

Seasonal variation of gravity values at the Ishioka Geodetic Observing Station

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Conventionally consistency between absolute gravimeters has been confirmed through the International Comparison of Absolute Gravimeters (ICAG) which is offered by the Comité International des Poids et Mesures (CIPM) with supports of the International Association of Geodesy (IAG). In order to extent the consistency to inside Japan, the Domestic Comparison of Absolute Gravimeters (DCAG) has been conducted by the Geospatial Information Authority of Japan (GSI) since 2002. Thanks to the opening of a new facility of GSI, named the Ishioka Geodetic Observing Station, the DCAG has been held there with inviting several domestic organizations which own absolute gravimeters. In order to evaluate validity of obtained data, it is necessary to collect data inside the Ishioka station and to examine influences of external factors. Therefore, we carried out periodic measurements using one of our FG5 absolute gravimeters for about one week every month throughout one year at the fundamental gravity point, “Ishioka FGS” , which is installed inside the Ishioka station. In this presentation, we will report the seasonal variation of gravity values obtained from our verification work.

Keywords: Absolute gravimeter, Seasonal variation