## **Seasonal Prediction Project (SPP)**

# Pacific Islands – Ocean and Climate Outlook Forum No. 181 Summary Report

Date: Tuesday 18 October 2022

**Time:** Australian Eastern Daylight Saving Time at 12:00PM (01:00 UTC)

Host: SPREP
Chair: SPREP

Apologies: Republic of Marshall Islands, Tuvalu, Papua New Guinea and SPC

#### 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 16 November and is to be chaired by Solomon Islands.

#### Participants:

The Forum was attended by 11 climate officers (6 female) from 8 partner PIC NMSs.

#### Cook Islands:

**Fiji**: Arieta Baleisolomone and Shweta Shiwangni

Kiribati: Tekaatu Uribano and Ueneta Toorua

Niue: Raquel Tanaki
Papua New Guinea:
Palau: Kiku Mochimaru

Republic of Marshall Islands:

Samoa: Kotoni Faasau and Mattaniah Salesa

Solomon Islands: Max Sitai Tonga: Seluvaia Finaulahi

Tuvalu:



Vanuatu: Allan Rarai  Australia: Grant Beard and Zhi-Weng Chua	
Australia: Grant Beard and Zhi-Weng Chua	
SPREP: Philip Malsale and Tile Tofaeono	
SPC:	

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

#### Observations of July to September 2022:

Observed rainfall for the one and three-month periods ending September 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 Mill, Fiji	September	0.0	1	123
Nausori Airport, Fiji	September	58.5	6	66
Lakeba, Fiji	September	224.9	70	73
Savusavu Airfield, Fiji	September	29.2	4	64
Lautoka Mill, Fiji	Jul-Sep	40.9	8	122
Nadi Airport, Fiji	Jul-Sep	68.1	8	81
Arorae, Kiribati	September	16.6	4	56
Arorae, Kiribati	Jul-Sep	52.7	1	54
Koror, Palau	September	135.9	5	72
Port Moresby, PNG	September	91.8	120	125
Kavieng PNG	September	20.6	2	95
Port Moresby, PNG	Jul-Sep	157.8	99	106
Kavieng, PNG	Jul-Sep	189.4	1	90
Kirakira, Solomon Islands	September	464.9	51	54
Munda, Solomon Islands	Jul-Sep	462.9	3	61
Nuku'alofa, Tonga	Jul-Sep	108.9	3	78
Nui,Tuvalu	Jul-Sep	256.1	6	77
Funafuti, Tuvalu	Jul-Sep	276.6	4	90

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

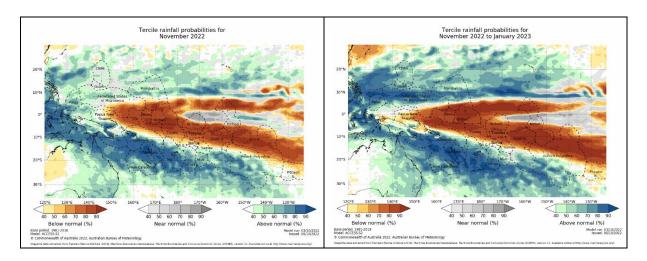
#### November 2022 to January 2023 Outlooks:

#### ACCESS-S outlooks:

The ACCESS-S for November to January 2023 shows aspects of a typical La Niña pattern, with a large region where below normal rainfall is very likely stretching east and southeast from FSM and northern PNG in the west, to French Polynesia and Pitcairn Island in the east. The centre of the dry-signal region is situated further west than normal for a classic La Niña.

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 Indonesia and Palau across the PNG mainland, the southern half of the Solomon Islands, New Caledonia, Vanuatu, most of Fiji, Tonga, Niue, the southern Cook Islands, and southern French Polynesia. Above normal is also favoured across all but the southern fringes of FSM and 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%
<b>Below normal</b>						
Near-normal						
Above normal						

October to December 2022					
	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					

#### Other matters Discussed:

- OCOF 182 will be hosted by SPREP via zoom on the 16 November 2022
- PICOF 11 schedule for the 25<sup>th</sup> October 2022
- NCOF 2022 schedules for Fiji, Tuvalu, Vanuatu, Samoa, Kiribati and Tonga

#### **Observed Rainfall**

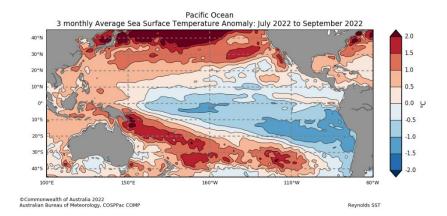
Country	September 2022	July to September 2022
Cook Islands		
Fiji	Mostly below normal and normal	Below normal to above normal
Kiribati	Below normal to above normal	Normal to below normal
RMI	Below normal and above normal	Normal
Niue	Normal	Below normal
Palau	Below normal	Below normal
Papua New Guinea	Below normal and above normal	Below normal and above normal
Samoa	Below normal and normal	Below normal and normal
Solomon Islands	Below normal to above normal	Below normal and normal
Tonga Below normal to about		Mostly below normal
Tuvalu	Below normal and normal	Below normal
Vanuatu		

#### **Ocean Conditions**

#### **Observations of July to September 2022**

Sea surface temperature:

Three-monthly SST shows below normal along the central equatorial regions including Nauru, southern Marshall Islands, northern Tuvalu, Kiribati and northern Cook Islands. Near-normal SSTs were observed along 10 degrees North latitude and over northern Marshall Islands, FSM, southern Tuvalu, northern Samoa and central Cook Islands. Above normal temperatures persisted in the remainder partner countries stretching from Palau to southern Cook Islands, with SST anomalies above 1.5°C located southward from PNG to southern Tonga.



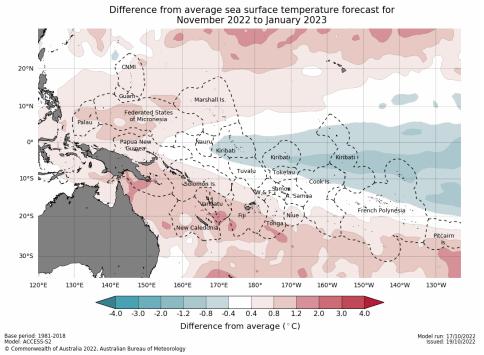
Sea level remained higher than normal for most of the countries from July to September, with anomalies above +200mm located from the Solomon Sea to eastern Fiji, plus some similarly elevated patches over southern Tonga, Niue and southern Cook Islands.

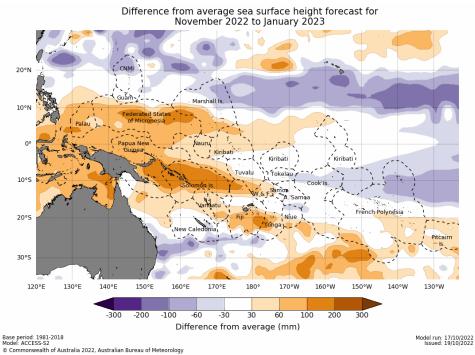
#### November 2022 to January 2023 Outlooks:

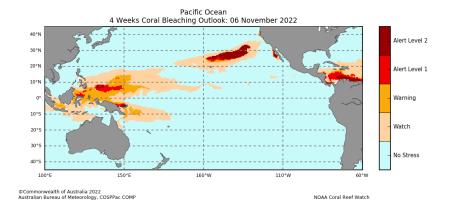
Sea surface temperature outlook: Equatorial zones east of Nauru is forecast to be cooler than normal, with anomalies in the range of -0.4 to -1.2 °C. Central and southern Tuvalu, Samoa, and central Cook Islands are favoured to have near-normal SSTs. Above normal SSTs are predicted in the western Pacific and remainder of the partner countries. SSTs are predicted to be 1.2 to 3.0 °C above normal in a zone stretching south-eastward from PNG to the southern Cook Islands.

Sea level outlook: Sea level is forecast to be 30-100mm above normal for countries west of the 180° meridian and between 10°N and 10°S, as well as in Vanuatu, southern Fiji, southern Tonga, and southern Niue. Regions where the sea level is forecast to be 100-200mm above normal include the Solomon Sea, Solomon Islands and southern parts of Palau, northern FSM, south-eastern Fiji, and southern Tonga. Pools of below average sea levels are predicted in north-eastern RMI, northern Cook Islands and Kiribati (central and 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 2' predicted for parts of northern PNG, 'Alert 1' for Palau and western FSM, with 'Warning' for central FSM, and southern Palau, and Solomon Islands. 'Watch' status for the remainder of FSM, RMI, and remainder of PNG. 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	September 2022				
	SST	SLA	СВ		
Cook Islands	BN, NN, AN	AN	No Stress		
Fiji	AN	AN	No Stress		
Kiribati	BN	AN	No Stress		
Marshall Islands	NN	AN	Watch		
Niue	AN	AN	No Stress		
Palau	AN	AN	Alert 1 & Warning		
Papua New Guinea	AN	AN	Alert 1-2 & Warning		
Samoa	NN	AN	No Stress		
Solomon Islands	AN	AN	Watch		
Tonga	AN	AN	No Stress		
Tuvalu	7.1.7		No Stress		
Vanuatu			Watch & No Stress		

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

Country	Date September	Stakeholder	Total Number of Participants	Number of male	Number of female
	2022				
Cook Islands	September	No engagement			
Fiji-Climate Summary	08 September	General public	140	106	34
Fiji-EAR Watch	15 September	Humanitarian partners	122	96	26
Fiji-Climate Outlook	30 September	General public	124	93	31
Fiji -Climate Outlook for Monasavu	30 September	Energy Fiji Limited	13	13	-
Fiji-Ocean Outlook	20 September	A number of key ocean related stakeholders	36	29	7
Fiji - ENSO update	23 September	General public	142	116	26
Fiji - Meteorological data request	01-30 September	A range of stakeholders	35	24	11
Kiribati - Climate bulletin	9 September	Government and Non-Government Organisations and public subscribed to the products.	118	45	73
Kiribati -Ocean Bulletin	9 September	Government and Non-Government Organisations and public subscribed to the products.	118	45	73
Kiribati- Media release	9 September	National Media and KMS Staffs	53	23	30
Kiribati - ACCESS-S and EAR Watch virtual training led by COSSPac team	8-9 September	KMS staff	9	3	6
Marshall Island – Climate briefing	23 September	Office of the Chief Secretary and the NDMO	6	3	3

Niue- Climate Bulletin	7 September	Private Sector, Government Officials and Government staff	50	10	40
Palau- EAR Watch	September	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	9
PNG	September	No engagement			
Samoa – Climate Outlook	30 September	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	30 September	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	30 September	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of	65	27	38

Solomon Islands – Climate bulletin	September	Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines  Red Cross, NDMO, Ministryof Agriculture, SIBC,Hydrology, Solomon	58	46	12
		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			
Solomon Islands – EAR Watch	September	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	September	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	3 September	Government ministries, NGOs, Media, Private sectors	155	118	37
Tonga – Ocean Bulletin	3 September	Government ministries, NGOs, Media, Private sectors	155	118	37
Tuvalu-Climate	September	Met staffs, Disaster Members	22	17	5
Bulletin		TRC	2		4
		TuCAN Agriculture	2		1
		All civil servants	1	1	•
		All kaupule members	2		2
Tuvalu -Monthly	September	Met staffs,	22	17	5
Climate briefing	,	Disaster Members TRC	2	118 37 118 37 17 5 2 1 1 1 2	
		TuCAN	2	1	1
		Agriculture	1	1	
		All civil servants	2		2
		All kaupule members	22	17	5
Tuvalu -Ocean	September	Met staffs, Disaster Members			Э
Outlook		TRC	2	2	
		TuCAN Agriculture	2	1	1
		All civil servants	1	1	•
		All kaupule members	2		2

Vanuatu - Climate bulletin	September	No engagement			
	7	<b>Total</b>	1,711	1,099	612

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