



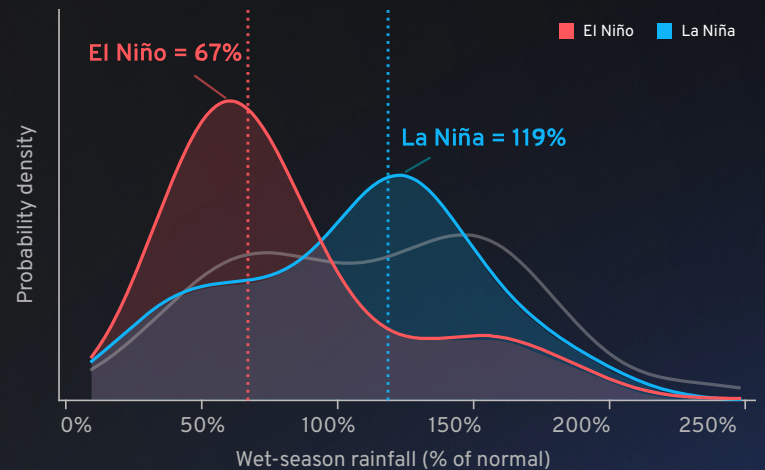
The El Niño-Southern Oscillation (ENSO) is a cycle of warming (El Niño) and cooling (La Niña) in the tropical Pacific. It shifts atmospheric circulation patterns, altering the likelihood and severity of various natural catastrophes in the Pacific and beyond.

EL NIÑO WINTERS TEND TO BE DRIER

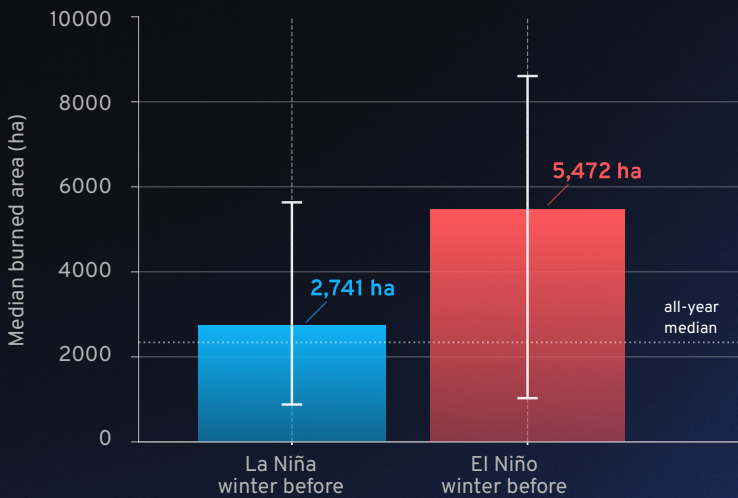
- During El Niño, the storm track that normally delivers Hawaii's winter rain shifts away from the islands, leaving them under drier, sinking air
- Wet seasons are on average 20% drier than normal during El Niño years
- El Niño shifts the odds towards a drier winter but does not determine how wet any individual season will be

Data: NOAA

WET SEASON (OCT-APR) RAINFALL 1951-2024



MEDIAN BURNED AREA FOR LA NIÑA AND EL NIÑO YEARS (1951-2024)

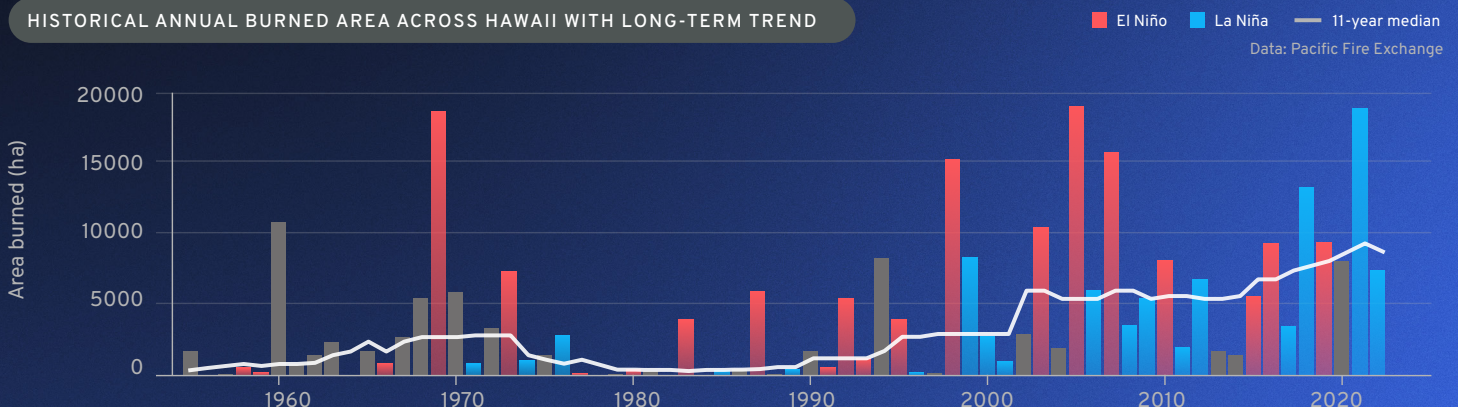


EL NIÑO WINTERS LEAVE A DRIER LANDSCAPE FOR THE NEXT WILDFIRE SEASON

- The rainfall deficit can lead to drier ground conditions during the following spring and summer
- Fire seasons following an El Niño winter burn roughly twice the area of those following a La Niña winter
- A long-term upward trend in burned area complicates the ENSO signal: associated with unmanaged invasive grasses on abandoned plantation land and climate change

Data: Pacific Fire Exchange

HISTORICAL ANNUAL BURNED AREA ACROSS HAWAII WITH LONG-TERM TREND



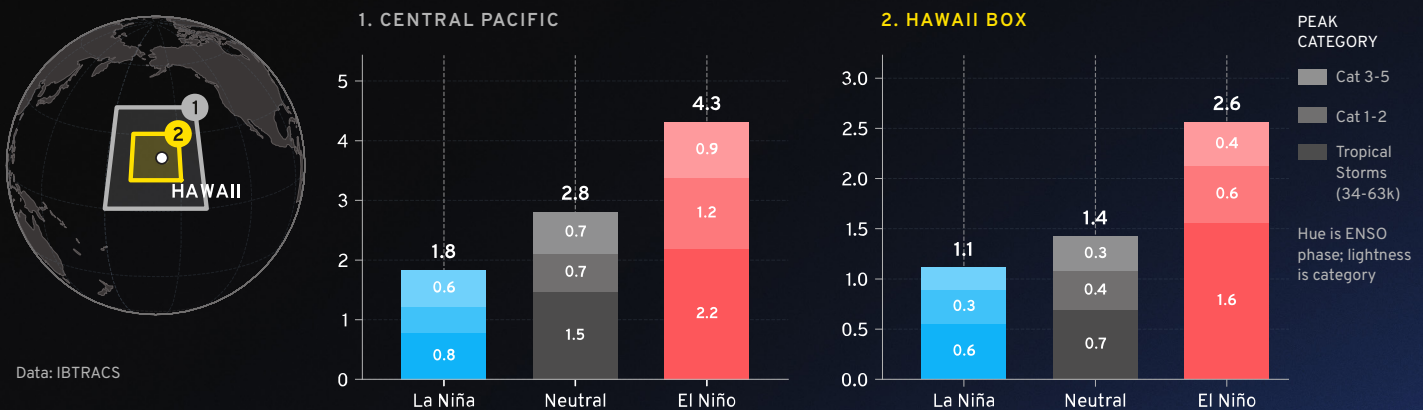
INCREASED CYCLONE RISK DURING EL NIÑO YEARS

- During El Niño conditions, warm central-Pacific water and more favourable atmospheric conditions increase the number of storms in the Central Pacific
- Hawaii is a small target and landfall remains unpredictable. What El Niño changes is the number of storms on average in the region
- Storms passing near Hawaii average 2.6 per season under El Niño, against 1.4 neutral and 1.1 La Niña

TROPICAL CYCLONES HAVE BEEN LINKED TO RECENT WILDFIRES ACROSS HAWAII

- Strong winds associated with cyclones (e.g. Lane in 2018) preceded destructive wildfires in Maui
- El Niño increases the number of these storms in the region, potentially increasing the risk of powerful winds that can ignite (by damaging power lines) and spread wildfires

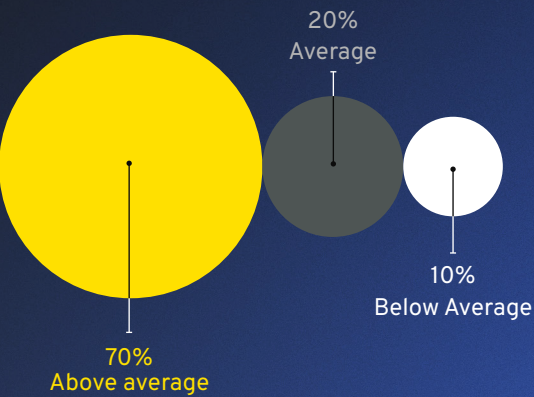
AVERAGE TROPICAL CYCLONES PER SEASON



THE 2026 TROPICAL CYCLONE SEASON IS FORECAST TO BE ACTIVE

- NOAA predict an above average cyclone season for the central Pacific: 5-13 combined named storms and tropical depressions vs an average of 4-5
- This is mostly due to the strong El Niño conditions developing through the summer
- Landfall location, timing, and intensity depend on daily weather patterns that are not predictable weeks or months in advance

2026 TROPICAL CYCLONE FORECAST PROBABILITY



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