Debris avalanche deposits from Kyogatake Volcano and the recent faulting events in Fukui Prefecture, central Japan.

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Kyogadake debris avalanche deposits were derived form the west and southwest side of the middle Pleistocene Kyogadake Volcano, and spread over the west to southwest foot of the mountain. The slope failure occurred 4-6 times in recent 50 ka. The oldest failure was generated about 41-46 ka on the west side of the mountain and the debris avalanche spread mainly over the west slope. The next one was about 30-40 ka on the southwest side and the debris avalanche go down the southwest slope straight over 10km, and formed the debris plateau called Tsukaharano upland area. The next two form the southwest side were about 31 ka and 21 ka. The last failure on the southwest side was 5.6-6.0 ka and formed the southwestward elongated lob on gentle slope northeast side of Tsukaharano upland area. Small collapse also occurred on the western side at that time.

The dextral strike-slip faults are situated of about 2-4 km southeast of these failures. One of the rupture historys of Kiotoshi fault, which extends N-S at the south side of Tsukaharano upland area, shows the same time as that of the last slope failure. This indicates that the slope failure may have triggered by the rupture of the fault passing southeast side of Mt. Kyogadake.