

## Table

Table R1. Model names, institution and horizontal resolution for 10 CMIP5 models (M1–M10) used in the paper.

<b>Model</b>	<b>Institution</b>	<b>Horizontal resolution</b>
<b>M1</b> BNU-ESM	College of Global Change and Earth System Science, Beijing Normal University(China)	$2.81^\circ \times 2.81^\circ$
<b>M2</b> CCSM4	NCAR (National Center for Atmospheric Research) Boulder(USA)	$1.25^\circ \times 0.94^\circ$
<b>M3</b> CNRM-CM5	Centre National de Recherches Meteorologiques / Centre European de Recherche et Formation Avancees en Calcul Scientifique(France)	$1.41^\circ \times 1.41^\circ$
<b>M4</b> BCC-CSM1-1	Beijing Climate Center, China Meteorological Administration(China)	$2.81^\circ \times 2.81^\circ$
<b>M5</b> FGOALS-g2	LASG, Institute of Atmospheric Physics, Chinese Academy of Sciences; and CESS, Tsinghua University(China)	$2.81^\circ \times 3.05^\circ$
<b>M6</b> GFDL-ESM2M	Geophysical Fluid Dynamics Laboratory(USA)	$2.5^\circ \times 2.0^\circ$
<b>M7</b> GISS-E2-H	NASA Goddard Institute for Space Studies(USA)	$2.5^\circ \times 2.0^\circ$
<b>M8</b> MIROC4h	Atmosphere and Ocean Research Institute (The University of Tokyo), National Institute for Environmental Studies, and Japan Agency for Marine-Earth Science and Technology(Japan)	$0.56^\circ \times 0.56^\circ$
<b>M9</b> MIROC-ESM-CHEM	Atmosphere and Ocean Research Institute (The University of Tokyo), National Institute for Environmental Studies, and Japan Agency for Marine-Earth Science and Technology(Japan)	$2.81^\circ \times 2.79^\circ$
<b>M10</b> inmcm4	Institute for Numerical Mathematics(Russia)	$2.0^\circ \times 1.5^\circ$