

STATISTICS OF EXTREMES IN THE WATERSHED SPARSELY GAUGES IN THE NORTH WEST ALGERIAN, APPLICATION OF A CONCEPTUAL GLOBAL MODEL RAIN-FLOW

Ouafik BOULARIAH¹, Mohamed MEDDI²

¹*laboratoire génie de l'eau, Ecole Nationale Supérieure de l'Hydraulique. Blida. Algérie,*
ouafik_hydro@yahoo.fr

²*laboratoire génie de l'eau, Ecole Nationale Supérieure de l'Hydraulique. Blida. Algérie,*
m.meddi@ensh.dz

ABSTRACT: This work is in the field of modeling the transformation of rain to flow at the daily scale of different watersheds in western Algeria. Our main objective is to assess the operation of a flow simulation model (GR4J) to study extreme flows in sparsely gauged watersheds. This study of the rain-discharge at daily scale is based on a series of hydro-rainfall data measured at different stations. The results obtained indicate that the model has acceptable ability to reproduce flows from rainfall data. Also, their use can be encouraged to flow prediction from climate models data.

KEYWORDS: Rainfall-runoff model, Gr4j, sparsely gauged watersheds, extremes.