聪风及熟节周晨的引起之高空慢乱在 美国南部之视测

Observation of Upper Atmospheric Disturbances Caused by
Hurricanes and Tropical Storms

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An experiment conducted by using a continuous wave-spectrum high frequency Doppler sounder array with three sites and nine transmitters (each site with three transmitters) was carried out to observe the coupling of energy between stratosphere and ionosphere during the period of hurricanes and tropical storms. The analysis of the Doppler sounder records indicated that gravity waves were detected when the eye wall of Hurricane Eloise was located at the Gulf of Mexico. A group ray tracing computation has been used in an attempt to locate the sources of these waves. By comparing the results of the computed sources of the waves and the actual storm track (time dependent location of the eye wall) of Hurricane Eloise, it is found that the computed locations of the source were located along the storm track 3 to 4 hours ahead of the actual location of the eye wall for the case of Hurricane Eloise. The nature of the applicability of the present study to a hurricane or typhoon warning system is discussed.

摘要

丰视网络利用高頻率虎波之發射 佐震離唐之及射末觀测跑風及越帶風 暑期间许引起之高受援礼。丰强维益 到包括9部發射台、分佈在3个区域 ,每区域35%14台,共分为35高 频率魔波波段。這些爱射台到住程手 国阿拉巴岛州北部的 Huntsville 19年近。科 的的討論将集中於1975年9月21日至 , 盾配用伊洛铅(Hurricane Eloise)性遇 墨西哥诗向佛雁里莲海岸递進 昨,在 度熟度上的视测到的度多名及慢動之 分析。分析信果與示在魔難詹祉例到 围期20至30分镜及住相建度100至200%。 之重力波。波豫之位置及波之產生時 间可以由波段追锅涡計车出来。計算 法来週文波译住程顾风服之轨路上, 同時在時间上科的可以確定4小時後 之雕風嚴位置。利用本视测技巧形的 可必你弹確如推测了至4为時後围 眼的位置。