NWS Climate Services

March PEAC Audio Conference Call Summary

11 March, 1430 HST (12 March 2020, 0030 GMT)

February rainfall totals reported

% Normal: blue above normal & red below normal. Departure from normal: blue-above & red-below (same for 3 mon %)

	Rainfall	% Norm	Normal	Departure	3 mon %
	Inches	February	Inches	inches	DJF
Airai	14.23	146	9.73	4.51	40.47
Yap	7.24	139	5.19	2.05	37.08
Chuuk	11.29	156	7.25	4.04	43.32
Pohnpei	6.24	65	9.55	-3.31	52.57
Kosrae	18.28	141	12.93	5.35	79.51
Kwajalein	1.97	75	2.64	-0.67	8.33
Majuro	3.89	57	6.88	-2.99	32.18
Guam NAS	1.01	33	3.03	-2.02	13.14
Saipan	3.15	122	2.59	0.56	12.88
Pago Pago	16.86	141	12.00	4.86	49.03
Lihue	4.10	223	1.84	2.26	7.83
Honolulu	1.54	156	0.99	0.55	5.08
Kahului	0.56	52	1.07	-0.51	4.46
Hilo	13.13	157	8.38	4.75	45.33

Current State of ENSO and predictions

ENSO Alert System Status: Final La Niña Advisory

Issued 11 March 2021

There is a ~60% chance of a transition from La Niña to ENSO-Neutral during the Northern Hemisphere spring 2021 (April-June).

La Niña continued during February, reflected by below-average sea surface temperatures (SST) anomalies, which extended from the western to east-central Pacific Ocean. SSTs returned to near average in the eastern Pacific Ocean by late January, before oscillating during February, as indicated by the week-to-week variability in most of the Niño index regions. The latest weekly Niño index values in the central (Niño-4) and east-central (Niño-3.4) Pacific Ocean were -0.8°C and -0.7°C. The below-average SSTs were linked to negative subsurface temperature anomalies, which weakened noticeably during the month. Currently, negative subsurface anomalies extended from the surface to approximately ~150m below the surface between 150°E and 90° W. Low-level wind anomalies showed periods of enhanced, but localized, easterlies in the east-central Pacific. Upper-level wind anomalies were westerly across the central and eastern tropical Pacific. The suppression of tropical convection over the western and central Pacific weakened during February, as did the enhancement of rainfall around the Philippines and Indonesia compared to the previous few months. The Southern Oscillation and Equatorial Southern Oscillation remained positive, but also weakened. Overall, the coupled ocean-atmosphere system is consistent with a weak or decaying La Niña.

Most of the models in the IRI/CPC plume predict a transition to ENSO-neutral during the Northern Hemisphere spring 2021. The forecaster consensus agrees with this transition and then predicts a continuation of ENSO-neutral at least through the Northern Hemisphere summer. In part, due to the uncertainty in predictions made at this time of year, the forecast for September-November remains lower confidence with a 45-50% for La Niña and 40-45% for ENSO-Neutral, with a low chance for El Niño. In summary, there is a ~60% chance of a transition from La Niña to ENSO-Neutral during the Northern Hemisphere spring 2021 (April-June; click CPC/IRI consensus forecast for the chances in each 3-month period).

6. Rainfall Verification DJF– December, January, February (Sony)

The verification result of **DJF** rainfall forecasts was 9 hits and 5 misses (Heidke score: 0.5544). All but three stations missed the forecast. The 3 missed stations were Kwajalein, Guam, and Kahului.

DJF Verification Location	Rainfall Outlook	Final Probs	3 month Verification		
			% norm	Total (in)	Tercile
Palau					
Airai 7º 22' N, 134º 32' E	**Above**	**20:30:50**	121	40.47	**Above**
FSM					
Yap 9º 29' N, 138º 05' E	**Above**	**25:30:45**	**185**	37.08	**Above**
Chuuk 7º 28'N, 151º 51'E	**Above**	**25:30:45**	**151**	43.32	**Above**
Pohnpei 6º 59'N, 158º 12'E	**Above**	**25:35:40**	135	52.57	**Above**
Kosrae 5º 21'N, 162º 57'E	Avg-above	**30:35:35**	**171**	79.51	**Above**
RMI					
Kwajalein 8º 43'N, 167º 44'E	**Above**	**25:35:40**	67	8.33	**Below**
Majuro 7º 04' N, 171º 17'E	Avg-above	**30:35:35**	124	32.18	**Above**
Guam and CNMI					
Guam 13º 29'N, 144º 48' E	**Above**	**25:35:40**	108	13.14	**Avg.**
Saipan 15º 06'N, 145º 48' E	**Above**	**25:35:40**	**144**	12.88	**Above**
American Samoa					
Pago Pago 14º 20'S, 170º 43'W	Avg-above	**30:35:35**	128	49.03	**Above**
State of Hawaii					
19.7º - 21.0' N, 155.0º - 159.5' W					
Lihue	Avg-above	**30:35:35**	108	7.83	**Avg.**
Honolulu	Avg-above	**30:35:35**	**147**	5.08	**Avg.**
Kahului	Avg-above	**30:35:35**	74	4.46	**Below**
Hilo	Avg-above	**30:35:35**	**165**	45.33	**Above**

Heidke:	**0.5544**
RPSS:	**0.1101**

Tercile Cut-offs for AMJ Season based on 1981-2010 Pacific Rainfall Climatologies (Luke He)

	Koror	Yap	Chuuk	Pohnpei	Guam	Saipan	Majuro	Kwaj
below (<)								
33.33%	26.42	17.47	25.39	34.23	11.41	8.66	24.24	11.78
near								
66.66%	37.21	25.53	32.01	45.42	16.49	11.56	30.01	16.47
above (>)								

	Lihue	Honolulu	Kahului	Hilo	Pago Pago	Kosrae
below (<)						
33.33%	7.45	3.68	4.64	19.58	35.2	43.72
near						
66.66%	13.98	8.62	8.68	33.29	46.65	53.68
above (>)						

6. Rainfall Outlook MAM– March, April, May (Sony)

MAM Forecast Location	Rainfall Outlook	Probability Pre-Conference	Final Outlook	Final Probability
Palau				
Airai 7º 22' N, 134º 32' E	**Above**	**20:30:50**	-	-
FSM				
Yap 9º 29' N, 138º 05' E	Avg-above	**30:35:35**	-	-
Chuuk 7º 28'N, 151º 51'E	Avg-above	**30:35:35**	-	-
Pohnpei 6º 59'N, 158º 12'E	Avg.	**30:40:30**	-	-
Kosrae 5º 21'N, 162º 57'E	Avg.	**30:40:30**	-	-
RMI				
Kwajalein 8º 43'N, 167º 44'E	Avg-above	**30:35:35**	-	-
Majuro 7º 04' N, 171º 17'E	Avg-above	**30:35:35**	-	-
Guam and CNMI				
Guam 13º 29'N, 144º 48' E	Avg-above	**30:35:35**	-	-
Saipan 15º 06'N, 145º 48' E	Avg-above	**30:35:35**	-	-
American Samoa				
Pago Pago 14º 20'S, 170º 43'W	**Below**	**40:30:30**	-	-
State of Hawaii				
19.7º - 21.0' N, 155.0º - 159.5' W				
Lihue	Avg-above	**30:35:35**	-	-
Honolulu	Avg.	**30:40:30**	-	-
Kahului	Avg.	**30:40:30**	-	-
Hilo	Avg-above	**30:35:35**	-	-

Tercile Cut-offs for MAM Season based on 1981-2010 Pacific Rainfall Climatologies (Luke He)

	Koror	Yap	Chuuk	Pohnpei	Guam	Saipan	Majuro	Kwaj
below (<)								
33.33%	26.86	14.74	30.3	46.13	7.61	5.88	21.02	9.74
near								
66.66%	33.44	22.41	36.94	58.61	11.51	8.02	32.44	21.13
above (>)								

	Lihue	Honolulu	Kahului	Hilo	Pago Pago	Kosrae
below (<)						
33.33%	5.32	1.83	2.45	22.5	27.97	51
near						
66.66%	7.98	3.05	4.64	34	38.33	55.49
above (>)						