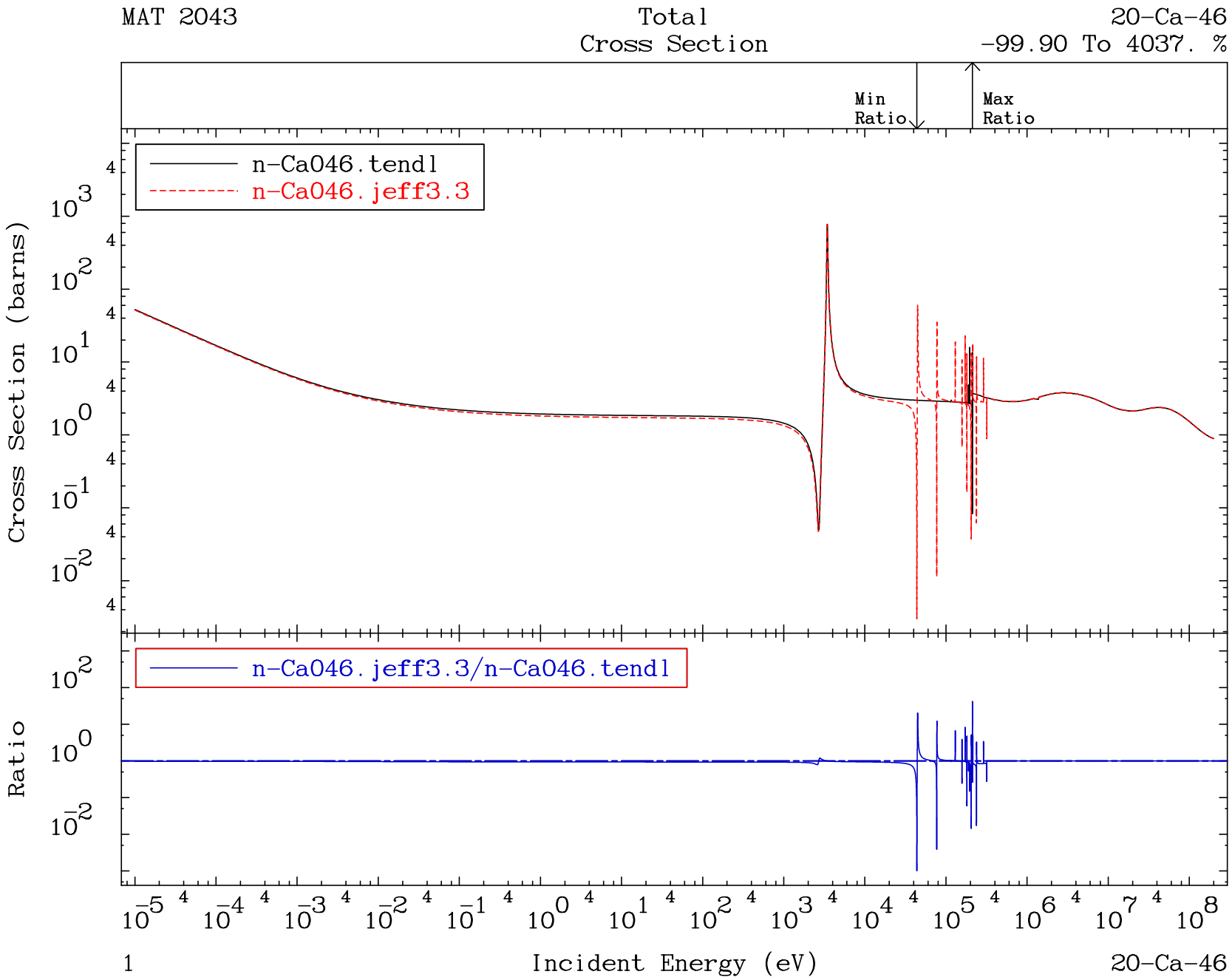
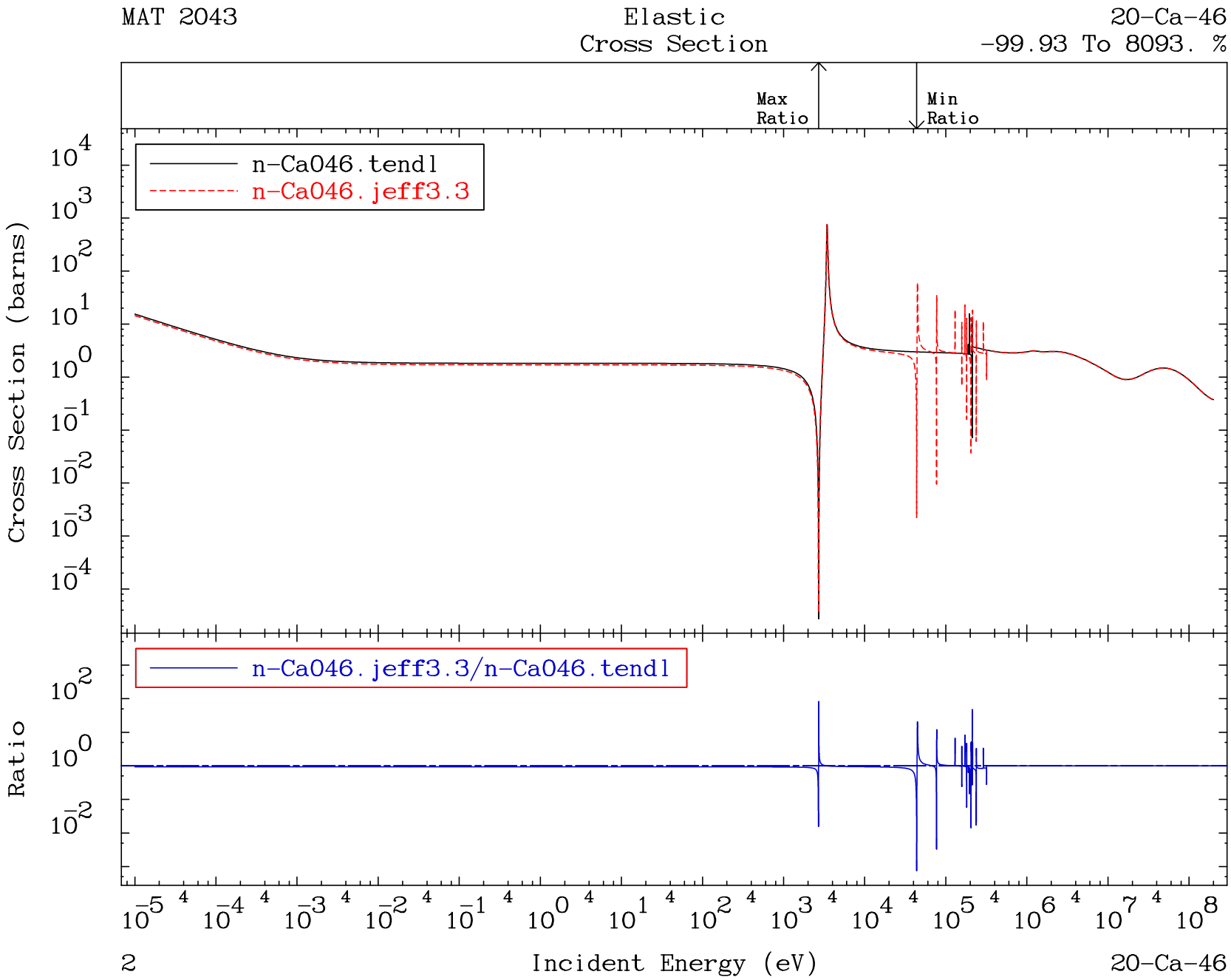
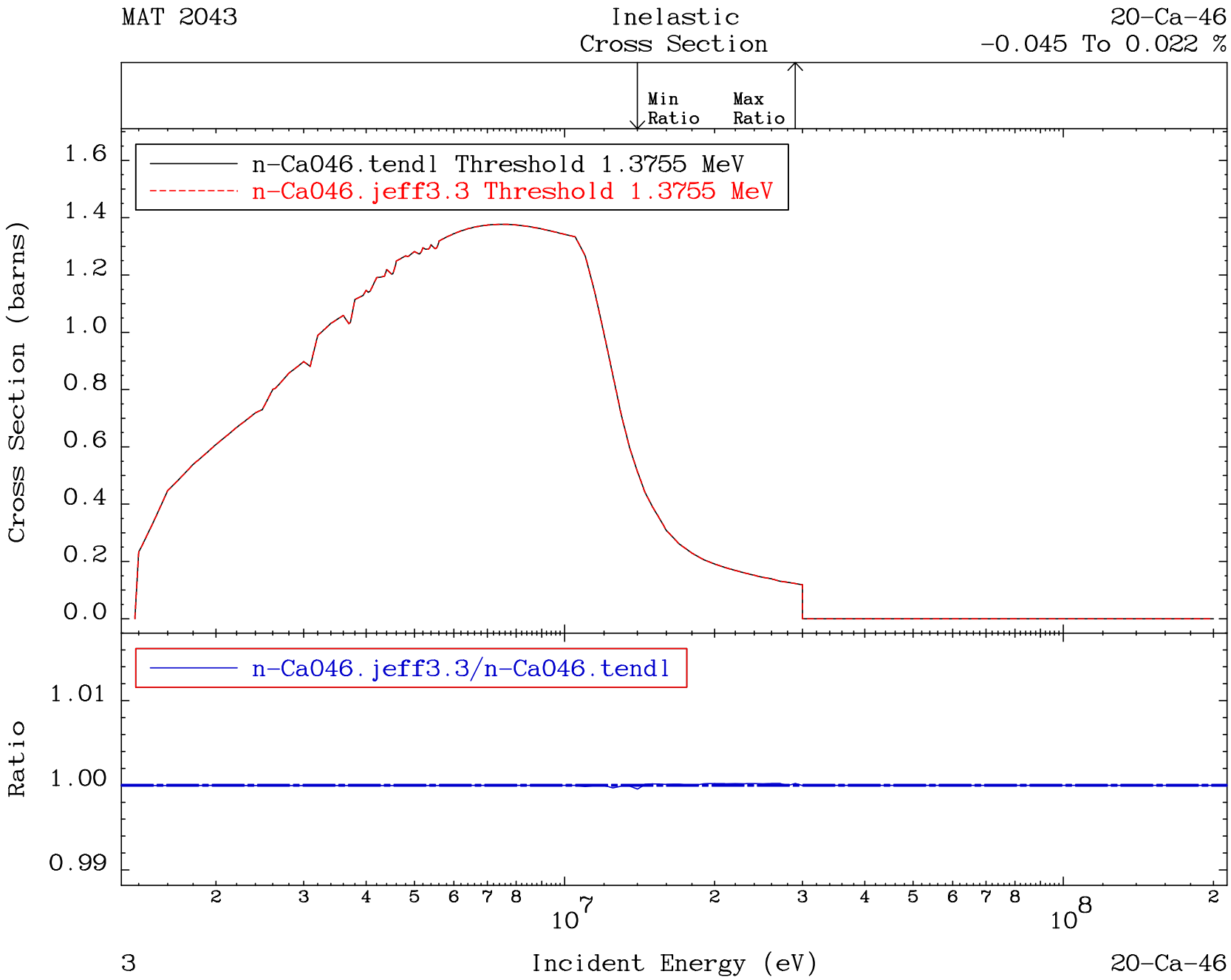
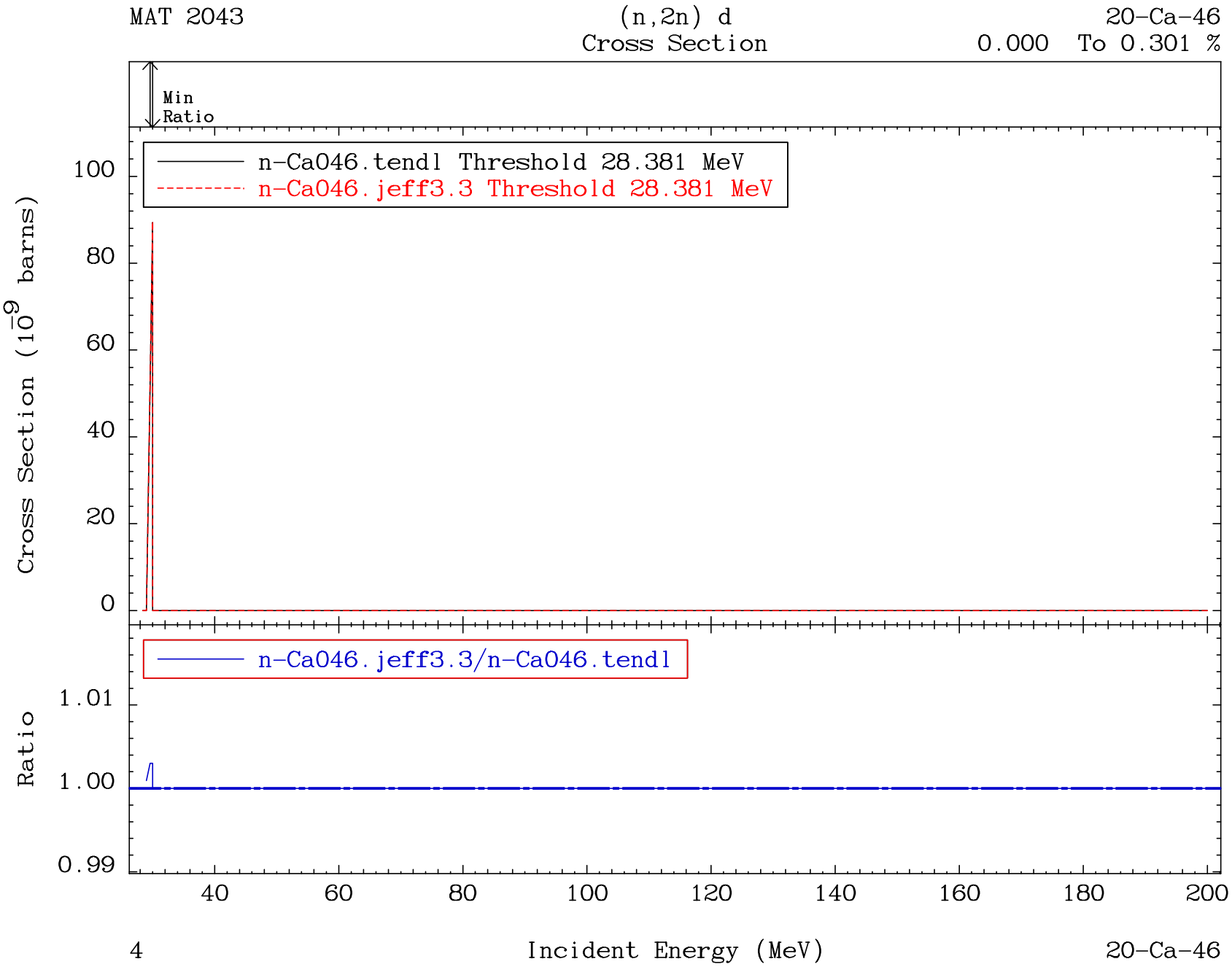
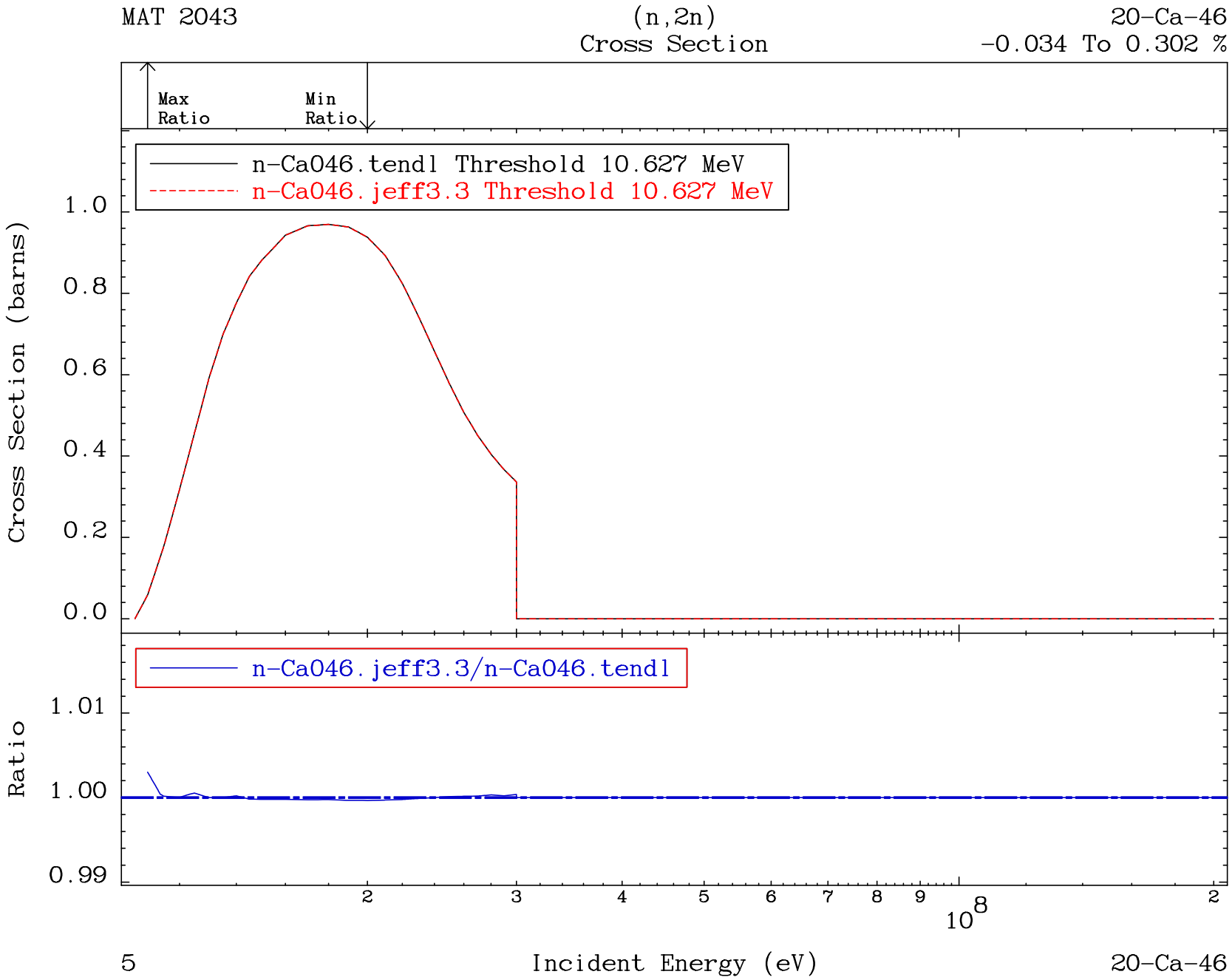
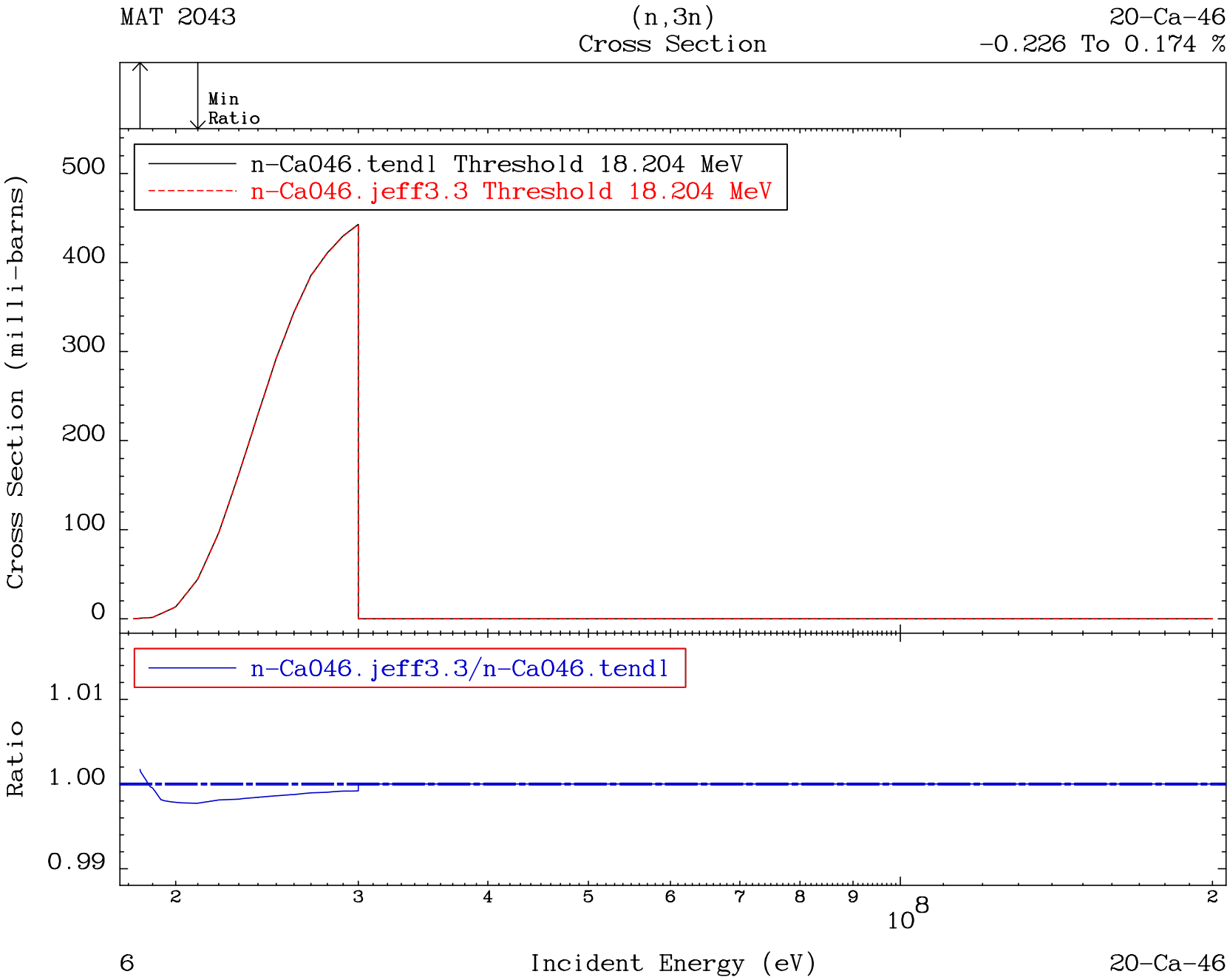

MAT 2043
Total
Cross Section
20-Ca-46
-99.90 To 4037. %
Min Ratio
Max Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
1
20-Ca-46

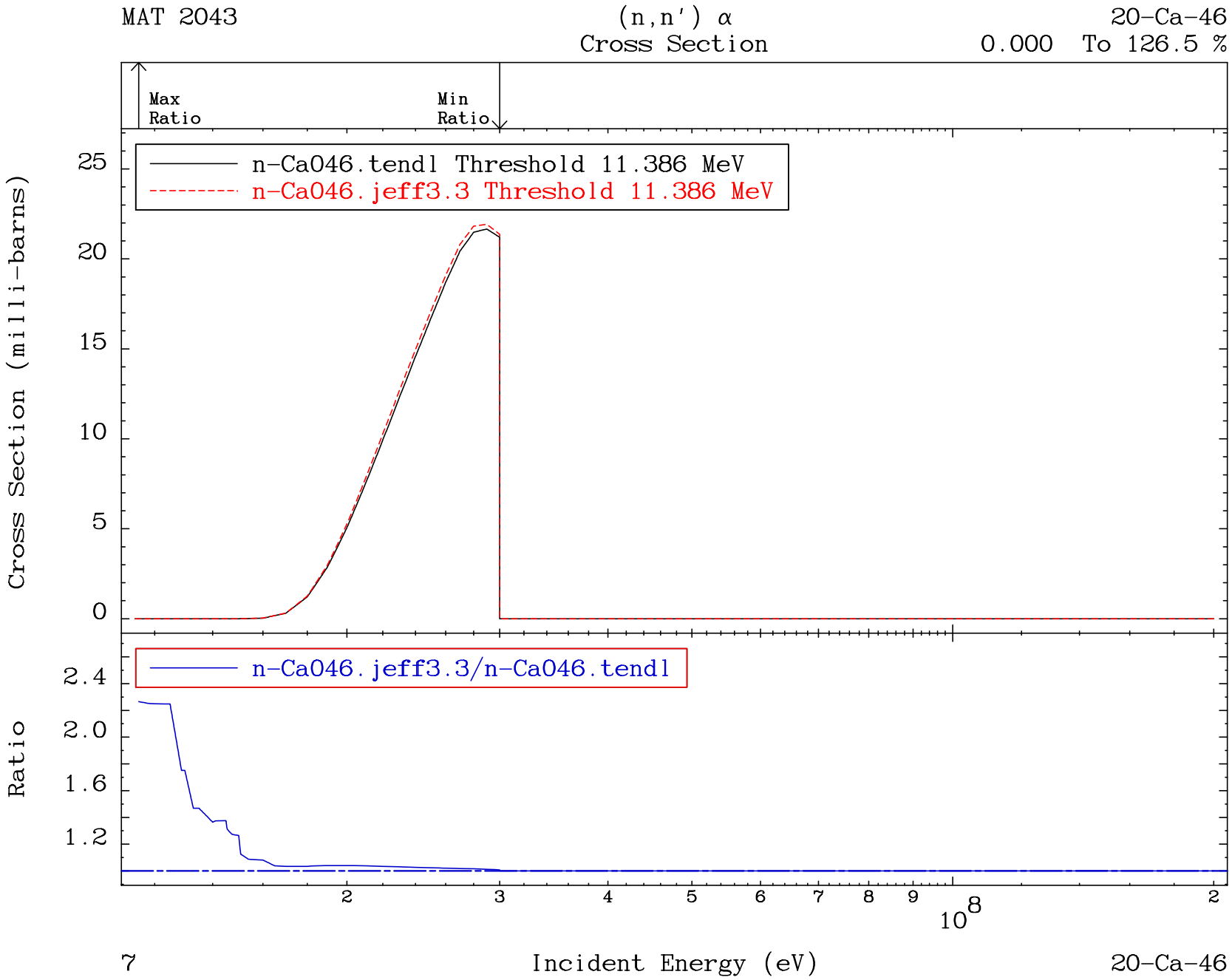

MAT 2043
Elastic
Cross Section
20-Ca-46
-99.93 To 8093. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
2
20-Ca-46

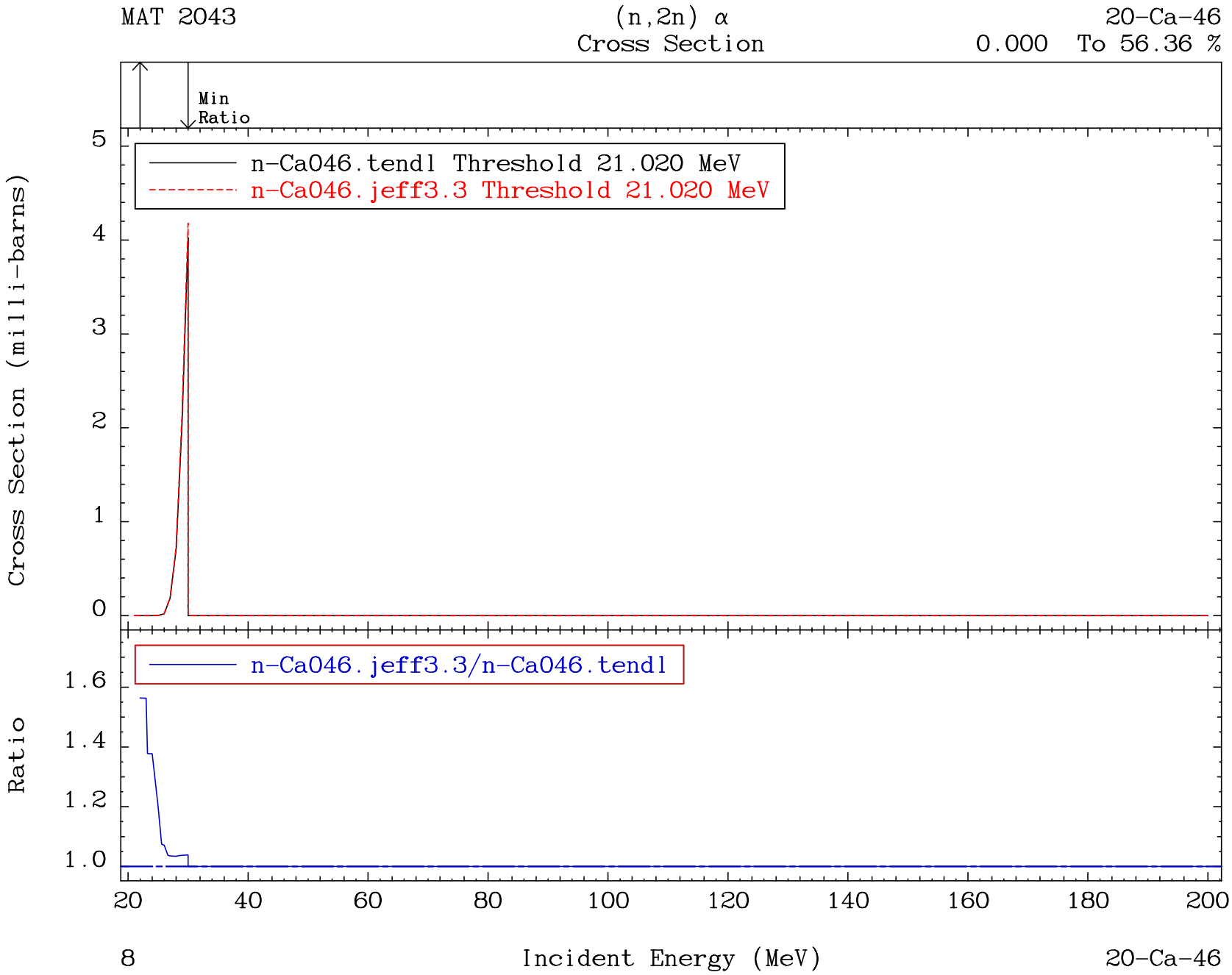

MAT 2043
Inelastic
Cross Section
20-Ca-46
-0.045 To 0.022 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 1.3755 MeV
n-Ca046.jeff3.3 Threshold 1.3755 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
3
Incident Energy (eV)
20-Ca-46

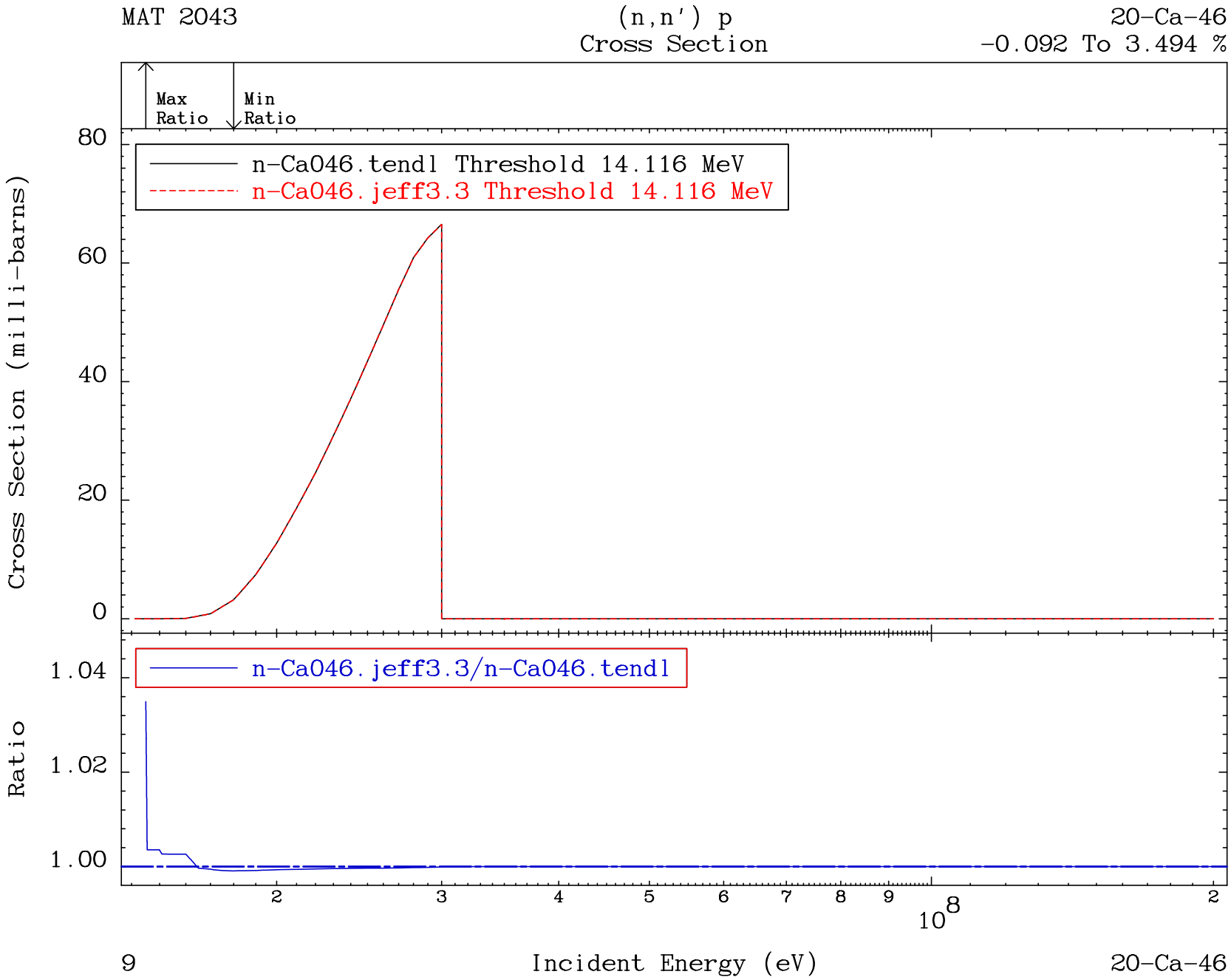

MAT 2043
(n,2n) d
Cross Section
20-Ca-46
0.000 To 0.301 %
Min
Ratio
n-Ca046.tendl Threshold 28.381 MeV
n-Ca046.jeff3.3 Threshold 28.381 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
20-Ca-46

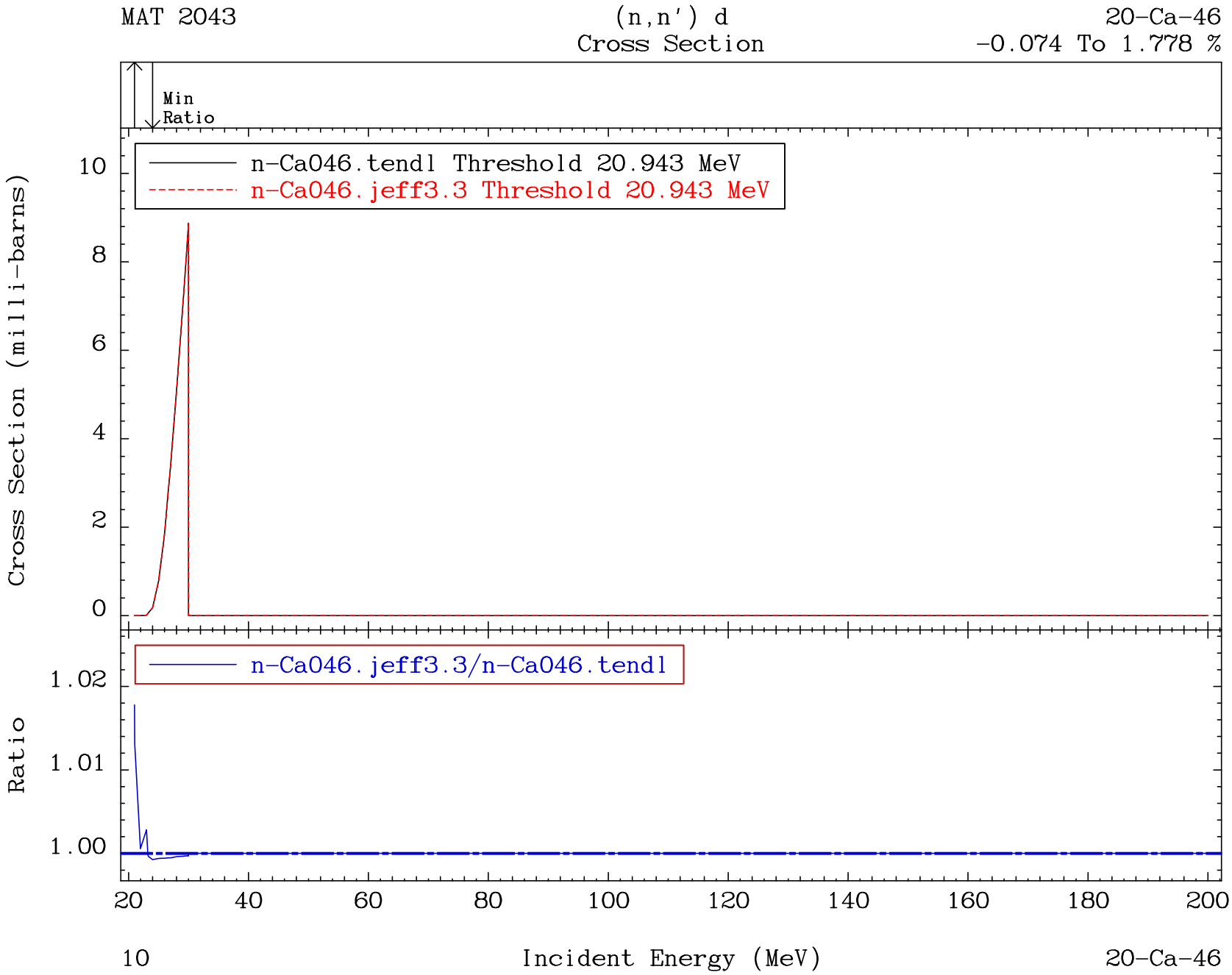

MAT 2043
(n,2n)
Cross Section
20-Ca-46
-0.034 To 0.302 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 10.627 MeV
n-Ca046.jeff3.3 Threshold 10.627 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
20-Ca-46

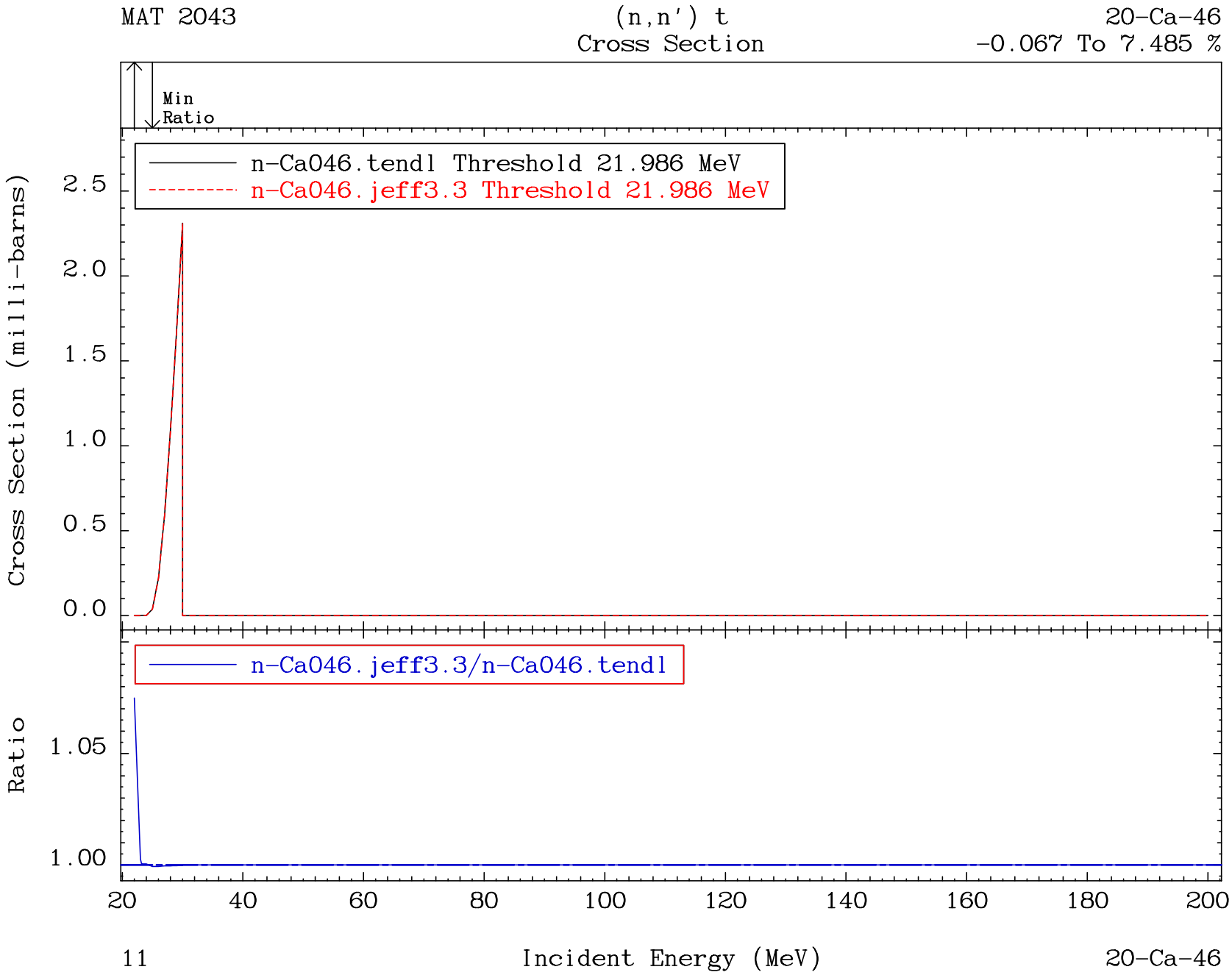

MAT 2043
(n,3n)
Cross Section
20-Ca-46
-0.226 To 0.174 %
Min
Ratio
n-Ca046.tendl Threshold 18.204 MeV
n-Ca046.jeff3.3 Threshold 18.204 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
20-Ca-46

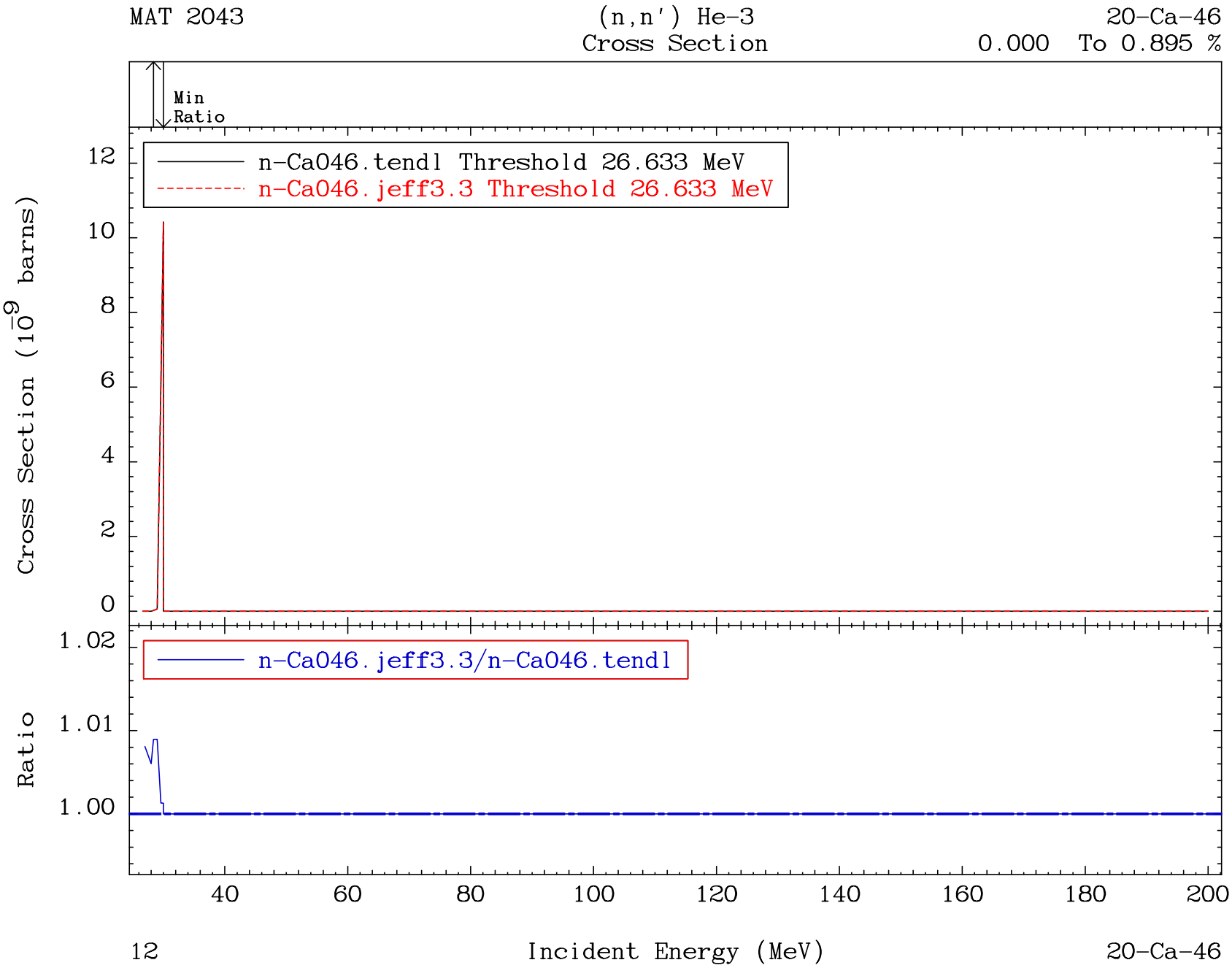

MAT 2043
(n,n') α
Cross Section
20-Ca-46
0.000 To 126.5 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 11.386 MeV
n-Ca046.jeff3.3 Threshold 11.386 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
2.4
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
20-Ca-46

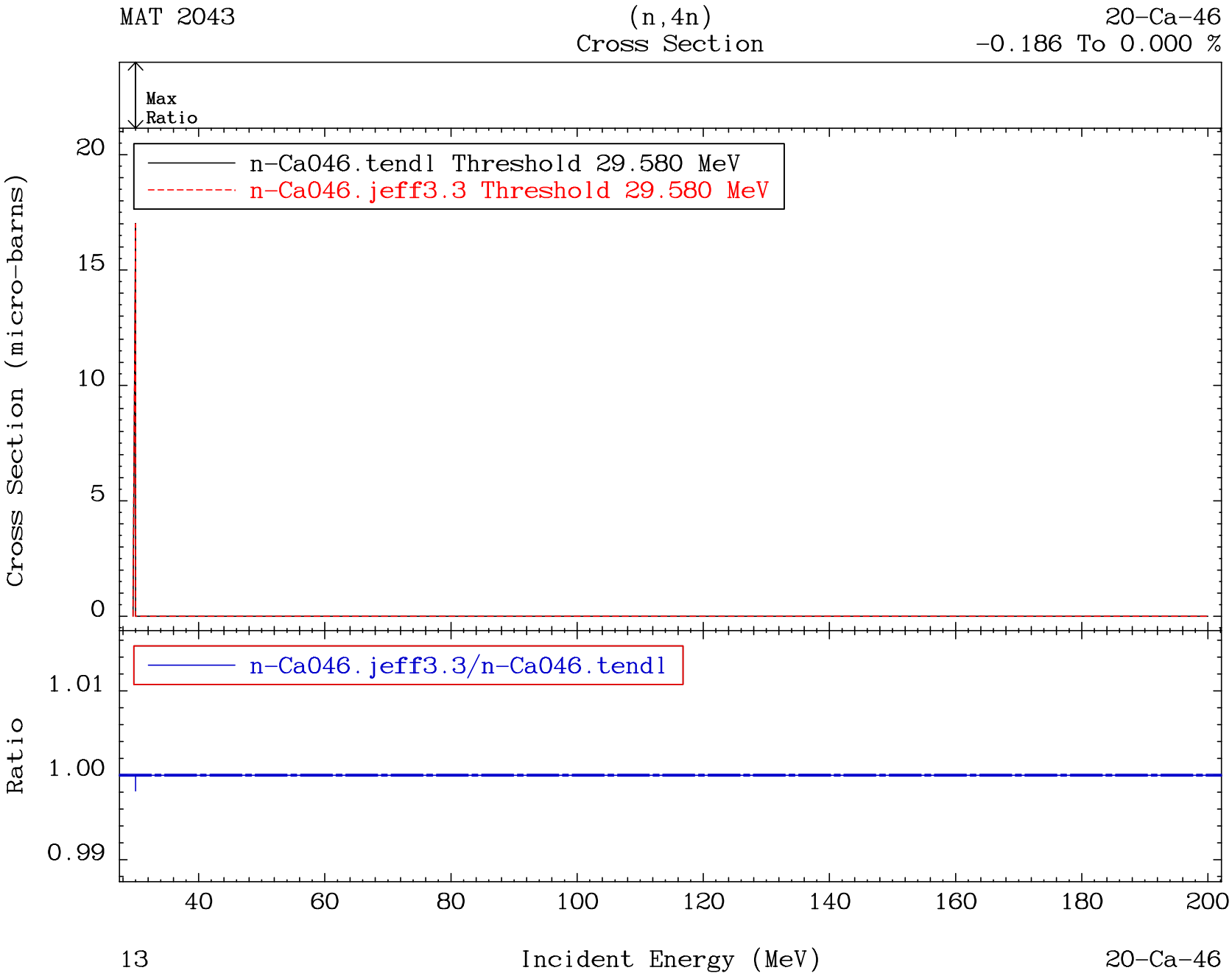

MAT 2043
(n,2n) α
Cross Section
20-Ca-46
0.000 To 56.36 %
Min
Ratio
n-Ca046.tendl Threshold 21.020 MeV
n-Ca046.jeff3.3 Threshold 21.020 MeV
Cross Section (milli-barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (MeV)
8
20-Ca-46

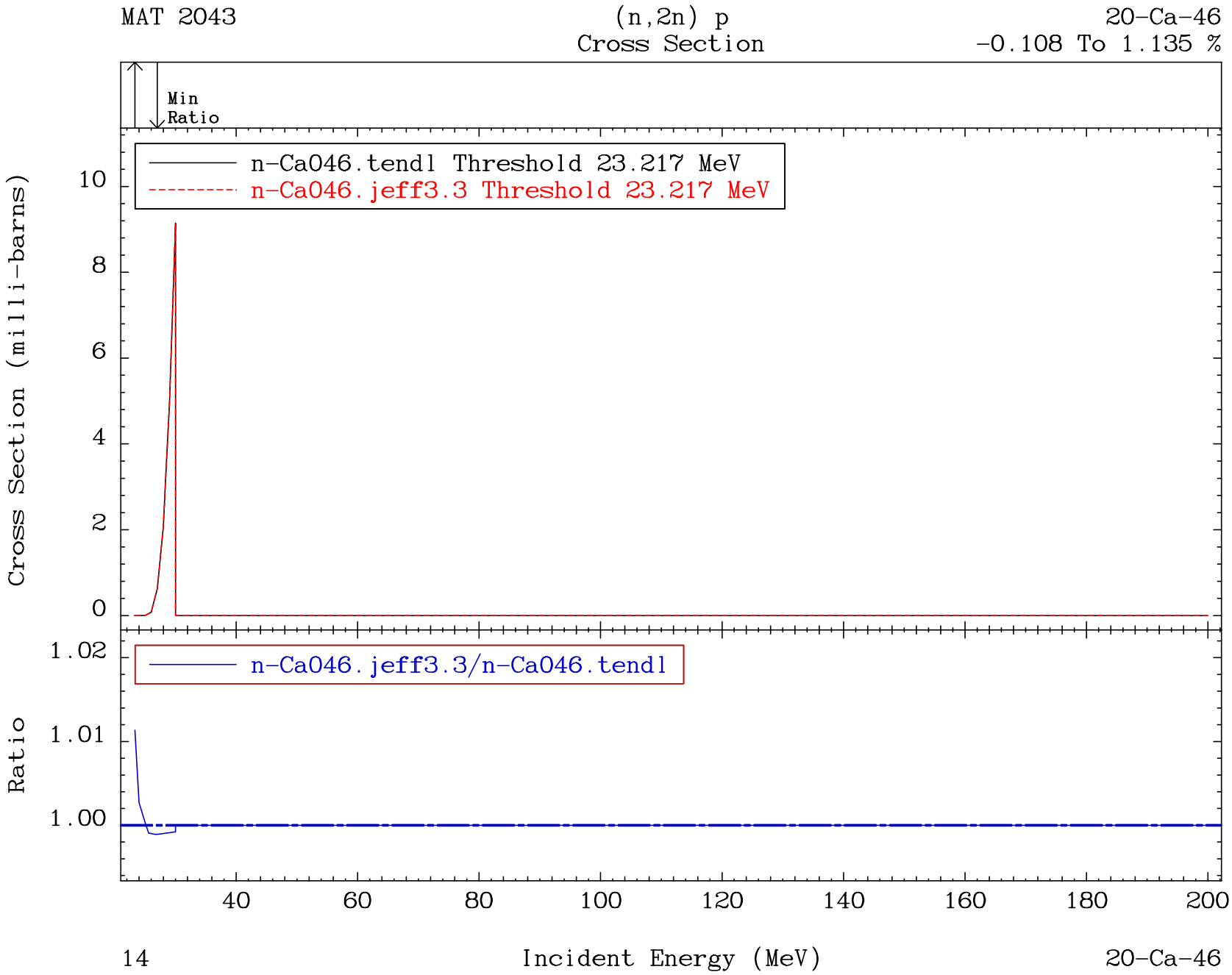

MAT 2043
(n,n') p
Cross Section
20-Ca-46
-0.092 To 3.494 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 14.116 MeV
n-Ca046.jeff3.3 Threshold 14.116 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
20-Ca-46

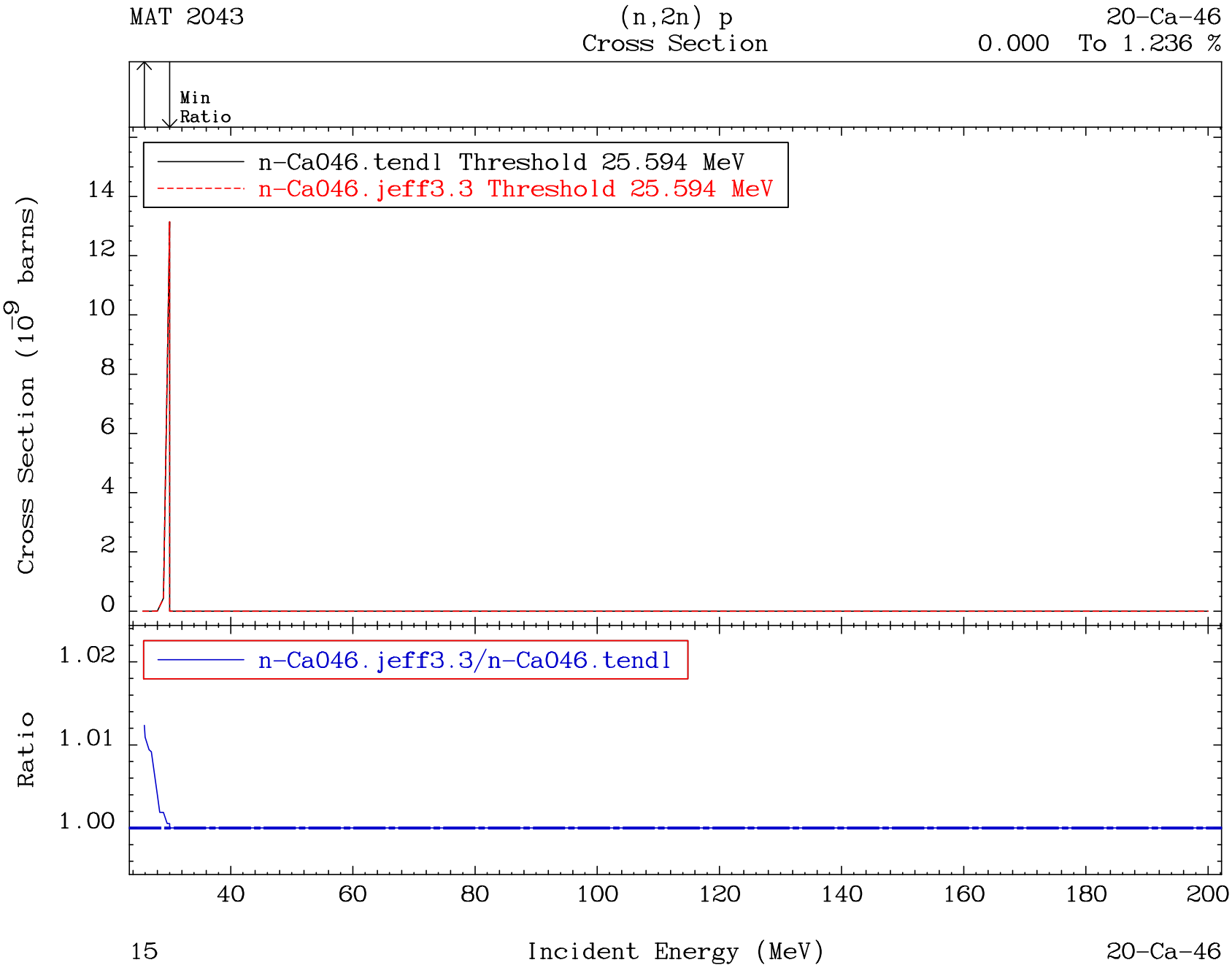

MAT 2043
(n,n') d
Cross Section
20-Ca-46
-0.074 To 1.778 %
Min
Ratio
n-Ca046.tendl Threshold 20.943 MeV
n-Ca046.jeff3.3 Threshold 20.943 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
20
40
60
80
100
120
140
160
180
200
10
Incident Energy (MeV)
20-Ca-46

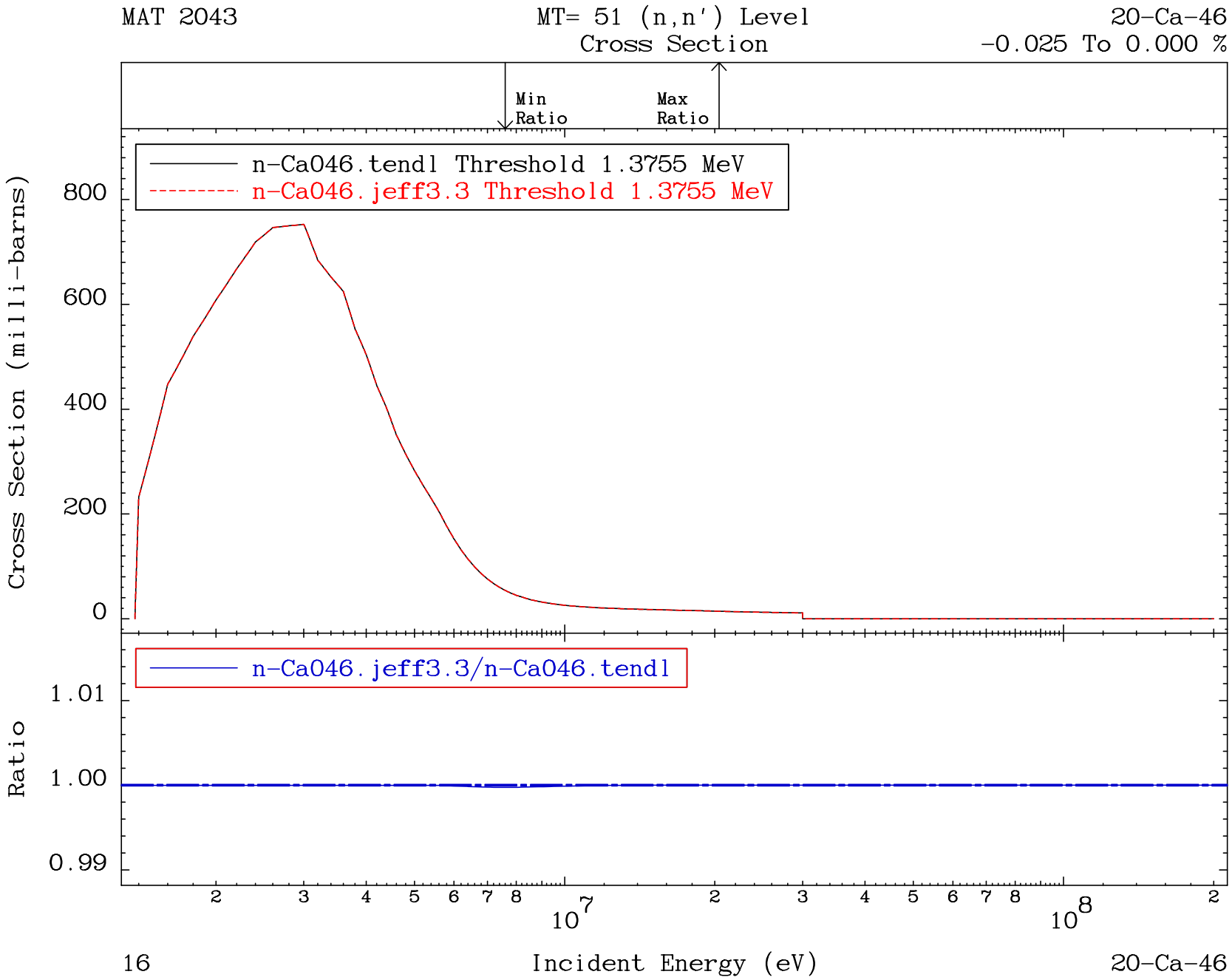

MAT 2043
(n,n') t
Cross Section
20-Ca-46
-0.067 To 7.485 %
Min
Ratio
n-Ca046.tendl Threshold 21.986 MeV
n-Ca046.jeff3.3 Threshold 21.986 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.05
1.00
20
40
60
80
100
120
140
160
180
200
11
Incident Energy (MeV)
20-Ca-46

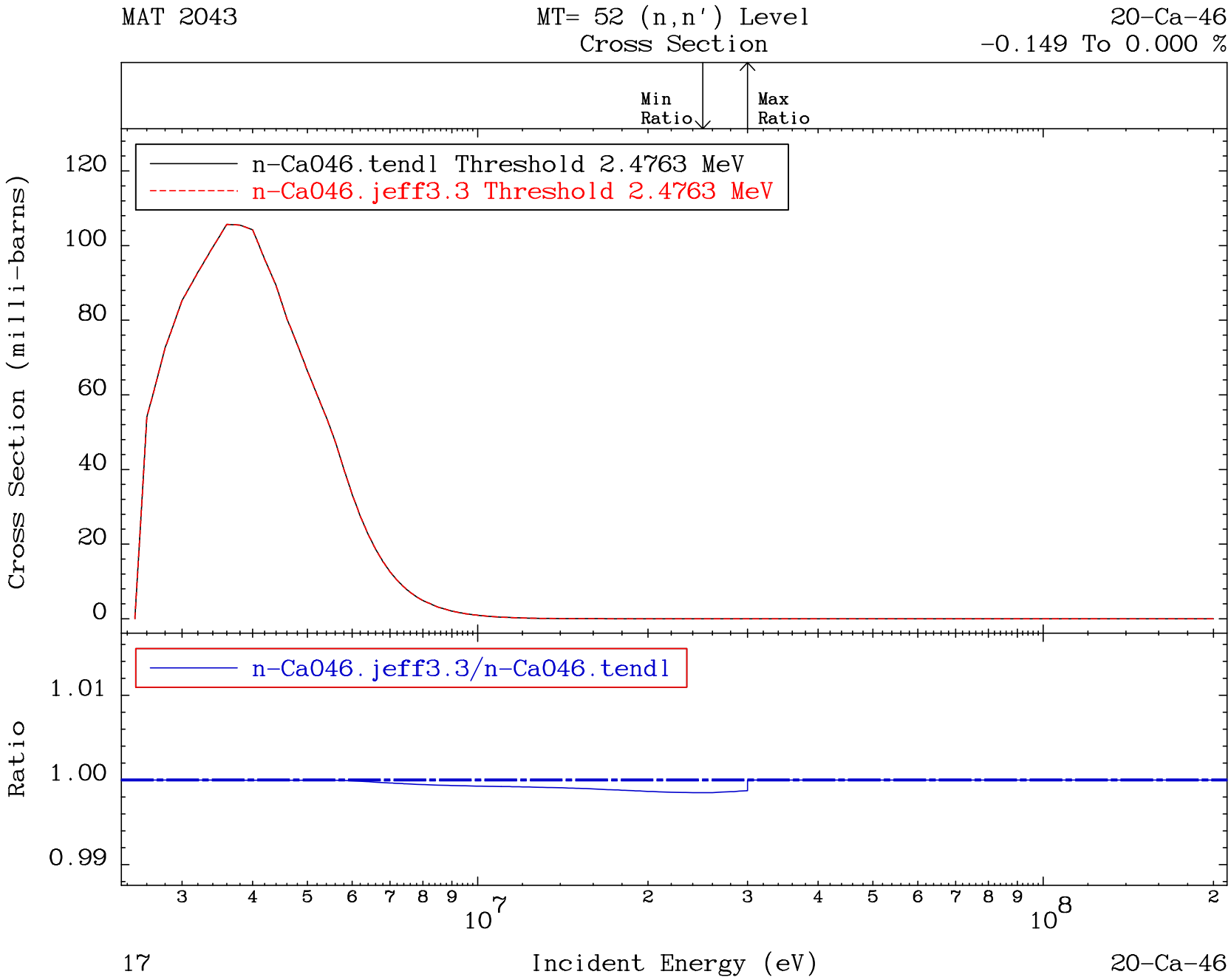

MAT 2043
(n,n') He-3
Cross Section
20-Ca-46
0.000 To 0.895 %
Min
Ratio
n-Ca046.tendl Threshold 26.633 MeV
n-Ca046.jeff3.3 Threshold 26.633 MeV
Cross Section (10^-9 barns)
12
10
8
6
4
2
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
20-Ca-46

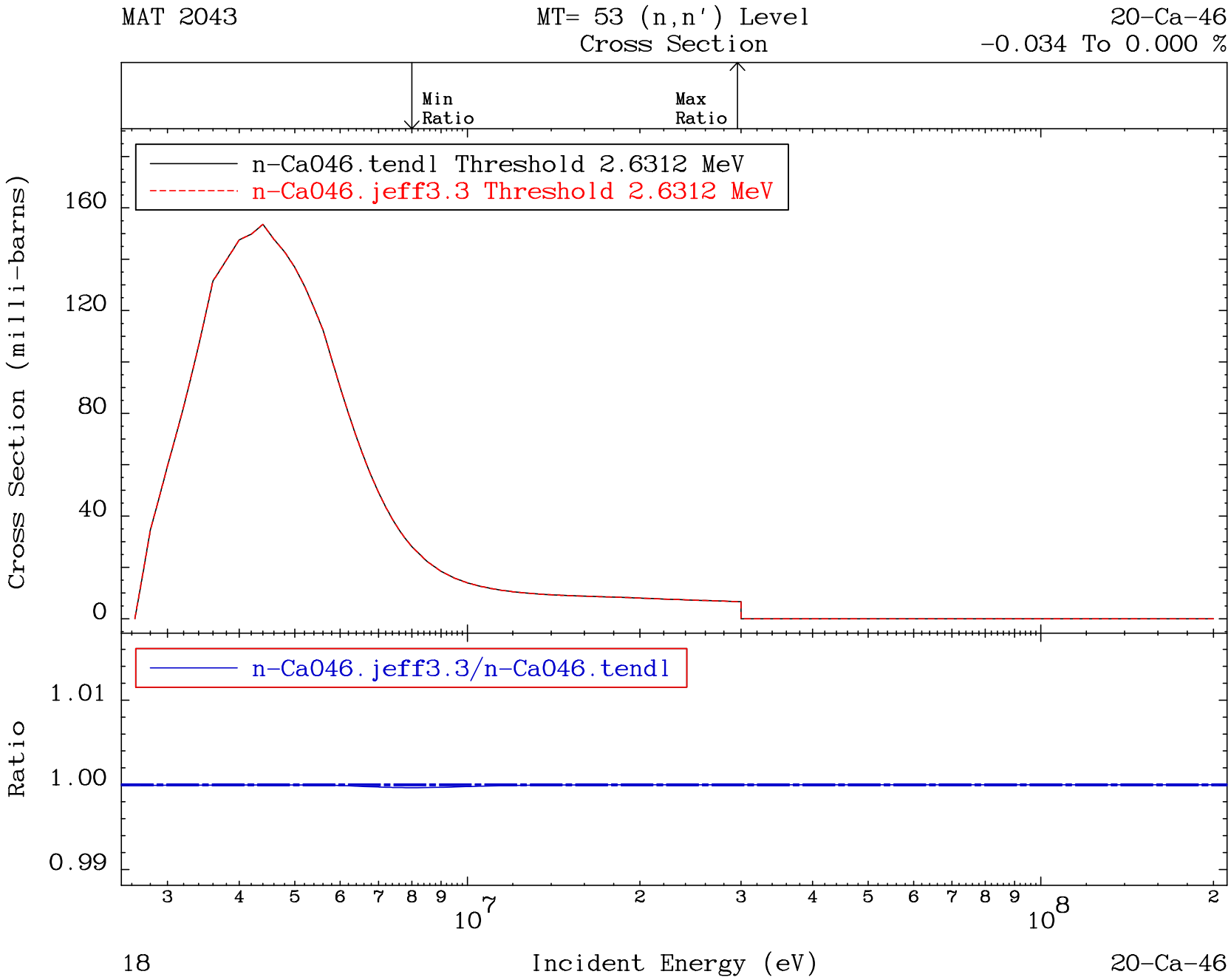

MAT 2043
(n,4n)
Cross Section
20-Ca-46
-0.186 To 0.000 %
Max
Ratio
n-Ca046.tendl Threshold 29.580 MeV
n-Ca046.jeff3.3 Threshold 29.580 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
20-Ca-46

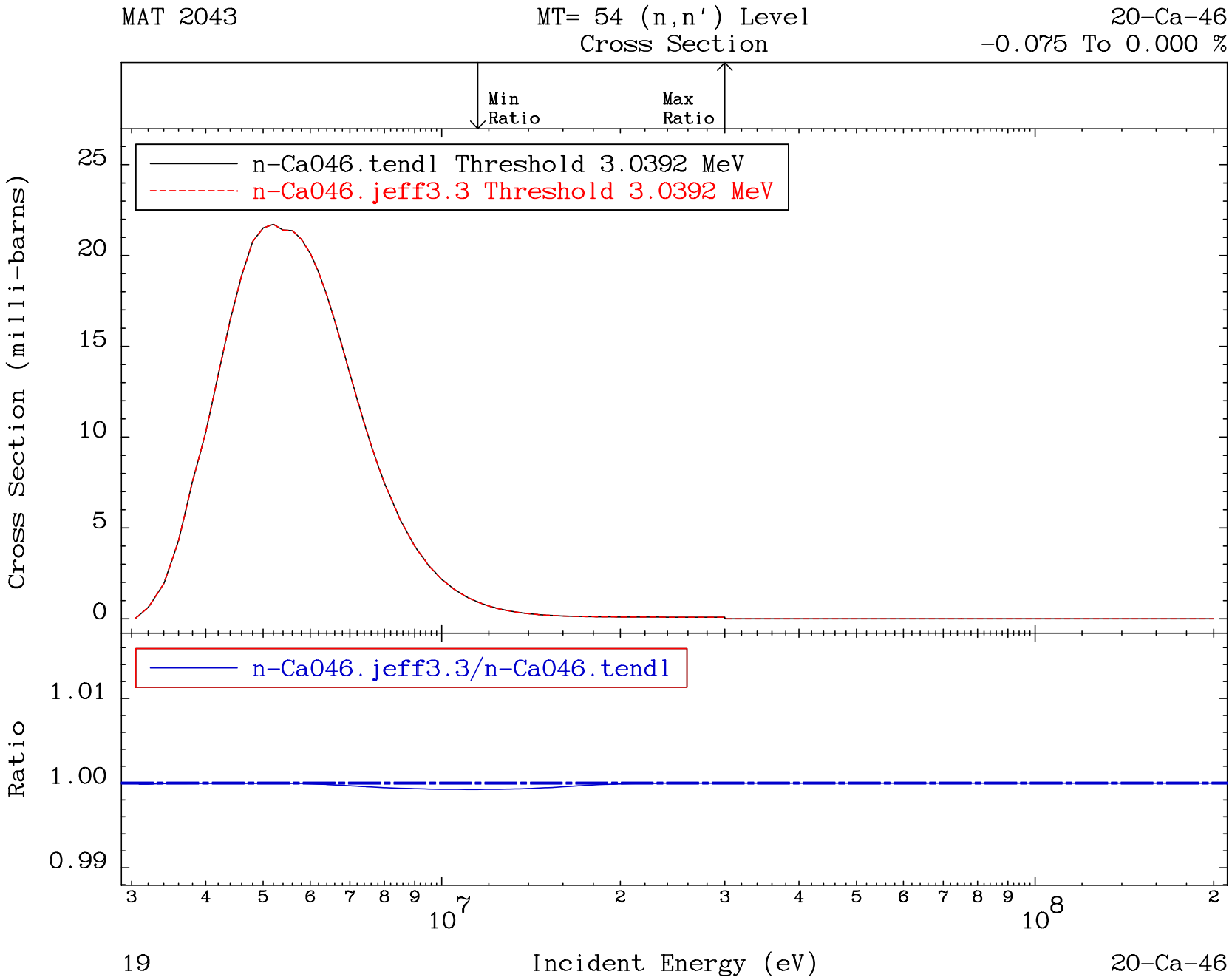

MAT 2043
(n,2n) p
Cross Section
20-Ca-46
-0.108 To 1.135 %
Min
Ratio
n-Ca046.tendl Threshold 23.217 MeV
n-Ca046.jeff3.3 Threshold 23.217 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
20-Ca-46

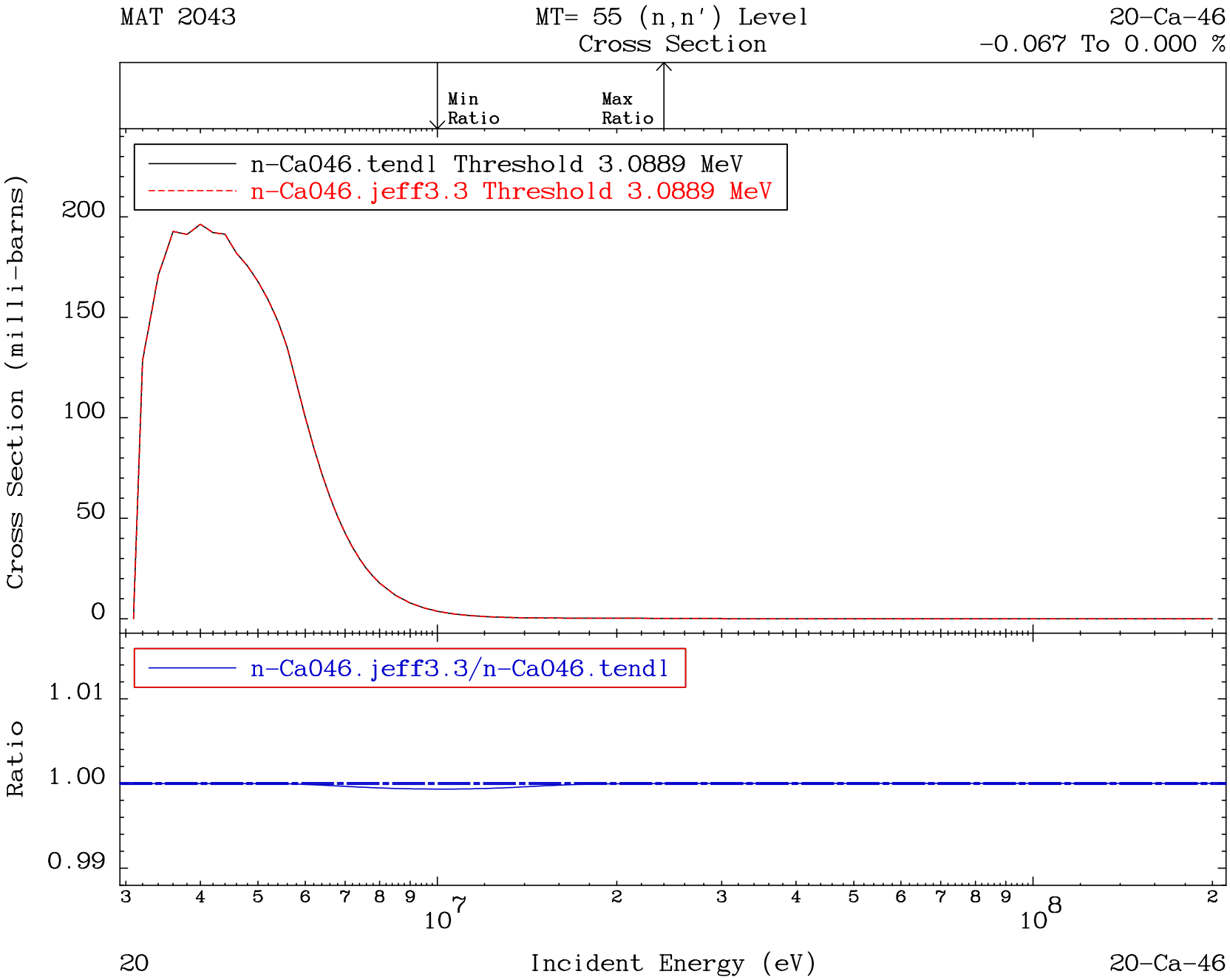

MAT 2043
(n,2n) p
Cross Section
20-Ca-46
0.000 To 1.236 %
Min
Ratio
n-Ca046.tendl Threshold 25.594 MeV
n-Ca046.jeff3.3 Threshold 25.594 MeV
Cross Section (10^-9 barns)
0
2
4
6
8
10
12
14
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.00
1.01
1.02
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
20-Ca-46

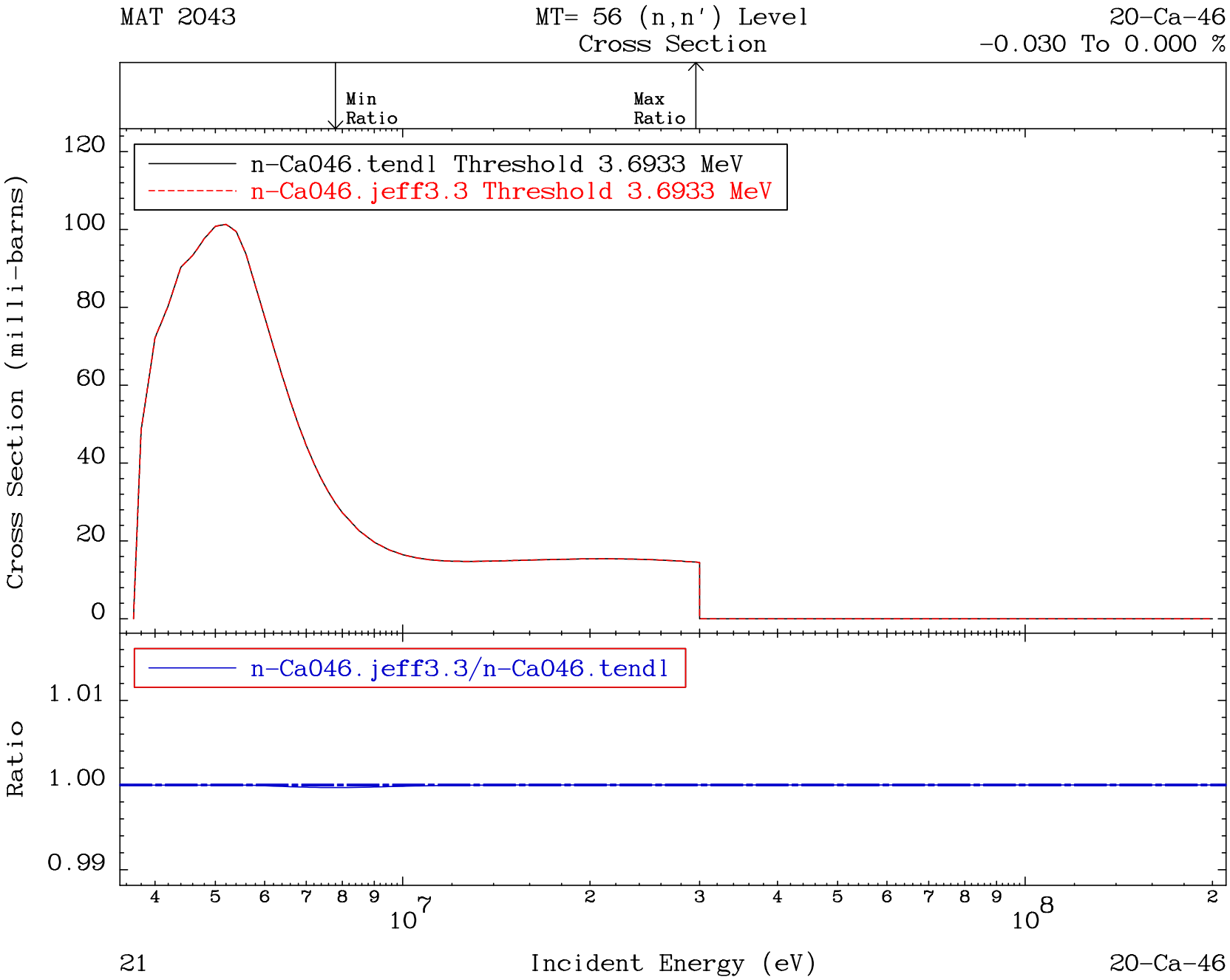

MAT 2043
MT= 51 (n,n') Level
Cross Section
20-Ca-46
-0.025 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 1.3755 MeV
n-Ca046.jeff3.3 Threshold 1.3755 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
20-Ca-46

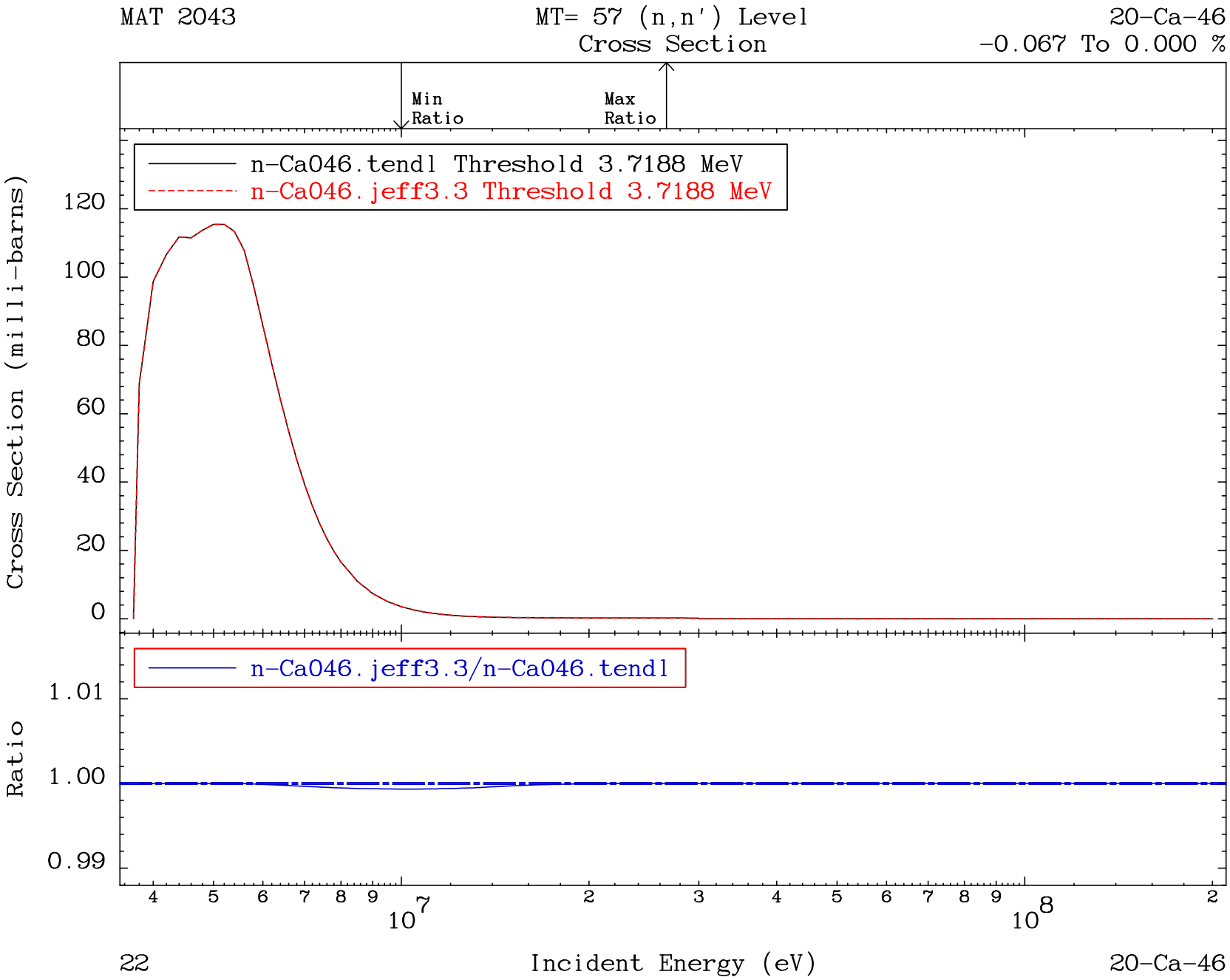

MAT 2043
MT= 52 (n,n') Level
Cross Section
20-Ca-46
-0.149 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 2.4763 MeV
n-Ca046.jeff3.3 Threshold 2.4763 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
20-Ca-46

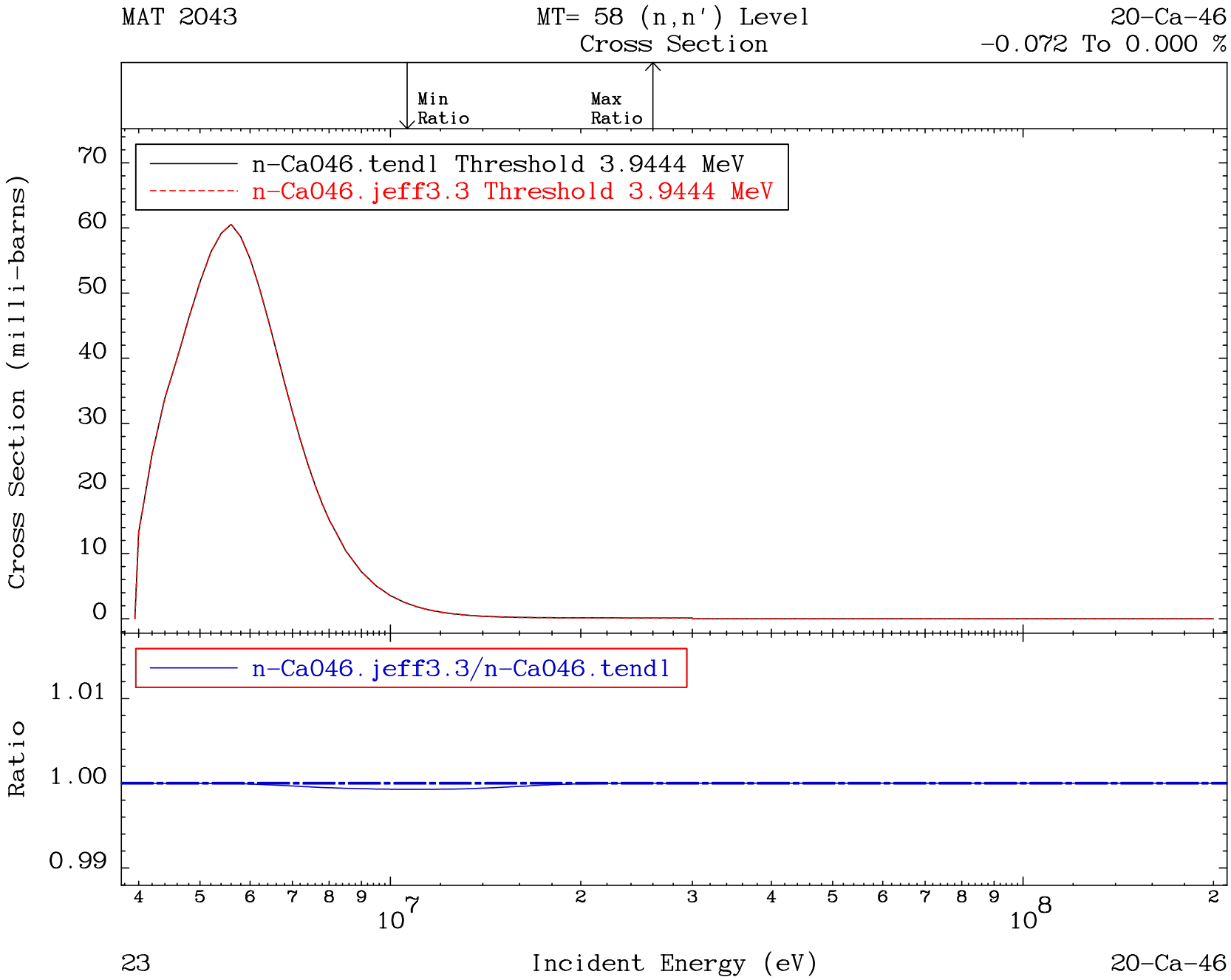

MAT 2043
MT= 53 (n,n') Level
Cross Section
20-Ca-46
-0.034 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 2.6312 MeV
n-Ca046.jeff3.3 Threshold 2.6312 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
20-Ca-46

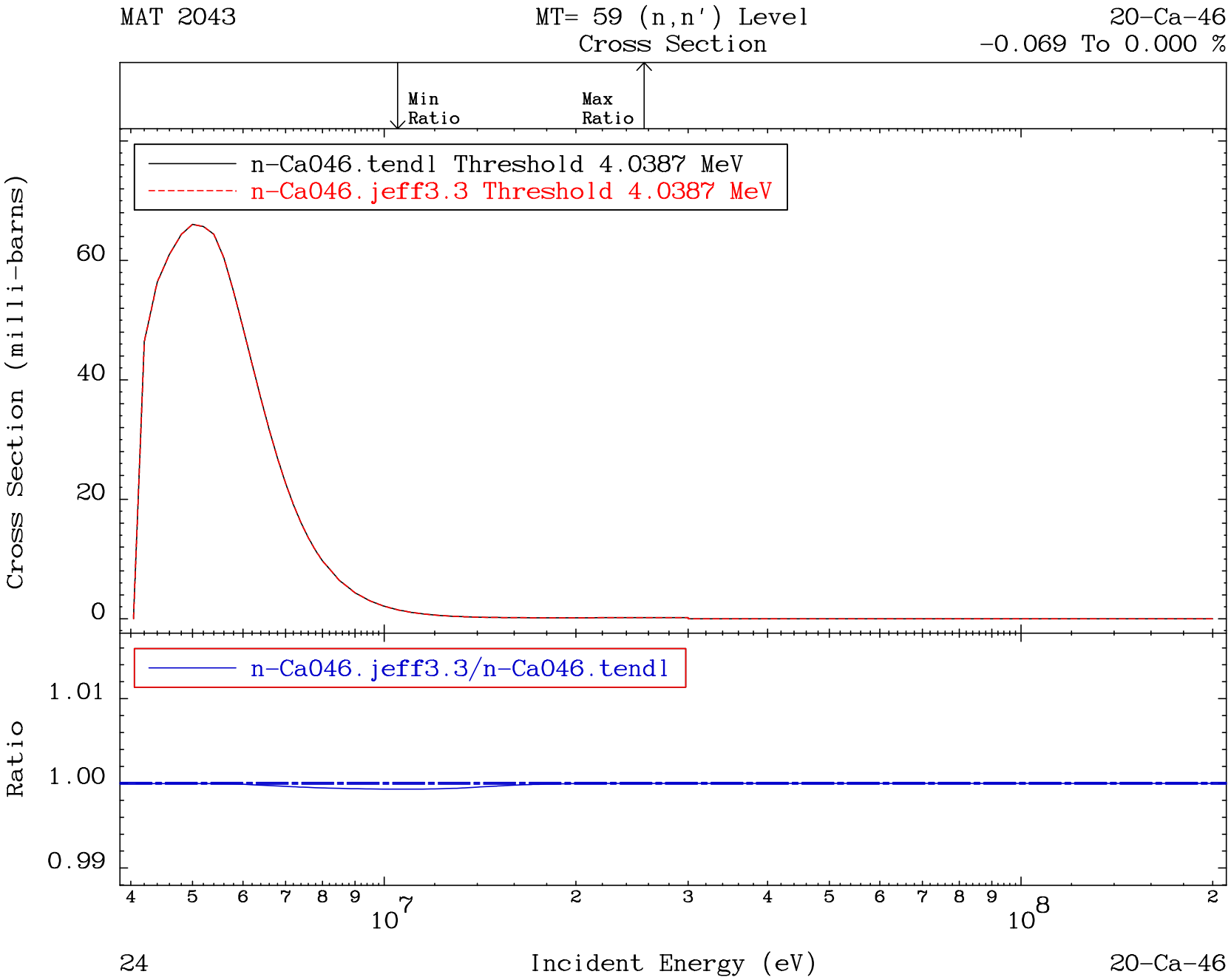

MAT 2043
MT= 54 (n,n') Level
Cross Section
20-Ca-46
-0.075 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 3.0392 MeV
n-Ca046.jeff3.3 Threshold 3.0392 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
20-Ca-46

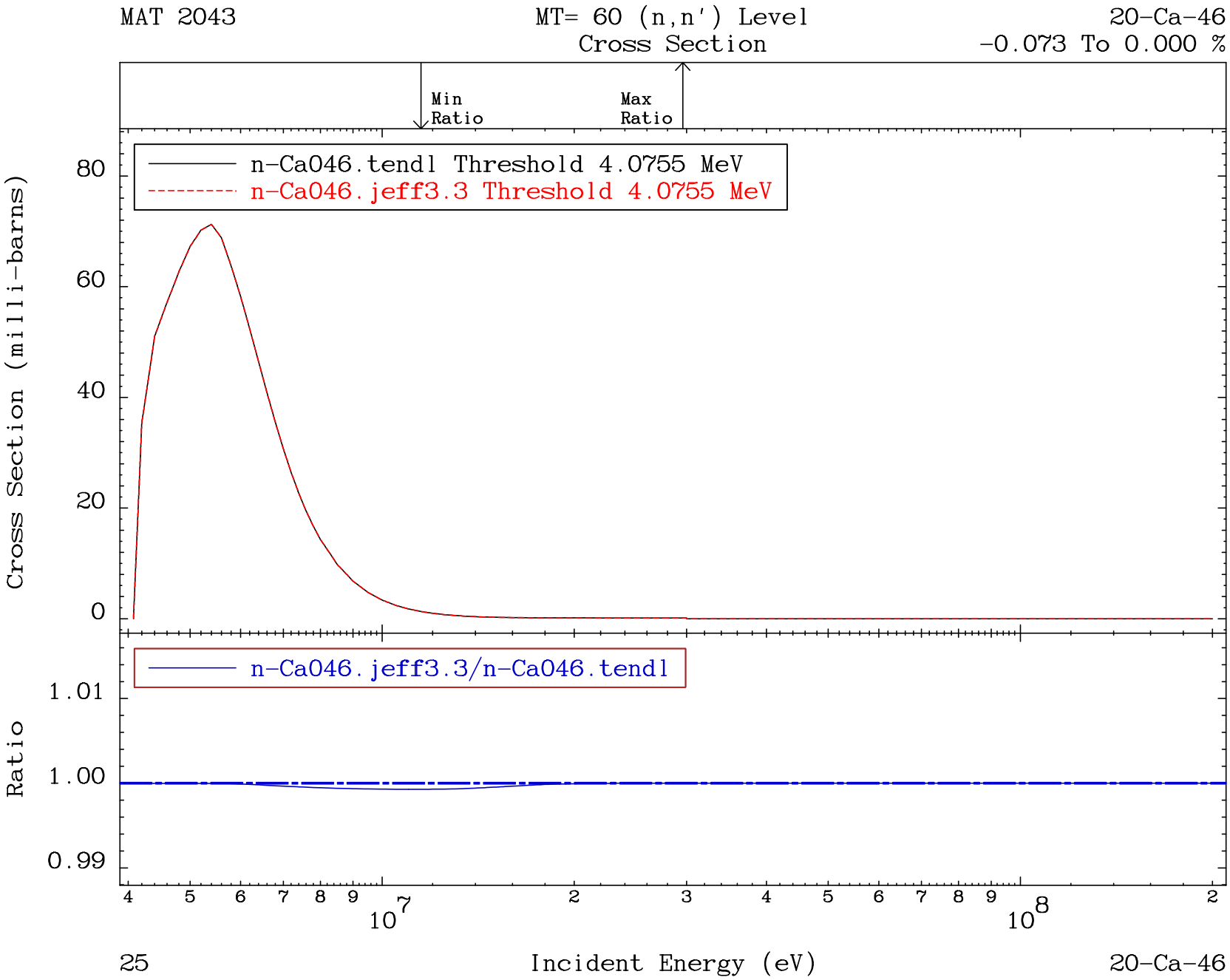

MAT 2043
MT= 55 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 3.0889 MeV
n-Ca046.jeff3.3 Threshold 3.0889 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
20-Ca-46

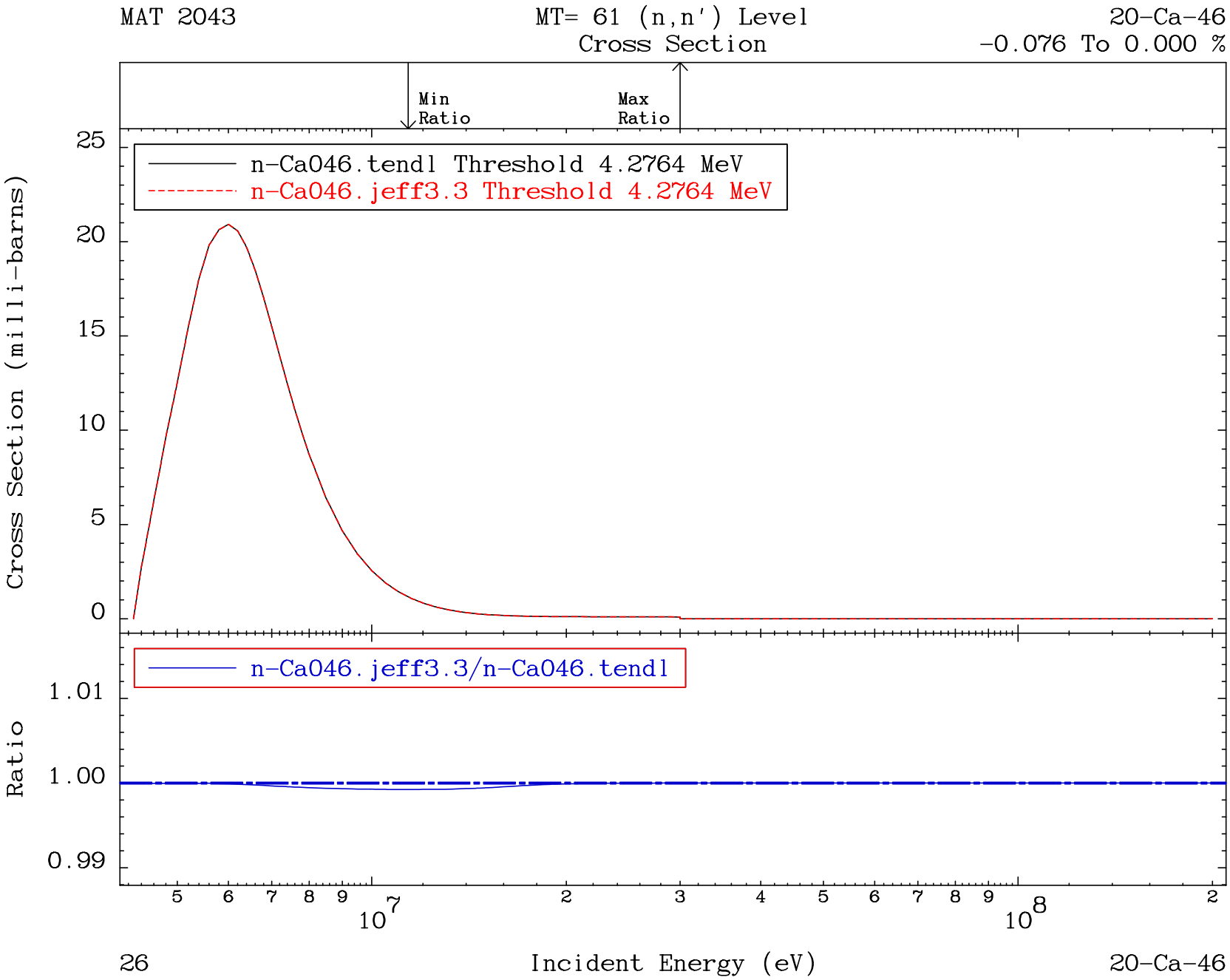

MAT 2043
MT= 56 (n,n') Level
Cross Section
20-Ca-46
-0.030 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 3.6933 MeV
n-Ca046.jeff3.3 Threshold 3.6933 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
20-Ca-46

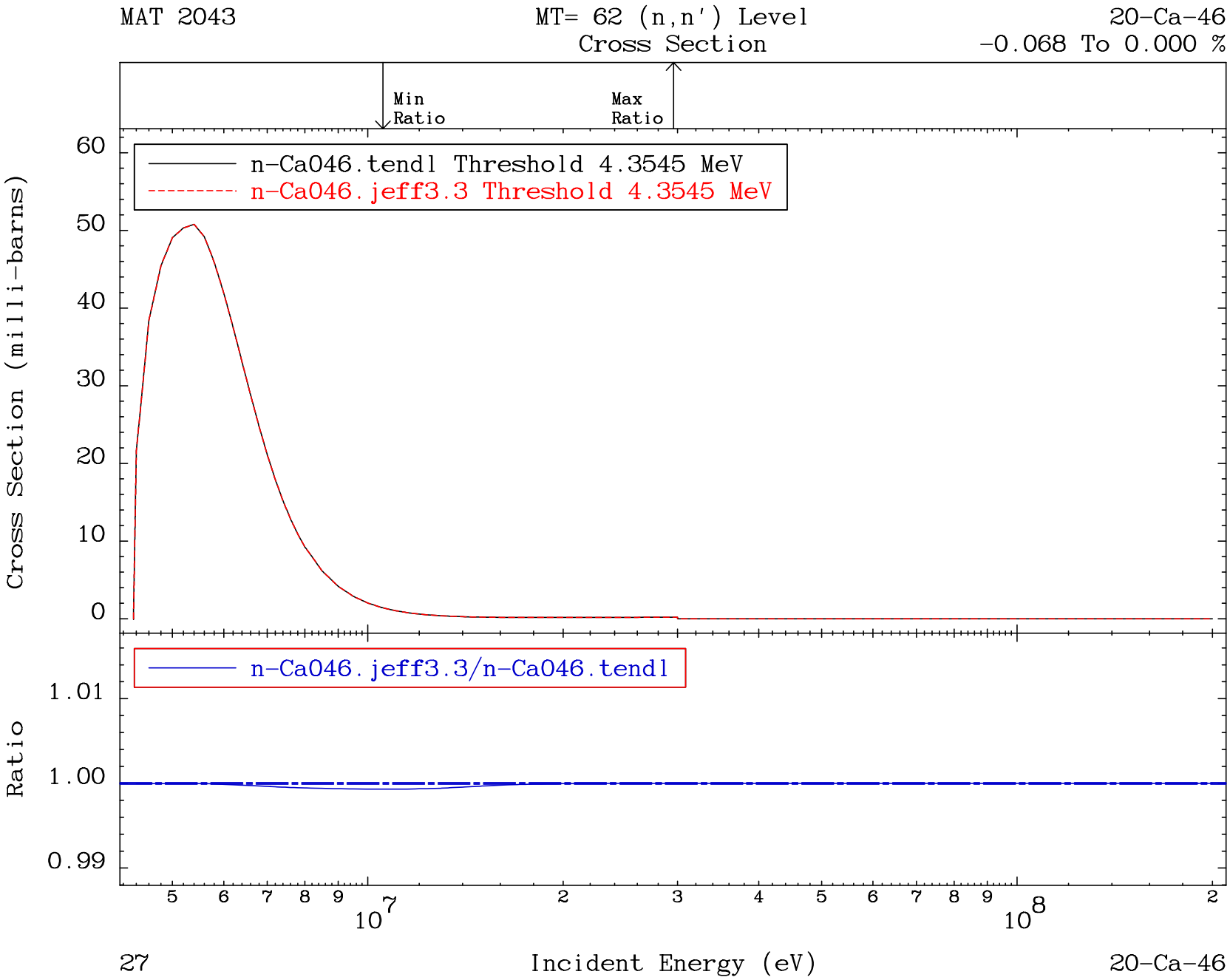

MAT 2043
MT= 57 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 3.7188 MeV
n-Ca046.jeff3.3 Threshold 3.7188 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
20-Ca-46

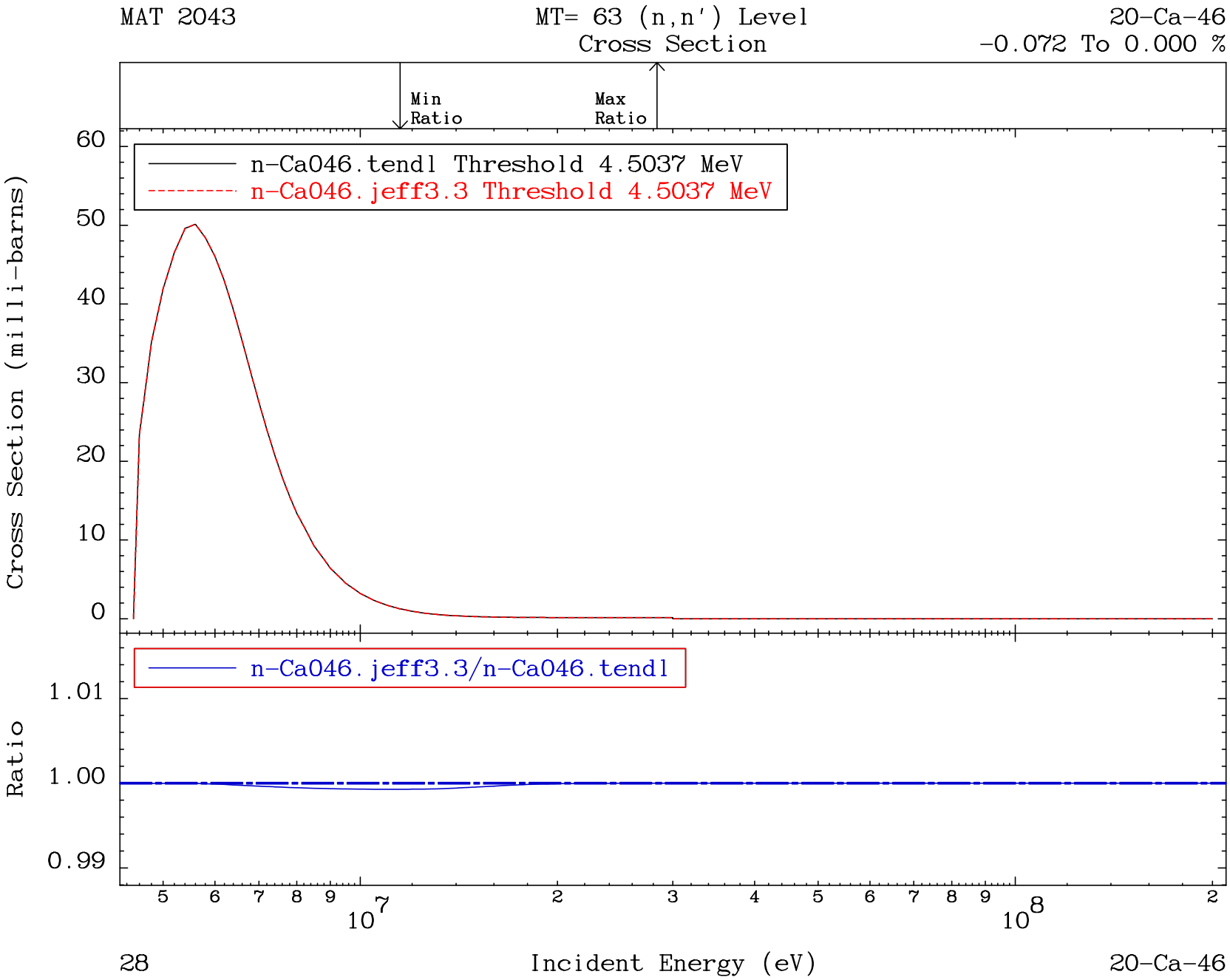

MAT 2043
MT= 58 (n,n') Level
Cross Section
20-Ca-46
-0.072 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 3.9444 MeV
n-Ca046.jeff3.3 Threshold 3.9444 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
20-Ca-46

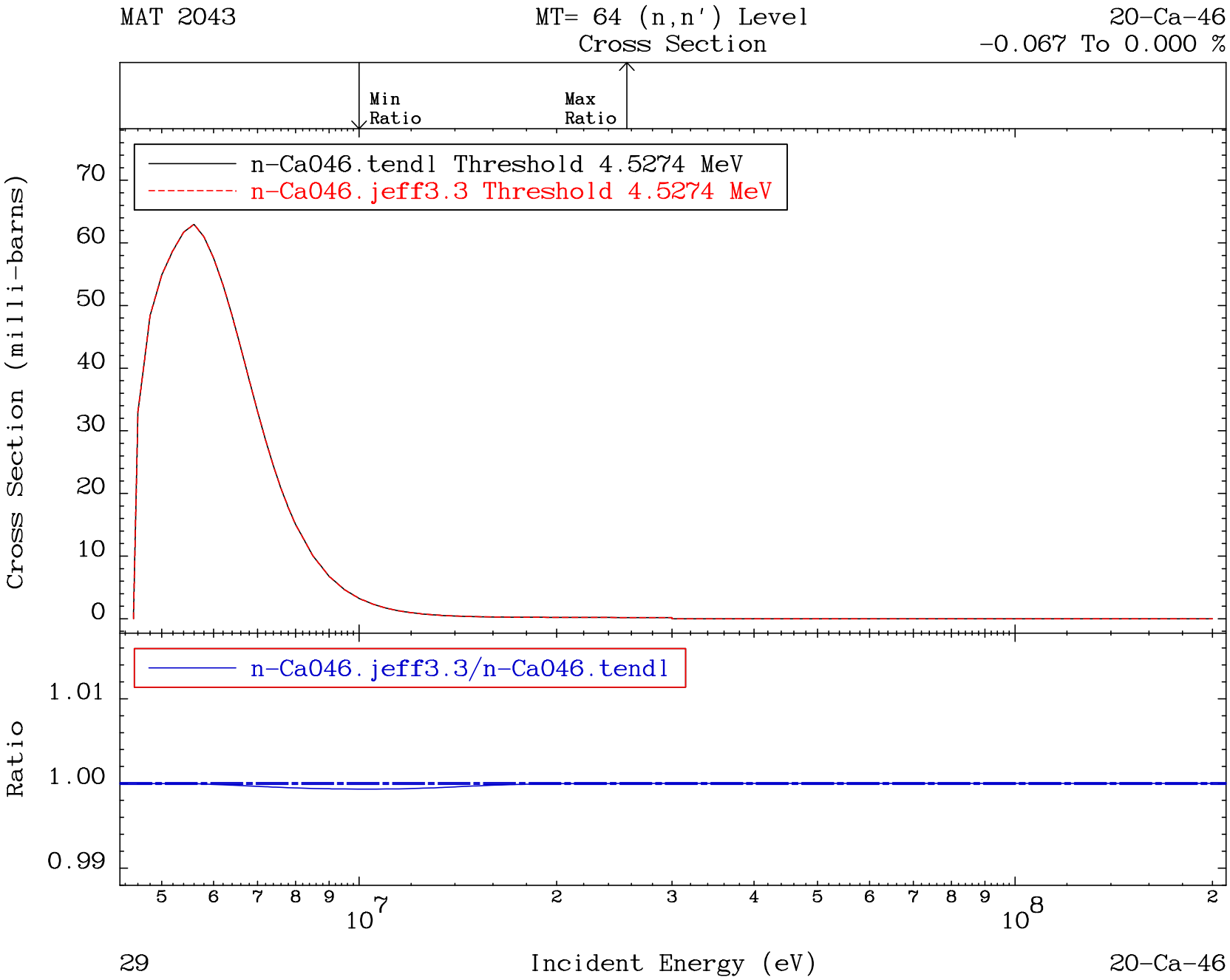

MAT 2043
MT= 59 (n,n') Level
Cross Section
20-Ca-46
-0.069 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.0387 MeV
n-Ca046.jeff3.3 Threshold 4.0387 MeV
Cross Section (milli-barns)
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
20-Ca-46

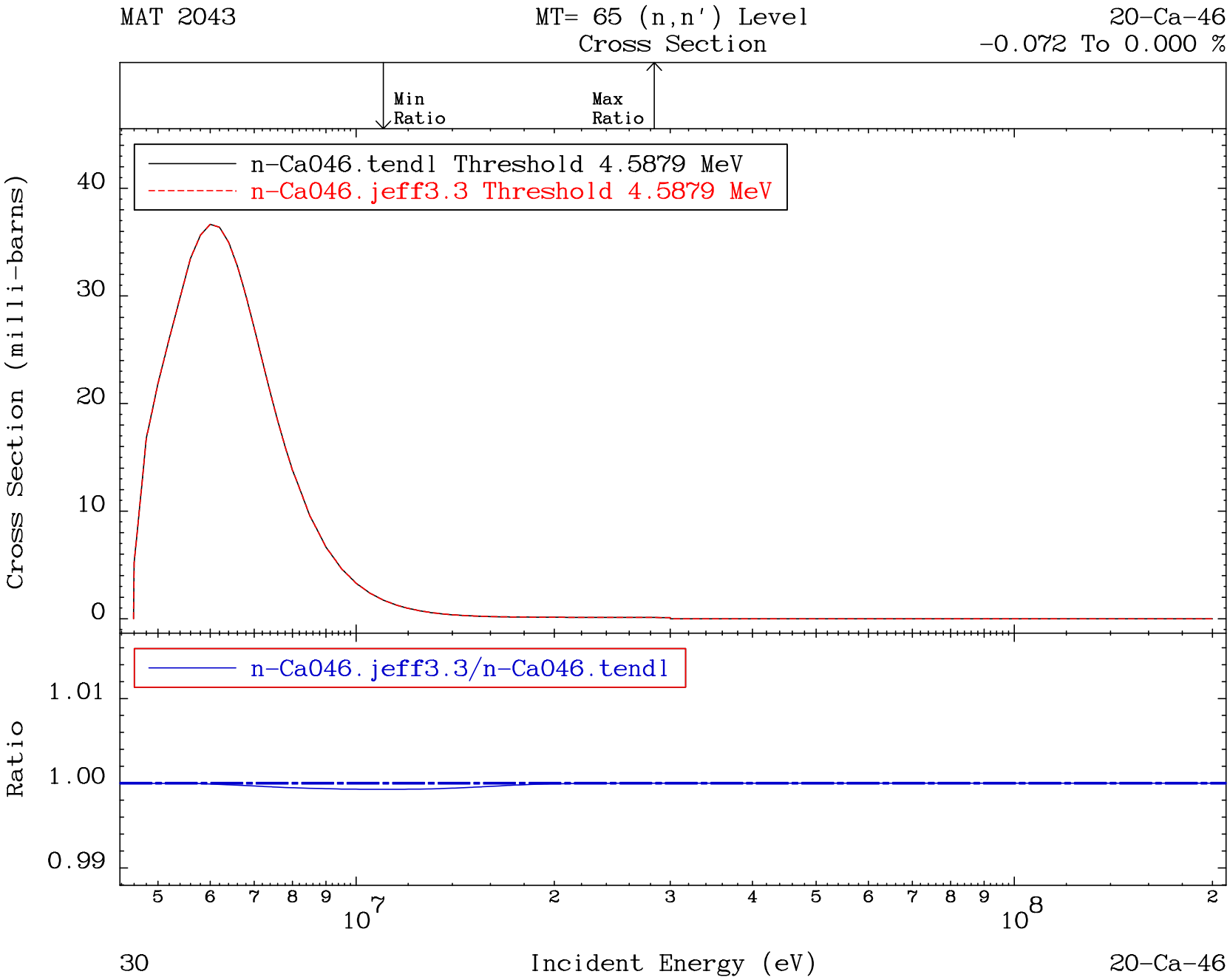

MAT 2043
MT= 60 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.0755 MeV
n-Ca046.jeff3.3 Threshold 4.0755 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
20-Ca-46

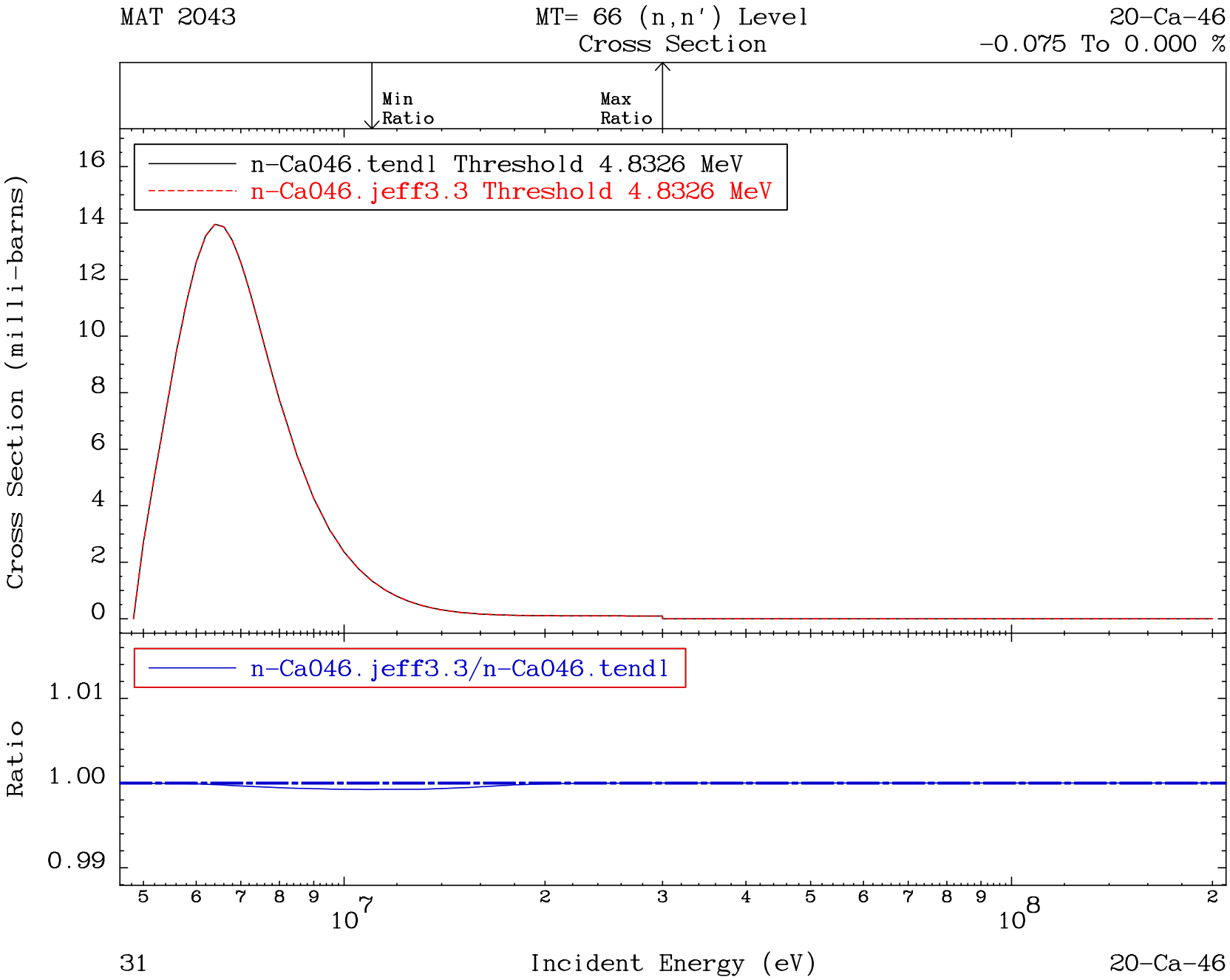

MAT 2043
MT= 61 (n,n') Level
Cross Section
20-Ca-46
-0.076 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.2764 MeV
n-Ca046.jeff3.3 Threshold 4.2764 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
20-Ca-46

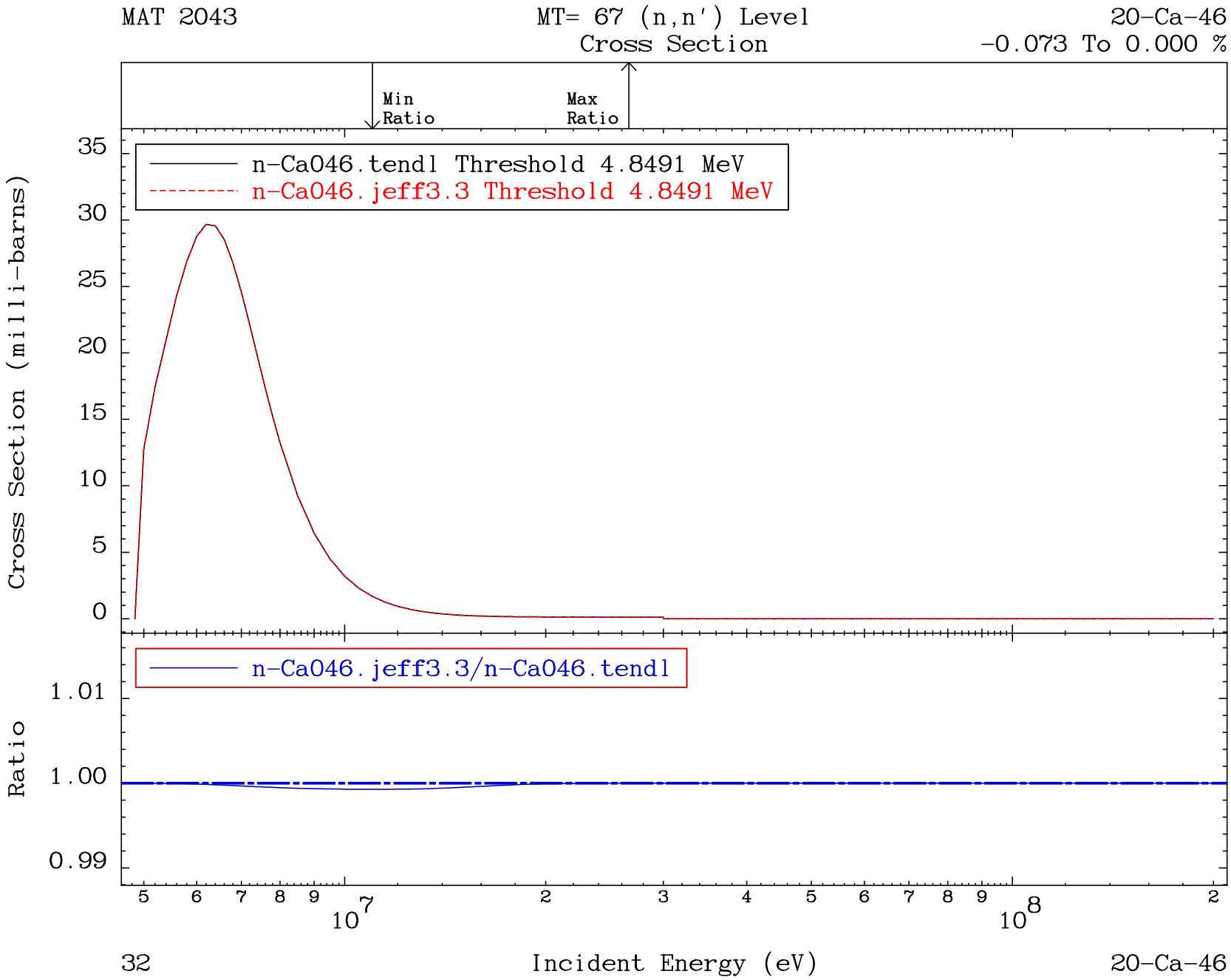

MAT 2043
MT= 62 (n,n') Level
Cross Section
20-Ca-46
-0.068 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.3545 MeV
n-Ca046.jeff3.3 Threshold 4.3545 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
20-Ca-46

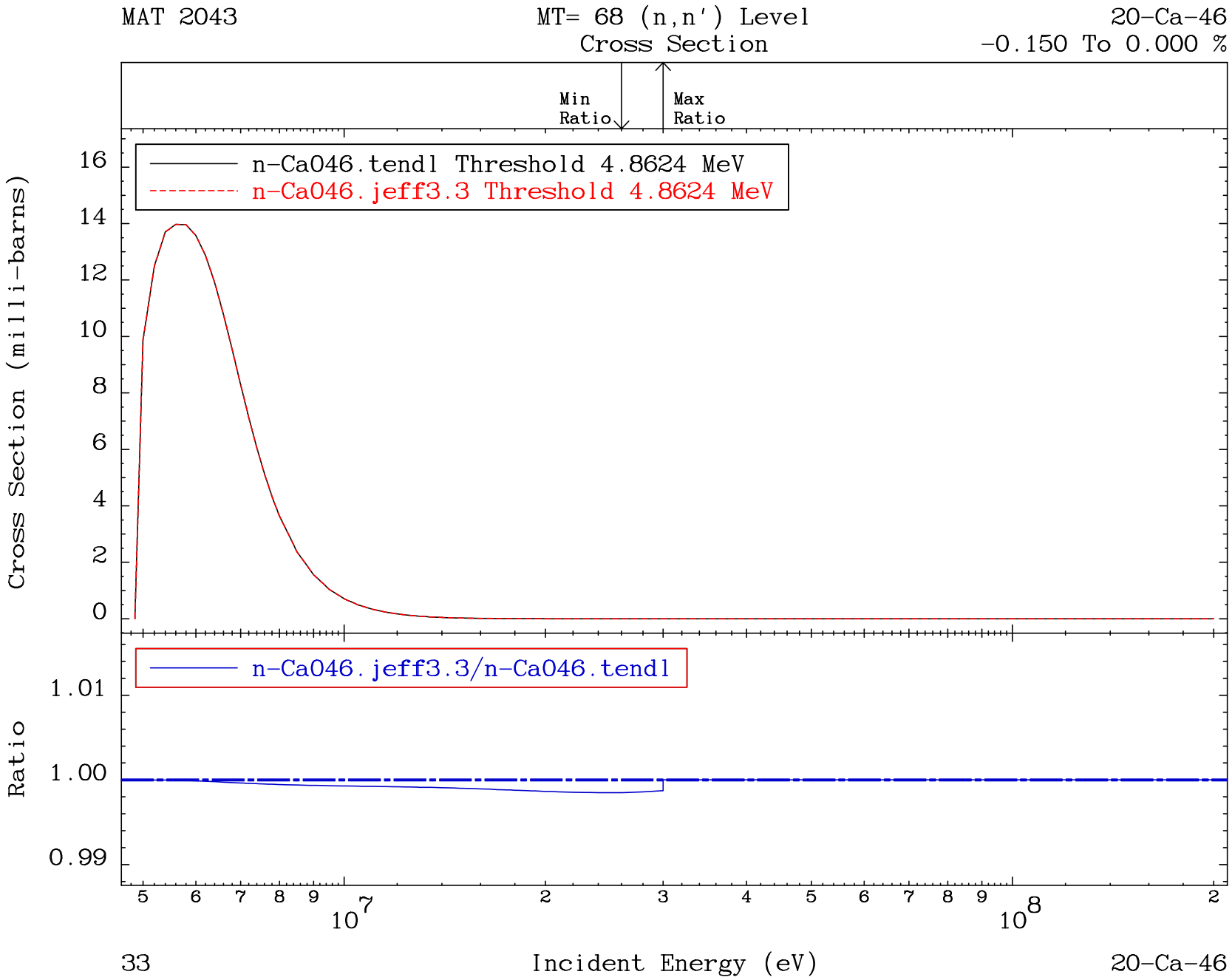

MAT 2043
MT= 63 (n,n') Level
Cross Section
20-Ca-46
-0.072 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.5037 MeV
n-Ca046.jeff3.3 Threshold 4.5037 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
20-Ca-46

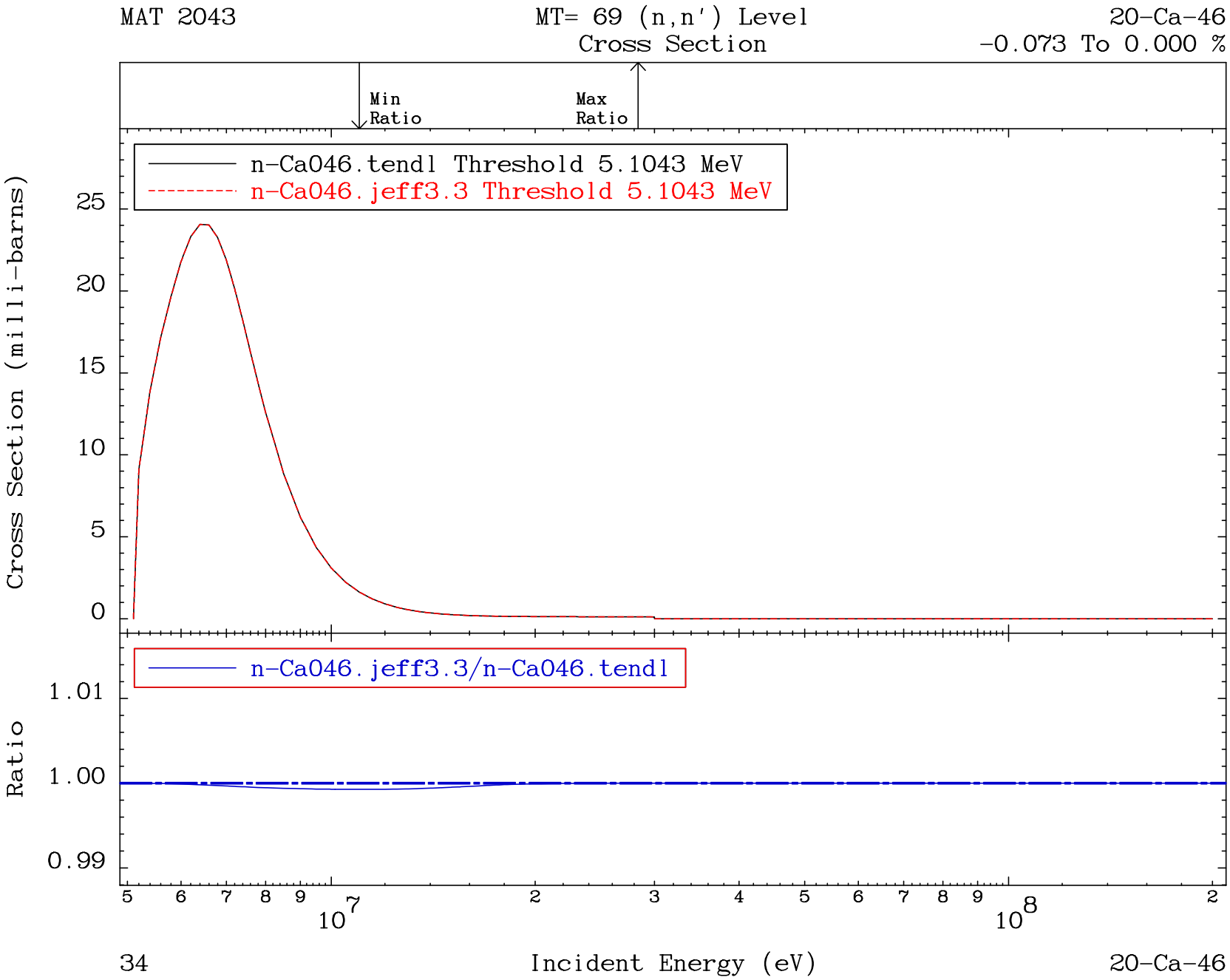

MAT 2043
MT= 64 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.5274 MeV
n-Ca046.jeff3.3 Threshold 4.5274 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
20-Ca-46

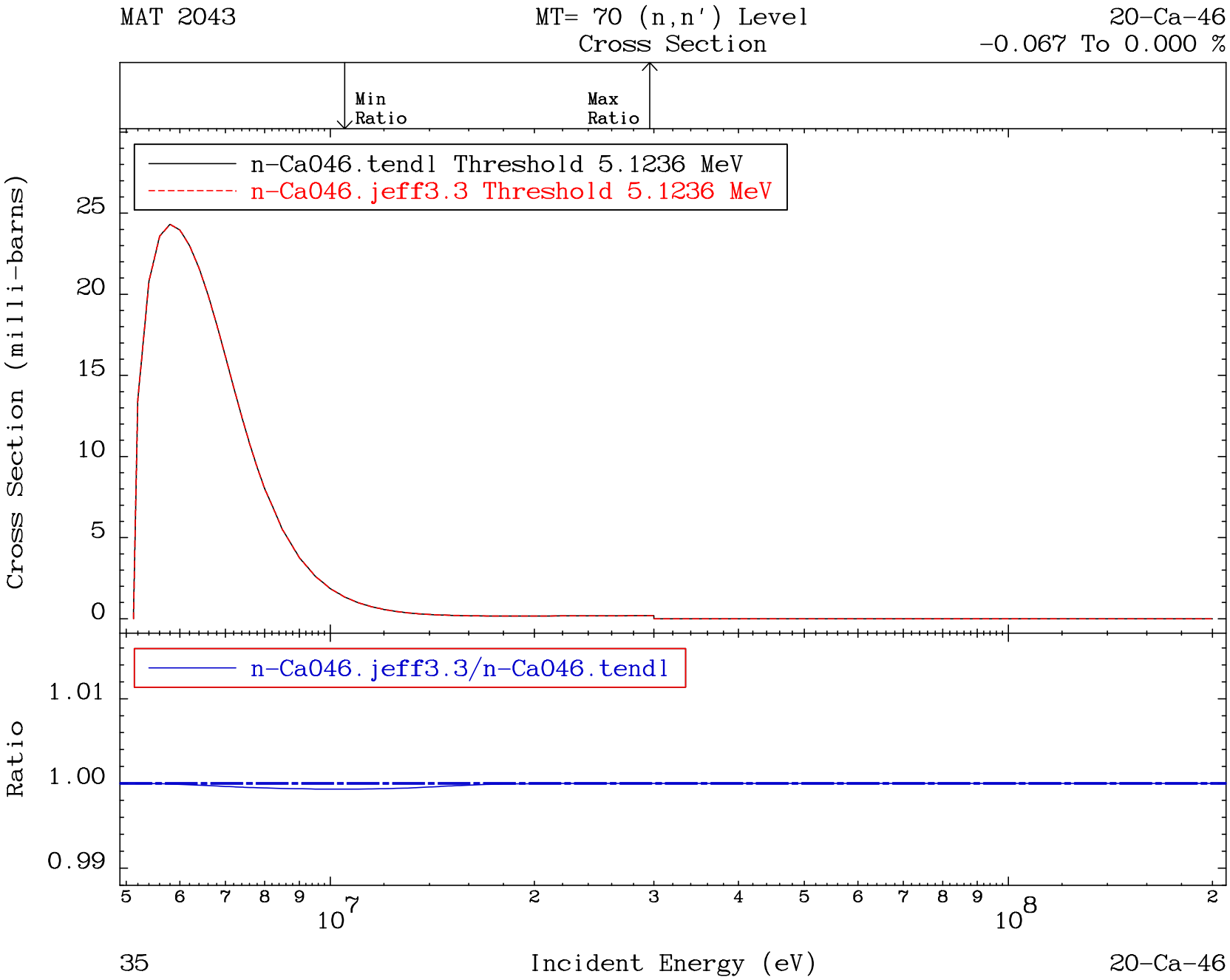

MAT 2043
MT= 65 (n,n') Level
Cross Section
20-Ca-46
-0.072 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.5879 MeV
n-Ca046.jeff3.3 Threshold 4.5879 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
20-Ca-46

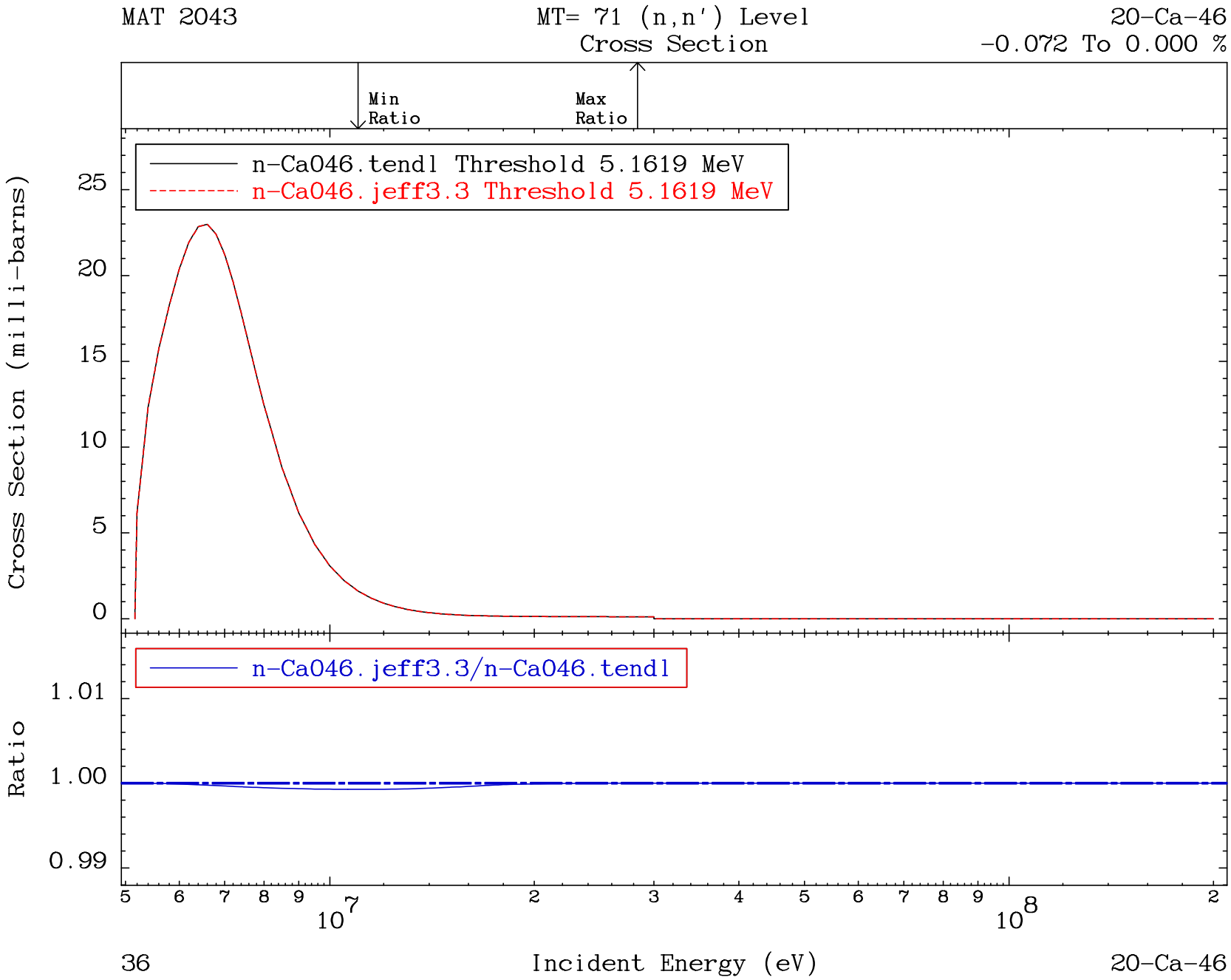

MAT 2043
MT= 66 (n,n') Level
Cross Section
20-Ca-46
-0.075 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.8326 MeV
n-Ca046.jeff3.3 Threshold 4.8326 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
20-Ca-46

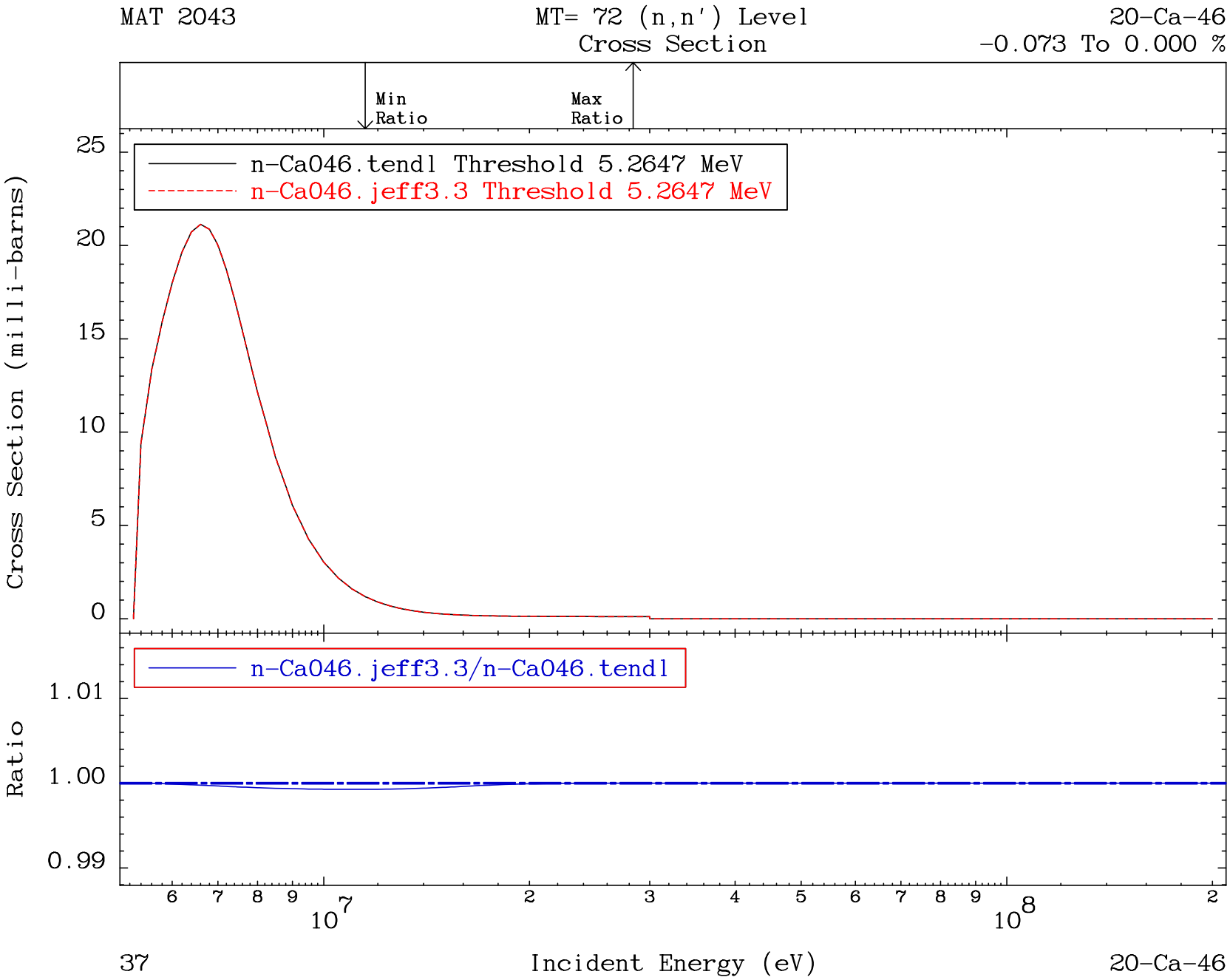

MAT 2043
MT= 67 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.8491 MeV
n-Ca046.jeff3.3 Threshold 4.8491 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
20-Ca-46

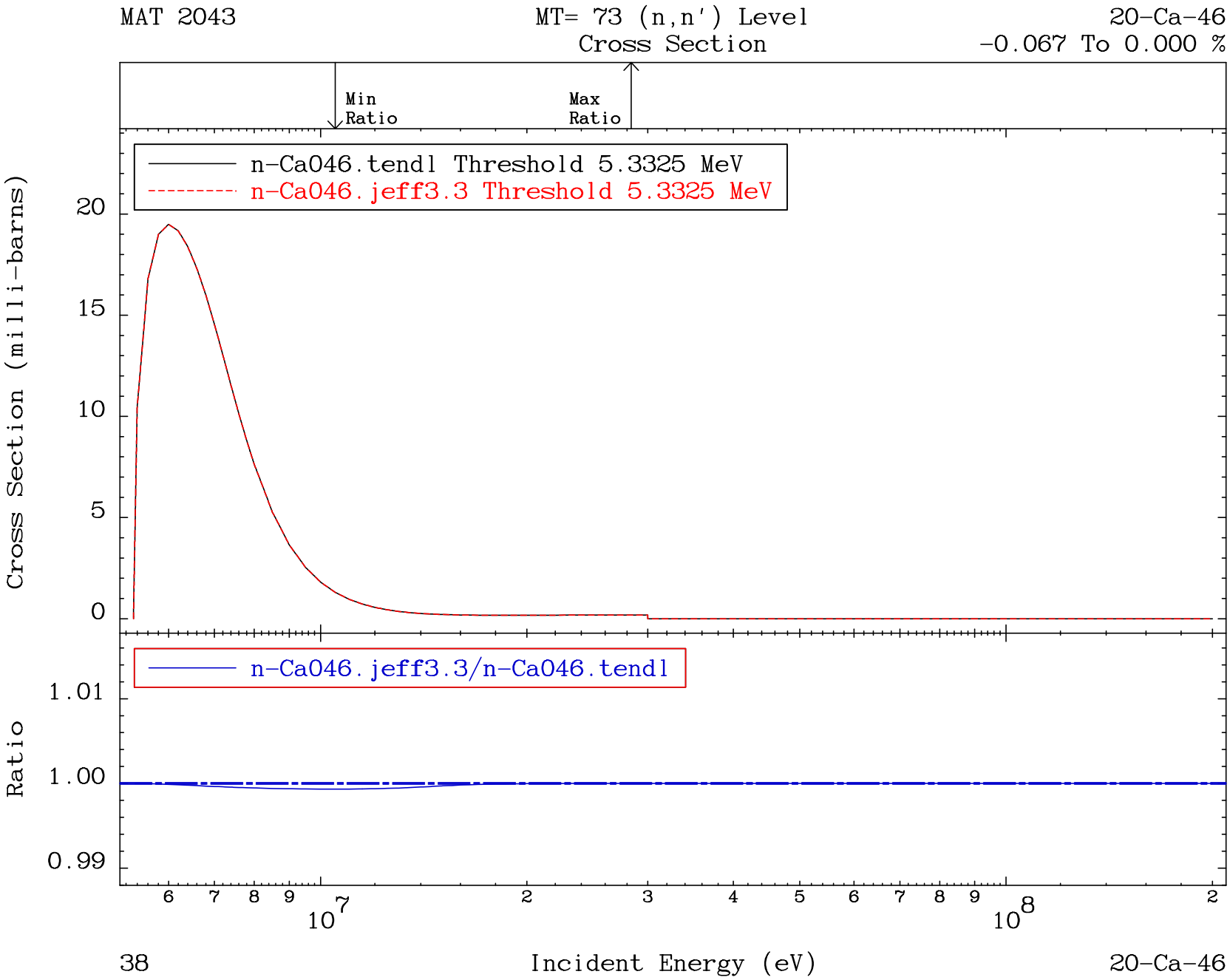

MAT 2043
MT= 68 (n,n') Level
Cross Section
20-Ca-46
-0.150 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 4.8624 MeV
n-Ca046.jeff3.3 Threshold 4.8624 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
20-Ca-46

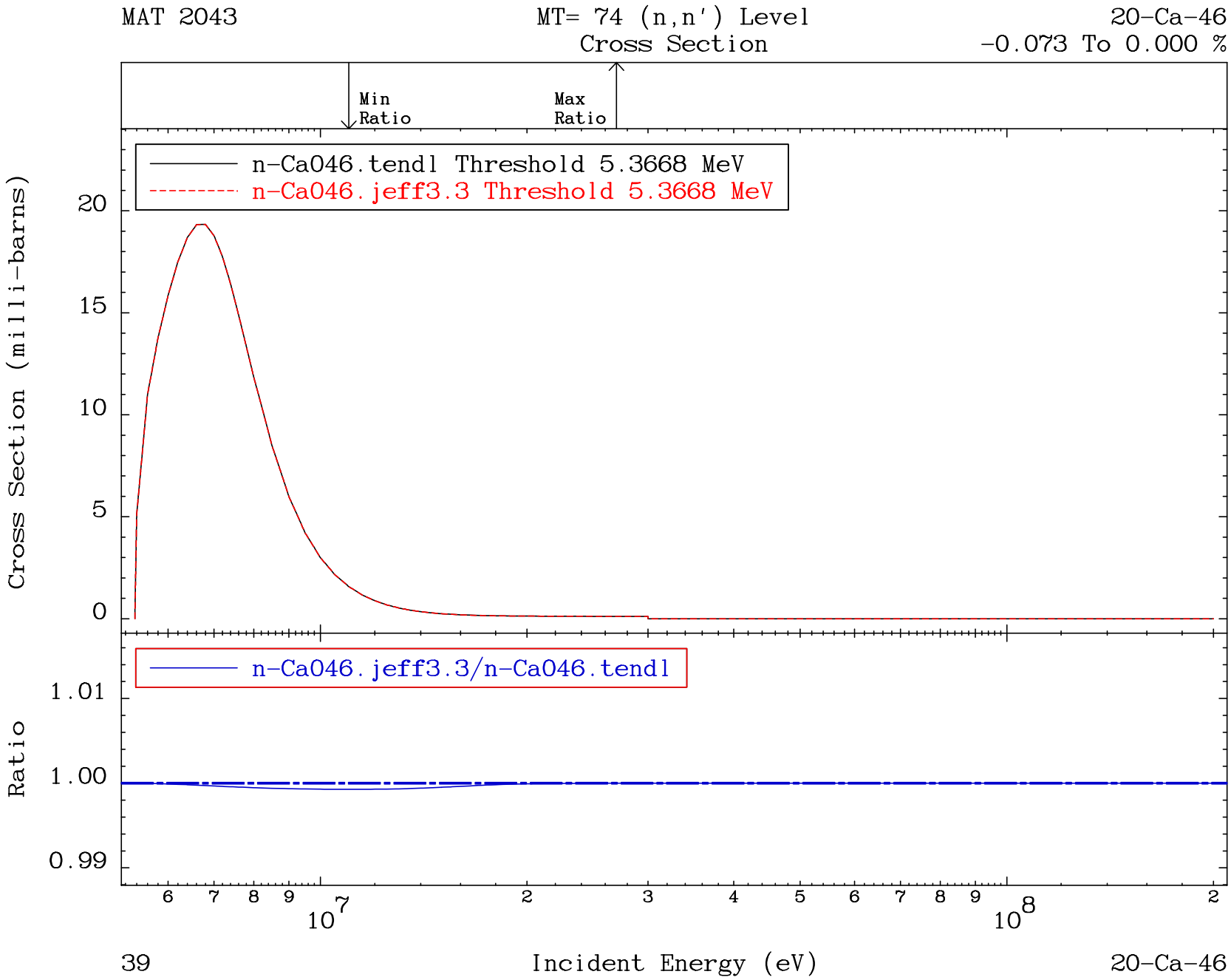

MAT 2043
MT= 69 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 5.1043 MeV
n-Ca046.jeff3.3 Threshold 5.1043 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
20-Ca-46

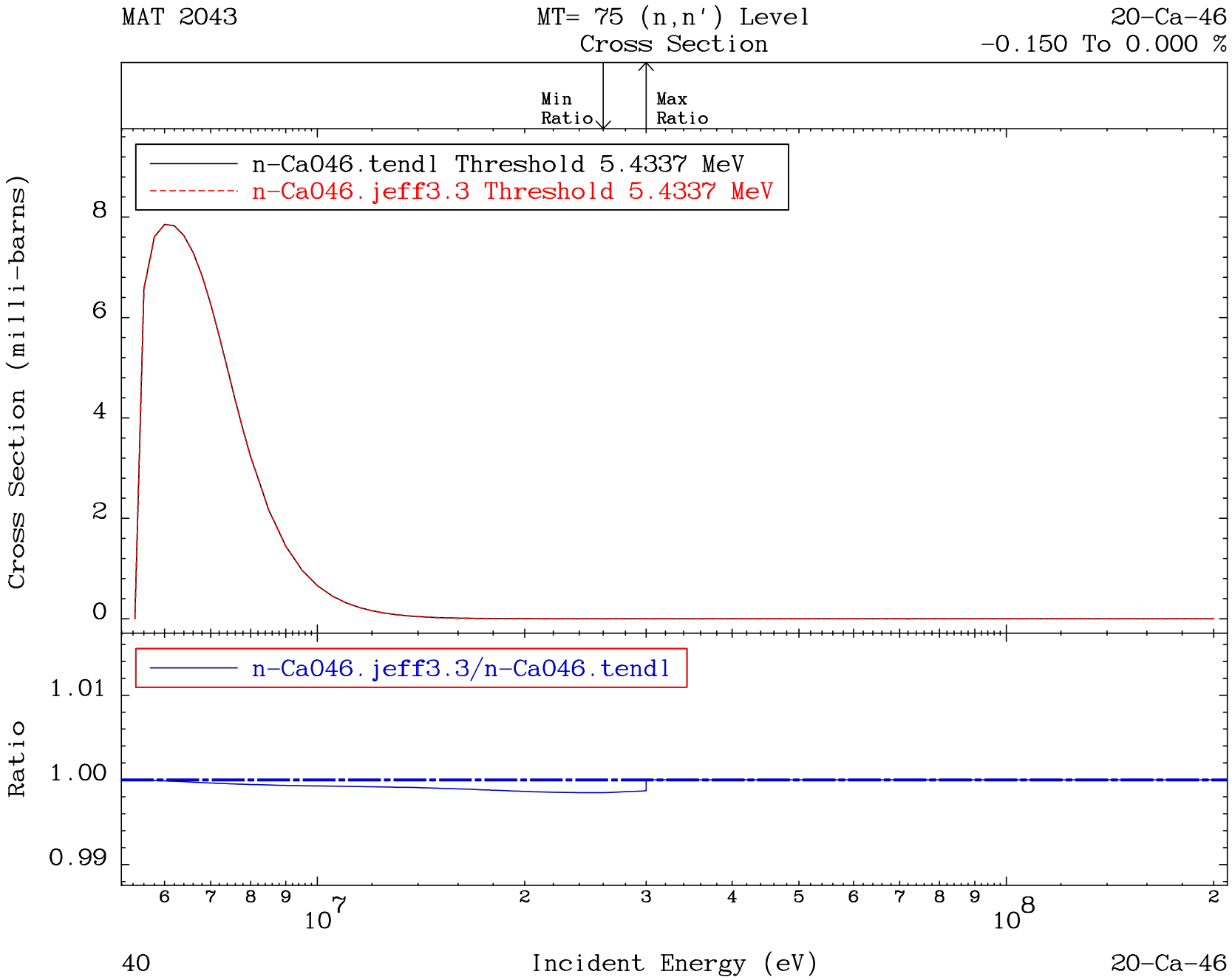

MAT 2043
MT= 70 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.1236 MeV
n-Ca046.jeff3.3 Threshold 5.1236 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
20-Ca-46

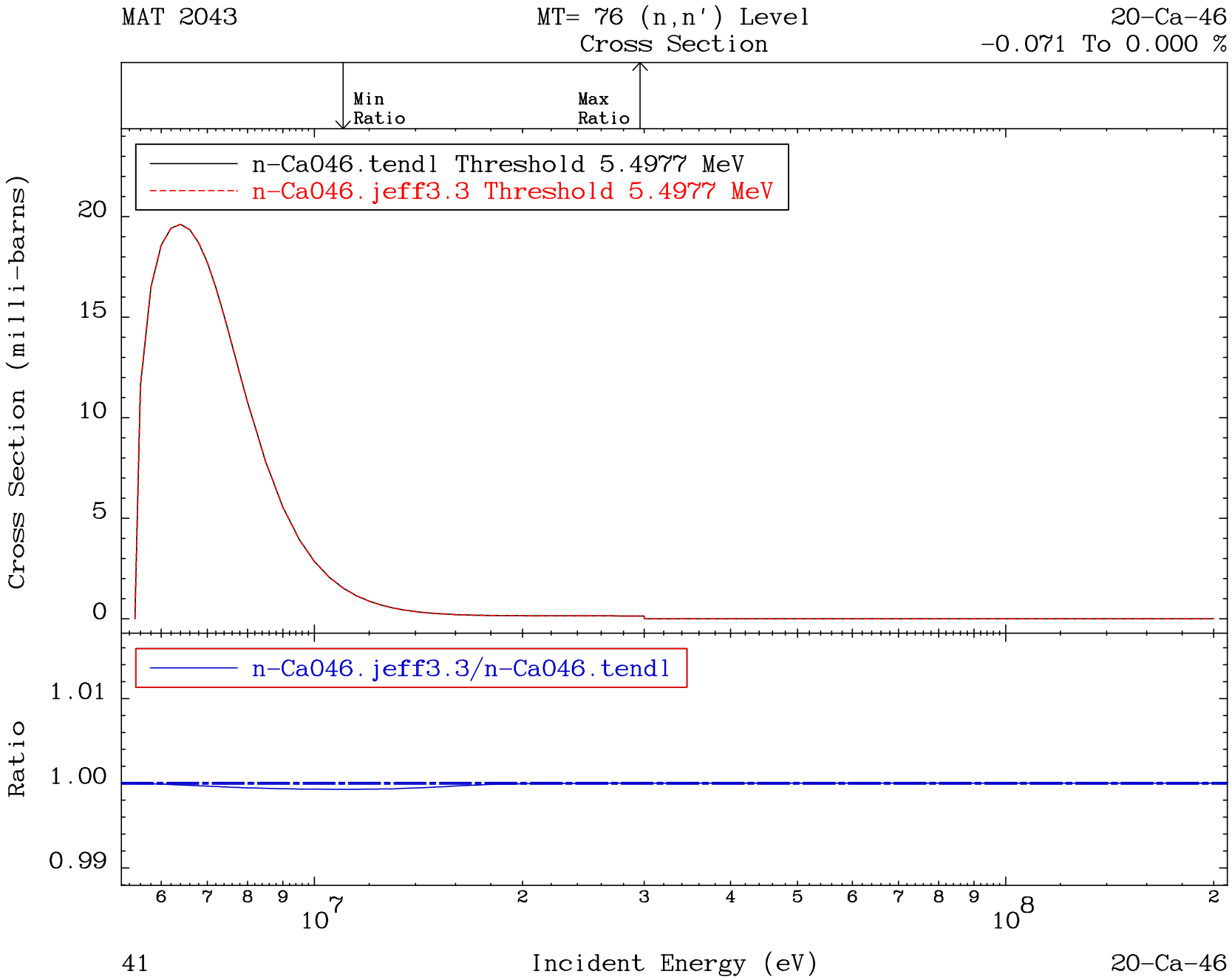

MAT 2043
MT= 71 (n,n') Level
Cross Section
20-Ca-46
-0.072 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.1619 MeV
n-Ca046.jeff3.3 Threshold 5.1619 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
20-Ca-46

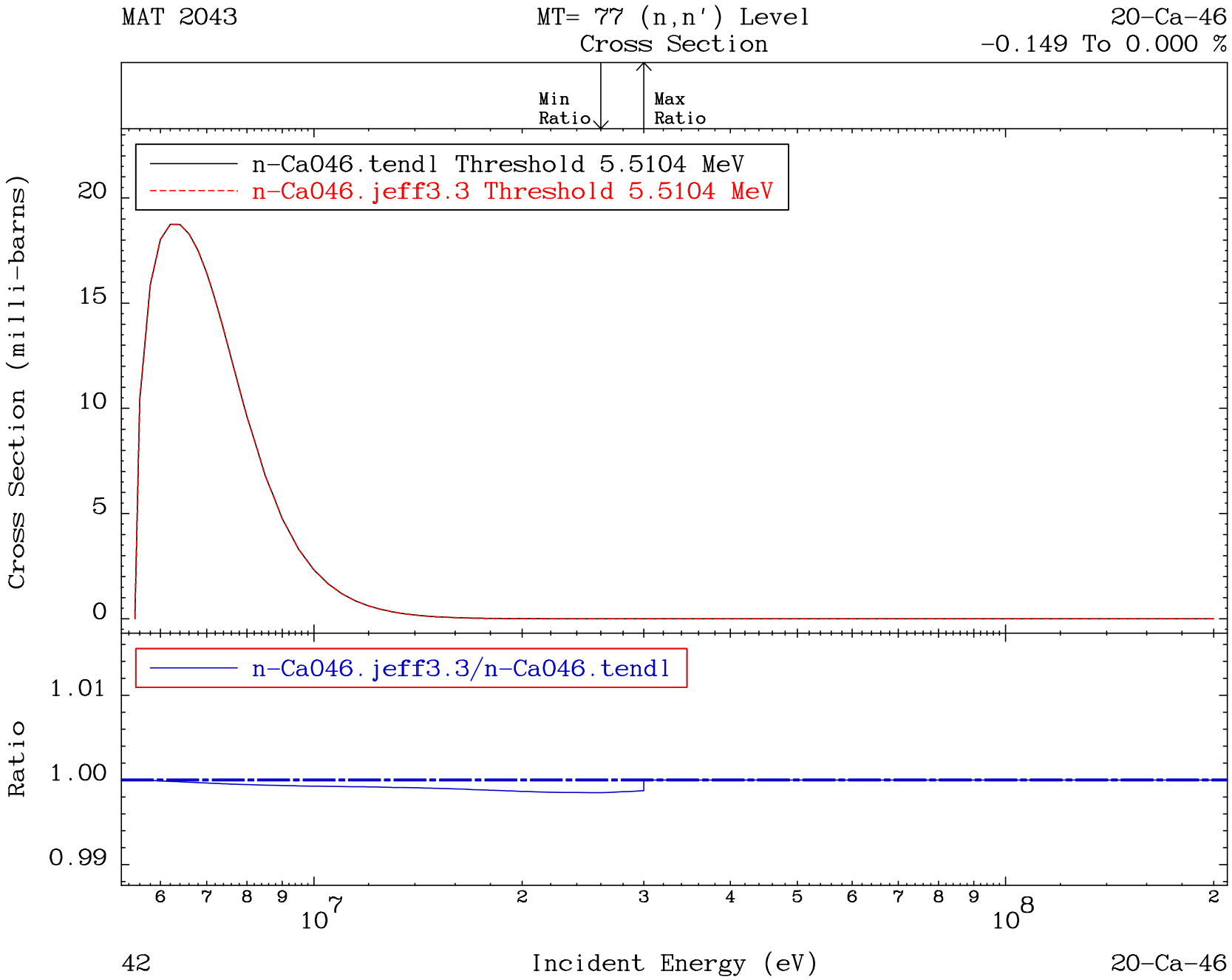

MAT 2043
MT= 72 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.2647 MeV
n-Ca046.jeff3.3 Threshold 5.2647 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
20-Ca-46

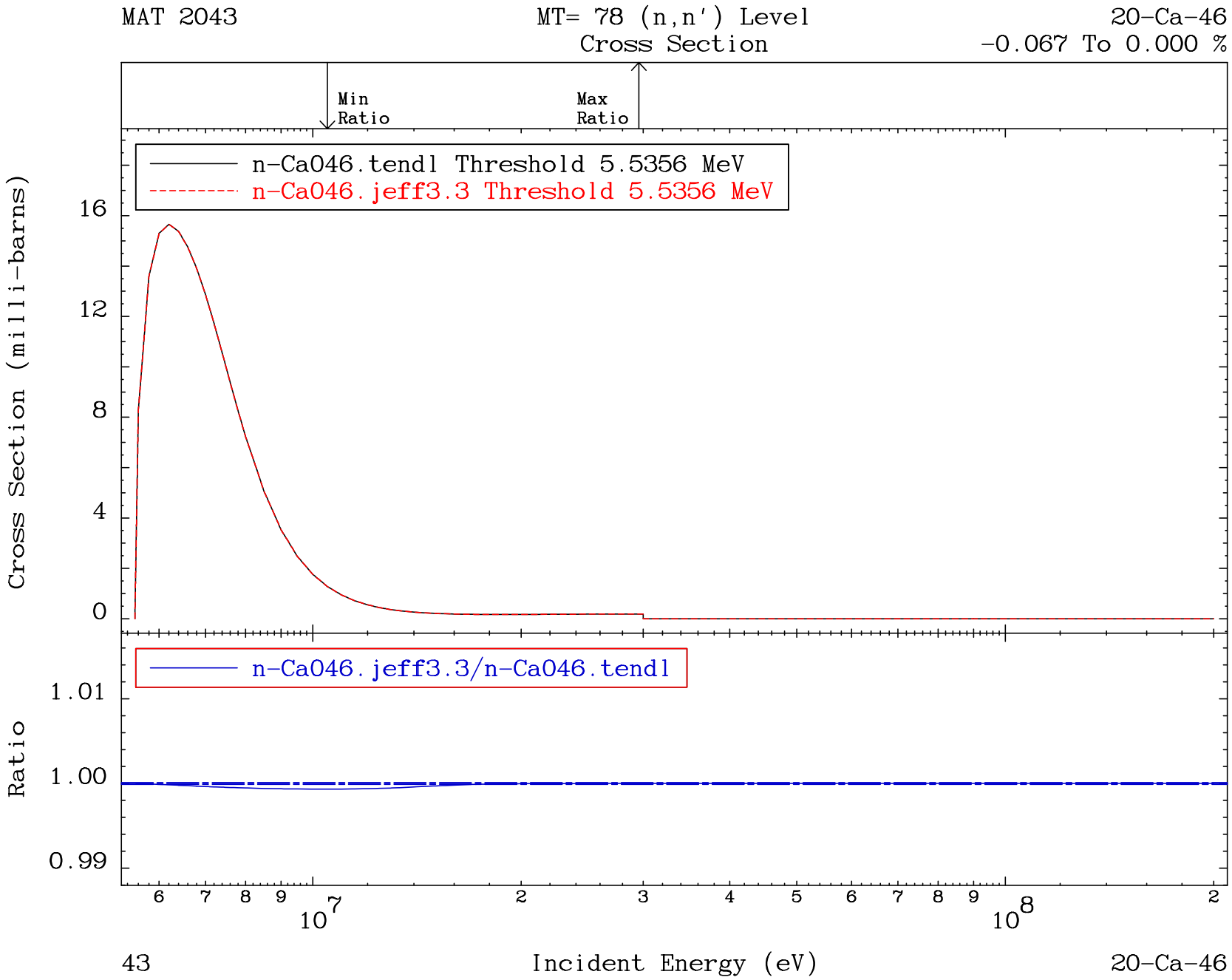

MAT 2043
MT= 73 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 5.3325 MeV
n-Ca046.jeff3.3 Threshold 5.3325 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
20-Ca-46

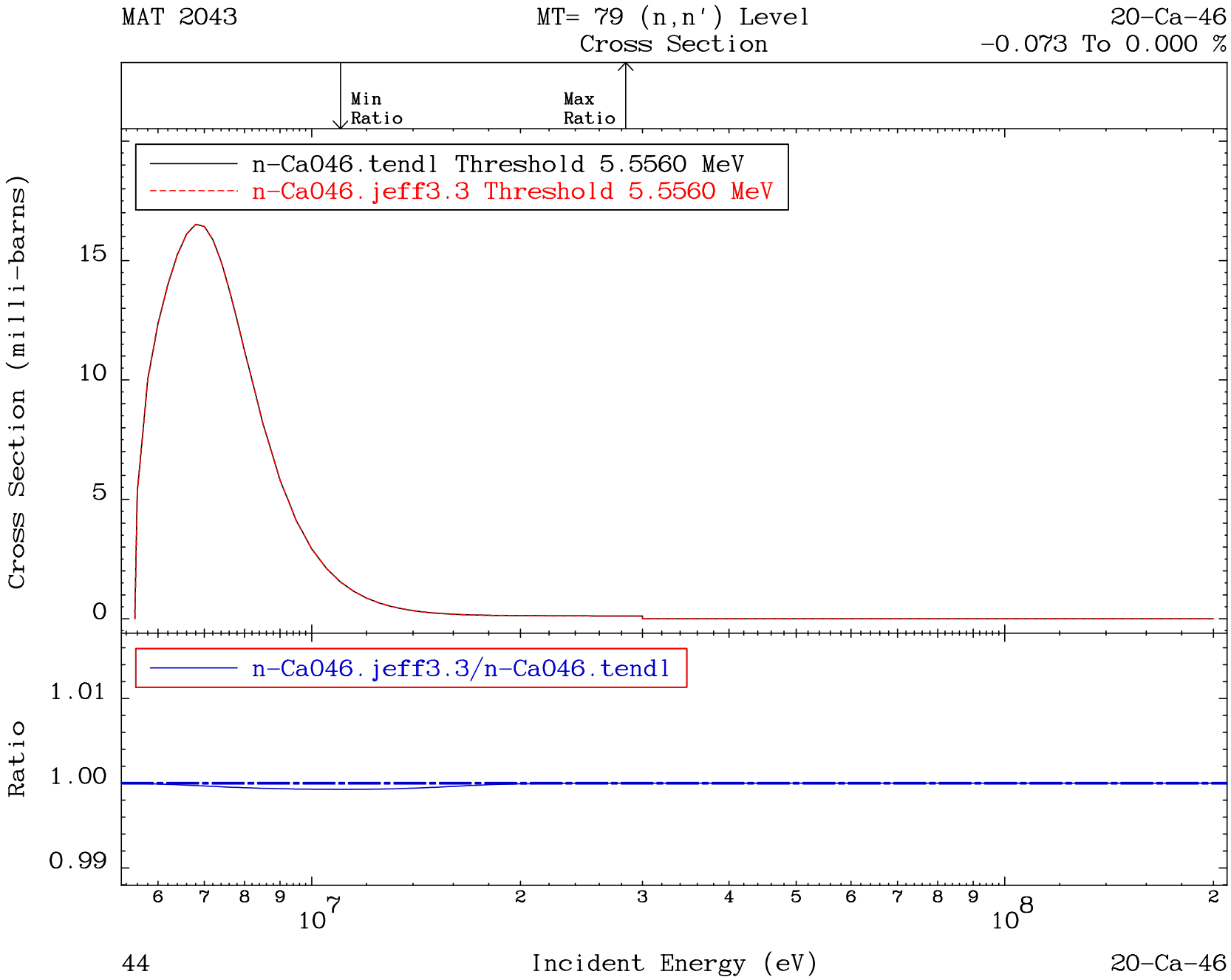

MAT 2043
MT= 74 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.3668 MeV
n-Ca046.jeff3.3 Threshold 5.3668 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
20-Ca-46

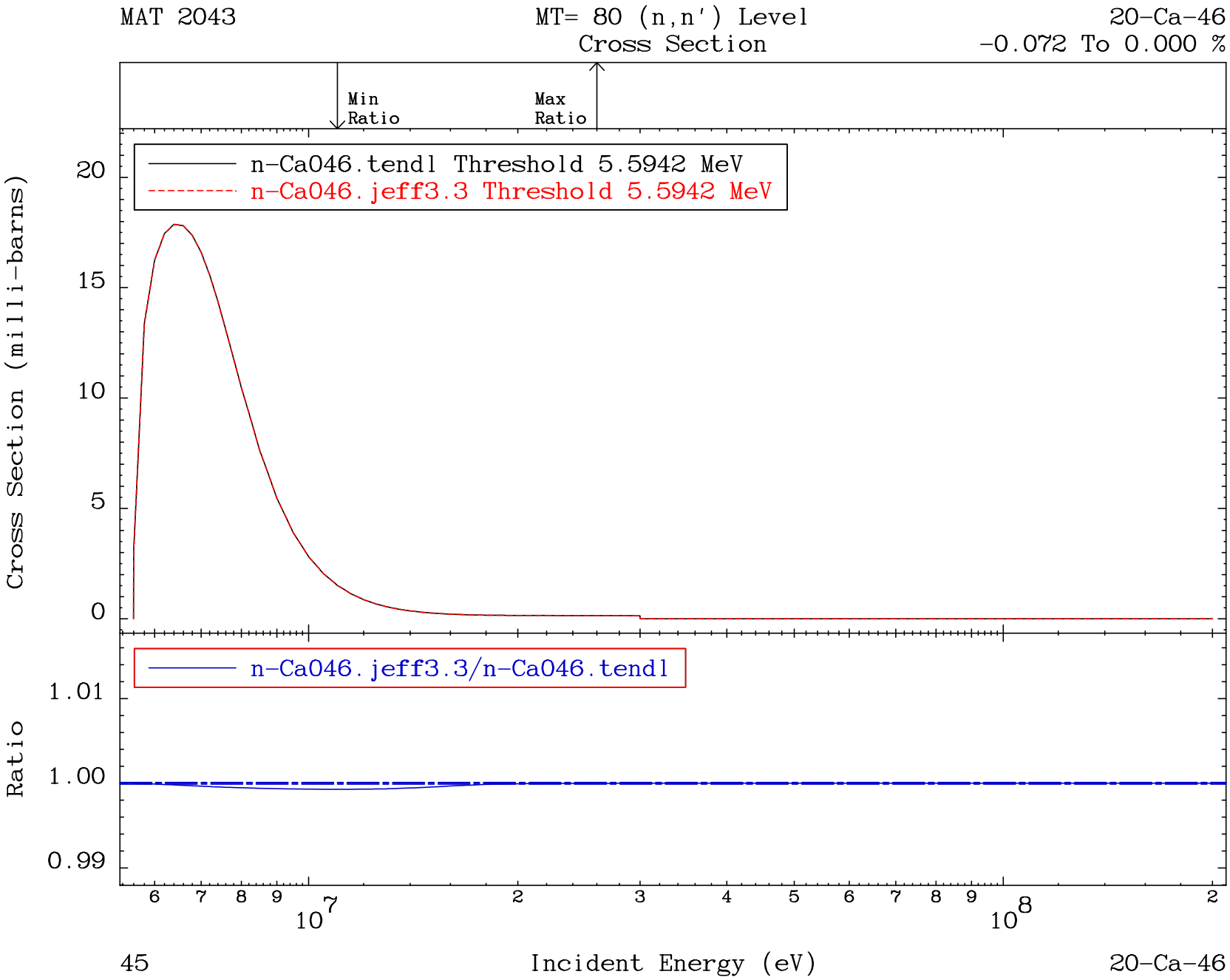

MAT 2043
MT= 75 (n,n') Level
Cross Section
20-Ca-46
-0.150 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.4337 MeV
n-Ca046.jeff3.3 Threshold 5.4337 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
0.99
1.00
1.01
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
20-Ca-46

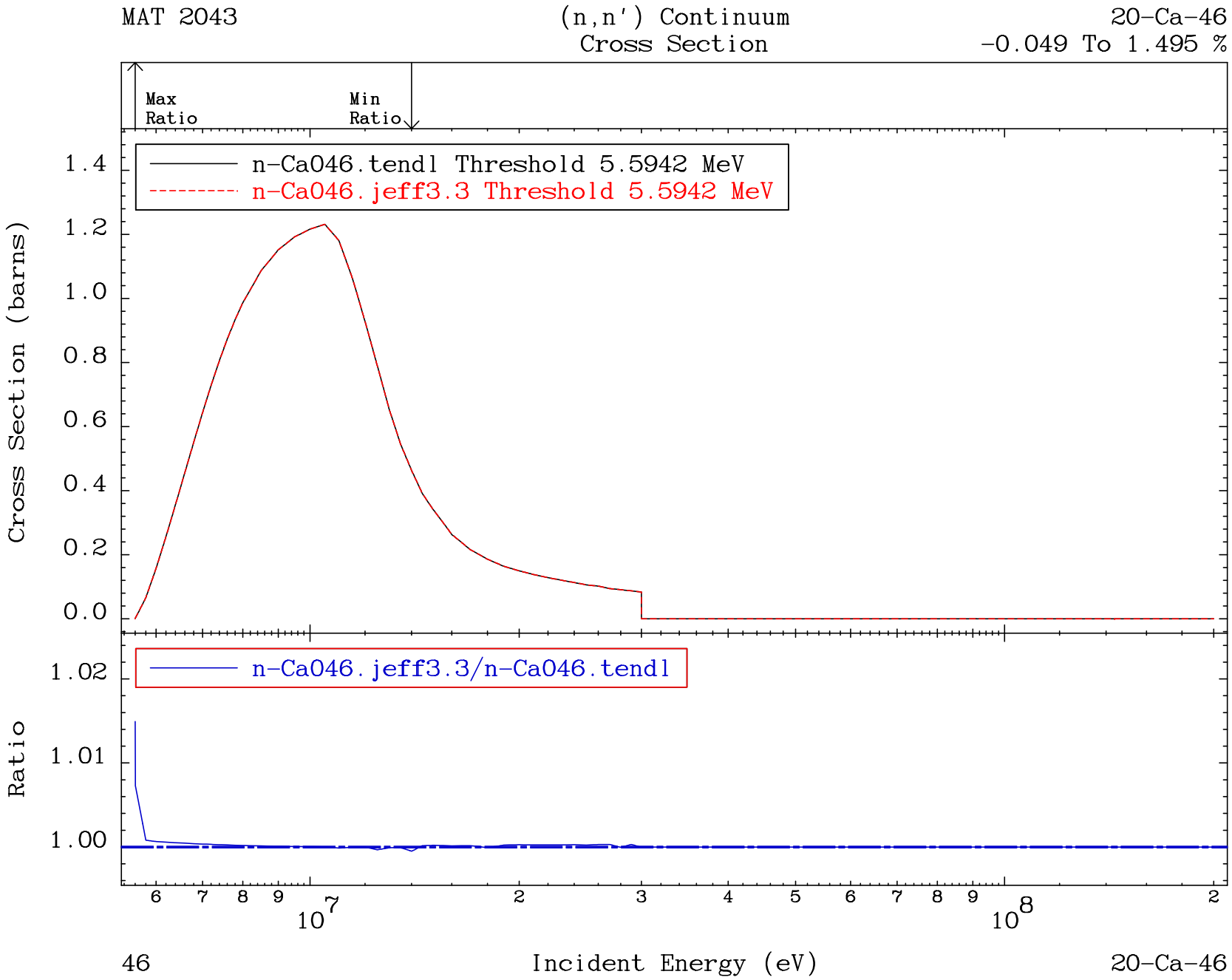

MAT 2043
MT= 76 (n,n') Level
Cross Section
20-Ca-46
-0.071 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 5.4977 MeV
n-Ca046.jeff3.3 Threshold 5.4977 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
20-Ca-46

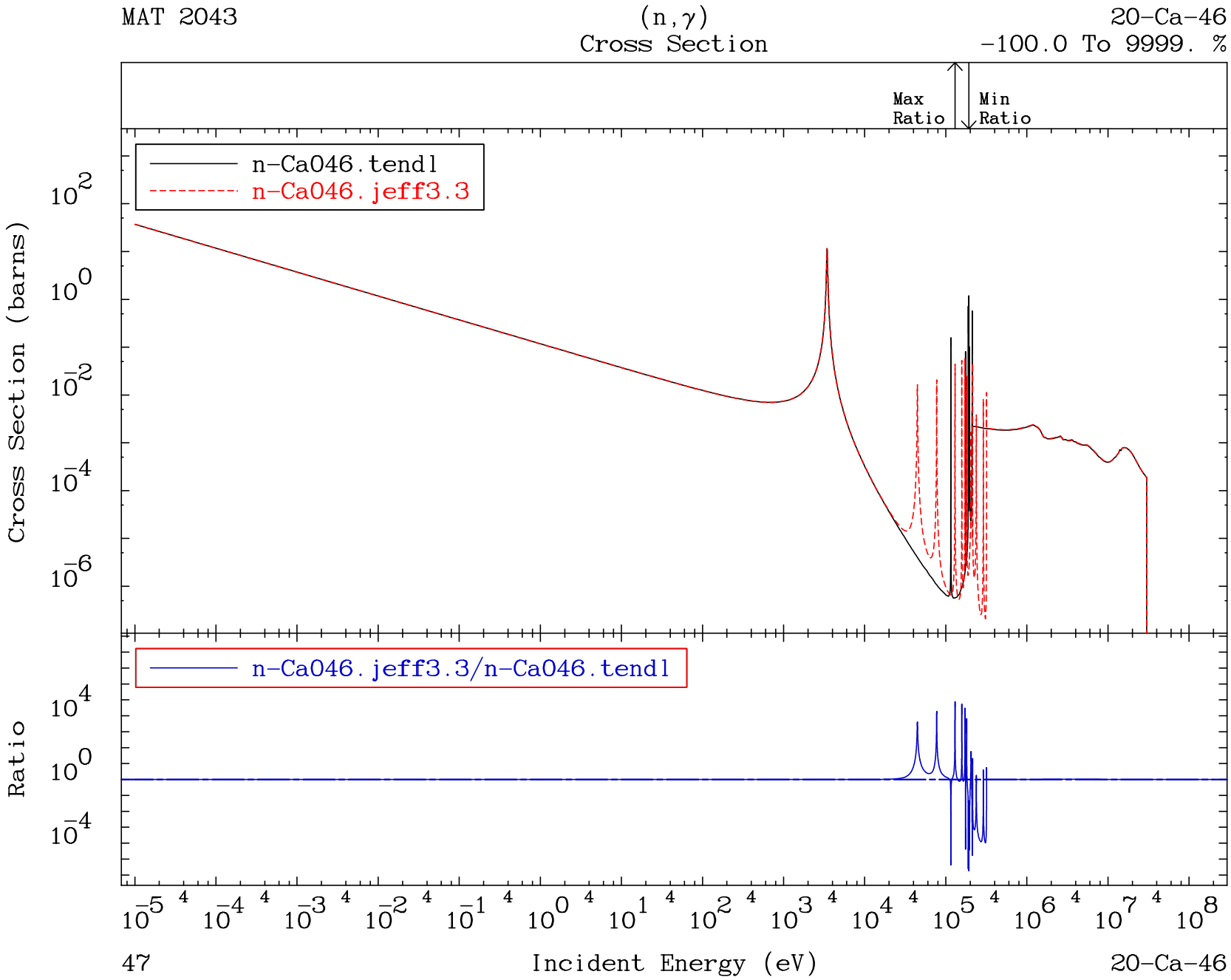

MAT 2043
MT= 77 (n,n') Level
Cross Section
20-Ca-46
-0.149 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.5104 MeV
n-Ca046.jeff3.3 Threshold 5.5104 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
20-Ca-46

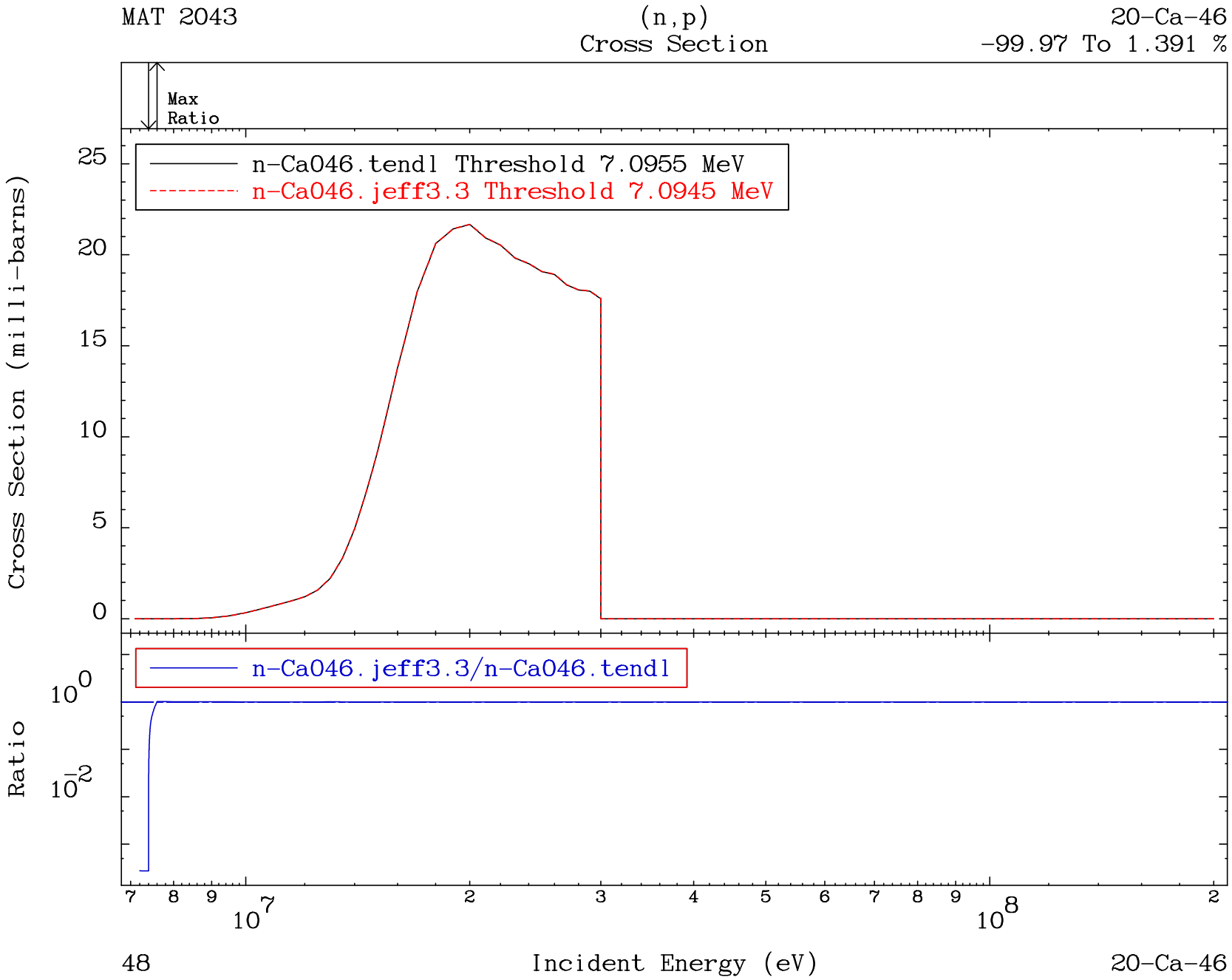

MAT 2043
MT= 78 (n,n') Level
Cross Section
20-Ca-46
-0.067 To 0.000 %
Min
Ratio
Max
Ratio
n-Ca046.tendl Threshold 5.5356 MeV
n-Ca046.jeff3.3 Threshold 5.5356 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
43
Incident Energy (eV)
20-Ca-46

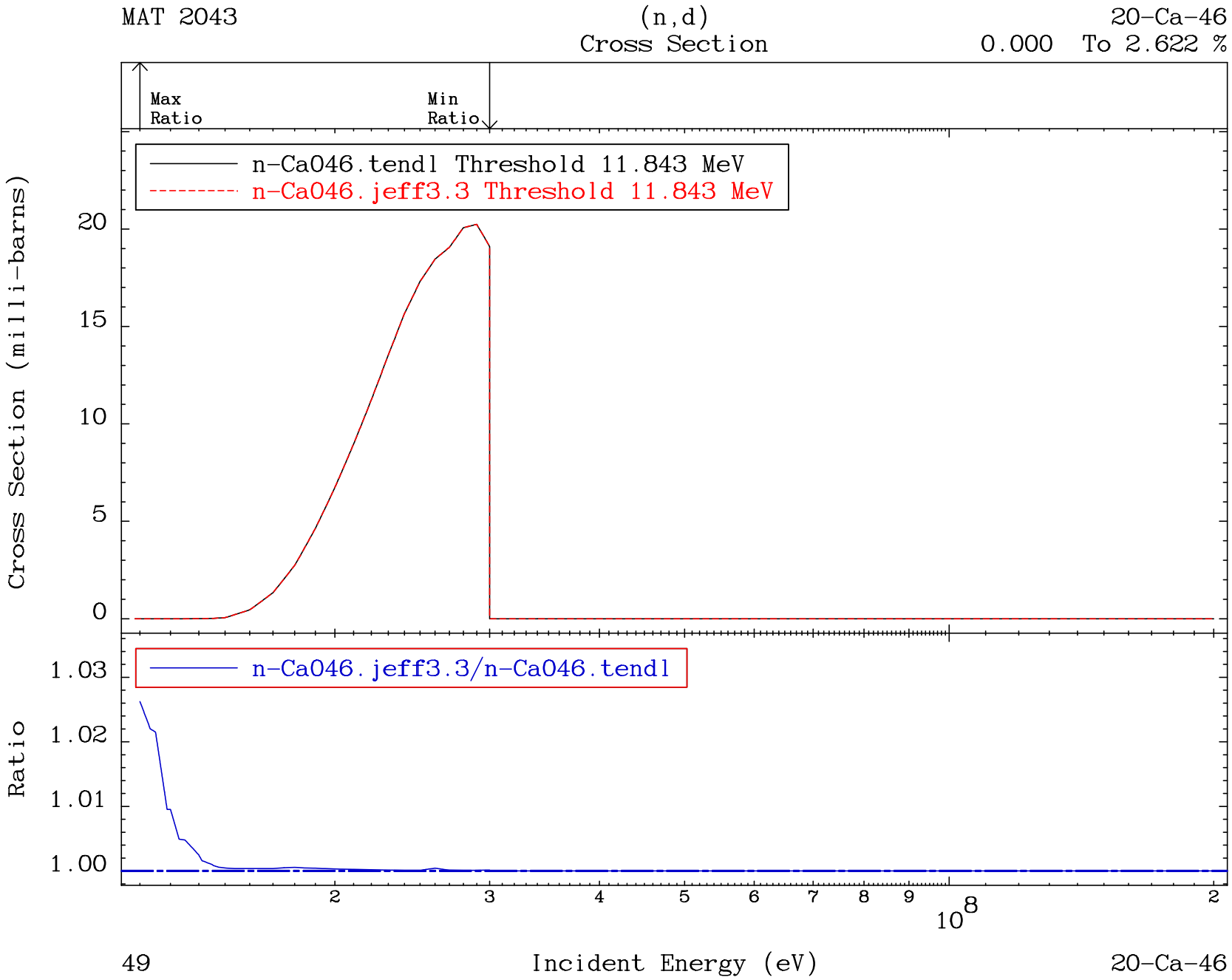

MAT 2043
MT= 79 (n,n') Level
Cross Section
20-Ca-46
-0.073 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.5560 MeV
n-Ca046.jeff3.3 Threshold 5.5560 MeV
Cross Section (milli-barns)
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
20-Ca-46

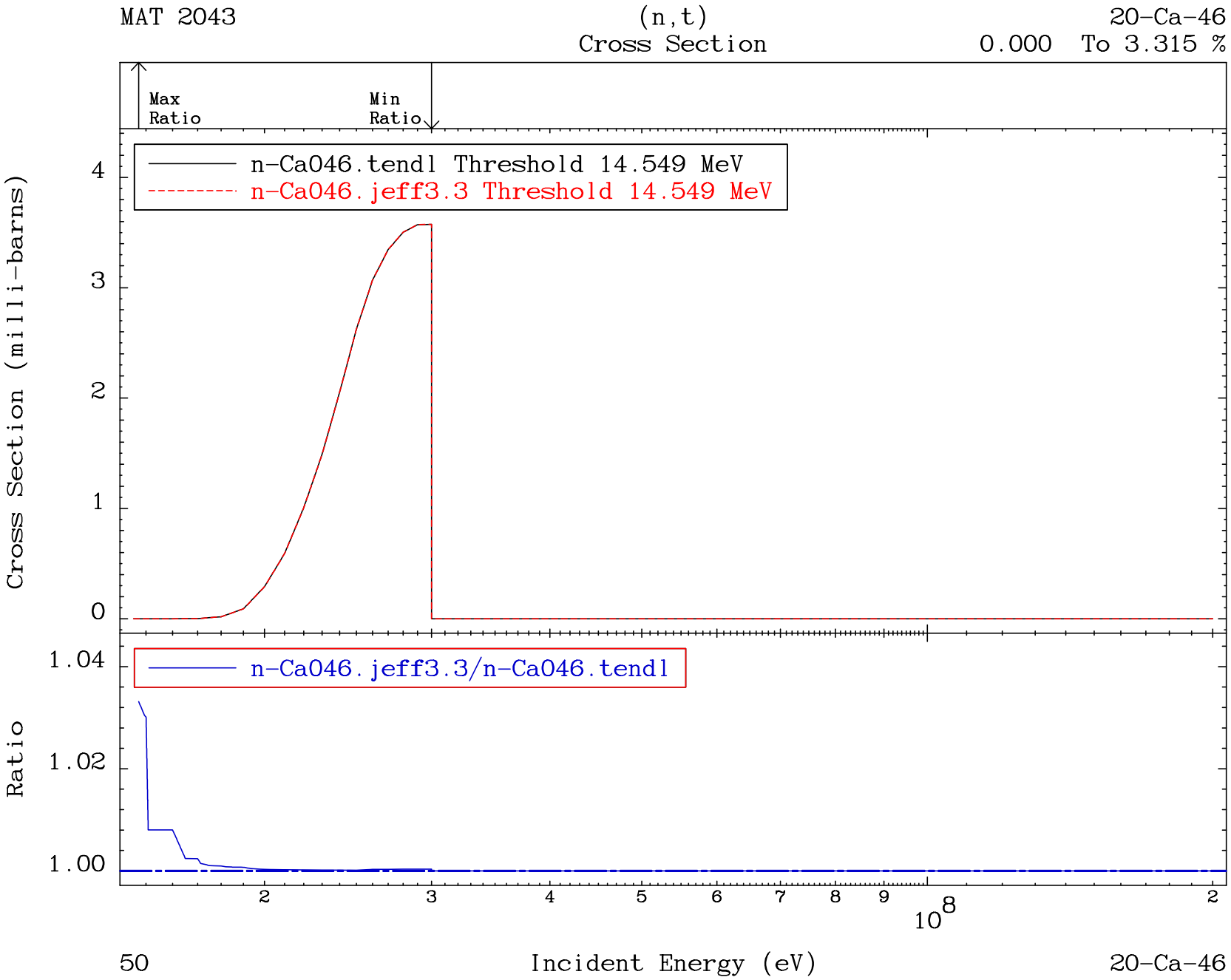

MAT 2043
MT= 80 (n,n') Level
Cross Section
20-Ca-46
-0.072 To 0.000 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 5.5942 MeV
n-Ca046.jeff3.3 Threshold 5.5942 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
20-Ca-46

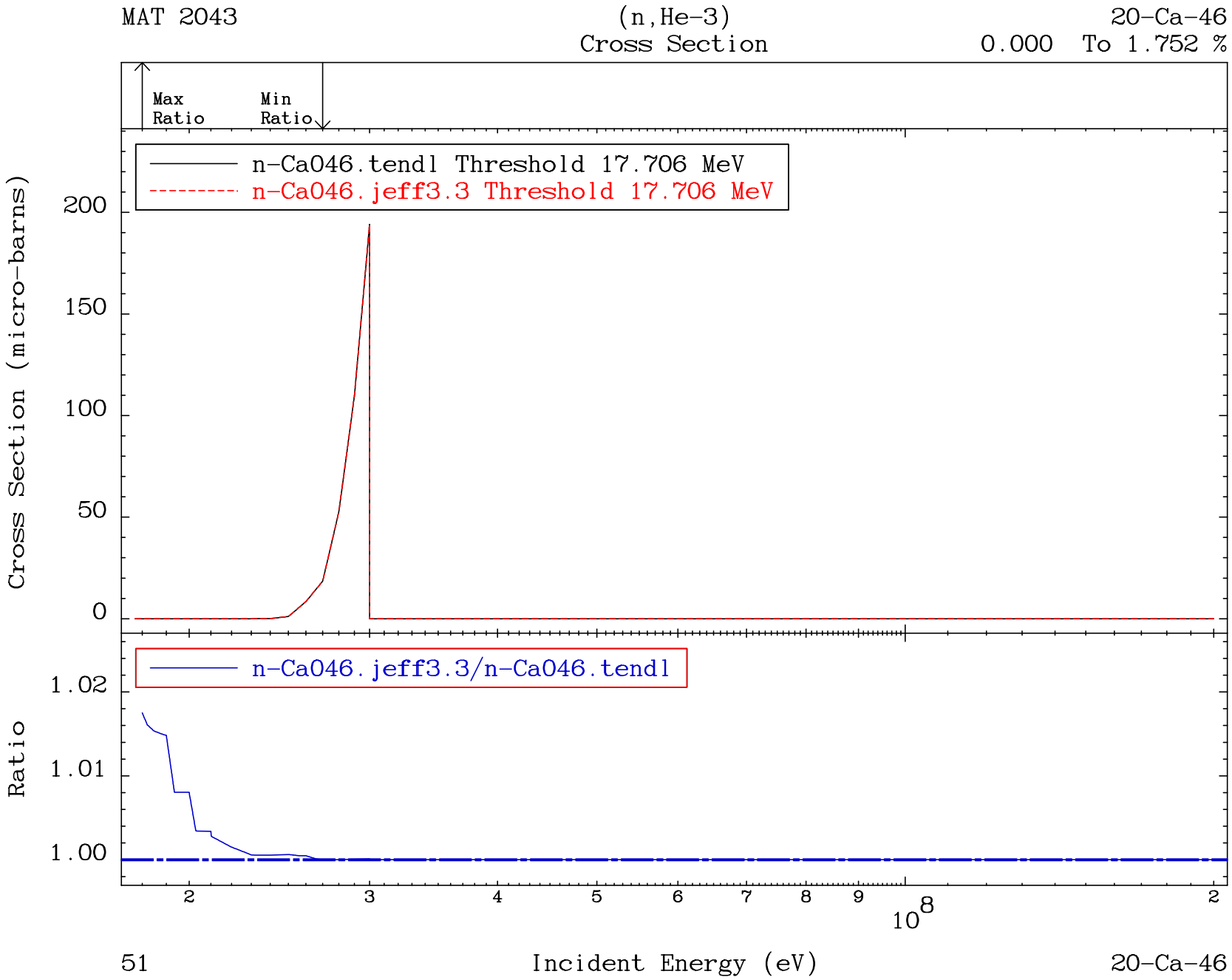

MAT 2043
(n,n') Continuum
Cross Section
20-Ca-46
-0.049 To 1.495 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 5.5942 MeV
n-Ca046.jeff3.3 Threshold 5.5942 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
20-Ca-46

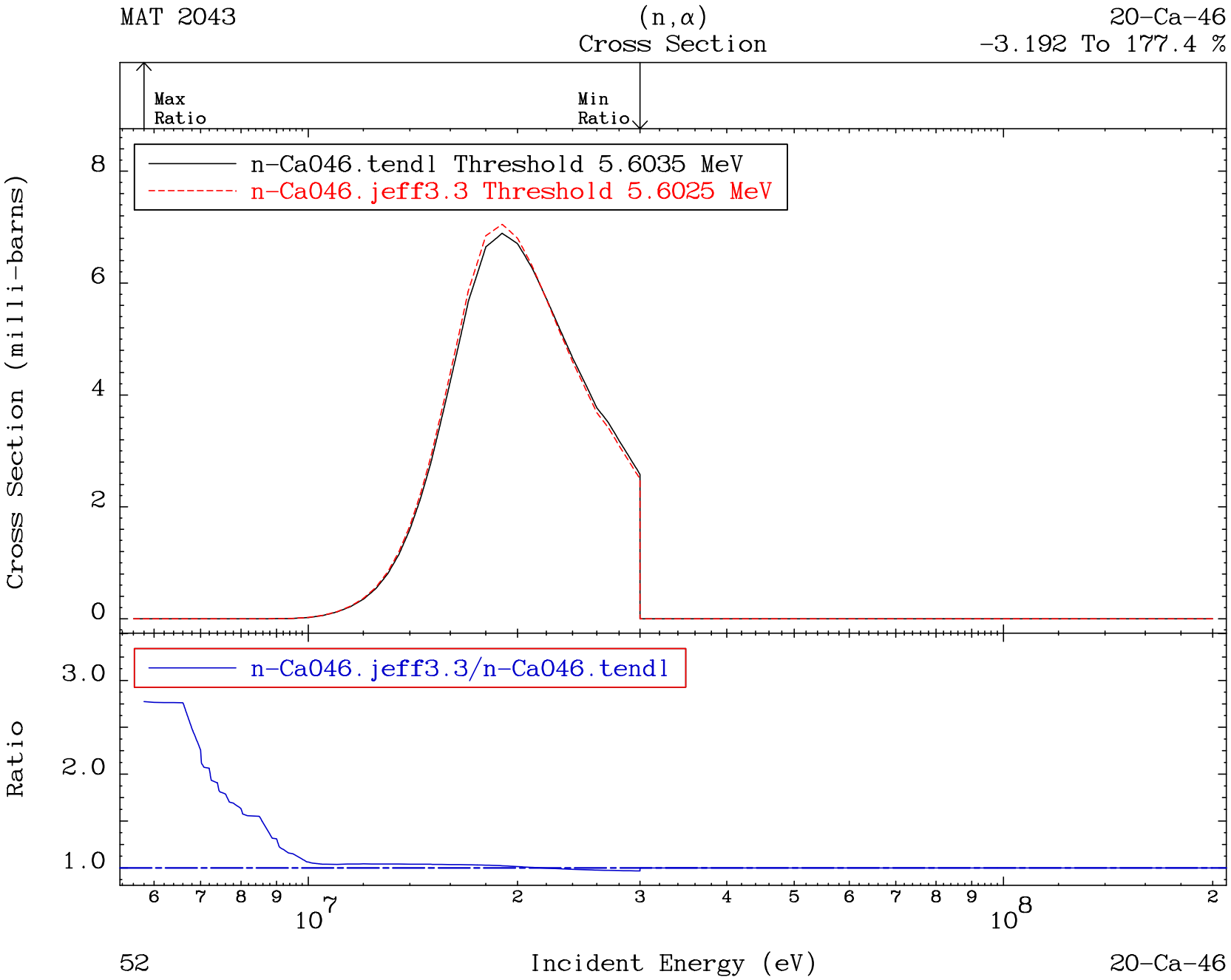

MAT 2043
(n,γ)
Cross Section
20-Ca-46
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
47
Incident Energy (eV)
20-Ca-46

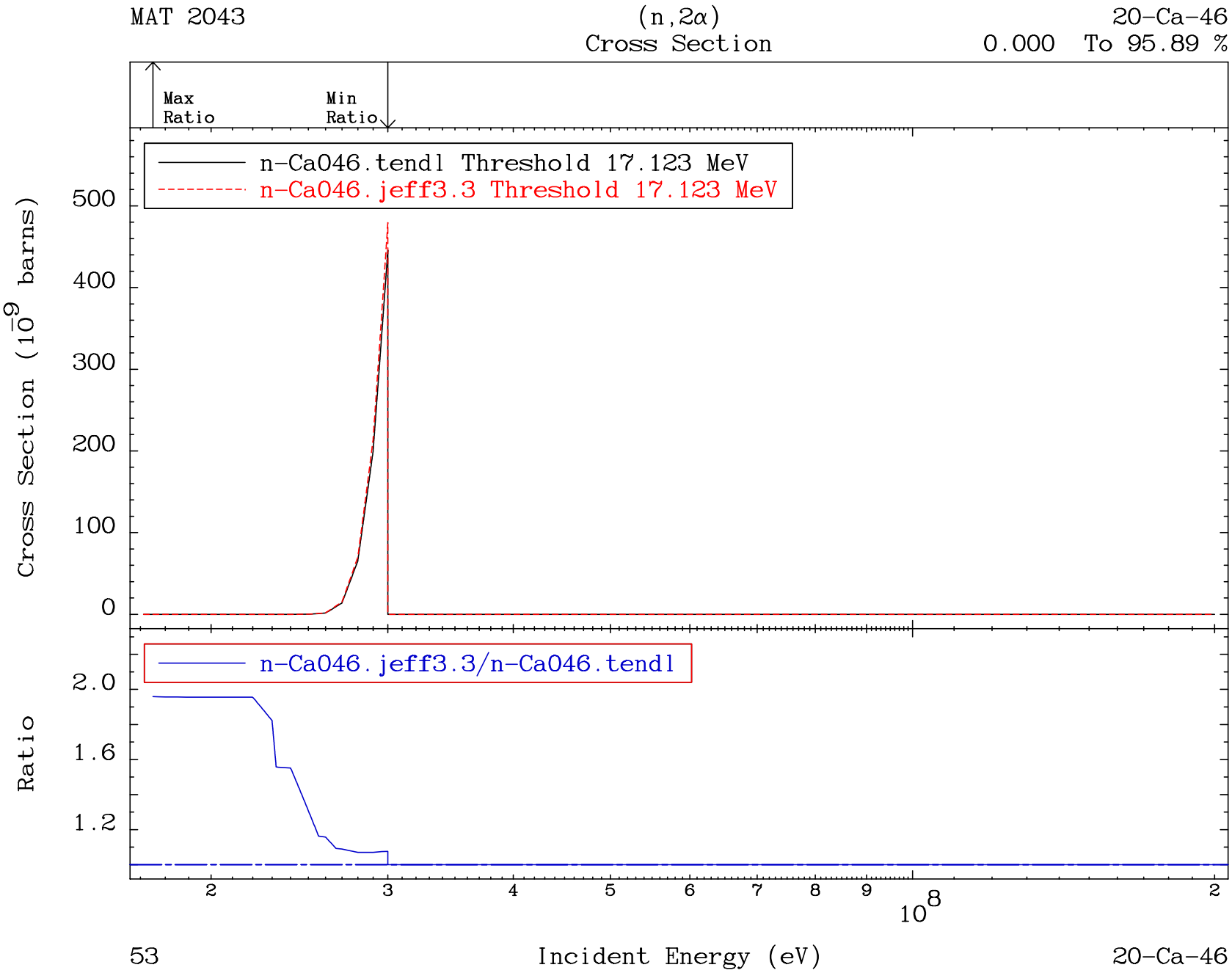

MAT 2043
(n,p)
Cross Section
20-Ca-46
-99.97 To 1.391 %
Max
Ratio
n-Ca046.tendl Threshold 7.0955 MeV
n-Ca046.jeff3.3 Threshold 7.0945 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
10^0
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
20-Ca-46

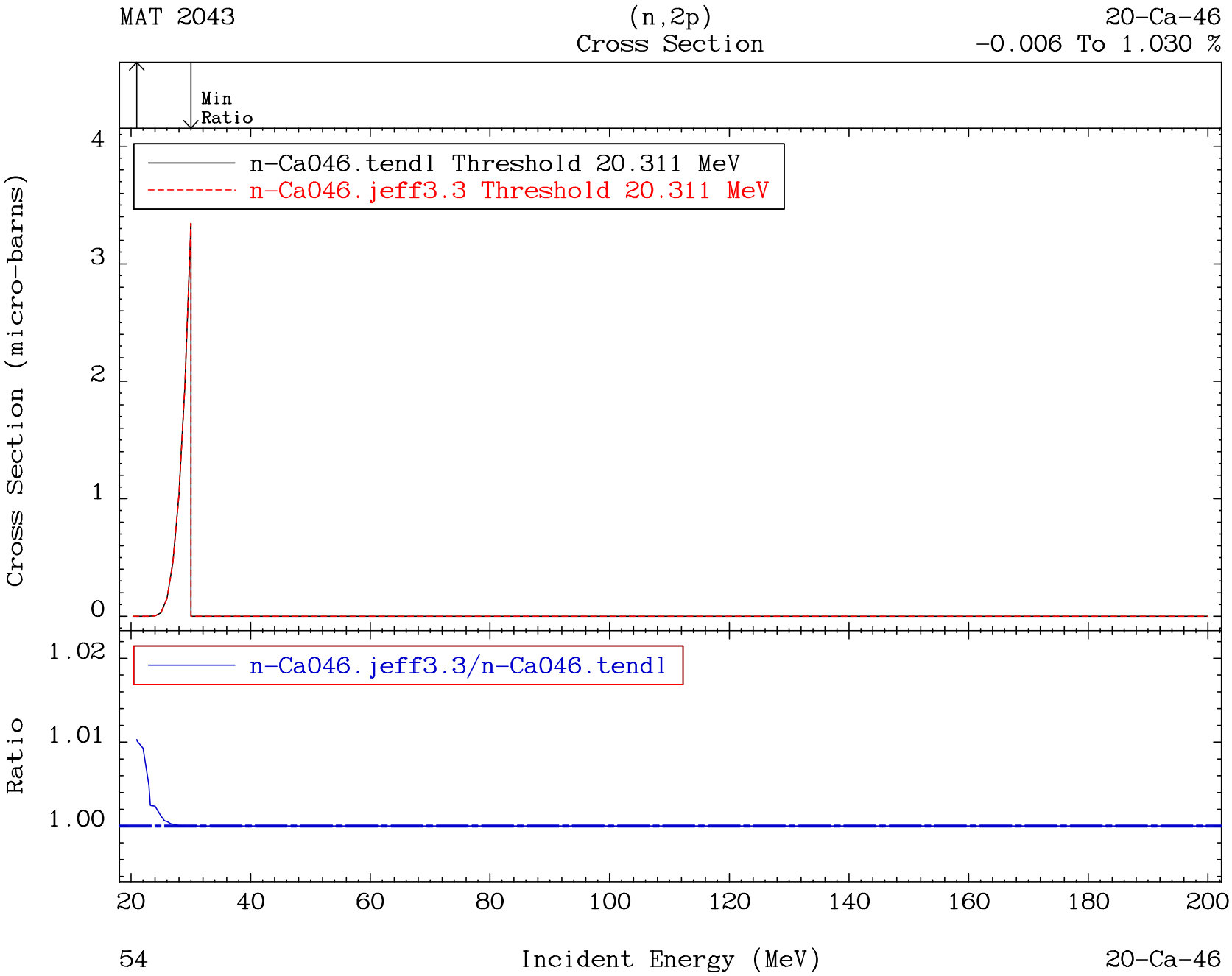

MAT 2043
(n,d)
Cross Section
20-Ca-46
0.000 To 2.622 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 11.843 MeV
n-Ca046.jeff3.3 Threshold 11.843 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
20-Ca-46

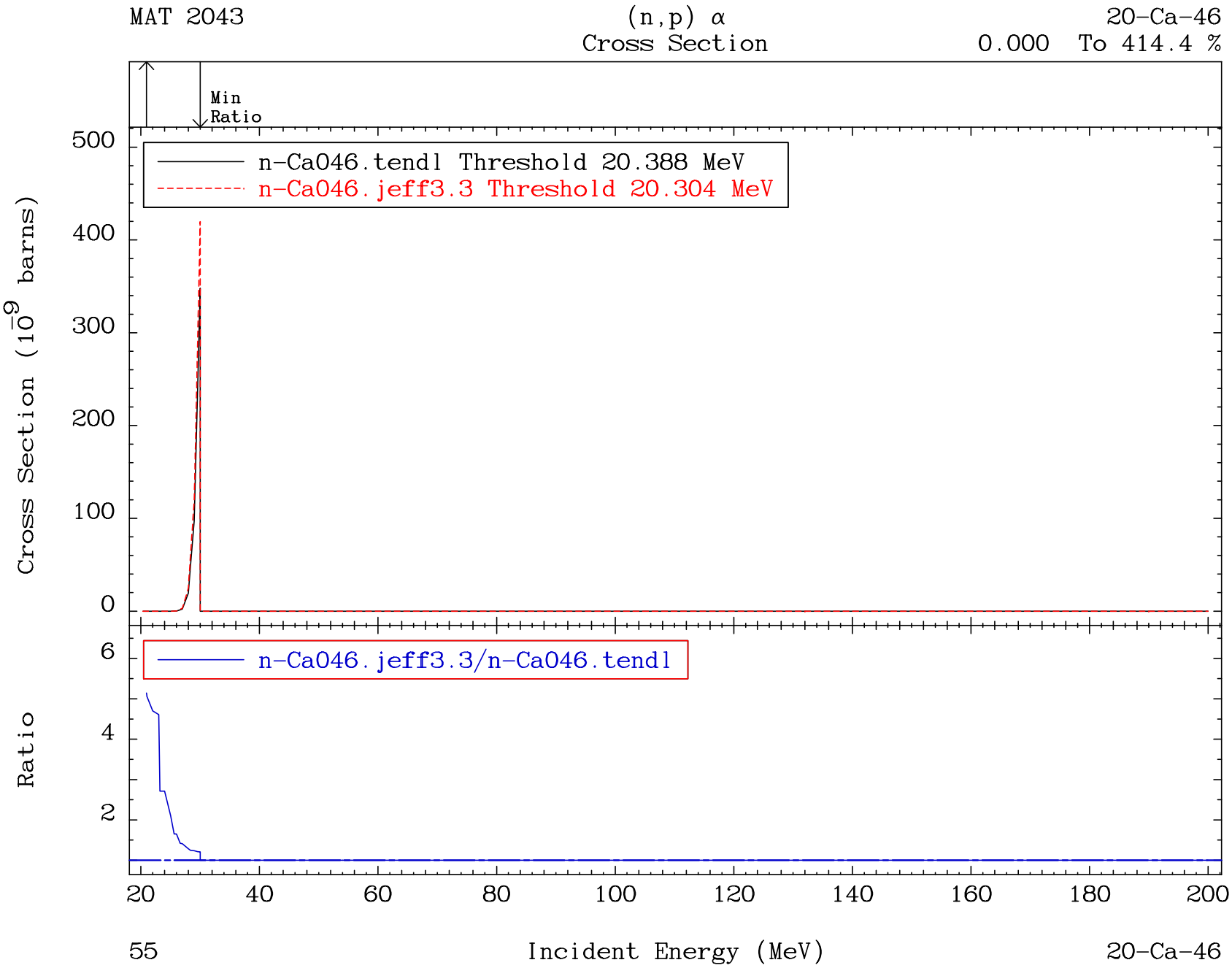

MAT 2043
(n,t)
Cross Section
20-Ca-46
0.000 To 3.315 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 14.549 MeV
n-Ca046.jeff3.3 Threshold 14.549 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.00
1.02
1.04
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
20-Ca-46

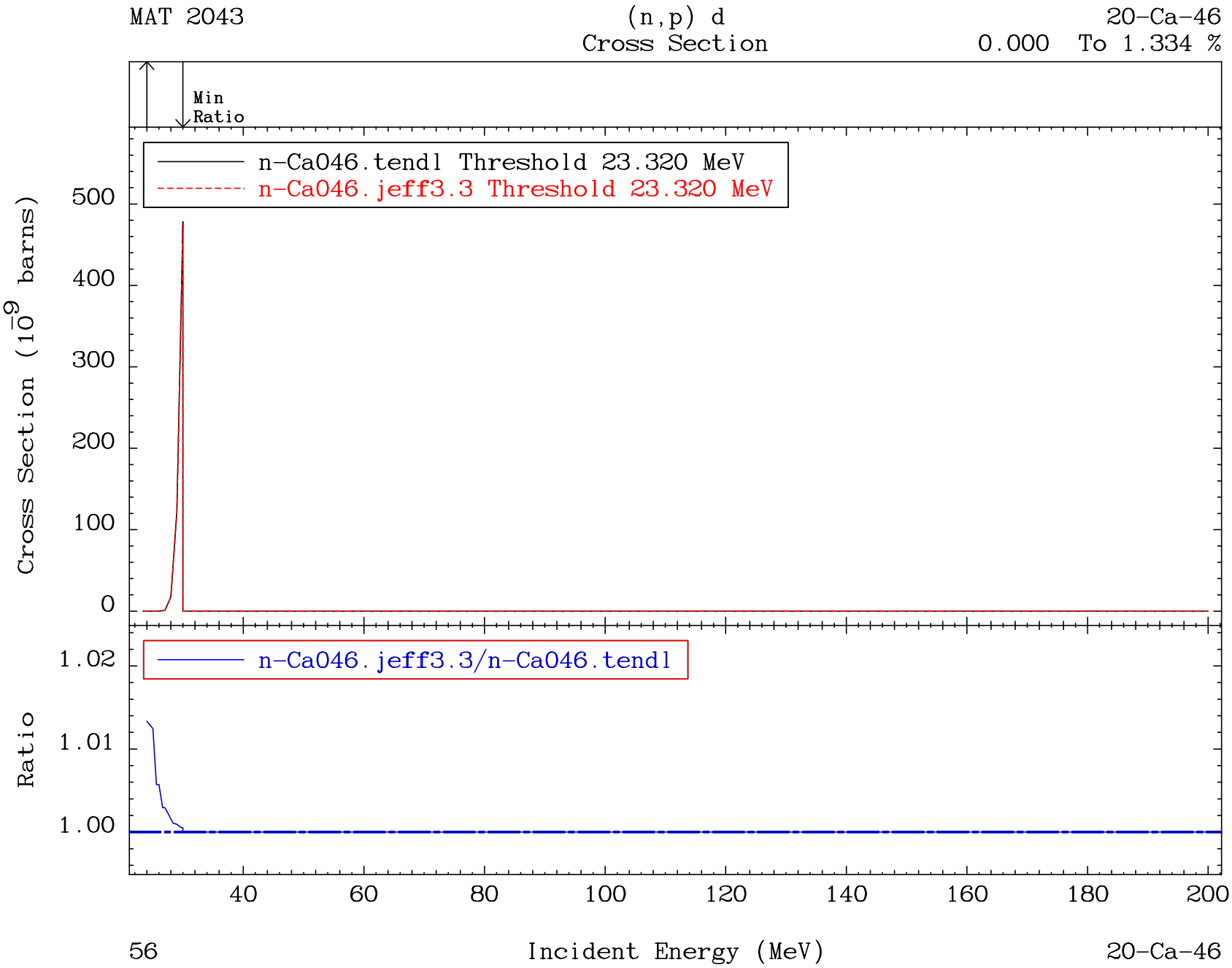

MAT 2043
(n,He-3)
Cross Section
20-Ca-46
0.000 To 1.752 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 17.706 MeV
n-Ca046.jeff3.3 Threshold 17.706 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
20-Ca-46

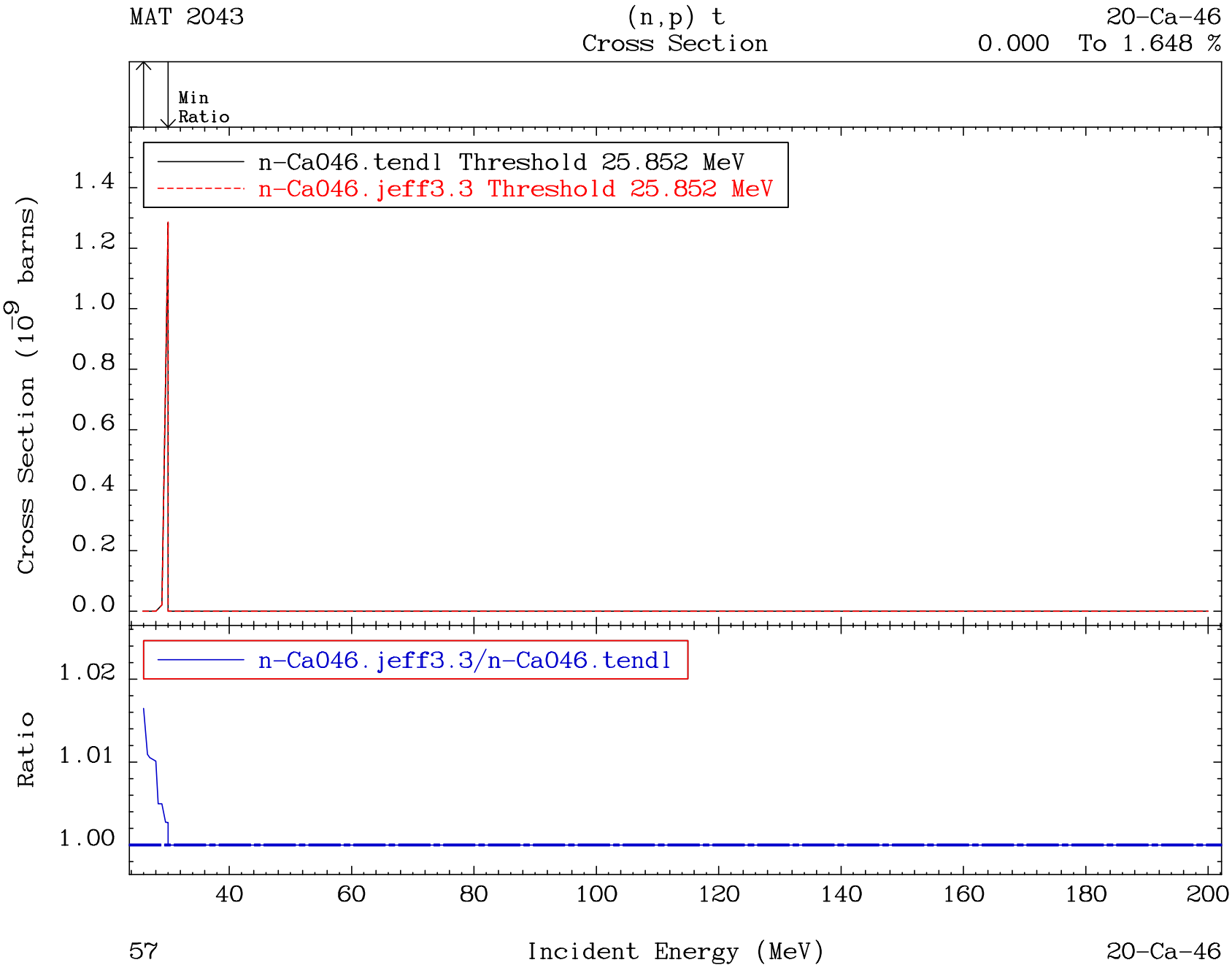

MAT 2043
(n,α)
Cross Section
20-Ca-46
-3.192 To 177.4 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 5.6035 MeV
n-Ca046.jeff3.3 Threshold 5.6025 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.0
2.0
3.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
20-Ca-46

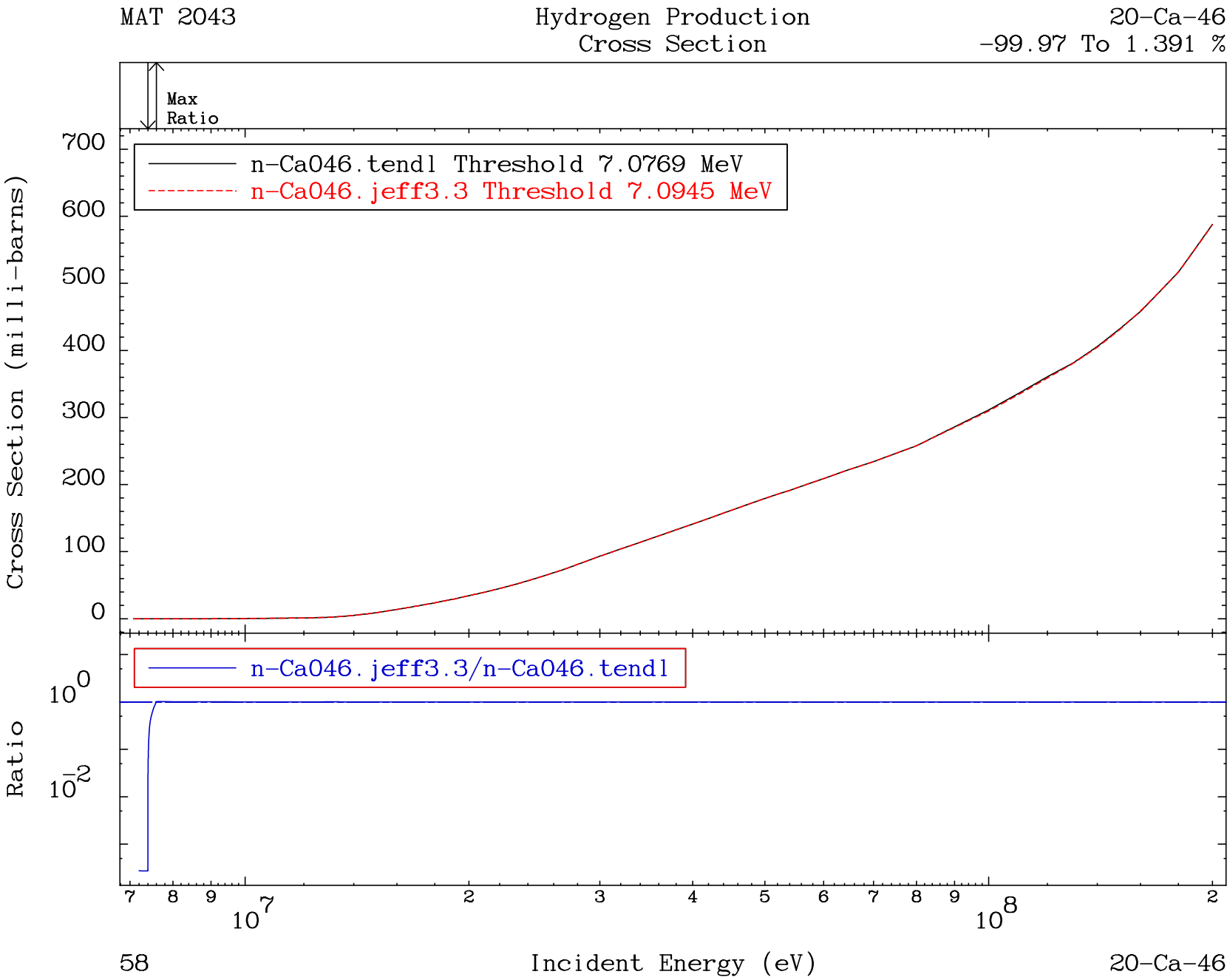

MAT 2043
(n,2α)
Cross Section
20-Ca-46
0.000 To 95.89 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 17.123 MeV
n-Ca046.jeff3.3 Threshold 17.123 MeV
Cross Section (10^-9 barns)
500
400
300
200
100
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
20-Ca-46

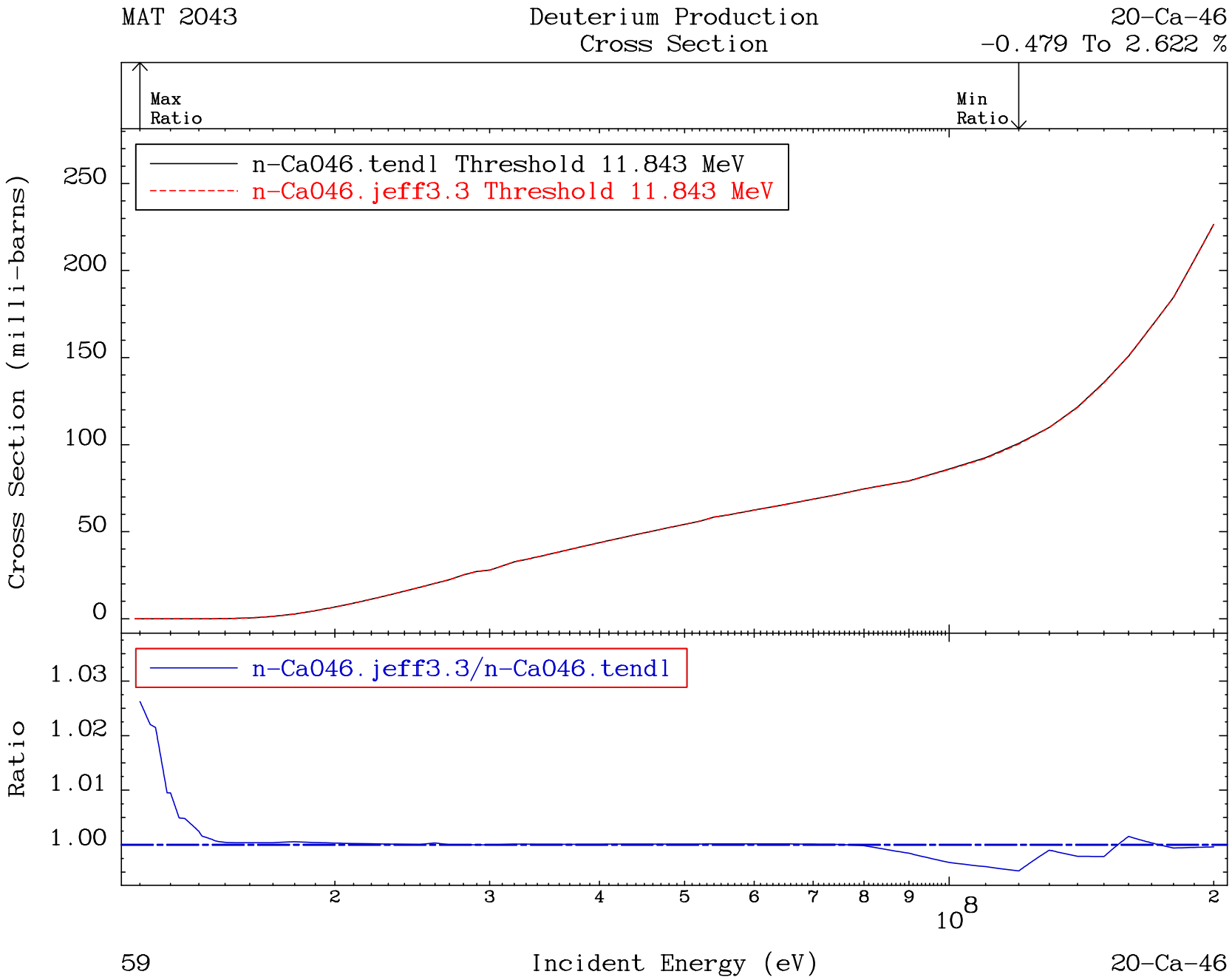

MAT 2043
(n,2p)
Cross Section
20-Ca-46
-0.006 To 1.030 %
Min
Ratio
n-Ca046.tendl Threshold 20.311 MeV
n-Ca046.jeff3.3 Threshold 20.311 MeV
Cross Section (micro-barns)
0
1
2
3
4
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.00
1.01
1.02
20
40
60
80
100
120
140
160
180
200
54
Incident Energy (MeV)
20-Ca-46

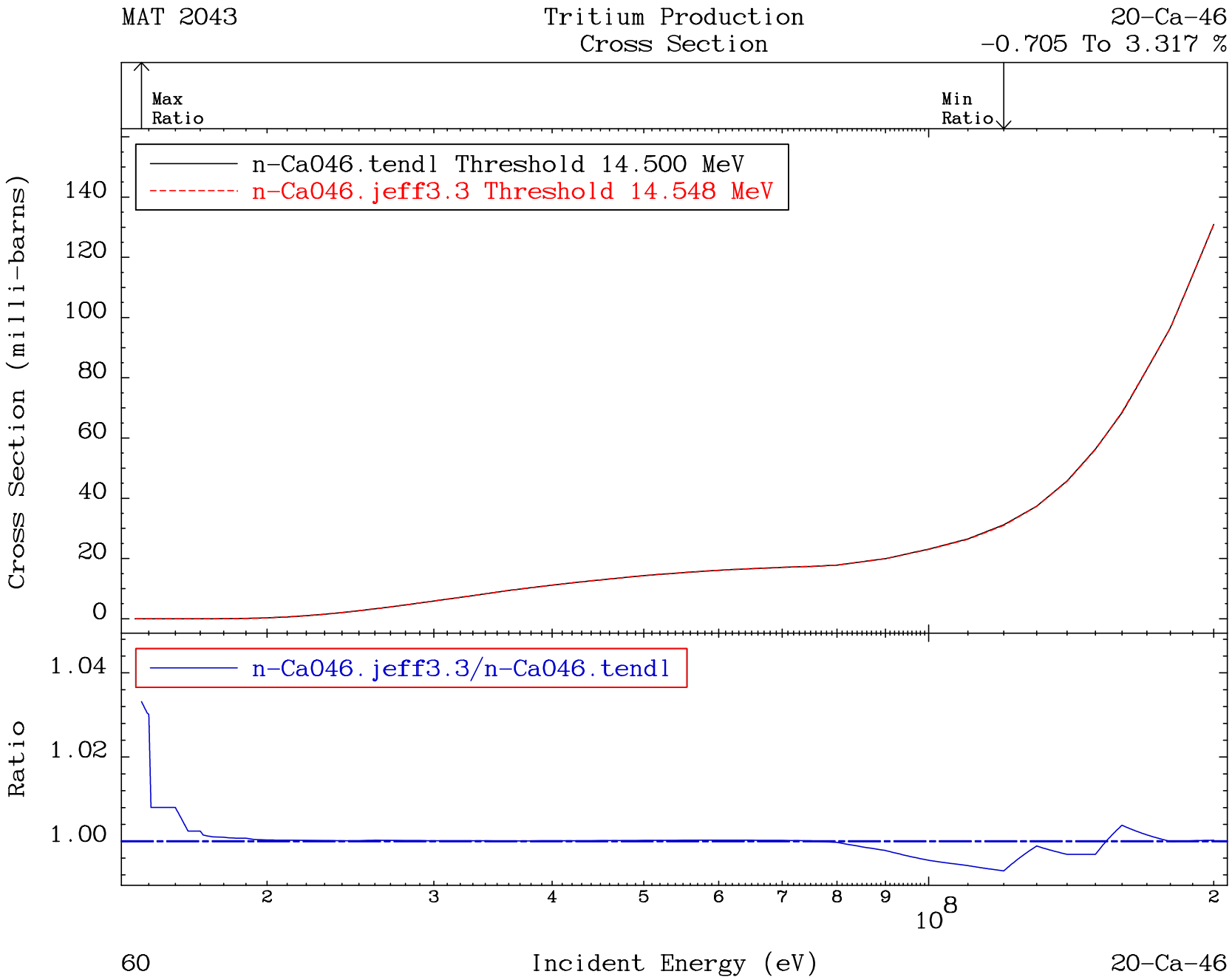

MAT 2043
(n,p) α
Cross Section
20-Ca-46
0.000 To 414.4 %
Min
Ratio
n-Ca046.tendl Threshold 20.388 MeV
n-Ca046.jeff3.3 Threshold 20.304 MeV
Cross Section (10^-9 barns)
500
400
300
200
100
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
6
4
2
20
40
60
80
100
120
140
160
180
200
55
Incident Energy (MeV)
20-Ca-46

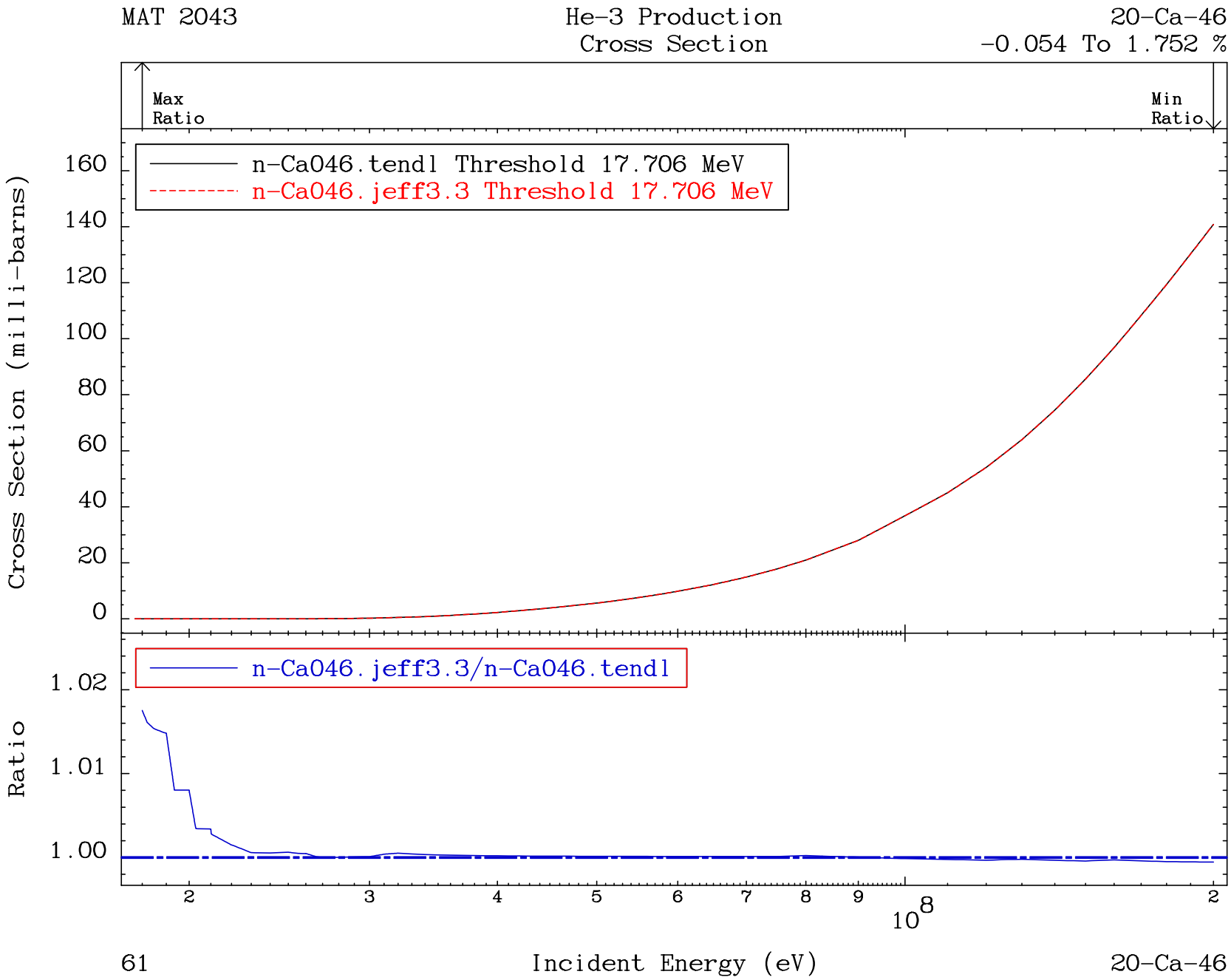

MAT 2043
(n,p) d
Cross Section
20-Ca-46
0.000 To 1.334 %
Min
Ratio
n-Ca046.tendl Threshold 23.320 MeV
n-Ca046.jeff3.3 Threshold 23.320 MeV
Cross Section (10^-9 barns)
500
400
300
200
100
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
56
Incident Energy (MeV)
20-Ca-46

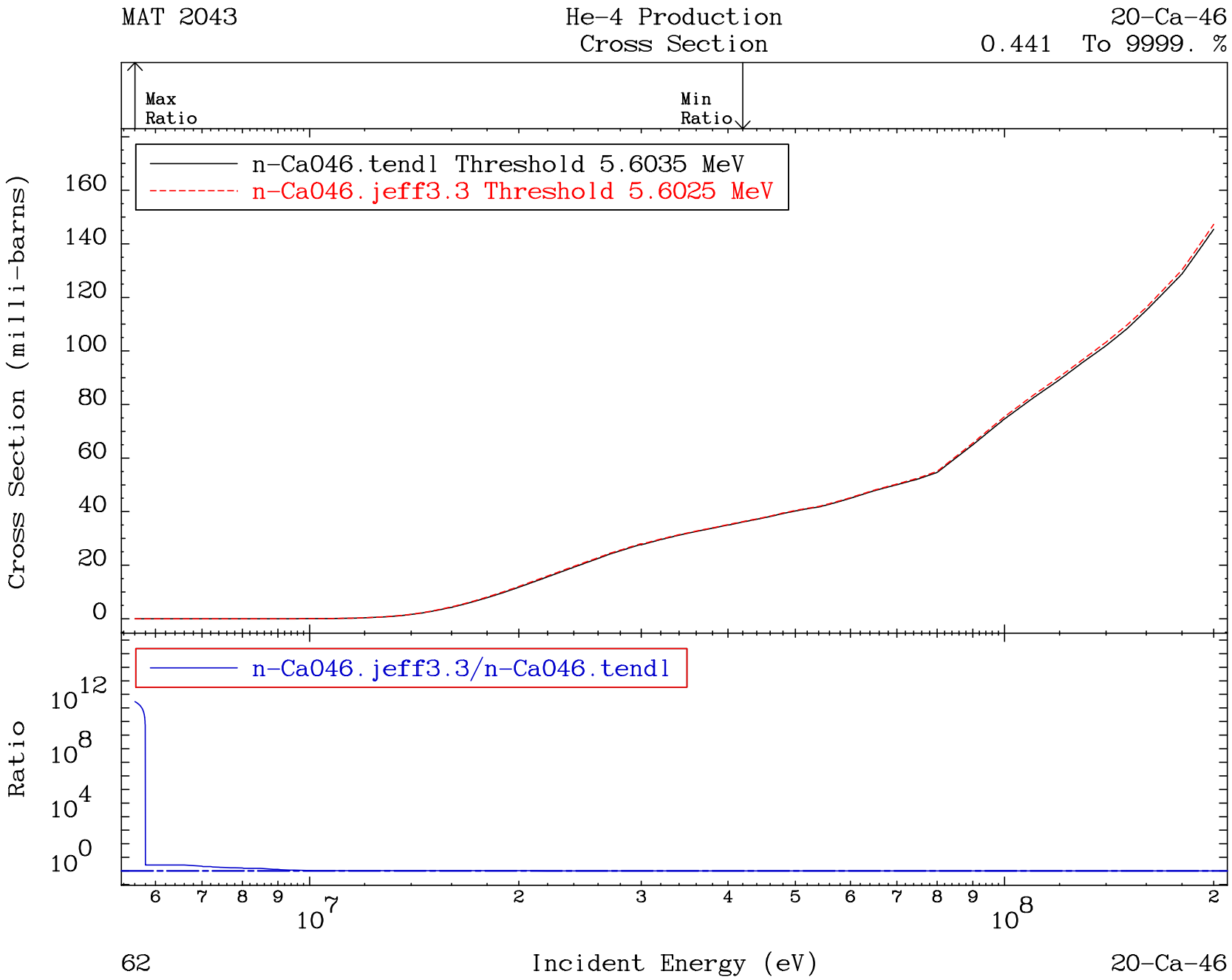

MAT 2043
(n,p) t
Cross Section
20-Ca-46
0.000 To 1.648 %
Min
Ratio
n-Ca046.tendl Threshold 25.852 MeV
n-Ca046.jeff3.3 Threshold 25.852 MeV
Cross Section (10^-9 barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
57
Incident Energy (MeV)
20-Ca-46

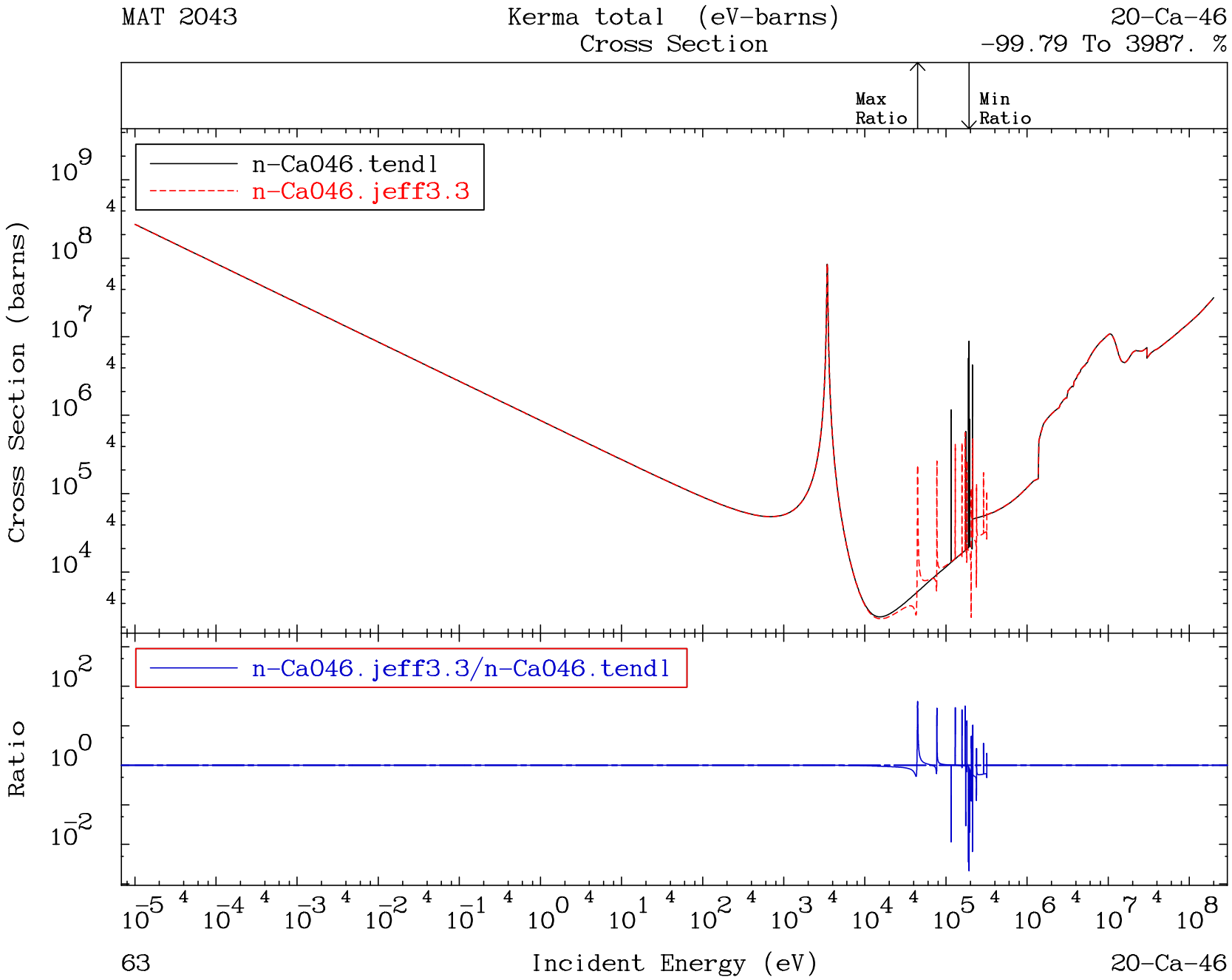

MAT 2043
Hydrogen Production
Cross Section
20-Ca-46
-99.97 To 1.391 %
Max
Ratio
n-Ca046.tendl Threshold 7.0769 MeV
n-Ca046.jeff3.3 Threshold 7.0945 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
10^0
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
20-Ca-46

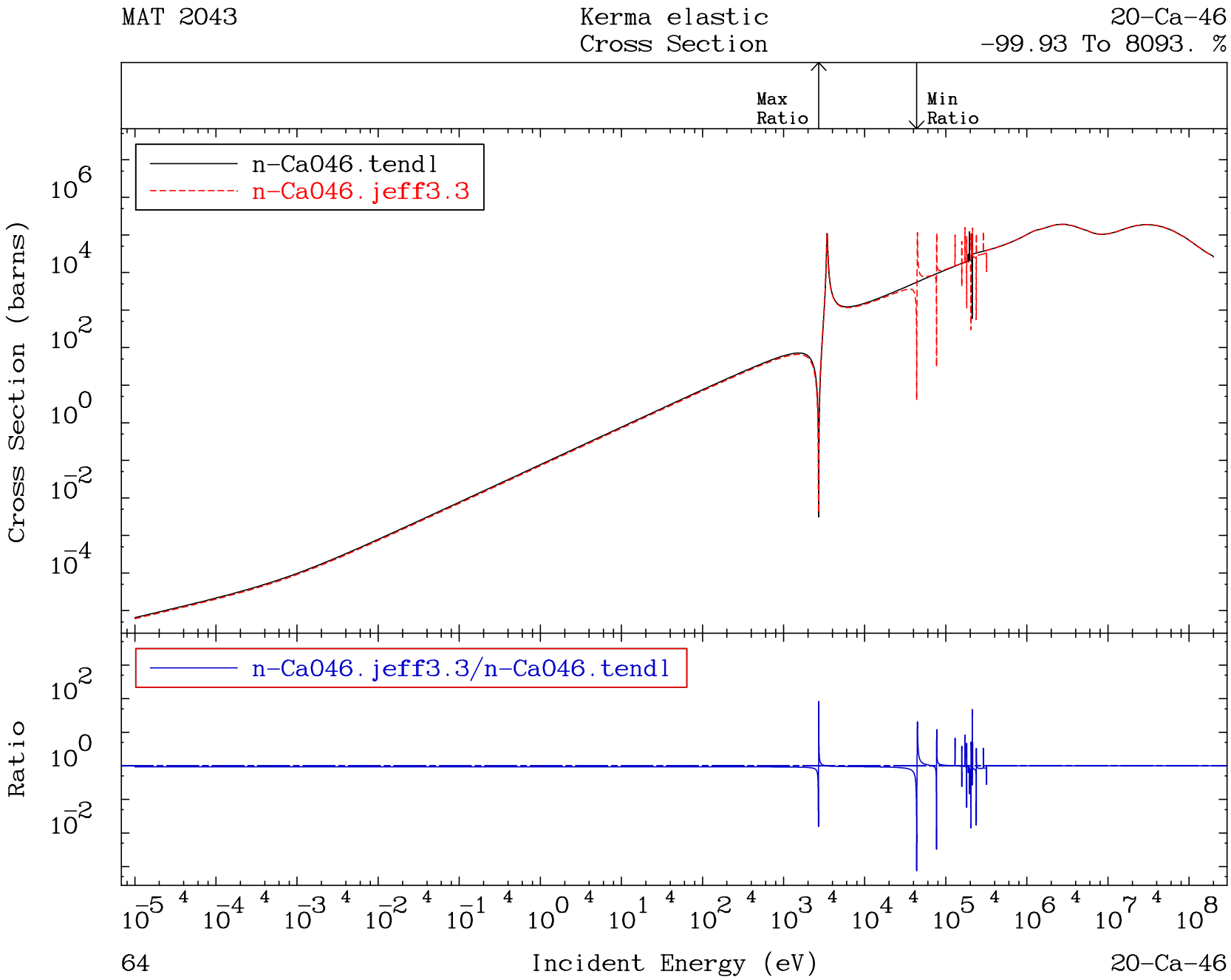

MAT 2043
Deuterium Production
Cross Section
20-Ca-46
-0.479 To 2.622 %
Max
Ratio
Min
Ratio
n-Ca046.tendl Threshold 11.843 MeV
n-Ca046.jeff3.3 Threshold 11.843 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
20-Ca-46

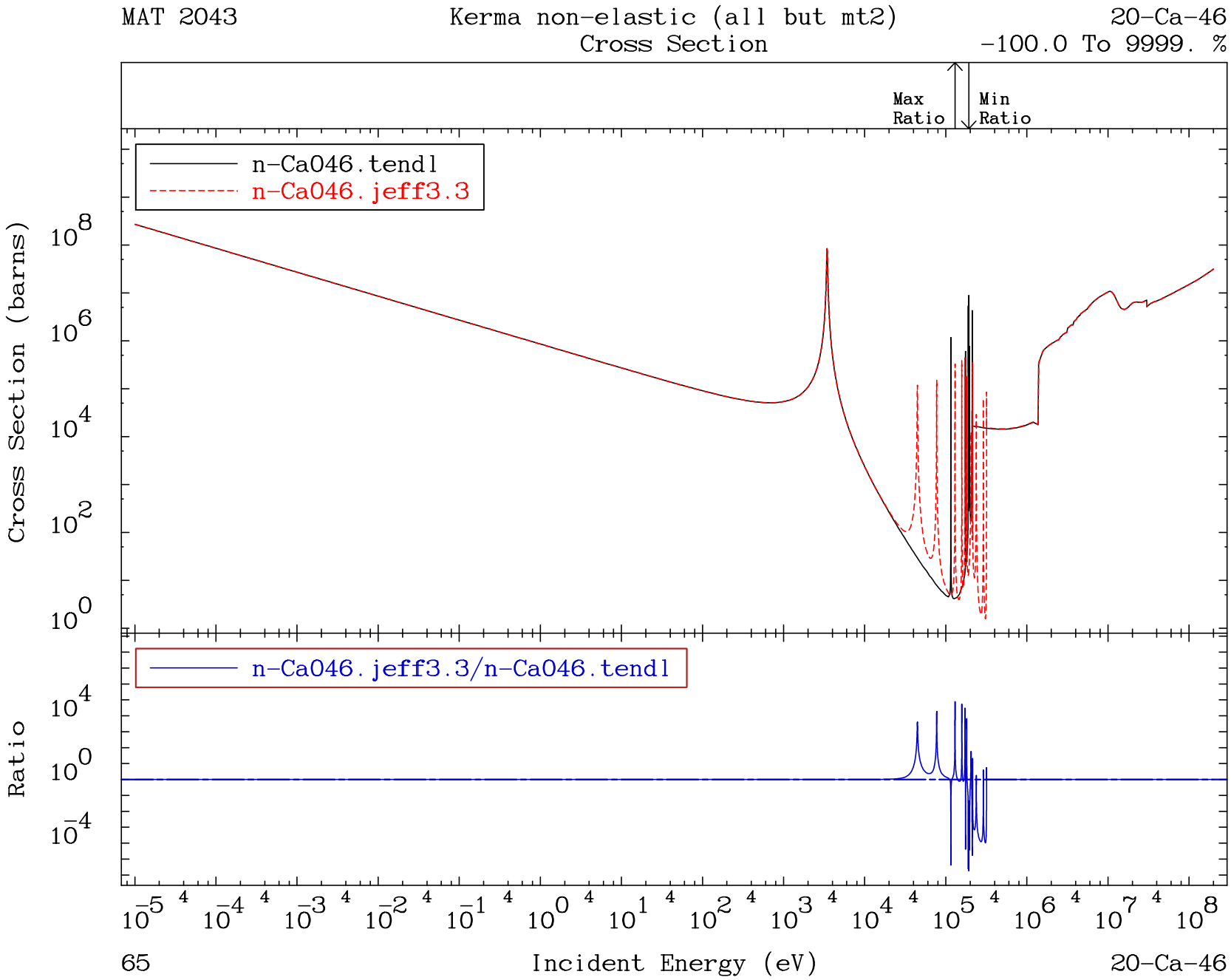

MAT 2043
Tritium Production
Cross Section
20-Ca-46
-0.705 To 3.317 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 14.500 MeV
n-Ca046.jeff3.3 Threshold 14.548 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
20-Ca-46

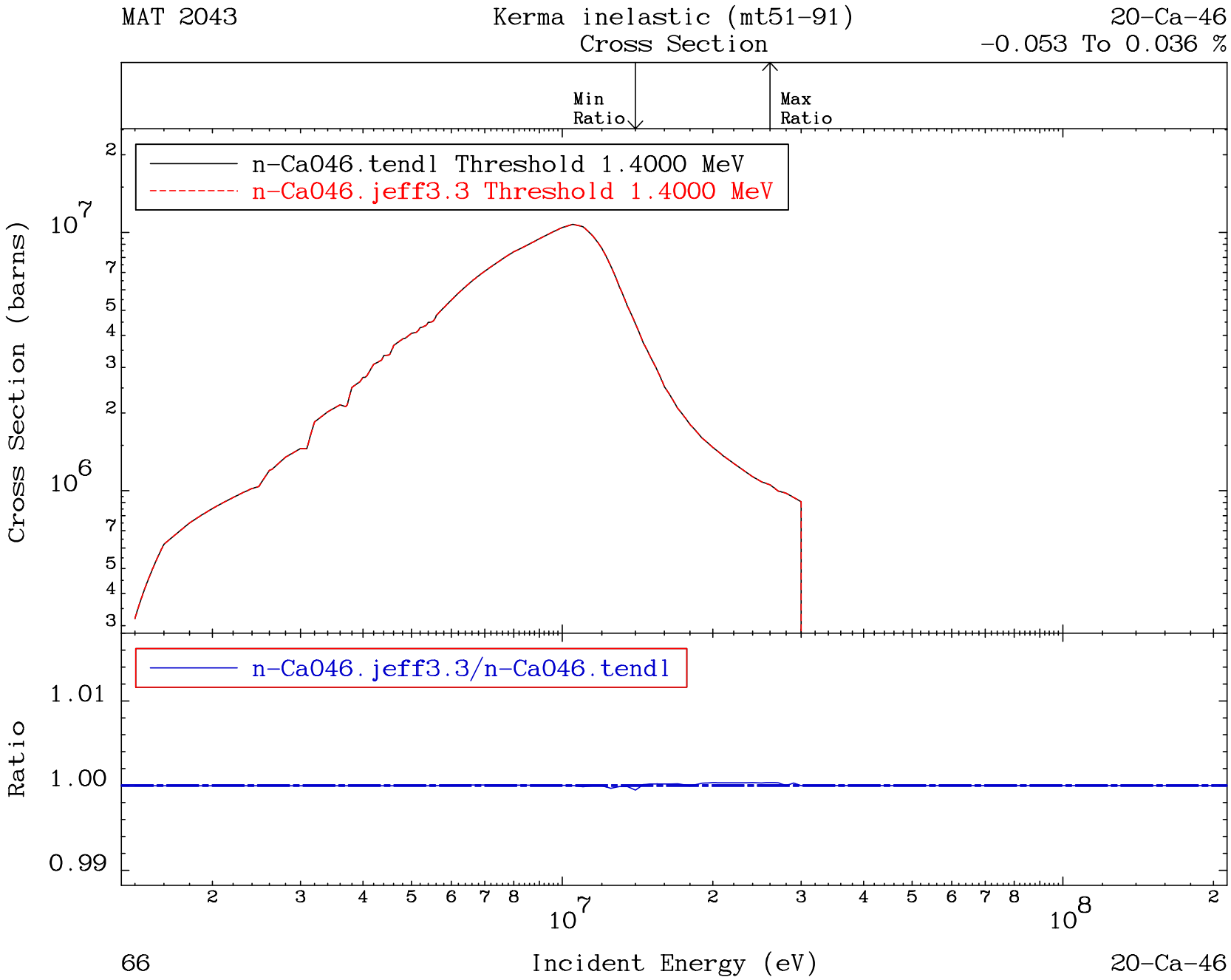

MAT 2043
He-3 Production
Cross Section
20-Ca-46
-0.054 To 1.752 %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 17.706 MeV
n-Ca046.jeff3.3 Threshold 17.706 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
20-Ca-46

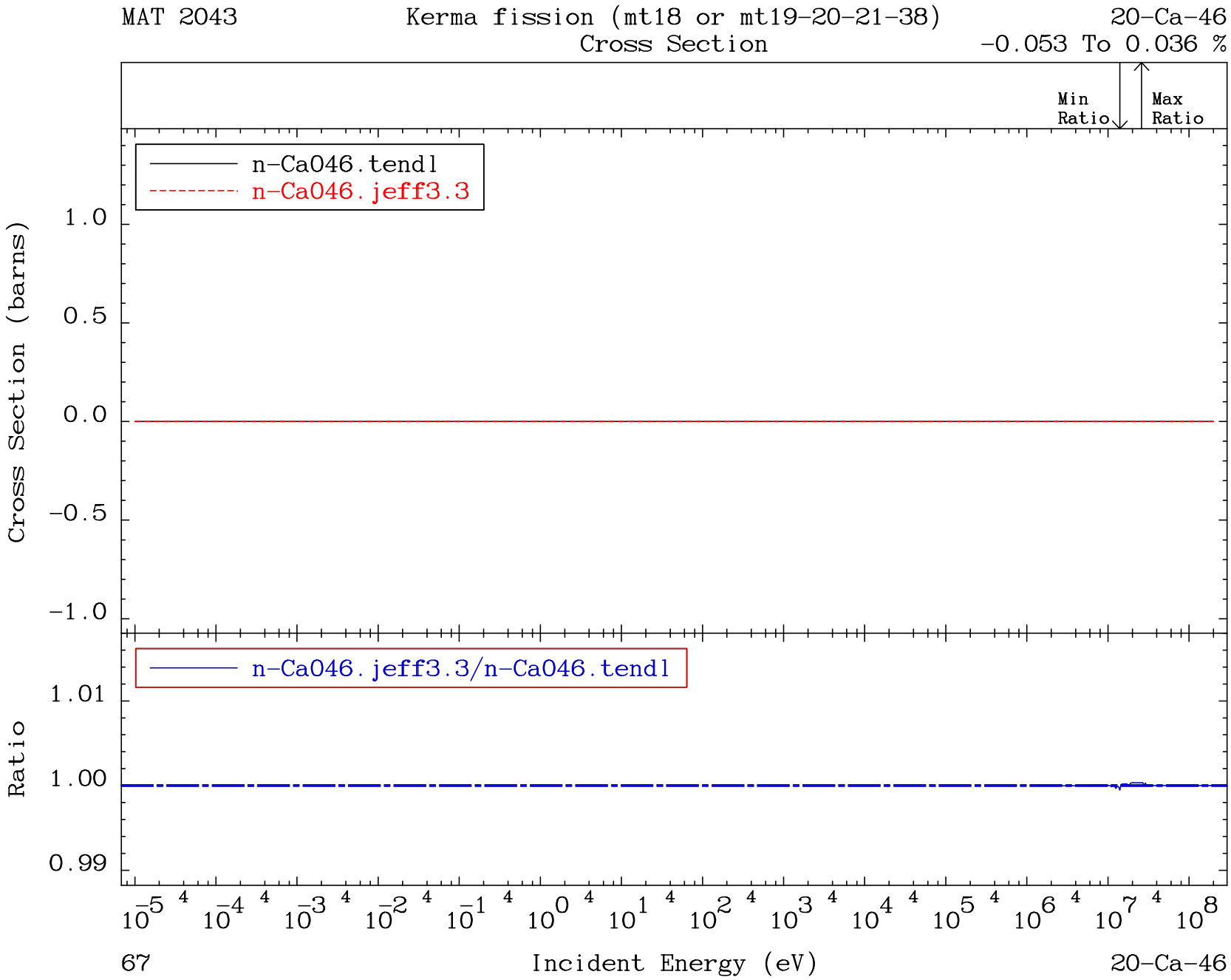

MAT 2043
He-4 Production
Cross Section
20-Ca-46
0.441 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 5.6035 MeV
n-Ca046.jeff3.3 Threshold 5.6025 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
10^12
10^8
10^4
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
20-Ca-46

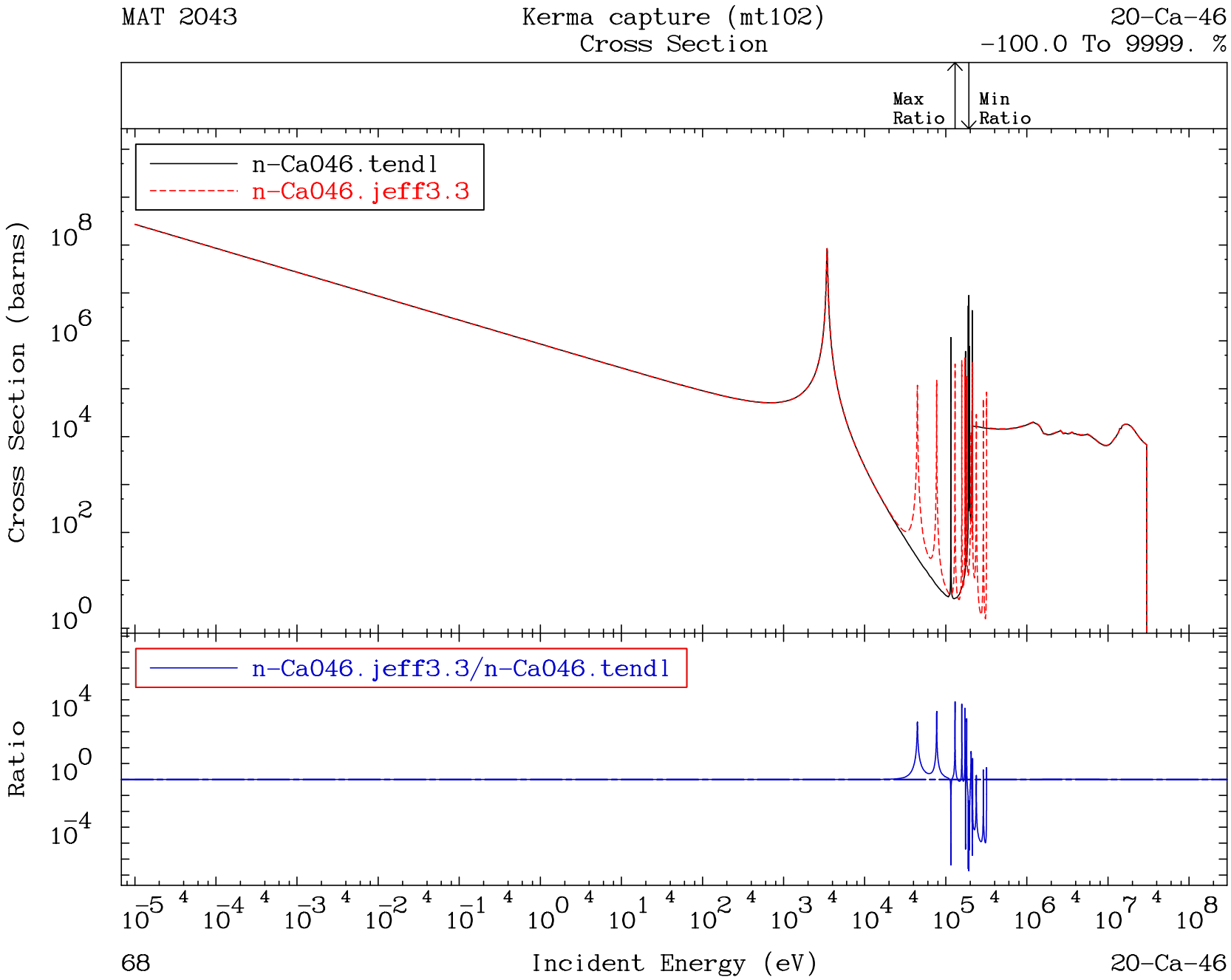

MAT 2043
Kerma total (eV-barns)
Cross Section
20-Ca-46
-99.79 To 3987. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
63
Incident Energy (eV)
20-Ca-46

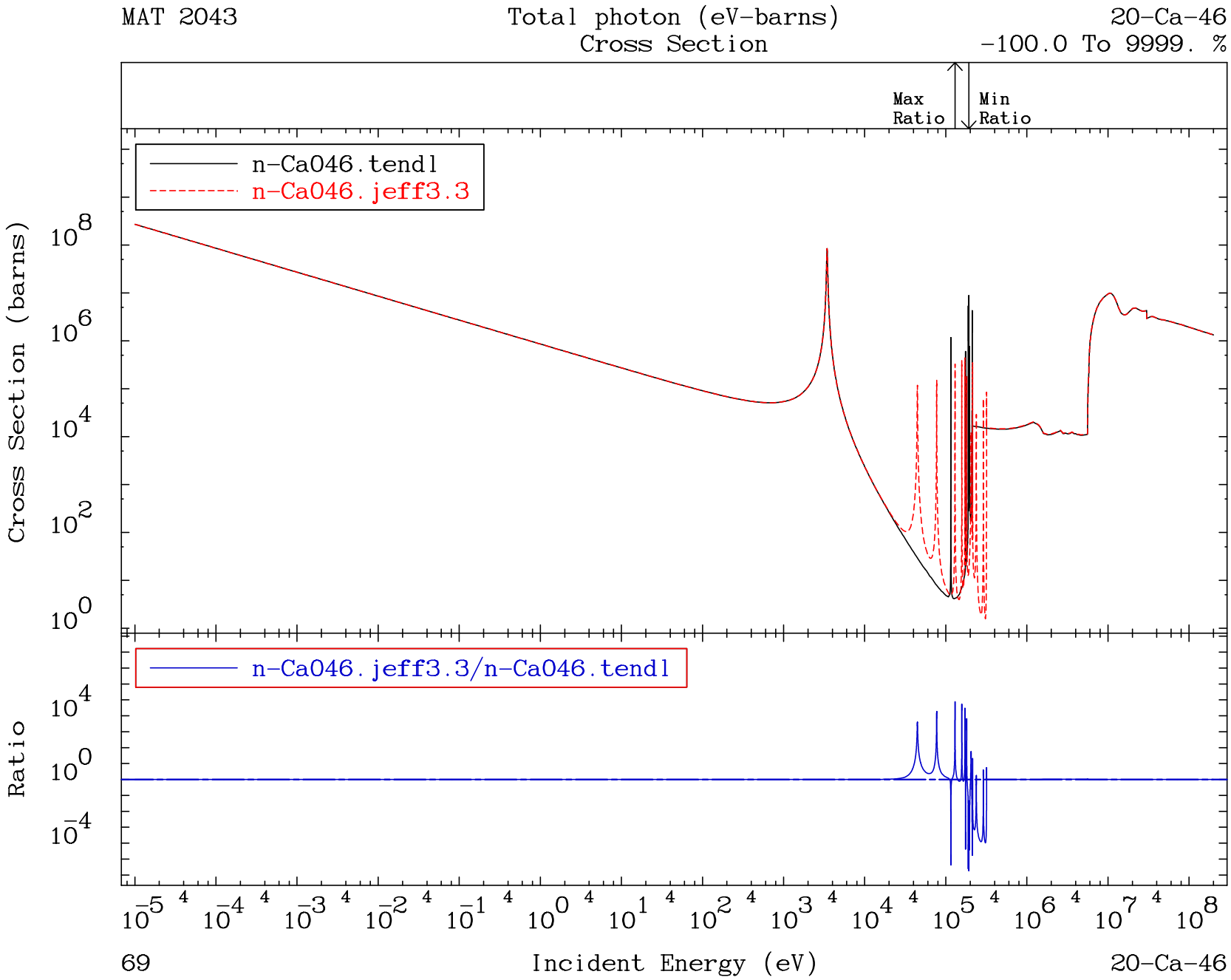

MAT 2043
Kerma elastic
Cross Section
20-Ca-46
-99.93 To 8093. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
64
20-Ca-46

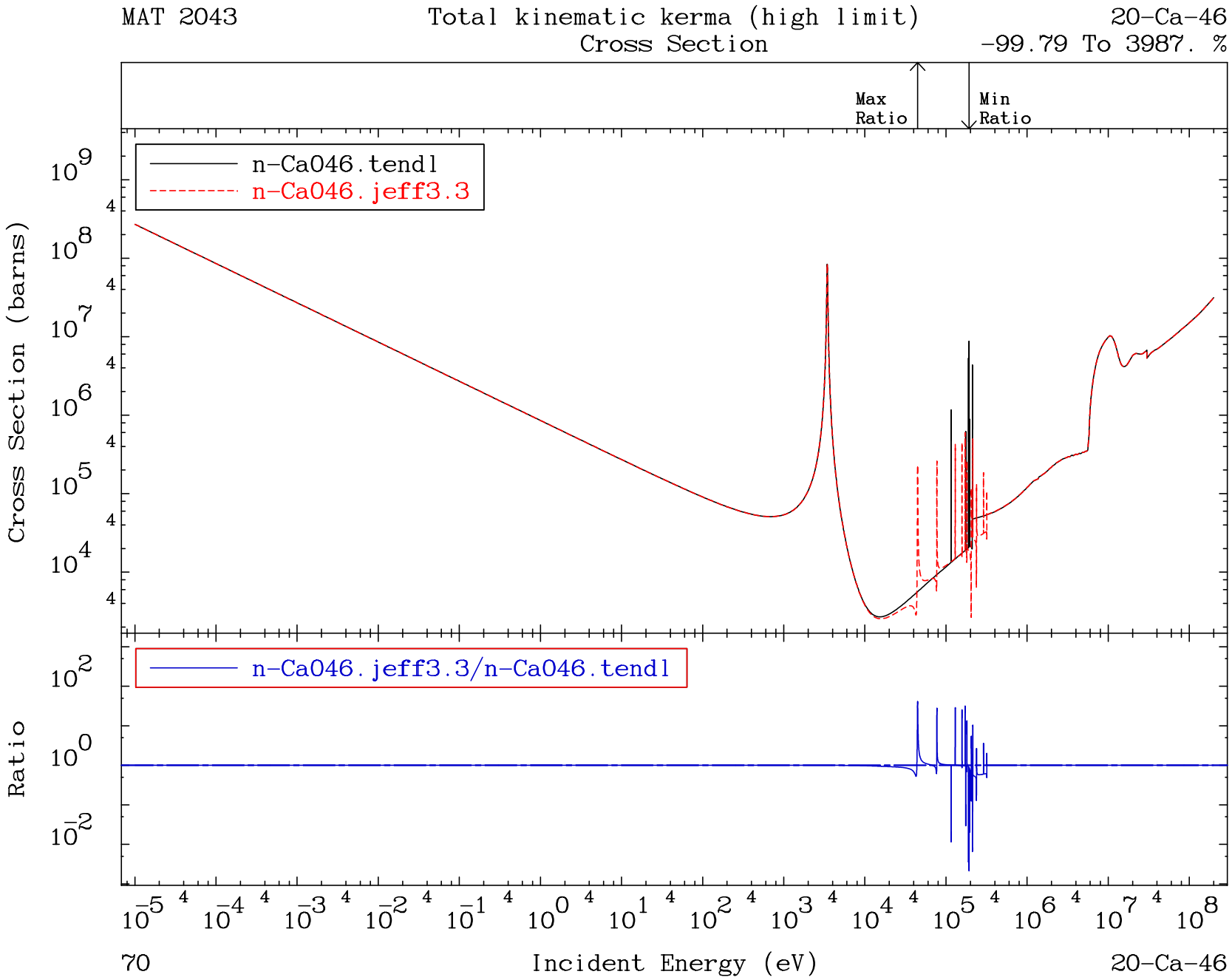

MAT 2043
Kerma non-elastic (all but mt2)
Cross Section
20-Ca-46
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
10^8
10^6
10^4
10^2
10^0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
10^4
10^0
10^{-4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
65
Incident Energy (eV)
20-Ca-46

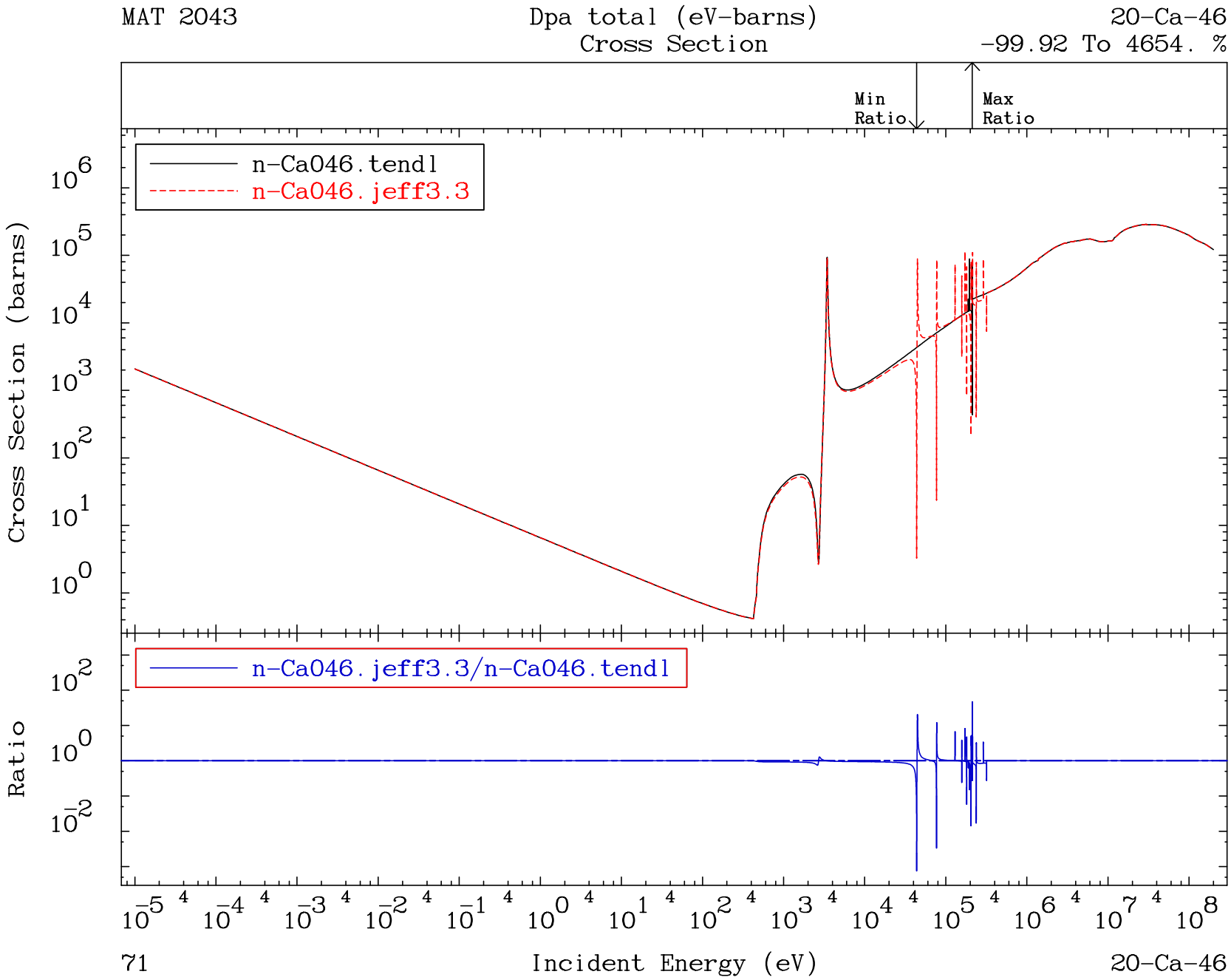

MAT 2043
Kerma inelastic (mt51-91)
Cross Section
20-Ca-46
-0.053 To 0.036 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 1.4000 MeV
n-Ca046.jeff3.3 Threshold 1.4000 MeV
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
66
20-Ca-46

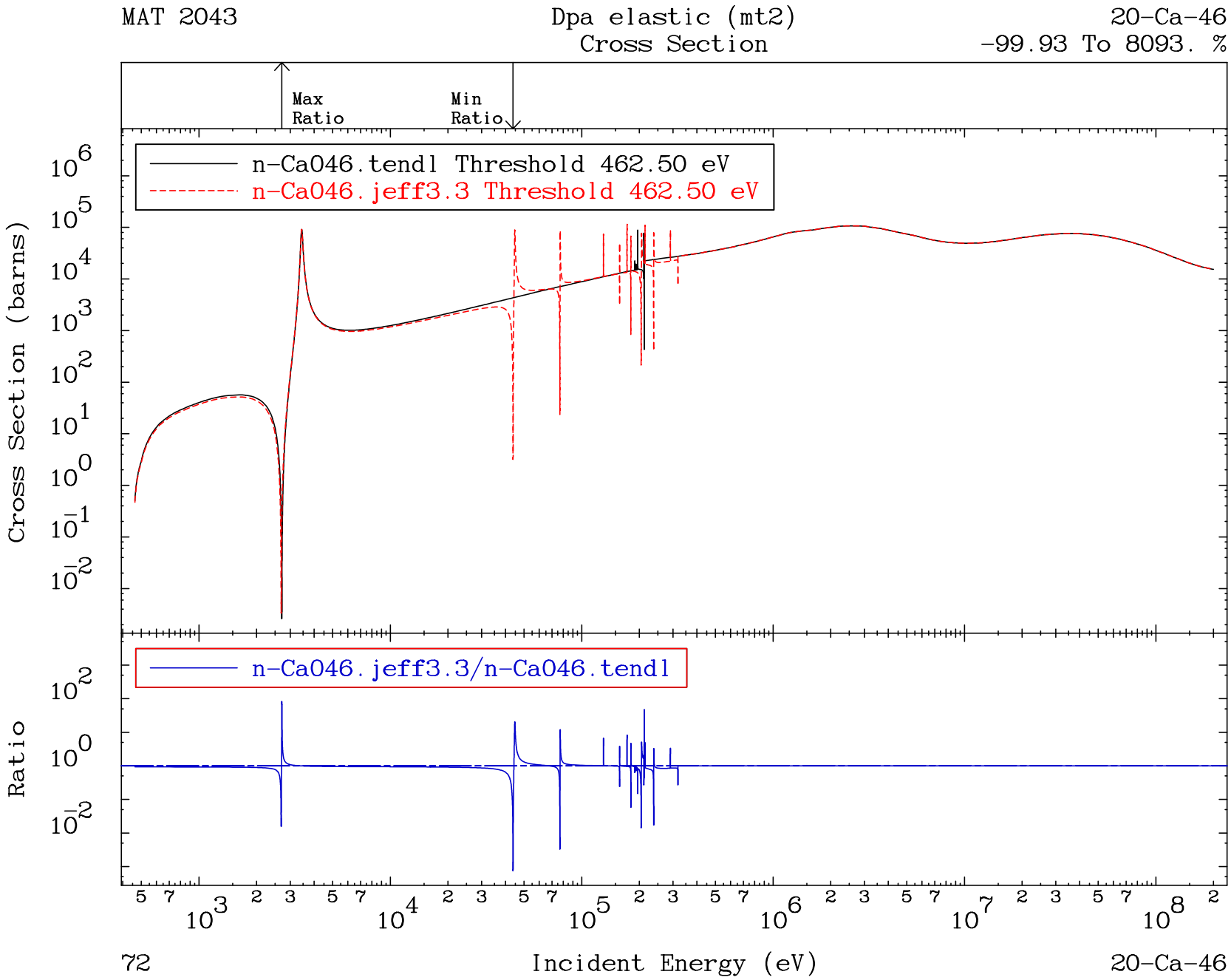

MAT 2043
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
20-Ca-46
-0.053 To 0.036 %
Min Ratio
Max Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
67
Incident Energy (eV)
20-Ca-46

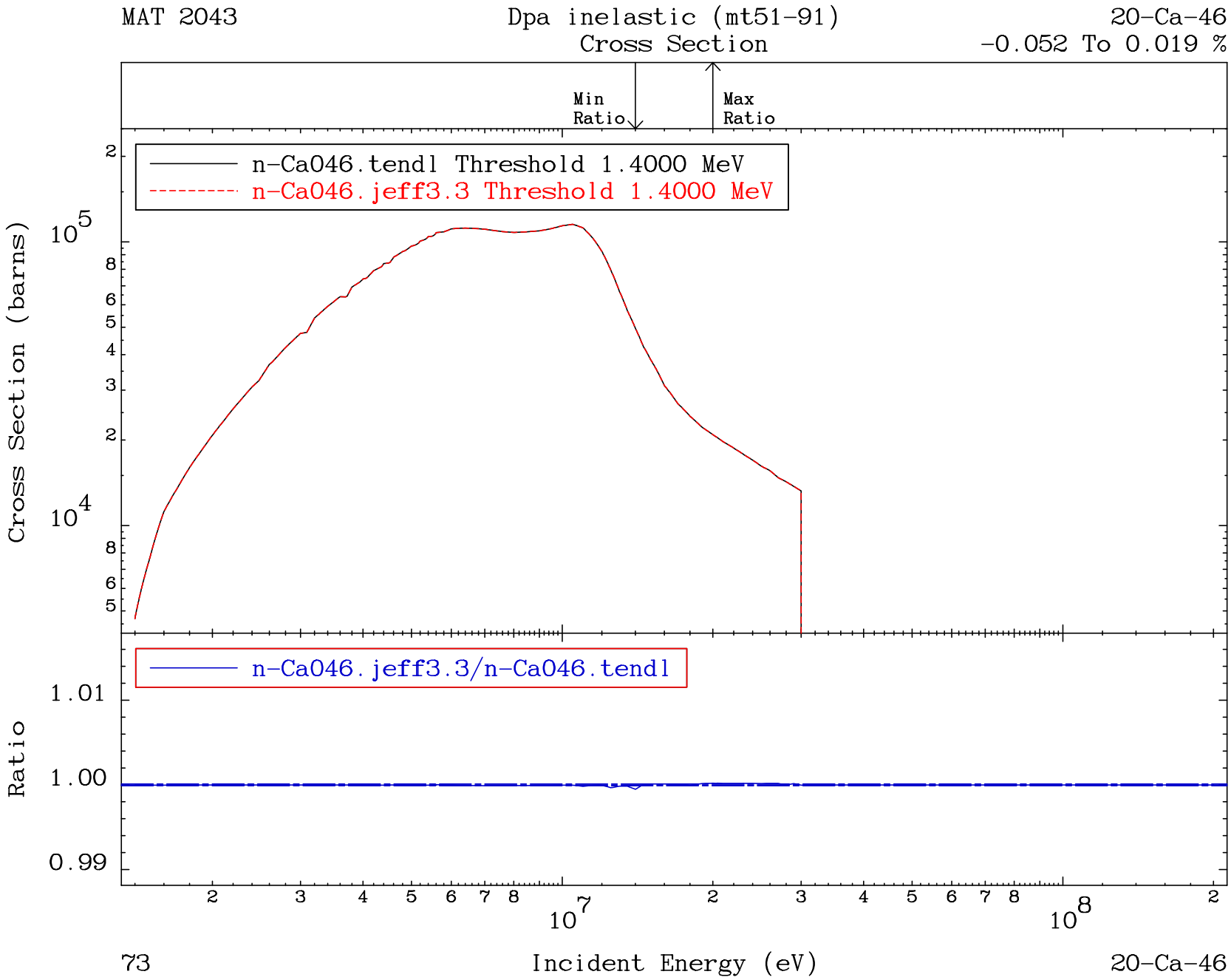

MAT 2043
Kerma capture (mt102)
Cross Section
20-Ca-46
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
68
20-Ca-46

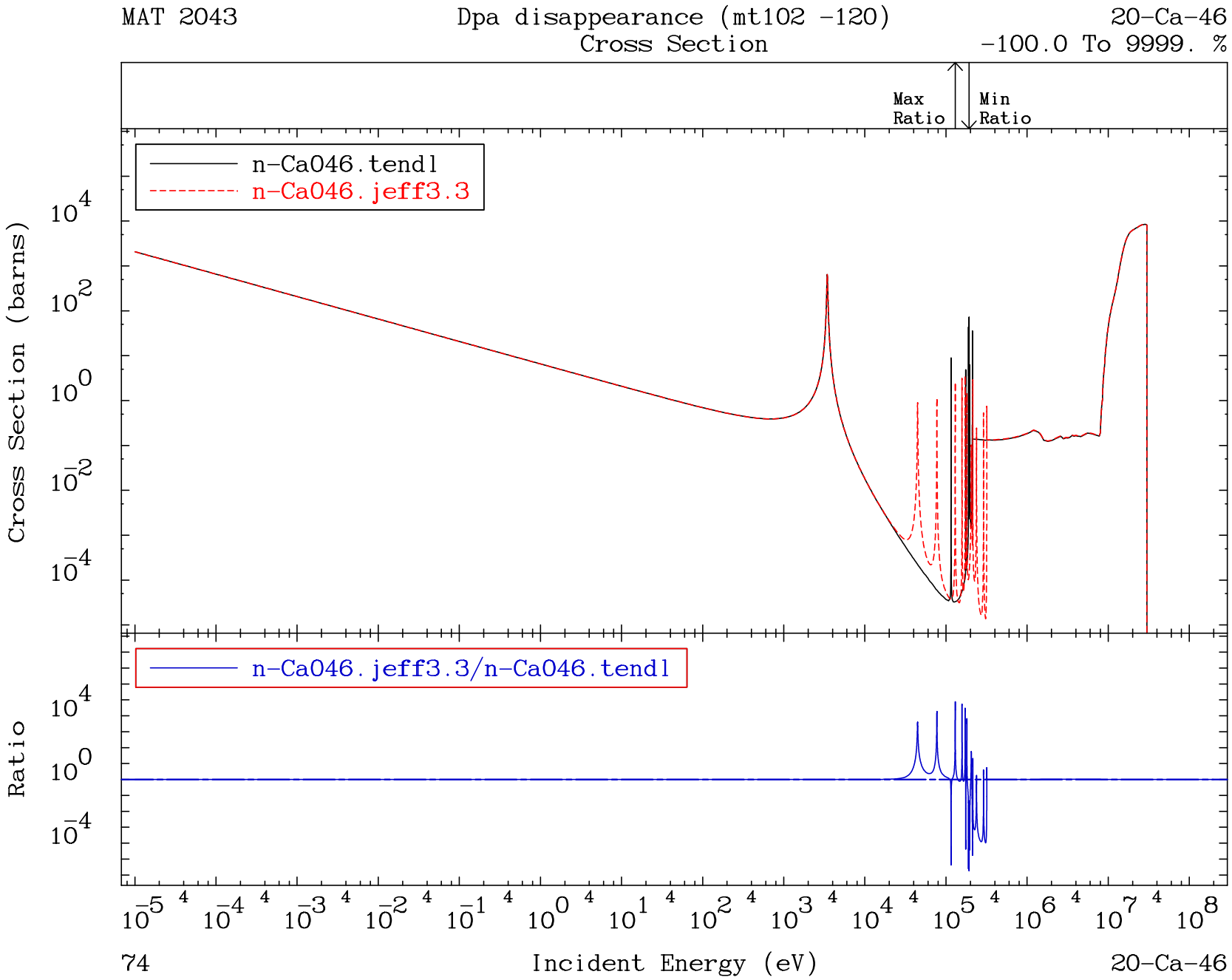

MAT 2043
Total photon (eV-barns)
Cross Section
20-Ca-46
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
69
20-Ca-46


MAT 2043
Total kinematic kerma (high limit)
Cross Section
20-Ca-46
-99.79 To 3987. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
70
20-Ca-46


MAT 2043
Dpa total (eV-barns)
Cross Section
20-Ca-46
-99.92 To 4654. %
Min Ratio
Max Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
71
20-Ca-46


MAT 2043
Dpa elastic (mt2)
Cross Section
20-Ca-46
-99.93 To 8093. %
Max Ratio
Min Ratio
n-Ca046.tendl Threshold 462.50 eV
n-Ca046.jeff3.3 Threshold 462.50 eV
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
72
20-Ca-46


MAT 2043
Dpa inelastic (mt51-91)
Cross Section
20-Ca-46
-0.052 To 0.019 %
Min Ratio
Max Ratio
n-Ca046.tendl Threshold 1.4000 MeV
n-Ca046.jeff3.3 Threshold 1.4000 MeV
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
73
20-Ca-46


MAT 2043
Dpa disappearance (mt102 -120)
Cross Section
20-Ca-46
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Ca046.tendl
n-Ca046.jeff3.3
Cross Section (barns)
n-Ca046.jeff3.3/n-Ca046.tendl
Ratio
Incident Energy (eV)
74
20-Ca-46