

Dam-induced seismicity of Kenyir, Terengganu

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Among the more documented cases of man-made or induced earthquakes are those associated with fluid. Dam- or reservoir-induced earthquakes are quite common. Seismicity data can be used to site a dam or to monitor a dam for safety reasons, using data before and after construction, throughout the life of the reservoir. Shocks are expected from large dams constructed in a seismically active areas. However, dams that exceed 100 meters high are also good candidates even though their sites were previously aseismic. The Kenyir Dam was no exception; tremors were reported (and recorded) near the Kenyir area since 1984, and recorded by seismic stations in Ipoh, Kluang and Kuala Lumpur. These stations are a part of a nationwide network managed by the Seismological Division of the Malaysian Meteorological Department since 1979.

A total of 27 shocks were recorded, with the magnitude ranging from 2.5 to 4.6 on the Richter scale. The earthquakes from Kenyir have their own *signatures* on the seismograms. In addition to providing data for dam monitoring, this data set can also be used to study the regional geology and the crust structure between the source and the recording stations. The records, however, have to be reevaluated to increase precision and minimise error.