



## **Spatial distribution of tsunami height and the extent of inundation along the Portuguese coast – the 1755 event; preliminary evaluation**

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Previous work on the 1755 November 1<sup>st</sup> Lisbon tsunami focused on the study of the earthquake and tsunami source. To do so, a set of coastal areas were chosen due to the availability of a coherent set of tsunami parameters needed for numerical modelling, namely travel-time and maximum water elevation. This approach was important to assess the likelihood of the source location, but a larger set of historical reports do exist in what concerns the interaction of the tsunami with the coast, an important information for quantitative tsunami risk assessment. These observations are compiled here, particularly the spatial distributions of the inundation extent, the destruction level and the run-up heights. The results presented here, based on available historical information, indicate a large level of heterogeneity, with run up heights extremely high along the south coast, Algarve, and show the influence of the coastal geomorphology on the extent of inundation. This work was funded by TRANSFER, Tsunami Risk AND Strategies For the European Region, contract 037058.