World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:9, No:05, 2015

## Analysis of Rainfall Hazard in North East of Algeria

Authors: Imene Skhakhfa, Lahbaci Ouerdachi

**Abstract :** The design of sewerage systems is directly related to rainfall, which has a highly random character. Showers are usually described by three characteristics: intensity, volume and duration. Several studies considered only in two of the three models. The objective of our work is to perform an analysis of the impact of three variables on put in charge of sewerage system, responsible for misbehavior, origin of urban flooding. 30 events were considered events for the longest, most rushed and most intense period which runs from 1986 -2001. We built the IDF curves and heavy projects double symmetrical triangles associated with this selection. A simulation of the operation, with the model canoe, sewage from the city of Annaba (Algeria) in the three rain solicitation project, double triangles associated with events considered. It appears that the sewage of the city of Annaba, in terms of charging, is much more sensitive to rain most precipitous, and the more intense causing loadings and last the longest. Further analysis of all the rain and the field measurements are underway to confirm the test simulations.

**Keywords:** intensity, volume, duration, sewerage, design, simulation

Conference Title: ICWEEM 2015: International Conference on Water, Energy and Environmental Management

**Conference Location :** Paris, France **Conference Dates :** May 18-19, 2015