

## Characterization of Climatic Drought in the Saiss Plateau (Morocco) Using Statistical Indices

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**Abstract :** Climate change is now an undeniable reality with increasing impacts on water systems worldwide, especially leading to severe drought episodes. The Southern Mediterranean region is particularly affected by this drought, which can have devastating consequences on water resources. Morocco, due to its geographical location in North Africa and the Southern Mediterranean, is especially vulnerable to these effects of climate change, particularly drought. In this context, this article focuses on the study of climate variability and drought characteristics in the Saiss Plateau region and its adjacent areas with the Middle Atlas, using specific statistical indices. The study begins by analyzing the annual precipitation variation, with a particular emphasis on data homogenization and gap filling using a regional vector. Then, the analysis delves into drought episodes in the region, using the Standardized Precipitation Index (SPI) over a 12-month period. The central objective is to accurately assess significant drought changes between 1980 and 2015, based on data collected from nine meteorological stations located in the study area.

**Keywords :** climate variability, regional vector, drought, standardized precipitation index, Saiss Plateau, middle atlas

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