

## National Weather Service Storm Data and Unusual Weather Phenomena



Time Path Path Number of Estimated February 1998

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

## **HAWAII**

HIZ002>005

Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore

01 0000HST 0 0 100K Drought

Below average precipitation occurred statewide in February, with all first order rain gauges, and all but one automated rain gauge, receiving less than average rainfall. Sixty-three of the 73 rain gauges in the state reported less than 50 percent of average for the month, while 57 received less than 25 percent of average. This continued the four to five month trend of drier than usual conditions for the entire state.

February weather patterns were dominated by a strong upper level zonal jet stream across the Pacific Ocean north of the islands and by multiple upper level ridges over and to the west of the state. These combinations of phenomena responsible for the rainfall shortage are indicative of the effects that El Nino has on weather in the state of Hawaii. February is normally one of the wetter months, and precipitation for the month is usually associated with synoptic scale weather systems or trade wind regimes. However, with the overall weather dominated by upper level ridging for much of February, few synoptic scale systems affected the island chain and trade winds were generally weak or nonexistent.

The following are rainfall statistics (in inches) for selected locations on Oahu, Maui, the Island of Hawaii, and Molokai for February 1998. For comparison, the average for the month and percent of average, respectively, are listed for each site in the next two columns. The following two columns represent the rainfall totals and the average rainfall totals for the three-month period December-February. The last column shows rainfall totals from February 1983, which was another El Nino-influenced time period

	Feb. 98	Avg.	% Avg.	3 Month	Avg. for 3 Months	Feb. 83
Oahu		_			-	
Honolulu	0.21	2.2	10	1.42	9.6	0.0 6
Waianae	0.11	2.3	5	1.04	9.4	0.0 5
Hawaii Kai	0.17	3.2	5	3.07	11.9	N/A
Manoa						
Lyon A	2.48	10.2	24	21.29	37.7	1.29
Waialua	0.64	3.9	16	3.71	14.5	0.68
Ahuimanu						
(windward)	1.40	8.9	24	16.71	32.2	N/ A
Maui						
Kahului	0.49	2.9	17	2.60	10.2	0.07
Hana	0.47	6.8	8	5.13	22.4	1.01
Kihei	0.09	2.2	4	0.77	8.7	0.16
Lahainaluna	0.03	2.7	1	0.47	10.5	N/A
Wailuku	1.01	3.8	27	5.04	13.3	0.42
vv arruku	1.01	3.0	21	3.04	13.3	0.42
Island Of Hawaii						
Hilo	2.40	10.3	23	10.64	32.3	0.83
Pahala	0.07	6.1	1	1.15	19.2	0.17
Honaunau						
(Captain Cook)	0.22	3.2	7	1.08	10.0	0.2 8
Kamuela	3.27	6.0	55	12.20	19.9	0.22
Laupahoehoe	3.08	13.2	23	10.06	41.5	4.0 0
Molokai						
Kaunakakai	0.44	2.6	17	2.38	8.9	3.25

Water restrictions and conservation notices were posted on the Island of Hawaii and in Maui. Most of the Island of Hawaii's 33,000 water customers were asked to eliminate most outdoor uses of water such as washing cars and/or boats and watering lawns, and to limit agricultural use. Many residents in the Puna and South Hilo districts of the isle were asked to lower their water consumption by 25 percent. Residents of Upcountry Maui, from Haiku to Kanaio, were ordered to reduce their water use by 10 percent. More than 8000 homes and farms were affected by the order. Many people on the Island of Hawaii and in Maui who use rooftop catchment systems were running out of water completely.

So far, commercial flower growers on the Island of Hawaii have lost about \$100,000 in revenue because of the drought conditions. Hawaiian Commercial & Sugar Company on Maui, with the largest plantation in Hawaii and with 37,000 acres in production, has stopped planting about 500 acres in Haliimaile because of the lack of rainfall. Other farmers on Maui have also stopped planting on some of their land.

The drought conditions on the Island of Hawaii contributed to the severity of a brush fire that burned more than 2500 acres in the



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February 1998 Time Local/ Path Length Path Width Number of Estimated Persons Damage **HAWAII** Hawaii Beaches Estate subdivision in the Puna district. HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast **High Surf** 0500HST Storm low far northwest of the Hawaiian Islands produced surf of 8 to 10 feet on west facing shores of all the islands. HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast A storm low far northwest of the Hawaiian Islands generated surf of 12 to 18 feet along the north and northwest facing shores of the islands. **HIZ004 Kauai Mountains** 0400HST High Wind (70) 0200HST West winds of 60 to 80 mph occurred near the summits of Mauna Kea and Mauna Loa. **HIZ004 Kauai Mountains** 0500HST High Wind (87) 03 05 0800HST West to northwest winds of 80 to 100 mph occurred near the summits of Mauna Kea and Mauna Loa. HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast Storm low far north of the Hawaiian Islands produced surf of 15 to 20 feet along north and northwest facing shores and 10 to 15 feet along west facing shores of all the islands. HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast 0 **High Surf** Storm low far northwest of the Hawaiian Islands produced surf of 8 to 12 feet along the north and northwest facing shores of the HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast 1000HST Intense storm low far west of the Hawaiian Islands generated surf of 10 to 15 feet along west facing shores of the islands HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast **High Surf** Strong storm low far west of the Hawaiian Islands produced surf of 18 to 25 feet along the north and northwest facing shores of all HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast Storm low far northwest of the Hawaiian Islands generated surf of 10 to 15 feet along the north and northwest facing shores of the HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast Gale low northwest of the Hawaiian Islands generated surf of 8 to 12 feet along the north and northwest facing shores of all the

islands