

1960—2005年东北地区降雪变化特征研究

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Characteristics of snowfall from 1960 to 2005 in northeast China

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摘要 利用国家气象信息中心提供的逐日降水和逐日天气现象台站资料,在运用旋转经验正交函数(Rotated Empirical Orthogonal Function, REOF)和相关分析进行降雪分区的基础上,重点研究了46 a来东北地区降雪的时空分布、演变特征和长期气候趋势。结果表明:东北地区的山地是主要的降雪地区,而平原及平原南部是降雪较少的区域,降雪区域差异明显。在空间上,大兴安岭北部(长白山地区)是降雪增加(减少)最大的地区,小兴安岭地区(平原地区)是降雪增加(减少)较明显的地区。在时间上,东北北区降雪量呈增加趋势,且在20世纪90年代发生了突变,目前增加趋势显著,而东北南区降雪量是减少的。

关键词: 降雪 REOF 气候趋势 突变 中国东北地区

Abstract: Based on daily precipitation and daily weather phenomena data from national meteorological center, snowfall divisions in northeast China during recent 46 years were analyzed by rotated empirical orthogonal function (REOF) and correlation analysis, and spatial-temporal distribution and evolvement characteristics as well as climatic trend of snowfall were discussed. The results show that the primary snowfall region is located in mountain areas of northeast China. There is less snowfall in plain and in the south of plain. The regional difference of snowfall is obvious. Snowfall increases (decreases) obviously in the north of Daxing' anling mountain area (Changbai mountain area), followed in Xiaoxing' anling mountain area (plain area). Snowfall shows an increasing trend in the north of northeast China, and there is an abrupt change since 1990s. The increasing trend of annual snowfall is significant until now. However, annual snowfall decreases in the south of northeast China.

Keywords:

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- [1] 白松竹,李焕,田忠锋.1961—2008年阿勒泰地区异常初终霜日变化特征[J]. 气象与环境学报, 2010,26(5): 25-29
- [2] 刘闯.1958—2009年本溪地区气候变化特征[J]. 气象与环境学报, 2010,26(5): 57-60
- [3] 李春,刘德义,黄鹤.1958—2007年天津降水量和降水日数变化特征[J]. 气象与环境学报, 2010,26(4): 8-11
- [4] 高祺,缪启龙,赵世林.气候变暖对石家庄春季物候的影响[J]. 气象与环境学报, 2010,26(1): 21-26
- [5] 韩军彩,陈静,岳艳霞,高祺,.石家庄不同等级降水日数的时空分布特征[J]. 气象与环境学报, 2009,25(6): 34-38
- [6] 周璋,李意德,林明献,陈德祥,许涵,骆土寿.1980—2005年海南岛尖峰岭热带山地雨林区气候突变与异常的初步研究[J]. 气象与环境学报, 2009,25(3): 66-72
- [7] 李辑,蔡福,明惠青,谷秀杰.辽宁地区第一对流层顶高度变化特征分析[J]. 气象与环境学报, 2009,25(2): 9-15
- [8] 赵连伟,金巍,张运福,曲岩.辽宁冬季气温时空分布特征及其预测概念模型[J]. 气象与环境学报, 2009,25(1): 19-22
- [9] 宋艳华,张润仙,罗律,谢太初,孙晓文.气候变暖背景下清远气温变化特征[J]. 气象与环境学报, 2008,24(3): 38-41
- [10] 苟阿宁,顾松山,骆兴江,黄延刚.一次海面降雪的双线偏振多普勒雷达回波特征分析[J]. 气象与环境学报, 2007,23(6): 6-10
- [11] 蔡福,李辑.1964—2005年辽宁第一对流层顶温度变化特征分析[J]. 气象与环境学报, 2007,23(4): 18-24
- [12] 赵宗慈,罗勇.21世纪中国东北地区气候变化预估[J]. 气象与环境学报, 2007,23(3): 1-4
- [13] 张黎红,.大连地方性冷流降雪成因分析[J]. 气象与环境学报, 2004,20(4): 12-13
- [14] 刘玉梅,费云霞,邵光,冯胜民,邢孟国,宿玉亮,袁涛,王波.大庆市汛期特征分析[J]. 气象与环境学报, 2004,20(4): 14-15