

4th International Conference on **Earth Science & Climate Change**

June 16-18, 2015 Alicante, Spain

Flood risk in small basins of the Mediterranean. The case of La Zenia (Alicante)

Ana Arahuetes Hidalgo
University of Alicante, Spain

Floods are among the most frequent natural hazards in the Mediterranean region and in particular in the area of Orihuela Costa (Alicante). Since flooding is a natural phenomenon intrinsic to river systems, the problem occurs when man occupies the areas susceptible to flooding. On the Mediterranean coast there are two favorable aspects for these floods, which are the strong urbanization suffered during the “real estate bubble” and irregular rainfall that occurs mainly between September and November, and often in a torrential way. To exemplify this compendium of circumstances the ravine of La Zenia will be studied, focusing on (i) the hydrological characteristics of the basin, (ii) the human occupation that has suffered in recent years within the framework of flooding and (iii) the basin reaction during these tumultuous events. The methodology, steps and tools used for the study are a compendium of different methods proposed in Spain for this type of study. In this poster we also refer to the legislation in terms of urbanization and flood prevention applicable in these cases. This example highlights how strong urban development has turned the ravine main channels into the urbanization streets, which has eventually led to heavy losses, mainly material and economic. In this situation, it is necessary to adopt a series of measures to try to minimize the risk associated with floods and mitigate their consequences.

Biography

Ana Arahuetes Hidalgo is a Geological Engineer, with an MSc in Hydrology and Water Resource Management. Currently she is a PhD candidate, and this poster is a result of a pre-doctoral fellowship Researcher Training National Programme for Scientific Research, Development and Technological Innovation Research (FPI) and is inserted in the research project “Construction and water metabolism in the coast of Alicante: trend analysis for the period 2000-2010” (CSO2012-36997-CO2-02) funded by the Ministry of Economy and Finance.

ana.arahuetes@ua.es

Notes: