

Republic of Korea-Pacific Islands Climate Prediction Services Project Summary: April to June 2021 (AMJ)

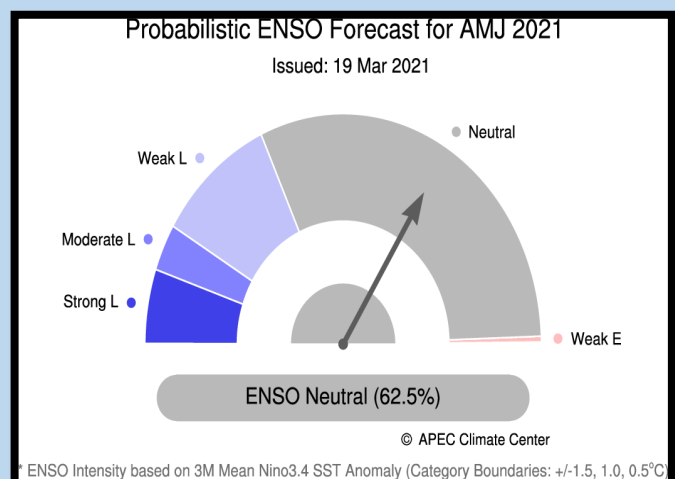
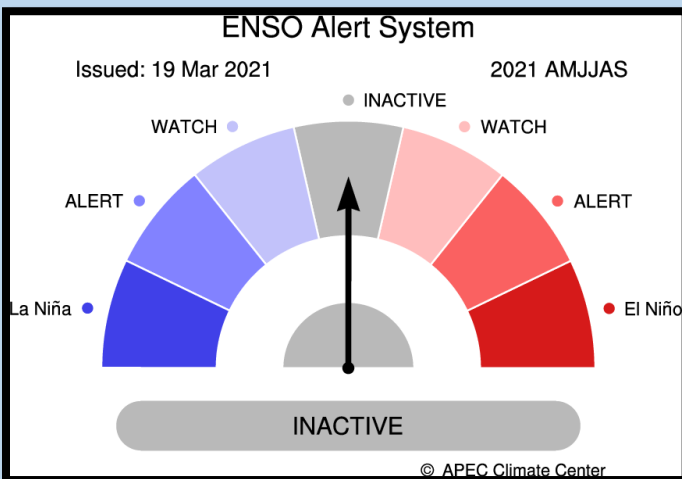
2021-03 Edition



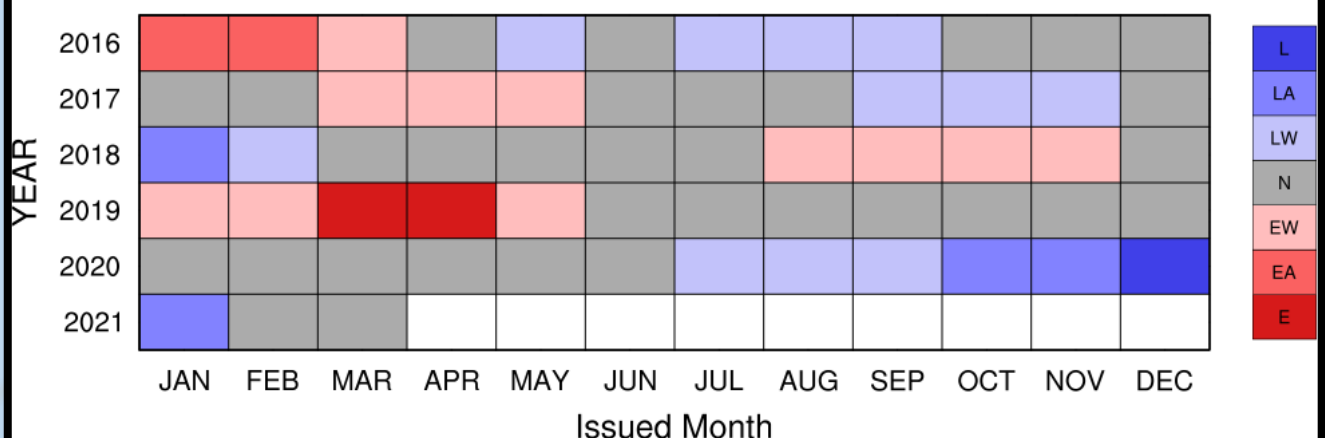
Climate Outlook for April ~ September 2021

- The APCC ENSO outlook suggests “INACTIVE”.
- The prevailing ENSO phase is expected to be neutral. The intensity of negative SST anomalies along the equatorial Pacific is expected to be gradually weakened, which corresponds to a negative Niño3.4 index around -0.5°C during April-September 2021. In summary, based on the running 3-month mean Niño3.4 index, the APCC ENSO outlook suggests an around 60% chance of ENSO neutral conditions during April-June 2021. The chance of the conditions is expected to gradually decrease but still remain above 50% through July-September 2021.
- Please see <https://apcc21.org/ser/enso.do?lang=en> for more information

ENSO



APCC ENSO Alert History



E: El Niño EA: El Niño Alert EW: El Niño Watch N: Neutral L: La Niña LA: La Niña Alert LW: La Niña Watch



RAINFALL OUTLOOK

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

Republic of Korea-Pacific Islands Climate Prediction Services Project PICASO Regional Rainfall Forecast (AMJ)

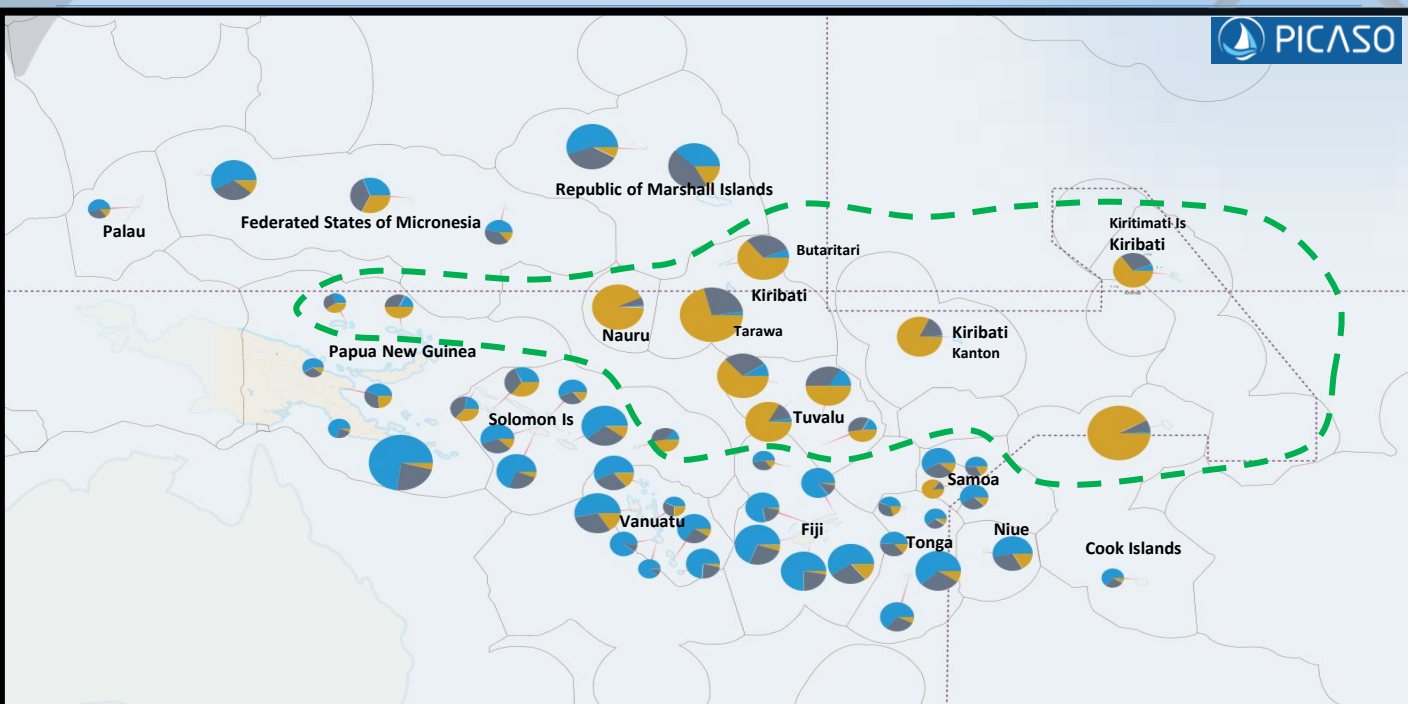







Figure 1: Regional outlook map of the Pacific. In general, all stations within the green-dash line is anticipated to have Below Normal (BN) rainfall. Normal (N) to Above Normal (AN) rainfall is predicted for stations above and below the green line. (Note: the larger the pie chart the higher the forecast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

OUTLOOK TABLE BY COUNTRY

	Station	Tercile Probability			Verification Score (LEPS)		Verification Score (HSS)		Hit/NearMiss/Miss		
	Cook Islands										
<input checked="" type="checkbox"/>	Penrhyn	<div><div>92%</div><div>7%</div></div>			60.5	Excellent	60		11	3	1
<input checked="" type="checkbox"/>	Rarotonga	<div><div>8%</div><div>28%</div><div>64%</div></div>			-12.9	Very Low	-10		4	6	5
	Fiji										
<input checked="" type="checkbox"/>	Rotuma	<div><div>14%</div><div>34%</div><div>52%</div></div>			-24	Very Low	-10		4	5	6
<input checked="" type="checkbox"/>	Udu Point	<div><div>3%</div><div>12%</div><div>85%</div></div>			9.5	Moderate	12.5		3	8	1
<input checked="" type="checkbox"/>	Nabouwalu	<div><div>3%</div><div>19%</div><div>78%</div></div>			6	Moderate	18.2		5	3	3
<input checked="" type="checkbox"/>	Nadi Airport	<div><div>5%</div><div>26%</div><div>69%</div></div>			18.7	High	0		5	8	2
<input checked="" type="checkbox"/>	Suva	<div><div>3%</div><div>22%</div><div>75%</div></div>			17.3	High	10		6	6	3
<input checked="" type="checkbox"/>	Ono I Lau	<div><div>14%</div><div>27%</div><div>59%</div></div>			19	High	67.9		11	1	2
	Kiribati										
<input checked="" type="checkbox"/>	Kiritimati	<div><div>65%</div><div>29%</div><div>6%</div></div>			13.3	Good	30		8	5	2
<input checked="" type="checkbox"/>	Butaritari	<div><div>64%</div><div>30%</div><div>6%</div></div>			29.5	Very High	45		8	6	1
<input checked="" type="checkbox"/>	Tarawa	<div><div>71%</div><div>27%</div><div>2%</div></div>			40.4	Excellent	20		7	8	0
<input checked="" type="checkbox"/>	Kanton	<div><div>82%</div><div>17%</div><div></div></div>			16	High	-7.1		4	9	1
	Marshall Islands										
<input checked="" type="checkbox"/>	Kwajalein Bucholz Aaf	<div><div>8%</div><div>37%</div><div>55%</div></div>			28	Very High	30		8	7	0
<input checked="" type="checkbox"/>	Majuro	<div><div>17%</div><div>45%</div><div>38%</div></div>			28	Very High	40		9	5	1

Republic of Korea-Pacific Islands

Climate Prediction Services Project

PICASO Regional Rainfall Forecast (AMJ)

PICASO



Station	Terile Probability				Verification Score (LEPS)	Verification Score (HSS)	Hit/NearMiss/Miss		
	KEY	BN	N	AN					
Micronesia									
<input checked="" type="checkbox"/> Chuuk WSO AP	32%		37%	31%	12.8	Good	45	8	5 2
<input checked="" type="checkbox"/> Pohnpei	14%		40%	46%	0.3	Low	-20	3	8 4
<input checked="" type="checkbox"/> Yap Island WSO Airport	11%		31%	58%	16.3	High	40	9	3 3
Nauru									
<input checked="" type="checkbox"/> Nauru		93%		6%	26.3	Very High	14.3	3	4 0
Niue									
<input checked="" type="checkbox"/> Hanan Airport	17%		30%	53%	11.9	Good	20	7	7 1
Palau									
<input checked="" type="checkbox"/> Koror	15%		30%	55%	-0.9	Very Low	8.9	5	3 6
Papua New Guinea									
<input checked="" type="checkbox"/> Madang	10%		32%	58%	-1.6	Very Low	10	6	4 5
<input checked="" type="checkbox"/> Port Moresby	6%	22%		72%	-12.2	Very Low	-20	3	7 5
<input checked="" type="checkbox"/> Momote	39%		32%	29%	-3	Very Low	0	5	2 8
<input checked="" type="checkbox"/> Nadzab	24%		33%	43%	2.7	Low	5	5	5 5
<input checked="" type="checkbox"/> Kavieng	50%		32%	18%	3.1	Low	25	7	3 5
<input checked="" type="checkbox"/> Misima	4%	23%		73%	35.8	Excellent	20	7	8 0
Samoa									
<input checked="" type="checkbox"/> Afiamalu	12%		30%	58%	0.9	Low	10	6	5 4
<input checked="" type="checkbox"/> Laulili	17%		33%	50%	-9.5	Very Low	-25	1	11 3
<input checked="" type="checkbox"/> Faleolo		85%		14%	-37.4	Very Low	-30	2	3 10
<input checked="" type="checkbox"/> Apia	11%		31%	58%	5.3	Moderate	30	8	3 4
Solomon Islands									
<input checked="" type="checkbox"/> Taro Island	36%		41%	23%	4.7	Low	25	7	7 1
<input checked="" type="checkbox"/> Munda	35%		34%	31%	5.8	Moderate	20	7	4 4
<input checked="" type="checkbox"/> Auki	14%		30%	56%	4.5	Low	20	7	5 3
<input checked="" type="checkbox"/> Honiara	12%		32%	56%	7.4	Moderate	0	5	8 2
<input checked="" type="checkbox"/> Honiara Henderson	6%	25%		69%	14.3	Good	3.6	5	7 2
<input checked="" type="checkbox"/> Kira Kira	10%		29%	61%	22.7	High	30	8	6 1
<input checked="" type="checkbox"/> Santa Cruz	47%		39%	14%	1	Low	-10	4	6 5
Tonga									
<input checked="" type="checkbox"/> Nukunono	20%		37%	43%	-6.7	Very Low	10	4	7 4
<input checked="" type="checkbox"/> KeppelMata'aho Airport	10%		29%	61%	-10.8	Very Low	-10	4	4 7
<input checked="" type="checkbox"/> Lupepau'u	14%		37%	49%	3.8	Low	10	6	7 2
<input checked="" type="checkbox"/> Haapai	9%		29%	62%	16.2	High	5	5	8 2
<input checked="" type="checkbox"/> Nuku'alofa	7%		29%	64%	7.3	Moderate	20	7	4 4
Tuvalu									
<input checked="" type="checkbox"/> Nanumea	63%		28%	9%	26.8	Very High	70	12	1 2
<input checked="" type="checkbox"/> Nui	83%		14%	3%	20.6	High	40	9	4 2
<input checked="" type="checkbox"/> Funafuti	50%		34%	16%	22.5	High	35	8	6 1
<input checked="" type="checkbox"/> Niulakita	47%		36%	17%	2.2	Low	10	6	7 2
Vanuatu									
<input checked="" type="checkbox"/> Sola (Vanua Lava)	14%		29%	57%	11.7	Good	-9.1	3	7 1
<input checked="" type="checkbox"/> Pekoa Airport (Santo)	16%		31%	53%	18.6	High	19.6	5	7 2
<input checked="" type="checkbox"/> Lamap (Malekula)	25%		33%	42%	-0.1	Very Low	1.9	3	6 4
<input checked="" type="checkbox"/> Bauerfield (Eate)	10%			89%	3.7	Low	25	7	3 5
<input checked="" type="checkbox"/> Port Vila	11%			88%	-8.7	Very Low	-17.9	3	7 4
<input checked="" type="checkbox"/> White Grass Airport	9%		26%	65%	6.4	Moderate	25	7	2 5
<input checked="" type="checkbox"/> Anielyum	4%	22%		74%	5.9	Moderate	0	5	7 3

Republic of Korea-Pacific Islands Climate Prediction Services Project CLIK® Rainfall Forecast (AMJ)

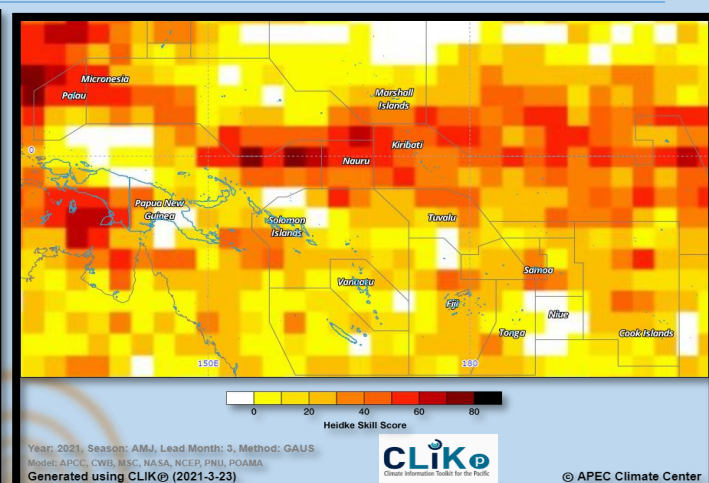
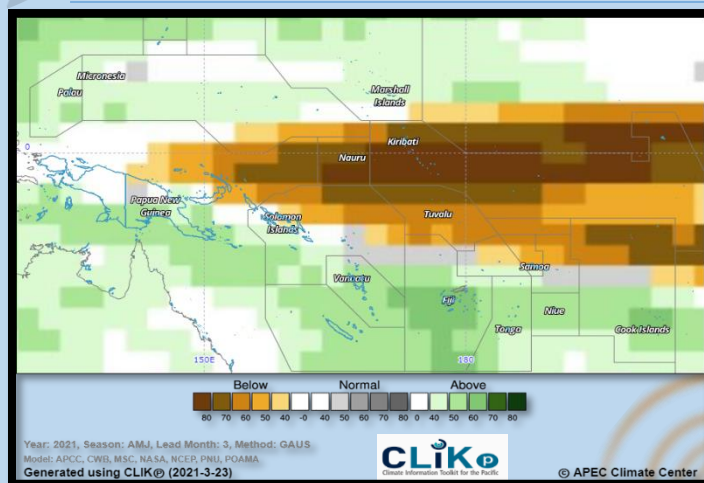


Figure 1: MME Rainfall Forecast for the Pacific Islands – AMJ 2021 period

Figure 2: Rainfall Forecast Skill for the Pacific Islands – AMJ 2021 period

Country	Rainfall Outlook	Skill
Cook Islands	Below Normal - Penrhyn Above Normal - Rarotonga	Low
FSM	Above Normal	Very Low – High
Fiji	Normal - Rotuma Above Normal elsewhere	Very Low - Low
Kiribati	Below Normal	Low - Moderate
Marshall Islands	Above Normal	Low
Nauru	Below Normal	High
Niue	Above Normal	Very Low
Palau	Above Normal	High
PNG	Above Normal (Port Moresby/Nadzab/Misima) Normal (Madang) Below Normal (Momote/Kavieng)	Very Low – Moderate
Samoa	Above Normal	Moderate
Solomon Islands	Above Normal (Honiara/Henderson/Kirakira) Normal (Santa Cruz) and Below Normal elsewhere	Very Low - Low
Tonga	Above Normal	Very Low - Low
Tokelau	Below Normal	Low
Tuvalu	Below Normal	Low - Moderate
Vanuatu	Above Normal	Very Low - Low

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® Temperature Forecast (AMJ)

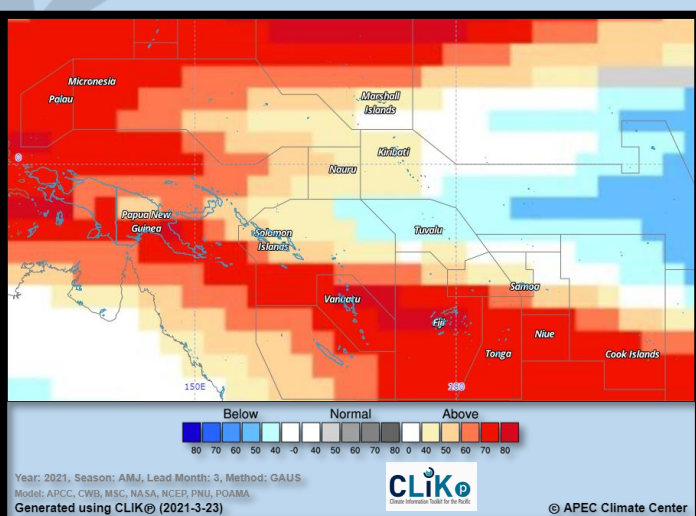


Figure 3: MME Temperature Forecast for the Pacific Islands – AMJ 2021 period

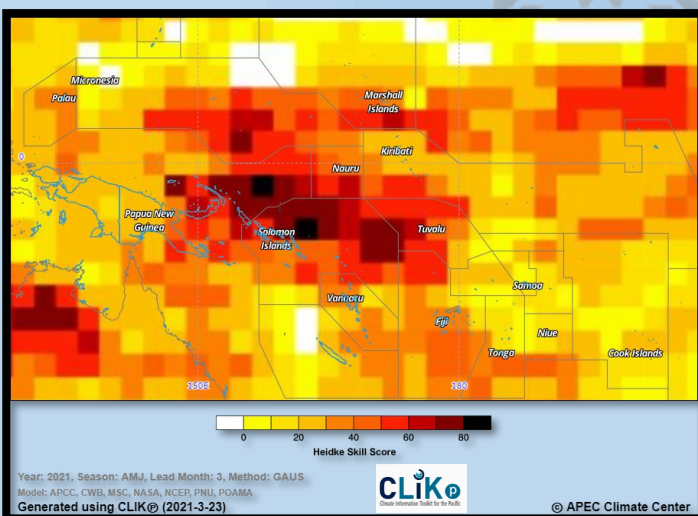


Figure 4: Air Temperature Forecast Skill for the Pacific Islands – AMJ 2021 period

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

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).

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

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