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Letters

# Trends of Extreme Precipitation over the Yangtze River Basin of China in 1960-2004

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摘要

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Trends of Extreme Precipitation over the Yangtze River Basin of China in 1960-2004

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**Abstract** Recent trends of the rainfall, intensity and frequency of extreme precipitation (EP) over the Yangtze River Basin are analyzed in this paper. Since the mid-1980s the rainfall of EP in the basin has significantly increased, and the most significant increment occurred in the southeast mid-lower reaches, and southwest parts of the basin. Summer witnessed the most remarkable increase in EP amount. Both the intensity and frequency of EP events have contributed to the rising of EP amount, but increase in frequency contributed more to the increasing trend of EP than that in intensity. The average intervals between adjacent two EP events have been shortened. It is also interesting to note that the monthly distribution of EP events in the upper basin has changed, and the maximum frequency is more likely to occur in June rather than in July. The synchronization of the maximum frequency month between the upper and mid-lower reaches might have also increased the risk of heavy floods in the mid-lower reaches of the Yangtze River.

**Key words** extreme precipitation event spatial and temporal pattern climate change the Yangtze River Basin

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