JET Z VERTEX

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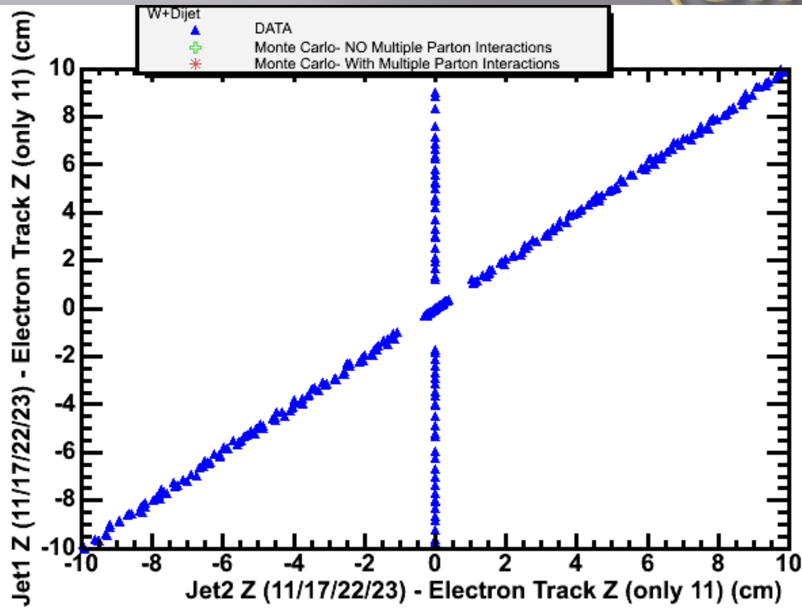
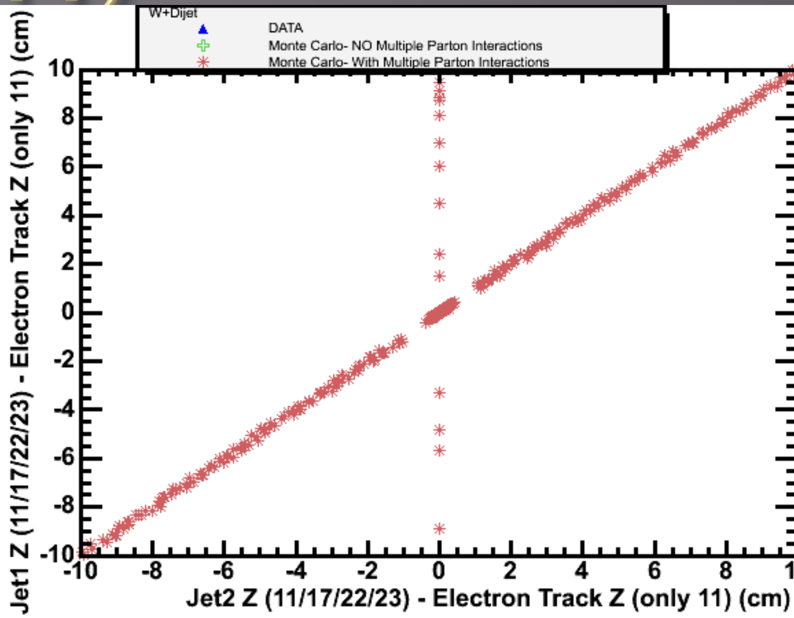
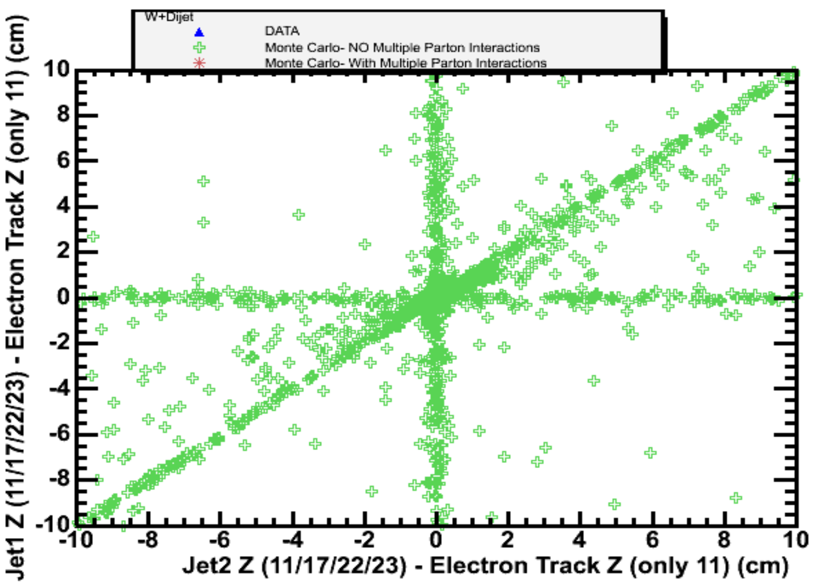
Jet Z Vertex

- Only Jets with Atleast One Track or More are Included
- Atleast one of these Tracks in the Each of the Two Jets making up the Dijet sholud be # 11
- The Other track Algorithms could be either 17,11,22,23
- Average Z is calculated using all the Included Track algorithms and Only using # 11
- The above average ,calculated both ways is considered as the Jet Z

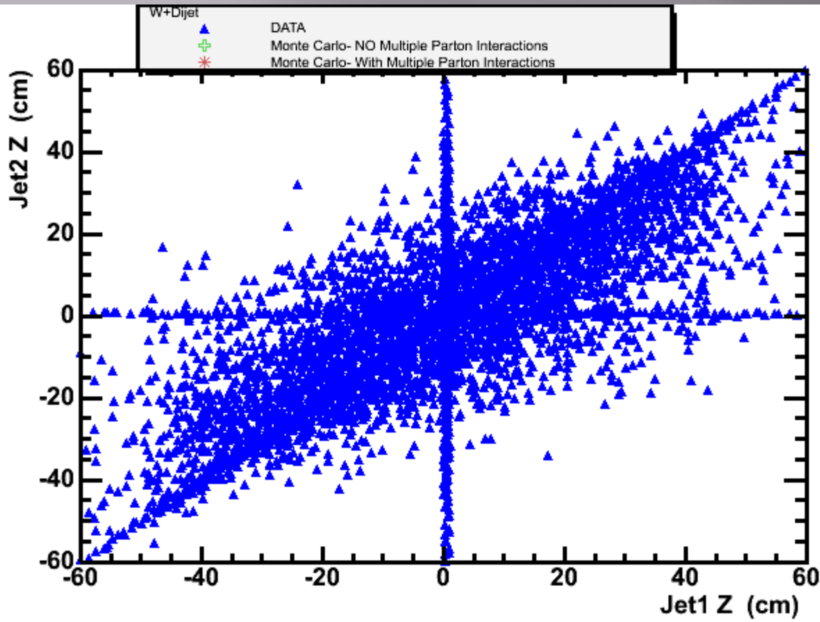
Jet 1 Z (11/17/22/23)-Electron Track Z (only 11)

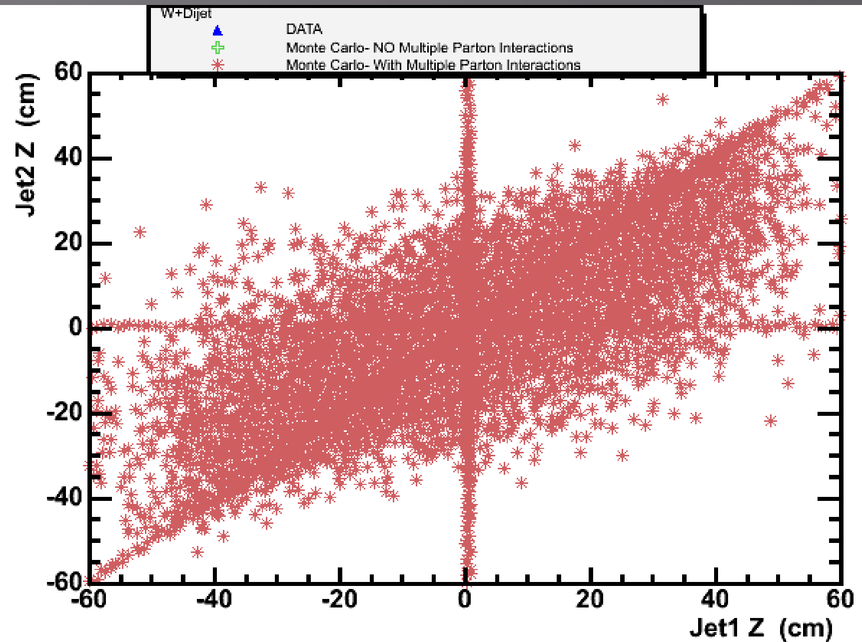


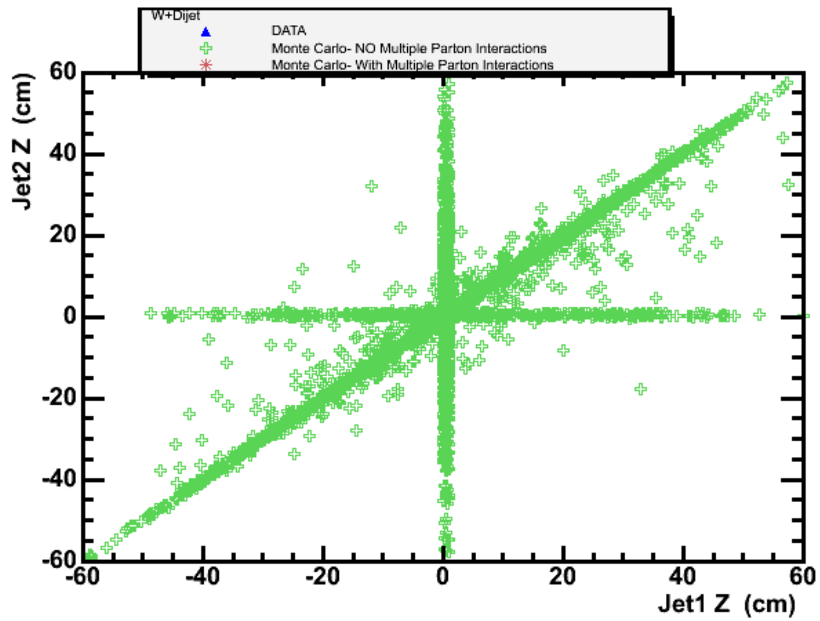




Jet 1 Z (11/17/22/23)-Jet2 Z (11/17/22/23)



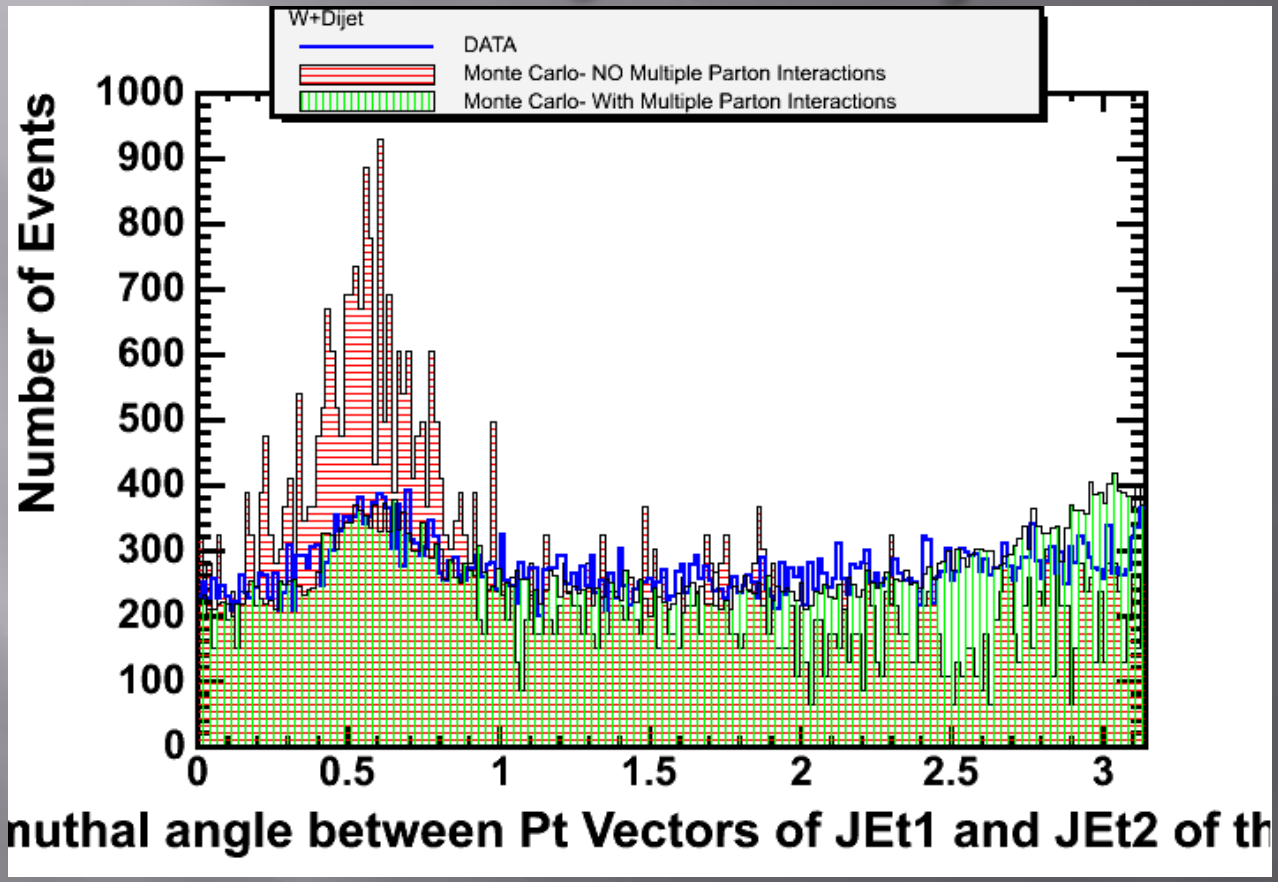




Cuts Applied on the Plots to Follow

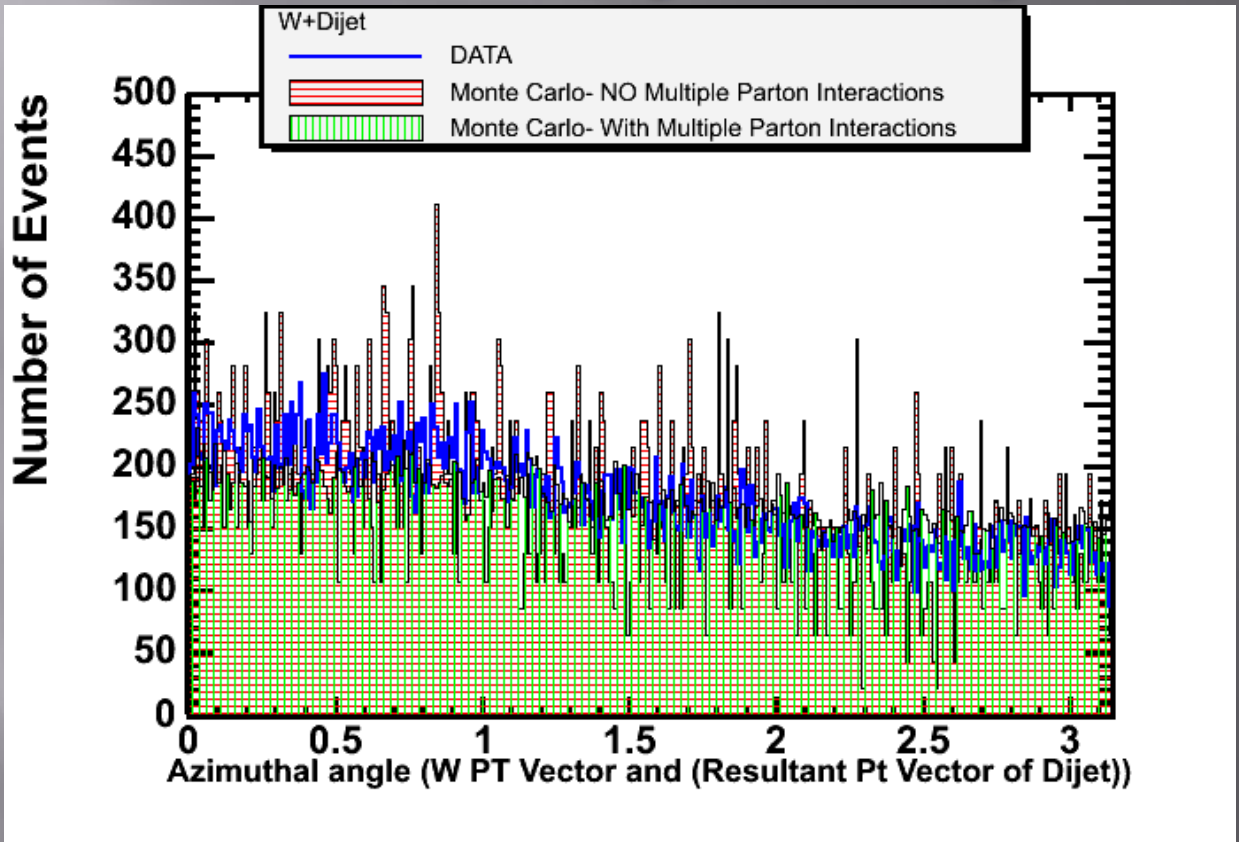
- Next Three slides has $\Delta\varphi$ plots with the follwing cuts applied
- From the 2D plots on Slide 3 for (Jet1Z-Electron Track Z) Vs (Jet2Z-Electron Track Z) ,I am picking out the Events that lie along the Diagonal
- How Do I do that ?
  1. Get the ArcTan {(jet1z –electron Track Z)/(jet2Z – electron Track Z)}
  2. Now as for the above angle to be ≥ 44.75 and ≤ 45.25

Azimuthal angle between Pt Vectors of Jet1 and Jet2 of Dijet



- Why the Peak ~ 0.5 (90 deg) for NO-MPI Sample alone ?
  1. Peak ~ 0.5 for all three characterized by Single Vertex W+Dijet Event
- At $\Delta\varphi \sim \pi$ we can see that No-MPI sample is lower that other two in statistics

Azimuthal angle between W Pt Vector and Resultant Vectors of Jet1 and Jet2 of Dijet



Azimuthal angle between W Pt Vector and Resultant Vectors of Jet1 and Jet2 of Dijet (with Δφ(jet1/Jet2)>2.6