

Dear Drs Feng Liu and Xin Li,

I have received two reviews of the latest version of your paper. The referees are the same as those of the previous versions. In particular, referee 2, who has again let his name known, is Prof. P. J. van Leeuwen.

Both referees give credit to the work you have done to further improve your paper (referee 1 writes that *The authors have worked hard*, and referee 2 that they *have done a fantastic job*). They both consider that your paper is now basically suitable for publication. They nevertheless add comments and suggestions, stressing in particular that they think the paper will still be difficult to understand by the potential readers. They write *It's not as easy to read as it should be* (referee 1) and *I still expect the readers get lost* (referee 2). As Editor, I certainly agree with them on that aspect.

Referee 1 does not make specific requests about the paper, and actually writes that the paper can be accepted in its present form. He/she nevertheless makes two suggestions which could in his/her mind improve the clarity of the paper. I leave it to you to follow or not these suggestions.

Referee 2 is much more specific. He writes that the paper can be accepted subject to minor revisions. But he also raises a number of specific questions and makes a number of specific requests, which are intended at simplifying and clarifying the paper, but actually go beyond 'minor' revisions. Please consider all of them. I stress one (his point 8). It would certainly be good that you push your example in subsection 3.3 to its end, by showing the probability distributions that you obtain with and without using a Stochastic Differential Equation for the scale transformation.

Please revise your paper taking into consideration all comments and suggestions of both referees. When you send the revised version, please give a point-by-point response to all of these comments and suggestions. Should you disagree with one particular comment, or decide not to follow one particular suggestion, please state precisely your reasons for that.

Referee 1 mentions that the English of the paper must be improved. It is certainly in part because of the English that both referees (as well as myself) have had difficulties in understanding your paper (for an example, I do not personally understand what you mean by the sentence *the formulations of scale transformation can be extremely reduced*, on p. 12, l. 12). If you can have your paper checked by a native English speaker, that will be very good. But I mention that, if your paper is accepted, it will be submitted to a (free of charge for you) copy-editing, intended in particular at correcting the English (with of course further check by you).

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In agreement with Referee 2's request, I am formally asking for *further review by Editor*, but I may nevertheless send your new version to Referee 2, not for a further review, but to ask him if he thinks you have responded properly to his various comments and suggestions.

I looked forward to receiving your new version,

With regards,

Olivier Talagrand

Editor

*Nonlinear Processes in Geophysics*