Long-term changes of gravity observed at Kyoto

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Routine observations of gravity changes at Kyoto have been performed since July, 1988 by employing superconducting gravity meters Model TT-70 (SCG#8 and SCG#9). Trends in the observational data of SCG#8 and SCG#9 were +14.4 and +22.2 microgal/year in 1997, respectively. Gravity change due to polar motion is one of significant signals in the 1.2 year band. Admittance of the gravity changes due to polar motion at Kyoto was calculated to be 1.63+-0.18. This result is about 1.4 time as large as the expected admittance 1.2. It is possible that the sources of the discrepancy were the gravity signals due to variations of atmosphere, ocean and groundwater.