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THE HOLO-PLIESTOCENE BEDS OF THE KALAWANA-NIVITIGALA AREA AS INDICATORS OF PAST CLIMATIC CHANGE

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Stratigraphical sections from five selected gem pits of the Kalawana-Nivitigala area were examined for inidcations of past climatic change. The stratifications examined show strong sedimentological similarities, so that, although Deraniyagala (1958) stated that the layers overlying the fossiliferous gem gravels are ' not in consistent stratigraphical sequence ', such a view probably holds to the Ratnapura Series as a whole, and not necessarily to the deposits in a single valley or neighbouring valleys as the present case, is, where a greater consistency may be expected.

Assuming the absence of significant eustatic movements, the alternation of fine clays, sometimes including plant matter, and coarse particled sands and gravels, probably indicate real changes in rainfall in the watershed.

The evidence appears to support the view that, in the Kalawana-Nivitigala areas, after the ' rainy ' climate corresponding to the deposition of the lowest layer, namely the gem gravels two periods of ' less rainy ' and ' rainy ' climates prevailed, followed by a ' less rainy ' climate corresponding to the uppermost layer.