



## **Climate change features along the Brahmaputra valley in the past 26 years and possible causes**

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Through analyzing the changes of temperature and precipitation at seven observational stations along the Brahmaputra Valley from 1980 to 2005, and investigating the correlation between atmospheric circulation indices and these changes, the response of the valley to the global warming had been analyzed in this paper. It is found that the climate change over the Brahmaputra Valley became warmer and wetter from 1980 to 2005, and the magnitude of change is higher than that over the whole Tibetan Plateau. Therefore, the response of the valley to the global warming is more evident than that of the whole plateau during the period. The relationship between atmospheric circulation indices and the regional climate change is remarkable. When North Atlantic Oscillation index is higher in summer, the valley climate becomes warmer and dryer; vice versa. When South Oscillation index is higher, it becomes warmer and wetter; vice versa. Worthy of note, the results in this study only emphasize some evidence of change in temperature and precipitation over the Valley during 1980-2005.