

## Publication of new Japan Gravity Reference System 2011

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GSI constructed new Japanese gravity standardization net, JGSN2011, using latest gravity survey data. In Japan, the gravity reference had been published twice. The first publication was JGSN75 in 1976 which was based on IGSN71 and has been used as a Japanese gravity reference. The second was JGSN96 in 1997. While it is not connected to second order gravity stations which consist of 14000 points in Japan, it has 10 times higher precision than JGSN75's and has been used as an academic production.

JGSN2011 is composed of fundamental gravity survey (absolute gravity) data and first order gravity survey (relative gravity) data. Since we re-conducted gravity surveys in Tohoku region after the 2011 off the Pacific coast of Tohoku Earthquake, the seismic effects are included in JGSN2011.

In this third gravity reference, JGSN2011, more fundamental gravity stations are used and the gravity reference system are took into account by using higher precision of the position of the gravity stations and unifying a tidal correction, while it has the same precision as JGSN96. We aim to register JGSN2011 gravity data on AGrav and contribute to GGOS etc.

We present the outline of JGSN2011 and our future plan.

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