The geotherm is the rate of change of

Heat transfer to the terrestrial lithosphere to similar geophysics and tectonic, continental geothermanship, ie the distribution of temperature with depth, is an important characteristic of the terrestrial lithosphere because the impact on temperature on all the physical properties of the rocks (ad Example density, viscosity, conductivity, elasticity, magnetism, etc.) and since the temperature controls the rheology of the rocks (ie as they deform in response to applied deviating stresses) and therefore as the Lithosphere of the earth reacts to the tectonic forces. Continental geotherm is a function of the I / rate in which heat is produced or consumed inside the lithosphere, II / the rate to which the lithosphere loses heat to the atmosphere / ocean system, and III / the rate In which the lithosphere earns heat from the convective cloak. When the heat lost from the lithosphere balances the heat acquired by the lithosphere, a balance is reached and the geothermal is said that it was stable (ie the temperature in a certain depth does not change over time). On the contrary, when the lithosphere has a net gain or a clear heat loss, it is said that geothermal is transitory (ie the temperature changes over time, until a new balance is reached). On a time scale billions, the geothermbles are always transitional, however, to the scale of 100 Myr, and in the absence of geological processes, geothermbles can approach a balance that express the balance between the heat earned and the heat lost by the lithosphere . Here, we were reviewed for the first time the processes involved in the generation of heat and in the transfer of heat and we derive from the rate of these processes a general equation that describes the change in temperature with depth and time. From this general equation we derive a particular solution for the so-called "Stationary State" continental geoterm (temperature variations with depth but not with time, ie the gain or loss of net net zero). In a second part, we discuss how the continental geotherm of the stationary state is influenced by a number of geological processes including thinning and lithosphherical thickening, burial through sedimentary or volcanic processes and basal heating through the spread of handle grips at the base of the earth lithosphere. Temperature and heating The temperature (degree of heat or cold) of a small volume of rock somewhere in the lithosphere varies if heat (a form of kinetic energy) is earned or lost. The report that provides the variation of the DT temperature according to a heat variation of it is: DT = DE / (CP.M), with CP the thermal capacity and mass. The main processes capable of changing the quantity of heat contained in a small volume or rock in the lithosphere are: conduction of heat (transfer of kinetic energy between molecules or atoms) (replacement of a volume at temperature T1 with a volume equivalent to T2 temperature) Heat production (heat produced by radioactive isotopes, viscous heating, exothermal metamorphic reactions) Heat consumption (heat consumed by endothermic metamorphic reactions, in particular partial fusion) The variation of DT temperature over an increase in DT time depends on the sum of heat Variations of due to each process. In what follows, we derive three expressions for the conduction rate from heat, II / for the heat progress rate and III / for the rate of radiogenic heating. From these, we derive the heat transfer equation with 1D conduction from which an expression for the stationary state can derive. It seems more complicated than it really is. So bring with me ...