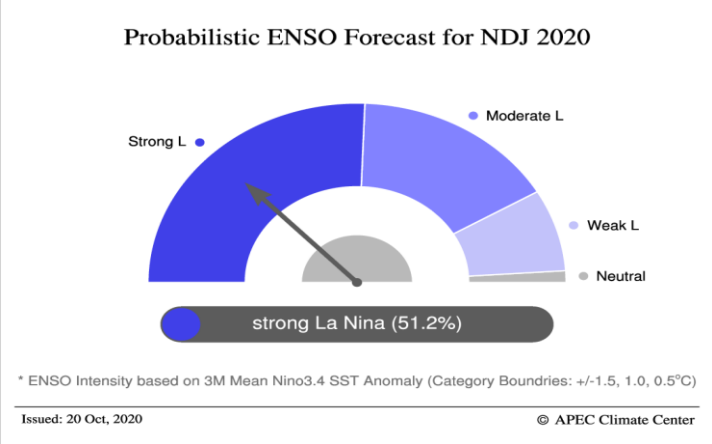
Republic of Korea-Pacific Islands Climate Prediction Services Project

2020-10 Edition

Summary: November 2020 to January 2021 (NDJ)



The APCC ENSO outlook suggests La Niña conditions (~97% probability) with strong intensity for November 2020 to January 2021 and the probability for the conditions is likely to decrease to 79% for February to April 2021.

RAINFALL OUTLOOK

Status	COUNTRY (Area)
	PICASO
Above Normal	**Cook Is -** (*Rarotonga), **Fiji –** (Udu Point, Nabouwalu, Suva, Nadi Airport, Rotuma, *Ono-i-lau), **Marshall Is**. – (Majuro),**FSM** – (Yap, Pohnpei, Chuuk), **Niue** – (Hanan Airport), **Palau** – (Koror), **PNG** – (Madang, Port Moresby, Misima, *Nadzab), **Samoa** – (Afiamalu, Apia, Faleolo), **Solomon Is**, **Tonga, Tuvalu –** (Niulakita)**, Vanuatu.**
Normal	**Samoa** – (Lauli'i)
Below Normal	**Cook Is -** (Penrhyn), **Kiribati –** (Butaritari, Tarawa, Kanton, Kiritimati), **Marshall Is**. – (Kwajalein), **Nauru**, **PNG** – (Kavieng, Momote), **Tuvalu –** (Funafuti, Nui, Nanumea)
	CLIK℗
Above Normal	**Cook Is –** (Ratotonga)**, FSM**, **Fiji, Marshall Is** – (Majuro, Kwajalein), **Niue, Palau, PNG –** (Nadzab, Madang, Misima, Port Moresby), **Samoa**, **Solomon Is, Tonga**, **Vanuatu** – (Aneityum, Pekoa, Sola, Whitegrass, Bauerfield, Lamap, Port Vila, Sola)
Normal	
Below Normal	**Cook Is -** (Penrhyn)**, Kiribati, Nauru, PNG** – (Kavieng/Momote), **Tuvalu, Tokelau,**

*Note: * indicate stations that have equal or similar probability of getting Above normal, Normal and Below normal*

TEMPERATURE OUTLOOK

Status	COUNTRY
	CLIK℗
Above Normal	**Cook Is (south), FSM, Fiji, Marshall Is, Kiribati, Nauru, Niue, Palau, PNG, Samoa, Solomon Is., Tonga, Vanuatu**.
Normal	**Fiji (Rotuma)**
Below Normal	**Cook Is (north), Kiribati (Kiritimati), Tokelau, Tuvalu,**

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PICASO Regional Rainfall Forecast

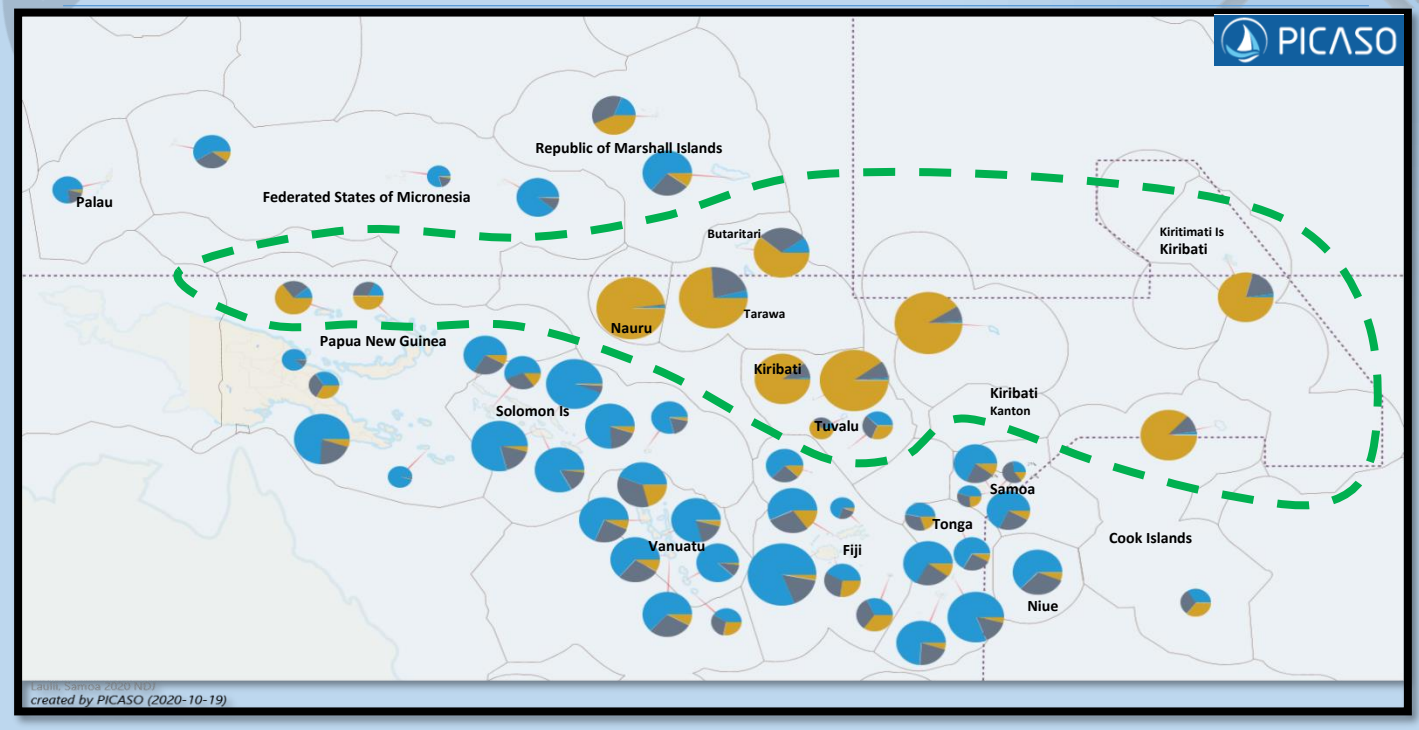

Figure 1: Regional outlook map of the Pacific. In general, all stations within the green-dash line is anticipated to have Below Normal (BN) rainfall. Normal (N) to Above Normal (AN) rainfall is predicted for stations above and below the green line. *(Note: the larger the pie chart the higher the forecast skills.)*

PICASO

OUTLOOK TABLE BY COUNTRY

Station	Tercile Probability			Verification Score (LEPS)		Verification Score (HSS)	Hit/NearMiss/Miss
	KEY	BN	N	AN				
Cook Islands							
Penrhyn		87%		11%	31	Very High	46.4	9 3 2
Rarotonga		35%	31%	34%	0.8	Low	3.6	5 4 5
Fiji							
Rotuma	12%	25%	63%		6.3	Moderate	-1.8	3 10 1
Udu Point	5%	25%	70%		-24.3	Very Low	11.4	4 2 5
Nabouwalu	15%	28%	57%		16.5	High	79.5	8 2 1
Nadi Airport	3	16%	81%		39.9	Excellent	46.4	9 5 0
Suva	27%	31%	42%		7.1	Moderate	57.1	10 1 3
Ono I Lau	35%	33%	32%		7.2	Moderate	53.8	9 1 3
Kiribati							
Kiritimati		79%		19%	27.9	Very High	3.6	5 8 1
Butaritari		61%	29%	10%	29	Very High	25	7 6 1
Tarawa		74%	22%	4%	39.7	Excellent	51.8	8 4 2
Kanton		91%		8%	44.4	Excellent	50	8 2 2
Marshall Islands							
Kwajalein Bucholz Aaf		43%	38%	19%	10.9	Good	14.3	6 7 1
Majuro	10%	26%	64%		22.2	High	41.1	8 5 1

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PICASO Regional Rainfall Forecast

Station	Tercile Probability			Verification Score (LEPS)		Verification Score (HSS)		Hit/NearMiss/Miss		
Micronesia	KEY	BN	N	AN						
Chuuk WSO AP	3	18%	79%		-5.5	Very Low	-7.1	4	4	6
Pohnpei		10%	89%		10.8	Good	14.3	6	6	2
Yap Island WSO Airport		10%	31%	59%	5.3	Moderate	25	7	2	5
Niue										
Hanan Airport		6%	31%	63%	23.9	High	51.8	8	5	1
Palau										
Koror	4	19%	77%		2.1	Low	8.9	5	7	2
Papua New Guinea										
Madang		10%	89%		-38.4	Very Low	-26.9	2	7	4
Port Moresby		5%	21%	74%	31.1	Very High	53.8	9	3	1
Momote			65%	24%	11%	7	Moderate	19.2	6	3
Nadzab			33%	33%	34%	1.6	Low	-3.8	4	6
Kavieng			50%	32%	18%	1.2	Low	1.9	3	8
Misima	3		96%		-13.3	Very Low	-21.2	1	10	2
Samoa										
Afiamalu		8%	24%	68%	12.4	Good	3.6	5	7	2
Laulii		15%	58%	27%	-15.5	Very Low	-39.3	1	11	2
Faleolo		24%	31%	45%	-16.8	Very Low	14.3	5	1	8
Apia		10%	22%	68%	13.2	Good	35.7	8	3	3
Solomon Islands										
Taro Island		8%	26%	66%	10.1	Good	14.3	6	6	2
Munda		15%	29%	56%	7.6	Moderate	14.3	6	4	4
Auki		5%	94%		31.9	Very High	25	7	6	1
Honiara	4	17%	79%		25.8	Very High	46.4	9	1	4
Honiara Henderson		15%	83%		18.4	High	46.4	9	2	3
Kira Kira	5%	19%	76%		15.2	High	14.3	6	6	2
Santa Cruz	3	18%	79%		9.3	Moderate	-7.1	4	6	4
Tonga										
Niuafoou		20%	33%	47%	3.4	Low	-7.1	4	5	5
KeppelMata'aho Airport		8%	25%	67%	5.7	Moderate	-3.8	4	6	3
Lupepau'u		10%	23%	67%	20.2	High	62.5	10	1	3
Haapai	4	15%	81%		31.4	Very High	57.1	10	2	2
Nuku'alofa	5%	21%	74%		17.9	High	35.7	8	3	3
Vanuatu										
Sola (Vanua Lava)		21%	35%	44%	22.1	High	-9.1	3	7	1
Pekoa Airport (Santo)		7%	24%	69%	19.7	High	46.4	9	2	3
Lamap (Malekula)	4	17%	79%		20.4	High	51.8	9	3	2
Bauerfield (Efate)		9%	27%	64%	21.4	High	25	7	5	2
Port Vila		8%	29%	63%	18.3	High	25	7	6	1
White Grass Airport		10%	88%		14.5	Good	3.6	5	7	2
Aneityum		28%	31%	41%	2	Low	8.9	5	5	4

created by PICASO (2020-10-19)

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CLIK®Rainfall Forecast

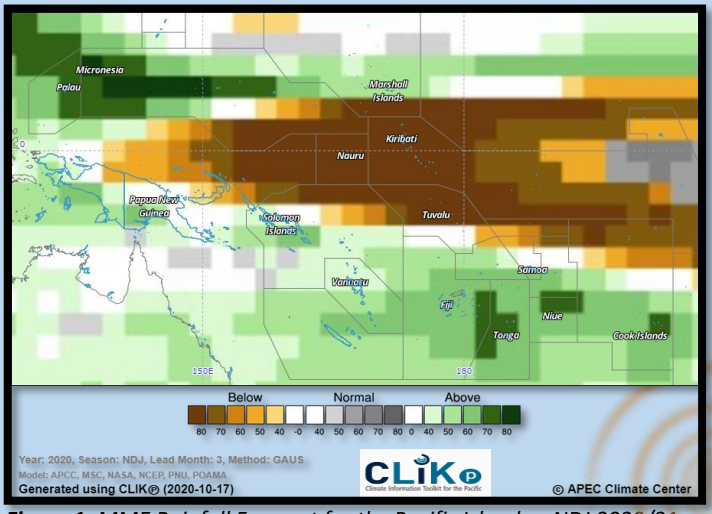

Figure 1: *MME Rainfall Forecast for the Pacific Islands – NDJ 2020/21 period*

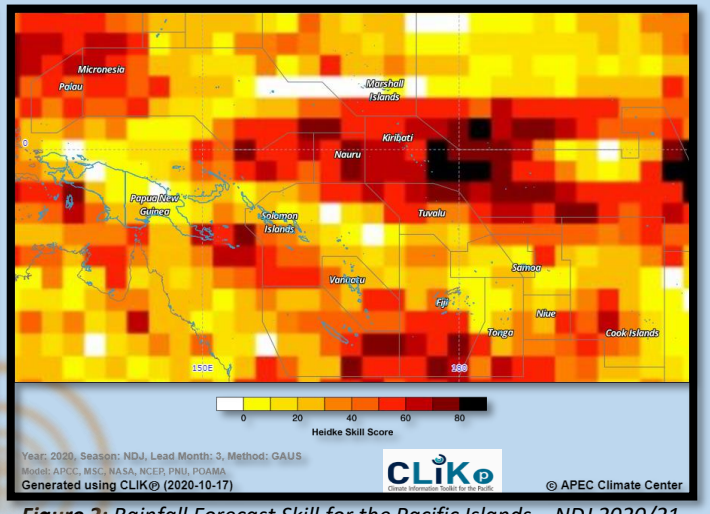

Figure 2: *Rainfall Forecast Skill for the Pacific Islands – NDJ 2020/21 period*

Country	Rainfall Outlook	Skill
Cook Islands	Below Normal for northern Islands Normal – Above Normal elsewhere	Low - Moderate
FSM	Above Normal	Very Low (Pohnpei) Moderate – High (Yap & Chuuk)
Fiji	Above Normal	Low - Moderate
Kiribati	Below Normal	Moderate - High
Marshall Islands	Normal - Above Normal (central & Northern) Below Normal (Southern)	Very Low - Low
Nauru	Below Normal	High
Niue	Above Normal	Moderate
Palau	Above Normal	Moderate
PNG	Normal – Above Normal Below Normal (Momote & Kavieng)	Moderate – High (Momote/Kavieng) Low (elsewhere)
Samoa	Above Normal	Low
Solomon Islands	Normal – Above Normal	Low - Moderate
Tonga	Above Normal	Low - Moderate
Tokelau	Below Normal	High
Tuvalu	Normal – Below Normal	Moderate - High
Vanuatu	Above Normal	Moderate - High

Table 1: *Rainfall Outlook and Skill for the Pacific Islands.*

Note: *Variation in the skill is due to model agreement and data availability at each location.*

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CLIK® Rainfall Forecast

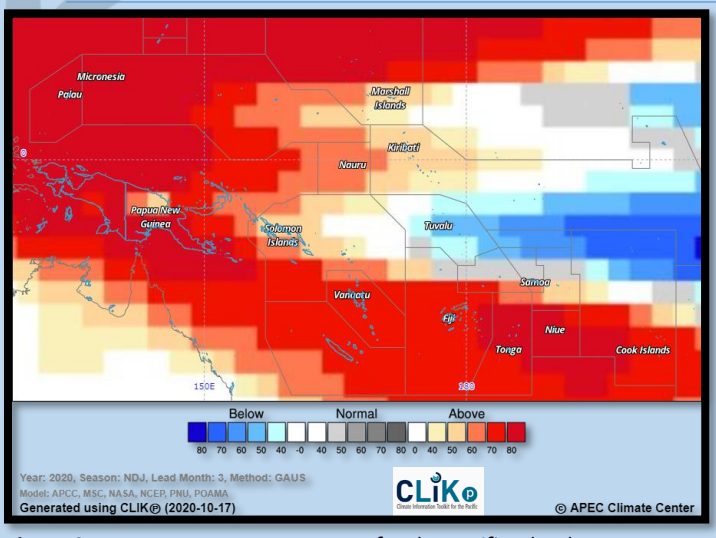

Figure 3: *MME Temperature Forecast for the Pacific Islands – NDJ 2020/21 period*

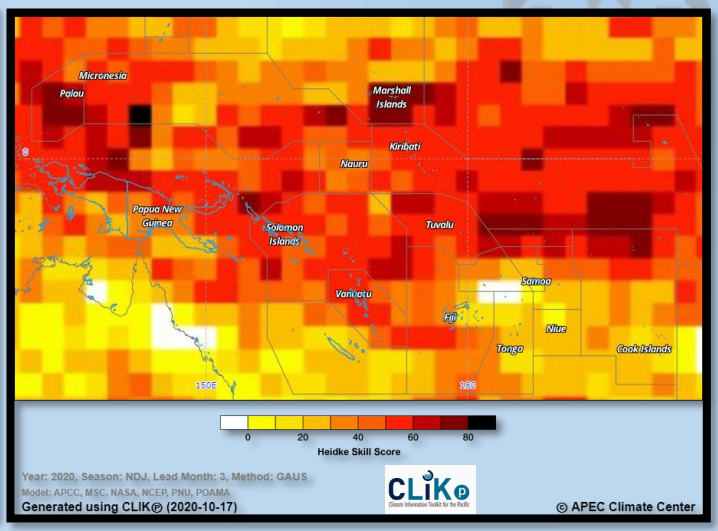

Figure 4: *Air Temperature Forecast Skill for the Pacific Islands – NDJ 2020/21 period*

Country	Air Temperature Outlook	Skill
Cook Islands	Below Normal (north) Above Normal (south)	Moderate - High
FSM	Above Normal	Moderate - High
Fiji	Normal (Rotuma) Above Normal (elsewhere)	Low - Moderate
Kiribati	Normal to Above Normal (Tarawa/Butaritari) Below Normal (Kiritimati)	High
Marshall Islands	Above Normal	Moderate - High
Nauru	Above Normal	High
Niue	Above Normal	Low - Moderate
Palau	Above Normal	High
PNG	Above Normal	Moderate - High
Samoa	Normal - Above Normal	Low - Moderate
Solomon Islands	Above Normal	Moderate - High
Tonga	Above Normal	Low - Moderate
Tokelau	Below Normal	High
Tuvalu	Below Normal	High
Vanuatu	Above Normal	Moderate - High

Table 2: *Temperature Outlook and Skill for the Pacific Islands.*

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Important:
This publication is developed from information in PICASO and CLIK®, products of the Republic of Korea-Pacific Islands Climate Prediction Services Project (ROK-PI CliPS).

This resource is compiled to provide dynamical model data to support and complement information generated by Pacific Islands NMHS.

Contact your location Meteorology Service for site specific forecasts.

PICASO
PICASO (Pacific Island Countries Advanced Seasonal Outlook) is a PC-based seasonal prediction tool tailored for the Pacific Island countries jointly developed by APCC and SPREP through the ROK-PI CliPS project.

PICASO produces probabilistic forecasts of the seasonal mean rainfall of the given weather stations by customizing the data from the APCC dynamical seasonal prediction multi-model ensemble.

CLIK®
The rainfall and temperature forecasts are derived from a multi-model ensemble (MME) of all available Dynamical Models that are provided by WMO Global Producing Centers (GPCs) available on the Climate Services Toolkit for the Pacific (CLIK Pacific or CLIK®).

CLIK® is a product of the Republic of Korea-Pacific Islands Climate Prediction Services Project (ROK-PI CliPS).

Visit the CLIK® Online Climate Prediction System: clikp.sprep.org

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