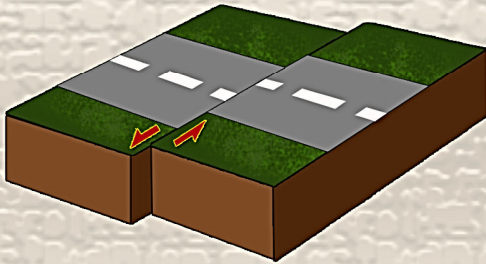


EARTHQUAKE

What is an Earthquake?

An **EARTHQUAKE** is a weak to violent shaking of the ground produced by the sudden movement of rock materials below the earth's surface.

What are the TYPES OF EARTHQUAKE?



TECTONIC earthquakes are produced by sudden movement along faults and plate boundaries.

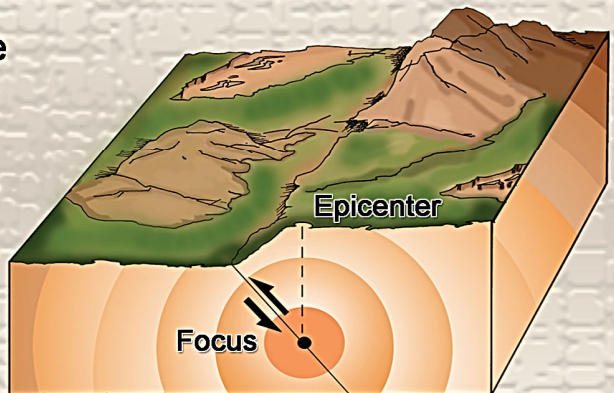
VOLCANIC earthquakes are produced by movement of magma beneath active volcanoes.



Where does an earthquake originate?

FOCUS is the point inside the earth where the earthquake started, sometimes called the hypocenter.

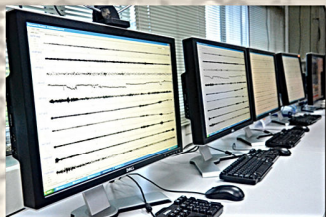
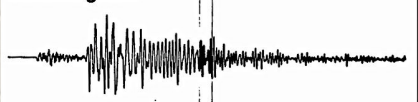
EPICENTER is the point on the surface of the earth directly above the focus.



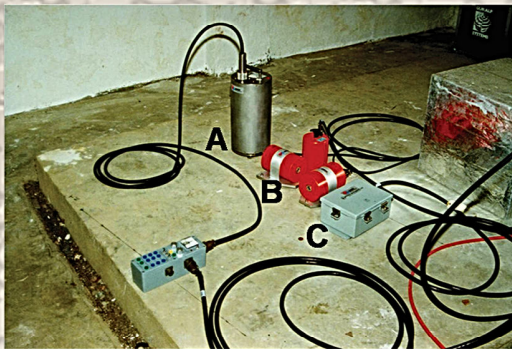
EARTHQUAKES CAN BE MEASURED IN TWO WAYS:

MAGNITUDE is proportional to the energy released by an earthquake at the focus. It is calculated from earthquakes recorded by an instrument called seismograph. It is represented by Arabic Numbers (e.g. 4.8, 9.0).

Seismogram



Digital seismic data record.



Instrumentation set-up (A- broadband seismometer, B- 3-component short-period seismometers, C- strong-motion seismometer) in seismic stations.

INTENSITY is the strength of an earthquake as perceived and felt by people in a certain locality. It is a numerical rating based on relative effects to people, objects, environment and structures in the surroundings. The intensity is generally higher near the epicenter. It is represented by Roman Numerals (e.g. II, IV, IX).



The PHIVOLCS Earthquake Intensity Scale (PEIS), a descriptive scale from I to X, is used to determine the intensity in the Philippines.



Department of Science and Technology
**PHILIPPINE INSTITUTE OF VOLCANOLOGY
AND SEISMOLOGY**
PHIVOLCS Building, C.P. Garcia Avenue, U.P. Campus, Diliman, Quezon City
Telephone Number: +632 426-1468 to 79 Telefax Number: +632 929 8366
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Visit our website: www.phivolcs.dost.gov.ph



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