ACTN (34.46, −118.18) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Ground Motion (g)

Logic Tree Tornado

Ground Motion (g)
AC01 (34.42, -118.10) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

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

ELL B
M5+ 7.9
U3 SEIS
GEOL
UNIFORM
Mmax=7.9
FM 3.1

Summed Weights

Ground Motion (g)
Bakersfield (35.35, -119.00) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Nodes

Logic Tree Tornado

Ground Motion (g)
2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.35]
NSHMP CA [UC3/NSHMP = 1.38]

Logic Tree GM Distr.

Summed Weights

Logic Tree Nodes

Mmax=7.6

Logic Tree Tornado

NEOK
FM 3.2
M5+ 6.5
SHAW 09m
U2 SEIS
UNIFORM
Mmax=7.6

Brawley (33.00, −115.55) : 2in50 : 4Sec
BKBU (34.56, -117.73) : 2 in 50 : 4 Sec

2% 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

H&B 08
ABM
U2 SEIS
M5+ 9.6
TAPERED
Mmax=7.9
FM 3.2
ELL B
GEOL
U3 SEIS
M5+ 7.9
UNIFORM
Mmax=7.3
FM 3.1
Brookings (42.05, −124.25) : 2\text{in50} : 4\text{Sec}

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

NEOK
H&B 08
FM 3.2
Mmax=7.3
U3 SEIS
M5+ 6.5
UNIFORM

ABM
ELL B
FM 3.1
Mmax=7.9
U2 SEIS
M5+ 7.9
TAPERED

H&B 08
FM 3.2
Mmax=7.3
U3 SEIS
M5+ 6.5
UNIFORM

2% in 50 yrs AFE
Carson City (39.15, –119.75) : 2in50 : 4Sec

Logistic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Ground Motion (g)

Logic Tree Nodes

ZENGBB
SHAW CSD
U3 SEIS
Mmax=7.3
M5+ 6.5
TAPERED
FM 3.2

ABM
ELL B
U2 SEIS
Mmax=7.9
M5+ 7.9
UNIFORM
FM 3.1

Ground Motion (g)
Century City (34.05, -118.40): 2 in 50: 4 Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.02]
NSHMP CA [UC3/NSHMP = 1.04]

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

U2 SEIS
U3 SEIS
UNIFORM
M5+ 9.6
M5+ 9.7
M5+ 7.9
TAPERED

Century City (34.05, -118.40): 2 in 50 : 4 Sec

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.02]
NSHMP CA [UC3/NSHMP = 1.04]

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

U2 SEIS
U3 SEIS
UNIFORM
M5+ 9.6
M5+ 9.7
M5+ 7.9
TAPERED
Coalinga (36.15, −120.40) : 2in50 : 4Sec

2% in 50 yrs AFE
Concord (37.95, -122.00) : 2in50 : 4Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights
Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.99]
NSHMP CA [UC3/NSHMP = 0.98]

Logic Tree GM Distr.

Logic Tree Tornado

H&B 08 ELL B
NEOK ABM
M5+ 9.6 M5+ 7.9
TAPERED UNIFORM
U3 SEIS U2 SEIS
Mmax=7.3 Mmax=7.9
FM 3.2 FM 3.1

Cucamonga (34.20, −117.55) : 2in50 : 4Sec
Diablo Canyon (35.20, −120.85): 2 in 50 : 4Sec
Death Valley (36.35, −116.85) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)
2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Eureka (40.80, -124.20) : 2in50 : 4Sec
Fresno (36.75, −119.75) : 2 in 50 : 4 Sec

2% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Tornado

UCERF3

UCERF2 [UC3/UC2 = 1.10]

NSHMP CA [UC3/NSHMP = 1.09]
2% in 50 yrs AFE

Logix Tree GM Distr.

Logic Tree Nodes

GOPH (33.90, -117.36) : 2in50 : 4Sec

Ground Motion (g)

Annual Frequency of Exceedance

0.09

0.1

0.11

0.12

0.13

0.14

0.15

Summed Weights

0.02

0.04

0.06

0.08

0.1

Ground Motion (g)

Logic Tree Tornado

Logic Tree Nodes

H&B 08
NEDK
M5+ 9.6
U3 SEIS
Mmax=7.3
TAPERED
FM 3.1

ELL B
ABM
M5+ 7.9
U2 SEIS
Mmax=7.9
UNIFORM
FM 3.2

Ground Motion (g)
Irvine (33.65, −117.80) : 2 in 50 : 4Sec

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Irvine (33.65, −117.80) : 2 in 50 : 4Sec

Logic Tree Nodes

Ground Motion (g)

Ground Motion (g)

UCERF3

UCERF2 [UC3/UC2 = 0.99]

NSHMP CA [UC3/NSHMP = 0.98]

Summed Weights

0.065

0.07

0.075

0.08

0.085

0.09

0.095

0.078

0.08

0.082

0.084

0.086

0.088

0.09
GV03 (34.28, -117.23) : 2in50 : 4Sec

Logic Tree GM Distr.

Logic Tree Tornado

H&B 08  ELL B
ZENGBB  ABM
M5+ 6.5  M5+ 7.9
U2 SEIS  U3 SEIS
UNIFORM  TAPERED
FM 3.1  FM 3.2
Mmax=7.9  Mmax=7.6
LMAT (33.79, -117.40) : 2 in 50 : 4 Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Ground Motion (g)
LIBUT2 (34.59, -117.81) : 2in50 : 4Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Ground Motion (g)

Logic Tree Nodes

- UCERF3
- UCERF2 [UC3/UC2 = 1.02]
- NSHMP CA [UC3/NSHMP = 1.01]
Los Angeles (34.05, -118.25) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Ground Motion (g)

Logic Tree Nodes

UNIFORM TAPERED

M5+ 9.6

Mmax=7.6

SHAW 09m

FM 3.2

FM 3.1

U2 SEIS

Mmax=7.9

M5+ 7.9

ABM

NEOK

ELL B

TAPERED

NEOK

FM 3.2

U3 SEIS

Mmax=7.6

M5+ 7.9

UNIFORM

Table:

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<tr>
<th>Model</th>
<th>UC3/UC2</th>
<th>UC3/NSHMP</th>
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<td>UCERF3</td>
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<td>1.10</td>
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<td>UCERF2</td>
<td>1.10</td>
<td>1.09</td>
</tr>
<tr>
<td>NSHMP CA</td>
<td>1.09</td>
<td>1.09</td>
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Graphs:

- Annual Frequency of Exceedance vs. Ground Motion (g)
- Logic Tree GM Distr.
- Logic Tree Tornado
Long Beach (33.80, -118.20) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Nodes

Logic Tree Tornado
LPER (33.89, -117.16) : 2in50 : 4Sec

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Tornado

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

Ground Motion (g)

Summed Weights

Logic Tree Nodes

- FM 3.2
- FM 3.1
- U3 SEIS
- U2 SEIS
- M5+ 7.9
- M5+ 6.5
- H&B 08
- NEOK
- TAPERED
- Mmax=7.9
- Mmax=7.6
- ABM
- ELL B
- UNIFORM
- ELL B

Ground Motion (g)
Monterey (36.60, -121.90) : 2in50 : 4Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights

Ground Motion (g)
MKBD (33.88, -117.39) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Ground Motion (g)

Logic Tree Nodes

NEOK
H&B 08
M5+ 9.6
TAPERED
FM 3.1
U2 SEIS
Mmax=7.3

ABM
ELL B
M5+ 7.9
UNIFORM
FM 3.2
U3 SEIS
Mmax=7.9
Morgan Hill (37.15, -121.65) : 2in50 : 4Sec

2% 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

M5+ 9.6
Mmax=7.3
U3 SEIS
SHAW 09m
UNIFORM
FM 3.2

ZENGBB
ABM
M5+ 7.9
Mmax=7.9
U2 SEIS
ELL B
TAPERED
FM 3.1
Northridge (34.20, -118.55) : 2in50 : 4Sec

Annual Frequency of Exceedance vs Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Summed Weights
Annual Frequency of Exceedance

2% in 50 yrs AFE

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.95]
NSHMP CA [UC3/NSHMP = 0.94]

Logic Tree GM Distr.

Ground Motion (g)

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

Mmax=7.3
Mmax=7.9

FM 3.1
FM 3.2
U3 SEIS
U2 SEIS
M5+ 6.5
M5+ 7.9

H&B 08
NEOK
TAPERED
UNIFORM

E&L B
ABM
Palmdale (34.50, -118.00) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Ground Motion (g)

Logic Tree Nodes

Ground Motion (g)
Palm Springs (33.85, -116.55) : 2 in 50 : 4 Sec

2% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

UCERF3
UCERF2 [UC3/UC2 = 0.98]
NSHMP CA [UC3/NSHMP = 0.94]

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

H&B 08
M5+ 6.5
M5+ 7.9
GEOL
U2 SEIS
ABM
U3 SEIS
FM 3.1
FM 3.2
Mmax=7.6
Mmax=7.9
TAPERED
UNIFORM
Pasadena (34.15, −118.15) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)

Summed Weights

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.09]
NSHMP CA [UC3/NSHMP = 1.09]
PBWL (34.41, -117.86) : 2in50 : 4Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Summed Weights

Ground Motion (g)

Logic Tree Nodes

FM 3.1

TAPERED UNIFORM H&B 08 GEOL

M5+ 9.6 Mmax=7.3

M5+ 7.9

U3 SEIS U2 SEIS

FM 3.2

Mmax=7.9

H&B 08 ABM

PBWL (34.41, -117.86) : 2in50 : 4Sec

Logic Tree GM Distr.

Summed Weights

Ground Motion (g)

Logic Tree Tornado

Ground Motion (g)

Logic Tree Nodes

FM 3.1

TAPERED UNIFORM H&B 08 GEOL

M5+ 9.6 Mmax=7.3

M5+ 7.9

U3 SEIS U2 SEIS

FM 3.2

Mmax=7.9

H&B 08 ABM
PEDLEY1 (33.99, −117.46) : 2in50 : 4Sec

2% 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)
PERR2 (33.79, −117.24) : 2in50 : 4Sec

Ground Motion (g)

Annual Frequency of Exceedance

2% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.97]
NSHMP CA [UC3/NSHMP = 0.96]

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

Ground Motion (g)
PIBU (34.65, −117.85) : 2in50 : 4Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)

Summed Weights
Reno (39.55, −119.80) : 2 in 50 : 4 Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 0.57]
NSHMP CA [UC3/NSHMP = 0.71]

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

FM 3.2
TAPERED
U3 SEIS
ZENGBB
SHA W CSD
ELL B
U2 SEIS
UNIFORM
FM 3.1

M5+ 6.5
Mmax=7.3
M5+ 7.9
Mmax=7.9
ABM
Redding (40.60, -122.40) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes
Riverside (33.95, −117.40) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 1.03]
NSHMP CA [UC3/NSHMP = 1.02]

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

FM 3.1
U2 SEIS
M5+ 9.6
TAPERED
H&B 08
Mmax=7.3
Mmax=7.9
ABM
ELL B
UNIFORM
M5+ 7.9
U3 SEIS
FM 3.2

Ground Motion (g)
Sacramento (38.60, −121.50) : 2 in 50 : 4 Sec

Annual Frequency of Exceedance

2% in 50 yrs AFE

Sacramento (38.60, −121.50) : 2 in 50 : 4 Sec

Logic Tree GM Distr.

Logic Tree Tornado

Ground Motion (g)

Ground Motion (g)

UCERF3
UCERF2 [UC3/UC2 = 1.10]
NSHMP CA [UC3/NSHMP = 1.10]

Ground Motion (g)

H&B 08
M5+ 9.6
NEOK
Mmax=7.3
U3 SEIS
UNIFORM
FM 3.2
ELL B
M5+ 7.9
ABM
Mmax=7.9
U2 SEIS
TAPERED
FM 3.1

Logic Tree Nodes

Logic Tree Nodes

Ground Motion (g)

Ground Motion (g)

Ground Motion (g)

Ground Motion (g)
San Diego (32.70, −117.15) : 2 in 50 : 4 Sec

2% 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

NEOK
SHAW CSD
FM 3.1
M5+ 6.5
Mmax=7.9
U2 SEIS
UNIFORM

ABM
ELL B
FM 3.2
M5+ 7.9
Mmax=7.3
U3 SEIS
TAPERED
San Francisco (37.75, −122.40) : 2in50 : 4Sec

2% in 50 yrs AFE

Ground Motion (g)

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Nodes

H&B 08
NEOK
M5+ 9.6
Mmax=7.3
FM 3.1
U3 SEIS
UNIFORM
ELL B
ABM
M5+ 7.9
Mmax=7.9
FM 3.2
U2 SEIS
TAPERED

Ground Motion (g)

Ground Motion (g)
San Luis Obispo (35.30, −120.65) : 2in50 : 4Sec

2% in 50 yrs AFE
San Mateo (37.55, -122.30) : 2in50 : 4Sec
Santa Barbara (34.45, -119.70) : 2in50 : 4Sec

Ground Motion (g)

Annual Frequency of Exceedance

Logic Tree GM Distr.

Logic Tree Tornado

Logic Tree Nodes

GEOL
FM 3.2
SHAW 09m
M5+ 6.5
U2 SEIS
TAPERED
Mmax=7.9

Logic Tree Nodes

Logic Tree Tornado

GEOL
FM 3.2
SHAW 09m
M5+ 6.5
U2 SEIS
TAPERED
Mmax=7.9

Ground Motion (g)

Ground Motion (g)

Summed Weights

Summed Weights

2% in 50 yrs AFE

UCERF3
UCERF2 [UC3/UC2 = 0.99]
NSHMP CA [UC3/NSHMP = 1.00]
San Onofre (33.40, -117.55) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)

Ground Motion (g)
Santa Cruz (36.95, −122.05) : 2in50 : 4Sec

---

**Logic Tree GM Distr.**

- **UCERF3**
- **UCERF2** [UC3/UC2 = 1.08]
- **NSHMP CA** [UC3/NSHMP = 1.07]

**Logic Tree Tornado**

- H&B 08
- ABM
- M5+ 9.6
- Mmax=7.3
- Mmax=7.9
- U3 SEIS
- FM 3.2
- TAPERED

---

**Ground Motion (g)**

- **Summed Weights**
  - 0.1
  - 0.08
  - 0.06
  - 0.04
  - 0.02
  - 0.0

---

**Annual Frequency of Exceedance**

- 2% in 50 yrs AFE

---

**Logic Tree Nodes**

- ELL B
- GEOL
- M5+ 7.9
- U2 SEIS
- FM 3.1
- UNIFORM

---

**Graph Details**

- **Ground Motion (g)**
  - 10^{-2}
  - 10^{-1}
  - 10^0

---

**Graphical Elements**

- **Ground Motion (g)**
  - 0.1
  - 0.12
  - 0.14
  - 0.16

---

**Table Columns**

- **UCERF3**
- **UCERF2** [UC3/UC2 = 1.08]
- **NSHMP CA** [UC3/NSHMP = 1.07]
Santa Rosa (38.45, −122.70) : 2 in 50 : 4 Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

Logic Tree GM Distr.

Logic Tree Tornado

Summed Weights

Logic Tree Nodes

NEOK
SHAW 09m
TAPERED
U3 SEIS
M5+ 7.9
Mmax=7.9
FM 3.2

ABM
ELL B
UNIFORM
U2 SEIS
M5+ 9.6
Mmax=7.3
FM 3.1

Ground Motion (g)
UCR (33.96, -117.32) : 2in50 : 4Sec

2% in 50 yrs AFE

Annual Frequency of Exceedance

Ground Motion (g)

UCERF3
UCERF2  [UC3/UC2 = 1.02]
NSHMP CA  [UC3/NSHMP = 1.01]

Logic Tree GM Distr.

Summed Weights

0.13 0.14 0.15 0.16 0.17

Logic Tree Tornado

Logic Tree Nodes

H&B 08  ELL B
NEOK  ABM
TAPERED  UNIFORM
M5+ 9.6  M5+ 7.9
Mmax=7.3  Mmax=7.9
U3 SEIS  U2 SEIS
FM 3.1  FM 3.2

Ground Motion (g)
Vallejo (38.10, -122.25) : 2in50 : 4Sec

Annual Frequency of Exceedance

Ground Motion (g)

2% in 50 yrs AFE

Logic Tree GM Distr.

Summed Weights

Logic Tree Tornado

Logic Tree Nodes

Ground Motion (g)

Ground Motion (g)