Sensitivity change of TL signal of quartz extracted from the Lake Biwa1400 m Core sample, Japan.

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Quartz is one of the most common minerals on the Earth and thermoluminescence (TL) signal of quartz is widely used for Quaternary dating in Earth science and Archeology. TL signal in quartz are also used for purposes other than dating. For example, variety of sensitivity change of TL signal of quartz is recorded for quartz crystals of different origins (Takada, 2010), suggesting the possibility for rough estimates of the provenance of sediments. In this study we analyzed TL sensitivity change of quartz grains from the Lake Biwa 1400 meter Core sample, to discuss their chronological background.

(Reference)
Takada M. (2010): Characteristics of 110 degrees Celsius TL signal in quartz from a variety of rocks and sediments: a clue to sediment provenance. Studies in Geography and Regional Environment Research, Nara Women’s University, VII, 105-112.

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