteorological Data Request	01-31 July	A range of stakeholders	41	31	10
Kiribati - Climate bulletin	15 July	Government and Non-Government Organisations and public subscribed to the products.	118	45	73
Kiribati -Ocean Bulletin	15 July	Government and Non-Government Organisations and public subscribed to the products.	118	45	73
Kiribati- Media release	15 July	National Media and KMS Staffs	53	23	30
Kiribati – EAR Watch	15 July	MISE and NDMO	2		2
Marshall Island – Climate briefing	20 July	Office of the Chief Secretary and the NDMO	6	4	2
Niue- Climate Bulletin	25 July	Private Sector, Government Officials and Government staff	75	30	45
Palau- EAR Watch	06 July	National Emergency Committee (NEC) Office of the Vice President Office of the President NEMO Coordinator National Weather Service Bureau of Budget and Planning Bureau of Tourism Bureau of Commercial Development Attorney General's Office Bureau of Youth, Applied Arts and Careers Bureau of Public Health Bureau of Public Work Bureau of Public Safety Palau Community College Bureau of Education Administration Palau Public Utility Corporation Palau National Communication Corporation Bureau of Foreign Affairs& Trade Bureau of Agriculture Governors Association Palau Red Cross Society Environment Quality Protection Board Bureau of Aviation Division of Property and Supply Palau Chamber of Commerce Palau Visitor's Authority Bureau of Customs & Boarder Protection Koror State Government	28	19	g
PNG- Climate bulletin	21 July	Govt: National Disaster Centre, Dept. of Agriculture and Livestock,	172	132	40

		ClimateChange Development Authority,National Agriculture Research Institute, Dept. of Transport, Dept. of Mineral Policy and GeohazardManagement, Dept. of Works, PNGFire, National Maritime SafetyAuthority, Civil Aviation SafetyAuthority, PNG Forest Authority,National Capital District Commission,PNG Customs Authority, NationalDept. Of Health, Dept. of Education,Centre for Environmental Protection Authority. UN agencies: UNDP, IOM, UNOCH. Private: PNG Air ServicesLimited, ExxonMobil, Ok Tedi MiningLtd, PNG Power Ltd, GlobalConstruction Ltd, Datec, Interoil, AirNiugini, Bank South Pacific, PNGPorts, Media and Universities.			
PNG – Drought Early Warning Update	11 July	WMO, BoM, UNDP, PNGNWS	12	8	4
PNG- CREWS workshop	24-25 July	Ok Tedi, NARI, Fresh Produce, Geo- Hazards, Red Cross, Coffee Industry, World Vision, NCDC, Dept. of Transport, SPREP, China Engineering Ltd. BOM, WMO, PNGNWS	37	28	9
PNG- Climate data request	1-31 July	GHD, NCDC, China Civil Engineering Construction Corporation (PNG) Ltd, Unitech	8	2	6
Samoa – Climate bulletin	29 July	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 – EAR Watch	29 July	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- Monthly climate briefing	29 July	Samoa Met	5	10	5
Samoa - Ocean Outlook	29 July	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	65	27	38

		Technology, Disaster Managers, Marines			
Samoa- Climate data request	1-31 July	SPREP			
Solomon Islands – Climate bulletin	July	Red Cross, NDMO, Ministryof 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	July	Red Cross, NDMO, Ministryof 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	July	Red Cross, NDMO, Ministryof Agriculture, SIBC,Hydrology, Solomon star, Paoa FM, World Vision, Glodridge Mining, Ministry of Mines and Energy, MEHRD.	14	9	5
Tonga – Climate Bulletin	03 July	Government ministries, NGOs, Media, Private sectors	155	118	37
Tonga – Ocean Bulletin	03 July	Government ministries, NGOs, Media, Private sectors	155	118	37
Tuvalu-Climate	July	Met staffs,	22	17	5
Bulletin		Disaster Members	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All civil servants			
		All kaupule members			
Tuvalu -EAR	July	Met staffs,	22	17	5
Watch		Disaster Members	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All civil servants			
		All kaupule members			
Tuvalu -Monthly	July	Met staffs,	22	17	5
Climate briefing		Disaster Members	2	2	
		TRC	2	1	1

		TuCAN			
			1	1	
		Agriculture	2		2
		All civil servants			
		All kaupule members			
Tuvalu -Ocean Outlook	June	Met staffs,	22	17	5
		Disaster Members	2	2	
		TRC	2	1	1
		TuCAN	1	1	
		Agriculture	2		2
		All civil servants			
		All kaupule members			
Vanuatu - Climate update	20 July	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)	206	104	102
Vanuatu -EAR Watch	20 July	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)	206	104	102
Vanuatu – Ocean Outlook	20 July	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	206	104	102

People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), General Public (Website and VMGD Call-Center). Total	2,435	1,571	1.118
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			

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