

EXERCISES, E-MODULES, GEOV210 AUTOMN 2014

<http://buster.geo.uib.no/emodules/>

All e-modules listed below are part of the syllabus (pensum) in GEOV210.

Exercise 1: Vøring Margin: underplating.

Discuss various hypotheses concerning the composition and formation of the lower crustal 7+ km/s layer often observed along continental margins.

Exercise 2: Vøring Margin: lineaments.

Describe the different lineaments along the Vøring Margin, and how they relate to rifting processes.

Exercise 3: Vøring Margin: Tertiary domes.

Discuss various hypotheses concerning the formation of the Tertiary domes in the Vøring Basin.

Exercise 4: Vøring Margin: COT.

Discuss the Continent-Ocean-Transition/Boundary on the Vøring Margin and the processes leading to continental break-up in this area.

Exercise 5: Vøring Margin: Structural Evolution.

Discuss the structural evolution of the Vøring Margin.

Exercise 6 (two modules): Mantle Plume 1, Mantle Plume 2.

What is the link between Mantle Plumes, the Icelandic Hotspot and the Vøring Margin?

Exercise 7: Atlantic Transect.

Describe the evolution of the transect and discuss the processes involved.

Exercise 8 (two modules): Svalbard Margin, Knipovich Ridge.

Discuss the evolution of the Barents Sea and the adjacent oceanic crust.

Useful background modules: OBS Acquisition, OBS Processing, OBS modeling: P-waves, OBS modeling: S-waves. Moho, so what!