



Physiological equivalent temperature as an indicator of the UHI effect with the city of Prague as an example

Pavel Zahradníček (1,2), Michal Žák (3), Petr Skalák (1,3), Petr Štěpánek (1,2)

(1) Global Change Research Centre AS, v.v.i., Brno, Brno, Czech Republic (zahradnicek@chmi.cz), (2) Czech Hydrometeorological Institute, Brno, Czech Republic, (3) Czech Hydrometeorological Institute, Praha, Czech Republic

Description of an Urban Heat Island (UHI) using the difference in air temperature is one of the world's most studied characteristics. If, however, one wants to express how the temperature is perceived by humans, one must consider the overall effect of air temperature, wind speed, air humidity and radiation flows, which is expressed using temperature bioclimatological indexes. One of them is the so-called physiological equivalent temperature (PET), which is used for quantification of the overall effect of meteorological parameters combined with human energetic balance and which is perceived by humans. The RayMan (Matzarakis et al 2007, 2010) microscale models in the city of Prague were used to simulate biometeorological conditions describing the effect on humans using PET.

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