极端事件专栏

1951-2005年中国区域气候变化与干旱化趋势

马柱国 任小波

中国科学院大气物理研究所

收稿日期 2007-2-14 修回日期 2007-4-23 网络版发布日期: 2007-8-9

摘要:利用1951-2006年中国区域160个站的月降水及月平均气温资料,对中国区域近56 a气候要素的 变化及其与干旱化联系的事实进行了分析。结果表明: 降水减少的地区主要位于我国北方的西北东部、华北及 东北;在南方,西南的降水减少趋势与上述地区具有类似特征。气温基本为增温趋势,而西北东部及西南地区 气温也在20世纪80年代发生转折性变化,由80年代中期以前的降温趋势转为其后的增温趋势。地表湿润指数分 析的结果指出:我国西北东部、华北、东北及西南地区当前正处于一个干旱化过程,但不同地区干湿变化特征 及干旱化的持续时间和位相却有差别。

中国区域 气候变化 干旱化 地表湿润指数 关键词 分类号

Abstract Abstract: Based on the monthly mean surface air temperature (SAT) and monthly preci ▶ 本刊中 包含"中国区域"的 相关 pitation of 160 meteorological stations over China from 1951 to 2006, the relationship between cl imate change and drying trend was analyzed in the last 56 years. The results indicated that the ann ual precipitation reduced in North China, Northeast China, the east part of Northwest China, and Southwest China, while the SAT generally increased in these regions. It is worth noting that the tr end of SAT turned from a decreasing trend to an increasing trend in Southwest China and the eas t part of Northwest China in the 1980s. Analysis of surface wetness index (SWI) shows there we re drying trends in North China, Northeast China, Southwest China and the east part of Northwe st China, but the phase and duration of the drying processes were different in the above mentione d regions.

Key words China region climate change dring trend surface wetness index (SWI)

DOI

扩展功能

本文信息

- ▶ Supporting info
- ▶ [PDF全文](4063KB)
- ►[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

- 文章
- ▶本文作者相关文章
- 马柱国 任小波