

# Verification of seasonal gravity variation measured with an absolute gravimeter and the influence of rainfall in Kyoto

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Since April 1999, absolute gravity measurement with the FG-5 #210 gravimeter have been intermittently carried out at the fundamental gravity station Kyoto C.

Then we found the corrected gravity value was bigger from summer to autumn, and smaller from winter to spring. Seasonal gravity change was 5-9 micro gal.

Main cause seems to be influence of groundwater, but we don't have effective data of a well for comparison.

We compared the gravity data with AMeDAS data and precipitation data at the roof of SG site, so we found the long-term and short-term influence of rainfall.

From the above, we can reappear gravity variation which is similar to the absolute gravimeter data, using the data of superconducting gravimeter located about 50 meters apart from Kyoto C, and we report the result this time.