



Curiosities in micro scale modeling for human-biometeorological assessment

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For the quantification of thermal human-biometeorological assessment methods, based on the human energy balance builds the basis of all the known thermal indices. There are specific models, which require and deliver different kind of data (morphological, meteorological and human-biometeorological). The relevant data and information in order to calculate thermal indices start from the knowledge of sky view factors, aspect ratio, sunshine duration, shade to air temperature, air humidity, roughness, wind conditions and short and long wave radiation fluxes. For the human-biometeorological assessment of the short- and long wave radiation the mean radiation temperature and wind speed including roughness is required and is one aim of micro scale models. In addition the micro scale models are focused on the processing of grid data and vector data and the visualization of input and output data. Another aim of the micro scale models is the linking relevant inputs and information. Examples and results produced by RayMan and Skyhelios will be shown.