

E42 Tracking

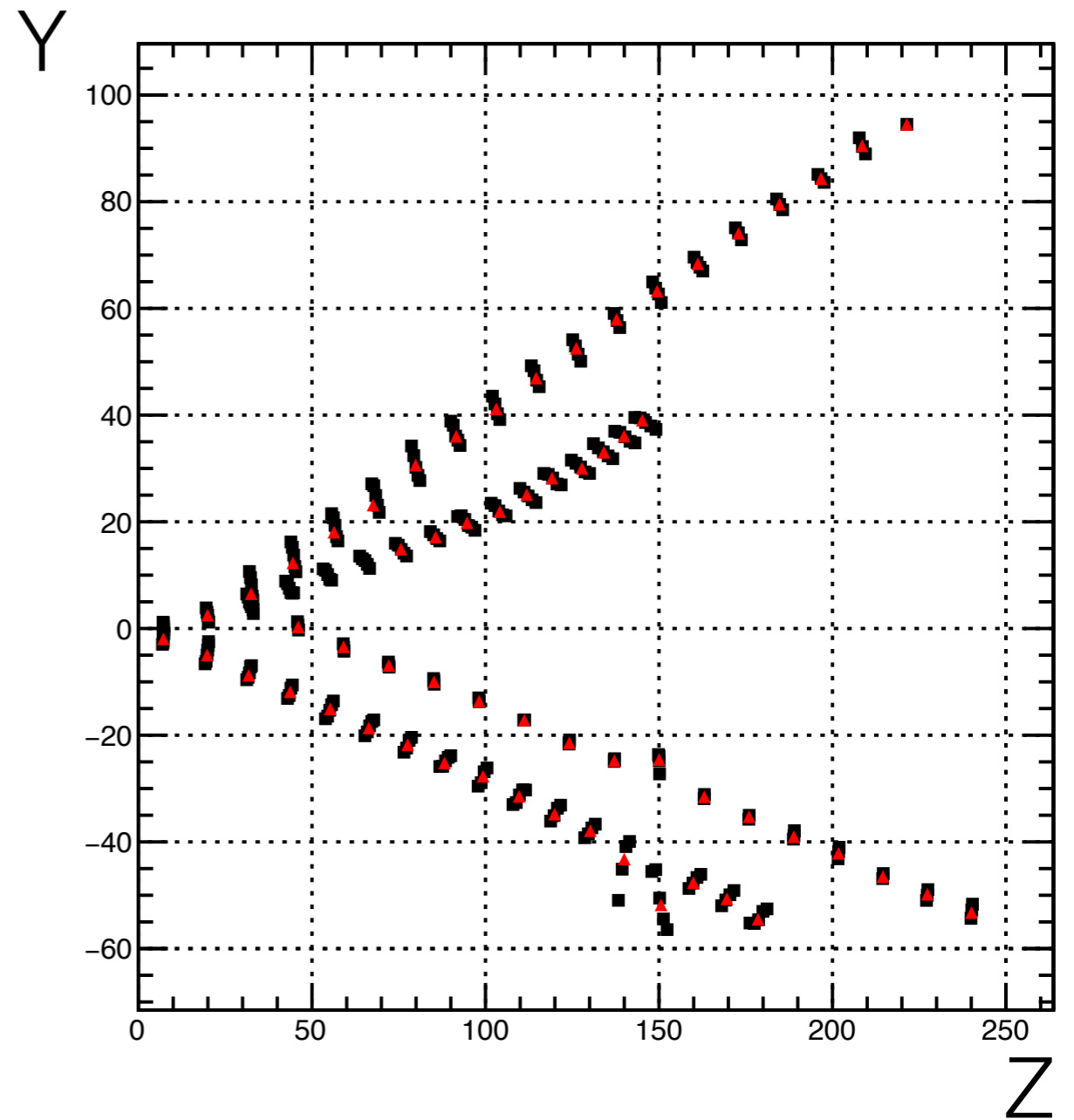
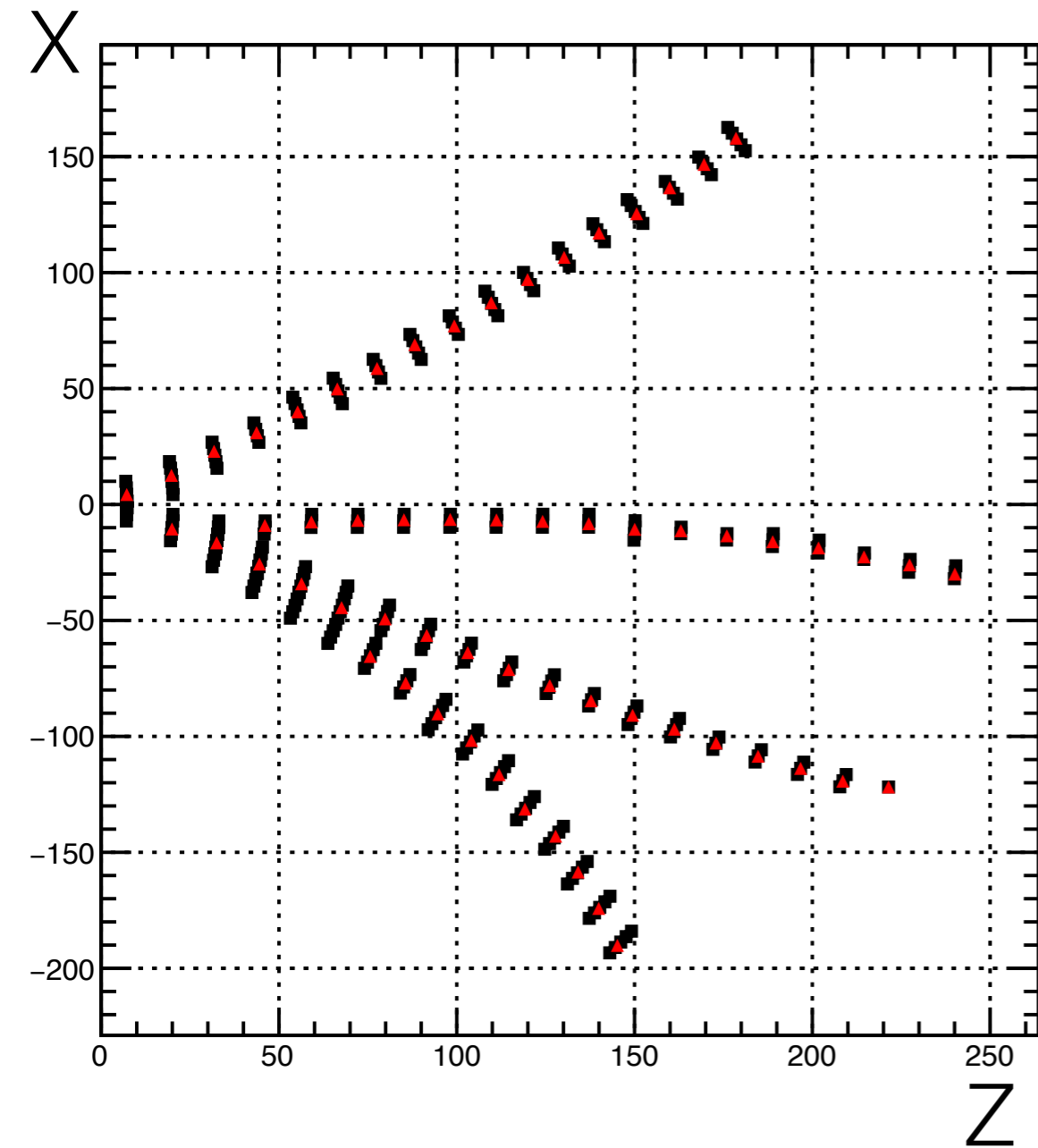
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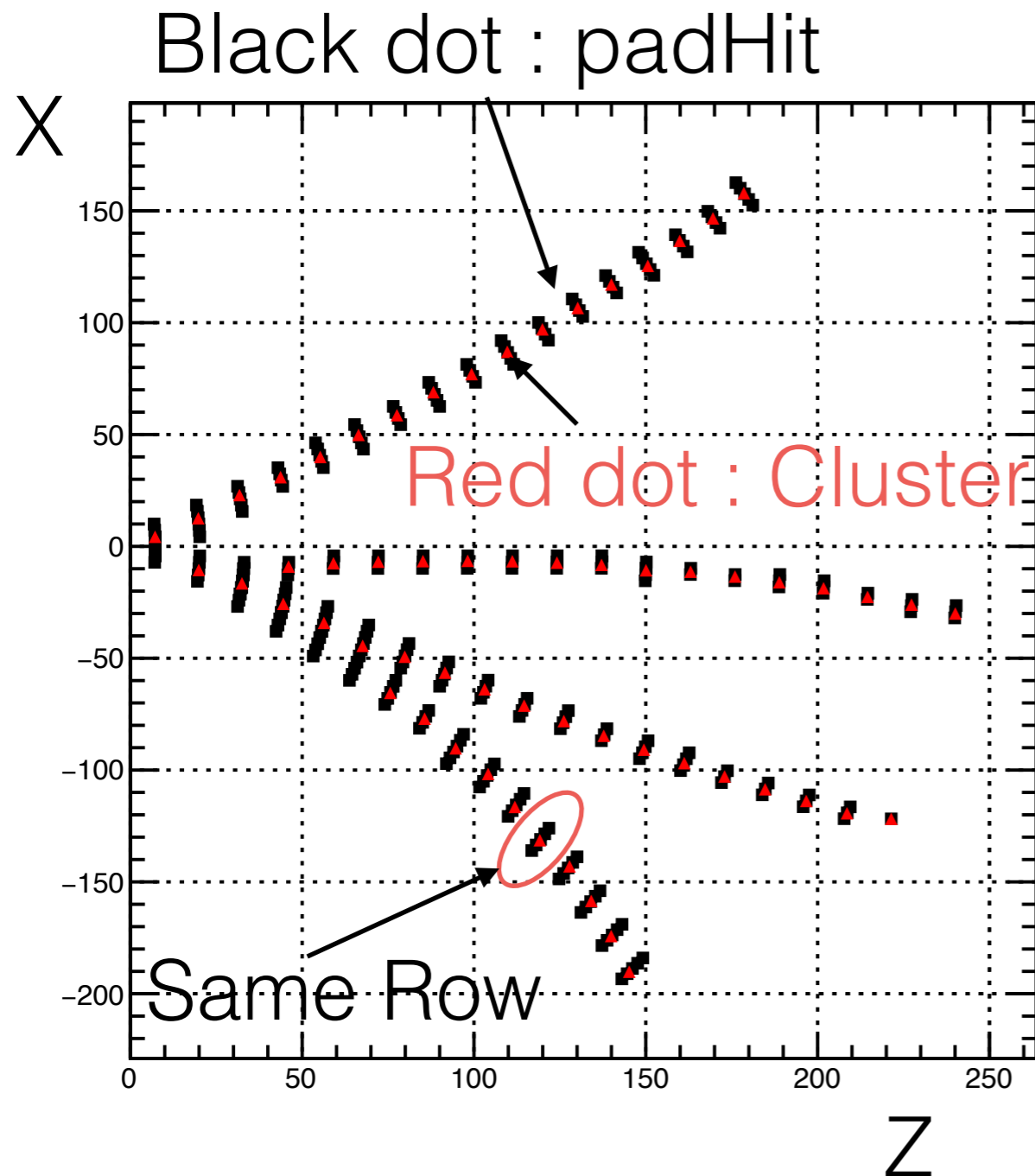
Single $H \rightarrow 2\Lambda \rightarrow 2\pi^- + 2\text{proton}$ event sample

XZ plot

YZ plot



Event reconstruction

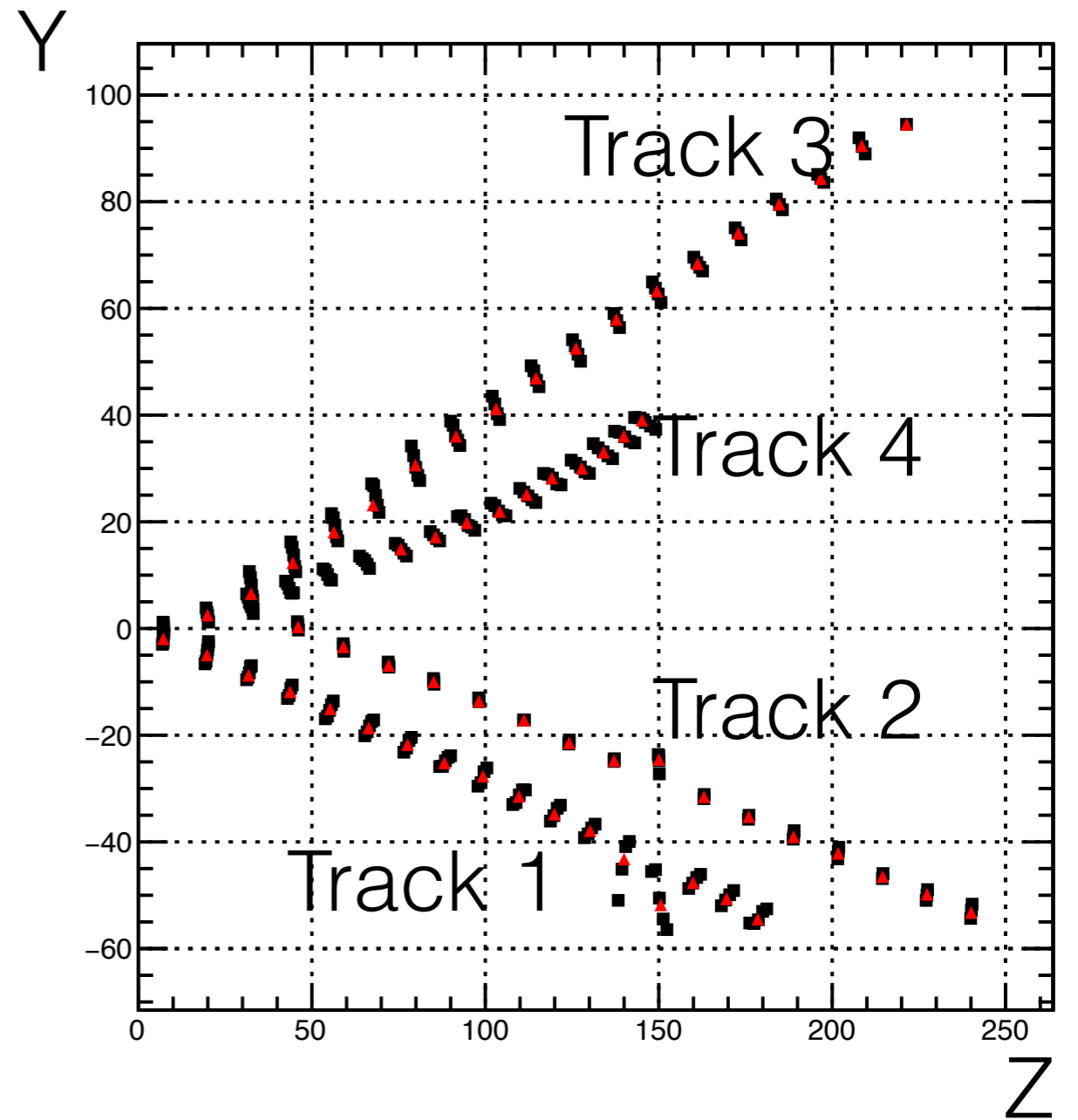
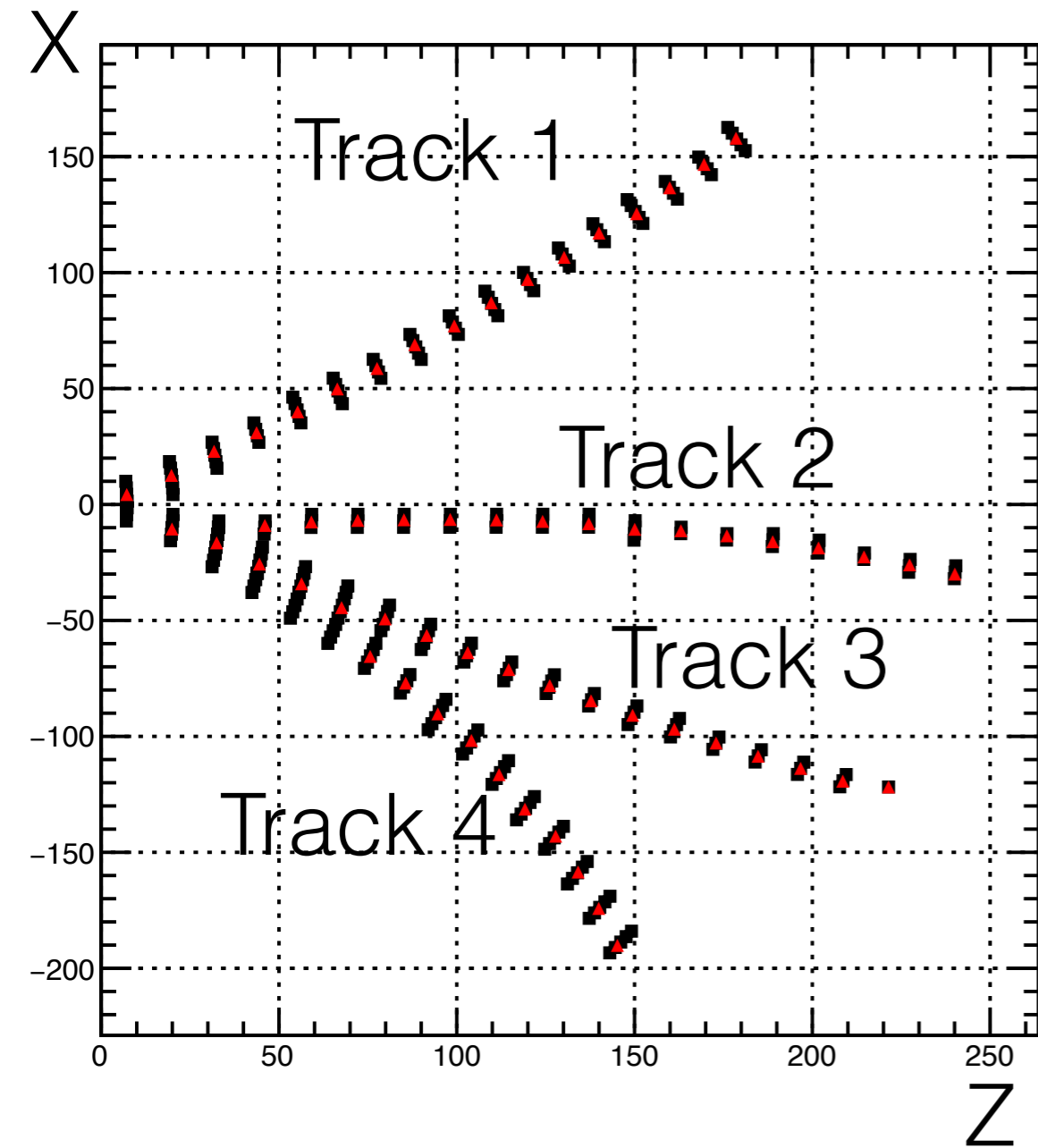


1. Generate virtual-electrons from a MC hit position.
2. Gather electrons by pad and get mean hit position Y and total energy.
3. Clustering padHits by row.
4. Tracking(ungergoing)

Tracking strategy

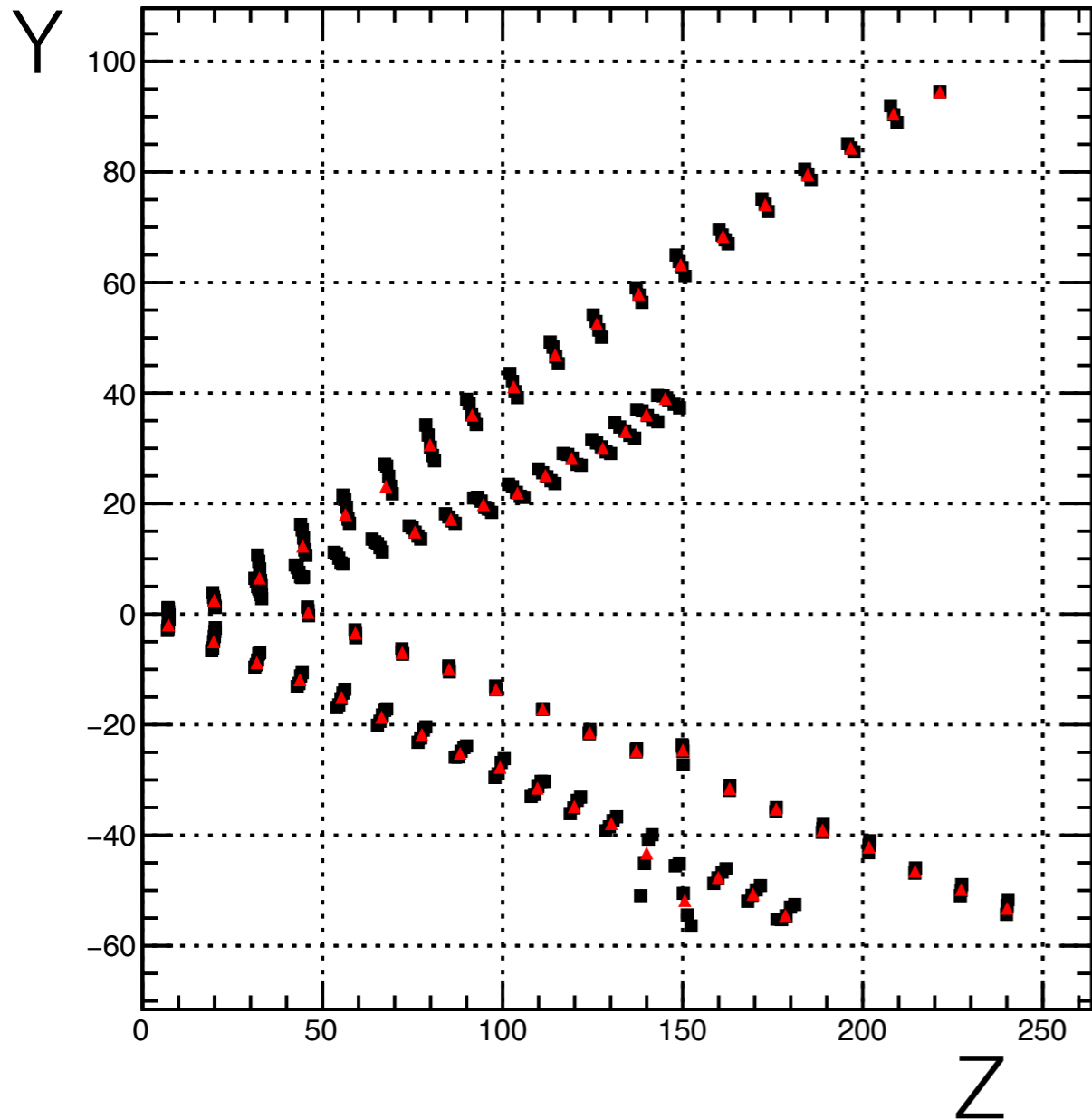
XZ plot

YZ plot



(Track1, Track4) + (Track2, Track3) : How to divide?

Dividing events to two clusters



1. Candidate 1: clustering by row and tracking with inner hit-cluster searching method
2. Candidate 2: Clustering event at padHit level and clustering by row and applying inner hit-cluster searching method

Issues for tracking method candidates

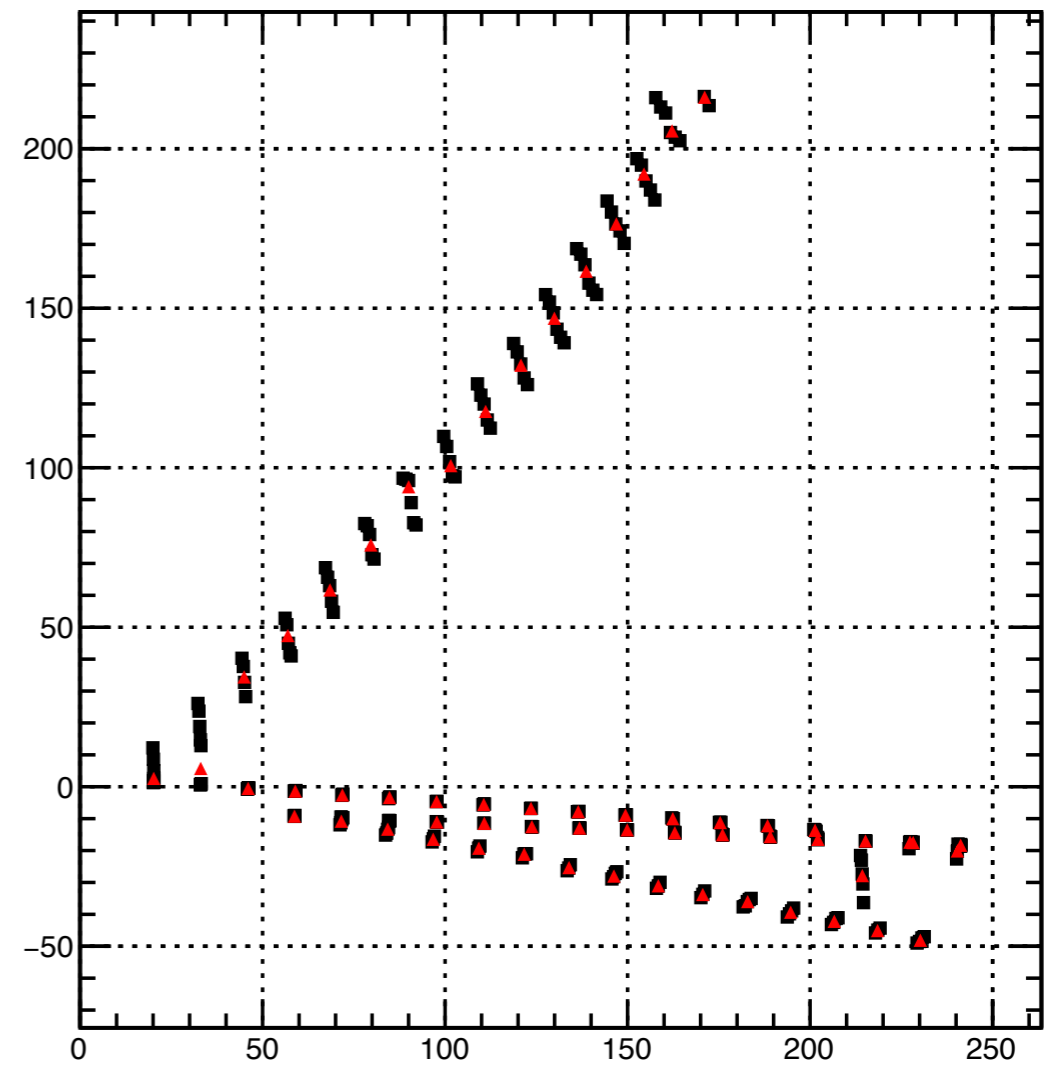
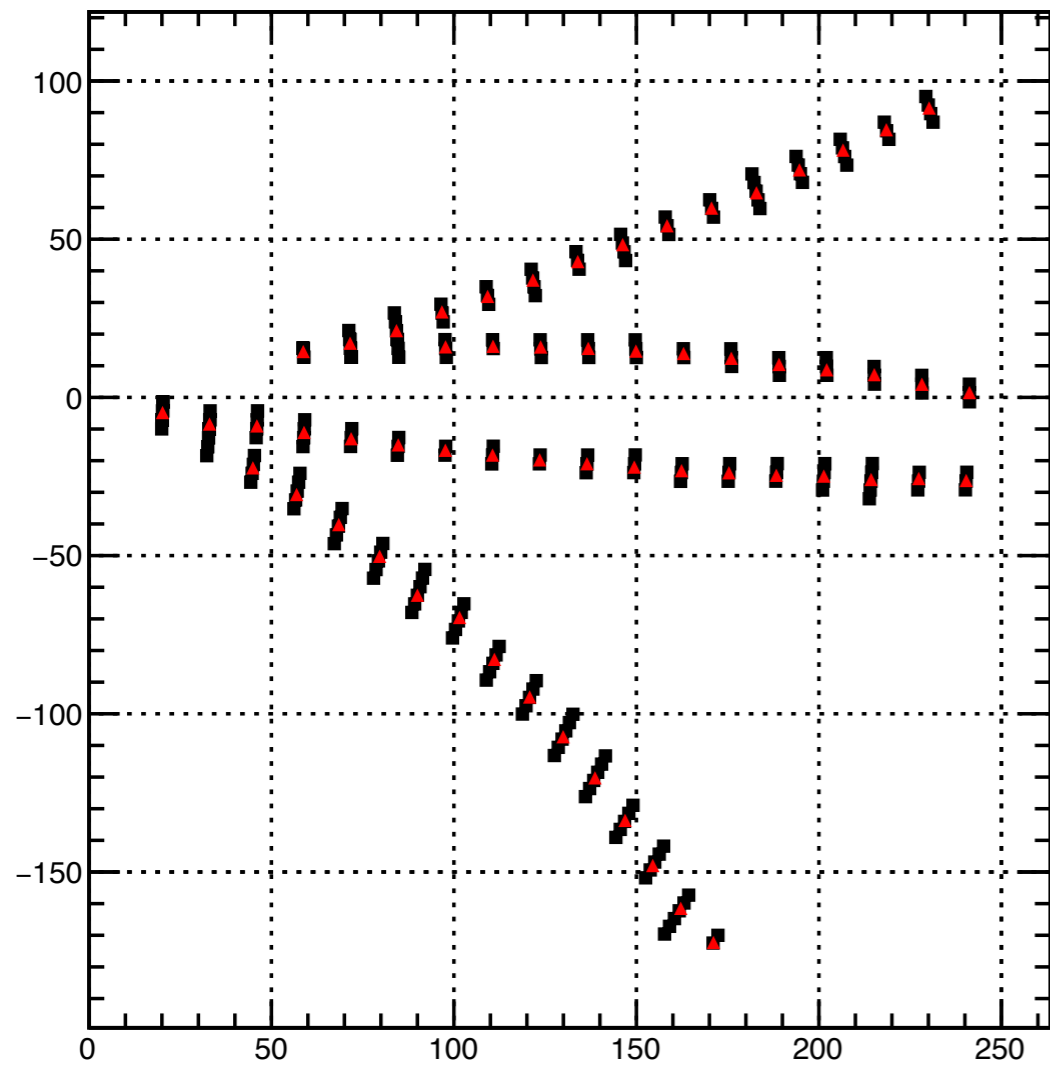
1. Candidate 1

1. In case of Example 2, which had many hits in a row, difficult to set prefer hit position.

2. Candidate 2

1. Easy to divide tracks...
2. Difficult to connect to next pads in next row. (If next pad was insensitive region. example 2)

Example 1 : Maybe good for tracking



Example 2

