USGS Earthquake

USGS earthquake data is global data that shows shake intensity measured or/and felt during real and possible earthquakes.

Coverage area & data available

- Global
- Current year's earthquakes above magnitude 3.0
- Earthquakes above magnitude 6.0 since 2018
- USGS earthquake scenarios

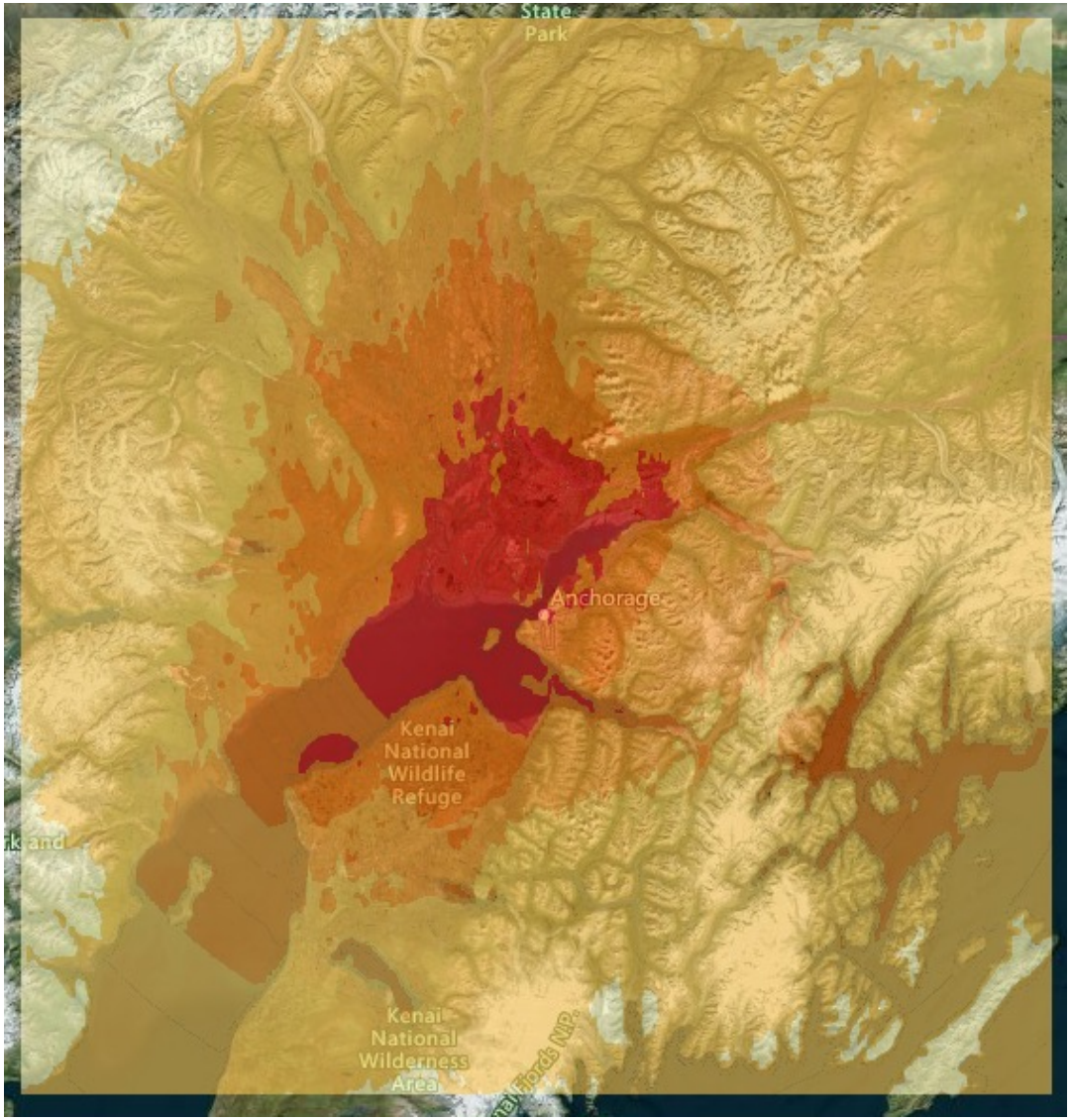
Update frequency

Current event data is updated every 30 minutes.

Enhanced columns

We enhance your data with up to six shake intensity columns that you can view and filter by:

- MMI (USGS) [Date/Time]
- PGA (USGS) [Date/Time]
- PGV (USGS) [Date/Time]
- SA 0.3 secs (USGS) [Date/Time]
- SA 1.0 secs (USGS) [Date/Time]
- SA 3.0 secs (USGS) [Date/Time]



Learn more about USGS Earthquake data at
https://earthquake.usgs.gov/

USGS science for a changing world

USGS Earthquake (Continued)

What the data means
The Modified Mercalli Intensity (MMI) scale quantifies the shaking felt by people from I (not felt) to XII (extreme shaking) and can be correlated with likely damage.

Peak ground acceleration (PGA) is equal to the maximum ground acceleration that occurred during earthquake shaking at a location and the likely damage associated from I (none) to XII (total destruction).

Peak ground velocity (PGV) is equal to the peak of the first integration of the acceleration record and the likely damage associated from I (none) to XII (total destruction).

Spectral Acceleration (SA) is approximately the highest shake intensity experienced by an object during a specified time interval.

Exported columns
The models you enhanced your data by will be available in the exported CSV files as:

- USGS Earthquake MMI [Date/Time]
- USGS Earthquake PGA [Date/Time]
- USGS Earthquake PGV [Date/Time]
- USGS Earthquake PSA 0.3 Date/Time]
- USGS Earthquake PSA 1.0 [Date/Time]
- USGS Earthquake PSA 3.0 [Date/Time]

When you download your enhanced data, look for the columns that start the “Provider Name”, then the “Peril Name”, and ending with the date and time. For example, “USGS Earthquake MMI 2022-04-21 23:59 (UTC)”.

Scenarios
Earthquake scenarios represent a potential future earthquake by assuming a particular magnitude, location, and fault-rupture and estimating shaking using a variety of strategies. These are not actual events. You'll find these in the event list with the word "SCENARIO" in front of the scenario name.