Table S1. The ScenarioMIP prediction and historical evaluation.

Model	scenarios	Gridnum	σ	P	S
BCC	SSP126		1.03591	0.93323	0.93867
BCC	SSP245	160× 320	1.02156	0.93341	0.93975
BCC	SSP370		1.01483	0.93259	0.93839
BCC	SSP585		1.02955	0.93184	0.93634
EC-Earth	SSP126		**1.00502**	**0.96258**	**0.99820**
EC-Earth	SSP245	256× 512	**1.01943**	**0.96137**	**0.99540**
EC-Earth	SSP370		**1.00964**	**0.96345**	**0.99991**
EC-Earth	SSP585		**1.02409**	**0.96296**	**0.99844**
GFDL	SSP126		0.94545	0.95284	0.97548
GFDL	SSP245	180× 288	0.94764	0.95071	0.97148
GFDL	SSP370		0.95038	0.95075	0.97185
GFDL	SSP585		0.93762	0.95279	0.97440
INM-CM5-0	SSP126		0.91217	0.92097	0.90852
INM-CM5-0	SSP245	120× 180	0.91584	0.92157	0.91031
INM-CM5-0	SSP370		0.90216	0.92034	0.90539
INM-CM5-0	SSP585		0.91692	0.92300	0.91321
MPI-ESM1-2-HR	SSP126		0.92197	0.94537	0.95733
MPI-ESM1-2-HR	SSP245	192× 384	0.94980	0.94520	0.96078
MPI-ESM1-2-HR	SSP370		0.92498	0.94360	0.95436
MPI-ESM1-2-HR	SSP585		0.91991	0.94368	0.95367
Multi-mode average	SSP126		0.95514	0.95205	0.97491
Multi-mode average	SSP245	-	0.96178	0.95162	0.97464
Multi-mode average	SSP370		0.95131	0.95149	0.97343
Multi-mode average	SSP585		0.95707	0.95151	0.97402