

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

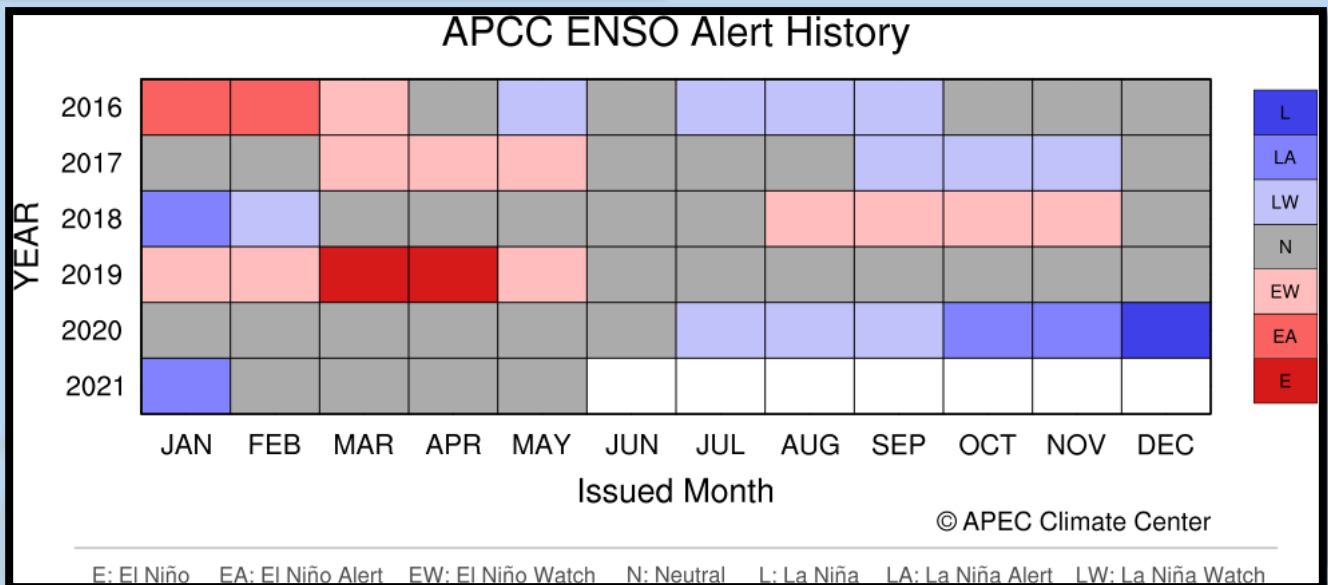
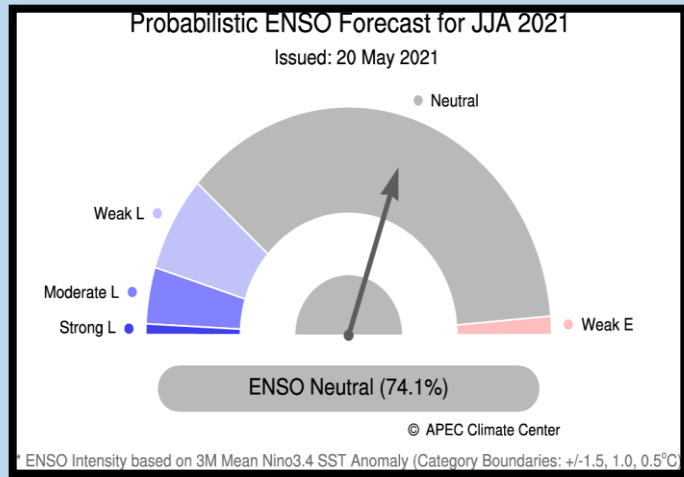
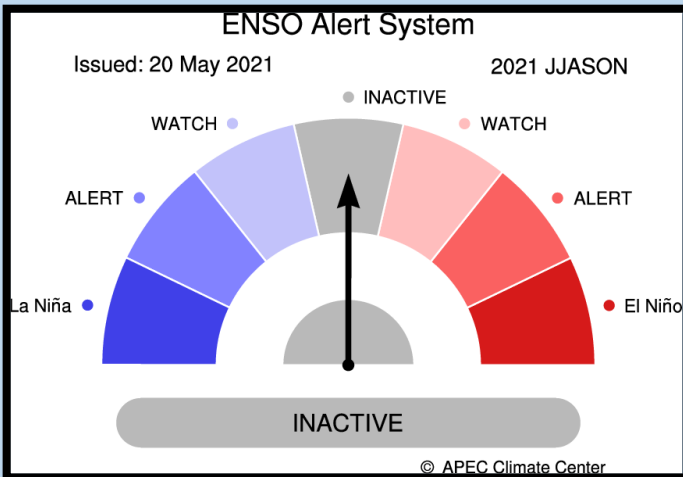
2021-05 Edition



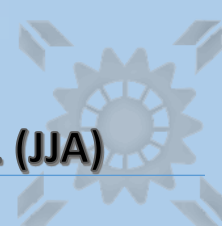
Climate Outlook for June ~ November 2021

- The APCC ENSO Alert suggests “INACTIVE”. During April 2021, negative sea surface temperature anomalies were observed over the equatorial Pacific. The negative Niño3.4 index decreasing from -0.25 °C to -0.51 °C is expected during June – November 2021. Based on the running 3-month mean Niño3.4 index, the latest APCC ENSO outlook suggests ENSO neutral conditions with a decreasing chance from 74% to 54% during the forecast period.
- Strongly enhanced probability for above normal temperatures is predicted for Micronesia, Melanesia (excluding equatorial region) and southern Polynesia for June – November 2021.
- Enhanced probability for below normal precipitation is predicted for equatorial region of Pacific Islands for June – November 2021.
- Please see <https://apcc21.org/ser/outlook.do?lang=en> for more information

ENSO



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

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

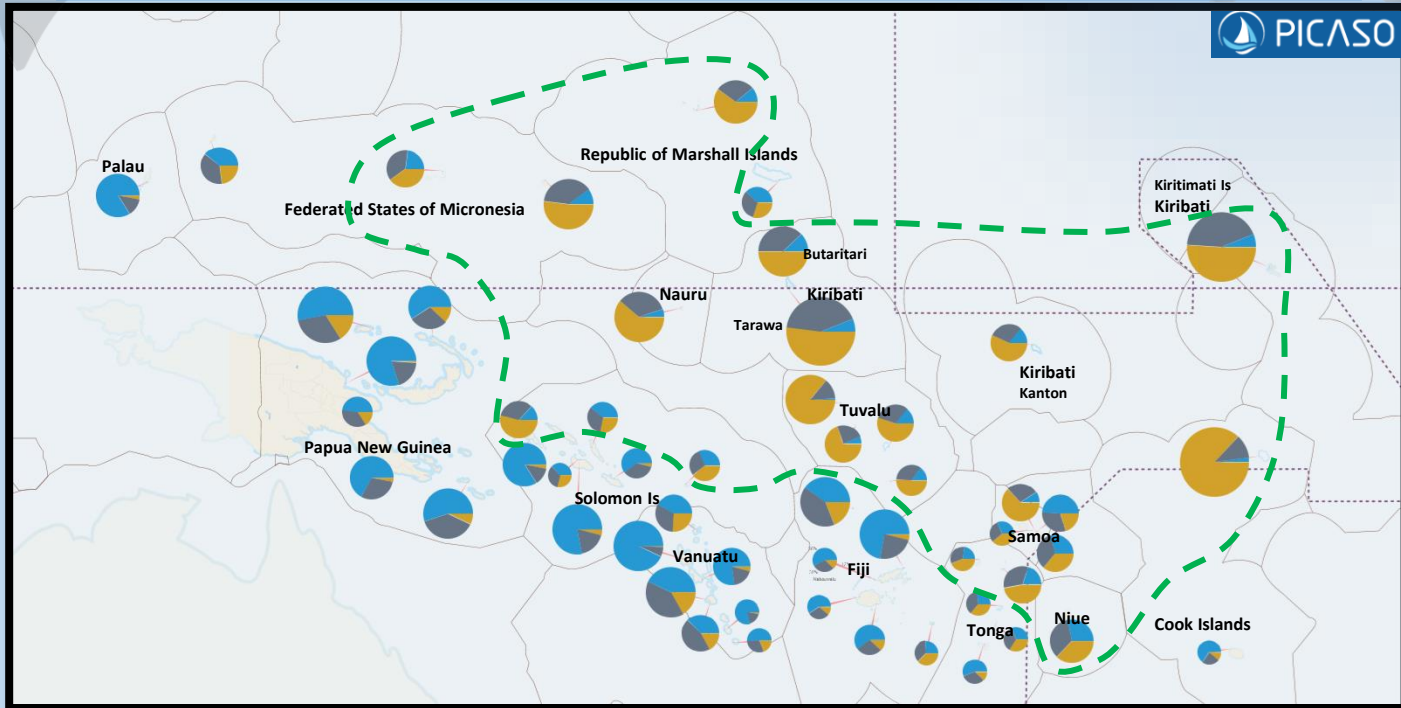


Figure 1: Regional outlook map of the Pacific. In general, all stations enclosed within the green-dash line anticipated to have Below Normal (BN) rainfall. Normal (N) to Above Normal (AN) rainfall is predicted for stations outside the green-dashed line. (Note: the larger the pie chart the higher the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

OUTLOOK TABLE BY COUNTRY

Station	Tercile Probability				Verification Score (LEPS)		Verification Score (HSS)		Hit/NearMiss/Miss				
	KEY	BN	N	AN	Score	Category	Score	Category	Hit	NearMiss	Miss		
Cook Islands													
Penrhyn		87%			11%	46.8	Excellent	50		10	5	0	
Rarotonga	11%	24%		65%		-0.2	Very Low	-10		4	2	9	
Fiji													
Rotuma	19%		41%		40%	19.3	High	50		10	3	2	
Udu Point	4%	24%		72%		23.2	High	12.5		5	6	1	
Nabouwalu	12%	30%		58%		-5.1	Very Low	-2.3		2	7	2	
Nadi Airport	11%	30%		59%		-8	Very Low	0		5	5	5	
Suva	12%	28%		60%		0.3	Low	-20		3	5	7	
Ono I Lau		38%			26%	-4.4	Very Low	8.9		5	6	3	
Kiribati													
Kiritimati		51%			43%	6%	37.1	Excellent	60		11	4	0
Butaritari		50%			38%	12%	16.9	High	14.3		6	6	2
Tarawa		52%			42%	6%	52.5	Excellent	50		10	5	0
Kanton		57%			29%	14%	7.4	Moderate	7.7		5	5	3
Marshall Islands													
Kwajalein Bucholz Aaf		60%			29%	11%	14	Good	35		7	5	3
Majuro		30%			32%	38%	3.4	Low	90		10	2	3

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



Station	Tercele Probability				Verification Score (LEPS)	Verification Score (HSS)	Hit/NearMiss/Miss
	KEY	BN	N	AN			
Micronesia							
Chauk WSO AP	40%	37%	23%	8.4	Moderate	10	6 4 5
Pohnpei	52%	38%	10%	17	High	-10	4 10 1
Yap Island WSO Airport	23%	38%	39%	5.4	Moderate	25	6 5 4
Nauru							
Nauru	61%	34%	5%	15.9	High	35.7	4 2 1
Niue							
Hanan Airport	37%	35%	28%	12.1	Good	25	6 8 1
Palau							
Koror	3 13%	84%		11.7	Good	0	5 6 4
Papua New Guinea							
Madang	19%	80%		21.6	High	25	7 6 1
Port Moresby	3 30%	67%		13.6	Good	0	5 9 1
Momote	16%	31%	53%	29.6	Very High	70	12 2 1
Nadzab	16%	36%	48%	2.9	Low	0	5 6 4
Kavieng	12%	29%	59%	13.3	Good	20	7 3 5
Misima	7%	38%	55%	19.1	High	10	6 8 1
Samoa							
Afiamalua	36%	35%	29%	7.5	Moderate	15	5 7 3
Laullii	20%	31%	49%	7.8	Moderate	50	10 2 3
Faleolo	39%	30%	31%	3.3	Very Low	10	4 4 7
Apia	63%	28%	9%	5.3	Moderate	10	6 4 5
Solomon Islands							
Taro Island	54%	33%	13%	5	Moderate	3.6	5 8 1
Munda	3 13%	84%		13	Good	20	7 5 3
Auki	28%	33%	39%	3.8	Low	10	6 7 2
Honiara	29%	34%	37%	-1.6	Very Low	30	7 3 5
Honiara Henderson	4 18%	78%		22.7	High	35.7	8 4 2
Kira Kira	4 36%	60%		1.1	Low	0	2 12 1
Santa Cruz	39%	30%	31%	4.8	Low	10	6 7 2
Tonga							
Niuafoou	44%	33%	23%	-6	Very Low	10	4 6 5
KeppelMata'aho Airport	47%	33%	20%	7.6	Moderate	-10	4 9 2
Lupepa'u	36%	37%	27%	-1.8	Very Low	5	5 5 5
Hapail	34%	35%	31%	-10.8	Very Low	-30	2 7 6
Nuku'alofa	12%	32%	56%	-10.5	Very Low	-10	4 8 3
Tuvalu							
Nanumea	86%	13%		21.5	High	30	8 5 2
Nui	70%	24%	6%	6.2	Moderate	10	6 6 3
Funafuti	55%	31%	14%	5	Moderate	5	4 6 5
Niulakita	51%	34%	15%	0.1	Low	-5	3 9 3
Vanuatu							
Sola (Vanua Lava)	26%	32%	42%	7.3	Moderate	62.5	9 2 1
Pekoa Airport (Santo)	6%	93%		18.2	High	40	9 1 5
Lamap (Malekula)	4 19%	77%		9.6	Moderate	3.6	5 7 2
Bauerfield (Efate)	17%	40%	43%	21.2	High	40	9 4 2
Port Vila	17%	46%	37%	7.7	Moderate	0	5 8 2
White Grass Airport	3 18%	79%		26.3	Very Low	-20	3 3 9
Anclitum	19%	30%	51%	-10.8	Very Low	-6.7	4 6 5

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

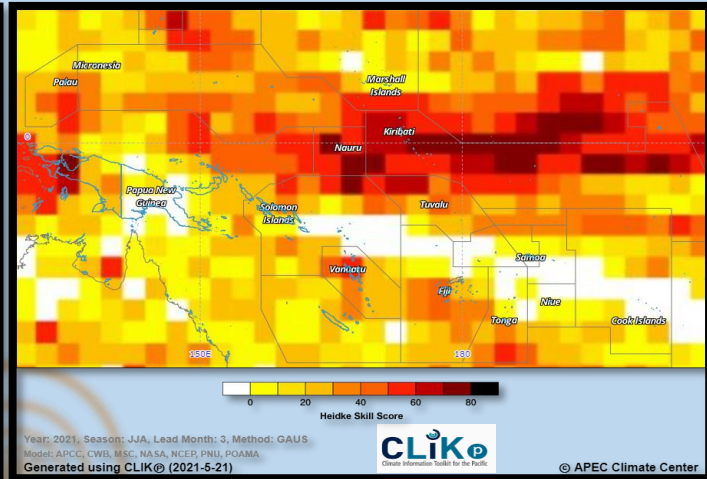
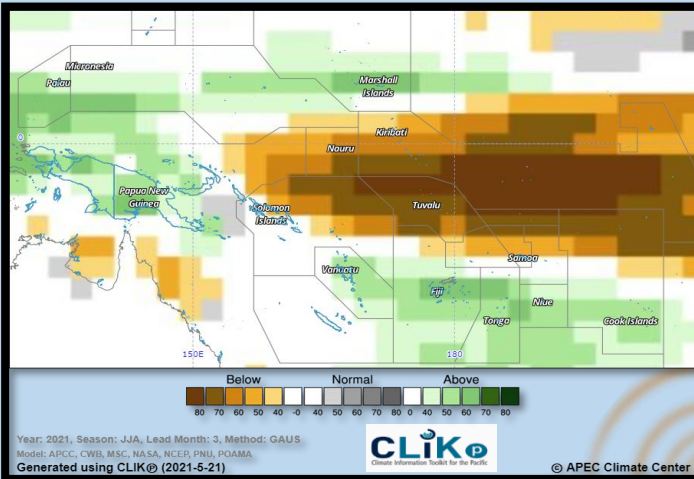


Figure 1: MME Rainfall Forecast for the Pacific Islands – JJA 2021 period

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

Country	Rainfall Outlook	Skill
Cook Islands	Below Normal - Penrhyn Above Normal - Rarotonga	Moderate Very Low
FSM	Above Normal	Very Low – Moderate
Fiji	Below Normal - Rotuma Above Normal elsewhere	Very Low Low – Moderate
Kiribati	Below Normal	Moderate – High
Marshall Islands	Above Normal	Very Low - Low
Nauru	Below Normal	High
Niue	Above Normal	Very Low
Palau	Above Normal	Moderate
PNG	Above Normal	Very Low – Low
Samoa	Normal	Very Low
Solomon Islands	Above Normal - (Honiara/Henderson) Normal – (Taro Is, Munda, Kirakira) Below Normal – (Auki, Santa Cruz)	Very Low – Moderate
Tonga	Normal - Above Normal	Very Low
Tokelau	Below Normal	Moderate
Tuvalu	Below Normal	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[®] Temperature Forecast (JJA)

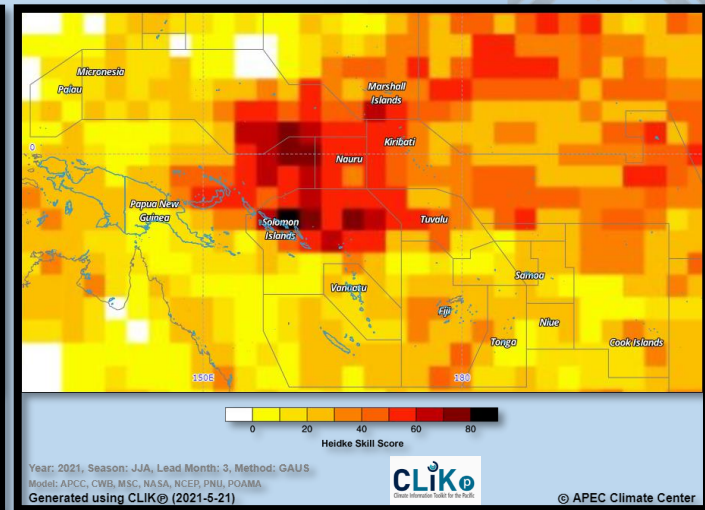
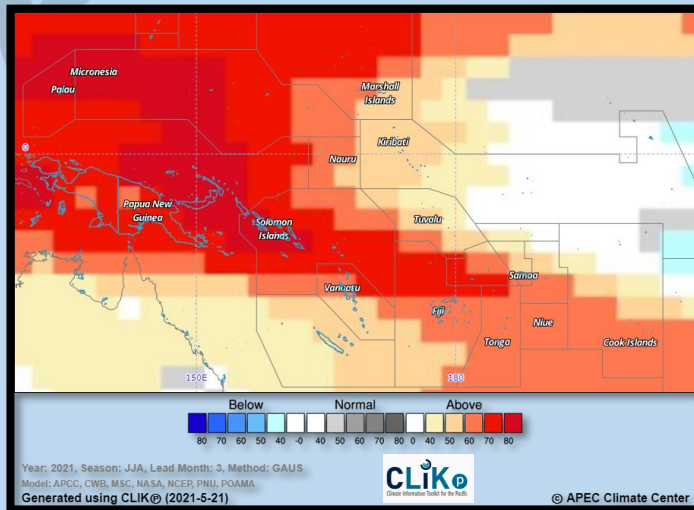
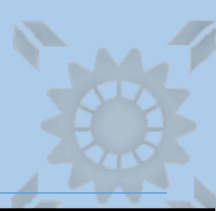


Figure 3: MME Temperature Forecast for the Pacific Islands – JJA 2021 period

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

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

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

CONTACT INFORMATION:

For more information, please contact Mr. Tile Tofaeono, Climate Prediction Services Coordinator, SPREP tilet@sprep.org



PO Box 240, Apia, Samoa
E: sprep@sprep.org
T: +685 21929
F: +685 20231
W: www.sprep.org



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