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Sediment flux from the Rhein–Maas loess plateau to the Lower Rhein

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The Rhein–Mass loess plateau presents a quantity of about 5 billion m^3 of loess. From this only a minimal share was moved since the Neolithic Period, mostly caused by man's land clearence activity. The erosional portion is estimated by means of the loss of the recent soil formation on top of the plateau. A distinct part of the eroded loess has been deposited within dales and small valleys which drain the loess plateau. Another part of the erosional flux has been transported to the floodplains of the smaller and bigger rivers in the drainage basin, the Lower Rhein and the Maas River. A last and third part has been washed through the Lower Rhein basin into the North Sea.

The aim of the record given is to quantify the erosional part of the loess plateau and likewise to quantify both the deposits within the transport channels leading down to the floodplains and the floodplain deposits of the Lower Rhein.

To yield differentiation in man's clearence activity deposits of distinct time slices are quantified.