

Understanding the Killer Waves of Asia

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Asia is a region of killer waves. Tsunamis and storm surges have killed more than 400,000 people in the last five years in Asia. The death tolls and socio-economic disruption were obvious but what lessons have we learnt?

This talk will focus on tsunami and storm surge events in Asia including the 2004 Indian Ocean tsunami and Cyclone Nargis in 2008. I will discuss how and why these events occur and discuss how earth scientists are working to predict, prepare and mitigate against future events.

Despite the known risks to many coastlines throughout Asia tourism and coastal development continue unabated in many 'high risk' regions. The importance of understanding geological and historical records of these events will be outlined as will the lessons we should learn from the past. Studying the impact of these events and planning for the future requires truly interdisciplinary science. Geology, physics, biology and geography all play a role in preparing the coasts of Asia within the true principles of sustainable development of Asian coasts for the future of the next generation.