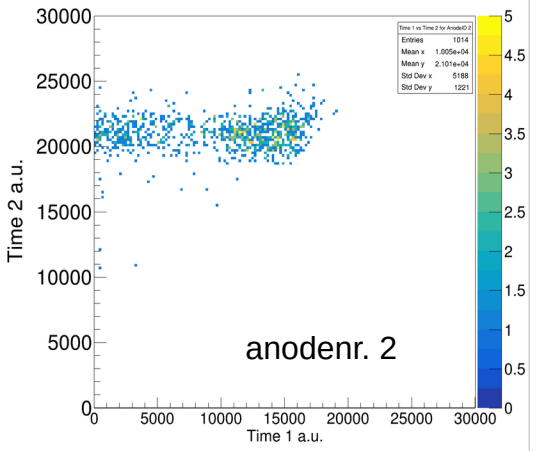
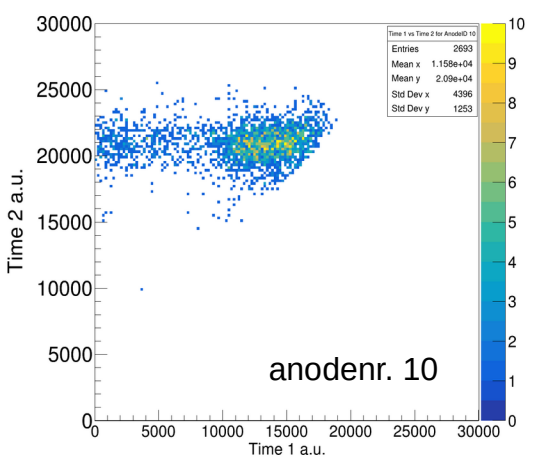
S444 experiment - update2

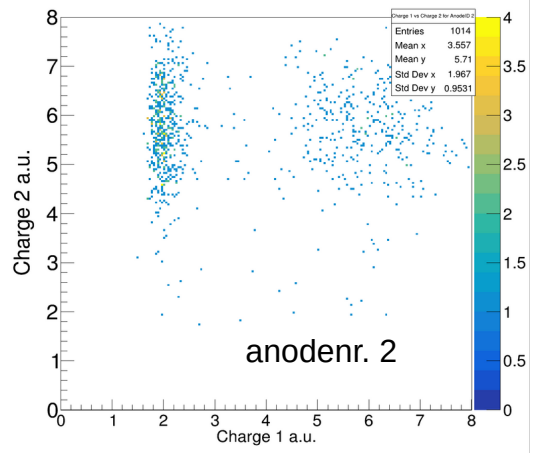
28.08.2024

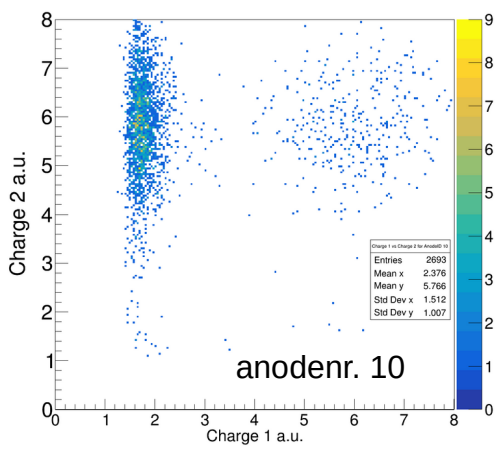
Time1 vs Time2 in TWIM – no cut on charge 400 AMeV

Carbon Target

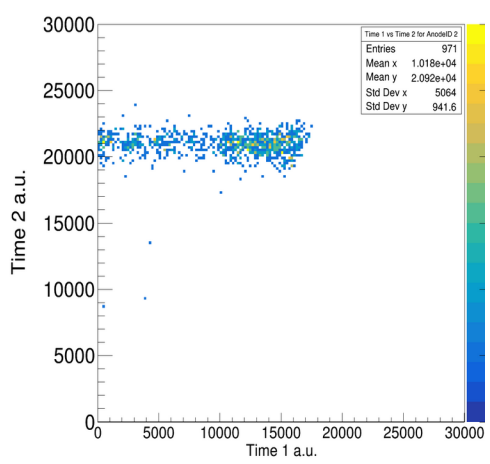


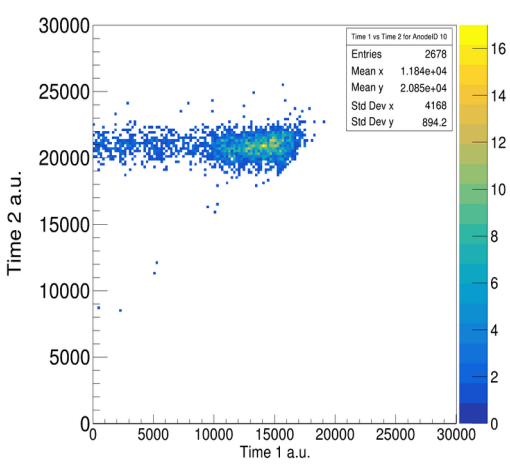


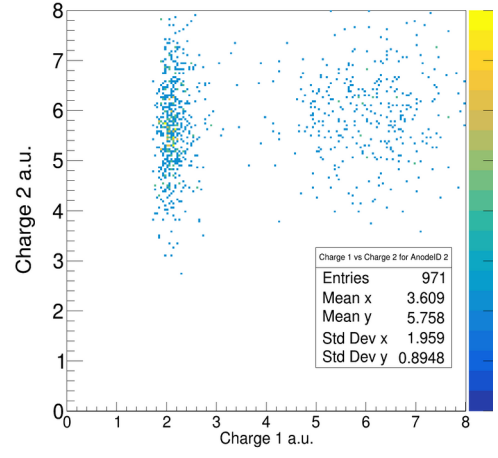


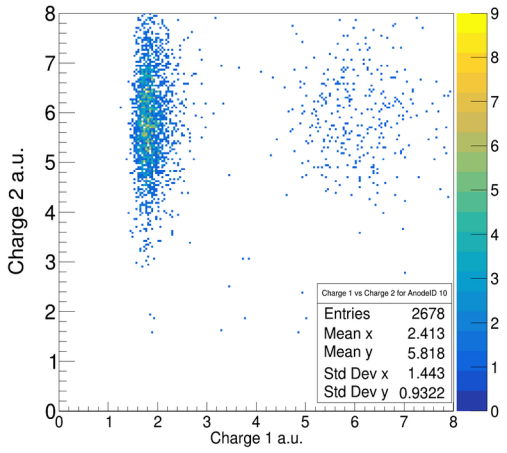


Empty Target



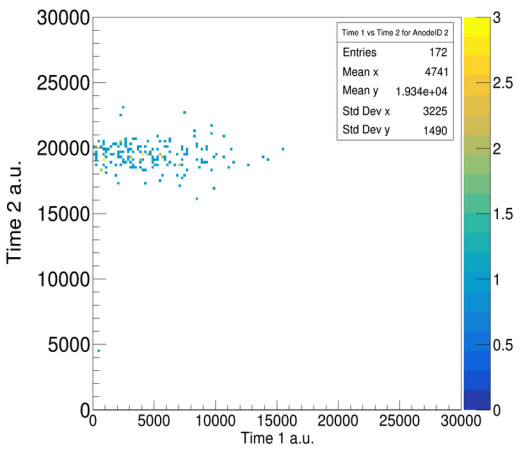


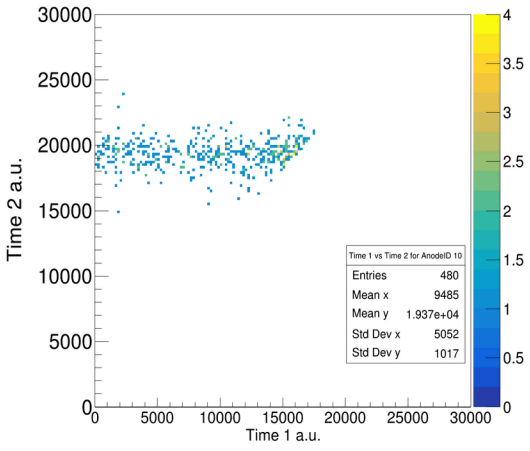


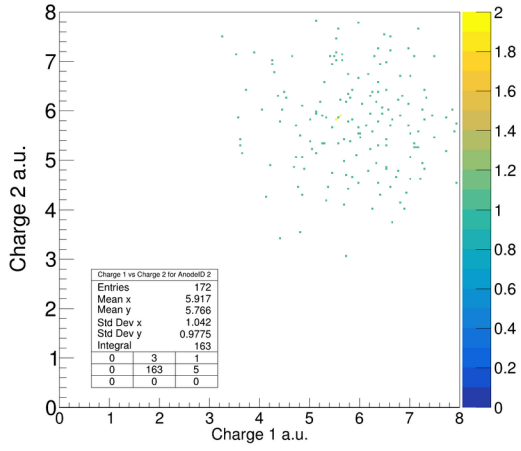


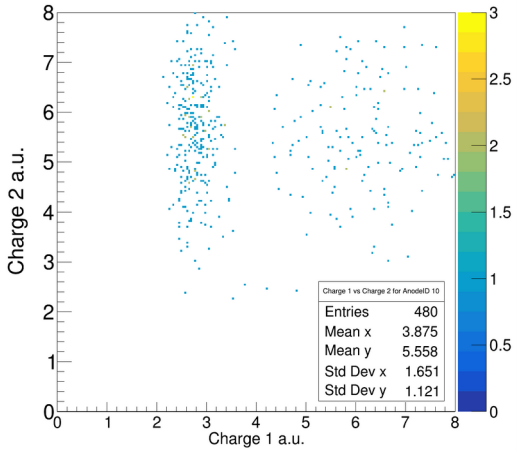
Time1 vs Time2 in TWIM – no cut on charge 550 AMeV

Carbon Target

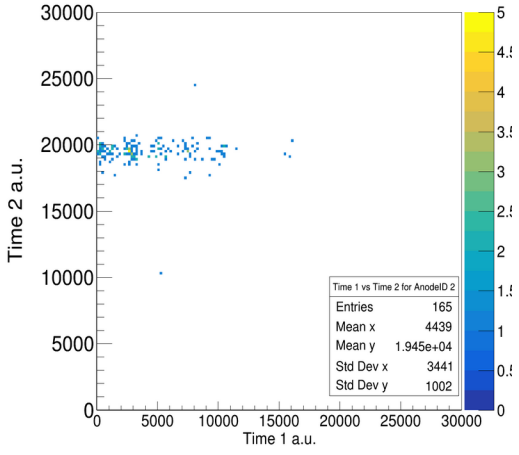


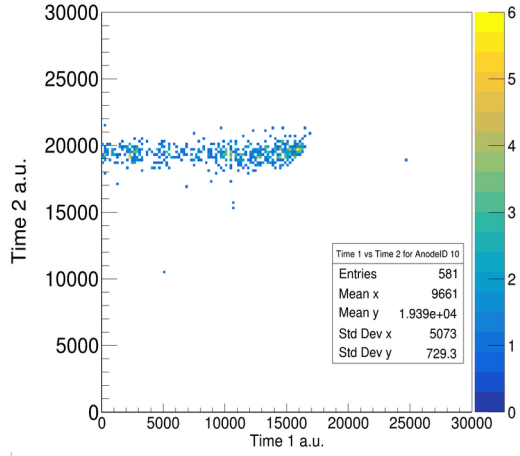


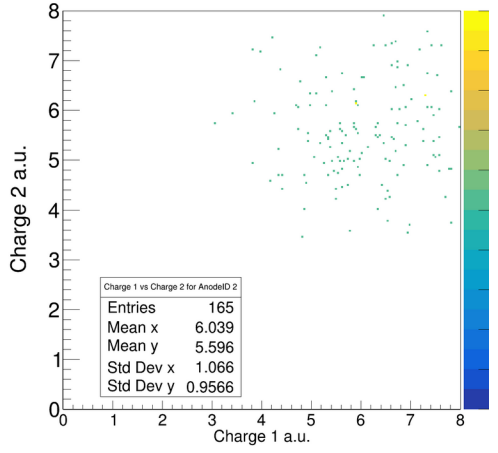


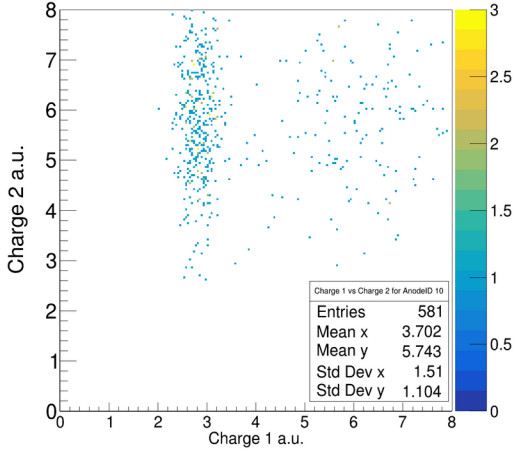


Empty Target



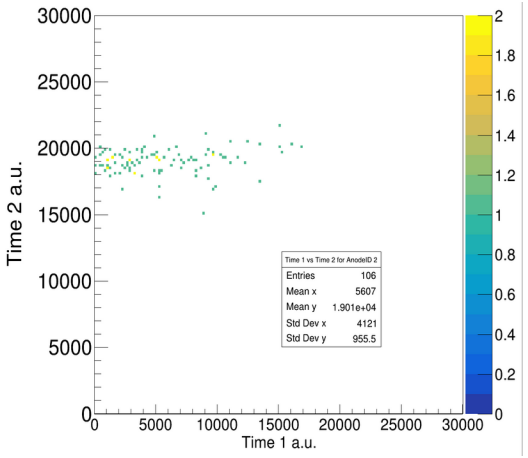


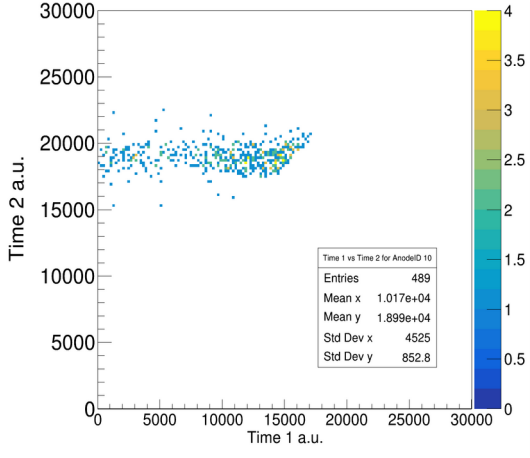


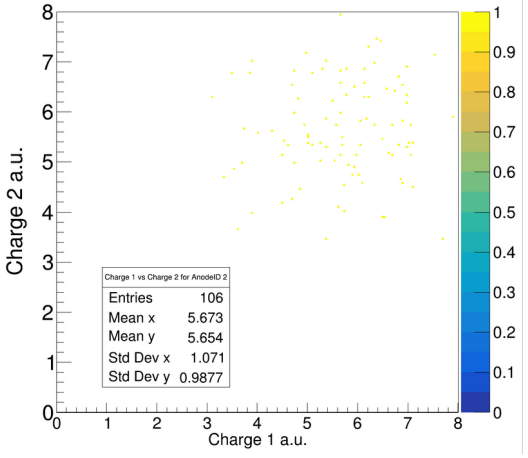


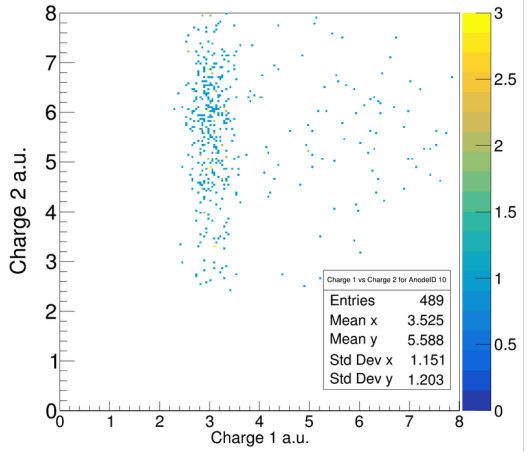
Time1 vs Time2 in TWIM – no cut on charge 650 AMeV

Carbon Target

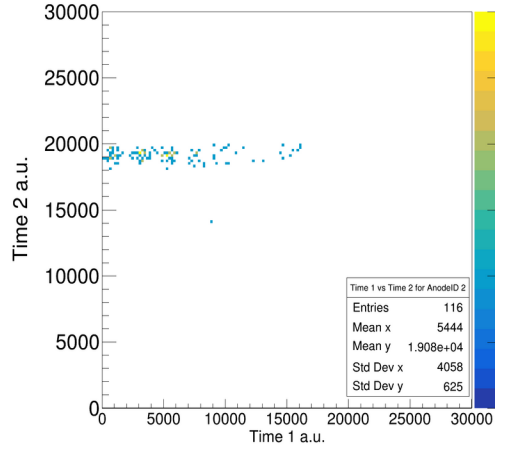


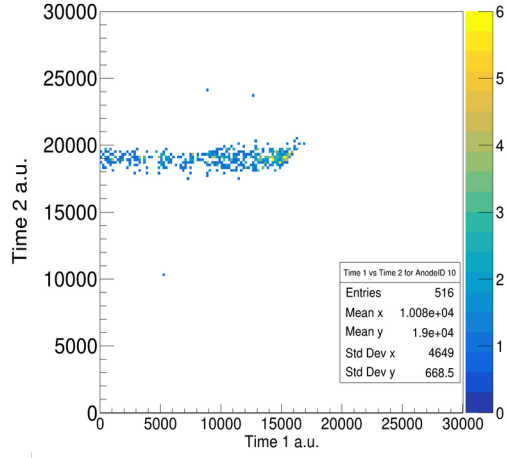


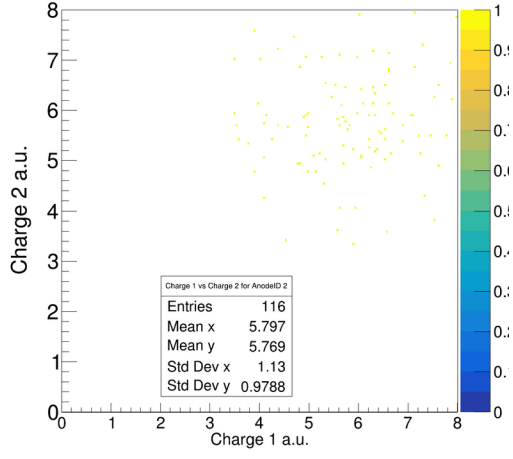


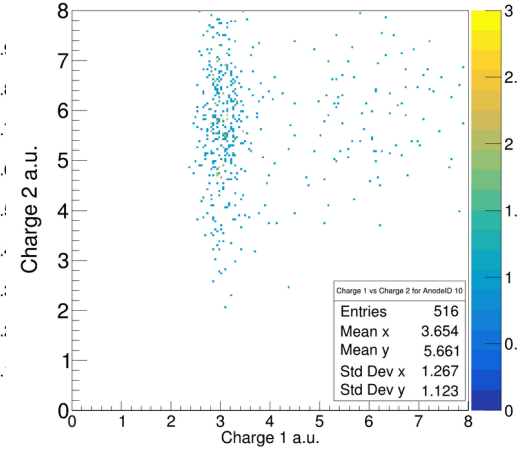


Empty Target



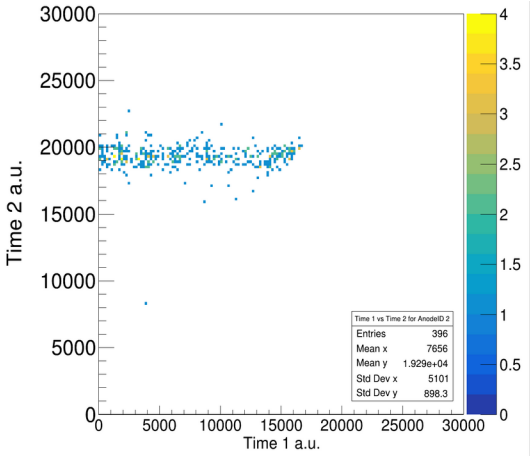


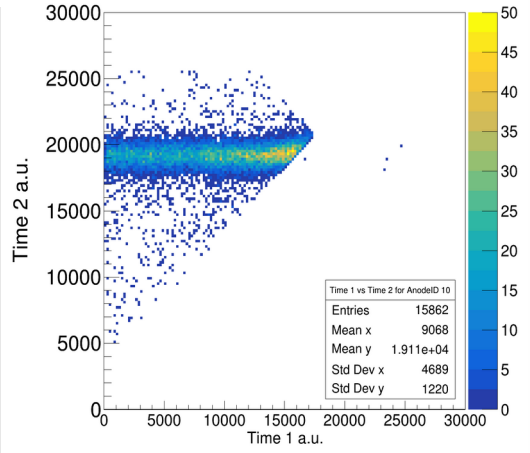


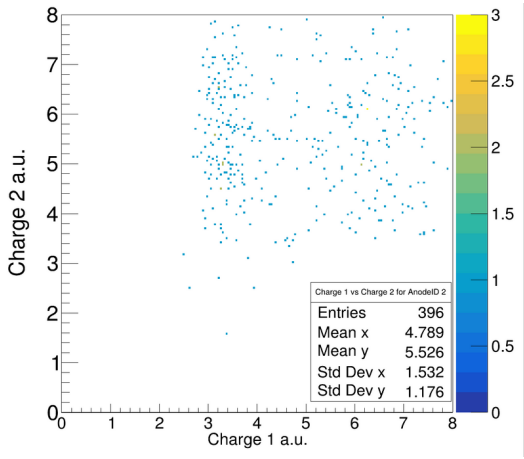


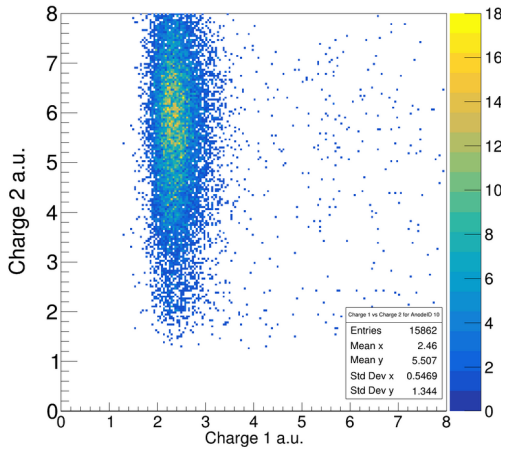
Time1 vs Time2 in TWIM – no cut on charge 800 AMeV

Carbon Target

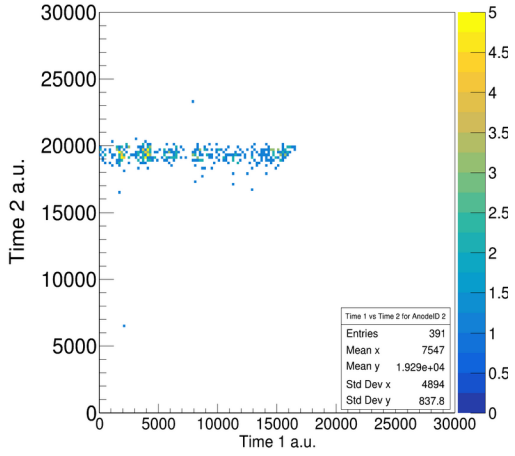


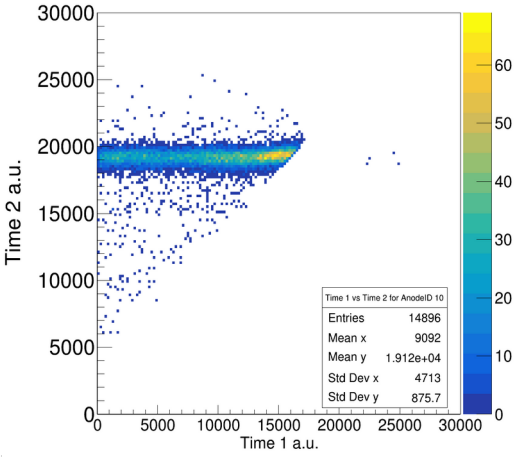


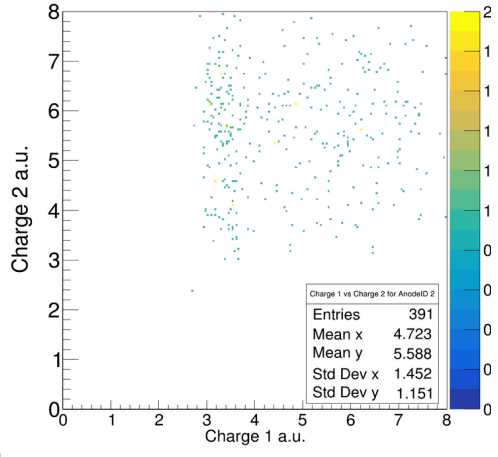


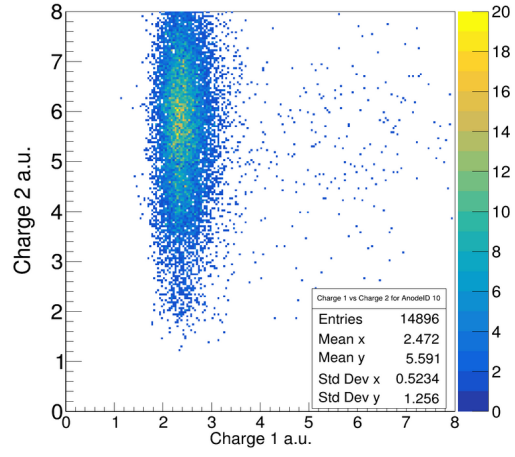


Empty Target

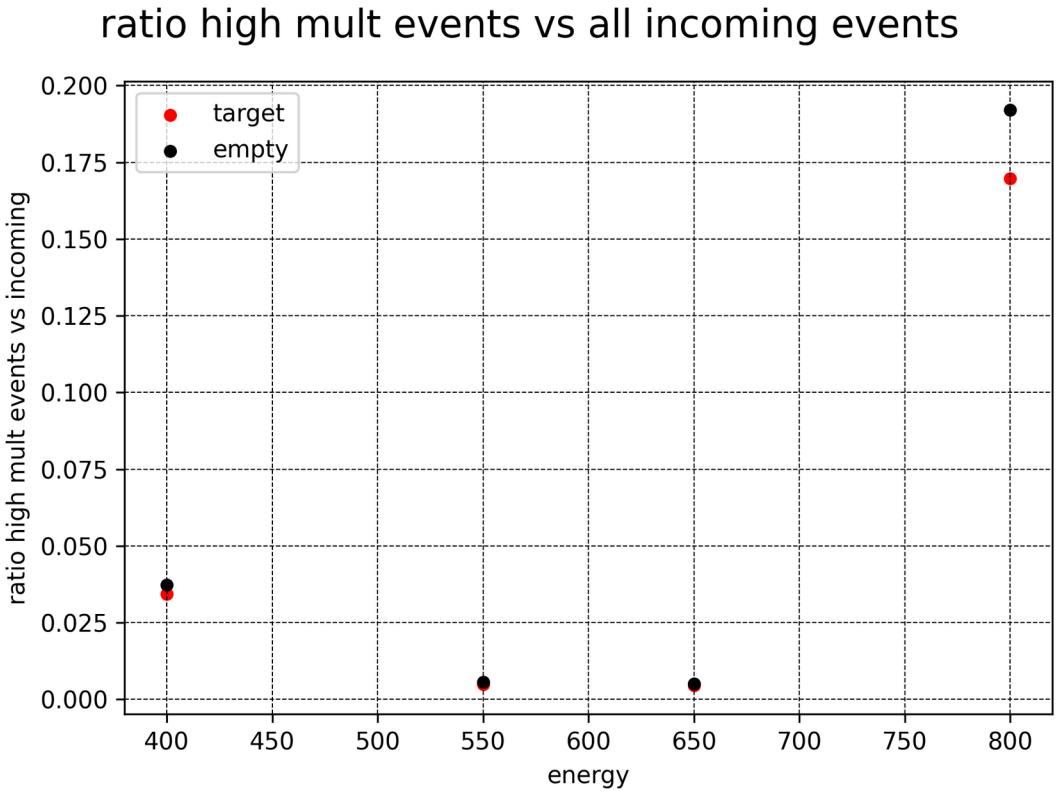


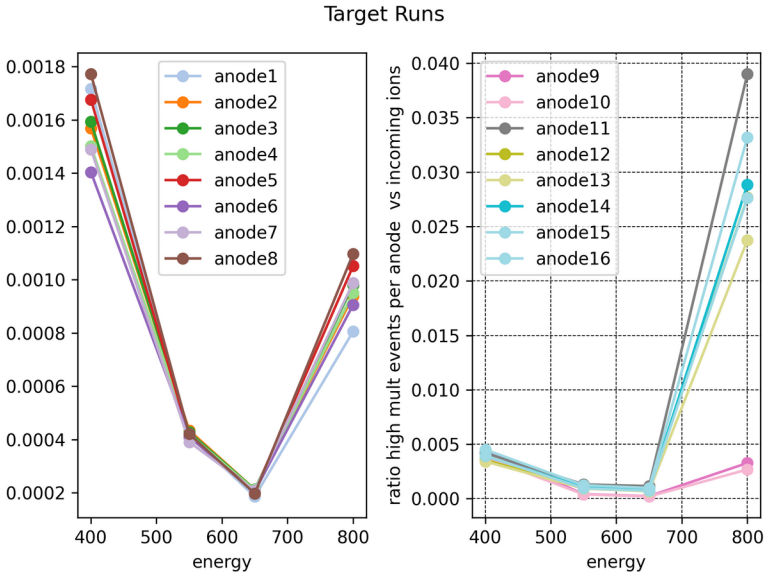


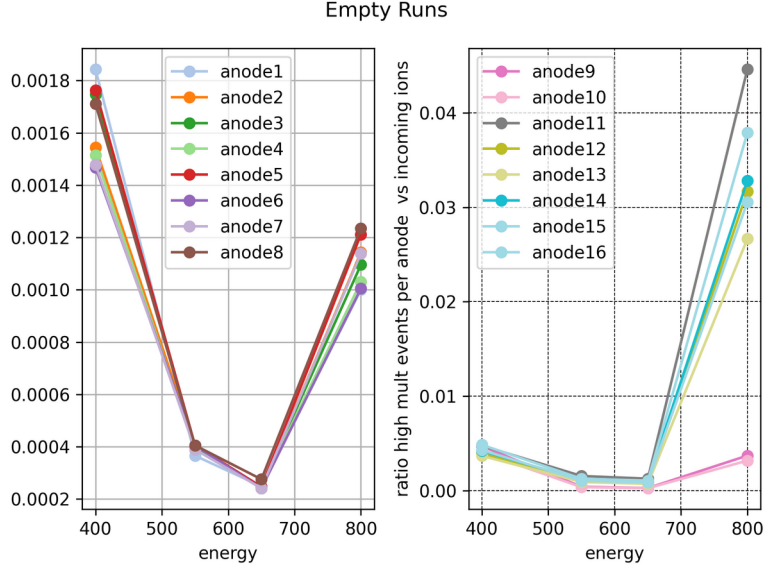




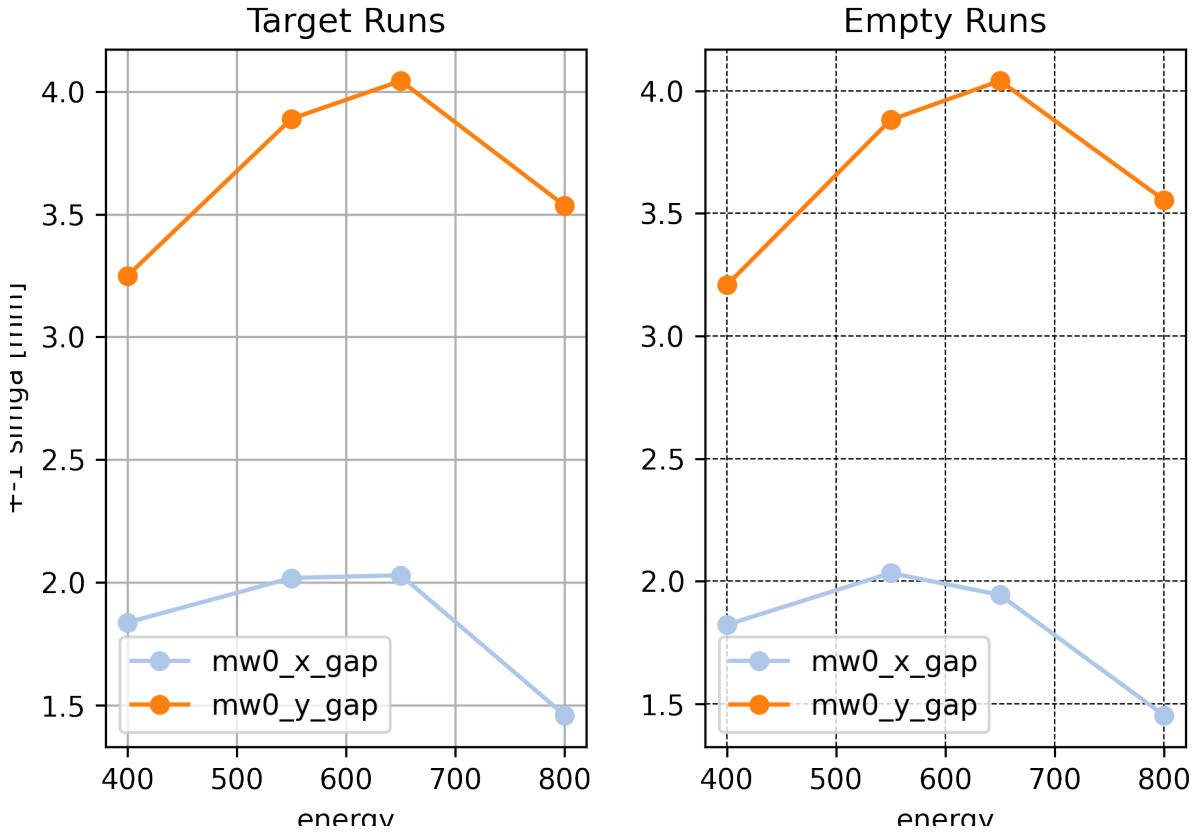
TWIM Multiplicities



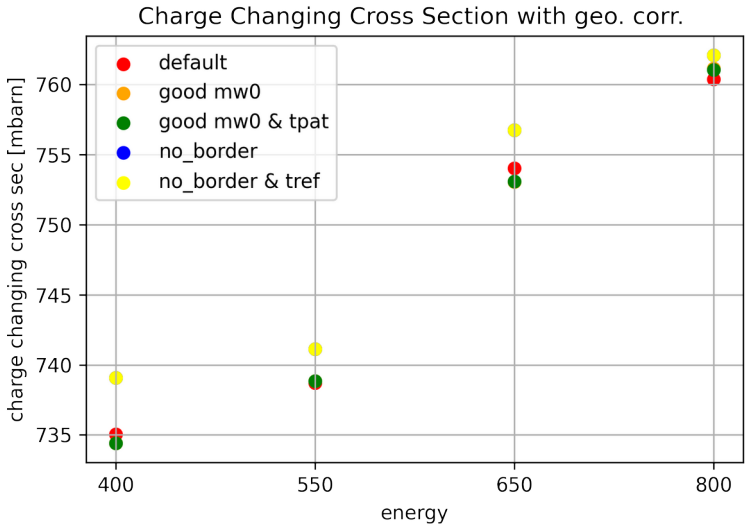


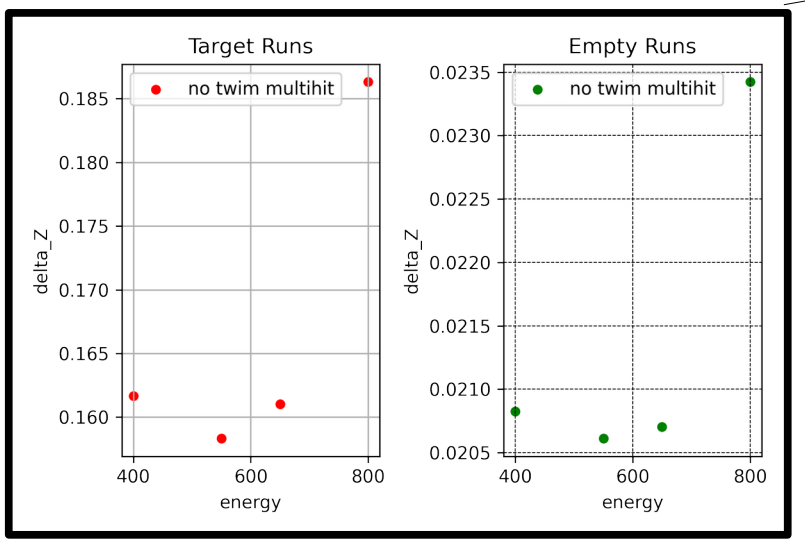


MW0 openign gaps (+-sigma cut condition for x and y)

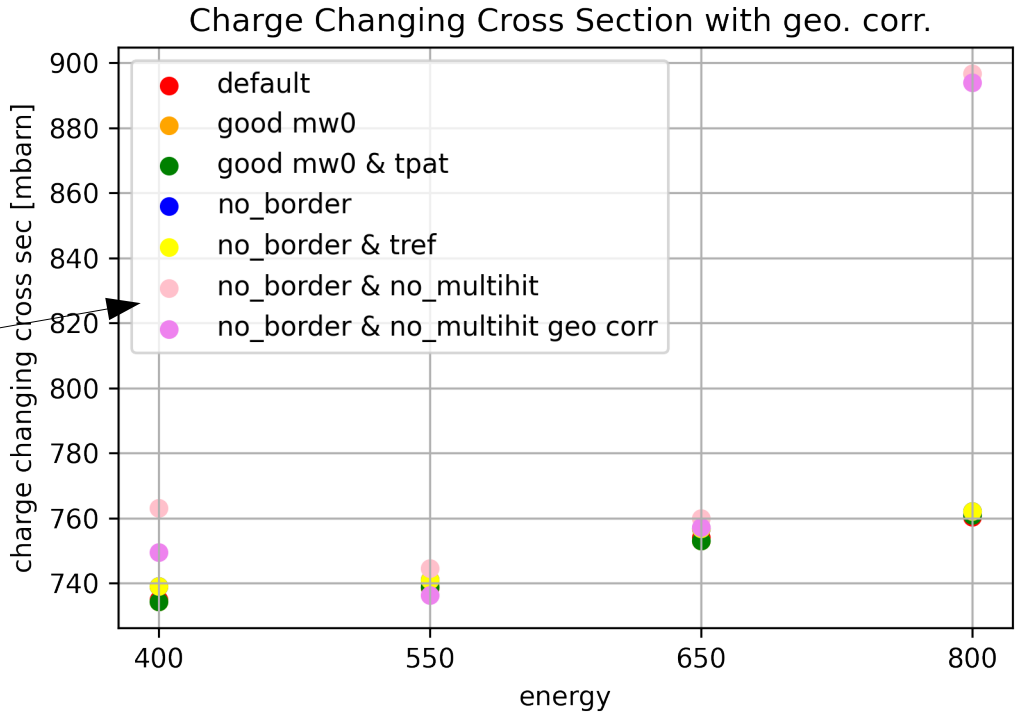


Cross Sections for different conditions

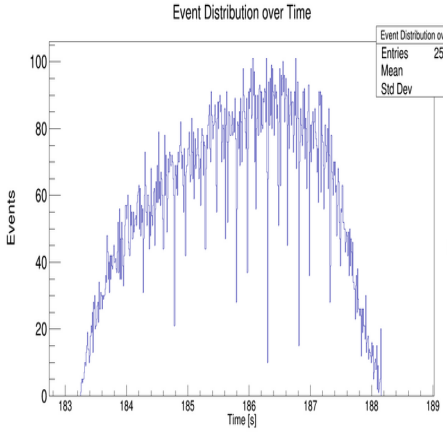




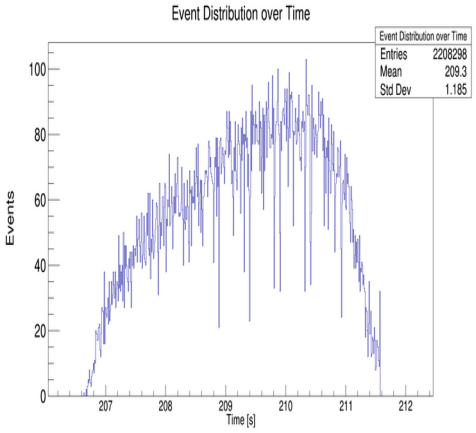
Now applying multiplicity cut on TWIM:
Only select events with no high multiplicity hits in TWIM anodes



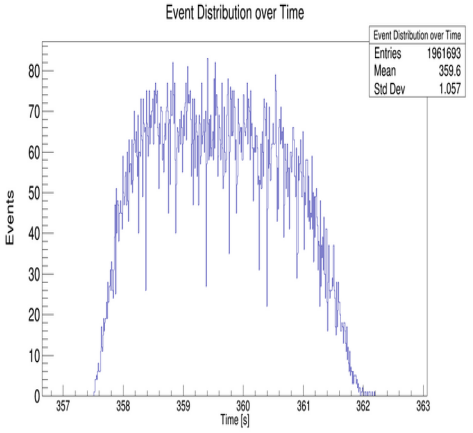
Shape of beam spills



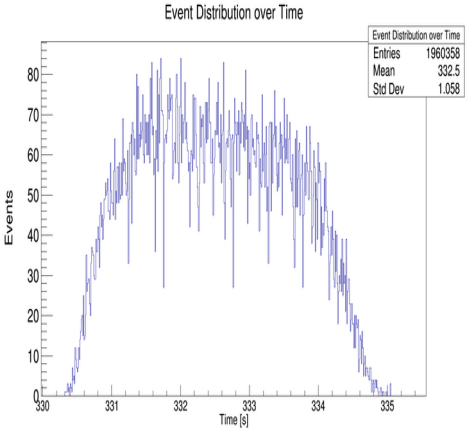
400 AmeV carbon



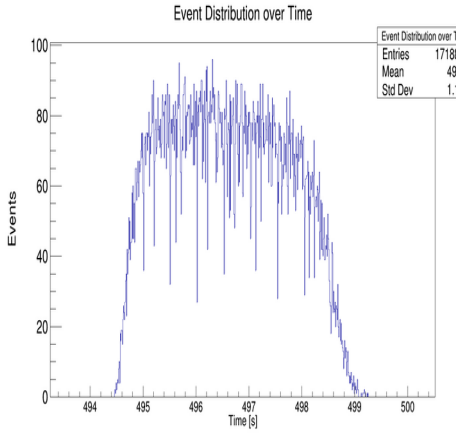
400 AmeV empty



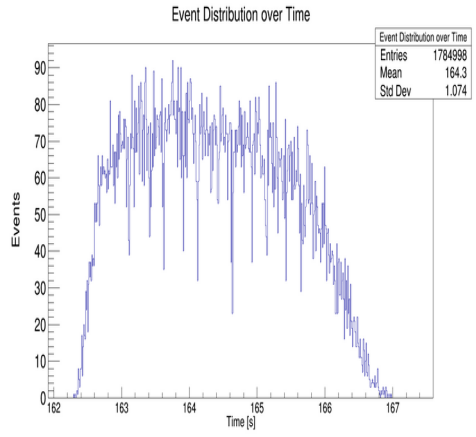
650 AmeV carbon



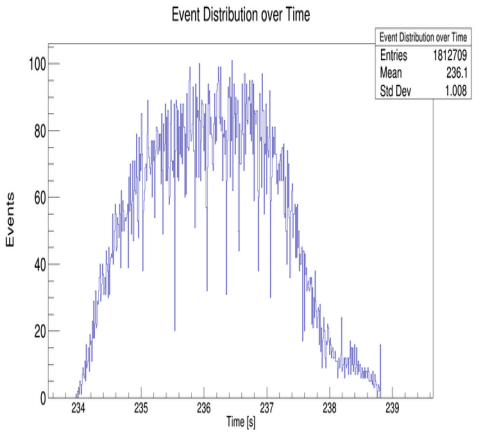
650 AmeV empty



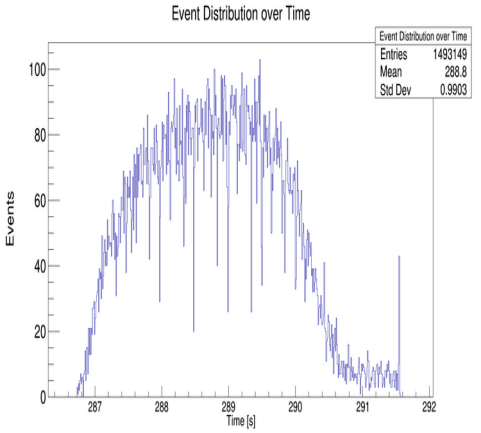
550 AmeV carbon



550 AmeV empty



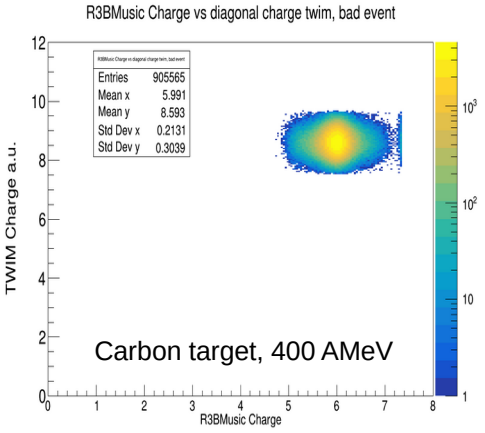
800 AmeV carbon

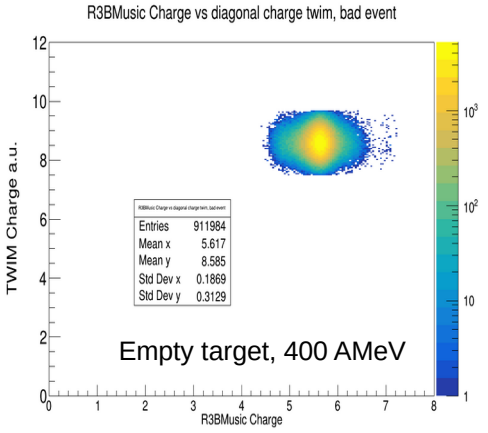


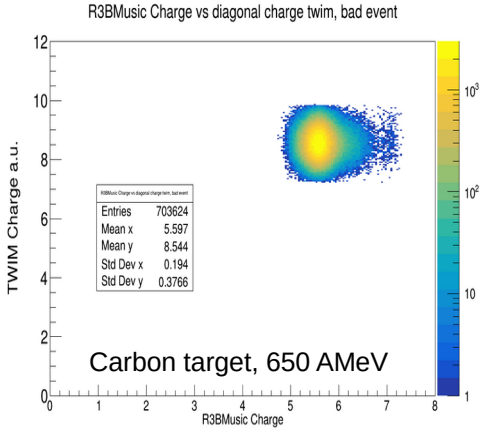
800 AmeV empty

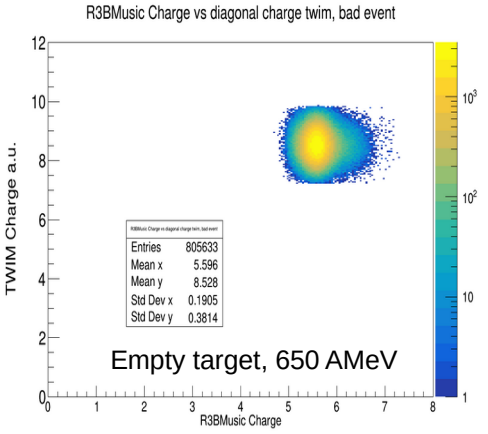
Applied cuts:
+-1sigma MW0 x-y
Charge cut = 6 in TWIM

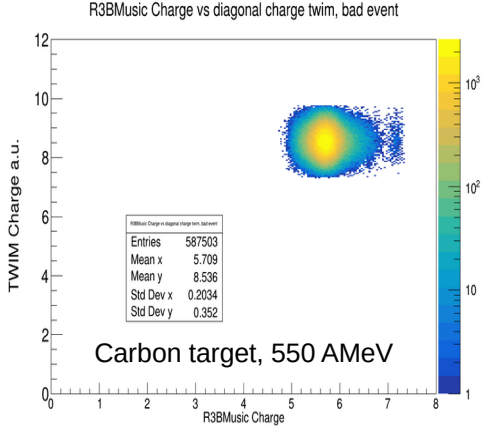
R3BMusic vs Twim Charge

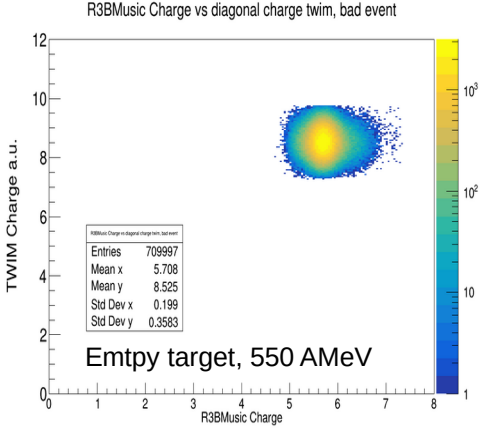


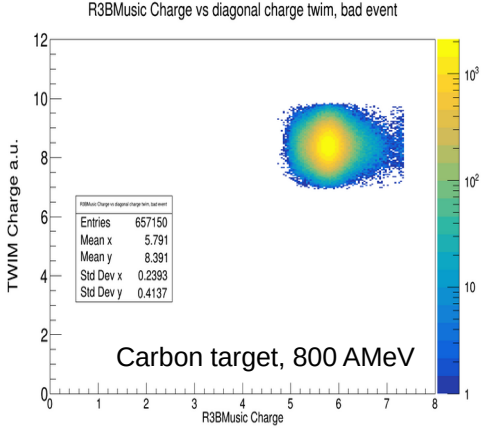


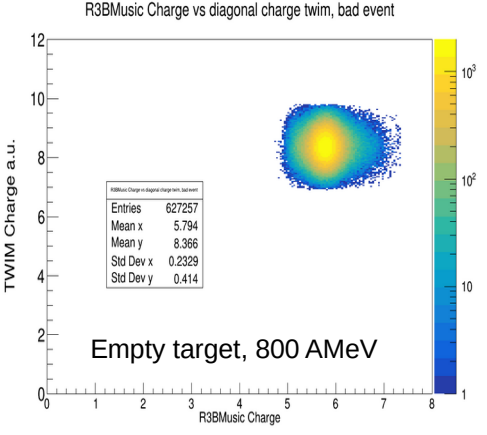




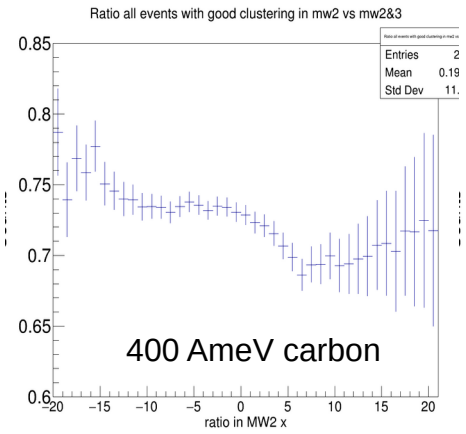




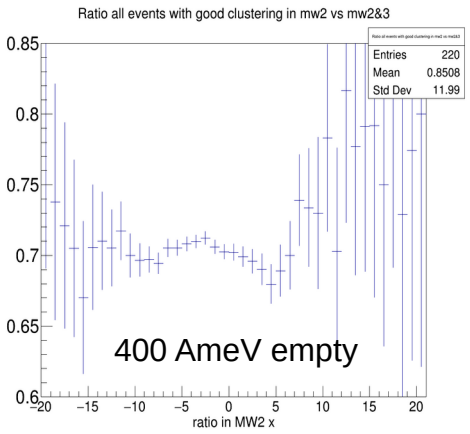




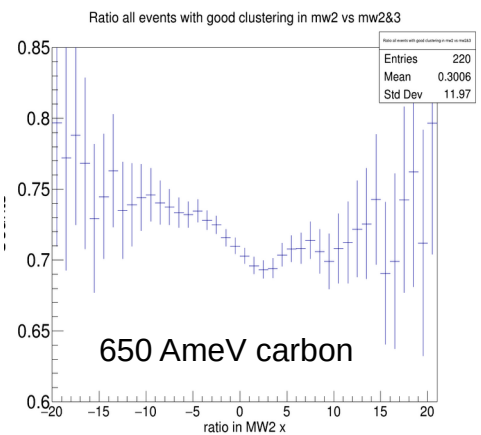
Efficiency of MW3 depening on MW2 x-position



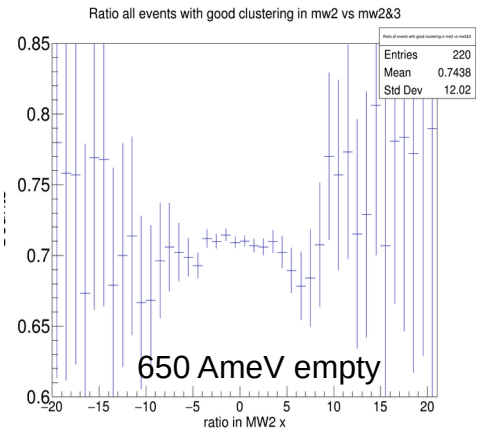
400 AmeV carbon



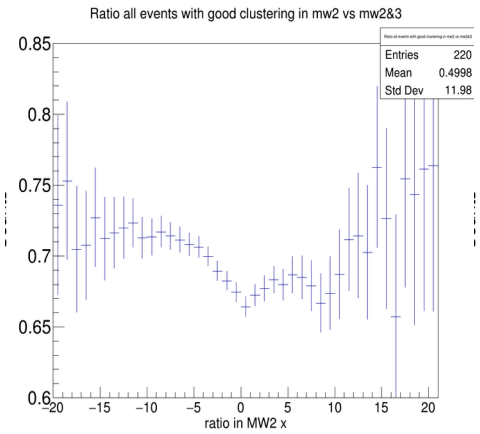
400 AmeV empty



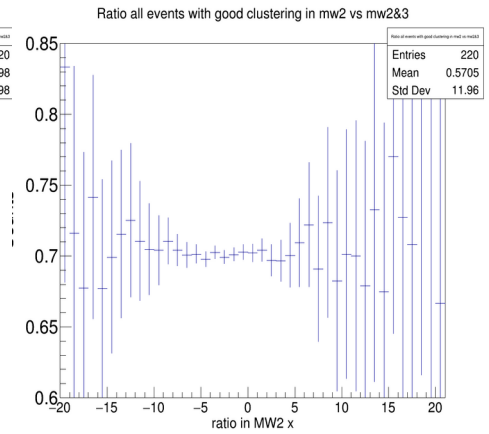
650 AmeV carbon



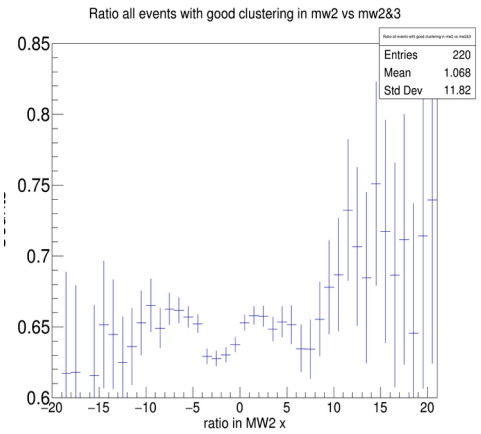
650 AmeV empty



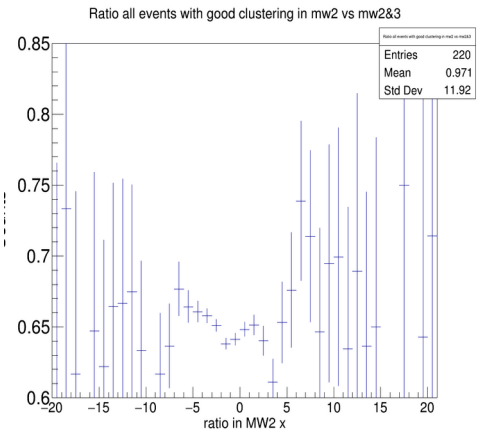
550 AmeV carbon



550 AmeV empty



800 AmeV carbon



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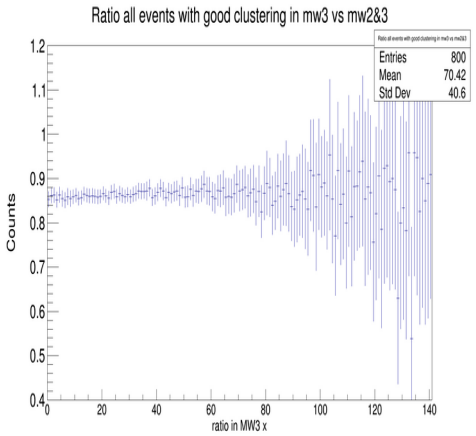
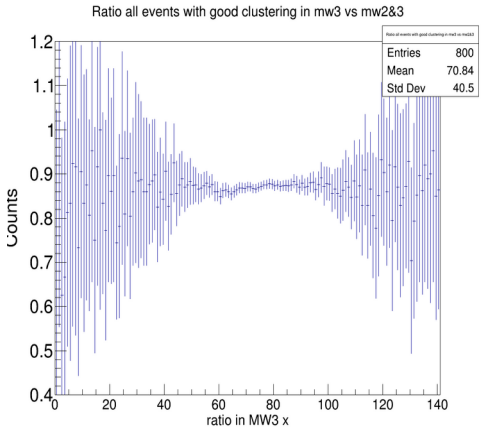
Efficiency of MW2 depening on MW3 x-position



400 AmeV carbon



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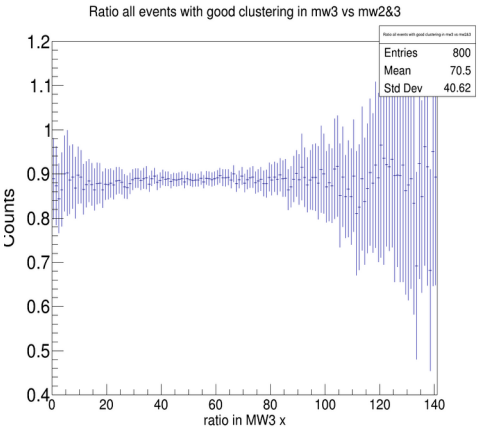
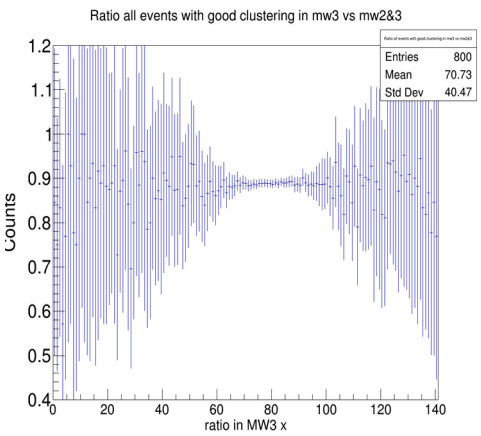
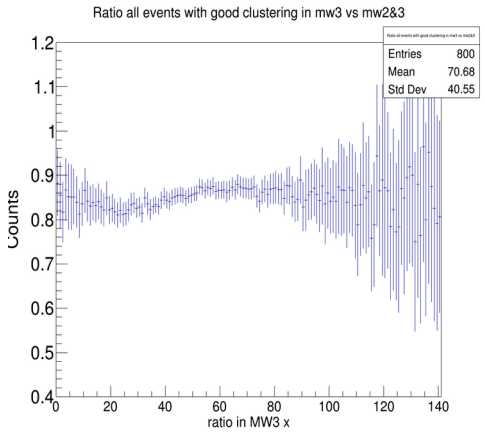


650 AmeV carbon



650 AmeV empty



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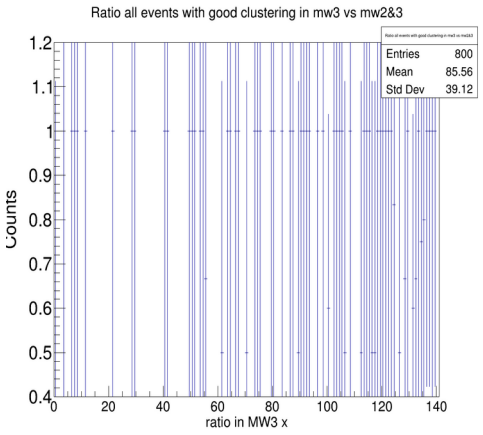

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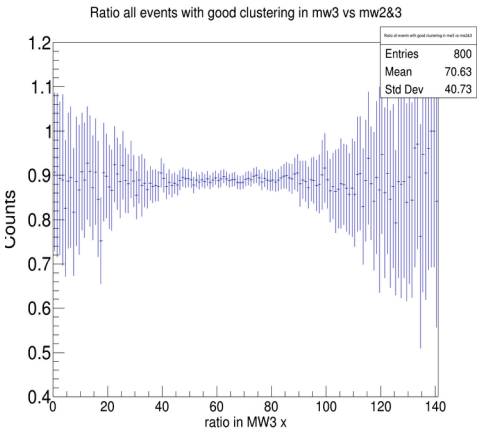

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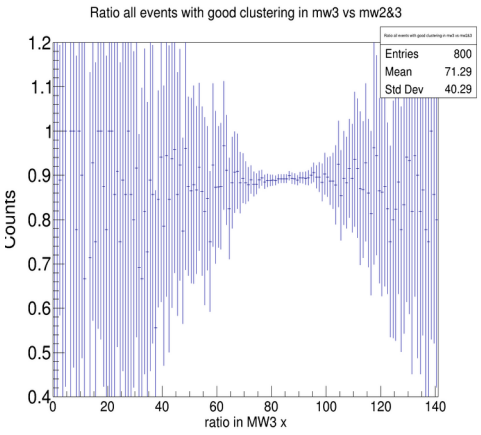

800 AmeV empty