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Impacts of reservoir operations on multi-scale correlations between hydrological drought and meteorological drought

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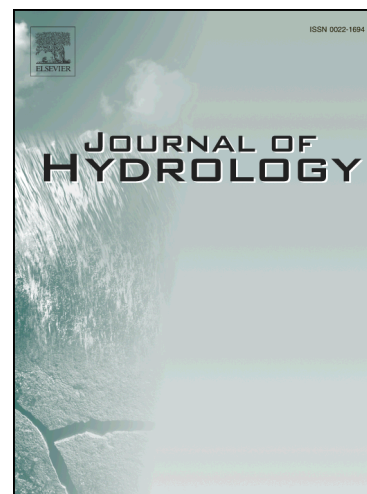
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1 **Impacts of reservoir operations on multi-scale correlations between**
2 **hydrological drought and meteorological drought¹**

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13 **Abstract:** Although numerous studies have investigated the relationships between *hydrological*
14 *drought (HD)* and *meteorological drought (MD)* in different regions, few studies have examined the
15 influence of reservoir operations during drought periods on such relationships, particularly at
16 multiple time scales. This study presents a useful framework to examine the influences of reservoir
17 operation rules during drought periods on the multi-scale correlations between *HD* and *MD*. Two
18 standardized drought indices (*Standardized Streamflow Index (SSI)* and *Standardized Precipitation*
19 *Index (SPI)*) with different timescales (1, 3, 6, 12, and 24 months) were used to compare the

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