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Supplement of

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

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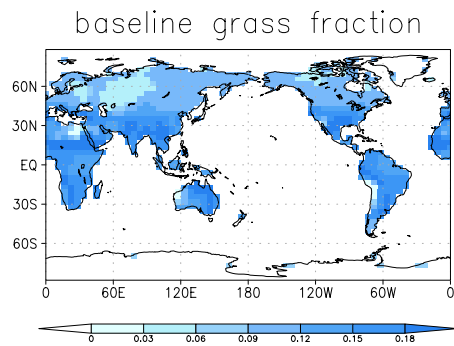
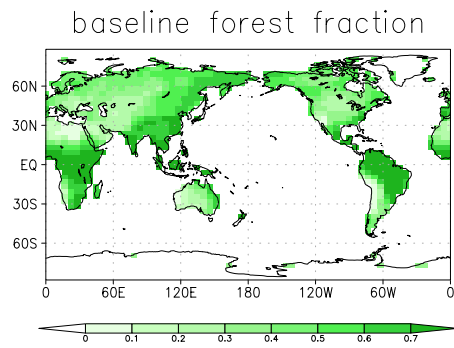
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1 **Supplementary figures:**

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

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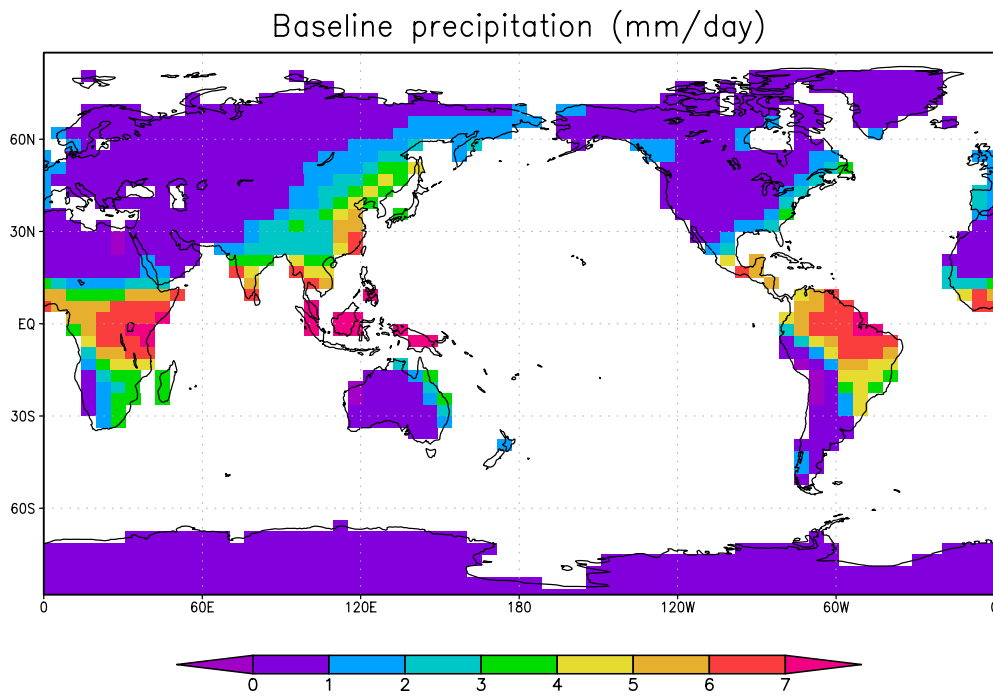
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Figure S2. Annual mean precipitation simulated in the control experiment

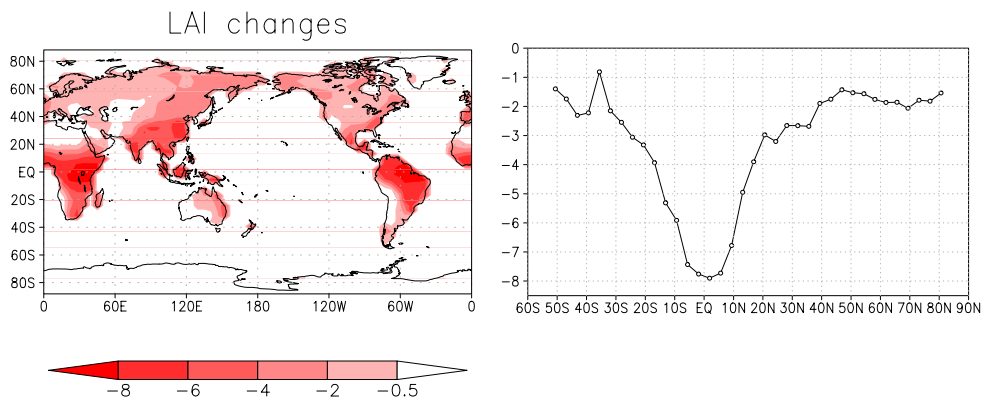


Figure S3. Spatial (left) and latitudinal (right) patterns of LAI changes due to global deforestation (Unit: m^2/m^2)

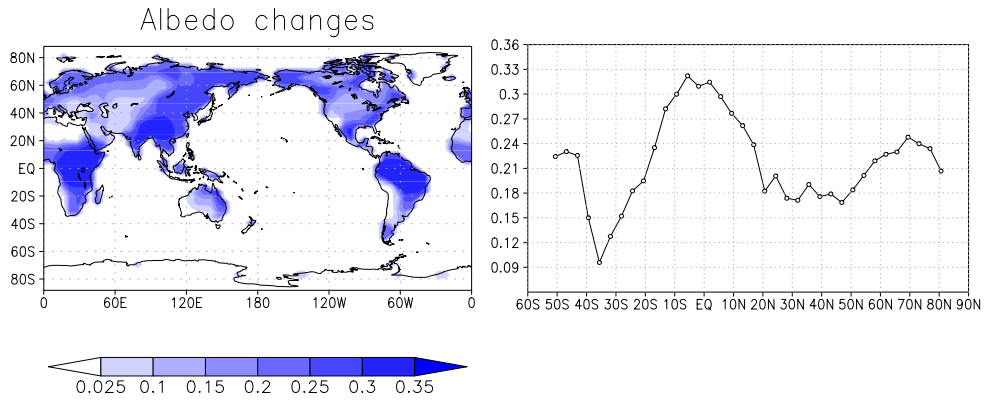


Figure S4. Spatial (left) and latitudinal (right) patterns of albedo changes due to global deforestation

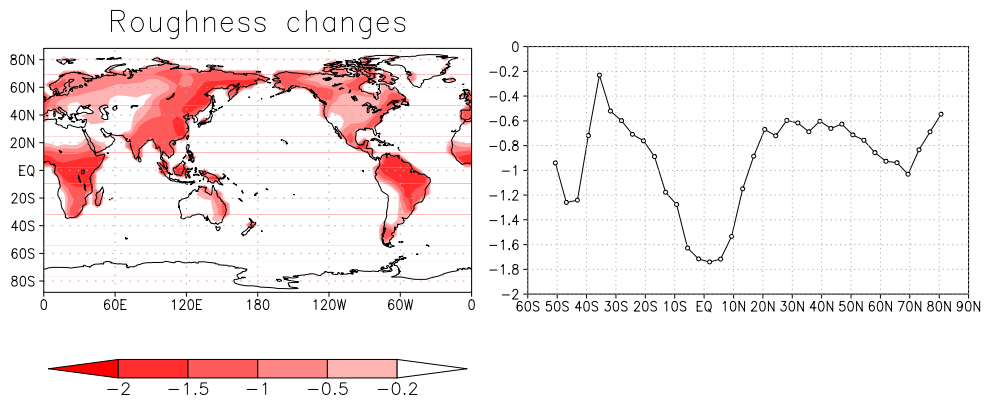


Figure S5. Spatial (left) and latitudinal (right) patterns of roughness changes due to global deforestation (Unit: m)

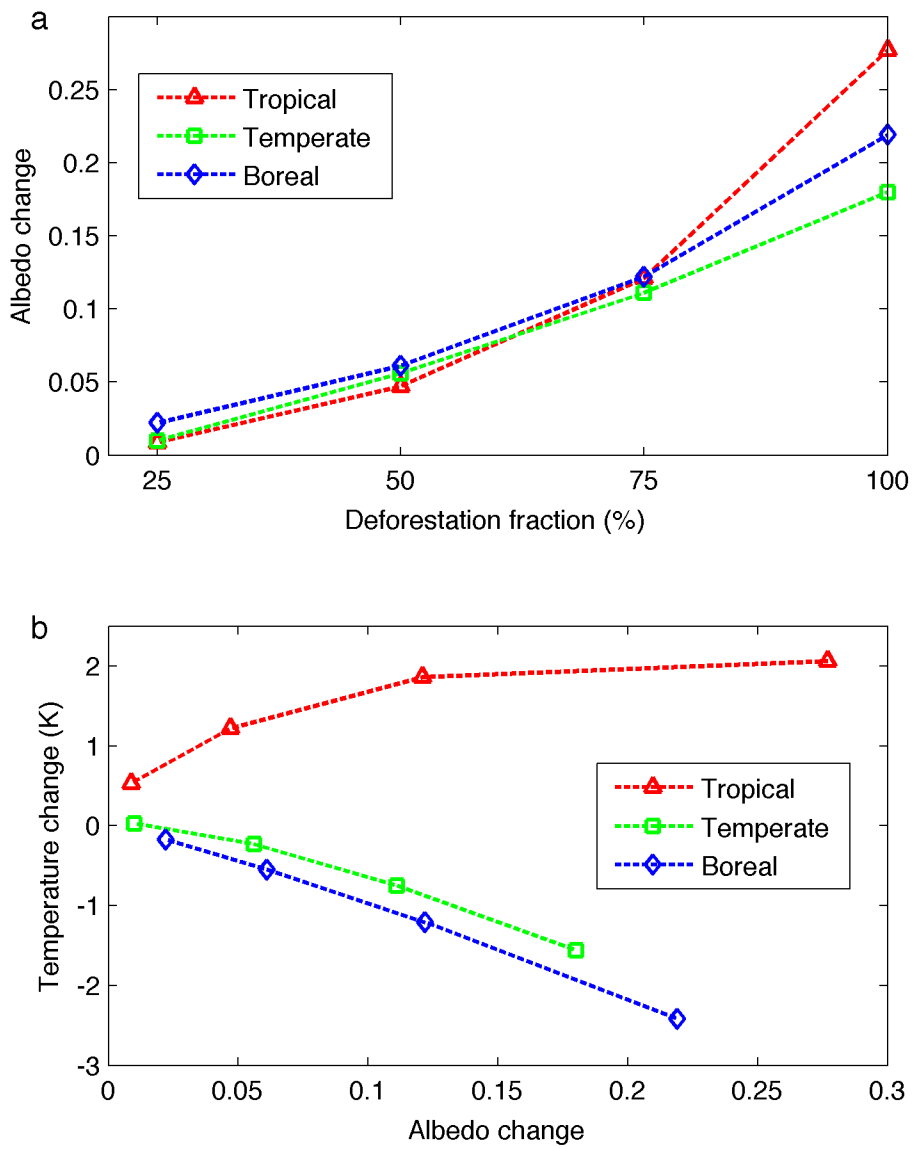


Figure S6. (a) Response of albedo change to growing deforestation fraction from 25% to 100% and (b) temperature response to albedo change under different deforestation fractions. Data points in the figure are from Table 3.

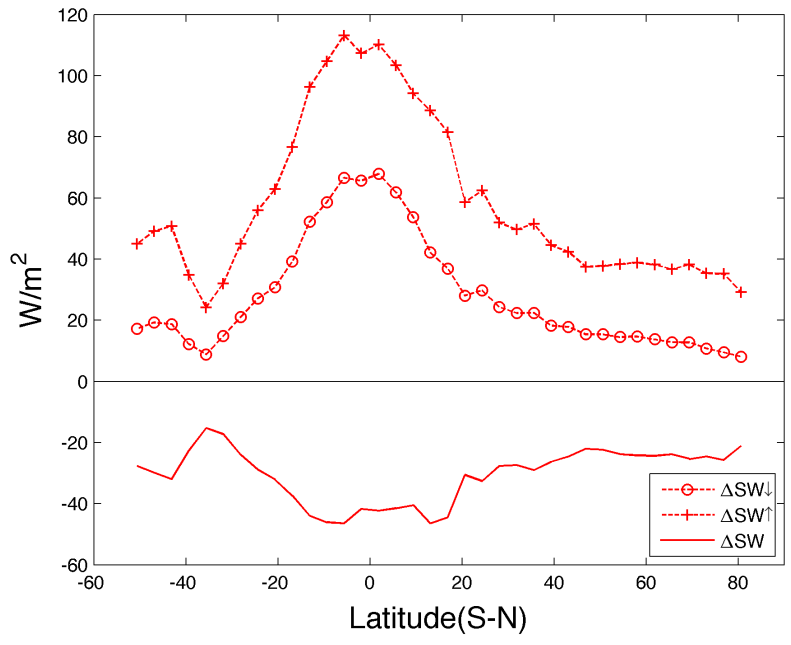


Figure S7. Latitudinal changes in downward (ΔSW_{\downarrow}), upward (ΔSW_{\uparrow}) and absorbed shortwave radiation (ΔSW)

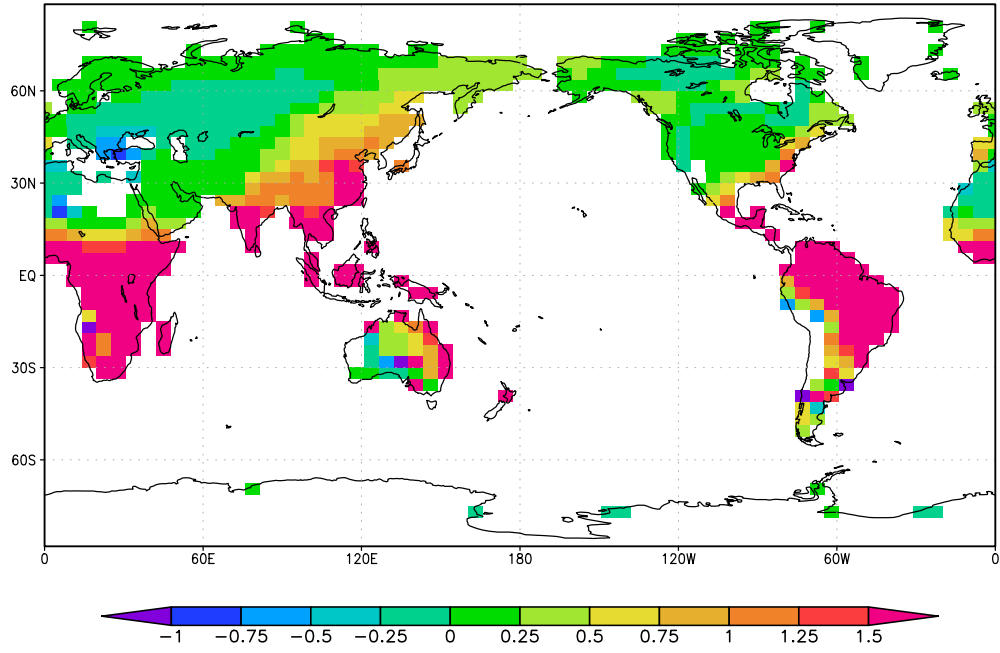
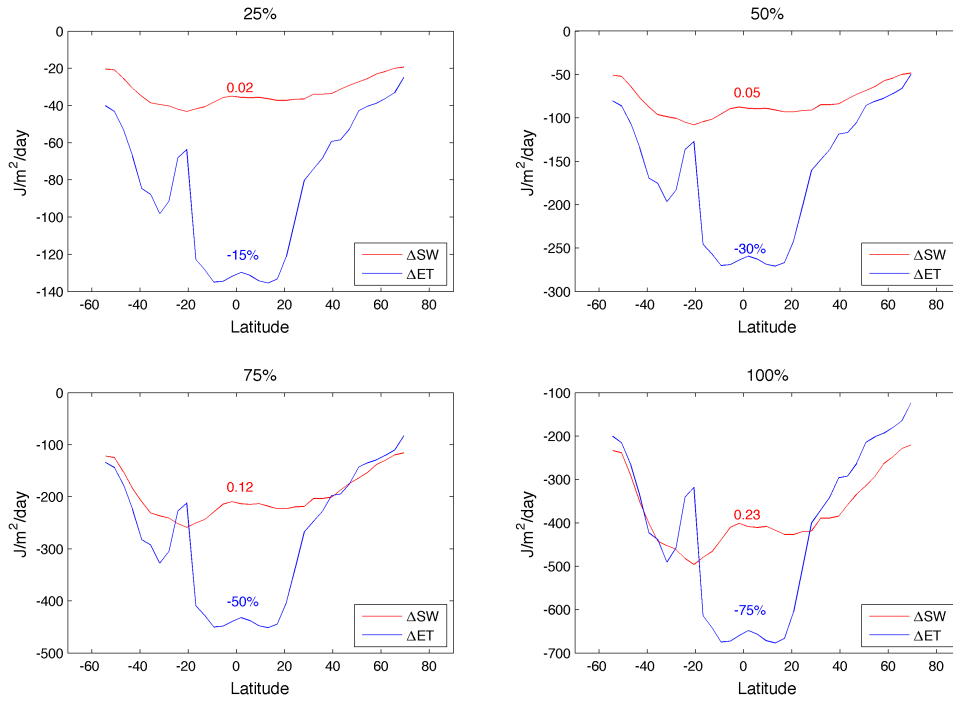


Figure S8. Ratio of $\Delta ET / \Delta SW$ in global deforestation



17

Figure S9. ΔSW and ΔET calculated with MODIS ET and shortwave radiation (data from Li et al. (2015))

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21