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Climatology of Tropical Cyclones in the Central Pacific Basin

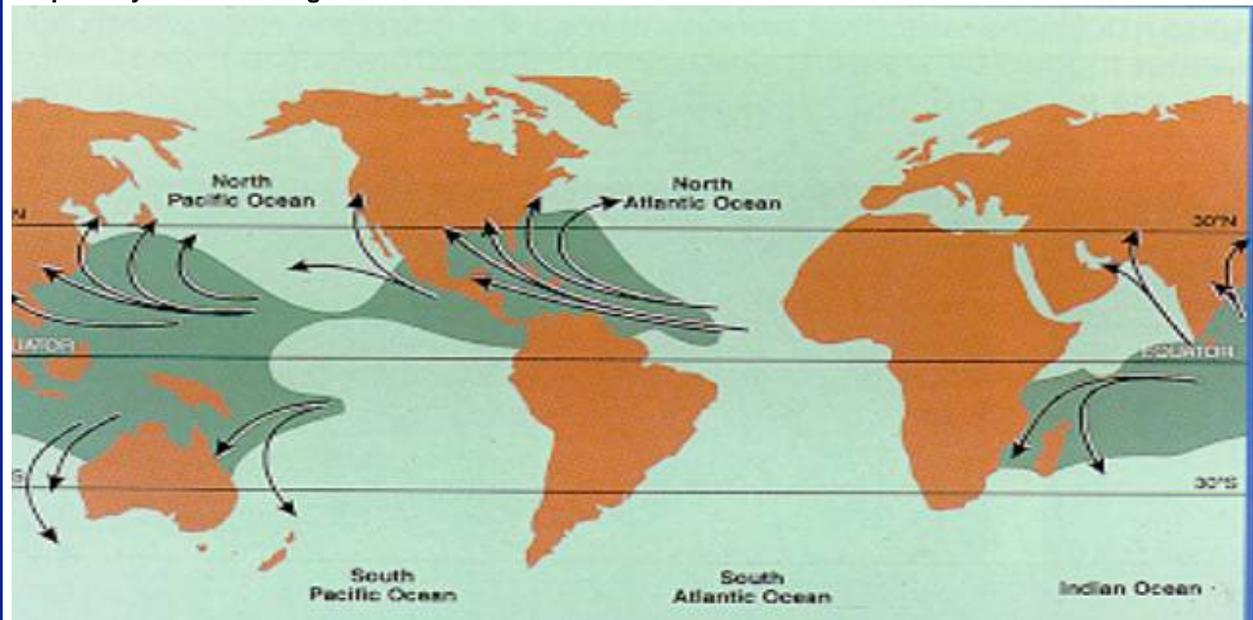
The following graphs and charts describe some of the climatology of tropical cyclone activity in the area served by the Central Pacific Hurricane Center, between 140 degrees West longitude and the International Date Line and north of the equator.

Many factors affect the level of tropical cyclone activity from year to year. Among them are the state of the El Niño Southern Oscillation in the Pacific. Moderate to strong El Niño years are correlated with increased tropical cyclone activity in the Central Pacific and the occurrence of late season storms.

Continuous satellite coverage has been available in the Central Pacific since 1971 so many climatologies start with that date. Earlier accounts of tropical cyclone activity are based on land, ship, and aircraft observations as well as some non-continuous satellite data.

Hurricane activity is favored at different times of the year around the globe. The primary controlling factor for tropical cyclone formation is sea surface temperature. Warm ocean waters of 82 degrees provide ample moisture and water vapor to the atmosphere to drive the hurricane engine. The timing of warm waters determines the hurricane season in a particular basin.

Tropical Cyclone Breeding Grounds



In the East Pacific, the season runs from mid May through October. In the Central Pacific, Atlantic, Caribbean, and Gulf of Mexico, the season runs from June to November. In the West Pacific, the water remains warm year round and typhoons occur in every season.

On average, between four and five tropical cyclones are observed in the Central Pacific every year. This number has ranged from zero, most recently as 1979, to as many as 11 in 1992 and 1994.

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Hurricane Season Climatology Central Pacific

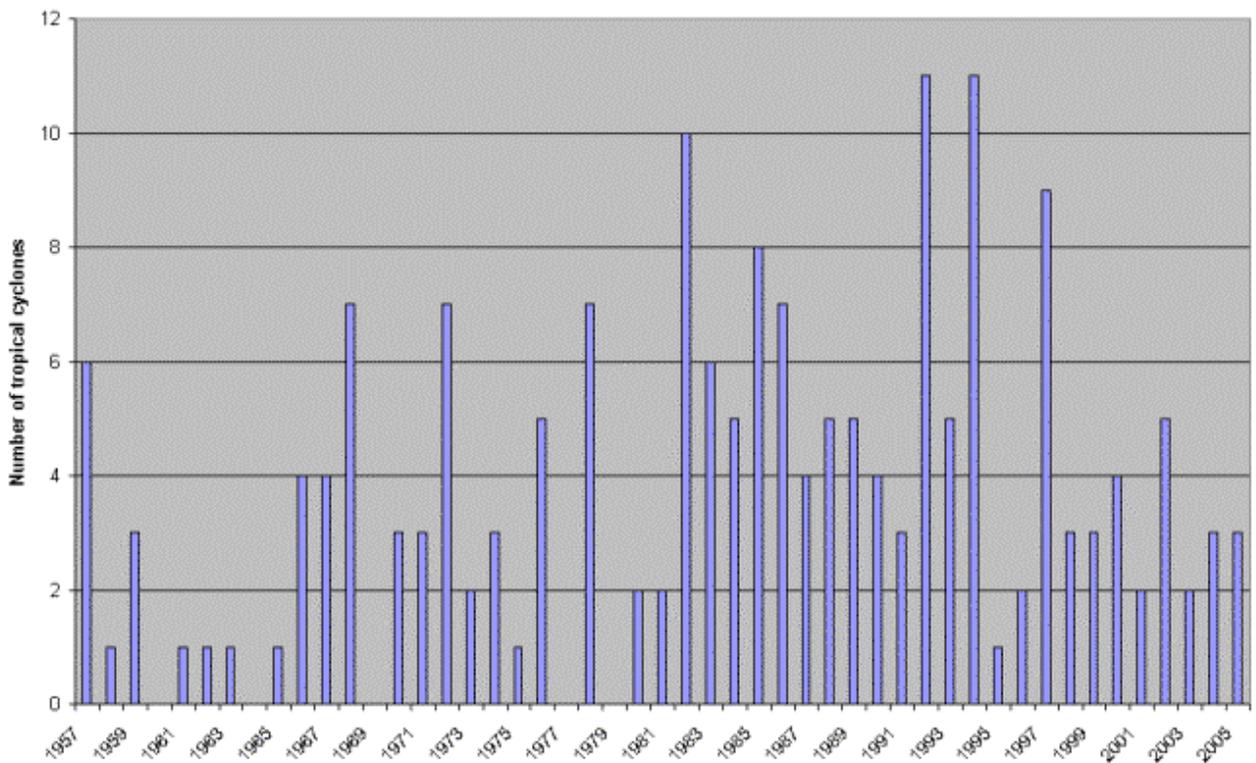
1971-2005

	Hurricanes	Tropical Storms	Tropical Depressions	Total
Total Number	48	57	48	153
Average Per Year	1.4	1.6	1.4	4.4
Percent of All Systems	31%	36%	33%	

Tropical Cyclones in the Central Pacific By Year

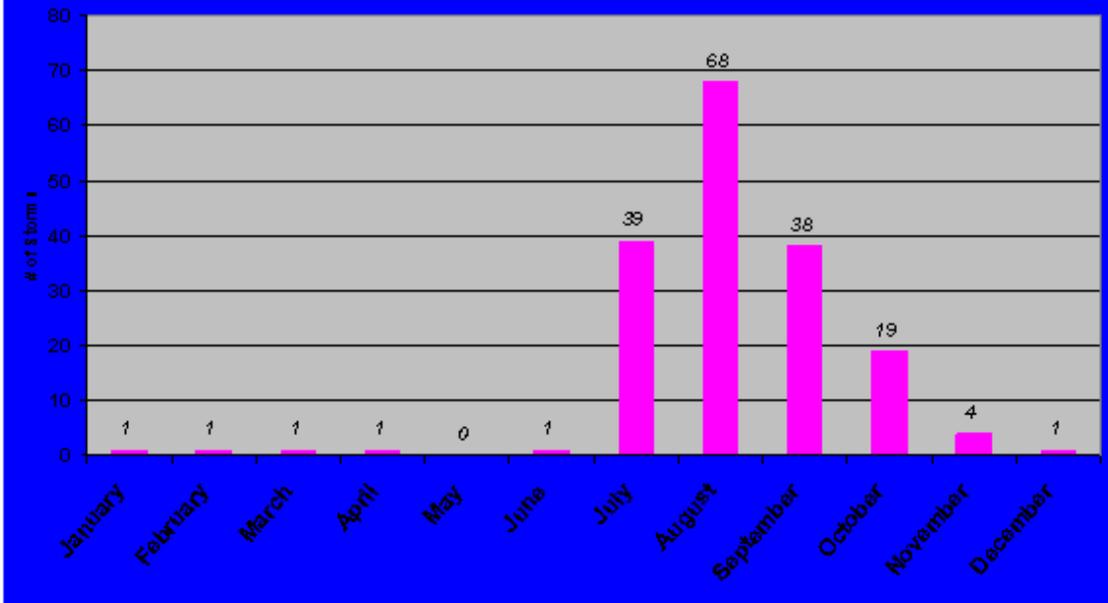
1957-2005

Tropical Cyclones in the Central Pacific Basin



Total Number of Hurricanes, Tropical Storms, Tropical Depressions by Month (1971-2005)

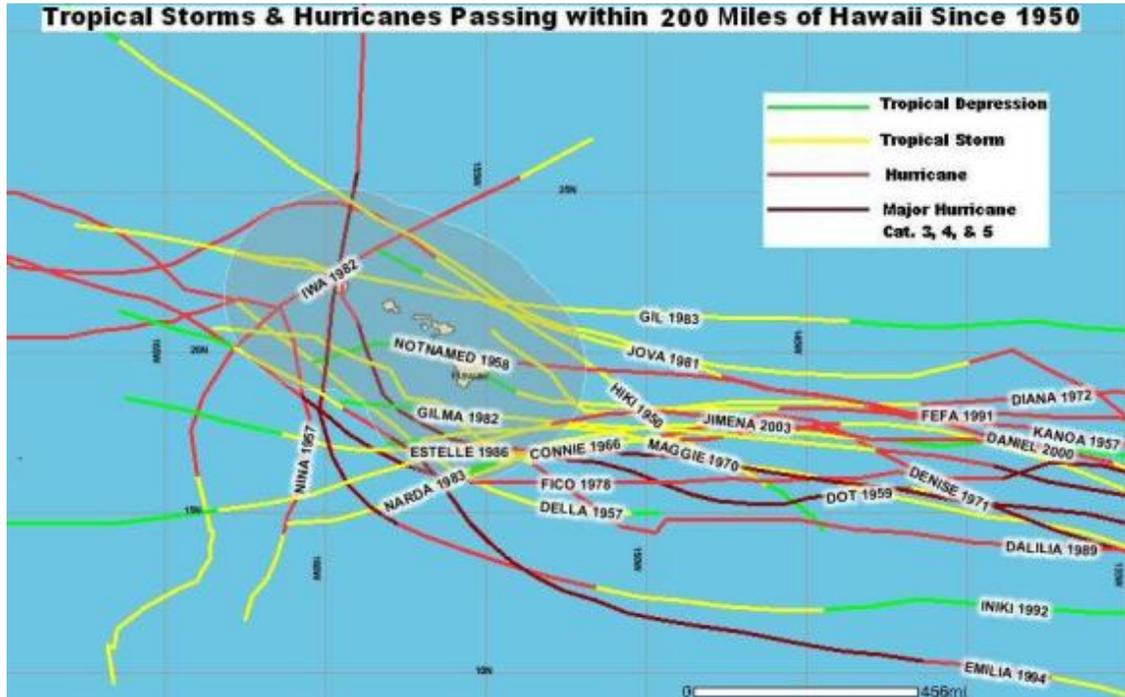
Central Pacific Tropical Cyclones 1971 - 2005

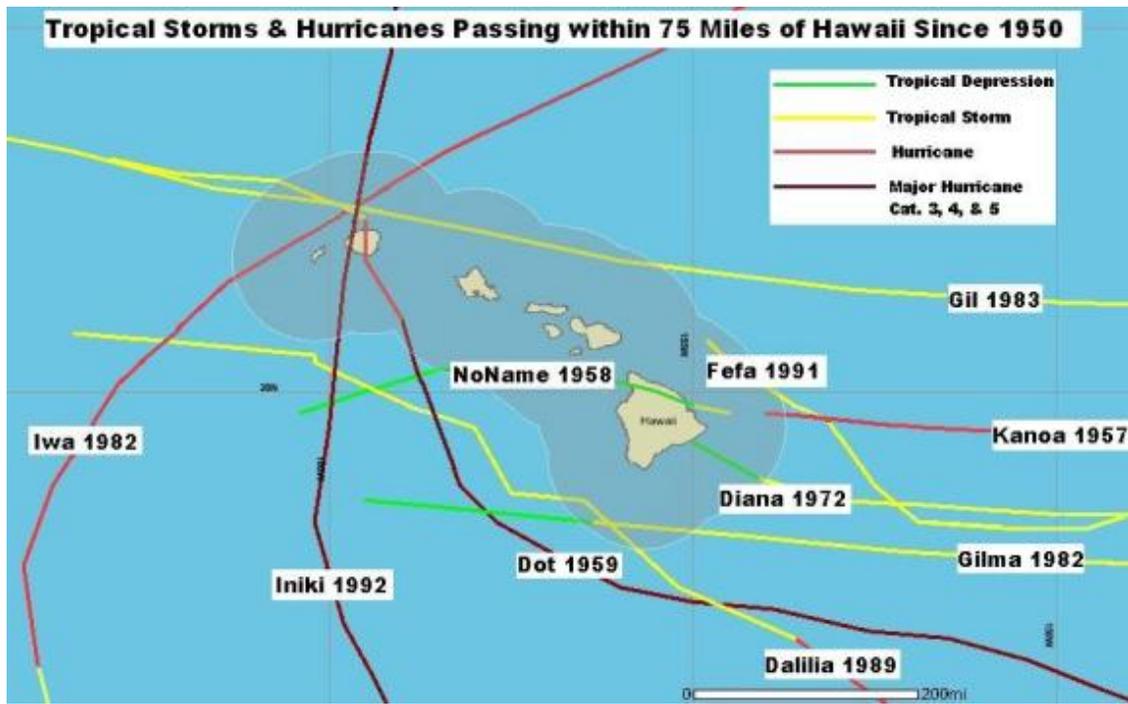


Total Number of Hurricanes, Tropical Storms, Tropical Depressions by Month (1971-2005)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1	1	1	0	1	43	80	44	21	5	1
<1%	<1%	<1%	<1%	0%	<1%	25%	46%	25%	12%	3%	<1%

The following charts show the storms that have come within 200 miles and 75 miles of Hawaii. Storms that do not make landfall in Hawaii can still cause considerable damage, mostly from winds and surf.





National Weather Service
Honolulu Forecast Office
2525 Correa Rd, Ste 250
Honolulu, HI 96822
(808) 973-5286
Web Master's email: W-HFO.Webmaster@noaa.gov

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