

遙測地表判釋技術-以竹東為例

陳莉, 魏曉萍, 陳慧敏

土木與工程資訊學系

工學院

lichen@chu.edu.tw

摘要

The Chu-tung Working Station of Irrigation Association was selected as the study area.

This study is aimed at imagery classification by the maximum-likelihood decision rule and

back-propagation neural network (BPN), both belong to artificial intelligence. The training

procedure are comparing between the cultivation area calculated by ground survey and by

image classification in the paddy-majority area. The supervised classification methods have

high accuracy, which could demonstrate by the accuracy verification table. Furthermore, these

two methods could assist us to calculate the water requirement for each crop, based on the

area of each crop derives from image classification and the growing and cropping pattern.

關鍵字：Remote Sensing, Maximum-likelihood Decision Rule, Back-propagation Neural Network, Imagery Classification