IAHS2017-46
IAHS Scientific Assembly 2017

Sedimentary evolution and change ecosystems of Aheme lake in south-west of Benin

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Abstract
Tropical moist ecosystems, particularly Lake Aheme, are increasingly marked by water degradation, linked to the many activities they offer to the riparian population. The objective of this study is to analyze the sedimentary dynamics variability and their influence on the Aheme ecosystem.
Data on precipitation, flows, turbidity, solid loads, mineral elements and bathymetry were used. The grain size data from the sieving of sediment samples collected during hand dredging and gauging were used to interpret the distribution of grains in the lake. To all this is added field observation data. The linear correlation coefficient was used to measure the degree of dependence between the precipitated slides and the leached slats feeding the lake. The quantification of the evolution of the depths in some areas of the lake made it possible to appreciate the rate of filling. The Sorting index was used to determine the distribution and origin of sediments in the lake.
The results show a degradation of the state of the ecosystem characterized by a filling of the lake bed, a change in physicochemical parameters and a decrease in fish production. The most important solid inputs reach the lake during periods of high water
Key words: Aheme lake, mutation, filling, ecosystem, sedimentation