

Summary

Droughts are complex natural hazards that cause problems in many parts of the world every year, with serious social, environmental and économiques.vu its harmfulness, the study of the drought has been curiously the target of several research. Now she is among the extreme weather phenomenon that we understand the least in practice for this, our work will focus on the identification of regional patterns of drought in eastern Algeria on the basis of annual precipitation data from 1970 to 2009, for 32 rain gauges distributed uniformly over the study area.

The identification of homogeneous regions in terms of dryness is a prerequisite, so that the of characteristics drought can be studied within each of these regions. In this study, standardized precipitation index is used (SPI) on annual rainfall applied to determine dry and wet periods and to study the regionalization of drought we apply the principal components analysis (PCA) on the of average Annual SPI.

Keywords: drought, SPI, PCA, regionalization, eastern Algeria.