

Maps and speeds of Tsunami measured by oblique mono photogrammetry with video image in Asahi City, Chiba Prefecture

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¹The Group of Recording for Tsunami Damage of Asahi City in 2011

With captured pictures from video image, I made maps of tsunami waves and measured tsunami speeds by oblique mono picture photogrammetry.

Eastern area, Tsunami were plane waves. 1st wave emerged as a dark blue rise, and after 45 seconds it turned into breaker. 3rd wave emerged as a breaker, and after 10 minutes it reached Cape Gyobu. Strikes and speeds, 1st wave N40E 8.6-9.4m/s, 3rd wave N44E 4.9m/s. 3rd wave had little water depth in front.

Western area, For 1st wave, 5 lines were drawn in every about 17 seconds, and for 3rd wave, 4 lines in every about 60 seconds. Tsunami speeds, 1st wave 10-12m/s, 3rd wave 4-6m/s. The disorder of 1st wave lines in the west part may be due to halation of the Sun, but it needs further examination. 3rd wave had no water depth in front.

I used DVD made by Reflect Image Channel. Our group is going to issue the report this year.

Keywords: maps of tsunami, tsunami speed, photogrammetry, video image, Asahi City, Iioka

