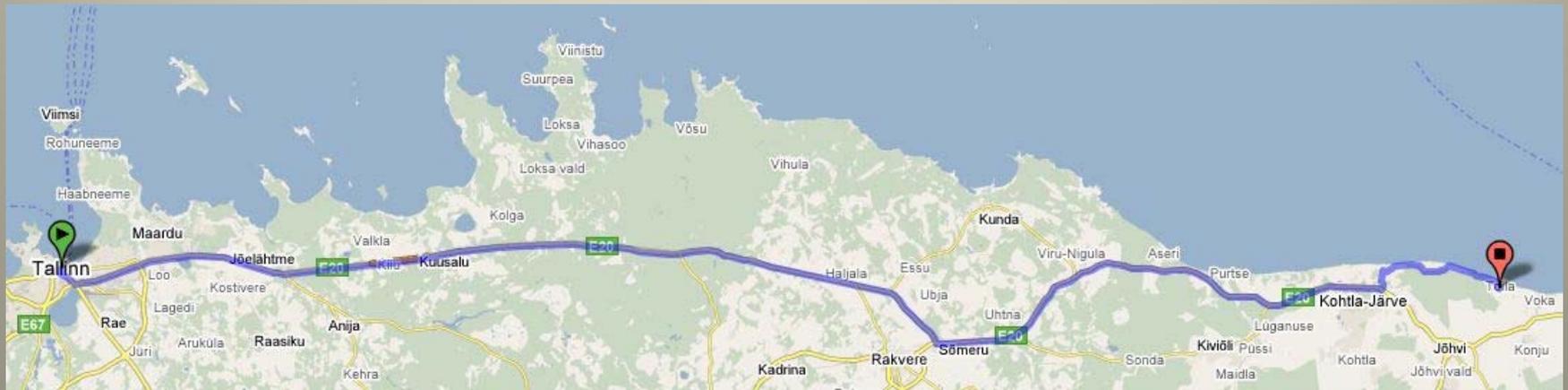


EFFECT OF A SMALL BRAKEWATER ON COASTAL EVOLUTION

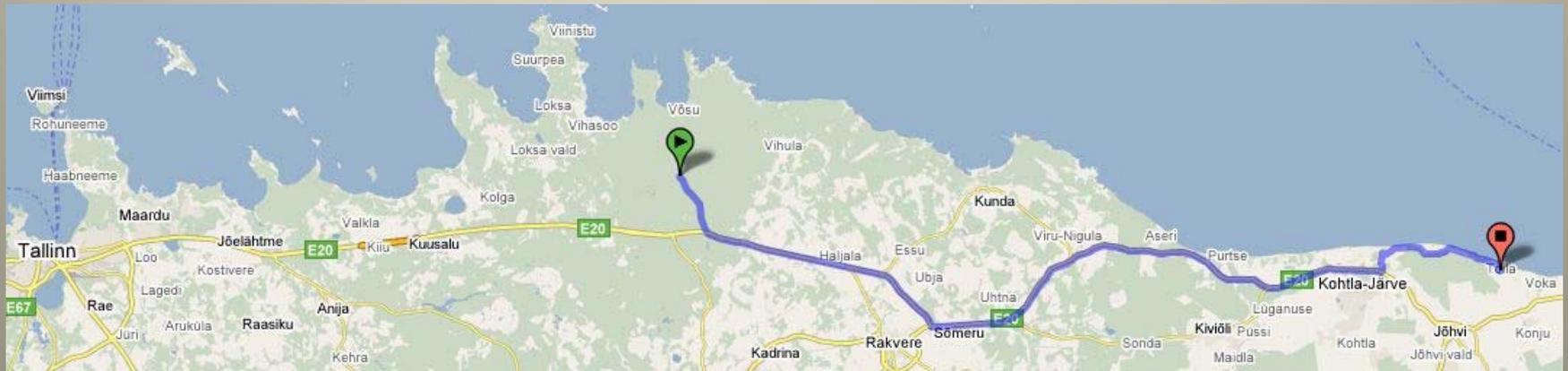
Andres Kask

Faculty of Civil Engineering
at Tallinn University of Technology

Tallinn to Toila 170 km



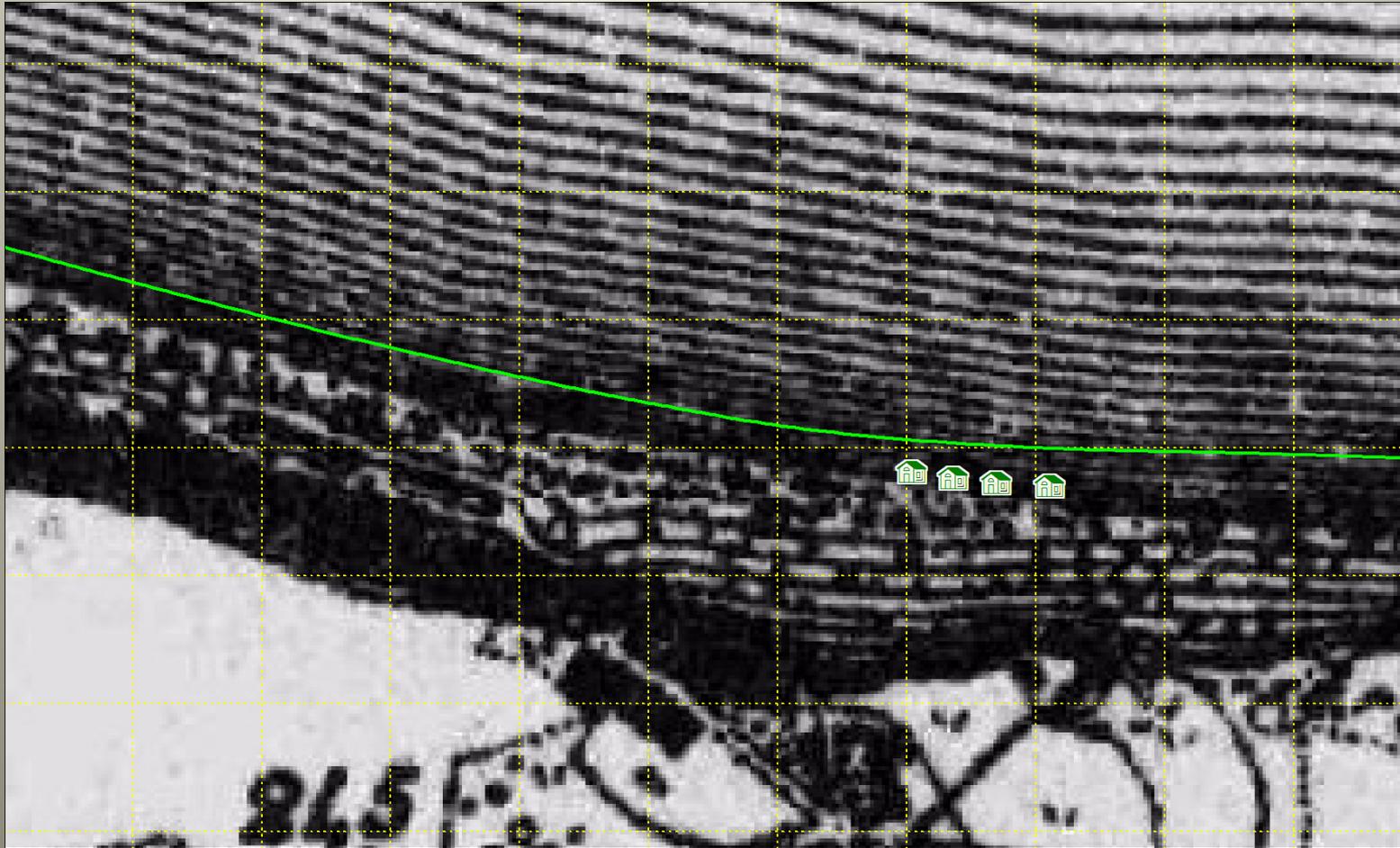
Palmse to Toila 104 km



1910



1891 ... 1912



1945...1967



1967...



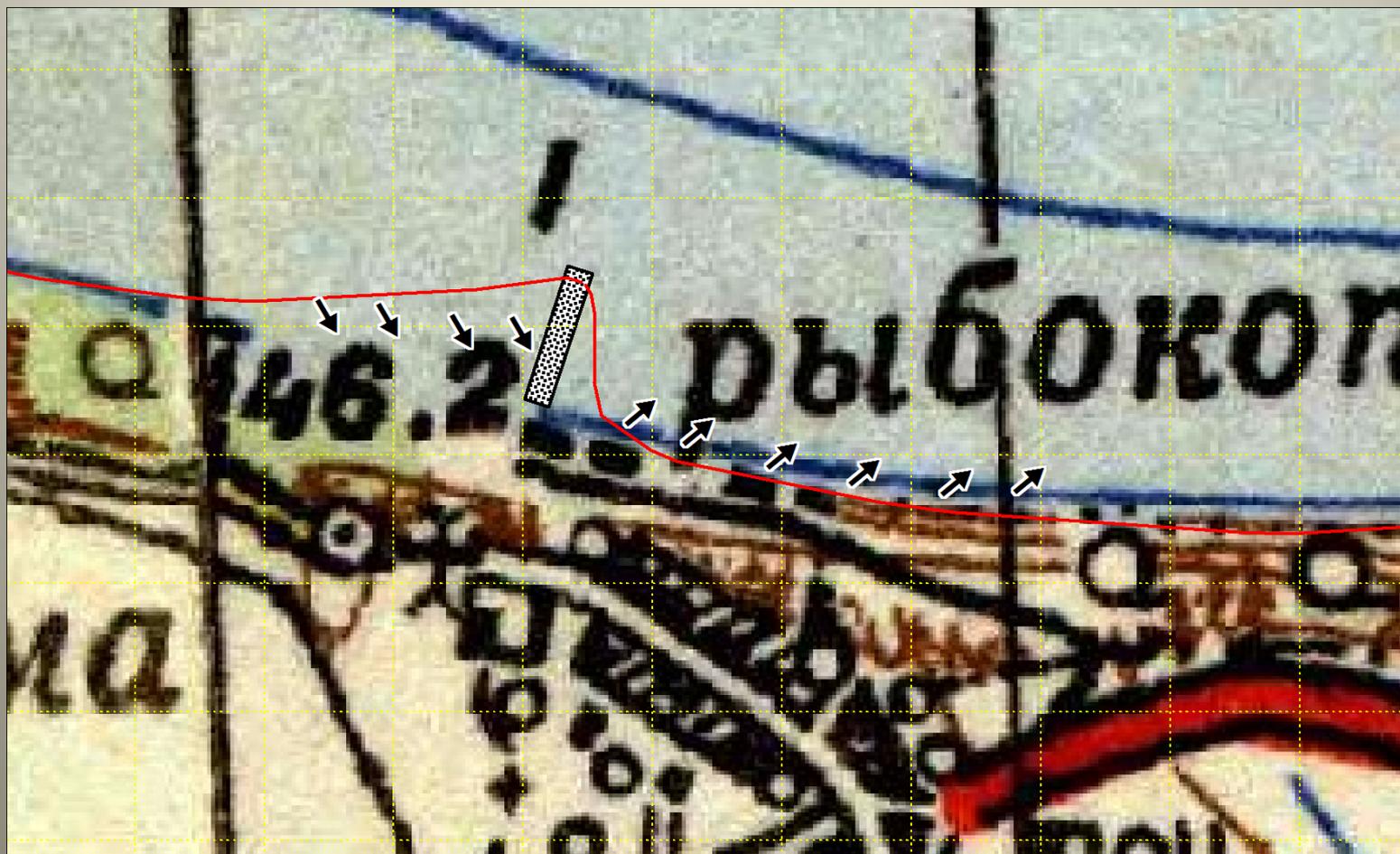
1967...



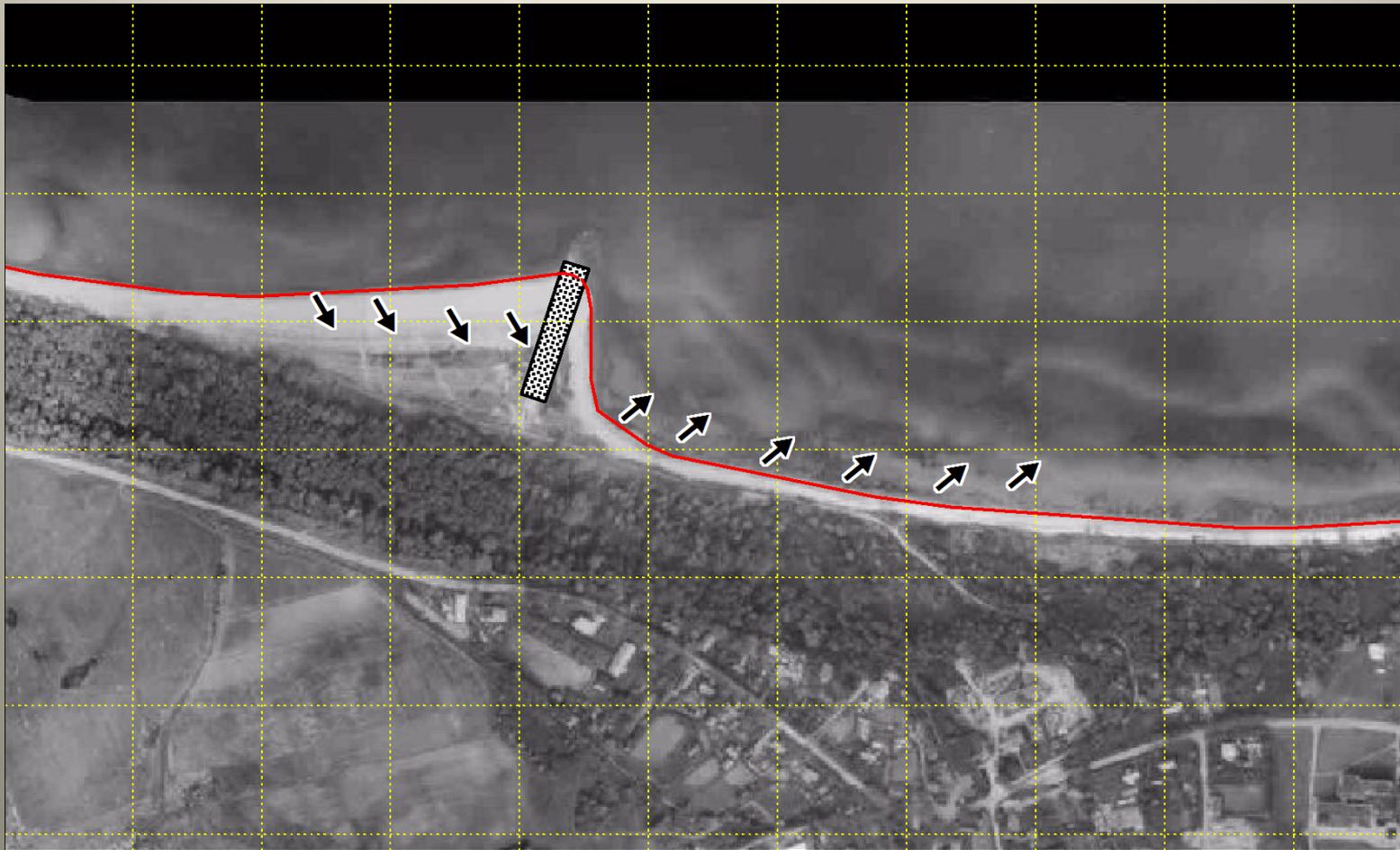
1967...



1967...2005



2003

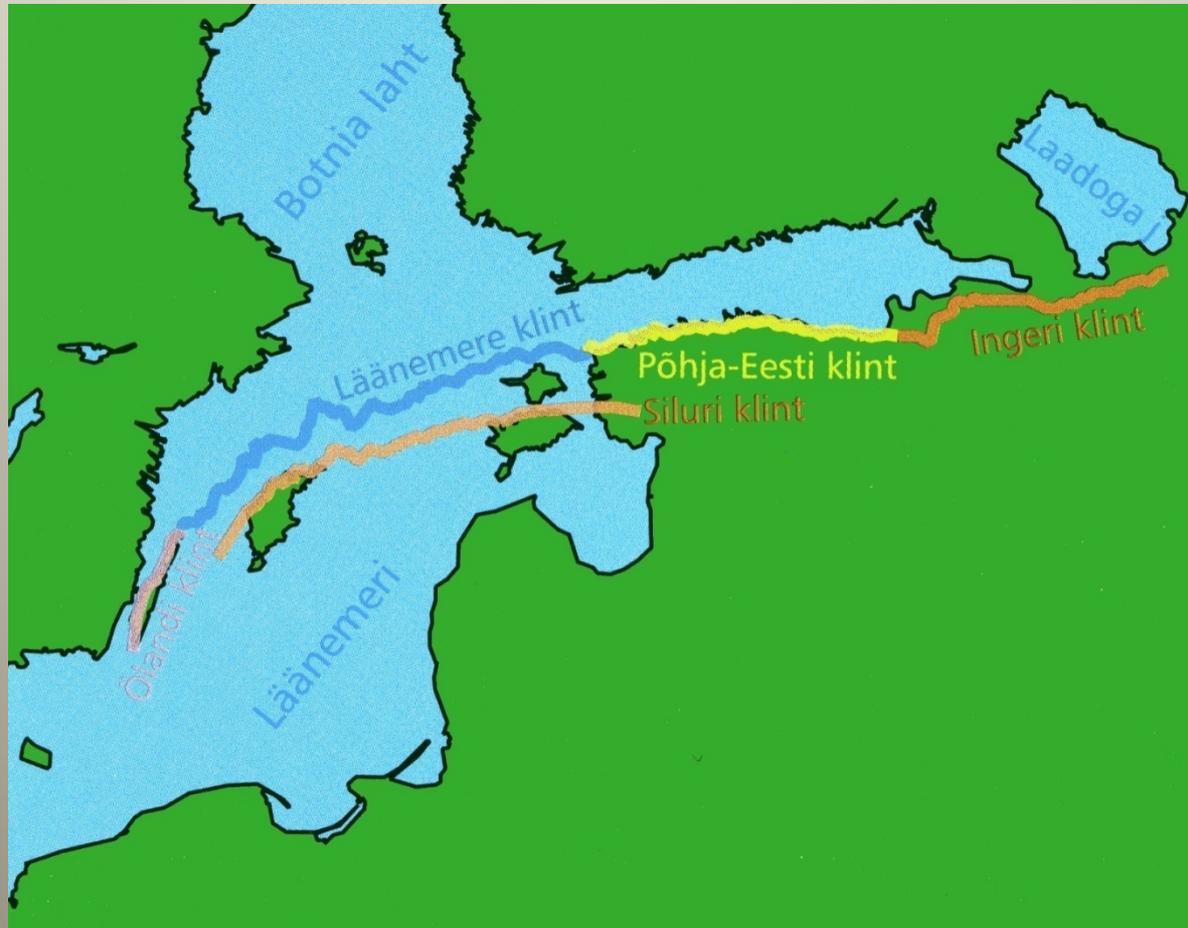


2003



Geology of Kings cape region

North Estonian Cliff part of Baltic Cliff

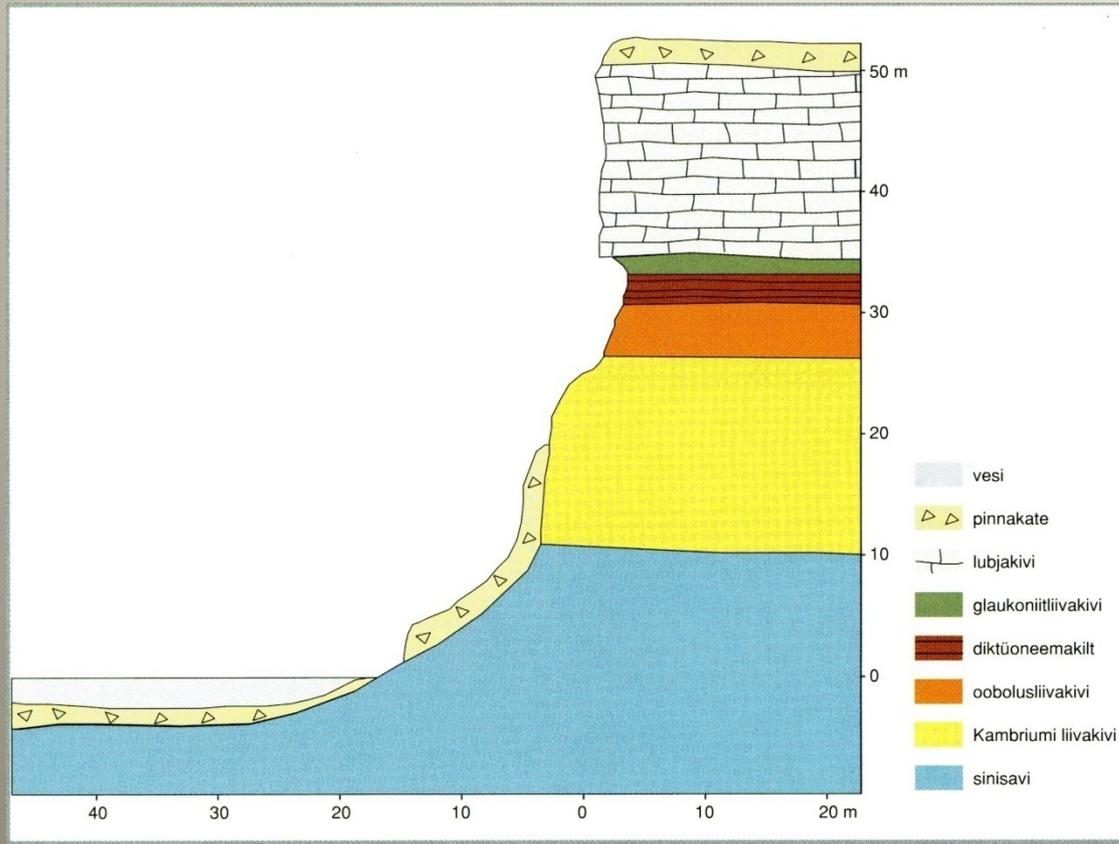


North-Estonian Cliff



Ordovician (490-445 million years b.)

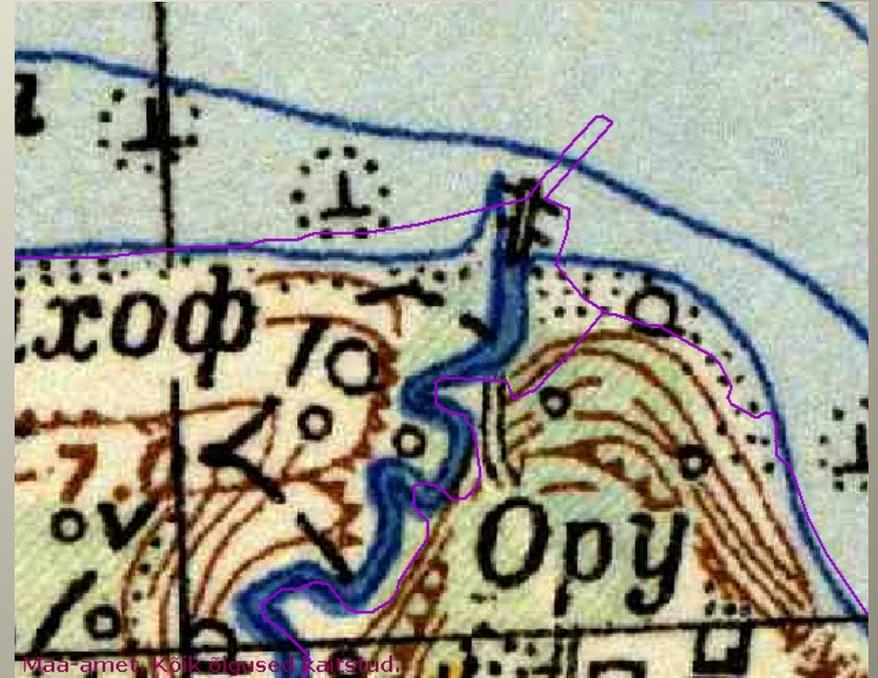
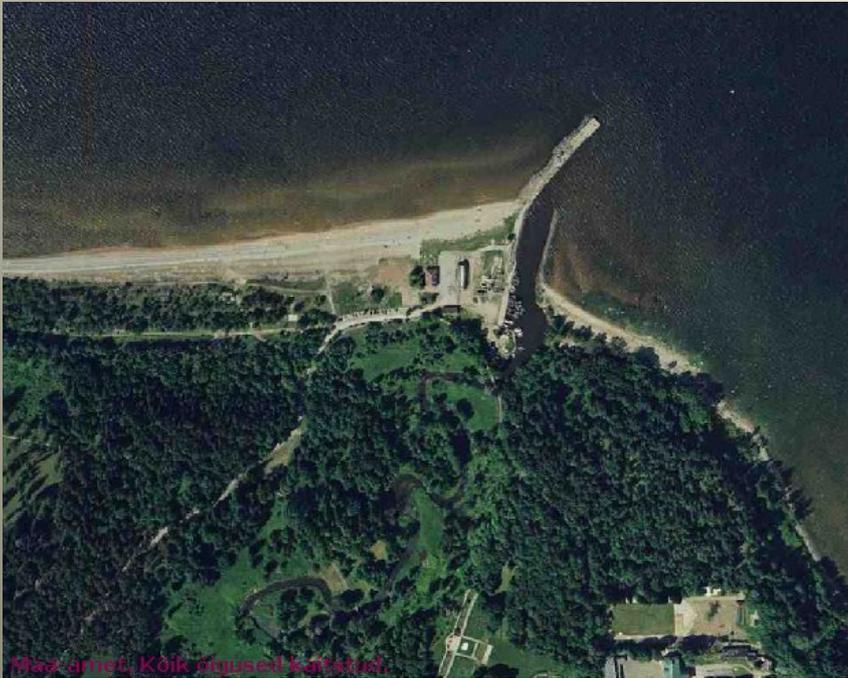
Cambrian (540-490 million years b.)







Toila harbour



Erosion east of Toila harbour



Conclusions

- Hydrotechnical structure on shoreline may influence coastal processes
- Investigations of hydrodynamic and sedimentation conditions needed
- Kings Cape Brakewater removal helps to restore the sediment supply
- Before and after removal monitoring of beach profiles should be done