Supplementary Material - Incremental improvements to 2030 targets insufficient to achieve the Paris Agreement goals

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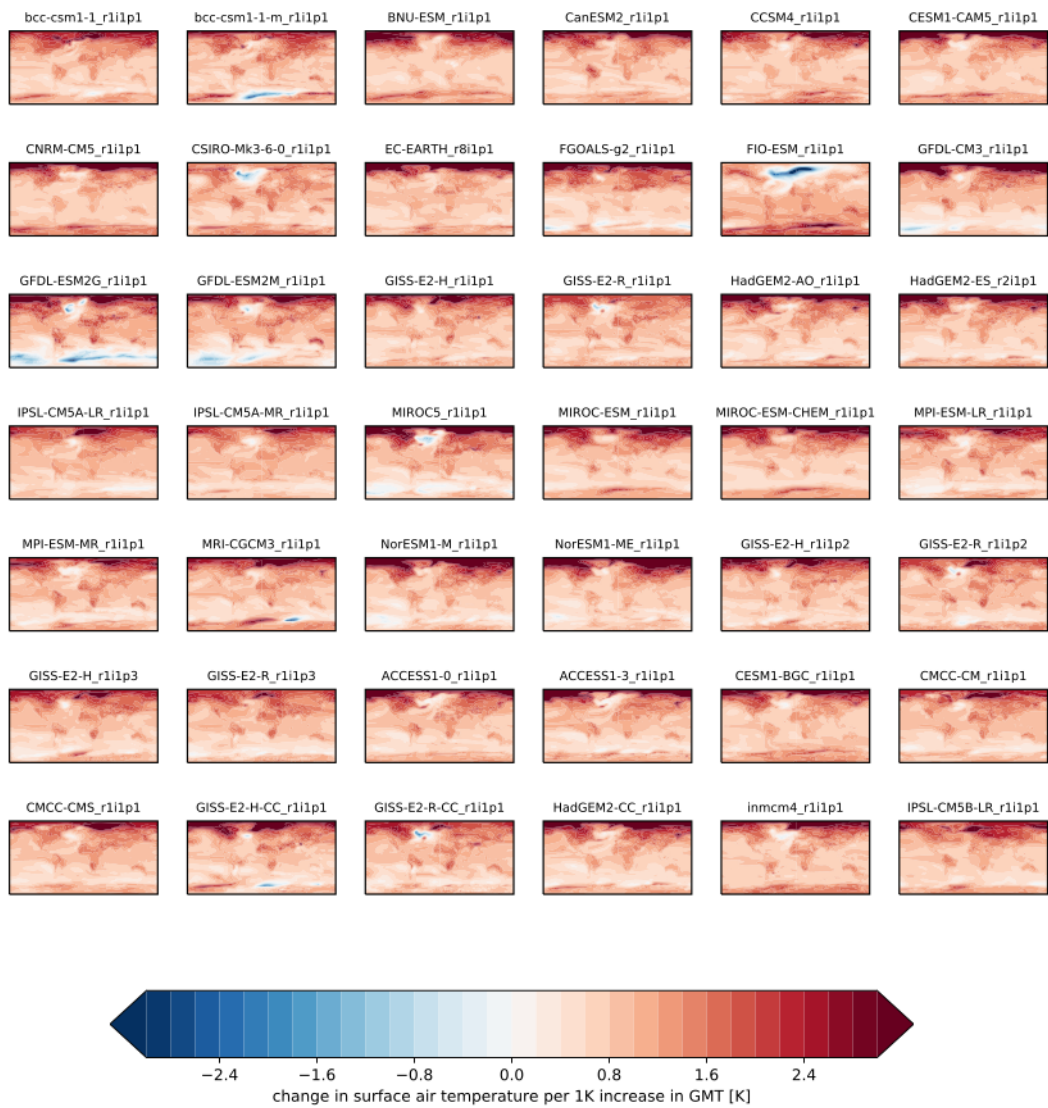
Figure A1. Downscaling factors for all used global circulation models. In each panel, the surface air temperature response to an increase of 1K in GMT is displayed (in K).

Model	Run	NDC reference		CAT -33%		ALL -33%		1.5°C	
		RCP	Year	RCP	Year	RCP	Year	RCP	Year
ꟾ ACCESS1-0	r1i1p1	rcp85	2052	rcp85	2038	rcp85	2035	rcp85	2023
ACCESS1-3	r1i1p1	rcp85	2050	rcp85	2037	rcp85	2035	rcp85	2022
CANESM2	r5i1p1	rcp45	2062	rcp45	2037	rcp45	2034	rcp45	2020
CCSM4	r2i1p1	rcp85	2060	rcp45	2061	rcp45	2053	rcp45	2031
CESM1-BGC	r1i1p1	rcp85	2058	rcp45	2056	rcp45	2051	rcp45	2031
CESM1-CAM5	r1i1p1	-	-	rcp26	2055	rcp26	2047	rcp26	2023
CNRM-CM5	r1i1p1	rcp85	2061	rcp45	2059	rcp45	2053	rcp45	2035
CSIRO-MK3-6-0	r4i1p1	rcp45	2073	rcp45	2041	rcp45	2039	rcp45	2027
EC-EARTH	r1i1p1	rcp45	2096	rcp45	2055	rcp45	2049	rcp45	2031
GFDL-CM3	r1i1p1	rcp85	2045	rcp85	2030	rcp85	2027	rcp85	2016
HADGEM2-CC	r1i1p1	rcp45	2068	rcp45	2041	rcp45	2038	rcp45	2024
HADGEM2-ES	r1i1p1	rcp45	2059	rcp45	2037	rcp45	2034	rcp45	2020
IPSL-CM5A-LR	r3i1p1	rcp45	2076	rcp45	2041	rcp45	2037	rcp45	2024
IPSL-CM5A-MR	r1i1p1	rcp45	2072	rcp45	2043	rcp45	2038	rcp45	2022
MIROC-ESM-CHEM	r1i1p1	rcp45	2057	rcp45	2036	rcp45	2033	rcp45	2021
MIROC-ESM	r1i1p1	rcp45	2062	rcp45	2037	rcp45	2034	rcp45	2022
MIROC5	r1i1p1	rcp85	2062	rcp45	2061	rcp45	2056	rcp45	2033
MPI-ESM-LR	r1i1p1	rcp85	2059	rcp45	2059	rcp45	2053	rcp45	2030
MPI-ESM-MR	r2i1p1	-	-	rcp45	2059	rcp45	2054	rcp45	2028
MRI-CGCM3	r1i1p1	rcp85	2062	rcp45	2071	rcp45	2066	rcp45	2039
NORESM1-M	r1i1p1	rcp85	2064	rcp45	2067	rcp45	2061	rcp45	2034

Table A1. Time slices for climate models from the CMIP5 model ensemble corresponding to the end of century warming level implied by different GMT trajectories analysed. For each model, the center year of a 21-year period is given.