

Tracking timing studies

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Anne-Catherine Le Bihan

Status of regional iterative tracking

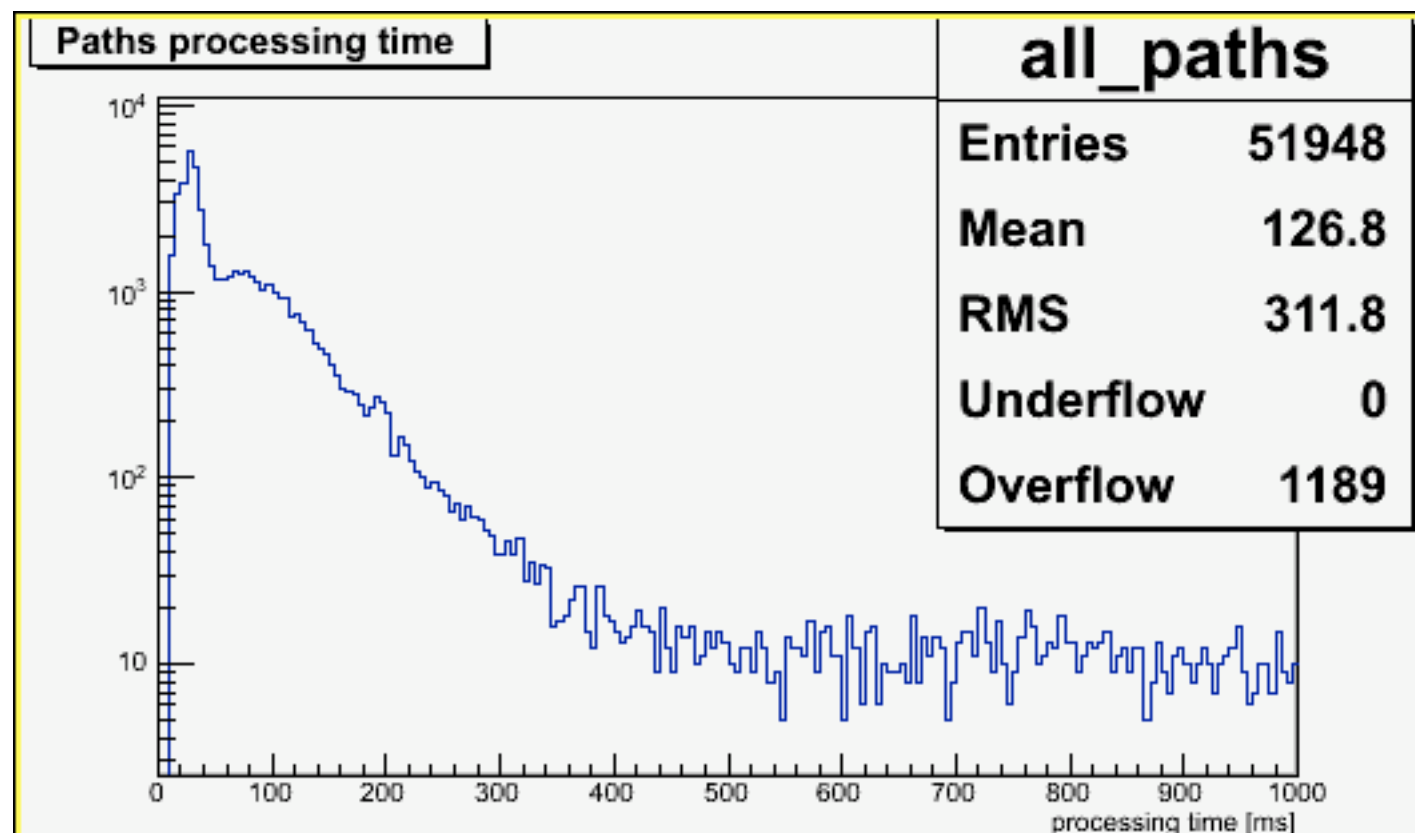
- Testing the “hybrid” configuration developed by the tau-POG : pixelTracks around jets are propagated through iterative tracking (thanks to Anthony Rose for sharing it !)
- Last TSG meeting: only QuadJet VBF and $H \rightarrow b\bar{b}$ $Z \rightarrow \nu\bar{\nu}$ (DiCentralPFJet30_PFMET80_BTagCSV07) and DiPFJet80_DiPFJet30_BTagCSVd*d*d* paths migrated.
- All paths have been migrated now : no further gain seen when migrating the remaining paths
- Timing is 131.8 ms to be compared to 133.8 ms (timing of menu using fastPV @ L2.5 + pflow / it. tracking before b-tagging at L3 for all paths)
- Further optimisations possible ? 3 jets collections are seeding regional iterative tracking for the b-tagging paths, some overlap between jet collections may exist

2 GeV cut on pixelTracks used to seed iterative tracking

All paths have been migrated (except single-top, applicable ?).

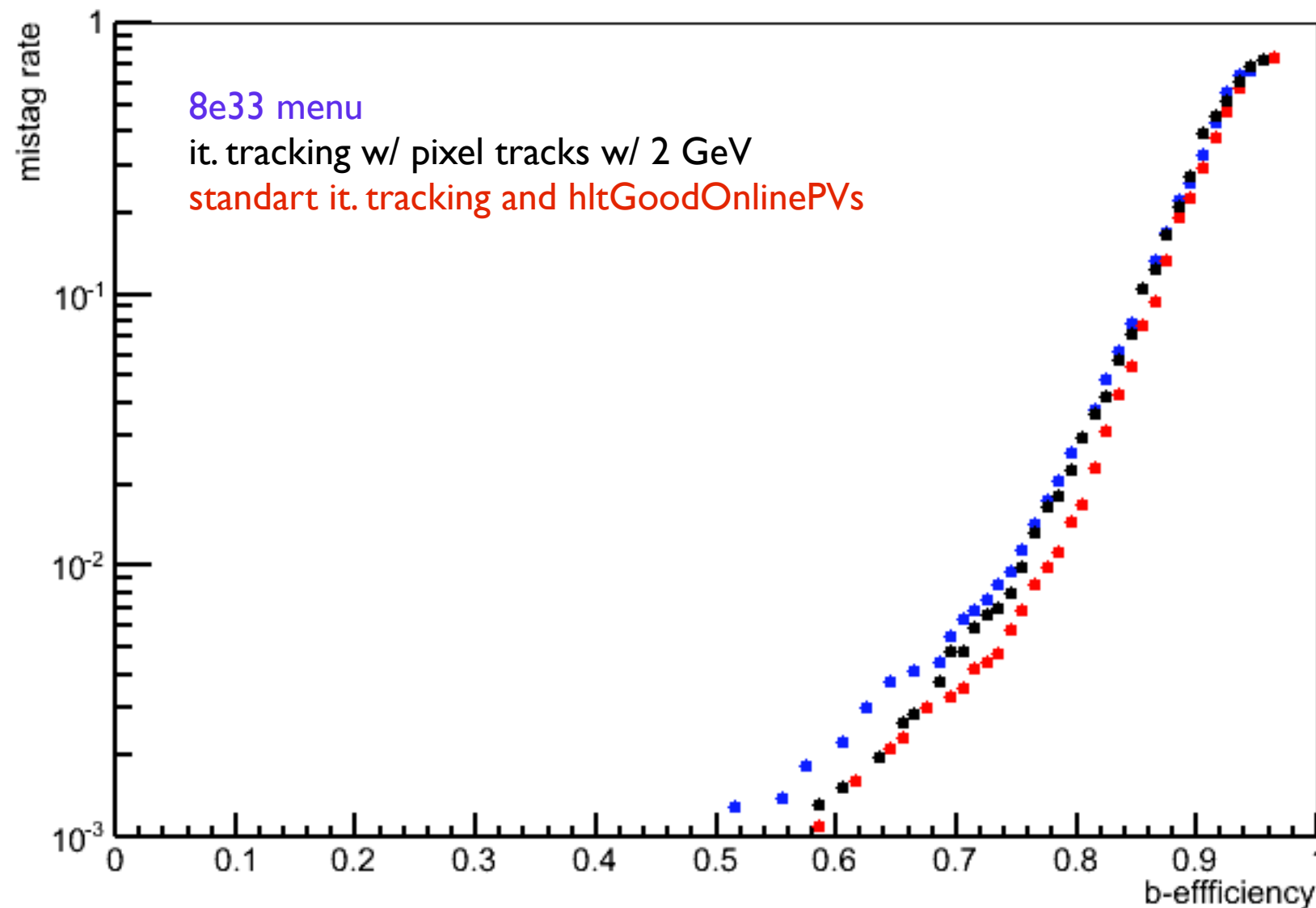
Iterative tracking w/ pixelTracks of 2 GeV performed before b-tagging @ L3, full original PFlow still ran after b-tagging @ L3 for the paths using PFlow.

Timing of full menu 126.8 ms to be compared to 125.2 ms, timing of the original 8e33 menu (i.e. not running iterative tracking for paths w/ b-tagging (except single-top)).



2 GeV cut on pixelTracks used to seed iterative tracking

L3_b_light_mistagrate



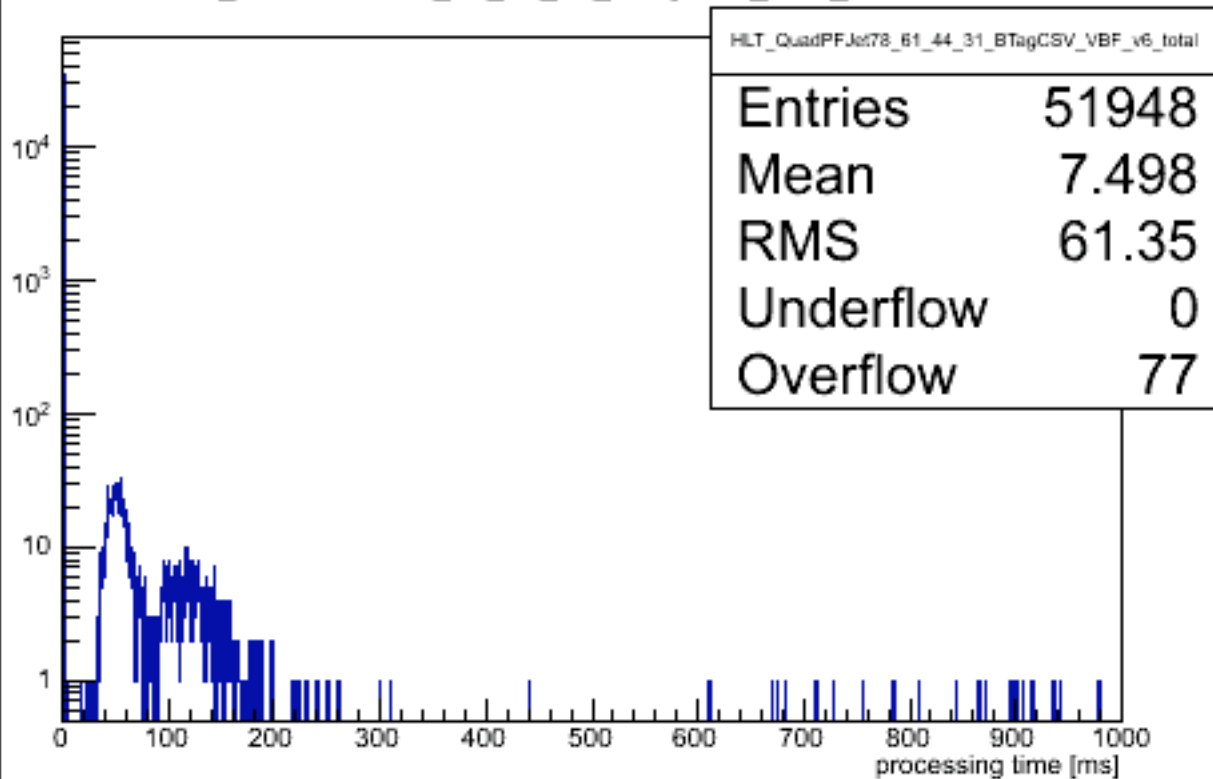
Backup

Status of regional iterative tracking (2/3)

A-C

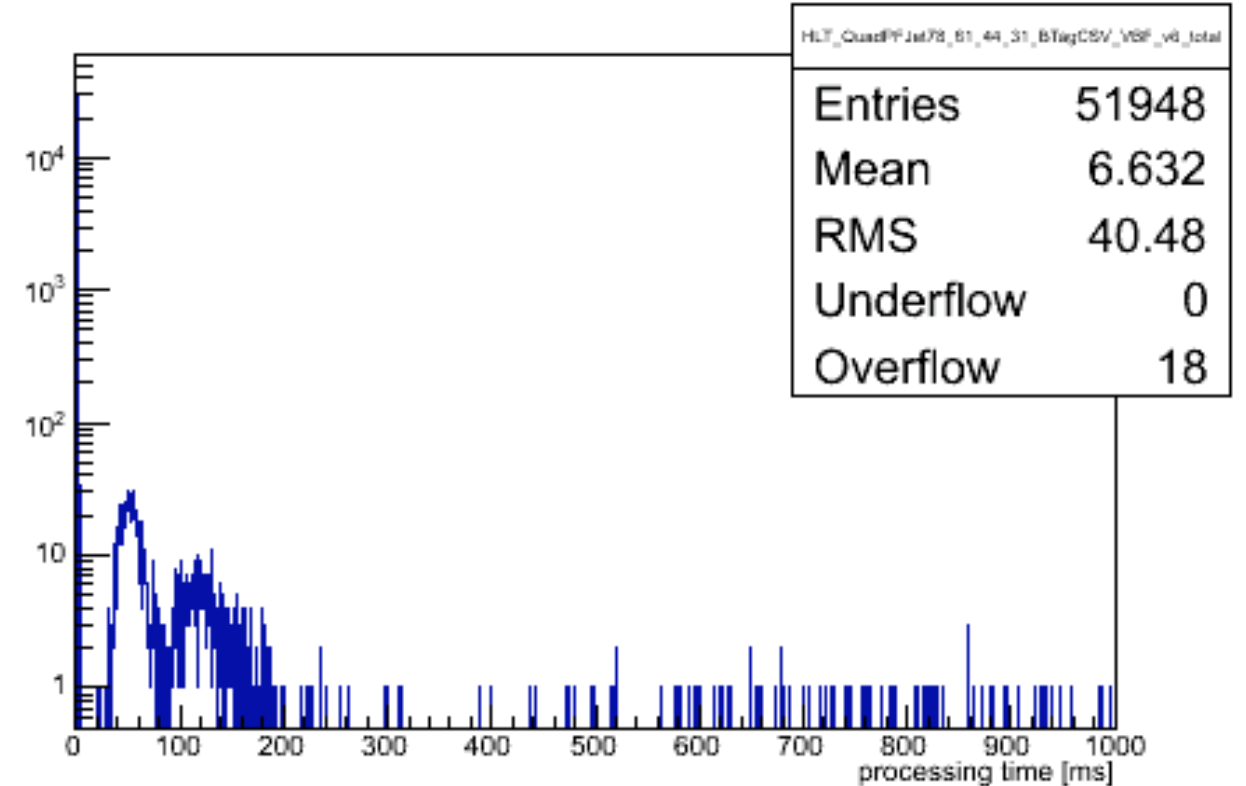
QuadJetVBF CSV trigger
w/ full iterative tracking

HLT_QuadPFJet78_61_44_31_BTagCSV_VBF_v6 total time



QuadJetVBF CSV trigger
w/ regional iterative tracking

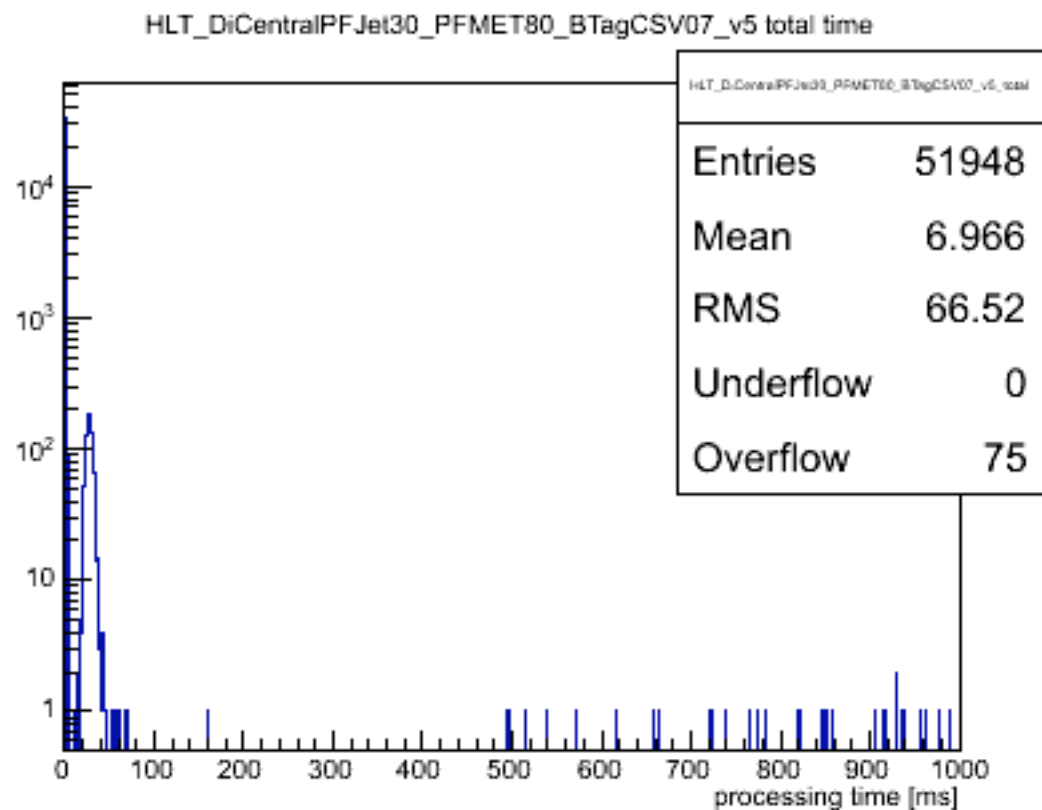
HLT_QuadPFJet78_61_44_31_BTagCSV_VBF_v6 total time



Status of regional iterative tracking (3/3)

A-C

DiCentralPFJet30_PFMET80_BTagCSV07
w/ full iterative tracking



DiCentralPFJet30_PFMET80_BTagCSV07
w/ regional iterative tracking

