



## Supplemental Material

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# Supplemental Materials for 'Correcting Observational Biases in Sea-Surface Temperature Observations Removes Anomalous Warmth during World War II'

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Supplemental materials contain one supplemental table and two supplemental figures.

**Table S1.** CMIP5 and CMIP6 models used in this study.

**Fig. S1.** Data coverage during WW2 years in different SST estimates.

**Fig. S2.** Groupwise adjustments for daytime measurements.

11 **Table S1. CMIP5 and CMIP6 models used in this study.** Listed numbers are numbers  
12 of ensemble members for historical experiments and numbers of 15-year segments for pre-  
13 industrial control simulations.

CMIP5 Models	Historical	pi-Control	CMIP6 Models	Historical	pi-Control
ACCESS1-0	1	33	ACCESS-CM2	1	--
ACCESS1-3	1	33	ACCESS-ESM1-5	1	--
BNU-ESM	1	37	AWI-CM-1-1-MR	1	--
CCSM4	6	83	AWI-ESM-1-1-LR	1	6
CESM1-BGC	1	33	BCC-CSM2-MR	1	--
CESM1-CAM5	3	21	BCC-ESM1	1	30
CESM1-CAM5-1-FV2	--	3	CAMS-CSM1-0	1	33
CESM1-FASTCHEM	--	14	CESM2	1	80
CMCC-CESM	1	18	CESM2-FV2	1	33
CMCC-CM	1	22	CESM2-WACCM	1	33
CMCC-CMS	1	33	CESM2-WACCM-FV2	1	33
CNRM-CM5	5	56	CMCC-CM2-HR4	1	--
CNRM-CM5-2	--	49	CMCC-CM2-SR5	1	33
CSIRO-Mk3-6-0	10	33	CanESM5	1	66
CanESM2	5	66	E3SM-1-0	1	33
EC-EARTH	12	30	E3SM-1-1	1	16
FGOALS-s2	--	33	E3SM-1-1-ECA	1	16
FIO-ESM	3	53	EC-Earth3	1	--
GFDL-CM3	1	53	EC-Earth3-AerChem	1	20
GFDL-ESM2G	1	33	EC-Earth3-Veg	1	--
GFDL-ESM2M	1	33	EC-Earth3-Veg-LR	1	--
GISS-E2-H	5	70	FIO-ESM-2-0	1	38
GISS-E2-H-CC	1	16	GISS-E2-1-G	1	56
GISS-E2-R	5	153	GISS-E2-1-H	1	53
GISS-E2-R-CC	1	16	GISS-E2-2-G	--	10
HadGEM2-AO	1	6	HadGEM3-GC31-LL	--	33
HadGEM2-CC	1	16	IITM-ESM	--	13
HadGEM2-ES	4	38	INM-CM4-8	1	35
IPSL-CM5A-LR	4	66	INM-CM5-0	1	80
IPSL-CM5A-MR	1	20	KACE-1-0-G	1	--
IPSL-CM5B-LR	1	20	KIOST-ESM	1	33
MIROC-ESM	1	45	MCM-UA-1-0	1	--
MIROC-ESM-CHEM	1	--	MIROC6	1	53
MIROC5	3	44	MPI-ESM-1-2-HAM	1	52
MPI-ESM-LR	3	66	MPI-ESM1-2-HR	1	33
MPI-ESM-MR	1	66	MPI-ESM1-2-LR	1	66
MPI-ESM-P	--	77	MRI-ESM2-0	1	--
MRI-CGCM3	1	33	NESM3	--	33
MRI-ESM1	1	--	NorCPM1	1	--
NorESM1-M	1	33	NorESM2-LM	1	--
NorESM1-ME	1	16	NorESM2-MM	1	--
bcc-csm1-1	1	33	TaiESM1	1	--
bcc-csm1-1-m	1	26			
inmcm4	1	33			

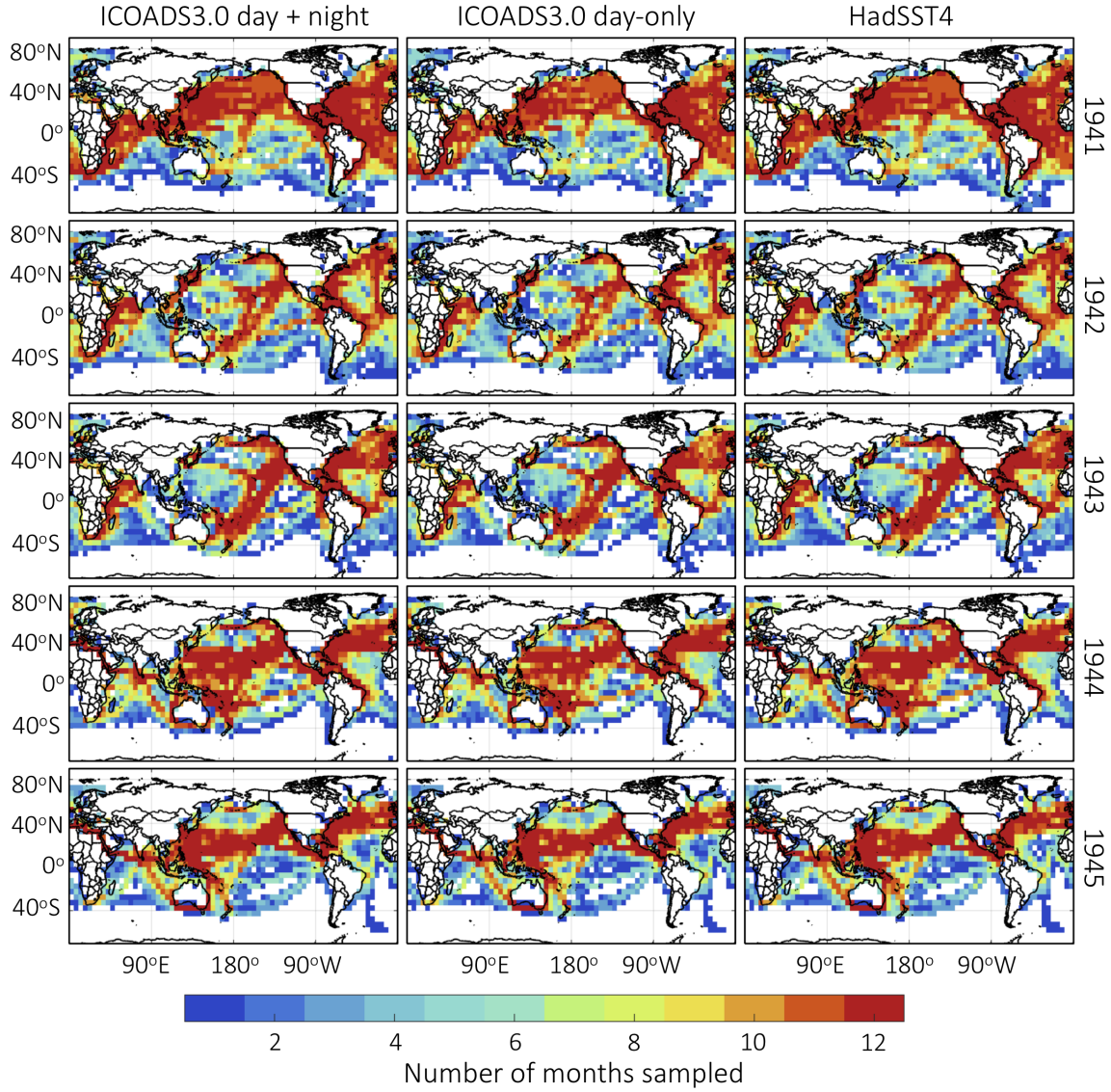


Fig. S1. **Data coverage during WW2 years.** Individual panels show the number of months that are sampled by ships in individual years (rows) during WW2. Individual columns show the coverage for ICOADS day and nighttime SSTs (R4, left), ICOADS daytime-only SSTs (R5, middle), and HadSST4 (right). Although daytime measurements contribute to 61% of the wartime data archive, their coverage (R5, middle) is very similar to the estimate (R4, left) that uses all available SST measurements.

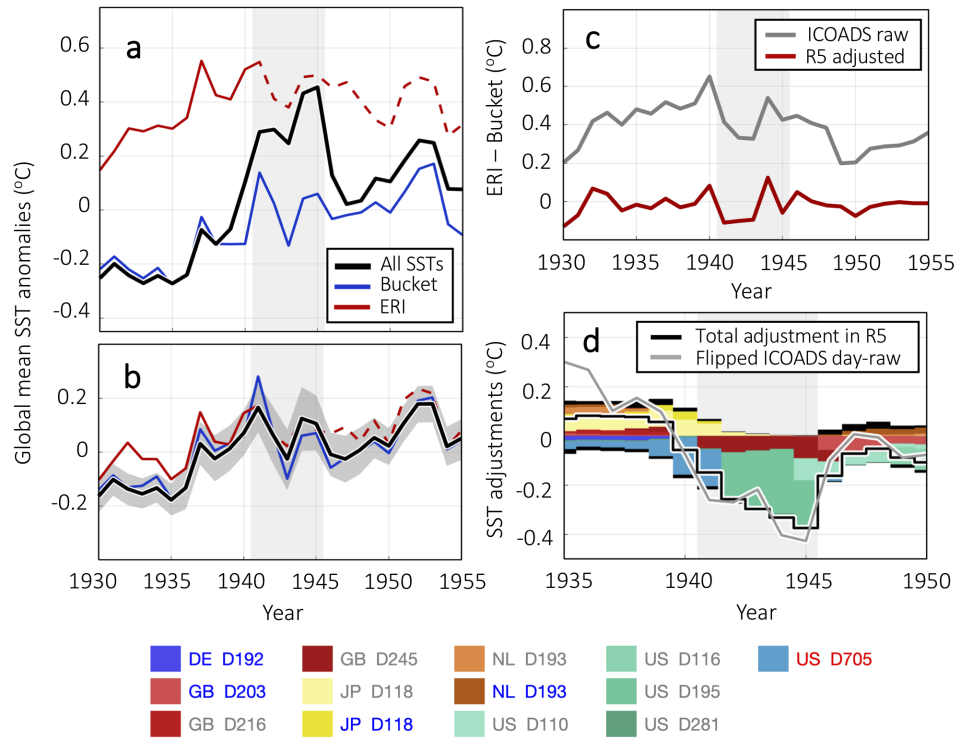


Fig. S2. **Groupwise adjustments for daytime SSTs.** Individual panels are as those in Fig. 1b and Fig. 5 in the main text but for the LME analysis that only uses daytime measurements.