

1979年夏季熱帶非地轉風 和澳洲噴氣流加速之初步研究*

李 汴 軍

中央氣象局
氣象科技研究中心

摘 要

每週平均之全球觀測資料(1979年5月-8月)對正模展開,可以得到熱帶波模分量。這些波在200mb上的型態顯示跨越赤道流主要由內重力波和羅斯貝-重力波所組成,此二波在熱帶地區之經向風和波數一的澳洲噴氣流加速其相關很好。這顯示此加速現象與熱帶哈德雷環流有密切關係。

A preliminary study of tropical ageostrophic wind and subtropical jet acceleration during May to August 1979

Beng-chun Lee

Research and Development Center
Central Weather Bureau

ABSTRACT

Tropical modes are examined using weekly averages of selected normal mode projections of the Global Weather Experiment (GWE) summer data. Quantification of contributions of the wind field, which are reconstructed from modal component, at 200 mb indicates that cross-equatorial flows over the tropics mostly due to internal gravity modes and mixed Rossby-gravity modes. The meridional wind of these two modes are well correlated with wavenumber one structure of the southern subtropical jet. This suggests that the subtropical jet acceleration is may influenced by tropical local Hadley cell.

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