

Vertical variation of radioactive elements in an active fault region

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Gamma-ray spectral analysis have been performed to investigate radioactive elements of core samples of 1800m drilling hole at the Nojima fault which was the epicenter of the devastating Kobe earthquake with magnitude 7.2. The results indicated that the samples at the shallow zone contain low content of uranium, thorium and potassium elements, on the other hand, the samples at the depth more than 700m contain high. This variation is strongly affected by the geological structure. The core sample at the depth of 533m showed lower values of ratio of U/K and Th/K. Therefore, it suggests there exists a ground water flow at this zone, because U and Th are dissoluble into water.