



The age of the Storegga-North Sea Fan mega slides and their timing in relation to sea-level stand

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The Mid- and South Norwegian continental margin has been exposed by a number of mega-scale submarine landslides ($>2000 \text{ km}^3$) during the last c. 1.1 Ma. The frequency and timing of these slides clearly indicate that this downslope process seems to be associated with the frequency and timing of shelf-edge glaciations, initiated at c. 1.1 Ma. Most of the large paleo-slides have been released within the present Storegga Slide depression or in the nearby North Sea Fan area, whereas the 7250 14C BP (8100 cal BP) age Storegga Slide is the last mega slide that has released in this area. The exposed Storegga Slide is found to have affected an area of c. $95\,000 \text{ km}^2$ and a sediment volume of $2400\text{--}3200 \text{ km}^3$ have been displaced. Since c. 0.5 Ma the frequency of the mega slides on the Storegga-North Sea Fan area has been more regular reflecting the repeated shelf edge glaciations associated with the glacial-interglacial cyclicity. The hypothesis has been introduced stating that submarine slope failures on a passive margin are most frequent during sealevel lowstands. If this is true then passive margins should become more stable during rising sea-level as it occurs today. With aid of the unique data set available from this area we will have a possibility to date with certain accuracy the last three mega slides released in the Storegga-North Sea Fan area and evaluate the timing of failure in terms of the glacial-interglacial cyclicity and sea-level stand.