

## Using Geographic Information Systems in the Desertification Risk's Cartography: Case South of the Aurès Region, Algeria

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**Abstract :** The sensitivity to the desertification map of the south of Aurès region has been elaborated by the crossing of four thematic layers capable to have an impact on the process of desertification. The following step is inspired of MEDALUS (Mediterranean desertification and land Use), which use qualitative index to define the environment zones sensitive to the desertification. The cartographical information of vegetation, the climate, the soil and the socioeconomic state descended from cartographic data transformed to numerical data then seized on, structured and managed by an algorithm dedicated to a geographical information system. In step with information, each layer makes object of 3 or 4 classes, the geometrical median of the four layers used are leaded to sensitivity classes (ISD) of different mapped environment.

**Keywords :** information systems, thematic layers, the sensitivity to the desertification map, concept MEDALUS, South of Aurès

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