



Interactive
Comment

Interactive comment on “Brief communication “Likelihood of societal preparedness for global change”” by R. M. Vogel et al.

R. M. Vogel et al.

richard.vogel@tufts.edu

Received and published: 3 May 2013

The authors are indebted to the anonymous reviewer for raising numerous important issues which will improve our final manuscript. The following revisions will be made in response to those comments:

1. The reviewer points out the tremendous challenge in distinguishing autocorrelation from trends in hydrologic series, especially given that different types of hydrologic processes exhibit very different types of trends and autocorrelation structures. This point will be elaborated upon in several places in the revised manuscript to highlight the tremendous significance of this issue. The paper by Cohn and Lins (2005) already cited in the paper, addresses these issues directly and will be cited more heavily and

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



explicitly throughout the manuscript to drive these points home. In particular, the degradation in the power of hypothesis tests resulting from the presence of autocorrelation will be highlighted.

2. Similar to Reviewer 1 (Salvadore Grimaldi), Reviewer 2 also suggests elaboration of new methods which would lead to improvements in our ability to detect, predict and attribute trends. As suggested by reviewer 2, Kropp and Schellnhuber (2011) provide a great deal of information relating to new methods for detection of nonstationarities in hydrologic extreme value series in the presence of change points, autocorrelation and other stochastic annoyances. Our revised manuscript will include a summary of those developments. We are indebted to the reviewer for pointing out the important work of Kropp and Schellnhuber (2011), a reference which will surely improve our revised manuscript.

Reference to be added to revised manuscript:

Kropp, J. and H. Schellnhuber, In *Extremis: Disruptive Events and Trends in Climate and Hydrology*, Springer-Verlag Berlin Heidelberg , 400p, 2011.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 1, 2013.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper