

National Oceanic and Atmospheric Administration

U.S. Department of Commerce

2023 Hurricane Season Summary for the Central Pacific Basin

The 2023 hurricane season featured four tropical cyclones in the Central Pacific Hurricane Center (CPHC) area of responsibility. Four to five tropical cyclones occur during an average year. Hurricane season runs from June 1 to November 30. The central Pacific basin extends from 140°W to the International Date Line.

Tropical Storm Calvin was the first tropical cyclone of the season in the central Pacific, moving into the basin from the east on July 17. Calvin prompted a Tropical Storm Warning for Hawaii County and passed within 80 miles of South Point, Big Island on July 19.

Hurricane Dora was the first major hurricane in the central Pacific basin since 2020. Dora moved into the basin on August 6 as a category 4 hurricane and maintained its strength as it passed over 500 miles south of the state at its closest point on August 8. Dora then passed over 300 miles south of Johnston Island on August 10 and crossed the International Date Line into the western Pacific basin on August 12 as a category 2 hurricane. This makes Dora the second tropical cyclone on record to maintain hurricane strength through the eastern, central, and western Pacific basins, the other being Hurricane John in 1994.

Tropical Storm Greg moved into the basin from the east on August 14 and tracked westward, weakening to a remnant low on August 17 about 500 miles south of the Big Island.

Tropical Depression Twelve-E was declared a remnant low shortly after crossing into the central Pacific basin on September 16. Thunderstorms continued to pulse near the low, prompting CPHC to extend the duration of T. D. Twelve-E through September 18 in the postseason reanalysis.

Note: these are preliminary values and the dates provided are Universal Coordinated Time (UTC), which is 10 hours ahead of Hawai'i Standard Time.

Impacts to the State of Hawai'i: Damaging winds and dry air across the state on August 7-8 were a result of a strong gradient and sinking air between high pressure to the north and Hurricane Dora far to the south. The winds contributed to the destructive, fast-moving wildfires on August 8 that destroyed the town of Lahaina, Maui and killed at least 100 people, making it the deadliest wildfire in US history in more than a century.

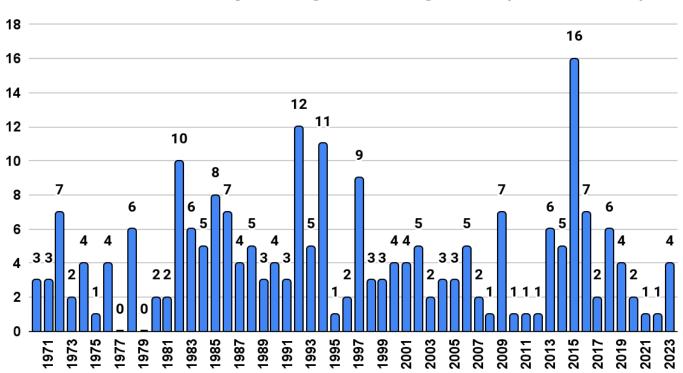
Heavy rain from Tropical Storm Calvin caused flash flooding that closed several roads across Hawaii County on July 19.

Hurricane Season Outlook: NOAA's <u>2023 central Pacific hurricane season outlook</u>, issued on May 25, 2023, called for four to seven tropical cyclones in the central Pacific basin, with a 50% chance of an above normal season, a 35% chance of a near-normal season, and a 15% chance of a below normal season. The 2023 season started with ENSO-neutral conditions in the equatorial Pacific that were expected to quickly transition to El Niño conditions and continue through the summer.

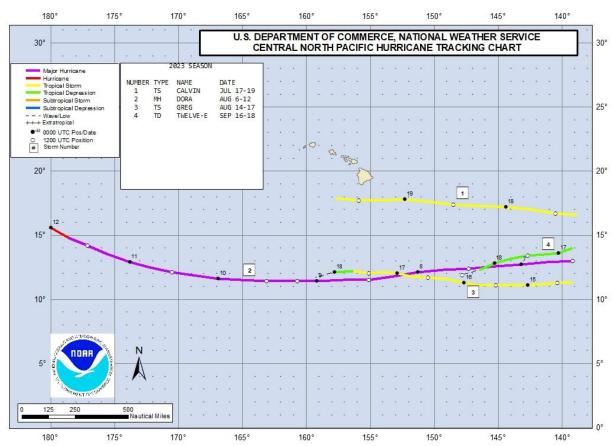
The following table outlines tropical cyclone names and highest classification, life cycle dates, and maximum sustained wind speeds while in the central Pacific basin. *Please note that these are preliminary values and may change following the post-season review for the official Tropical Cyclone Reports.*

Name	Dates (UTC)	Max Wind (mph)
Tropical Storm Calvin	July 17-19	60
Major Hurricane Dora	August 6-12	140
Tropical Storm Greg	August 14-17	50
Tropical Depression Twelve-E	September 16-18	35

Annual Comparisons (including out of season tropical cyclones):



Central Pacific Tropical Cyclones By Year (1970 - 2023)



2023 Hurricane Season Tropical Cyclone Track Map (Preliminary):

Additional graphics from social media:

NWS Honolulu Facebook - <u>https://www.facebook.com/NWSHonolulu</u> NWS Honolulu Instagram - <u>https://www.instagram.com/NWSHonolulu</u> NWS Honolulu Twitter - <u>https://www.twitter.com/NWSHonolulu</u> NWS Honolulu YouTube - <u>https://www.youtube.com/NWSHonolulu</u>

Other useful web links:

NOAA Central Pacific Hurricane Center - <u>https://www.hurricanes.gov/cphc</u> NOAA National Weather Service Forecast Office Honolulu - <u>https://www.weather.gov/hawaii</u> CPHC Tropical Cyclone Product Archive - <u>https://www.hurricanes.gov/archive/2023/</u> CPHC Tropical Cyclone Reports - <u>https://www.hurricanes.gov/data/tcr/?basin=cpac</u> Central Pacific Hurricane Season Outlook for 2023 -<u>https://www.noaa.gov/news-release/noaa-predicts-near-or-above-normal-2023-central-pacific-h</u> <u>urricane-season</u>

NOAA Atlantic Hurricane Season Summary for 2023 -

https://www.noaa.gov/news-release/2023-atlantic-hurricane-season-ranks-4th-for-most-named-s torms-in-year