

Experimental Study on the Characteristics of Thermal Comfort in a Main Line Vehicle in Winter

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In this paper, the relationships between the thermal environment and thermal comfort in a main line vehicle in winter were reported. At first, in the field measurement, temperature and humidity in main line vehicles in regular passenger services were measured and their observational ranges were investigated. And then, a subjective experiment was conducted in a main line vehicle at a standstill. In the experiment, the subjects taking on the same clothes sat on the seat and answered the questions about thermal comfort. Based on the results, the regression equations of thermal comfort on the thermal index (SET*) were derived and the comparisons with the summer experiment in a commuter train were made.