

DROUGHT AND WATER MANAGMENT IN THE WADI MINA BASIN, ALGERIA.

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Abstract :

In the North African countries, particularly Algeria, the population life is very related to the climate and its fluctuation. Economy: Agriculture, industry, tourism... are very dependent the water. This communication aims to show the effect of fluctuation of the principal climatic variables fluctuation (rain, temperature, potential evapotranspiration) on the liquid supplies. In this study, rainfall of 16 stations in the Wadi Mina Basin (4900 km²), in the Northwest of Algeria were statistically analysed over a 30 years period (1970/71-1999/00). The principal component (CPA) application showed that the first principal component [C1] explains more than 67% of the variance. Rainfall data showed two periods; a wet period from 1970 to 1980 and a dry period from 1980 until now. Thus, the Analysis in Principal Components (CPA) is used to optimize the annual rainfall records and to reconstitute the hydrological series

Key words: drought; Fluctuation; basin; CPA; Algeria