

Table S1: Results from spatial correlation analysis between SSR in ERA_{QM} and CMIP6 climate models and the ensemble (ENS). The symbol (***) represents a significant correlation ($p < 0.05$) in all target areas. The “0” means no-significant correlation in the sequence of target areas A1, A2, and A3. Models highlighted in orange were removed from the next method step

ID.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
M01	***	***	***	***	***	***	***	***	***	**0	***	***
M02	***	**0	**0	***	***	***	***	***	***	**0	**0	**0
M03	***	***	***	***	***	***	***	***	***	***	***	***
M04	***	***	***	***	***	***	***	***	***	**0	***	***
M05	***	***	***	***	***	***	***	***	***	***	***	***
M06	***	***	***	***	***	***	***	***	***	**0	***	***
M07	***	***	***	***	***	***	***	***	***	**0	***	***
M08	***	***	***	***	***	***	***	***	***	***	***	***
M09	***	***	***	***	***	***	***	***	***	***	***	***
M10	***	***	***	***	***	***	***	***	***	***	***	***
M11	***	***	***	***	***	***	***	***	***	***	***	***
M12	***	***	***	***	***	***	***	***	***	***	***	***
M13	***	***	***	***	***	***	***	***	***	***	***	***
M14	***	***	0**	***	***	***	***	***	***	***	***	***
M15	***	***	0**	**0	***	***	***	***	***	***	***	***
M16	***	***	***	***	***	***	***	***	***	***	***	***
M17	***	***	***	***	***	***	***	***	***	***	***	***
M18	***	***	***	***	***	***	***	***	***	***	***	***
M19	***	***	***	***	***	***	***	***	***	***	***	***
M20	***	***	***	***	***	***	***	***	***	**0	***	**0
M21	***	***	***	***	***	***	***	***	***	***	***	***
M22	***	***	***	***	***	***	***	***	***	***	***	***
M23	***	***	***	***	***	***	***	***	***	***	***	***
M24	***	***	***	***	***	***	***	***	***	***	0**	***
M25	***	***	***	***	***	***	***	***	***	***	***	***

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M26	0**	0**	0**	***	***	***	***	***	***	***	***	***
M27	***	***	***	**0	***	***	***	***	***	***	***	***
M28	***	***	***	***	***	***	***	***	***	***	***	***
M29	***	***	***	***	***	***	***	***	***	**0	***	***
M30	***	***	***	***	***	***	***	***	***	**0	***	***
M31	***	***	***	***	***	***	***	***	***	**0	**0	***
M32	***	***	***	***	***	***	***	***	***	***	***	***
M33	0**	***	0**	***	***	***	***	***	***	***	***	0**
M34	0**	0**	0**	***	***	***	***	***	***	**0	***	0**
M35	***	***	***	***	***	***	***	***	***	***	***	***
M36	***	***	0**	***	***	***	***	***	***	***	***	***
M37	***	***	***	***	***	***	***	***	***	**0	***	***
M38	***	***	***	***	***	***	***	***	***	***	***	***
M39	***	***	***	***	***	***	***	***	***	***	***	***
M40	***	***	***	***	***	***	***	***	***	***	***	***
ENS	***	***	***	***	***	***	***	***	***	***	***	***