

Paleoclimatic changes during the last 30 kyr recorded in the Kathmandu Basin, central Nepal Himalayas

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Palynological studies of a 30-m-long drill core from the Kathmandu Basin reveal paleoclimatic records during the last 300 kyr. A paleoclimatic curve shows five times fluctuation of warm and cold climate at interval from 4 m to 6 m. Peaks of the curve correspond to those of oxygen isotope stages 1 to 8. Paleoclimatic data indicate that a dry climate prevailed during the glacial age and wet climate in the inter-glacial age.

Sedimentological studies of three cores from academic drilling project of Paleo-Kathmandu Lake reveal when the Paleo-Kathmandu Lake dried up. The clayey open lacustrine sediments are eroded and covered with fluvial deposits at 10 to 17 m under the surface. On the basis of pollen analyses, it is estimated that the Paleo-Kathmandu Lake has dried up at around 6-5 kyr.

Palynological studies of a 30-m-long drill core from the central part of the Kathmandu Basin reveal paleoclimatic records in the Kathmandu Valley during the last 300 kyr. A paleoclimatic curve obtained from the pollen diagram shows five times fluctuation of warm and cold climate at interval from 4 m to 6 m. Peaks of the curve correspond to those of oxygen isotope stages 1 to 8. Furthermore, paleoclimatic data indicate that a dry climate prevailed during the glacial age and wet climate in the inter-glacial age.

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