

# Status-møde

Korsør brandskole

Udstilling af forureningsdata

13 august 2023

# Program

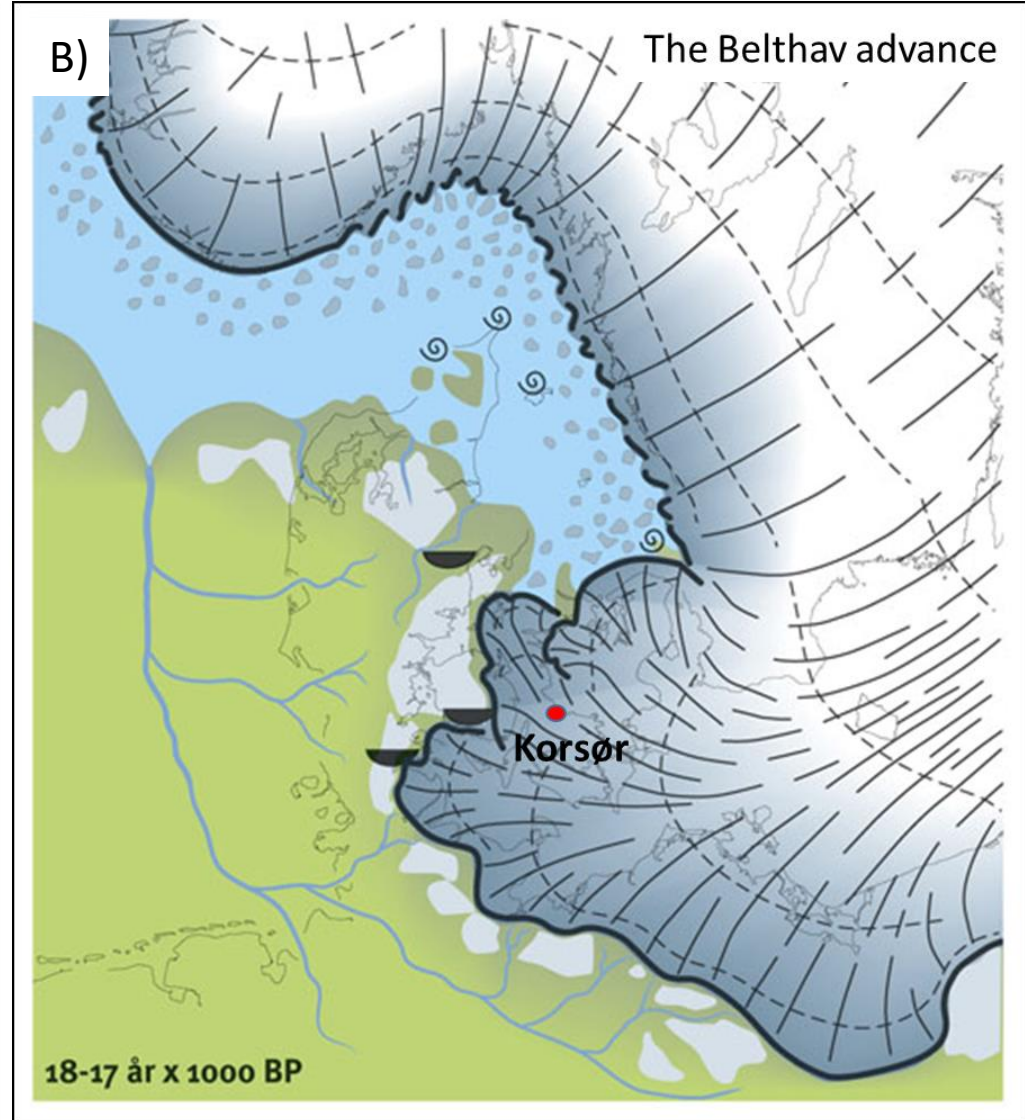
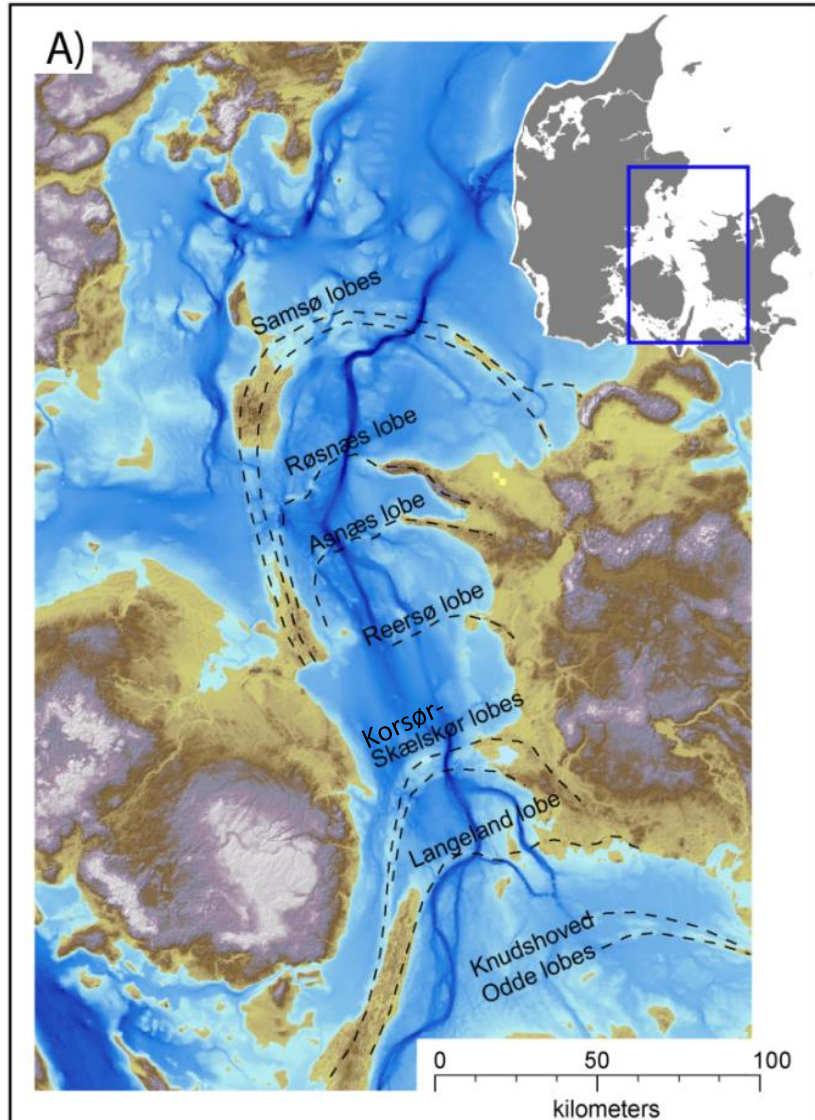
- Ny 3-d geologisk model over Korsør i GAL (knud Erik)
- Geologisk forståelsesmodel
- GeoScene-3D model (afgrænsning/opløsning)
- Maximal-stratigrafi (antal lag)
- Præsentation af modellen i GAL
- Opjusteringer
- Udstilling af forureningsdata i GAL for Region Sjælland (Carina)
- Funktionalitet/baggrund
- Demo

# Korsør brandskole 3-D geologisk model

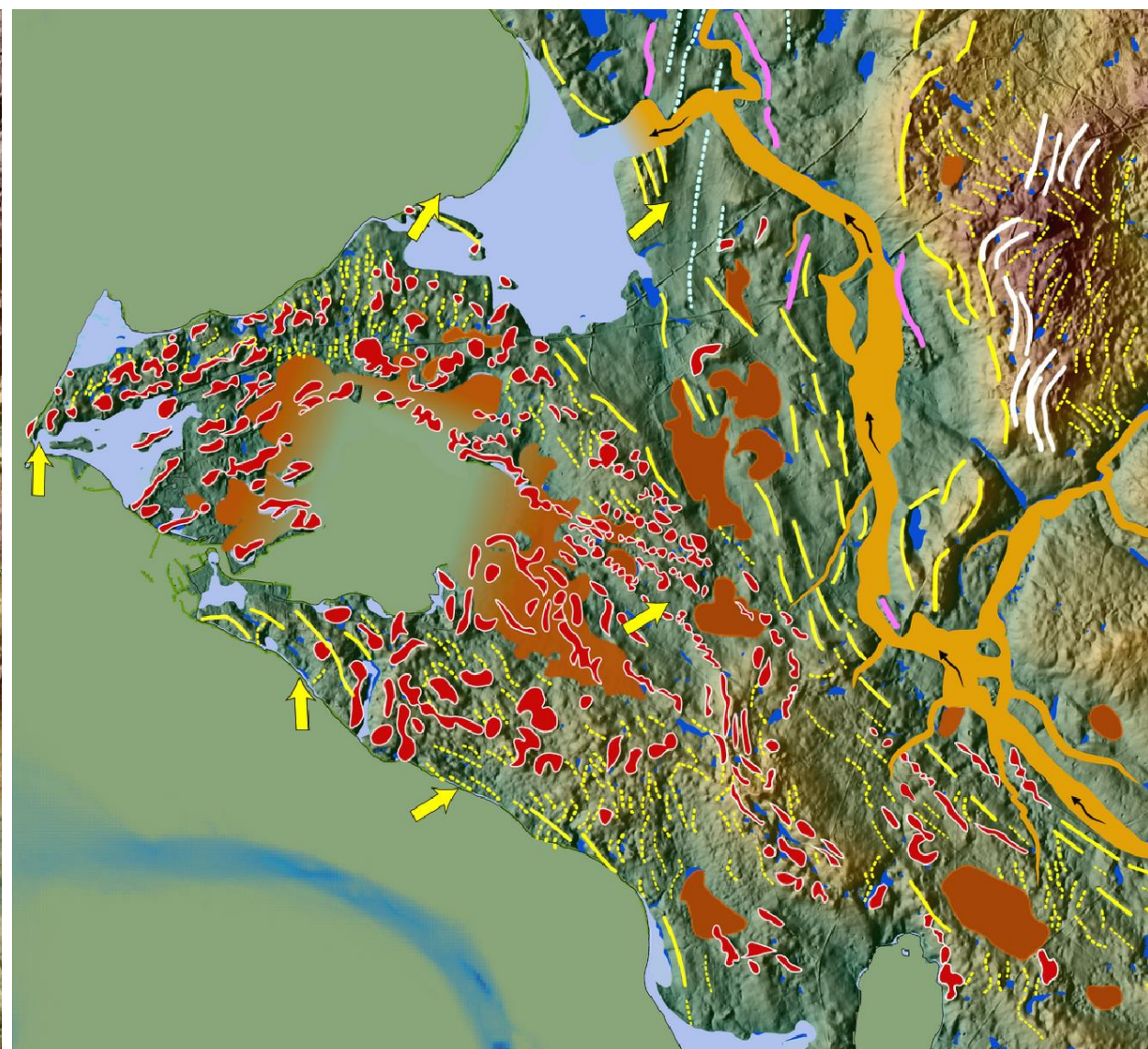
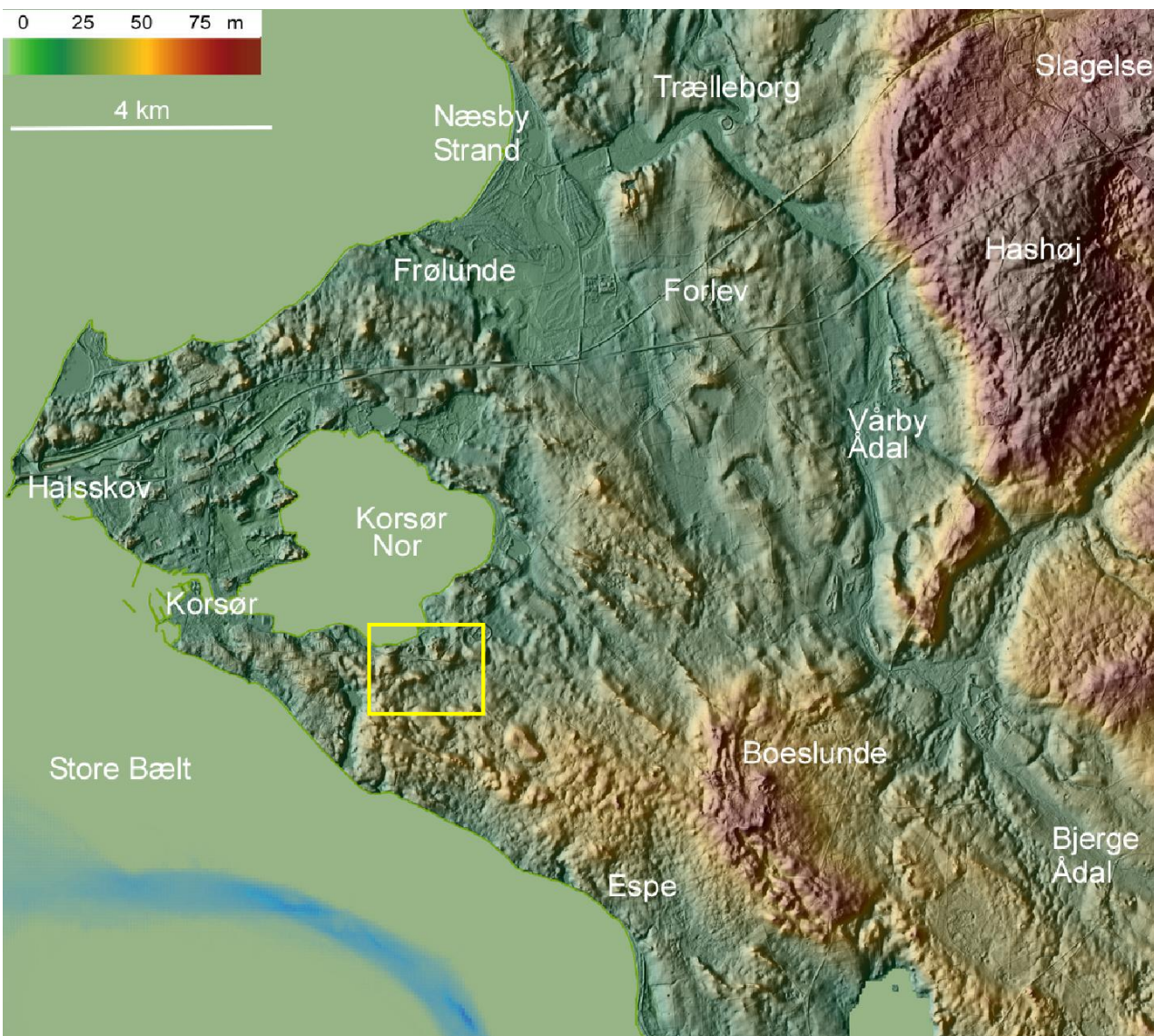
# Geologisk forståelsesmodel



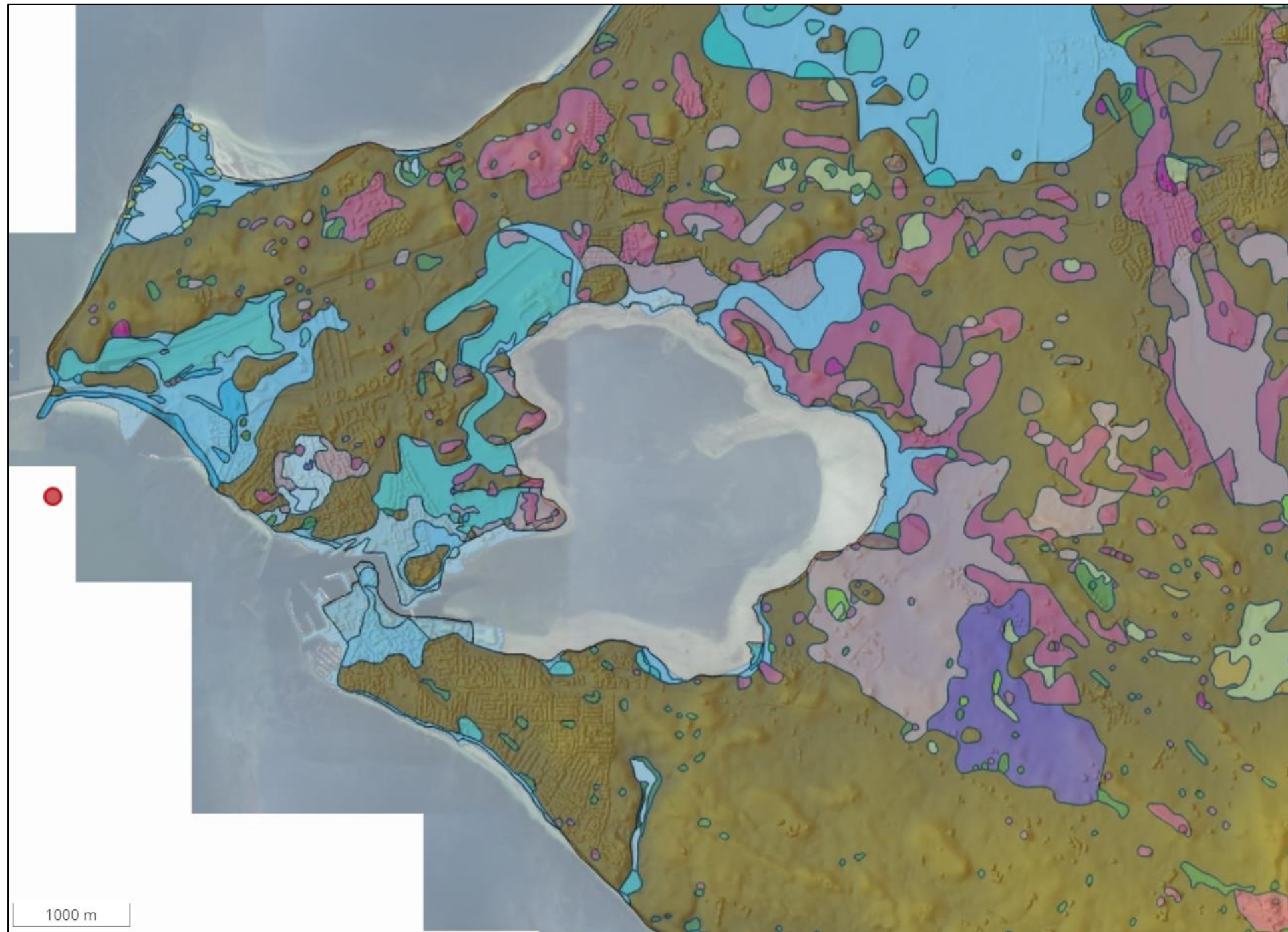
# Geologisk historik Bælthav-fremstødet



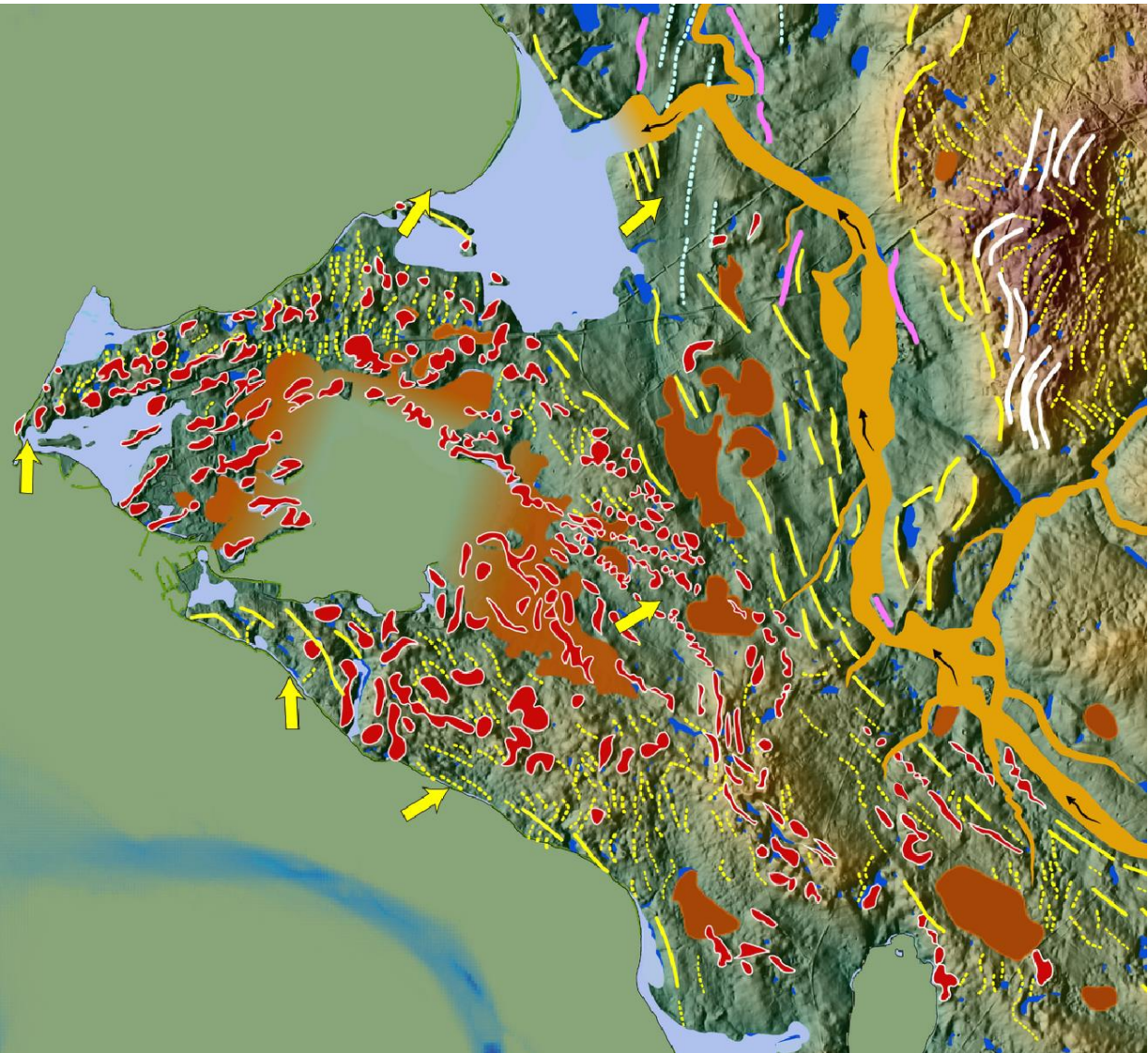
# Geomorfologi



# Geologi



# Geomorfologi



Issø-  
bakker



Strømliniet  
bund-  
moræne  
og ås



NØ-isens  
rand-  
moræner



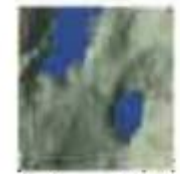
Mindre  
rygge på  
dødis-  
moræne



Smelte-  
vands-  
flod



Bælthav  
Isstrøms  
rand-  
moræner



Dødis-  
lavning



Isdæmmet  
sø



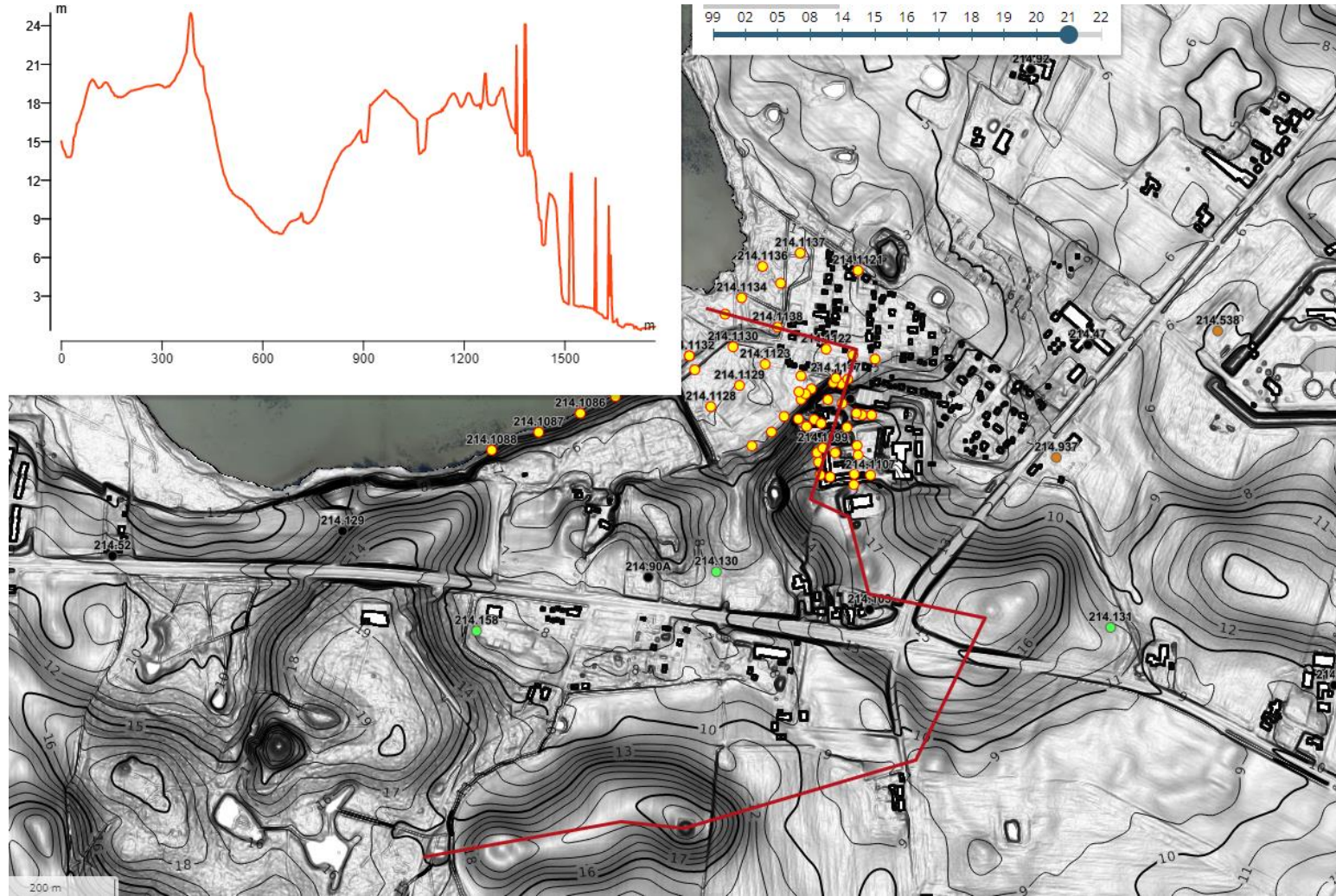
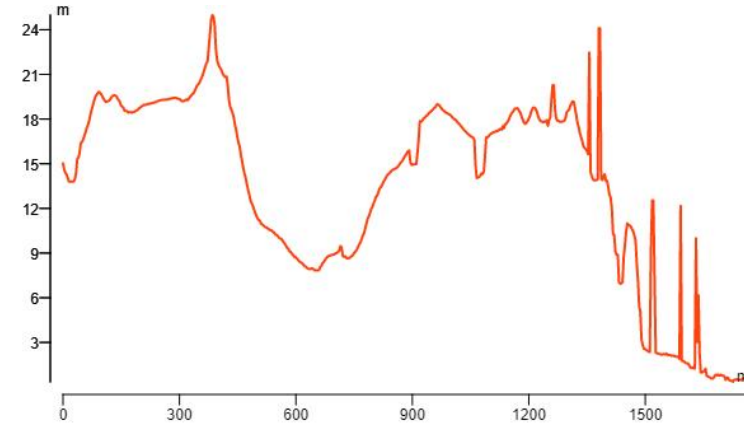
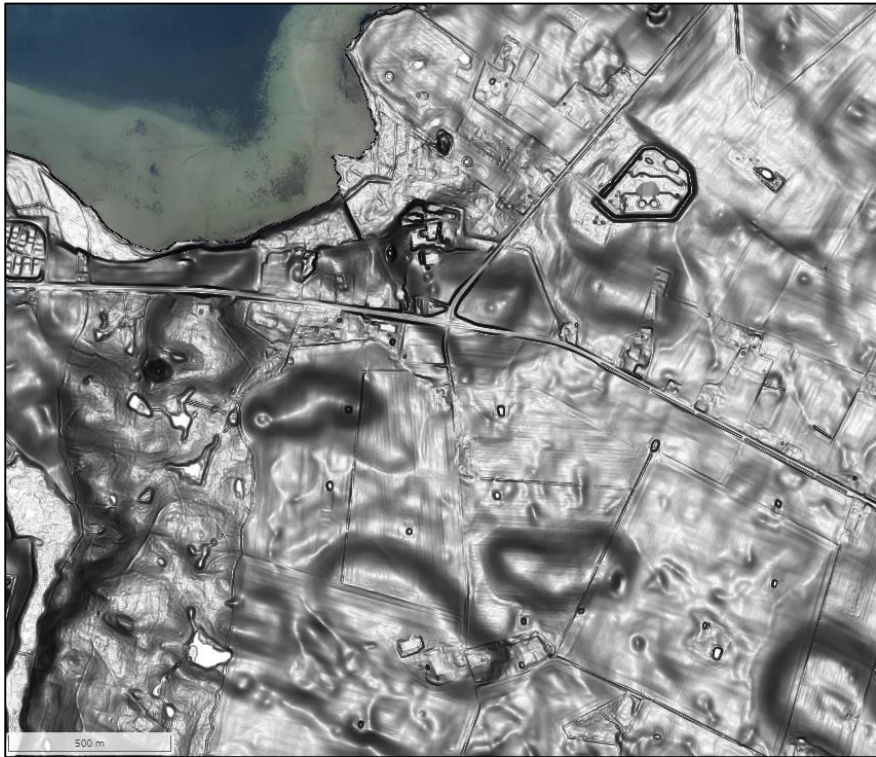
Målt  
retning af  
istryk



Postglacial  
havbund



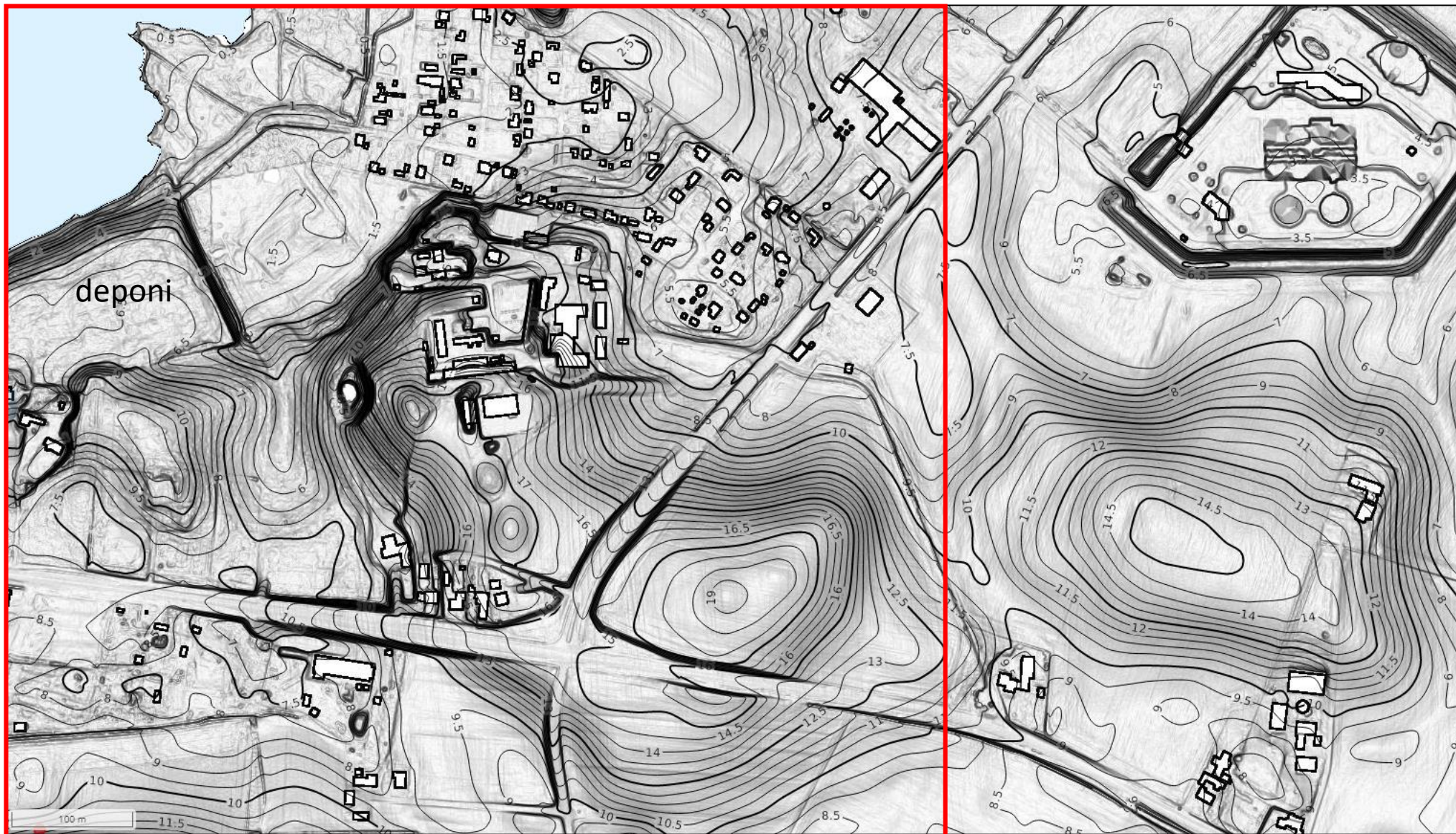
# Elevation model



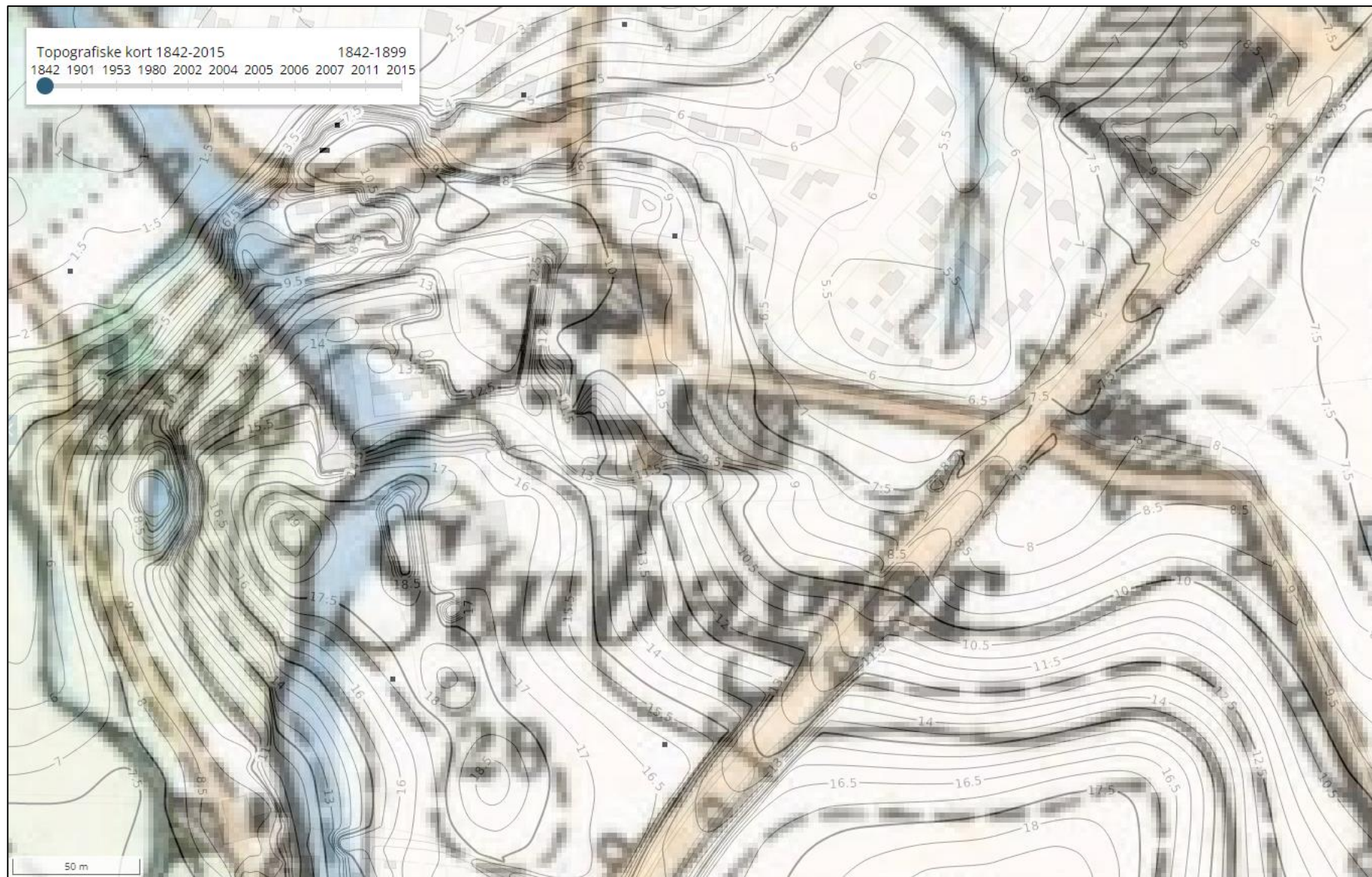
# Issøbakker og randmoræner



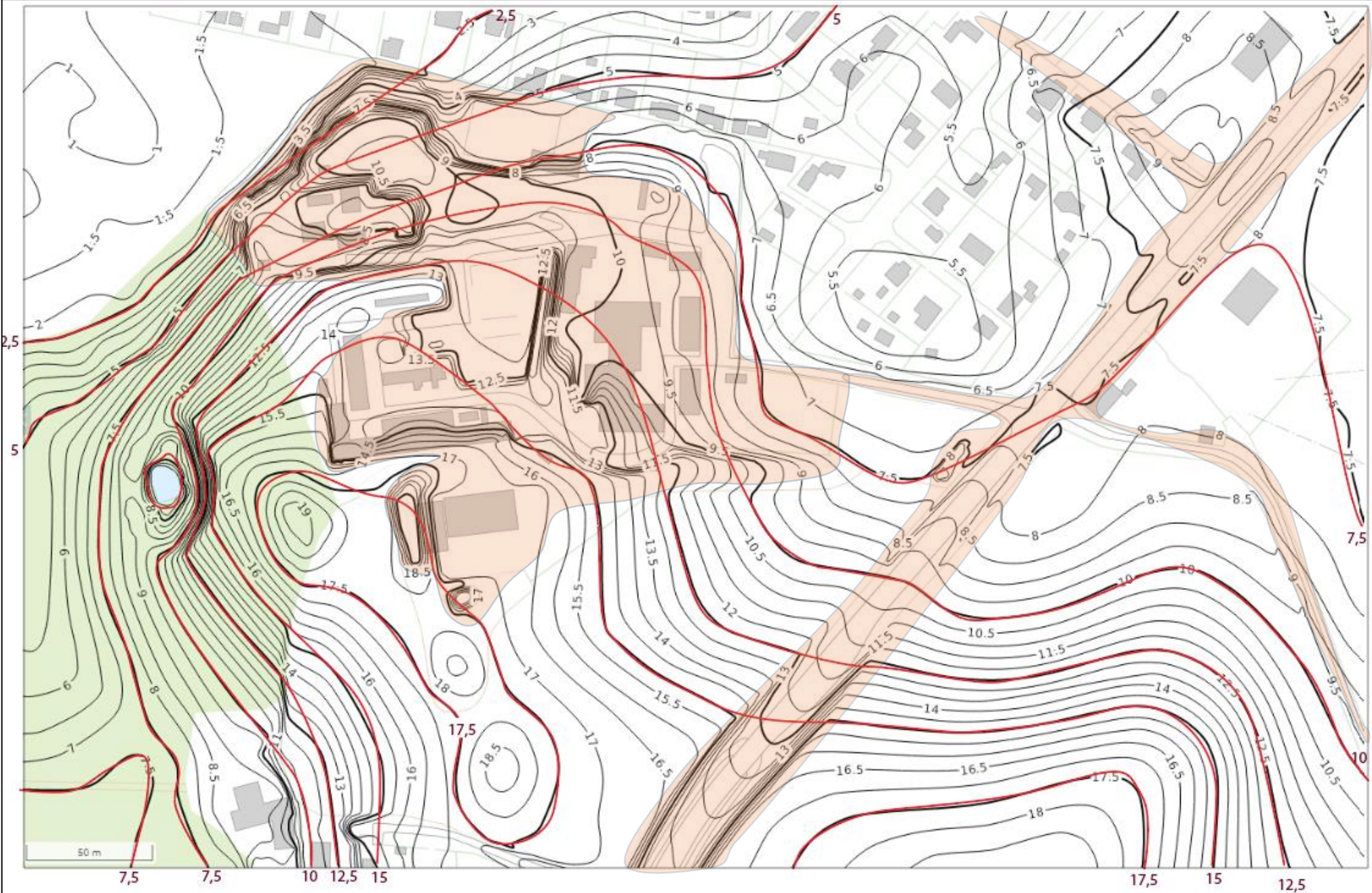
# Modelområde



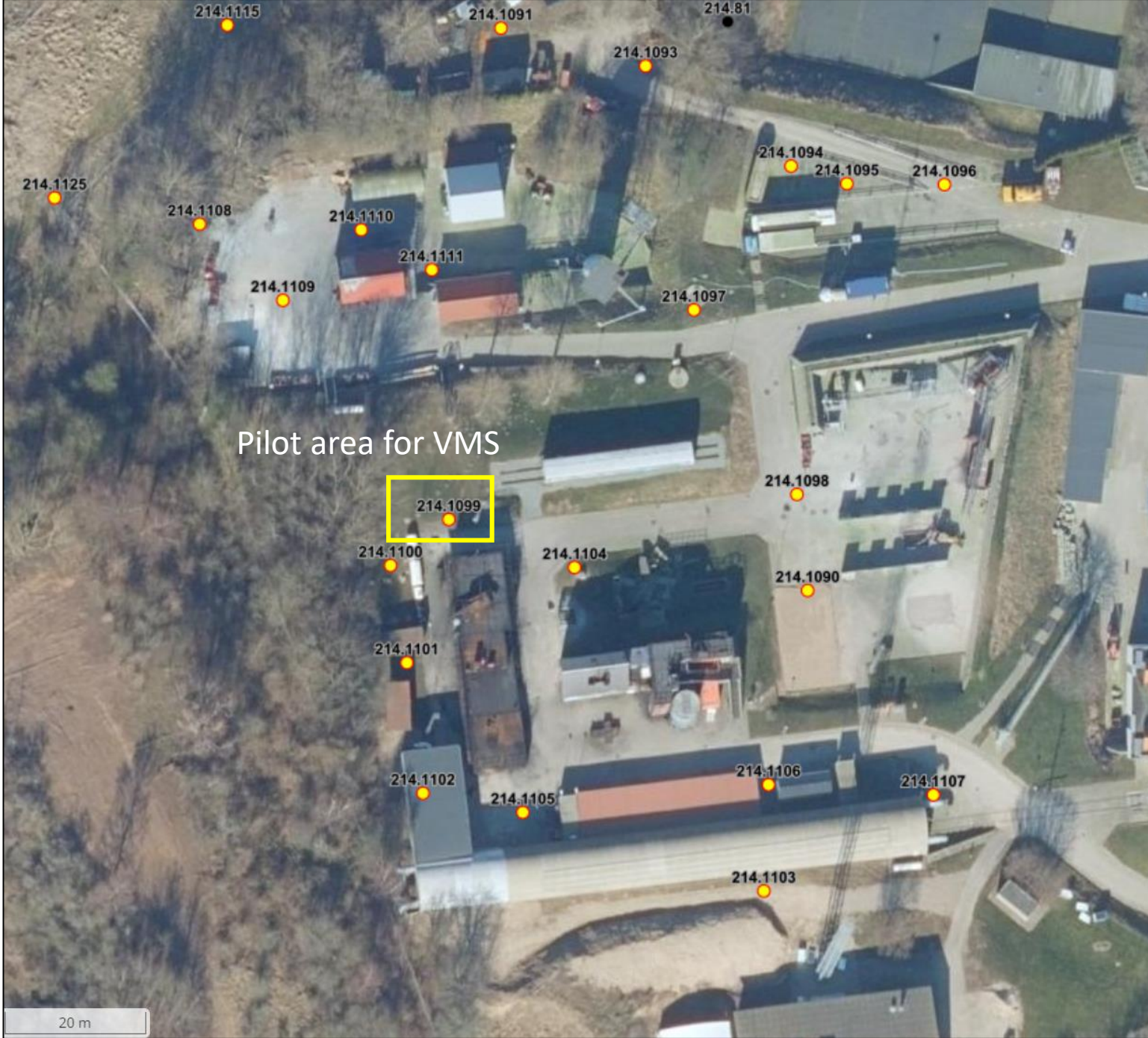
# FYLDLAGS UDBREDELSE Original (1842) and new contourslines



# Areas with fill materiale

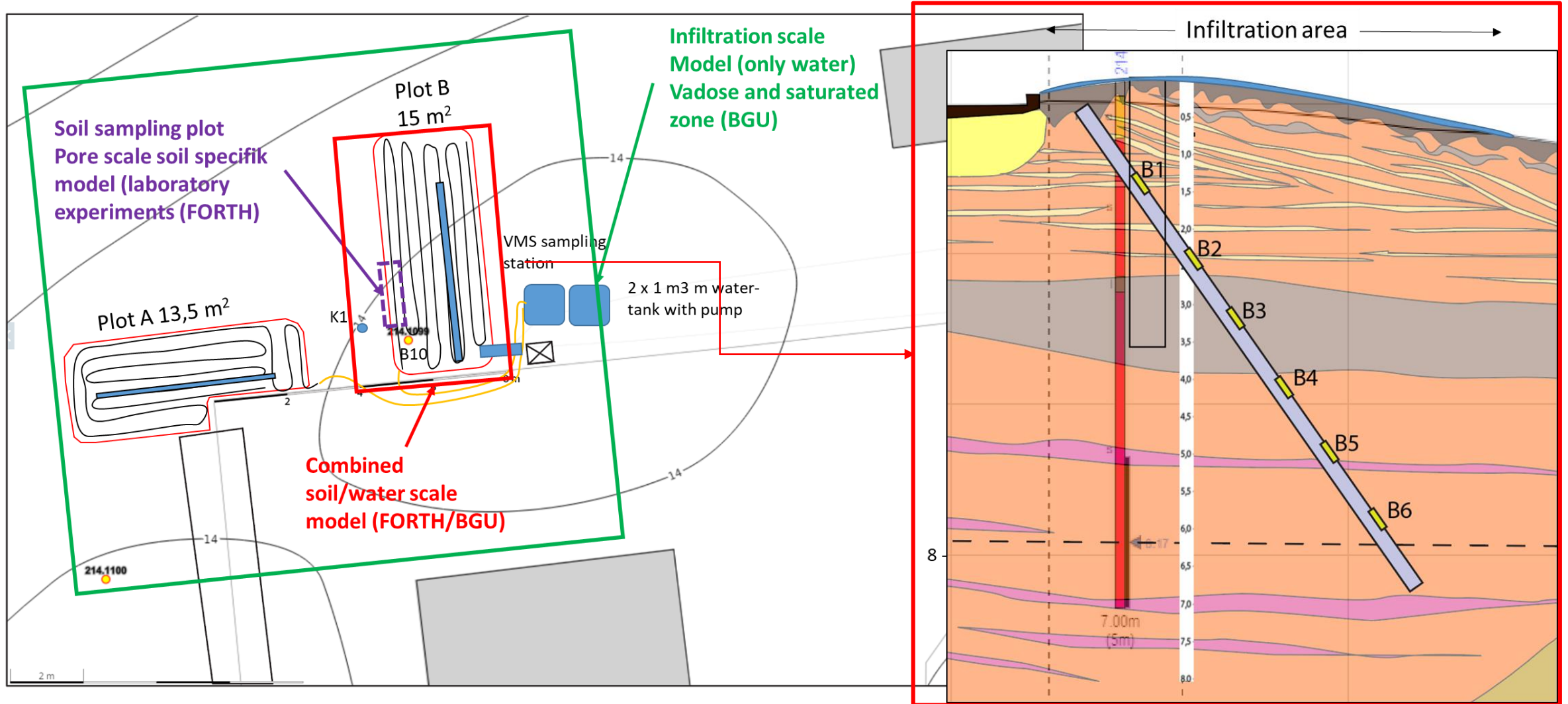


# Detail undersøgelser og boringer

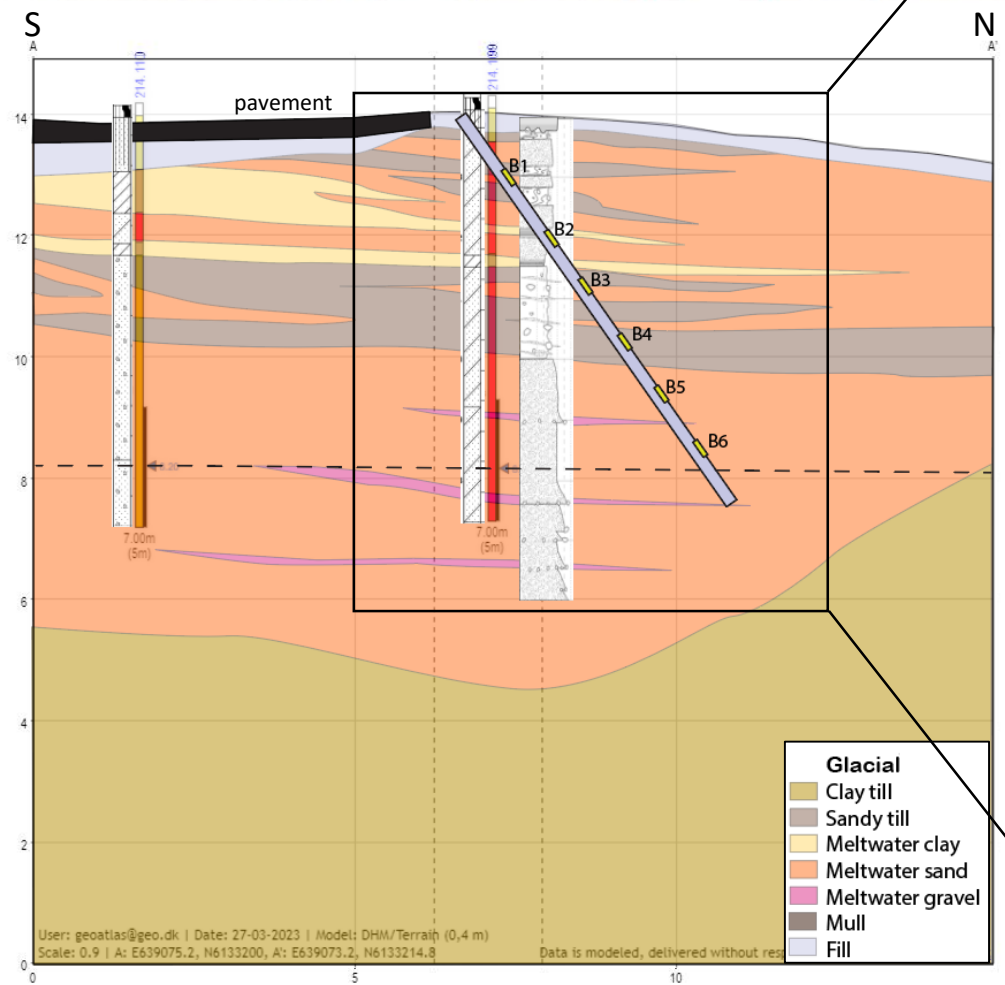
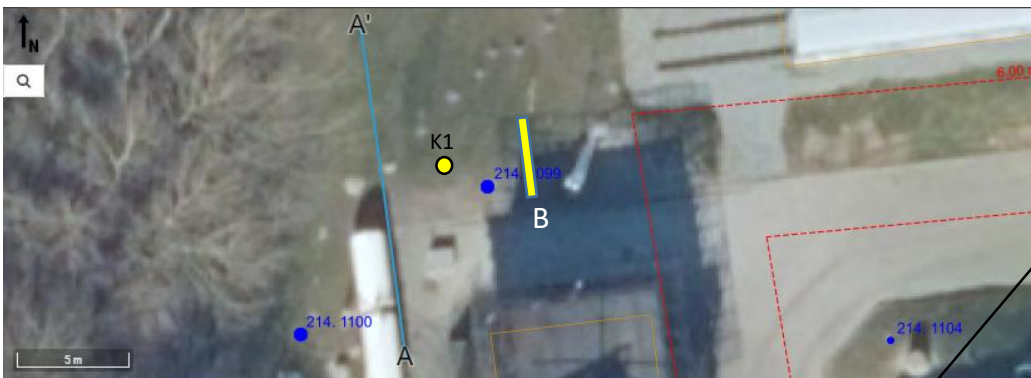




# VMS Pilot experimental site scale 25 x 25 m

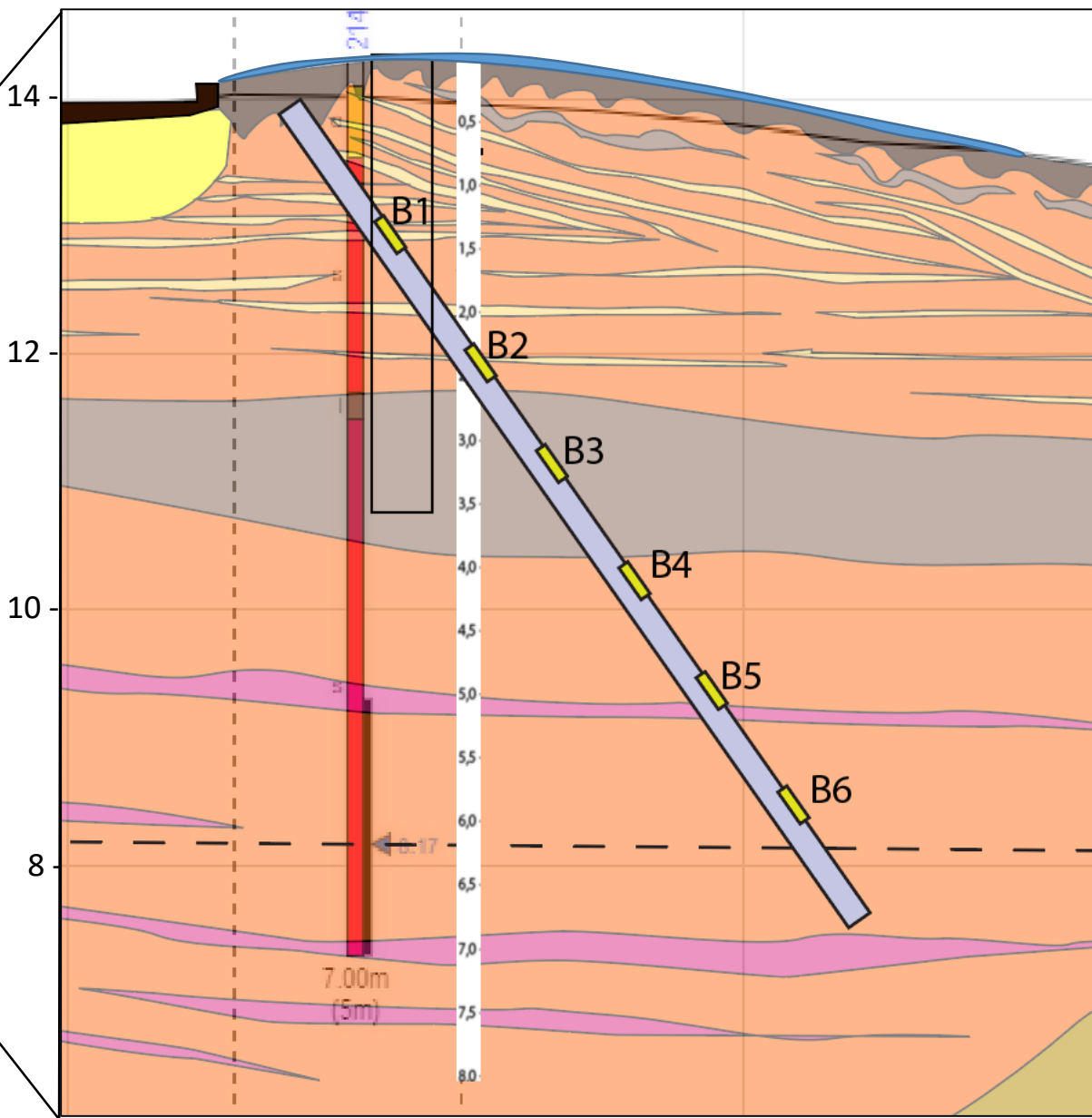






Updated model

← Infiltration area →



# Depositional environment

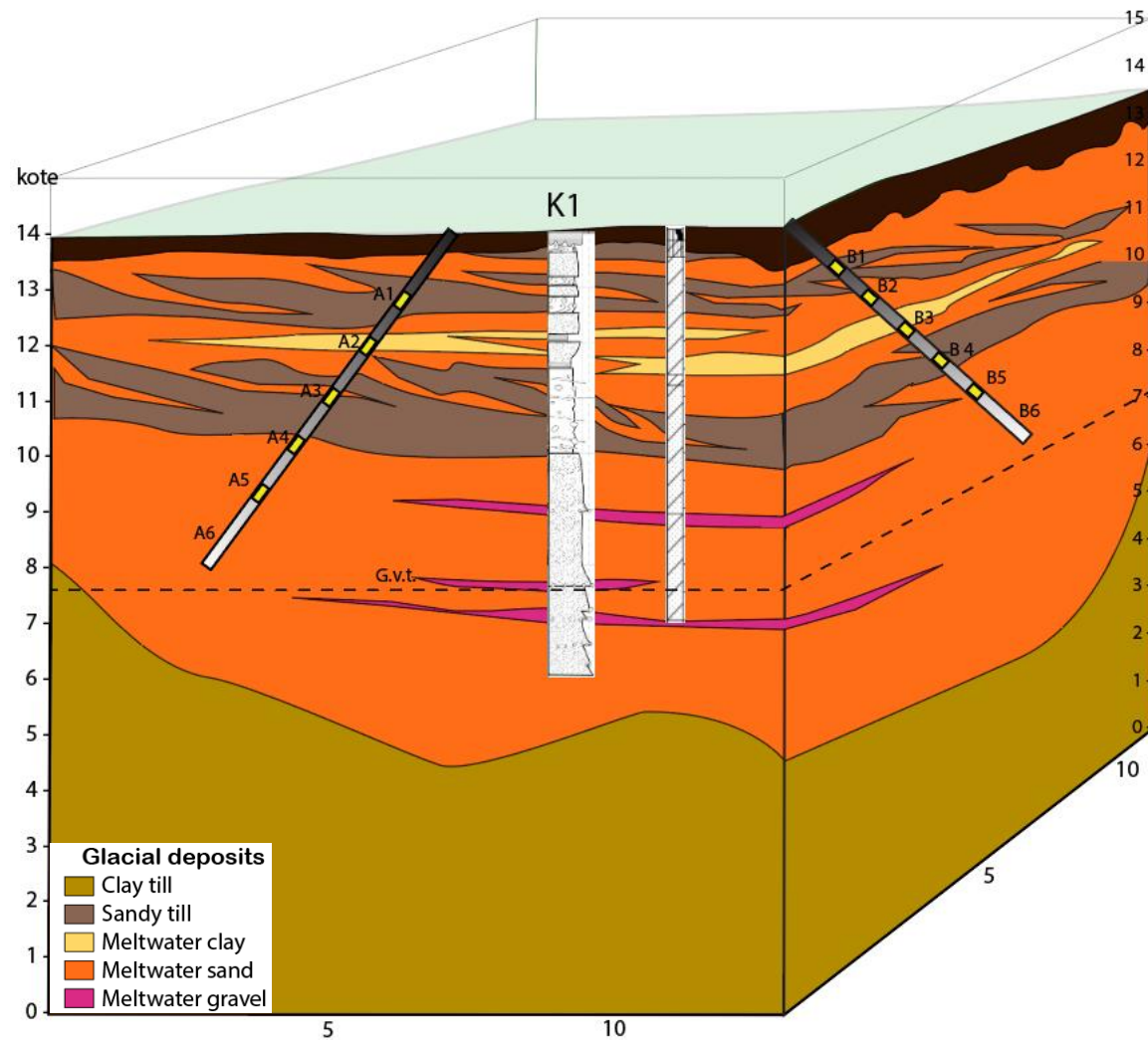
Drill log page 1/1		Borehole no: K1	Driller id: Mats	Pl: KEK	GeO		
Project 205579		Start date:		Coordinat:			
Borehole: Korsoer		End date:		Gw. table m b.g.s. : kote, terrain: ROK:			
Depth m.	Filter	Drilling method Transitions	Lithology	Grainsize day silt fine sand Medium sand coarse sand gravel stone	Description and geological setting	soil sample	Watersample
0,5					Mull, sandy topsoil brown CaCO <sub>3</sub> poor Sandy till, clayey, silty, few stones, yellowish brown CaCO <sub>3</sub> poor Sand, medium, light yellowish brown CaCO <sub>3</sub> poor "meltwatersand"	242	
1,0					Sandy till, w. clayey, silty, some gravel, brown CaCO <sub>3</sub> poor Sand, medium, light reddish brown CaCO <sub>3</sub> poor "meltwatersand" Sandy till, w. clayey, silty, some gravel, reddish brown CaCO <sub>3</sub> poor Sand, medium, light yellowish brown CaCO <sub>3</sub> rich "meltwatersand"	245	
2,0					Clay silty, massive, brown, CaCO <sub>3</sub> rich "meltwater-clay"	244	
2,5					Sand, fine, medium, coarse, laminated, light yellowish brown CaCO <sub>3</sub> rich "meltwatersand"	243	
3,0					Sandy till, w. clayey, silty, some gravel, few stones, sandstringer, brown, CaCO <sub>3</sub> rich, "flowtill"		
3,5					Sandy till, w. clayey, silty, some gravel, few stones, sandstringer, brown, CaCO <sub>3</sub> rich, "flowtill"	221	
4,0					Sand, medium, coarse, gravely, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand" Sand, medium, coarse, light yellowish brown CaCO <sub>3</sub> rich "meltwatersand"	223	
5,0					Sand, medium, coarse, gravely, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"		
6,0					Sand, medium, coarse, gravely, few stones, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"		
6,5					Sand, medium, coarse, gravely, few stones, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"		
7,0					Sand, medium, coarse, gravely, few stones, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"	224	
7,5					Sand, medium, coarse, gravely, few stones, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"		
8,0					Sand, medium, coarse, gravely, few stones, light yellowish brown, CaCO <sub>3</sub> rich "meltwatersand"	222	

Ice Lake meltwater  
massive-laminated  
sand/silt

Flow till

Ice Lake meltwater  
sand/gravel

# Lokal 3-D geologisk ramme på forsøgsområdet



Ice Lake meltwater  
massive-laminated  
sand/silt

Flow till

Ice Lake meltwater  
sand/gravel

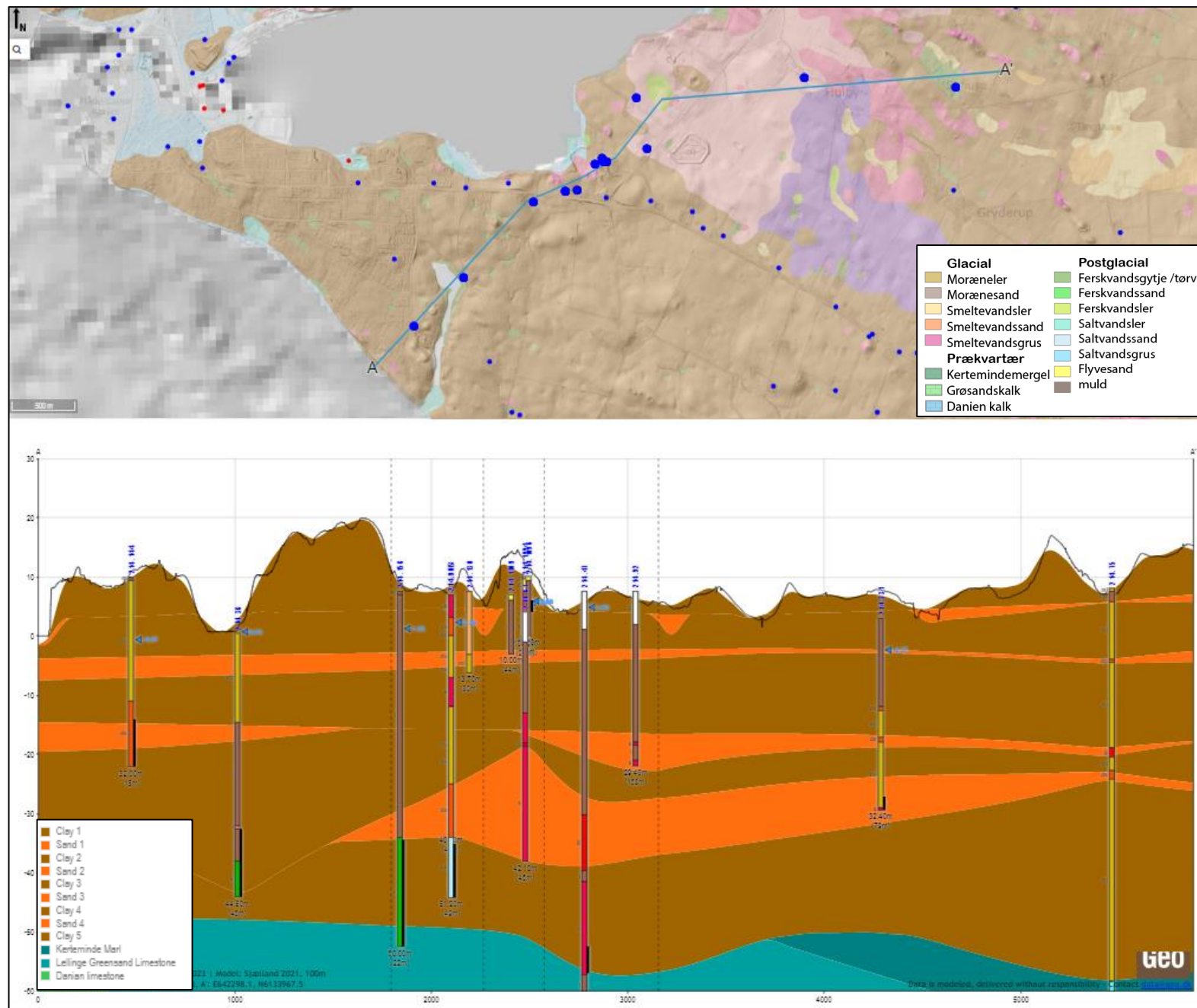
Clay till

4 PFAS $\mu\text{g}/\text{kg}$ (dybde)	
111 (0,2)	71 (0,2)
179(0,5)	34(0,5)
199 (1,0)	510 (1,0)

# Konstruktion af 3-D model I GAL

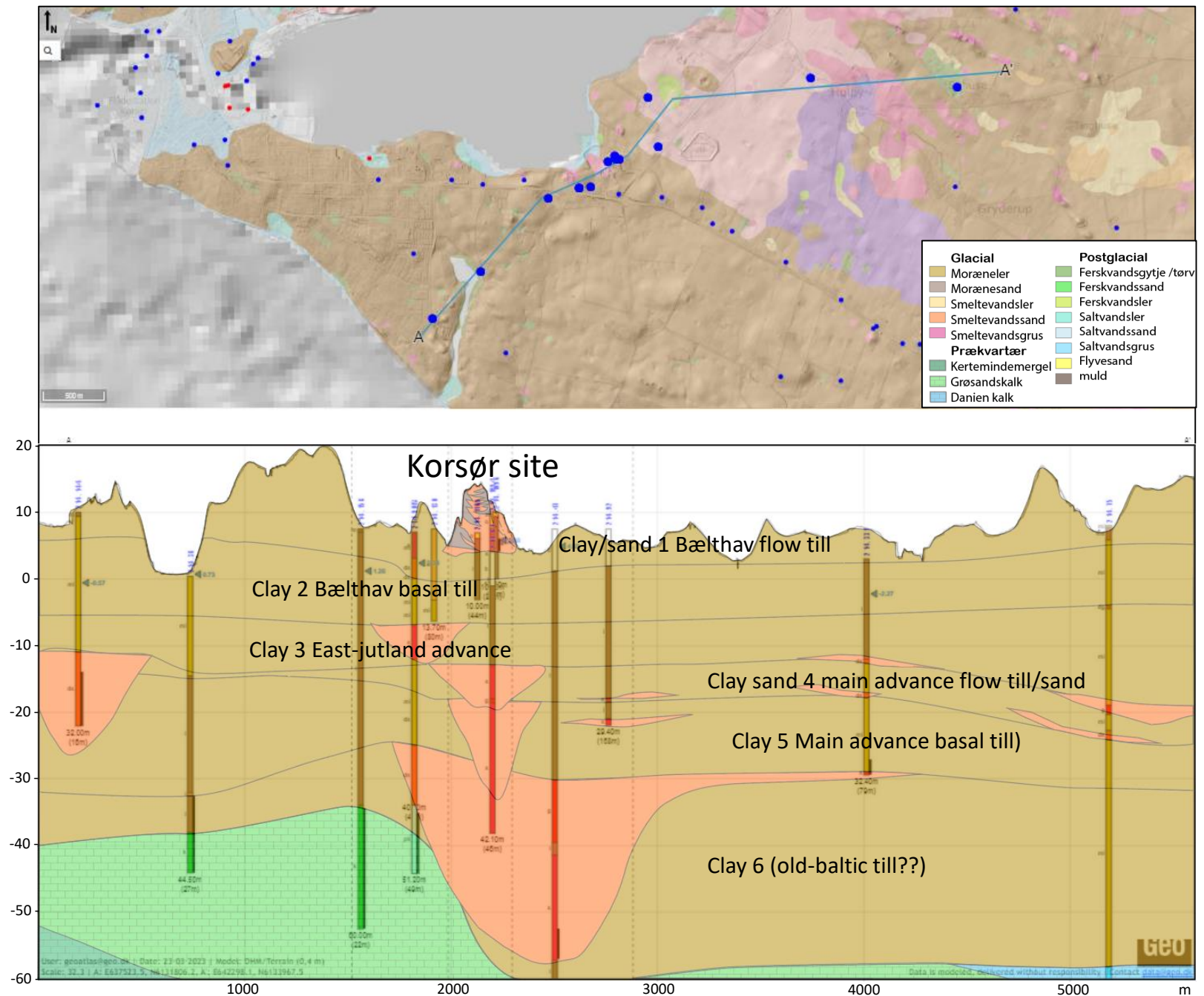


# Eksisterende Maximal stratigrafi DK model 2021 (100m)



# Retolket maximalstratigrafi

- Ler 1 Flow-till i dødis landskab (Bælthav fremstødet)
- Sand 1 Smeltevandssand/ler i dødislandskab (Bælthavs fremstødet)
- Ler 2 Basal till (Bælthavs fremstødet)
- Sand 2 Smeltevandssand Østjysk fremstød
- Ler 3 Basal till Østjysk fremstød
- Sand 3 Smeltevandssand Østjysk fremstød
- Ler 4 Flowtill NØ-fremstød
- Sand 4 Smeltevandssand NØ-fremstød
- Ler 5 Basal till NØ- fremstød (Mid Danish till fm)
- Sand 5 Smeltevandssand NØ-till (Hedelands fm)
- Ler 6 Basal till (Gammel baltiske fremstød)
- Sand 6 Smeltevandssand (Gammel baltiske fremstød)
- Selandien (Kertemindemergel)
- Selandien Kalk (Grønsandskalk)
- Danien kalk (bryozokalk)



## Oprindelig Maximal stratigrafi

Alder	Modellagnavn	Beskrivelse
Kvartær	L01 Fyld	Fyld
	L02 Postglacial	Marine aflejringer af primært HS, men også HT, HP, findes omkring kote 0 m.
	L03 Sand Smeltevandssand i dødislandskab Bælthavs isfremstød	DS
	L03a Morænesand 1_0a	MS, MG
	L03b Sand 1_0b	Usammenhængende DS
	L03c Morænesand 1_0c	Usammenhængende MS
	L03d Sand 1_0d	Usammenhængende DS
	L04 Morænesand 1_0a	Usammenhængende MS
	L05 Sand 1 Smeltevandssand/Dødis Bælthav isfremstød	DS
	L06 Ler 2 Bælthavs isfremstød	ML, DL
Selandien kertemindemergel	L07 Sand 2 Smeltevandssand Østjysk isfremstød	DS
	L08 Ler 3 Basal till Østjyske isfremstød (Østjylland Till Fm)	ML, DL
	L09 Sand 3 Smeltevandssand Østjysk isfremstød	DS
	L10 Ler 4 Flowtill NØ-fremstød	ML
Selandien kalk	L15 Selandien Grønsandsmergel	
	L16 Selandien Grønsandskalk	Svarer til toppen af Bryozokalk
Bryozokalk	L17 Bryozokalk	Kote -xx (koten er ikke fastsat )

## Opjusteret Maximal stratigrafi

- L01 Fill
- L02 Postglacial
- L03 Sand Melt water sand
- L03a Moraine sand 1\_0a
- L03b True 1\_0b
- L03c Moraine sand 1\_0c
- L03d True 1\_0d
- L04 Moraine sand 1\_0a
- L05 Sand 1 Meltwater sand
- L06 Clay 2 Belt Sea ice advance
- L07 Sand 2 Meltwater sand
- L08 Clay 3 Basal till
- L09 Sand 3 Melt water sand
- L10 Clay 4 Flowtill
- L11 Sand 4 Melt water sand
- L12 Clay 5 Basal add
- L13 Sand 5 Meltwater sand
- L14 Clay 6
- L15 Selandien Greensand marl
- L16 Selandien Greensand lime

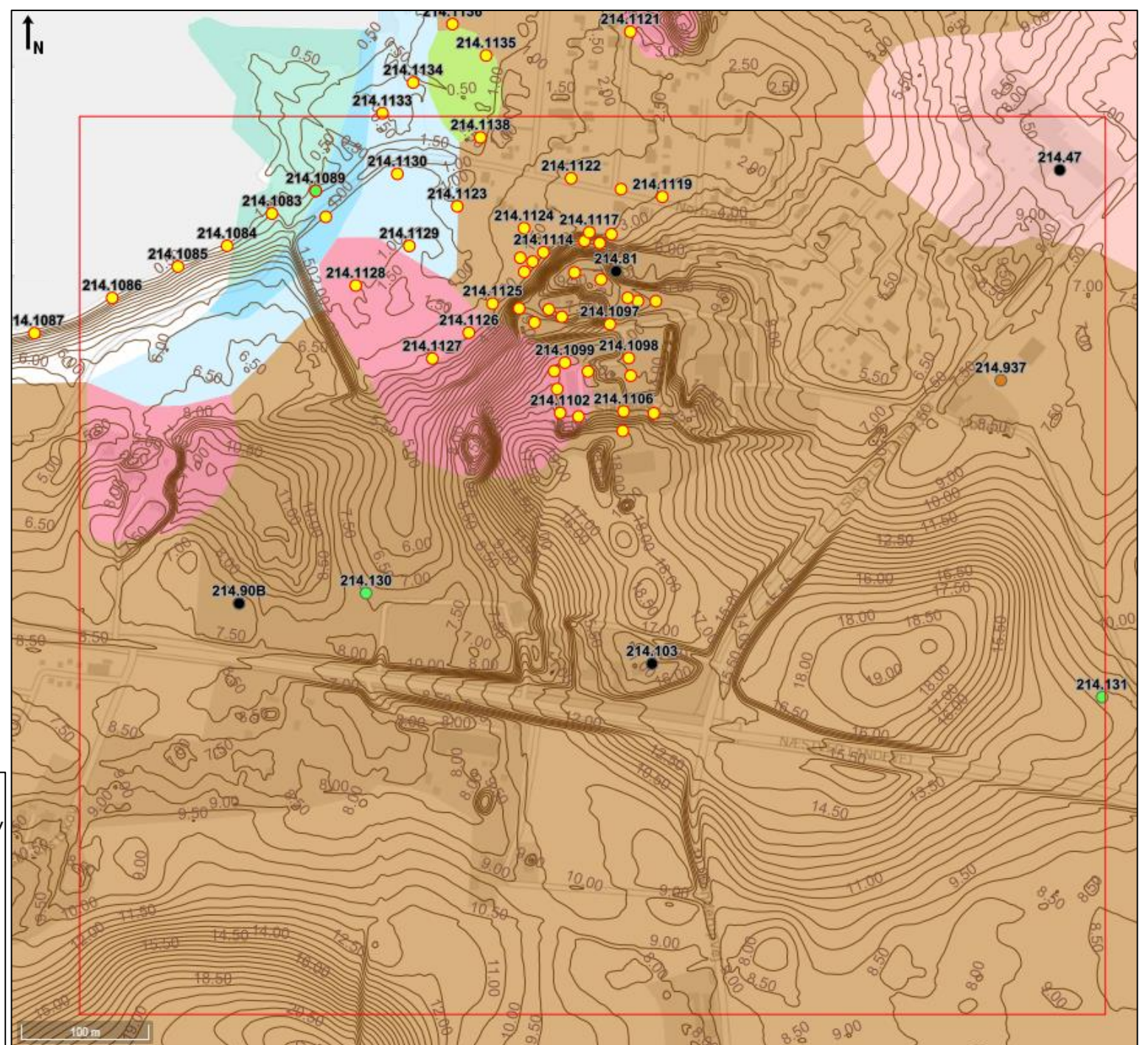
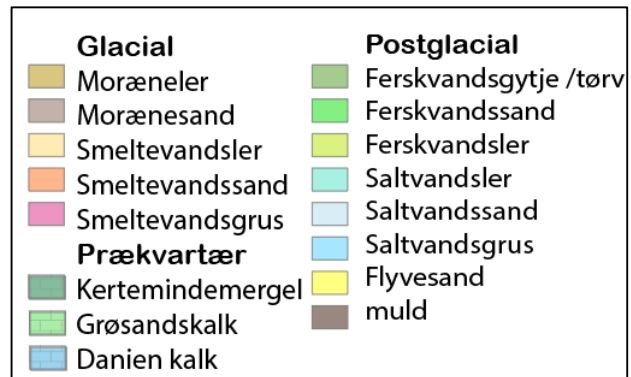
Issø sediementer  
Relateret til

# Model område

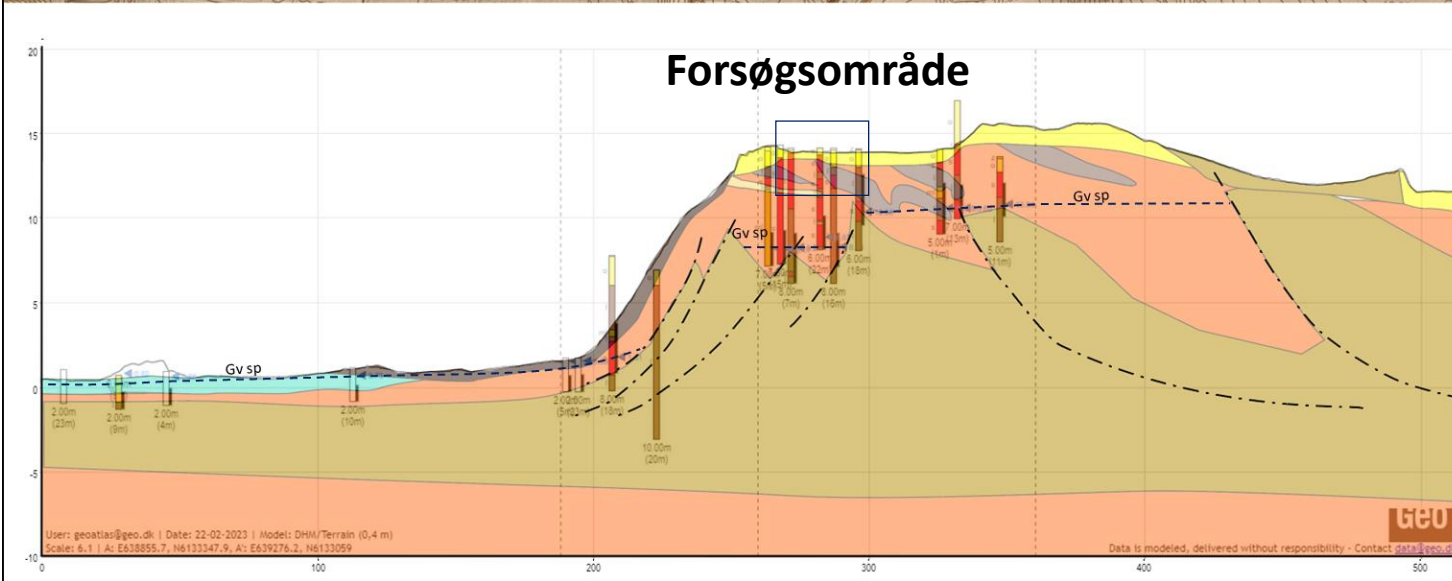
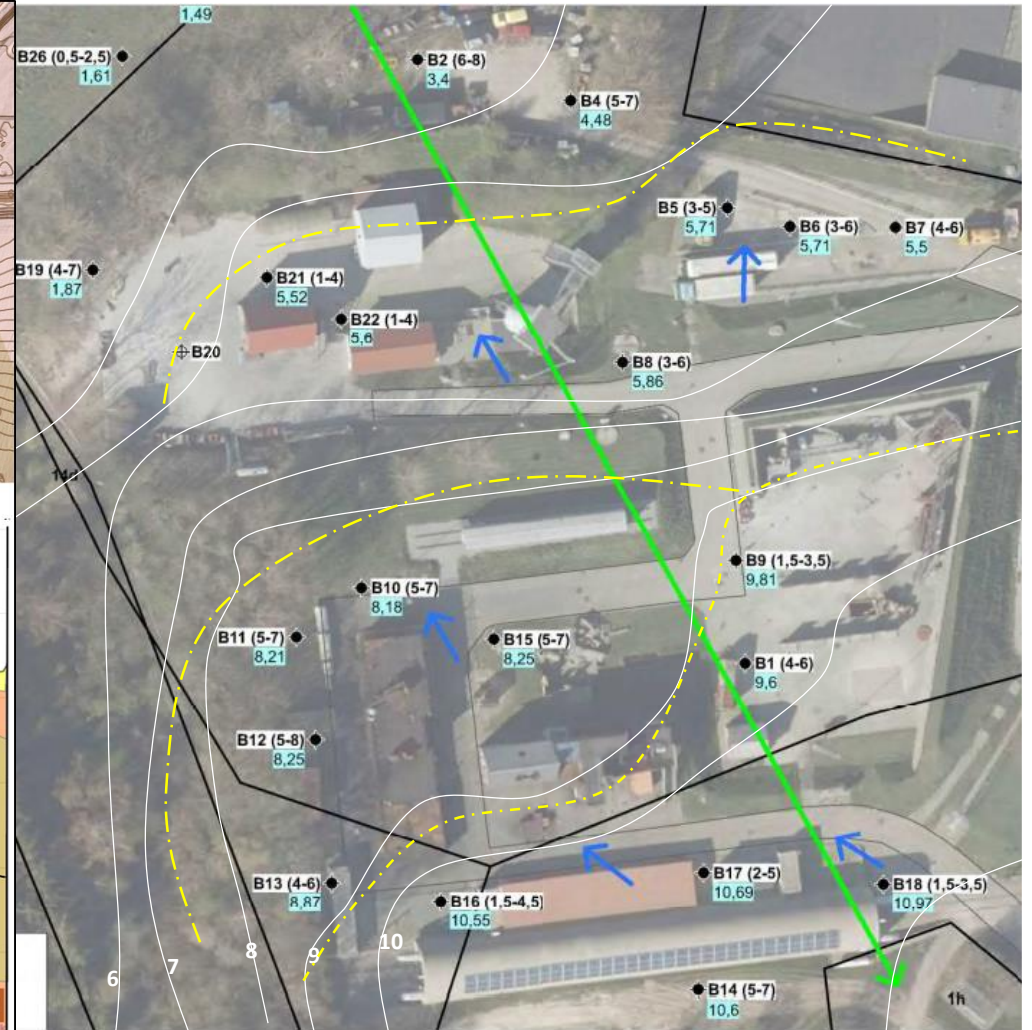
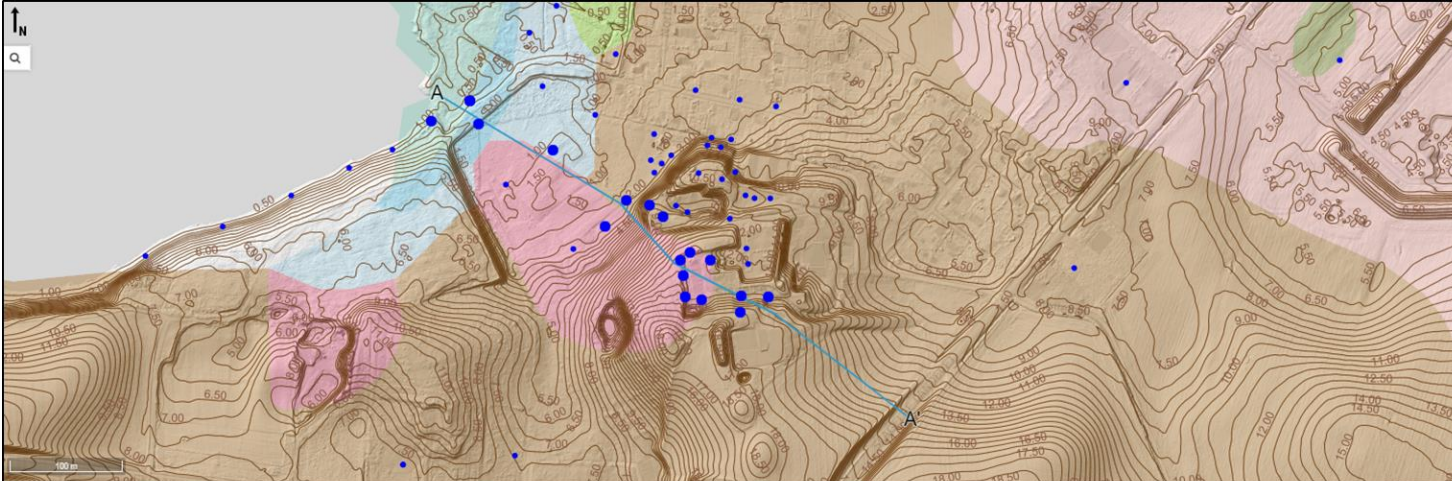




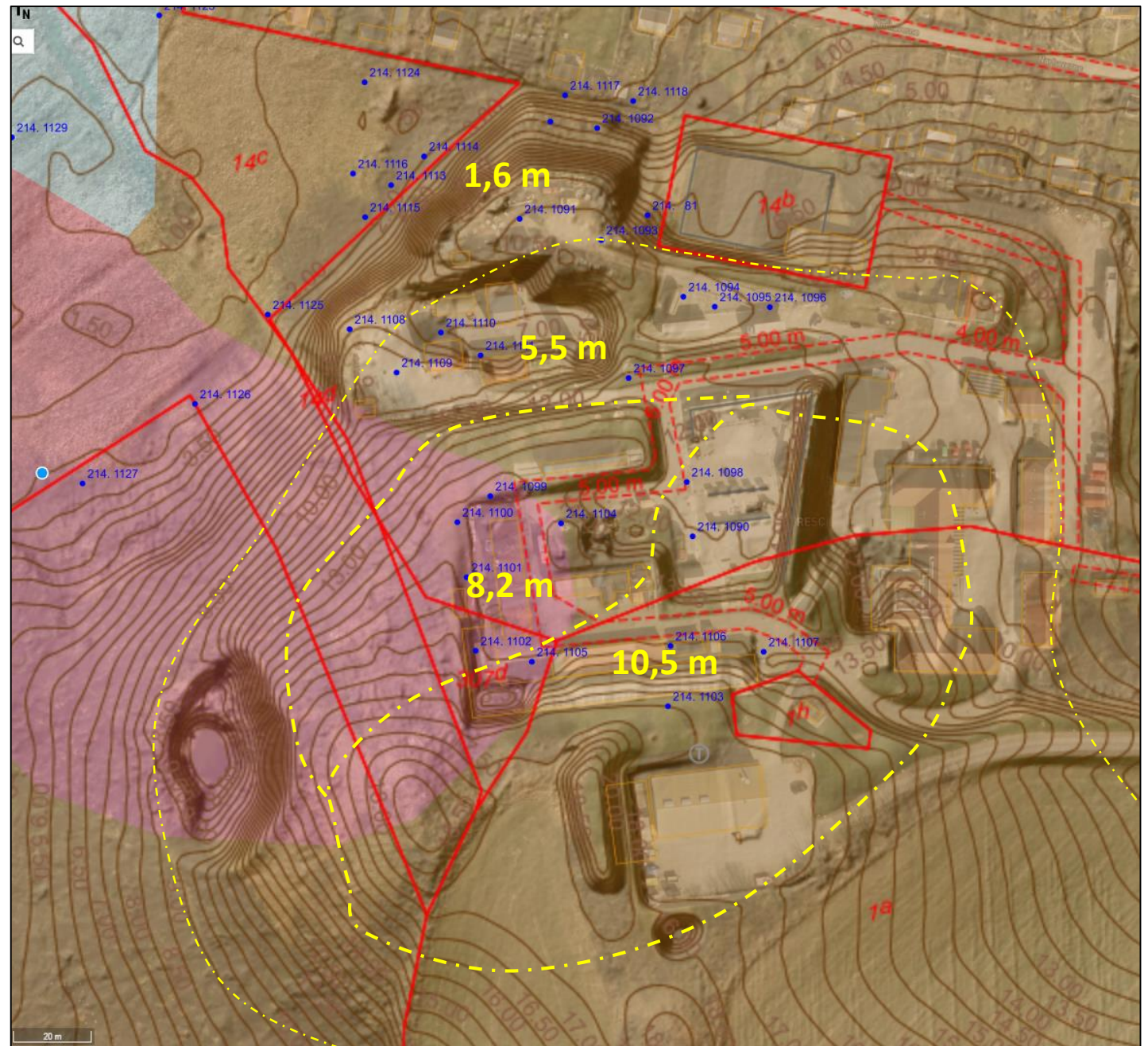
# Geologisk kort og topografi



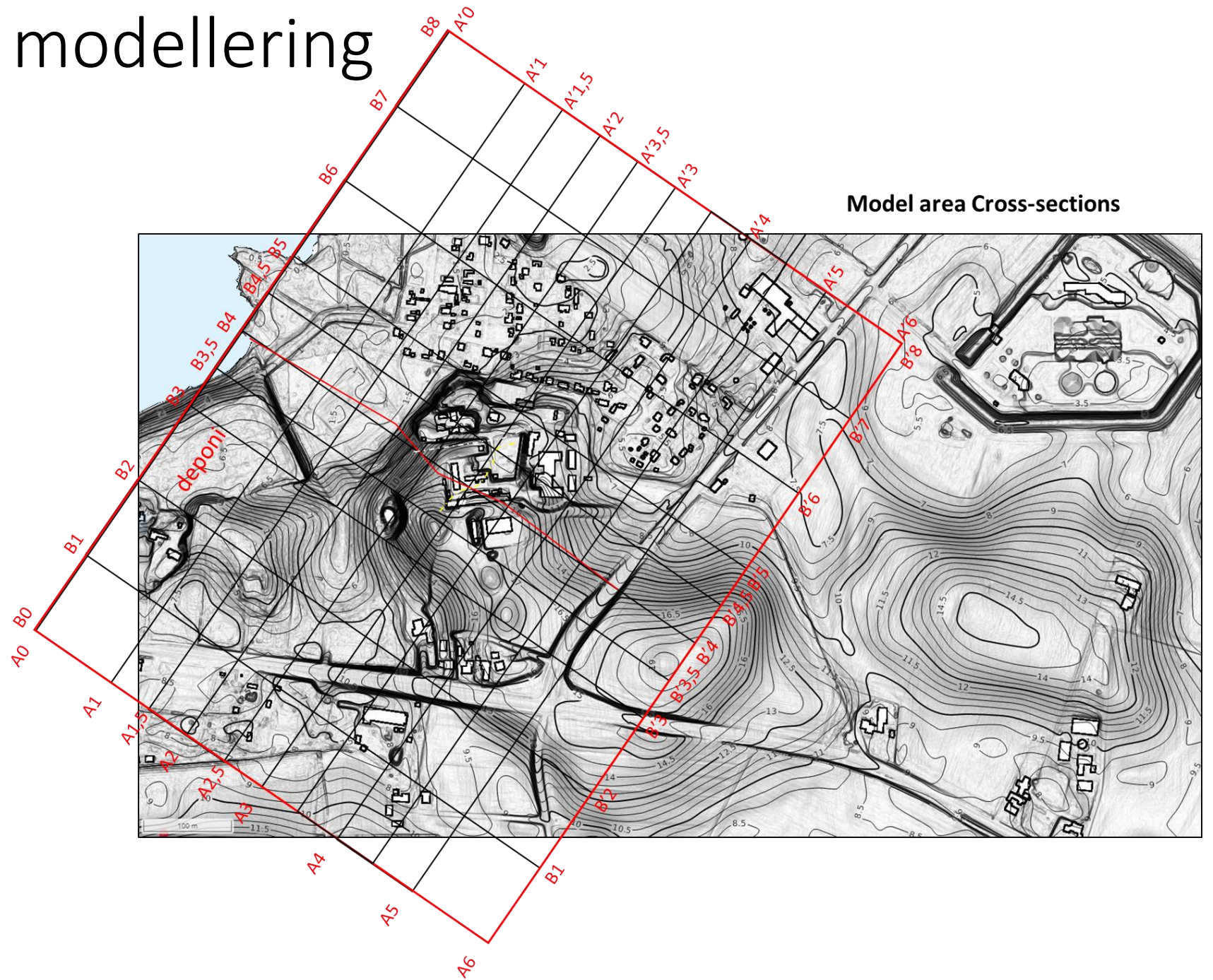
# Geologisk/hydrologisk forståelses model

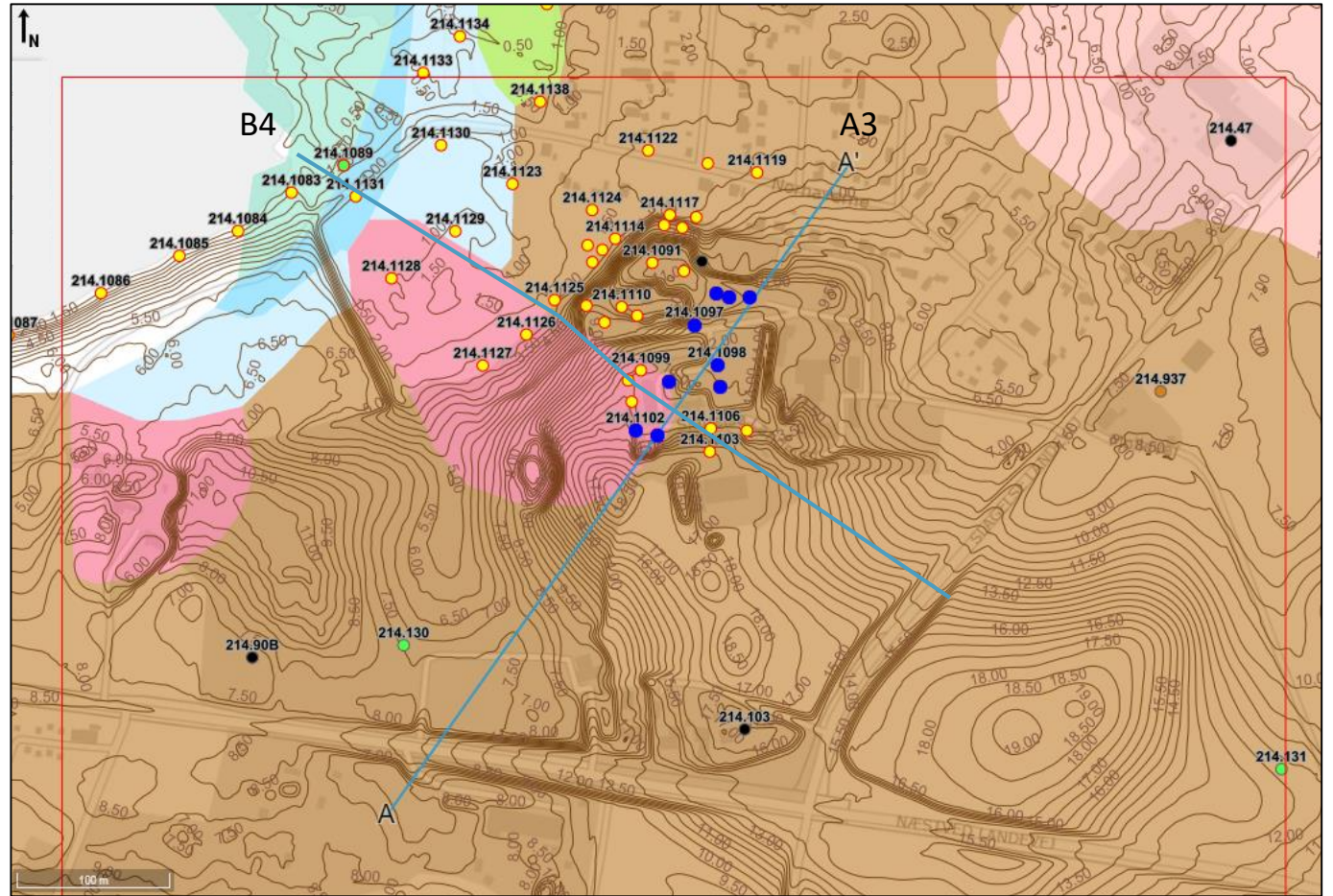


# Afgrænsning af sekundære grundvandsmagasiner



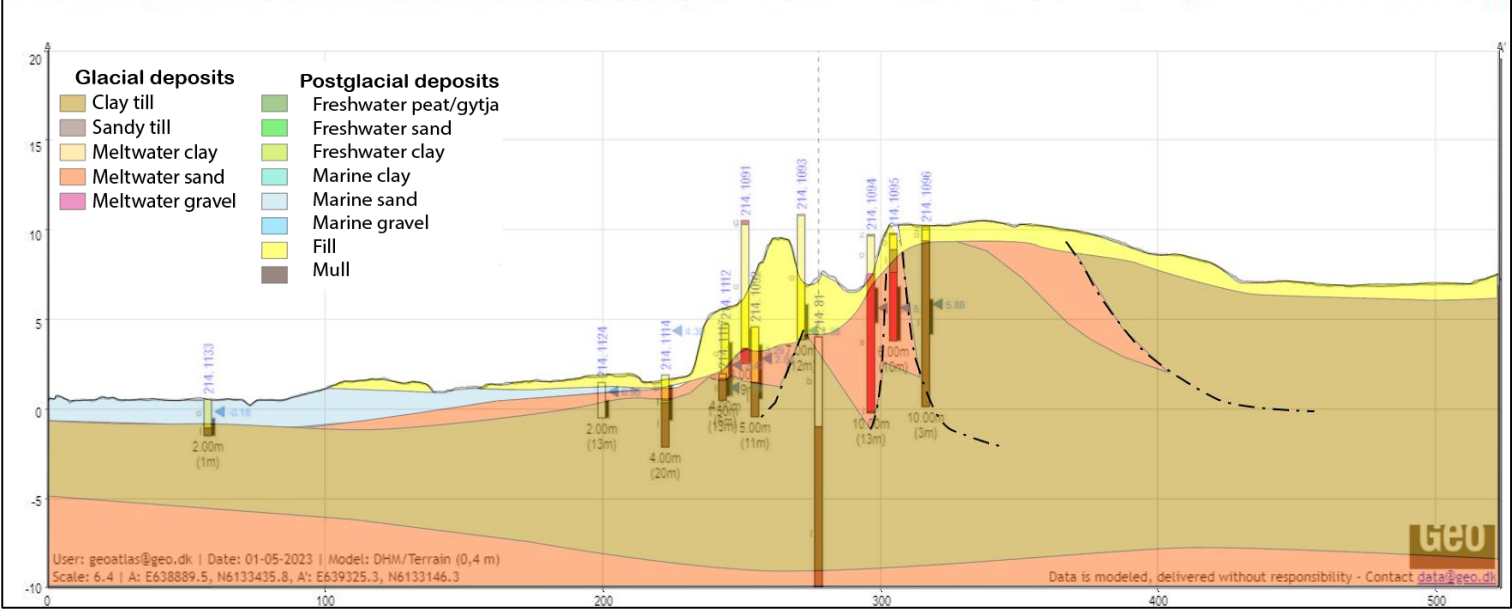
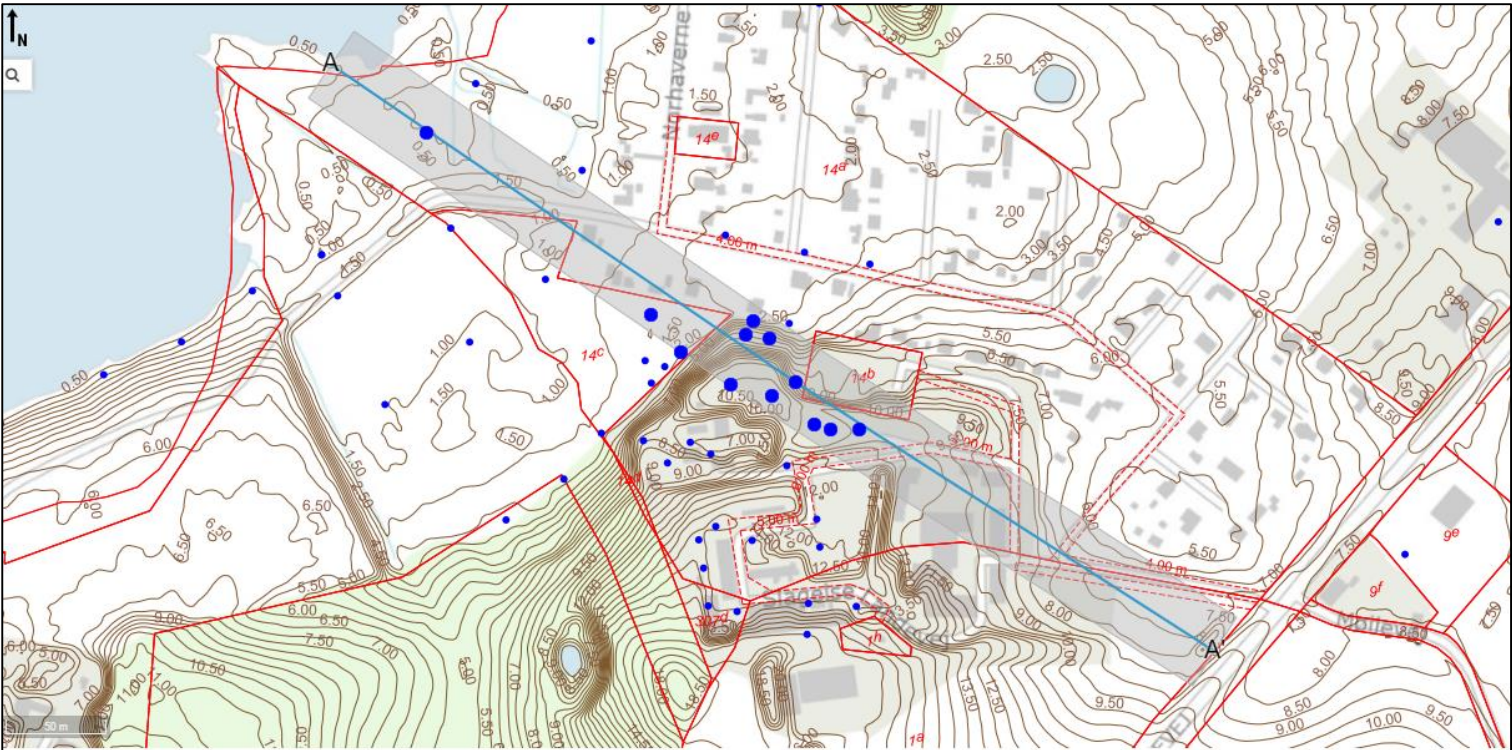
# Reference Grid til modellering i GS3D



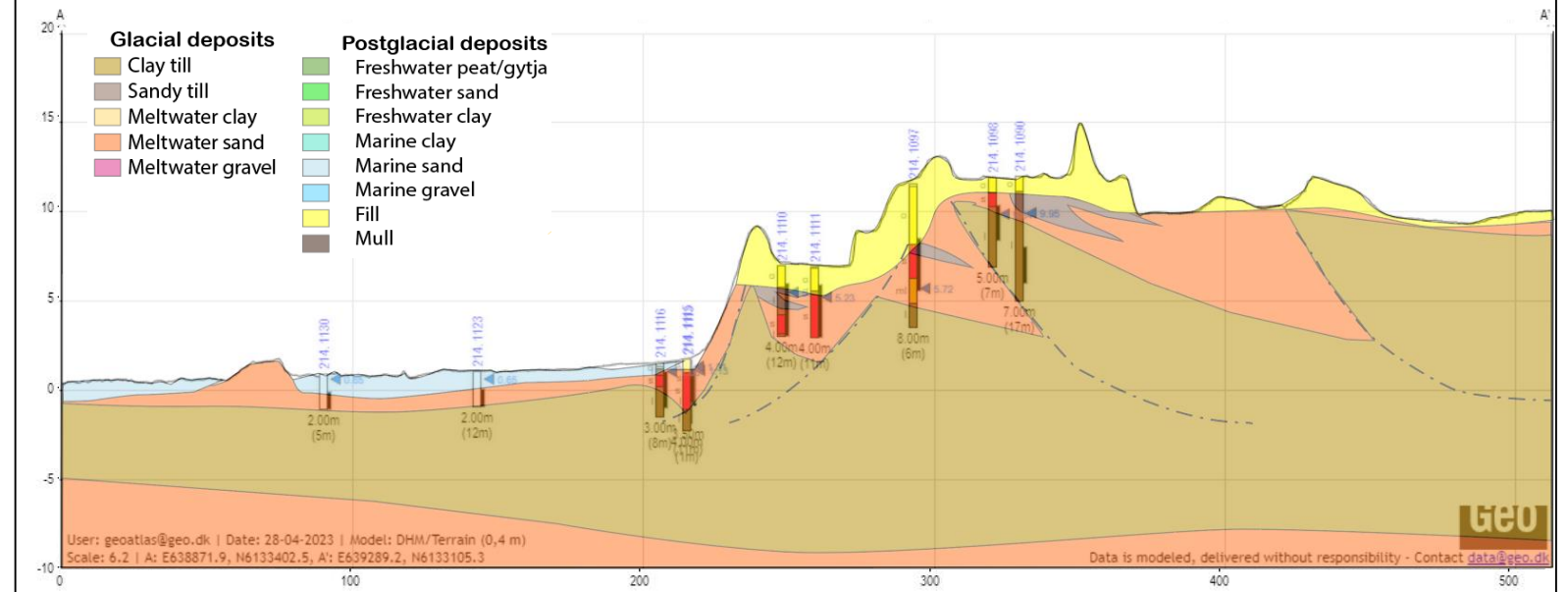
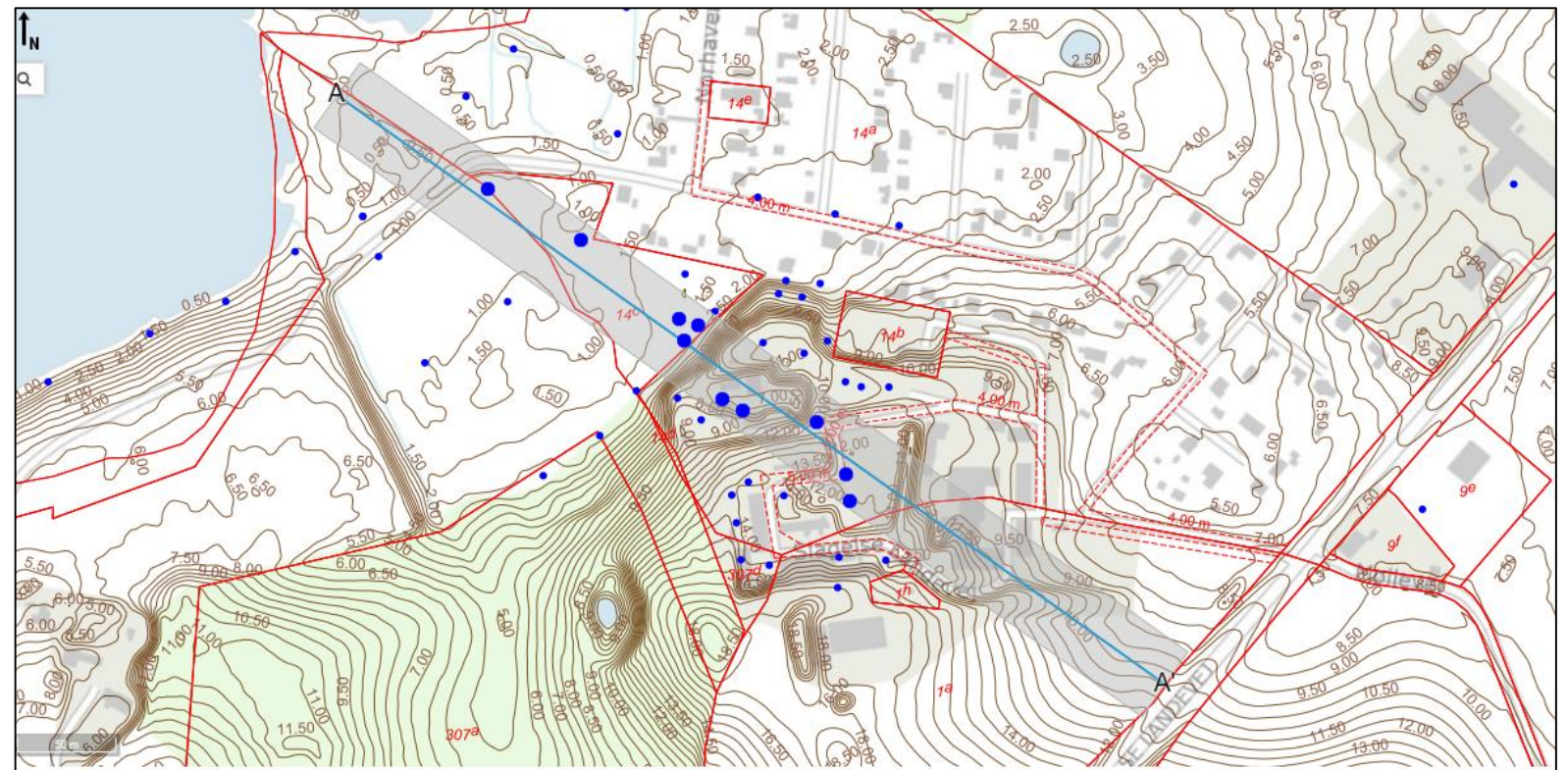


# Tolket geologisk model

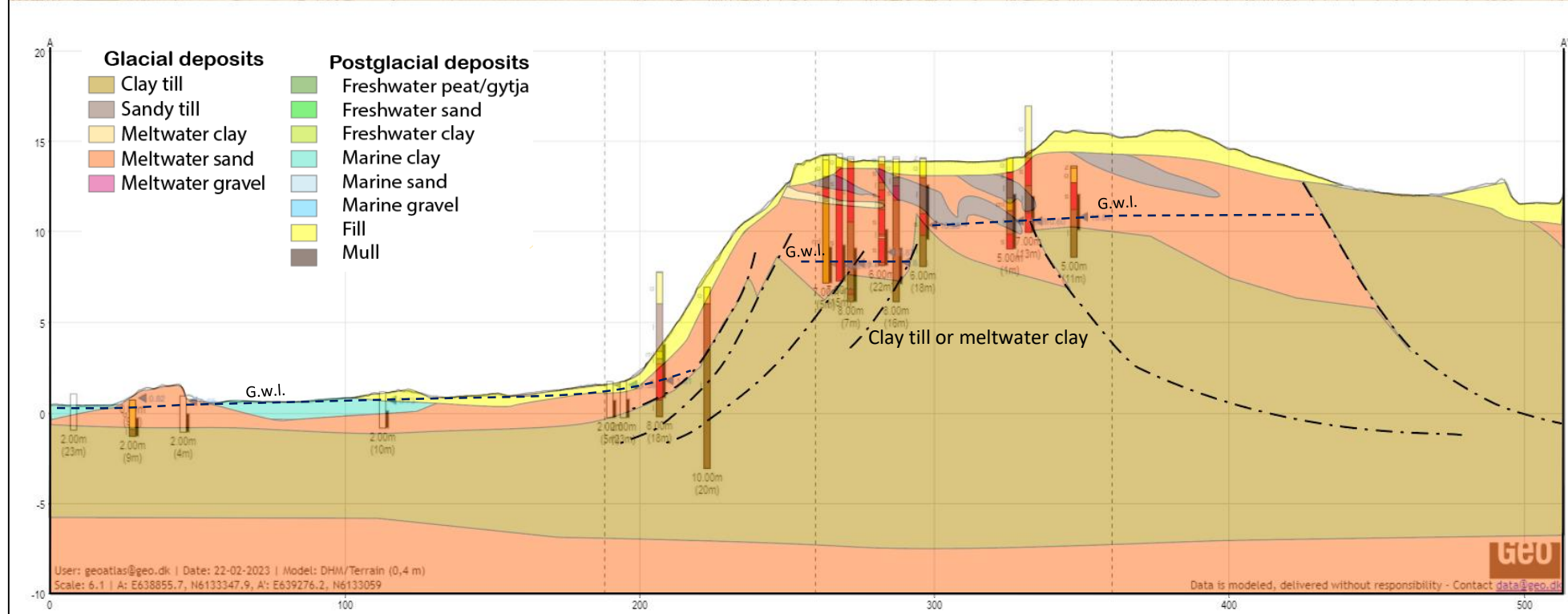
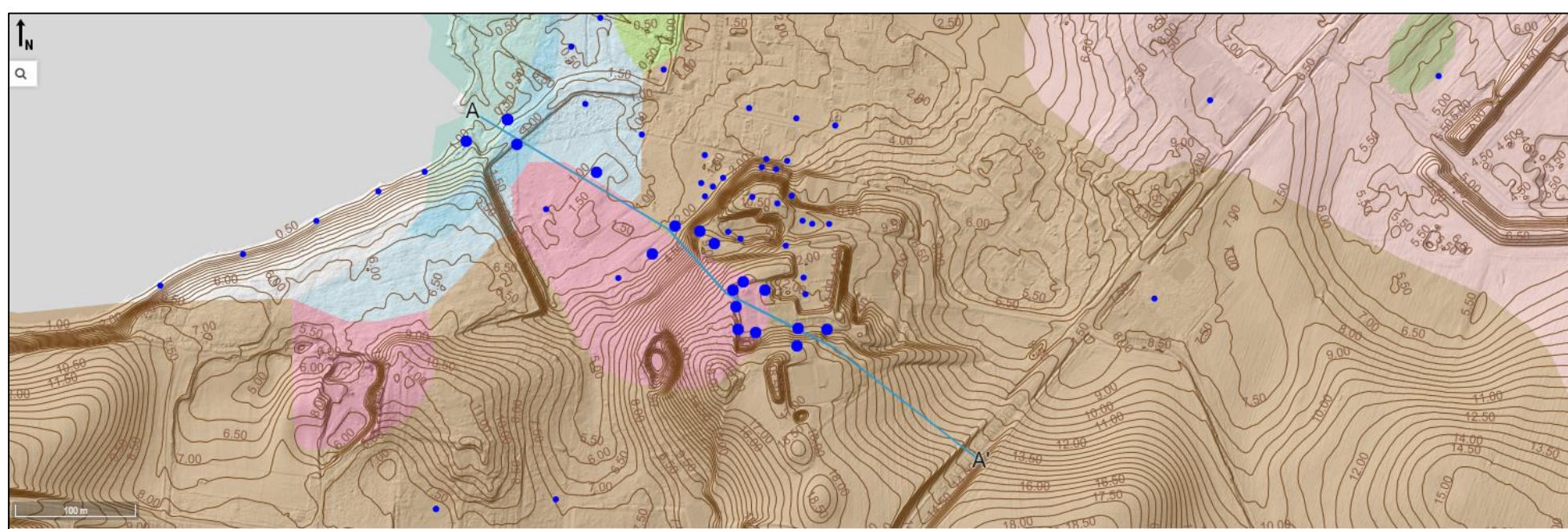
Profil B5



# Profil B4,5

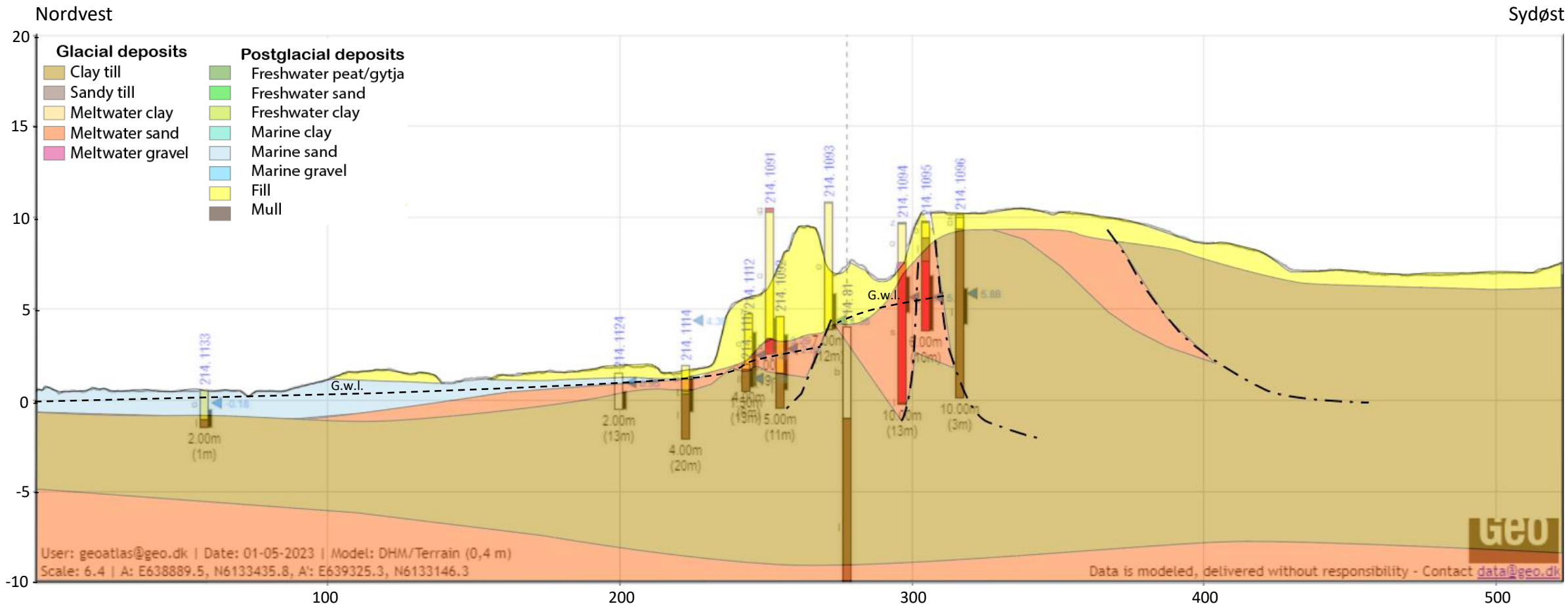


# Profile B4





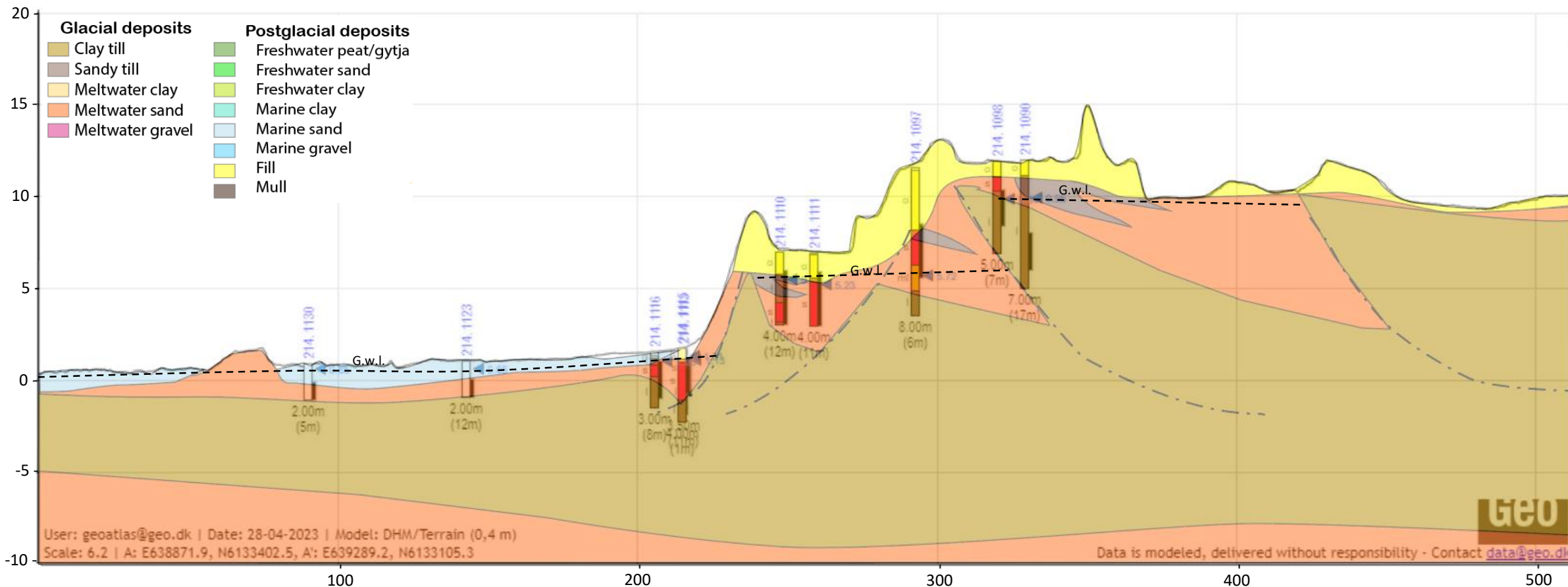
# Profil B5



# Profil B4,5

Nordvest

Sydøst

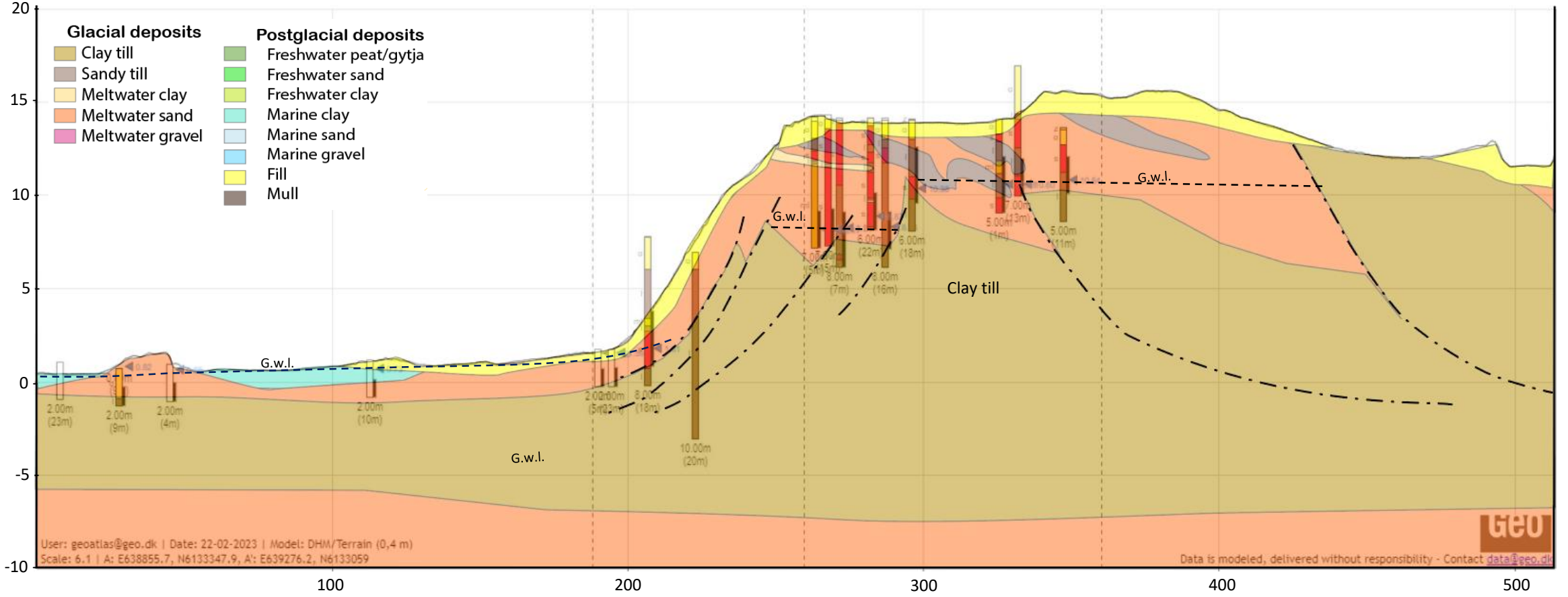


# pilotområde

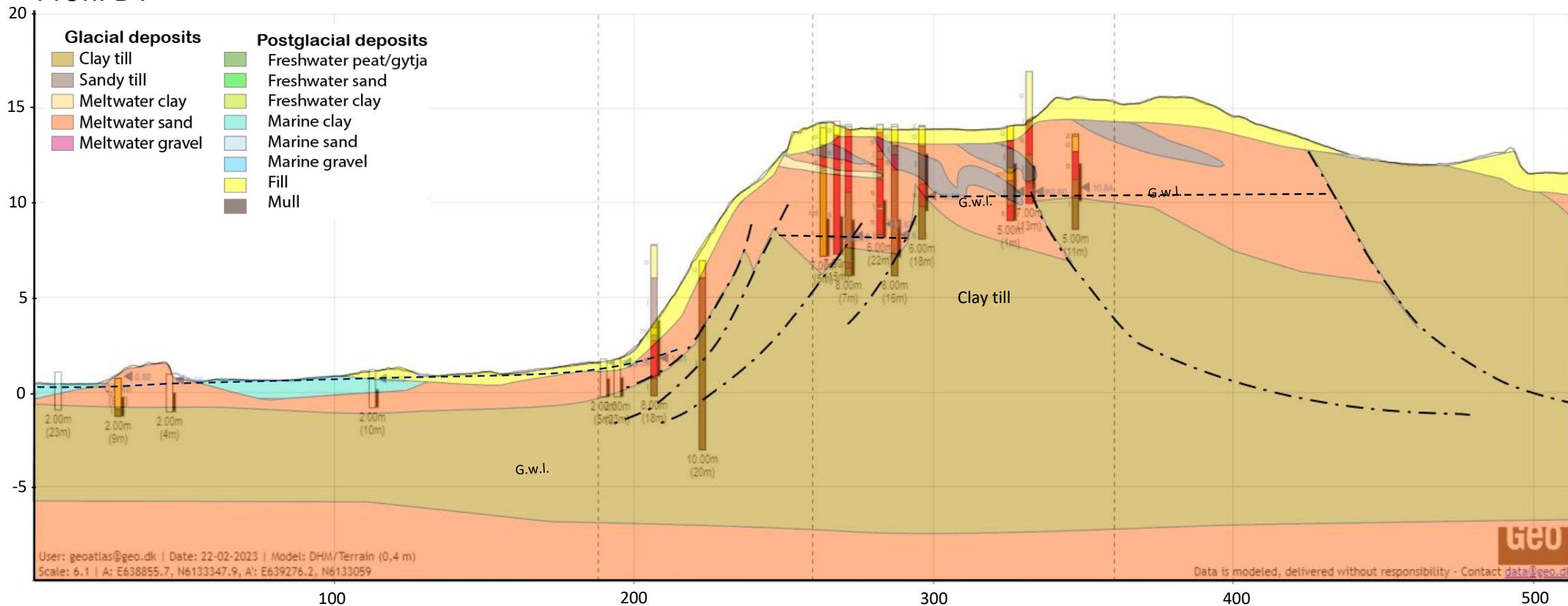
## Profil B4

Nordvest

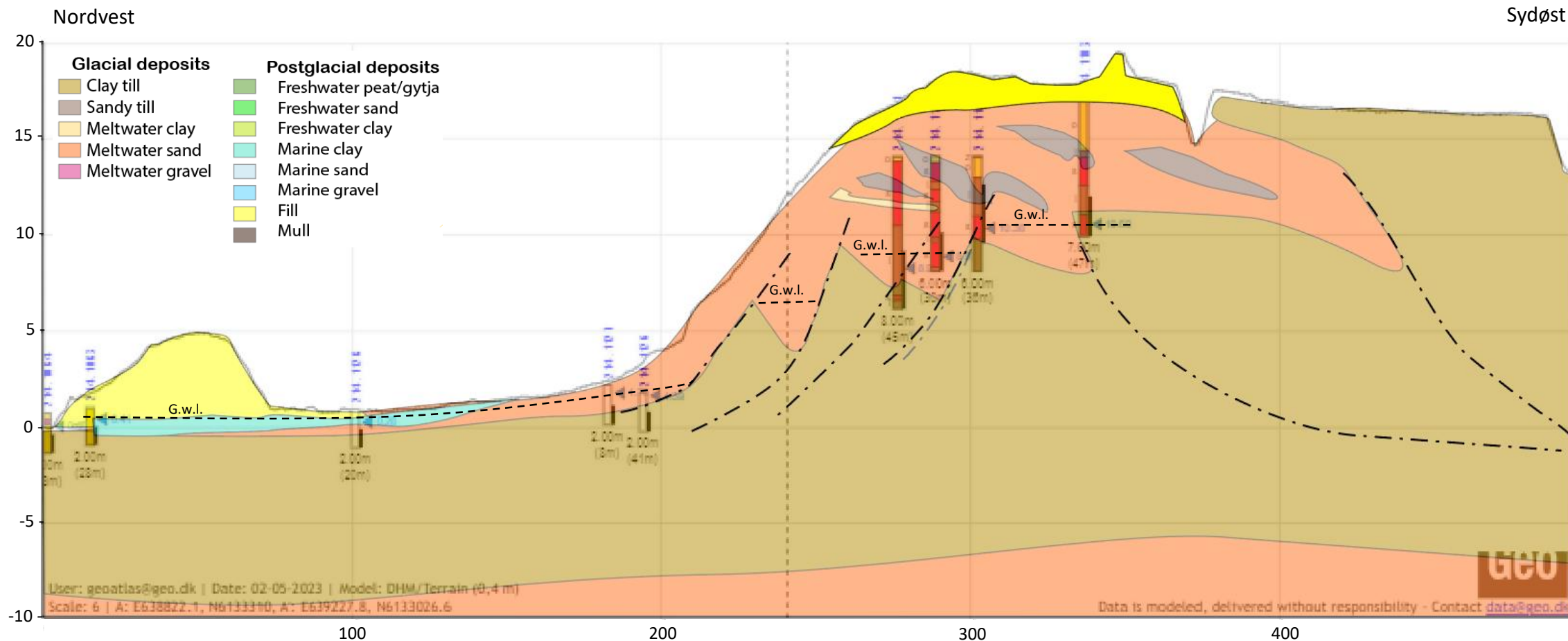
Sydøst



# Profil B4



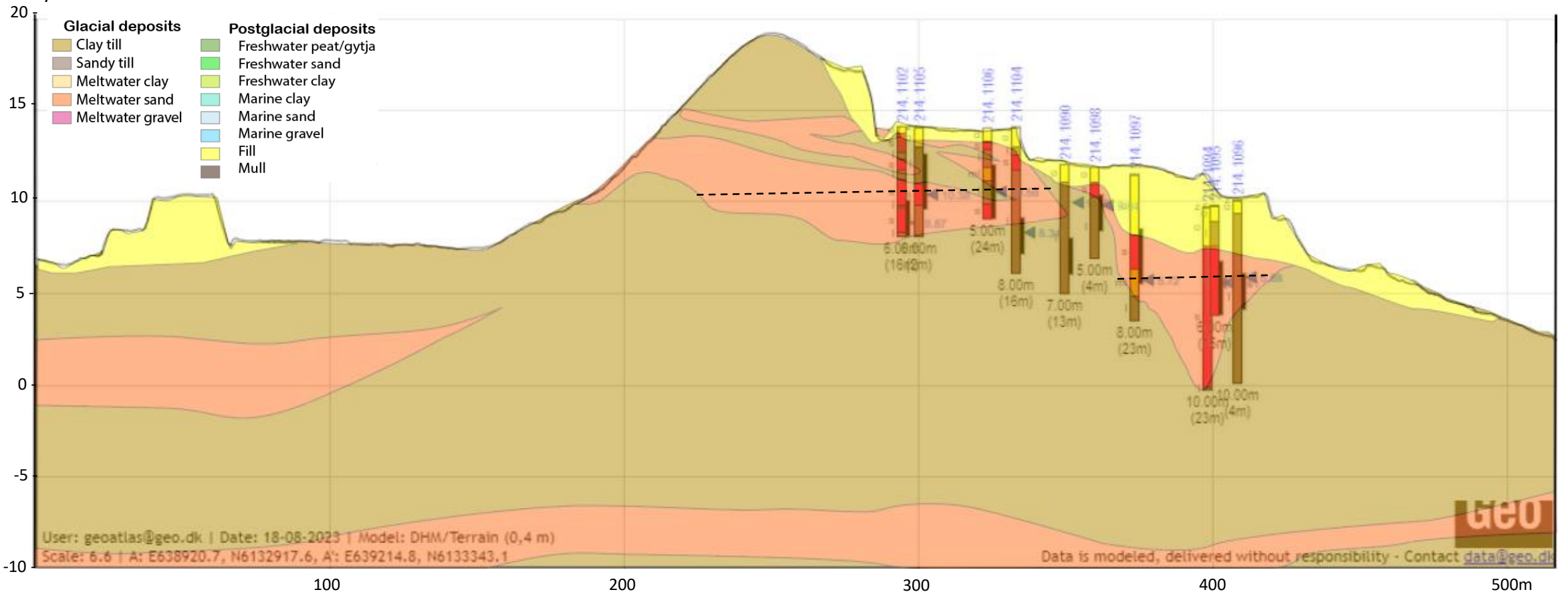
# Profil B3.



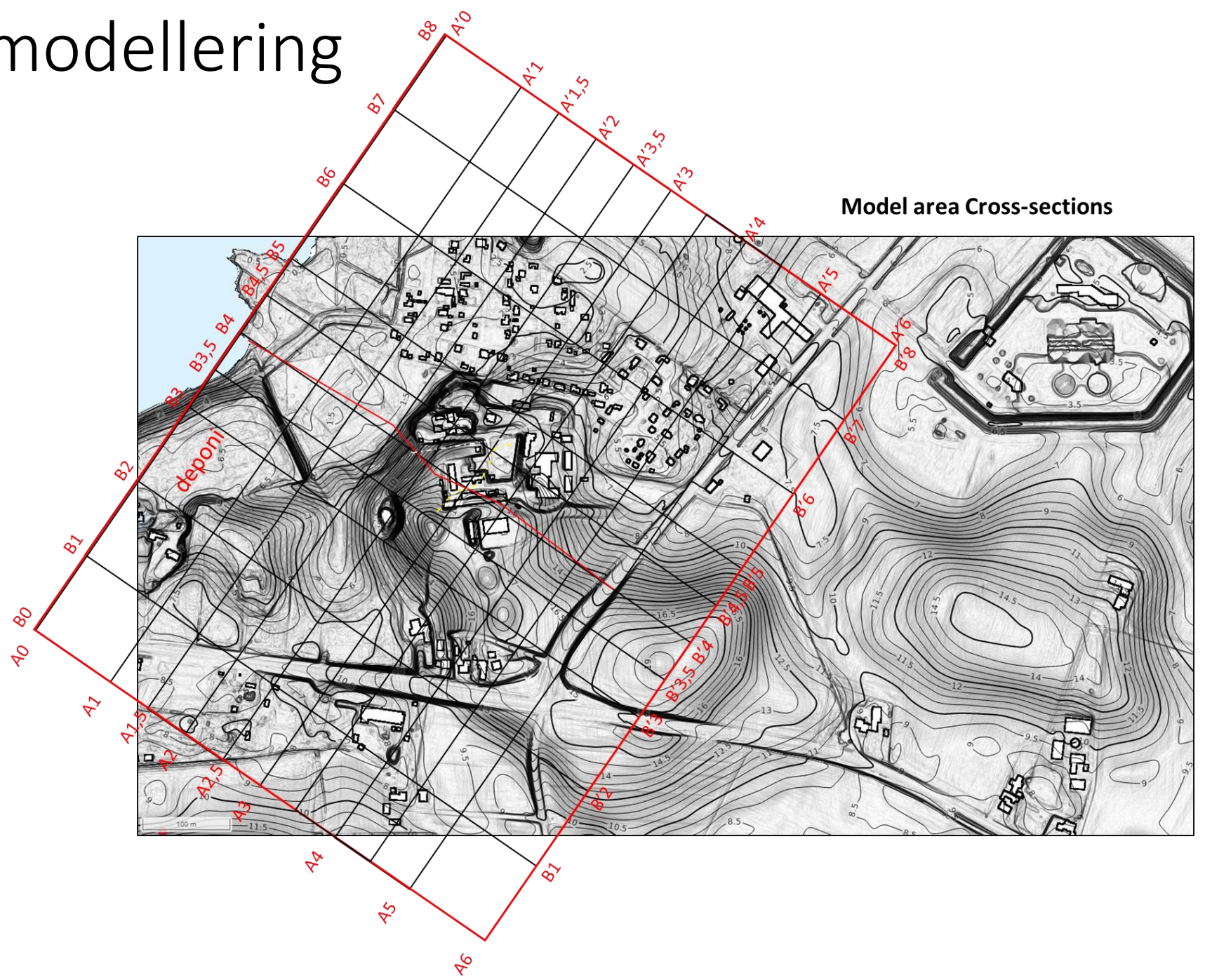
# Profil A3

Sydvest

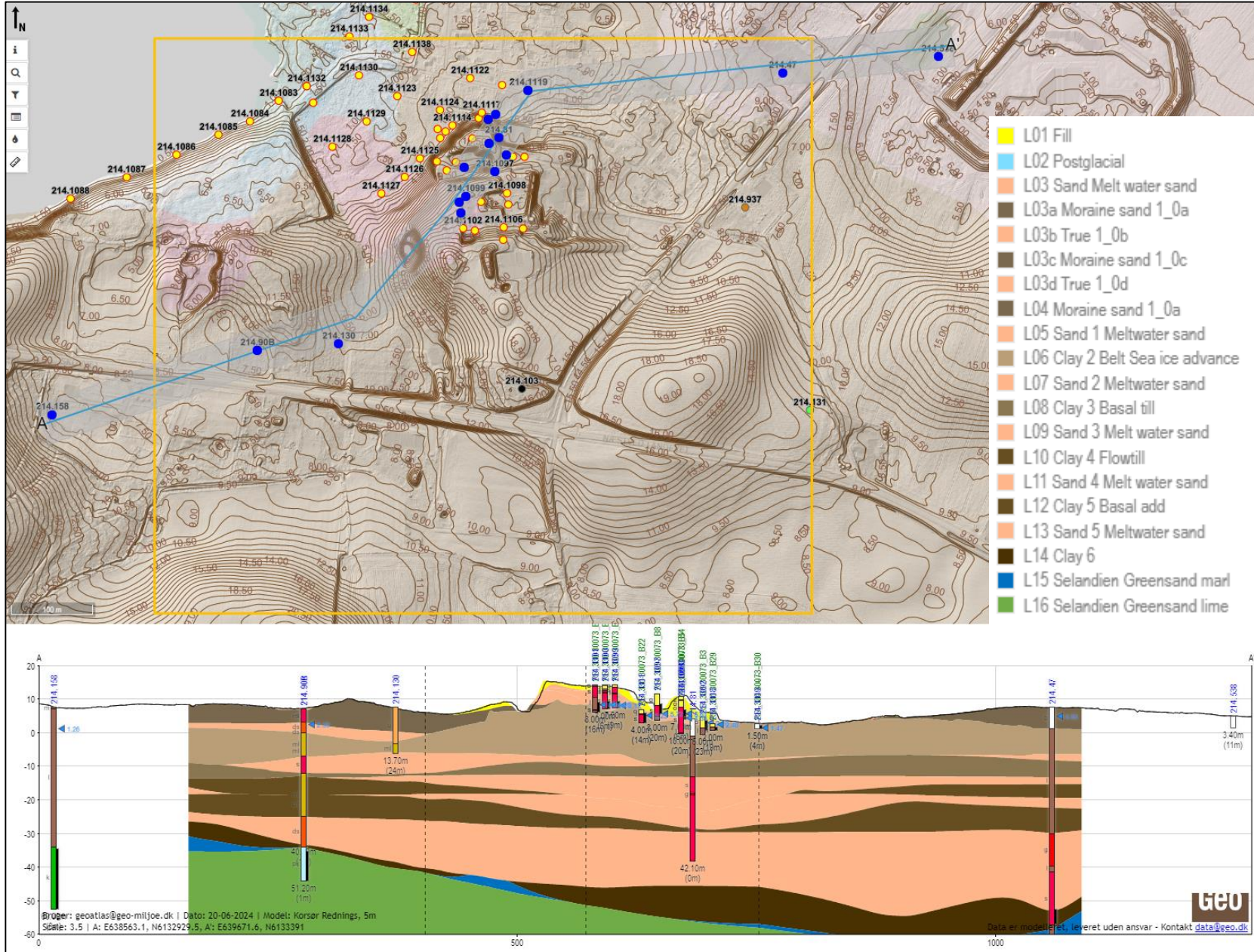
Nordøst



# Referencegrid til modellering i GS3D

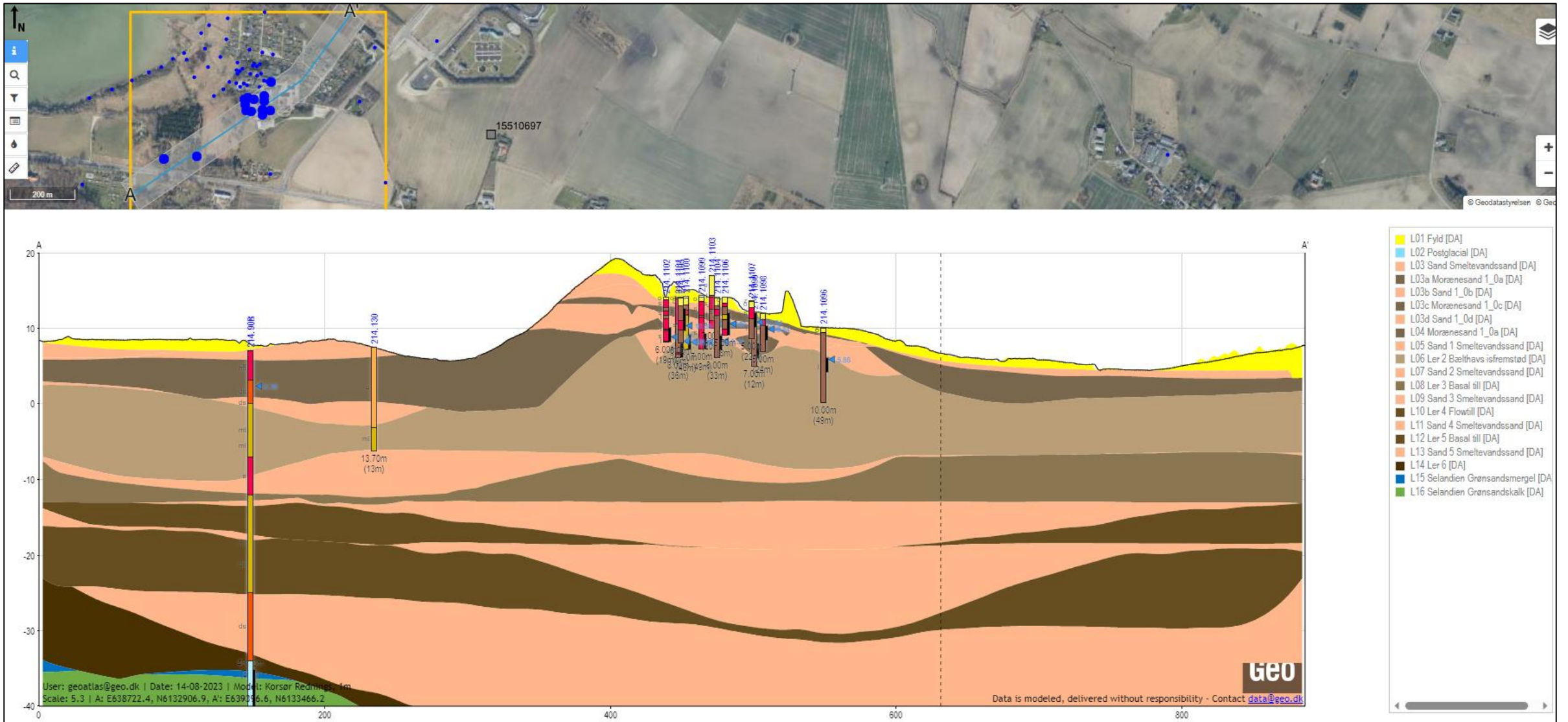


# Geoscene 3D model udstillet i GAL

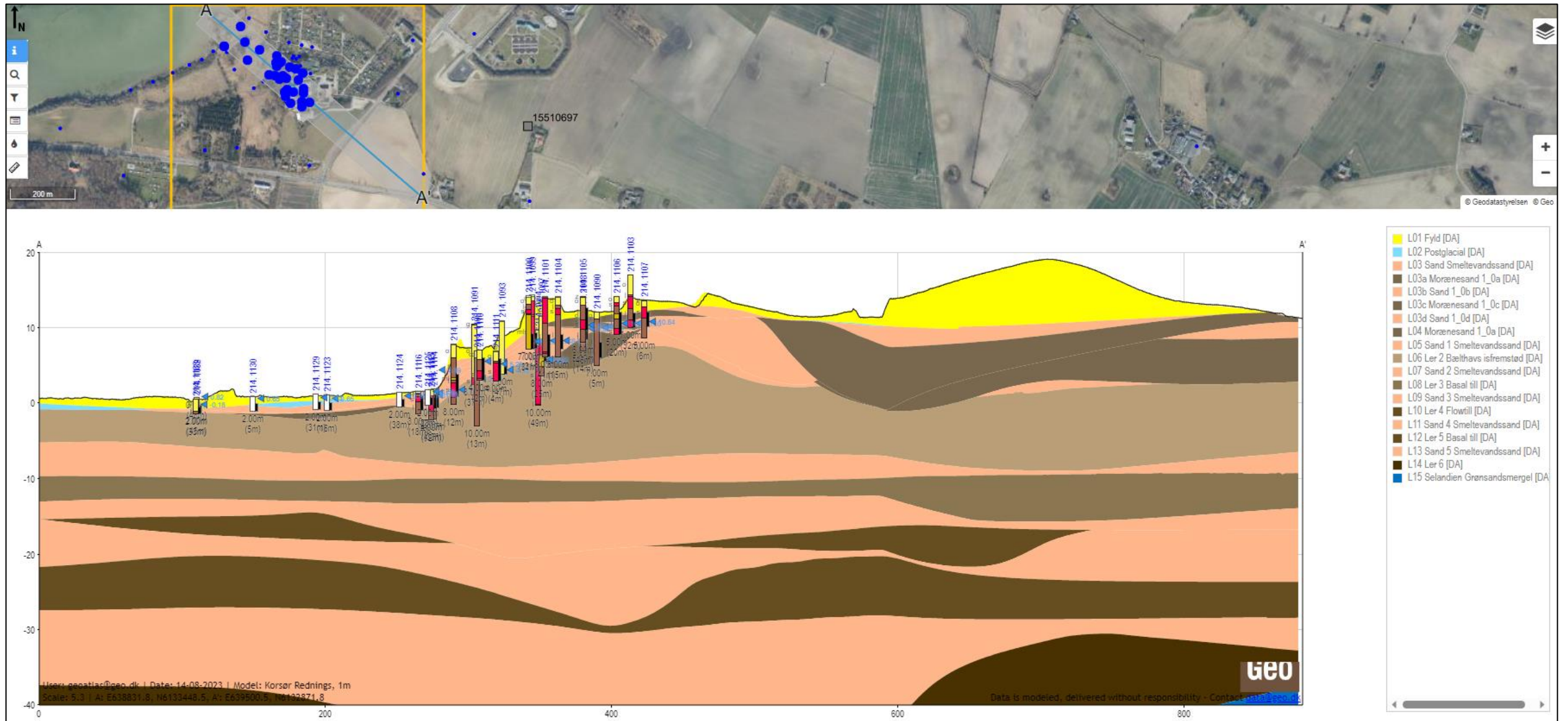




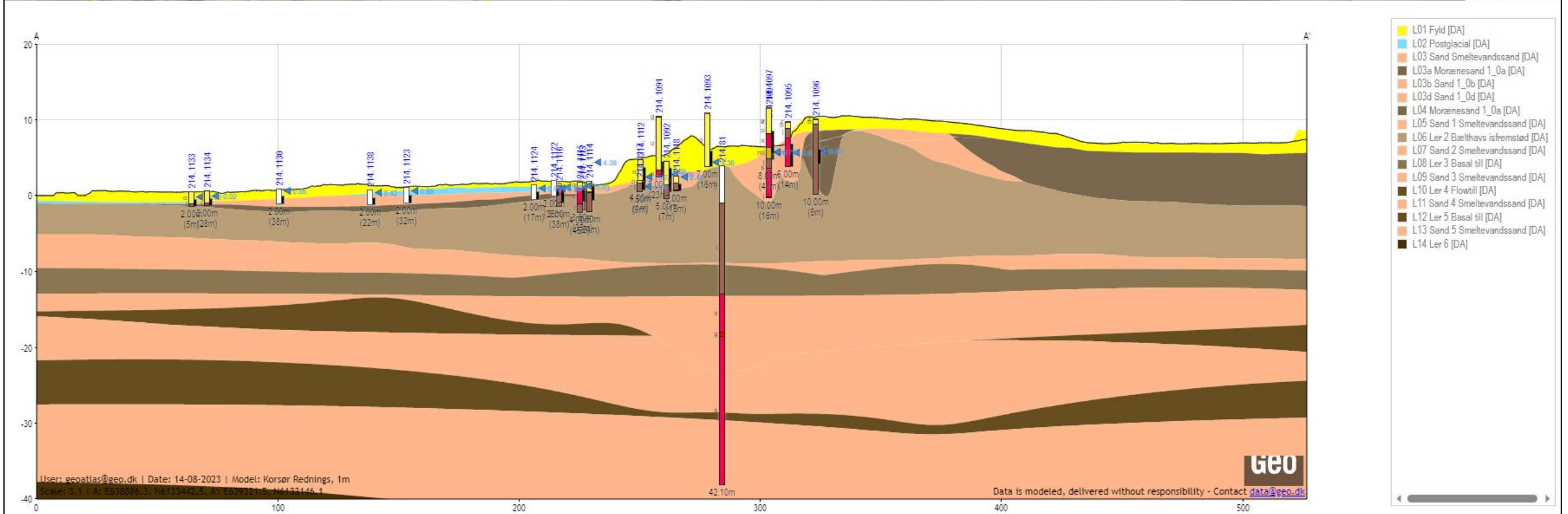
# Profil A4



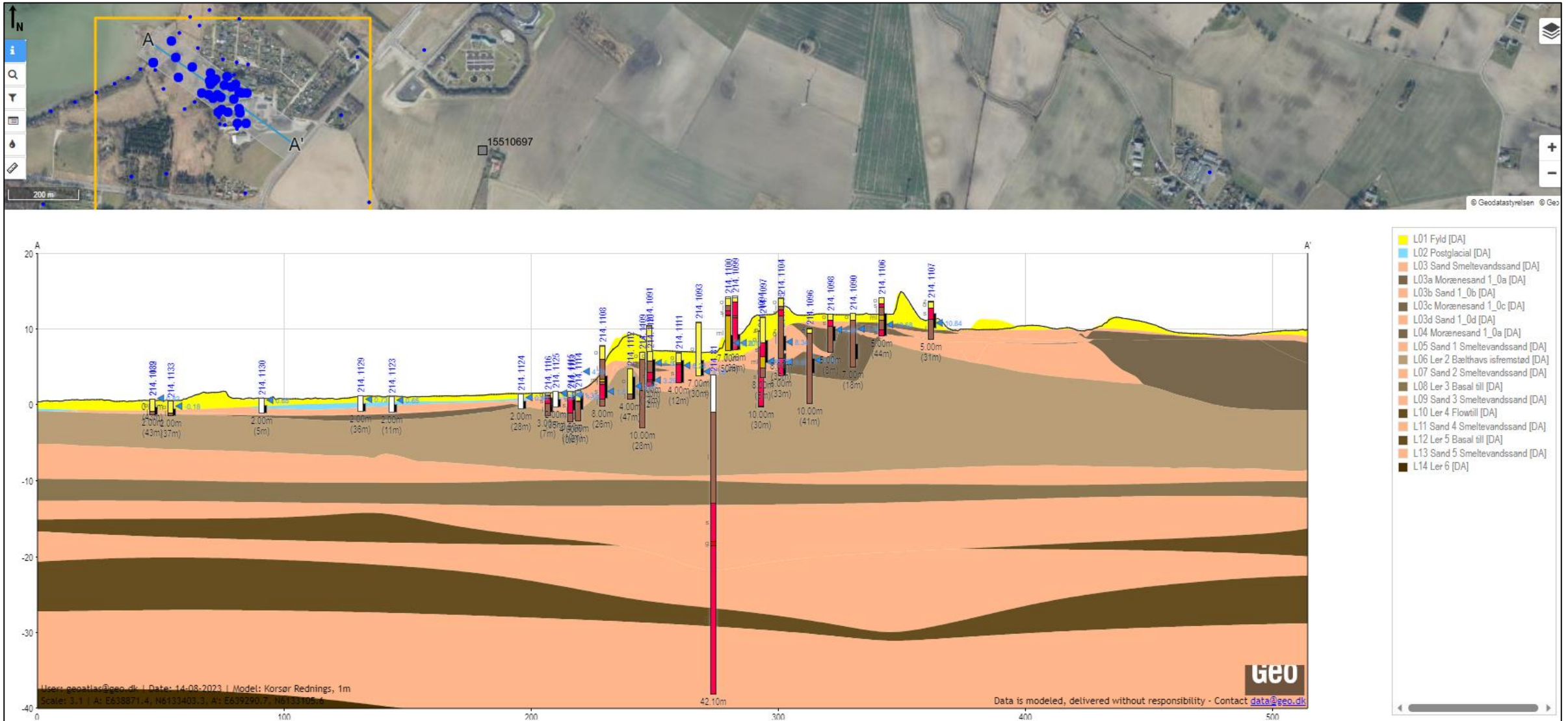
# Profil B4,4 long



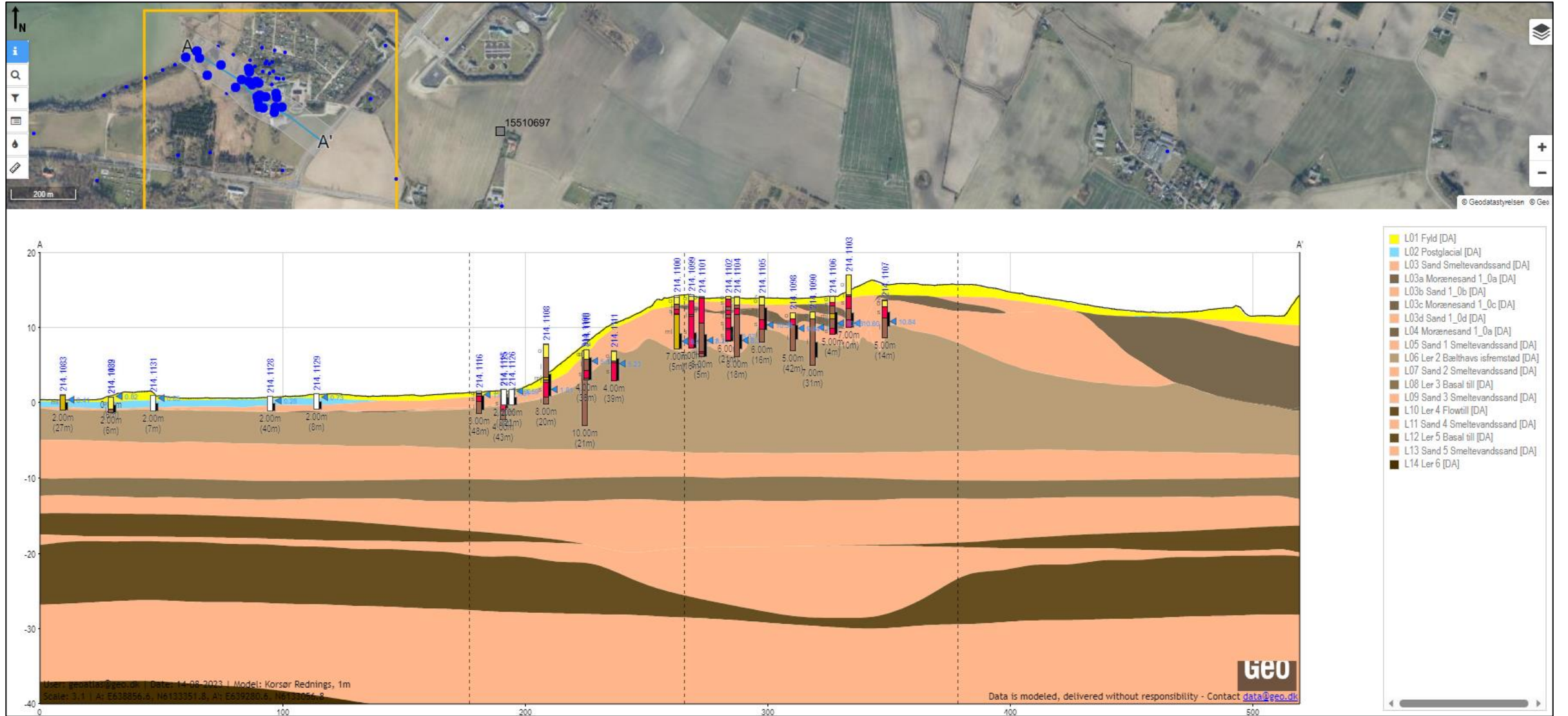
# Profil B5



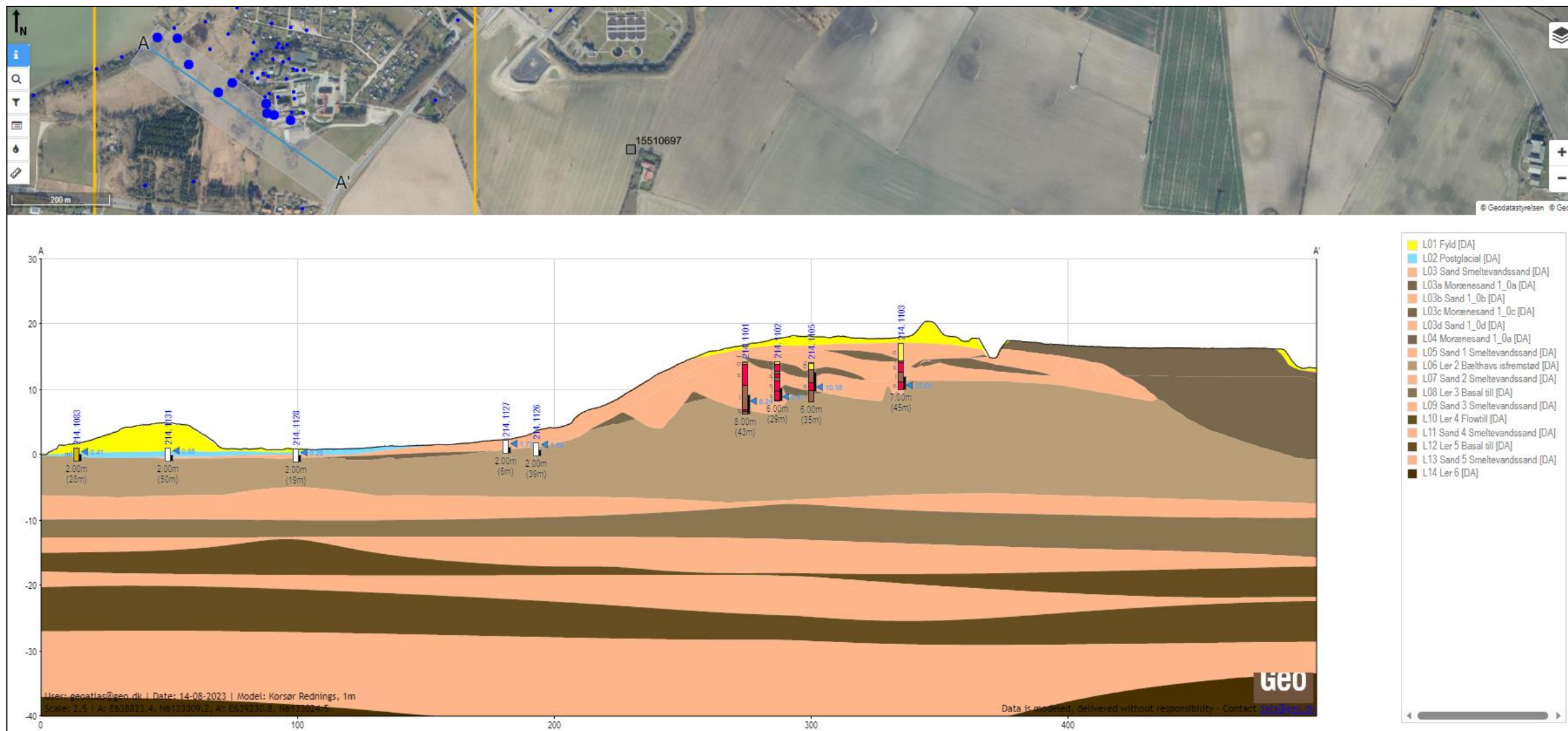
# Profil B4,5



# Profil B4



# Profil 3



# Udstilling af Kemidata fra jord vand og luftprøver

