

MAD Analysis 5

The LaTeX report

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1 Setup

1.1 Command history

```
ma5>import Isol0ff.root as Isol0ff
ma5>import R04.root as R04
ma5>set main.stackng_method = superimpose
ma5>plot PT(a)
ma5>plot PT(a[1])
ma5>plot PT(a[1]) 20 0 200
ma5>plot PT(a) 20 0 200
ma5>plot PT(a[1]) 200 0 200
ma5>plot PT(a) 200 0 200
ma5>plot PT(a) 200 0 200 [logY]
ma5>plot PT(a[1]) 200 0 200 [logY]
ma5>plot PT(a) 200 0 40 [logY]
ma5>plot PT(a[1]) 200 0 40 [logY]
ma5>plot DELTAR(a,j) 100 0 10
ma5>plot DELTAR(a,j) 100 0 0.5
ma5>plot DELTAR(a[1],j) 100 0 10
ma5>plot DELTAR(a[1],j) 100 0 0.5
ma5>plot PT(j) 100 0 100
ma5>plot PT(j) 100 0 50
ma5>reject (j) PT < 10
ma5>plot DELTAR(a,j) 100 0 1
ma5>plot DELTAR(a,j) 100 0 0.5
ma5>submit photon-delphes
```

1.2 Configuration

- MadAnalysis version 1.1.11.16 (2014/07/08).
- Histograms are not scaled.

2 Datasets

2.1 isoloff

- Sample consisting of: signal events.
- Generated events: 99782 events.
- Normalization to the luminosity: 0+/- 0 events.
- Ratio (event weight): 0.0 .

Path to the event file	Nr. of events	Cross section (pb)	Negative wghts (%)
IsolOff.root	99782	0.0 @ 0.0%	0.0

2.2 r04

- Sample consisting of: signal events.
- Generated events: 99811 events.
- Normalization to the luminosity: 0+/- 0 events.
- Ratio (event weight): 0.0 .

Path to the event file	Nr. of events	Cross section (pb)	Negative wghts (%)
R04.root	99811	0.0 @ 0.0%	0.0

3.3 Histogram 3

* Plot: PT (a[1])

Table 3. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	10145	0.102	28.1758	28.87	0.0	0.2957
r04	10620	0.106	28.3982	28.62	0.0	0.2542

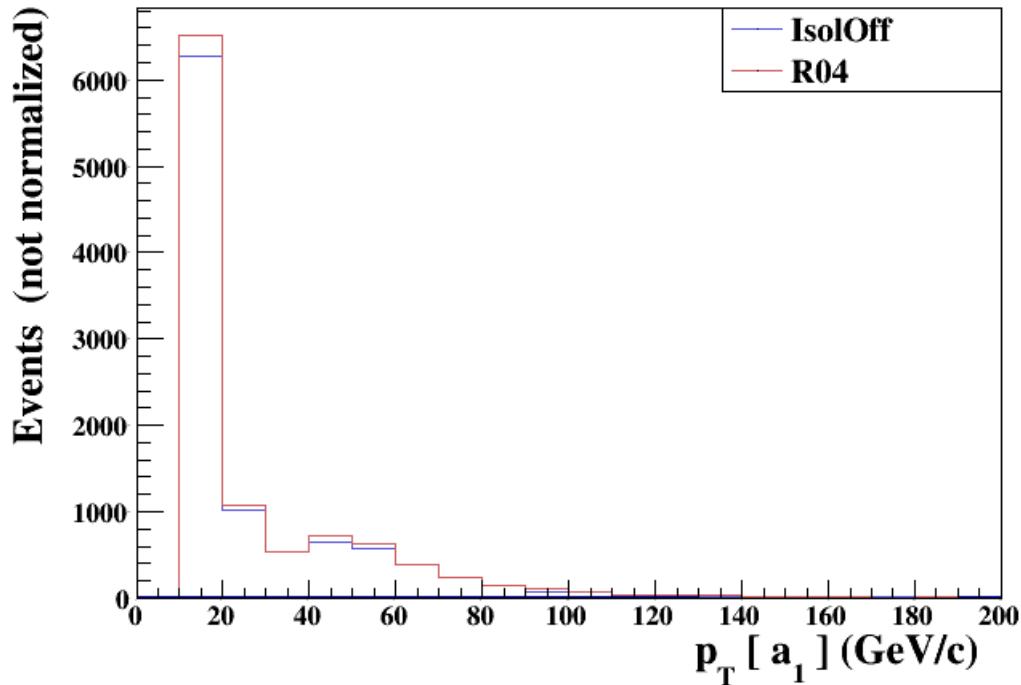


Figure 3.

3.4 Histogram 4

* Plot: PT (a)

Table 4. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	15153	0.152	24.9124	25.08	0.0	0.2046
r04	15917	0.159	24.9207	24.75	0.0	0.1696

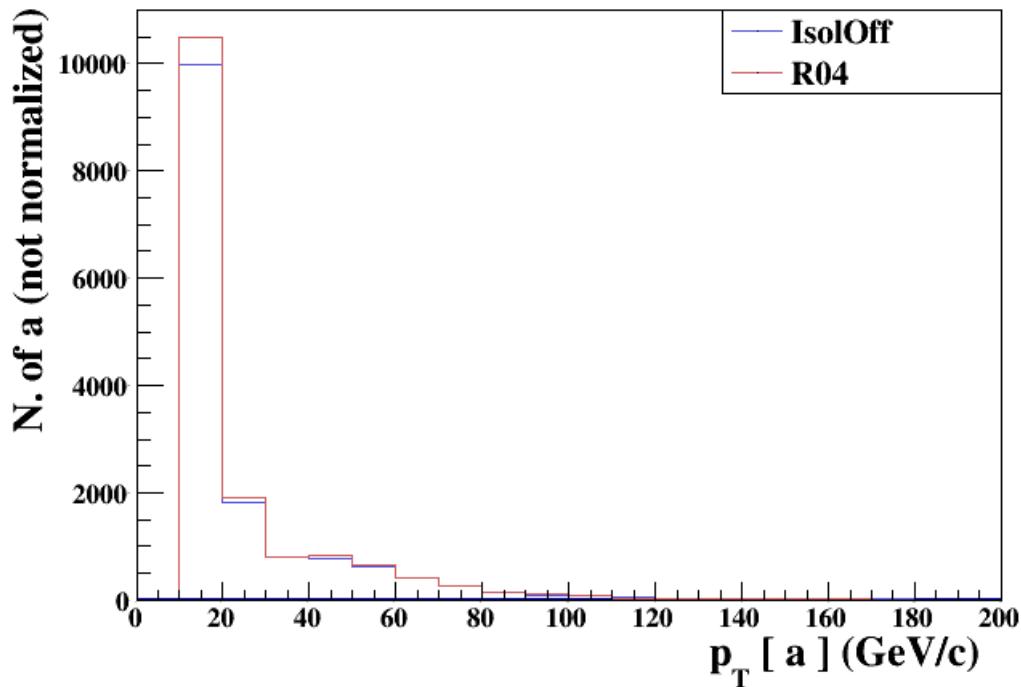


Figure 4.

3.5 Histogram 5

* Plot: PT (a[1])

Table 5. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	10145	0.102	28.1758	28.87	0.0	0.2957
r04	10620	0.106	28.3982	28.62	0.0	0.2542

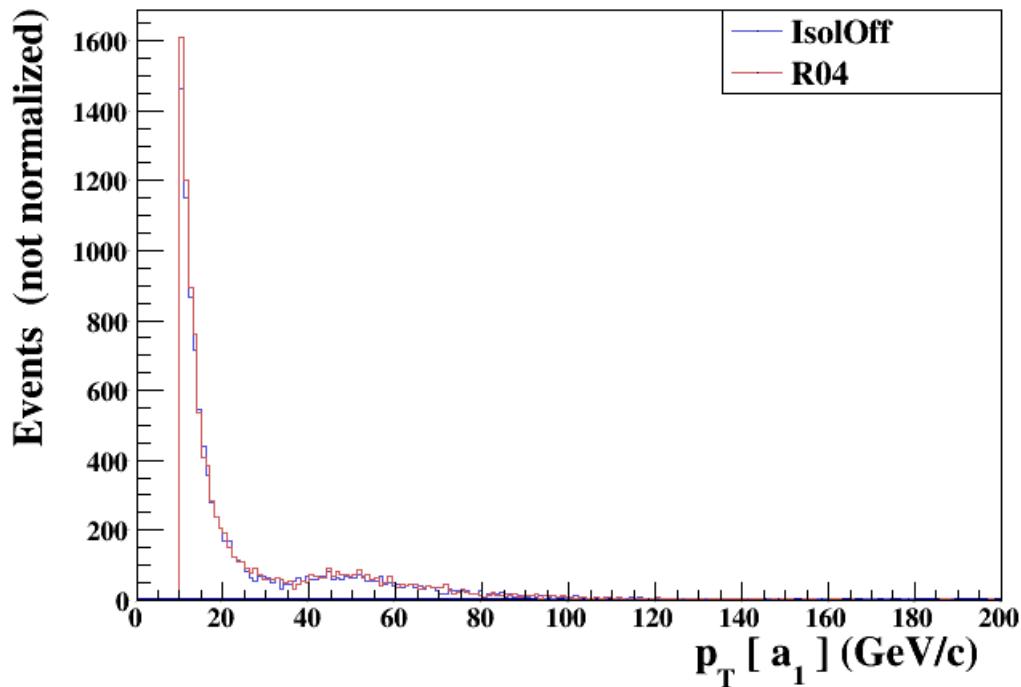


Figure 5.

3.6 Histogram 6

* Plot: PT (a)

Table 6. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	15153	0.152	24.9124	25.08	0.0	0.2046
r04	15917	0.159	24.9207	24.75	0.0	0.1696

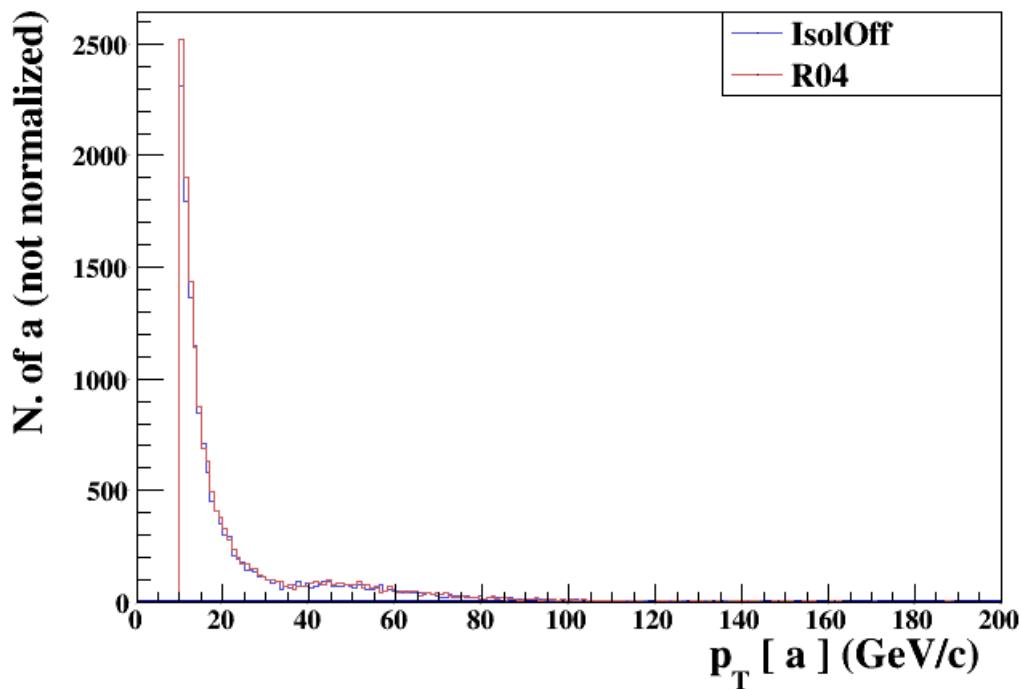


Figure 6.

3.7 Histogram 7

* Plot: PT (a)

Table 7. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	15153	0.152	24.9124	25.08	0.0	0.2046
r04	15917	0.159	24.9207	24.75	0.0	0.1696

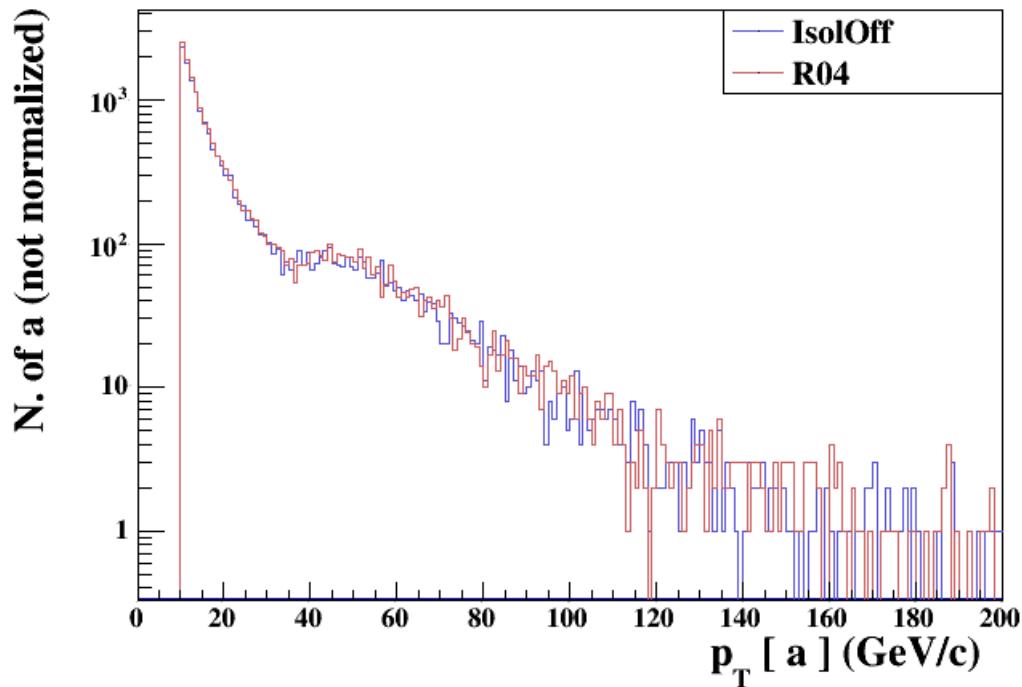


Figure 7.

3.8 Histogram 8

* Plot: PT (a[1])

Table 8. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	10145	0.102	28.1758	28.87	0.0	0.2957
r04	10620	0.106	28.3982	28.62	0.0	0.2542

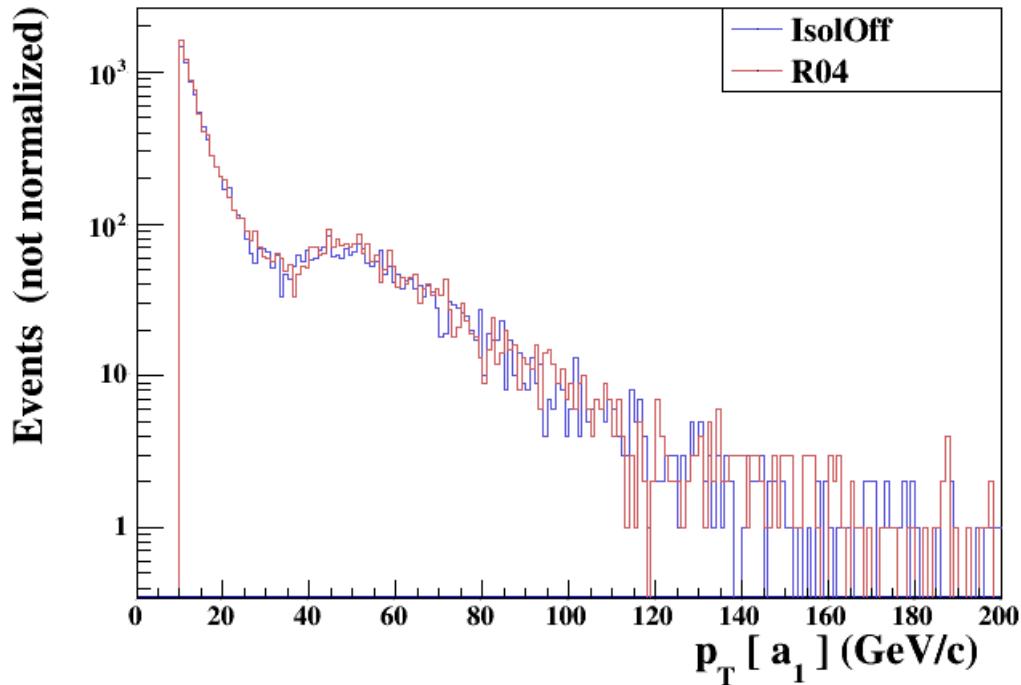


Figure 8.

3.9 Histogram 9

* Plot: PT (a)

Table 9. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	15153	0.152	24.9124	25.08	0.0	16.81
r04	15917	0.159	24.9207	24.75	0.0	17.11

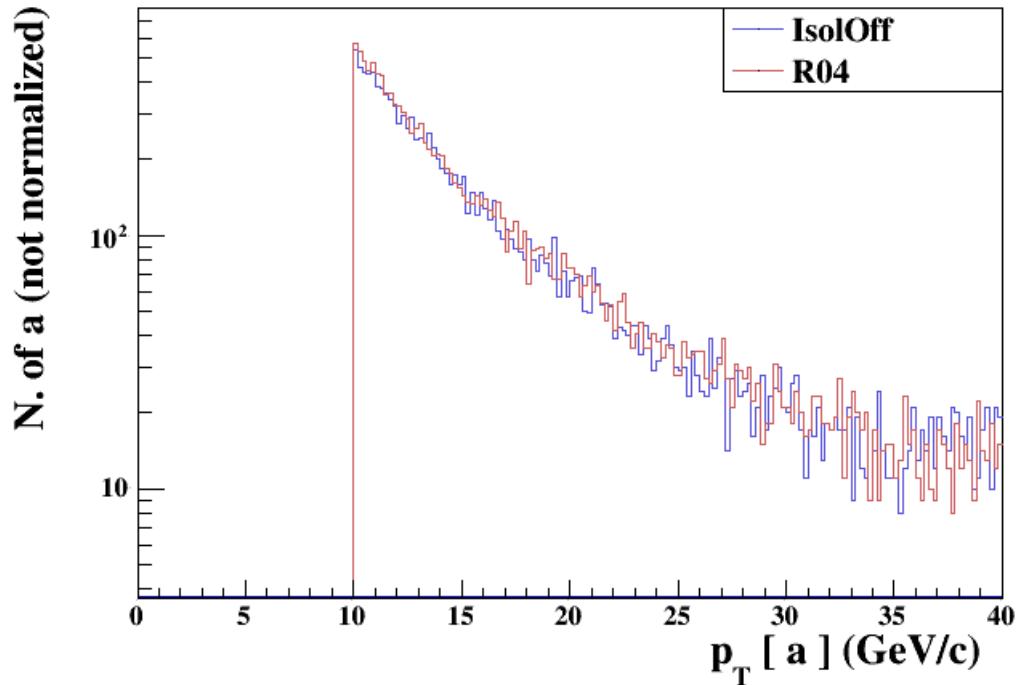


Figure 9.

3.10 Histogram 10

* Plot: PT (a[1])

Table 10. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	10145	0.102	28.1758	28.87	0.0	22.87
r04	10620	0.106	28.3982	28.62	0.0	23.63

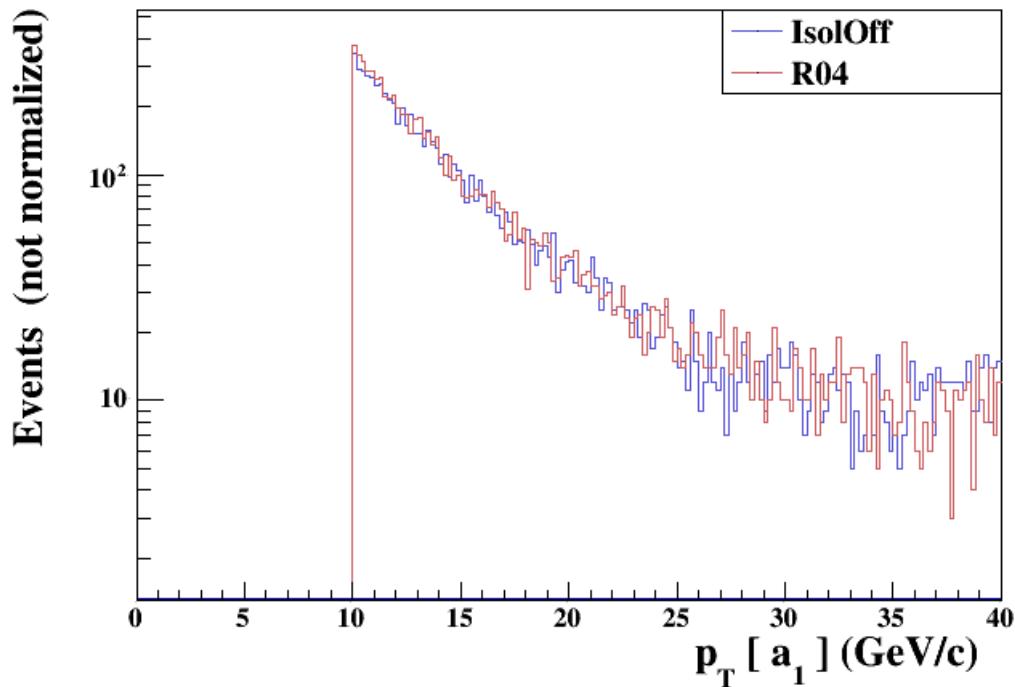


Figure 10.

3.11 Histogram 11

* Plot: DELTAR (a , j)

Table 11. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	6770	0.0678	2.4026	1.348	0.0	0.0
r04	7487	0.075	2.39171	1.335	0.0	0.0

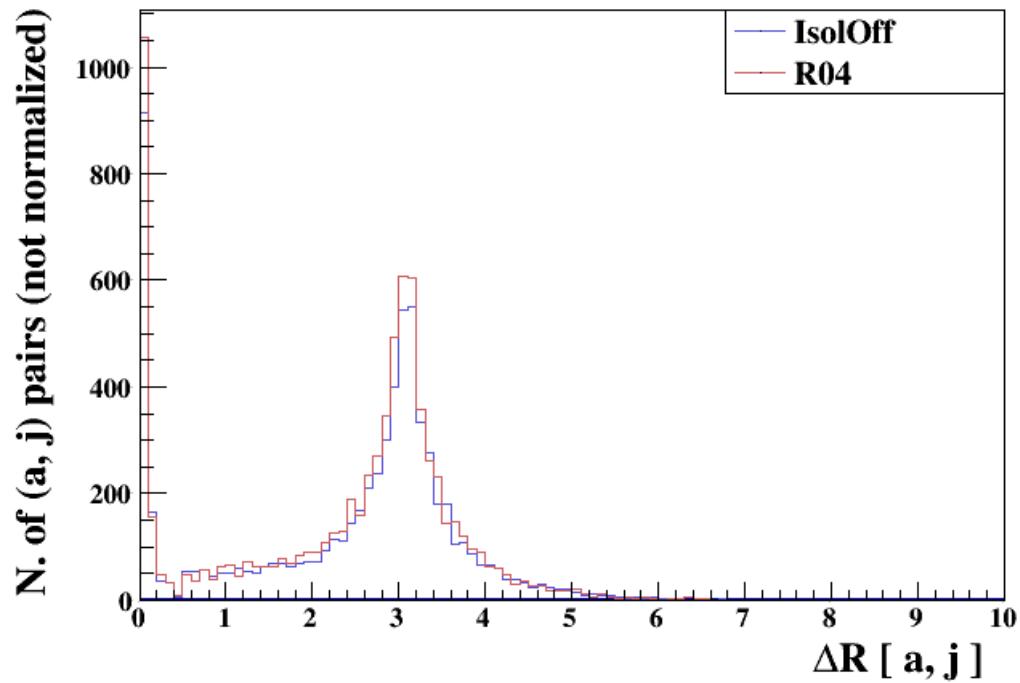


Figure 11.

3.12 Histogram 12

* Plot: DELTAR (a , j)

Table 12. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	6770	0.0678	2.4026	1.348	0.0	82.98
r04	7487	0.075	2.39171	1.335	0.0	82.65

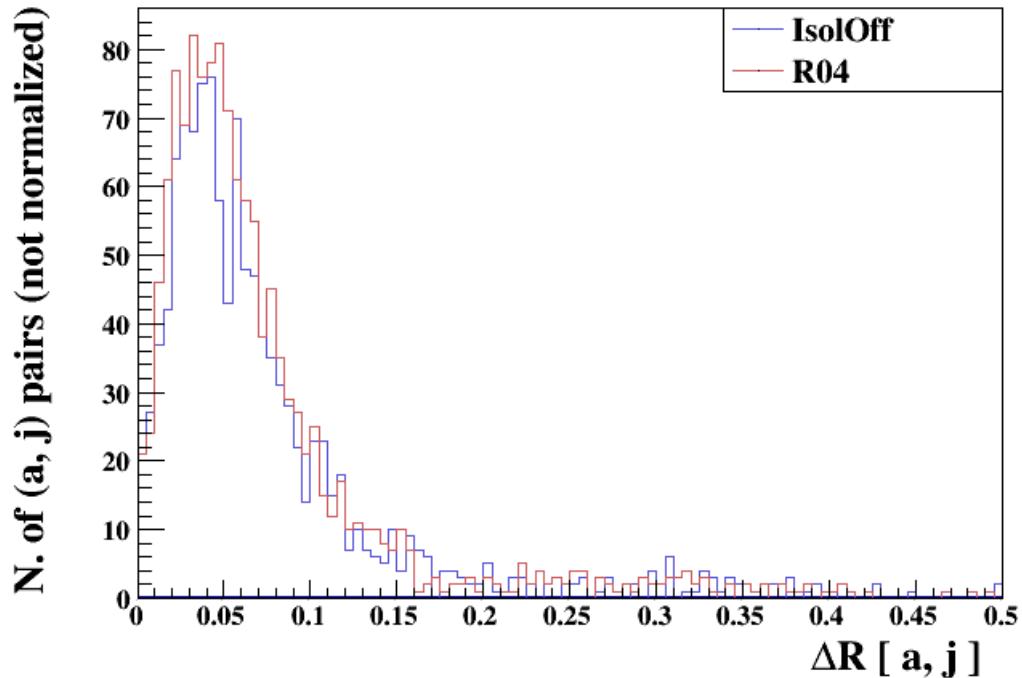


Figure 12.

3.13 Histogram 13

* Plot: DELTAR (a[1] , j)

Table 13. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	4108	0.0412	2.92557	0.9329	0.0	0.0
r04	4535	0.0454	2.9246	0.9083	0.0	0.0

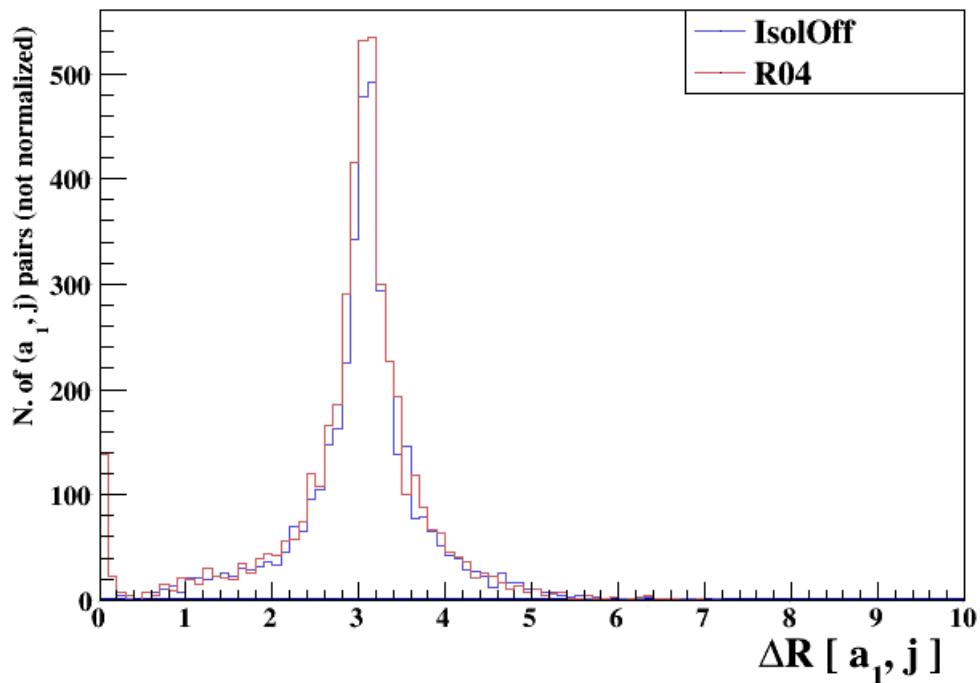


Figure 13.

3.14 Histogram 14

* Plot: DELTAR (a[1] , j)

Table 14. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	4108	0.0412	2.92557	0.9329	0.0	95.91
r04	4535	0.0454	2.9246	0.9083	0.0	96.19

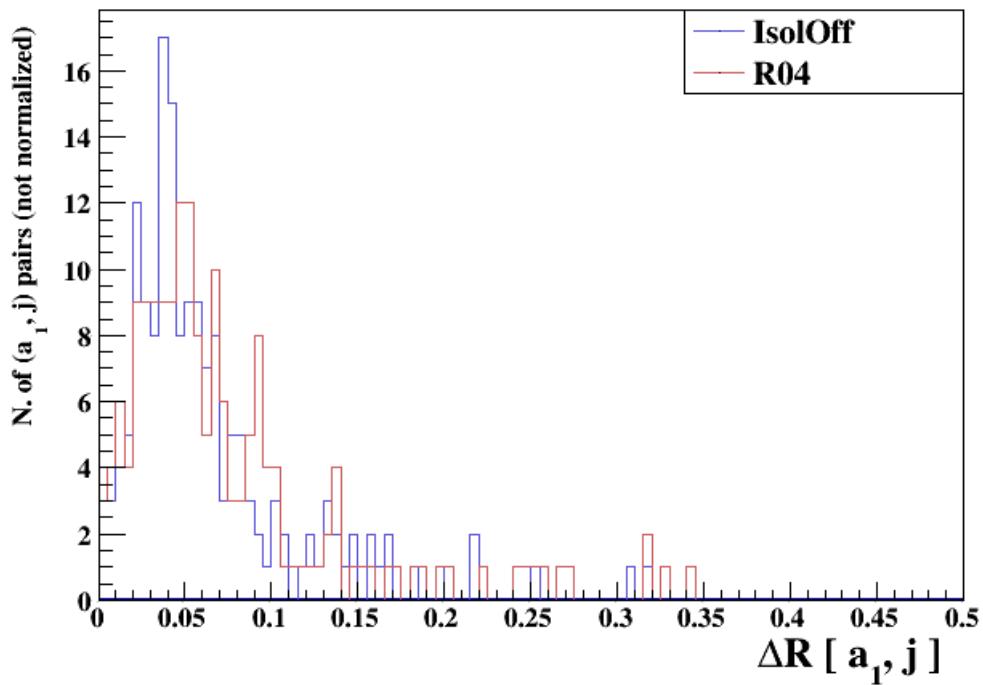


Figure 14.

3.15 Histogram 15

* Plot: PT (j)

Table 15. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
isoloff	4450	0.0446	54.0561	35.19	0.0	6.449
r04	4880	0.0489	53.3676	32.74	0.0	6.455

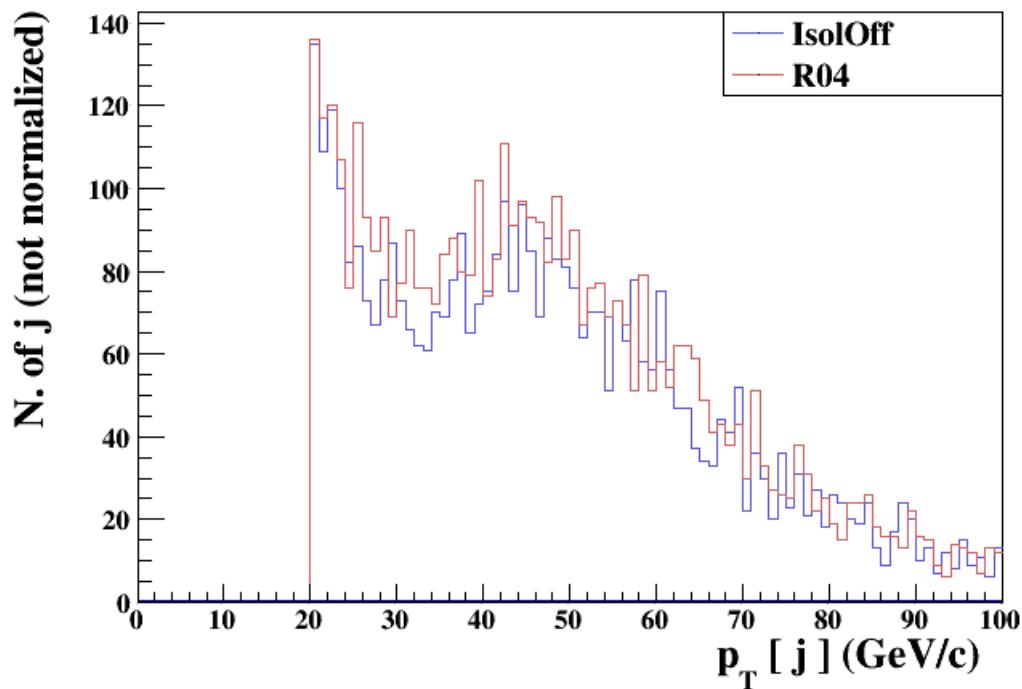


Figure 15.