中華水土保持學報,34(2)：161-170 (2003)
Journal of Chinese Soil and Water Conservation, 34 (2)：*161-170* (2003)

台灣地區之降雨變遷研究

賴栗葦[1]　　**姜善鑫**[2]

摘　　要　近年來全球各地接連發生許多極端氣候事件，台灣地區的降雨是否受到氣候變遷影響，以及降雨參數的變化情形如何，為本文探討的重點。本文選取台灣中央氣象局氣候資料時間較長約 100 年的彭佳嶼、台北、台中、澎湖、台南、恆春、台東和花蓮測站之降雨資料，以時間序列迴歸模型進行分析。分析結果顯示，近 100 年來（各站創站年-2000 年）台灣地區的年降雨日數呈顯著減少的趨勢，年平均降雨強度則呈增加的趨勢，年單日最大降雨量以彭佳嶼、台東和花蓮呈顯著增加的趨勢。近 40 年來（1958-2000 年）台灣地區年降雨日數亦呈減少現象，而年平均降雨強度亦呈增加現象，其中以東部、南部地區最為顯著。此外，近 40 年趨勢的變化幅度大於近百年來的變化幅度。
關鍵詞：時間序列迴歸模型、降雨日數、降雨強度、台灣。

Rainfall Changes in Taiwan

Li-Va Lay[1]　　Shan-Hsin Chiang[2]

ABSTRACT　Recently, the number of extreme climatic events have increased in the world. The purpose of this study was to investigate rainfall changes in Taiwan. The time series regression model was used to analyze the rainfall data, which began from 1896 to 1911 and ended in 2000 for eight stations, Pengchiayu, Taipei, Taichung, Penghu, Tainan, Hengchun, Taitung and Hualien in Taiwan. Results indicated that numbers of rainy days (>0.1mm) for all Taiwan area had decreased significantly; intensity of rainfall for the whole of Taiwan had increased significantly; and the maximum rainfall in a single day had increased significantly for a few stations. The amplitude of rainfall changes over the recent period (1958-2000) was larger than that over the past longer period of around 100 years.
Key Words: time series regression model, rainy day, rainfall intensity, Taiwan.