

Cosmogenic ^{10}Be in endogenic travertine deposits at Baishuitai, China: A pilot study

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We report on the preliminary experiment for measurement of beryllium-10 in travertine samples from Baisuitai, China. Beryllium-10 is one of the cosmic-ray induced isotopes and thus can be used as a proxy for the flux of galactic cosmic rays incident on the Earth. For example, the content of beryllium-10 in ice cores from polar region is often used for examining the past cosmic ray flux and solar variations. However, the data from ice cores is often accompanied by dating uncertainty. In this study, we seek for the possibility to use travertine which has recognizable annual layers.

Keywords: Cosmogenic nuclide, Solar cycle, Travertine deposit