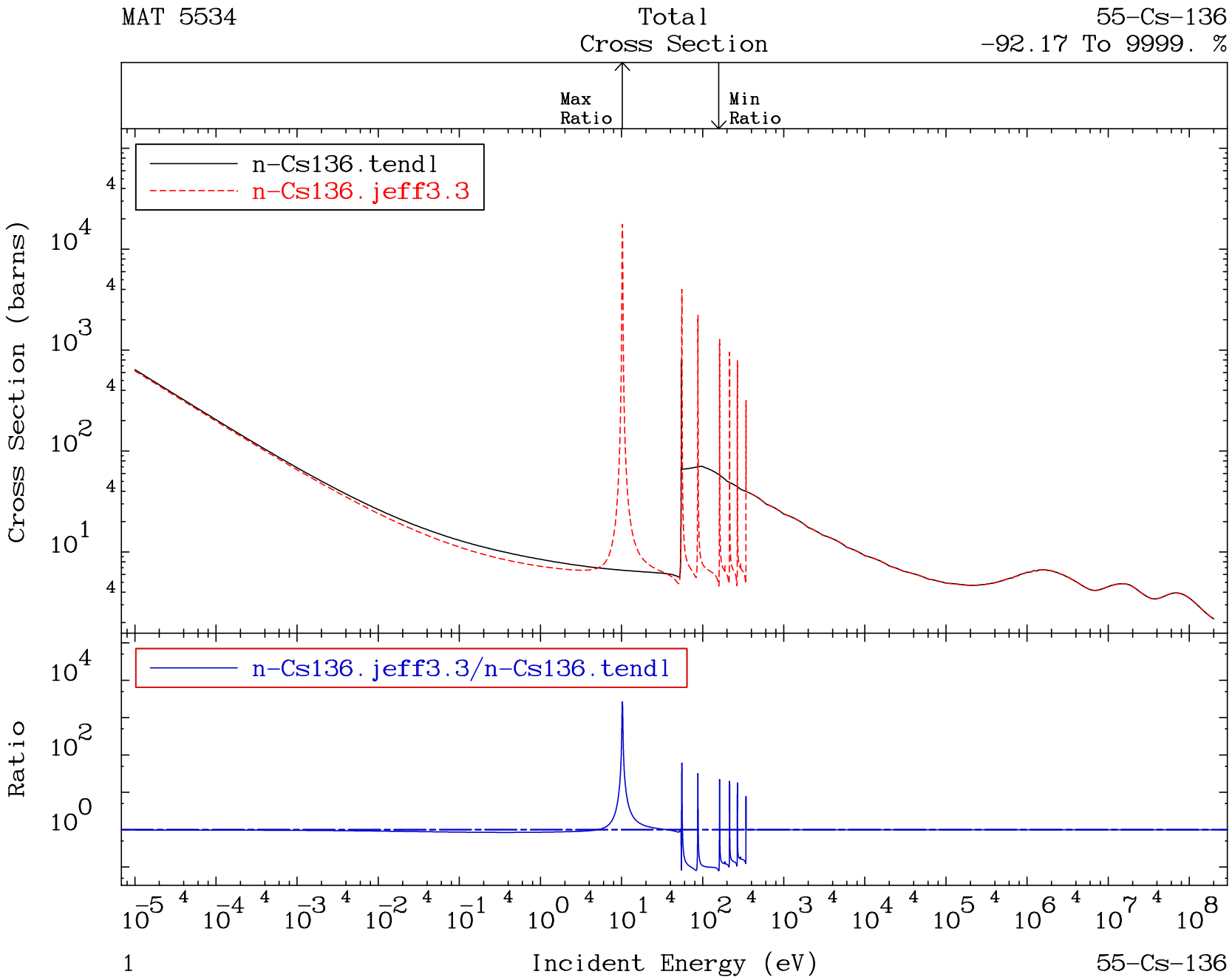
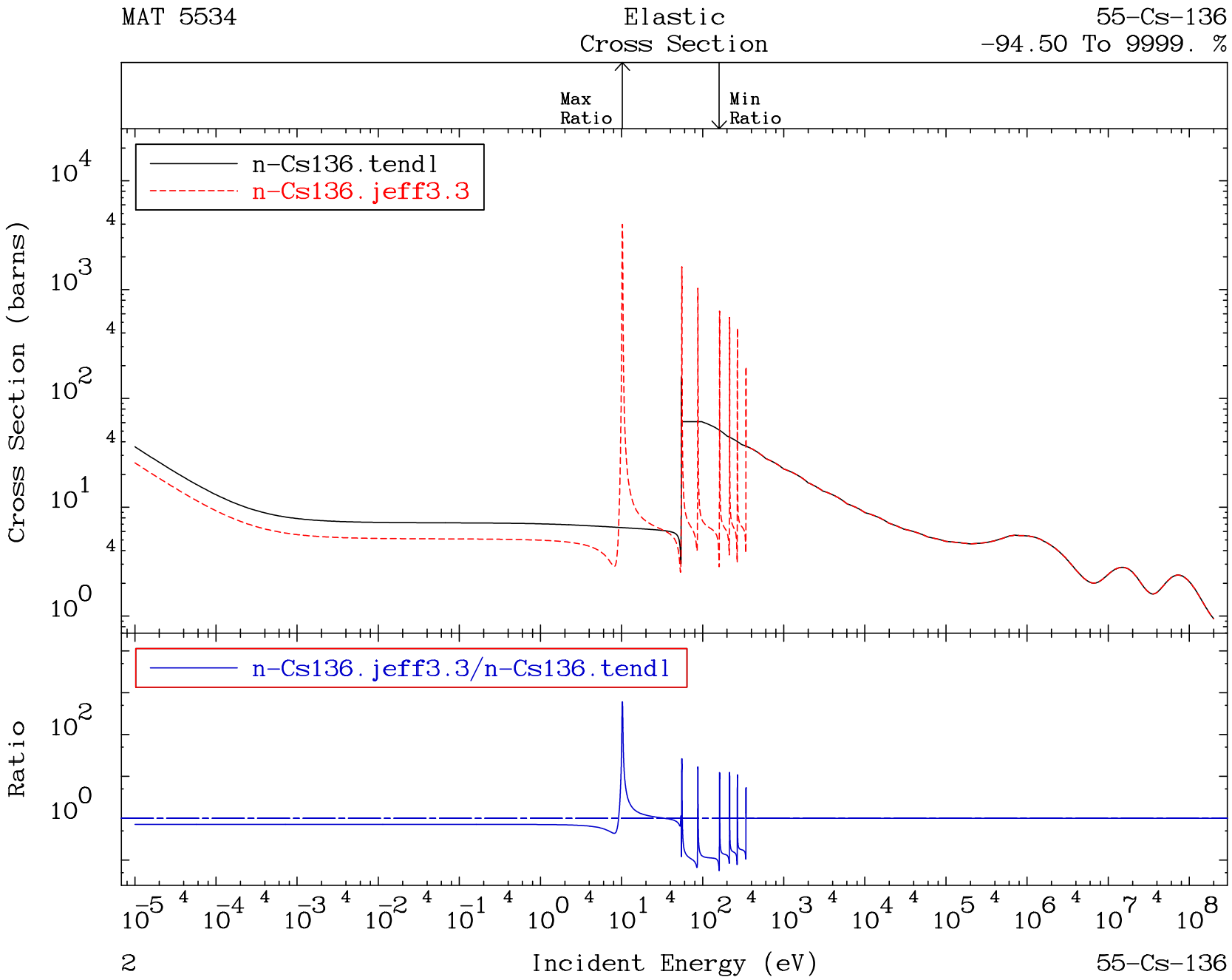
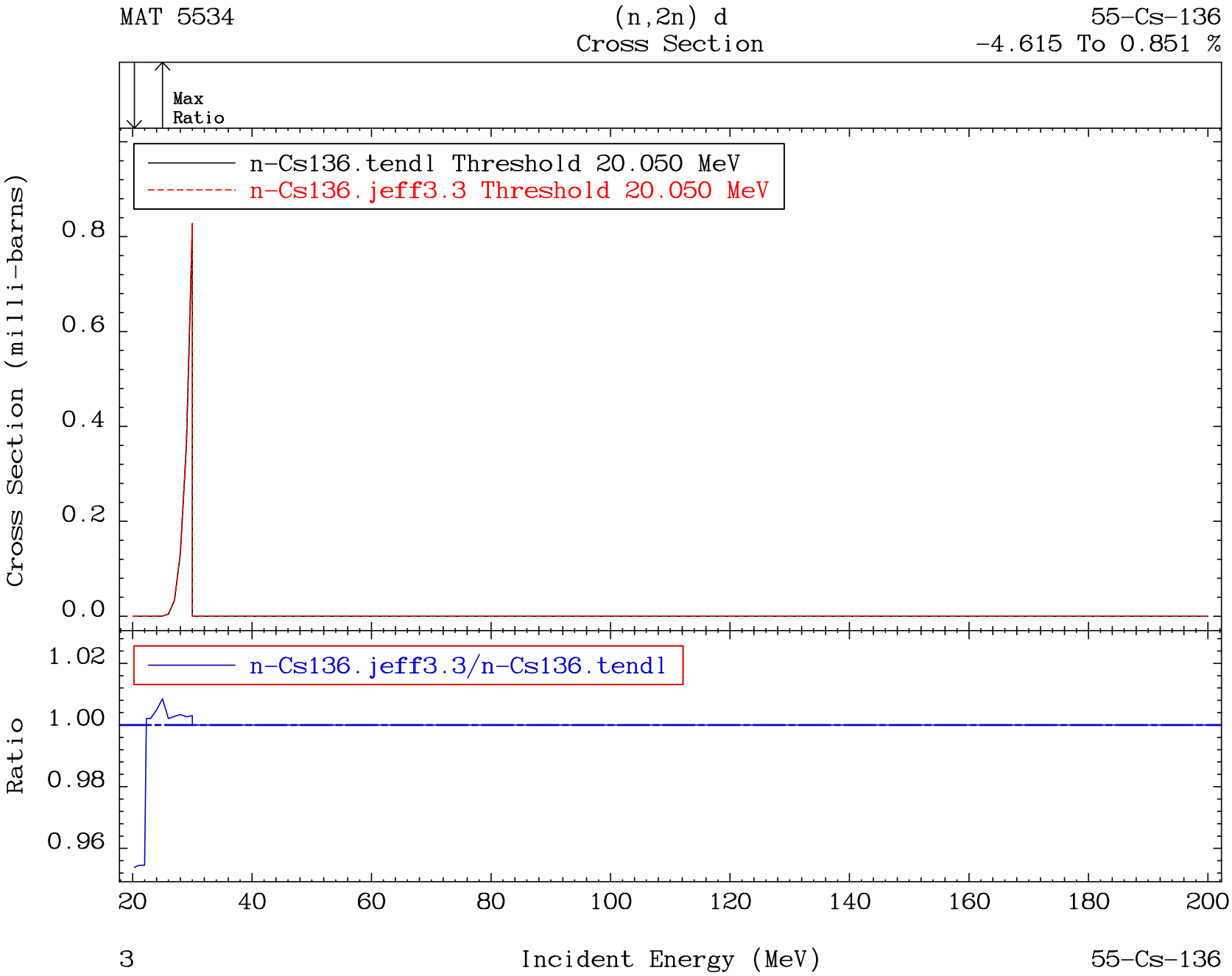
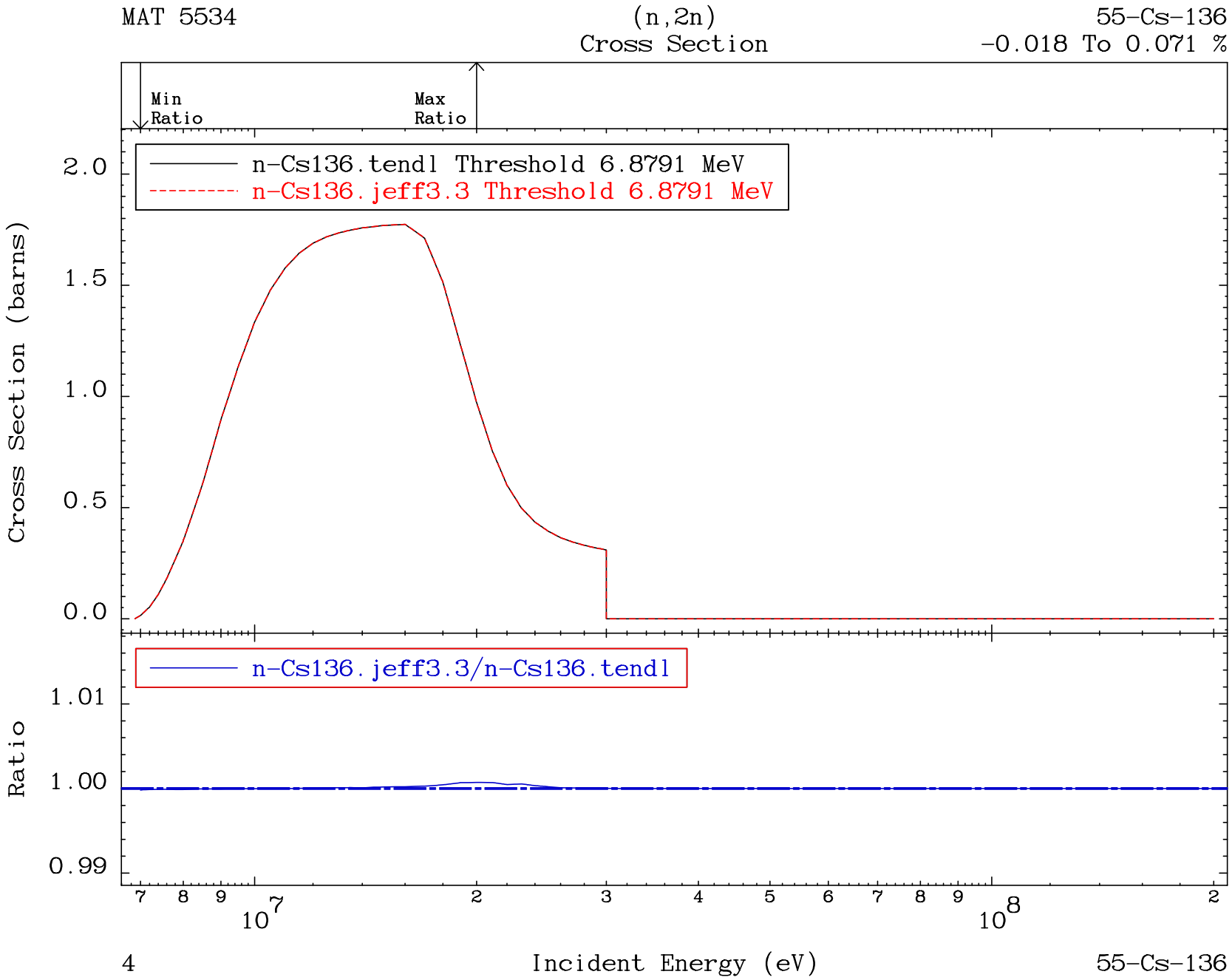
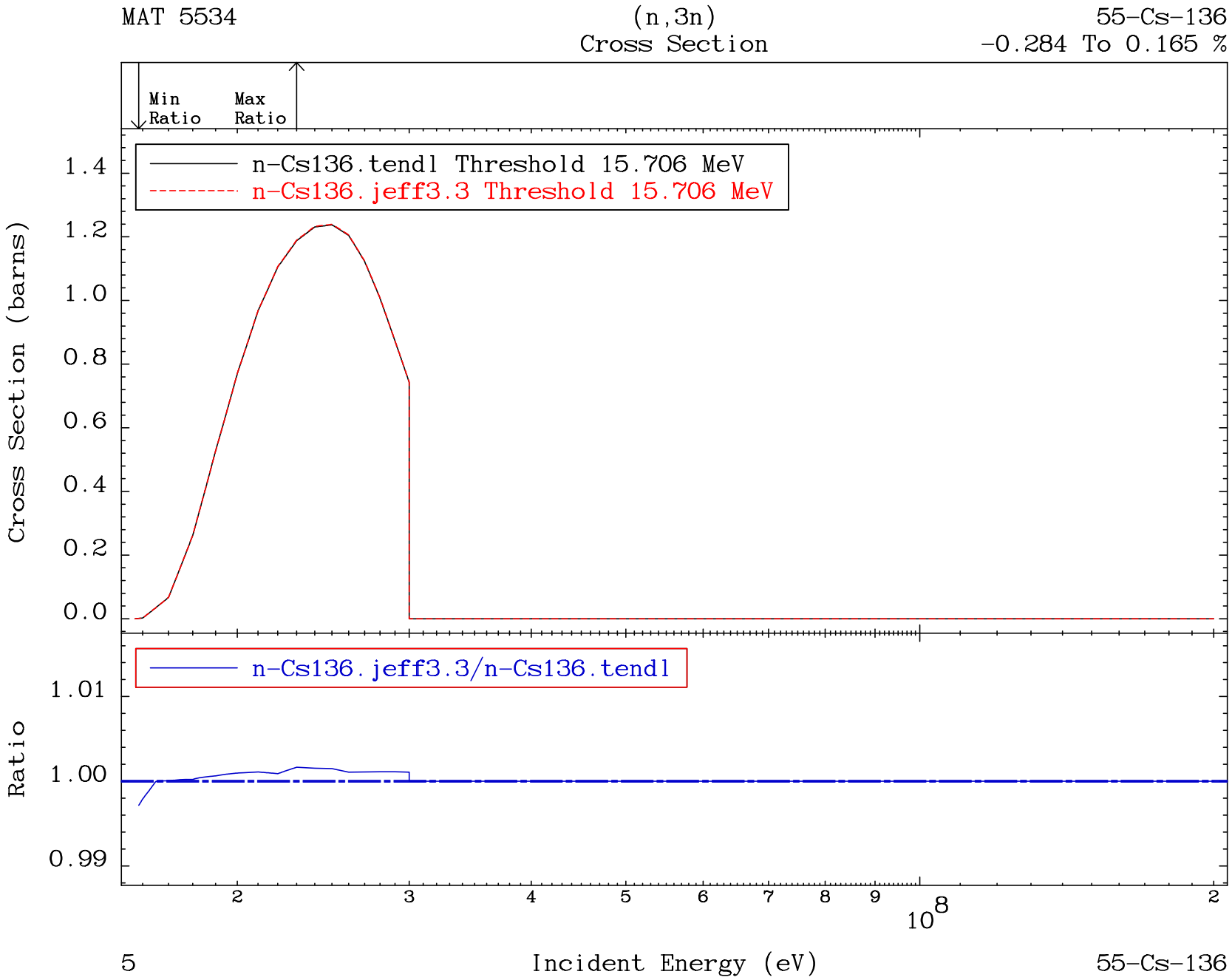
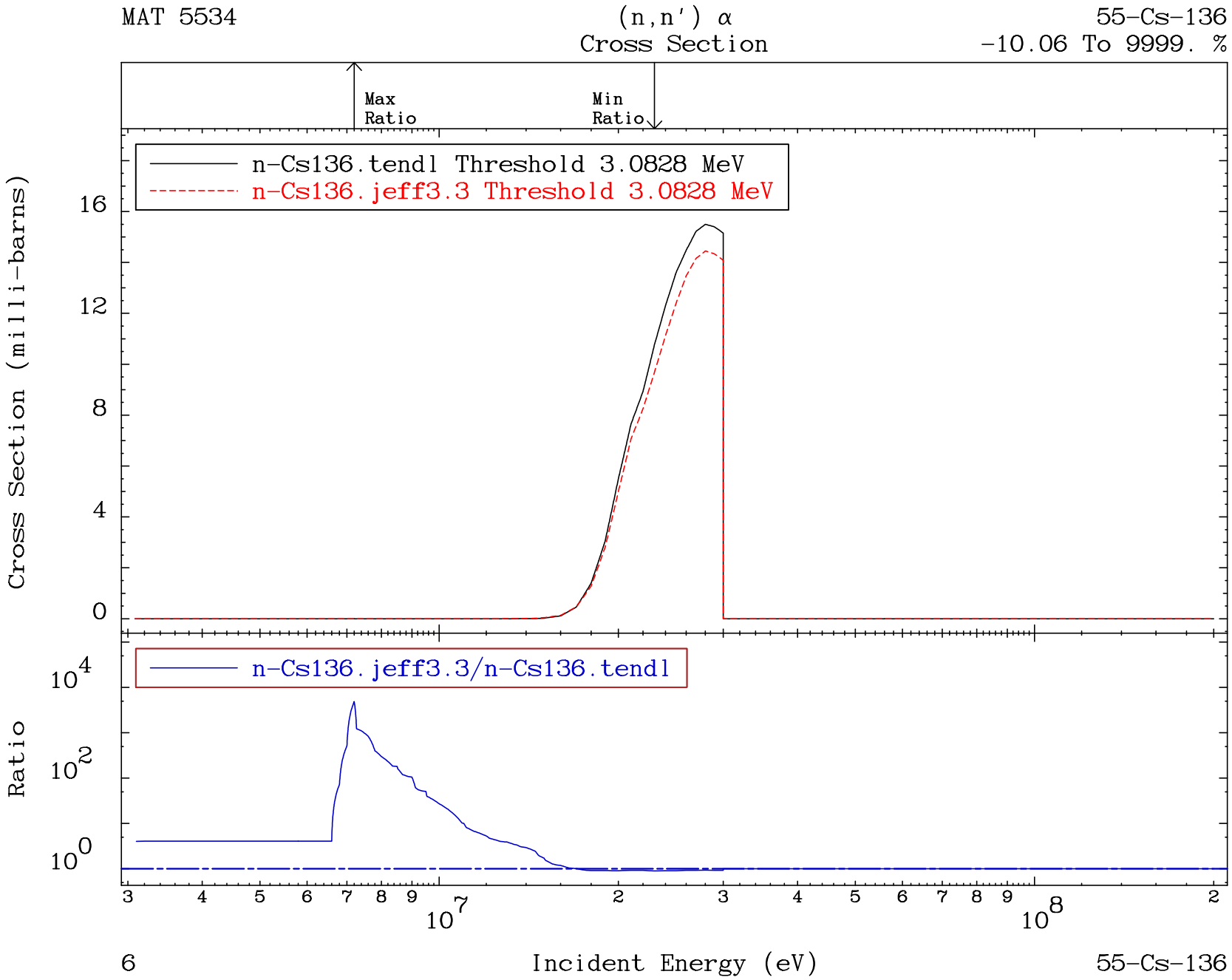

MAT 5534
Total
Cross Section
55-Cs-136
-92.17 To 9999. %
Max
Ratio
Min
Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
1
55-Cs-136

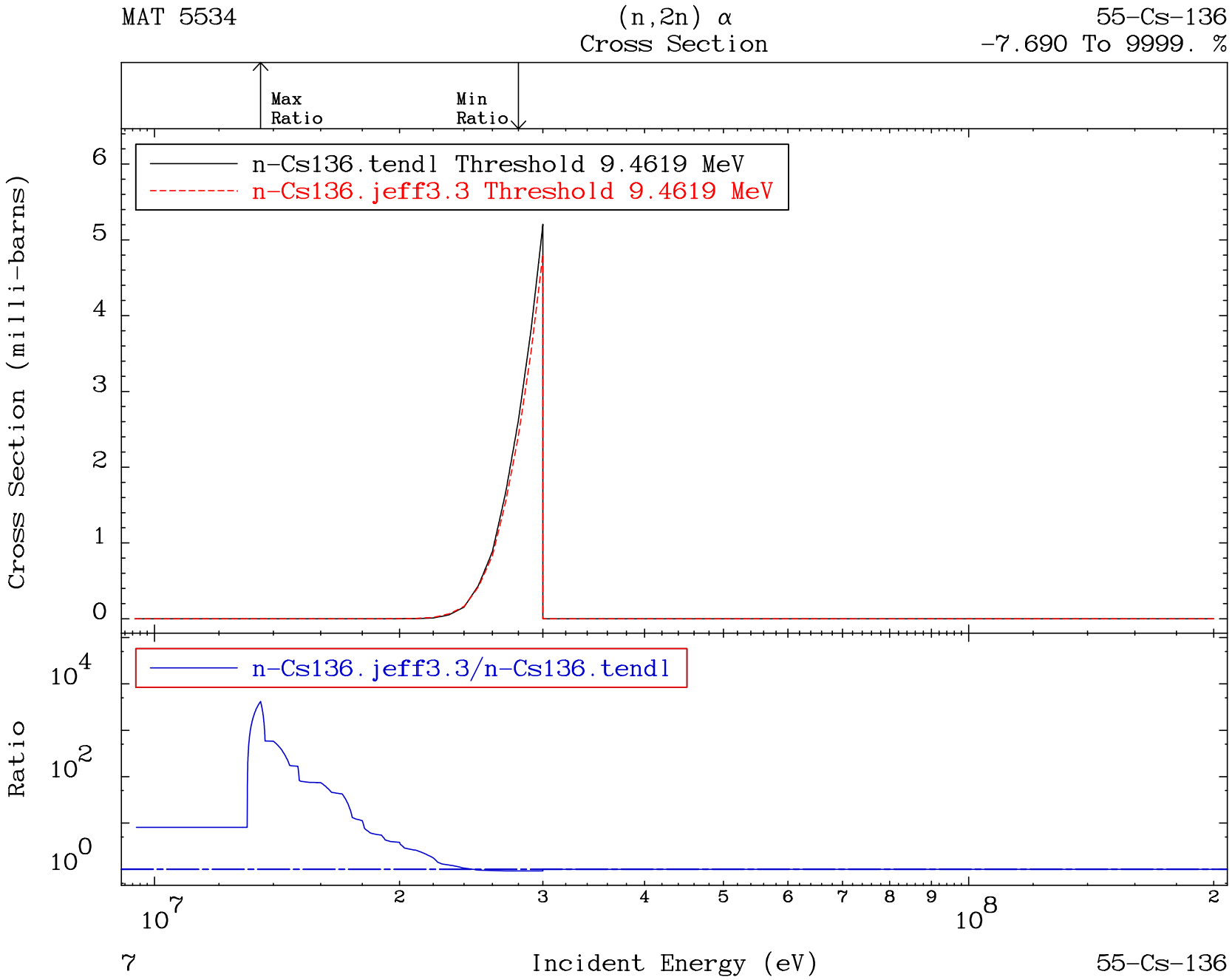

MAT 5534
Elastic
Cross Section
55-Cs-136
-94.50 To 9999. %
Max
Ratio
Min
Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
2
55-Cs-136

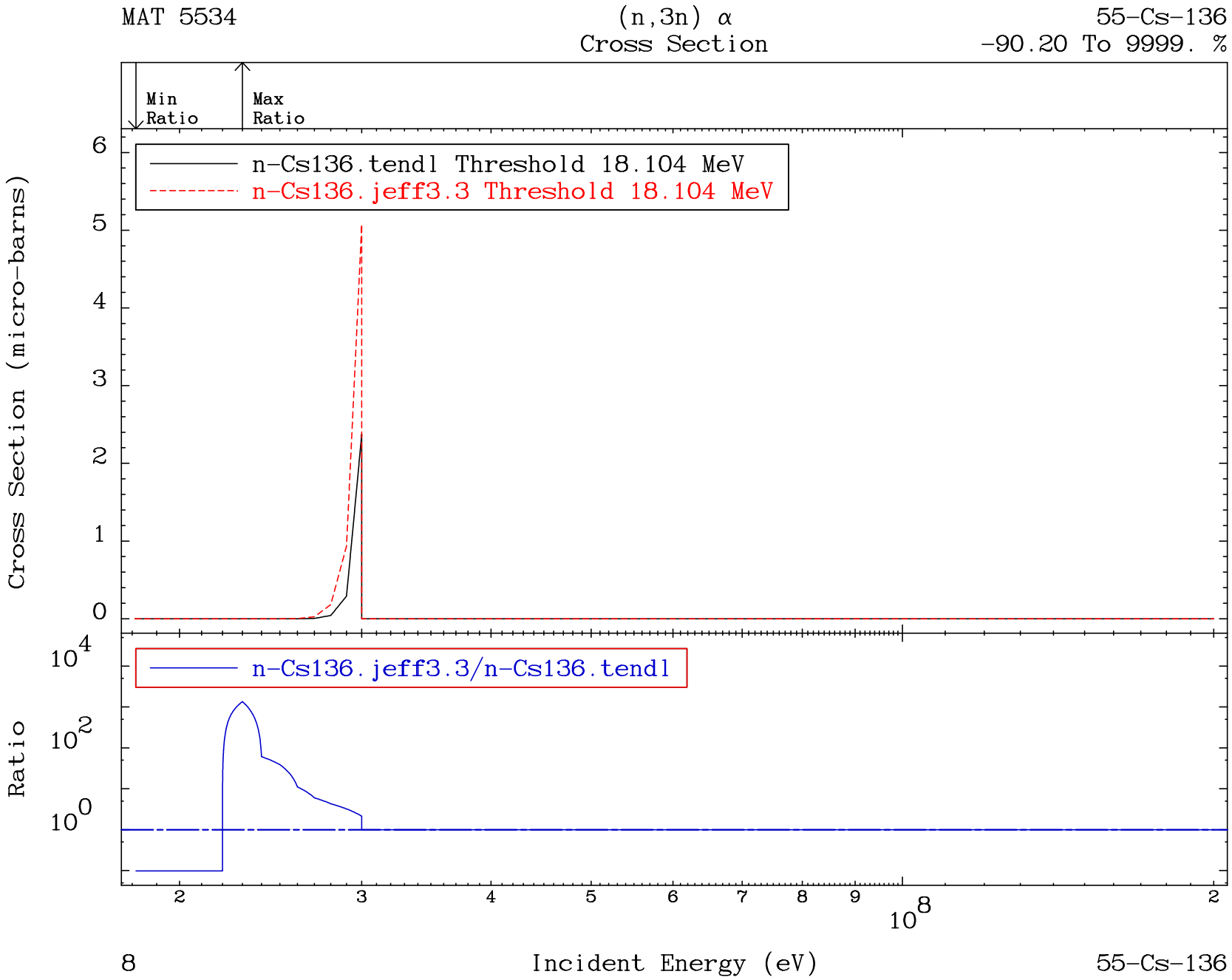

MAT 5534
(n,2n) d
Cross Section
55-Cs-136
-4.615 To 0.851 %
Max
Ratio
n-Cs136.tendl Threshold 20.050 MeV
n-Cs136.jeff3.3 Threshold 20.050 MeV
Cross Section (milli-barns)
0.8
0.6
0.4
0.2
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.02
1.00
0.98
0.96
20
40
60
80
100
120
140
160
180
200
3
Incident Energy (MeV)
55-Cs-136

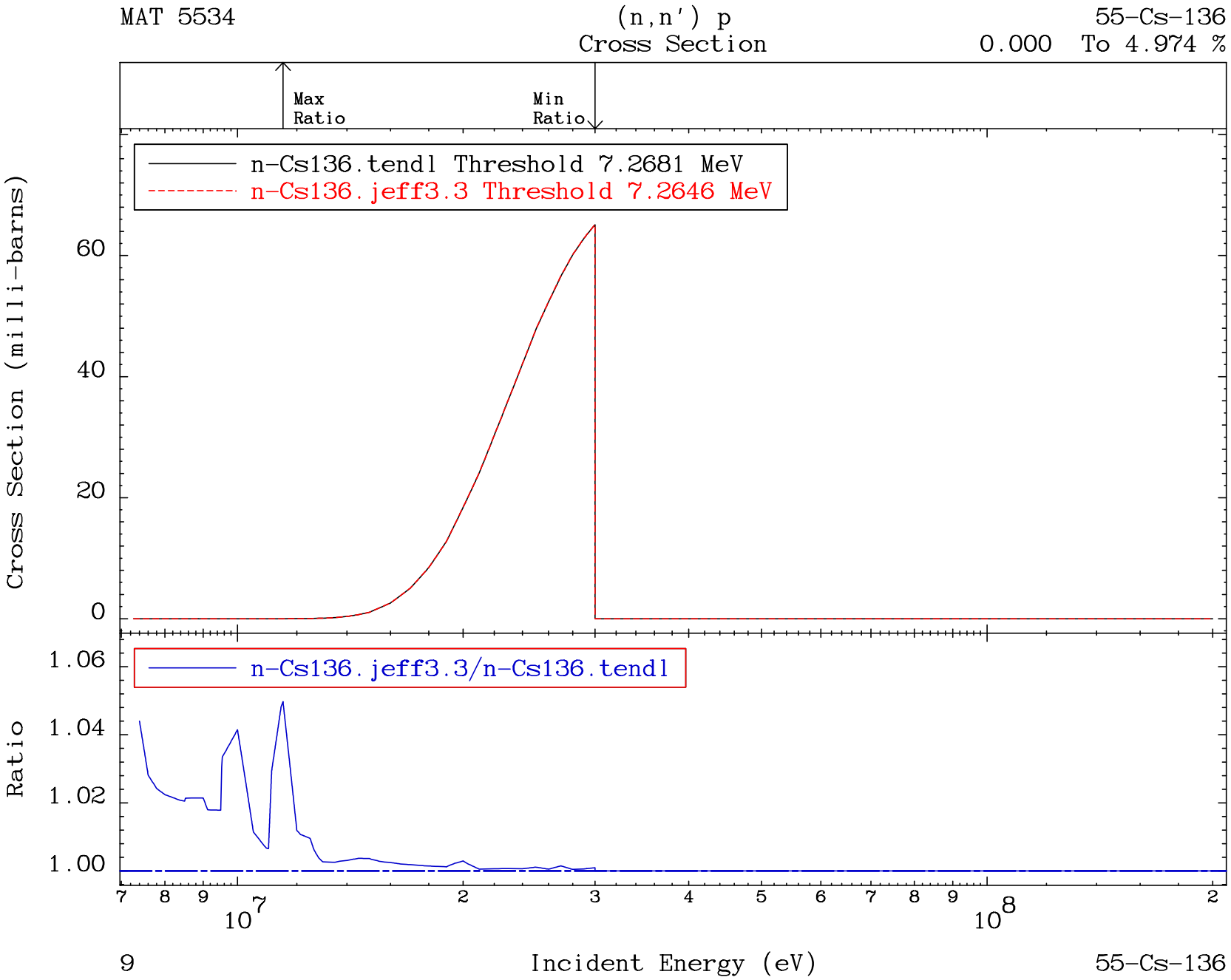

MAT 5534
(n,2n)
Cross Section
55-Cs-136
-0.018 To 0.071 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 6.8791 MeV
n-Cs136.jeff3.3 Threshold 6.8791 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
55-Cs-136

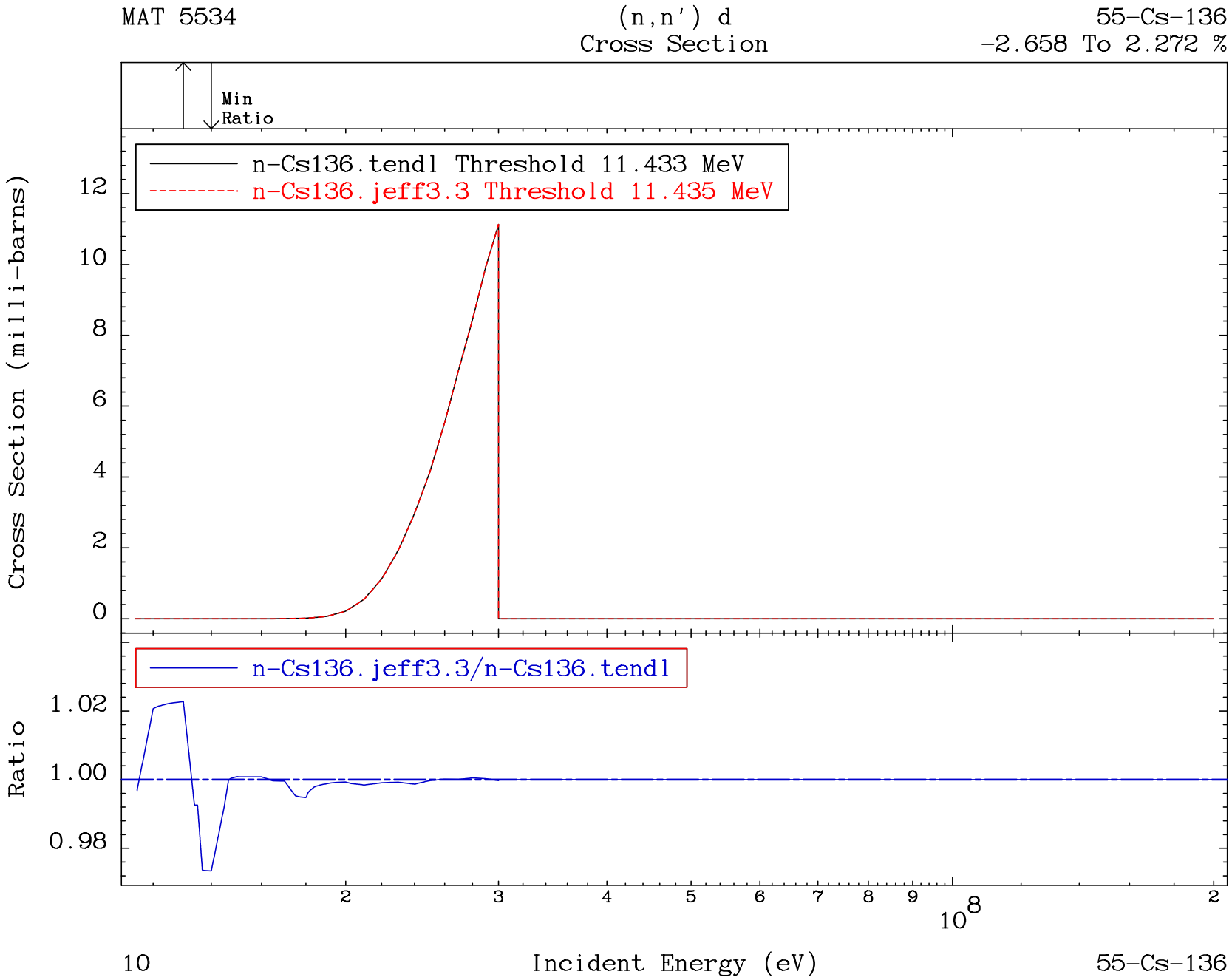

MAT 5534
(n,3n)
Cross Section
55-Cs-136
-0.284 To 0.165 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 15.706 MeV
n-Cs136.jeff3.3 Threshold 15.706 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
55-Cs-136

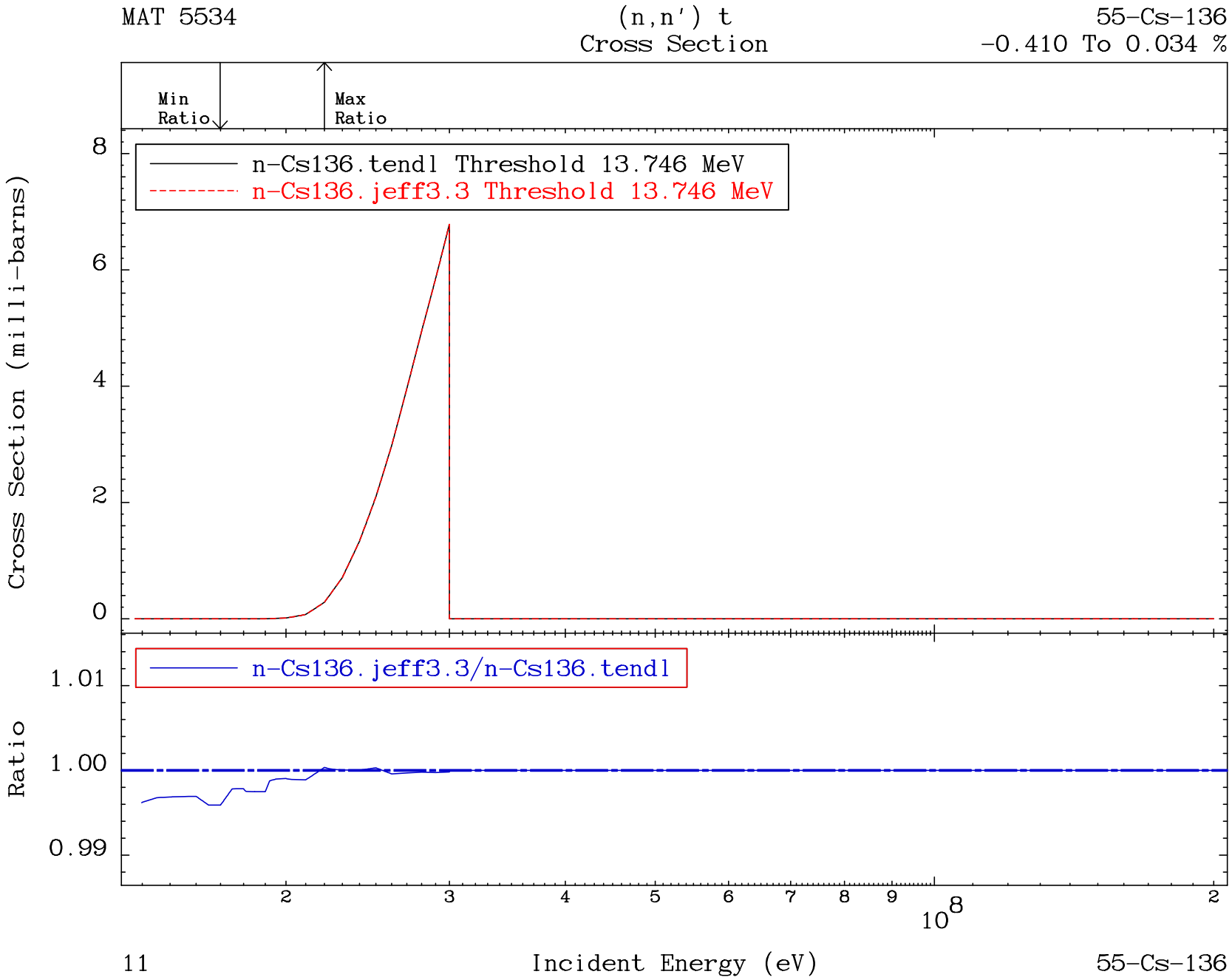

MAT 5534
(n,n') α
Cross Section
55-Cs-136
-10.06 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 3.0828 MeV
n-Cs136.jeff3.3 Threshold 3.0828 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
55-Cs-136

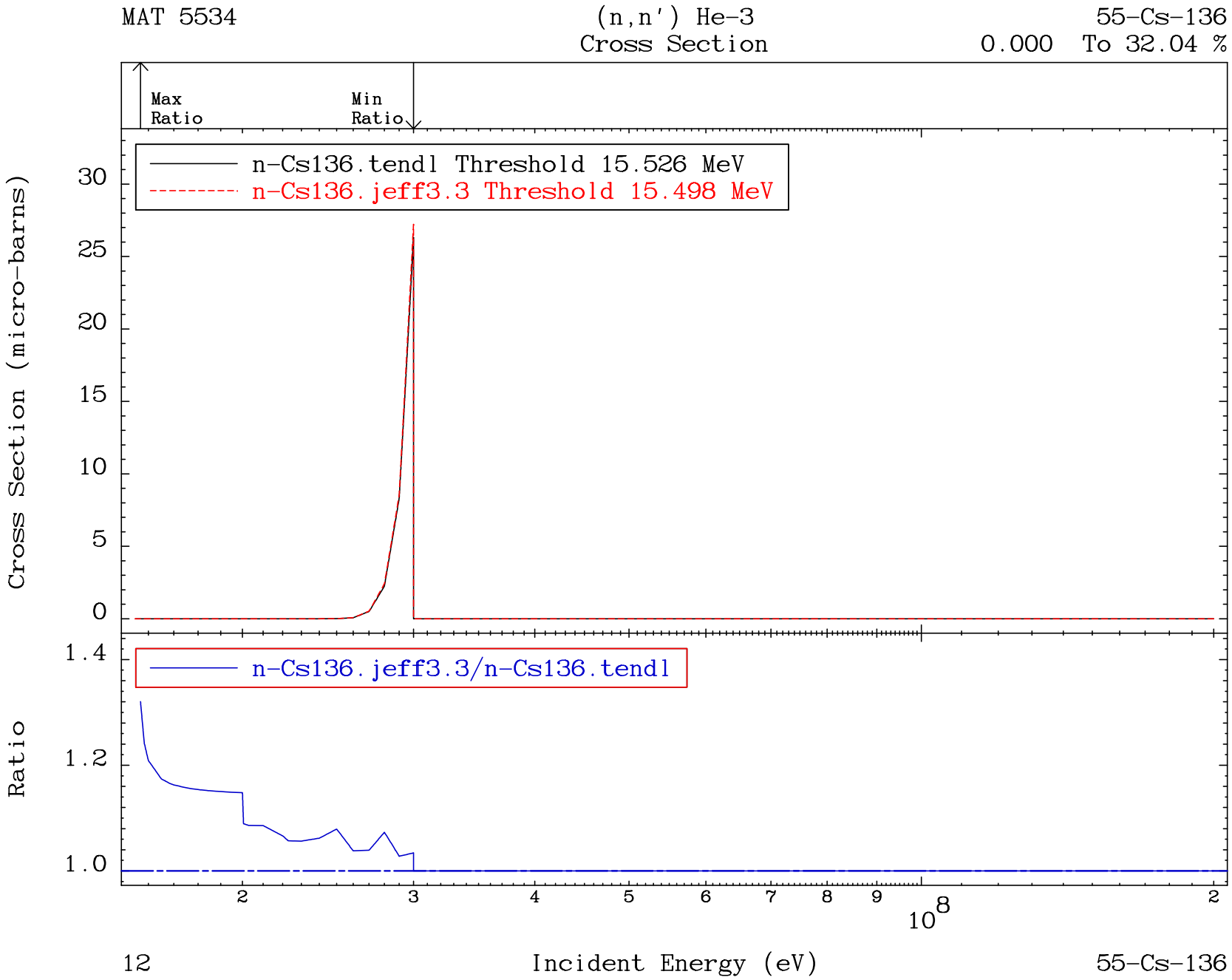

MAT 5534
(n,2n) α
Cross Section
55-Cs-136
-7.690 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.4619 MeV
n-Cs136.jeff3.3 Threshold 9.4619 MeV
Cross Section (milli-barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
55-Cs-136

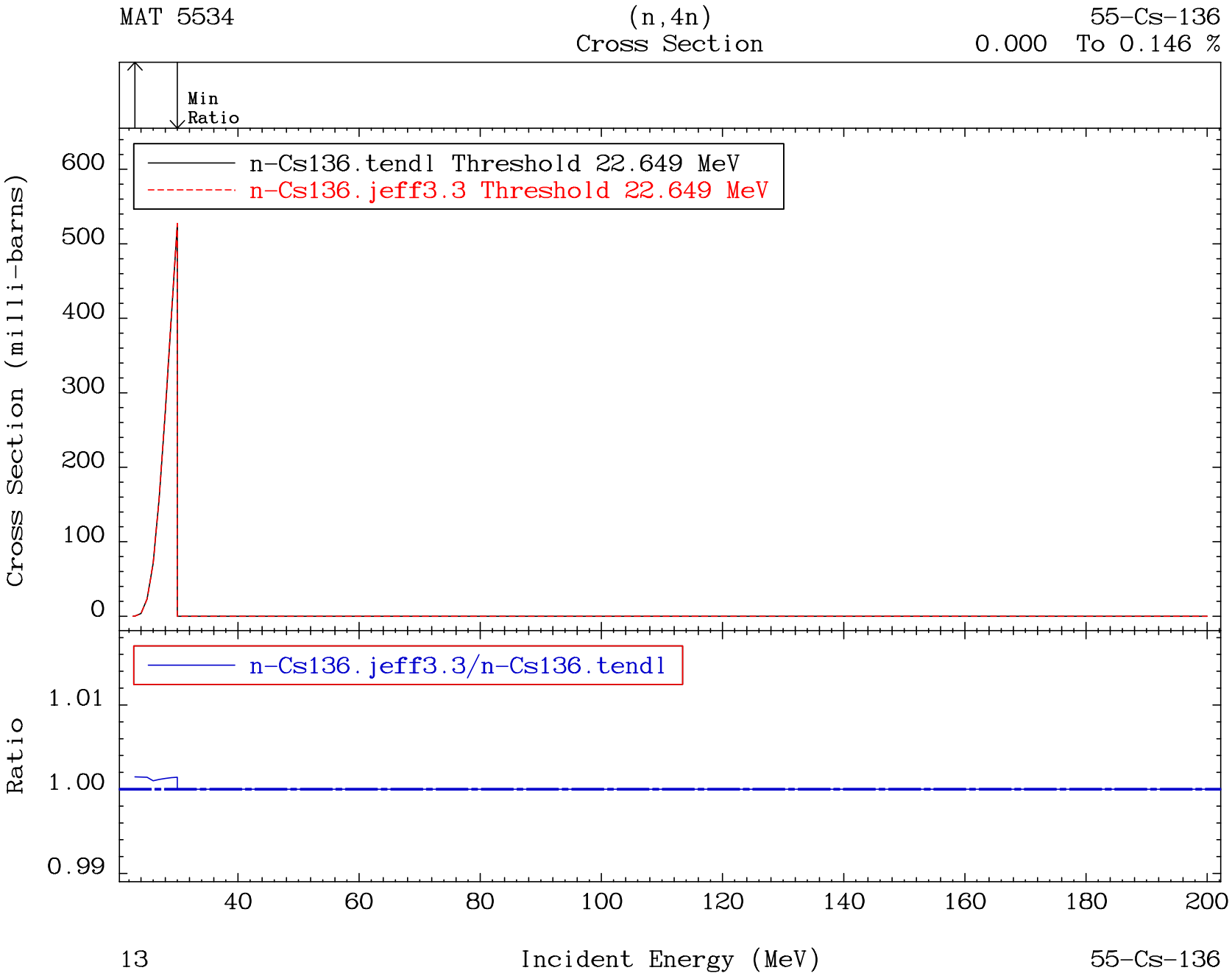

MAT 5534
(n,3n) α
Cross Section
55-Cs-136
-90.20 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 18.104 MeV
n-Cs136.jeff3.3 Threshold 18.104 MeV
Cross Section (micro-barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
8
55-Cs-136

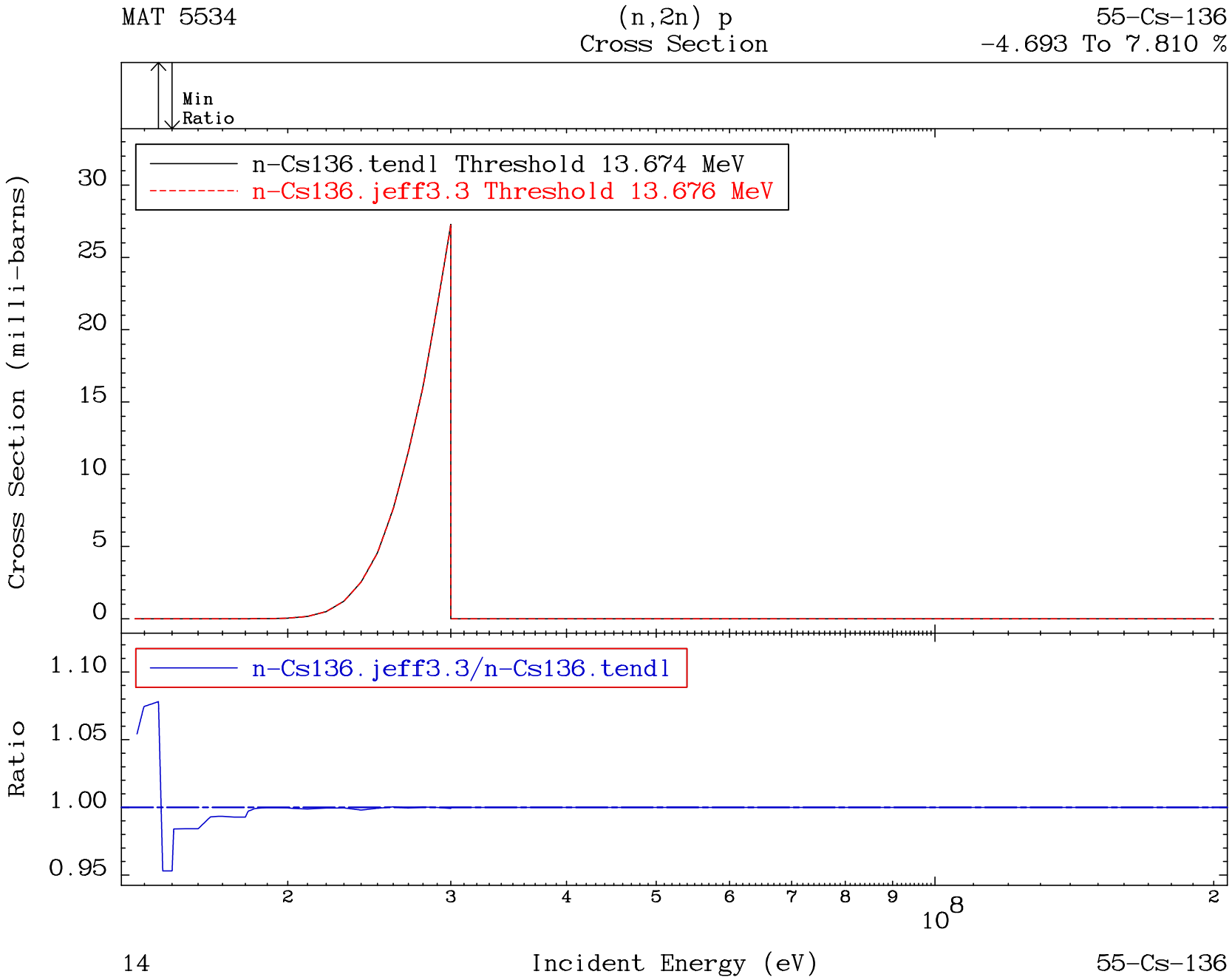

MAT 5534
(n,n') p
Cross Section
55-Cs-136
0.000 To 4.974 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 7.2681 MeV
n-Cs136.jeff3.3 Threshold 7.2646 MeV
Cross Section (milli-barns)
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.06
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
55-Cs-136

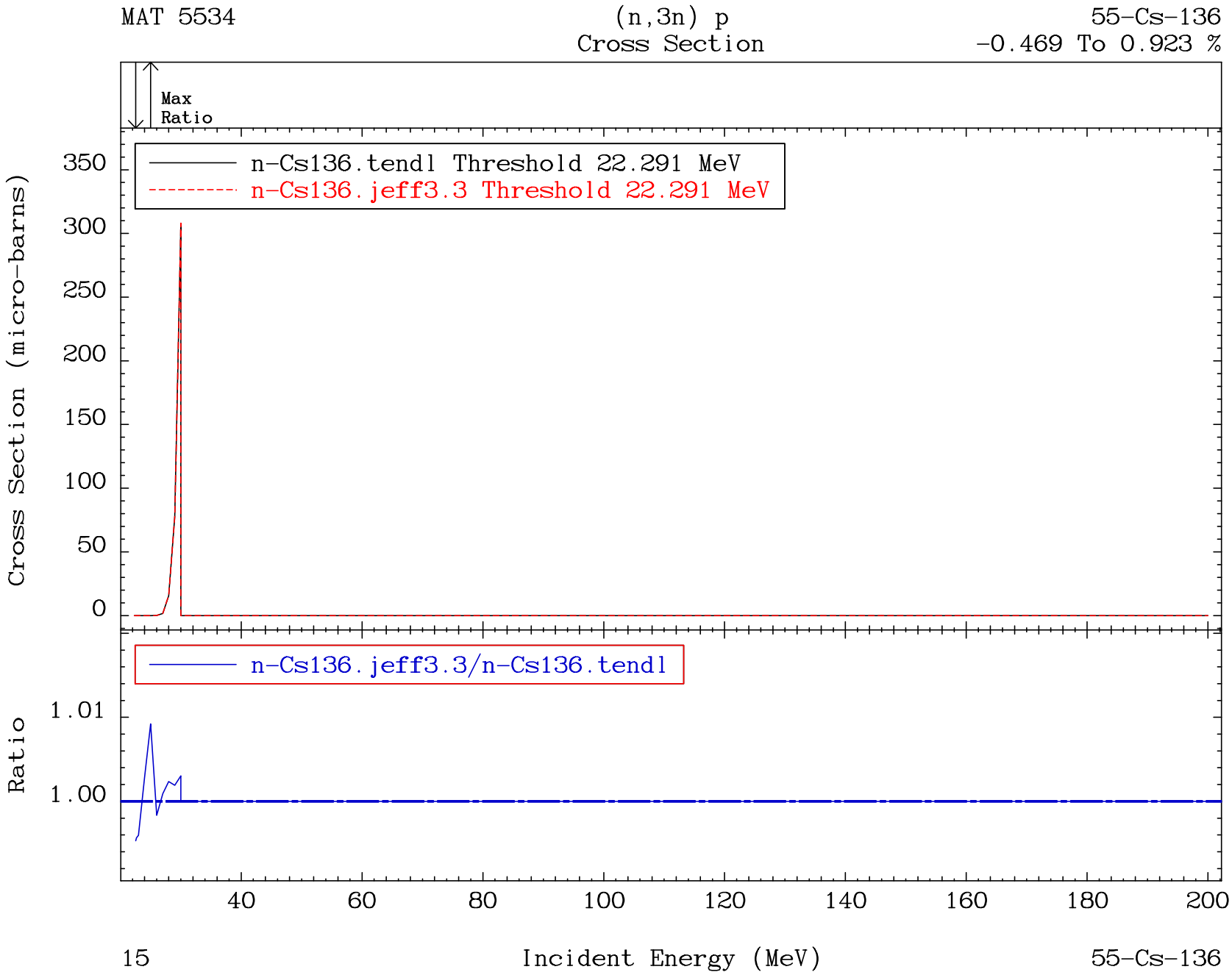

MAT 5534
(n,n') d
Cross Section
55-Cs-136
-2.658 To 2.272 %
Min
Ratio
n-Cs136.tendl Threshold 11.433 MeV
n-Cs136.jeff3.3 Threshold 11.435 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.98
1.00
1.02
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
55-Cs-136

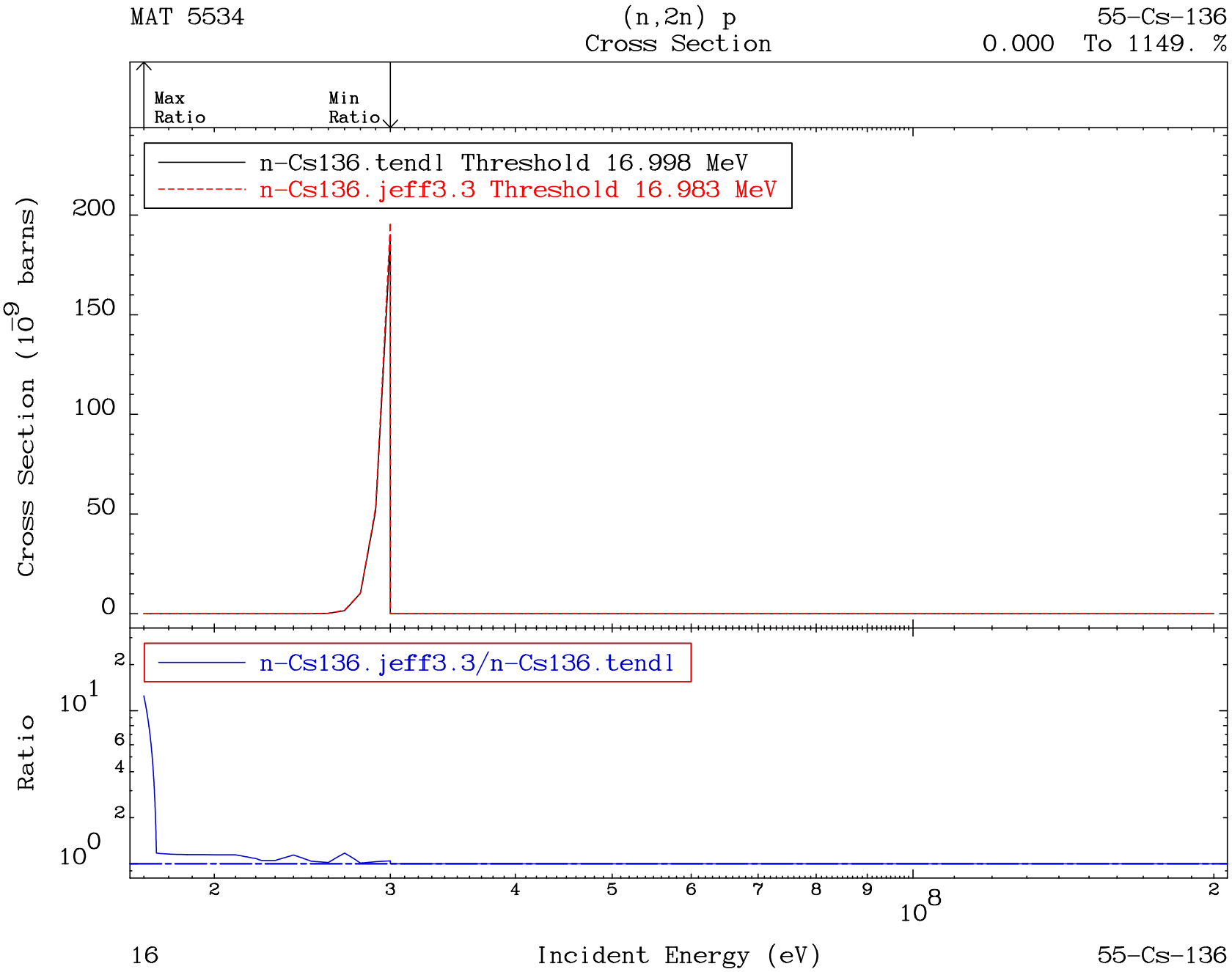

MAT 5534
(n,n') t
Cross Section
55-Cs-136
-0.410 To 0.034 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 13.746 MeV
n-Cs136.jeff3.3 Threshold 13.746 MeV
Cross Section (milli-barns)
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
55-Cs-136

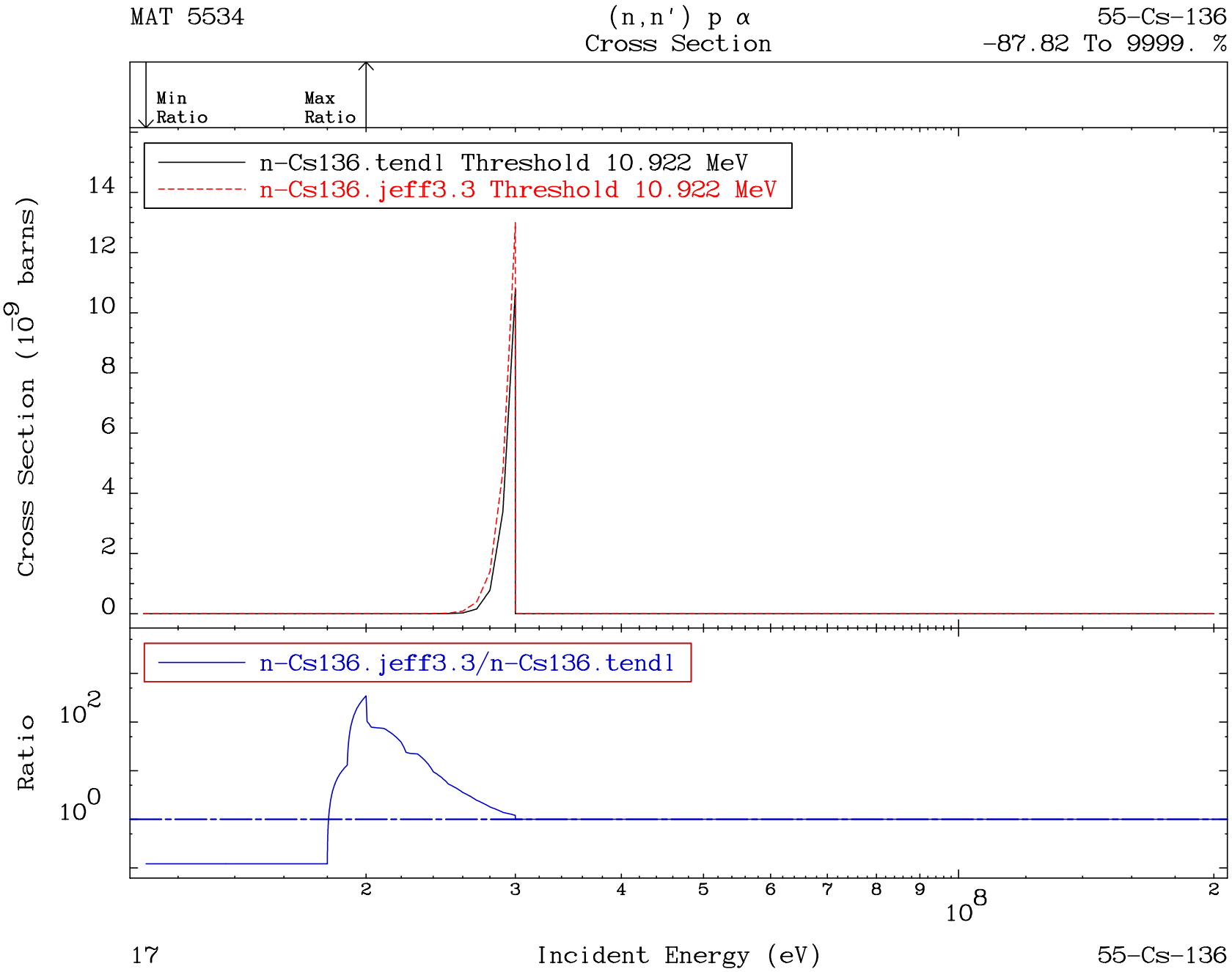

MAT 5534
(n,n') He-3
Cross Section
55-Cs-136
0.000 To 32.04 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 15.526 MeV
n-Cs136.jeff3.3 Threshold 15.498 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
55-Cs-136

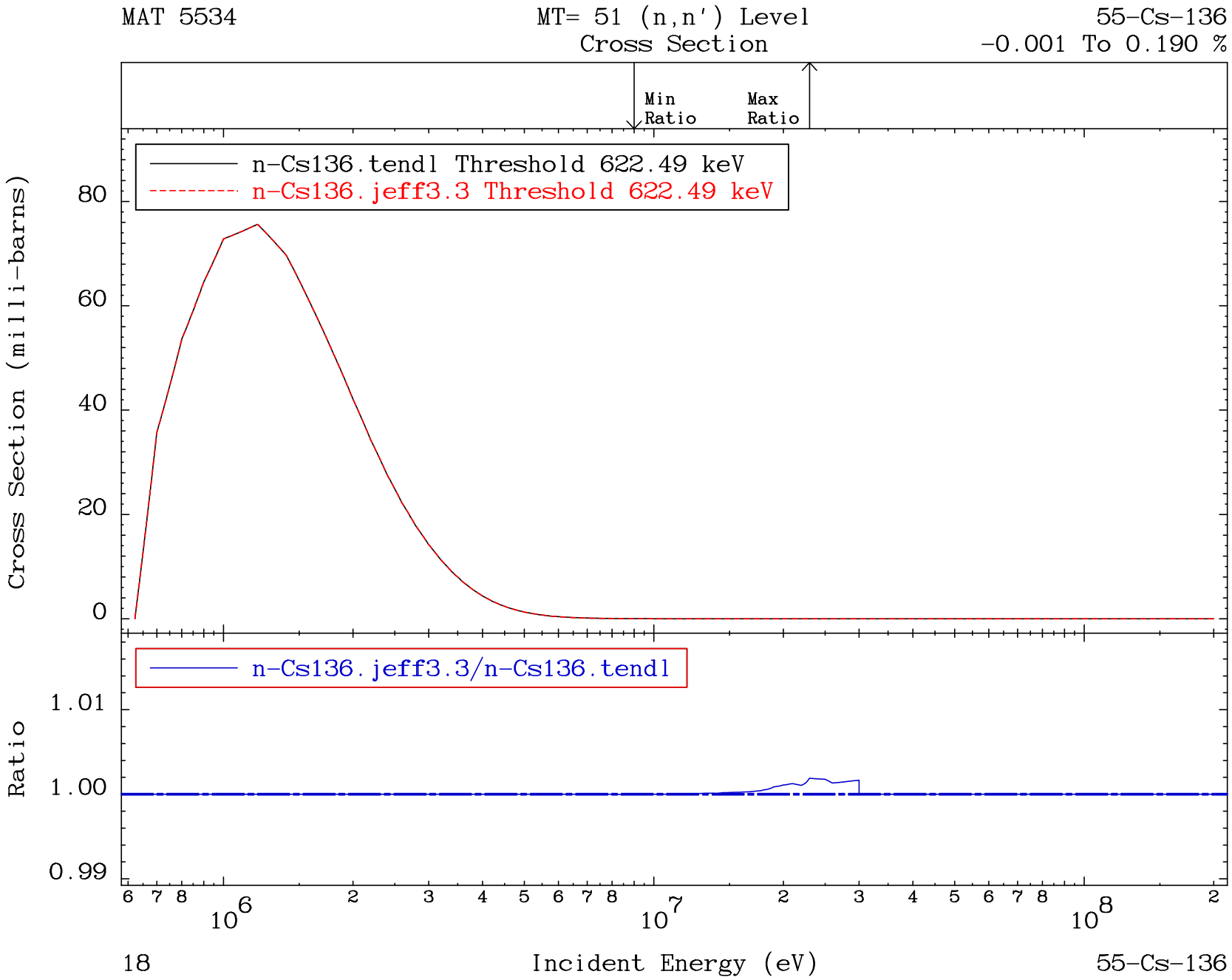

MAT 5534
(n,4n)
Cross Section
55-Cs-136
0.000 To 0.146 %
Min
Ratio
n-Cs136.tendl Threshold 22.649 MeV
n-Cs136.jeff3.3 Threshold 22.649 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
55-Cs-136

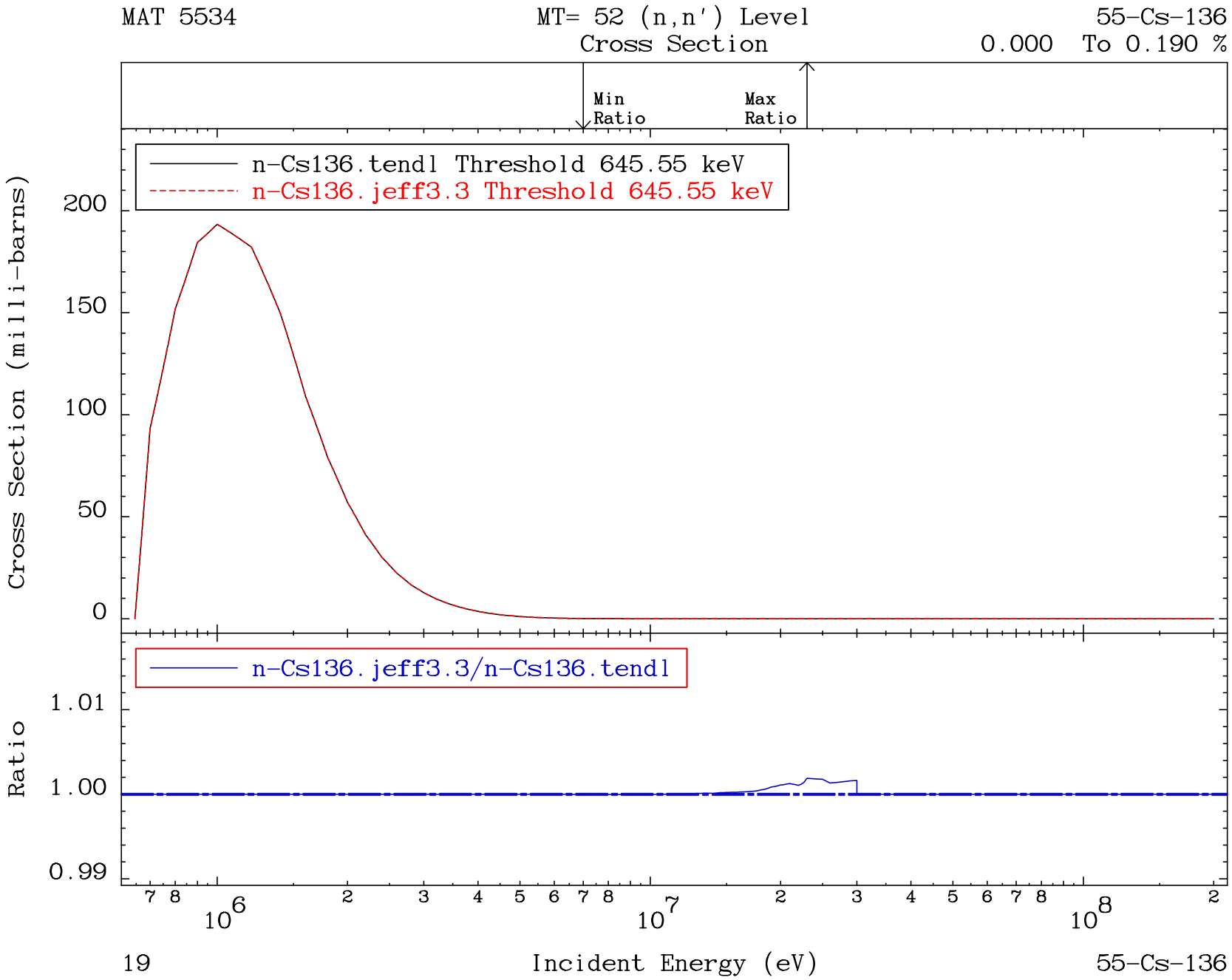

MAT 5534
(n,2n) p
Cross Section
55-Cs-136
-4.693 To 7.810 %
Min
Ratio
n-Cs136.tendl Threshold 13.674 MeV
n-Cs136.jeff3.3 Threshold 13.676 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.10
1.05
1.00
0.95
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
55-Cs-136

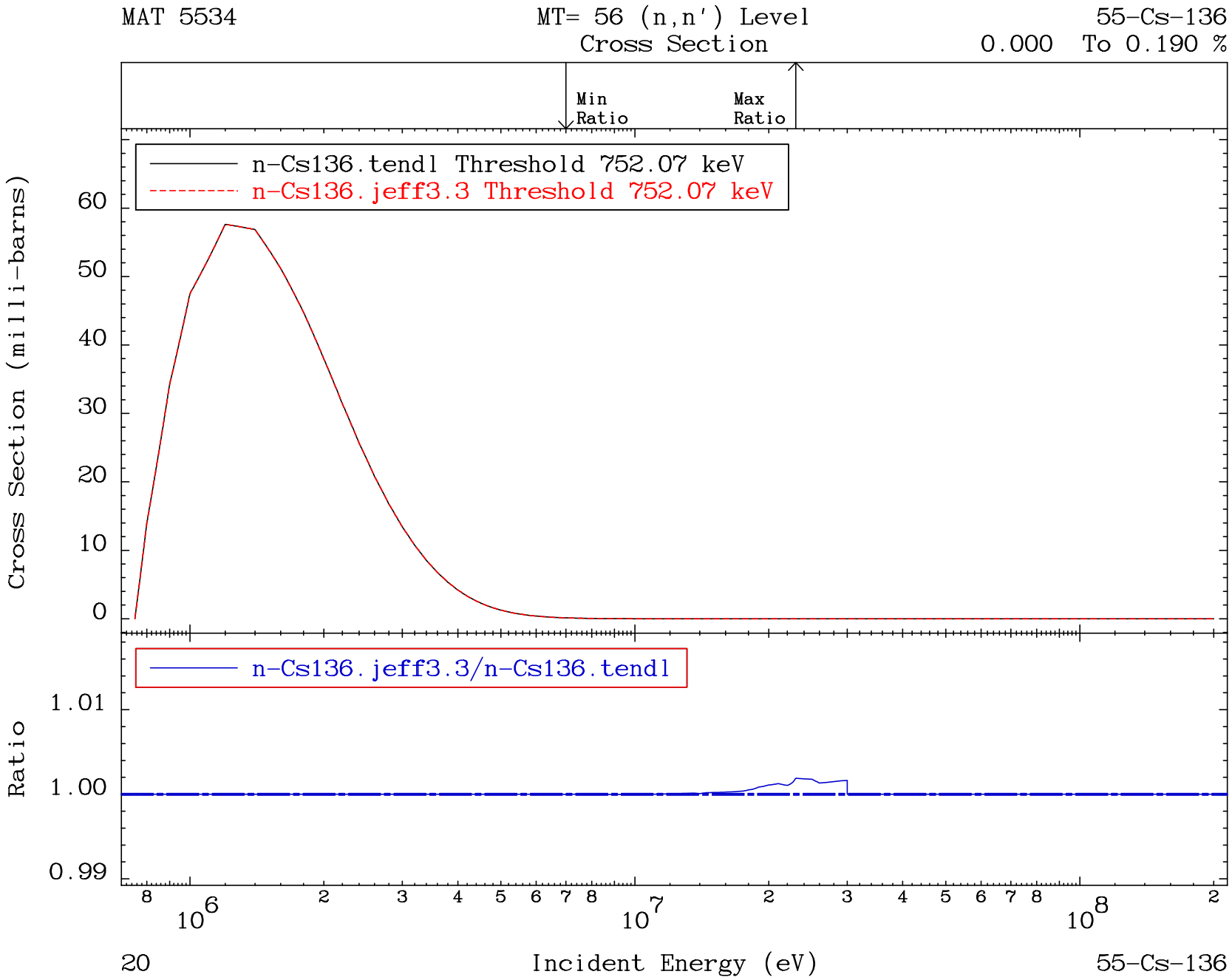

MAT 5534
(n,3n) p
Cross Section
55-Cs-136
-0.469 To 0.923 %
Max
Ratio
n-Cs136.tendl Threshold 22.291 MeV
n-Cs136.jeff3.3 Threshold 22.291 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
55-Cs-136

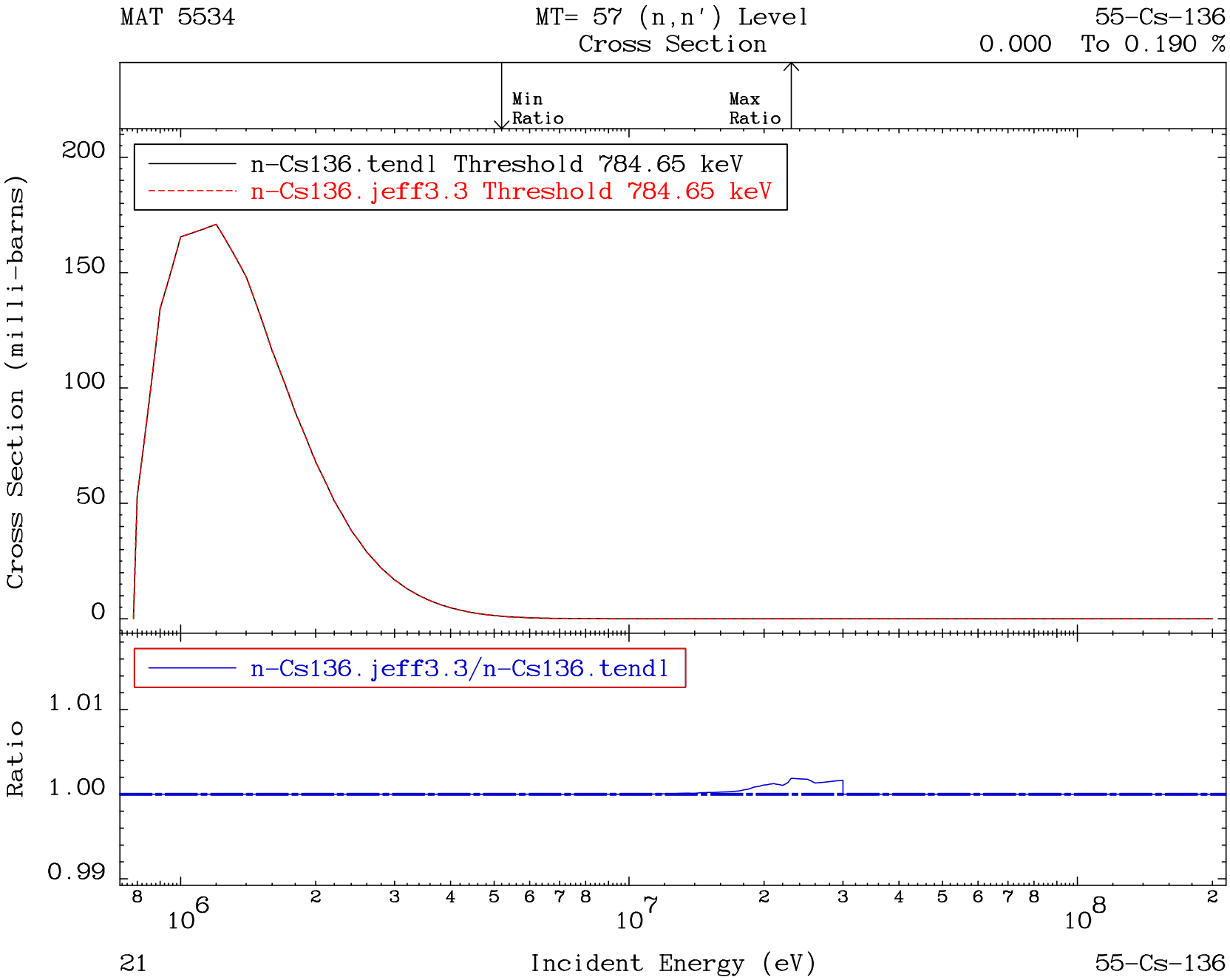

MAT 5534
(n,2n) p
Cross Section
55-Cs-136
0.000 To 1149. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 16.998 MeV
n-Cs136.jeff3.3 Threshold 16.983 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^{1}
6
4
2
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
16
Incident Energy (eV)
55-Cs-136

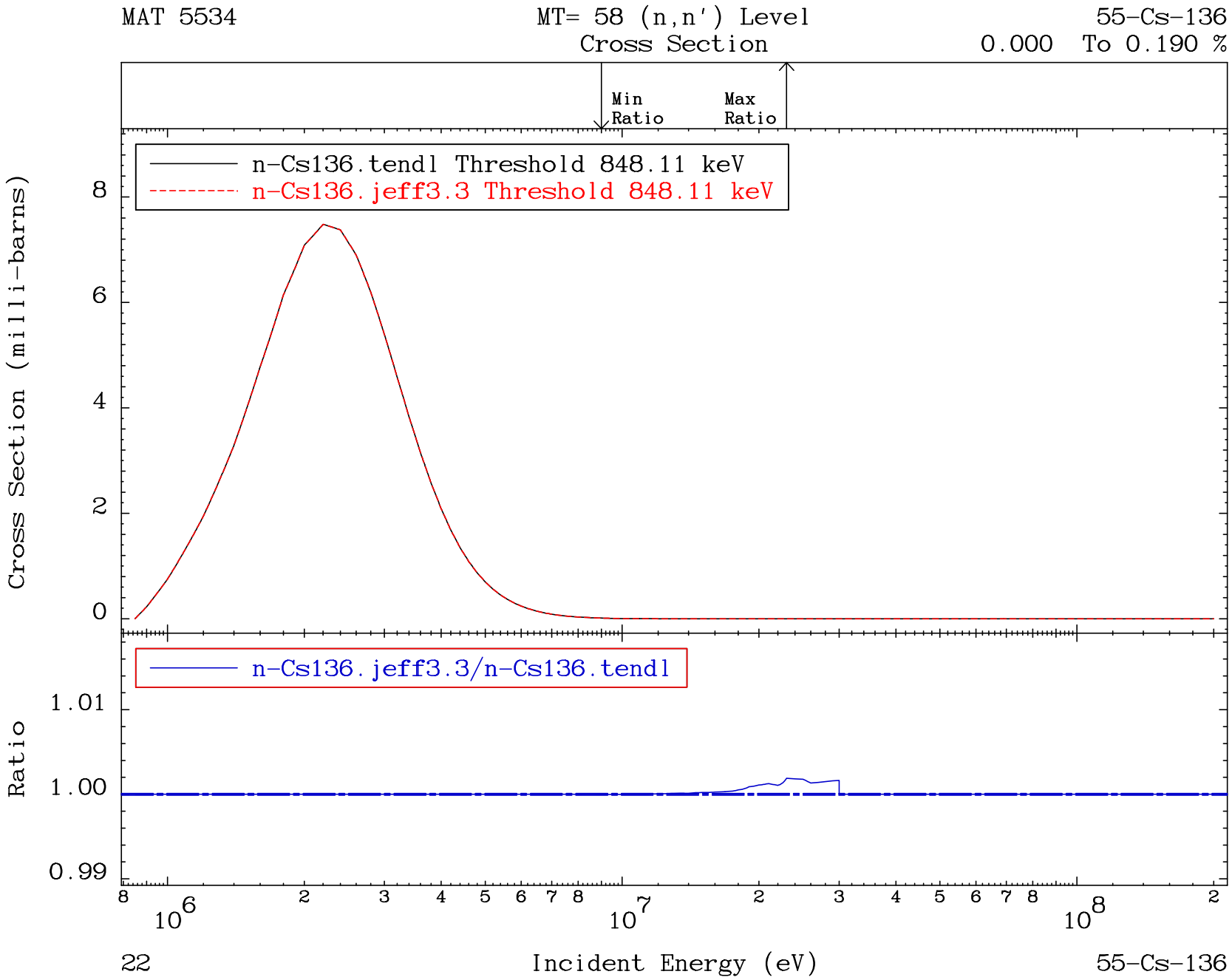

MAT 5534
(n,n') p α
Cross Section
55-Cs-136
-87.82 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 10.922 MeV
n-Cs136.jeff3.3 Threshold 10.922 MeV
Cross Section (10^{-9} barns)
14
12
10
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^{2}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
17
Incident Energy (eV)
55-Cs-136

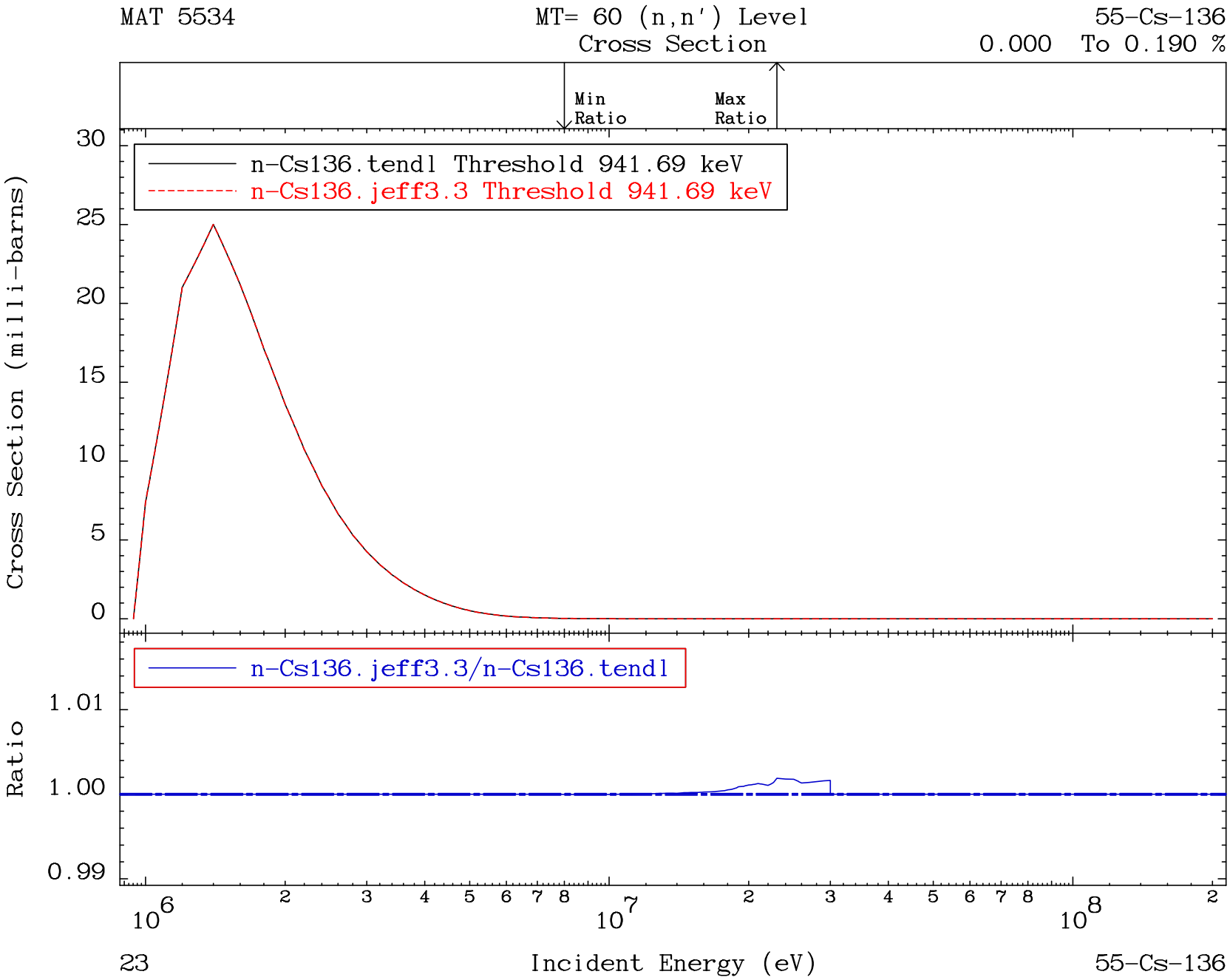

MAT 5534
MT= 51 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 622.49 keV
n-Cs136.jeff3.3 Threshold 622.49 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
55-Cs-136

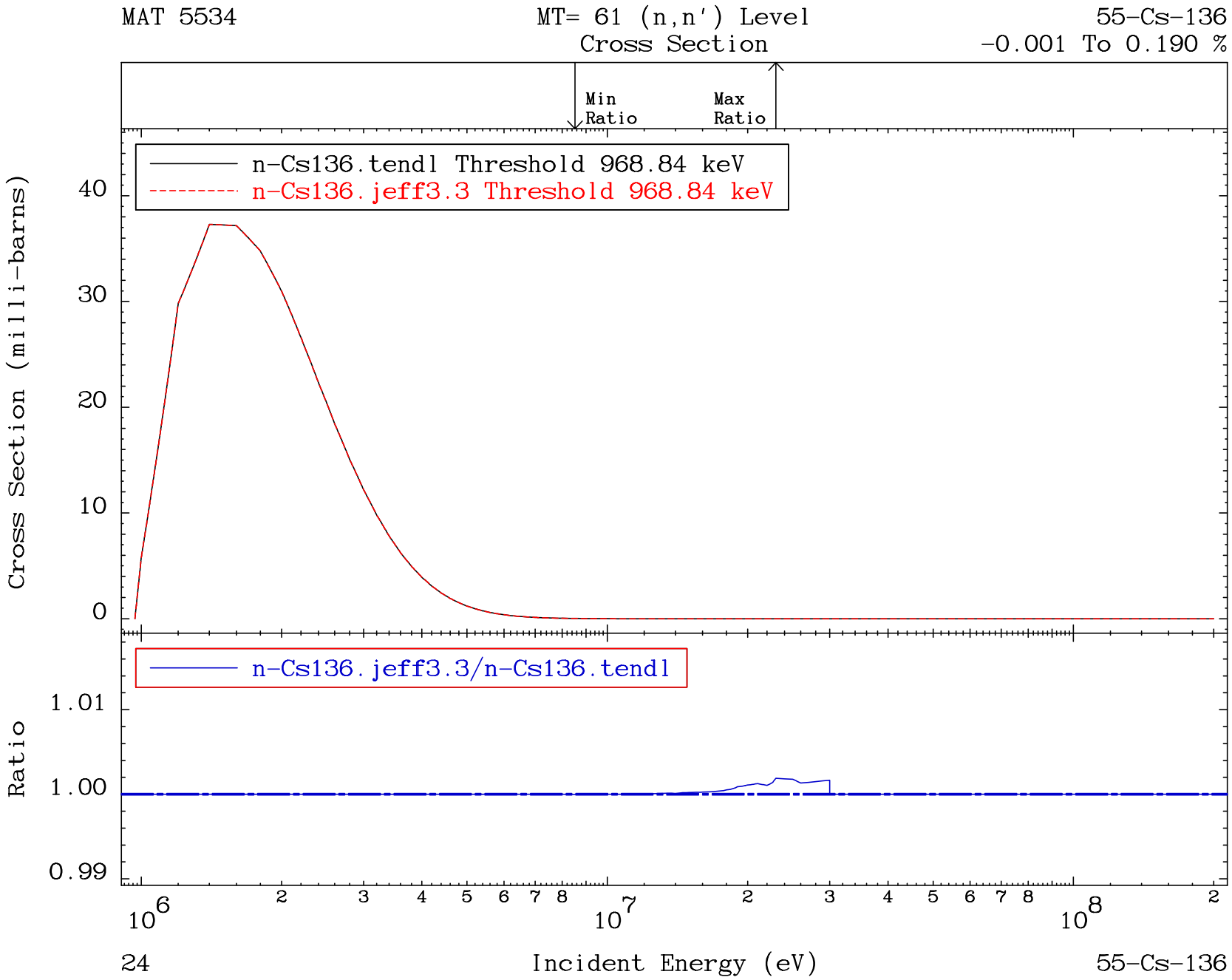

MAT 5534
MT= 52 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 645.55 keV
n-Cs136.jeff3.3 Threshold 645.55 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
55-Cs-136

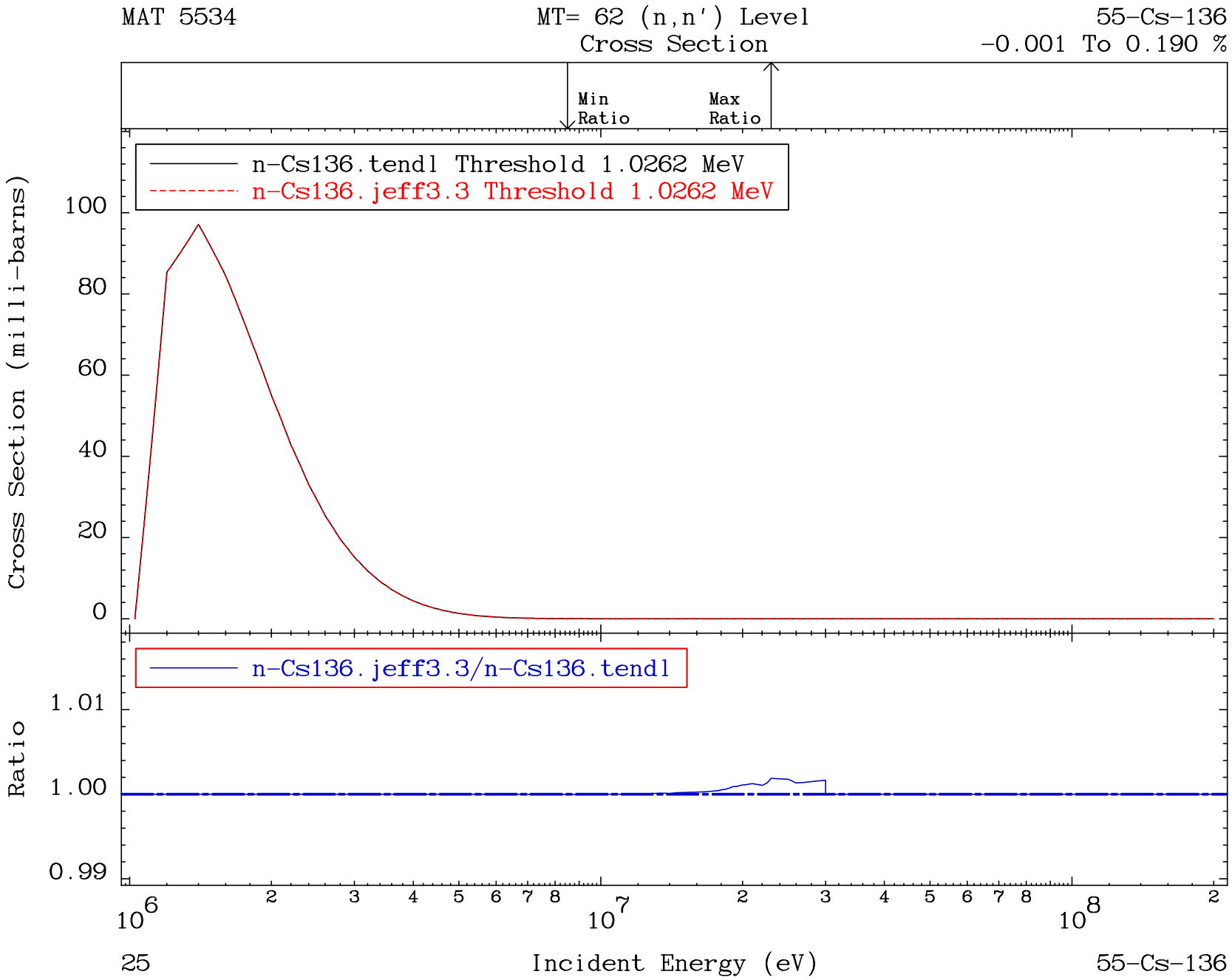

MAT 5534
MT= 56 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 752.07 keV
n-Cs136.jeff3.3 Threshold 752.07 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
8 2 3 4 5 6 7 8 2 3 4 5 6 7 8 2
10^6
10^7
10^8
20
Incident Energy (eV)
55-Cs-136

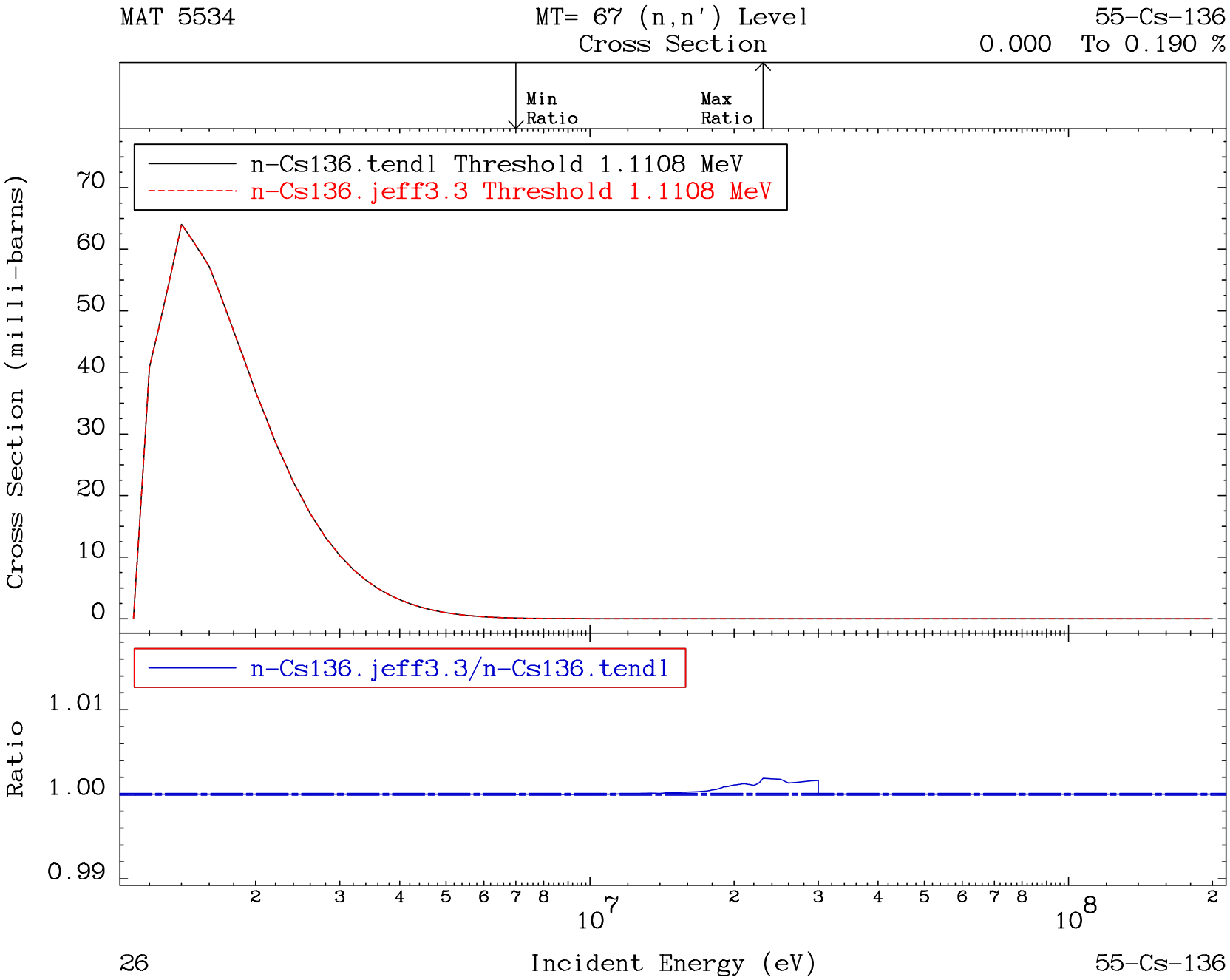

MAT 5534
MT= 57 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 784.65 keV
n-Cs136.jeff3.3 Threshold 784.65 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
8 2 3 4 5 6 7 8 2 3 4 5 6 7 8 2
10^6
10^7
10^8
21
Incident Energy (eV)
55-Cs-136

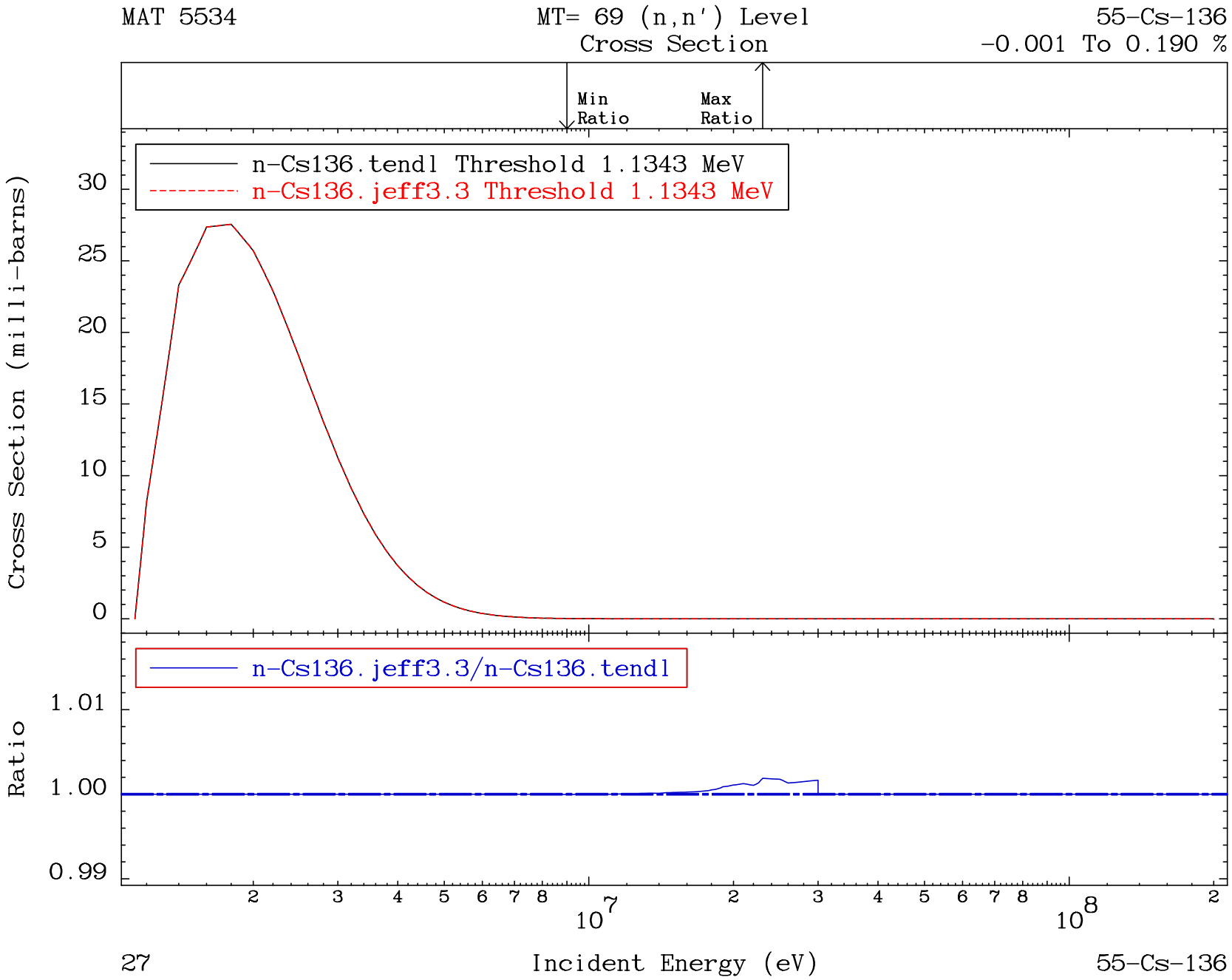

MAT 5534
MT= 58 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 848.11 keV
n-Cs136.jeff3.3 Threshold 848.11 keV
Cross Section (milli-barns)
0
2
4
6
8
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.99
1.00
1.01
8 2 3 4 5 6 7 8 2 3 4 5 6 7 8 2
10^6
10^7
10^8
22
Incident Energy (eV)
55-Cs-136

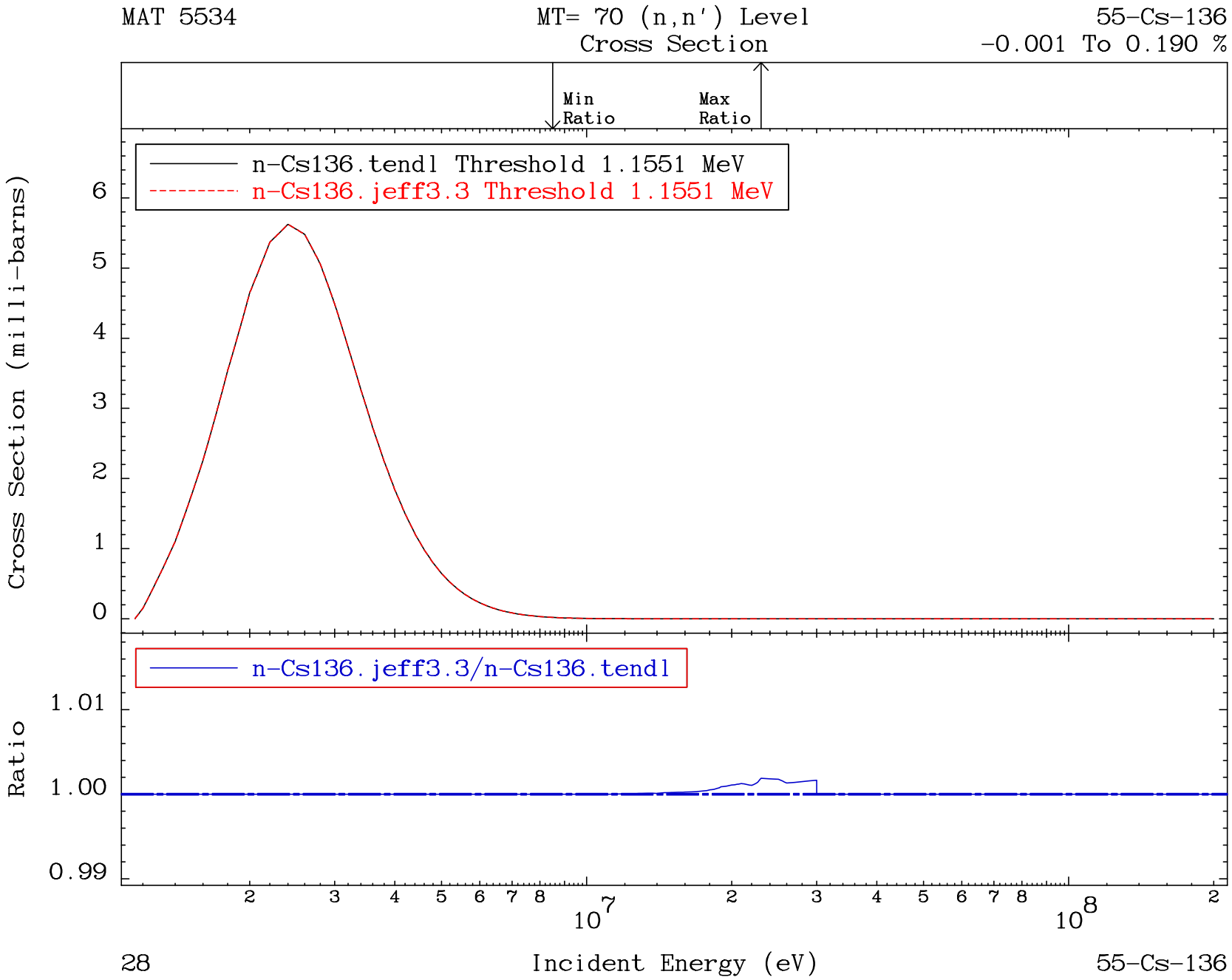

MAT 5534
MT= 60 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 941.69 keV
n-Cs136.jeff3.3 Threshold 941.69 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
23
Incident Energy (eV)
55-Cs-136

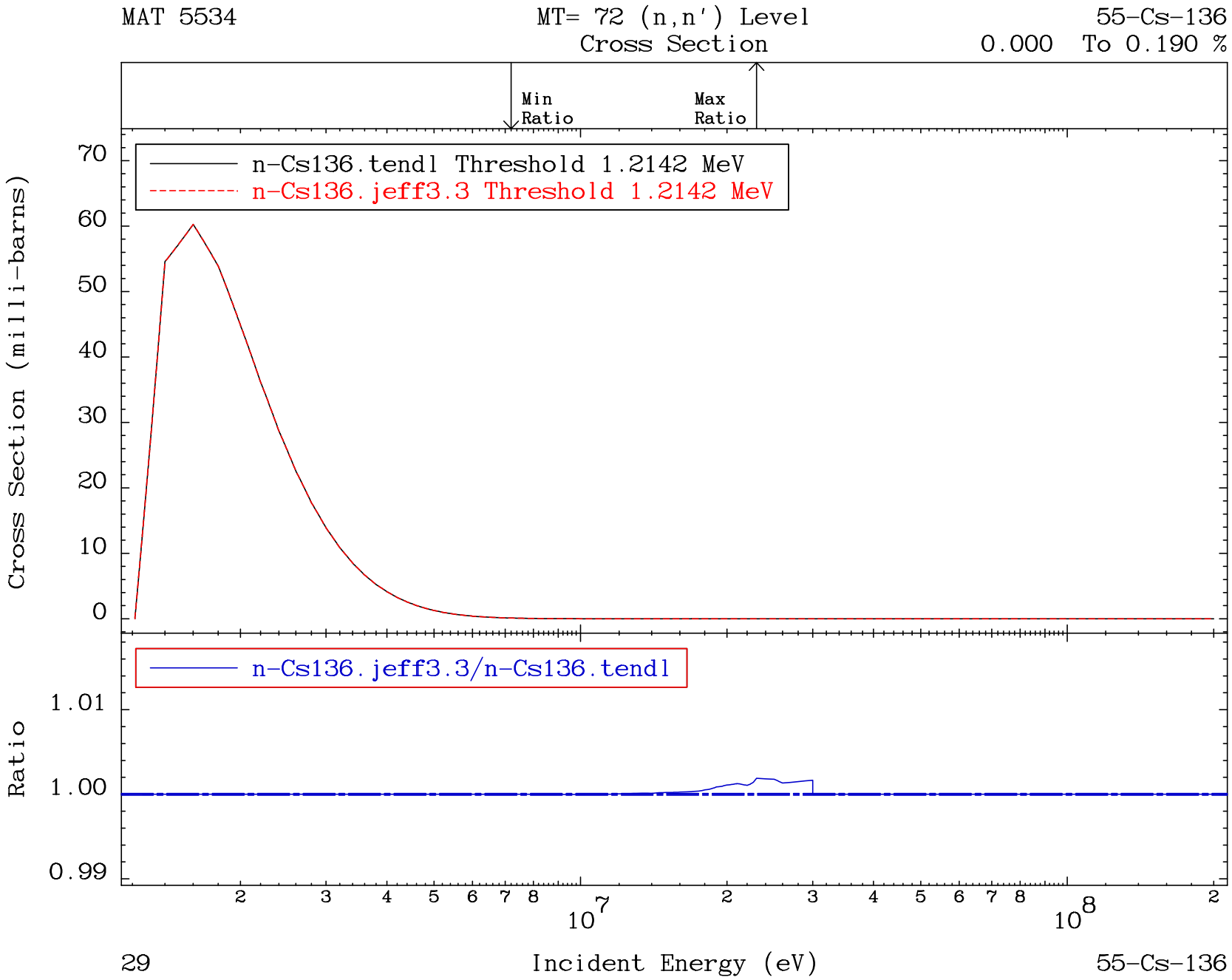

MAT 5534
MT= 61 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 968.84 keV
n-Cs136.jeff3.3 Threshold 968.84 keV
Cross Section (milli-barns)
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
55-Cs-136

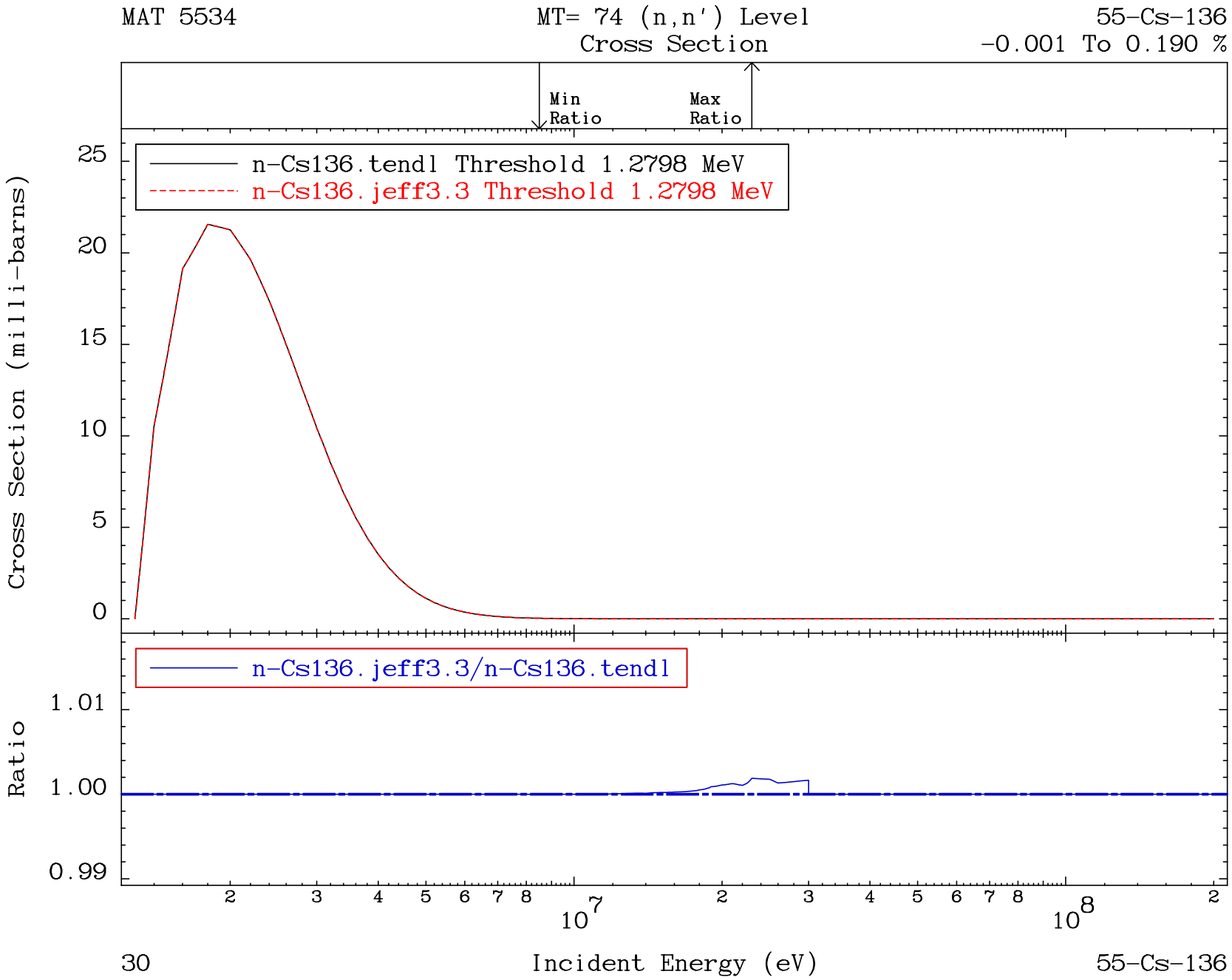

MAT 5534
MT= 62 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.0262 MeV
n-Cs136.jeff3.3 Threshold 1.0262 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
55-Cs-136

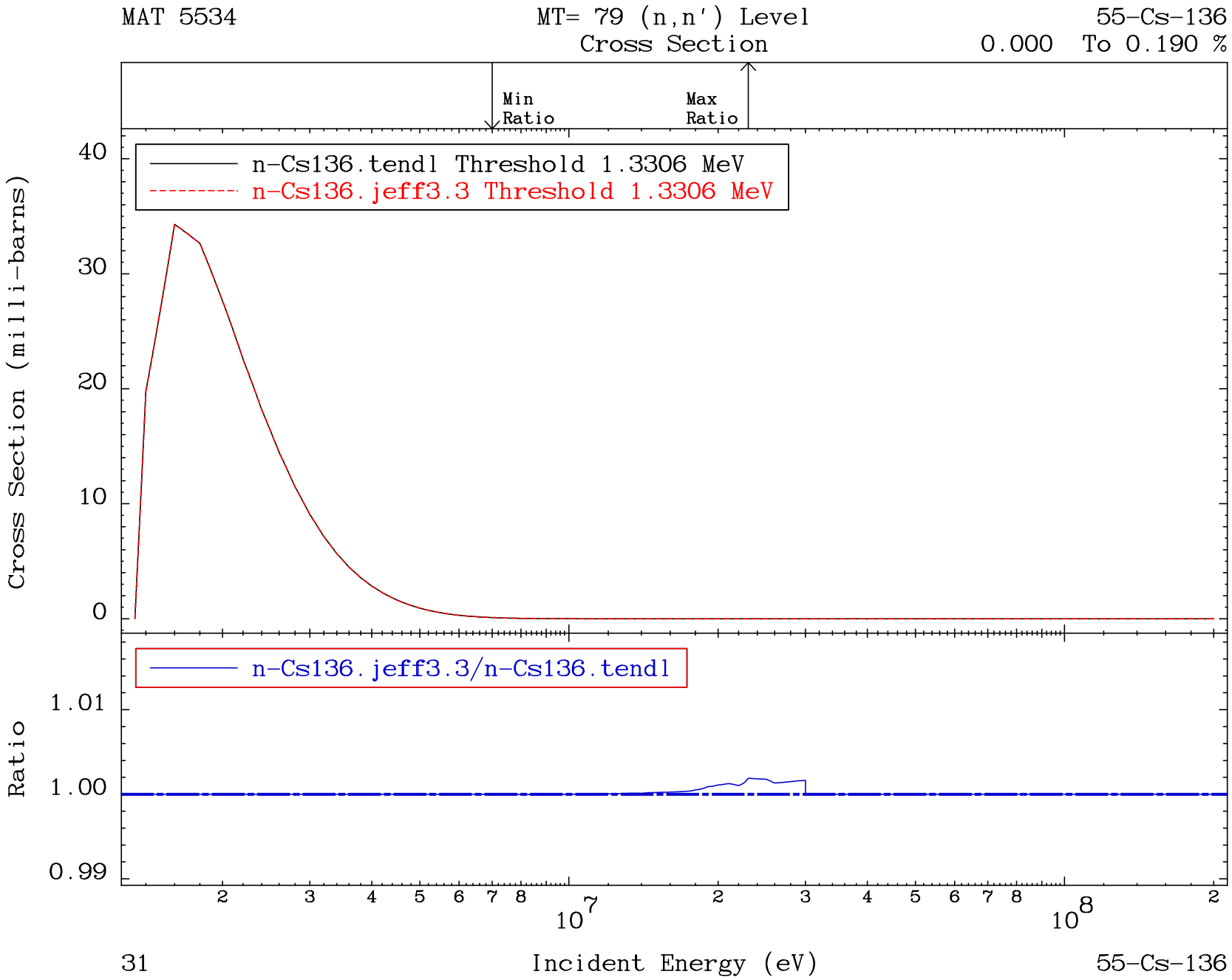

MAT 5534
MT= 67 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.1108 MeV
n-Cs136.jeff3.3 Threshold 1.1108 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
55-Cs-136

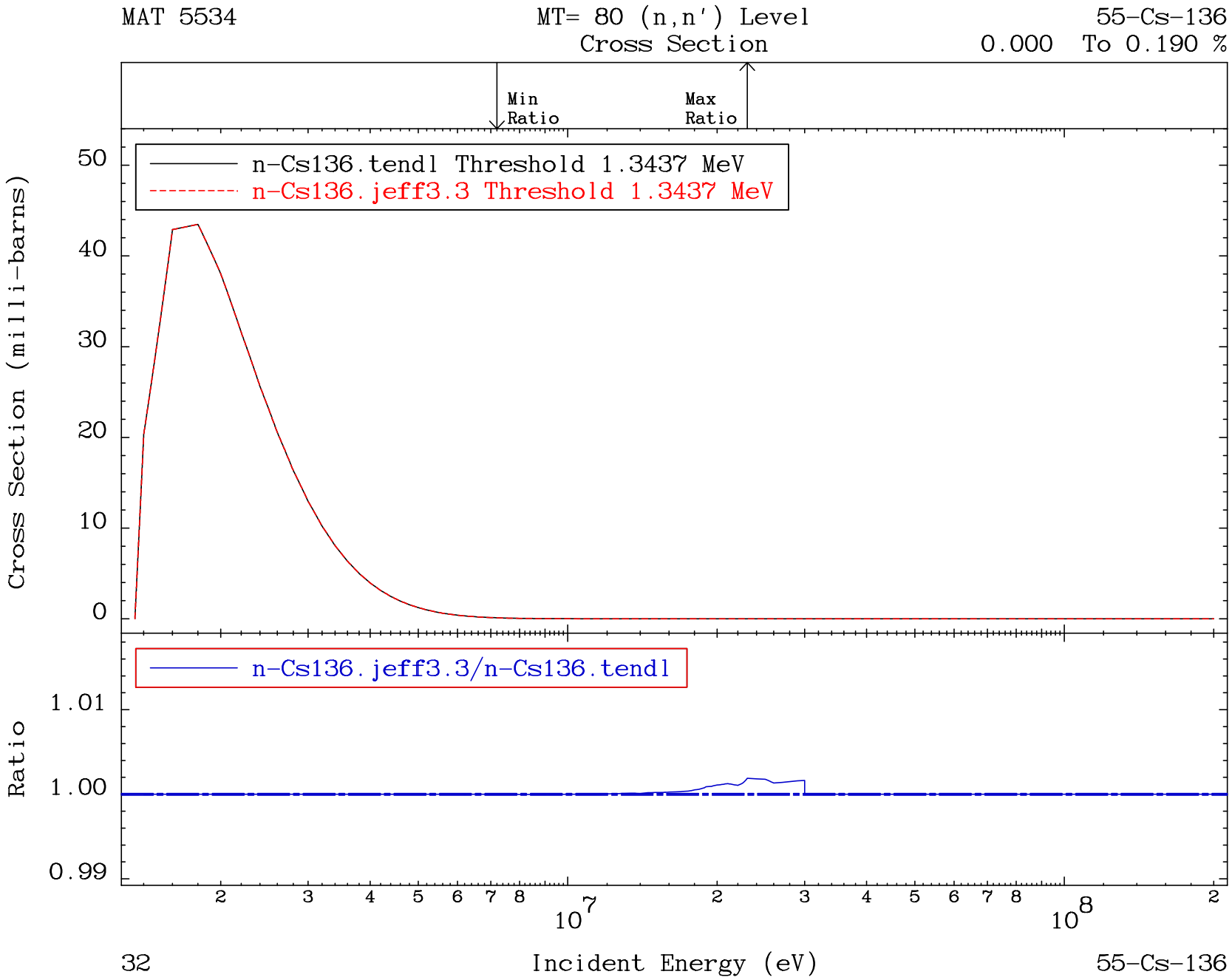

MAT 5534
MT= 69 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.1343 MeV
n-Cs136.jeff3.3 Threshold 1.1343 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
55-Cs-136

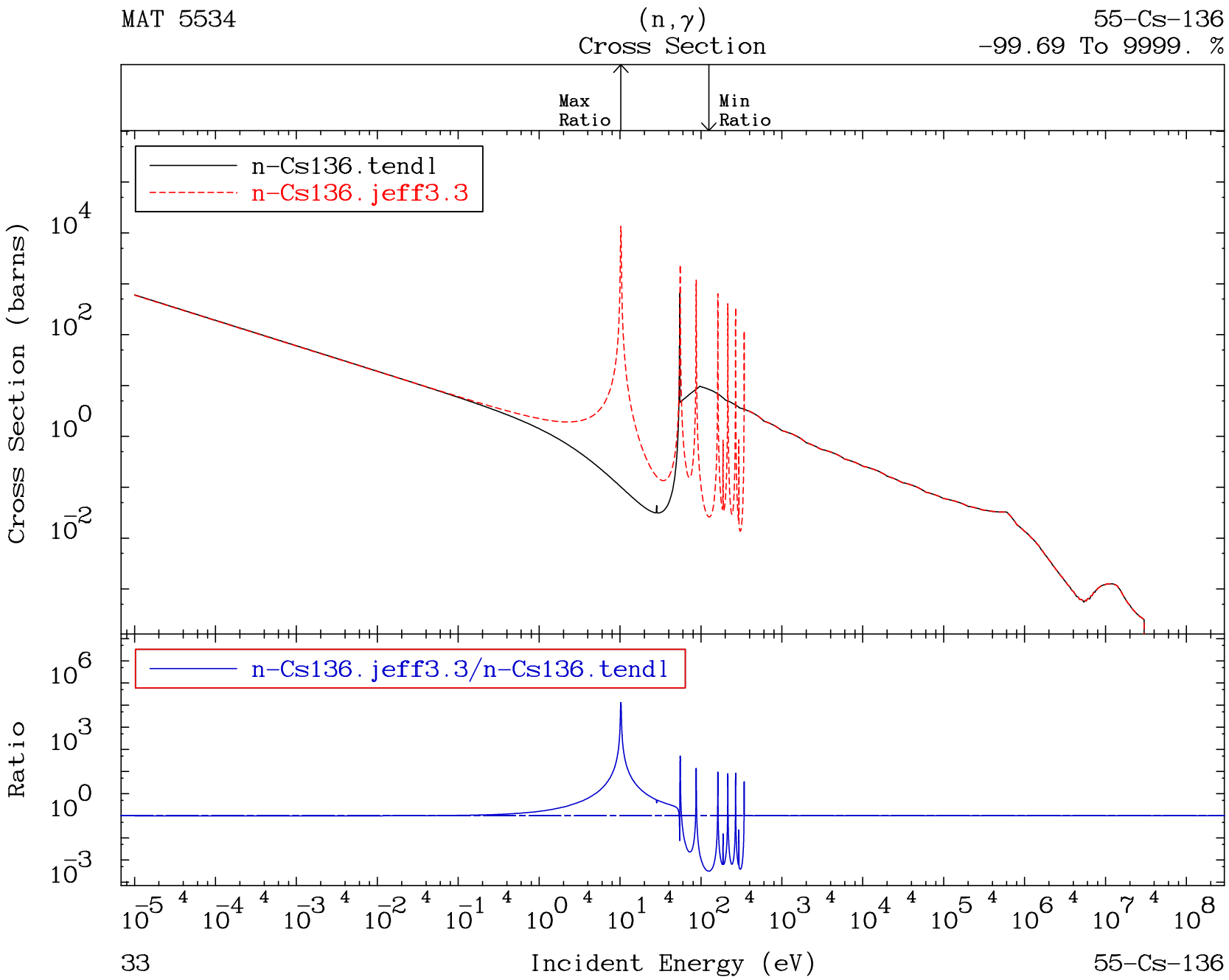

MAT 5534
MT= 70 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.1551 MeV
n-Cs136.jeff3.3 Threshold 1.1551 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.99
1.00
1.01
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
55-Cs-136

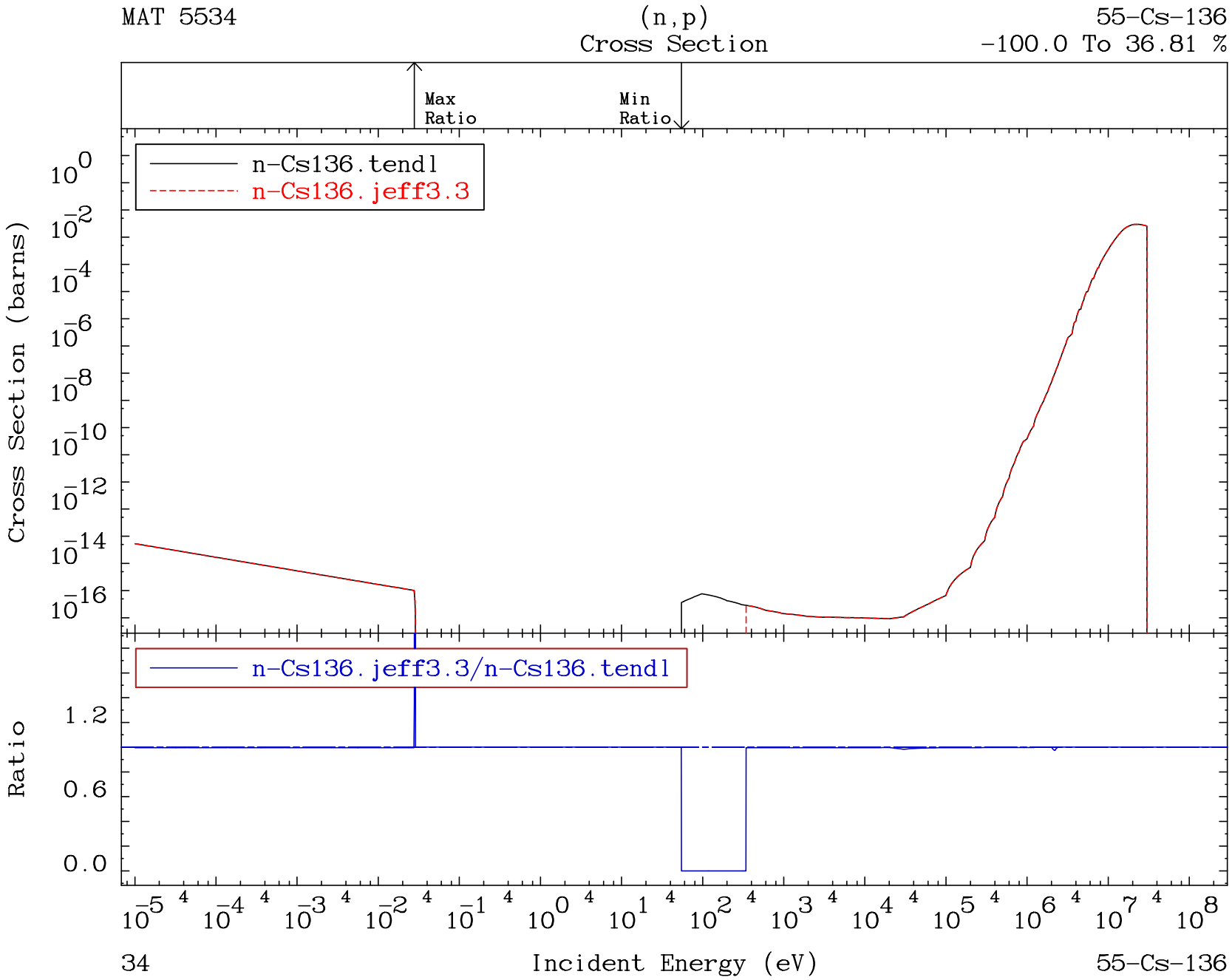

MAT 5534
MT= 72 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.2142 MeV
n-Cs136.jeff3.3 Threshold 1.2142 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
55-Cs-136

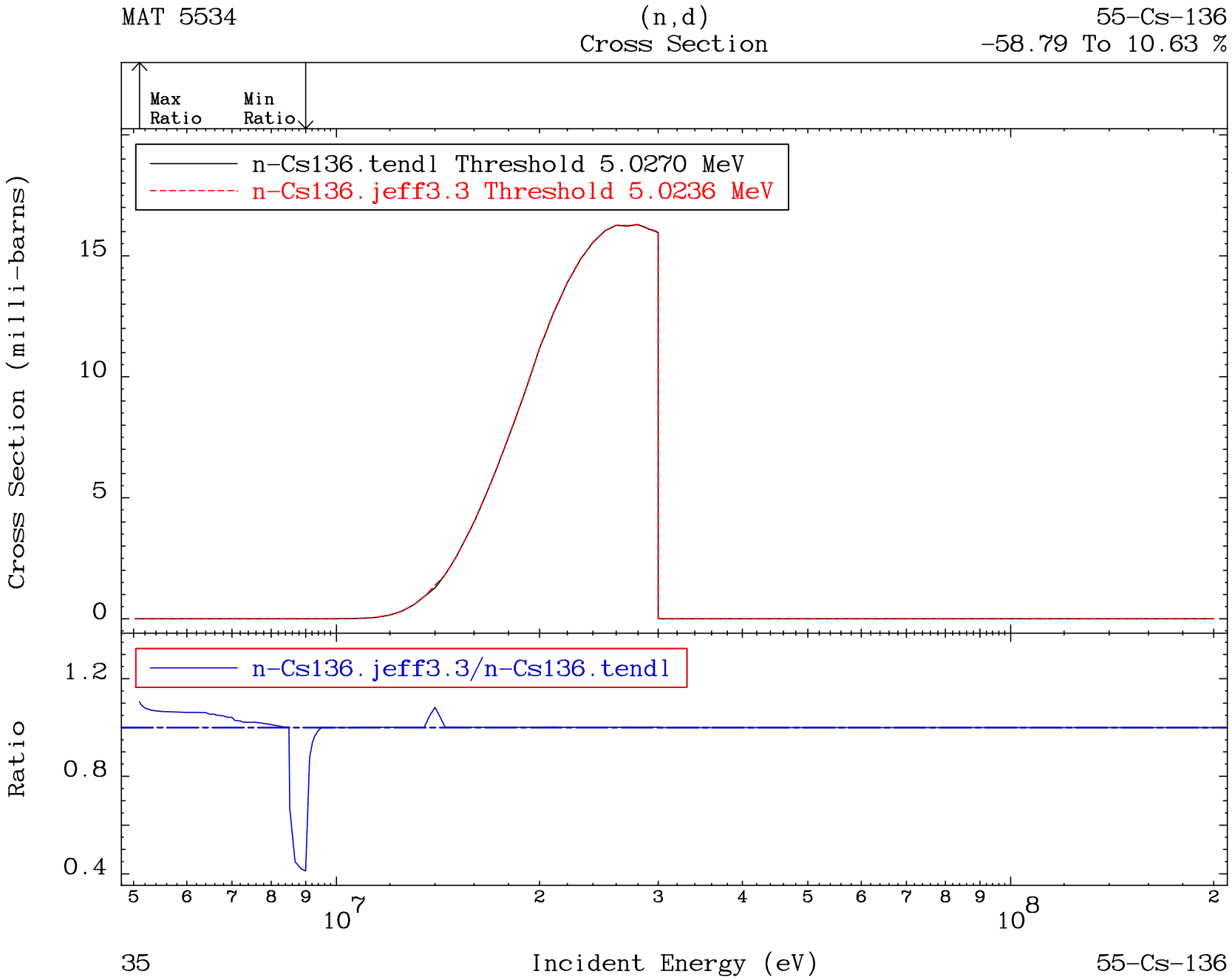

MAT 5534
MT= 74 (n,n') Level
Cross Section
55-Cs-136
-0.001 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.2798 MeV
n-Cs136.jeff3.3 Threshold 1.2798 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
55-Cs-136

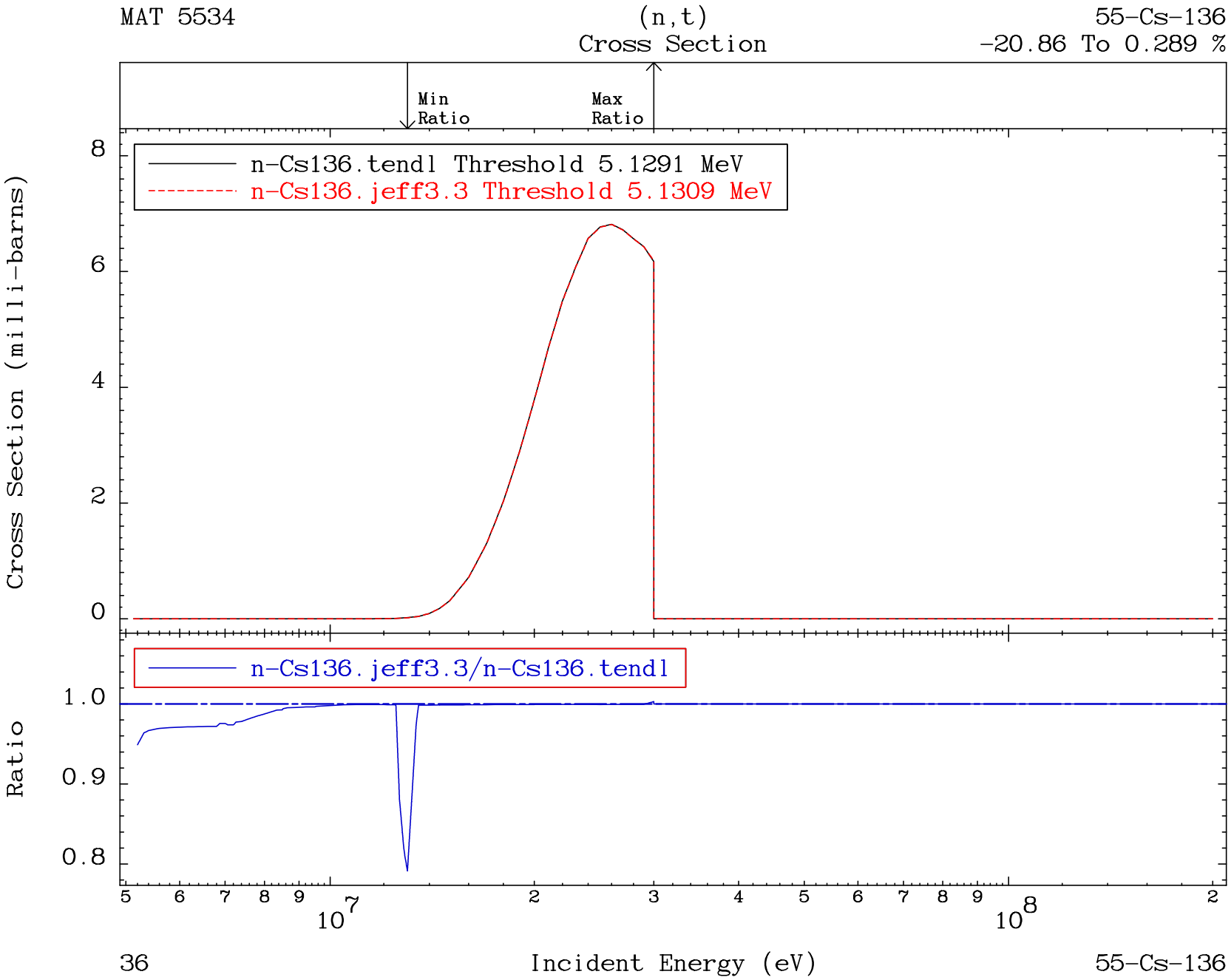

MAT 5534
MT= 79 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.3306 MeV
n-Cs136.jeff3.3 Threshold 1.3306 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
55-Cs-136

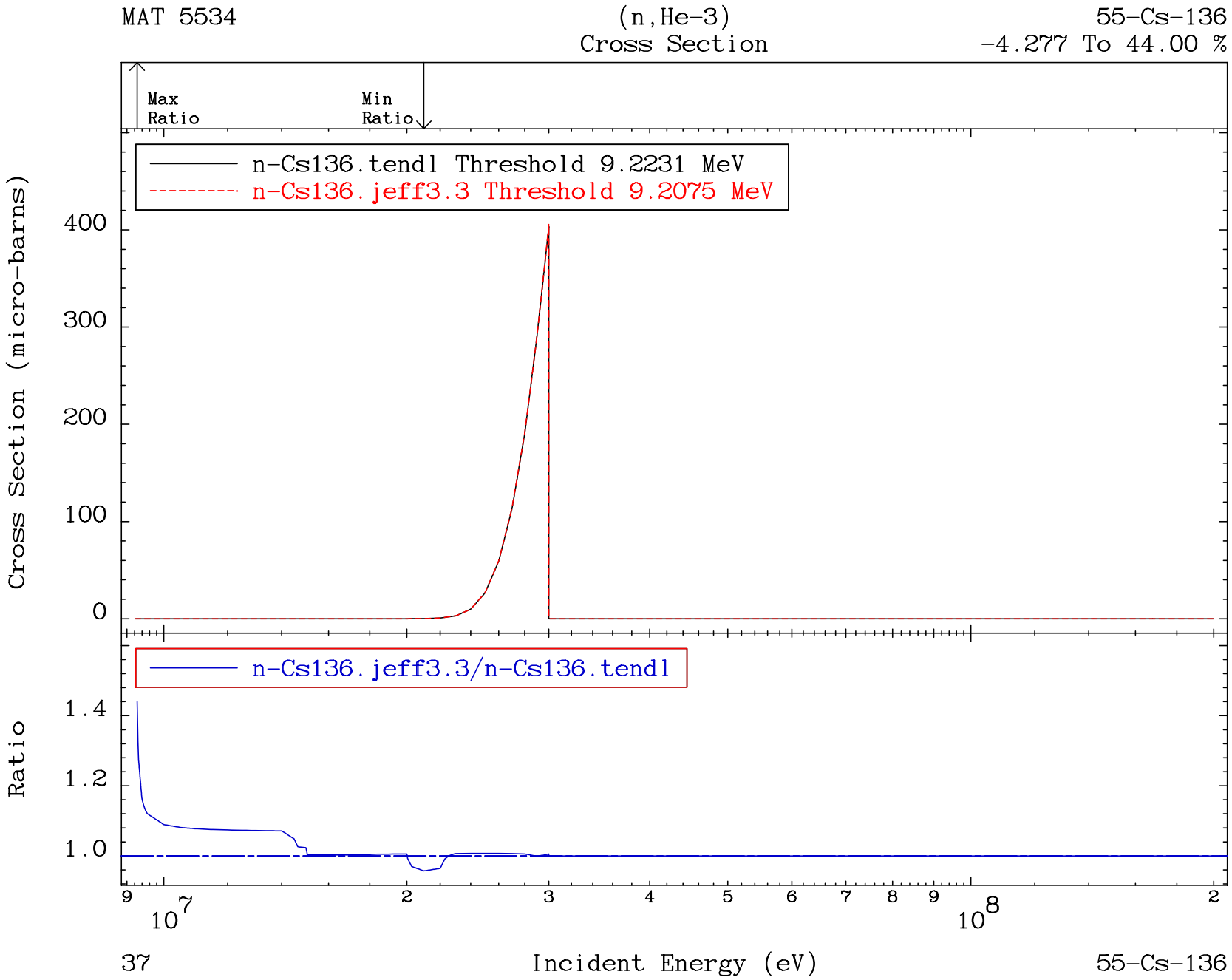

MAT 5534
MT= 80 (n,n') Level
Cross Section
55-Cs-136
0.000 To 0.190 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 1.3437 MeV
n-Cs136.jeff3.3 Threshold 1.3437 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
55-Cs-136

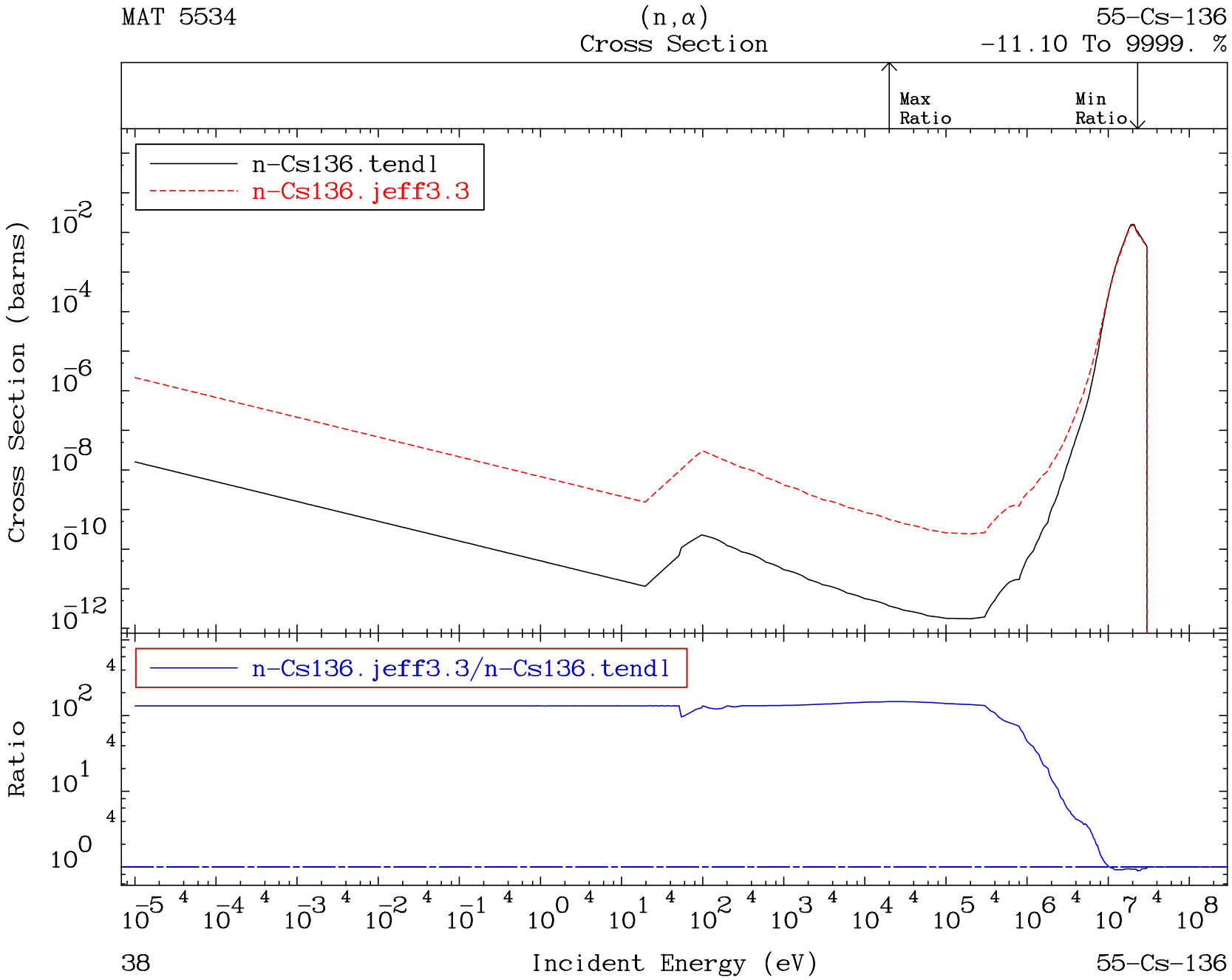

MAT 5534
(n,γ)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
33
55-Cs-136

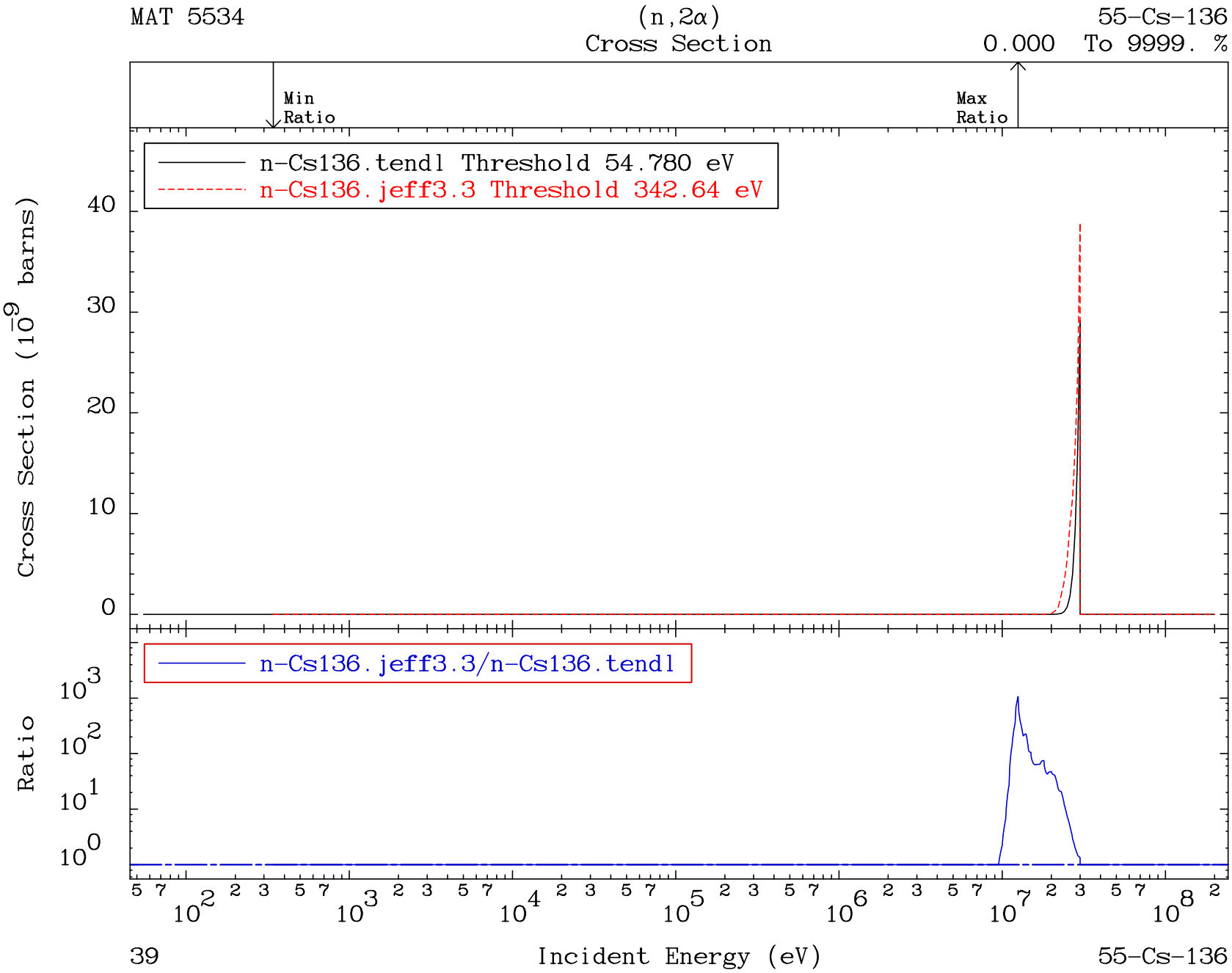

MAT 5534
(n,p)
Cross Section
55-Cs-136
-100.0 To 36.81 %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
34
55-Cs-136

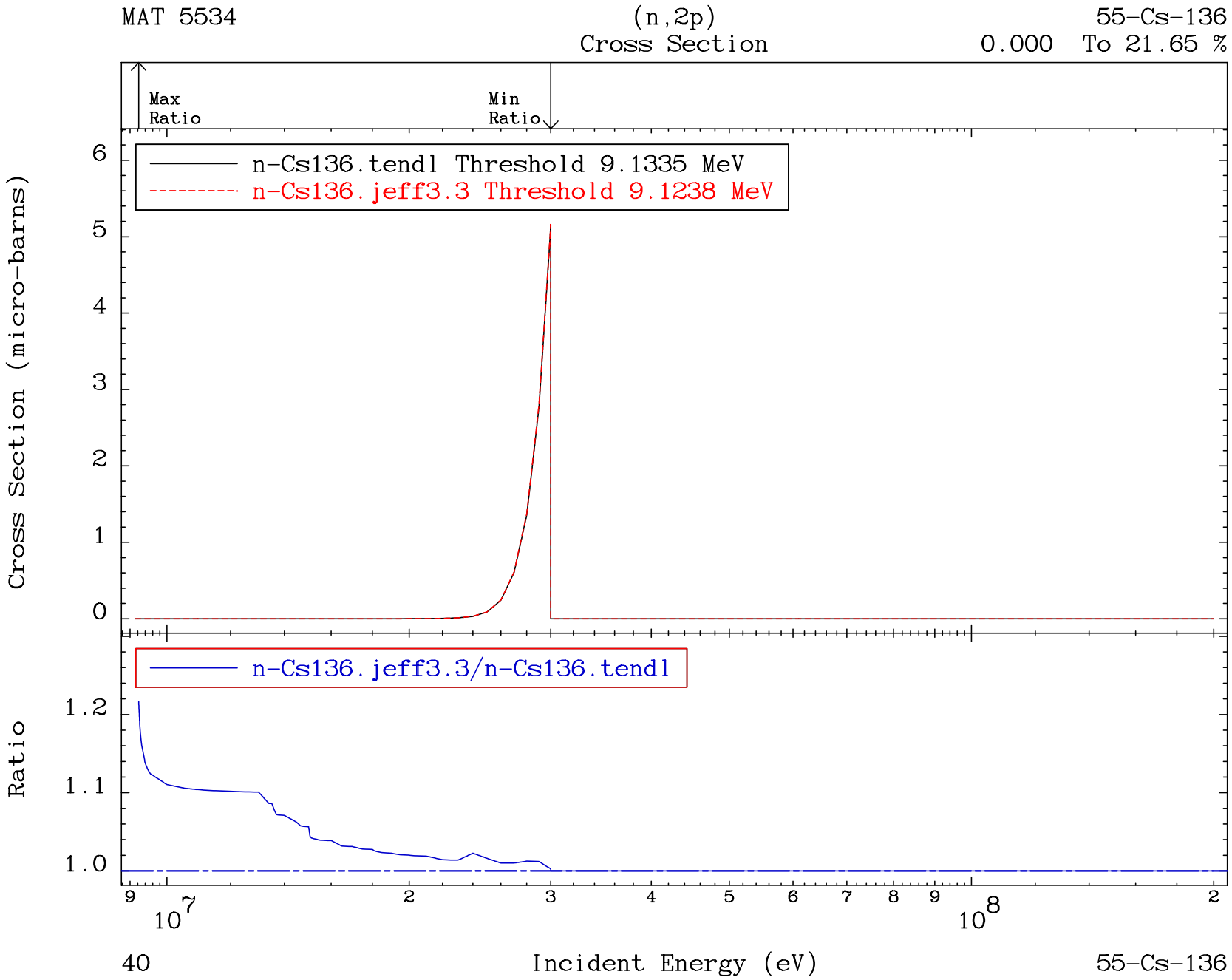

MAT 5534
(n,d)
Cross Section
55-Cs-136
-58.79 To 10.63 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 5.0270 MeV
n-Cs136.jeff3.3 Threshold 5.0236 MeV
Cross Section (milli-barns)
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
55-Cs-136

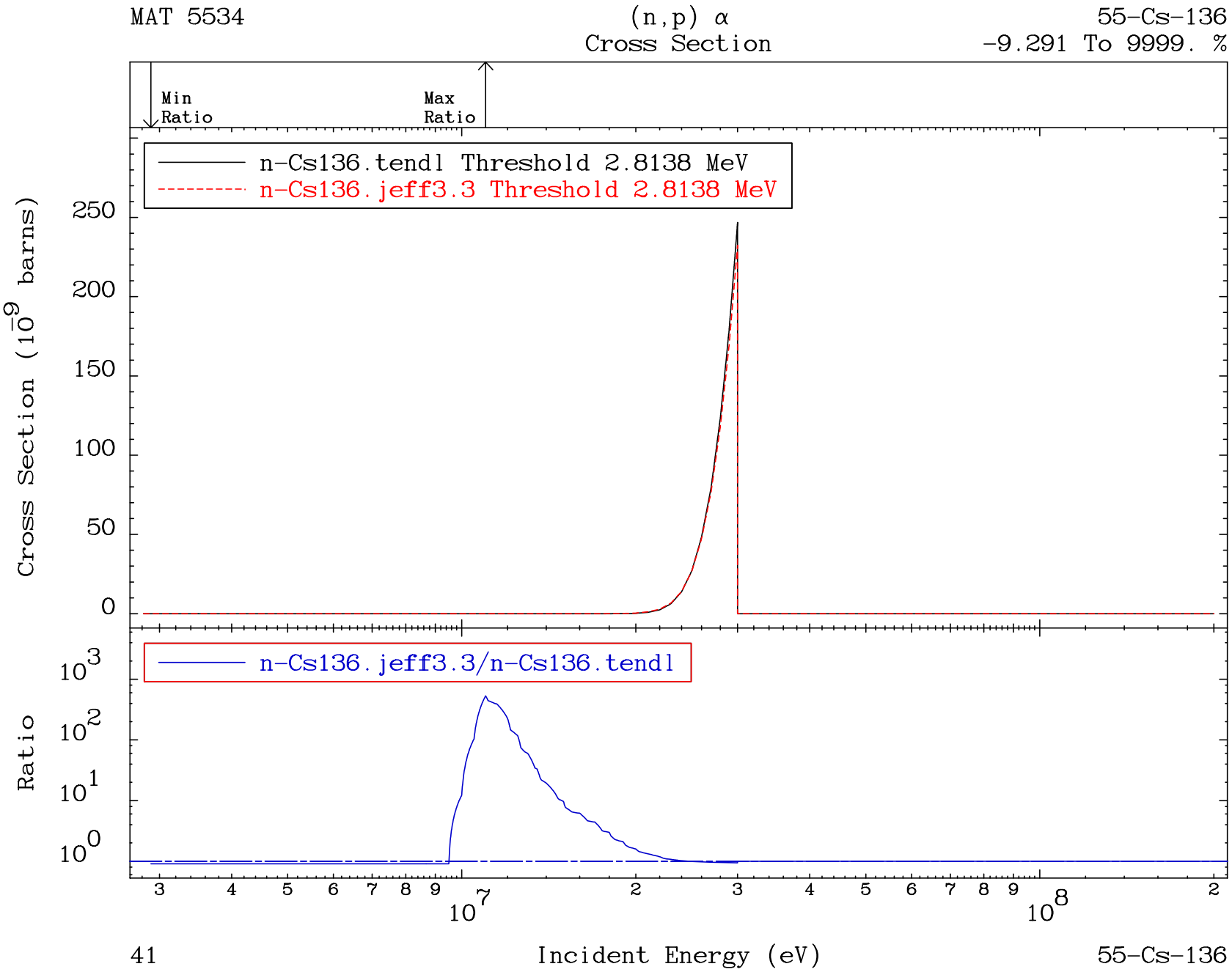

MAT 5534
(n,t)
Cross Section
55-Cs-136
-20.86 To 0.289 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 5.1291 MeV
n-Cs136.jeff3.3 Threshold 5.1309 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.8
0.9
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
55-Cs-136

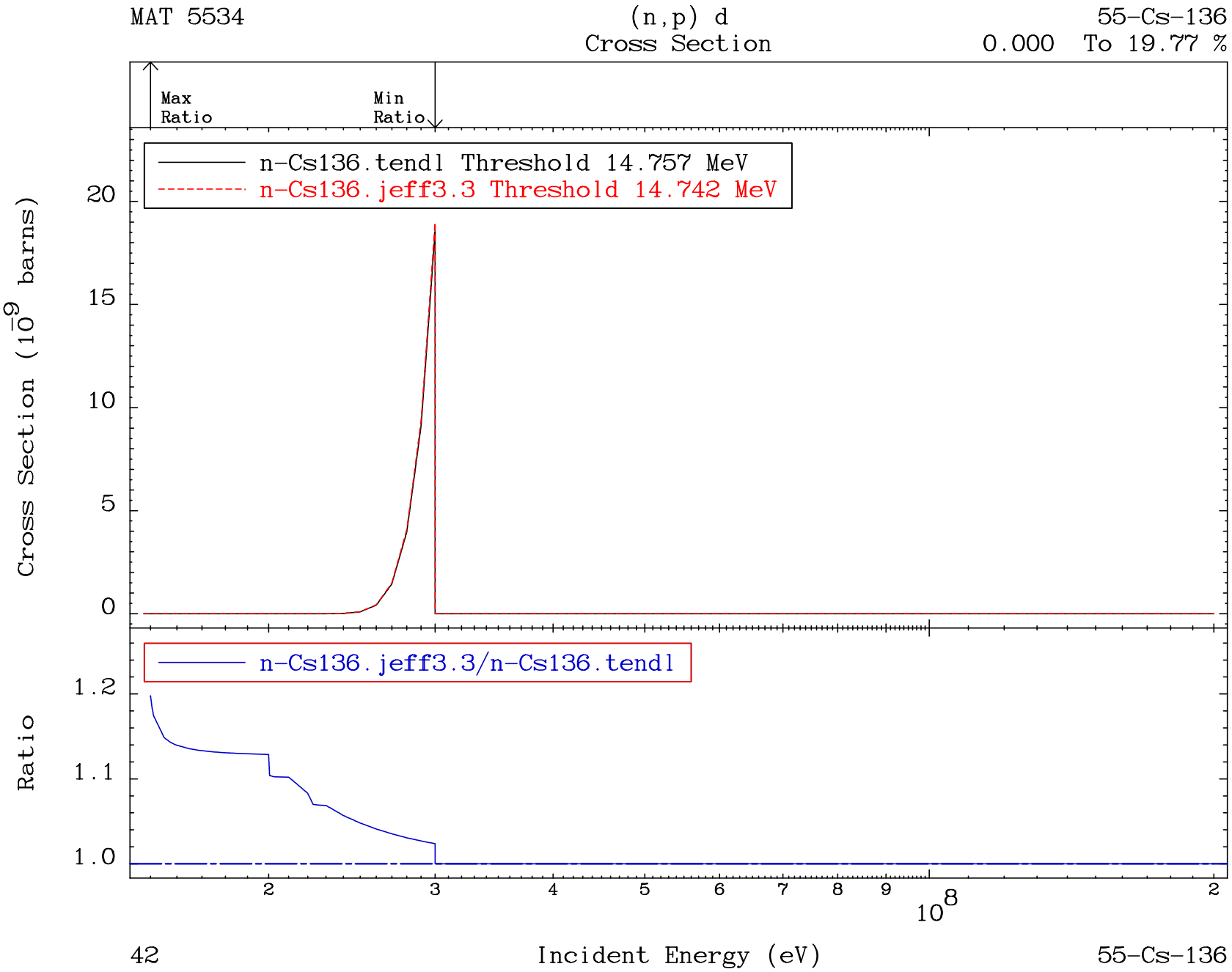

MAT 5534
(n,He-3)
Cross Section
55-Cs-136
-4.277 To 44.00 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.2231 MeV
n-Cs136.jeff3.3 Threshold 9.2075 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
55-Cs-136

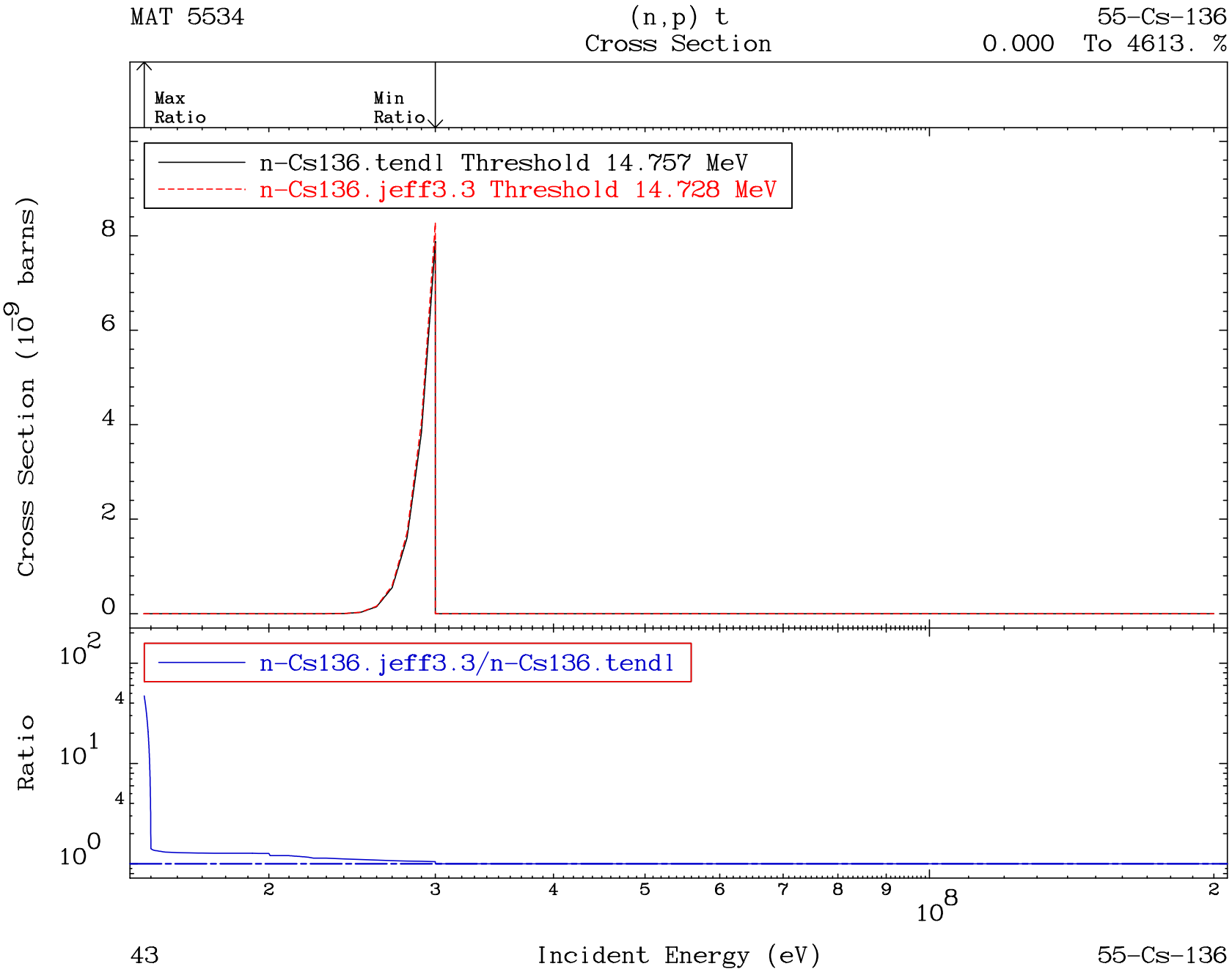

MAT 5534
(n,α)
Cross Section
55-Cs-136
-11.10 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
38
55-Cs-136

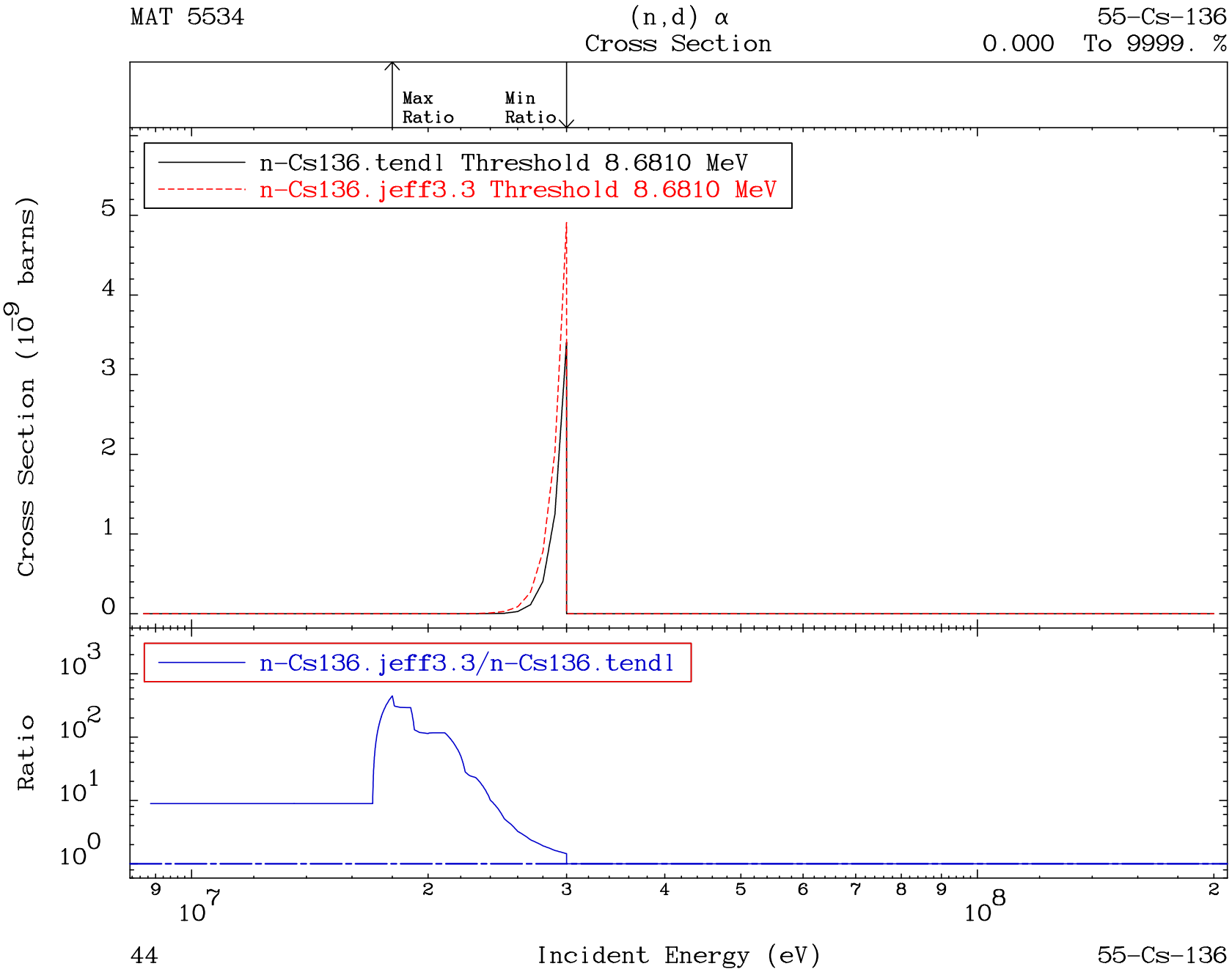

MAT 5534
(n,2α)
Cross Section
55-Cs-136
0.000 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 54.780 eV
n-Cs136.jeff3.3 Threshold 342.64 eV
Cross Section (10^-9 barns)
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^3
10^2
10^1
10^0
5 7 10^2 2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
39
Incident Energy (eV)
55-Cs-136

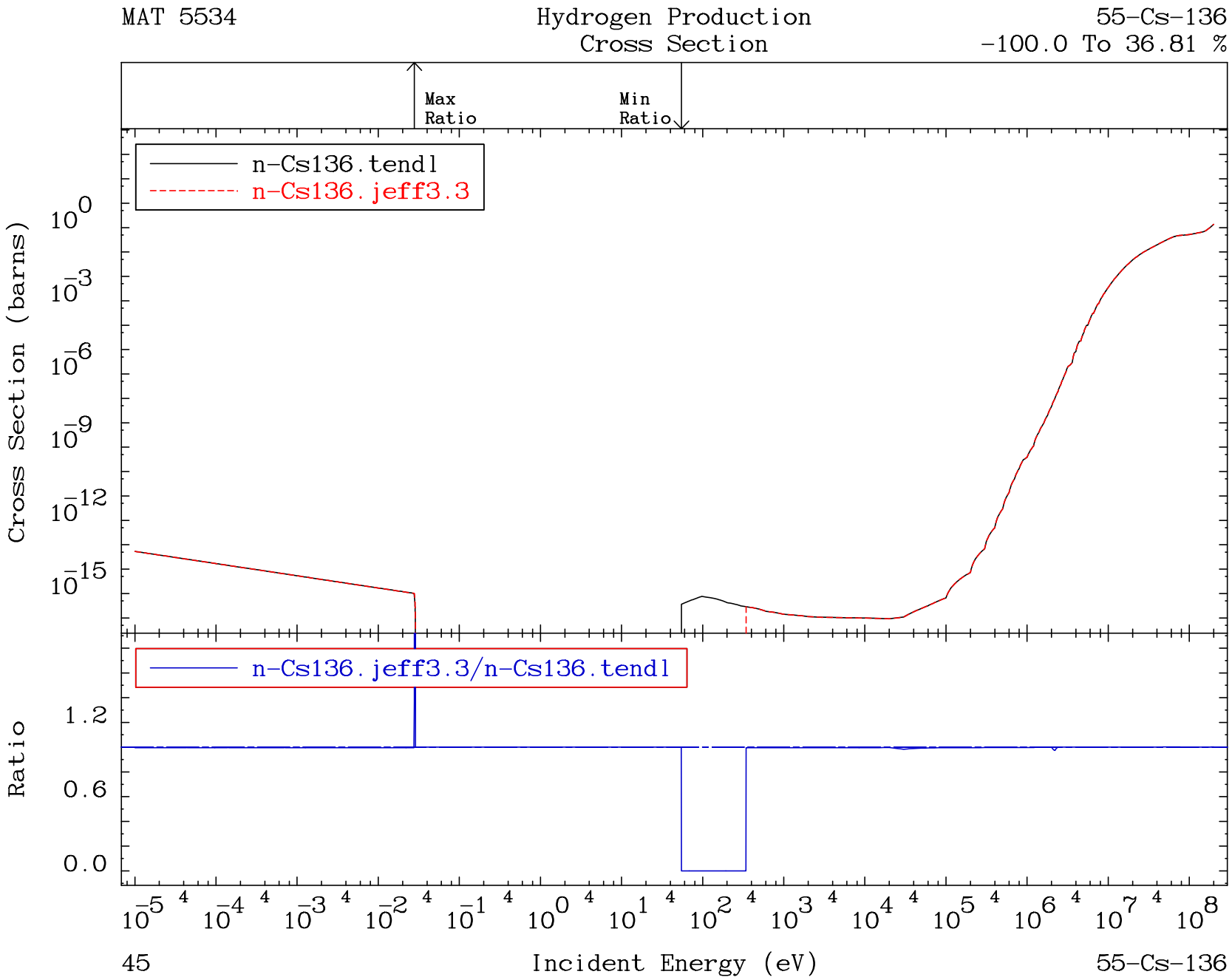

MAT 5534
(n,2p)
Cross Section
55-Cs-136
0.000 To 21.65 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.1335 MeV
n-Cs136.jeff3.3 Threshold 9.1238 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.0
1.1
1.2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
55-Cs-136

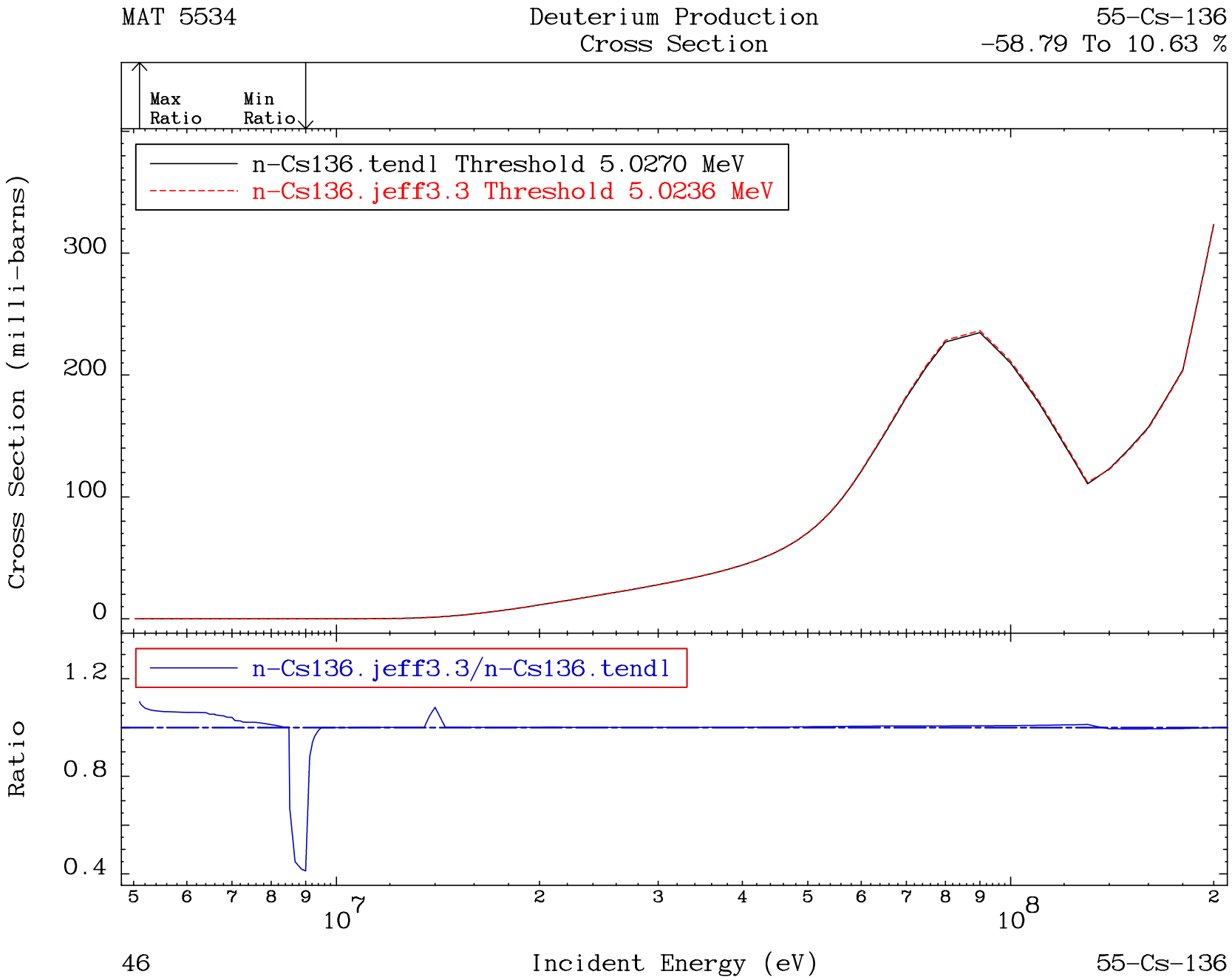

MAT 5534
(n,p) α
Cross Section
55-Cs-136
-9.291 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 2.8138 MeV
n-Cs136.jeff3.3 Threshold 2.8138 MeV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
55-Cs-136

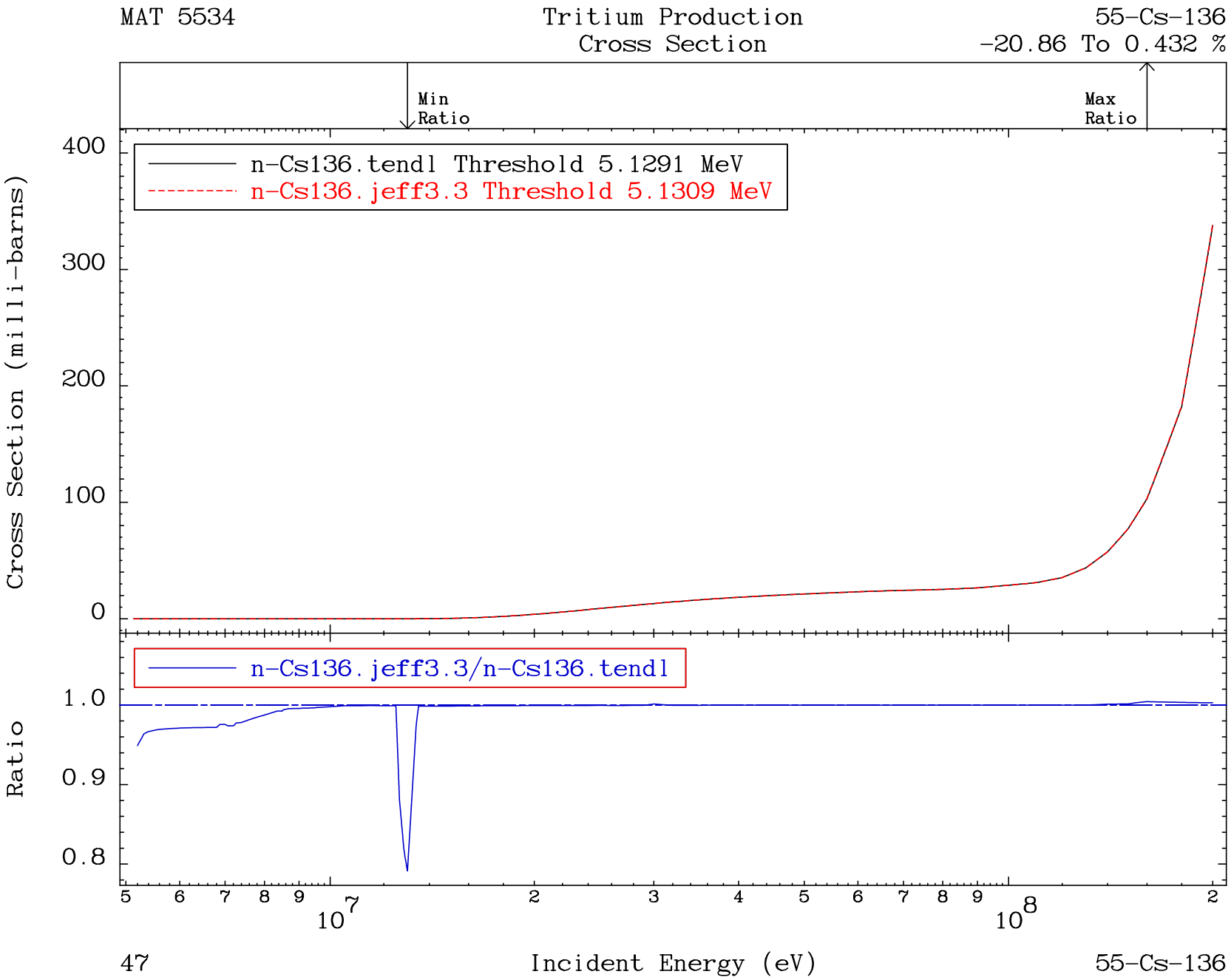

MAT 5534
(n,p) d
Cross Section
55-Cs-136
0.000 To 19.77 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 14.757 MeV
n-Cs136.jeff3.3 Threshold 14.742 MeV
Cross Section (10^-9 barns)
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
55-Cs-136

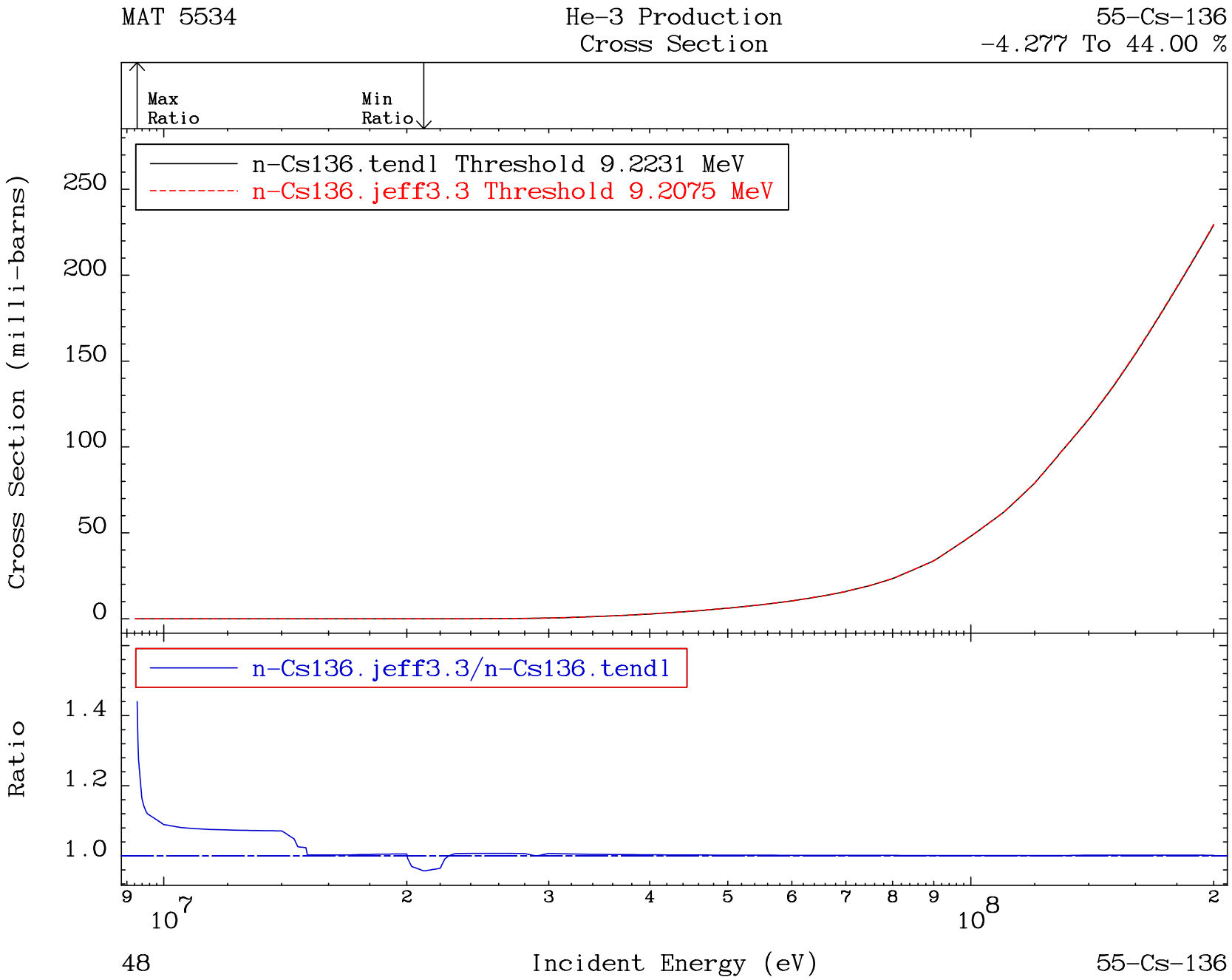

MAT 5534
(n,p) t
Cross Section
55-Cs-136
0.000 To 4613. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 14.757 MeV
n-Cs136.jeff3.3 Threshold 14.728 MeV
Cross Section (10^{-9} barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
43
55-Cs-136

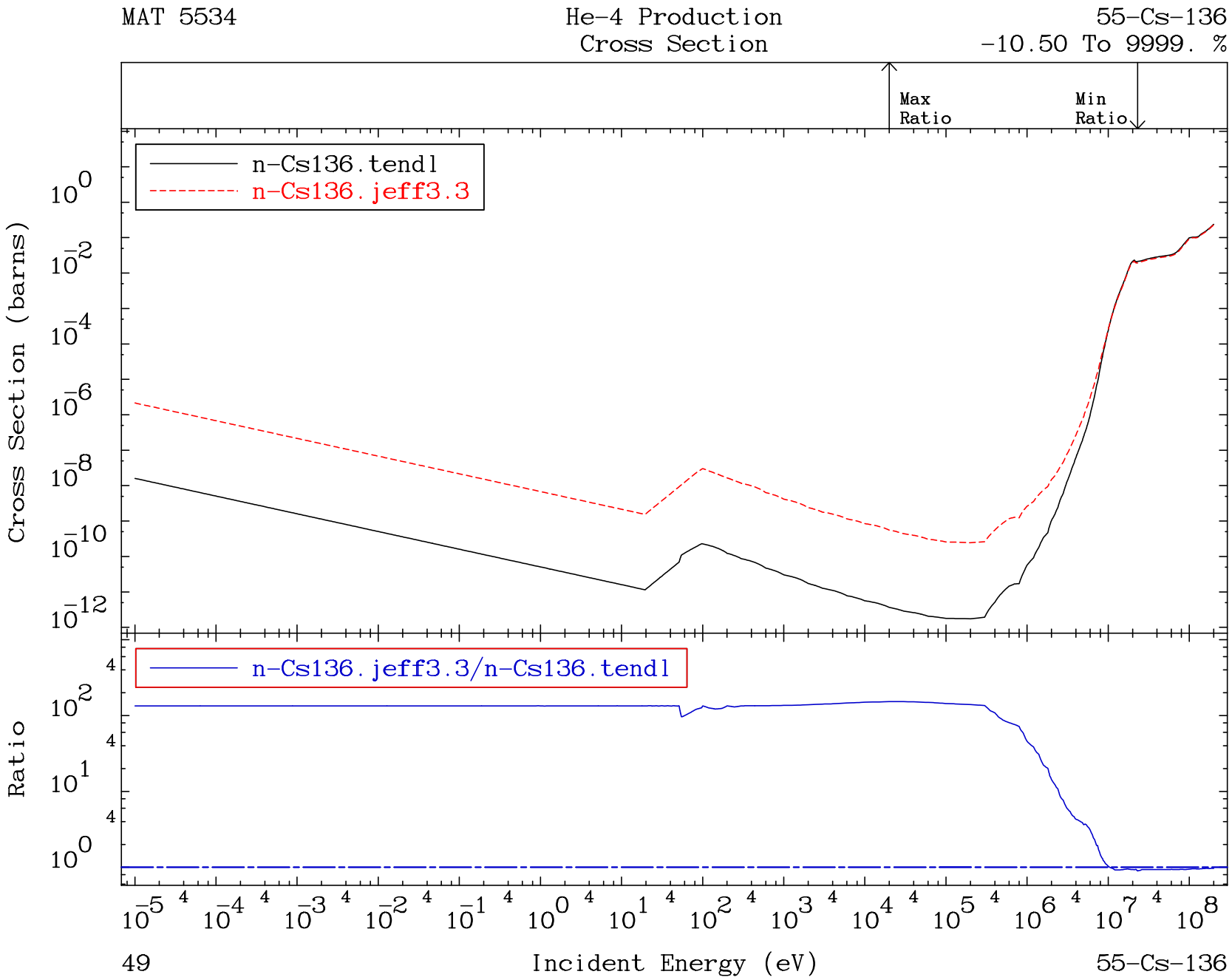

MAT 5534
(n,d) α
Cross Section
55-Cs-136
0.000 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 8.6810 MeV
n-Cs136.jeff3.3 Threshold 8.6810 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
5
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^0
10^1
10^2
10^3
9
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
55-Cs-136

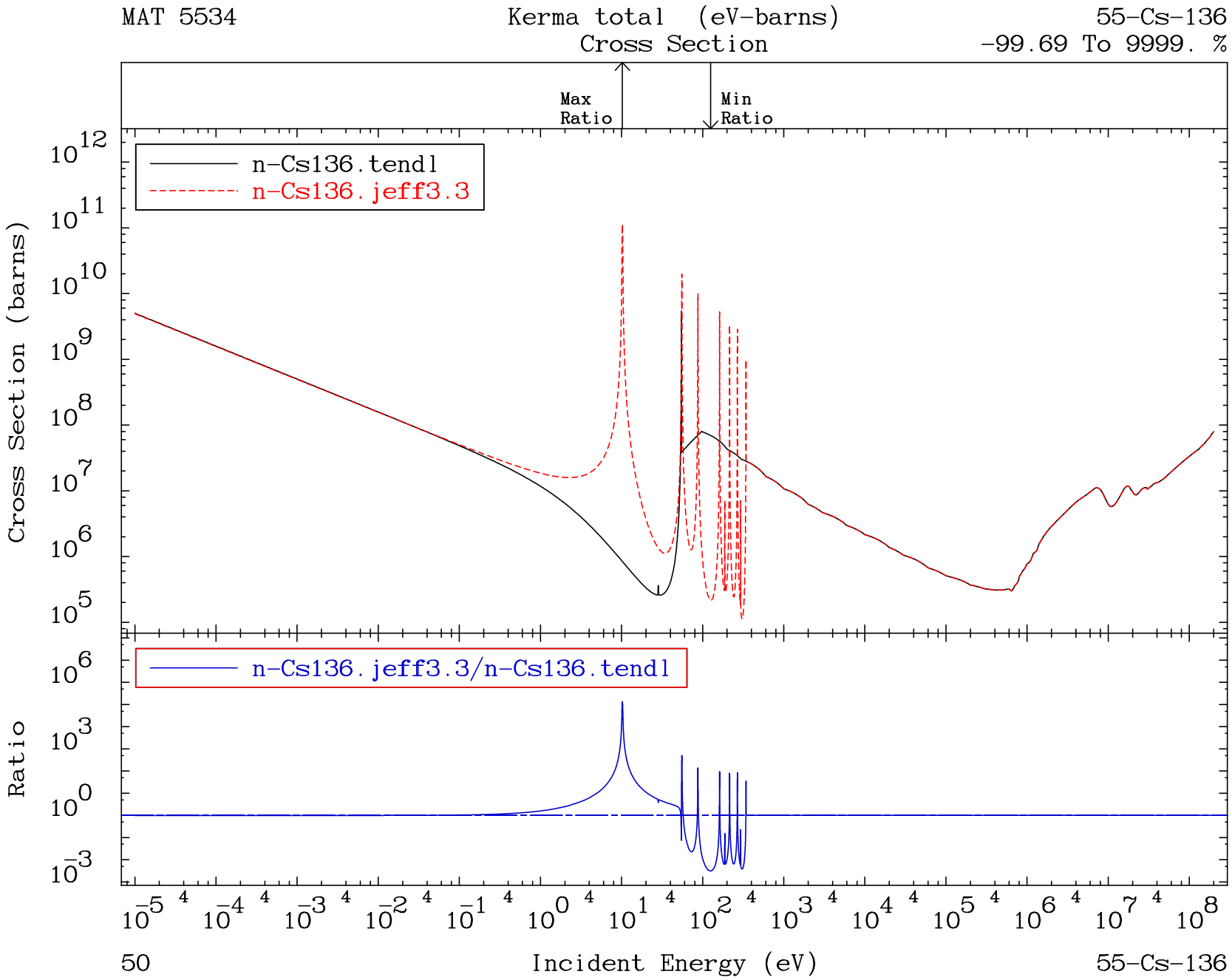

MAT 5534
Hydrogen Production
Cross Section
55-Cs-136
-100.0 To 36.81 %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
10^0
10^-3
10^-6
10^-9
10^-12
10^-15
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
55-Cs-136

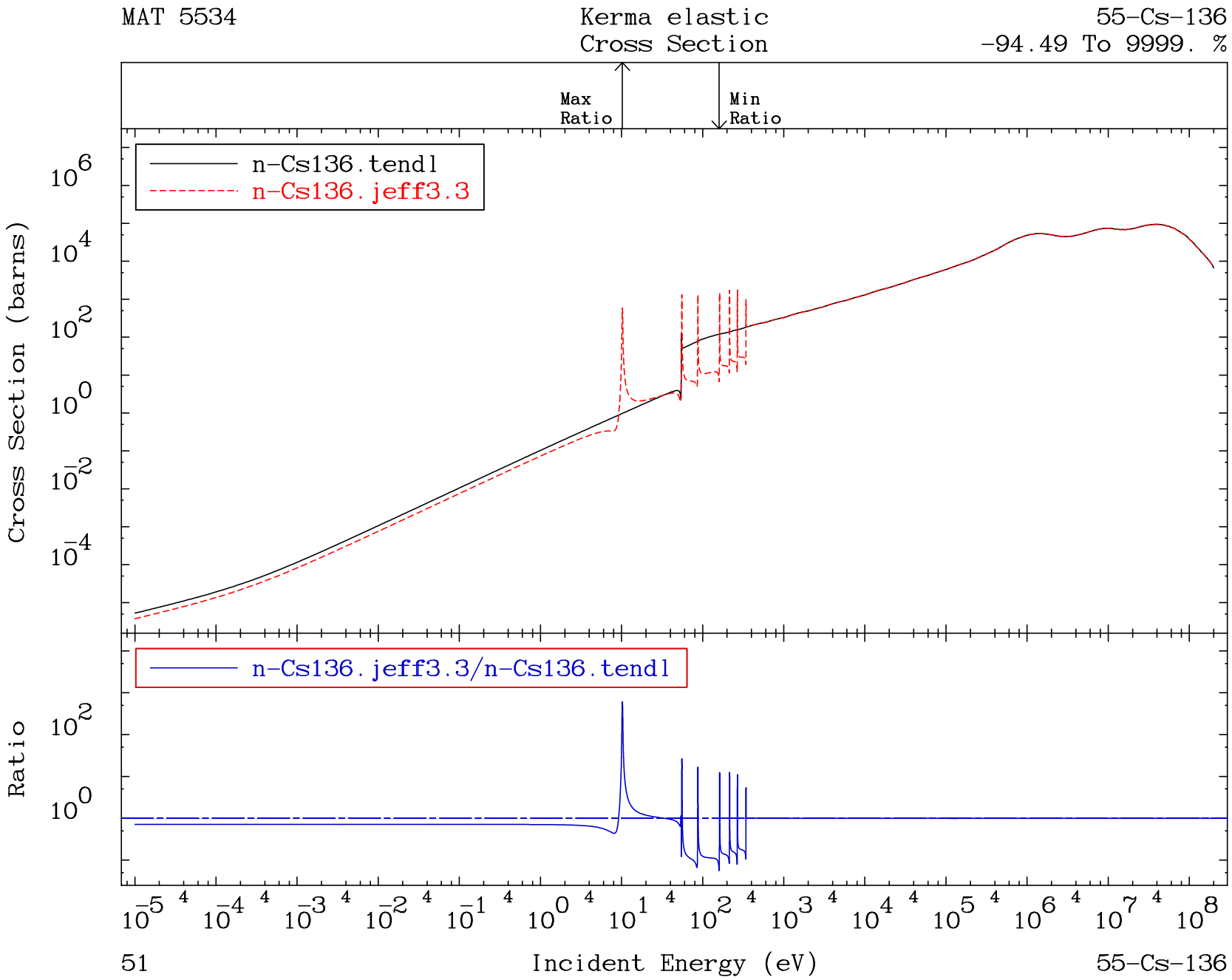

MAT 5534
Deuterium Production
Cross Section
55-Cs-136
-58.79 To 10.63 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 5.0270 MeV
n-Cs136.jeff3.3 Threshold 5.0236 MeV
Cross Section (milli-barns)
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
55-Cs-136

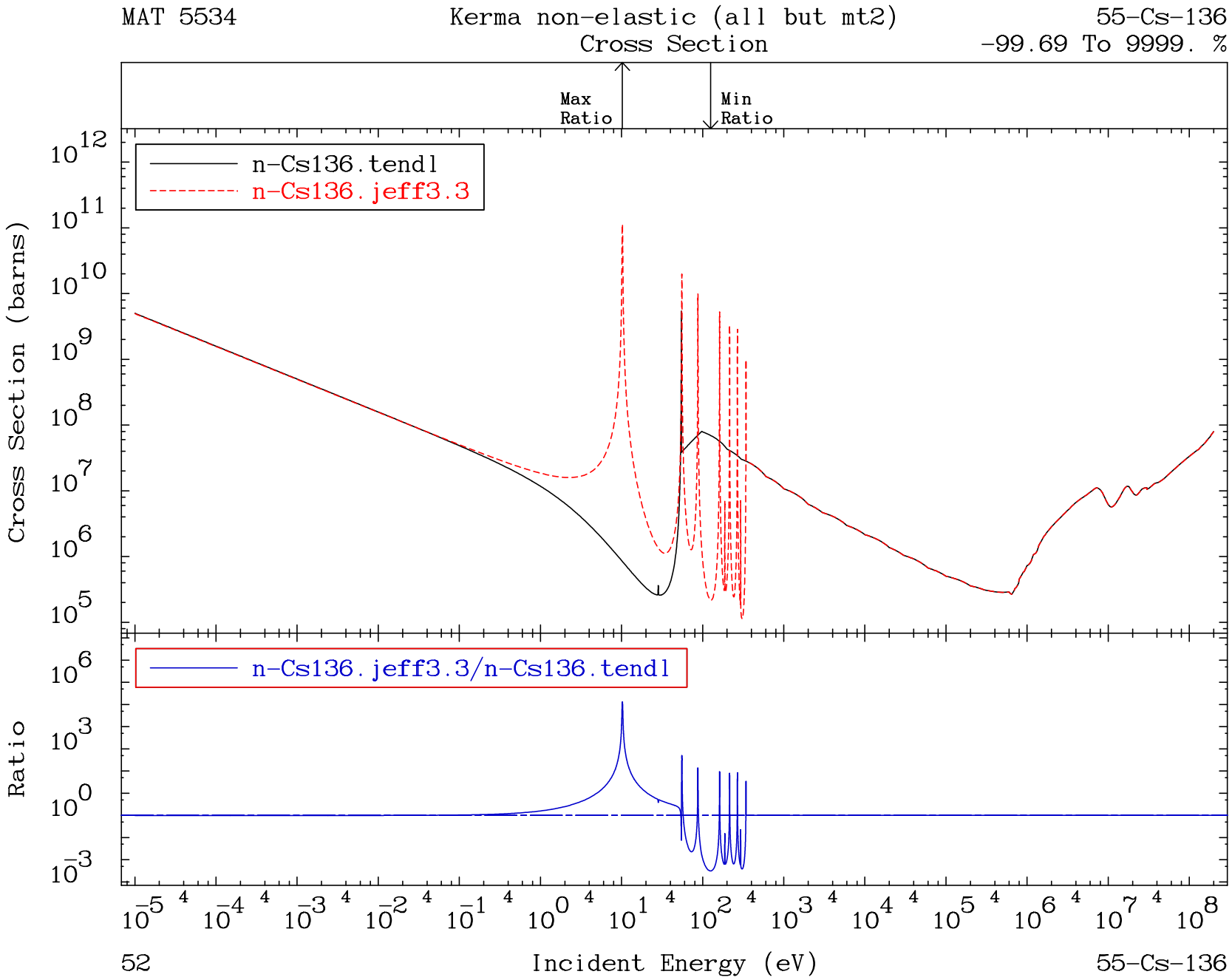

MAT 5534
Tritium Production
Cross Section
55-Cs-136
-20.86 To 0.432 %
Min
Ratio
Max
Ratio
n-Cs136.tendl Threshold 5.1291 MeV
n-Cs136.jeff3.3 Threshold 5.1309 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.0
0.9
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
55-Cs-136

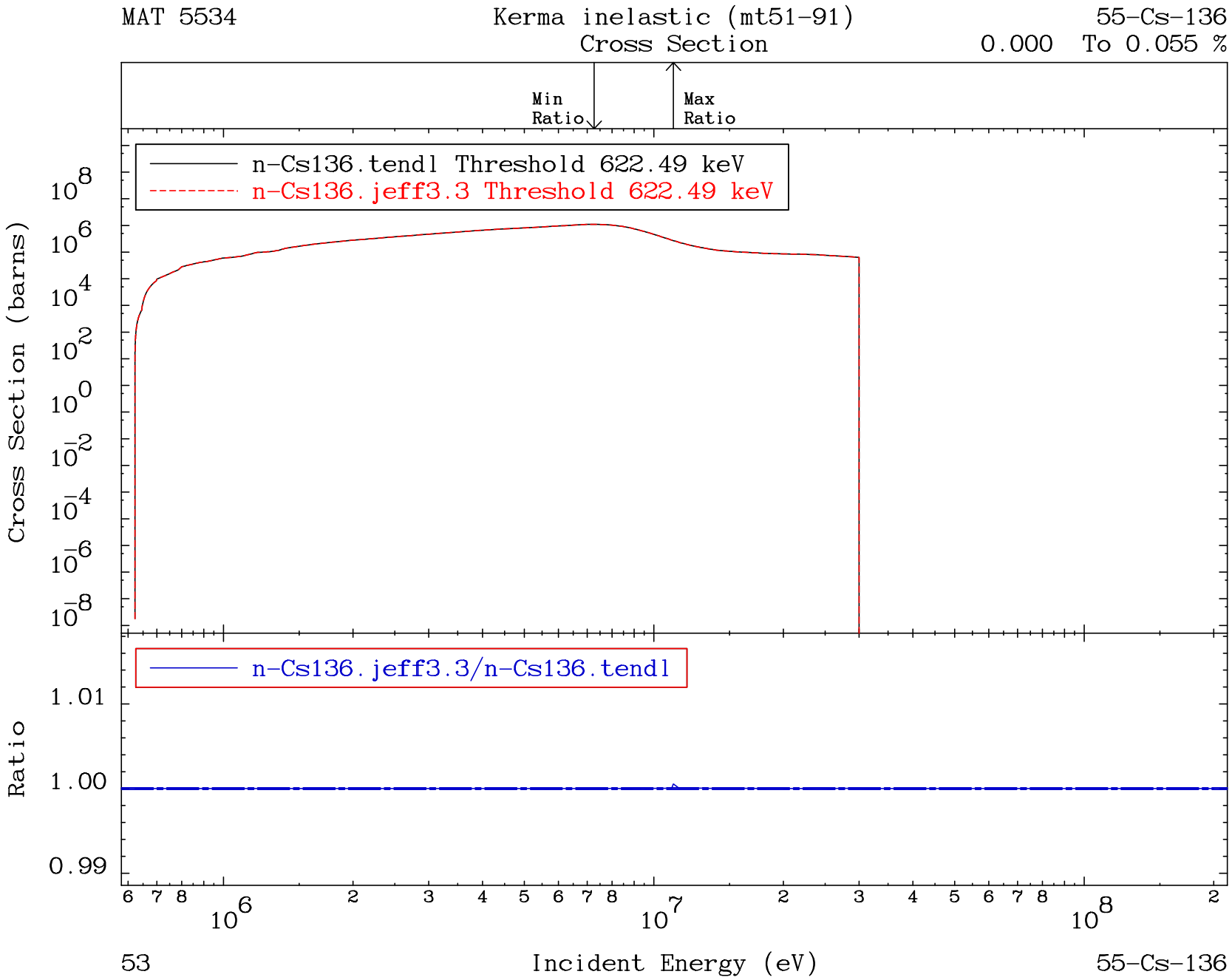

MAT 5534
He-3 Production
Cross Section
55-Cs-136
-4.277 To 44.00 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.2231 MeV
n-Cs136.jeff3.3 Threshold 9.2075 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
55-Cs-136

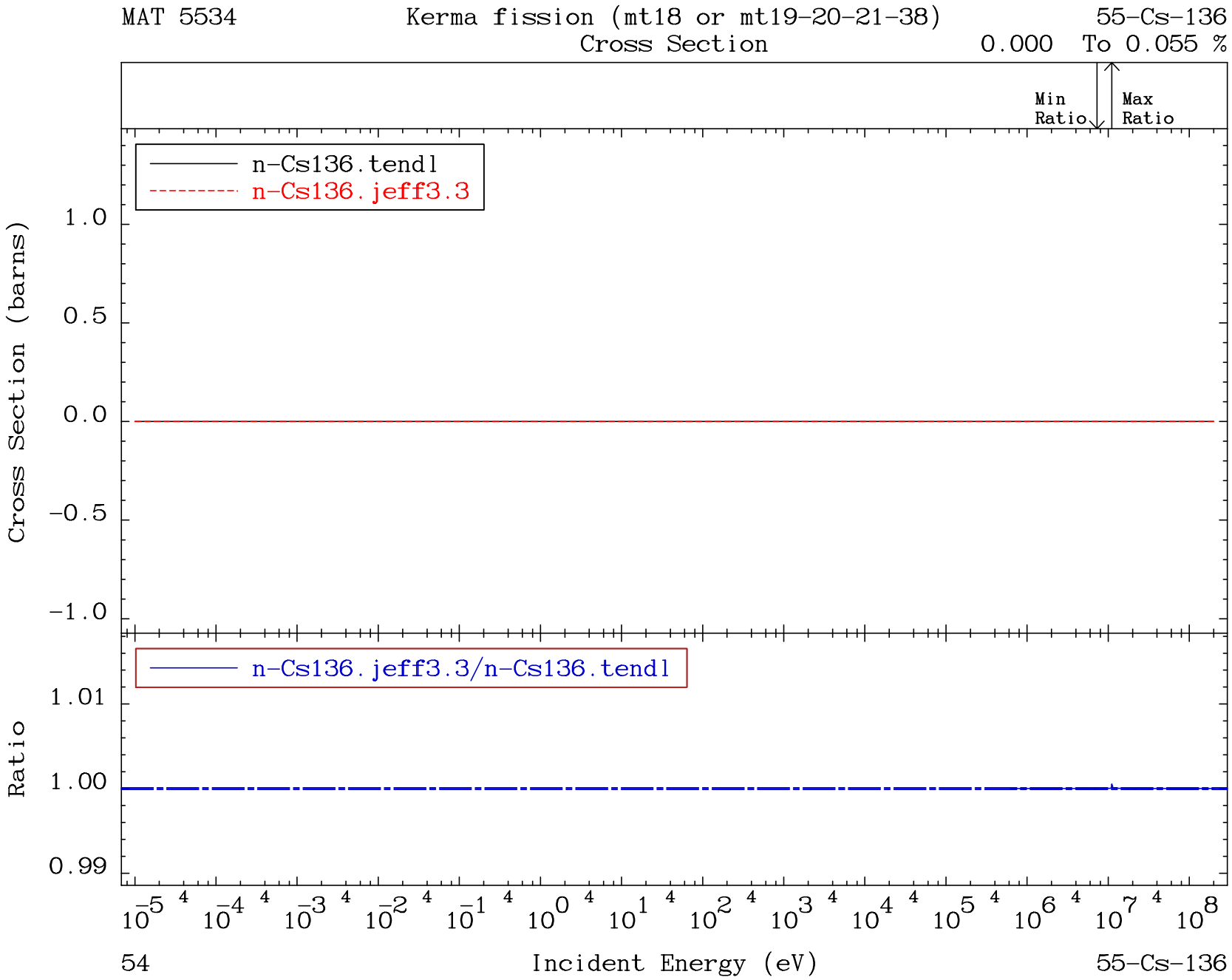

MAT 5534
He-4 Production
Cross Section
55-Cs-136
-10.50 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
49
55-Cs-136

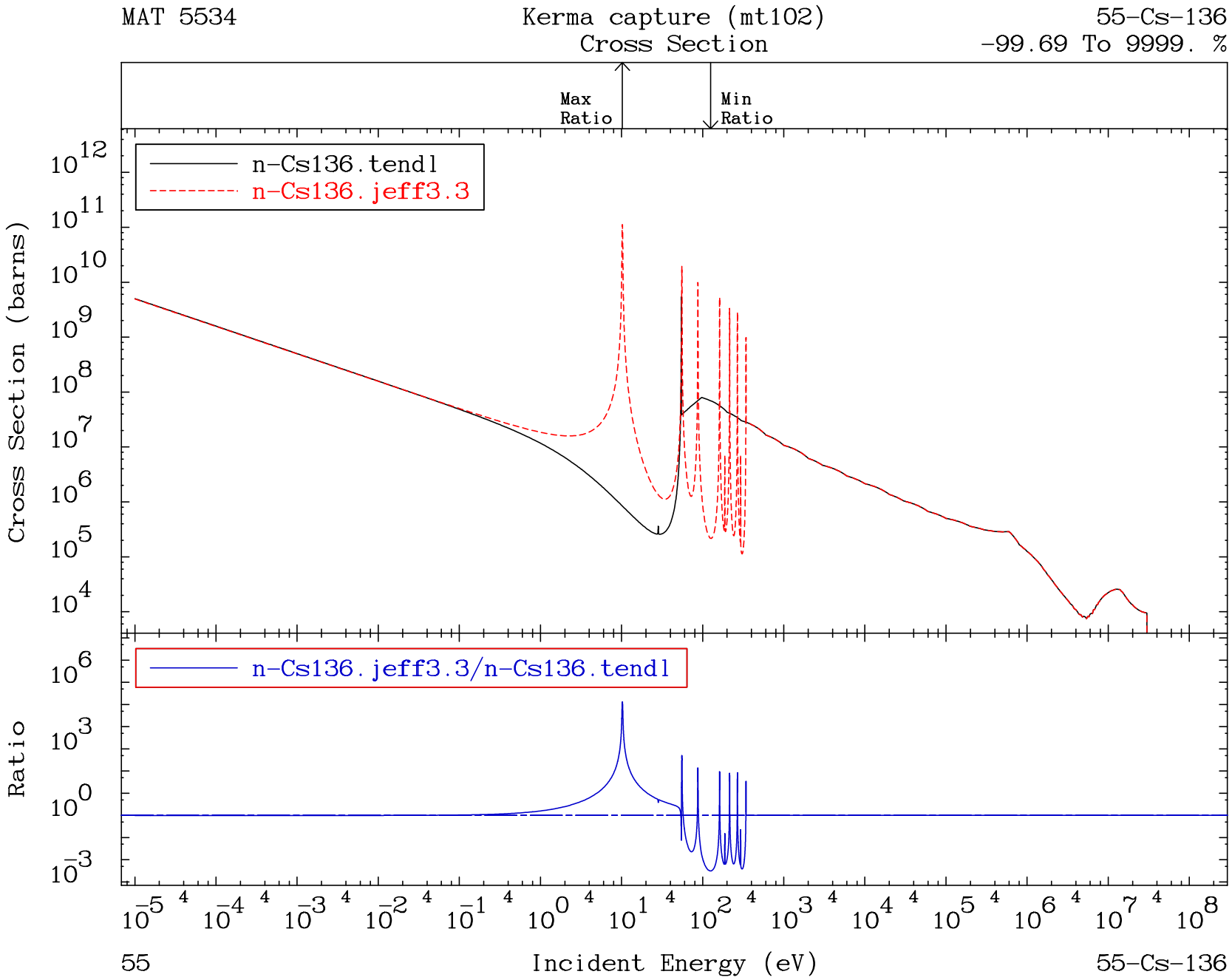

MAT 5534
Kerma total (eV-barns)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
50
55-Cs-136

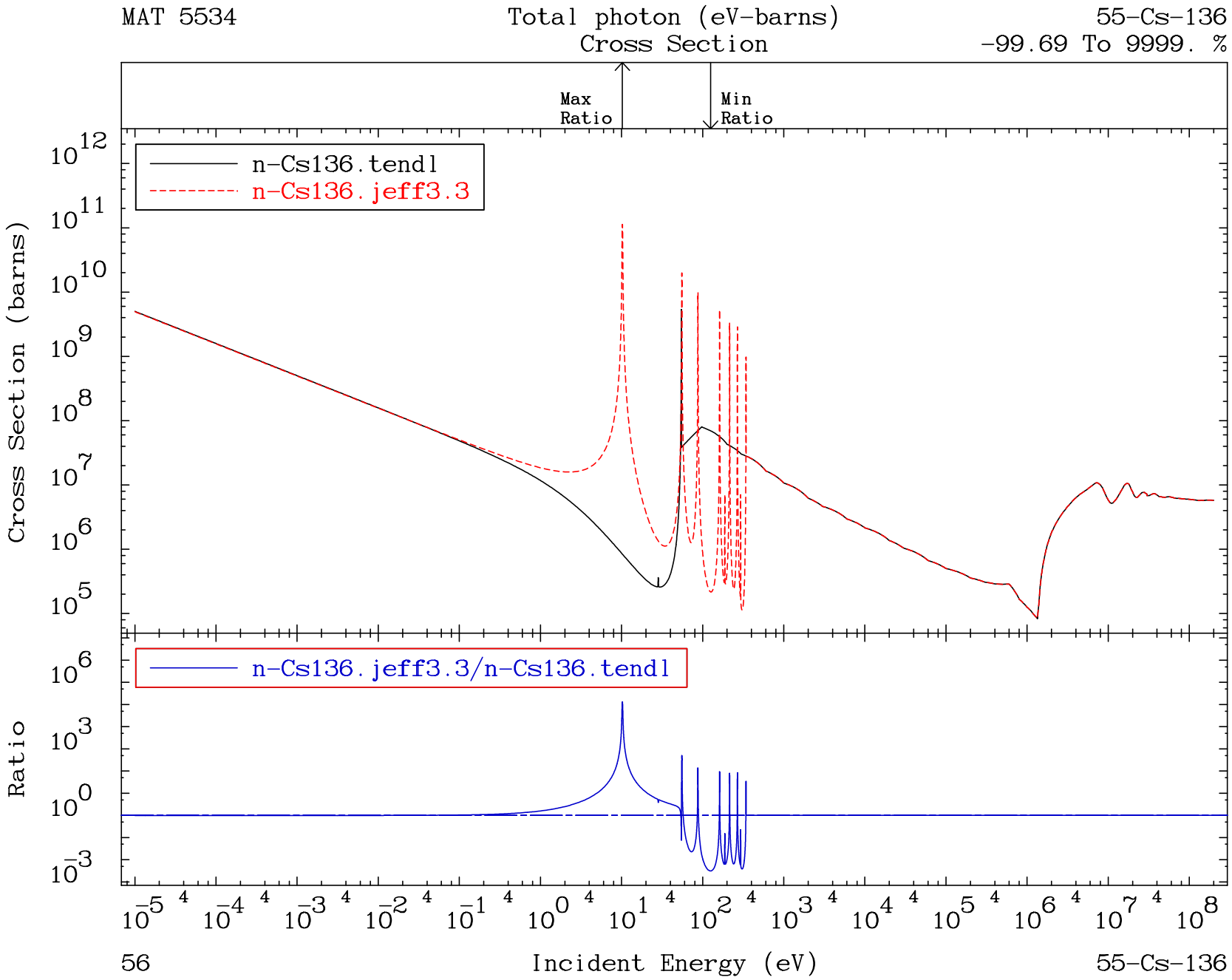

MAT 5534
Kerma elastic
Cross Section
55-Cs-136
-94.49 To 9999. %
Max
Ratio
Min
Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
51
55-Cs-136

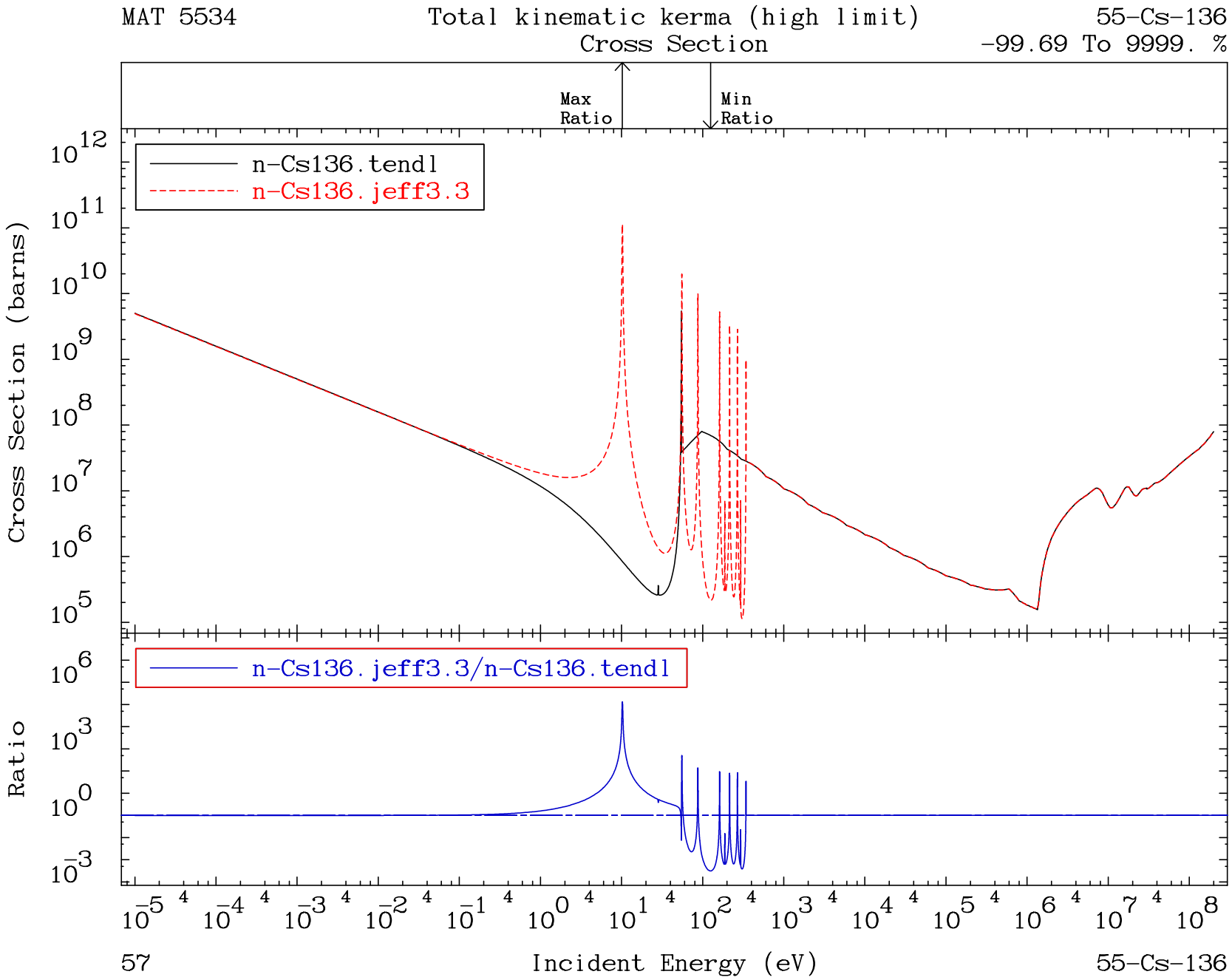

MAT 5534
Kerma non-elastic (all but mt2)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
52
55-Cs-136

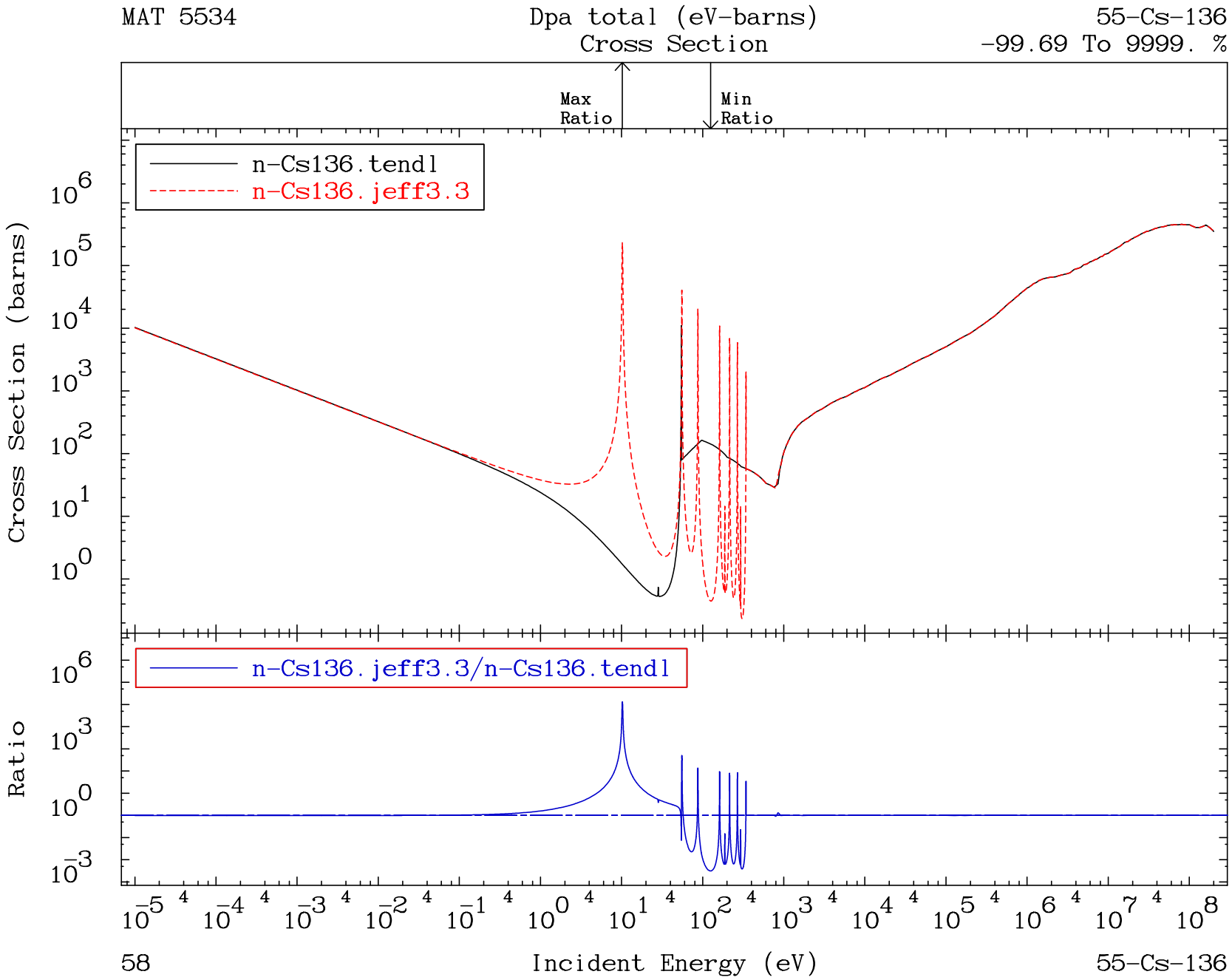

MAT 5534
Kerma inelastic (mt51-91)
Cross Section
55-Cs-136
0.000 To 0.055 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 622.49 keV
n-Cs136.jeff3.3 Threshold 622.49 keV
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
53
55-Cs-136

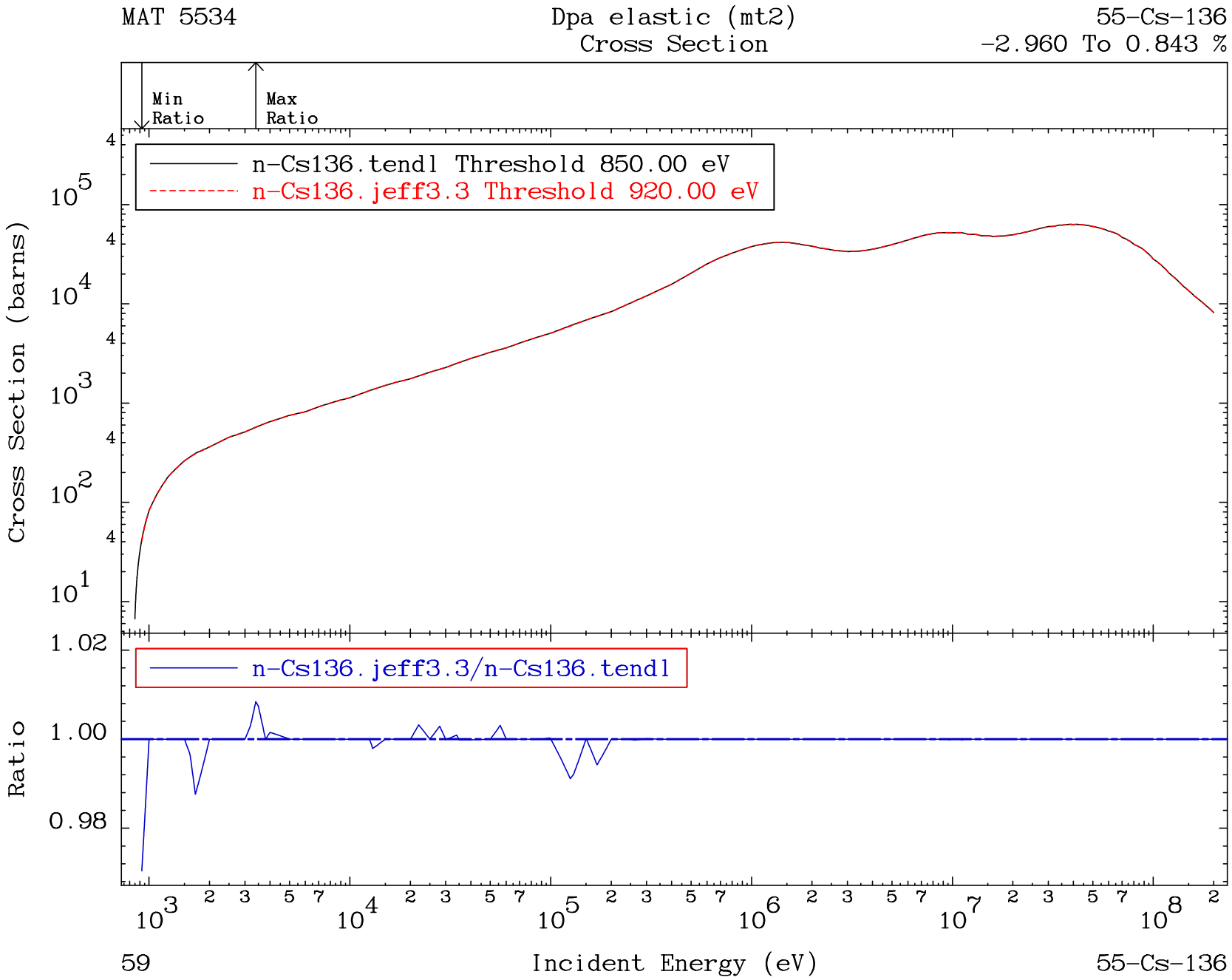

MAT 5534
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
55-Cs-136
0.000 To 0.055 %
Min Ratio
Max Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
55-Cs-136

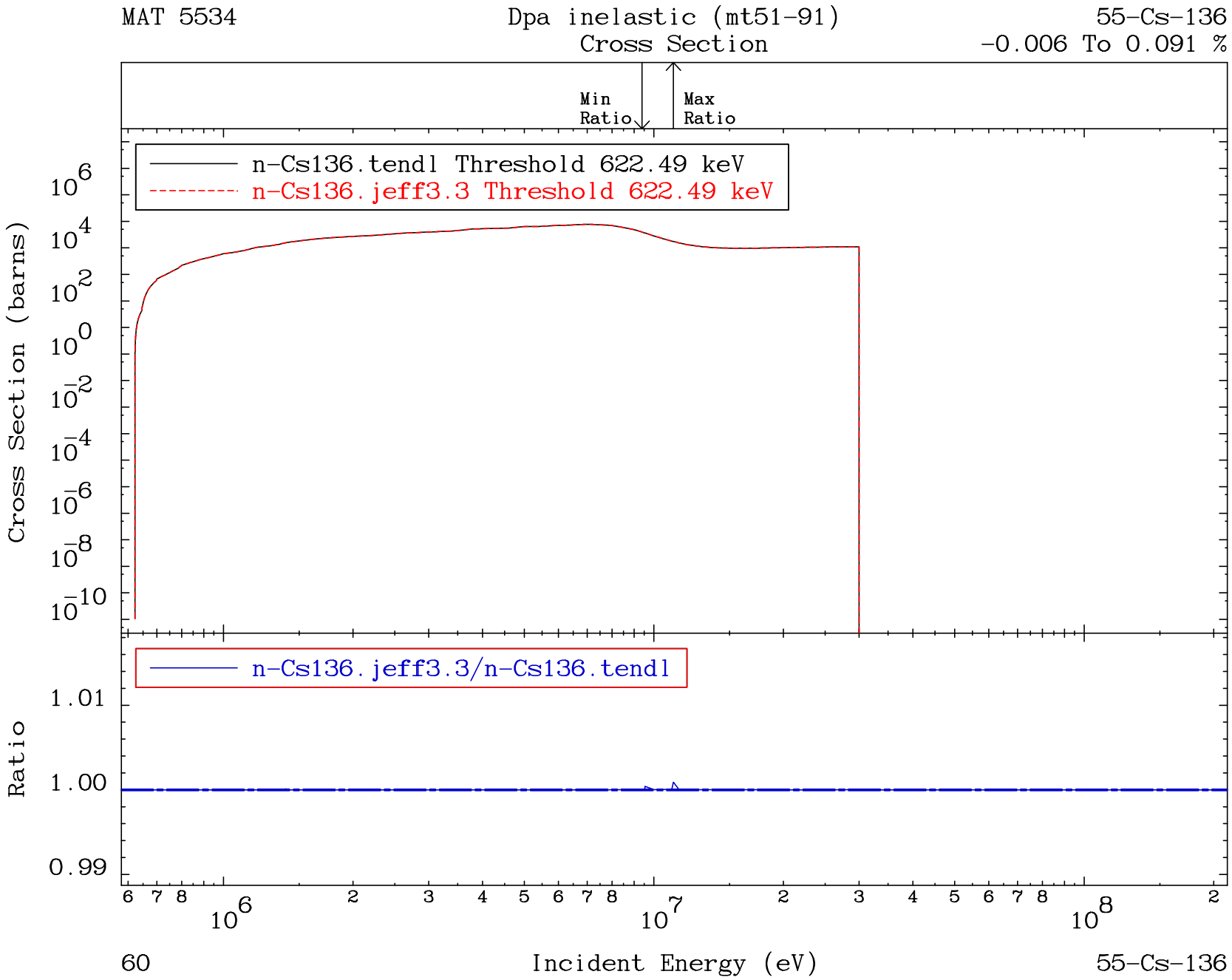

MAT 5534
Kerma capture (mt102)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
55
Incident Energy (eV)
55-Cs-136

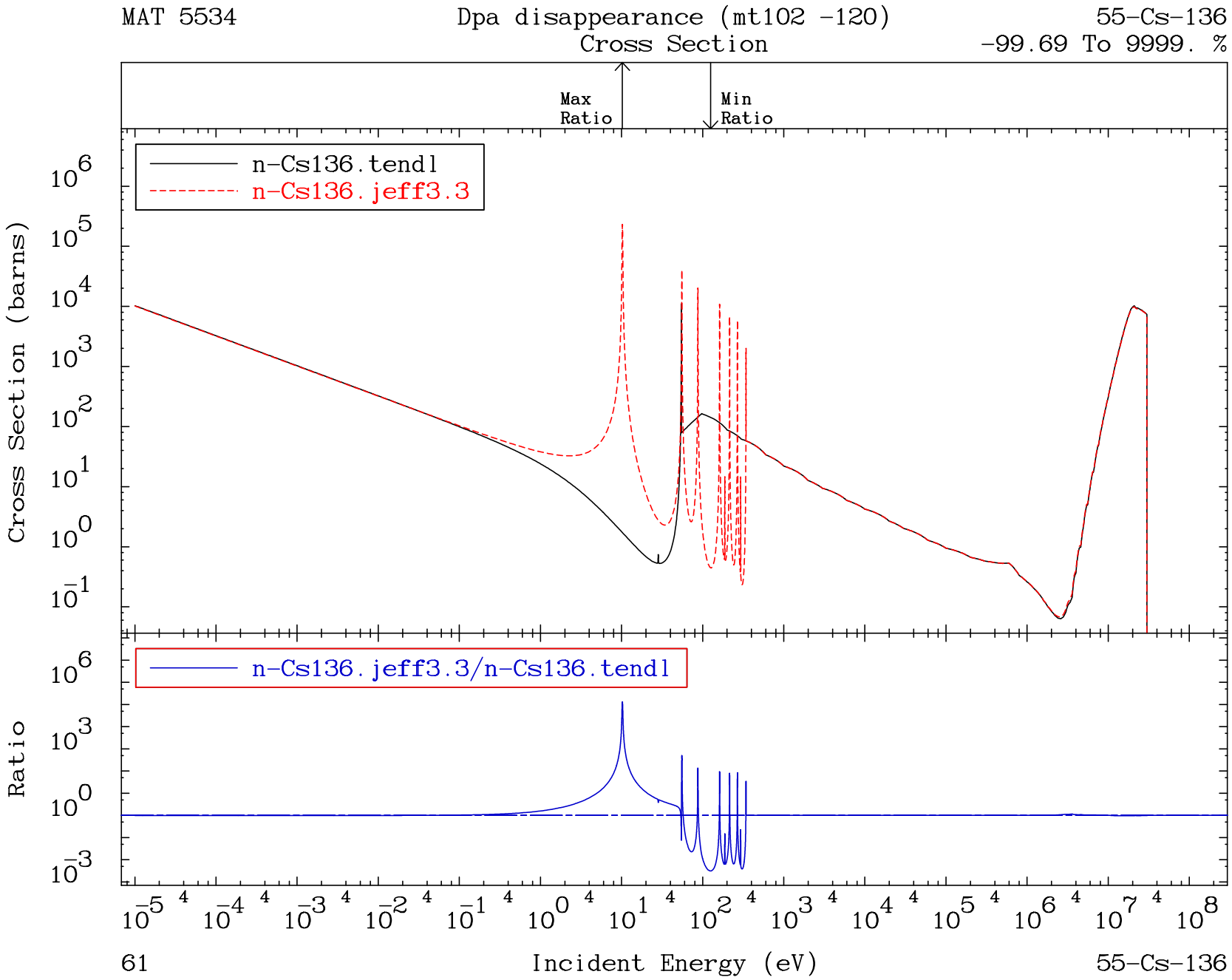

MAT 5534
Total photon (eV-barns)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
56
55-Cs-136

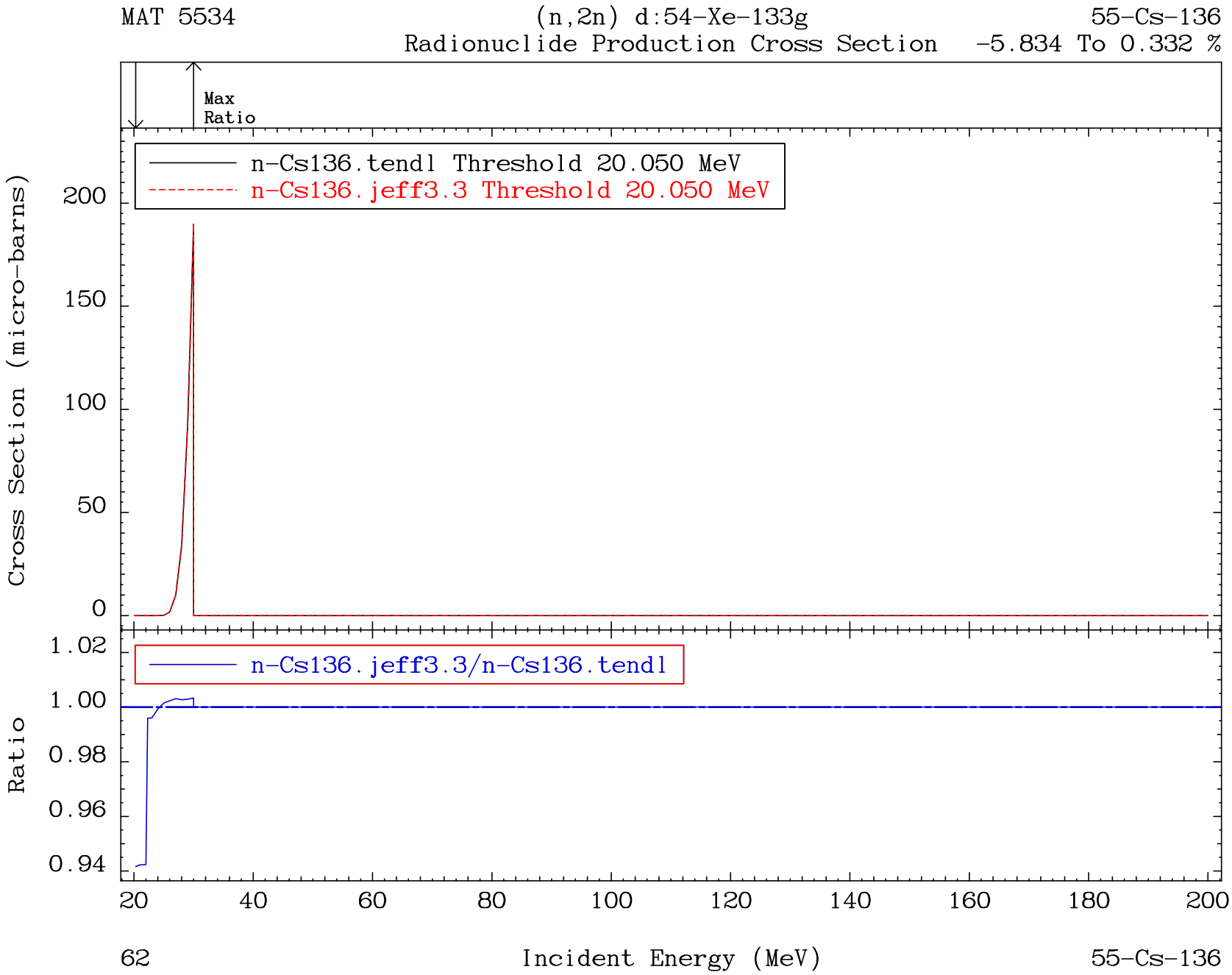

MAT 5534
Total kinematic kerma (high limit)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
57
55-Cs-136

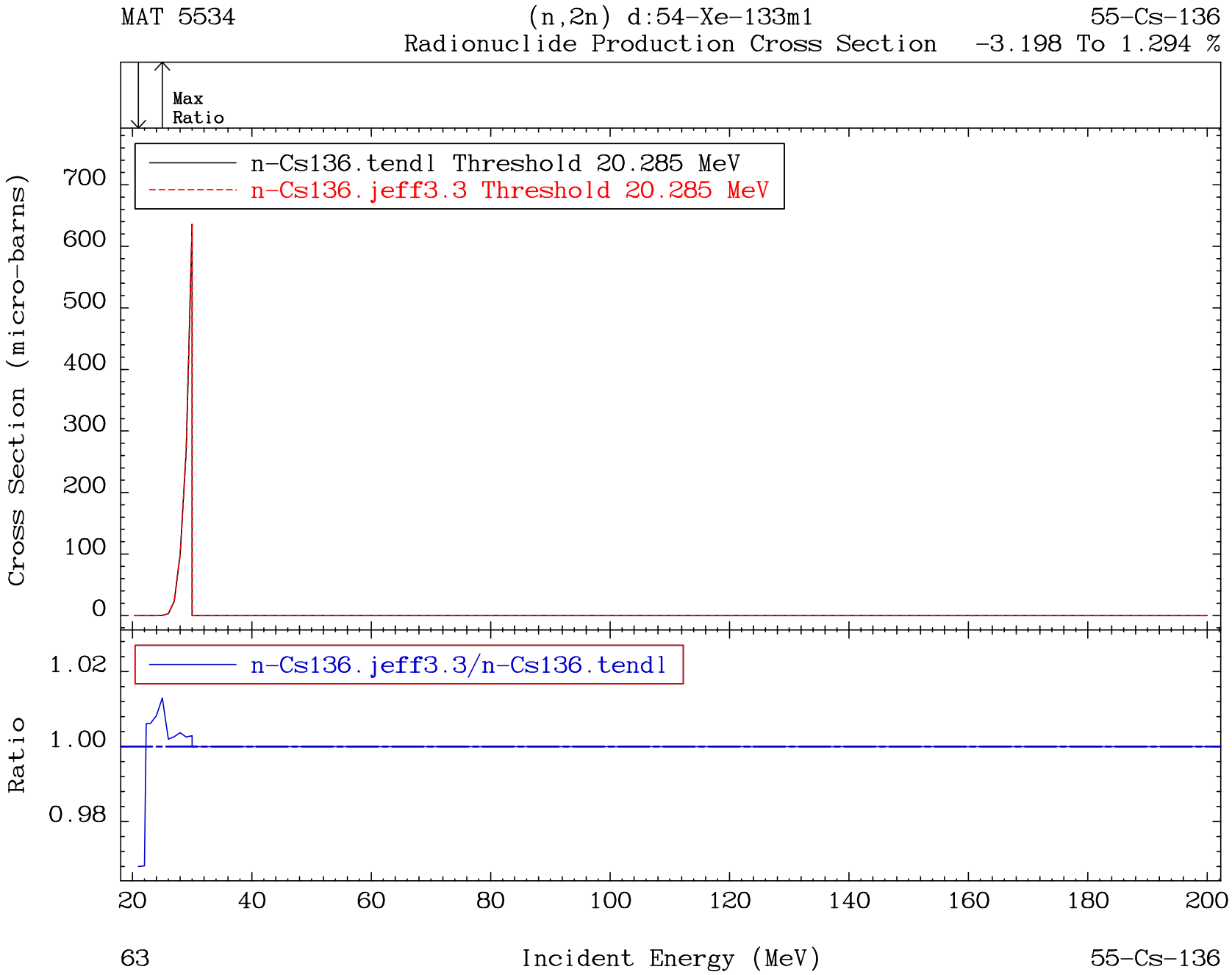

MAT 5534
Dpa total (eV-barns)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
58
55-Cs-136

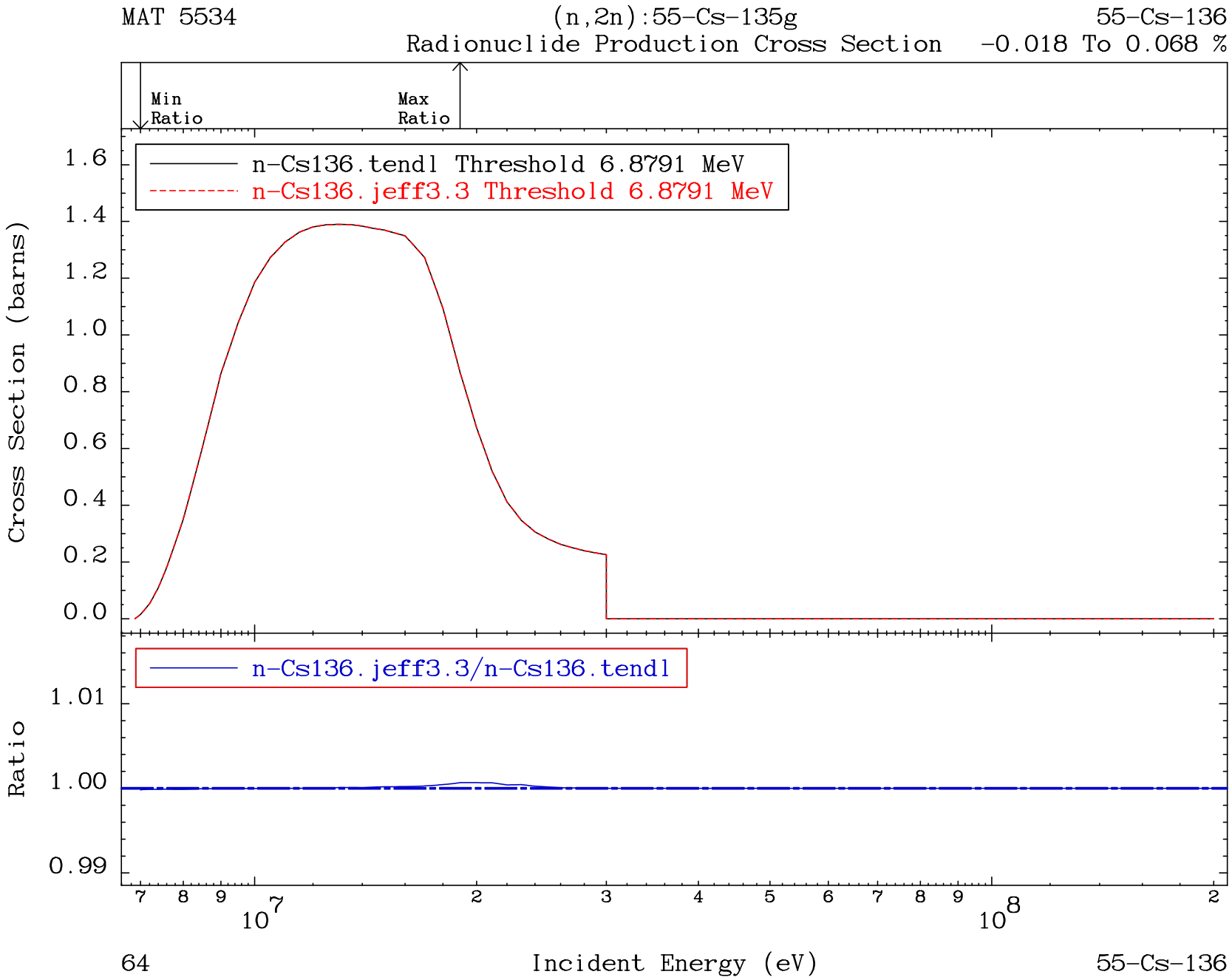

MAT 5534
Dpa elastic (mt2)
Cross Section
55-Cs-136
-2.960 To 0.843 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 850.00 eV
n-Cs136.jeff3.3 Threshold 920.00 eV
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
59
55-Cs-136

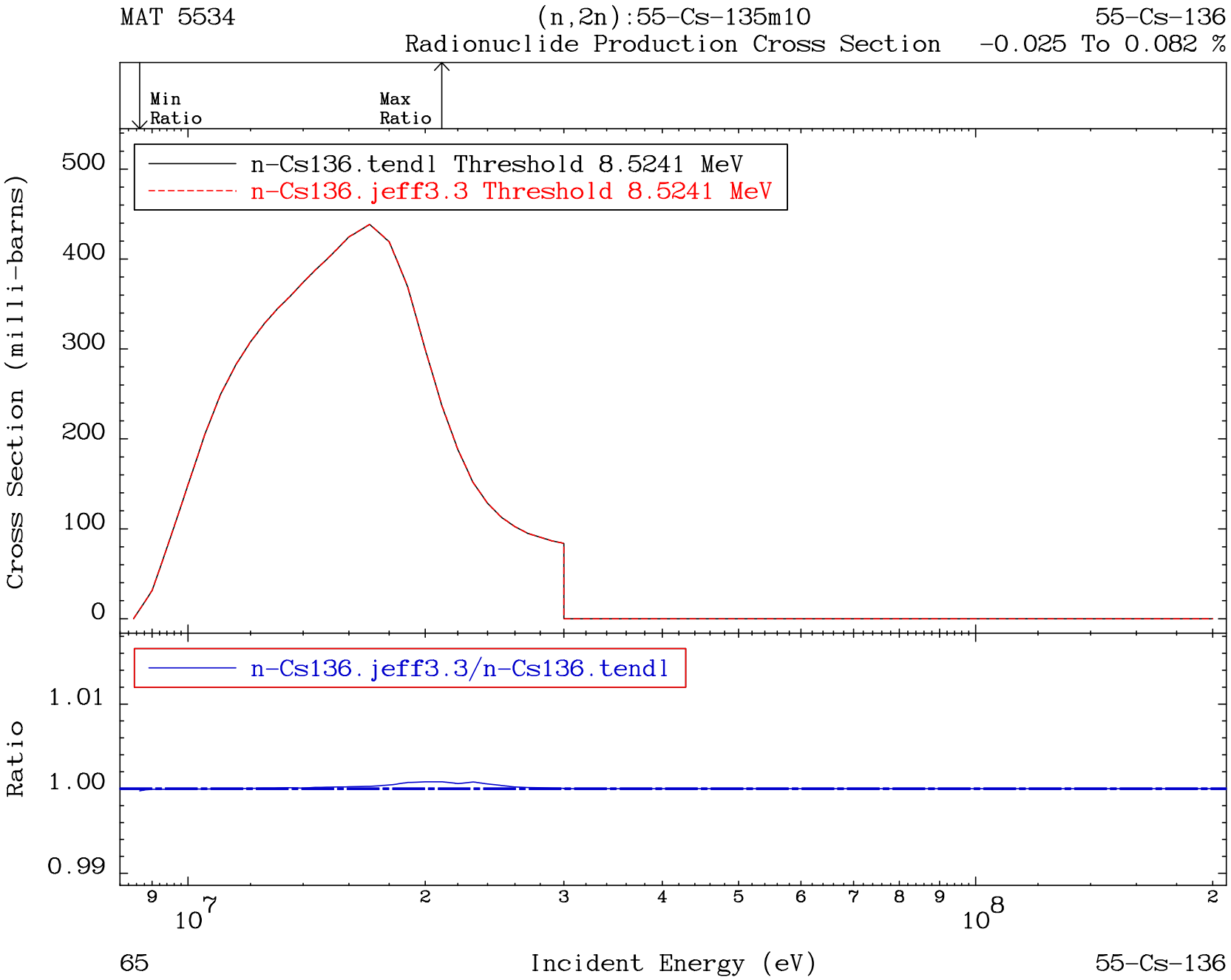

MAT 5534
Dpa inelastic (mt51-91)
Cross Section
55-Cs-136
-0.006 To 0.091 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 622.49 keV
n-Cs136.jeff3.3 Threshold 622.49 keV
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
60
55-Cs-136

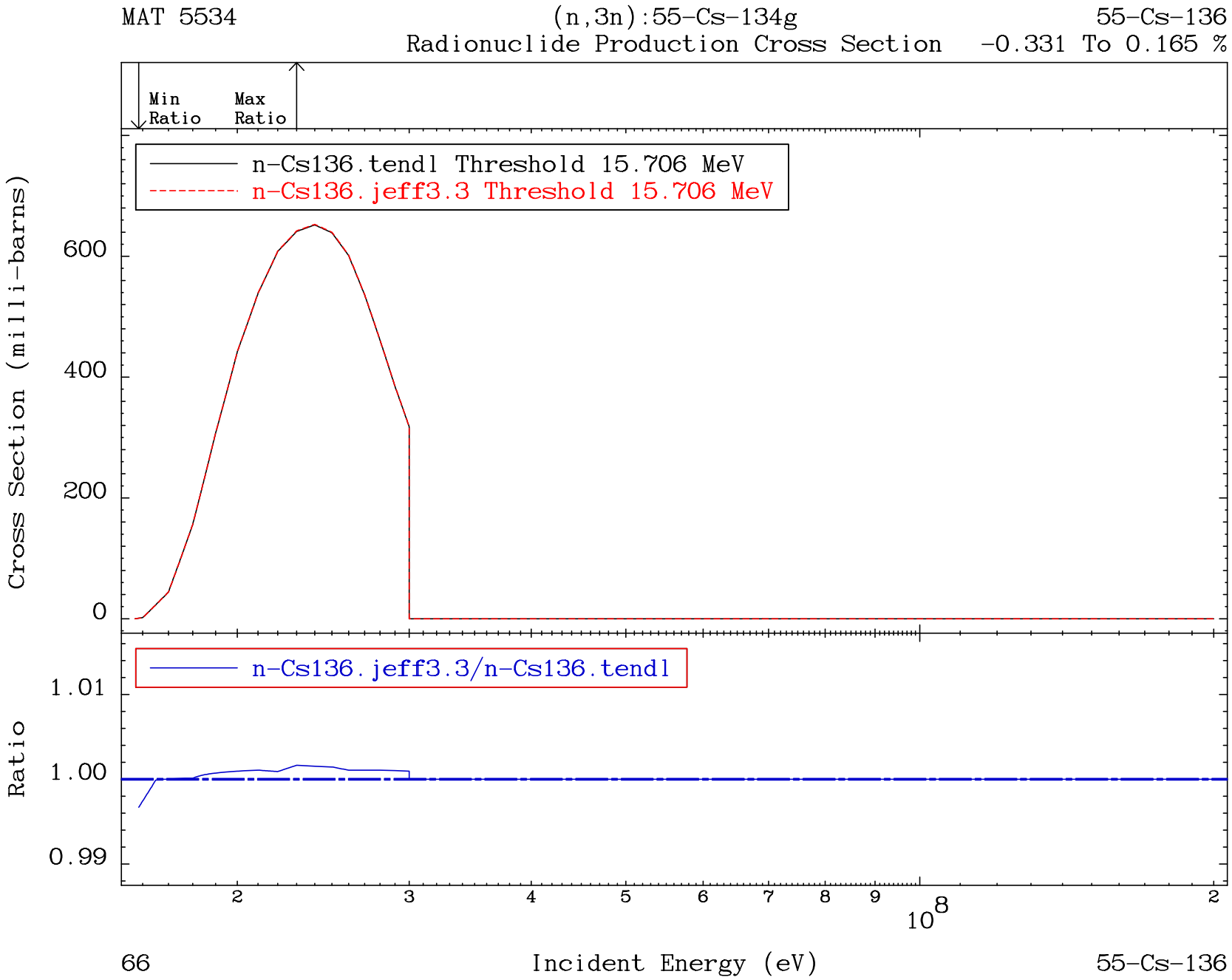

MAT 5534
Dpa disappearance (mt102 -120)
Cross Section
55-Cs-136
-99.69 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl
n-Cs136.jeff3.3
Cross Section (barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
61
55-Cs-136

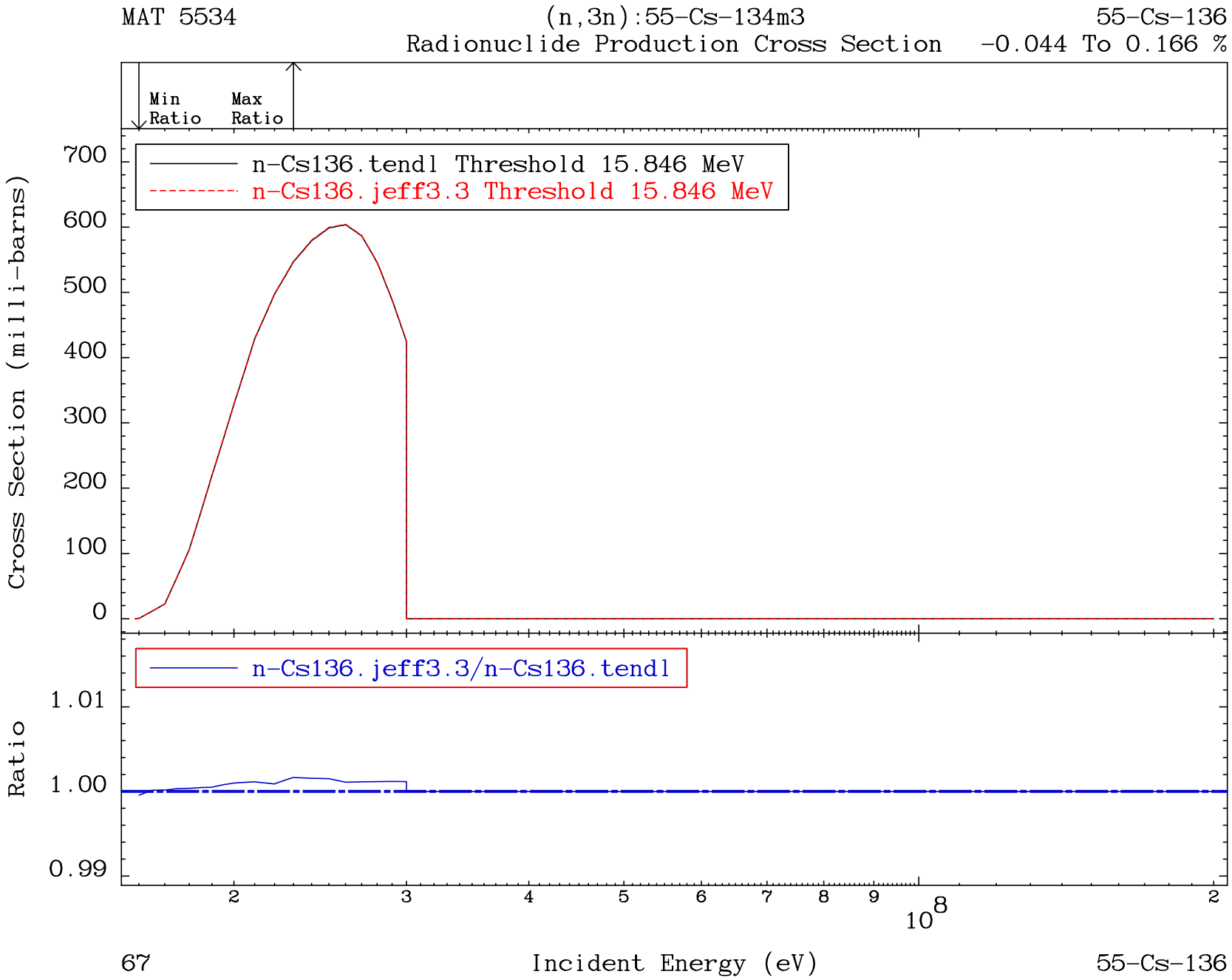

MAT 5534
(n,2n) d:54-Xe-133g
55-Cs-136
Radionuclide Production Cross Section -5.834 To 0.332 %
Max
Ratio
n-Cs136.tendl Threshold 20.050 MeV
n-Cs136.jeff3.3 Threshold 20.050 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.02
1.00
0.98
0.96
0.94
20
40
60
80
100
120
140
160
180
200
62
Incident Energy (MeV)
55-Cs-136

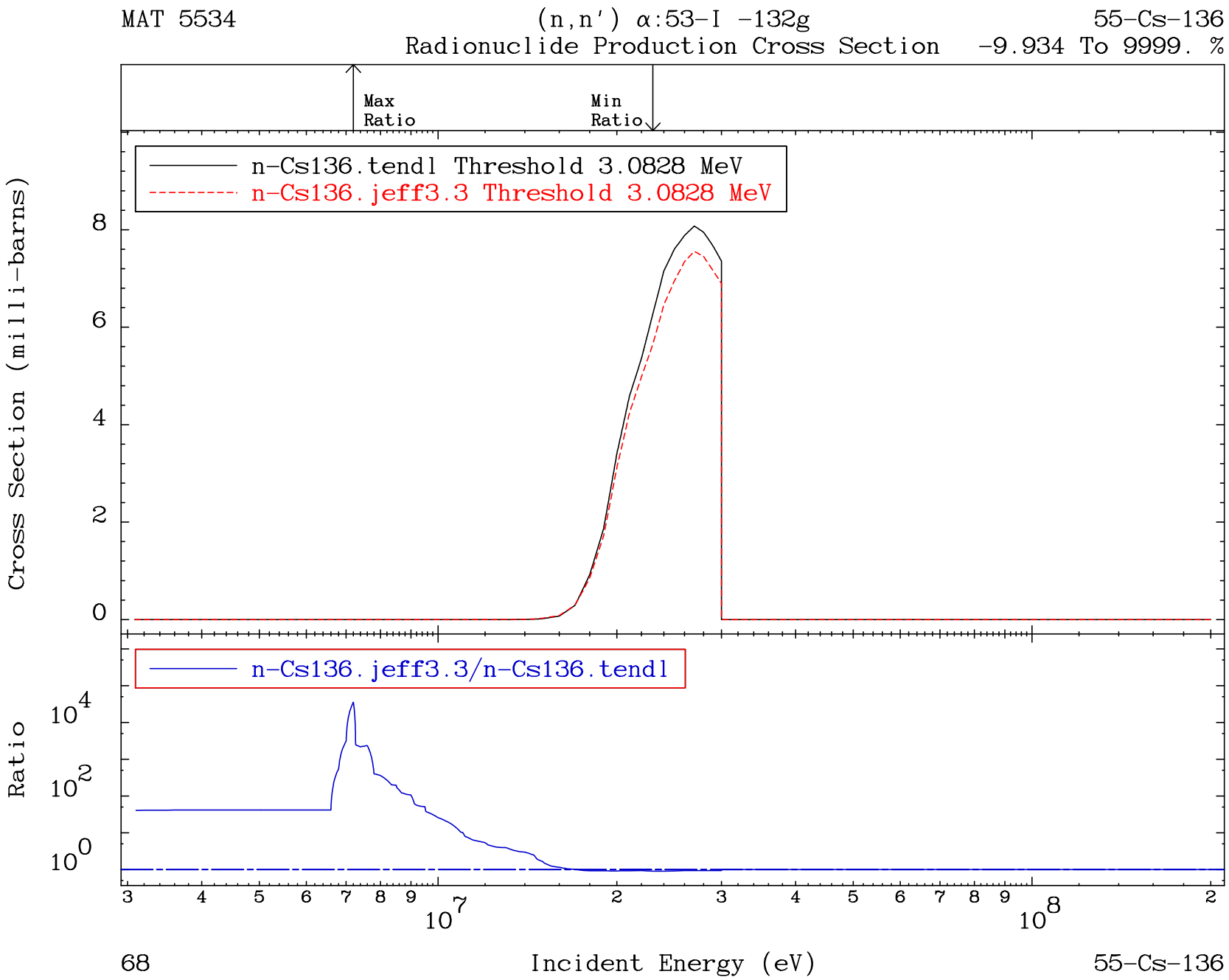

MAT 5534
(n,2n) d:54-Xe-133m1
55-Cs-136
Radionuclide Production Cross Section -3.198 To 1.294 %
Max
Ratio
n-Cs136.tendl Threshold 20.285 MeV
n-Cs136.jeff3.3 Threshold 20.285 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.02
1.00
0.98
20
40
60
80
100
120
140
160
180
200
63
Incident Energy (MeV)
55-Cs-136

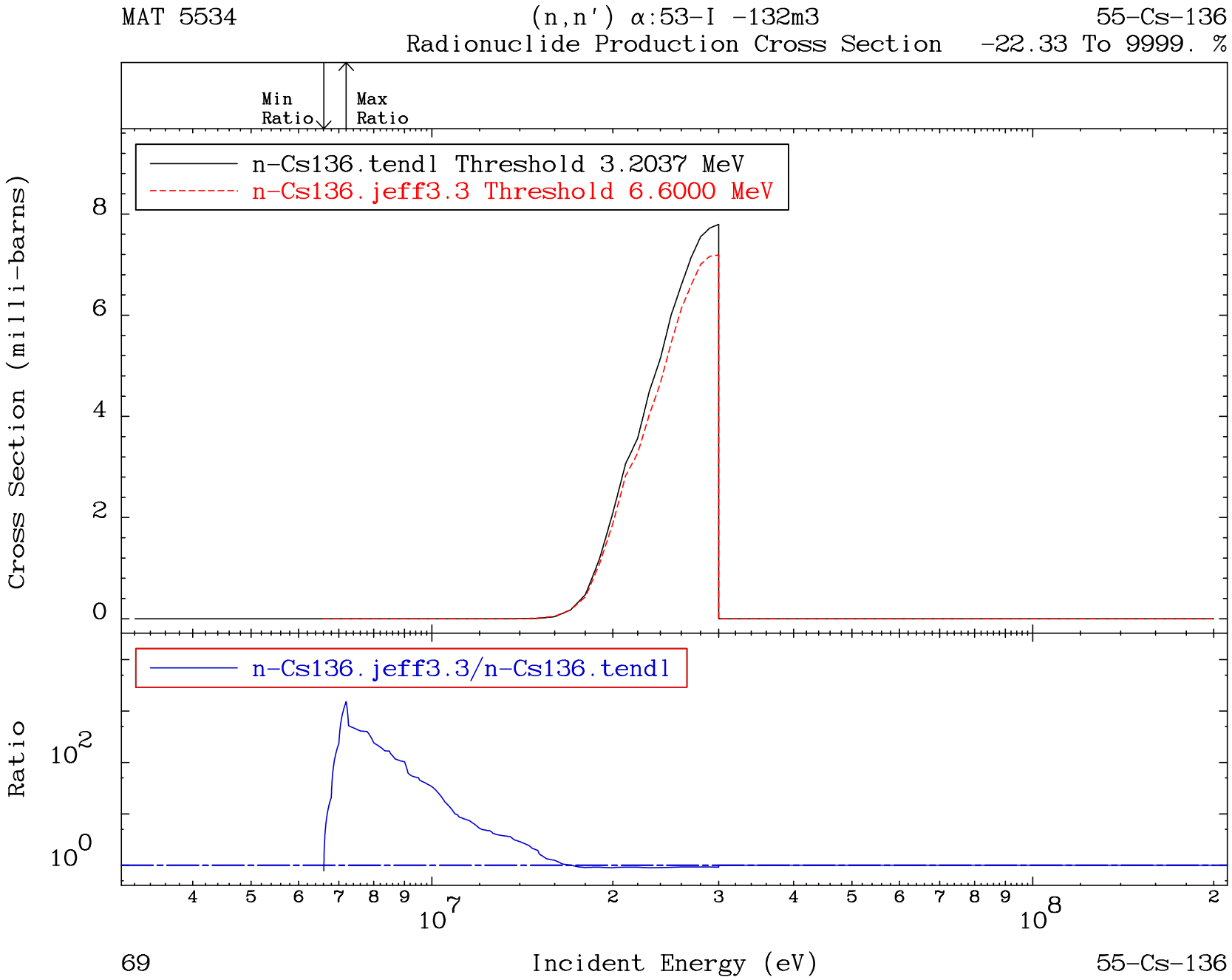

MAT 5534
(n,2n):55-Cs-135g
55-Cs-136
Radionuclide Production Cross Section
-0.018 To 0.068 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 6.8791 MeV
n-Cs136.jeff3.3 Threshold 6.8791 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
55-Cs-136

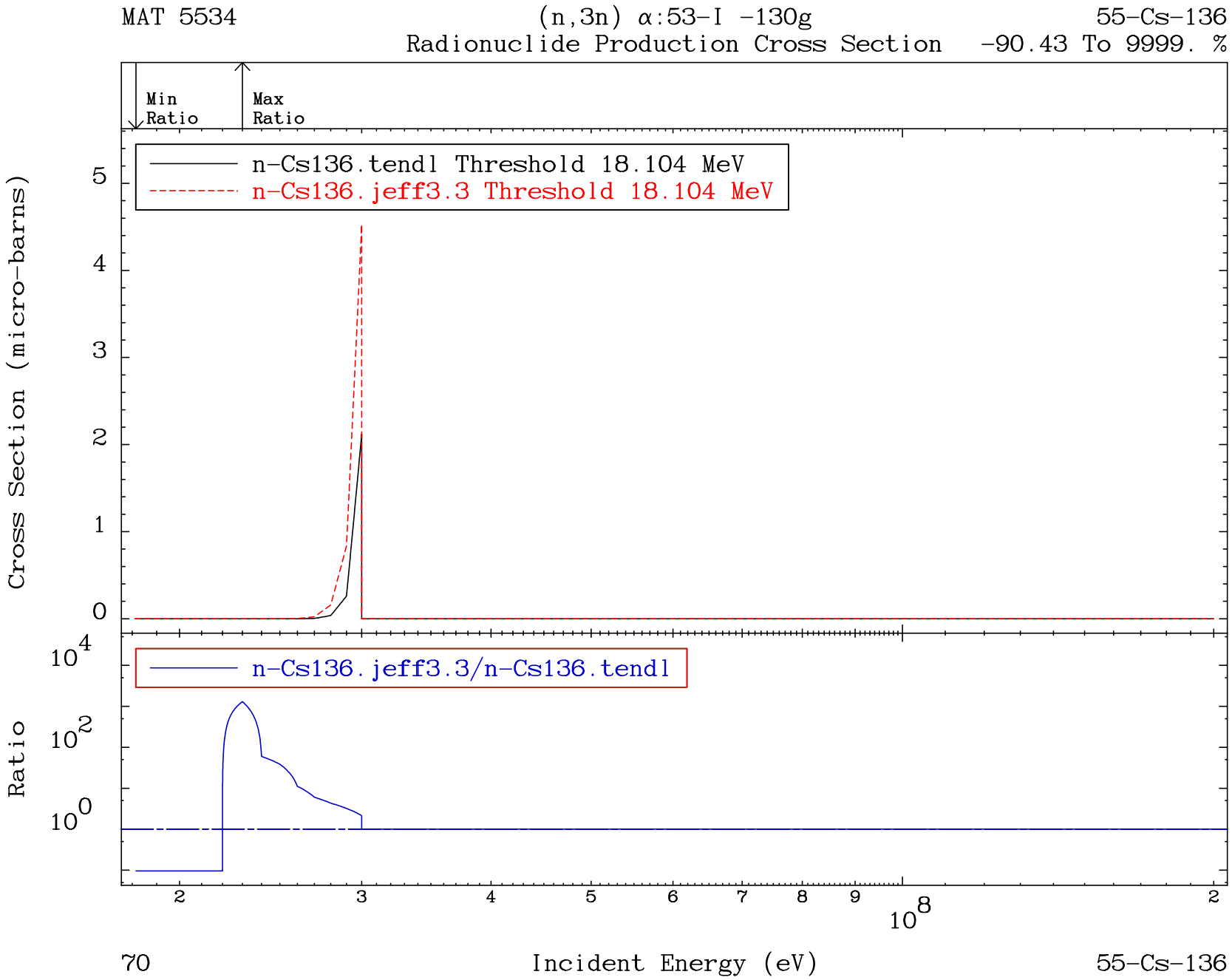

MAT 5534
(n,2n):55-Cs-135m10
55-Cs-136
Radionuclide Production Cross Section -0.025 To 0.082 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 8.5241 MeV
n-Cs136.jeff3.3 Threshold 8.5241 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
55-Cs-136

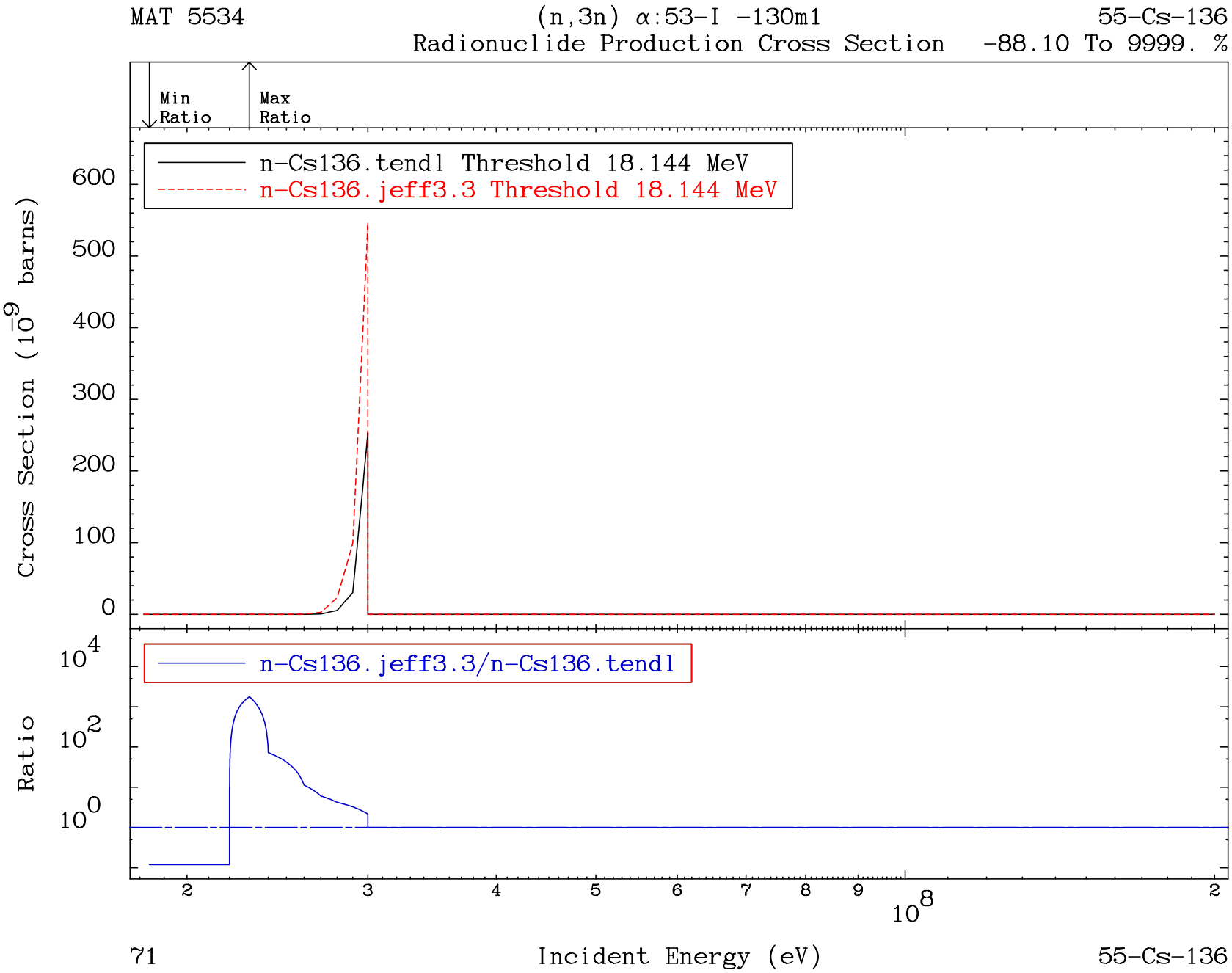

MAT 5534
(n,3n):55-Cs-134g
55-Cs-136
Radionuclide Production Cross Section
-0.331 To 0.165 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 15.706 MeV
n-Cs136.jeff3.3 Threshold 15.706 MeV
Cross Section (milli-barns)
600
400
200
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
55-Cs-136

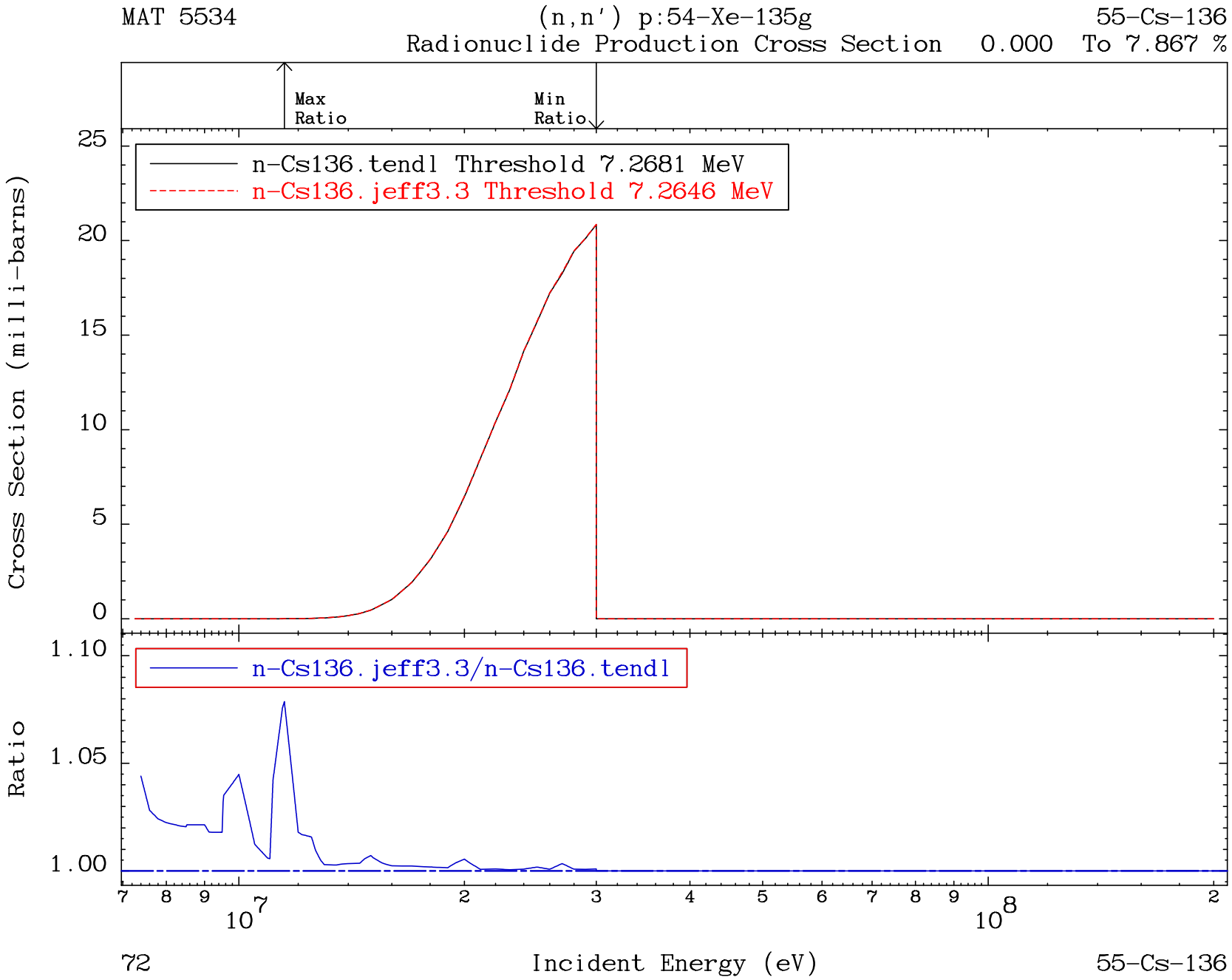

MAT 5534
(n,3n):55-Cs-134m3
55-Cs-136
Radionuclide Production Cross Section -0.044 To 0.166 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 15.846 MeV
n-Cs136.jeff3.3 Threshold 15.846 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
55-Cs-136

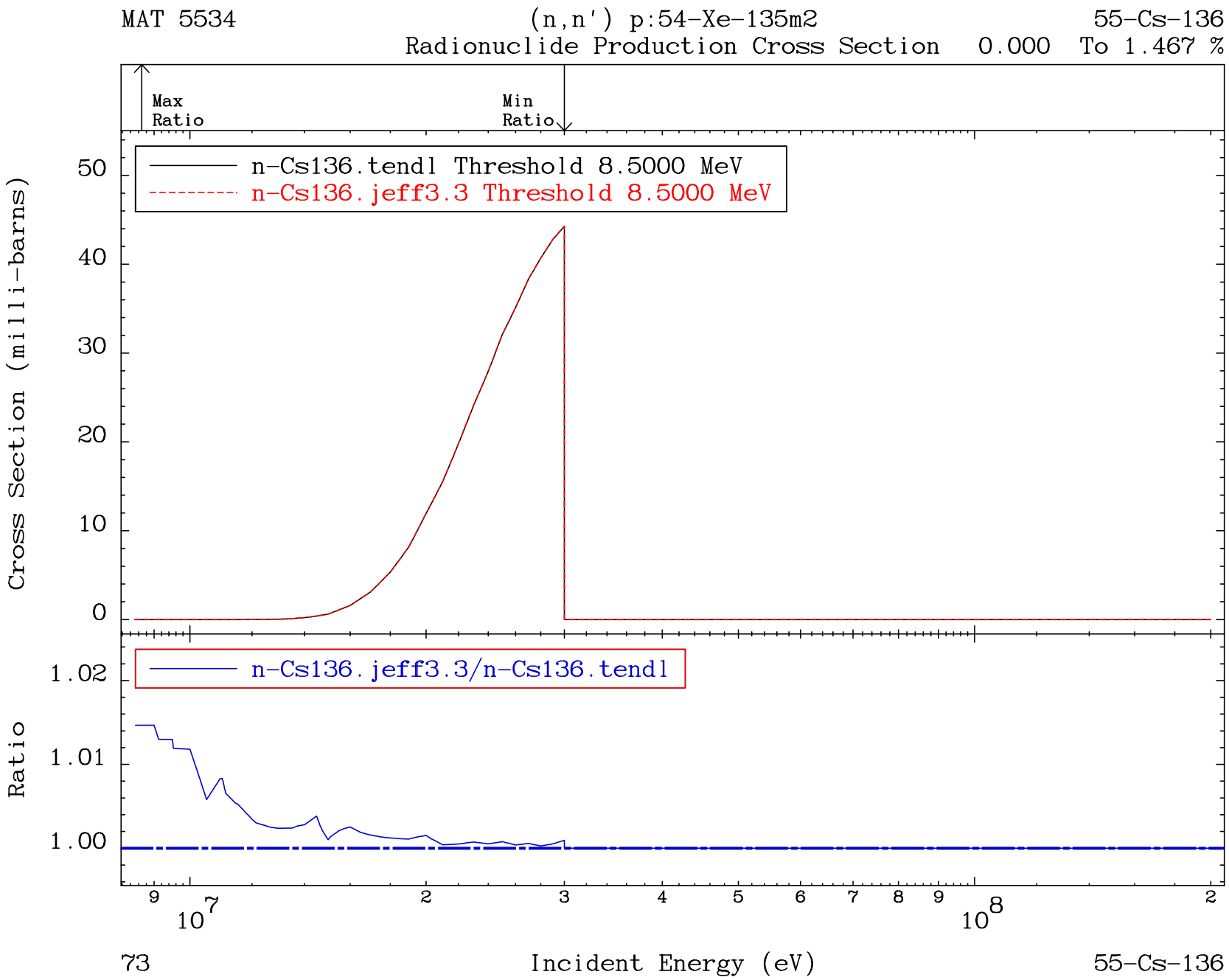

MAT 5534
(n,n') α:53-I -132g
55-Cs-136
Radionuclide Production Cross Section -9.934 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 3.0828 MeV
n-Cs136.jeff3.3 Threshold 3.0828 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
68
Incident Energy (eV)
55-Cs-136

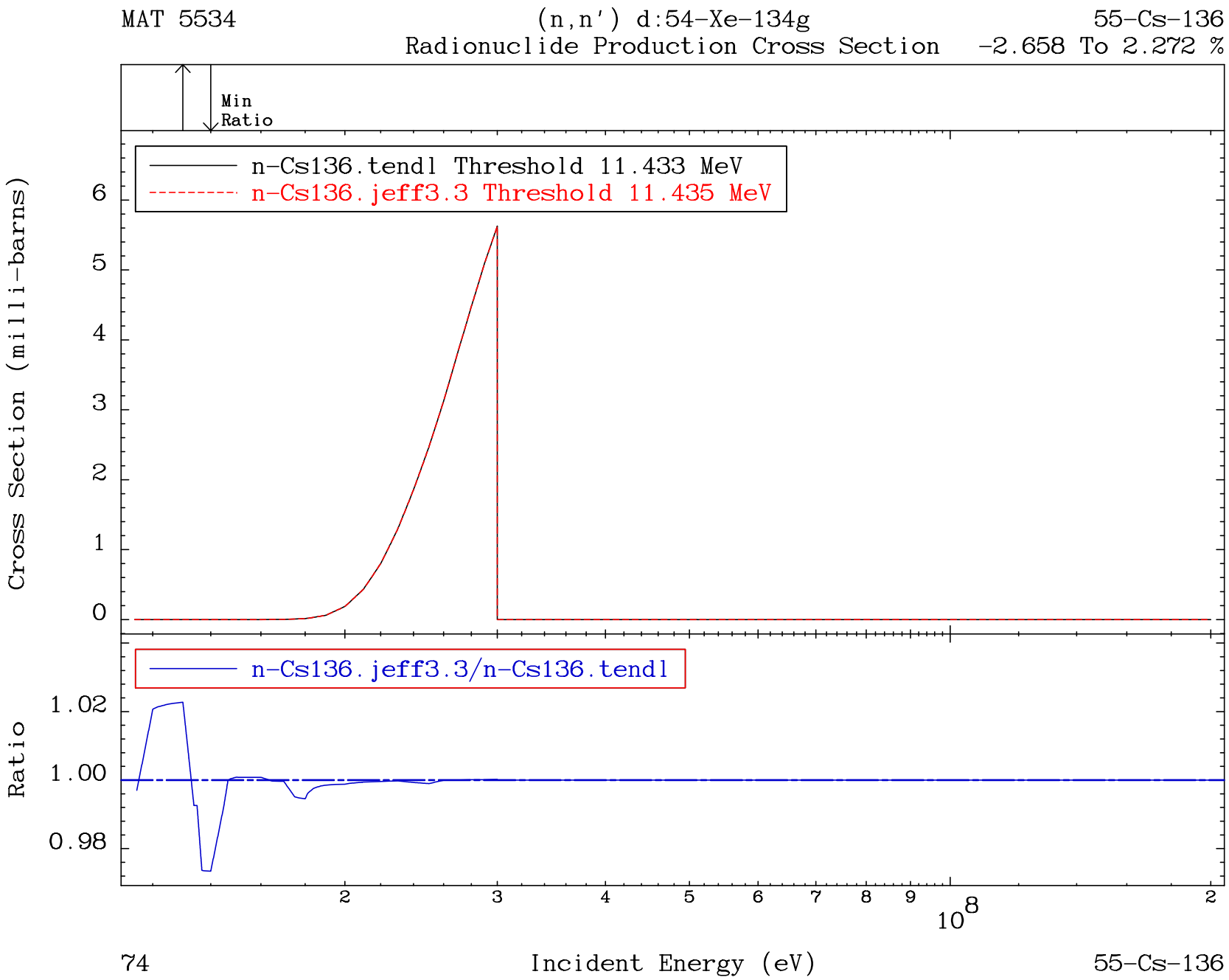

MAT 5534
(n,n') α:53-I -132m3
55-Cs-136
Radionuclide Production Cross Section -22.33 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 3.2037 MeV
n-Cs136.jeff3.3 Threshold 6.6000 MeV
Cross Section (milli-barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
69
55-Cs-136

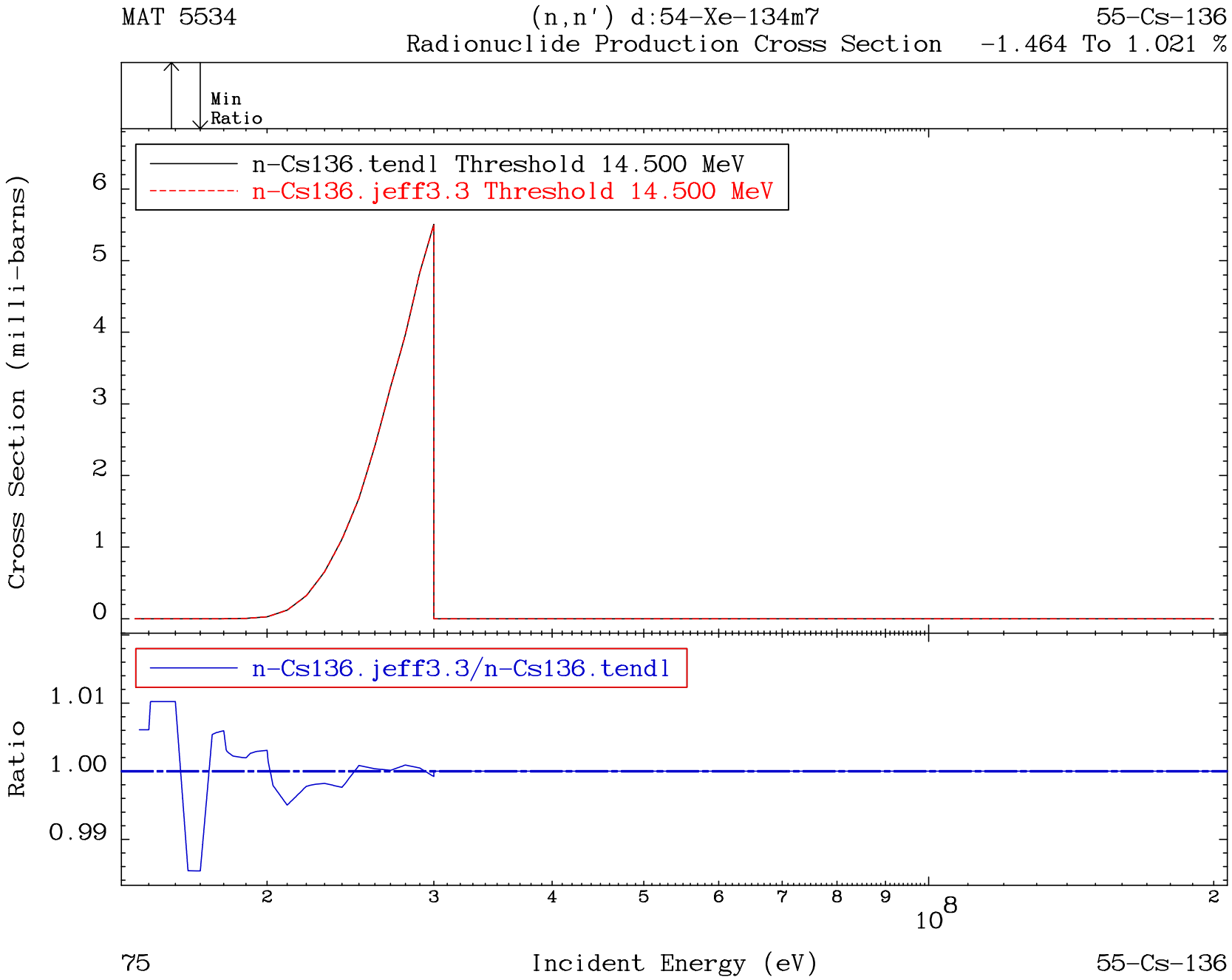

MAT 5534
(n,3n) α:53-I -130g
55-Cs-136
Radionuclide Production Cross Section -90.43 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 18.104 MeV
n-Cs136.jeff3.3 Threshold 18.104 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
55-Cs-136

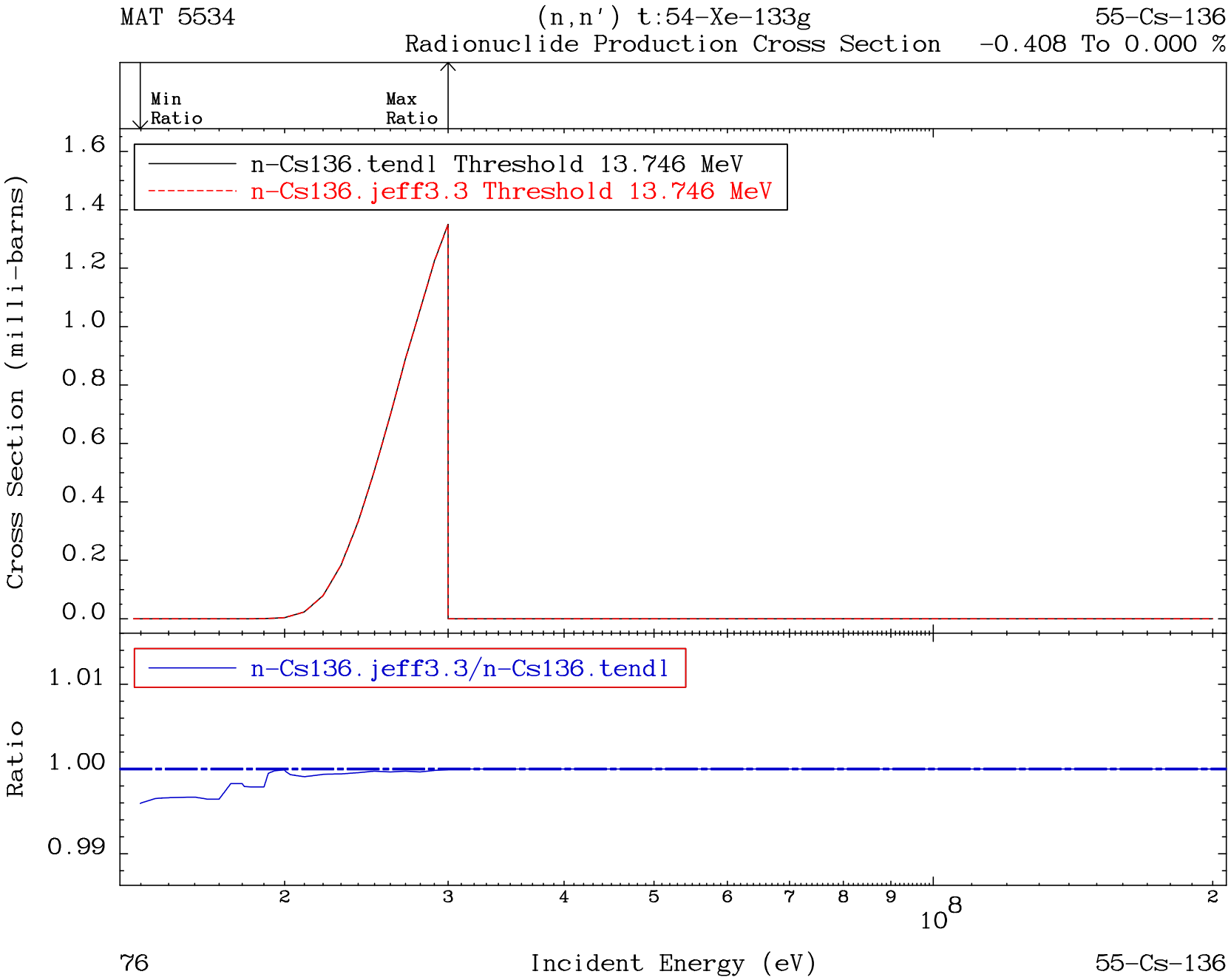

MAT 5534
(n,3n) α:53-I -130m1
55-Cs-136
Radionuclide Production Cross Section -88.10 To 9999. %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 18.144 MeV
n-Cs136.jeff3.3 Threshold 18.144 MeV
Cross Section (10^{-9} barns)
600
500
400
300
200
100
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
71
Incident Energy (eV)
55-Cs-136

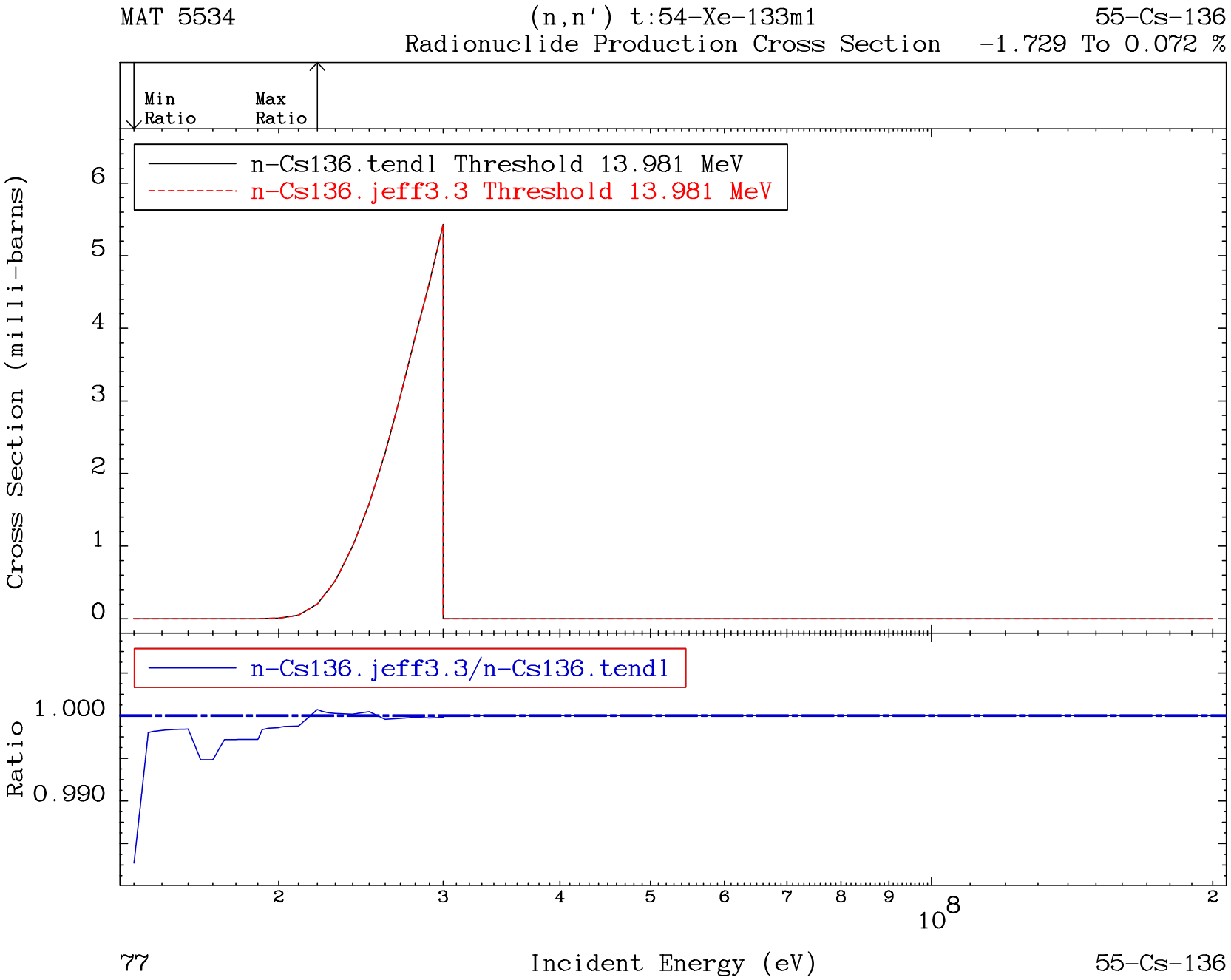

MAT 5534
(n,n') p:54-Xe-135g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 7.867 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 7.2681 MeV
n-Cs136.jeff3.3 Threshold 7.2646 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.10
1.05
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
72
Incident Energy (eV)
55-Cs-136

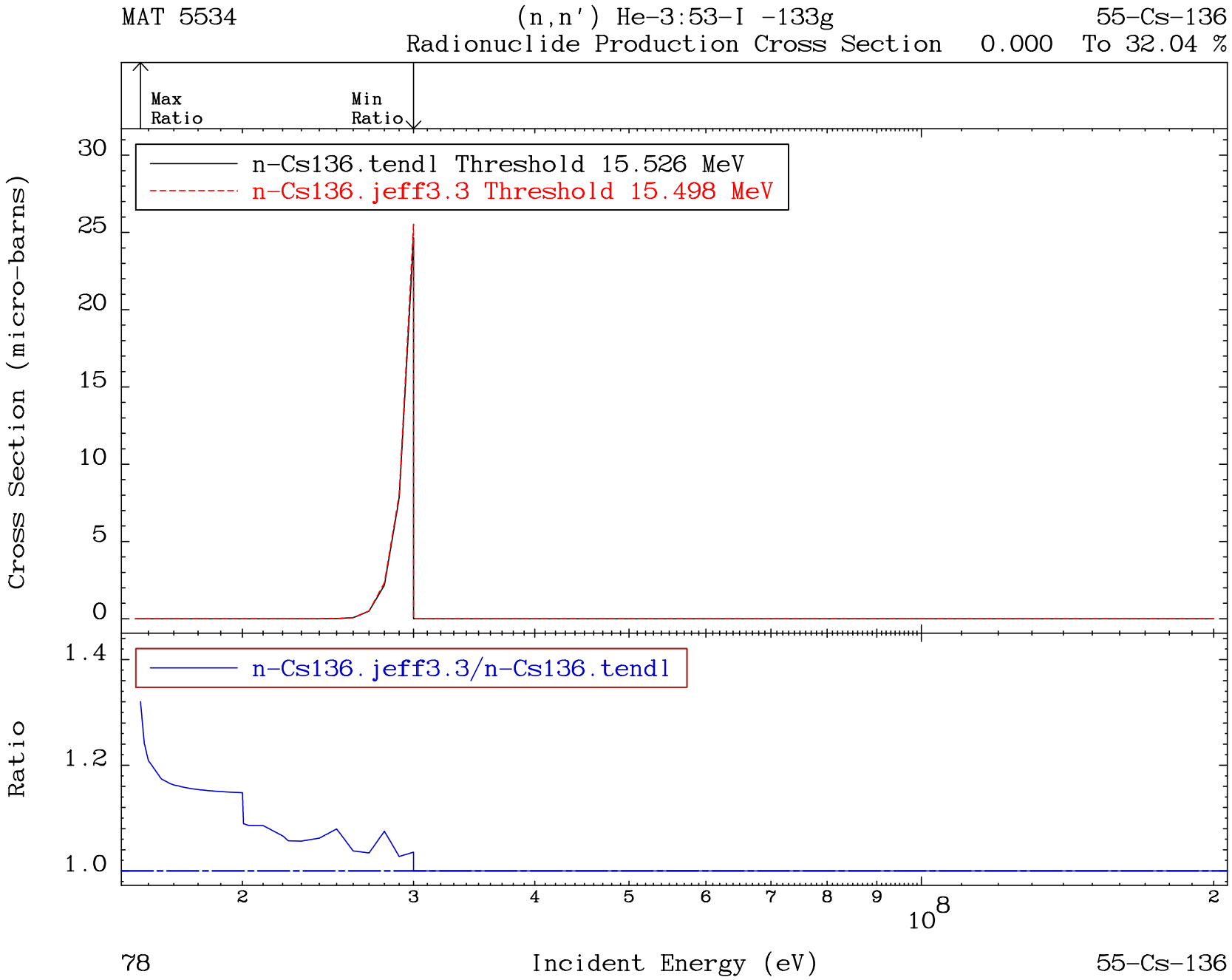

MAT 5534
(n,n') p:54-Xe-135m2
55-Cs-136
Radionuclide Production Cross Section 0.000 To 1.467 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 8.5000 MeV
n-Cs136.jeff3.3 Threshold 8.5000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.02
1.01
1.00
9
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
55-Cs-136

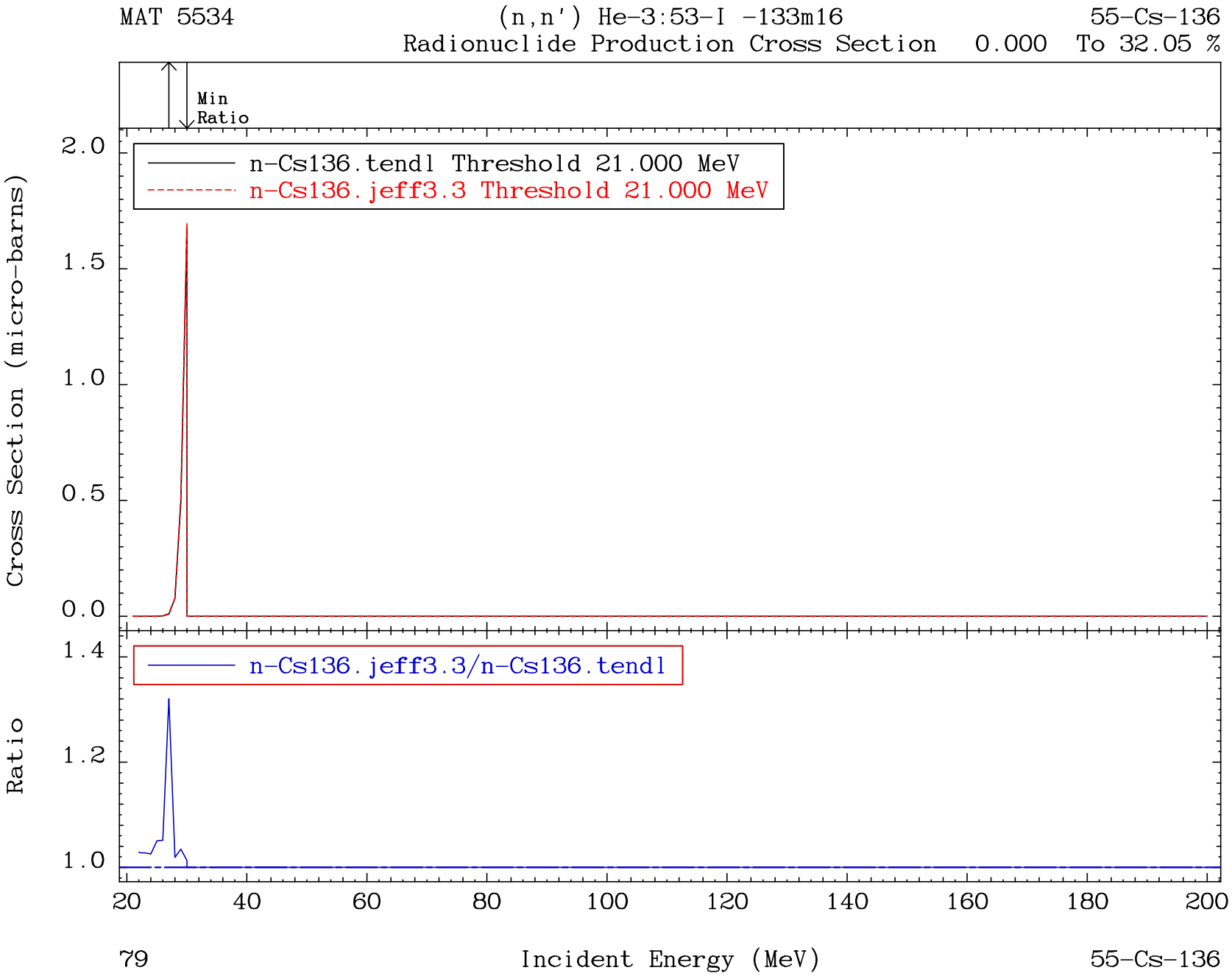

MAT 5534
(n,n') d:54-Xe-134g
55-Cs-136
Radionuclide Production Cross Section -2.658 To 2.272 %
Min Ratio
n-Cs136.tendl Threshold 11.433 MeV
n-Cs136.jeff3.3 Threshold 11.435 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.98
1.00
1.02
2
3
4
5
6
7
8
9
2
10^8
74
Incident Energy (eV)
55-Cs-136

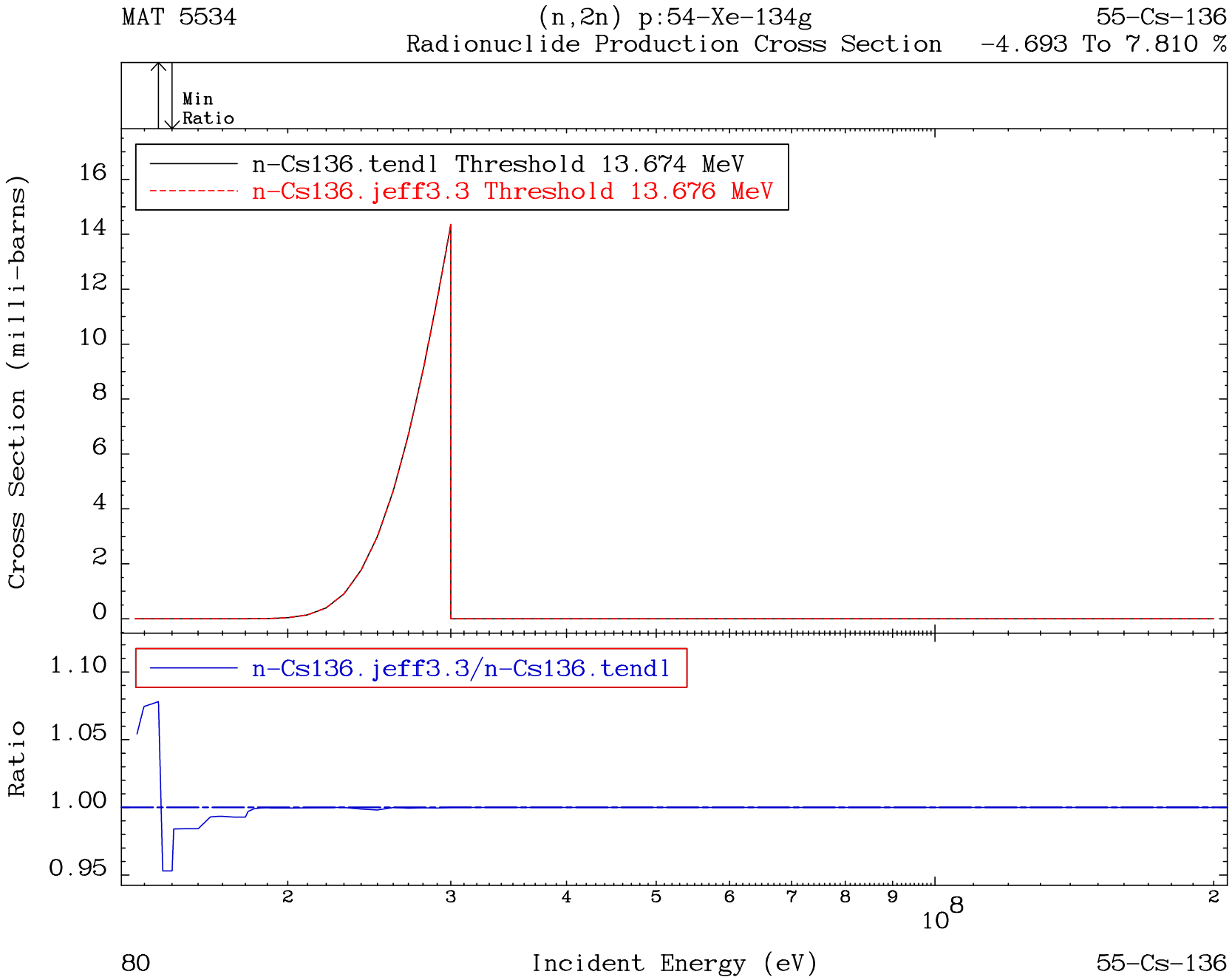

MAT 5534
(n,n') d:54-Xe-134m7
55-Cs-136
Radionuclide Production Cross Section -1.464 To 1.021 %
Min Ratio
n-Cs136.tendl Threshold 14.500 MeV
n-Cs136.jeff3.3 Threshold 14.500 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
2
10^8
75
Incident Energy (eV)
55-Cs-136

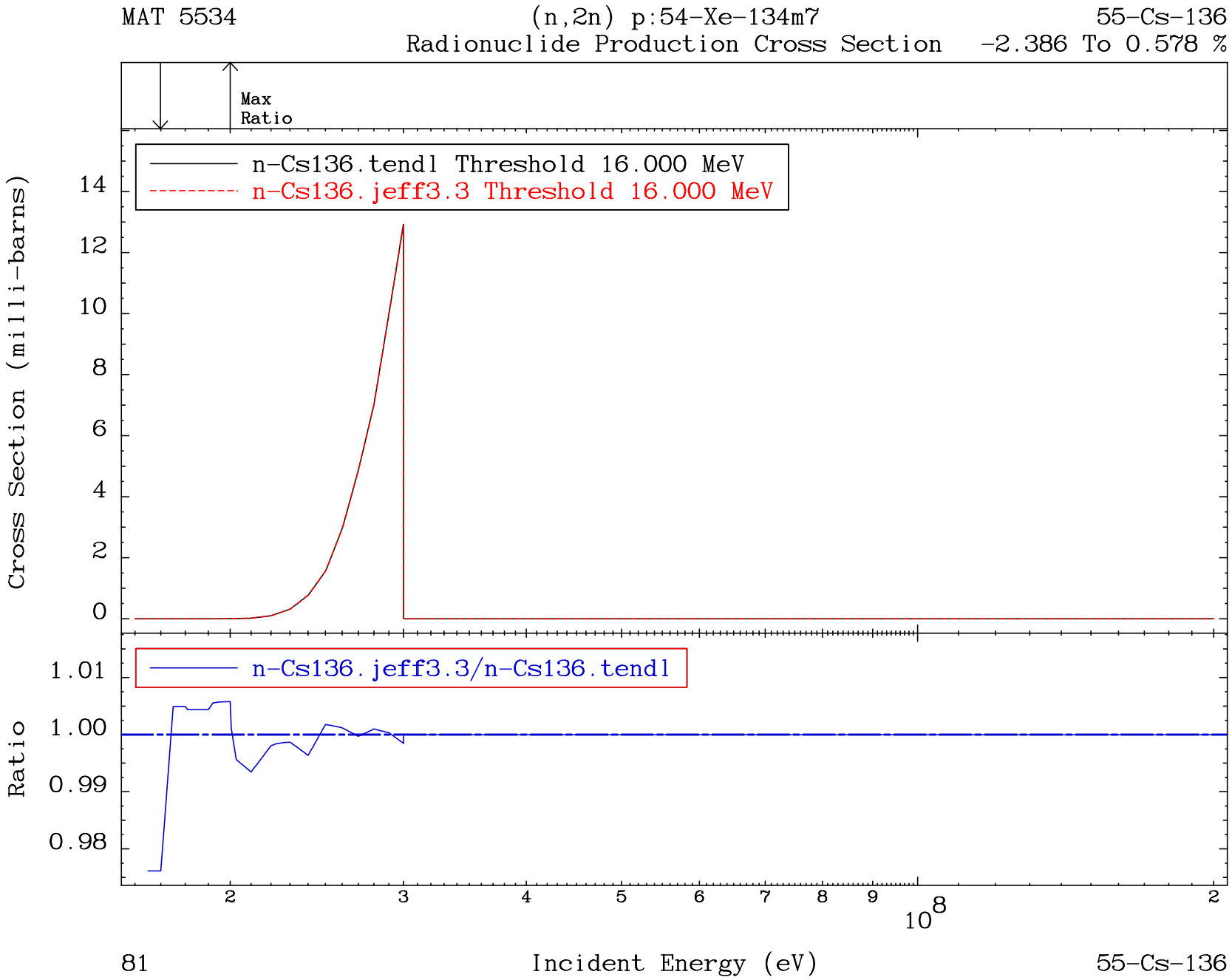

MAT 5534
(n,n') t:54-Xe-133g
55-Cs-136
Radionuclide Production Cross Section -0.408 To 0.000 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 13.746 MeV
n-Cs136.jeff3.3 Threshold 13.746 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
55-Cs-136

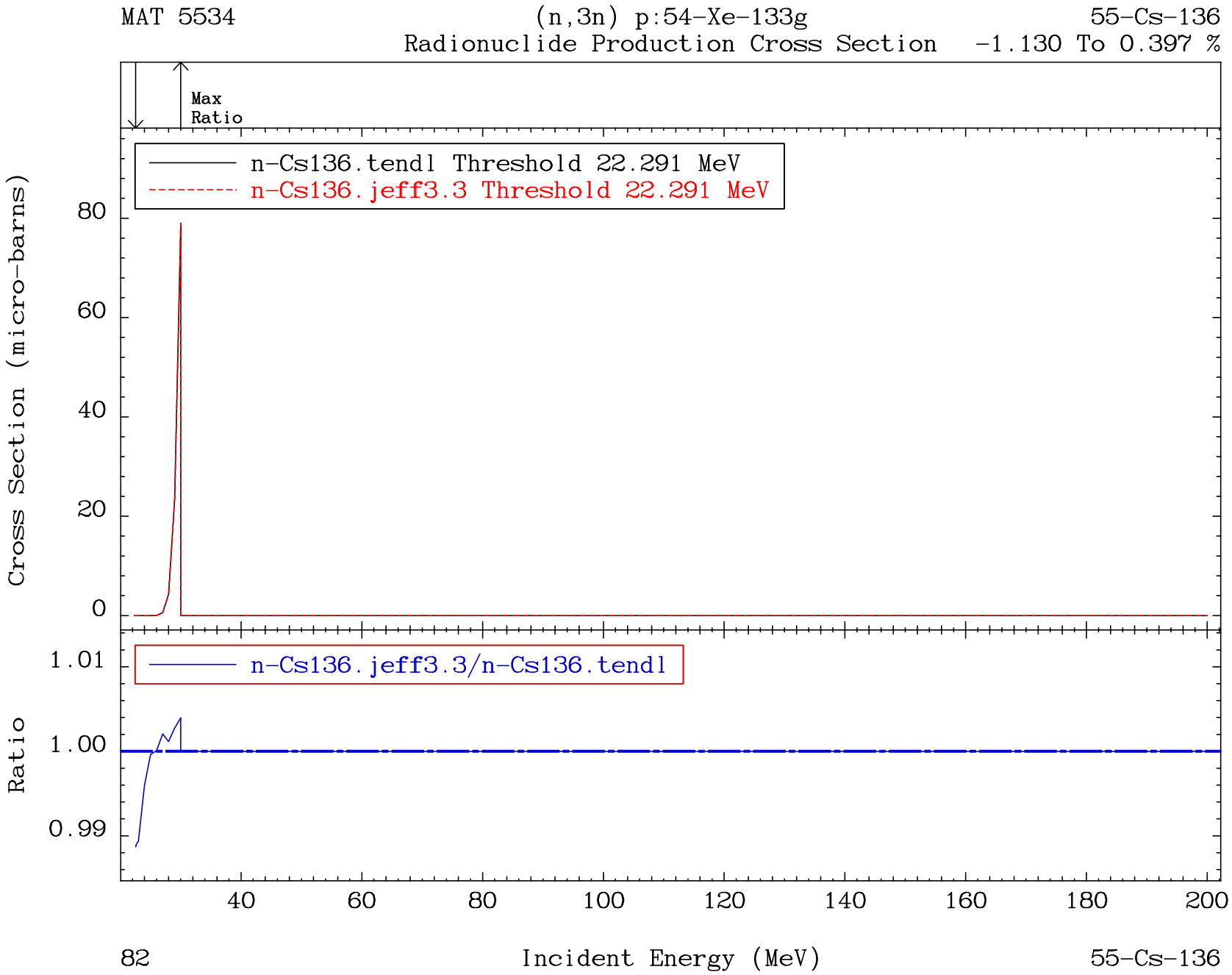

MAT 5534
(n,n') t:54-Xe-133m1
55-Cs-136
Radionuclide Production Cross Section -1.729 To 0.072 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 13.981 MeV
n-Cs136.jeff3.3 Threshold 13.981 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.000
0.990
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
55-Cs-136

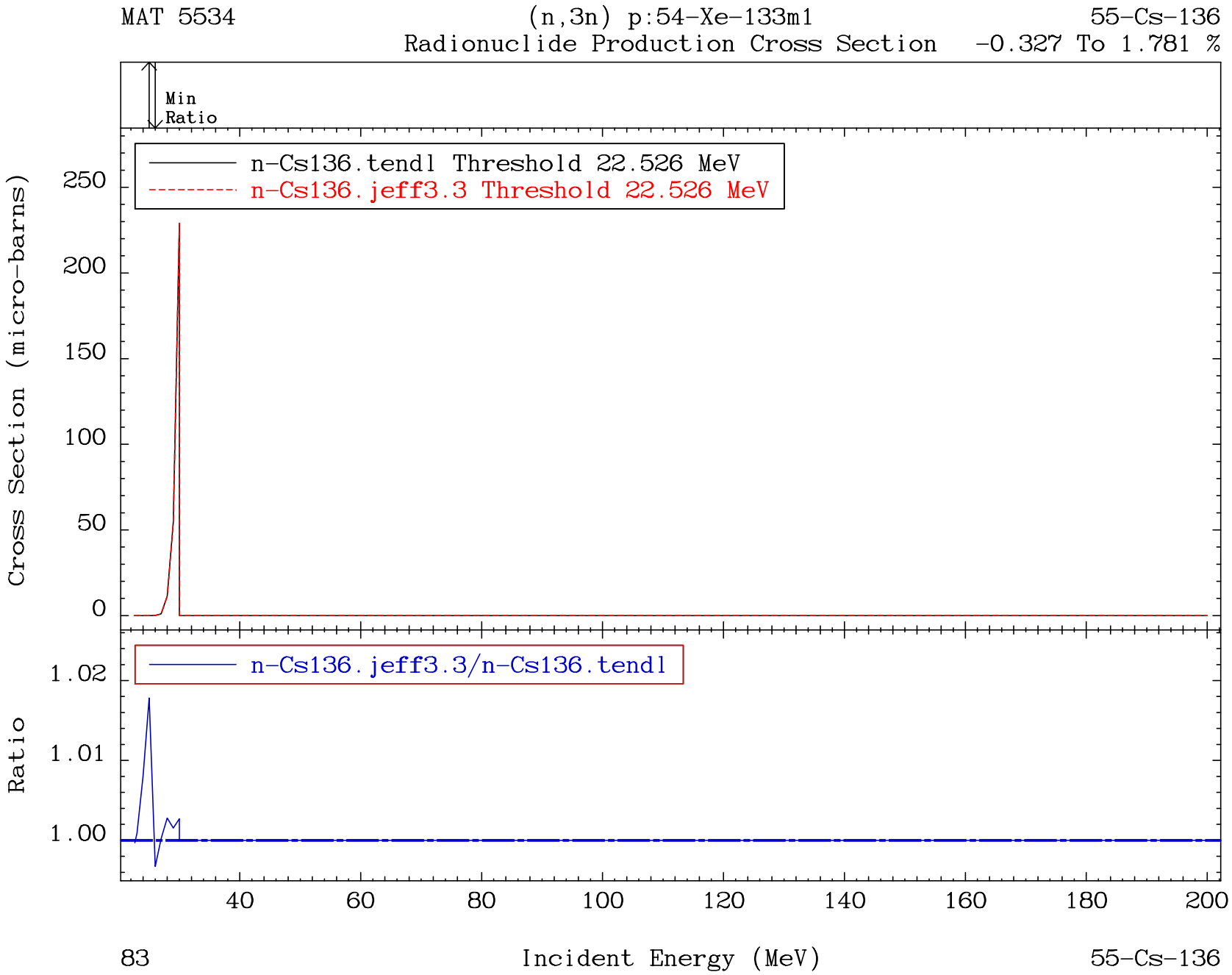

MAT 5534
(n,n') He-3:53-I -133g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 32.04 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 15.526 MeV
n-Cs136.jeff3.3 Threshold 15.498 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
55-Cs-136

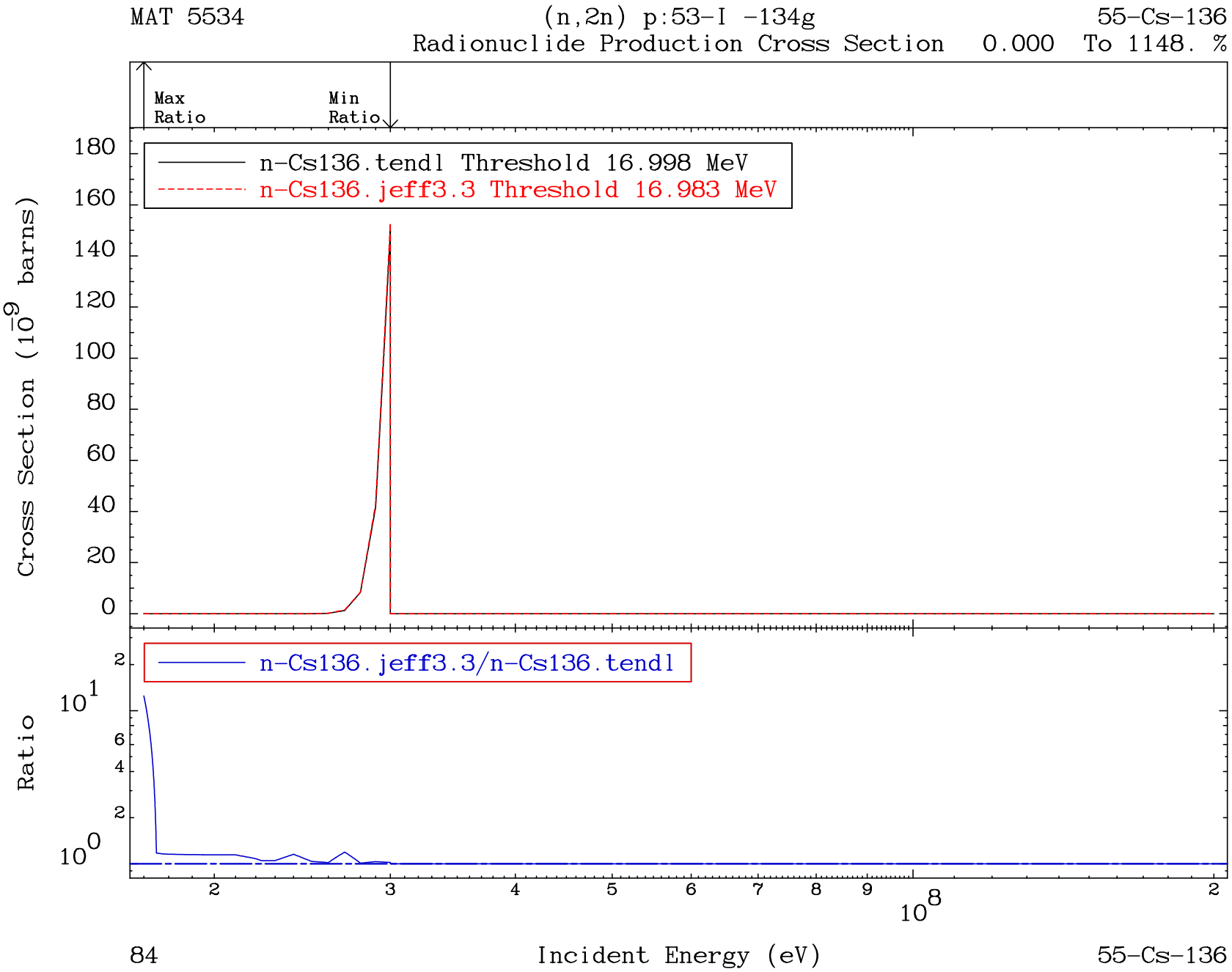

MAT 5534
(n,n') He-3:53-I -133m16
55-Cs-136
Radionuclide Production Cross Section 0.000 To 32.05 %
Min Ratio
n-Cs136.tendl Threshold 21.000 MeV
n-Cs136.jeff3.3 Threshold 21.000 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.4
1.2
1.0
20
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
55-Cs-136

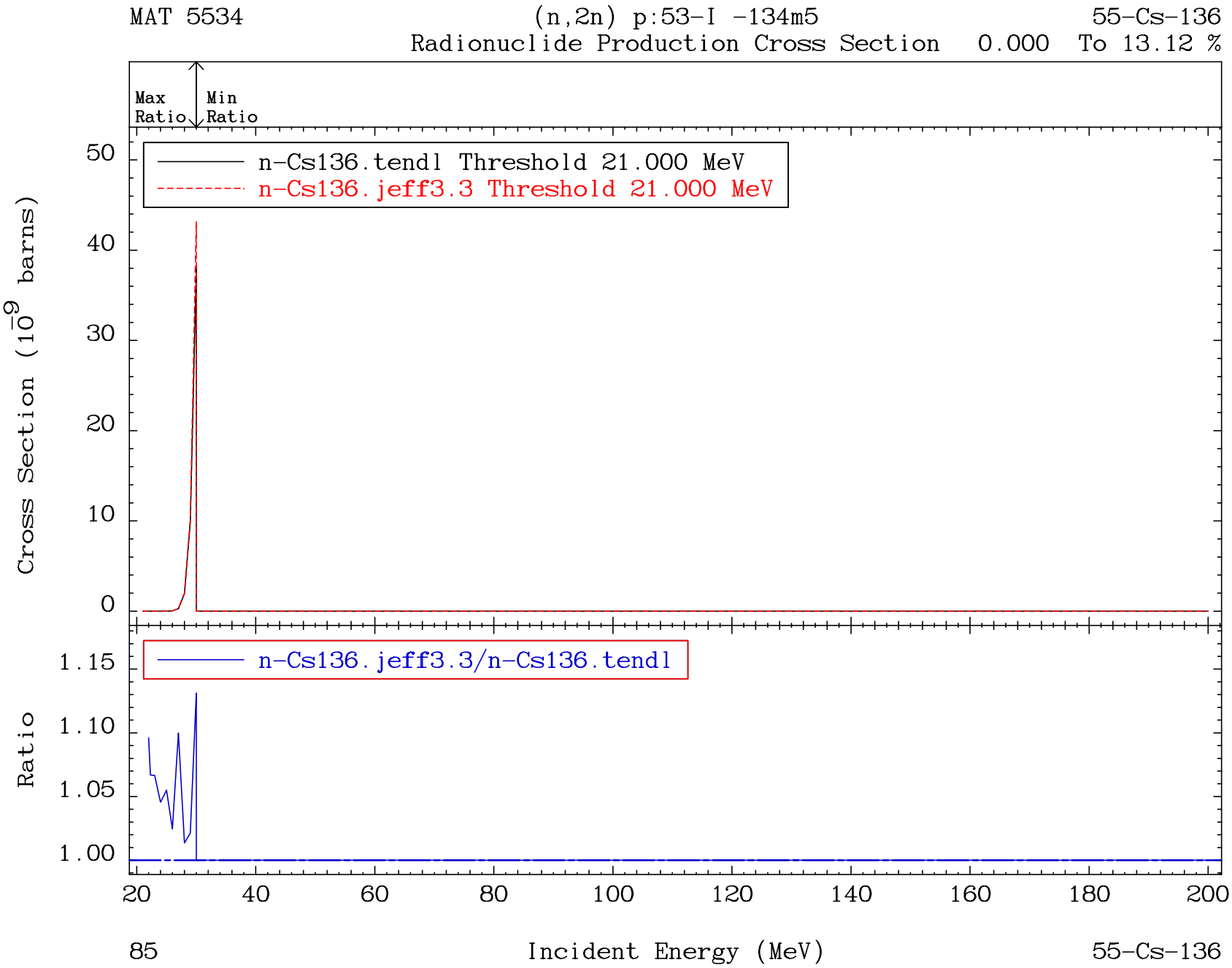

MAT 5534
(n,2n) p:54-Xe-134g
55-Cs-136
Radionuclide Production Cross Section -4.693 To 7.810 %
Min Ratio
n-Cs136.tendl Threshold 13.674 MeV
n-Cs136.jeff3.3 Threshold 13.676 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.10
1.05
1.00
0.95
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
55-Cs-136

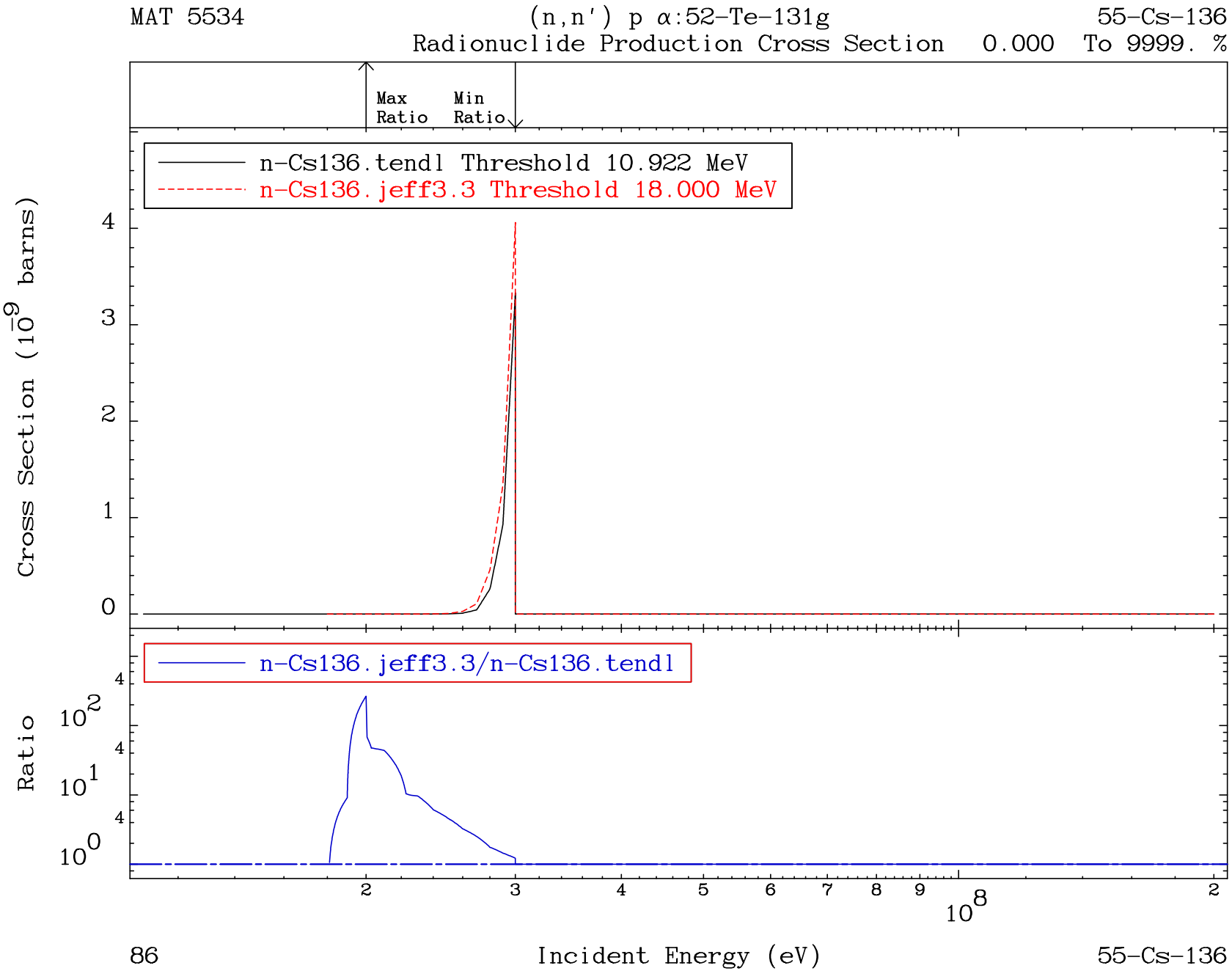

MAT 5534
(n,2n) p:54-Xe-134m7
55-Cs-136
Radionuclide Production Cross Section
-2.386 To 0.578 %
Max
Ratio
n-Cs136.tendl Threshold 16.000 MeV
n-Cs136.jeff3.3 Threshold 16.000 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
55-Cs-136

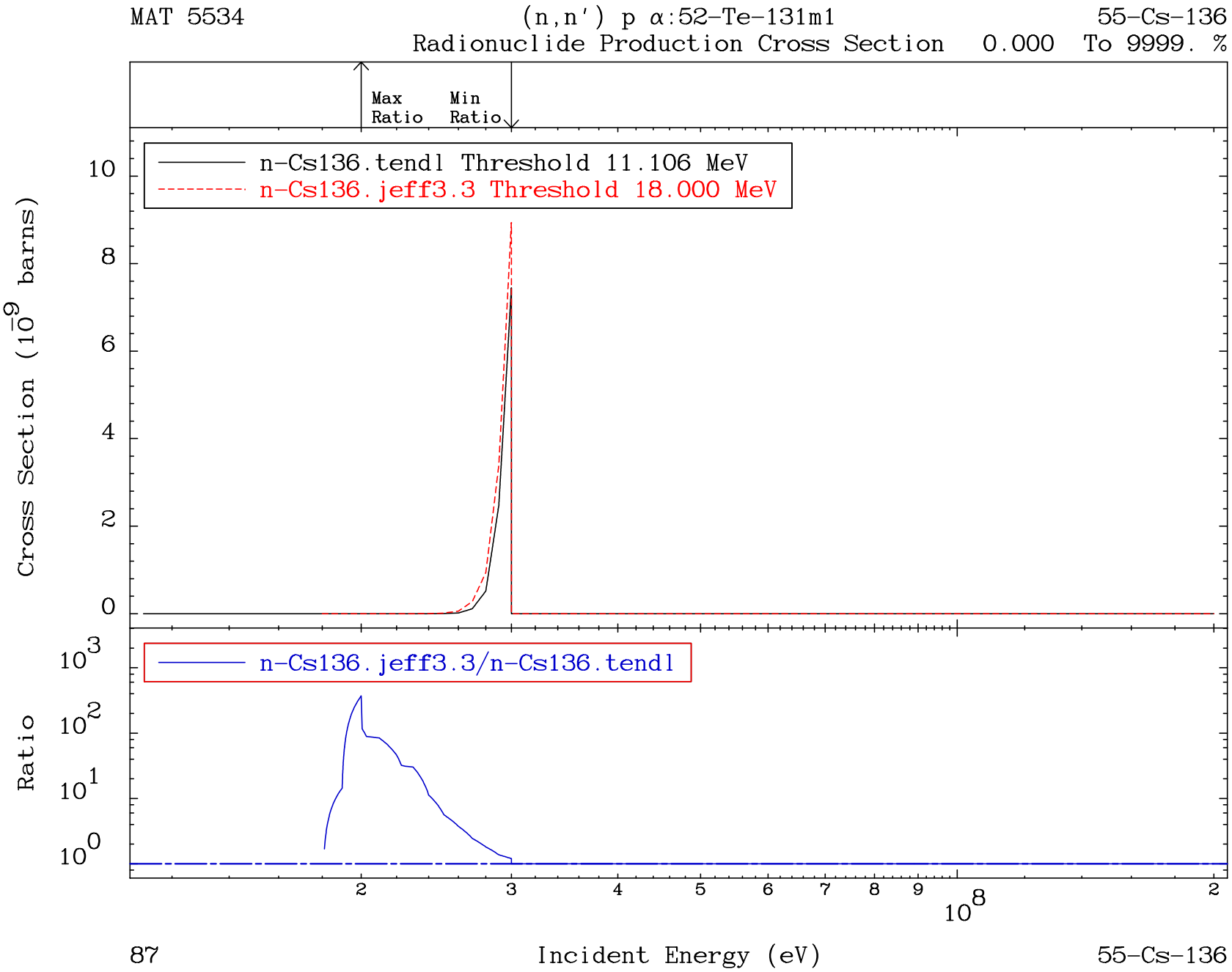

MAT 5534
(n,3n) p:54-Xe-133g
55-Cs-136
Radionuclide Production Cross Section -1.130 To 0.397 %
Max
Ratio
n-Cs136.tendl Threshold 22.291 MeV
n-Cs136.jeff3.3 Threshold 22.291 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
82
Incident Energy (MeV)
55-Cs-136

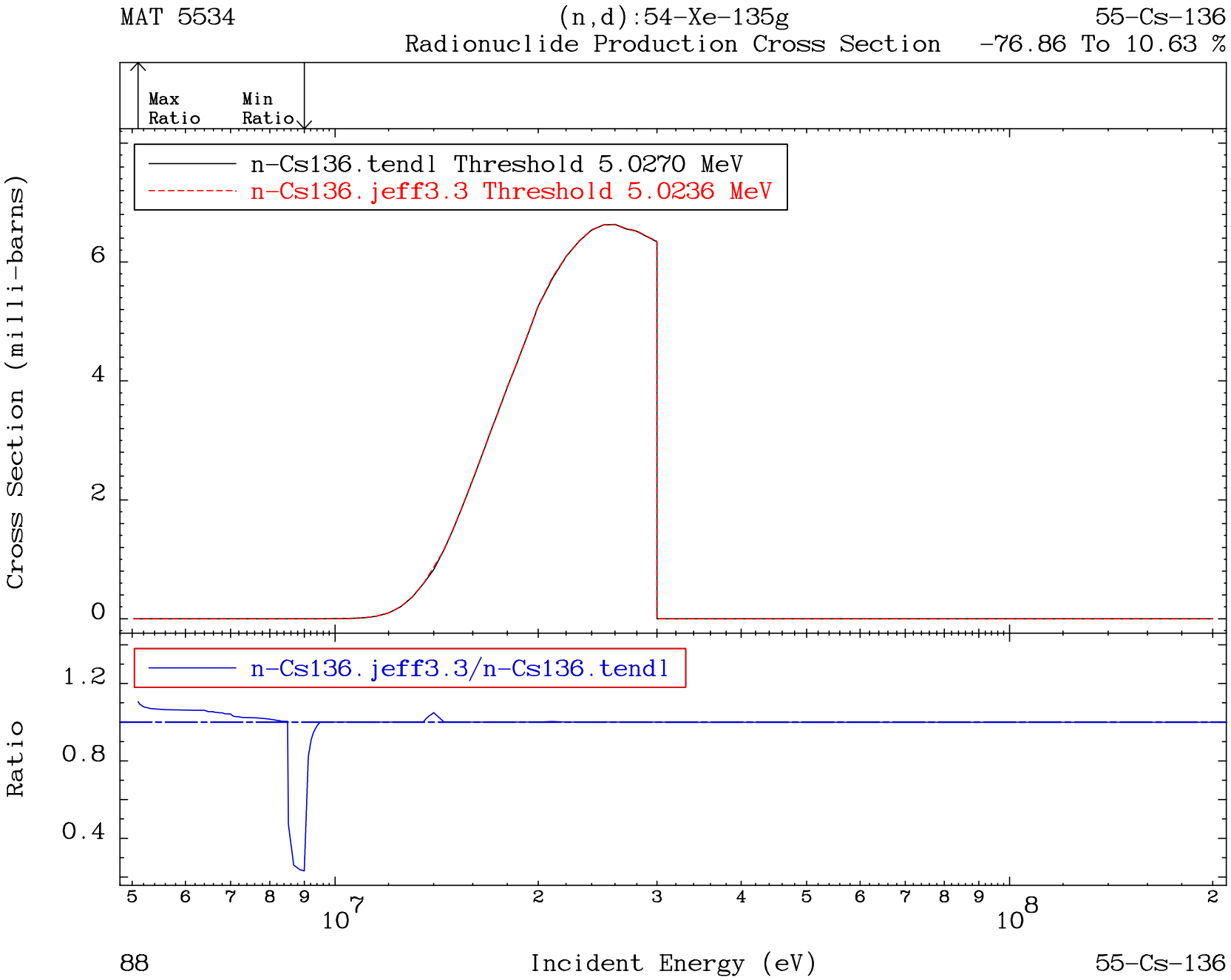

MAT 5534
(n,3n) p:54-Xe-133m1
55-Cs-136
Radionuclide Production Cross Section -0.327 To 1.781 %
Min Ratio
n-Cs136.tendl Threshold 22.526 MeV
n-Cs136.jeff3.3 Threshold 22.526 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
55-Cs-136

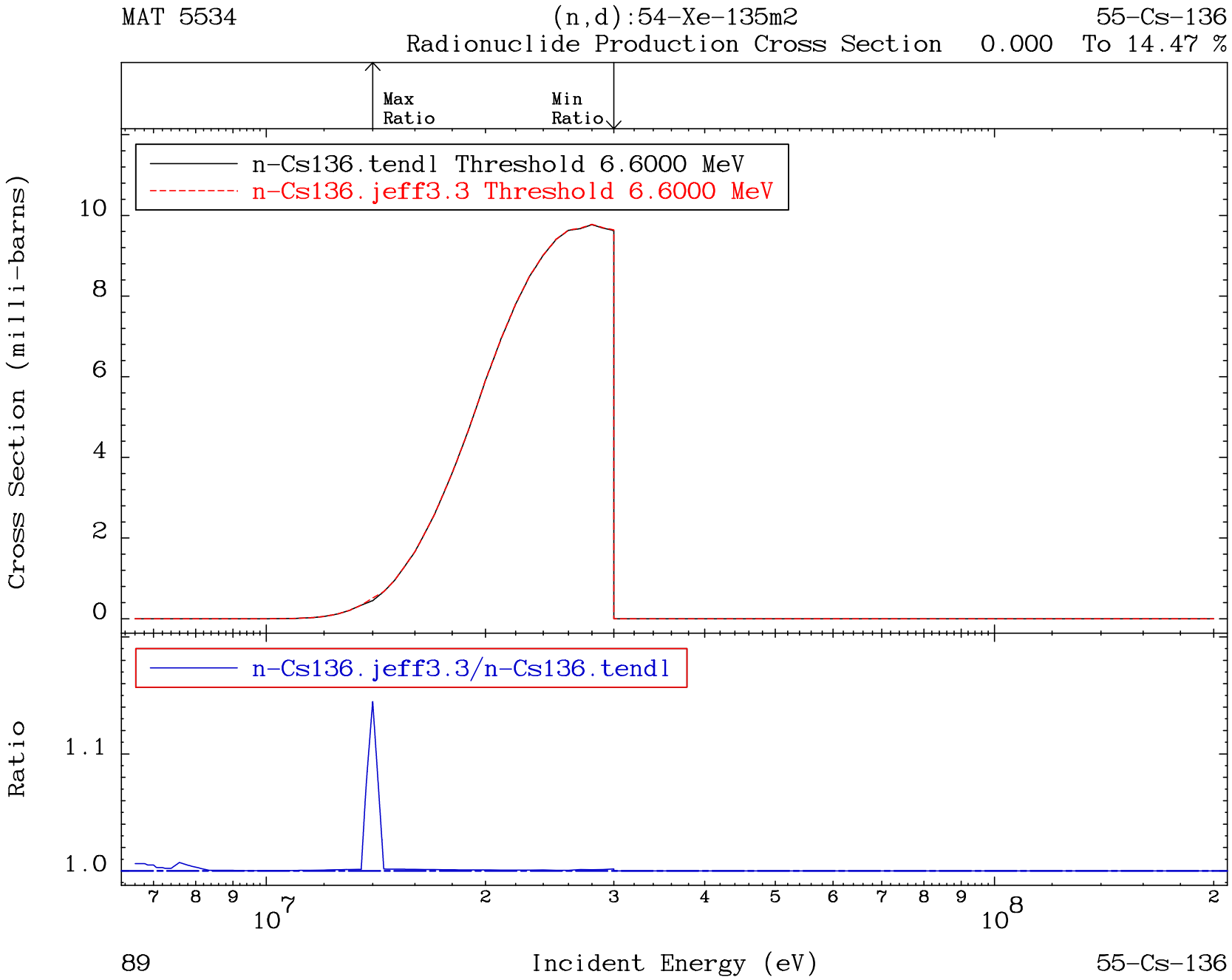

MAT 5534
(n,2n) p:53-I -134g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 1148. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 16.998 MeV
n-Cs136.jeff3.3 Threshold 16.983 MeV
Cross Section (10^{-9} barns)
180
160
140
120
100
80
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^{1}
6
4
2
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
84
Incident Energy (eV)
55-Cs-136

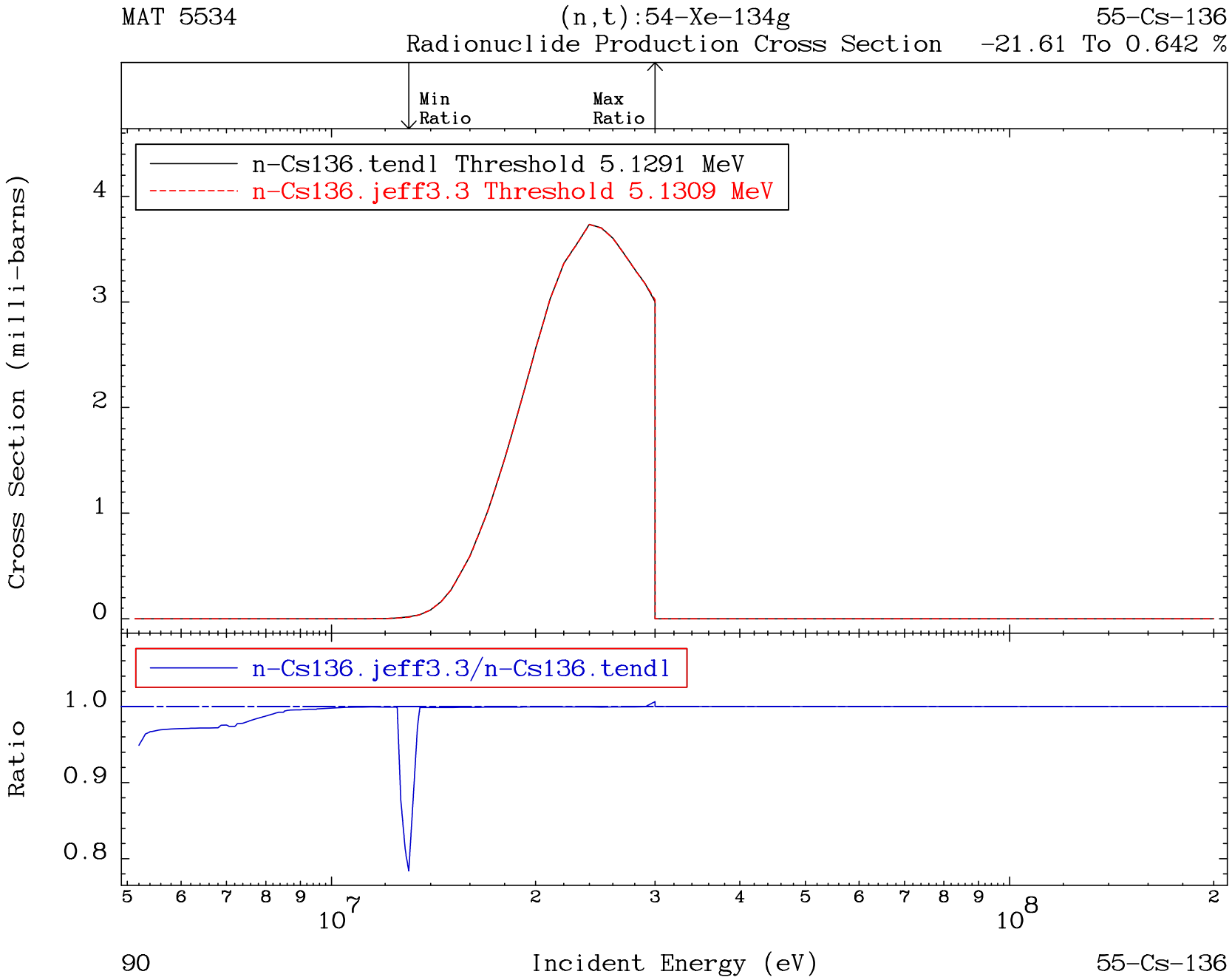

MAT 5534
(n,2n) p:53-I -134m5
55-Cs-136
Radionuclide Production Cross Section 0.000 To 13.12 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 21.000 MeV
n-Cs136.jeff3.3 Threshold 21.000 MeV
Cross Section (10^{-9} barns)
50
40
30
20
10
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.15
1.10
1.05
1.00
20
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
55-Cs-136

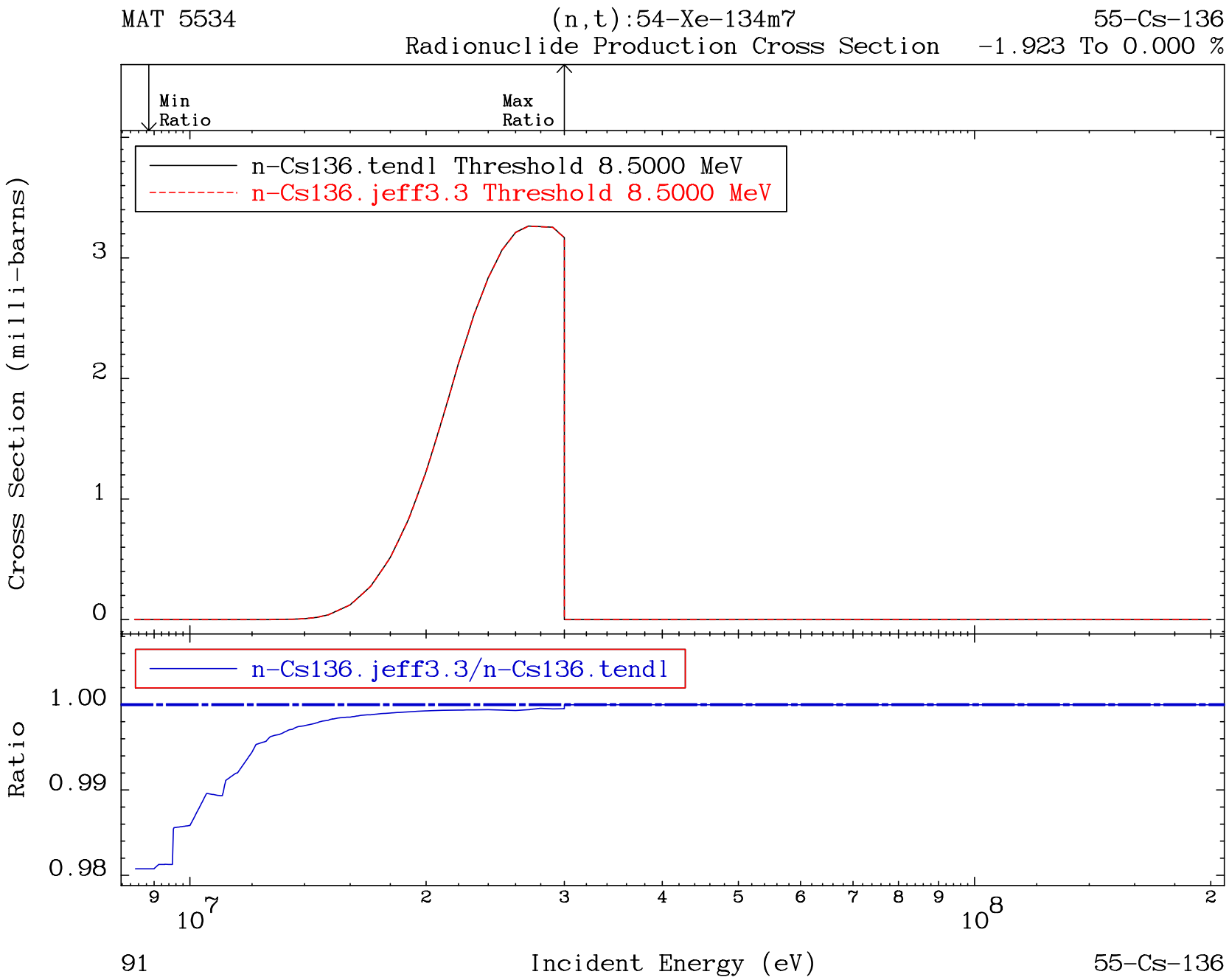

MAT 5534
(n,n') p α:52-Te-131g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 10.922 MeV
n-Cs136.jeff3.3 Threshold 18.000 MeV
Cross Section (10^{-9} barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
86
55-Cs-136

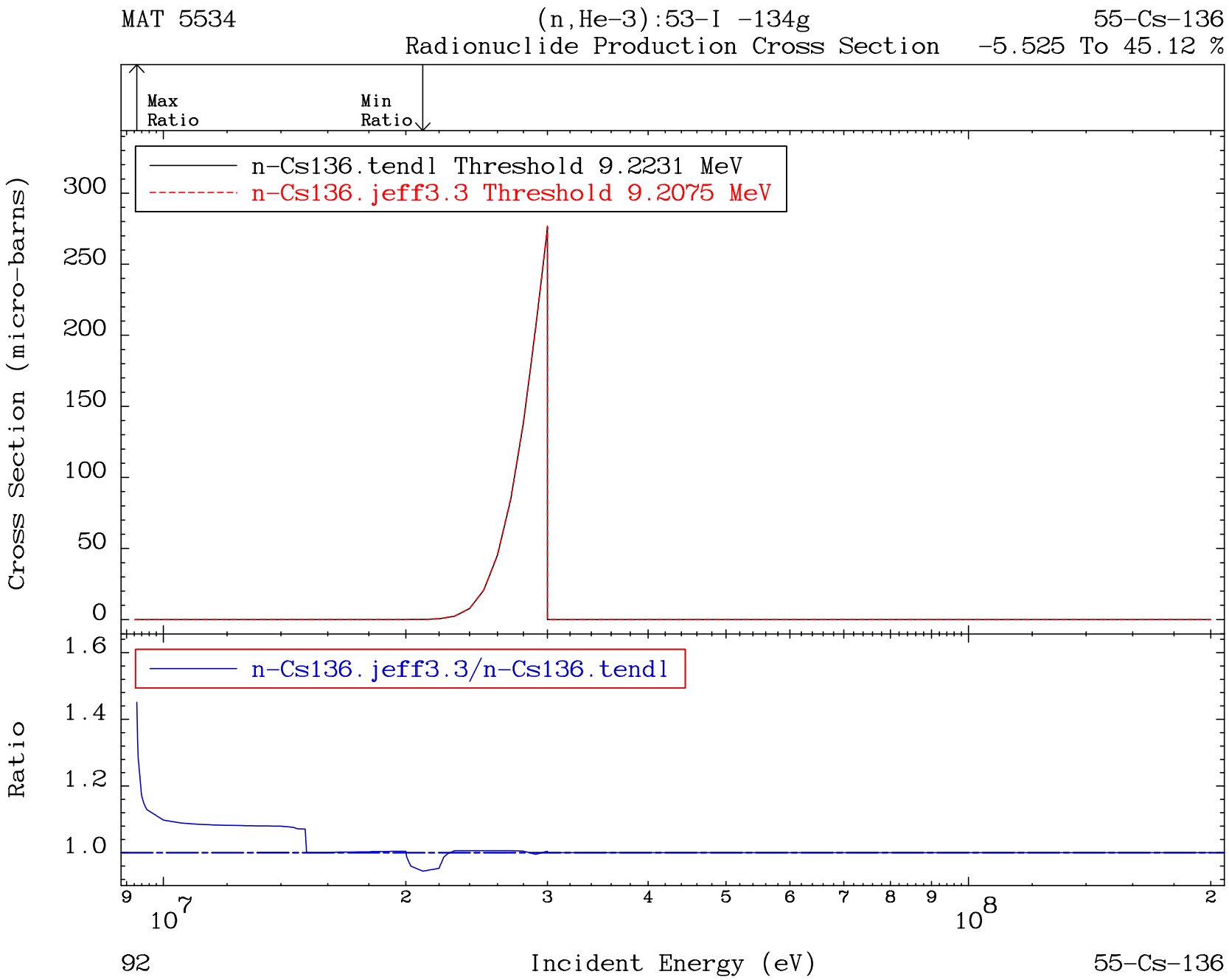

MAT 5534
(n,n') p α:52-Te-131m1
55-Cs-136
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 11.106 MeV
n-Cs136.jeff3.3 Threshold 18.000 MeV
Cross Section (10^{-9} barns)
0
2
4
6
8
10
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^0
10^1
10^2
10^3
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
55-Cs-136

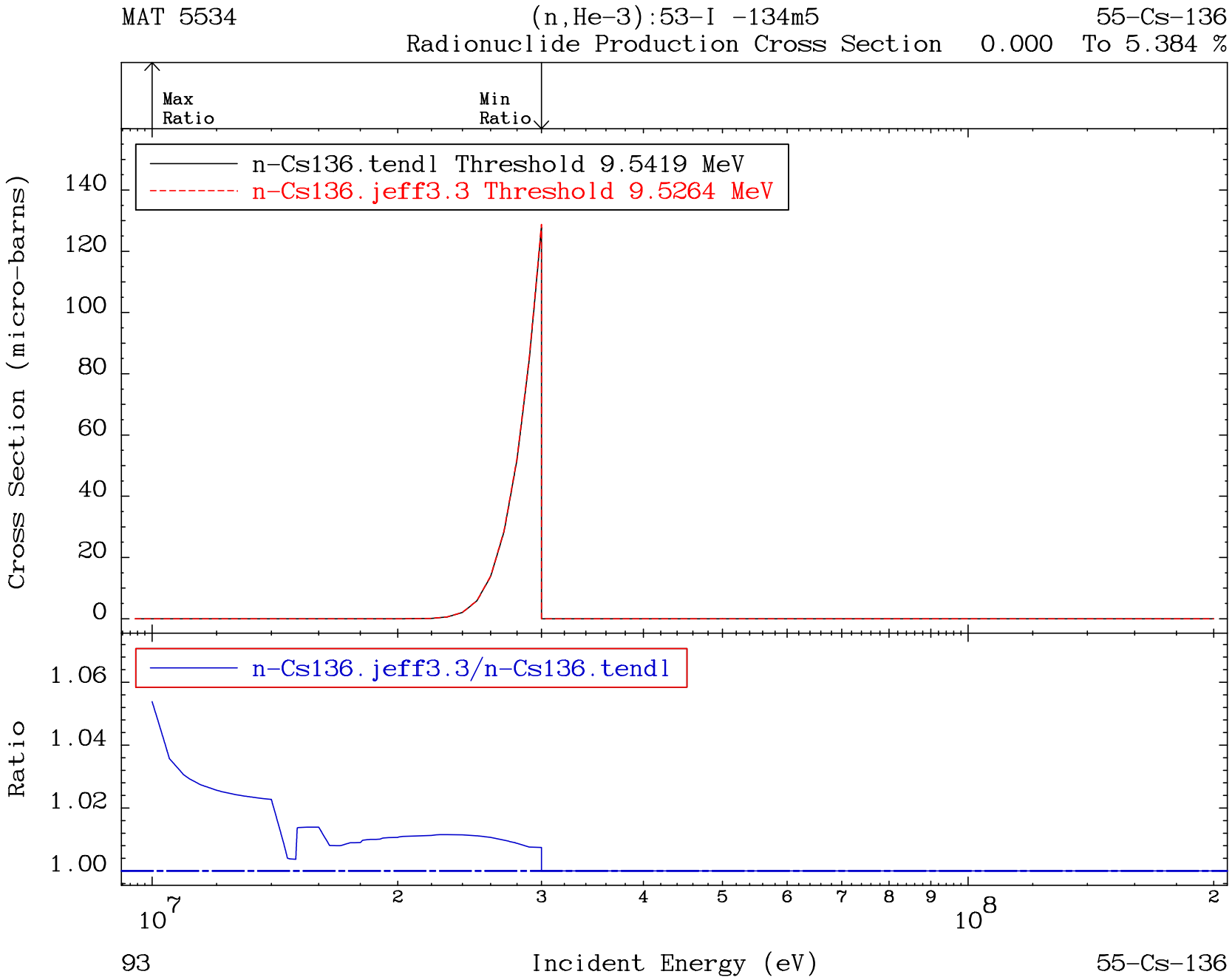

MAT 5534
(n,d):54-Xe-135g
55-Cs-136
Radionuclide Production Cross Section -76.86 To 10.63 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 5.0270 MeV
n-Cs136.jeff3.3 Threshold 5.0236 MeV
Cross Section (milli-barns)
0
2
4
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
0.4
0.8
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
88
Incident Energy (eV)
55-Cs-136

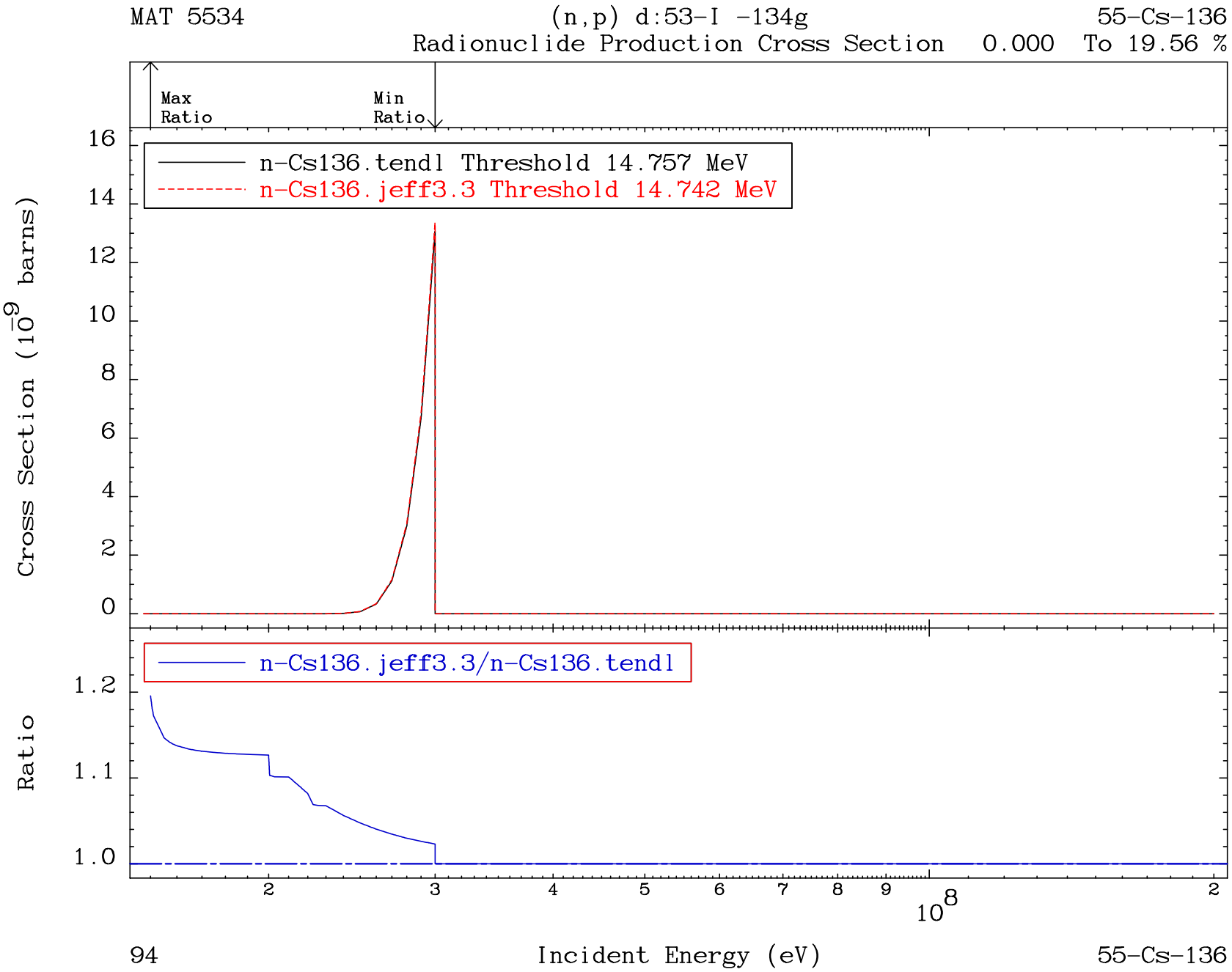

MAT 5534
(n,d):54-Xe-135m2
55-Cs-136
Radionuclide Production Cross Section 0.000 To 14.47 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 6.6000 MeV
n-Cs136.jeff3.3 Threshold 6.6000 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
55-Cs-136

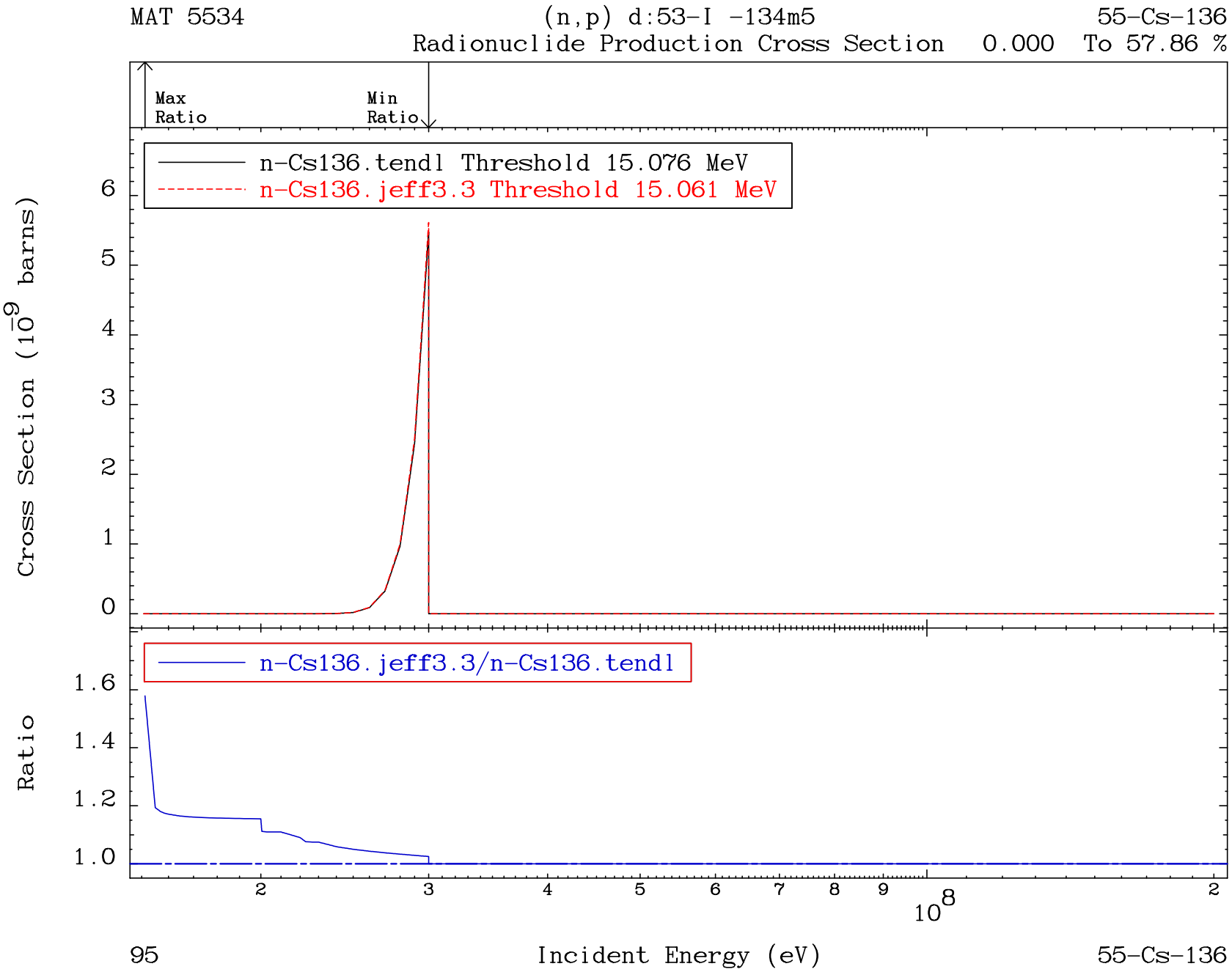

MAT 5534
(n,t):54-Xe-134g
55-Cs-136
Radionuclide Production Cross Section -21.61 To 0.642 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 5.1291 MeV
n-Cs136.jeff3.3 Threshold 5.1309 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.0
0.9
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
55-Cs-136

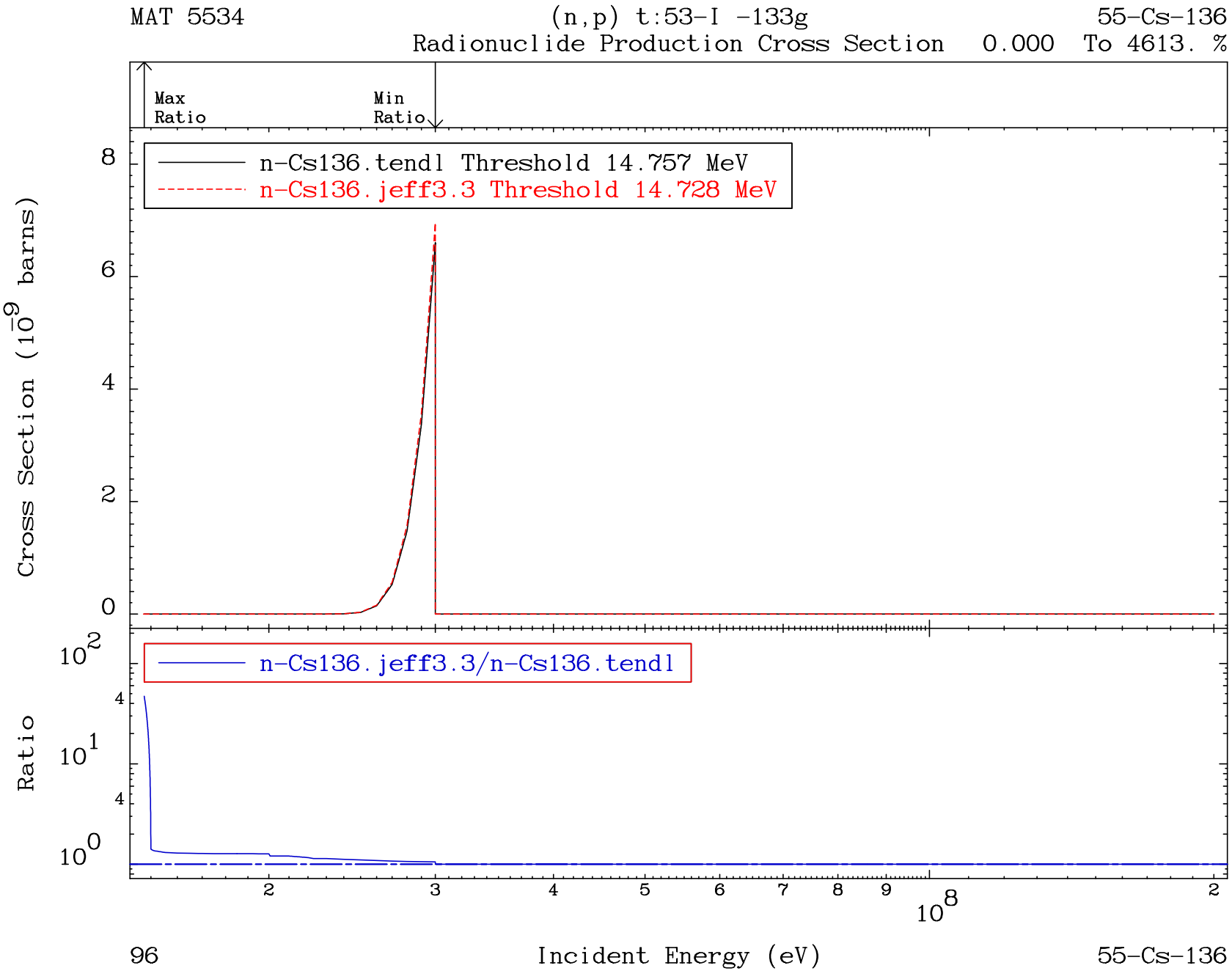

MAT 5534
(n,t):54-Xe-134m7
55-Cs-136
Radionuclide Production Cross Section -1.923 To 0.000 %
Min Ratio
Max Ratio
n-Cs136.tendl Threshold 8.5000 MeV
n-Cs136.jeff3.3 Threshold 8.5000 MeV
Cross Section (milli-barns)
0
1
2
3
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.00
0.99
0.98
9
10^7
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
55-Cs-136

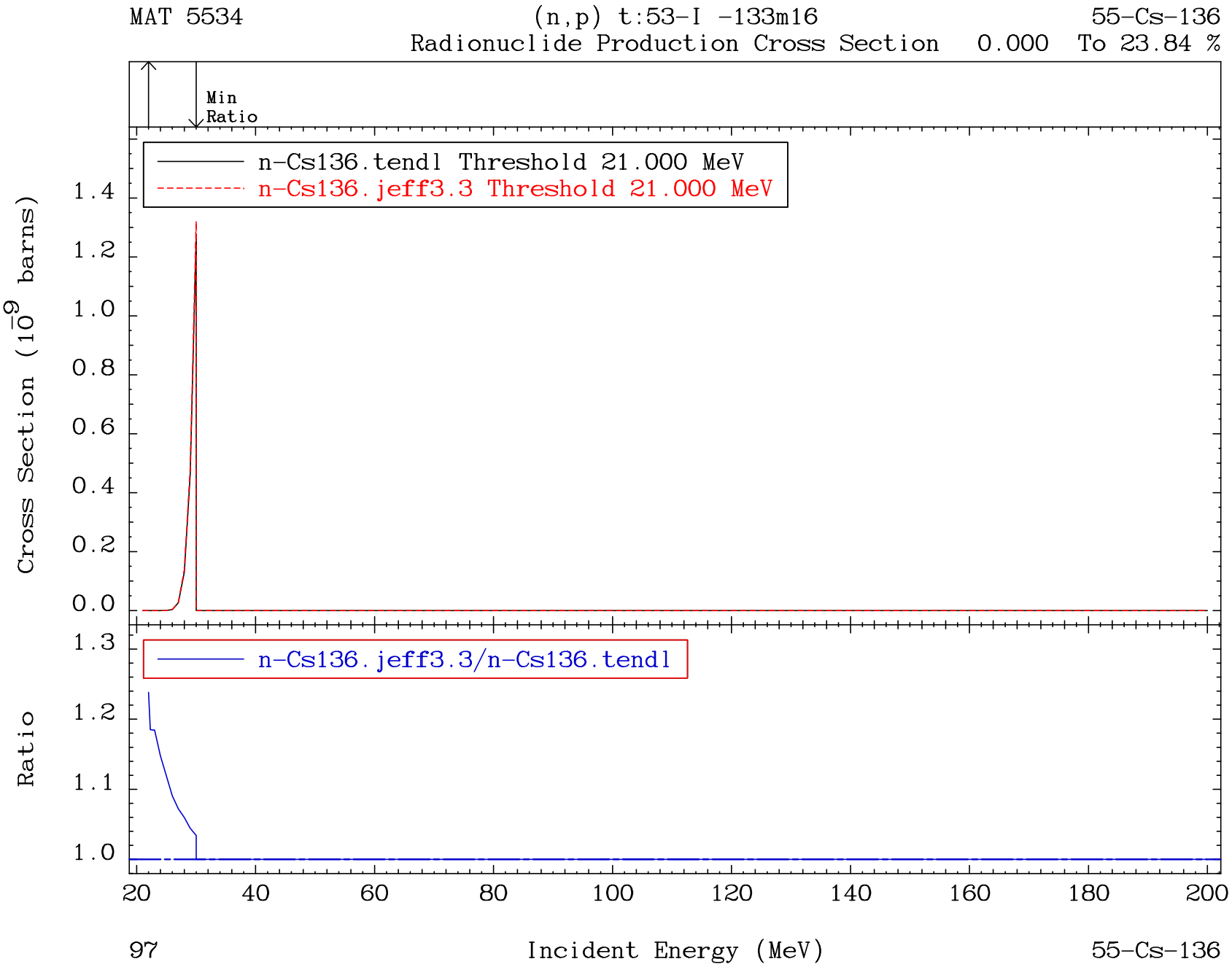

MAT 5534
(n,He-3):53-I -134g
55-Cs-136
Radionuclide Production Cross Section -5.525 To 45.12 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.2231 MeV
n-Cs136.jeff3.3 Threshold 9.2075 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.6
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
55-Cs-136

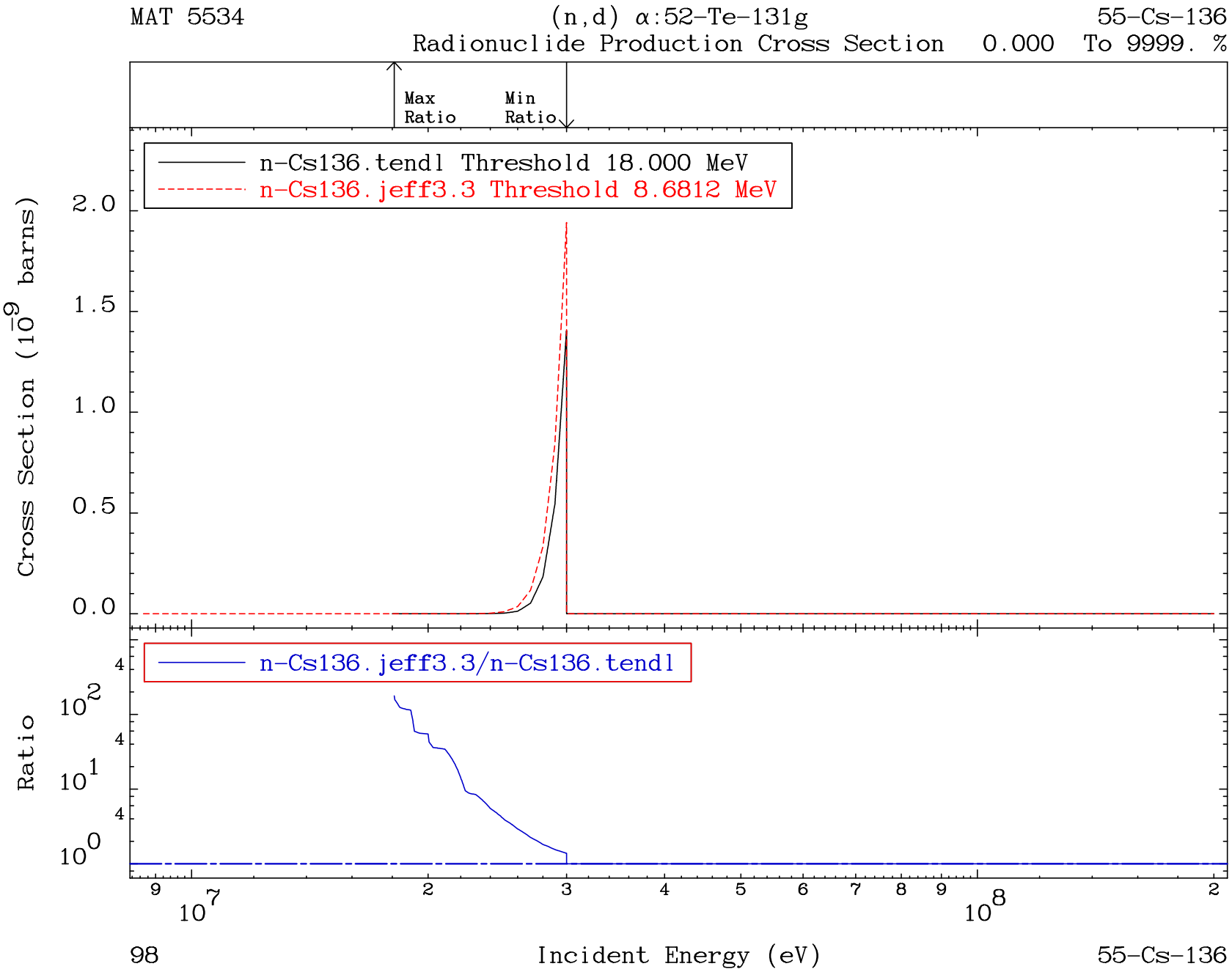

MAT 5534
(n,He-3):53-I -134m5
55-Cs-136
Radionuclide Production Cross Section 0.000 To 5.384 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 9.5419 MeV
n-Cs136.jeff3.3 Threshold 9.5264 MeV
Cross Section (micro-barns)
140
120
100
80
60
40
20
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.06
1.04
1.02
1.00
10^7
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
55-Cs-136

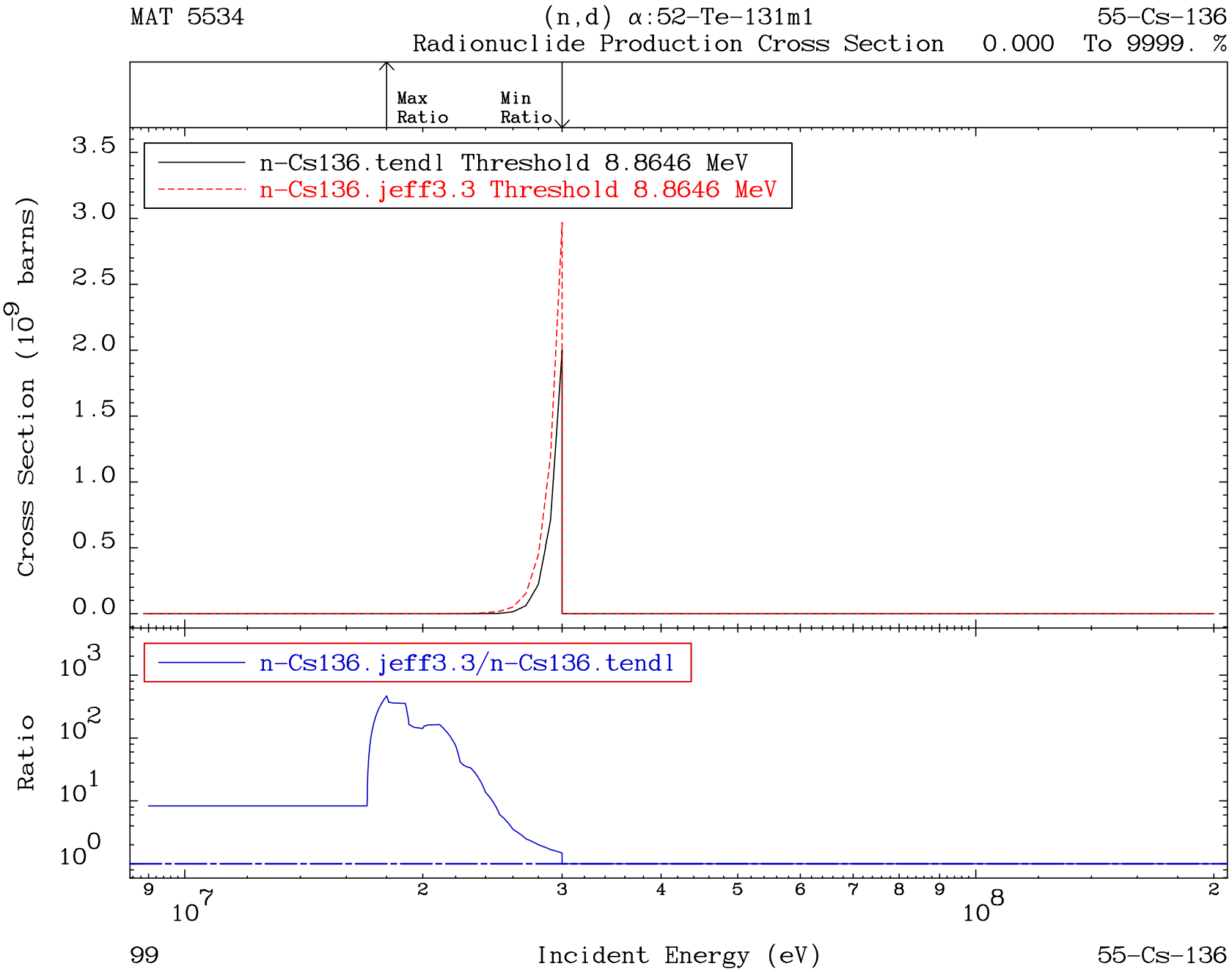

MAT 5534
(n,p) d:53-I -134g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 19.56 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 14.757 MeV
n-Cs136.jeff3.3 Threshold 14.742 MeV
Cross Section (10^{-9} barns)
16
14
12
10
8
6
4
2
0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
55-Cs-136


MAT 5534
(n,p) d:53-I -134m5
55-Cs-136
Radionuclide Production Cross Section 0.000 To 57.86 %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 15.076 MeV
n-Cs136.jeff3.3 Threshold 15.061 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
5
6
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.0
1.2
1.4
1.6
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
55-Cs-136


MAT 5534
(n,p) t:53-I -133g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 4613. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 14.757 MeV
n-Cs136.jeff3.3 Threshold 14.728 MeV
Cross Section (10^{-9} barns)
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
Incident Energy (eV)
96
55-Cs-136


MAT 5534
(n,p) t:53-I -133m16
55-Cs-136
Radionuclide Production Cross Section 0.000 To 23.84 %
Min Ratio
n-Cs136.tendl Threshold 21.000 MeV
n-Cs136.jeff3.3 Threshold 21.000 MeV
Cross Section (10^{-9} barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
1.3
1.2
1.1
1.0
20
40
60
80
100
120
140
160
180
200
97
Incident Energy (MeV)
55-Cs-136


MAT 5534
(n,d) α:52-Te-131g
55-Cs-136
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 18.000 MeV
n-Cs136.jeff3.3 Threshold 8.6812 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^{2}
10^{1}
10^{0}
10^{7}
10^{8}
Incident Energy (eV)
98
55-Cs-136


MAT 5534
(n,d) α:52-Te-131m1
55-Cs-136
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Cs136.tendl Threshold 8.8646 MeV
n-Cs136.jeff3.3 Threshold 8.8646 MeV
Cross Section (10^{-9} barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Cs136.jeff3.3/n-Cs136.tendl
Ratio
10^3
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
55-Cs-136