Discussion of Basic Definitions

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Overview/Summary of Definitions:

Geo- means earth or of the earth and thermal means heat, thus geothermal means of, relating to, or using the natural heat produced inside the Earth

tectonics refers to surface of earth and how it changes shape over time

climate or climatic refers to conditions at surface of earth

Discussion of Definitions:

As a prefix: geo- is taken from the Greek word $\gamma\eta$ or $\gamma\alpha\iota\alpha$ meaning "earth", usually in the sense of "ground or land". Geo- is thus a prefix for many words dealing in some way with the earth, including: geography, geology, geopolitics, or geothermal. The term Geometry refers to the mathematics or measurements of Earth, for example Geocentric, a model of the universe that places the earth at its center; Geostationary orbit, a circular orbit directly above the Earth's equator; Geosynchronous orbit, an orbit that has the same period as the Earth's sidereal rotation

Thermal is from Greek word therm- or thermo- meaning heat. Thus geothermal means heat from the earth and the basic geologically correct meaning/definition of geothermal is of, relating to, or using the natural heat produced inside the earth. In common use means using the existing magma that is near the earth surface, such as in volcanic regions. Practically this means 3 km (1mi). Also in a few locations, it manifests itself as hot water at the surface of earth.

In common current terminology, geothermal refer to pockets of hot water or steam near the Earth's surface that can be accessed economically, and in a few rare cases where the hot magma has pushed close to the earth's surface. It should be noted that combinations of the above geothermal structural types may exist at the same location and can be used profitably and with additional benefit with optimization. Geologically inactive regions occur in Eastern region of the US.