Late Quaternary faulting along the western margin of the Poronaysk Lowland, central Sakhalin, Russia

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We have mapped faults along the western margin of the Poronaysk Lowland, central Sakhalin, Russia, based on aerial photograph interpretation and field observations. The fault extends for about 150 km from 49 degrees N to 50 degrees and 10 minutes N. The slip rate is estimated at 2-3 mm/yr. A west-dipping reverse fault was exposed on trench walls north of the City of Smirnykh. The net-slip for the most recent earthquake is estimated at about 5 m.