The german contribution to the Indian Ocean tsunami early warning system (GITEWS) - Status quo

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The installation of the German-Indonesian Tsunami Early Warning System for the Indian Ocean (GITEWS) runs on track. Backbone modules of different sensors such as seismic stations, GPS stations and tide gauges are installed and already online. Further stations and redesigned buoys are in preparation. Other key milestones such as the development of the automatic data processing software SeisComP3, and the underwater communication for the transmission of the pressure data from the ocean floor to a warning centre are successfully realised. Also, the simulation of a tsunami wave including the source modelling has been completed. The capacity and the fast functionality of SeisComP3 has been demonstrated several times. The epicentre and the magnitude of the 8.0 Bengkulu earthquake in the southern part of Sumatra on the 12th of September 2007 could be determined in less than five minutes, so that the Geophysical survey in Jakarta (BMG) released a tsunami warning on its own initiative. Tsunami-simulations are of particular importance and allow a precise prediction of the inundation of affected coastlines. More than 250 scenarios have been calculated and are available in a data base. Information from the different sensor systems converge in a central warning centre. These data are matched with the precalculated simulation scenarios to enable the officer on duty to appraise the danger and to release a warning dossier. Therefore the education and training also of the local authorities and the population is an important task of the capacity building programme within GITEWS. This presentation gives a status report of the technical realisation of the Early Warning System and of the training programme. The technical system of GITEWS will be set up until November 2008 and there will be a joint operation period until spring 2010,
together with the Indonesian partners.