



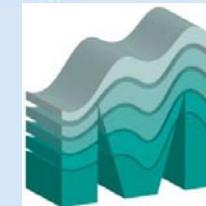
**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

**Applied geoscience for our
changing Earth**

Shallow geological mapping of the Inner Moray Firth and adjacent areas

Alick Leslie, Heather Stewart & Clive Auton

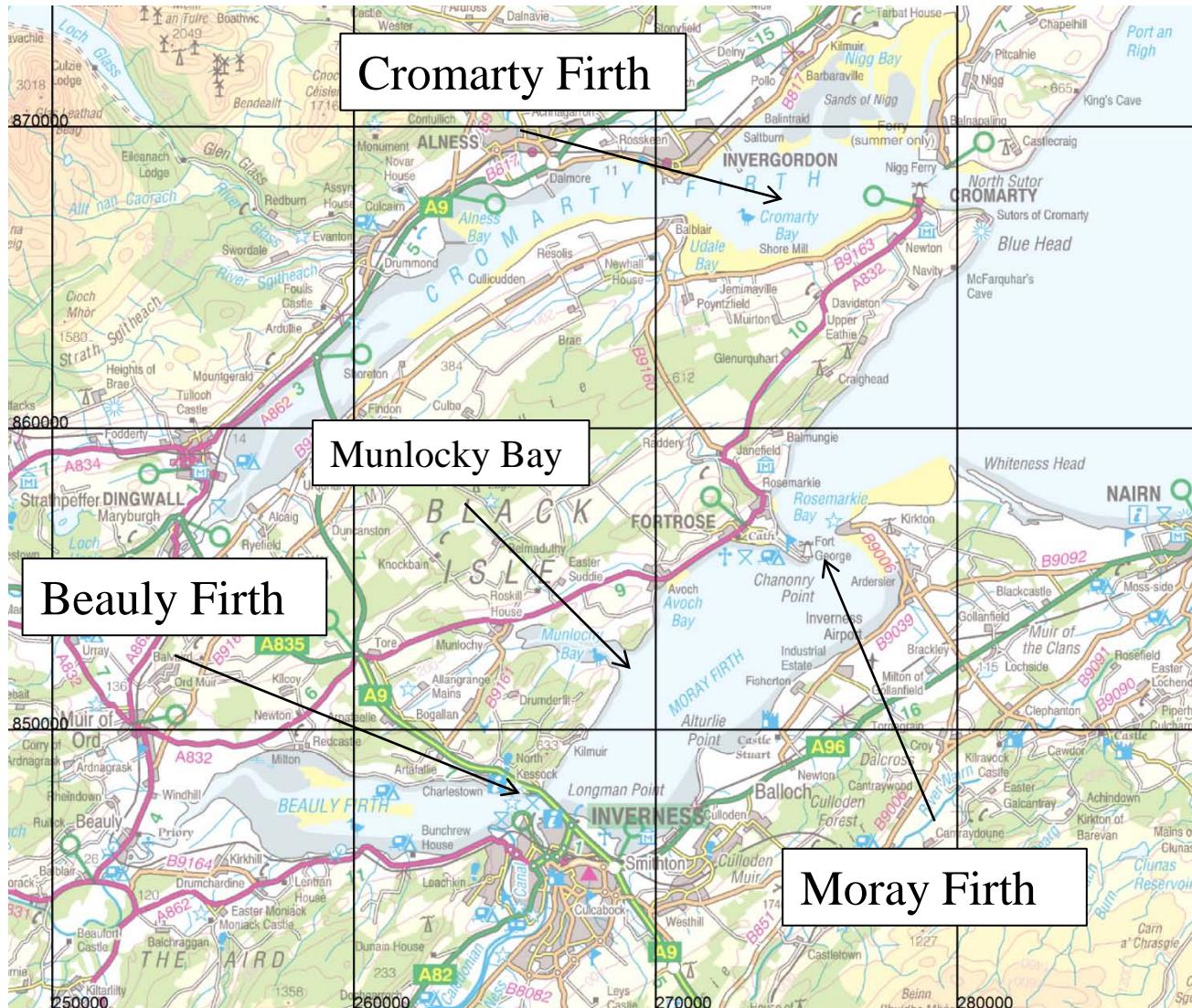
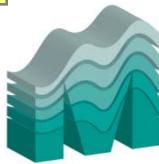


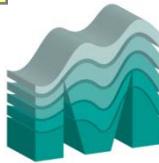
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BGS Cruise 2012_1

- Seismic and multibeam acquisition
- Data to help in understanding the glacial and post glacial history of the area
- Moray Firth area integrated with onshore modelling
- Other areas to be linked with onshore work in future
- Data will contribute to Sea Bed Sediments and Quaternary offshore map sheets
- Some revision of the solid geology map sheet

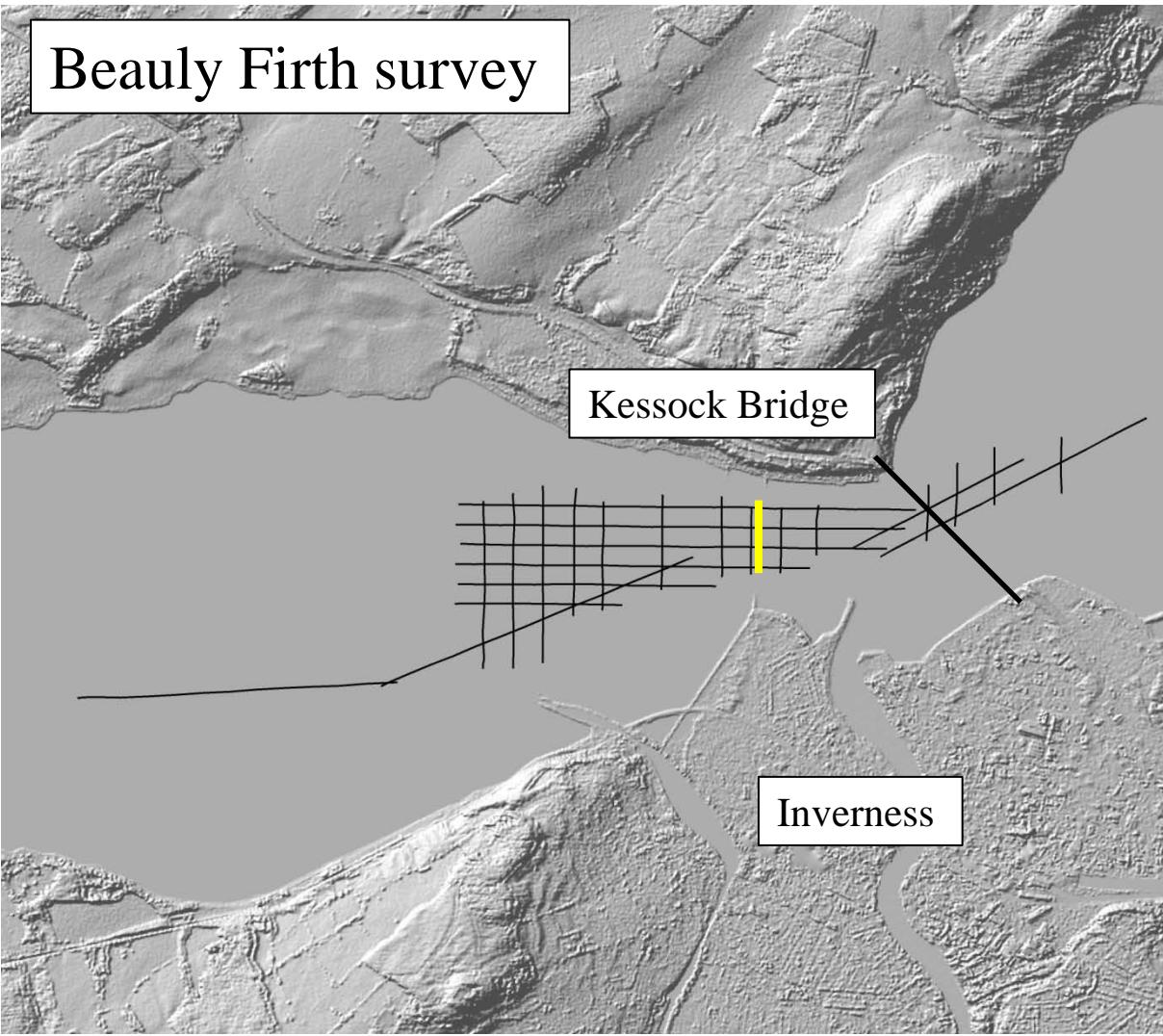


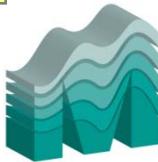




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North Kessock

INTERPOLATED CROSS-SECTION ALONG PROPOSED LINE OF DRILLING

Longman Quay

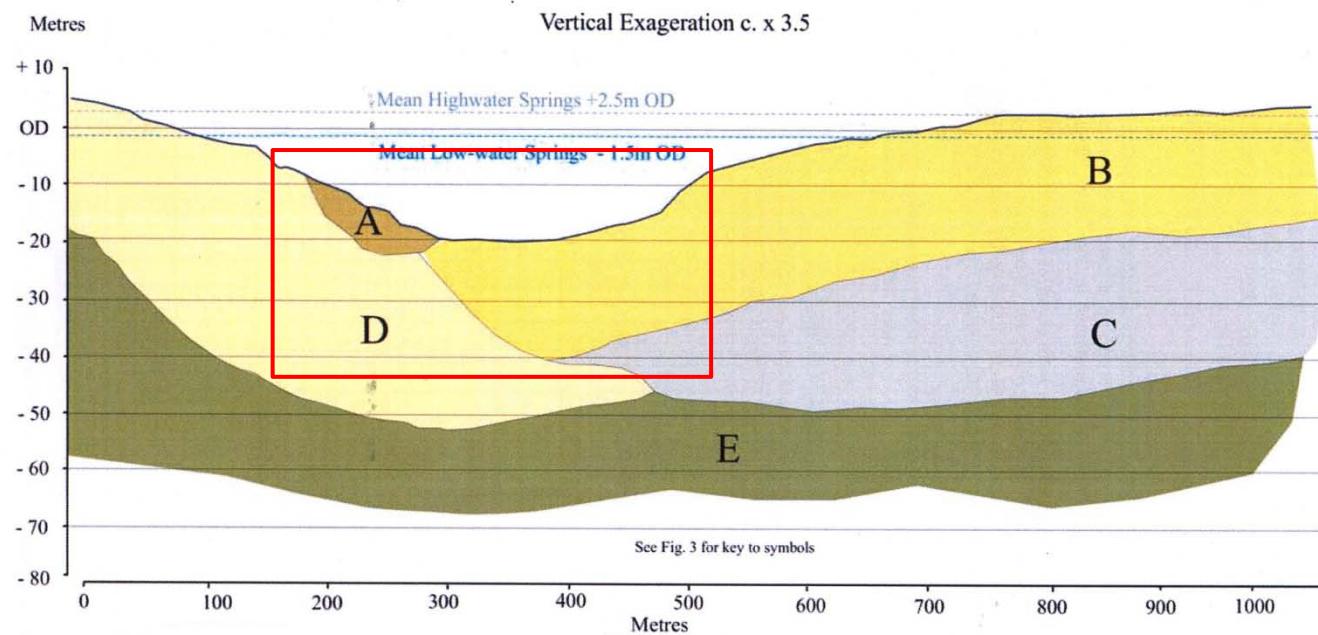
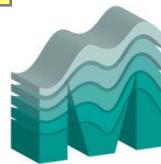
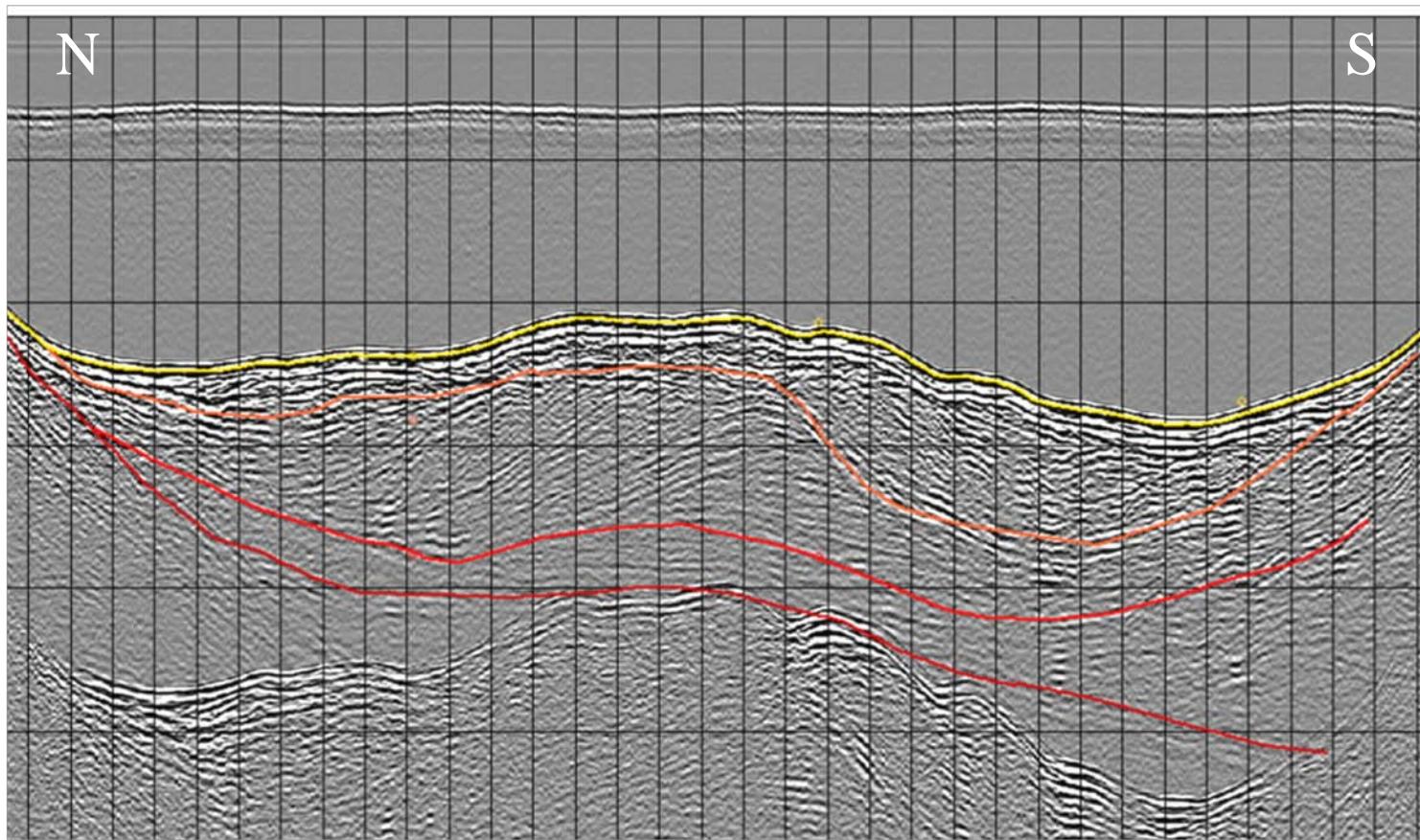


Fig. 5. Interpolated cross-section of the Superficial Deposits along the proposed drilling route



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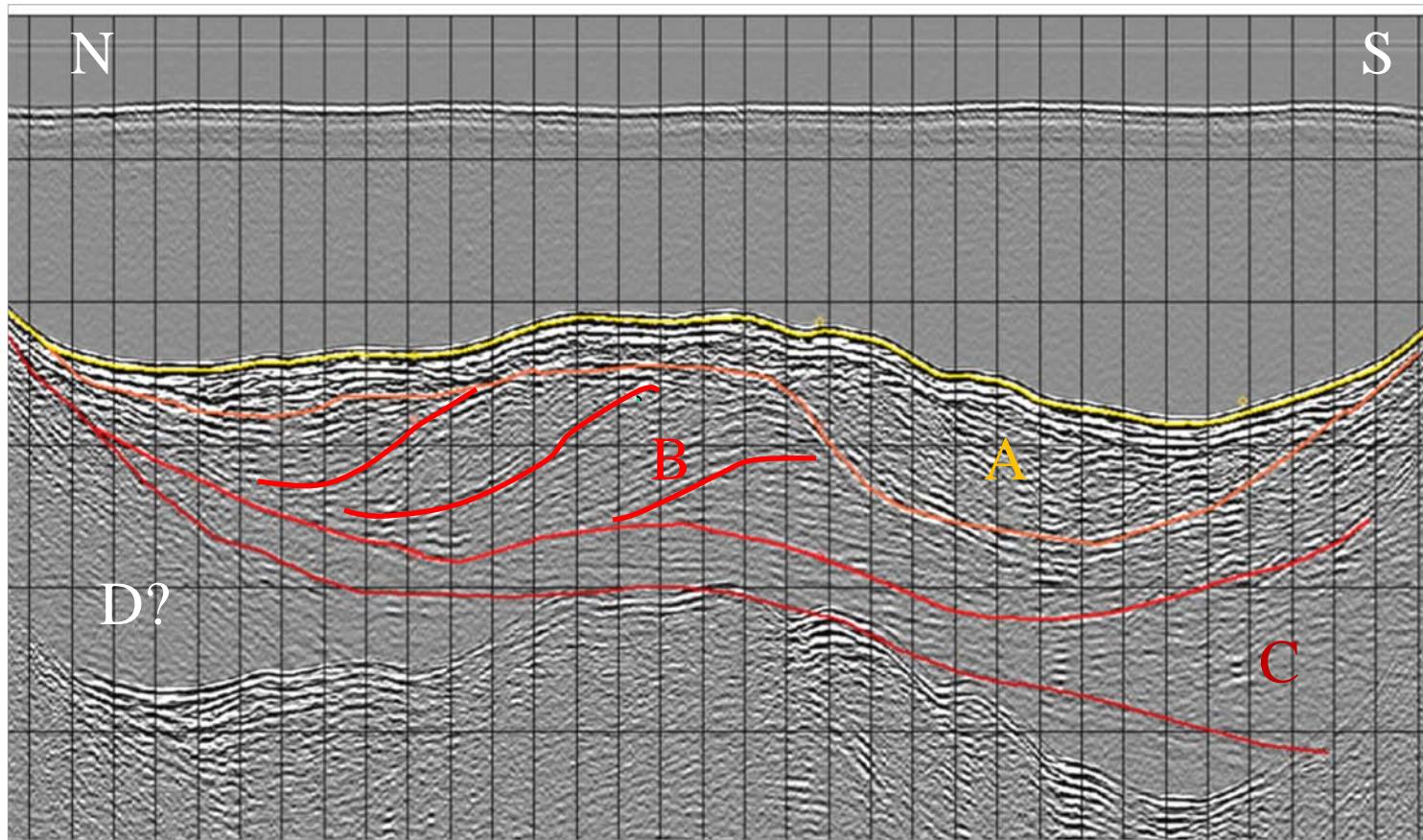
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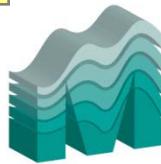




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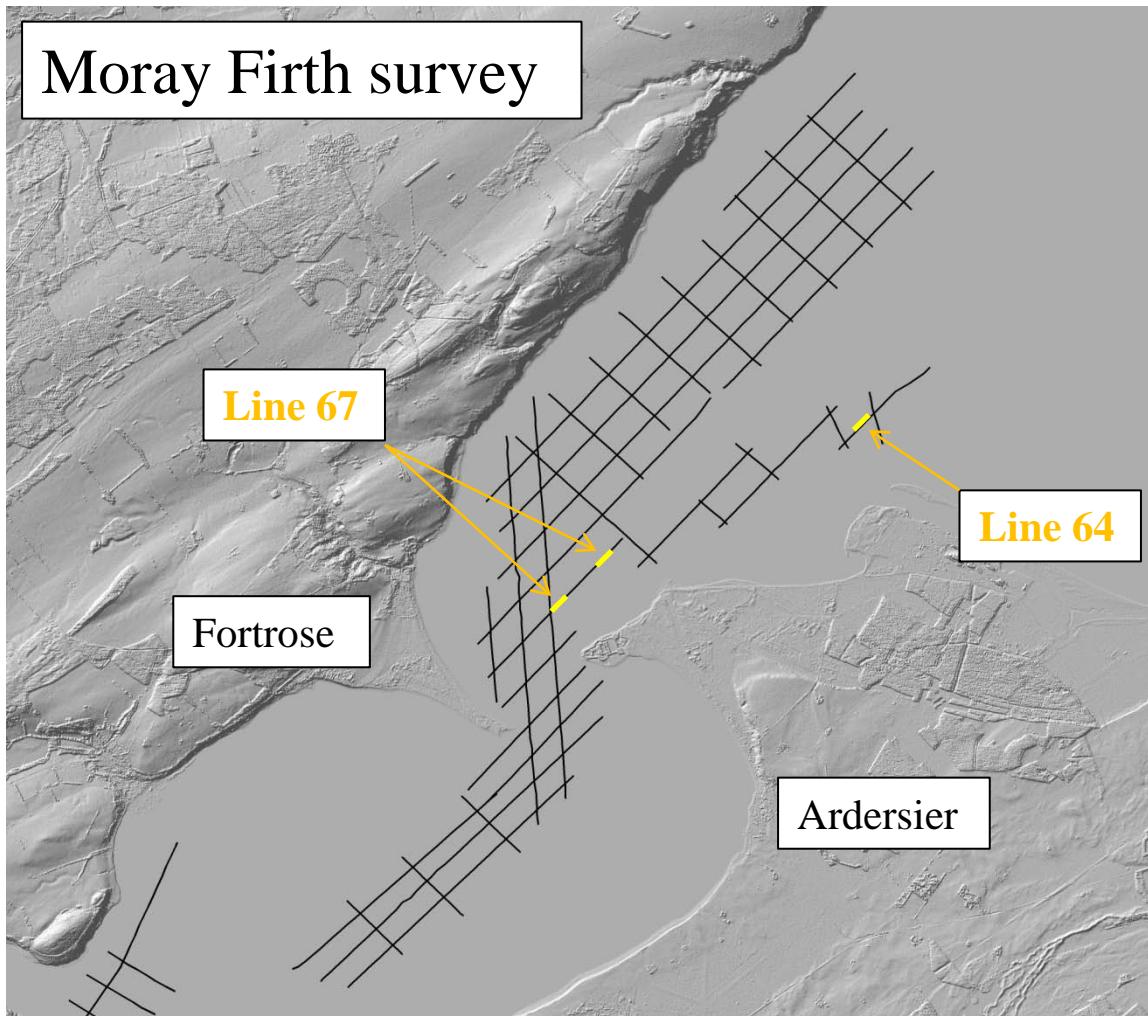
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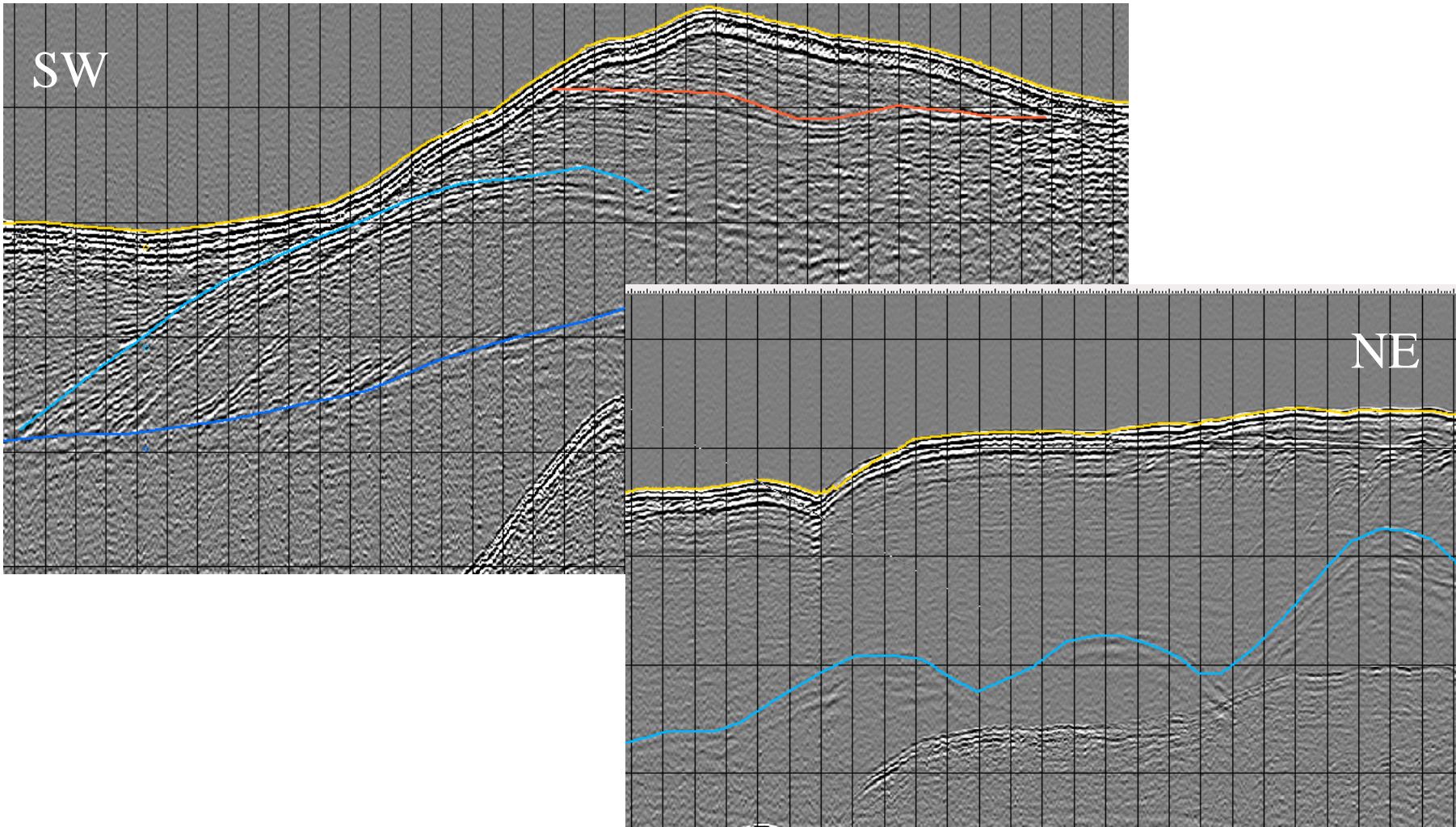


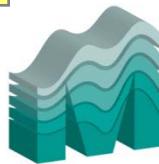


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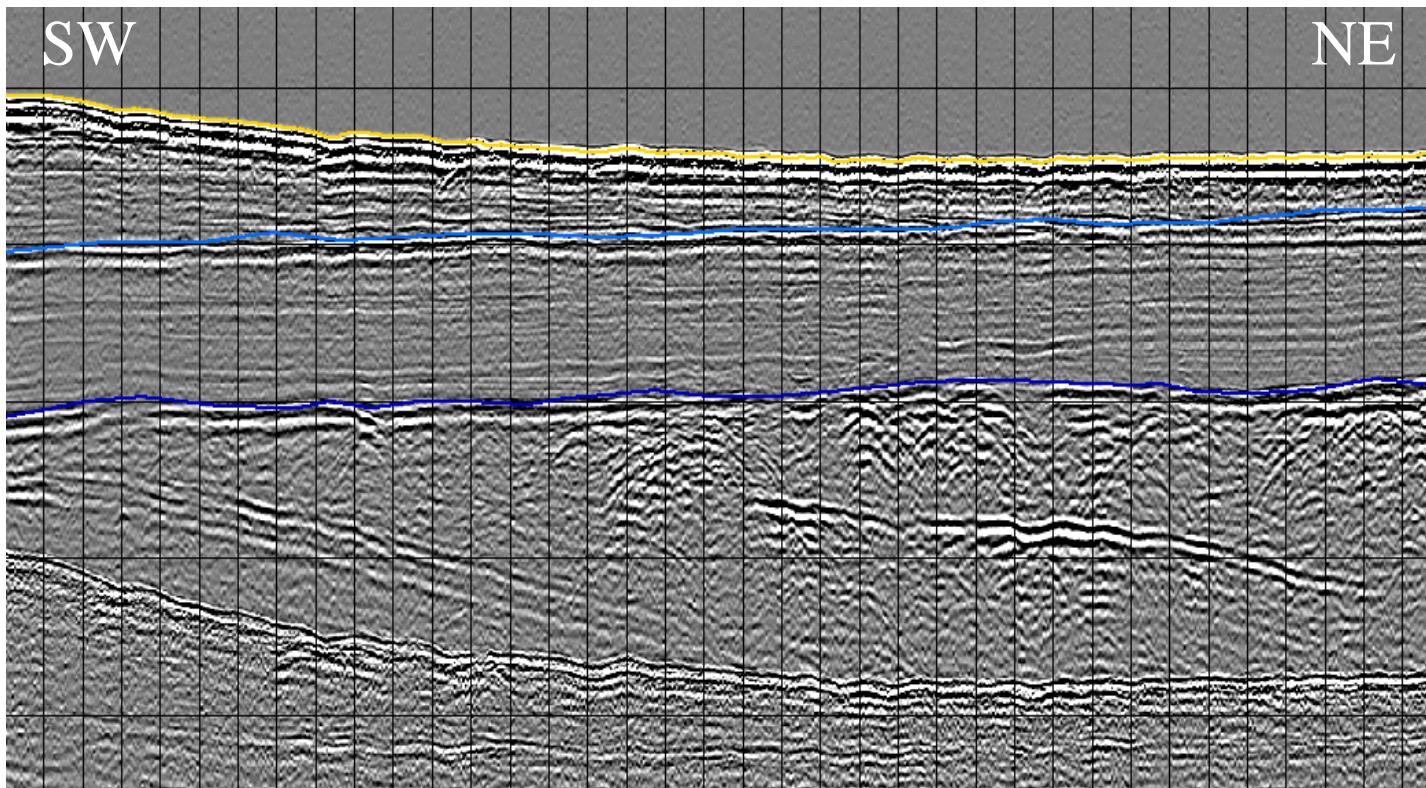


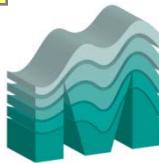


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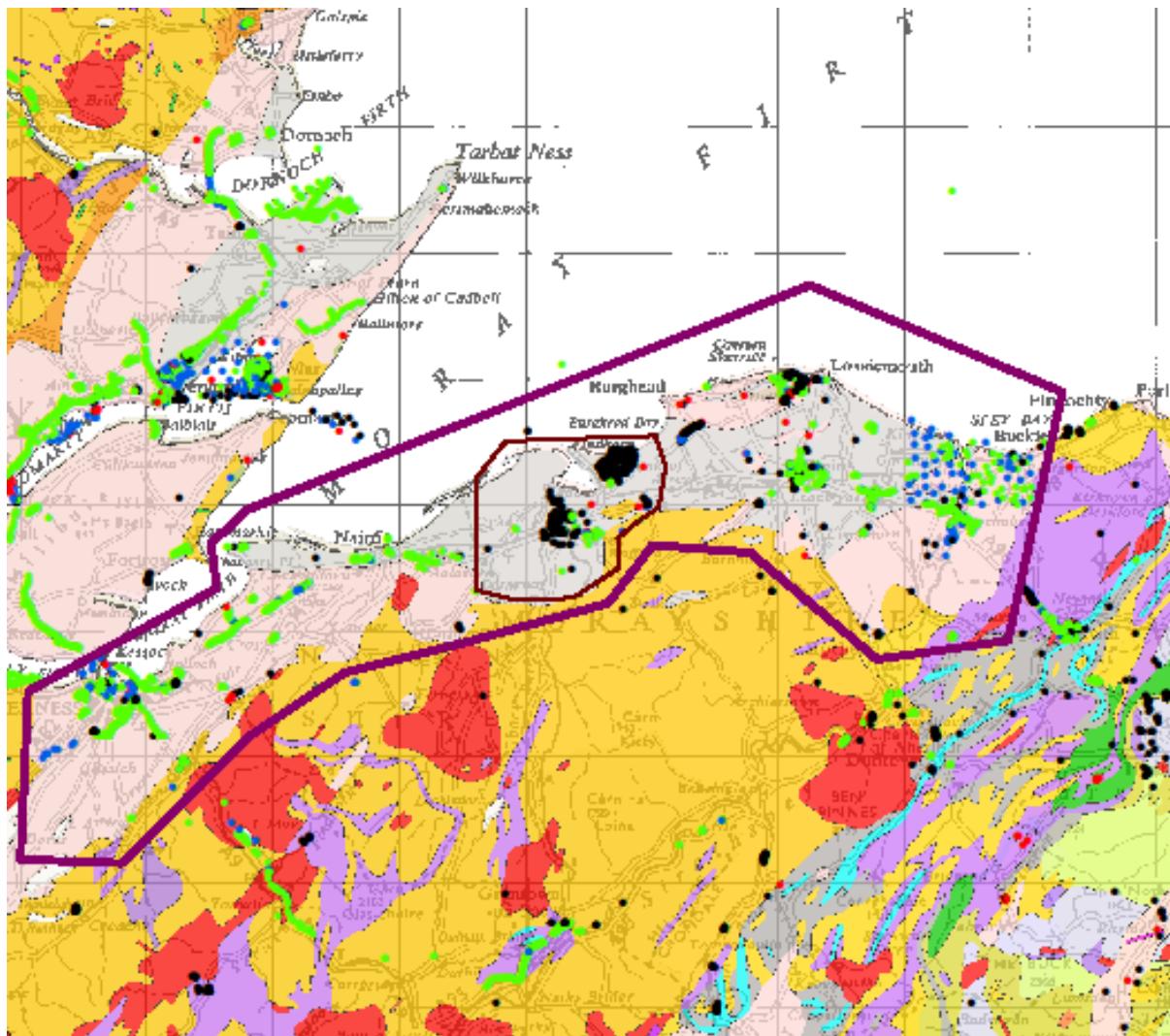
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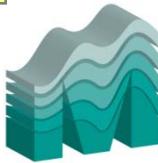




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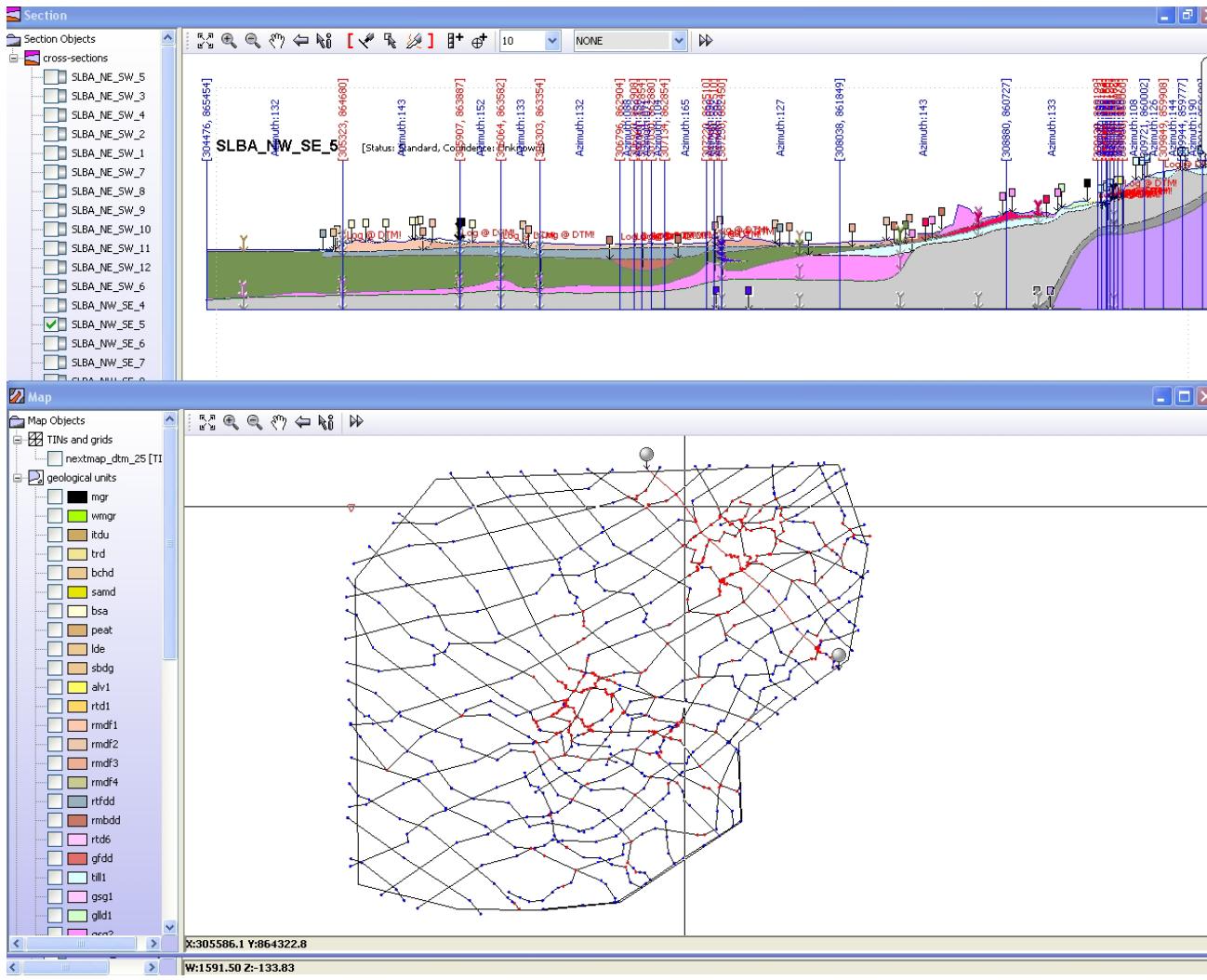
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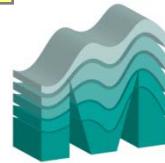




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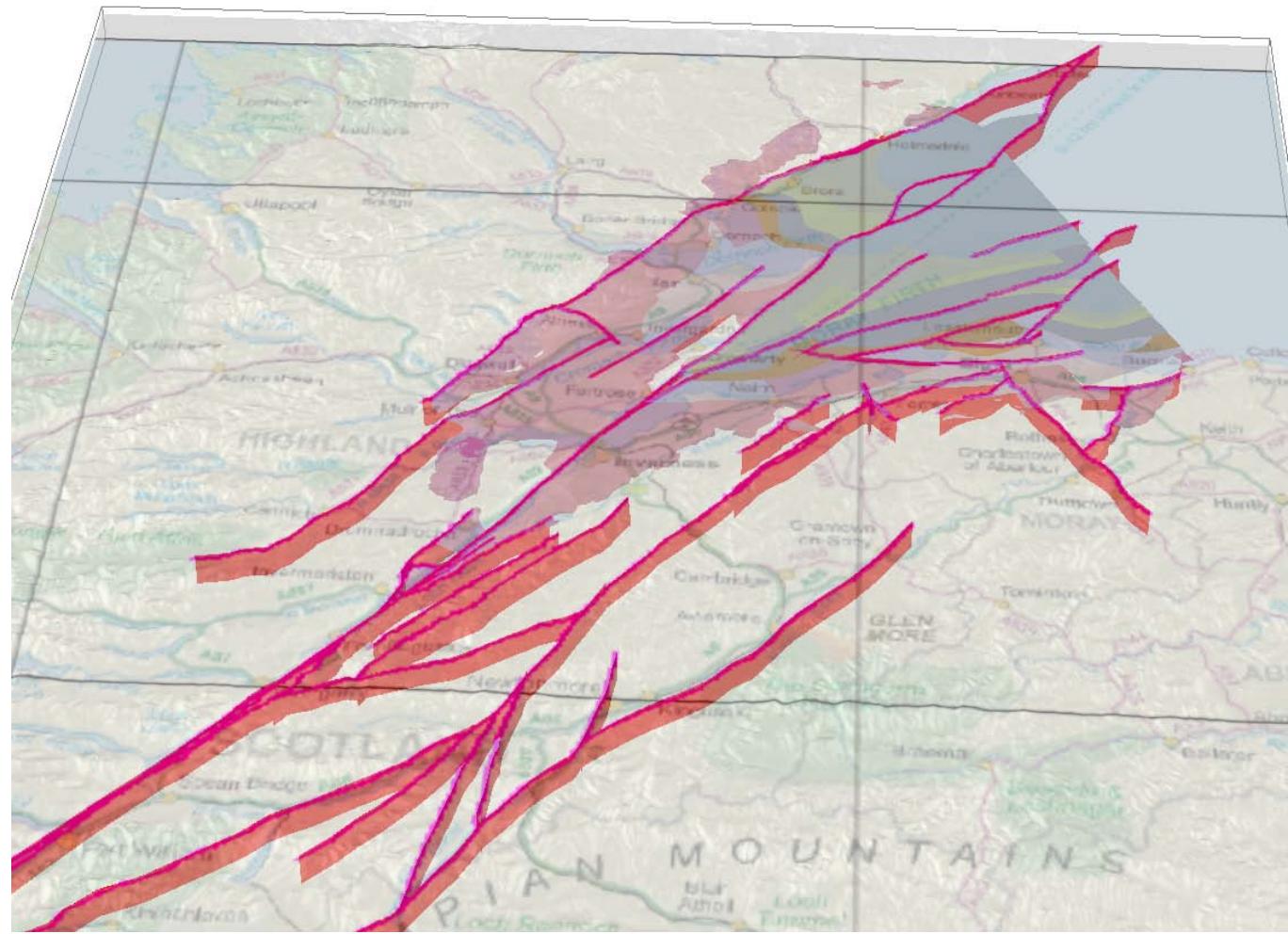
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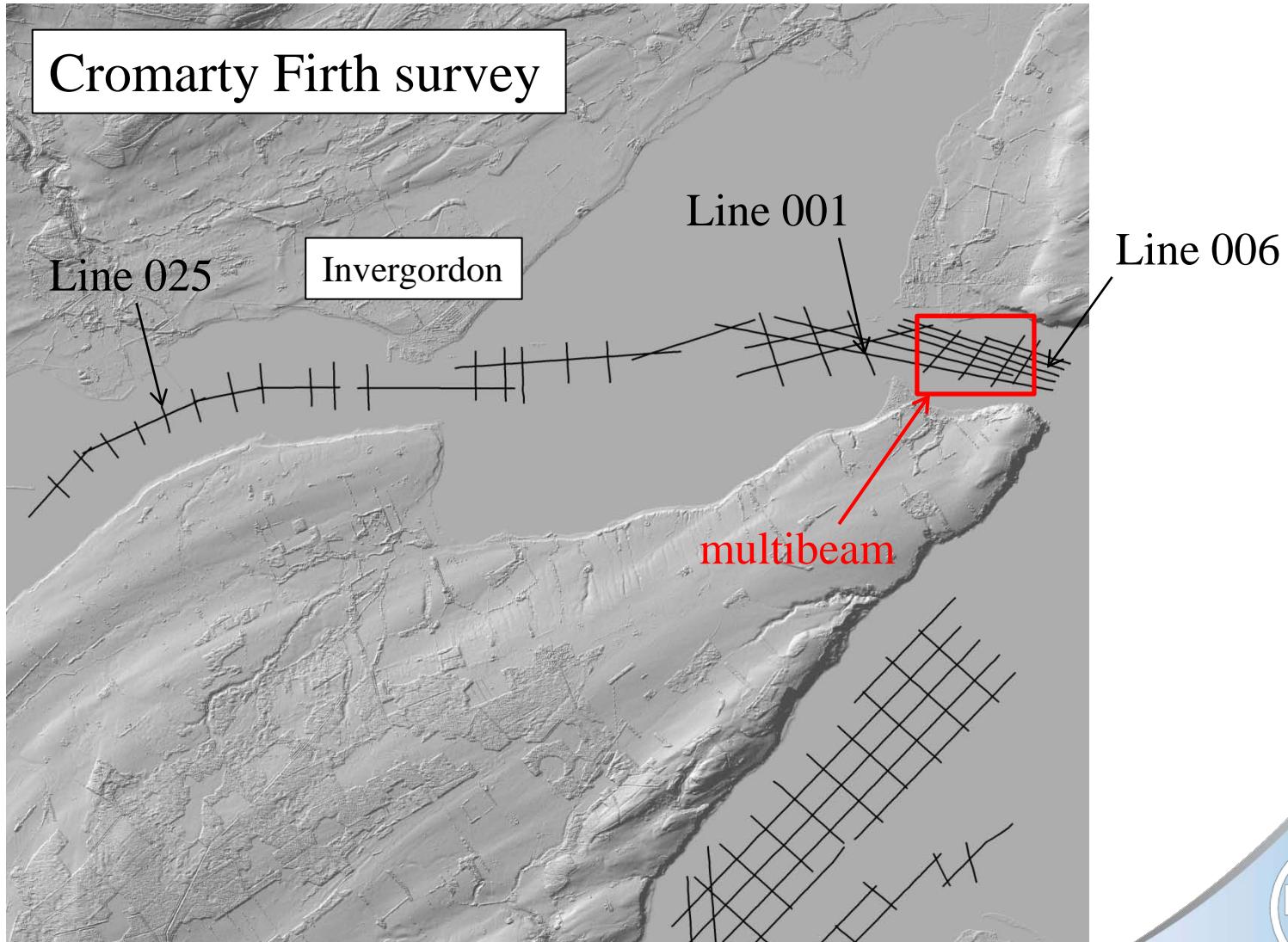
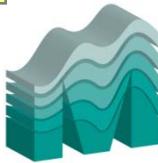




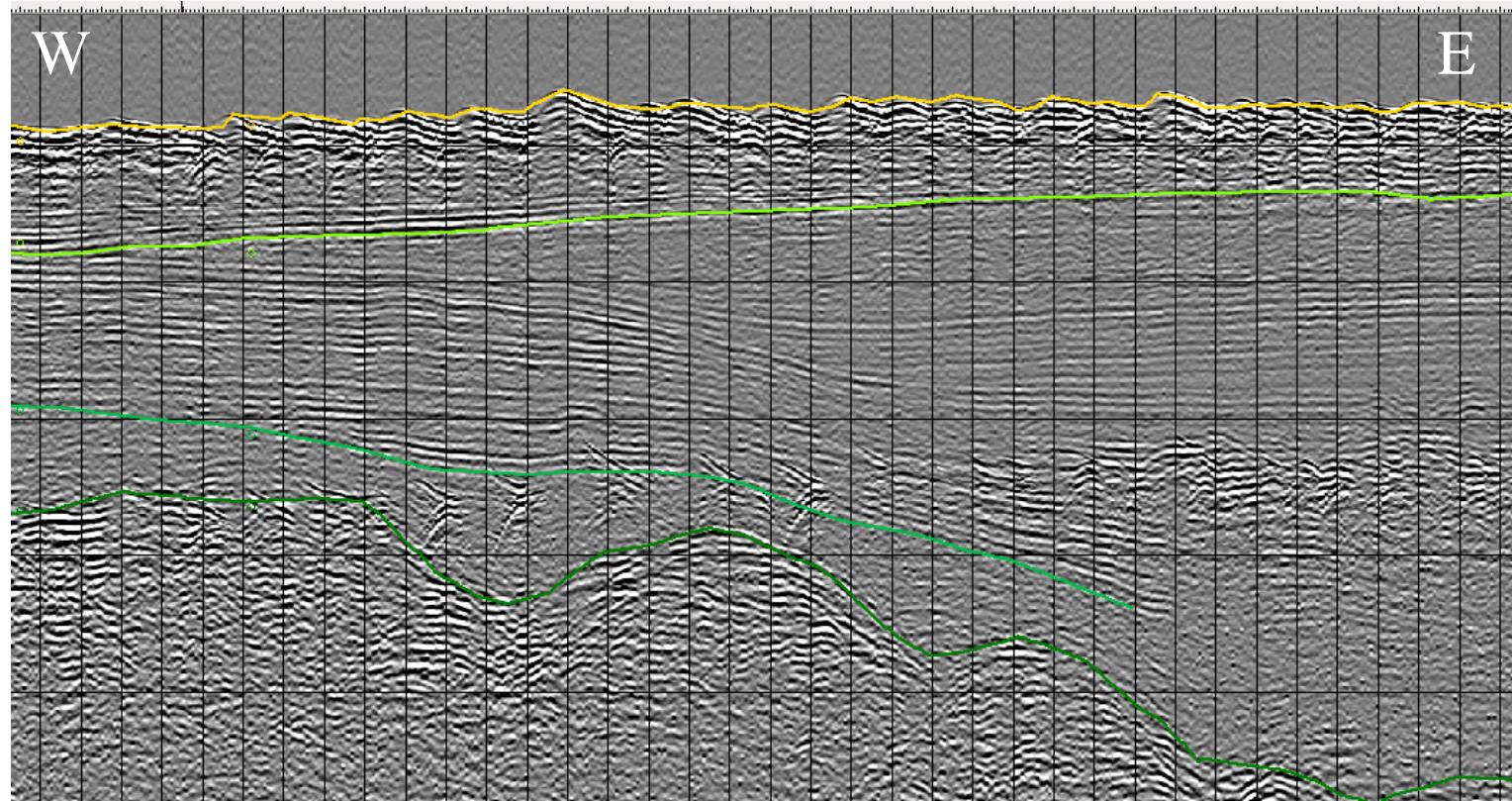
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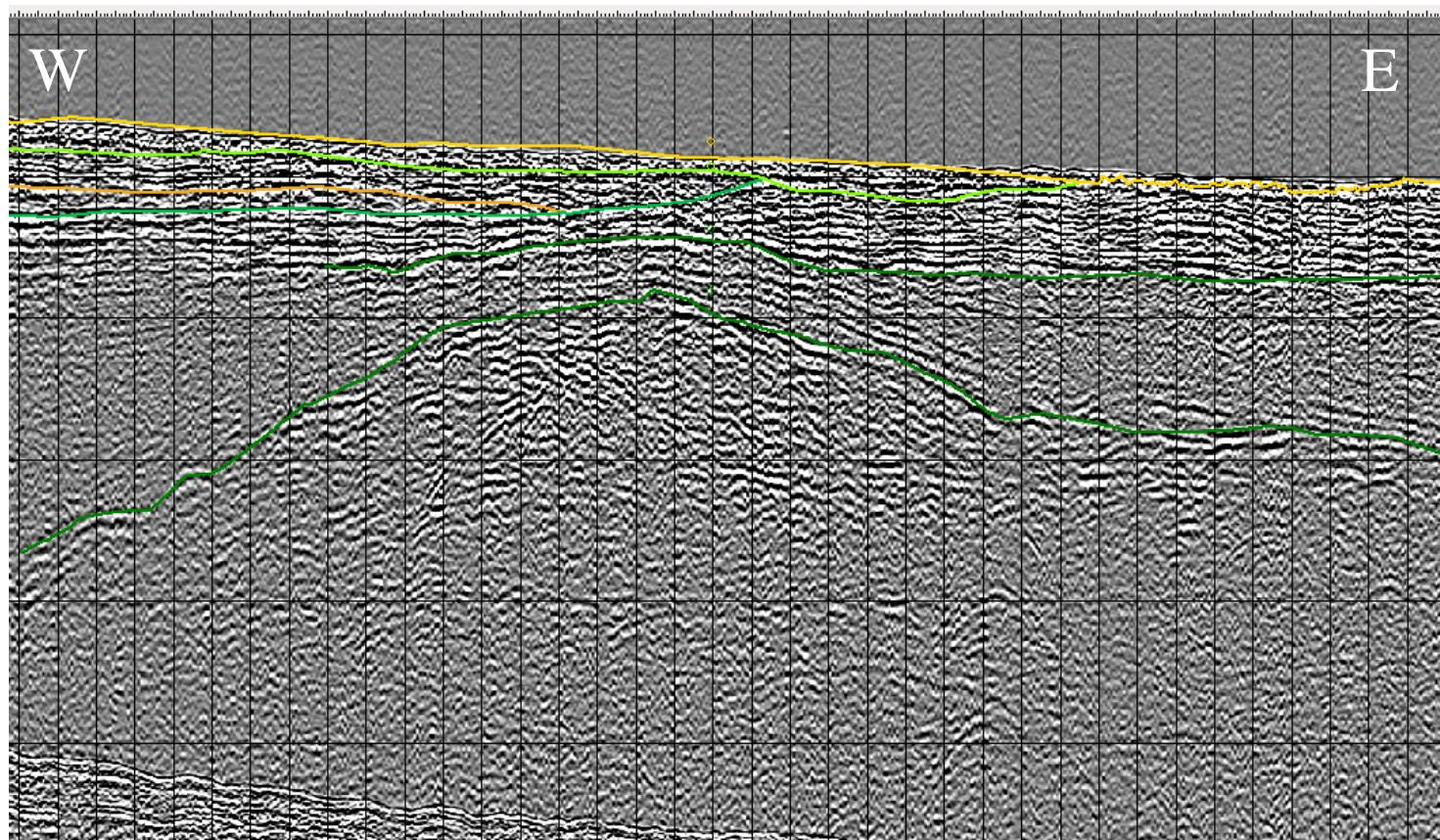


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Line 001

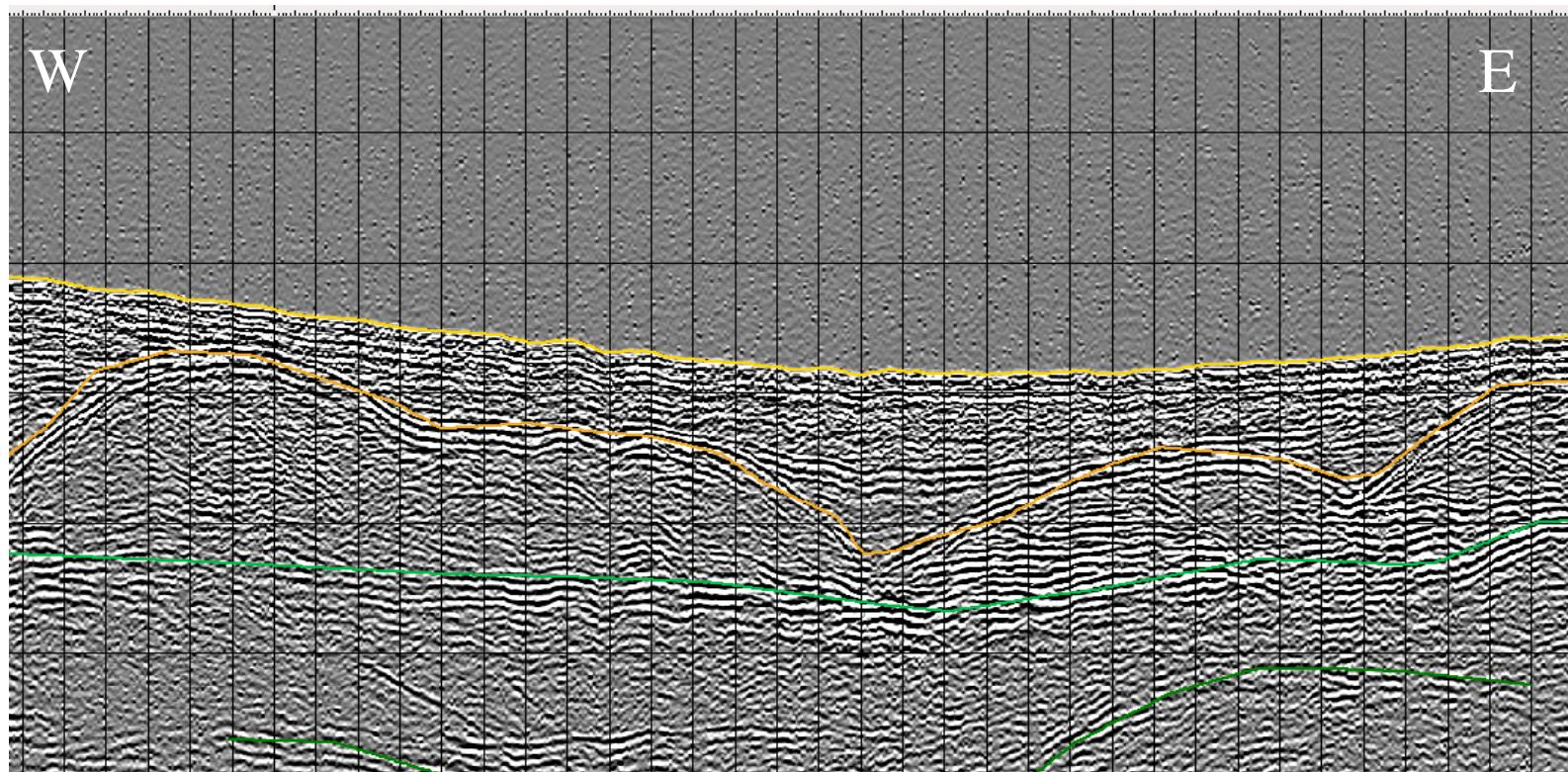


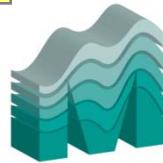


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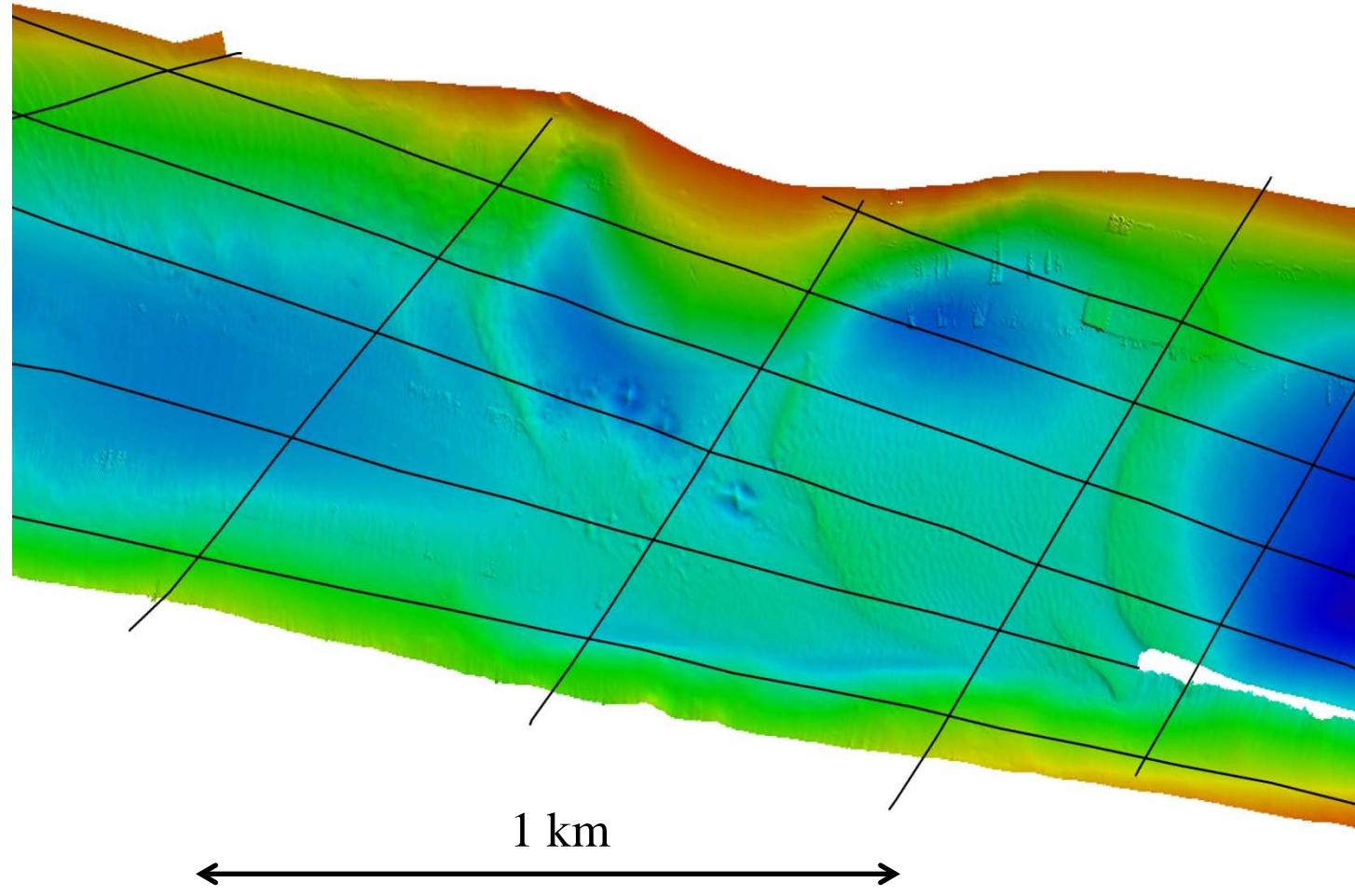
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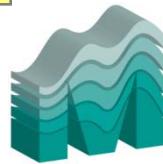




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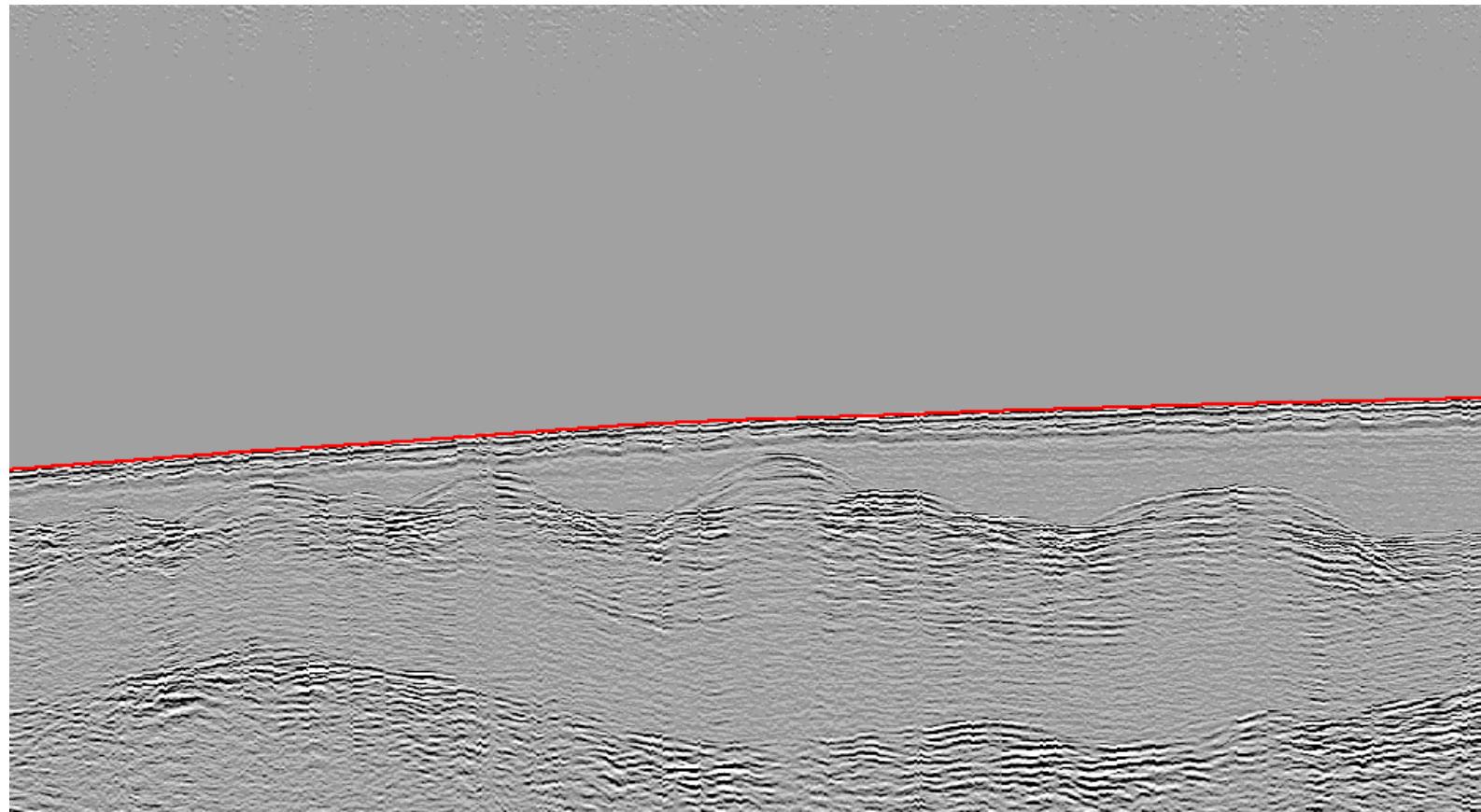
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Conclusions

- Some parts of the Beauly Firth allow good correlation of new seismic data with existing borehole records.
- There is some potential for combining offshore and onshore work in the area (see Auton et al. Poster).
- While late glacial sediments are commonly not resolved in the seismic data, post glacial to Holocene packages can be mapped out.
- This work, with additional multibeam data in other parts of the Moray firth, will lead to SBS, Quaternary and bedrock panels for the Maremap programme.