# Regional characteristics of perceived temperature in South Korea

**K.R. Kim**, J. Kim, I.-S. Park, J.-S. Kim, and D.-G. Lee

Meteorological Research Institute, Korea Meteorological Administration, Seoul 156-720, South Korea (jykim@kma.go.kr/ Fax: +82-2-846-2851)

Spatial and temporal distribution of perceived temperature estimated by a human biometeorological model (Klima-Michel model) in South Korea was investigated. Sensitivity of perceived temperature was also tested according to the input meteorological variables such as ambient air temperature, dew point temperature, humidity, cloud information (amount and types), wind, and so on. Meteorological data provided from 28 meteorological stations every 6-hour during the recent 22 years (1983-2004) was used to analyze the temporal and geographical distribution of perceived temperature in South Korea. Mean frequency distributions of thermal stress (heat stress and cold stress) in South Korea during the recent 22 years are likely to be associated with geographical location as well as local climatic characteristics of each station. In order to satisfy a growing awareness of the linkages between human health and the weather and climate, the incorporation plan of perceived temperature into the content of national public weather service is discussed as an application of the digital model output with high spatial resolution (about 5 km) which is provided from numerical weather prediction (NWP) model by the Korea Meteorological Administration.