

Characteristics of earthquake belts and examples of tectonic activity in the greater Sundaland Area counting from the Tertiary

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Dr. Franz L. Kessler works as a senior production geologist for Shell Tech India, particularly for reserves booking in Brunei, Oman, Pakistan. His talk entitled “characteristics of earthquake belts and examples of tectonic activity in the greater Sundaland Area counting from the Tertiary” was well attended by the academic staff and students of the Department of Geology, University of Malaya. The abstract of the talk is given below:

Abstract: Many papers published in the past have inferred a highly complex history of the area defined as Sundaland - an area that encompasses most of Malaysia, as well as large parts of Indonesia, the Philippines as well as large portions of the South China Sea. All studied data (these being: earthquake activity, volcanicity, Bouguer Gravity, geological fieldwork) suggest a rather simple picture - a large subcontinent, attached to Vietnam/Southern China, formed by thick continental crust, and surrounded by a crescent of active subduction zones that date back at least to the Cretaceous in a strip North of Java Island. Depth of quake foci vary from 5 to 900 km depth. The eastern margin of Sundaland looks highly complex, with several stacked sheets of oceanic crust being present. Since the Early Tertiary, Sundaland has seen several phases of limited extension and re-compression, the most prominent among these being of Intra-Eocene and Late-Miocene ages.

