



## **Field Survey of the December 26 tsunami in the Maldives**

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The submarine earthquake off Sumatra on December 26, 2004 generated the most destructive tsunami in the recorded history of the Indian Ocean. The Maldives were also severely affected by the tsunami. The Maldivian Islands are situated in numerous coral atolls separated by deep sea channels. The estimated 1190 Islands are spread over a distance of 868 km in North-South direction. In mid-January 2005 the authors surveyed the damage on the following 6 islands: Vilufushi, Madifushi, Kolhufushi, Kandoludu, Eydafushi and Hinnvaru. Given the minimal elevations of the Maldives many islands were completely flooded by the tsunami. Therefore primarily flow depths and tsunami elevations were measured based on visible watermarks on houses or debris in trees. In some cases tsunami run-up and inundation depth are reported. Over one hundred elevation points were measured and located by GPS. In addition more than two dozen eyewitness accounts were recorded. The destruction was documented by aerial photography and video. The maximum elevations on the islands are around 2m above mean sea level. Nevertheless both the damage to the infrastructure and the number of casualties were considerably smaller than in Sri Lanka. We will present a hypothesis explaining why the Maldives were less affected than other islands such as Sri Lanka.