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Dynamics
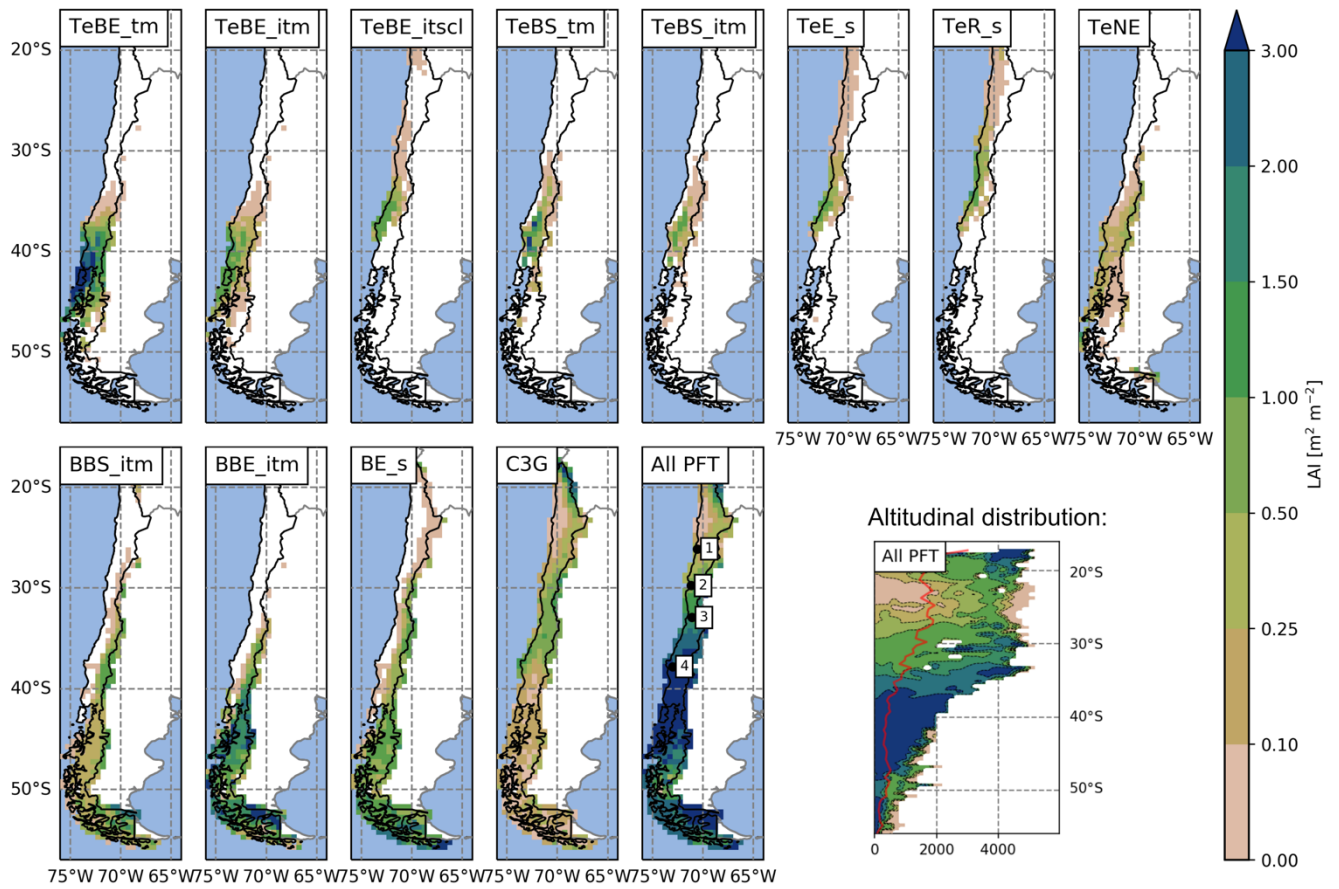
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Supplement of

Effect of changing vegetation and precipitation on denudation – Part 1: Predicted vegetation composition and cover over the last 21 thousand years along the Coastal Cordillera of Chile

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Supplemental Material

Figure S1. Spatial and altitudinal distribution of modelled plant functional types (PFT) for Mid Holocene climate conditions (LAI: leaf area index [m^2 m^{-2}], the altitudinal subplot represents zonal mean LAI; red line: average elevation). PFTs: TeBE$_{tm}$/ TeBE$_{itm}$ (temperate broadleaved evergreen trees; t = shade-tolerant; it = shade-intolerant; m = mesic), TeBE$_{itscl}$ (temperate broadleaved evergreen trees; scl = sclerophyllous), TeBS$_{im}$/ TeBS$_{itm}$ (temperate broadleaved summergreen trees), TeE$_s$ (temperate evergreen shrubs; s = shrub), TeR$_s$ (temperate raingreen shrubs), TeNE (temperate needleleaved evergreen trees), BBS$_{itm}$ (boreal broadleaved summergreen trees), BBE$_{itm}$: (boreal broadleaved evergreen trees), BE$_s$: (boreal evergreen shrubs), C3G (herbaceous vegetation). 1: Pan de Azúcar, 2: Sta. Gracia, 3: La Campana, 4: Nahuelbuta.
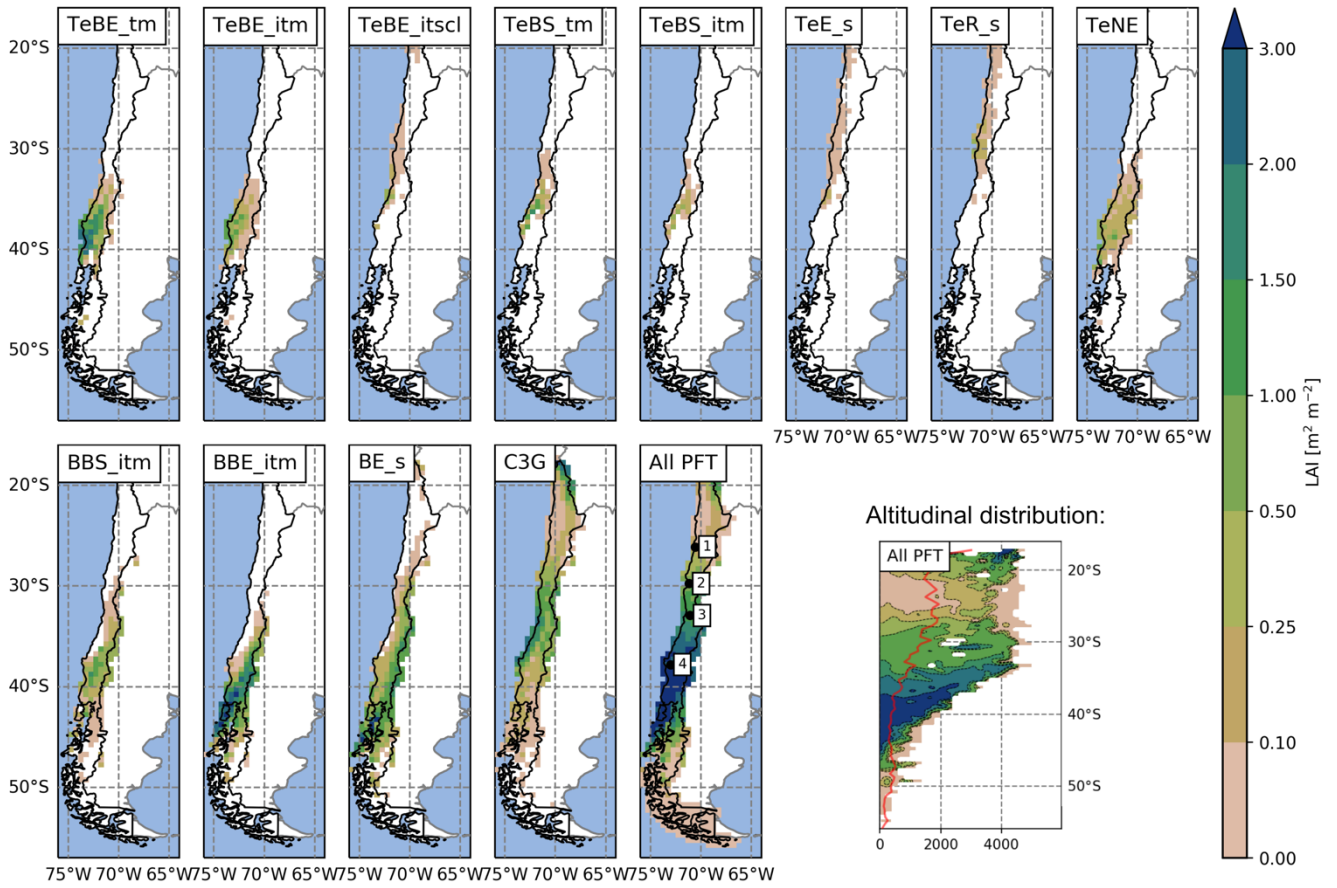
Figure S2. Spatial and altitudinal distribution of modelled plant functional types (PFT) for Last Glacial Maximum climate conditions (LAI: leaf area index $[m^2\ m^{-2}]$, the altitudinal subplot represents zonal mean LAI; red line: average elevation). PFTs: $TeBE_{tm}$/ $TeBE_{itm}$ (temperate broadleaved evergreen trees; t = shade-tolerant; it = shade-intolerant; m = mesic), $TeBE_{itscl}$ (temperate broadleaved evergreen trees; scl = sclerophyllous), $TeBS_{im}$/ $TeBS_{itm}$ (temperate broadleaved summergreen trees), TeE_s (temperate evergreen shrubs; s = shrub), TeR_s (temperate raingreen shrubs), TeNE (temperate needleleaved evergreen trees), BBS_{itm} (boreal broadleaved summergreen trees), BBE_{itm}: (boreal broadleaved evergreen trees), BE_s: (boreal evergreen shrubs), C3G (herbaceous vegetation). 1: Pan de Azúcar, 2: Sta. Gracia, 3: La Campana, 4: Nahuelbuta.
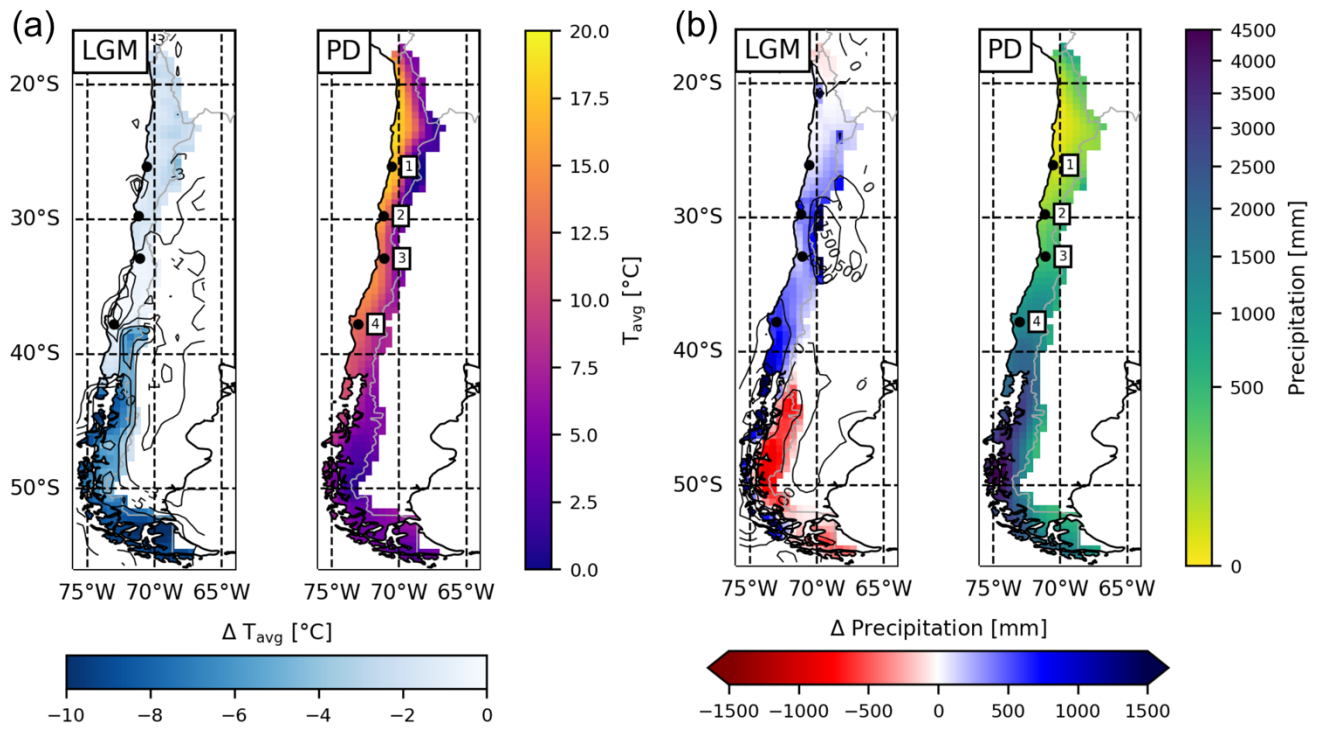
Figure S3. (a) Average annual temperature and **(b)** precipitation conditions derived from the downscaled and bias-corrected ECHAM5 paleoclimate dataset (Mutz et al., 2017) for the Last Glacial Maximum (LGM) and present day (PD) time-slices (data: avg. of 10-yr monthly data; 1: Pan de Azúcar, 2: Sta. Gracia, 3: La Campana, 4: Nahuelbuta).