

## **SIMULATING SUBMARINE SLOPE INSTABILITY INITIATION USING CENTRIFUGE MODEL TESTING**

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### **Abstract**

COSTA is addressing the questions of why seafloor slope failures occur where they do, and with what frequency they occur. The original program has been complemented by COSTA-Canada. One of the tasks involves the study of the initiation of slope instability through numerical and centrifuge modelling.

This paper reviews previous centrifuge studies related to submarine slope failure and presents the preparations for this task. The initiation of submarine slope instability has been attributed to triggers such as earthquakes, erosion, oversteepening, wave loading, and sedimentation. Centrifuge modelling has been used to simulate most of these loading conditions in similar boundary value problems.

J. Locat, J. Mienert (eds), 2003, *Submarine Mass Movements and their Consequences 1<sup>st</sup> International Symposium*, Kluwer Academic Publishers, 29-36.