

## Mapping of Potential Areas for Groundwater Storage in the Sais Plateau and Its Middle Atlas Borders, Morocco

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**Abstract :** At the level of the Moroccan Sais Plateau, groundwater constitutes strategic natural resources for agricultural, industrial, and domestic use. Today, due to climate change and population growth, the pressure on groundwater has increased considerably. This contribution aims to delineate and map potential areas for groundwater storage in the area in question using GIS and remote sensing. The methodology adopted is based on the identification of the thematic layers used to assess the potential recharge of the aquifer. The mapping of potential areas for groundwater storage is developed through the method of modeling and weighted overlay using the spatial analysis tool on the Geographic Information System. The results obtained can be used for the planning of future artificial recharge projects in the study area in order to ensure the good sustainable use of this underground gift.

**Keywords :** Morocco, climate change, groundwater, mapping, recharge

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