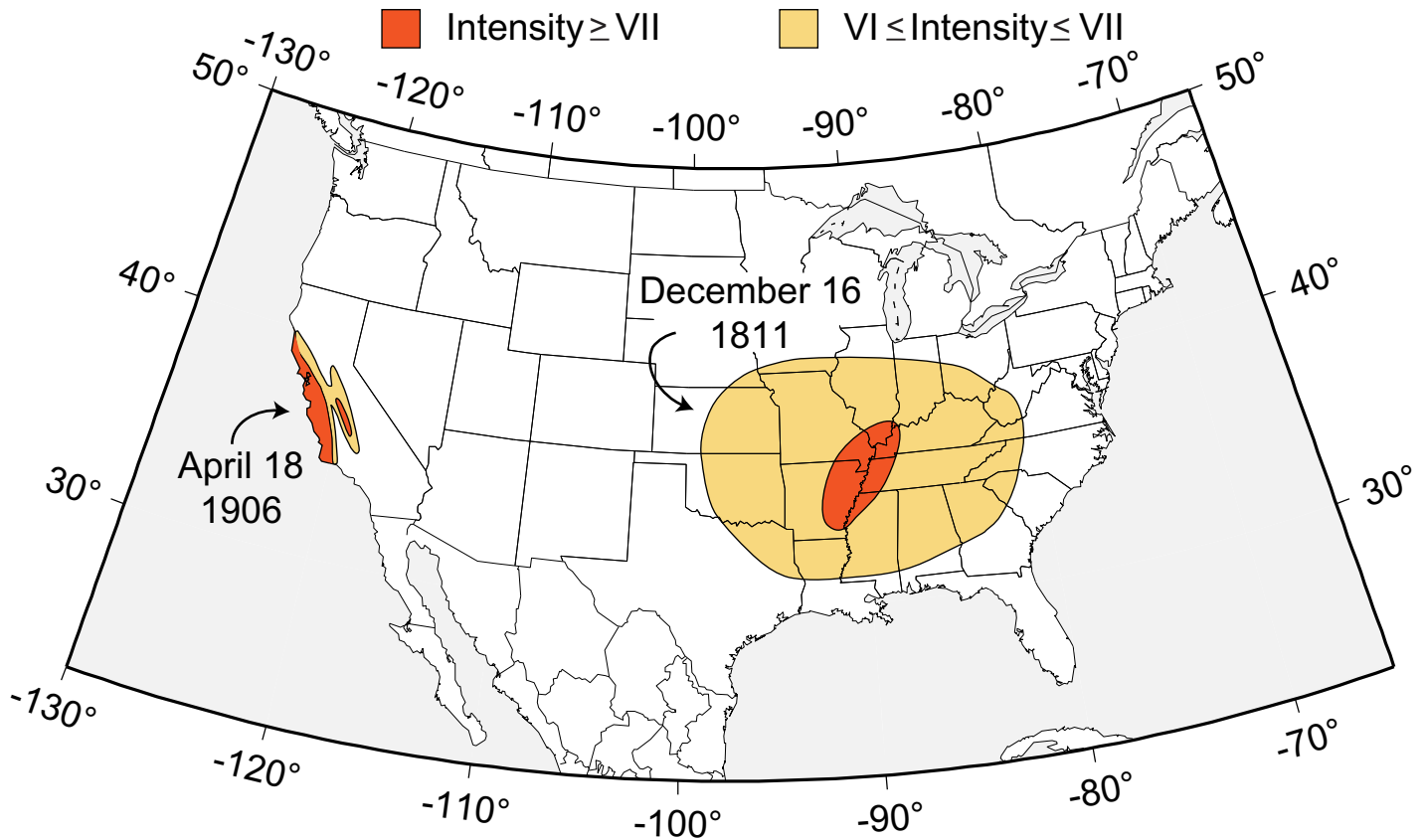


Shaking Intensity and Regional Geology

New Madrid & 1906 San Francisco Shaking Intensities



Several factors influence the level of ground shaking during an earthquake - most important is how close you are to the fault. An important factor in large events is regional geology, which can affect how well the energy released during the earthquake is transmitted into the surrounding regions. Generally seismically active areas are relatively warm and the energy is relatively quickly absorbed. Older, more stable regions transmit the seismic energy more efficiently and a larger region may be shaken. The effect is illustrated in the seismic patterns observed following two large earthquakes, the 1906 San Francisco and the 1811-12 New Madrid Earthquakes. For similar size, large earthquakes, the region of experiencing strong shaking is generally larger in the eastern US, where the waves are transmitted more efficiently.

SAINT LOUIS UNIVERSITY



EARTHQUAKE CENTER

Earthquakes in the Conterminous United States

Earthquake scientists use a variety of geological and seismological information to estimate the likelihood of strong shaking throughout the country. The results reflect the recent distribution of earthquake activity.

For more information, visit
http://www.eas.slu.edu/Earthquake_Center

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