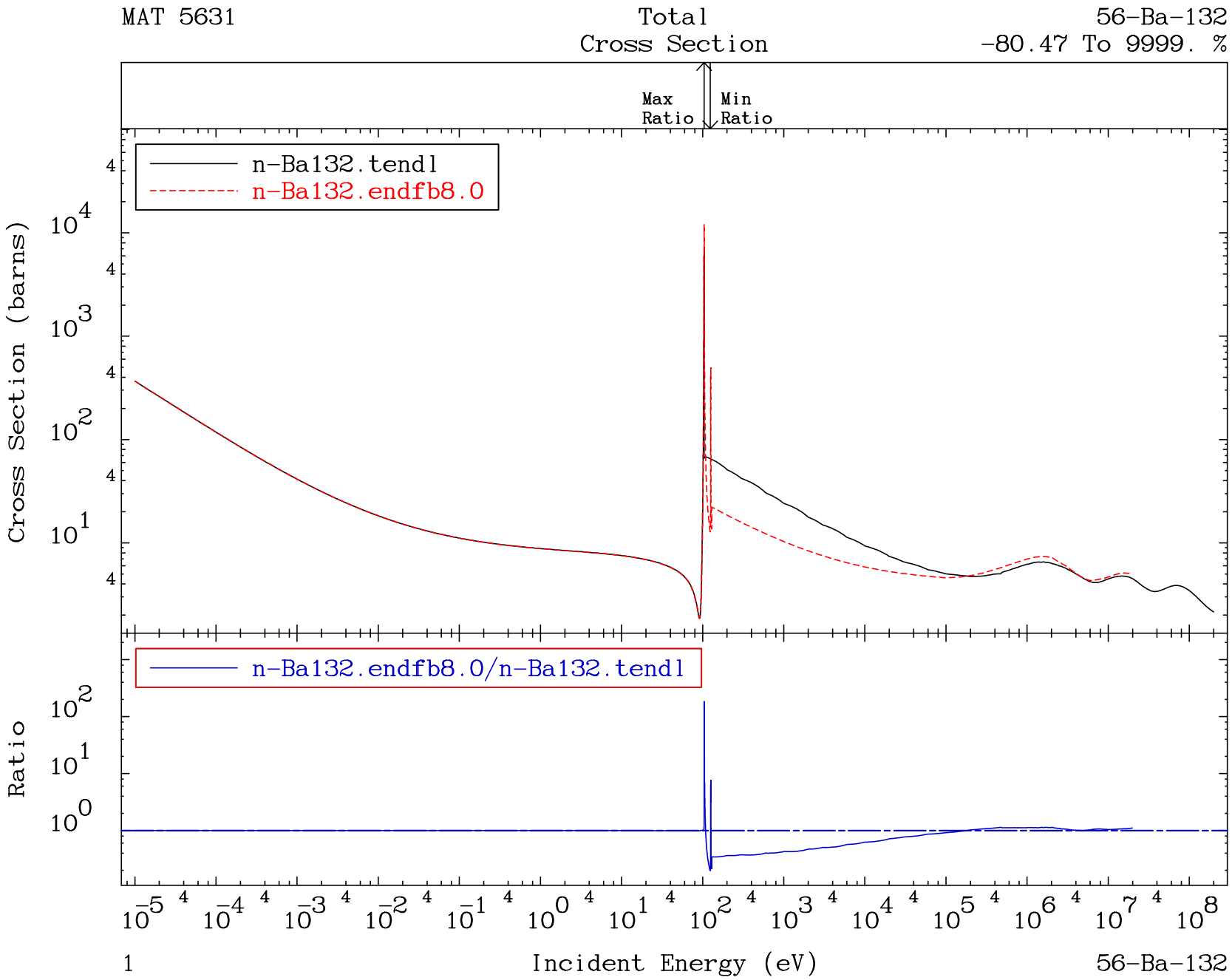
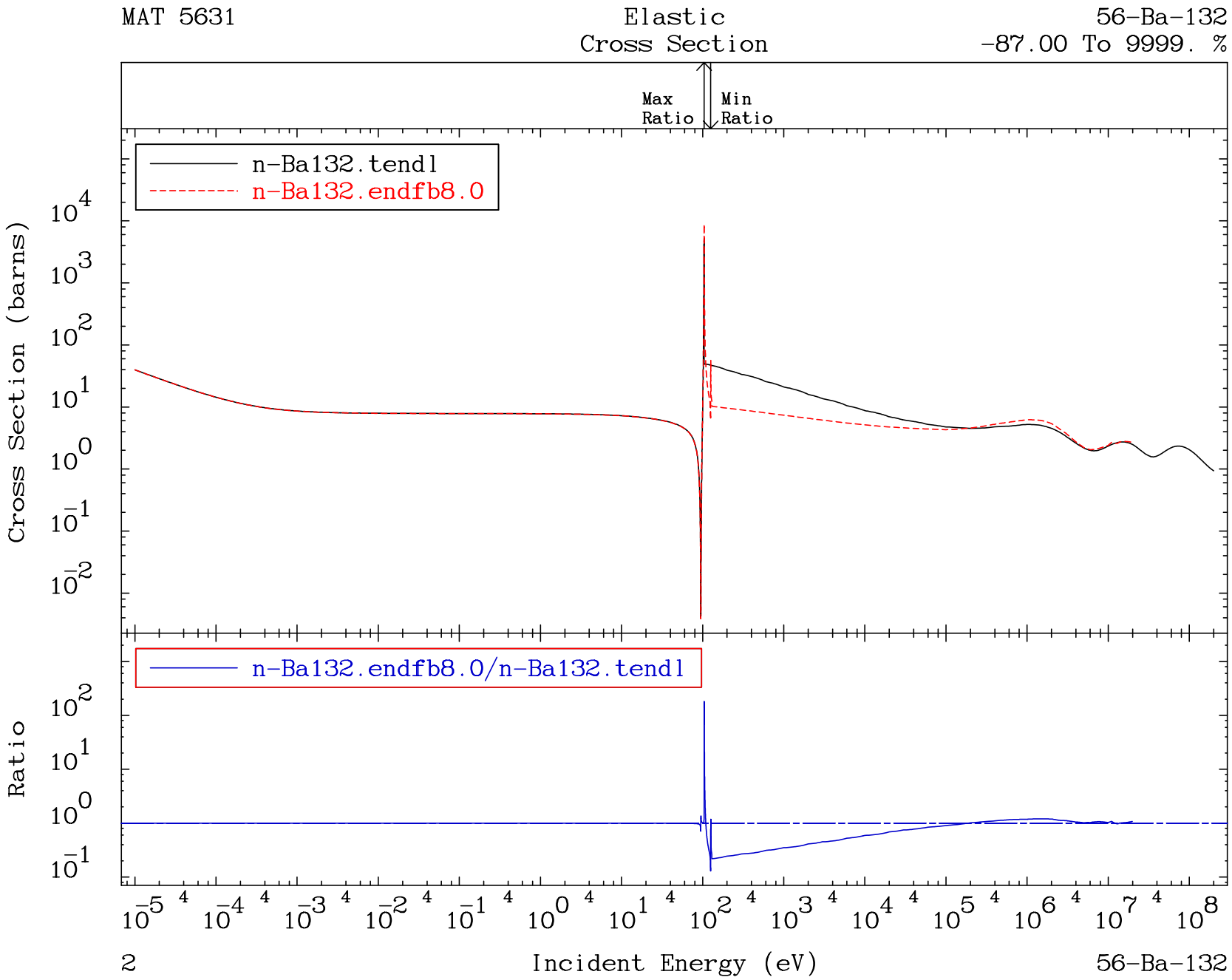
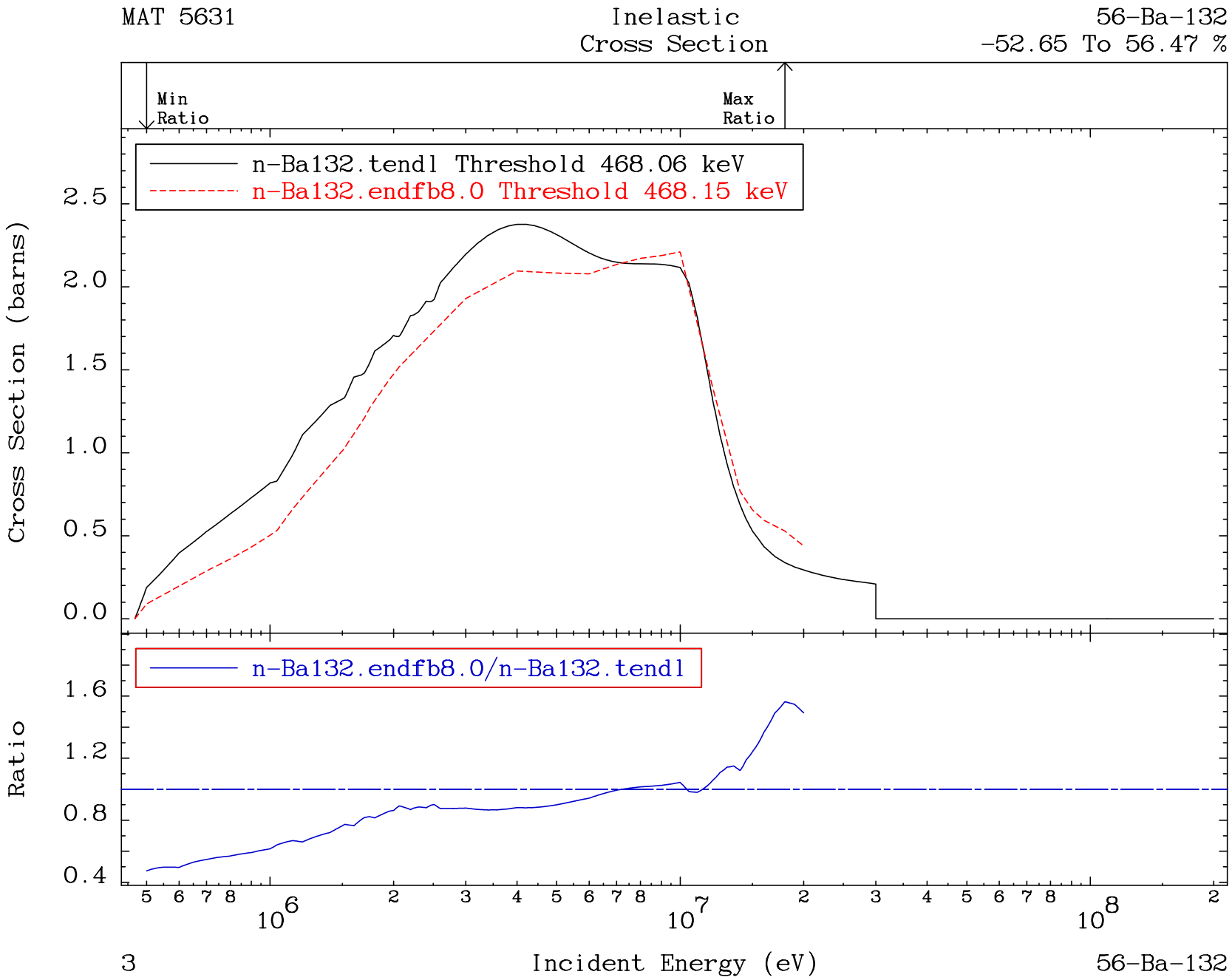
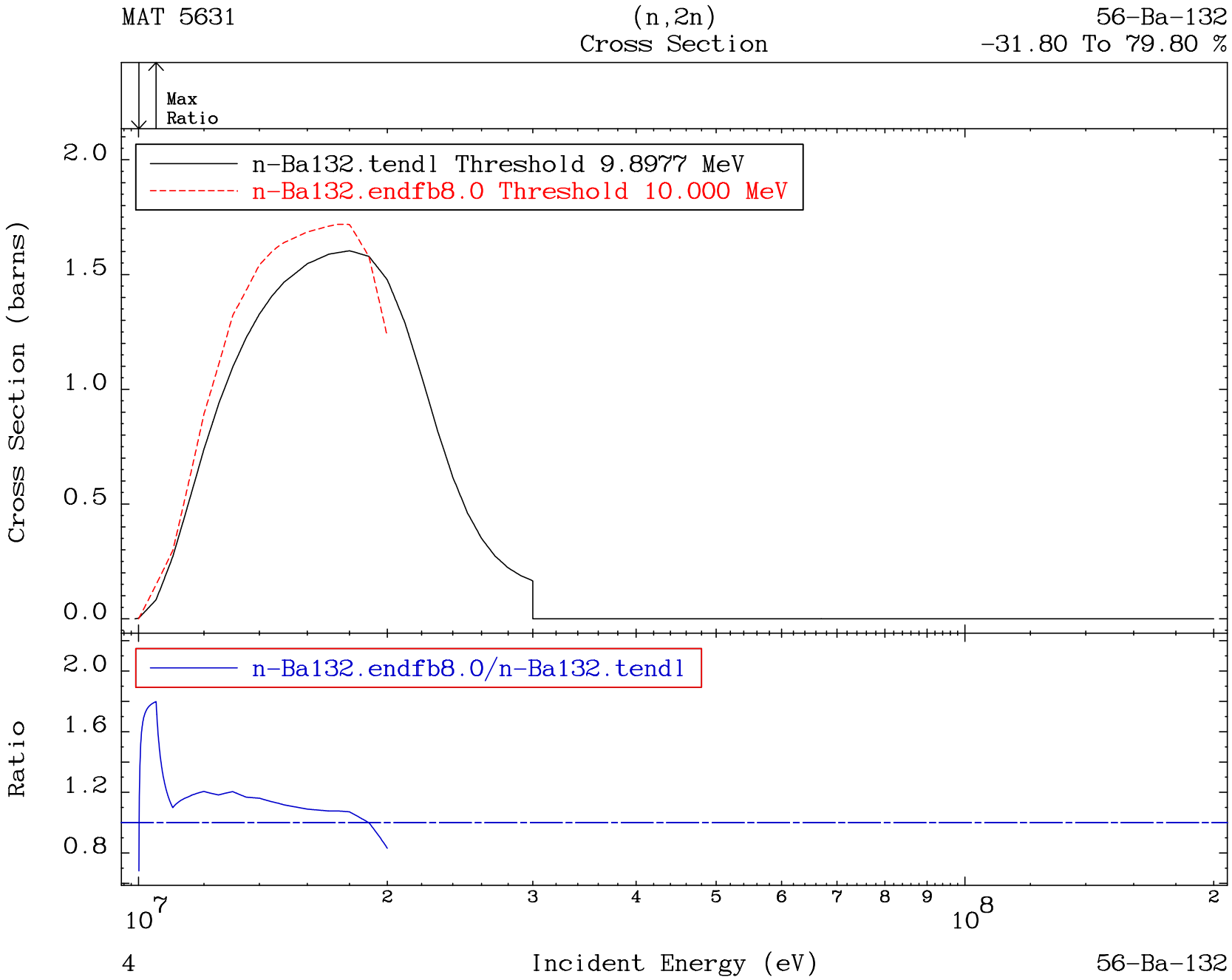
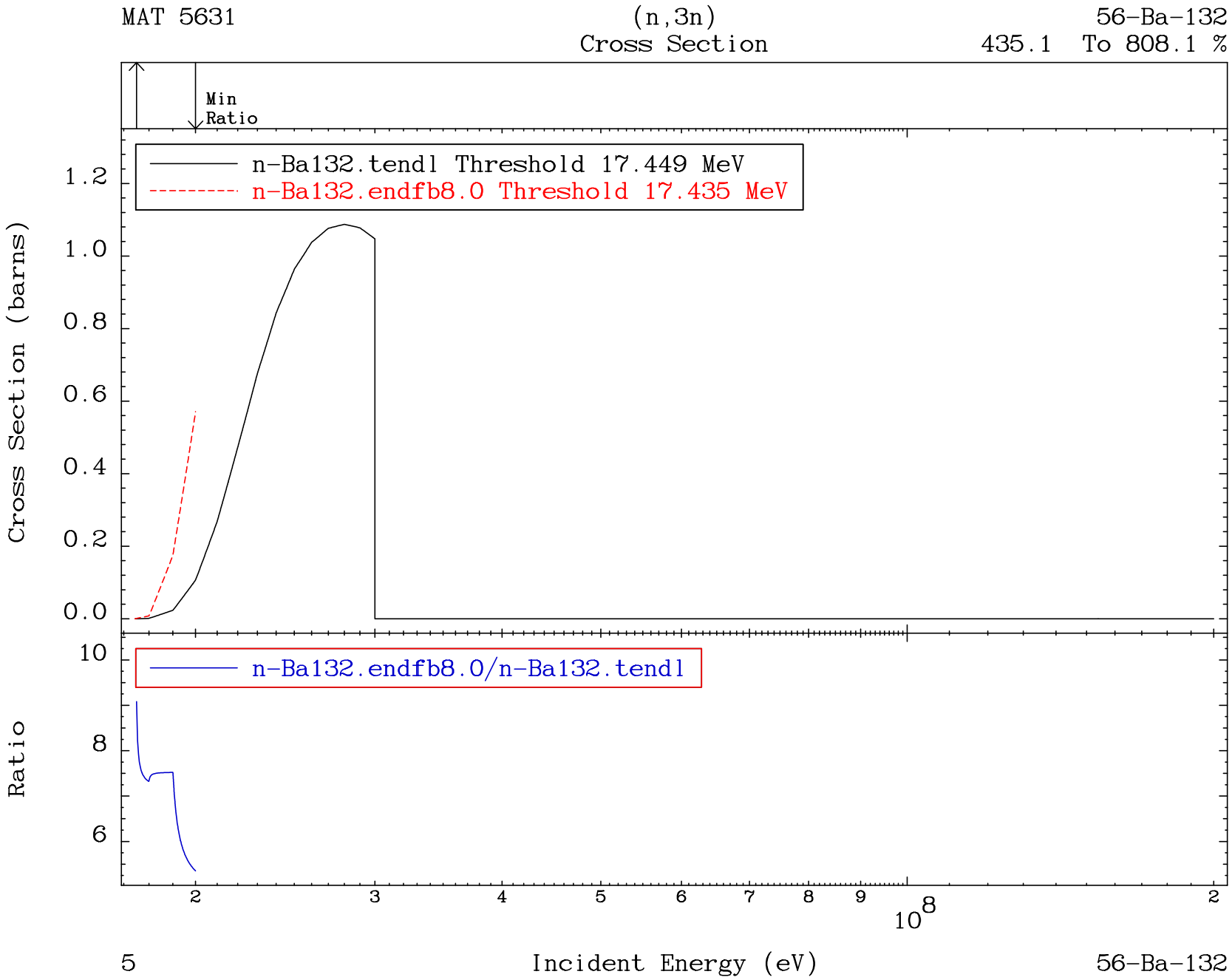
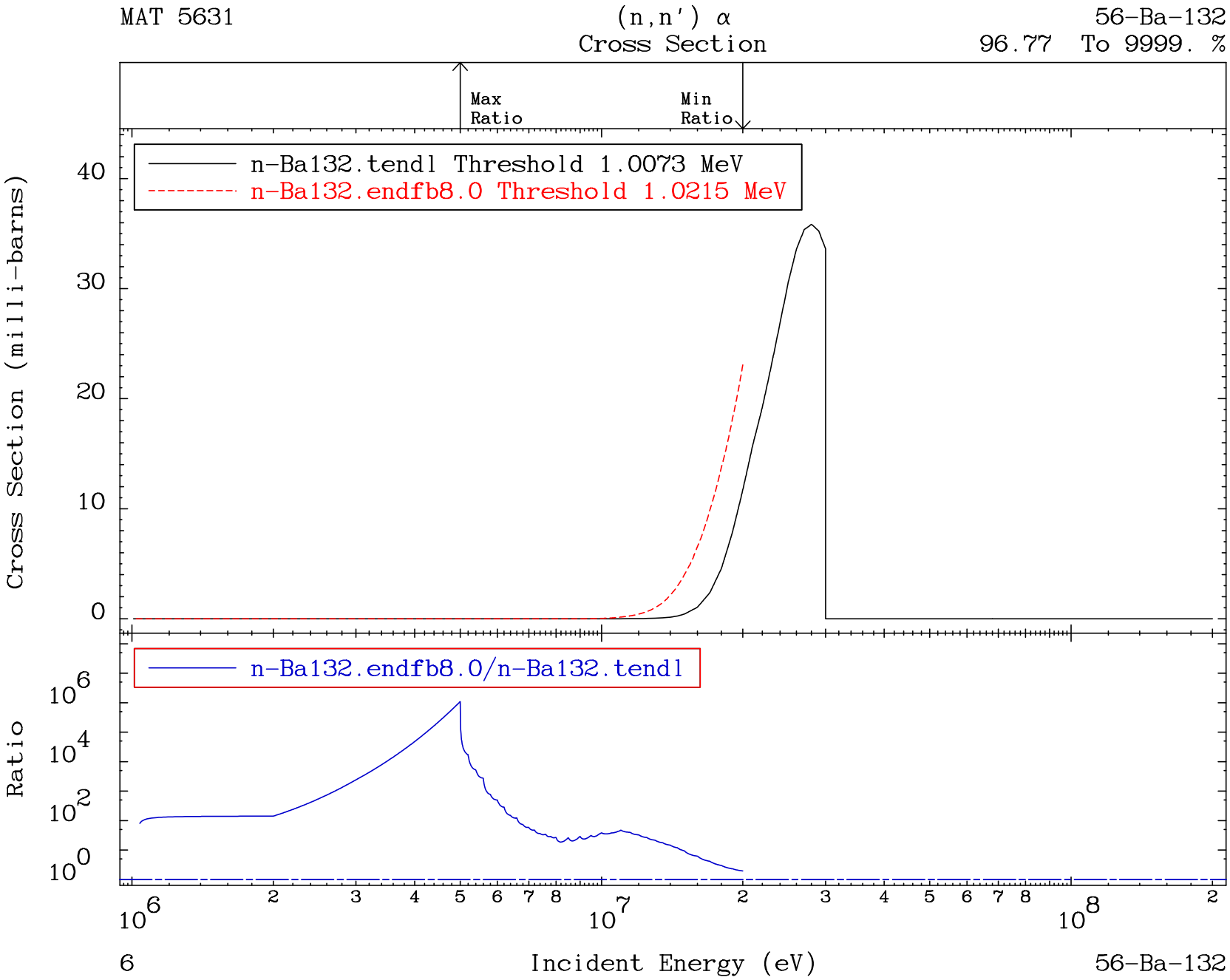

MAT 5631
Total
Cross Section
56-Ba-132
-80.47 To 9999. %
Max
Ratio
Min
Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
1
56-Ba-132

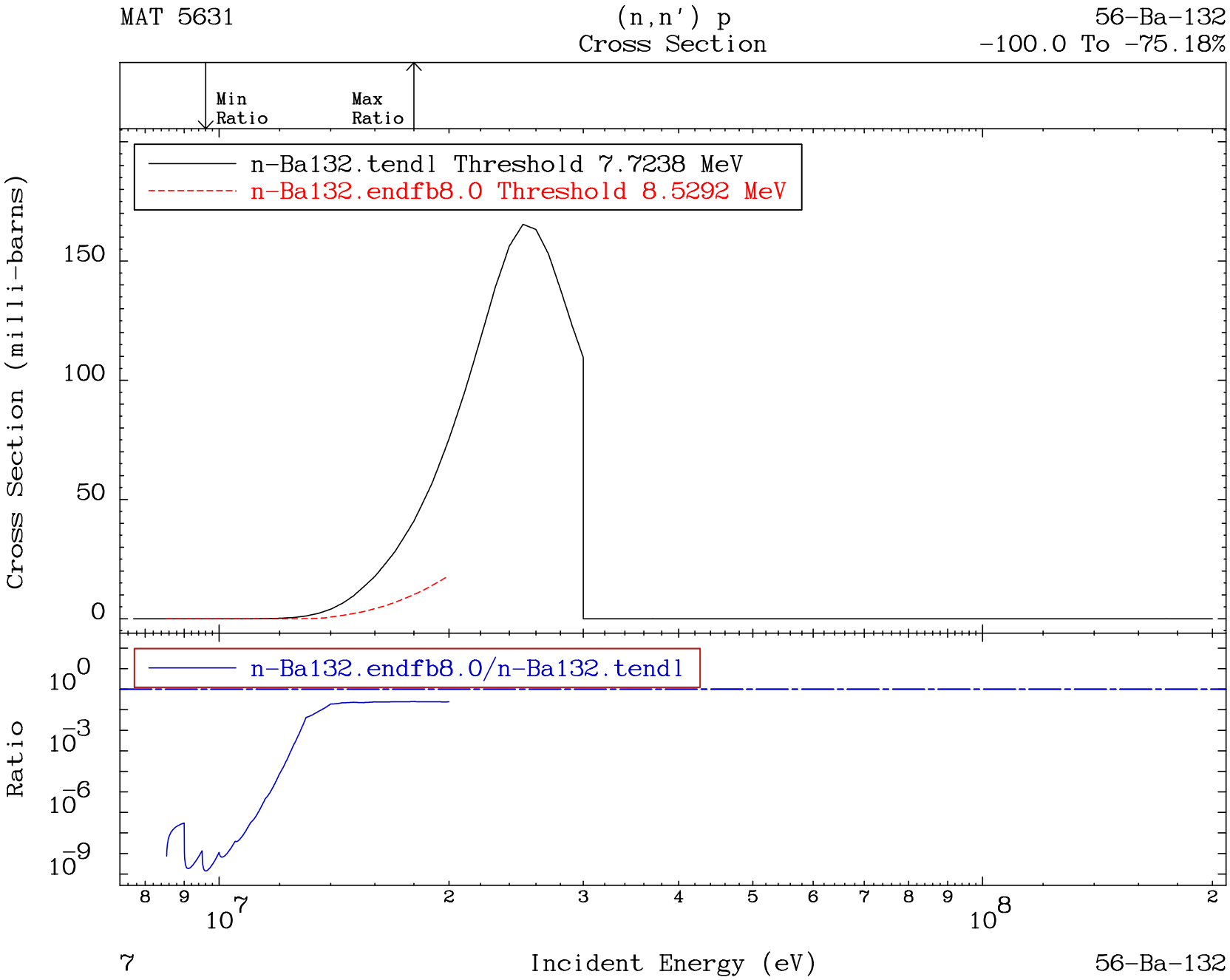

MAT 5631
Elastic
Cross Section
56-Ba-132
-87.00 To 9999. %
Max
Ratio
Min
Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
Ratio
n-Ba132.endfb8.0/n-Ba132.tendl
Incident Energy (eV)
2
56-Ba-132

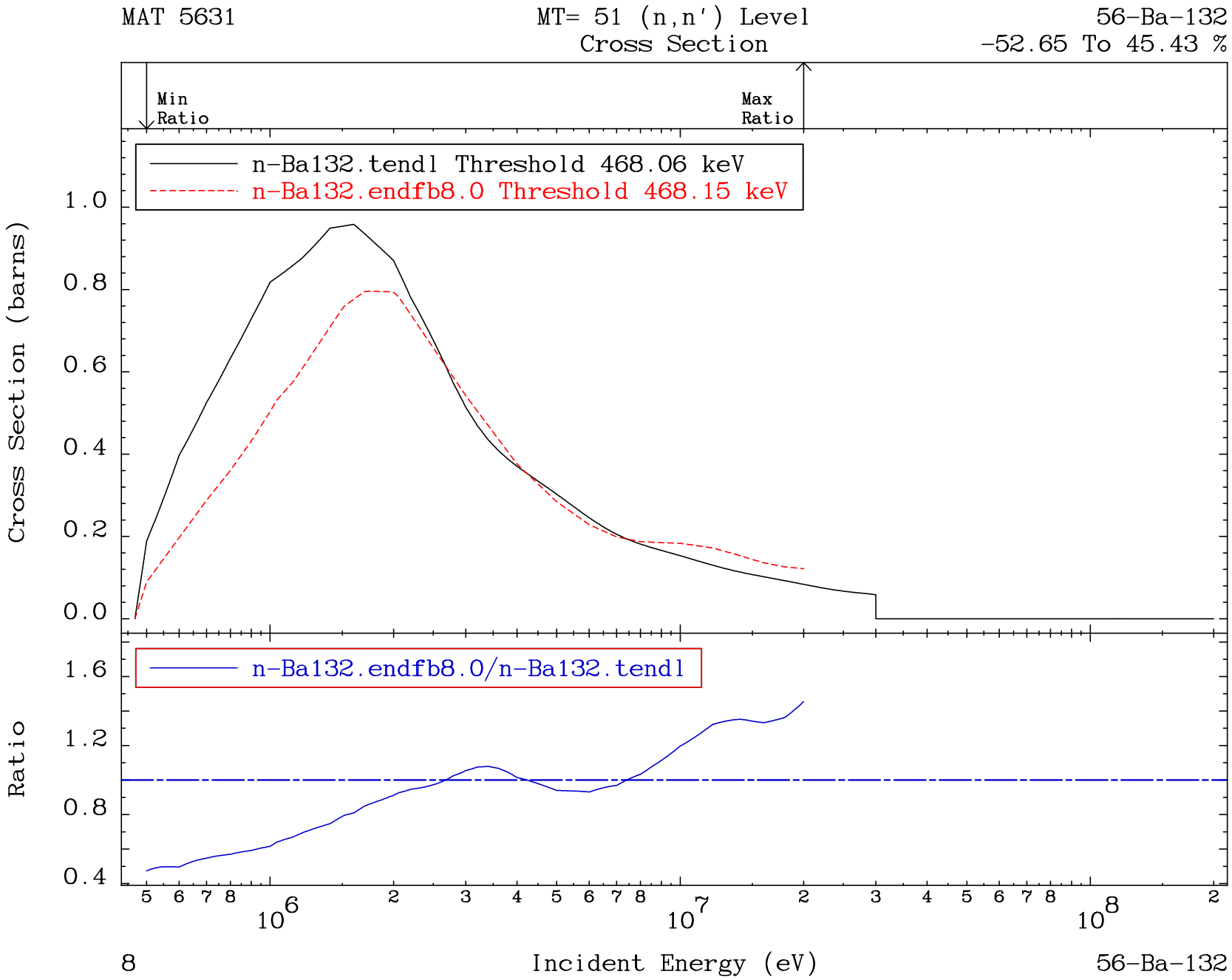

MAT 5631
Inelastic
Cross Section
56-Ba-132
-52.65 To 56.47 %
Min
Ratio
Max
Ratio
n-Ba132.tendl Threshold 468.06 keV
n-Ba132.endfb8.0 Threshold 468.15 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
1.6
1.2
0.8
0.4
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
56-Ba-132

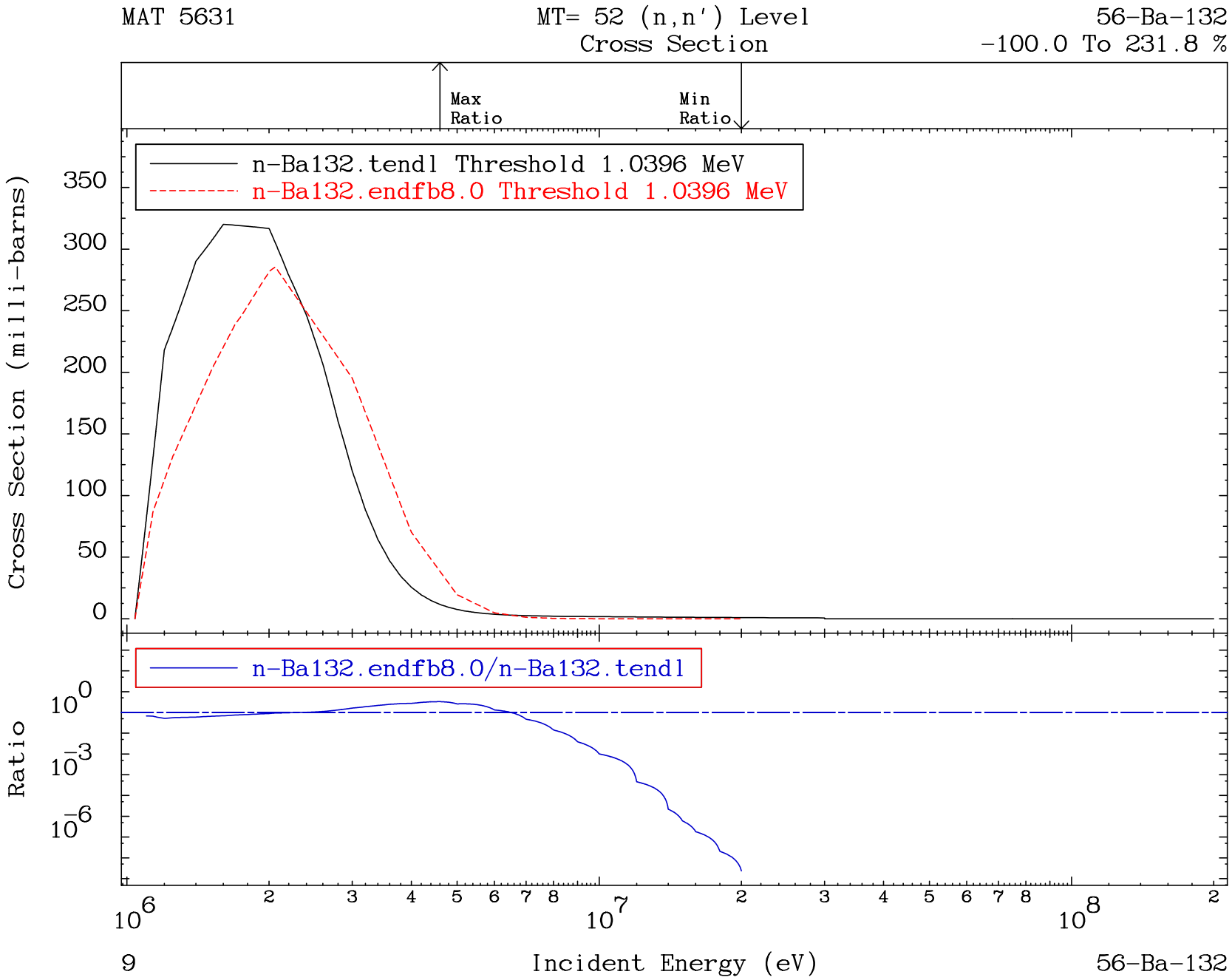

MAT 5631
(n,2n)
Cross Section
56-Ba-132
-31.80 To 79.80 %
Max
Ratio
n-Ba132.tendl Threshold 9.8977 MeV
n-Ba132.endfb8.0 Threshold 10.000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
2.0
1.6
1.2
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
56-Ba-132

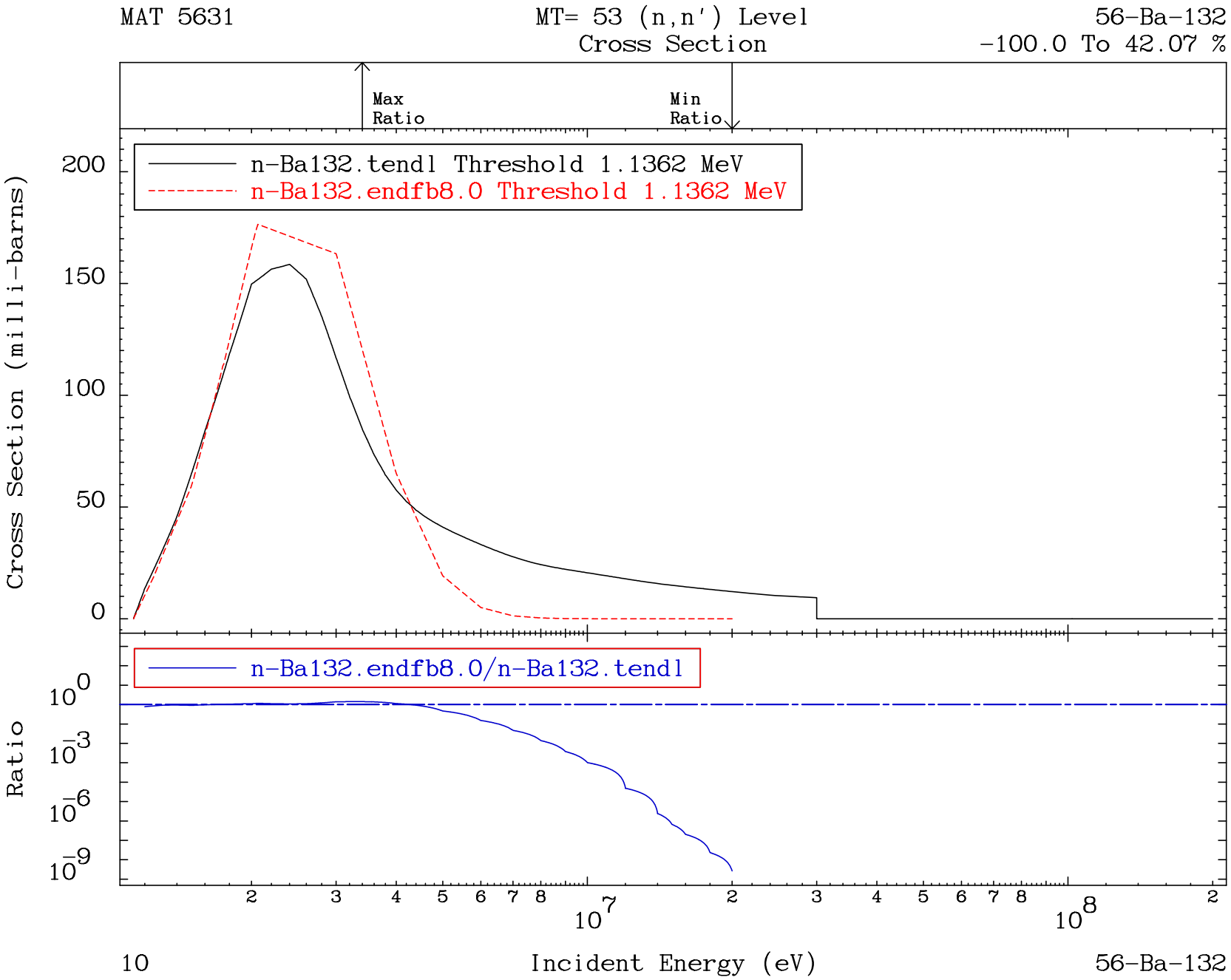

MAT 5631
(n,3n)
Cross Section
56-Ba-132
435.1 To 808.1 %
Min
Ratio
n-Ba132.tendl Threshold 17.449 MeV
n-Ba132.endfb8.0 Threshold 17.435 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10
8
6
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
56-Ba-132

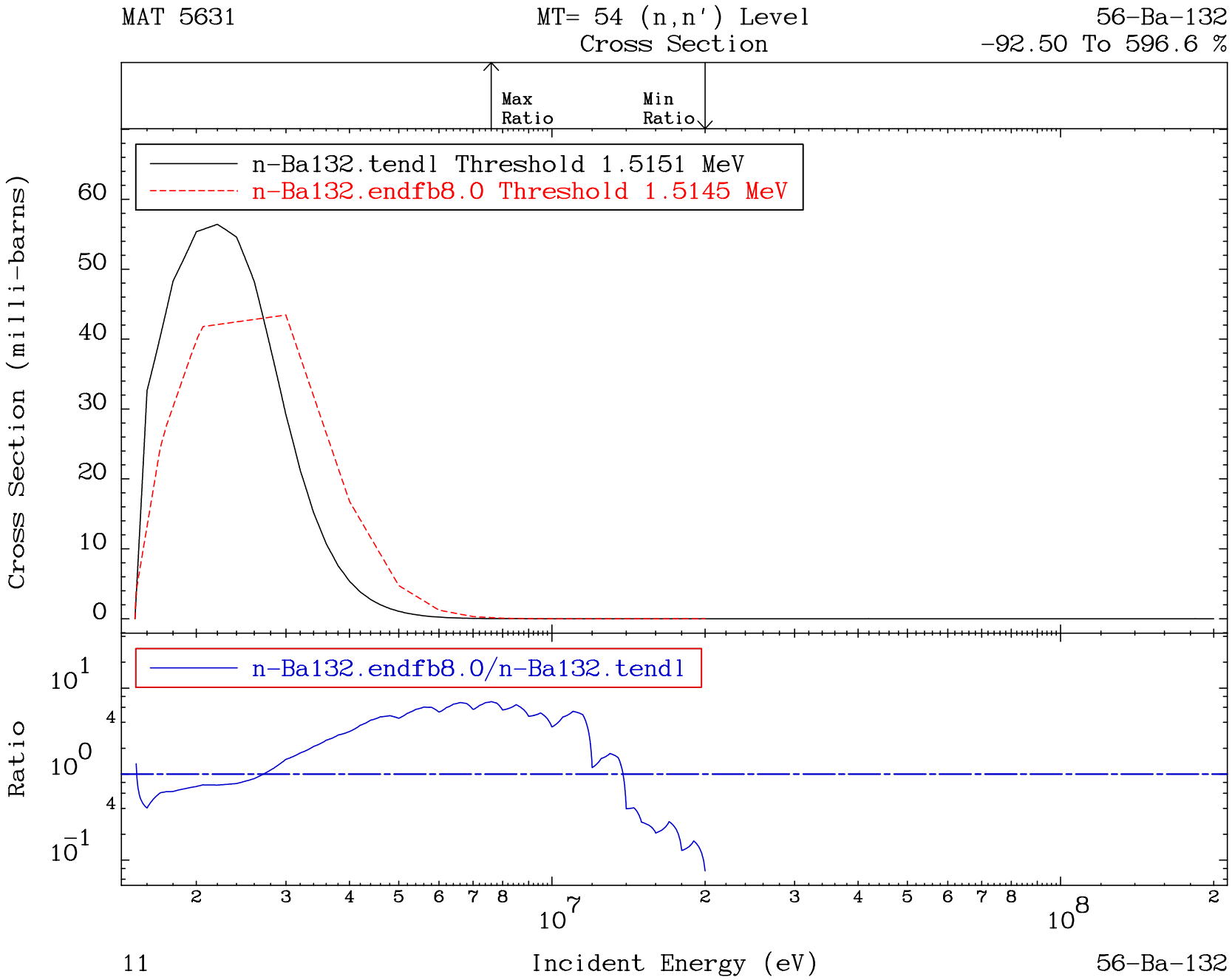

MAT 5631
(n,n') α
Cross Section
56-Ba-132
96.77 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 1.0073 MeV
n-Ba132.endfb8.0 Threshold 1.0215 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^6
10^7
10^8
6
Incident Energy (eV)
56-Ba-132

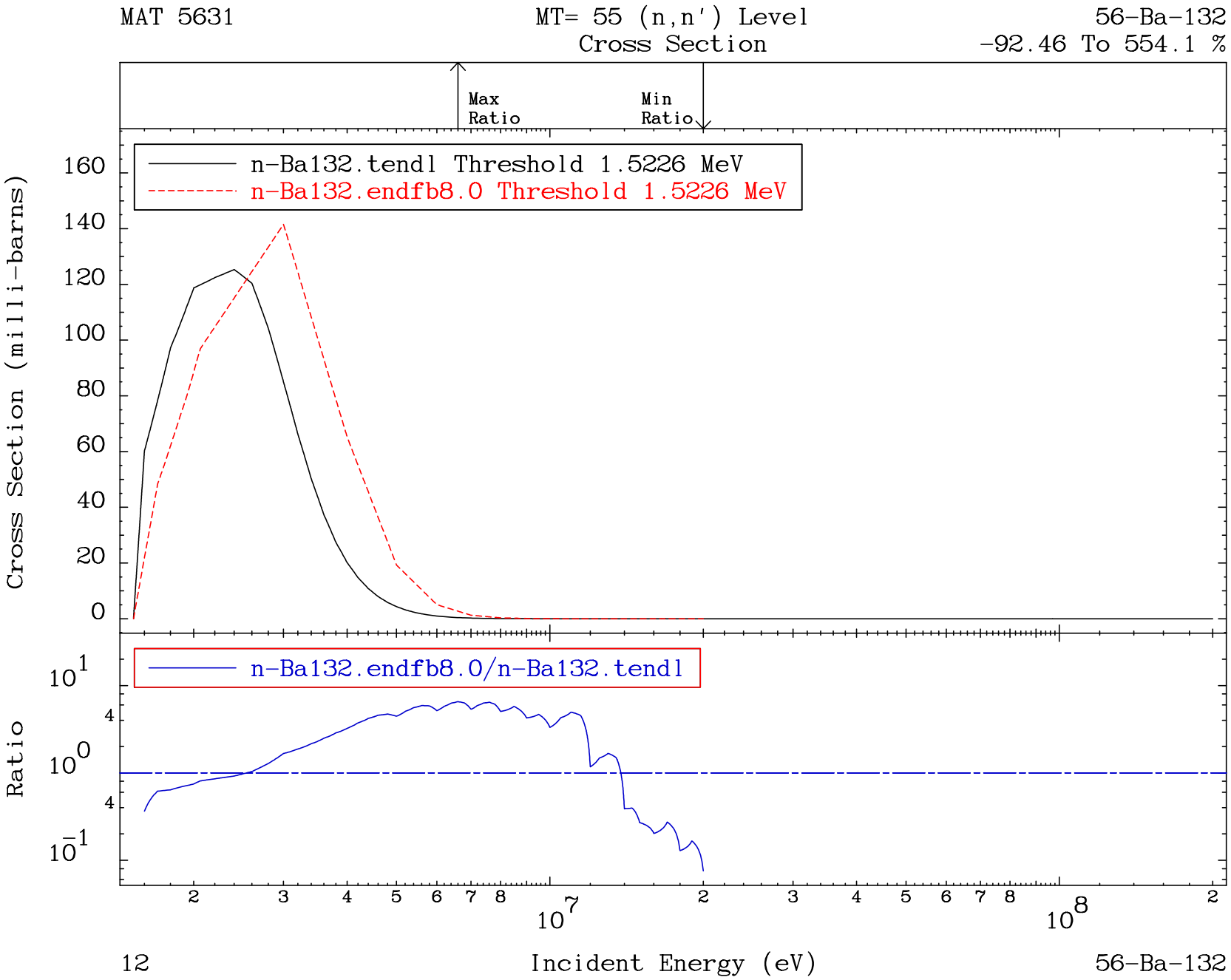

MAT 5631
(n,n') p
Cross Section
56-Ba-132
-100.0 To -75.18%
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 7.7238 MeV
n-Ba132.endfb8.0 Threshold 8.5292 MeV
Cross Section (milli-barns)
150
100
50
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
10^-9
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
56-Ba-132

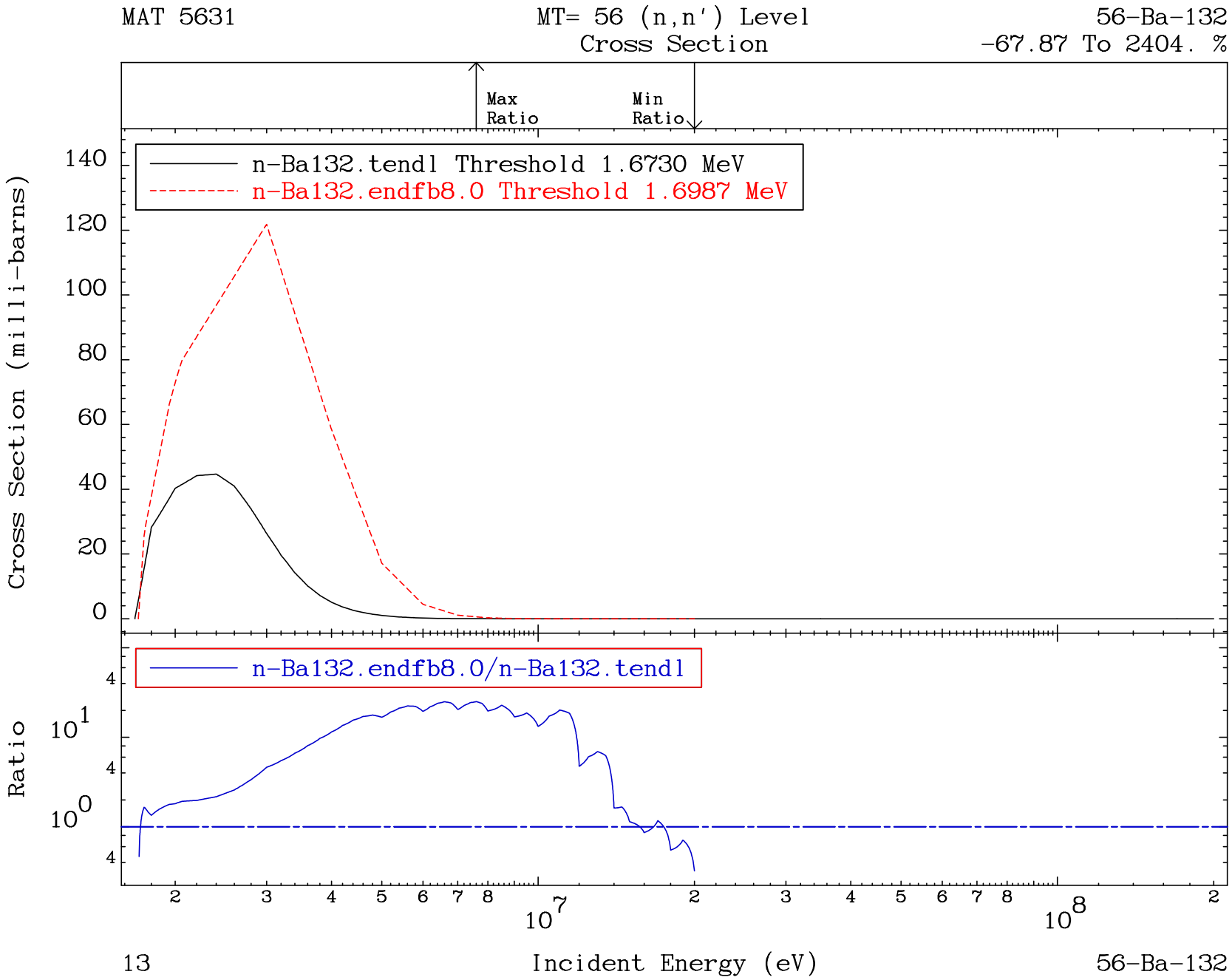

MAT 5631
MT= 51 (n,n') Level
Cross Section
56-Ba-132
-52.65 To 45.43 %
Min
Ratio
Max
Ratio
n-Ba132.tendl Threshold 468.06 keV
n-Ba132.endfb8.0 Threshold 468.15 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
1.6
1.2
0.8
0.4
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
56-Ba-132

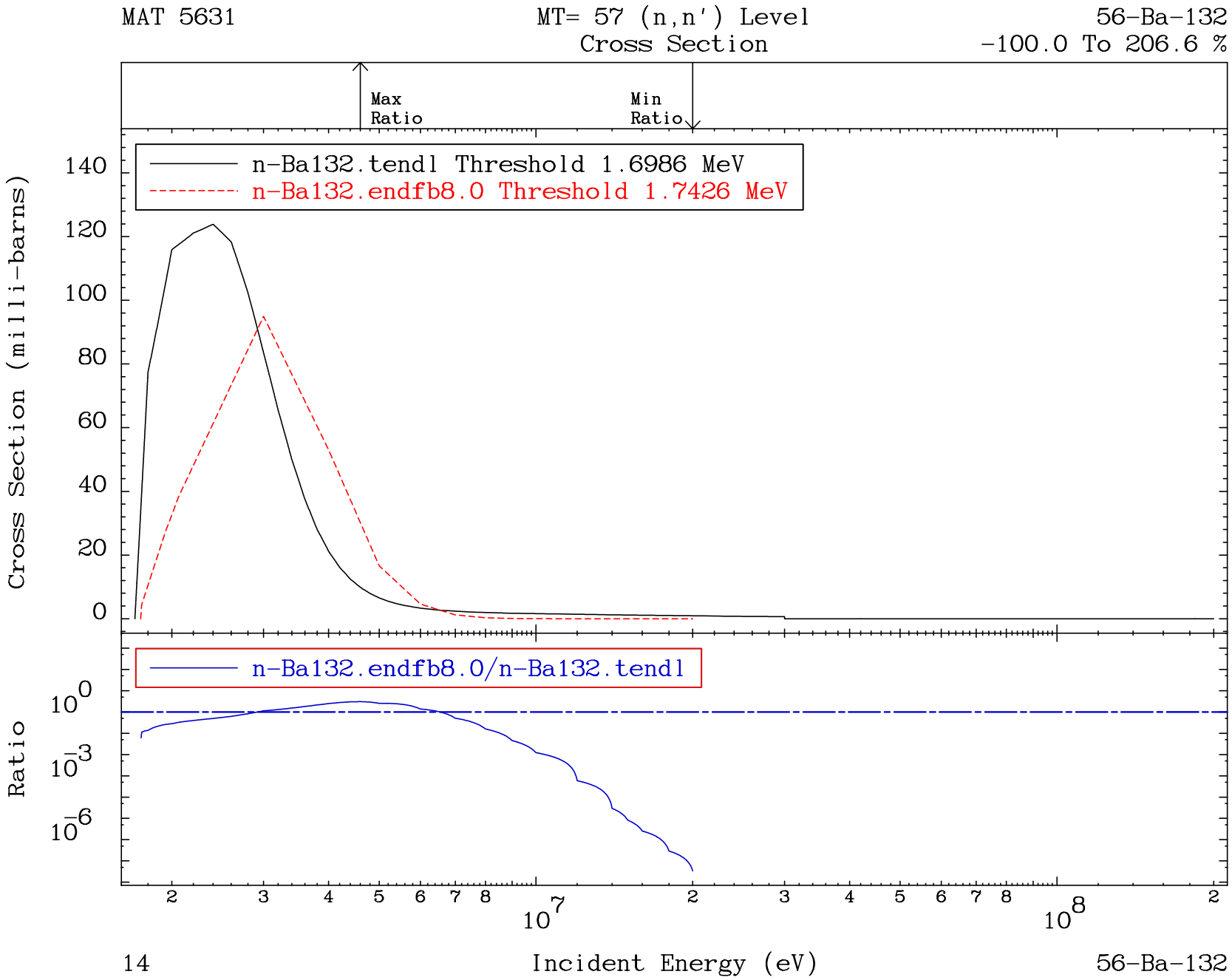

MAT 5631
MT= 52 (n,n') Level
Cross Section
56-Ba-132
-100.0 To 231.8 %
Max
Ratio
Min
Ratio
n-Ba132.tendl Threshold 1.0396 MeV
n-Ba132.endfb8.0 Threshold 1.0396 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
9
Incident Energy (eV)
56-Ba-132

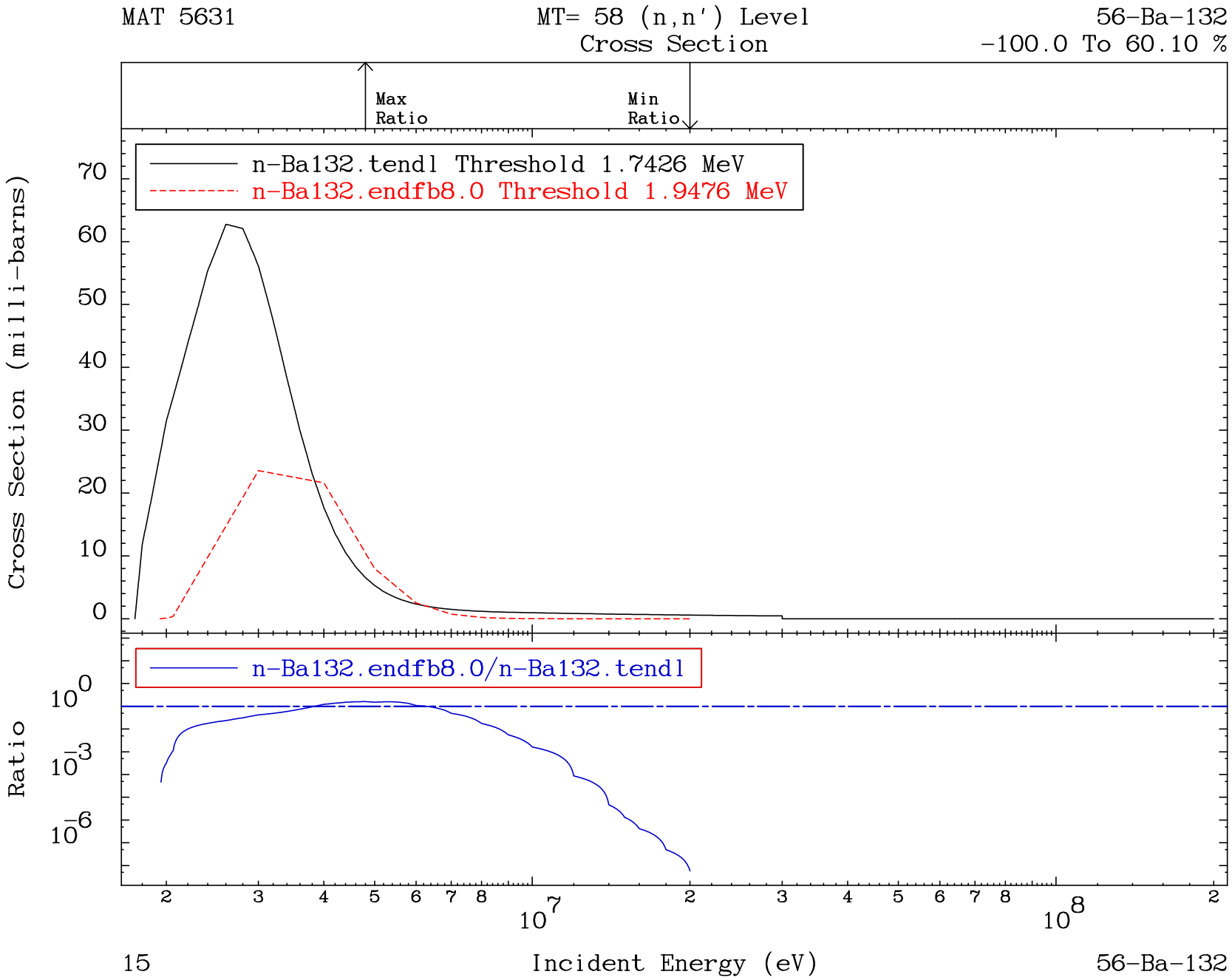

MAT 5631
MT= 53 (n,n') Level
Cross Section
56-Ba-132
-100.0 To 42.07 %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 1.1362 MeV
n-Ba132.endfb8.0 Threshold 1.1362 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
56-Ba-132

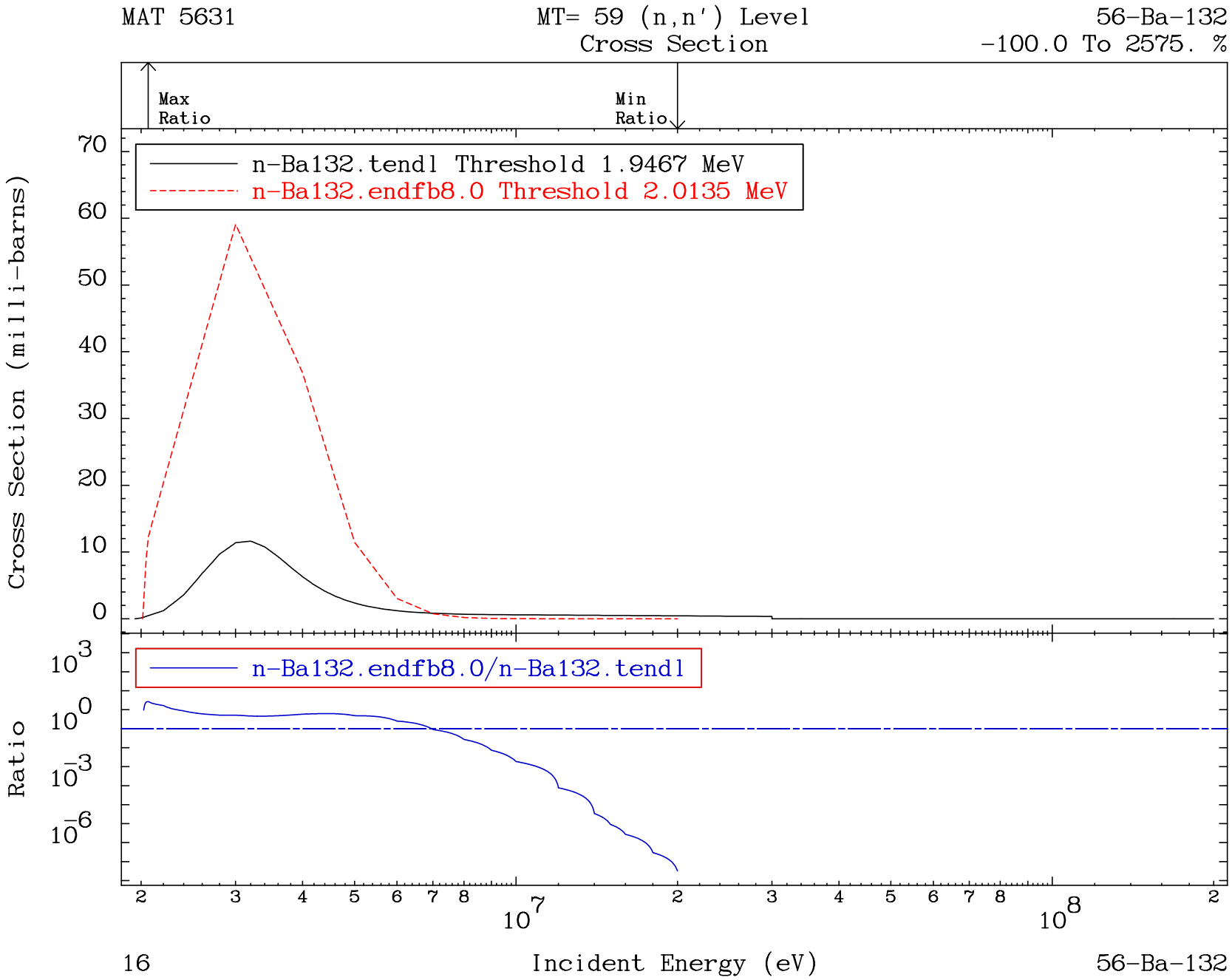

MAT 5631
MT= 54 (n,n') Level
Cross Section
56-Ba-132
-92.50 To 596.6 %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 1.5151 MeV
n-Ba132.endfb8.0 Threshold 1.5145 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
11
Incident Energy (eV)
56-Ba-132

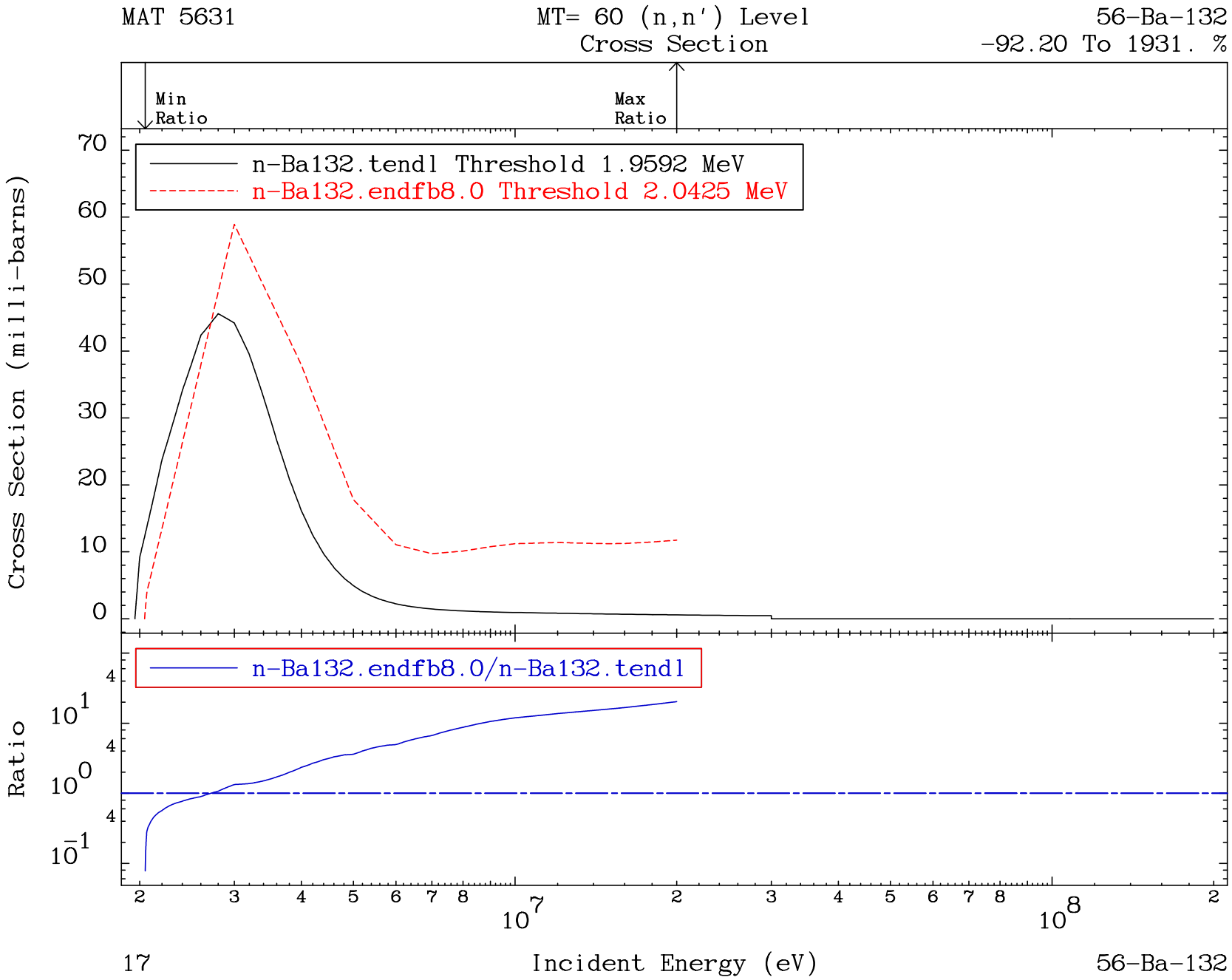

MAT 5631
MT= 55 (n,n') Level
Cross Section
56-Ba-132
-92.46 To 554.1 %
Max
Ratio
Min
Ratio
n-Ba132.tendl Threshold 1.5226 MeV
n-Ba132.endfb8.0 Threshold 1.5226 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
12
Incident Energy (eV)
56-Ba-132

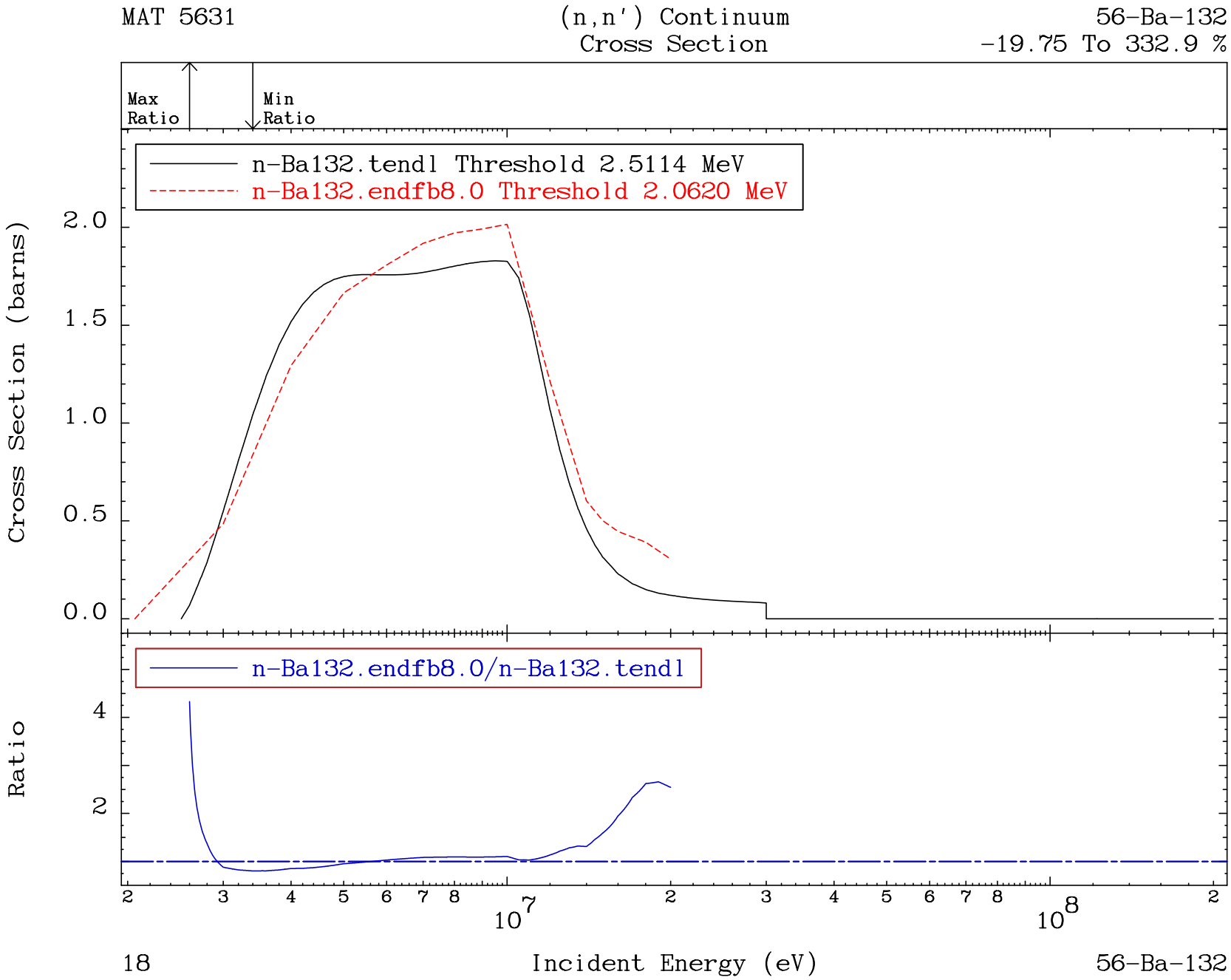

MAT 5631
MT= 56 (n,n') Level
Cross Section
56-Ba-132
-67.87 To 2404. %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 1.6730 MeV
n-Ba132.endfb8.0 Threshold 1.6987 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^1
10^0
2
3
4
5
6
7
8
10^7
10^8
13
Incident Energy (eV)
56-Ba-132

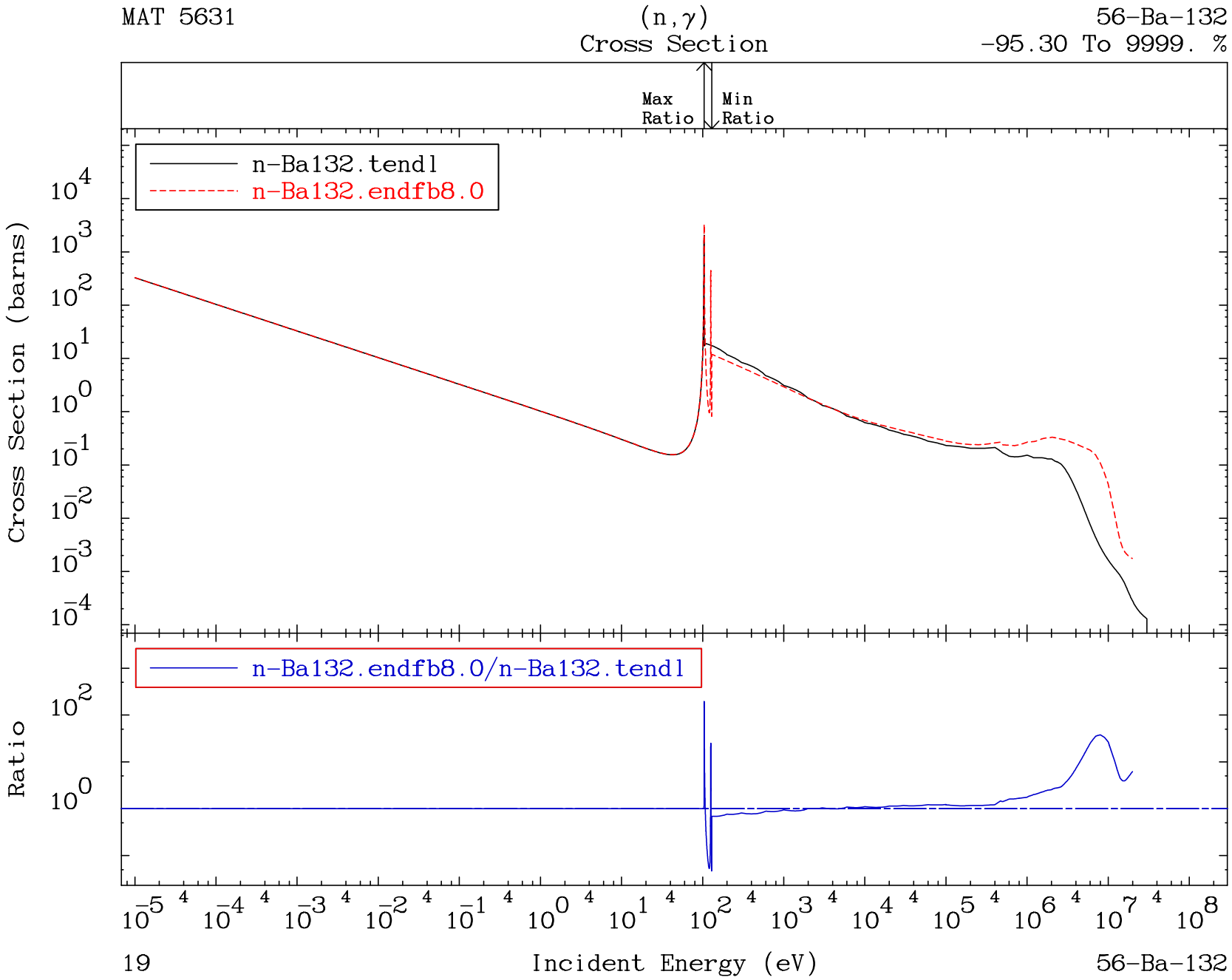

MAT 5631
MT= 57 (n,n') Level
Cross Section
56-Ba-132
-100.0 To 206.6 %
Max
Ratio
Min
Ratio
n-Ba132.tendl Threshold 1.6986 MeV
n-Ba132.endfb8.0 Threshold 1.7426 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
56-Ba-132

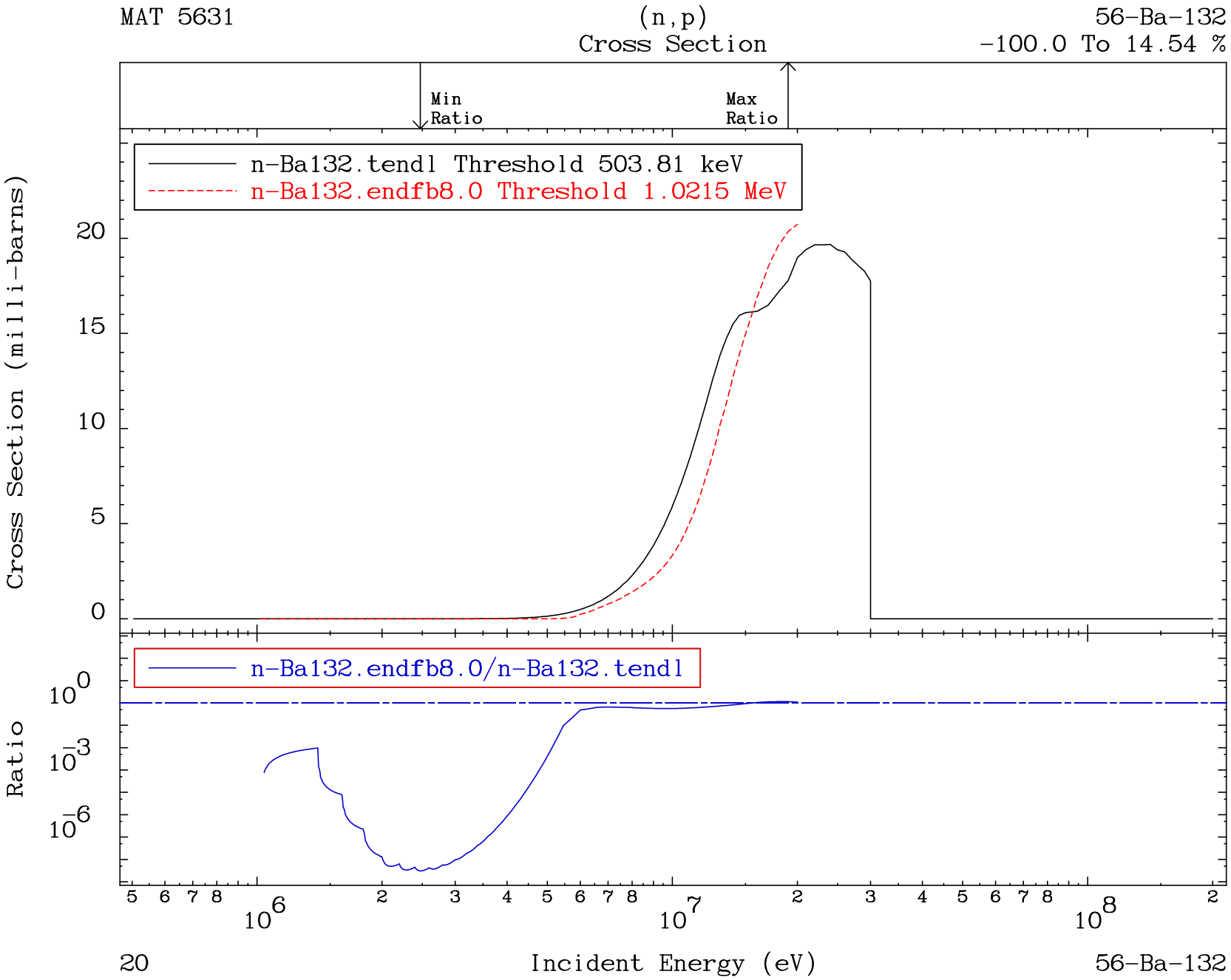

MAT 5631
MT= 58 (n,n') Level
Cross Section
56-Ba-132
-100.0 To 60.10 %
Max
Ratio
Min
Ratio
n-Ba132.tendl Threshold 1.7426 MeV
n-Ba132.endfb8.0 Threshold 1.9476 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
56-Ba-132

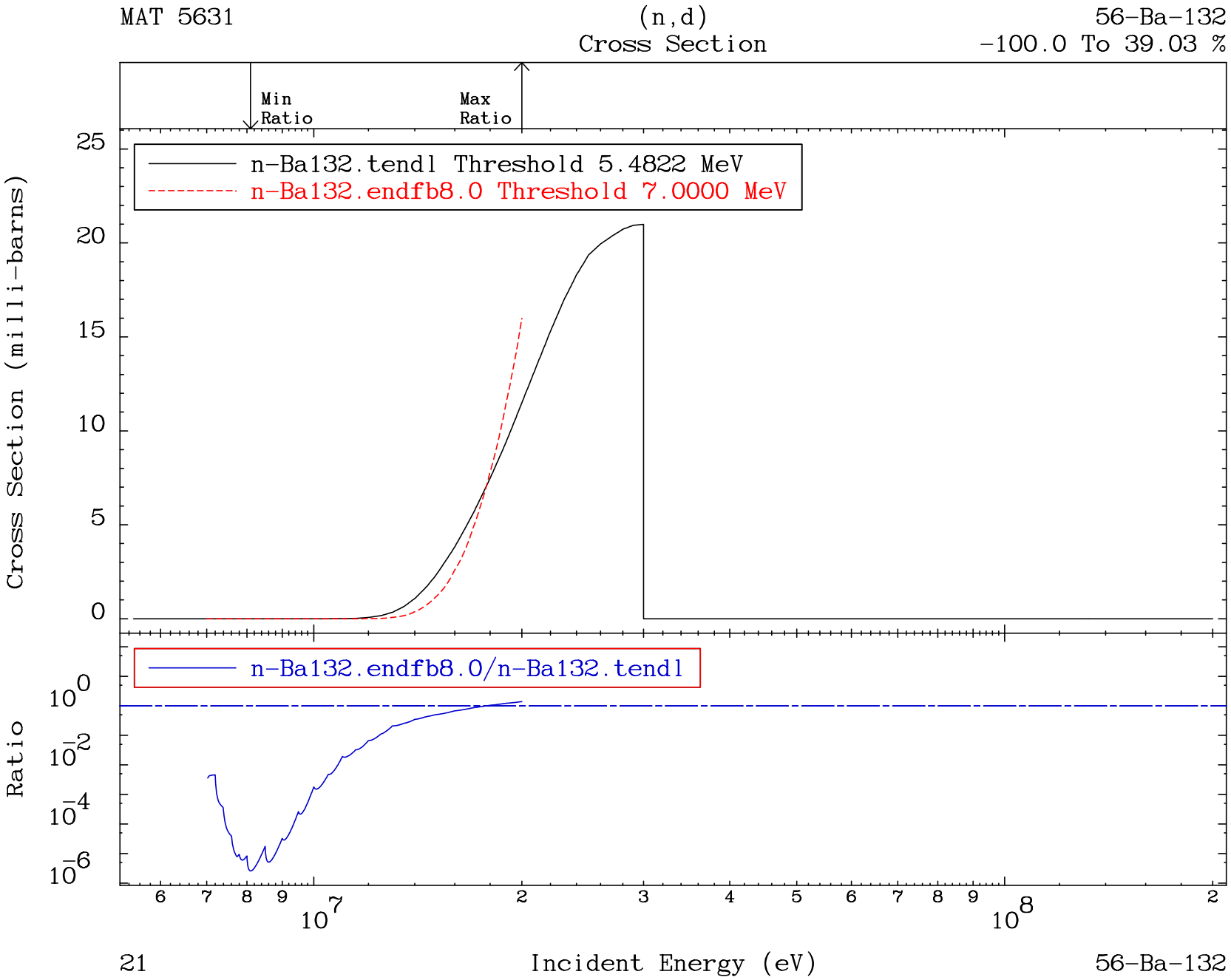

MAT 5631
MT= 59 (n,n') Level
Cross Section
56-Ba-132
-100.0 To 2575. %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 1.9467 MeV
n-Ba132.endfb8.0 Threshold 2.0135 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^3
10^0
10^-3
10^-6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
56-Ba-132

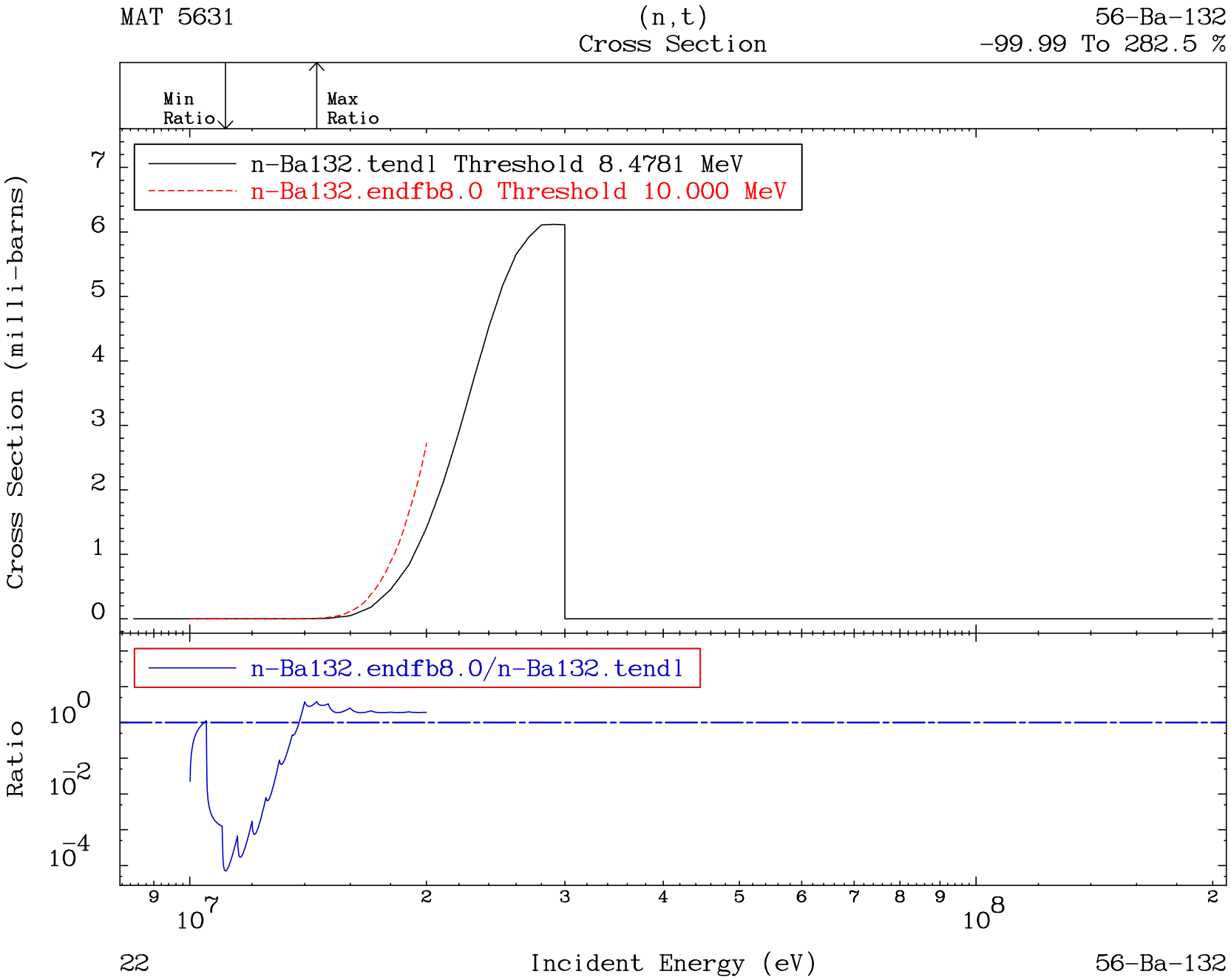

MAT 5631
MT= 60 (n,n') Level
Cross Section
56-Ba-132
-92.20 To 1931. %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 1.9592 MeV
n-Ba132.endfb8.0 Threshold 2.0425 MeV
Cross Section (milli-barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
17
56-Ba-132

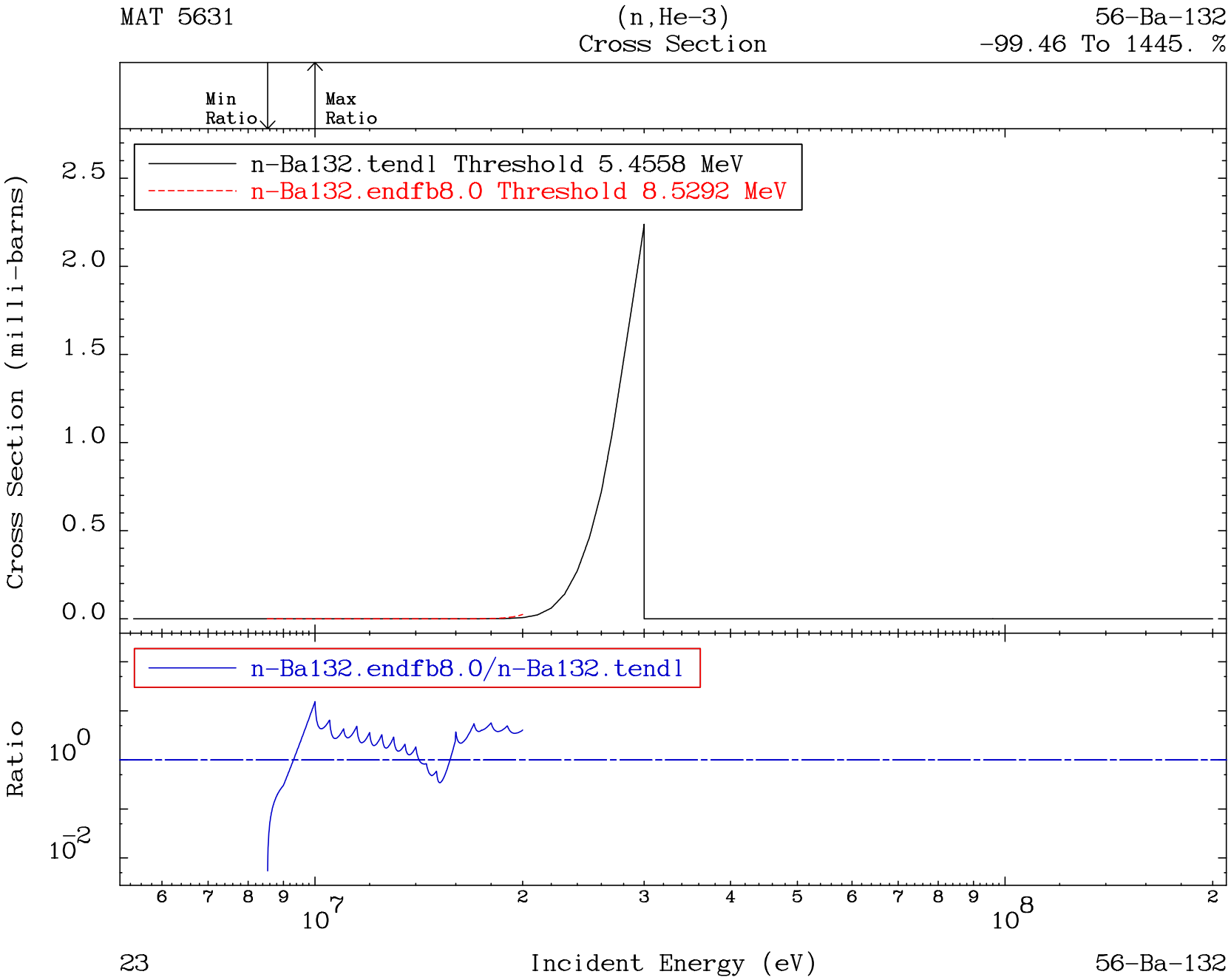

MAT 5631
(n,n') Continuum
Cross Section
56-Ba-132
-19.75 To 332.9 %
Max Ratio
Min Ratio
n-Ba132.tendl Threshold 2.5114 MeV
n-Ba132.endfb8.0 Threshold 2.0620 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
4
2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
56-Ba-132

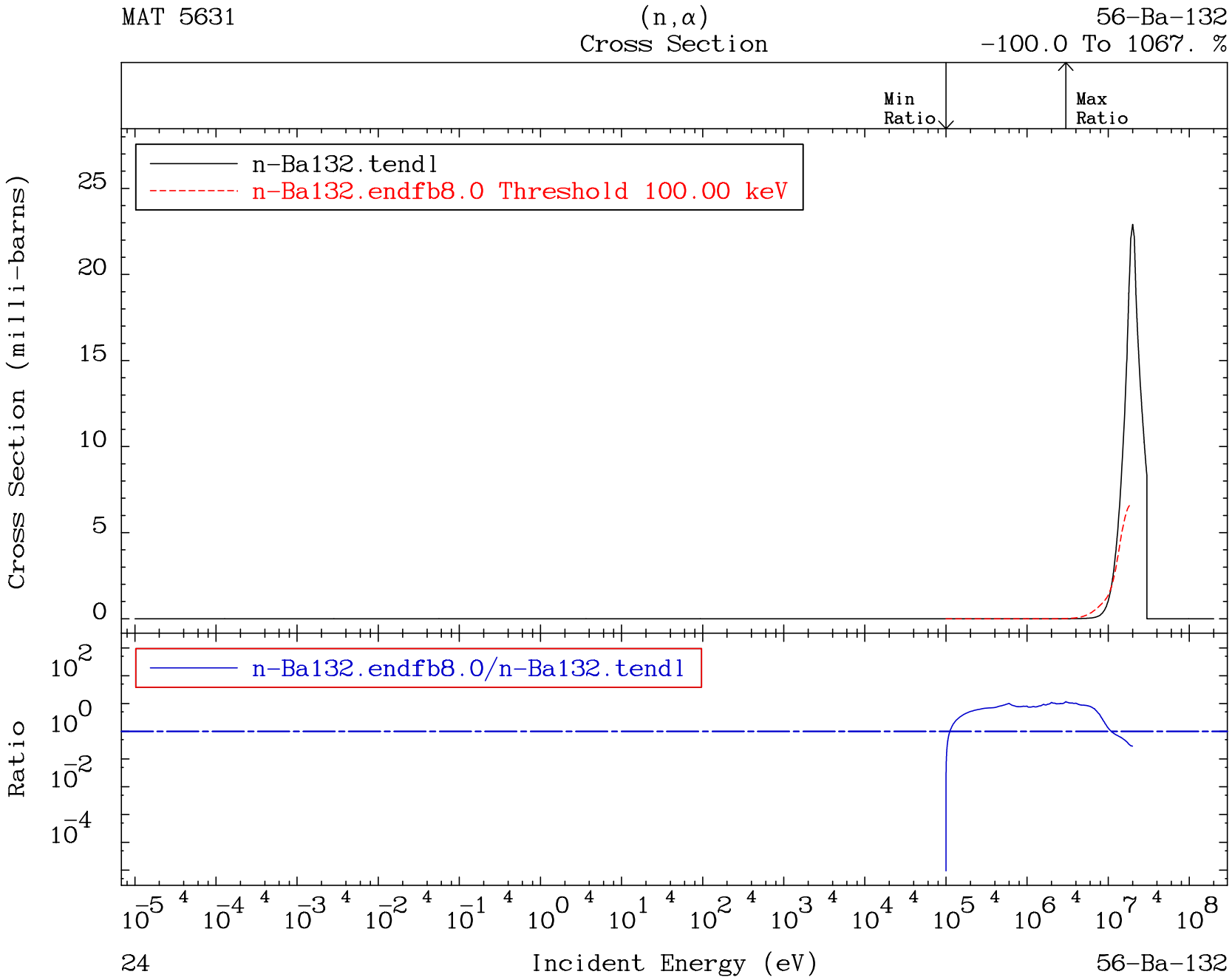

MAT 5631
(n,γ)
Cross Section
56-Ba-132
-95.30 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
19
56-Ba-132

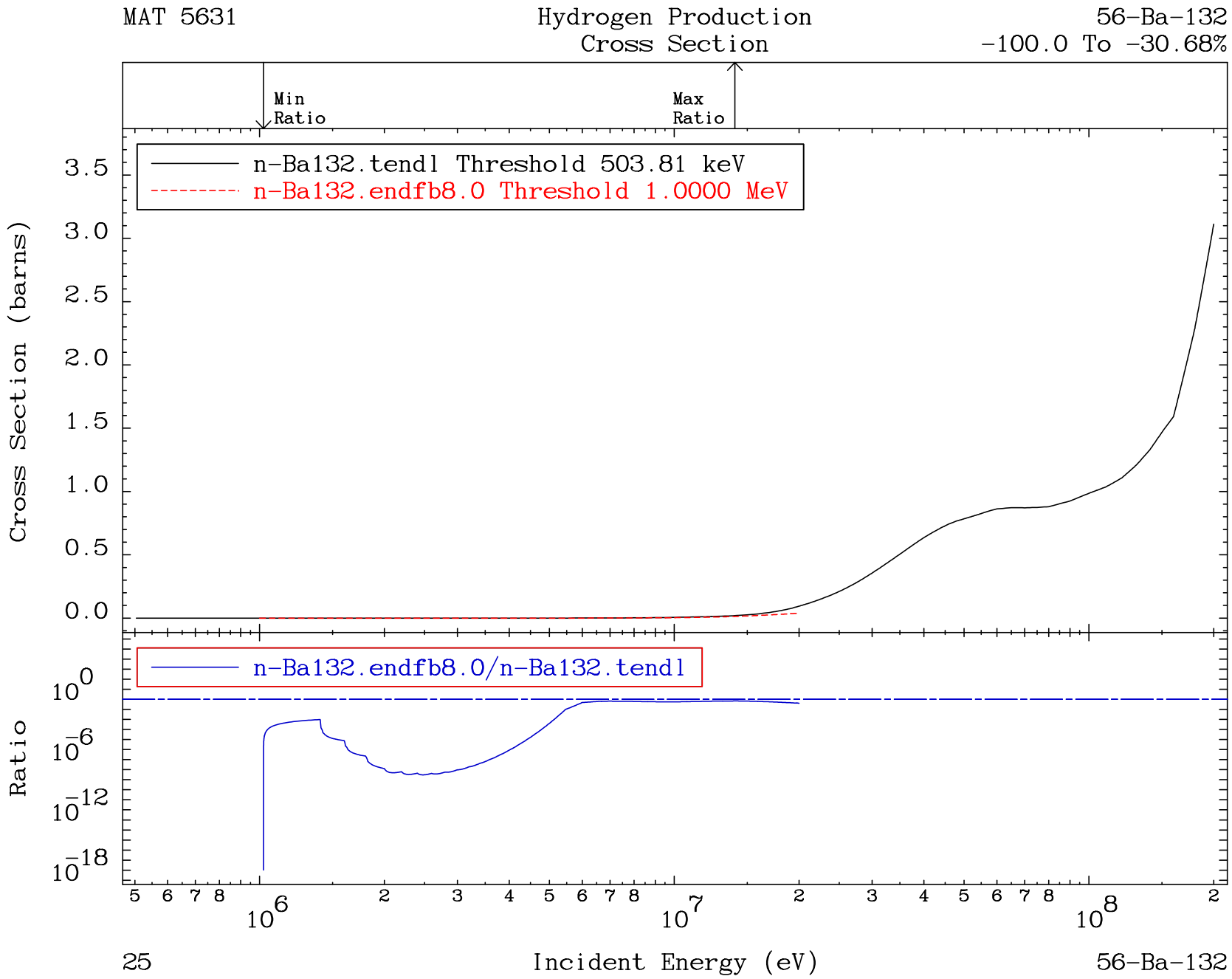

MAT 5631
(n,p)
Cross Section
56-Ba-132
-100.0 To 14.54 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 503.81 keV
n-Ba132.endfb8.0 Threshold 1.0215 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
56-Ba-132

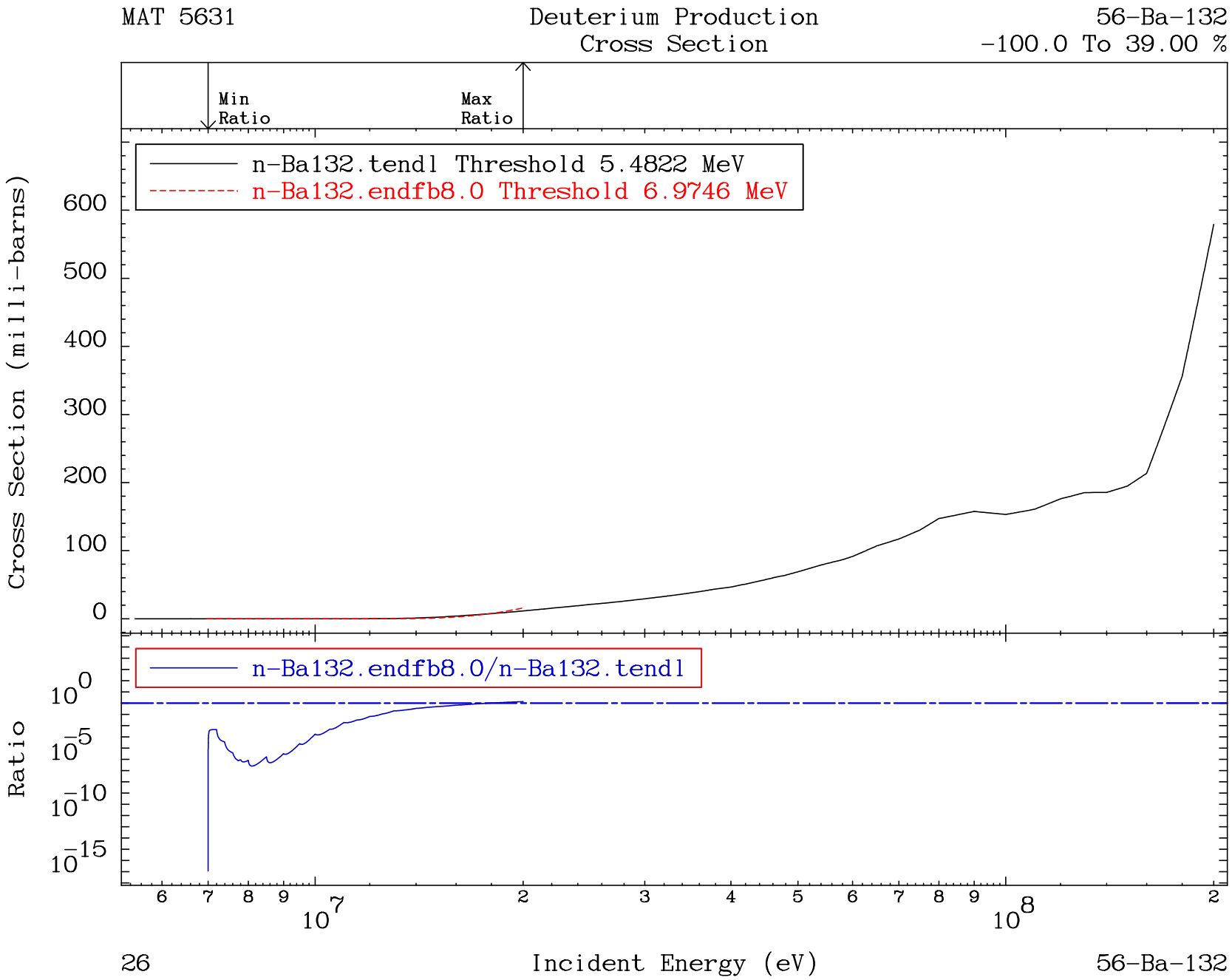

MAT 5631
(n,d)
Cross Section
56-Ba-132
-100.0 To 39.03 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 5.4822 MeV
n-Ba132.endfb8.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-2
10^-4
10^-6
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
56-Ba-132

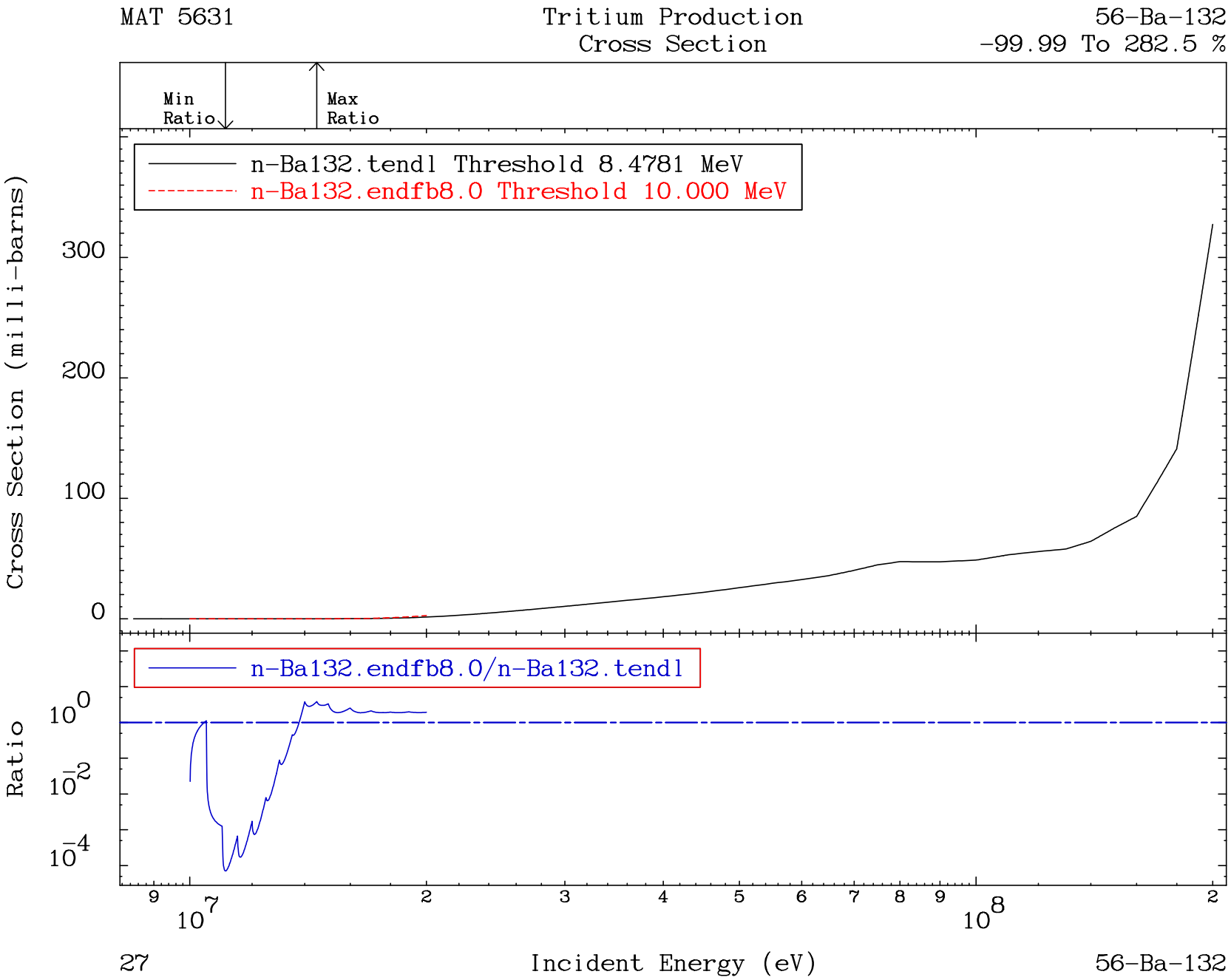

MAT 5631
(n,t)
Cross Section
56-Ba-132
-99.99 To 282.5 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 8.4781 MeV
n-Ba132.endfb8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
22
56-Ba-132

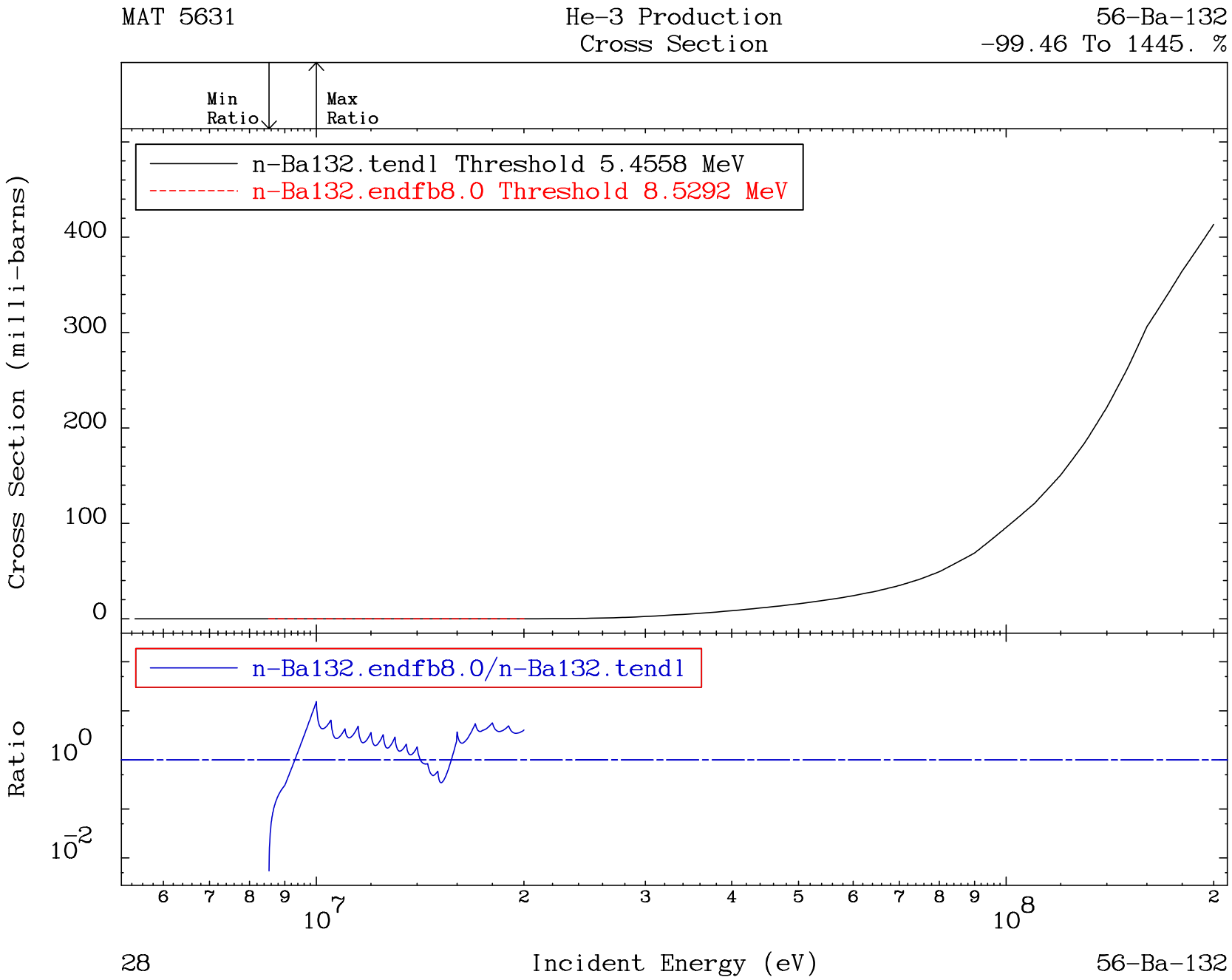

MAT 5631
(n,He-3)
Cross Section
56-Ba-132
-99.46 To 1445. %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 5.4558 MeV
n-Ba132.endfb8.0 Threshold 8.5292 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
56-Ba-132

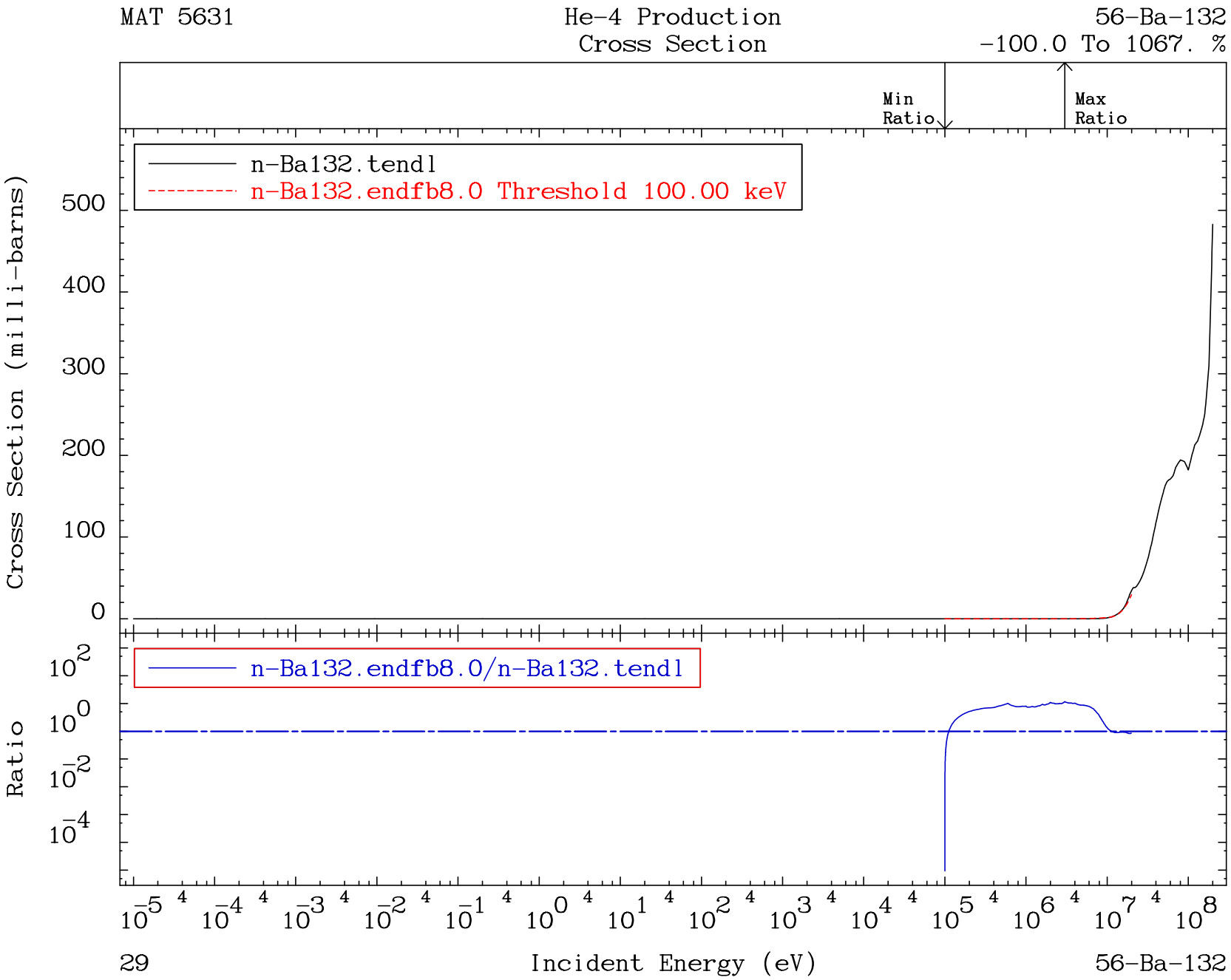

MAT 5631
(n,α)
Cross Section
56-Ba-132
-100.0 To 1067. %
Min Ratio
Max Ratio
n-Ba132.tendl
n-Ba132.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^2
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
24
Incident Energy (eV)
56-Ba-132

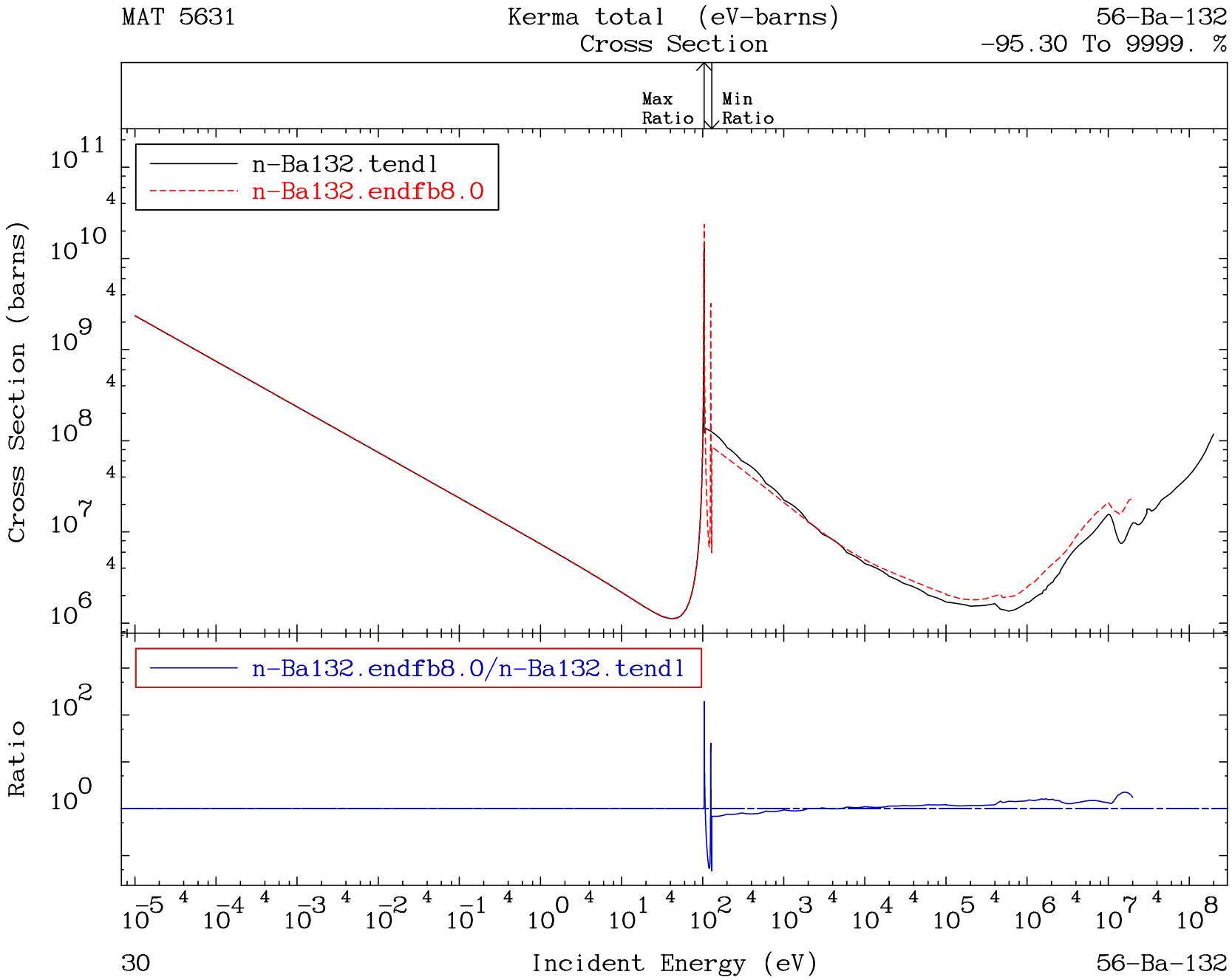

MAT 5631
Hydrogen Production
Cross Section
56-Ba-132
-100.0 To -30.68%
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 503.81 keV
n-Ba132.endfb8.0 Threshold 1.0000 MeV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-6
10^-12
10^-18
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
56-Ba-132

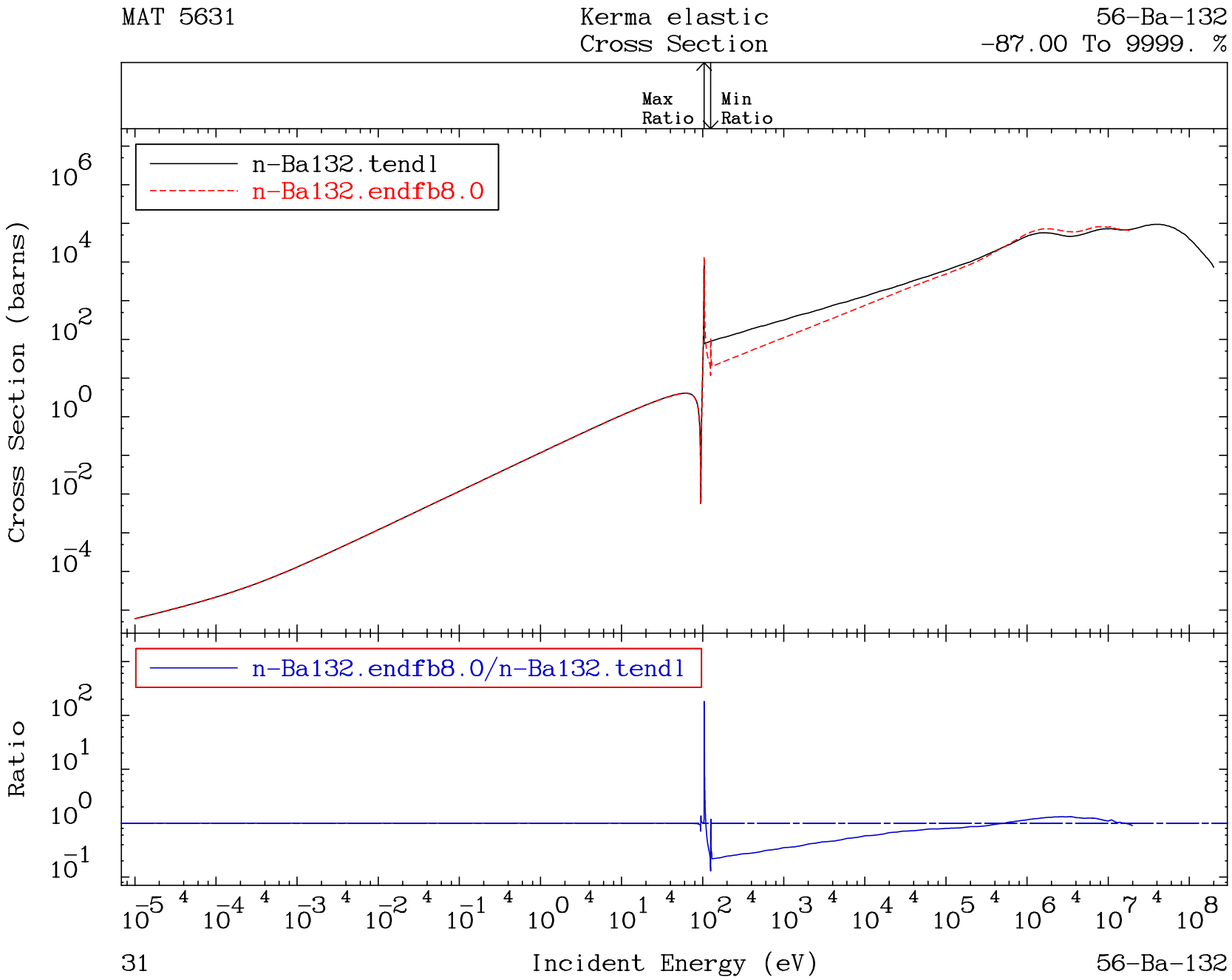

MAT 5631
Deuterium Production
Cross Section
56-Ba-132
-100.0 To 39.00 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 5.4822 MeV
n-Ba132.endfb8.0 Threshold 6.9746 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-5
10^-10
10^-15
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
56-Ba-132

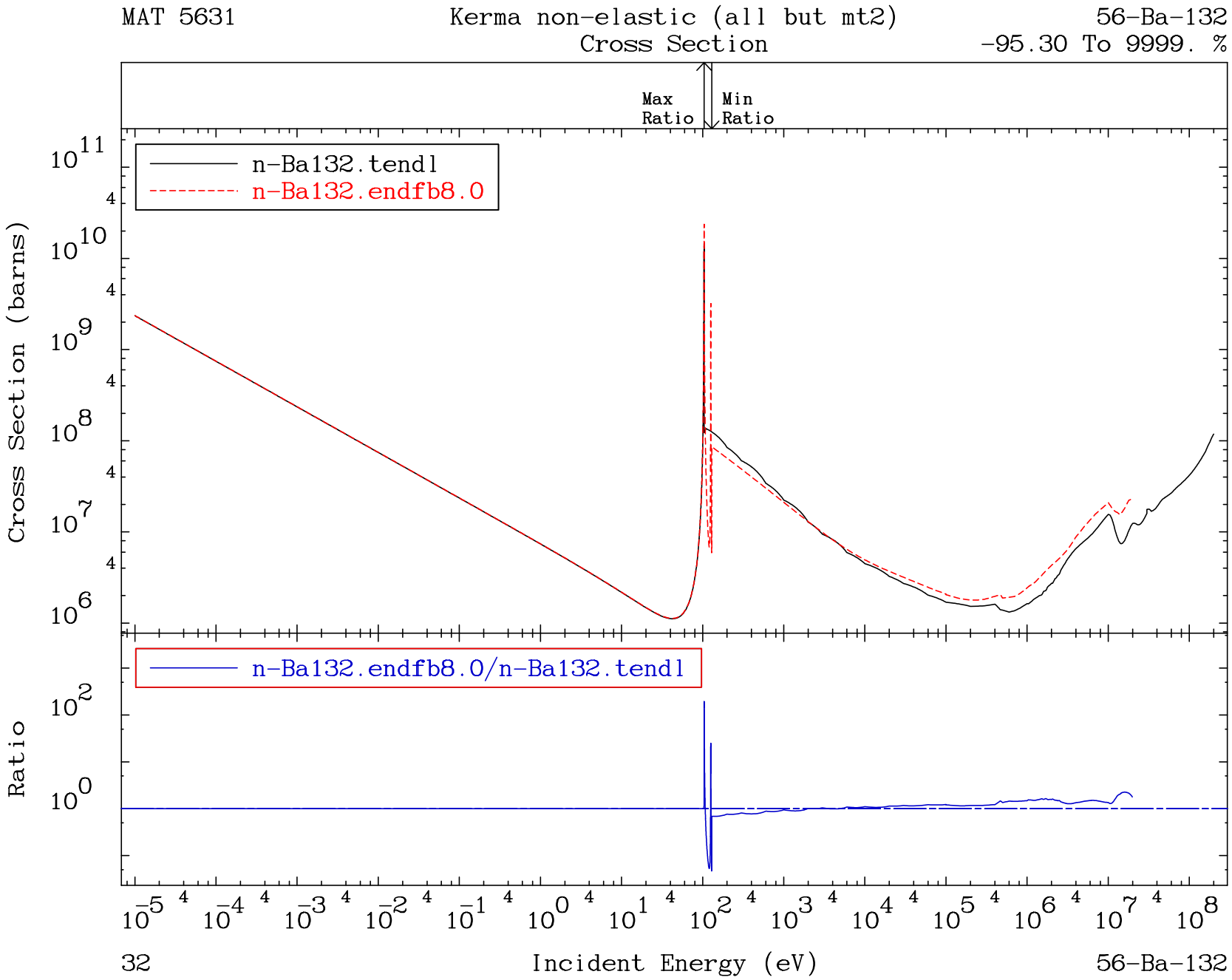

MAT 5631
Tritium Production
Cross Section
56-Ba-132
-99.99 To 282.5 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 8.4781 MeV
n-Ba132.endfb8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
300
200
100
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-2
10^-4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
56-Ba-132

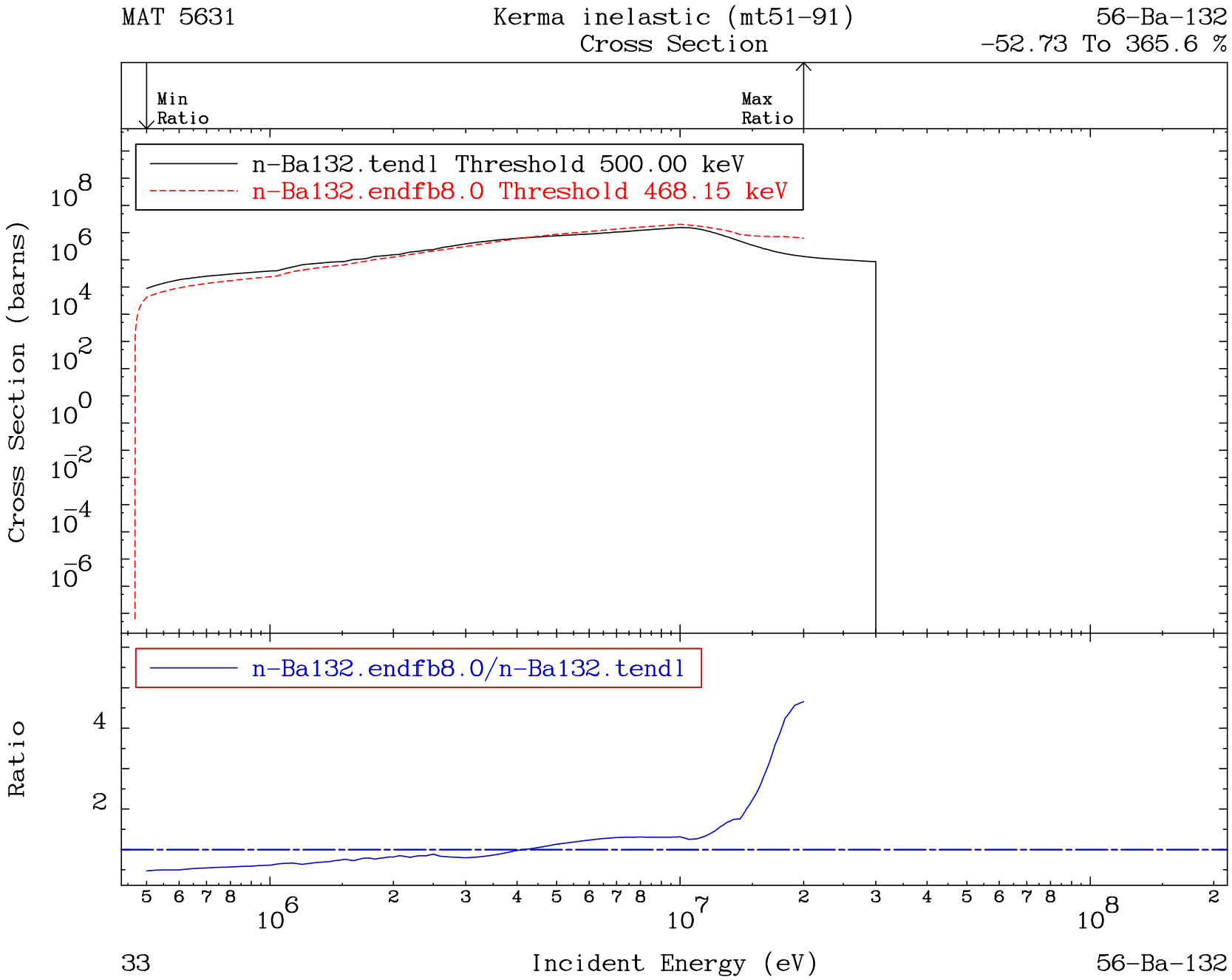

MAT 5631
He-3 Production
Cross Section
56-Ba-132
-99.46 To 1445. %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 5.4558 MeV
n-Ba132.endfb8.0 Threshold 8.5292 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^0
10^-2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
56-Ba-132

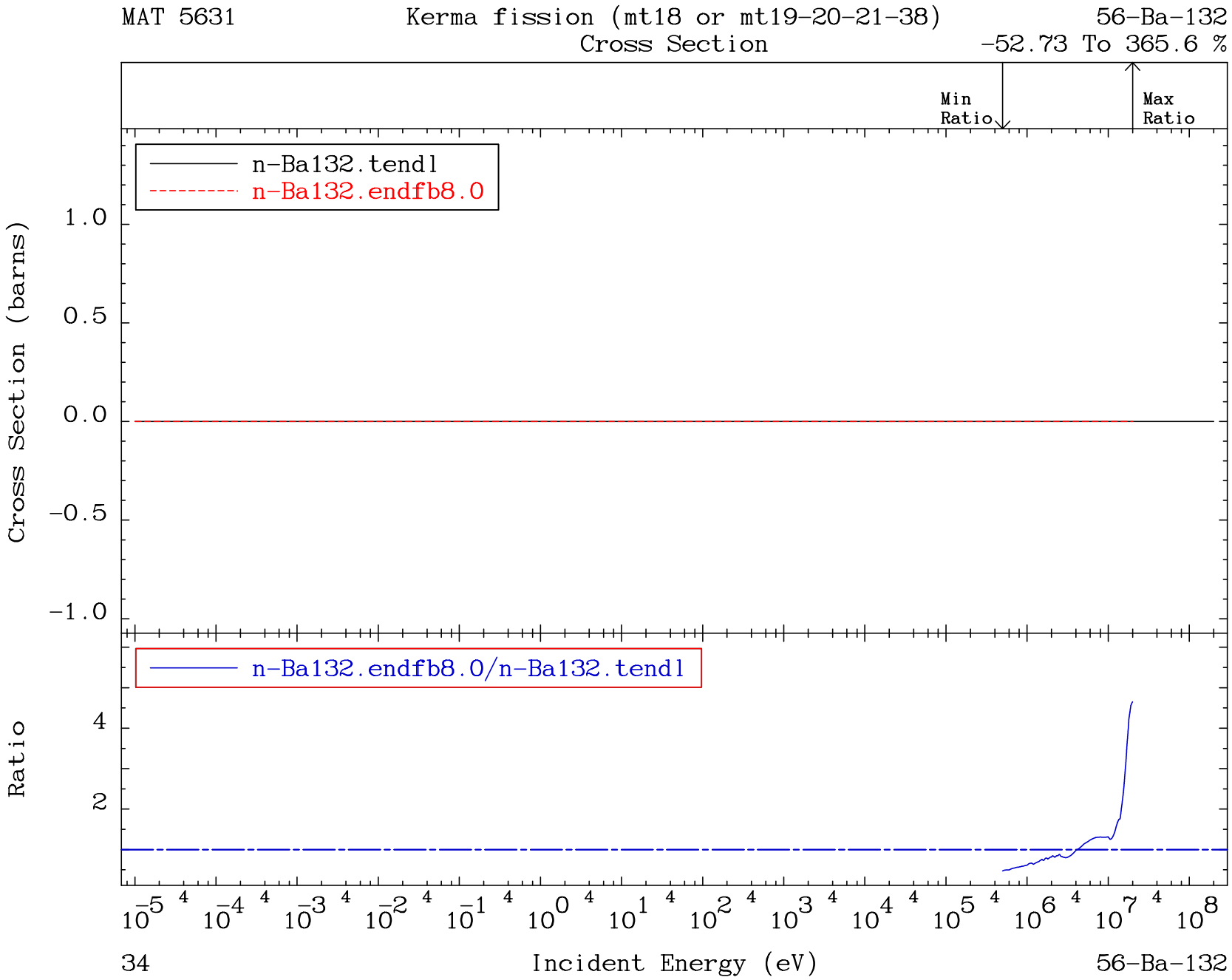

MAT 5631
He-4 Production
Cross Section
56-Ba-132
-100.0 To 1067. %
Min Ratio
Max Ratio
n-Ba132.tendl
n-Ba132.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^2
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
56-Ba-132

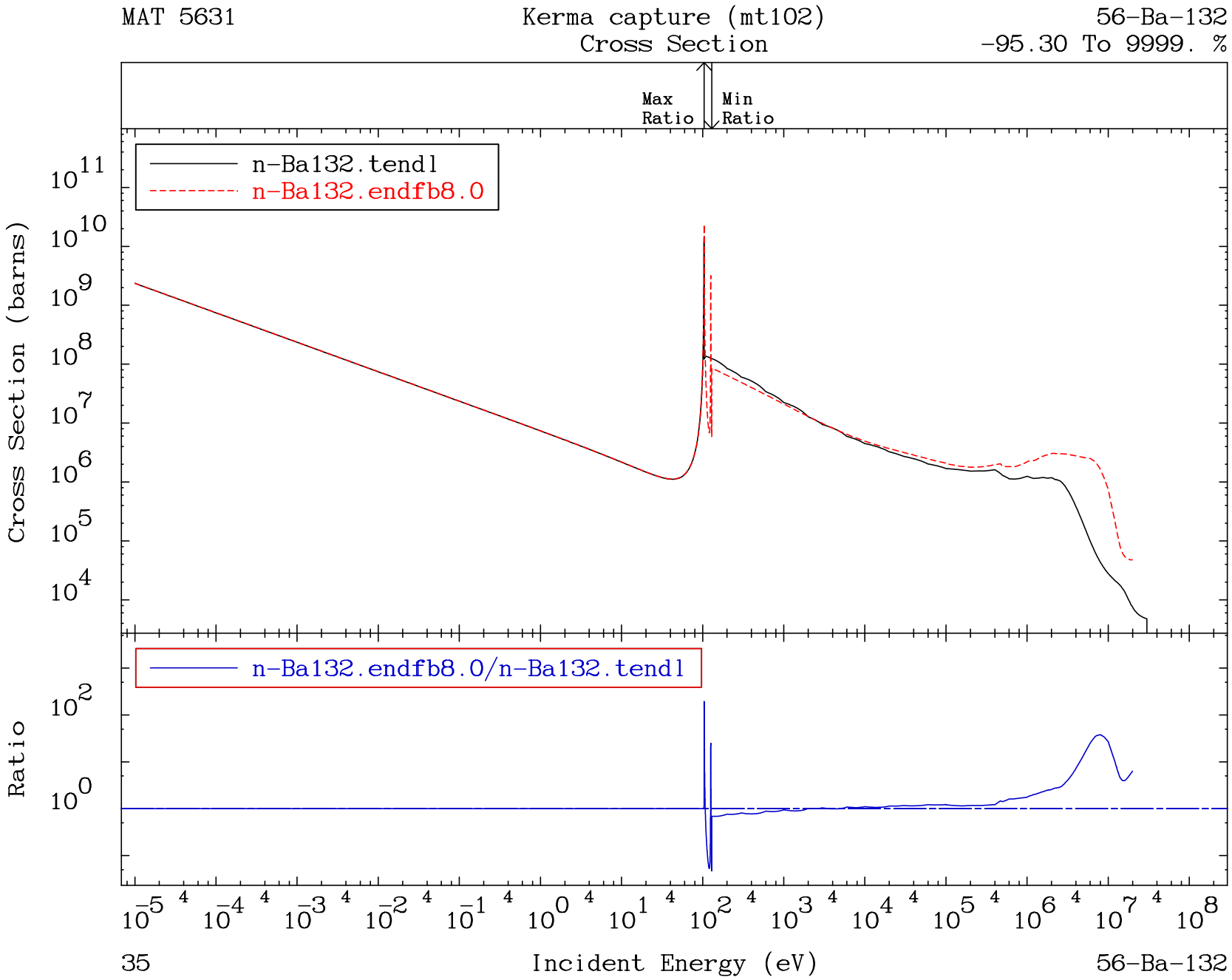

MAT 5631
Kerma total (eV-barns)
Cross Section
56-Ba-132
-95.30 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
30
56-Ba-132

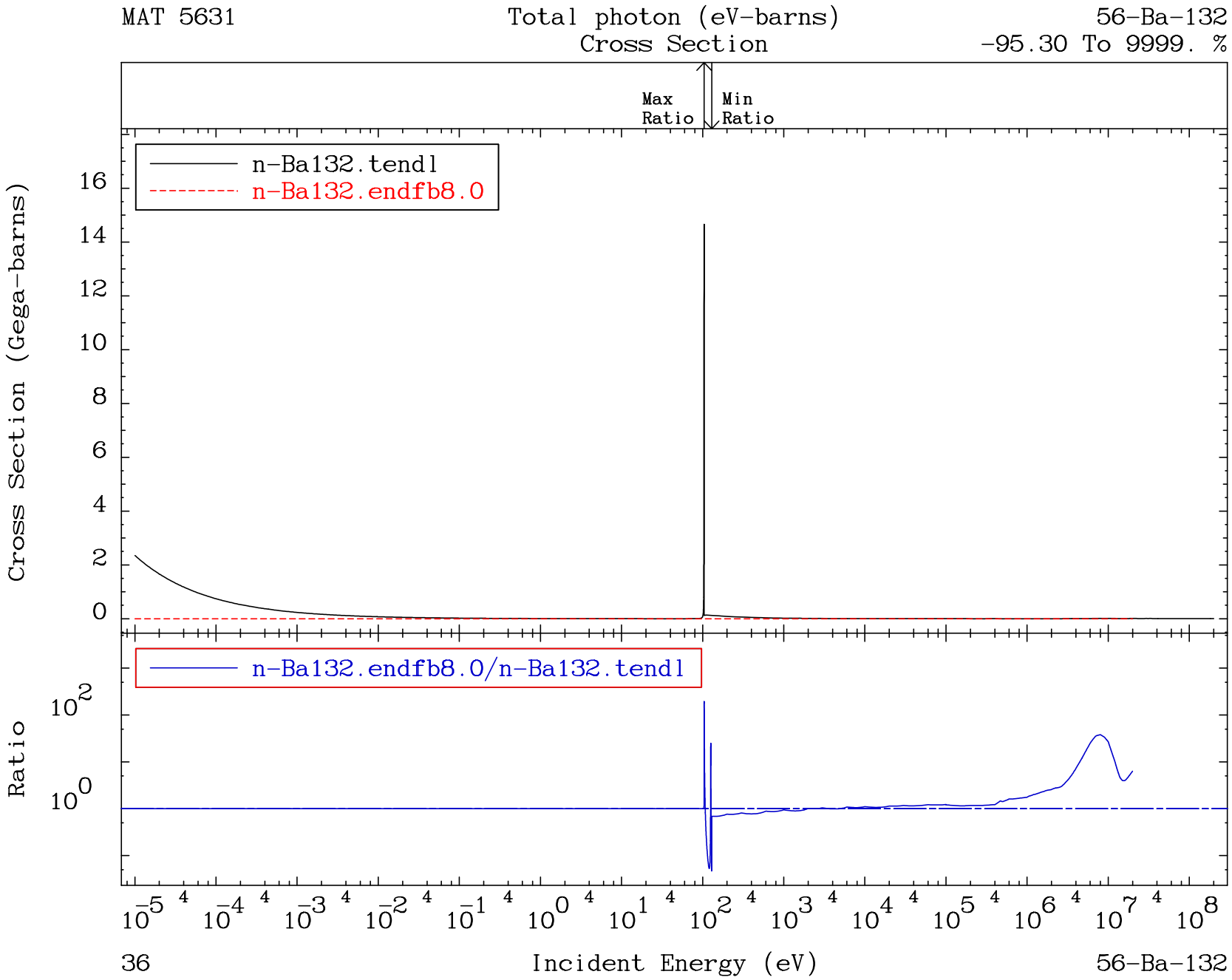

MAT 5631
Kerma elastic
Cross Section
56-Ba-132
-87.00 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
31
56-Ba-132

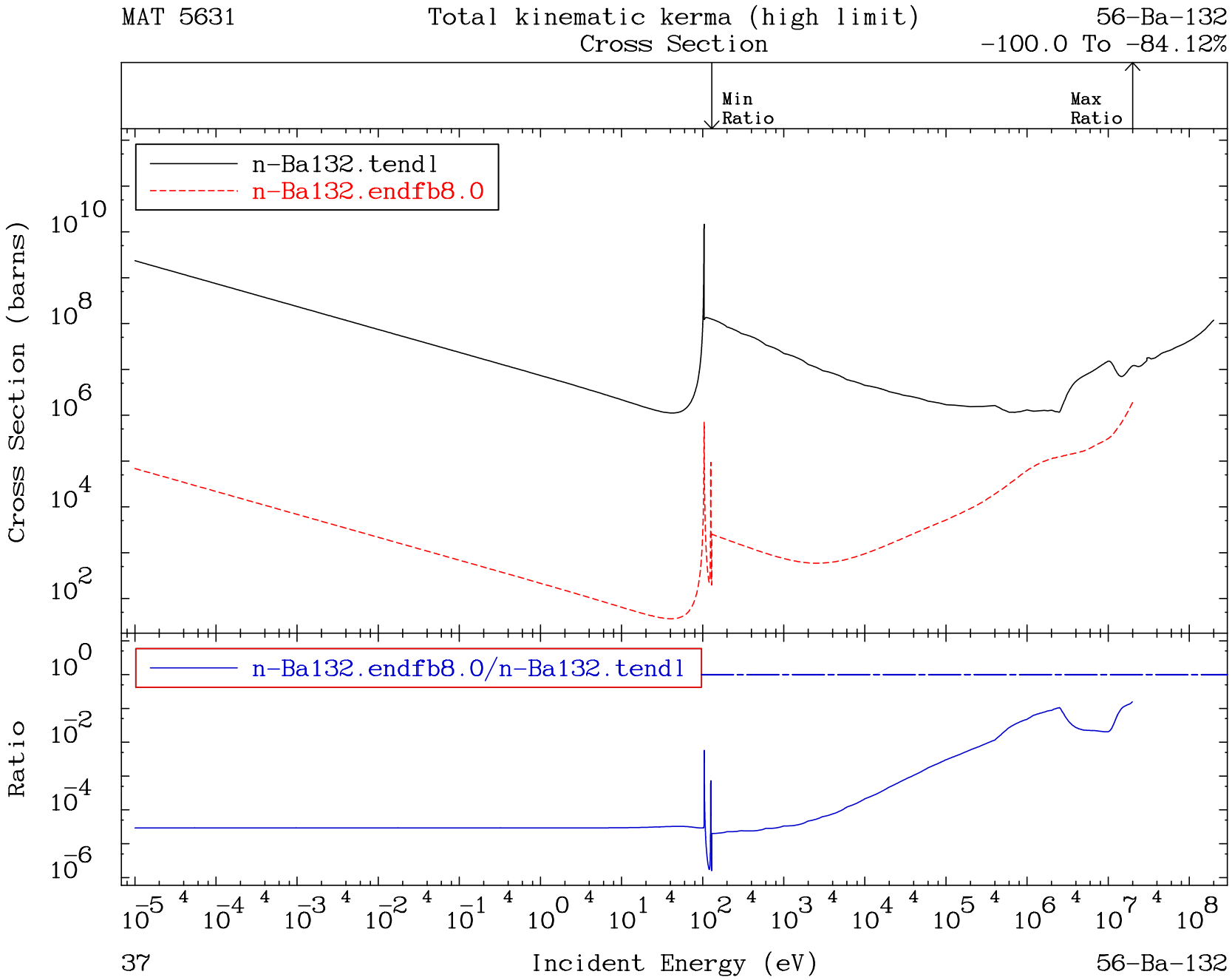

MAT 5631
Kerma non-elastic (all but mt2)
Cross Section
56-Ba-132
-95.30 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
32
56-Ba-132

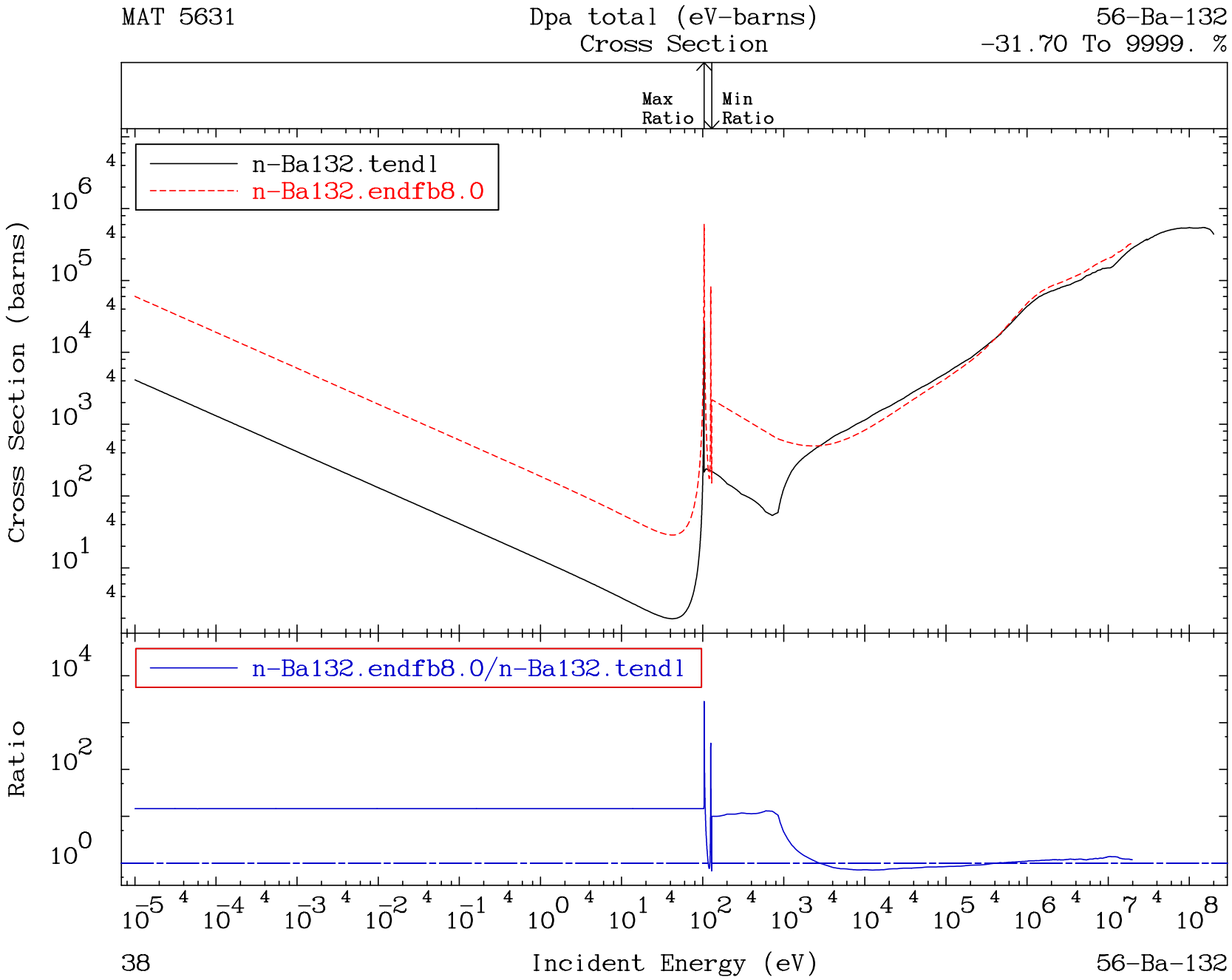

MAT 5631
Kerma inelastic (mt51-91)
Cross Section
56-Ba-132
-52.73 To 365.6 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 500.00 keV
n-Ba132.endfb8.0 Threshold 468.15 keV
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
33
56-Ba-132

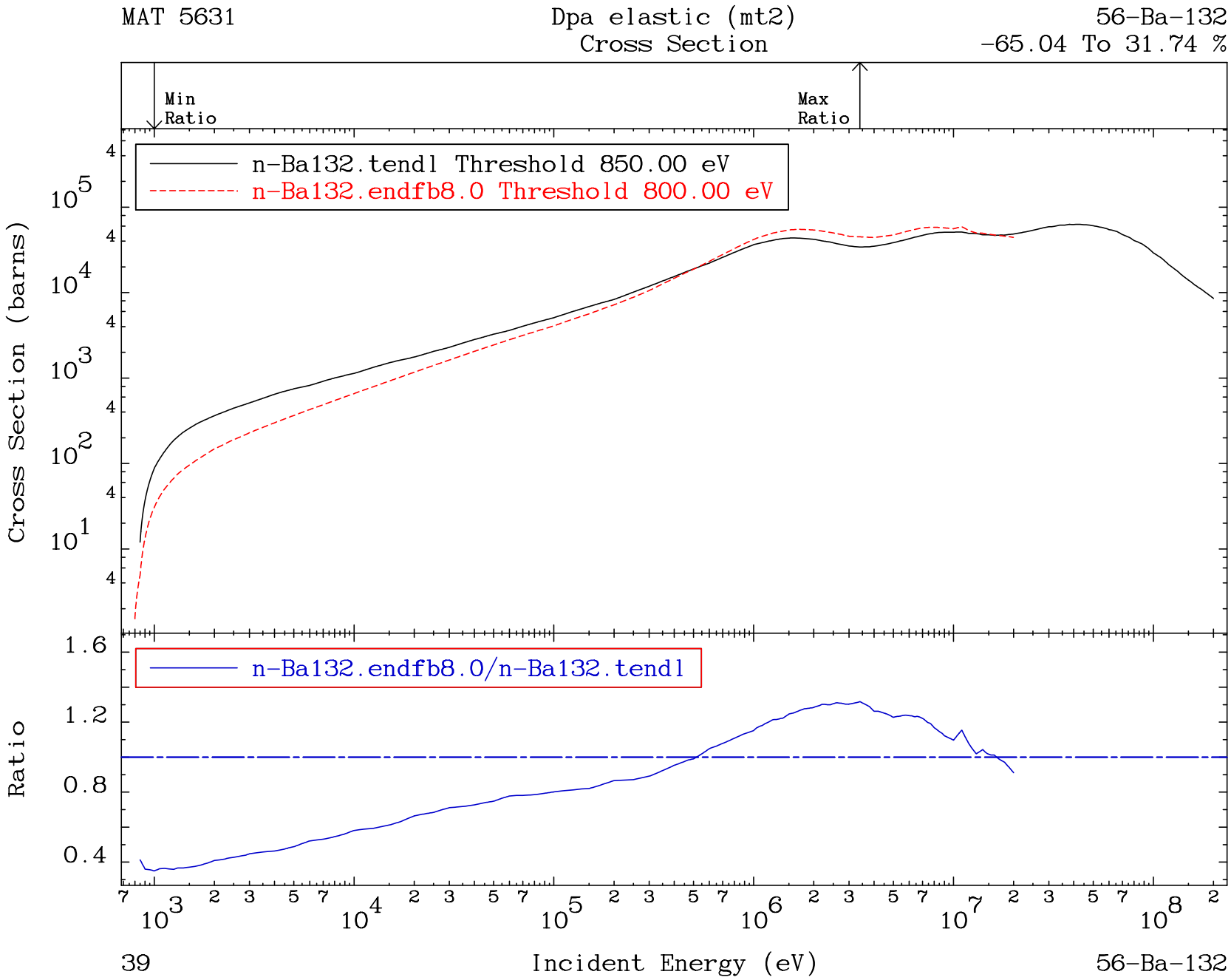

MAT 5631
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
56-Ba-132
-52.73 To 365.6 %
Min Ratio
Max Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
4
2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
34
Incident Energy (eV)
56-Ba-132

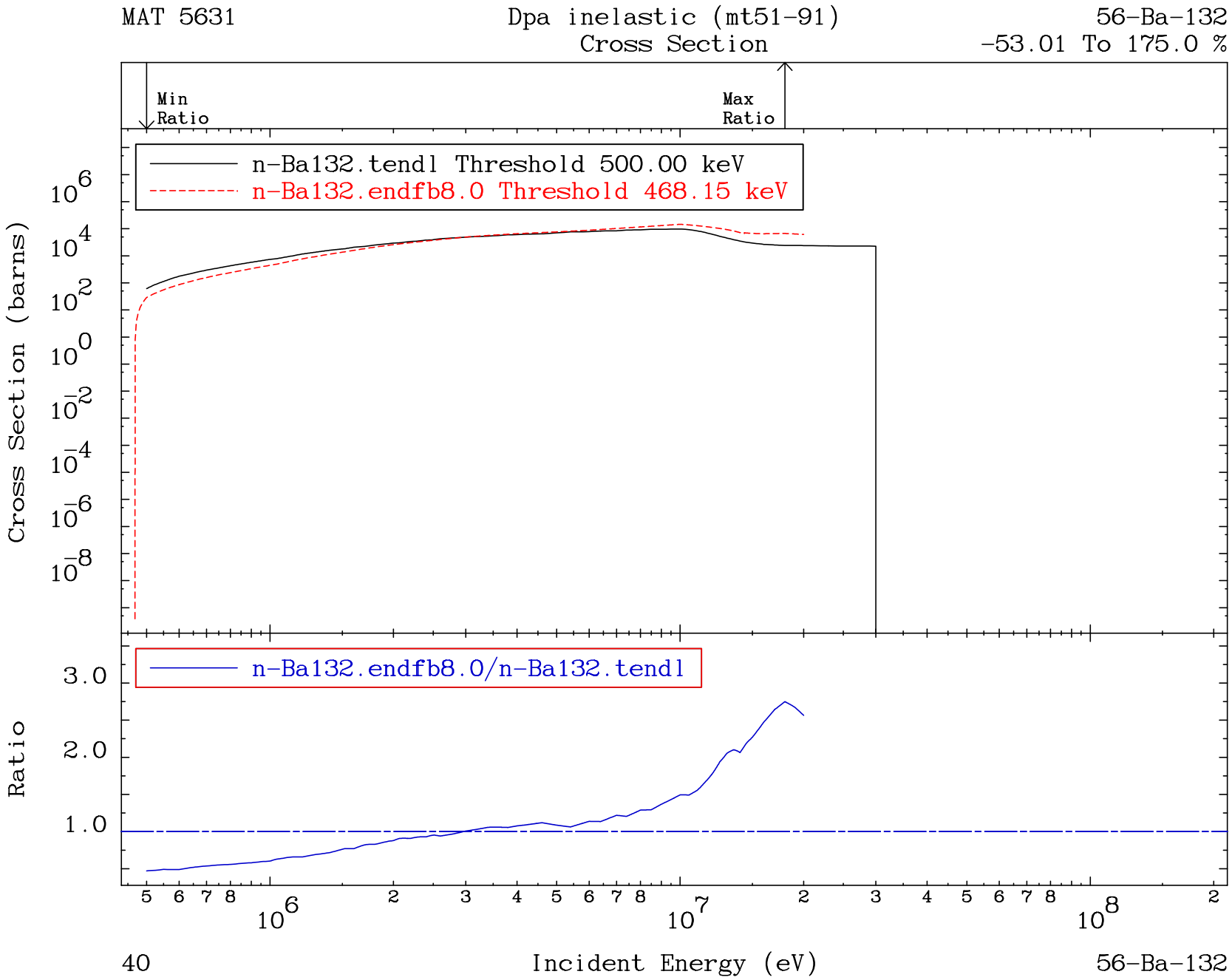

MAT 5631
Kerma capture (mt102)
Cross Section
56-Ba-132
-95.30 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
35
56-Ba-132

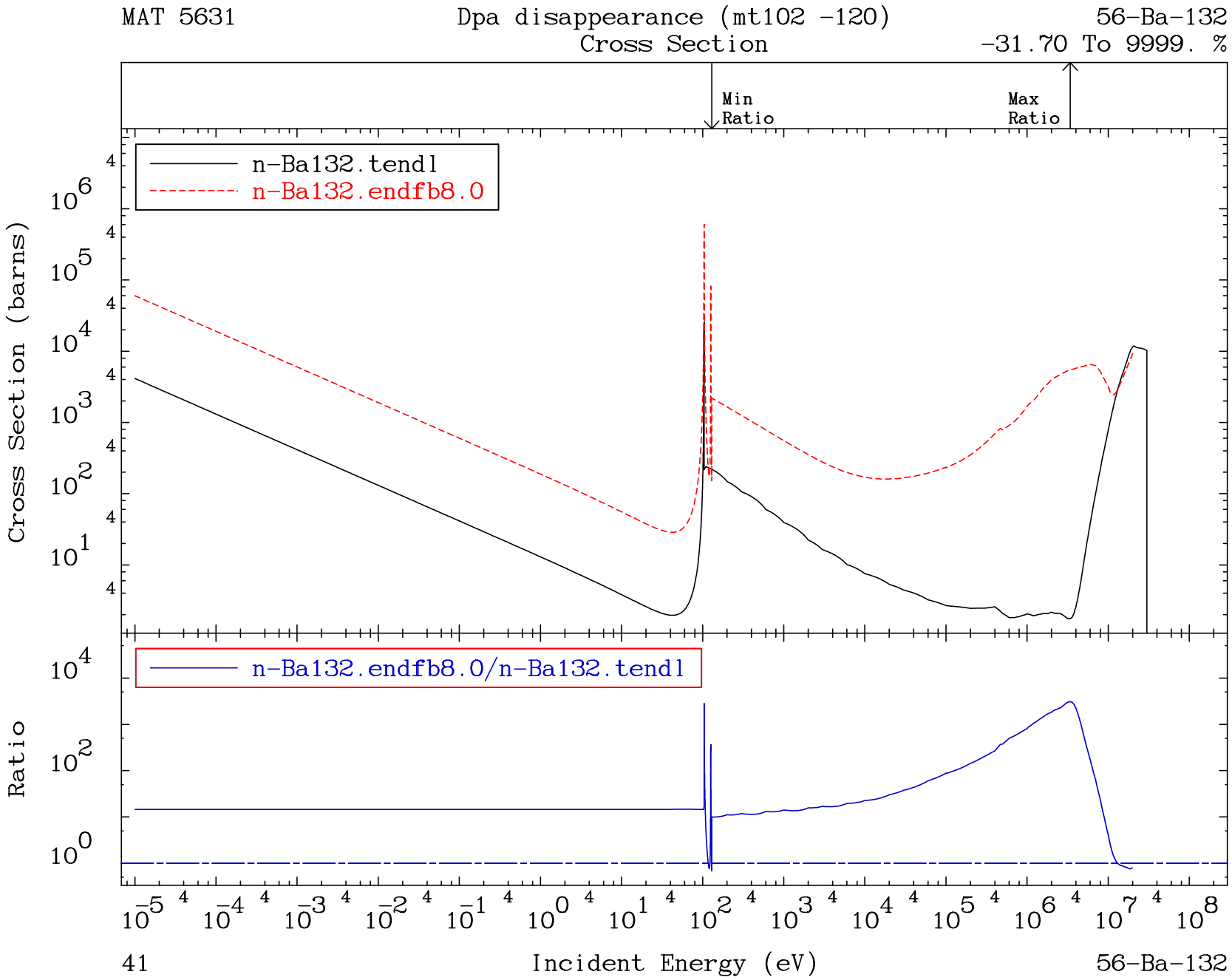

MAT 5631
Total photon (eV-barns)
Cross Section
56-Ba-132
-95.30 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (Giga-barns)
16
14
12
10
8
6
4
2
0
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
56-Ba-132


MAT 5631
Total kinematic kerma (high limit)
Cross Section
56-Ba-132
-100.0 To -84.12%
Min Ratio
Max Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
37
56-Ba-132


MAT 5631
Dpa total (eV-barns)
Cross Section
56-Ba-132
-31.70 To 9999. %
Max Ratio
Min Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
38
56-Ba-132


MAT 5631
Dpa elastic (mt2)
Cross Section
56-Ba-132
-65.04 To 31.74 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 850.00 eV
n-Ba132.endfb8.0 Threshold 800.00 eV
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
39
56-Ba-132


MAT 5631
Dpa inelastic (mt51-91)
Cross Section
56-Ba-132
-53.01 To 175.0 %
Min Ratio
Max Ratio
n-Ba132.tendl Threshold 500.00 keV
n-Ba132.endfb8.0 Threshold 468.15 keV
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
40
56-Ba-132


MAT 5631
Dpa disappearance (mt102 -120)
Cross Section
56-Ba-132
-31.70 To 9999. %
Min Ratio
Max Ratio
n-Ba132.tendl
n-Ba132.endfb8.0
Cross Section (barns)
n-Ba132.endfb8.0/n-Ba132.tendl
Ratio
Incident Energy (eV)
41
56-Ba-132