



# National Weather Service

## Storm Data and Unusual Weather Phenomena



January 1999

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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### HAWAII

**HIZ001>006**

**Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast**

<b>01</b>	<b>0000HST</b>								
<b>03</b>	<b>2030HST</b>			<b>0</b>	<b>1</b>				<b>High Surf</b>

Intense storm low northwest of the Hawaiian Islands produced surf of 15 to 25 feet on the north shores, and 10 to 15 feet on the west shores of all islands on 1 Jan. One veteran surfer broke his leg while surfing at Waimea Bay of Oahu on 1 Jan.

**Honolulu County**

**Hawaii Kai to Aiea**

<b>05</b>	<b>1730HST</b>								
	<b>2330HST</b>			<b>0</b>	<b>0</b>				<b>Urban/Sml Stream Fld</b>

Heavy rains flooded basements and streets in Waikiki and Kapahulu. A landslide at Aina Haina hillside dismounted a boulder, about 2 1/2 feet in diameter, which rolled down the hillside and damaged the roof of a house. Heavy rain and some ponding were also observed in other areas on the leeward side of Oahu.

There was a report of soaked and damaged merchandise at some stores at Ala Moana Shopping Center, due to leaky roofs.

The total amount of precipitation recorded near the flooded areas for this event is as follows:

Manoa	1.94 in.
Palolo	2.96 in.
Niu Valley	2.18 in.
Aloha Tower	1.10 in.

**HIZ002-004**

**Kauai Windward - Kauai Mountains**

<b>07</b>	<b>0000HST</b>								
	<b>2359HST</b>			<b>0</b>	<b>0</b>				<b>Vog</b>

The high vog level sent people with respiratory problems to hospital emergency rooms, while outdoor activities were limited until the vog cleared off. The state's Vog Index Hotline measured the vog at six on a scale of 10. The volcanic haze built up from the eruption at Kilauea and the lack of trade winds caused increased smoglike conditions over part of Oahu.

**HIZ001>006**

**Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast**

<b>07</b>	<b>0815HST</b>								
<b>11</b>	<b>0800HST</b>			<b>0</b>	<b>0</b>				<b>High Surf</b>

A low northwest of the Hawaiian Islands produced surf of 15 to 18 feet along north shores, and 8 to 12 feet along west shores. On Oahu, water was observed near road at North Shore.

**Kauai County**

**Kapaa to Wailua**

<b>07</b>	<b>1400HST</b>								
	<b>2000HST</b>			<b>0</b>	<b>0</b>				<b>Urban/Sml Stream Fld</b>

Heavy rain produced an overflow of water across the bridge at Kahuna Road at Kapa'a. Rainfall from 2:00pm to 8:00 pm was 3.41 inches at Wailua.

**Honolulu County**

**Aiea to Honolulu**

<b>08</b>	<b>0500HST</b>								
	<b>0600HST</b>			<b>0</b>	<b>0</b>				<b>Urban/Sml Stream Fld</b>

Heavy rain over Southern Oahu produced ponded water along roadways.

**HIZ004**

**Kauai Mountains**

<b>09</b>	<b>0500HST</b>								
	<b>1100HST</b>			<b>0</b>	<b>0</b>				<b>Heavy Snow</b>

A storm brought about 4 inches of snow to Mauna Kea. The Mauna Kea summit access road was shut down, but was reopened in the afternoon because weather conditions improved. Winds caused snow drifts to form more than 1 foot deep.

**HIZ001>006**

**Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast**

<b>14</b>	<b>2030HST</b>								
				<b>0</b>	<b>0</b>				<b>High Surf</b>



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					Killed	Injured	Property

### HAWAII

**16 0400HST**

Storm low northwest of the Hawaiian Islands generated surf of 8 to 12 feet along north shores, and 3 to 6 feet along west shores of the islands.

#### **HIZ003**

##### **Kauai Leeward**

**15 0800HST  
1800HST**

**0 0**

**High Wind (64)**

A spotter from upcountry Maui reported strong winds which knocked down power lines. Average sustained winds from 8 a.m. to 6 p.m. at Haleakala were 40 mph, while a peak wind of 74 mph was recorded at 1:00 p.m.

#### **HIZ001>006**

##### **Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast**

**19 0330HST  
22 0900HST**

**0 0**

**High Surf**

Storm low far northwest of the island chain produced surf of 6 to 10 feet along west shores, and 12 to 18 feet along north shores of all the Hawaiian islands.

#### **HIZ004**

##### **Kauai Mountains**

**19 2245HST  
20 1430HST**

**0 0**

**High Wind (52)**

Astronomers reported high winds of 60 mph at the summits.

#### **Maui County Makawao to Kipahulu**

**22 0000HST  
1100HST**

**0 0**

**Small Hail**

There were several reports of pea-sized or small marble sized hail on Haleakala at the 3,000 and 4,000 foot level near the Kula area. Hail was also reported in Kokomo and Haliimaile.

#### **Kauai County Hanalei**

**22 0520HST  
1400HST**

**0 0**

**Urban/Sml Stream Fld**

At Kauai, water ponded along several roads from Wainiha to Hanalei. Hanalei had a total of 2.93 inches.

#### **Hawaii County Hilo to Pahoa**

**22 1030HST  
1600HST**

**0 0**

**Urban/Sml Stream Fld**

A thunderstorm drenched the Islands, pouring more than two inches of rain in some areas. In Hilo, 2.2 inches fell between 8 a.m. and 2 p.m. , while Mountain View received 3.89 inches.

#### **Honolulu County Honolulu to Waimanalo**

**22 1100HST  
1800HST**

**0 0**

**Urban/Sml Stream Fld**

Heavy showers were making driving difficult and dangerous. Drainage systems were having trouble handling all the runoff, so there had been some ponding along roadways, and visibility along the H-1 was very poor in the afternoon. There were no storm-related incidents except for a flooded basement in a downtown Honolulu jewelry store. In Manoa, 2.33 inches of rain fell from 11 a.m. to 5 p.m. Hawaii Kai received 1.24 inches and Waimanalo had 1.92 inches.

#### **Maui County Hana to Kipahulu**

**22 1200HST  
1440HST**

**0 0**

**Urban/Sml Stream Fld**

Heavy showers were observed at the windward side of Maui, causing ponded water along roadways.

#### **HIZ001>006**

##### **Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast**

**23 1025HST  
27 1200HST**

**0 0**

**High Surf**

A large tradewind swell generated surf of 6 to 10 feet along east shores of the islands.

#### **Hawaii County Hilo**

**24 1310HST  
1320HST**

**0 0**

**Thunderstorm Wind (61)**

Several buildings in Hilo were damaged early in the afternoon by what were described as strong thunderstorm winds. A strong wind



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### HAWAII

uprooted a breadfruit tree and damaged a garage on West Kahaopea Street. Immediately thereafter on Anela Street, winds tore corrugated metal off one home and a poorly constructed roof from a combination garage and storage building on the other side of the street. According to Fire Department officials, the wind was strong enough to carry the 34 foot-long roof about 100 feet through the air where it landed close to a house down the street.

#### Hawaii County

<b>Hilo to Paho</b>	<b>24</b>	<b>1400HST 1600HST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
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There was minor street flooding between Hilo and Puna districts.

#### Hawaii County

<b>Volcano to Hilo</b>	<b>25 26</b>	<b>2145HST 0400HST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
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Heavy showers caused local street flooding in the Puna and South Hilo districts.

#### Maui County

<b>Hana to Kahului</b>	<b>31</b>	<b>0530HST 1615HST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
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Heavy showers and thunderstorms produced minor flooding in areas along the entire windward coast, from Hana to Kahakuloa. The five corners intersection at Haiku-Kapakalu was flooded. Landslides occurred near Honomanu, Ke'anae, and Kahakuloa

#### Maui County

<b>Hana to Kipahulu</b>	<b>31</b>	<b>0845HST 1500HST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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Heavy showers and thunderstorms produced high amounts of rainfall over the south and east flank of Haleakala. Flooding occurred in the vicinity of several streams. The Alelele stream near Kipahulu flooded the area with two feet of water with severe erosion to road surfaces.

#### Hawaii County

<b>Hilo to Paho</b>	<b>31</b>	<b>0855HST 1545HST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
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Moist, unstable air mass produced heavy showers with increasing rainfall throughout the day, which caused widespread ponding of water on roadways.

#### Hawaii County

<b>Hilo to Paho</b>	<b>31</b>	<b>1545HST 2030HST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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30 homes sustained minor flooding, while high water in a stream along East Palai Street in Hilo required some evacuations. The Hilo Municipal Golf Course was closed, and reports of widespread street flooding in Hilo and runoffs in Waiakea Uka were observed during this event.

Several roads, including East Kawailani Street, were closed due to flooding and runoffs. Lightning caused power outages of up to an hour and affected about 14,000 homes in Hilo, Puna, and Kona. Hilo received a 24-hour total of 5.69 inches for this event. Other rainfall totals for this event on Hawaii are as follow:

Waiakea Uka	5.14 in.
Piihonua	4.80 in.
Mountain View	5.36 in.
Glenwood	4.60 in.
Paho	3.87 in.