

## ***Interactive comment on “Astronomical forcing and mathematical theory of glacial-interglacial cycles”*** **by A. V. Kislov**

**Anonymous Referee #3**

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In this paper different zero-dimensional models of climatic change are reviewed, as different approximations of the balance equation (2). The author discusses, successively, evolutions driven entirely by noise, linear and nonlinear responses, time delays and external periodic forcings. All these limiting cases, with the possible exception of the time delay one (which is, however, hardly touched upon) have been discussed extensively in the literature more than two decades ago. Unfortunately, the author adds no new physical insights or comments on the connections between the models and physical processes as described, typically, by large numerical models. In this respect I fail to see the novelty and usefulness of the work.

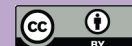
As a technical comment I was surprised by the statement following eqs. (4)-(5) that the process described by eq. (4) - the Wiener process - represents a system with

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infinite memory. As well known from any Introductory book on stochastic processes, the Wiener process is in fact a typical example of a continuous Markov process!

In conclusion, I recommend that this work should not be accepted for publication.

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Interactive comment on Clim. Past Discuss., 5, 327, 2009.

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