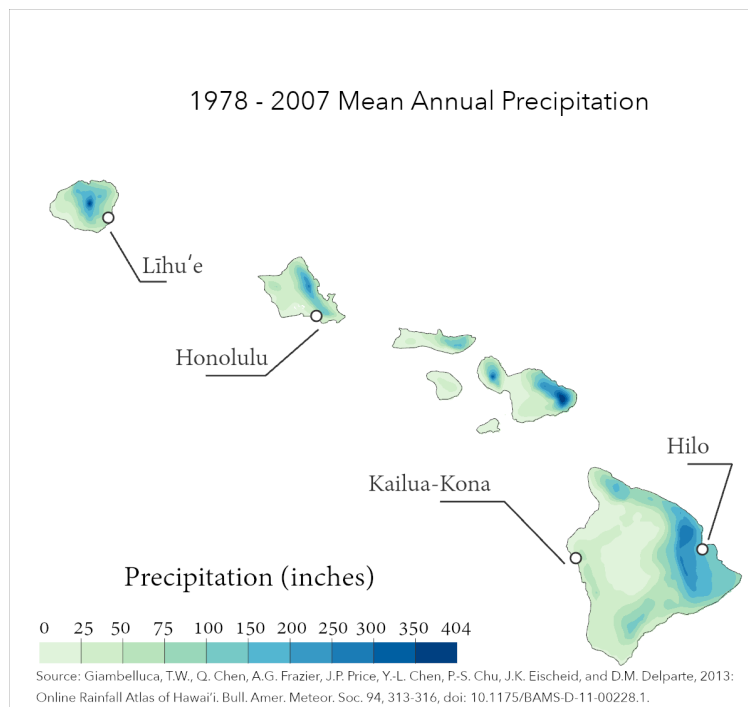


Regional Background

Hawai'i is known for having an enjoyable climate throughout the year. Most of the state experiences only summer and winter seasons, with winter significantly wetter than summer. Hawai'i is climatologically diverse, boasting 11 climate classifications, ranging from arid to humid tropical. Rainfall is heavily influenced by the location on an island: the Eastern (or windward) side is typically cooler and wetter, while the Western (or leeward) side is warmer and drier. Mean annual precipitation for Hawai'i ranges from 8 to 404 inches a year, and the average annual temperature ranges from 38.5 to 75 degrees Fahrenheit. Daily and annual temperatures vary depending on elevation.

Reporting Reminders

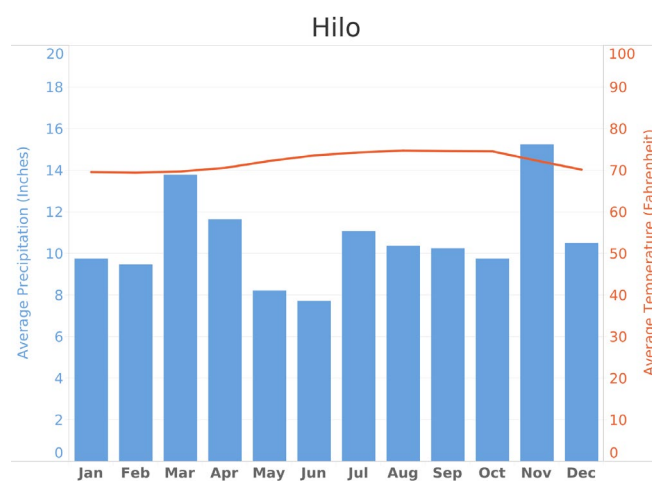
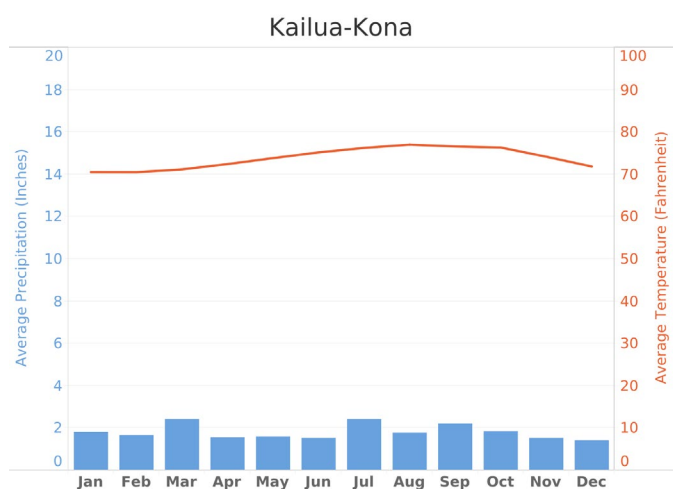
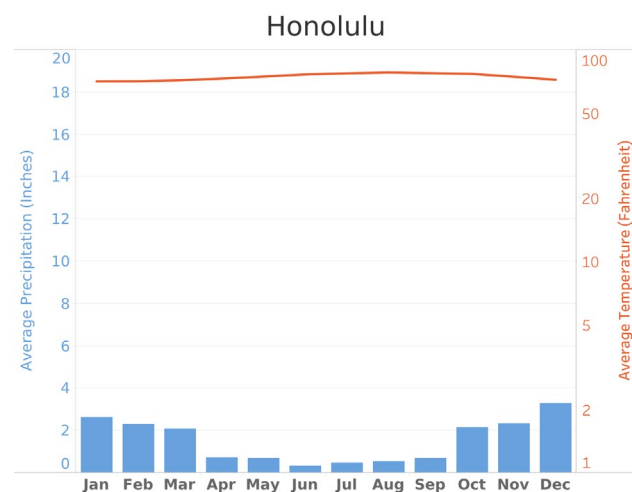
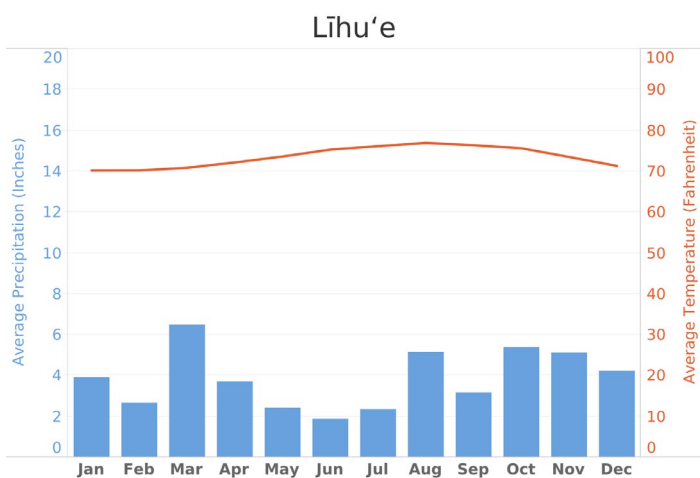
- Use “Severe” categories sparingly: overuse of these labels can make it hard for researchers to identify the hardest hit areas.
- Sometimes, minor events may still have major human impacts, or vice versa. Don't worry if your precipitation measurements seem to conflict with the severity reflected in your reports: differentiating between magnitude and human impact is valuable to researchers and decision makers!
- Droughts do not end instantly. Rain after long droughts may mean *less dry* conditions, but not necessarily a reset to “Near Normal” conditions. Think *long term*.
- In addition to rain measurements, notes on a storm's duration, power outages, road closures, and other such impacts are helpful to include.
- It is crucial to consider what “normal” means for your area. Eastern and Western sides of the island likely report significantly different normal conditions.



Average Monthly Climate Data

These sample climate charts, created with data from the Climate Atlas of Hawai'i, represent normal monthly precipitation and temperature in your region. Pick a city near you and use the data below as a baseline for your “near normal” conditions. Explore these resources for other climate and drought data:

- [Climate Atlas of Hawai'i](#)
- [U.S. Drought Monitor - Hawai'i](#)
- [NOAA National Centers for Environmental Information](#)
- [NOAA Western Regional Climate Center – Hawai'i Narrative](#)



What to Look For

The following tables provide examples of the types of conditions you might observe during different wet or dry periods. **These lists are designed as an aid.** The first table shows the condition monitoring scale bar categories and the types of conditions that correspond to those categories. The second table organizes different types of conditions and impacts by sectors and areas of interest. Be sure to note any other observations that you think may relate to dry or wet conditions.

SEVERELY WET	MODERATELY WET	MILDLY WET	NEAR NORMAL	MILDLY DRY	MODERATELY DRY	SEVERELY DRY
<ul style="list-style-type: none"> • Use this category sparingly • Wet conditions have persisted for several weeks • Major flooding • Soil is saturated 	<ul style="list-style-type: none"> • Wet conditions have persisted for a few weeks, or there has been a major rainfall event • Standing water and minor flooding • Soil is very damp 	<ul style="list-style-type: none"> • Frequent precipitation for several days • Standing water is common • Soil moisture is above normal 	<ul style="list-style-type: none"> • Observed conditions normal for this time of year • This should be your default entry 	<ul style="list-style-type: none"> • Dry conditions have persisted for a few weeks • Soil is somewhat dry 	<ul style="list-style-type: none"> • Dry conditions have persisted for several weeks • Lakes and rivers are low • Water use restrictions start • Soil is very dry 	<ul style="list-style-type: none"> • Use this category sparingly • Dry conditions have persisted for months • Soil is completely dry • Water is scarce • State of Emergency

WET

DRY

Agriculture

Crops and grazing pastures will likely be green and in healthy conditions. Even with moderately wet conditions, need for irrigation may drop off noticeably. Oversaturated soil could result in runoff, making agricultural products such as fertilizer less effective. Moisture dependent commodities such as macadamia and coffee will likely experience larger yields during the growing season.

Without enough water, crops may develop late, show stunted growth, or yield smaller harvests. Irrigation systems in the interior may be strained. The ranching industry may experience widespread (and costly) livestock loss if the conditions are prolonged and severe. Macadamia and coffee can potentially see severe and costly impacts.

Business

Rainy and muddy conditions may delay construction and infrastructure projects. Flooding may result in school closures or lost work hours, particularly in rural areas where alternative routes may not be available.

Landscaping and similar businesses are likely to lose revenue as urban areas are pressured to reduce their water consumption. Diminished water supply and quality may negatively affect aquaculture operations.

Energy

Periods of heavy rain may create the risk of power outages due to wind or falling tree limbs.

Hawaii is among the five states with the lowest total energy use due to its mild climate, permitting lower energy use than states with harsher environments. Utility bills may increase due to industry strain, but solar power, which makes up over 50% of the state's power, may see increased outputs.

Fire

Expect fire danger declarations to be at or near minimum levels. Fire crews will often wait for wet conditions to perform prescribed burns to minimize the danger of unwanted spreading.

Wildfires will be larger and more common, as reflected by increases in Fire Danger ratings from the U.S. Forest Service. Drought conditions both heighten the risk of wildfire ignition and promote fast spreading of ignited fires due to lack of moisture. Wildfires can be especially dangerous with strong wind, which occurs frequently on the Hawaiian Islands.

Plants & Wildlife

Rainy seasons may improve conditions for native plants and wildlife to flourish. Regions that experience wetter conditions will appear more green, lush, and healthy, and will most likely be light limited. Wildlife, such as bird populations, may be more active in wet conditions.

Ecosystems will struggle under dry conditions. Many native plant and wildlife species struggle under drought conditions, making room for invasive species to take control of the drought-stricken regions.

Relief & Response

Restrictions on water use and outdoor burning are likely to be lifted or relaxed as weather shifts from dry to wet. Road safety measures are possible on routes likely to be affected by fog, flooding, or landslides.

Governments and other agencies may issue statements encouraging voluntary conservation of water and energy. These will often become mandatory if drought worsens. Regulations on outdoor burning and the use of fireworks are common, even at low levels of drought.

Safety & Health

Heavy, saturated soil creates a risk of landslides and flooding in the region. Pooling water can cause increases in mosquito populations following wet periods, which can lead to mosquito-borne disease outbreaks such as dengue fever.

The drying of streams and wetlands may increase the presence of stagnant water and contribute to higher mosquito levels. Pollen and diminished air quality may exacerbate allergies and asthma symptoms. Smoke from wildfires may diminish air quality. Wildfires may require evacuations or damage homes and businesses.

Tourism & Recreation

Relatively wet seasons may often work to the benefit of specific recreational activities, such as viewing waterfalls. While many regions of Hawaii are characterized by frequent rain, extended wet periods may discourage hiking, camping, and other outdoor activities.

Dry conditions may cause a hazy dust in the air, which can decrease outdoor recreation and tourism. Mild drought conditions will do little to affect the tourism industry, as a large portion of the island chain's infrastructure tailors to the tourism industry.

Water

Rivers and reservoirs may be at normal or above normal levels. While conserving water is always suggested, restrictions won't be announced during wet conditions.

In severe drought conditions, water shortages are common and water restrictions will likely be imposed. Water quality will typically decrease due to increased temperature and decreased volume.