Supplementary of

Multi-site evaluation of modelled methane emissions over northern wetlands by the JULES land surface model coupled with the HIMMELI peatland methane emission model

Yao Gao et al.
Correspondence to: Yao Gao (yao.gao@fmi.fi)
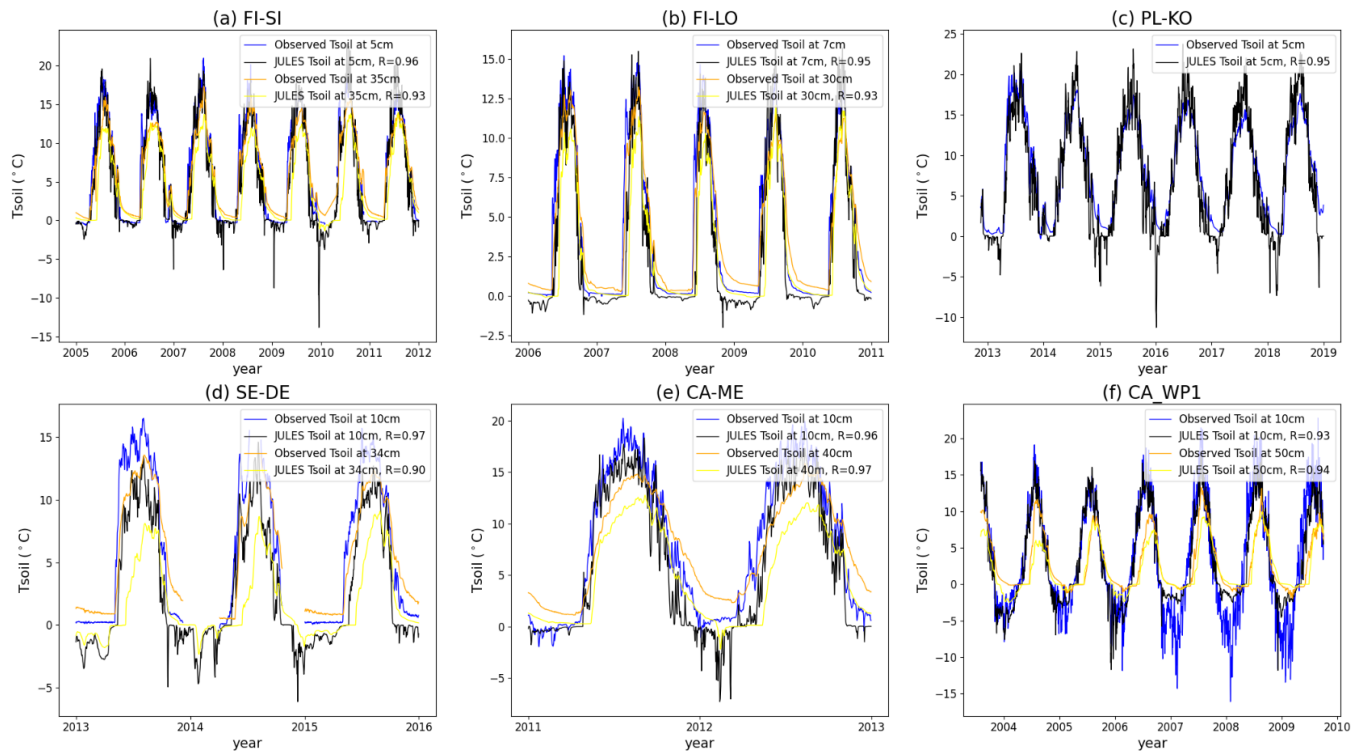
Figure S1: The timeseries of observed and simulated soil temperatures (Tsoil) at all the sites. The soil column was forced to be saturated (i.e., WTD=0) in Lompolojänkkä run. The correlation coefficient shown in the legend was calculated by filtering the simulated soil temperature according to the availability of observed soil temperature.
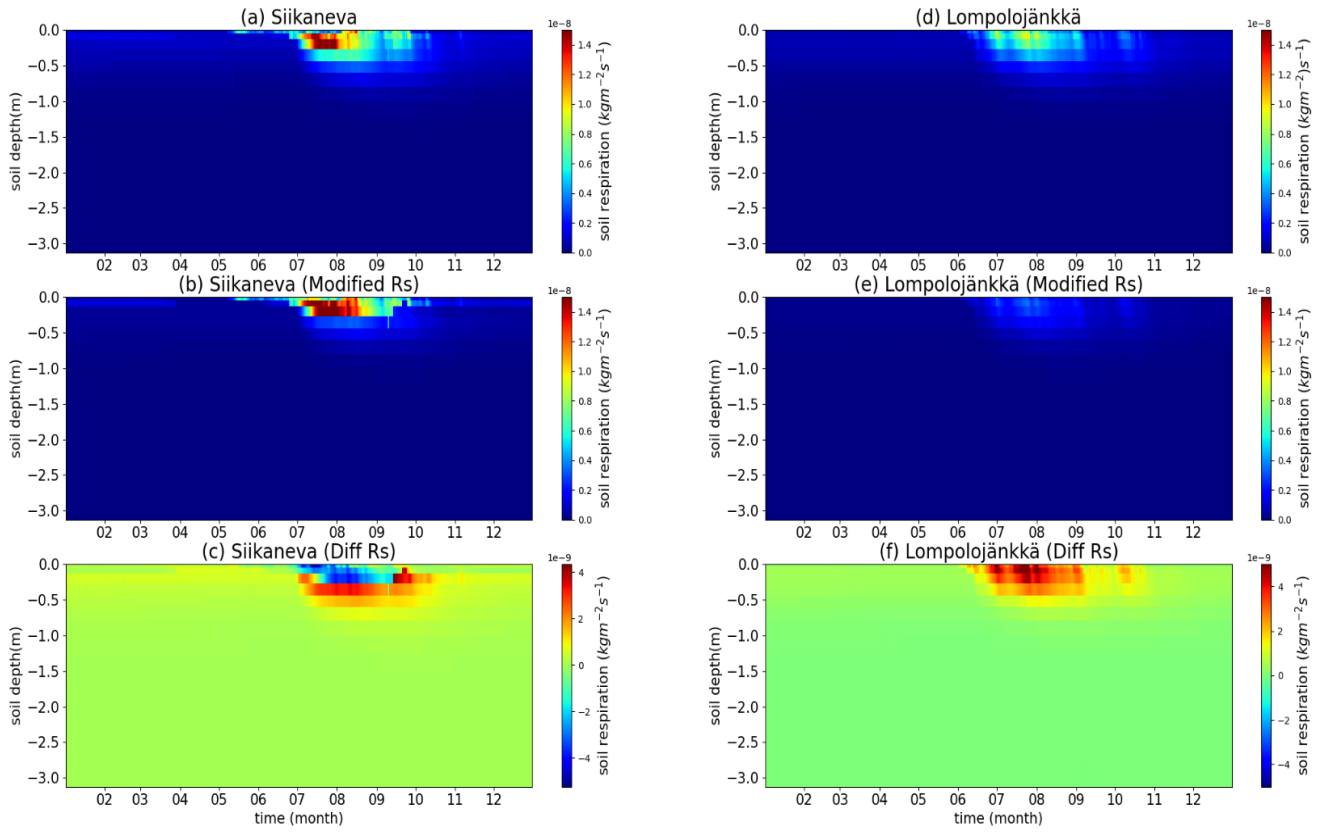
Figure S2: Soil respiration (Rs) profiles along the soil depth using the original soil decomposition function and the modified soil decomposition function, as well as the differences between the original and modified soil decomposition function at Siikaneva and Lompolojänkkä sites in the year 2010.
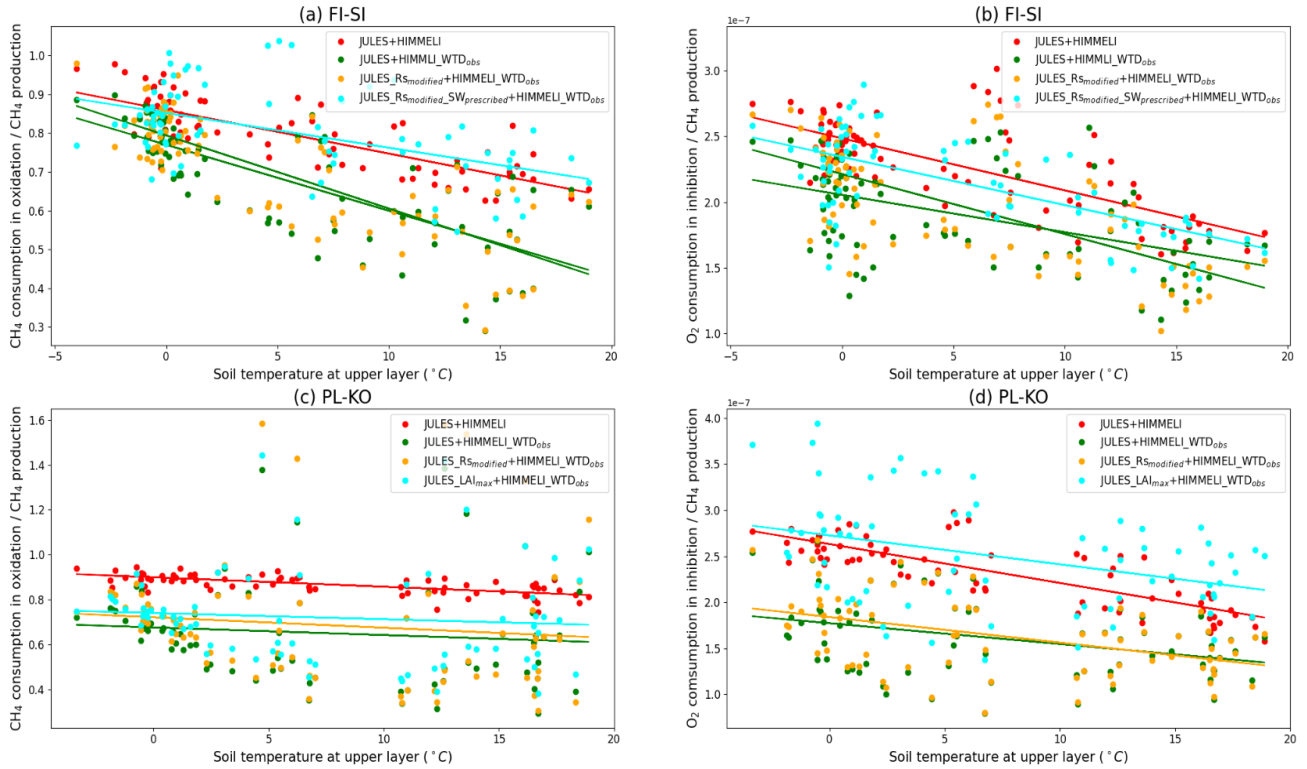
Figure S3: The relationship between the ratio of methane (CH$_4$) consumption in oxidation to CH$_4$ production to upper layer soil temperature, and the relationship between the ratio of O$_2$ consumption in inhibition to CH$_4$ production to upper layer soil temperature at Siikaneva and Kopytkowo sites.