



NWS Climate Services

August PEAC Audio Conference Call Summary

8 August, 1430 HST (9 August 2024, 0030 GMT)

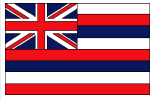


July rainfall totals reported

% 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	July	Inches	inches	MJJ
Airai	19.72	121	16.29	3.43	98
Yap	20.23	134	15.09	5.14	94
Chuuk	15.37	130	11.80	3.57	116
Pohnpei	21.09	141	14.96	6.13	126
Kosrae	14.97	101	14.79	0.18	102
Kwajalein	10.98	111	9.87	1.11	138
Majuro	8.85	86	10.29	-1.44	108
Guam NAS	7.51	73	10.30	-2.79	97
Saipan	3.74	53	7.01	-3.27	93
Pago Pago	4.50	70	6.40	-1.90	156
Lihue	0.64	42	1.53	-0.89	114
Honolulu	0.02	5	0.37	-0.35	498
Kahului	0.25	60	0.42	-0.17	79
Hilo	4.84	61	7.94	-3.10	87

Reports from around the Region



Hawaii (Kevin Kodama)

Precipitation Summaries for HI can also be found:

https://www.weather.gov/hfo/hydro_summary

Kauai

Nearly all of the rain gages on Kaua'i had below average rainfall for the month of July. The U.S. Geological Survey's Kilohana rain gage on the northwest side of the island was the only site with near average rainfall. The USGS' Mount Wai'ale'ale rain gage had the highest monthly total of 20.49 inches (53 percent of average), and the highest daily total of 2.78 inches on July 23. The Līhu'e Airport, Līhu'e Variety Station, and the Wailua Experiment Station rain gages posted their lowest July totals on record. Mount Wai'ale'ale and Princeville Airport had their lowest July totals since 1984 and 2010, respectively.

Due to wet conditions during the first half of the year, most of the gages on Kaua'i still had near to above average rainfall for 2024 through the end of July. The Mount Wai'ale'ale rain gage had the highest year-to-date total of 217.52 inches (96 percent of average).

Oahu

Generally dry conditions in July resulted in most of the gages on O'ahu having below average rainfall. Most of the monthly totals from sites along the Wai'anae Range were less than 50 percent of the July average. A few of the gages along the slopes of the Ko'olau Range had near average July totals. The Mānoa Lyon Arboretum gage had the highest monthly total of 11.26 inches (73 percent of average), and the highest daily total of 1.85 inches on July 23. The Punalu'u Pump rain gage had its lowest July total since 2004. Schofield Barracks and Wai'anae Valley had their lowest July totals since 2009.

Nearly all of the gages on O'ahu had near to above average rainfall totals for 2024 through the end of July. The USGS' Poamoho Rain Gage No. 1 had the highest year-to-date total of 106.40 inches (82 percent of average).

Maui

July rainfall totals were below average at most of the gages across Maui County. Several of the leeward sites had totals below 10 percent of average. The USGS' rain gage at West Wailuaiki Stream had the highest monthly total of 15.27 inches (76 percent of average). Their gage on top of Pu'u Kukui had the highest daily total of 4.29 inches on July 23 associated with the above-mentioned moisture from the remnants of a weak tropical disturbance.

Despite the recent dry conditions, Maui County rainfall totals for 2024 through the end of July were still near to above average at most sites due to wet conditions during the first half of the year. The Pu'u Kukui rain gage had the highest year-to-date total of 150.34 inches (67 percent of average).

Big Island

Big Island rainfall totals for the month of July were mostly below average, with many totals ranging from 30 to 70 percent of average. The portion of the Hāmākua Coast northwest of Pa'auilo and the windward slopes of the Kohala Mountains were the main exceptions with near to above average rainfall in these areas. The USGS' rain gage at Kawainui Stream had the highest monthly total of 16.20 inches (120 percent of average). Their rain gage at Honoli'i Stream had the highest daily total of 4.14 inches on July 19. The Pāhoia gage had its lowest July total since 2004.

Rainfall totals for 2024 through the end of July were near to above average at most of the gages on the Big Island. The USGS' rain gage at Honoli'i Stream had the highest year-to-date total of 129.37 inches (97 percent of average).

Current State of ENSO and predictions

Issued 8 August 2024

ENSO Alert System Status: [La Niña Watch](#)

Synopsis: ENSO-neutral is expected to continue for the next several months, with La Niña favored to emerge during September-November (66% chance) and persist through the Northern Hemisphere winter 2024-25 (74% chance during November-January).

ENSO-neutral continued during July 2024, with near-average sea surface temperatures (SSTs) observed across most of the equatorial Pacific Ocean. In the past week, except for the Niño-4 index (+0.3°C), the other Niño region indices were slightly negative. Below-average subsurface temperatures strengthened during the past month (area-averaged index in) associated with the expansion of negative anomalies along the thermocline. Low-level wind anomalies were easterly over the east-central and eastern Pacific, and upper-level winds were westerly over the eastern Pacific. Convection was near average around Indonesia and the Date Line. Collectively, the coupled ocean-atmosphere system reflected ENSO-neutral.

The IRI plume indicates that Niño-3.4 is most likely to be below La Niña thresholds for four overlapping seasons, from September-November 2024 through December 2024 - February 2025. Based on updated guidance and recent observations, the forecast team predicts nearly equal chances for ENSO-neutral and La Niña in August-October 2024, with higher odds for La Niña in September-November. Although the rate of SST cooling has been slower than previously anticipated, below-average subsurface temperatures and low-level easterly wind anomalies remain conducive to La Niña development in the coming months. In summary, ENSO-neutral is expected to continue for the next several months, with La Niña favored to emerge during September-November (66% chance) and persist through the Northern Hemisphere winter 2024-25 (74% chance during November-January).

6. Rainfall Verification MJJ– May, June, July (Josie)

The verification result of MJJ rainfall forecasts was 8 hits and 6 misses (Heidke score: 0.3758).

Location	UKMO	ECMWF	CA	NASA	NCEP	IRI	APCC	Rainfall Outlook	Final Probs	3 mo Verification		
										% norm	Total (in)	Tercile
Palau												
Airai 7° 22' N, 134° 32' E	Above	Avg-below	Avg.	Avg-below	Above	Avg-below	Below	Avg-below	30:35:35	98	43.78	Avg.
FSM												
Yap 9° 29' N, 138° 05' E	Below	Below	Below	Avg-below	Avg.	Below	Below	Avg-below	35:35:30	94	32.87	Avg.
Chuuk 7° 28' N, 151° 51' E	Below	Avg-below	Avg.	Avg.	Avg-above	Below	Below	Avg.	30:40:30	116	41.53	Above
Pohnpei 6° 59' N, 158° 12' E	Below	Below	Avg.	Avg-below	Avg.	Clim.	Below	Avg.	30:40:30	126	60.50	Above
Kosrae 5° 21' N, 162° 57' E	Below	Avg.	Avg-above	Below	Avg-below	Below	Below	Avg.	30:40:30	102	48.61	Avg.
RMI												
Kwajalein 8° 43' N, 167° 44' E	Below	Below	Avg-below	Avg-above	Avg.	Below	Below	Avg-below	35:35:30	138	32.32	Above
Majuro 7° 04' N, 171° 17' E	Below	Below	Avg-above	Avg-above	Avg.	Below	Below	Avg.	30:40:30	108	34.94	Avg.
Guam and CNMI												
Guam 13° 29' N, 144° 48' E	Below	Below	Below	Below	Avg.	Below	Below	Below	50:30:20	97	19.33	Avg.
Saipan 15° 06' N, 145° 48' E	Below	Below	Below	Below	Avg-below	Below	Below	Below	45:30:25	93	12.71	Avg.
American Samoa												
Pago Pago 14° 20' S, 170° 43' W	Above	Below	Above	Above	Above	Above	Avg.	Above	30:30:40	156	34.78	Above
State of Hawaii												
19.7° - 21.0° N, 155.0° - 159.5° W												
Lihue	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Avg-below	35:35:30	114	5.00	Avg.
Honolulu	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Avg-below	35:35:30	498	4.98	Above
Kahului	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Avg-below	35:35:30	79	0.81	Avg.
Hilo	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Avg-below	35:35:30	87	18.47	Avg.
										8	Hit	
										6	Miss	
										Heidke:	0.3758	
										RPSS:	0.3402	

Tercile Cut-offs for Season based on 1991-2020 Pacific Rainfall Climatologies (Moore)

	Koror	Yap	Chuuk	Pohnpei	Guam	Saipan	Majuro	Kwaj
below (<)								
33.33%	36.75	28.42	32.16	43.82	17.31	11.70	26.86	19.85
near								
66.66%	50.8	41.19	41.44	55.76	25.7	16.41	36.36	27.79
above (>)								

	Lihue	Honolulu	Kahului	Hilo	Pago Pago	Kosrae
below (<)						
33.33%	3.66	0.56	0.41	16.04	17.77	42.52
near						
66.66%	5.12	1.46	1.65	25.01	26.87	56.94
above (>)						

6. Rainfall Outlook ASO– August, September, October

ASO Forecast	Rainfall	Probability	Final	Final
Location	Outlook	Pre-Conference	Outlook	Probability
Palau				
Airai 7° 22' N, 134° 32' E	Above	25:30:45	-	-
FSM				
Yap 9° 29' N, 138° 05' E	Avg-Above	30:35:35	-	-
Chuuk 7° 28' N, 151° 51' E	Avg.	30:40:30	-	-
Pohnpei 6° 59' N, 158° 12' E	Avg.	30:40:30	-	-
Kosrae 5° 21' N, 162° 57' E	Avg-Below	35:35:30	-	-
RMI				
Kwajalein 8° 43' N, 167° 44' E	Avg.	35:40:25	-	-
Majuro 7° 04' N, 171° 17' E	Avg-Above	30:35:35	Avg.	30:40:30
Guam and CNMI				
Guam 13° 29' N, 144° 48' E	Below	50:30:20	Avg-Below	35:35:30
Saipan 15° 06' N, 145° 48' E	Below	45:30:25	Avg-Below	35:35:30
American Samoa				
Pago Pago 14° 20' S, 170° 43' W	Above	25:35:40	-	-
State of Hawaii				
19.7° - 21.0' N, 155.0° - 159.5' W				
Lihue	Below	40:35:25	-	-
Honolulu	Below	40:35:25	-	-
Kahului	Below	40:35:25	-	-
Hilo	Below	40:35:25	-	-

Tercile Cut-offs for ASO Season based on 1991-2020 Pacific Rainfall Climatologies (Moore)

	Koror	Yap	Chuuk	Pohnpei	Guam	Saipan	Majuro	Kwaj
below (<)								
33.33%	32.33	33.74	34.44	37.86	35.45	26.34	31.93	27.08
near								
66.66%	43.28	50.47	45.76	46.87	50.84	39.64	40.99	36.55

above (>)

	Lihue	Honolulu	Kahului	Hilo	Pago Pago	Kosrae
below (<)						
33.33%	4.69	1	0.57	20.65	16.67	36.12
near						
66.66%	9.12	3.1	1.74	33	28.68	46.78

above (>)

3. Drought monitoring updates.

A. End-of-July Monthly Drought Assessment:

- i. With WxCoder III data, we have 23 stations in the monthly analysis.
- ii. July was dry (less than the 4- or 8-inch monthly minimum needed to meet most water needs) at Saipan (in the Marianas) and Jaluit & Wotje (in the Marshalls); it was wet everywhere else. July was drier than normal in the Marianas, American Samoa, Majuro (Marshalls), and Lukunor & Kapingamarangi (FSM); it was near to wetter than normal in Palau, at Kwajalein (Marshalls), and other parts of the FSM.
- iii. The end-of-July monthly analysis (July 31) is consistent with the weekly analyses for July 30 & August 6.
 - a. End-of-July drought conditions:
 1. Abnormal dryness (D0) continued at Saipan.
 2. D0 ended at Guam and Rota.
 3. Drought (D1 or D2) and abnormal dryness ended at Ulithi & Yap.
 4. No analysis could be made due to no data at Fananu, Pingelap, Mili, & Utirik.
 5. No analysis was made at Wotje due to questionable data.
 6. D-Nothing continued at all other locations.
 - b. Compared to the end-of-June monthly analysis:
 1. 1 station was in Dx -- 1 D0, none in D1, D2, D3, or D4 -- in July.
 2. 6 stations were in Dx -- 3 D0, 1 D1, 2 D2, none in D3 or D4 -- in June.
 - iii. Some July 2024 precipitation ranks:
 - a. **Saipan**: third driest July (in a 44-year record).
 - b. **Lukunor**: sixth driest July (40 years).
 - c. **Jaluit**: seventh driest July (41 years), sixth driest December-July & August-July.
 - d. **Kapingamarangi**: 11th driest July (35 years), sixth driest April-July & seventh driest June-July & May-July, but third wettest September-July & August-July.
 - e. **Ulithi**: 23rd driest (18th wettest) July (40 years), but seventh driest November-July.
 - f. **Yap**: seventh wettest July (74 years), but sixth driest December-July & November-July and fifth driest September-July.
 - g. **Majuro**: 13th driest July (71 years) and tenth driest September-July.
 - h. Some stations at the wet end of the scale:
 1. **Pago Pago** had the second wettest December-July (58 years).
 2. **Kapingamarangi** had the third wettest September-July & August-July (23 years).

Current (Weekly) Drought Conditions: The discussion above is the monthly (end of July) analysis. The latest weekly USAPI USDM assessment may show different USDM classifications. The latest weekly USAPI USDM assessment is for August 6 (https://droughtmonitor.unl.edu/data/png/20240806/20240806_usdm_pg2.png).

i. The August 6 map is the same as the July 31 map, except Kwajalein was missing.

C. July 2024 NCEI State of the Climate Drought Report: The July 2024 NCEI SotC Drought report will go online Tuesday next week, August 13.

i. The web page url for the July report will be:

a. <https://www.ncei.noaa.gov/access/monitoring/monthly-report/drought/202407#regional-usapi>