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颱風早期降雨預測

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摘　　要　本文利用颱風之行進方向、經緯度、風速、強度等較完整且較易取得的氣象因子，以案例式推理之歐幾里得距離法及權重相似度法，比對歷史颱風找出相似度最高者，以期預測颱風降雨空間分佈，再利用對降雨量影響最大的氣壓參數進行迴歸分析以進行降雨量推估修正。分析結果顯示，降雨量預測準確率可達百分之七十至七十五，降雨中心位置預測上，歐幾里得距離法預測誤差大致在相鄰兩縣市之間。

關鍵詞：案例式推理、歐幾里得距離法、權重相似度法。

Early Phase of Typhoon Rainfall Forecast

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ABSTRACT　This research finds the most similar meteorological factors. We predict the typhoon rainfall with the case-based reasoning of the Euclidean distance and weight similarity. We compare the history of a typhoon's data by direction, longitude, latitude, wind velocity and strength. Then we use regression analysis method to infer rainfall with the atmospheric pressure. The results of the rainfall forecast reach 70 to 75 percent. The errors location of maximum rainfall forecast are nearby two counties according to the Euclidean distance method.

Key Words:　Case-based reasoning, Euclidean distance,　weight similarity.

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