

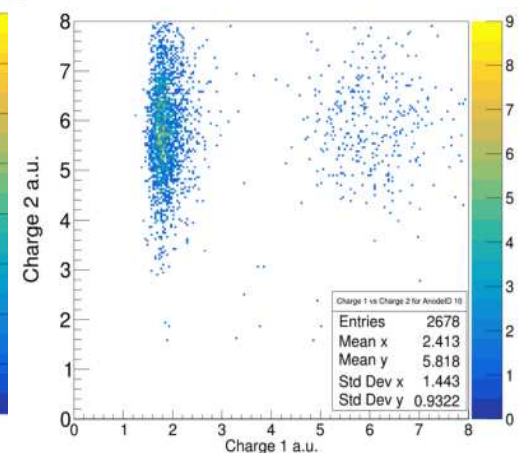
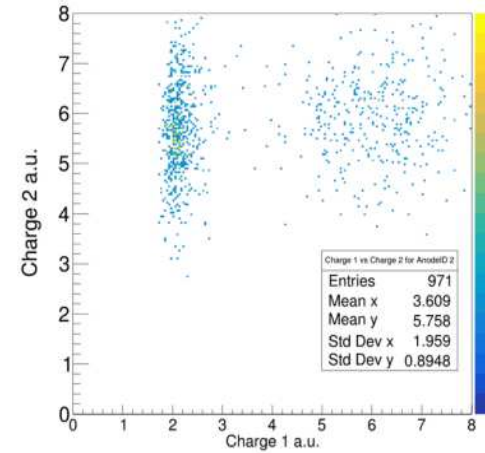
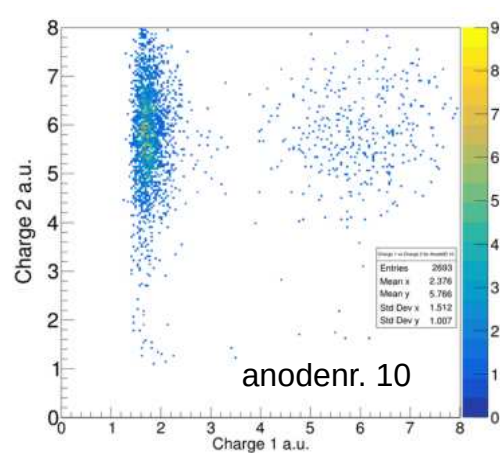
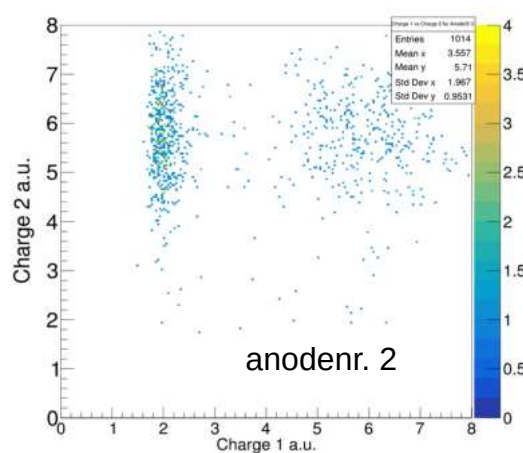
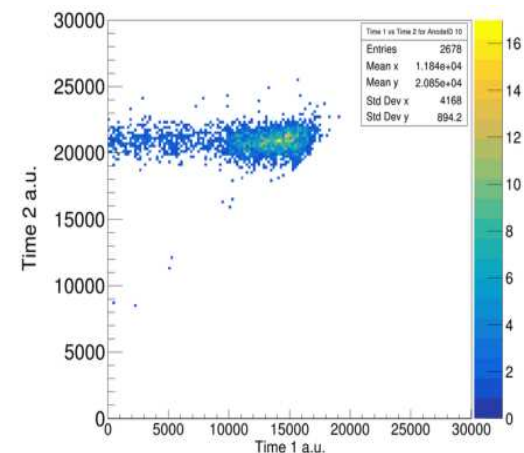
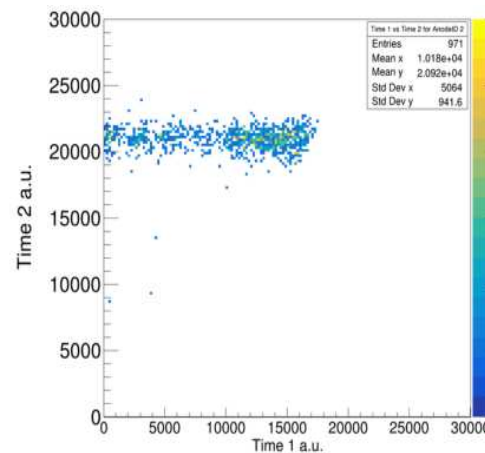
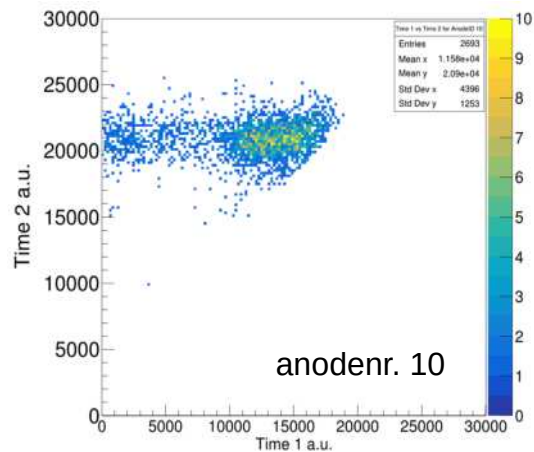
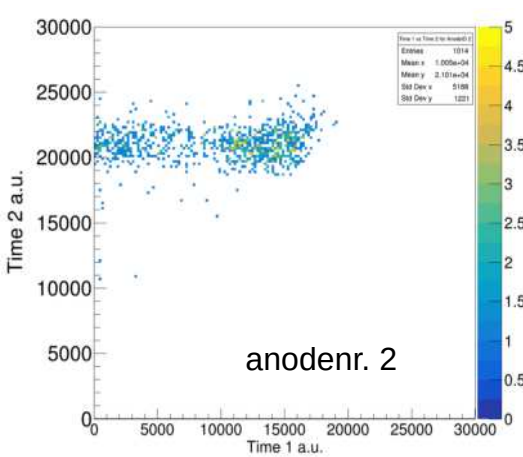
S444 experiment - update2

28.08.2024

Time1 vs Time2 in TWIM – no cut on charge 400 AMeV

Carbon Target

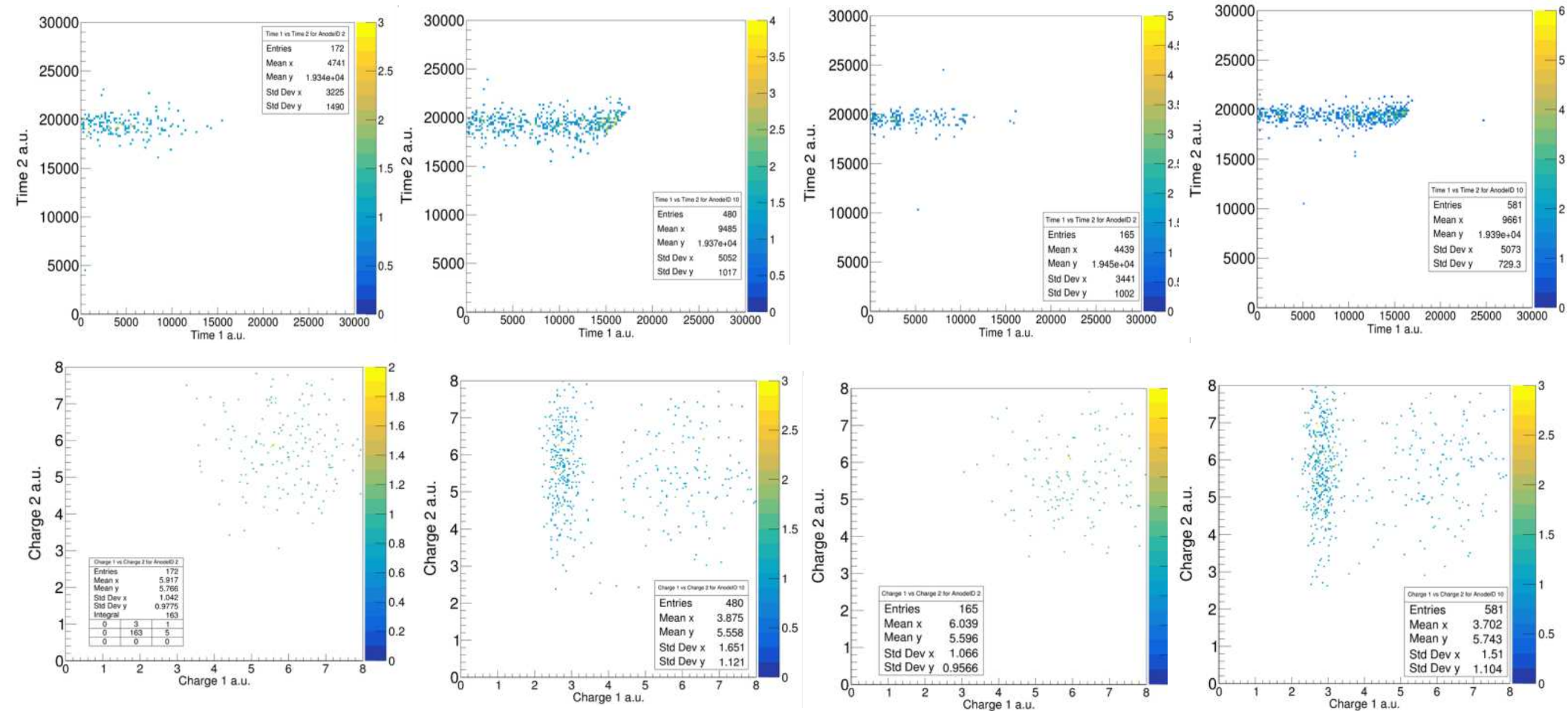
Empty Target



Time1 vs Time2 in TWIM – no cut on charge 550 AMeV

Carbon Target

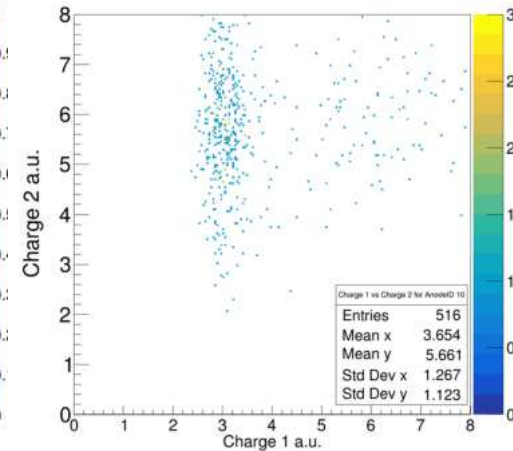
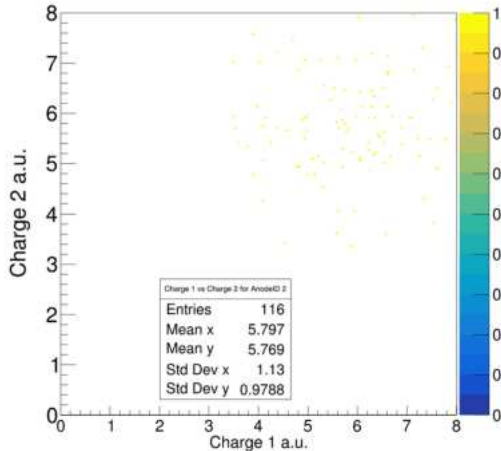
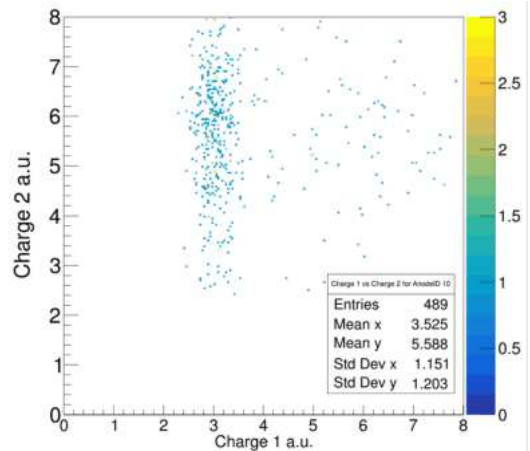
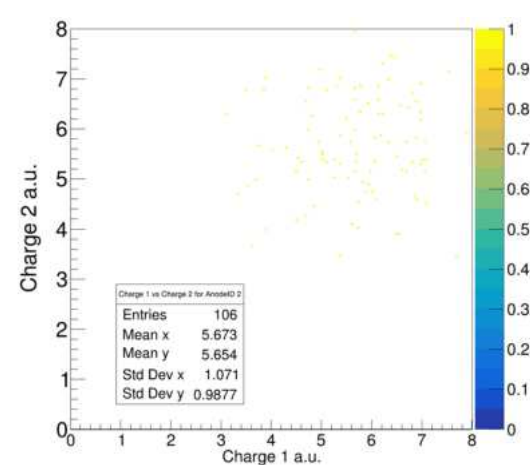
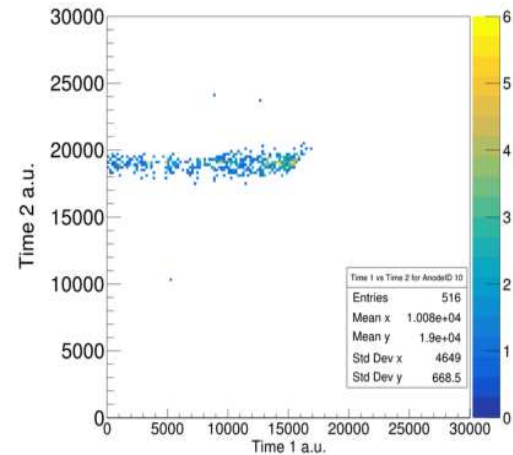
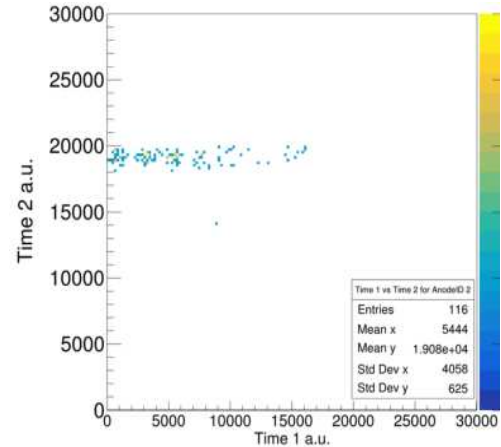
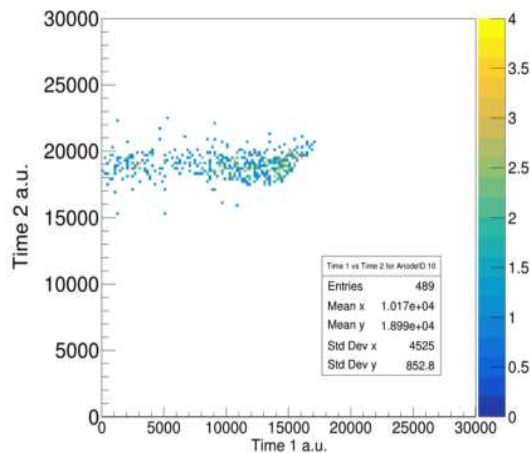
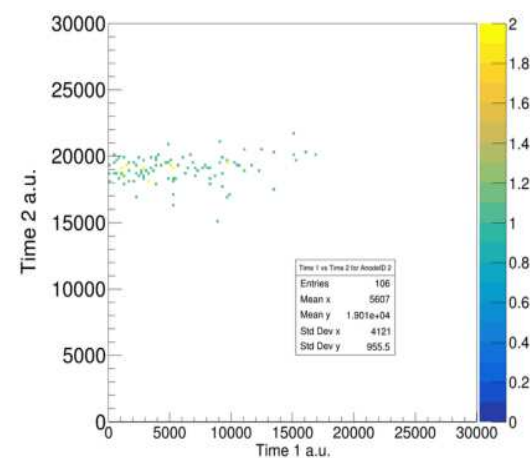
Empty Target



Time1 vs Time2 in TWIM – no cut on charge 650 AMeV

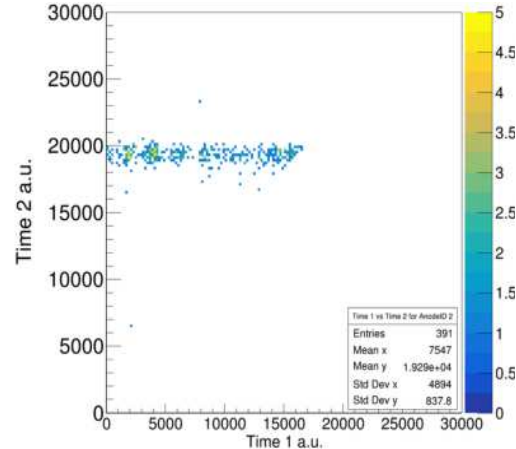
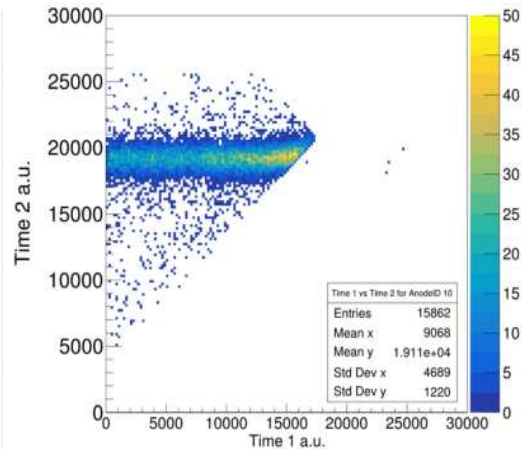
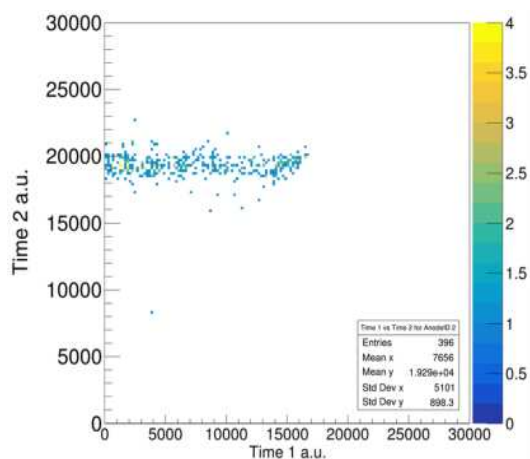
Carbon Target

Empty Target

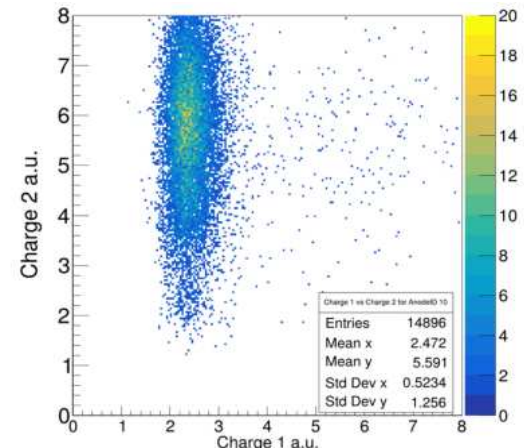
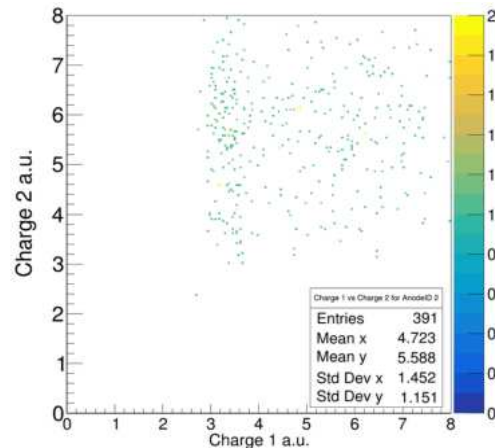
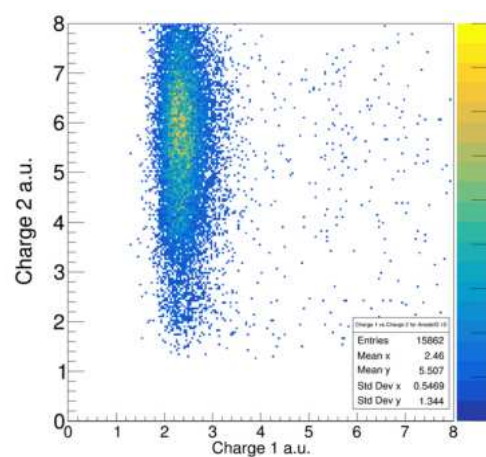
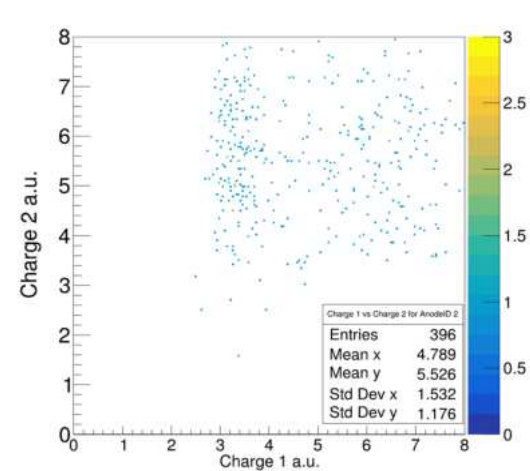
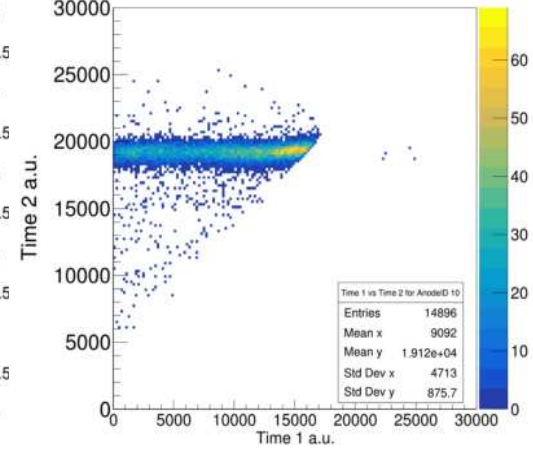


Time1 vs Time2 in TWIM – no cut on charge 800 AMeV

Carbon Target

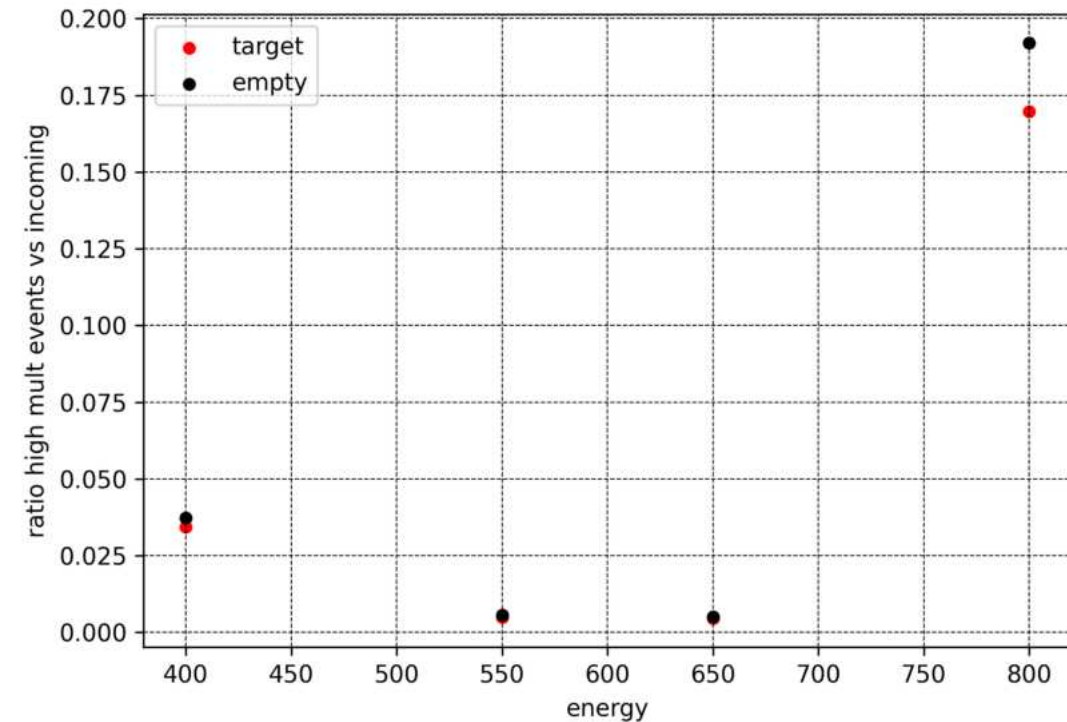


Empty Target

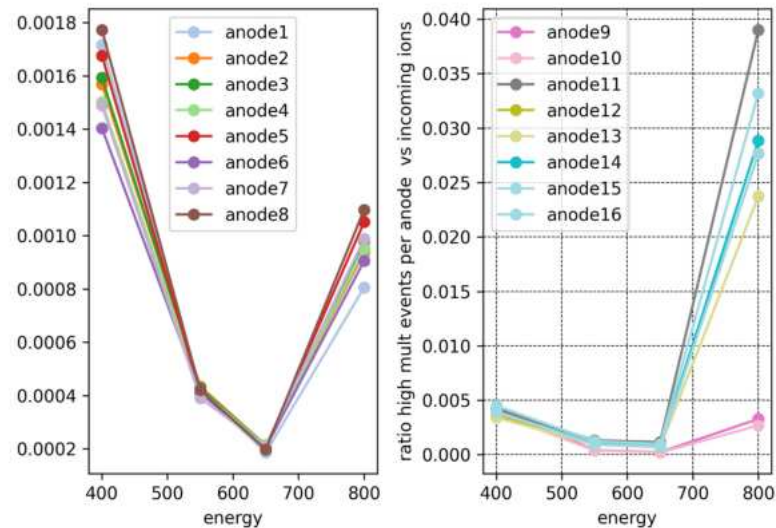


TWIM Multiplicities

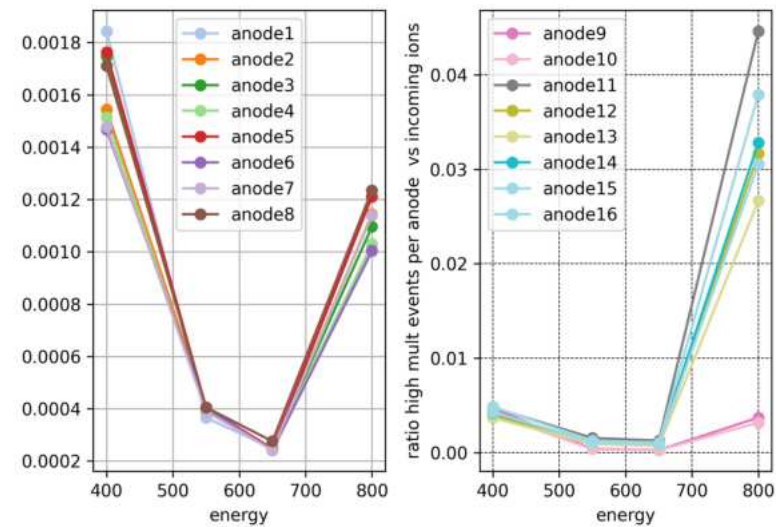
ratio high mult events vs all incoming events



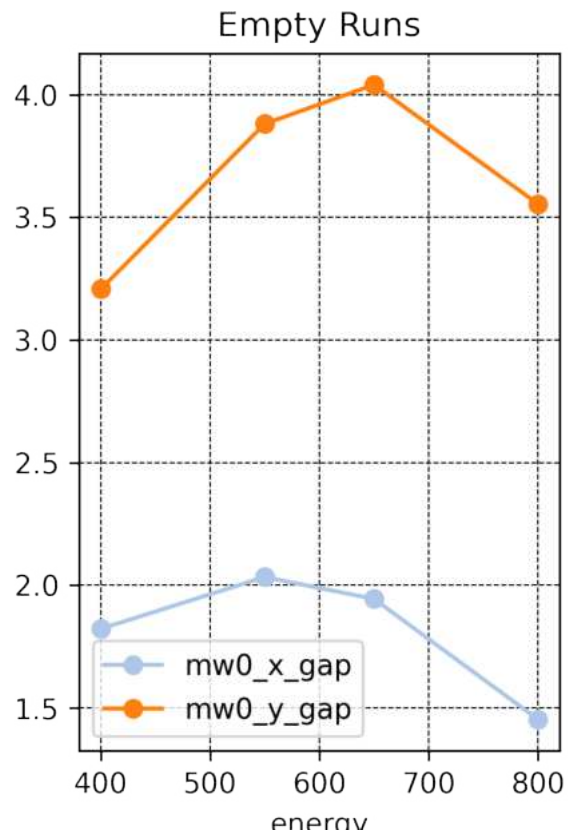
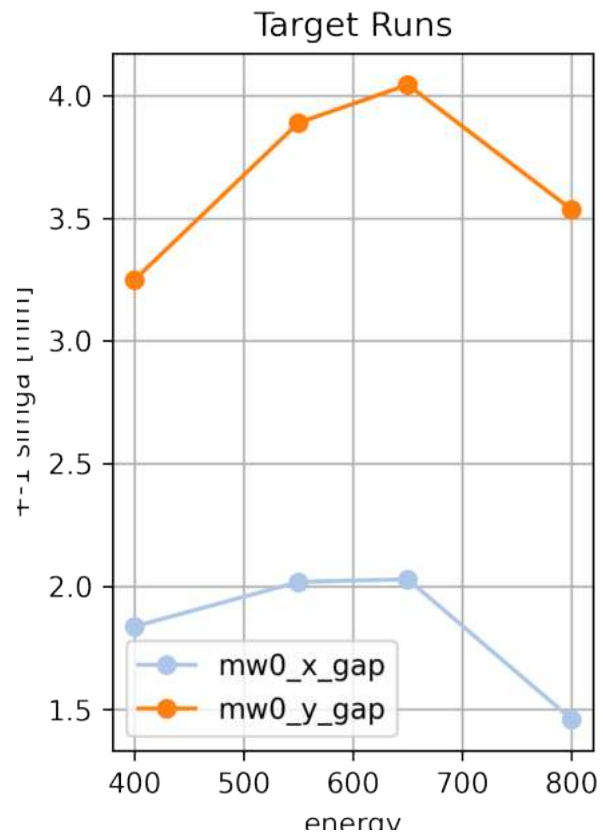
Target Runs



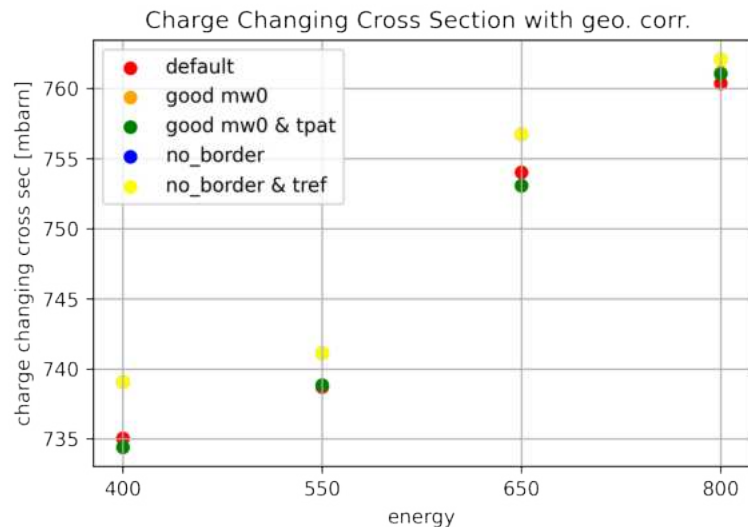
Empty Runs



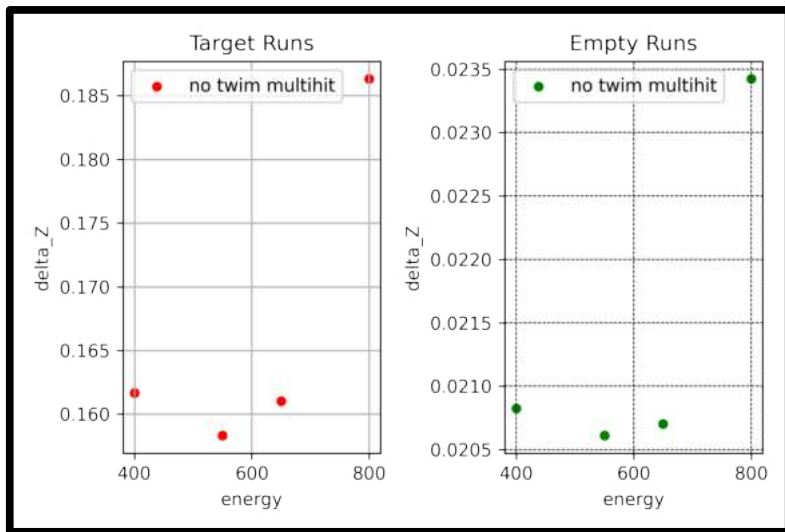
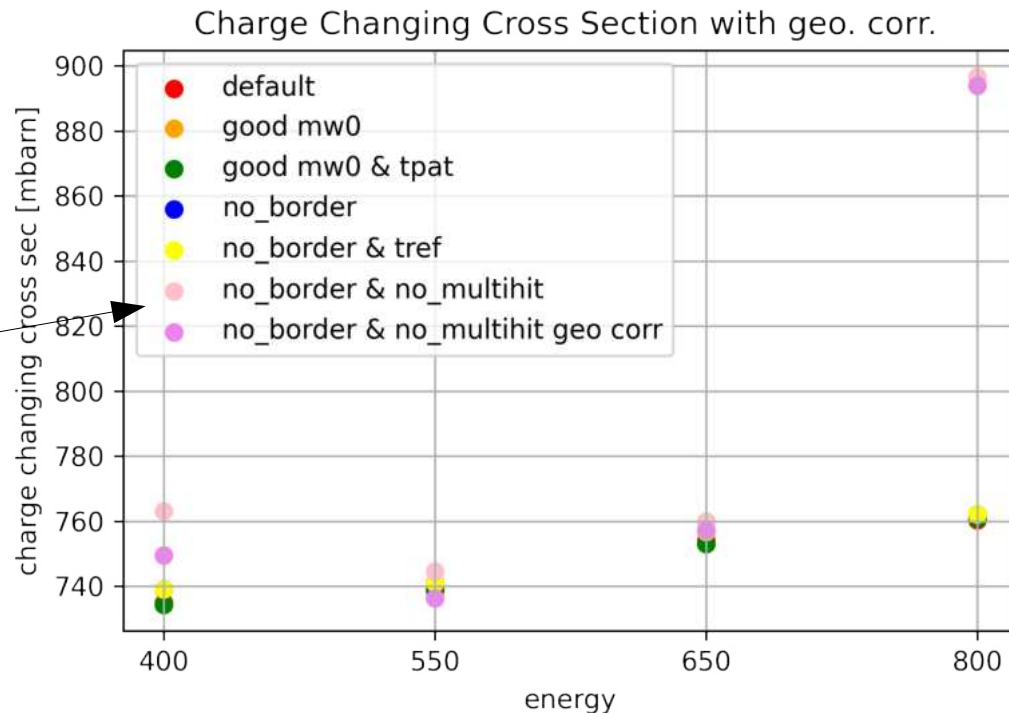
MW0 openign gaps (+-sigma cut condition for x and y)



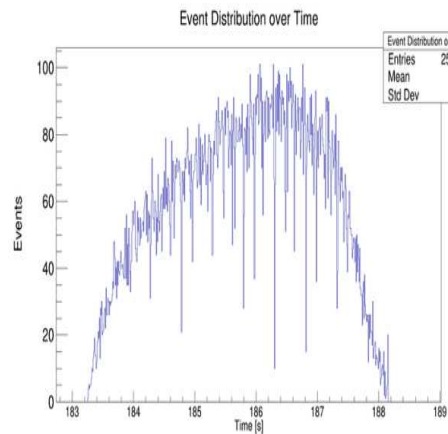
Cross Sections for different conditions



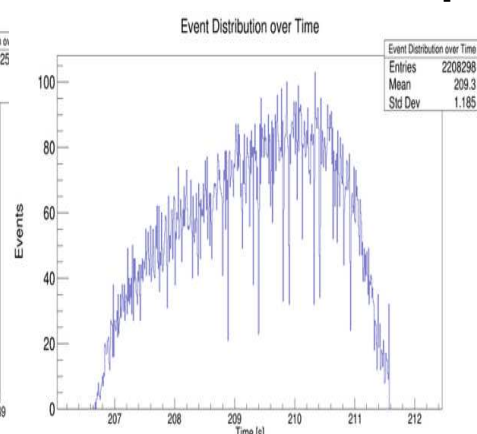
Now applying multiplicity cut on TWIM:
Only select events with no high multiplicity hits in TWIM anodes



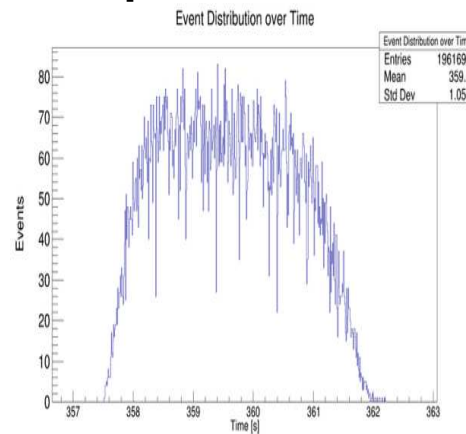
Shape of beam spills



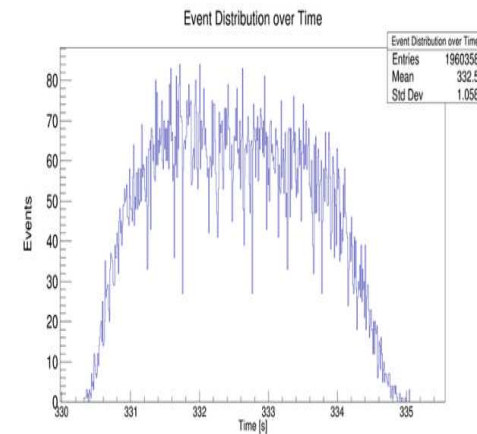
400 AmeV carbon



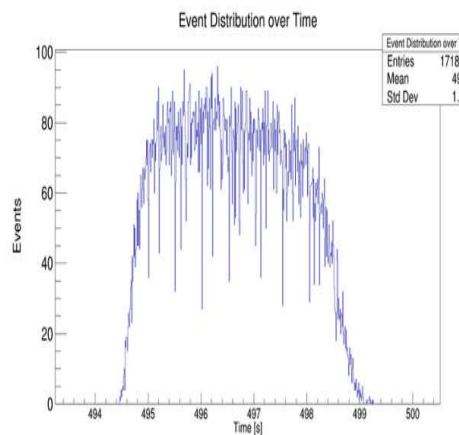
400 AmeV empty



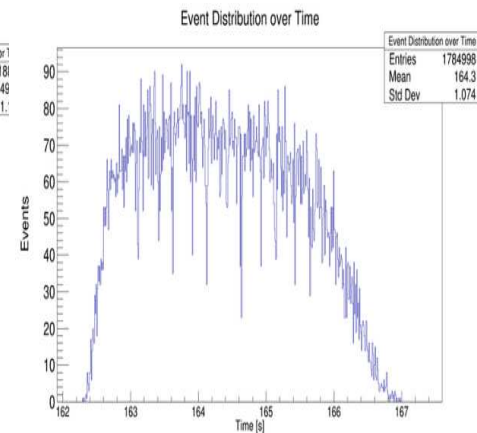
650 AmeV carbon



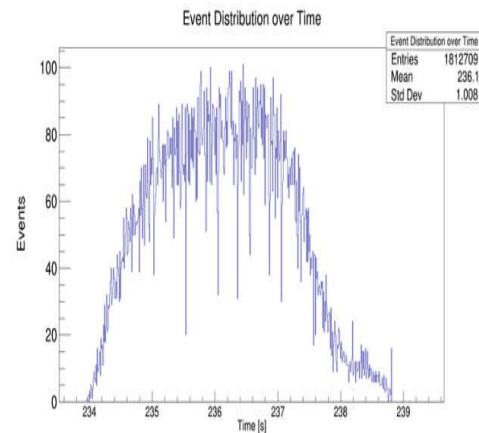
650 AmeV empty



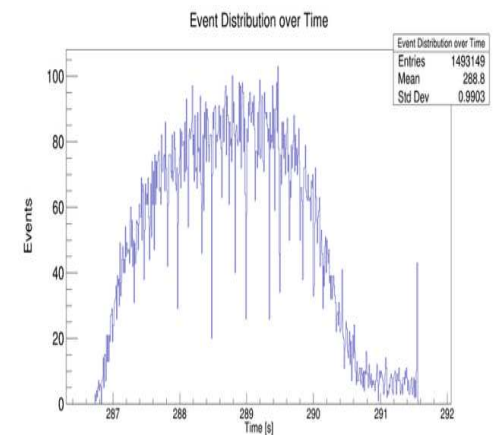
550 AmeV carbon



550 AmeV empty



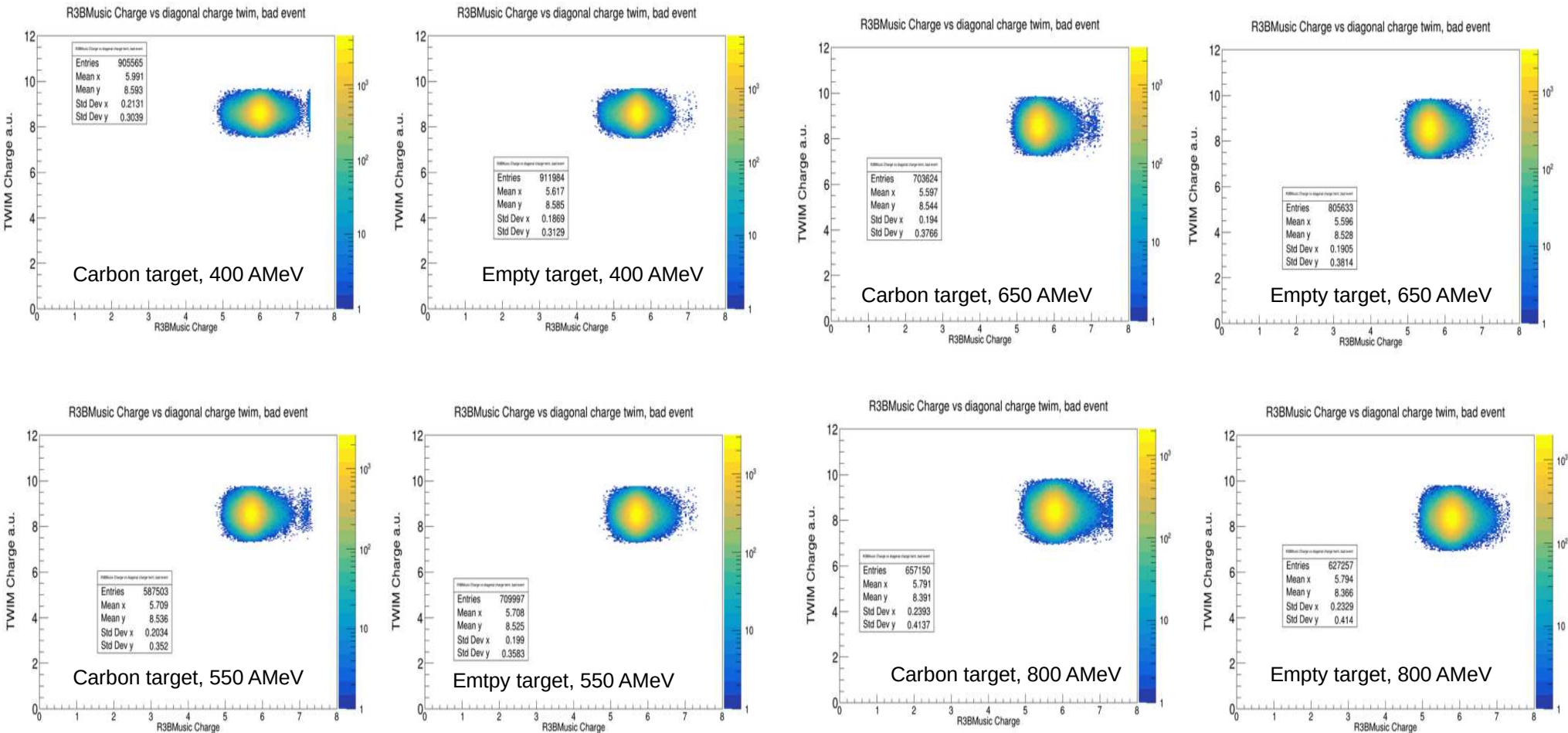
800 AmeV carbon



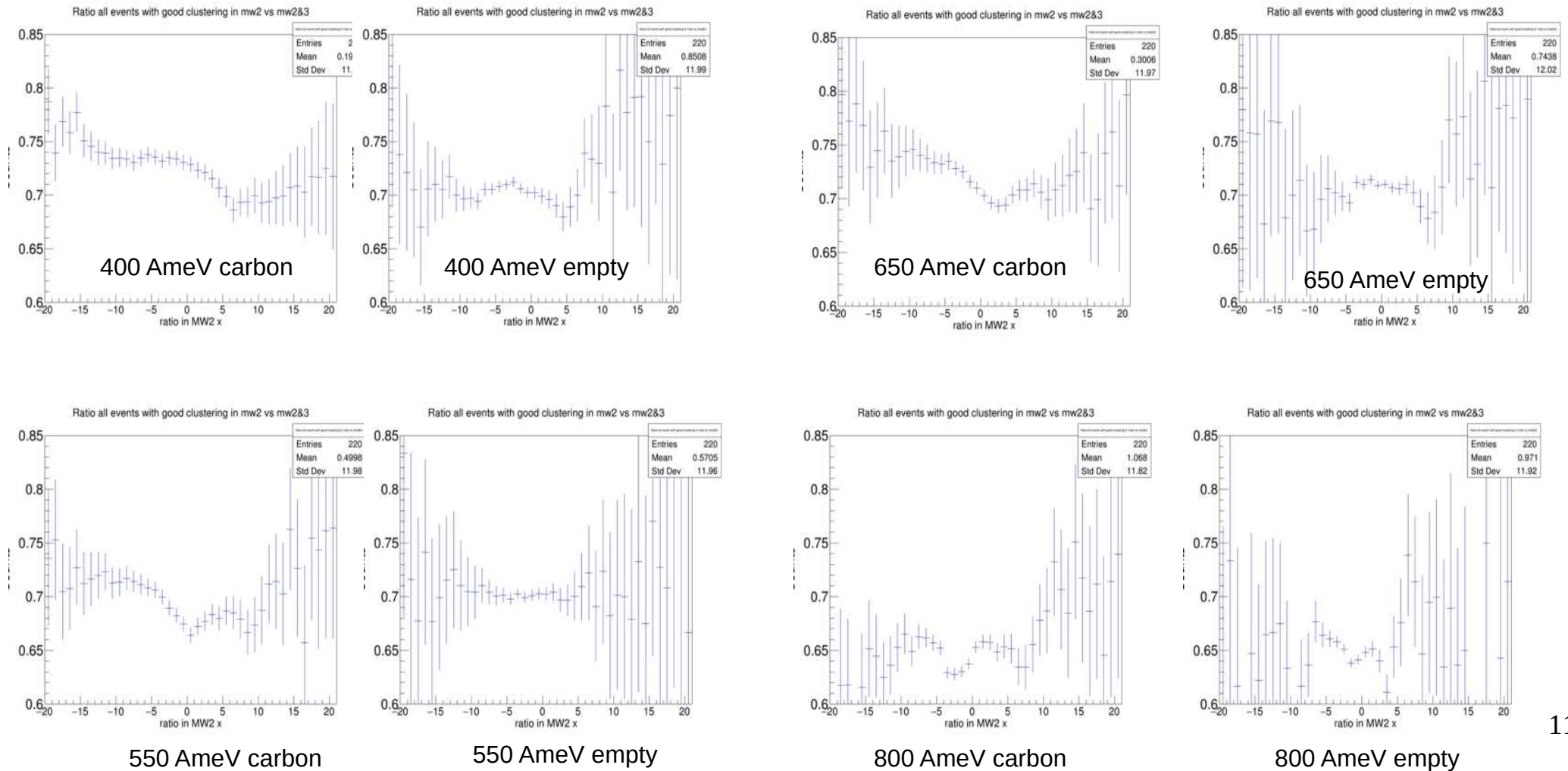
800 AmeV empty

Applied cuts:
 $\pm 1\sigma$ MW0 x-y
 Charge cut = 6 in TWIM

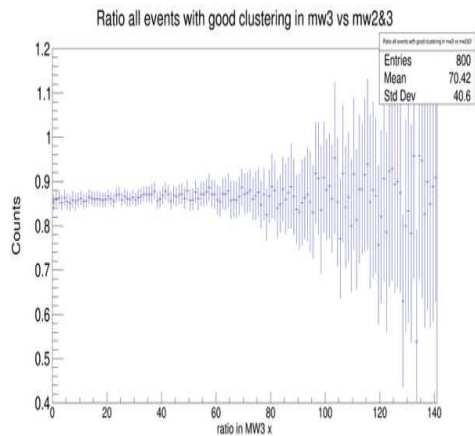
R3BMusic vs Twim Charge



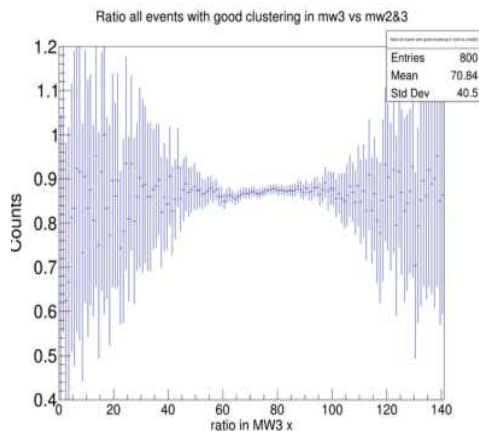
Efficiency of MW3 depening on MW2 x-position



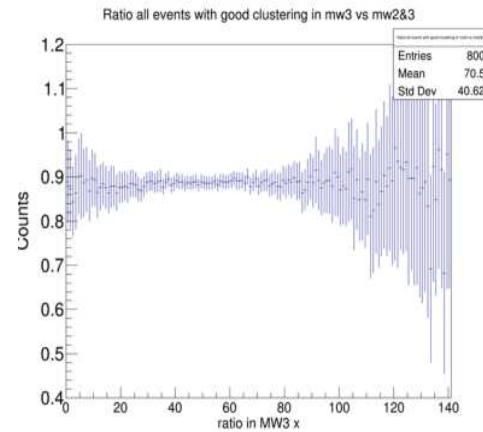
Efficiency of MW2 depening on MW3 x-position



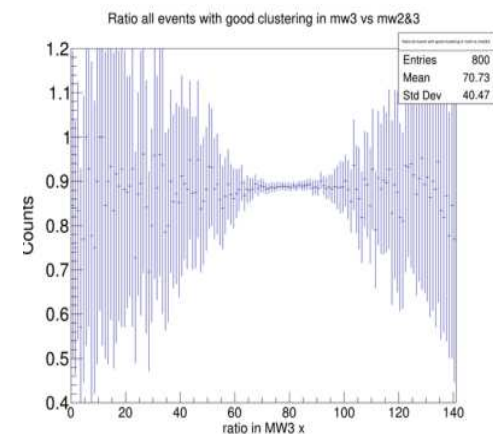
400 AmeV carbon



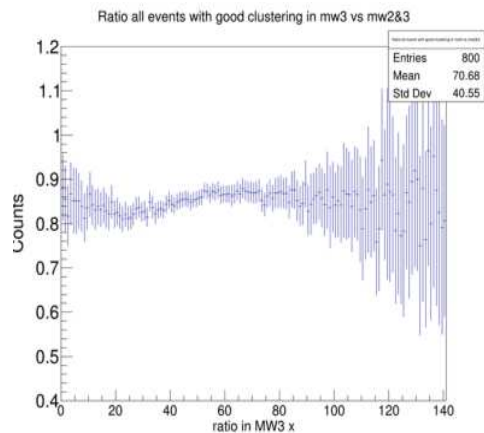
400 AmeV empty



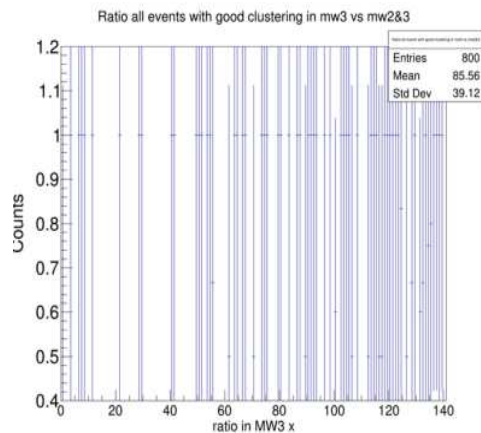
650 AmeV carbon



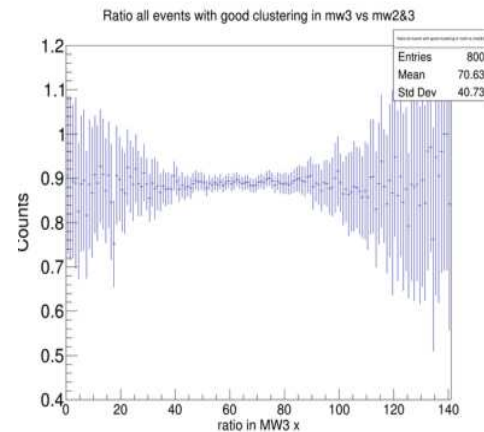
650 AmeV empty



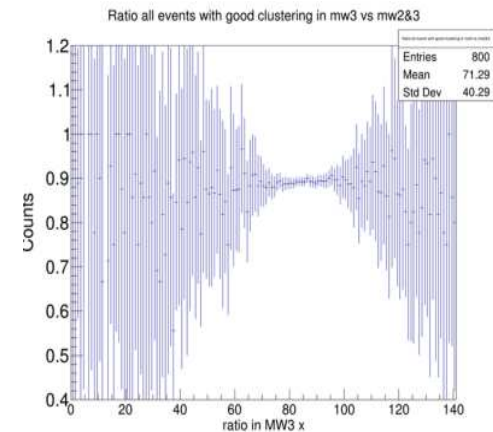
550 AmeV carbon



550 AmeV empty



800 AmeV carbon



800 AmeV empty