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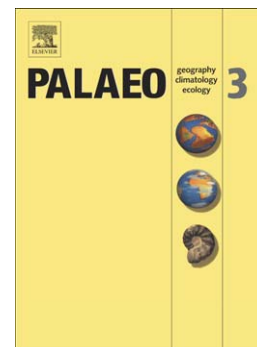
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Monsoon variability over Peninsular India during Late Pleistocene: signatures of vegetation shift recorded in terrestrial archive from the corridors of Western Ghats

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ABSTRACT

The fossil flora recovered from the Kangvai well, Ratnagiri District, Maharashtra (17°53'41" N; 73°12'23" E) has been used to reconstruct the monsoon variations and seasonal rainfall pattern during the Late Pleistocene (44,020 ± 390 yr BP) by using the Coexistence Approach. The reconstruction suggests that the Southwest (SW) and Northeast monsoons (NE) contributed ~64% and 18% of the total rainfall, respectively. Moreover, the pre-monsoon showers were responsible for about 15% of the annual rainfall. As both SW and NE monsoons were very active, along with the pre-monsoonal rainfall, the length of rainy season increased and extended up to nine months in a year favouring the evergreen continuum and prevalence of wet evergreen forests until the Late Glacial Maximum or slightly prior to it. However, due to the weakening of NE and pre-monsoon rainfall later in the Late Pleistocene and Early Holocene, the area

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