

# **Distinguishing Triggering Mechanisms of Turbidity Flow from Core Information in Cascadia Subduction Zone**

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**Date:** 2015/12/31

## **Abstract**

Many of the largest earthquakes are generated at subduction zones or other plate boundary fault systems near enough to the coast that marine environments may record evidence of them. Marine records may be quite long and can be used to examine recurrence models, fault interactions, clustering, and other phenomenon, commonly limited on shore by short temporal records. Shaking or displacement of the seafloor can trigger processes such as turbidity currents, submarine landslides, tsunami and soft-sediment deformation. Marine sites may also share evidence of fault scarps, colluvial wedges, offset features, and liquefaction or fluid expulsion with their onshore counterparts. But we didn't have a criterion for recognizing the turbidite is earthquake-triggering or other mechanisms. In this study, reviewing the use of submarine turbidite deposits for paleoseismology, focuses on the dating and correlation techniques in Cascadia subduction zone and northern San Andreas fault, attempting to generalize some traces of earthquake-triggering turbidite. Final, we can find some criteria from the core information, to distinguish earthquake deposits and the strategies used to acquire suitable samples and data for marine paleoseismology.

## **Reference**

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