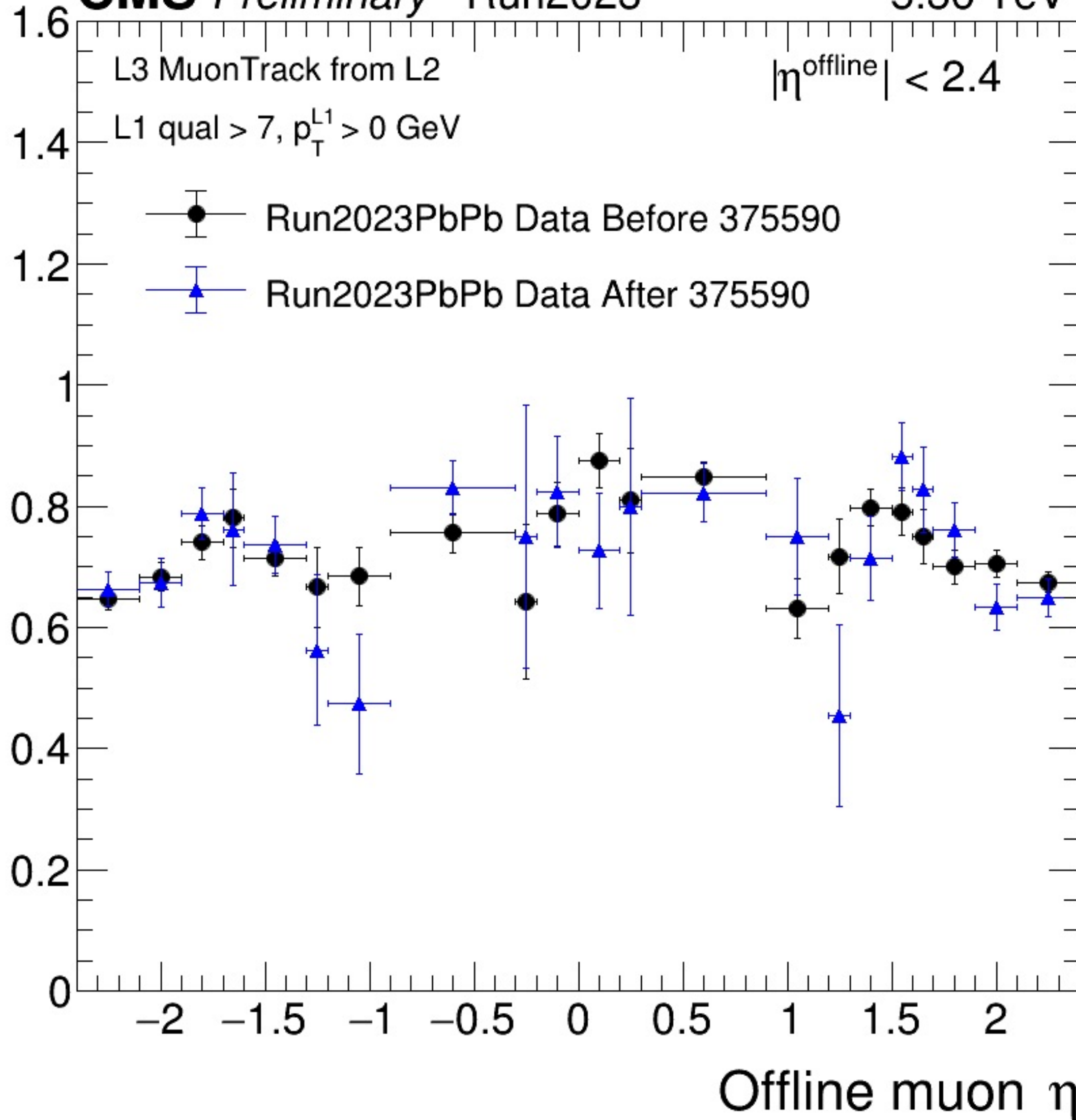


HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

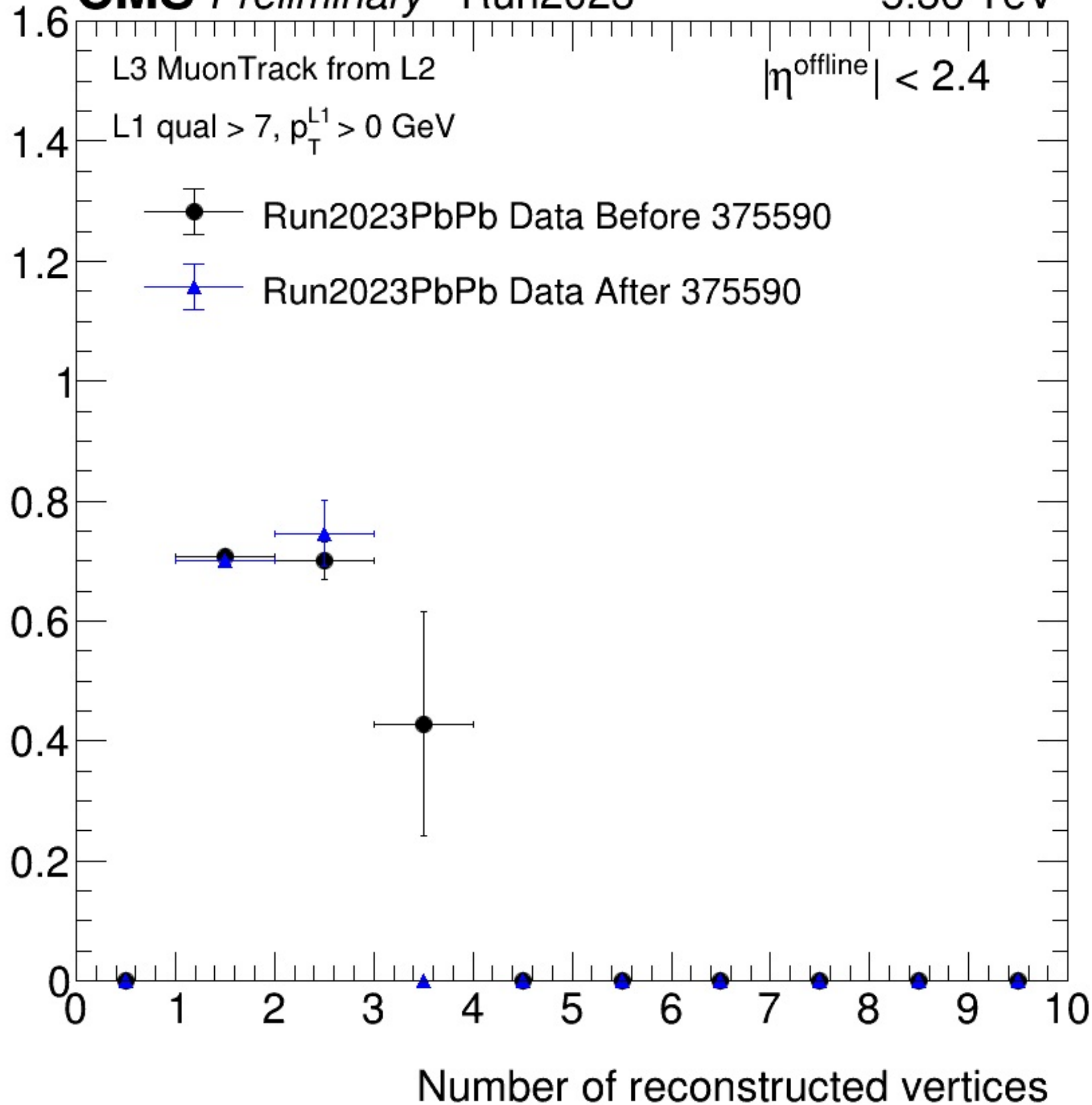


HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

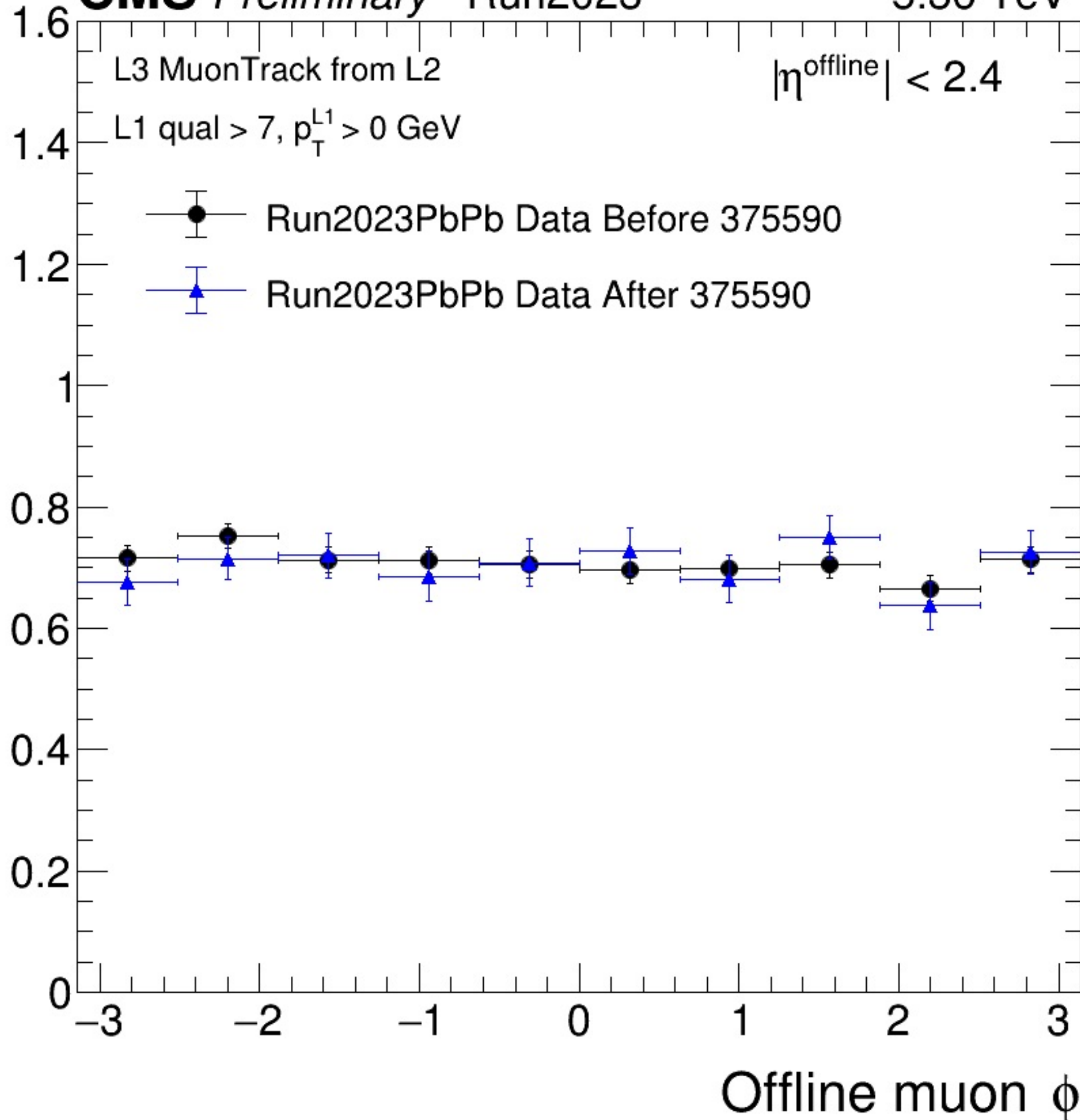


HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

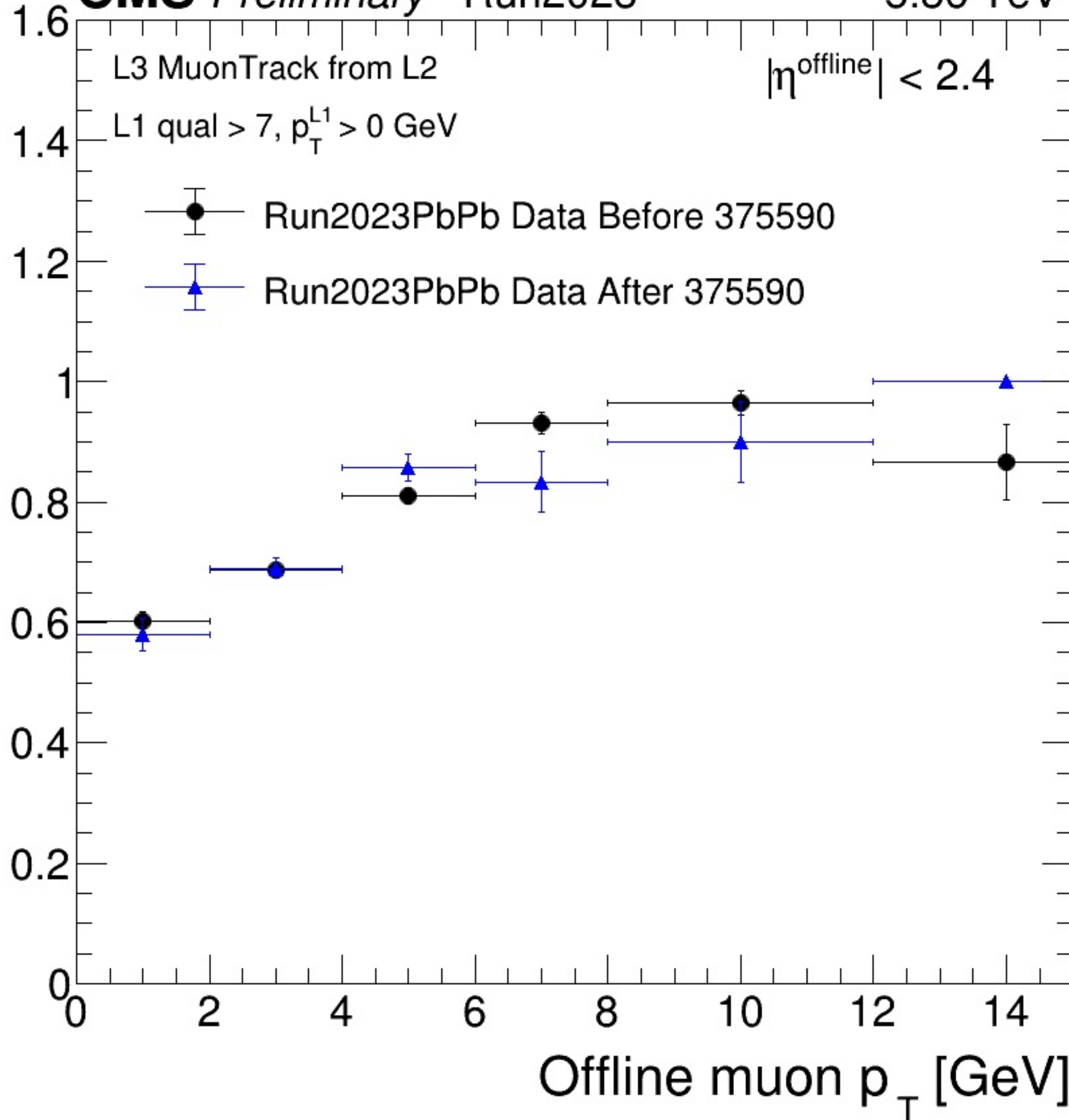
Offline muon ϕ

HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

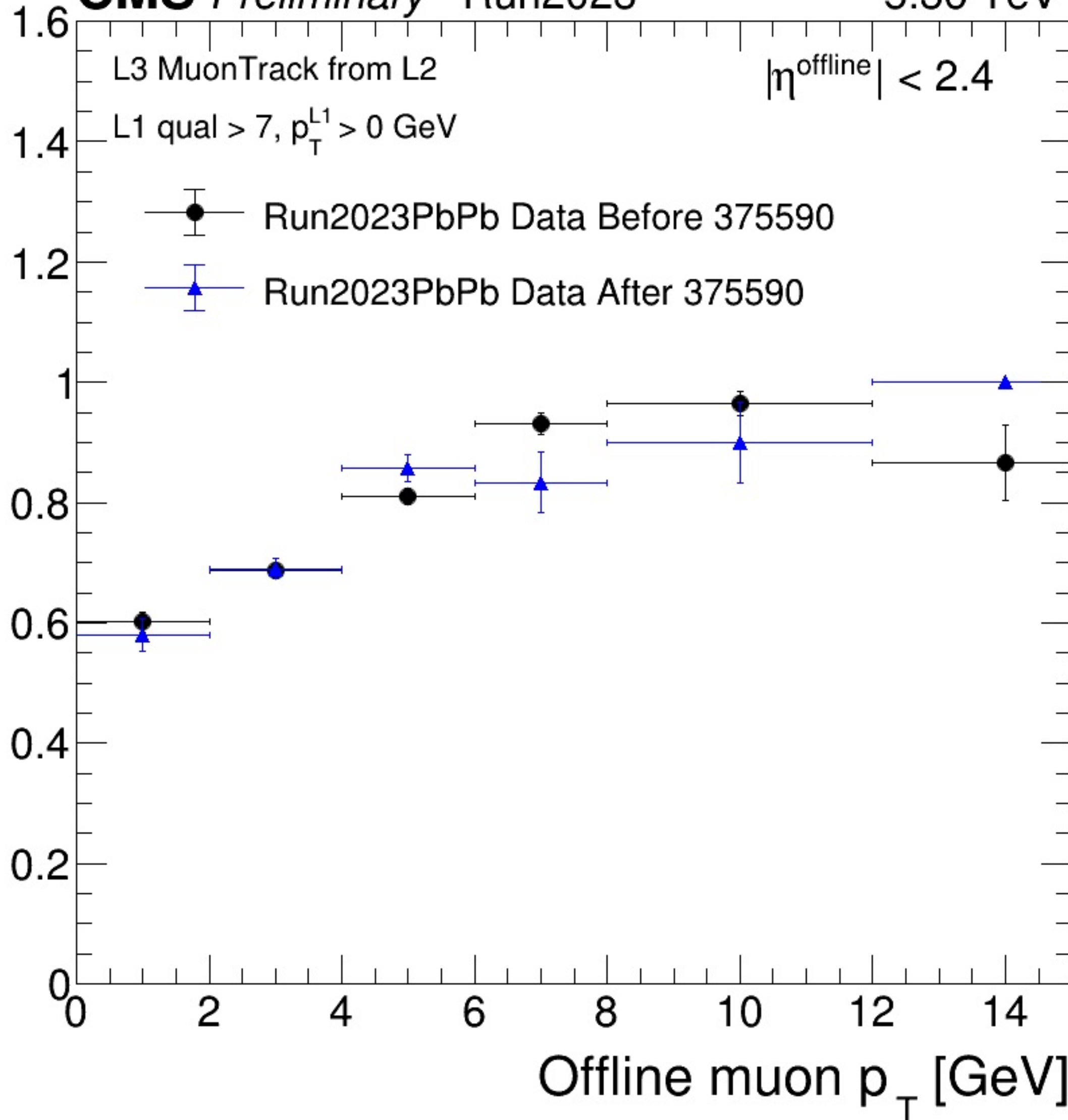


HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



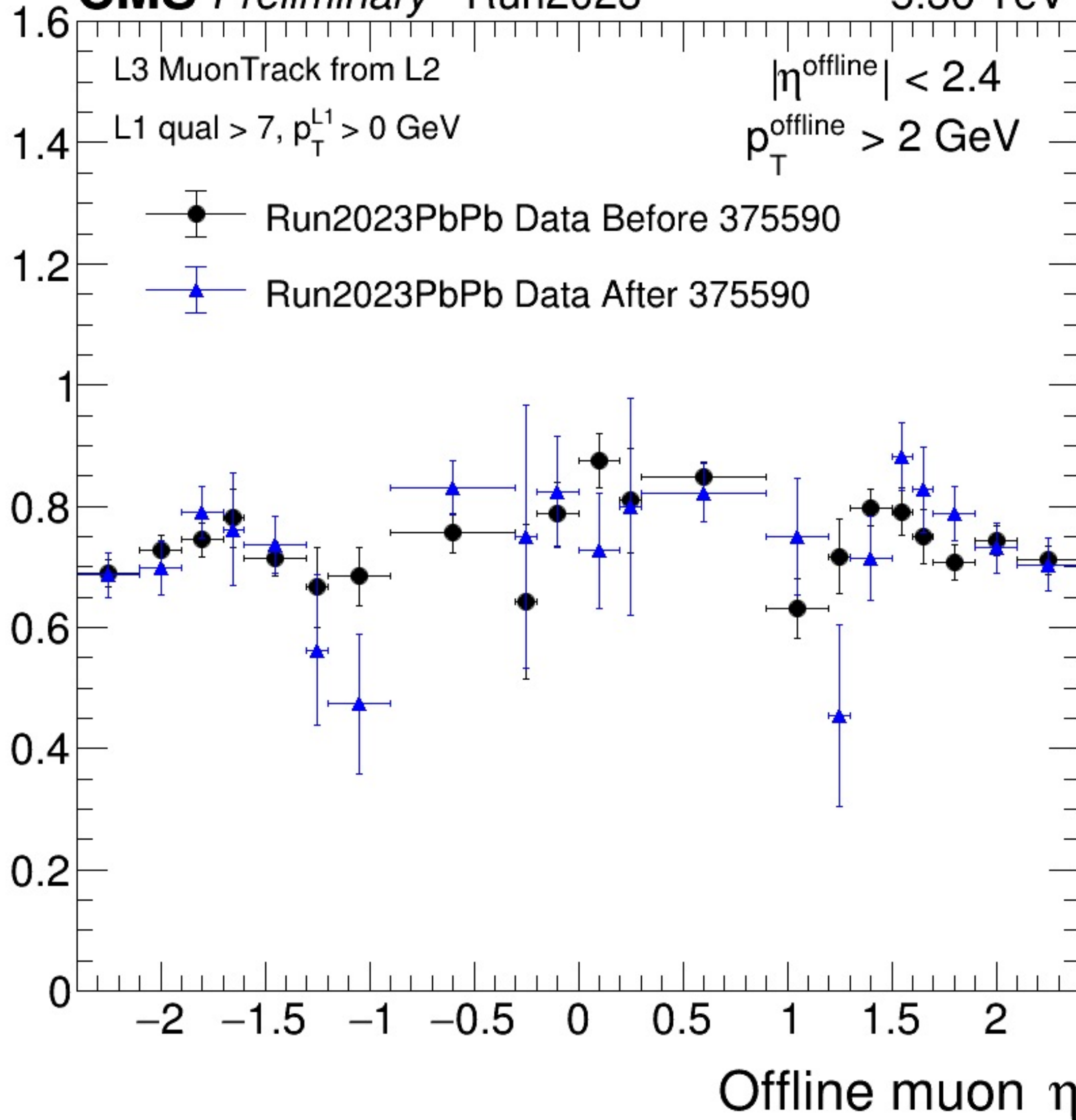
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 2$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

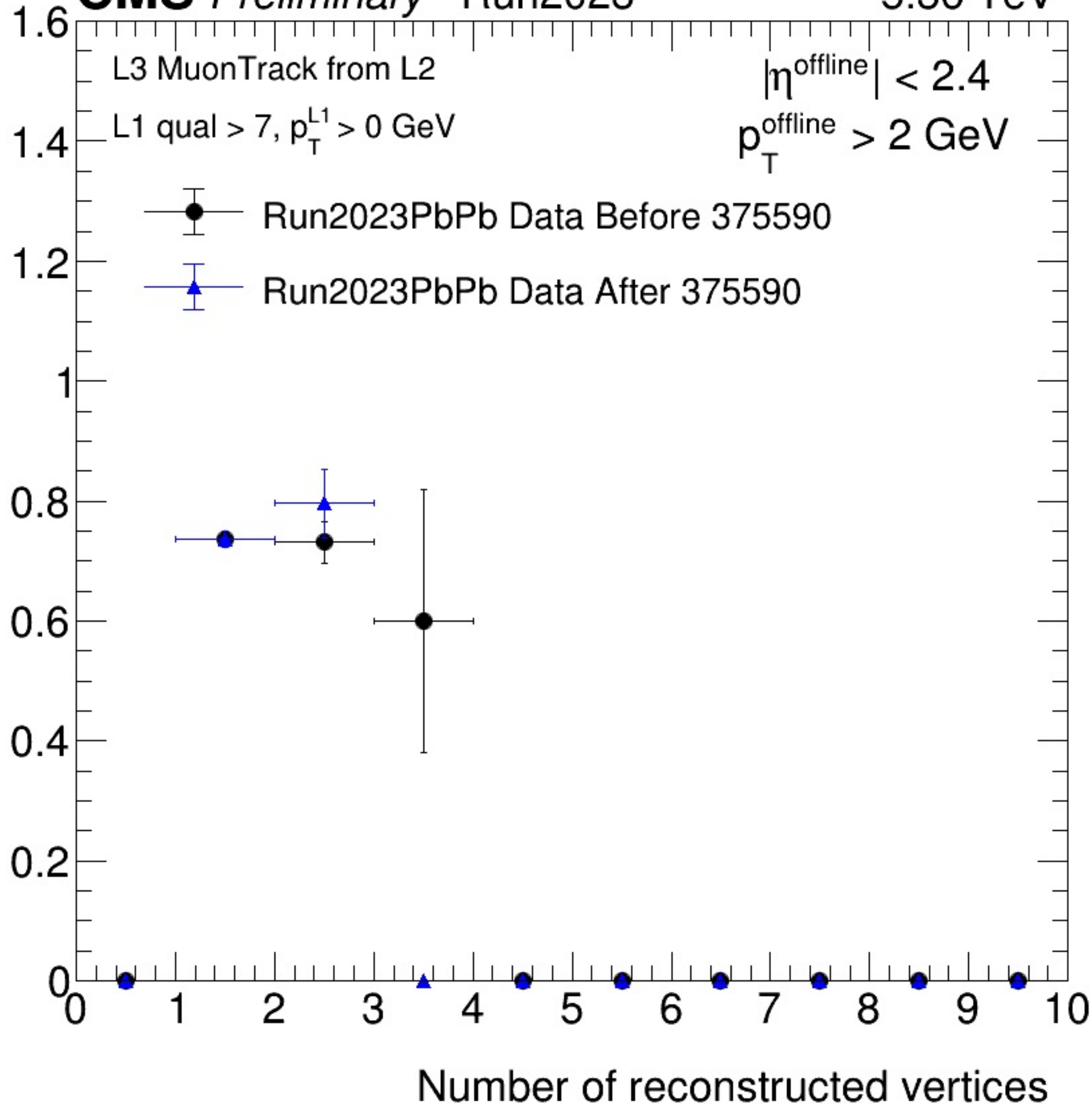


HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 2$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



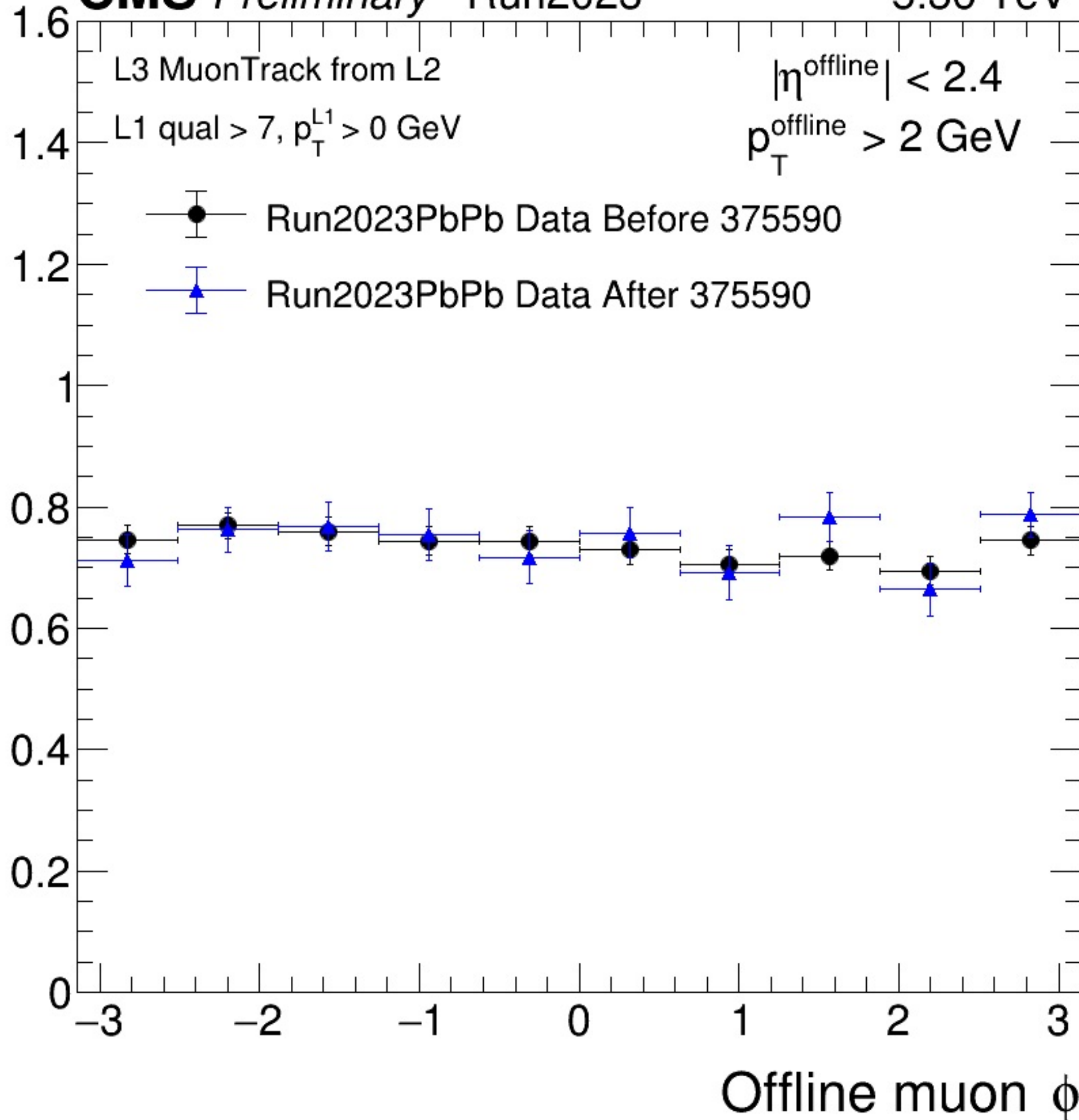
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 2$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590



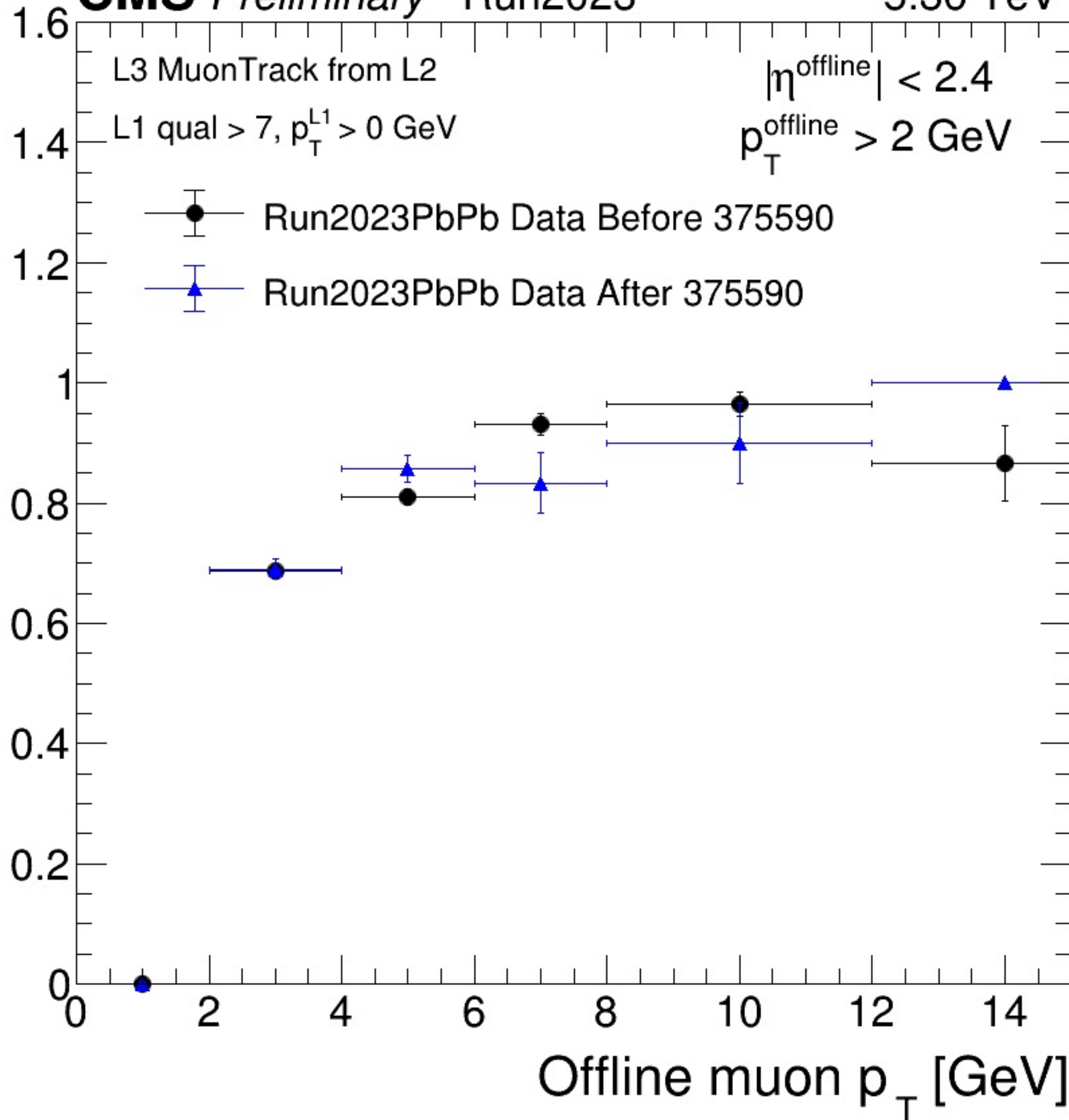
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 2$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

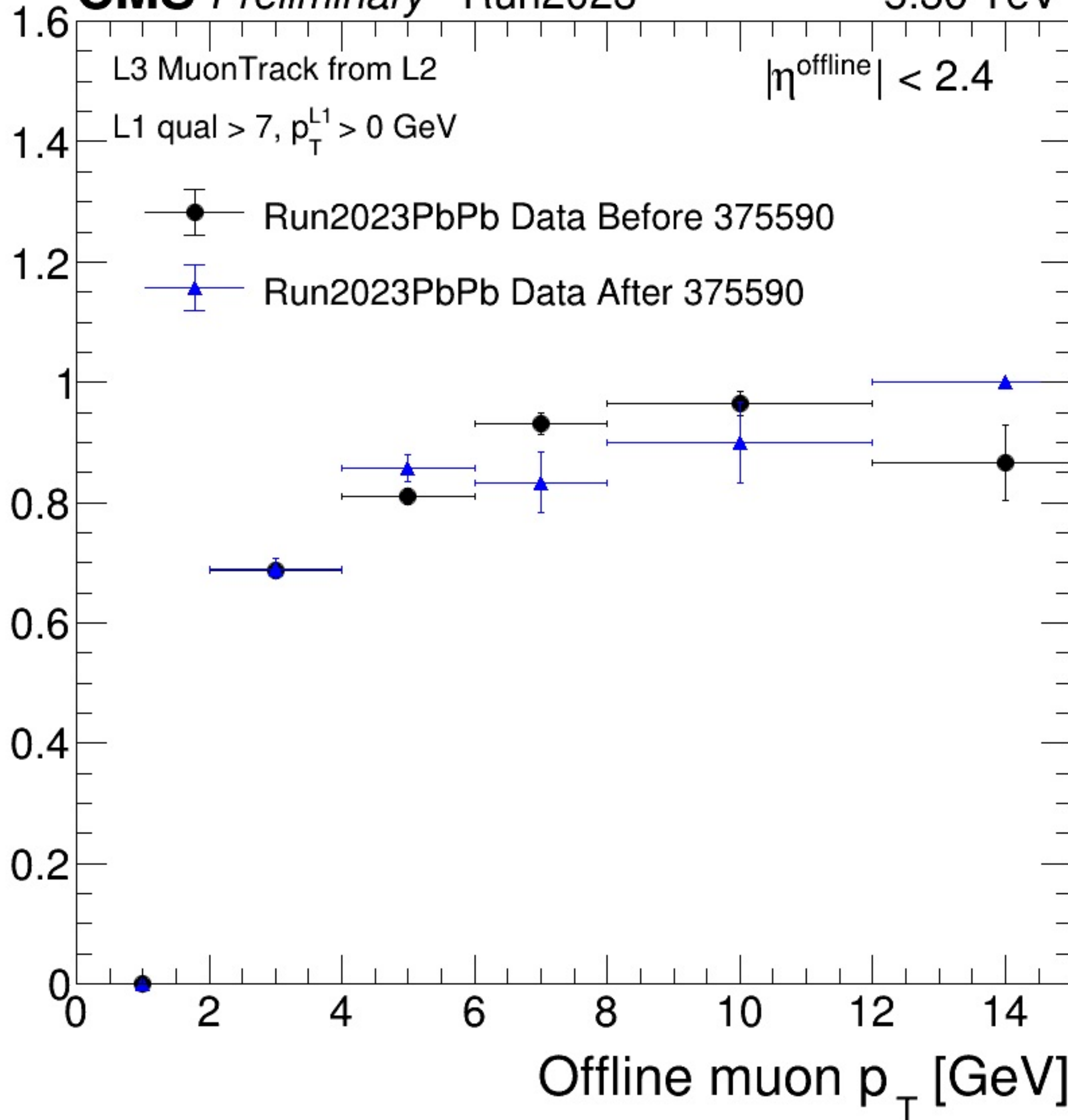


HLT efficiency

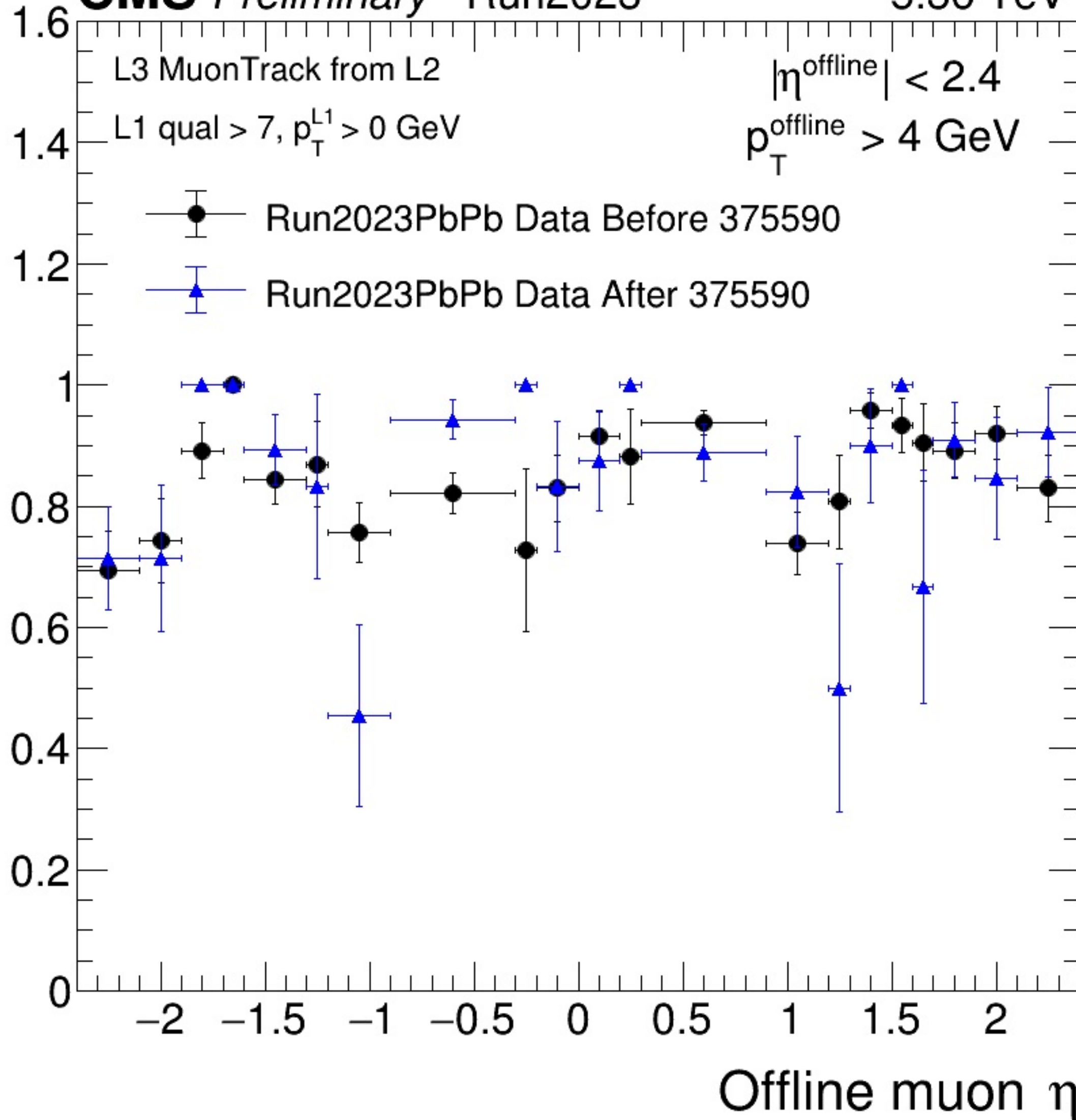
L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



HLT efficiency

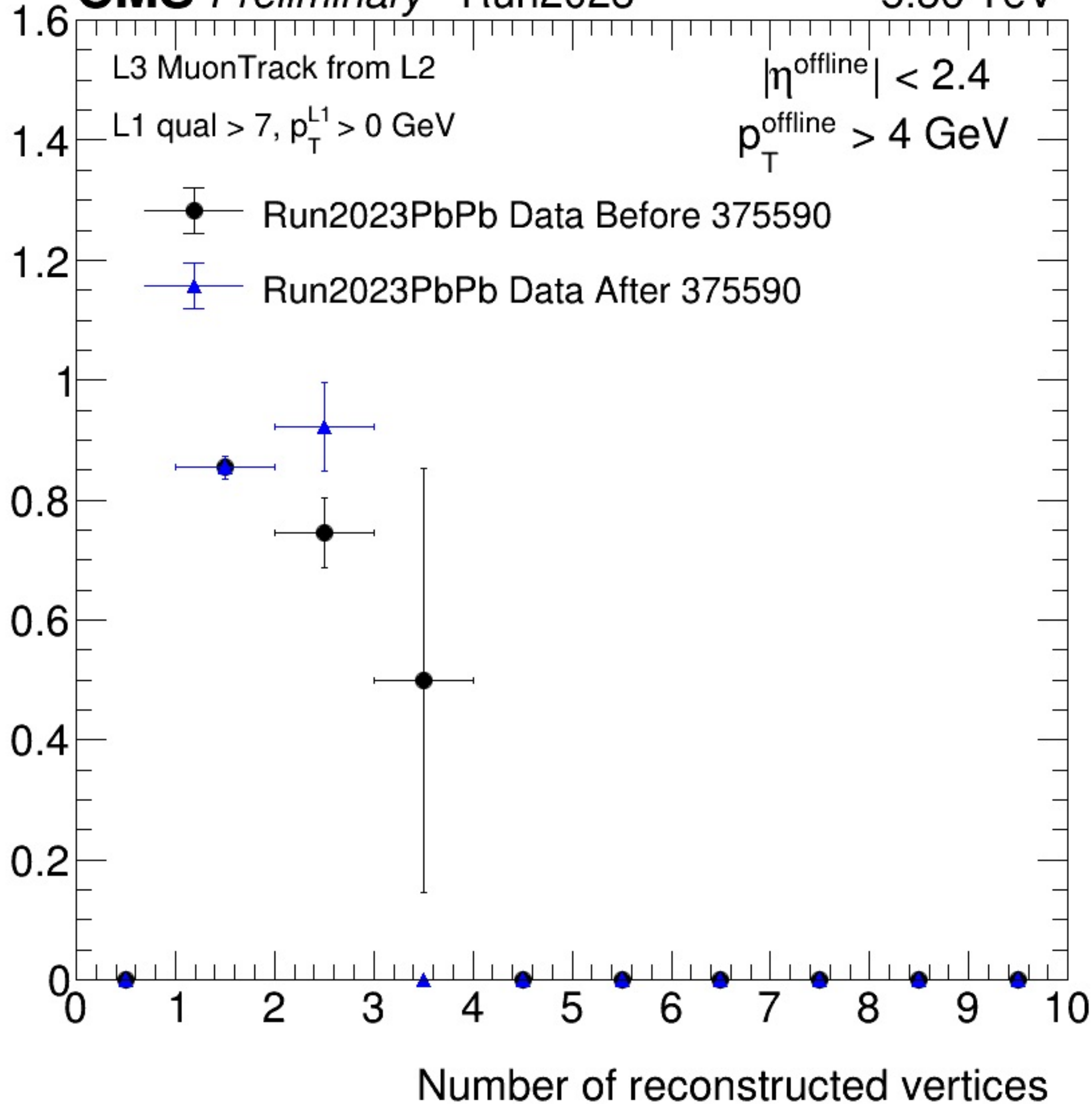


HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 4$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



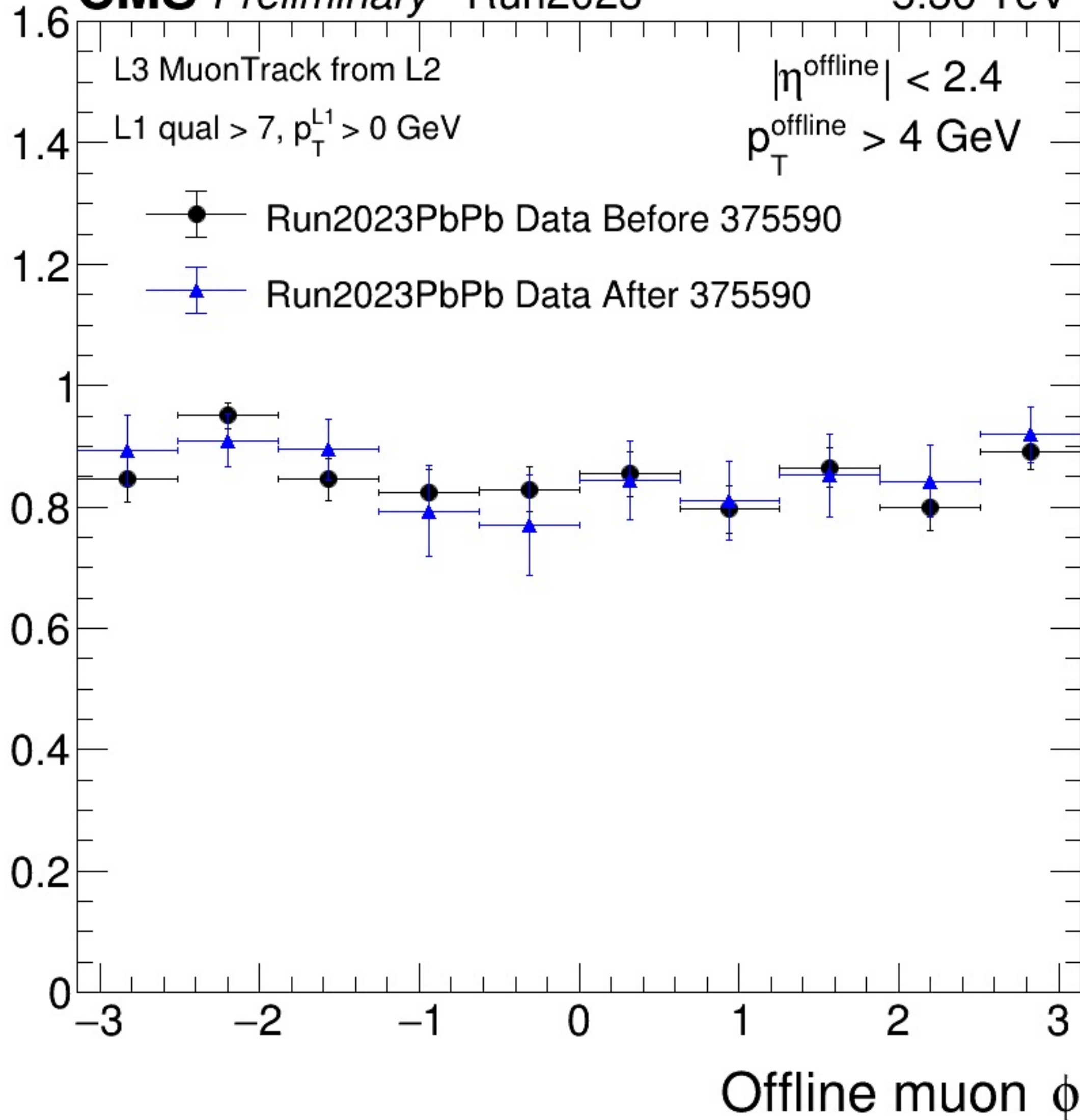
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 4$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

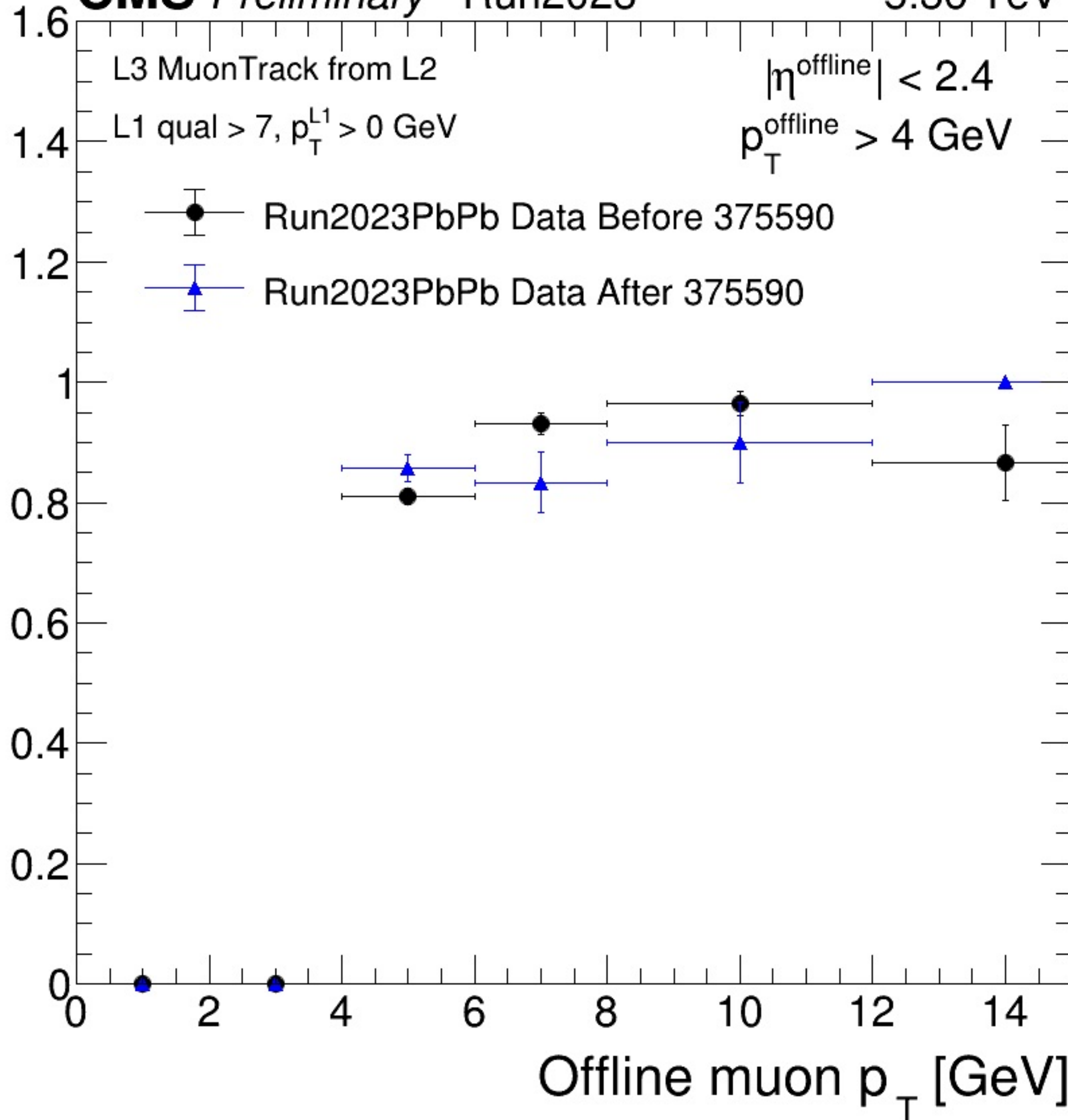


HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 4$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

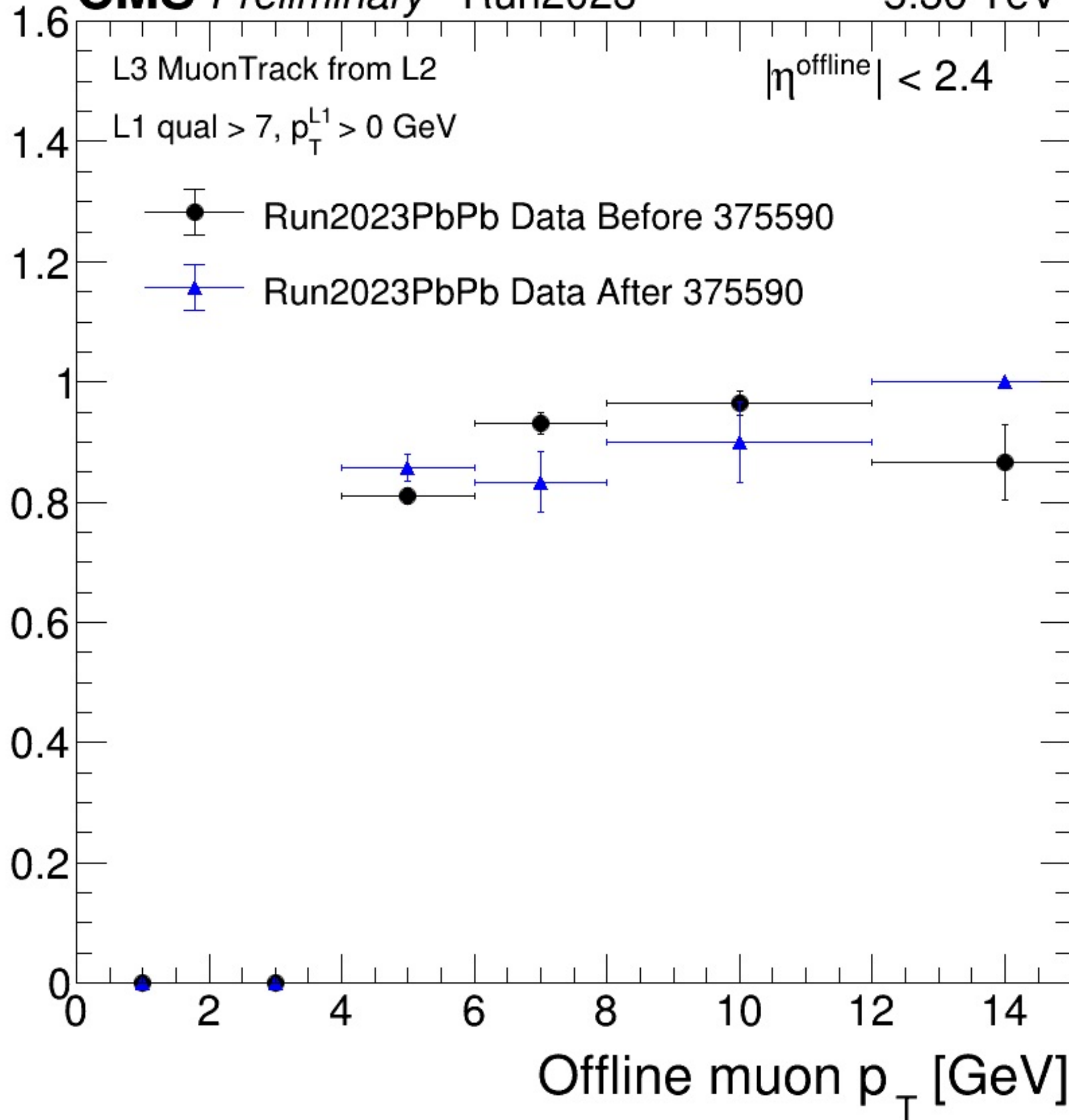


HLT efficiency

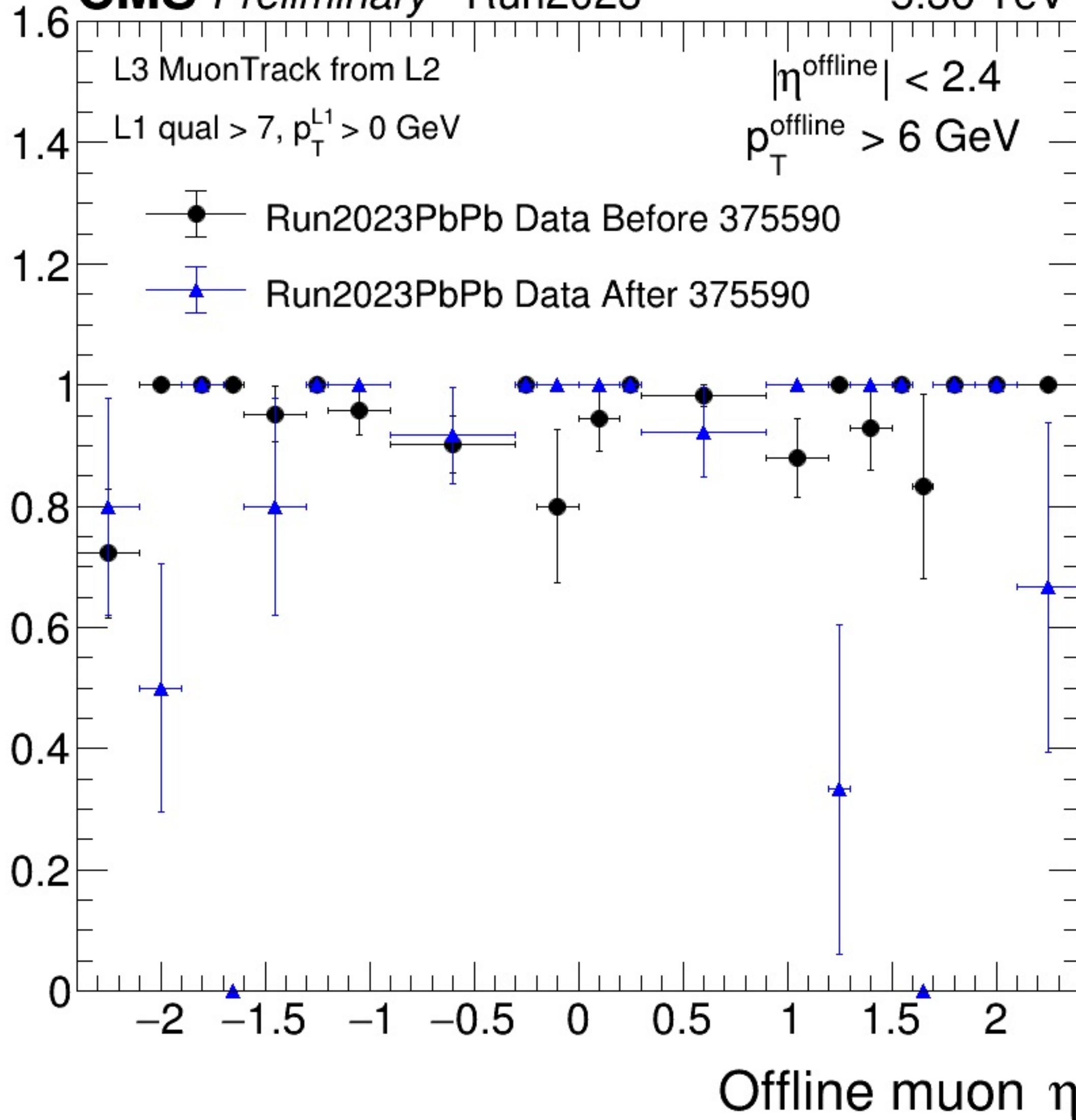
L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



HLT efficiency



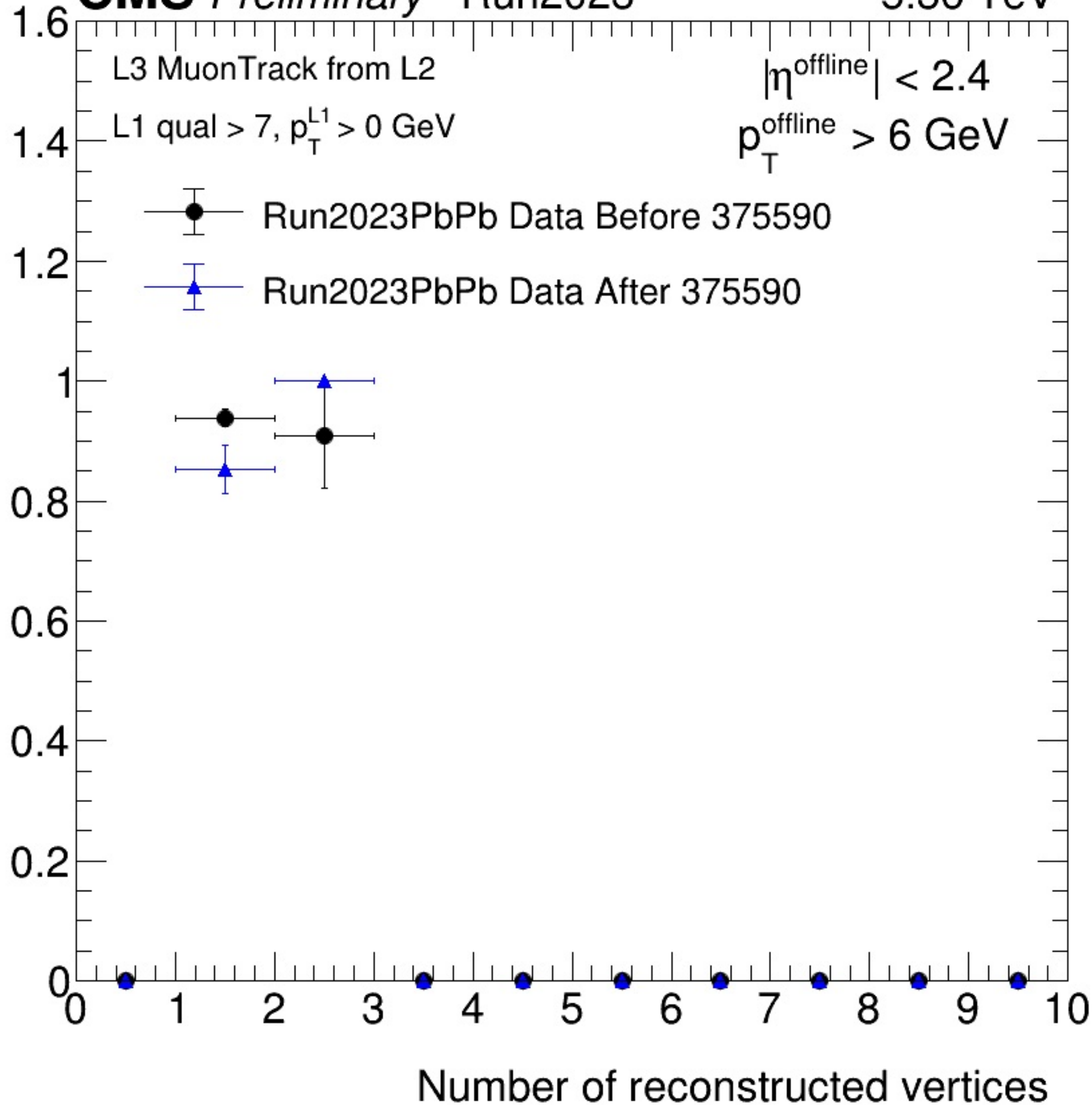
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 6$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590



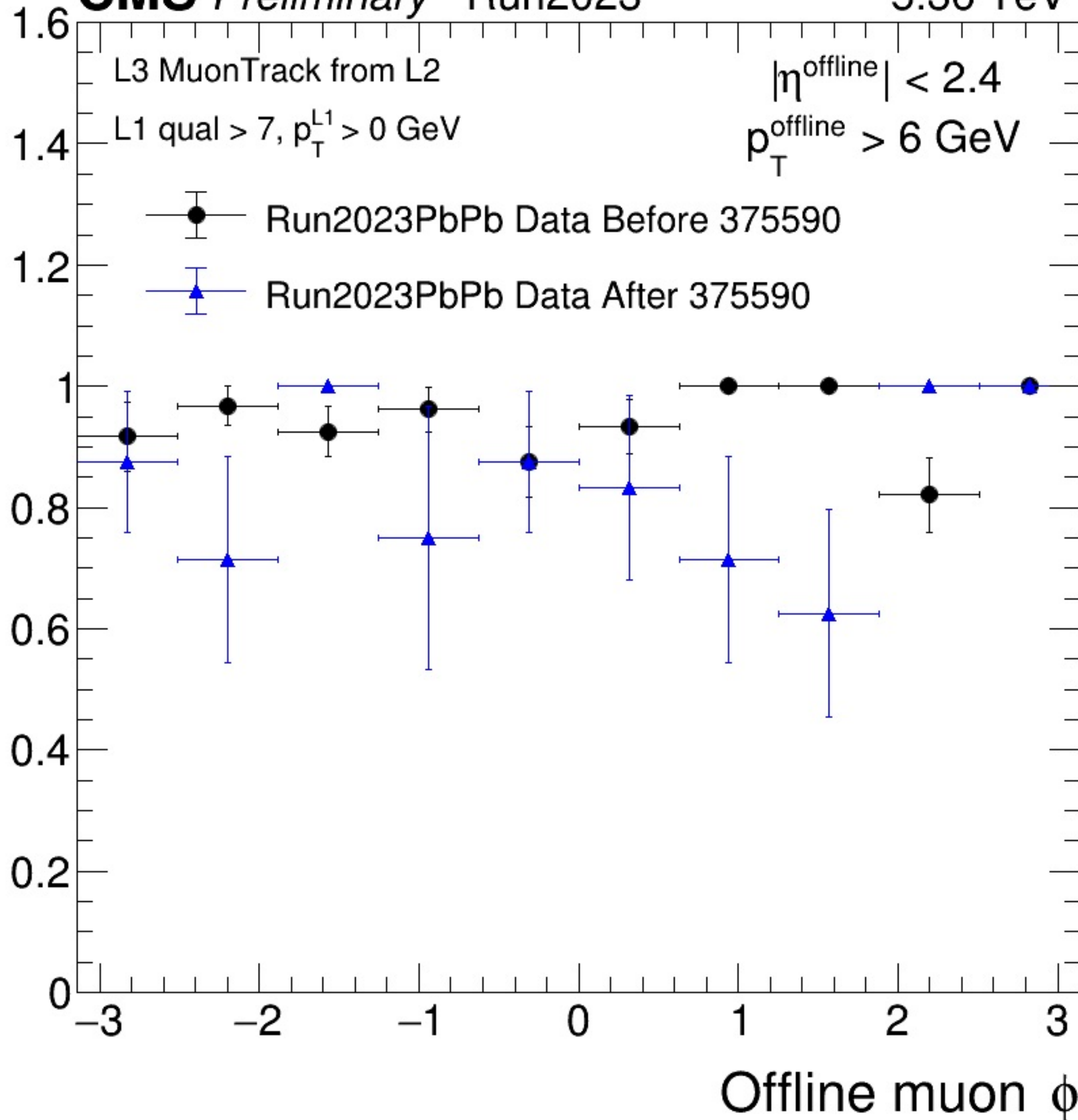
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 6$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

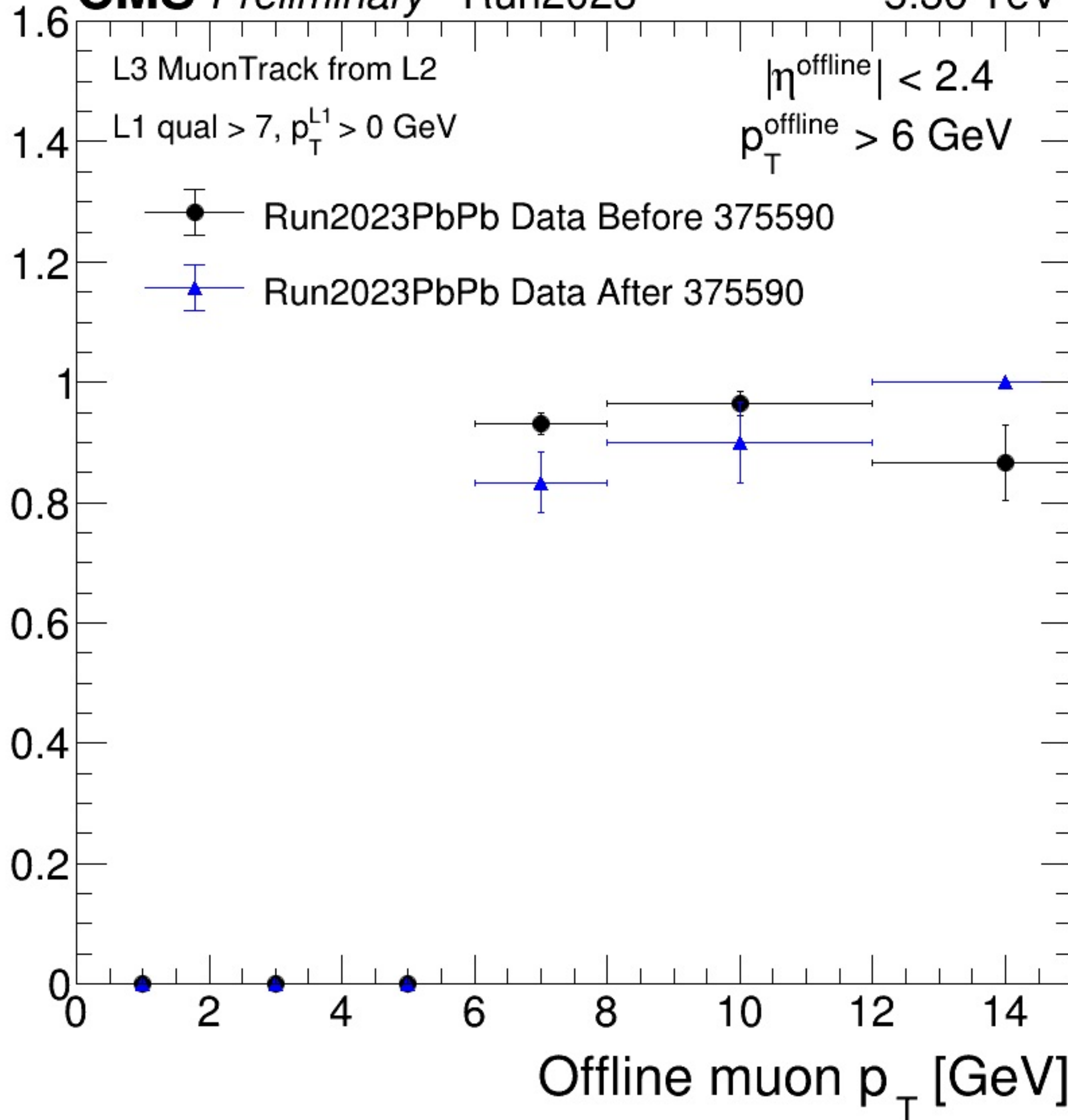


HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 6$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

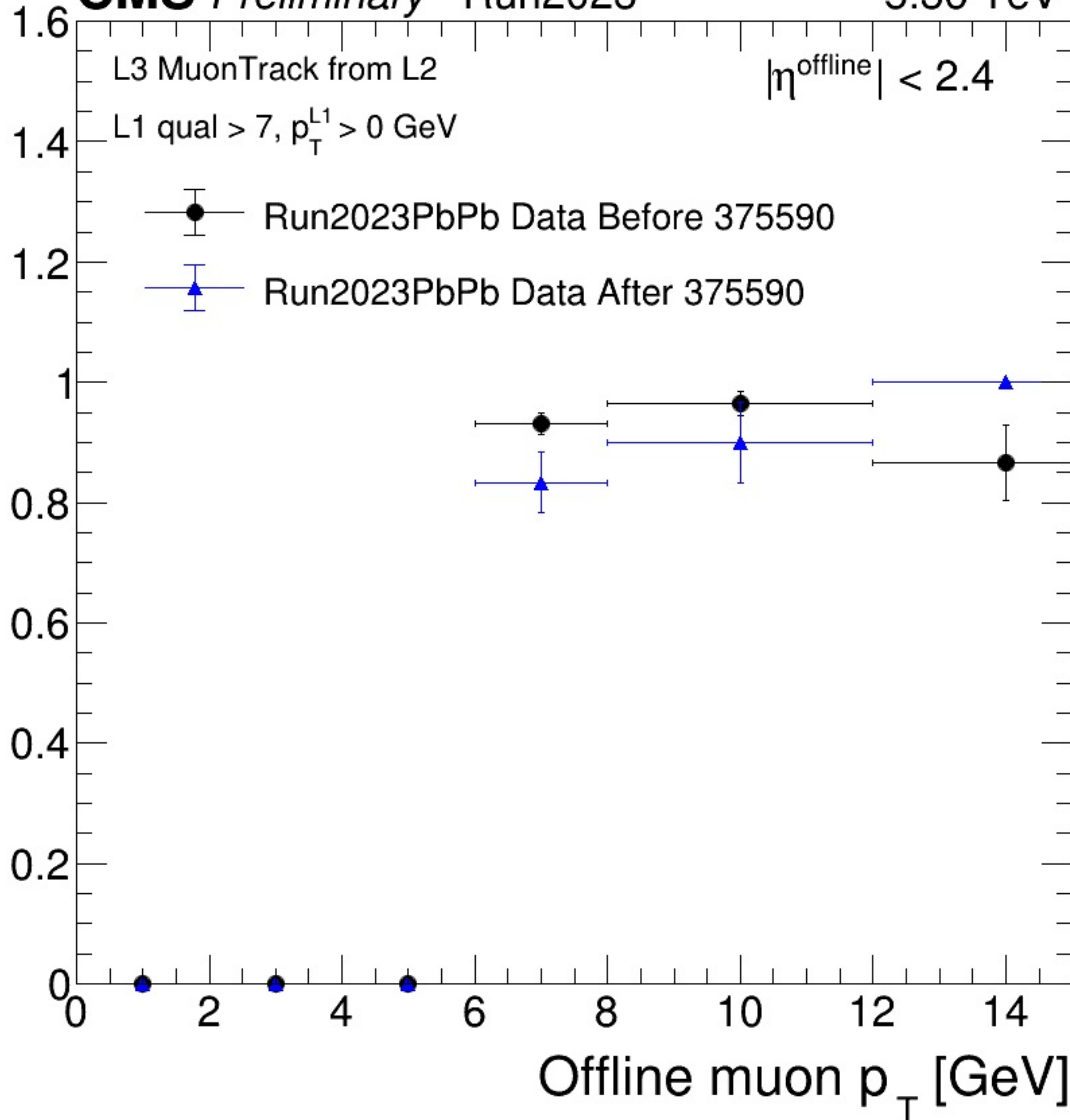


HLT efficiency

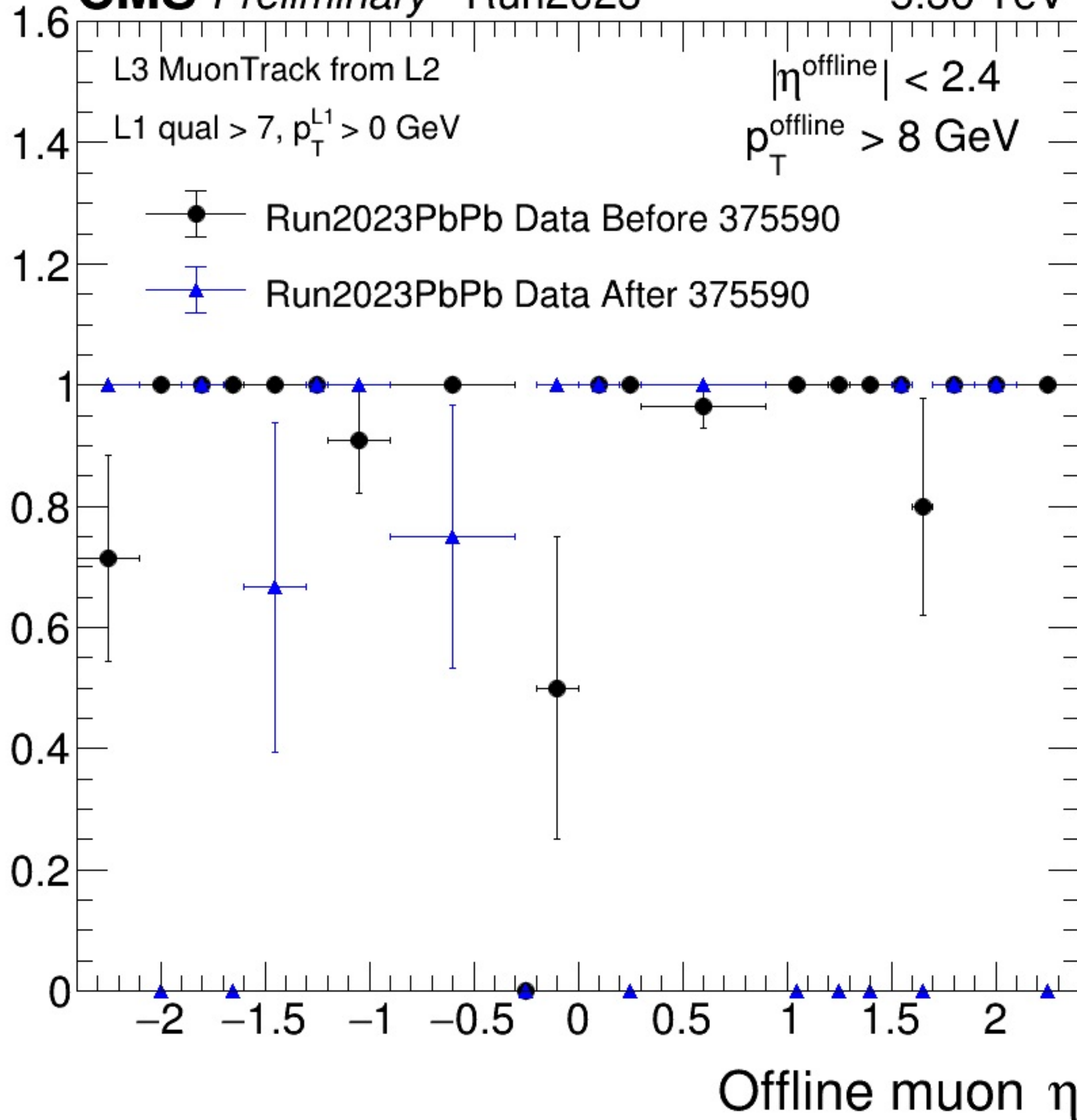
L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



HLT efficiency



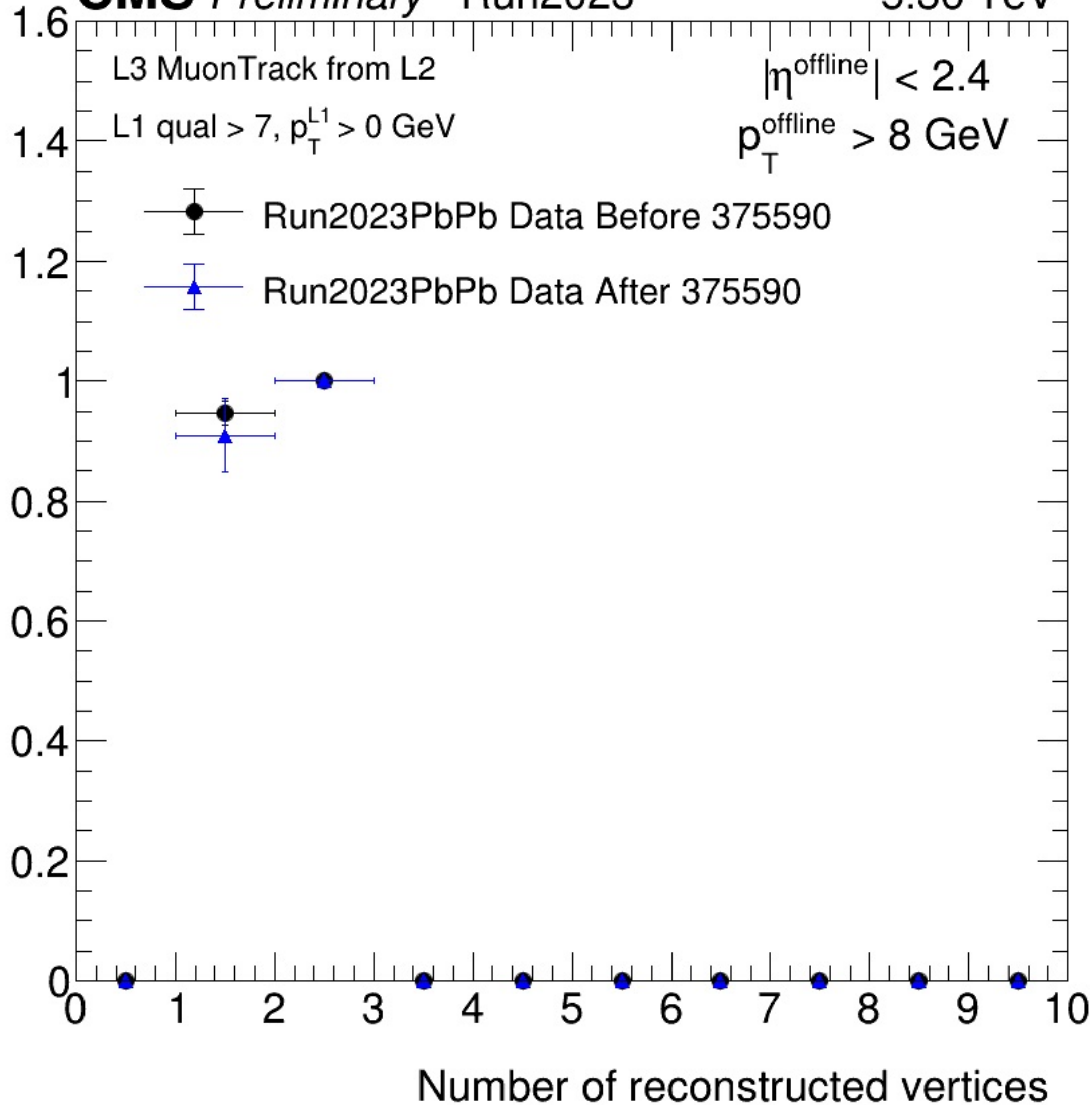
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 8$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590



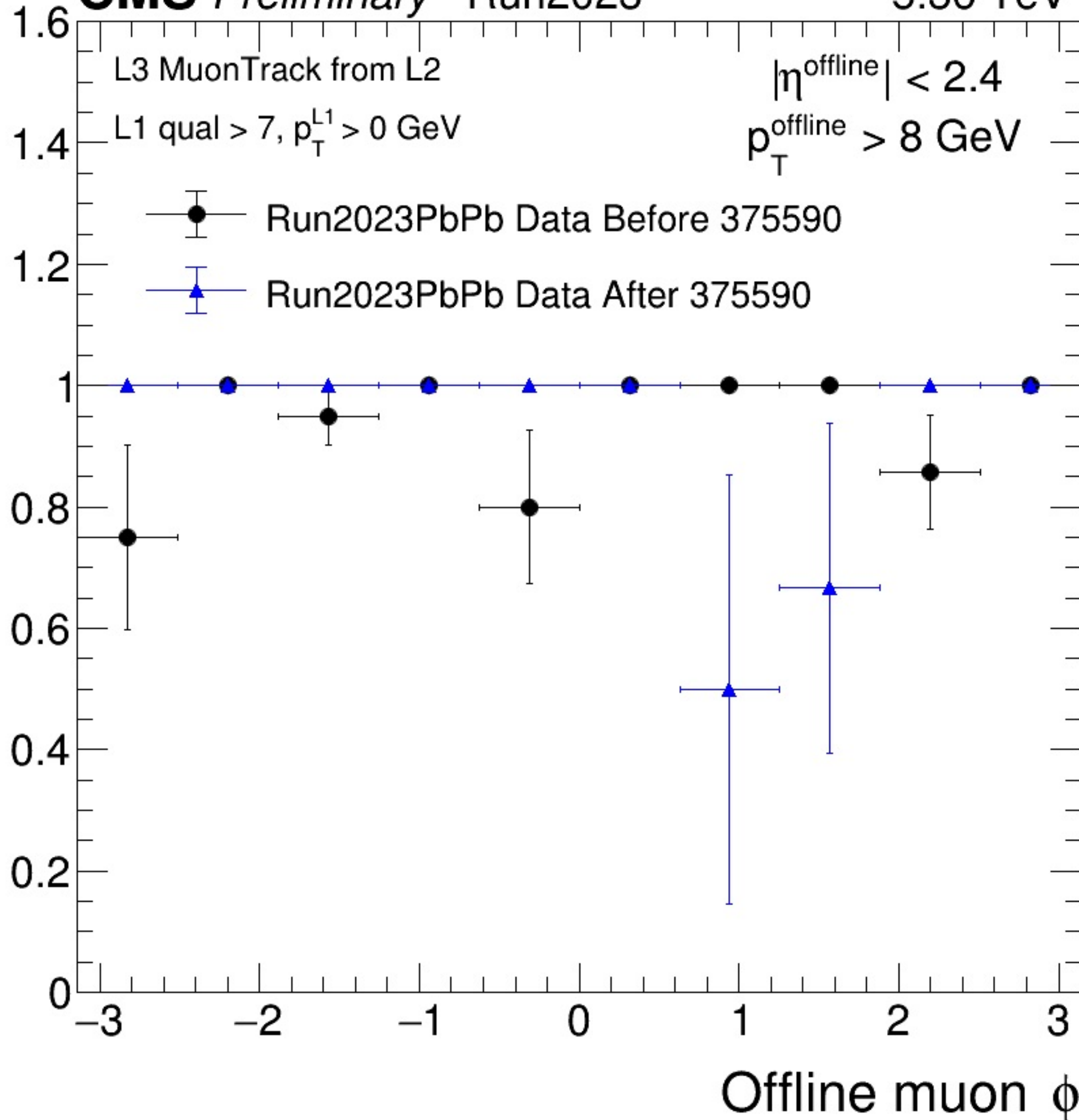
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 8$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

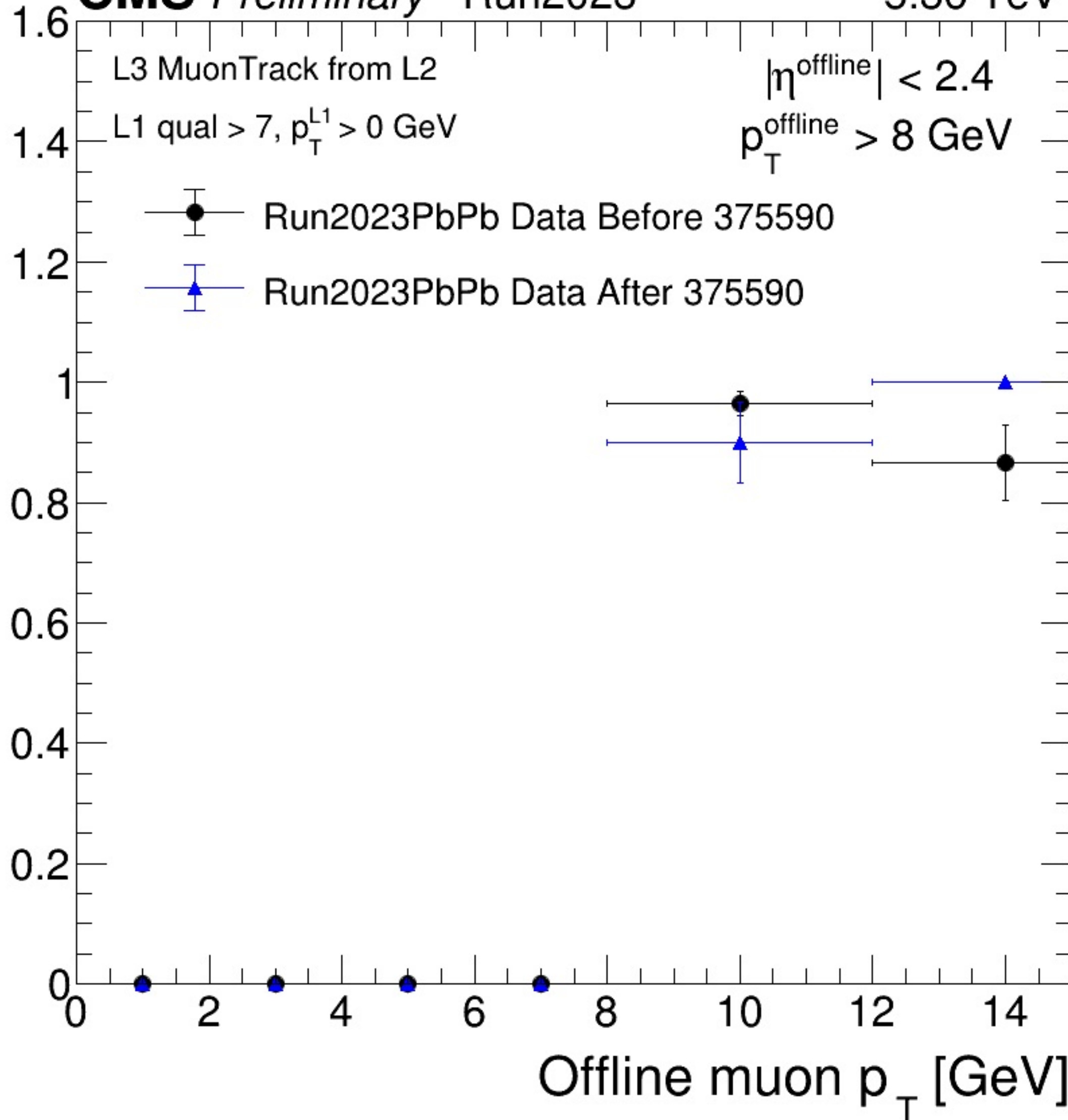


HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 8$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

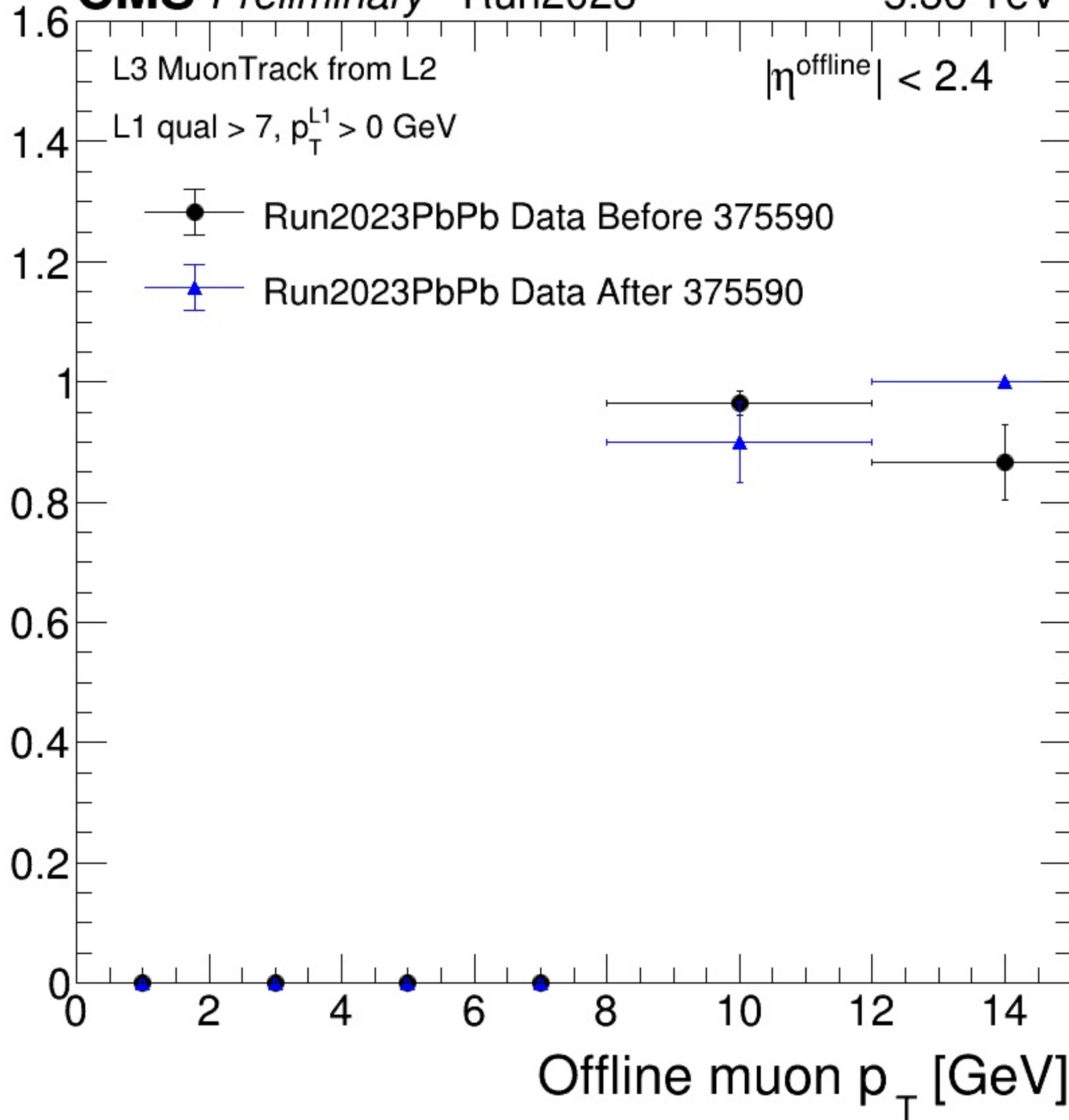


HLT efficiency

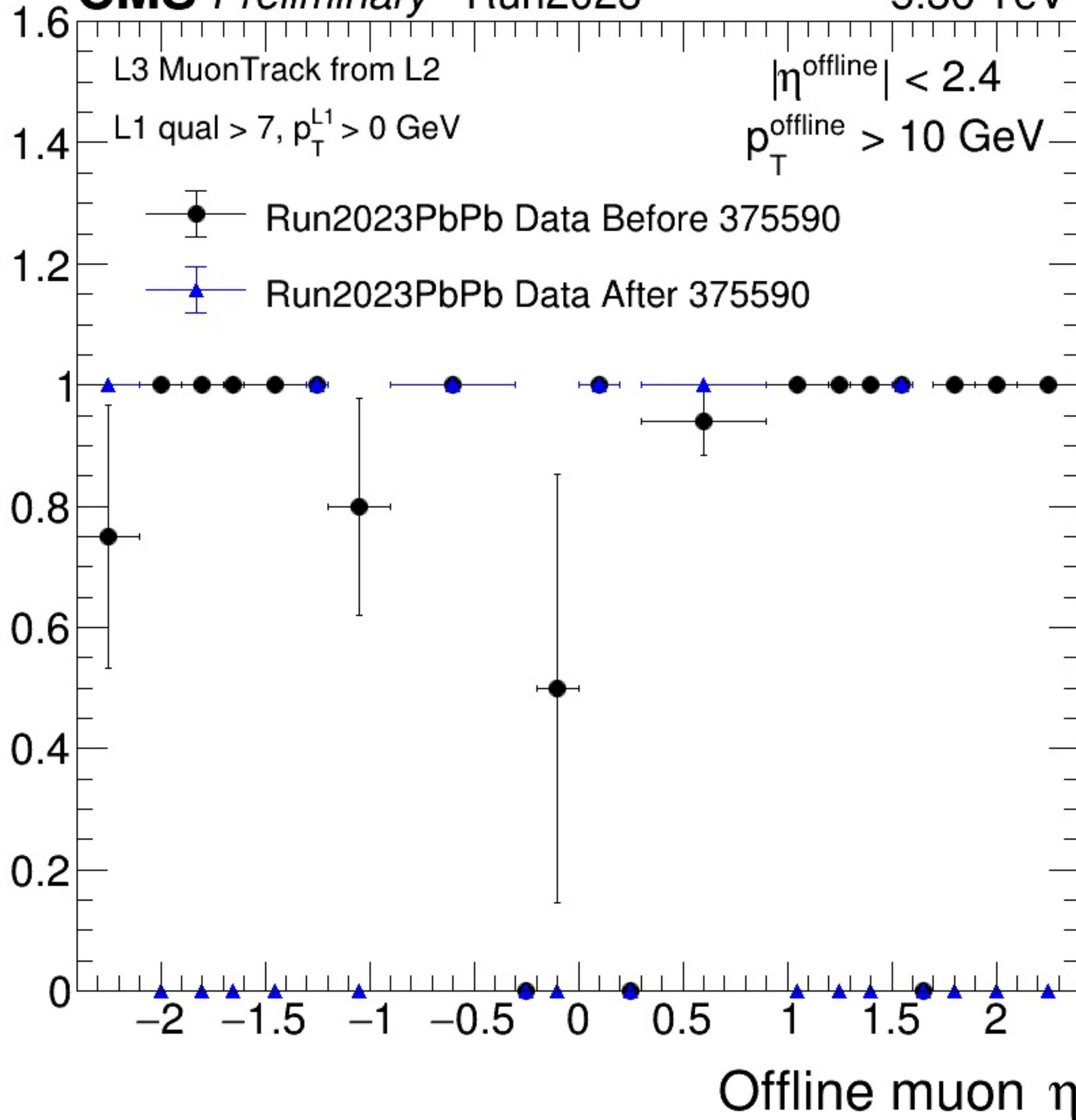
L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590



HLT efficiency



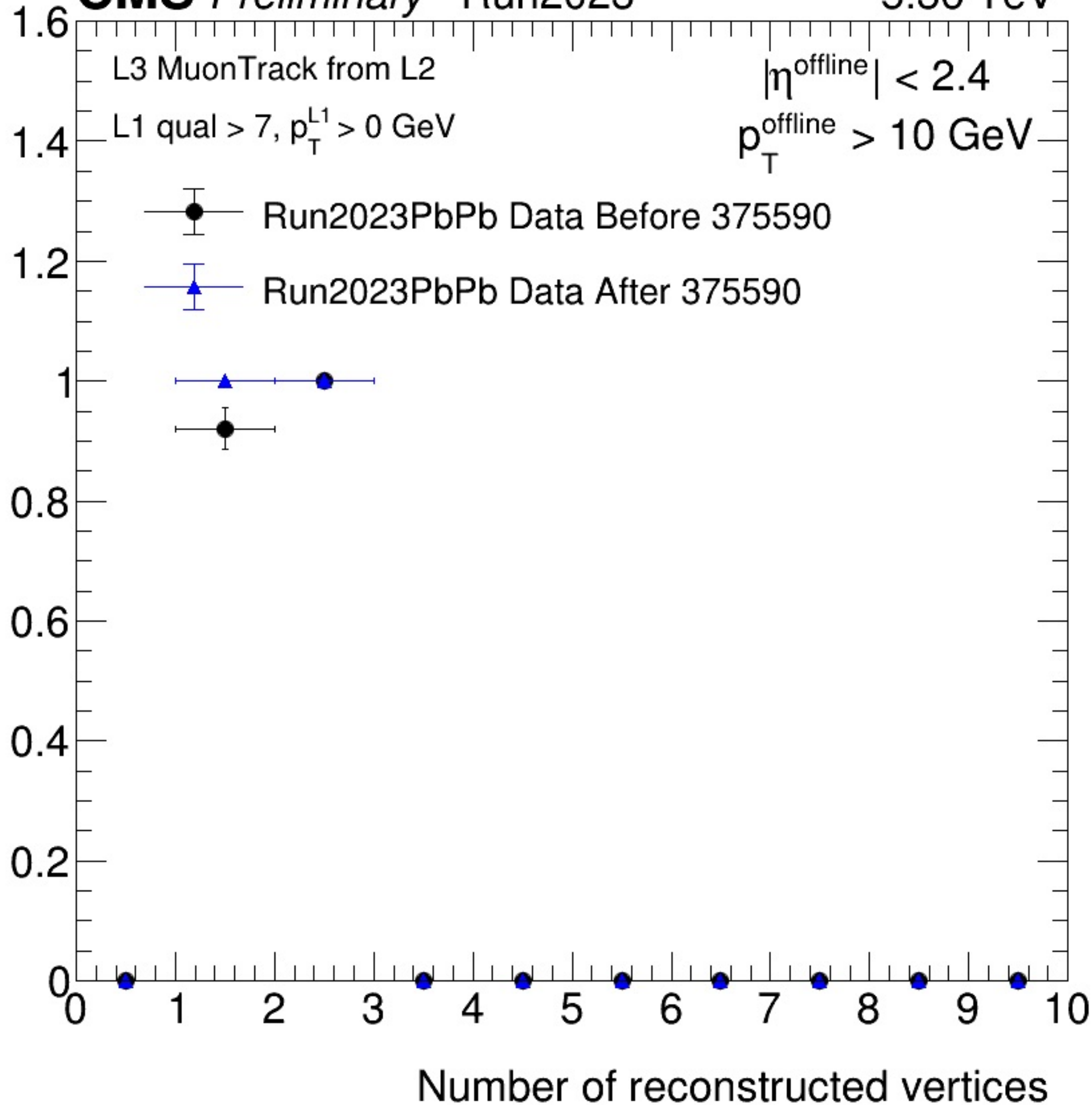
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 10$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590



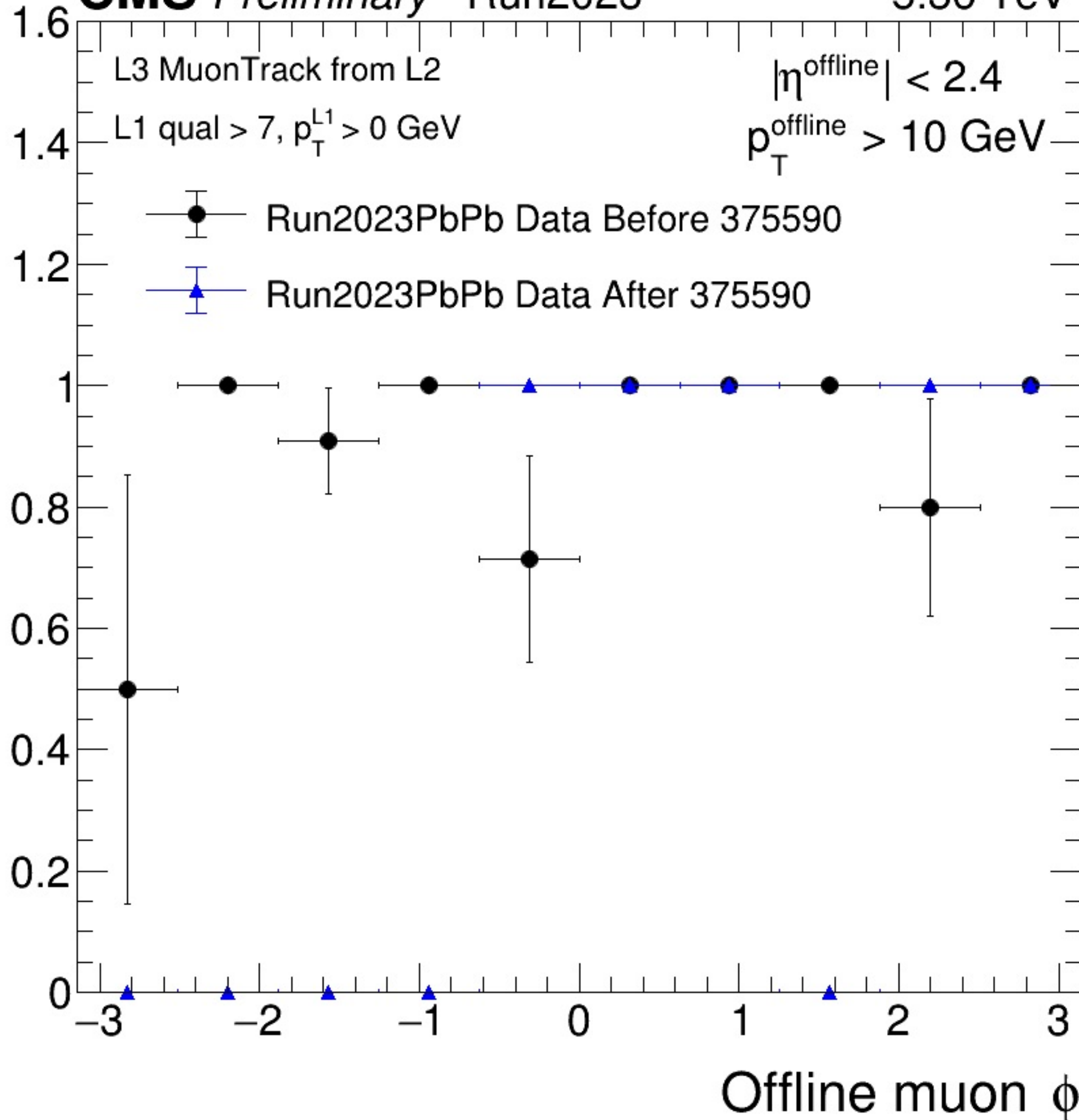
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 10$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590

Offline muon ϕ

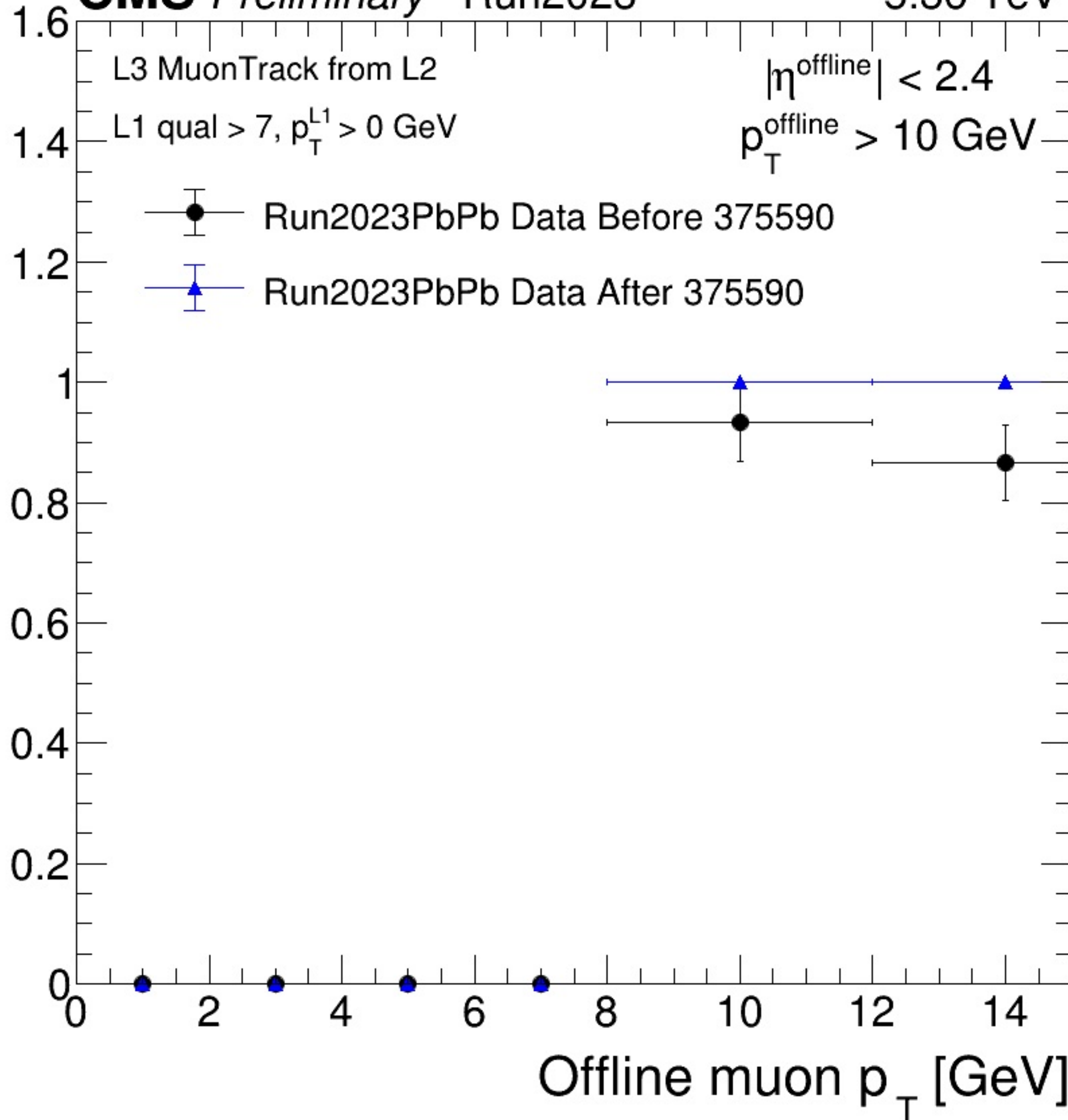
HLT efficiency

L3 MuonTrack from L2

L1 qual > 7, $p_T^{L1} > 0$ GeV $|\eta^{\text{offline}}| < 2.4$ $p_T^{\text{offline}} > 10$ GeV

Run2023PbPb Data Before 375590

Run2023PbPb Data After 375590



HLT efficiency

L3 MuonTrack from L2

 $|\eta^{\text{offline}}| < 2.4$ L1 qual > 7, $p_T^{\text{L1}} > 0$ GeV

- Run2023PbPb Data Before 375590
- Run2023PbPb Data After 375590

