

Supplemental Material

Table S1. The standard deviation of daily SAT anomaly and climatology of SAT over each SAT domain in observation and CMIP5 models.

Observation and Model	1.5 * standard deviation of daily SAT anomaly		Climatology of SAT	
	Northeastern China	Korean Peninsular	Northeastern China	Korean Peninsular
Observation	6.03	4.88	-5.92	2.09
ACCESS1-3	5.25	3.84	-6.74	3.69
BNU-ESM	9.45	5.78	-11.49	1.58
Can-ESM2	8.16	4.34	-4.89	6.39
CMCC-CESM	6.95	4.70	-12.23	3.27
CMCC-CMS	6.93	5.49	-10.14	3.47
GFDL-ESM2G	7.70	6.05	-5.94	1.01
MPI-ESM-LR	6.39	4.80	-7.06	4.23
MPI-ESM-MR	6.50	4.77	-6.67	3.76
NorESM1-M	7.01	4.83	-11.22	1.76

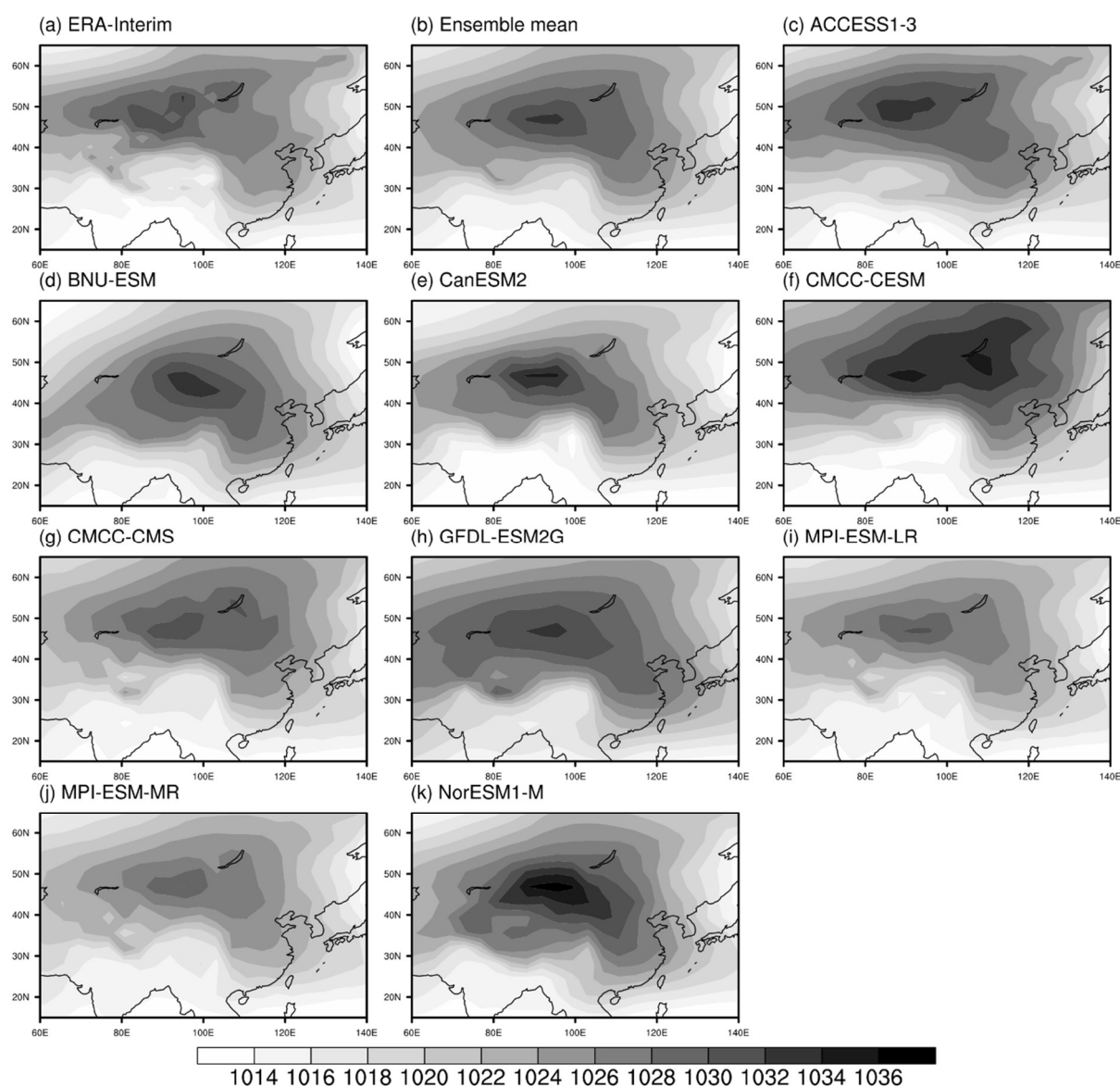


Figure S1. The climatology of mean sea level pressure (hPa) for 1979–2016 in observation and 1975–2005 in CGCMs during winter season, respectively.