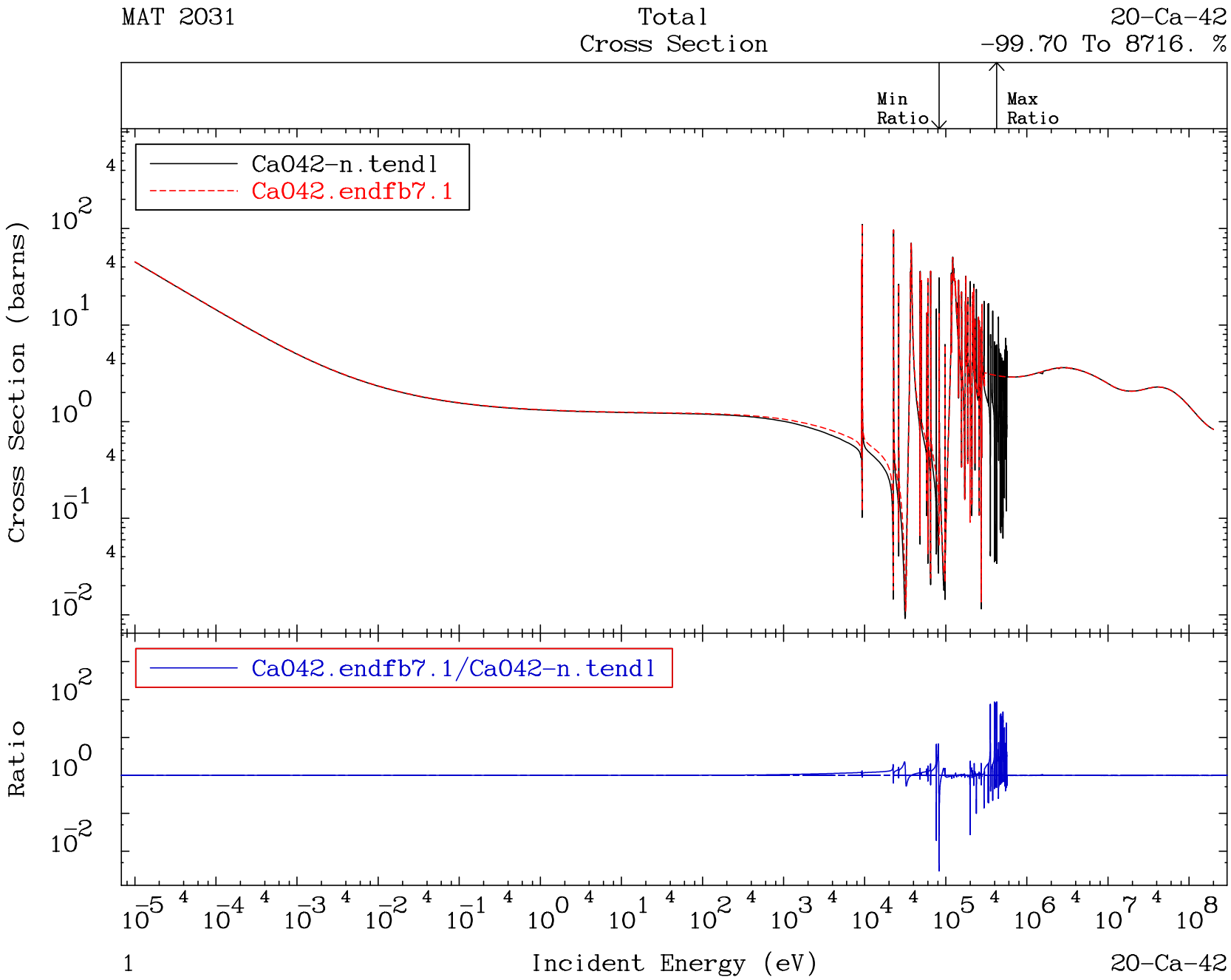
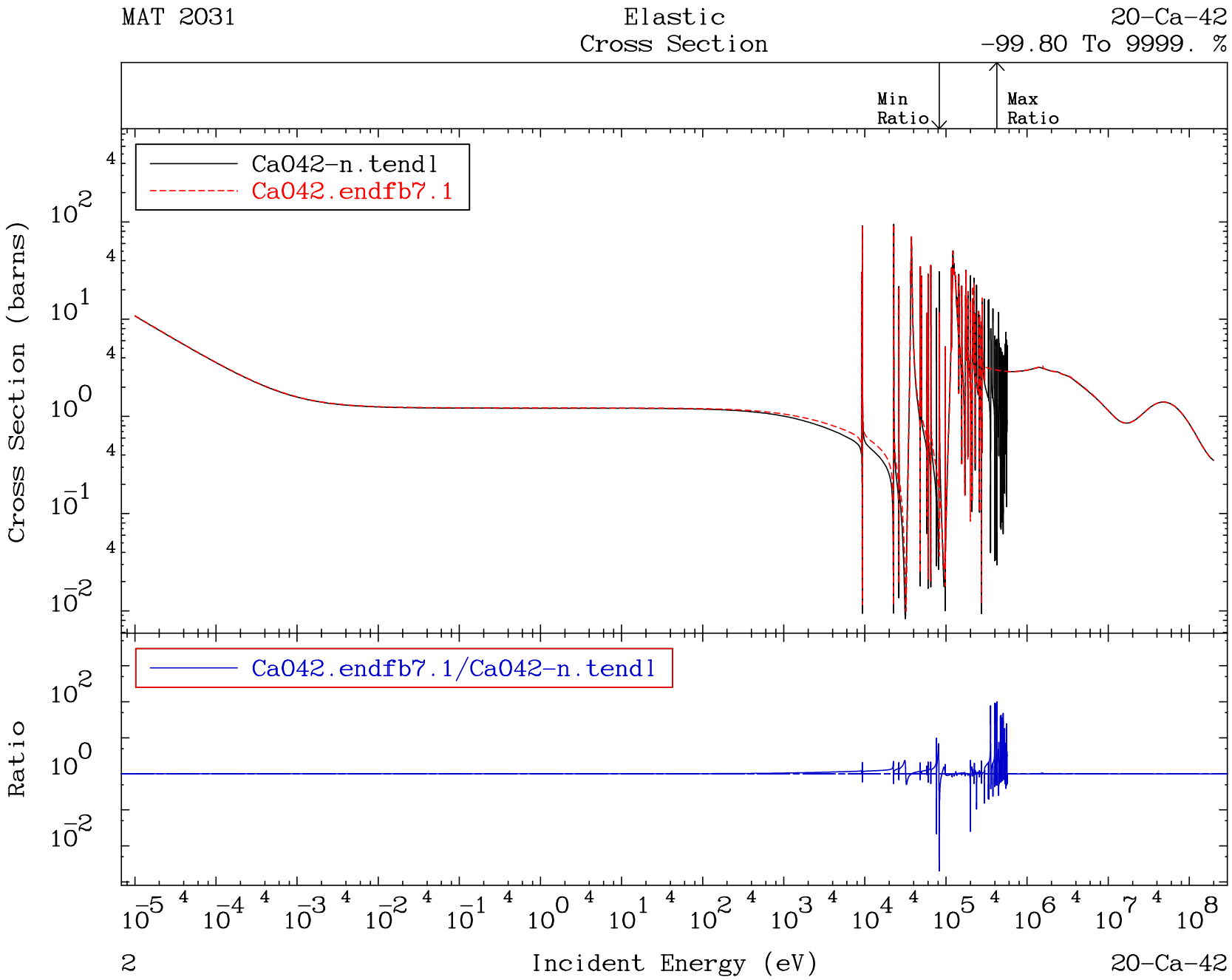
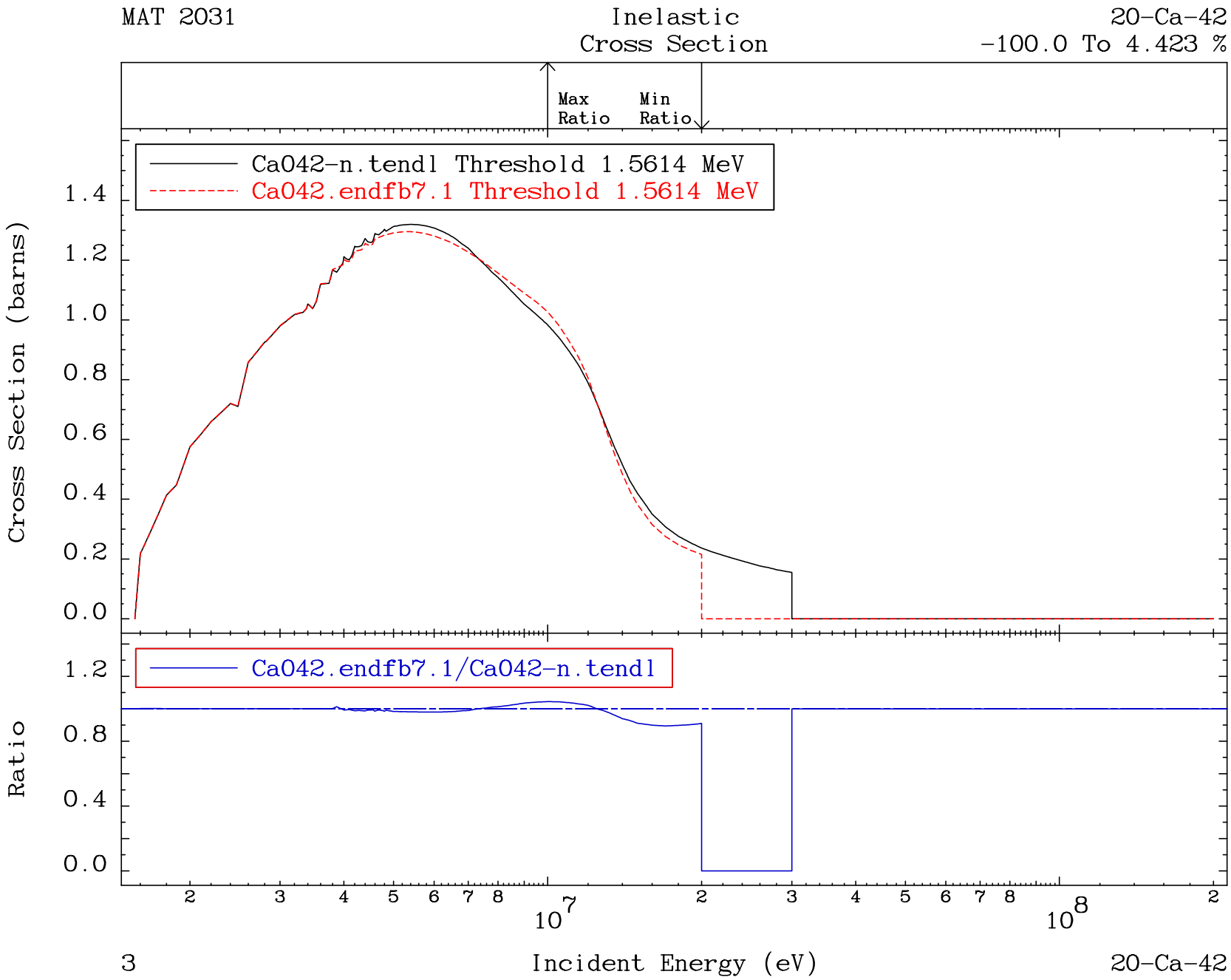
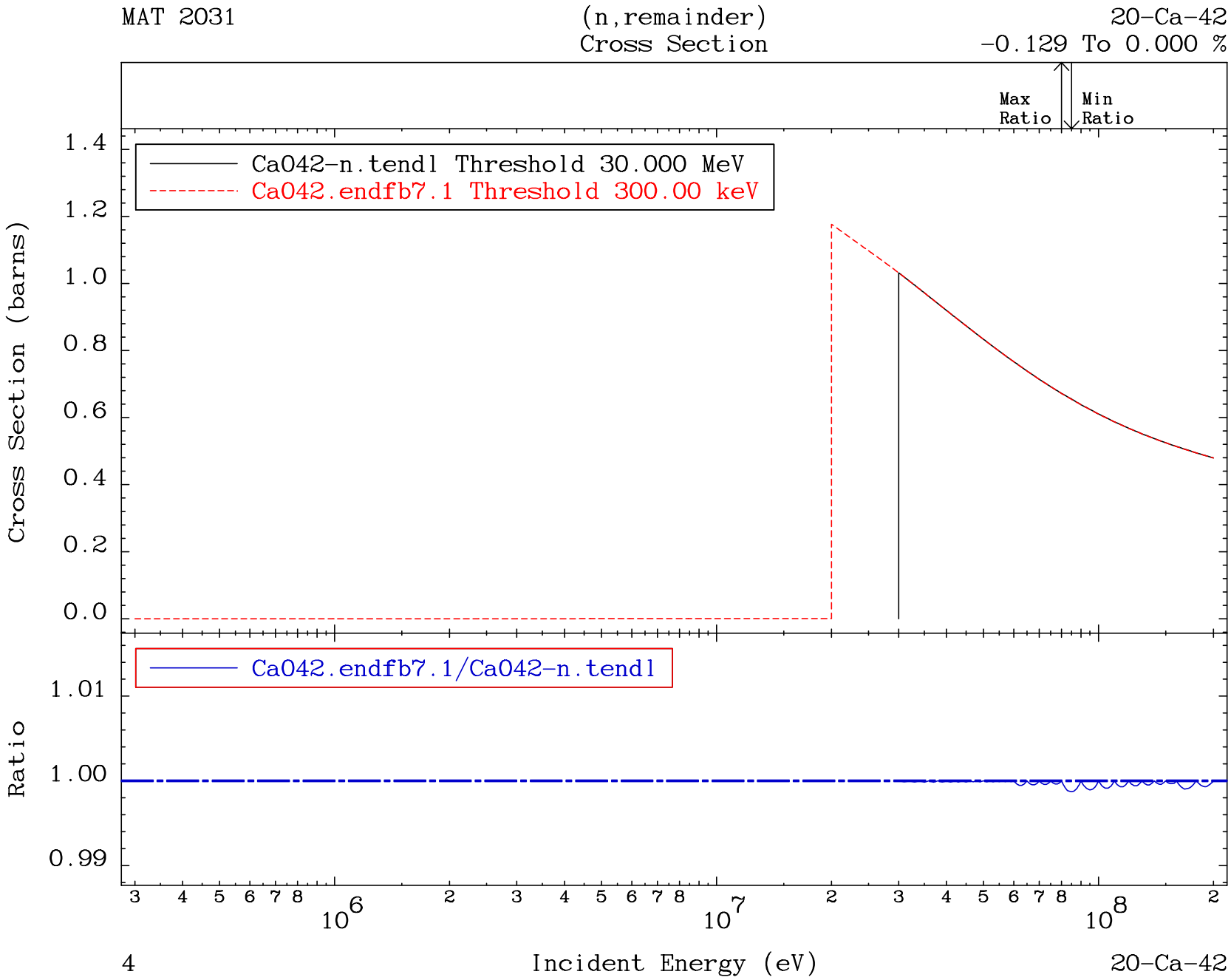
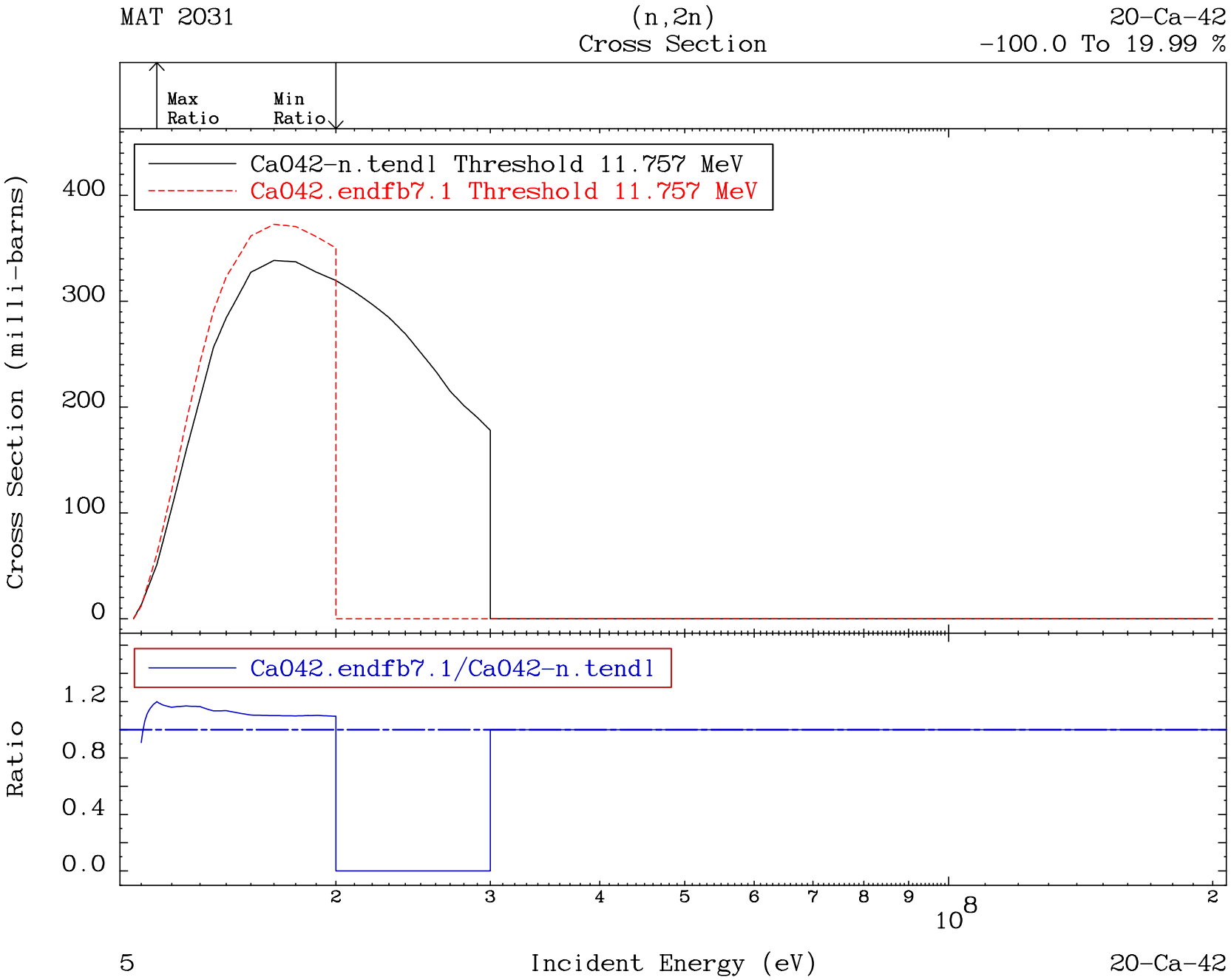
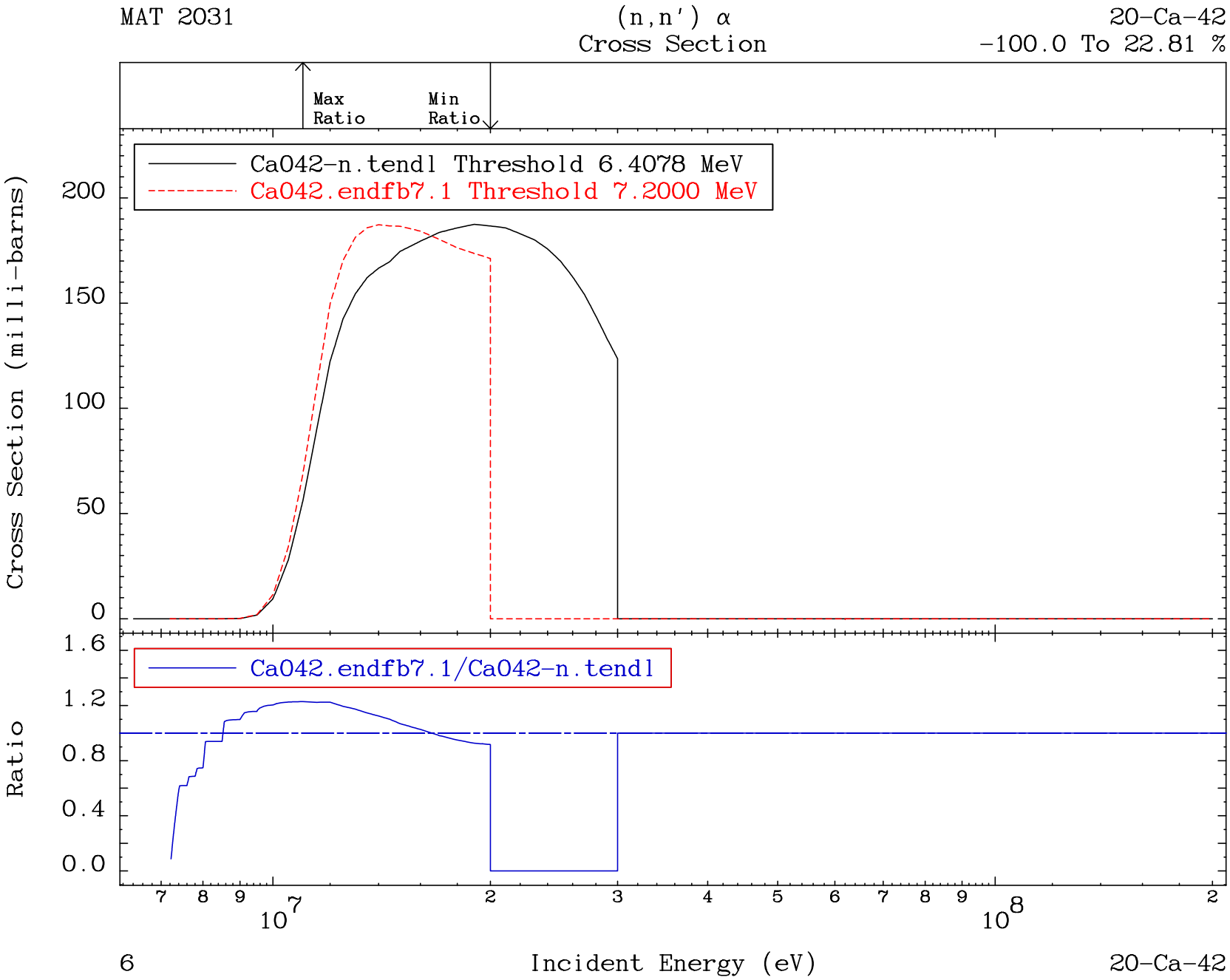

MAT 2031
Total
Cross Section
20-Ca-42
-99.70 To 8716. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
1
20-Ca-42

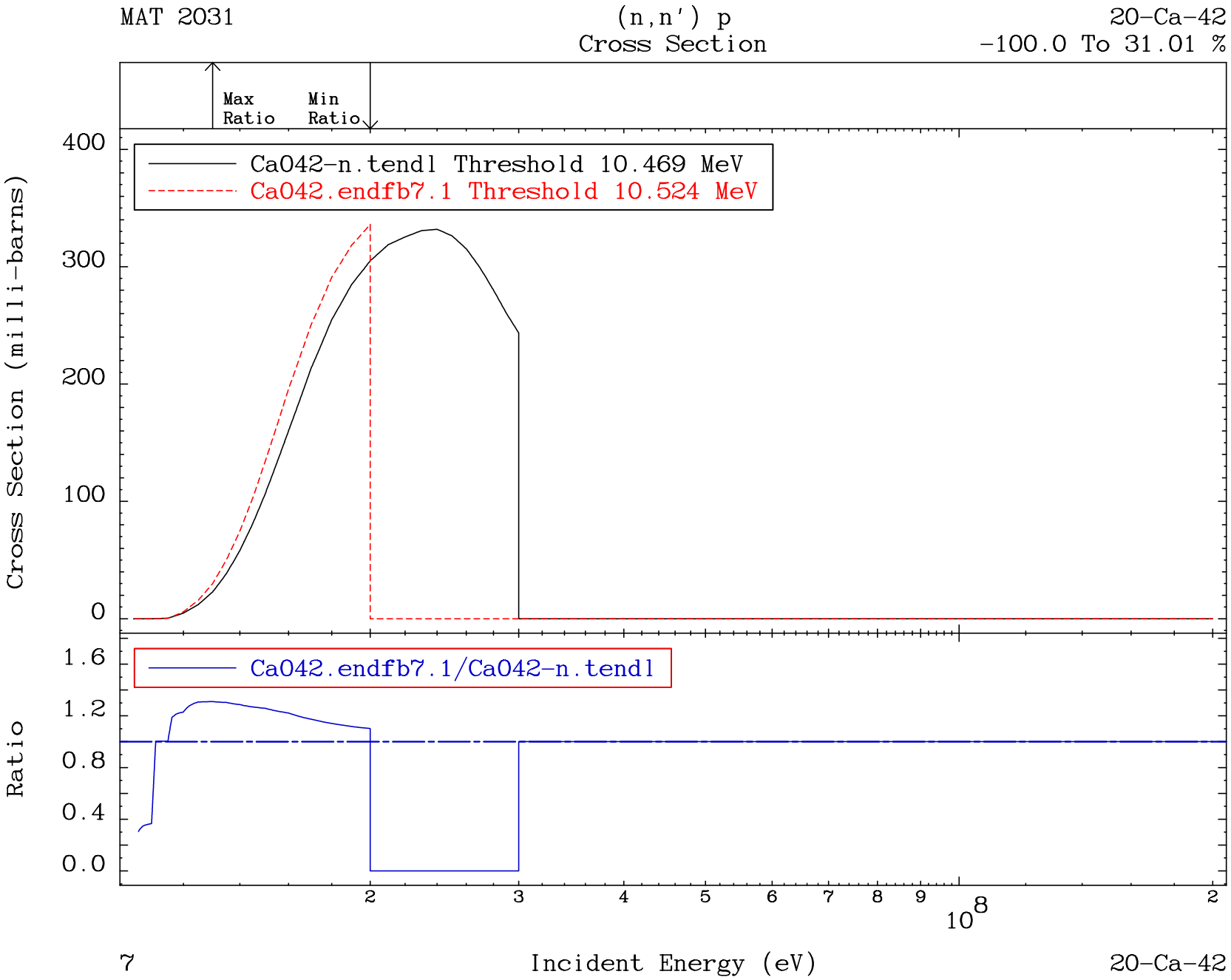

MAT 2031
Elastic
Cross Section
20-Ca-42
-99.80 To 9999. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
2
20-Ca-42

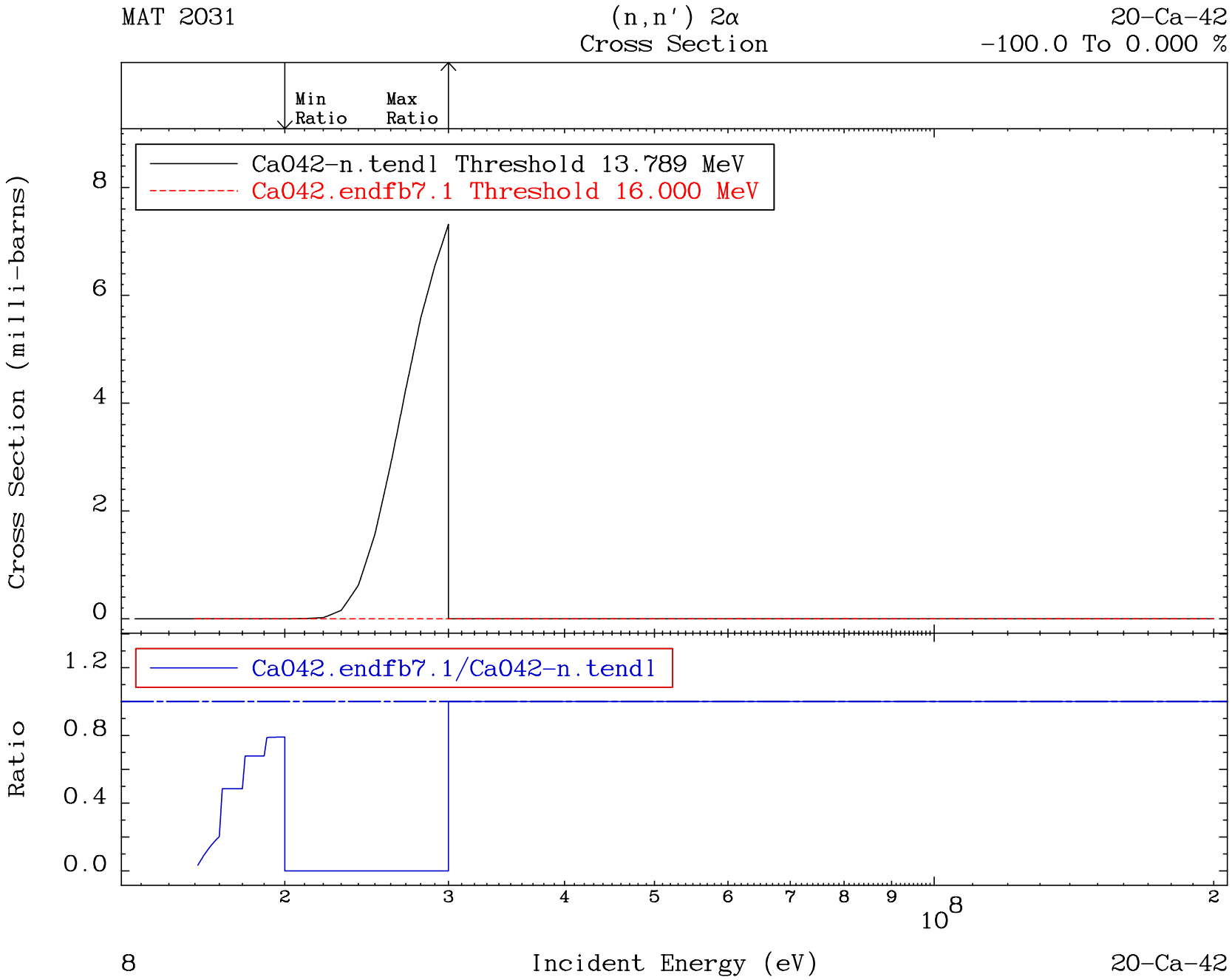

MAT 2031
Inelastic
Cross Section
20-Ca-42
-100.0 To 4.423 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 1.5614 MeV
Ca042.endfb7.1 Threshold 1.5614 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
20-Ca-42

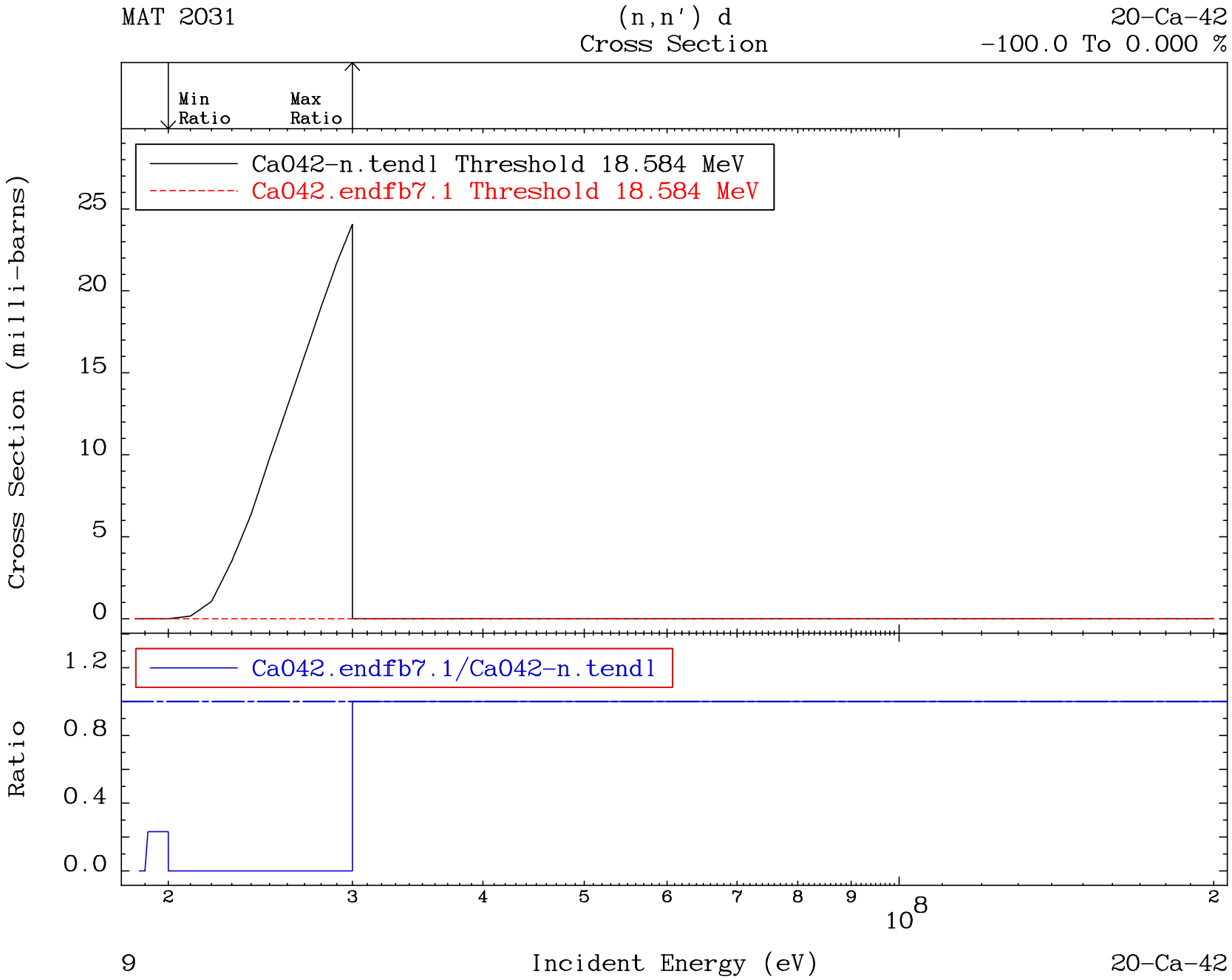

MAT 2031
(n,remainder)
Cross Section
20-Ca-42
-0.129 To 0.000 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 30.000 MeV
Ca042.endfb7.1 Threshold 300.00 keV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
4
Incident Energy (eV)
20-Ca-42

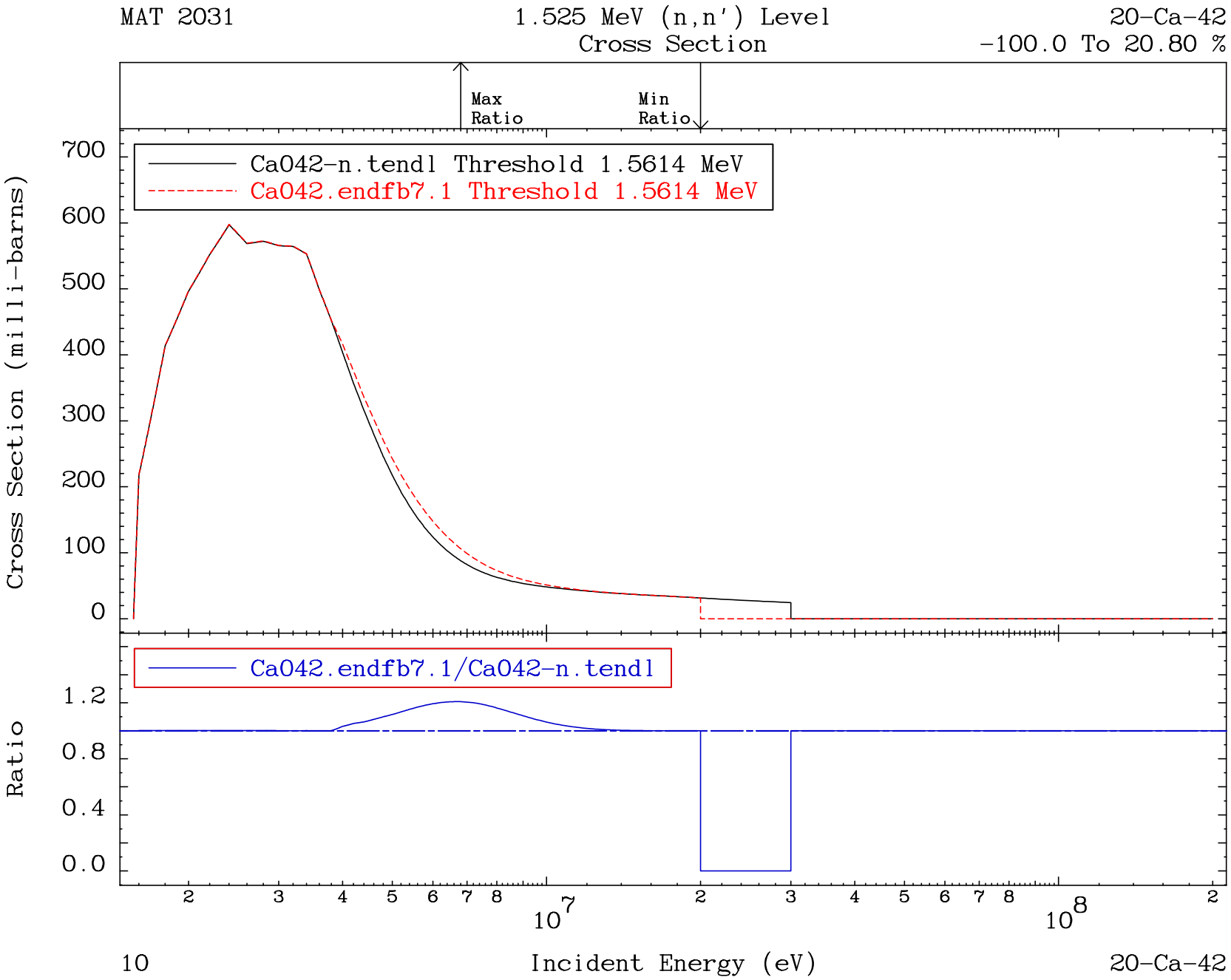

MAT 2031
(n,2n)
Cross Section
20-Ca-42
-100.0 To 19.99 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 11.757 MeV
Ca042.endfb7.1 Threshold 11.757 MeV
Cross Section (milli-barns)
400
300
200
100
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
20-Ca-42

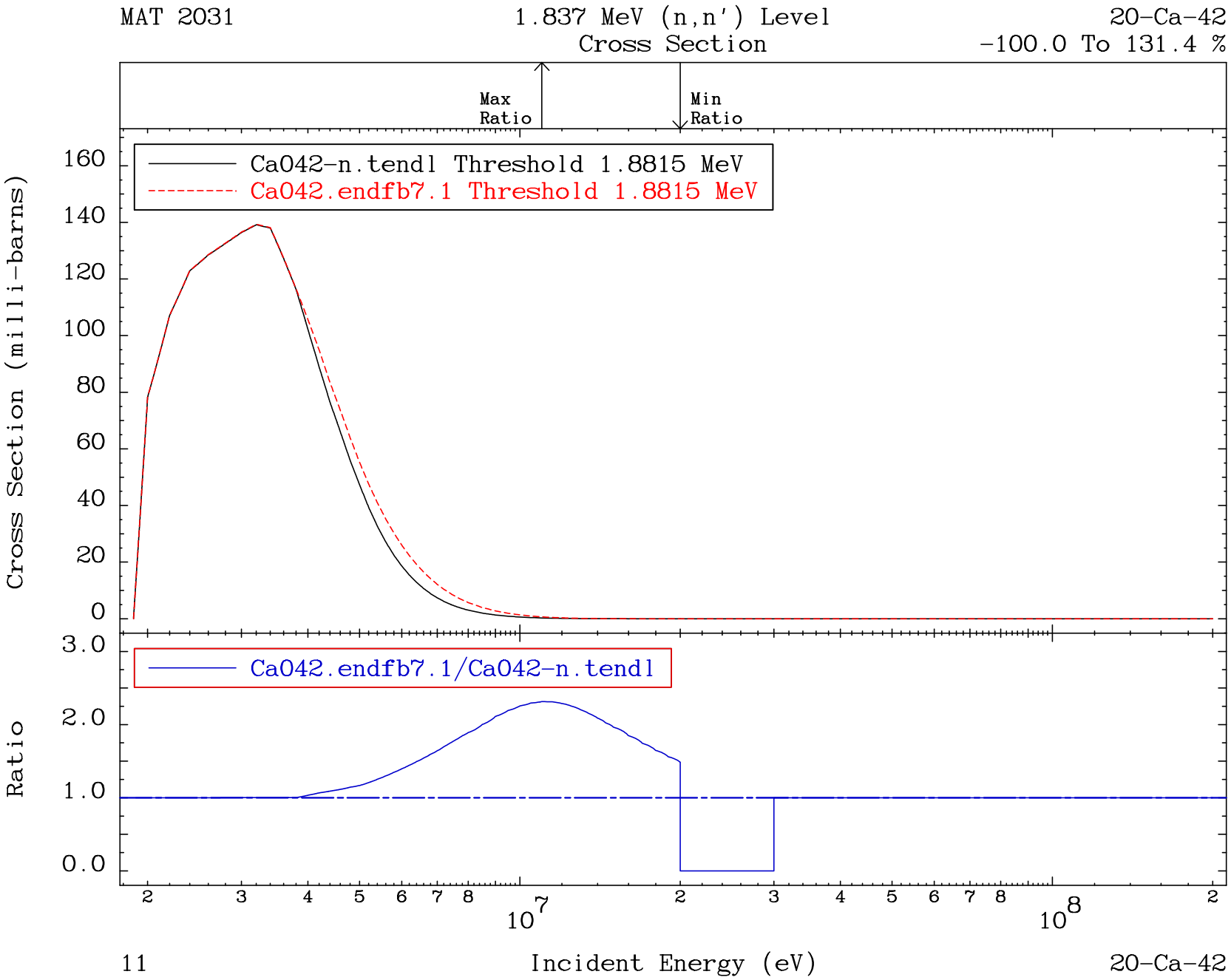

MAT 2031
(n,n') α
Cross Section
20-Ca-42
-100.0 To 22.81 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 6.4078 MeV
Ca042.endfb7.1 Threshold 7.2000 MeV
Cross Section (milli-barns)
200
150
100
50
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
20-Ca-42

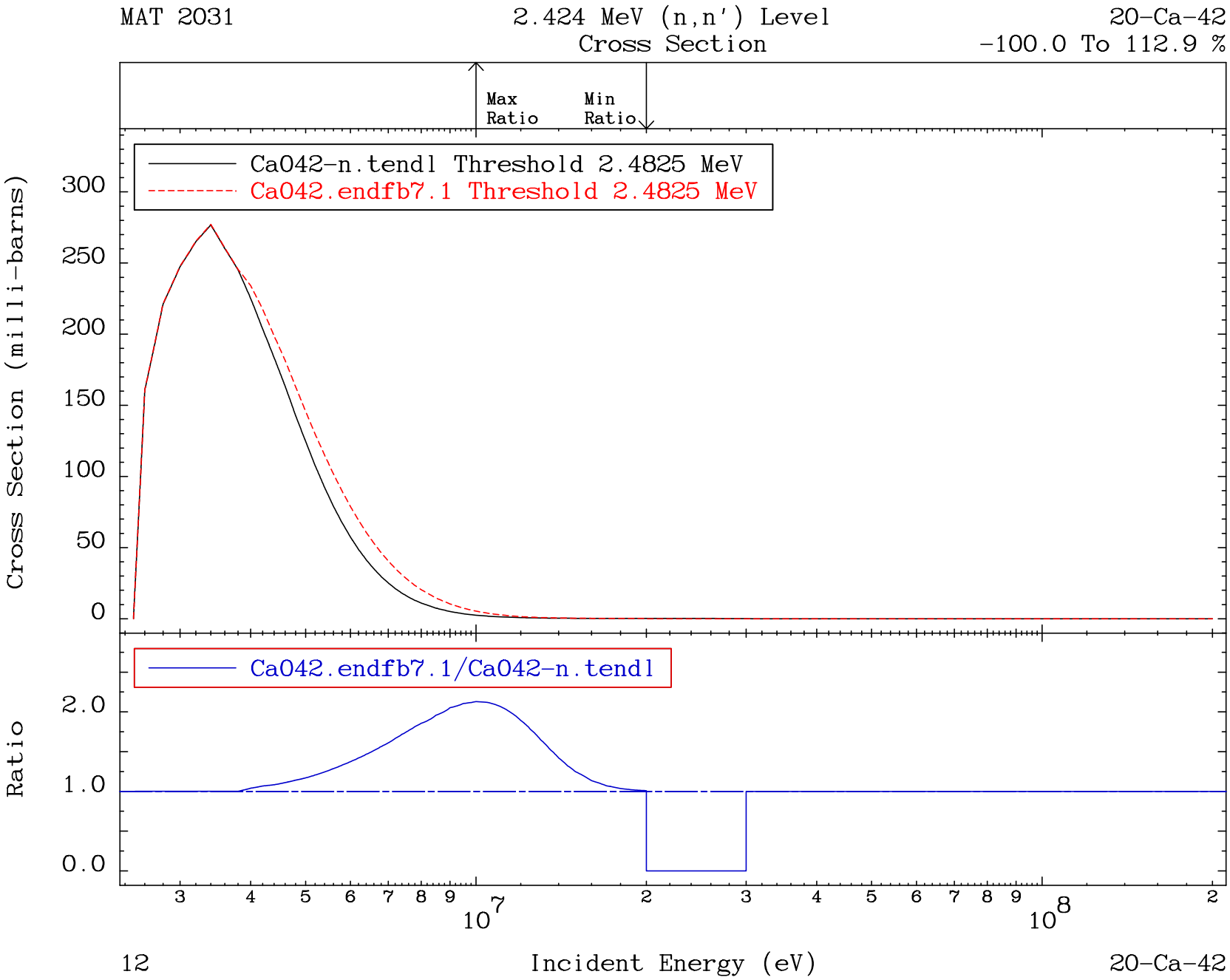

MAT 2031
(n,n') p
Cross Section
20-Ca-42
-100.0 To 31.01 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 10.469 MeV
Ca042.endfb7.1 Threshold 10.524 MeV
Cross Section (milli-barns)
400
300
200
100
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
20-Ca-42

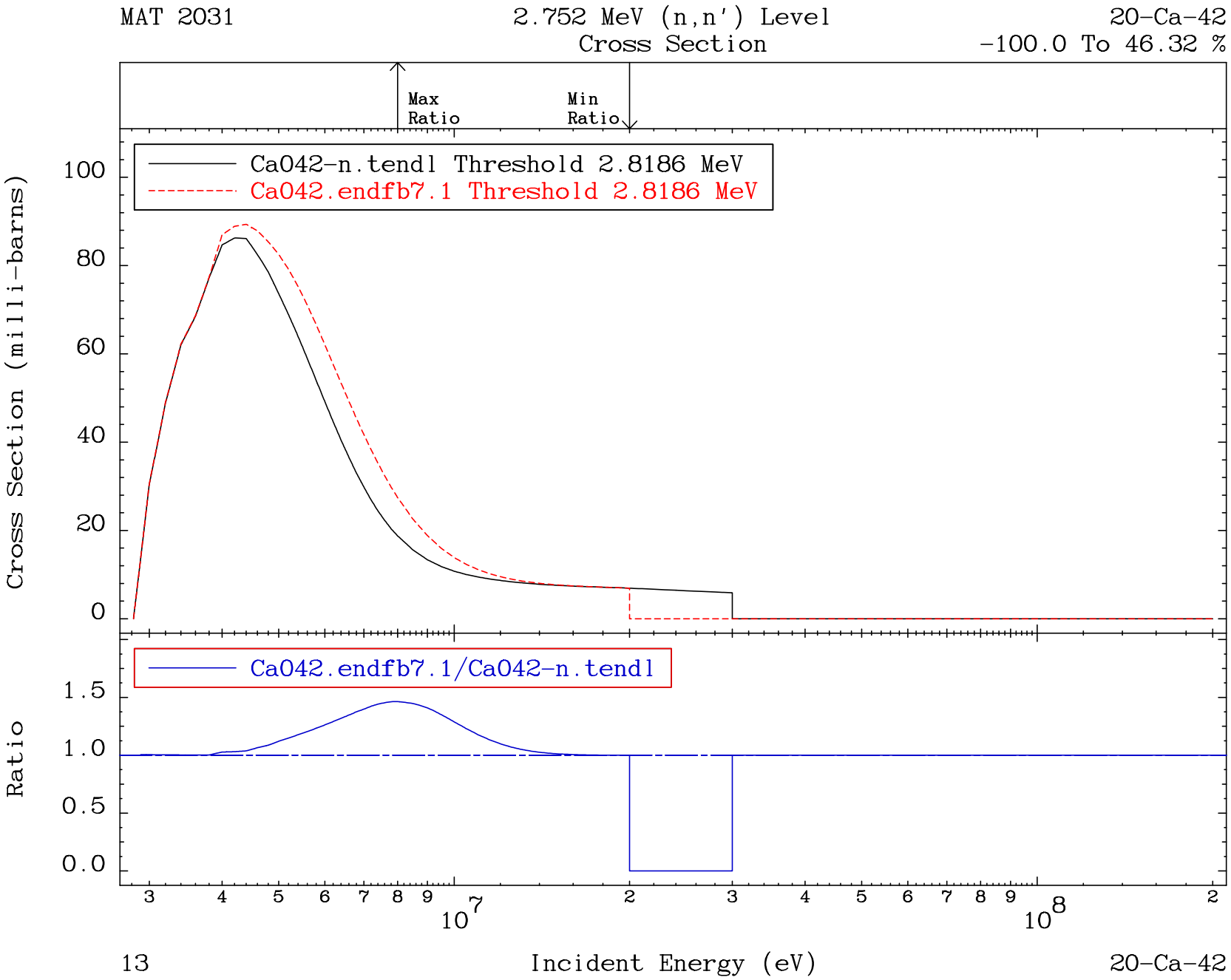

MAT 2031
(n,n') 2α
Cross Section
20-Ca-42
-100.0 To 0.000 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 13.789 MeV
Ca042.endfb7.1 Threshold 16.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
Ca042.endfb7.1/Ca042-n.tendl
Ratio
0.0
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
20-Ca-42

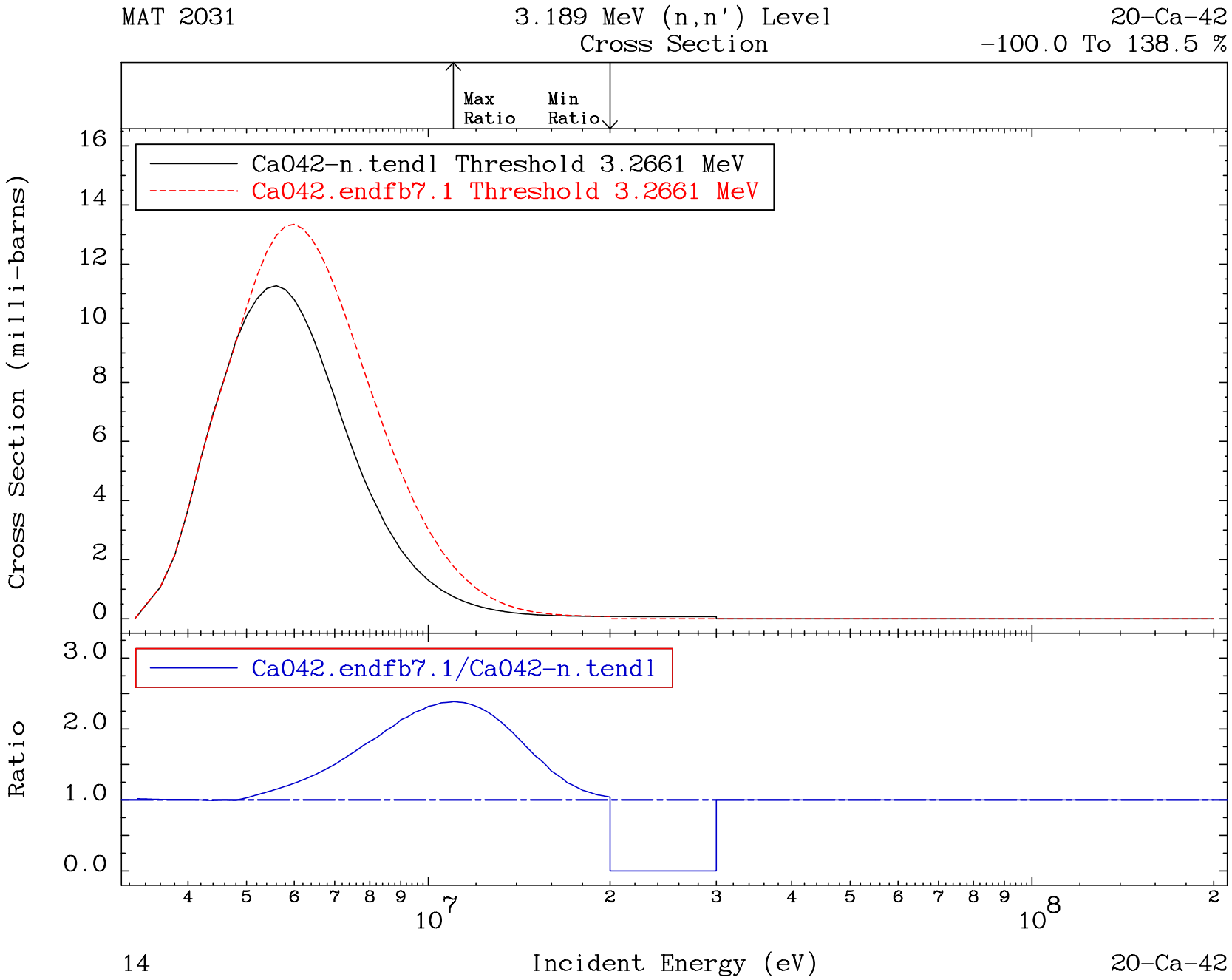

MAT 2031
(n,n') d
Cross Section
20-Ca-42
-100.0 To 0.000 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 18.584 MeV
Ca042.endfb7.1 Threshold 18.584 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
20-Ca-42

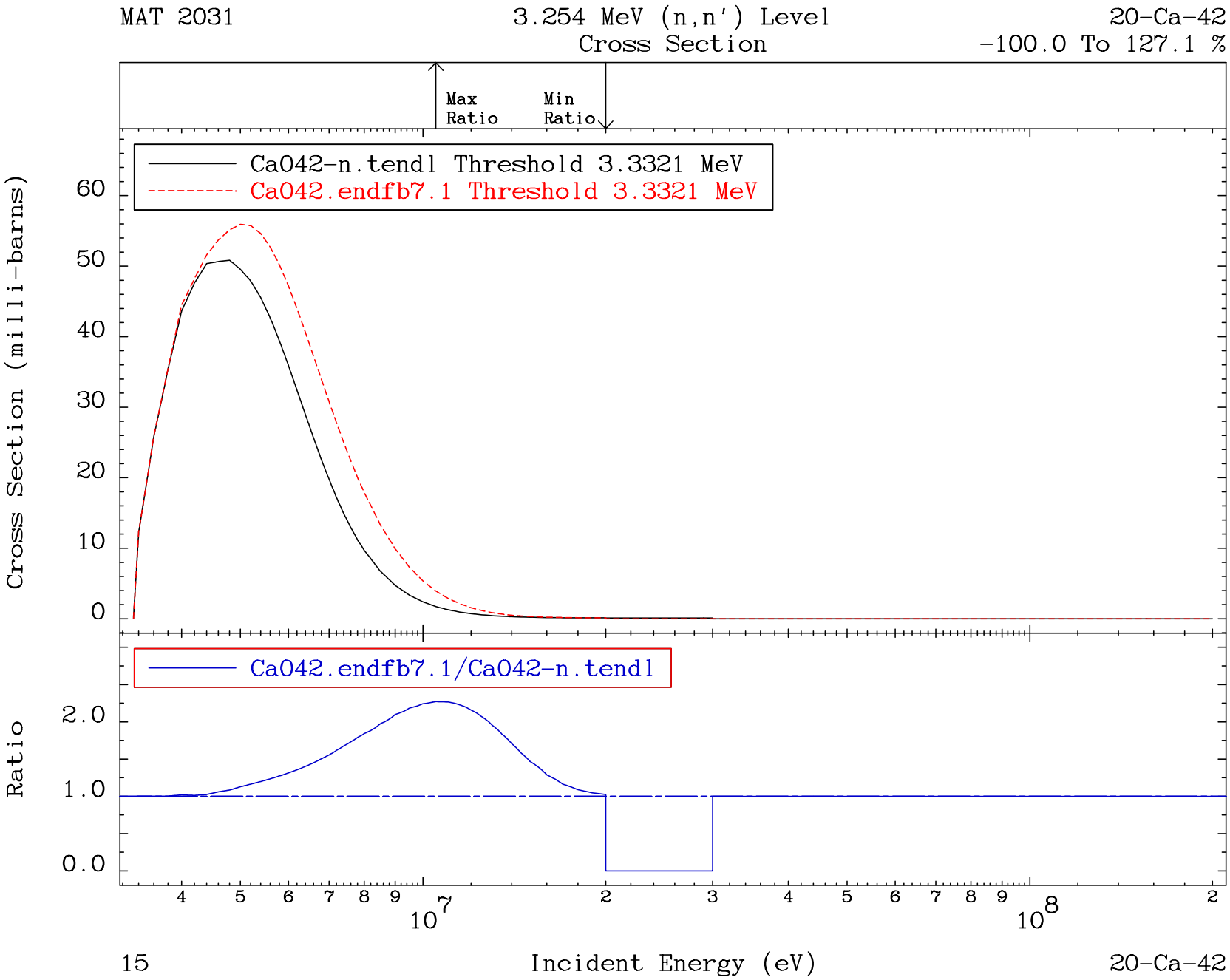

MAT 2031
1.525 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 20.80 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 1.5614 MeV
Ca042.endfb7.1 Threshold 1.5614 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
20-Ca-42

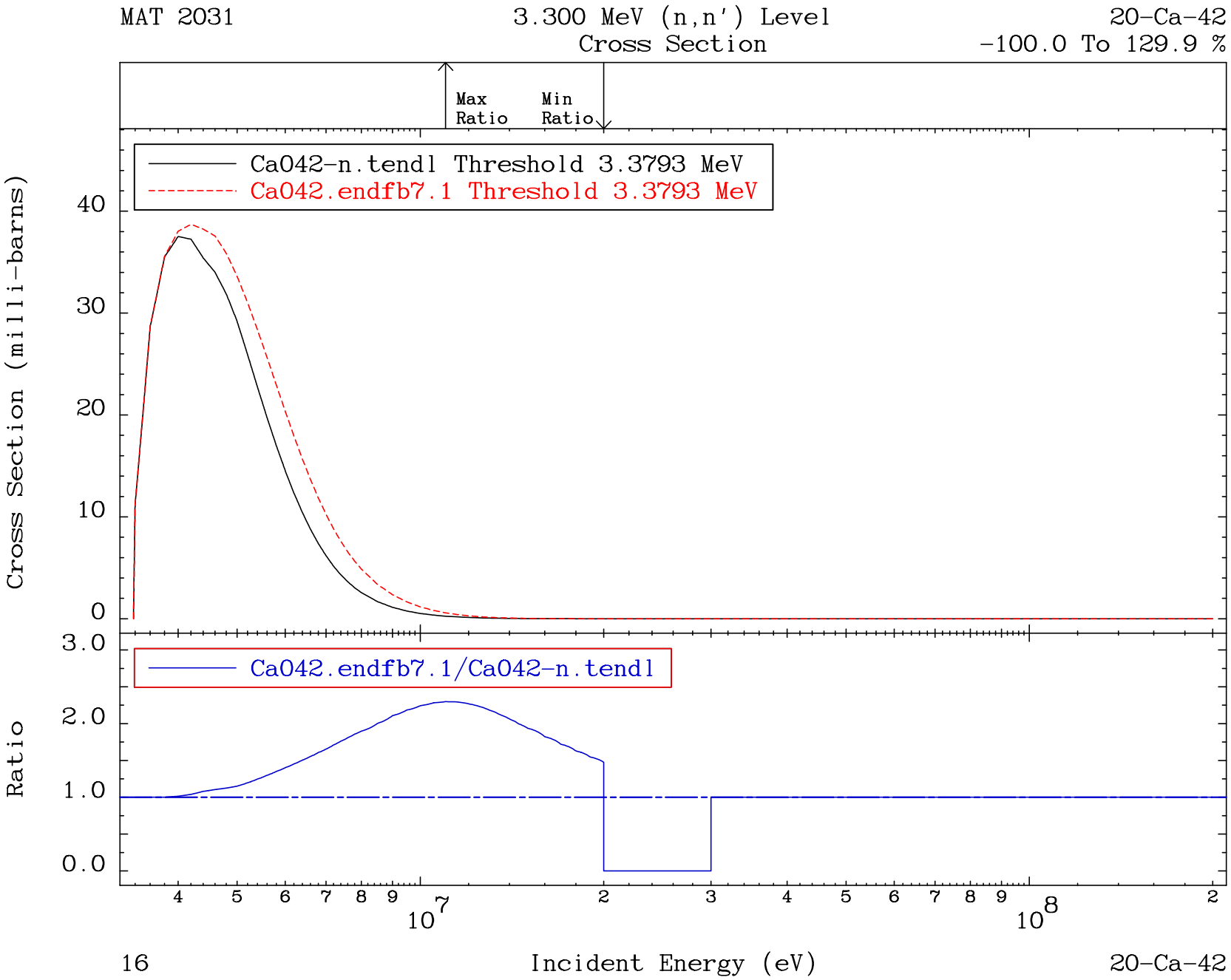

MAT 2031
1.837 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 131.4 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 1.8815 MeV
Ca042.endfb7.1 Threshold 1.8815 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
20-Ca-42

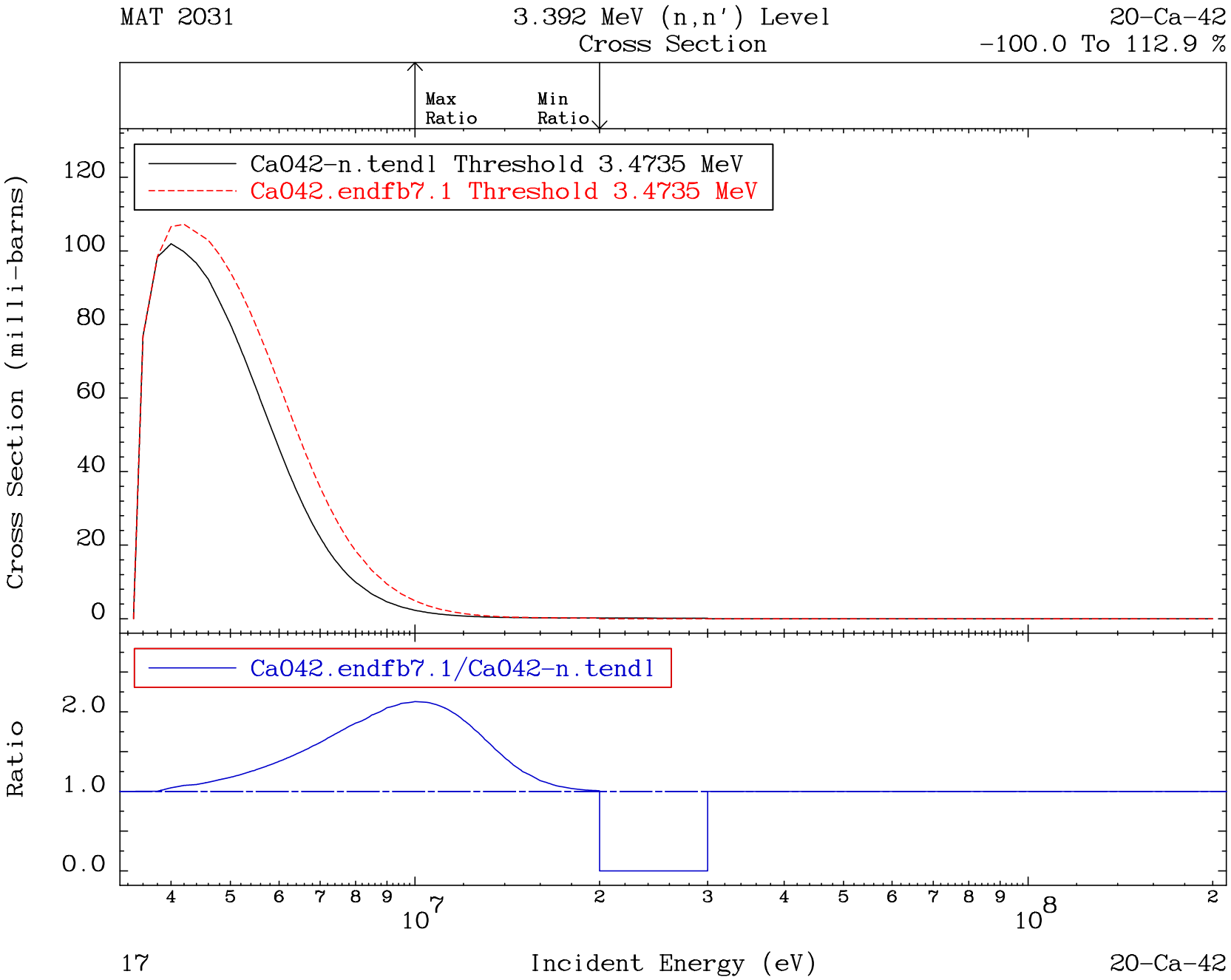

MAT 2031
2.424 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 112.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 2.4825 MeV
Ca042.endfb7.1 Threshold 2.4825 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
20-Ca-42

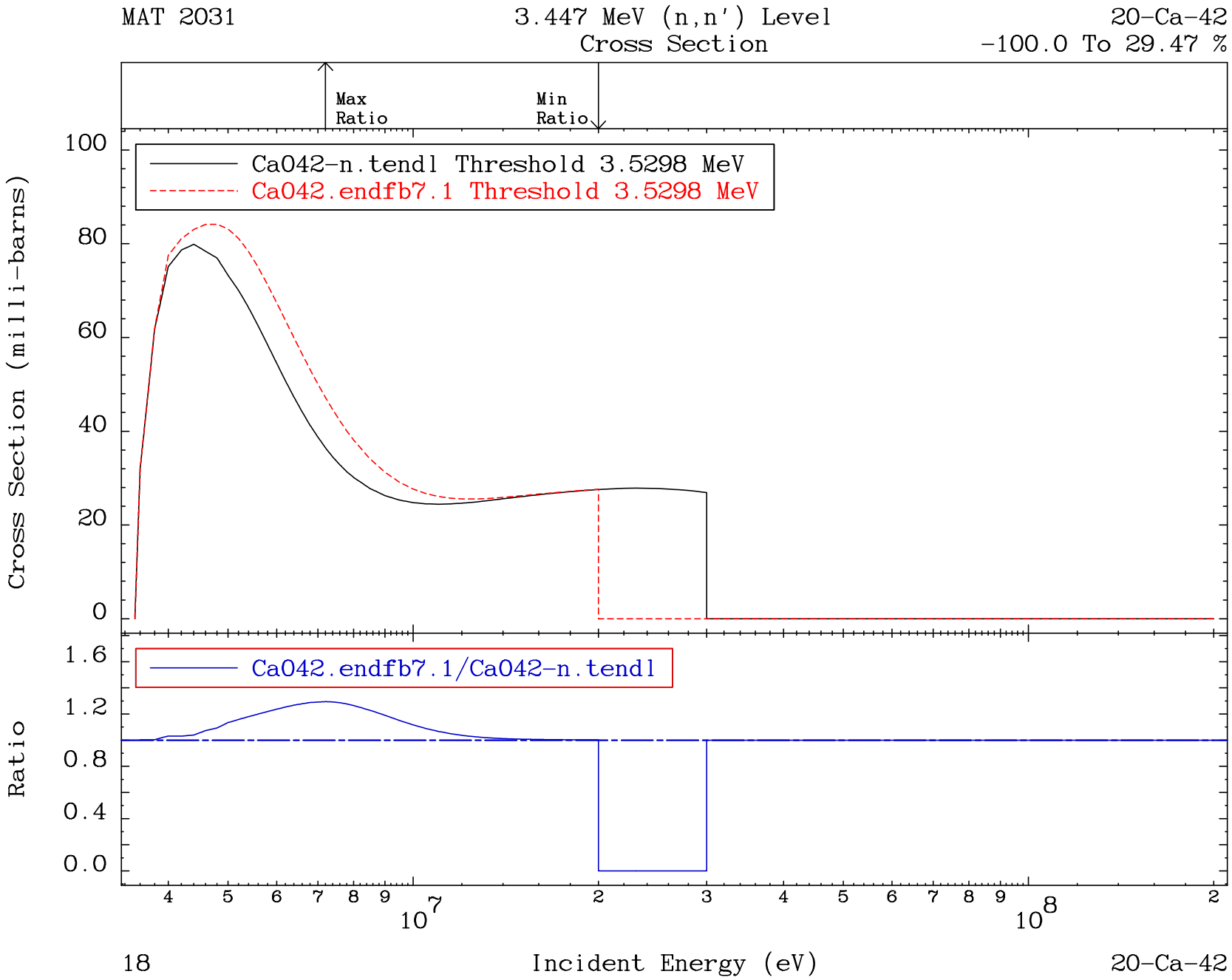

MAT 2031
2.752 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 46.32 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 2.8186 MeV
Ca042.endfb7.1 Threshold 2.8186 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.5
1.0
0.5
0.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
20-Ca-42

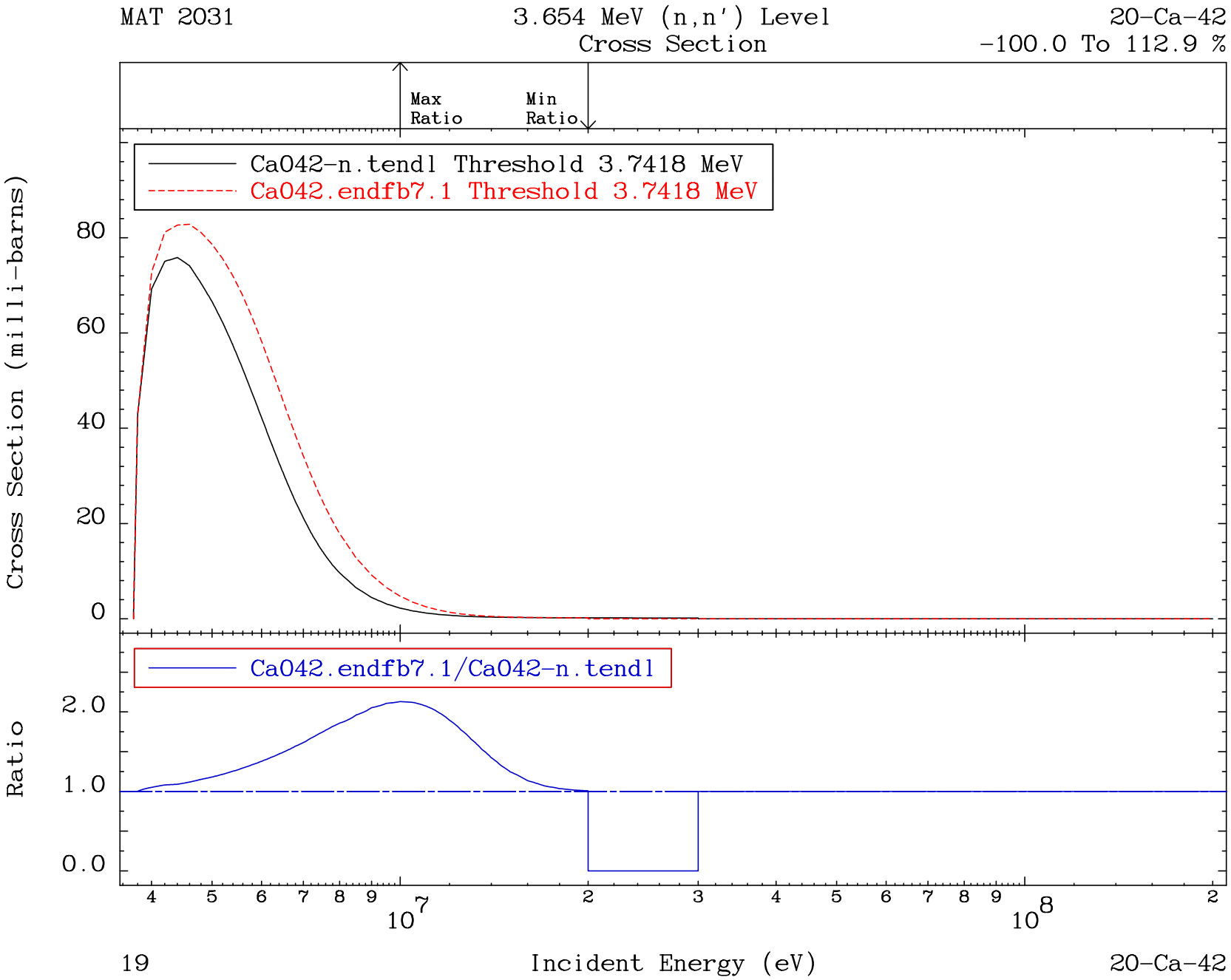

MAT 2031
3.189 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 138.5 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.2661 MeV
Ca042.endfb7.1 Threshold 3.2661 MeV
Cross Section (milli-barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
14
20-Ca-42

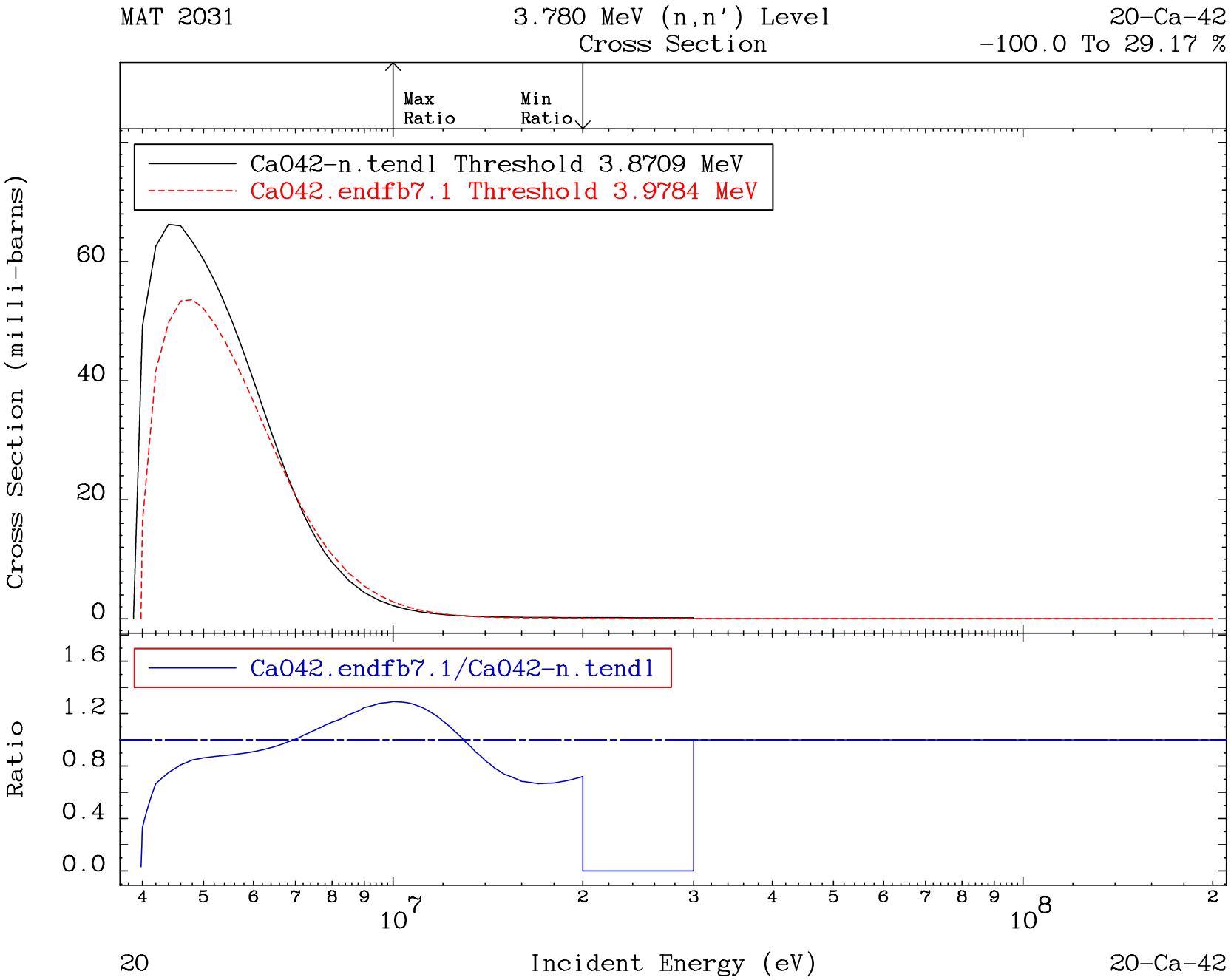

MAT 2031
3.254 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 127.1 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.3321 MeV
Ca042.endfb7.1 Threshold 3.3321 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
20-Ca-42

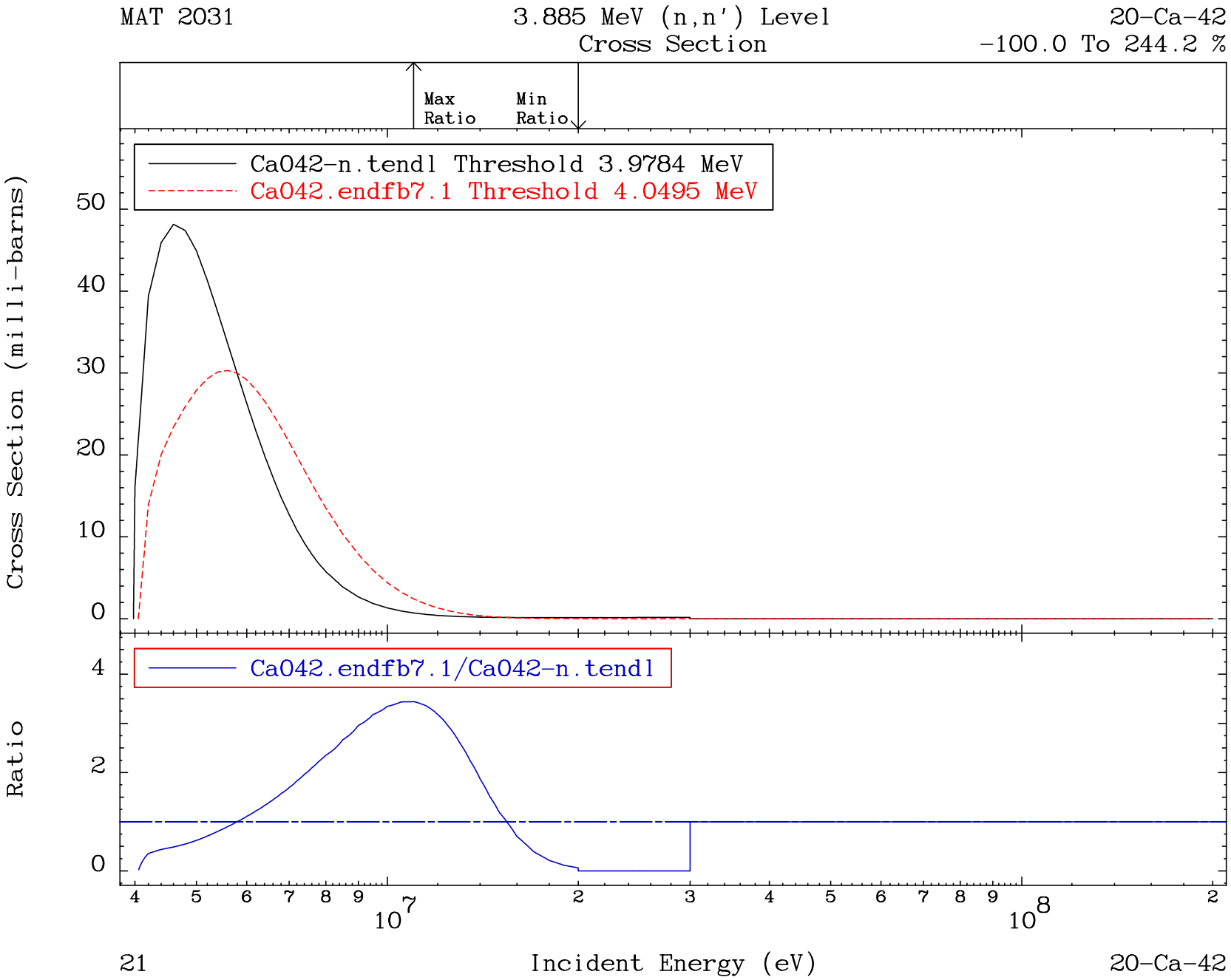

MAT 2031
3.300 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 129.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.3793 MeV
Ca042.endfb7.1 Threshold 3.3793 MeV
Cross Section (milli-barns)
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
3.0
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
20-Ca-42

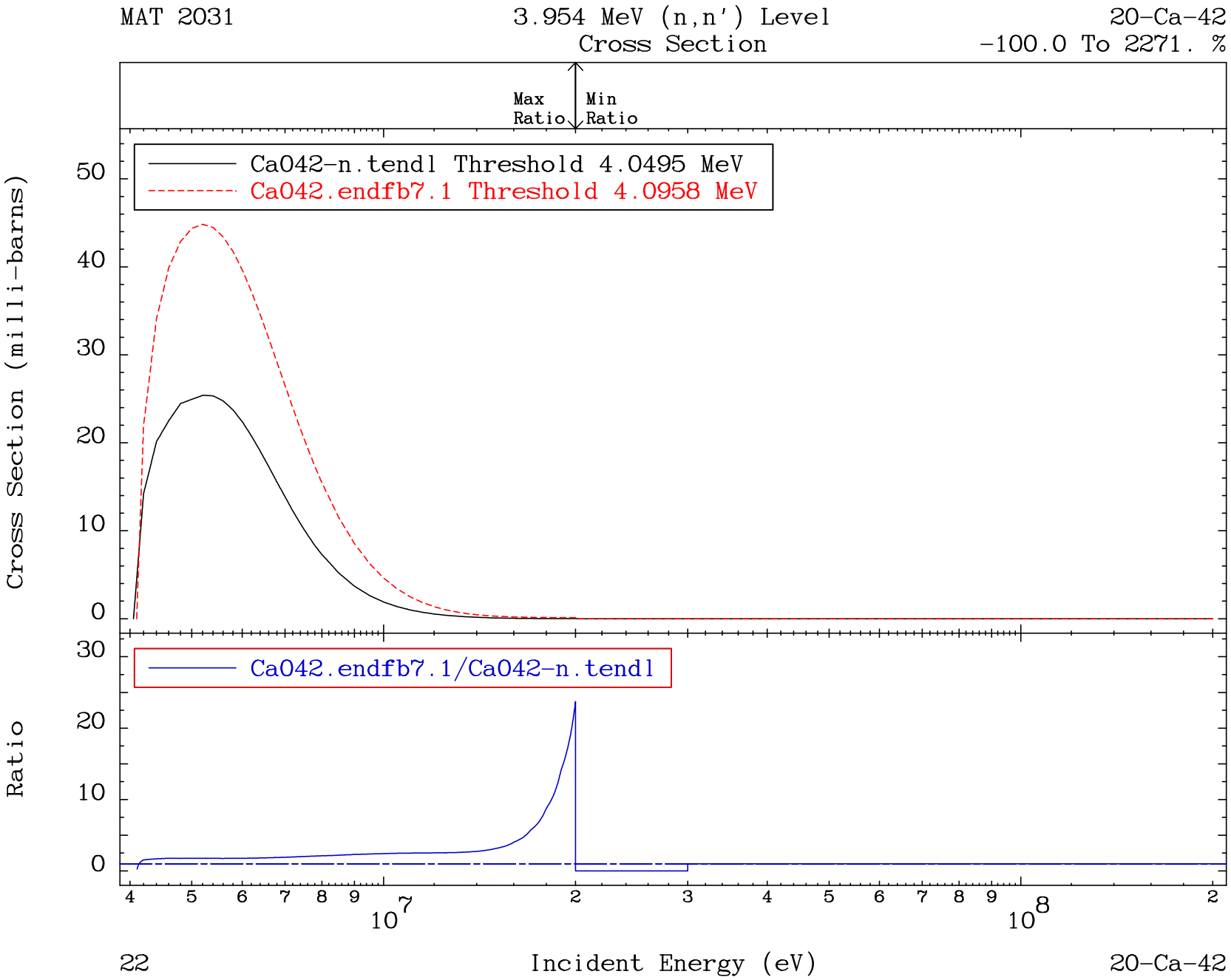

MAT 2031
3.392 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 112.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.4735 MeV
Ca042.endfb7.1 Threshold 3.4735 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
20-Ca-42

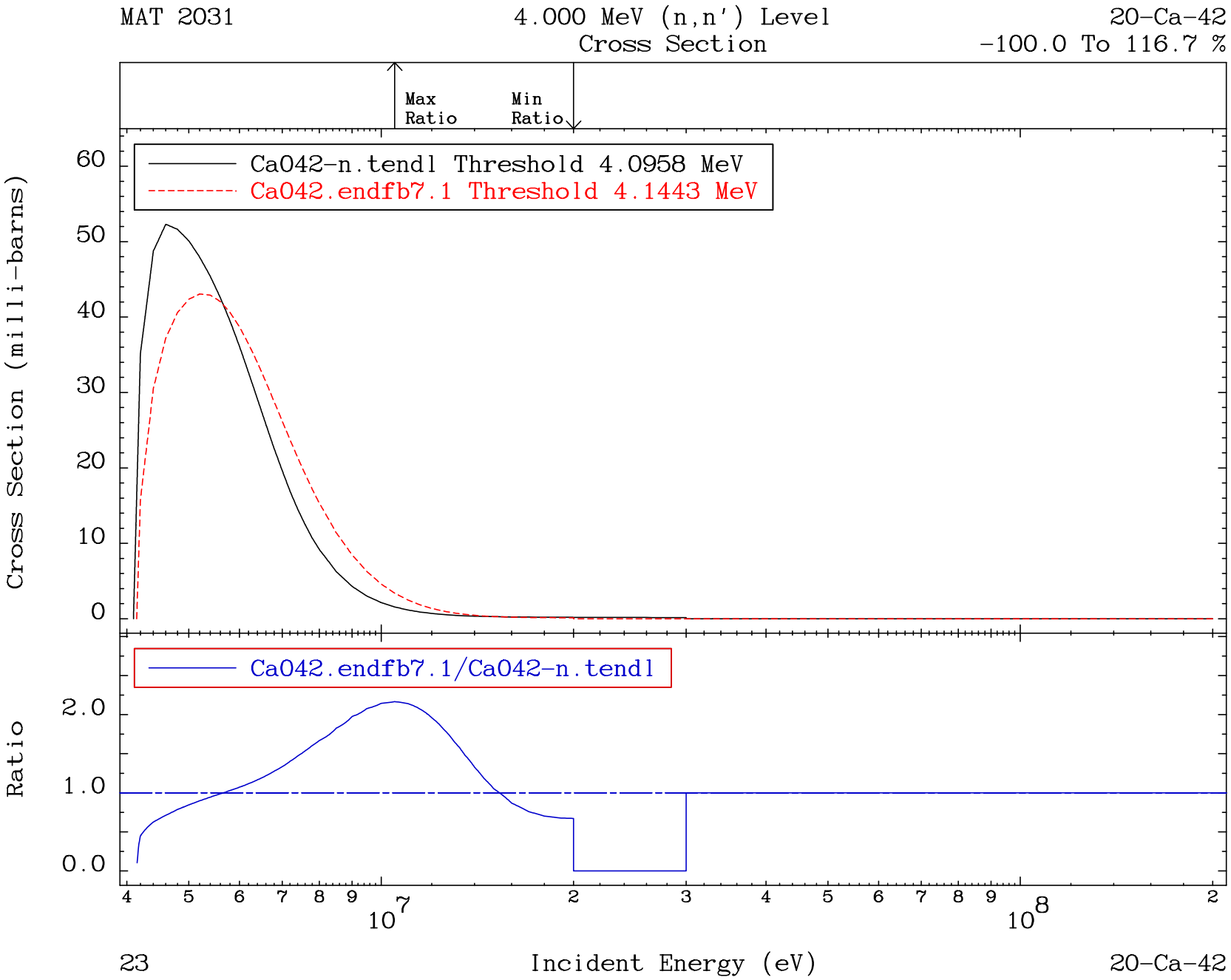

MAT 2031
3.447 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 29.47 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.5298 MeV
Ca042.endfb7.1 Threshold 3.5298 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
20-Ca-42

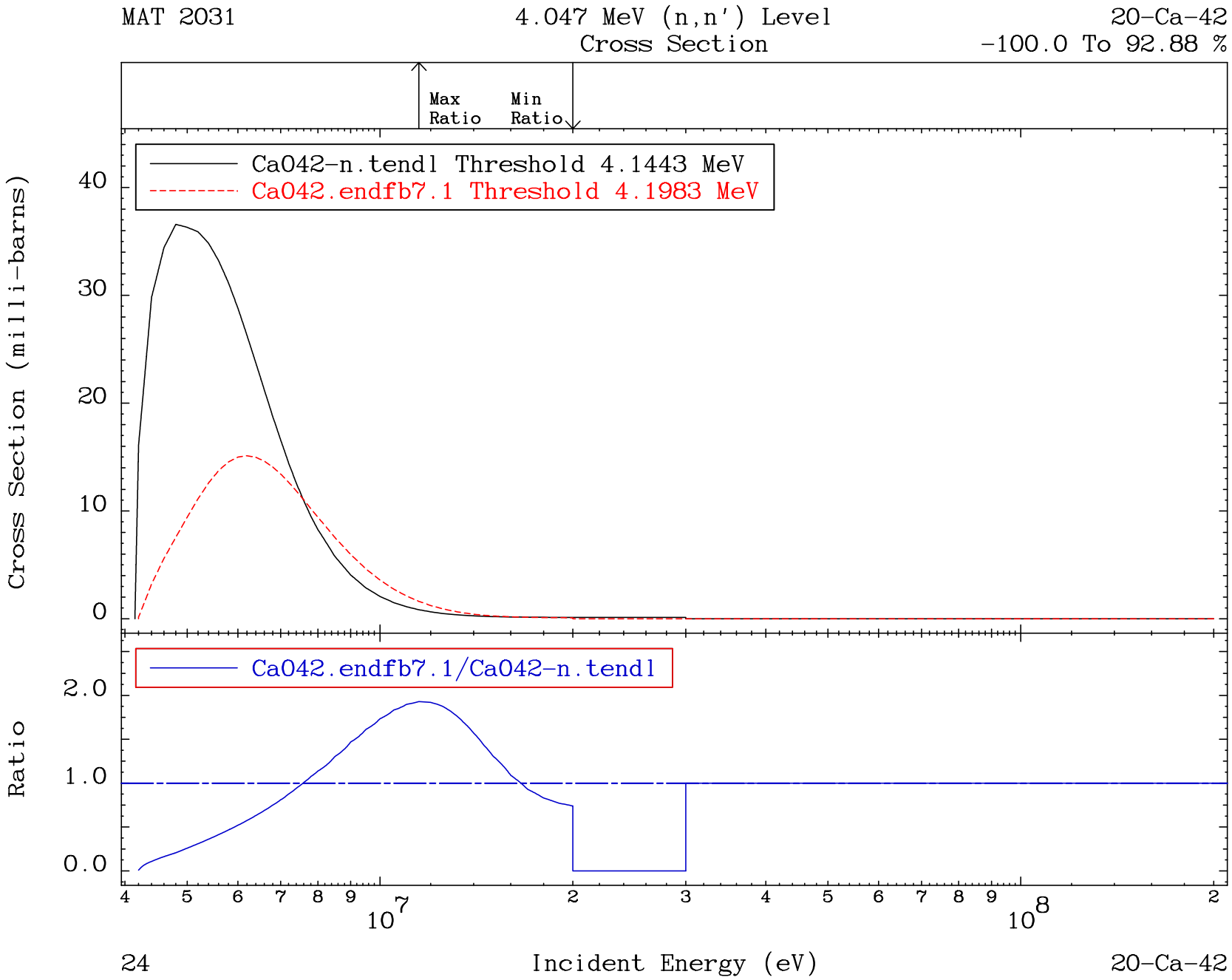

MAT 2031
3.654 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 112.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.7418 MeV
Ca042.endfb7.1 Threshold 3.7418 MeV
Cross Section (milli-barns)
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
20-Ca-42

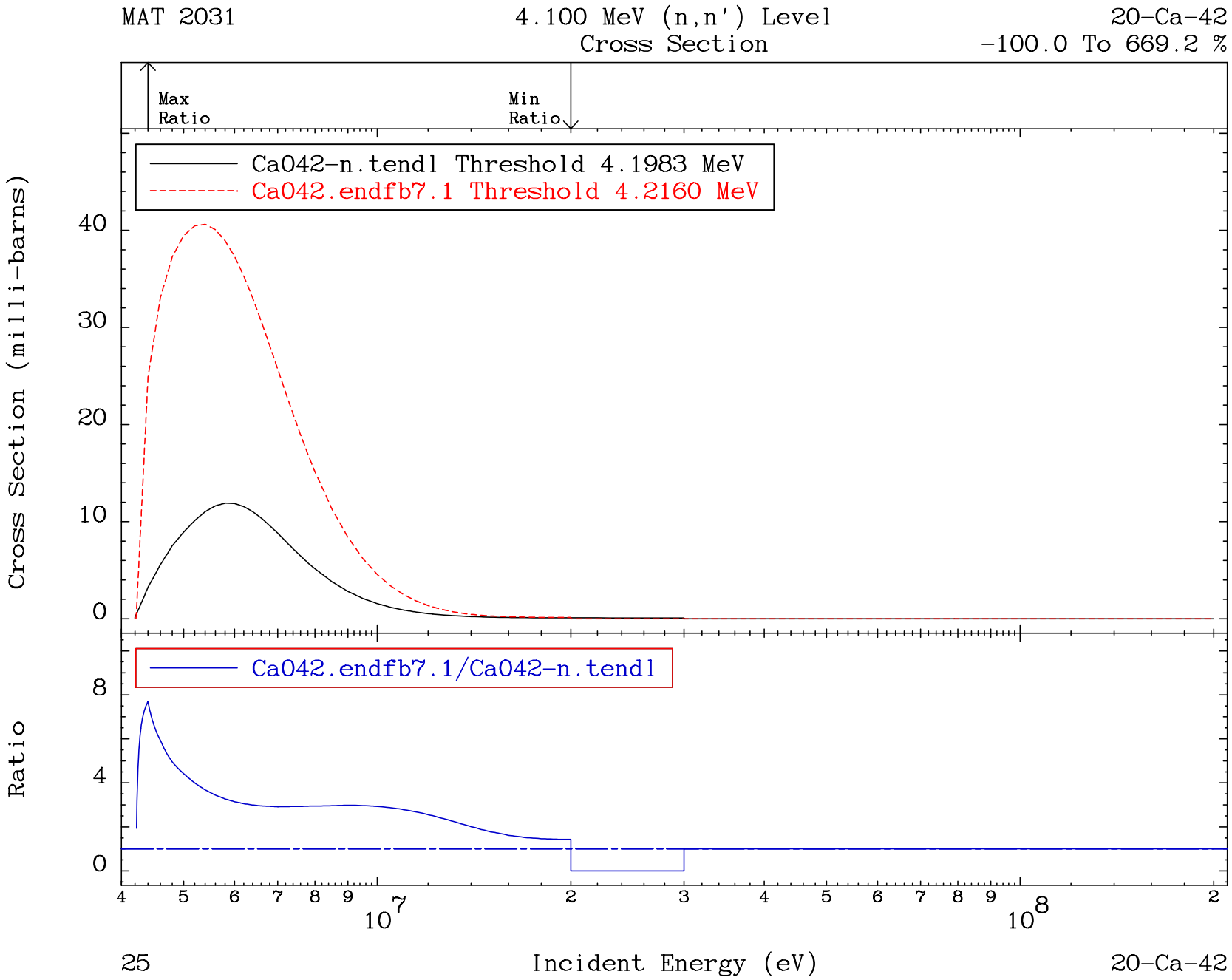

MAT 2031
3.780 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 29.17 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.8709 MeV
Ca042.endfb7.1 Threshold 3.9784 MeV
Cross Section (milli-barns)
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
20-Ca-42

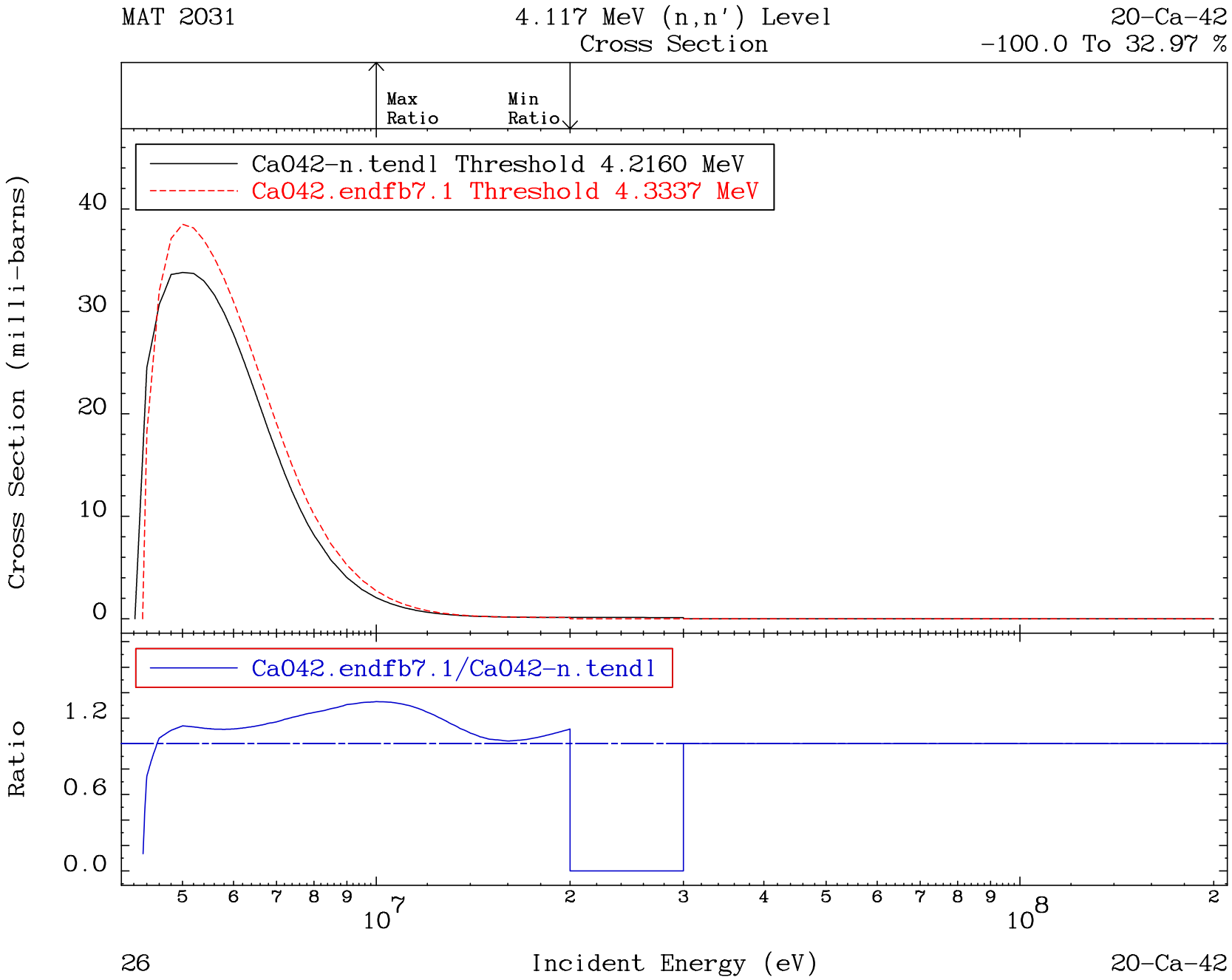

MAT 2031
3.885 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 244.2 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 3.9784 MeV
Ca042.endfb7.1 Threshold 4.0495 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
4
2
0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
20-Ca-42

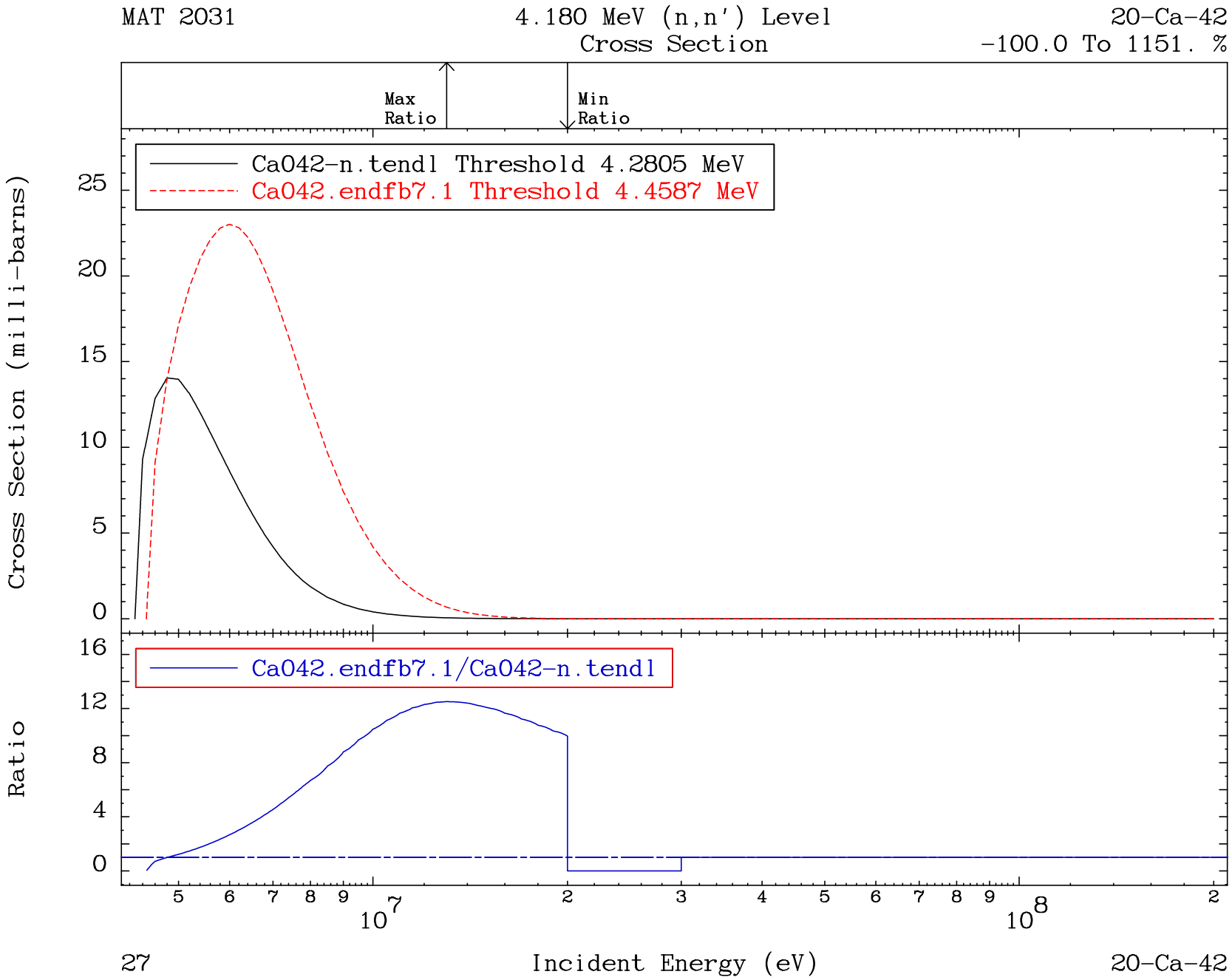

MAT 2031
3.954 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 2271. %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.0495 MeV
Ca042.endfb7.1 Threshold 4.0958 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
30
20
10
0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
20-Ca-42

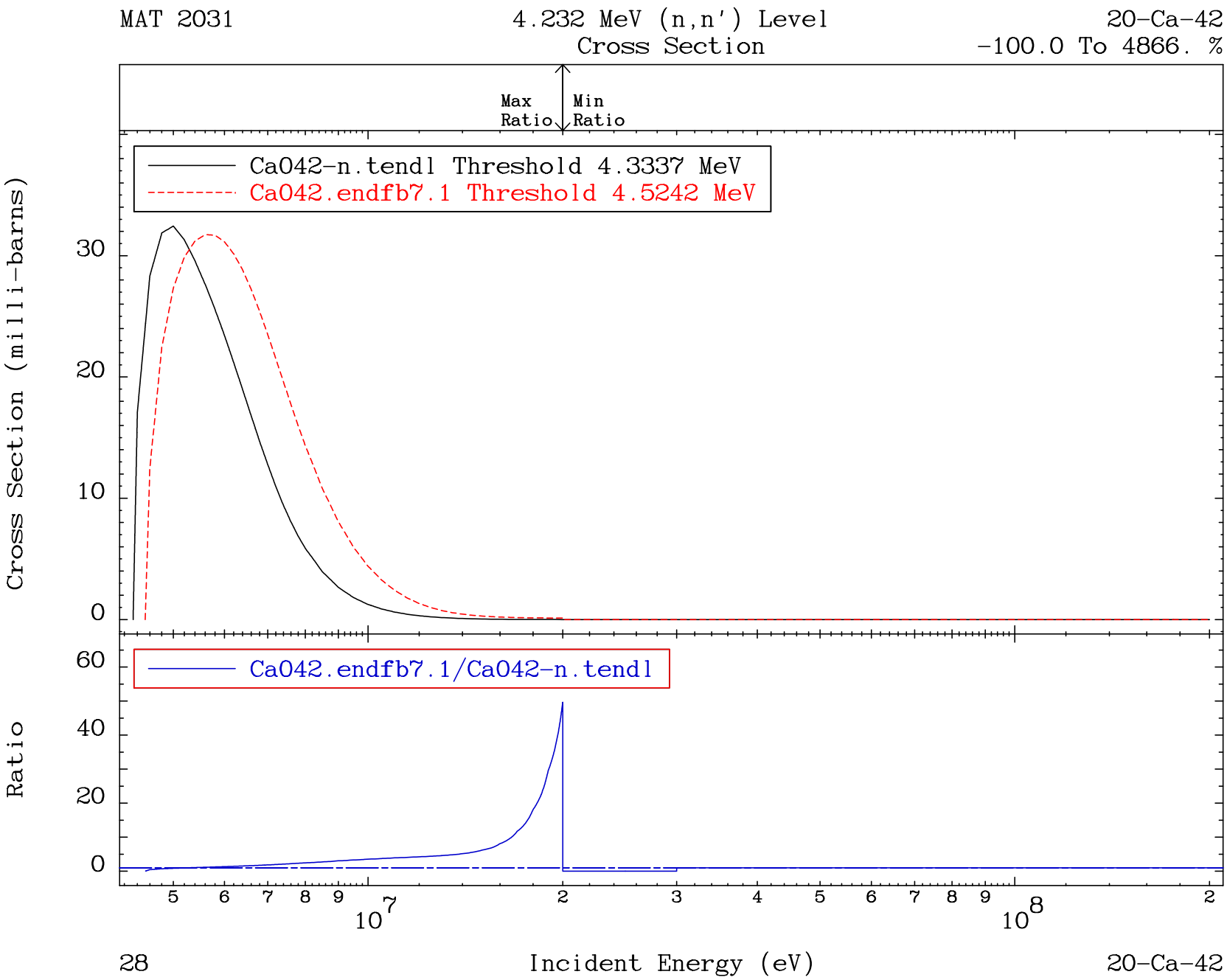

MAT 2031
4.000 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 116.7 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.0958 MeV
Ca042.endfb7.1 Threshold 4.1443 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
20-Ca-42

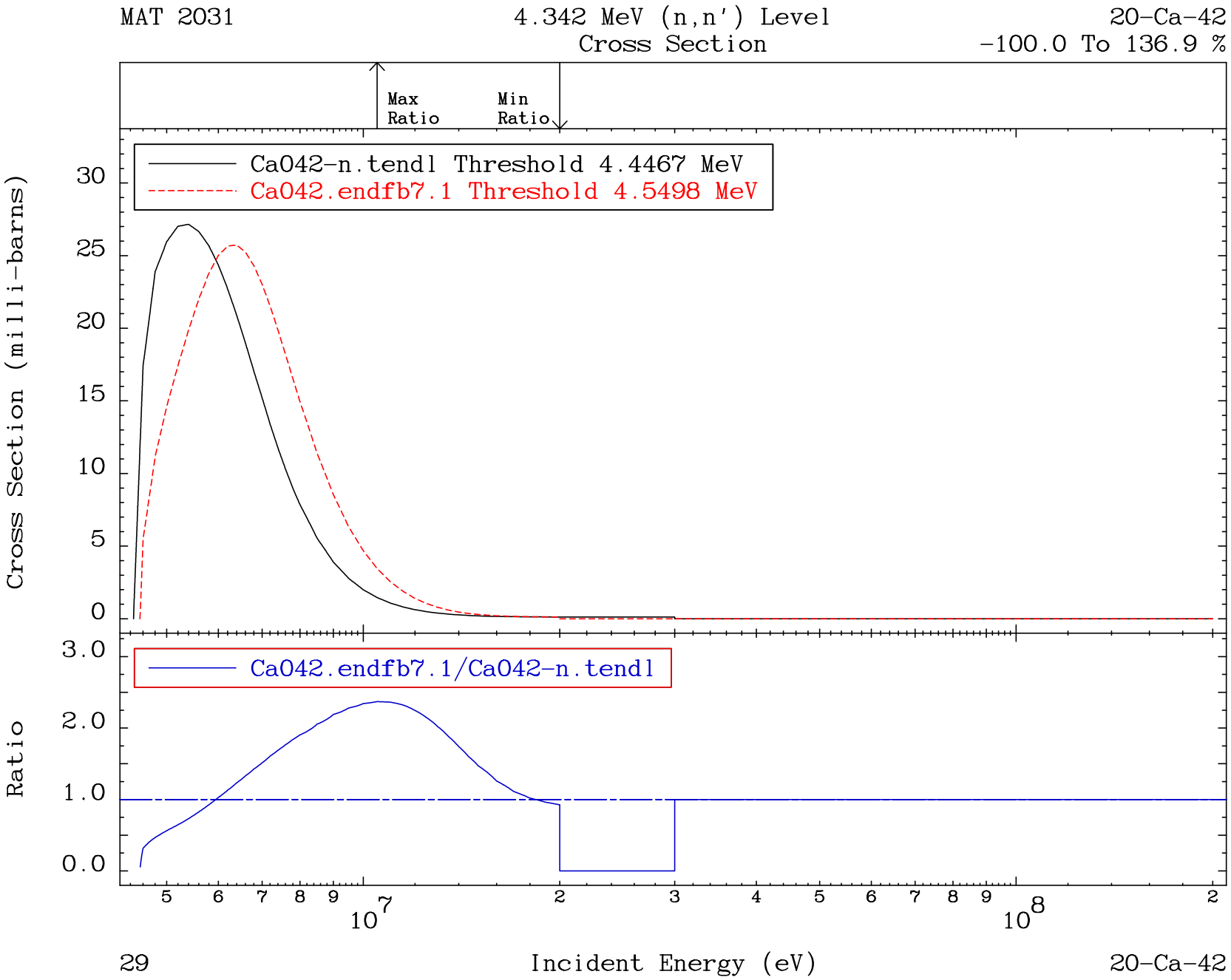

MAT 2031
4.047 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 92.88 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.1443 MeV
Ca042.endfb7.1 Threshold 4.1983 MeV
Cross Section (milli-barns)
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
20-Ca-42

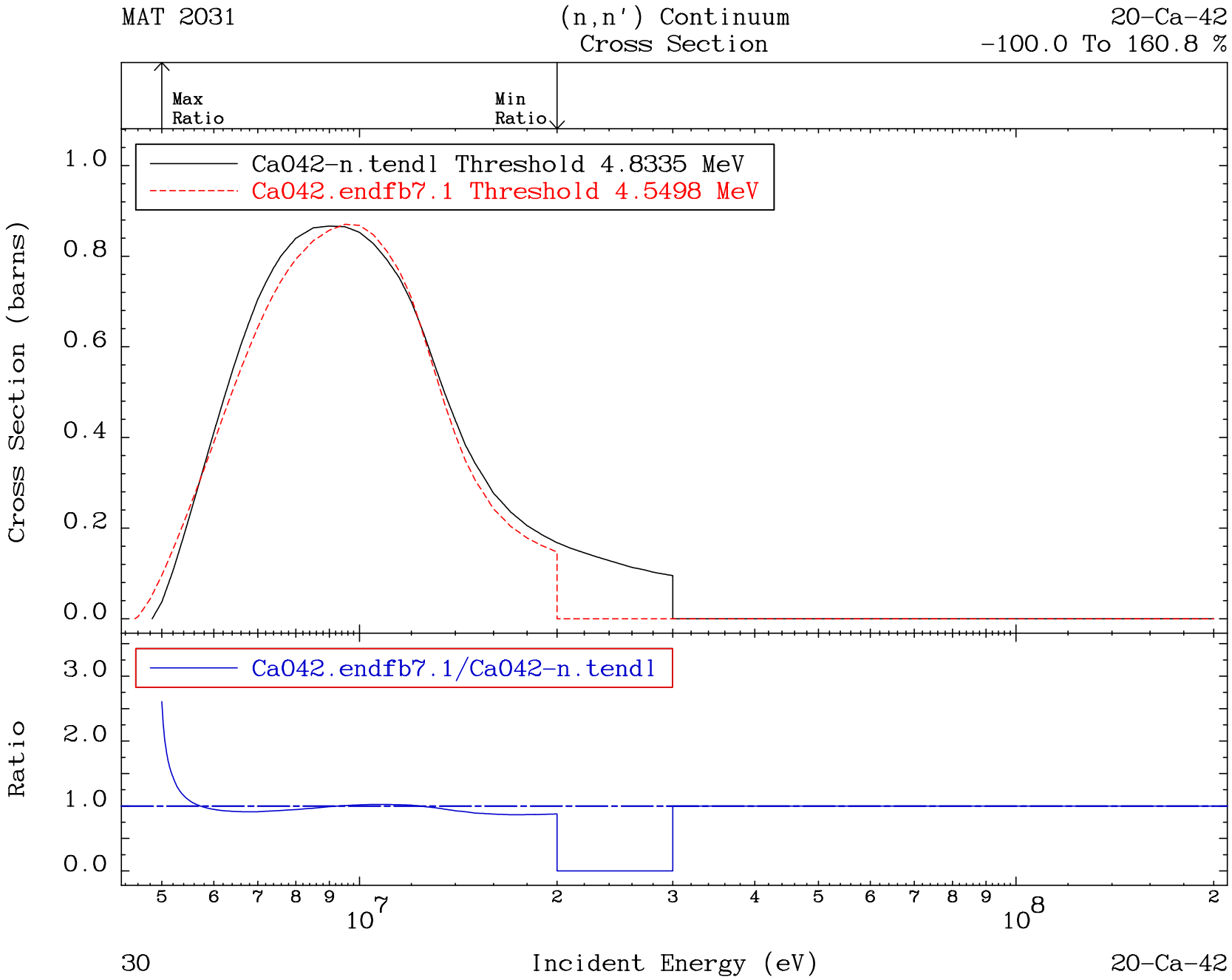

MAT 2031
4.100 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 669.2 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.1983 MeV
Ca042.endfb7.1 Threshold 4.2160 MeV
Cross Section (milli-barns)
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
8
4
0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
20-Ca-42

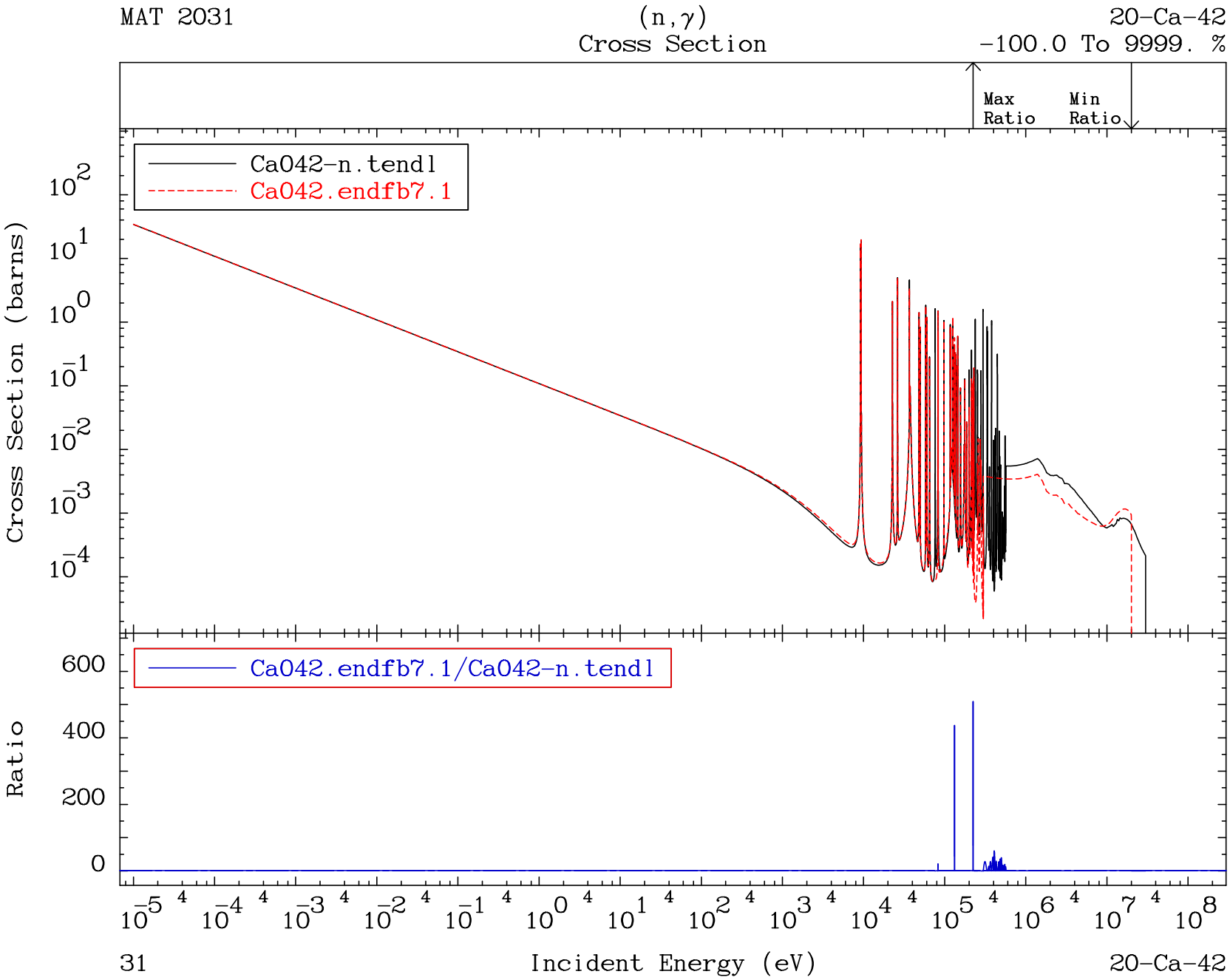

MAT 2031
4.117 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 32.97 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.2160 MeV
Ca042.endfb7.1 Threshold 4.3337 MeV
Cross Section (milli-barns)
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.6
0.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
20-Ca-42

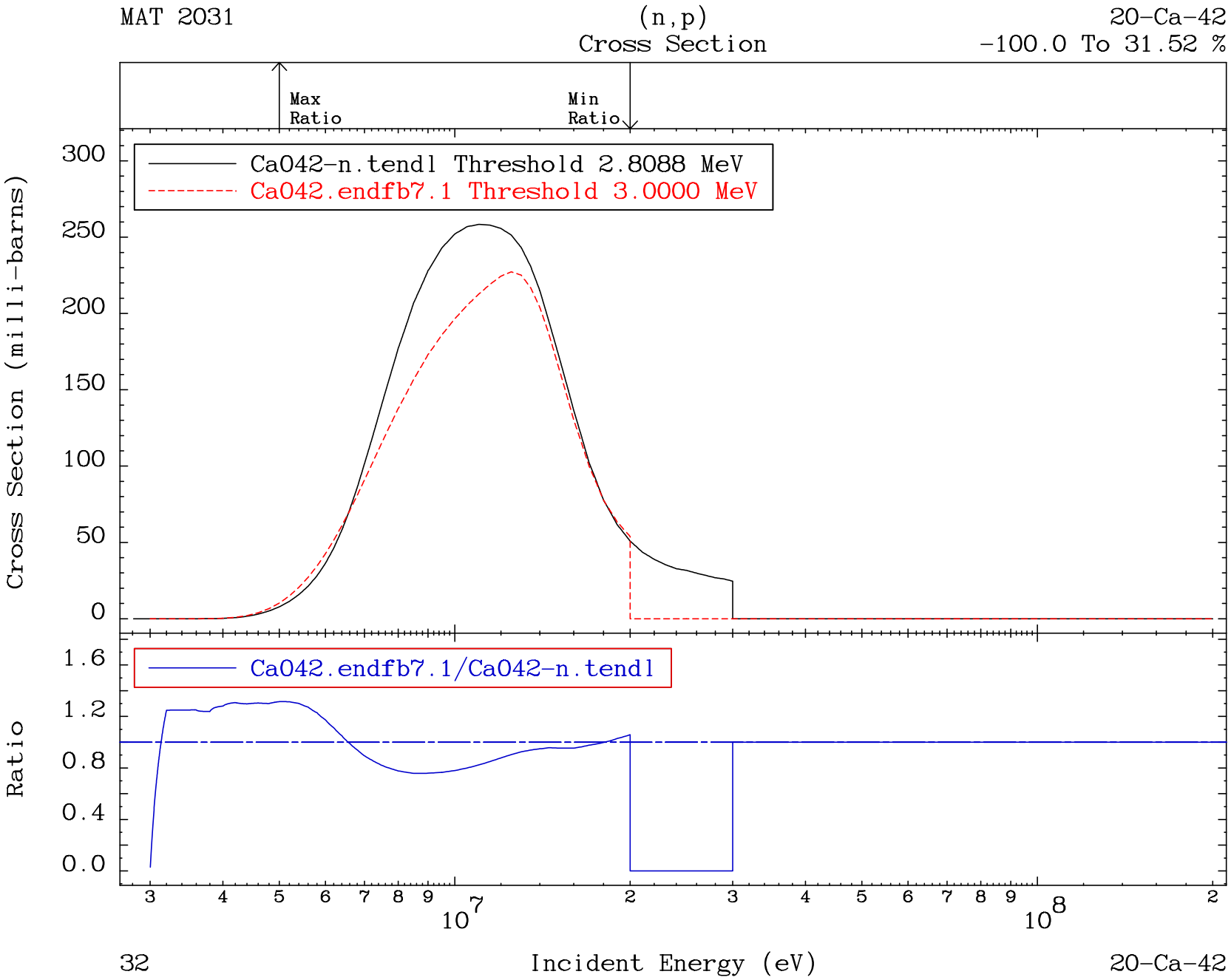

MAT 2031
4.180 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 1151. %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.2805 MeV
Ca042.endfb7.1 Threshold 4.4587 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
16
12
8
4
0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
20-Ca-42

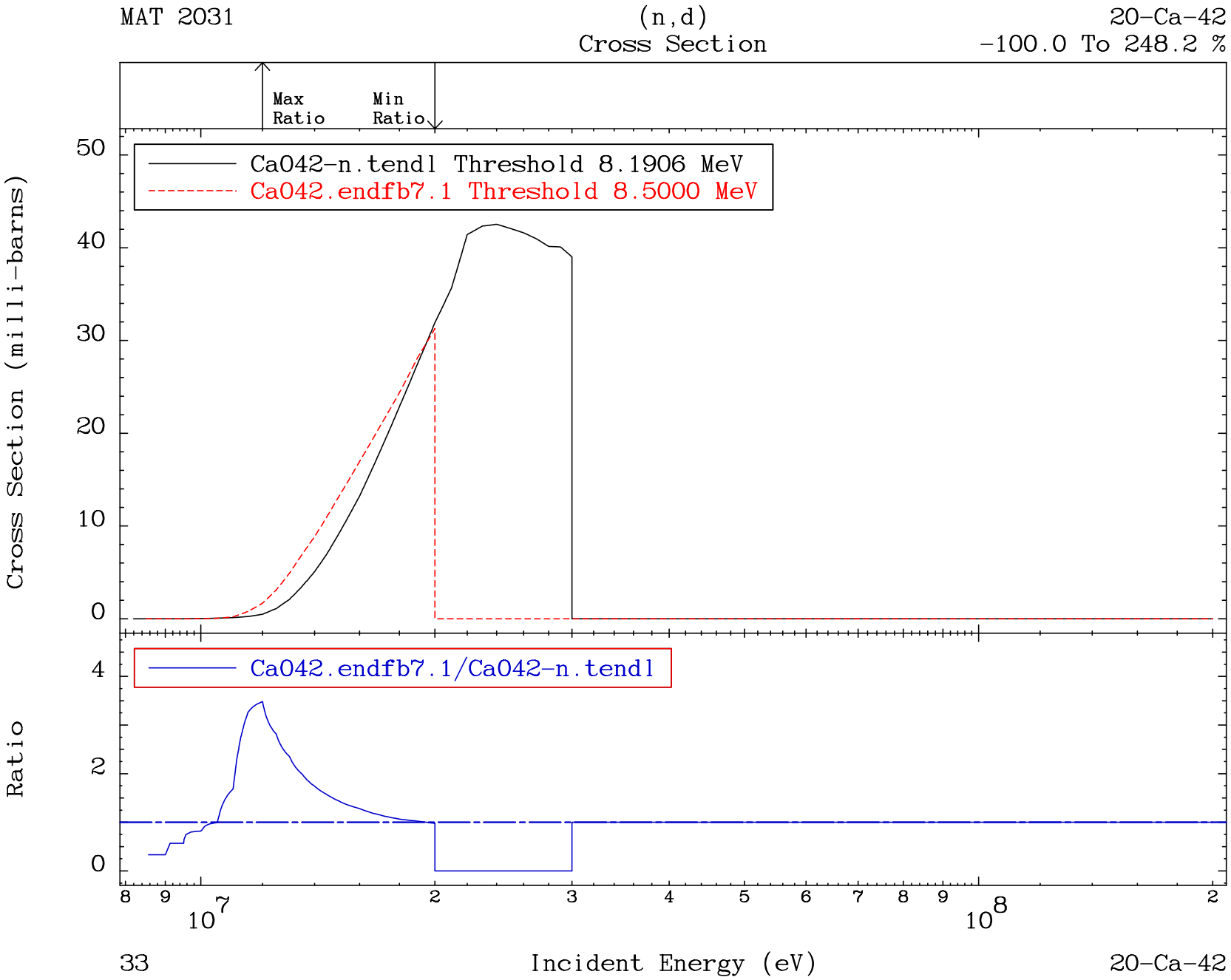

MAT 2031
4.232 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 4866. %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.3337 MeV
Ca042.endfb7.1 Threshold 4.5242 MeV
Cross Section (milli-barns)
0
10
20
30
Ca042.endfb7.1/Ca042-n.tendl
Ratio
0
20
40
60
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
20-Ca-42

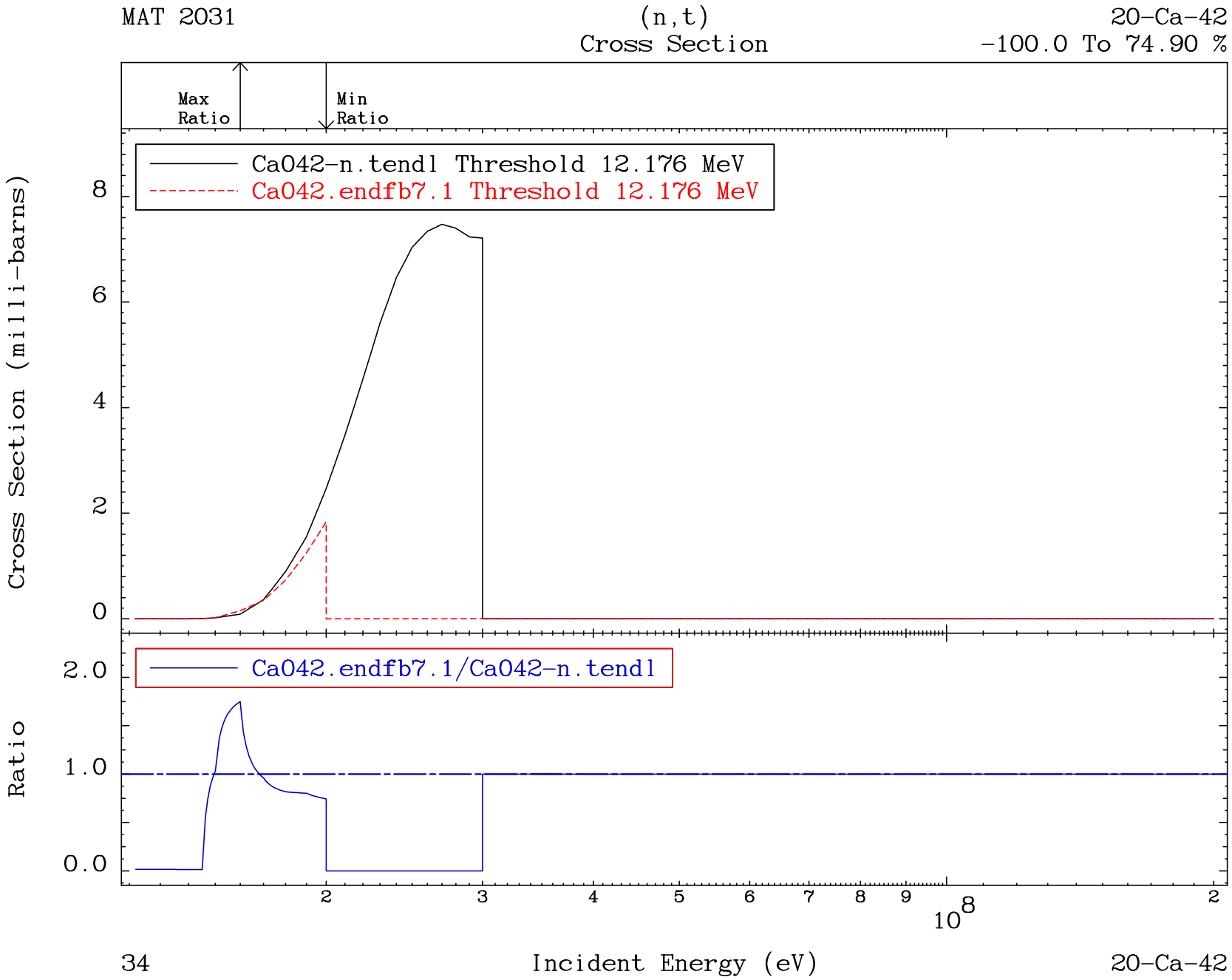

MAT 2031
4.342 MeV (n,n') Level
Cross Section
20-Ca-42
-100.0 To 136.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.4467 MeV
Ca042.endfb7.1 Threshold 4.5498 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
3.0
2.0
1.0
0.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
20-Ca-42

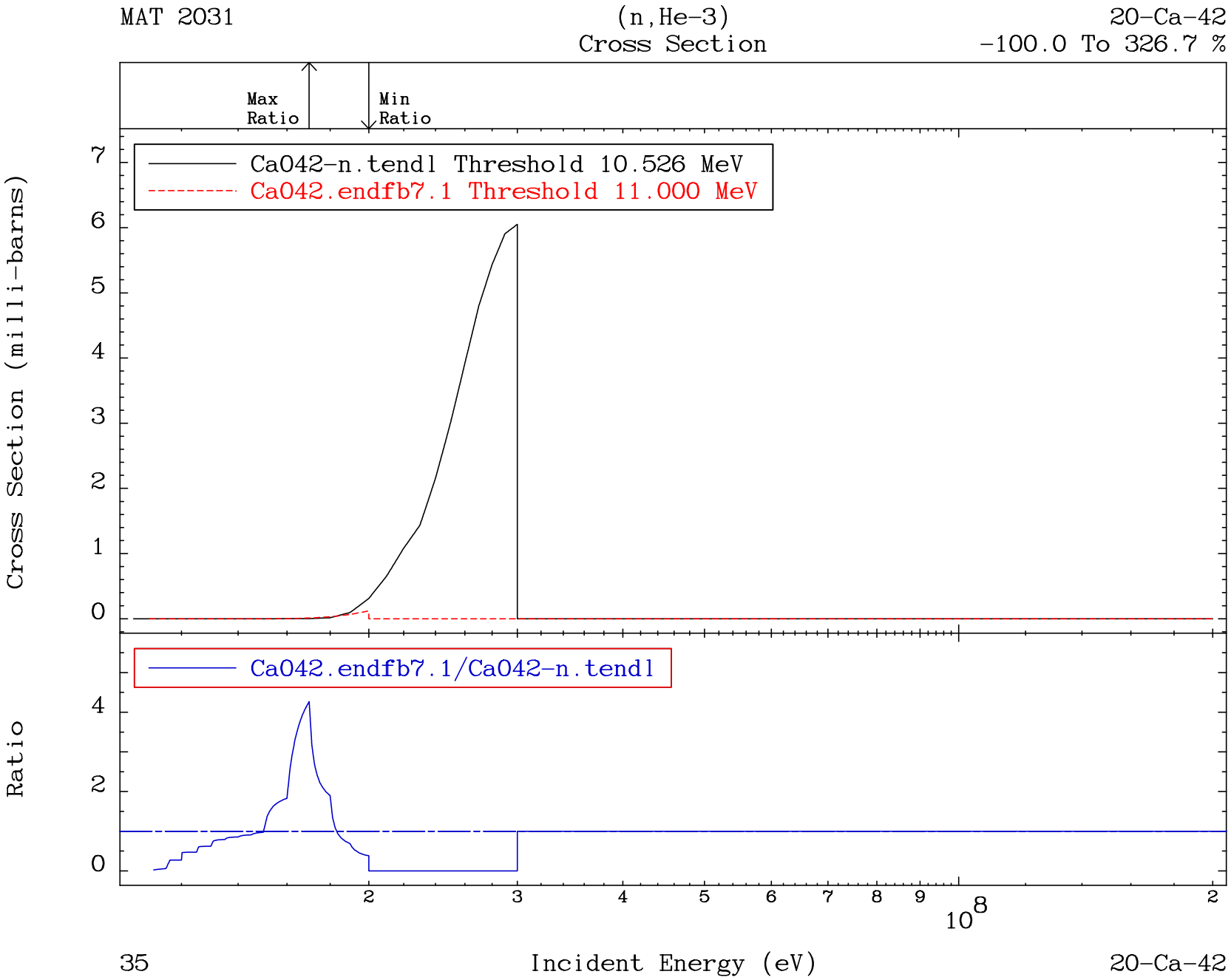

MAT 2031
(n,n') Continuum
Cross Section
20-Ca-42
-100.0 To 160.8 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 4.8335 MeV
Ca042.endfb7.1 Threshold 4.5498 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
3.0
2.0
1.0
0.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
20-Ca-42

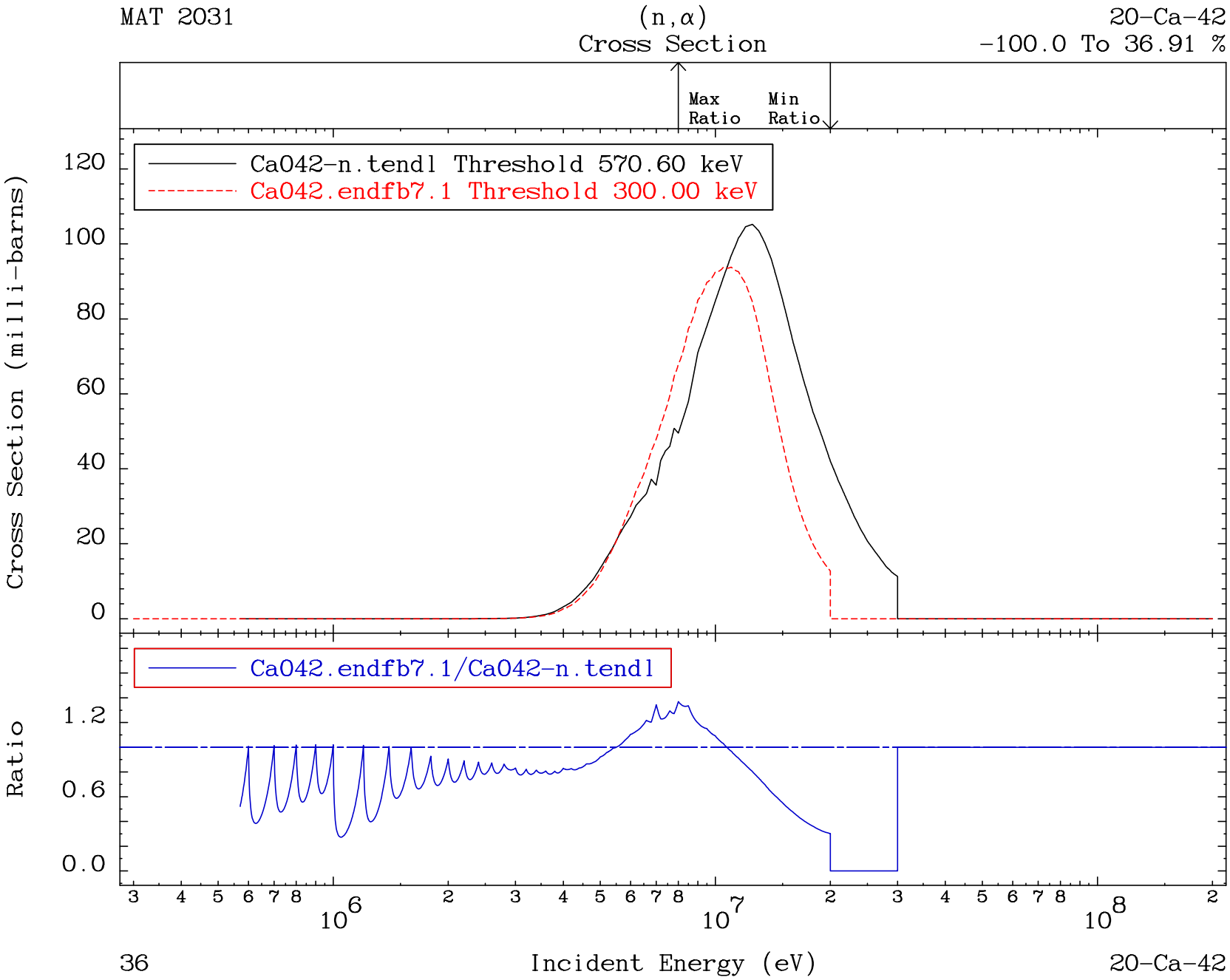

MAT 2031
(n,γ)
Cross Section
20-Ca-42
-100.0 To 9999. %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
31
20-Ca-42

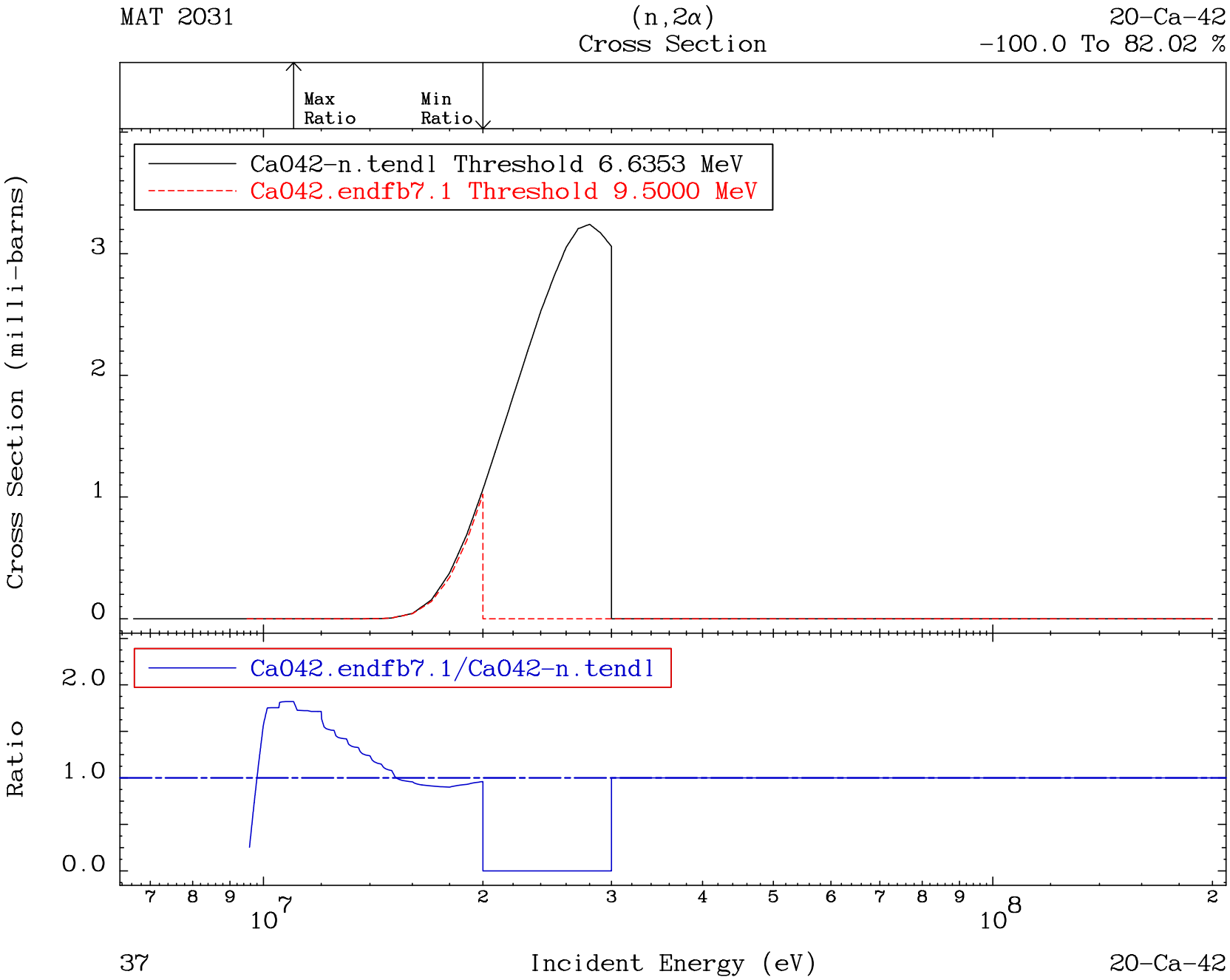

MAT 2031
(n,p)
Cross Section
20-Ca-42
-100.0 To 31.52 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 2.8088 MeV
Ca042.endfb7.1 Threshold 3.0000 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
20-Ca-42

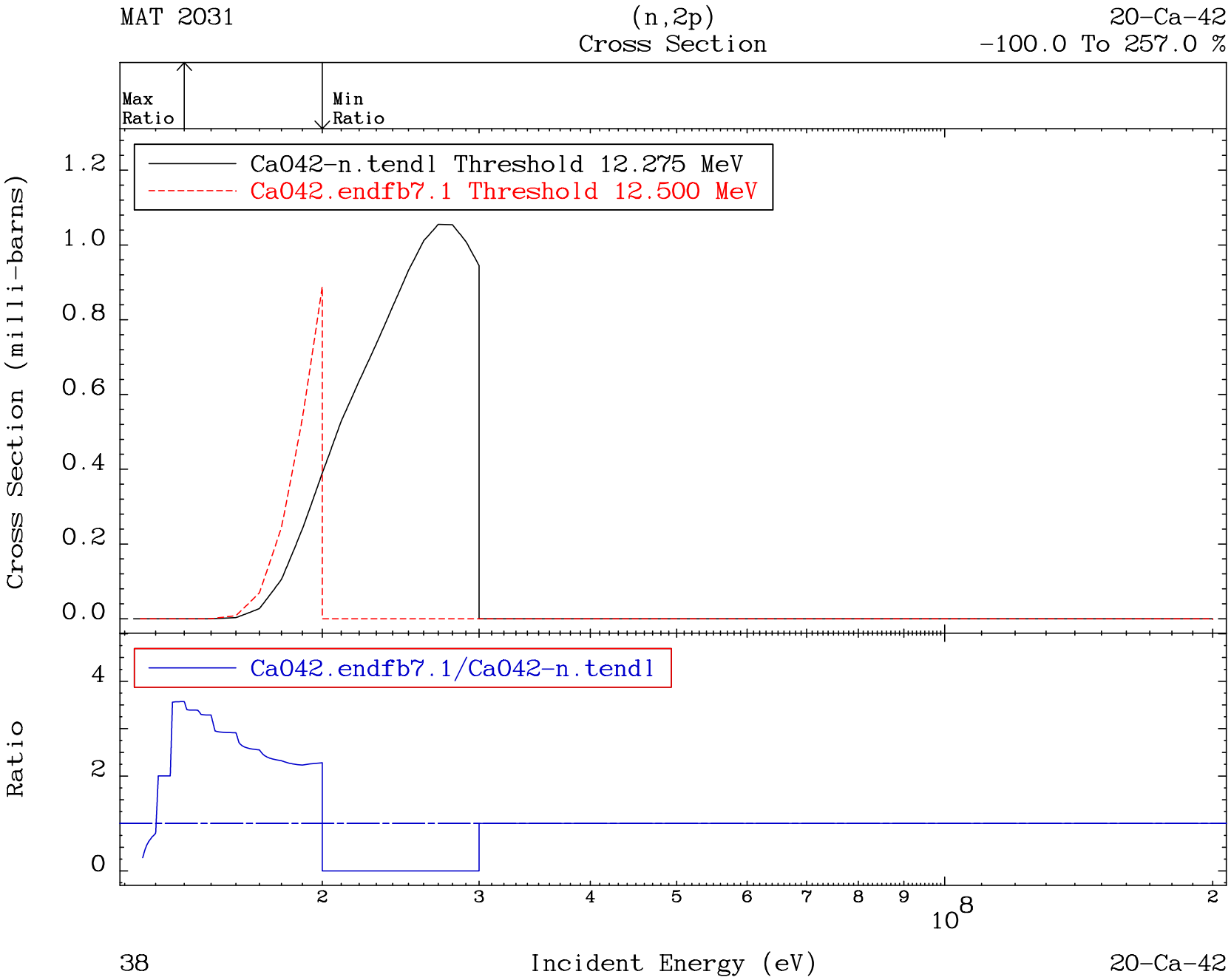

MAT 2031
(n,d)
Cross Section
20-Ca-42
-100.0 To 248.2 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 8.1906 MeV
Ca042.endfb7.1 Threshold 8.5000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
4
2
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
20-Ca-42

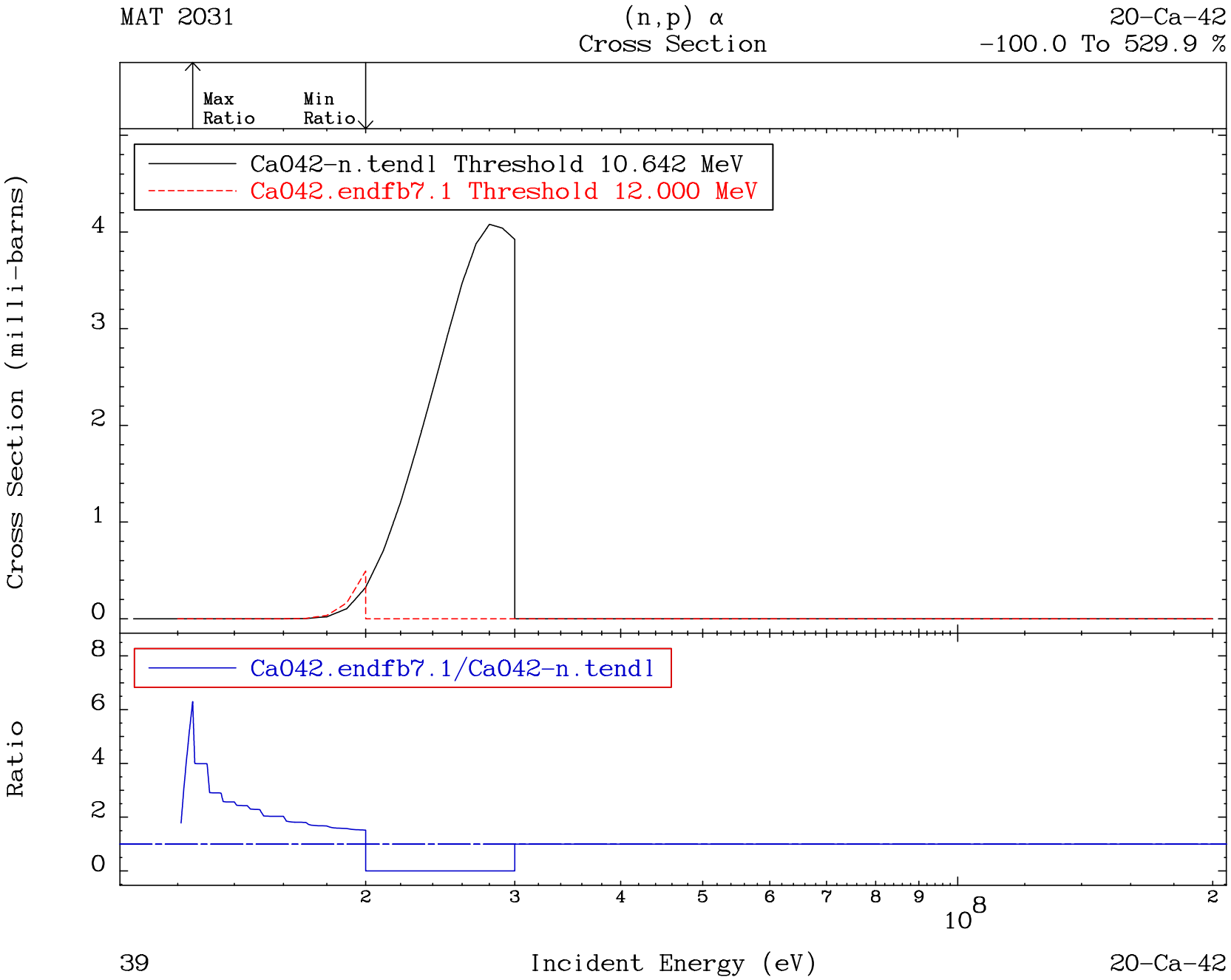

MAT 2031
(n,t)
Cross Section
20-Ca-42
-100.0 To 74.90 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 12.176 MeV
Ca042.endfb7.1 Threshold 12.176 MeV
Cross Section (milli-barns)
8
6
4
2
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
34
Incident Energy (eV)
20-Ca-42

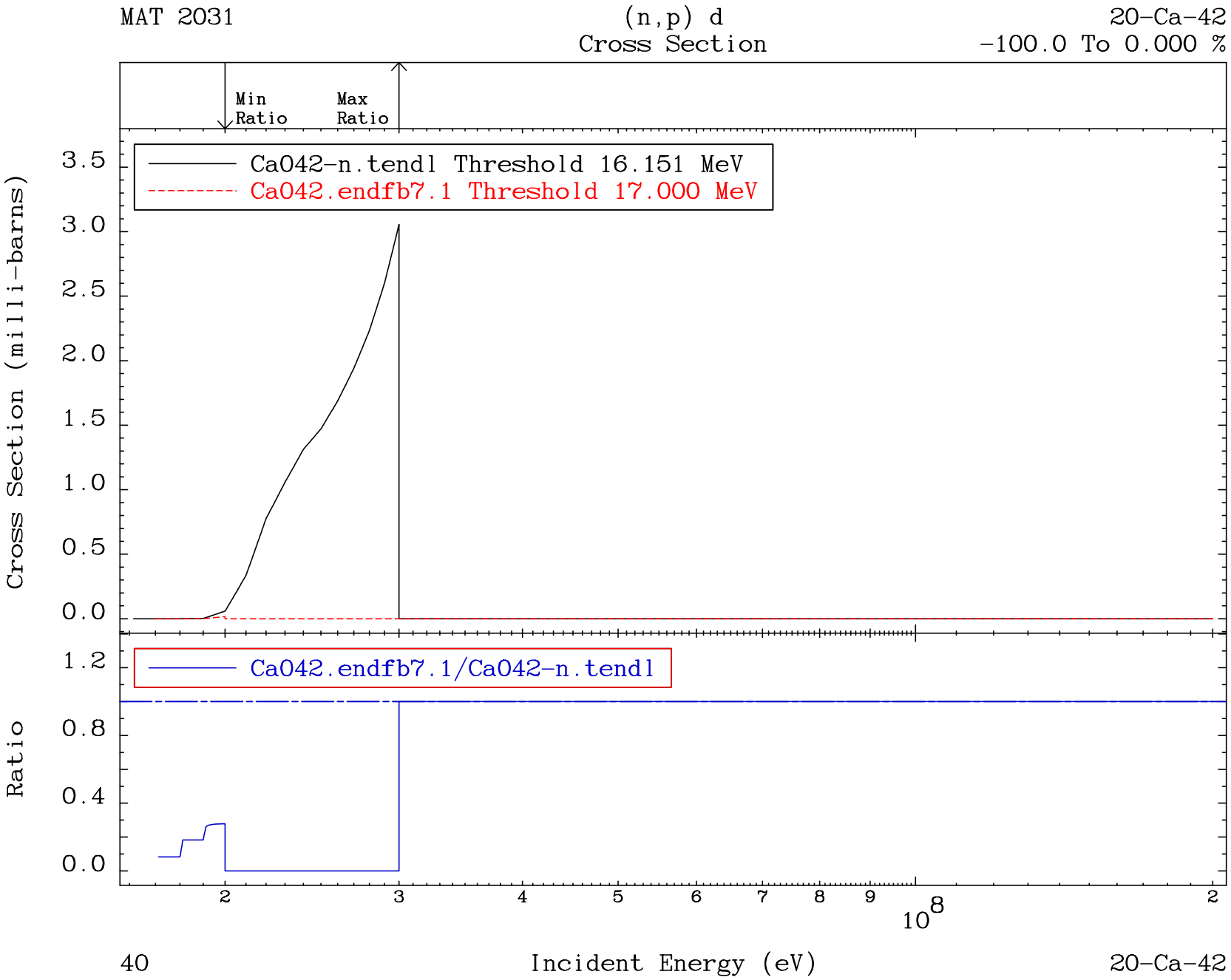

MAT 2031
(n,He-3)
Cross Section
20-Ca-42
-100.0 To 326.7 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 10.526 MeV
Ca042.endfb7.1 Threshold 11.000 MeV
Cross Section (milli-barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
35
20-Ca-42

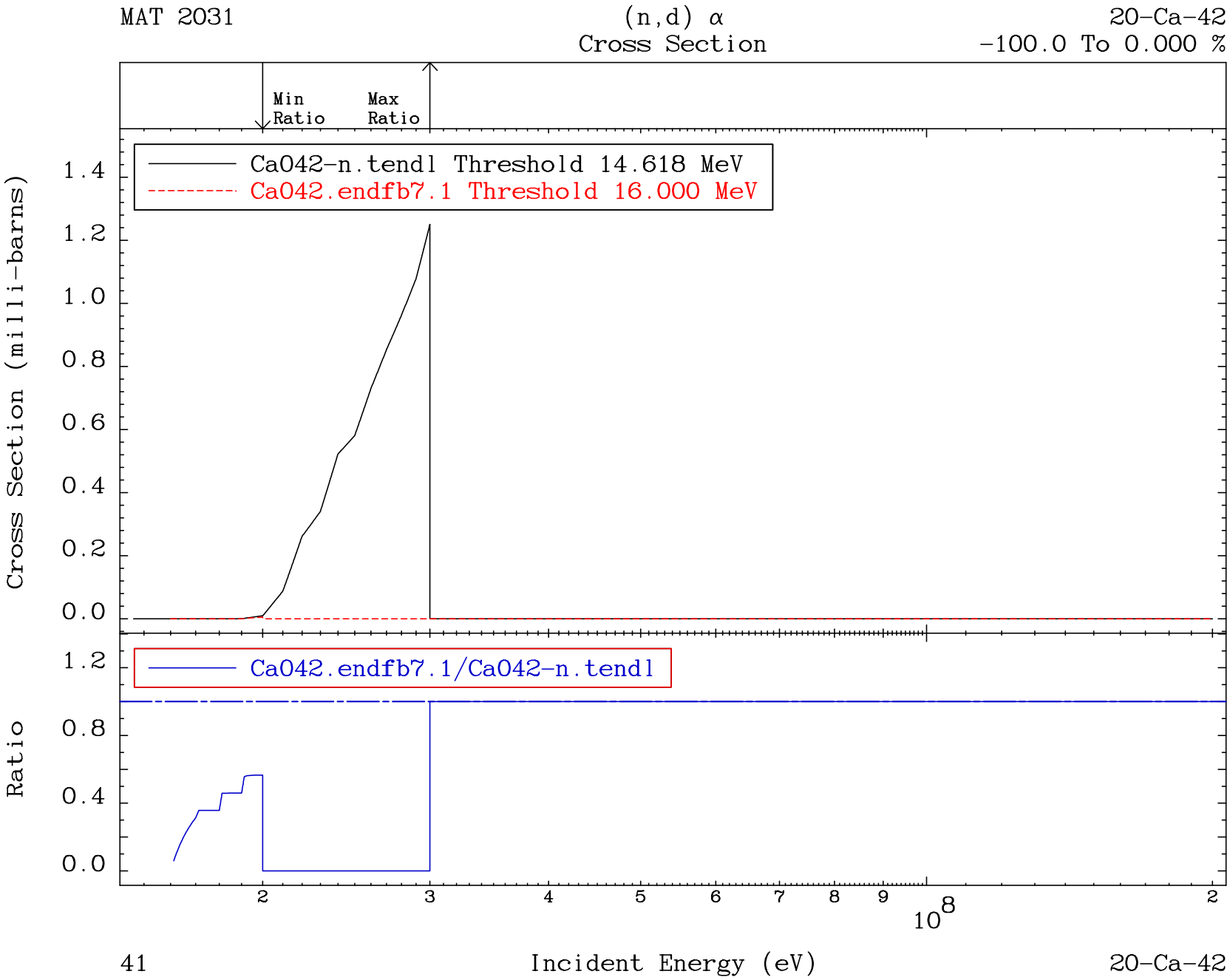

MAT 2031
(n,α)
Cross Section
20-Ca-42
-100.0 To 36.91 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 570.60 keV
Ca042.endfb7.1 Threshold 300.00 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.6
0.0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
20-Ca-42

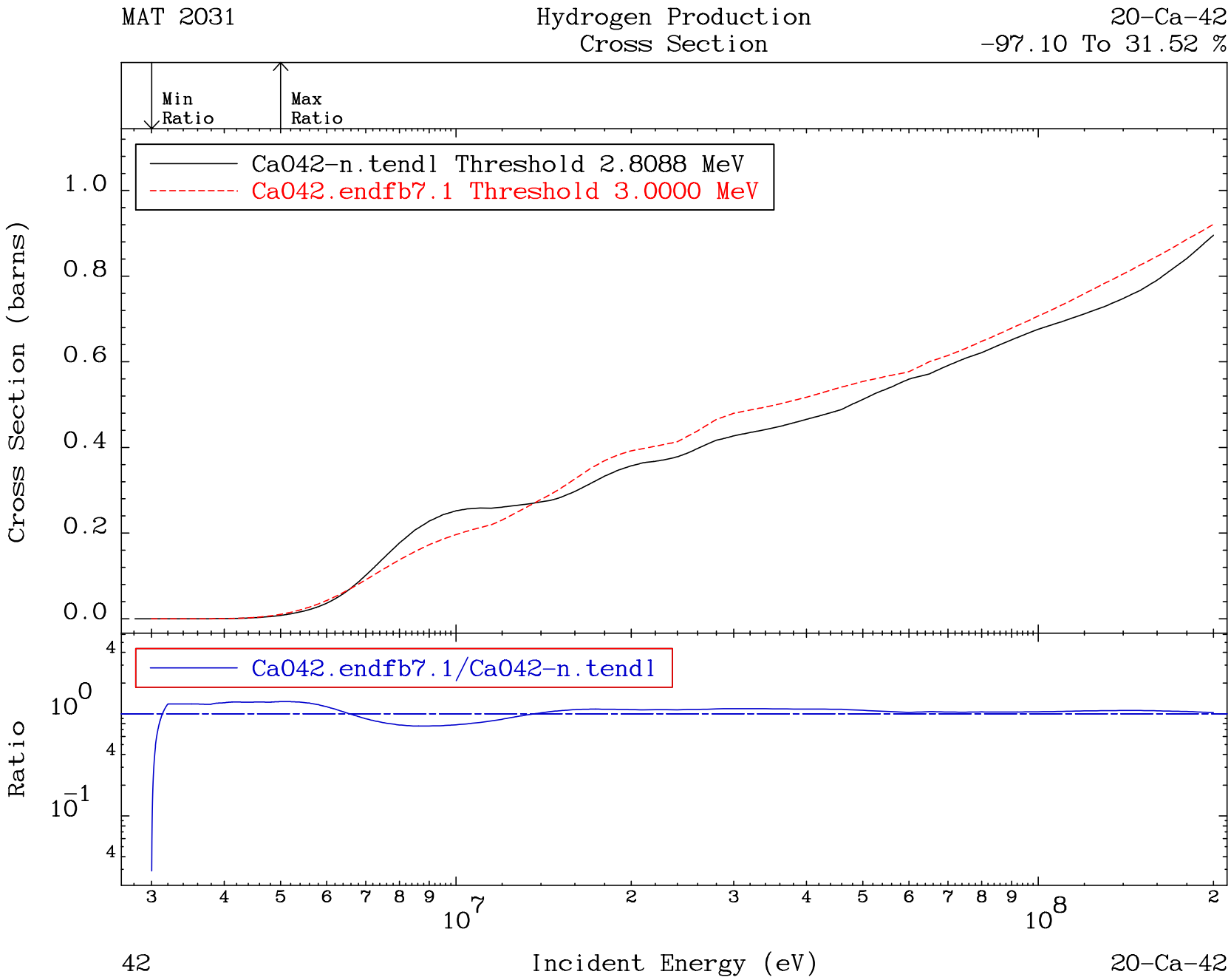

MAT 2031
(n,2α)
Cross Section
20-Ca-42
-100.0 To 82.02 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 6.6353 MeV
Ca042.endfb7.1 Threshold 9.5000 MeV
Cross Section (milli-barns)
0
1
2
3
Ca042.endfb7.1/Ca042-n.tendl
Ratio
0.0
1.0
2.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
20-Ca-42

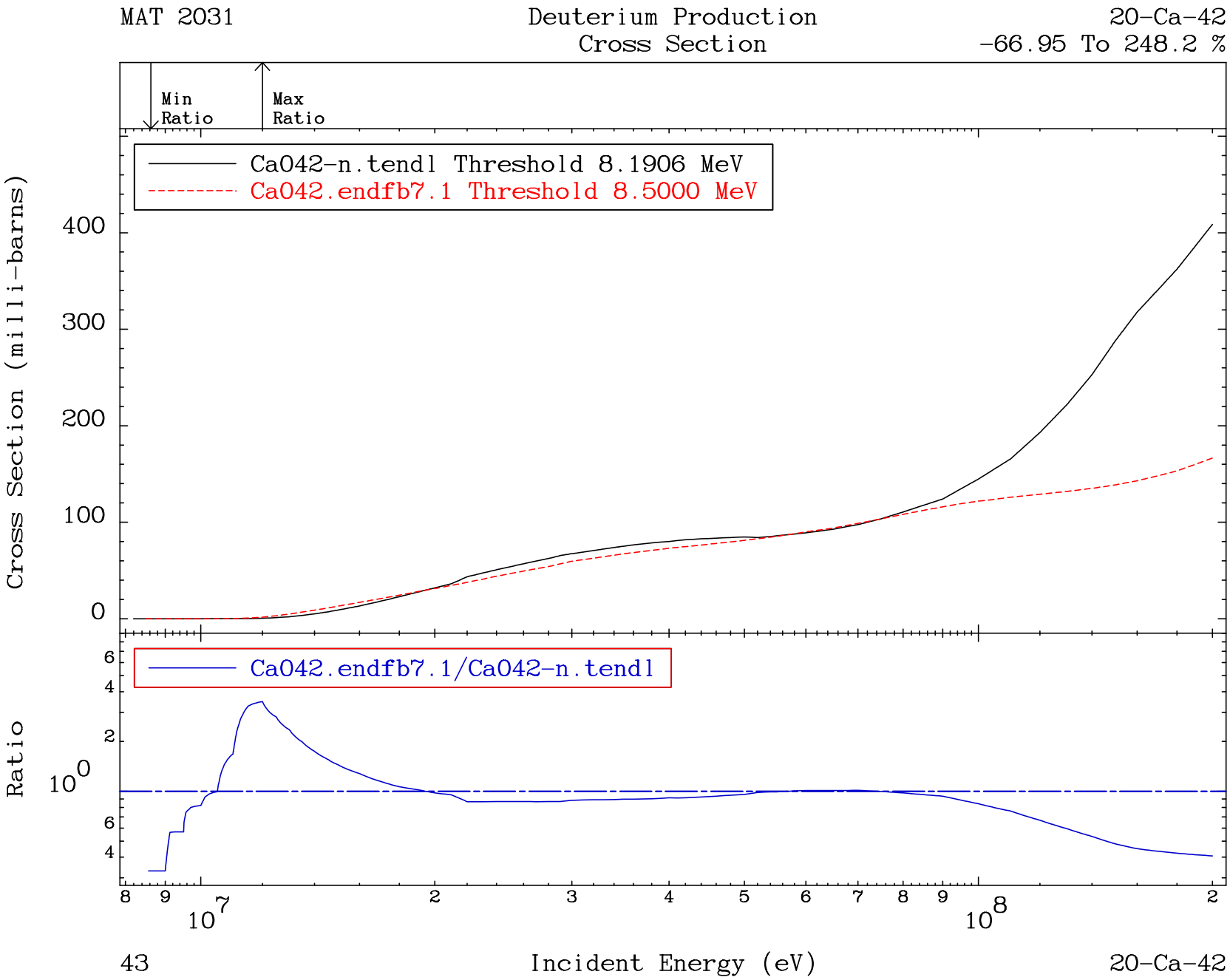

MAT 2031
(n,2p)
Cross Section
20-Ca-42
-100.0 To 257.0 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 12.275 MeV
Ca042.endfb7.1 Threshold 12.500 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
9
10^8
2
38
Incident Energy (eV)
20-Ca-42

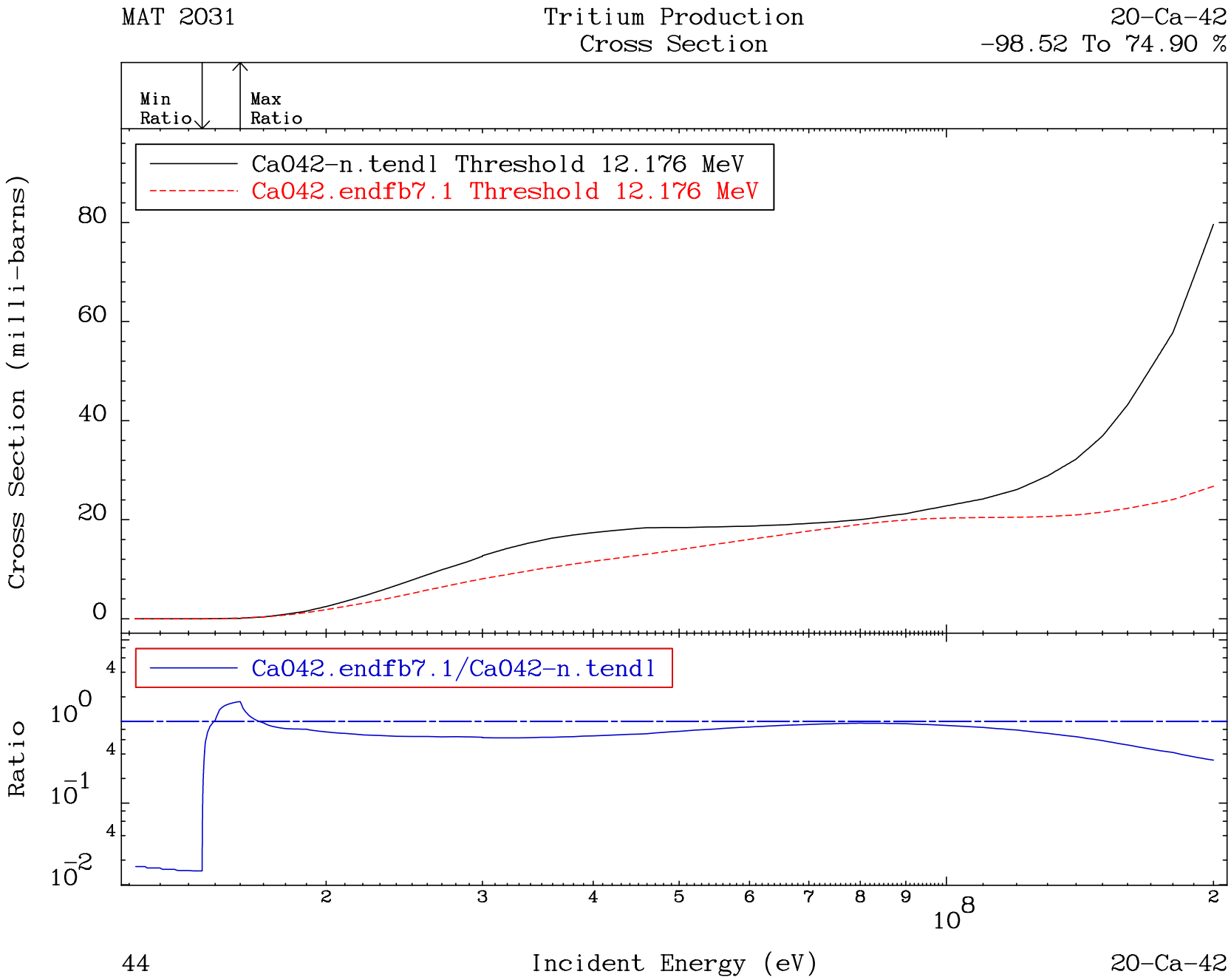

MAT 2031
(n,p) α
Cross Section
20-Ca-42
-100.0 To 529.9 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 10.642 MeV
Ca042.endfb7.1 Threshold 12.000 MeV
Cross Section (milli-barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
39
20-Ca-42

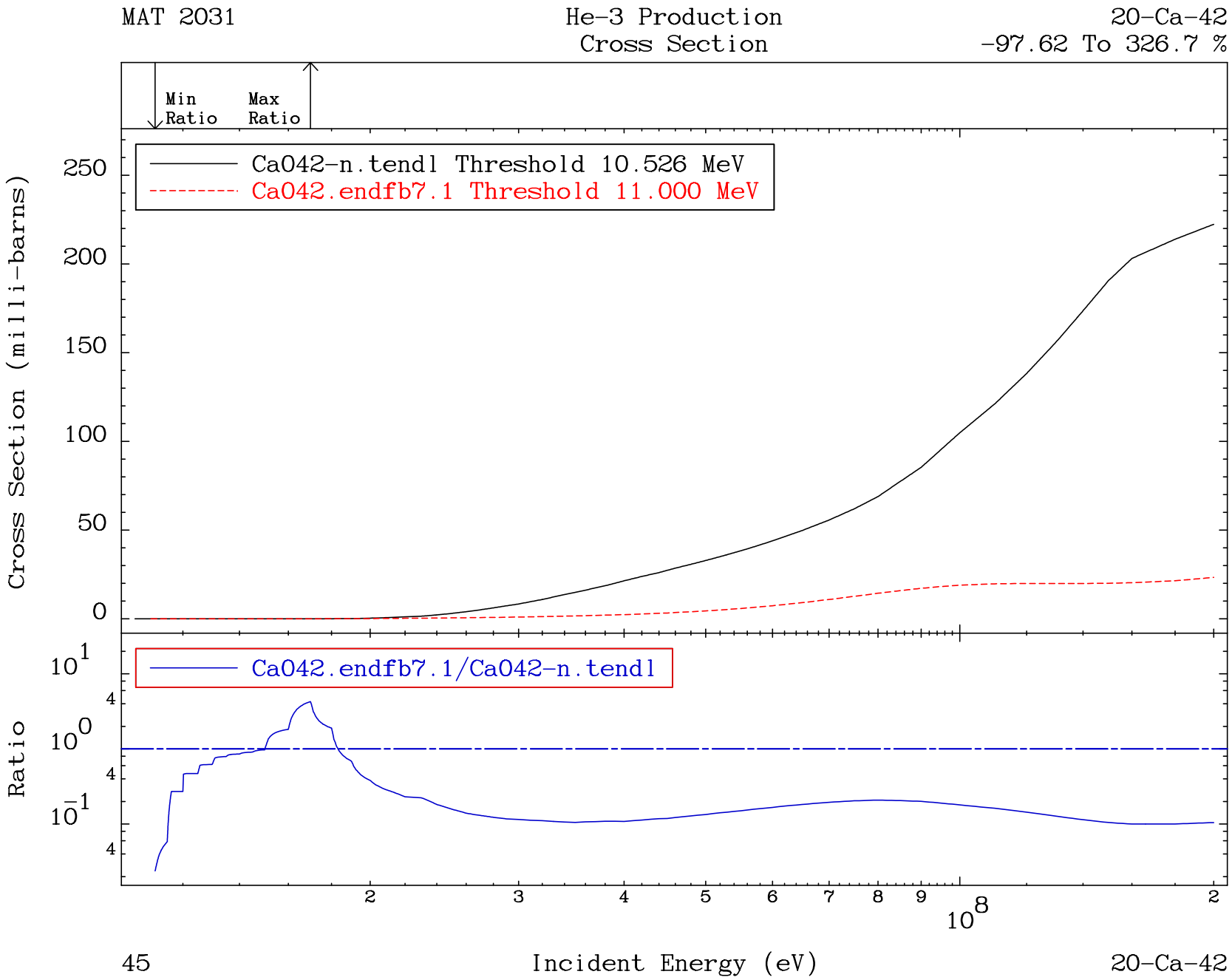

MAT 2031
(n,p) d
Cross Section
20-Ca-42
-100.0 To 0.000 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 16.151 MeV
Ca042.endfb7.1 Threshold 17.000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
20-Ca-42

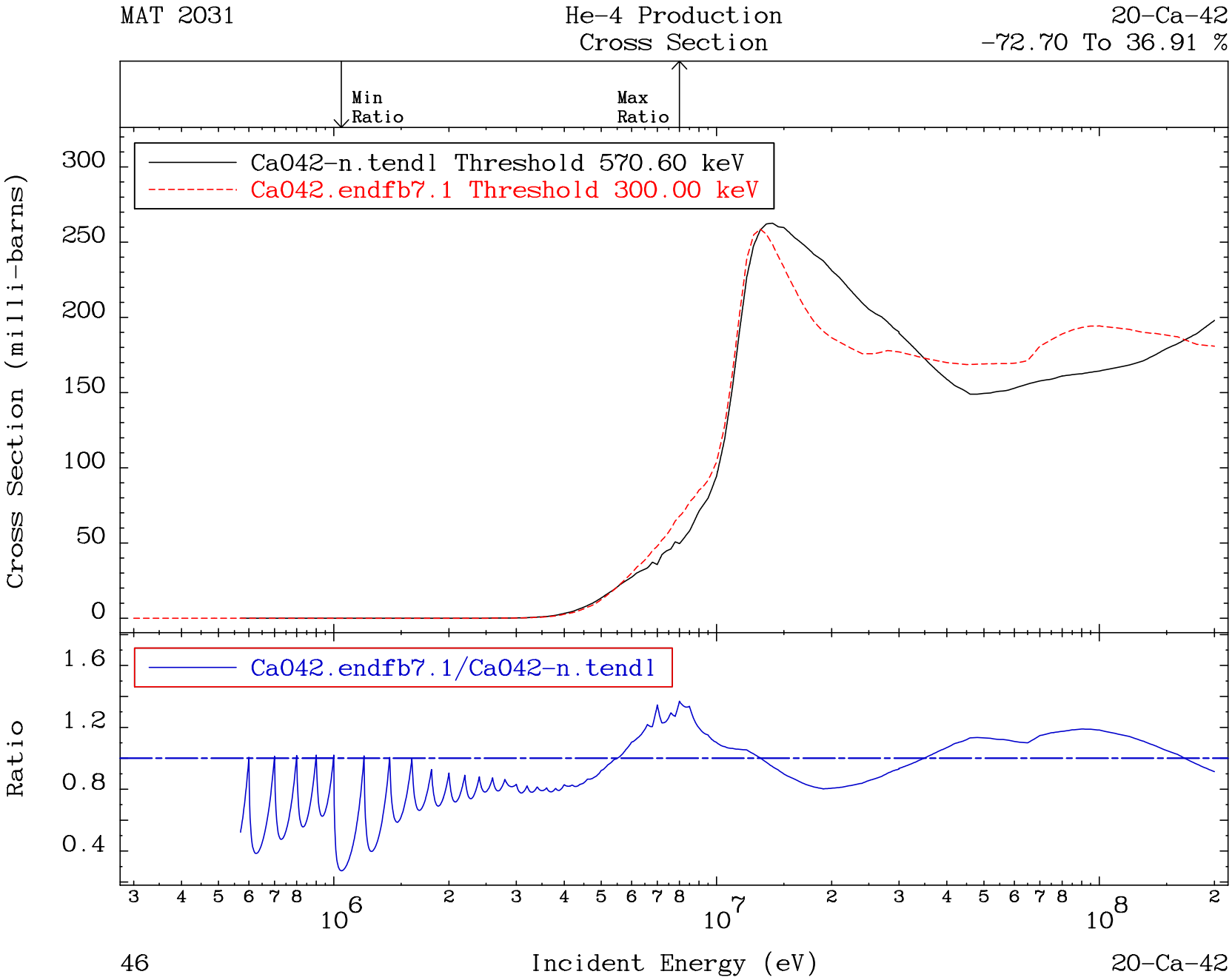

MAT 2031
(n,d) α
Cross Section
20-Ca-42
-100.0 To 0.000 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 14.618 MeV
Ca042.endfb7.1 Threshold 16.000 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
20-Ca-42

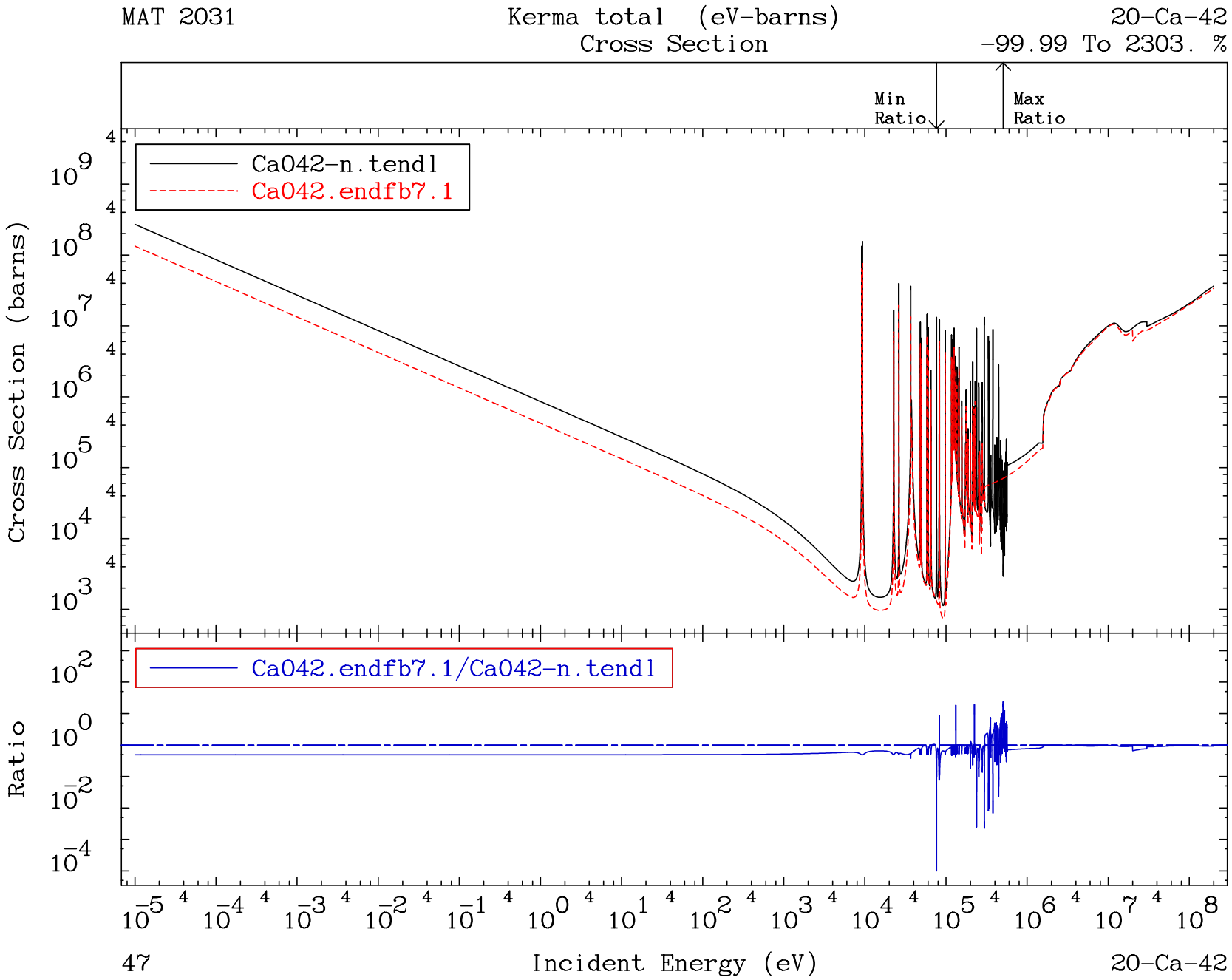

MAT 2031
Hydrogen Production
Cross Section
20-Ca-42
-97.10 To 31.52 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 2.8088 MeV
Ca042.endfb7.1 Threshold 3.0000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
4
10^{0}
4
10^{-1}
4
3 4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
42
Incident Energy (eV)
20-Ca-42

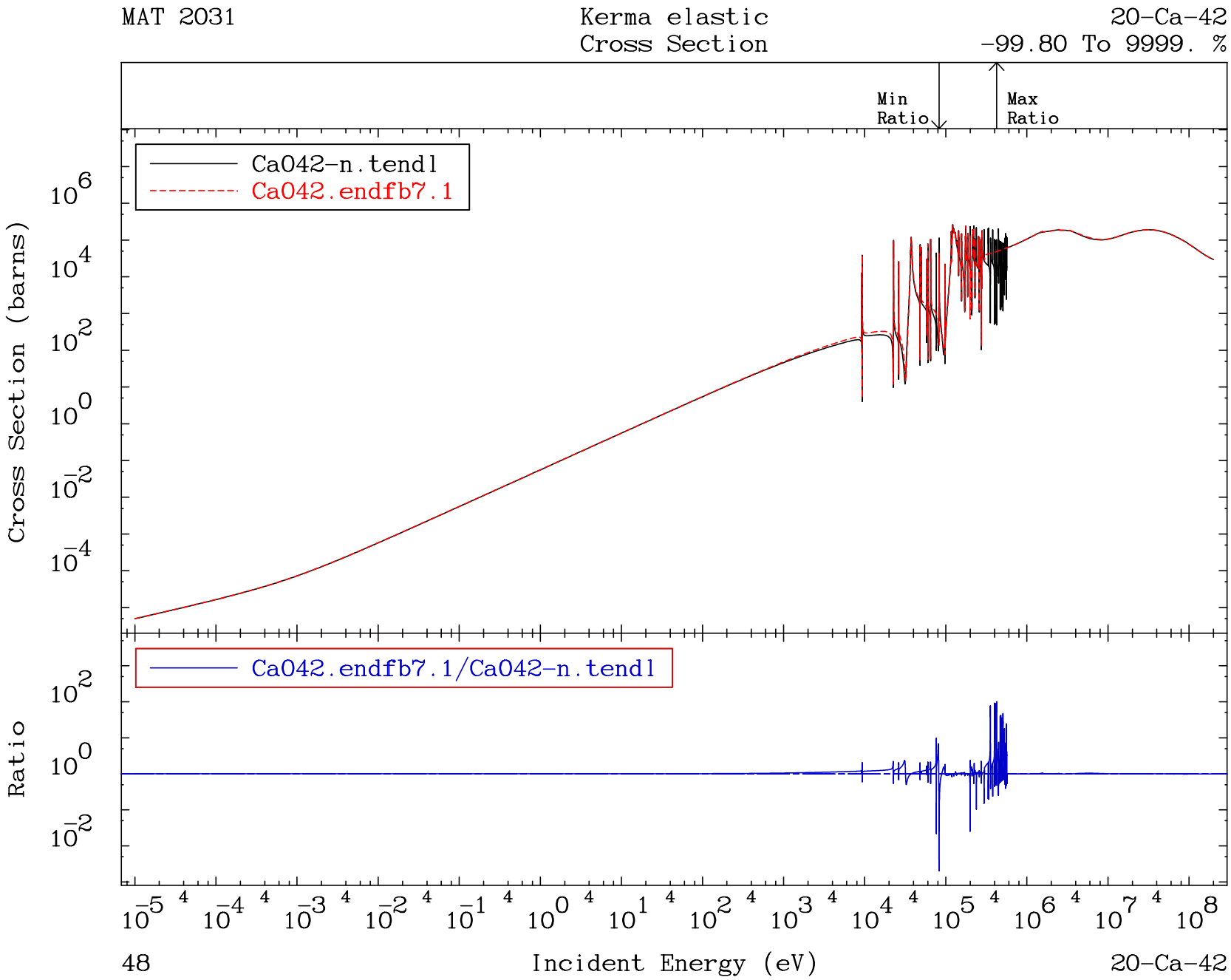

MAT 2031
Deuterium Production
Cross Section
20-Ca-42
-66.95 To 248.2 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 8.1906 MeV
Ca042.endfb7.1 Threshold 8.5000 MeV
Cross Section (milli-barns)
400
300
200
100
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
10^0
6
4
2
6
4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
20-Ca-42

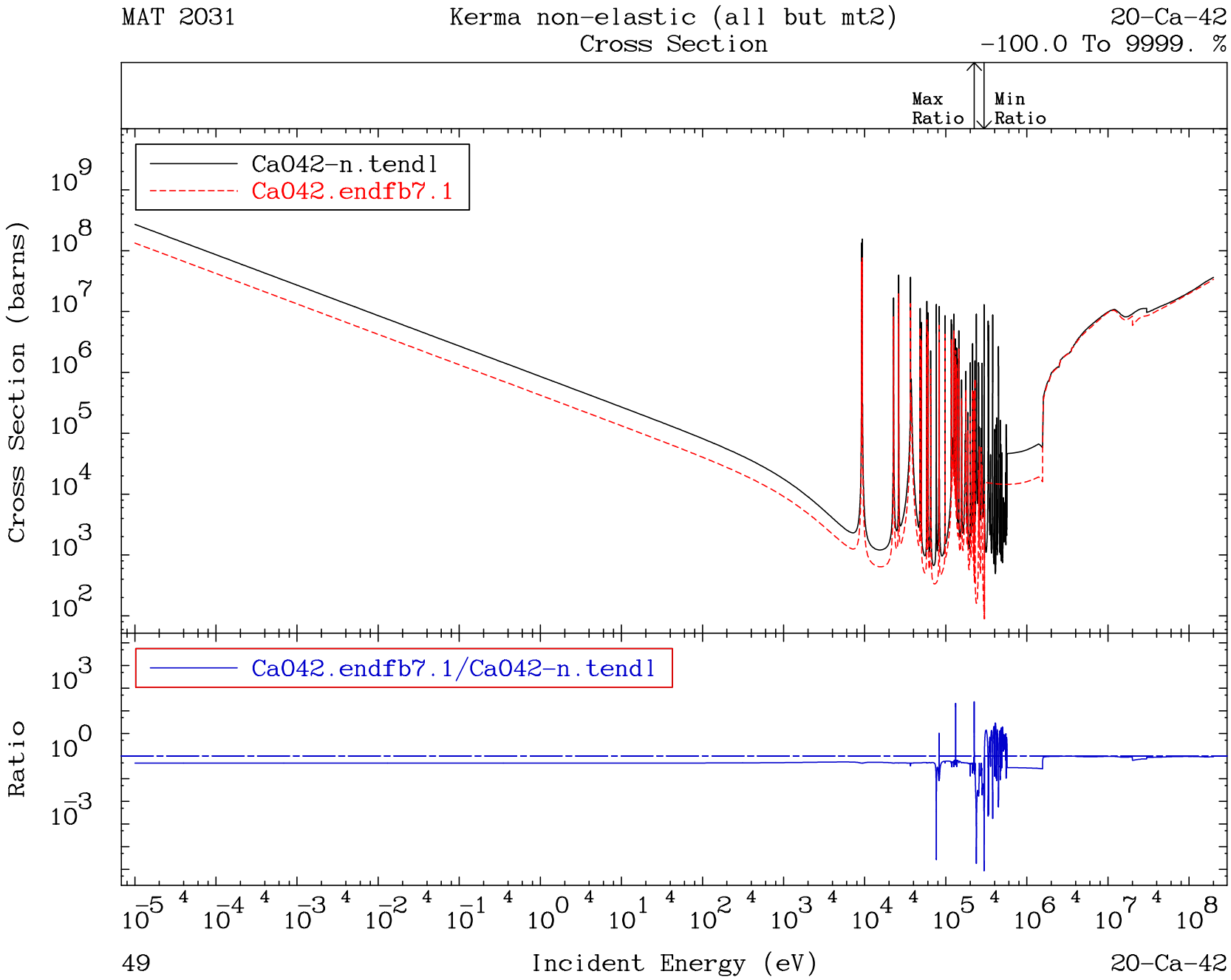

MAT 2031
Tritium Production
Cross Section
20-Ca-42
-98.52 To 74.90 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 12.176 MeV
Ca042.endfb7.1 Threshold 12.176 MeV
Cross Section (milli-barns)
80
60
40
20
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
4
10^{0}
4
10^{-1}
4
10^{-2}
2
3
4
5
6
7
8
9
10^{8}
2
44
Incident Energy (eV)
20-Ca-42

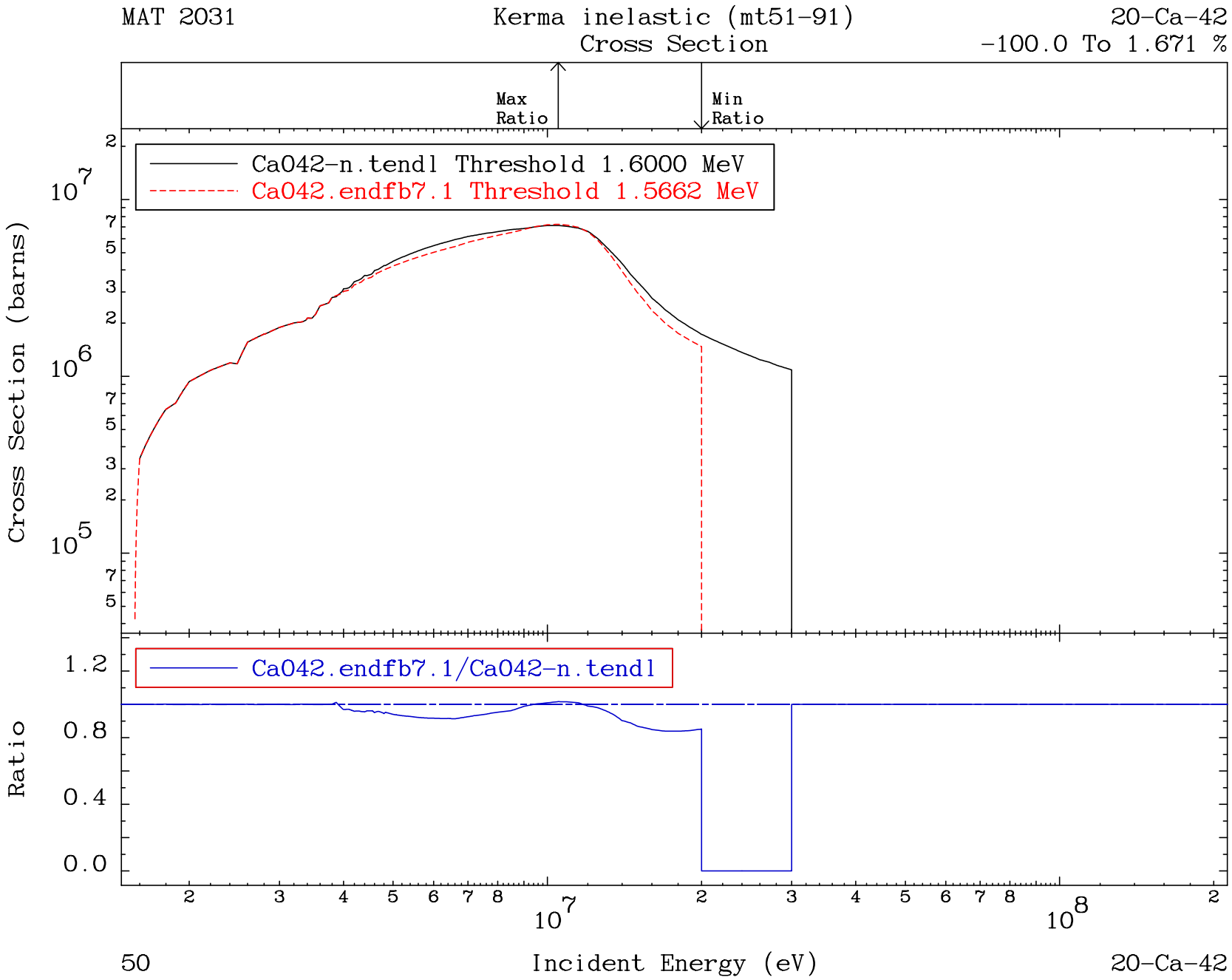

MAT 2031
He-3 Production
Cross Section
20-Ca-42
-97.62 To 326.7 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 10.526 MeV
Ca042.endfb7.1 Threshold 11.000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
20-Ca-42

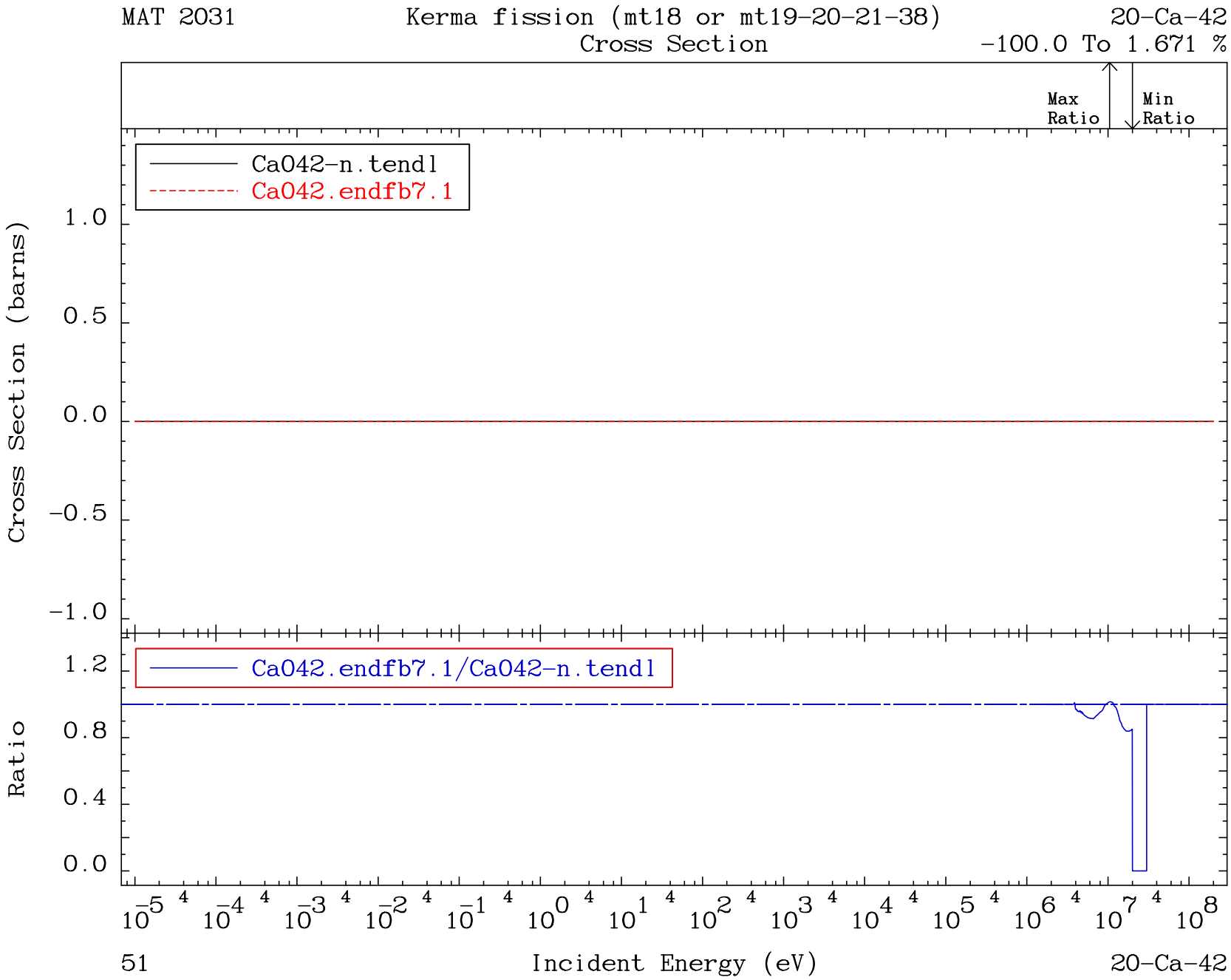

MAT 2031
He-4 Production
Cross Section
20-Ca-42
-72.70 To 36.91 %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 570.60 keV
Ca042.endfb7.1 Threshold 300.00 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
20-Ca-42

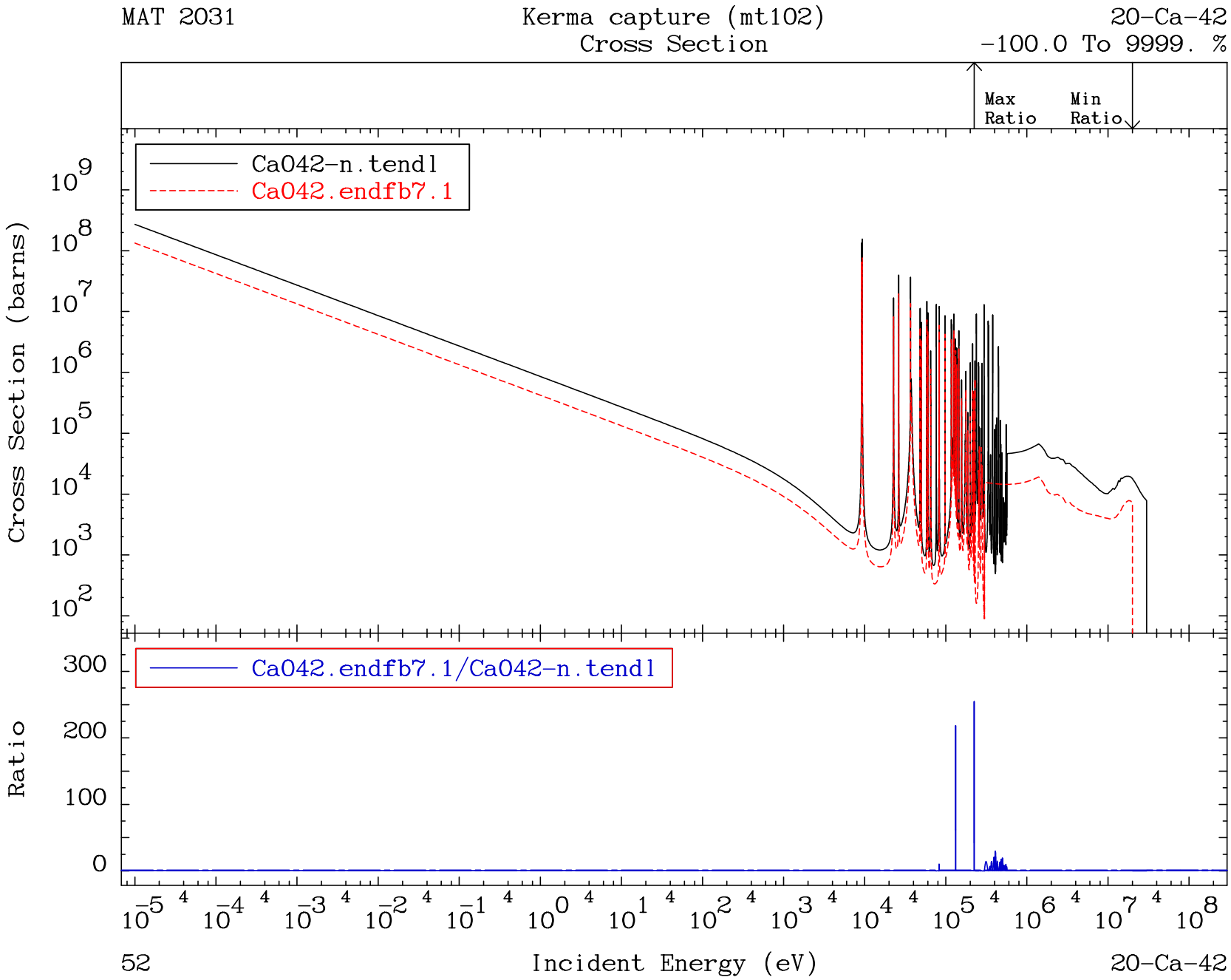

MAT 2031
Kerma total (eV-barns)
Cross Section
20-Ca-42
-99.99 To 2303. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
47
20-Ca-42

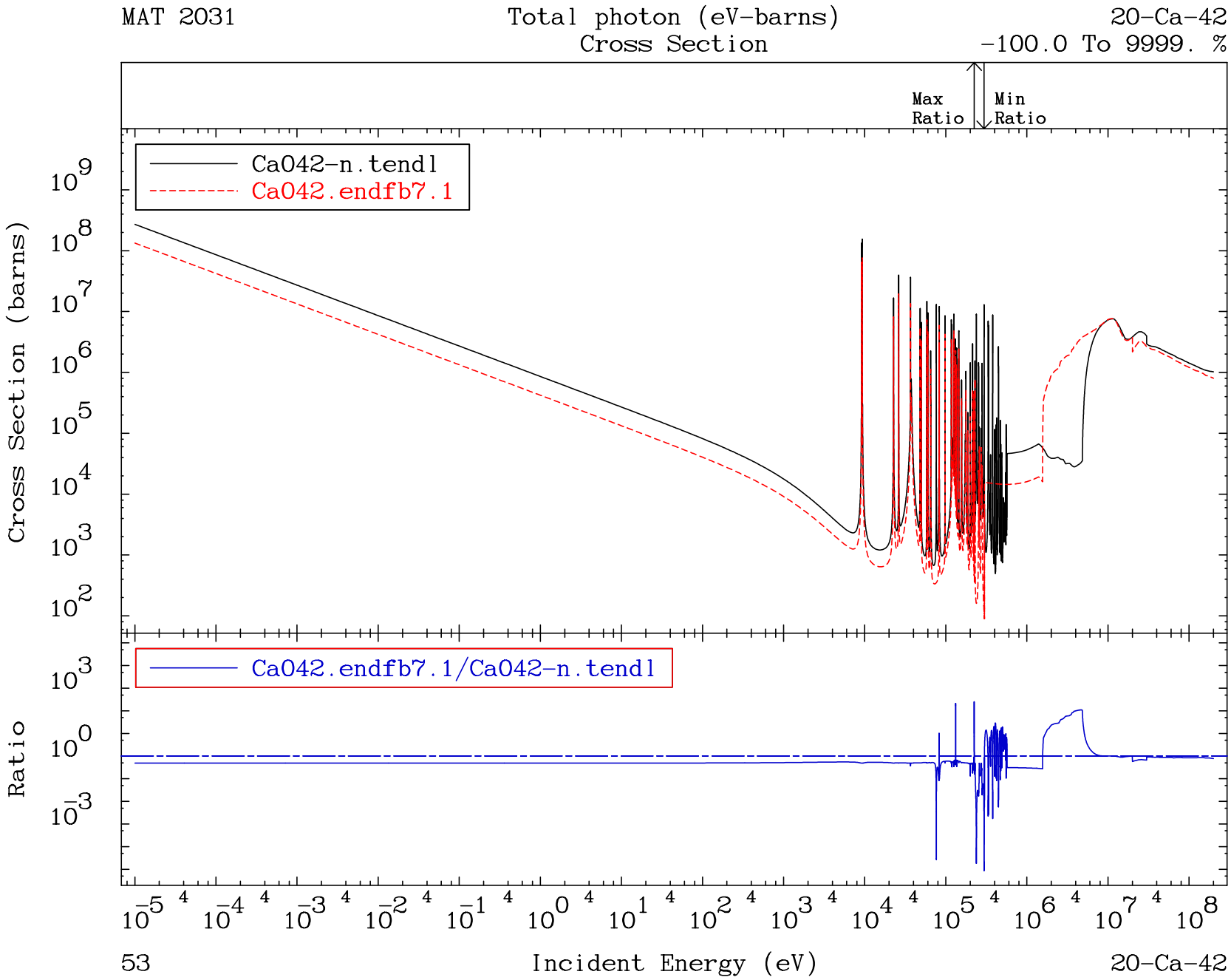

MAT 2031
Kerma elastic
Cross Section
20-Ca-42
-99.80 To 9999. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
48
20-Ca-42

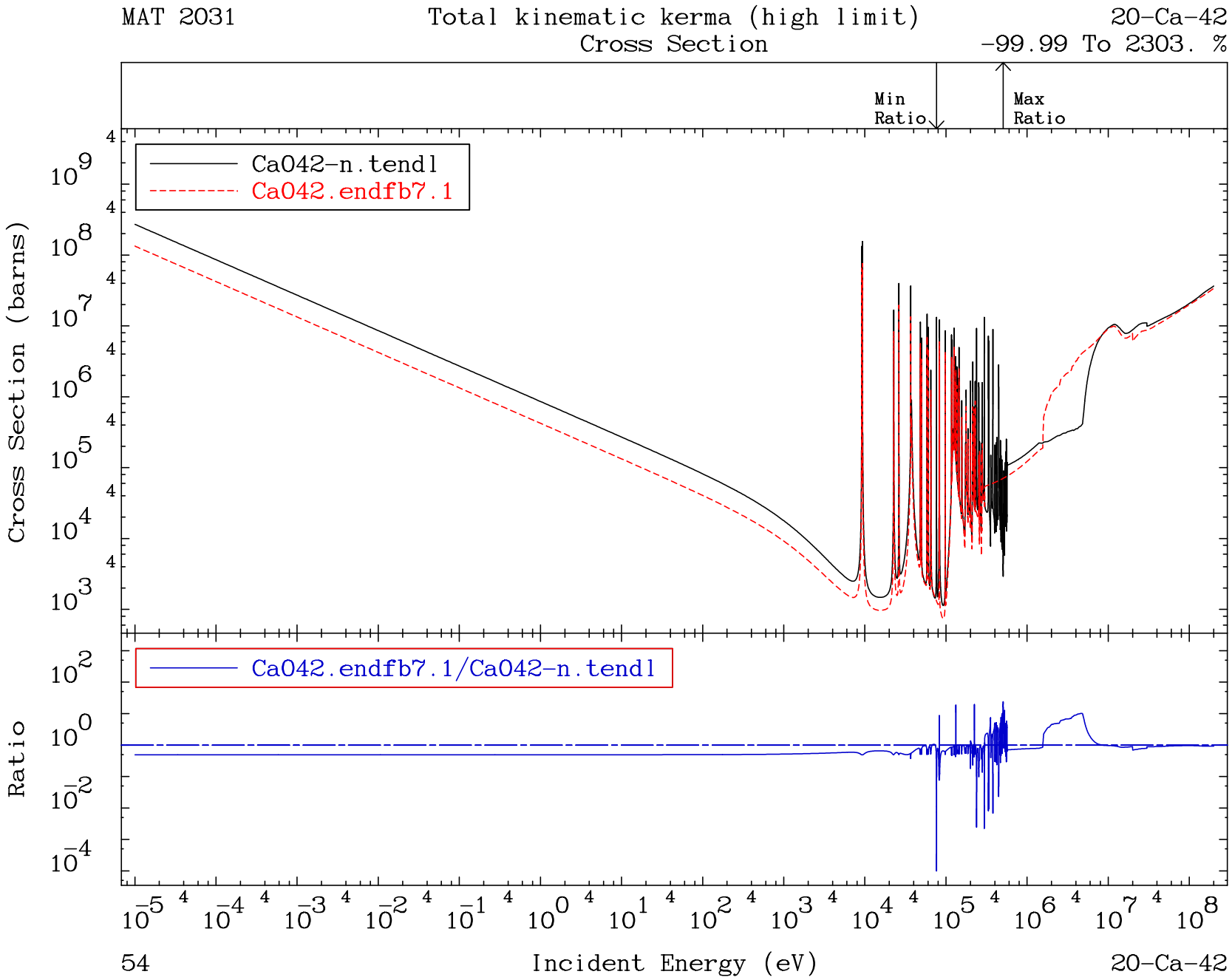

MAT 2031
Kerma non-elastic (all but mt2)
Cross Section
20-Ca-42
-100.0 To 9999. %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
49
Incident Energy (eV)
20-Ca-42

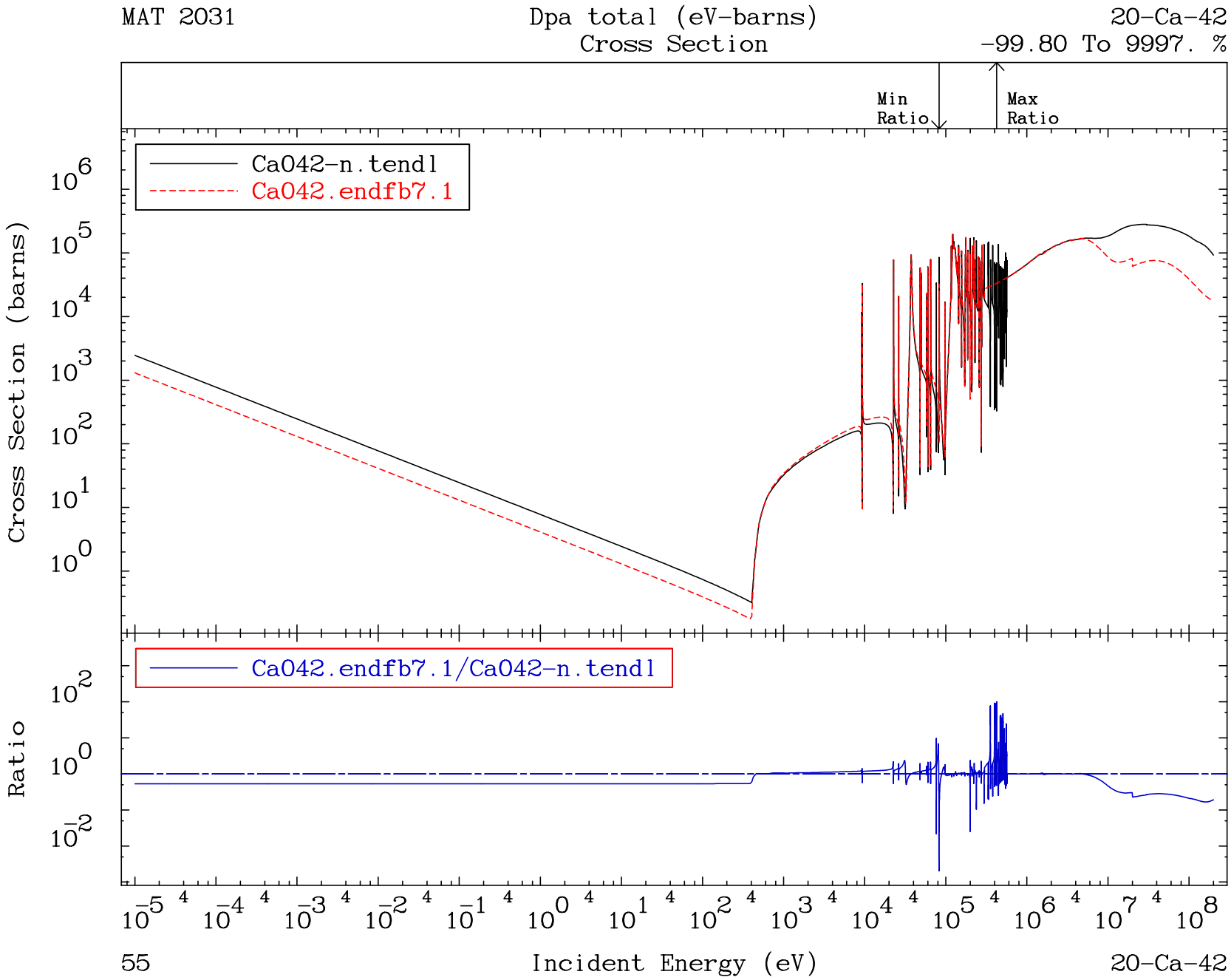

MAT 2031
Kerma inelastic (mt51-91)
Cross Section
20-Ca-42
-100.0 To 1.671 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 1.6000 MeV
Ca042.endfb7.1 Threshold 1.5662 MeV
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
50
20-Ca-42

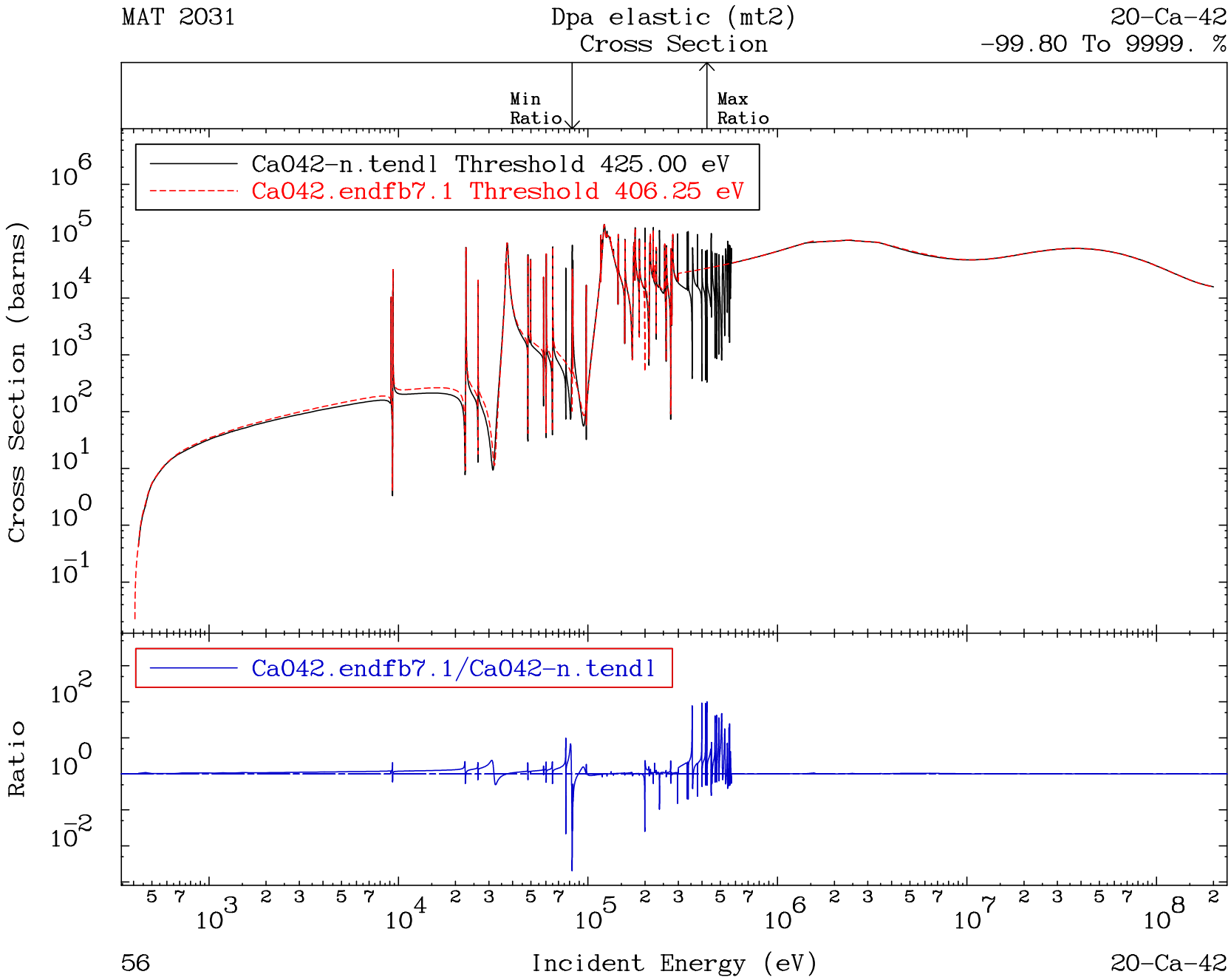

MAT 2031
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
20-Ca-42
-100.0 To 1.671 %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Ca042.endfb7.1/Ca042-n.tendl
Ratio
1.2
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
51
Incident Energy (eV)
20-Ca-42

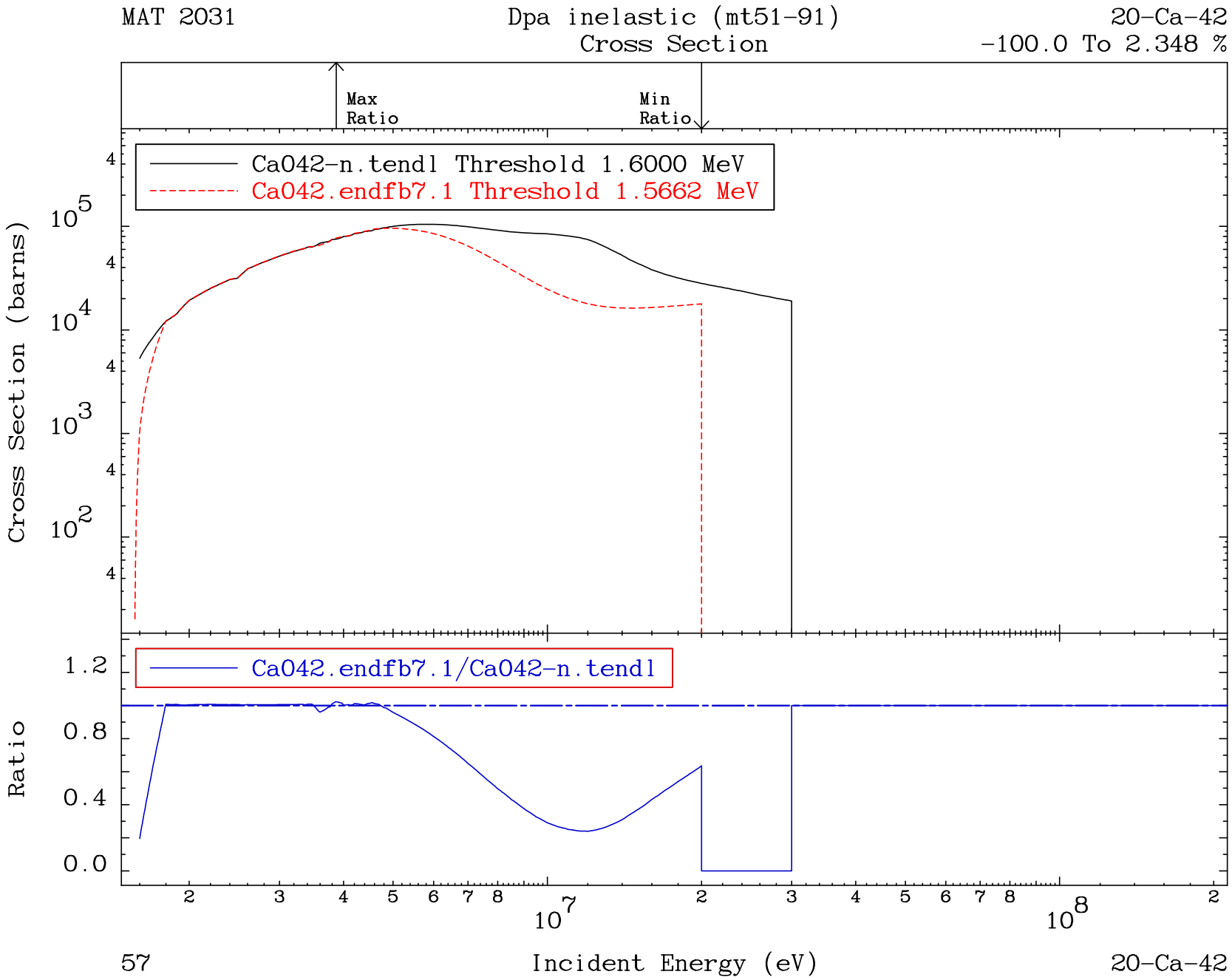

MAT 2031
Kerma capture (mt102)
Cross Section
20-Ca-42
-100.0 To 9999. %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
52
20-Ca-42

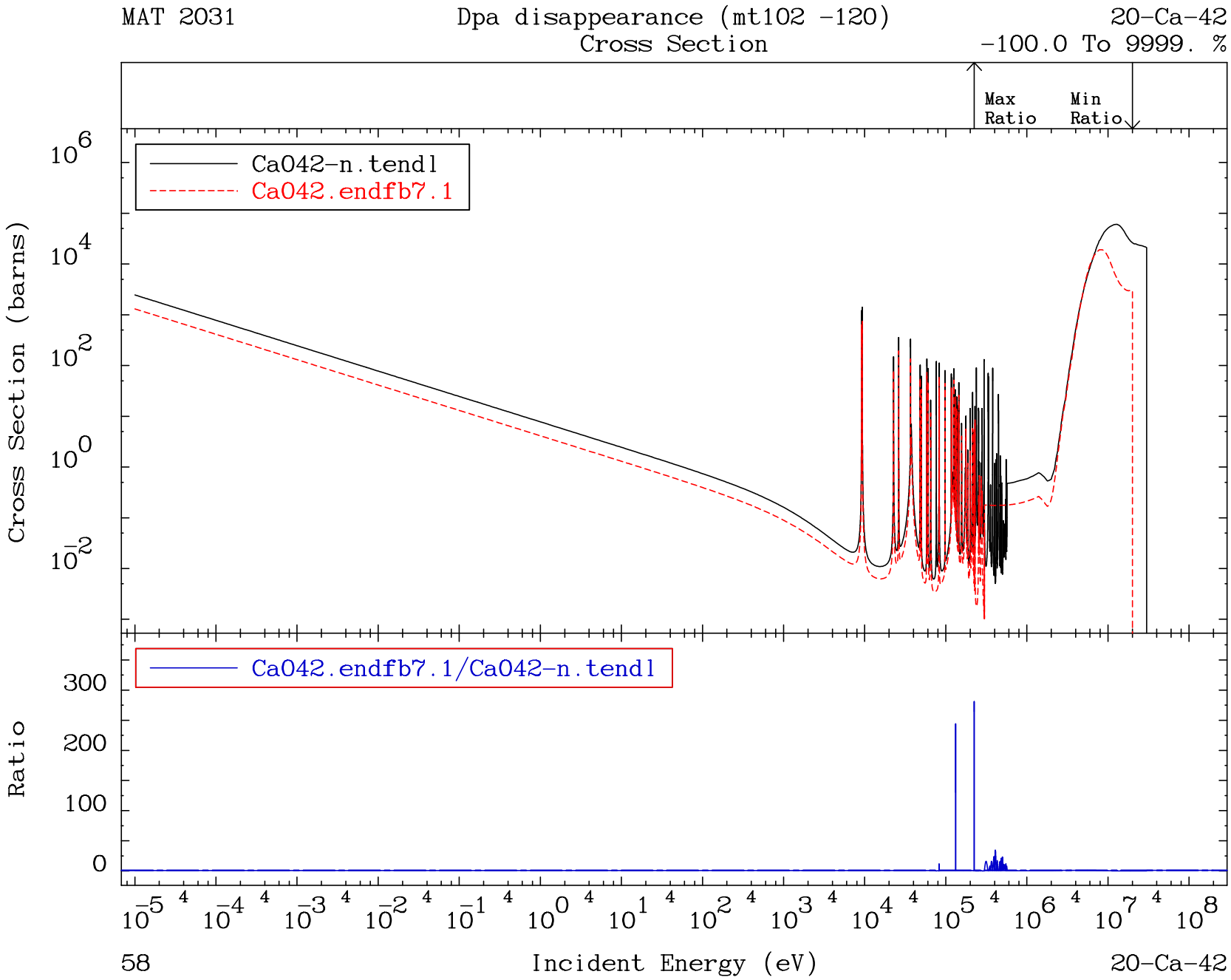

MAT 2031
Total photon (eV-barns)
Cross Section
20-Ca-42
-100.0 To 9999. %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
53
20-Ca-42


MAT 2031
Total kinematic kerma (high limit)
Cross Section
20-Ca-42
-99.99 To 2303. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
54
20-Ca-42


MAT 2031
Dpa total (eV-barns)
Cross Section
20-Ca-42
-99.80 To 9997. %
Min Ratio
Max Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
55
20-Ca-42


MAT 2031
Dpa elastic (mt2)
Cross Section
20-Ca-42
-99.80 To 9999. %
Min Ratio
Max Ratio
Ca042-n.tendl Threshold 425.00 eV
Ca042.endfb7.1 Threshold 406.25 eV
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
56
20-Ca-42


MAT 2031
Dpa inelastic (mt51-91)
Cross Section
20-Ca-42
-100.0 To 2.348 %
Max Ratio
Min Ratio
Ca042-n.tendl Threshold 1.6000 MeV
Ca042.endfb7.1 Threshold 1.5662 MeV
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
57
20-Ca-42


MAT 2031
Dpa disappearance (mt102 -120)
Cross Section
20-Ca-42
-100.0 To 9999. %
Max Ratio
Min Ratio
Ca042-n.tendl
Ca042.endfb7.1
Cross Section (barns)
Ca042.endfb7.1/Ca042-n.tendl
Ratio
Incident Energy (eV)
58
20-Ca-42