

Accumulation age of the Dome Fuji ice core estimated from volcanic eruption records : 1. from 1260AD to 2001AD

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We measured non-sea salt sulfate (nssSO_4^{2-}) in the Dome Fuji ice core from surface to 40m depth to estimate accumulation age from volcanic eruption records. Three huge spikes related to large scale volcanic eruptions were detected at 12.5m, 29.9m and 38.8m depth, and were identified as Tambora (1815AD), Kuwae (1452AD) and Unknown (1259AD), respectively. In addition, ten nssSO_4^{2-} spikes connected with volcanoes where erupting age is accurately known were detected. We will report an accurate accumulation age of Dome Fuji ice core with these 13 nssSO_4^{2-} spikes.