

陽明山國家公園遊客量之預測 —以時間數列模式(ARIMA)分析法

Forecasts of Visitors' Trend of the Young-Ming Mountain National Park using ARIMA model

陳淑女

育達商業技術學院·人事室組員

【摘要】

由內政部營建署統計資料得知台灣地區國家公園遊客量產生與日俱增之現象，然而國家公園遊客量高度成長將會使國家公園在營運管理上、周邊相關產業之發展及遊客的遊憩品質等造成相當程度之負面影響。因此，本研究以陽明山國家公園遊客量為例，利用時間數列模式(ARIMA ;Auto-Regressive Integrated Moving Average Model)分析法以同時考量自我迴歸(Auto-Regressive)、移動平均(Moving Average)、差分(Difference)、季節性因子和整合(Integreted)等特性建立陽明山國家公園之遊客量 ARIMA 預測模式，以推估未來可能之遊客量；本研究之結果將可提供政府有關單位未來發展國家公園計畫上、推動保育、遊憩及研究上，或國家公園的周邊相關產業經營管理上之參考，並協助制定未來之發展政策；也期能以拋磚引玉之精神為後續國家公園遊客量預測相關研究之比較與評估。

關鍵詞：國家公園遊客量預測、ARIMA 預測模式

【Abstract】

An indication from tourists data complied by the Ministry of Interior, shows that visitors to the National Parks of Taiwan has been increasing for the past consecutive years. The impact of this upward trend of tourist's volume, to the National Park's operations, to the related tourism industry, and to the quality of tourists themselves when visiting the Park, may be negative, and need to be looked into and paid attention to. This paper studies historical data on tourists of the Young-Ming Mountain National Park, utilizes the Time-Series analysis model-Auto-Regressive Integrated Moving Average (ARIMA) model to predict the future trend of the Park's visitors. The results of the present study can provide information for the following decision makings: for the future development planning of the National Parks, for planning of the nature resources protection, for leisure, for further investigation on tourist's trend, for perational and administrative considerations for all National Park's related tourism industry, and for all related policy makings.

Keywords : ARIMA model for National Park's Tourist, Forecast of the National

Park's Visitors.