

## Interactive comment on "Thermogeodynamic manifestations in the Caucasus and their genesis" by G. E. Gugunava et al.

## **Anonymous Referee #1**

Received and published: 5 November 2009

I have read with initial interest this manuscript. An then I was completely disappointed.

It is basically impossible to evaluate in any ways the approach, quality, validity, methods or interpretations in this manuscript. There might be interesting things, but these are impossible to be evaluated in this form of the manuscript. It must be completely rewritten in a scientific way.

The manuscript is written by someone which looks like just discovered plate tectonics, at the level of 1970s. There is no methodological section explaining the approach, methodology, calculations. There is no data section showing which are the data on which the interpretation is based. Conclusions are thrown directly as maps which are impossible to judge. Completely unfamiliar terminology is used (thermodisplacements, theremostressed seals, thermofaults, whatever these mean for the authors) without

СЗ

any explanation. There is zero description on what the Caucasus is, short overview on the geological/tectonic evolution, which are the important elements which should be viewed for interpretation. The maps are published with information from the Black Sea to the Aral Sea with basically no background or any relevant information given.

My suggestion is that the authors do a better job in writing a scientific publication and organize their manuscript in a chapters which should reflect - a coherent problem statement using notions which can be understood by a wide audience; - some background for the studied area in which they explain shortly the main tectonic or geologic events for the areas and the time span studied. Worthwhile is also to explain what has been published before and what is going this paper to bring new; - a clear methodology section where the approach is detailed, including explaining calculations and their error bars; - a data section where the data and their error bars are discussed; - interpretations of data and conclusions where the authors interpret ONLY the data they present in their regional context.

In the present form, no one can understand this manuscript except the authors. There might be interesting things here, but despite my efforts I was unable to get them. The authors should do a better job in writing their science.

Interactive comment on eEarth Discuss., 4, 77, 2009.

C4