



Distribution and information of submarine landslides offshore southern Taiwan

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Submarine landslide is one of the important mechanisms for sediment transportation, and may cause geohazard. However, because of lacking high-resolution bathymetric data, few studies have been conducted on submarine landslides offshore Taiwan.

In this study, we use GIS (Geographic Information System) and GMT (Generic Mapping Tools) software to identify submarine landslides based on seafloor morphology from multi-beam bathymetric data, and then use side-scan sonar images of the MW9006 survey as a constraint. The study area is located between 21.5°N and 23°N, and from 119.5°E to 121.5°E, and we focus on establishing the techniques for positioning and measuring submarine landslides around Taiwan.

We observe that different landslide arrangements might be related to different tectonic settings. The landslides located in offshore southwestern Taiwan appear to be sub-parallel to the structural trends.