* VTUF-3D is the first micro-scaled urban surface energy balance model that allows inclusion of any type of urban vegetation.
* Designed to examine human thermal comfort impacts of urban vegetation by providing predictions of surface temperature, mean radiant temperature, and UTCI.
* An extensive model evalution shows VTUF-3D performs within the range of other urban land surface schemes while delivering micro-scaled results.
* Urban heat mitigation strategies using the cooling effects of urban vegetation (shading and evapotranspiration) can be evaluated using VTUF-3D.