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SCG063-P06

Room:Convention Hall

Time:May 26 10:30-13:00

Denudation history of the Akaishi Range, central Japan, based on low-temperature thermochronology

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We conducted low-temperature thermochronometric analysis to constrain denudation history of the Akaishi Range. ZHe ages of 20-3.5 Ma were obtained between the MTL (Median Tectonic Line) and ISTL (Itoigawa-Shizuoka Tectonic Line). These data are preliminary interpreted as below: 1) the youngest age, ~3.5 Ma, indicates the upper limit of the onset of the denudation event, which roughly corresponds with the onset of the uplift of the Akaishi Range estimated by previous studies, 2) younger ZHe ages to the east implies westward tilting of the Akaishi Range, 3) assuming geothermal gradient of ~30 deg.C/km and surface temperature of ~20 deg.C, the denudation in the past ~3.5 Ma is calculated at 5-6 km near the ISTL at the eastern margin of the Akaishi Range.

Keywords: fission-track thermochronology, (U-Th)/He thermochronometry, Akaishi Range, denudation