

The authors of this paper adapted and paraphrase the well known approach developed by Davison and Smith (1990) for statistical modeling the extremes of a non-stationary process of exceedances over thresholds by the usage of the generalized Pareto distribution (GPD). Due to this approach the rate and magnitude of exceedances over threshold can be modeled as binary and GPD regression models as functions of the covariates. Standard software procedures for fitting the components of these models are widely and freely available, e.g. Yee and Stephenson (2007) and Gilleland et al. (2013). However, all these papers, for some reason, are completely ignored by these authors.

The focus of the paper is about time series data but the likelihood factorizations (equations (5) and (19)) are presented under the assumption of temporal independence. Obviously, this should be clarified. I found the presentation outdated. It is done in a such way as in the 80's if little had happened in statistical modeling in hydrology and statistical software technologies. I would like to share that during the last 20 years the Generalized Linear Models (GLMs) methodology have been well developed and widely applied in hydrology due to availability of software procedures in computer packages such as R, S-plus, Matlab, SAS or Stata, e.g., Clarke (1994) and Aitkin et al. (2009). On the other hand the books of Coles (2001), Beirlant et al. (2004) and Reiss and Thomas (2007) give excellent overview for extreme value models with time-varying parameters as well as software procedures that handle the computations. Thus the authors should concentrate on the usage and interpretation of the software procedures that can handle the computations instead of presenting estimation equations such as (10), (20) or (21). The idea is to use standard software in order to unify the computations and make comparisons.

#### References:

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