

Supplementary Material

Table S1. List of 16 available CMIP5 models used for historical and RCP simulations.

Modelling Centre (or Group)	CMIP5 Models	Resolution (lat × lon × lev)
Beijing Climate Center, China Meteorological Administration	bcc-csm1-1	1.875° × 1.875° × 16
	bcc-csm1-1-m	1.875° × 1.875° × 16
College of Global Change and Earth System Science, Beijing Normal University	BNU-ESM	2.81° × 2.81° × 26
Canadian Centre for Climate Modelling and Analysis	CanESM2	2.790° × 2.812° × 35
Centre National de Recherches Météorologiques/Centre Européen de Recherche et Formation Avancée en Calcul Scientifique	CNRM-CM5	1.4° × 1.4° × 31
NOAA Geophysical Fluid Dynamics Laboratory	GFDL-ESM2G	2 × 2.5 × 24
	GFDL-ESM2M	2 × 2.5 × 24
Met Office Hadley Centre (additional HadGEM2-ES realizations contributed by Instituto Nacional de Pesquisas Espaciais)	HadGEM2-AO	1.25 × 1.875 × 38
	HadGEM2-ES	1.25 × 1.875 × 38
Institut Pierre-Simon Laplace	IPSL-CM5A-LR	1.9° × 3.75° × 39
	IPSL-CM5A-MR	1.25° × 2.5° × 39
Japan Agency for Marine-Earth Science and Technology, Atmosphere and Ocean Research Institute (The University of Tokyo), and National Institute for Environmental Studies	MIROC-ESM	2.8125 × 2.8125 × 80
Max-Planck-Institut für Meteorologie (Max Planck Institute for Meteorology)	MPI-ESM-LR	1.8653 × 1.875 × 47
	MPI-ESM-MR	1.8653 × 1.875 × 95
Meteorological Research Institute	MRI-CGCM3	1.12148 × 1.125 × 48
Norwegian Climate Centre	NorESM1-M	1.9 × 2.5 × 26