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Progress in China's climate change study in the 20th century

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Studies on the 20th century climate change in China have revealed that under the background of global warming over the past century, climate in China has also experienced significant change with mean annual temperature increased by about 0.5 oC. More reliable results for the latter part of the 20th century indicate that the largest warming occurred in Northwest China, North China and Northeast China, and the warming in winter is most significant. Although no obvious increase or decrease trends were detected for mean precipitation over China in the past half century, regional differences are very distinct. In the middle and lower reaches of the Yangtze River, precipitation increased, while that in the Yellow River Basin markedly decreased. Studies suggest that climate change in China seems to be related not only with the internal factors such as ENSO, PDO, and the others, but also with the anthropogenic effects such as greenhouse gas emissions, and land use. The future climate change studies in China seem to be important in narrowing understanding the nature of China's climate change and its main causes, since it is significant for projection and for impact assessment of climate change in the future.

Paper (PDF)

关键词: 20th century; climate change; China