

The target homogeneity measurements

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1 The measurement at Oxford Jan 2015

In Figure 1 a schematic display is shown of the measurements performed at Oxford Instruments with a hall probe after the coils have been rotated by 90 degrees. The blue biddy shows the shape of a target cell as planned for E1039, while the vertical lines show the different positions of the probe. We have measured at 5 vertical lines along the central axis, separated by 1.5 cm. The hall probe covered a radius of 1 cm. The convention is that measurement 14-21 are on the central axis, with 17 and 19, 16 and 20, 15 and 21 the same. We took them to measure of the reproducibility of the system. We also took there vertical measurements on each side of the middle axis, offset by 1 cm and again separated by 1.5 cm. these are 22 to 24 on one side and 25 to 27 on the other. The vertical spacing of the data points is 1 mm and goes from -15mm to +15mm.

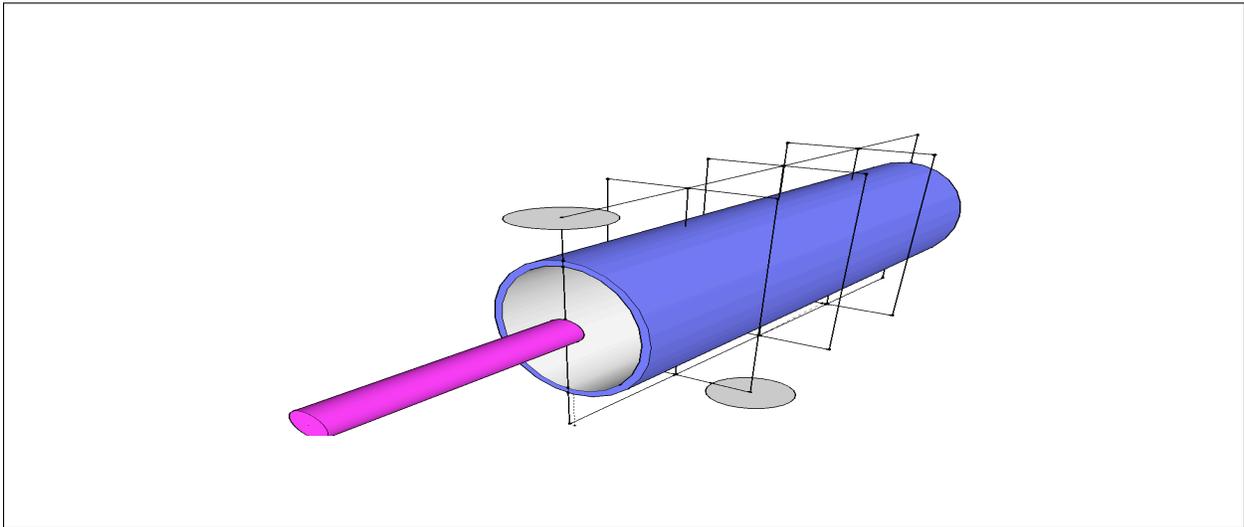


Figure 1: model of measurements

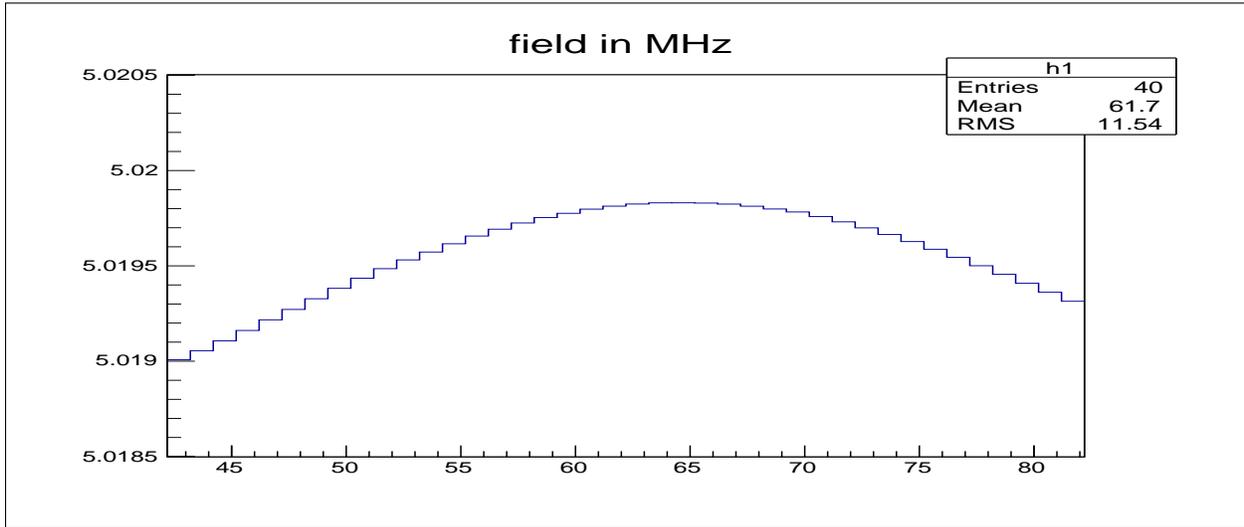


Figure 2: measurement 14

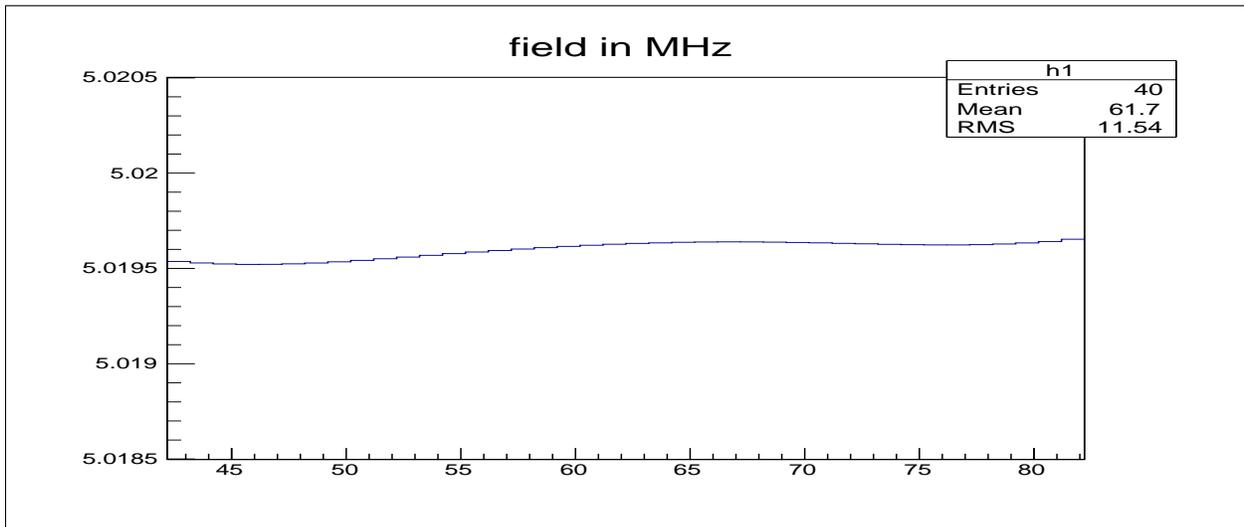


Figure 3: measurement 15

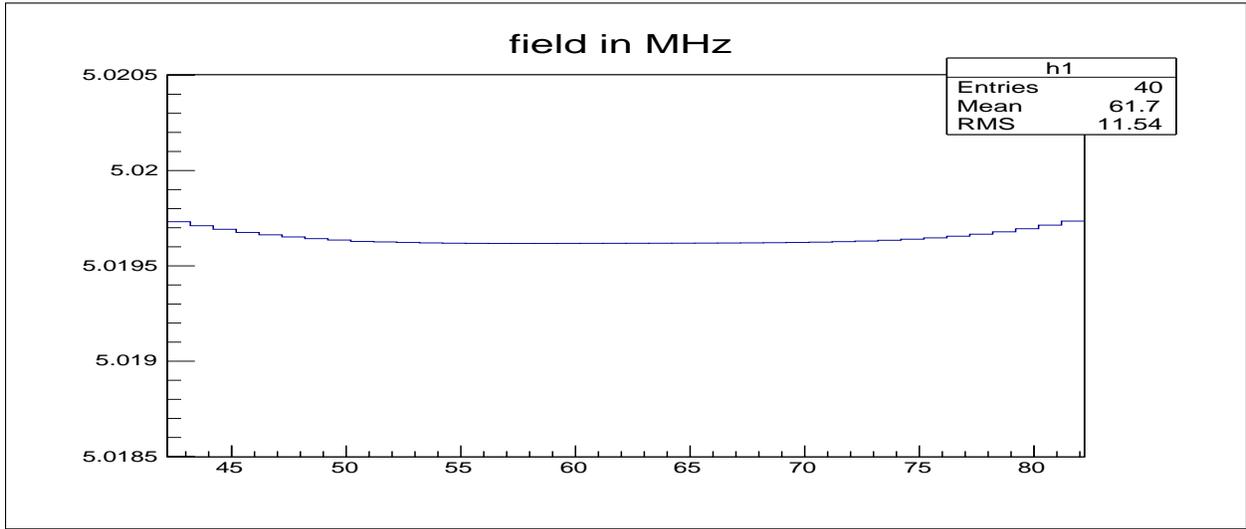


Figure 4: measurement 16

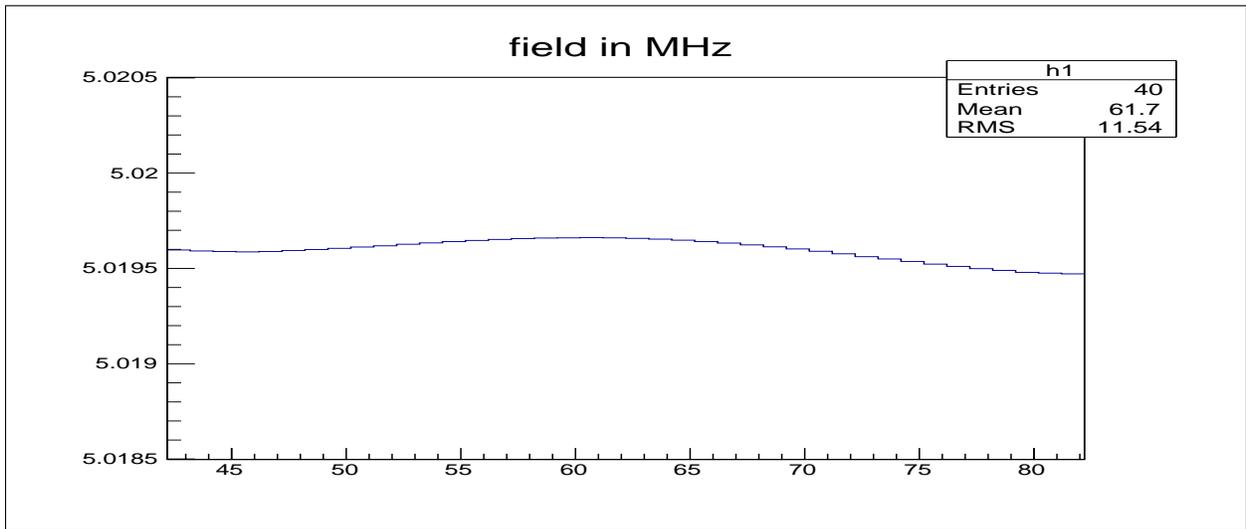


Figure 5: measurement 17

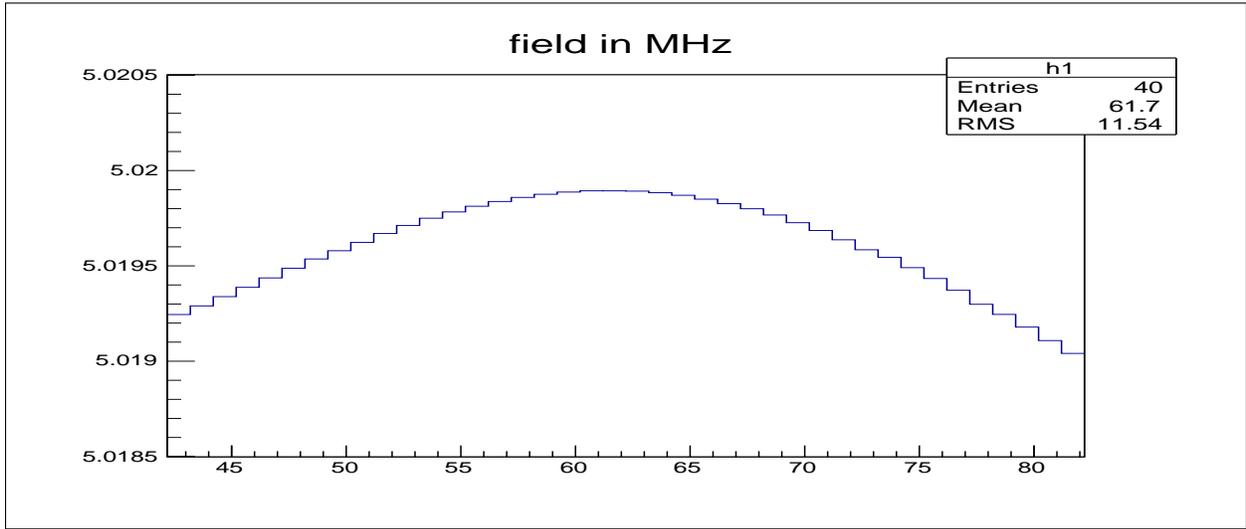


Figure 6: measurement 18

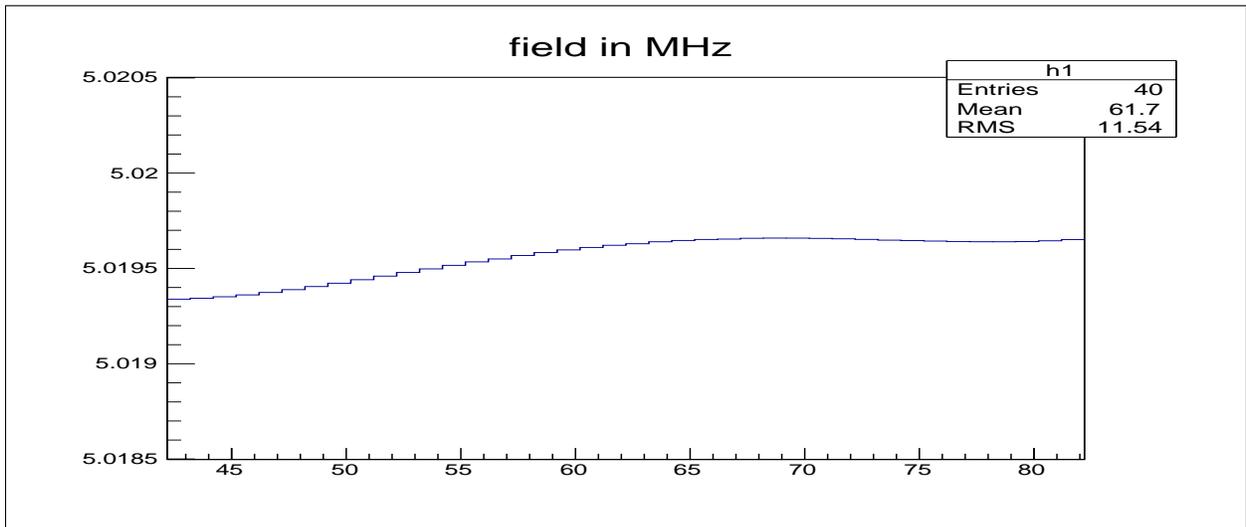


Figure 7: measurement 22

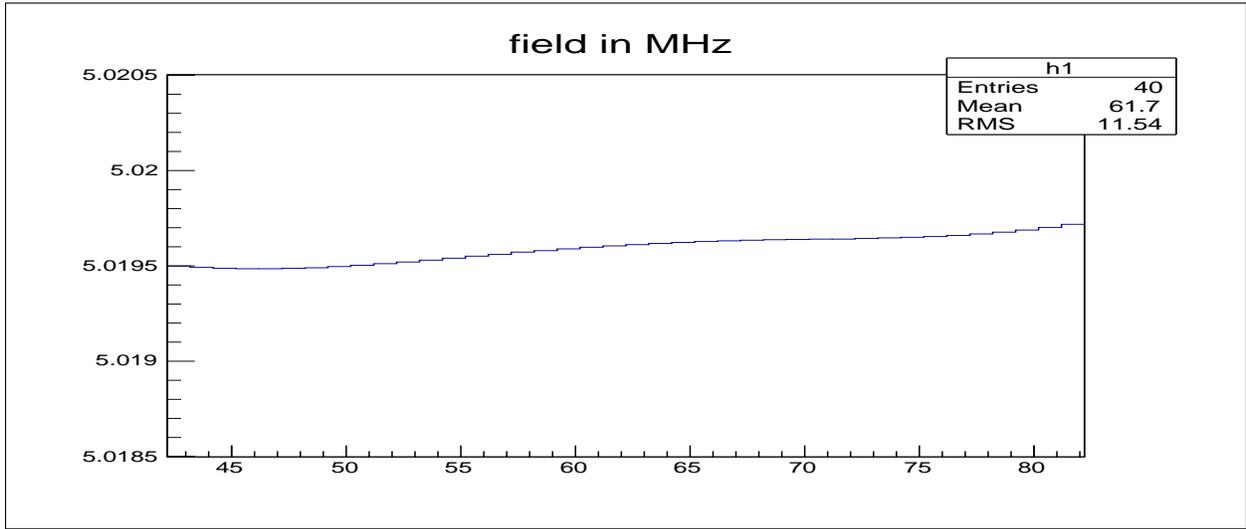


Figure 8: measurement 23

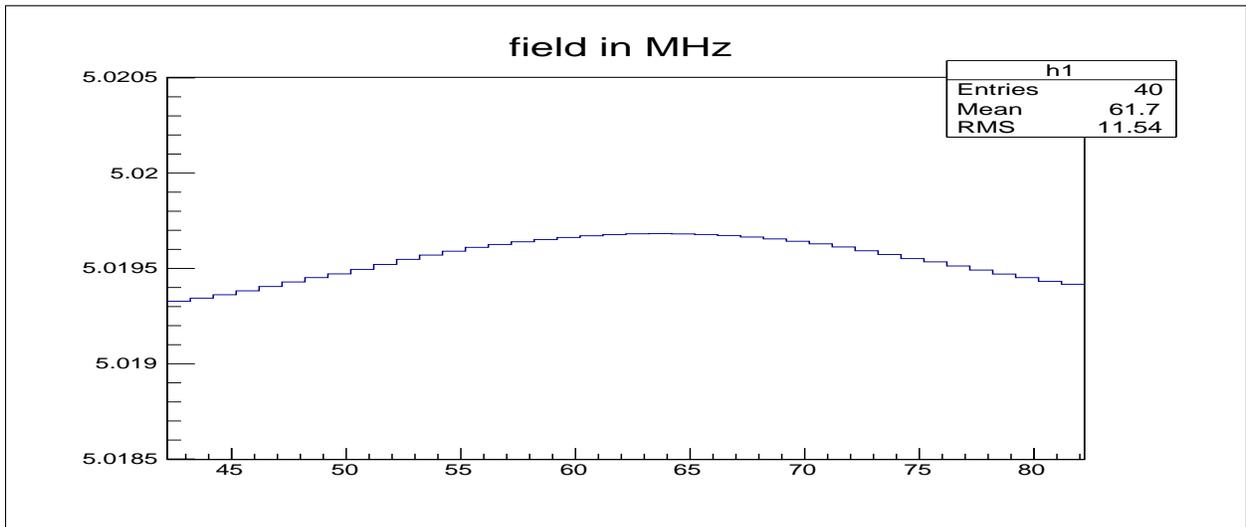


Figure 9: measurement 24

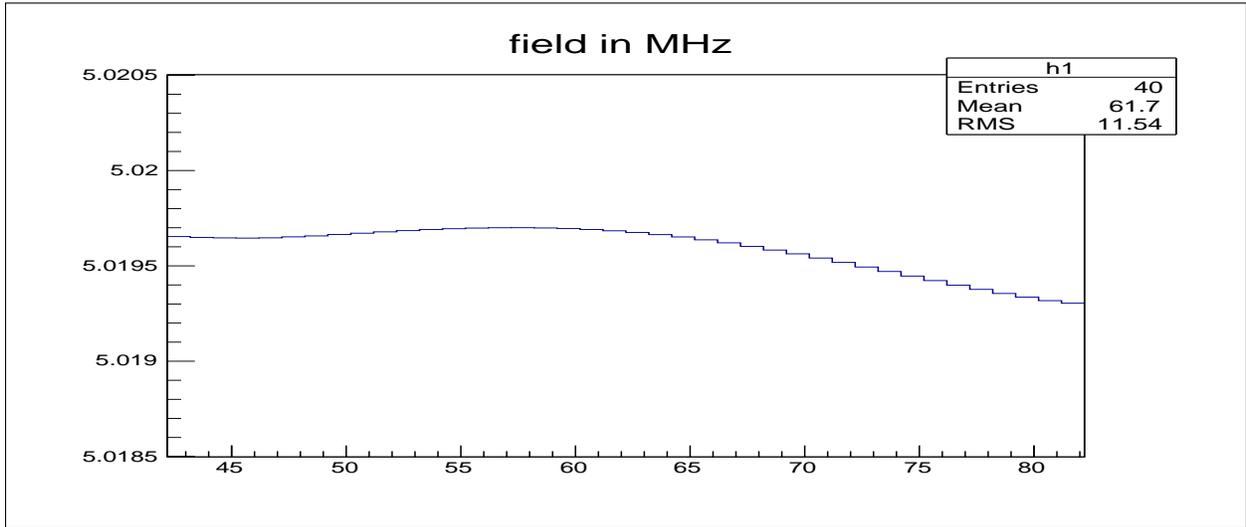


Figure 10: measurement 25

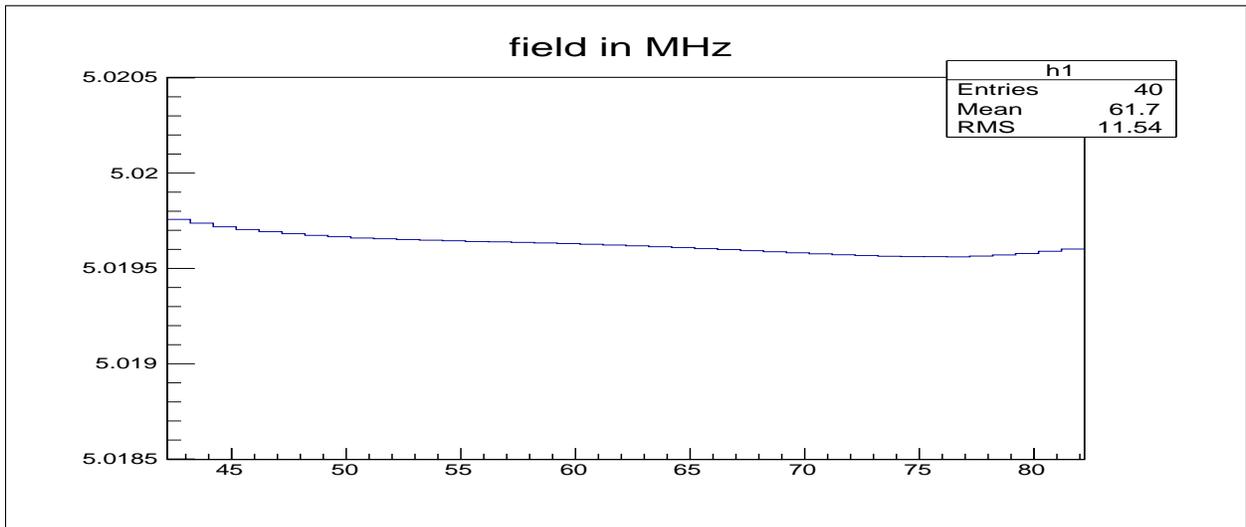


Figure 11: measurement 26

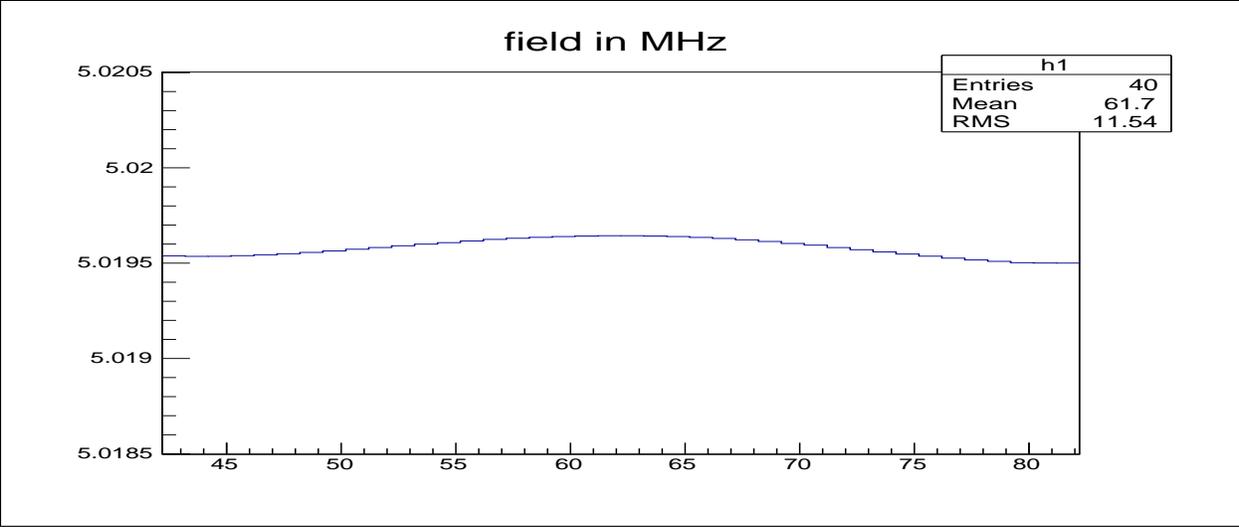


Figure 12: measurement 27