

異空間分佈點之因果迴歸分析-克利金法與AASN神經網路之比較

葉怡成, 陳柏愷, 周文杰

資訊管理學系

資訊學院

icyeh@chu.edu.tw

摘要

The purpose of this paper is to explore, when the spatial positions of sampling points of two variables are different, how to construct their cause-and-effect regression model. This research used the kriging method and the AASN neural networks as the tools to construct spatial interpolation model. This research examined seven relations from three groups of cases to compare advantages and disadvantages of these two methods. The findings showed that (1) the spatial interpolation models constructed by AASN neural networks are much more accurate than by kriging method, (2) the cause-and-effect regression models constructed by AASN neural networks are much more accurate than by kriging method.

關鍵字：neural networks, kriging method, spatial interpolation, cause-and-effect regression, spatial sampling.