

Refurbishment of the SG-CT36 at University of Tsukuba for a new challenging observation at Ishigakijima, Japan

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We started a superconducting gravimeter observation to elucidate relationships between slow slip events and gravity changes at Ishigakijima near Ryukyu trench, southwestern Japan in February 2012 (Tanaka et al., and Imanishi et al., this meeting). Before the installation of the superconducting gravimeter (CT36) at Ishigakijima, we refurbished the CT36, installed at the Inuyama observatory of Nagoya University originally, so that the system can operate reliably at such a remote island. Specifically, for the planned observation, we replaced compressor for the coldhead from 'water-cooled' type to 'air-cooled' type. In addition, at University of Tsukuba, we warmed up the Dewar to room temperature to remove the 'clogs' inside it. This has resulted in eliminating strange behaviors in the temperature and tilt controls of the gravimeter, as well as solving the problem in transferring liquid helium into the Dewar.

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