**Climate
of the Past
Discussions**

Interactive comment on "Borehole paleoclimatology – the effect of deep lakes and "heat islands"on temperature profiles" *by* V. T. Balobaev et al.

Anonymous Referee #3

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Having read the J.-C. Mareschal's comment and the L.Eppelbaum's response to it, it is difficult for me to add something new.

As mentioned in the text, analytic solution of the heat conduction equation for the ax-isymmetric geothermal model with the considered boundary conditions (2) was published more than 30 years ago. I expect, according to my own experience, that most of people would use a numerical solution of the problem to assess the effect of the surface temperature spatial variations in the subsurface temperature field today. To use the final formula (8), one has to find out values of the complete elliptical integrals of the third order. So, from a practical point of view, I am rather sceptical about attractive-

ness and efficiency of the analytical formula today, when confronted with the available numerical codes.

On the other hand, it is always good to have an analytic solution of a problem, which can be used in evaluating a performance of a numerical code. From this point of view, I consider it useful to publish the discussion paper.

There are some typos in the text, like Safandra et al.(2007) instead of Safanda et al.(2007) (page 419, 420 and 427)

Interactive comment on Clim. Past Discuss., 4, 415, 2008.

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