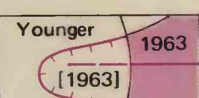


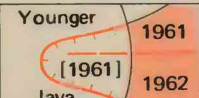
EXPLANATION



1965 basalt
Lava of March and December 1965. Lava of December 1965 near west margin of map occurs as three flows north and northwest of Makoopuhi Crater (mapping from Fiske and Koyanagi, 1965). All other 1965 basalt erupted in March. 1965 eruptive vents shown by red line



1963 basalt
Lava of October 1963. Lava of August 1963 is slightly off west margin of map. October 1963 eruptive vents shown by purple line, dashed where covered with younger lava. Date followed by "S" where only steam and gas were emitted. Lava buried by younger flows bounded by purple hachured line; date in brackets



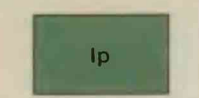
1962 and 1961 basalt
Lava of September 1961 and December 1962. Vents shown by orange line, dashed where covered by younger lava. Lava buried by younger flows bounded by orange hachured line; date in brackets; "S" indicates only steam and gas were emitted



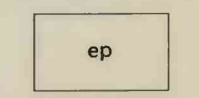
1923 and 1922 basalt
Lava of May 1922 and August 1923. Vents shown by brown line, dashed where covered by younger lava. Lava buried by younger flows bounded by brown hachured line; date in brackets



1840 basalt
Early historic and very late prehistoric basalt
Year of eruption shown where known, queried where probable, and marked hp where hypothetical. Vents shown by blue line, dashed where covered by younger lava. Lava flows buried by younger flows bounded by blue hachured line; date in brackets. Flows probably not more than 300 years old. Generally sparsely covered by low ferns and small trees



Late prehistoric basalt
Probably older than 300 years and younger than a few thousand years. Generally densely covered by small to medium trees



Early prehistoric basalt
Probably older than a few thousand years and younger than 10,000 years. Generally covered by large trees and tree ferns

Contact
Dashed where aerial photographs not available; dotted where concealed. Because of low relief, dense forest, and lack of surface drainage, contacts may be misplaced as much as several hundred feet

Fault
Year of formation shown where known. Dashed where covered by younger flows. Bar and ball on downthrown side. Faults bounding pit craters not shown

Crack
Dashed where covered by younger flows

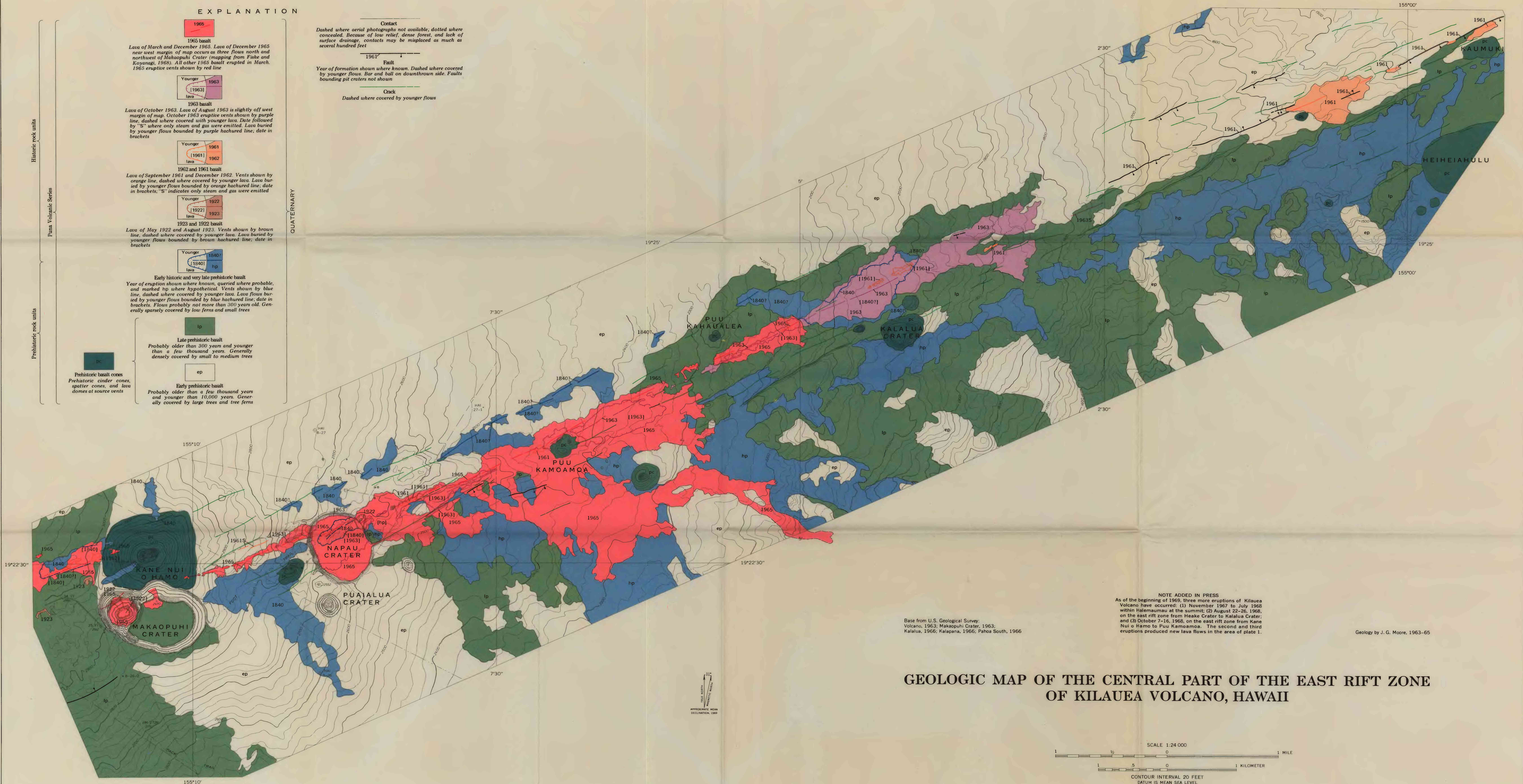
Historic rock units

Puna Volcanic Series

Prehistoric rock units

QUATERNARY

Prehistoric basalt cones
Prehistoric cinder cones, spatter cones, and lava domes at source vents



NOTE ADDED IN PRESS
As of the beginning of 1969, three more eruptions of Kilauea Volcano have occurred: (1) November 1967 to July 1968 within Halemaumau at the summit; (2) August 22-26, 1968, on the east rift zone from Heahe Crater to Kalalua Crater; and (3) October 7-16, 1968, on the east rift zone from Kane Nui o Hamo to Puu Kamoama. The second and third eruptions produced new lava flows in the area of plate 1.

Base from U.S. Geological Survey:
Volcano, 1963; Makoopuhi Crater, 1963;
Kalalua, 1966; Kalapana, 1966; Pahoa South, 1966

Geology by J. G. Moore, 1963-65

GEOLOGIC MAP OF THE CENTRAL PART OF THE EAST RIFT ZONE
OF KILAUEA VOLCANO, HAWAII

