

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

**K. Gessner (Referee)**

klaus.gessner@dmp.wa.gov.au

Received and published: 6 March 2014

Review SE-2014-1, Klaus Gessner, Geological Survey of Western Australia

1. Does the paper address relevant scientific questions within the scope of SE? No 2. Does the paper present novel concepts, ideas, tools, or data? Yes (data) No (concepts, ideas) 3. Are substantial conclusions reached? No 4. Are the scientific methods and assumptions valid and clearly outlined? Mostly 5. Are the results sufficient to support the interpretations and conclusions? Yes 6. Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes 7. Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Mostly 8. Does the title clearly reflect the contents of the paper? Yes 9. Does the abstract provide a concise

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and complete summary? Yes 10. Is the overall presentation well-structured and clear? Yes 11. Is the language fluent and precise? Yes 12. Are mathematical formulae, symbols, abbreviations, and units correctly defined and used? Yes 13. Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? Yes 14. Are the number and quality of references appropriate? Mostly 15. Is the amount and quality of supplementary material appropriate? N/A

### General Comments

In his manuscript (ms) ‘Crustal heat flow measurements in western Anatolia’ the author K. Erkan reports on heat flow calculations based on measurements taken in relatively shallow water bores. Whereas the data treatment and interpretation appears to be mostly correct and the data is of interest, the dataset is somewhat limiting due to the shallow depths of measurement.

The main issue however is the lack of context these data are presented in. The introduction would need a section that puts the significance of heat flow calculations in western Anatolia in a geothermal, geodynamic and geological context. This would make the study much more appealing to the potential reader.

As it stands the data are reported without much scientific value-adding: how does the presentation change/confirm/challenge scientific knowledge or hypotheses?

Specific comments and technical corrections Please see the attached PDF.

Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/6/C84/2014/sed-6-C84-2014-supplement.pdf>

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