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Thermal Structure of Continental Crust in Central Anatolia

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Central Anatolia Region, by reason of located in Alp-Himalaya orogenic belt, consist of continental blocks which have history different metamorphism and deformation and these blocks are seperated by ophiolitic suture belts represented old oceanic crust and mantle. These complex evoluation of the region are reflected to ıts thermal properties, high and low heat flow regions are located side by side. from these point of view, the region between Kırşehir and Nevşehir provinces indicate interesting thermal structure for the purposes of mesured heat flow values.

In our study, two dimentional heat flow modelling has been calculated in a line of approximately 70 km located between Nevşehir and Kırşehir provinces. The depth of the model is 35 km and this value is same with Moho discontinuaty. Temparature depending on the surface heat flow value, in the 35 km crustal mantle is higher as 12500C and In the south part of the model, is lower as 4000C.