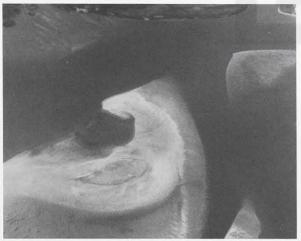


Mapped by T. Theodore Fujita based on aerial photos taken on Sep. 27 - Oct. 02, 1989 by Fujita and Stiegler, The University of Chicago.

Supported by the National Weather Service, cost-shared by the Office of Naval Research and the University of Chicago



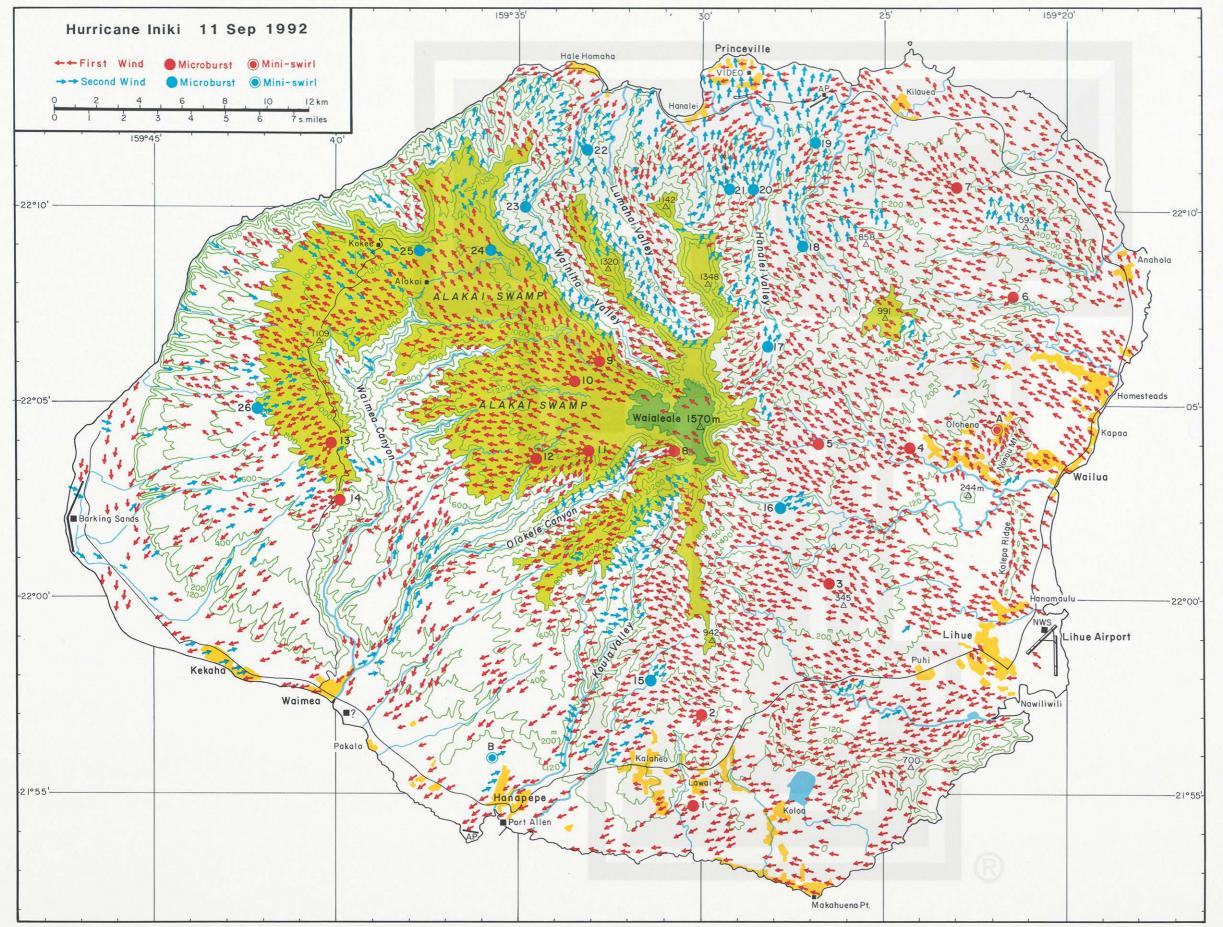


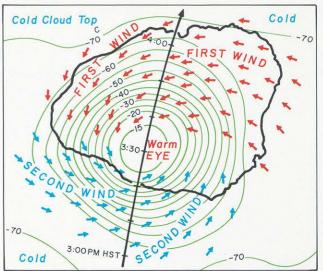


DAMAGE IN DOWNTOWN CHARLESTON



SUSPECTED MICROBURST IN BULLS BAY AREA

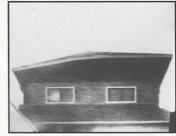




Hurricane-top temperatures measured by GOES-7 satellite suggest that Iniki's eye passed across the center of Kauai in the north-northeasterly direction. Cloud-top isotherms in the above map depict the warm, circular eye at 3:30 p.m. HST on 11 September 1992.

The damaging wind on the front side of the eye (first wind) either reversed or gradually changed into the back-side wind (second wind). The damage map on the left shows the direction of the first wind in red and that of the second wind in blue. In mountain areas, the downslope wind was found more damaging than the upslope wind.

Microburst (small downburst) has been known to endanger aircraft during landing and/or takeoff operations. Unexpectedly, 26 microbursts have been found in Kauai in the wake of lniki. A video taken by Mr. Dean Marshall from San Francisco shows the scene of a roof at Princeville being blown off by the southerly wind induced by Microburst No. 20 shown in the damage map.





In addition, two mini-swirls (not tornadoes) were found in Kauai. The violent whirlwind, first identified in south Florida after hurricane Andrew of 24 August 1992, could induce a peak wind of 200 mph within a very small area. Iniki was a very complicated storm accompanied by both mini-swirls and microbursts.

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