

研究论文

1955-2002年气候因子对鄱阳湖流域径流系数的影响

郭华 姜彤 王艳君 陈桂亚

中科院南京地理与湖泊研究所 中国科学院 南京地理与湖泊研究所

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摘要 1955-2002年间, 鄱阳湖流域径流系数均呈现显著上升趋势, 有较明显的突变性和阶段性, 突变主要发生在20世纪60年代末和90年代初。径流系数的趋势及突变与该时期降水量的变化吻合较好; 气温和蒸发量的变化趋势及突变点也与径流系数基本吻合; 季节变化中, 7-9月的径流系数与气候因子的变化趋势最为吻合。气候因子的变化与鄱阳湖流域径流系数变化的一致性, 说明48 a来气候变化对径流系数的影响非常显著。尽管鄱阳湖流域的径流系数还受到土地利用变化、水土流失和地形等因素叠加效应的影响, 但是气候变化仍然是其主要影响因素。

关键词 [径流系数](#) [气候变化](#) [突变](#) [鄱阳湖流域](#)

分类号

Impacts of Climate Factors on Runoff Coefficients in the Poyang Lake Basin in 1955-2002

Abstract From the view of water cycling, runoff coefficients are important index of water resources in a particular catchment. The changes of runoff coefficients in the five rivers of Poyang Lake basins during 1955-2002 were analysed. And the corresponding relationship between the changes of climate factors and runoff coefficients is the emphasis question discussed. Results show that runoff coefficients of the Poyang River basin increased significantly and changed abruptly in the late 1960s and the early 1990s. The trends and abrupt changes of runoff coefficients are in accordance with that of precipitation, evapotranspiration and temperature, respectively, especially with the precipitation. As for seasonal changes, runoff coefficients corresponded well to the climate change from July to September in 1955-2002. This suggests that climate factors significantly influenced the changes of runoff coefficients. Although the runoff coefficients would also be impacted by soil erosion and topographic condition, climate factors are still the main factors to the changes of runoff coefficients.

Key words [runoff coefficient](#) [climate change](#) [abrupt change](#) [Poyang Lake basin](#)

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通讯作者 郭华 qhguohua@163.com

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