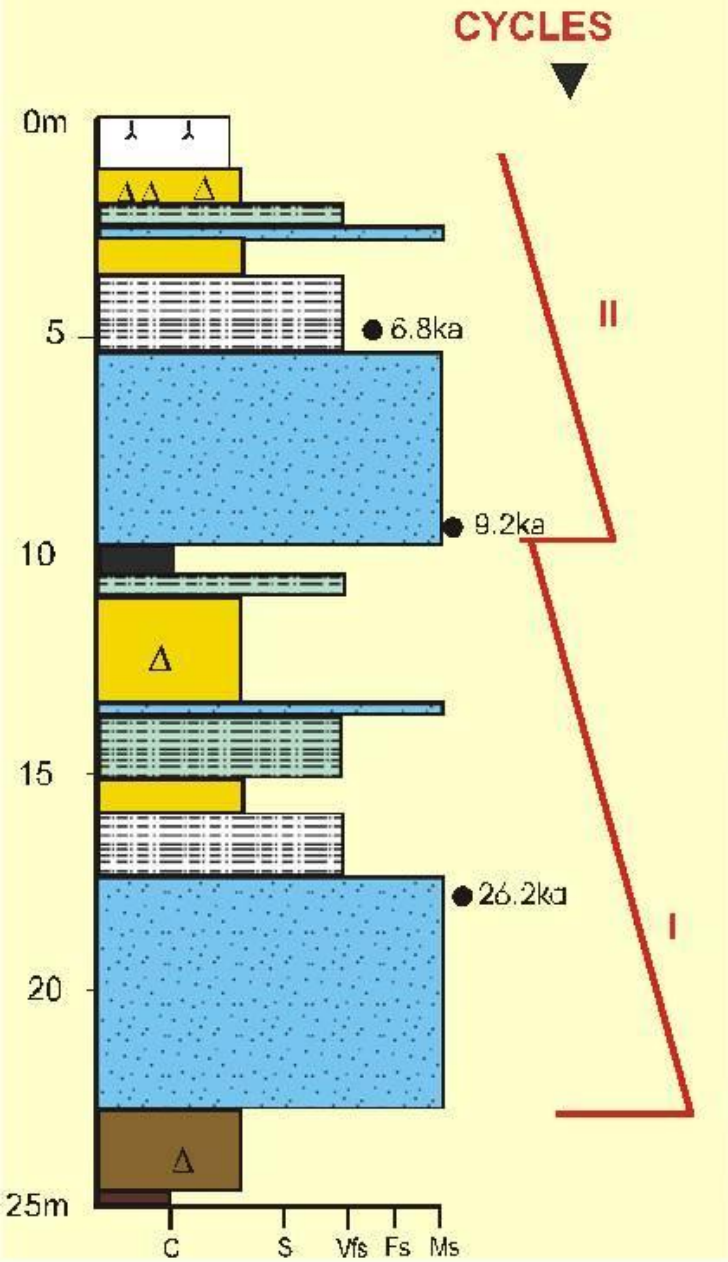


JAGDISHPUR CORE



This core, located in a valley fill of the Ganga river, consists of two major depositional cycles, I & II, representing valley filling episodes. These cycles commence with fine- to medium-grained channel sand (facies C1), locally with concretions and red and brown mottling, passing upward into interbedded silt and very fine sand (facies C2) and ending with yellow-brown floodplain mud (facies F1) with carbonate concretions (indicated by local increases in LOI). Cycle II is capped by modern soil with rootlets.

The top of the lower sand body is dated at 26.2 ± 5.1 ka. The upper sand body is well constrained with an age of 9.2 ± 1.23 ka for the lower part and 6.8 ± 0.69 ka for the upper part. The lower sand body marks pre-LGM channel activity, with apparent reduction of activity during the LGM through to the early Holocene which appears to be represented only by floodplain deposits. Channel activity was enhanced again after about 10–11 ka, when the upper sand body formed — during a period of monsoon intensification. The channel was finally abandoned after ~6 ka, when the Ganga moved southwards to the valley margin at Bithur, forming a large meander cut-off .

Ref: Sinha, R., Bhattacharjee, P., Sangode, S.J., Gibling, M.R. and Tandon, S.K., Jain, M. Godfrey, D. (2007). Valley and interfluvial sediments in the southern Ganga plains, India: exploring facies and magnetic signatures. *Sedimentary Geology*, 201, 386-411.