



Extreme run-up from the 17 July 2006 Java tsunami

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The 17 July 2006 magnitude 7.7 earthquake off the south coast of western Java, Indonesia generated a tsunami that affected over 300 km of coastline killing more than 600 people, with locally focused run-ups exceeding 20 m. This slow earthquake was hardly felt on Java, and the high wave-energy coast masked any preceding ocean withdrawal, making this tsunami difficult for witnesses to detect before impact. An International Tsunami Survey Team was deployed and their investigations covered more than 600 km of coastline. Measured tsunami heights and run-up distributions were

uniform over large areas, however there was a pronounced peak on the south coast of Nusa Kambangan, where the tsunami impact carved a sharp trimline in a forest at elevations up to 21 m and 1 km inland. Local flow depth exceeded 8 m along the elevated coastal plain between the beach and the hill slope. We infer that the focused tsunami and runup heights on the island suggest a possible local submarine slump or mass movement.