

Comment :

1. This paper introduces two transfer functions of RCCISD. The first one is the transfer function using vibration table test data (see page 7). The second one is the transfer function using the sine calibration method (see pages 8-9). In these two RCCISD transfer functions, Which one is more accurate? I recommended to keep the accurate transfer function.
2. The article mentions two methods for measuring vibration interference acceleration signals. The first method is to measure interference vibration acceleration signals with RCCISD. Another method is to measure interference vibration acceleration signals with seismometers placed on the ground to directly. What is the difference in the gravity values measured and calculated under these two different methods. Can you directly provide the gravity value or gravity curve graph? Not just give a conclusion that the accuracy has improved by 7 times after 50 drop measurements.
3. There are some errors in the ordinate in Figure 14.

Response :

1. Added an explanation of two transfer functions after Figure 9, with the specific content as follows: Vibration table testing is primarily used to test the amplitude-frequency characteristics of instruments. It is an objective test of absolute quantities, and the vibration table's ability to cover the frequency

bandwidth is relatively weak, especially toward longer periods. The amplitude-frequency characteristics of instruments may change during prolonged use or in specific environments, so it is very necessary to perform a sinusoidal calibration test on the instrument before a particular use to calibrate the amplitude-frequency characteristics. Figure 9 in the article shows the amplitude-frequency characteristics normalized based on the results of the sinusoidal calibration test before using the RCCISD for experiments. This result is consistent with the vibration table test results in Figure 8.

2. The vibration PSD values obtained by placing the reference corner cube on the ground and on the RCCISD already demonstrate the vibration isolation effect of the RCCISD. The comparison of the g-values measured by the gravimeter is the next step in our experimental work.

3. Figure 14 has been revised.