

Supplemental material

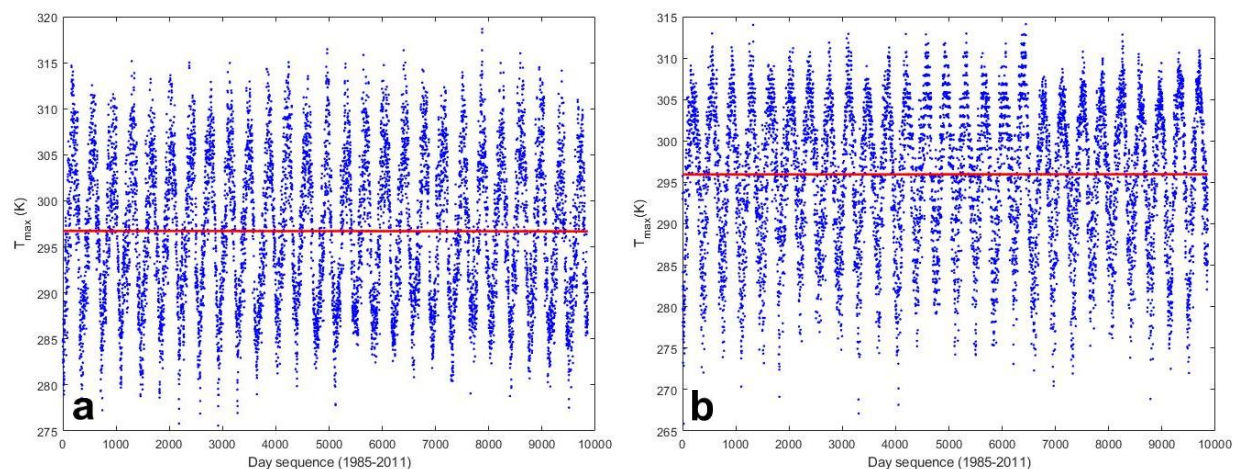


Figure S1: Scatter-plot of the $T_{\max}$ from historical observations for AFB(a) and FBR(b) (Livneh et al. (2013)) along with the best linear fit. There is no evidence of a trend within 30-year window, based on two tailed Mann-Kendall test at the level of significance 0.05 and the null hypothesis of the absence of trend ($p=0.57$ and 0.95 , for AFB and FBR, respectively).

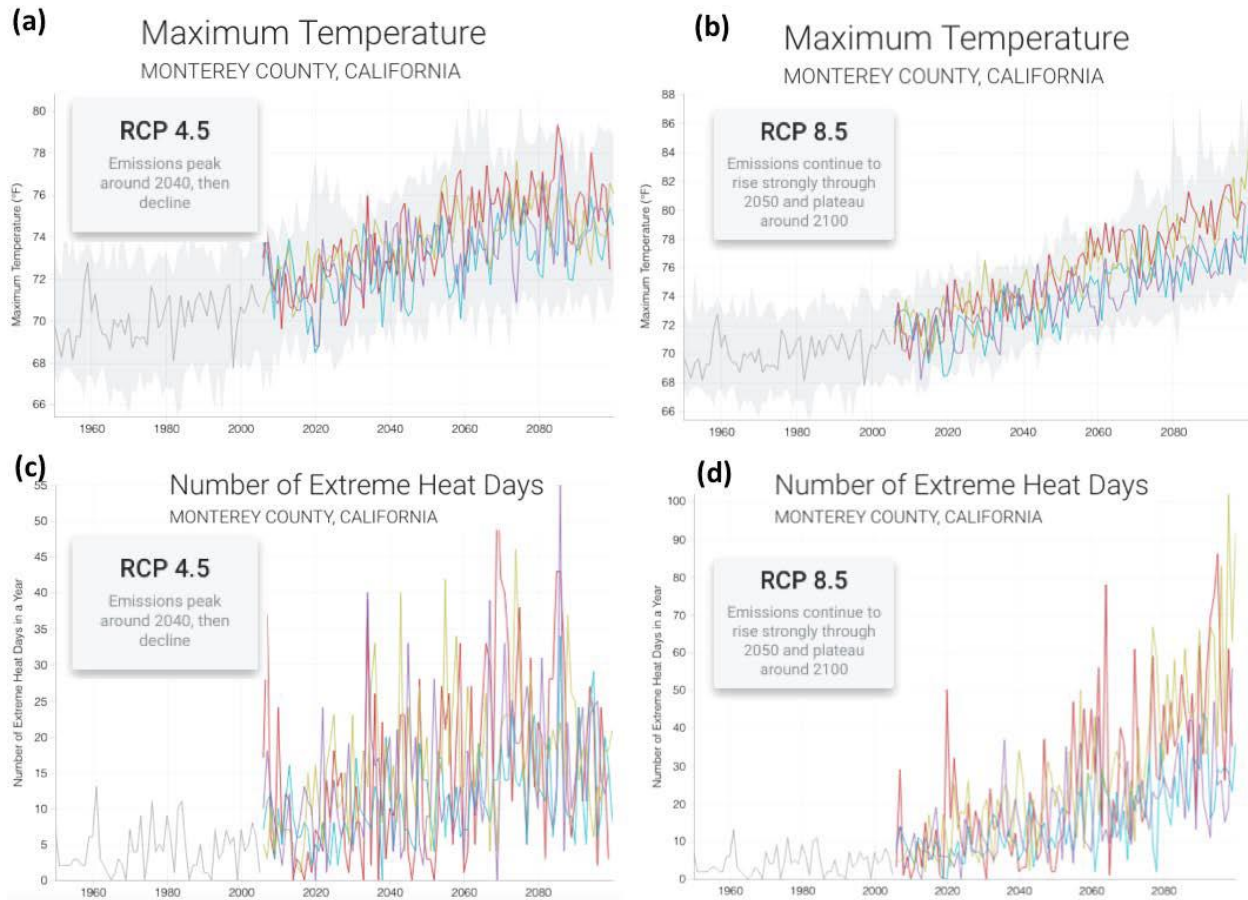


Figure S2: Monterey County, CA historical and future temperature trajectories from Cal-Adapt.org. (a) Average daily maximum temperature for RCP4.5 (b) Same as (a) but for RCP8.5. (c) Extreme heat days (above 92.5 °F) for RCP4.5 (d) Same as (c) but for RCP8.5.

Table S1: List of downscaled CMIP5 GCMs used in the study

GCM No.	GCM name	Center	Atm. Resolution (long x lat)	Vertical levels in Atm.
1	ACCESS1-0	The Centre for Australian Weather and Climate Research - a partnership between CSIRO and the Bureau of Meteorology	1.875 x 1.25	38
2	ACCESS1-3		1.875 x 1.25	38
3	BCC-CSM1-1	Beijing Climate Center, China Meteorological Administration (BCC/China)	2.8 x 2.8	26
4	BCC-CSM1-1-m		1.2 x 1.2	26

5	CanESM2	Canadian Centre for Climate Modeling and Analysis (CCCma/Canada)	2.8 x 2.8	35
6	CCSM4	National Center for Atmospheric Research (NCAR/USA)	1.25 x 0.94	26
7	CESM1-BGC	National Center for Atmospheric Research (NSF-DOE NCAR/USA)	1.25 x 0.9	26
8	CESM1-CAM5		1.25 x 0.94	26
9	CMCC-CM	The Centro Euro-Mediterraneo sui Cambiamenti Climatici	2 x 2	31
10	CNRM-CM5	Centre National de Recherches Meteorologiques / Centre Europeen de Recherche et Formation Avancees en Calcul Scientifique (CNRM/France)	1.4 x 1.4	31
11	HadGEM2-ES	Met Office Hadley Centre(MOHC/UK)	1.88 x1.25	38
12	CMCC-CMS	The Centro Euro-Mediterraneo sui Cambiamenti Climatici	3.75 x 3.71	95
13	CSIRO-Mk3-6-0	Communication Scientific and Industrial Research Organization (CSIRO/Australia)	1.8 x 1.8	18
14	EC-EARTH	A European community Earth-System Model	1.12 x 1.12	62
15	FGOALS-g2	LASG, Institute of Atmospheric Physics, Chinese Academy of Sciences; and CESS, Tsinghua University	2.8 x 2.8	26
16	GFDL-CM3	NOAA Geophysical Fluid Dynamics	2.5 x 2	48
17	GFDL-ESM2G		2 x 2	48
18	GFDL-ESM2M		2.5 x 2	48

		Laboratory (GFDL/USA)		
19	GISS-E2-H	NASA Goddard Institute for Space Studies (NASA GISS/USA)	2.5 x 2	40
20	GISS-ES-R		2.5 x 2	40
21	HadGEM2-AO	National Institute of Meteorological Research (NIMR/South Korea)	1.88 x 1.25	38
22	HadGEM2-CC	Met Office Hadley Centre(MOHC/UK)	1.88 x1.25	60
23	Inmcm4	Russian Institute for Numerical Mathematics	1.5 x 2	40
24	IPSL-CM5A-LR	Institute Pierre- Simon Laplace (IPSL/France)	1.89 x 3.75	39
25	IPSL-CM5A-MR		1.26 x 2.5	39
26	MIROC5	National Institute for Environmental Studies, The university of Tokyo (MIROC/Japan)	1.4 x 1.4	40
27	MIROC-ESM	Japan Agency for Marine-Earth Science and Technology (JAMSTEC), The University of Tokyo Atmosphere Ocean Research Institute (AORI) and National Institute for Environmental Studies (NIES)	2.8 x 2.8	80
28	MIROC-ESM- CHEM		2.8 x 2.8	80
29	MPI-ESM-LR	Max Planck Institute for Meteorology (MPI- M/Germany)	1.88 x 1.8	47
30	MPI-ESM-MR		1.88 x 1.8	95
31	MRI-CGCM3	Meteorological Research Institute (MRI/Japan)	1.13 x 1.1	48
32	NorESM1-M	Norwegian Climate Centre (NCC/Norway)	2.5 x 1.89	26

