A Study on the Difference between Urban and Rural Climate in Hong Kong

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Abstract

Recent studies carried out by the Hong Kong Observatory show that the rising trends of air temperature in Hong Kong are influenced by both the global warming due to enhanced greenhouse effect and the high density urban development in Hong Kong. Apart from temperature, urbanization also brings about obvious differences between the urban and rural areas in respect of other meteorological elements such as wind speed, relative humidity etc. This paper aims at examining the climatological characteristics of Hong Kong’s urban and rural areas as well as their differences.

The scope of the present study includes the selection of representative urban and rural meteorological stations in Hong Kong so that the temperature difference between those chosen urban and rural stations can be utilized to quantify the effect of urbanization. By making use of some 20 years’ data, this study preliminarily compared the diurnal variations and seasonal variations of the differences in various meteorological elements between urban and rural stations, and try to analyze the relationship between these differences and urbanization.