

技术应用

广东省农业旱灾遥感监测

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摘要:

研究了基于遥感与GIS的广东省农业旱灾遥感监测方法, 建立了农业旱情遥感监测评估模型。该模型结合MODIS遥感数据、地面气象观测资料以及当地基础地理信息系统数据, 分析评价了2006年5~10月广东省每旬的农业旱情发展变化过程, 结果与2006年广东农业旱情发展变化趋势吻合程度很好, 表明这一监测方法能够用来有效地监测评价广东省农业旱情发展时空变化。

关键词: 广东省 农业旱灾 旱情监测 遥感 MODIS

REMOTE SENSING MONITORING OF AGRICULTURAL DROUGHTS IN GUANGDONG PROVINCE USING MODIS SATELLITE DATA

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Abstract:

Drought has long been one of the most serious natural disasters having important impacts on agricultural farming in Guangdong province. Agricultural drought monitoring using remote sensing and Geographic Information System (GIS) was examined in this paper. A practical approach was presented for agricultural drought monitoring and assessment in Guangdong province. An operational monitoring system was developed on the basis of the approach. Using the MODIS satellite data as the main input, the authors carried out a preliminary operation of the system for the year 2006 to assess drought severity in each 10-days from March to October. The results show that the drought phenomenon was not very severe in 2006 in Guangdong province. It can be seen that light drought events happened in the province in mid-May, early-July, mid-August and late-September. The monitoring results are consistent to the spatial variation of drought events observed in the province in 2006, indicating the applicability of the approach to drought monitoring.

Keywords: Guangdong province Agricultural drought Drought monitoring Remote sensing MODIS

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