

研究短论

北方农牧交错带中部区域气候变化特征

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摘要 分析北方农牧交错带中部区域1951-2005年温度、降水的变化特征, 结果表明, 研究区近55 a的气温和降水具有如下特征: 1) 增温明显, 气温变率为0.4°C/10 a, 不同季节增温幅度以冬、春、夏、秋依次递减; 2) 降水变化可分为3个阶段: 20世纪50-60年代降水量呈减少趋势, 70-80年代处于较平稳的过渡期, 90年代以来降水量又呈现增加趋势。夏季降水与年降水变化趋势类似, 秋季与冬季降水波动较小, 基本保持平稳。研究区高温、干旱有所加强, 暴雨、低温事件减少。

关键词 [农牧交错带](#) [气候变化](#) [温度](#) [降水](#)

分类号

Climate Change in the Middle of Farming-grazing Zone of Northern China

Abstract The middle of the farming-grazing zone of the northern China is a typical belt region with the ecological fragility, but is an important naturally and ecologically protective barrier for the North China Plain. This paper presents the results of the temperature and precipitation changes during 1951-2005 over this region. It is concluded that there was an increasing trend of the annual mean temperature at a growth rate of 0.4°C per ten years, and the increment in temperature was the highest in winter, followed by spring, summer and autumn. There was a decreasing trend of annual precipitation from 1950s to 1960s and an increasing trend from the 1990s to the present. Precipitation in summer showed a similar trend as the annual precipitation, and precipitation in autumn and winter no evident change trend. The extreme events have more frequently happened since the 1990s because the high temperature and dry weather continuously increased, which is detrimental to the development of agriculture in the study area.

Key words [farming-grazing zone](#) [climate change](#) [temperature](#) [precipitation](#)

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