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## Analysis of agronomic drought over North Africa using remote sensing satellite data

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This paper aims to analyze the agronomic drought in a highly anthropogenic semi-arid region, North Africa. In the context of the Mediterranean climate, characterized by frequent droughts, North Africa is particularly affected. Indeed, in addition to this climatic aspect, it is one of the areas most affected by water scarcity in the world. Thus, understanding and describing agronomic drought is essential. The proposed study is based on remote sensing data from TERRA-MODIS and ASCAT satellite, describing the dynamics of vegetation cover and soil water content through NDVI and SWI indices. Two indices are analyzed, the Vegetation Anomaly Index (VAI) and the Moisture Anomaly Index (MAI). The dynamics of the VAI is analyzed for different types of regions (agicultural, forest areas). The contribution of vegetation cover is combined with the effect of soil water content through a new drought index combining the VAI and MAI. A discussion of this combination is proposed on different study areas in the study region. It illustrates the complementarity of these two informations in analysis of agronomic drought.