

THE IMPACT OF CLIMATE CHANGE ON DROUGHT EVENTS IN CHINA

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ABSTRACT

Due to climate change and human activities, extreme drought disasters have frequently occurred and the issues regarding water shortage are increasingly serious in recent years in China, which not only threatens food security but also exerts substantial pressure on the demand of economic development for water. The impact of climate change on water resources has become the major focus for all the parties concerned. In this paper, the relation between depth of annual runoff in different basin (DARB) and drought disaster has been established. Meanwhile, the frequency and its change of extremely low flow events and continuous dry years have been studied, based on the analysis on the DARB, including both the natural DARB and predicted DARB of A1B scenario simulated by different climate models (NCAR, CSIRO, and MPI). At last, the paper presents the impact of climate change on drought events.

PALAVRA-CHAVE: drought, climate change, extremely low flow, runoff, scenario