

The region of Ain-Témouchent is a seismic zone; its land is predominately agricultural and shows complex structures, with many problems linked to the development of urbanized areas; these problems are directly or indirectly related to the geotechnical conditions of soil. The purpose of the present research is to build a database from the different measurements carried out in the region, and to conduct tests in places where information is not available in order to consider the entire perimeter of the study area. Once the database is completed, an analysis of all the data will be carried out using a numerical tool in order to establish the geotechnical map of the city. This map will certainly allow all decision-makers and designers to have clear and precise information when proposing or designing new structures. The geotechnical mapping of Ain-Témouchent soils based on 178 observations divided these soils into ten groups. Eight of them according to the Unified Soil Classification System (USCS): CH (High plasticity clay), CL (Low plasticity clay), MH (High plasticity silt), ML (Low plasticity silt), SC (clayey sand), SM (Silty sand), GM (Silty gravel with sand), OH (organic soil of high plasticity). The other two groups are rocky soils: basalts (hard volcanic rock with high resistance), and limestone turf (sedimentary rock).
Keywords: Thematic map; Geotechnical map; Thiessen polygons; Ain Témouchent