In *Extreme Value Theory* (EVT) the ordering of a sample is of primordial relevance. Indeed, and more generally in almost all areas of Statistics, the ordering of a univariate sample, as a basis for a clear representation of the sample’s content, has been considered highly relevant for a long time. Such an importance enabled us to have nowadays access to a broad statistical methodology related to ordered samples together with associated distributional theory. After a brief reference to a few concepts related to the exact distributional theory of order statistics, we provide some motivation for the need of EVT in the analysis of rare events, in fields as diverse as Environment, Finance, Insurance and Sports, among others. We next provide a few details on the asymptotic behaviour of order statistics. The *general extreme value* (GEV) and the generalized Pareto (GP) distributions are introduced, together with the concepts of *extreme value index* (EVI) and the notion of tail-heaviness, directly related to the Regular Variation Theory. Finally, we shall deal with several topics in the field of *Statistics of Univariate Extremes*, an highly useful area in applications, whenever we want to make inference on the tail (either right or left), estimating rare events’ parameters, like high (low) quantiles or return periods of high (low) levels, among others. We shall first review most of the parametric approaches in the area, like the blocks method (BM) or annual maxima method (AMM) and the *peaks over threshold*’ (POT) method, and the statistical choice among extremal models and max-domains of attraction. We shall further refer a few semi-parametric approaches, with the analysis of a few case-studies in the fields of Hydrology, Insurance and Finance, performed essentially through the use of a few R- *Packages for Extreme Values*, like the *evd*, *evdbayes*, *evir*, *ismev*, *extRemes*, *extremevalues*, *fExtremes*, *POT*, and *SpatialExtremes*, among others.

**References (basic)**

