



pt LUT assignment for CSCTF

By Anna Kropivnitskaya

- PtLUTs News
- Study $\Delta\phi_{23}$ resolution Lowers₂₃ = 4 versus Lowers₂₃ = 2
- Conclusion and Plans

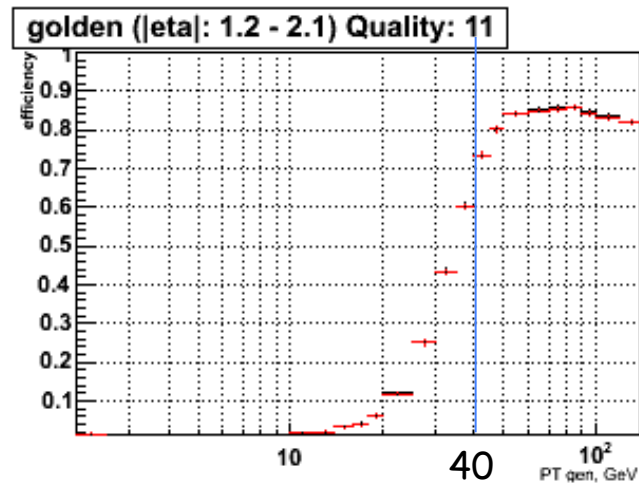
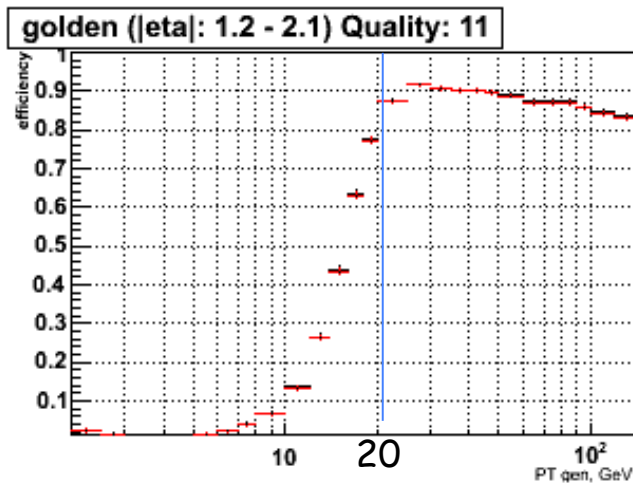
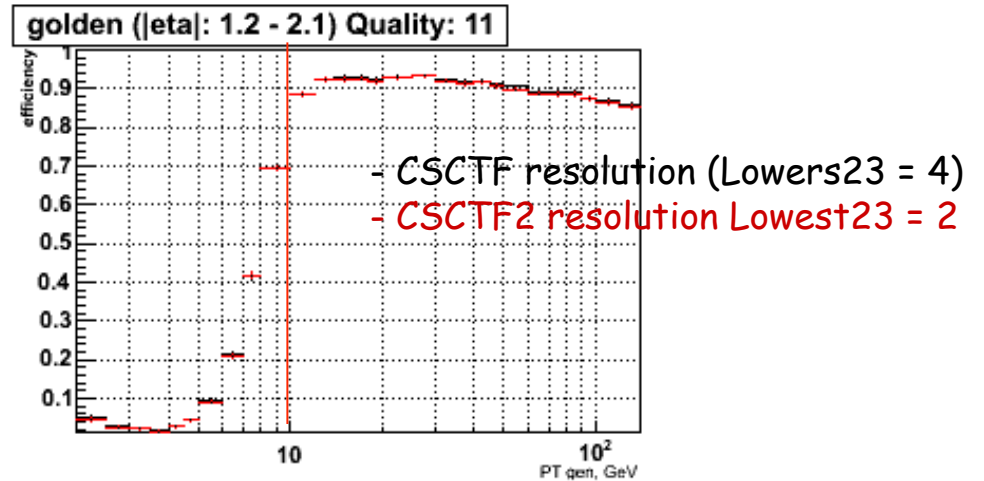
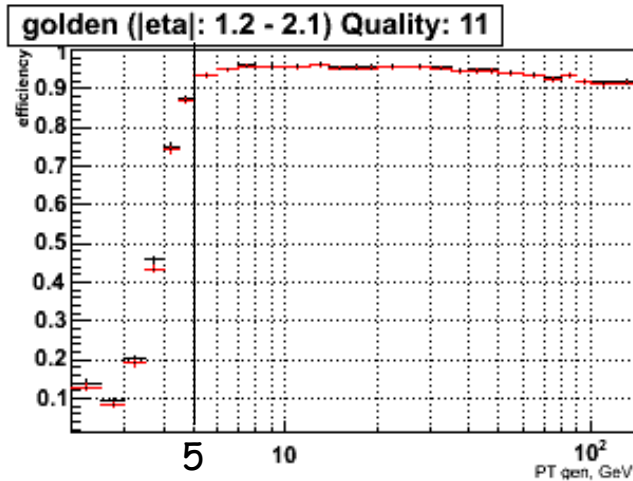
PtLUTs News

- ✓ PtLUTs in dat-format is created and is tested
-> equivalent to bin-format as expected
- ✓ New version of PtLUTs is created with `isBeamStart = true` (= false previously)
`isBeamStart = false` -> for high $\eta > 2.1$ Quality assignment like for $\eta < 2.1$
Quality = 1 for ME2-ME3-ME4 and all 2 Station tracks without ME1
`isBeamStart = true` -> for high $\eta > 2.1$
Quality = 3 for ME2-ME3-ME4 track
Quality = 2 for all 2 Stations tracks
New version of ptLUTs is available at

https://twiki.cern.ch/twiki/pub/Main/PtLUTs/L1CSCPtLUT_4N9.bin.gz

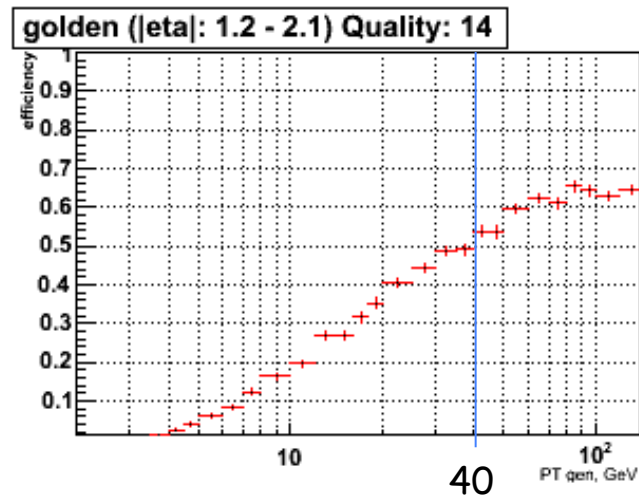
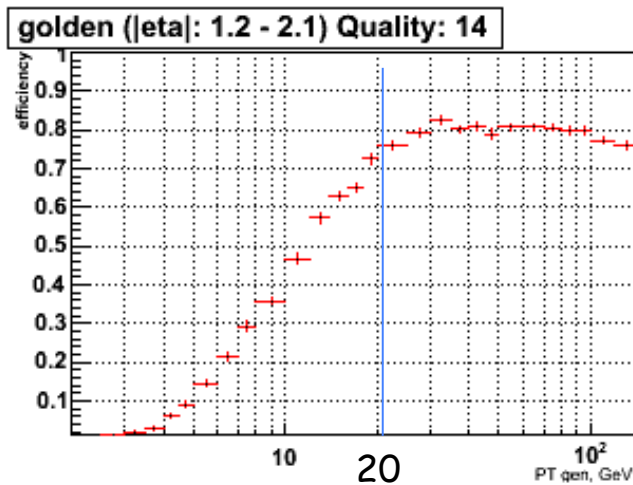
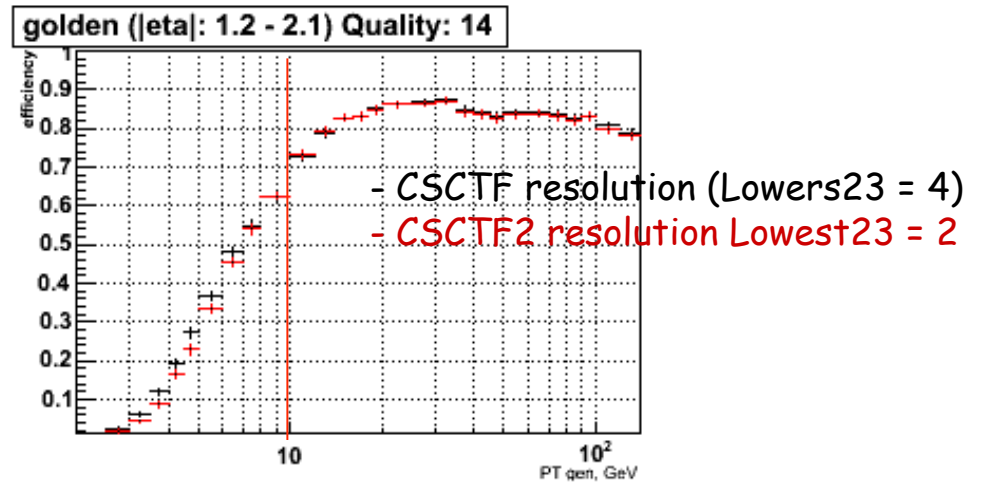
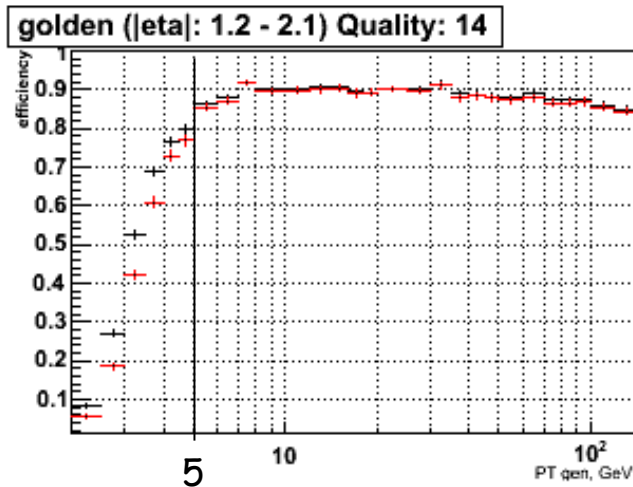
- ✓ Gian Piero and Anna uploaded new PtLUTs at Point 5 (4 March 2010)
- ✓ Code `L1Trigger/CSCTrackFinder/` is committed in the CVS with tag-name: `V00-18-00`. The new PtLUTs are generated by default in this version, method 4 (5 March 2010)

Pt efficiency ME1-2-3 track for $1.2 < |\eta| < 2.1$



- ✓ Small difference between CSCTF and CSCTF2 resolution for ME1-2-3 track
→ no needs to change $\Delta\phi_{23}$ firmware ???

Pt efficiency ME2-3-4 track for $1.2 < |\eta| < 2.1$



✓ Some difference between CSCTF and CSCTF2 resolution for ME2-3-4 track for threshold 5 and 10 GeV.

→ some indication that we possibly need to change $\Delta\phi_{23}$ firmware

Conclusion and Plans

What was done:

- it is not obvious that we will gain if we change $\Delta\phi_{23}$ firmware

To do list:

- ✓ long time scale: to write a Note.