
Dear Anonymous Referee,

We thank the referee again for your comments. We have responded to each comment below in bold font. All revised portions of the manuscript have been given in red font.

1, Remarks

(3) The fact that vibration interference from eq (3.2) and (3.3) are referencing the actual signal measured using an actual PVIS system, can be added to the manuscript for clarity.

Response:

Unfortunately, the purpose of the referee's comment is not entirely clear. Please note that each of Eqs. (3.2) and (3.3) were employed as a known vibrational interference coupled to the measurement system, which is denoted as $d(t_i)$ in Eq. (2.7). These known interferences were applied for demonstrating the accuracy of the proposed error compensation method because $d(t_i)$ is not generally known in advance. We hope this addresses the referee's comment.

2, Specific questions

(a) Can the PVIS prior (vibration information) be included in the LSS for comparison?

Response:

The displacement of the FB as a function of time was established by Eq. (2.7). Accordingly, the results obtained using the LSS to solve this equation will include not only the quadratic term arising from acceleration due to gravity but also the quadratic term in the vibration interference. However, the PVIS is employed only as a vibration isolation device. Therefore, other algorithms such as the VECA must be employed to reduce the effect of the quadratic term in the vibration interference, and thereby enable the PVIS to be applied simultaneously as both a vibration isolation device and as a sensor detecting the vibration signal of the reference corner-cube.

(b) Can you try to solve the VECA with other techniques? If yes, make a comparison, if no, you should explain why in the manuscript?

Response:

A discussion of this question has been provided in the revised manuscript.

3, Typing errors:

I. 166 There is still a little inconsistency in the mathematical symbols: * should be replaced by \times, or better 1^* can be removed.

Response:

We apologize for these errors. This issue has been corrected in the revised manuscript.