

FIG

FIG WORKING WEEK 2017

Helsinki Finland

29 May - 2 June 2017

Presented at the FIG Working Week 2017,
May 29 - June 2, 2017 in Helsinki, Finland

Capt. Axel Annaert
**Movement of the fairway around the
Molenplaat and Rug van Baarland in
the River Scheldt based on old
navigation charts**

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From digitalisation to augmented reality

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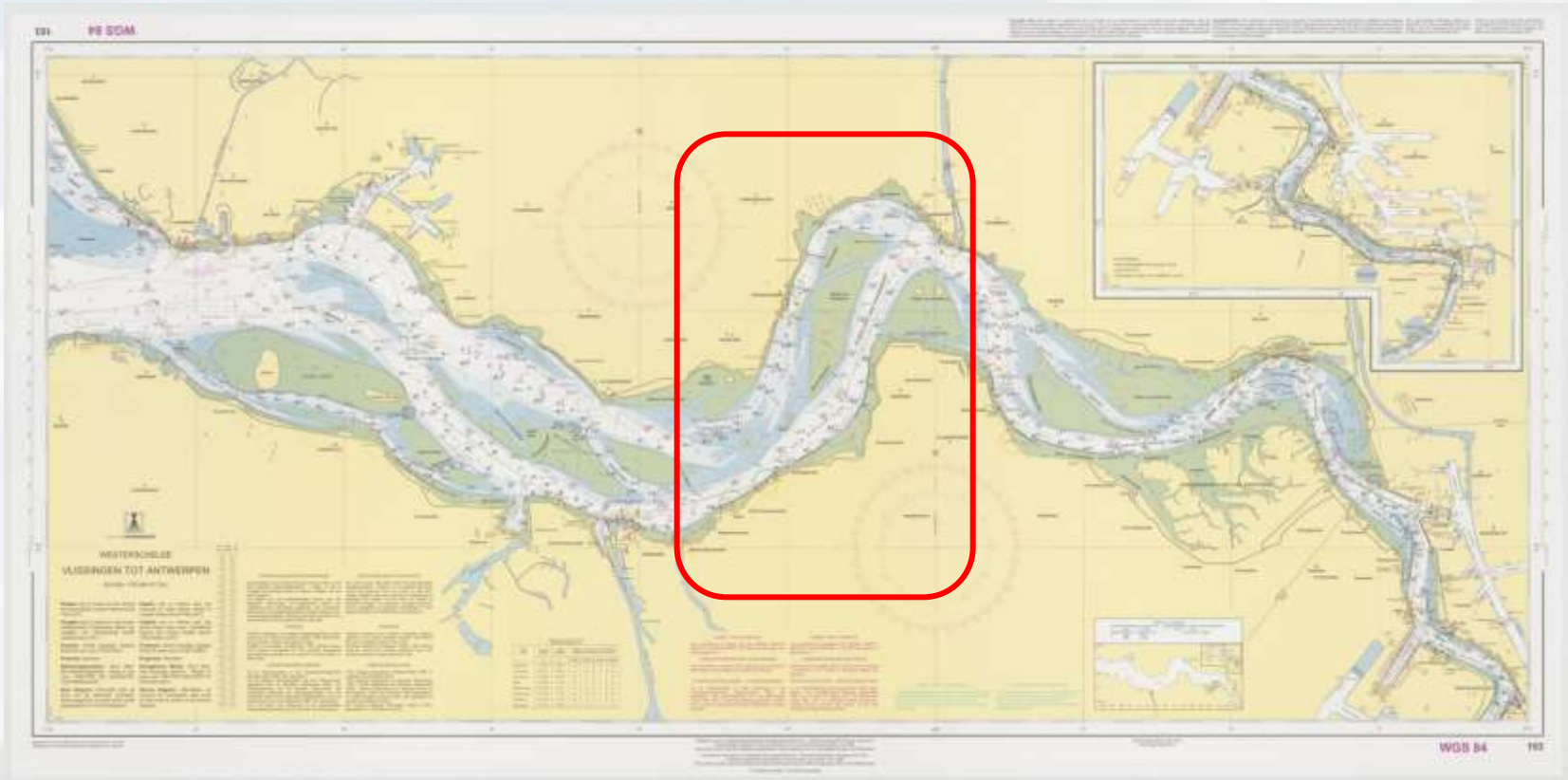
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Area of Investigation



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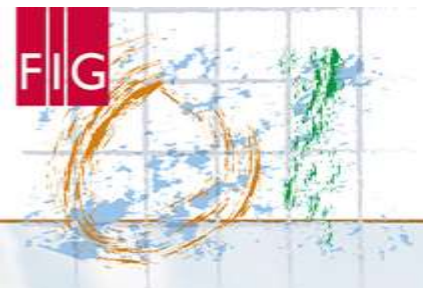


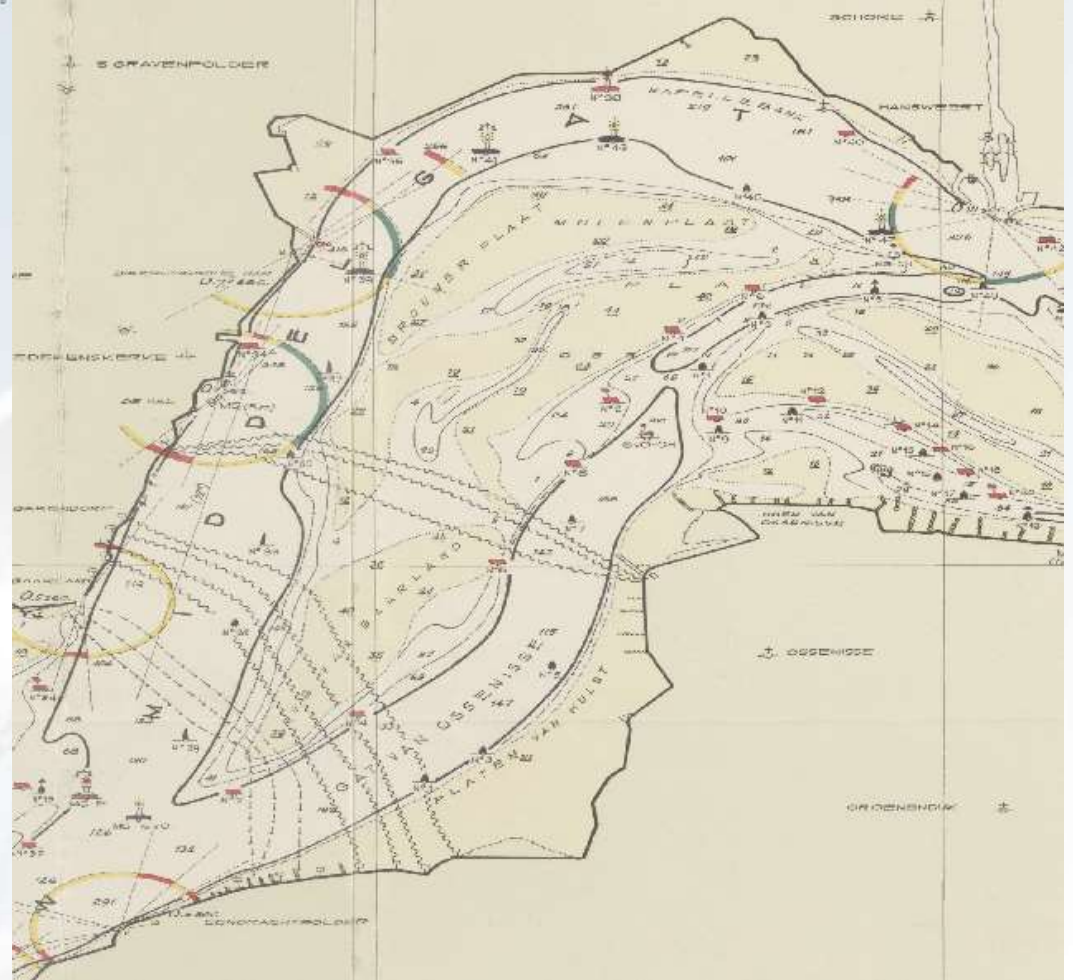
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Situation in 1956



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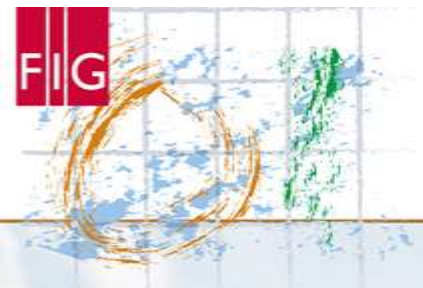


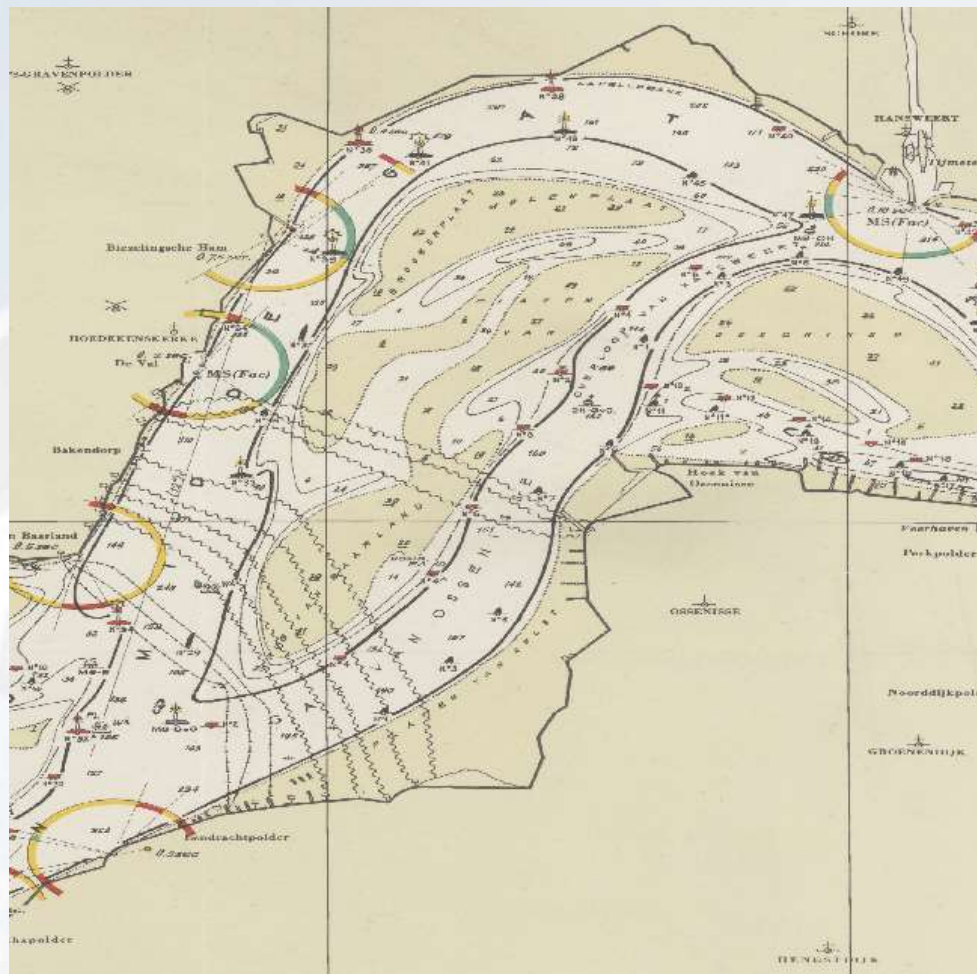
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Situation in 1962



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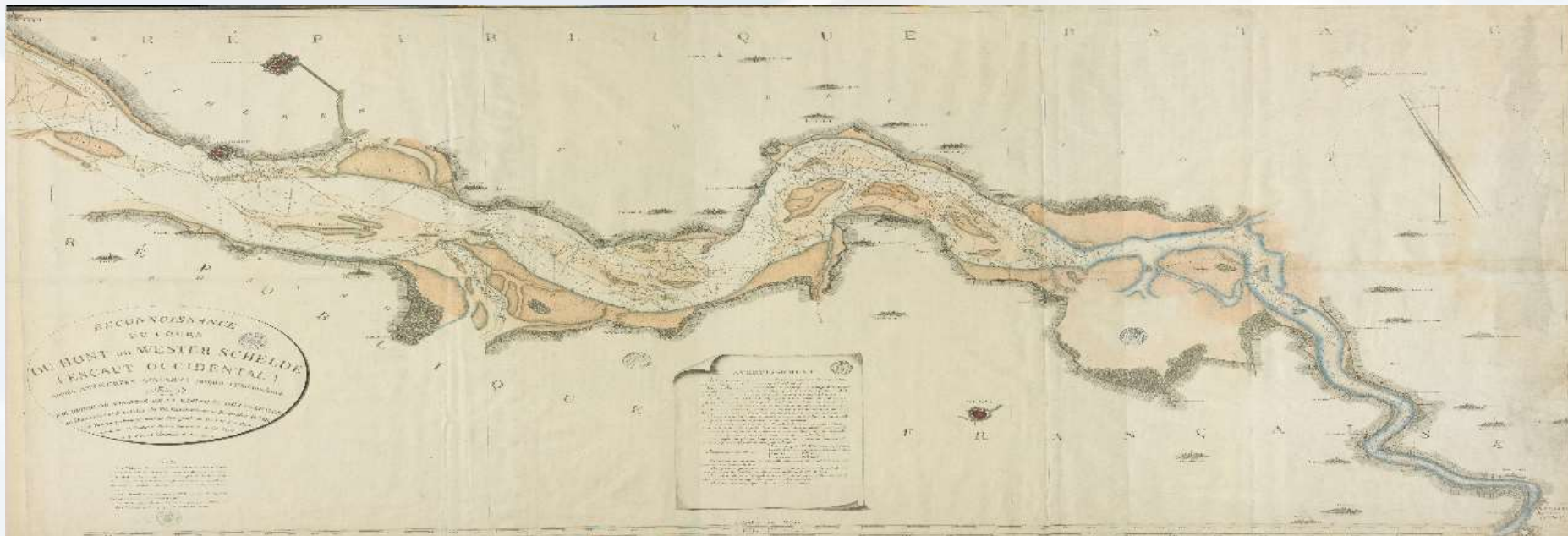
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Chart Beautemps Beauprez 1799



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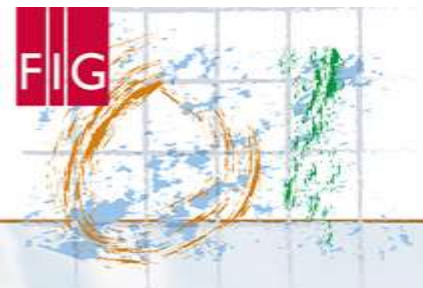


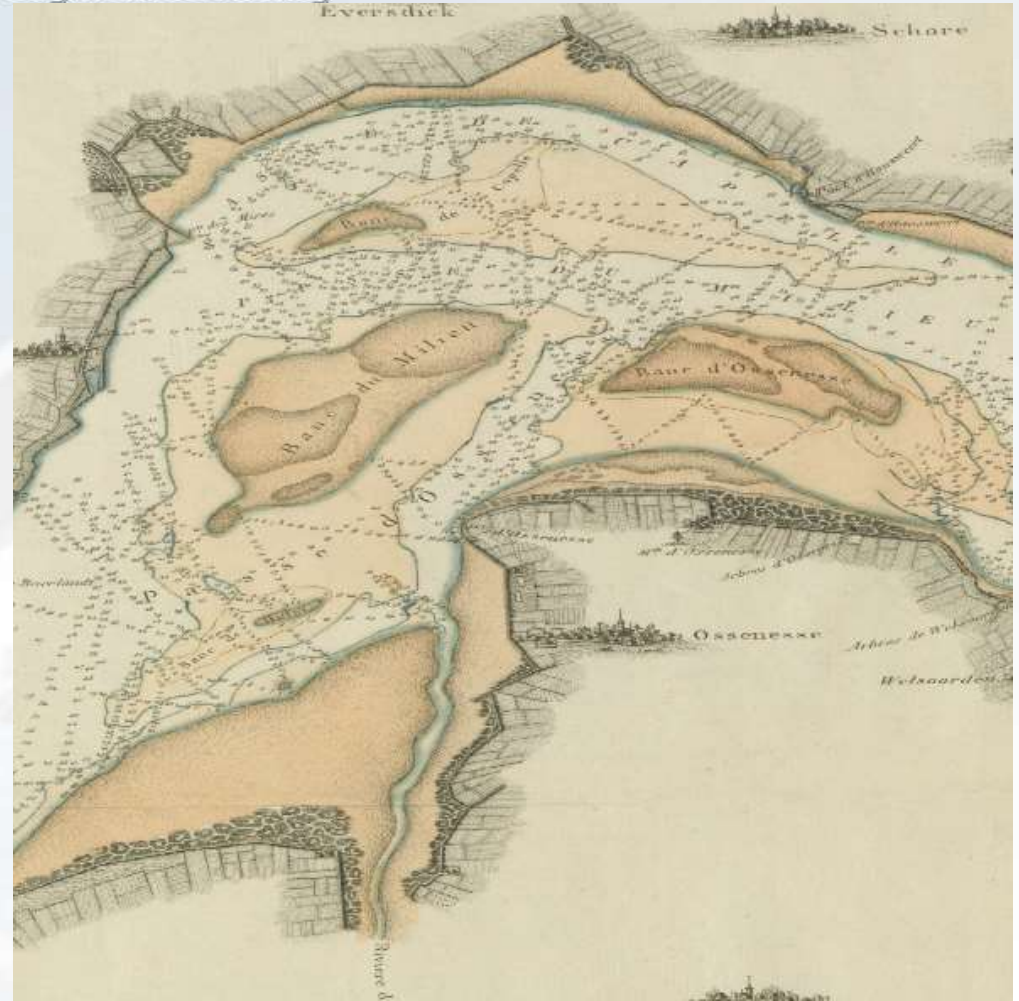
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Beautemps Beauprez



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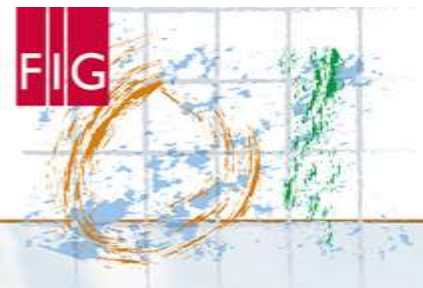


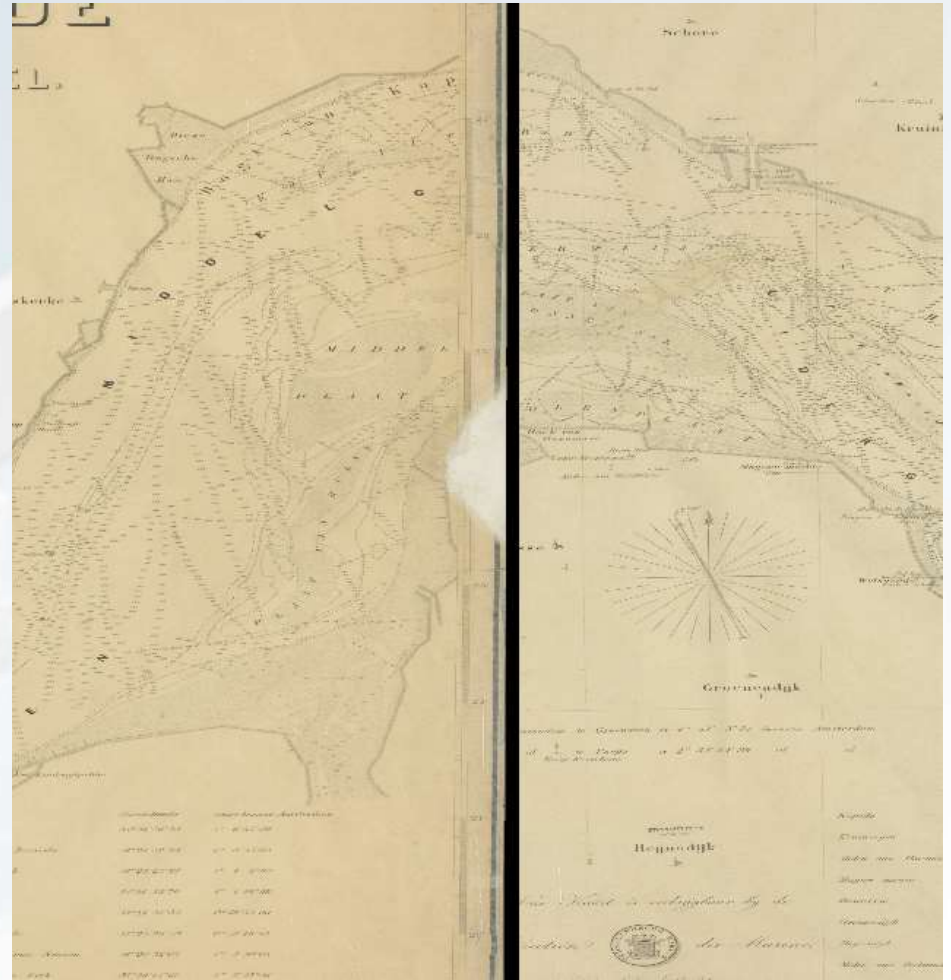
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Dutch chart 1867 by A.R. Blommendal



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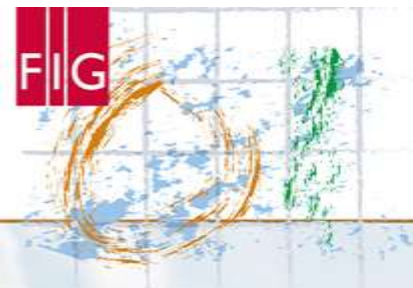


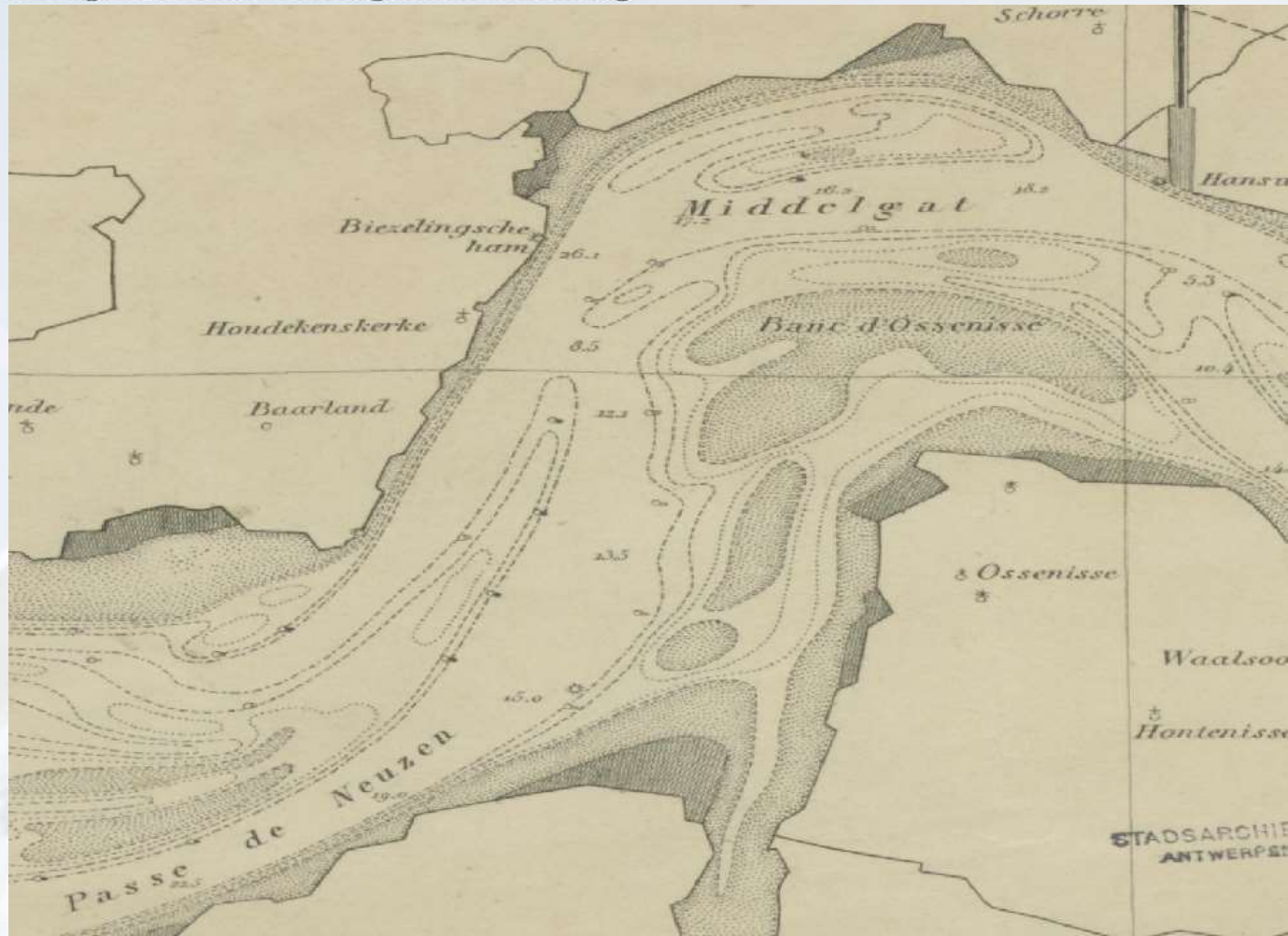
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Belgian Chart Stessels 1869



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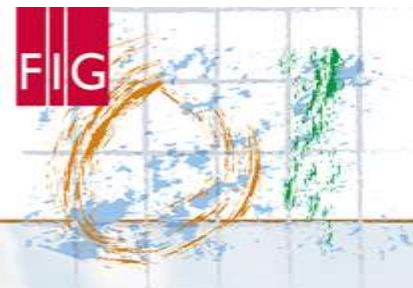


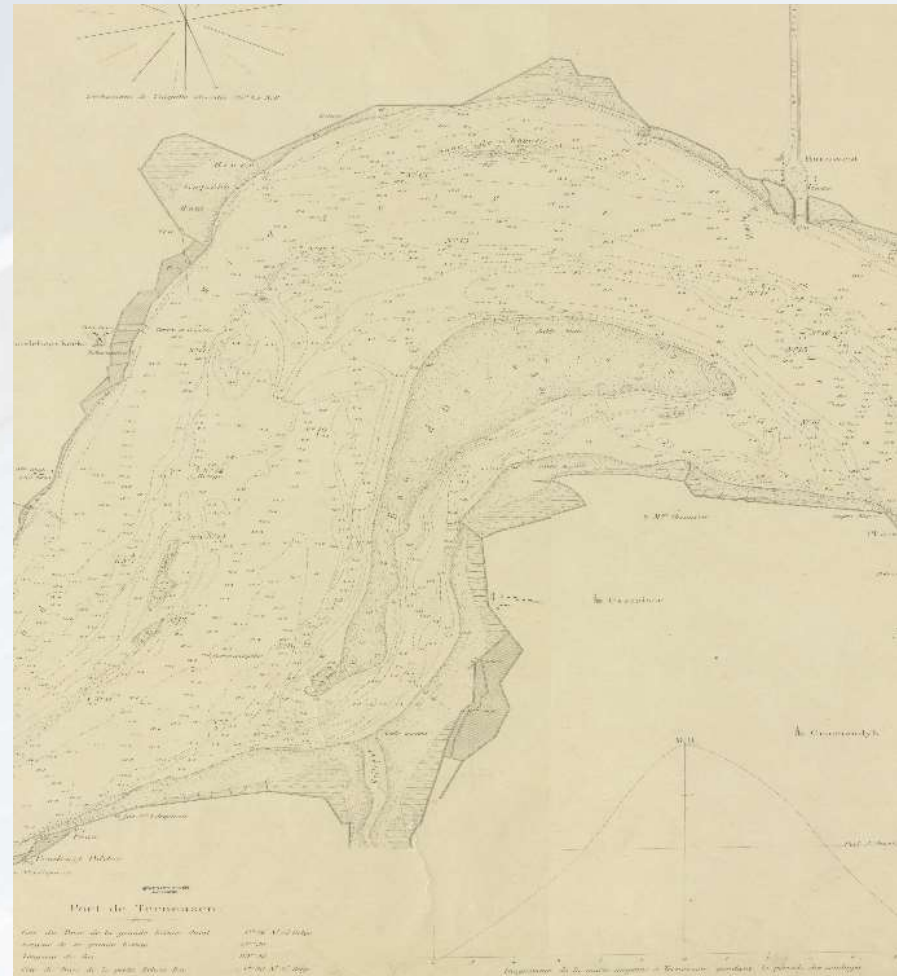
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Belgian Chart Sainctelette 1880



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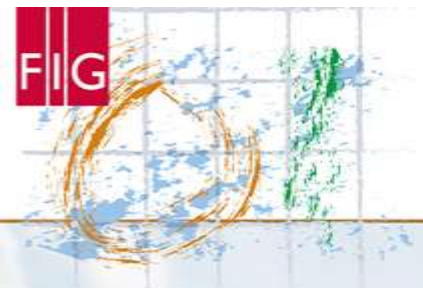


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Belgian Chart 1898



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1936



1946



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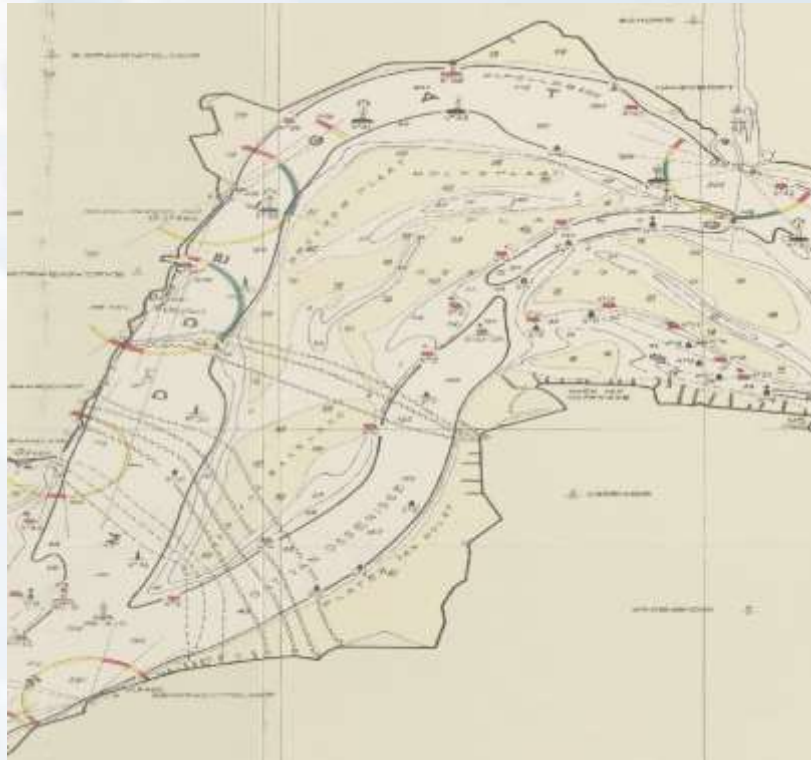


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1956



1962



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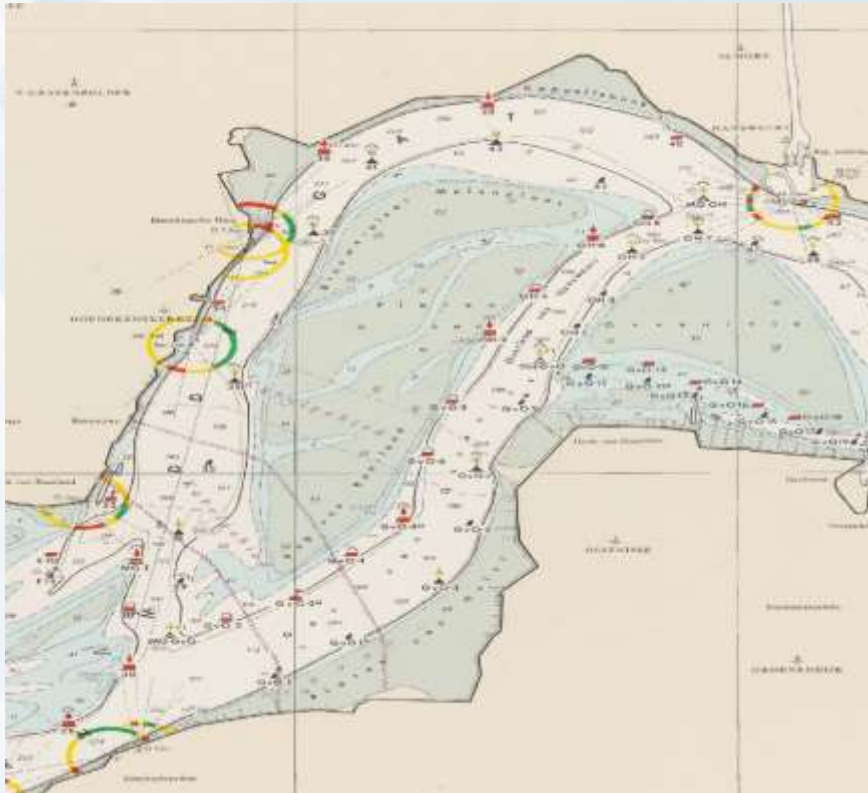


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1978



1996



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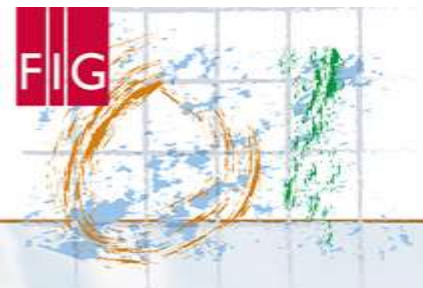
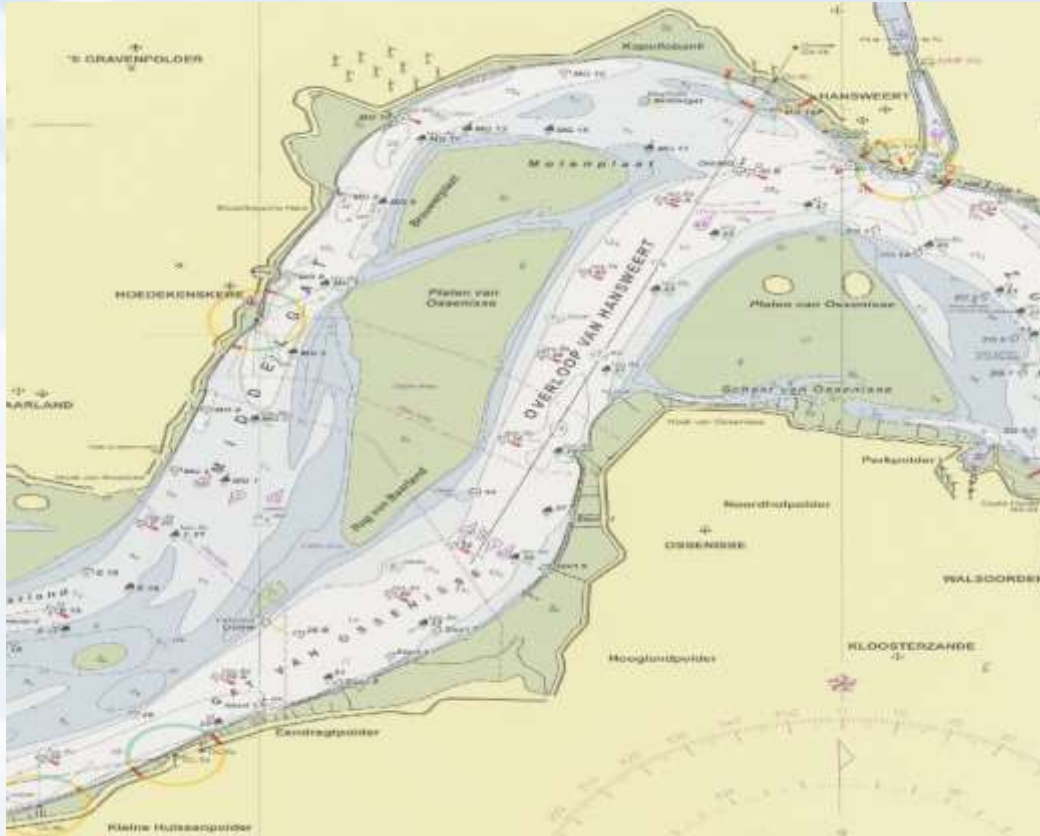


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2010

Georeferencing by churchtowers



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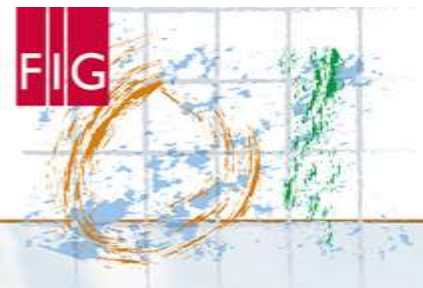


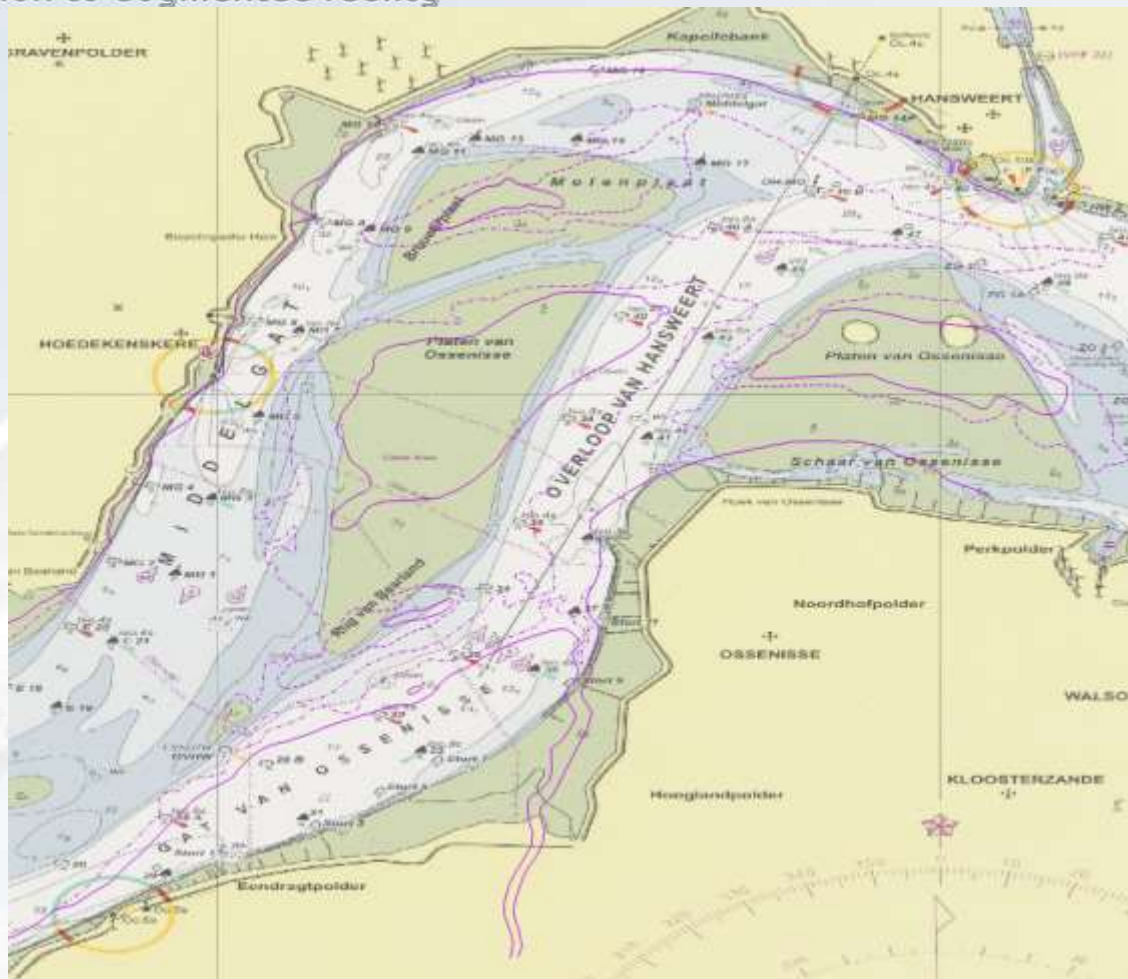
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Contours chart of 1799 on chart of 2010



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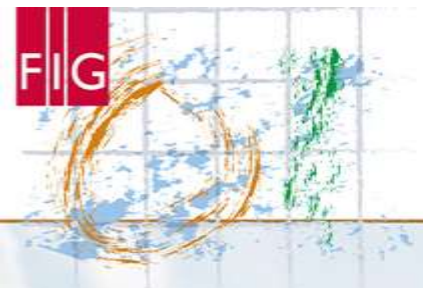


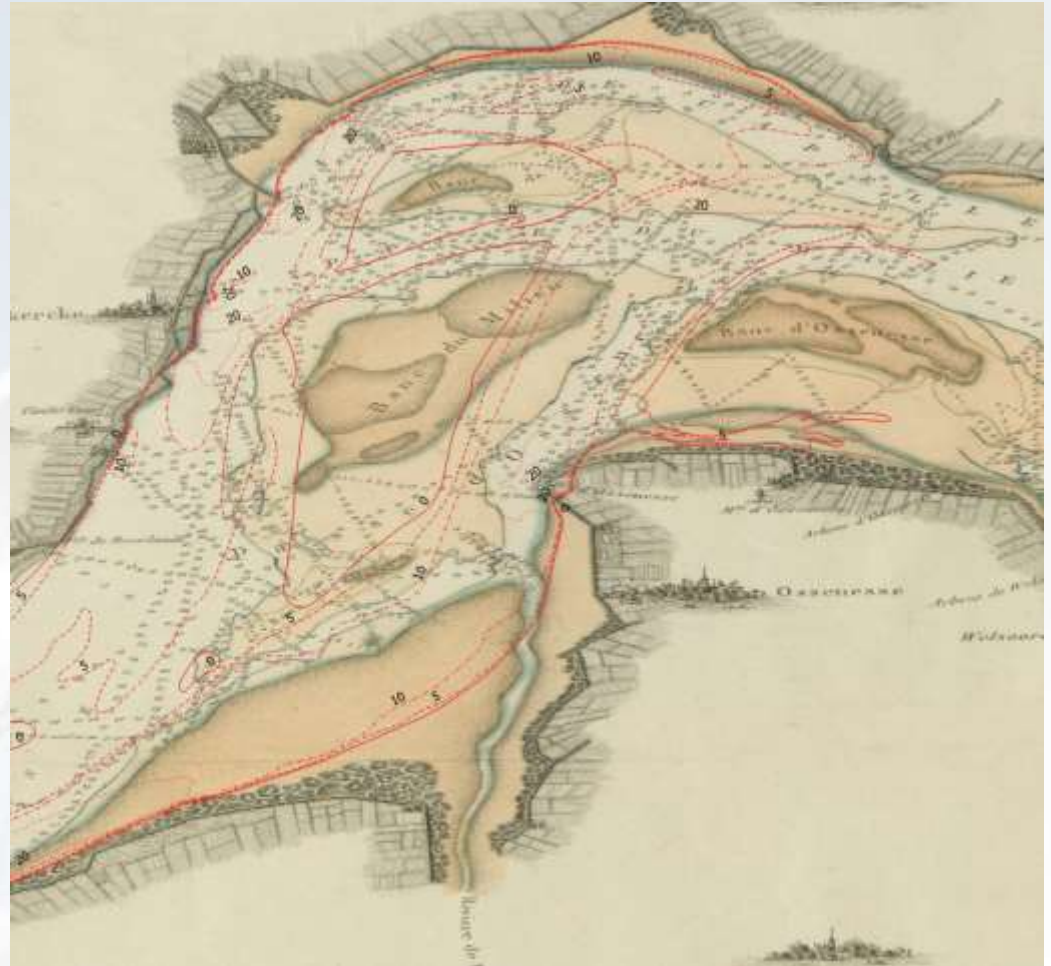
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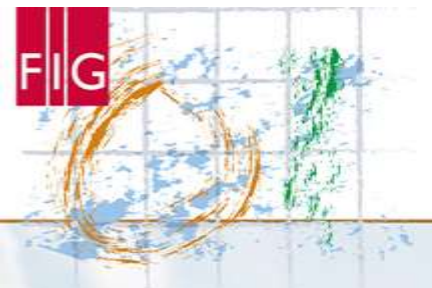


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Conclusions

- North riverbank matches on all charts.
- South riverbank with signs of erosion
- Sedimentation of North side of the river results in changing of Fairway in 1956 without human interference, later deepening of fairway by dredging works.
- Still missing: depth reference plane

Thank you for listening

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