

## Investigation of Building Damage near Surface Faults and Estimation of Strong Motion of the 2011 Iwaki Earthquake

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Iwaki Earthquake occurred in Fukushima Prefecture Iwaki City on April 11, 2011. This earthquake is assumed to be induced the Great Tohoku Earthquake, and the Itozawa Fault, the Shionohira Fault, the Yunotake Fault and Fujiwara Fault appeared (Ishiyama et al, 2011). The wooden houses was damaged due to the ground deformation which was caused by these faults.

We investigate the bulding damage on May 29 and 30, 2011, and collect the building damage data near the faults.

As a result, almost all bulding damages were located immediately above the faults.

We estimate the strong ground motion using the result of the source inversion by the observed strong motion (Hikima, 2011), because there is not the observed data near the faults.

We analysis the relationships between the building damages, the strong ground motion and the ground deformation.

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