

**Prof. Dr. Jochen Zschau**  
**GFZ, Section 2.1 “Earthquake Risk and Early Warning”**

**The German-Indonesian Tsunami Early Warning System  
for the Indian Ocean**

**Abstract**

The mega-tsunami of Dec. 26<sup>th</sup>, 2004, in the Indian Ocean has made clear to the world that there is a need for reliable tsunami early warning not only in case of the Pacific where early warning is already in place since a few decades, but also in case of other major oceans, such as the Indic, the Atlantic, the Caribbean and the Mediterranean, where nothing comparable exists.

Guided by the German-Indonesian activities towards an early warning system for the Indian Ocean, the presentation will attempt to answer the questions,

- which technological components are essential and presently available for tsunami early warning,
- which new scientific challenges can be identified in this field and
- what are the technologies we should further develop for more effective systems in the future.

Besides this, the presentation will also point out that a scientific-technological system alone will not be sufficient for reliable early warning, but that bridging the “last mile”, i.e. bringing a warning message to the people and making them understand and react properly, is an absolutely necessary, though still the weakest link in the early warning chain..

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**Short biographical notes**



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6.12.1944	Born in Lauenburg
1974	PhD: CA-University Kiel
1979	Doctor of Sciences (Habilitation), CA-University Kiel
1969-1974	Research Fellow, Geophys. CA-Univ. Kiel
1974-1979	Scientific Assistant, Associate Professor at the Department of Geophysics, CA-Univ. Kiel
1978	Visiting Fellow at the Cooperative Institute for Research in Environmental Sciences, Boulder, Colorado, USA
1979 - 1980	Docent at the Dept. of Geophysics Univ. Kiel
1980 - 1992	Professor and Director at the Dept. of Geophysics Univ. Kiel
since 1992	Professor of Geophysics at the Institute of Geosciences, University of Potsdam
1992 - 1995	Director of the Division “Disaster Research”, GFZ Potsdam
since 1996	Director of Department “Physics of the Earth” and Head of Section “Earthquake Risk and Early Warning” at the GeoForschungsZentrum (GFZ) Potsdam