

*Supplement of*

**Observed and CMIP6 model simulated organic aerosol response to drought in the contiguous United States during summertime**

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**Table S1. Information of the ten CMIP6 models selected for evaluation.**

<b>Models</b>	<b>Resolution (lat×lon)</b>	<b>Aerosol scheme</b>	<b>Model references</b>
BCC-ESM1	2.81°×2.81°	BCC-AGCM3-Chem	Wu et al. (2020)
CESM2-WACCM	0.95°×1.25°	MAM4	Danabasoglu et al. (2020)
CNRM-ESM2-1	1.40°×1.40°	TACTIC	Séférian et al. (2019)
EC-Earth3- AerChem	2.00°×3.00°	TM5	van Noije et al. (2021)
GFDL-ESM4	1.00°×1.25°	Bulk aerosol scheme	Dunne et al. (2020)
GISS-E2-1-G	2.00°×2.50°	TCADI	Kelley et al. (2020)
MIROC6	1.40°×1.40°	SPRINTARS	Tatebe et al. (2019)
MRI-ESM2-0	1.87°×1.87°	MASINGAR	Yukimoto et al. (2019)
NorESM2-LM	1.87°×2.50°	OsloAero6	Seland et al. (2020)
UKESM1-0-LL	1.25°×1.87°	UKCA1	Senior et al. (2020)

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