

A decorative graphic consisting of numerous thin, white, wavy lines that create a sense of movement and depth, resembling ocean waves or seismic data. The lines are layered and overlap, creating a complex, textured effect.

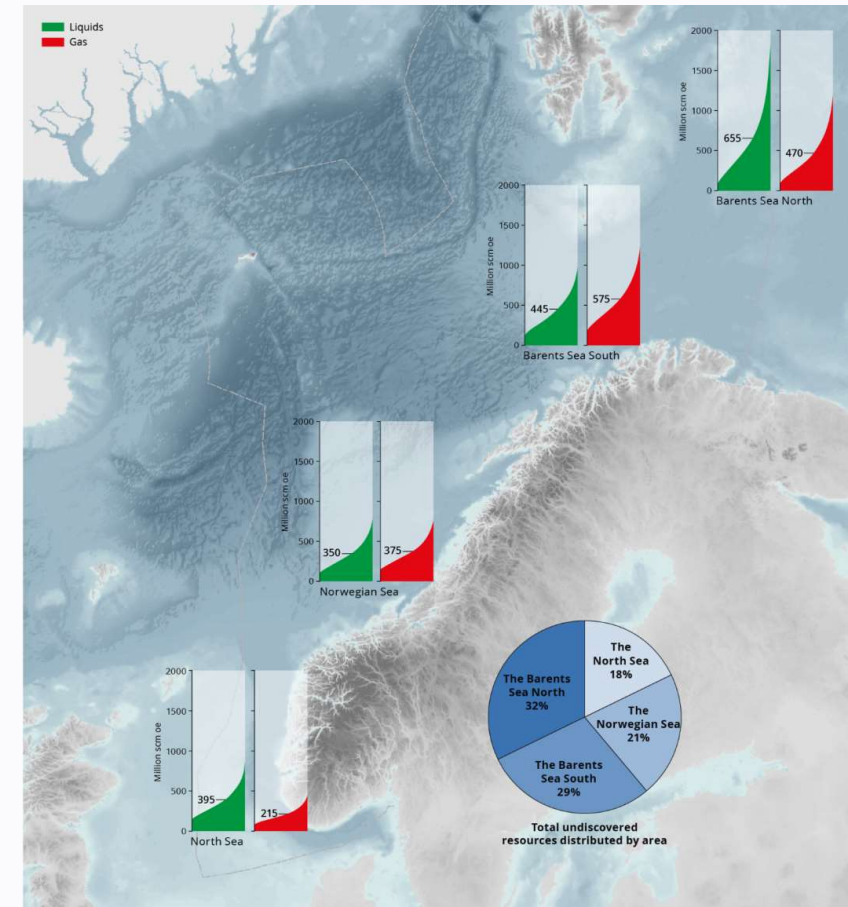
Remaining undiscovered resources in the Barents Sea

Daniel Høie & Abryl O. Ramirez
Leitestudielaget, Norwegian Offshore Directorate



NOD's estimates of undiscovered resources

- Includes resources in areas opened for petroleum activities as well as those areas not opened but where mapping has been done
- Includes all resources that, if found, would be technically recoverable. No commercial thresholds has been applied.
- No assumptions has been made as to whether resources will actually be found or found within a certain time limit.



Play analysis



- A play is a group of fields and discoveries, prospects, leads, drilled dry features as well as unmapped (postulated) prospects.
- These are grouped based on common features with regards to one or more of the critical elements reservoir rock, trap and source rock.
- The play will be delimited both geographically and stratigraphically.

This definition suits the purpose of a play as a resource assessment unit

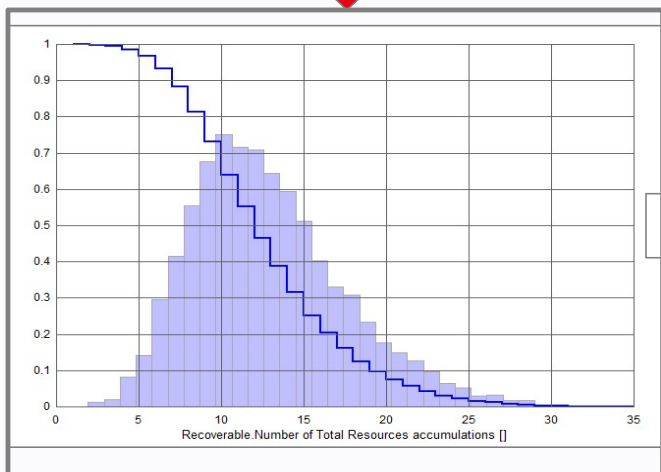


Resources in a play

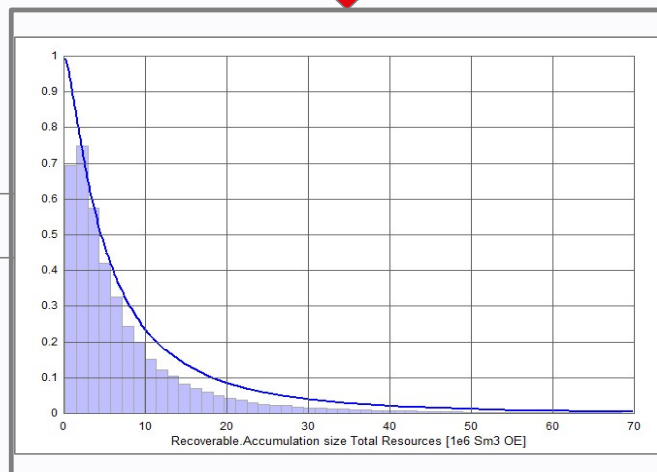
Number of features
x
Success rates

Gross rock volume
Reservoir parametres
Fluid parametres
Recovery rates

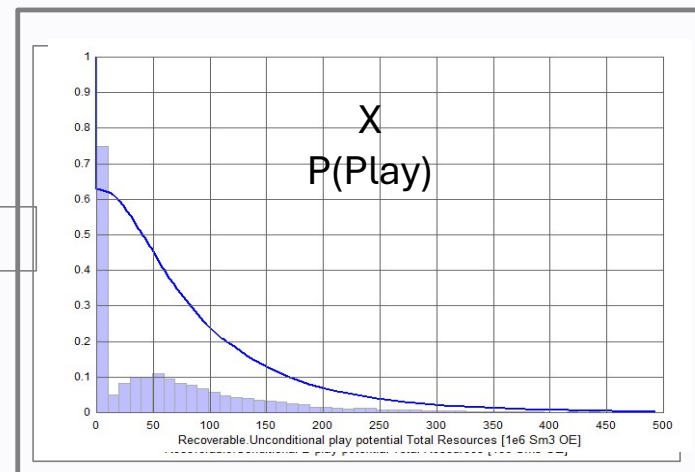
Undiscovered resources



x

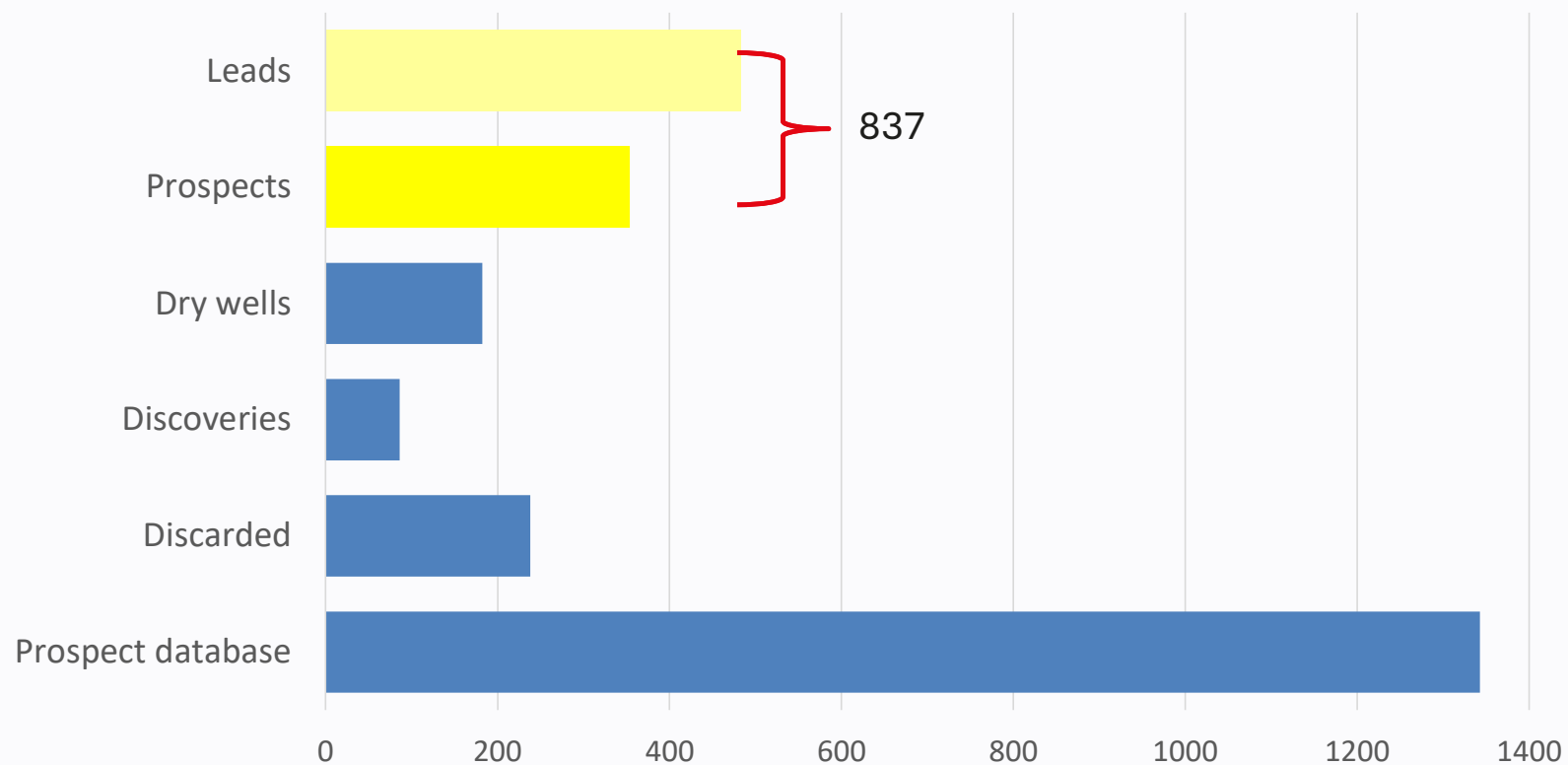


=





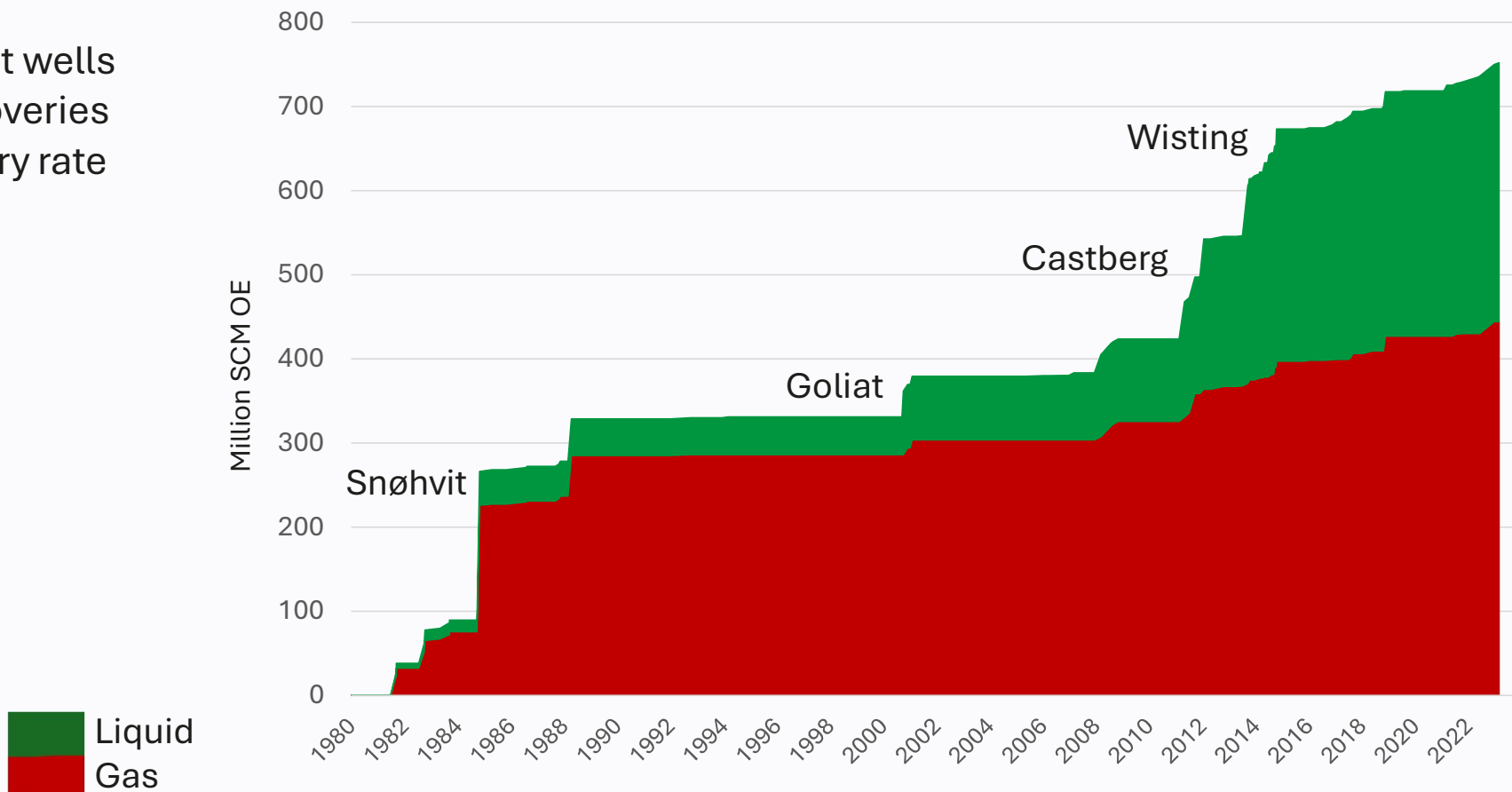
NOD «Treasure Box» in the Barents Sea





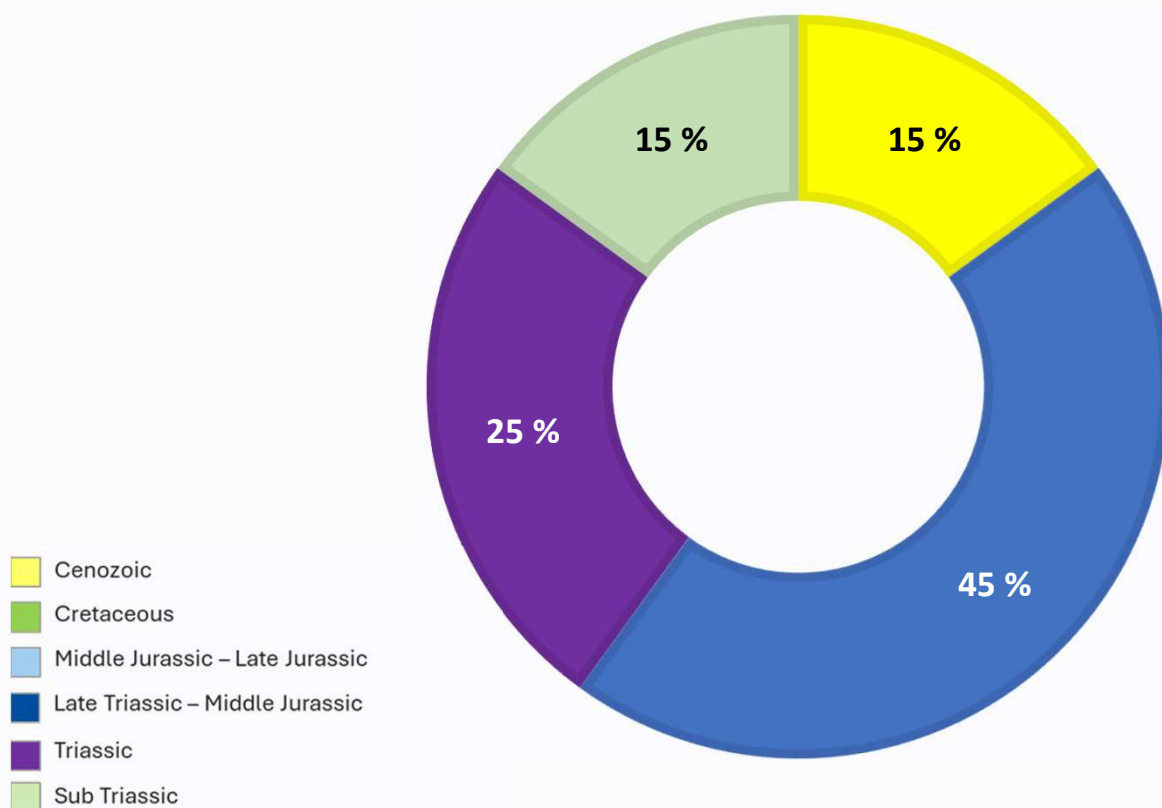
Wells and discoveries

- 140 wildcat wells
- 64 discoveries
- Discovery rate 46%





Barents Sea - drilled targets by stratigraphy (2021 – 2024)

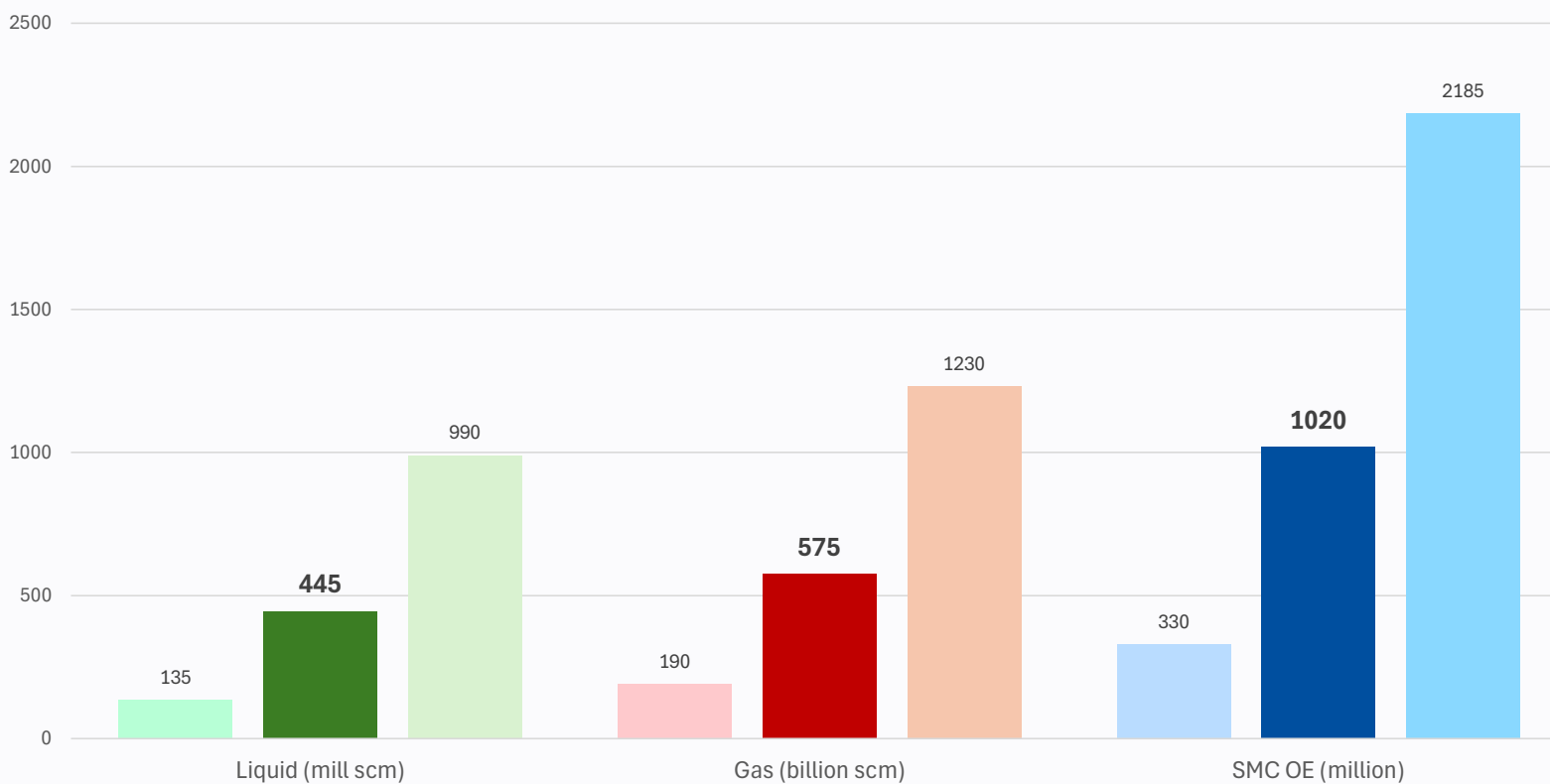


- 15 wells
 - 18 targets (3 targets not tested yet)
 - 10 discoveries
- 70 % of targets are testing the Triassic and the Late Triassic – Middle Jurassic stratigraphy

Disclaimer: current estimates, can change during 2024

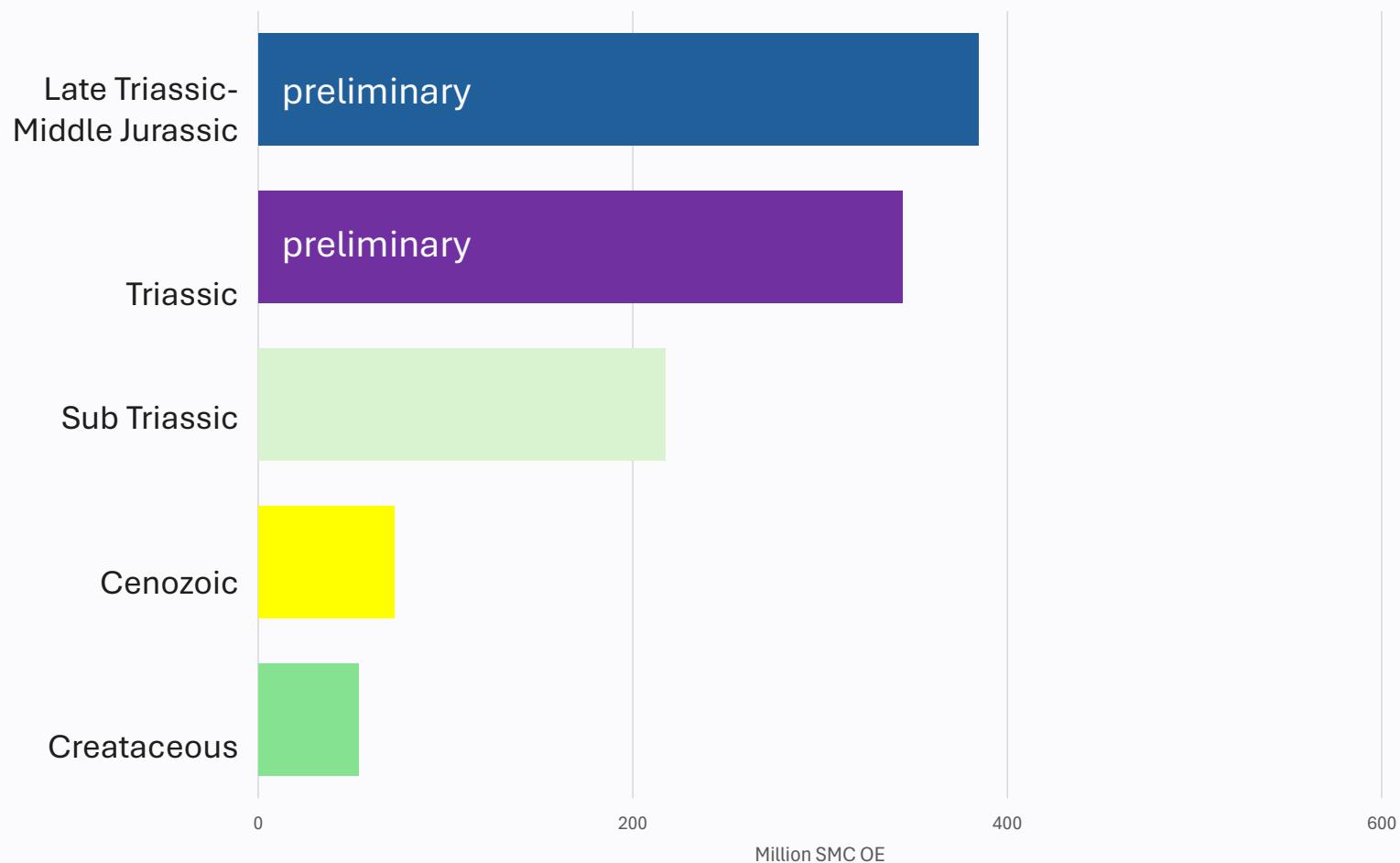


Undiscovered resources Barents Sea south 1020 Million Sm³ o.e



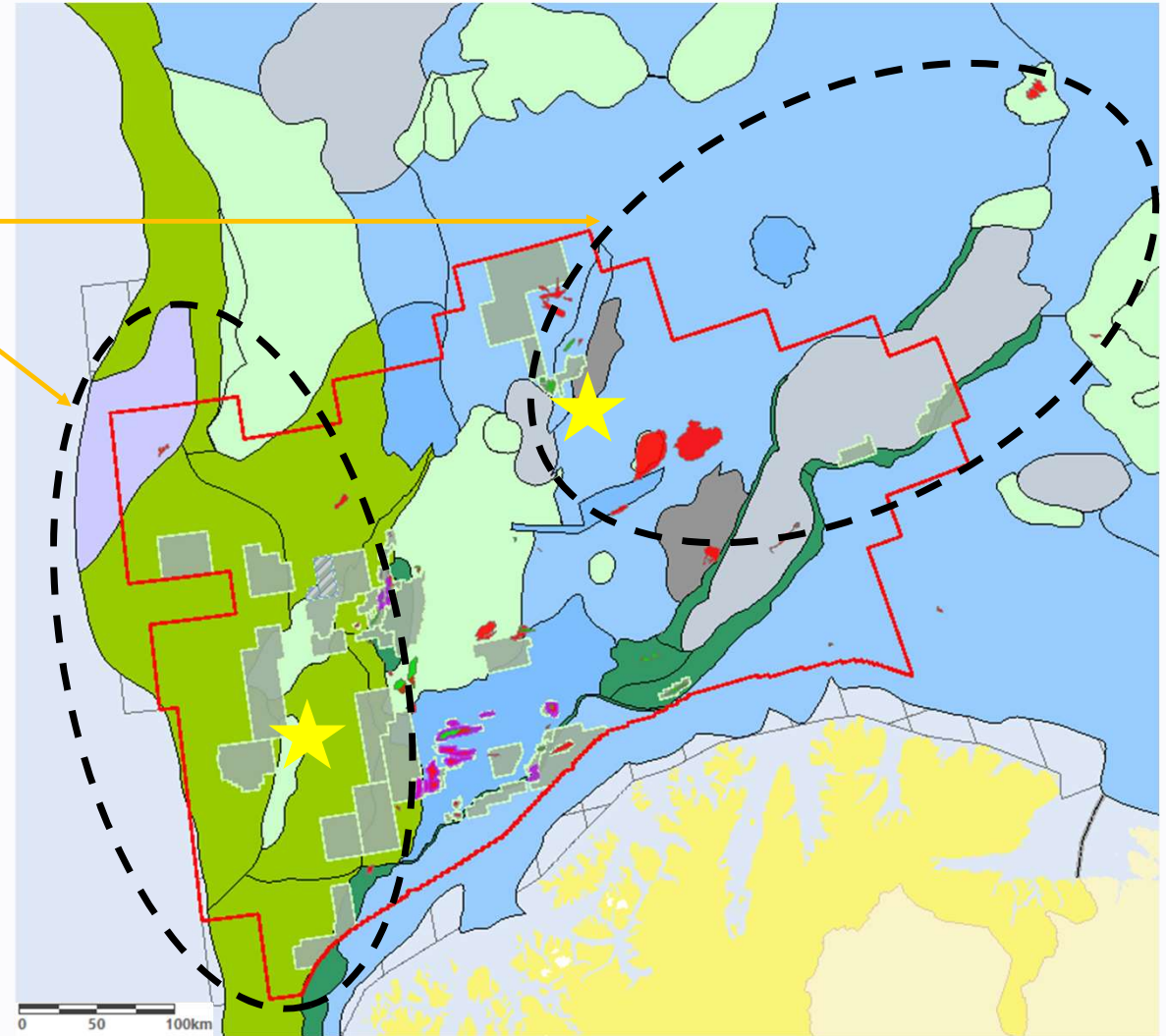


Undiscovered resources by stratigraphy, Barents Sea south



Examples of underexplored plays in the Barents Sea

- Paleogene plays in the western Barents Sea
- Gipsdalen play on the Bjarmeland Platform++

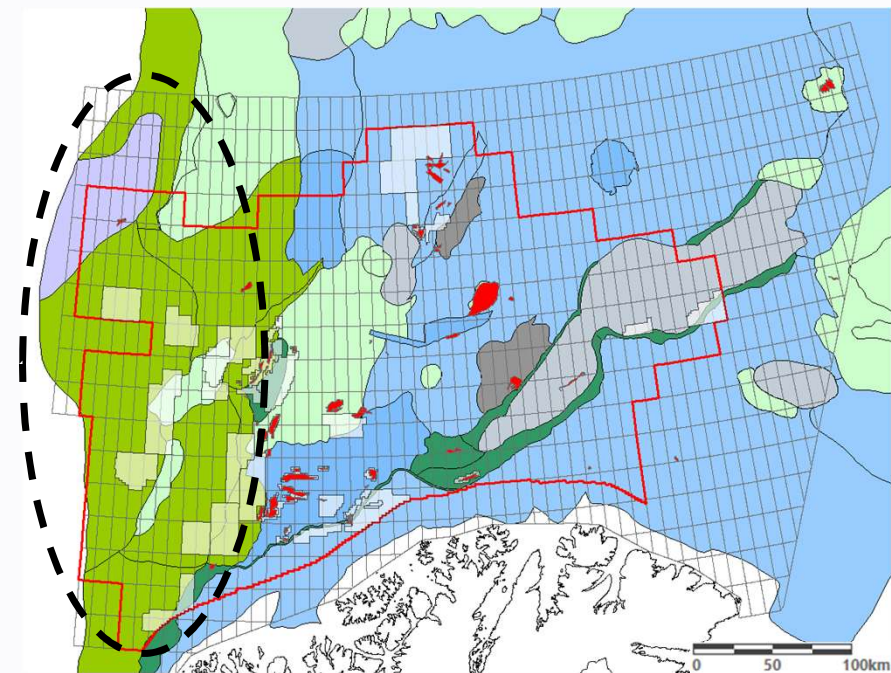
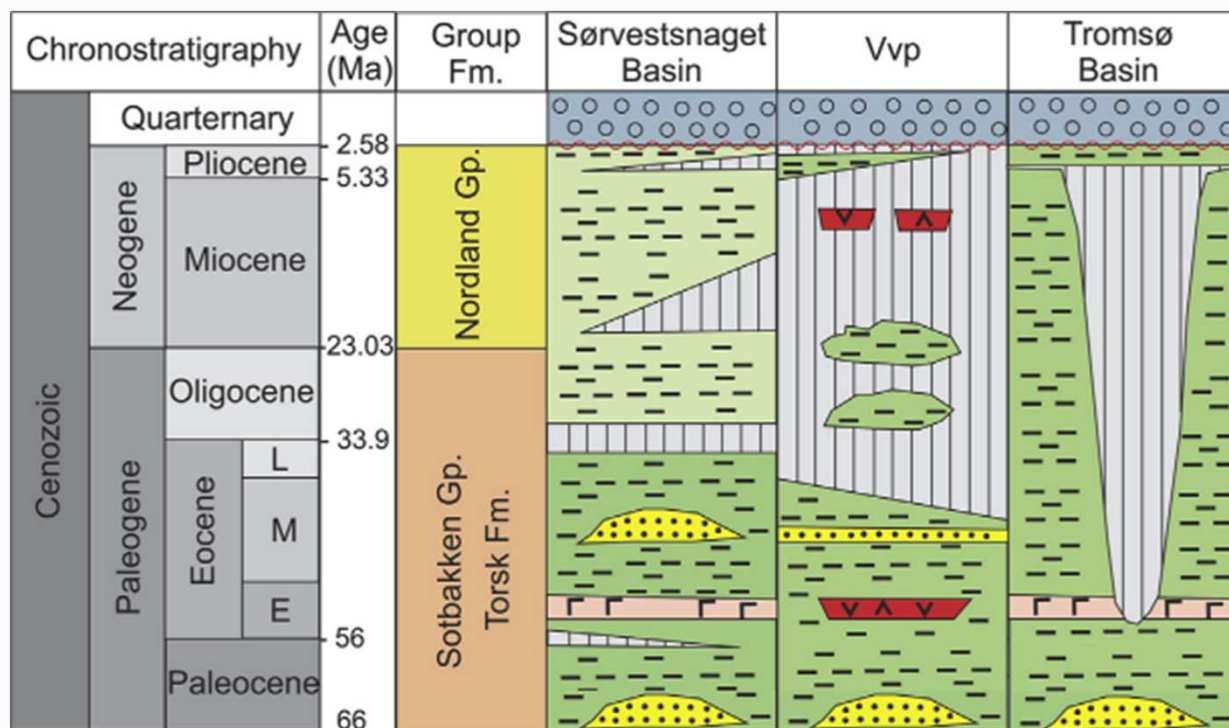




Paleogene plays



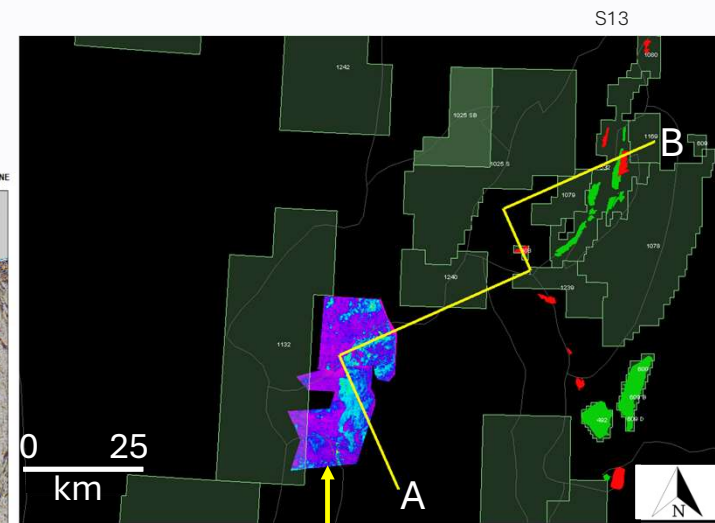
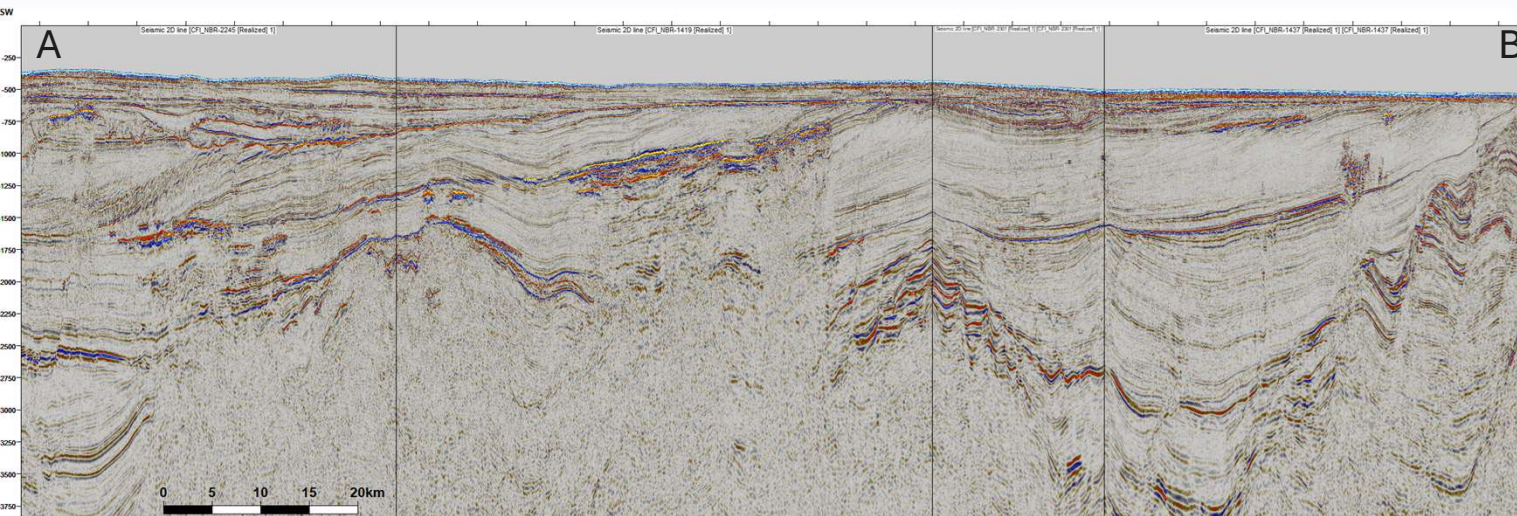
Cenozoic lithostratigraphic units in the southern Norwegian Barents Sea



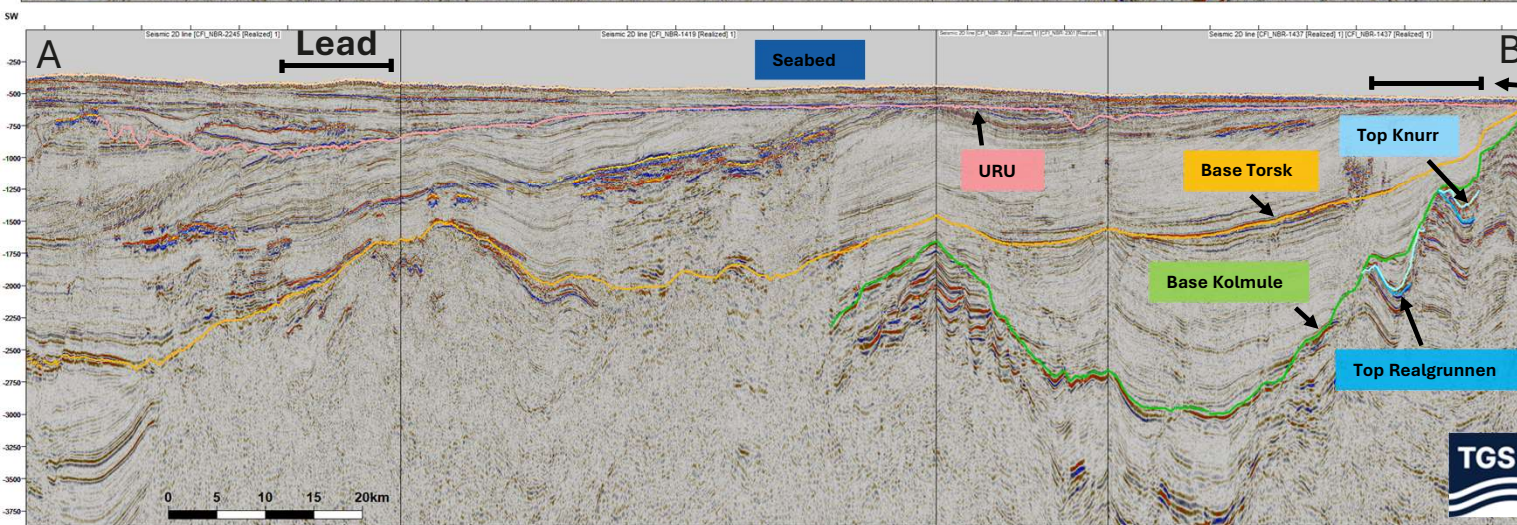
Modified from Lasabuda et al. (2018)



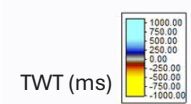
Overview Paleocene/Eocene plays



Base Paleogene UNC time map displaying amplitudes from fan interval

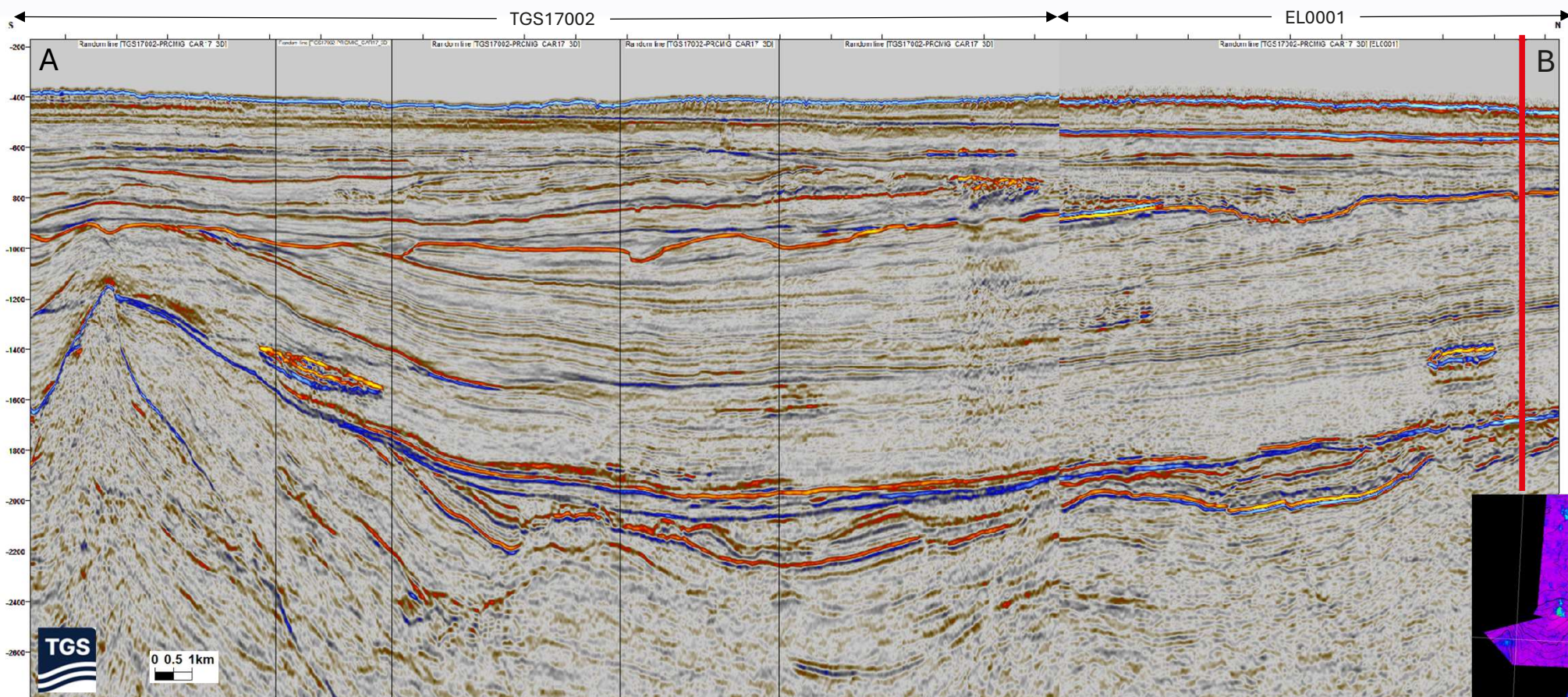


Johan Castberg

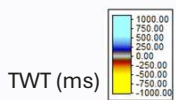




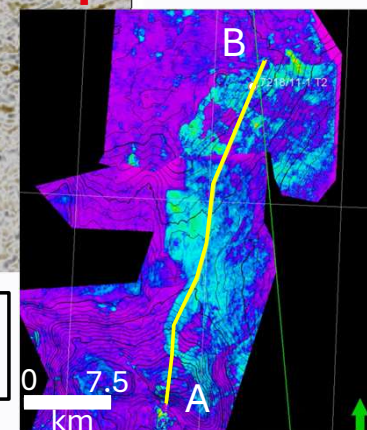
Seismic random line showing early Paleocene prospectivity in open acreage



7218/11-1
(Darwin)

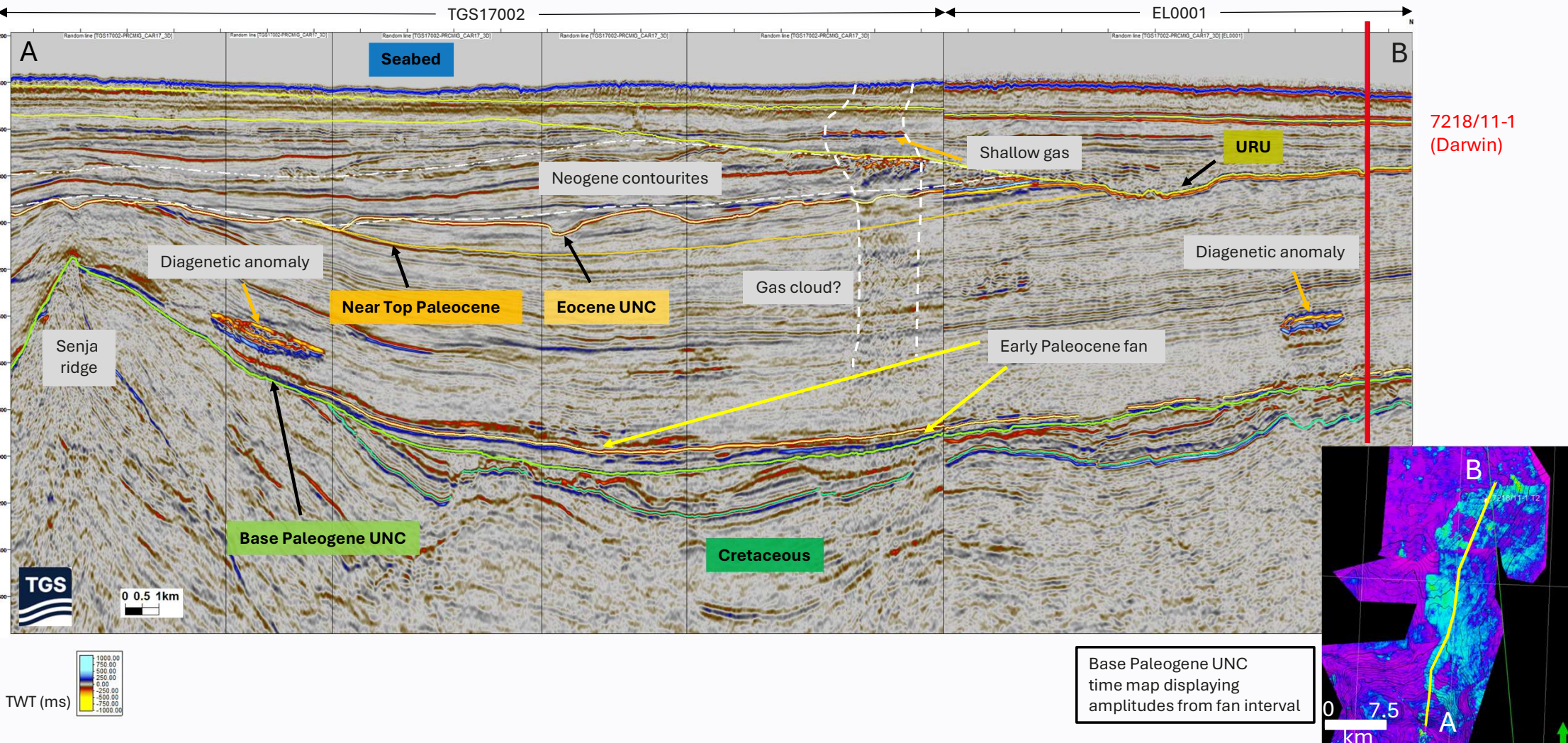


Base Paleogene UNC
time map displaying
amplitudes from fan interval





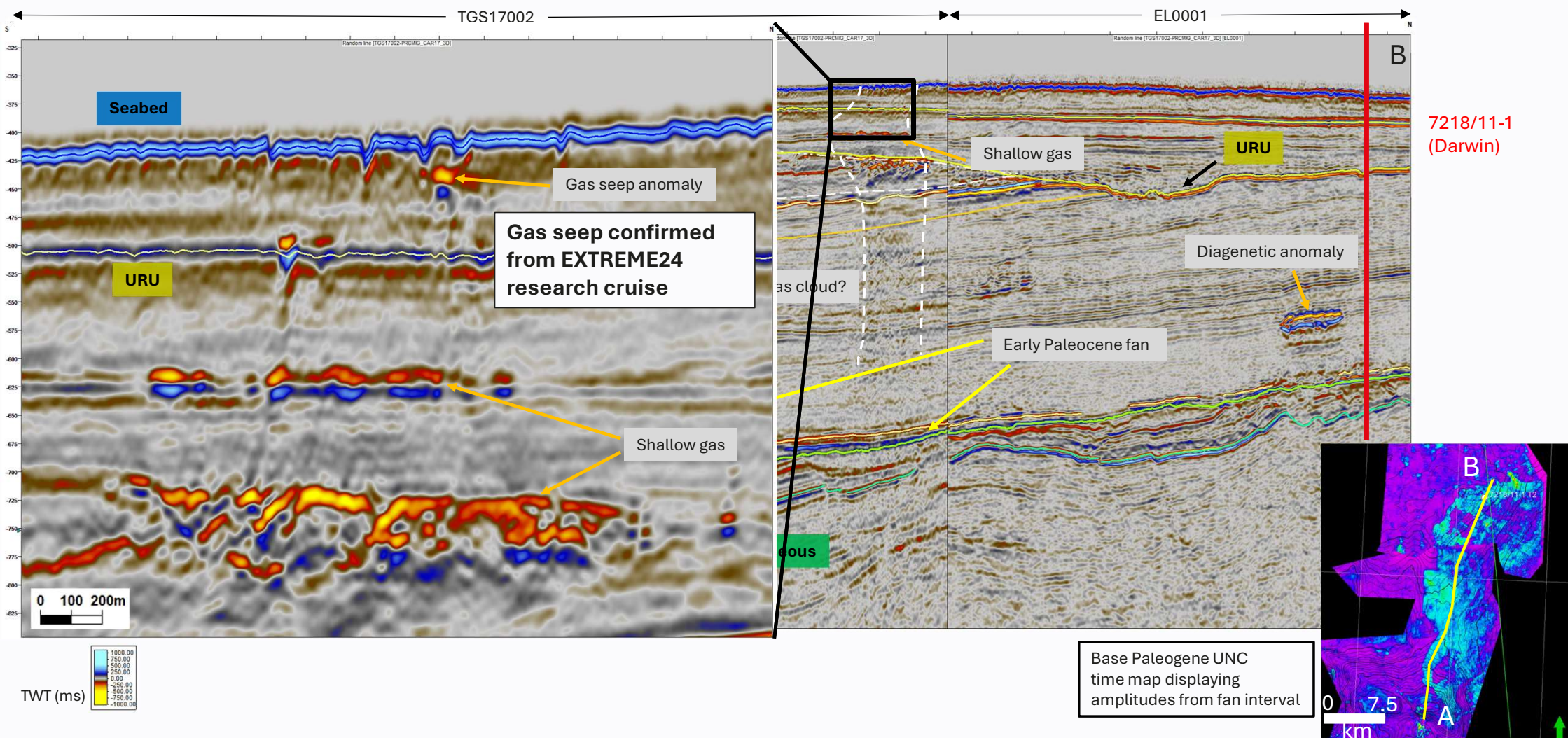
Seismic random line showing early Paleocene prospectivity in open acreage



Base Paleogene UNC time map displaying amplitudes from fan interval



Seismic random line showing early Paleocene prospectivity in open acreage

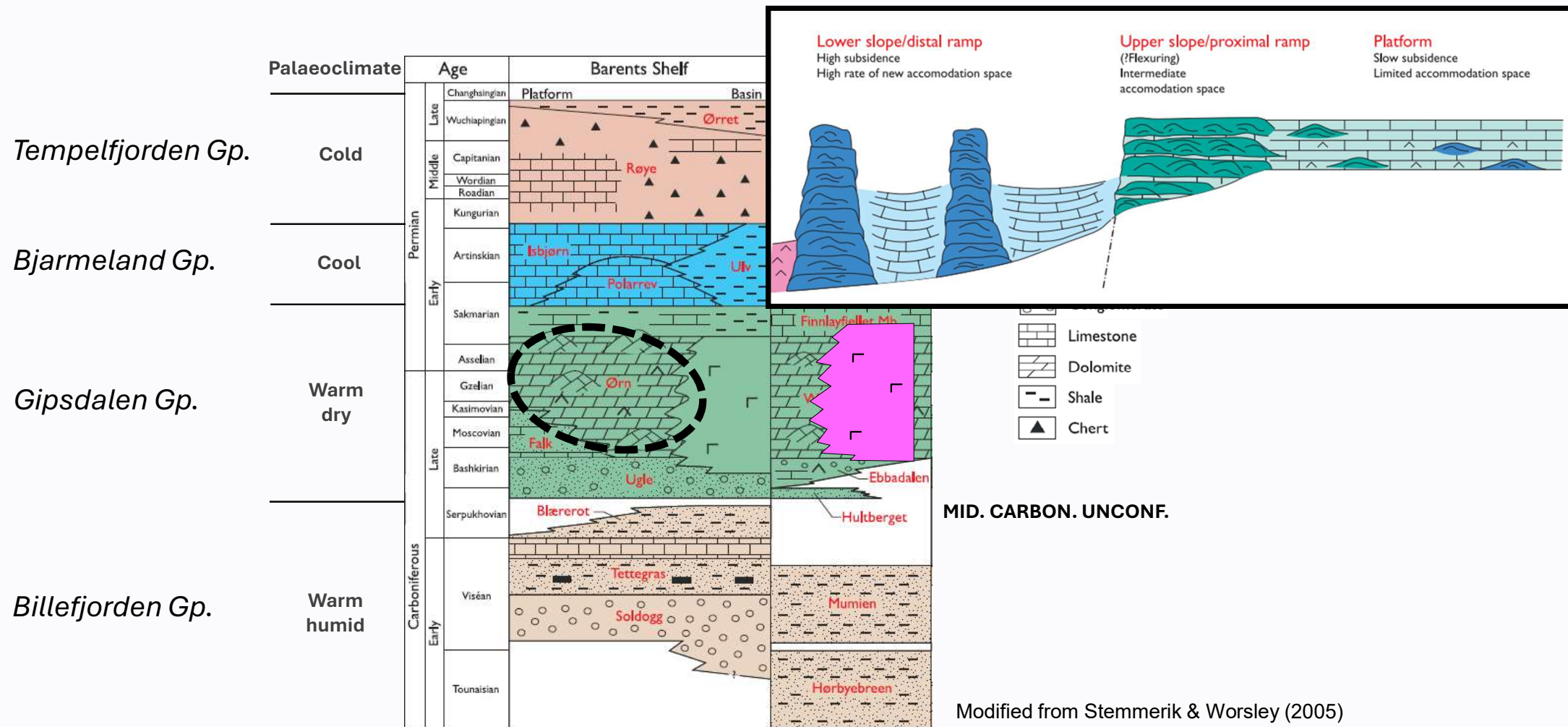




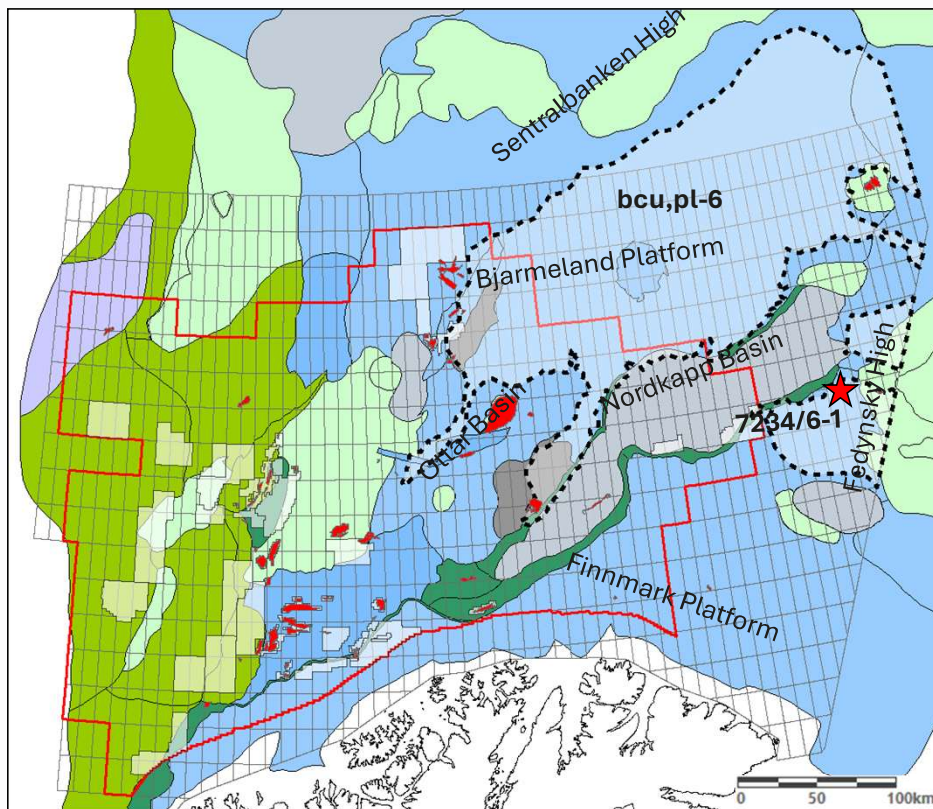
Gipsdalen play



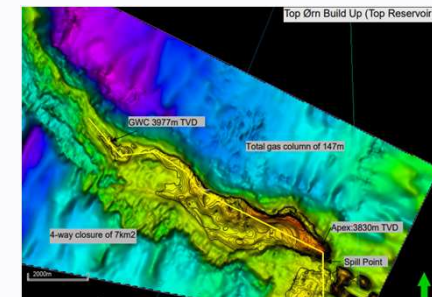
Upper Palaeozoic lithostratigraphic units in the southern Norwegian Barents Sea and on Svalbard



bcu,pl-6 : Gipsdalen Gp play on the Bjarmeland Platform++

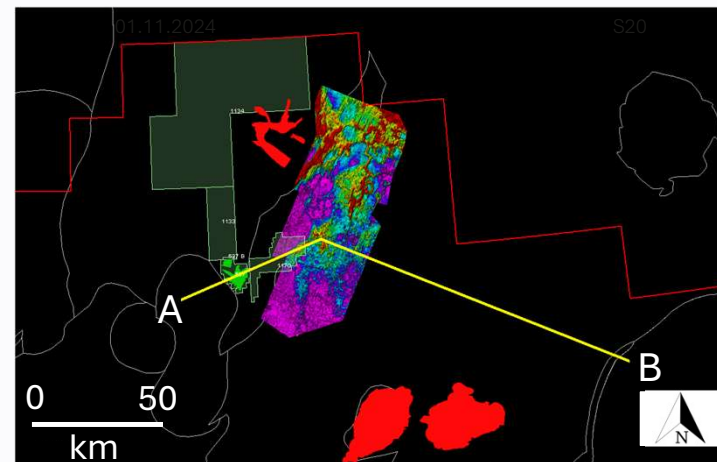


- Main reservoir is the warm-water Palaeoplysina buildups (carbonate reefs).
- Confirmed play by 7234/6-1 (Stangnestind) drilled in 2021:
 - Small gas discovery.
 - Filled to spill (147 m gas column)
 - Karstified and totally dolomitised
 - Porosity: 14%
 - Surprisingly high considering apex at 3830 m + uplift/erosion.

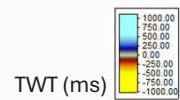
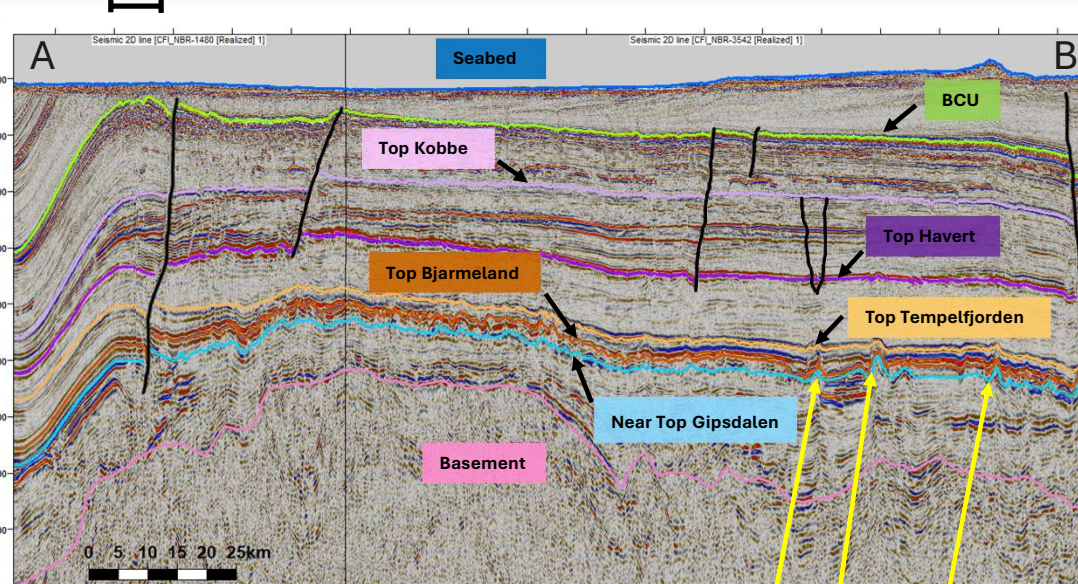
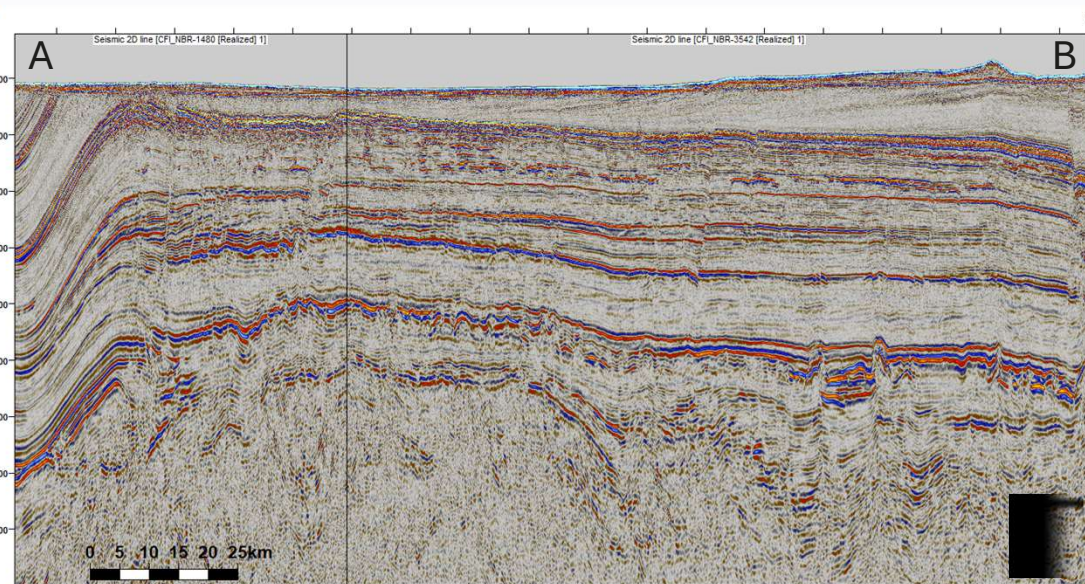




Overview Gipsdalen play



Wisting



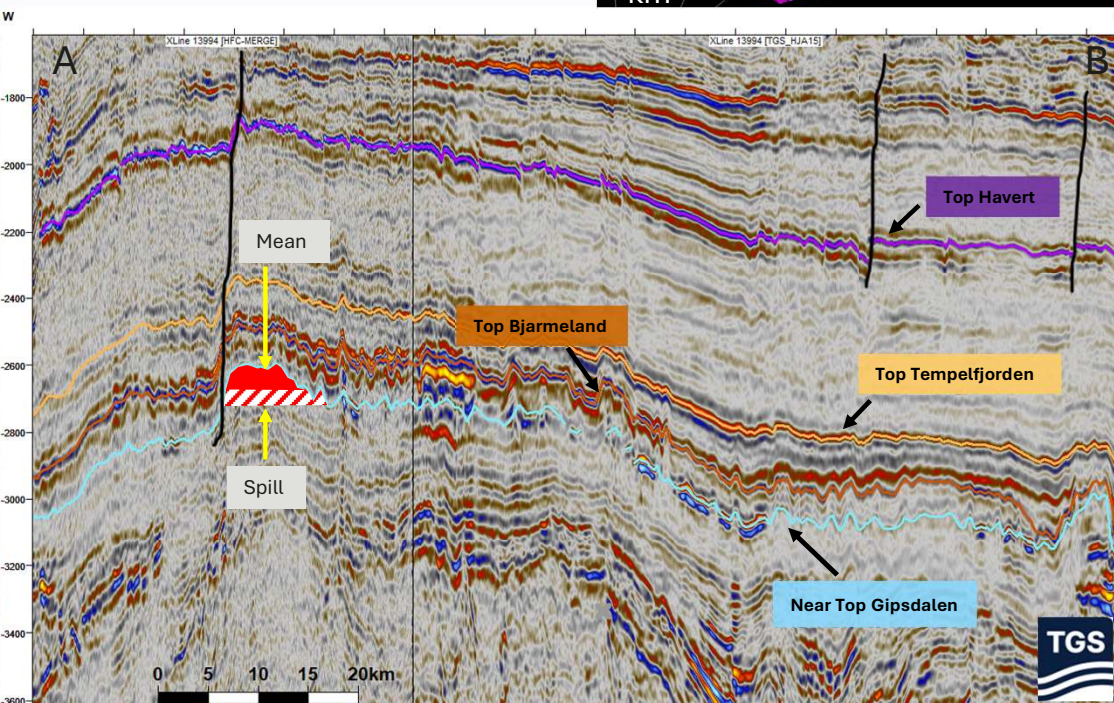
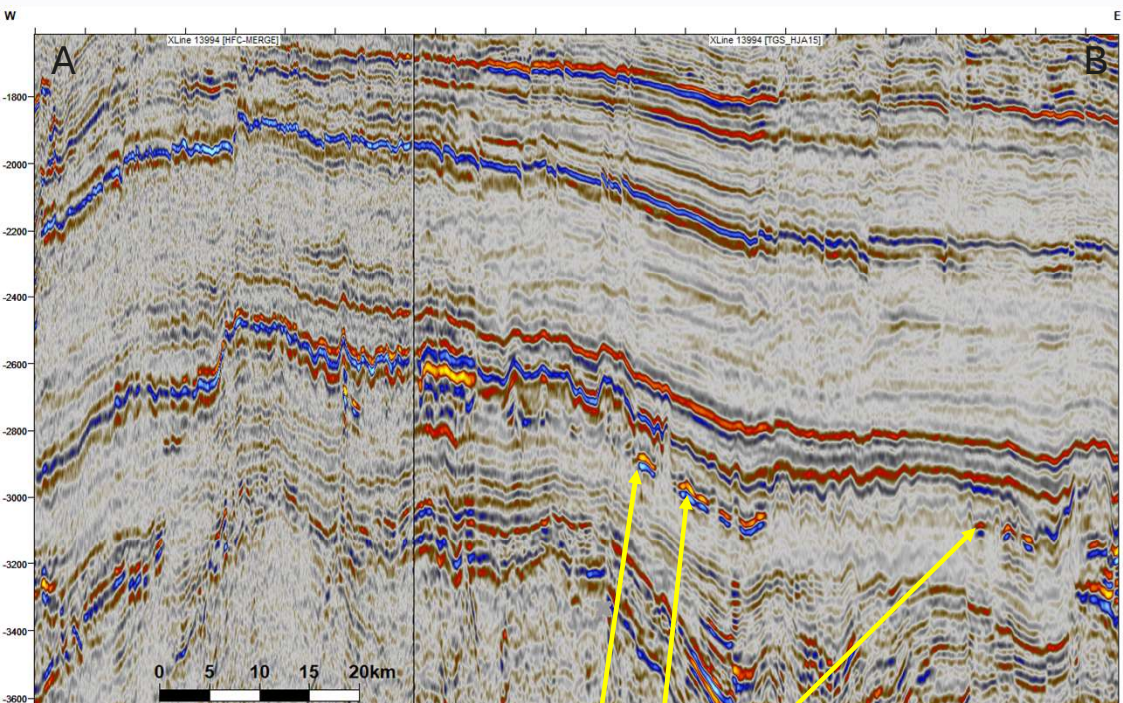
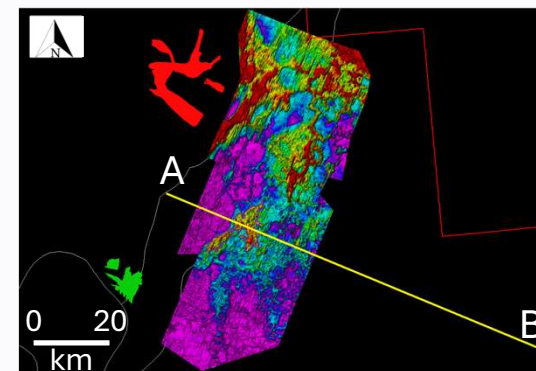
Carbonate buildups



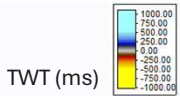
Prospectivity along Mercurius High/Hoop Fault Complex

S21

7324/5
Gipsdalen



Evaporitic lagoons





Key takeaways

- Large undiscovered resources in several plays
- Potential in underexplored plays within open APA acreage
- Turn every stone!



01.11.2024

S23

THANK YOU FOR YOUR ATTENTION

Daniel Høie & Abryl O. Ramirez

NORWEGIAN OFFSHORE DIRECTORATE

+47 51 87 60 00
postboks@sodir.no

SODIR.NO/EN

