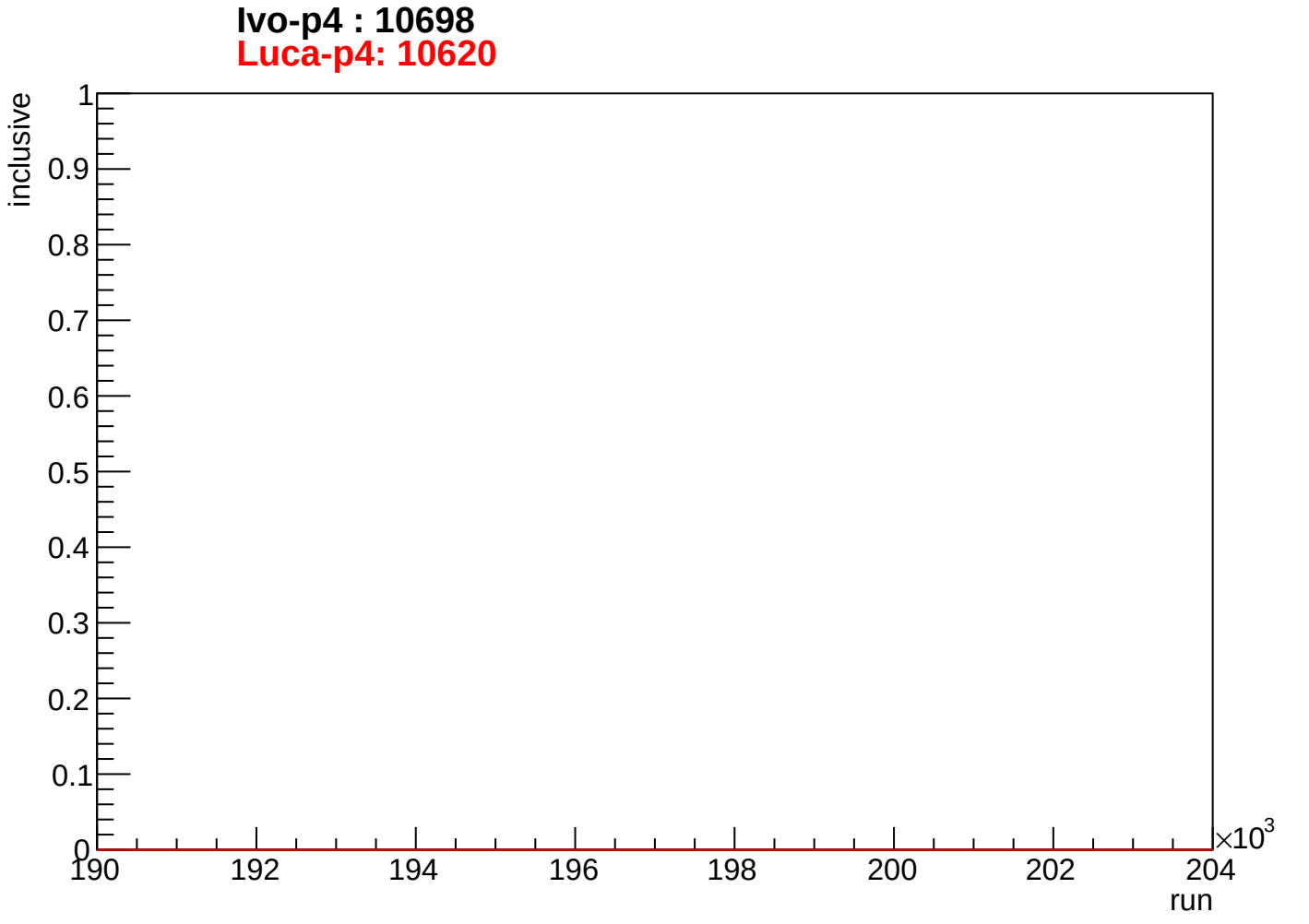
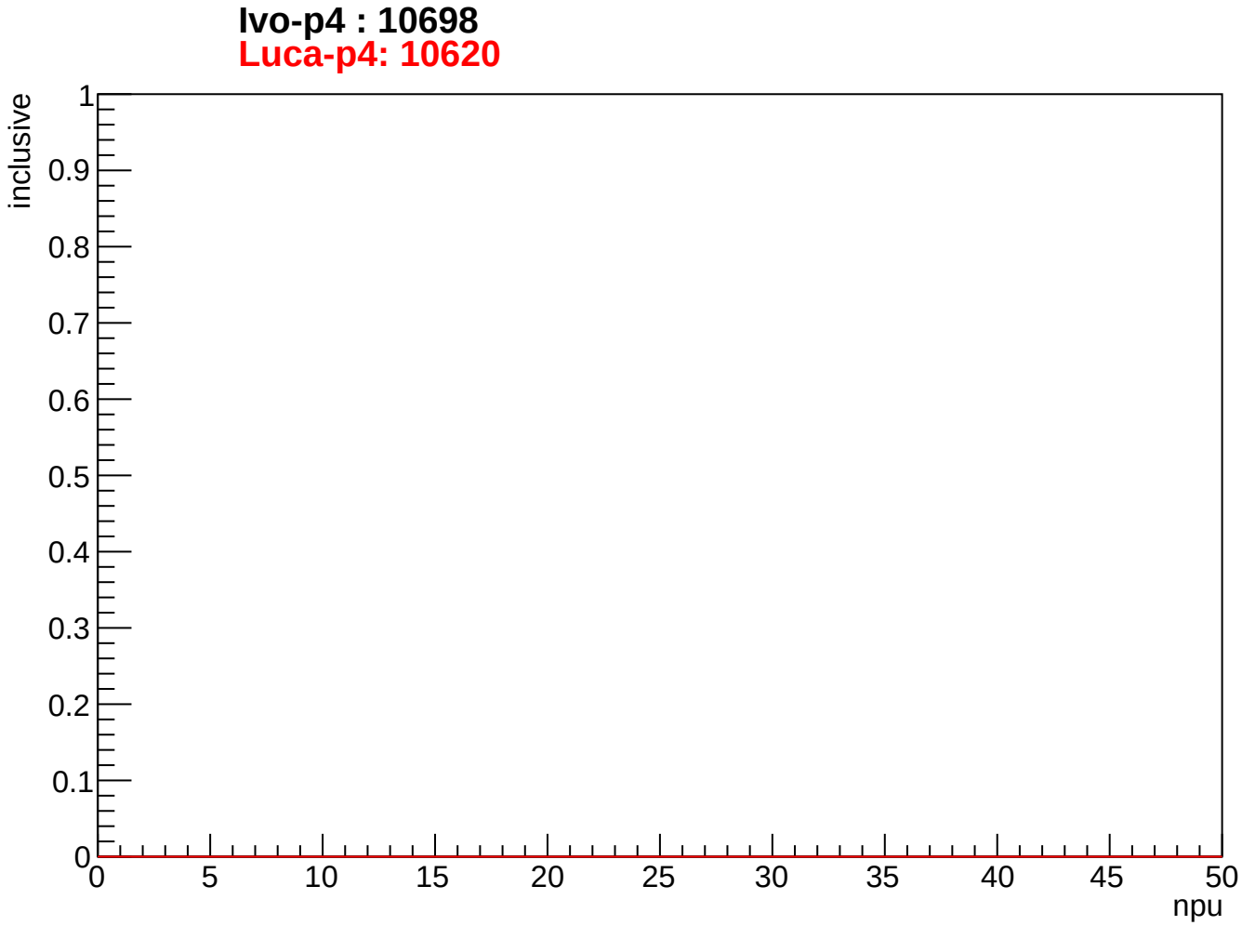
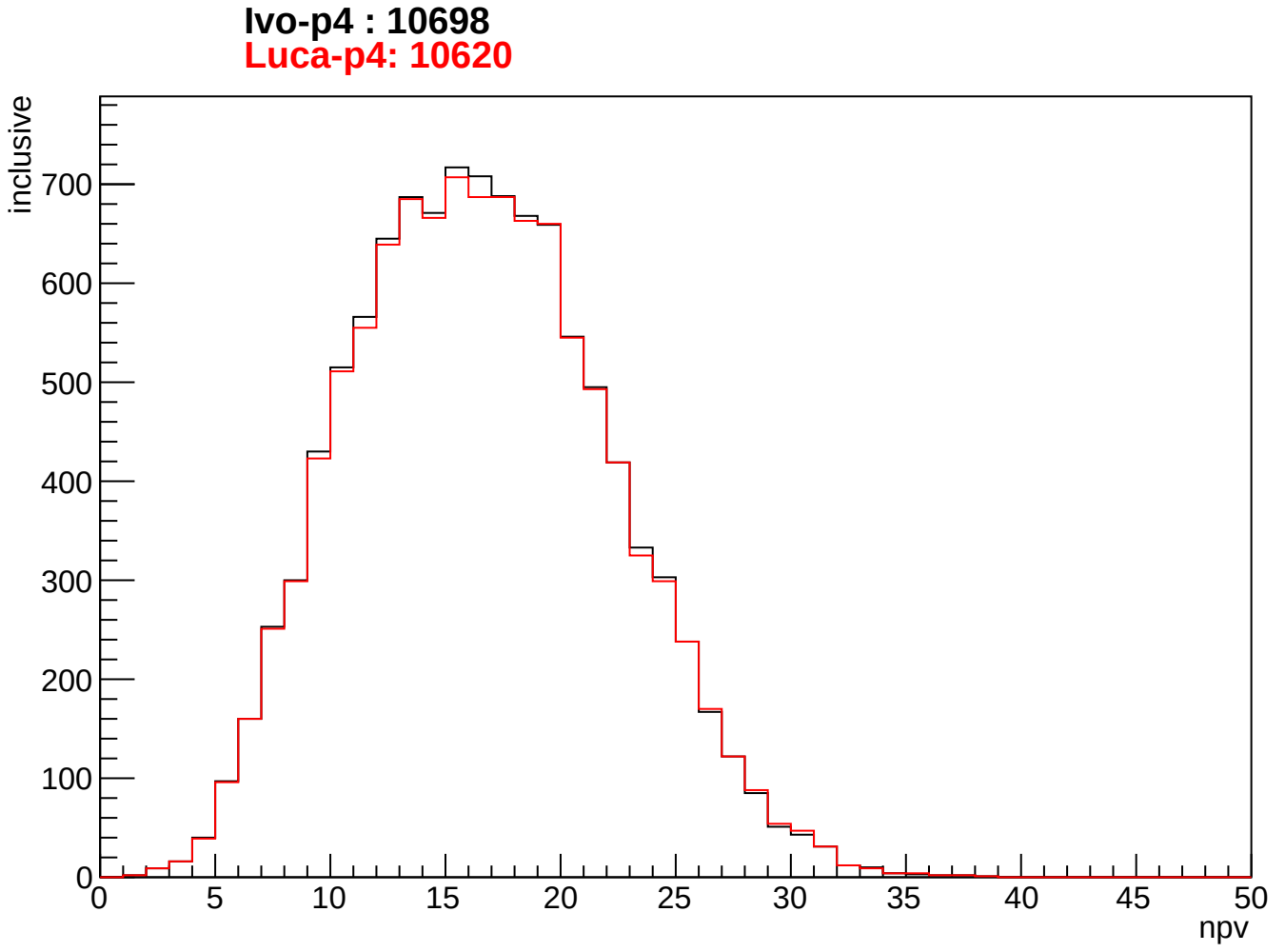
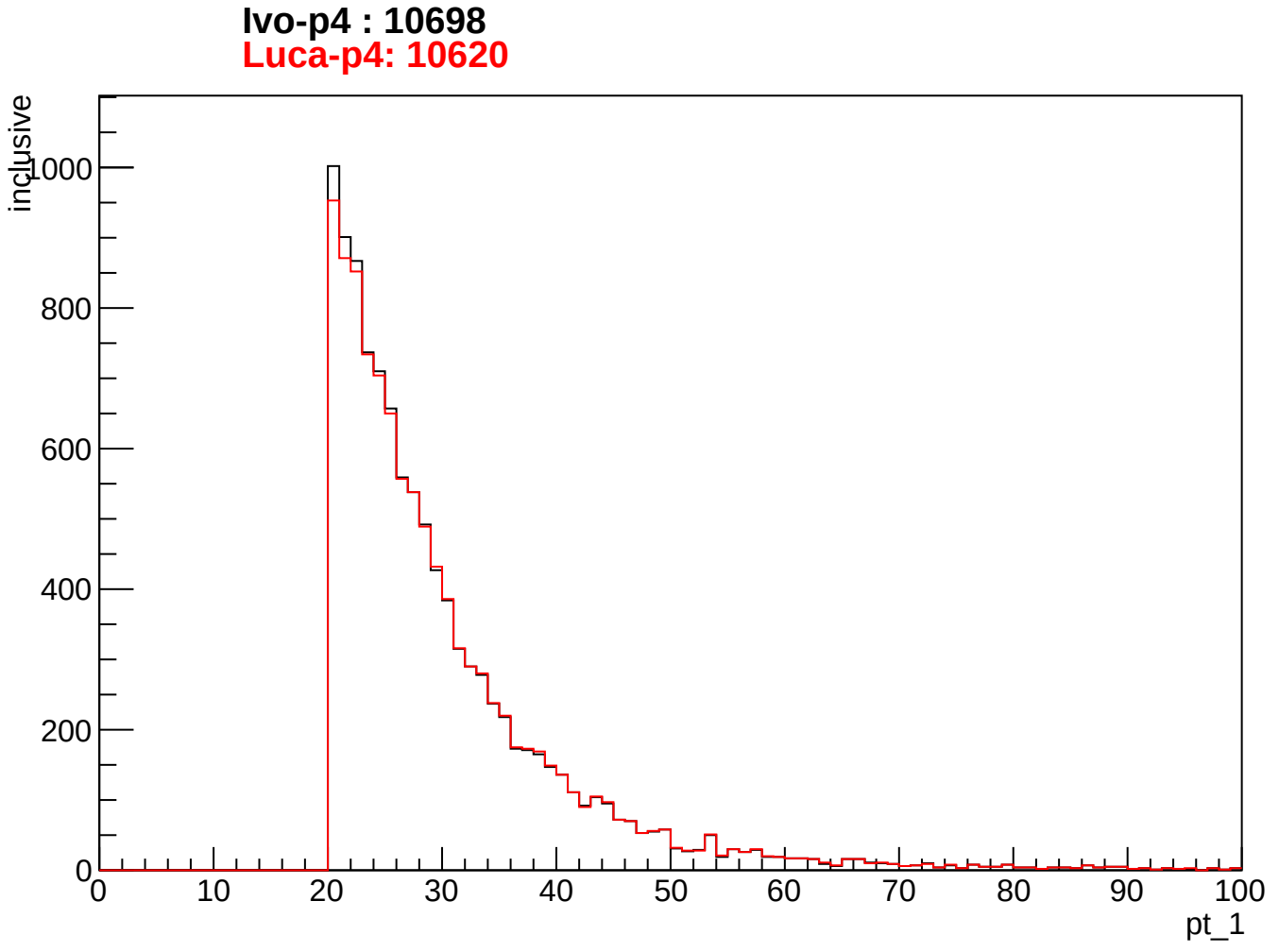
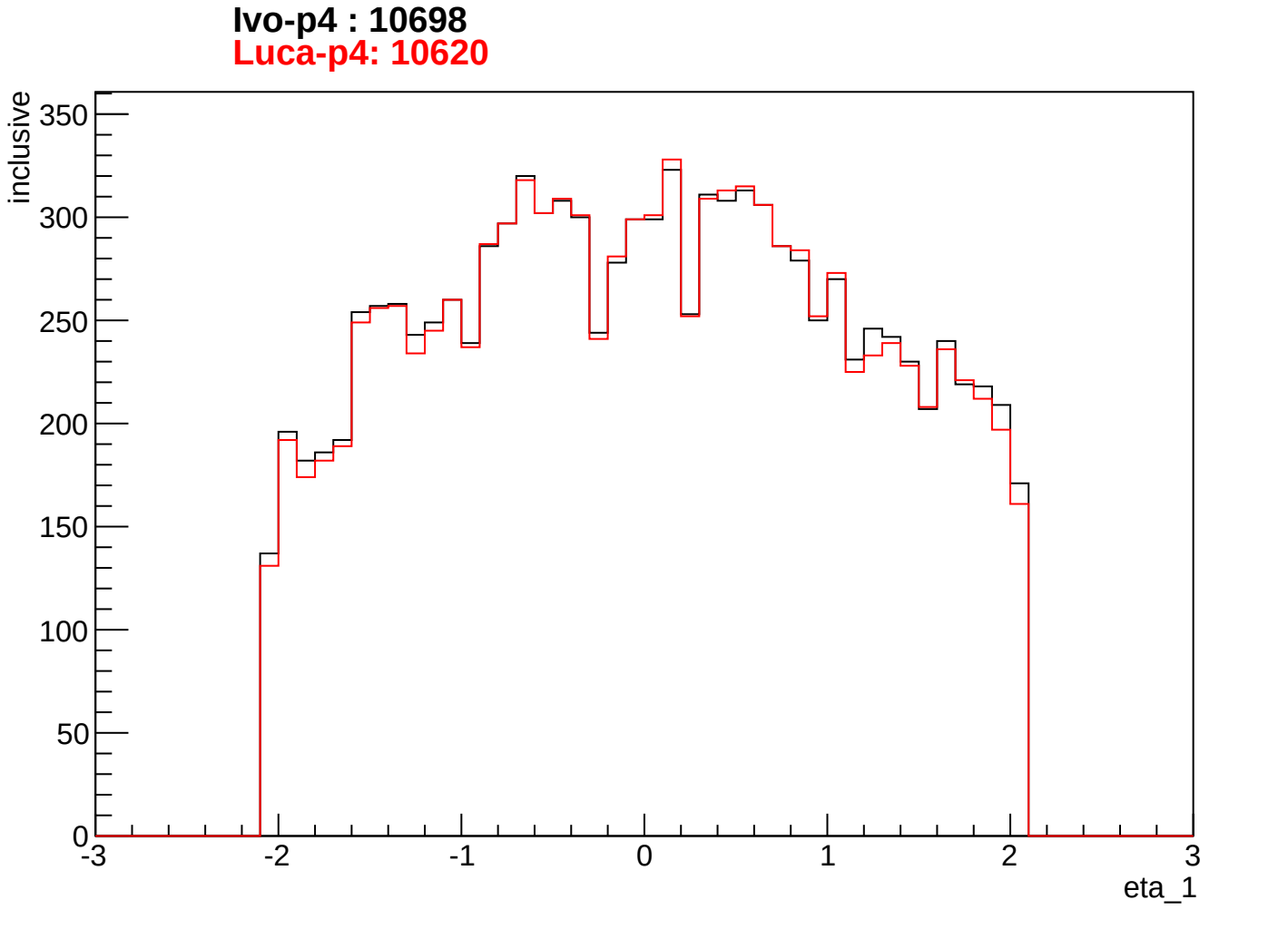
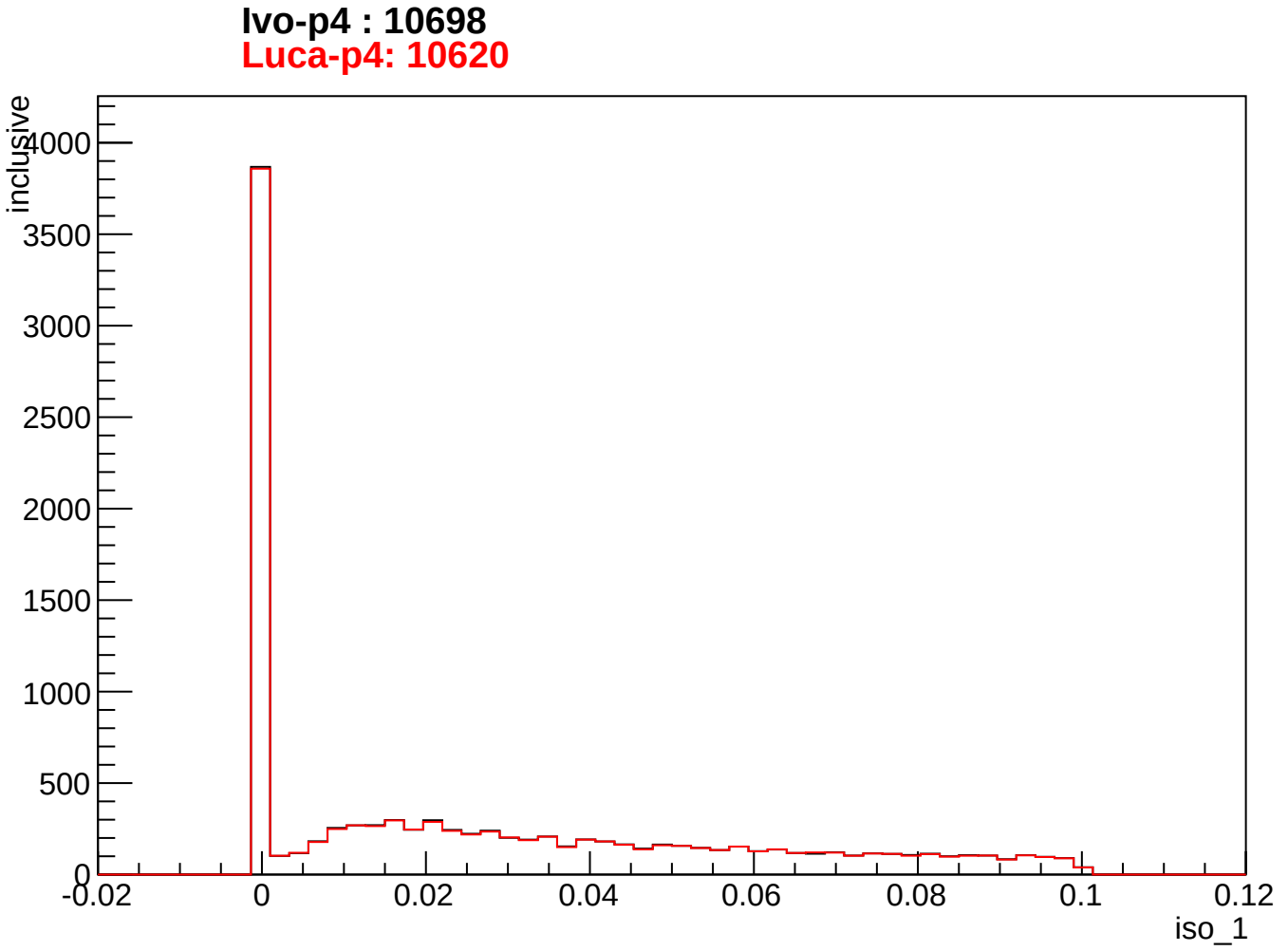

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
190
192
194
196
198
200
202
204
×10^3
run

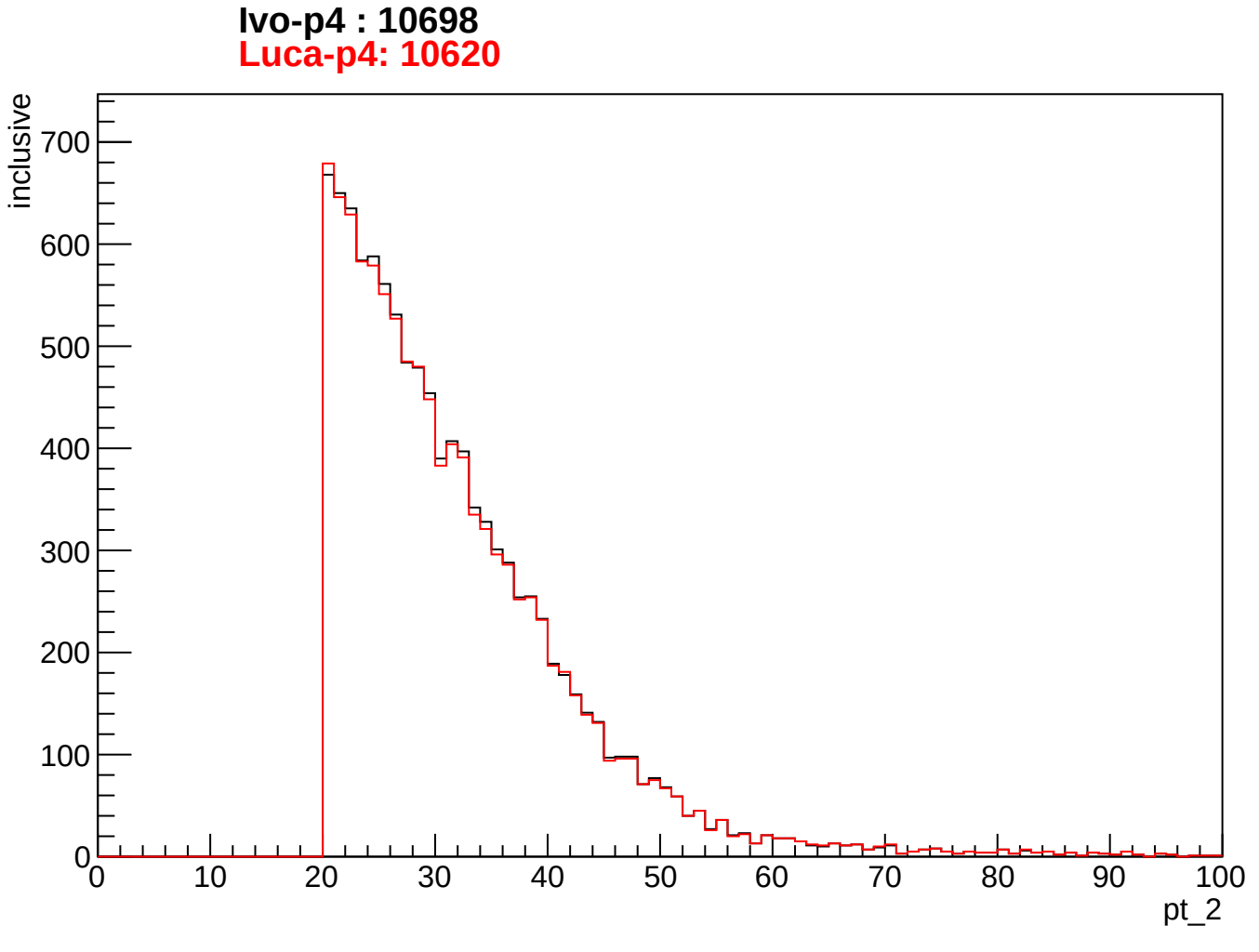

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
5
10
15
20
25
30
35
40
45
50
npu

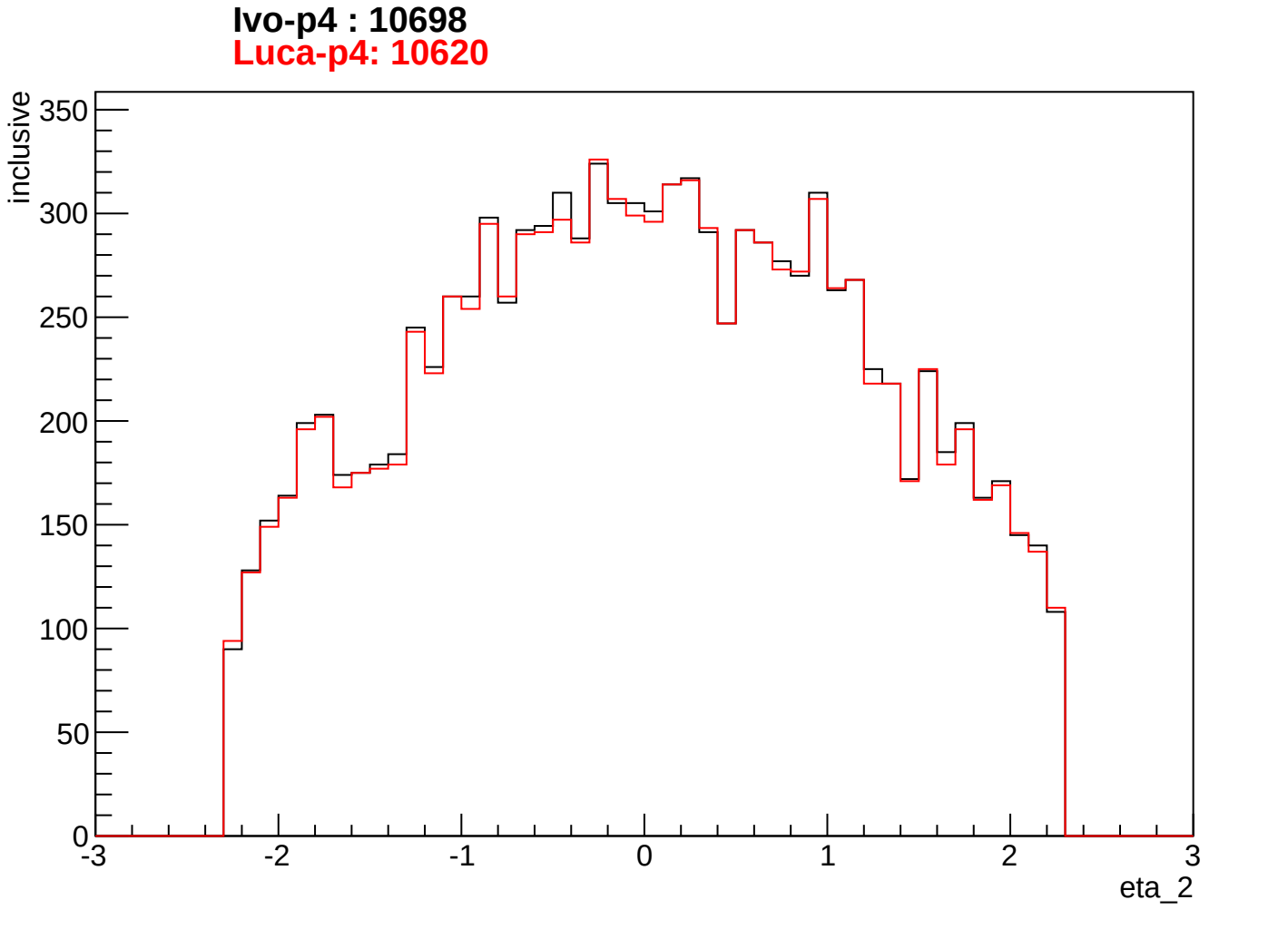

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
0
100
200
300
400
500
600
700
0
5
10
15
20
25
30
35
40
45
50
npv

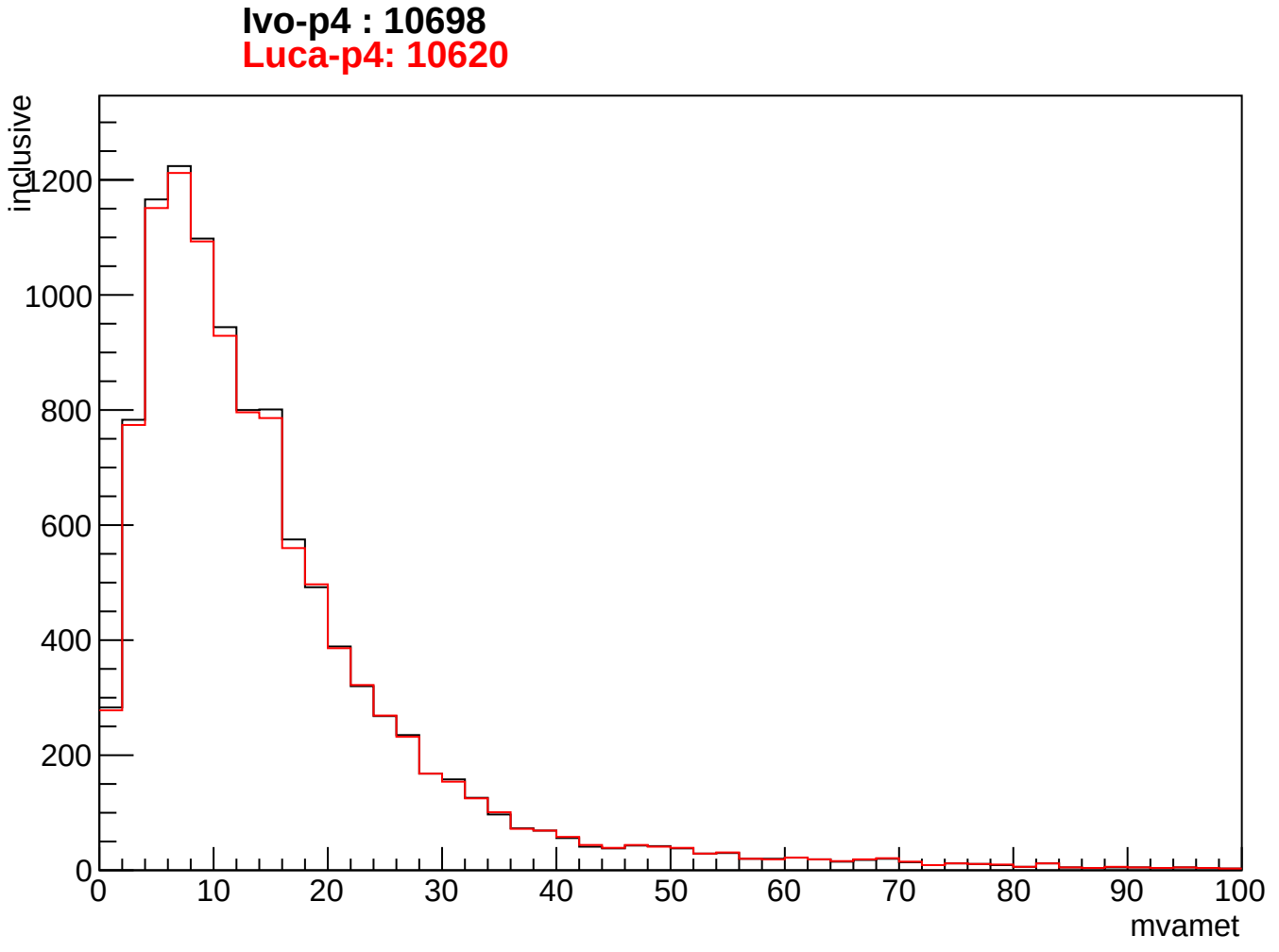

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1000
800
600
400
200
0
0
10
20
30
40
50
60
70
80
90
100
pt_1

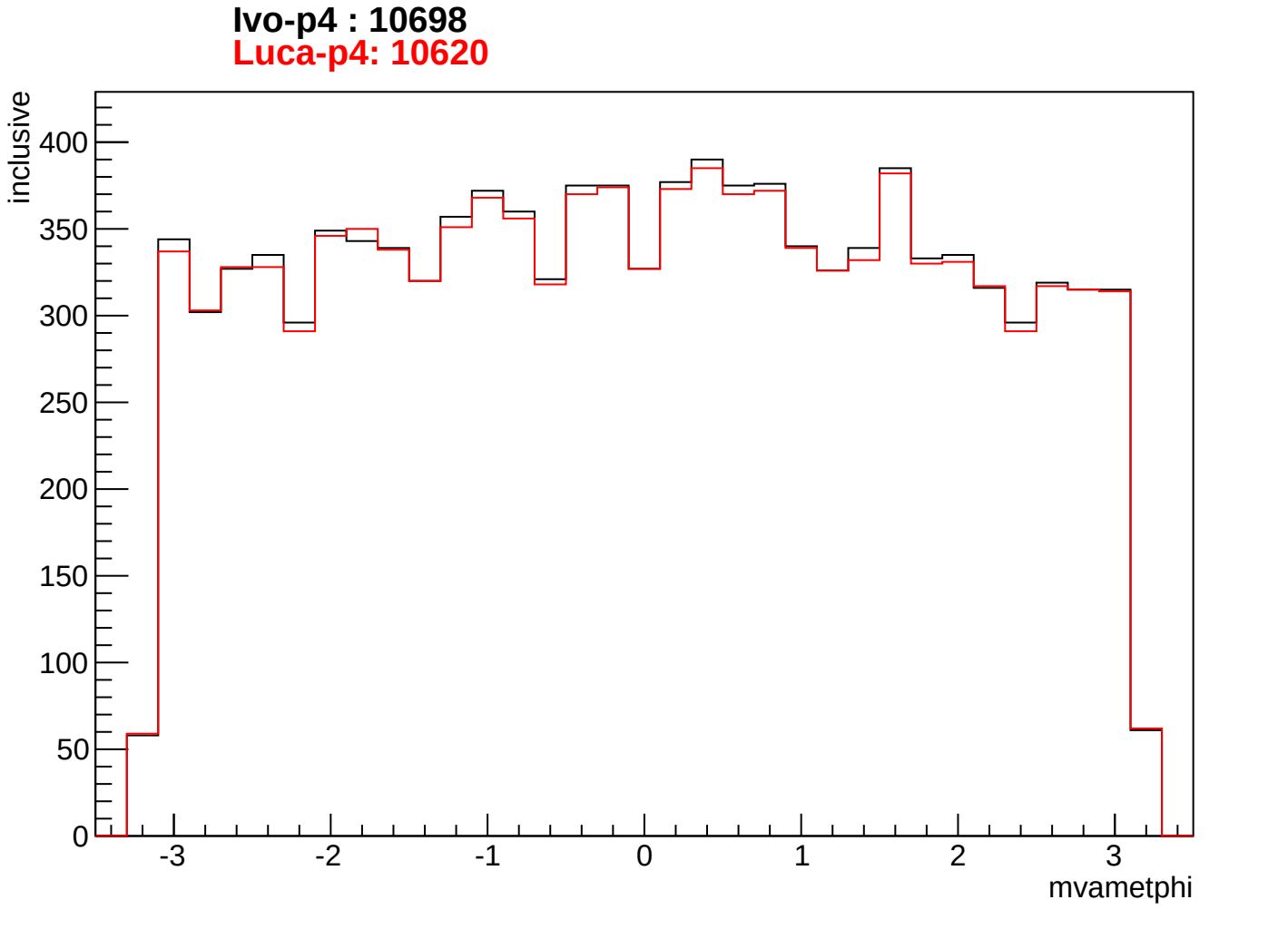

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
350
300
250
200
150
100
50
0
-3
-2
-1
0
1
2
3
eta_1

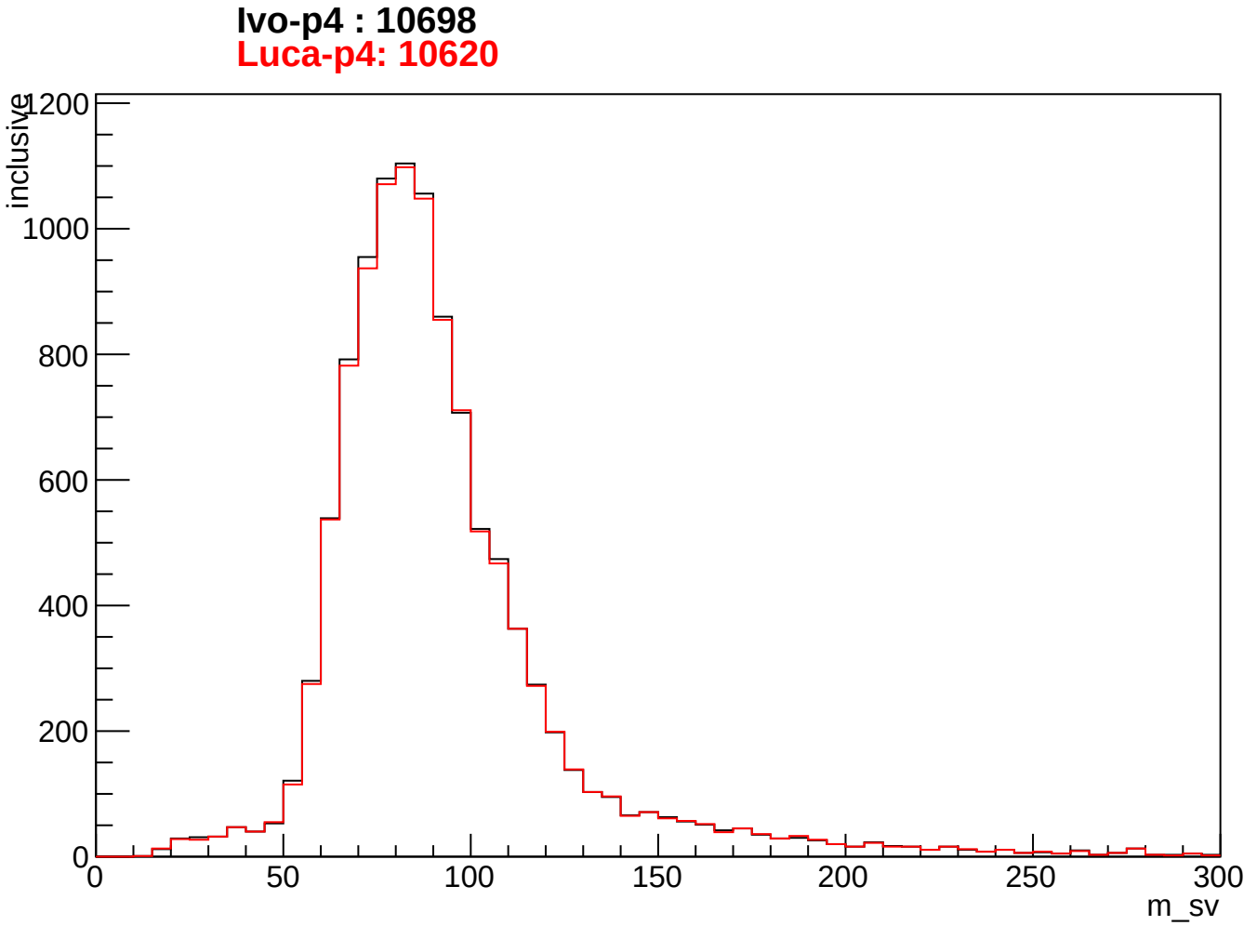

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
4000
3500
3000
2500
2000
1500
1000
500
0
-0.02
0
0.02
0.04
0.06
0.08
0.1
0.12
iso_1

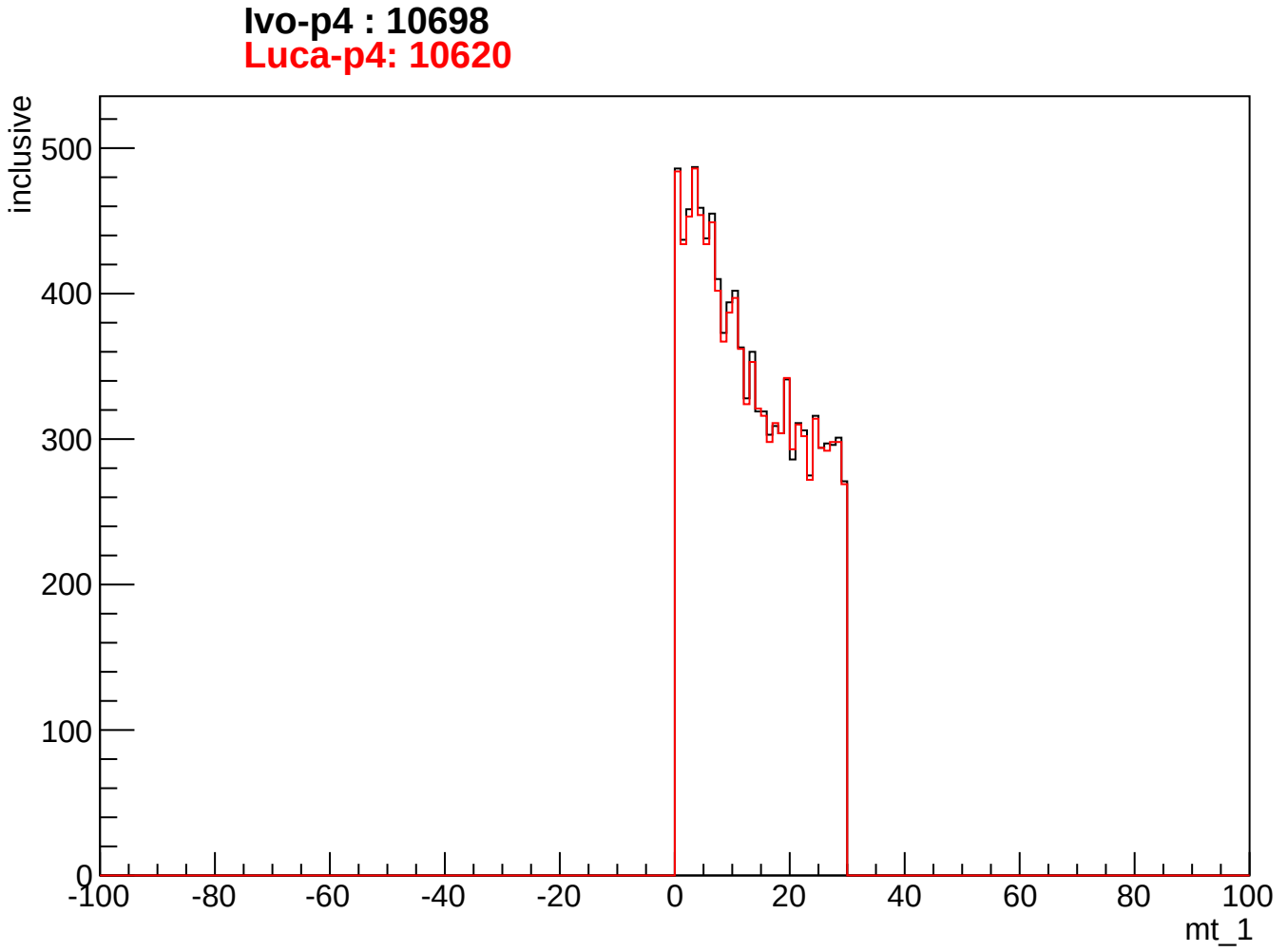

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
0
100
200
300
400
500
600
700
0
10
20
30
40
50
60
70
80
90
100
pt_2

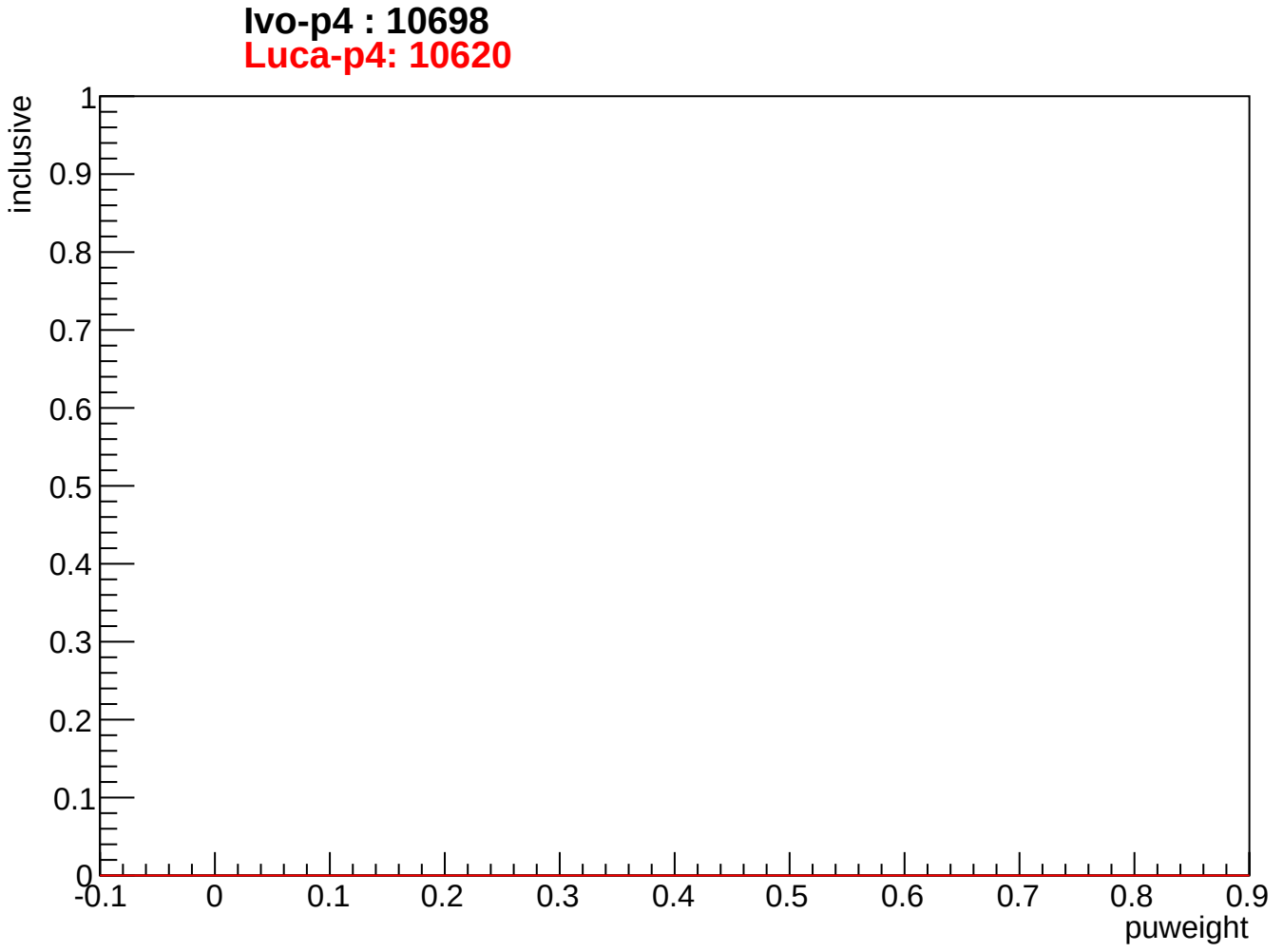

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
350
300
250
200
150
100
50
0
-3
-2
-1
0
1
2
3
eta_2

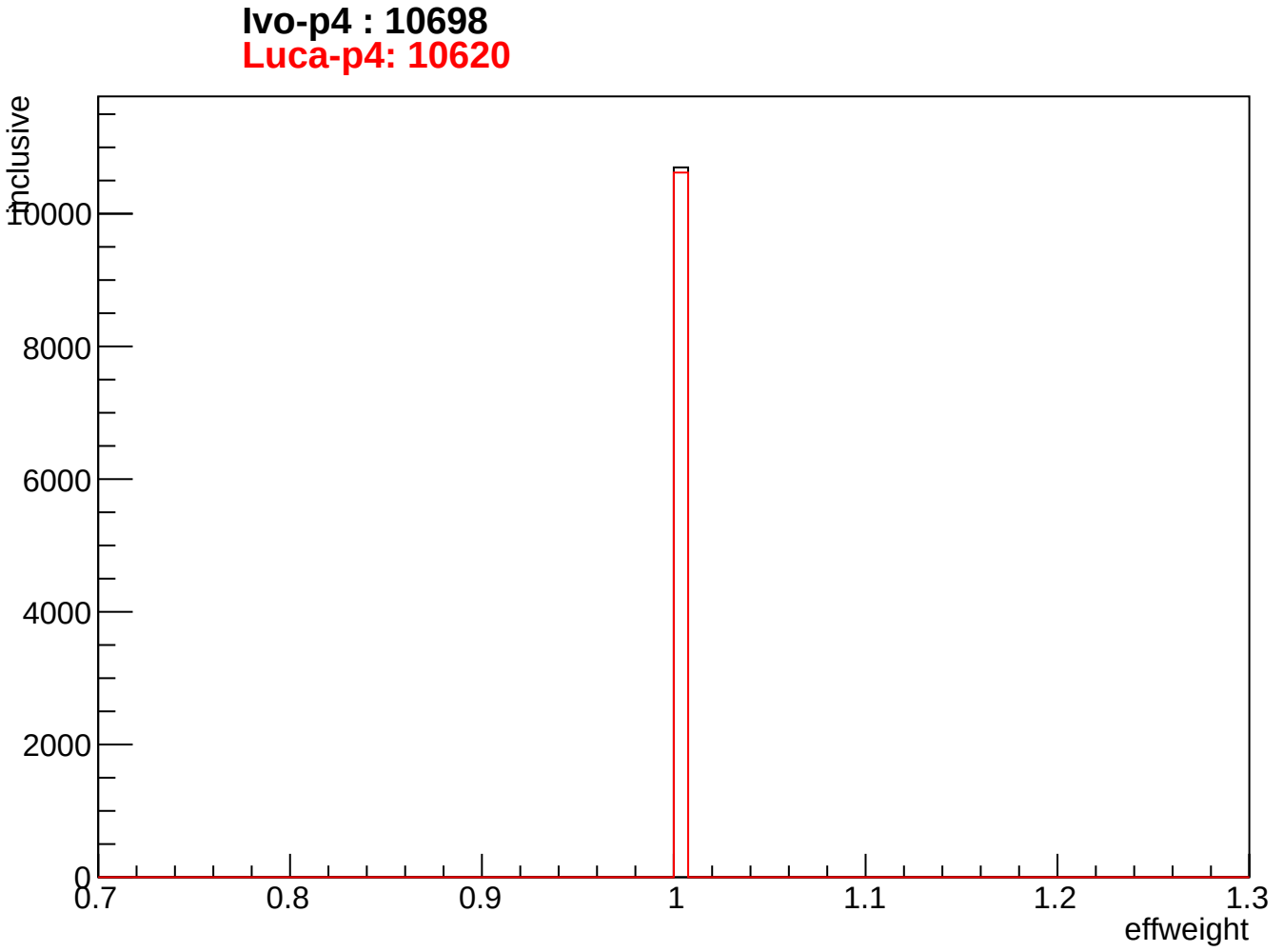

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1200
1000
800
600
400
200
0
0
10
20
30
40
50
60
70
80
90
100
mvamet

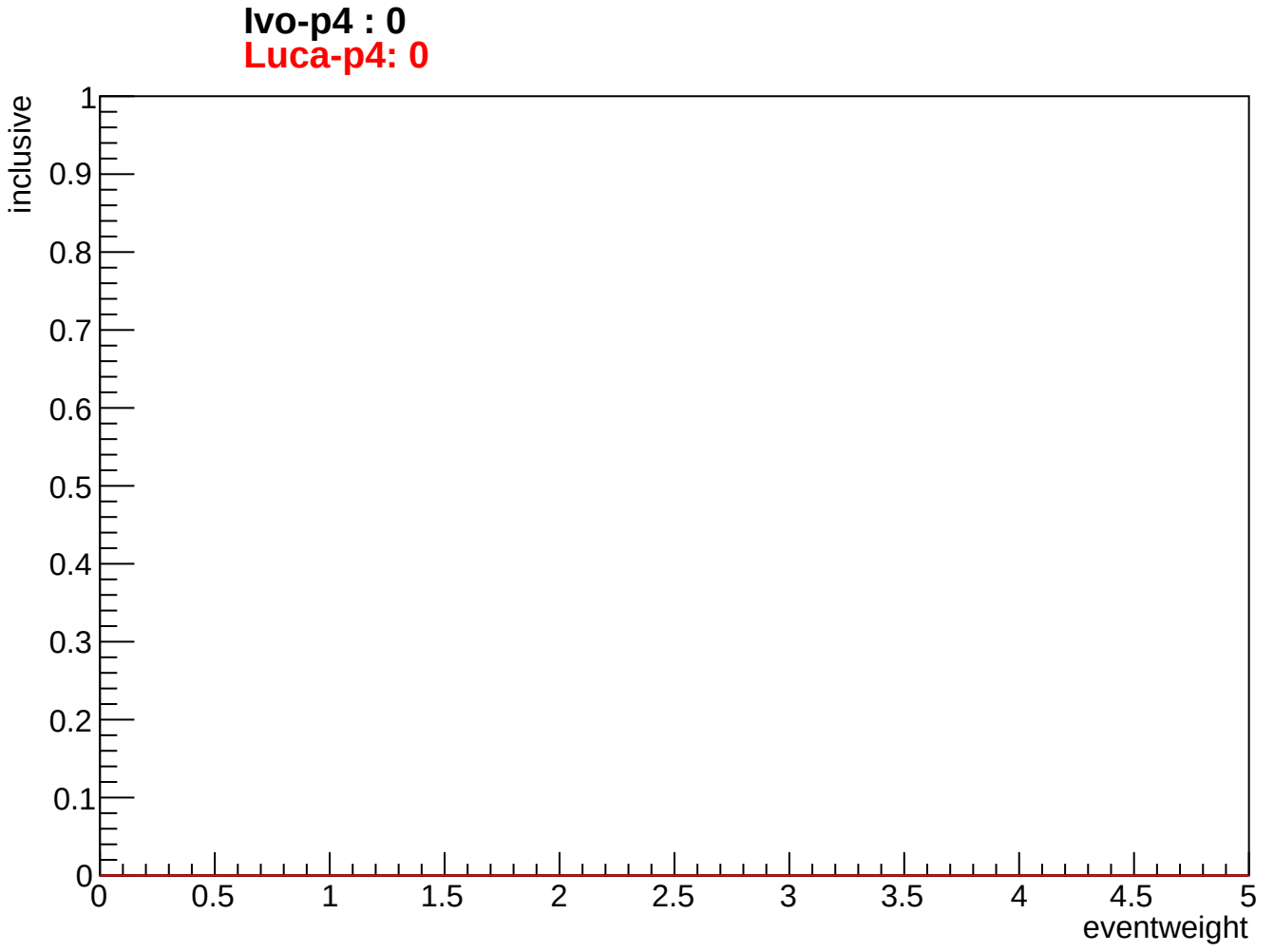

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
400
350
300
250
200
150
100
50
0
-3
-2
-1
0
1
2
3
mvametphi

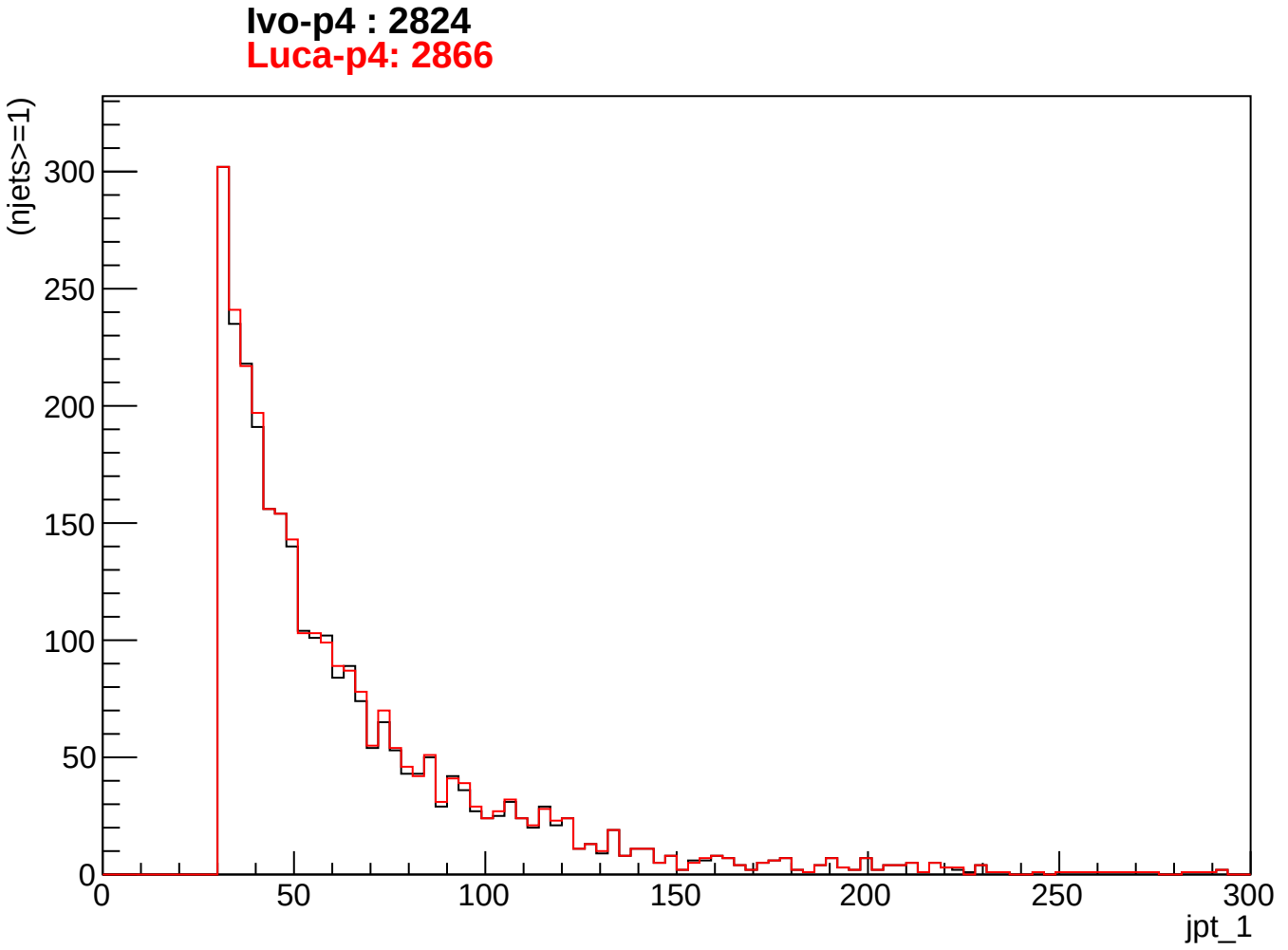

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
m_sv

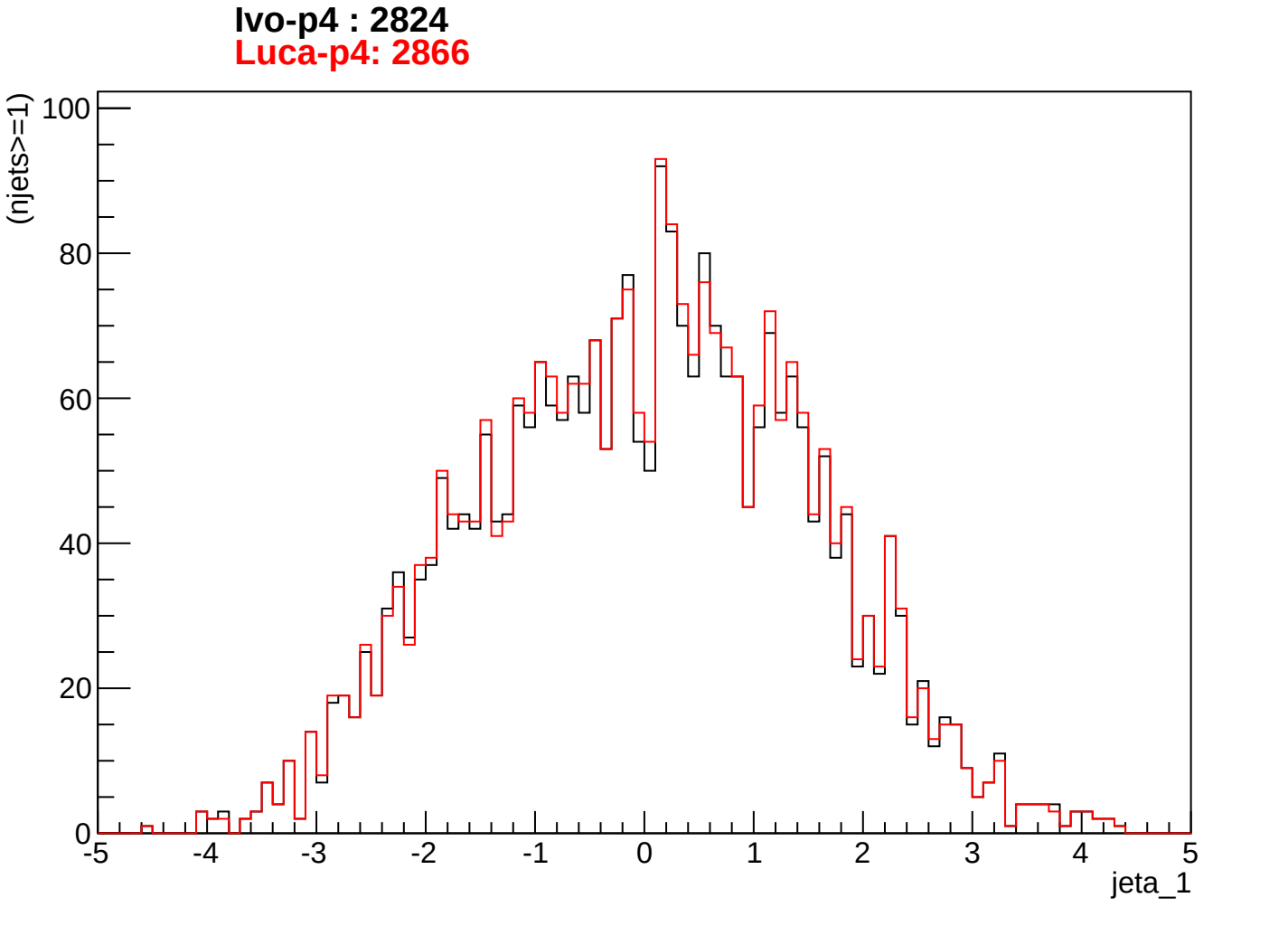

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
500
400
300
200
100
0
-100
-80
-60
-40
-20
0
20
40
60
80
100
mt_1

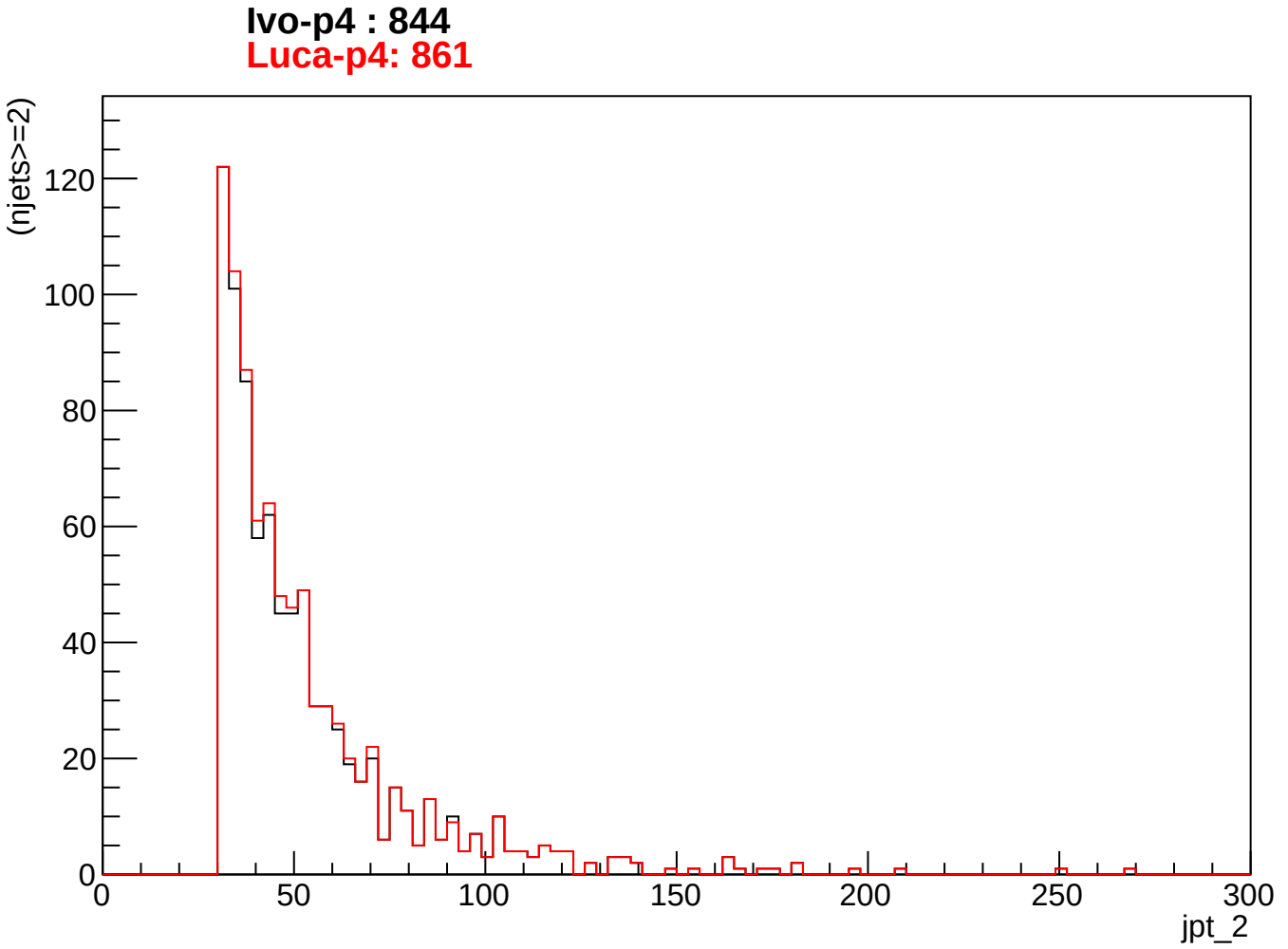

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
puweight

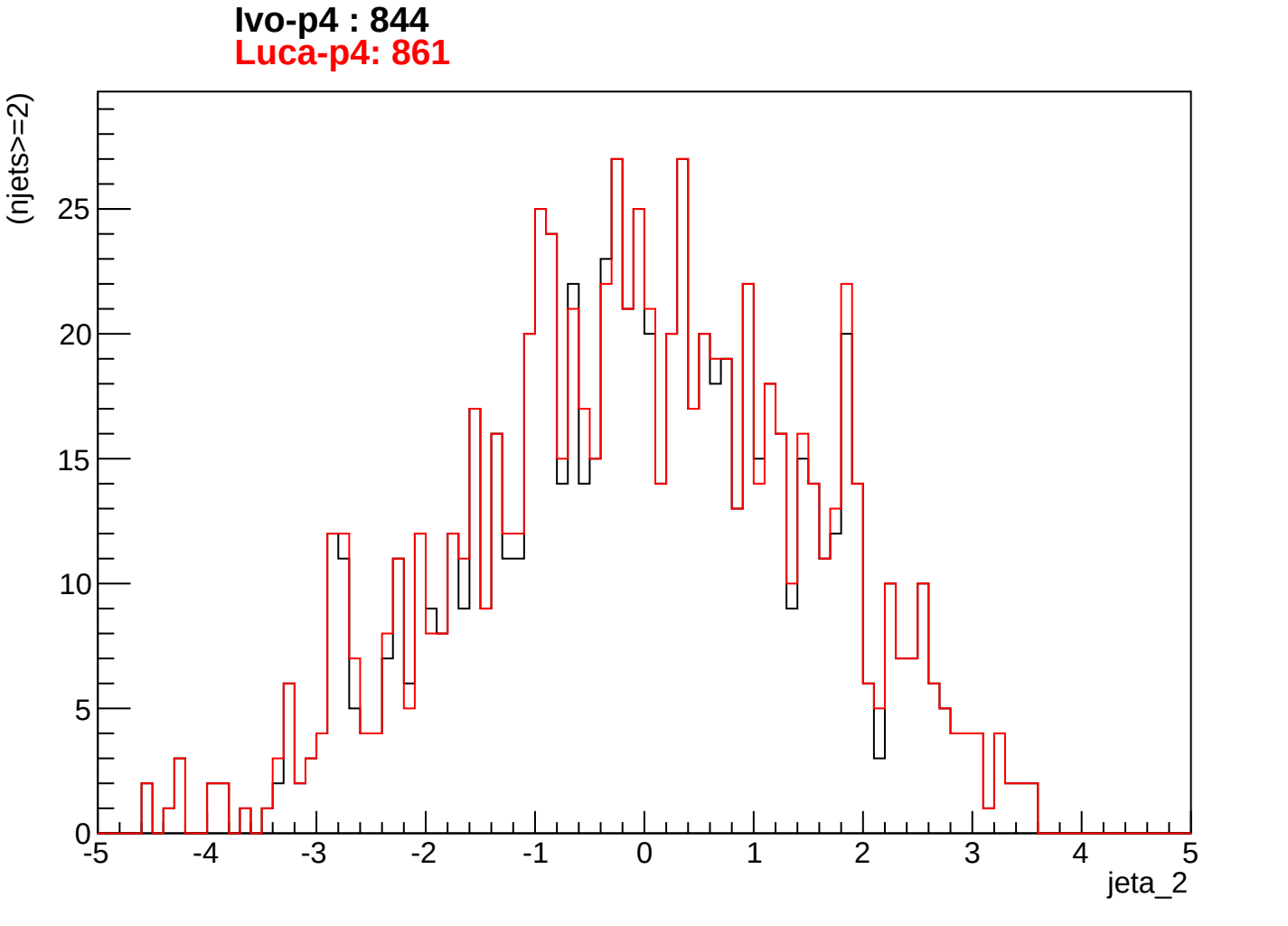

Ivo-p4 : 10698
Luca-p4: 10620
inclusive
10000
8000
6000
4000
2000
0
0.7
0.8
0.9
1
1.1
1.2
1.3
effweight

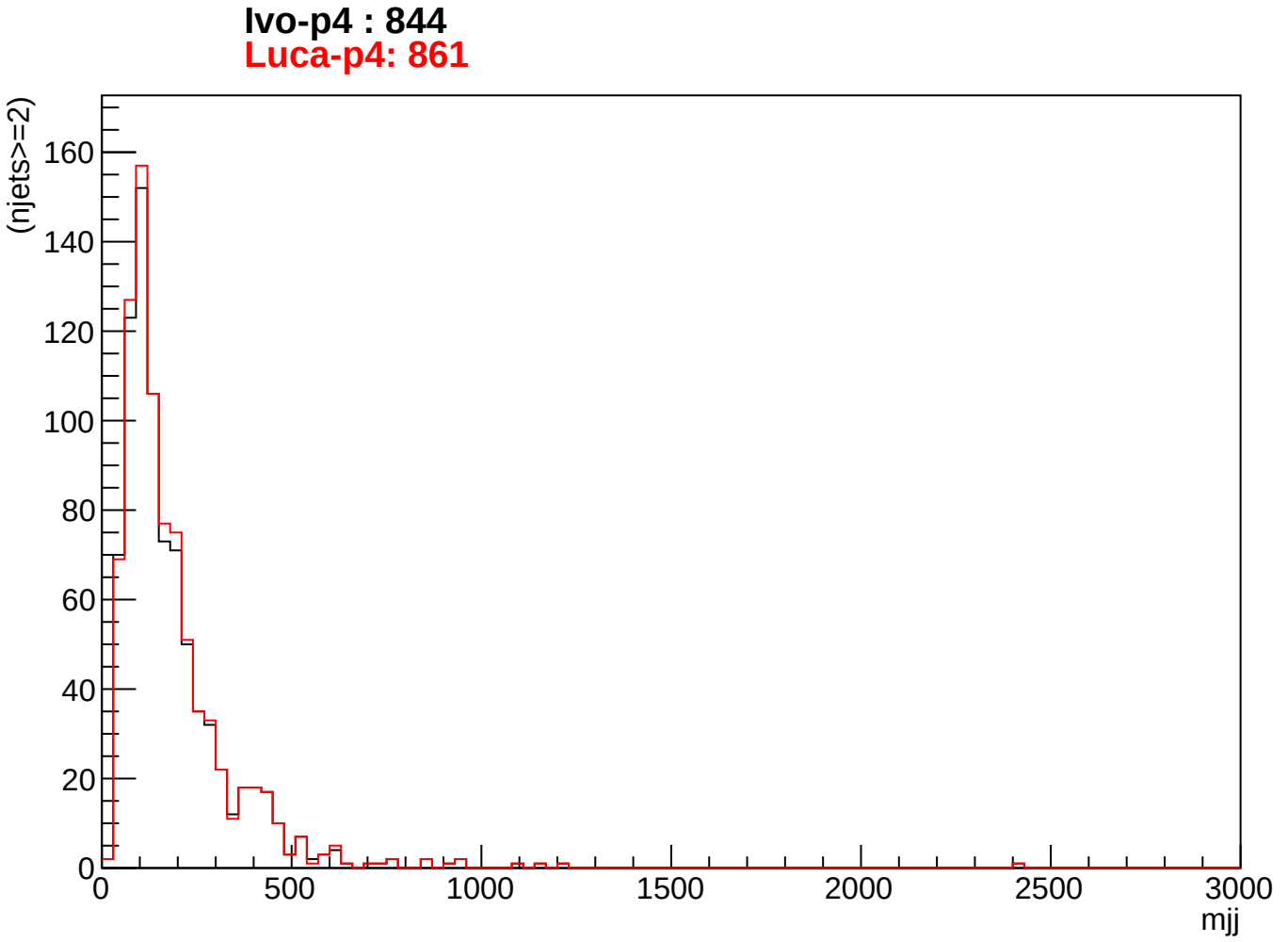

Ivo-p4 : 0
Luca-p4: 0
inclusive
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
eventweight

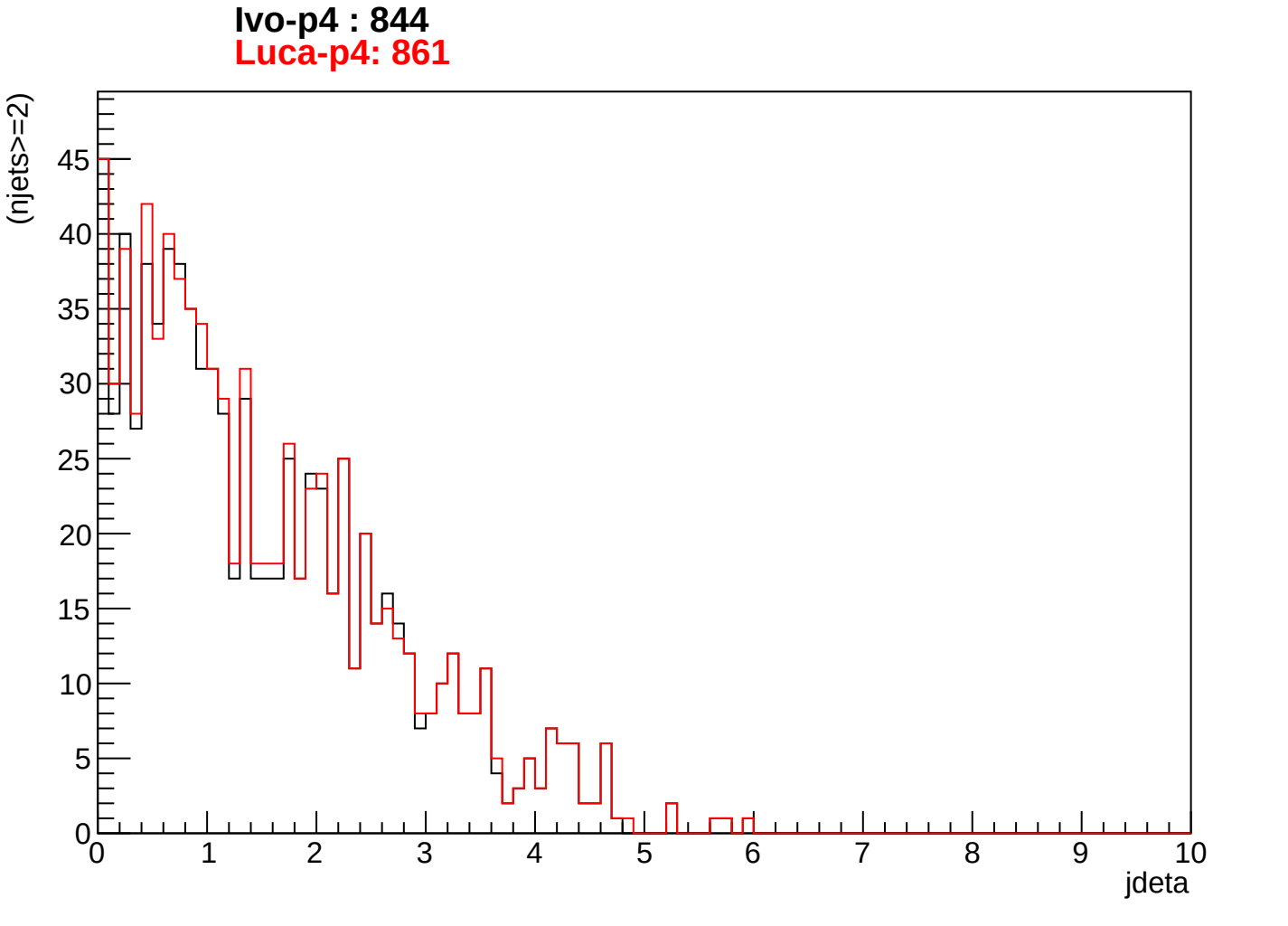

Ivo-p4 : 2824
Luca-p4: 2866
(njets>=1)
0
50
100
150
200
250
300
jpt_1

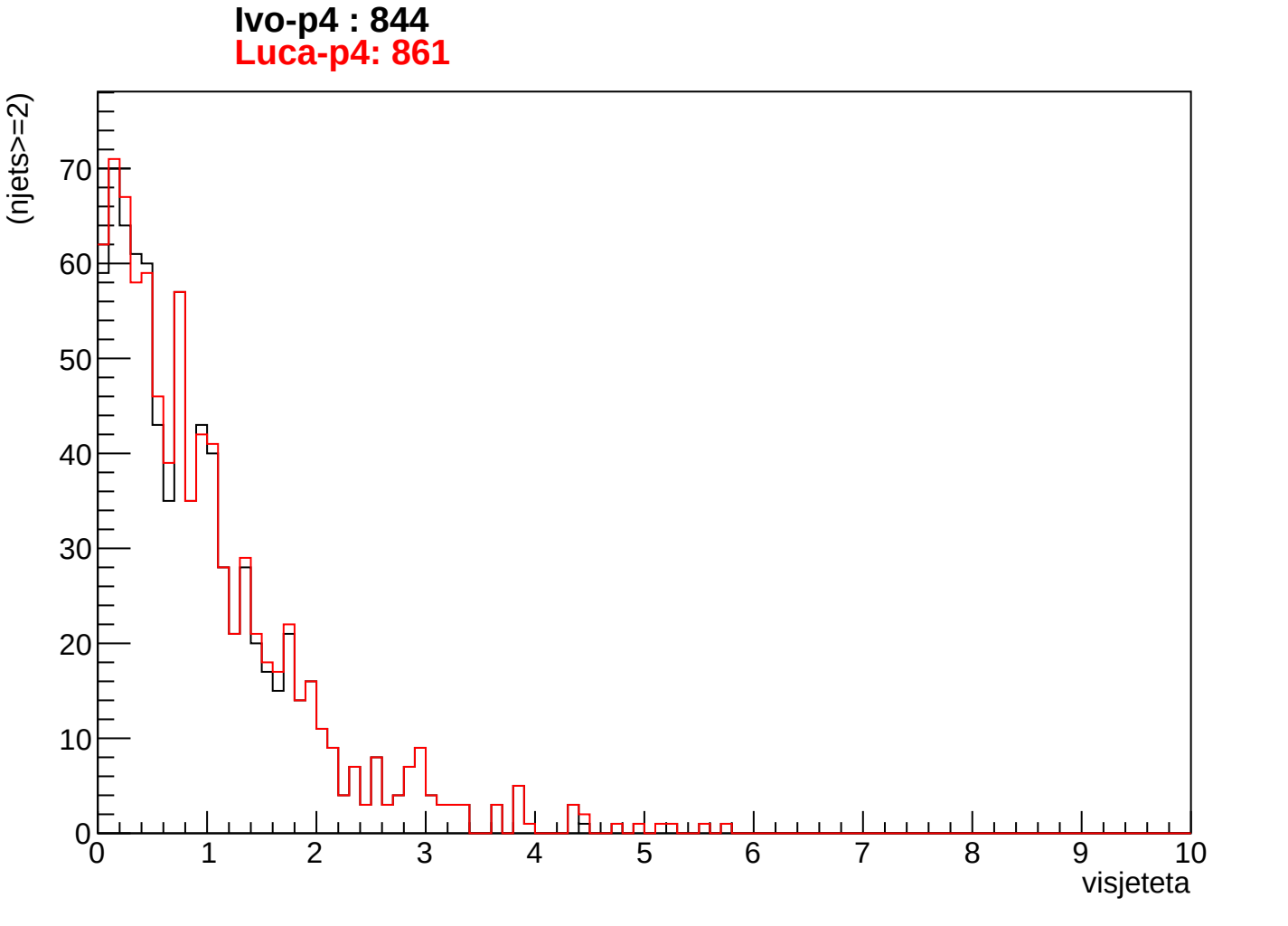

Ivo-p4 : 2824
Luca-p4: 2866
(njets>=1)
100
80
60
40
20
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
jeta_1

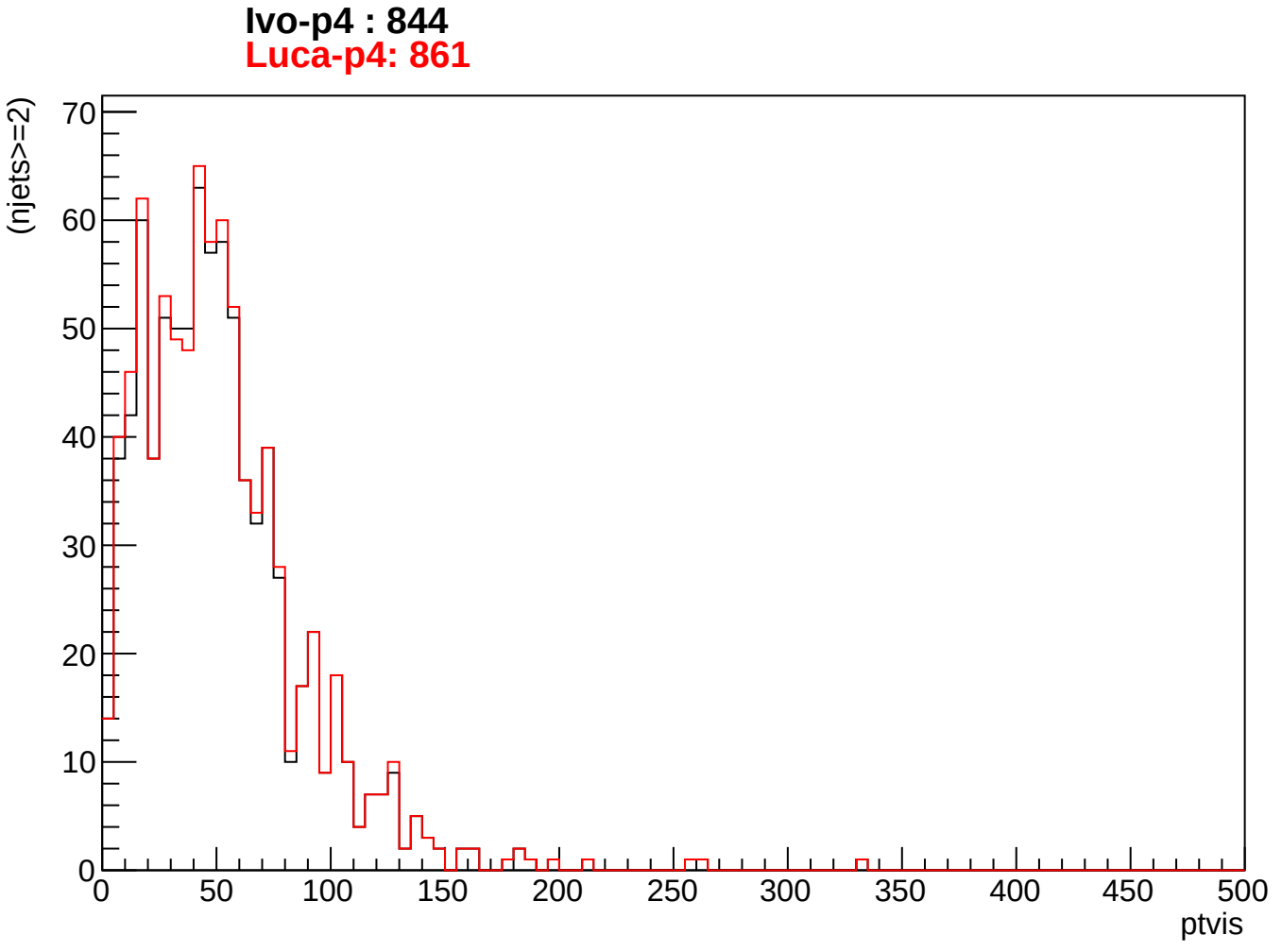

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
0
20
40
60
80
100
120
0
50
100
150
200
250
300
jpt_2

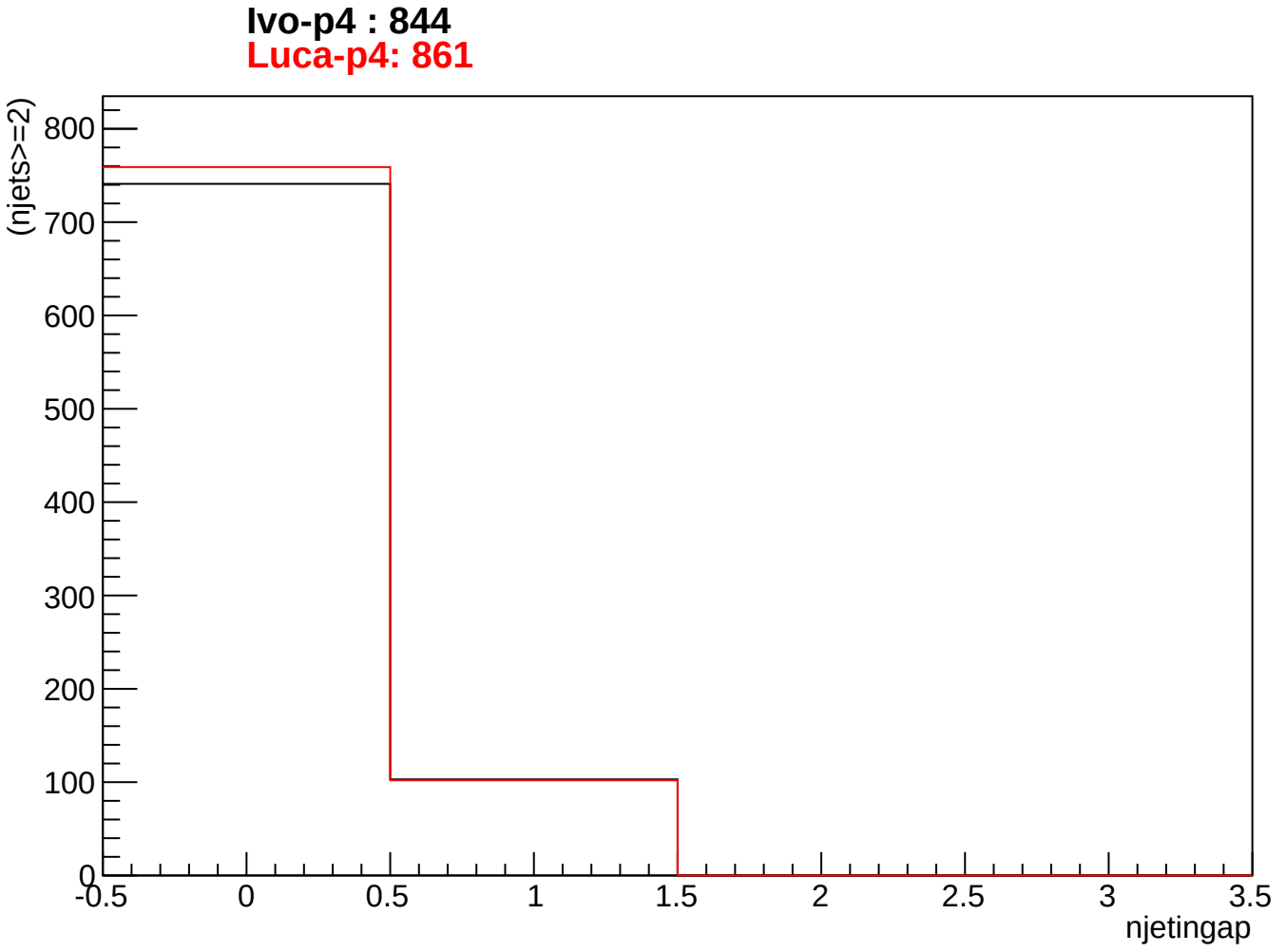

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
25
20
15
10
5
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
jeta_2

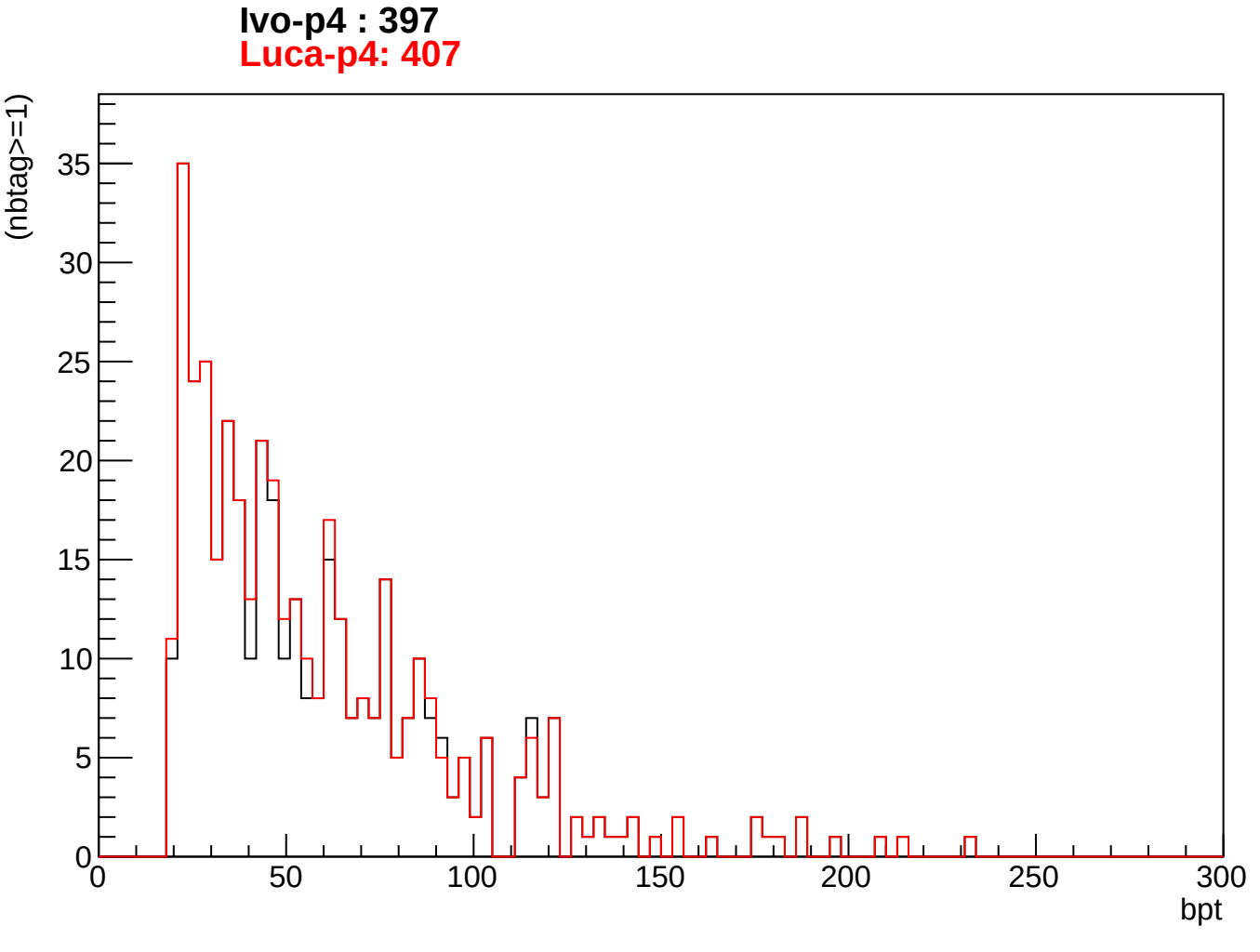

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
0
20
40
60
80
100
120
140
160
0
500
1000
1500
2000
2500
3000
mjj

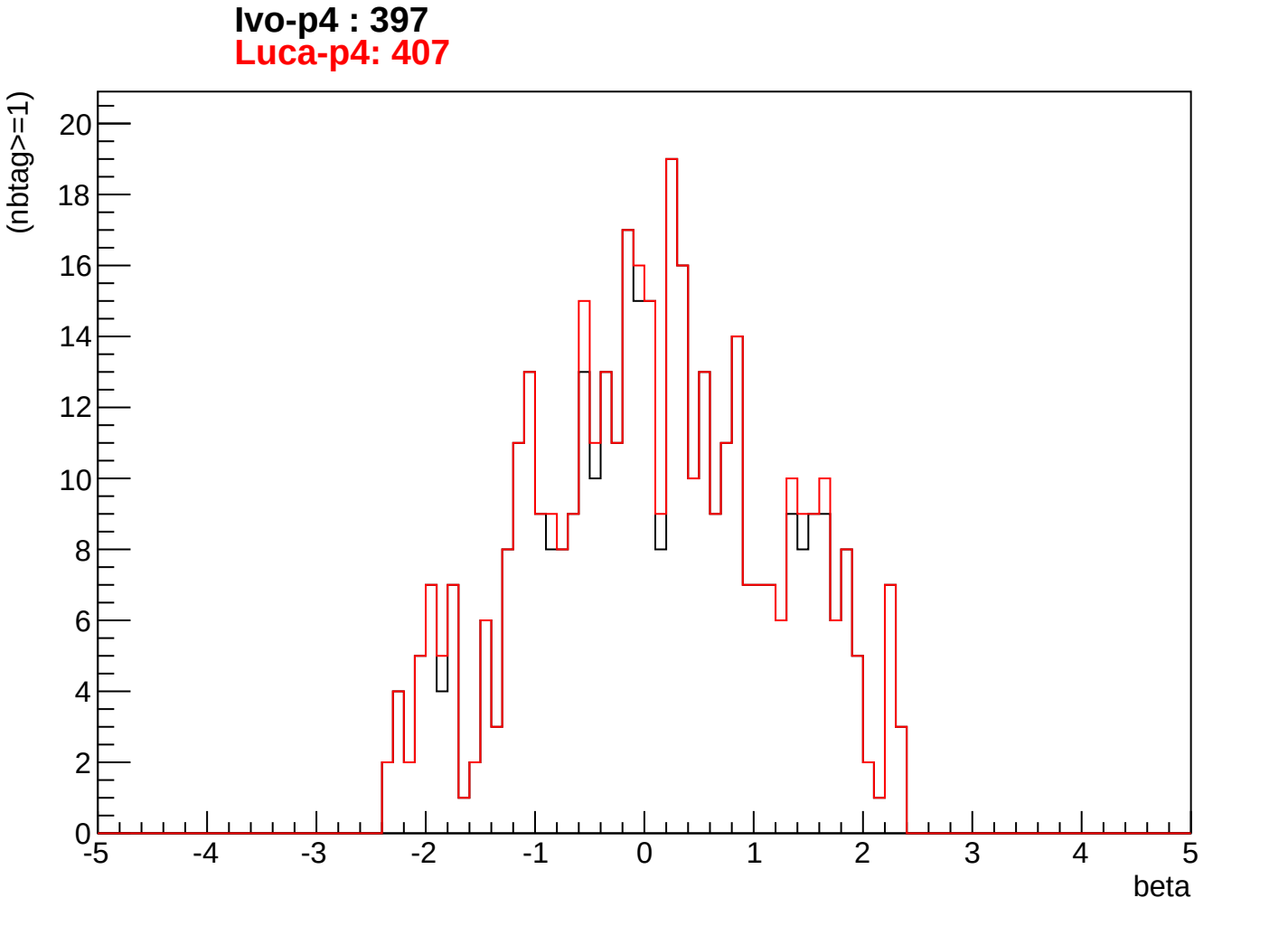

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
0
5
10
15
20
25
30
35
40
45
0
1
2
3
4
5
6
7
8
9
10
jdeta

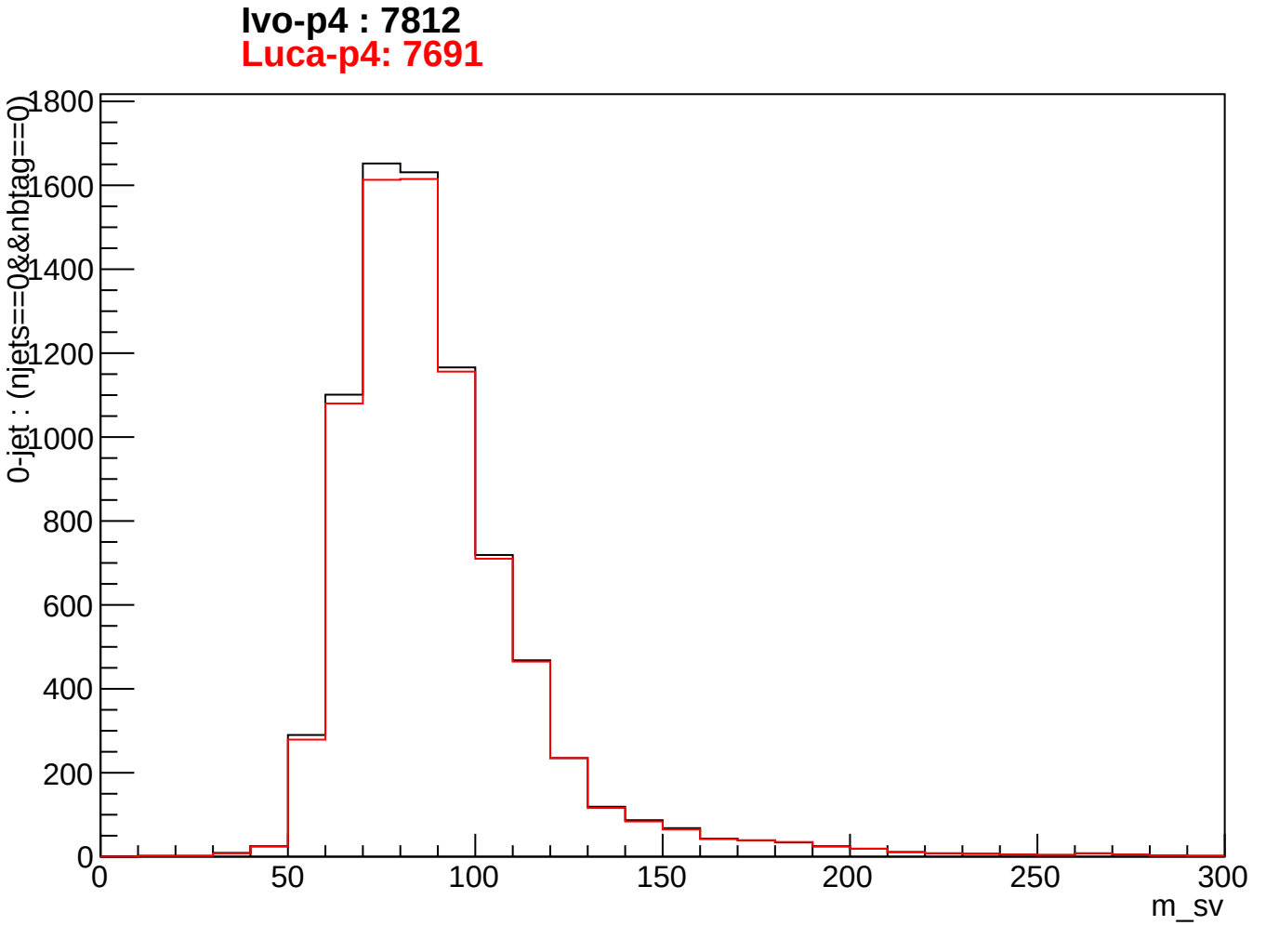

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
0
10
20
30
40
50
60
70
0
1
2
3
4
5
6
7
8
9
10
visjeteta

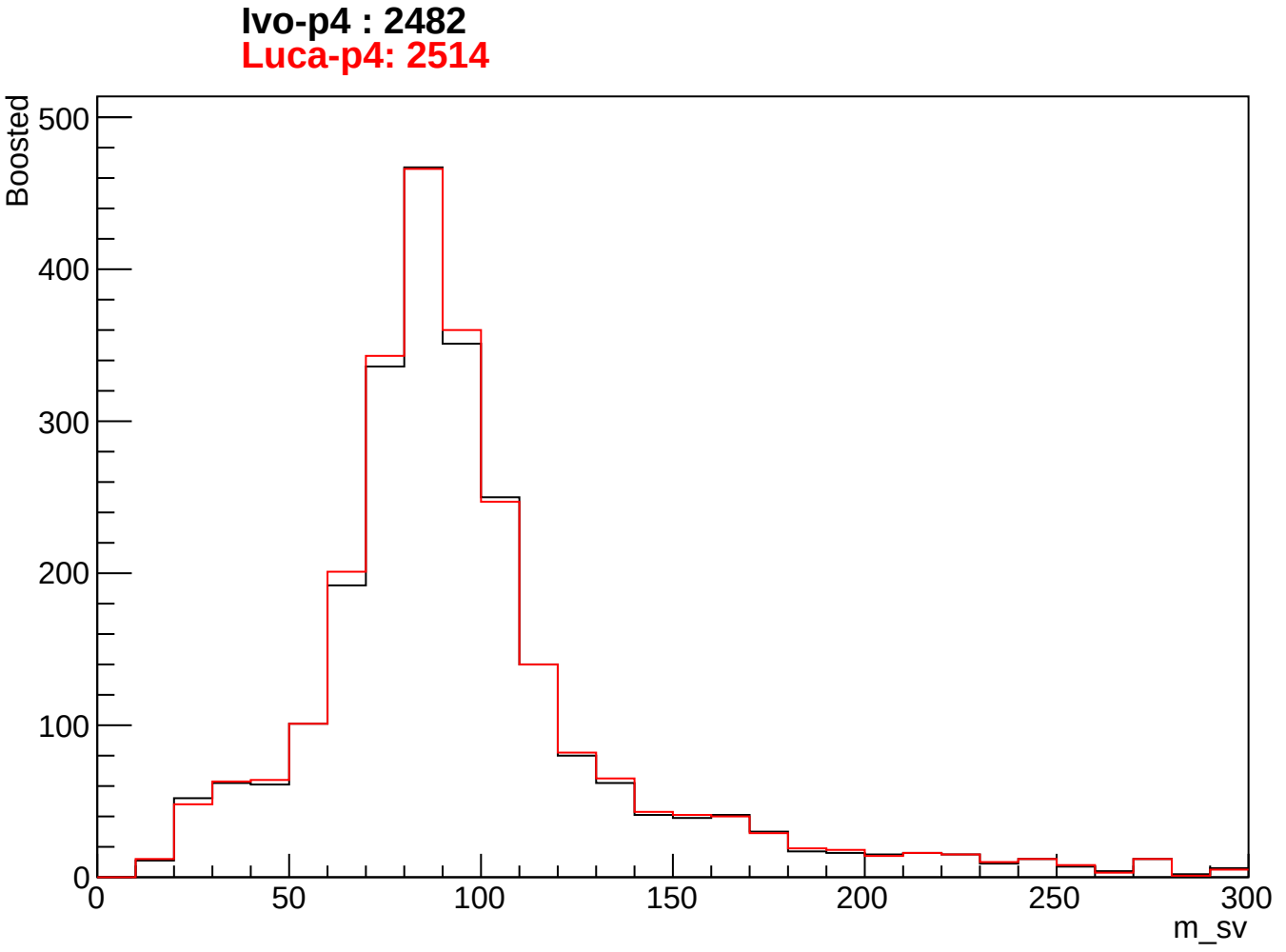

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
0
10
20
30
40
50
60
70
0
50
100
150
200
250
300
350
400
450
500
ptvis

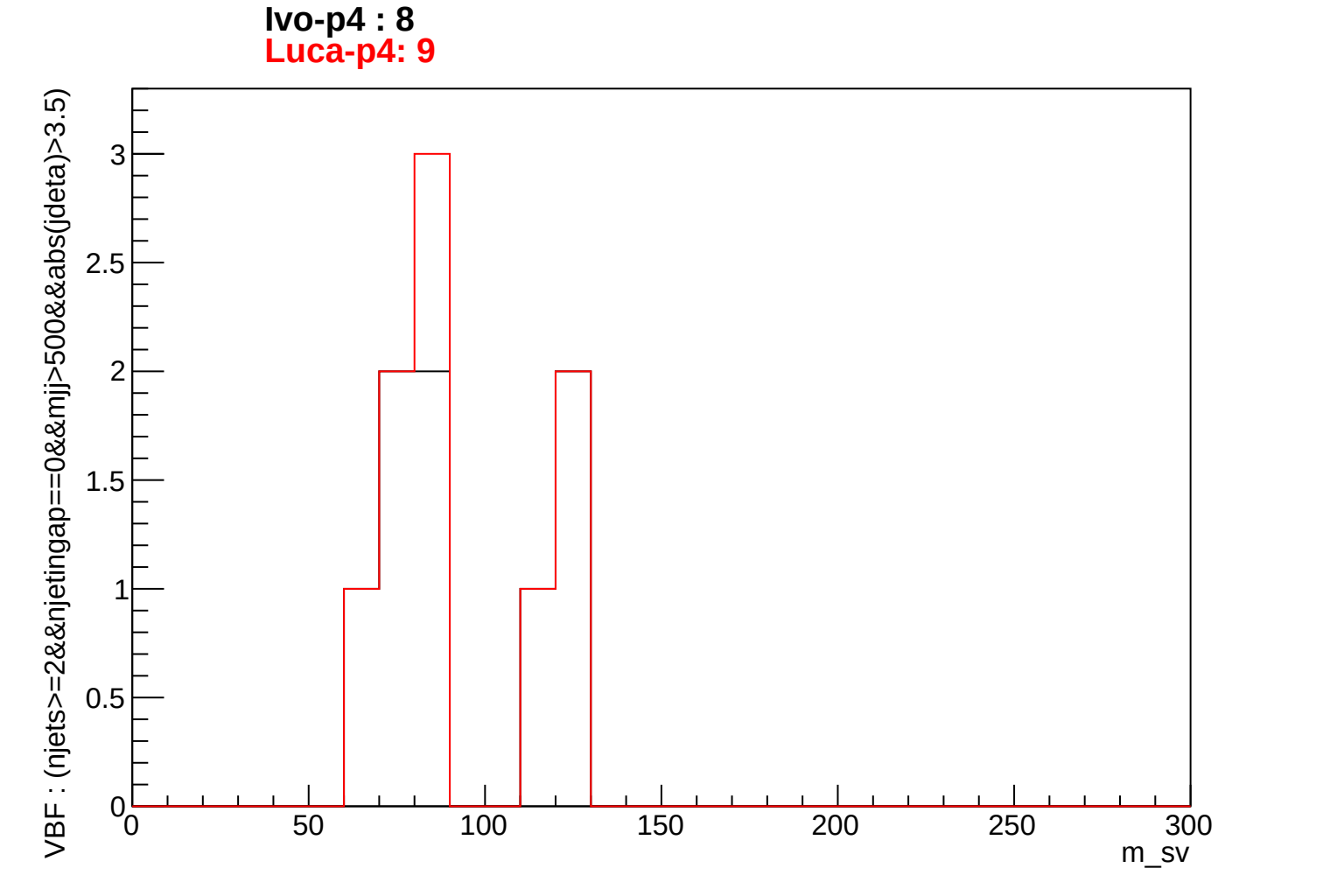

Ivo-p4 : 844
Luca-p4: 861
(njets>=2)
800
700
600
500
400
300
200
100
0
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
njetingap

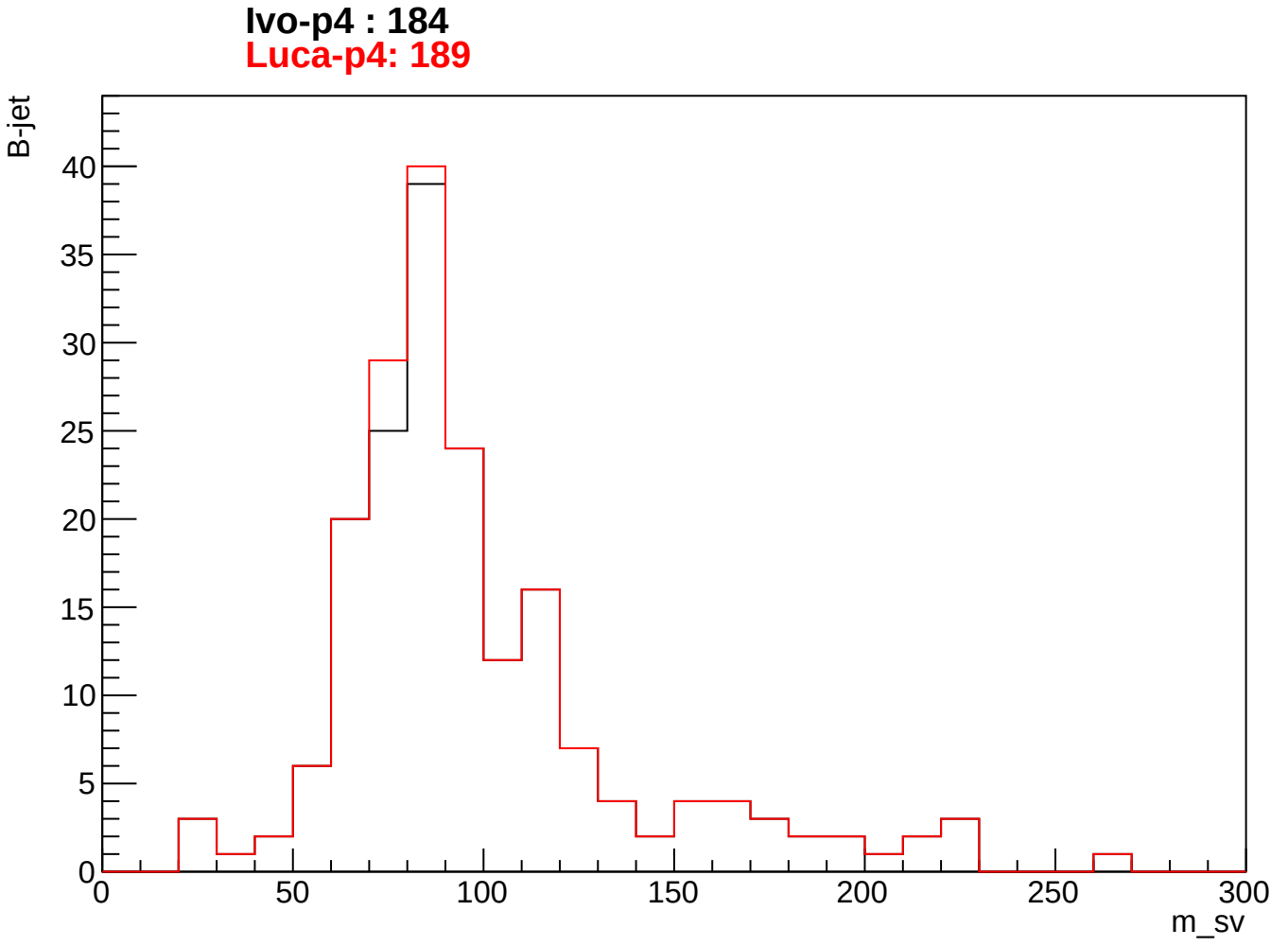

Ivo-p4 : 397
Luca-p4: 407
(nbtag>=1)
0
5
10
15
20
25
30
35
0
50
100
150
200
250
300
bpt

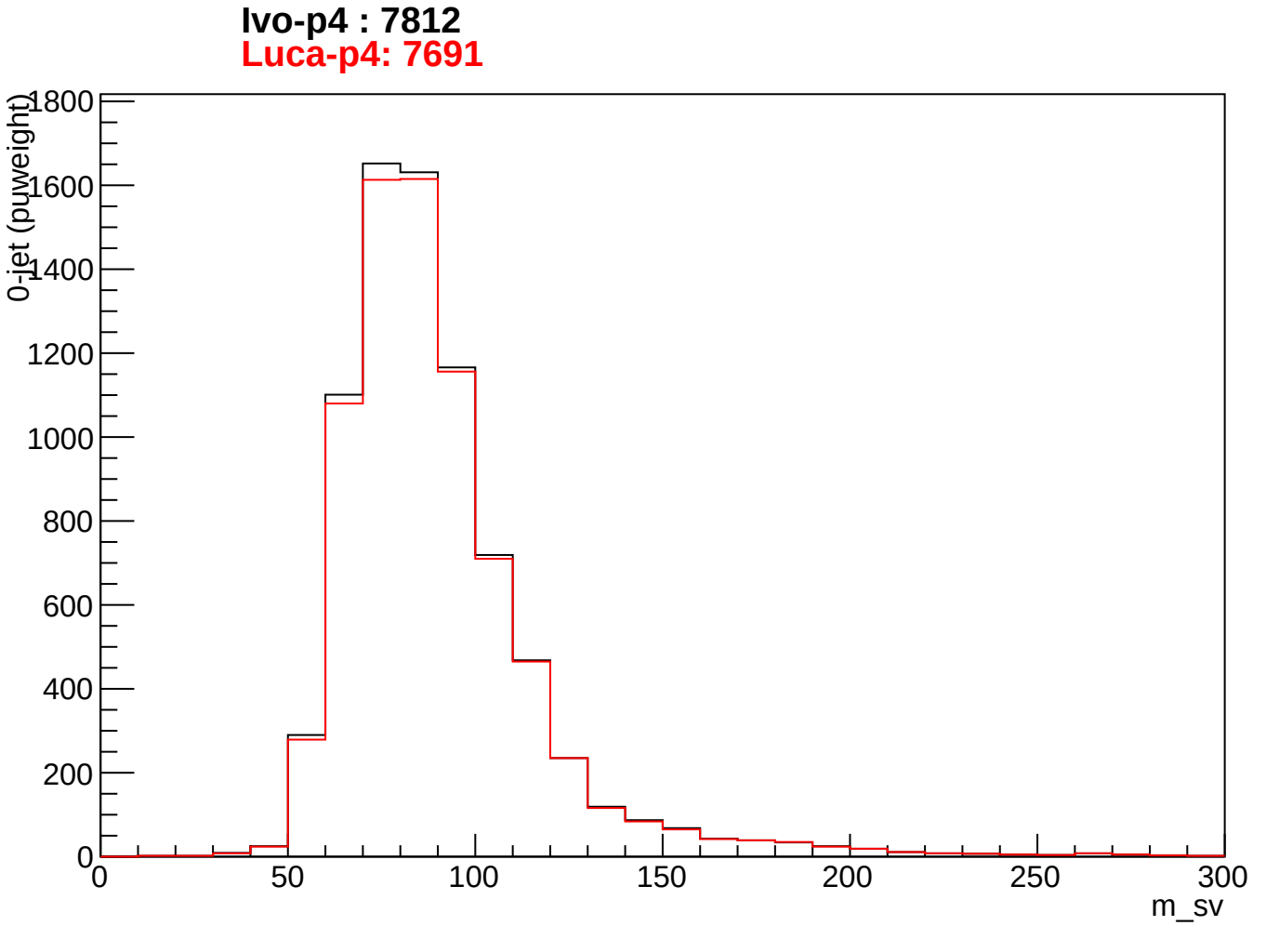

Ivo-p4 : 397
Luca-p4: 407
(nbtag>=1)
20
18
16
14
12
10
8
6
4
2
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
beta

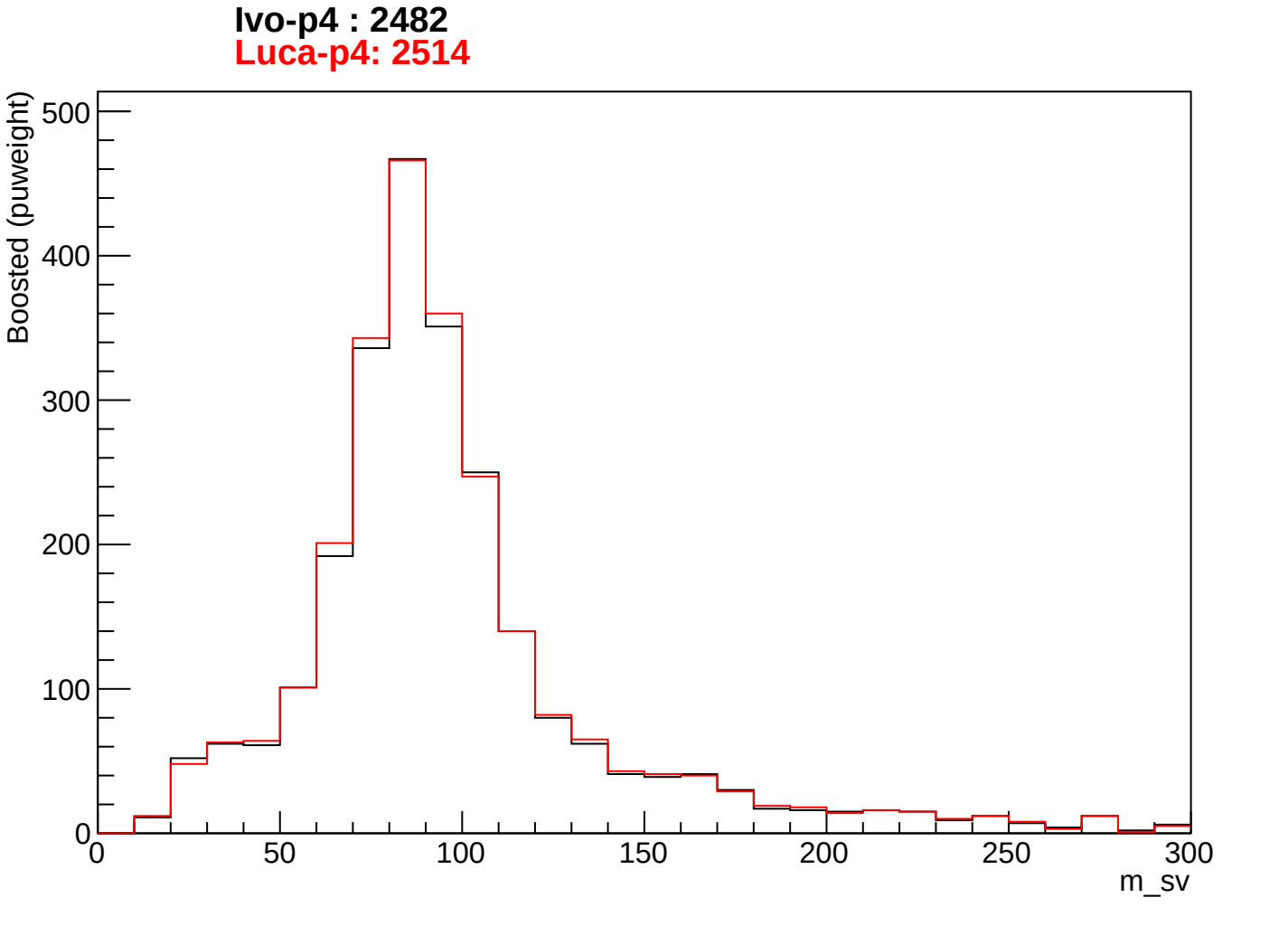

Ivo-p4 : 7812
Luca-p4: 7691
0-jet : (njets==0&&nbtag==0)
1800
1600
1400
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
m_sv

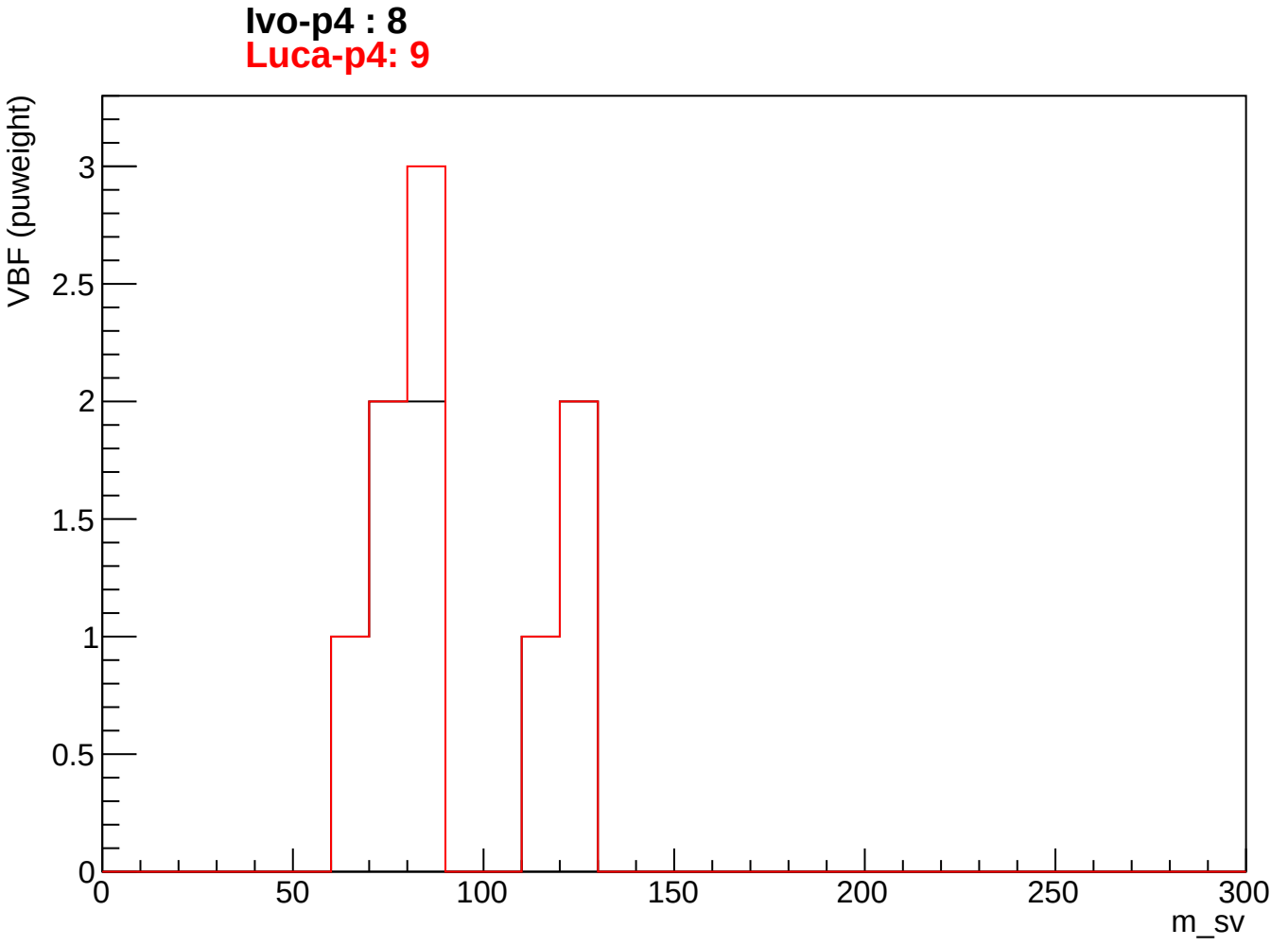

Ivo-p4 : 2482
Luca-p4: 2514
Boosted
500
400
300
200
100
0
0
50
100
150
200
250
300
m_sv

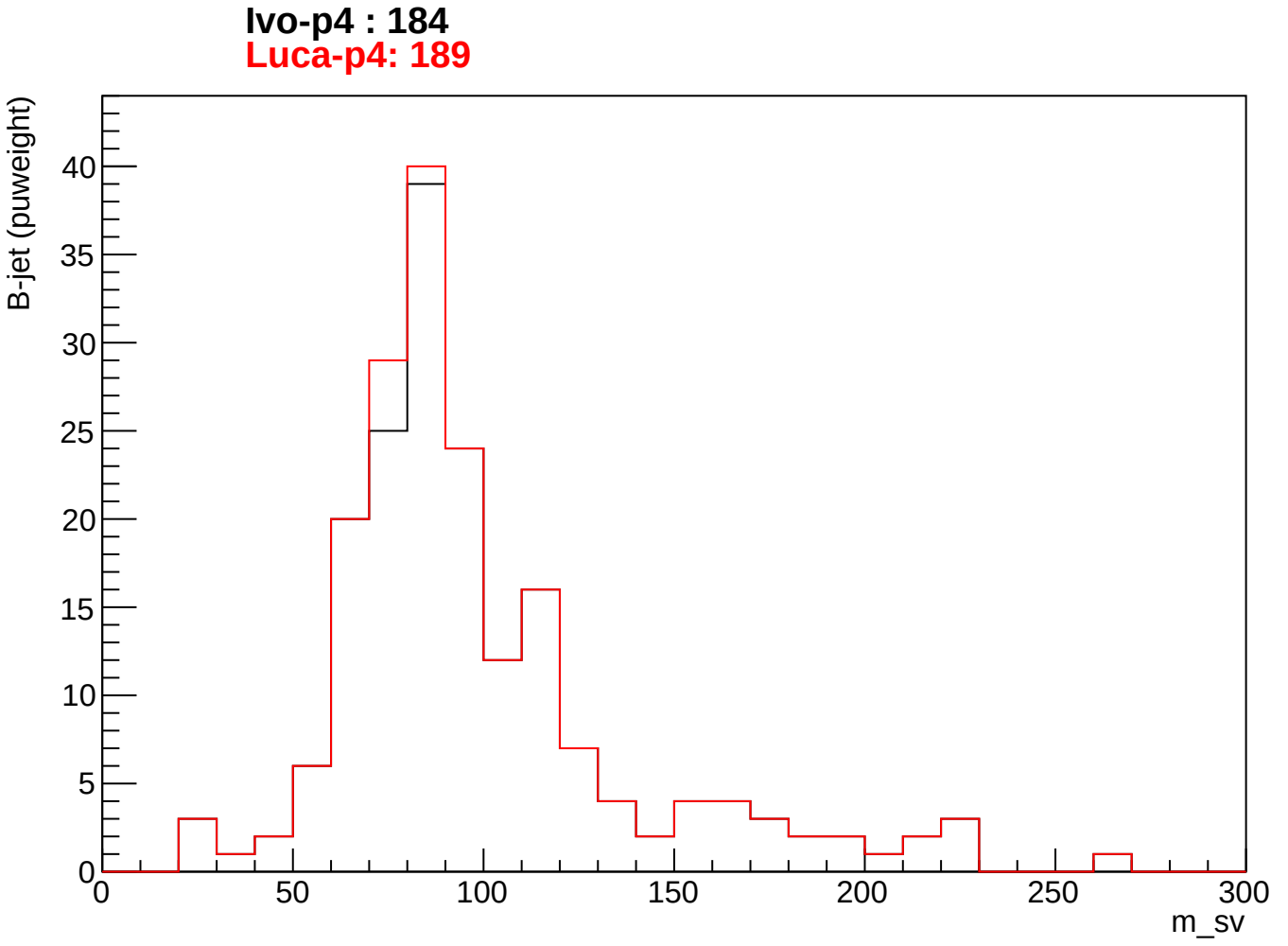

Ivo-p4 : 8
Luca-p4: 9
VBF : (njets>=2&&njetingap==0&&mjj>500&&abs(jdeta)>3.5)
m_sv
0
0.5
1
1.5
2
2.5
3
0
50
100
150
200
250
300

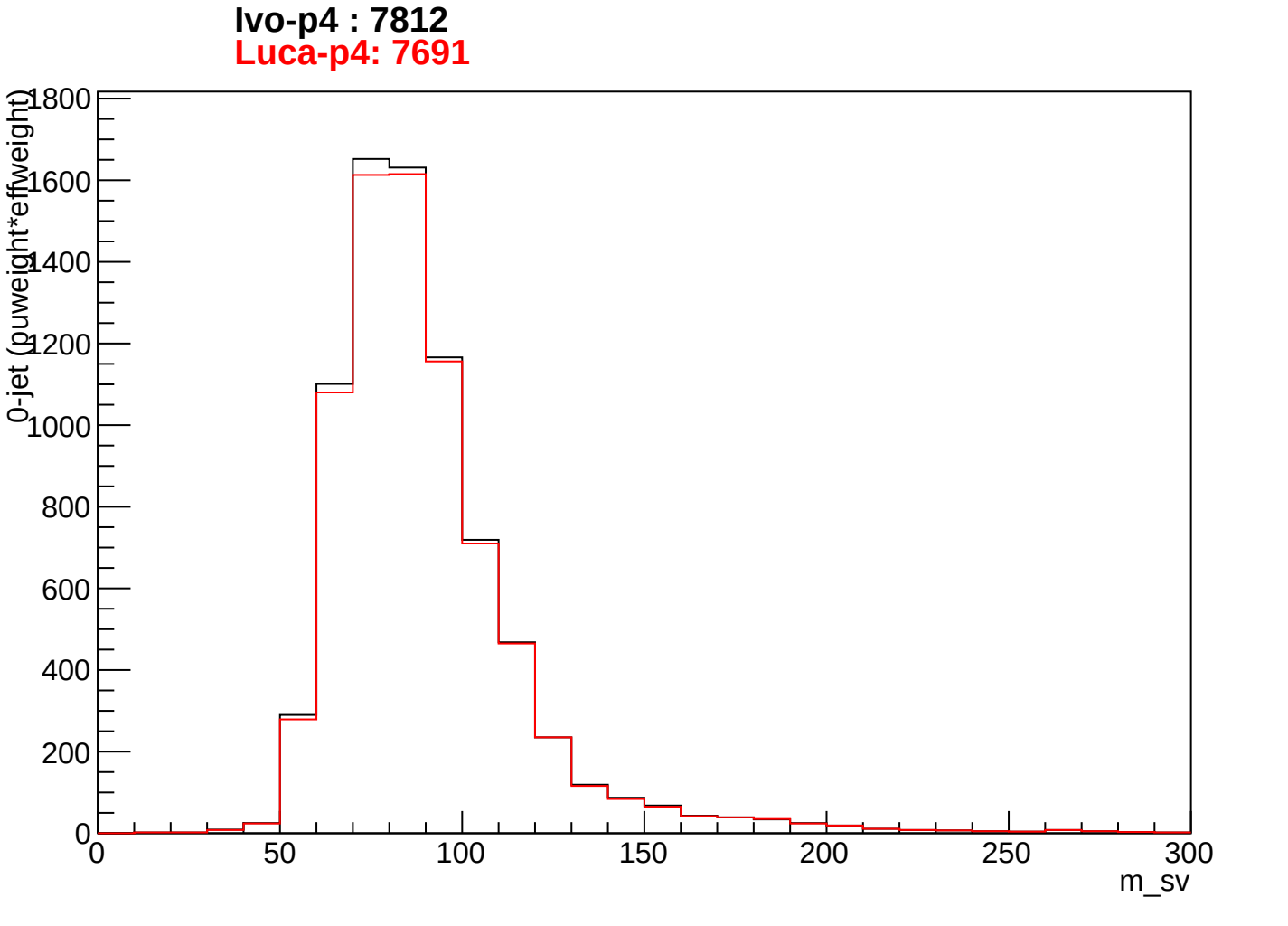

Ivo-p4 : 184
Luca-p4: 189
B-jet
0
5
10
15
20
25
30
35
40
0
50
100
150
200
250
300
m_sv

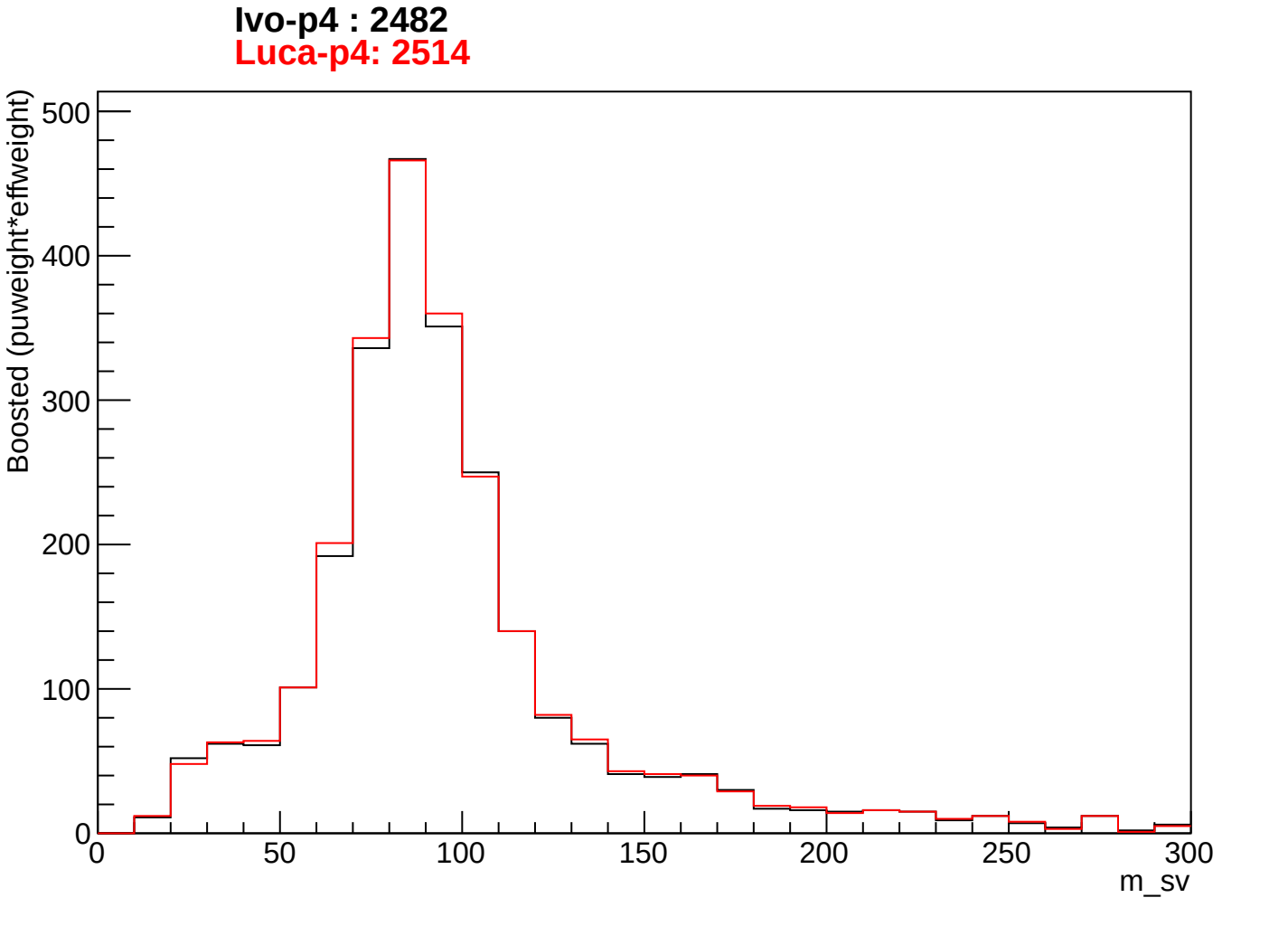

Ivo-p4 : 7812
Luca-p4: 7691
0-jet (puweight)
1800
1600
1400
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
m_sv

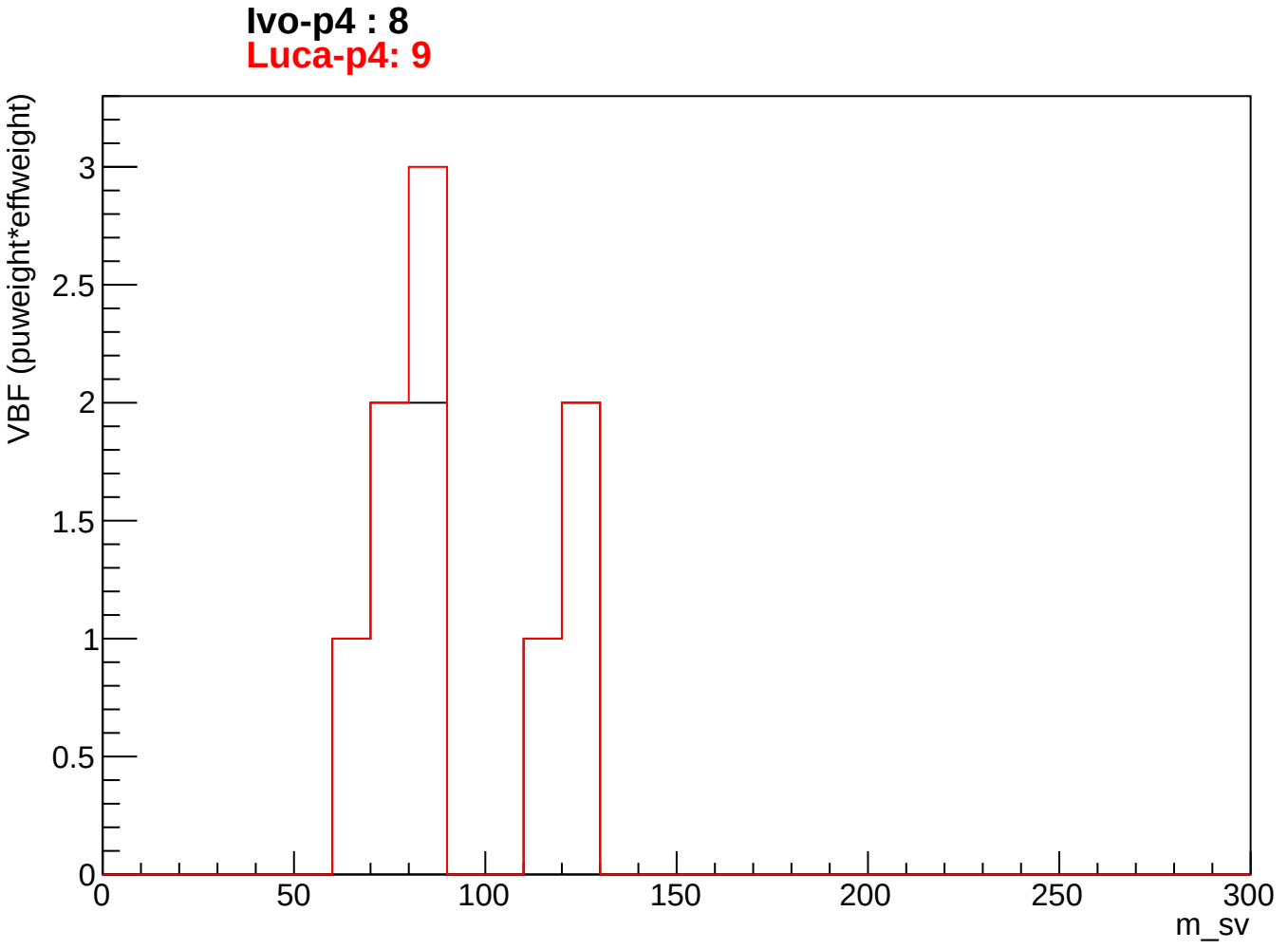

Ivo-p4 : 2482
Luca-p4: 2514
Boosted (puweight)
0
100
200
300
400
500
0
50
100
150
200
250
300
m_sv

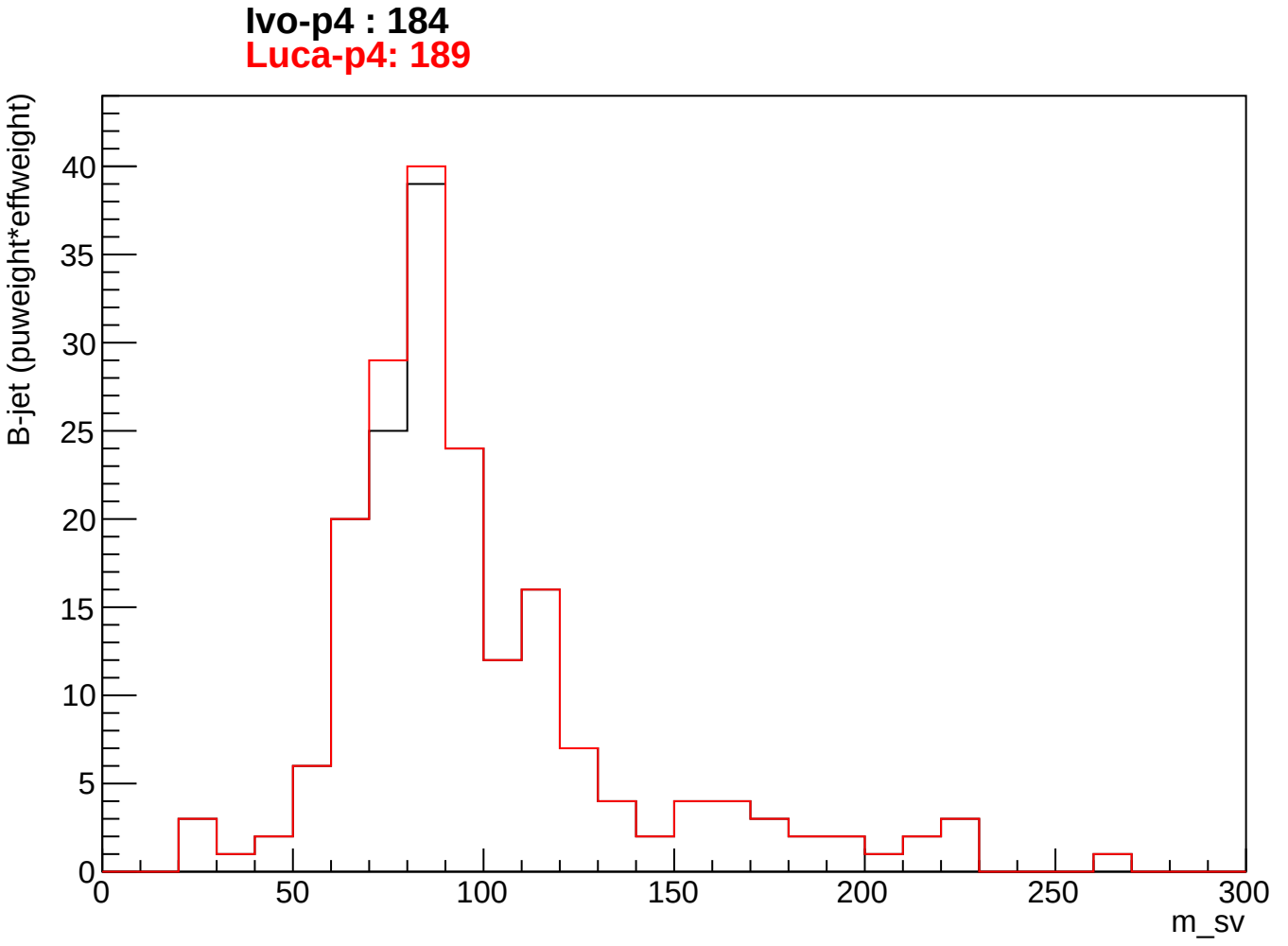

Ivo-p4 : 8
Luca-p4: 9
VBF (puweight)
0
0.5
1
1.5
2
2.5
3
0
50
100
150
200
250
300
m_sv

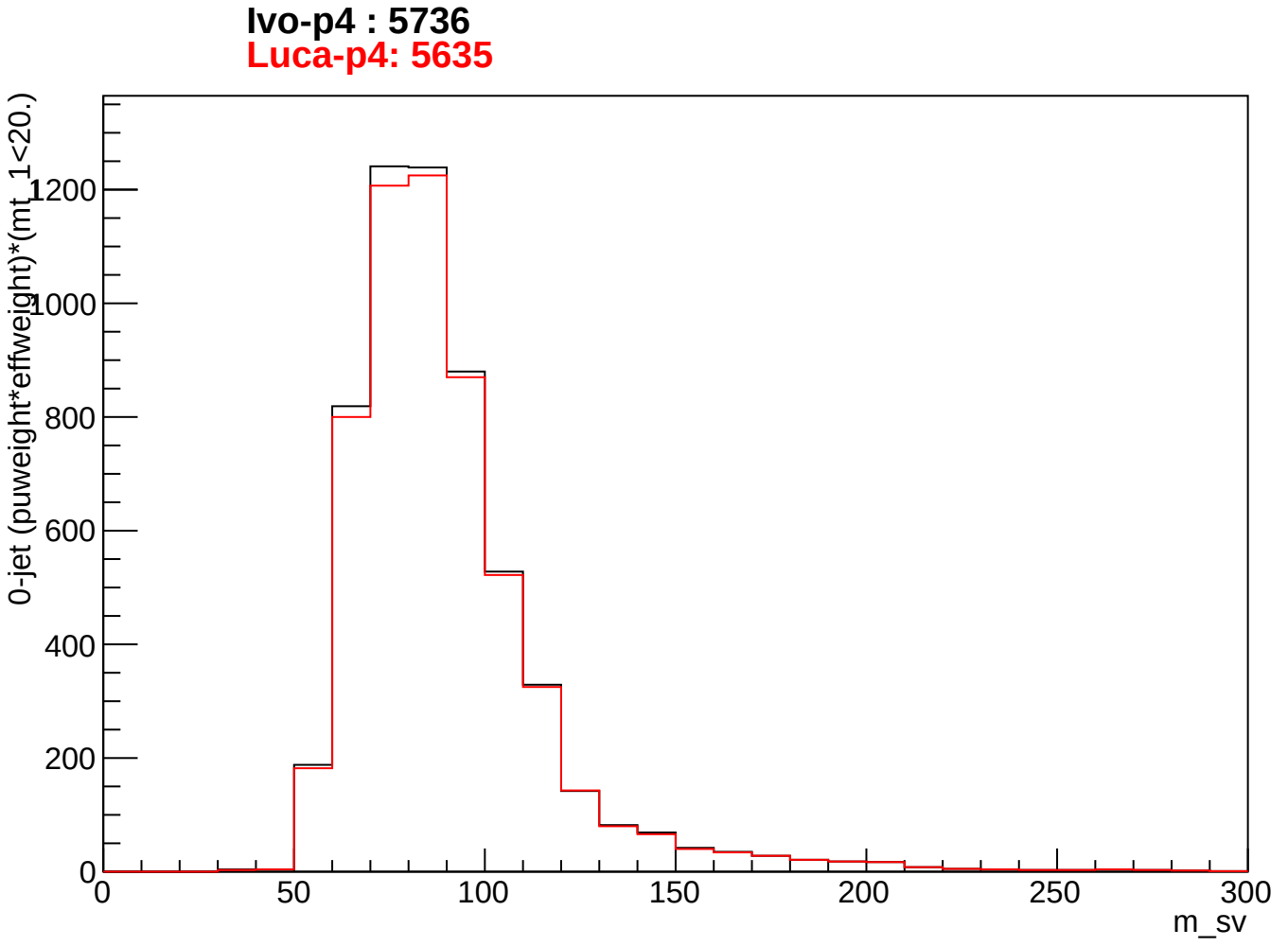

Ivo-p4 : 184
Luca-p4: 189
B-jet (puweight)
0
5
10
15
20
25
30
35
40
0
50
100
150
200
250
300
m_sv

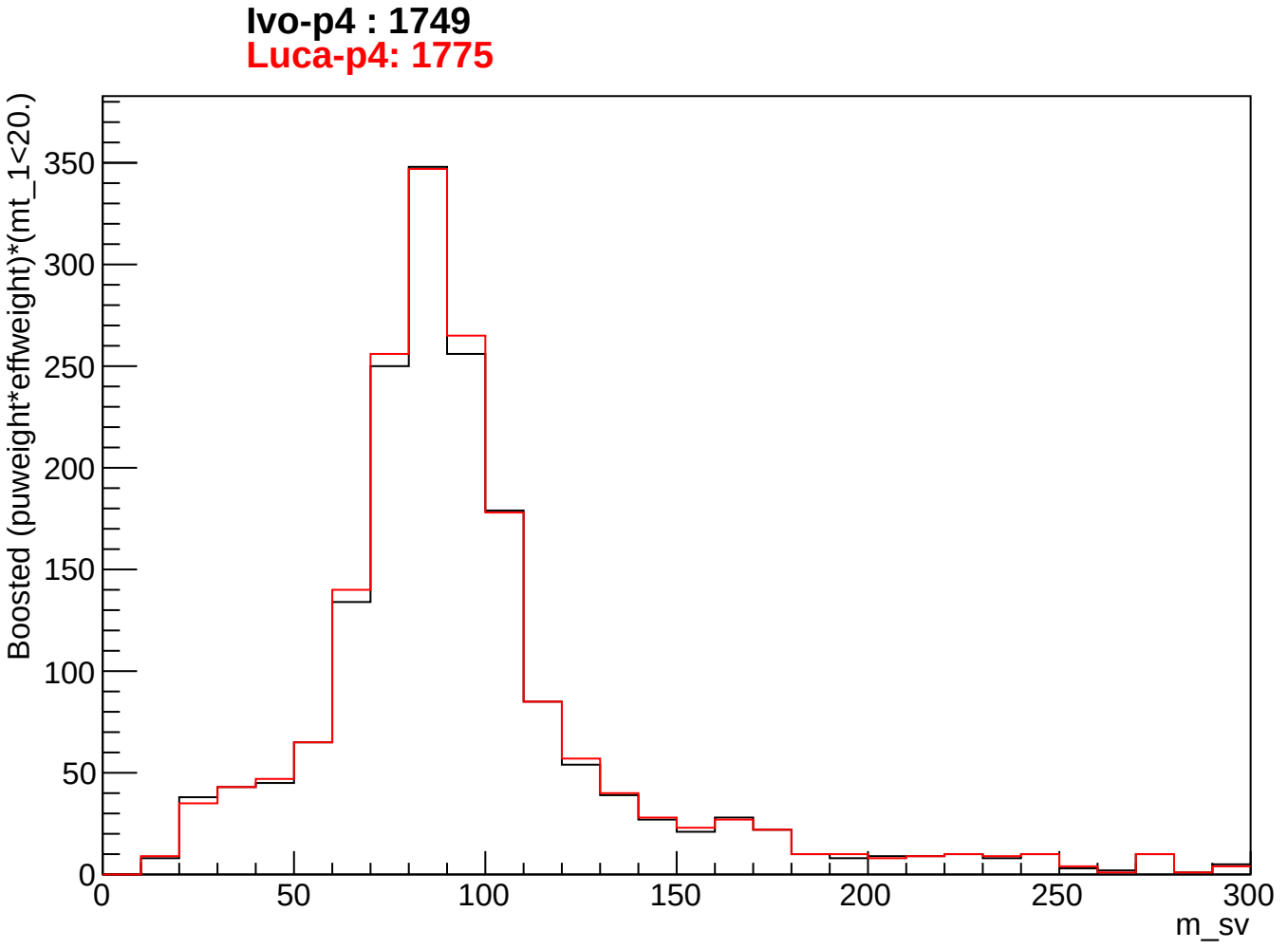

Ivo-p4 : 7812
Luca-p4: 7691
0-jet (puweight*effweight)
1800
1600
1400
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
m_sv

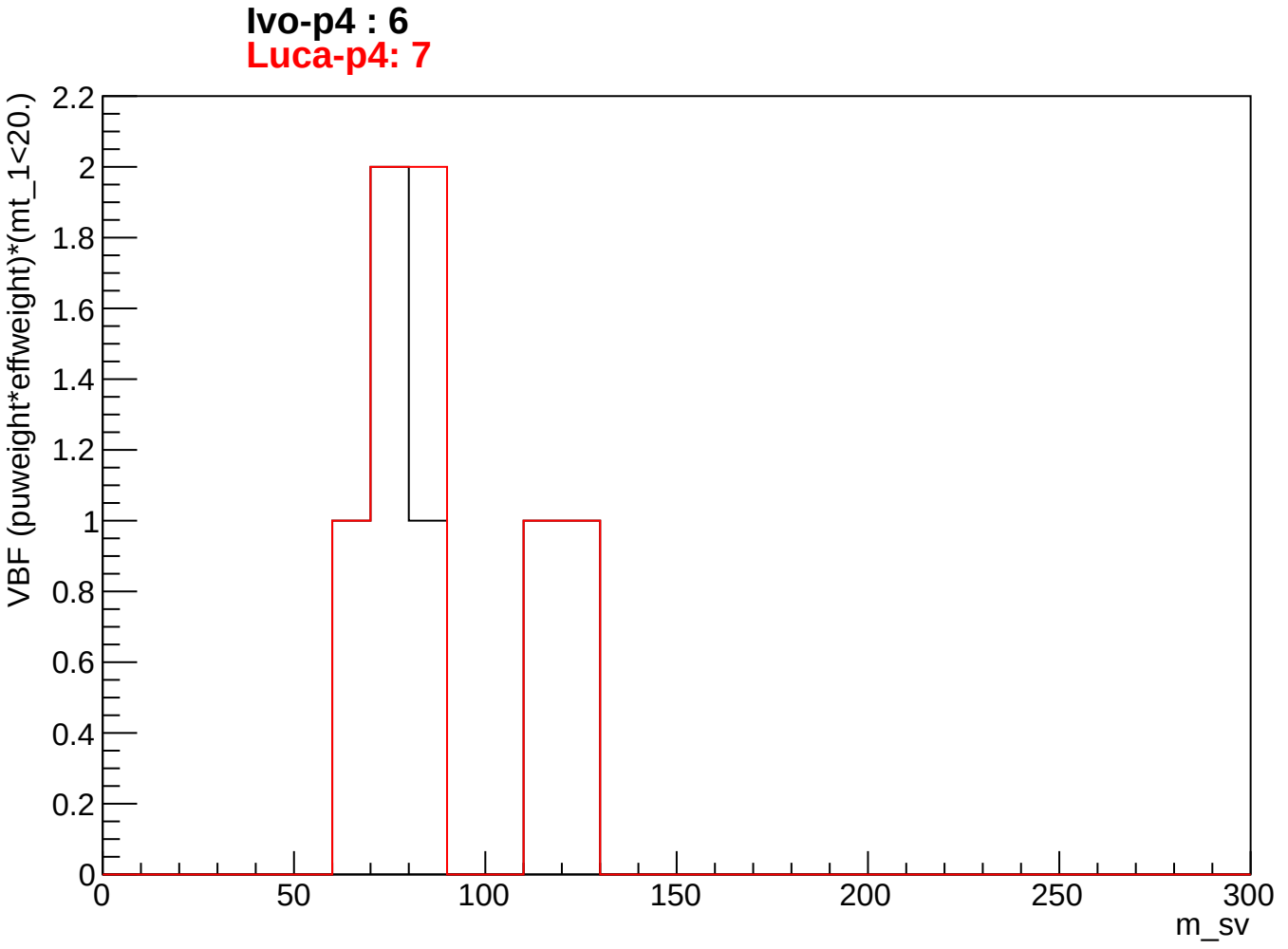

Ivo-p4 : 2482
Luca-p4: 2514
Boosted (puweight*effweight)
0
100
200
300
400
500
0
50
100
150
200
250
300
m_sv

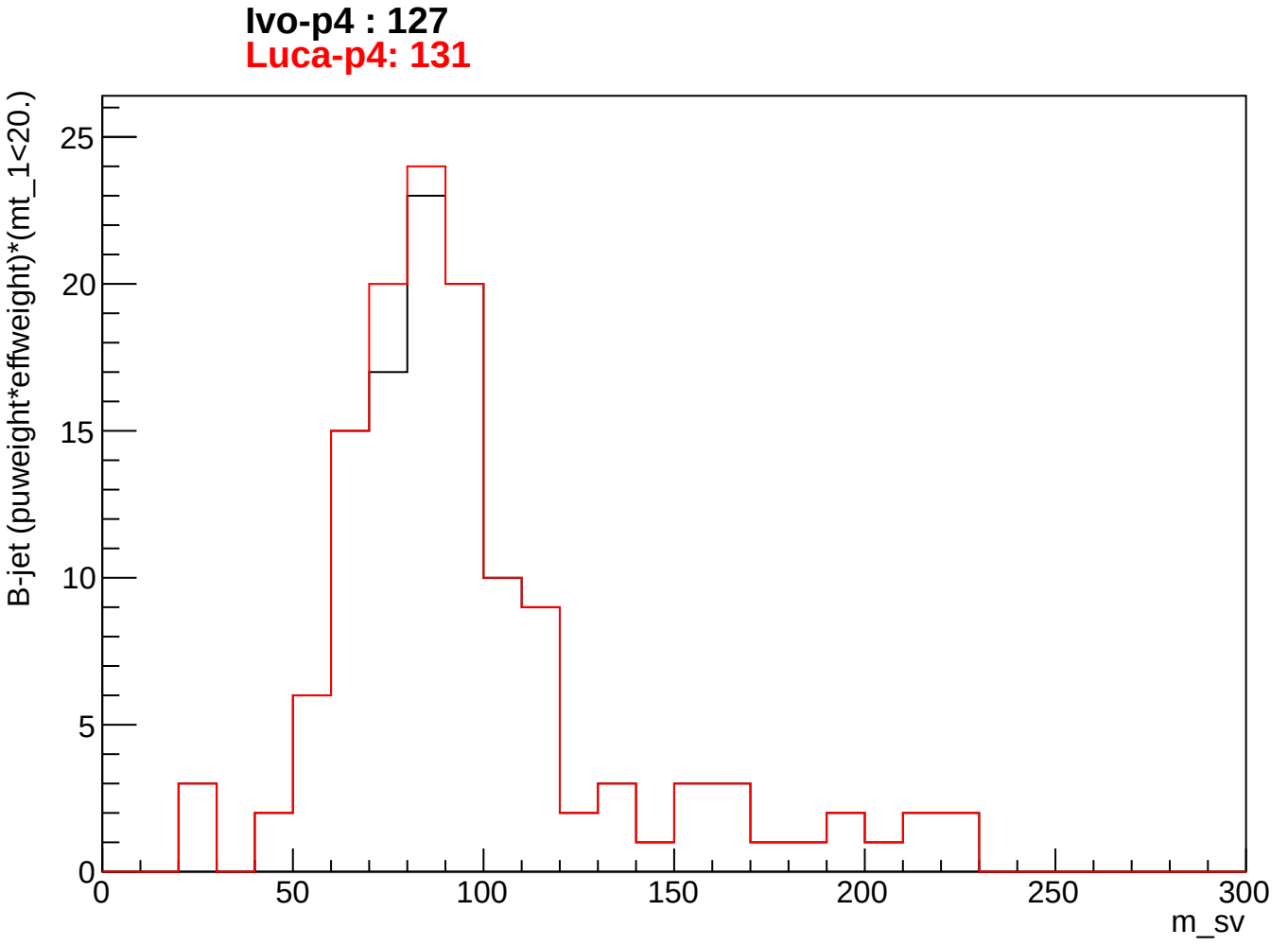

Ivo-p4 : 8
Luca-p4: 9
VBF (puweight*effweight)
0
0.5
1
1.5
2
2.5
3
0
50
100
150
200
250
300
m_sv


Ivo-p4 : 184
Luca-p4: 189
B-jet (puweight*effweight)
0
5
10
15
20
25
30
35
40
0
50
100
150
200
250
300
m_sv


Ivo-p4 : 5736
Luca-p4: 5635
0-jet (puweight*effweight)*(mt_1<20.)
0
200
400
600
800
1000
1200
0
50
100
150
200
250
300
m_sv


Ivo-p4 : 1749
Luca-p4: 1775
Boosted (puweight*effweight)*(mt_1<20.)
m_sv
0
50
100
150
200
250
300
350


Ivo-p4 : 6
Luca-p4: 7
VBF (puweight*effweight)*(mt_1<20.)
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
50
100
150
200
250
300
m_sv


Ivo-p4 : 127
Luca-p4: 131
B-jet (puweight*effweight)*(mt_1<20.)
m_sv
0
5
10
15
20
25
0
50
100
150
200
250
300