10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Ground Motion (g)

Logic Tree Tornado

ACTN (34.46, −118.18) : 10in50 : 4Sec

Logic Tree Nodes

H&B 08

ABM

TAPERED

U2 SEIS

M5+ 6.5

FM 3.1

Mmax=7.9

GEOL

UNIFORM

U3 SEIS

M5+ 7.9

FM 3.2

Mmax=7.3

Logic Tree Weights

0.05 0.1 0.15 0.2

0 0.06 0.07 0.08 0.09 0.1 0.11

0.065 0.07 0.075 0.08 0.085

Ground Motion (g)
AC01 (34.42, -118.10) : 10in50 : 4Sec

10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.95]
NSHMP CA [UC3/NSHMP = 0.94]
10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Bakersfield (35.35, -119.00) : 10in50 : 4Sec
Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

0.05 0.06 0.07 0.08
Ground Motion (g)

0 0.05 0.1 0.15 0.2
Summed Weights

0.05 0.06 0.07 0.08
Ground Motion (g)

H&B 08
ABM
M5+ 6.5
U2 SEIS
FM 3.1
Mmax=7.9
TAPERED
ELL B
GEOL
M5+ 7.9
U3 SEIS
FM 3.2
Mmax=7.3
UNIFORM

BKBU (34.56, -117.73) : 10in50 : 4Sec
Brookings (42.05, −124.25) : 10in50 : 4Sec

10% in 50 yrs AFL

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)
Carson City (39.15, -119.75) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

0.02
0.025
0.03
0.035
0.04
0.045

Logic Tree GM Distr.

Logic Tree Nodes

Logic Tree Tornado

Summed Weights

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.54]
NSHMP CA [UC3/NSHMP = 1.00]
Century City (34.05, −118.40) : 10in50 : 4Sec

10% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

UCERF3
UCERF2 [UC3/UC2 = 0.99]
NSHMP CA [UC3/NSHMP = 1.00]

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights

Century City (34.05, −118.40) : 10in50 : 4Sec
Coalinga (36.15, -120.40) : 10in50 : 4Sec

10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes
Concord (37.95, -122.00) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Summed Weights

Ground Motion (g)

Logic Tree Tornado

Logic Tree Nodes

Concord (37.95, -122.00) : 10in50 : 4Sec
Diablo Canyon (35.20, -120.85) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance vs Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

UCERF3
UCERF2 [UC3/UC2 = 0.89]
NSHMP CA [UC3/NSHMP = 0.89]

Summed Weights

Logic Tree Nodes

ABM
H&B 08
M5+ 6.5
U2 SEIS
Mmax=7.3
TAPERED
FM 3.2

GEOL
ELL B
M5+ 7.9
U3 SEIS
Mmax=7.9
UNIFORM
FM 3.1
Eureka (40.80, -124.20) : 10in50 : 4Sec

Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)

Summed Weights

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Eureka (40.80, -124.20) : 10in50 : 4Sec
10% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

UCERF3
UCERF2 [UC3/UC2 = 0.86]
NSHMP CA [UC3/NSHMP = 0.84]

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

GOPH (33.90, -117.36) : 10in50 : 4Sec
Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Nodes
- Mmax=7.9
- H&B 08
- ZENGBB
- UNIFORM
- M5+ 6.5
- U2 SEIS
- FM 3.1

Logic Tree Tornado
- Mmax=7.3
- M5+ 7.9
- TAPERED
- U3 SEIS
- FM 3.2
- ABM
- ELL B

UCERF3
UCERF2 [UC3/UC2 = 0.75]
NSHMP CA [UC3/NSHMP = 0.74]

10% in 50 yrs AFE

Annual Frequency of Exceedance

GV03 (34.28, −117.23) : 10in50 : 4Sec
10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

SUMMED WEIGHS

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<th>0.06</th>
<th>0.07</th>
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<td>0.15</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

SUMMED WEIGHS

Ground Motion (g)
Los Angeles (34.05, −118.25) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)

Mmax=7.9
Mmax=6.5
U2 SEIS
U3 SEIS
TAPERED
FM 3.1
FM 3.2
ABM
ELL B
GEOL
SHAW 09m

Ground Motion (g)

0.045
0.05
0.055
0.06
0.065

0.2
0.15
0.1
0.05
0

Summed Weights

0.045
0.05
0.055
0.06
0.065

0.045
0.05
0.055
0.06
0.065

0.045
0.05
0.055
0.06
0.065

0.045
0.05
0.055
0.06
0.065

0.045
0.05
0.055
0.06
0.065

UCERF3
UCERF2
NSHMP CA

[UC3/UC2 = 0.97]
[UC3/NSHMP = 0.96]
Long Beach (33.80, -118.20) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Logic Tree Nodes

Ground Motion (g)
Malibu West (34.05, -118.95) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

Ground Motion (g)
LPER (33.89, −117.16) : 10 in 50 : 4Sec
Monterey (36.60, -121.90) : 10in50 : 4Sec
MRVY (33.93, -117.17) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.70]
NSHMP CA [UC3/NSHMP = 0.69]

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

Neok
Shaw 09m
Ms+ 6.5
U2 Seis
Uniform
Mmax=7.9
FM 3.2

Neok
Ell B
Ms+ 7.9
U3 Seis
Tapered
Mmax=7.3
FM 3.1
Northridge (34.20, -118.55) : 10in50 : 4Sec

Annual Frequency of Exceedance

- 10% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

Northridge (34.20, -118.55) : 10in50 : 4Sec

10% in 50 yrs AFE

Ground Motion (g)
NUEVO (33.78, -117.15) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Logic Tree Nodes

H&B 08
NEOK
M5+ 6.5
U2 SEIS
Mmax=7.3
TAPERED
FM 3.2

ELL B
ABM
M5+ 7.9
U3 SEIS
Mmax=7.9
UNIFORM
FM 3.1
Oakland (37.80, -122.25) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

Logic Tree GM Distr.

Summed Weights

Ground Motion (g)

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)
PACI2 (34.39, −118.05) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights
Palmdale (34.50, -118.00): 10in50: 4Sec

Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.88]
NSHMP CA [UC3/NSHMP = 0.86]

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

TAPERED
TAPERED
FM 3.1
FM 3.2
Mmax=7.6
Mmax=7.9
H&B 08
M5+ 7.9
U2 SEIS
U3 SEIS

Ground Motion (g)

Ground Motion (g)
Palm Springs (33.85, -116.55) : 10in50 : 4Sec

Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

Palm Springs (33.85, -116.55) : 10in50 : 4Sec

Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)
Pasadena (34.15, −118.15) : 10 in 50 : 4 Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.92]
NSHMP CA [UC3/NSHMP = 0.91]

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

UNIFORM TAPERED
U2 SEIS U3 SEIS
Mmax=7.9 Mmax=7.3
FM 3.2 FM 3.1
Mmax=7.9 Mmax=7.3
U2 SEIS U3 SEIS
UNIFORM TAPERED

Ground Motion (g)

Ground Motion (g)
PEDLEY1 (33.99, -117.46) : 10in50 : 4Sec

10% in 50 yrs AFE

Ground Motion (g) vs. Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes
Annual Frequency of Exceedance

10% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

PERR2 (33.79, −117.24) : 10in50 : 4Sec
PERRM (33.80, -117.25) : 10in50 : 4Sec

10% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights
10% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.93]
NSHMP CA [UC3/NSHMP = 0.91]

Logic Tree GM Distr.
Logic Tree Tornado
Reno (39.55, −119.80) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.57]
NSHMP CA [UC3/NSHMP = 0.82]

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Logic Tree Nodes

ZENGBB
M5+ 6.5
ELL B
Mmax=7.3
U3 SEIS
U2 SEIS
TAPERED
FM 3.2
ABM
M5+ 7.9
ELL B
Mmax=7.9
U2 SEIS
UNIFORM
FM 3.1

Ground Motion (g)
Redding (40.60, -122.40): 10 in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

UCERF3
UCERF2
[UC3/UC2 = 1.12]
NSHMP CA
[UC3/NSHMP = 1.12]

Summed Weights

Logic Tree Nodes

U2 SEIS
NEOK
M5+ 6.5
Mmax=7.3
H&B 08
TAPERED
FM 3.1
U3 SEIS
ABM
M5+ 7.9
Mmax=7.9
ELL B
UNIFORM
FM 3.2
Riverside (33.95, −117.40) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Ground Motion (g)

Logic Tree Nodes

Ground Motion (g)
San Bernardino (34.10, -117.30) : 10in50 :
4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

H&B 08
M5+ 6.5
NEOK
UNIFORM
U2 SEIS
FM 3.1
Mmax=7.9

EL B
M5+ 7.9
ABM
TAPERED
U3 SEIS
FM 3.2
Mmax=7.6

Ground Motion (g)

0.08 0.1 0.12 0.14 0.16

0.02 0.04 0.06 0.08 0.1

0.09 0.1 0.11 0.12 0.13

0.08 0.09 0.1 0.12 0.14 0.16

0.1 0.08 0.06 0.04 0.02
San Diego (32.70, −117.15) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Ground Motion (g)

Logic Tree Nodes

Ground Motion (g)
Ground Motion (g)

Annual Frequency of Exceedance

10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

San Francisco (37.75, -122.40) : 10in50 : 4Sec
San Jose (37.35, −121.90) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)
San Luis Obispo (35.30, -120.65) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

San Luis Obispo (35.30, -120.65) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)
San Mateo (37.55, -122.30) : 10in50 : 4Sec

10% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

UCERF3
UCERF2 [UC3/UC2 = 0.99]
NSHMP CA [UC3/NSSHMP = 0.96]

Summed Weights

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Mmax=7.9
Mmax=7.3
FM 3.2
FM 3.1
UNIFORM
U5 SEIS
U3 SEIS
H&B 08
ASH
GEOL
M5+ 7.9
M5+ 6.5
U2 SEIS
TAPERED
ELL B
ABM
FM 3.1
Mmax=7.3

Ground Motion (g)
Santa Barbara (34.45, -119.70) : 10in50 : 4Sec

10% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.88]
NSHMP CA [UC3/NSHMP = 0.89]

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes
M5+ 6.5
GEOL
ELL B
FM 3.1
TAPERED

M5+ 7.9
ABM
H&B 08
U3 SEIS
Mmax=7.3
FM 3.2
UNIFORM
San Onofre (33.40, −117.55) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

Ground Motion (g)
Santa Cruz (36.95, −122.05) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

0 0.05 0.1 0.15 0.2
0.045 0.05 0.055 0.06 0.065 0.07 0.075

Ground Motion (g)

Logic Tree Nodes

A&M
H&B 08
M5+ 7.9
UNIFORM
Mmax=7.9
U2 SEIS
FM 3.1

GEOL
ELL B
M5+ 9.6
TAPERED
Mmax=7.3
U3 SEIS
FM 3.2

Ground Motion (g)
Santa Rosa (38.45, –122.70) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

Mmax=7.9  Mmax=7.6
FM 3.1  FM 3.2
M5+ 6.5  M5+ 7.9
U3 SEIS  U2 SEIS
UNIFORM TAPERED
ABM  GEOL

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

SHAW CSD  ELL B
ABM  GEOL
UNIFORM  TAPERED
U3 SEIS  U2 SEIS
M5+  6.5  M5+  7.9
FM  3.1  FM  3.2
Mmax= 7.9  Mmax= 7.6
SW01 (34.30, -117.34) : 10in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

10% in 50 yrs AFE

0.07 0.08 0.09 0.1 0.11 0.12 0.13
0.02 0.04 0.06 0.08 0.1
0.075 0.08 0.085 0.09 0.095
0.07 0.08 0.09 0.1 0.11 0.12 0.13
0.02 0.04 0.06 0.08 0.1

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

H&B 08  ELL B
ABM  GEOL
U2 SEIS  U3 SEIS
TAPERED  UNIFORM
M5+ 9.6  M5+ 7.9
Mmax=7.9  Mmax=7.3
FM 3.1  FM 3.2
UCR (33.96, −117.32) : 10in50 : 4Sec

10% in 50 yrs AFE

**Logic Tree GM Distr.**

**Logic Tree Tornado**

**Annual Frequency of Exceedance**

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<th>Ground Motion (g)</th>
<th>10^{-10}</th>
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<th>10^{-7}</th>
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<th>10^{-5}</th>
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</tbody>
</table>

**Logic Tree Nodes**

- H&B 08
- ABM
- M5+ 6.5
- U2 SEIS
- UNIFORM
- Mmax=7.9
- FM 3.1
- ELL B
- GEOL
- M5+ 7.9
- U3 SEIS
- TAPERED
- Mmax=7.3
- FM 3.2
Vallejo (38.10, −122.25) : 10in50 : 4Sec

10% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.13]
NSHMP CA [UC3/NSHMP = 1.12]

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

0.2

0.15

0.1

0.05

0

0.06

0.07

0.08

0.09

0.06

0.065

0.07

Ground Motion (g)

GECL
FM 3.1
UNIFORM
ELL B
U3 SEIS
Mmax=7.9
M5+ 6.5
ABM
FM 3.2
TAPERED
H&B 08
U2 SEIS
Mmax=7.3
M5+ 7.9

10% in 50 yrs AFE

Ground Motion (g)
10% in 50 yrs AFE

Ventura (34.30, -119.30) : 10in50 : 4Sec

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights