

Interactive comment on “Crustal heat flow measurements in western Anatolia from borehole equilibrium temperatures” by K. Erkan

K. Erkan

kamil.erkan@marmara.edu.tr

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I appreciate very much the constructive comments from the reviewer.

The paper is prepared in the form of a classical geophysical study where the main focus was the details of the data processing. However, some new findings were also outlined, especially for the thermal regime of the Menderes horst-graben system. This study shows for the first time that heat flow values of >100 mW/m² as previously reported are not true for the general horst-graben system, but localized to near the active Kula volcanic center. Also, thermal effect of sedimentation and erosion were studied and applied for the first time in Menderes horst-graben system.

Shallow (100-m) boreholes may be used for regional heat flow studies depending on

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the their site-specific physical conditions. These boreholes usually show near-surface hydrologic activity. In this study, a significant proportion of the boreholes (Figure 1) had to be eliminated as a result of this fact; but the remaining holes are suitable for regional heat flow assessment in varying qualities (Table 1).

Interactive comment on Solid Earth Discuss., 6, 403, 2014.

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