

## Oxygen and hydrogen isotope analyses of fluid inclusions in Holocene stalagmite from Niigata prefecture

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The climate in East Asia is influenced by the East Asian Winter Monsoon (EAWM). Recently, the EAWM variations during Holocene have been revealed by the oxygen isotope ( $\delta^{18}\text{O}$ ) record of stalagmite calcite from Fukugaguchi cave (Sone *et al.*, 2013). In this study, we show oxygen and hydrogen stable isotopes of fluid-inclusion water in the stalagmite. The stalagmite (FG01) in Fukugaguchi cave in Niigata, Japan (Sone *et al.*, 2013) was used for fluid inclusions analyses. The analytical method was based on Uemura *et al.* (2016), but most of operations were automated. Although water content of FG01 was very low (average 0.006 wt.%), fluid-inclusion isotope data covering 4000-8000 yrs BP were measured successfully.

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