

Supplement of Earth Surf. Dynam., 6, 705–721, 2018
<https://doi.org/10.5194/esurf-6-705-2018-supplement>
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Supplement of

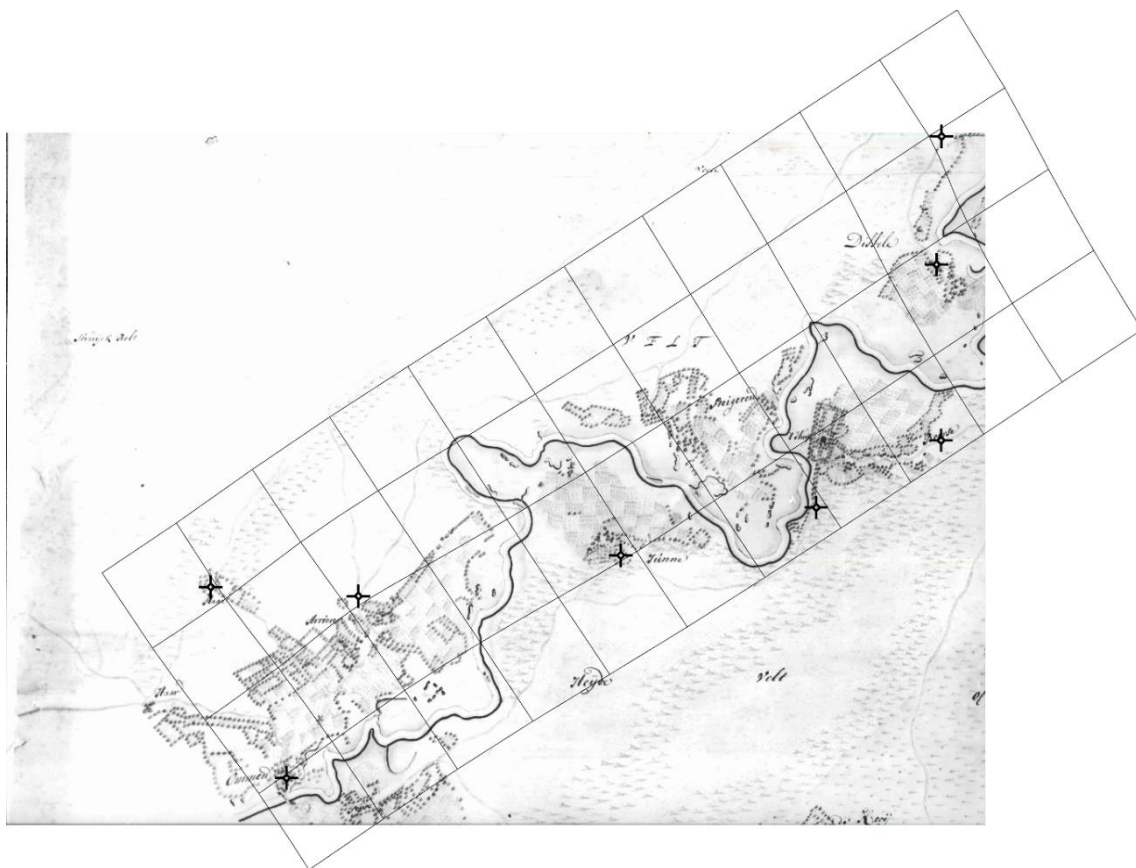
Reconstructing lateral migration rates in meandering systems – a novel Bayesian approach combining optically stimulated luminescence (OSL) dating and historical maps

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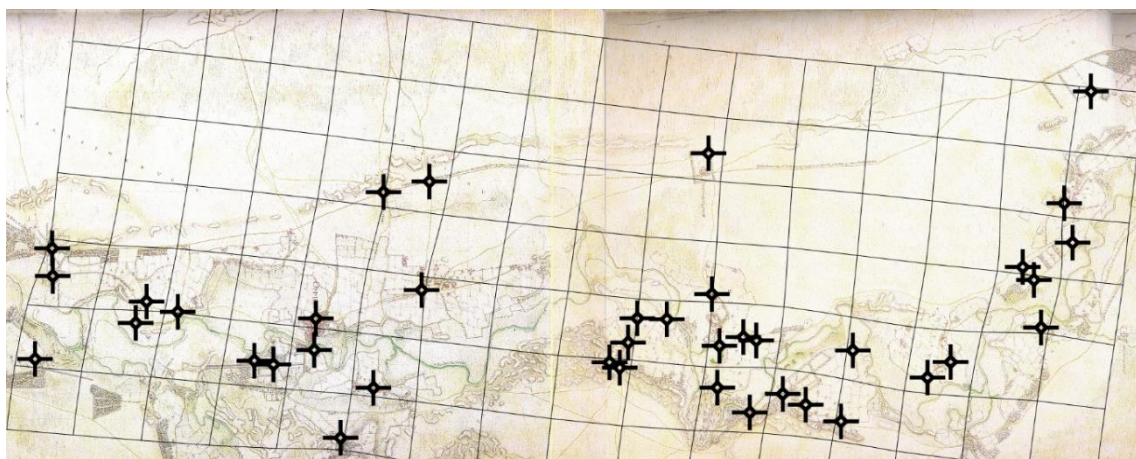
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As part of our analysis of historical maps we generated visualisations of geodetic distortions as generated with the freely available MapAnalyst software (Jenny and Hurni, 2011). For methodological details please refer to the manuscript to which this supplement belongs. This supplement contains the distortion grids for all map fragments (figure S1 a-f, starting on the next page).



(a)



(b)

Figure S1. Fragments of the investigated historical maps displaying the study area, showing ground control points (black or white crosses) and a distortion grid (in black or white, maze size of 1 km). In all cases the grid approaches a perfect grid, indicating that map distortion is minimal. Grids were generated with the MapAnalyst software by Jenny and Hurni (2011). Image references: (a) 'Limiten tussen Bentheim en Overijssel' by Pieter de la Rive (publication date ~1720 CE), Algemeen Rijks Archief. Genie-archief, situatiekaart 07; Wolfert et al. (1996); Box (2007); (b) De Hottinger-atlas van Noord- en Oost-Nederland, map sheets 35 + 36 (survey date 1785 - 1787 CE), Versfelt, 2003; (c) Atlas of Huguenin, map sheets 72 + 73 (survey date 1829 CE), Versfelt and Schroor, 2005; (d) Topographische en Militaire Kaart van het Koninkrijk der Nederlanden, map sheet 22 (survey date 1851 CE), CC-BY Kadaster, 2018; Van der Linden (1973); (e) Topographical map of the Netherlands (Bonne), map sheet Coevorden (revision date 1884 CE), CC-BY Kadaster, 2018; Van der Leest et al. (2005); Stam (2006); (f) Topographical map of the Netherlands (Bonne), map sheet 306 (revision date 1894 CE) + map sheet 307 (survey date 1901 CE), CC-BY Kadaster, 2018; Van der Leest et al. (2005); Stam (2006). For more details on the historical maps please refer to Table 1 of the manuscript to which this supplement belongs.

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