



MAXIN: Gis application to estimate Rainfall Intensity-Duration-Frequency laws in the Spanish peninsular area

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Hidrometeorological models to estimate flows require a Rainfall Intensity-Duration-Frequency relationship, an IDF law, but this expression can only be obtained in gauged stations. The IDF relationship which is being used in Spain was developed in the seventies, and consequently, it was necessary to make a revision and incorporate new data and more rain gauged stations as more than thirty years have passed. Besides, modern methods, such as regionalization, and more adequate functions, such as the SQRT-ET max function of distribution, can be incorporated into the study. Next step implies extending these results, obtained in gauged stations, to the rest of the country, so that finally, annual maximum rainfall intensity for d-duration and T-return period, $I(d,T)$, can be obtained everywhere in the Spanish peninsular area.

In this paper authors present an informatics application, MAXIN which will facilitate the use of this new method to estimate $I(d,T)$ in the Spanish peninsular area. MAXIN is a Gis application, downloading is free, and it is available in the following web site:

<http://www.forestales.upm.es/hidraulica/paginas/programas/programas.htm>