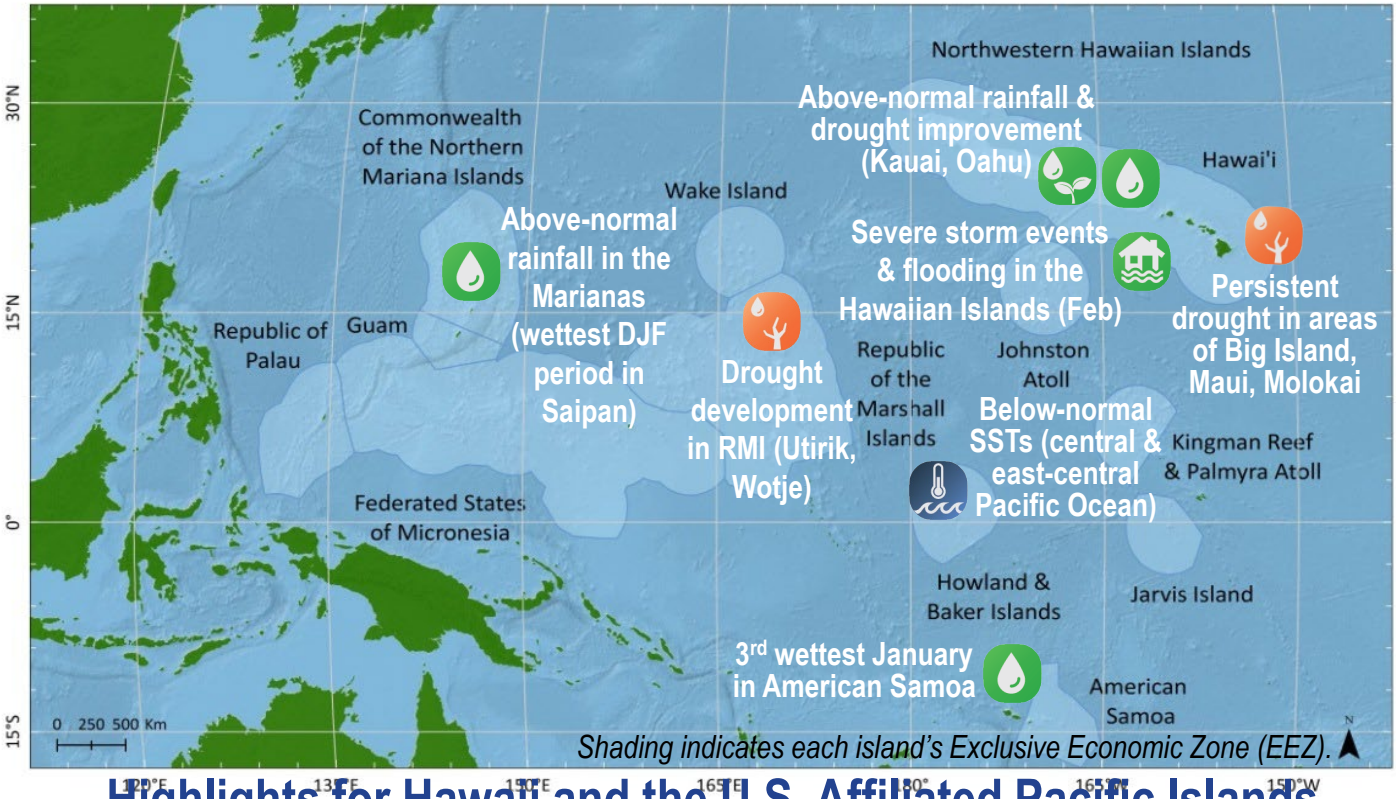
Significant Events – *For December 2025–February 2026*

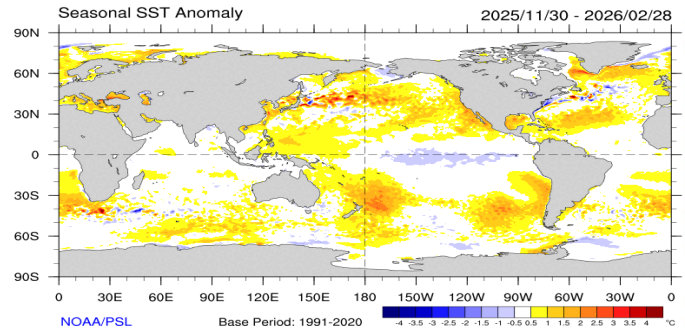


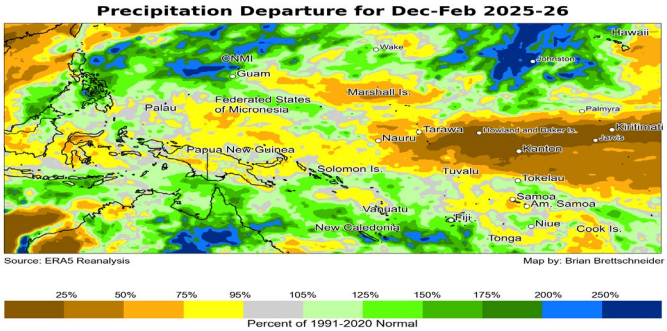
Highlights for Hawaii and the U.S. Affiliated Pacific Islands

- During the December-February period (DJF), La Niña conditions (Relative Oceanic Niño Index [RONI] = -0.9ºC for DJF) were present, with below-normal sea surface temperatures (SSTs) across the east-central equatorial Pacific Ocean. Currently, a La Niña Advisory/El Niño Watch is in effect and a transition from La Niña to El Niño–Southern Oscillation (ENSO)-neutral is expected in the next month, with ENSO-neutral expected to persist through May-July 2026 (55% chance). In June-August, El Niño is likely to emerge (62% chance) and persist through at least the end of 2026, according to the latest (3/12/26) ENSO Diagnostic Discussion update by NOAA Climate Prediction Center (CPC).
- For the DJF period, above-normal precipitation was observed across areas of the U.S. Affiliated Pacific Islands (USAPI) including the Commonwealth of the Northern Mariana Islands (CNMI), Guam, and areas of the Federated States of Micronesia (FSM). In American Samoa, rainfall was near normal for DJF, while below-normal levels were observed across much of the Republic of the Marshall Islands (RMI), southern FSM (Kapingamarangi), and Palau. In the Hawaiian Islands, conditions were mixed during DJF with drier-than-normal conditions observed in areas of the Big Island (Kona), Maui (Kahului), and Molokai (western), while above-normal precipitation prevailed in Oahu (Honolulu) and Kauai (Lihue).
- Two significant severe weather events impacted areas of the Hawaiian Islands during February. The first storm (Feb 7-10) delivered heavy rainfall accumulations (up to 25 inches) across the island chain leading to flash flooding and landslides as well as terrain-enhanced damaging wind gusts. The second storm (Feb 20-22) impacted the windward side of Oahu with intense, heavy rainfall (24-hr totals ranging from 6 to 25 inches), flash flooding, evacuations, and damage to infrastructure.

Lead Author: David Simeral (david.simeral@dri.edu)
Additional contact: Brandon Bukunt (brandon.bukunt@noaa.gov)

Climate Overview – *For December 2025–February 2026*





Seasonal sea surface temperature anomaly map for 11/30/25 to 2/28/26 (left) and 3-month seasonal precipitation departures from normal for the December 2025–February 2026 period for the central and western tropical Pacific Ocean with warmer colors representing drier-than-normal conditions and cooler colors wetter-than-normal conditions (right).
Source: NOAA Physical Sciences Laboratory (left); ERA5 Reanalysis, B. Brettschneider, National Weather Service (right).

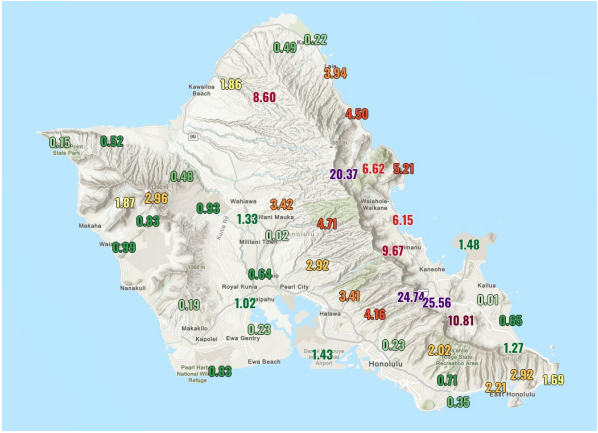
By the end of the DJF period, atmospheric anomalies over the tropical Pacific Ocean were consistent with La Niña and below normal SSTs were observed in the east-central (Niño 3.4) tropical Pacific Ocean with a gradual weakening occurring across most of the equatorial Pacific starting in early January 2026. In the far eastern equatorial Pacific (Niño 1+2), above-average SSTs emerged during February 2026. In the tropical western Pacific Ocean (Niño 4), SSTs were near to slightly below normal. According to the latest NOAA CPC ENSO: Recent Evolution, Current Status and Predictions update (3/9/26), Niño region SST departures were as follows: Niño 3.4 at -0.5ºC, Niño 3 at -0.3ºC, Niño 1+2 at 0.6ºC, and Niño 4 at -0.2ºC.

By February 2026, above-normal sea levels (~+5 to +15 cm anomalies) were observed across much of the equatorial central Pacific from the International Date Line (IDL) to 150ºW in proximity (within +/- 5º) of the equator. Across the western tropical Pacific, sea levels were primarily above normal (~+5 to +15 cm anomalies), including areas near Palau and across much of western Micronesia, with localized stronger anomalies approaching +20 cm east of Palau. Elevated sea levels were also observed in areas around the Hawaiian Islands (~+5 to +15 cm anomalies). In the equatorial eastern Pacific, above-normal sea levels (~+5 to +10 cm anomalies) were observed from roughly ~150ºW eastward, interspersed with areas of near-normal conditions and pockets of below-normal anomalies north of the equator, according to satellite altimetry observations from the Copernicus Marine Environment Monitoring Service (CMEMS).

During the DJF period, the USAPI region observed drought-free conditions, except for moderate-to-severe drought in Kapingamarangi (FSM), according to the U.S. Drought Monitor. For DJF precipitation totals, Airai (Palau) recorded 30.67 in. (90% of normal). In FSM, Yap observed 23.22 in. (106% of normal), Kapingamarangi 32.44 in. (81% of normal), Pohnpei 43.24 in. (108% of normal), Lukunor 24.91 in. (77% of normal), Kosrae 58.76 in. (109% of normal), and Chuuk 30.66 in. (103% of normal). In the Mariana Islands, Saipan observed 22.33 in. (220% of normal; wettest DJF on record), and Guam 21.93 in. (146% of normal; 7th wettest). In the RMI, Majuro observed 24.91 in. (88% of normal), while Kwajalein logged 14.88 in. (95% of normal). In Pago Pago, American Samoa, precipitation for DJF was slightly above normal (41.83 in., 104% of normal; 3rd wettest January [27.92 in.]; 5th driest February on record [6.01 in.]). In the Hawaiian Islands, conditions were mixed during DJF with drier-than-normal conditions observed in areas of the Big Island (Kona), Maui (Kahului), and Molokai (western), while wet conditions prevailed in Oahu (Honolulu) and Kauai (Lihue). In areas of Molokai, Lanai, Kahoolawe, Maui, and the Big Island, drought persisted during DJF with the most severe conditions (D3) observed in central Maui and the Hamakua District of the Big Island by late February, according to the U.S. Drought Monitor. For the DJF period, Lihue observed 15.52 in. (140% of normal), Honolulu 8.58 in. (144% of normal; 12th wettest December on record), Molokai 4.26 in. (49% of normal), Kahului 4.42 in. (61% of normal), Kailua-Kona 2.8 in. (78% of normal), and Hilo 29.8 in. (99% of normal; 12th wettest February).

Lead Author: David Simeral (david.simeral@dri.edu)
Additional contact: Brandon Bukunt (brandon.bukunt@noaa.gov)

Sectoral Impacts – *For December 2025–February 2026*

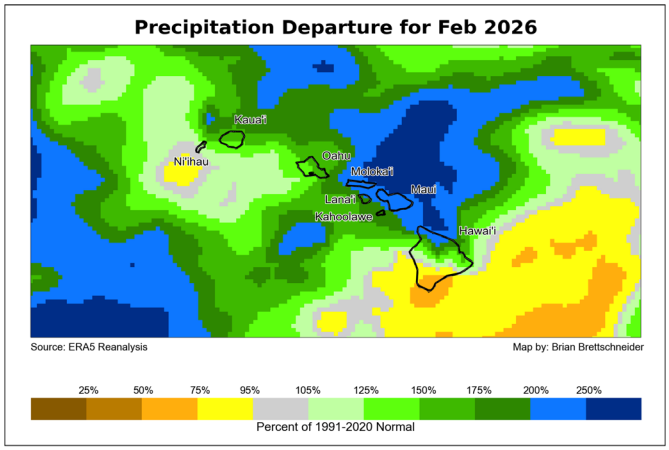


Multi-day rainfall accumulations associated with a severe storm event impacting the windward side of Oahu in late February 2026 (2/20-2/22).
Source: National Weather Service, Synoptic.

Landslide in association with heavy rains and saturated soils along Hana Highway between Kaumahina State Wayside Park and Keanae Peninsula in Maui (2/9/26).
Source: Hawaii Department of Transportation.

Wind damage including downed power lines and trees in Maui (2/9/26).
Source: Maui County, Hawaii.

Facilities and Infrastructure – In the Hawaiian Islands, Governor Green issued emergency proclamations related to two severe weather events occurring during Feb 2026. The first event (2/7-2/10), a stalled cold front brought heavy rains and damaging high winds (gust over 70 mph on Maui and Molokai), impacted areas across the island chain with flash flooding, road closures, and damage to infrastructure. The second event, associated with a short-wave trough combined with orographic lift from the Koolau Mountain Range, led to a nearly stationary band of heavy rain and thunderstorms parked over the range on the 21st with rainfall rates of 2 to 4 inches per hour and brief periods of over 6 inches per hour leading to severe flash flooding on both the windward and leeward sides of the range. The most severe flooding occurred in the Kaneohe, Waiāhole-Waikāne, and North Shore areas, according to the NWS Forecast Office Honolulu.



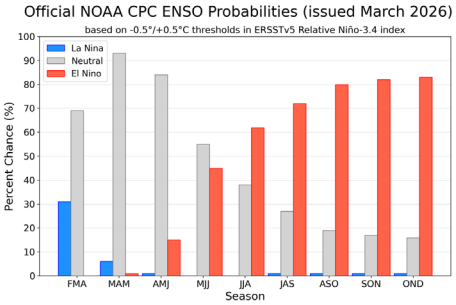
February 2026 departure from normal precipitation across the Hawaiian Islands.
Source: ERA5 Reanalysis, B. Brettschneider, NWS.

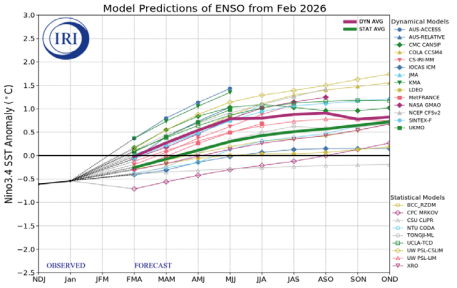
Heat – In the tropical western Pacific, above-normal air temperatures were observed during the Dec 2025-Feb 2026 period in areas of the region. The greatest anomalies were observed in areas including Palau, western FSM, Guam, and CNMI, according to satellite-based observations from ERA5 Reanalysis. Numerous daily maximum temperature records were broken during DJF including at Airai (Palau); Guam Intl. Airport (Guam); and Rota Airport (CNMI), according to observational data from the NOAA Regional Climate Centers' Applied Climate Information System.

Water Resources – In Majuro (RMI), reservoir storage reached 80% of total capacity (47,400,000 gallons) on 2/28/26.

Lead Author: David Simeral (david.simeral@dri.edu)
Additional contact: Brandon Bukunt (brandon.bukunt@noaa.gov)

Seasonal Outlook – *For March–May 2026*

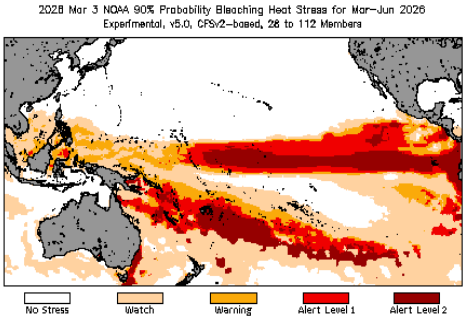


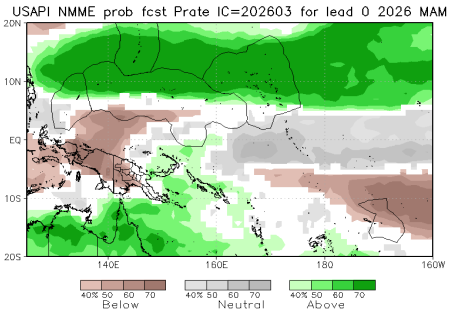


Forecast for each of the three possible ENSO categories for the next 8 overlapping 3-month seasons. Blue bars show the chances of La Niña, gray bars the chances for neutral, and red bars the chances for El Niño (left); and ENSO forecast model predictions (right).
Source: NOAA CPC (left); Columbia IRI (right).

According to the latest NOAA CPC ENSO Diagnostic Discussion (3/12/26), a La Niña Advisory/El Niño Watch is in effect with a transition from La Niña to ENSO-neutral expected in the next month, with ENSO-neutral favored during the May-July 2026 (55% chance) period. In June-August 2026, El Niño is expected to emerge (62% chance) and persist through at least the end of 2026.

The NOAA Coral Reef Watch four-month coral bleaching heat stress outlook (Mar-Jun 2026; below left) calls for a high probability (90%) of high heat stress (Alert Level 1-2) developing in the equatorial eastern and central Pacific Ocean as well as in the Gilbert Islands, while a high heat stress watch/warning is forecasted for areas of USAPI including southern RMI, FSM, Palau, and American Samoa.





NOAA Coral Reef Watch 90% probability coral reef heat stress outlook for March-June 2026 (left); and NOAA North American Multi-Model Ensemble (NMME) USAPI seasonal precipitation forecast for March-May 2026 (right).
Source: NOAA NESDIS (left); NOAA CPC (right).

For the Mar-May 2026 precipitation forecast, above-normal rainfall is favored for Palau (northern), Guam, CNMI, FSM (northern), most of RMI, and the Hawaiian Islands. Elsewhere, near-normal conditions are expected in central and southern FSM, and Tutuila Island in American Samoa, while below-normal precipitation is expected for areas of Palau (southern) FSM (southwestern), and Manua Islands of eastern American Samoa, according to the NOAA NMME forecast and NOAA CPC Long-Lead Hawaiian Islands Seasonal Forecast Discussion.

Regional Partners

NOAA Coral Reef Watch:
https://coralreefwatch.noaa.gov/

NOAA National Centers for Environmental Information:
https://www.ncei.noaa.gov/

NOAA NMFS Pacific Island Fisheries Science Center:
https://www.fisheries.noaa.gov/about/pacific-islands-fisheries-science-center

NOAA NWS Weather Forecast Offices Honolulu, Guam, & Pago Pago:
https://www.weather.gov/hfo/
https://www.weather.gov/gum/
https://www.weather.gov/ppg/

NOAA OceanWatch - Central Pacific Node:
https://oceanwatch.pifsc.noaa.gov/index.html

NPS Pacific Island Inventory & Monitoring Network:
https://www.nps.gov/im/pacn/index.htm

University of Guam - Water and Environmental Research Institute:
https://weri.uog.edu/

University of Hawaii - Asia Pacific Data Research Center (APDRC):
https://apdrc.soest.hawaii.edu/

University of Hawaii – Cooperative Institute for Marine & Atmospheric Research:
https://www.soest.hawaii.edu/jimar/index.htm

University of Hawaii - Sea Level Center:
https://uhslc.soest.hawaii.edu/

USGS Science Center - Pacific Coastal and Marine Science Center:
https://www.usgs.gov/pacific-coastal-and-marine-science-center

USGS Pacific Islands Water Science Center:
https://www.usgs.gov/centers/pacific-islands-water-science-center

Western Regional Climate Center:
https://wrcc.dri.edu/

Lead Author: David Simeral (david.simeral@dri.edu)
Additional contact: Brandon Bukunt (brandon.bukunt@noaa.gov)