



NWS Climate Services

February PEAC Audio Conference Call Summary

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

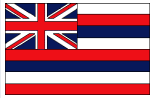


January rainfall totals reported

% 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	January	Inches	inches	NDJ
Airai	13.85	136	10.18	3.67	85
Yap	5.73	90	6.39	-0.66	68
Chuuk	10.05	100	10.10	-0.05	113
Pohnpei	6.65	50	13.18	-6.53	93
Kosrae	15.04	90	16.67	-1.63	96
Kwajalein	1.66	53	3.16	-1.50	127
Majuro	4.38	57	7.74	-3.36	79
Guam NAS	2.38	59	4.01	-1.63	85
Saipan	1.86	74	2.53	-0.67	128
Pago Pago	18.99	142	13.34	5.65	131
Lihue	2.60	117	2.22	0.38	131
Honolulu	2.64	230	1.15	1.49	148
Kahului	5.07	220	2.30	2.77	103
Hilo	3.21	36	8.87	-5.66	72

Reports from around the Region



Hawaii (Kevin Kodama)

Precipitation Summaries for HI can also be found:

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

Kauai

The lack of trade winds during January resulted in most of the normally “windward” gages along the north- and east-facing slopes recording below average monthly rainfall totals. Normally “leeward” gages on the south- and west-facing slopes had mostly above average rainfall totals. One consequence of the anomalous weather pattern is that Mount Wai‘ale‘ale, usually the wettest location on Kaua‘i for any given month, had less rainfall than several other gages on the island. The highest monthly rainfall total of 19.39 inches (164 percent of average) came from the U.S. Geological Survey’s (USGS) gage at Waiakoali on the upper west side of the island. This site also had the highest daily rainfall total of 4.62 inches on January 8. The gages at Hanapēpē and Kalāheo recorded their highest January totals since 2005 and 2013, respectively.

Oahu

Rain gages along the slopes of the Ko‘olau Range had mostly near to below average rainfall totals for the month of January. Gages along the slopes of the Wai‘anae Range had mostly near to above average totals. The Poamoho Experiment Farm gage had the highest monthly total of 19.72 inches (408 percent of average), and this was also the highest January total on record for this site. The USGS’ rain gage at Mākaha Stream had the highest daily total of 11.44 inches on January 8. Mākua Range had its highest January total since 2003. The Kahuku Training Area, Schofield Barracks, and Wheeler Army Airfield sites all had their highest January totals since 2004.

Maui

Most of the gages across Maui County had above average rainfall totals for the month of January. The USGS’ gage on Pu‘u Kukui had the highest monthly total of 26.75 inches (86 percent of average), and the highest daily total of 11.44 inches on January 16. Records for the highest January rainfall total were broken at Kula Branch Station, ‘Ulupalakua Ranch, and Kīhei 2. Gages at Kahului Airport, Lahainaluna, Māhinahina, Waikapū Country Club, and Wailuku posted their highest January totals since 2004.

Big Island

January rainfall totals from the northeast half of the island were mostly below average, while totals from the southwest half were mostly near to above average. This distribution of rainfall is not surprising due to the prevalence of kona winds during the month. The Pali 2 rain gage had the highest monthly total of 12.80 inches (122 percent of average), which was the highest January total at this site since 2004. The Pali 2 gage also had the highest daily total of 6.89 inches on January 9.

Current State of ENSO and predictions

Issued 8 February 2024

ENSO Alert System Status: [El Niño Advisory](#) / [La Niña Watch](#)

Synopsis: A transition from El Niño to ENSO-neutral is likely by April-June 2024 (79% chance), with increasing odds of La Niña developing in June-August 2024 (55% chance).

During January 2024, above-average sea surface temperatures (SST) continued across most of the equatorial Pacific Ocean. SST anomalies weakened slightly in the eastern and east-central Pacific, as indicated by the weekly Niño index values. However, changes were more pronounced below the surface of the equatorial Pacific Ocean, with area-averaged subsurface temperature anomalies returning to near zero. Although above-average temperatures persisted in the upper 100 meters of the equatorial Pacific, below-average temperatures were widespread at greater depths. Atmospheric anomalies across the tropical Pacific also weakened during January. Low-level winds were near average over the equatorial Pacific, while upper-level wind anomalies were easterly over the east-central Pacific. Convection remained slightly enhanced near the Date Line and was close to average around Indonesia. Collectively, the coupled ocean-atmosphere system reflected a weakening El Niño.

The most recent IRI plume indicates a transition to ENSO-neutral during spring 2024, with La Niña potentially developing during summer 2024. Even though forecasts made through the spring season tend to be less reliable, there is a historical tendency for La Niña to follow strong El Niño events. The forecast team is in agreement with the latest model guidance, with some uncertainty around the timing of transitions to ENSO-neutral and, following that, La Niña. Even as the current El Niño weakens, impacts on the United States could persist through April 2024 (see CPC seasonal outlooks for probabilities of temperature and precipitation). In summary, a transition from El Niño to ENSO-neutral is likely by April-June 2024 (79% chance), with increasing odds of La Niña developing in June-August 2024 (55% chance).

6. Rainfall Verification NDJ– November, December, January (Josie)

The verification result of NDJ rainfall forecasts was 4 hits and 10 misses (Heidke score: 0.1602).

November, December, January-NDJ 2023 Verification												
Updated 2/20/2024 NDJ												
Location	UKMO	ECMWF	CA	NASA	NCEP	IRI	APCC	Initial:		3 mo Verification		
								Rainfall Outlook	Final Probs	% norm	Total (in)	Tercile
Palau												
Airai 7° 22' N, 134° 32' E	Avg-below	Below	Avg-below	Avg-below	Avg-below	Avg-below	Below	Avg-below	35:35:30	85	30.96	Avg.
FSM												
Yap 9° 29' N, 138° 05' E	Avg-below	Below	Avg.	Avg.	Avg-below	Avg.	Below	Avg-below	35:35:30	68	16.21	Below
Chuuk 7° 28' N, 151° 51' E	Avg-below	Below	Avg-below	Avg-above	Below	Avg-below	Below	Below	40:35:25	113	36.20	Avg.
Pohnpei 6° 59' N, 158° 12' E	Avg-below	Below	Avg-below	Avg-above	Below	Avg-below	Below	Below	40:35:25	93	40.80	Avg.
Kosrae 5° 21' N, 162° 57' E	Avg-above	Above	Below	Above	Avg-below	Clim.	Avg.	Above	30:30:40	96	44.70	Avg.
RMI												
Kwajalein 8° 43' N, 167° 44' E	Avg-above	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	40:35:25	127	26.73	Above
Majuro 7° 04' N, 171° 17' E	Above	Below	Below	Above	Avg.	Avg-below	Above	Above	30:30:40	79	25.85	Below
Guam and CNMI												
Guam 13° 29' N, 144° 48' E	Avg-above	Below	Avg-below	Avg.	Avg.	Clim.	Below	Avg-below	35:35:30	85	14.05	Below
Saipan 15° 06' N, 145° 48' E	Above	Below	Avg-below	Avg-below	Avg.	Clim.	Below	Below	40:30:30	128	15.37	Avg.
American Samoa												
Pago Pago 14° 20' S, 170° 43' W	Avg.	Below	Avg-below	Avg-below	Avg-below	Clim.	Below	Avg-below	35:35:30	131	47.68	Above
State of Hawaii												
19.7° - 21.0° N, 155.0° - 159.5° W												
Lihue	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	131	11.72	Above
Honolulu	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	148	5.66	Avg.
Kahului	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	103	6.97	Avg.
Hilo	Below	Below	Avg-below	Avg-below	Avg.	Below	Below	Below	45:30:25	72	22.00	Below

4	Hit
10	Miss
Heidke:	0.1062
RPSS:	-0.0158

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

	Koror	Yap	Chuuk	Pohnpei	Guam	Saipan	Majuro	Kwaj
below (<)								
33.33%	29.21	21.82	30.16	38.94	14.88	11.78	32.31	21.12
near								
66.66%	38.94	28.08	36.49	47.32	21.97	16.53	36.56	25.30
above (>)								

	Lihue	Honolulu	Kahului	Hilo	Pago Pago	Kosrae
below (<)						
33.33%	8.57	3.89	5.16	26.44	32.98	44.1
near						
66.66%	16.95	8.76	9.46	42.99	47.68	55.78
above (>)						

6. Rainfall Outlook FMA– February, March, April

FMA Forecast Location	Rainfall Outlook	Probability Pre-Conference	Final Outlook	Final Probability
Palau				
Airai 7° 22' N, 134° 32' E	Below	45:30:25	-	-
FSM				
Yap 9° 29' N, 138° 05' E	Below	50:30:20	-	-
Chuuk 7° 28' N, 151° 51' E	Below	50:30:20	-	-
Pohnpei 6° 59' N, 158° 12' E	Below	50:30:20	-	-
Kosrae 5° 21' N, 162° 57' E	Below	50:30:20	-	-
RMI				
Kwajalein 8° 43' N, 167° 44' E	Below	50:30:20	-	-
Majuro 7° 04' N, 171° 17' E	Below	45:30:25	-	-
Guam and CNMI				
Guam 13° 29' N, 144° 48' E	Below	40:35:25	-	-
Saipan 15° 06' N, 145° 48' E	Below	40:35:25	-	-
American Samoa				
Pago Pago 14° 20' S, 170° 43' W	Avg-Above	30:35:35	-	-
State of Hawaii				
19.7° - 21.0' N, 155.0° - 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 FMA 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>Kwai</u>
below (<)								
33.33%	22.53	14.18	25.26	38.32	6.88	6.15	21.03	8.63
near								
66.66%	31.23	19.83	31.4	48.92	10.04	8.74	28.4	16.52

above (>)

	<u>Lihue</u>	<u>Honolulu</u>	<u>Kahului</u>	<u>Hilo</u>	<u>Pago Pago</u>	<u>Kosrae</u>
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 (>)

3. Drought monitoring updates.

A. End-of-January Monthly Drought Assessment:

- i. With WxCoder III data, we have 23 stations in the monthly analysis.
- ii. January was dry (less than the 4- or 8-inch monthly minimum needed to meet most water needs) in the Marianas and parts of the FSM (Yap, Ulithi, Woleai, Lukunor, Pohnpei, Pingelap) and Marshalls (Wotje, Kwajalein, Jaluit, Majuro); it was wet elsewhere in the FSM and Marshalls and in the Republic of Palau and American Samoa. January was drier than normal in the Marianas, Marshalls, and most of the FSM; it was wetter than normal in Palau and American Samoa and at Kapingamarangi (southern FSM).

The end-of-January monthly analysis (January 31) is consistent with the weekly analyses for January 30 and February 6.

End-of-January drought conditions:

D0 began in the Marianas (Guam, Rota, Saipan), Marshalls (Jaluit, Mili), and at Woleai.

D0 continued at Lukunor.

D0 ended at Nukuoro.

D0 worsened to D1 at Pingelap & Pohnpei.

D1 developed at Kwajalein & Majuro.

D1 continued at Wotje.

D1 worsened to D2 at Yap.

D2 continued at Ulithi.

D-Nothing at all other locations.

Utirik & Fananu were plotted as missing due to missing data for the month.

Compared to the end-of-December monthly analysis:

7 stations were D0, 5 were D1, and 2 were D2 in January.

4 stations were D0, 2 were D1, and 1 was D2 in December.

Some January 2024 precipitation ranks:

Pingelap: fifth driest January (in a 40-year record), second driest December-January & November-January, third driest May-January.

Kosrae: seventh driest December-January (49 years).

Ulithi: sixth driest December-January (39 years) and fifth driest November-January.

Yap: 28th driest January (73 years) but third driest September-January & seventh driest October-January and November-January.

Wotje: sixth wettest January (41 years), but seventh driest July-January.

Jaluit: 20th driest January (41 years), but fourth driest June-January back to March-January, and sixth driest 12-month period (February-January).

Pohnpei: 12th driest January (73 years) and sixth driest December-January.

Majuro: 13th driest January (70 years) and sixth driest July-January & May-January.

Some stations at the wet end of the scale:

Kapingamarangi had the fourth wettest January (34 years) and wettest September-January and July-January back to February-January.

Guam had the second wettest May-January and April-January (67 years) but 12th driest January.

Mili had the second wettest July-January back through April-January and February-January (35 years).

B. Current (Weekly) Drought Conditions: The discussion above is the monthly (end of January) analysis. The latest weekly USAPI USDM assessment may show different USDM classifications. The latest weekly USAPI USDM assessment is for February 6 (https://droughtmonitor.unl.edu/data/png/20240206/20240206_usapi_text.png).

The February 6 weekly analysis has the following changes compared to the end of January: the Marianas worsened to D1, but Majuro improved to D0 and Jaluit to D-Nothing.

C. January 2024 NCEI State of the Climate Drought Report: The January 2024 NCEI SotC Drought report will go online next week.

The web page url for the January report will be:

<https://www.ncei.noaa.gov/access/monitoring/monthly-report/drought/202401#regional-usapi>