研究短论

中国冬半年最低气温概率分布特征

魏凤英

中国气象科学研究院

摘要　　根据1955-2005年中国160个站冬半年 (当年11月至翌年4月)平均最低气温资料，使用统计检验的方法，分析了近50 a中国冬半年最低气温的突变事实，在此基础上给出了气候变暖前后最低气温的概率分布，比较了变暖前后时段全国最低气温空间分布的差异。结果表明：1) 20世纪80年代末中国冬半年最低气温发生了显著突变，进入异常增暖时期，其增温程度比平均气温明显；2) 增暖后中国最低气温的概率分布发生了明显的变化，最低气温偏冷的概率显著减小，偏暖的概率明显增大；3)气候变暖后除西南地区最低气温上升幅度不显著外，其余地区均呈现显著增温趋势。

关键词　　冬半年　最低气温　概率分布　增温趋势　中国

分类号　P423.3+6

扩展功能

本文信息

▸ Supporting info
▸ [PDF全文](2223KB)
▸ [HTML全文](0KB)
▸ 参考文献

服务与反馈

▸ 把本文推荐给朋友
▸ 加入我的书架
▸ Email Alert
▸ 文章反馈
▸ 浏览反馈信息

相关信息

▸ 本刊中 包含"冬半年"的 相关文章
▸ 本文作者相关文章
· 魏凤英

Probability Distribution of Minimum Temperature in Winter Half Years in China

WEI fengying

Abstract　Based on the winter half year (from November to the April of next year) minimum temperature data at 160 stations in China during 1955-2005, by using Mann-Kendall statistic test the abrupt changes in the minimum temperature were analyzed. The probability distributions of the minimum temperature series for the colder period (1955/1956-1988/1989) and warmer period (1989/1990-2004/2005) were given and the spatial differences of the minimum temperature between the two climatic periods were also compared. The results show that: 1) the significant rising of minimum temperature occurred in the end of the 1980s, and the rising amplitude was larger than that of mean temperature; 2) after the warming the probability of lower minimum temperature has apparently reduced and that of higher minimum temperature increased; 3) statistically, the rising trends of the minimum temperature were all significant over most regions in China except those in South west China.

Key words　winter half year　minimum temperature　probability distribution　warming trend　China

通讯作者　魏凤英 weify@cams.cma.gov.cn