**Table S4. Models (CMIP5) used in our simulation**

|  |  |
| --- | --- |
| RCP 4.5 | RCP 8.5 |
| ACCESS1-0 | ACCESS1-0 |
| ACCESS1-3 | ACCESS1-3 |
| bcc-csm1-1 | bcc-csm1-1 |
| BNU-ESM | BNU-ESM |
| CanCM4 |   |
| CanESM2 | CanESM2 |
| CCSM4 | CCSM4 |
| CESM1-CAM5-1-FV2 | CESM1-WACCM |
| CESM1-WACCM |   |
| CNRM-CM5 | CNRM-CM5 |
| EC-EARTH | EC-EARTH |
| FGOALS-g2 | FGOALS-g2 |
| FIO-ESM | FIO-ESM |
| GFDL-CM3 | GFDL-CM3 |
| GFDL-ESM2G | GFDL-ESM2G |
| GFDL-ESM2M | GFDL-ESM2M |
| GISS-E2-H | GISS-E2-H |
| GISS-E2-R | GISS-E2-R |
| HadCM3 |   |
| HadGEM2-AO | HadGEM2-AO |
| HadGEM2-CC | HadGEM2-CC |
| HadGEM2-ES | HadGEM2-ES |
| inmcm4 | inmcm4 |
| IPSL-CM5A-LR | IPSL-CM5A-LR |
| IPSL-CM5A-MR | IPSL-CM5A-MR |
| MIROC4h |   |
| MIROC5 | MIROC5 |
| MIROC-ESM-CHEM | MIROC-ESM-CHEM |
| MIROC-ESM | MIROC-ESM |
| MPI-ESM-LR | MPI-ESM-LR |
| MPI-ESM-MR | MPI-ESM-MR |
| MRI-CGCM3 | MRI-CGCM3 |
| NorESM1-M | NorESM1-M |