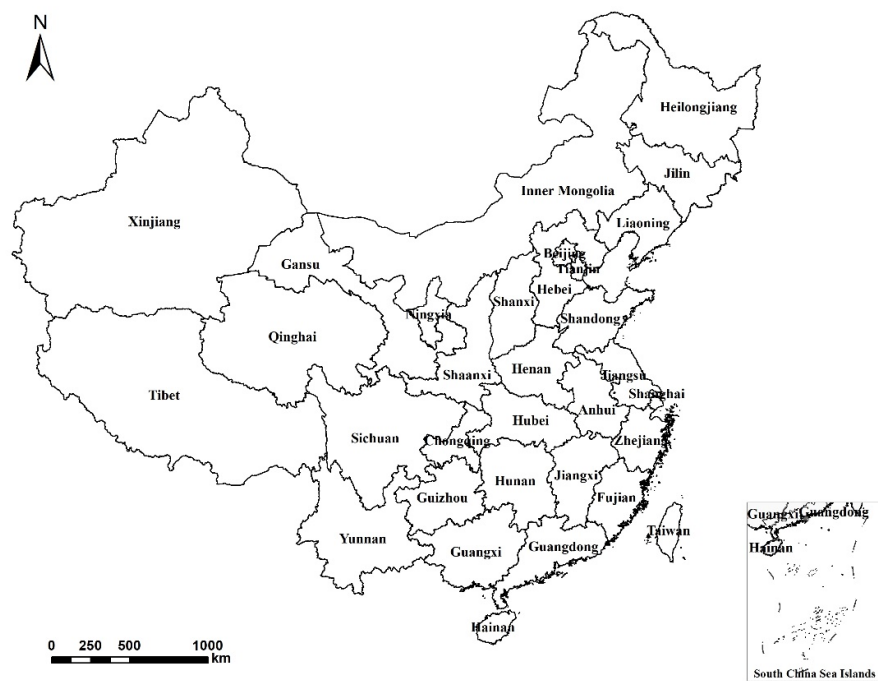


**Table S1.** Definitions of the 27 extreme climate indices of ETCCDI and the results of correlation analysis.

Indices	Definition	Unit	Correlation Coefficient with NDVI
TX <sub>x</sub>	Monthly maximum value of daily maximum temperature	°C	0.378 **
TN <sub>x</sub>	Monthly maximum value of daily minimum temperature	°C	0.503 **
TX <sub>n</sub>	Monthly minimum value of daily maximum temperature	°C	0.483 **
TN <sub>n</sub>	Monthly minimum value of daily minimum temperature	°C	0.608 **
TX90p	Percentage of days when daily maximum temperature (TX) < 10 <sup>th</sup> percentile	%	0.229 **
TN90p	Percentage of days when daily minimum temperature (TN) > 90 <sup>th</sup> percentile	%	-0.114 **
TX10p	Percentage of days when TX < 10 <sup>th</sup> percentile	%	0.284 **
TN10p	Percentage of days when TN < 10 <sup>th</sup> percentile	%	0.195 **
DTR	Daily temperature range	°C	-0.601 **
GSL	Growing season length	d	0.659 **
FD	Number of frost days	d	-0.416 **
ID	Number of icing days	d	-0.194 **
SU	Number of summer days	d	0.450 **
TR	Number of tropical nights	d	0.535 **
WSDI	Warm spell duration index	d	-0.0003
CSDI	Cold spell duration index	d	-0.045
RX1day	Monthly maximum 1-day precipitation	mm	0.705 **
RX5day	Monthly maximum consecutive 5-day precipitation	mm	0.718 **
SDII	Simple precipitation intensity index	mm/d	0.615 **
R10mm	Annual count of days when precipitation (PRCP) ≥ 10mm	d	0.782 **
R20mm	Annual count of days when PRCP ≥ 20mm	d	0.738 **
R50mm	Annual count of days when PRCP ≥ 50mm	d	0.611 **
CDD	Maximum length of dry spell, maximum number of consecutive days with daily precipitation amount (RR) < 1mm	d	-0.530 **
CWD	Maximum length of wet spell, maximum number of consecutive days with RR ≥ 1mm	d	0.694 **
R95pTOT	Annual total PRCP when RR > 95p	mm	0.473 **
R99pTOT	Annual total PRCP when RR > 99p	mm	0.353 **
PRCPTOT	Annual total precipitation in wet days	mm	0.745 **

Indices information come from [http://etccdi.pacificclimate.org/list\\_27\\_indices.shtml](http://etccdi.pacificclimate.org/list_27_indices.shtml). (accessed on 1 December 2020). \*\* The significance level was 0.01.



**Figure S1.** Map of provinces in China.