

Palaeomagnetisma - arvurin, sum lærir okkum um føroyiske jarðfrøðina

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Jarðfeingi

Spurningar at svara

- **Hvat er palaeomagnetisma?**
 - Magnetisering av grýti / globalt felt / pól-skiftir
- **Hvussu arbeiða vit við palaeomagnetismu?**
- **Hvat lærir Palaeomagnetisma okkum um føroySKU jarðfrøðina?**



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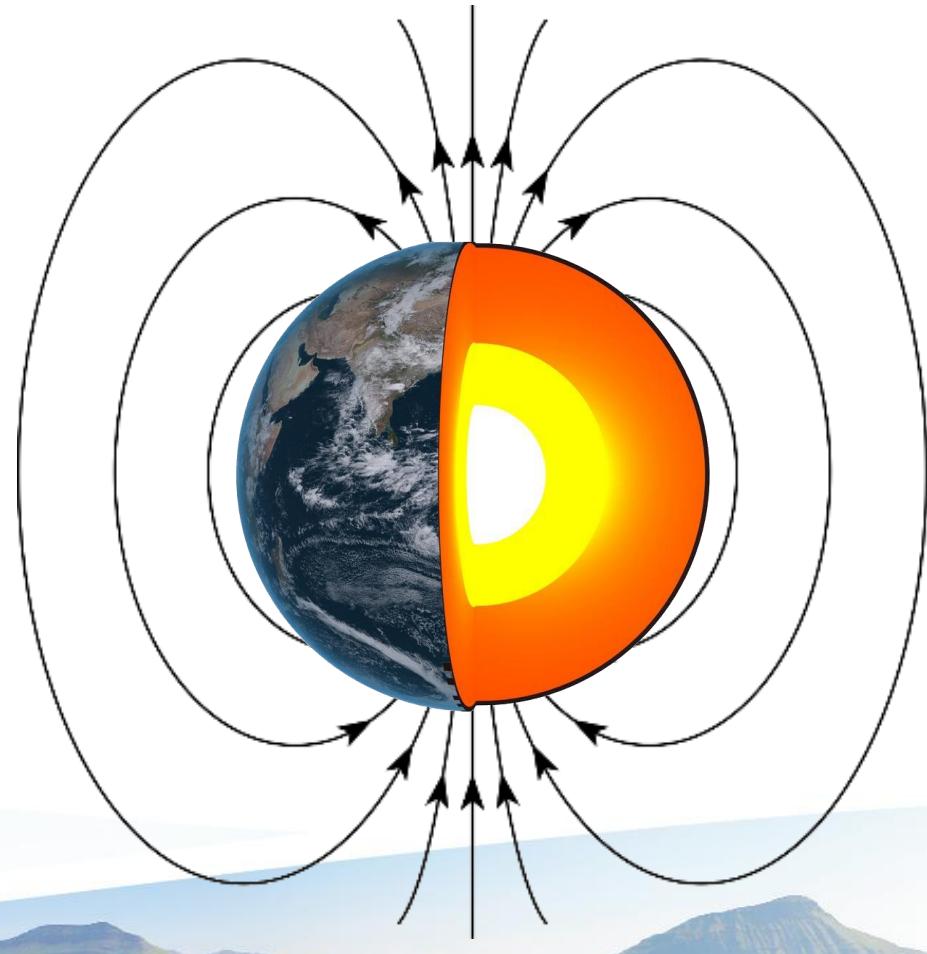
How natural remanent magnetization of basaltic units can dominate the reduced to pole magnetic value: A case study from the Faroe Islands

Heri Ziska^{1*}, Paul Williamson² and Óluva Reginsdóttir Eidesgaard¹

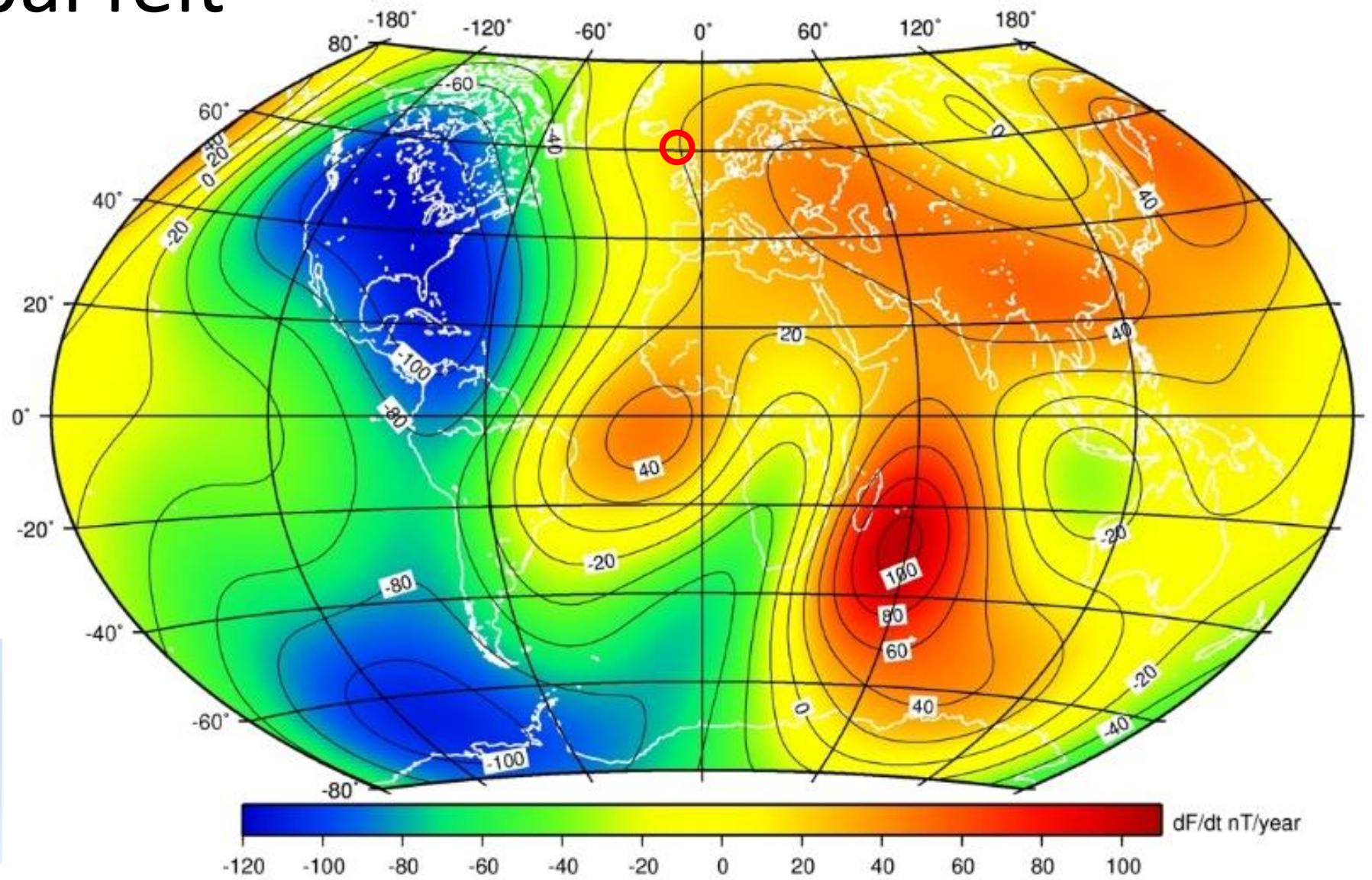
¹Faroese Geological Survey, Jóannesar Paturssonargøta 32–34, Postsmoga 3059, FO-110 Tórshavn, Faroe Islands, and ²British Geological Survey, Keyworth, Nottingham NG12 5GG, UK

Globalfeltið

- Magnetlinjur ganga frá pluss til minus
- Jørðin er ein stór magnet
- Upprunin er at finna í uttaru kjarnu

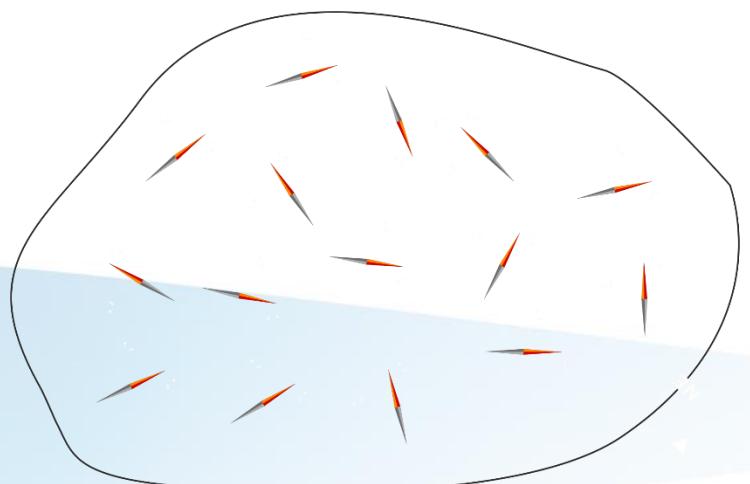


Gobal felt



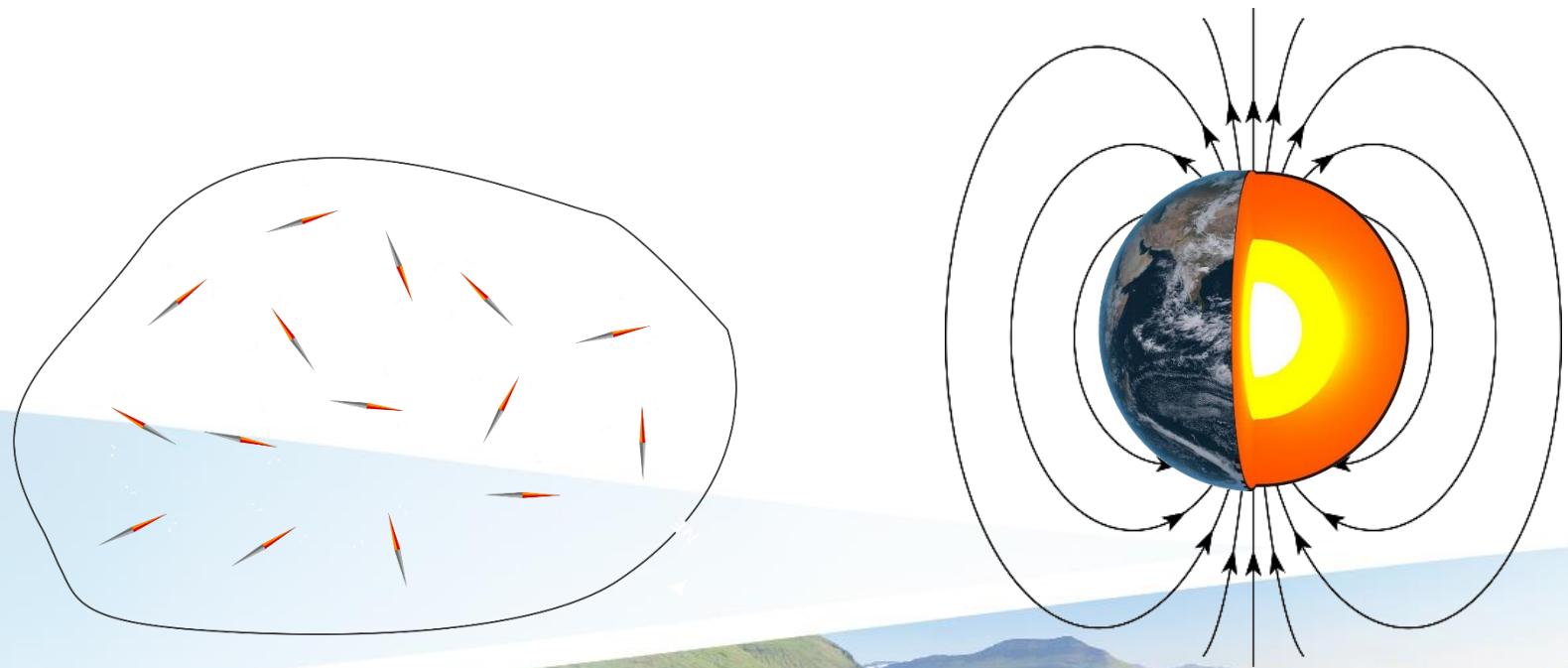
Magnetisering av lava

- Onki magnetfelt: grýtið er ómagnetiskt



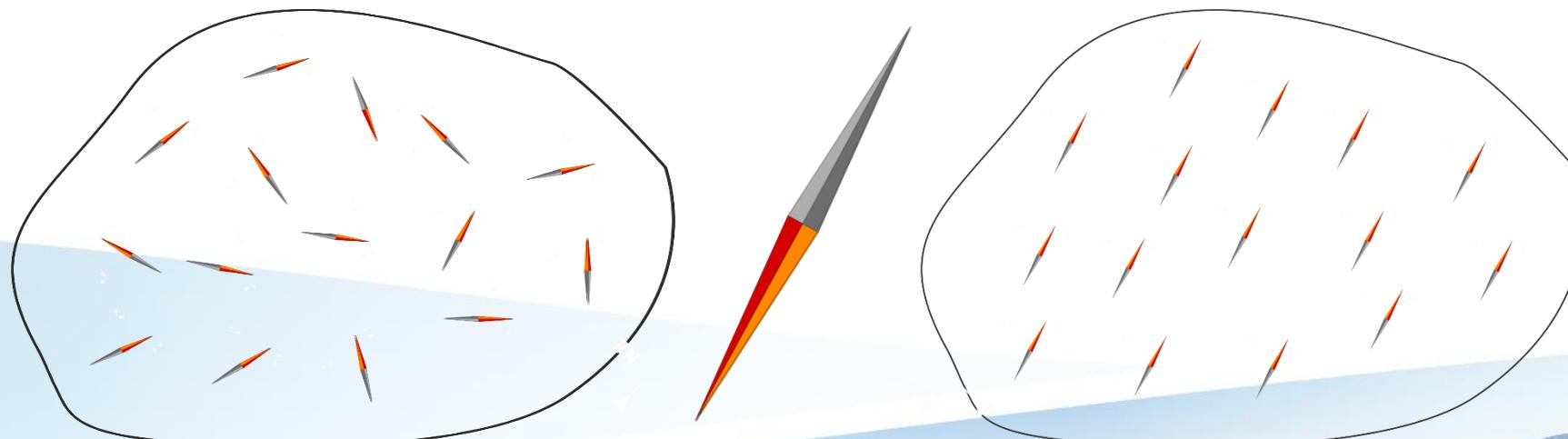
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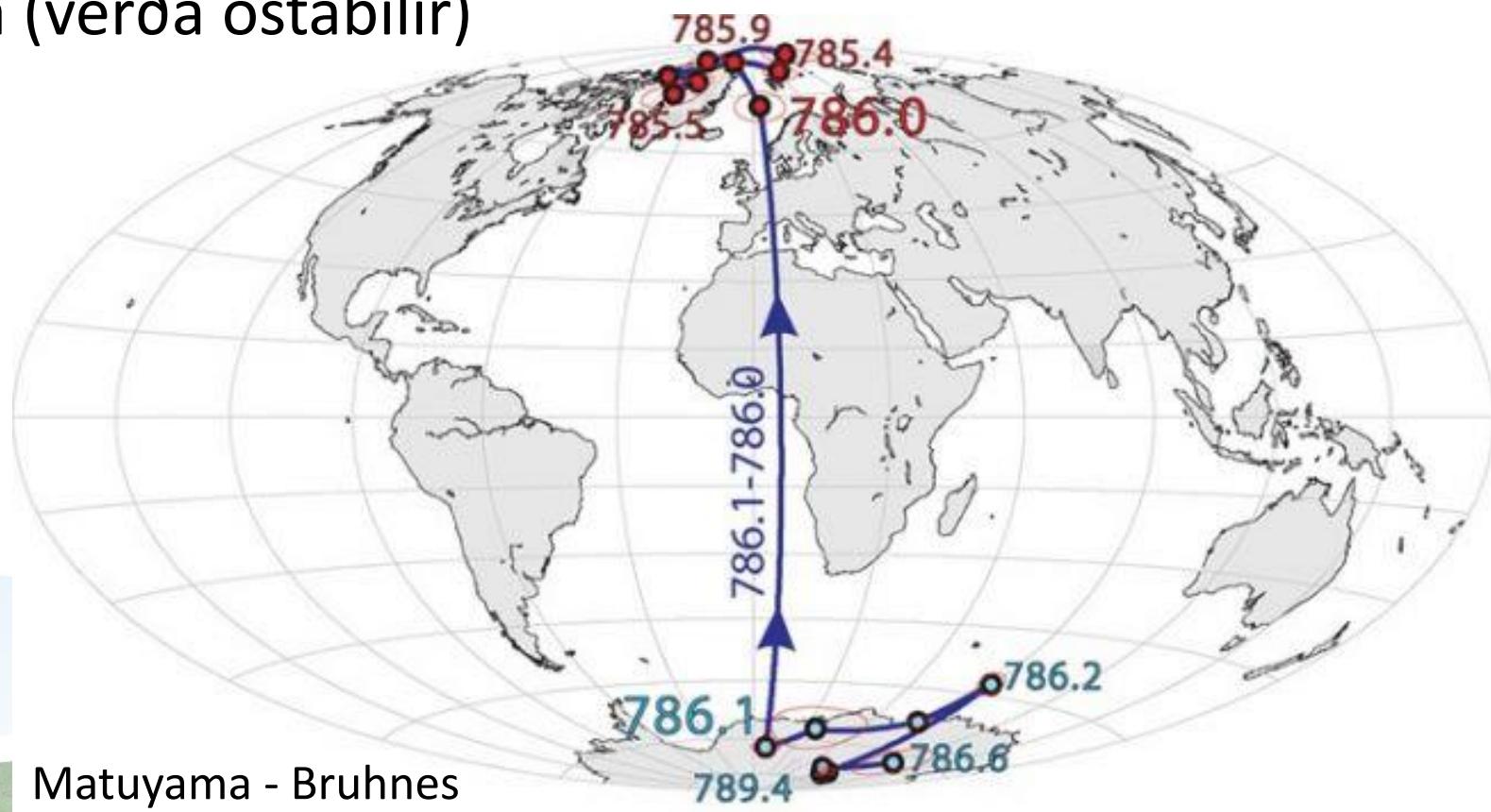
Magnetisering av lava

- Onki magnetfelt: grýtið er ómagnetiskt
- Globalfeltið hevur styrki og rætning
=> grýtið gerst magnetiskt



Tá pólarnir skifta pláss

- Fyrst minkar styrkin til uml 1/10
- So fara pólarnir at reika (verða óstabilir)
- So koppa teir á
- So stabilisera teir seg



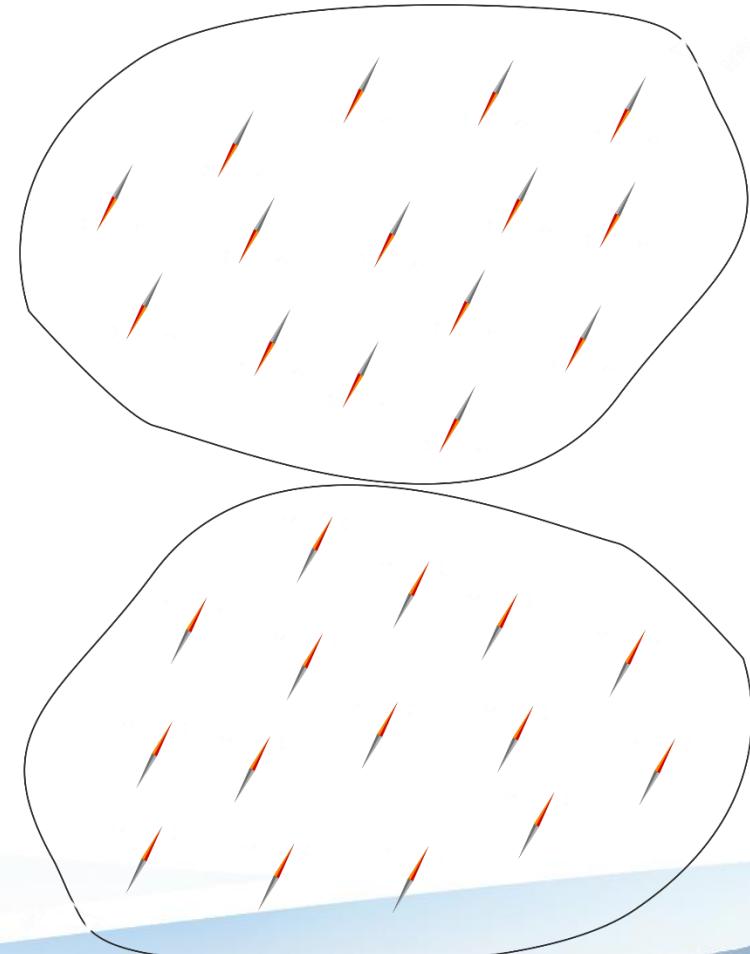
Magnetisering av lava

Eksternt magnetfelt:

=> grýtið blívur magnetiskt

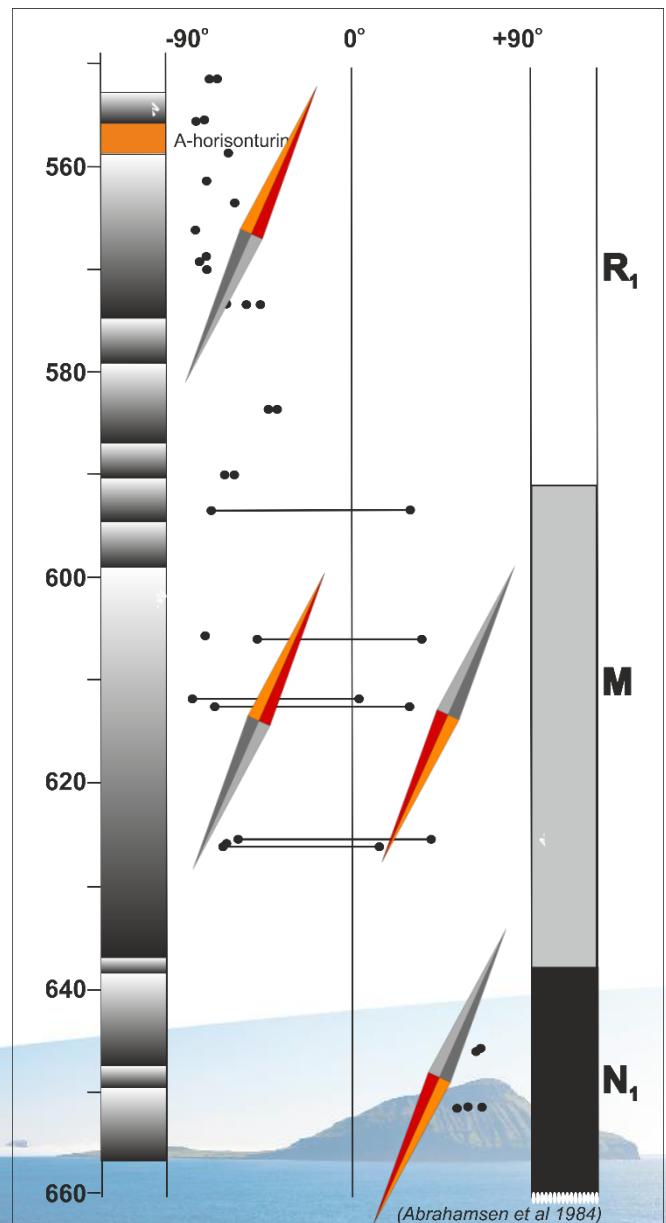
Tá pólarnir skifta:

=> grýtið blívur magnetiskt –
mótsattan veg



Vestmanna - 1

- Magnetiski norðpólurin er á suðurpólinum
- Pólurin er óstabilur (viknaður nógv eisini)
- Magnetiski norðpólurin er á norðpólinum

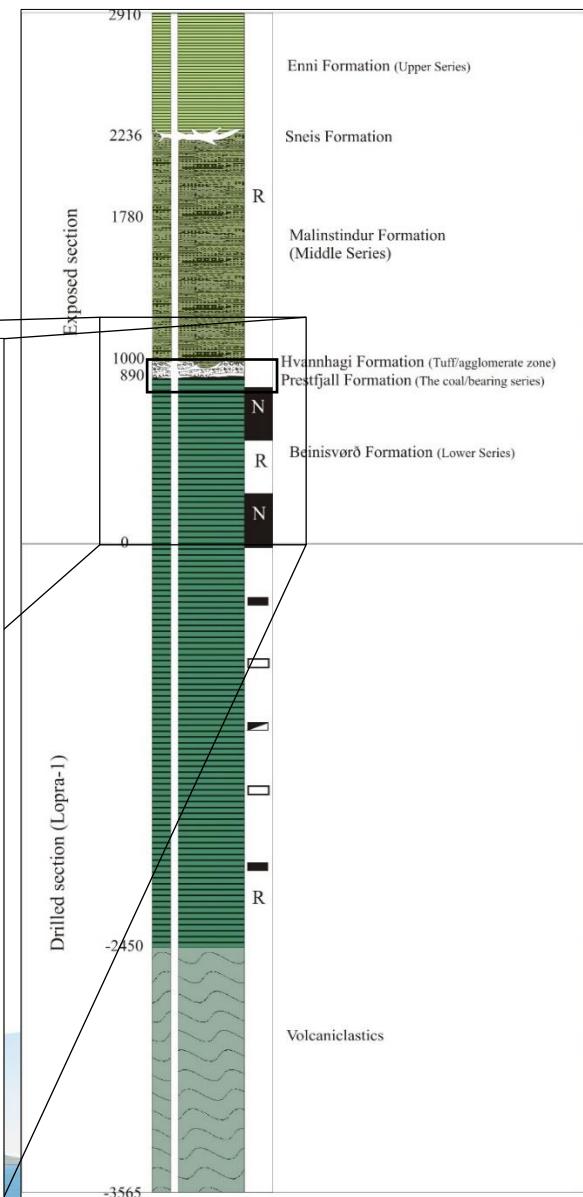
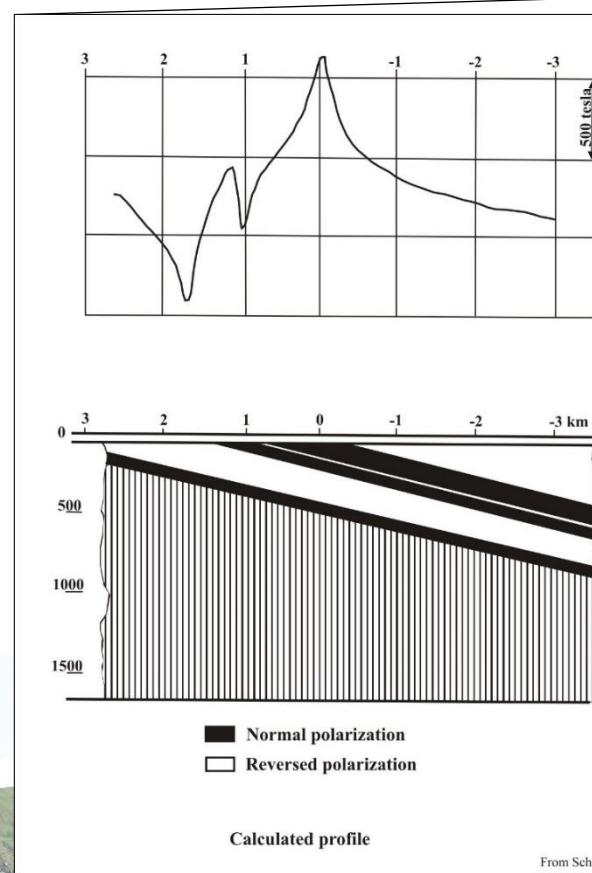


Fleiri pól-skifti fangað í basaltinum

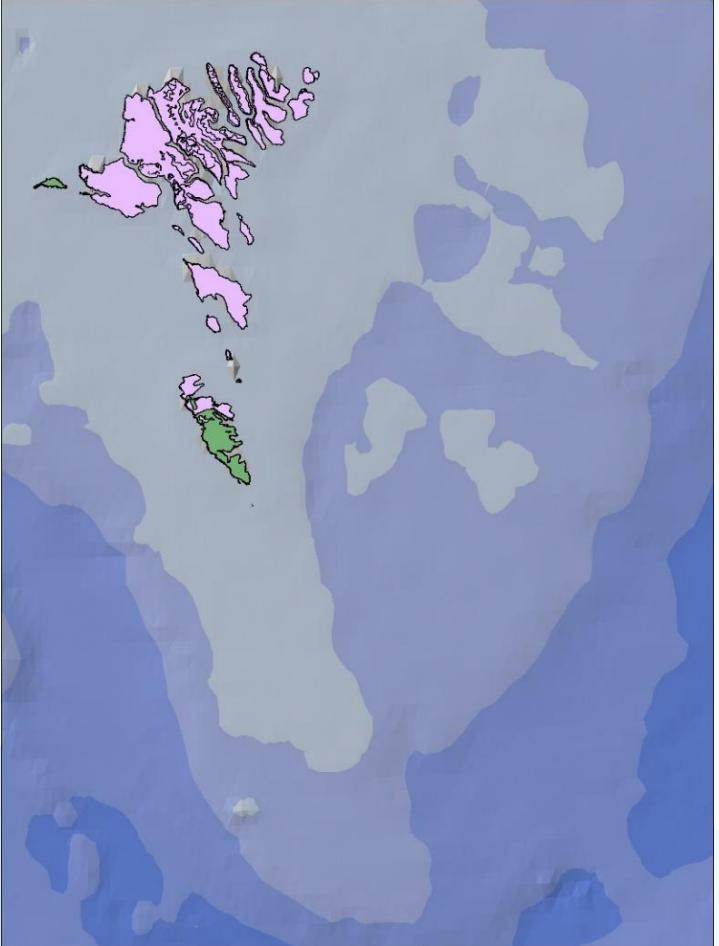
- Niðaru fláðir:
 - Reverse/Normal/Reverse/Normal/Reverse
- Mið- og ovaru fláðir
 - Reverse



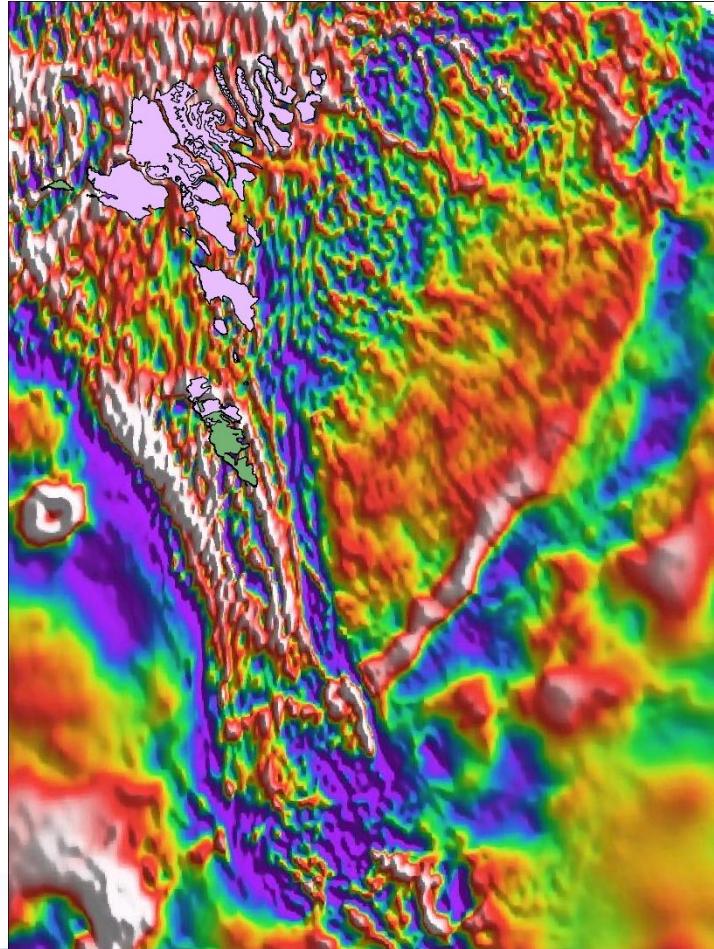
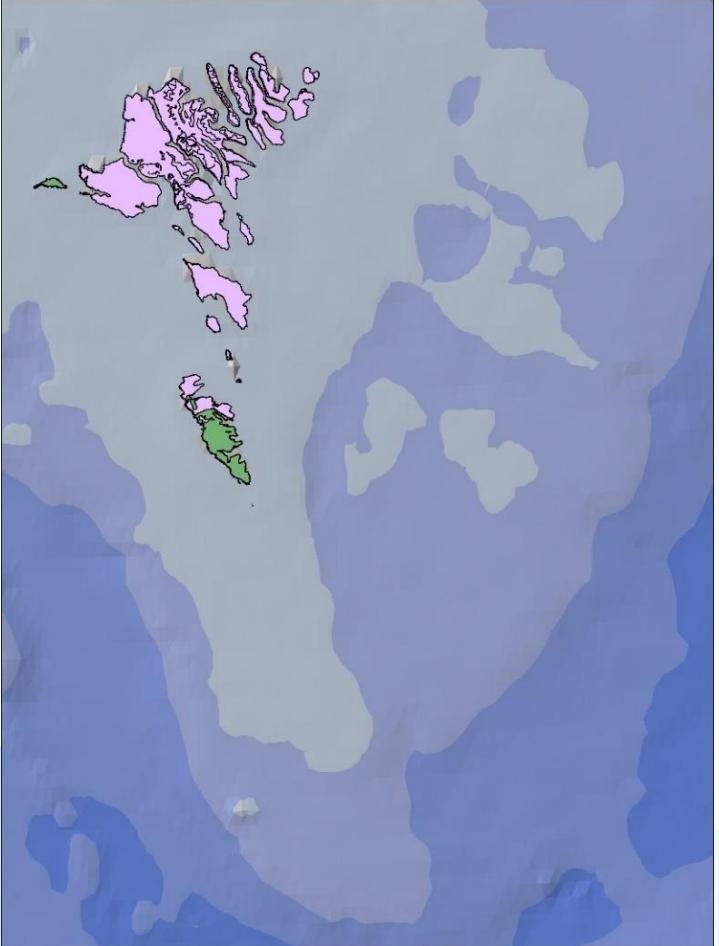
Modell frá 1971



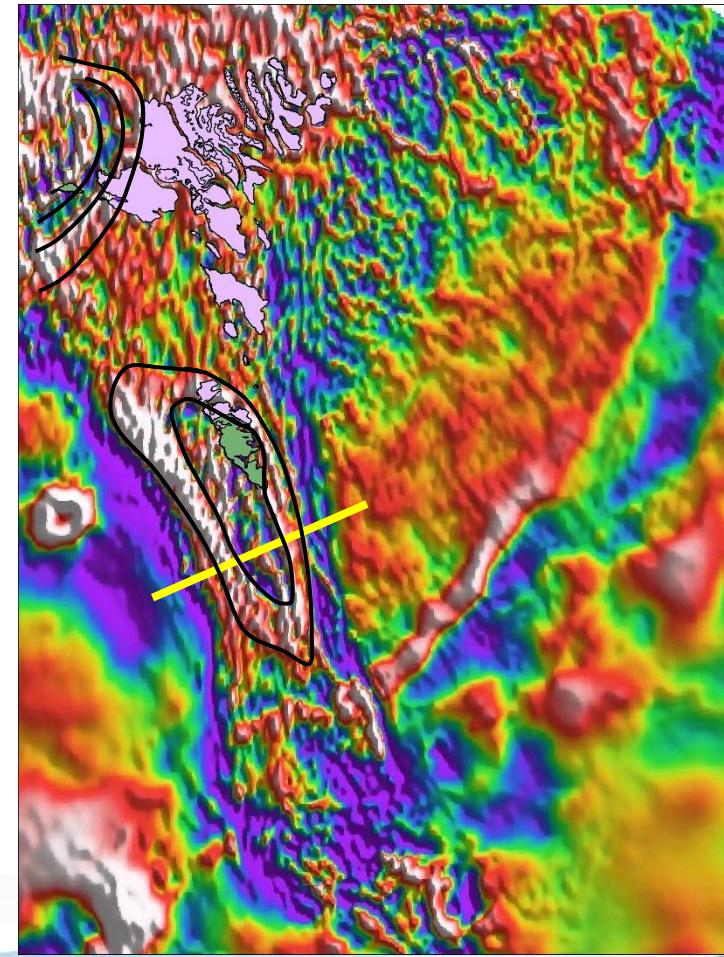
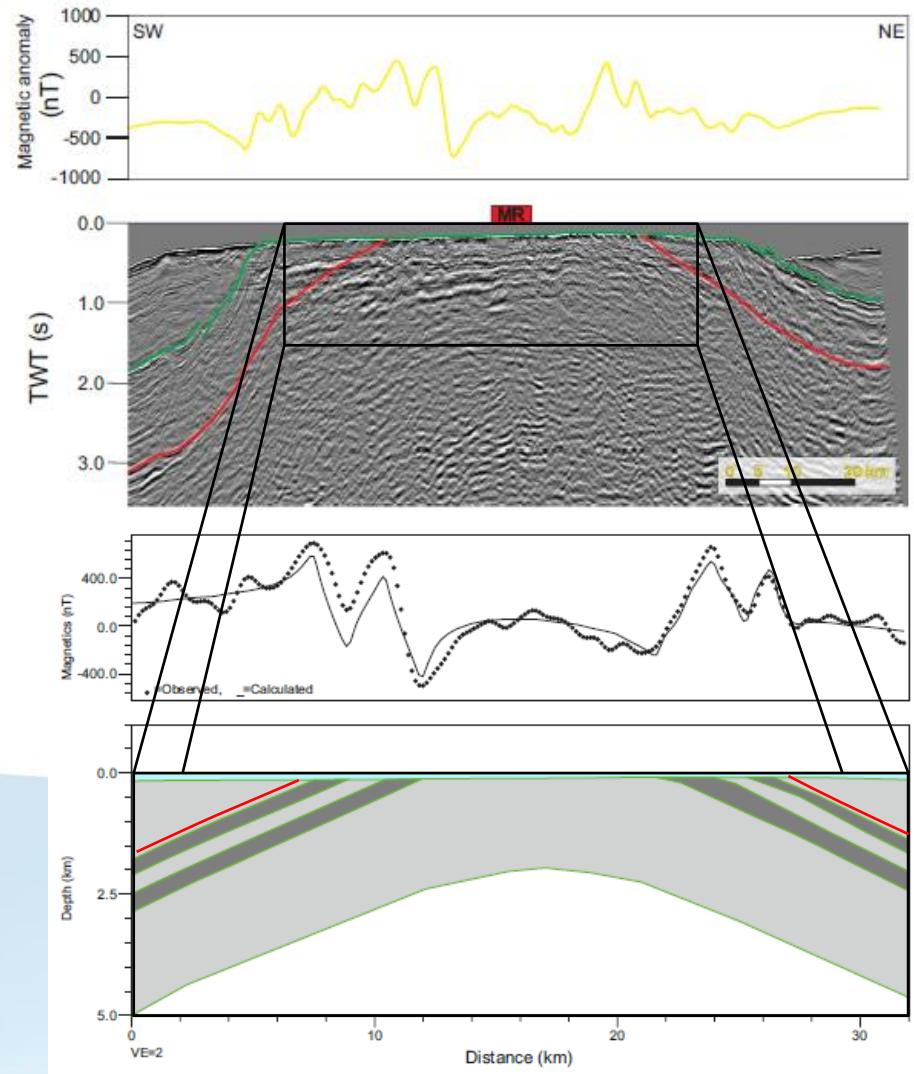
Hvat síggja vit kring Føroyar?



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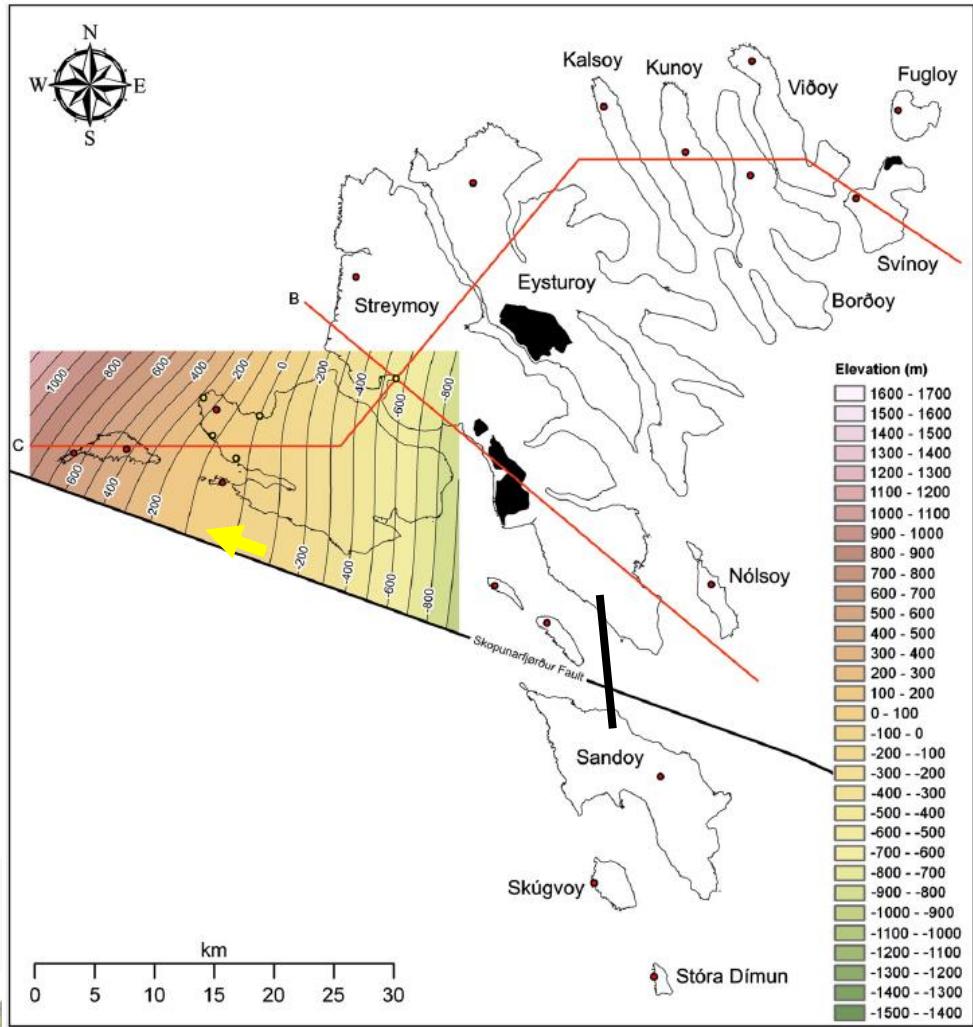


Modelling

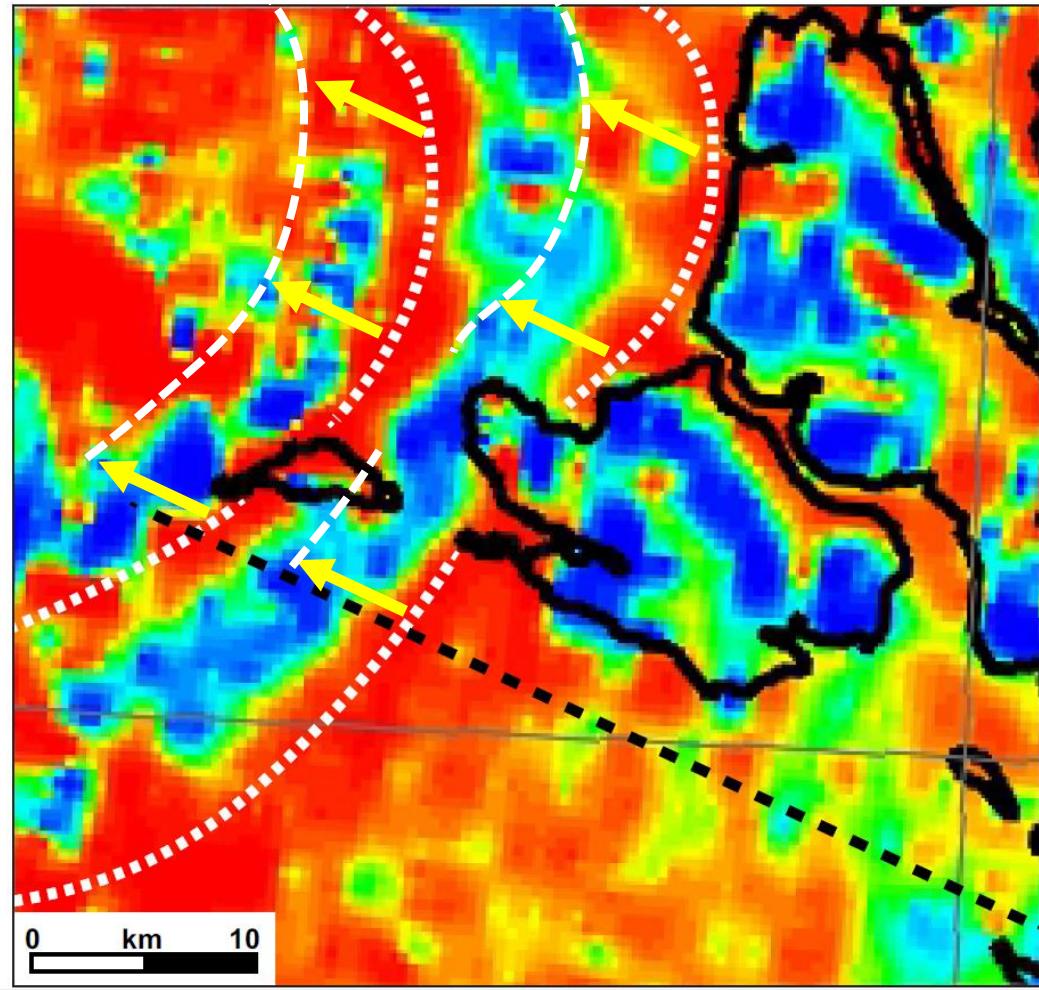
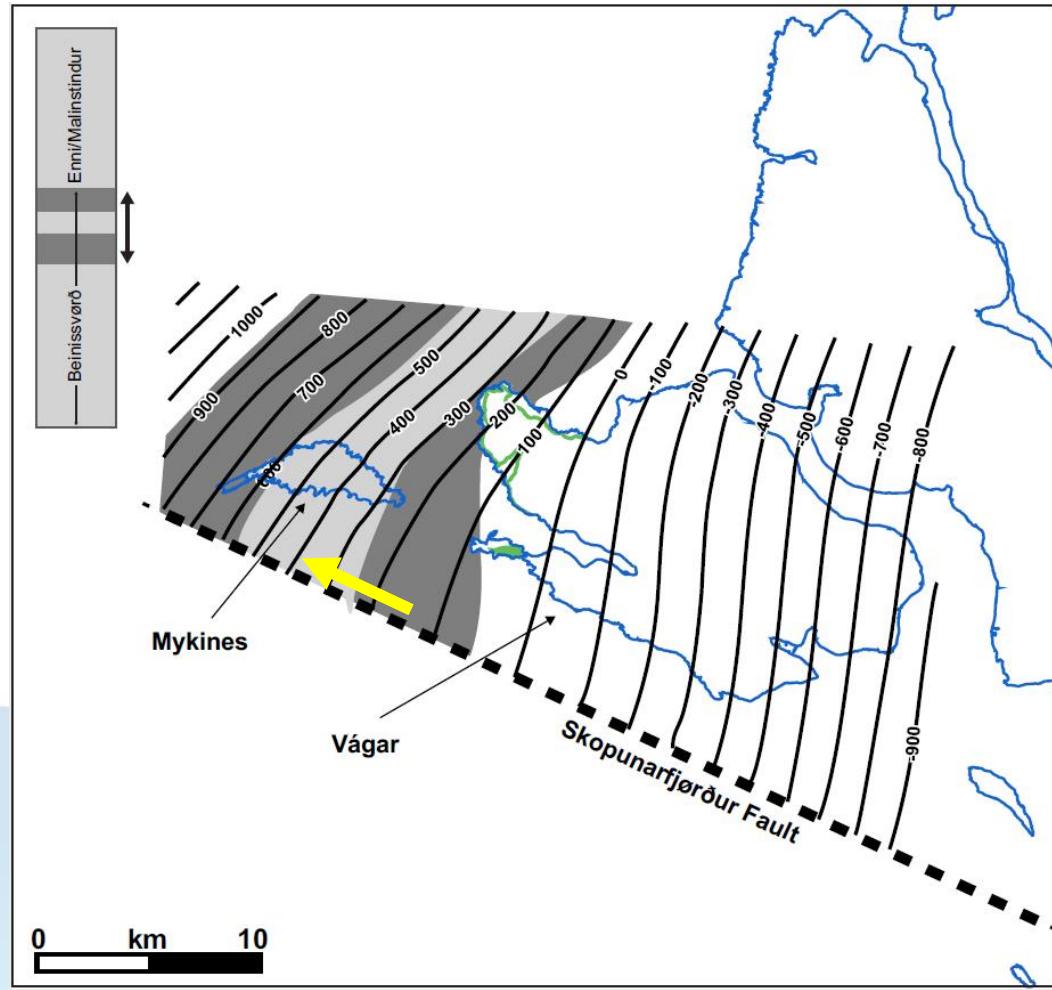


Umskaring í Skopunarfirði?

- Umskaring gongur gjøgnum Skopunarfjørð
- Norðursíðan flutt seg 4,2-6,2 km í útnyrðing vestan
- => Sandoyartunnil?

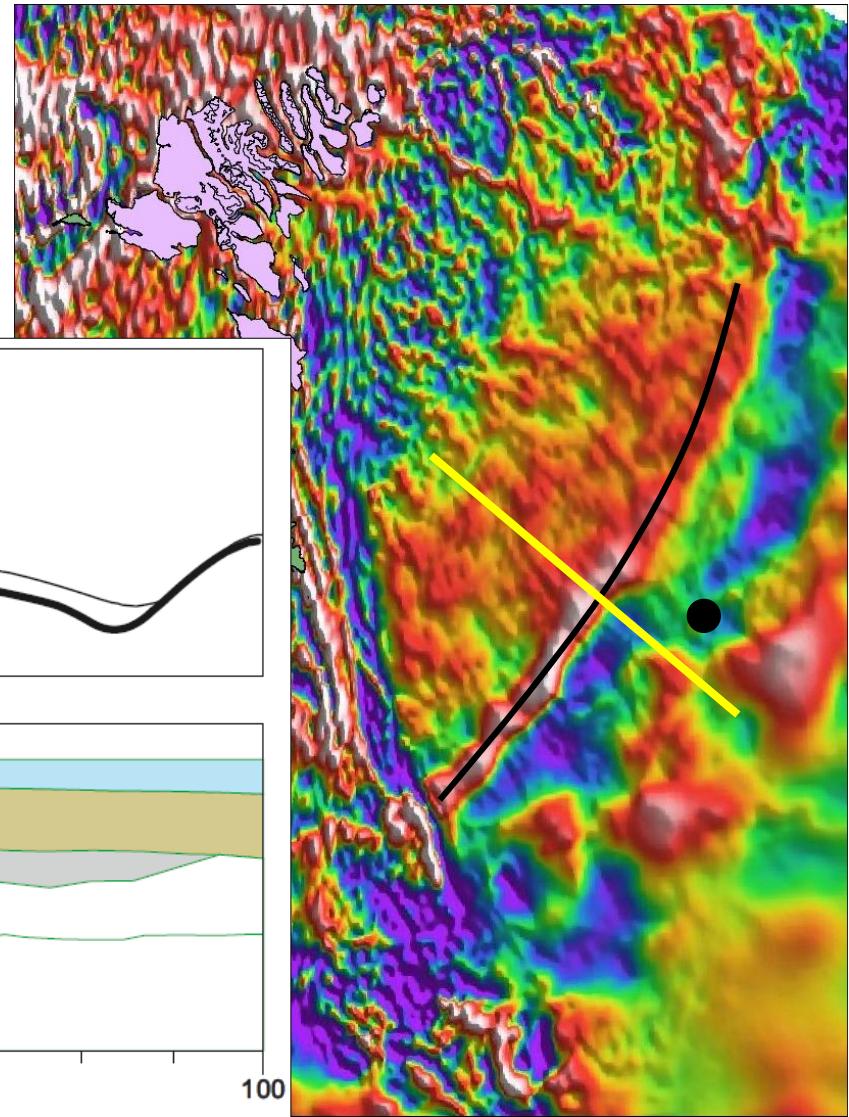
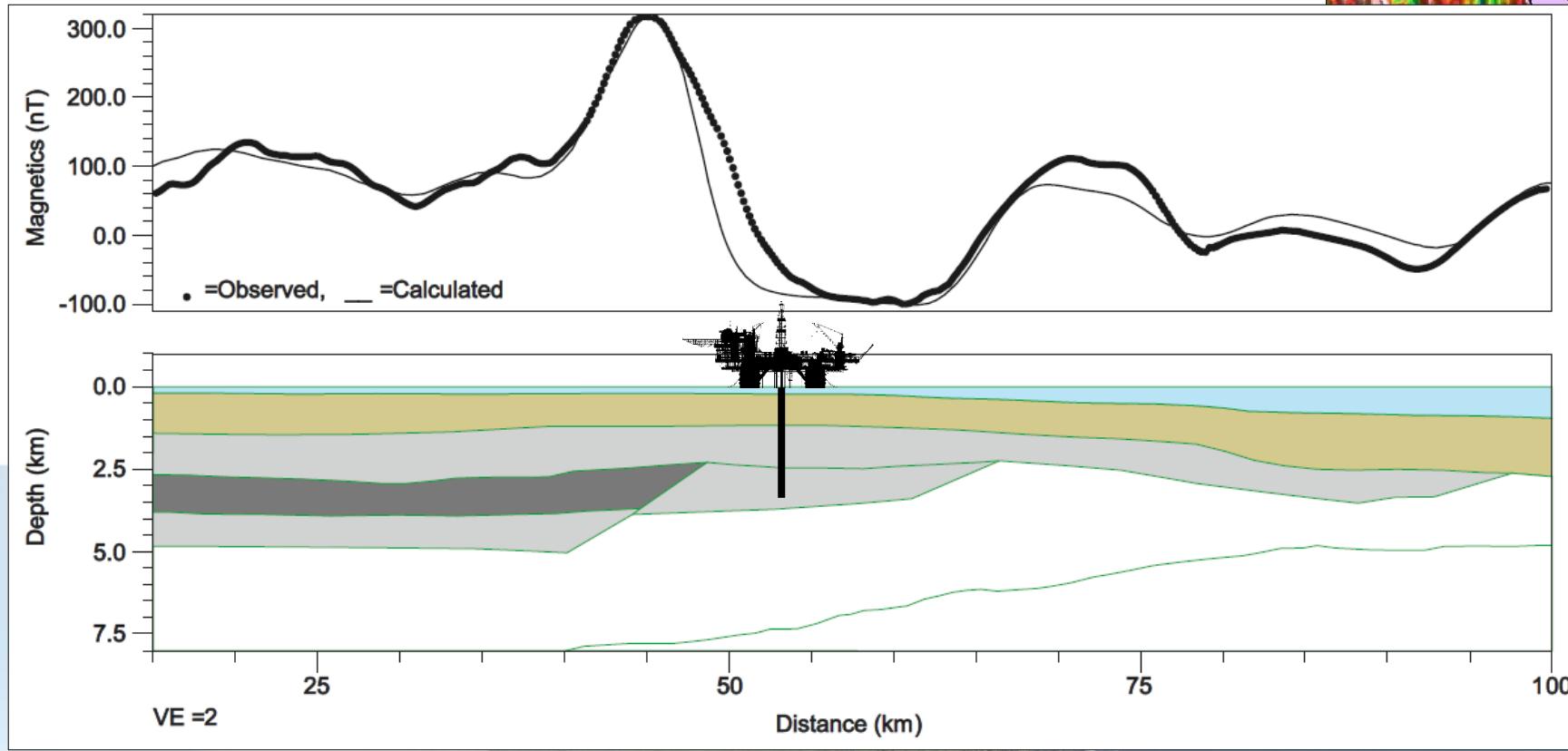


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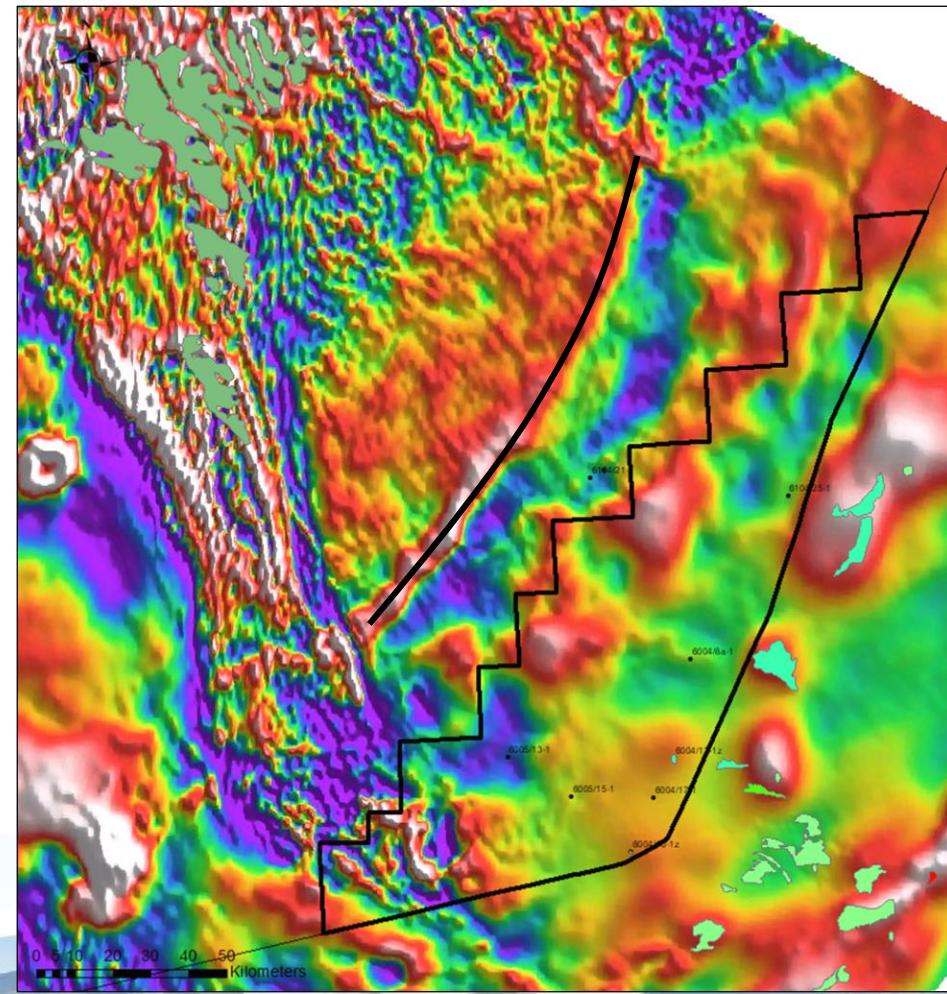
Annika anomaly

- Brádlig broyting í tjúgd



Fimta útbjóðingarumfar

- Bjóða út økir, har tað er minni av basalti
- => Vánirnar fyrir at finna kolvetti eru bestar



Samandráttur

- Jørðin framleiðir sítt egna magnetfelt (globalfeltið)
- Grýtið “arvar” verandi Globalfelt => palaeomagnetisma
- Føroyska basaltið hevur sterkar magnetiskar eginleikar
- Vit kunna kortleggja broytingar á landgrunninum út frá vitan um magnetisku eginleikarnar hjá basaltinum

Takk fyri!



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