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Room:Convention Hall

Time:May 26 18:15-19:30

Extensive fault rupture reached Japan trench is landslide

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Analysis on topographical change caused by the 2011 off the. Pacific coast of Tohoku Earthquake was carried out by using analyph images based on multi-narrow beam data collected by JAMSTEC and Japan Coast Guard. Apparent and distinctive change is not widely observed in spite of the large earthquake mainly because of rather coarse DEM grid (150 m), except along the seafloor of Japan trench between N 38.0 and N 38.2 where JAMSTEC claims based on topographical and structural changes after the earthquake that displacement over 50 m of the earthquake source fault reached the trench axis. However, detailed observation on analyph images reveals that such changes were caused by re-activation of pre-existing landslides located along the toe of a gigantic slope failure located near the epicenter. Mounds appeared along the trench axis probably rotating mass of landslide.

Keywords: Japan trench, submarine landslide, submarine active fault, 2011 Earthquake

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