
Summary

Submarine landslides have been identified in almost all ocean basins worldwide. The largest submarine landslides occur on very shallow slopes and can be far larger than any terrestrial landslide. Submarine landslides can produce tsunamis whose far-reaching effects can rival those produced by earthquake-tsunamis and threaten increasingly populated coastlines. Even small landslides can damage very expensive and critically important offshore infrastructure, such as pipelines used for oil and gas recovery, and telecommunication cables that now carry over 95% of digital data traffic. A better understanding of submarine landslide processes, including triggering mechanisms, preconditioning factors, timing, and frequency as well as dynamics of submarine landslide, and their consequences are of clear societal and economic importance. Despite their importance, many fundamental submarine landslide processes are still poorly understood. We currently have many studies that have mapped and sampled submarine landslide deposits; however, in order to fill outstanding but key knowledge gaps, future studies may have to go beyond this in order to unravel processes governing submarine landslides with even more interdisciplinary approaches. This chapter provides a very short review about submarine landslide studies, with emphasis on the emerging needs in future landslide research.