SUPPLEMENTARY FIGURES

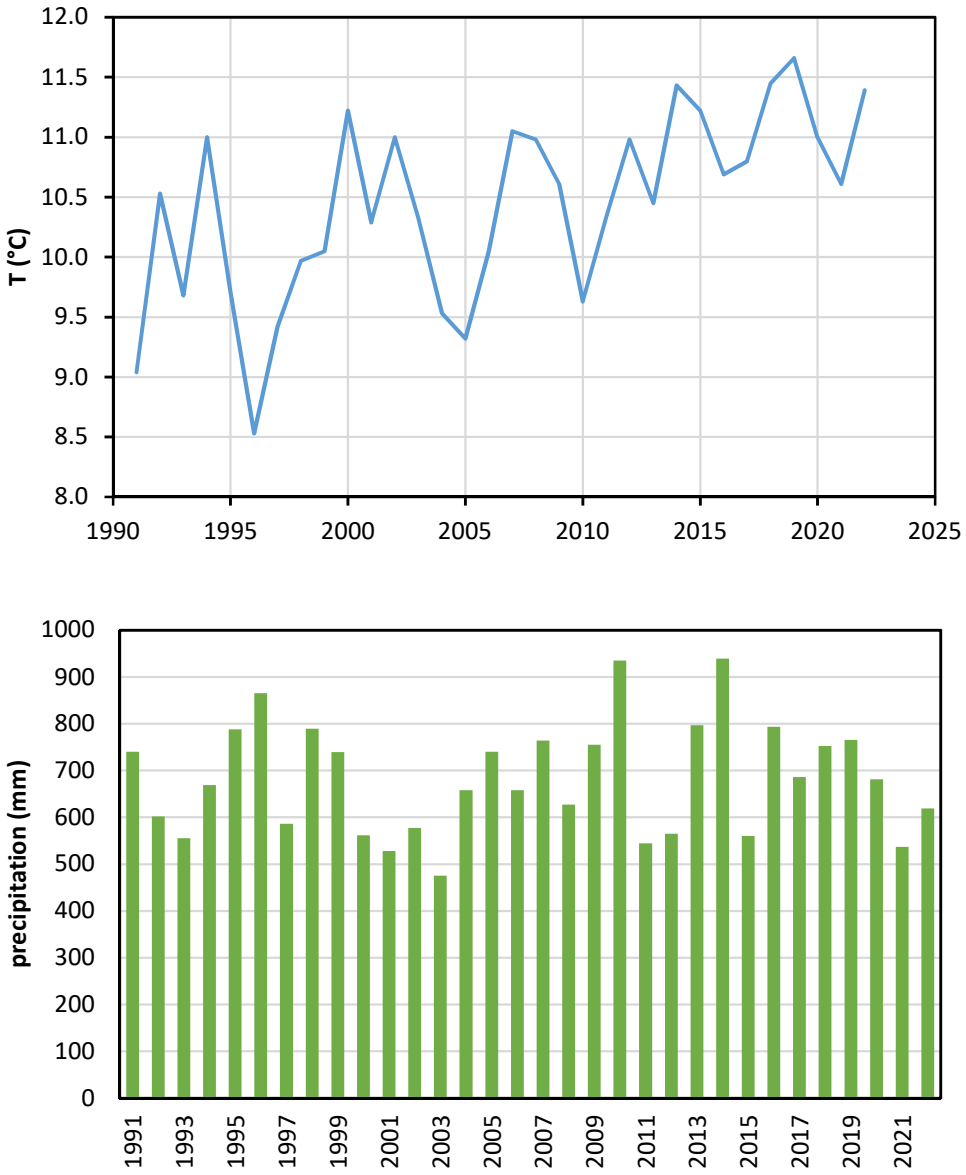

Figure S1: Temporal variation of the annual mean temperature (upper panel) and the annual amount of precipitation (lower panel) at HUN (Hungarian Meteorological Service, 2023). The positive trend in temperature (1991-2020: 0.54±0.13 °C decade^{-1}) is statistically significant at $p<0.01$. Statistically significant changes in the precipitation amount cannot be detected.

Reference:

Hungarian Meteorological Service: Meteorological Database, https://odp.met.hu/climate/homogenized_data/gridded_data_series/daily_data_series/, - last accessed 12 September 2023, 2023.

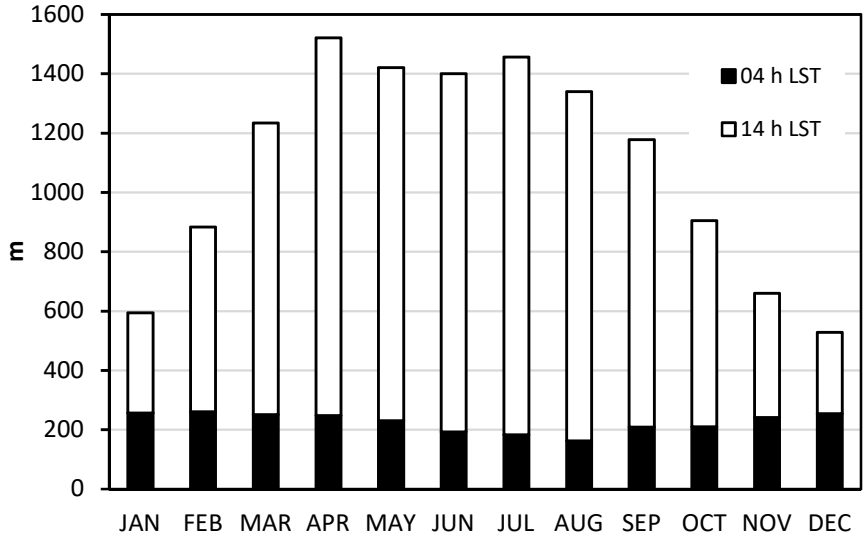

Figure S2: Mean seasonal variation of the nighttime (4 h local standard time) and early afternoon (14 h local standard time) height of the planetary boundary layer (1994-2022). Data are based on ECMWF ERA5 reanalysis (03 and 13 UTC) accessed on 8 October 2023

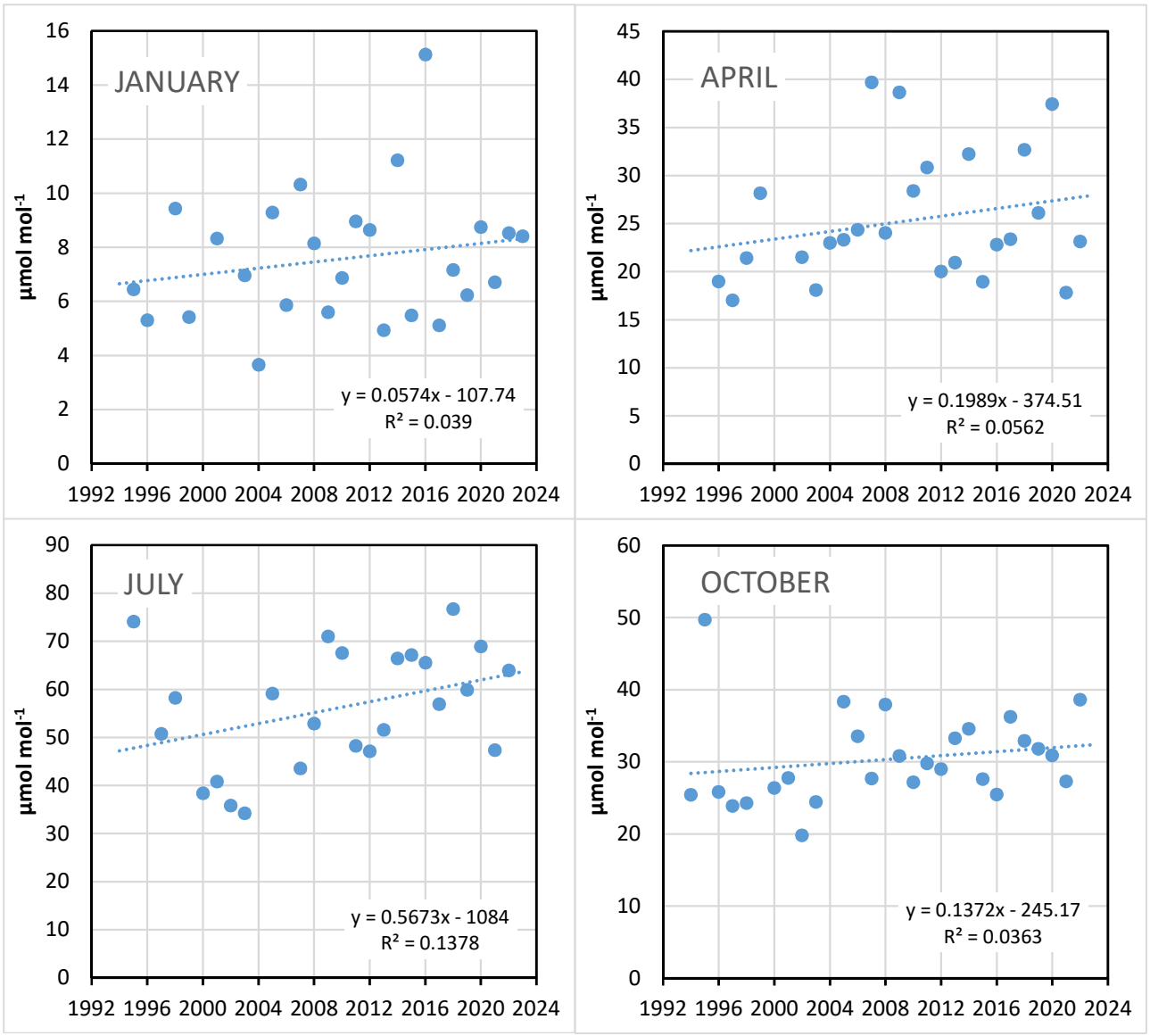

Figure S3: Temporal variation of the monthly mean diurnal amplitude of CO_2 concentration at 10 m elevation

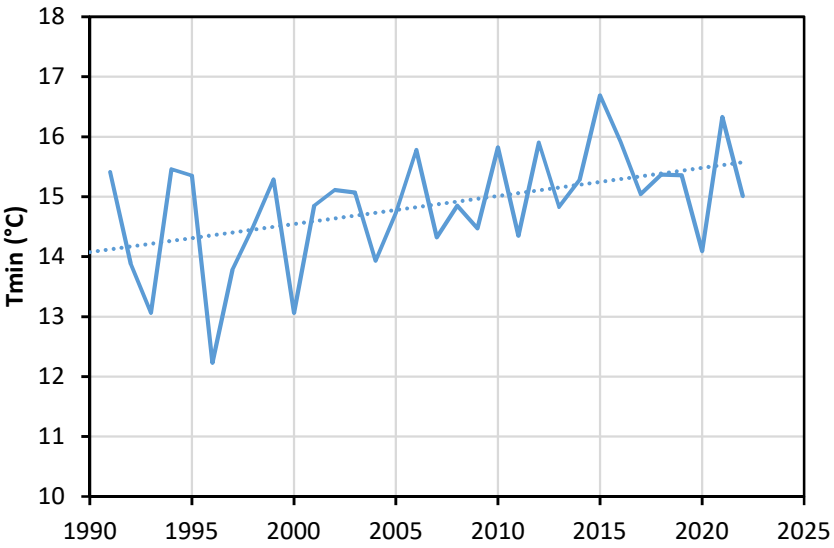

Figure S4: Temporal variation of the mean daily minimum temperature at Hegyhátsál in July. The trend (0.47±0.17 °C decade^{-1}) is statistically significant at $p<0.01$.