

Level 3 Jet Confirmation Filter

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- **Develop a filter**
 - **Matches the tracks**
 - **To the jets**
 - **To the primary vertex**
 - **Perform this using the dR match**
 - **Produce a list of track confirmed jets**

- **Useful:**
 - **To various physics signals to reduce the L3 rate**
 - **Reduce the L3 rate for jet triggers, esp. for triggers with MHT/MET**



- **Preliminary code is ready**
 - Put in test release t05.11.0
 - there is one track minimum requirement

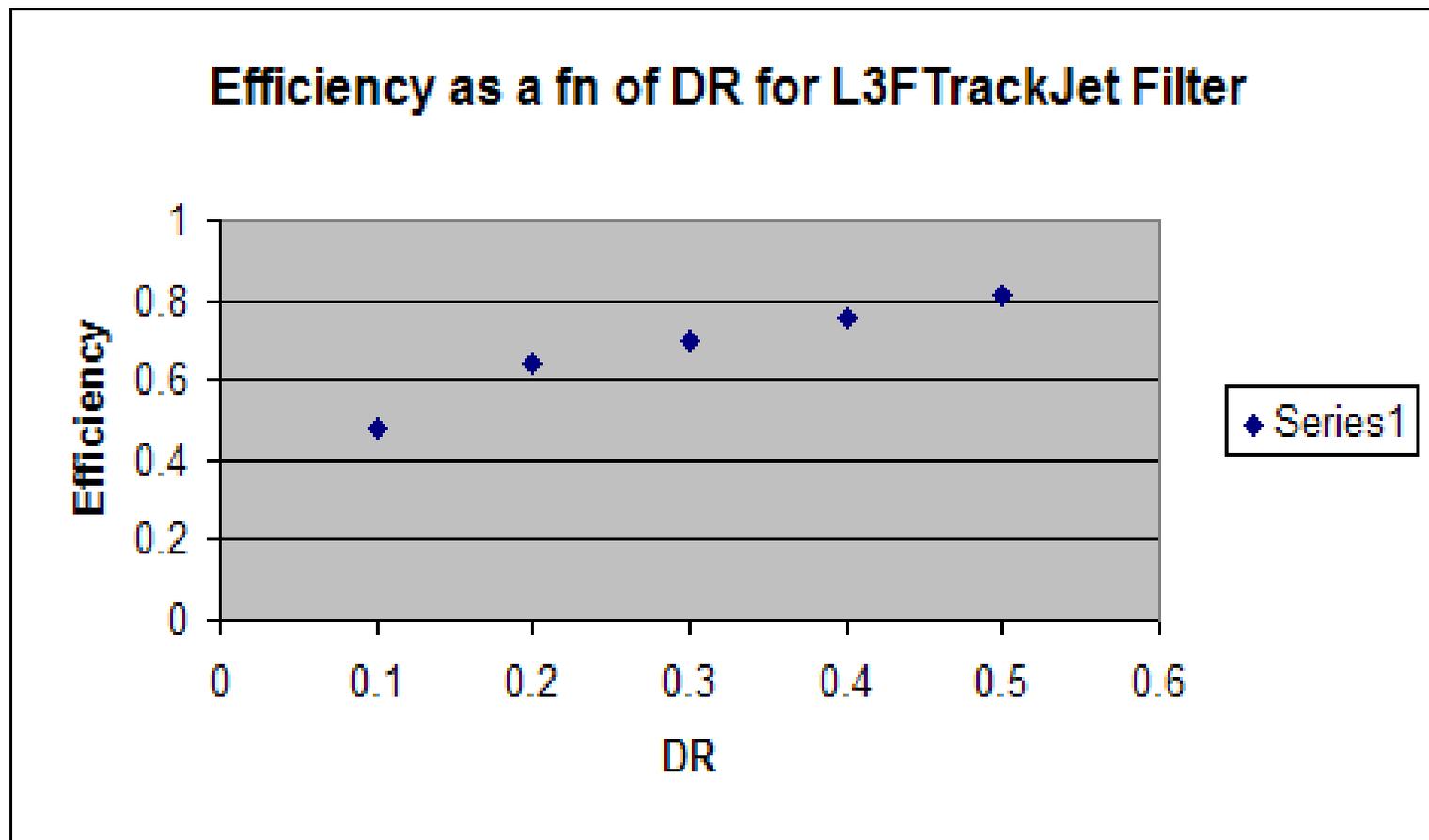
- **Used Global Tracks**
 - Looser and require no SMT hits
 - L3TPhysTracker : Produces Physics results for tracks

- **The PV match has to be done with a cut on the distance between PVZ and Z0.**

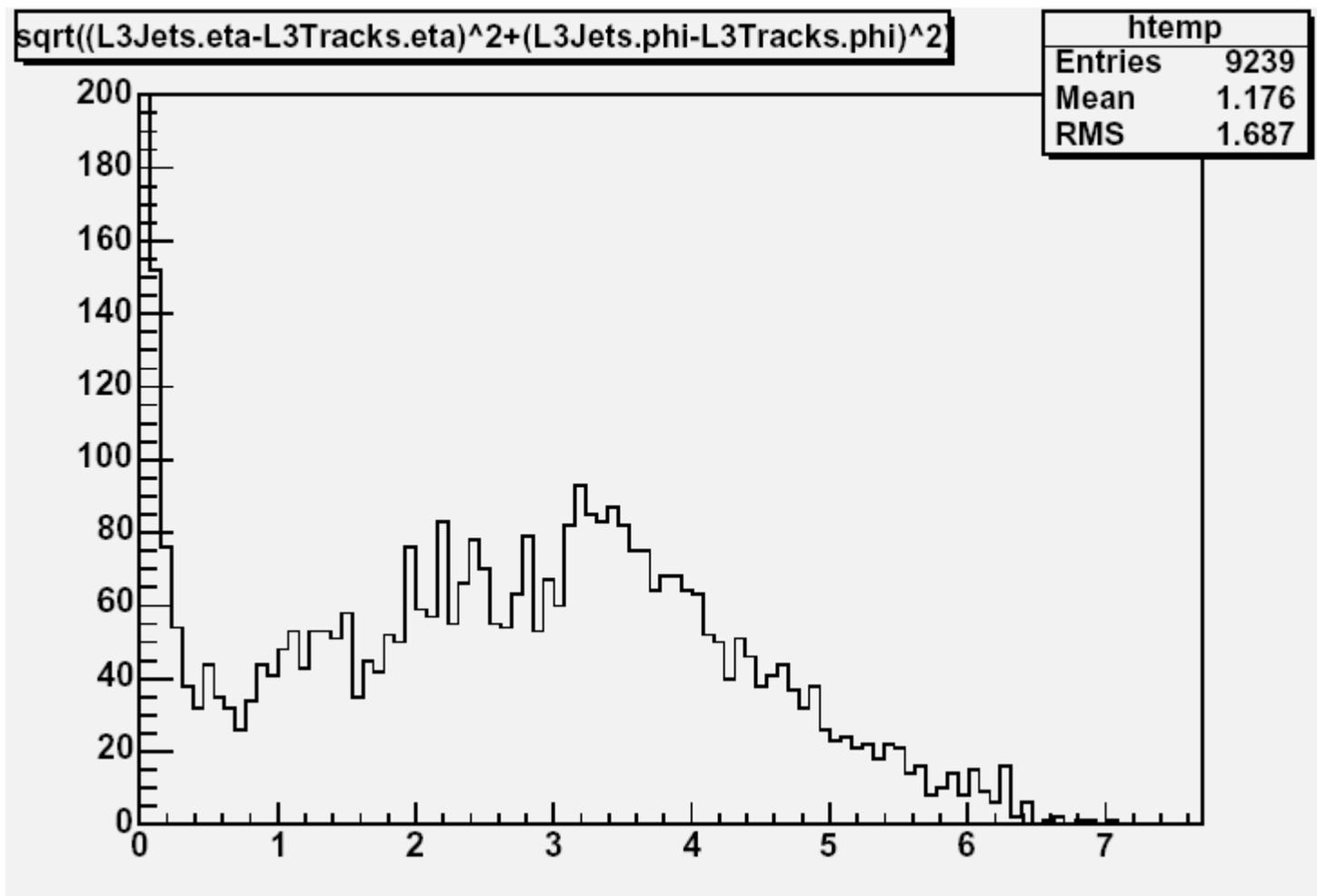


- **The raw data files from the special v14 L1L2 run at:
/prj_root/1161/l3_write/mverzocc/RAW**
- **Compiled the code using p17.05.01**
- **Ran the code on different dR cuts for 200 events initially**

Filter Efficiency



dR of matched Tracks and Jets



To do



- **dR of jets and tracks without any cuts**
- **track matched jet multiplicity and efficiency as a function of jet and track pT and eta**
- **Plots for leading and 2nd leading jet
(This filter will provide cleanup of the input jets to the MHT filter)**