

***Interactive comment on “A novel method for
analyzing the process of abrupt climate change”
by P. C. Yan et al.***

Anonymous Referee #2

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In this paper the authors consider a toy model to understand abrupt changes in a observables and posterior they applied the method to the PDO series. the idea is not new, other authors have used simple models to explain changes in complex systems like climate system. However it is interesting. In the complex global model are very difficult to follow the all interactions and to understand singular process like for example an abrupt climate change. the authors explain the model in clear way, however, I consider that the case of PDO is not sufficiently explained or maybe it is not clear. What real variables are the responsible of the change?. When you use a toy model you must give a role to the variables of model because this toy model can be applied to several fields, (ecology, climate sciences,...)With the title of the paper the reader wait a better explanation of the abrupt changes in the series of PDO. Can we predict changes in the PDO with this model?. It would be really interesting. Therefore I consider that

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the paper could be published in the NPG journal after a revision and better explanation of the section 3 of the paper. The authors must explain the role of each variable of the toy model in the particular analyzed case.

Interactive comment on Nonlin. Processes Geophys. Discuss., 2, 43, 2015.