

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

	<u>Koror</u>	<u>Yap</u>	<u>Chuuk</u>	<u>Pohnpei</u>	<u>Guam</u>	<u>Saipan</u>	<u>Majuro</u>	<u>Kwaj</u>
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	<u>Honolulu</u>	<u>Kahului</u>	<u>Hilo</u>	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
ahove (>)						

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

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