

## ***Interactive comment on “Relative chronology in high-grade crystalline terrain of the Eastern Ghats, India: new insights” by S. Bhattacharya et al.***

**Anonymous Referee #2**

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Reviewer's comments on the manuscript: “Relative chronology in high-grade crystalline terrain of the Eastern Ghats, India: new insights” S. Bhattacharya, R. Kar, A. K. Saw, P. Das

The paper is poorly organized and hard to follow. The data set (two Nd isotopic measures, and four field pictures) is too scarce to support publication of the paper in an international journal. Moreover, the data set is presented in a very poor way (the meaning of TDM is not explained, and the methods used to calculate them is not exposed, e.g. Faure vs DePaolo...). Additionally, some doubt arise for the originality of the two Nd determinations, because the TDM ages by Rickers et al. (2001) have the same values of those reported in Table 1. I've checked Rickers et al. (2001) and didn't find the same data, that seems therefore original; anyway the ambiguity should be removed

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from the text. The abstract is not informative at all. The introduction is too vague, with a final statement which nothing more than obvious. The general problem is not stated, the regional problem (i.e. the case study) is not presented, the methods are not illustrated, the aim is not set up. The English is quite poor, with several sentences barely understandable.

At this stage, it is very difficult to evaluate the paper. It has to be completely re-written, and accompanied by new illustrations and tables: this will help reviewers to evaluate the quality of results and models proposed. As a suggestion, a general sketch illustrating the existing model(s) and the alternative scenario proposed would greatly help the reader to follow the manuscript, particularly for those that are unfamiliar with the regional geology. Also a table summarizing existing geochronological data would be welcome. This table and the accompanying text should also better clarify the different significance of U-Pb age on detrital zircons vs. U-Pb age on igneous zircons vs. Nd model ages of mafic granulites. These ages have to be linked with the geological sketch (see above).

I hope these comments and suggestions can help the authors to improve their manuscript.

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Interactive comment on Solid Earth Discuss., 3, 1, 2011.

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