Late Quaterary activity of the Takashozu and Hohrinji faults along the east and west margin of the Tonami Plain, central Japan

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The Tonami Plain in western Toyama Prefecture, central Japan, is bounded by NNE- and NE-trending reverse faults. The NNE-trending Takashozu fault is located along the northwestern margin of the Takashozu Mountains and East-Tonami Hills, whereas the NE-trending Hohrinji fault is located along the eastern margin of the Iohzen Mountains and Minami-Kanita Hills.

The Takashozu and Hohrinji faults are accompanied with fault scarps several meters high on fluvial terraces. Vertical average slip rates for the Takashozu and Hohrinji faults are estimated at 0.08-0.30m/ka and 0.10-0.45m/ka, respectively.

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The Takashozu and Hohrinji faults are accompanied with fault scarps several meters high on fluvial terraces. At Yassui, northernmost of the Hohrinji fault, reverse faults were exposed by trench excavation. The Takashozu and Hohrinji faults are estimated to have been formed reverse faults under a stress field with almost E-W compression. Vertical average slip rates for the Takashozu and Hohrinji faults are estimated at 0.08-0.30m/ka and 0.10-0.45m/ka, respectively. The active trace along the Hohrinji fault has migrated basinward since at least 50 thousand years ago. The active trace along the Takashozu fault has also migrated basinward since at least 50 thousand years ago. The Takashozu fault is divided into two segments and the southern segment started basinward migration earlier than the northern segment.