

登陆东南沿海热带气旋的异常特征及其成因研究

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摘要 应用1949~2005年热带气旋(台风)年鉴资料, 对西太平洋以及登陆我国东南沿海地区的热带气旋活动的特征进行了分析, 发现西太平洋生成热带气旋个数和登陆我国热带气旋的个数有略为减少的趋势, 而登陆我国热带气旋的强度有显著增强趋势. 2005年西太平洋生成热带气旋数偏少, 但其中登陆我国的强热带气旋比例却明显偏高. 对导致这种异常现象的大尺度环流条件的分析表明, 前期南亚高压和副热带高压势力偏强, 台风期副高偏强、东亚夏季风偏弱、水平风垂直切变等因子不利于热带气旋生成; 而西太平洋西部异常的水汽输送、弱风垂直切变、海表面温度异常以及中低纬系统之间相互作用等则可能是导致登陆我国热带气旋强度异常偏强的主要原因.

关键词 [热带气旋](#) [异常特征](#) [成因分析](#) [水汽输送](#) [海表面温度](#)

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On abnormal features and formation causes of tropical cyclones landing southeastern coastal zones of China

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Abstract With the Tropical Cyclone (Typhoon) Year Books data from 1949 to 2005, the features of the TC activities in the western Pacific as well as TCs landing in the coastal area of southeastern China are analyzed. It is found that the number of TCs in the western Pacific and landing in China has decreased slightly, while the intensity of the TCs landing in China has increased significantly. In 2005, there are fewer TCs in the western Pacific, which results from the adverse factors for TC's generating, such as higher south Asia high in prior time, stronger subtropical high, weaker East Asian summer monsoon, and vertical shear of zonal wind in TC period. At the same time, the proportion of strong TCs landing in China is larger than normal, which may be caused by many factors, like the abnormal moisture transportation in west part of the western Pacific, weak wind vertical shear, SST anomaly and the interaction of weather systems between mid- and low- latitude areas.

Key words [Tropical cyclone \(TC\)](#); [Abnormal feature](#); [Causes analysis](#); [Moisture transportation](#); [Sea surface temperature \(SST\)](#)

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