

Letters

## Progress in the Attribution of Climate Warming in China for the 20th Century

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摘要

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## Progress in the Attribution of Climate Warming in China for the 20th Century

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**Abstract** Progress in the attribution of climate warming in China for the 20th century is summarized. Three sets of climate model experiments including both coupled and uncoupled runs have been used in the attribution analyses. Comparison of climate model results with the observations proves that in the 20th century, especially in the recent half century, climate warming in China is closely related to the increasing of the anthropogenic emissions of greenhouse gases, while sulfate aerosol should also have contributions. When both external forcing and natural forcing agents are prescribed, coupled climate models have better results in producing the observed variation of temperature in China. The role of oceanic forcing is also emphasized in the attribution analyses. The observed climate warming of China in the 1920s could not be reproduced in any set of climate model simulations.

**Key words** [20th century](#) [surface air temperature](#) [China](#) [attribution analysis](#) [climate warming](#)

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