

An immediate response is required here to the first part of the reviewer's comment, since it has implications for the review process. A final response will be added later covering other aspects, when the review deadline is up.

By way of a short clarification, the reviewer's reference to duality of maxima and minima is the sign connection between the asymptotic distributions of sample maxima and minima. So if X follows a distribution of maxima then Y follows a distribution of minima if $Y = -X$. This linkage, as noted by the reviewer, has been known for a very long time.

Because the reviewer has elected to publicly raise the history of this paper, the background needs to be set out a little more clearly. As the reviewer points out, the paper (essentially in its present form) was first submitted to *Advances in Water Resources*. It's not always easy to anticipate reviewer responses but I was astonished to see that I was charged with a rediscovery of the $Y = -X$ extreme value relation. And that was it. The editor would not permit any author response. I had rediscovered $Y = -X$, the reviewer was of standing and therefore could not be questioned, so the paper had to be rejected.

That was a frustrating experience of course, but reviewers are busy people and can have bad days. In due course a new submission was made – to *Environmental Modelling & Software*. This time it was made very clear in the text that the paper had no connection with the $Y = -X$ relation. Alas, it was to no avail. Once again the charge was made by the reviewer that the paper was a rediscovery $Y = -X$. And once again the paper was rejected, and once again no author response was permitted. I think if I could offer a single piece of advice to journal editors it would be: when faced an author and reviewer in direct conflict over basic content – seek a further independent reviewer.

The final step in the saga is the current submission to HESS. As part of the submission, an outline was provided to the Editors of the review history of the paper to date. In the manuscript I again tried to be as clear as possible over the $Y = -X$ issue, noting both in the abstract and in the text of Section 2 that the proposed monotonic transformation in the paper ...

... would include, for example, $Y = X^{-1}$ but not $Y = -X$.

I really don't think it could have been written more explicitly than that and I hoped that would be the end of the matter finally. Sadly, we are right down the same line as before, unbelievable as it may seem. So, for the third time, I stand accused of proposing a paper which in some way incorporates a rediscovery of the sign duality between extreme value maxima and minima.

There is, however, one important difference this time. Thanks to the HESS open review process, I at last have opportunity to respond on this topic and have been most pleased to do so here. The paper is there for all to see and anyone can verify that the reviewer criticism on the $Y = -X$ issue is simply a straw man tactic. That is, the paper was deliberately defined to be something that it certainly never was, and then demolished on that basis. The extreme value $Y = -X$ relation is in fact so totally unconnected to the paper that I'm surprised the reviewer did not go the whole way and deem the paper to be proposing a flat Earth as his basis for demolition.

As mentioned earlier, a final response to all reviewers will be made later. However, it is mentioned now that it is something of a low blow to both myself and HESS reviewers generally to imply that in some way I was using HESS to sneak a paper under the statistical review radar. Nor is the theme of the paper in any way related to presenting any new statistical distribution with much smoke and noise. I am in fact in full agreement with the reviewer that the "H distribution" is just one of an infinity of many, and will emphasise that point fully in a revised version. The inverse Weibull can be found in any text dealing with the Weibull distribution and its transformations – I should have made a reference.

In the meantime the review process can proceed to whatever conclusion. But can we please maintain the review standards expected of international scientific journals and not descend into straw man tactics.

Kind Regards Earl Bardsley