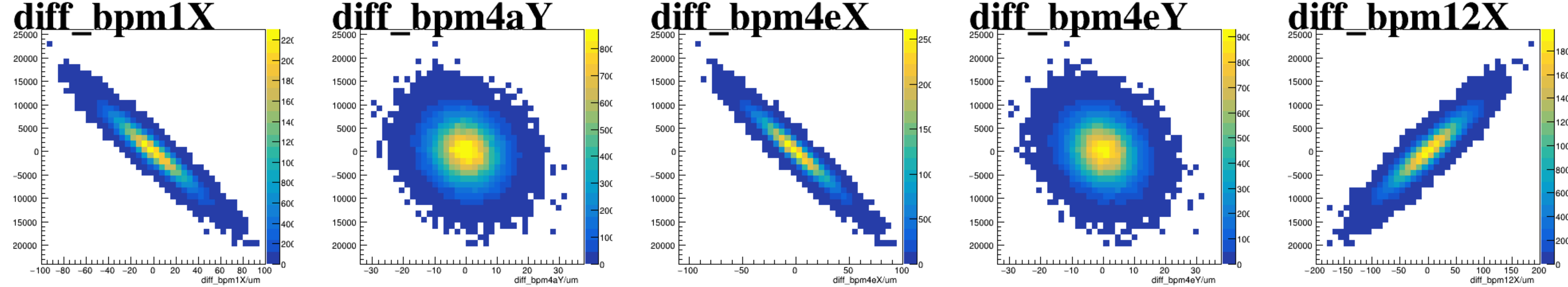
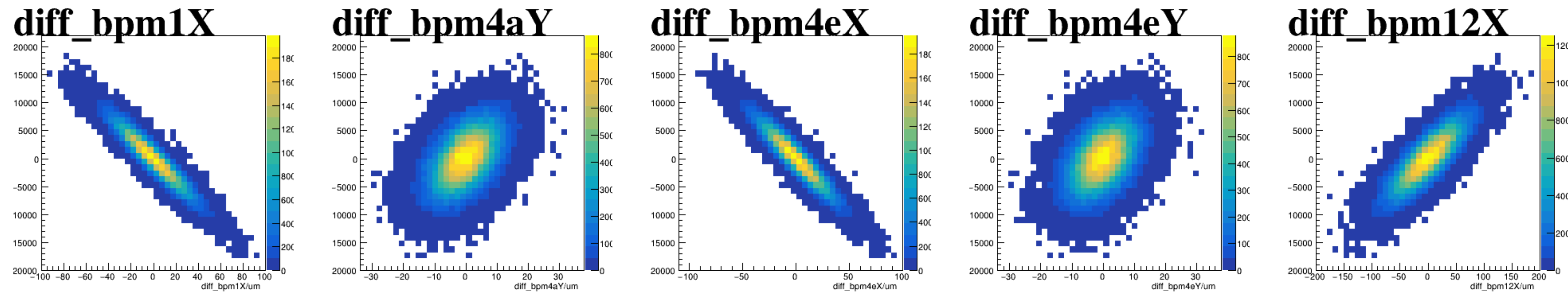


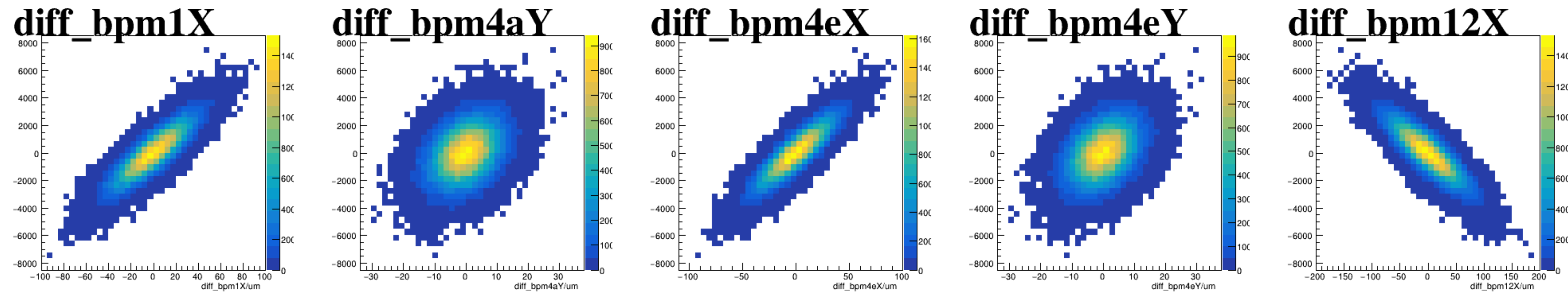
asym_sam2



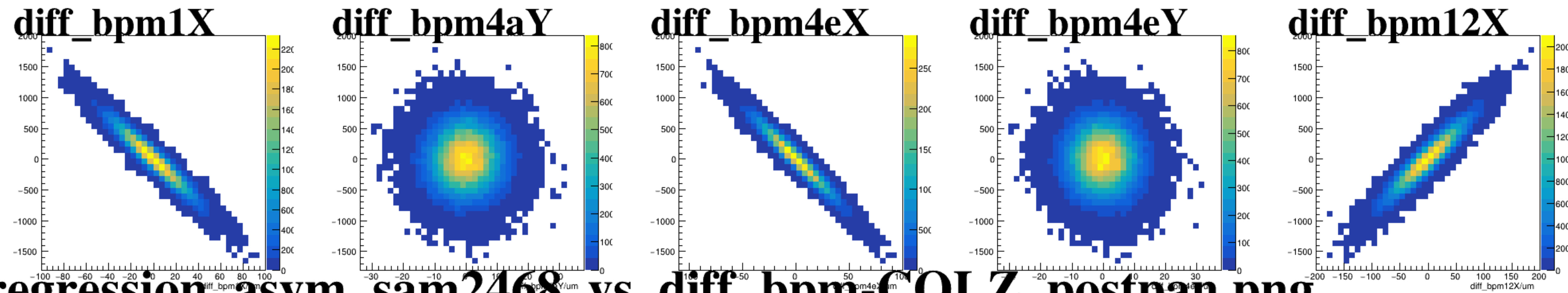
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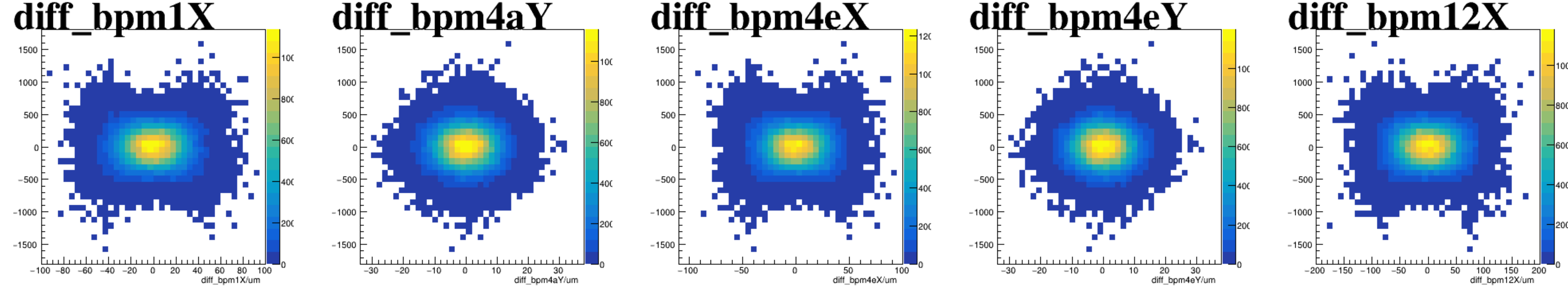
asym_sam6



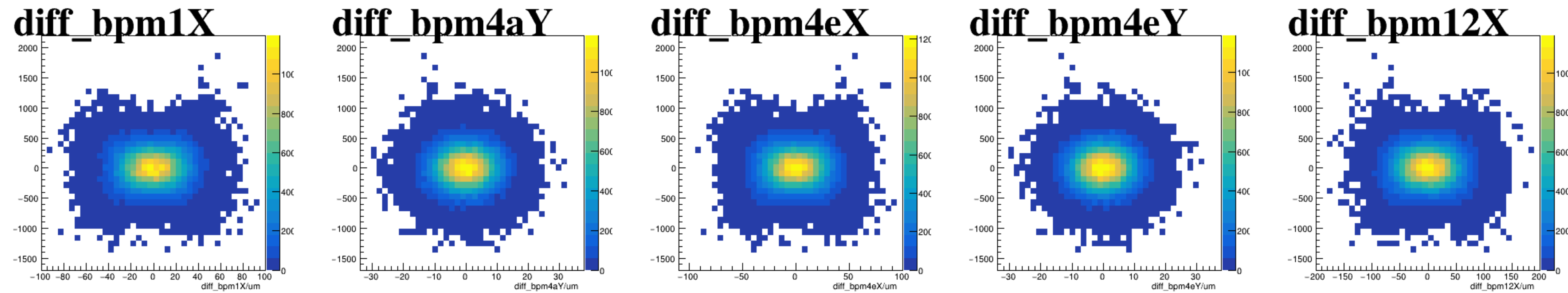
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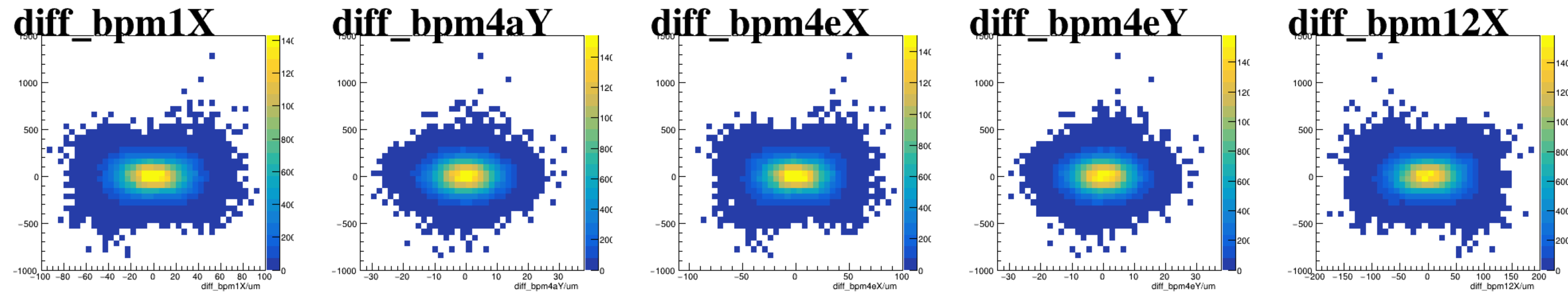
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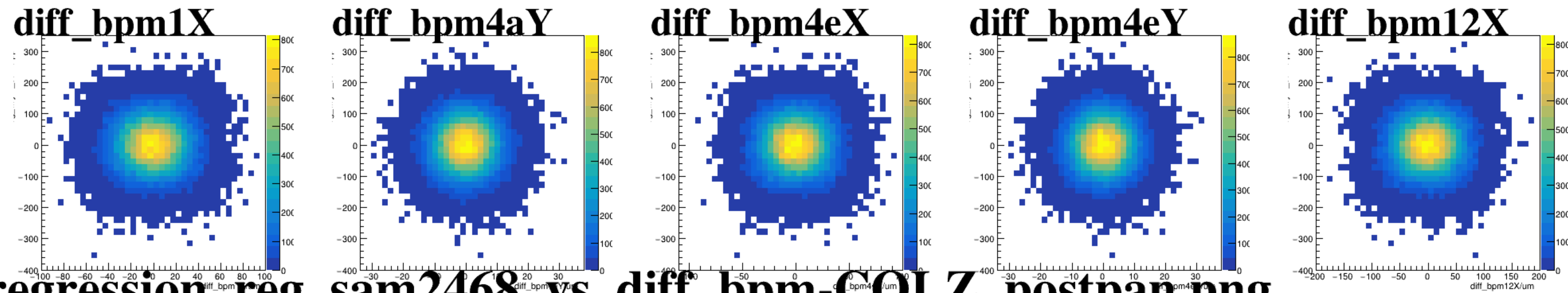
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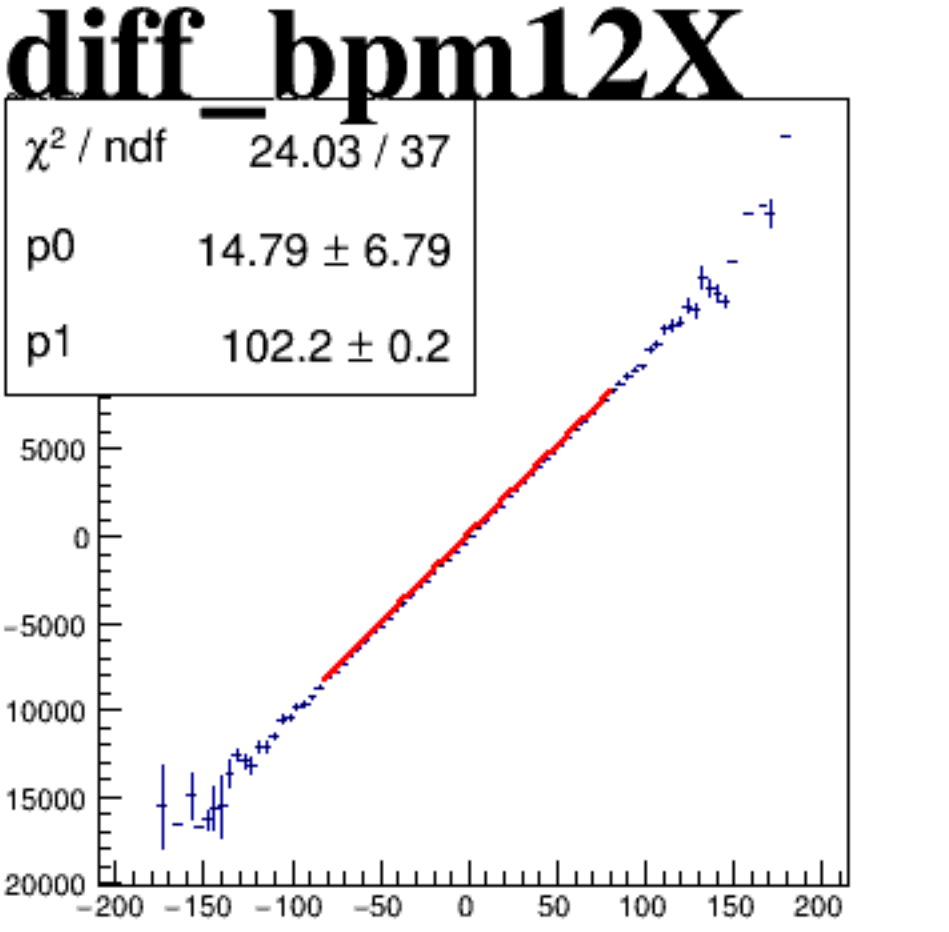
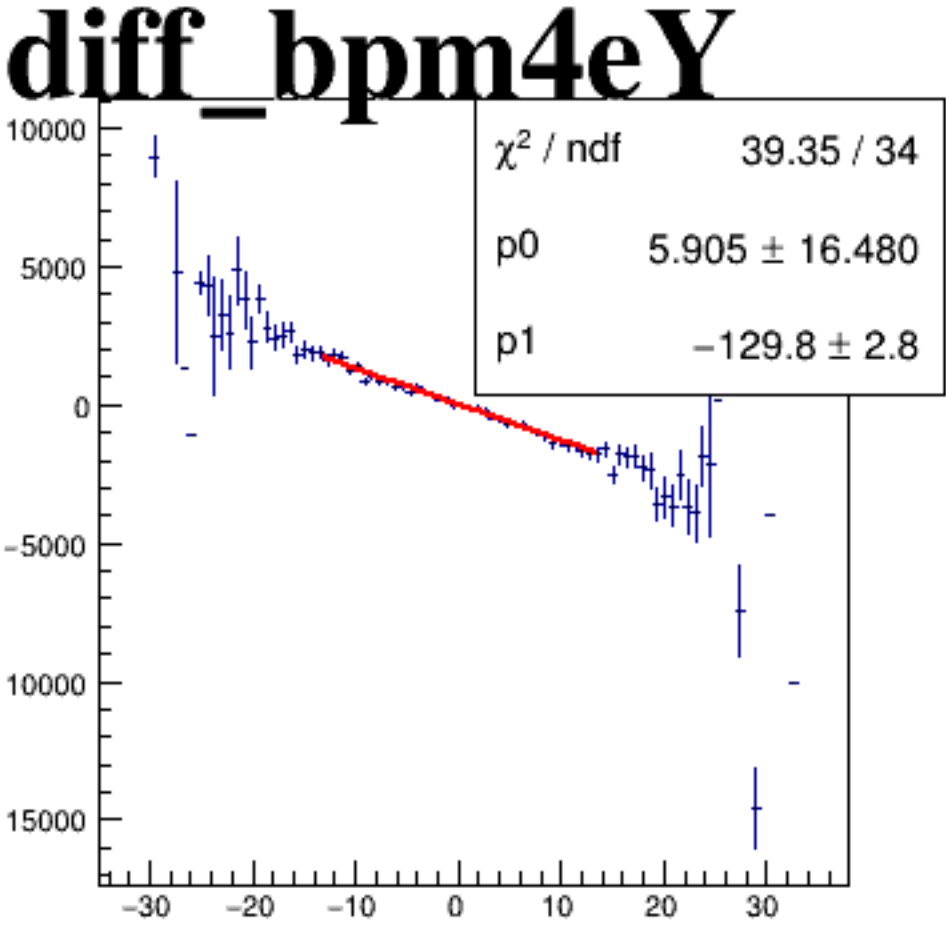
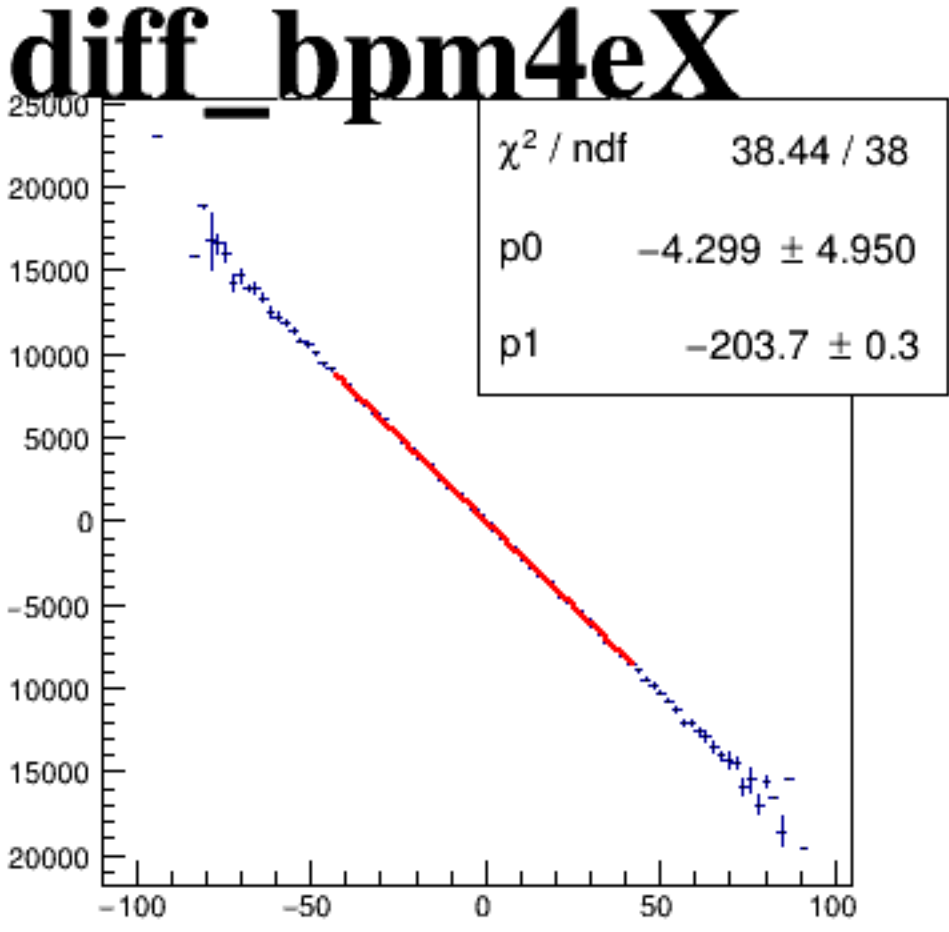
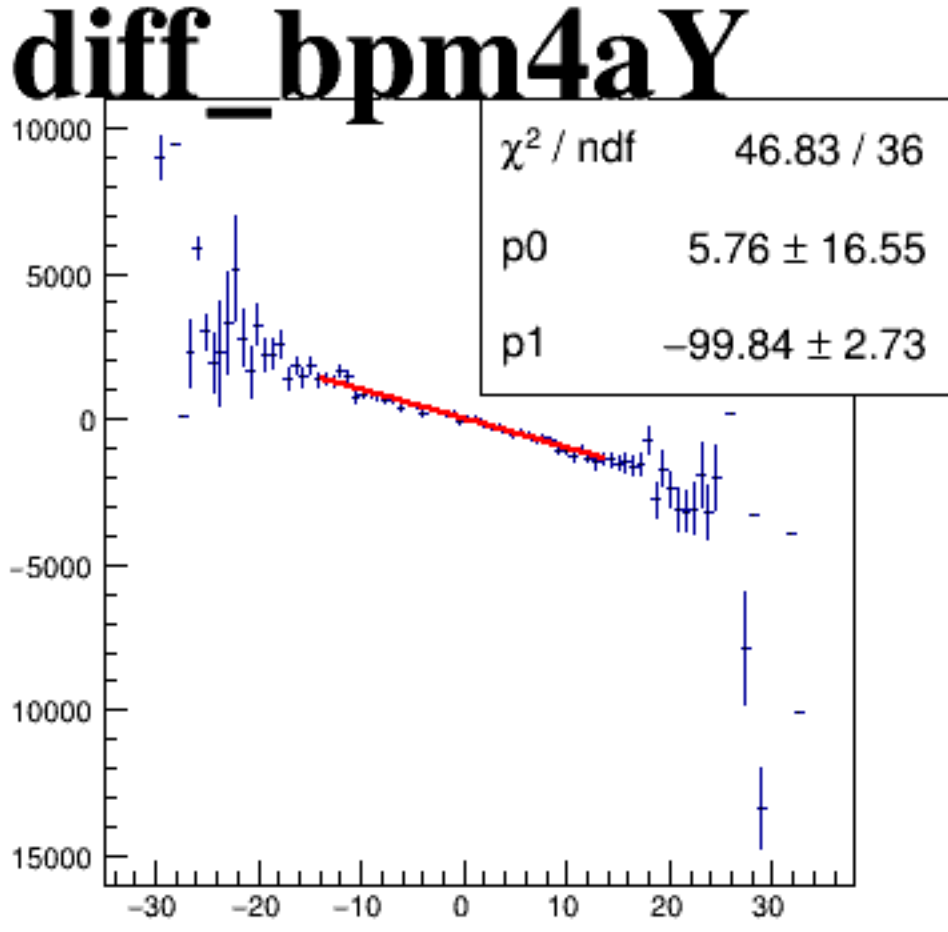
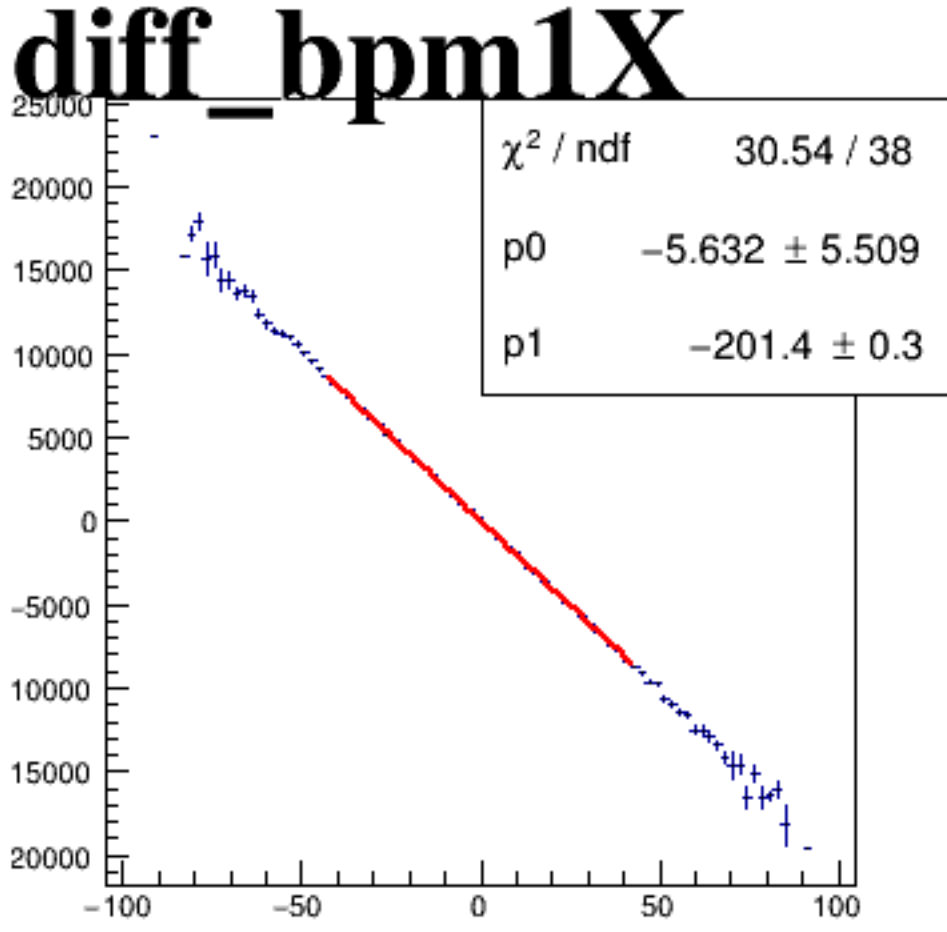
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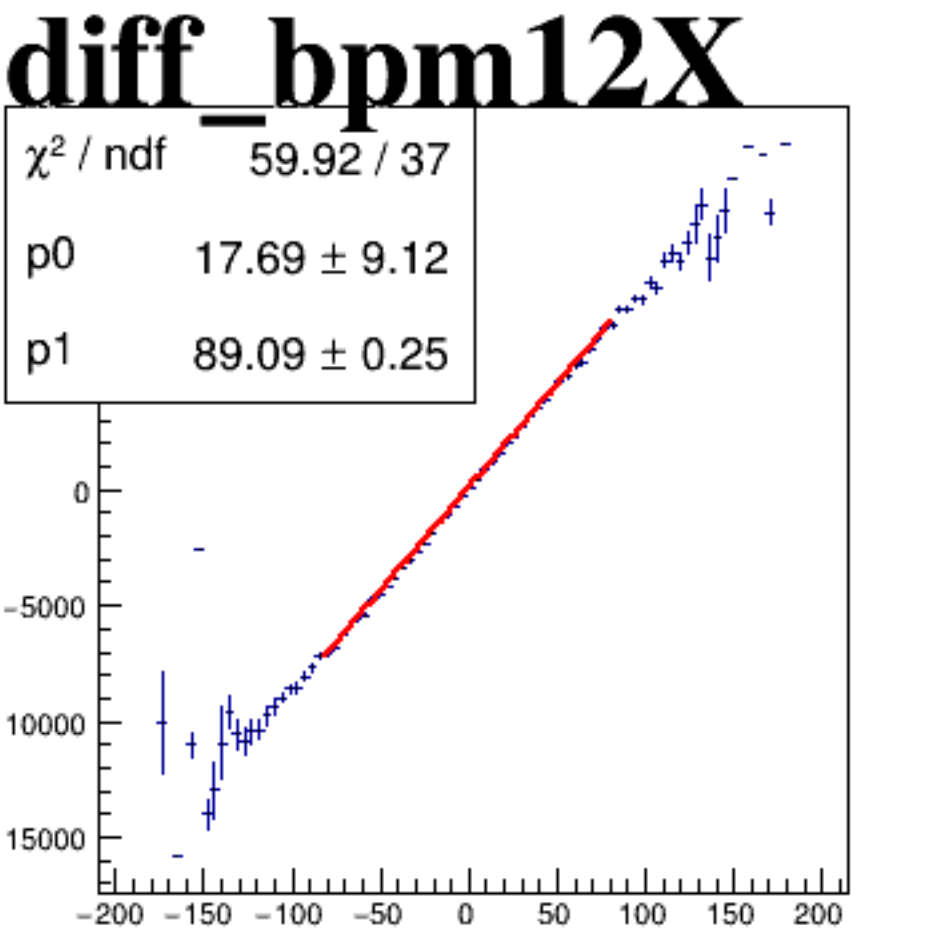
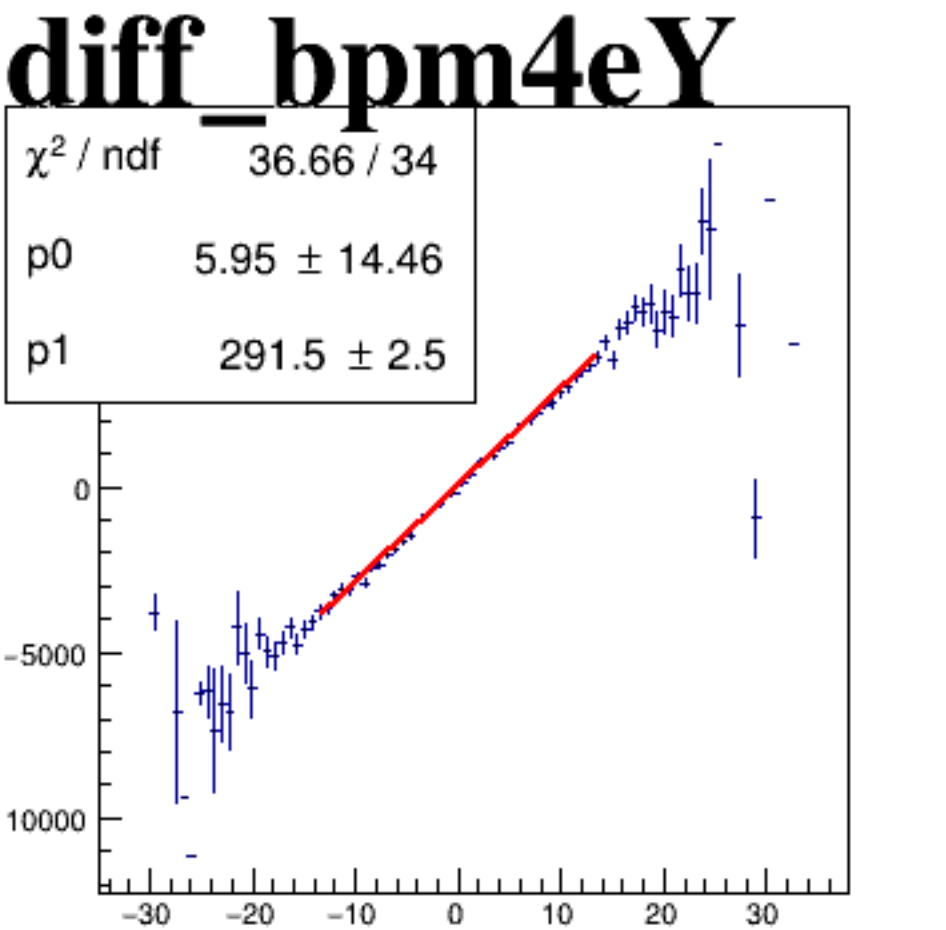
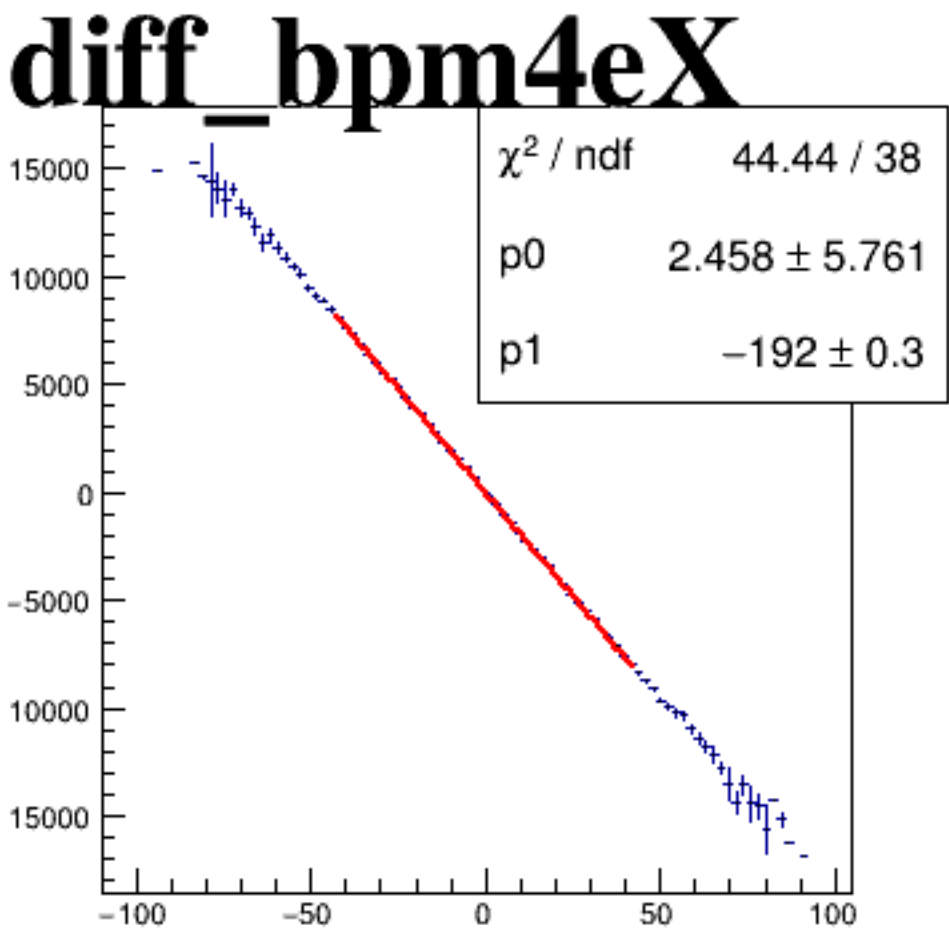
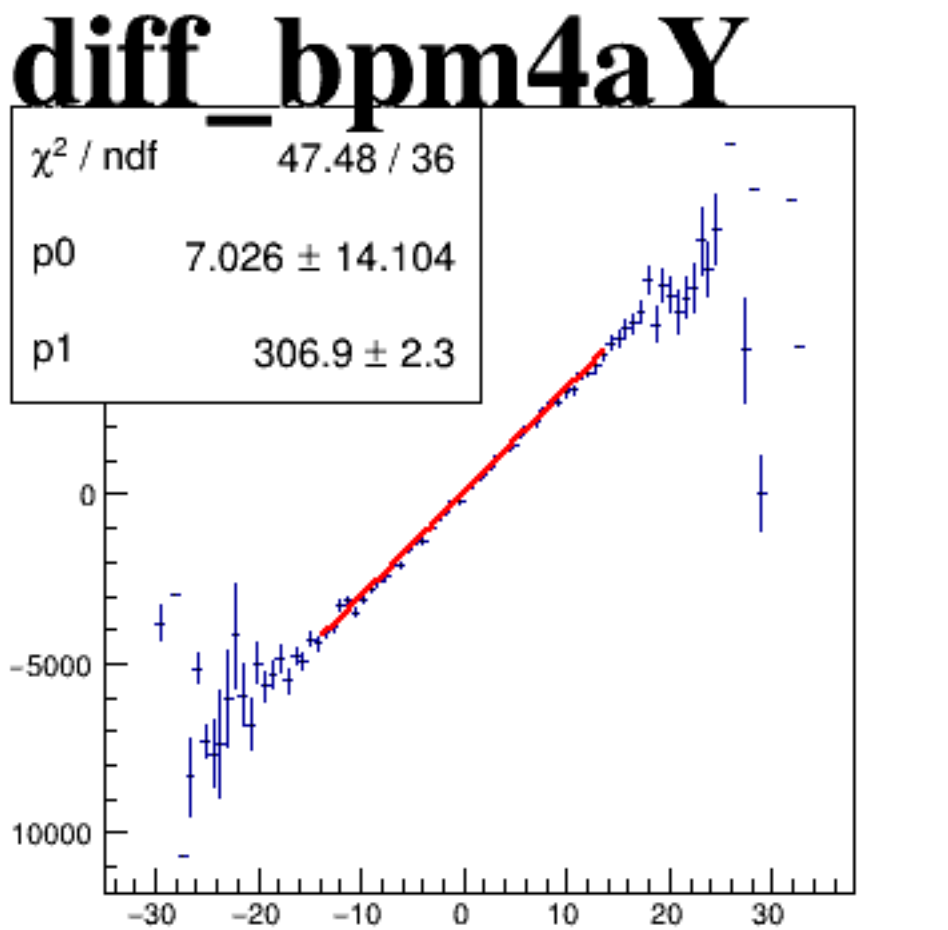
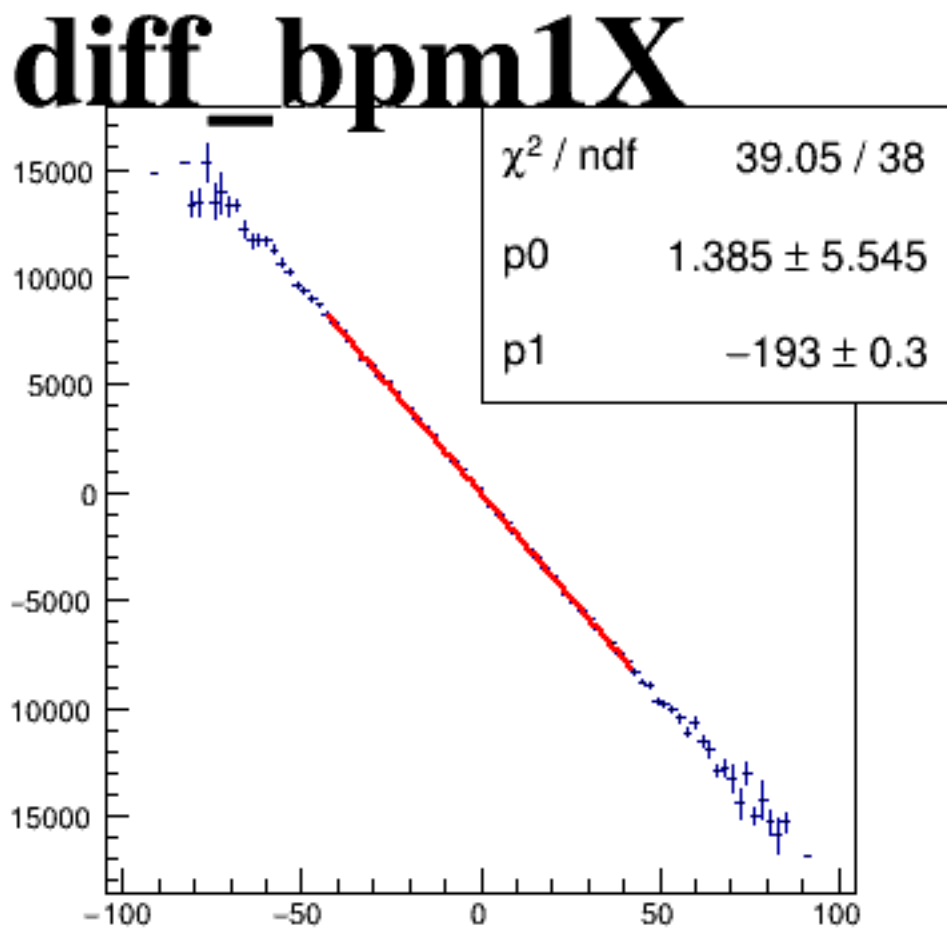
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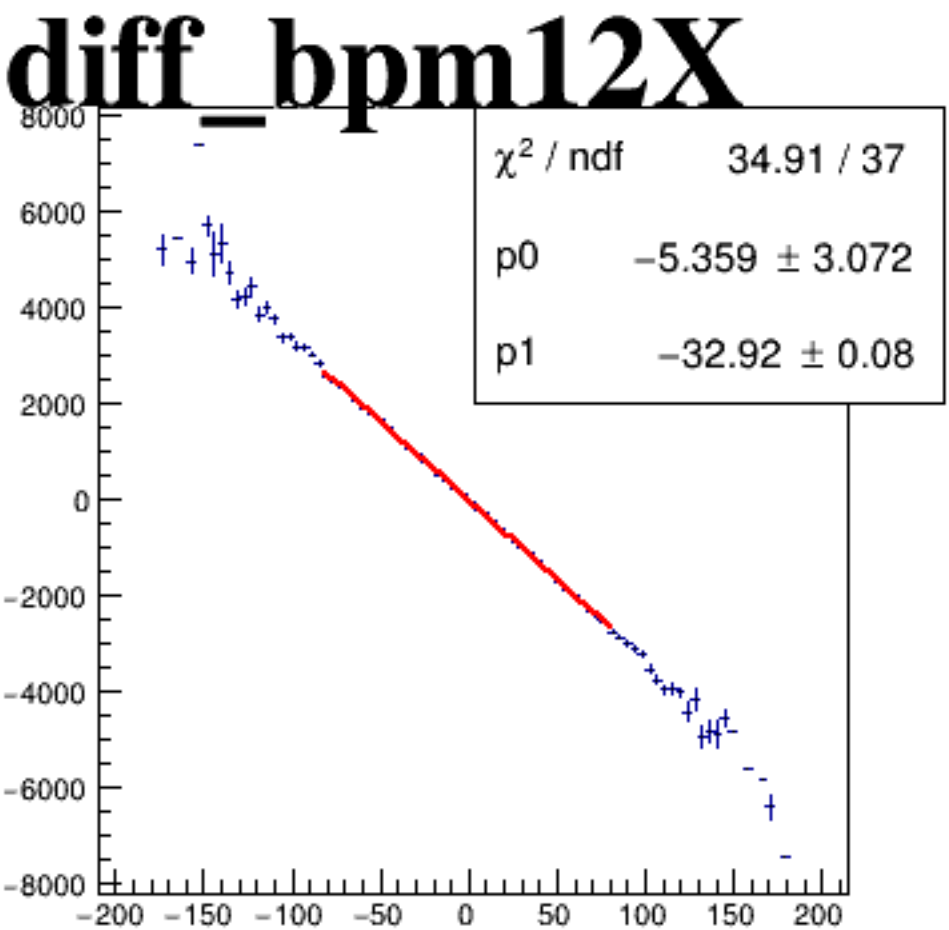
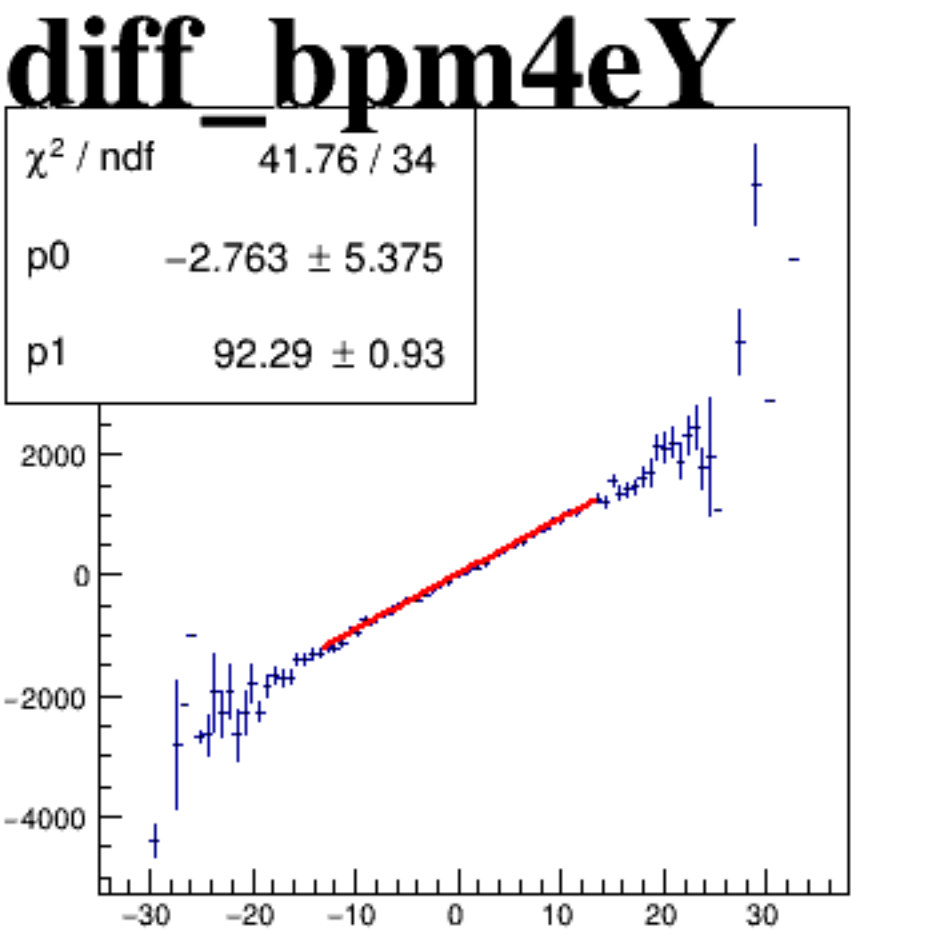
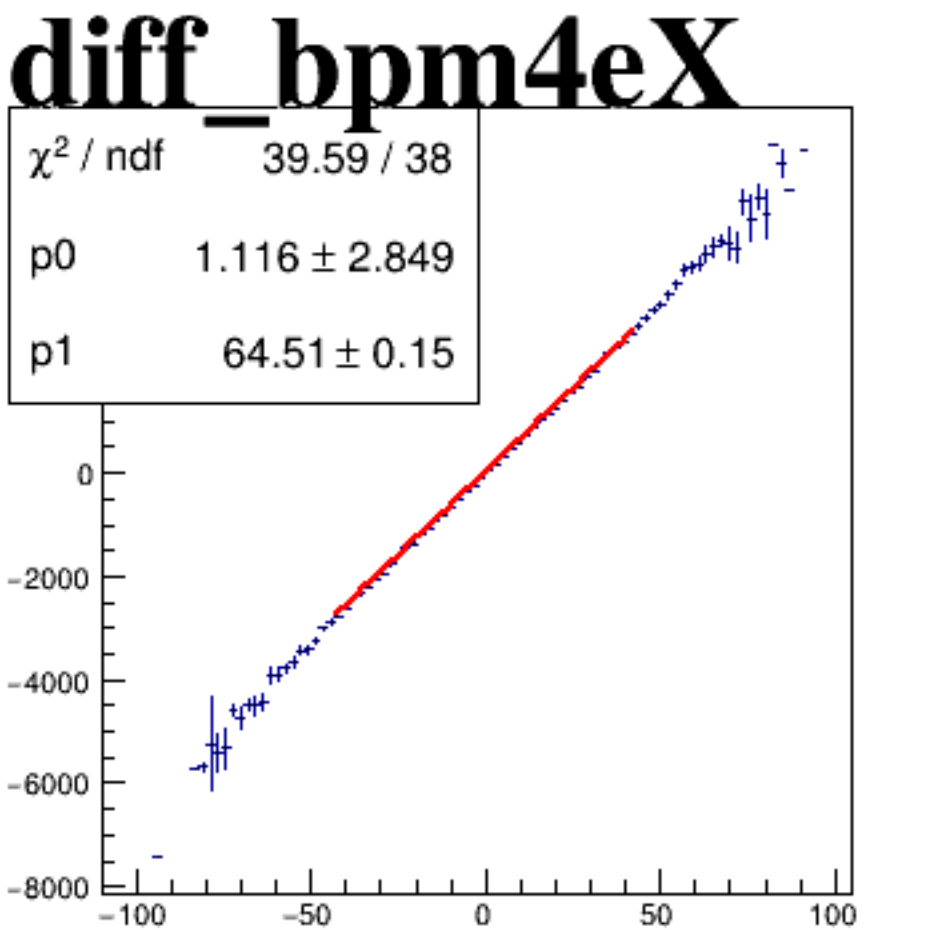
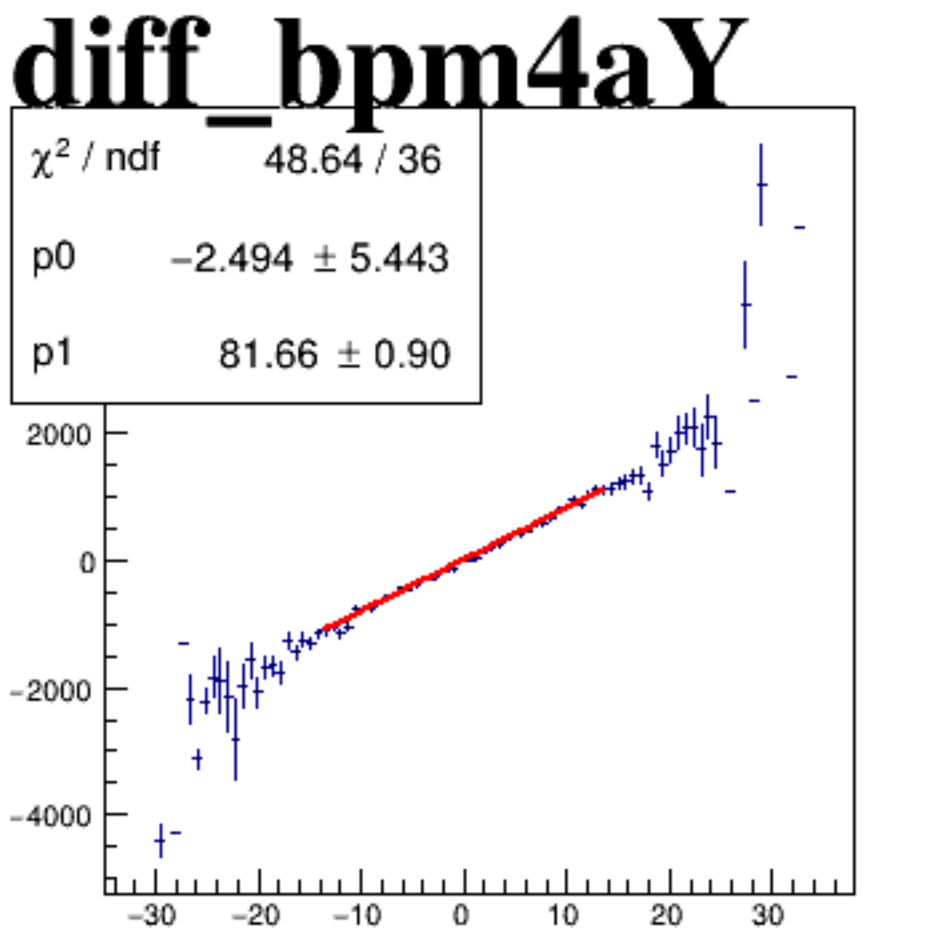
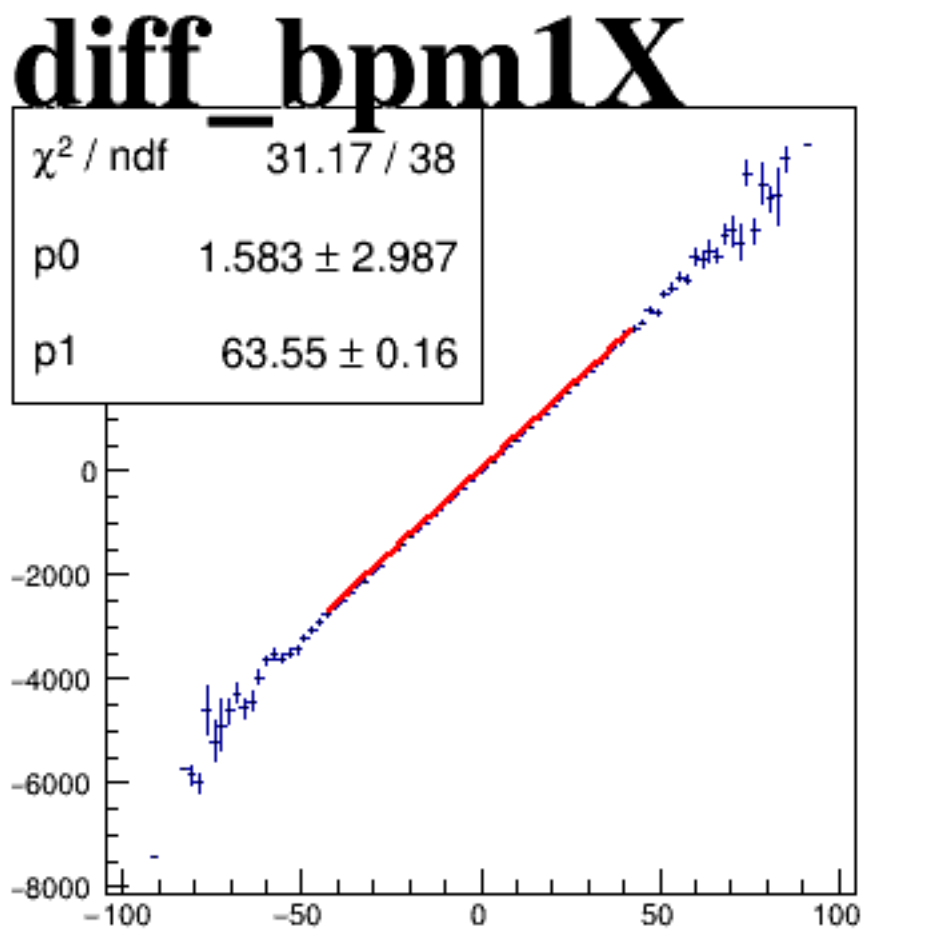
asym_sam2



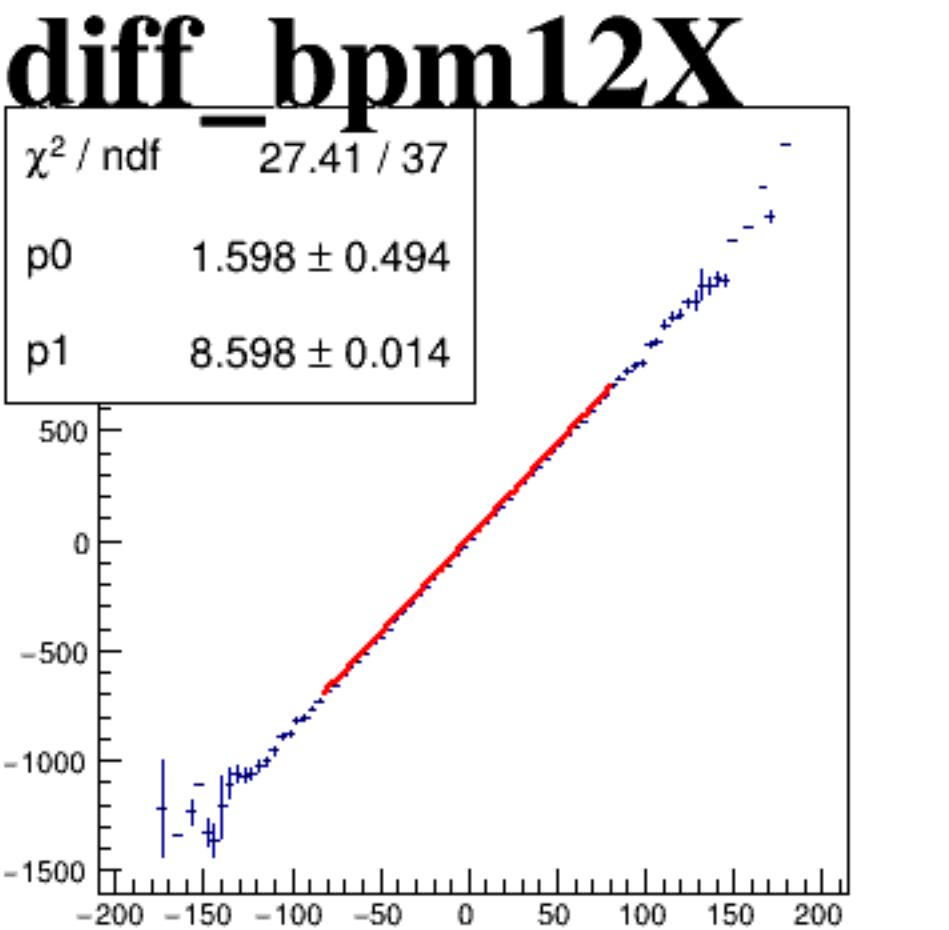
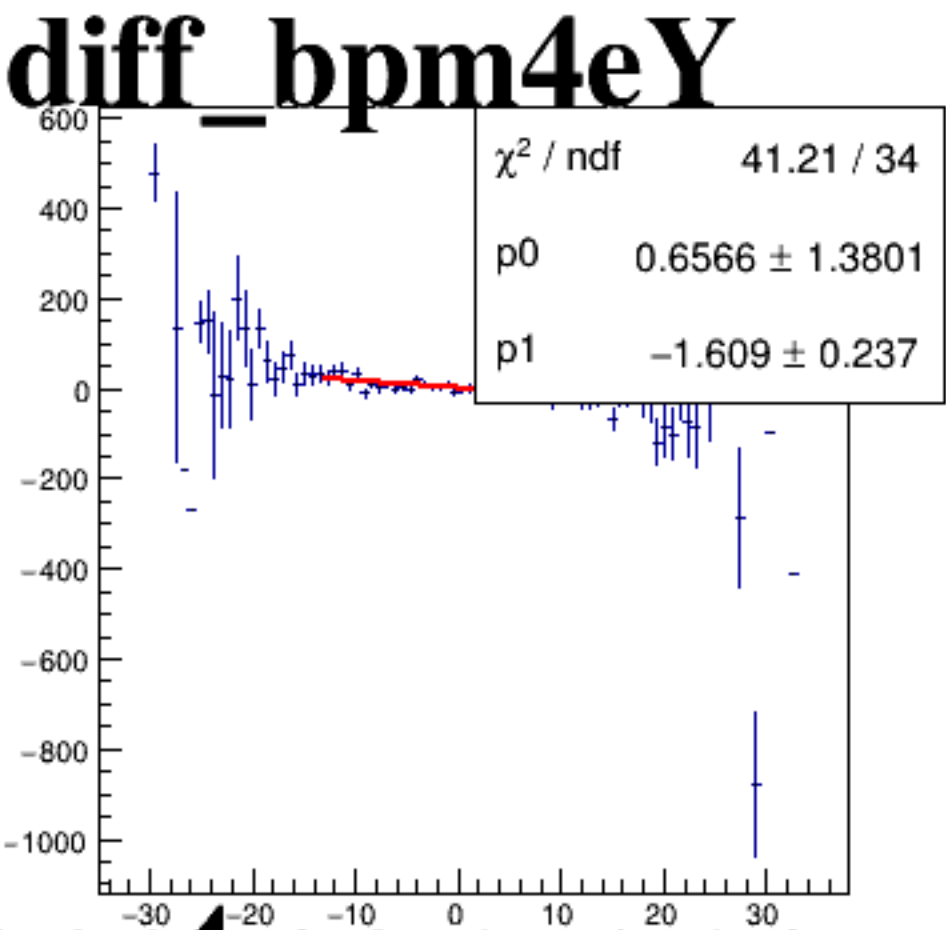
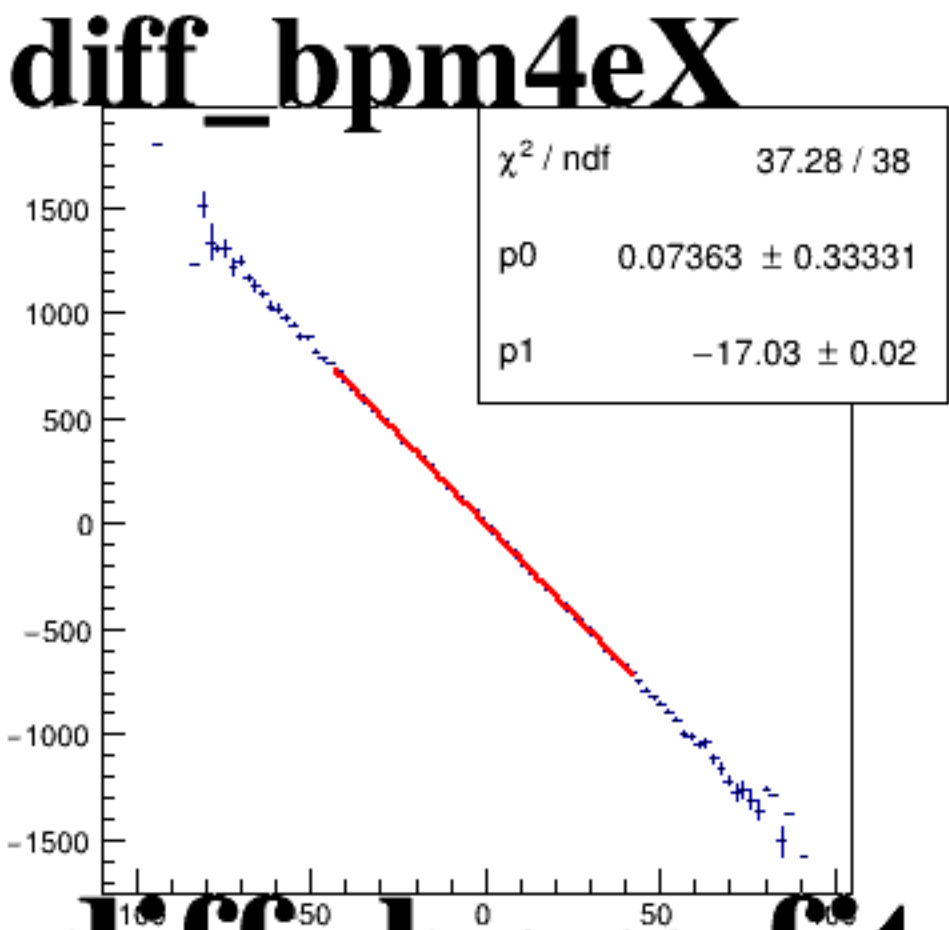
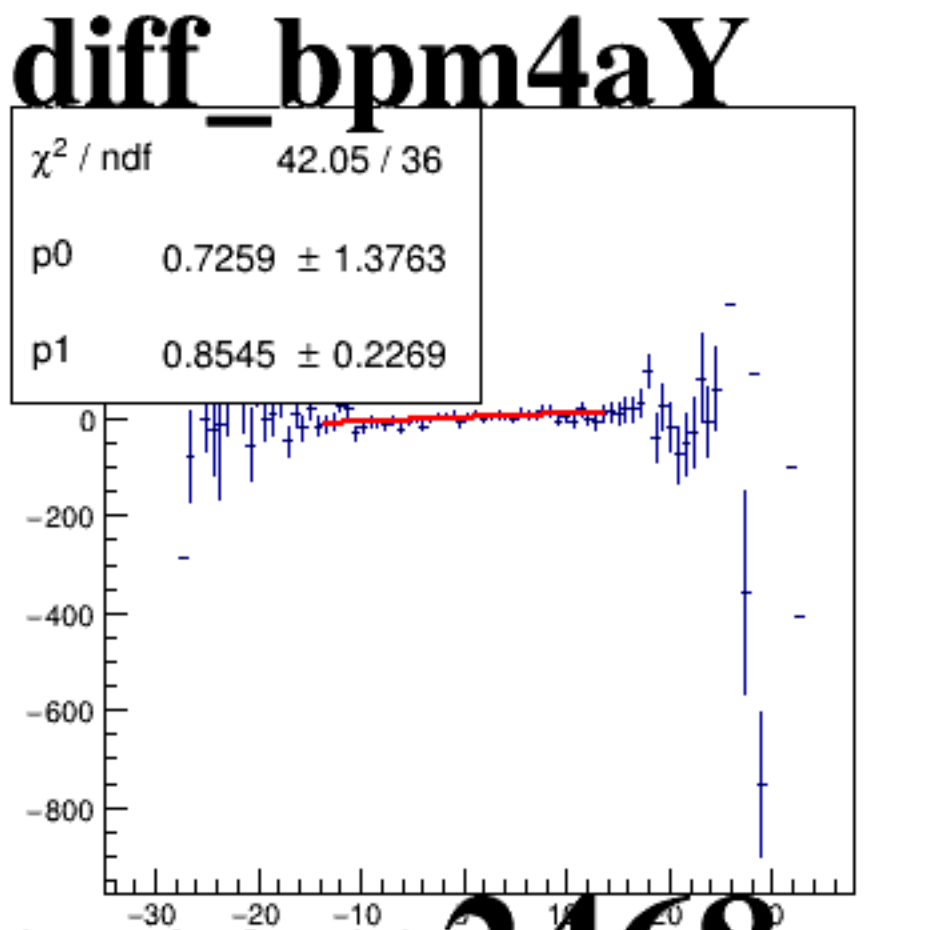
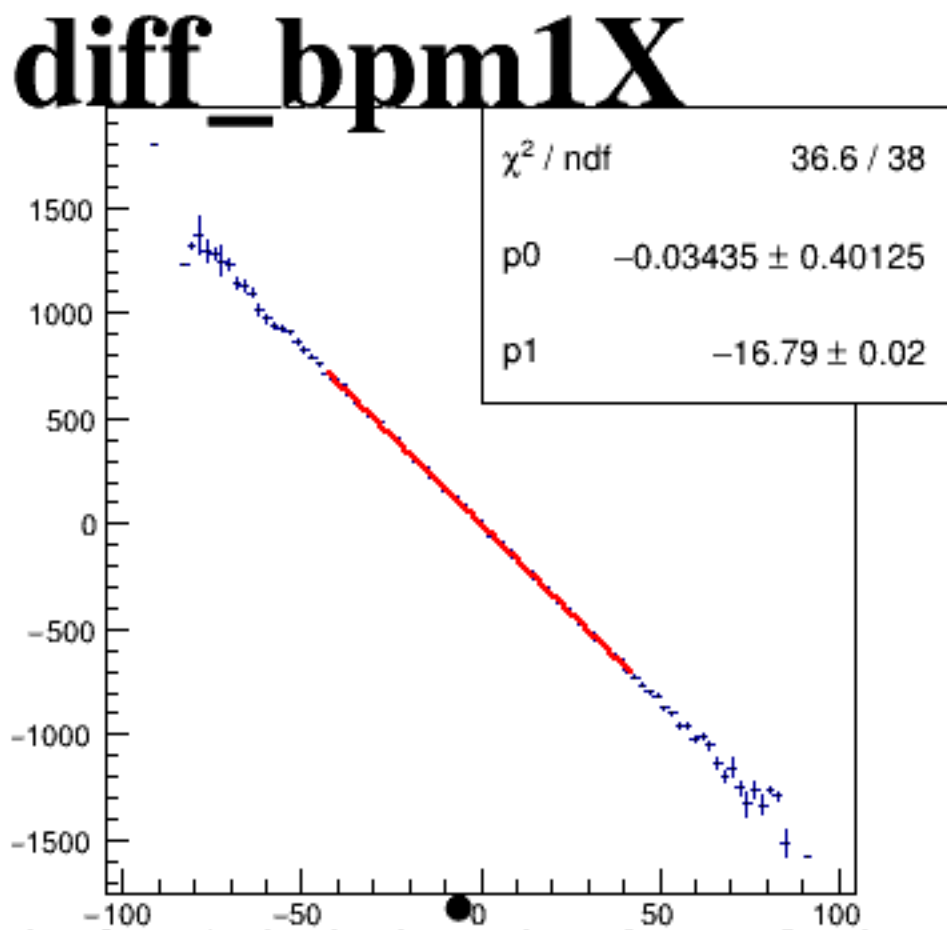
asym_sam4



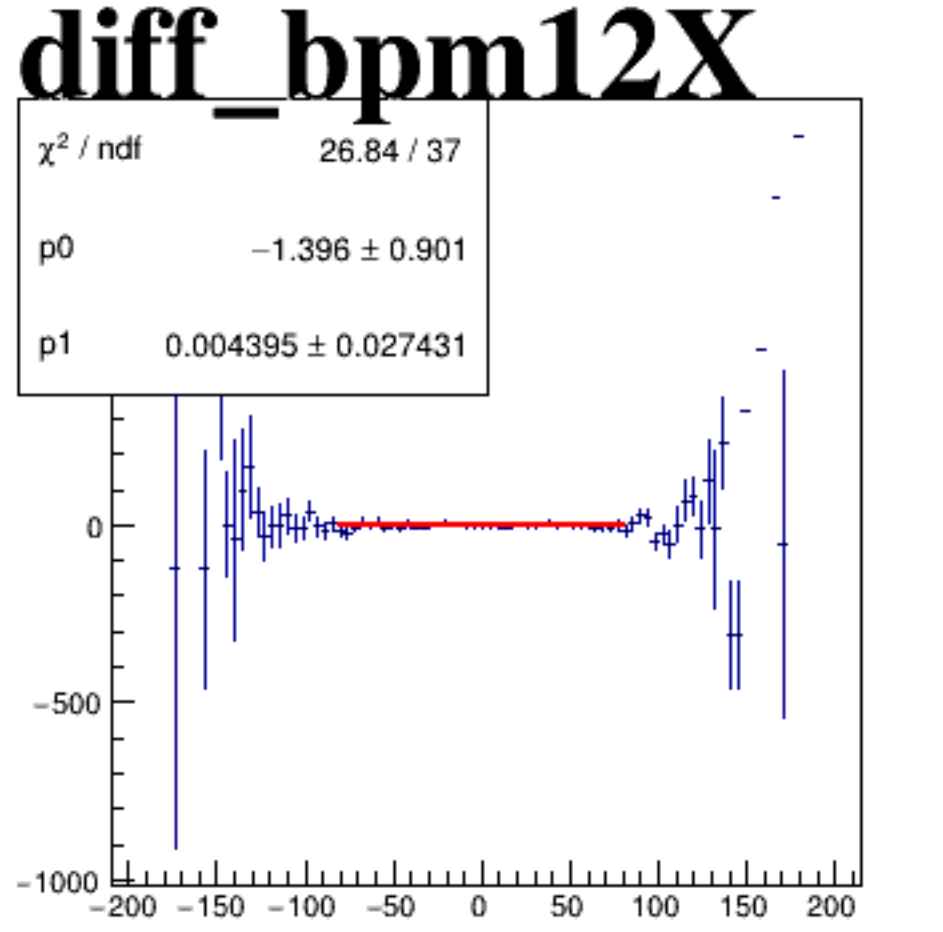
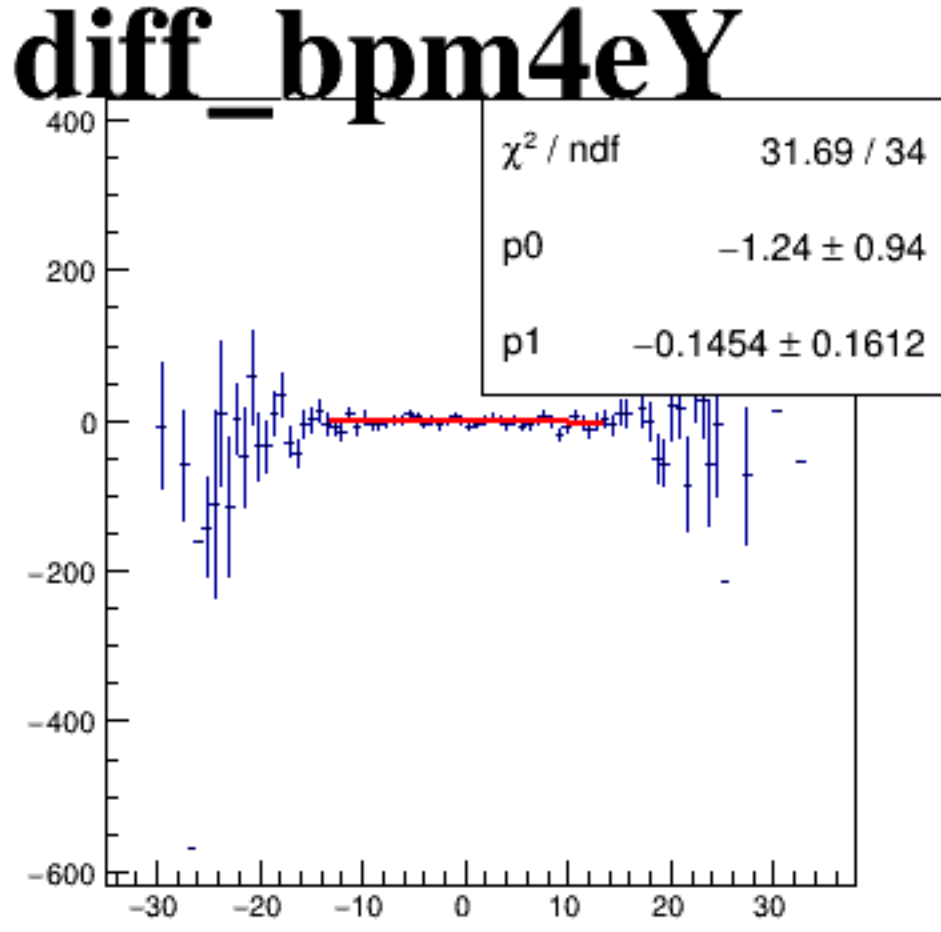
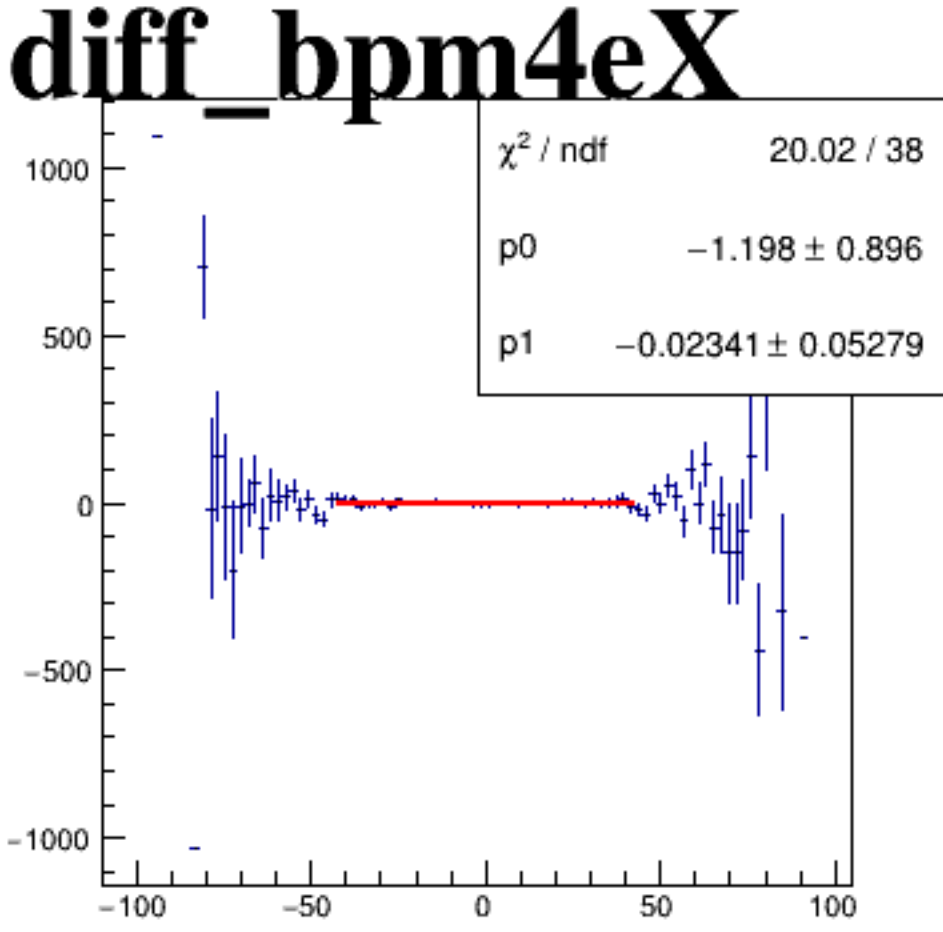
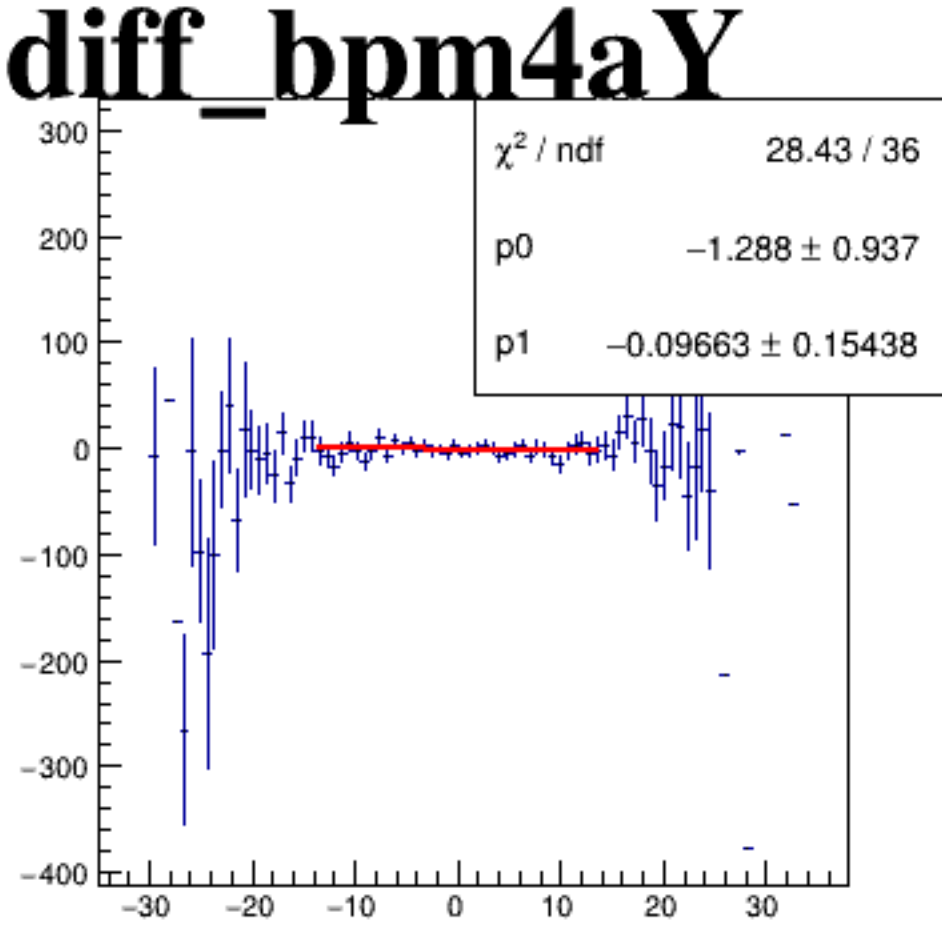
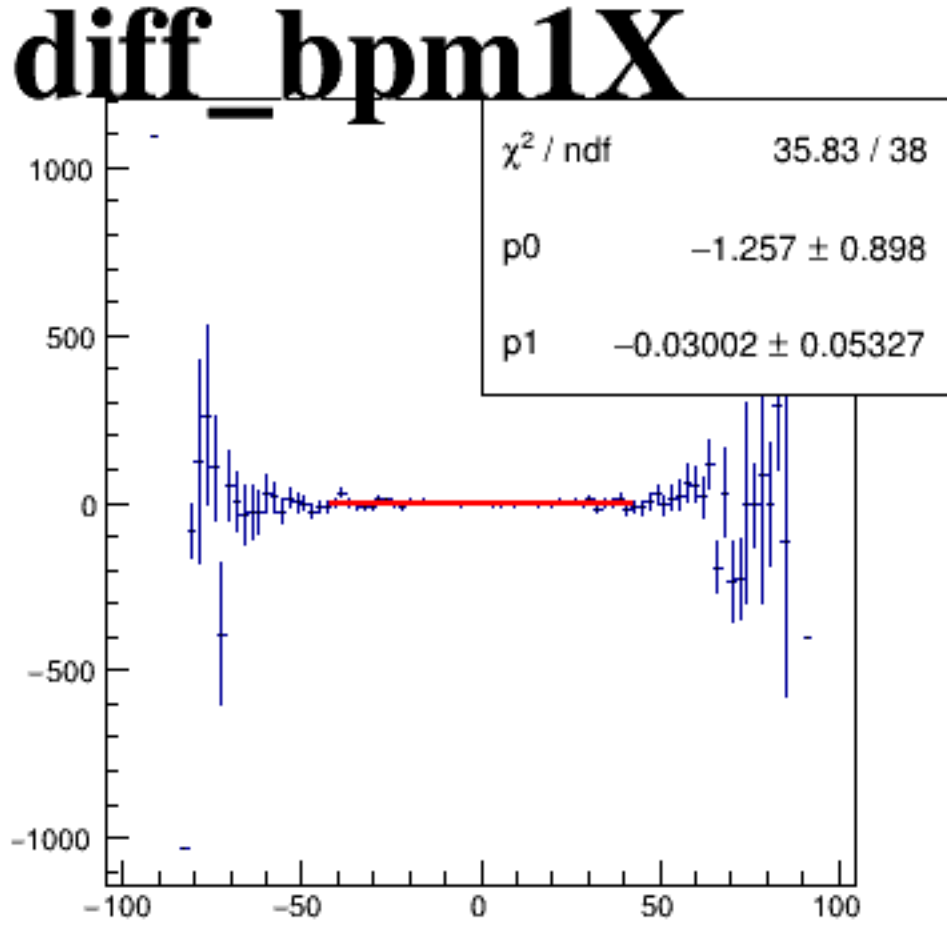
asym_sam6



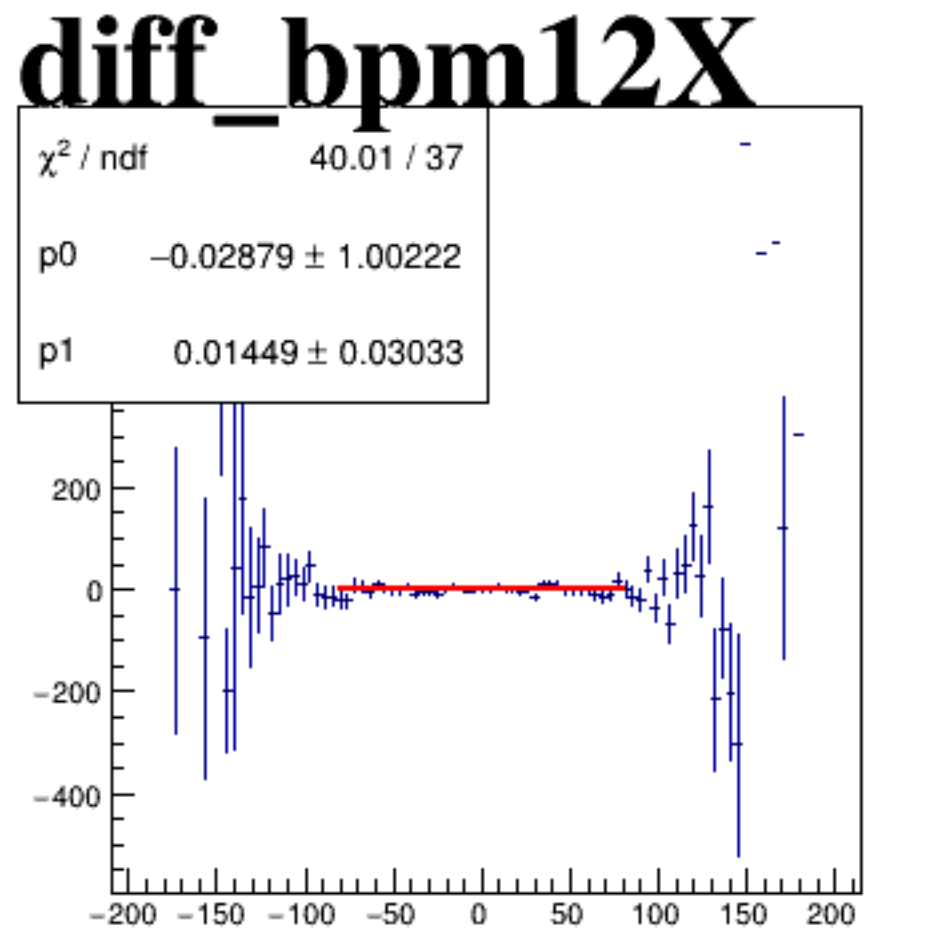
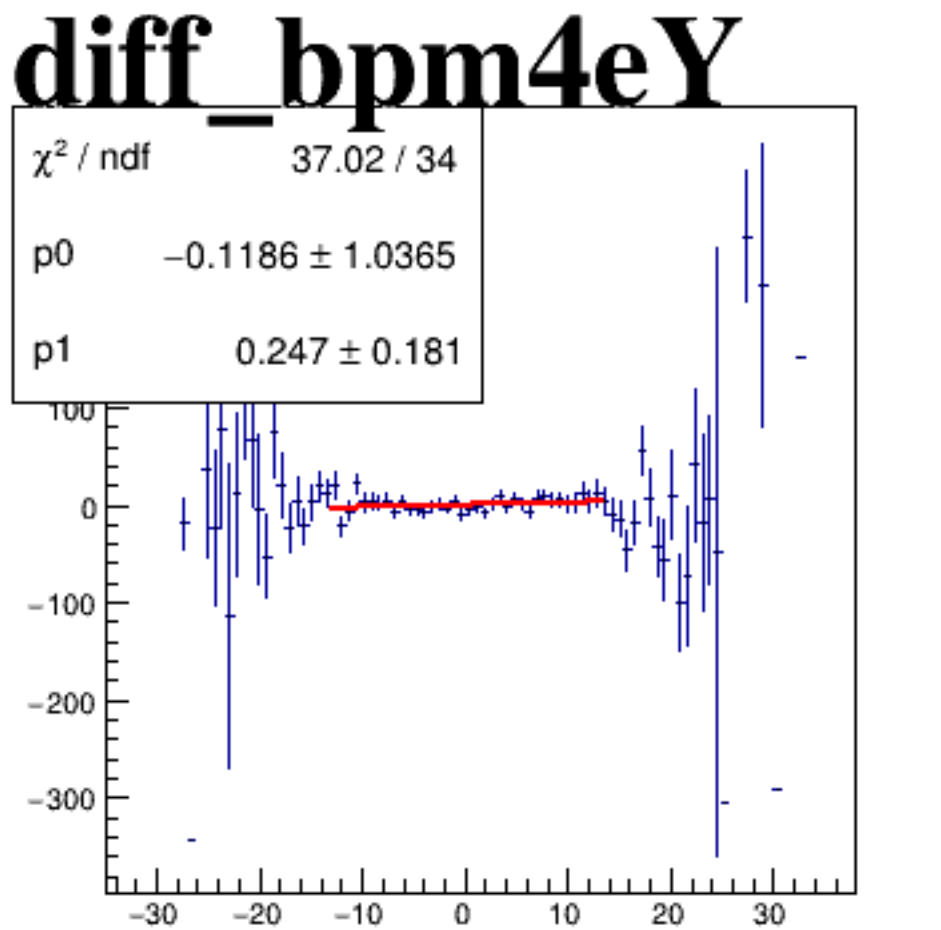
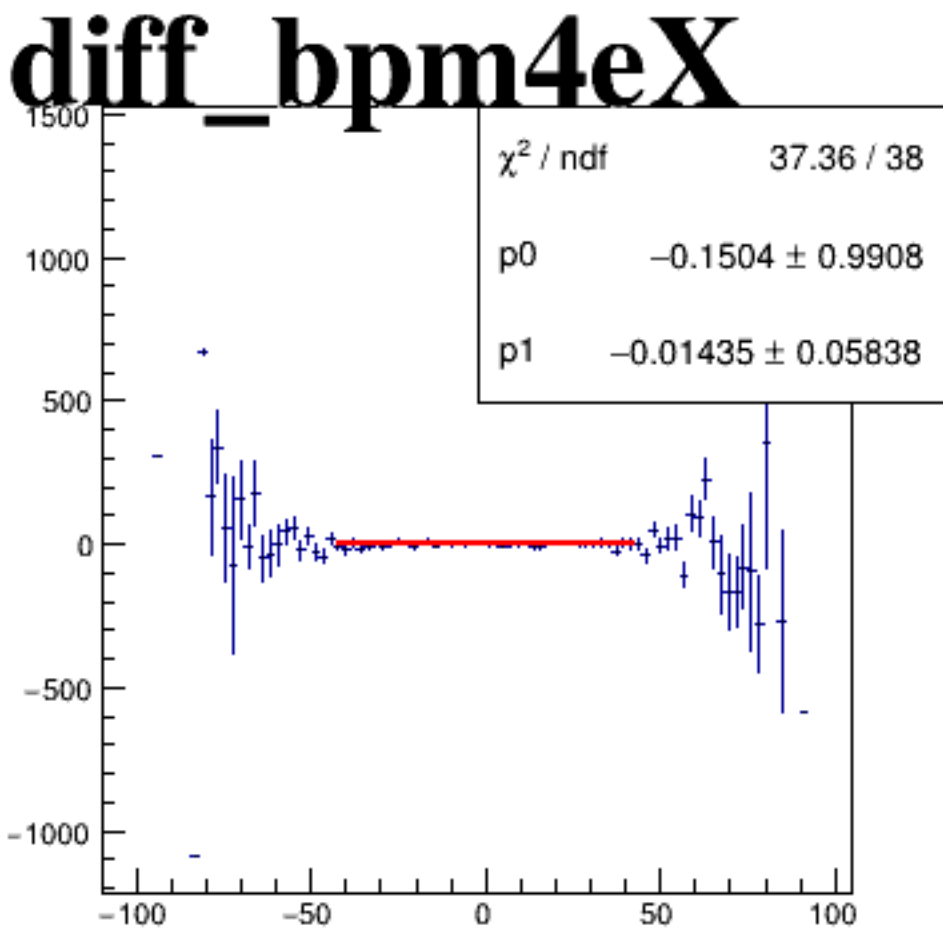
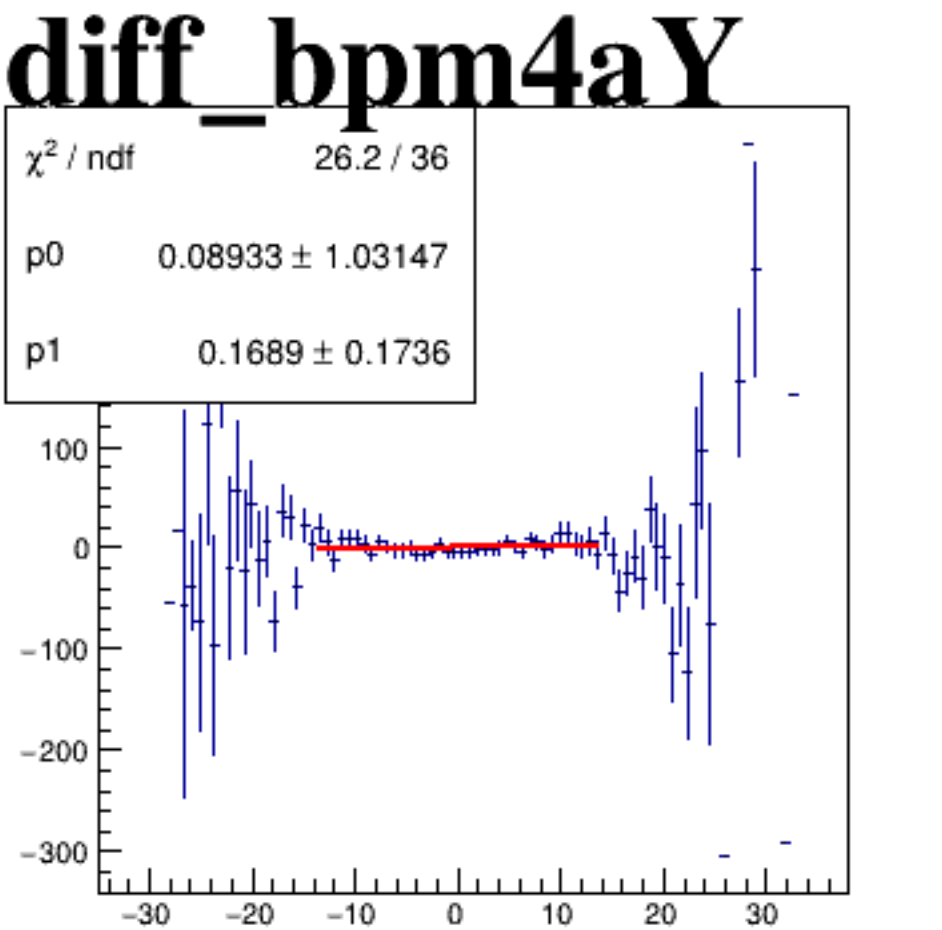
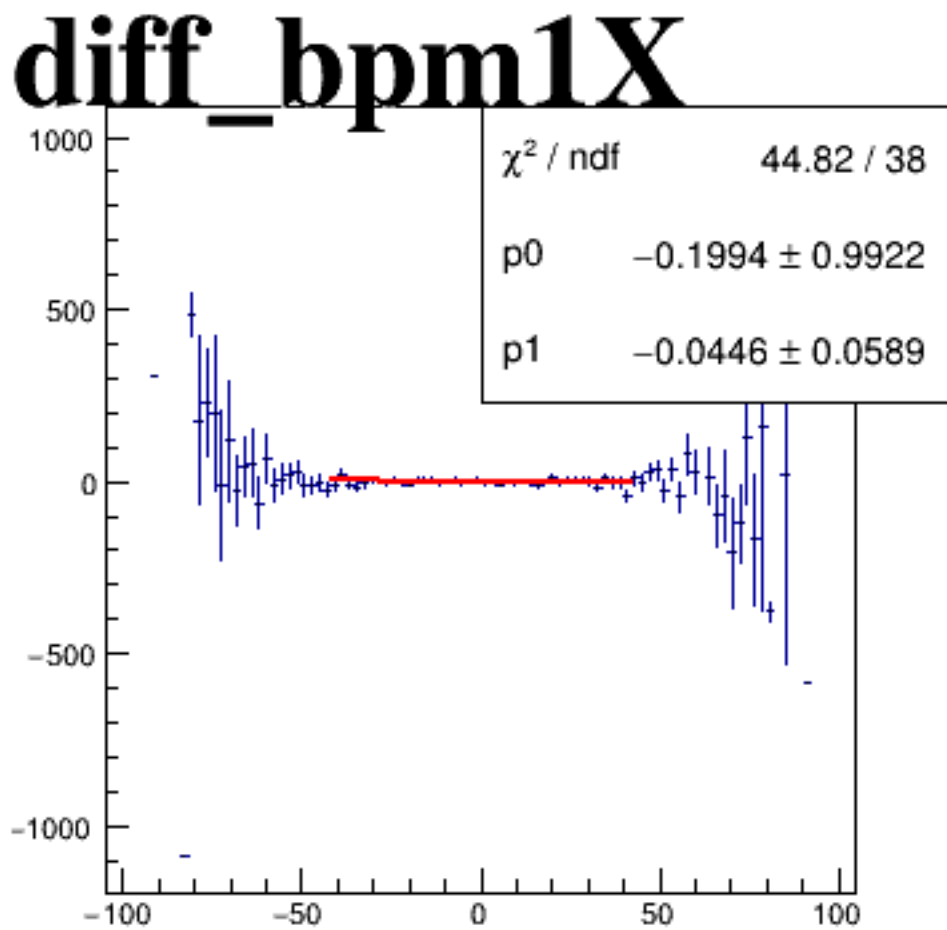
asym_sam8



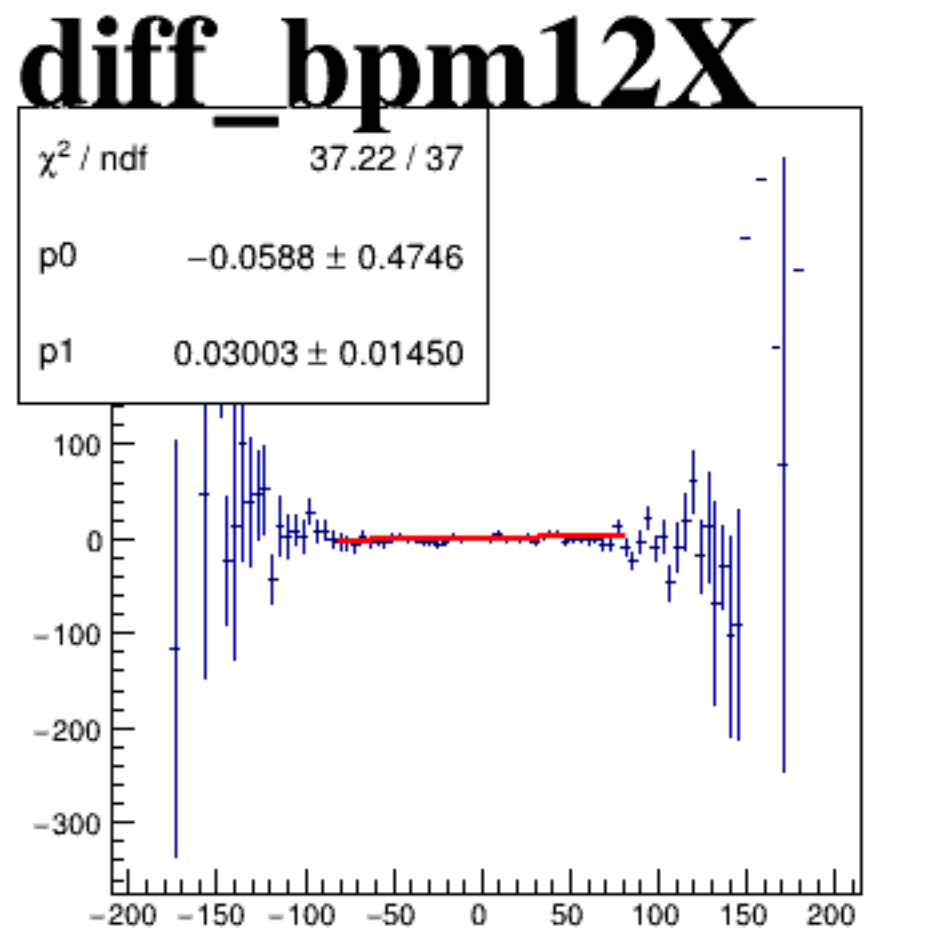
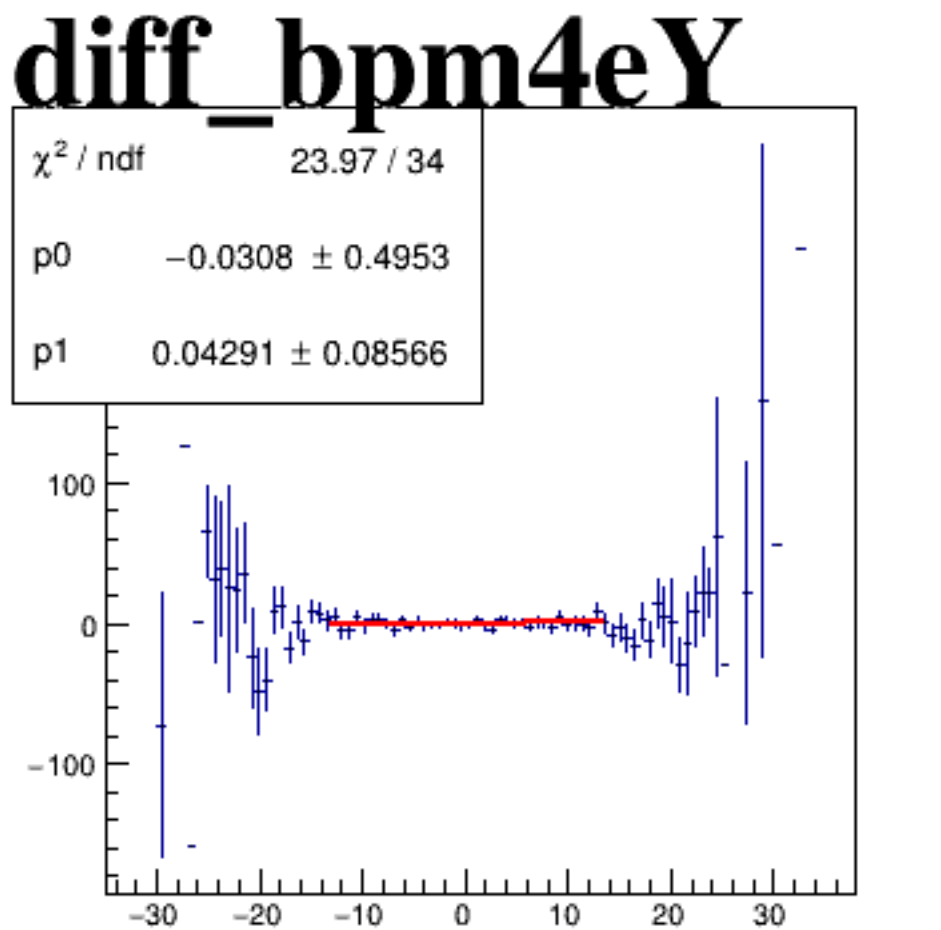
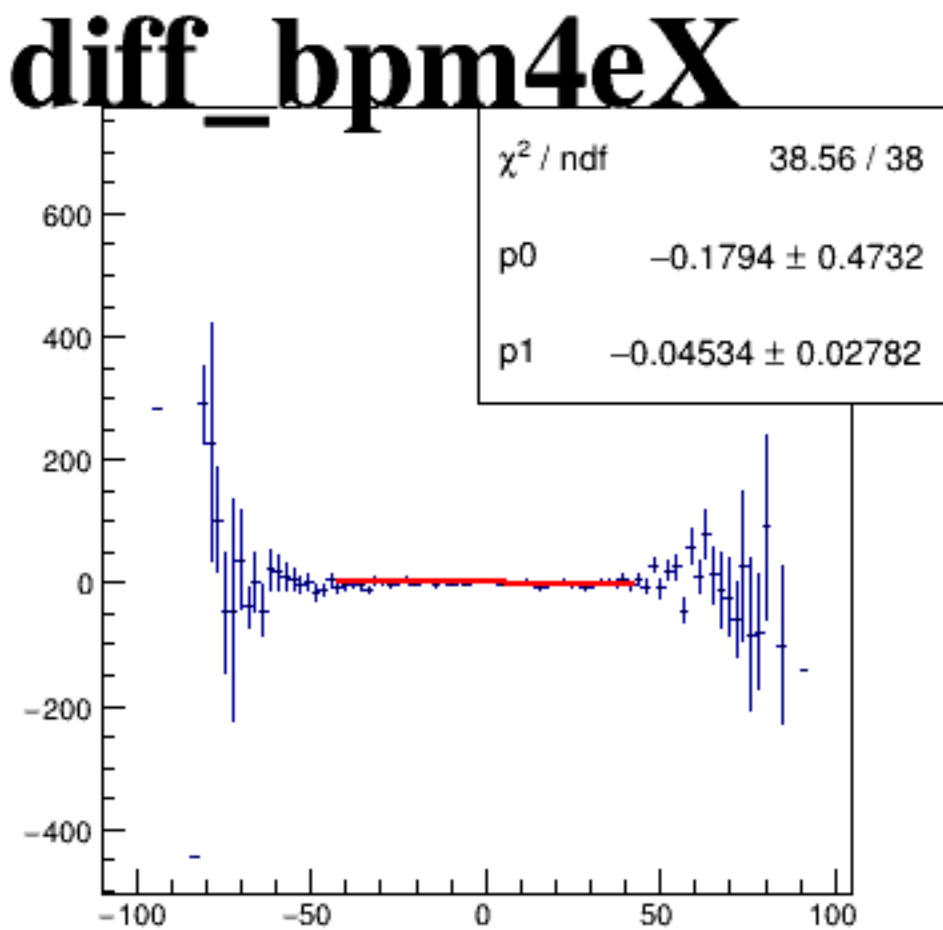
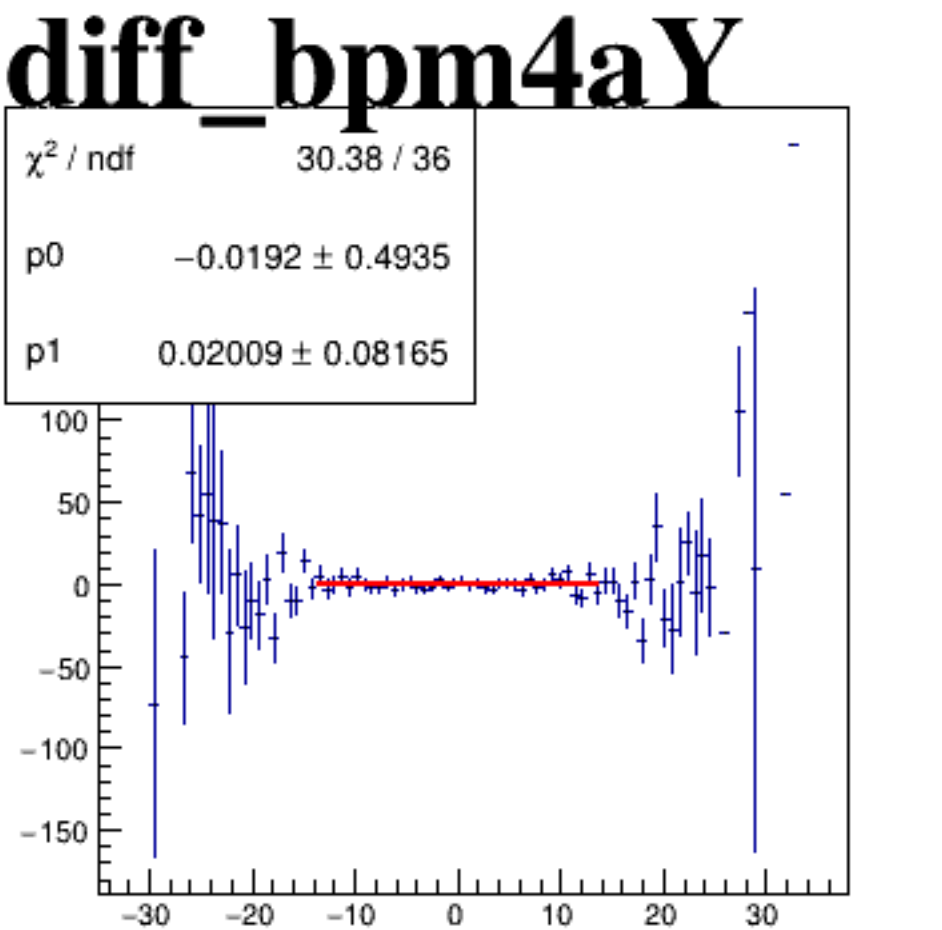
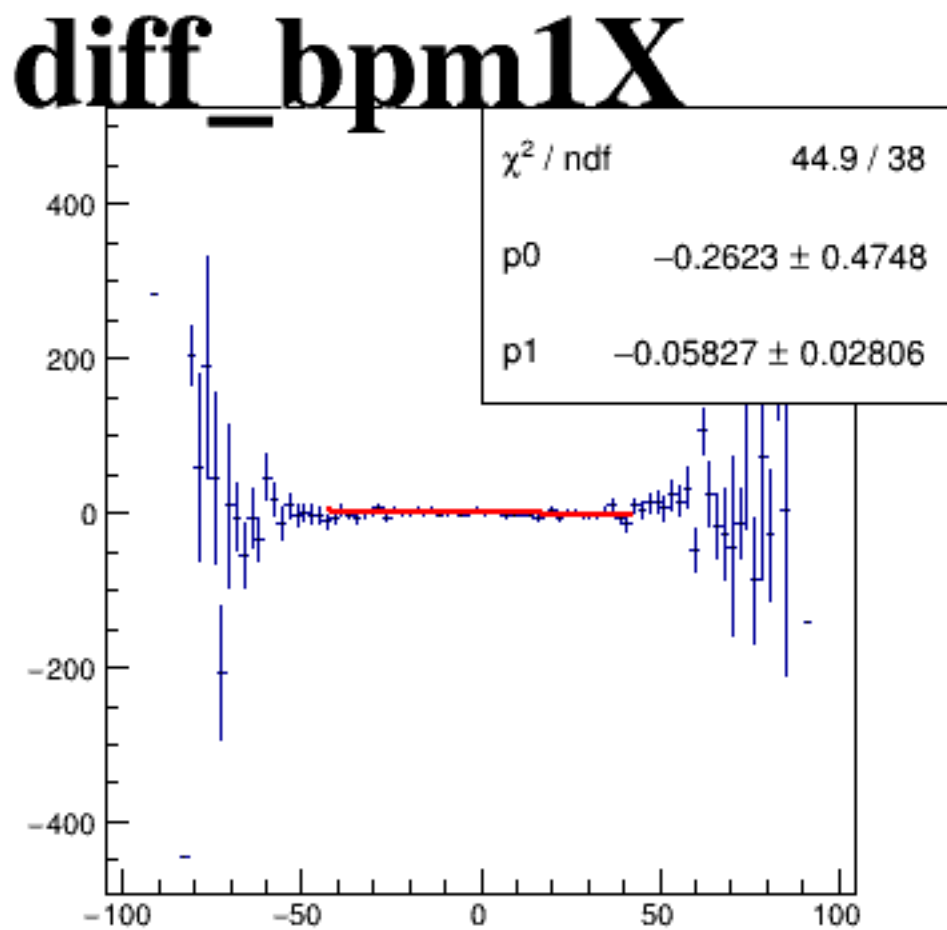
reg_asym_sam2



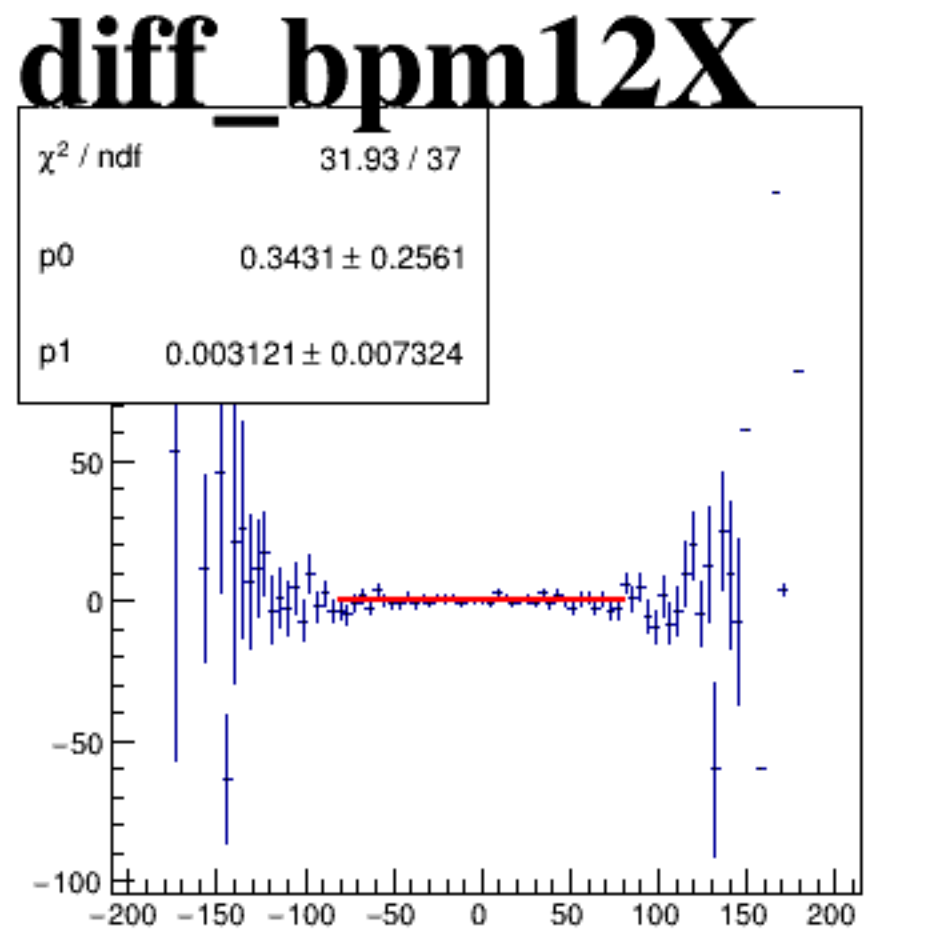
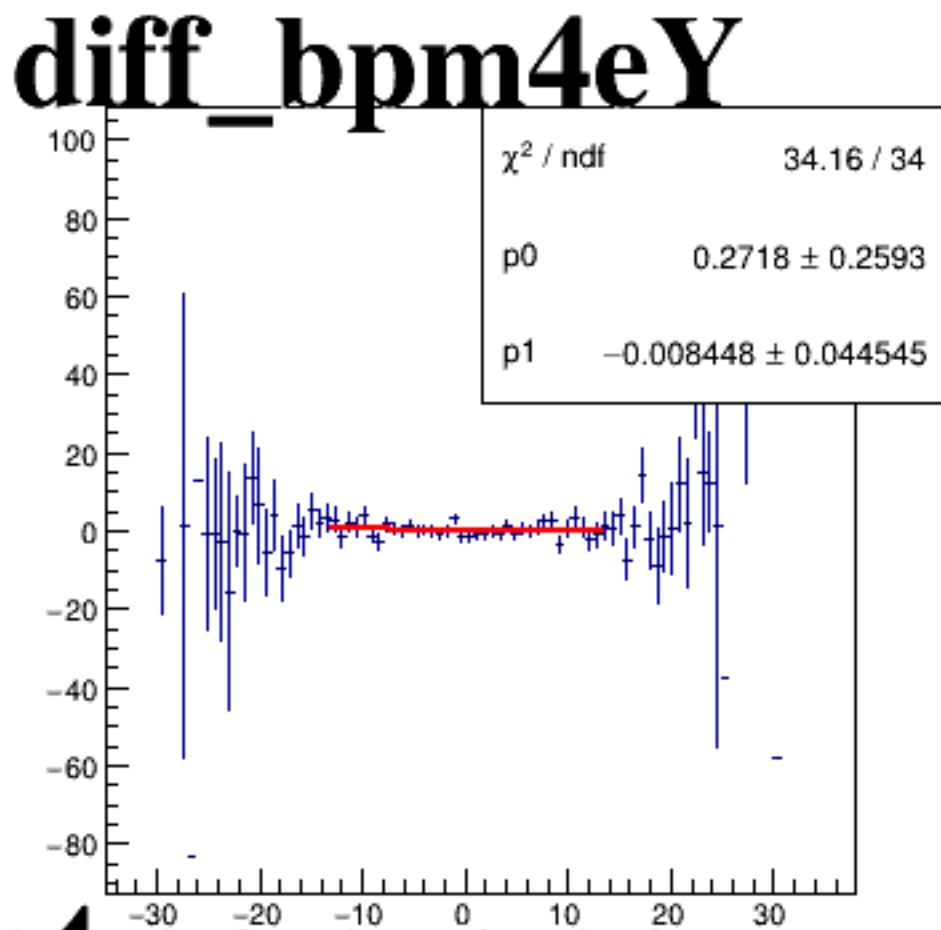
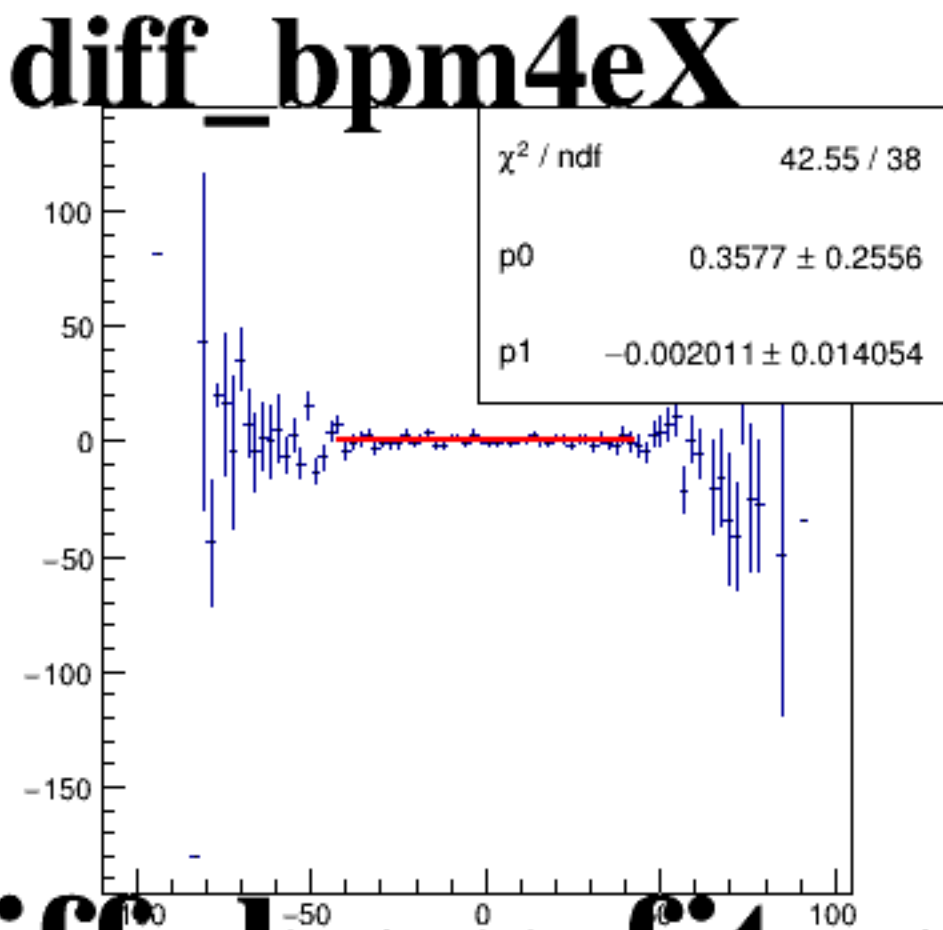
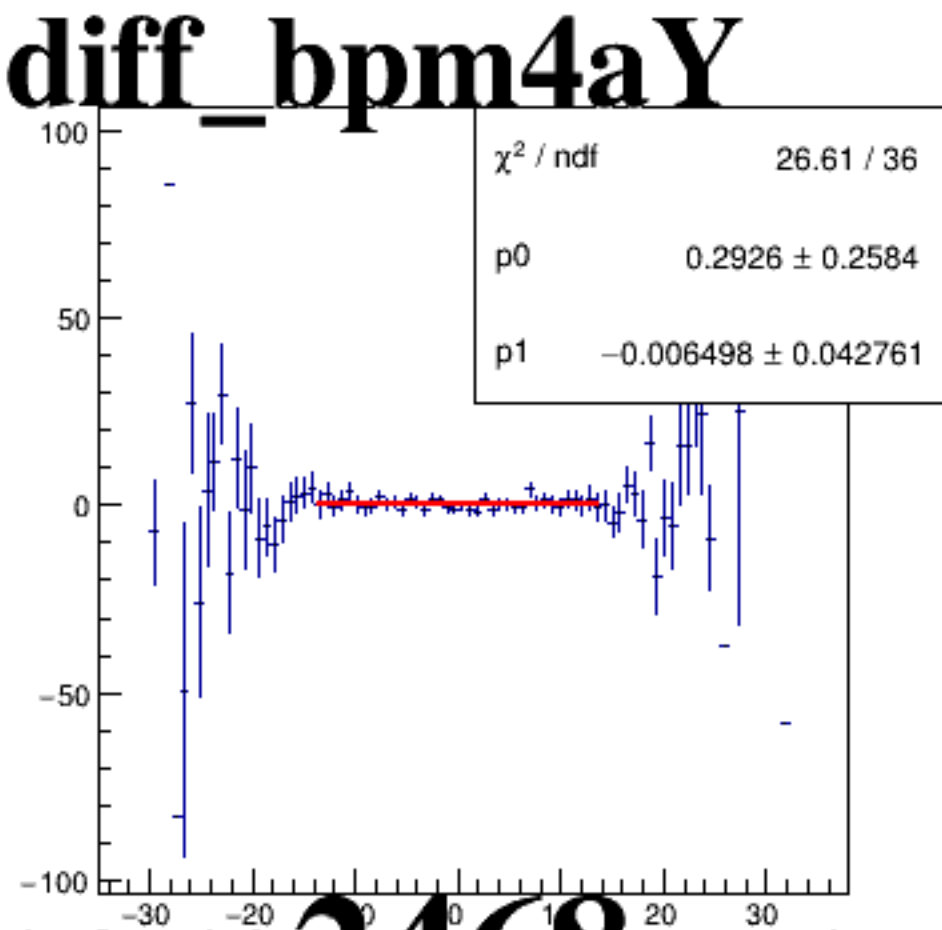
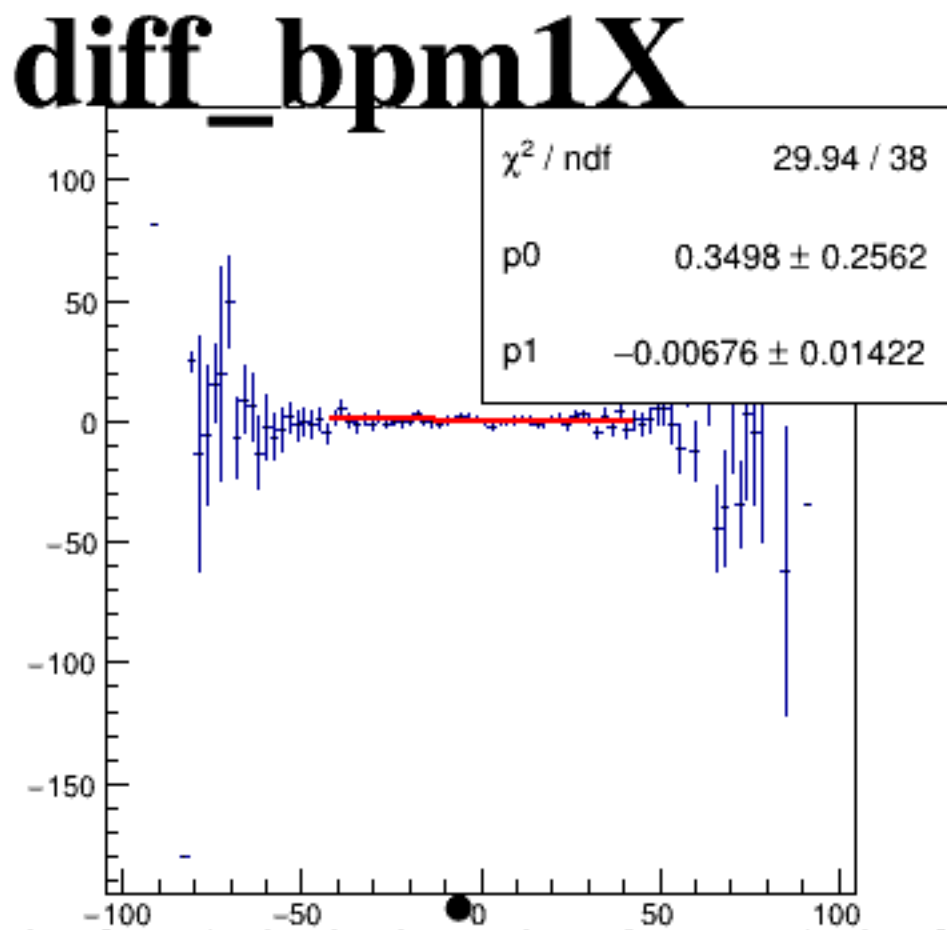
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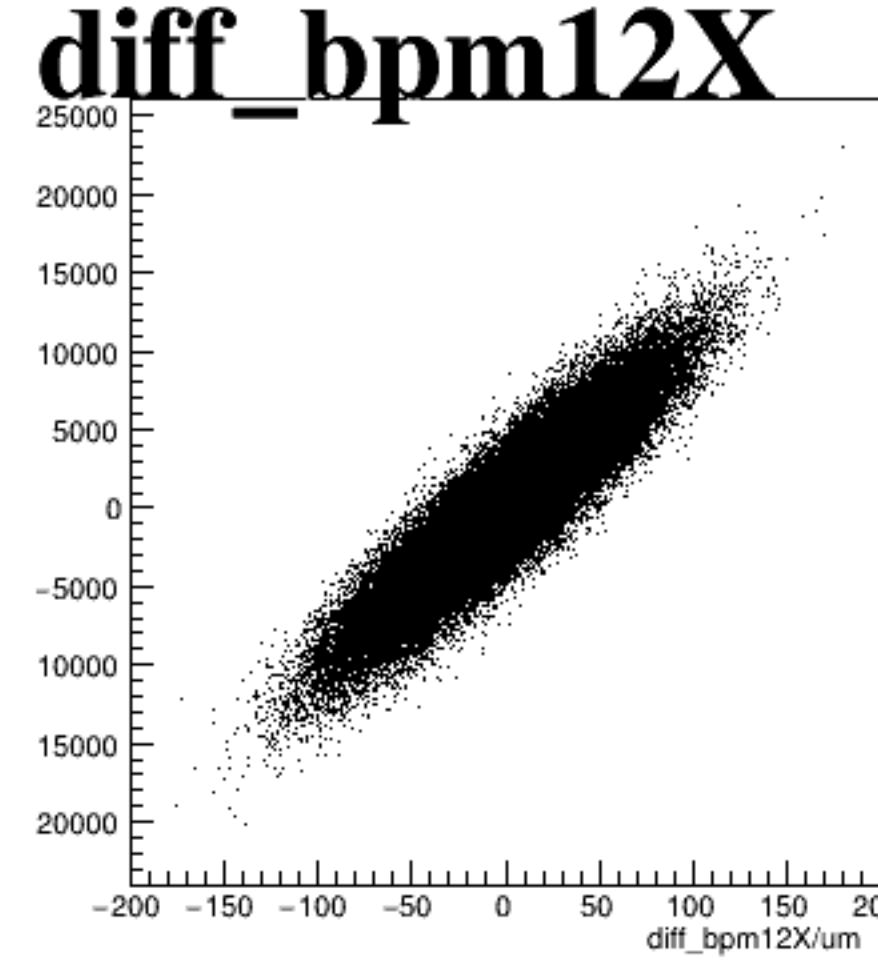
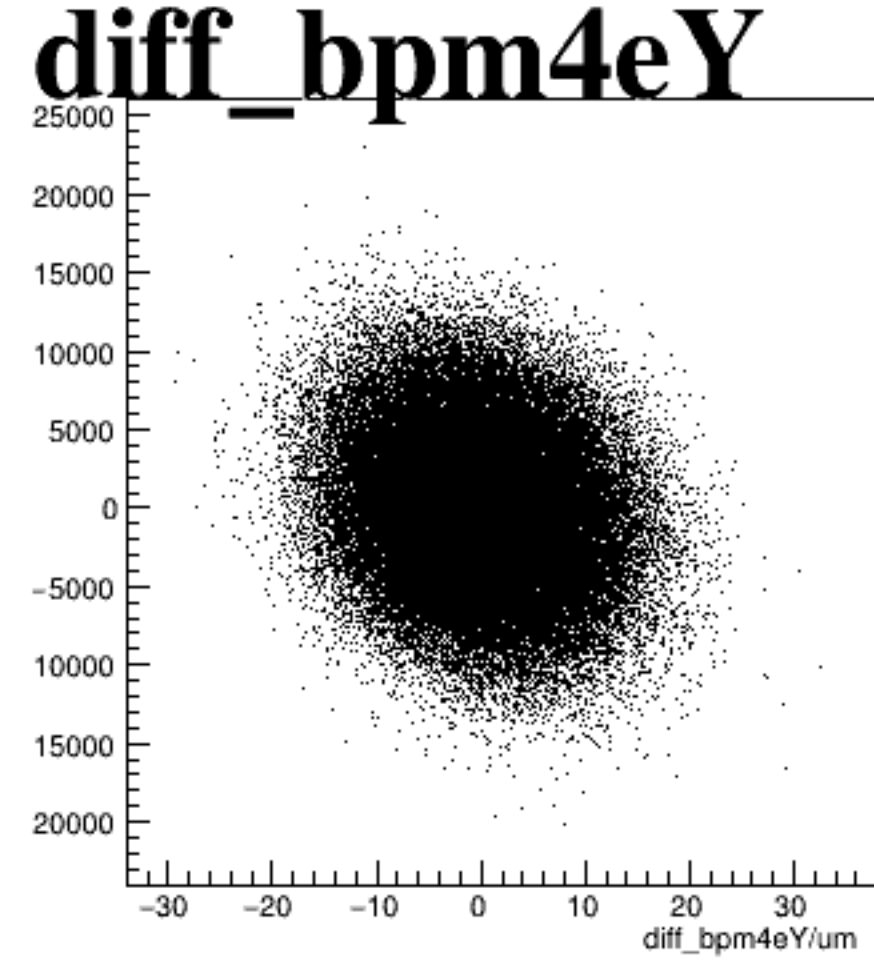
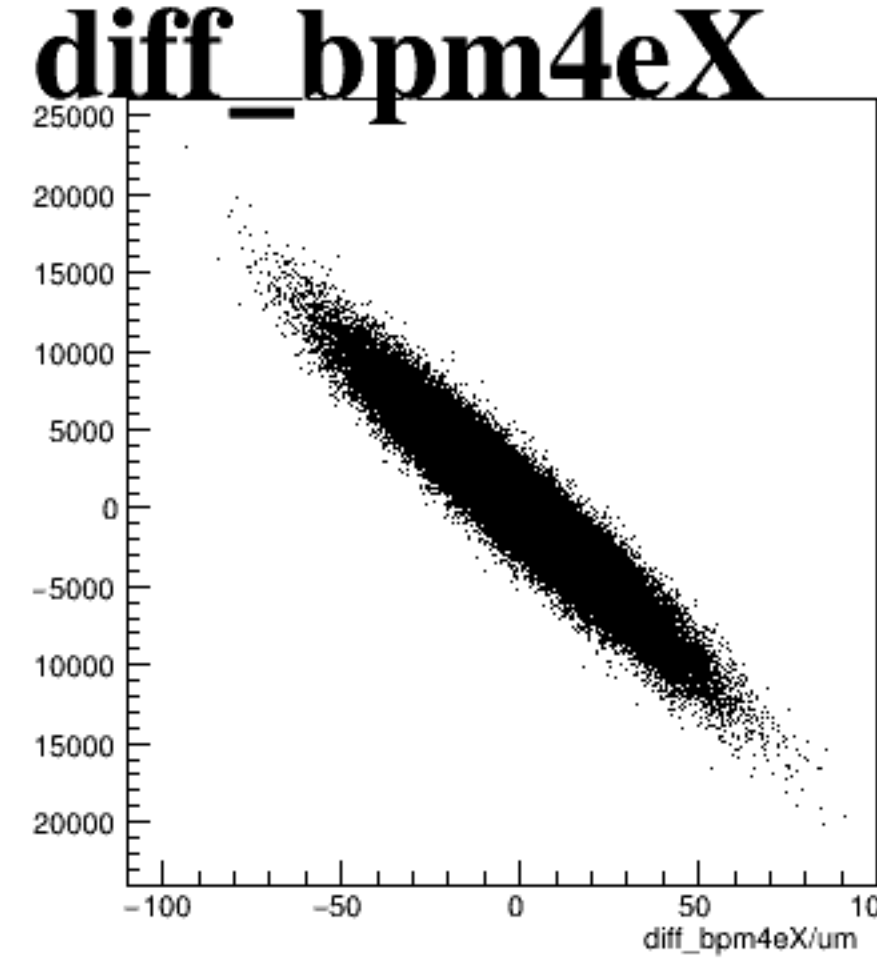
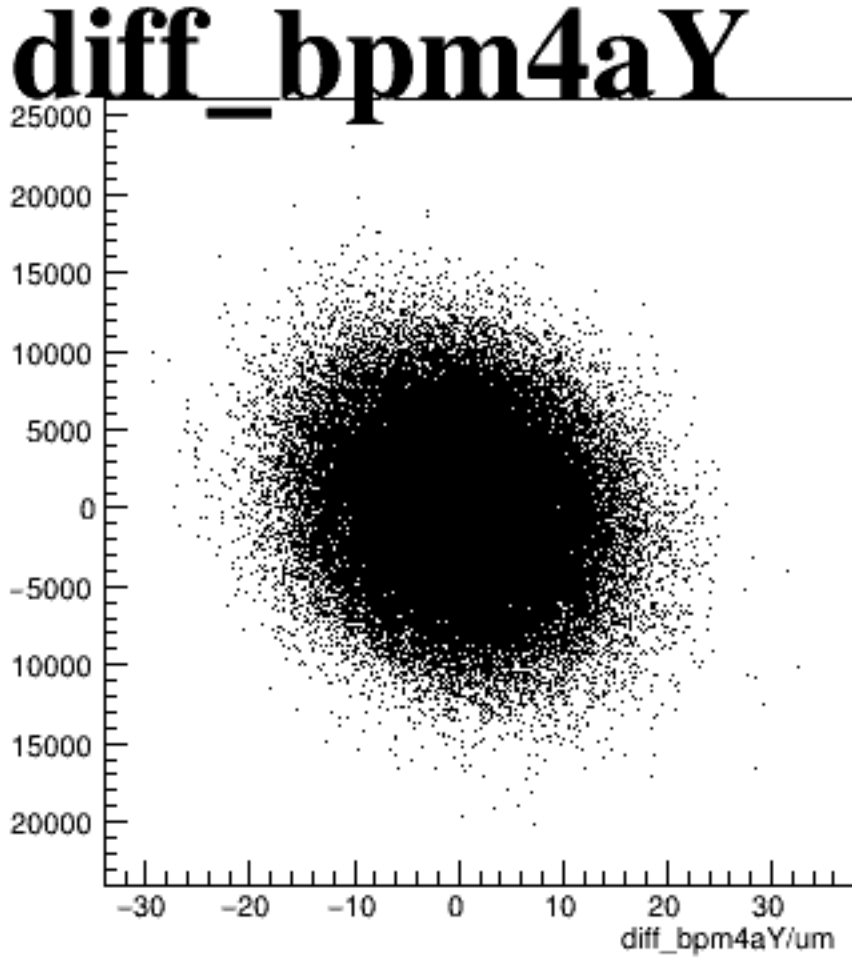
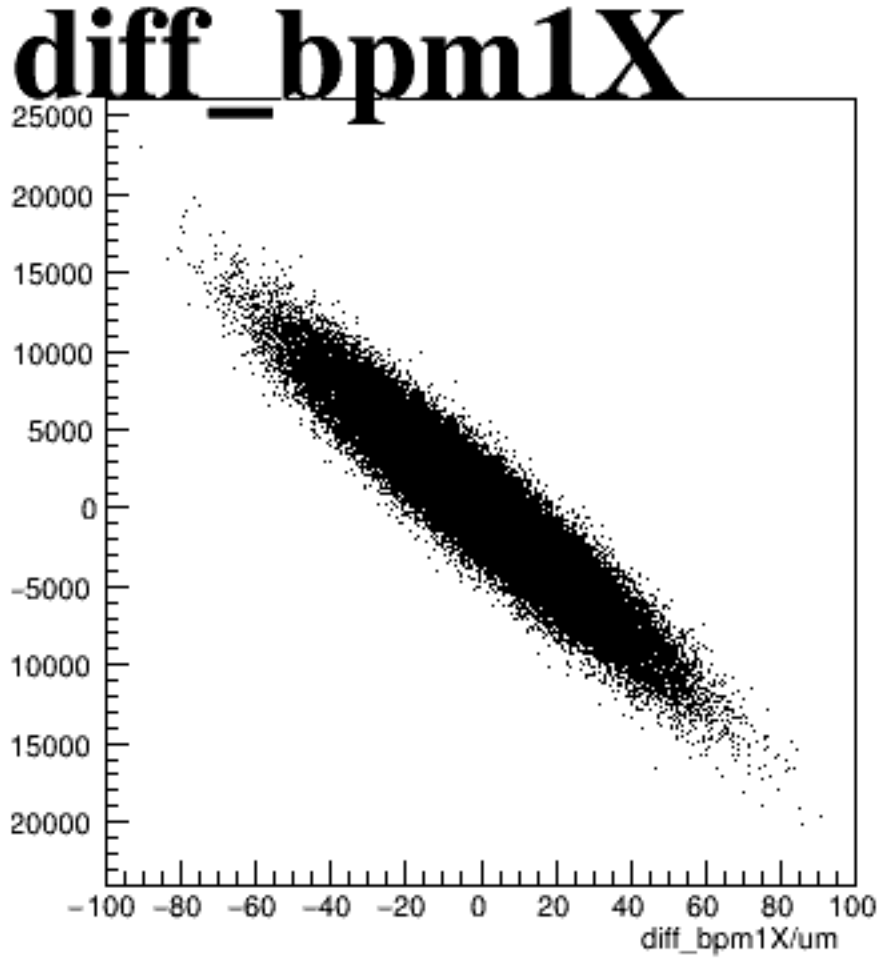
reg_asym_sam6



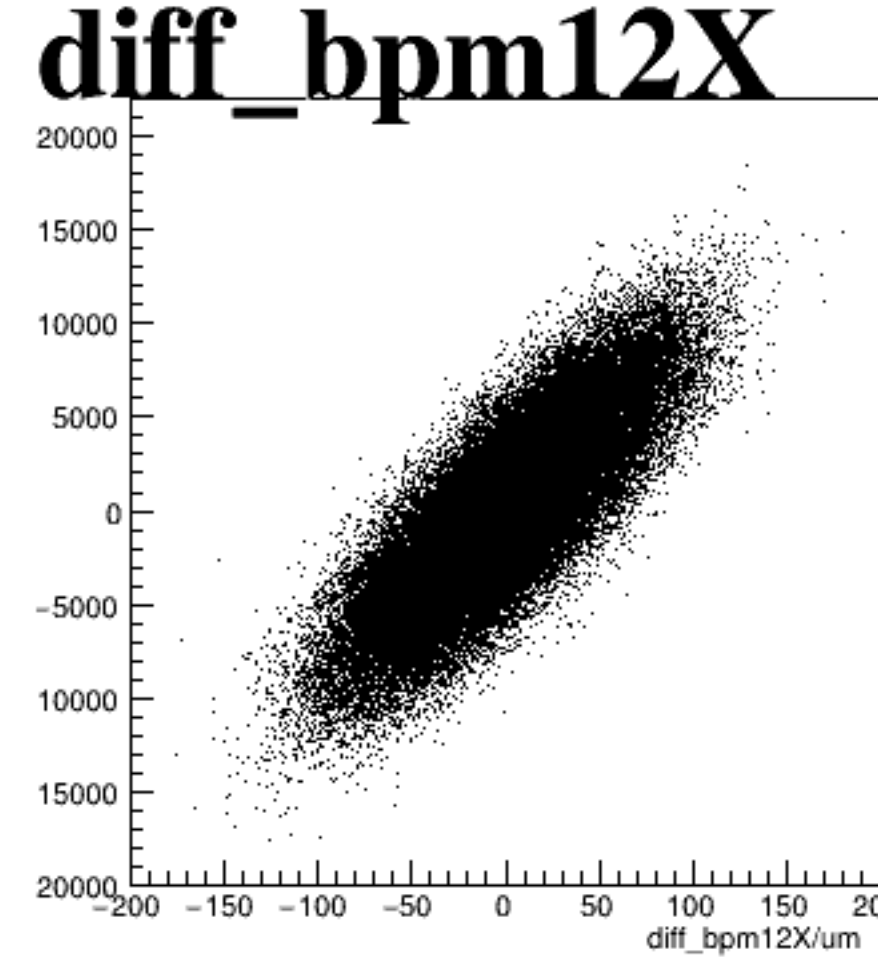
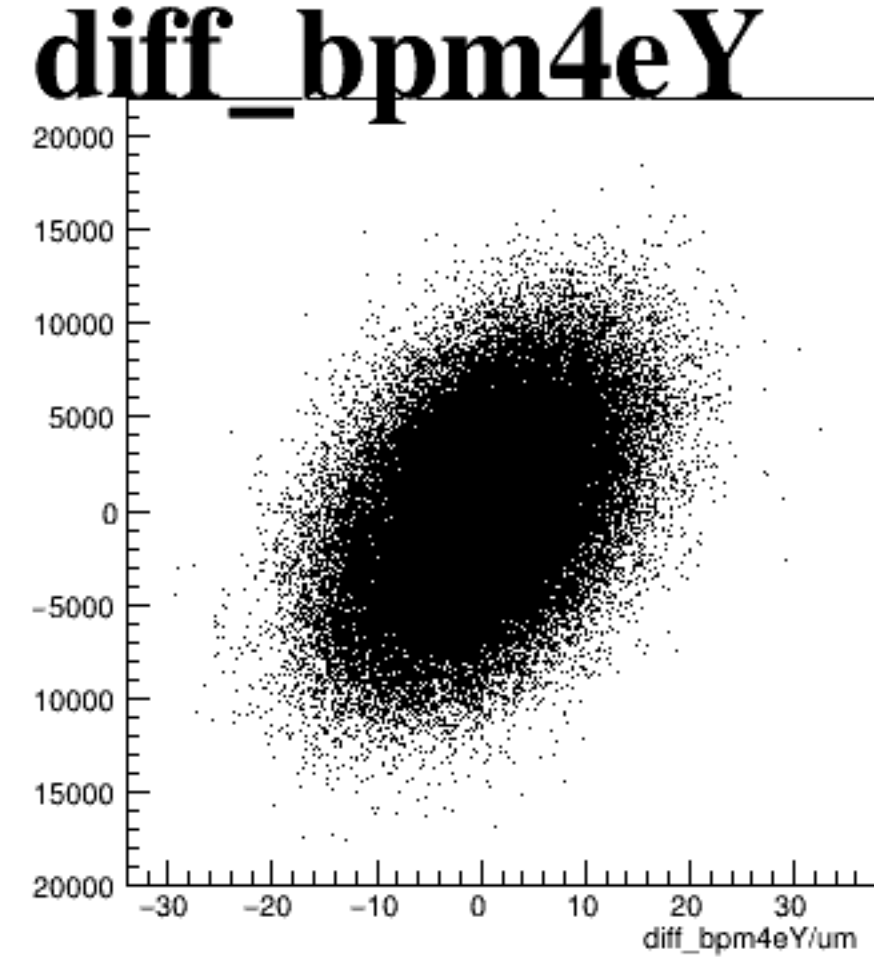
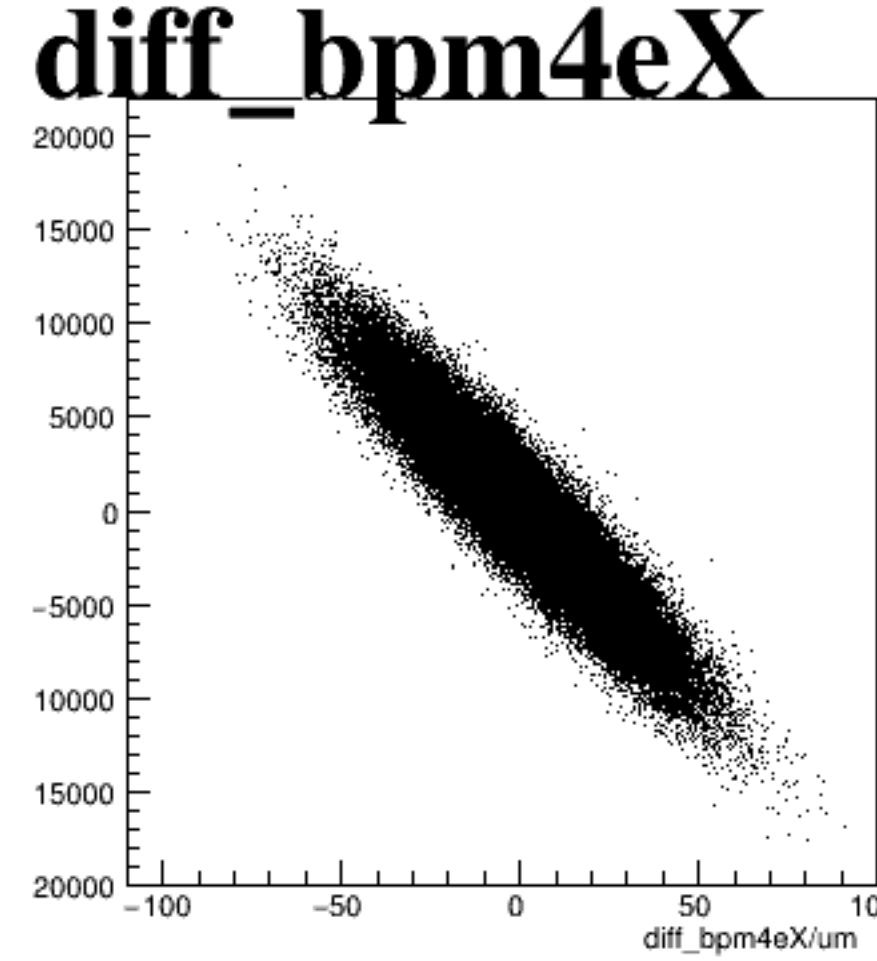
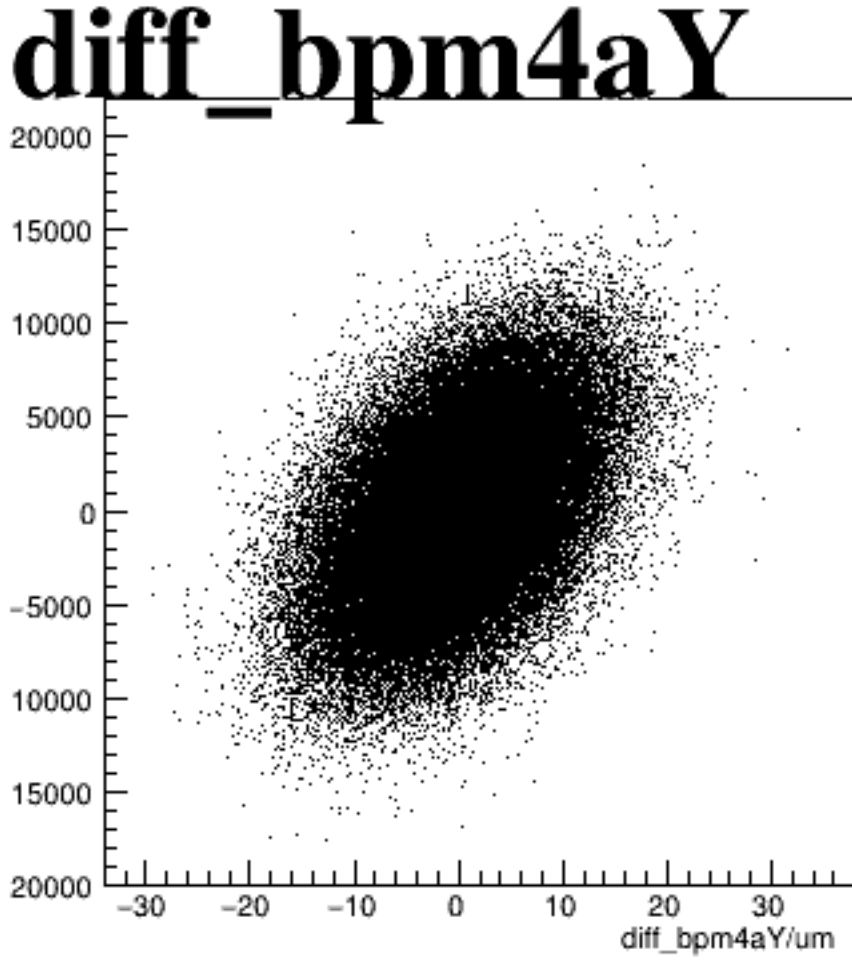
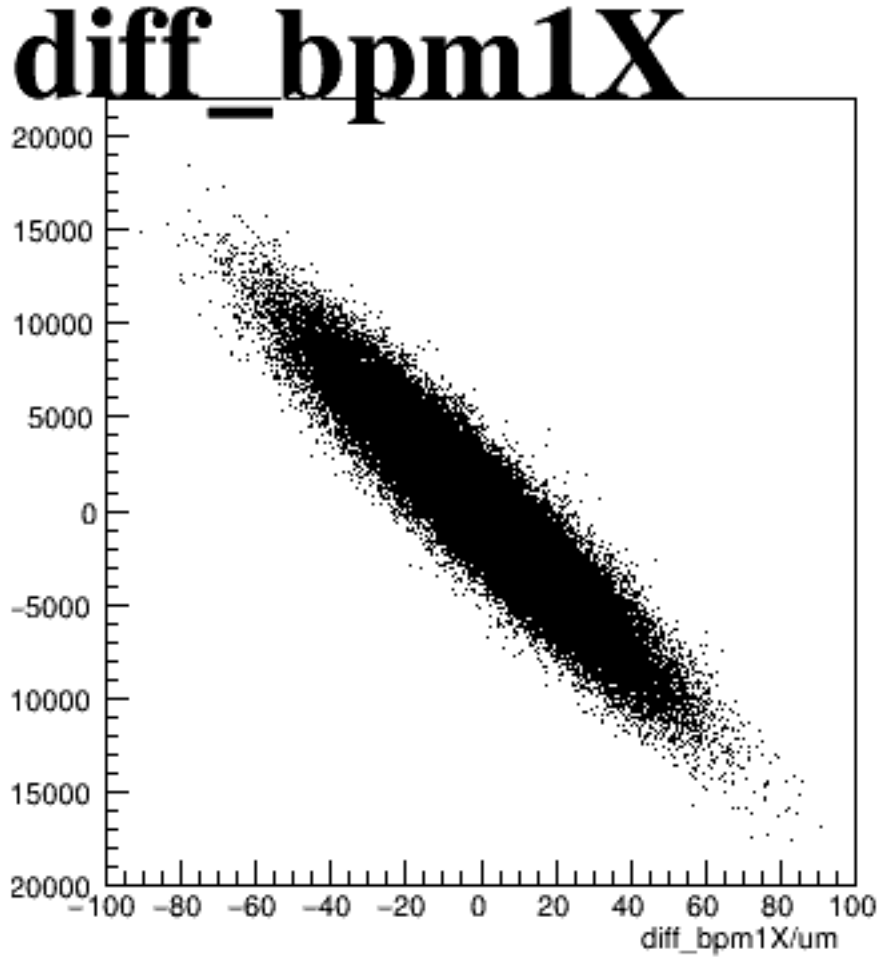
reg_asym_sam8



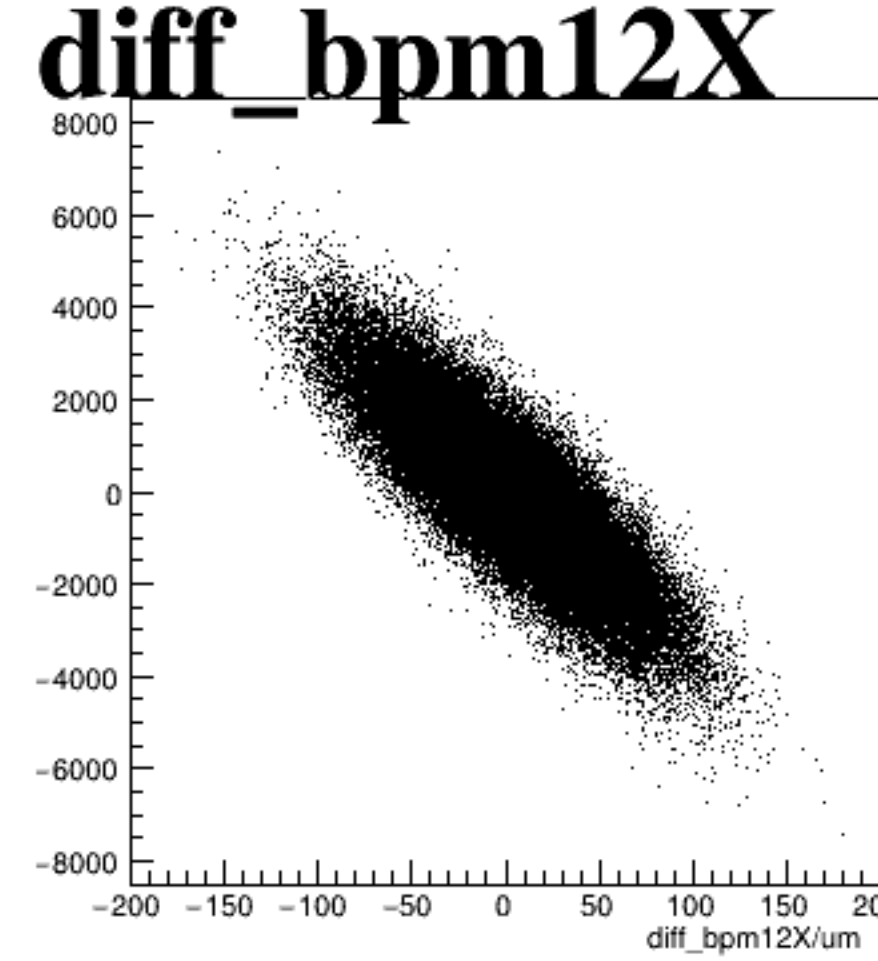
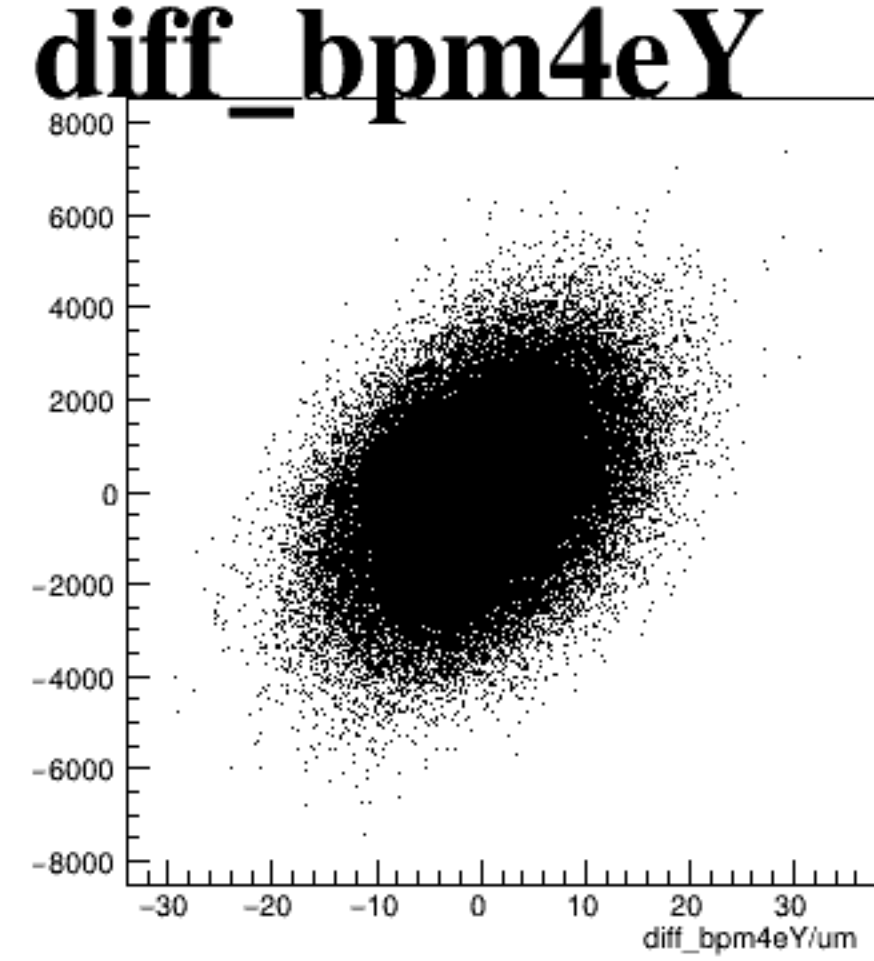
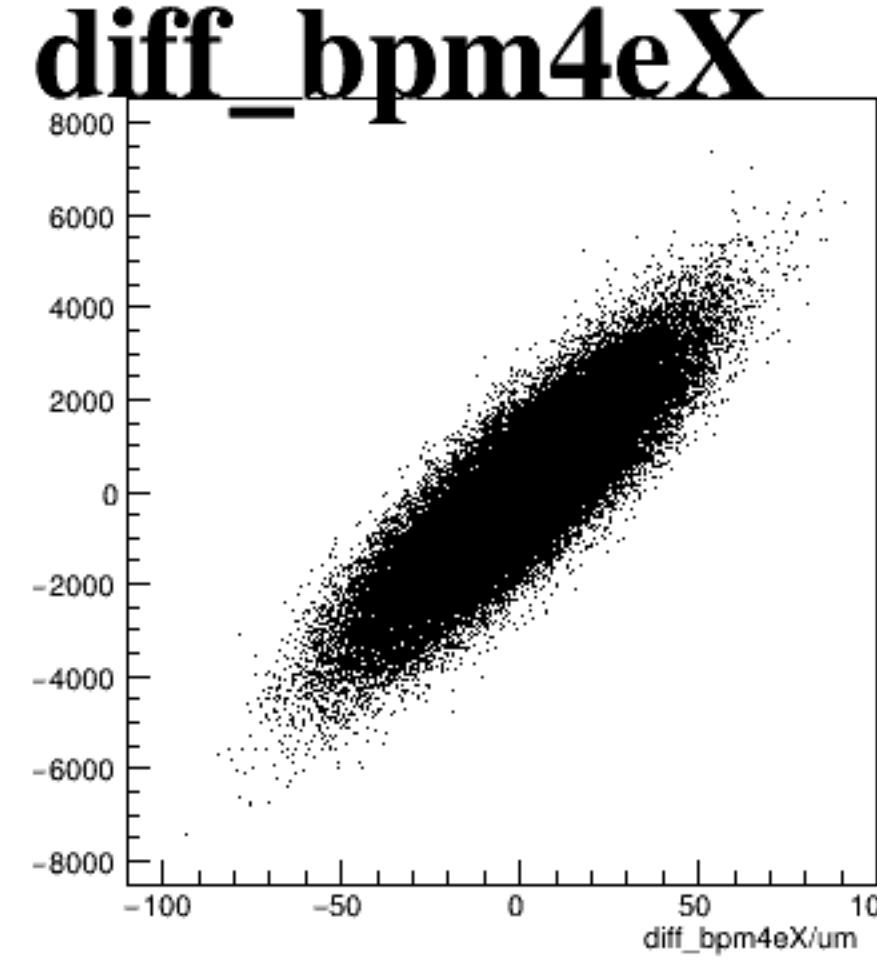
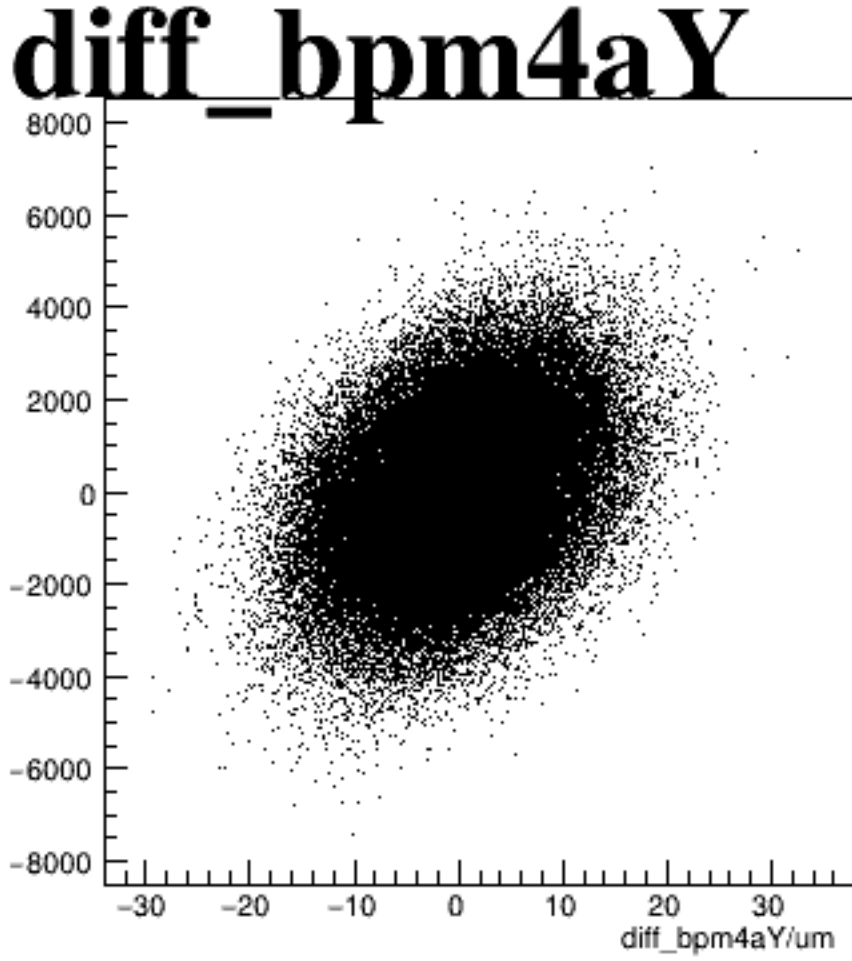
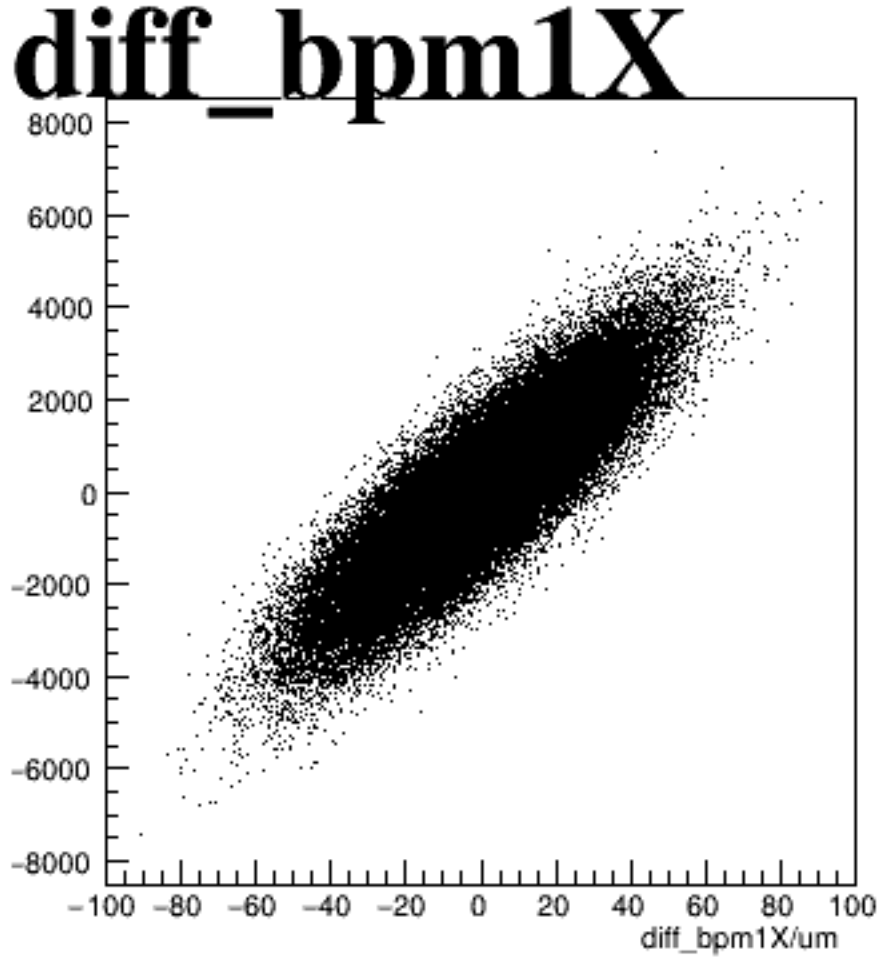
asym_sam2



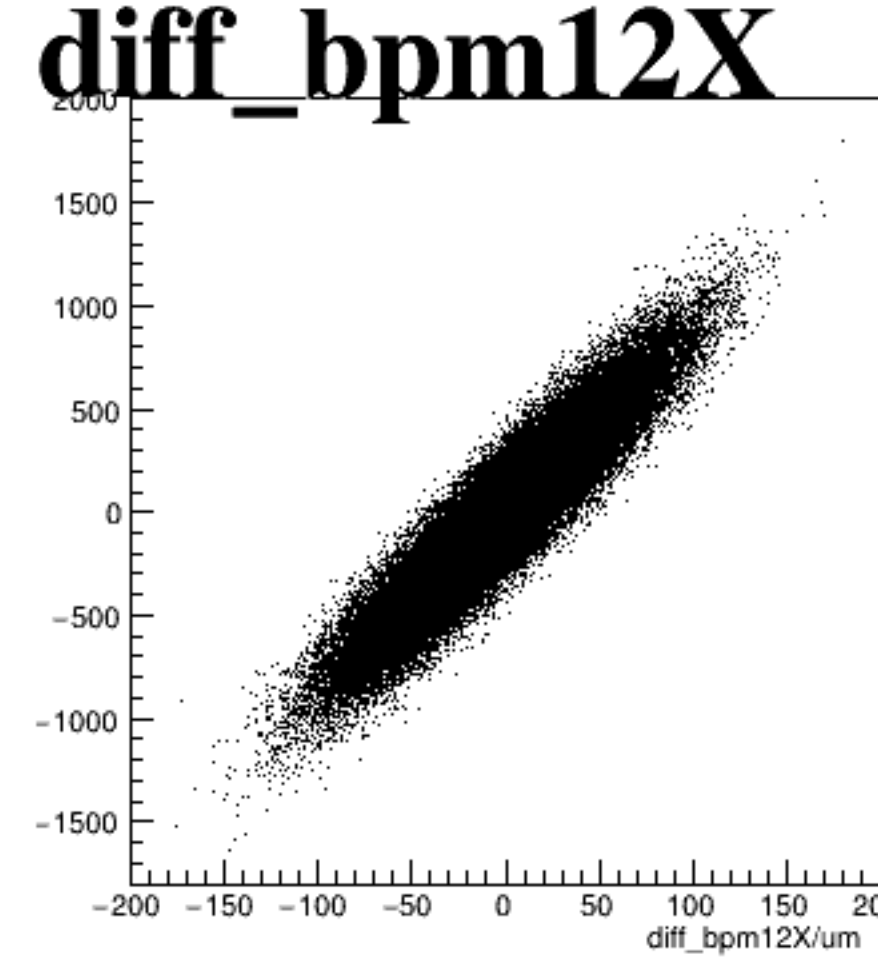
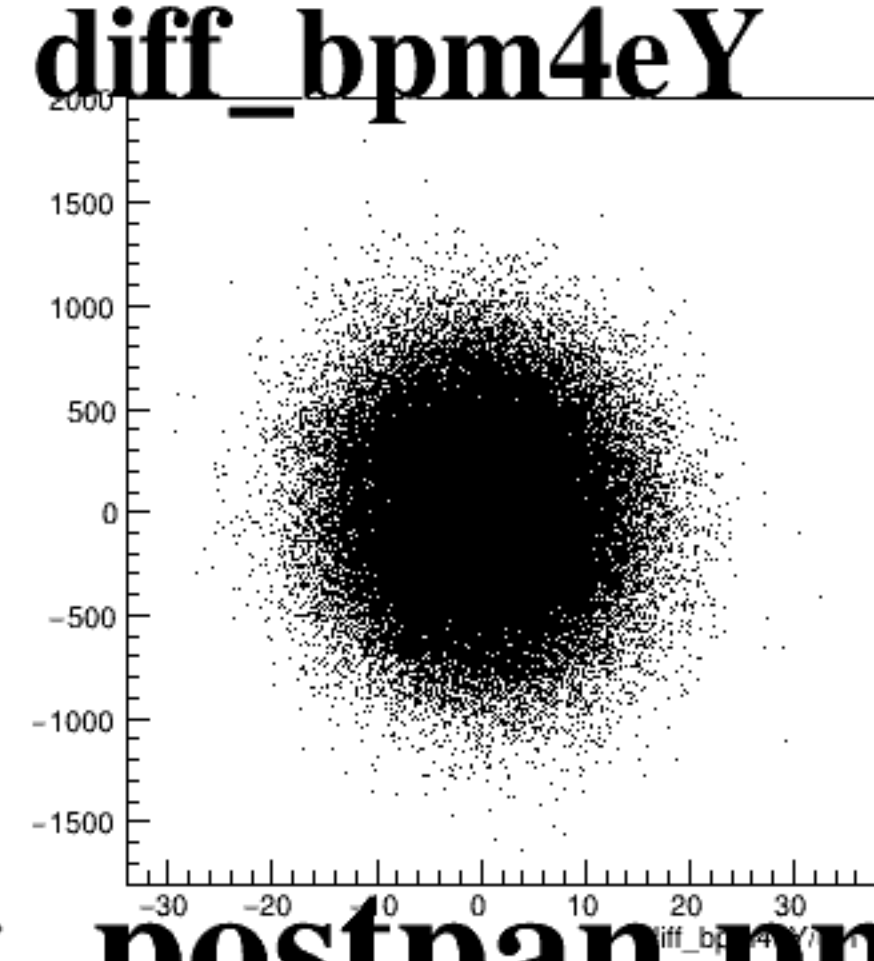
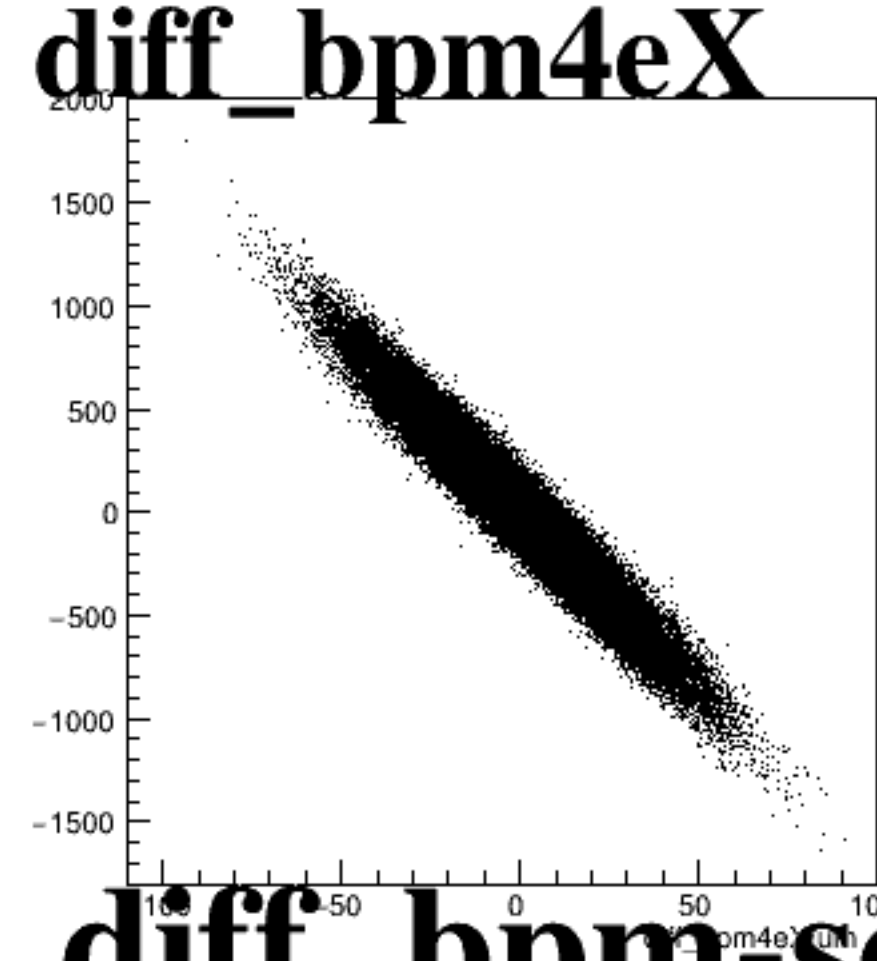
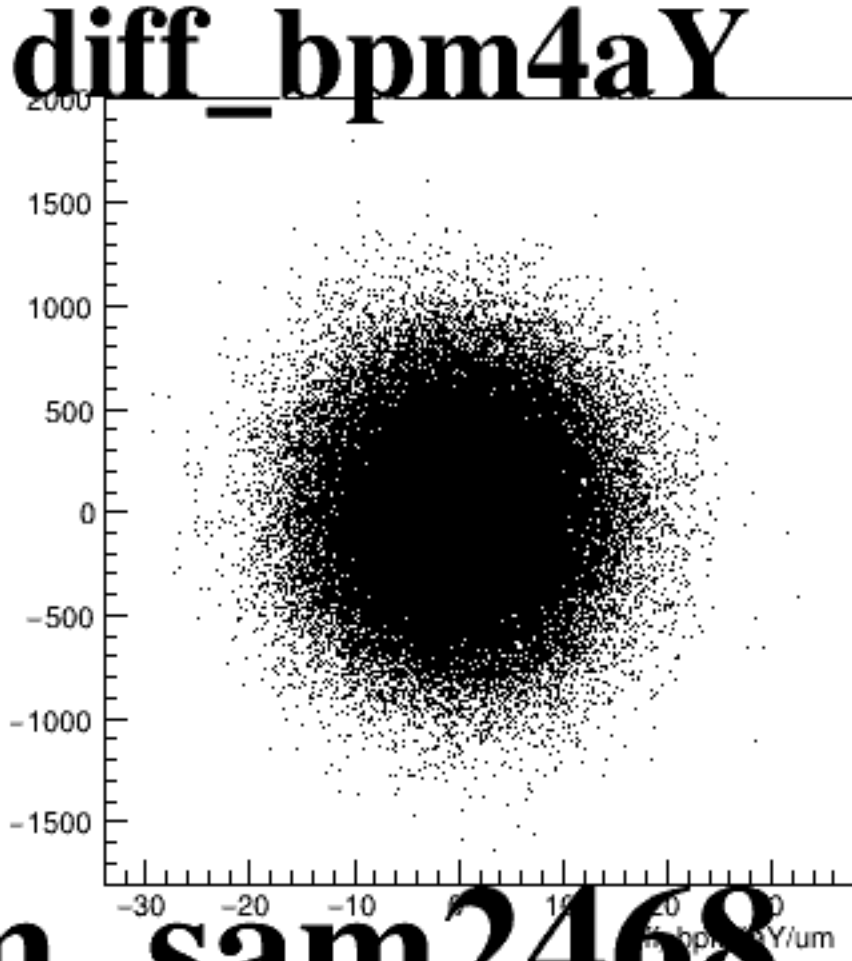
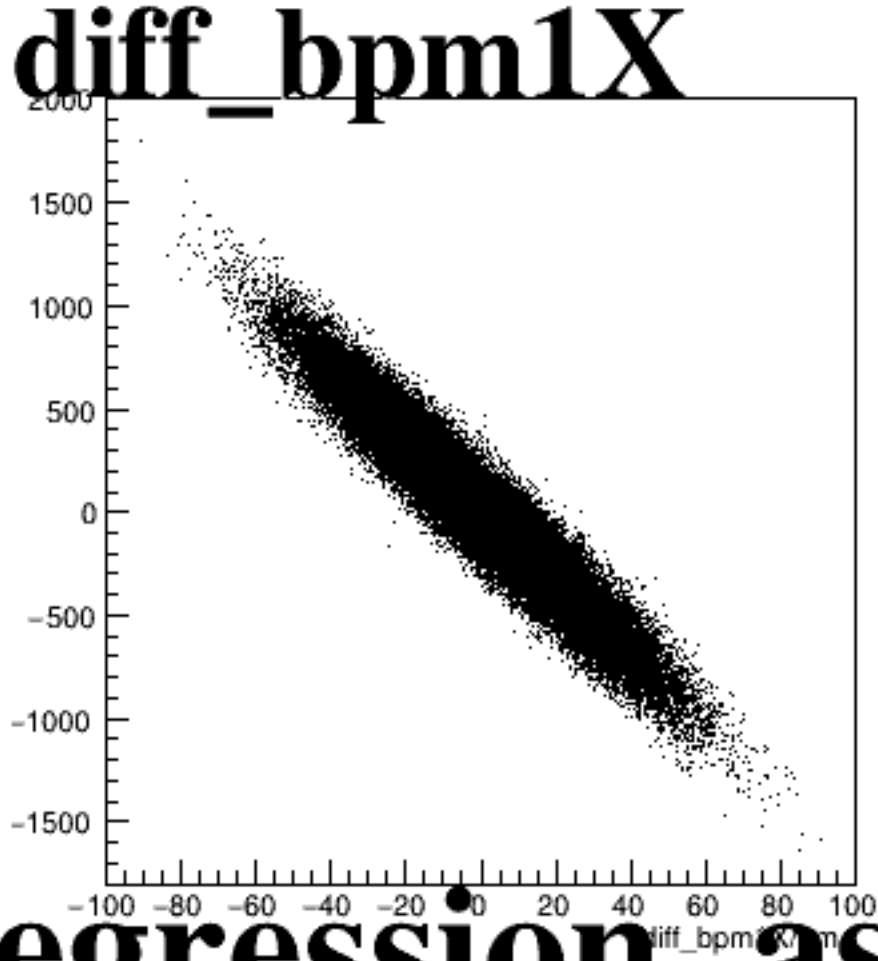
asym_sam4



asym_sam6



asym_sam8



The figure consists of five scatter plots arranged horizontally, each showing the difference in BPM coordinates for a specific beam size. The plots are titled as follows:

- diff_bpm1X**: The x-axis is labeled $\text{diff_bpm1X}/\mu\text{m}$ and ranges from -100 to 100. The y-axis is labeled $\text{diff_bpm1Y}/\mu\text{m}$ and ranges from -1500 to 1500.
- diff_bpm4aY**: The x-axis is labeled $\text{diff_bpm4aY}/\mu\text{m}$ and ranges from -30 to 30. The y-axis is labeled $\text{diff_bpm4aY}/\mu\text{m}$ and ranges from -1500 to 1500.
- diff_bpm4eX**: The x-axis is labeled $\text{diff_bpm4eX}/\mu\text{m}$ and ranges from -100 to 100. The y-axis is labeled $\text{diff_bpm4eY}/\mu\text{m}$ and ranges from -1500 to 1500.
- diff_bpm4eY**: The x-axis is labeled $\text{diff_bpm4eY}/\mu\text{m}$ and ranges from -30 to 30. The y-axis is labeled $\text{diff_bpm4eY}/\mu\text{m}$ and ranges from -1500 to 1500.
- diff_bpm12X**: The x-axis is labeled $\text{diff_bpm12X}/\mu\text{m}$ and ranges from -200 to 200. The y-axis is labeled $\text{diff_bpm12Y}/\mu\text{m}$ and ranges from -1500 to 1500.

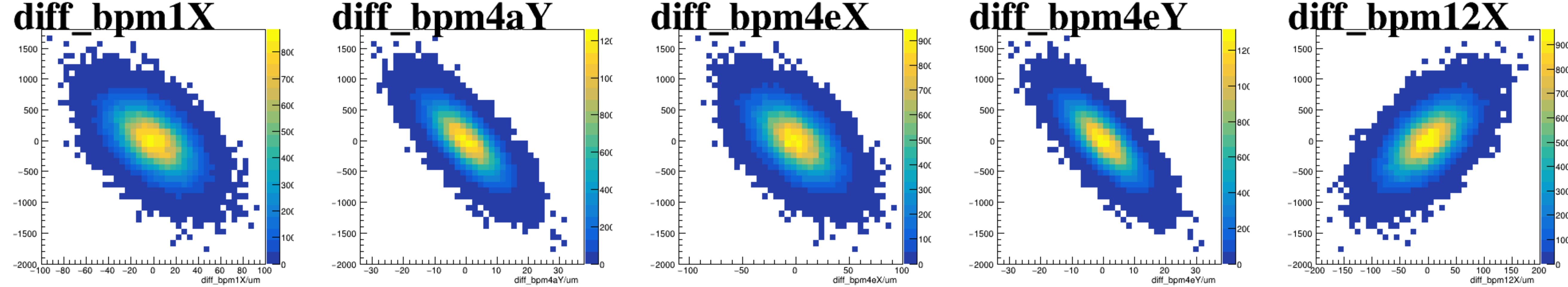
Each plot displays a dense, roughly circular distribution of points centered at the origin, representing the difference in BPM coordinates for the specified beam size. The distributions are centered at (0,0) in each plot's coordinate system.

Figure 1 displays five scatter plots showing the difference in beam position measurements (diff_bpm) for different beam parameters. The plots are:

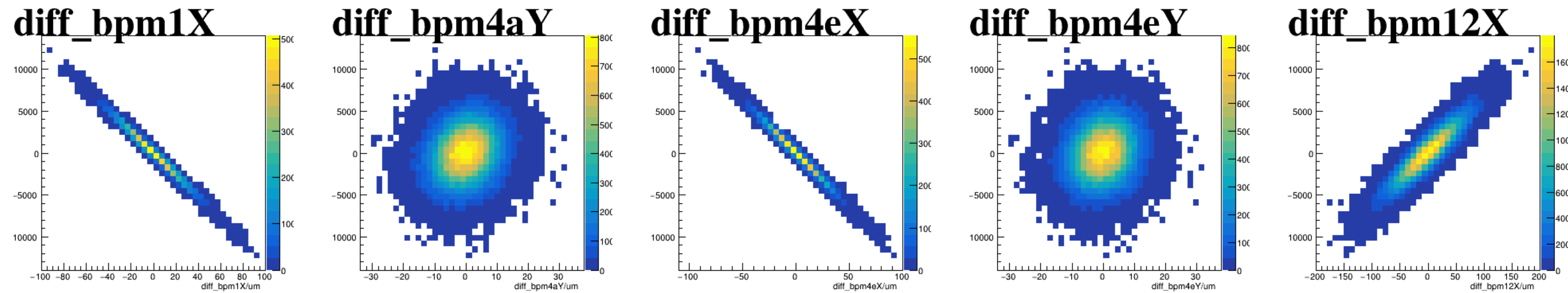
- diff_bpm1X**: Shows the difference in beam position measurements for the 1X parameter. The x-axis ranges from -100 to 100, and the y-axis ranges from -1500 to 2000.
- diff_bpm4aY**: Shows the difference in beam position measurements for the 4aY parameter. The x-axis ranges from -30 to 100, and the y-axis ranges from -1500 to 2000.
- diff_bpm4eX**: Shows the difference in beam position measurements for the 4eX parameter. The x-axis ranges from -100 to 100, and the y-axis ranges from -1500 to 2000.
- diff_bpm4eY**: Shows the difference in beam position measurements for the 4eY parameter. The x-axis ranges from -30 to 100, and the y-axis ranges from -1500 to 2000.
- diff_bpm12X**: Shows the difference in beam position measurements for the 12X parameter. The x-axis ranges from -200 to 200, and the y-axis ranges from -1500 to 2000.

Each plot shows a dense cloud of points centered around zero, indicating good agreement between measurements.

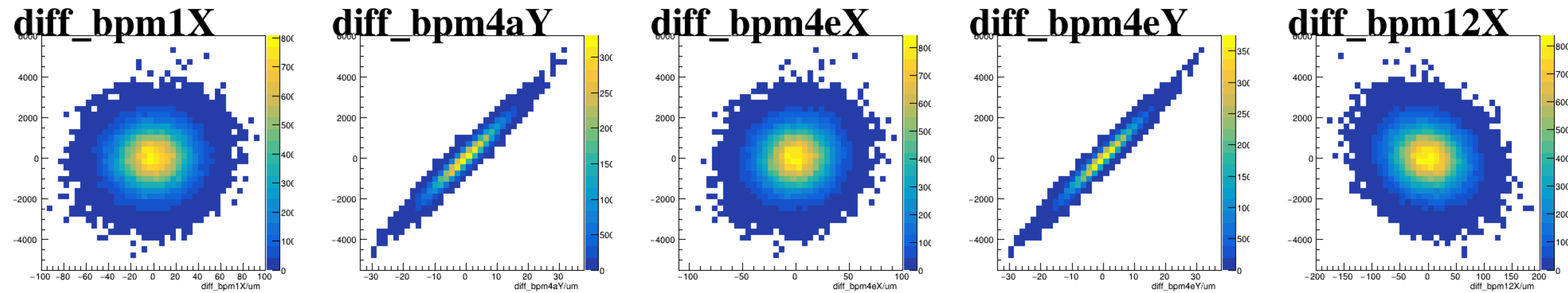
asym_sam1



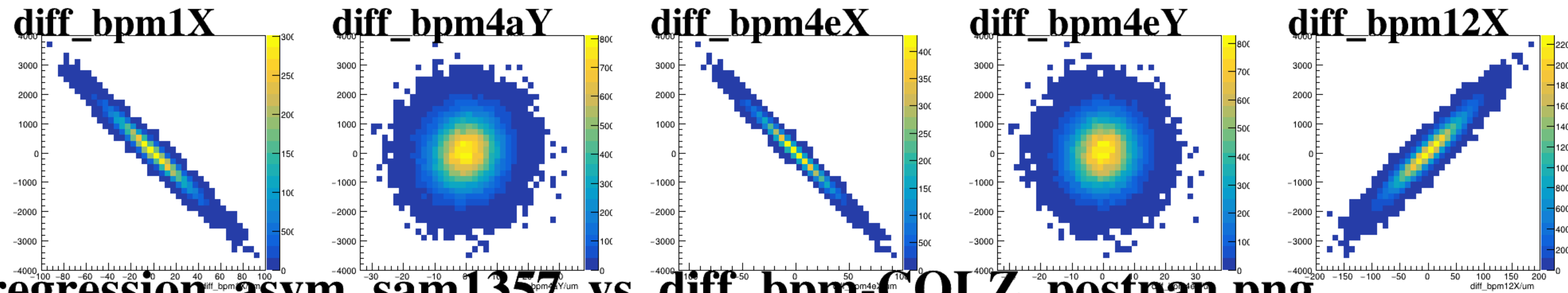
asym_sam3



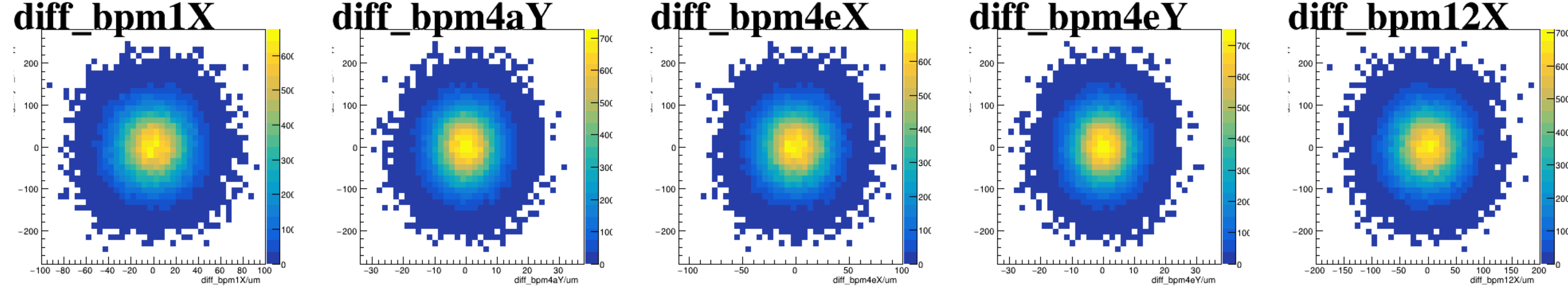
asym_sam5



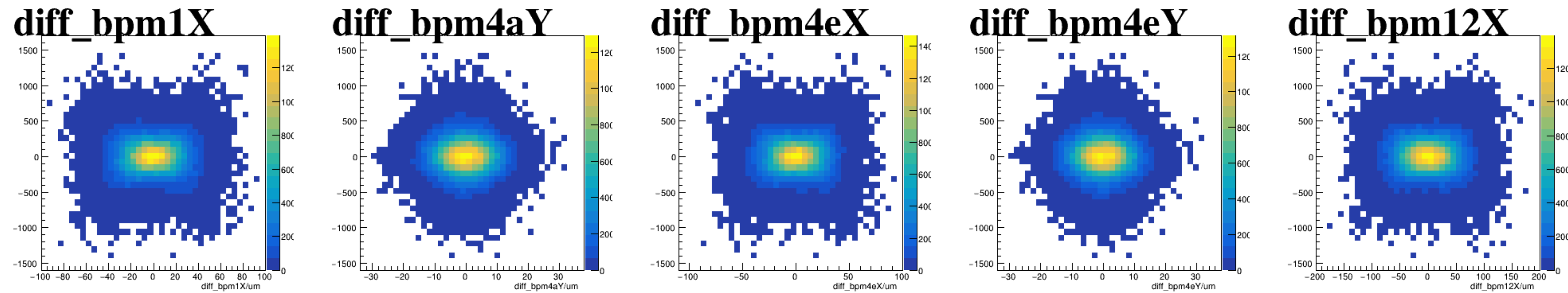
asym_sam7



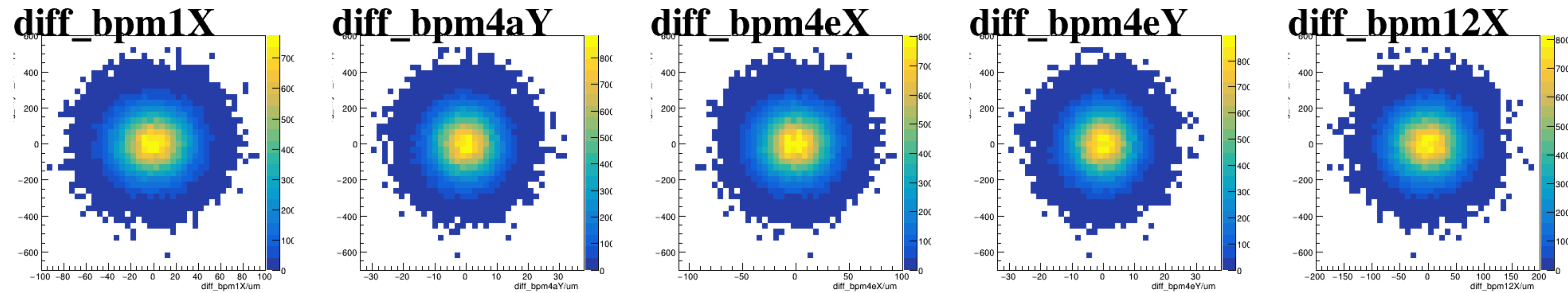
reg_asym_sam1



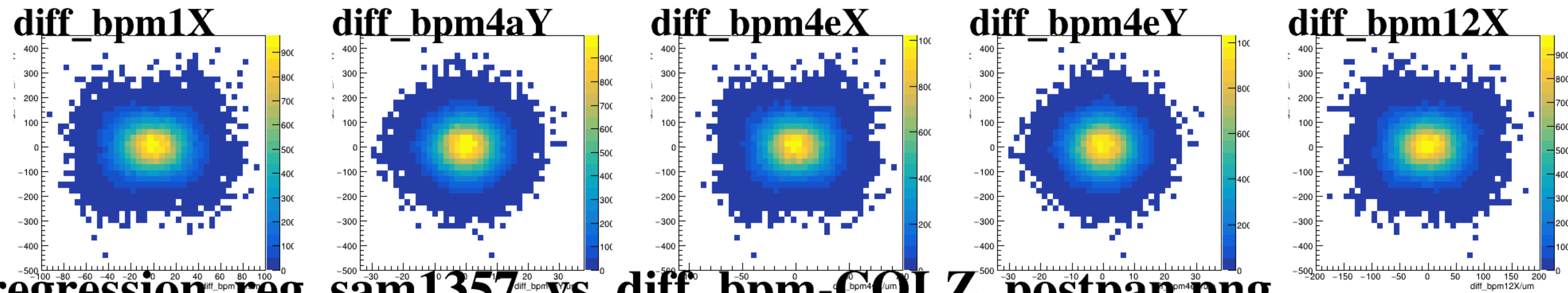
reg_asym_sam3



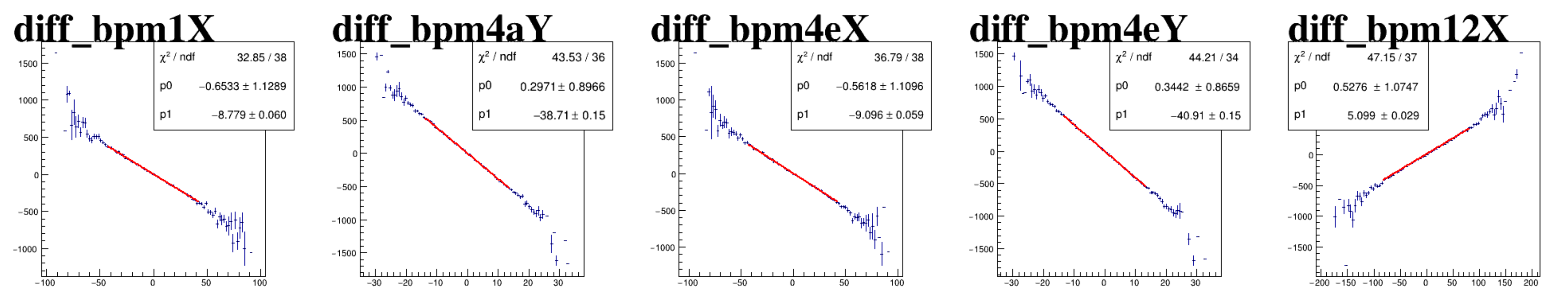
reg_asym_sam5



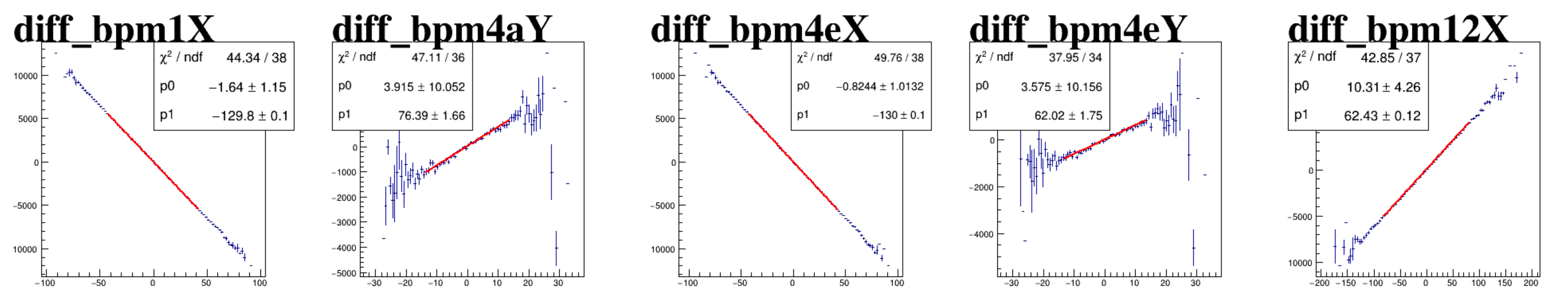
reg_asym_sam7



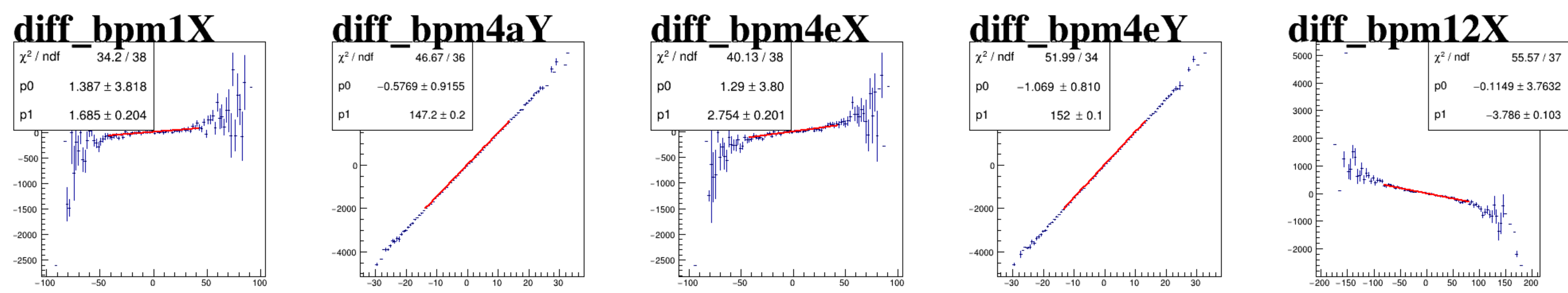
asym_sam1



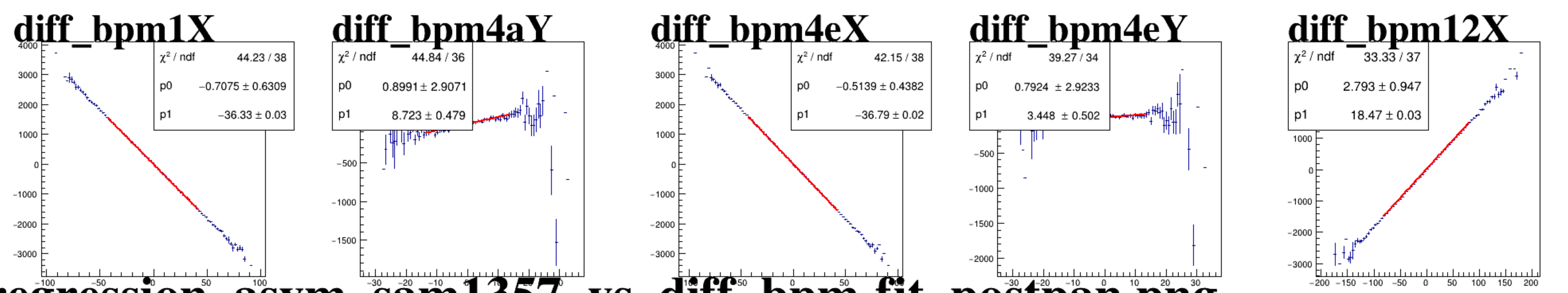
asym_sam3



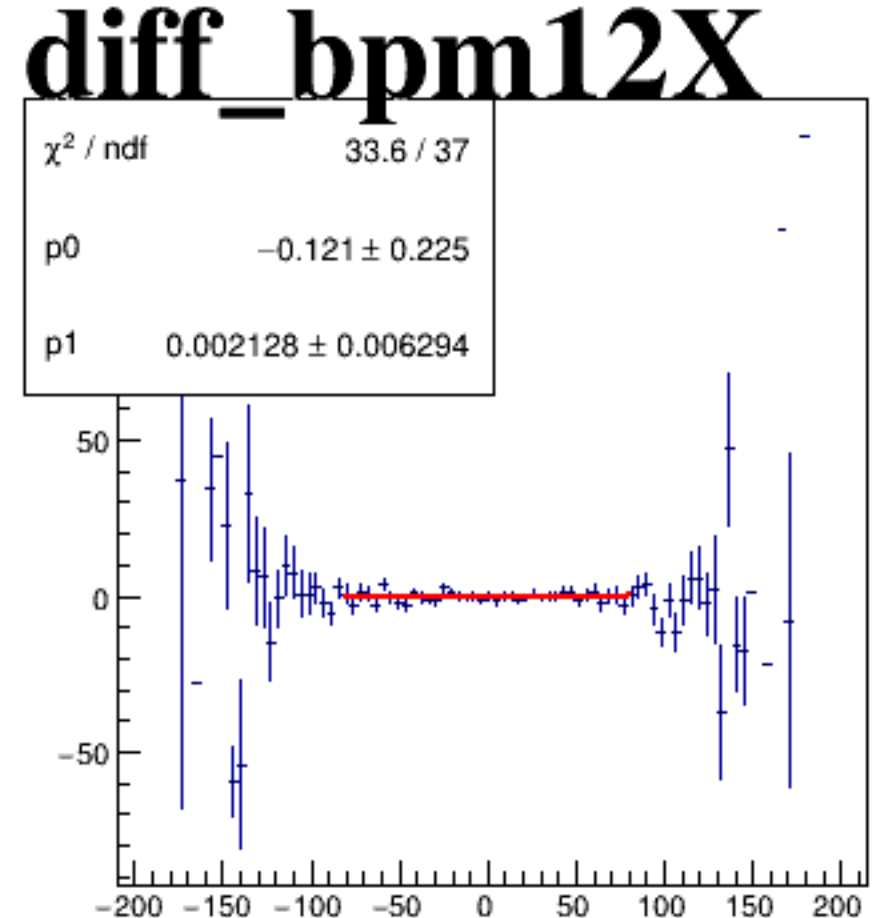
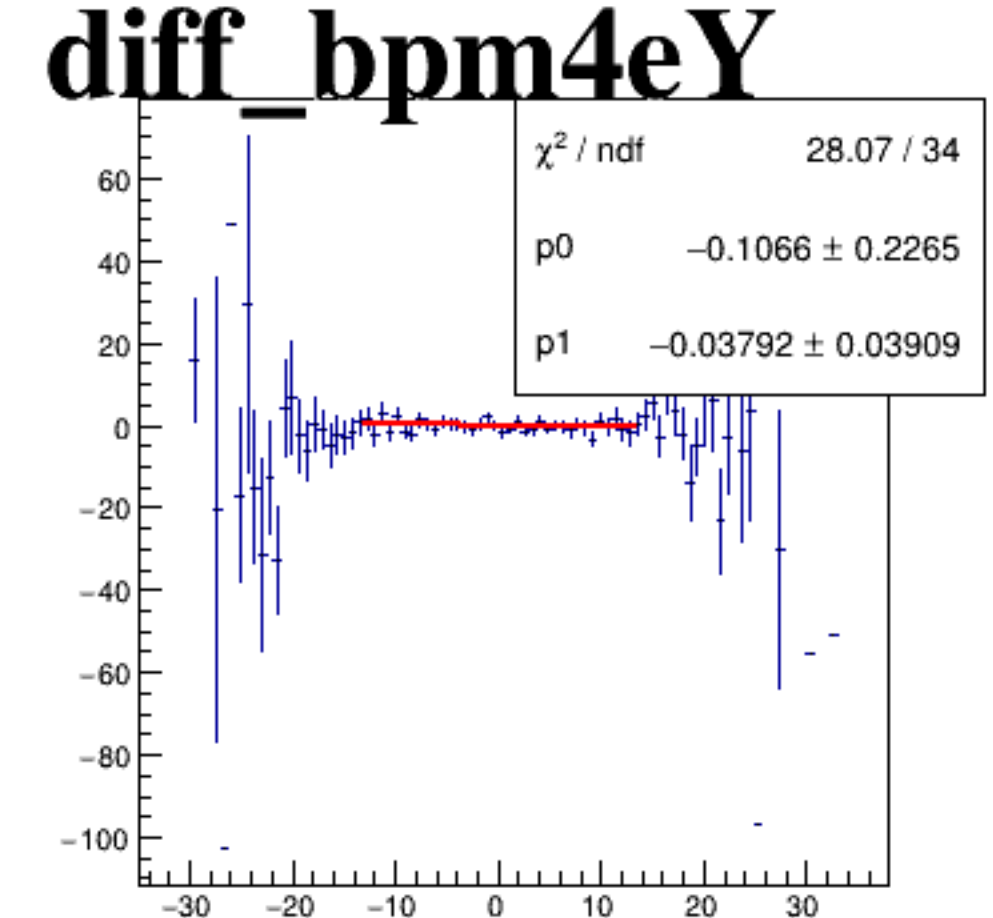
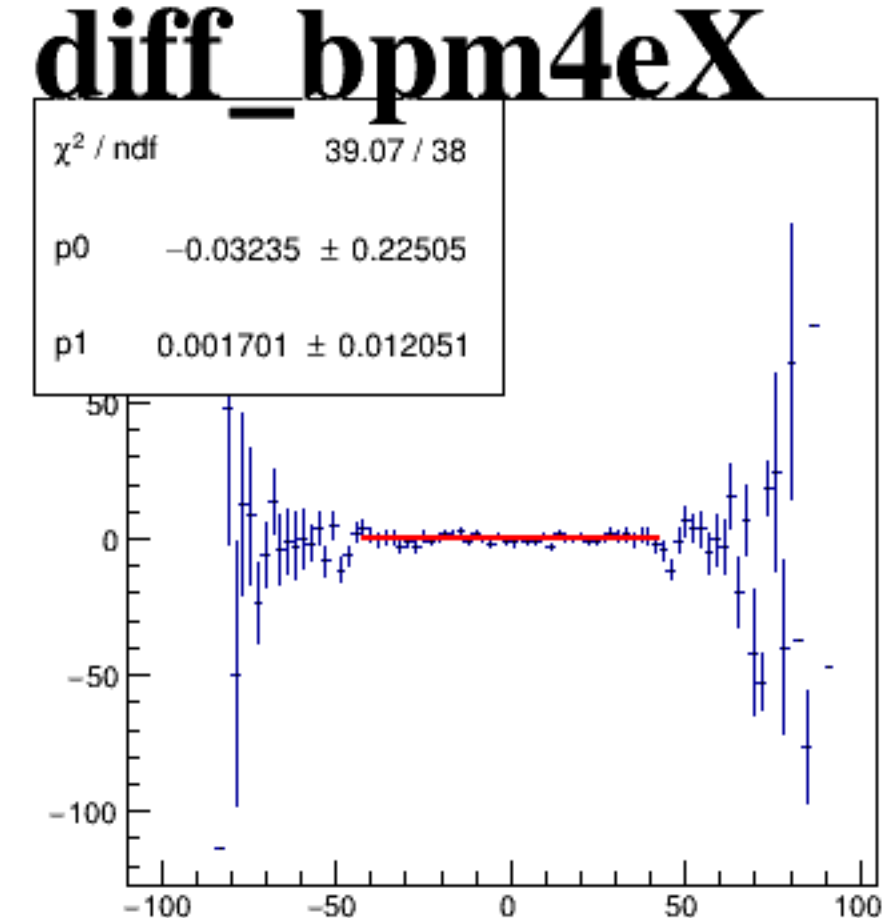
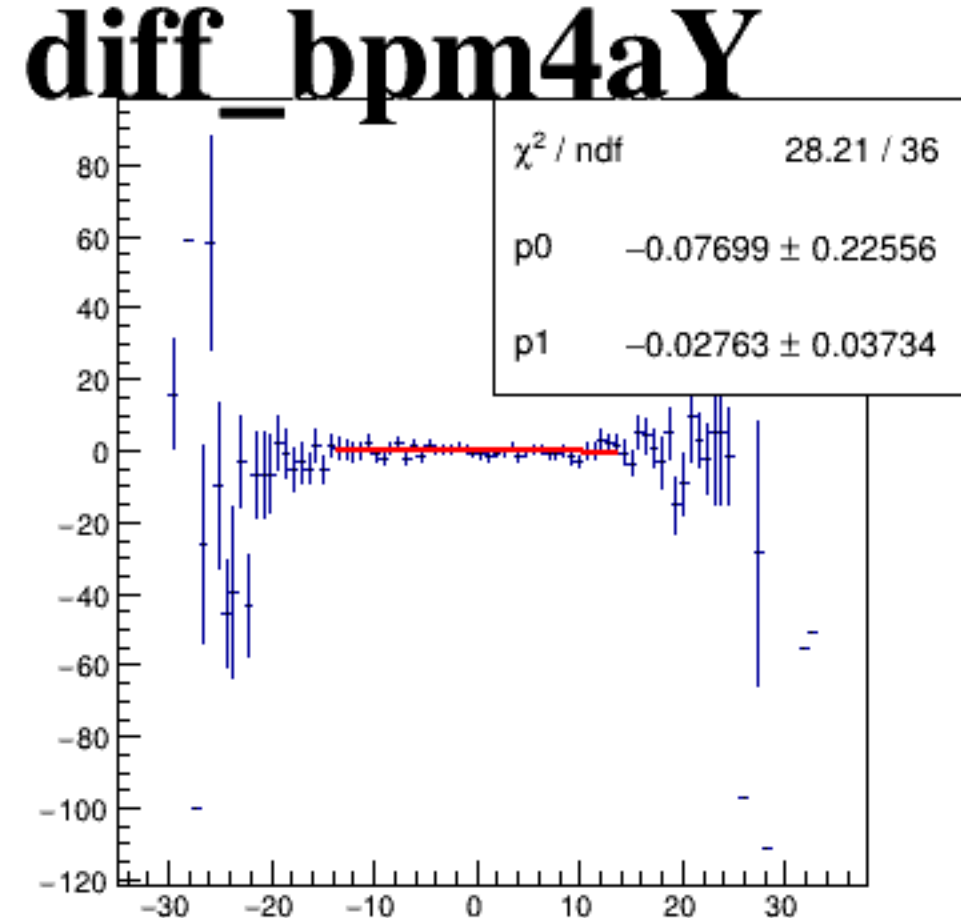
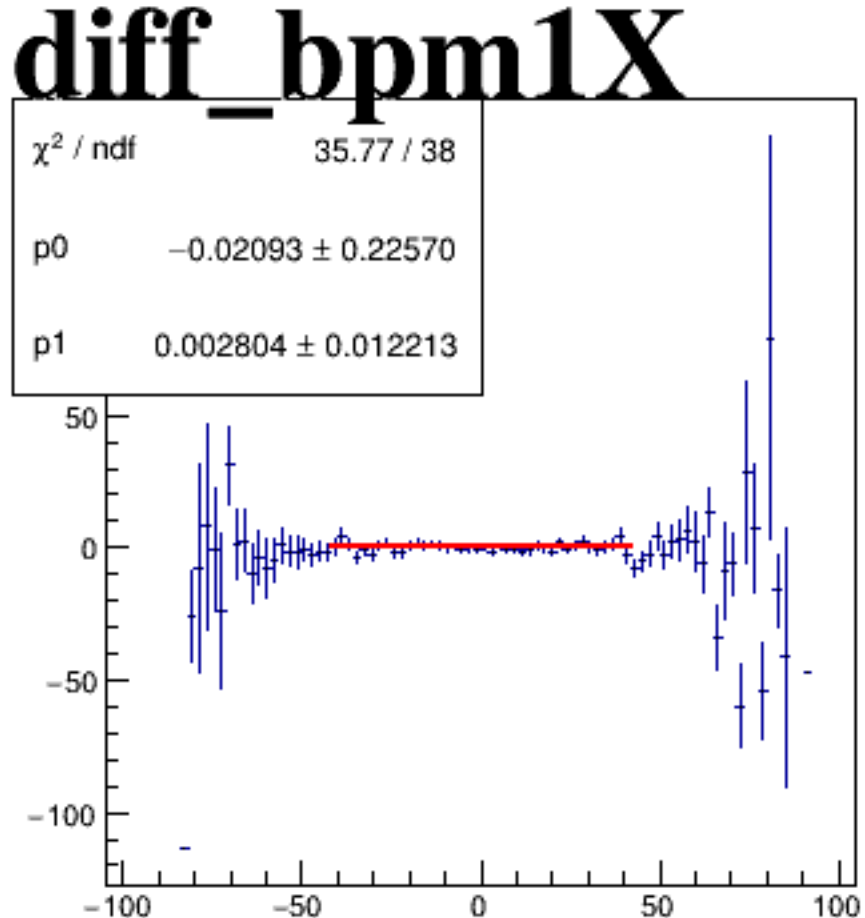
asym_sam5



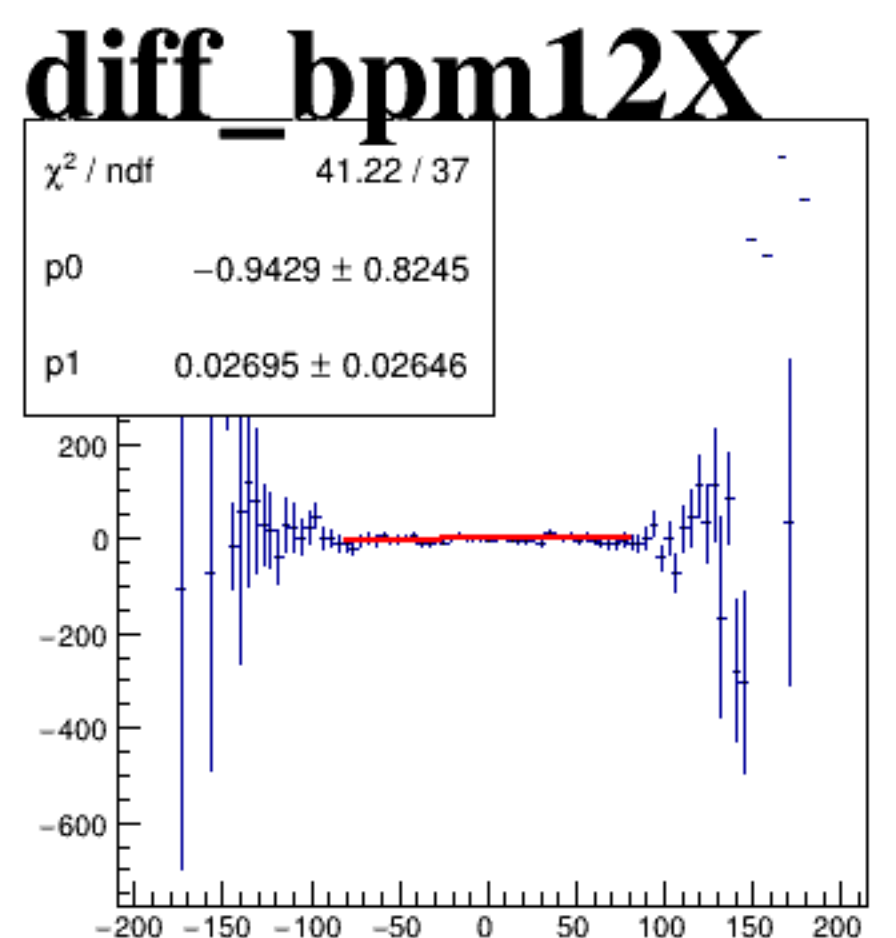
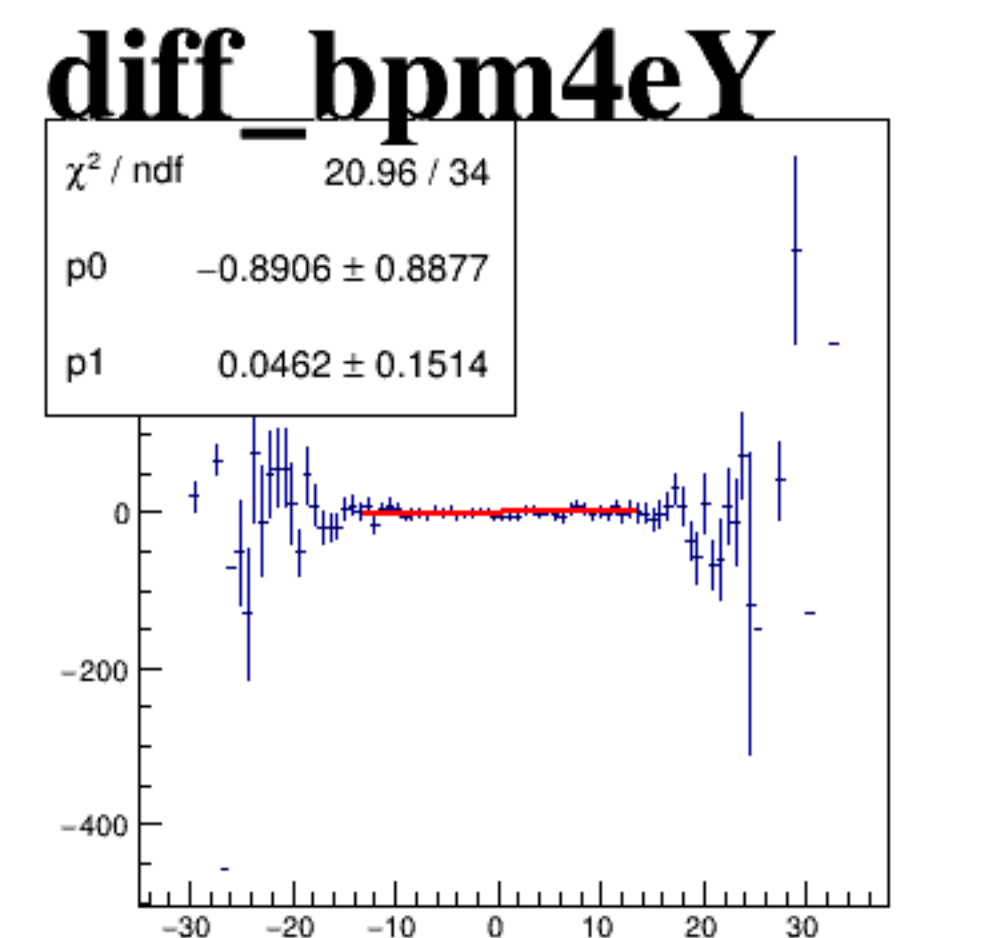
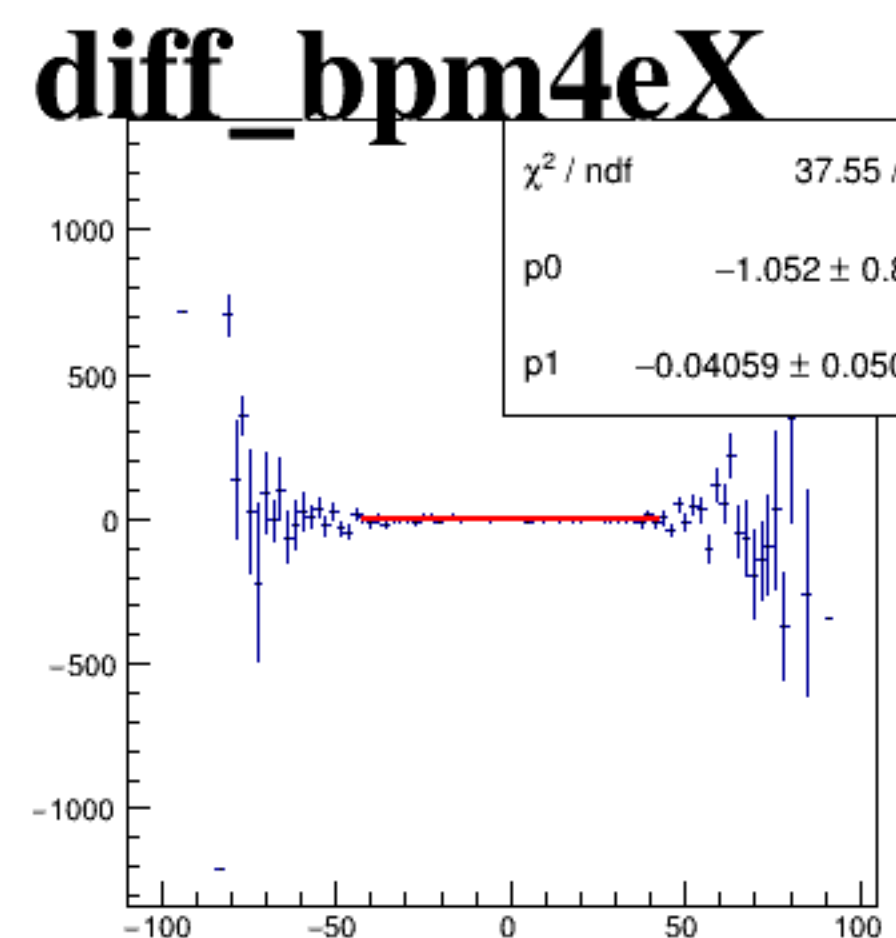
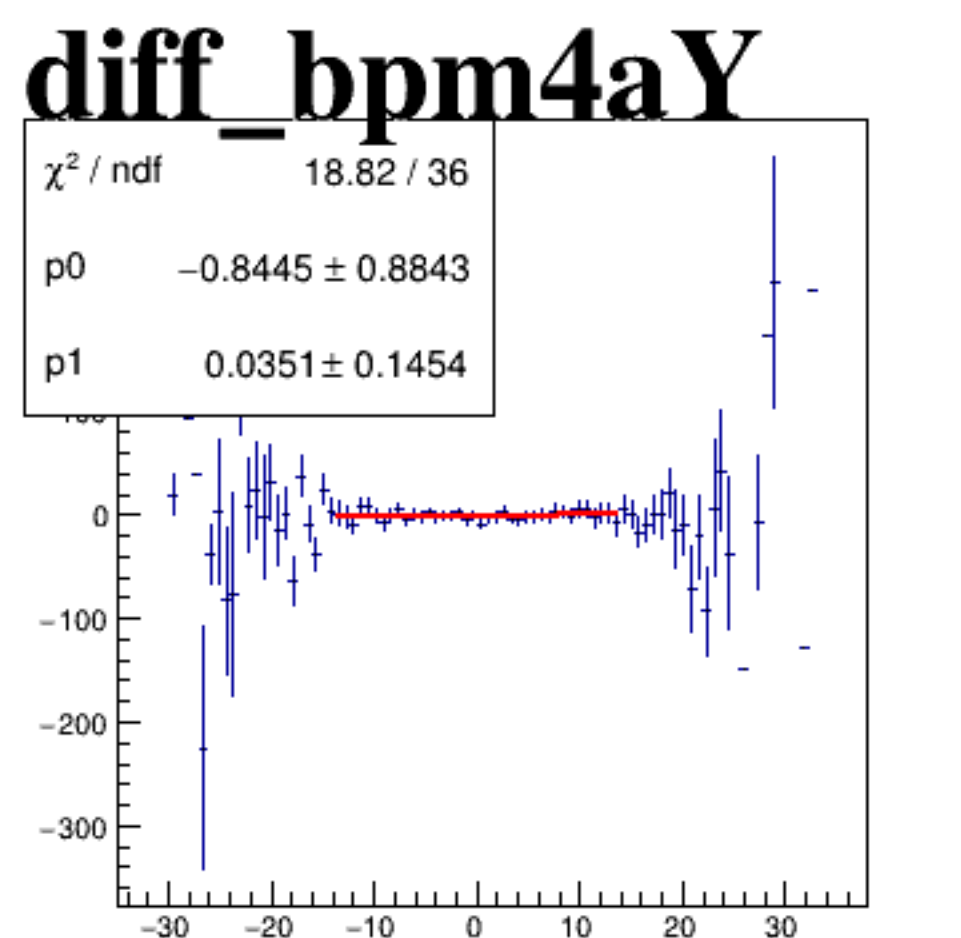
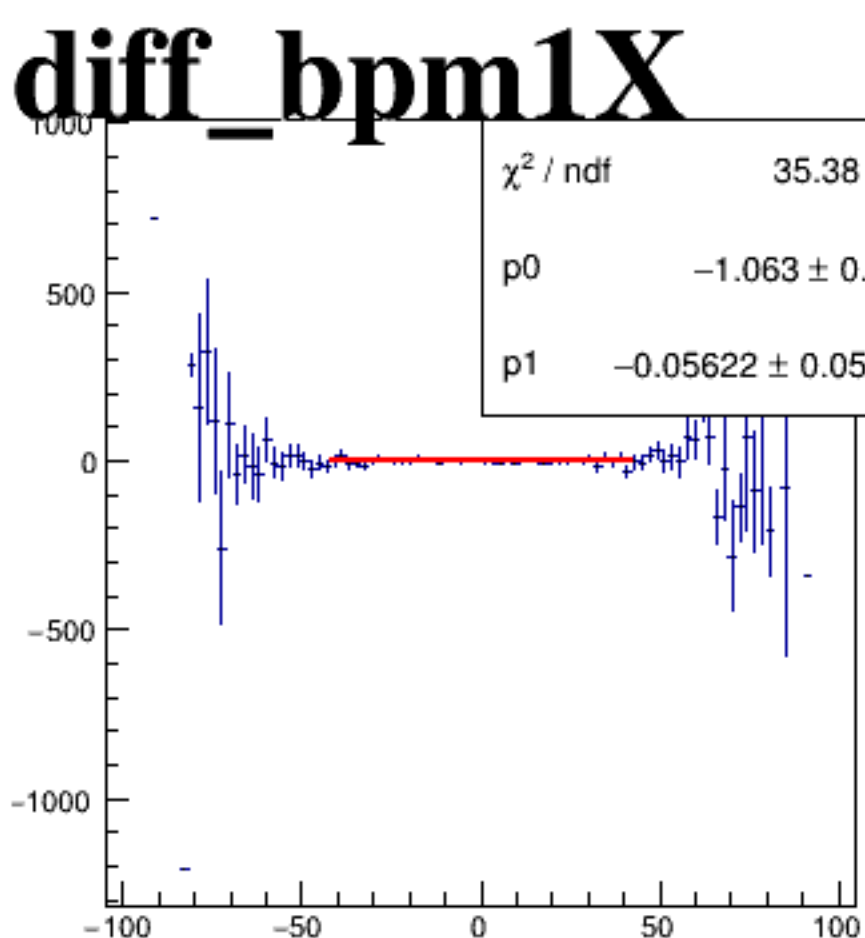
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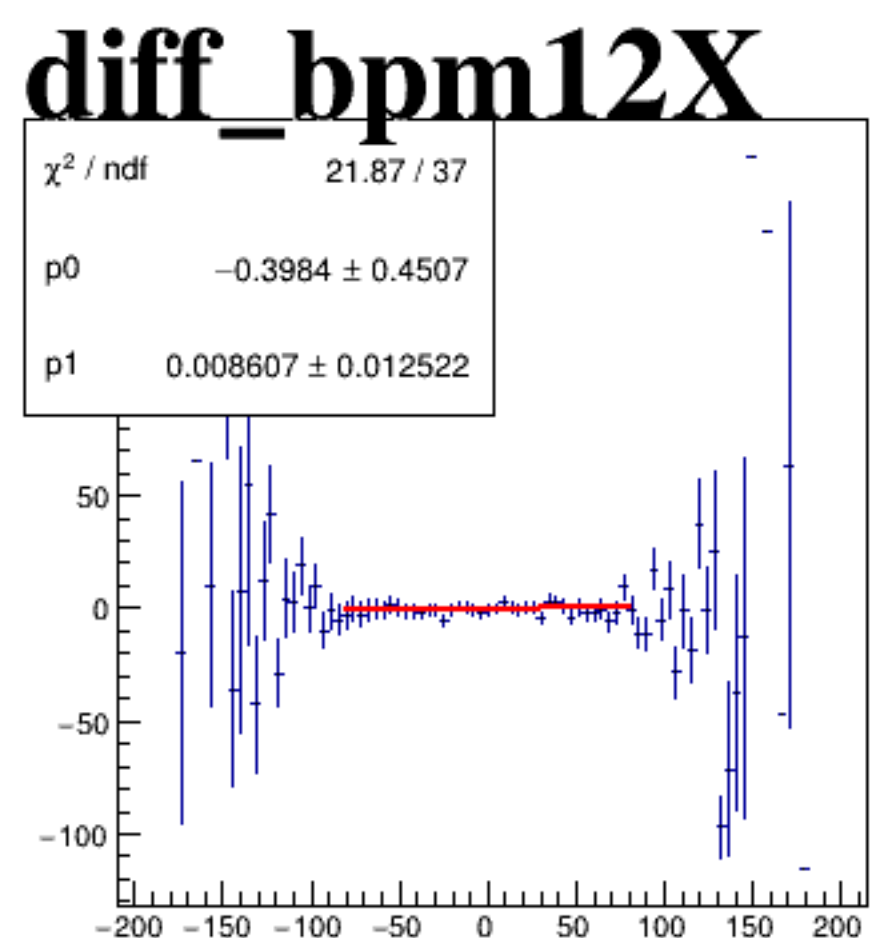
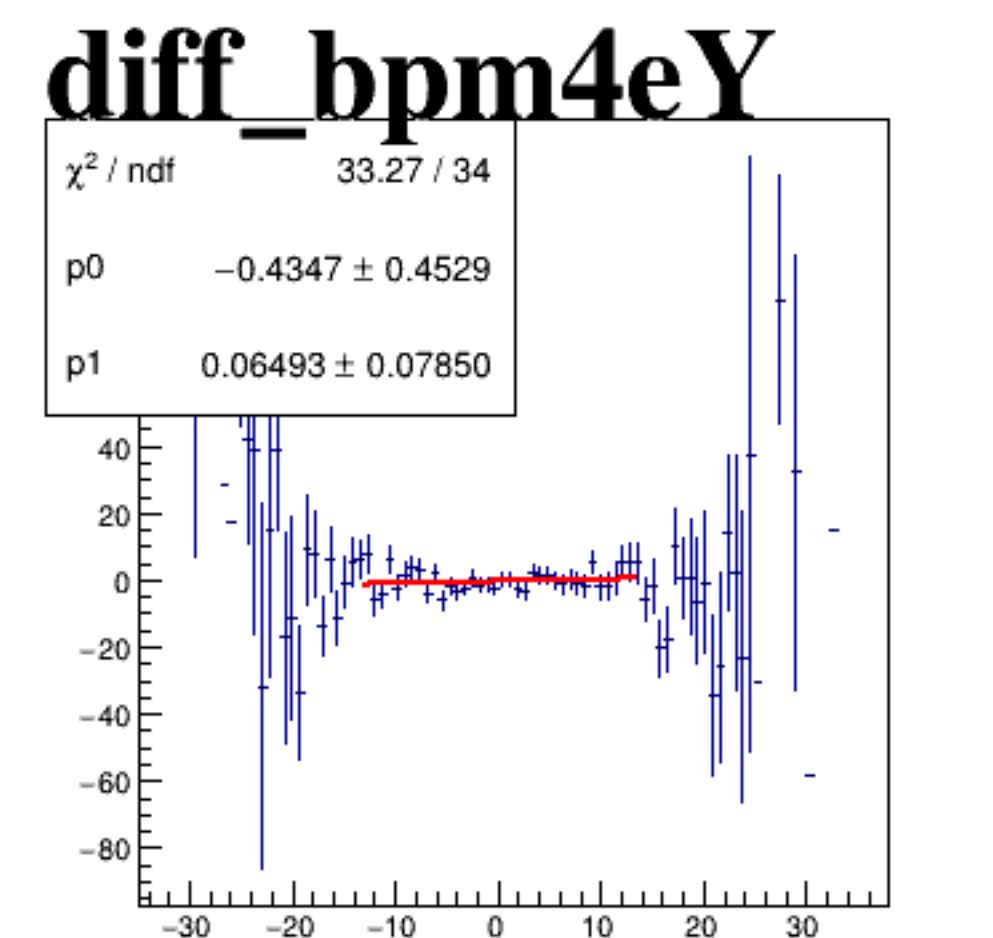
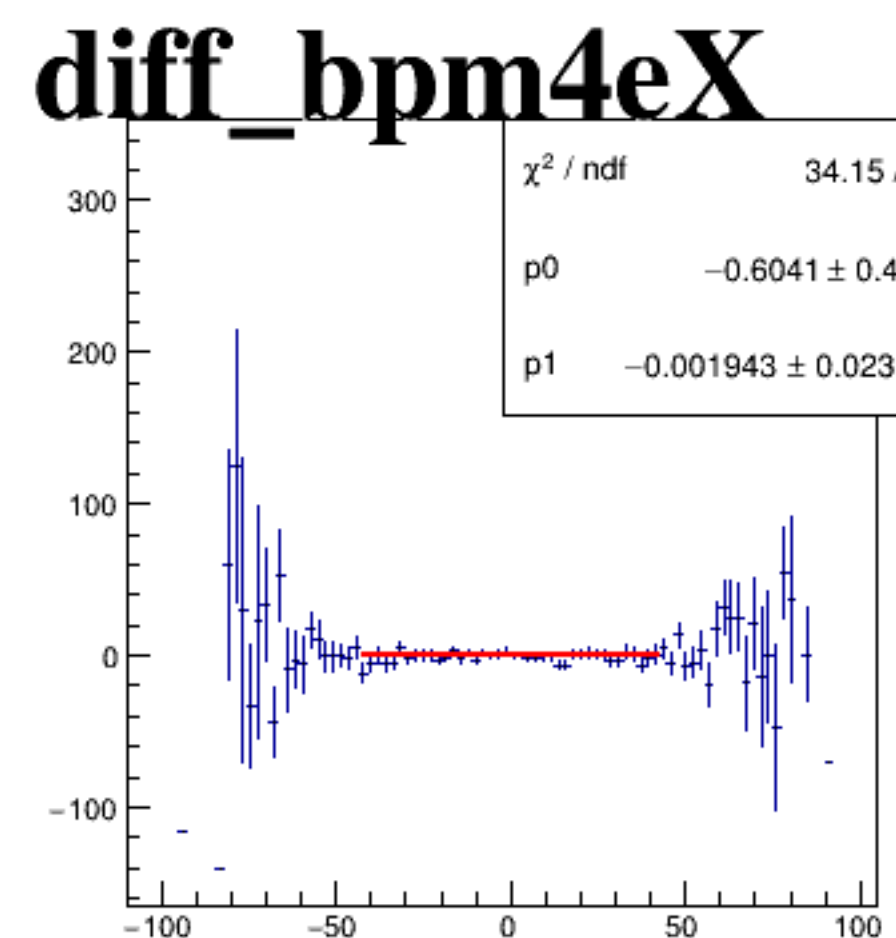
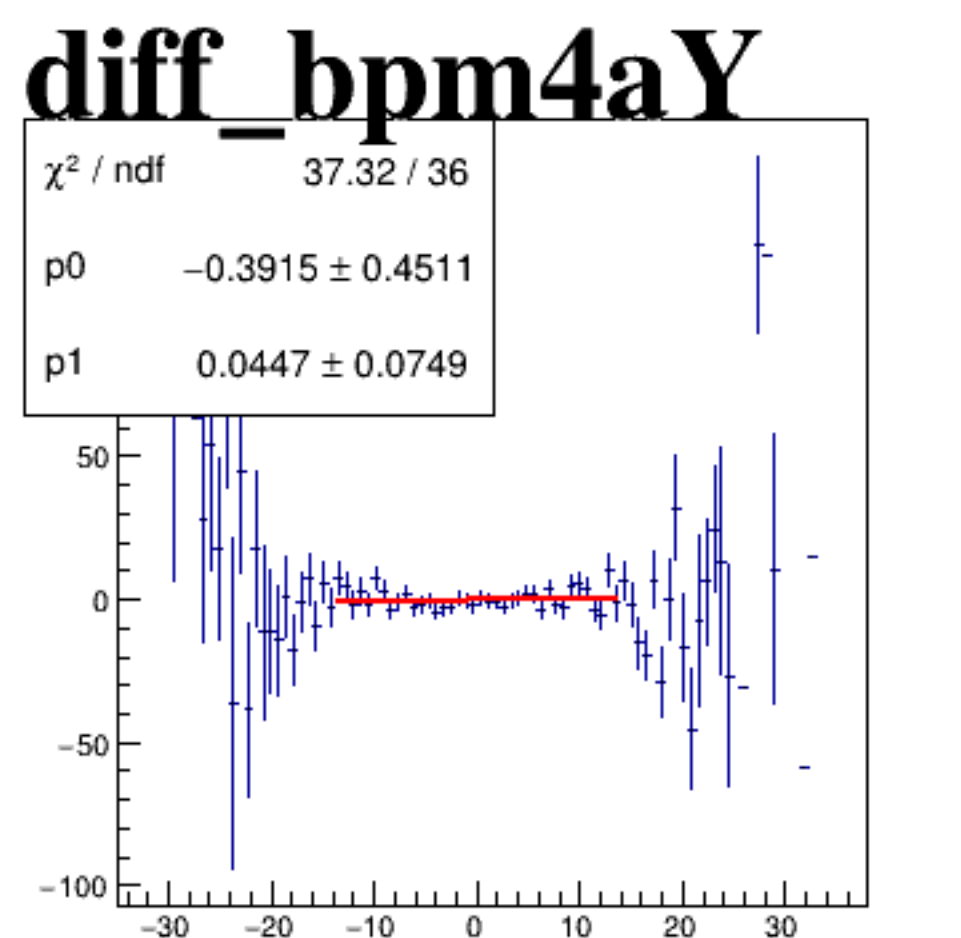
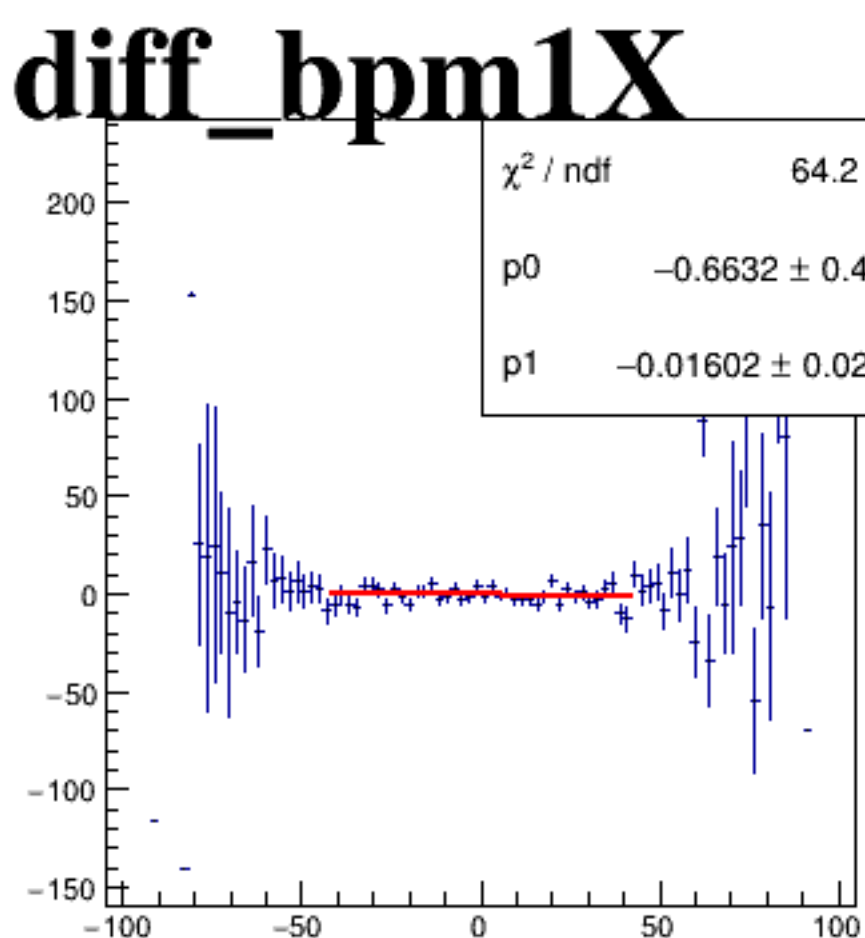
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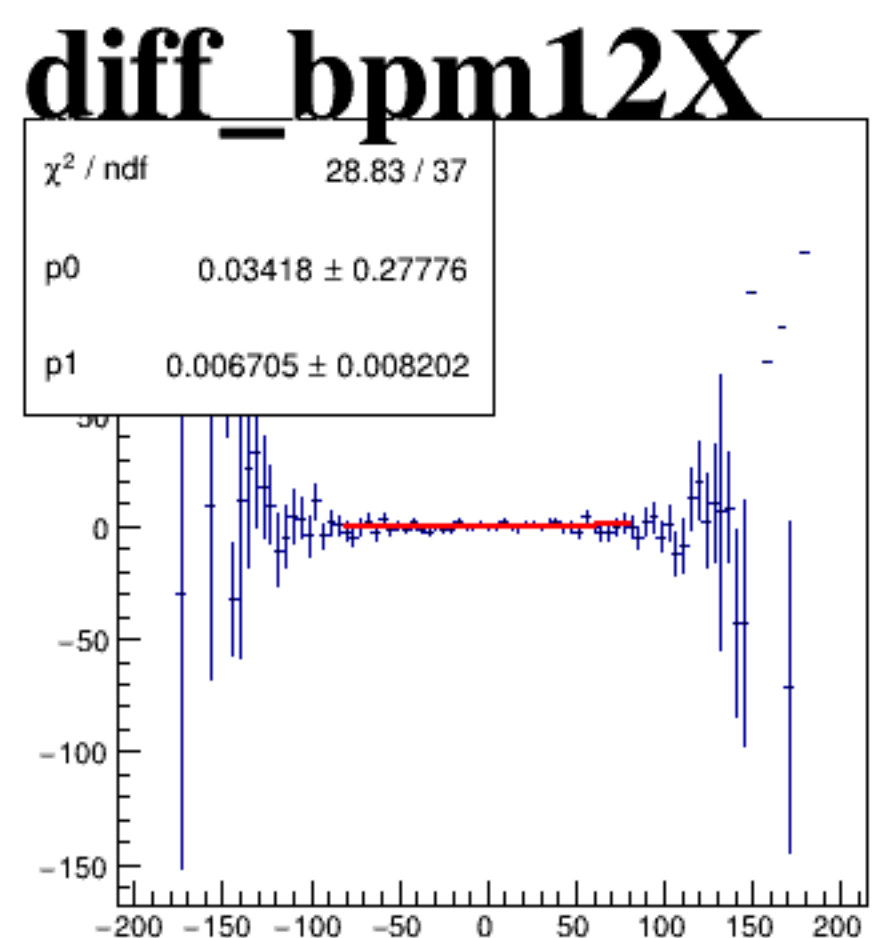
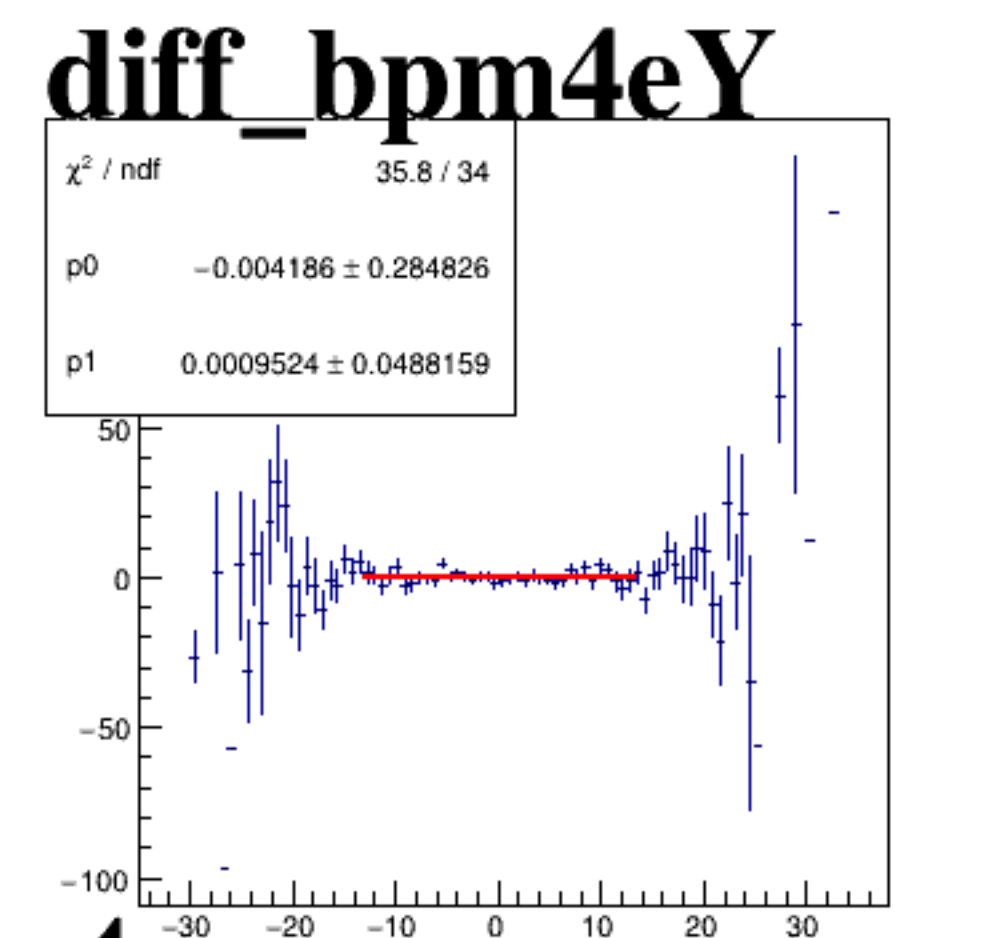
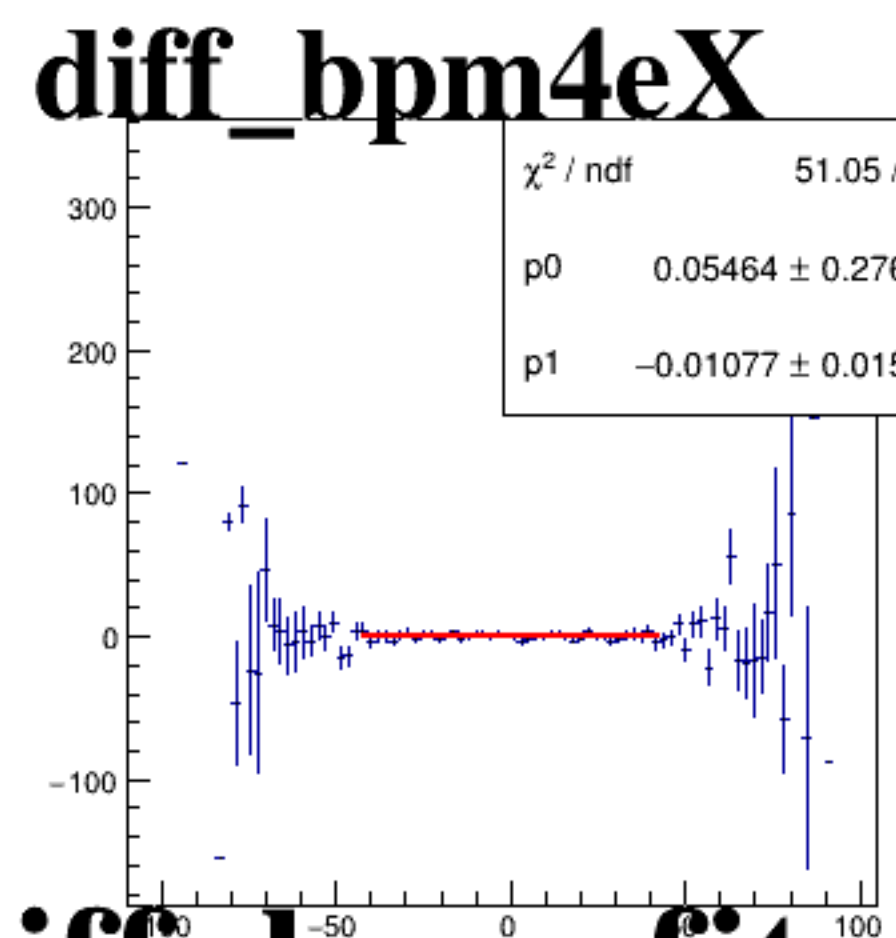
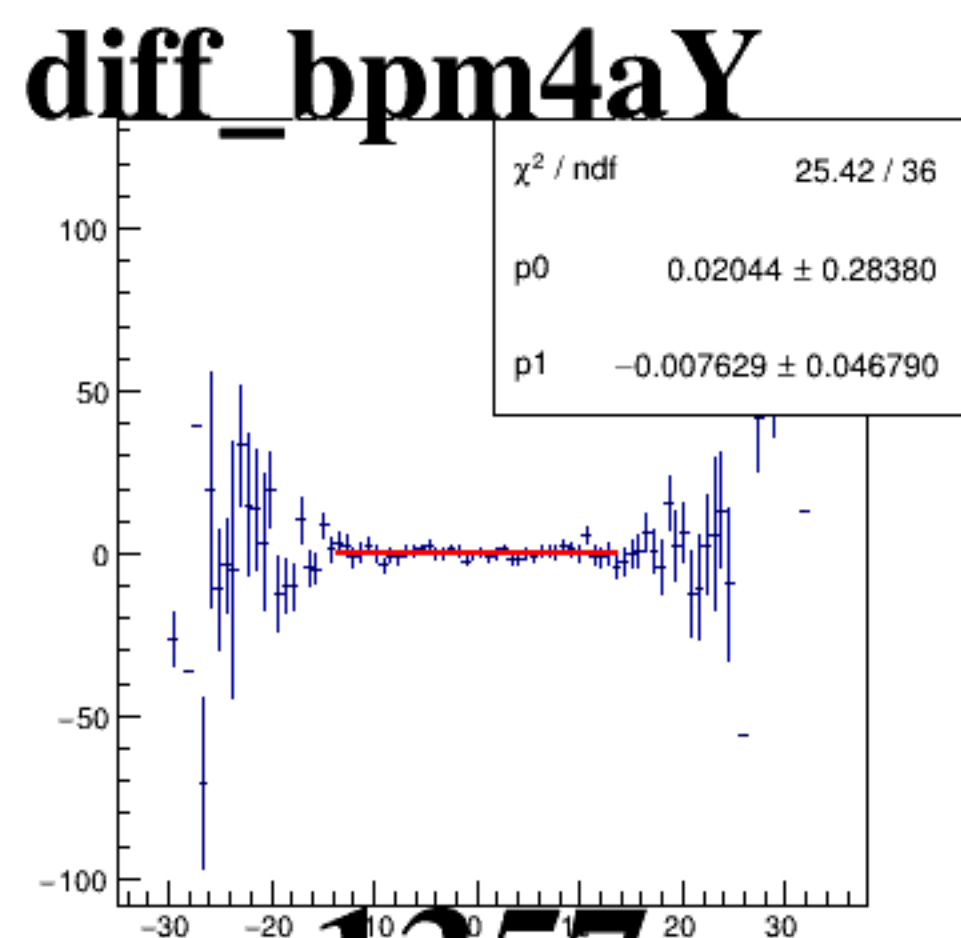
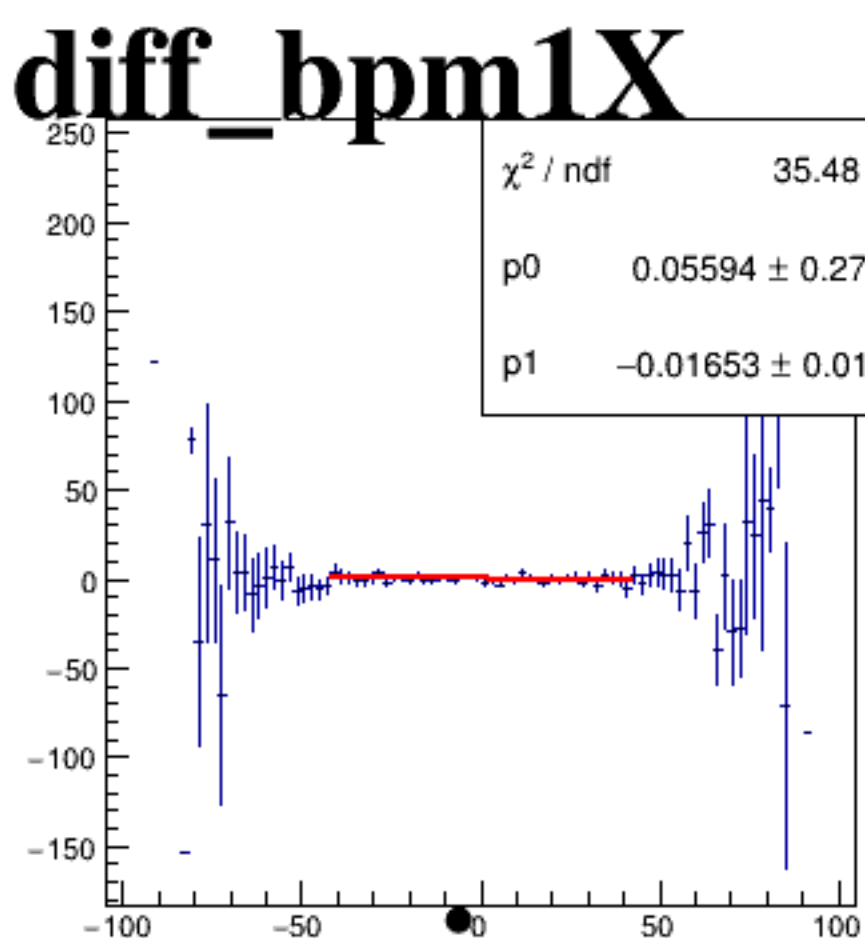
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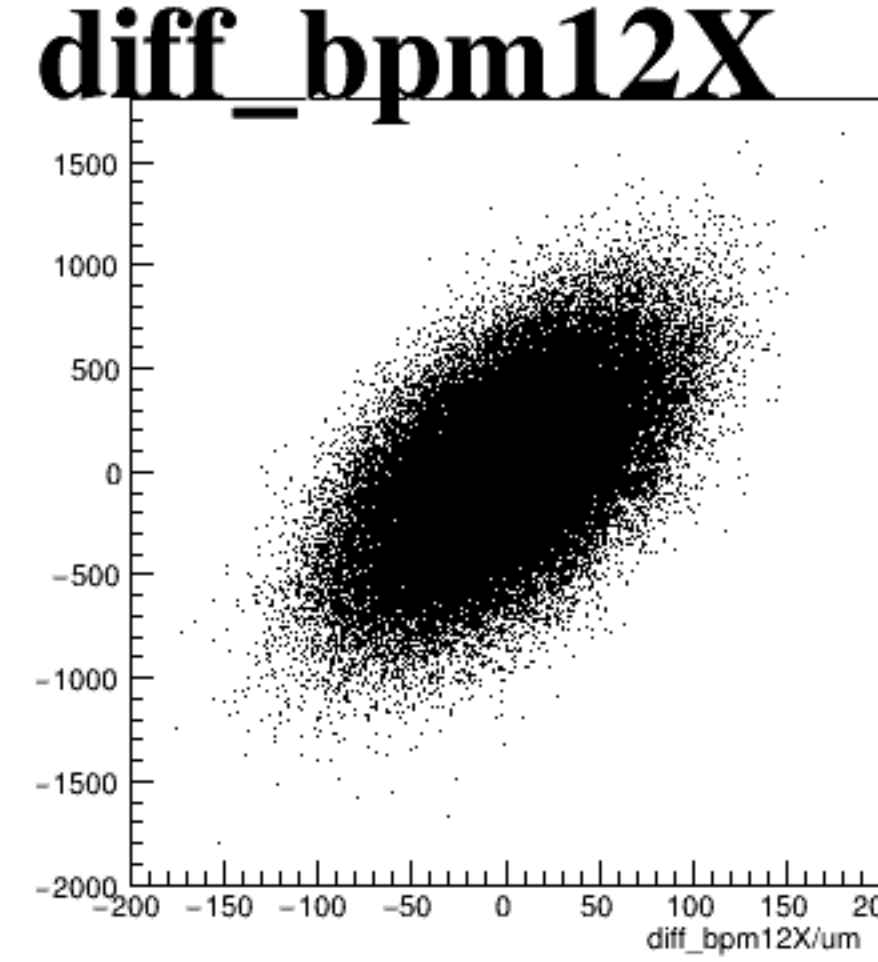
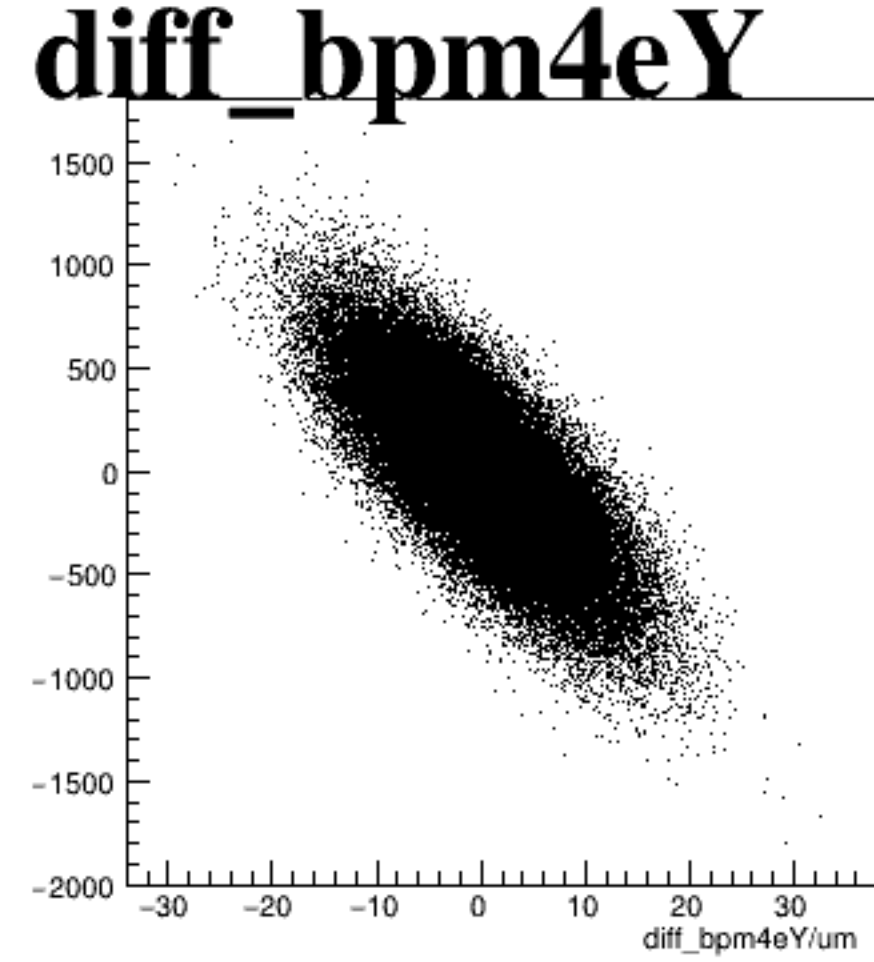
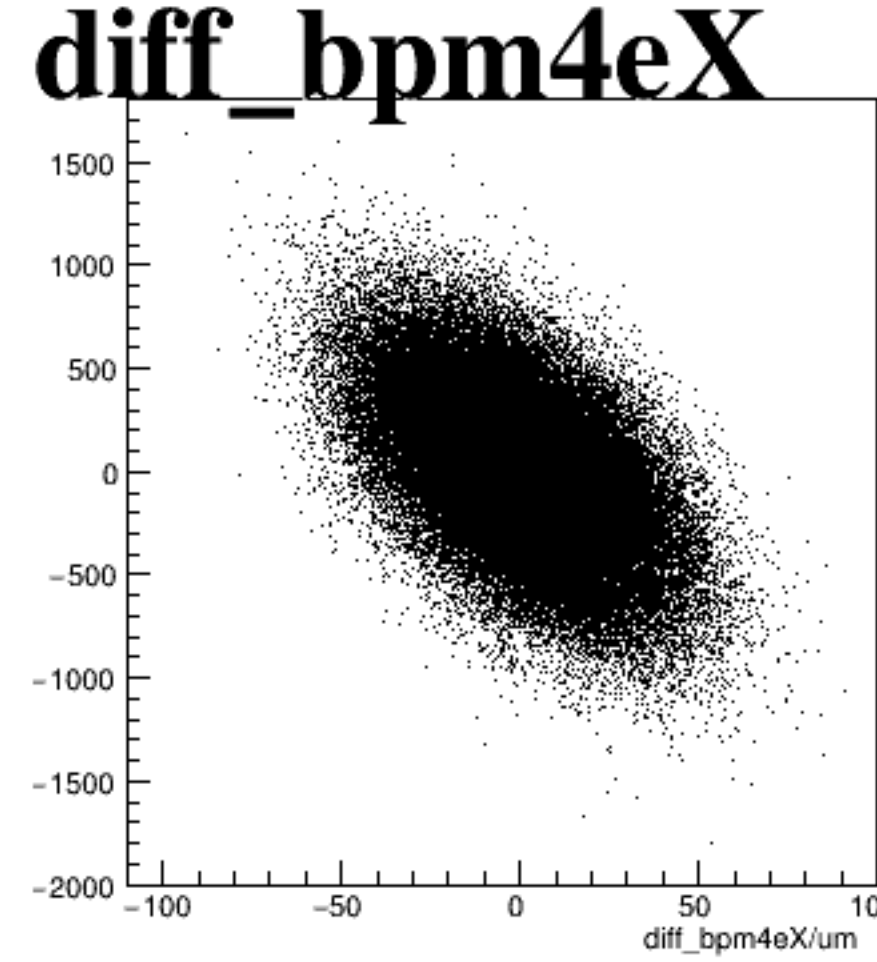
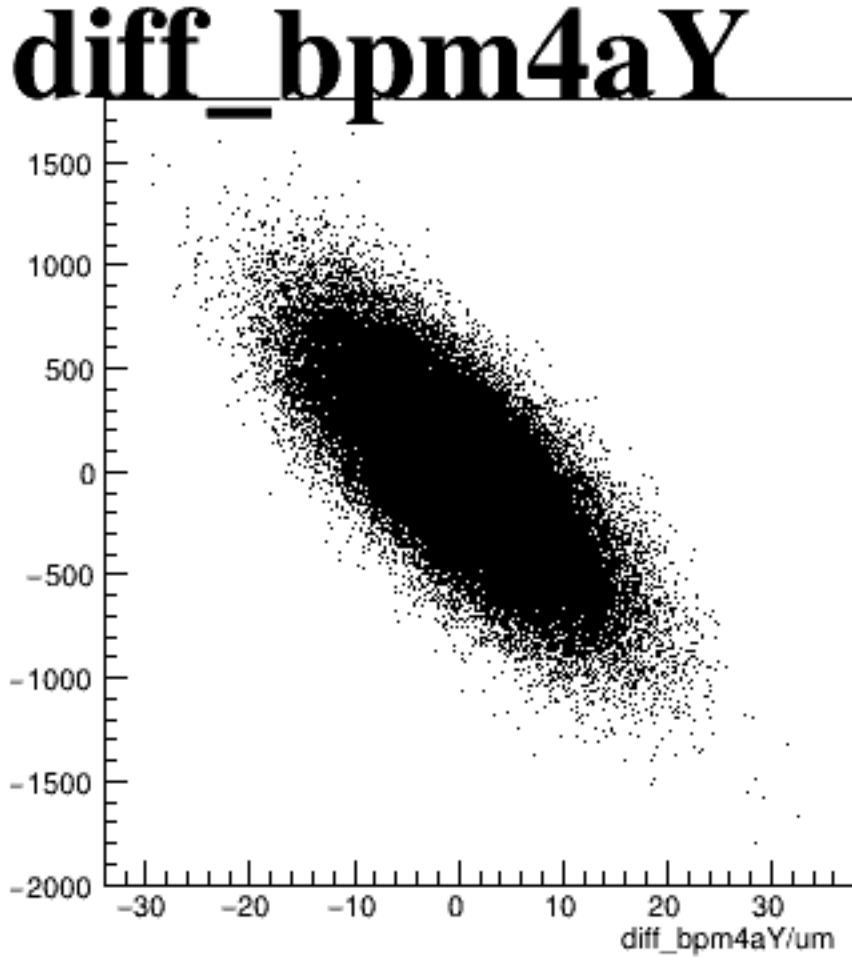
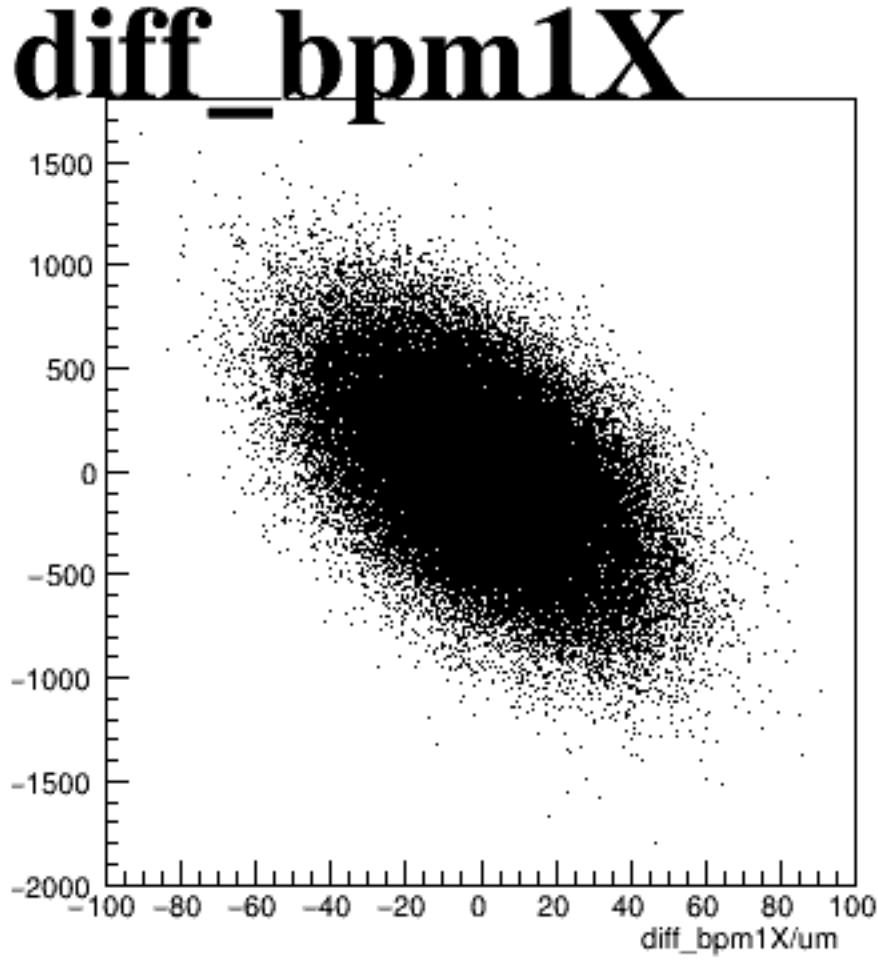
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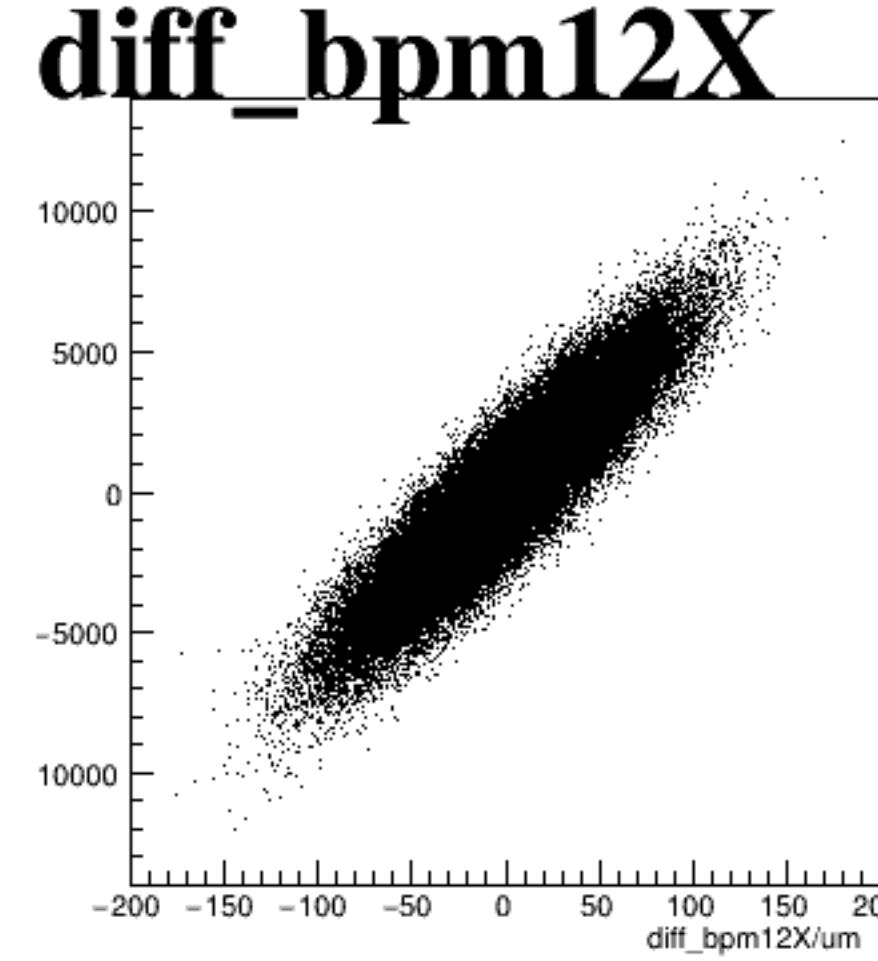
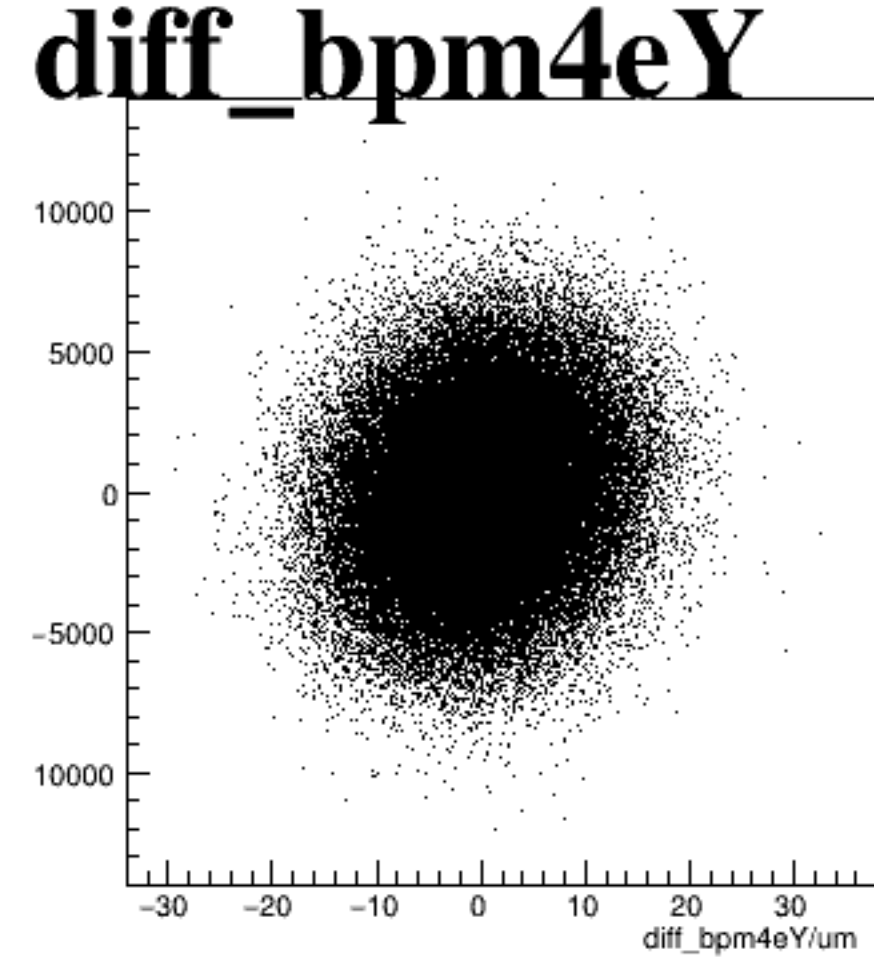
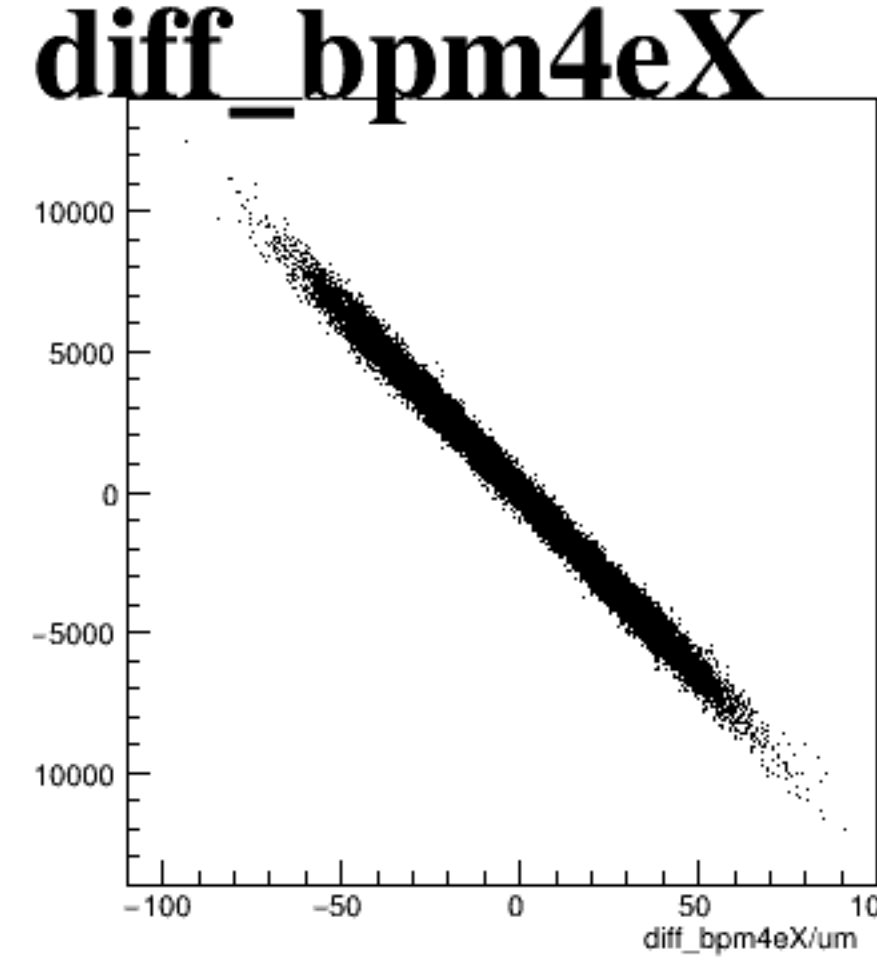
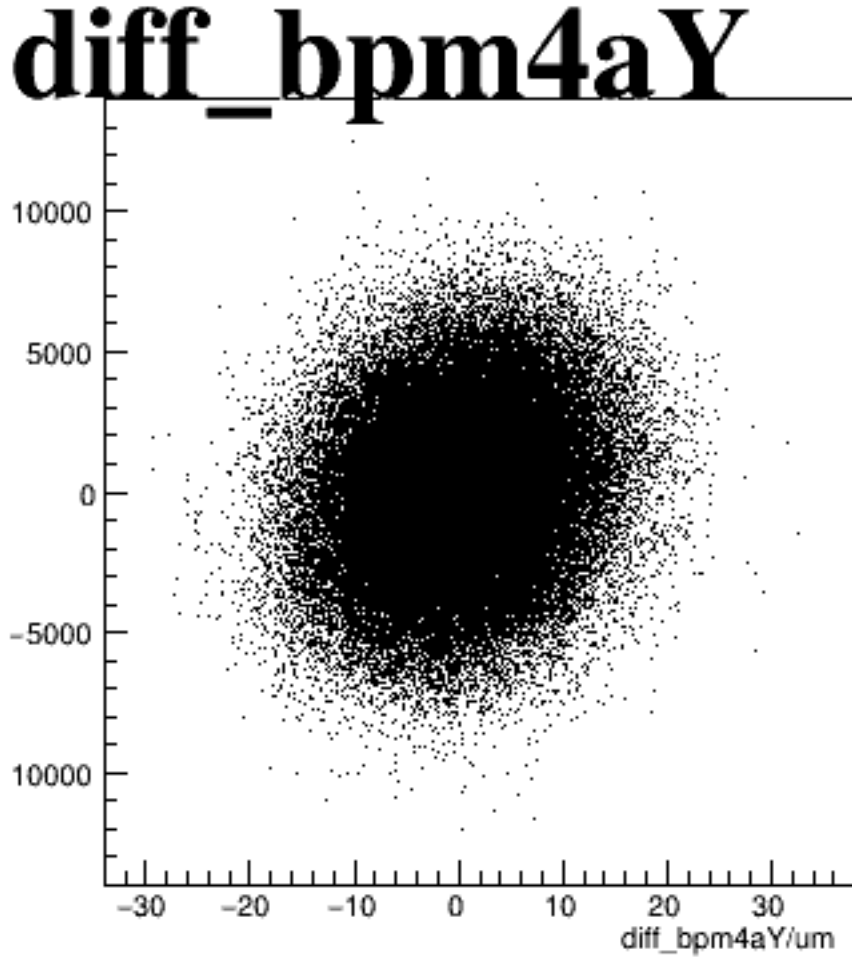
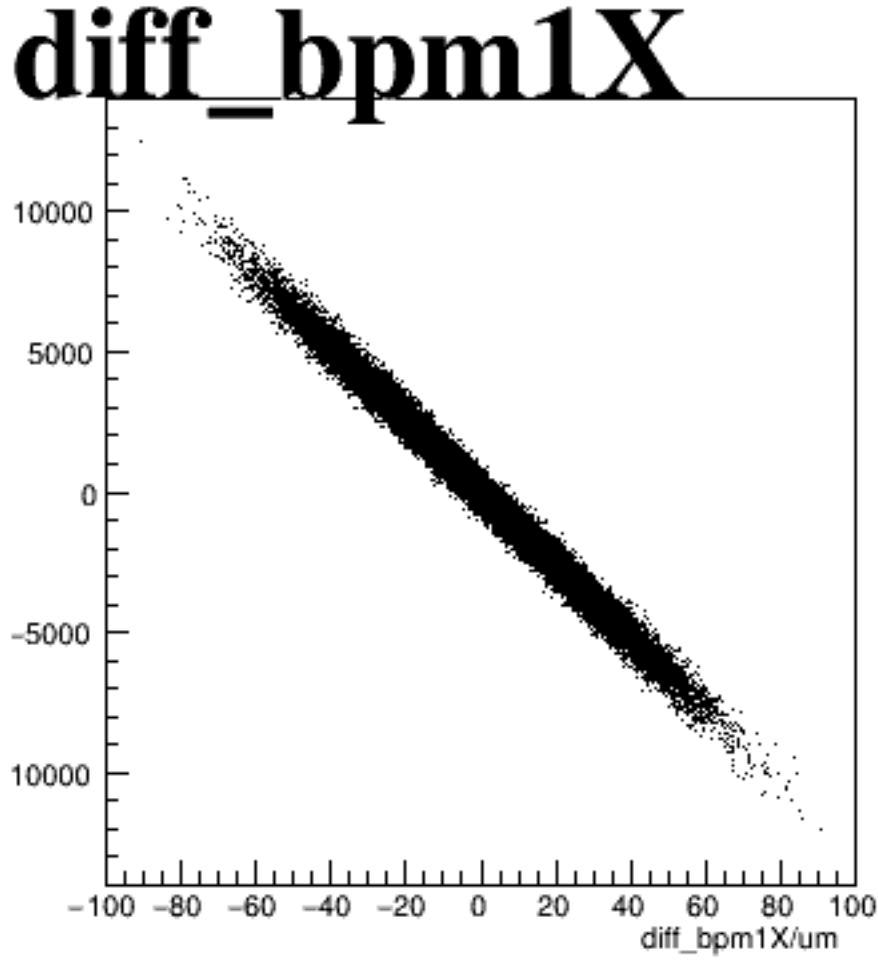
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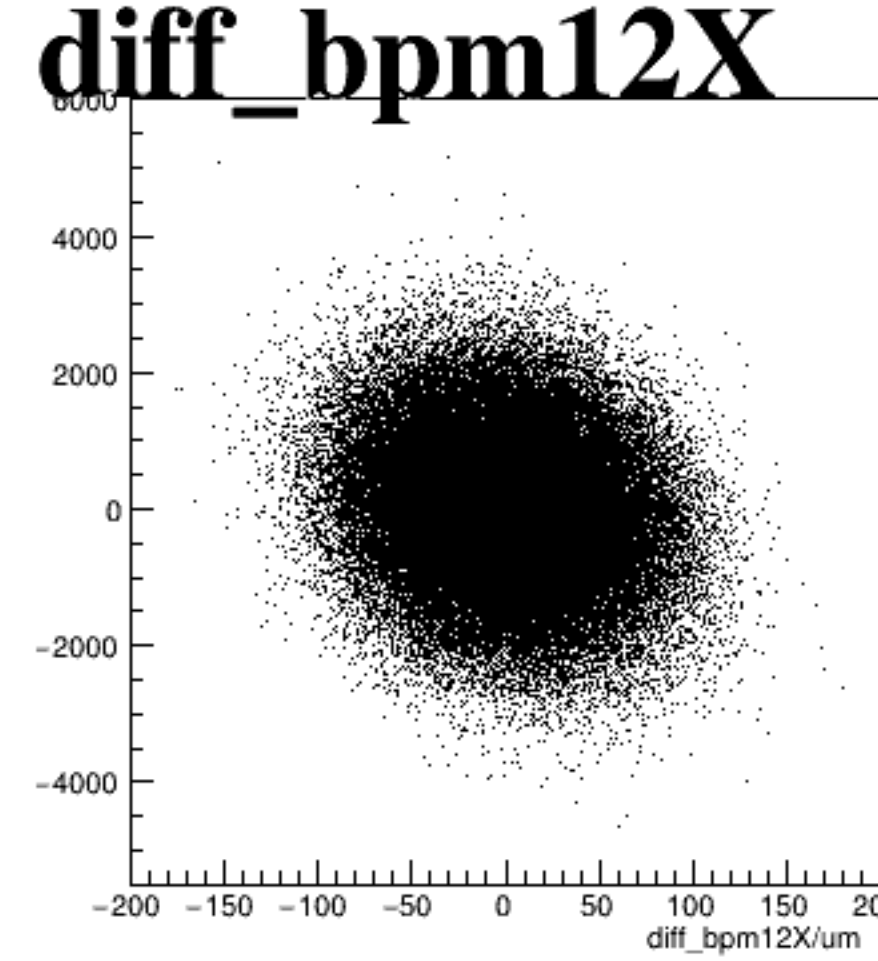
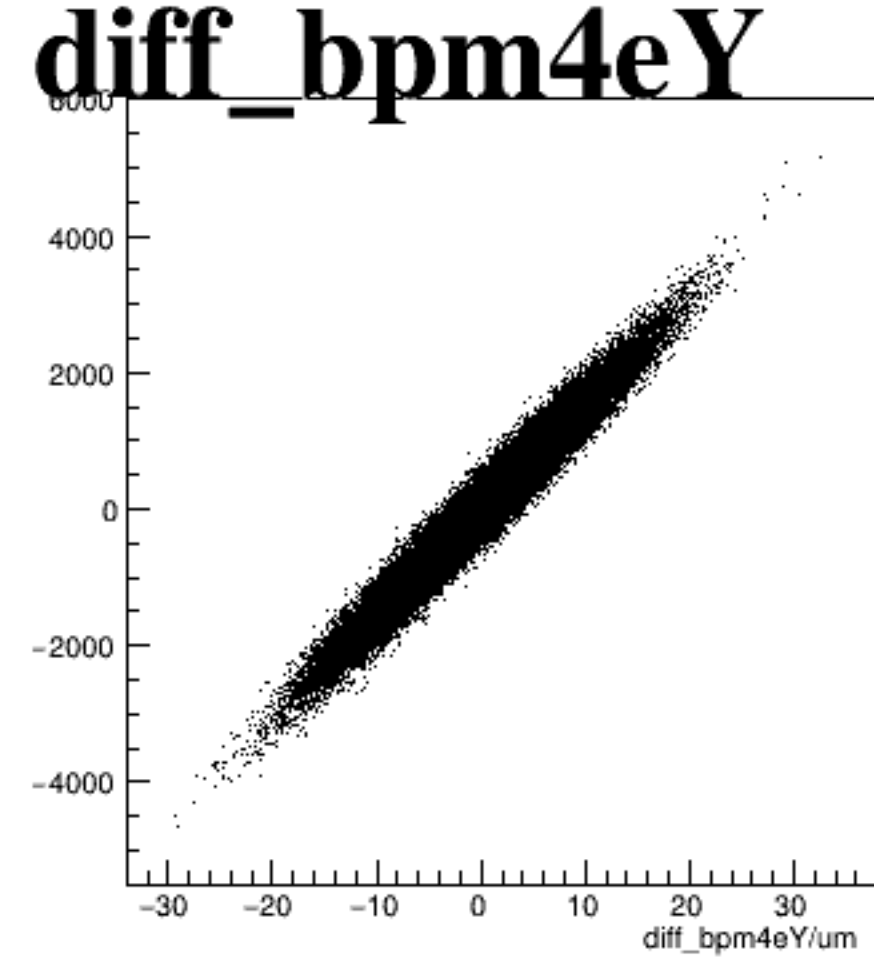
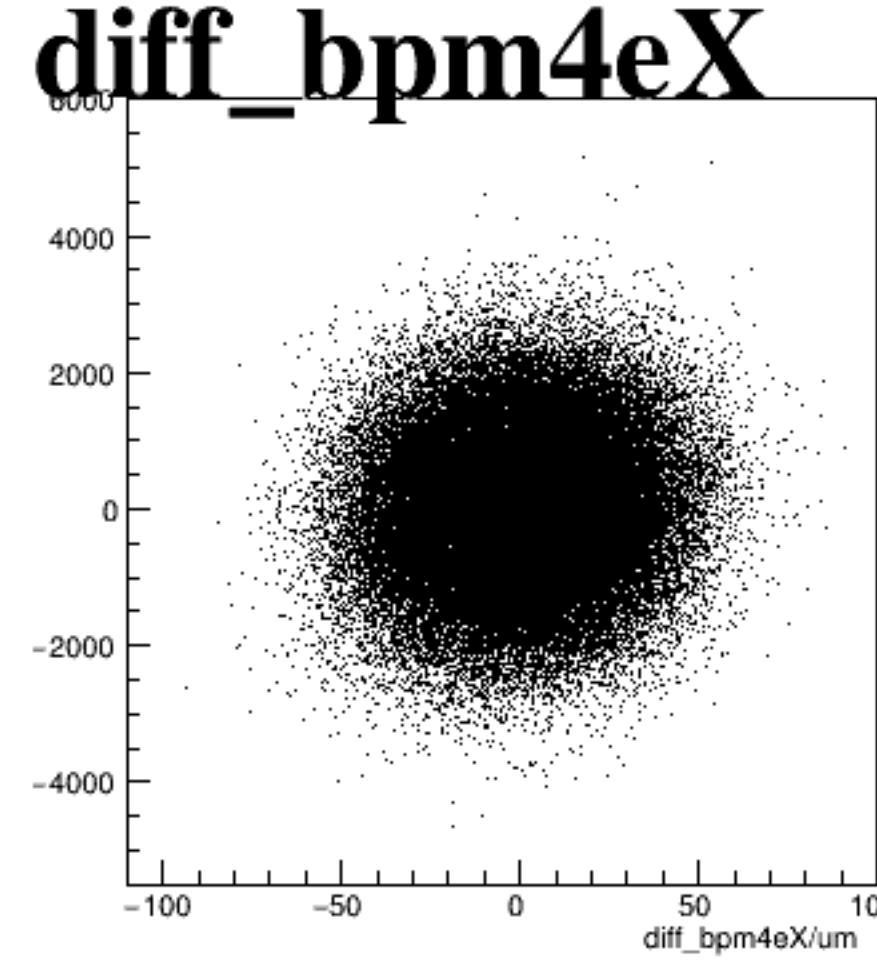
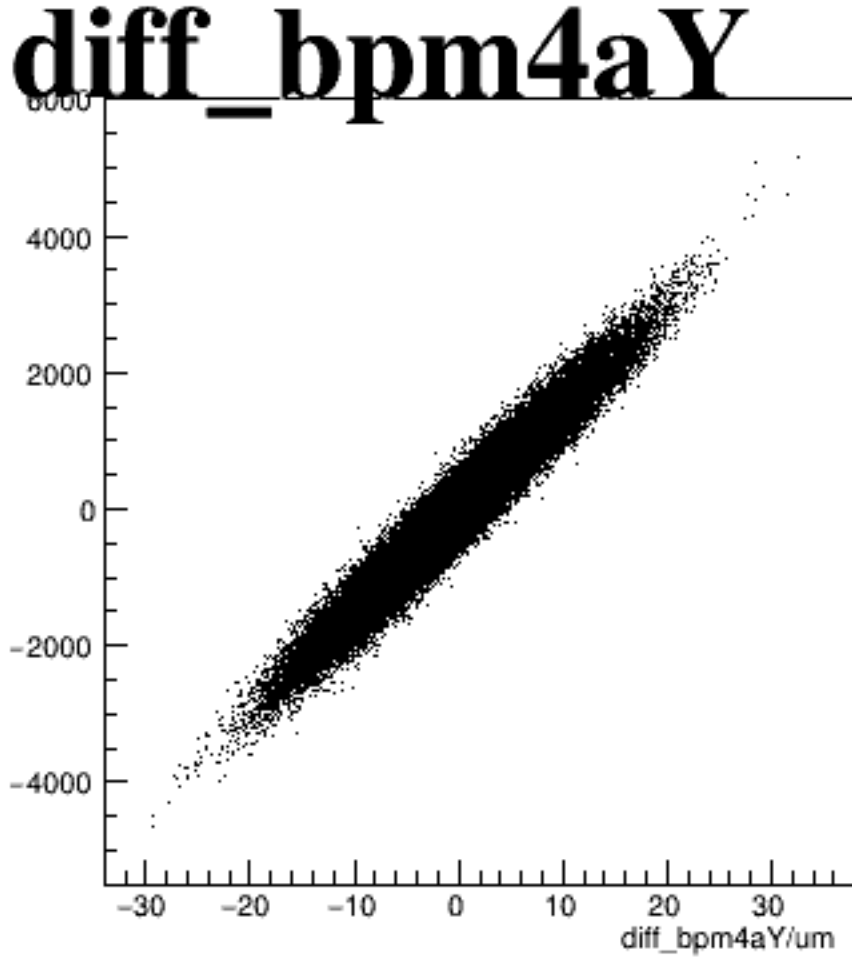
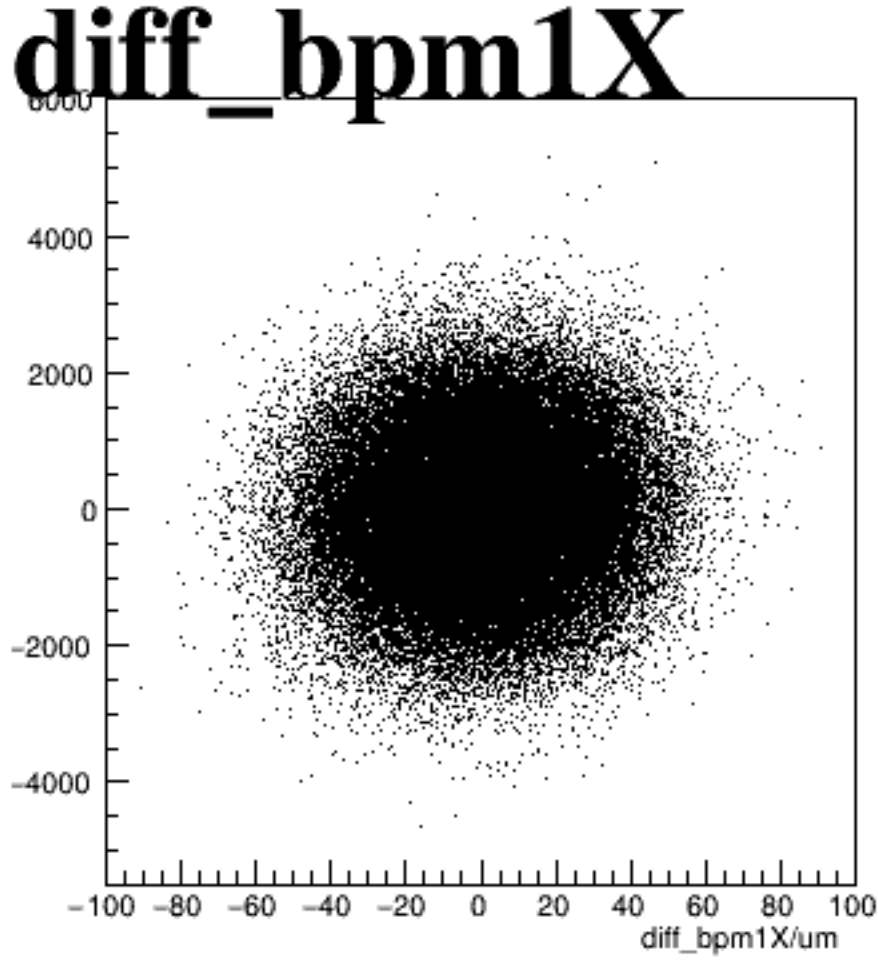
asym_sam1



asym_sam3



asym_sam5



asym_sam7

