

Explanation

Contour intervals, % g

- 300
- 200
- 150
- 125
- 100
- 90
- 80
- 70
- 60
- 50
- 40
- 35
- 30
- 25
- 20
- 15
- 10
- 5
- 0

Note: contours are irregularly spaced

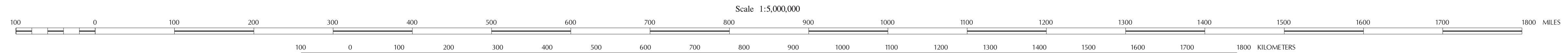
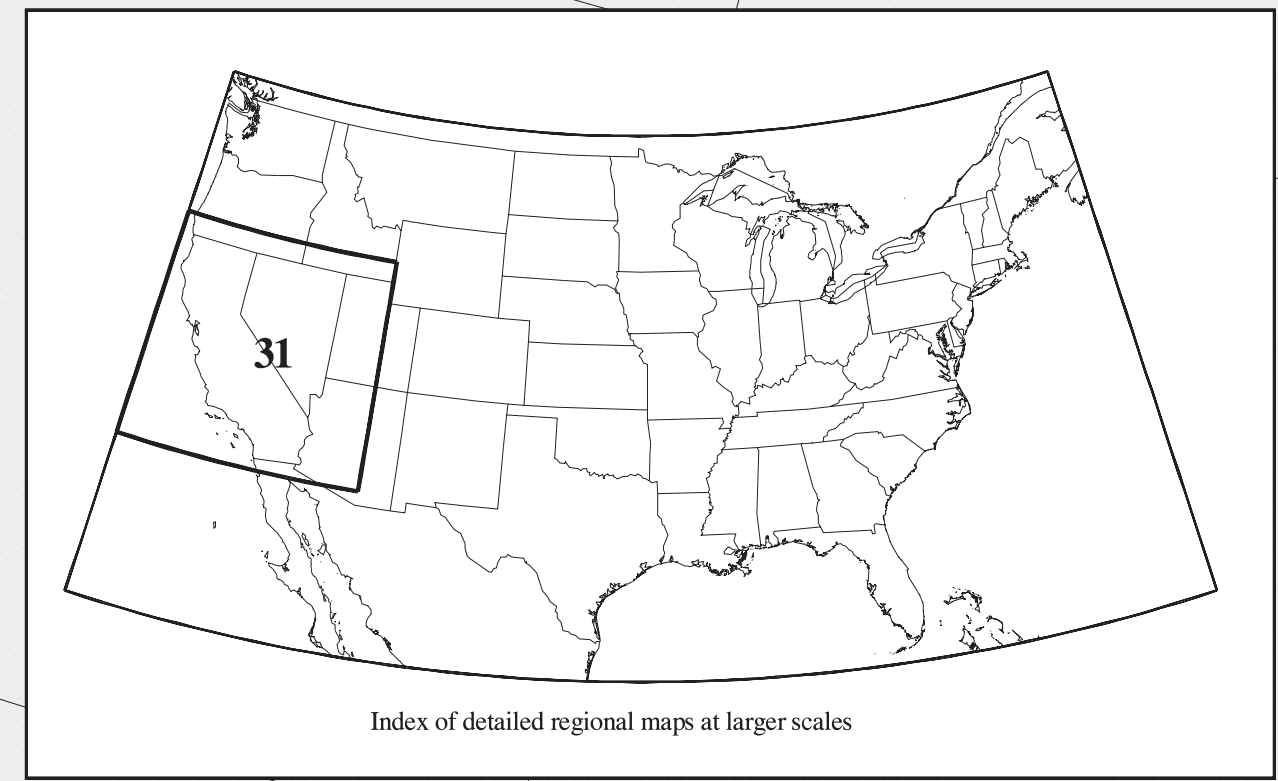
▲ 6.2 Point value of spectral response acceleration expressed as a percent of gravity

— 10 Contours of spectral response acceleration expressed as a percent of gravity. Hashmarks point in direction of decreasing values.

--- International boundary

- - - State boundary

— County boundary



MAP 27
Probabilistic Earthquake Ground Motion
for the United States
 of
 0.2 sec Spectral Response Acceleration (5% of Critical Damping)
 2% Probability of Exceedance in 50 years

DISCUSSION

This map is based on U.S. Geological Survey Open-File Report 97-131 (1997). The contour intervals have been modified to correspond to the intervals used in the Maximum Considered Earthquake Ground Motion Maps. The acceleration values contoured are the random horizontal component. Reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/sec in the top 30 meters, corresponding to the boundary between NEHRP site classes B and C. For use with the 1997 NEHRP Recommended Provisions for Seismic Regulations for New Buildings (FEMA 302), and NEHRP Guidelines for the Seismic Rehabilitation of Buildings (FEMA 273). The site class may be taken as Site class B. Regional maps should be used when additional detail is required.

REFERENCES

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1996. National Seismic-Hazard Maps. Documentation June 1996. U.S. Geological Survey Open-File Report 96-532, 110 p.

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1997. Seismic-Hazard Maps for the Conterminous United States. Map F - Horizontal Spectral Response Acceleration for 0.2 Second Period with 2% Probability of Exceedance in 50 Years. U.S. Geological Survey Open-File Report 97-131-F, scale 1:7,000,000.

Petersen, M., Bryant, W., Cramer, C., Cao, T., Reiche, M., Frankel, A., Loeferer, J., McCrory, P., and Schwartz, D., 1996. Probabilistic Seismic Hazard Assessment for the State of California. California Division of Mines and Geology Open-File Report 96-08, 66 p., and U.S. Geological Survey Open-File Report 96-706, 66 p.