Figure S1. Tropical ecosystems according to Köppen and Geiger (Kottek et al. 2006)
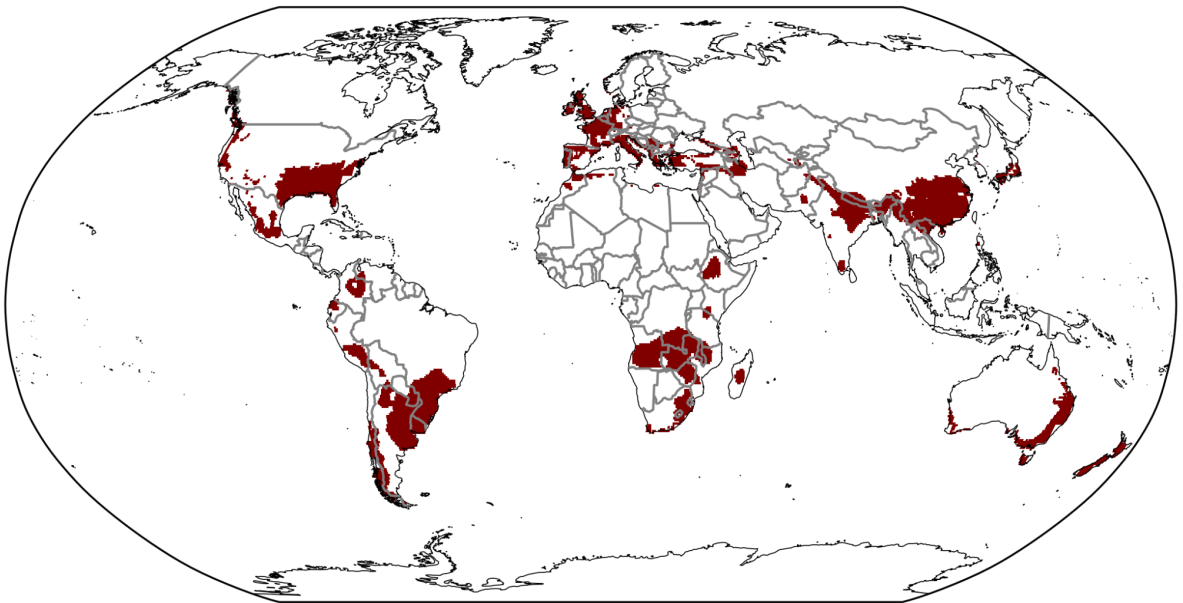
Figure S2. Temperate ecosystems according to Köppen and Geiger (Kottek et al. 2006)
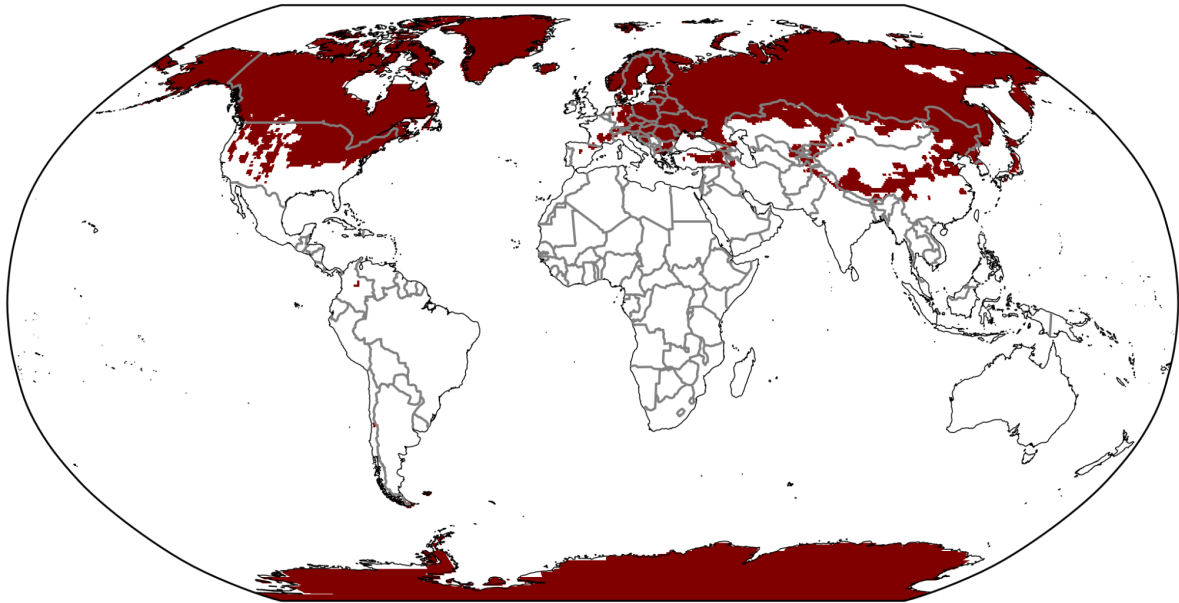
Figure S3. Boreal ecosystems according to Köppen and Geiger (Kottek et al. 2006)
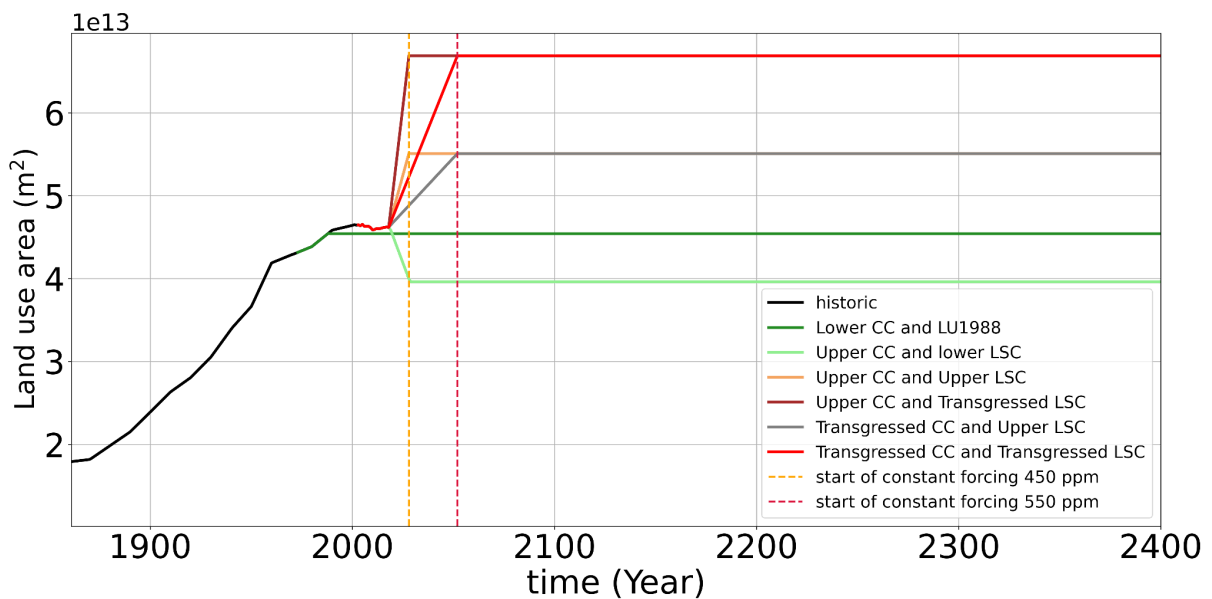
Figure S4. Land use area for the historic period and the different scenarios. For the LU1988 experiment, land use is constant from 1988. For all Upper CC experiments, land use is constant from 2029 and for all Transgressed CC experiments, land us is constant from 2052.
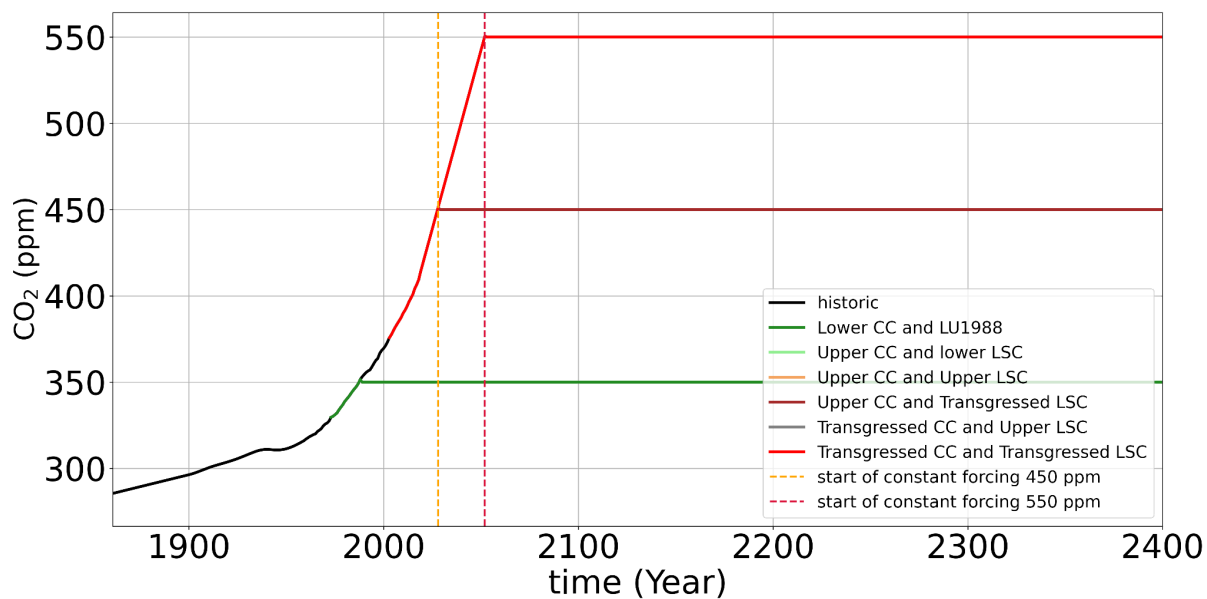
Figure S5. Atmospheric CO_2 concentration for the historic period and the different scenarios. For the Lower CC experiment, CO2 is constant from 1988 at 350 ppm. For all Upper CC experiments, CO2 is constant from 2029 at 450 ppm and for all Transgressed CC experiments, land us is constant from 2052 at 550 ppm.

Zone	Continent	Current natural land	Lower LSC	Upper LSC	Transgressed LSC
Temperate	Africa	0.35	0.5	0.3	0.2
Temperate	America	0.48	0.5	0.3	0.2
Temperate	Asia	0.59	0.5	0.3	0.2
Temperate	Europe	0.47	0.5	0.3	0.2
Temperate	Oceania	0.66	0.5	0.3	0.2
Boreal	America	0.86	0.85	0.6	0.4
Boreal	Asia	0.79	0.85	0.6	0.4
Boreal	Europe	0.78	0.85	0.6	0.4
Tropical	Africa	0.63	0.85	0.6	0.4
Tropical	America	0.73	0.85	0.6	0.4
Tropical	Asia	0.63	0.85	0.6	0.4
Tropical	Oceania	0.4	0.85	0.6	0.4

Tab. S1. Current fraction of natural land for the major climate zones on different continents and their respective lower, upper, and transgressed planetary boundaries.