HÁSKÓLI ÍSLANDS
JARÐVÍSINDASTOFNUN

Vegagerðin

Rannsóknaráðstefna
Vegagerðarinnar
6. nóvember 2026

Jarðlagaskipan, úthlaupslengd og aflögun á vegstæði Siglufjarðarvegar um Almenninga

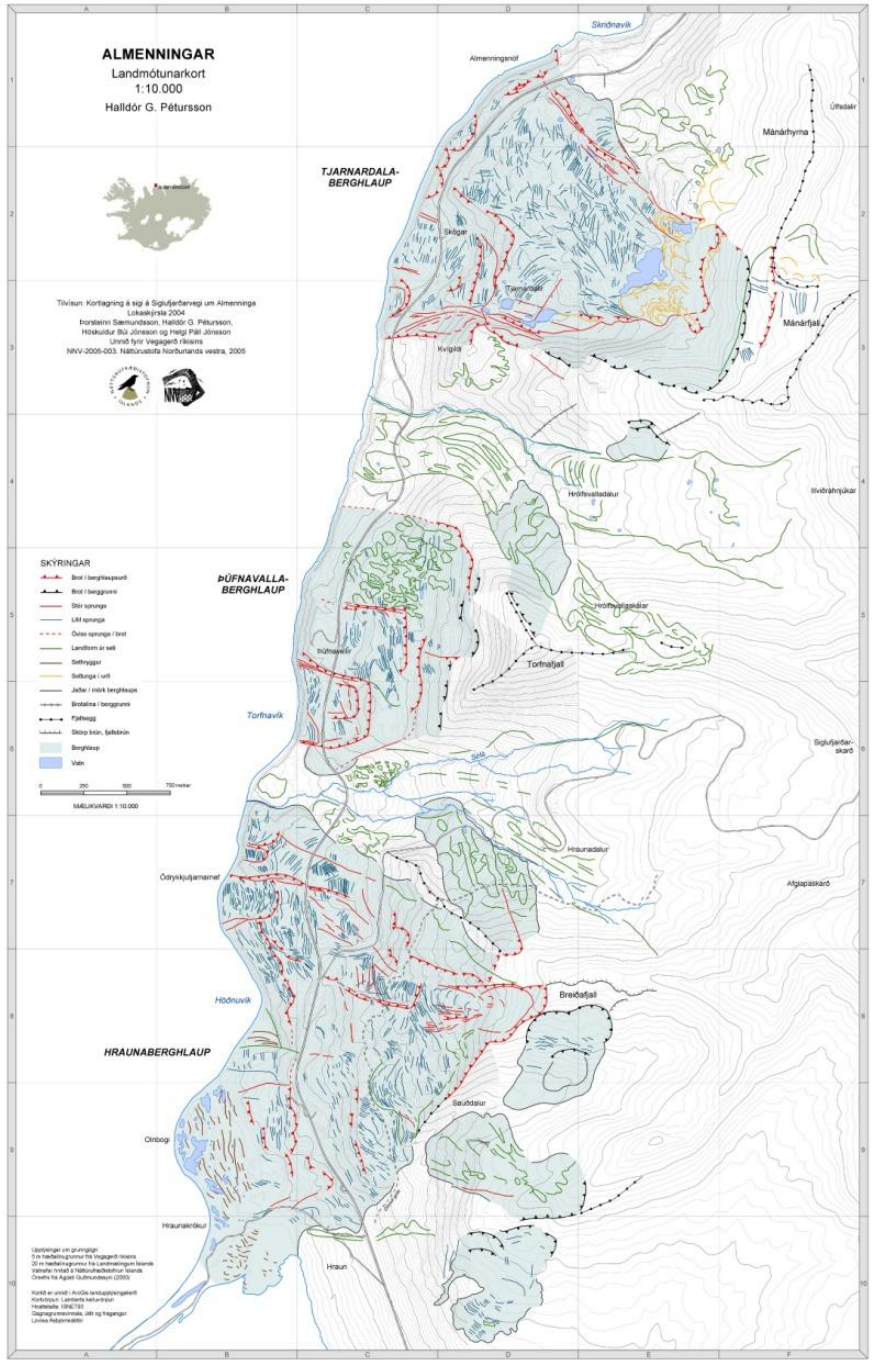
Þorsteinn Sæmundsson, Halldór Geirsson, Gunnar Orri Gröndal &
Hafdís Eygló Jónsdóttir

- Inngangur
- Það sem gert hefur verið !
- Jarðlagarannsóknir
- Mismunandi hreyfingar um misgengi
- Úthlaupslengd berghlaupa
- Samantekt



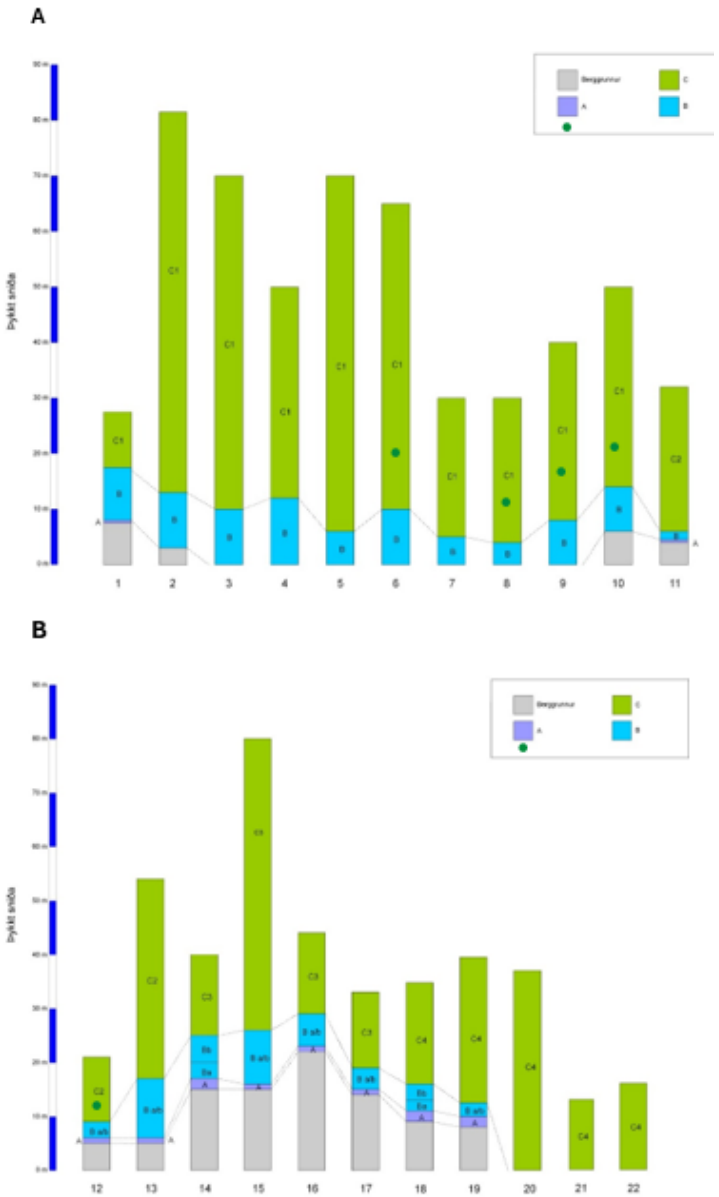
Það sem gert hefur verið !

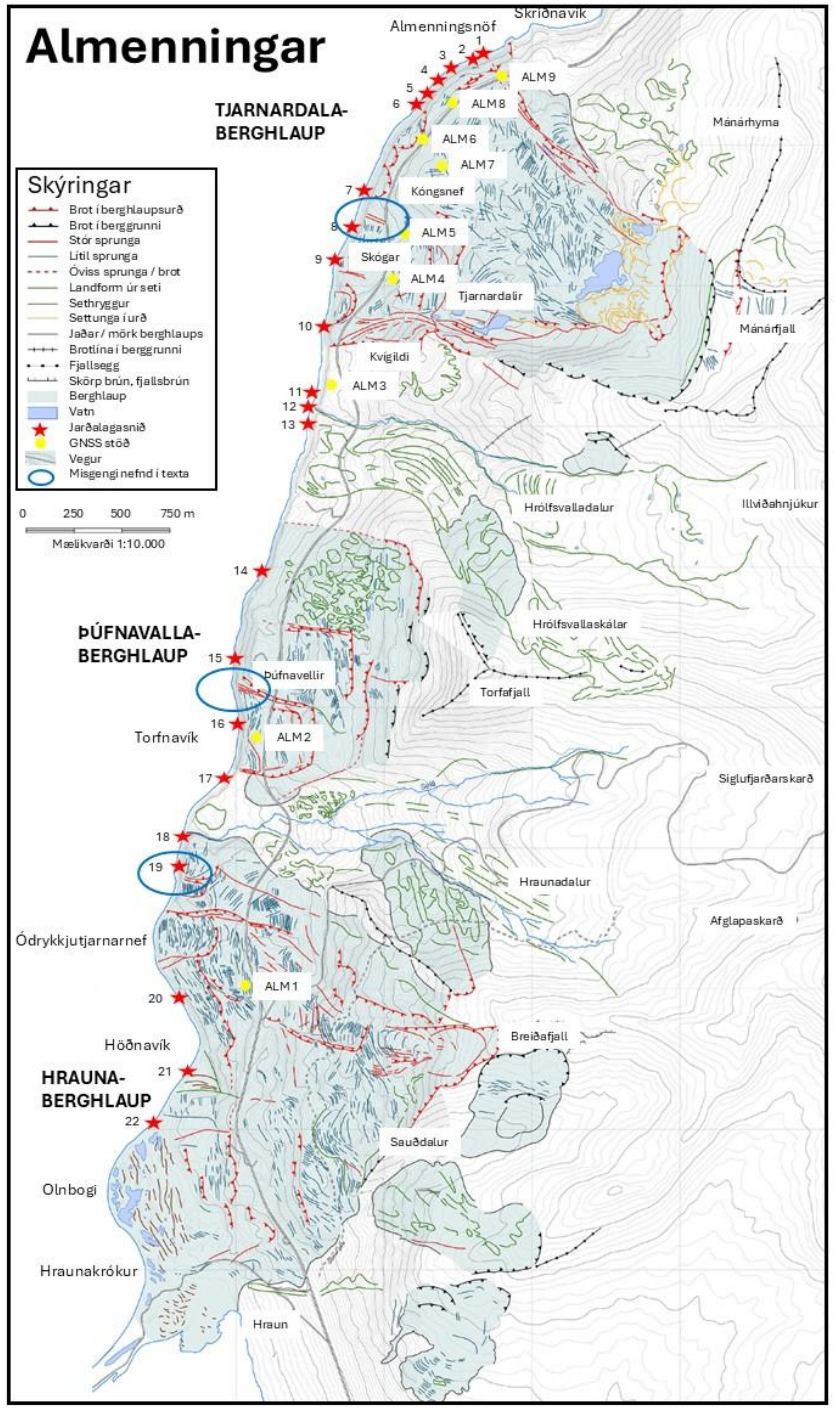
- Landmótunarkort
- Jarðlagaskipan
- Greining á hreyfingu berghlaupanna
- Viðnámsmælingar
- Saga hreyfinga
- Orsakatengsl hreyfinga
- Aflögunarmælingar (TDR)
- Ferligreining (feature tracking)
- InSAR greining
- Setfræðilegar rannsóknir
- Uppsetning GNSS stöðva og úrkomumælis
- Aldursgreiningar byggðar á geimgeislamnælingum
- Kortlagning á úthlaupslengd berghlaupanna



Setlagarannsóknir

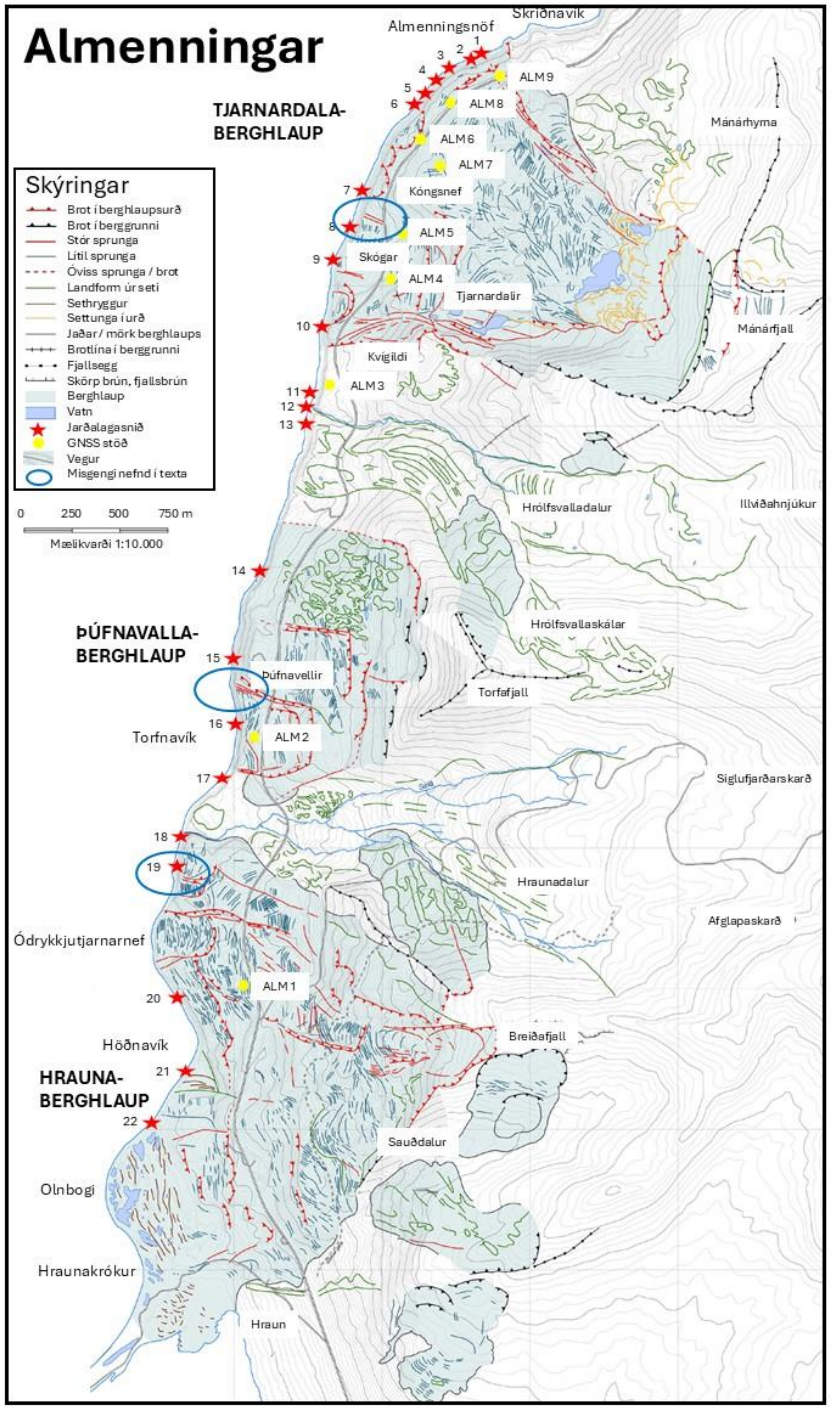
- Í berghlaupunum í Almenning-um má sjá millilög víðs vegar um skriðumassann.
- Ellefu sýni voru send í XRD greiningu (röntgen greiningu). Samkvæmt XRD greiningu innihalda öll dökkrauðu leirríku millilögin smektít leir.
- Smektít leir er vatnsþenjan-legur leir, oft kallað svellandi leir.
- Um er að ræða síðsteind sem hefur orðið til við veðrun og ummyndun vegna fargs og hita.



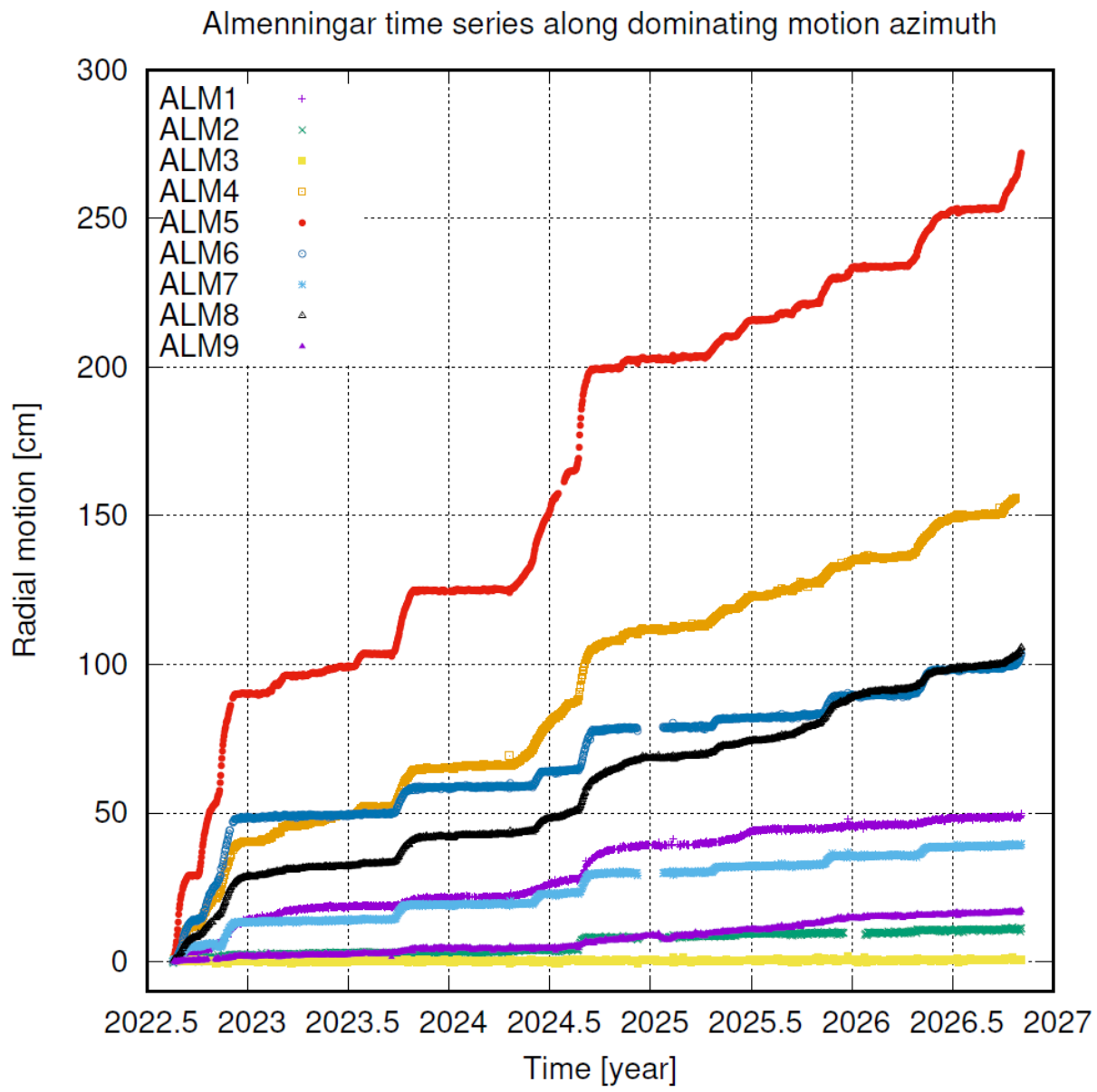


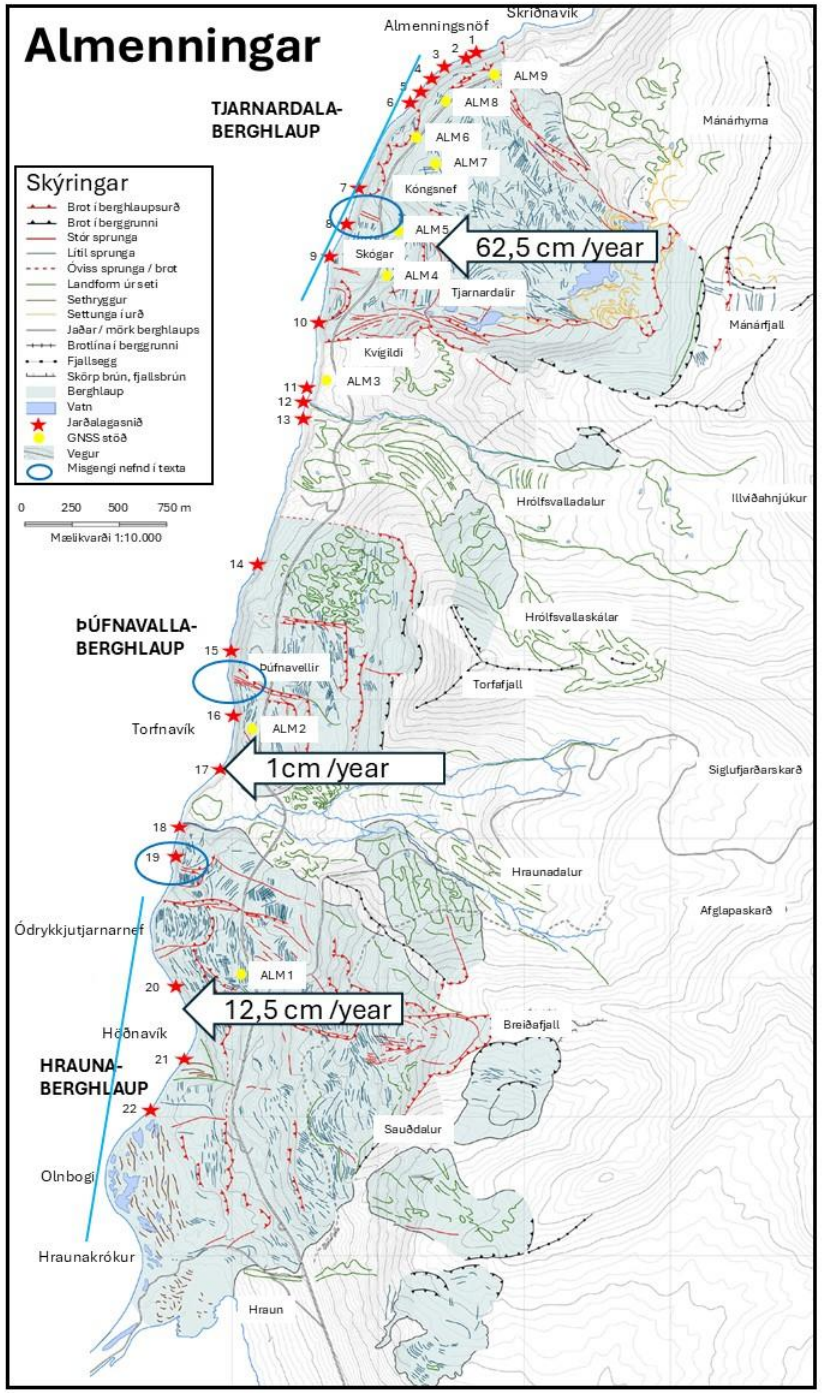
Mismunandi hreyfingar um misgengi

- Fjöldi misgengja hafa verið kortlögð í frambrún berghlaupanna í Almenningum.
- Hér á eftir er þremur af þessum misgengjum lýst og hreyfingum í kringum þau:
  - Tjarnardalaberghlaupið – misgengi í setlögum
  - Þúfnavallaberghlaupið – misgengi í setlögum ofaná berggrunni
  - Hraunaberghlaupið - misgengi bæði í setlögum og berggrunni
- Staðsetning þessara misgengja er táknuð með bláum hringjum.

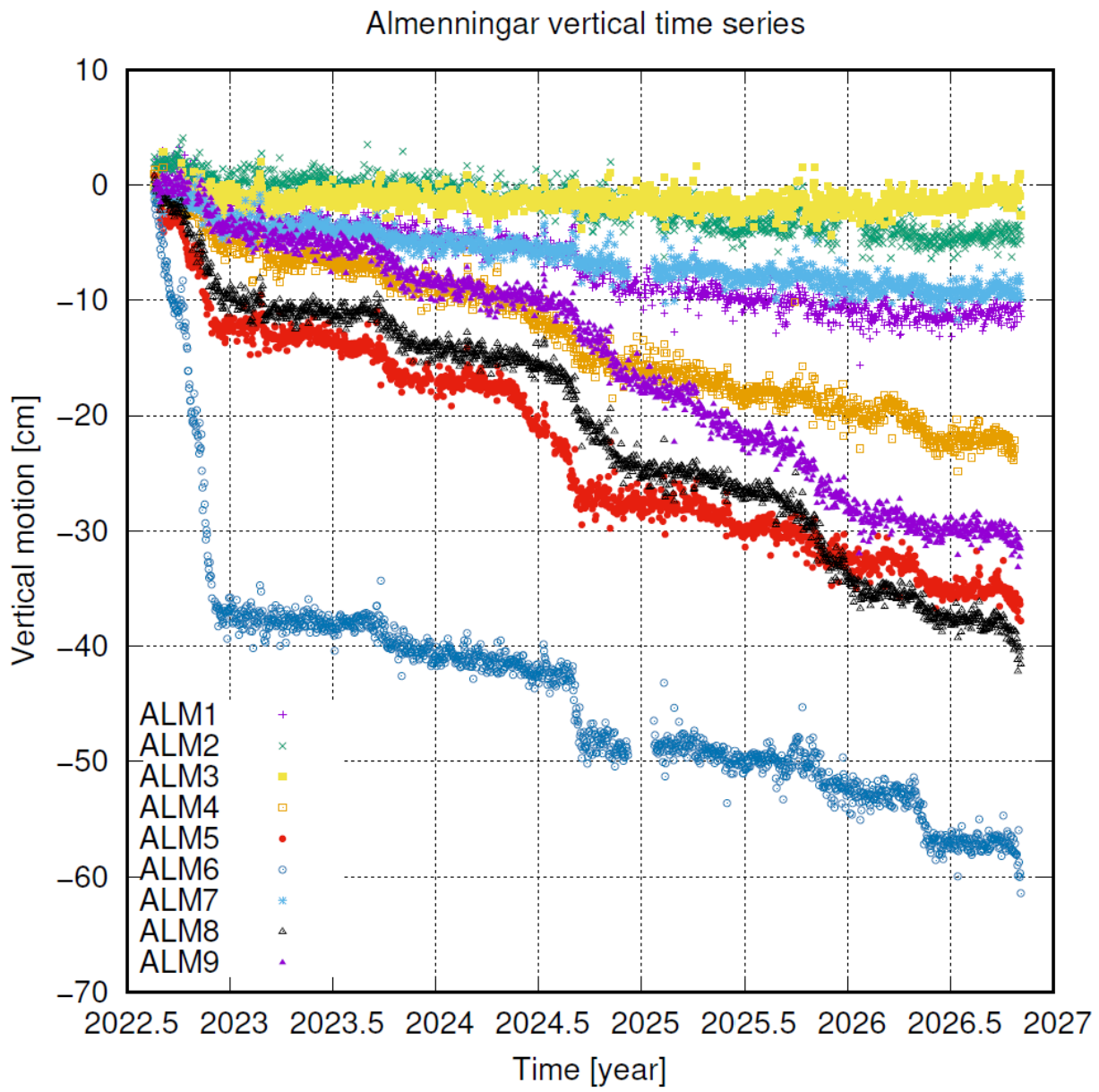


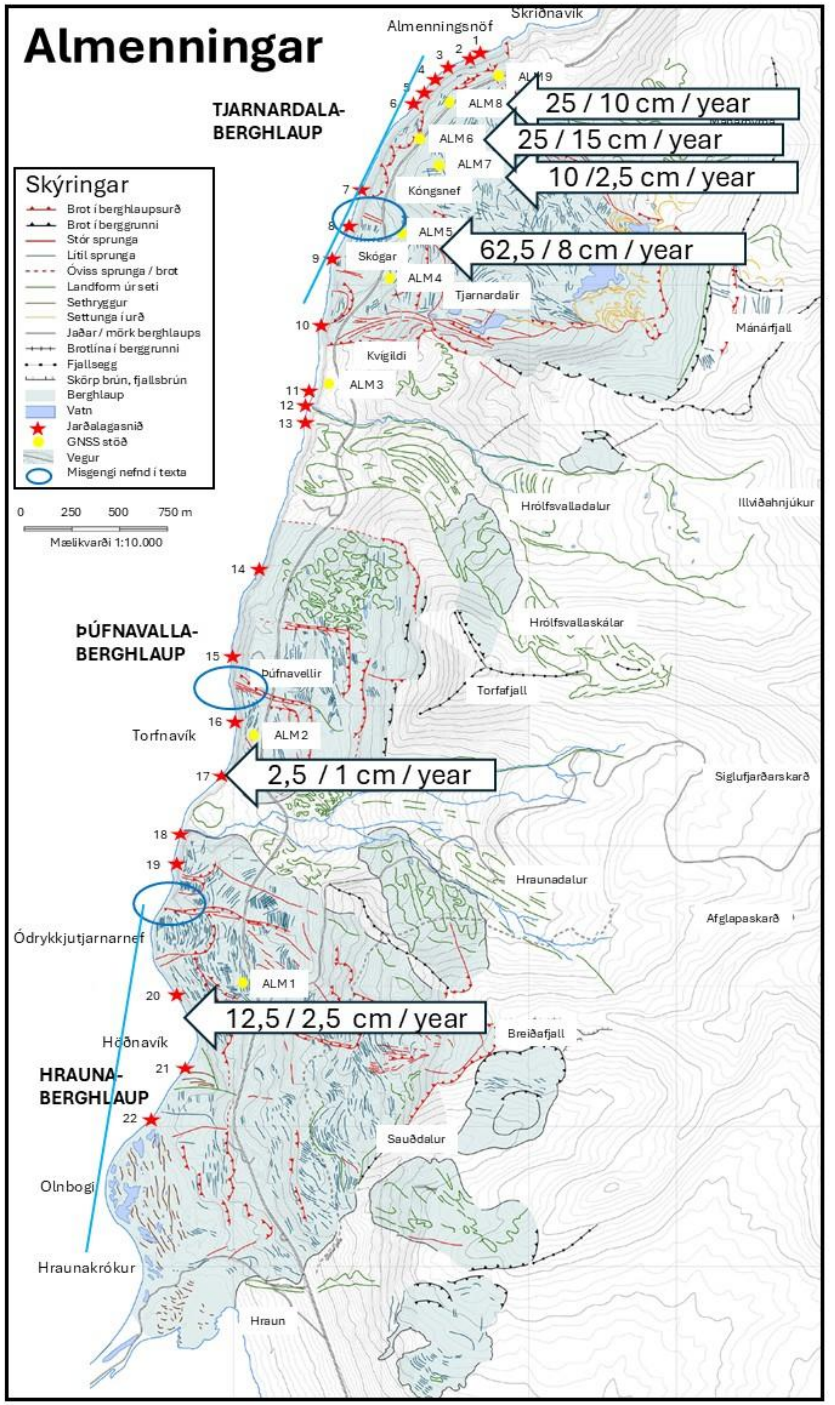
Lárétt færsla síðastliðin 4 ár





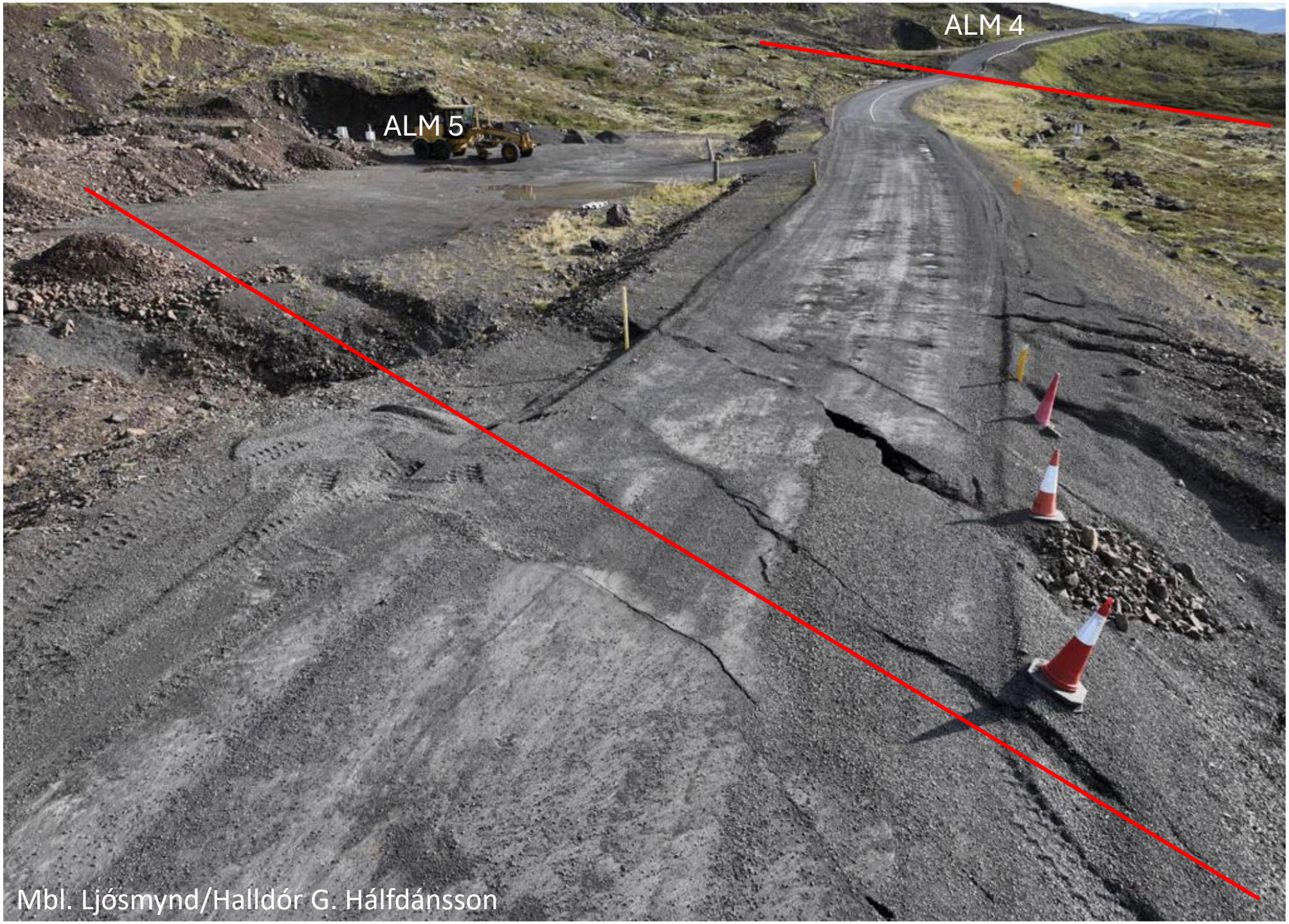
Lóðrétt færsla síðastliðin 4 ár

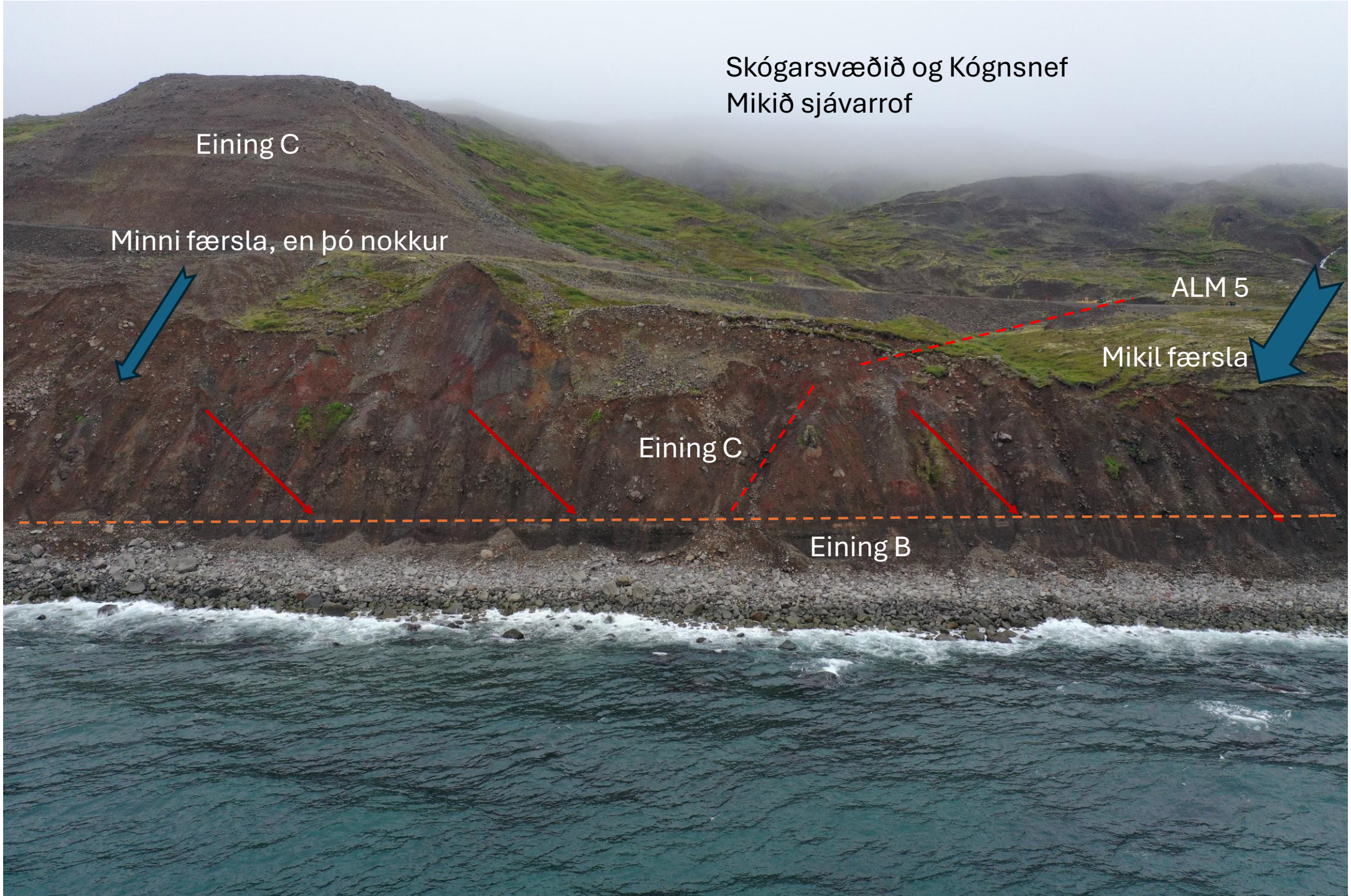






Neðri hluti Tjarnardalaberghlaupsins Skógarsvæðið


ALM 4
ALM 5
Mbl. Ljósmynd/Halldór G. Hálfdánsson

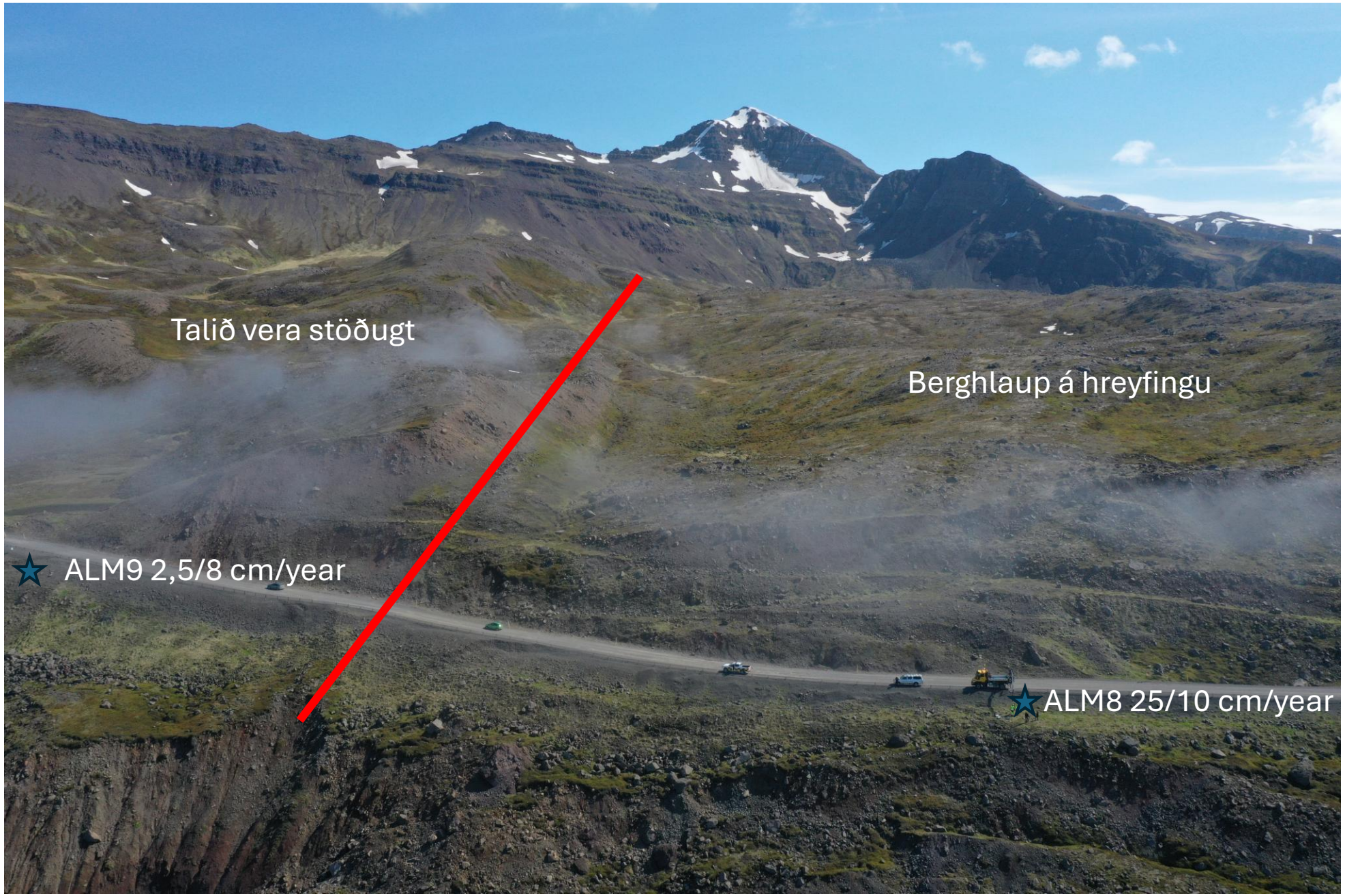

Skógarsvæðið og Kógnsnef
Mikið sjávarrof
Eining C
Minni færsla, en þó nokkur
ALM 5
Mikil færsla
Eining C
Eining B

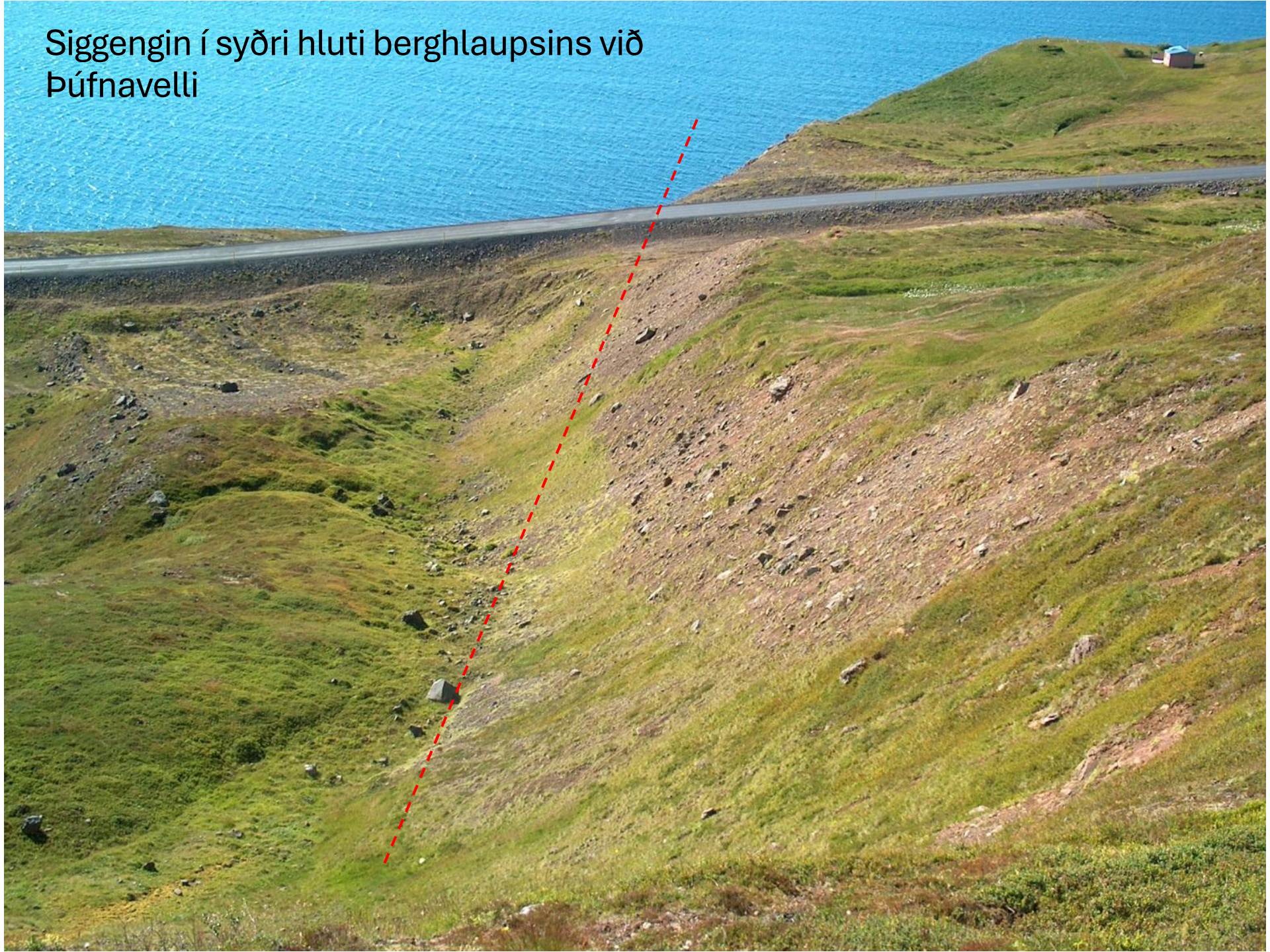

Grunnvatn / borholur
Eining C
Eining B

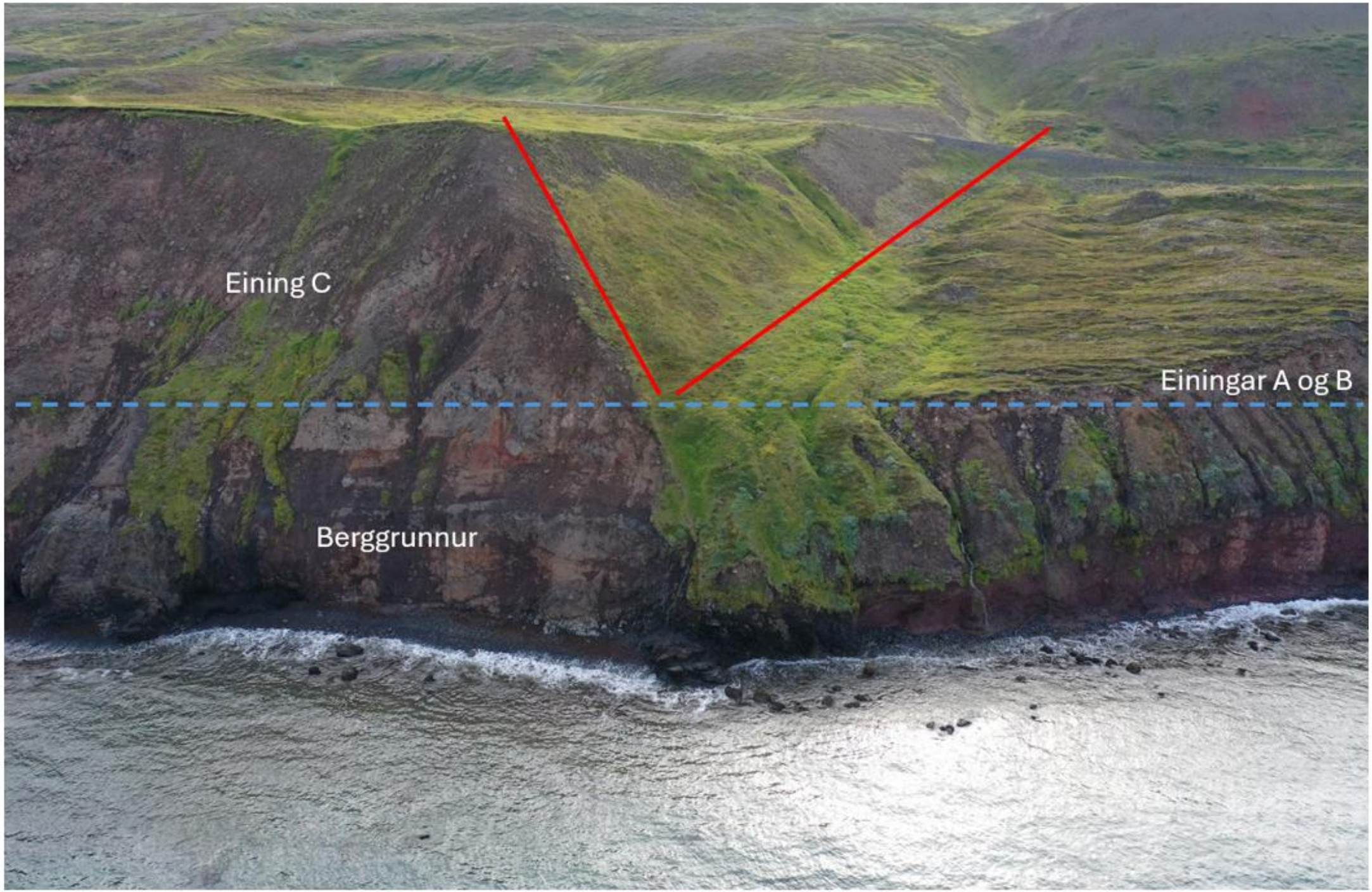
Kóngsnef ALM 6 / ALM7

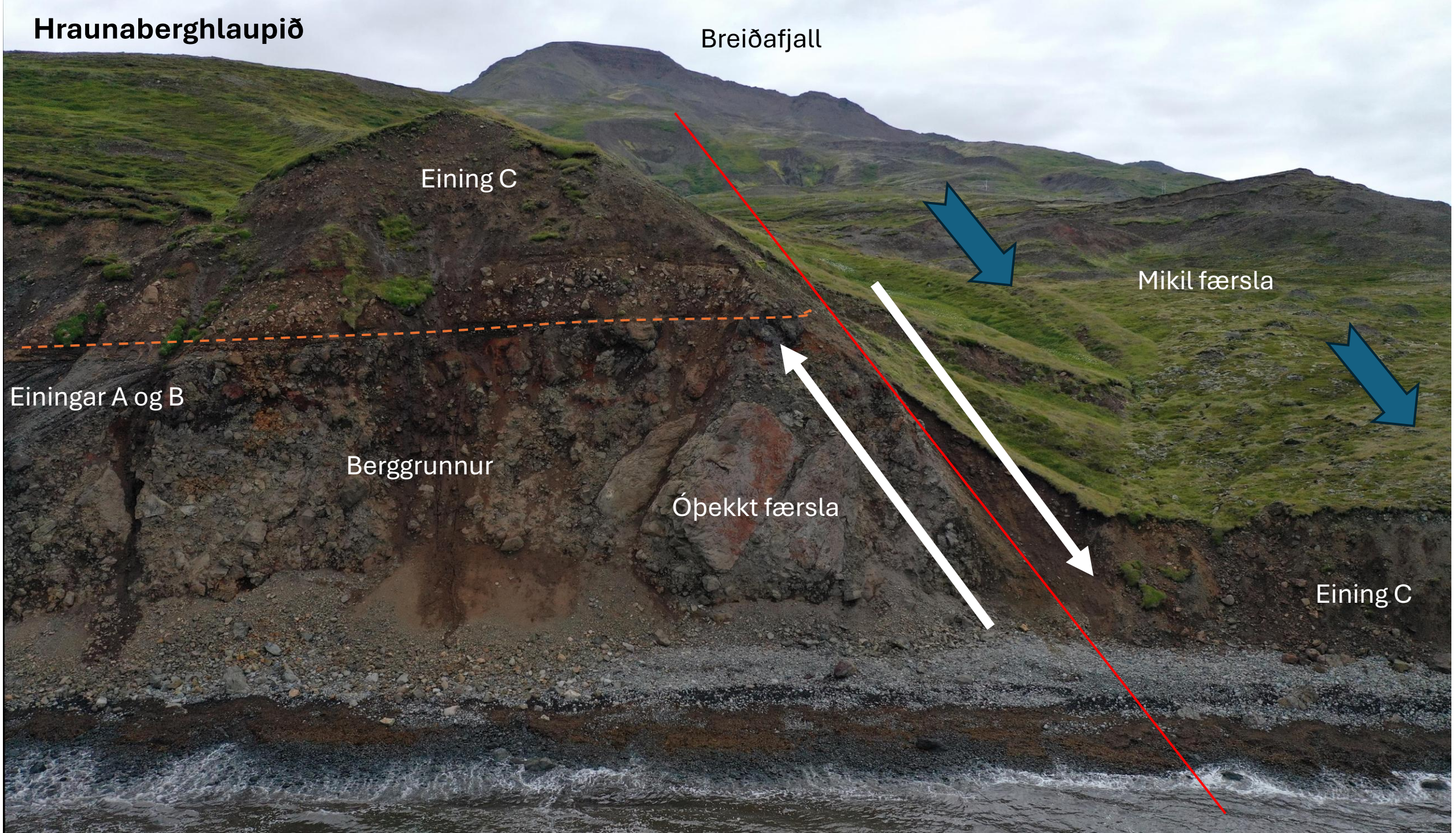


Almenningsnöf ALM 9 /ALM8




Siggengin í syðri hluti berghlaupsins við
Þúfnavelli


Eining C
Einingar A og B
Berggrunnur


Hraunaberghlaupið
Breiðafjall
Eining C
Mikil færsla
Einingar A og B
Berggrunnur
Óþekkt færsla
Eining C



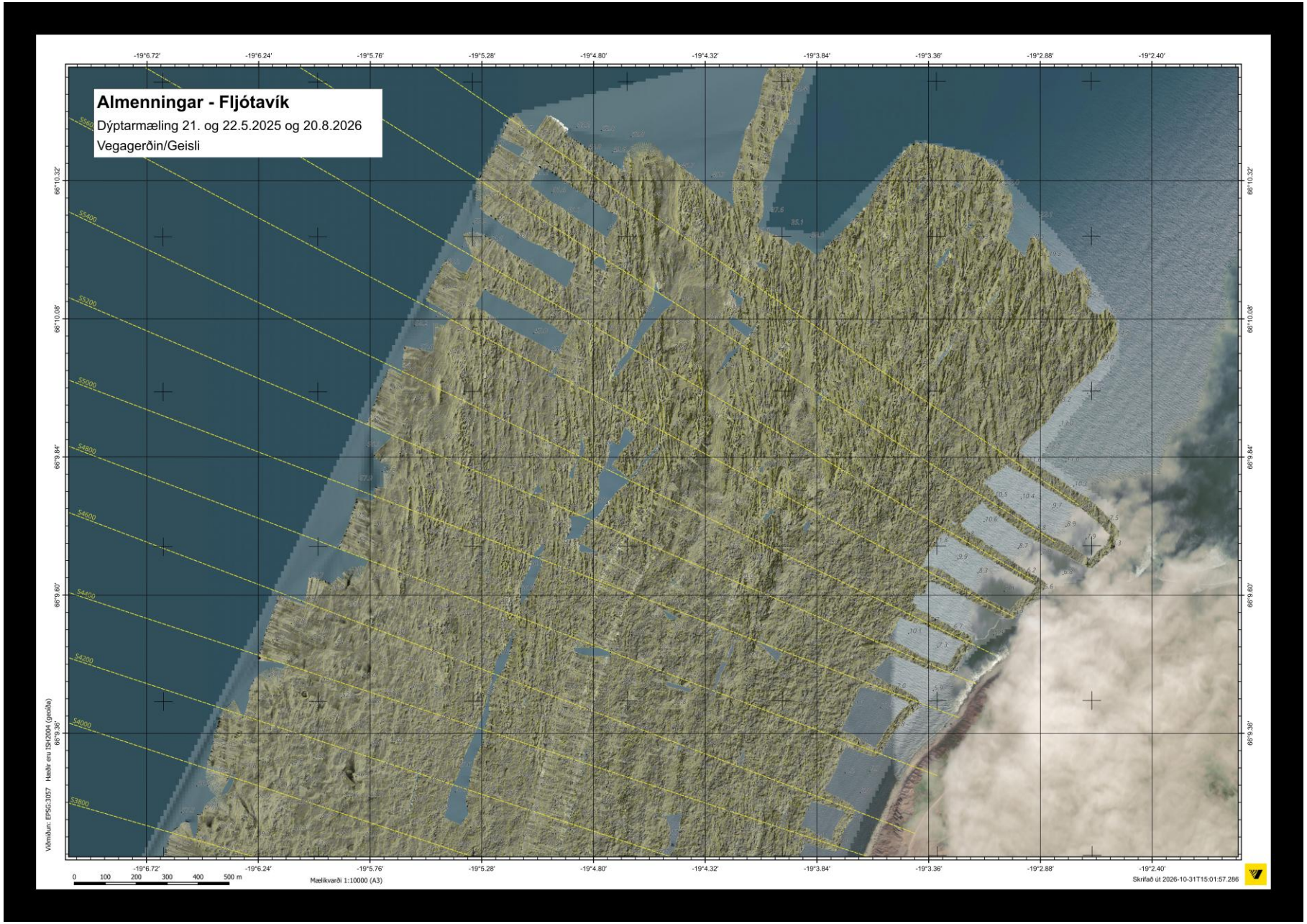

Breiðafjall
ALM 1
Ódrykkjutjarnarnefl

Mælingar á úthlaupslengd berghlaupanna

- Framkvæmdar árin 2025 og 2026



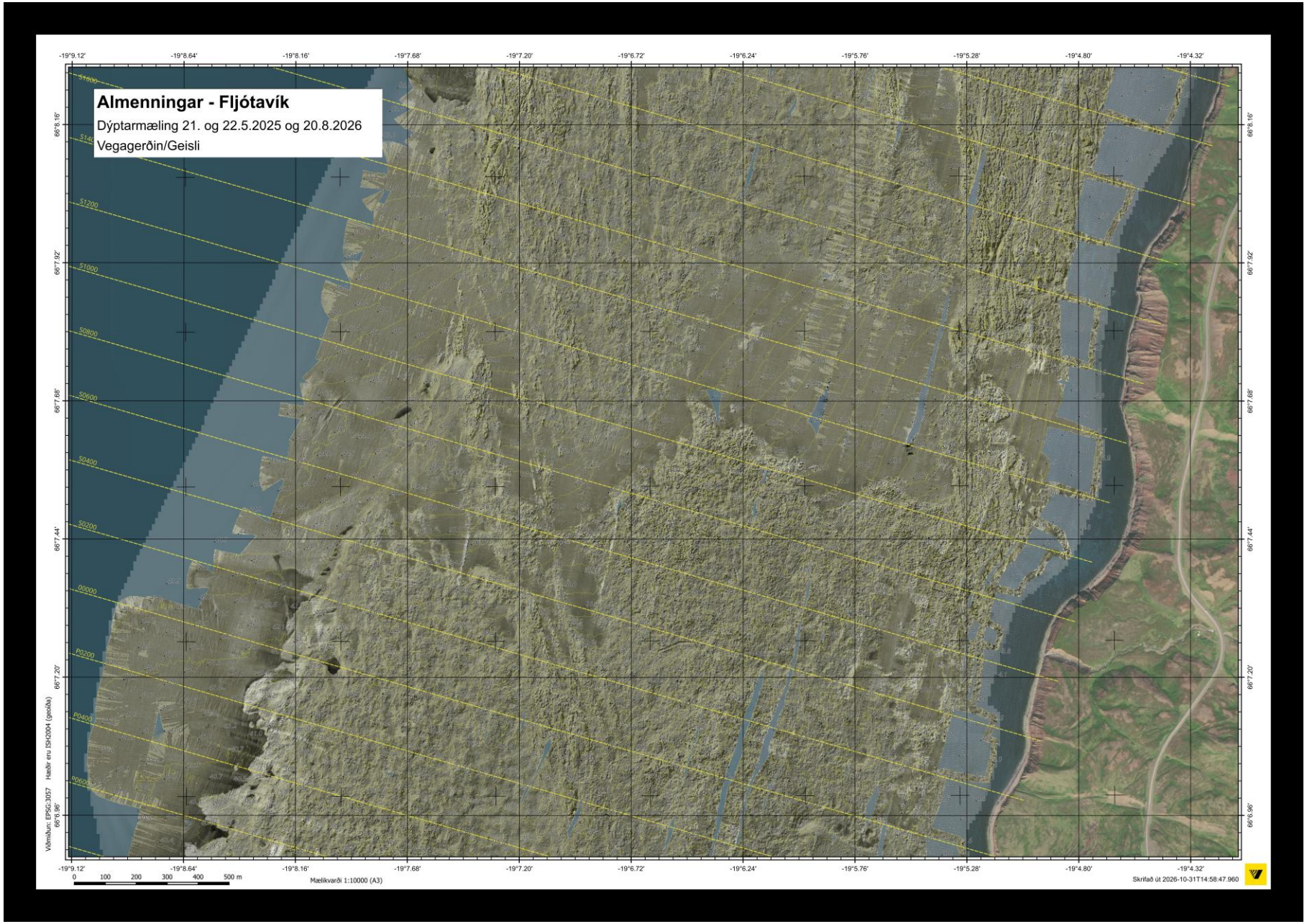
Tjarnardalir nyrðri hluti



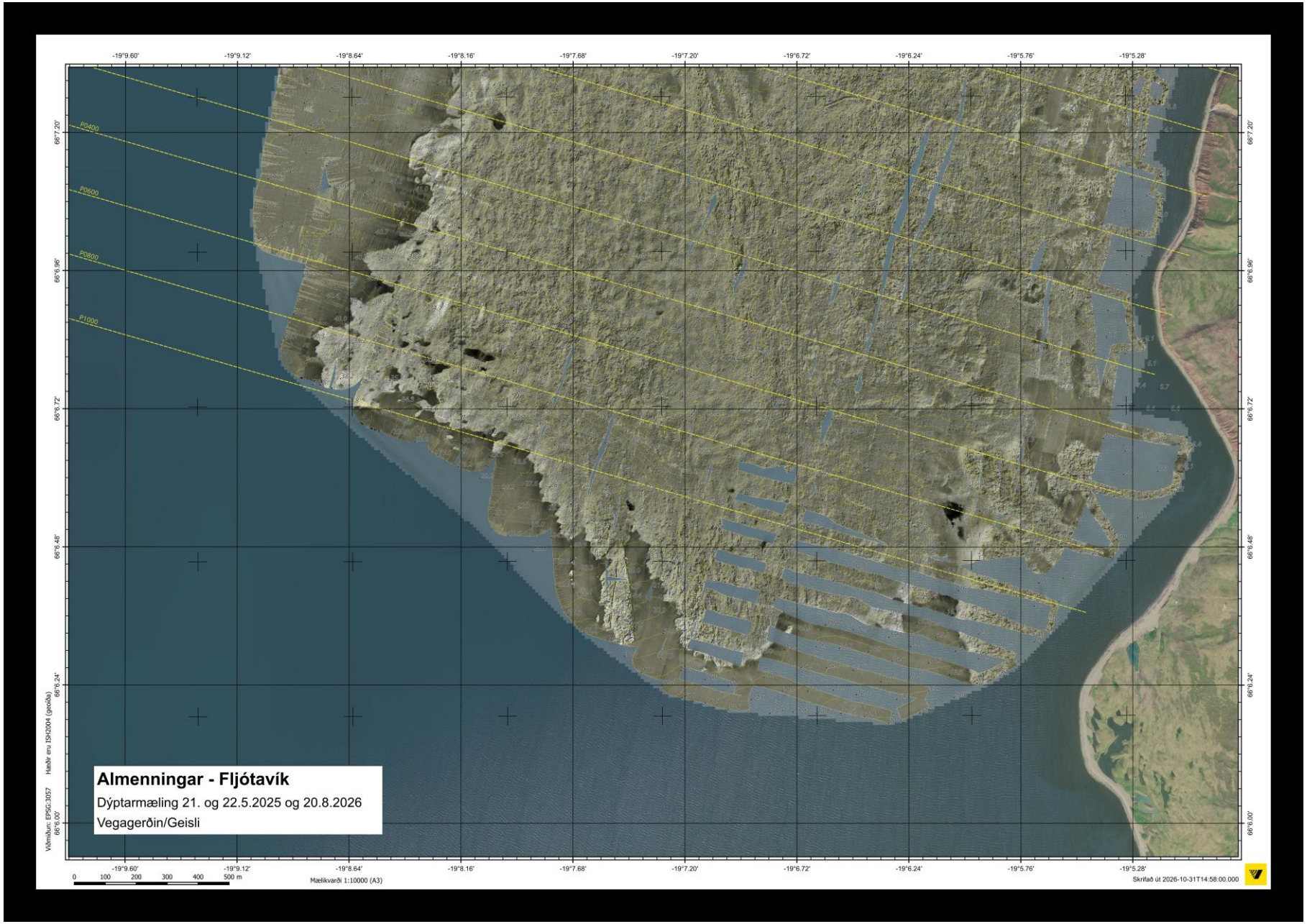
Tjarnardalir syðri hluti



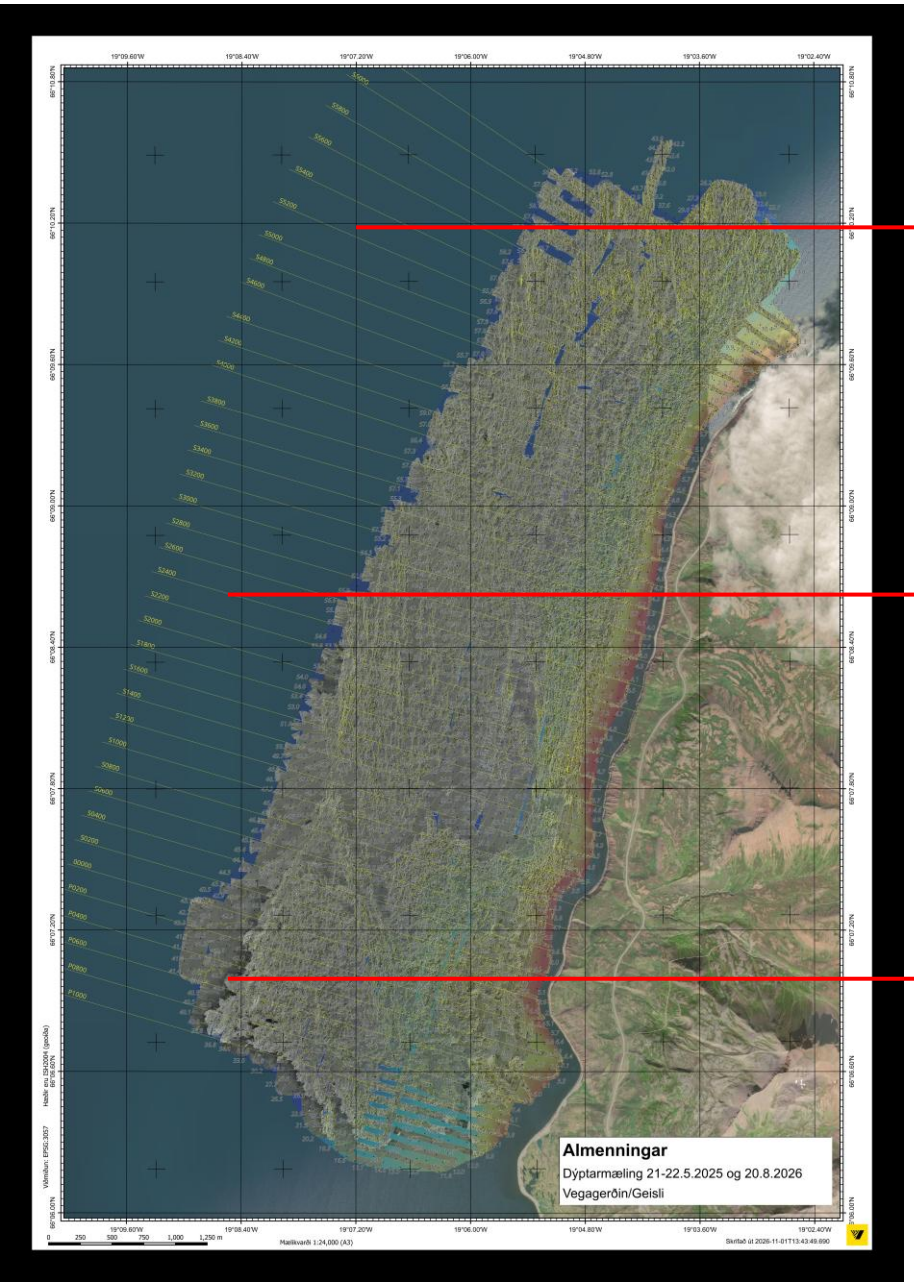
Þúfnavellir

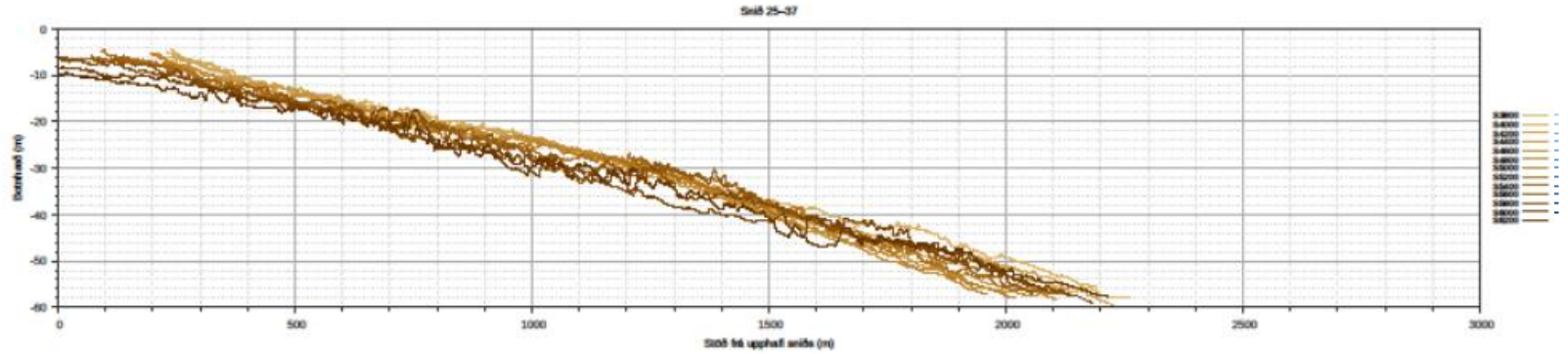


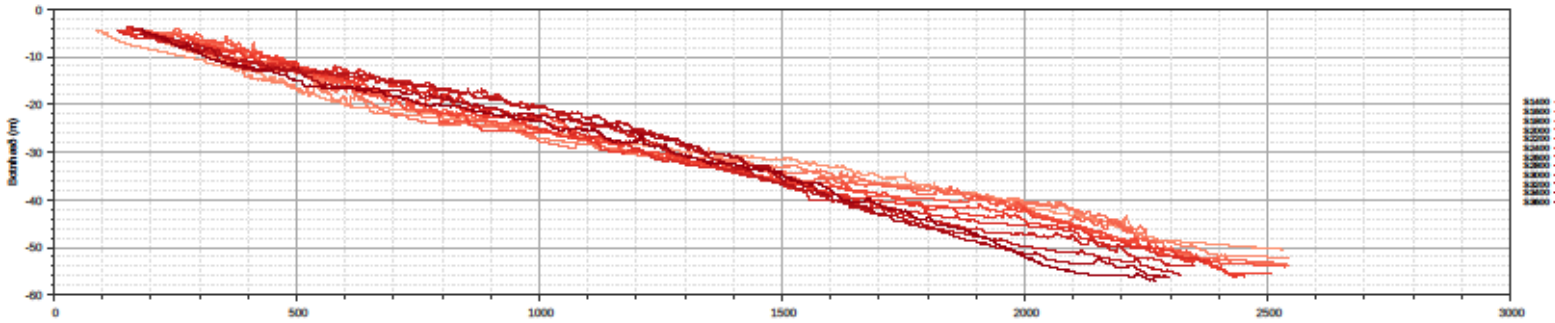
Hrauna

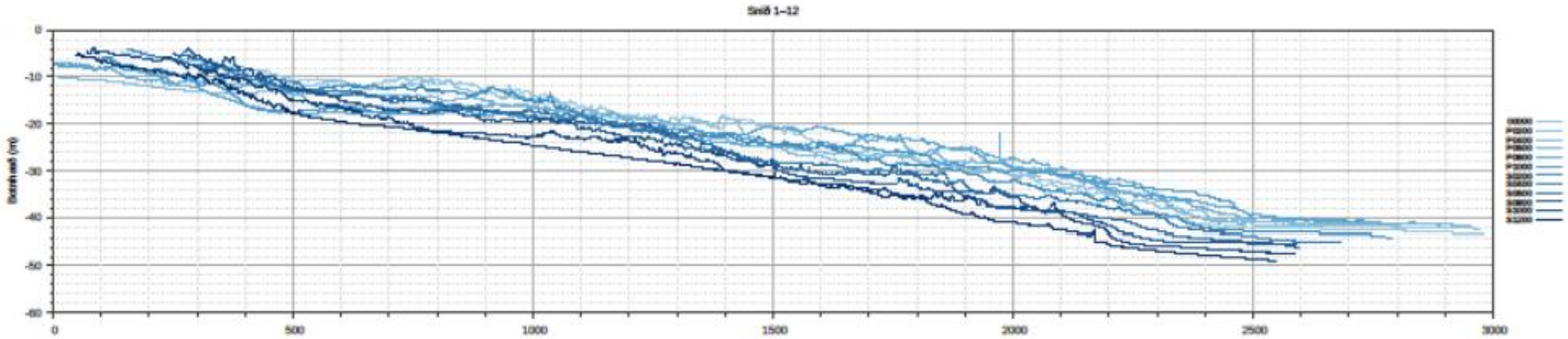

-19°9.60'
-19°9.12'
-19°8.64'
-19°8.16'
-19°7.68'
-19°7.20'
-19°6.72'
-19°6.24'
-19°5.76'
-19°5.28'
66°7.20'
66°6.96'
66°6.72'
66°6.48'
66°6.24'
66°6.00'
P0400
P0600
P0800
P1000
Almenningar - Fljótavík
Dýptarmæling 21. og 22.5.2025 og 20.8.2026
Vegagerðin/Geisli
Hæðir eru ISN2004 (geoida)
Vörpun: EPSG:3057
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Mælikvarði 1:10000 (A3)
Skrifað út 2026-10-31T14:58:00.000

Þversnið / úthlaupslengd

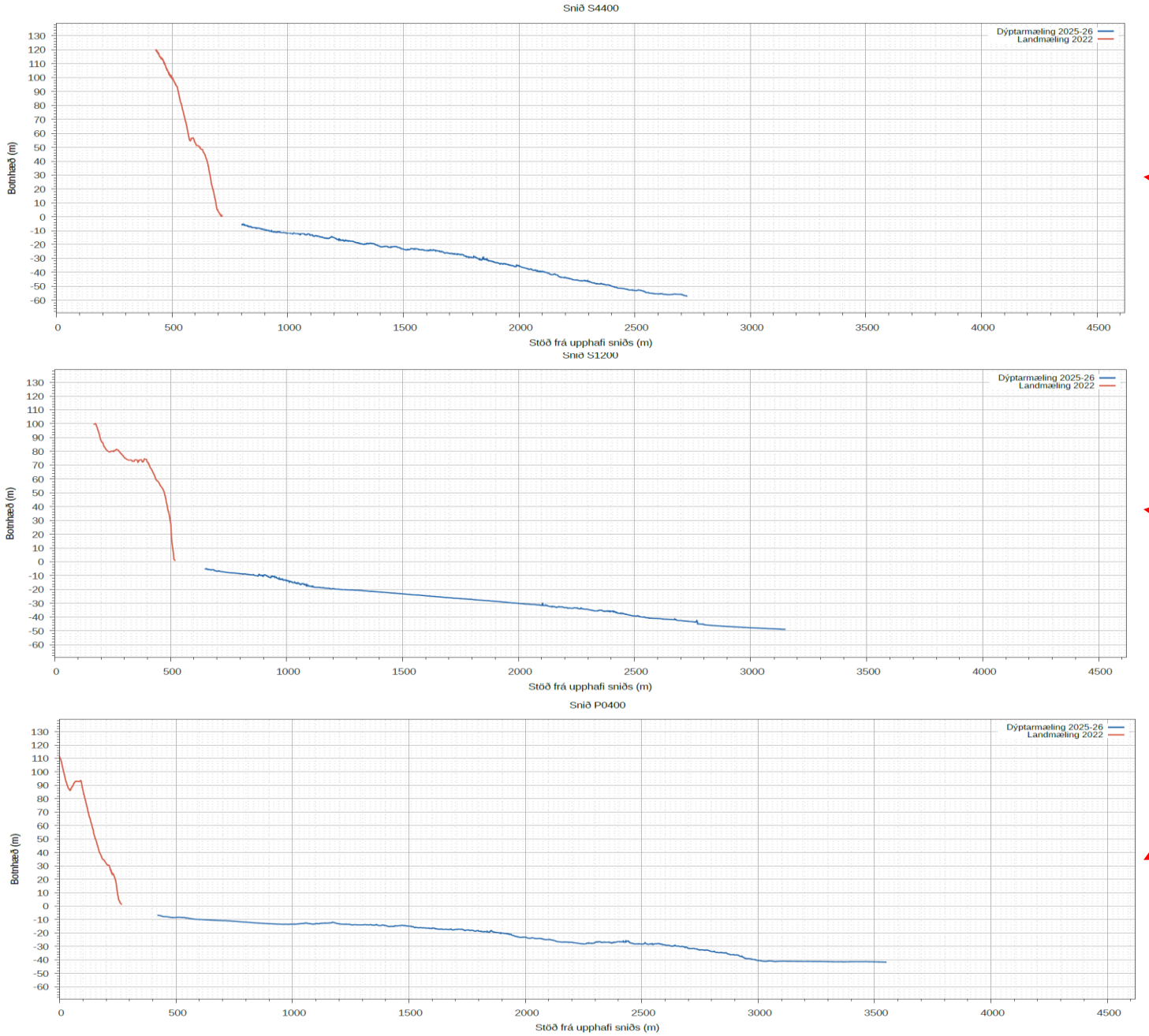


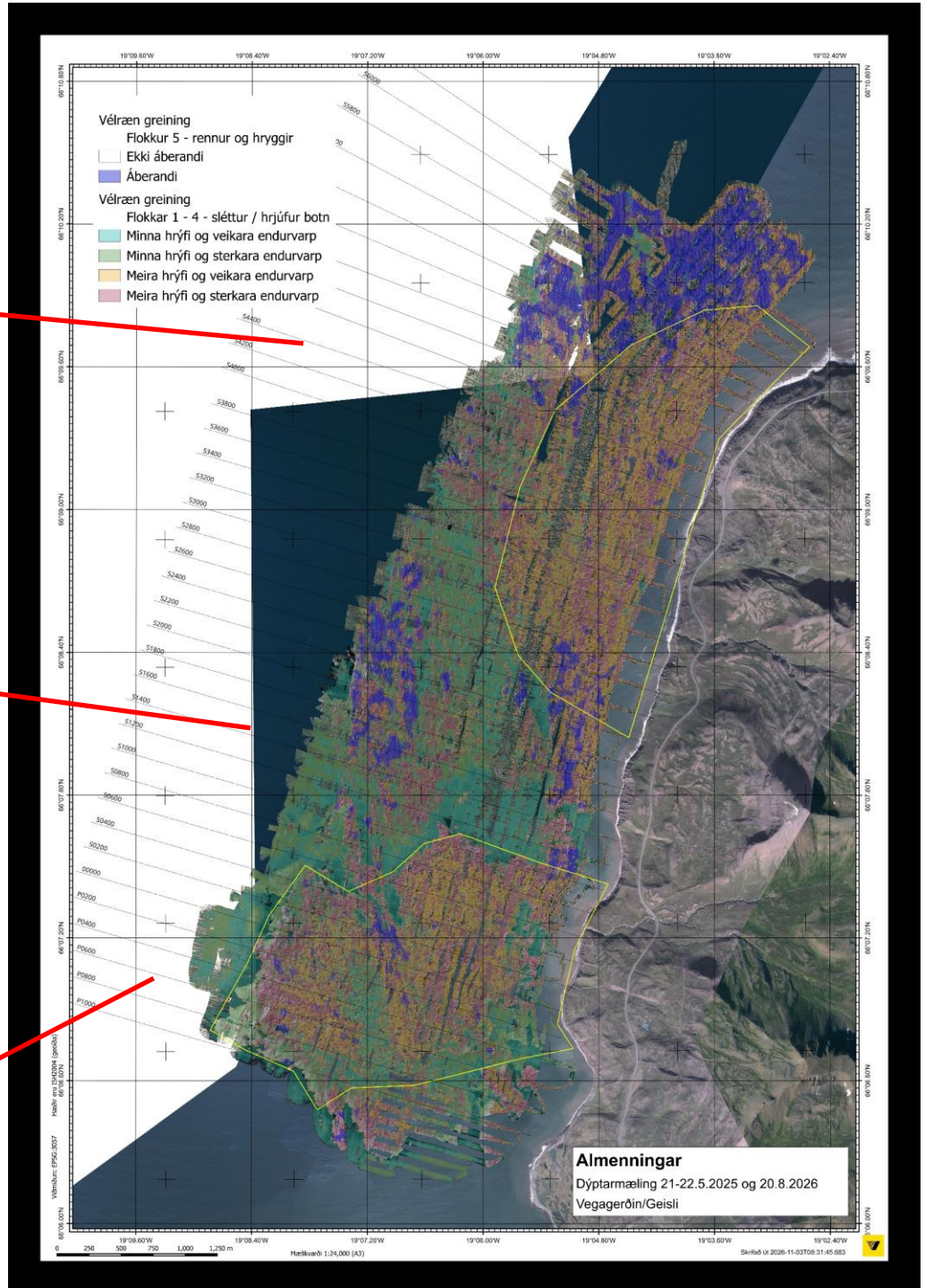




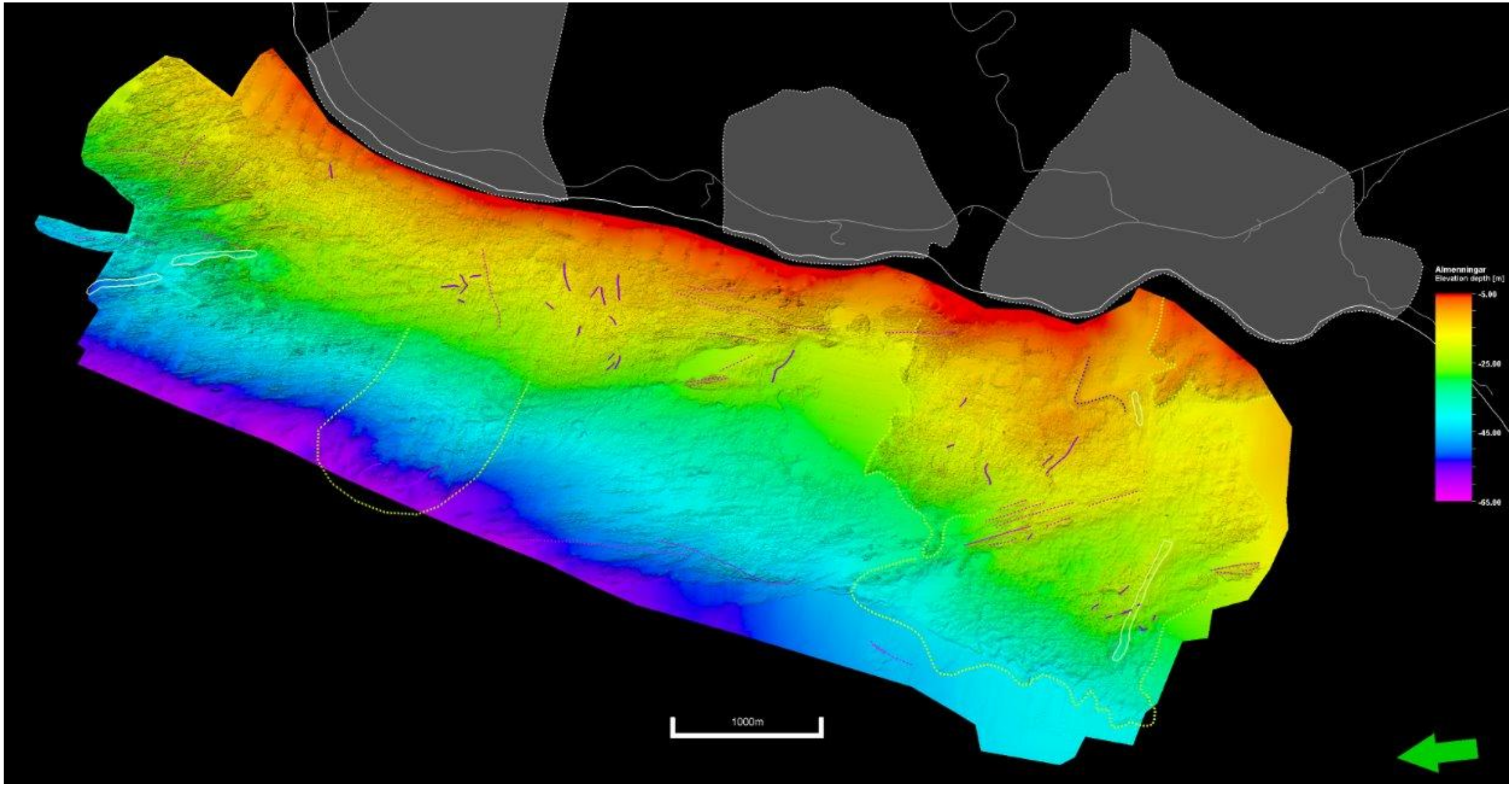


Botngerð / lengdarsnið

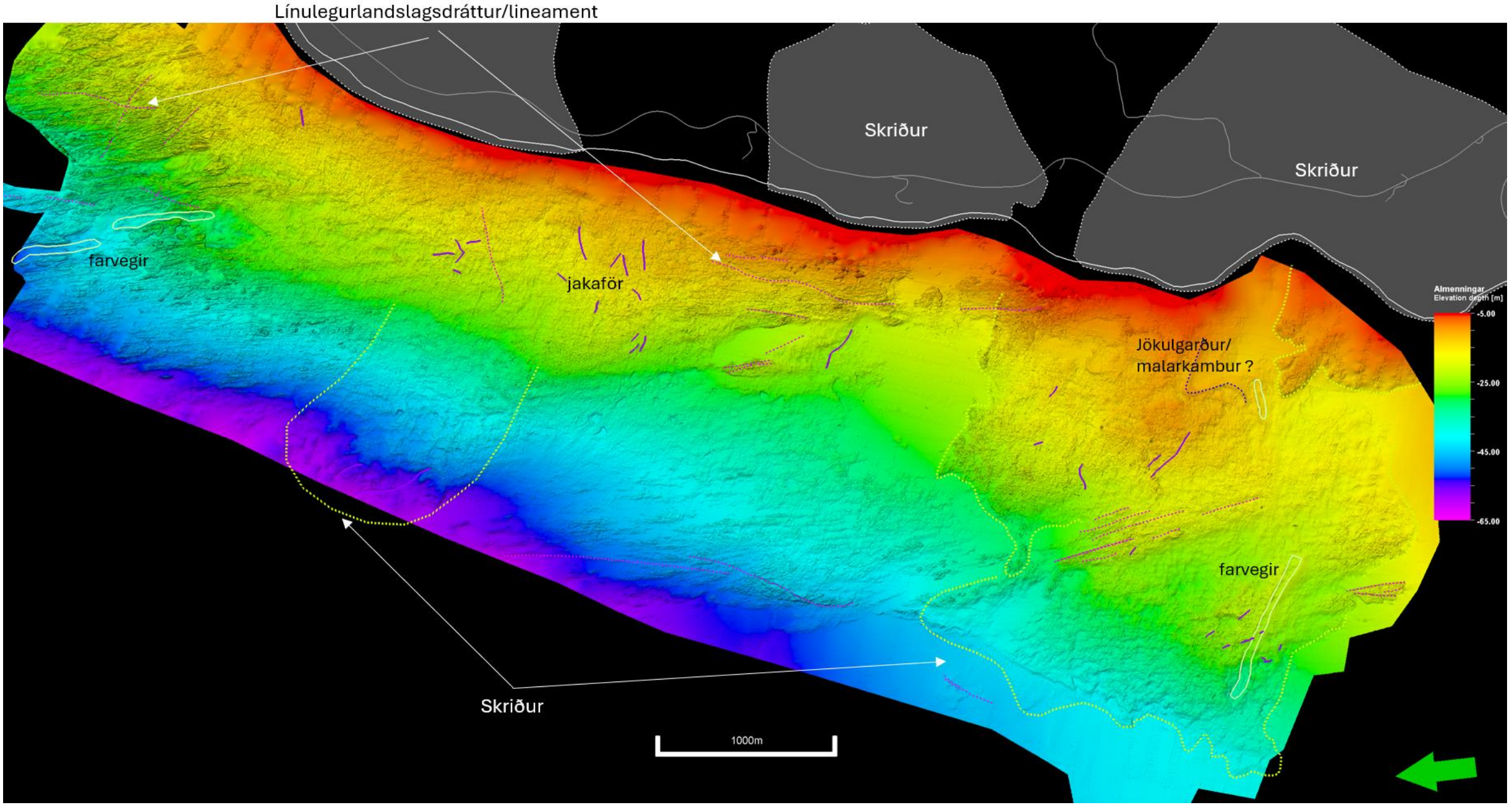




Önnur ásýnd (Takk Ögmundur á ÍSOR)



Önnur ásýnd


Línulegurlandslagsdráttur/lineament
Skriður
Skriður
farvegir
jakaför
Jökulgarður/
malarkambur ?
Almenningar
Elevation depth [m]
-5.00
-25.00
-45.00
-65.00
farvegir
Skriður
1000m

Samantekt

- Mismunandi rannsóknir staðið yfir í rúm 20 ár.
- Orðin nokkuð góður skilningur á eðli hreyfinga og orsakavalda.
- Hreyfingar sem mælst hafa á GNSS stöðvunum gefa okkur glögga mynd á láréttum og lóðréttum færslum í rauntíma.
- Kortlögð hafa verið fjölmörg misgengi sem gefa okkur mismunandi hreyfingar.
- Dýptarmælingar á hafsvæðinu fyrir framan Almenninga gefa til kynna mikla úthlaupslengd berghlaupanna.