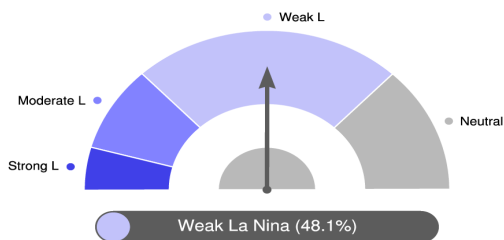


# Republic of Korea-Pacific Islands Climate Prediction Services Project

2020-08 Edition

## Summary: September to November (SON) 2020

Probabilistic ENSO Forecast for SON 2020



\* ENSO Intensity based on 3M Mean Nino3.4 SST Anomaly (Category Boundries: +/-1.5, 1.0, 0.5°C)

Issued: 20 Aug, 2020

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The APCC ENSO outlook suggests La Niña conditions (74% probability) with weak intensity for September to November 2020 and the probability for the conditions is likely to decrease to 59% for December 2020 to February 2021

### RAINFALL OUTLOOK

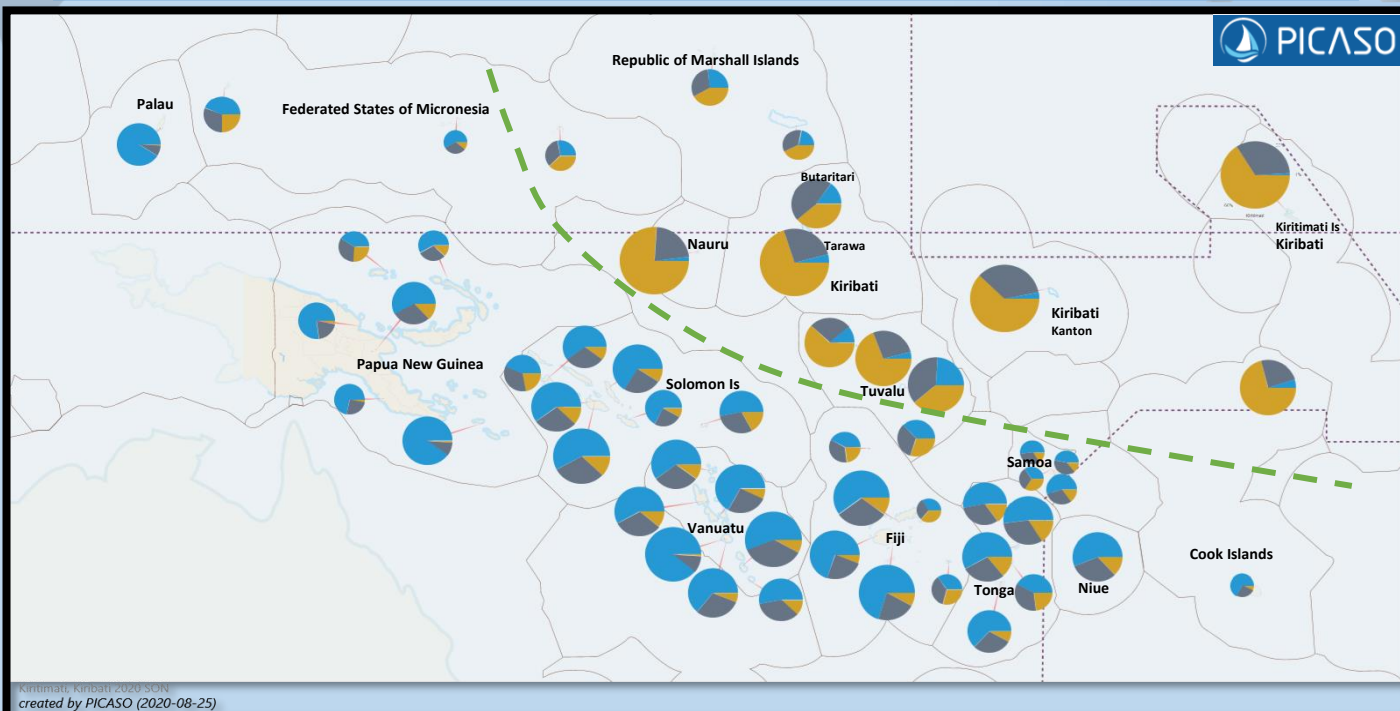
Status	COUNTRY (Area)
	PICASO
Above Normal	<b>Cook Is</b> - (Rarotonga), <b>Fiji</b> – (Nabouwalu, Suva, Nadi Airport, Rotuma), <b>FSM</b> – (Yap, Chuuk), <b>Niue</b> – (Hanan Airport), <b>Palau</b> – (Koror), <b>PNG</b> – (Madang, Port Moresby, Nadzab, Misima, Momote, Kavieng), <b>Samoa</b> – (Apia, Lauli'i, Afiamalu), <b>Solomon Is.</b> – (Taro Is., Munda, Auki, Henderson, Honiara, Kirakira, Santa Cruz), <b>Tonga</b> – (Keppel Mataaho Airport, Nukualofa, Hapai, Niuafoou, Lupepau'u), <b>Tuvalu</b> – (Niulakita), <b>Vanuatu</b> – (Aneityum, White Grass, Port Vila, Bauerfield, Pekoa, Sola, Lamap)
Normal	<b>Fiji</b> – (*Ono-i-lau), <b>Kiribati</b> – (Butaritari)
Below Normal	<b>Cook Is</b> - (Penrhyn), <b>Fiji</b> – (*Udu Point), <b>Kiribati</b> – (Tarawa, Kanton, Kiritimati), <b>Marshall Is.</b> – (Majuro, Kwajalein), <b>FSM</b> - (Pohnpei), <b>Samoa</b> – (*Faleolo), <b>Tuvalu</b> – (Funafuti, Nui, Nanumea), <b>Nauru</b> ,
	CLIK®
Above Normal	<b>Cook Is</b> – (Rarotonga), <b>FSM</b> , <b>Fiji</b> , <b>Marshall Is</b> – (Majuro, Kwajalein), <b>Niue</b> , <b>Palau</b> , <b>PNG</b> – (Nadzab, Madang, Misima, Port Moresby, Momote), <b>Samoa</b> , <b>Solomon Is.</b> – (Honiara, Henderson, Taro Is., Munda, Kirakira, Santa Cruz, Auki), <b>Tonga</b> , <b>Vanuatu</b> – (Aneityum, Pekoa, Sola, Whitegrass, Bauerfield, Lamap, Port Vila, Sola)
Normal	<b>Tokelau</b> , <b>Tuvalu</b> – (Niulakita)
Below Normal	<b>Cook Is</b> - (Penrhyn), <b>Kiribati</b> , <b>Nauru</b> , <b>PNG</b> – (Kavieng), <b>Tuvalu</b> – (Nui, Nanumea, Funafuti),

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

### TEMPERATURE OUTLOOK

Status	COUNTRY
	CLIK®
Above Normal	<b>Cook Is</b> , <b>FSM</b> , <b>Fiji</b> , <b>Marshall Is.</b> , <b>Nauru</b> , <b>Niue</b> , <b>Palau</b> , <b>PNG</b> , <b>Samoa</b> , <b>Solomon Is.</b> , <b>Tonga</b> , <b>Tokelau</b> , <b>Tuvalu</b> , <b>Vanuatu</b> .
Normal	
Below Normal	

# Republic of Korea-Pacific Islands Climate Prediction Services Project PICASO Regional Rainfall Forecast



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

## OUTLOOK TABLE BY COUNTRY



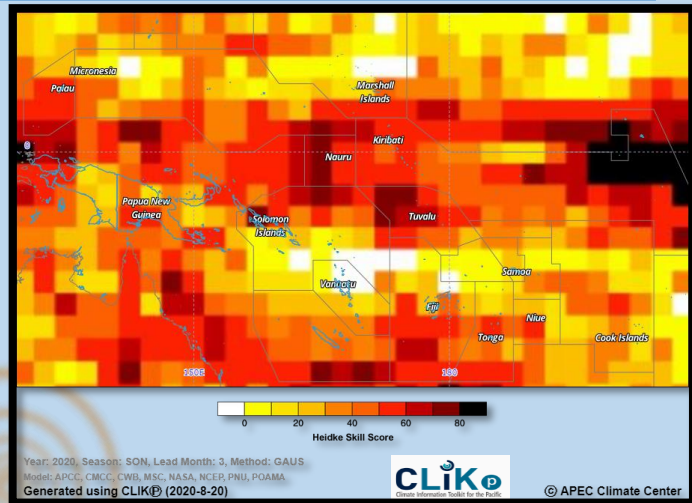
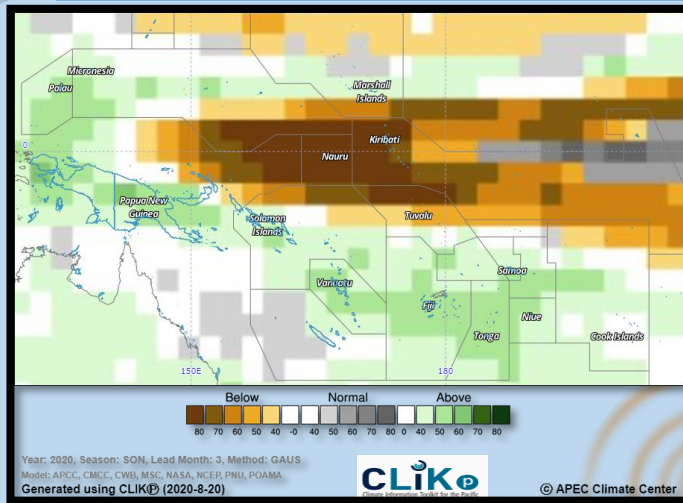
Station	Tercile Probability				Verification Score (LEPS)		Verification Score (HSS)		Hit/NearMiss/Miss		
	KEY	BN	N	AN							
Cook Islands											
<input checked="" type="checkbox"/> Penrhyn	71%	24%	5%		28.6	Very High	46.4		9	4	1
<input checked="" type="checkbox"/> Rarotonga	7%	26%	67%		-1.9	Very Low	-17.9		3	5	6
Fiji											
<input checked="" type="checkbox"/> Rotuma	23%	35%	42%		3.9	Low	14.3		6	6	2
<input checked="" type="checkbox"/> Udu Point	36%	30%	34%		-10.9	Very Low	40		4	1	5
<input checked="" type="checkbox"/> Nabouwalu	10%	30%	60%		26.7	Very High	33.3		5	4	0
<input checked="" type="checkbox"/> Nadi Airport	6%	24%	70%		17	High	35.7		8	2	4
<input checked="" type="checkbox"/> Suva	8%	22%	70%		28	Very High	35.7		8	5	1
<input checked="" type="checkbox"/> Ono I Lau	29%	36%	35%		2.5	Low	7.7		5	5	3
Kiribati											
<input checked="" type="checkbox"/> Kiritimati	66%	33%			50.4	Excellent	67.9		11	3	0
<input checked="" type="checkbox"/> Butaritari	39%	46%	15%		15.6	High	25		7	6	1
<input checked="" type="checkbox"/> Tarawa	70%	26%	4%		45.1	Excellent	35.7		8	5	1
<input checked="" type="checkbox"/> Kanton	62%	35%	3%		52.8	Excellent	62.5		9	3	0
Marshall Islands											
<input checked="" type="checkbox"/> Kwajalein Bucholz Aaf	42%	31%	27%		6.1	Moderate	35.7		8	42	2
<input checked="" type="checkbox"/> Majuro	43%	35%	22%		4.4	Low	14.3		6	4	4

# Republic of Korea-Pacific Islands Climate Prediction Services Project PICASO Regional Rainfall Forecast



Station	Tercile Probability				Verification Score (LEPS)		Verification Score (HSS)		Hit/NearMiss/Miss		
	KEY	BN	N	AN							
<b>Micronesia</b>											
✓ Chuuk WSO AP	11%	31%	58%	-5.3	Very Low	-7.1			4	6	4
✓ Pohnpei	38%	34%	28%	1	Low	-1.8			4	8	2
✓ Yap Island WSO Airport	25%	31%	44%	8.1	Moderate	67.9			11	0	3
<b>Nauru</b>											
✓ Nauru	76%	22%		38.5	Excellent	57.1			5	2	0
<b>Niue</b>											
✓ Hanan Airport	13%	31%	56%	22.7	High	35.7			8	5	1
<b>Palau</b>											
✓ Koror	8%	91%		10.6	Good	19.6			5	6	3
<b>Samoa</b>											
✓ Afiamalu	15%	30%	55%	4.4	Low	19.6			5	5	4
✓ Laulili	14%	39%	47%	-6.2	Very Low	8.9			5	8	1
✓ Faleolo	34%	32%	34%	-0.5	Very Low	35.7			7	3	4
✓ Apia	16%	32%	52%	-1.2	Very Low	3.6			5	3	6
<b>Solomon Islands</b>											
✓ Taro Island	22%	34%	44%	5.4	Moderate	-17.9			3	9	2
✓ Munda	10%	30%	60%	13.5	Good	3.6			5	5	4
✓ Auki	9%	25%	66%	23.2	High	35.7			8	5	1
✓ Honiara	12%	28%	60%	20.3	High	19.6			5	7	2
✓ Honiara Henderson	12%	30%	58%	26.5	Very High	35.7			8	6	0
✓ Kira Kira	8%	25%	67%	6.6	Moderate	-1.8			4	5	5
✓ Santa Cruz	17%	30%	53%	12.6	Good	35.7			8	3	3
<b>Tonga</b>											
✓ Niuafoou	15%	32%	53%	10.1	Good	14.3			6	4	4
✓ KeppelMata'aho Airport	16%	32%	52%	18.1	High	65.4			10	2	1
✓ Lupepau'u	14%	28%	58%	15.3	High	3.6			5	8	1
✓ Haapai	23%	35%	42%	8.3	Moderate	41.1			7	5	2
✓ Nuku'alofa	8%	29%	63%	14.6	Good	3.6			5	8	1
<b>Vanuatu</b>											
✓ Sola (Vanua Lava)	10%	30%	60%	22	High	52.3			6	4	1
✓ Pekoa Airport (Santo)	11%	31%	58%	21	High	57.1			9	4	1
✓ Lamap (Malekula)	7%	26%	67%	23.3	High	35.7			8	5	1
✓ Bauerfield (Efate)	10%	89%		28.8	Very High	57.1			10	1	3
✓ Port Vila	6%	30%	64%	23.9	High	25			7	5	2
✓ White Grass Airport	8%	36%	56%	31.5	Very High	46.4			9	4	1
✓ Aneityum	12%	35%	53%	13.3	Good	35.7			8	3	3

# Republic of Korea-Pacific Islands Climate Prediction Services Project CLIK® Rainfall Forecast



**Figure 1:** MME Rainfall Forecast for the Pacific Islands – SON 2020 period

**Figure 2:** Rainfall Forecast Skill for the Pacific Islands – SON 2020 period

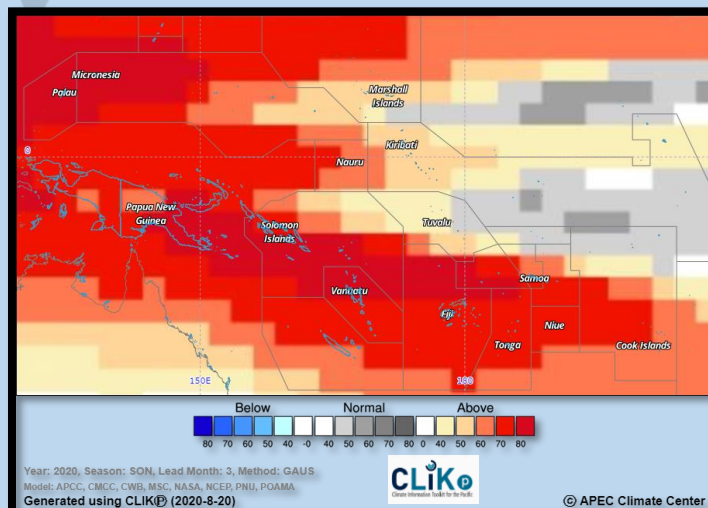
Country	Rainfall Outlook	Skill
Cook Islands	Below Normal for northern Islands Normal – Above Normal elsewhere	Low - Moderate
FSM	Normal – Above Normal	Low - Moderate
Fiji	Above Normal	Low - Moderate
Kiribati	Below Normal	Moderate - High
Marshall Islands	Normal to Above Normal (central) Below Normal (elsewhere)	Low - Moderate
Nauru	Below Normal	High
Niue	Above Normal	Moderate
Palau	Above Normal	Moderate
PNG	Normal – Above Normal Below Normal (Kavieng)	Low - Moderate
Samoa	Above Normal	Moderate
Solomon Islands	Normal – Above Normal	Low - Moderate
Tonga	Above Normal	Low - Moderate
Tokelau	Normal – Below Normal	Low - Moderate
Tuvalu	Below Normal Normal – Above Normal (Niulakita)	Moderate - High
Vanuatu	Above Normal	Low – Moderate

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

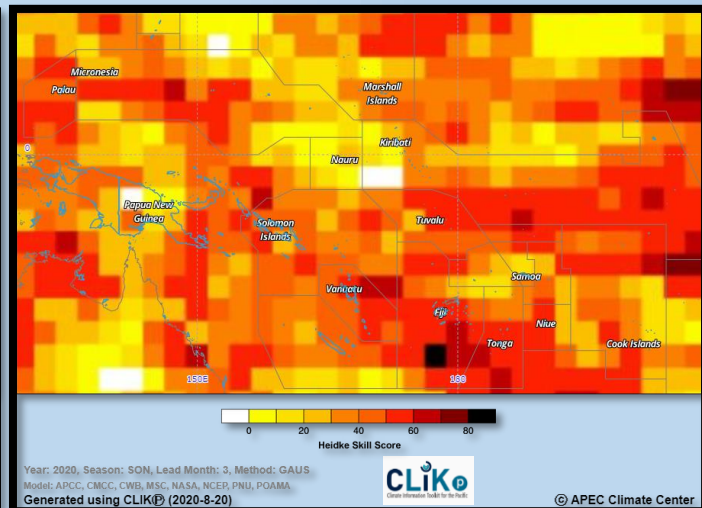
**Note:** Variation in the skill is due to model agreement and data availability at each location.



# Republic of Korea-Pacific Islands Climate Prediction Services Project CLIK® Rainfall Forecast



**Figure 3:** MME Temperature Forecast for the Pacific Islands – SON 2020 period



**Figure 4:** Air Temperature Forecast Skill for the Pacific Islands – SON 2020 period

Country	Air Temperature Outlook	Skill
Cook Islands	Above Normal	Low - Moderate
FSM	Above Normal	Moderate - High
Fiji	Above Normal	Moderate - High
Kiribati	Normal to Above Normal	Moderate - High
Marshall Islands	Above Normal	Low - Moderate
Nauru	Above Normal	Moderate
Niue	Above Normal	High
Palau	Above Normal	Moderate
PNG	Above Normal	Moderate - High
Samoa	Above Normal	Low - Moderate
Solomon Islands	Above Normal	Moderate - High
Tonga	Above Normal	Moderate - High
Tokelau	Above Normal	High
Tuvalu	Above Normal	Moderate - High
Vanuatu	Above Normal	Moderate - High

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

# Republic of Korea-Pacific Islands Climate Prediction Services Project



## **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).

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Visit the CLIK® Online Climate Prediction System: [clikp.sprep.org](http://clikp.sprep.org)

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