



British Earthquakes



Some of our SciBar participants prepared this glossary, independently of Dr Stimpson. Your feedback on the level of information and usefulness of the SciBar glossaries is most welcome.

Amplitude The maximum size of a peak or trough seen on a seismometer trace. When calculating magnitude of an earthquake, amplitudes are corrected for distance of the seismometer from the hypocentre.

Body wave Seismic wave that moves through the interior of the Earth. P- and S-waves are body waves.

Crust The outermost layer of the Earth, from 10-65 km thick. The upper 15-35 km of the crust is brittle enough to produce earthquakes.

Epicentre The position on the Earth's surface directly above the hypocentre of an earthquake.

Fault A weak area in the crust where fracture occurs during tension or compression and along which there is slip during an earthquake. May not show at the surface.

Glacial rebound Slow rise of the Earth's surface in areas that were once covered by ice sheets. Can trigger earthquakes.

Hertz (Hz) The unit for wave frequency. 1 Hz is one wave per second.

Hypocentre The point within the Earth where an earthquake starts, due to stresses exceeding the strength of the rock. Also commonly called the focus.

Iapetus suture Major fault system in UK, result of the collision of palaeocontinents about 400 million years ago. May be linked to some earthquakes in the present time.

Intensity Measure of the effects of an earthquake, describing the damage caused at a particular place. Intensity varies with distance from the epicentre but magnitude remains unchanged.

Magnitude The size of an earthquake measured on the Richter scale. Other magnitude scales exist, such as the body wave magnitude and surface wave magnitude scales.

Microseism A faint vibration that is not due to an earthquake, but to wind or wave action, traffic or industrial 'noise' such as wind turbines or cracking around tunnels.

P-wave A type of body wave in which the material shakes back and forth in the same direction as the wave is travelling, similar to a sound wave. Also called compressional waves.

Plates (tectonic plates) Sections of the outermost layer of the Earth, often bigger than continents, which can move relative to each other.

Richter scale Measure of an earthquake's amplitude on a logarithmic scale. Each whole number increase in magnitude represents a tenfold increase in measured amplitude.

S-waves A type of body wave in which the material shakes back and forth at right angles to the direction the wave is travelling. Slower than P-waves. Also called shear waves.

Surface wave A disturbance from an earthquake that travels near the surface of the Earth.

Useful weblinks:

www.earthquakes.bgs.ac.uk/ Map of events for the past 30 days, with links to other useful resources.

09 May 2011

During the Barnaby Festival in Macclesfield, on Sunday 19 June at the Park Tavern in Macclesfield, Roger Barlow will reprise his popular Bollington SciBar talk on Antimatter. Time: 6.30pm as usual – note one-off venue.