

Coastline Change and Tsunami Inundation Area of Northern Sumatra Island Inferred from Satellite Synthetic Aperture Radar Images

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2004 Indian Ocean Earthquake and Tsunami affected coastline of northern Sumatra island. An image was derived from a comparison of intensity of reflected microwave observed by Canadian RADARSAT satellite between July 22, 2003 (before Earthquake) and December 31, 2004 (after Earthquake). An area colored in red is a region where the reflective intensity is decreased. The red areas are distributed along the west coast of northern part of Sumatra Island, Indonesia. The image indicates Tsunami inundation area, coastal erosion and a subsidence caused by a crustal deformation due to the M9 earthquake.

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