

Spatial Analysis of South African Crime Data

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Crime is a prominent issue in South Africa. The high crime rate has given the country a reputation as a crime capital. Although there has been a reduction in serious crimes over the last few years, the fight against crime is still a key priority of the Government. An understanding of the distribution of crime in space can aid in developing crime prevention strategies. This paper describes how principal component analysis can be used to derive general and specific measures of reported contact crime. The smoothed spatial distributions of these measures are mapped and evaluated for the period 2003 to 2011.

Key Words: Principal component analysis, crime mapping, spatial smoothing.