

Surface ruptures of the Iwate-Miyagi Nairiku Earthquake: Reverse fault reactivation of caldera-collapse normal faults

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The 2008 M 6.9 Iwate-Miyagi Nairiku earthquake generated a reverse-fault surface ruptures that were observed at the Ichinoseki city area included in the present excursion area, as well as the Aratozawa dam site area already reported. These faulting reactivated normal faults formed by the crustal extension by the middle Miocene opening of Japan Sea and also by the overlapped late Miocene caldera collapses.

Keywords: The 2008 M 6.9 Iwate-Miyagi Nairiku Earthquake, earthquake surface rupture, reverse fault, istric normal fault, crustal extension, caldera-collapse normal fault, reactivation