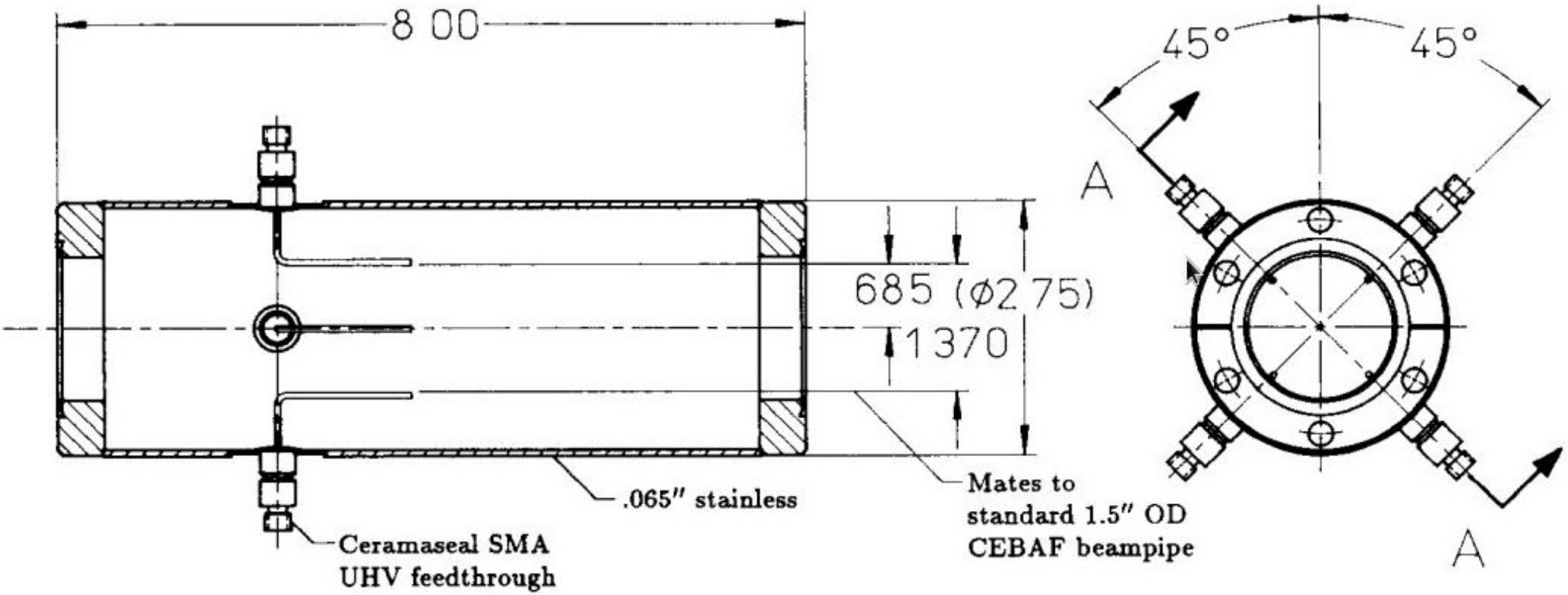
# BPM Calibration

# Outline

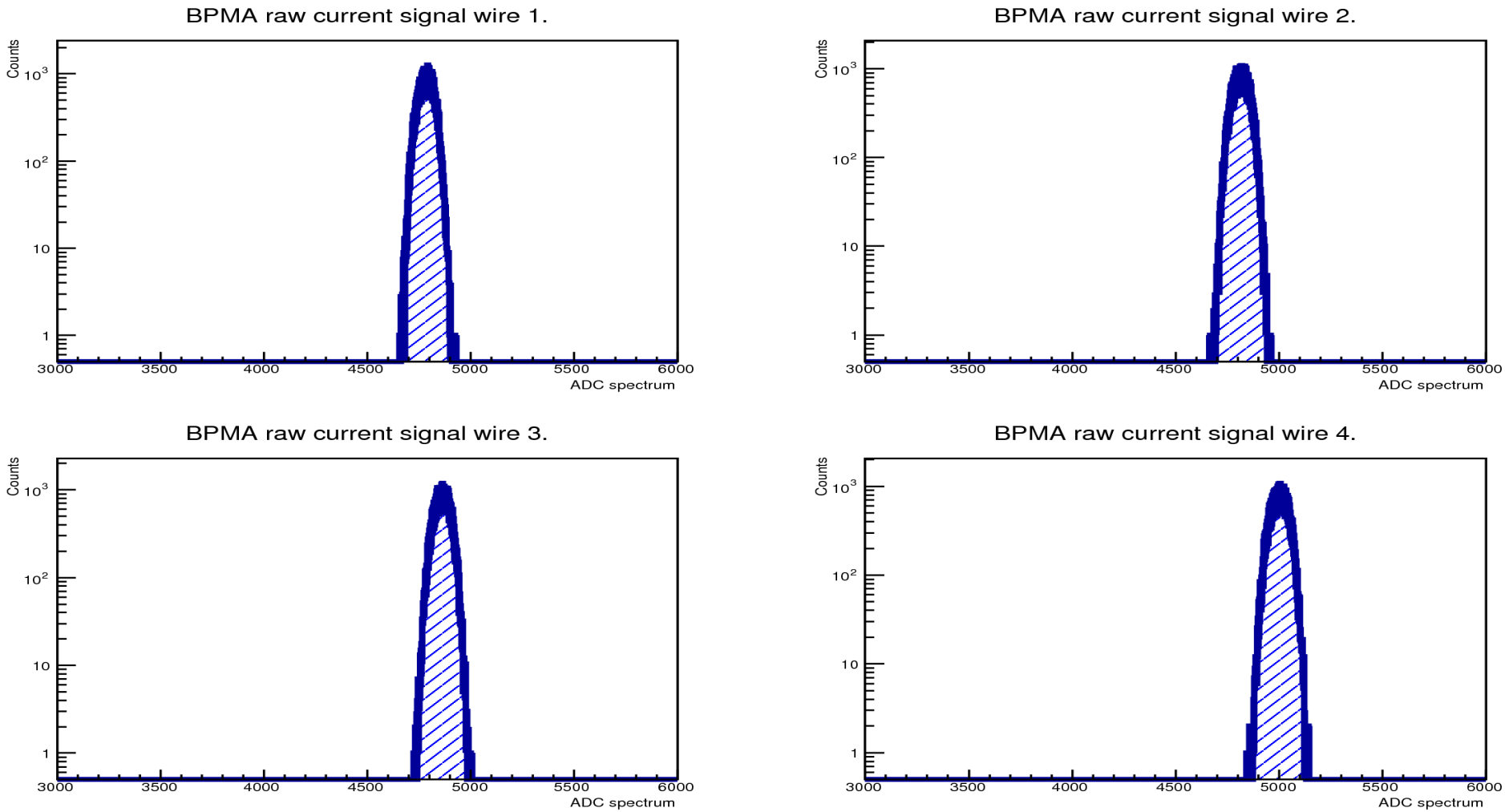
- Overview of the BPMs and the Harps
- Calibration procedure
- Results
- Current Issues

# The BPM



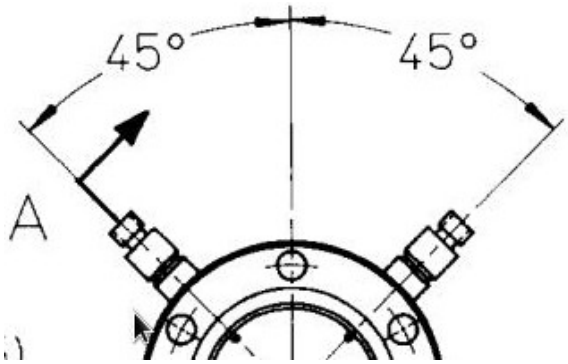

Open-circuited wireline BPM.

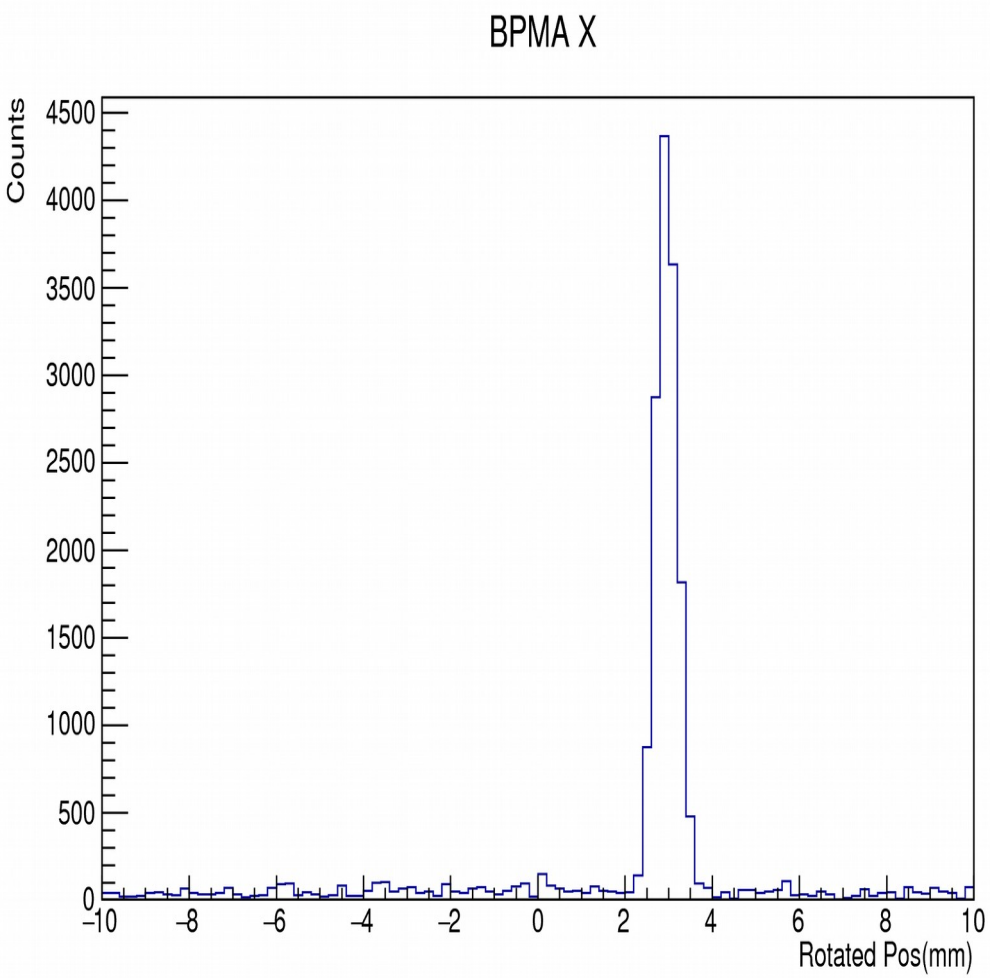
# BPM Signal

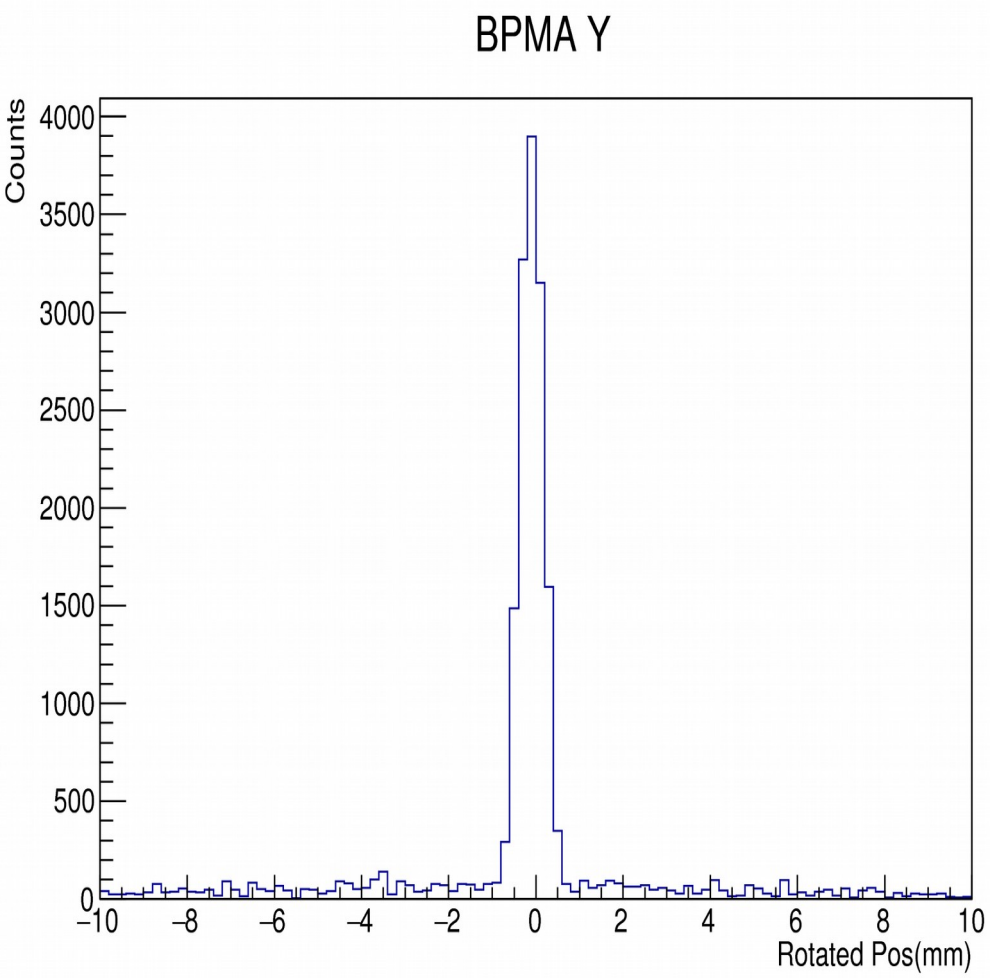



Raw Signals from the BPM wires

# BPM Frame

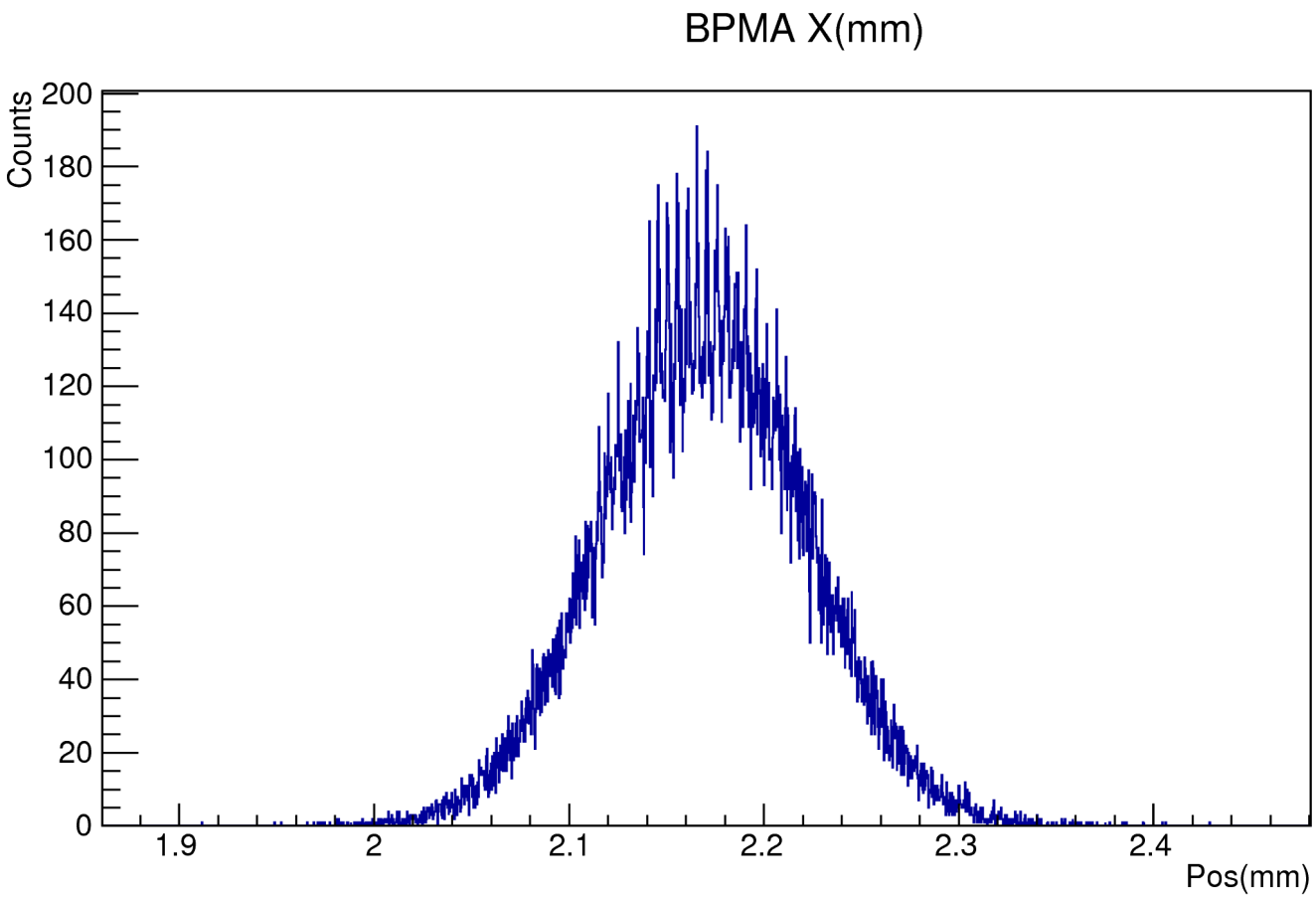



Position at BPMA in the BPM's rotated frame.

# Project Position




Use Calibration Matrix to rotate to the Hall A coordinates

# How to Determine the Calibrations

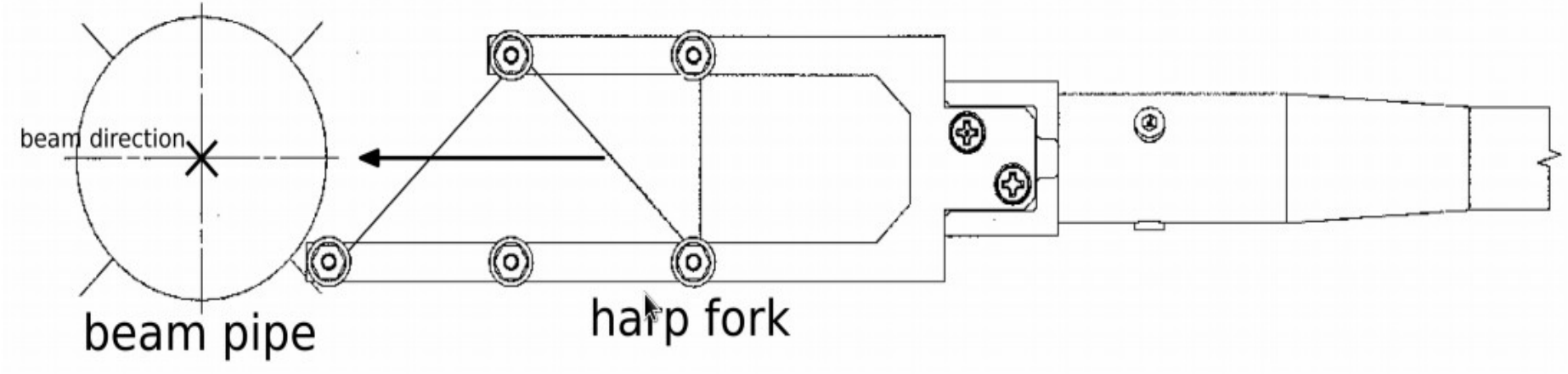
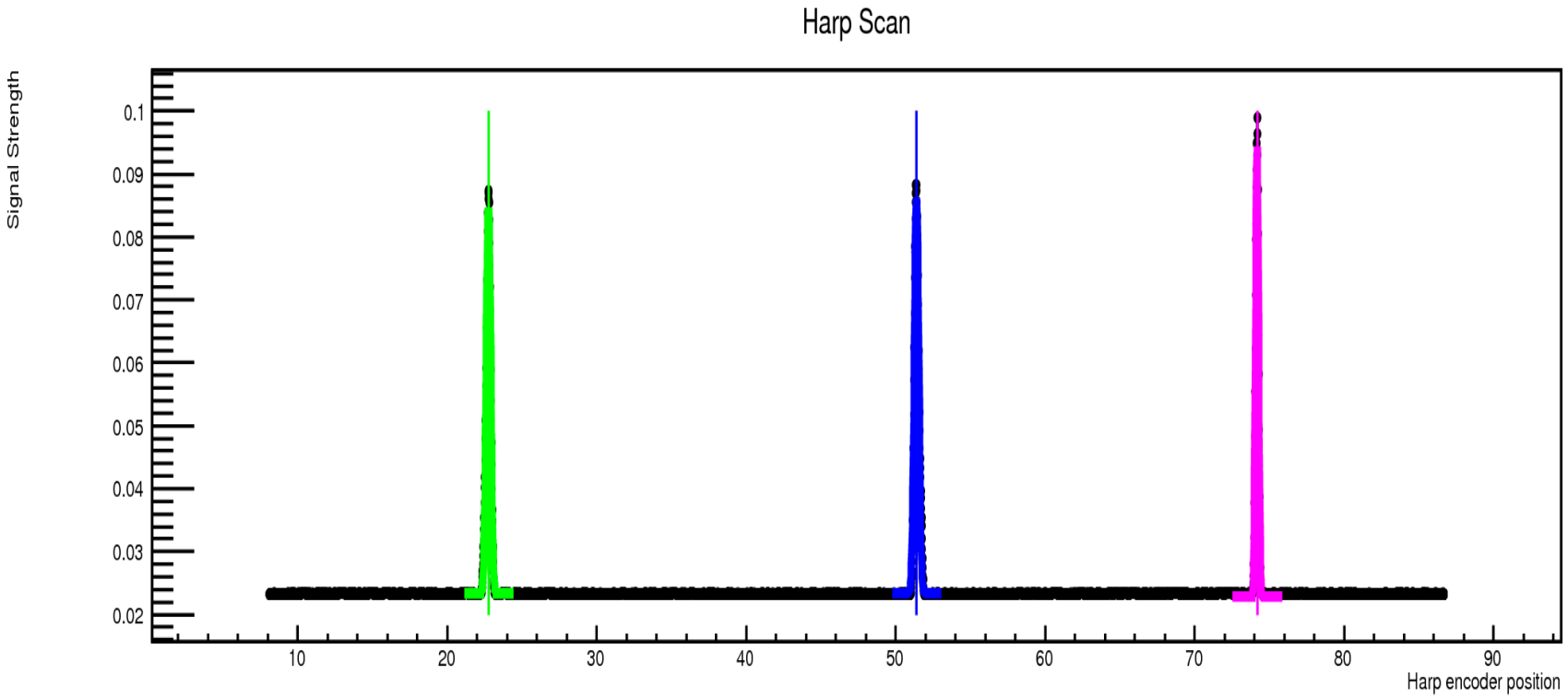
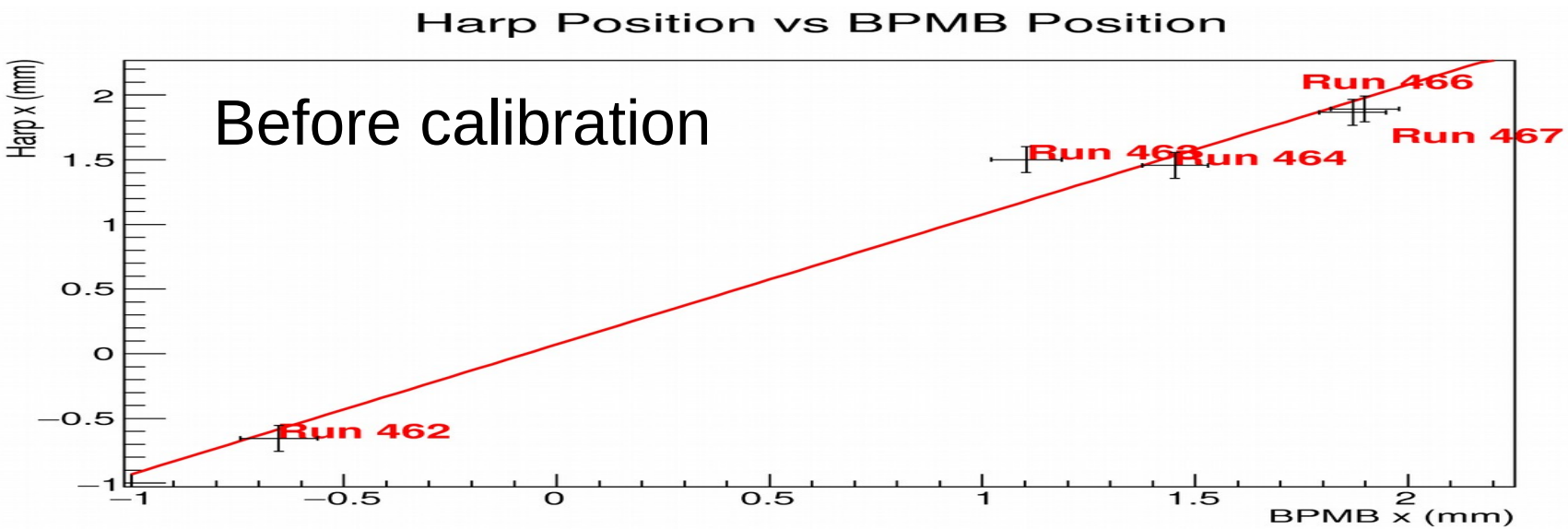
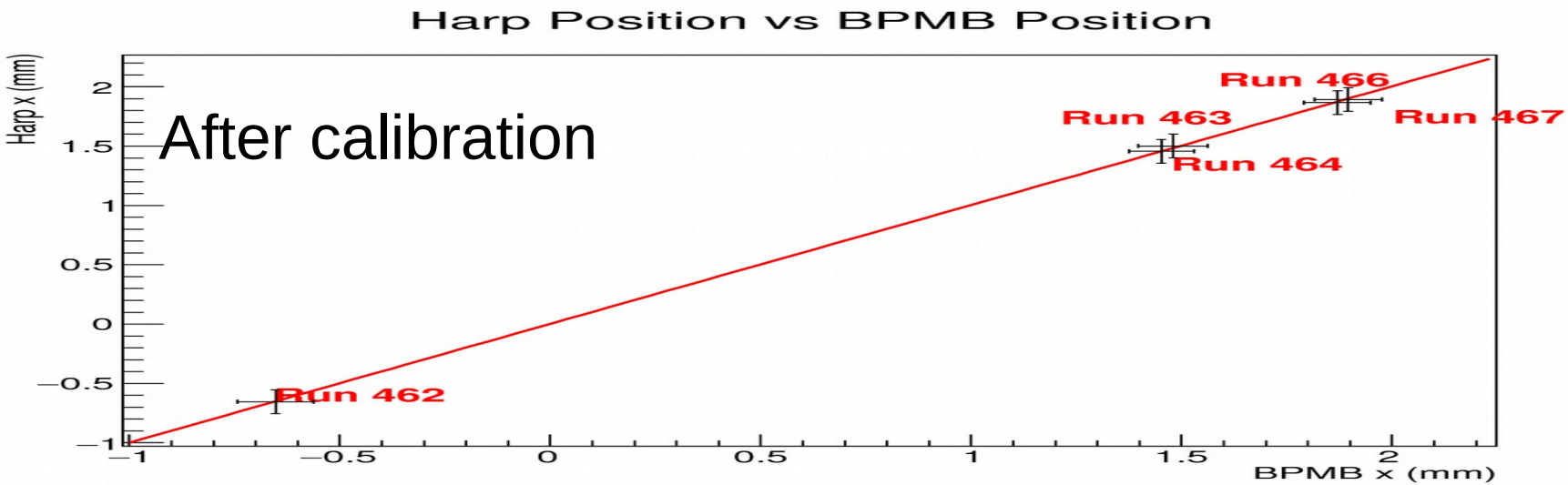



Figure 3: Harp diagram



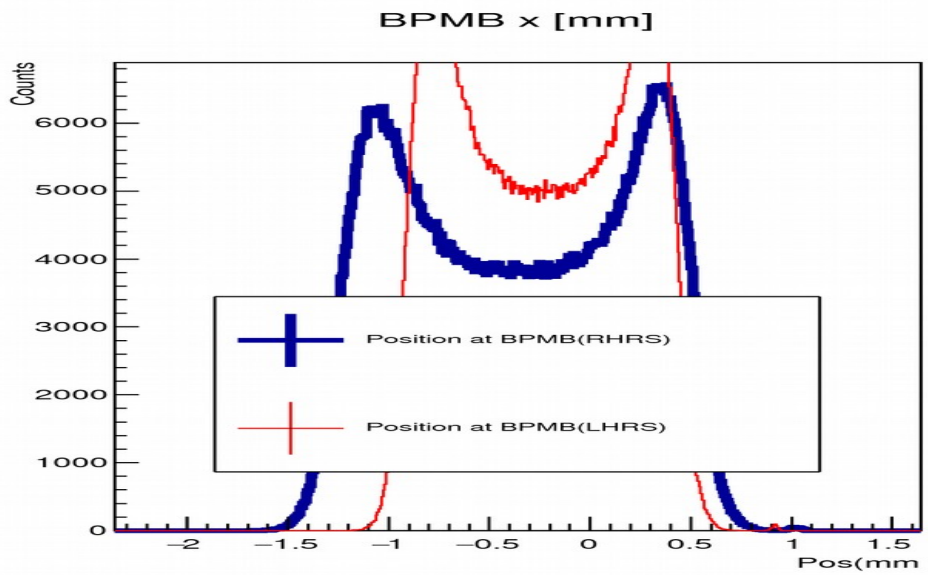
# Before and After Calibration

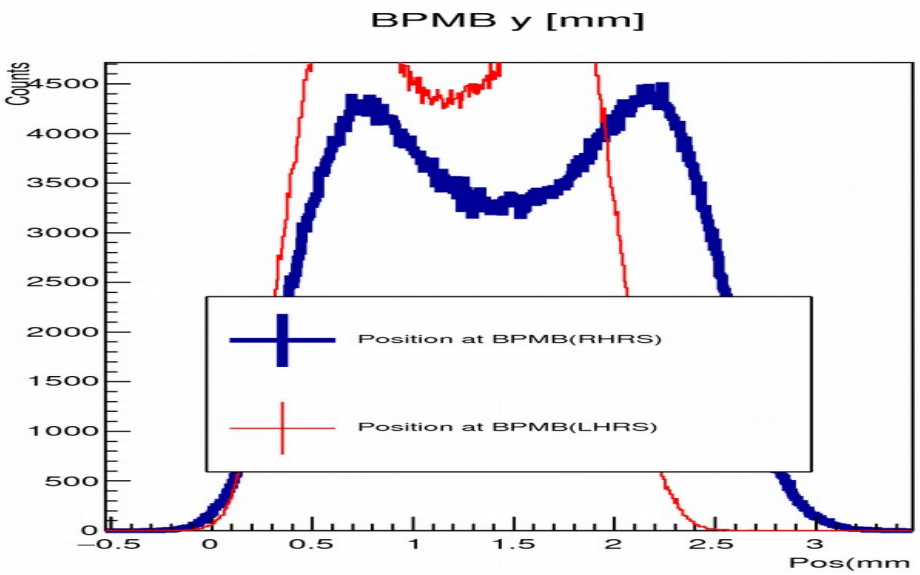


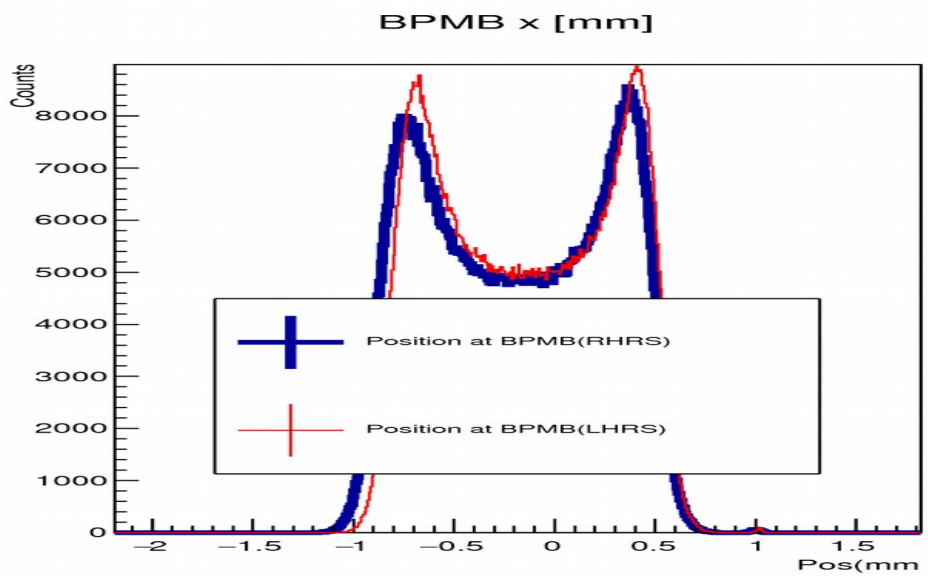
# Results!

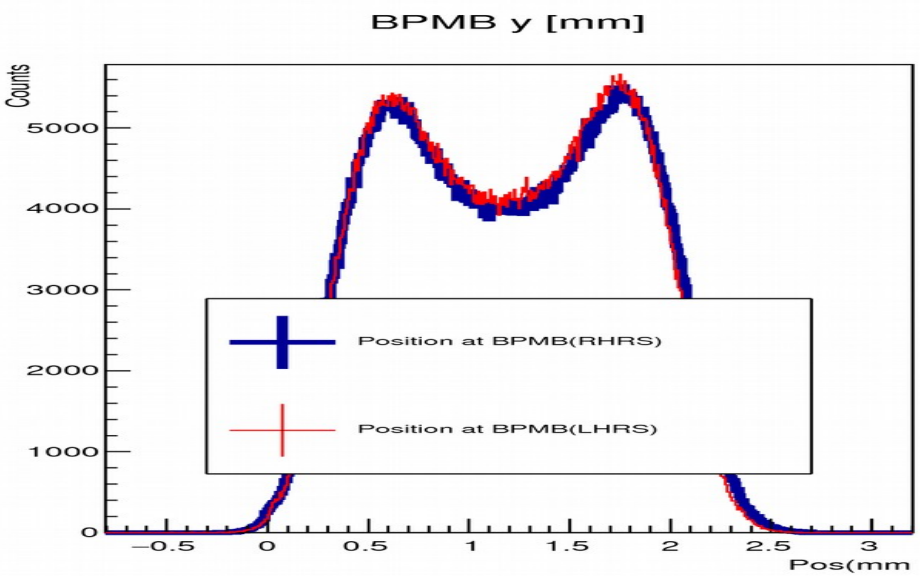
Before calibration



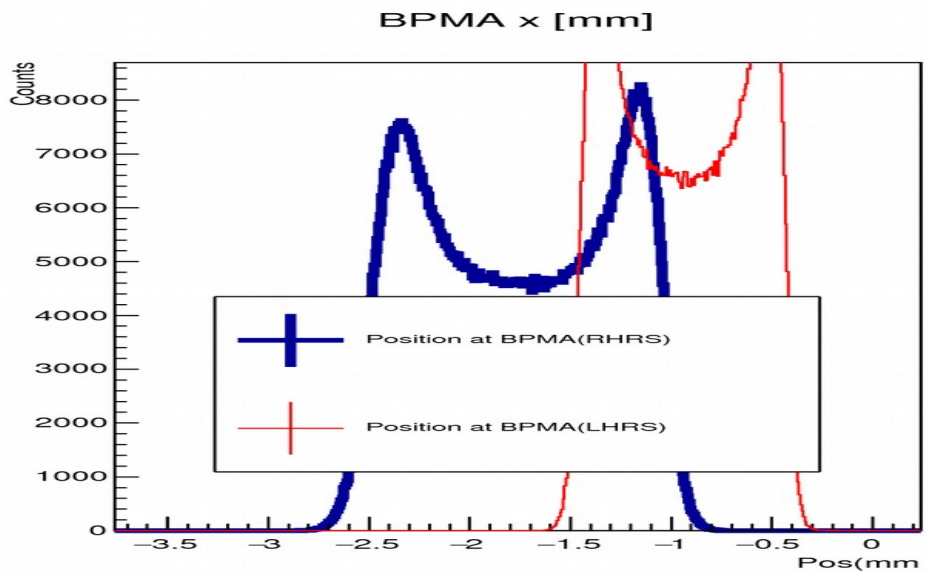

After calibration

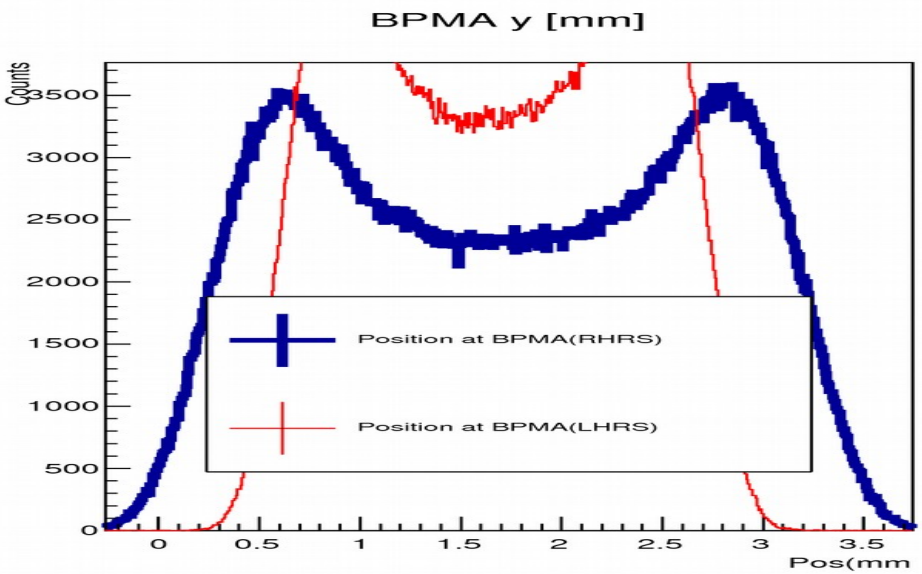


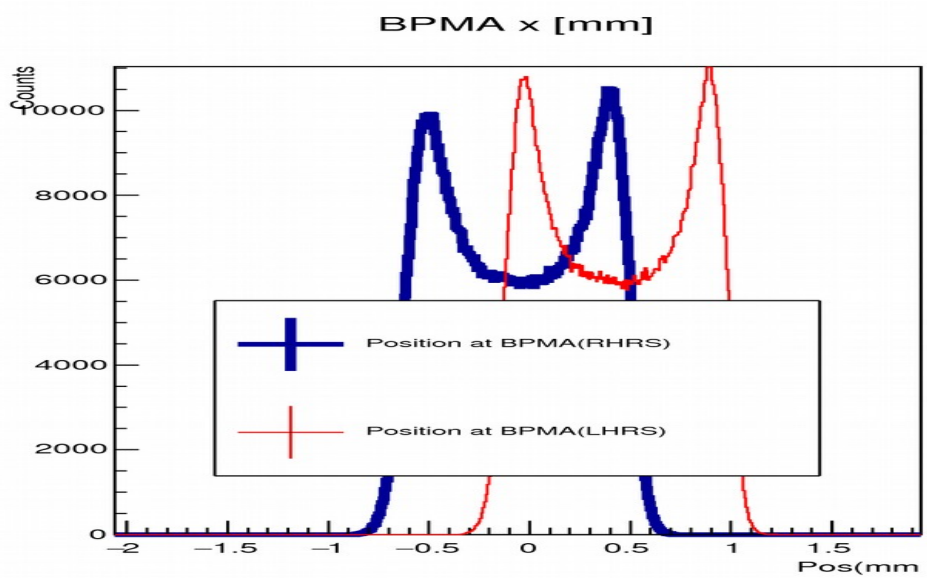
# Results!

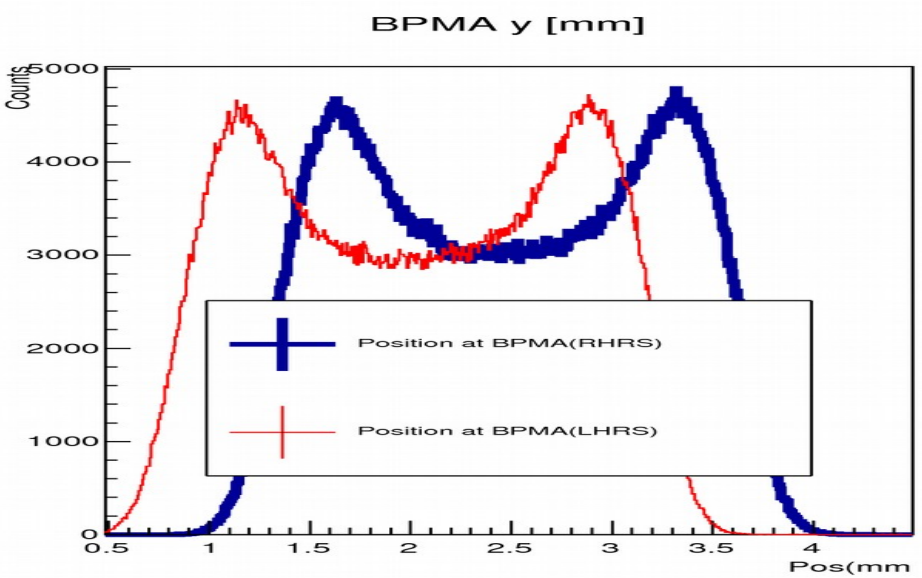
Before calibration



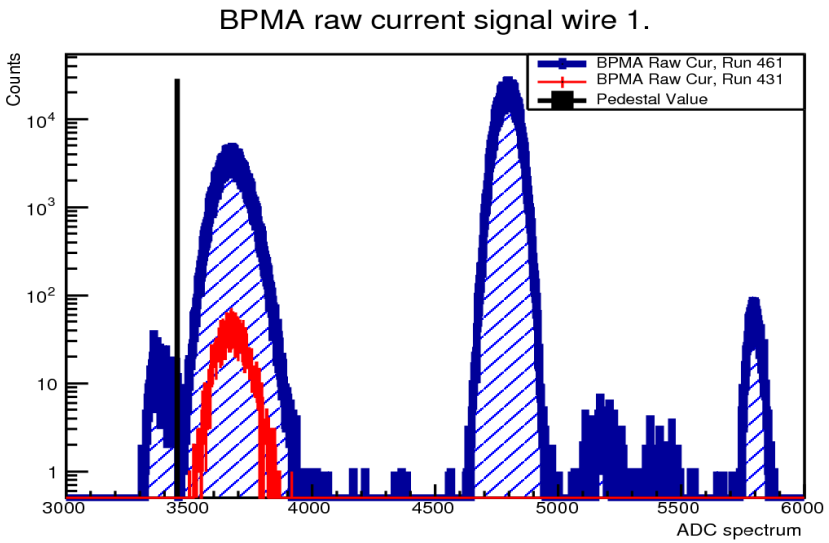



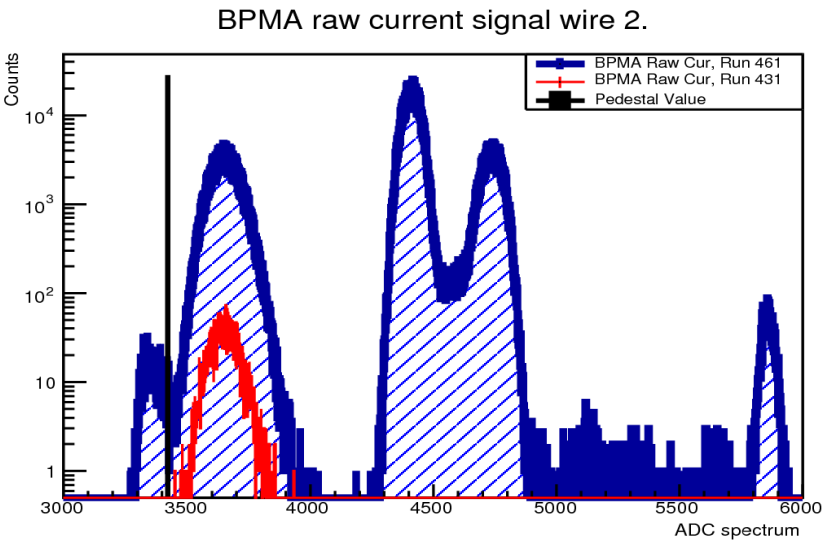

After calibration

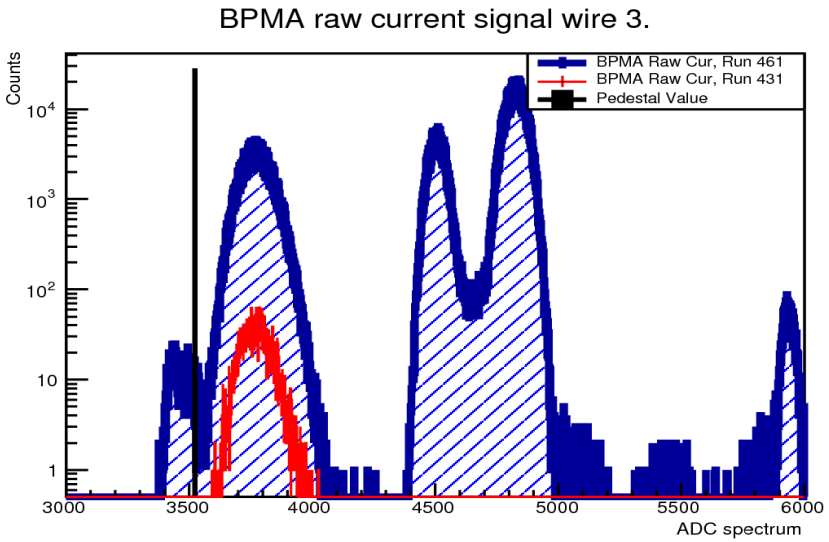


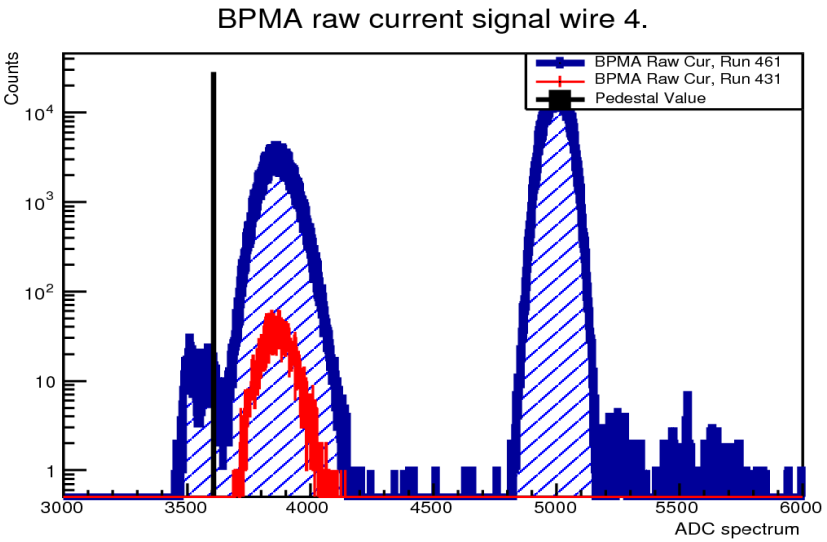



# Issues!!



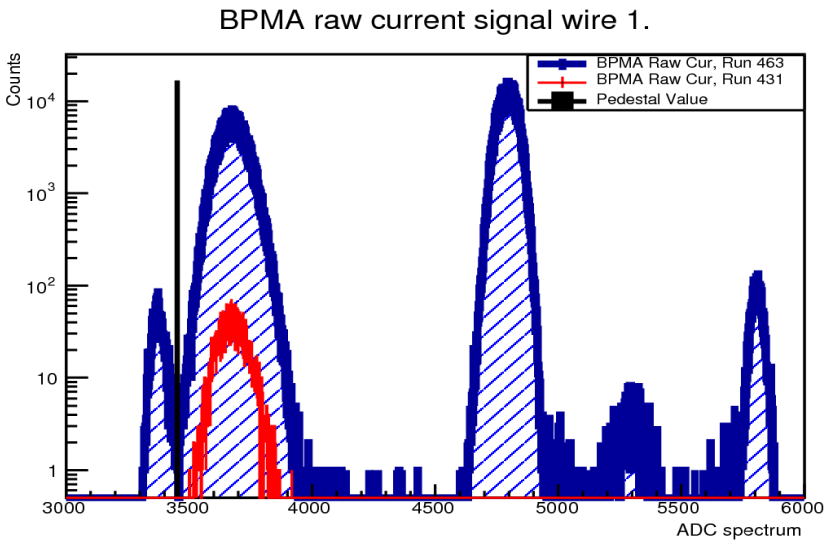



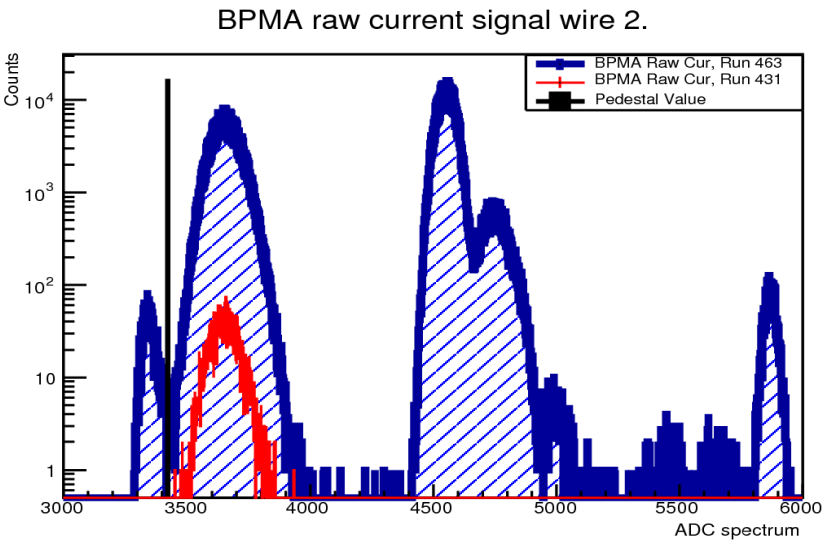



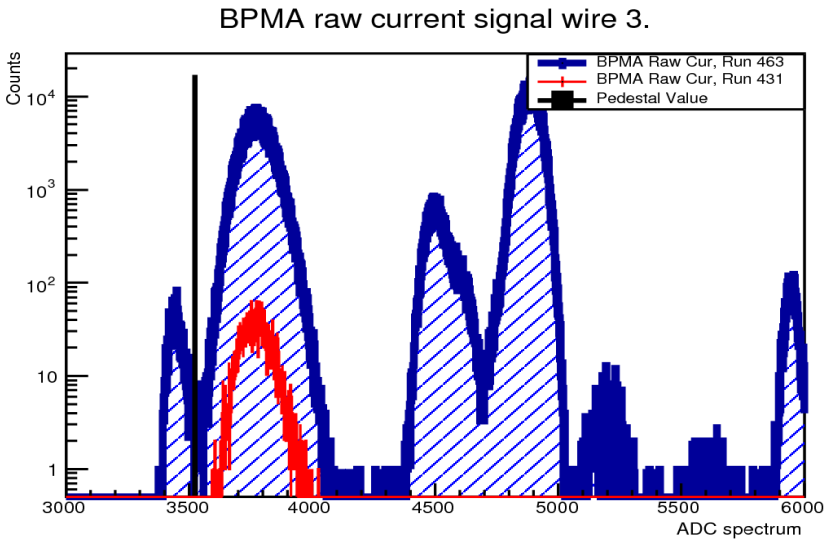



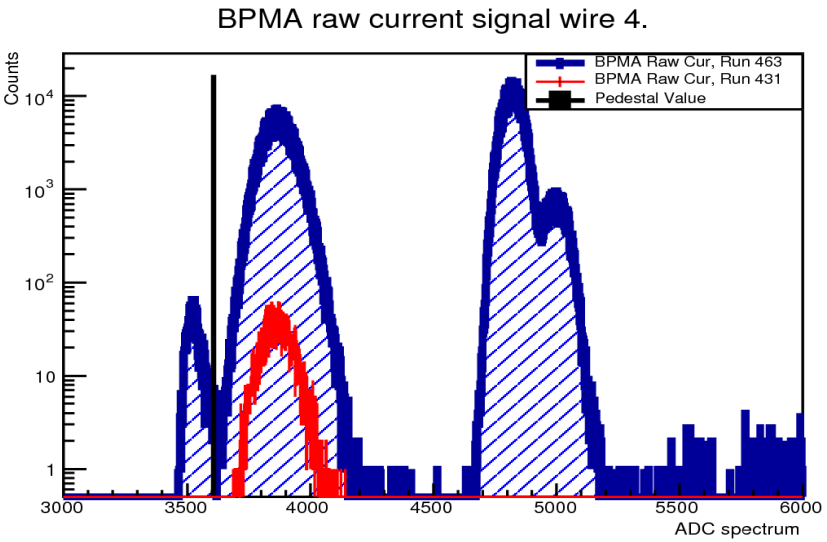

CODA runs Completed on Feb. 23rd during the Harp Scans

# Issues!!



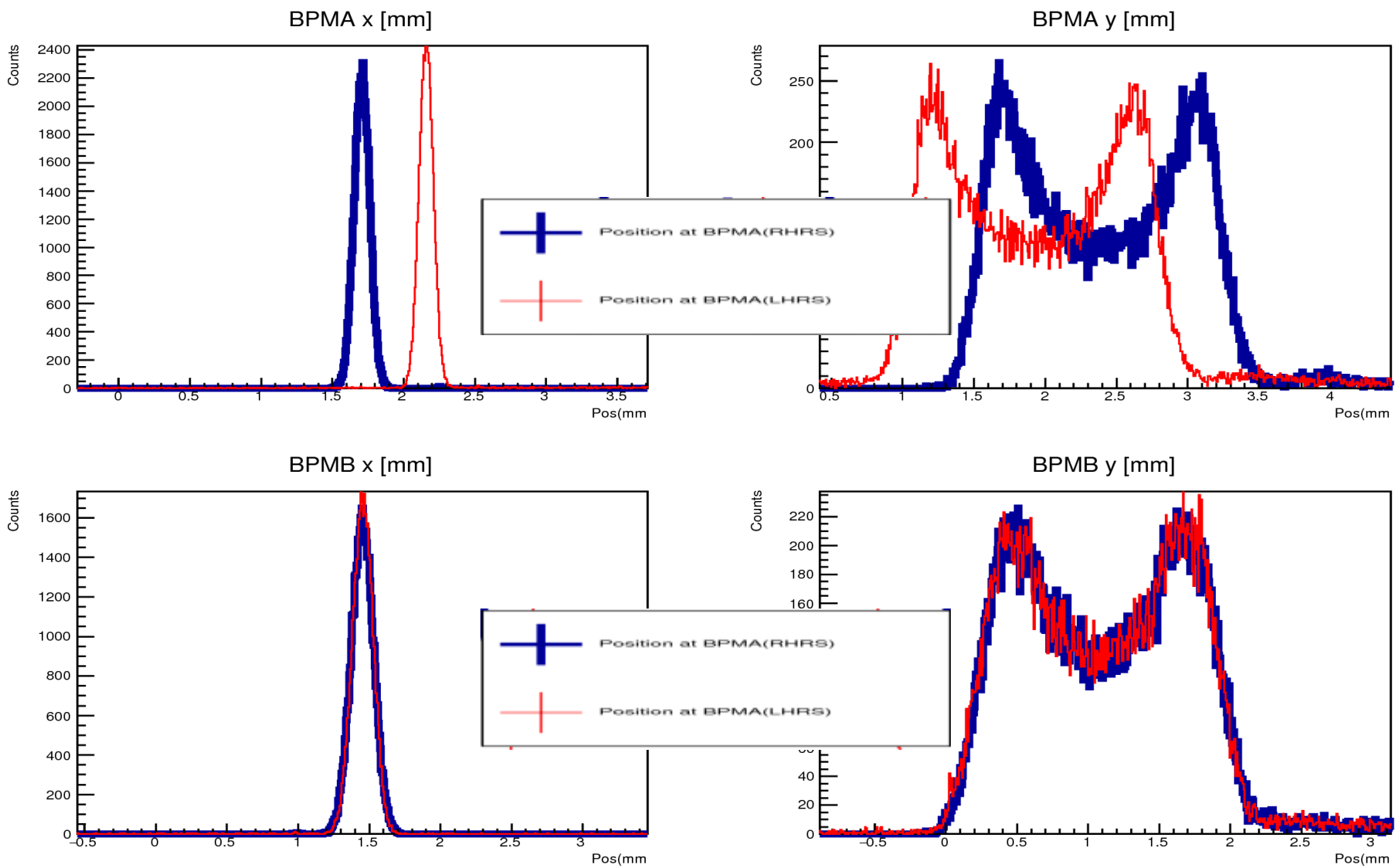



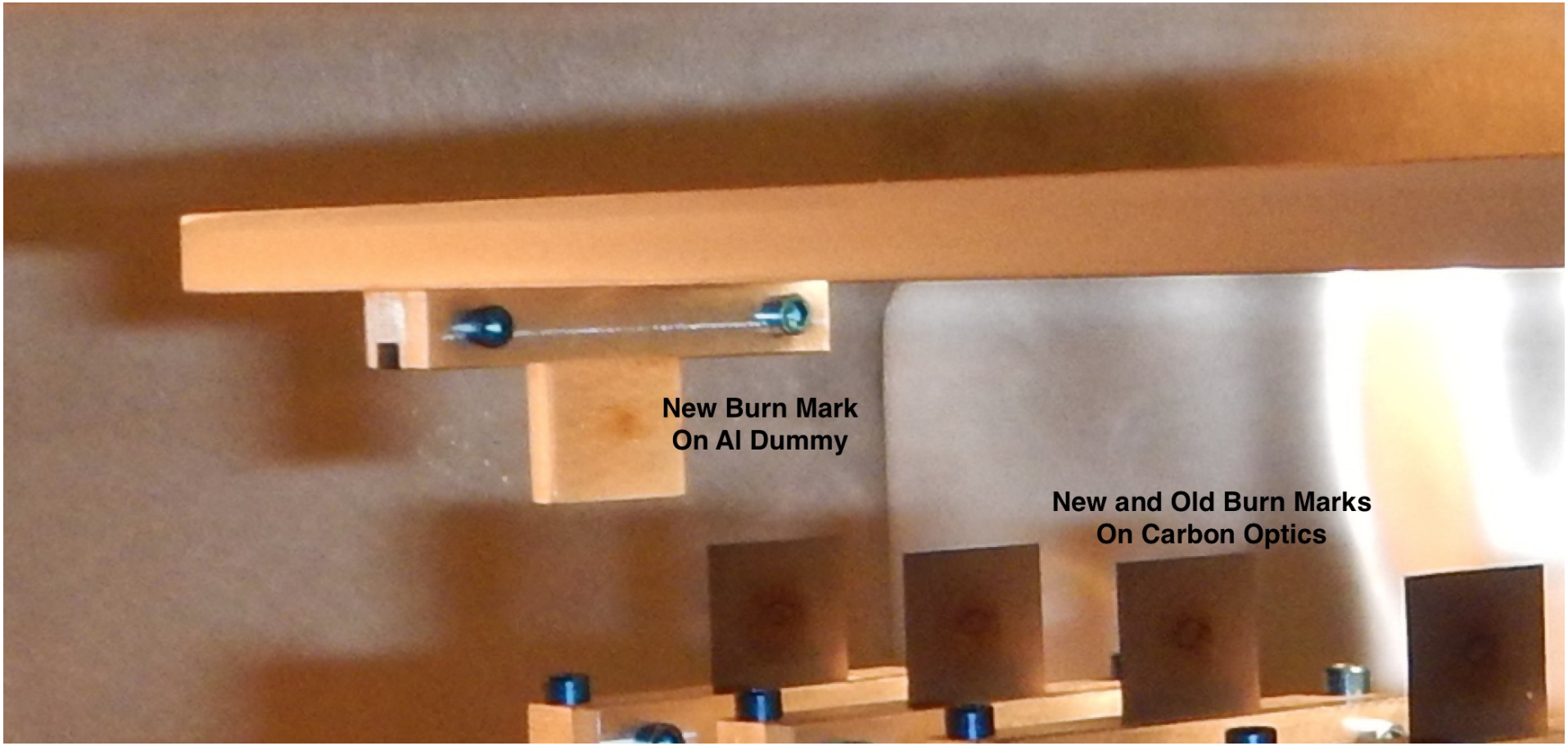

CODA runs Completed on Feb. 23rd during the Harp Scans

# Issues!!




BPM positions from the Harp Scans
The Raster is recorded as off during this Run.

# Burn Marks on Target



# Conclusion

- BPM calibrations were completed for Argon
- Harp scans and BPM pedestal runs in late February
- There was some weird issues with the beam during the harp scans which cause inconsistent results for calibration.
- Due to the ADC gate changes through out experiment:
    - These calibrations are not accurate for entire run
- However Beam was on target and reconstruction from the HRS will provide accurate event by event Beam position on Target!