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## The modelling concept of the German-Indonesian Tsunami Early Warning System GI TEWS

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The concept of modelling and data assimilation in the GI TEWS is presented. The tsunami wave model is based on a flexible unstructured mesh which allows proper representation of coastlines and bathymetry. The system includes first a calculation of tsunami arrival time based on a seismic alert. Wave height measurements allow determination of tsunami wave source using a precomputed data based on 'virtual tsunamis'. In the last step a prediction for the full Indian ocean is made.