

## Comparison of gravity changes observed by a superconducting gravimeter at Syowa Station with those estimated from ICESat data

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Continuous gravity measurement with a superconducting gravimeter has been carried out since 1993 in Syowa Station, Antarctica. Superconducting gravimeter TT-70 #016 had been used for the measurement from 1993 to 2003 and, since 2003, CT #043 has been installed there, and then it has been used for it.

ICESat is a satellite launched in January, 2003. It equipped with a laser altimeter and surface heights of Antarctic ice sheet are being measured by the altimeter with a rate about three times per year. We can obtain a time series of the ice sheet volume changes from the data and also obtain a mass changes time series by assuming some proper density of the ice sheet.

We will compare the gravity changes observed by the superconducting gravimeter with expected gravity changes calculated from the estimated ice sheet mass changes.