

NWS Climate Services June PEAC Audio Conference Call Summary





13 June, 1430 HST (14 June 2024, 0030 GMT)



May 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	May	Inches	inches	MAM
Airai	7.01	59	11.91	-4.90	87
Yap	6.03	72	8.34	-2.31	43
Chuuk	10.78	92	11.78	-1.00	79
Pohnpei	24.07	134	17.99	6.08	112
Kosrae	17.61	97	18.23	-0.62	82
Kwajalein	11.17	170	6.58	4.59	138
Majuro	15.17	142	10.70	4.47	94
Guam NAS	3.82	109	3.52	0.30	143
Saipan	1.26	41	3.10	-1.84	61
Pago Pago	20.37	191	10.69	9.68	130
Lihue	3.54	228	1.55	1.99	270
Honolulu	4.90	1195	0.41	4.49	258
Kahului	0.49	96	0.51	-0.02	91
Hilo	9.75	142	6.87	2.88	148

Reports from around the Region



Precipitation Summaries for HI can also be found:

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

<u>Kauai</u>

May rainfall totals were above average at most of the rain gages on Kaua'i. The U.S. Geological Survey's (USGS) rain gage on Mount Wai'ale'ale had the highest monthly total of 45.64 inches (148 percent of average), and the highest daily total of 6.18 inches on May 13. The Kalāheo and 'Ōma'o gages posted their highest May totals since 2011.

All of the gages on Kaua'i had near to above average rainfall for 2024 through the end of May. The Mount Wai'ale'ale rain gage had the highest year-to-date total of 174.13 inches (112 percent of average).

Oahu

Having taken the brunt of the rainfall from the weather systems affecting the state, nearly all of the rain gages across O'ahu had monthly totals more than double their May average. Several sites have monthly totals more than 6 times their May average. The USGS' Poamoho Rain Gage No. 1 had the highest monthly total of 40.11 inches (231 percent of average). This was the second highest May total at this site in a data record going back to 1967. The record May total at this gage is 41.08 inches in 2013. The Maunawili rain gage had the highest daily total of 10.18 inches on May 13. Many of the rain gages on O'ahu had their highest May totals in over 30 years. Honolulu Airport and Ewa Beach had their highest May totals since 1965 and 1977, respectively.

Nearly all of the gages on O'ahu had near to above average rainfall totals for 2024 through the end of May. The Poamoho Rain Gage No. 1 had the highest year-to-date total of 93.77 inches (99 percent of average).

Maui

Maui County once again had a wide range of rainfall conditions during the month of May. Most of the gages along the windward slopes had near to above average rainfall, and most of the leeward sites had below average rainfall. The USGS' rain gage at West Wailuaiki Stream had the highest monthly total of 17.07 inches (91 percent of average), and their rain gage on Pu'u Kukui had the highest daily total of 2.72 inches on May 3. The Kīhei 2 gage had its highest May total since 2002.

Most of the Maui County rainfall totals for 2024 through the end of May were near to above average. The Pu'u Kukui rain gage had the highest year-to-date total of 112.24 inches (69 percent of average).

Big Island

Big Island rainfall totals were near to above average at most of the rain gages. Honoka'a was a notable outlier at just 27 percent of average, but its May total of 1.78 inches was consistent with the lack of normal trade winds and CoCoRaHS network totals in the area. The USGS' rain gage at Honoli'i Stream had the highest monthly total of 32.75 inches (199 percent of average), and the highest daily total among the automated gages with 4.83 inches on May 12. The highest overall daily total was 6.19 inches on May 13 from the CoCoRaHS observer near Kurtistown. The Pāhala rain gage had its highest May total since 1965. Other notable totals came from Kamuela Upper and Kapāpala Ranch, which had their highest May totals since 1998 and 2002, respectively.

Rainfall totals for 2024 through the end of May were near to above average at most of the gages on the Big Island. Year -to-date totals from the Humu'ula Saddle/Pōhakuloa regions were lagging with most of these sites having totals in the below average range. The Honoli'i Stream rain gage had the highest year-to-date total of 100.83 inches (106 percent of average).

6. Rainfall Verification MAM- March, April, May (Josie)

The verification result of **MAM** rainfall forecasts was 5 hits and 9 misses (Heidke score: 0.3406).

Location	UKMO	ECMWF	CA	NASA	NCEP	IRI	APCC	Rainfall	Final		3 mo Verific	ation
								Outlook	Probs	% norm	Total (in)	Tercile
Palau												
Airai 7° 22' N, 134° 32' E	Below	Below	Avg.	Avg-above	Avg.	Avg-above	Below	Below	40:35:25	87	24.01	Below
FSM												
Yap 9° 29' N, 138° 05' E	Below	Below	Below	Avg-below	Avg-below	Below	Below	Below	50:30:20	43	8.50	Below
Chuuk 7° 28'N, 151° 51'E	Below	Below	Below	Avg.	Avg.	Below	Below	Below	45:30:25	79	26.46	Below
Pohnpei 6° 59'N, 158° 12'E	Below	Below	Below	Avg-above	Avg.	Below	Below	Below	45:30:25	112	57.45	Avg.
Kosrae 5° 21'N, 162° 57'E	Below	Below	Below	Above	Avg.	Avg-below	Below	Below	40:35:25	82	44.95	Below
RMI												
Kwajalein 8° 43'N, 167° 44'E	Avg-below	Below	Below	Above	Avg.	Below	Below	Below	45:30:25	138	19.97	Avg.
Majuro 7° 04' N, 171° 17'E	Avg-below	Below	Below	Above	Avg.	Below	Below	Below	45:30:25	94	26.68	Avg.
Guam and CNMI												
Guam 13° 29'N, 144° 48' E	Below	Below	Below	Avg-below	Avg-below	Below	Below	Below	50:30:20	143	12.61	Above
Saipan 15° 06'N, 145° 48' E	Below	Below	Below	Avg-below	Avg.	Below	Below	Below	45:30:25	61	4.59	Below
American Samoa												
Pago Pago 14° 20'S, 170° 43'W	Above	Below	Avg-above	Avg.	Avg.	Avg.	Below	Avg.	30:40:30	130	40.13	Above
State of Hawaii												
19.7° - 21.0' N, 155.0° - 159.5' W												
Lihue	Avg-below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	270	17.57	Above
Honolulu	Avg-below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	258	6.54	Above
Kahului	Avg-below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	91	3.08	Avg.
Hilo	Avg-below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	148	38.24	Above

10 Hit
4 Miss
Heidke: 0.3406
RPSS: -0.0647

Tercile Cut-offs for 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>
22.53	14.18	25.26	38.32	6.88	6.15	21.03	8.63
31.23	19.83	31.4	48.92	10.04	8.74	28.4	16.52

above (>)

	Lihue	<u>Honolulu</u>	<u>Kahului</u>	<u>Hilo</u>	Pago Pago	Kosrae
below (<)						
33.33%	5.78	1.88	3.25	24.59	32.29	45.07
near						
66.66%	9.92	4.7	6.41	45.54	36.83	52.02
above (>)						

6. Rainfall Outlook JJA– June, July, August

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

Tercile Cut-offs for JJA 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%	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	<u>Honolulu</u>	<u>Kahului</u>	<u>Hilo</u>	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 (>)						

Drought Monitoring Updates: (Richard Heim)

Drought monitoring updates.

- A. End-of-May Monthly Drought Assessment:
- i. With WxCoder III data, we have 23 stations in the monthly analysis.
- ii. May was dry (less than the 4- or 8-inch monthly minimum needed to meet most water needs) in the Marianas, northern Marshalls, western FSM, & Palau; it was wet in American Samoa, most of the Marshalls, and the southern, central & eastern FSM. May was drier than normal in Palau & parts of the Marianas and FSM; it was near to wetter than normal in the Marshalls, American Samoa, and other parts of the FSM and Marianas.
- iii. The end-of-May monthly analysis (May 31) is consistent with the weekly analyses for May 28 and June 4.

 a. End-of-May drought conditions:
- 1. D4 improved to D3 at Yap & Ulithi.
- 2. D4 improved to D1 at Wotje.
- 3. D3 developed at Rota.
- 4. D3 continued at Saipan.
- 5. D2 continued on Guam.
- 6. D2 improved to D1 at Woleai.
- 7. D1 improved to D0 at Kwajalein and to D-Nothing at Majuro.
- 8. D0 developed at Palau.
- 9. D0 ended at Chuuk & Ailinglaplap.
- 10. D-Nothing at all other locations.
- 11. Pingelap, Mili, Utirik, & Fananu were plotted as missing due to missing data for the month.
 - b. Compared to the end-of-April monthly analysis:
- 1. 9 stations were in Dx -- 2 D0, 2 D1, 1 D2, 4 D3, none in D4 -- in May.
- 2. 11 stations were in Dx -- 2 D0, 3 D1, 2 D2, 1 D3, 3 D4 -- in April.
- iii. Some May 2024 precipitation ranks:
 - a. **Saipan:** fourth driest May (in a 44-year record) and seventh driest January-May (year to date).
 - b. Nukuoro: fourth driest February-May (41 years), but only 14th driest May.
 - c. **Ulithi:** fourth driest March-May (40 years) and fifth driest November-May, but 21st driest (21st wettest) May.
 - d. **Kosrae:** eighth driest December-May (45 years), but 39th driest (17th wettest) May.
 - e. Woleai: eighth driest December-May (33 years), but 23rd driest (19th wettest) May.
 - f. **Yap:** fourth driest December-May (73 years) and fifth driest March-May, February-May, January-May, November-May, and September-May; 19th driest June-May (12-month period); but only 21st driest May.
 - g. **Jaluit:** fourth driest 12-month period June-May (38 years), but only 15th driest May.
 - h. **Majuro:** ninth driest June-May and July-May (70 years), but 57th driest (14th wettest) May.

- i. Some stations at the wet end of the scale:
- 1. **Pago Pago** had the fourth wettest May (59 years) and wettest December-May (6-month period).
- 2. **Pohnpei** had the 16th wettest May (73 years) and ninth wettest June-May (12-month period).
- <u>Current (Weekly) Drought Conditions</u>: The discussion above is the monthly (end of May) analysis. The latest weekly USAPI USDM assessment may show different USDM classifications. The latest weekly USA-PI USDM assessment is for June 11 (https://droughtmonitor.unl.edu/data/ png/20240611/20240611 usdm pg2.png).
- i. The June 11 map improved Palau to D-Nothing, Saipan to D2-S, and Guam to D1-S.
- C. <u>May 2024 NCEI State of the Climate Drought Report</u>: The May 2024 NCEI SotC Drought report went online today, June 13.
- The web page url for the April report is:
- a. https://www.ncei.noaa.gov/access/monitoring/monthly-report/drought/202405#regional-usapi