

Modelling and Calibration of a Thermal Model for an Automotive Cabin using HumanComfort Library

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This article aims to describe a modular system level modeling approach for the thermal behavior of an automotive cabin. The model is parameterized with geometric and physical data. At the end a set of 6 parameters is used to calibrate the model with two measurement data sets: one for a passive heat up and active pull down and one for a cold heat up. The procedure can be used as a recipe for developing own models of the same kind which may be used in integrated thermal management studies.

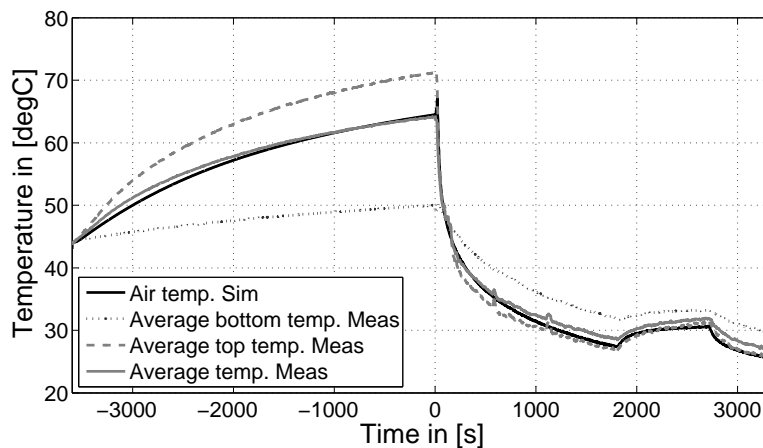


Fig. 1 Calibration result for passive heat up and active pull down of a sedan car – comparison of simulation result with average air temperature measurement

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