

# **Contribution to the study of drought: Studies and forecasts (Case of the catchment basin of Isser wadi)**

The objective of this thesis work is to contribute to the analysis of drought in Issers watershed.

A presentation of the study's context allowed establishing the different specifications of the basin and its various potentialities. The rainfall study of runoff has brought out a precipitation and runoff deficit for some stations of the basin. Moreover, the climate study of our study area has considered the watershed climate, dominated by a semi-arid climate for the most part, as approaching to dryness southwards.

Finally, a statistical modeling of the relationship between certain parameters of the water balance such as precipitation and depths of runoffs, has been developed, which allows a possible estimate of the cumulative flows for some tributaries of the basin.

Solutions and recommendations dealing with the reduction of drought effects in the watershed were listed in this thesis.

**Keywords:** drought, watershed, climate, aridity, modeling, water balance.