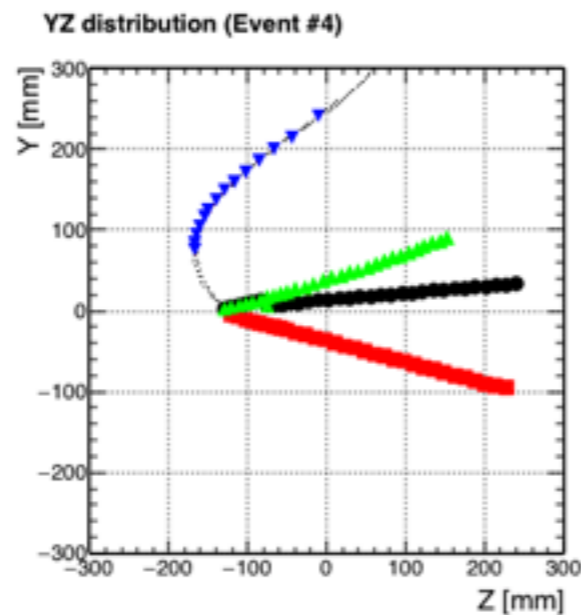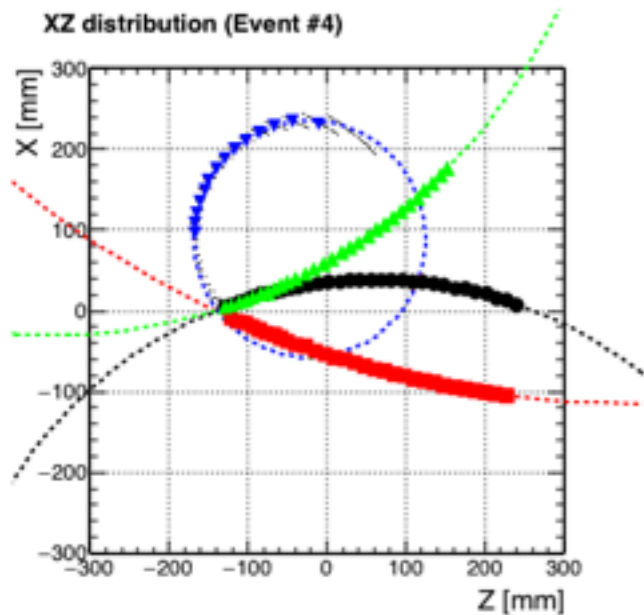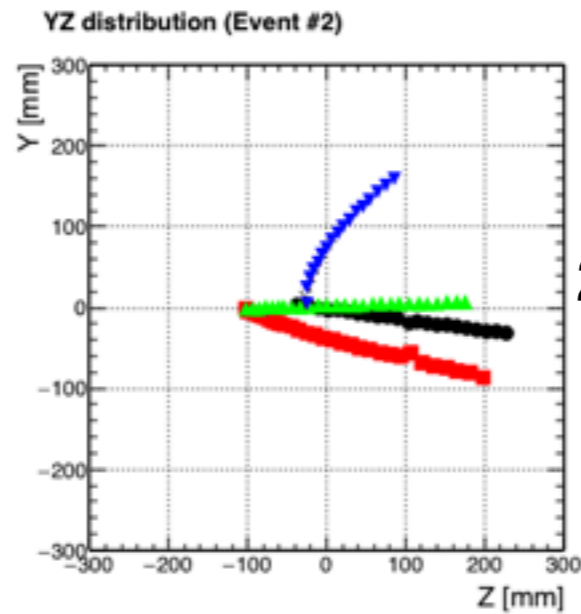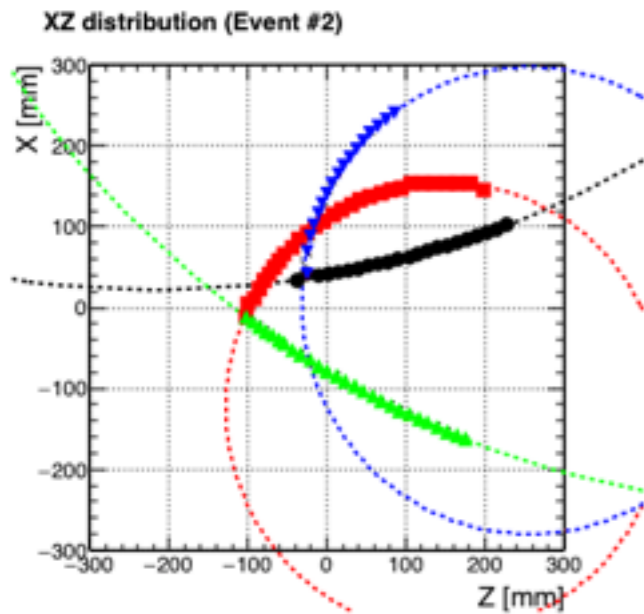# E42_tracking
15/Nov/2016

New tracking algorithm

1. Discarded prediction vector method which required "neighboured cluster".

2. Tracking steps

   1. Find 3 connected clusters which had largest layerID in the data.

   2. Circle fitting at each step and searching next cluster"s" within range. The clusters which layer ID < 5 was not clustered at the track finding step.
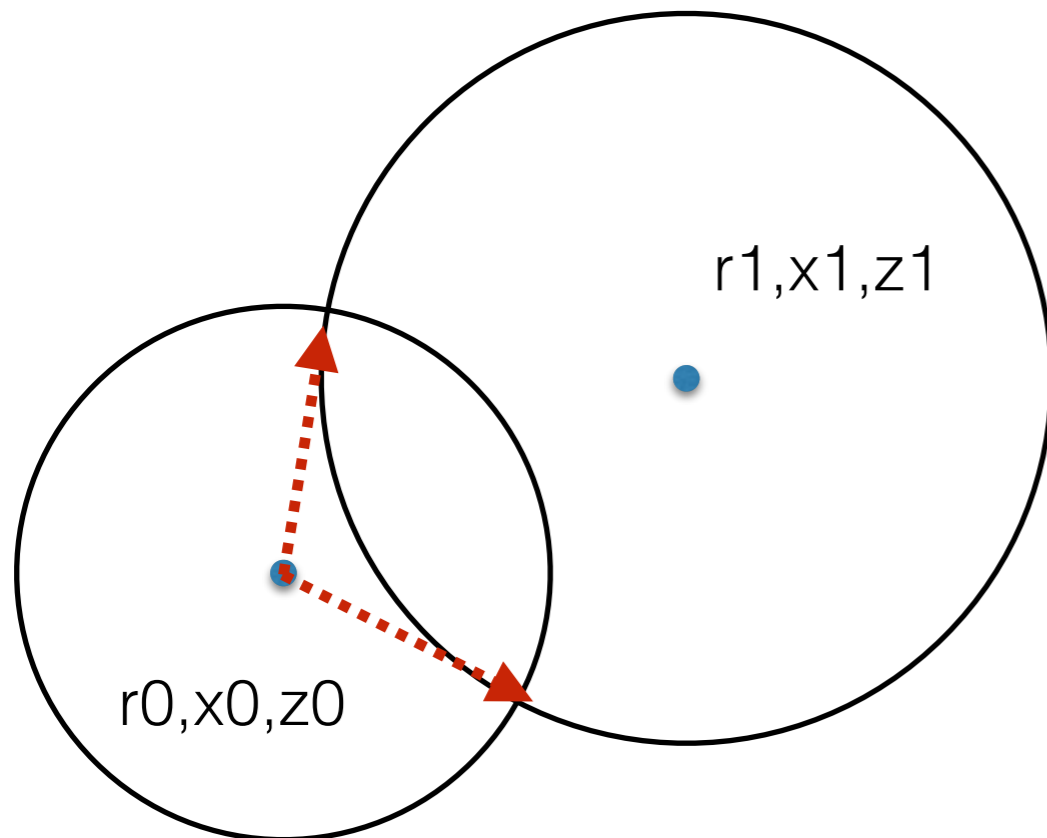
   3. After tracking, find clusters which placed near track (10mm in xy, 10mm in z);

   4. -> tracking end.

3. Improved tracking abilities around target.
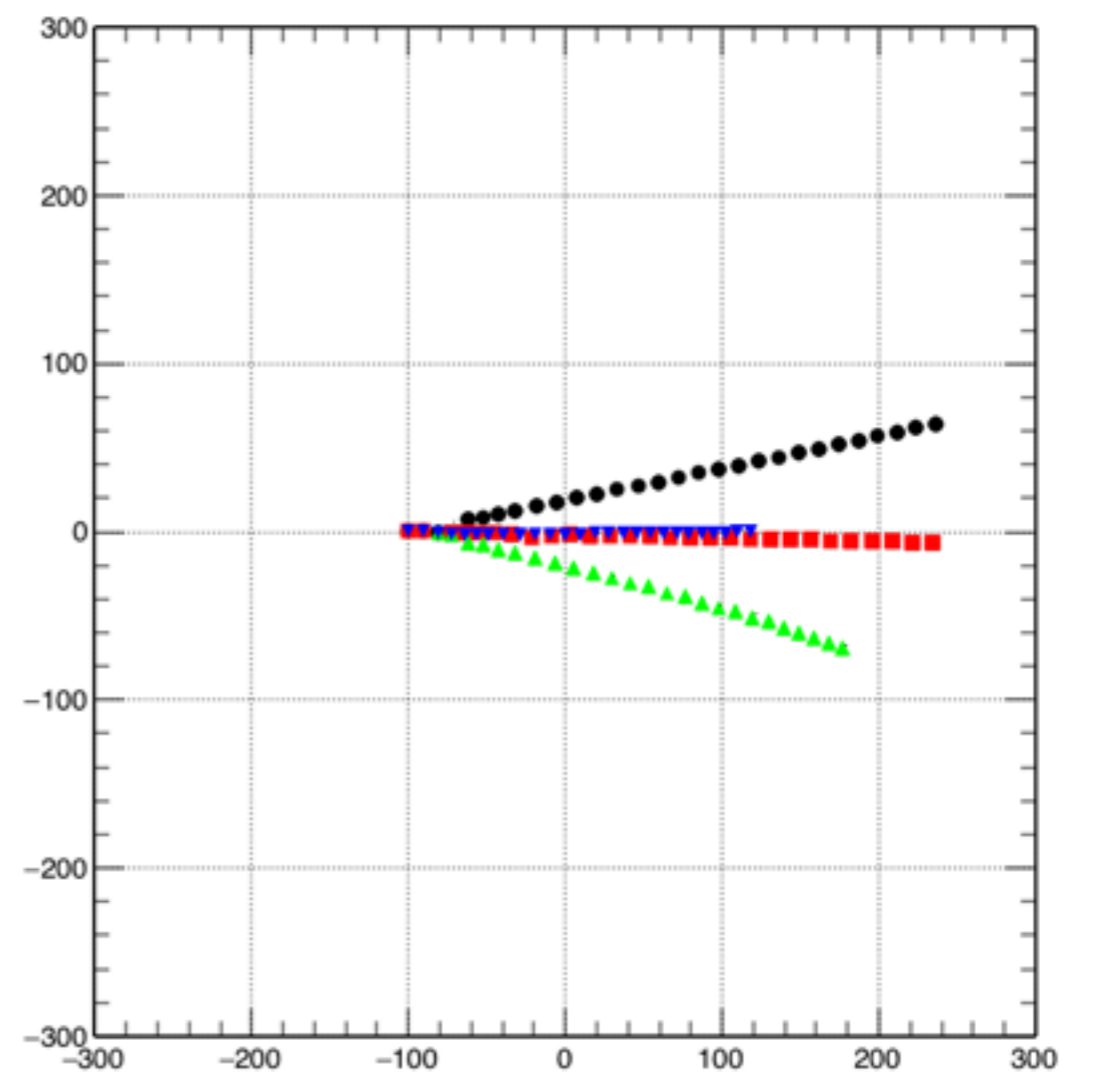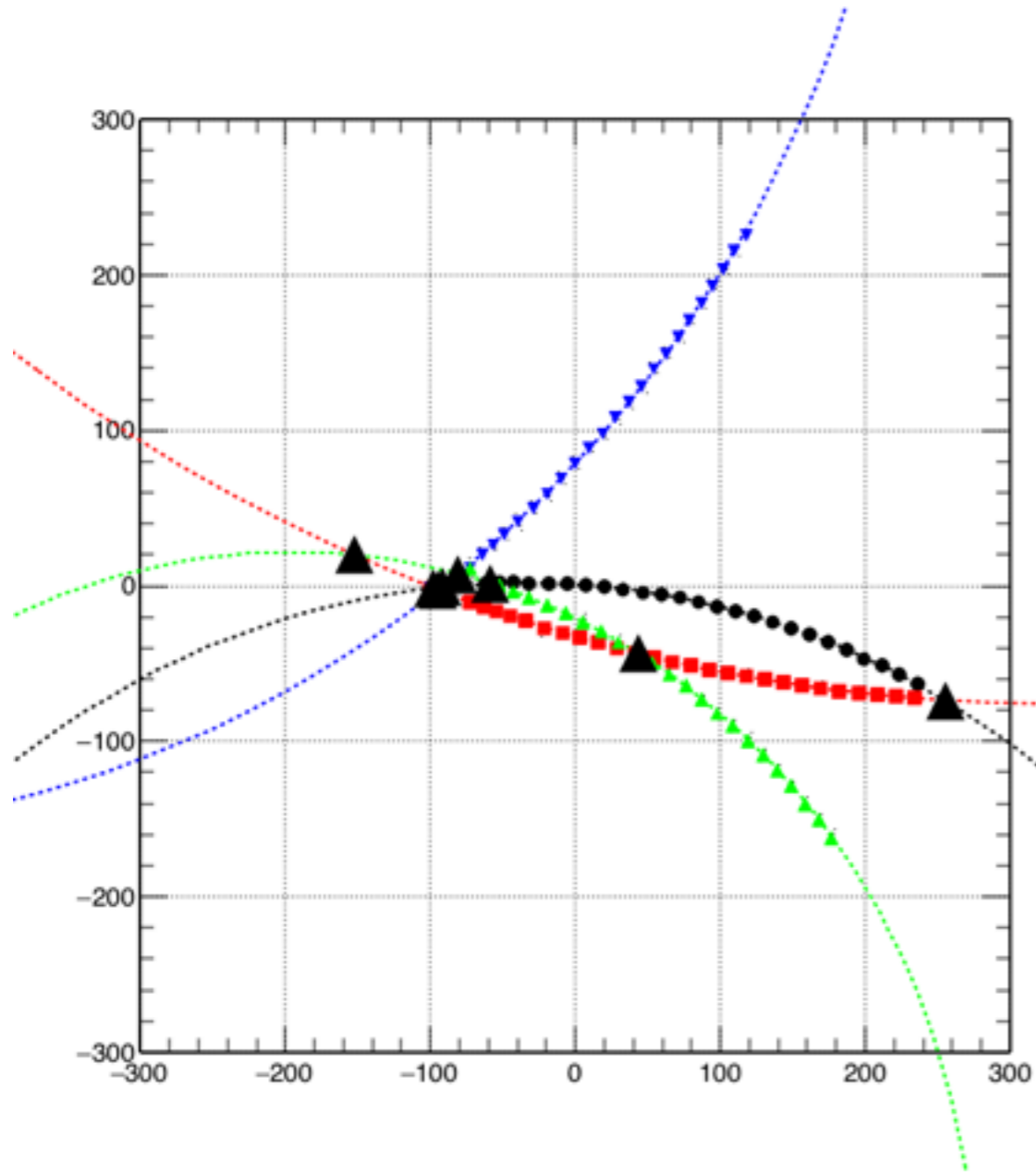
Searching crossing point

X,Z

Y

r1,x1,z1

r0,x0,z0

Y

dy

Track length
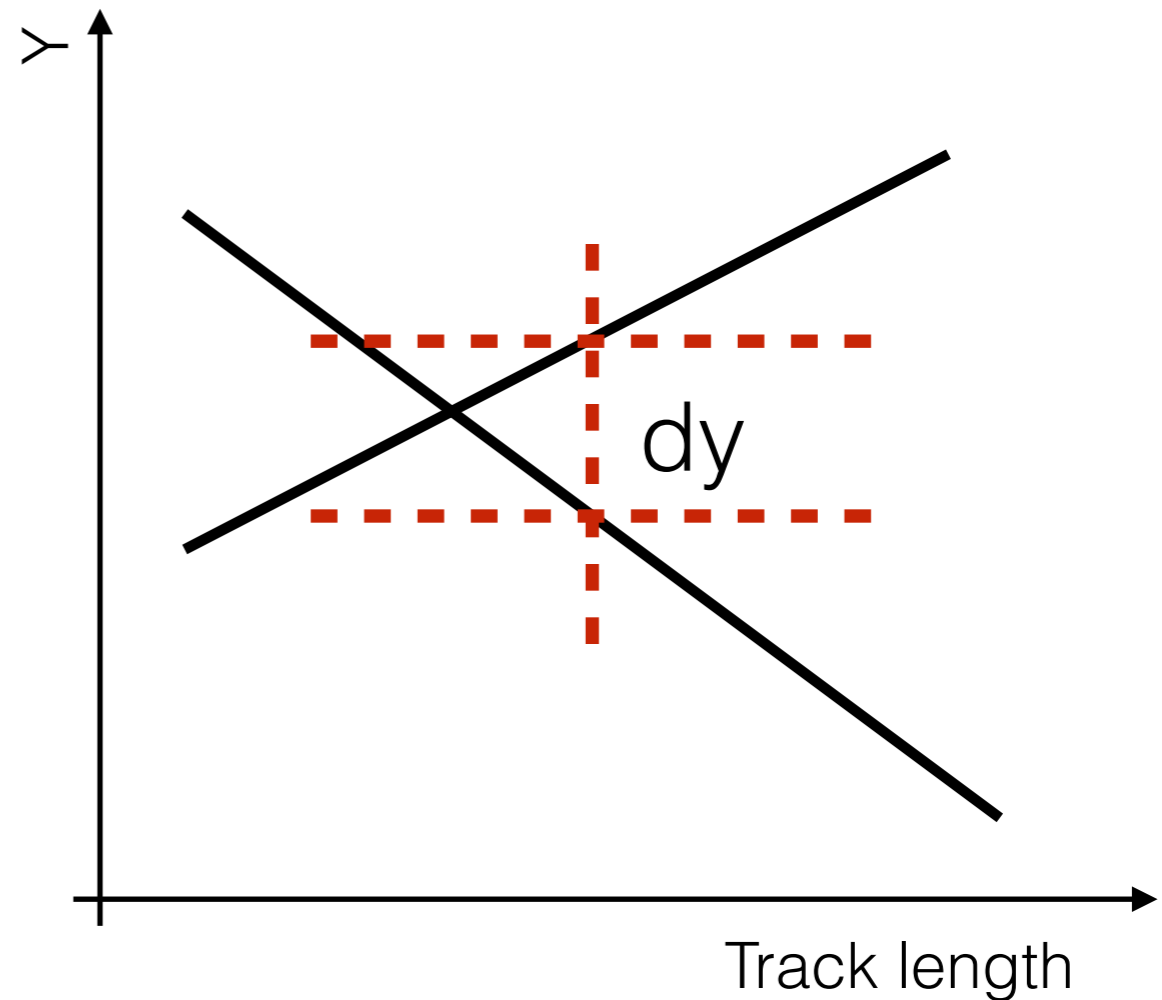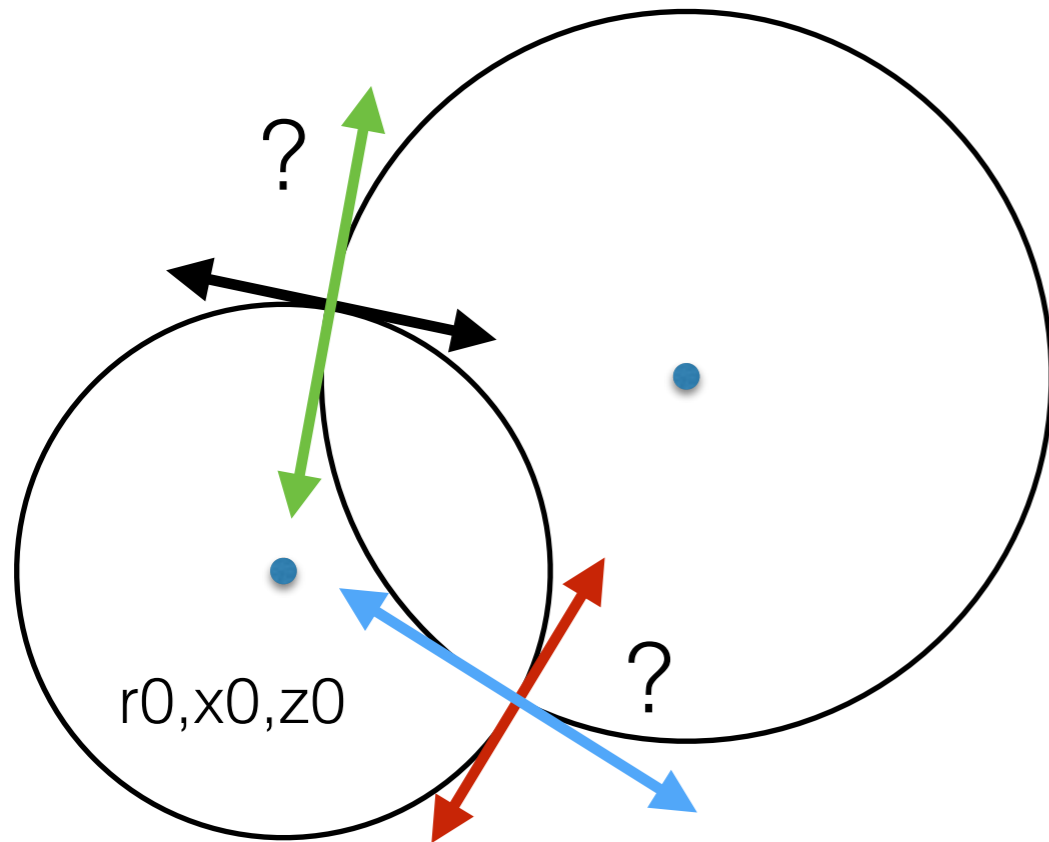
- Find two crossing point between two circle

- Select two circle which has the minimum |dy|

Crossing point finder sample

Under working

Tangent vector calculation

r0,x0,z0

Making selection algorithm
to find correct tangent vector

Find correct combination

XZ distribution (Event #4)