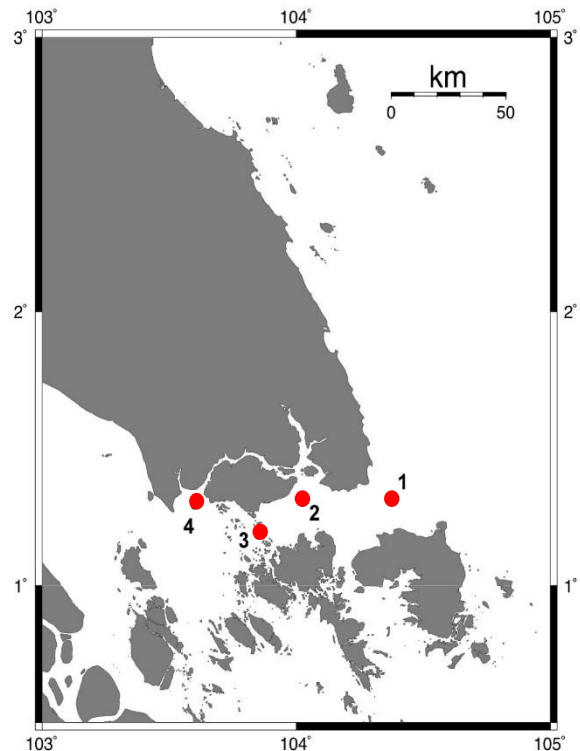
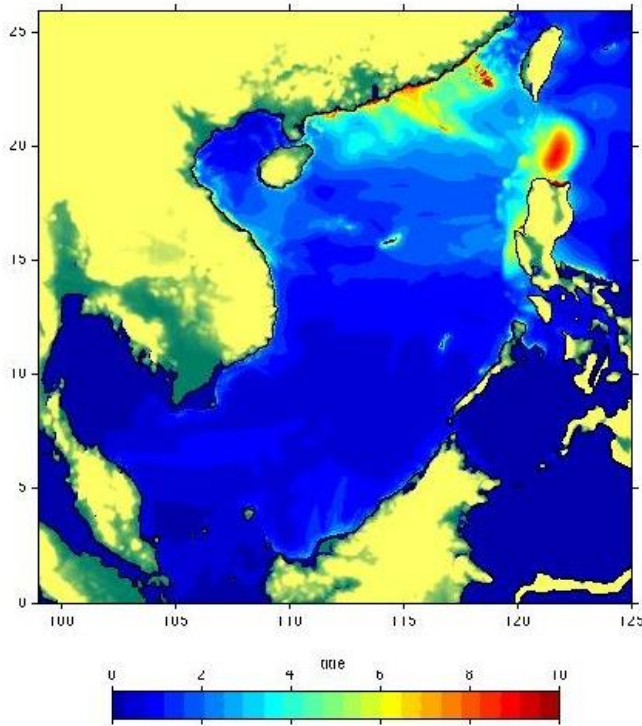


TSUNAMI HAZARD ASSESSMENT FOR SINGAPORE



INFO:

Location: Singapore

Client: Nanyang Technical University

Project Date: 2007

SCOPE OF WORK:

- Assessment of tsunami sources
- Numerical modelling of tsunami inundation and currents
- Assessment of overland flow velocities
- Multi-scenario sensitivity testing

PROJECT DESCRIPTION:

The Manila Trench represents a potentially large tsunamigenic earthquake source within the South China Sea. We were asked by researchers at Nanyang Technical University in Singapore to develop a numerical model to explore the possible effects of this tsunami source on Singapore.

The model results showed that tsunami propagation across the South China Sea is strongly attenuated as the sea becomes shallower in the south-western corner. Initial tsunami wave heights of over 10 m at the source are less than 1 m close to Singapore and reduced even further in the shallow waters of the Singapore Straits.

In contrast, coastal regions close to the deeper basin of the South China Sea such as mainland China, Hong Kong, Hainan Island and Vietnam are quite prone to the direct impact of this potential tsunami source. Further modelling is required to quantify the tsunami hazard to vulnerable communities, ports and infrastructure along these coastlines.

