

Interactive comment on “Hazard function theory for nonstationary natural hazards” by L. K. Read and R. M. Vogel

Anonymous Referee #2

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REVIEW OF

Hazard function theory for nonstationary natural hazards

by

L. K. Read and R. M. Vogel

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GENERAL COMMENTS

In this article the authors propose to extend classical approaches based on peak over threshold (POT) methods and generalized Pareto distribution models to the case of

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nonstationary processes modeling natural hazards. The main ingredient is based on the use of the hazard function analysis in order to construct a relation between the exceedance probability of the natural hazard and the time to failure.

The article is clearly written and the bibliographic discussion is very complete.

However there is a point which needs to be clarified before the article can be accepted for publication. The authors indeed extend the relation linking the hazard function $h(t)$ to the exceedance probability p_0 to the nonstationary case by writing:

$$h(t) = p_\tau.$$

This relation has to be justified.

As a minor remark the reviewer thinks that the use of 2 symbols for denoting time, t and τ could be confusing and suggest to drop either one. Moreover, if τ denotes a fixed value of time, relations (1) to (3) page 6890 should be written in terms of τ instead of t .

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