

Detection and mapping of hot/cold spots of urban spatial change in Tokyo 23 wards

WAKABAYASHI, Yoshiki^{1*}, Ryo Koizumi¹

¹Tokyo Metropolitan University

After the collapse of the bubble economy at the beginning of the 1990s, the deregulation policies of the government promoted urban development in Tokyo Metropolitan Area. This activated real estate market and accelerated population recovery in downtown Tokyo. However, this trend was not observed equally but expanded spatial differentiation within Tokyo Metropolitan Area. Hirayama (2005, 2006, 2011) pointed out that the government policy to promote housing supply and urban redevelopment has split the urban space into "hot spot" of newly invested and redeveloped districts and "cold spot" of stagnated and depopulated districts. The aim of this study was to identify and map these districts by employing spatial analysis with GIS. Results of the local analysis of spatial autocorrelation based on the grid square statistics of the Population Census and Establishment and Enterprise Census revealed that hot spot and cold spot coexist within Tokyo 23 wards and the spatial distribution has changed.

Keywords: geographic information systems, grid square statistics, spatial analysis, map, Tokyo