

Tsunami field observation in Bengkulu
Earthquake at 11:10 UTC and 101.22E; 4.59S Depth 10 km, Mw (mB) 7.9

BMG Team Survey;
Indra Gunawan, Andi Suhandi, Bambang Suryo.

Summary

The team goes to the site to measure the tsunami run up and talks to the people to find the fact about experience of local people on the tsunami. The maximum run up is 3.6 meters found in Muko-Muko beach, which is about 200km away to the north of epicenter. The beach in Bengkulu city of about 130km from the epicenter is very close to the epicenter, but no tsunami is observed. Unfortunately tide gauge has not been installed in Bengkulu city. After Aceh tsunami 2004, not only people in Bengkulu, but also most people in Indonesia are aware of tsunami prior to strong ground shaking. The team found that most people along the beach evacuated themselves after strong earthquake. People in Muko-Muko also watched the receding water a few minutes after the strong shaking. Therefore, they evacuated themselves to the high ground. They come back in the morning to the beach, but due to stronger aftershock located very close to Muko-Muko (Mw 7.7), people evacuated themselves to the higher ground and come back a few days after. BMG also announced tsunami warning for this aftershock.

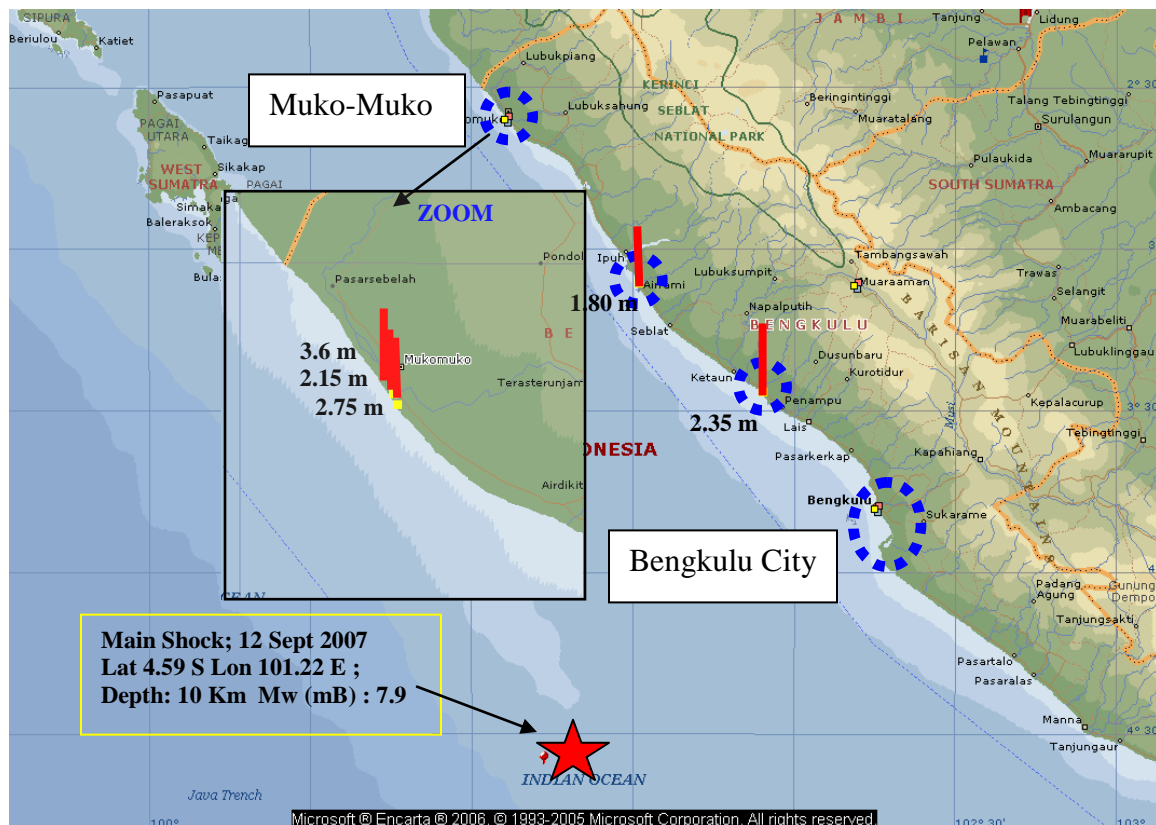


Figure 1. Tsunami high in Bengkulu region. The detail location is in the table.

No	Name of the beach	Coordinate		Run up	Inundation
		Longitude	Latitude		
1	Pantai Panjang Benteng Malbourgh	101 ⁰ 15' 01.7" E	03 ⁰ 48' 03.5" S	-	-
2	Pulau Baii Harbor	101 ⁰ 18' 12.7" E	03 ⁰ 54' 24.5" S	-	-
3	Desa Serangai	101 ⁰ 54' 02.1" E	03 ⁰ 25' 47.2" S	2.35 m	250-300 m
4	Pantai Pasir Indah 1	101 ⁰ 06' 46.2" E	02 ⁰ 35' 17.5" S	2.75 m	250-300 m
5	Pantai Pasir Indah 2	101 ⁰ 06' 45.3" E	02 ⁰ 35' 15.4" S	2.15 m	300-350 m
6	Pantai Pasir Indah 3	101 ⁰ 06' 42.1" E	02 ⁰ 35' 08.4" S	3.60 m	200-250 m
7	Ait Rami			1.80 m	200-250 m

Table 1. Observation of tsunami high and inundation



Figure 2. Pantai panjang Bengkulu, no tsunami is observed



Figure 3. Debris were washed by tsunami in Serangai village, put to the side way of the road by local people.



Figure 4. Observation in Pantai Pasir Indah Mukomuko



Figure 5. Observation in Pantai Pasir Indah Mukomuko