DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN FILE REPORT
77-718

PLATE 6

GEOLOGY OF THE MONTEREY BAY REGION, CALIFORNIA

EXPLANATION

FAULT

Dashed where inferred or approximately located

OFFSHORE SURFACE FAULT

Dashed where inferred or approximately located. Bar and box on downthrown side

TERRACE OFFSET

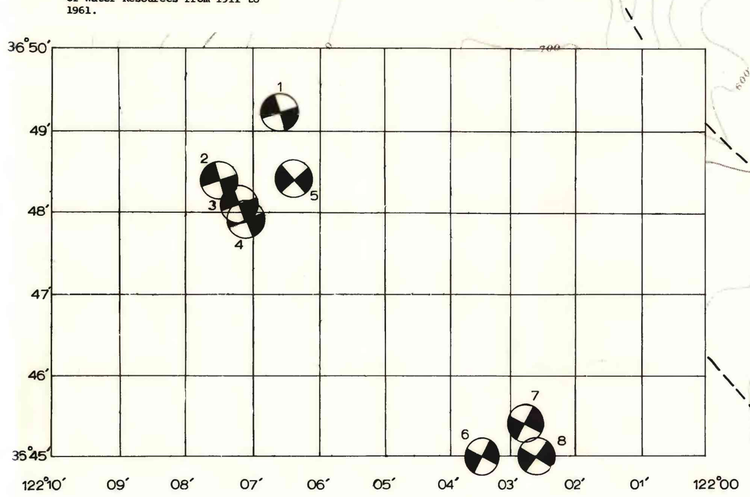
Places where terrace deposits have been or seem to be offset by faulting (See Clark, 1970a)

ZONE OF POOR ACOUSTICAL REFLECTIVITY

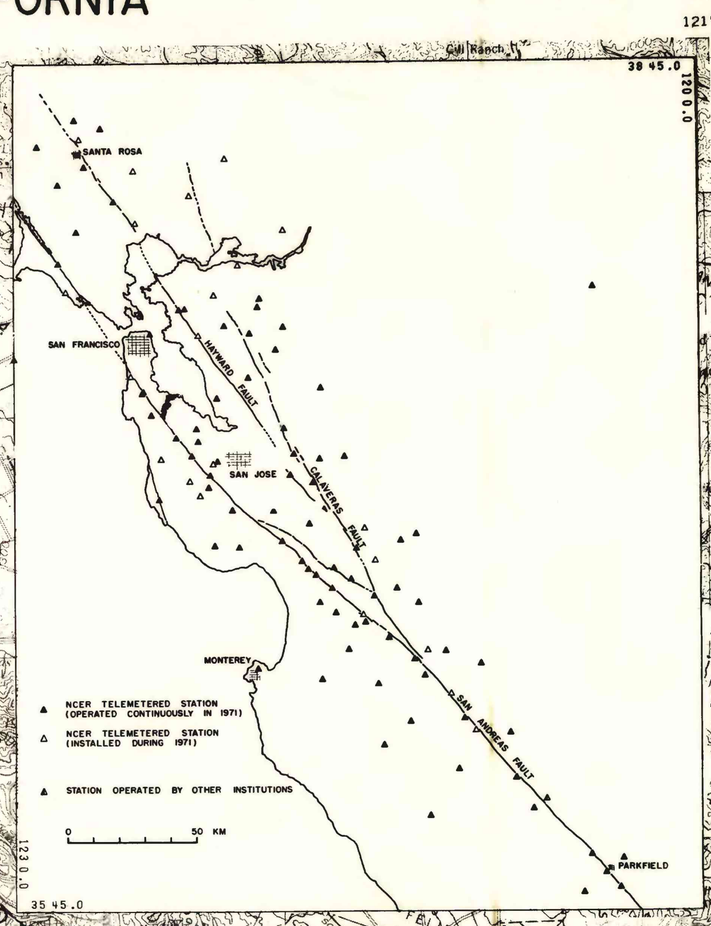
EARTHQUAKE EPICENTERS

Magnitude	Symbol 1911–1968	1969–1972	1973–1976
<1.5		•	◑
1.5–2.5	○	•	◑
2.5–3.5	○	•	◑
3.5–4.5	◎	•	◑
4.5–5.5	◎	•	◑
>5.5	◎	•	◑

Epicenter data compiled by USGS from 1969 to 1972, University of California at Berkeley, from 1962 to 1968, and California Department of Water Resources from 1911 to 1961.



Fault plane solutions of selected earthquakes in Monterey Bay according to first motions of P-wave arrivals. Numbers correspond to numbered epicenters shown above. The plot is an equal area projection of the lower focal hemisphere. Black segments indicate compression and white segments indicate dilation.



Map showing seismograph stations used in locating earthquakes during 1971. Locations of stations used for locating earthquakes prior to 1971 are slightly different.

Topographic base from U. S. Geological Survey 1:250,000 series: San Francisco, 1964, San Jose, 1966; Santa Cruz, 1958. Bathymetry from U. S. Coast and Geodetic Survey Chart 5402, Pt. Sur to San Francisco, California. Detailed bathymetry of Monterey Bay constructed from soundings made by the USGS, 1967.

Modified after Greene and others (1973)

FAULTS AND EARTHQUAKE EPICENTERS IN THE MONTEREY BAY REGION, CALIFORNIA

By
H. Gary Greene

SCALE 1:200,000

1977

Onland contour interval - 200 feet (60 meters)
Offshore contour interval - 100 fathoms (600 feet or 183 meters)
Contour interval of the detailed Monterey Bay area - 10 meters to a depth of 100 meters
- 50 meters at depths greater than 100 meters

0 2 4 NAUTICAL MILES

0 2 4 6 KILOMETERS

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.