

FAQ Categories

- [Earthquake Myths](#)
- [Earthquakes, Faults, Plate Tectonics, Earth Structure](#)
- [Current Earthquake Information](#)
- [Measuring Earthquakes](#)
- [Earthquake Effects & Experiences](#)
- [Seismographs](#)
- [Historic Earthquakes and Statistics](#)
- [Probabilities, Seismic Hazard & Earthquake Engineering](#)
- [Nuclear Explosions and Seismology](#)
- [Earthquake Preparedness](#)
- [California](#)
- [Other Resources](#)
- [Did You Feel It?](#)
- [PAGER](#)
- [National Seismic Hazard Maps](#)
- [Faults](#)
- [Seismic Design](#)
- [Global Vs30 Map Server](#)
- [View All FAQs](#)

FAQs - [Measuring Earthquakes](#)

[« Previous FAQ](#) | [All FAQ's](#) | [Next FAQ »](#)

Q: What is the difference between intensity scales and magnitude scales?

A: Intensity scales, like the Modified Mercalli Scale and the Rossi-Forel scale, measure the amount of shaking at a particular location. So the [intensity](#) of an earthquake will vary depending on where you are. Sometimes earthquakes are referred to by the maximum intensity they produce.

Magnitude scales, like the [Richter magnitude](#) and [moment magnitude](#), measure the size of the earthquake at its source. So they do not depend on where the measurement is made. Often, several slightly different magnitudes are reported for an earthquake. This happens because the relation between the seismic measurements and the magnitude is complex and different procedures will often give slightly different magnitudes for the same earthquake.

For further information, see:

- [Magnitude/Intensity Comparison](#)
- [Modified Mercalli Intensity Scale](#)

[« Previous FAQ](#) | [All FAQ's](#) | [Next FAQ »](#)

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- [Past - Present - Future](#)
- [Info by State](#)
- [Info by Country/Region](#)

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- [Faults](#)
- [Hazard Maps & Data](#)
- [Seismic Design](#)
- [Seismic Analysis Tools](#)
- [NSHM Project](#)

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- [For Kids](#)
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- [Photos](#)
- [Publications](#)
- [Google Earth/KML Files](#)

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- [How do I prepare?](#)
- [A quake just happened...](#)

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- [ANSS - United States](#)
- [GSN - World](#)
- [Volunteer Monitoring](#)
- [Int'l Registry of Seismograph Stations](#)
- [ASL - Albuquerque](#)
- [Network Operations](#)
- [NSMP - Strong Motion](#)
- [Crustal Deformation](#)

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- [Projects](#)
- [Data](#)
- [Software](#)
- [External Support](#)