

MAP 1—EPICENTERS, YEAR OF OCCURRENCE, AND MAGNITUDE

EXPLANATION FOR MAP 1

X
3, 4, 5, 6, 7
8, 9, 0, 1
0.0, 0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
5.0
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
6.0
6.1
6.2
6.3
6.4
6.5
6.6
6.7
6.8
6.9
7.0
7.1
7.2
7.3
7.4
7.5
7.6
7.7
7.8
7.9
8.0
8.1
8.2
8.3
8.4
8.5
8.6
8.7
8.8
8.9
9.0
9.1
9.2
9.3
9.4
9.5
9.6
9.7
9.8
9.9
10.0

Episodes of earthquake that occurred between January, 1964, and December, 1972.
Epicenters of earthquake that occurred between January, 1973, and December, 1981.
Number indicates year of occurrence.
None printed indicates magnitude range of earthquake.
0.00 - 0.99 magnitude
1.00 - 1.99 magnitude
2.00 - 2.99 magnitude
3.00 - 3.99 magnitude
4.00 and greater magnitude

Seismograph station in operation two or more years.
Fault (dotted where concealed) showing evidence of Quaternary movement.
Bristol caldera boundary fault.

EXPLANATION FOR MAP 2

Reliability of location
1 kilometer epicenter uncertainty
3 kilometer epicenter uncertainty
5 kilometer epicenter uncertainty
7.5 kilometer epicenter uncertainty

Seismograph station in operation two or more years.
Fault (dotted where concealed) showing evidence of Quaternary movement.
Bristol caldera boundary fault.
Large rectangles (A'-F') show area of projection onto sections.

EXPLANATION FOR MAP 3

Lower hemisphere projection, does indicate compressions, circles indicate tension and compression axis.
Mechanism numbers composed of numbered circles on map.

EXPLANATION FOR MAP 4

Depth in kilometers
Distance in kilometers

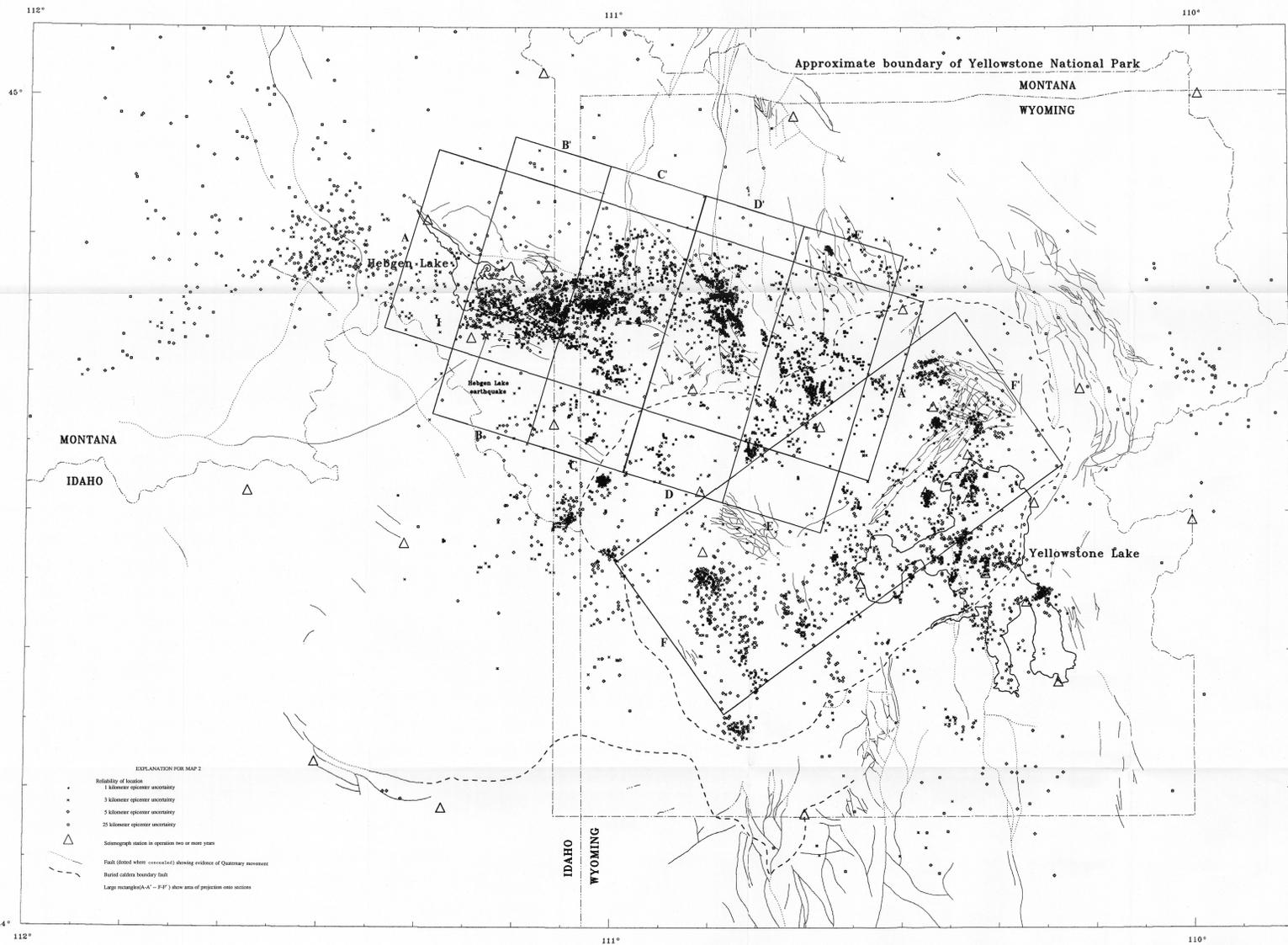
Base from U. S. Geological Survey topographic maps, Ashton-1967, Billings-1962, Bozeman-1967, Cody-1962.

Scale 1:250,000
CONTOUR INTERVAL 200 FEET
NATIONAL GEODESIC VERTICAL DATUM OF 1929

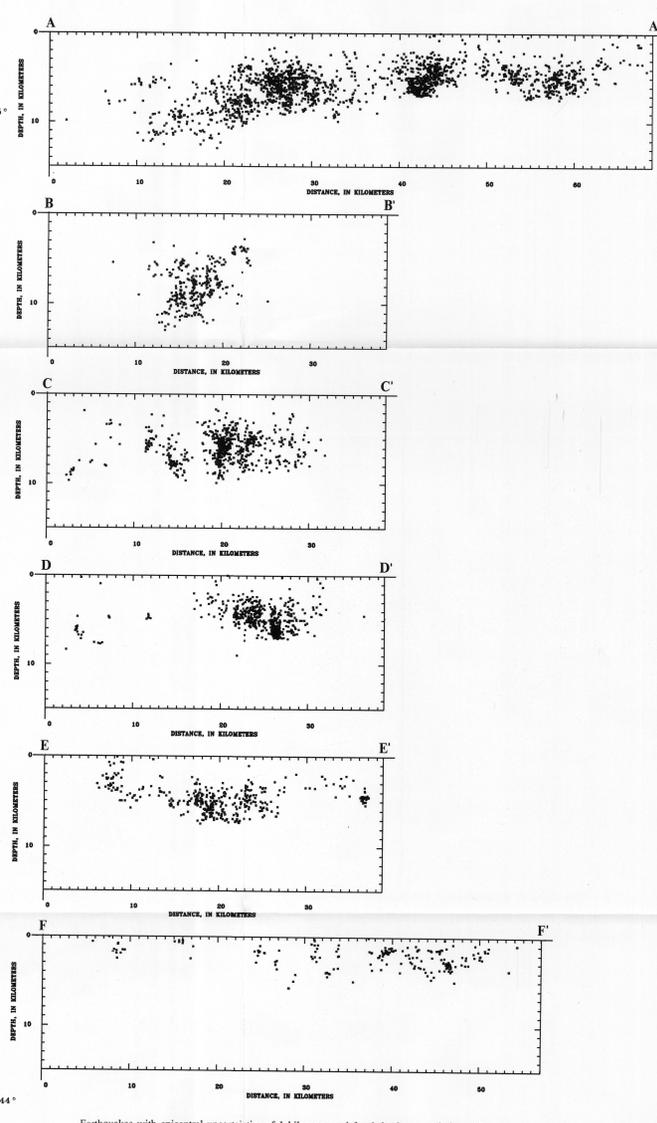
APPROXIMATE MEAN OCCURRENCE YEAR

AREA OF MAP

Fault locations from R. L. Christiansen (written communication, 1980, 1988) and U. S. Geological Survey, 1972.



MAP 2—EPICENTERS, RELIABILITY OF LOCATION, AND AREA OF CROSS SECTIONS



Earthquakes with epicentral uncertainties of 1 kilometer and focal depth uncertainties of 2 kilometers are projected onto a vertical plane in section. See map 2 for area of projections.

MAPS SHOWING EARTHQUAKE EPICENTERS (1964-81) IN YELLOWSTONE NATIONAL PARK AND VICINITY, WYOMING, IDAHO, AND MONTANA

By
A.M. Pitt
1989