The title (العنوان):

Trend in precipitation and evolution of discharge in a climate change context: Wadi Mina watershed in Algeria.

APA Citation (توثيق APA):

Hallouz F., Meddi M., Mahe G., et all (2019). Trend in precipitation and evolution of discharge in a climate change context: Wadi Mina watershed in Algeria. *Revue des Sciences de l'Eau: Journal of Water Science,* vol 32 (n°2) , p. 83-114. DOI ou URL : https://www.cabdirect.org/cabdirect/abstract/20219941619

Abstract: This study focuses on the analysis of the spatial and temporal variability of precipitation, temperature, and discharge indices in the wadi Mina watershed (6 048 km^2) in the Algerian northwest during the period of 1979-2013. The application of the non-parametric test of Kruskal-Wallis on rainfall indices has revealed that the total annual rainfall and the maximum number of consecutive rainy days show a large spatial variability. The number of days with high discharge decreases from the north to the south of the basin. As for the Mann-Kendall test, it revealed a decreasing trend in total annual rainfall. On the other hand, the maximal and minimal temperatures significantly increased with time. It was the same for the sequences of consecutive dry days, rainfall intensities and extremely rainy days. Also, the frequency of days with high discharge has decreased, while that with low discharge has increased in the three wadis Mina, Haddad and El Abd. Finally, the decrease in rainfall and the increase in temperature have generated a decline in water resources.

Key words: Water resources ; Rainfall ; Wadi Mina

Available from : https://www.cabdirect.org/cabdirect/abstract/20219941619

2-https://www.erudit.org/en/journals/rseau/2019-v32-n2-rseau04921/1065202ar/

3-https://www.erudit.org/en/journals/rseau/2019-v32-n2-rseau04921/1065202ar.pdf