Amplitude modulation of sea surface temperature variability in the Bay of Bengal by 400-kyr eccentricity cycle

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We generated a 1.7 kyr-resolution TEX_{86}-based sea surface temperature (SST) record from the International Ocean Discovery Program Site U1446 in the Bay of Bengal during the last 1.46 Myr. The SST varied synchronously with LR04 benthic foraminifera $\delta^{18}O$ and deep water $\delta^{13}C$. The cyclicity changed from 41-kyr to 100-kyr around 900 ka. The amplitude of SST variation responded to the 400-kyr cycles of eccentricity. Higher amplitude corresponded to low eccentricity. This suggests that eccentricity forced climate variability independently of the shift of cyclicity of glacial cycles across the Mid-Pleistocene Transition.

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