



Pilot research of influence of thermal stress on the human body under the extreme heat

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When we are exposed to thermal environments, such as a heat wave or extreme heat, our body is under thermal stress. Bulcao et al.(2000) indicated that the human thermal comfort is determined by the skin temperature related to the core body temperature. In order to understand the degree of thermal stress, experiment of measuring the skin temperature change under the extreme heat environment is done. The variation of skin temperature is observed at the 8 points of each body while testees took a moderate exercise under the heat wave. In results, the skin temperature observed at the 8 points of the body were different individually but the skin temperature in the right chest, thigh and calves were revealed to be similar for all testees. Therefore the degree of the thermal stress due to the heat wave or extreme heat can be understood.

Keywords: thermal stress, skin temperature, thermal comfort, extreme heat,

Acknowledgement

This work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MEST) (No. 2012-0029809).