



Morphologic and sedimentologic characteristics of continental slope box slides offshore Fraser Island, Queensland, Australia

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The Fraser Island Slide complex is located on eastern Australia's continental slope offshore Fraser Island in southern Queensland. Morphologic, sedimentologic and geomechanical properties data for two submarine landslides, the 'North Fraser Island Upper Slope Slide' (upper slope slide) and the 'Fraser Island Middle Slope Slide' (middle slope slide) are described. Both of these features are box-shaped, slide scars from which rectangular slabs of material have been shed.

The upper slope slide is situated at a water depth of approximately 750 m at the northern end of the Fraser Canyon. The head of this slide has apparently detached from a structural surface comprised of a Miocene reef complex located beneath the continental shelf edge; this slide is estimated to be 25 square kilometres in area and an average of 100m thick. The middle slope slide is situated in 1500 m of water at the southern end of the Fraser Canyon. It estimated to be 12 square kilometres in area and 50 m thick.

Cores taken in the continental slope within both slides are long (upper slope 5.65 m, middle slope 3.64 m) and are dominantly comprised of hemipelagic mud. Cores taken adjacent to both slides are short (upper slope 1.33m, middle slope 0.43m) and terminate in stiff muds of suspected Miocene or Pliocene age. Additionally, the 1.33 m core on the slope adjacent to the upper slide presents a near surface layer of upper-fining of coarse to fine shelly sand which we interpret to be a turbidite deposit, this layer was deposited within hemipelagic muds which are ubiquitously present on the upper eastern Australian Continental Slope in New South Wales and Southern Queensland.