

Abstract:

The purpose of this thesis is to contribute to the analysis of drought in the Mitidja plain and make predictions.

The presentation of the plain allowed us to evaluate its economical potential.

A climatological study of the area, based on recent climatological data helped us to situate climatologically the Mitidja plain, in order to understand how the climatological system of the region works.

The study of drought indexes helped us to know the rate of recurrence of this hazard and the degree of severity of this drought.

The application of the Markov chains gives the percentages of the hazard of drought recurrence in the first and second order, for monthly and annual scales.

Keywords: drought, Mitidja, Markov chains, drought index.