

鄉鎮年度大潮特性分析

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摘 要

本研究修正中央氣象局鄉鎮潮汐預報大潮的計算方法，以每年的日潮差累積發生機率取代使用19年全部日潮差累積機率所計算出的臨界值，以避免日潮差因年際間差異所造成的影響。並且使用一套具資料同化的「臺灣周邊海域潮位模式」模擬結果，分析各鄉鎮之年度大潮特性。經使用臺灣地區各潮位站觀測資料進行驗證後，修訂並提供一個鄉鎮年度大潮預報方法與各鄉鎮年度大潮警戒值，供中央氣象局發布警訊，提醒沿海低窪地區慎防高海水位造成的海潮淹水。

關鍵字：年度大潮、潮汐模式

Analysis on the characteristics of king tides in Taiwan

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Abstract

This study is to update the forecast calculation method on the township's large tidal range for the Central Meteorological Bureau. By replacing the critical values calculated using the cumulative probability of daily tidal range in 19 years with the cumulative occurrence probability of daily tidal range in each year. We could avoid the impact of inter-annual variations in daily tidal range.

We ran a simulation through the "Tide Model of the Sea Area around Taiwan" with data assimilation to analyze the characteristics of the king tides in Taiwan. This result was then verified with data collected from tidal stations. With our revised predicting method and king tide data from the observation points, the Central Meteorological Bureau could then issue flood warnings to the low-lying coastal areas.

Keywords: king tide, tide model