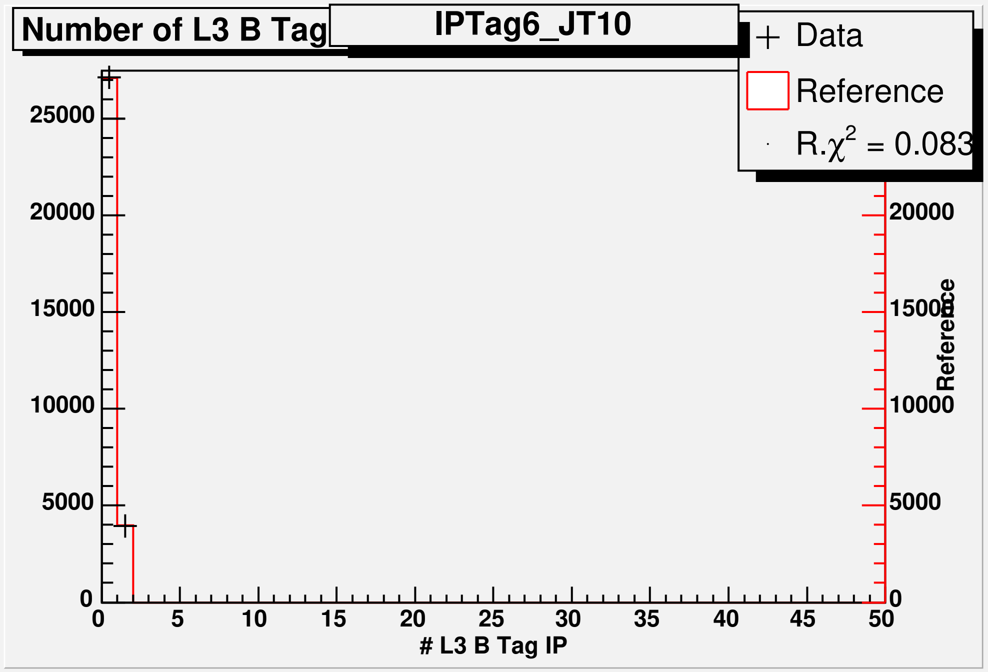
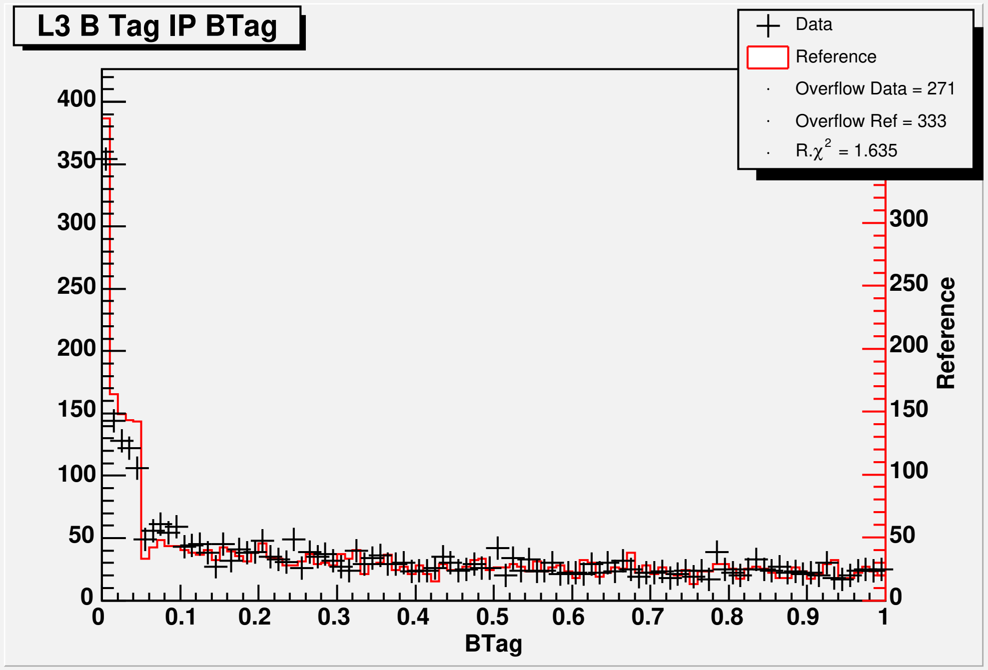
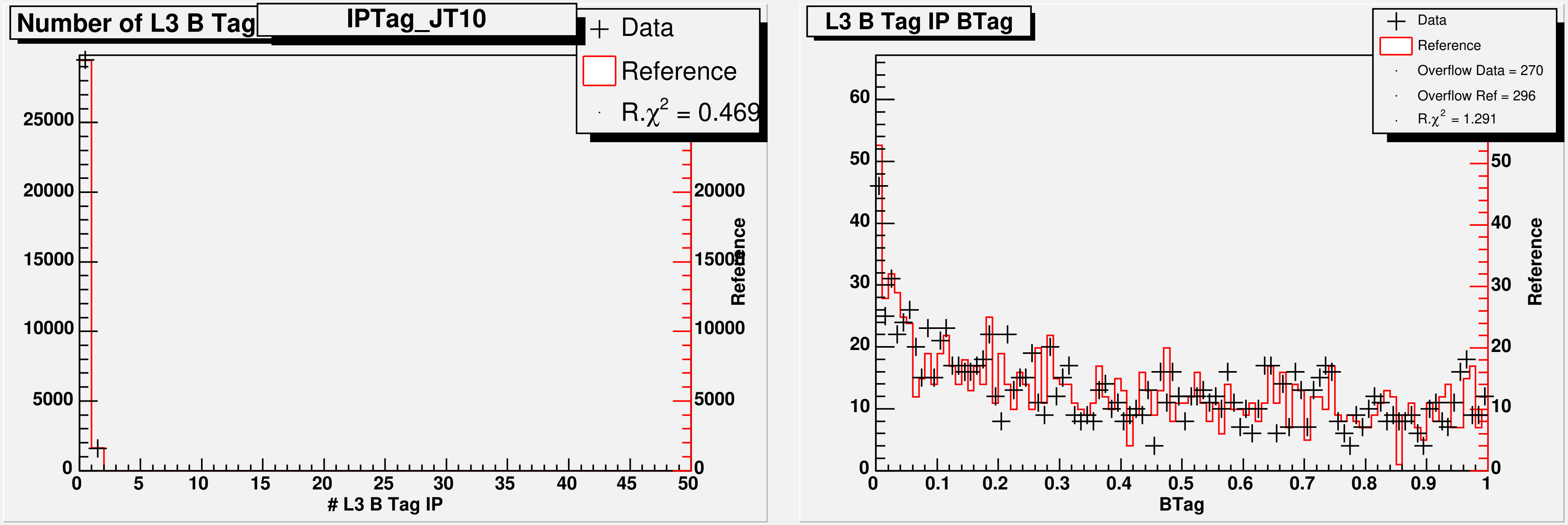
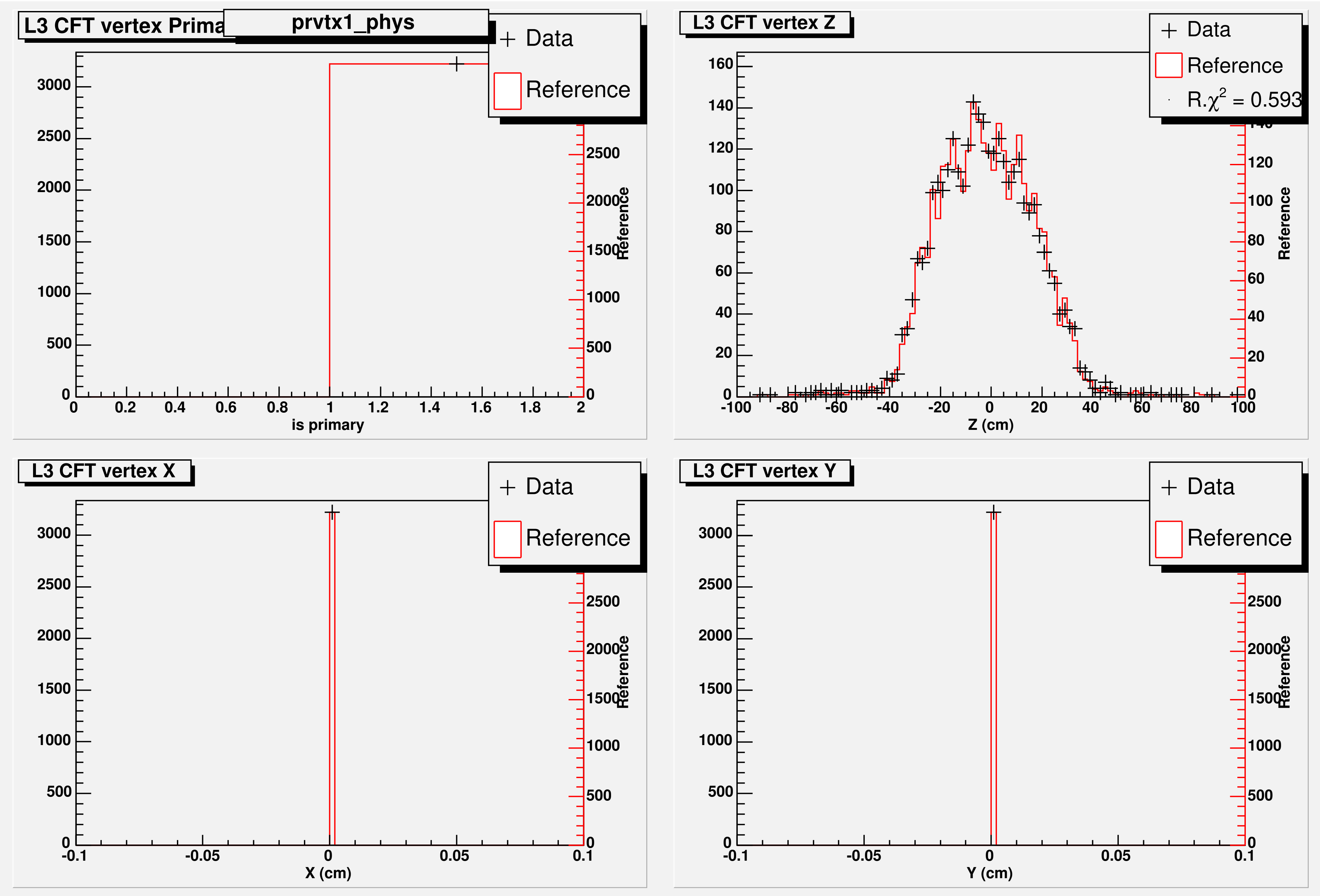


IPTag6_JT10
Number of L3 B Tag
Data
Reference
R.χ^2 = 0.083
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35 40 45 50
L3 B Tag IP
Reference

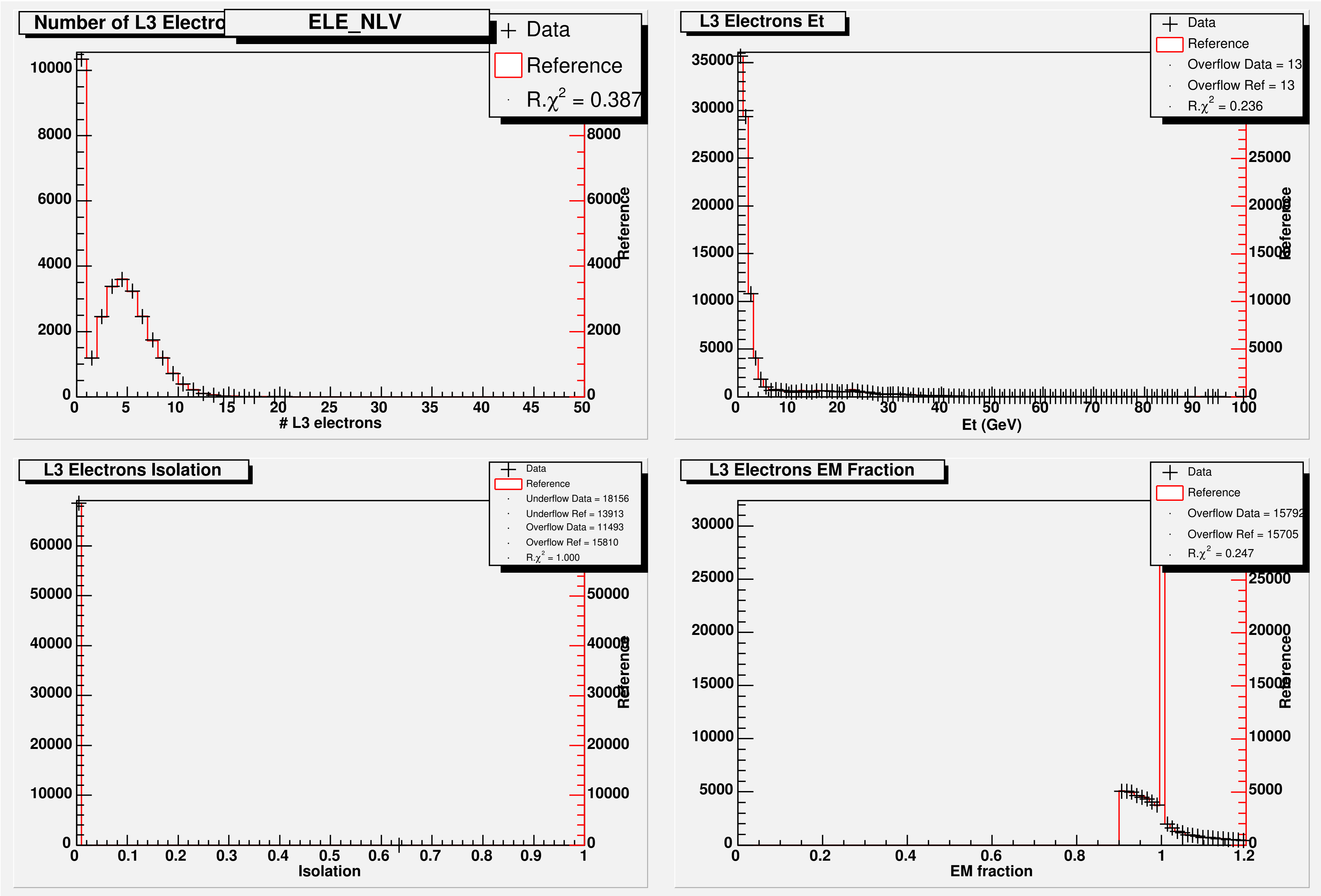


L3 B Tag IP BTag
Data
Reference
Overflow Data = 271
Overflow Ref = 333
R.χ^2 = 1.635
400
350
300
250
200
150
100
50
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
BTag
Reference

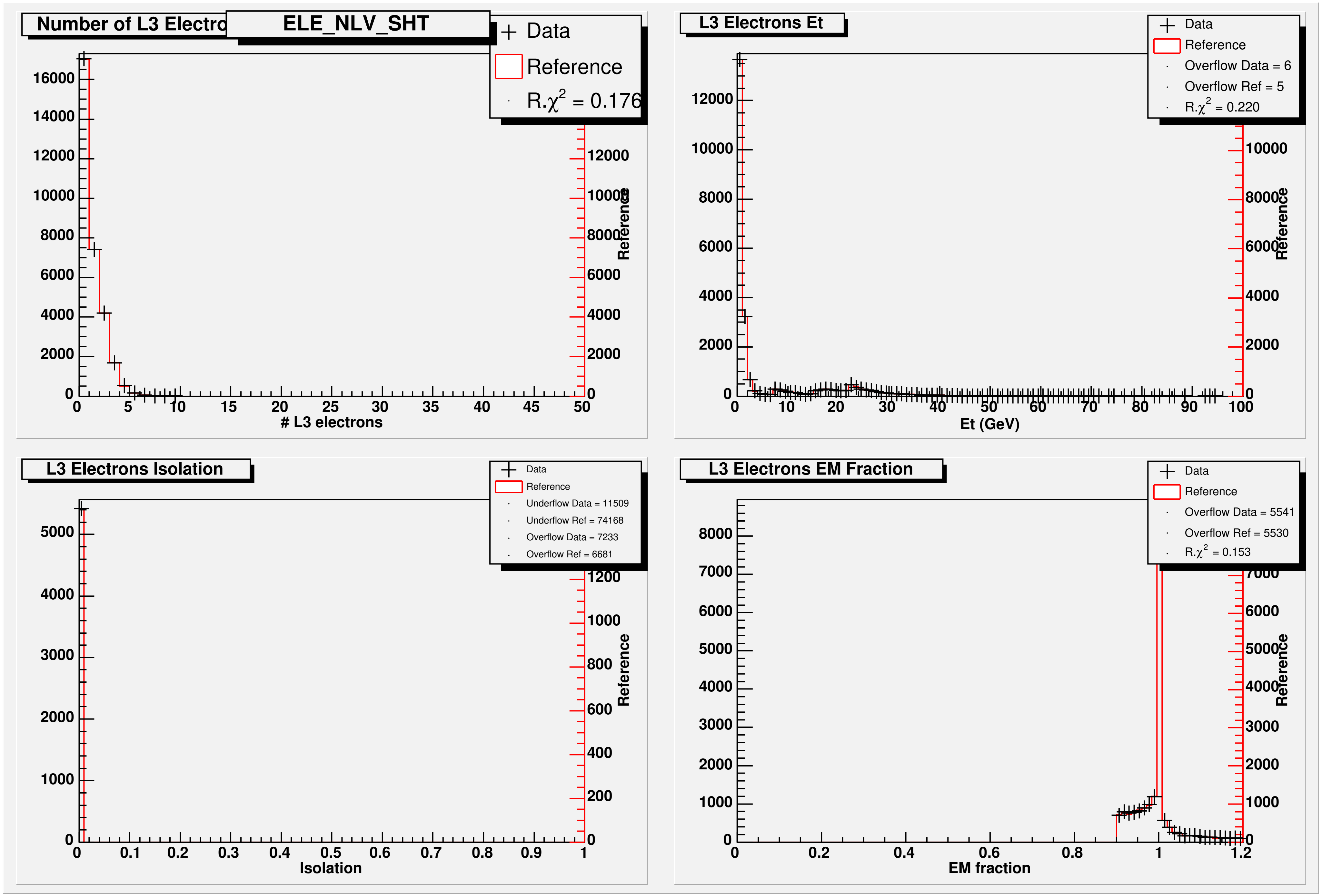

IPTag_JT10
Number of L3 B Tag
Data
Reference
R.χ² = 0.469
# L3 B Tag IP
Reference
L3 B Tag IP BTag
Data
Reference
Overflow Data = 270
Overflow Ref = 296
R.χ² = 1.291
BTag
Reference

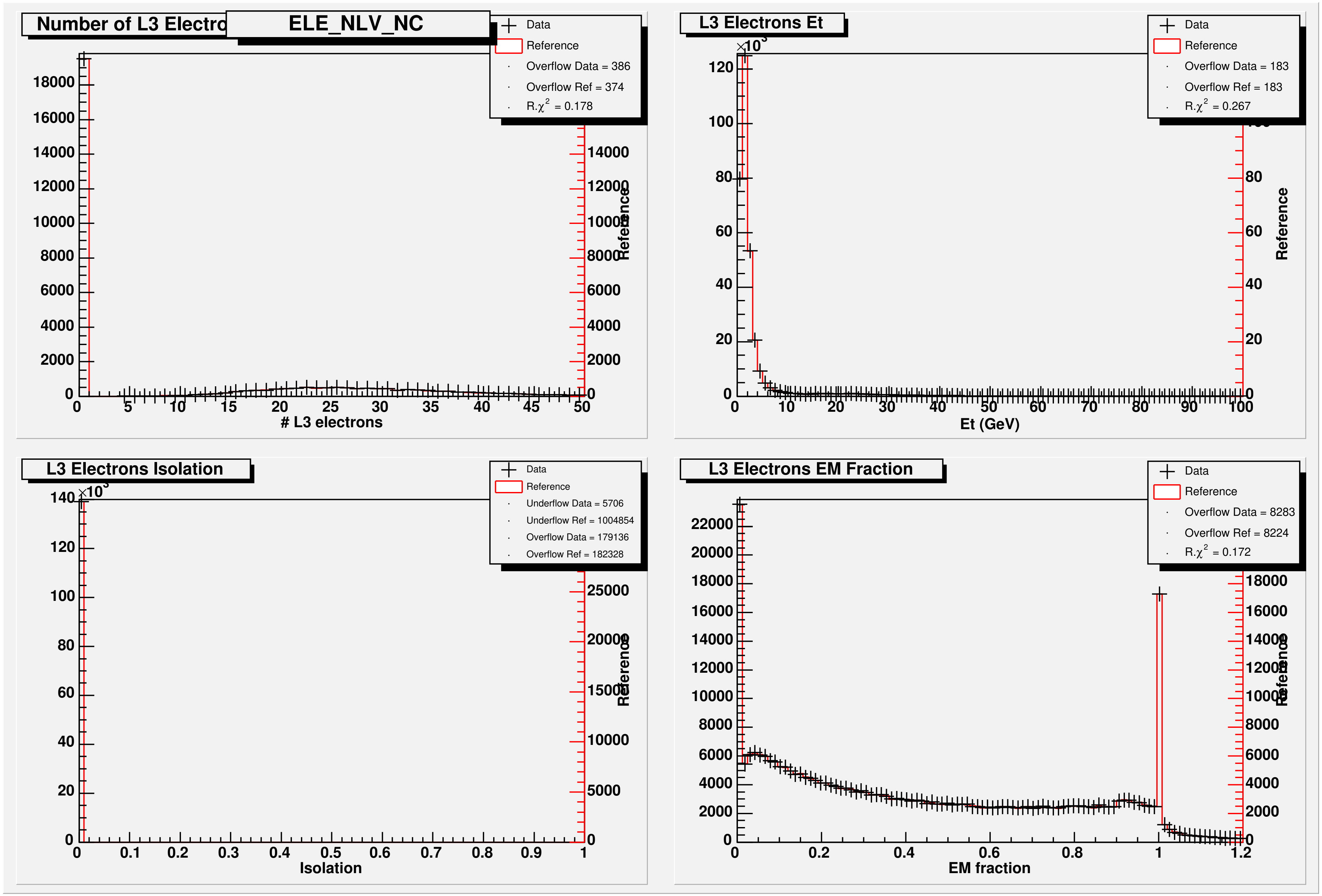


L3 CFT vertex Prima
prvtx1_phys
Data
Reference
is primary
Reference
L3 CFT vertex Z
Data
Reference
R.χ^2 = 0.593
Z (cm)
Reference
L3 CFT vertex X
Data
Reference
X (cm)
Reference
L3 CFT vertex Y
Data
Reference
Y (cm)
Reference

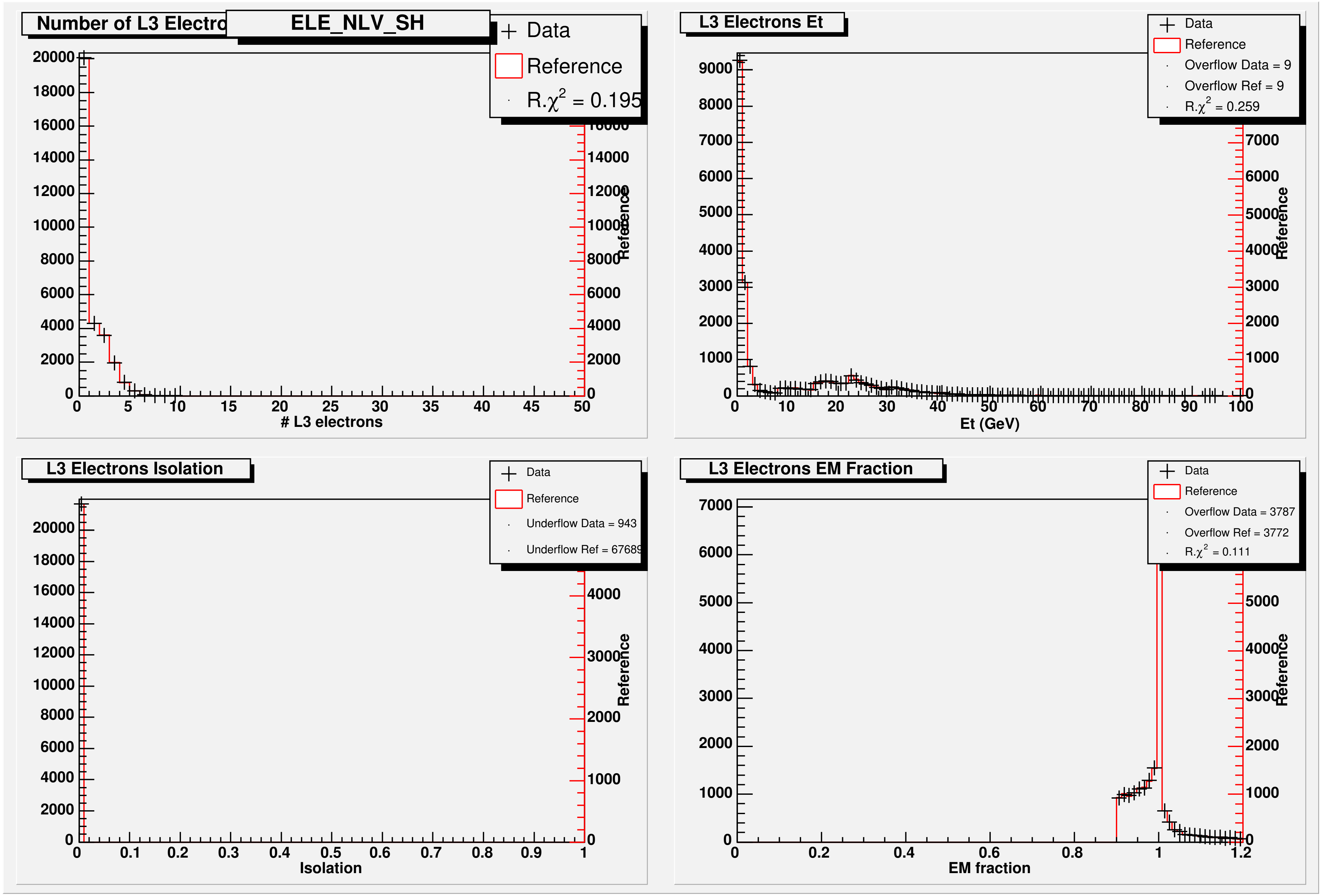


Number of L3 Electro
ELE_NLV
Data
Reference
R.χ2 = 0.387
# L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 13
Overflow Ref = 13
R.χ2 = 0.236
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 18156
Underflow Ref = 13913
Overflow Data = 11493
Overflow Ref = 15810
R.χ2 = 1.000
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 15792
Overflow Ref = 15705
R.χ2 = 0.247
EM fraction
Reference

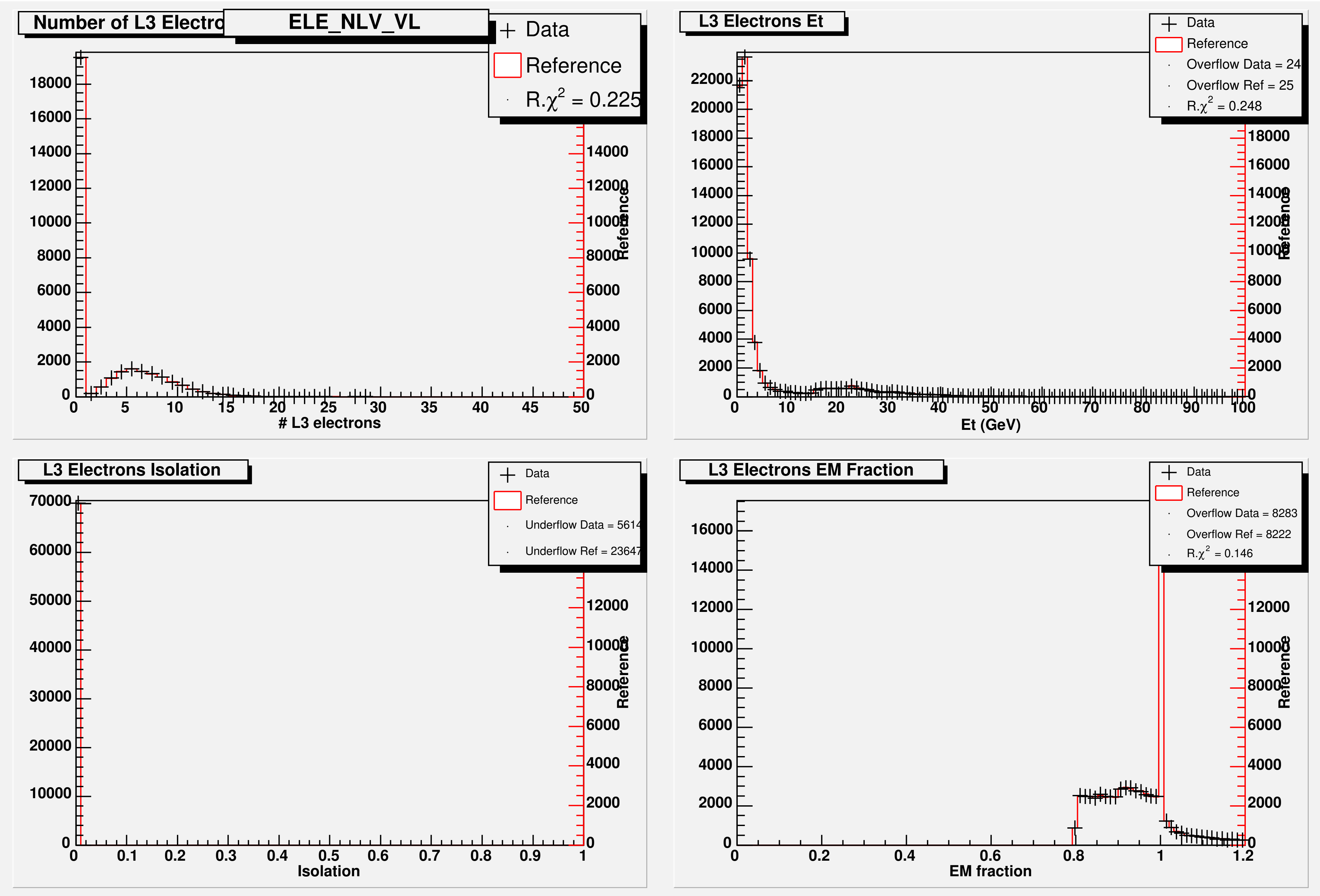

Number of L3 Electro
ELE_NLV_SHT
Data
Reference
R.χ^2 = 0.176
L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 6
Overflow Ref = 5
R.χ^2 = 0.220
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 11509
Underflow Ref = 74168
Overflow Data = 7233
Overflow Ref = 6681
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 5541
Overflow Ref = 5530
R.χ^2 = 0.153
EM fraction
Reference

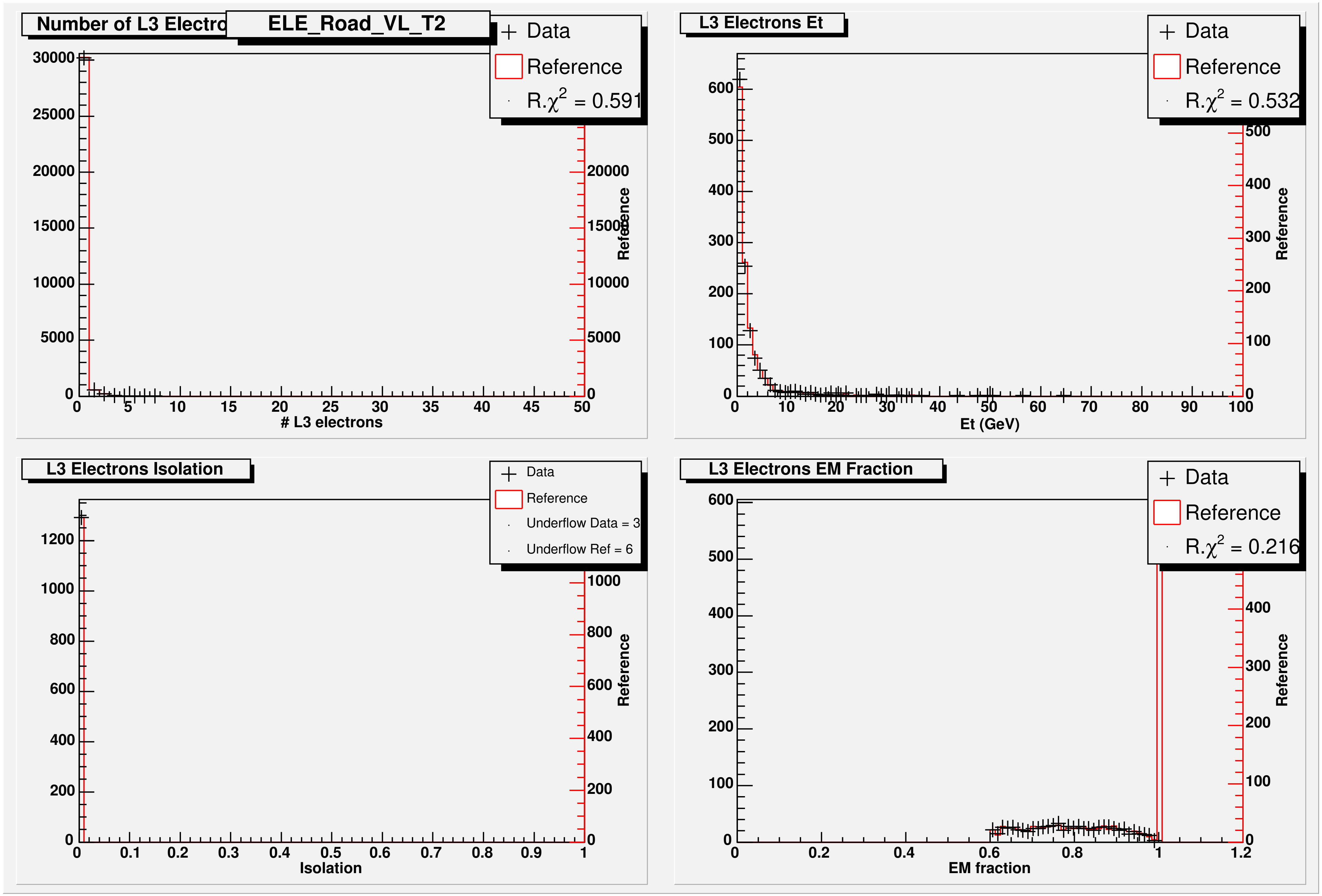


ELE_NLV_NC
Number of L3 Electro
Data
Reference
Overflow Data = 386
Overflow Ref = 374
R.χ^2 = 0.178
L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 183
Overflow Ref = 183
R.χ^2 = 0.267
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 5706
Underflow Ref = 1004854
Overflow Data = 179136
Overflow Ref = 182328
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 8283
Overflow Ref = 8224
R.χ^2 = 0.172
EM fraction
Reference

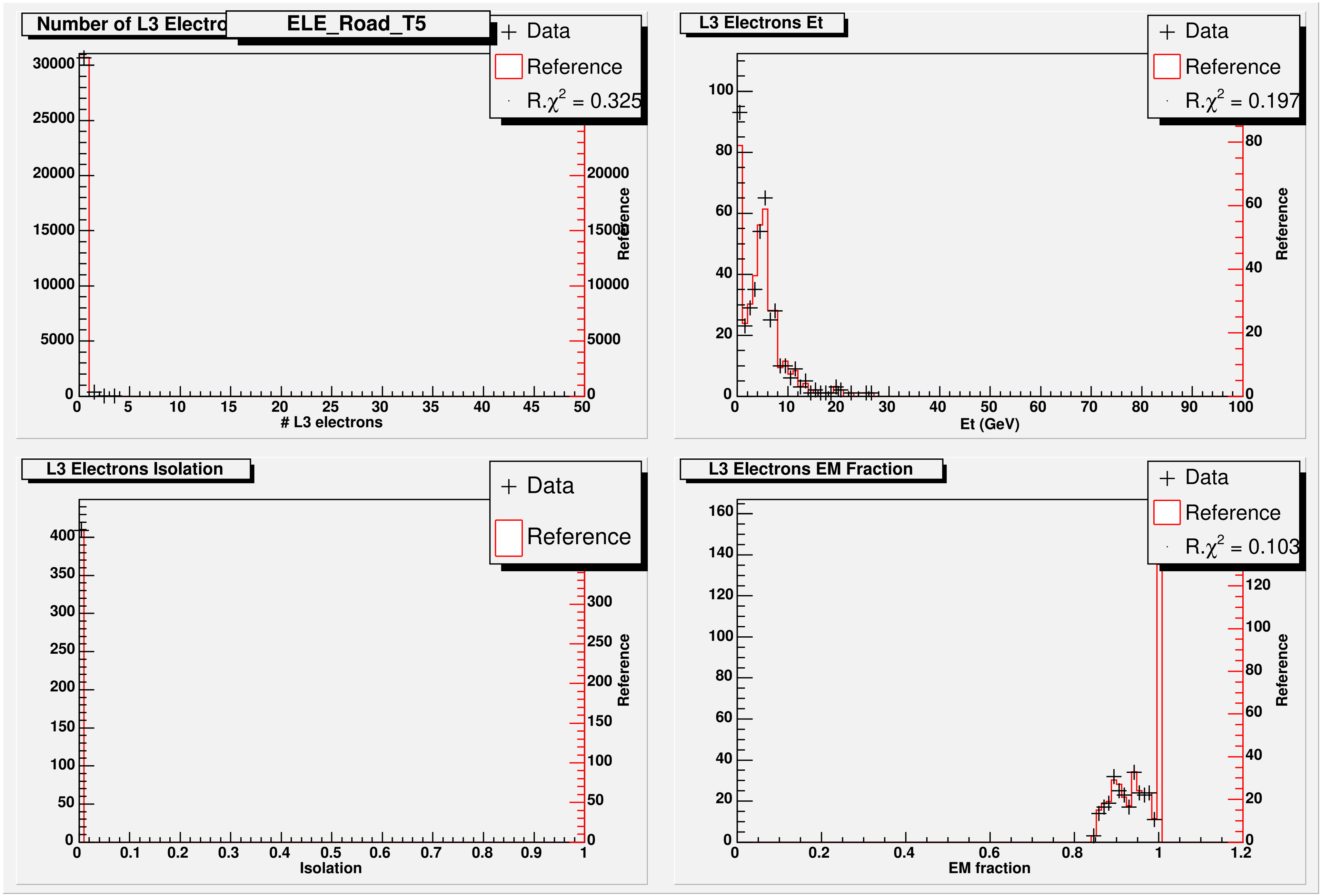


Number of L3 Electro
ELE_NLV_SH
Data
Reference
R.χ^2 = 0.195
Reference
L3 electrons
L3 Electrons Et
Data
Reference
Overflow Data = 9
Overflow Ref = 9
R.χ^2 = 0.259
Reference
Et (GeV)
L3 Electrons Isolation
Data
Reference
Underflow Data = 943
Underflow Ref = 67689
Reference
Isolation
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 3787
Overflow Ref = 3772
R.χ^2 = 0.111
Reference
EM fraction

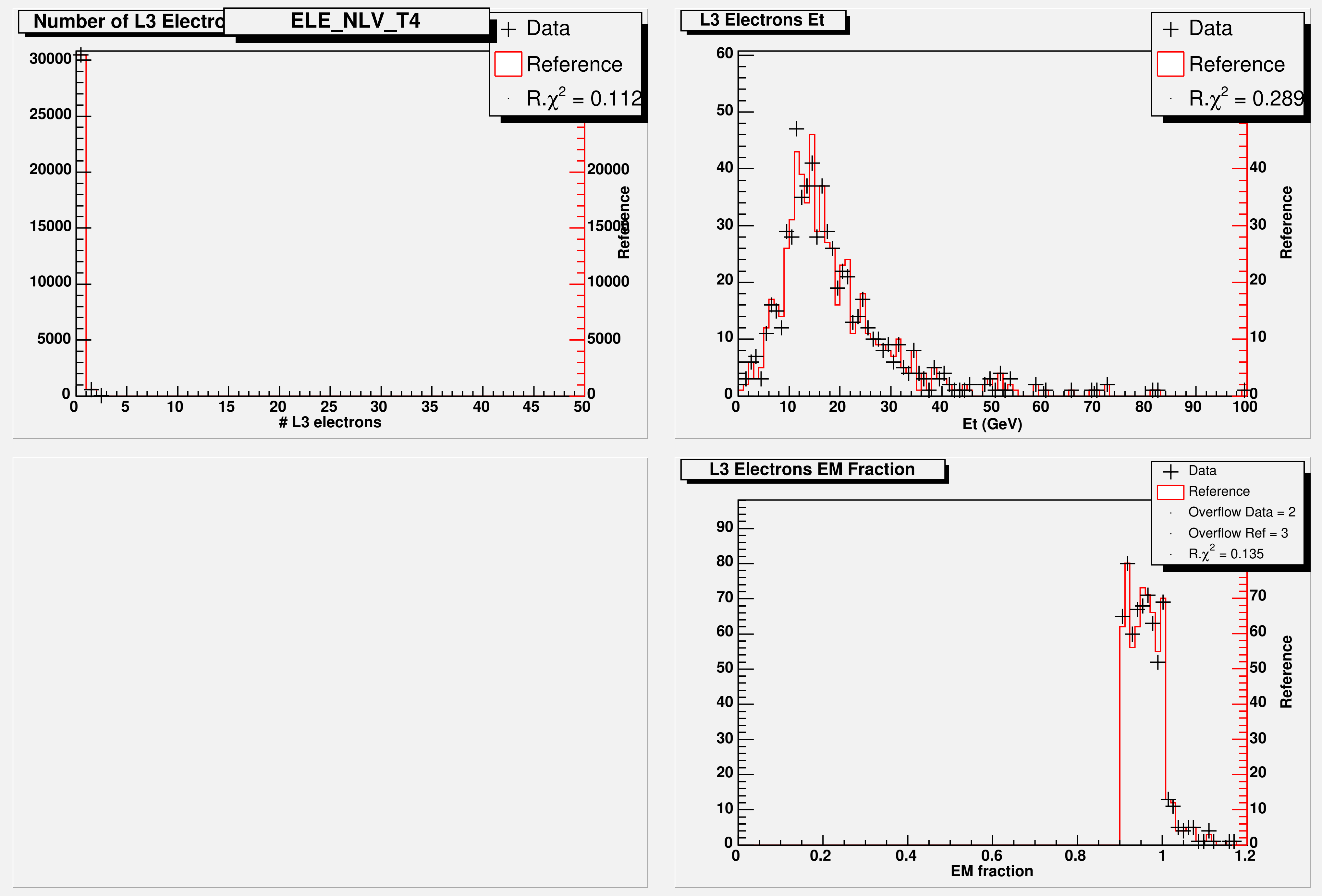

ELE_NLV_VL
Number of L3 Electro
Data
Reference
R.χ² = 0.225
# L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 24
Overflow Ref = 25
R.χ² = 0.248
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 5614
Underflow Ref = 23647
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 8283
Overflow Ref = 8222
R.χ² = 0.146
EM fraction
Reference

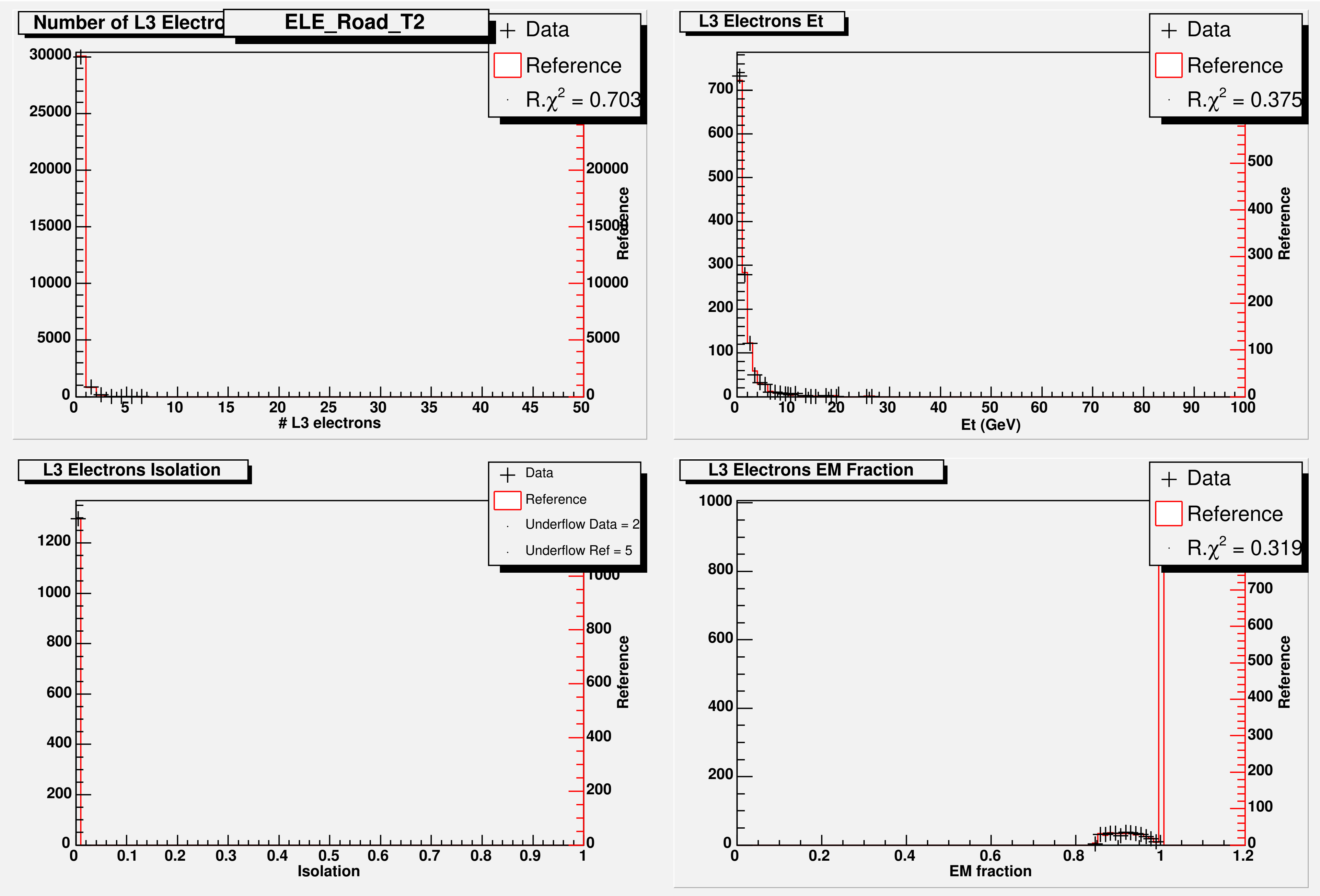


ELE_Road_VL_T2
Number of L3 Electro
Data
Reference
R.χ^2 = 0.591
L3 electrons
Reference
L3 Electrons Et
Data
Reference
R.χ^2 = 0.532
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 3
Underflow Ref = 6
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.216
EM fraction
Reference

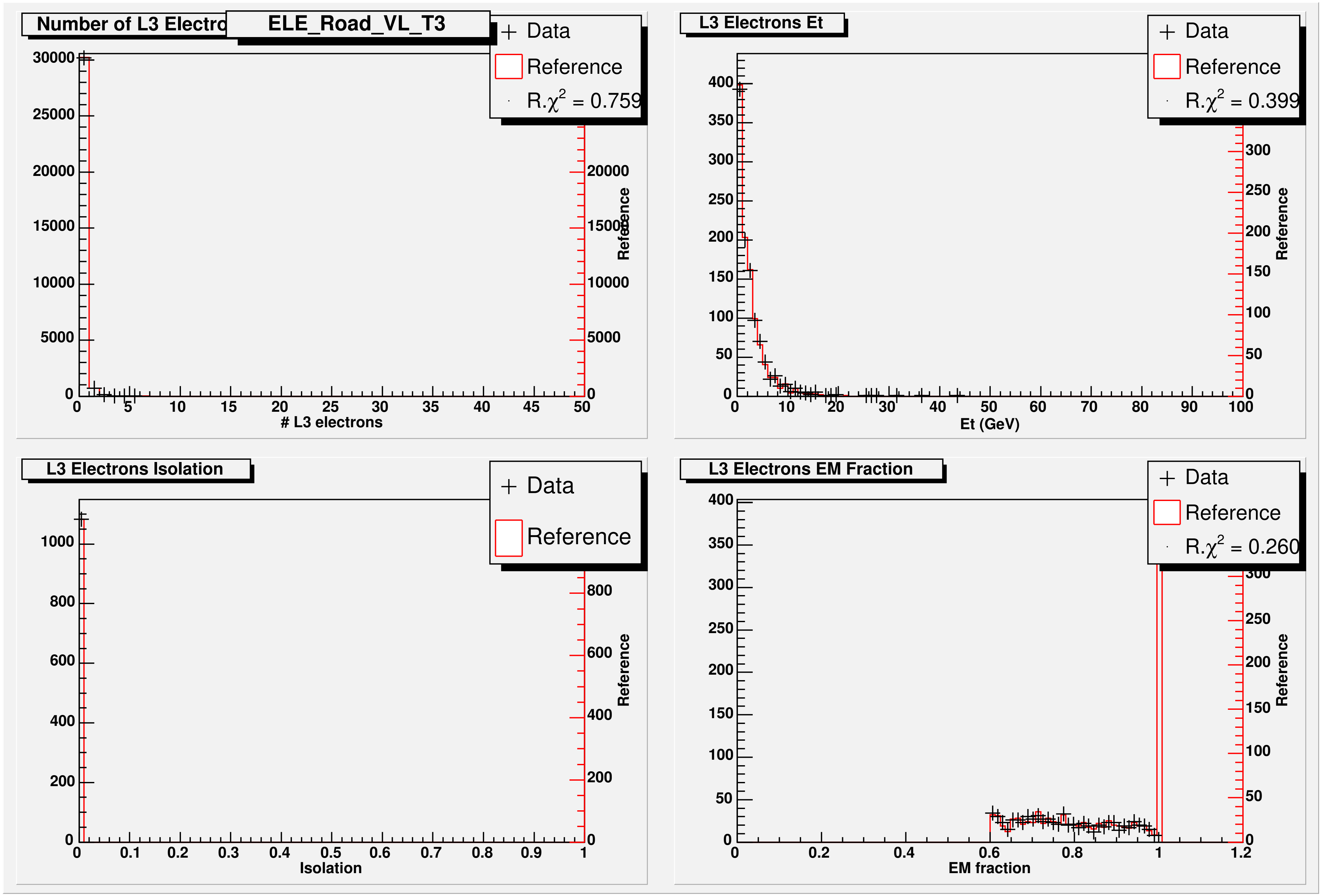


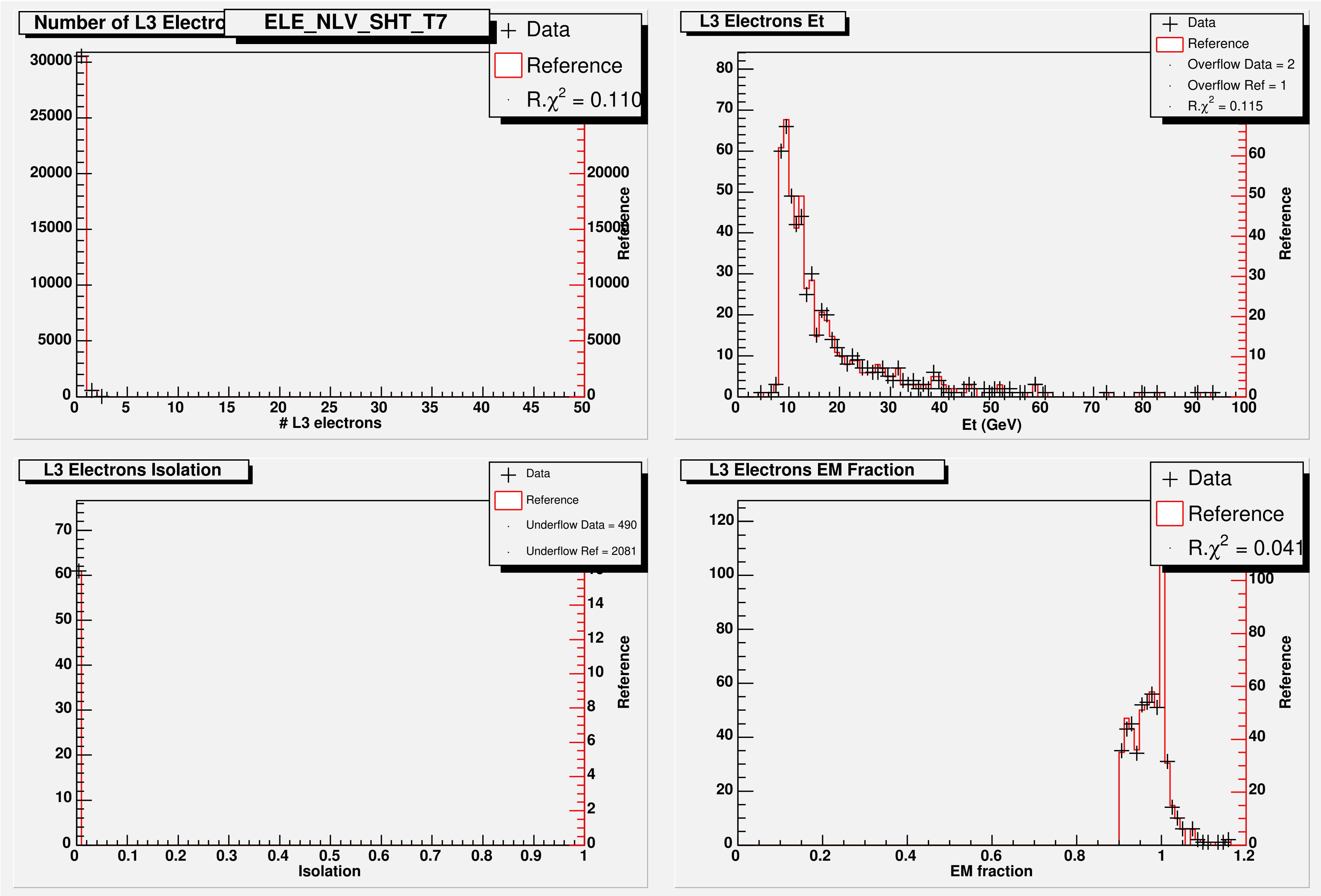
ELE_Road_T5
Number of L3 Electro
Data
Reference
R.χ^2 = 0.325
L3 electrons
Reference
L3 Electrons Et
Data
Reference
R.χ^2 = 0.197
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.103
EM fraction
Reference


ELE_NLV_T4
Number of L3 Electro
Data
Reference
R.χ² = 0.112
Reference
L3 electrons
L3 Electrons Et
Data
Reference
R.χ² = 0.289
Reference
Et (GeV)
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 2
Overflow Ref = 3
R.χ² = 0.135
Reference
EM fraction

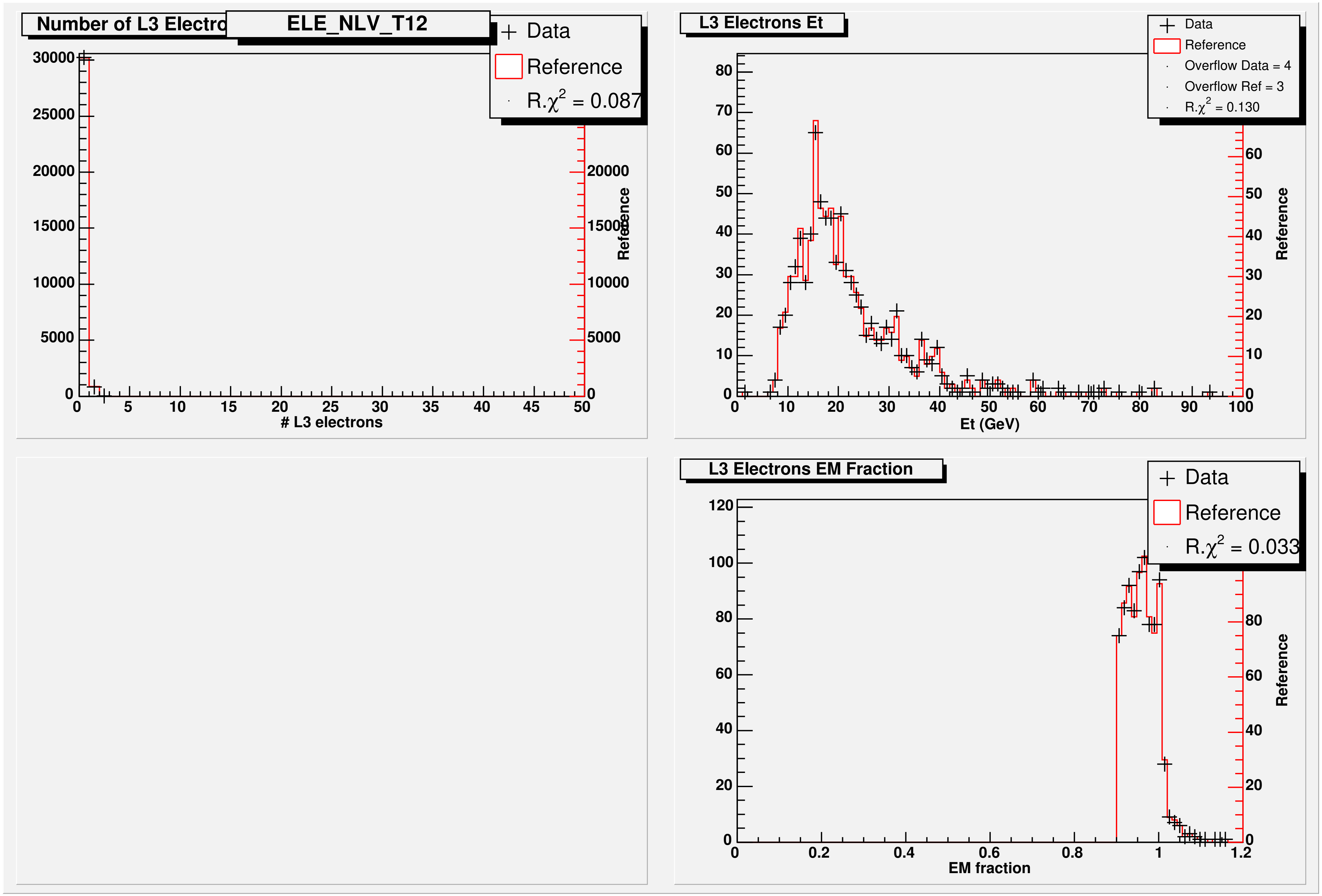


Number of L3 Electro
ELE_Road_T2
Data
Reference
R.χ² = 0.703
# L3 electrons
Reference
L3 Electrons Et
Data
Reference
R.χ² = 0.375
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 2
Underflow Ref = 5
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ² = 0.319
EM fraction
Reference

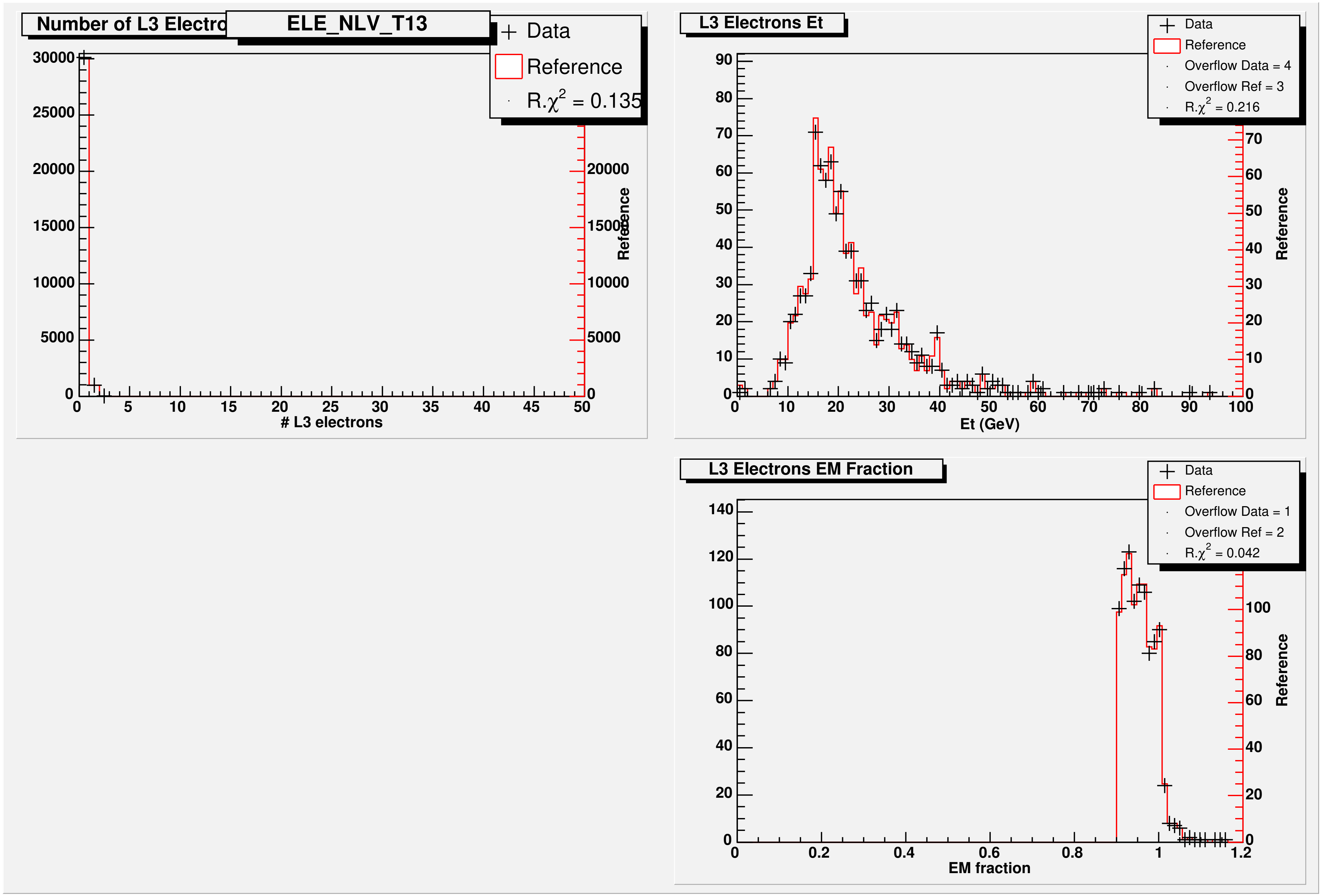

Number of L3 Electro
ELE_Road_VL_T3
Data
Reference
R.χ^2 = 0.759
L3 electrons
Reference
L3 Electrons Et
Data
Reference
R.χ^2 = 0.399
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.260
EM fraction
Reference



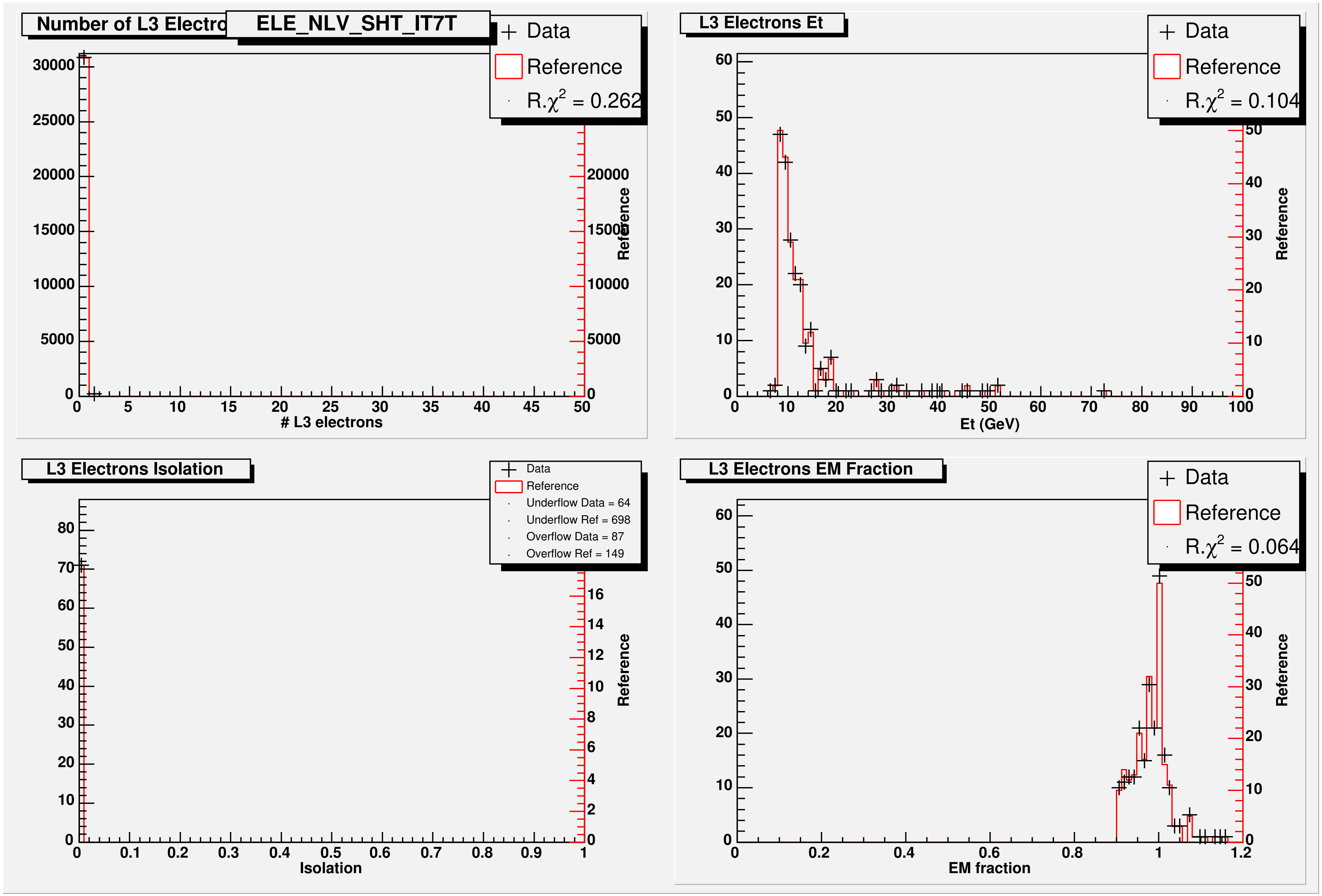
Number of L3 Electro
ELE_NLV_SHT_T7
Data
Reference
R.χ² = 0.110
# L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 2
Overflow Ref = 1
R.χ² = 0.115
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 490
Underflow Ref = 2081
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ² = 0.041
EM fraction
Reference



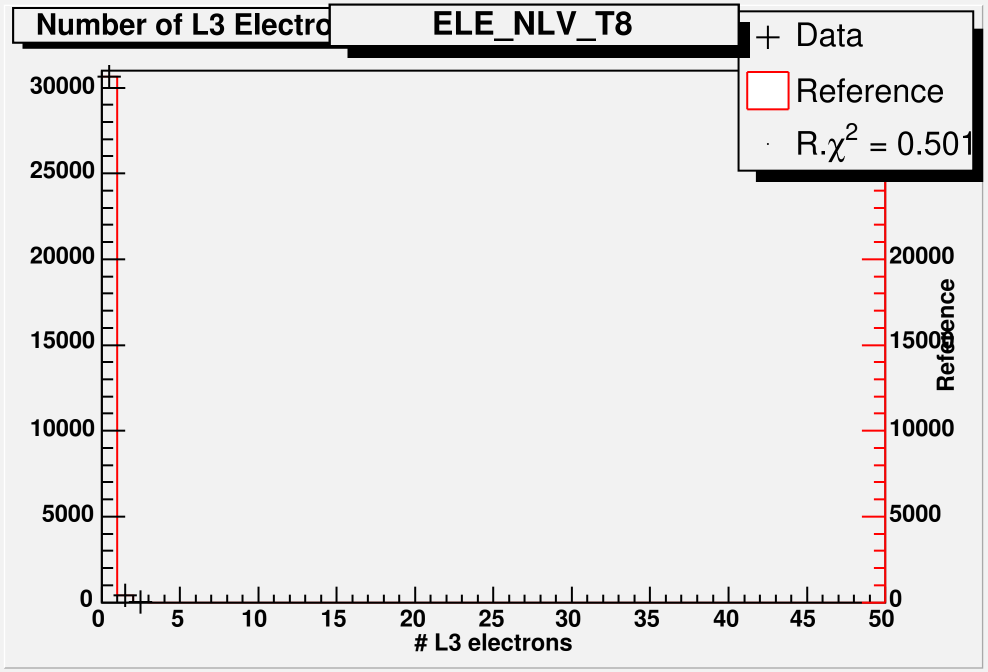
Number of L3 Electro
ELE_NLV_T12
Data
Reference
R.χ^2 = 0.087
L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 4
Overflow Ref = 3
R.χ^2 = 0.130
Et (GeV)
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.033
EM fraction
Reference

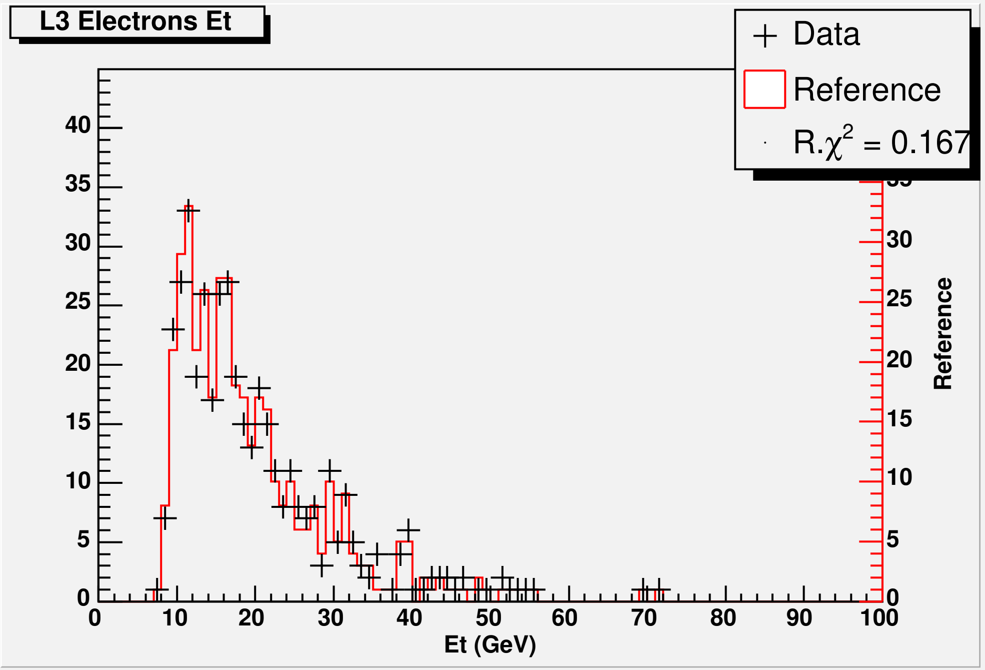


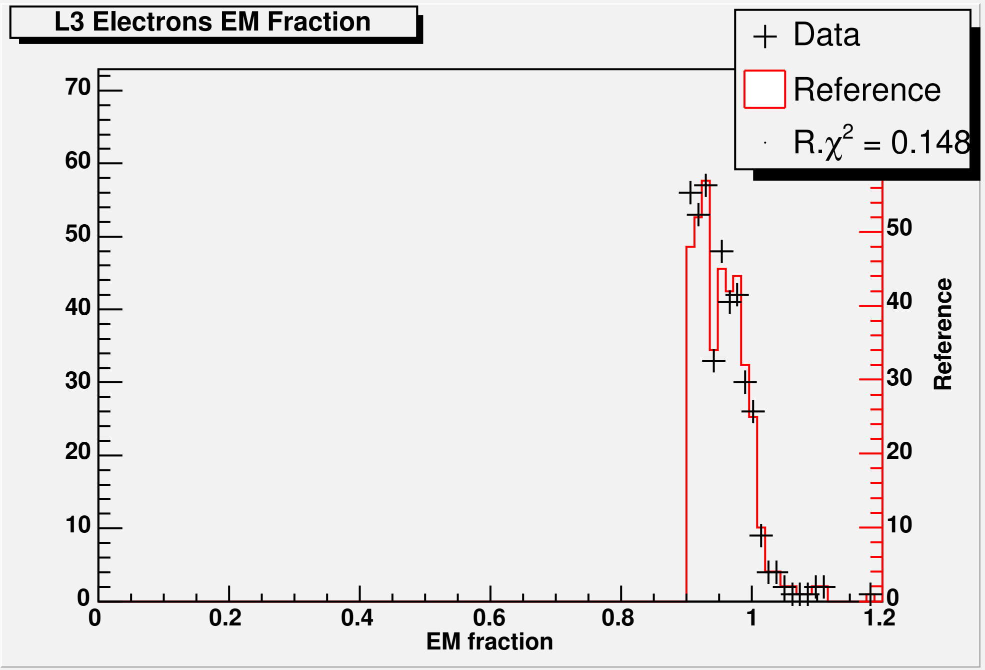
Number of L3 Electro
ELE_NLV_T13
Data
Reference
R.χ^2 = 0.135
L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 4
Overflow Ref = 3
R.χ^2 = 0.216
Et (GeV)
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Data = 1
Overflow Ref = 2
R.χ^2 = 0.042
EM fraction
Reference

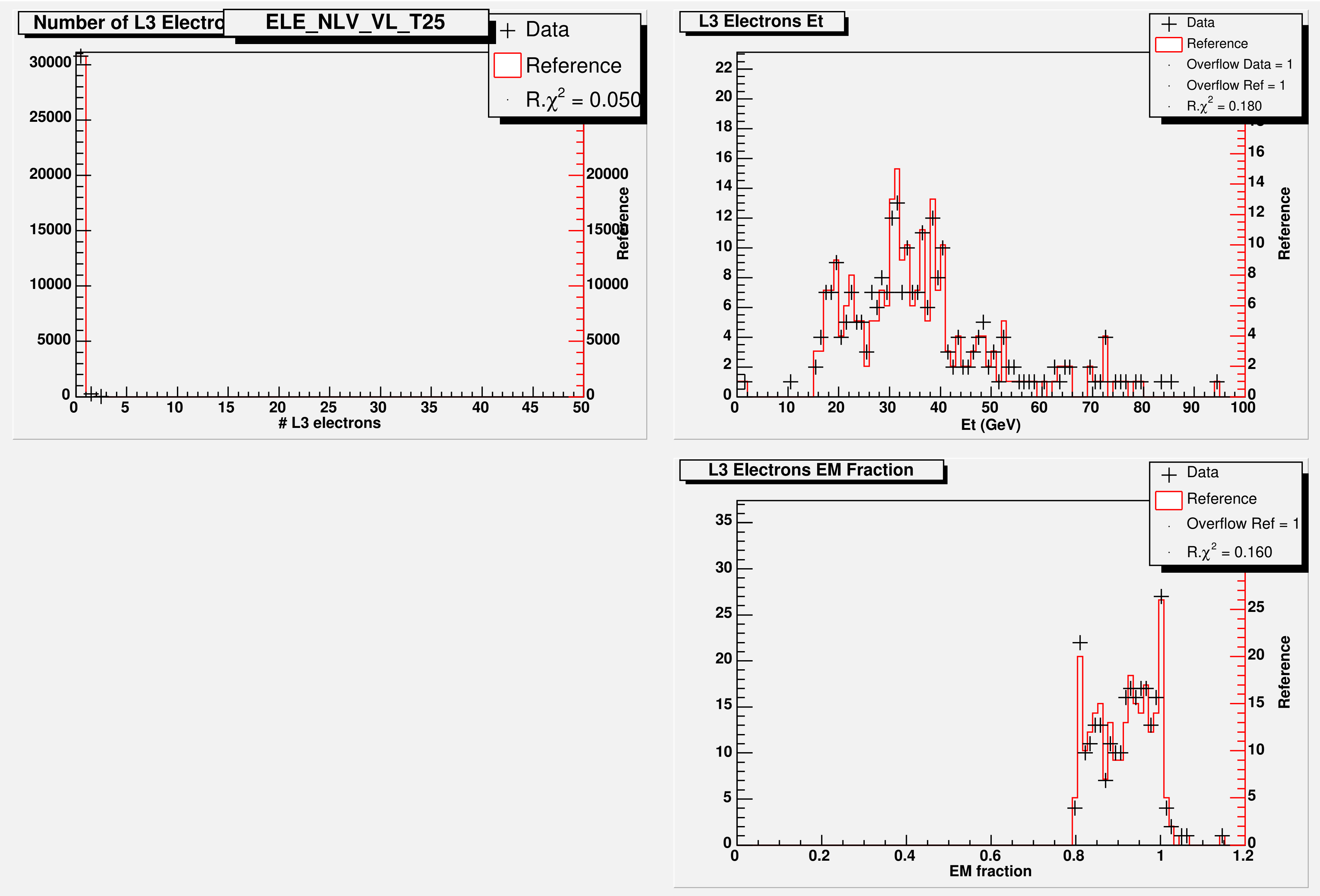


Number of L3 Electro
ELE_NLV_SHT_IT7T
Data
Reference
R.χ^2 = 0.262
L3 electrons
Reference
L3 Electrons Et
Data
Reference
R.χ^2 = 0.104
Et (GeV)
Reference
L3 Electrons Isolation
Data
Reference
Underflow Data = 64
Underflow Ref = 698
Overflow Data = 87
Overflow Ref = 149
Isolation
Reference
L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.064
EM fraction
Reference

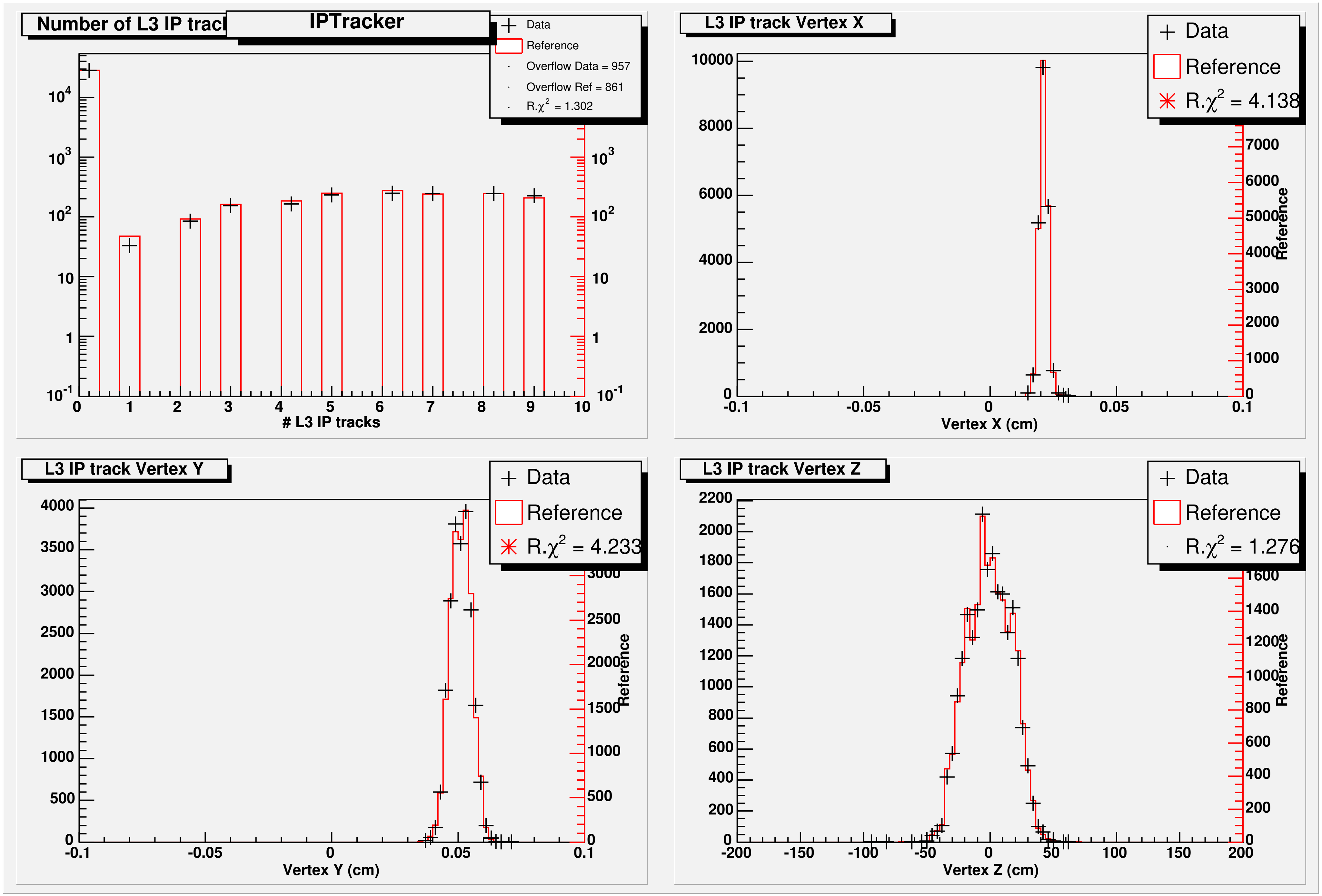

Number of L3 Electro
ELE_NLV_T8
Data
Reference
R.χ^2 = 0.501
L3 electrons
Reference


L3 Electrons Et
Data
Reference
R.χ^2 = 0.167
Et (GeV)
Reference

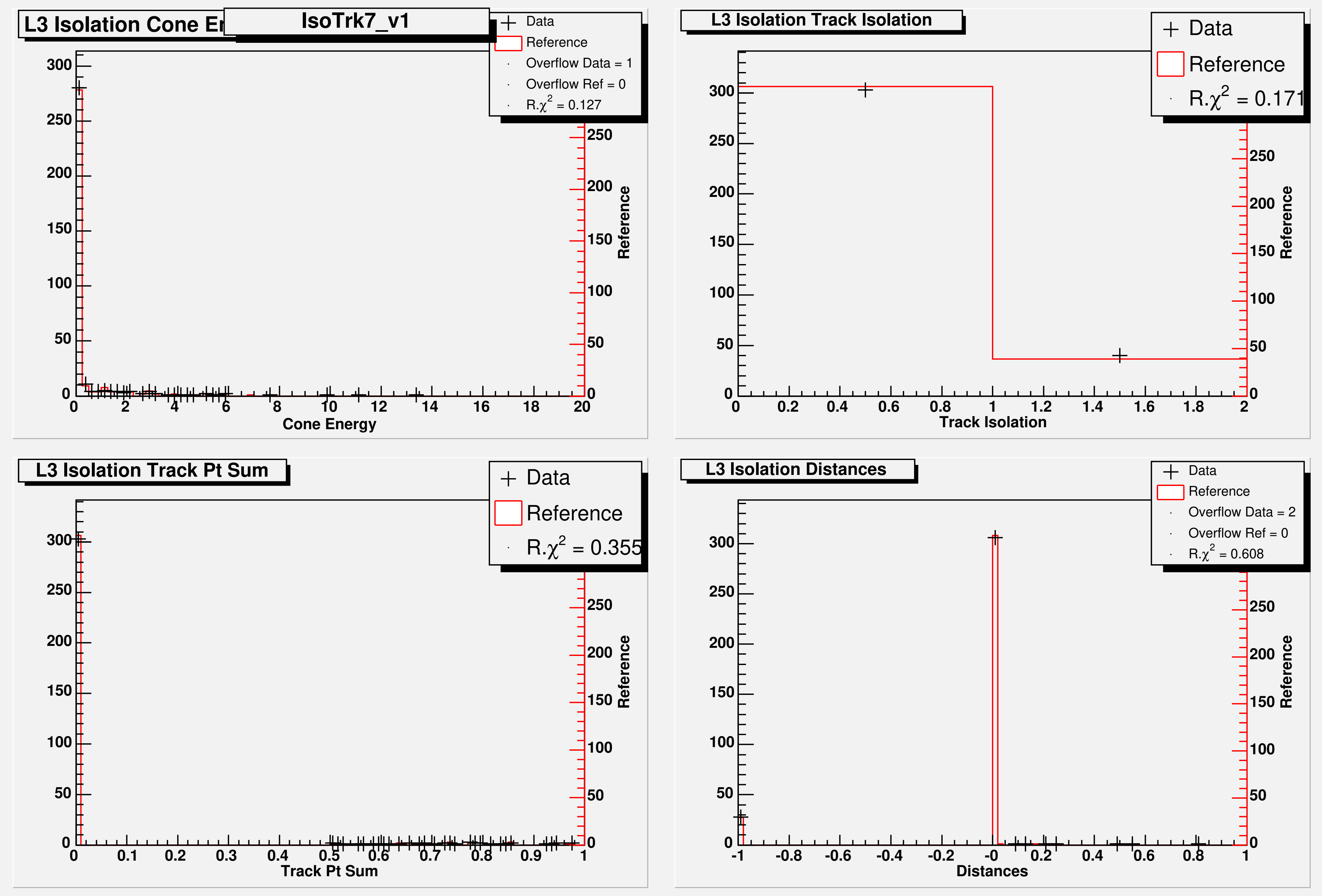

L3 Electrons EM Fraction
Data
Reference
R.χ^2 = 0.148
EM fraction
Reference

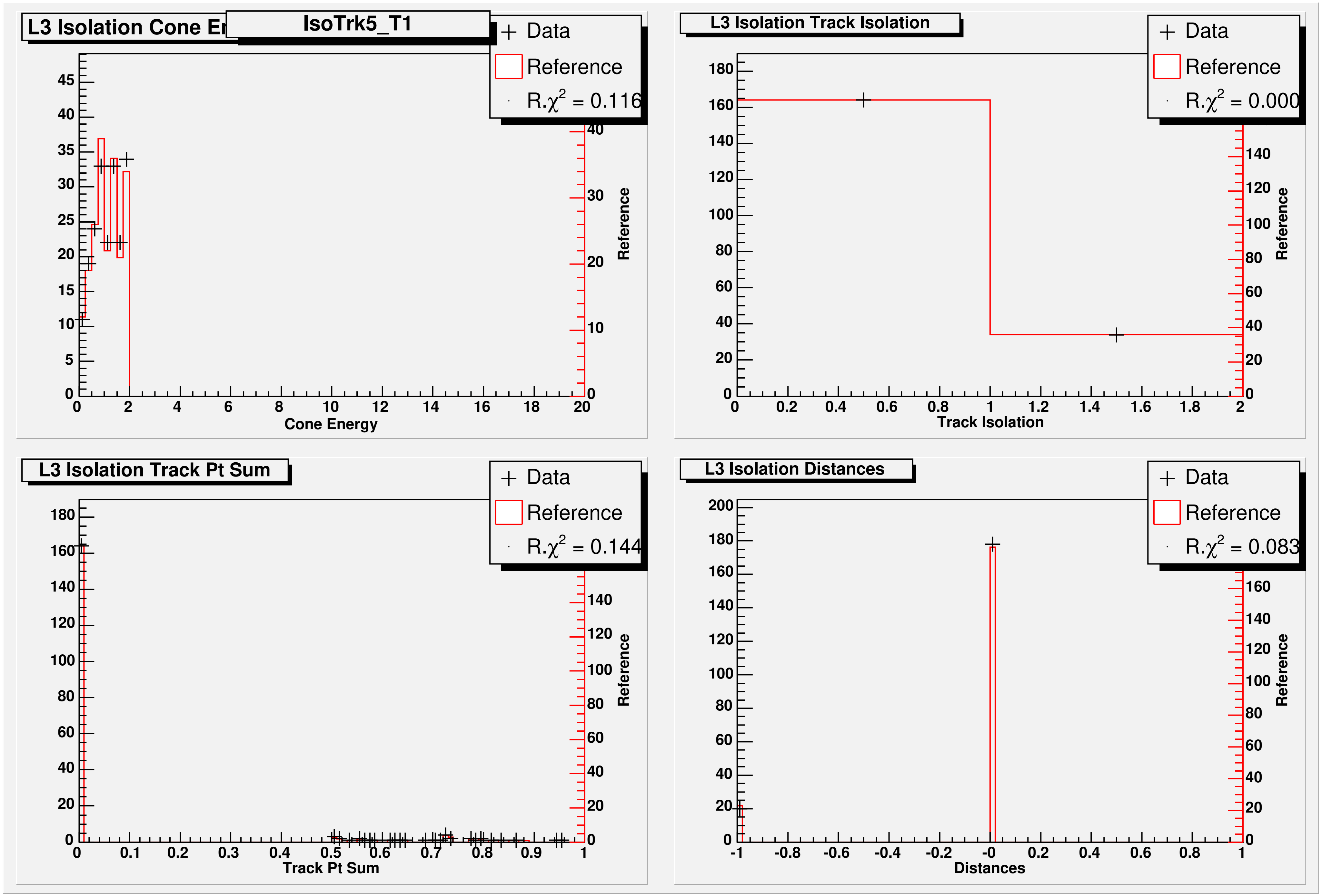


Number of L3 Electro
ELE_NLV_VL_T25
Data
Reference
R.χ² = 0.050
# L3 electrons
Reference
L3 Electrons Et
Data
Reference
Overflow Data = 1
Overflow Ref = 1
R.χ² = 0.180
Et (GeV)
Reference
L3 Electrons EM Fraction
Data
Reference
Overflow Ref = 1
R.χ² = 0.160
EM fraction
Reference

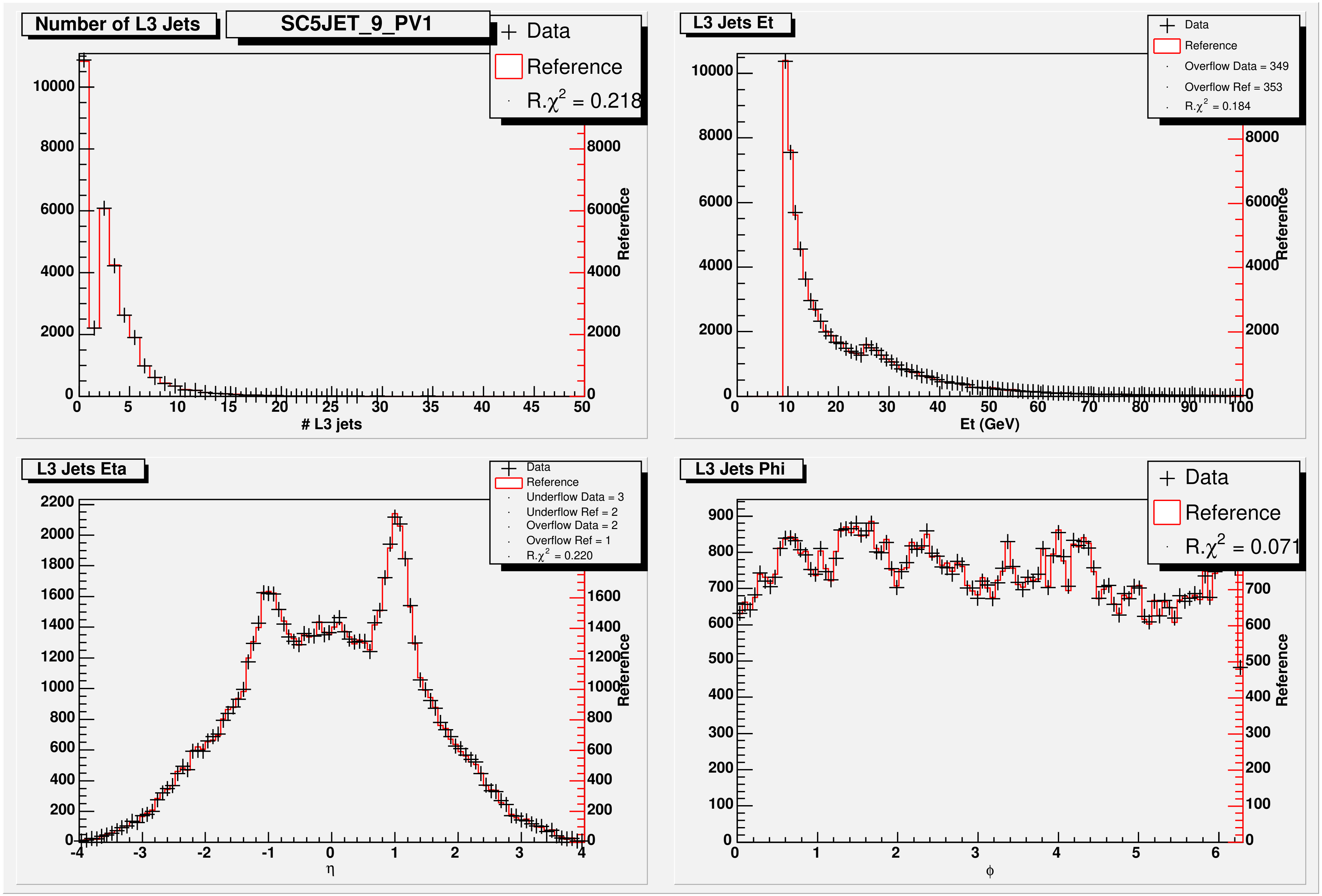


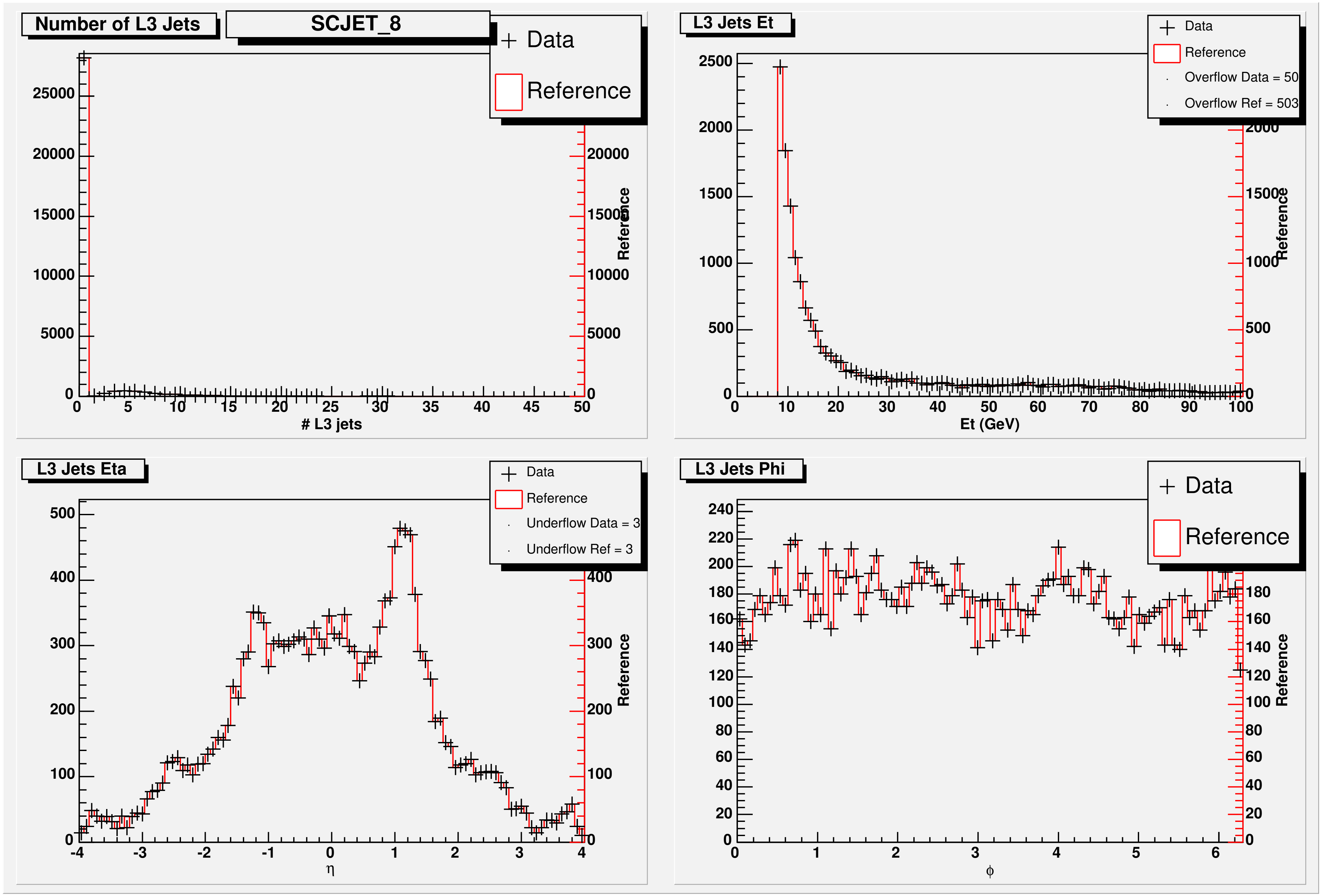
IPTracker
Number of L3 IP tracl
Data
Reference
Overflow Data = 957
Overflow Ref = 861
R.χ2 = 1.302
# L3 IP tracks
L3 IP track Vertex X
R.χ2 = 4.138
Vertex X (cm)
Reference
L3 IP track Vertex Y
R.χ2 = 4.233
Vertex Y (cm)
L3 IP track Vertex Z
R.χ2 = 1.276
Vertex Z (cm)

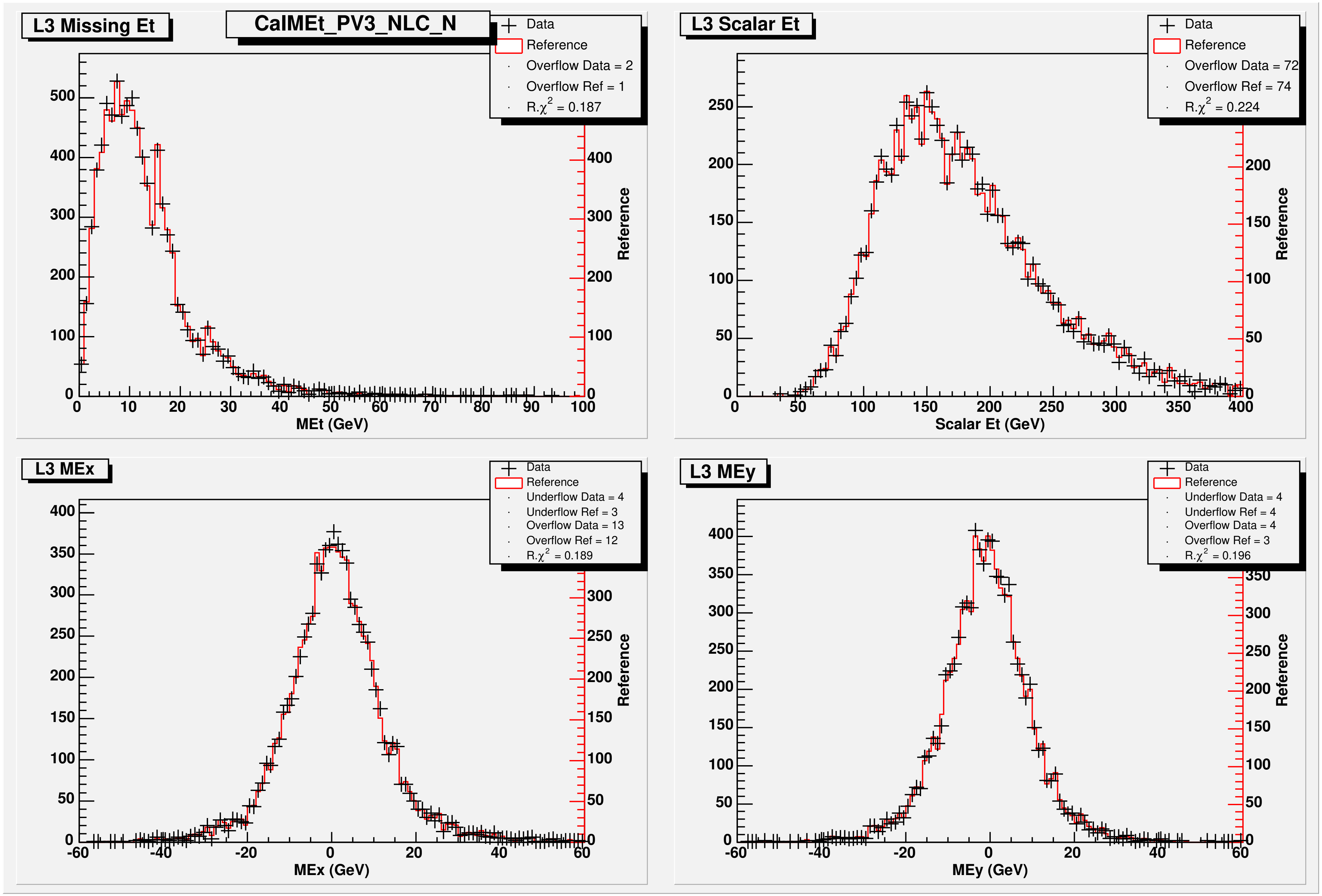

IsoTrk7_v1
L3 Isolation Cone En
Data
Reference
Overflow Data = 1
Overflow Ref = 0
R.χ^2 = 0.127
Cone Energy
Reference
L3 Isolation Track Isolation
Data
Reference
R.χ^2 = 0.171
Track Isolation
Reference
L3 Isolation Track Pt Sum
Data
Reference
R.χ^2 = 0.355
Track Pt Sum
Reference
L3 Isolation Distances
Data
Reference
Overflow Data = 2
Overflow Ref = 0
R.χ^2 = 0.608
Distances
Reference



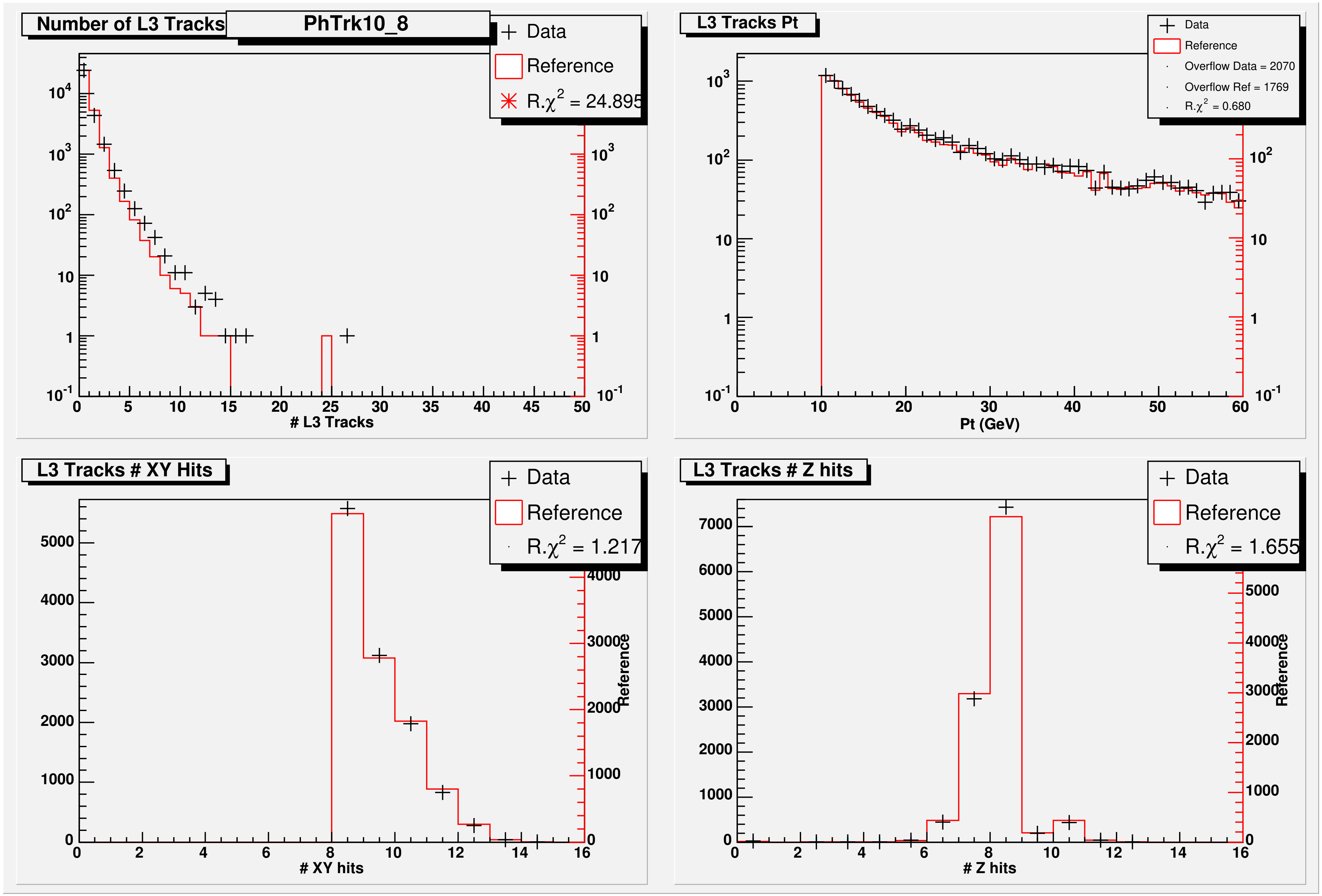
IsoTrk5_T1
L3 Isolation Cone En
Data
Reference
R.χ^2 = 0.116
Cone Energy
Reference
L3 Isolation Track Isolation
Data
Reference
R.χ^2 = 0.000
Track Isolation
Reference
L3 Isolation Track Pt Sum
Data
Reference
R.χ^2 = 0.144
Track Pt Sum
Reference
L3 Isolation Distances
Data
Reference
R.χ^2 = 0.083
Distances
Reference


Number of L3 Jets
SC5JET_9_PV1
Data
Reference
R.χ^2 = 0.218
L3 jets
Reference
L3 Jets Et
Data
Reference
Overflow Data = 349
Overflow Ref = 353
R.χ^2 = 0.184
Et (GeV)
Reference
L3 Jets Eta
Data
Reference
Underflow Data = 3
Underflow Ref = 2
Overflow Data = 2
Overflow Ref = 1
R.χ^2 = 0.220
η
Reference
L3 Jets Phi
Data
Reference
R.χ^2 = 0.071
ϕ
Reference

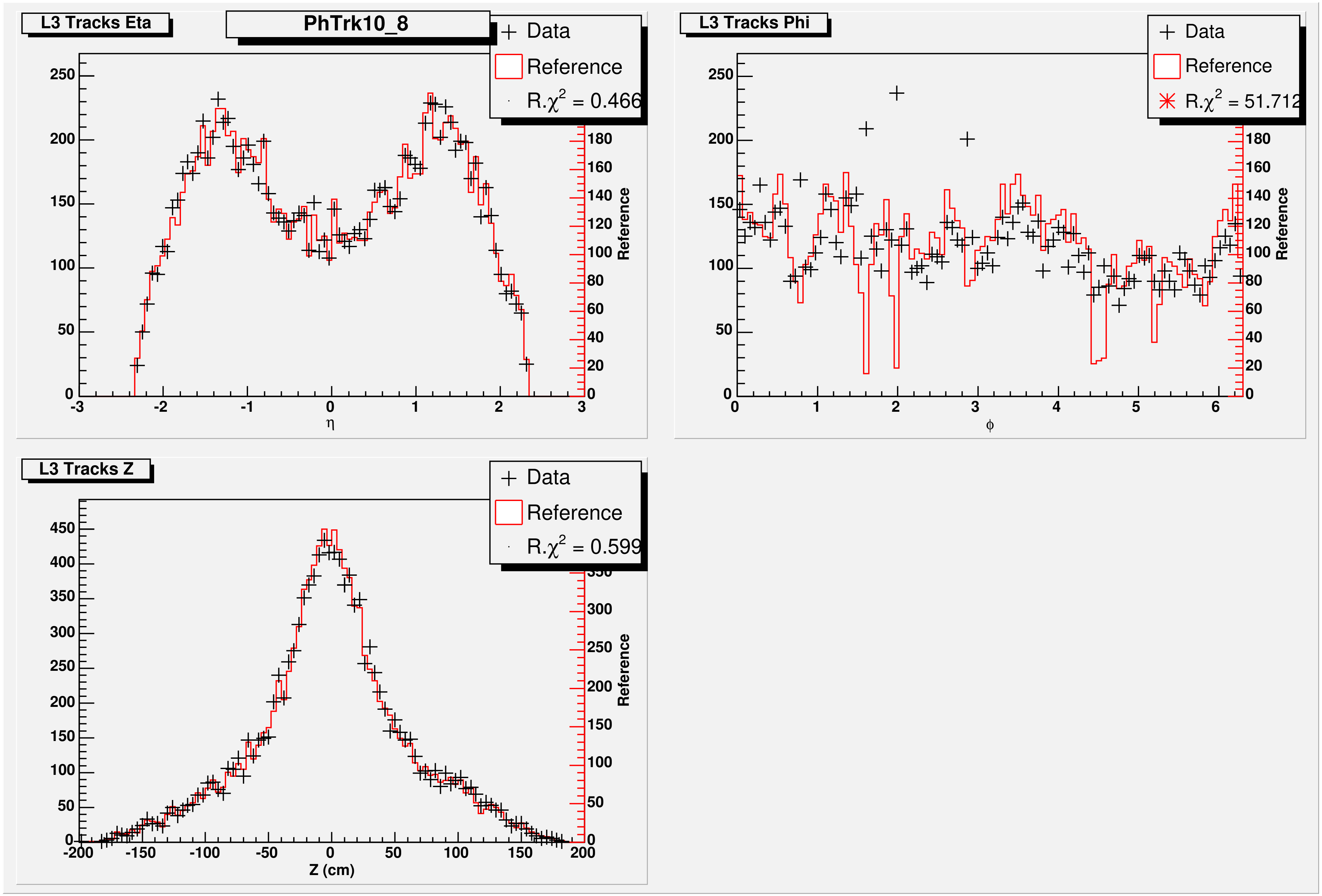

Number of L3 Jets
SCJET_8
Data
Reference
L3 jets
L3 Jets Et
Overflow Data = 50
Overflow Ref = 503
Et (GeV)
L3 Jets Eta
Underflow Data = 3
Underflow Ref = 3
η
L3 Jets Phi
ϕ



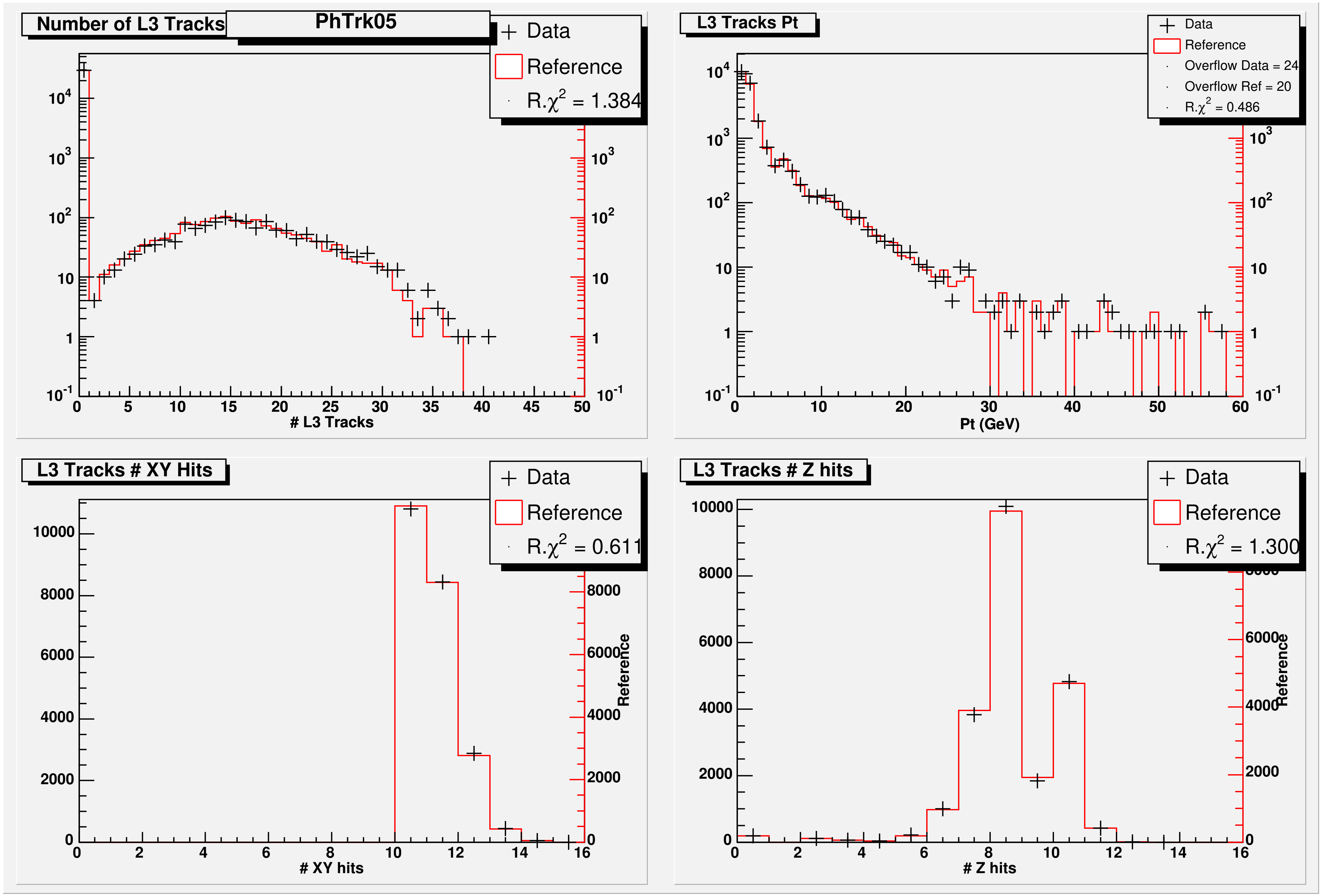
CalMEt_PV3_NLC_N
L3 Missing Et
Data
Reference
Overflow Data = 2
Overflow Ref = 1
R.χ^2 = 0.187
MEt (GeV)
Reference
L3 Scalar Et
Data
Reference
Overflow Data = 72
Overflow Ref = 74
R.χ^2 = 0.224
Scalar Et (GeV)
Reference
L3 MEx
Data
Reference
Underflow Data = 4
Underflow Ref = 3
Overflow Data = 13
Overflow Ref = 12
R.χ^2 = 0.189
MEx (GeV)
Reference
L3 MEy
Data
Reference
Underflow Data = 4
Underflow Ref = 4
Overflow Data = 4
Overflow Ref = 3
R.χ^2 = 0.196
MEy (GeV)
Reference



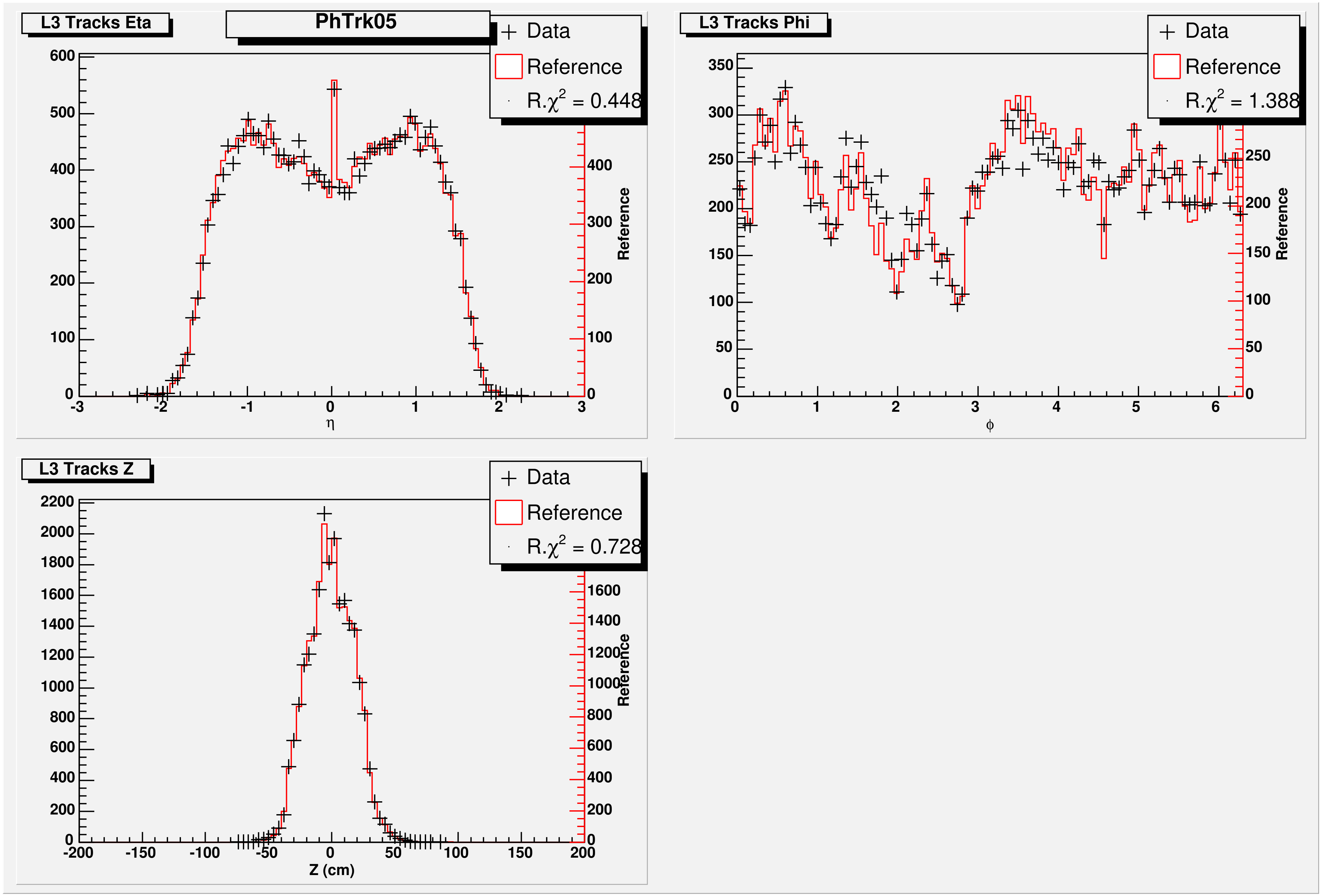
PhTrk10_8
Number of L3 Tracks
Data
Reference
R.χ2 = 24.895
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 2070
Overflow Ref = 1769
R.χ2 = 0.680
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ2 = 1.217
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ2 = 1.655
Reference
Z hits



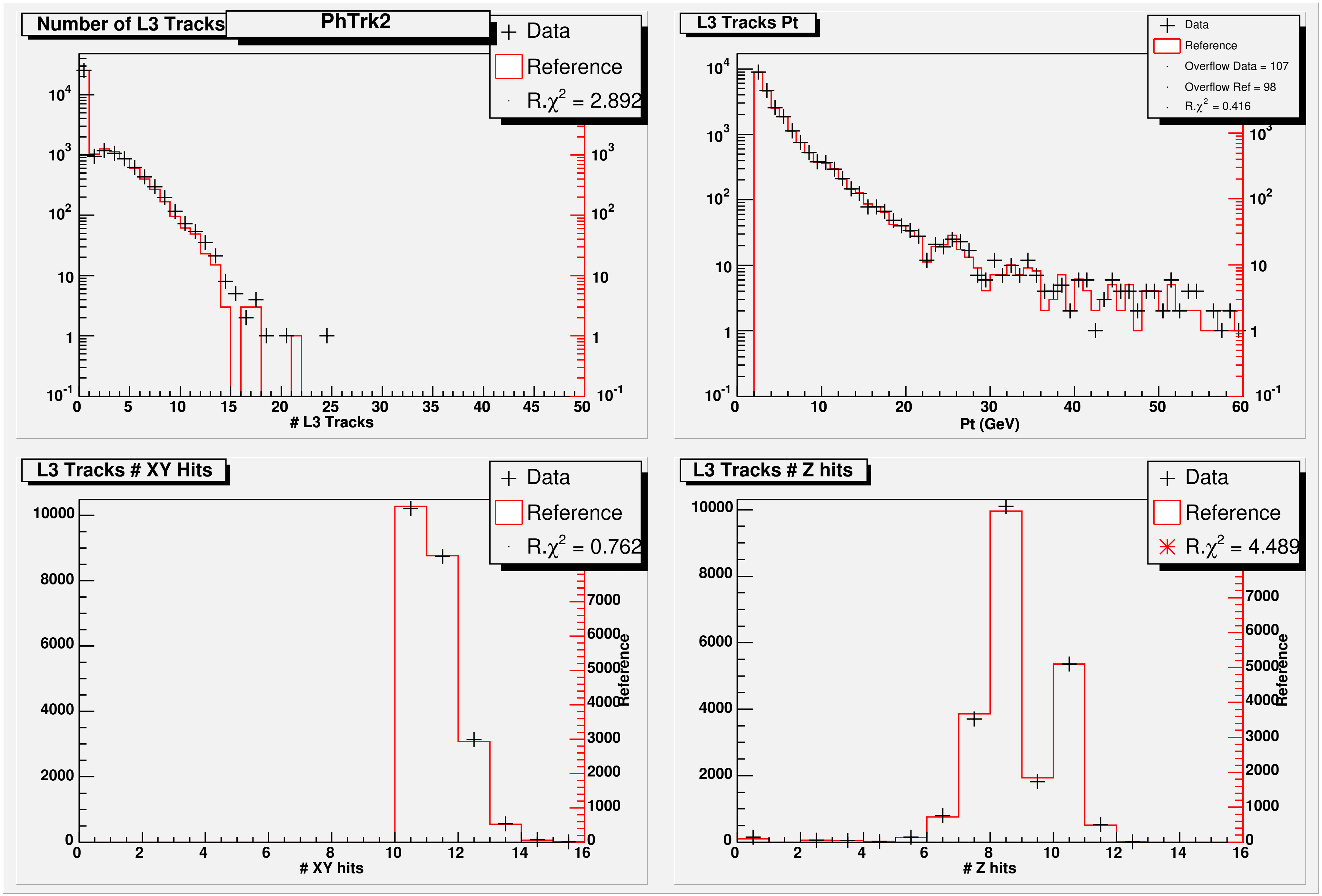
PhTrk10_8
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.466
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 51.712
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.599
Z (cm)
Reference

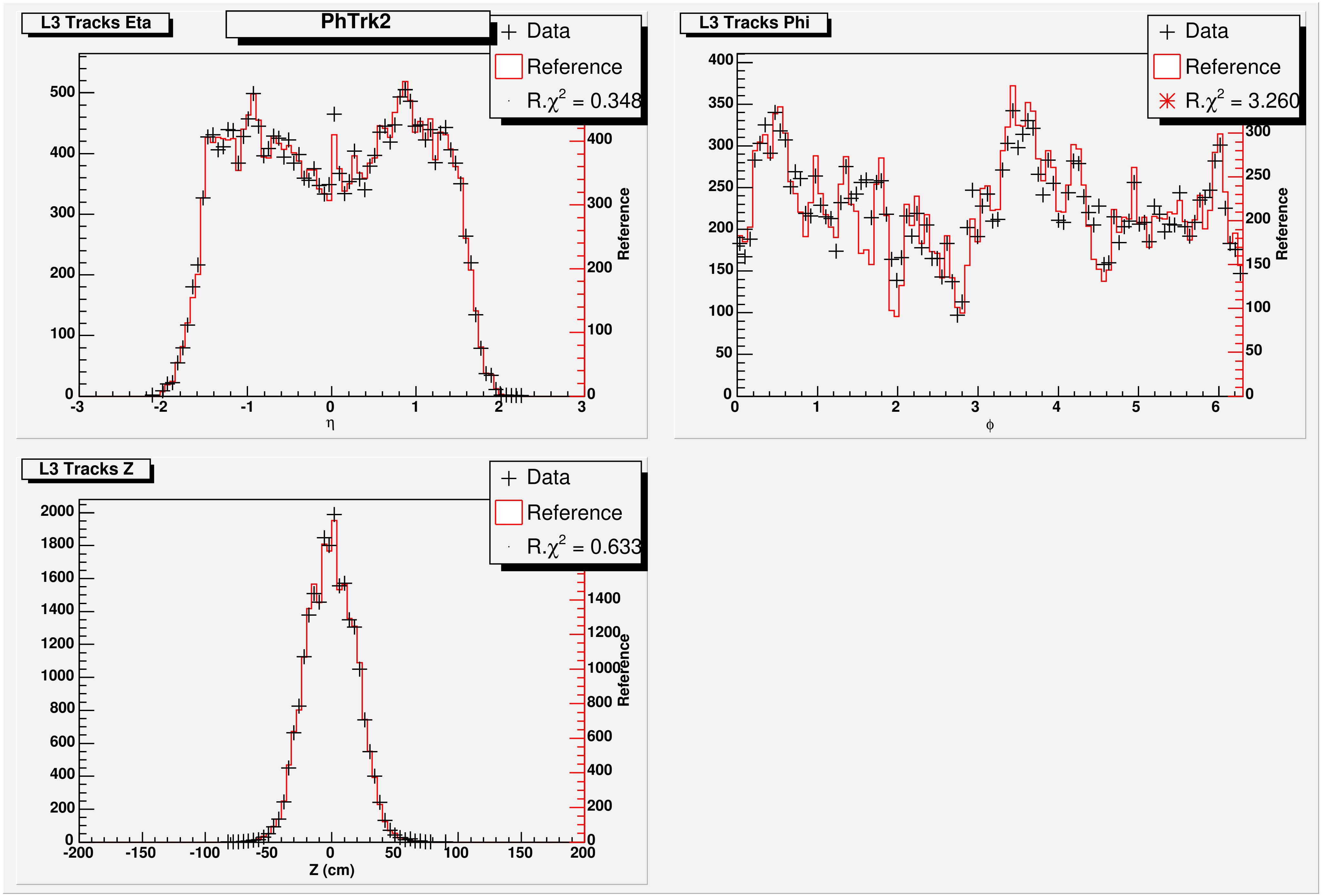


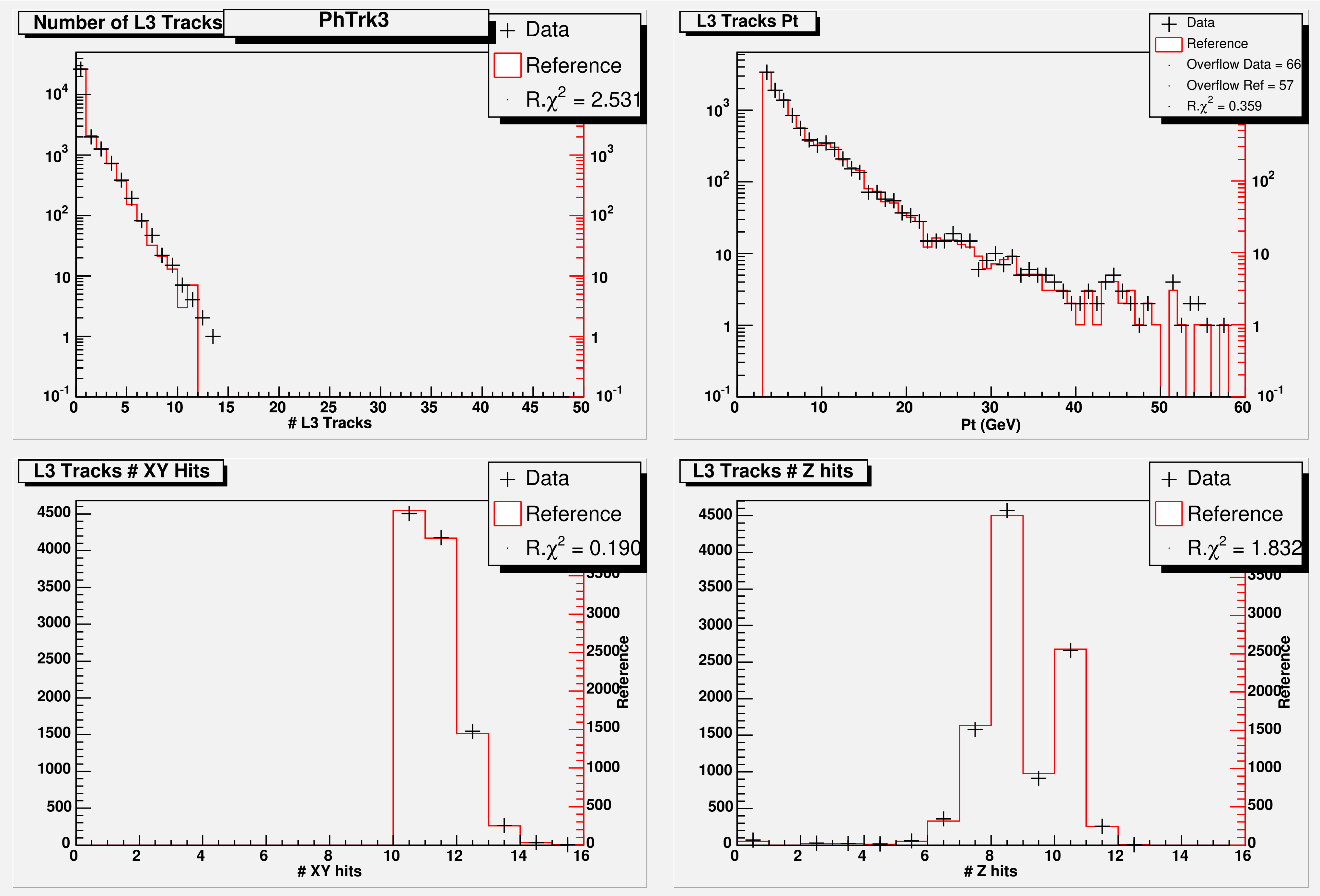
Number of L3 Tracks
PhTrk05
Data
Reference
R.χ^2 = 1.384
L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 24
Overflow Ref = 20
R.χ^2 = 0.486
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ^2 = 0.611
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ^2 = 1.300
Reference
Z hits



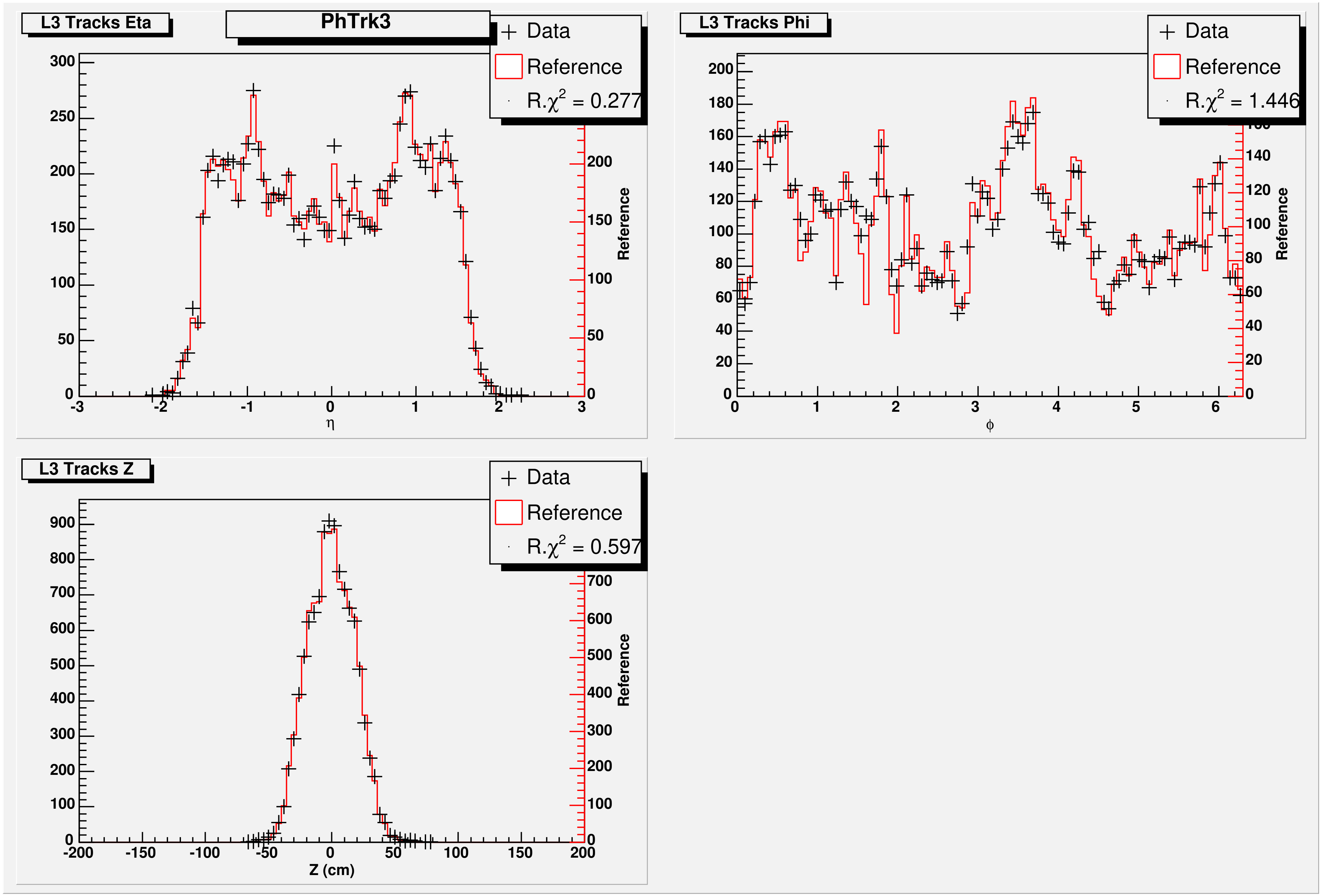
L3 Tracks Eta
PhTrk05
Data
Reference
R.χ^2 = 0.448
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 1.388
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.728
Z (cm)
Reference


PhTrk2
Number of L3 Tracks
Data
Reference
R.χ² = 2.892
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 107
Overflow Ref = 98
R.χ² = 0.416
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.762
# XY hits
Reference
L3 Tracks # Z hits
Data
Reference
R.χ² = 4.489
# Z hits
Reference

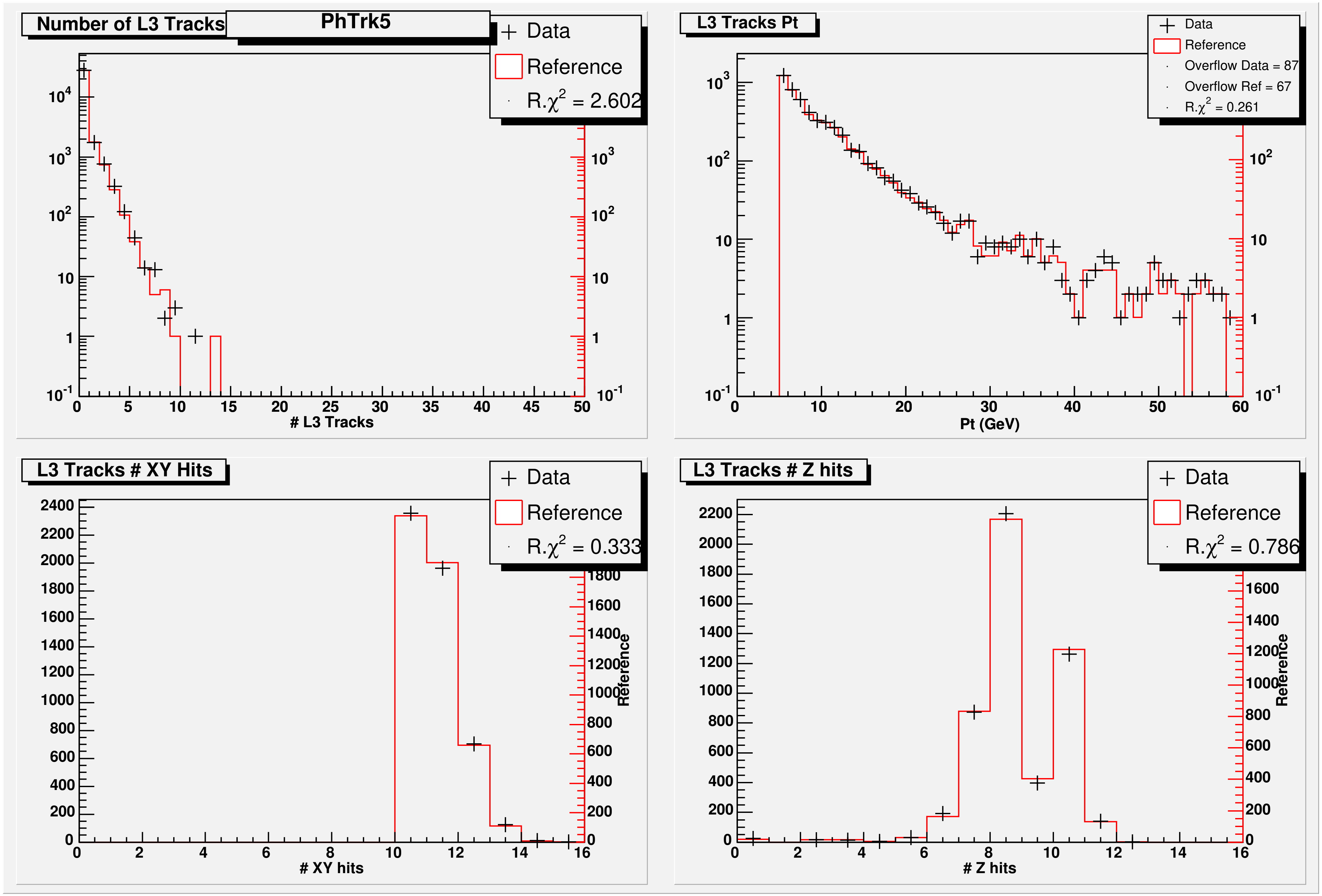

PhTrk2
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.348
Reference
η
L3 Tracks Phi
Data
Reference
R.χ^2 = 3.260
Reference
ϕ
L3 Tracks Z
Data
Reference
R.χ^2 = 0.633
Reference
Z (cm)



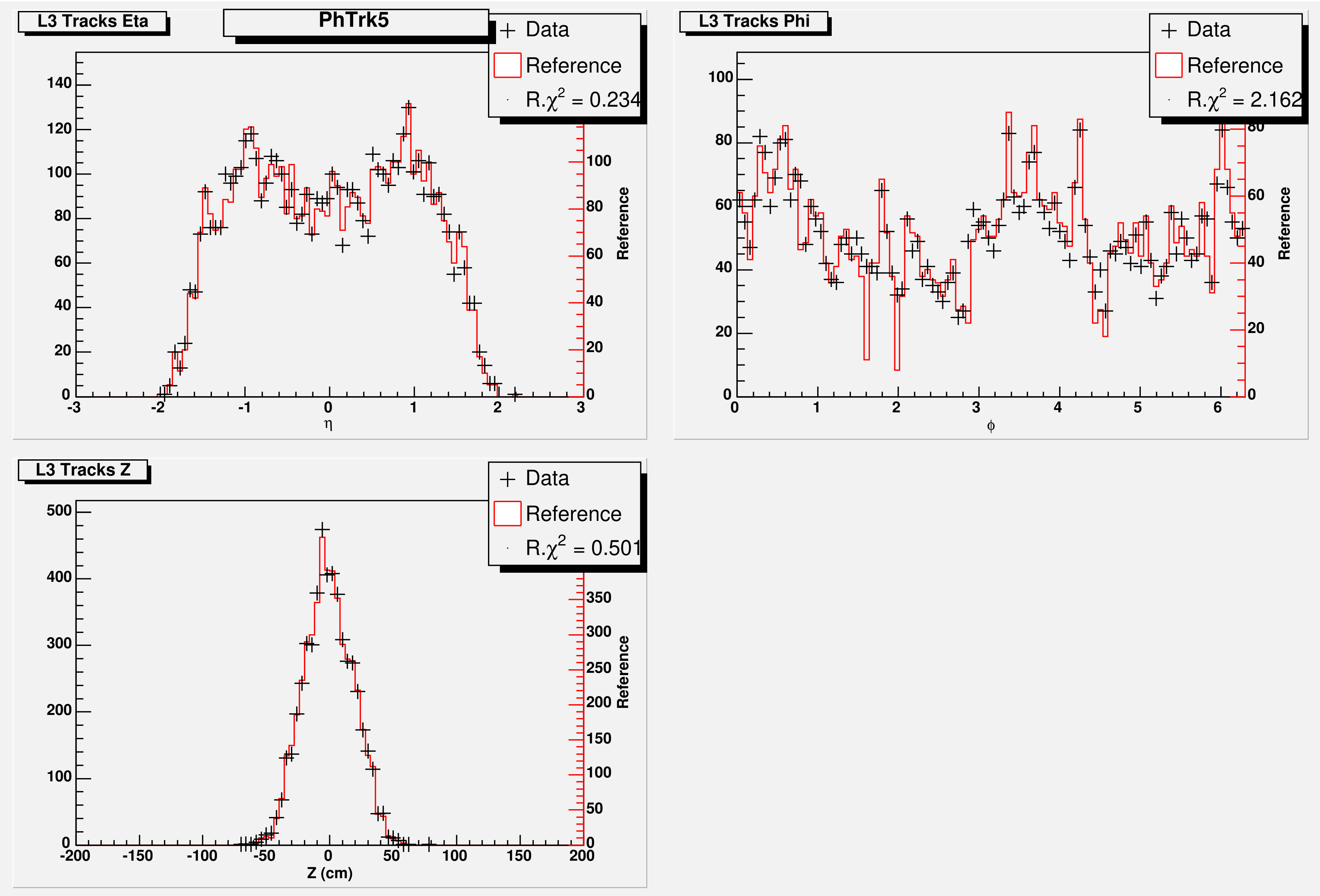
Number of L3 Tracks
PhTrk3
Data
Reference
R.χ^2 = 2.531
L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 66
Overflow Ref = 57
R.χ^2 = 0.359
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ^2 = 0.190
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ^2 = 1.832
Reference
Z hits



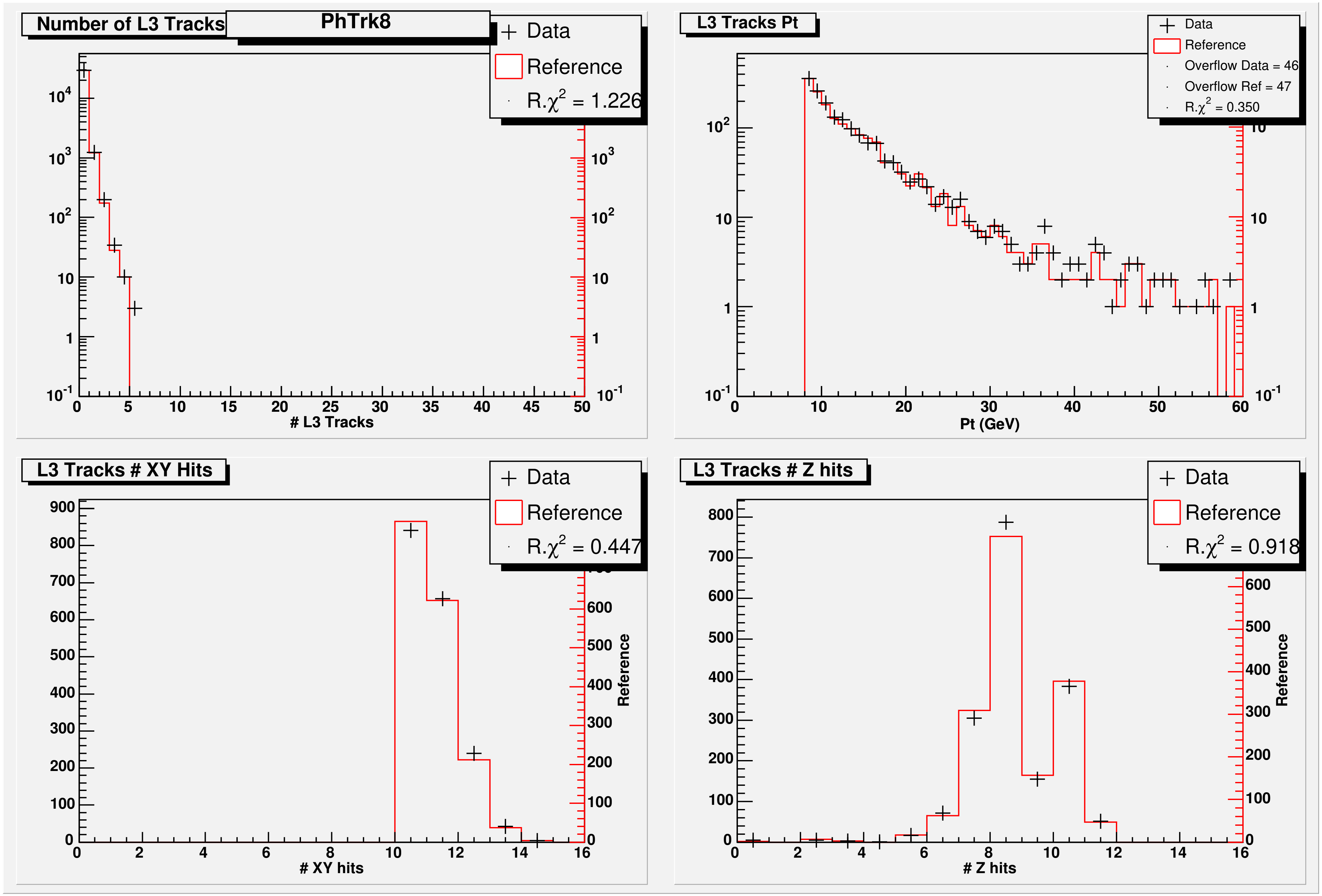
PhTrk3
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.277
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 1.446
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.597
Z (cm)
Reference



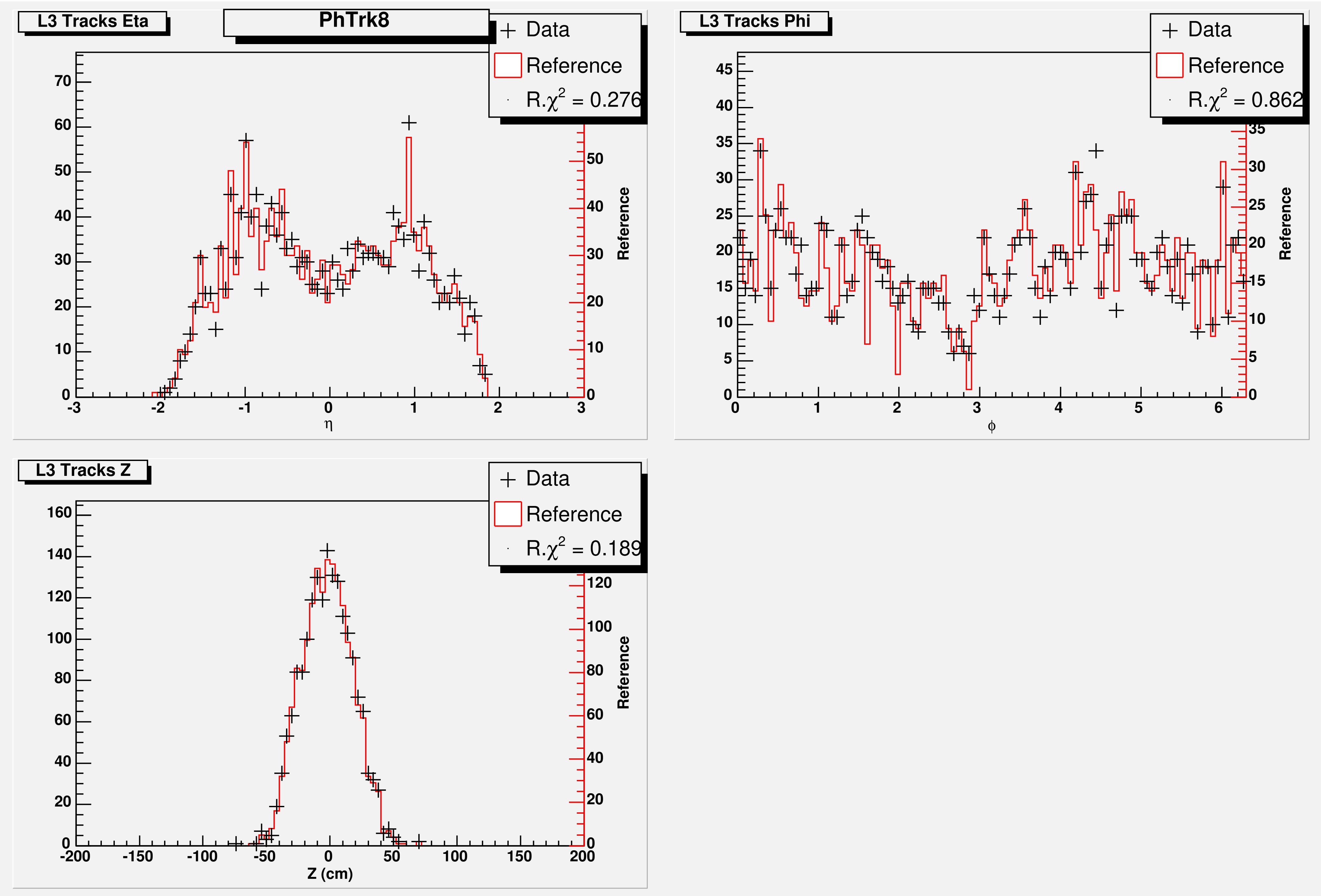
Number of L3 Tracks
PhTrk5
Data
Reference
R.χ² = 2.602
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 87
Overflow Ref = 67
R.χ² = 0.261
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.333
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ² = 0.786
Reference
Z hits

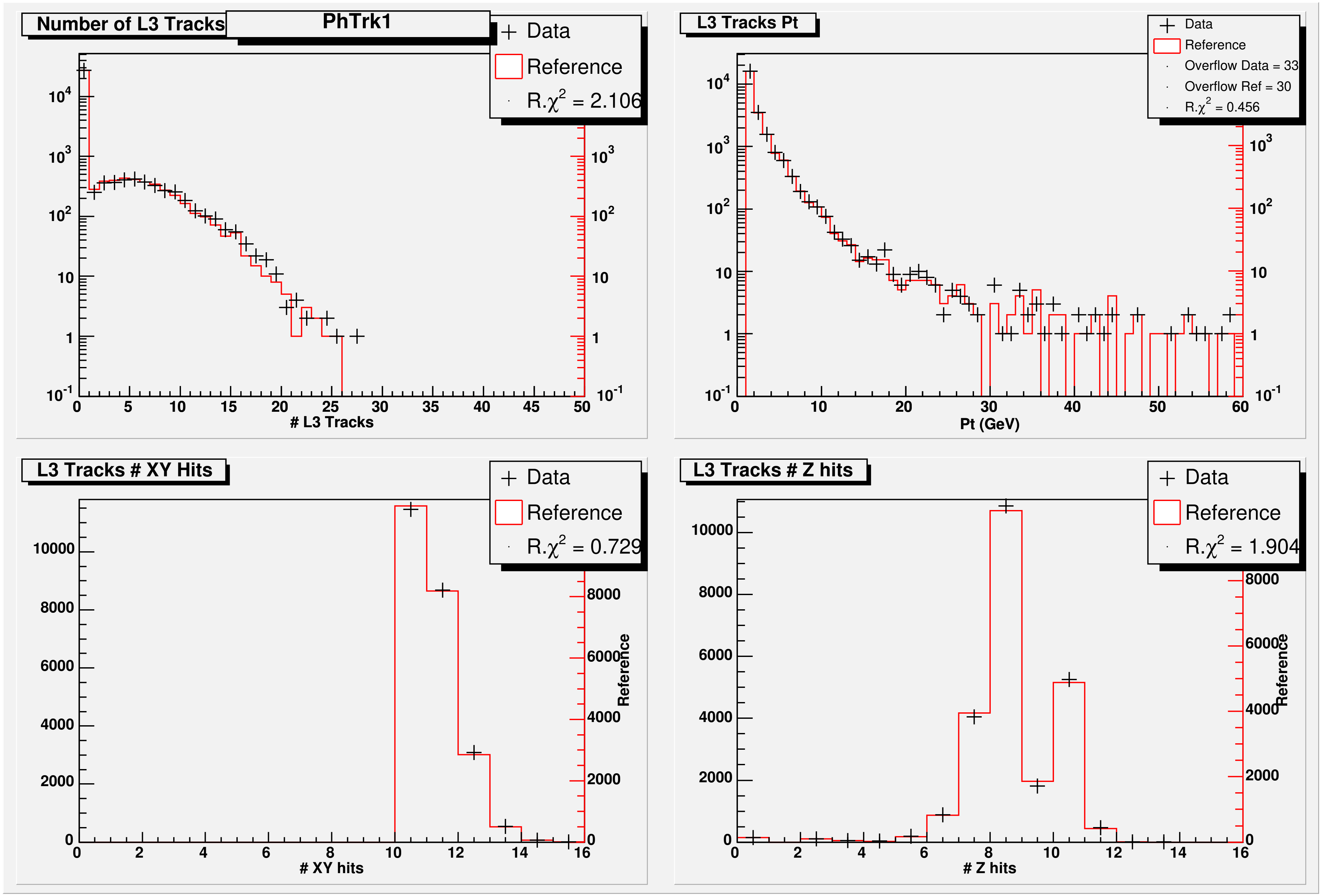


PhTrk5
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.234
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 2.162
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.501
Z (cm)
Reference

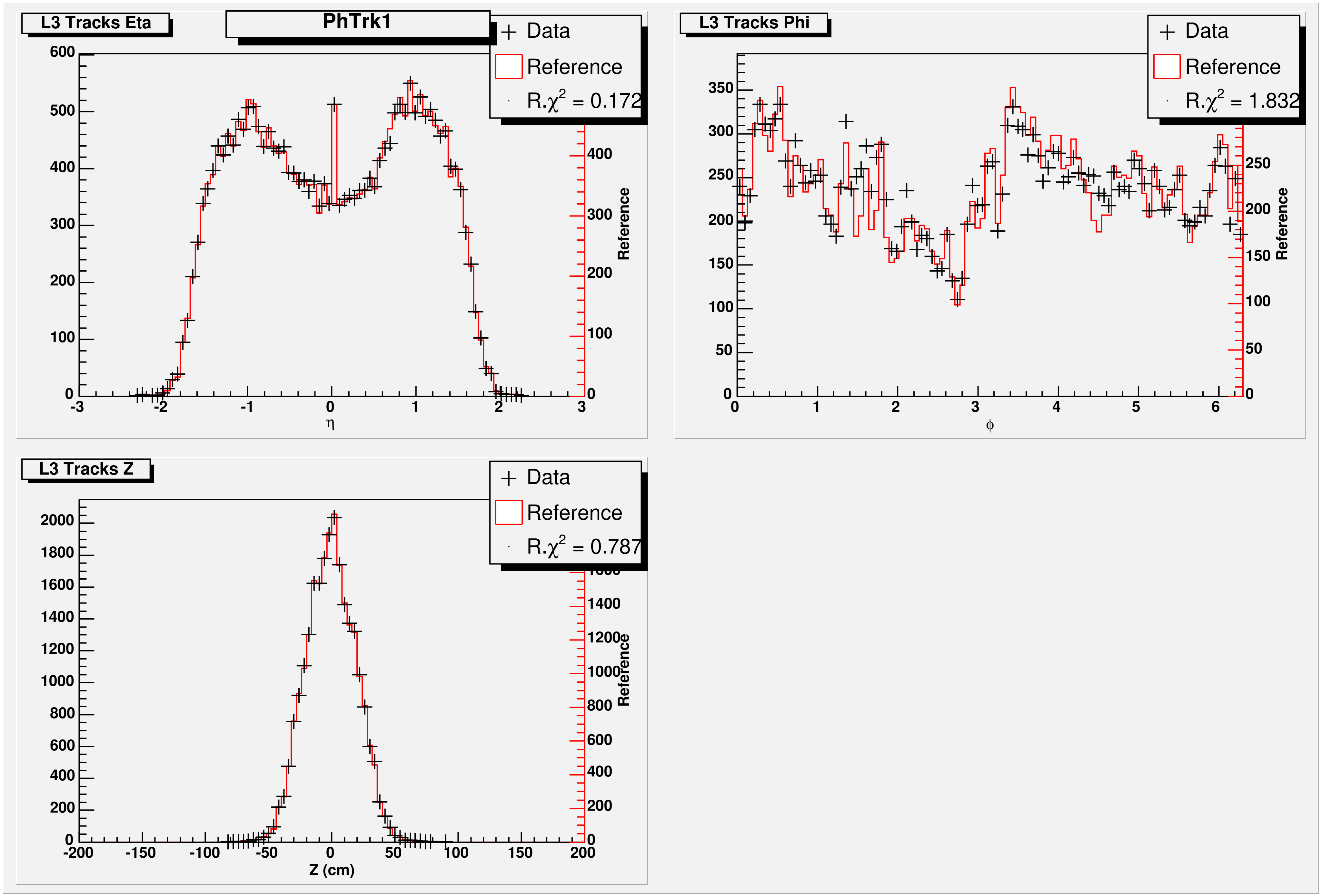


Number of L3 Tracks
PhTrk8
Data
Reference
R.χ^2 = 1.226
L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 46
Overflow Ref = 47
R.χ^2 = 0.350
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ^2 = 0.447
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ^2 = 0.918
Reference
Z hits

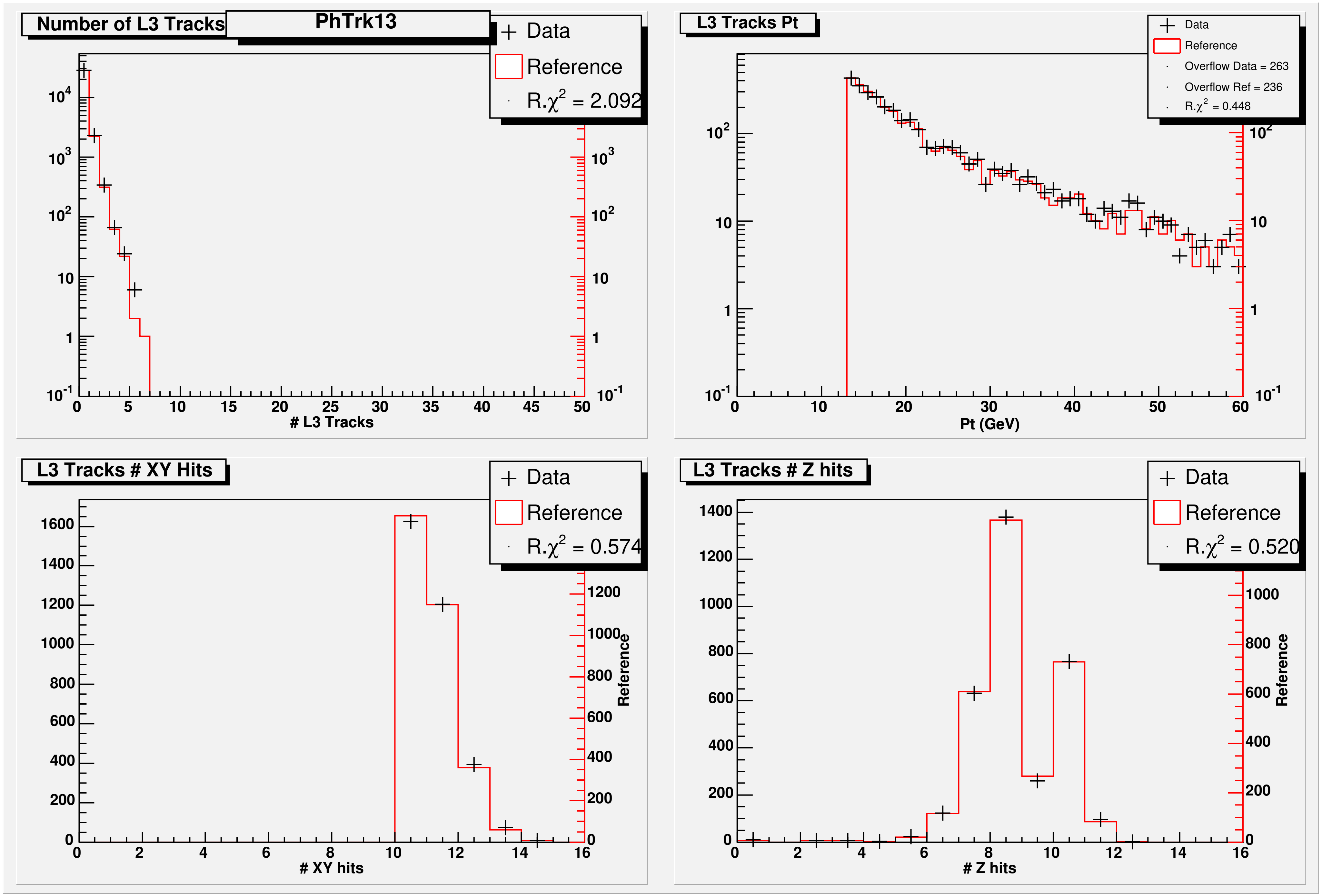

PhTrk8
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.276
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 0.862
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.189
Z (cm)
Reference



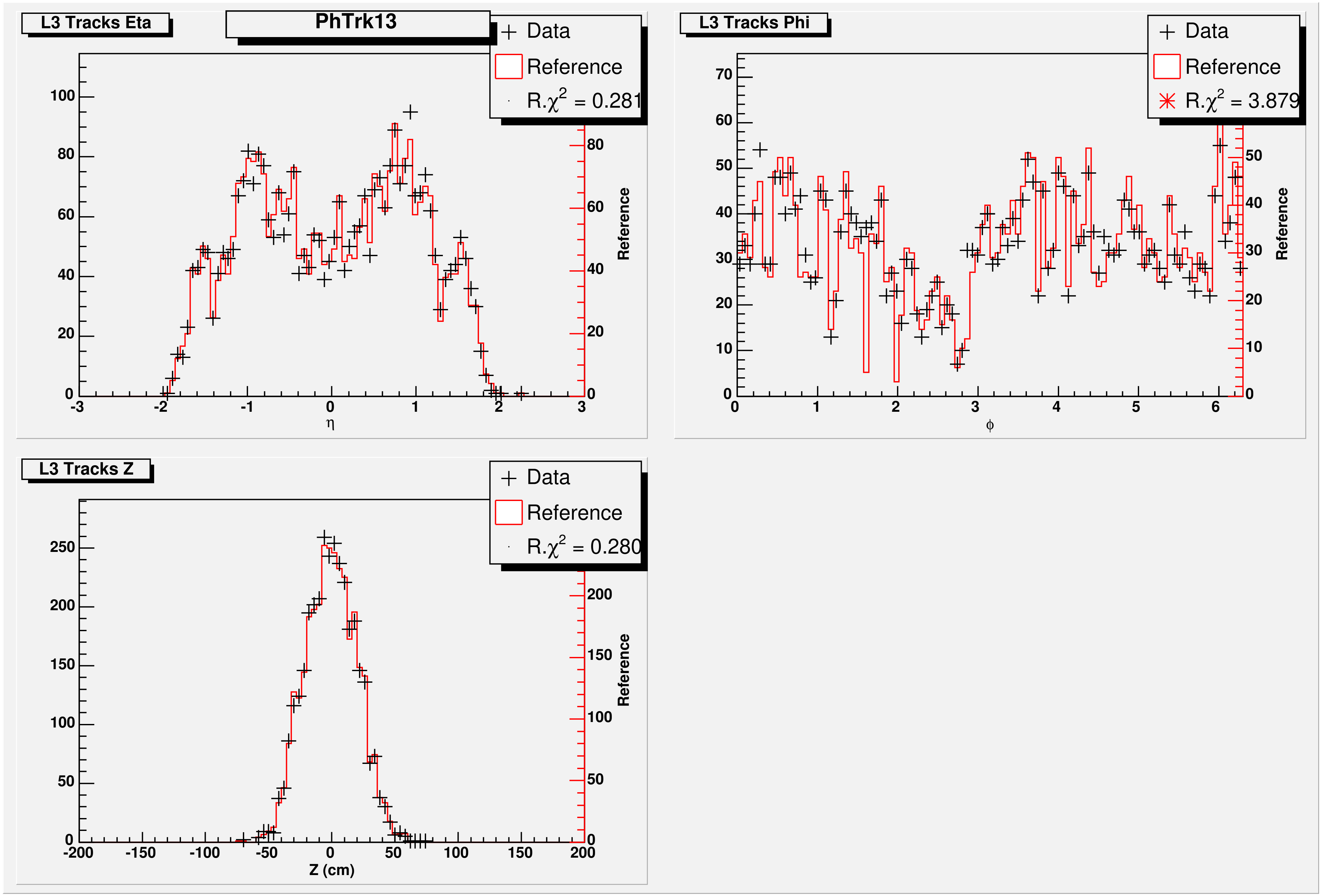
Number of L3 Tracks
PhTrk1
Data
Reference
R.χ^2 = 2.106
L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 33
Overflow Ref = 30
R.χ^2 = 0.456
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ^2 = 0.729
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ^2 = 1.904
Reference
Z hits



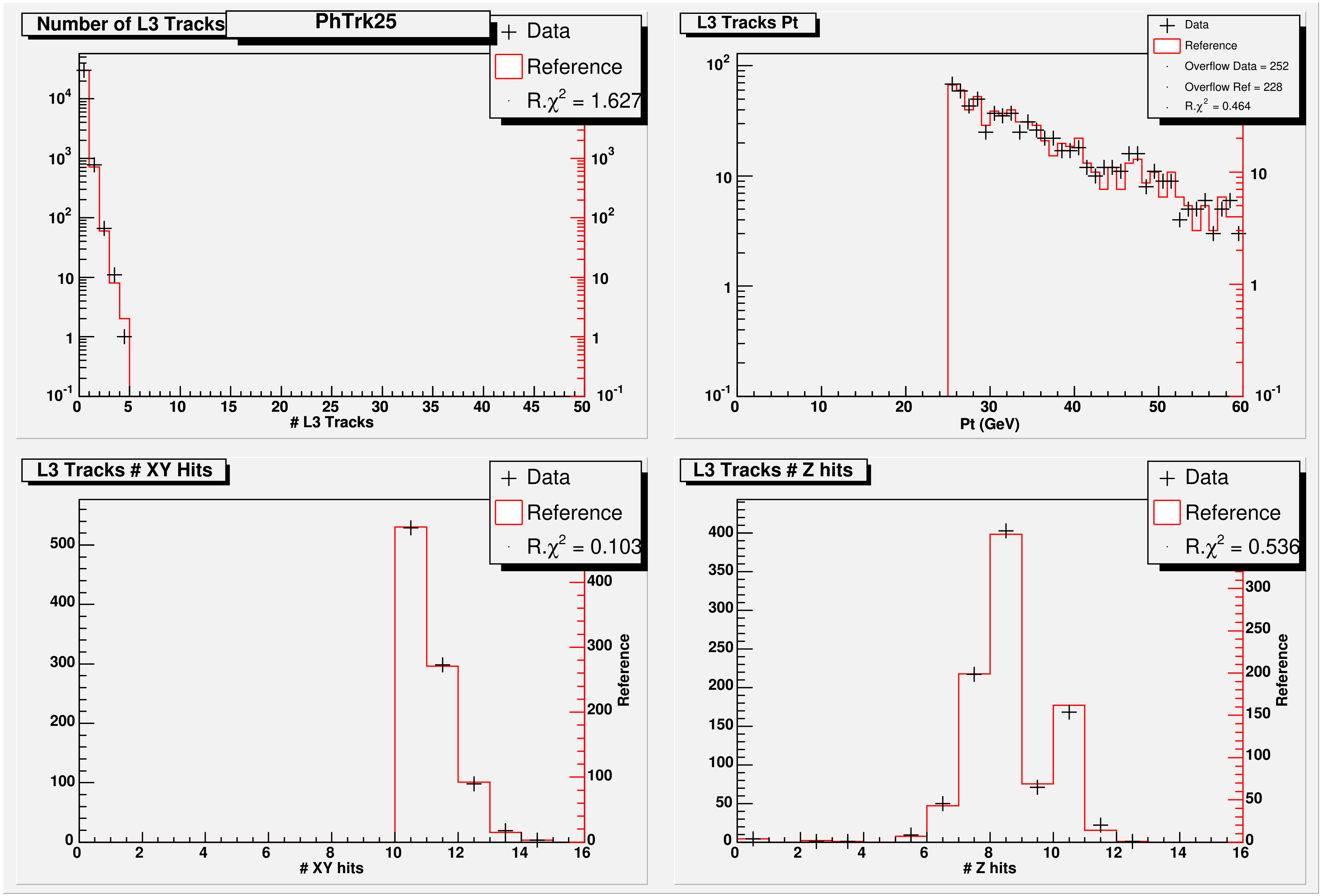
PhTrk1
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.172
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 1.832
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.787
Z (cm)
Reference



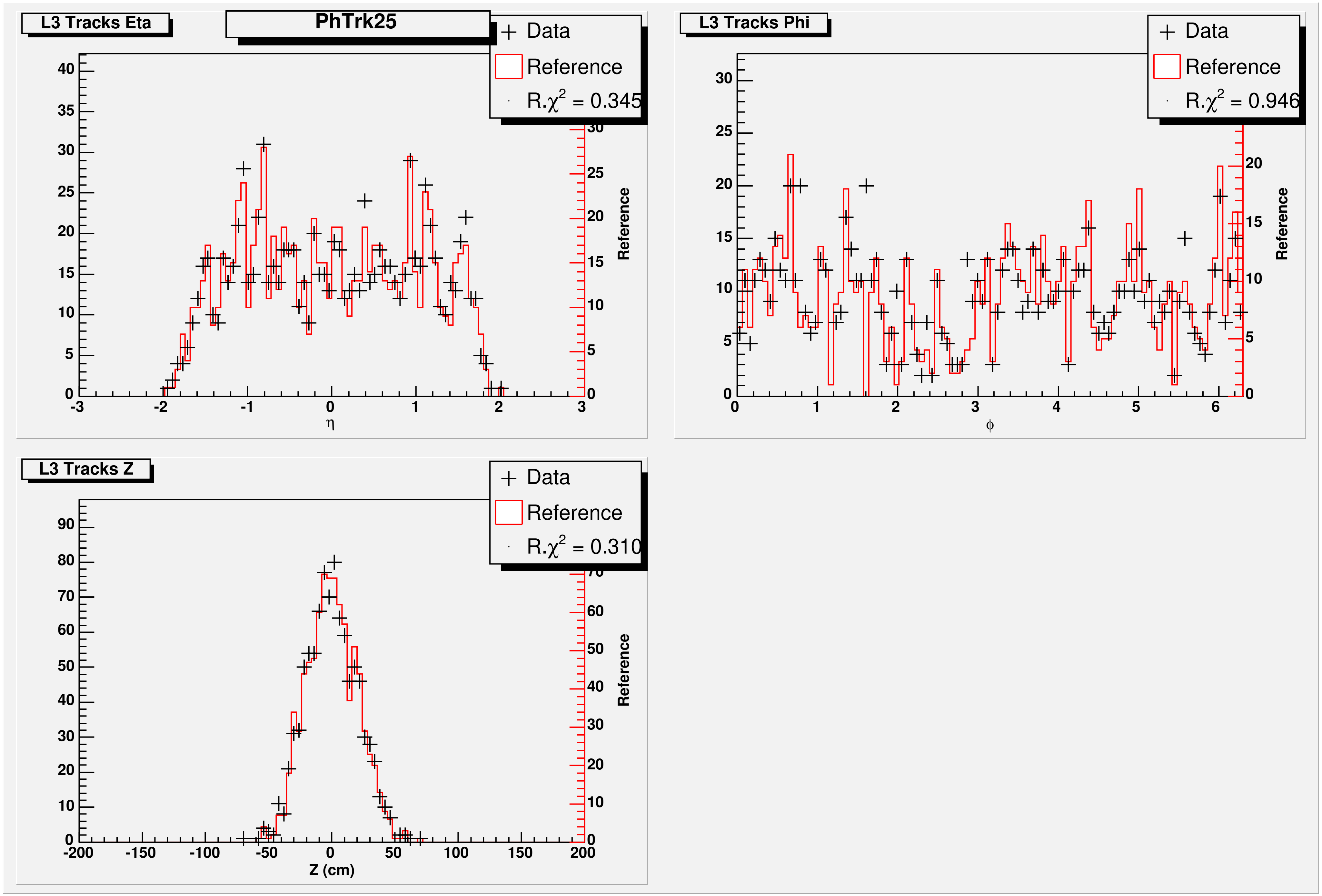
Number of L3 Tracks
PhTrk13
Data
Reference
R.χ² = 2.092
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 263
Overflow Ref = 236
R.χ² = 0.448
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.574
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ² = 0.520
Reference
Z hits

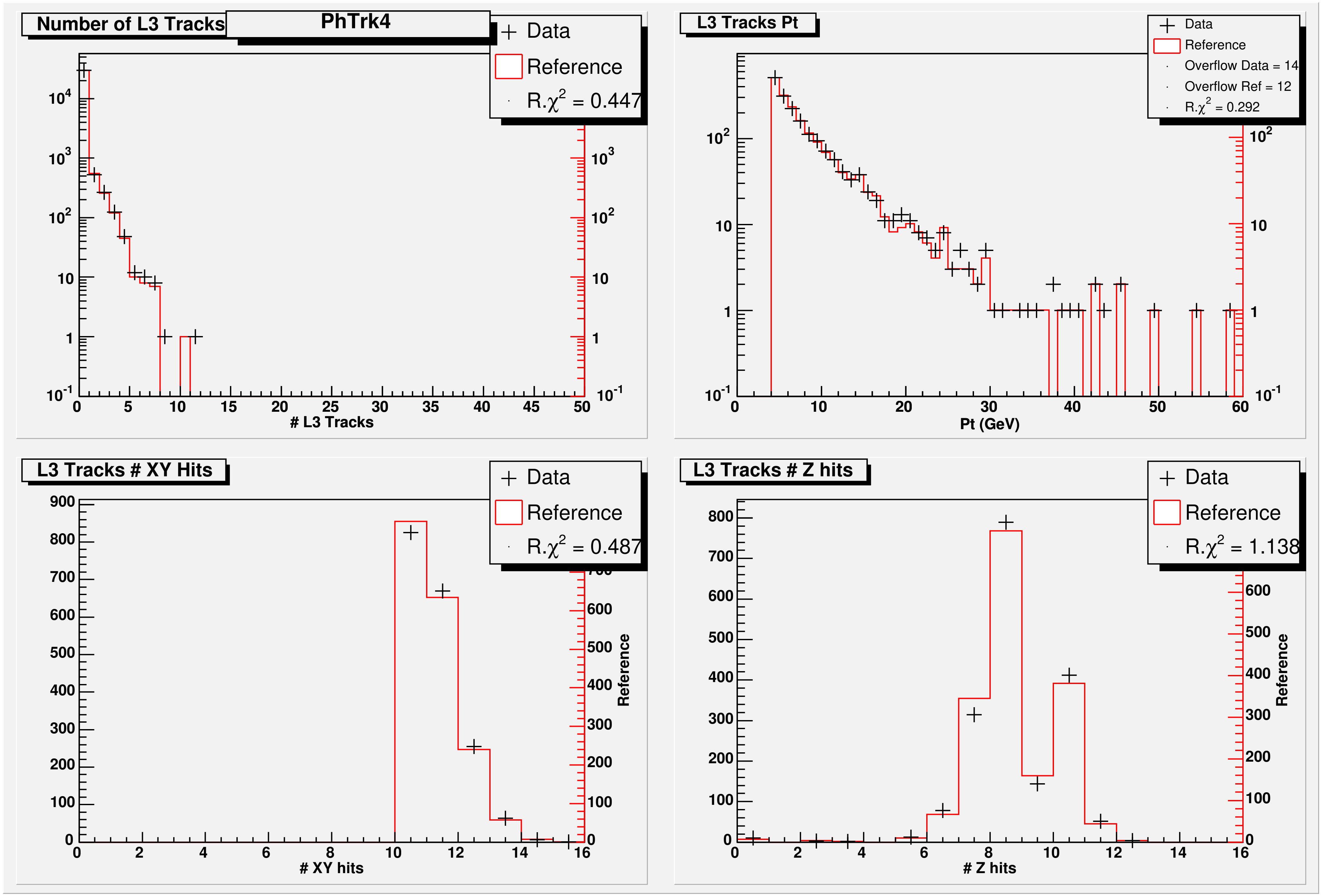


PhTrk13
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.281
η
L3 Tracks Phi
Data
Reference
R.χ^2 = 3.879
ϕ
L3 Tracks Z
Data
Reference
R.χ^2 = 0.280
Z (cm)
Reference

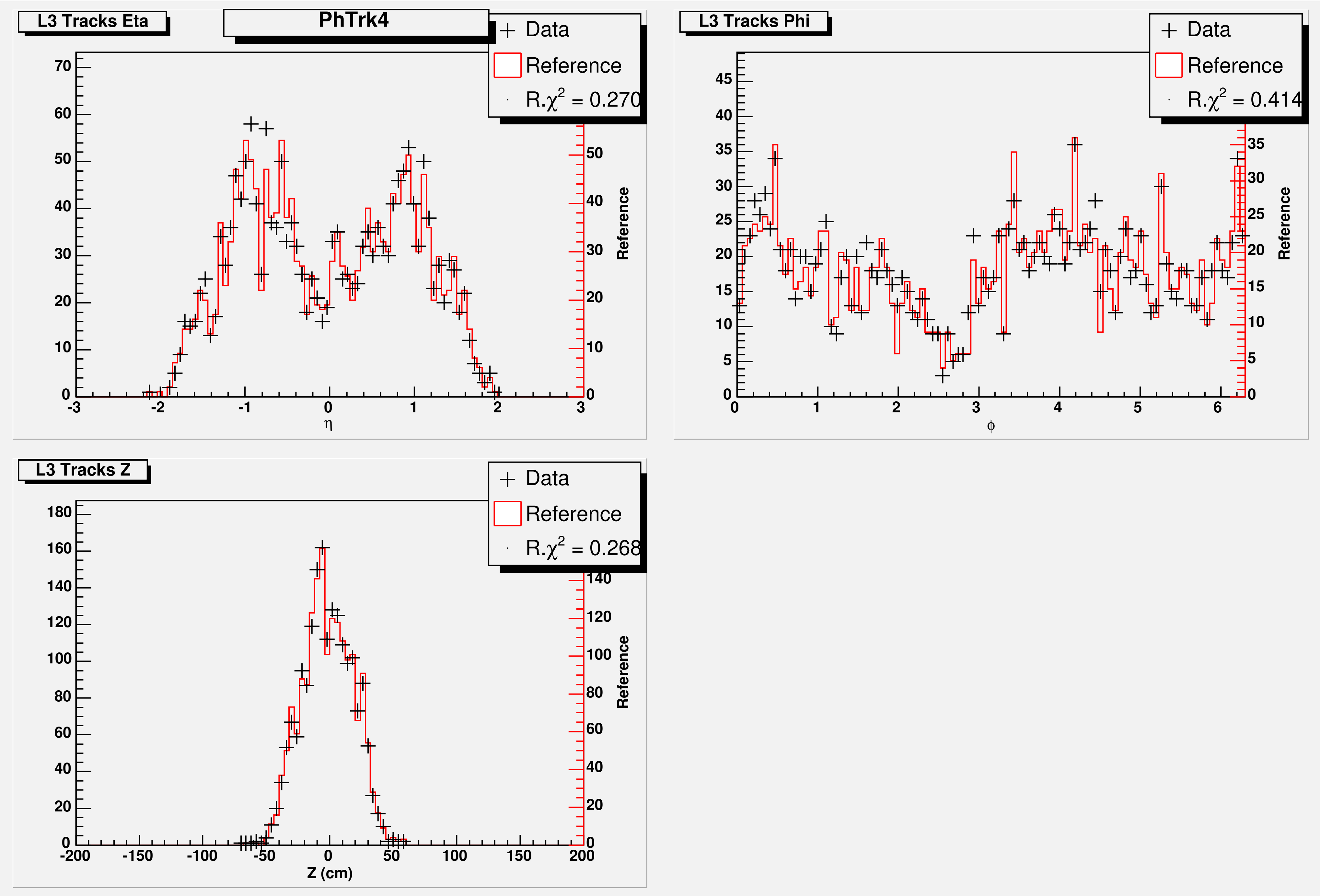


Number of L3 Tracks
PhTrk25
Data
Reference
R.χ² = 1.627
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 252
Overflow Ref = 228
R.χ² = 0.464
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.103
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ² = 0.536
Reference
Z hits

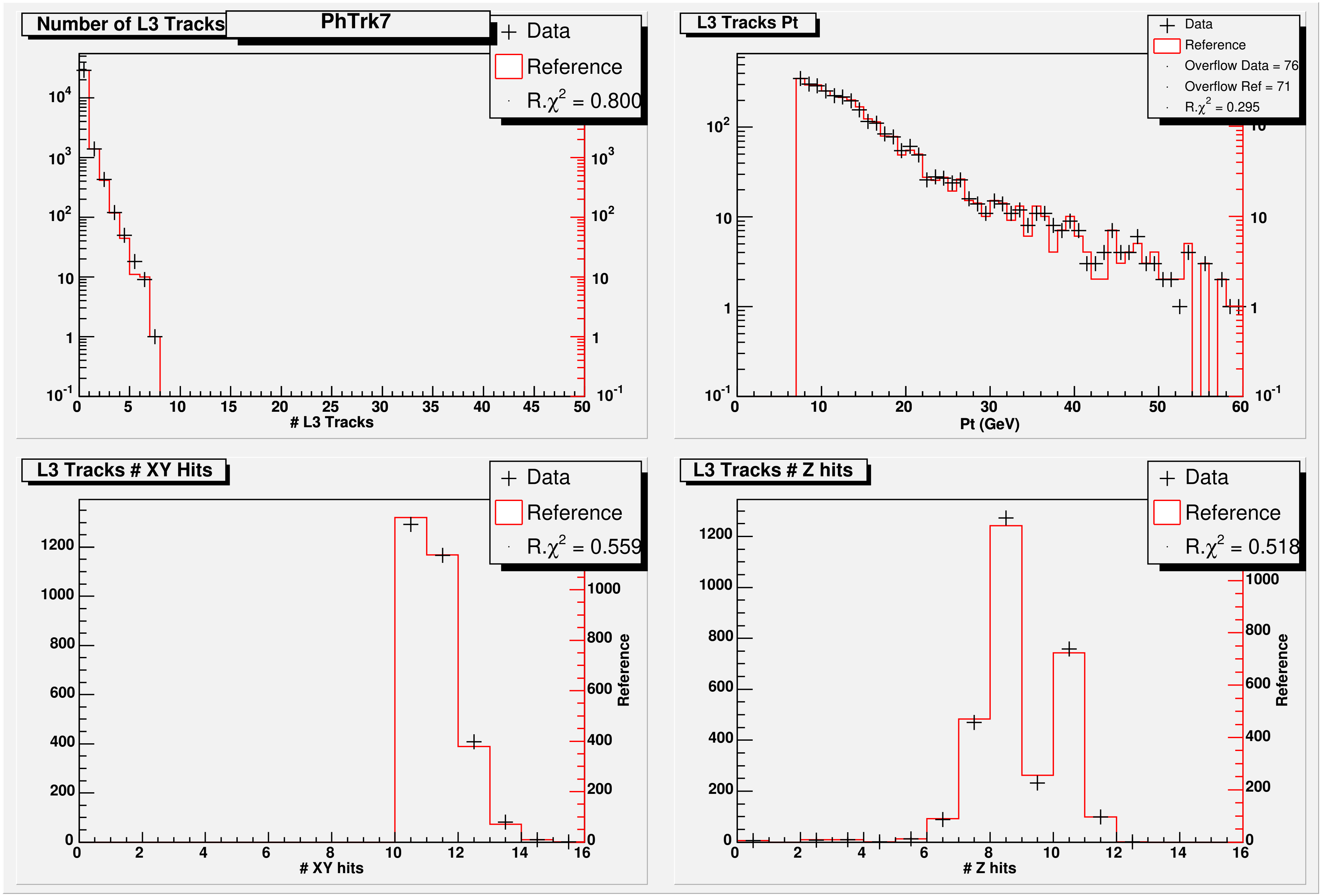

PhTrk25
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.345
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 0.946
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.310
Z (cm)
Reference



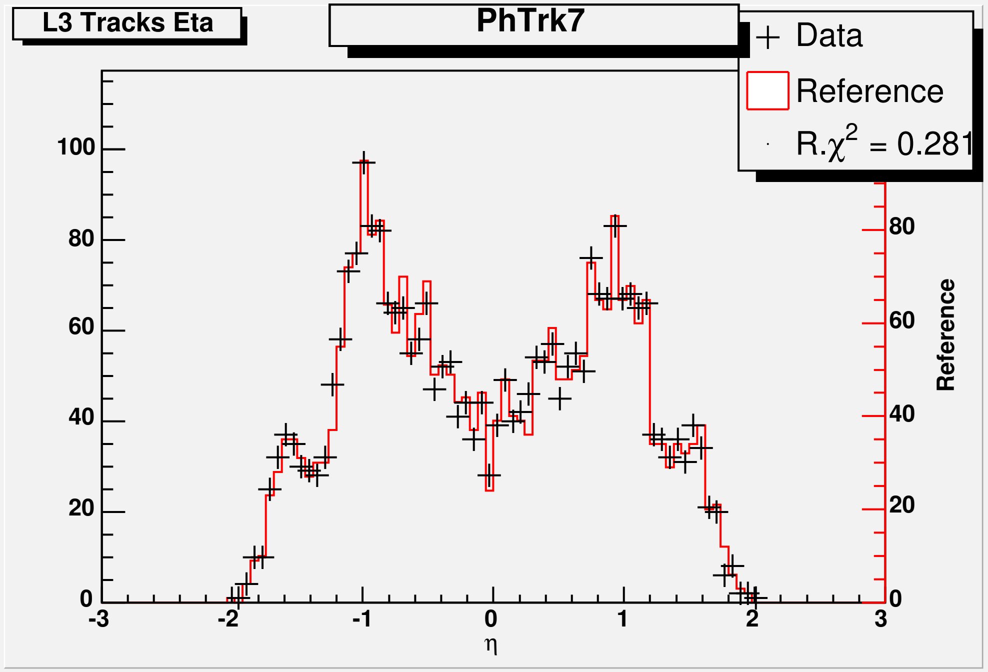
PhTrk4
Number of L3 Tracks
Data
Reference
R.χ² = 0.447
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 14
Overflow Ref = 12
R.χ² = 0.292
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.487
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ² = 1.138
Reference
Z hits

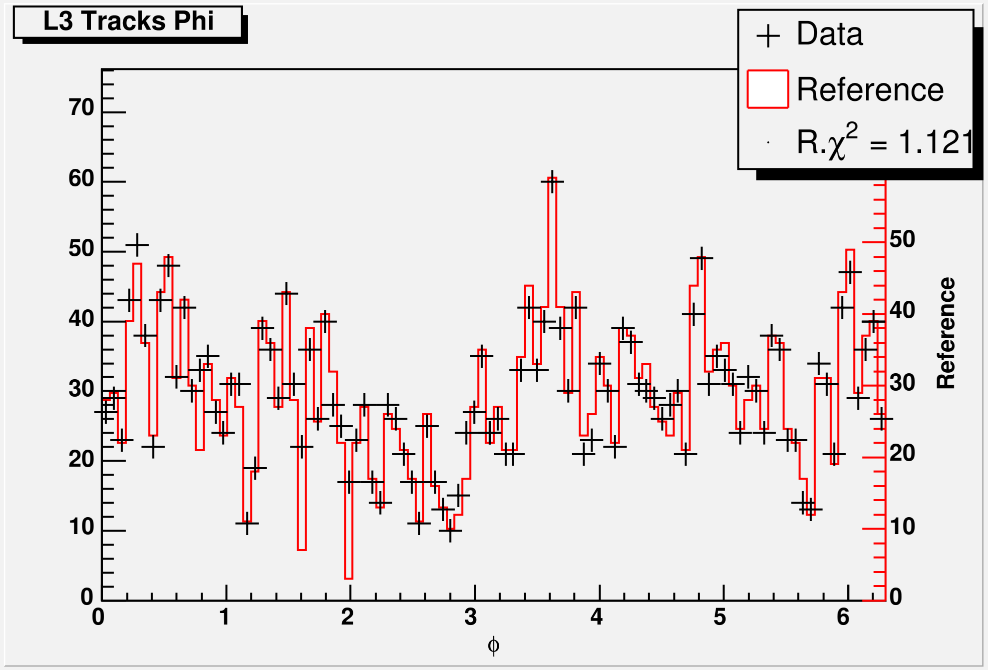


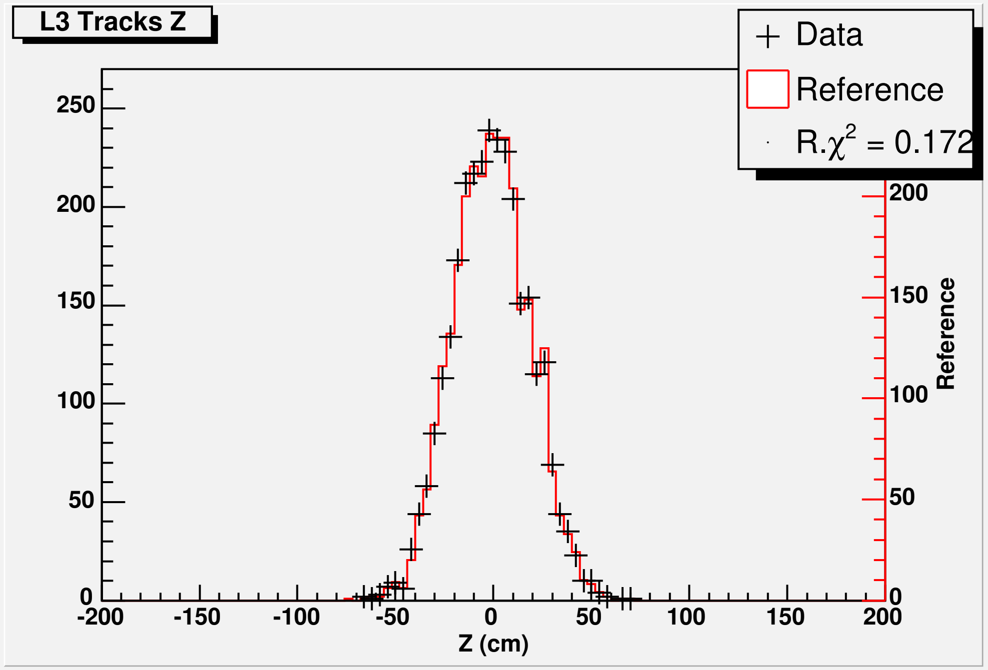
PhTrk4
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.270
η
Reference
L3 Tracks Phi
Data
Reference
R.χ^2 = 0.414
ϕ
Reference
L3 Tracks Z
Data
Reference
R.χ^2 = 0.268
Z (cm)
Reference

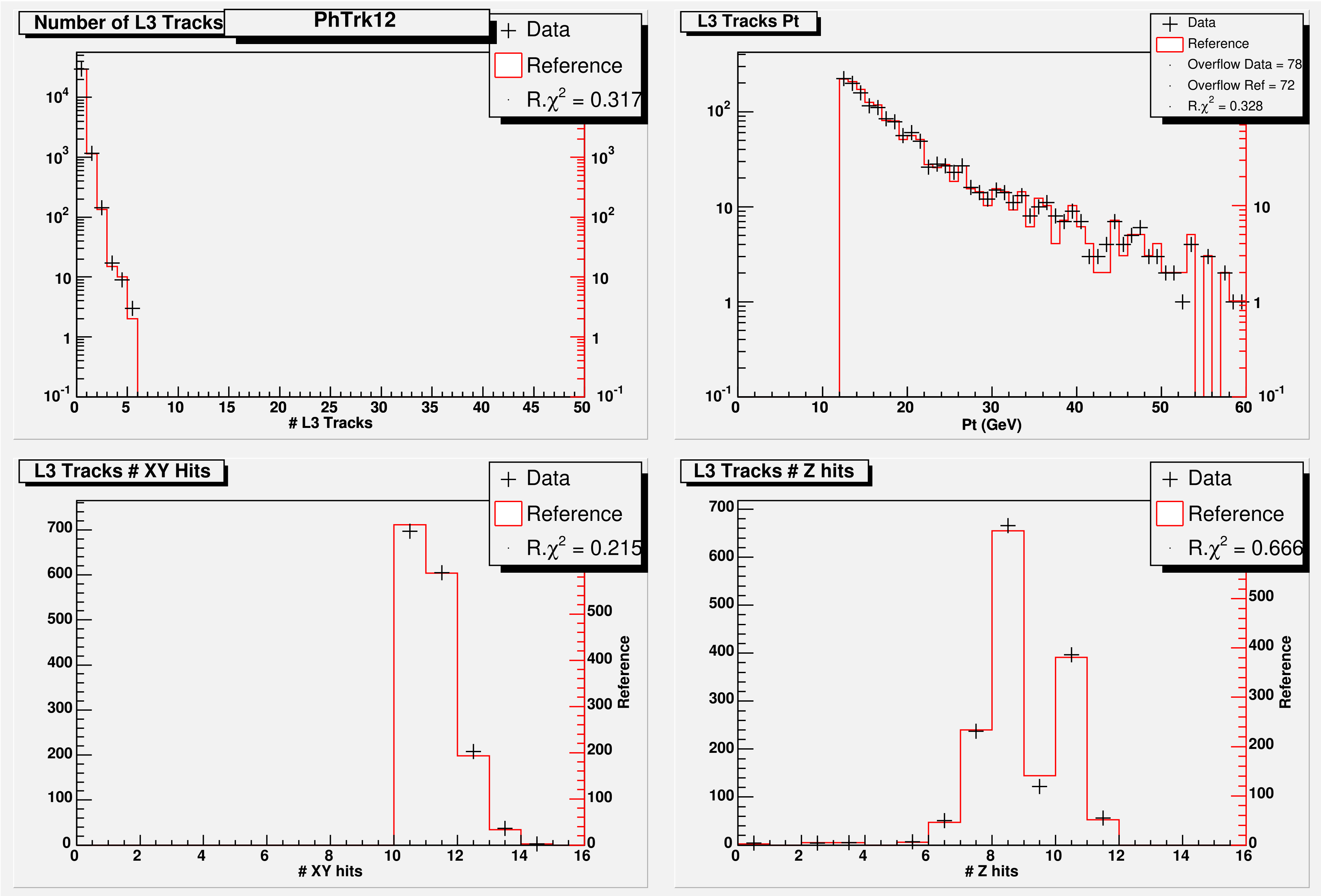


Number of L3 Tracks
PhTrk7
Data
Reference
R.χ^2 = 0.800
L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 76
Overflow Ref = 71
R.χ^2 = 0.295
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ^2 = 0.559
Reference
XY hits
L3 Tracks # Z hits
Data
Reference
R.χ^2 = 0.518
Reference
Z hits

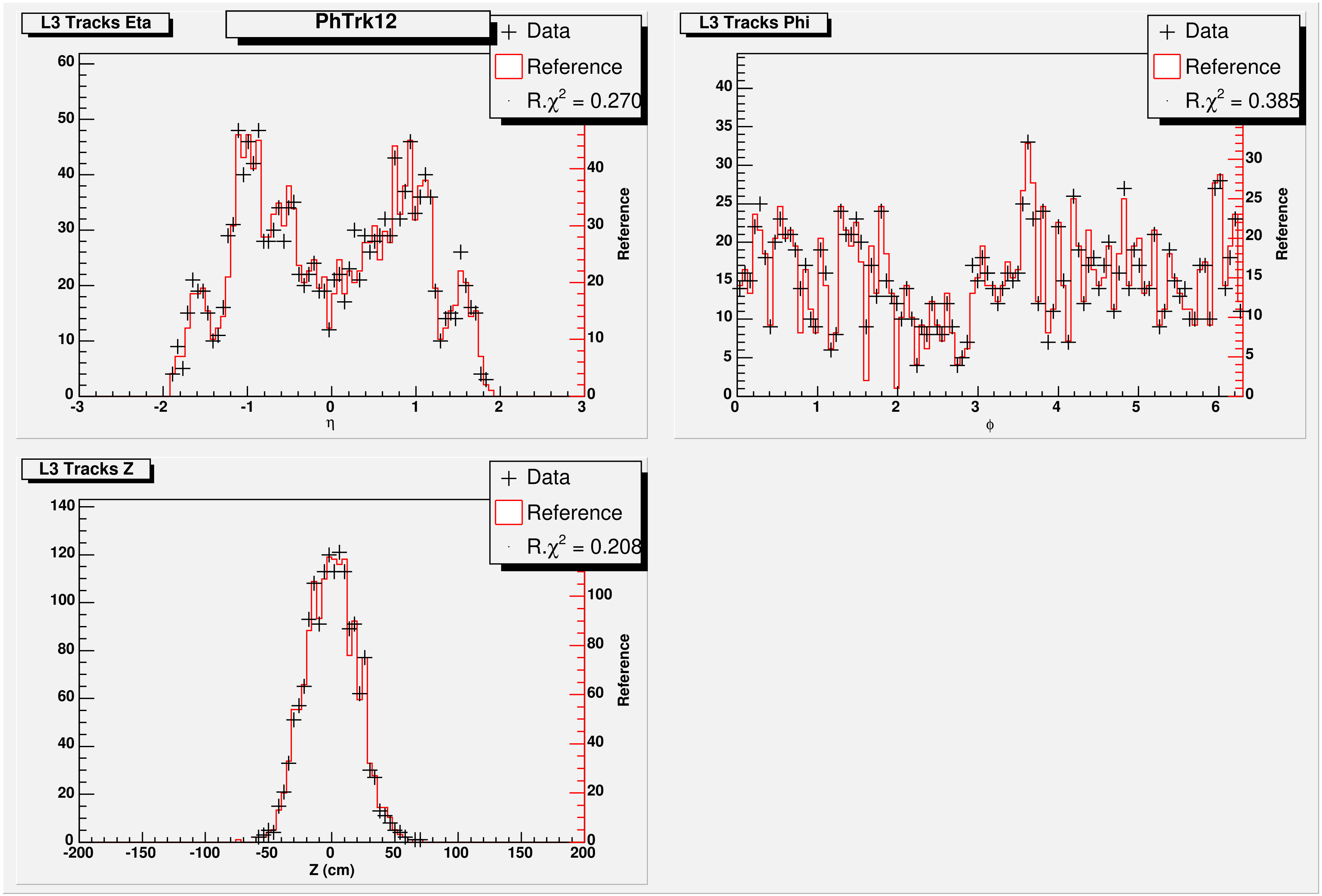

L3 Tracks Eta
PhTrk7
Data
Reference
R.χ^2 = 0.281
η
Reference


L3 Tracks Phi
Data
Reference
R.χ^2 = 1.121
ϕ
Reference

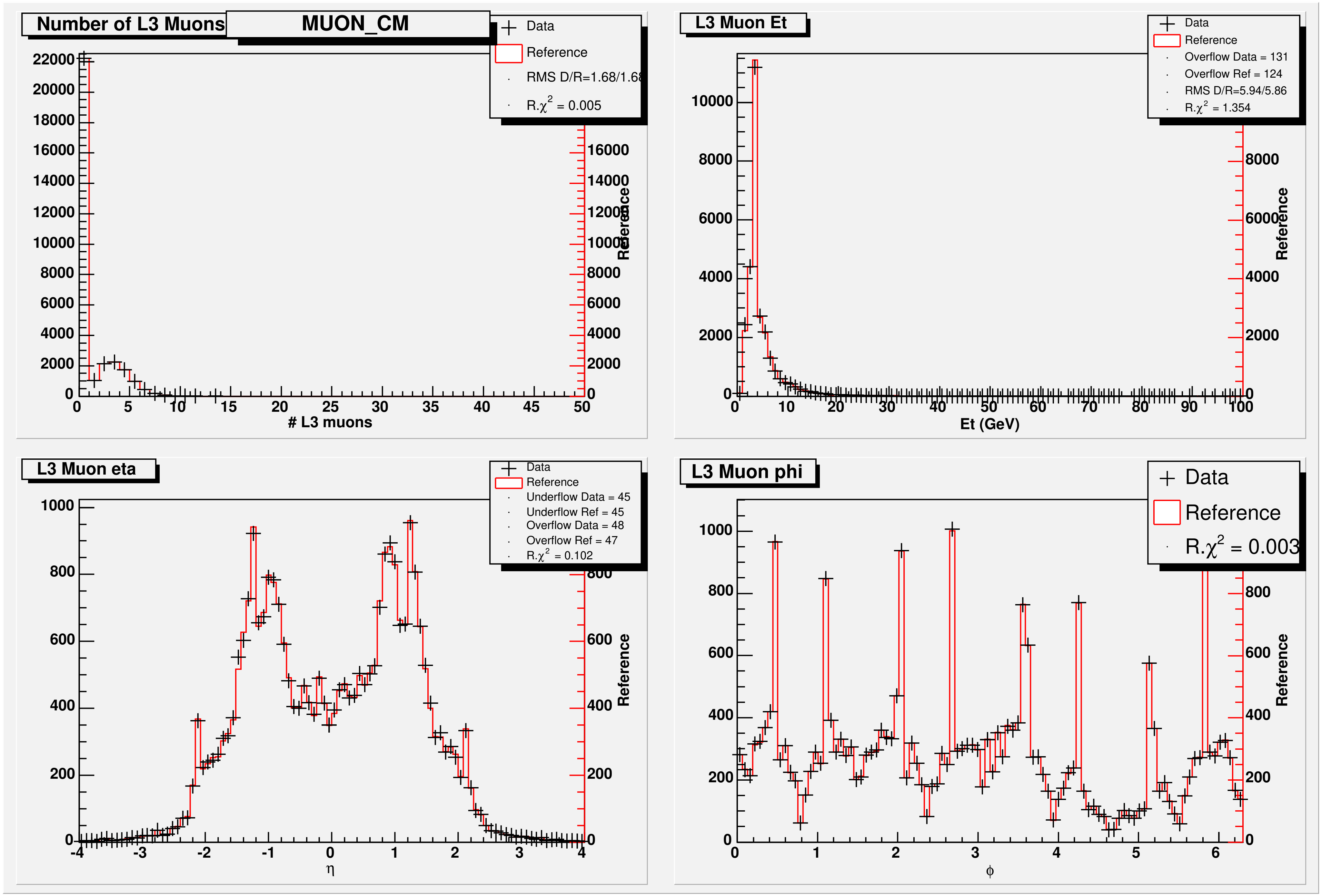

L3 Tracks Z
Data
Reference
R.χ^2 = 0.172
Z (cm)
Reference



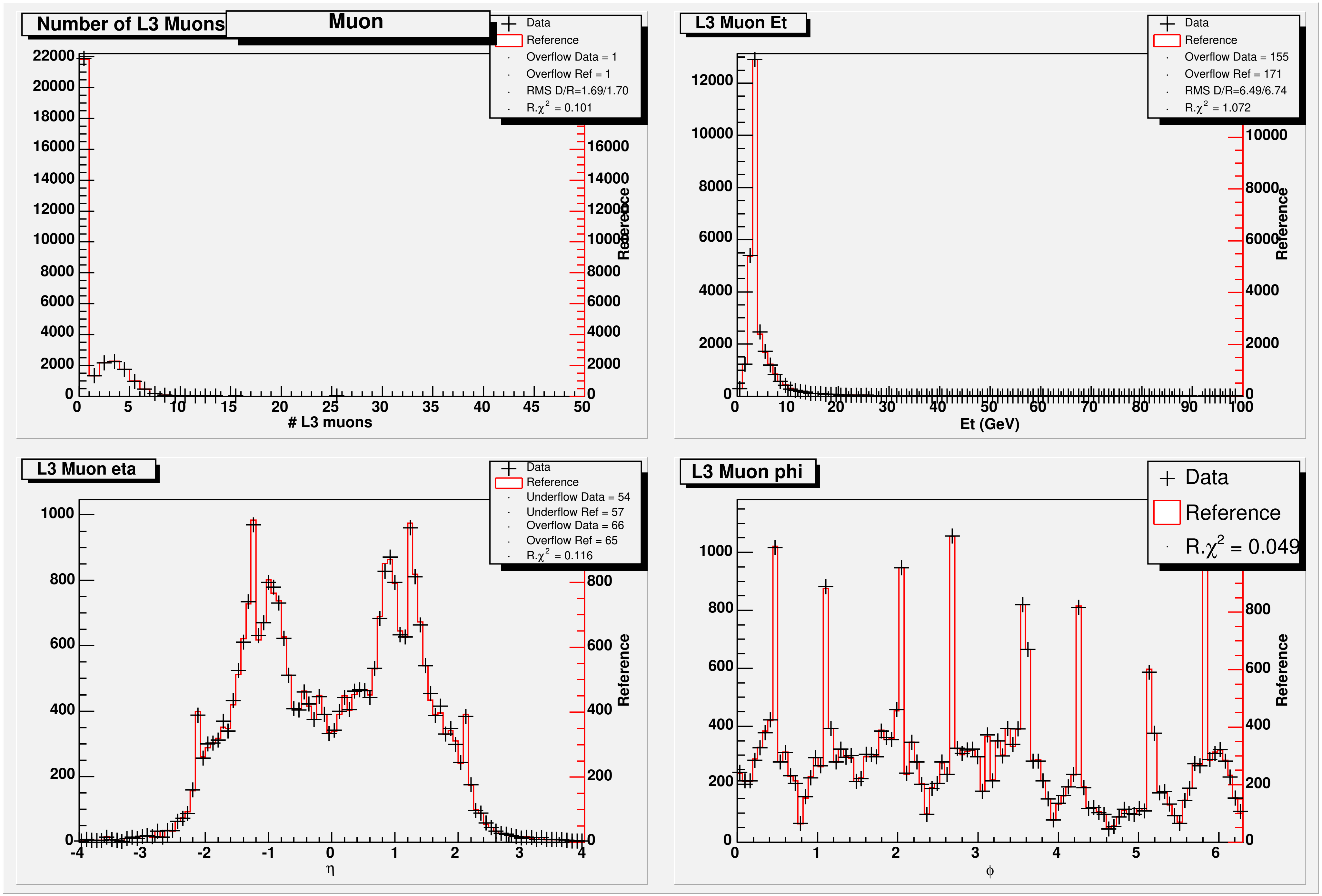
Number of L3 Tracks
PhTrk12
Data
Reference
R.χ² = 0.317
# L3 Tracks
L3 Tracks Pt
Data
Reference
Overflow Data = 78
Overflow Ref = 72
R.χ² = 0.328
Pt (GeV)
L3 Tracks # XY Hits
Data
Reference
R.χ² = 0.215
# XY hits
Reference
L3 Tracks # Z hits
Data
Reference
R.χ² = 0.666
# Z hits
Reference



PhTrk12
L3 Tracks Eta
Data
Reference
R.χ^2 = 0.270
η
L3 Tracks Phi
R.χ^2 = 0.385
ϕ
L3 Tracks Z
R.χ^2 = 0.208
Z (cm)
Reference



MUON_CM
Number of L3 Muons
Data
Reference
RMS D/R=1.68/1.68
R.χ^2 = 0.005
L3 muons
Reference
L3 Muon Et
Data
Reference
Overflow Data = 131
Overflow Ref = 124
RMS D/R=5.94/5.86
R.χ^2 = 1.354
Et (GeV)
Reference
L3 Muon eta
Data
Reference
Underflow Data = 45
Underflow Ref = 45
Overflow Data = 48
Overflow Ref = 47
R.χ^2 = 0.102
η
Reference
L3 Muon phi
Data
Reference
R.χ^2 = 0.003
ϕ
Reference



Number of L3 Muons
Muon
Data
Reference
Overflow Data = 1
Overflow Ref = 1
RMS D/R=1.69/1.70
R.χ² = 0.101
# L3 muons
Reference
L3 Muon Et
Data
Reference
Overflow Data = 155
Overflow Ref = 171
RMS D/R=6.49/6.74
R.χ² = 1.072
Et (GeV)
Reference
L3 Muon eta
Data
Reference
Underflow Data = 54
Underflow Ref = 57
Overflow Data = 66
Overflow Ref = 65
R.χ² = 0.116
η
Reference
L3 Muon phi
Data
Reference
R.χ² = 0.049
ϕ
Reference