[1]陈艺芳,吴丽娟,许金洪.一次强热带风暴引发的阶段性强降水分析[J].自然灾害学报,2009,01:199-203.

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一次强热带风暴引发的阶段性强降水分析(PDF)

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Title: Analysis of a staged heavy precipitation caused by severe tropical storm

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关键词: 强降水; 螺旋云系; 中小尺度雨带; 湿焓平流; 位势不稳定

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摘要: 2006年强热带风暴"碧利斯"引发了莆田市7月14-17日的持续强降水过程,这次强降水过程虽持续时间较长,但其发生的阶段性很明显.从不同阶段的强降水引发机制出发,利用湿焓平流、总能量、假相当位温等进行了详细分析,结果表明,强降水第一阶段是由热带风暴外围螺旋云系带来的,第二阶段是西南低空急流促发的结果,第三阶段主要是位势不稳定引发的局地强降水.

Abstract: The 2006 strong tropic storm"Bilis"brings lasting heavy rain in Putian from July 14 to July 17.Though the rain lasts long,its staged character is rather distinct.Starting from the triggering mechanism of different stages of the rain,this article makes a detailed analysis with wet enthalpy advection,total energy,pseudo-equivalent potential temperature ect.The analysis result shows:the first stage is brought by spiral clouds band circled outside the tropical storm;the second stage is the result of the southwesterly low-level jet;the third stage.slocal strong precipitation is caused by the potential instability.

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