



## Supplement of

## The role of spatial scale and background climate in the latitudinal temperature response to deforestation

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## Supplementary figures:

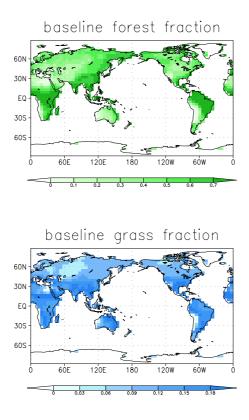


Figure S1 Simulated vegetation distribution in the control experiment (CTL)

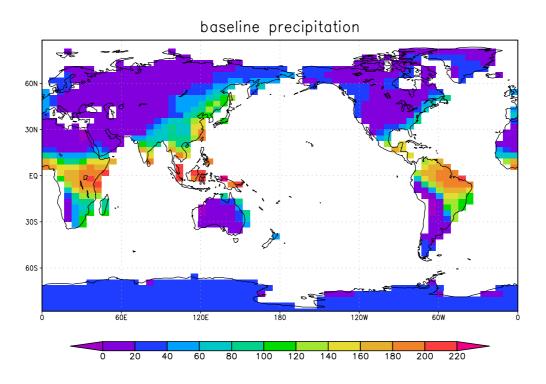


Figure S2 Annual mean precipitation simulated in the control experiment (unit:  $W/m^2$ )

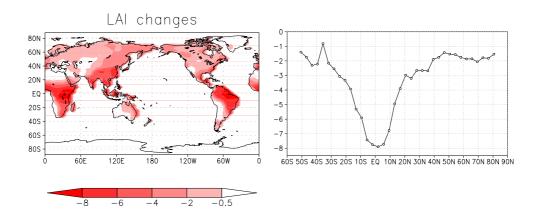


Figure S3 Spatial (left) and latitudinal (right) patterns of LAI changes due to global deforestation

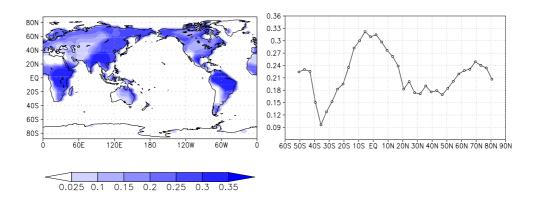


Figure S4 Spatial (left) and latitudinal (right) patterns of albedo changes due to global deforestation

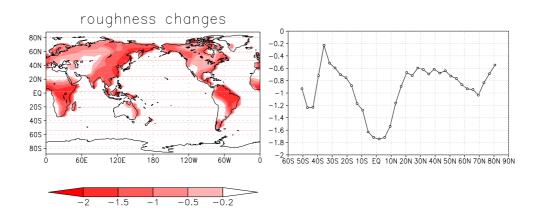


Figure S5 Spatial (left) and latitudinal (right) patterns of roughness changes due to global deforestation

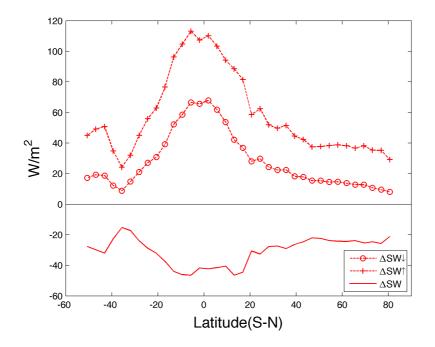


Figure S6 Latitudinal changes in downward ( $\Delta SW\downarrow$ ), upward ( $\Delta SW\uparrow$ ) and absorbed shortwave radiation ( $\Delta SW$ )

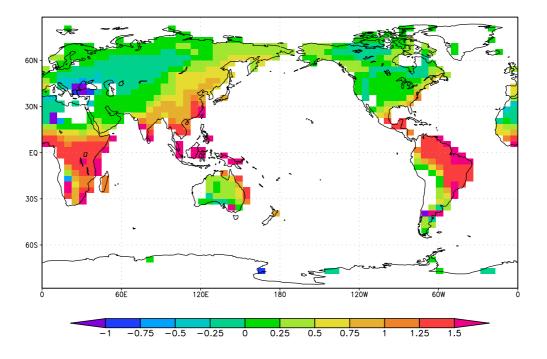


Figure S7 Ratio of  $\Delta ET/\Delta SW$  in global deforestation

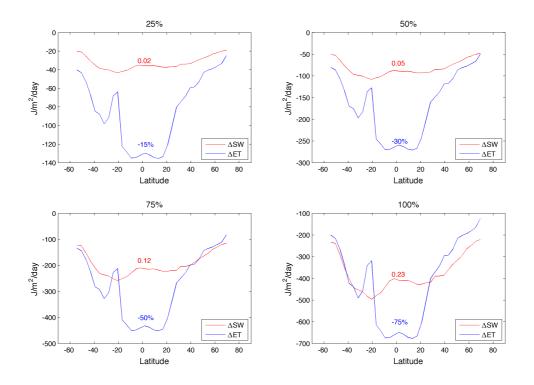


Figure S8  $\Delta$ SW and  $\Delta$ ET calculated with MODIS ET and shortwave radiation (data from Li et al. (2015))