## Dn-001

## Effect of earthquake vibration in precise gravity measurement with the FG-5 absolute gravimeter

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The "Superspring" of a FG-5 absolute gravimeter is devised to keep a reference corner cube in the stationary position relative to the inertial system. The superspring consists of the main spring and a feedback system. The main spring absorbs mainly short-period ground vibration, and the feedback system reduces long-period vibration. But, in fact, there are some cases in which the superspring did not effectively reduce earthquake vibrations and it cannot perfectly compensate urban noise in a large city such as Kyoto. Simultaneous observations with an absolute gravimeter and broadband seismometer (CMG-3T) will make clear the limit of correction by the superspring. We tried to reduce seismic noise in absolute gravity measurements by employing data obtained from the seismometer.