

THE CHRONOLOGY AND RECURRENCE OF SUBMARINE MASS MOVEMENTS ON THE CONTINENTAL SLOPE OFF SOUTHEASTERN CANADA

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Abstract

High-resolution seismic reflection profiles, multibeam bathymetry, piston cores, and biostratigraphy from petroleum wells are used to date submarine mass movements on the continental slope off southeastern Canada. Several different styles of mass movement are recognised in a variety of geological settings. The chronology allows evaluation of potential forcing processes, including earthquakes triggered by glacial loading on the continental shelf and dissociation of gas hydrates related to sea level or bottom-water-temperature changes.

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