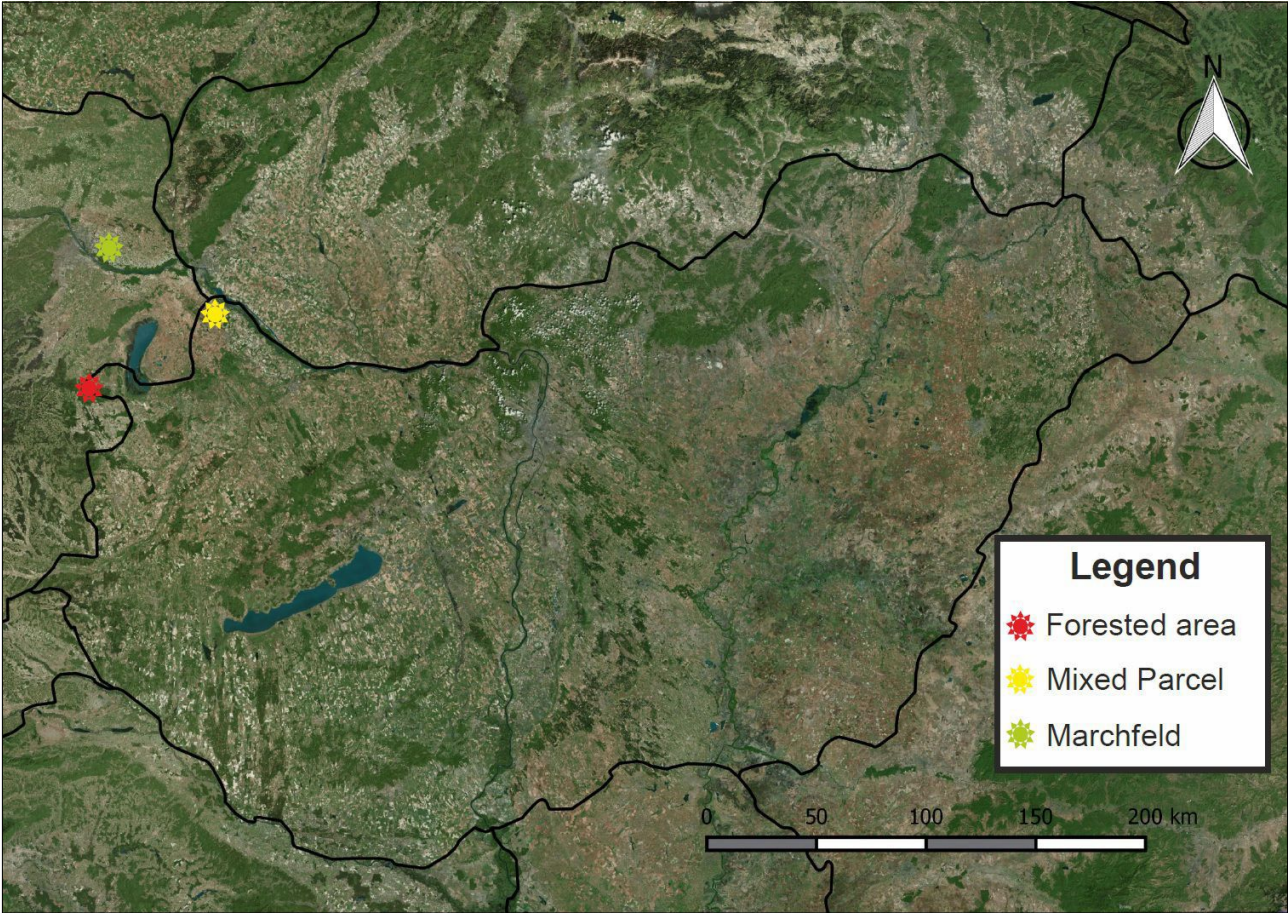


## Supplementary Material

**Tab. S1** - The applied RCMs (Van Der Linden & Mitchell 2009). (\*): Jacob 2001; (\*\*): Jones et al. 2004; (\*\*\*) : Christensen et al. 1996; (\*\*\*\*): Lenderink et al. 2007.

<b>Model ID</b>	<b>Research Institute</b>	<b>Regional climate model</b>	<b>Driving general circulation model</b>	<b>Emission scenario</b>	<b>Spatial resolution</b>
1	Max-Planck-Institute for Meteorology (MPI)*	REMO	ECHAM5	A1B	25km
2	Sweden's Meteorological and Hydrological Institute (SMHI)**	RCA	ECHAM5-r3	A1B	25km
3	Danish Meteorological Institute (DMI)***	HIRHAM5	ECHAM5	A1B	25km
4	Royal Netherlands Meteorological Institute (KNMI)****	RACMO2	ECHAM5-r3	A1B	25km

**Fig. S1** - The location of study areas.



**Fig. S2** - Graphical representation of the model of the study areas. Parameters: ET\_CREMAP and ET\_LYS are the measured actual evapotranspiration; PETH is the Hamon type potential evapotranspiration; PETM is the calibrated potential evapotranspiration; ET\_M is the actual evapotranspiration, SOIL\_MAX CALIBRATED is the calibrated soil-water storage capacity, and SOIL\_M is the soil moisture. The different shapes with the different type of arrows illustrate the connections amongst the used parameters during the model workflow.

