

## **Intelligent Earth system sensing, scientific enquiry and discovery**

### **The Scintrex CG5 used for superconducting gravimeter (SG) calibration**

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#### **Abstract:**

The determination of the SG scale factor is commonly done by co-located absolute gravimeter observations. Alternatively, the reference signal can also be provided by relative spring gravimeters. The irregular and strong instrumental drift of spring type instruments violates the basic assumption of monitoring a same gravity signal. However, adjusting the drift and scale factor simultaneously is able to cope with this problem. Selecting an appropriate drift model is the challenge in this case. In addition, instrumental properties of the spring gravimeter have to be taken carefully into account. We report on the experience gained by using a Scintrex CG-5 for SG calibration experiments at Conrad observatory and the comparison with results from AG collocated measurements.