Interactive comment on “Evaluation of Peaks-Over-Threshold Method” by Soheil Saeed Far and Ahmad Khairi Abd. Wahab

A. Sterl (Editor)

andreas.sterl@knmi.nl

Received and published: 31 August 2016

Dear dr Far, dear dr. Wahab,

The discussion period of your paper “Evaluation of Peaks-Over-Threshold Method” is over. Only the two anonymous reviewers have submitted a comment, and you have answered them.

The points raised by the reviewers are very serious, and to my judgement your answers fail to fully address their concerns. The main problems are

• The distinction between GPD and POT (Goda) is not clear. Both rely on fitting the exceedences over a threshold to a theoretical distribution function.

• Using a GPD to do so (which is usually called POT method in the literature) is based on solid mathematical theory. I do not see the bases for a fitting to the FT-I/II/III distributions. As both reviewers point out the FT-I/II/III (or GEV) distributions are the theoretical distributions for block-maxima and not for exceedences.

• It is unclear to me why you use fixed values for the shape parameter (see also reviewer #1) instead of estimating them as part of the fitting procedure.

• Both reviewers point at problems with your data. Reviewer #1 points out that there are suspiciously many data points close to 4.4 m (Fig. 8), but your answer fails to adequately explain this occurrence. Your answer that the GEV method has not been employed is off the point.

• In one of your answers to reviewer #1 you state that you are not allowed to show your data. This is unacceptable. Science relies on the reproducibility of results, and one cannot reproduce your results without having the original data, nor can one judge on their quality. As an Open Access journal, Ocean Science is dedicated to the openness of science and the scientific process. Publishing results based on disclosed data contradicts this idea.

Based on these considerations I regret that I cannot encourage you to submit a revised version of the paper.

With kind regards,
Andreas Sterl