



## **Large-Scale Submarine Mass-Masting offshore Uruguay**

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New geophysical data acquired during cruise M78/3 with RV “Meteor” in 2009 reveal large-scale mass-wasting along the passive continental slope offshore Uruguay. The slope failure is hosted in contouritic deposits between 1800 and 3300 m water depth, affecting an area of at least 1200 km<sup>2</sup>. Two escarpments up to 100 m high run along the slope. Echo-sounding data indicate that they are headwalls of individual failures with associated acoustically transparent sediment bodies. Sediment cores recovered from 3 transects across the failure complex confirm that the acoustic transparent units are debrites. Structure and geometry of the failure complex is indicative for a retrogressive submarine slide. Sedimentological evidence in accordance with hydro-acoustic data indicate that debrites deposited downslope of this failure complex are recent (Holocene) features on the slope. The morphology of the headwalls is underlain by a deeper reflector which we interpret as detachment. The detachment probably correlates with a regional BSR. Listric faults positioned upslope of the headwalls root into this detachment and are precursor of future failure at the location.