

DISCUSSION
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/s in the top 30 meters, corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction Program) site classes B and C. Documentation, gridded values, interactive maps, and GIS data used to make the map are available online at <http://earthquake.usgs.gov/hazards> or <http://dx.doi.org/10.3133/sim3325>.

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EXPLANATION
Peak acceleration expressed as a percent of gravity (%g)

≥100
80-100
60-80
40-60
30-40
25-30
20-25
15-20
10-15
9-10
8-9
7-8
6-7
5-6
4-5
3-4
2-3
1-2
≤1

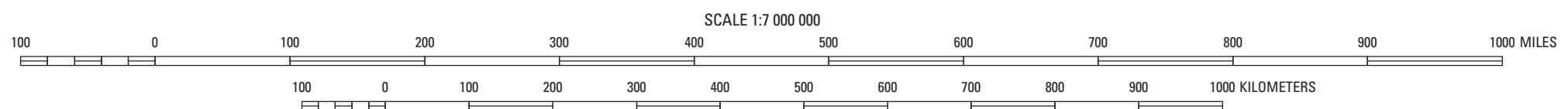
Contours of peak acceleration expressed as a percent of gravity (%g)

- Onshore
- - - Offshore

Point values of peak acceleration expressed as a percent of gravity (%g)

- 6.5 Local maximum
- ⊖ 2.4 Local minimum
- ⊕ 4.3 Saddle point

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Standard parallels 29.5°N, and 45.5°N, central meridian 95°W



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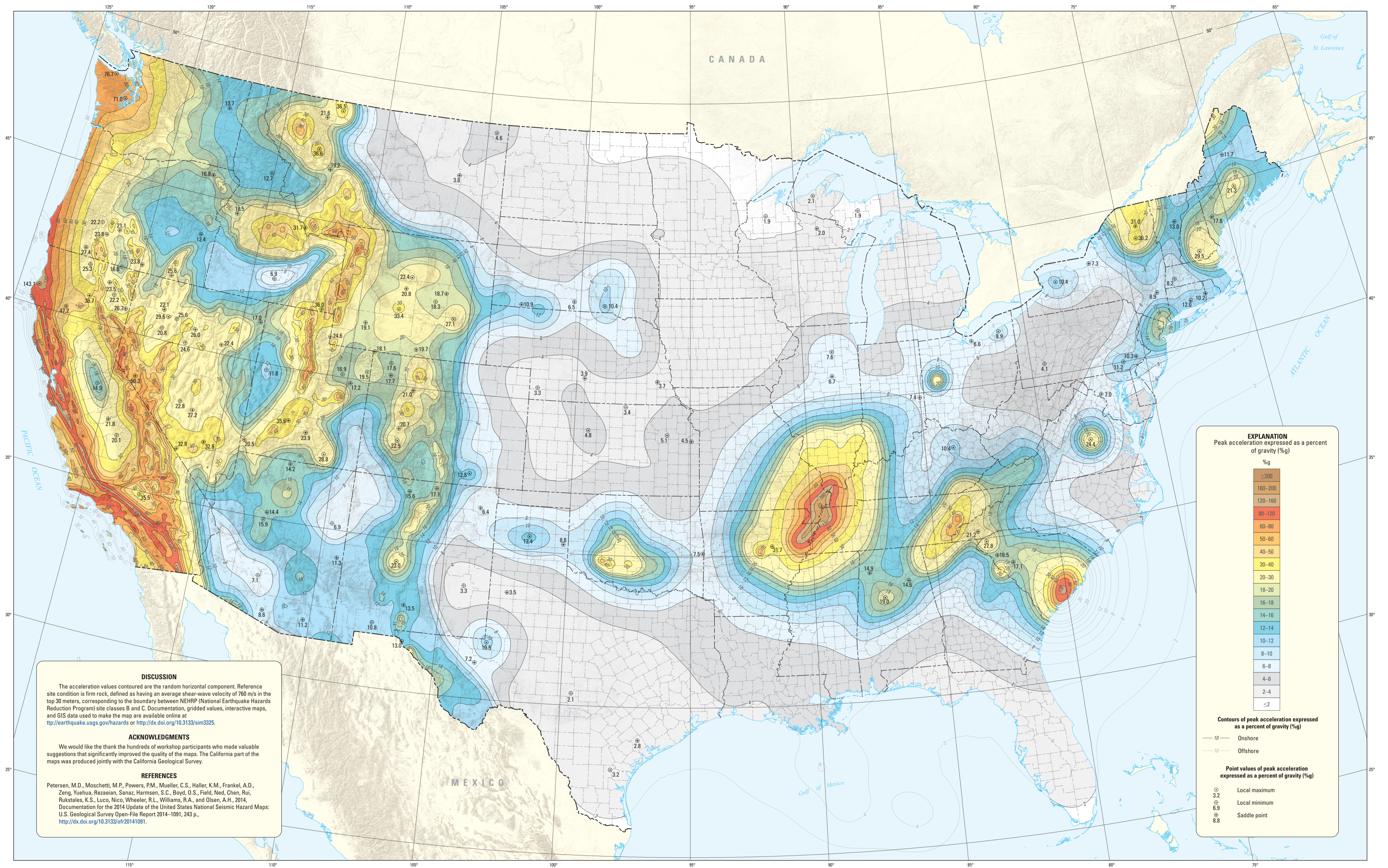
Seismic-Hazard Maps for the Conterminous United States, 2014

Peak Horizontal Acceleration with 10 Percent Probability of Exceedance in 50 Years

By
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U.S. Geological Survey
California Geological Survey, Sacramento, Calif.

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EXPLANATION
Peak acceleration expressed as a percent of gravity (%g)

>200
160-200
120-160
80-120
60-80
50-60
40-50
30-40
20-30
18-20
16-18
14-16
12-14
10-12
8-10
6-8
4-6
2-4
<2

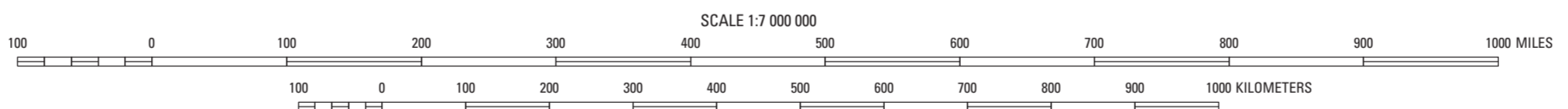
Contours of peak acceleration expressed as a percent of gravity (%g)

- Onshore
- Offshore

Point values of peak acceleration expressed as a percent of gravity (%g)

- ⊙ 3.2 Local maximum
- ⊕ 6.9 Local minimum
- ⊖ 8.8 Saddle point

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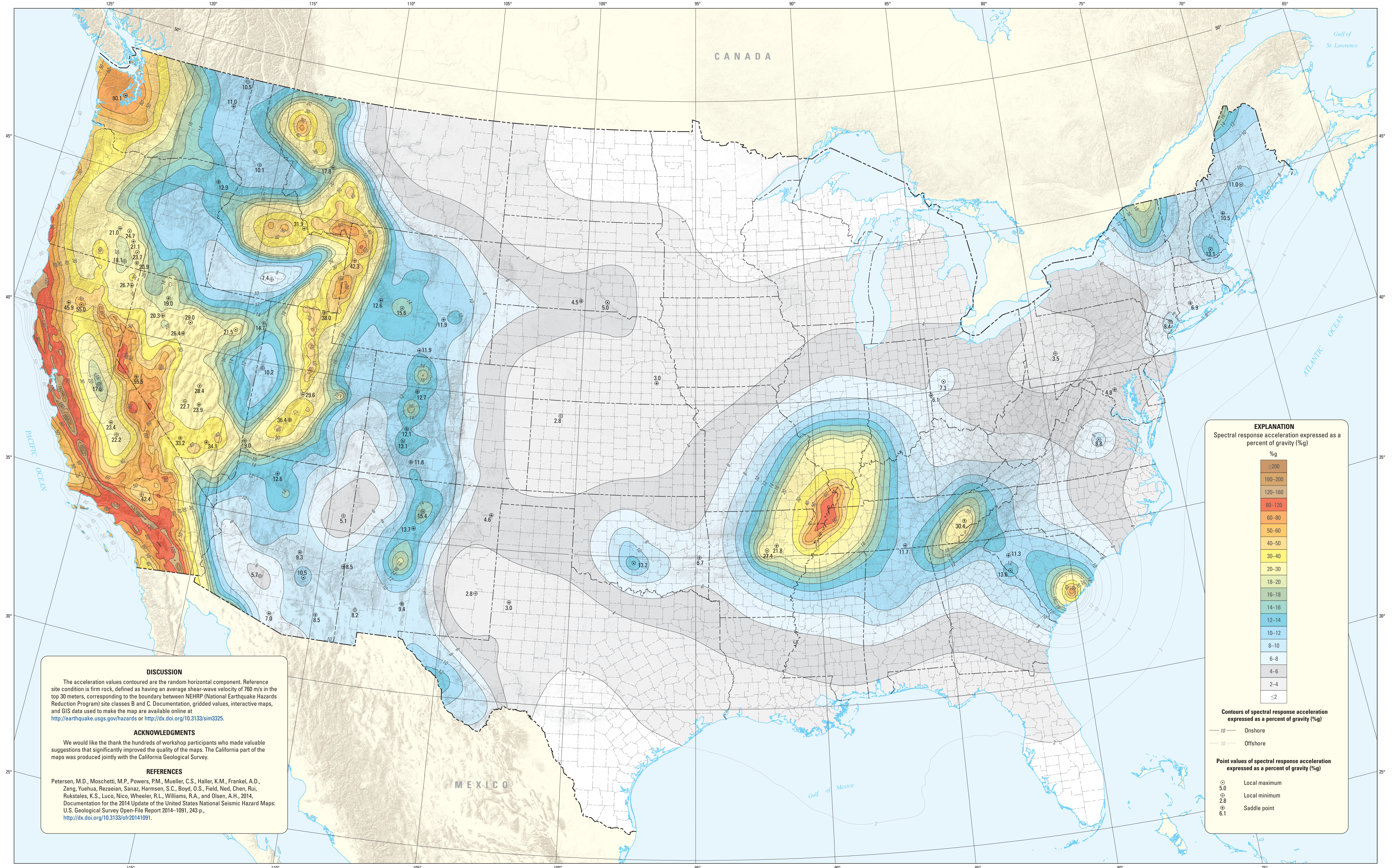
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EXPLANATION
Spectral response acceleration expressed as a percent of gravity (%g)

>200
160-200
120-160
80-120
60-80
50-60
40-50
30-40
20-30
18-20
16-18
14-16
12-14
10-12
8-10
6-8
4-6
2-4
<2

Contours of spectral response acceleration expressed as a percent of gravity (%g)

- 10 — Onshore
- 10 — Offshore

Point values of spectral response acceleration expressed as a percent of gravity (%g)

- 5.0 Local maximum
- ⊕ 2.8 Local minimum
- ⊕ 6.1 Saddle point

DISCUSSION
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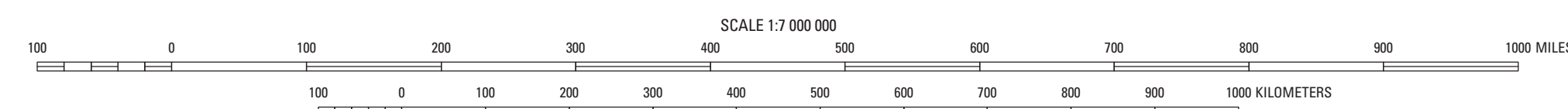
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Seismic-Hazard Maps for the Conterminous United States, 2014
Horizontal Spectral Response Acceleration for 0.2-Second Period (5 Percent of Critical Damping)
with 10 Percent Probability of Exceedance in 50 Years

By
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2015

¹U.S. Geological Survey
²California Geological Survey, Sacramento, Calif.

Scale 1:7 000 000
0 100 200 300 400 500 600 700 800 900 1000 MILES
0 100 200 300 400 500 600 700 800 900 1000 KILOMETERS

85° 90° 95° 100° 105° 110° 115° 120° 125°
25° 30° 35° 40° 45°

Atlantic Ocean
Gulf of Mexico
Gulf of St. Lawrence
CANADA
MEXICO

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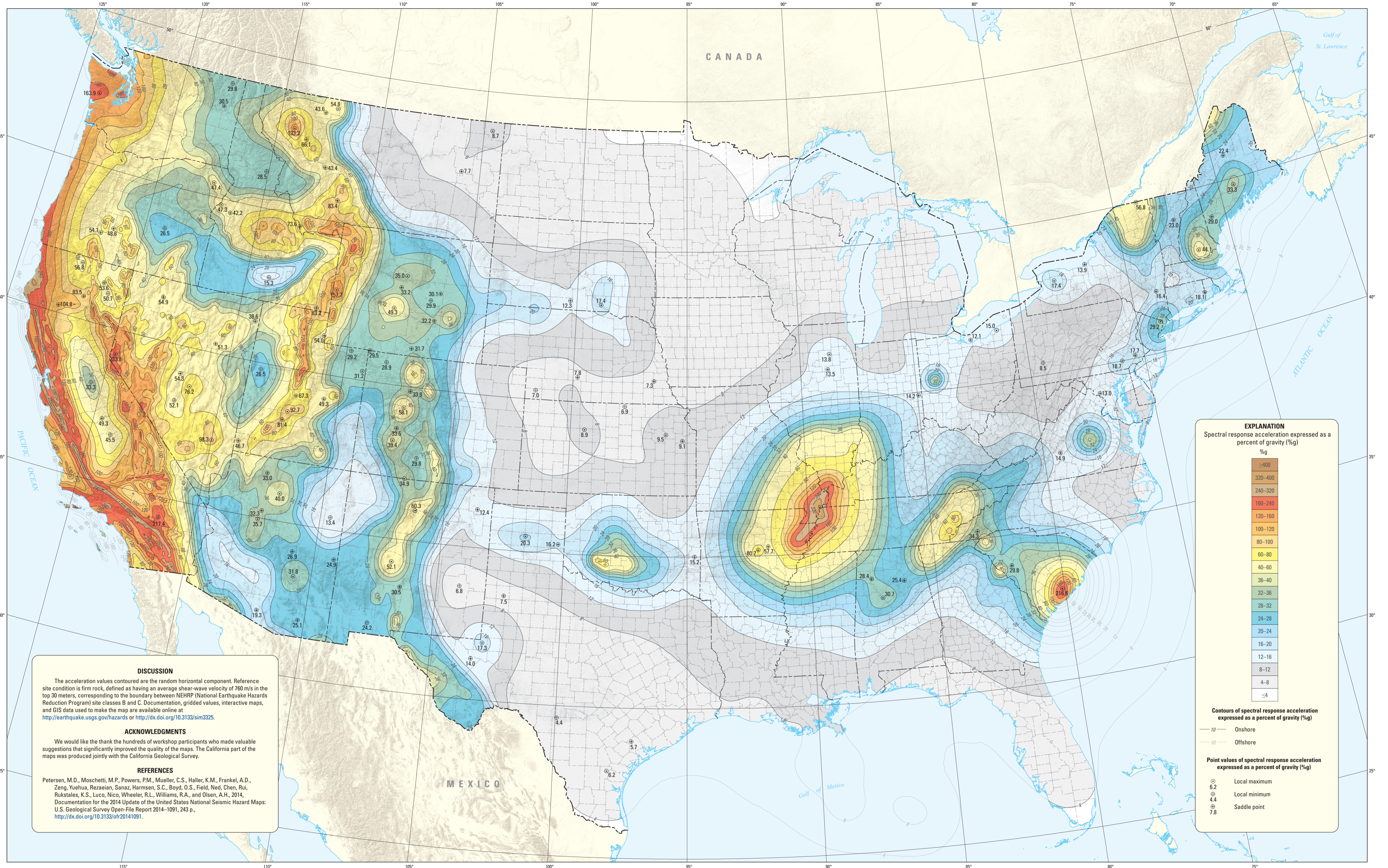
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EXPLANATION
Spectral response acceleration expressed as a percent of gravity (%g)

>400
320-400
240-320
180-240
120-180
100-120
80-100
60-80
40-60
36-40
32-36
28-32
24-28
20-24
16-20
12-16
8-12
4-8
≤4

Contours of spectral response acceleration expressed as a percent of gravity (%g)

- 10 — Onshore
- 10 — Offshore

Point values of spectral response acceleration expressed as a percent of gravity (%g)

- ⊙ Local maximum
- ⊖ Local minimum
- ⊕ Saddle point

DISCUSSION
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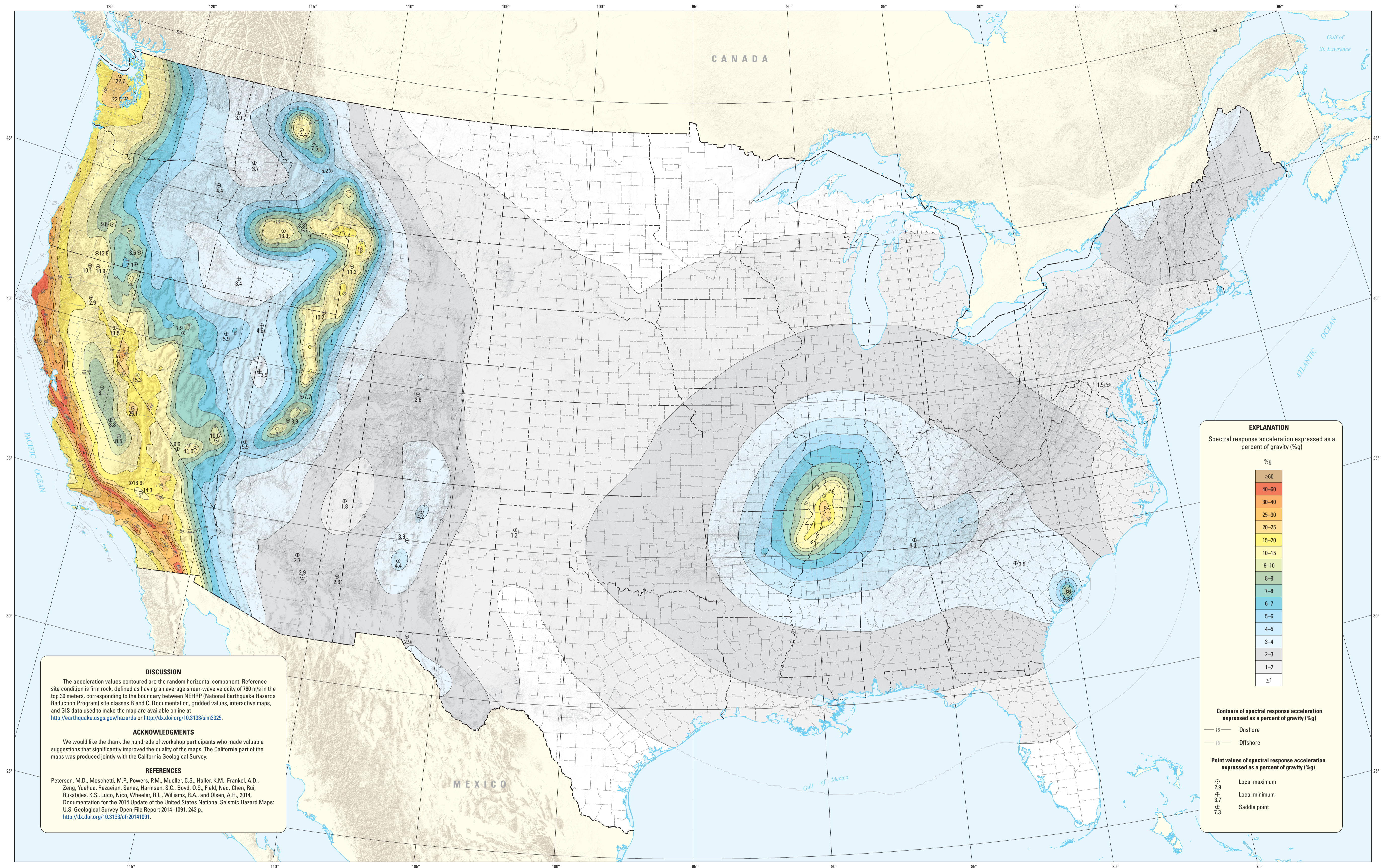
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EXPLANATION

Spectral response acceleration expressed as a percent of gravity (%g)

>60
40-60
30-40
25-30
20-25
15-20
10-15
9-10
8-9
7-8
6-7
5-6
4-5
3-4
2-3
1-2
≤1

Contours of spectral response acceleration expressed as a percent of gravity (%g)

- Onshore
- Offshore

Point values of spectral response acceleration expressed as a percent of gravity (%g)

- 2.9 Local maximum
- ⊖ 3.7 Local minimum
- ⊕ 7.3 Saddle point

DISCUSSION

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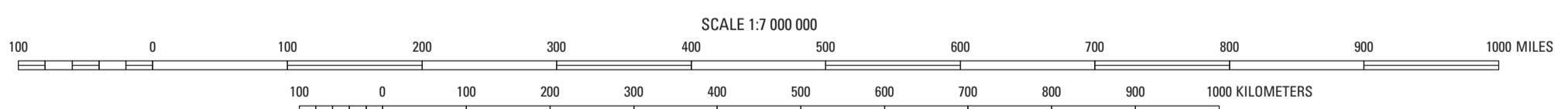
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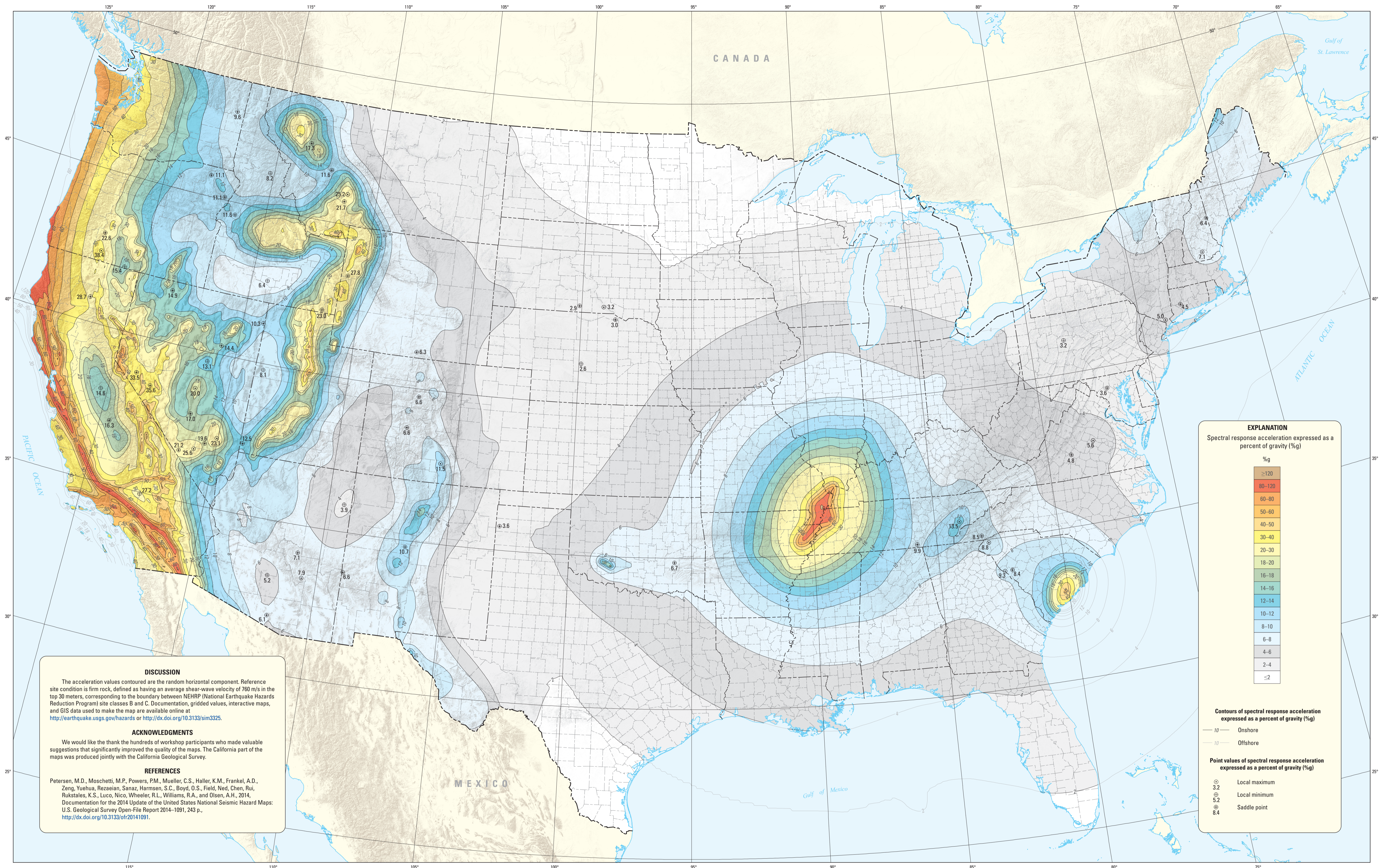
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EXPLANATION
Spectral response acceleration expressed as a percent of gravity (%g)

%g
≥120
80-120
60-80
50-60
40-50
30-40
20-30
18-20
16-18
14-16
12-14
10-12
8-10
6-8
4-6
2-4
<2

Contours of spectral response acceleration expressed as a percent of gravity (%g)

- 10 Onshore
- 10 Offshore

Point values of spectral response acceleration expressed as a percent of gravity (%g)

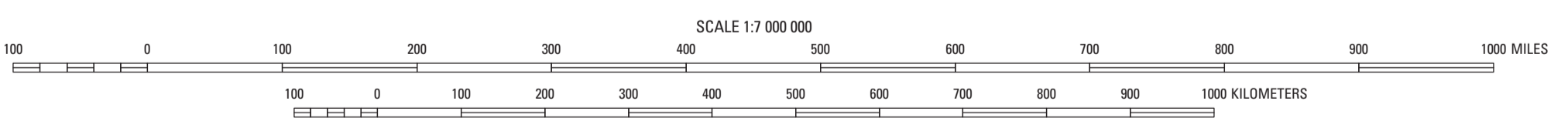
- Local maximum
- Local minimum
- Saddle point

DISCUSSION
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/s in the top 30 meters, corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction Program) site classes B and C. Documentation, gridded values, interactive maps, and GIS data used to make the map are available online at <http://earthquake.usgs.gov/hazards> or <http://dx.doi.org/10.3133/sim3325>.

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Shaded relief base from Esri Inc., 2008, Data and Maps
All other base map data from Esri Inc., 1983, Digital Chart of the World
United States County base map from the U.S. Geological Survey National Atlas, available at <http://nationatlas.gov/>
Projection: Albers equal-area conic
Standard parallels 29.5°N and 45.5°N, central meridian 95°W



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Seismic-Hazard Maps for the Conterminous United States, 2014

Horizontal Spectral Response Acceleration for 1.0-Second Period (5 Percent of Critical Damping) with 2 Percent Probability of Exceedance in 50 Years

By
Mark D. Petersen,¹ Morgan P. Moschetti,¹ Peter M. Powers,¹ Charles S. Mueller,¹ Kathleen M. Haller,¹ Arthur D. Frankel,¹ Yuehua Zeng,¹ Sanaz Rezaeian,¹ Stephen C. Harmsen,¹ Oliver S. Boyd,¹ Edward H. Field,¹ Rui Chen,² Nicolas Luco,¹ Russell L. Wheeler,¹ Robert A. Williams,¹ Anna H. Olsen,¹ and Kenneth S. Rukstales¹
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