In the conference paper, the novel dynamical measurement procedure developed for UME Oscillating-Magnet Kibble Balance experiment was proven to be useful for ultra-small displacement measurements performed simultaneously by Michelson and Fabry-Perot Interferometers so that we could investigate the resolution uncertainties of the two devices even in regular laboratory conditions. The latter was used to justify the ultra-small displacement measurements by the Michelson Interferometer. The results indicate that the parasitic effect by the environmental disturbances on the measurement precision of the Michelson Interferometer is immune provided that the dynamical measurement procedure is followed.

As the uncertainty analysis on the resolution of Michelson Interferometer is covered completely in the conference paper, we extended it to be submitted to ACTA IMEKO, by elaborating on the accuracy in displacement measurements. In traditional Kibble Balances, extreme precautions are taken for eliminating the environmental disturbances on the displacement measurements such that the system is covered by a global vacuum. In UME Kibble Balance experiment, this could be achieved with a local vacuum thanks to both the measurement procedure followed and its operation principle. The conference paper is extended by describing the local vacuum intended to be implemented on the magnet. Below the extensions are described point by point.

* The title of the paper is changed.
* Abstract is shortened to 195 words.
* Introduction is extended to emphasize possibility of using local vacuum instead of a global one as in the traditional Kibble Balances for accurate displacement measurements.
* The references in the Introduction are extended for global vacuum applications on Kibble Balance experiments.
* Results and Discussions is extended with through explanation on why and how we can implement a local vacuum instead of a global one.
* The solid drawing of the UME Kibble Balance experiment with local vacuum is given in Figure 8.
* The solid drawing of the local vacuum is given in Figure 9.
* Conclusion is extended to emphasize the advantage of following the novel dynamical measurement procedure in a local vacuum.
* References are extended.