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Research papers

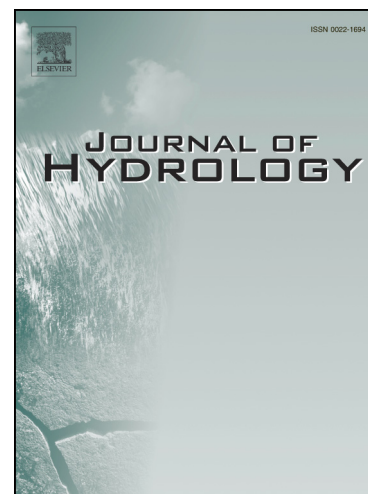
Assessing acid rain and climate effects on the temporal variation of dissolved organic matter in the unsaturated zone of a karstic system from southern China

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**Assessing acid rain and climate effects on the temporal variation of  
dissolved organic matter in the unsaturated zone of a karstic system  
from southern China**

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**Abstract:** Acid rain has the potential to significantly impact the quantity and quality of dissolved organic matter (DOM) leached from soil to groundwater. Yet, to date, the effects of acid rain have not been investigated in karstic systems, which are expected to strongly buffer the pH of atmospheric rainfall. This study presents a nine-year DOM fluorescence dataset from a karst unsaturated zone collected from two drip sites (HS4, HS6) in Heshang Cave, southern China between 2005 and 2014. Cross-correlograms show that fluorescence intensity of

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