Interactive comment on “Study of the threshold for the POT method based on hindcasted significant wave heights of tropical cyclone waves in the South China Sea” by Zhuxiao Shao et al.

Anonymous Referee #3

Received and published: 6 May 2019

The authors perform wave climate of South China Sea making usage of 40 years of wave hindcast data. The analysis is accomplished by a discussion on the statistical performance exhibited by a POT model at varying threshold.

The issue addressed by the authors is interesting, current and in line with the topics of the journal. However, here are some methodological aspects that deserve to be better presented and discussed I) Did the authors apply a temporal lag for declustering? II) It is not clear how they generalize the influence of trajectories by means of local conditions (which are not only function of the variable, but also of bathymetry/topography, diffraction and shoaling effects, ...). Please clarify. III) How do they mean with “stable
threshold”? IV) Since every change on bin range of histogram implies changes on related minimum point, how do you set this parameter? Finally, the English language is unsuitable and a deep review with a native speaker is strongly recommended.