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# of Potential Impact of Tsunami in West Papua due to North West Papua Earthquake Using TOAST Modeling

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Indonesia is a relatively high seismic activity region and one of the most active areas is the West Papua. TOAST is a software used for tsunami modeling simulations that can provide results quickly and in real time. Analysis of the impact of the tsunami using TOAST shows that based on the earthquake scenario on 10 October 2002 for the magnitudes varying from 7.0 to 8.0, the highest tsunami wave was recorded in the northern Sorong area with a height from 0.066 to 3.345 meters. Meanwhile, with a magnitude from 8.5 to 9.0, a tsunami was recorded in the Manokwari area with a height from 1.976 to 2.906 meters. The fastest estimated time arrival (ETA) was recorded in the northern Sorong area with an interval of about 3 minutes. For the earthquake scenario on 3 January 2009 with a magnitude between 7.0 to 8.5, the highest run-up was recorded in the Wondama Bay area with a height from 0.178 to 5.546 meters. For a magnitude of 9.0, it was recorded in Manokwari with a wave height of 2.906 meters and the fastest ETA was recorded in the Wondama Bay area with an interval from 8.25 to 8.5 minutes.

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Promotional text

TOAST is a software used for tsunami modeling simulations that can provide results quickly and in real-time. Furthermore, it can assist in making a decision of tsunami early warning

Oral preference format

in-person

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