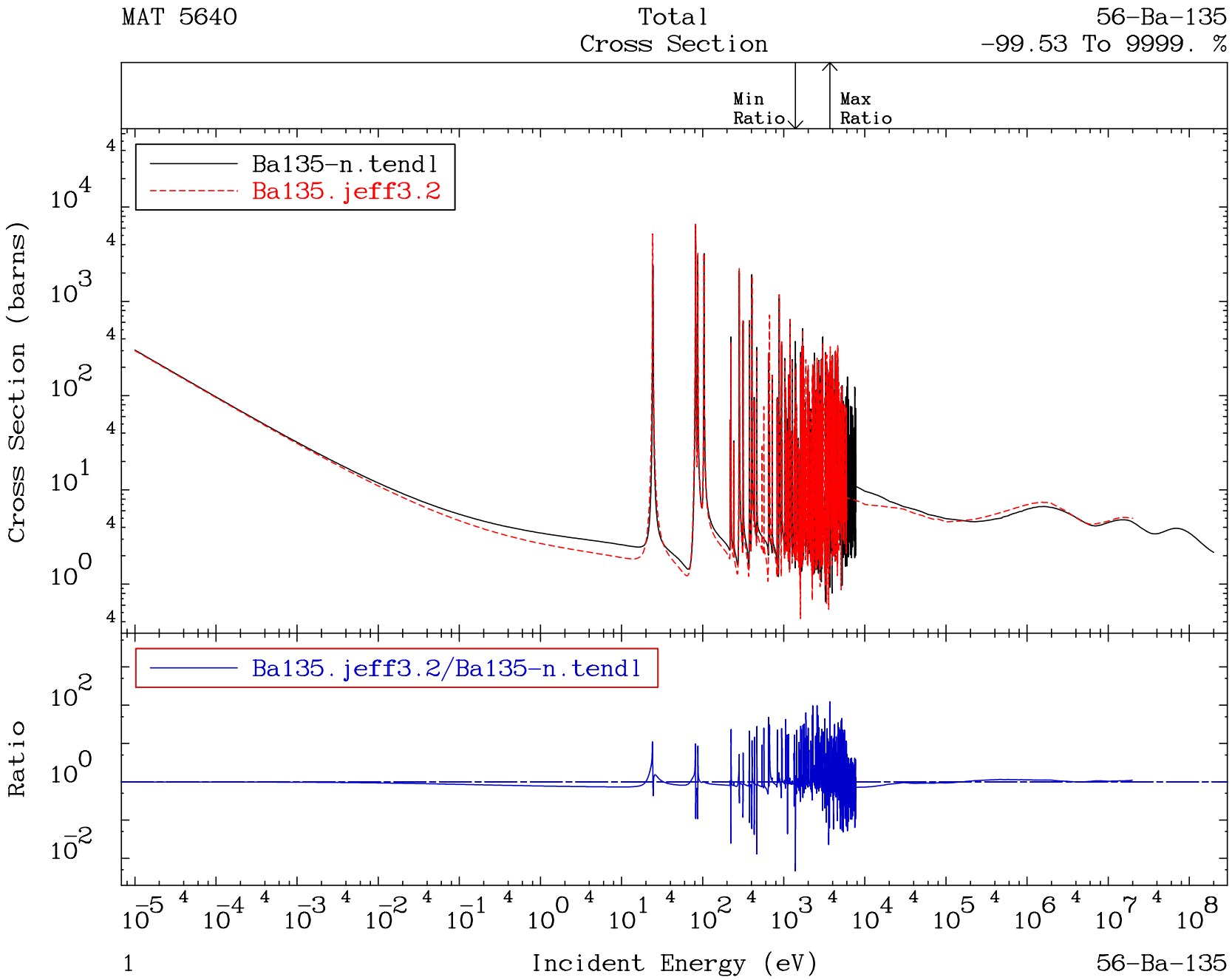
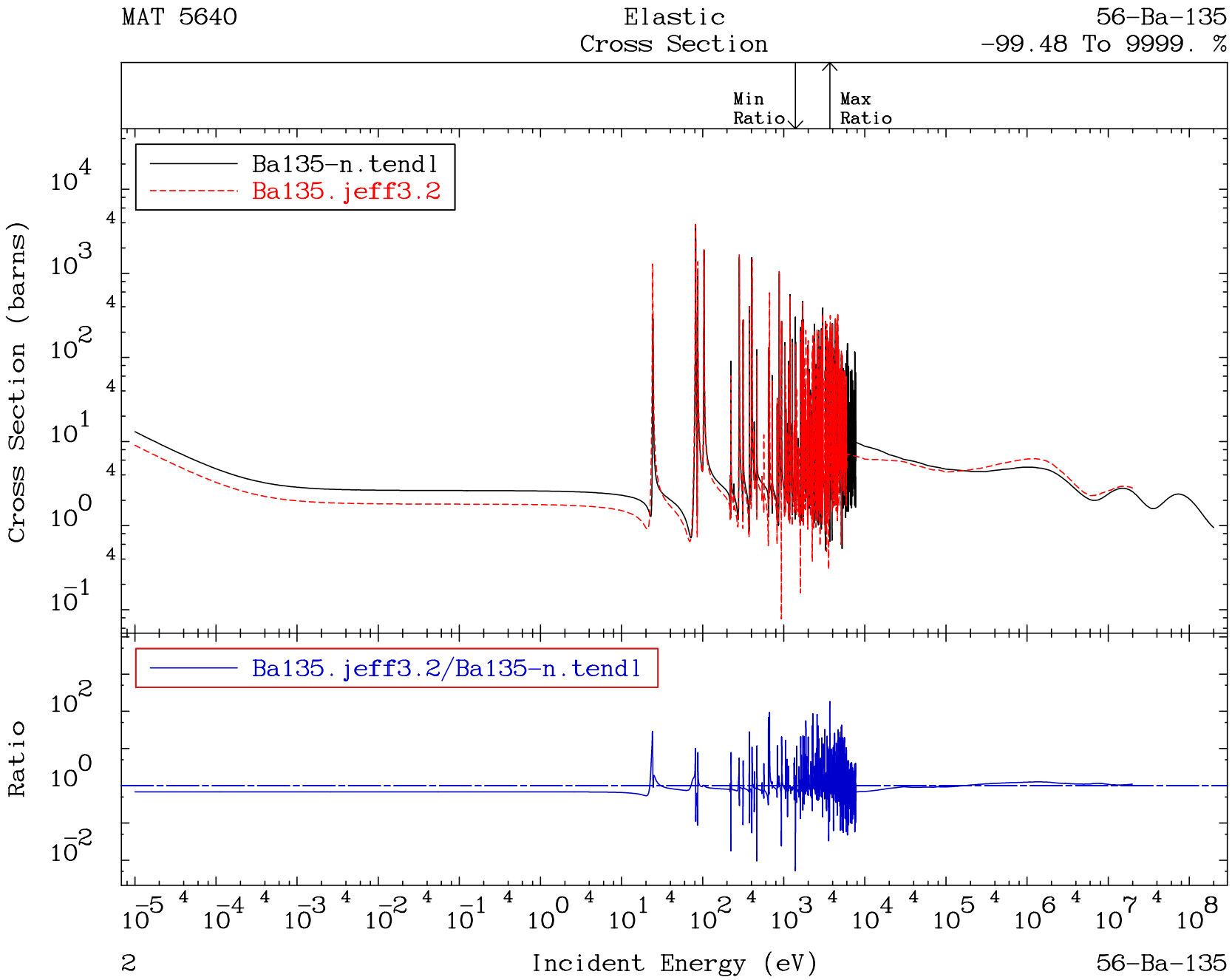
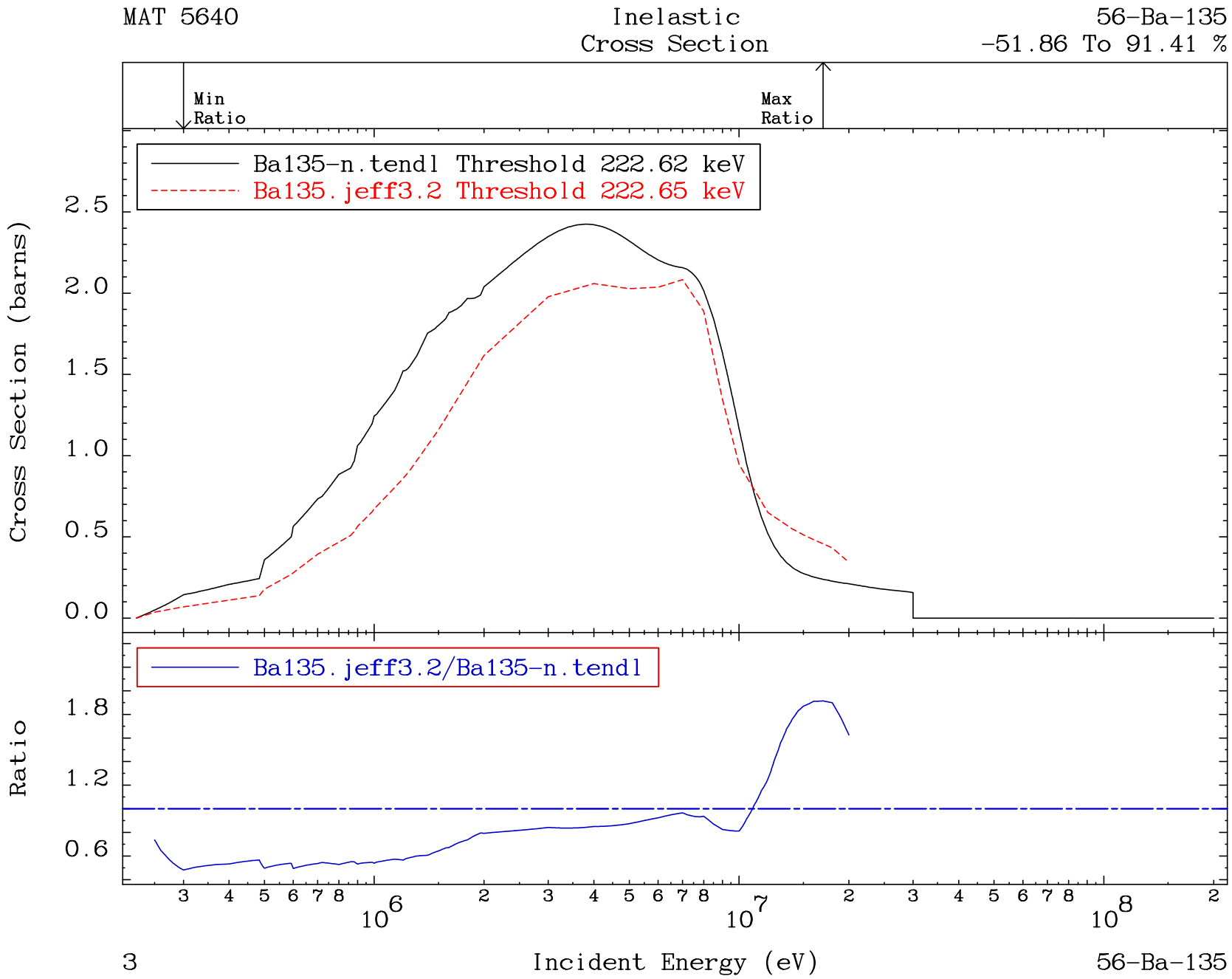
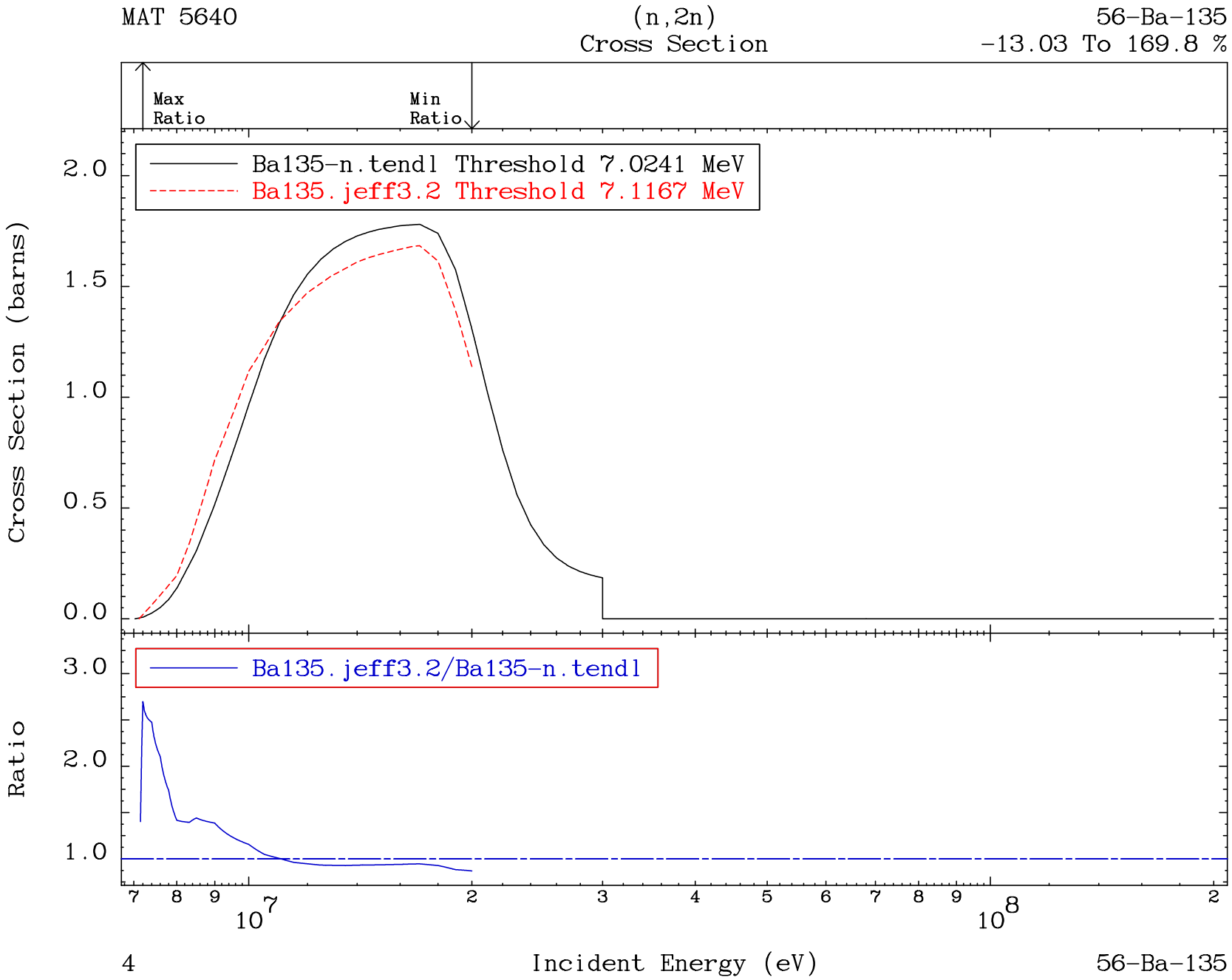
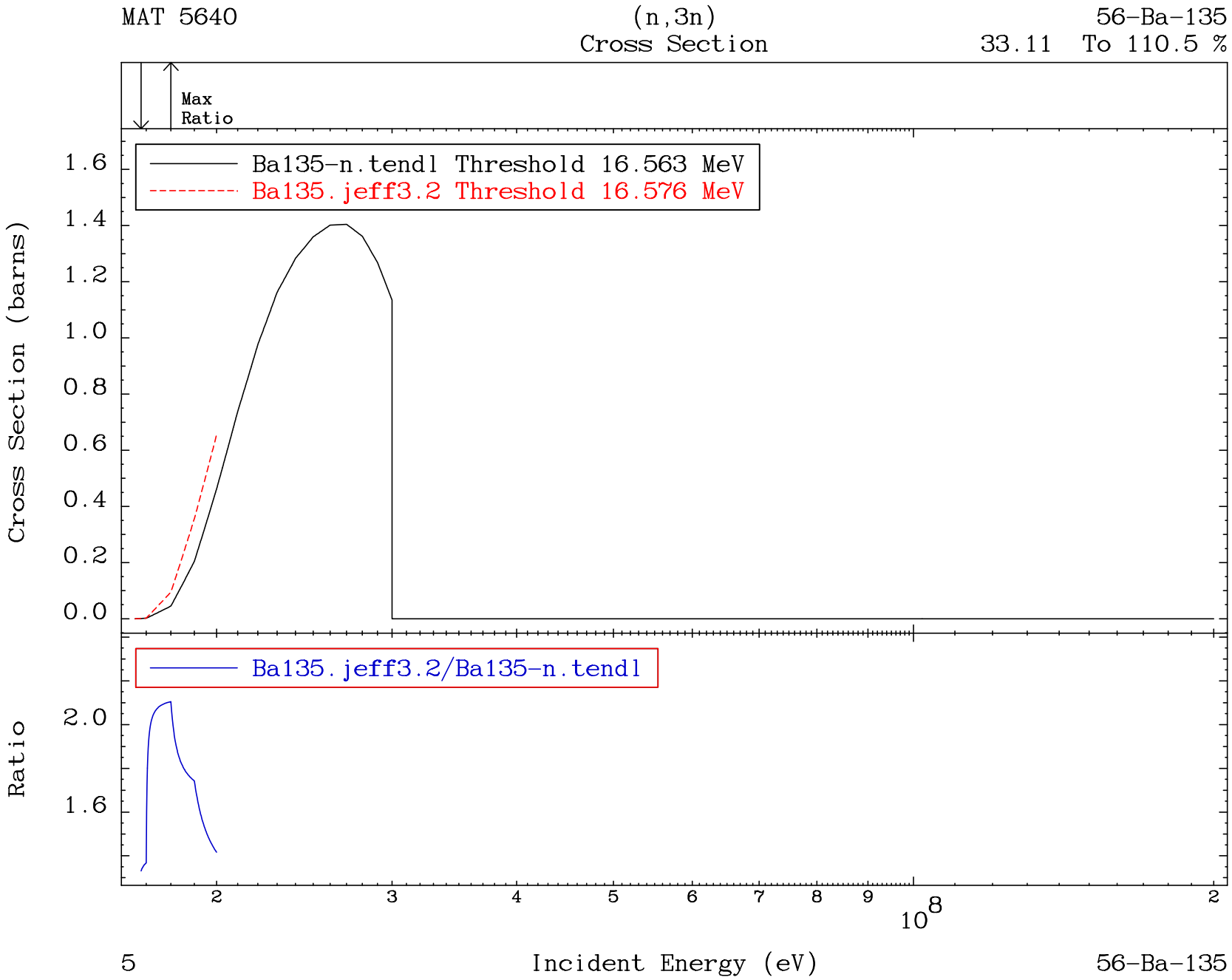
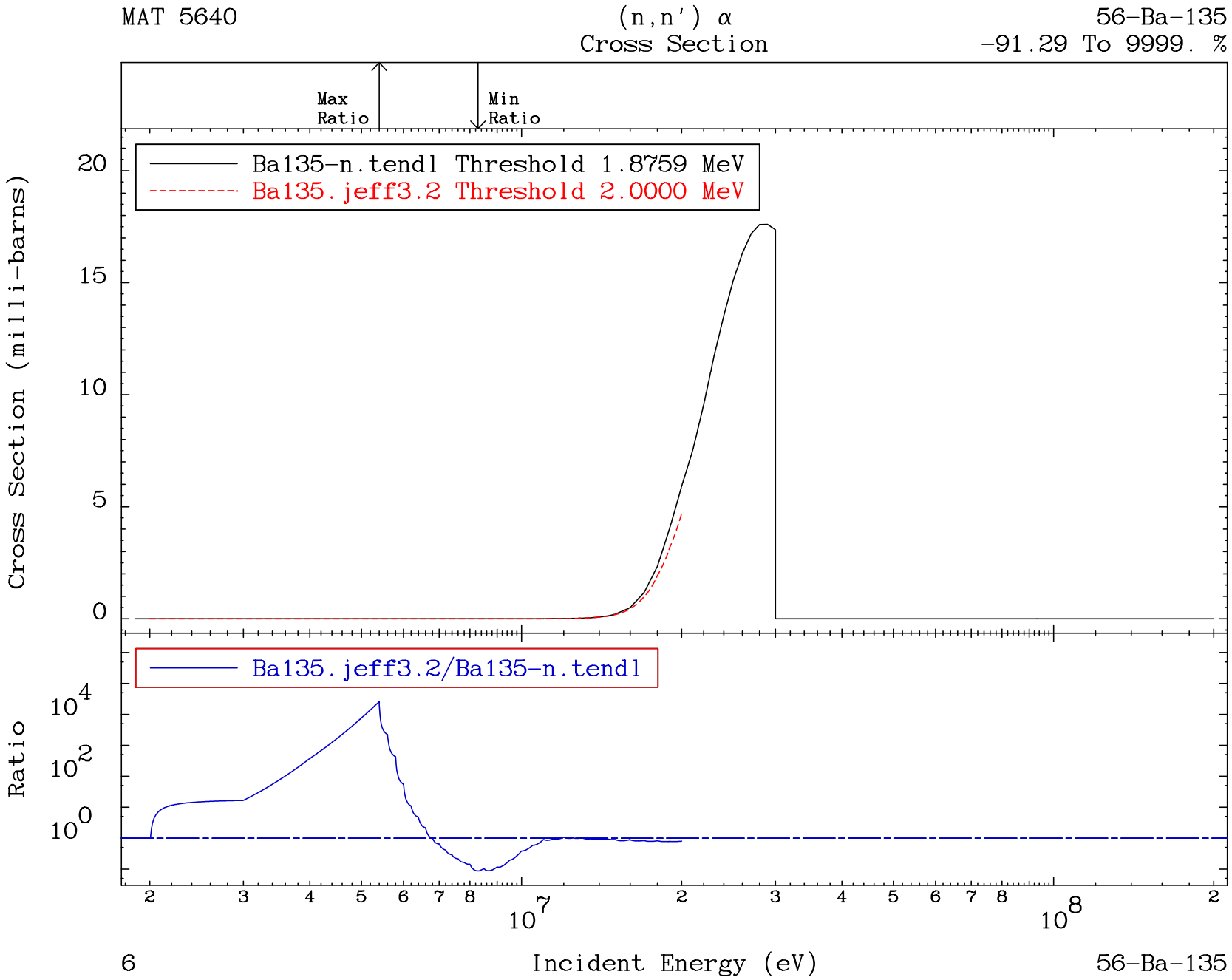

MAT 5640
Total
Cross Section
56-Ba-135
-99.53 To 9999. %
Min
Ratio
Max
Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
1
56-Ba-135

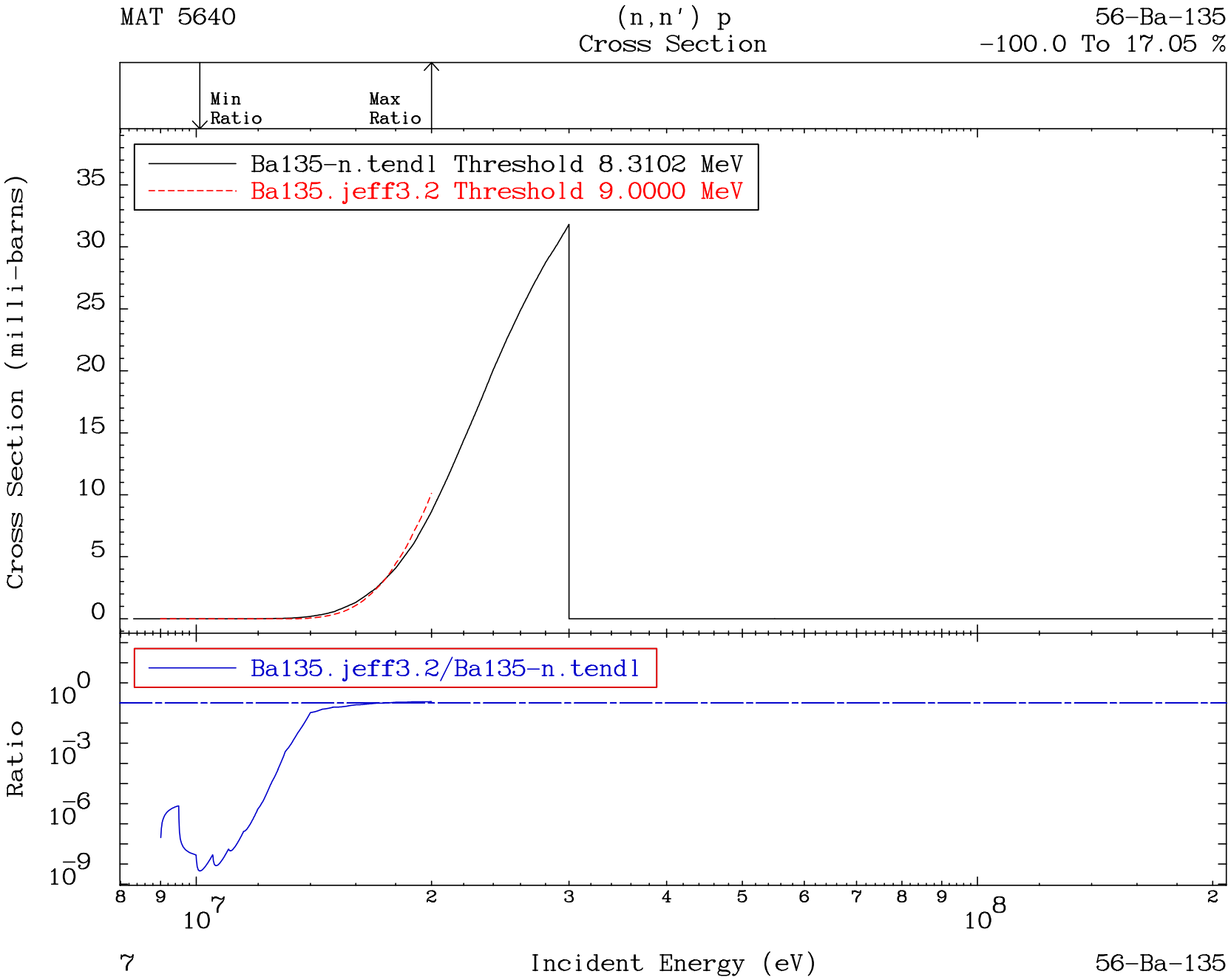

MAT 5640
Elastic
Cross Section
56-Ba-135
-99.48 To 9999. %
Min Ratio
Max Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
2
56-Ba-135

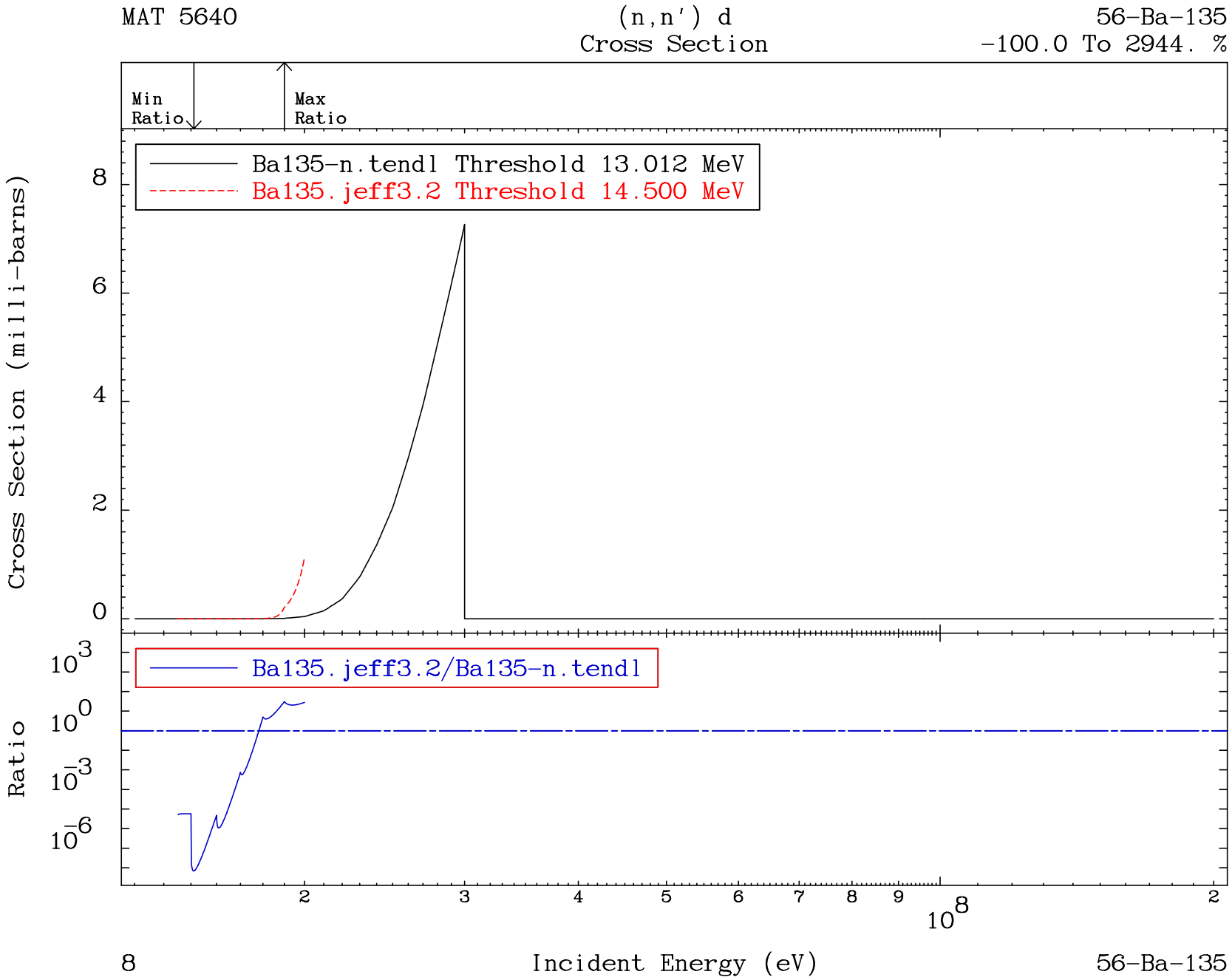

MAT 5640
Inelastic
Cross Section
56-Ba-135
-51.86 To 91.41 %
Min
Ratio
Max
Ratio
Ba135-n.tendl Threshold 222.62 keV
Ba135.jeff3.2 Threshold 222.65 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
1.8
1.2
0.6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
56-Ba-135

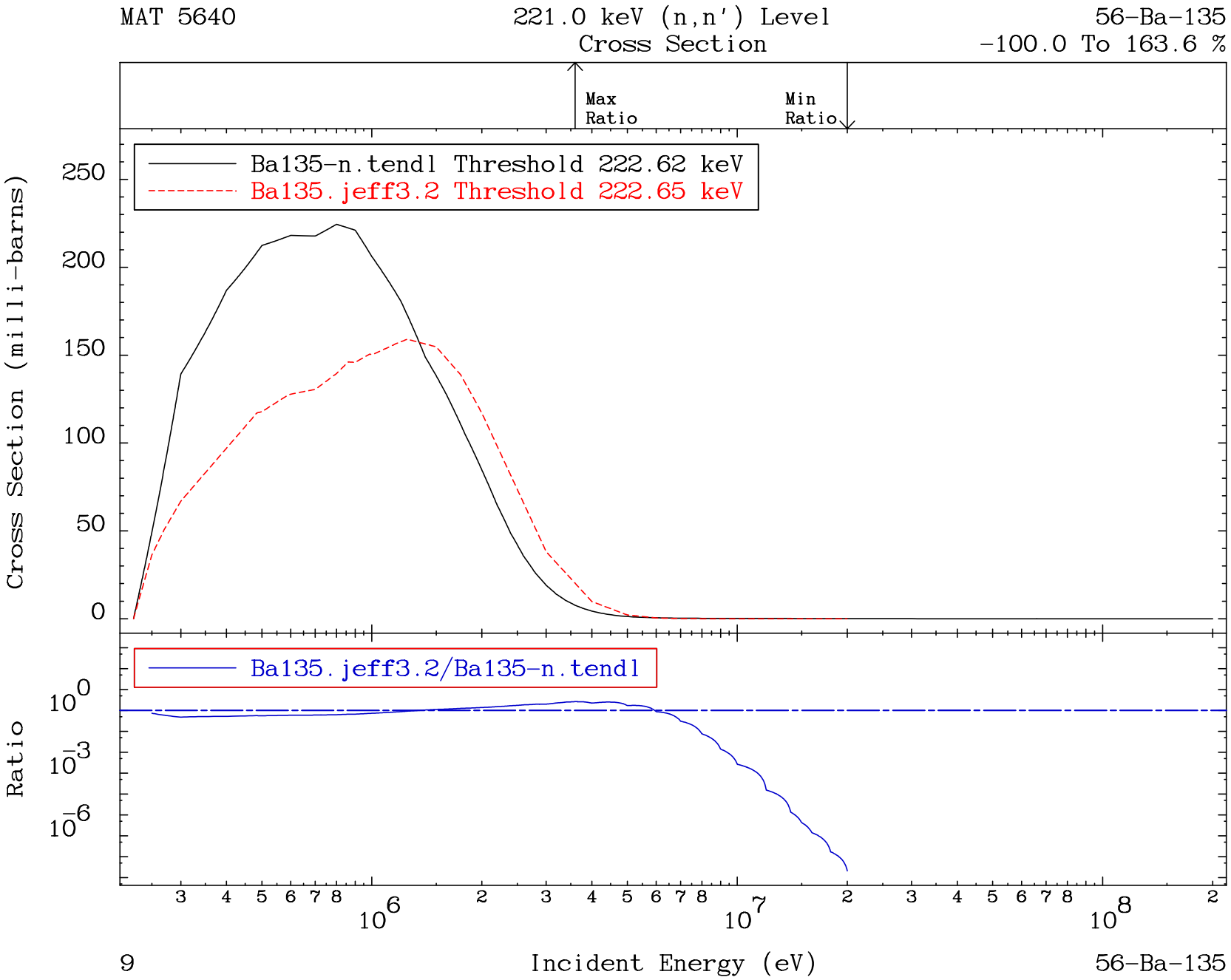

MAT 5640
(n,2n)
Cross Section
56-Ba-135
-13.03 To 169.8 %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 7.0241 MeV
Ba135.jeff3.2 Threshold 7.1167 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
3.0
2.0
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
56-Ba-135

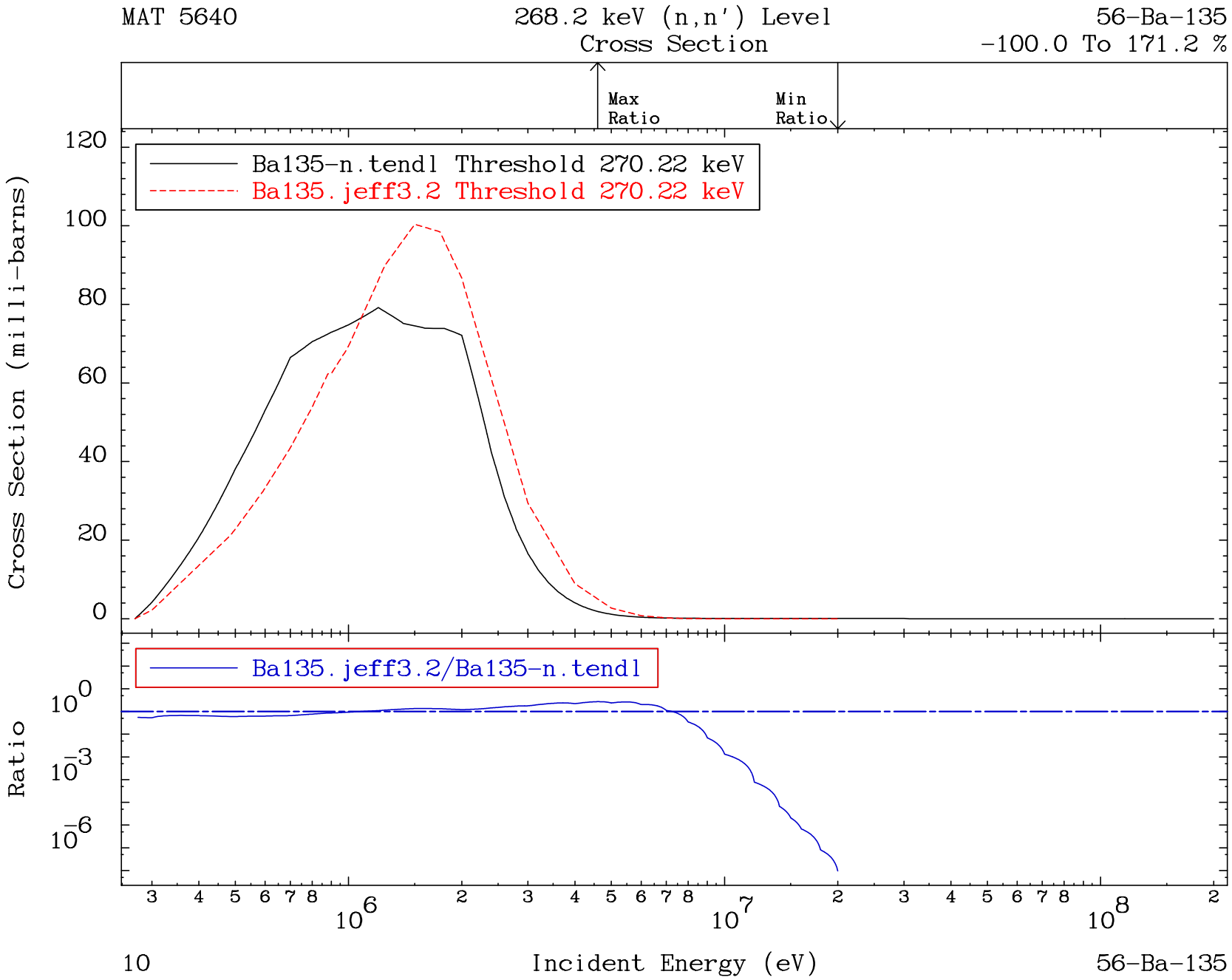

MAT 5640
(n,3n)
Cross Section
56-Ba-135
33.11 To 110.5 %
Max
Ratio
Ba135-n.tendl Threshold 16.563 MeV
Ba135.jeff3.2 Threshold 16.576 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
2.0
1.6
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
56-Ba-135

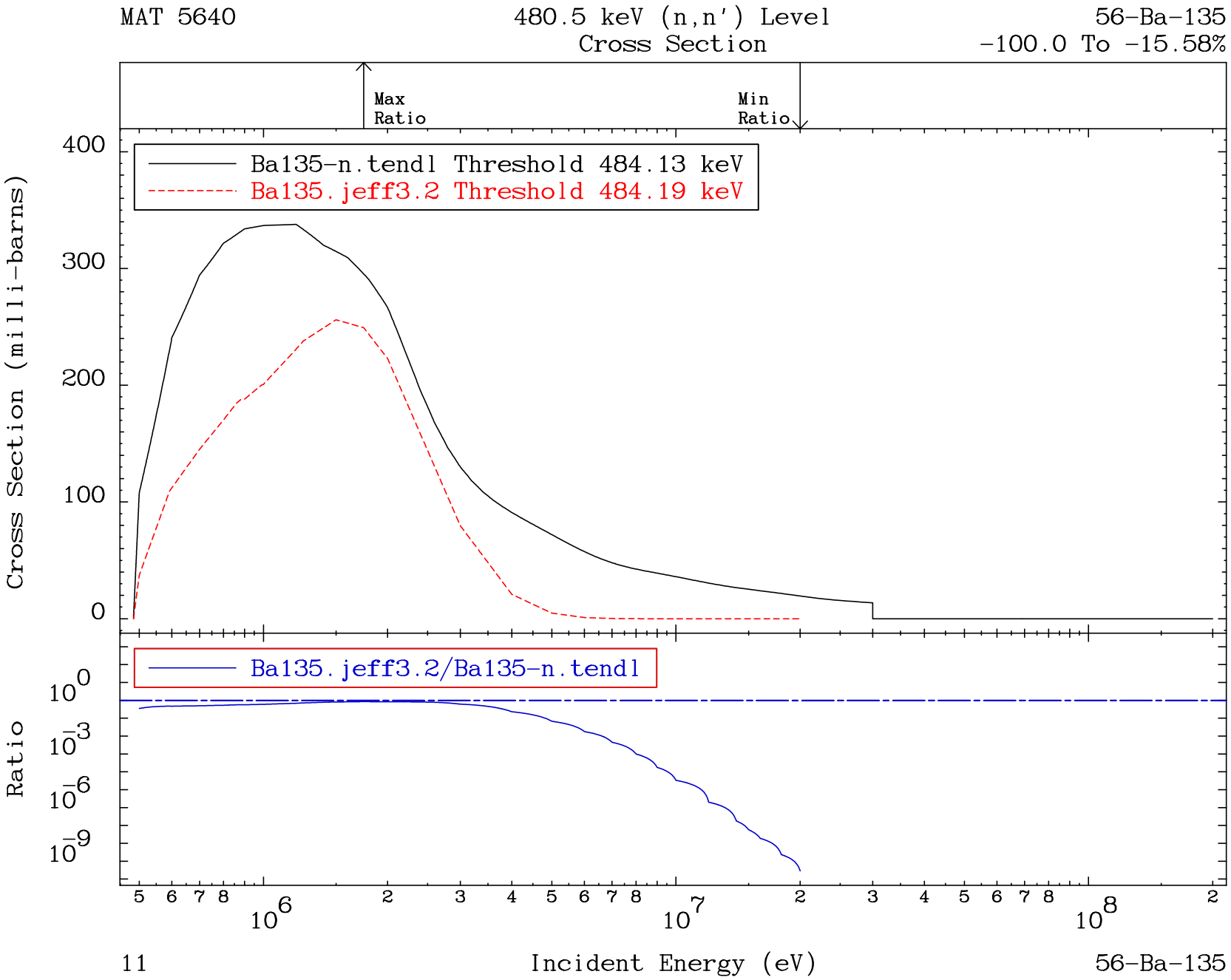

MAT 5640
(n,n') α
Cross Section
56-Ba-135
-91.29 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 1.8759 MeV
Ba135.jeff3.2 Threshold 2.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
56-Ba-135

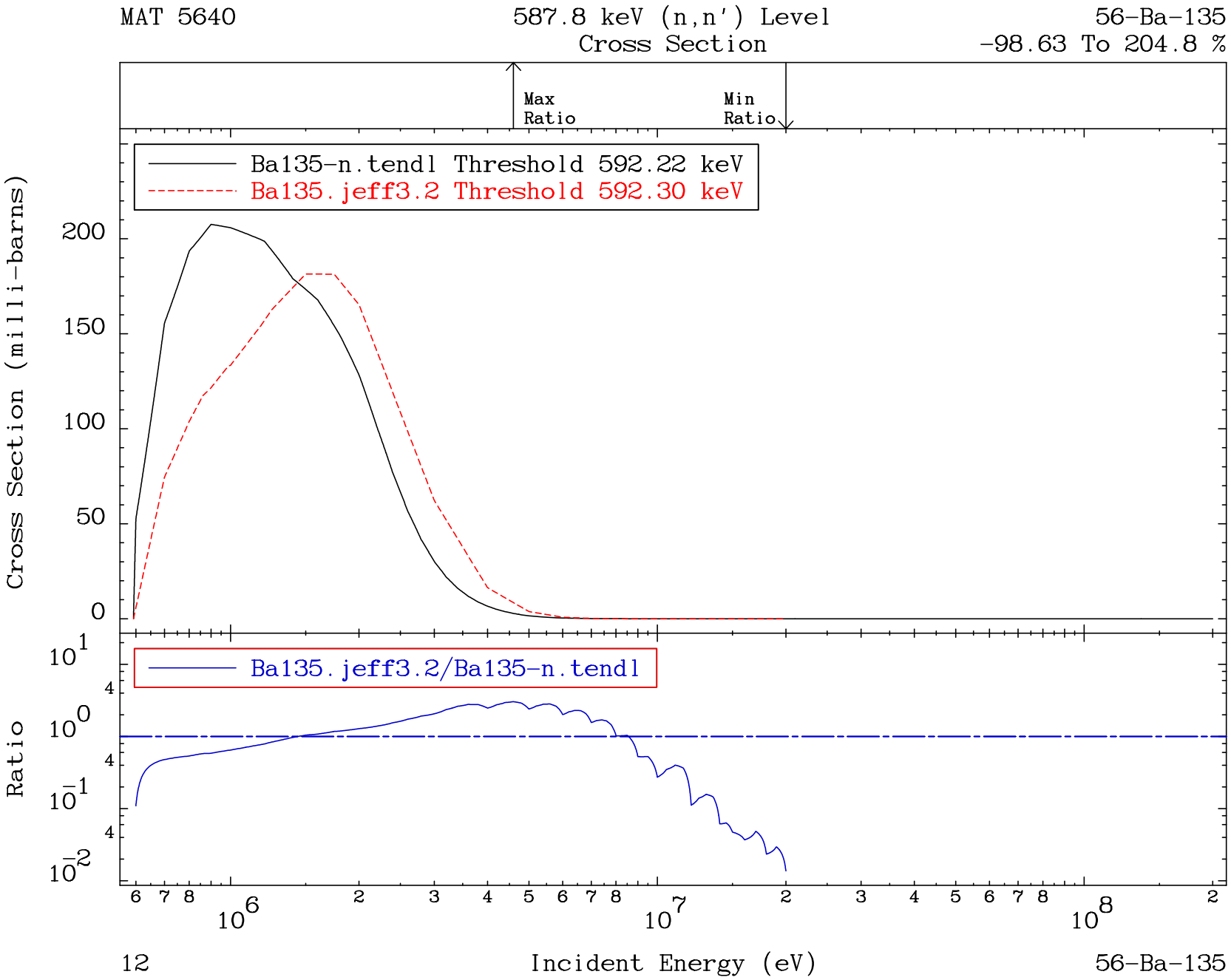

MAT 5640
(n,n') p
Cross Section
56-Ba-135
-100.0 To 17.05 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 8.3102 MeV
Ba135.jeff3.2 Threshold 9.0000 MeV
Cross Section (milli-barns)
0
5
10
15
20
25
30
35
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
56-Ba-135

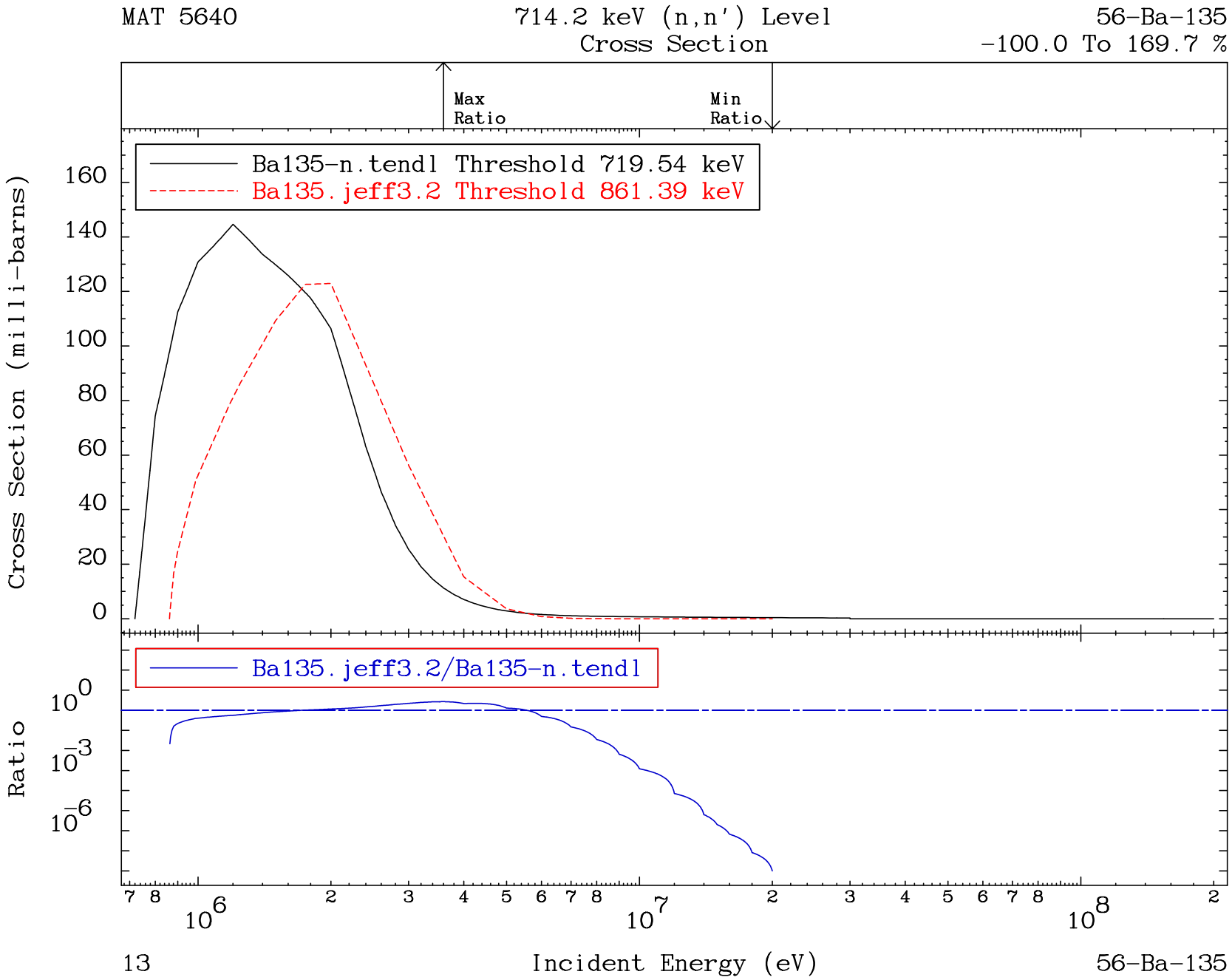

MAT 5640
(n,n') d
Cross Section
56-Ba-135
-100.0 To 2944. %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 13.012 MeV
Ba135.jeff3.2 Threshold 14.500 MeV
Cross Section (milli-barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
8
56-Ba-135

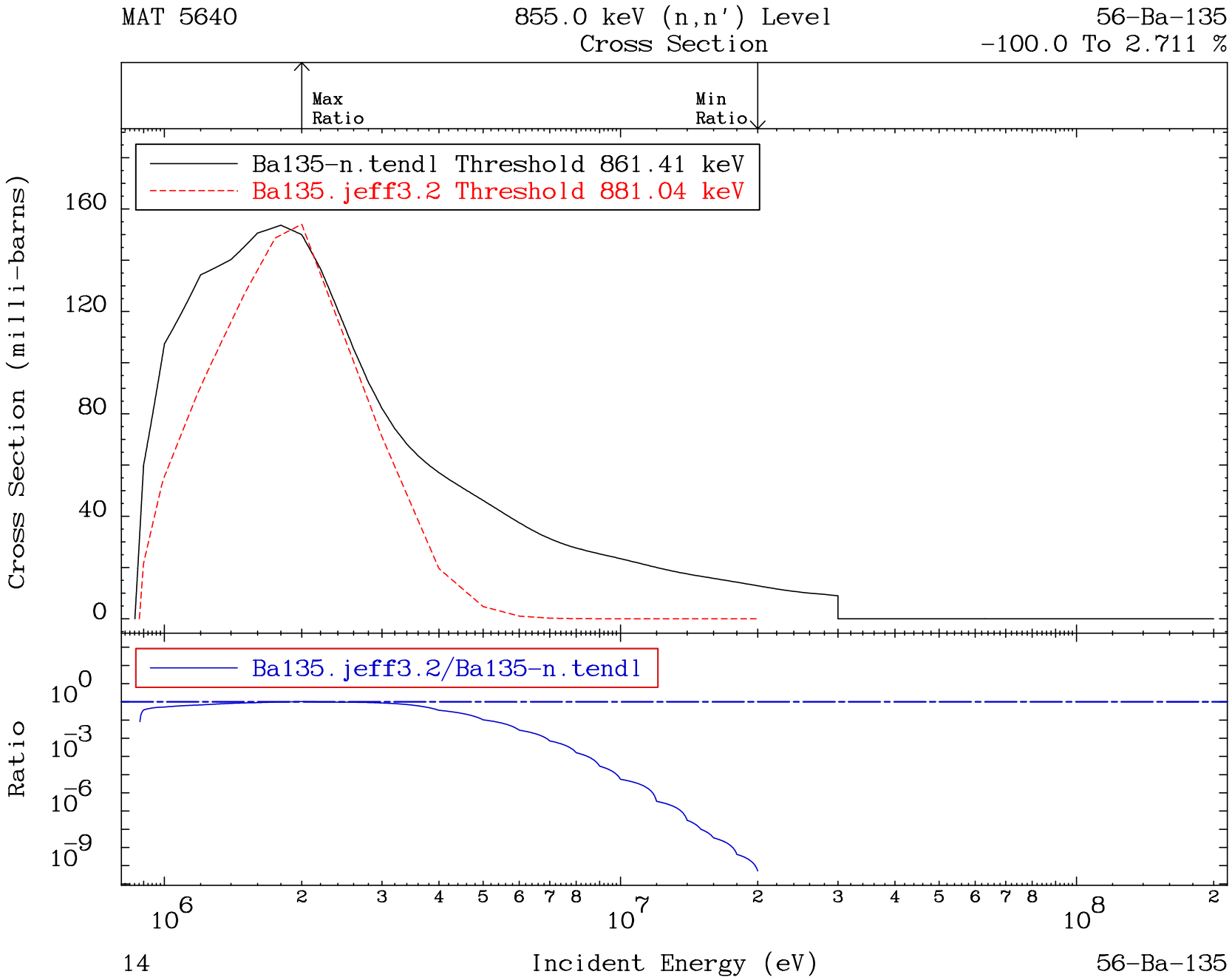

MAT 5640
221.0 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To 163.6 %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 222.62 keV
Ba135.jeff3.2 Threshold 222.65 keV
Cross Section (milli-barns)
250
200
150
100
50
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
56-Ba-135

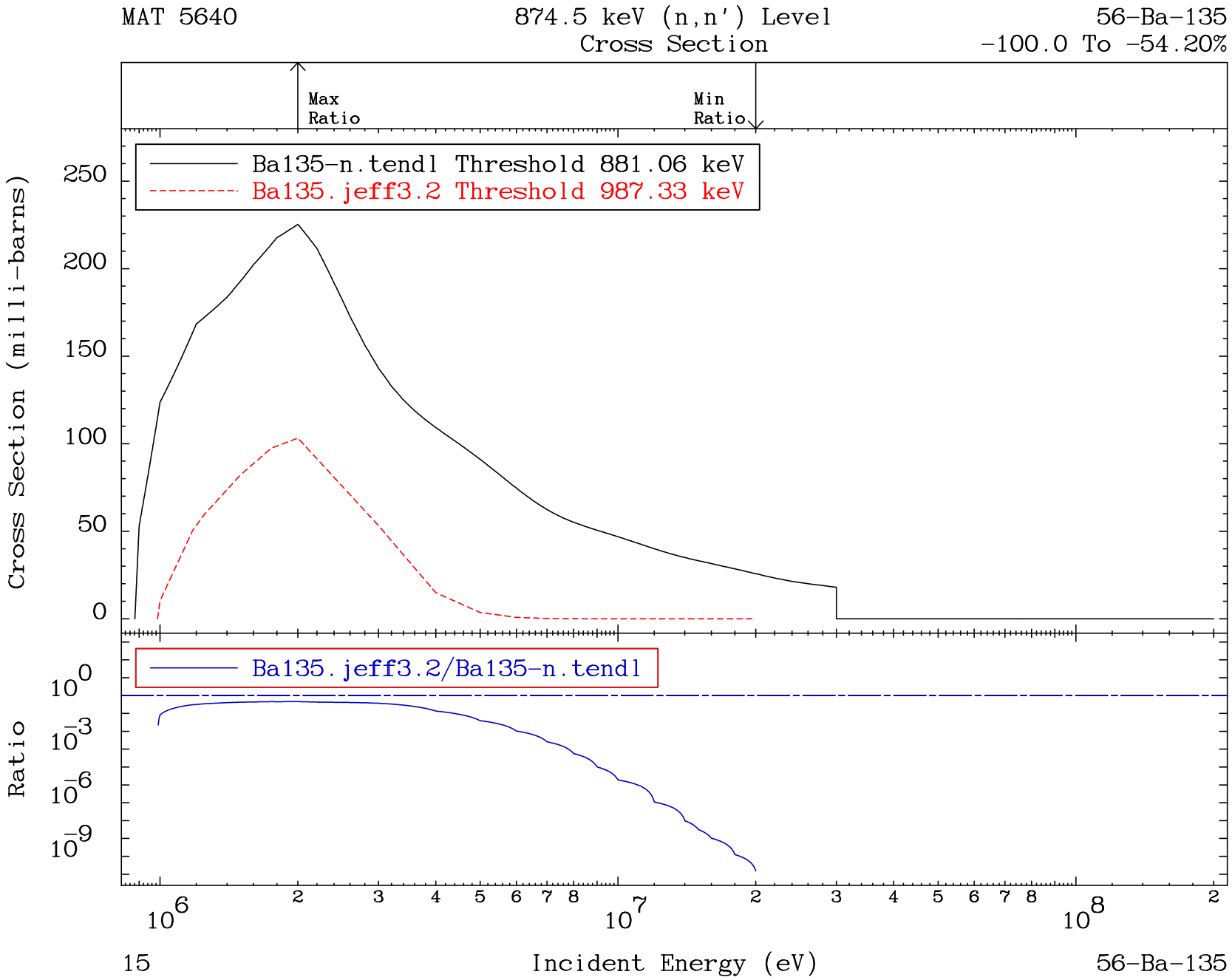

MAT 5640
268.2 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To 171.2 %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 270.22 keV
Ba135.jeff3.2 Threshold 270.22 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
56-Ba-135

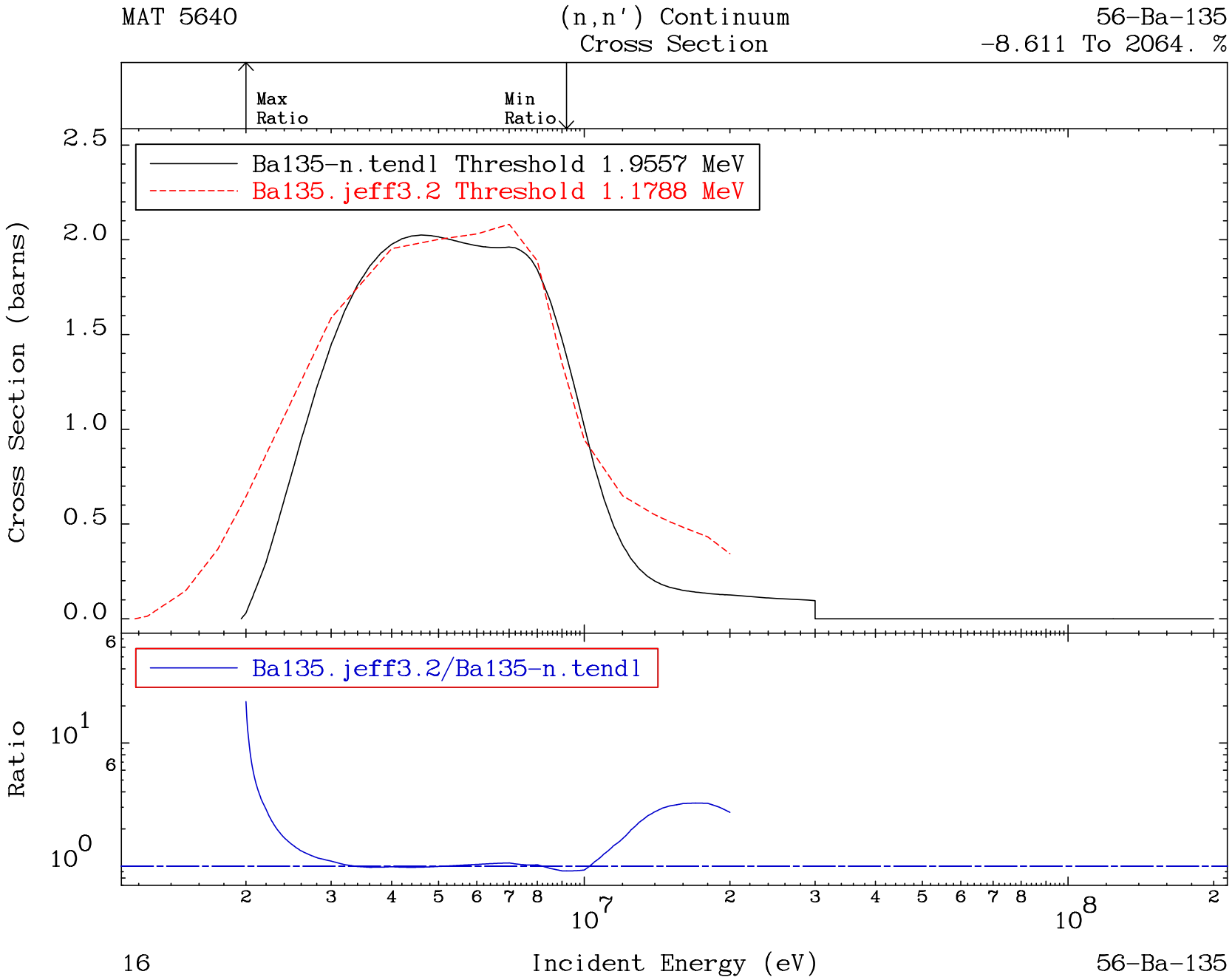

MAT 5640
480.5 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To -15.58%
Max
Ratio
Min
Ratio
Ba135-n.tendl Threshold 484.13 keV
Ba135.jeff3.2 Threshold 484.19 keV
Cross Section (milli-barns)
400
300
200
100
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
56-Ba-135

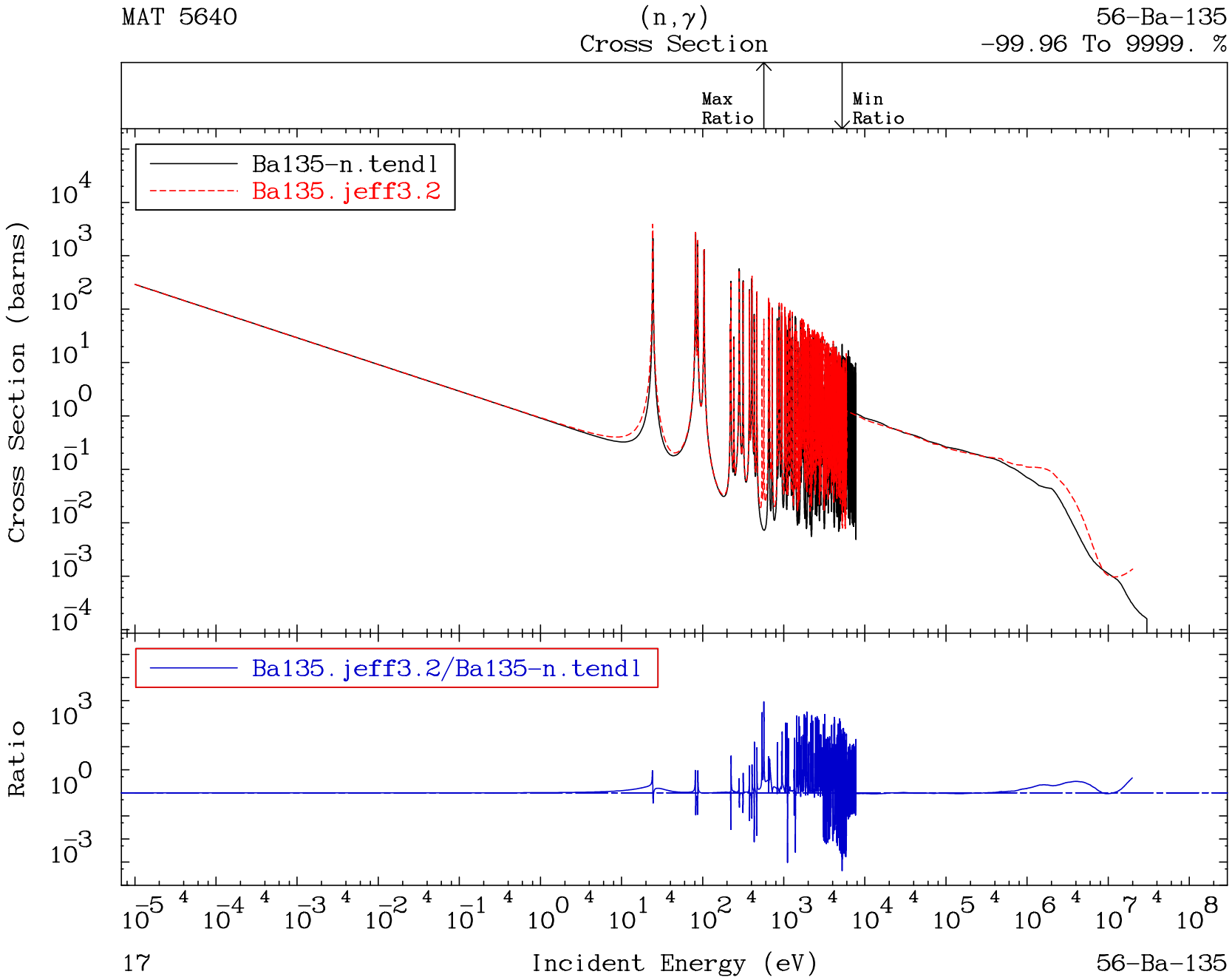

MAT 5640
587.8 keV (n,n') Level
Cross Section
56-Ba-135
-98.63 To 204.8 %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 592.22 keV
Ba135.jeff3.2 Threshold 592.30 keV
Cross Section (milli-barns)
200
150
100
50
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
$10^{1}$
$10^{0}$
$10^{-1}$
$10^{-2}$
$10^{6}$
$10^{7}$
$10^{8}$
Incident Energy (eV)
12
56-Ba-135

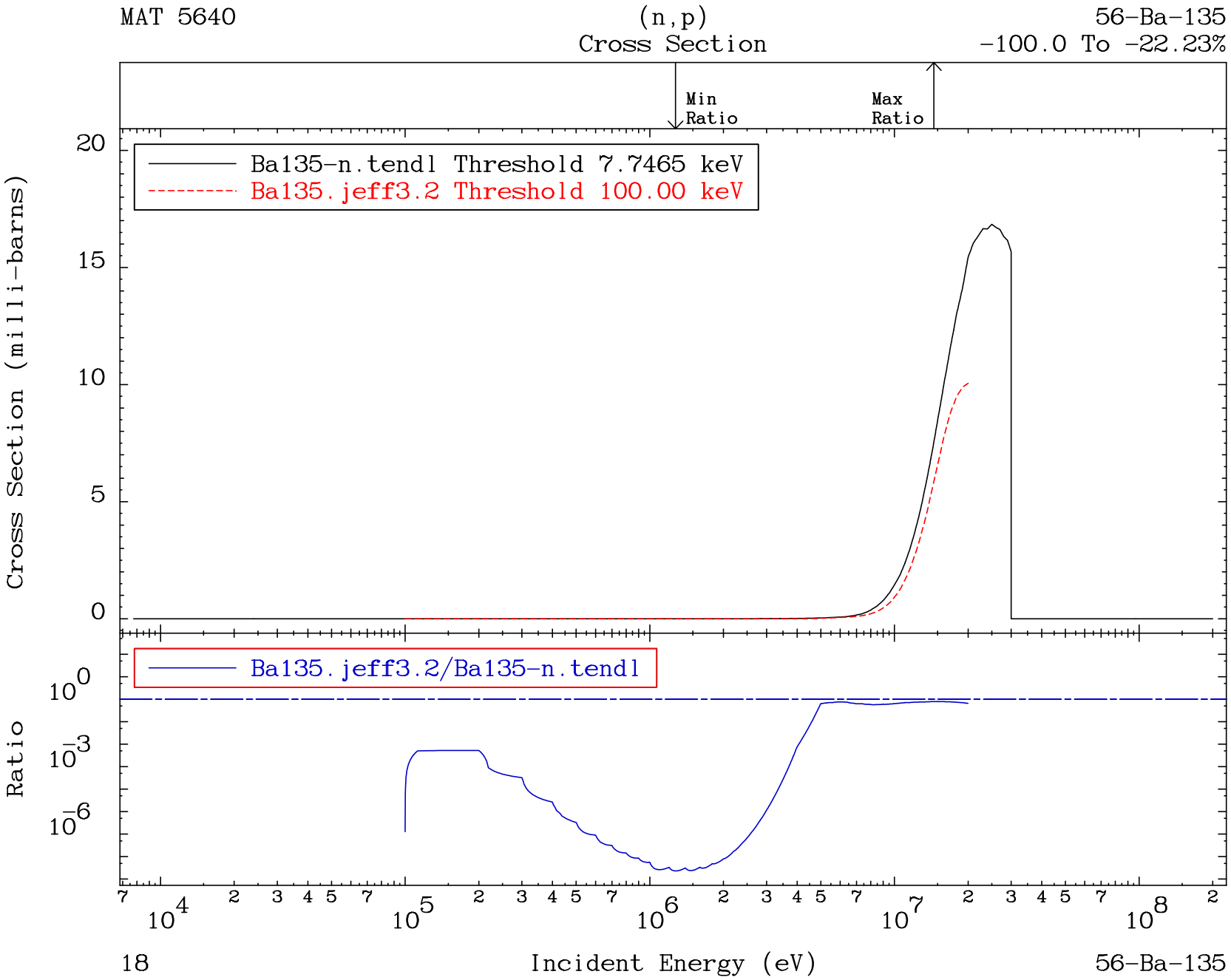

MAT 5640
714.2 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To 169.7 %
Max
Ratio
Min
Ratio
Ba135-n.tendl Threshold 719.54 keV
Ba135.jeff3.2 Threshold 861.39 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
56-Ba-135

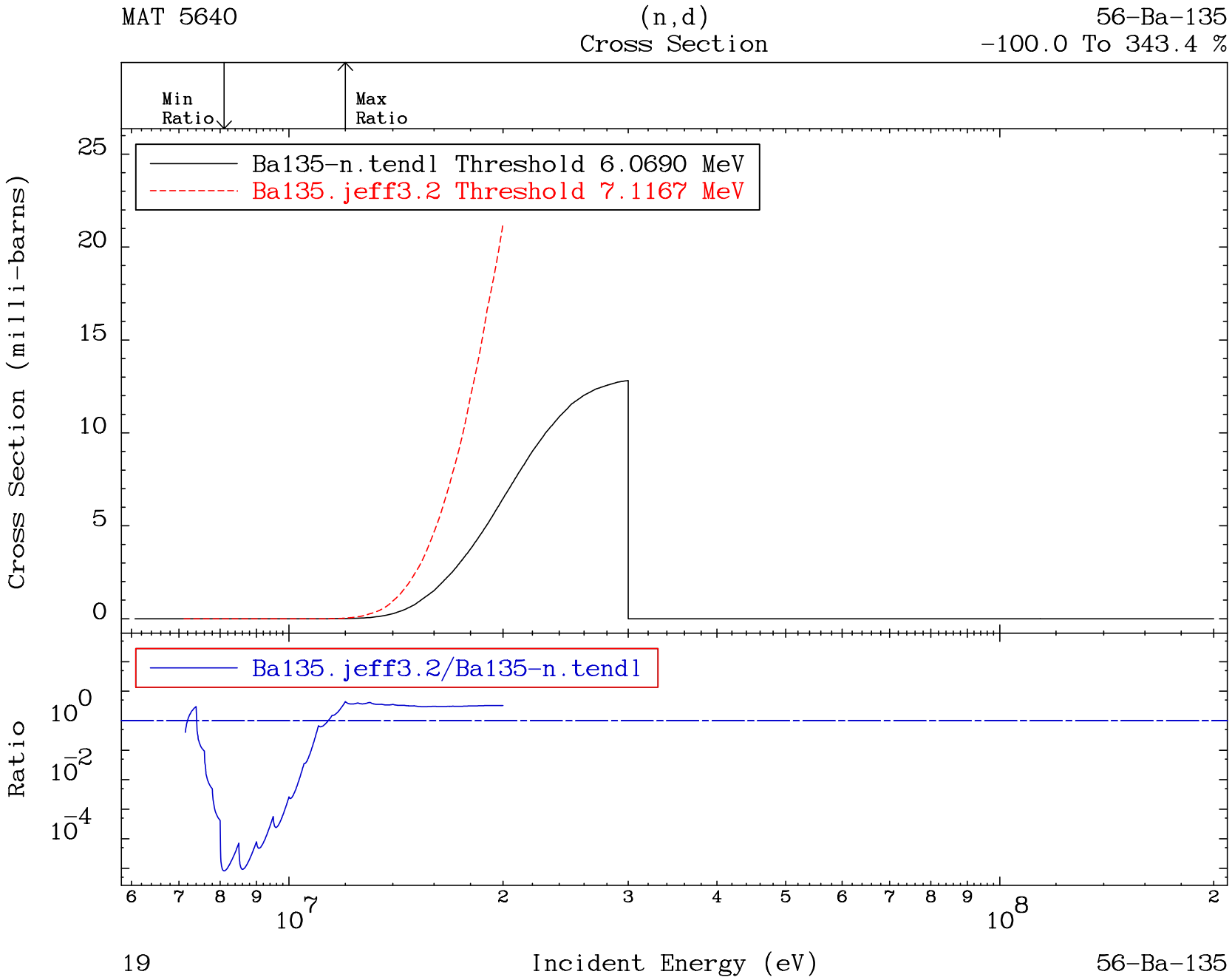

MAT 5640
855.0 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To 2.711 %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 861.41 keV
Ba135.jeff3.2 Threshold 881.04 keV
Cross Section (milli-barns)
160
120
80
40
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
56-Ba-135

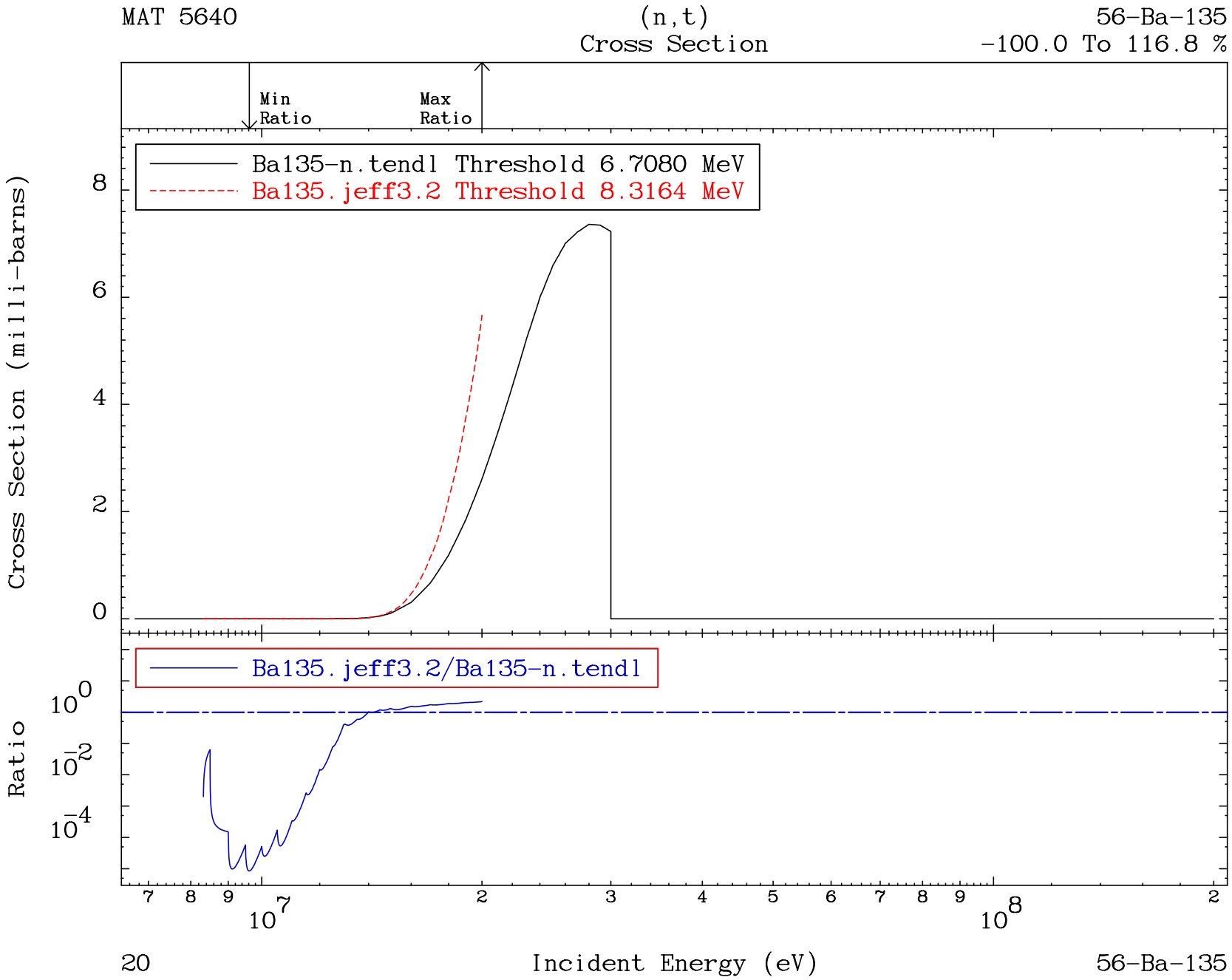

MAT 5640
874.5 keV (n,n') Level
Cross Section
56-Ba-135
-100.0 To -54.20%
Max
Ratio
Min
Ratio
Ba135-n.tendl Threshold 881.06 keV
Ba135.jeff3.2 Threshold 987.33 keV
Cross Section (milli-barns)
250
200
150
100
50
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
56-Ba-135

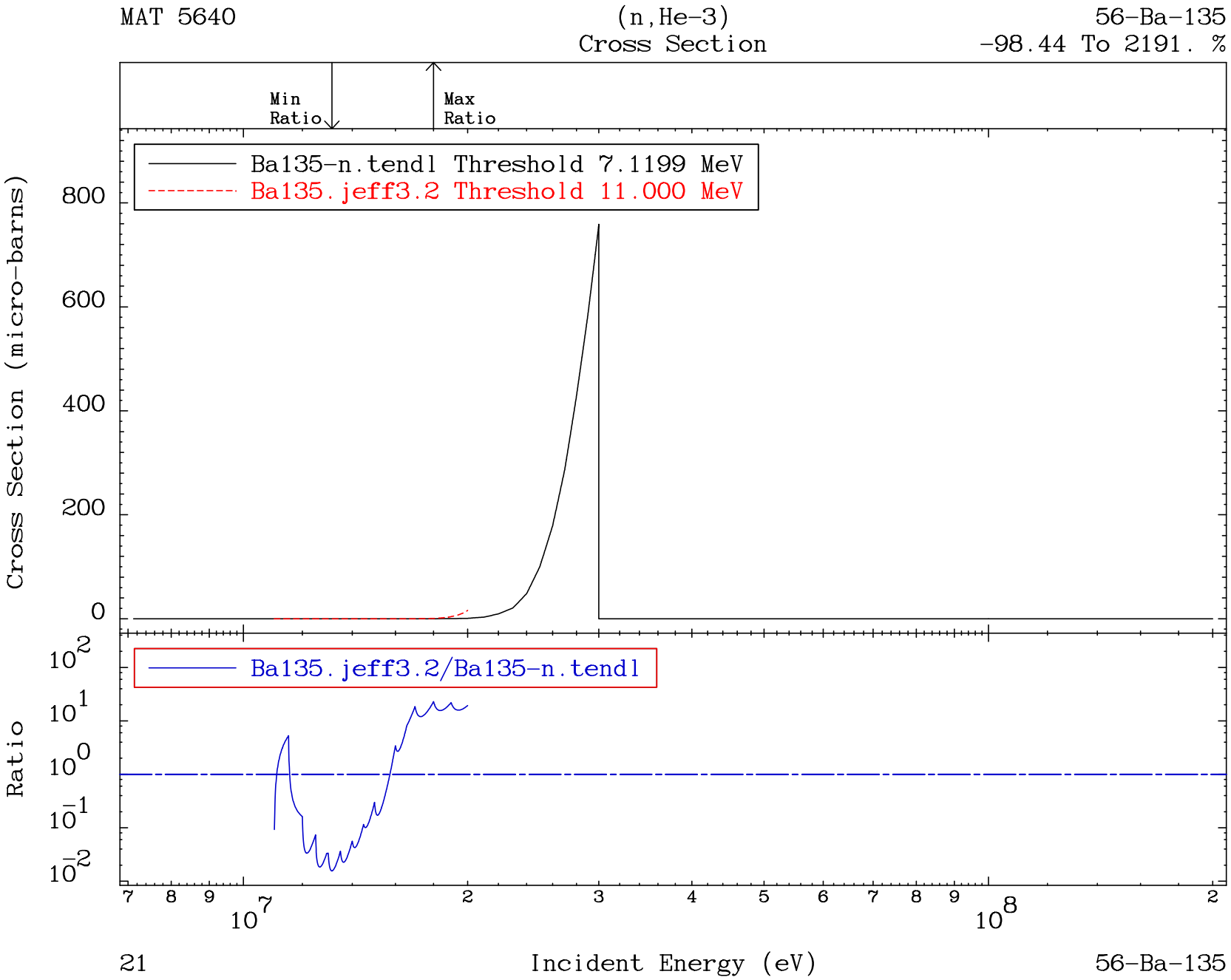

MAT 5640
(n,n') Continuum
Cross Section
56-Ba-135
-8.611 To 2064. %
Max Ratio
Min Ratio
Ba135-n.tendl Threshold 1.9557 MeV
Ba135.jeff3.2 Threshold 1.1788 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
6
$10^1$
6
$10^0$
2 3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
16
Incident Energy (eV)
56-Ba-135

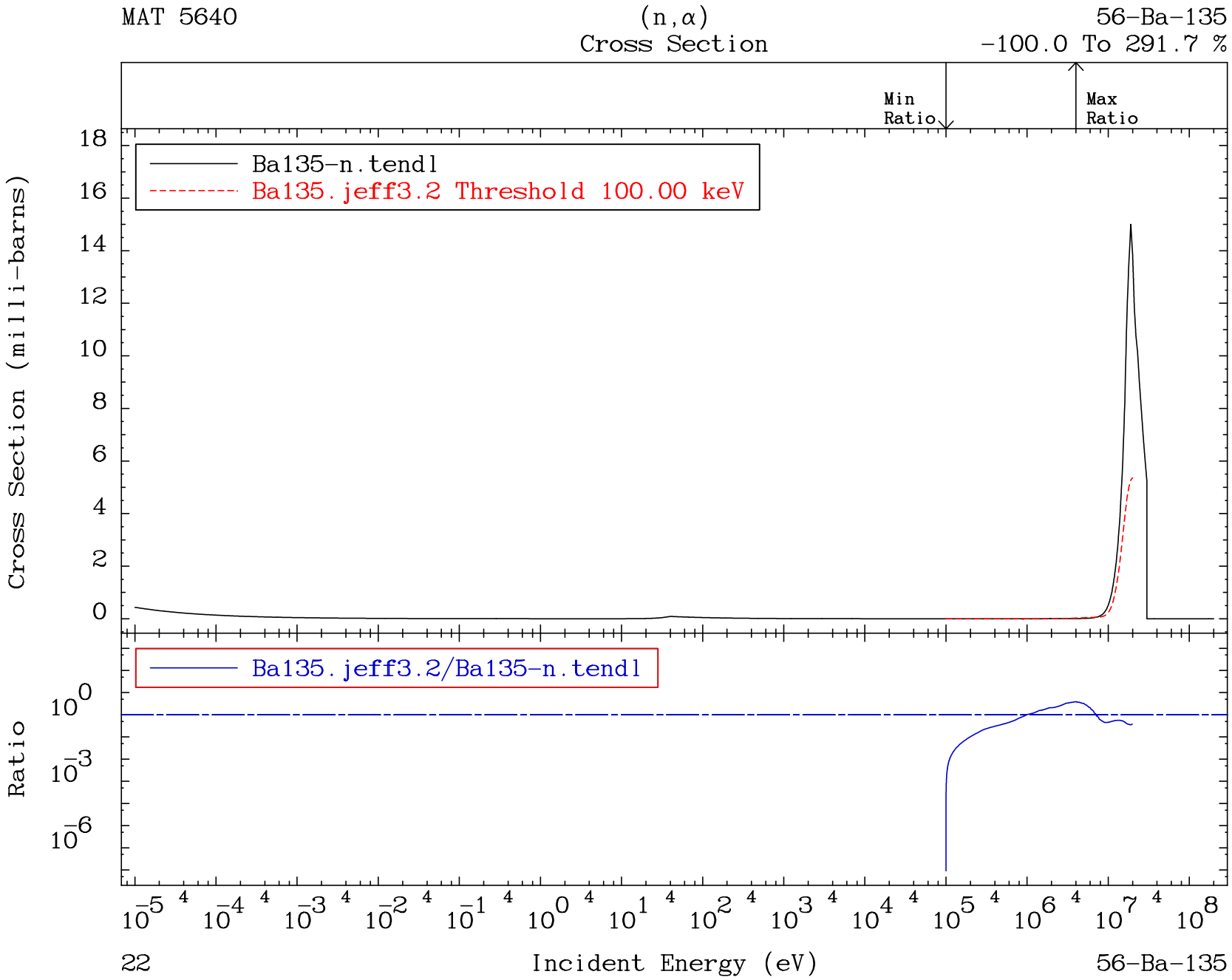

MAT 5640
(n,γ)
Cross Section
56-Ba-135
-99.96 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
17
56-Ba-135

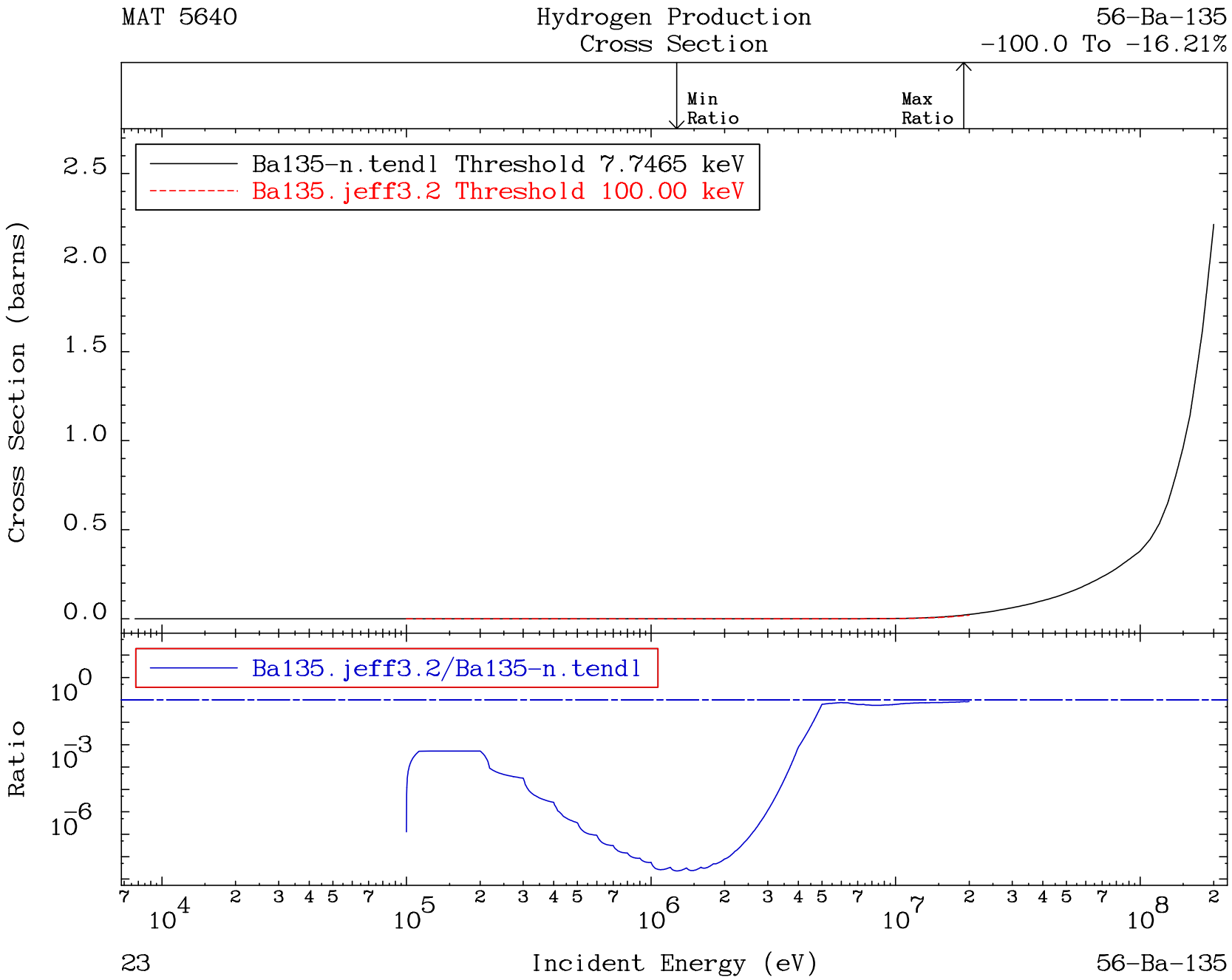

MAT 5640
(n,p)
Cross Section
56-Ba-135
-100.0 To -22.23%
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 7.7465 keV
Ba135.jeff3.2 Threshold 100.00 keV
Cross Section (milli-barns)
20
15
10
5
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^4
10^5
10^6
10^7
10^8
18
Incident Energy (eV)
56-Ba-135

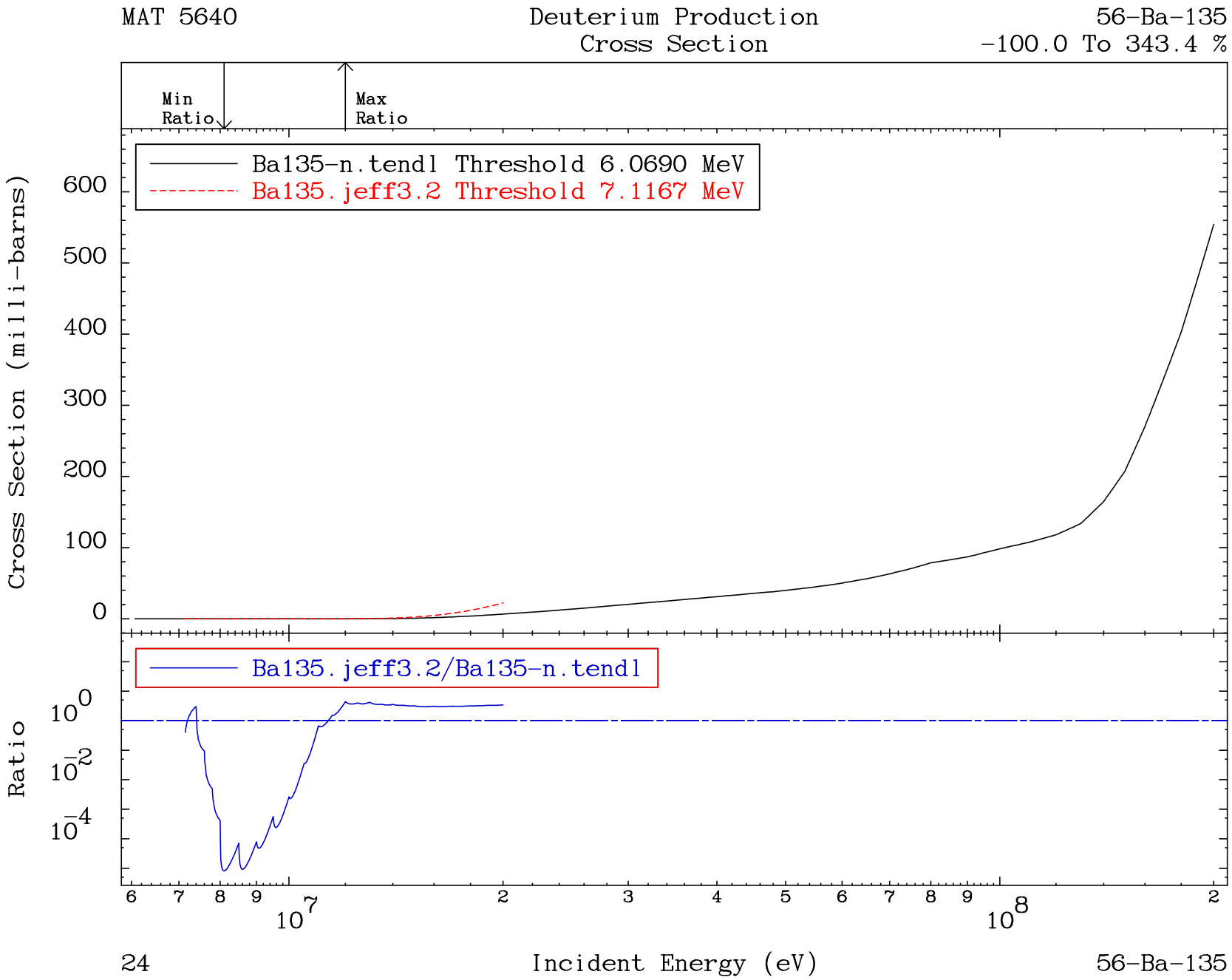

MAT 5640
(n,d)
Cross Section
56-Ba-135
-100.0 To 343.4 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 6.0690 MeV
Ba135.jeff3.2 Threshold 7.1167 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-2
10^-4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
56-Ba-135

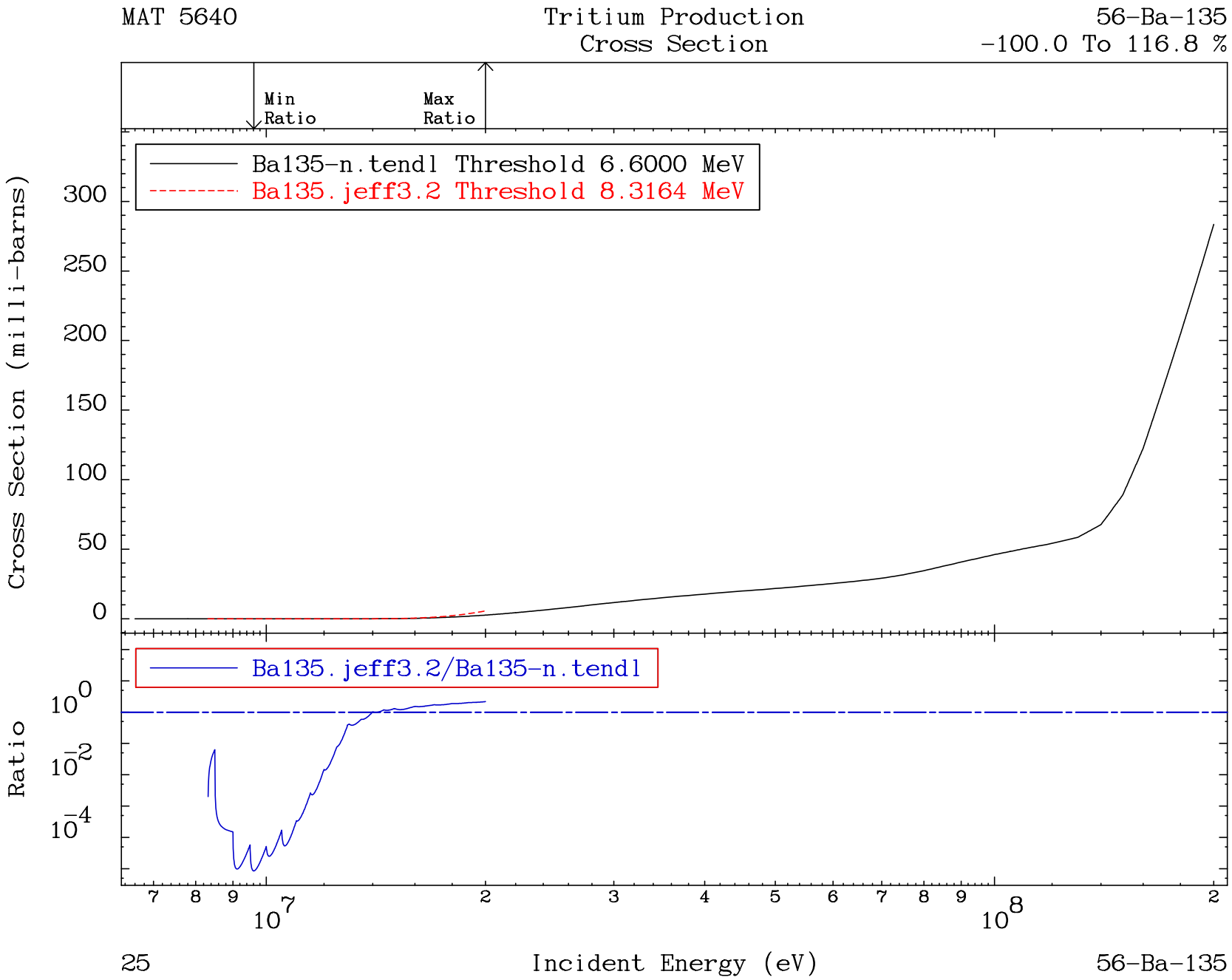

MAT 5640
(n,t)
Cross Section
56-Ba-135
-100.0 To 116.8 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 6.7080 MeV
Ba135.jeff3.2 Threshold 8.3164 MeV
Cross Section (milli-barns)
0
2
4
6
8
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
56-Ba-135

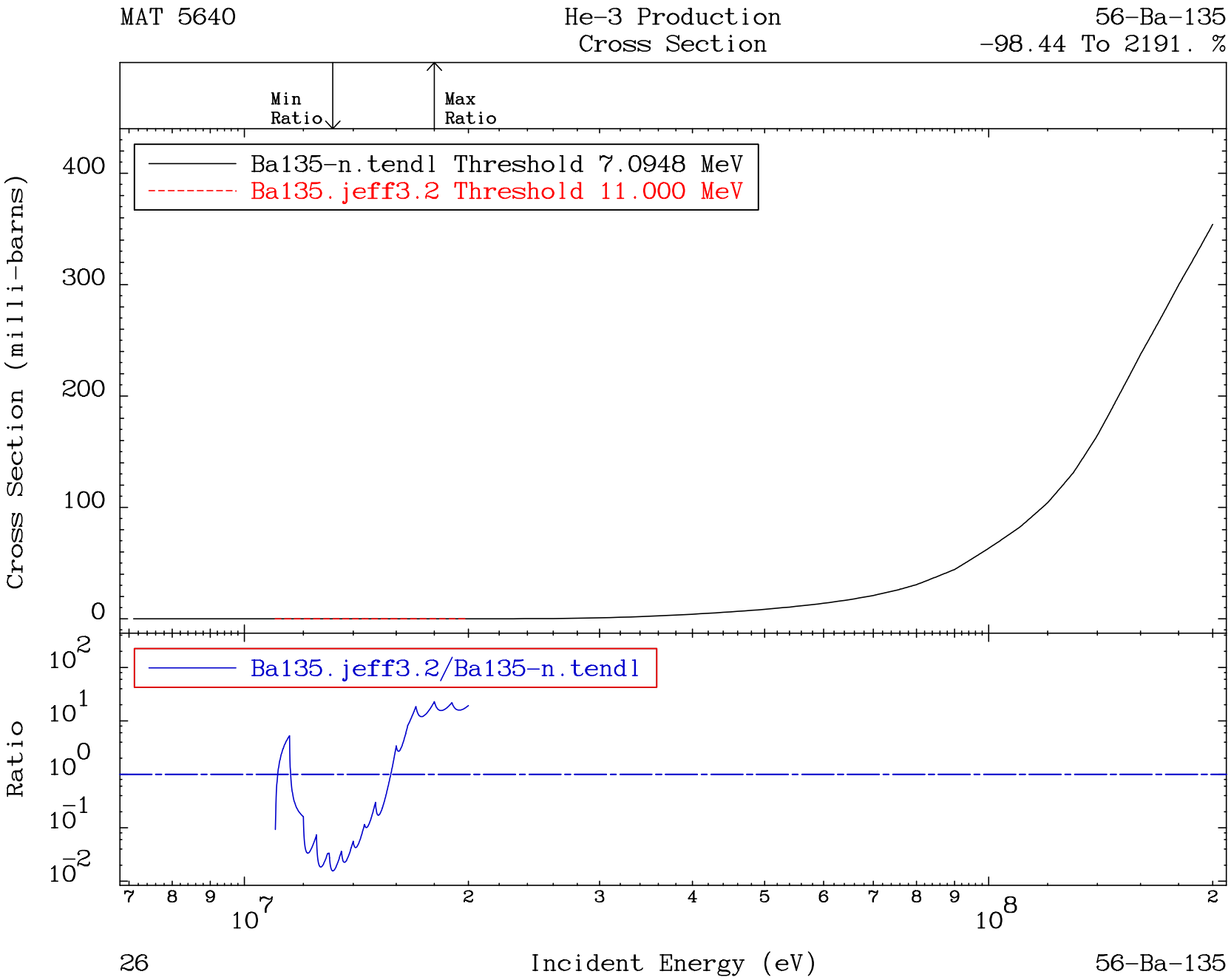

MAT 5640
(n,He-3)
Cross Section
56-Ba-135
-98.44 To 2191. %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 7.1199 MeV
Ba135.jeff3.2 Threshold 11.000 MeV
Cross Section (micro-barns)
800
600
400
200
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
$10^{2}$
$10^{1}$
$10^{0}$
$10^{-1}$
$10^{-2}$
7 8 9 $10^{7}$ 2 3 4 5 6 7 8 9 $10^{8}$ 2
21
Incident Energy (eV)
56-Ba-135

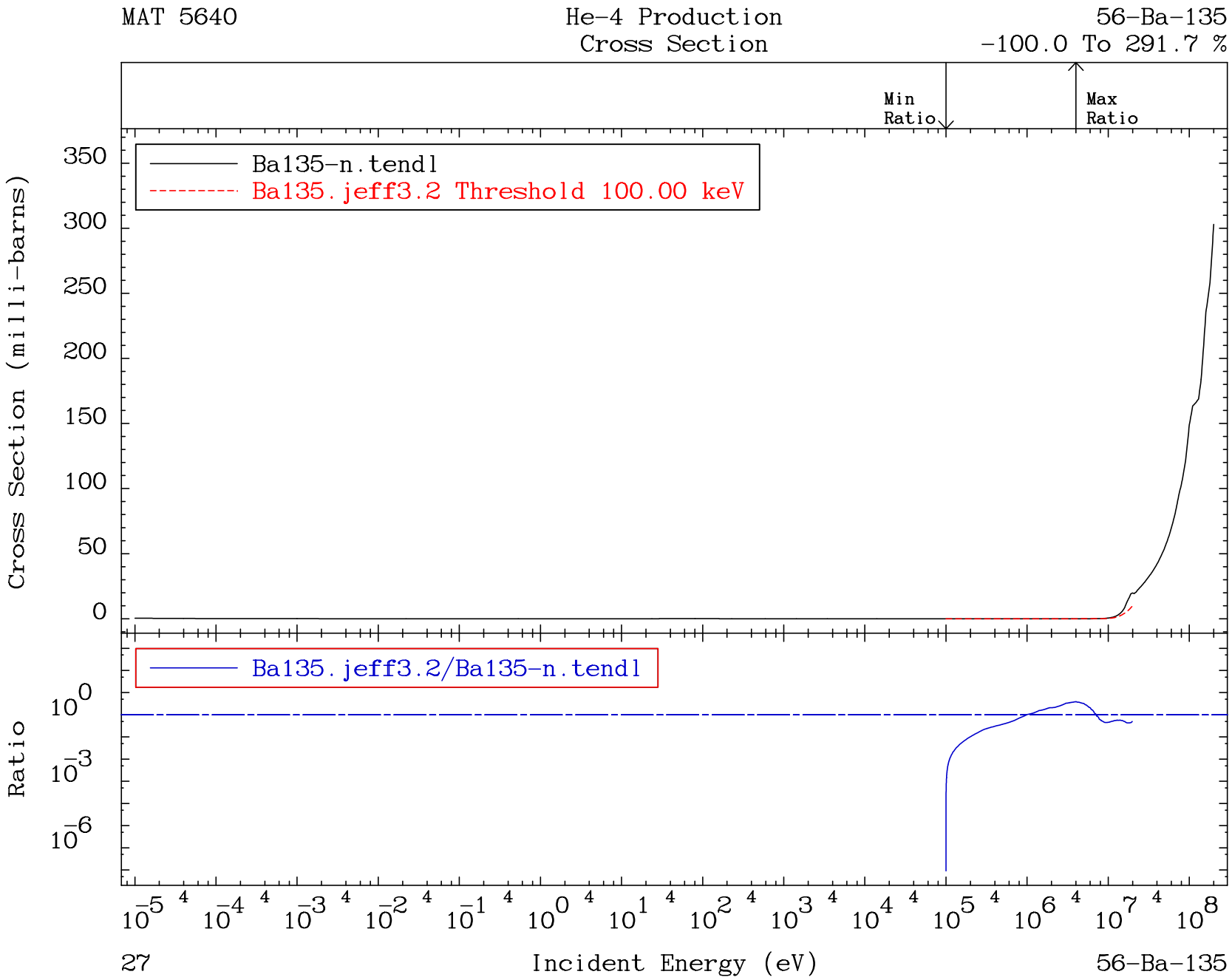

MAT 5640
(n,α)
Cross Section
56-Ba-135
-100.0 To 291.7 %
Min Ratio
Max Ratio
Ba135-n.tendl
Ba135.jeff3.2 Threshold 100.00 keV
Cross Section (milli-barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
22
56-Ba-135

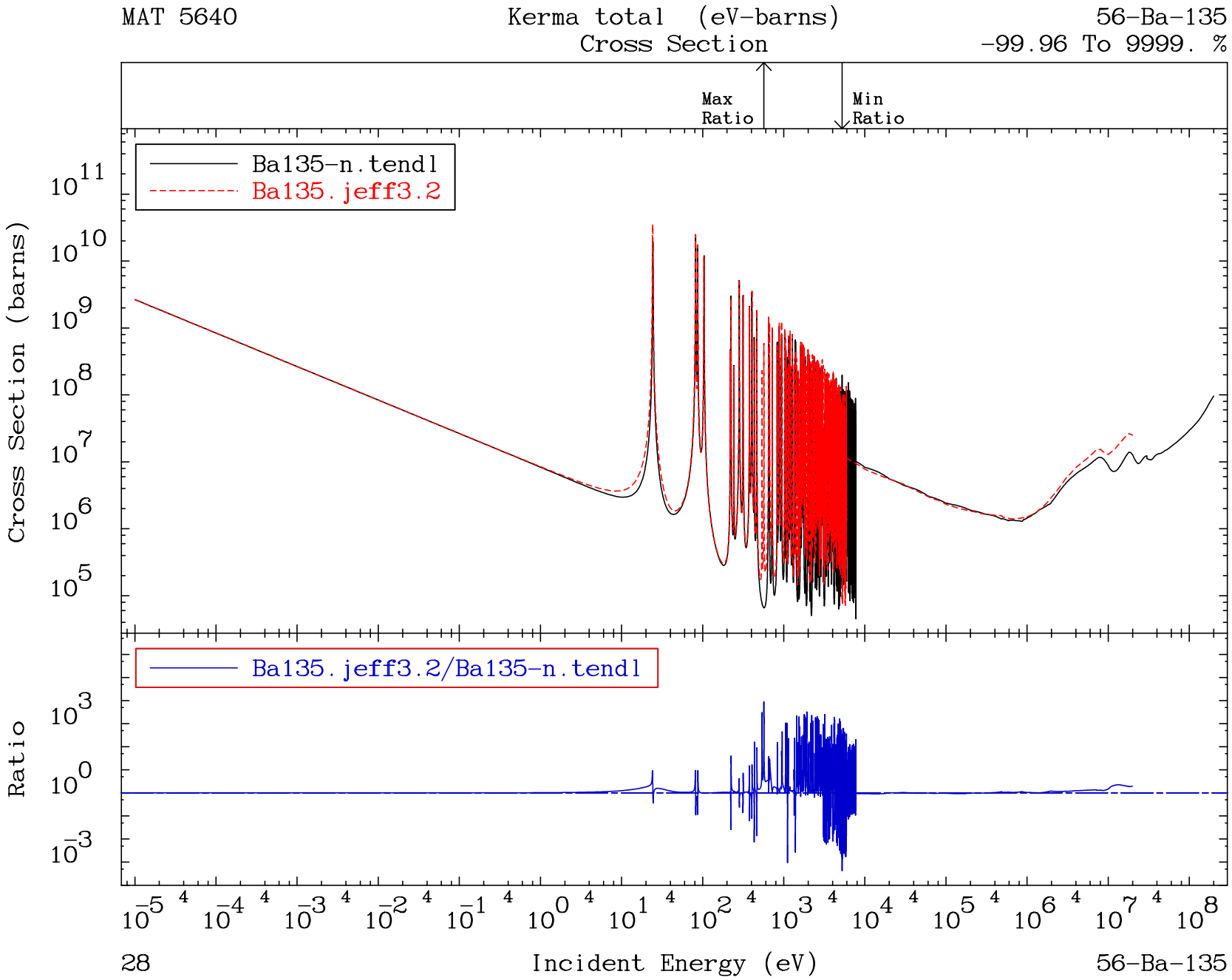

MAT 5640
Hydrogen Production
Cross Section
56-Ba-135
-100.0 To -16.21%
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 7.7465 keV
Ba135.jeff3.2 Threshold 100.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^4
10^5
10^6
10^7
10^8
23
Incident Energy (eV)
56-Ba-135

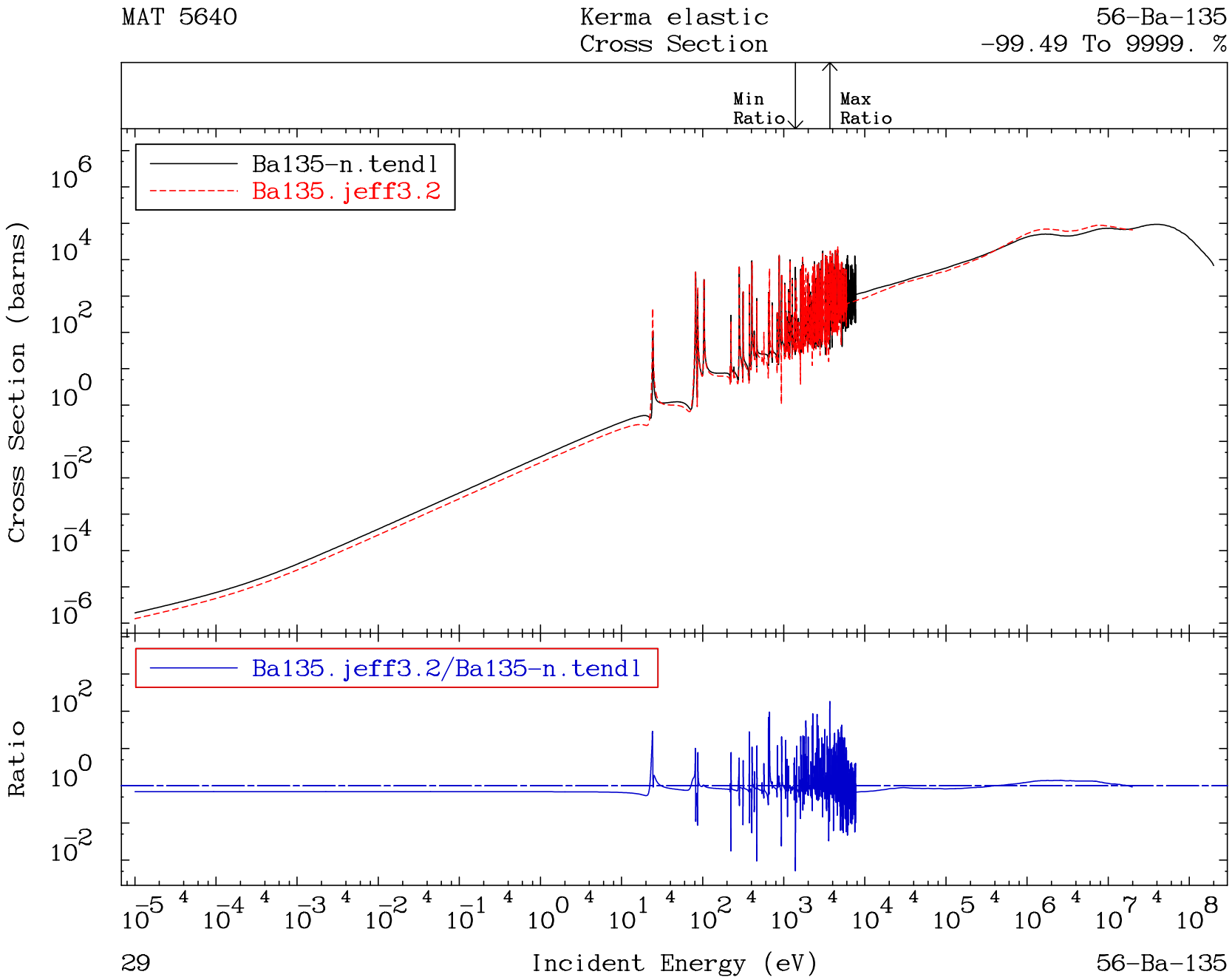

MAT 5640
Deuterium Production
Cross Section
56-Ba-135
-100.0 To 343.4 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 6.0690 MeV
Ba135.jeff3.2 Threshold 7.1167 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-2
10^-4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
56-Ba-135

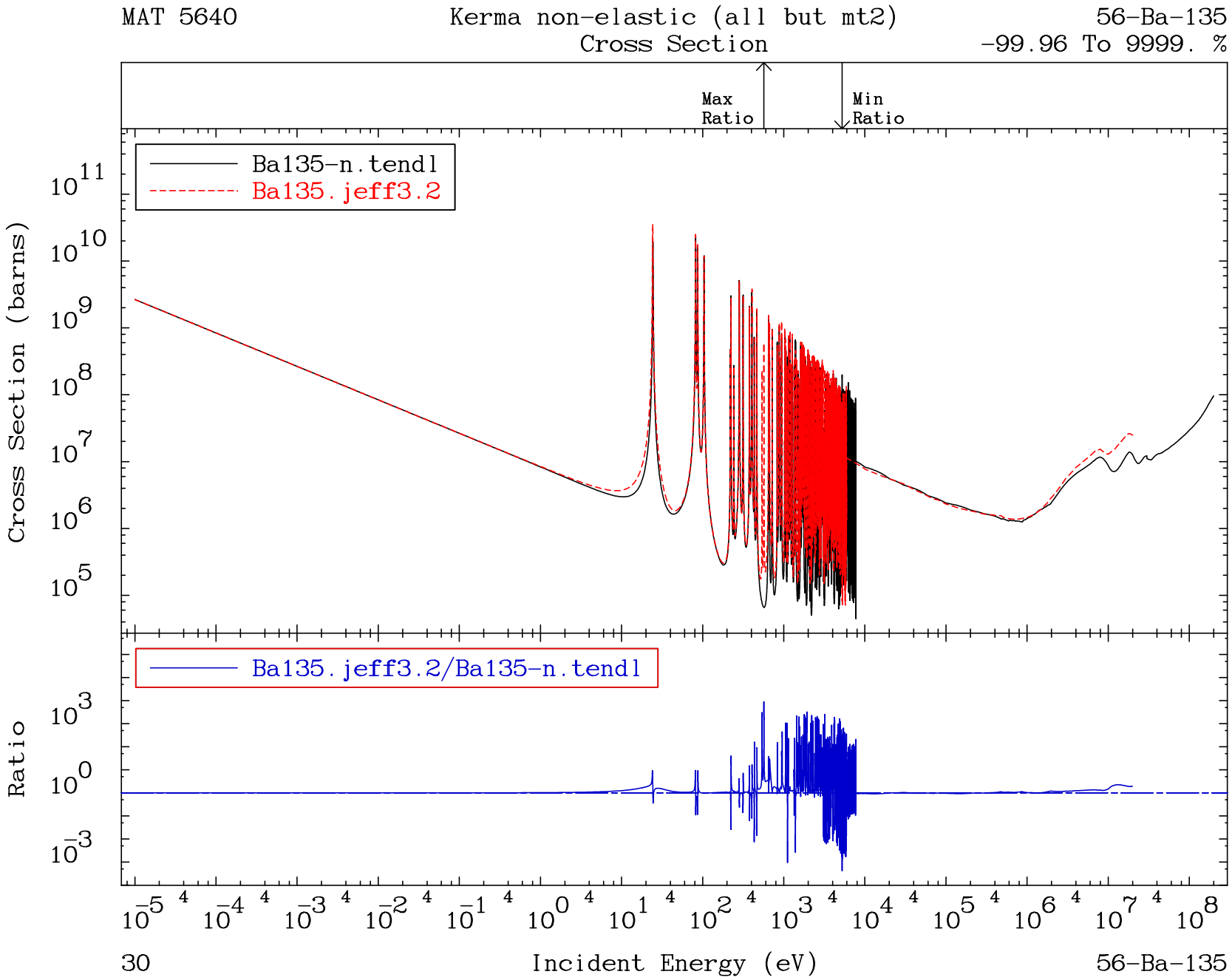

MAT 5640
Tritium Production
Cross Section
56-Ba-135
-100.0 To 116.8 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 6.6000 MeV
Ba135.jeff3.2 Threshold 8.3164 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
56-Ba-135

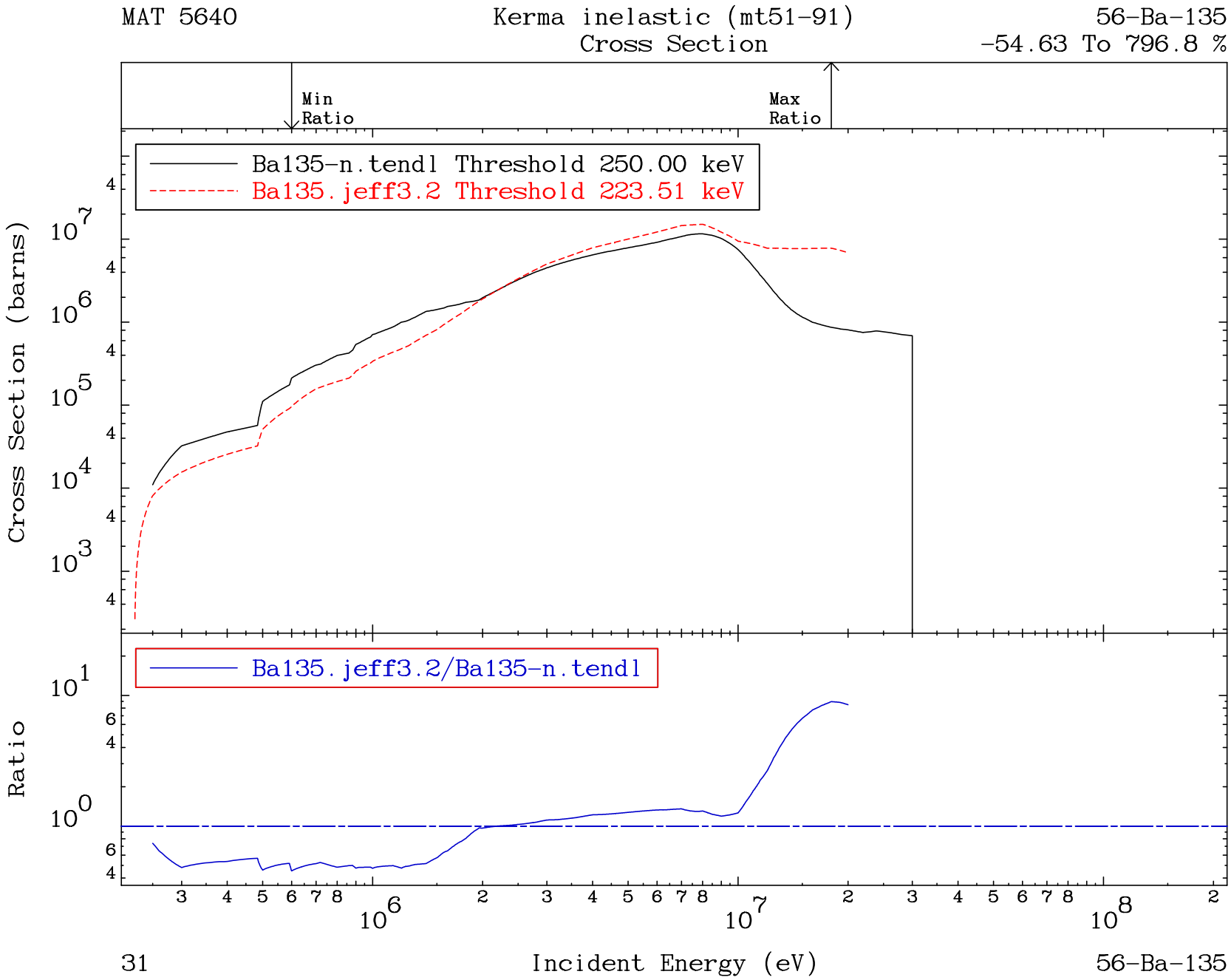

MAT 5640
He-3 Production
Cross Section
56-Ba-135
-98.44 To 2191. %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 7.0948 MeV
Ba135.jeff3.2 Threshold 11.000 MeV
Cross Section (milli-barns)
400
300
200
100
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^2
10^1
10^0
10^-1
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
56-Ba-135

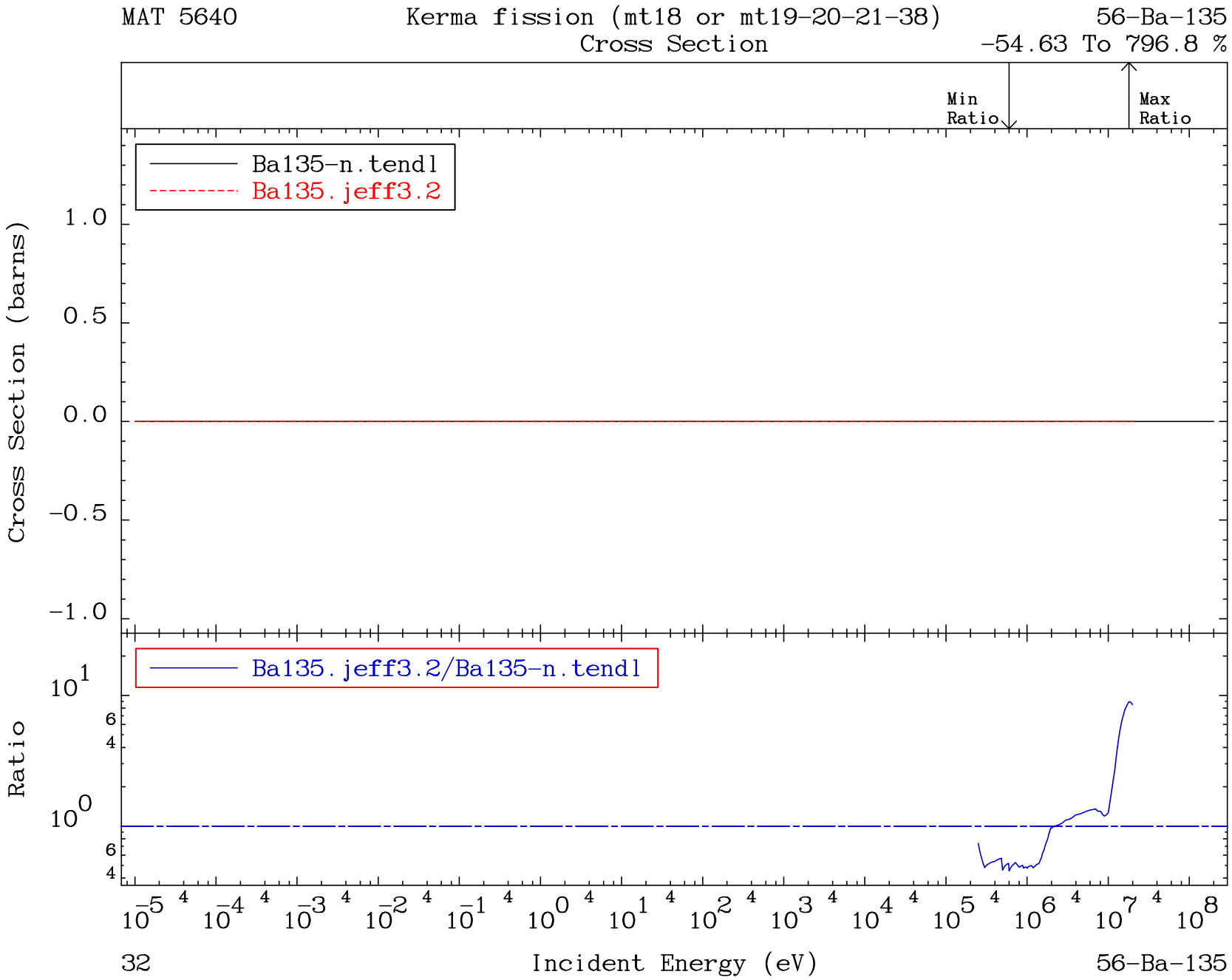

MAT 5640
He-4 Production
Cross Section
56-Ba-135
-100.0 To 291.7 %
Min Ratio
Max Ratio
Ba135-n.tendl
Ba135.jeff3.2 Threshold 100.00 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
56-Ba-135

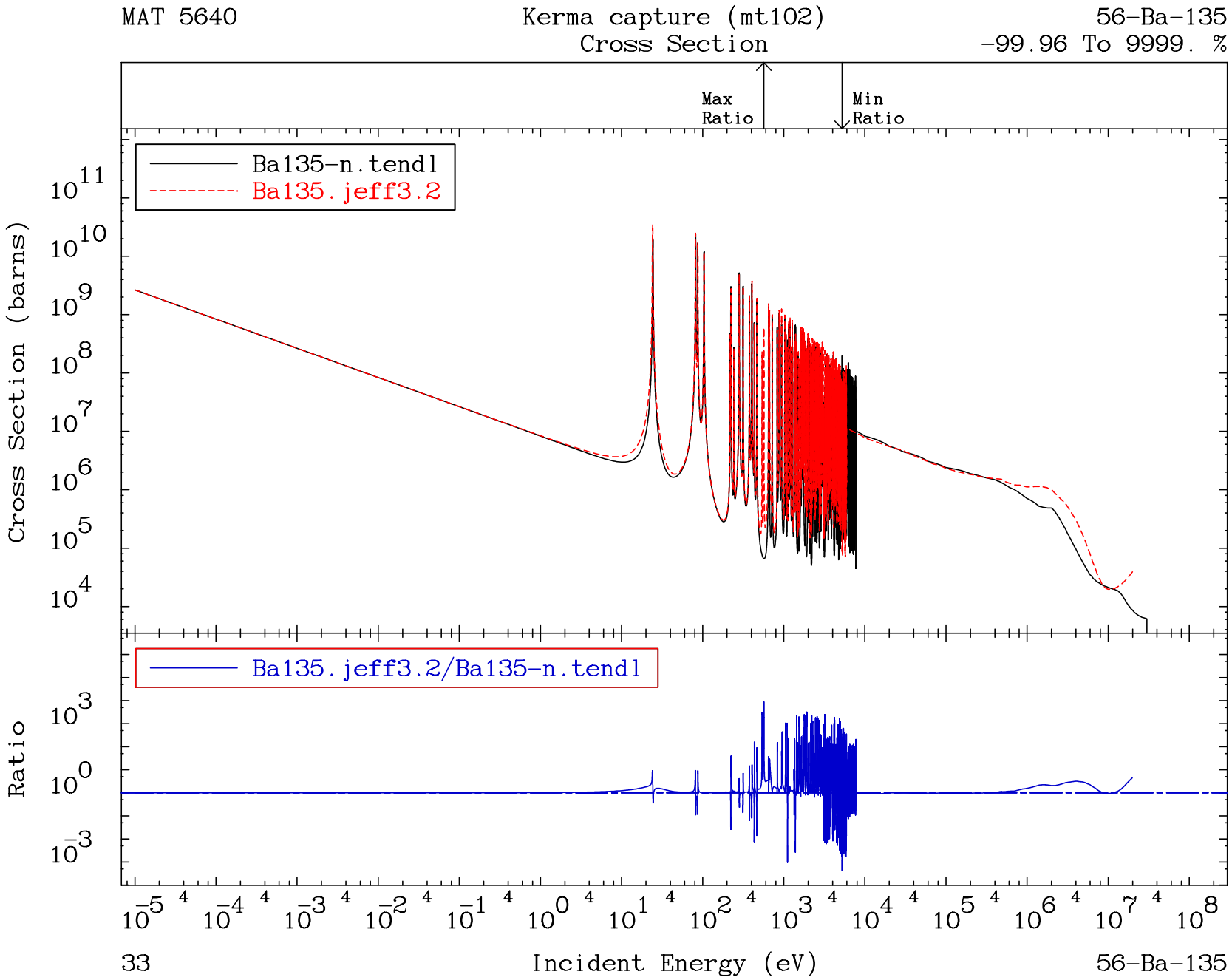

MAT 5640
Kerma total (eV-barns)
Cross Section
56-Ba-135
-99.96 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
28
56-Ba-135

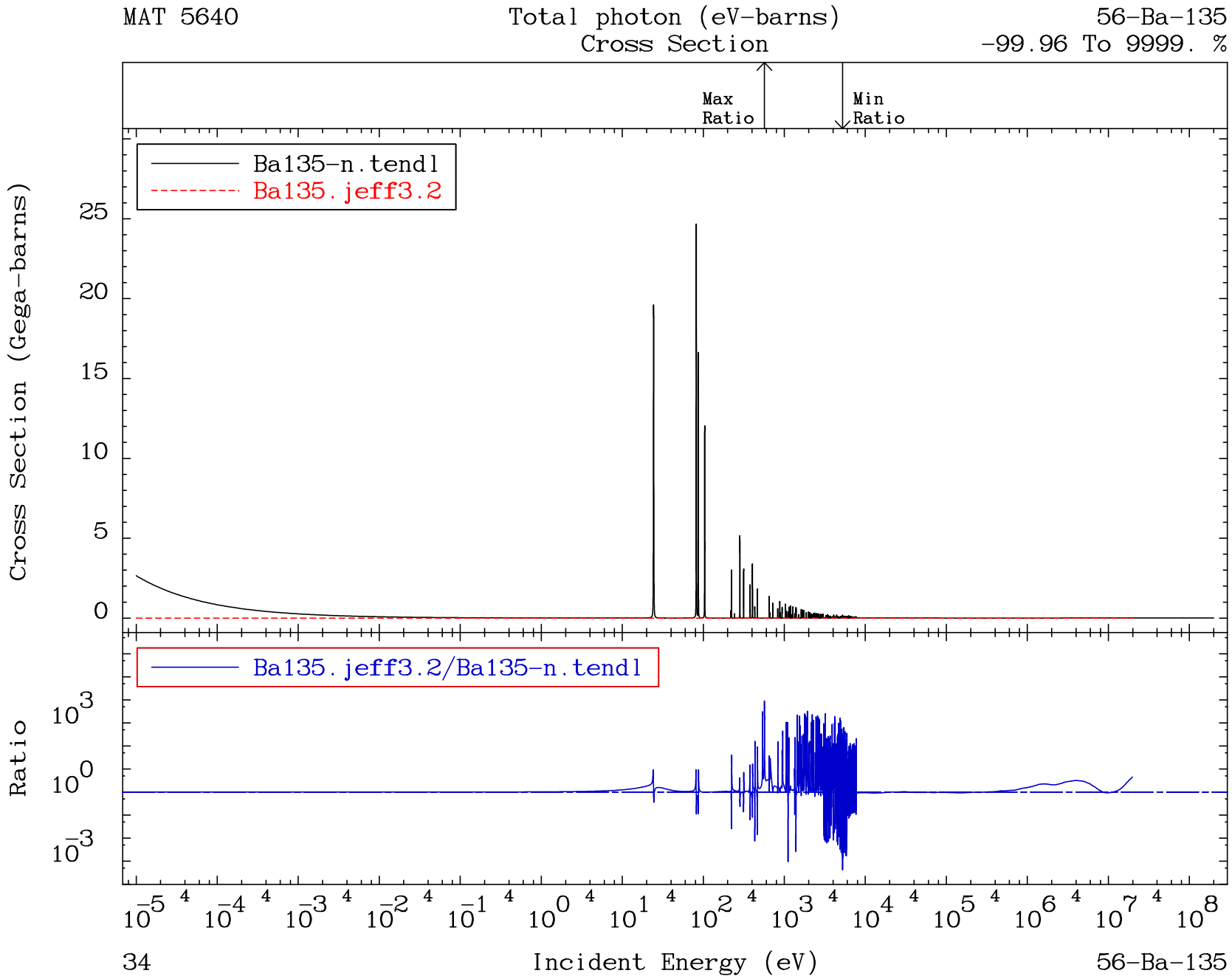

MAT 5640
Kerma elastic
Cross Section
56-Ba-135
-99.49 To 9999. %
Min
Ratio
Max
Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
29
56-Ba-135

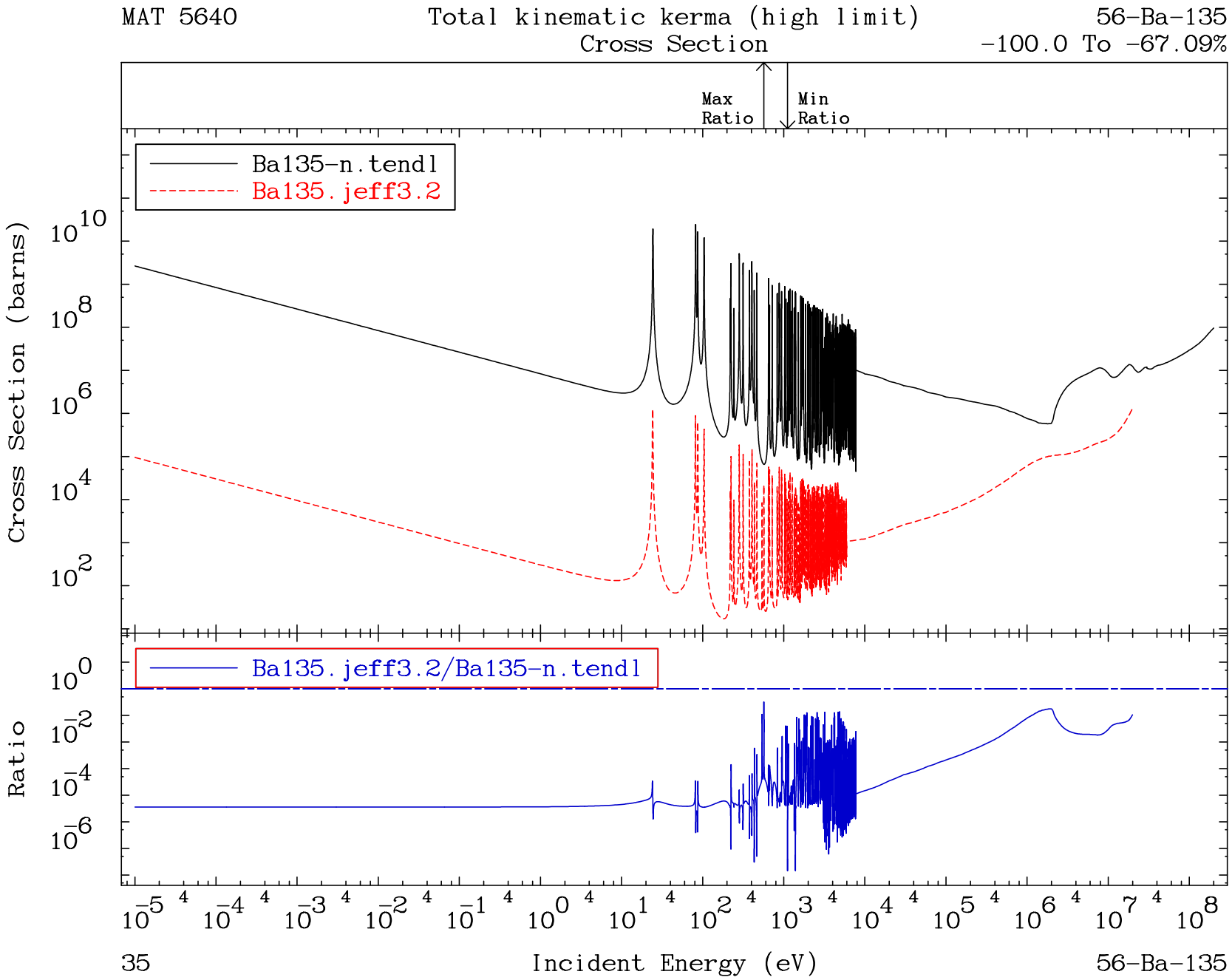

MAT 5640
Kerma non-elastic (all but mt2)
Cross Section
56-Ba-135
-99.96 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
30
56-Ba-135

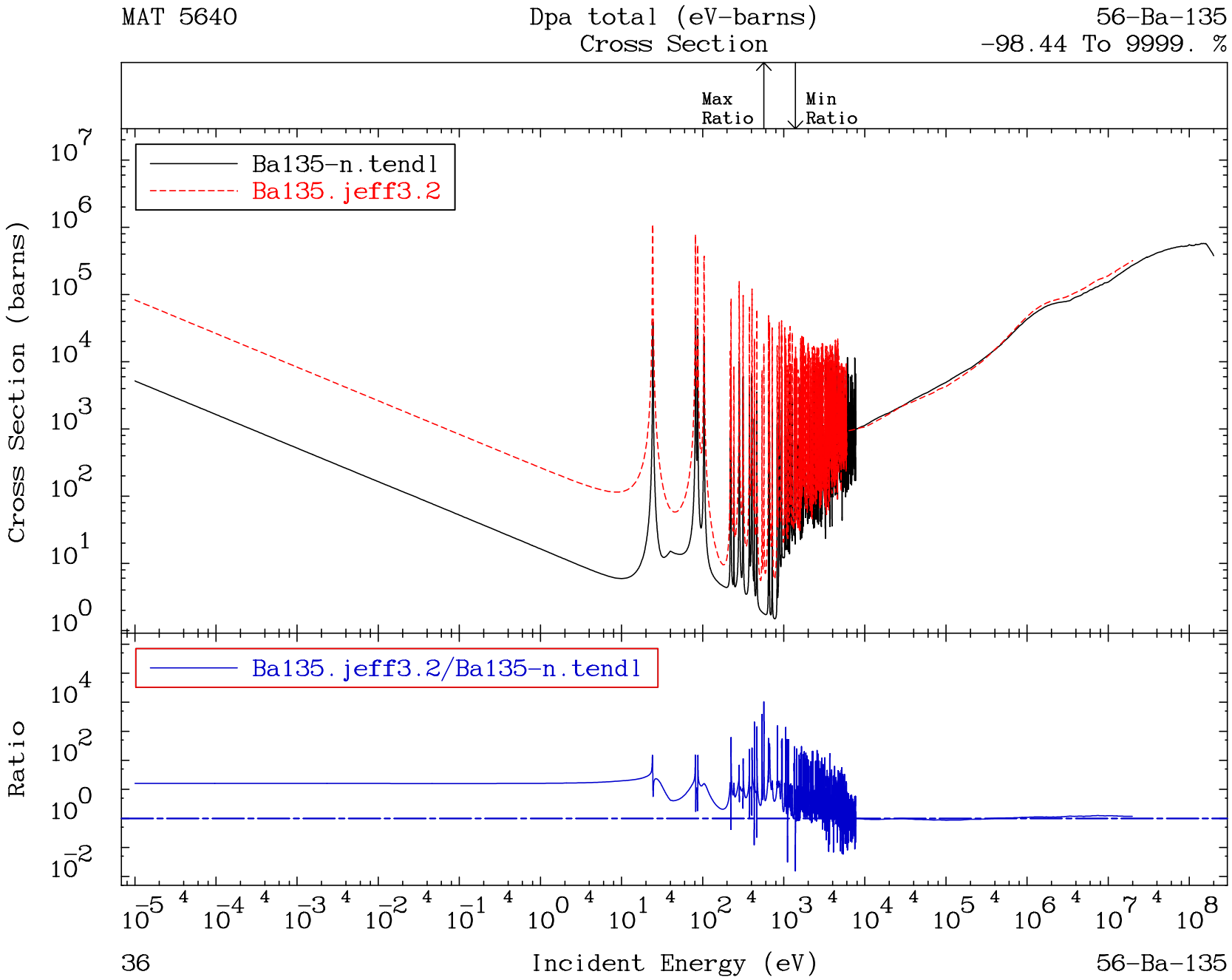

MAT 5640
Kerma inelastic (mt51-91)
Cross Section
56-Ba-135
-54.63 To 796.8 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 250.00 keV
Ba135.jeff3.2 Threshold 223.51 keV
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
31
56-Ba-135

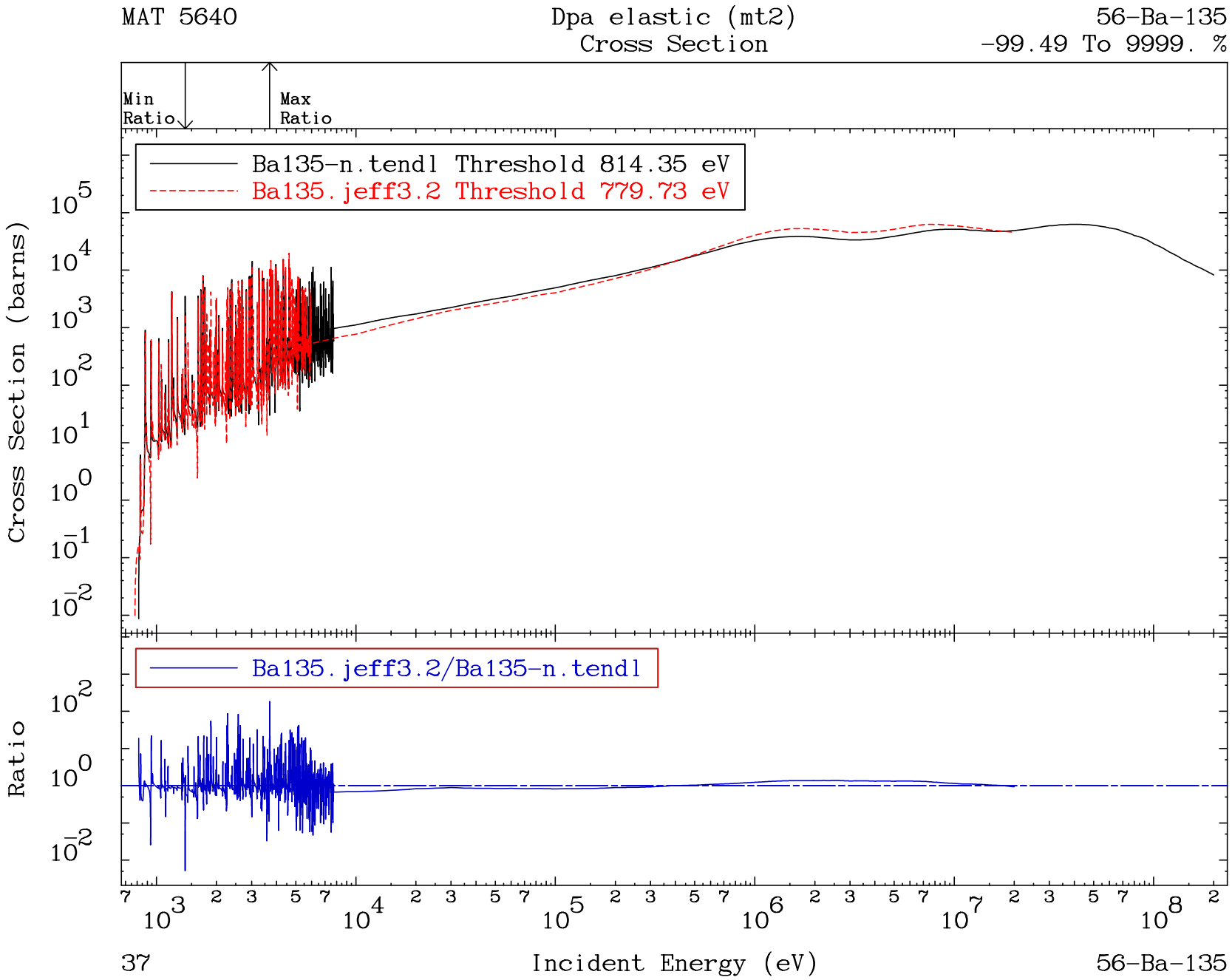

MAT 5640
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
56-Ba-135
-54.63 To 796.8 %
Min Ratio
Max Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
56-Ba-135

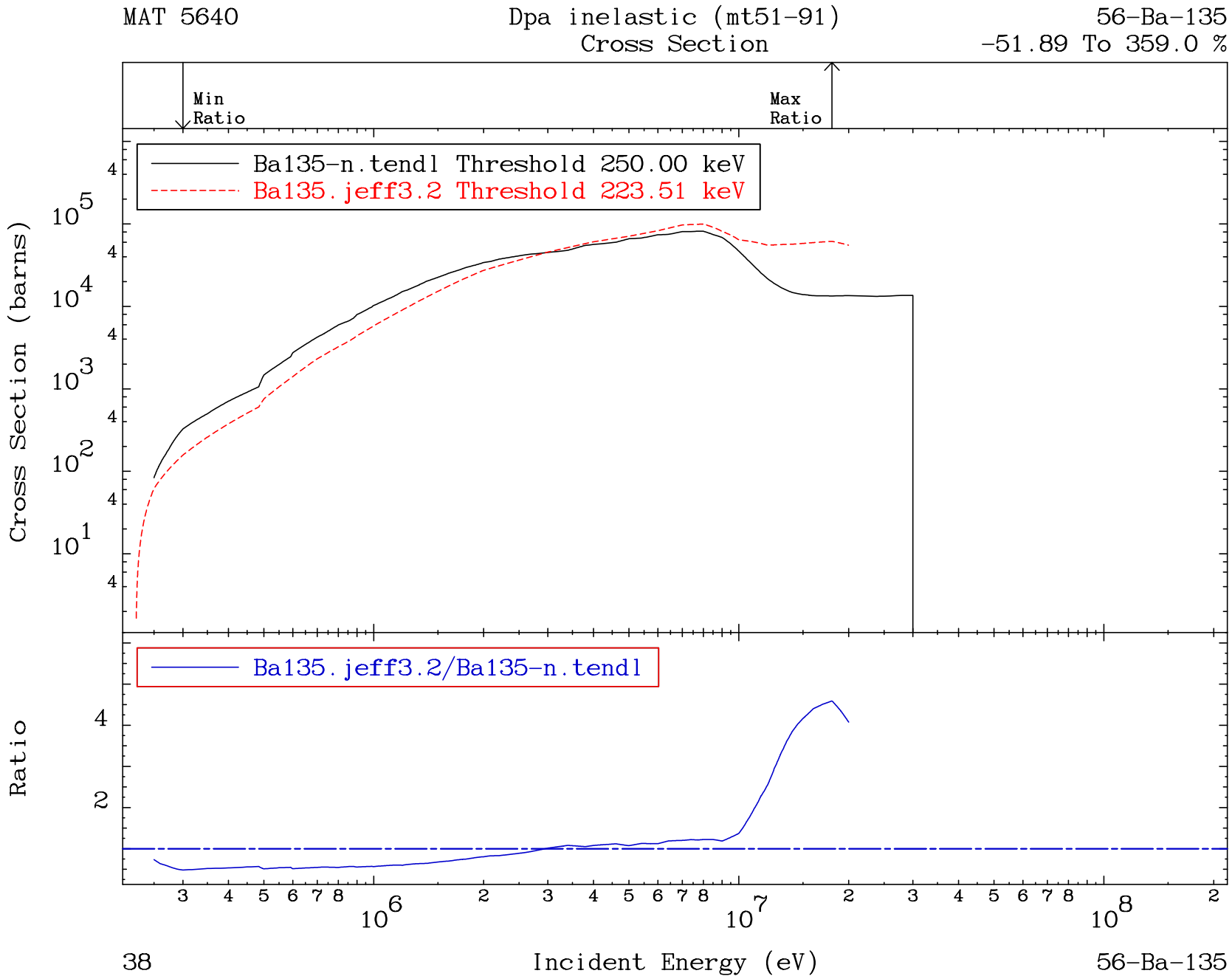

MAT 5640
Kerma capture (mt102)
Cross Section
56-Ba-135
-99.96 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
33
56-Ba-135

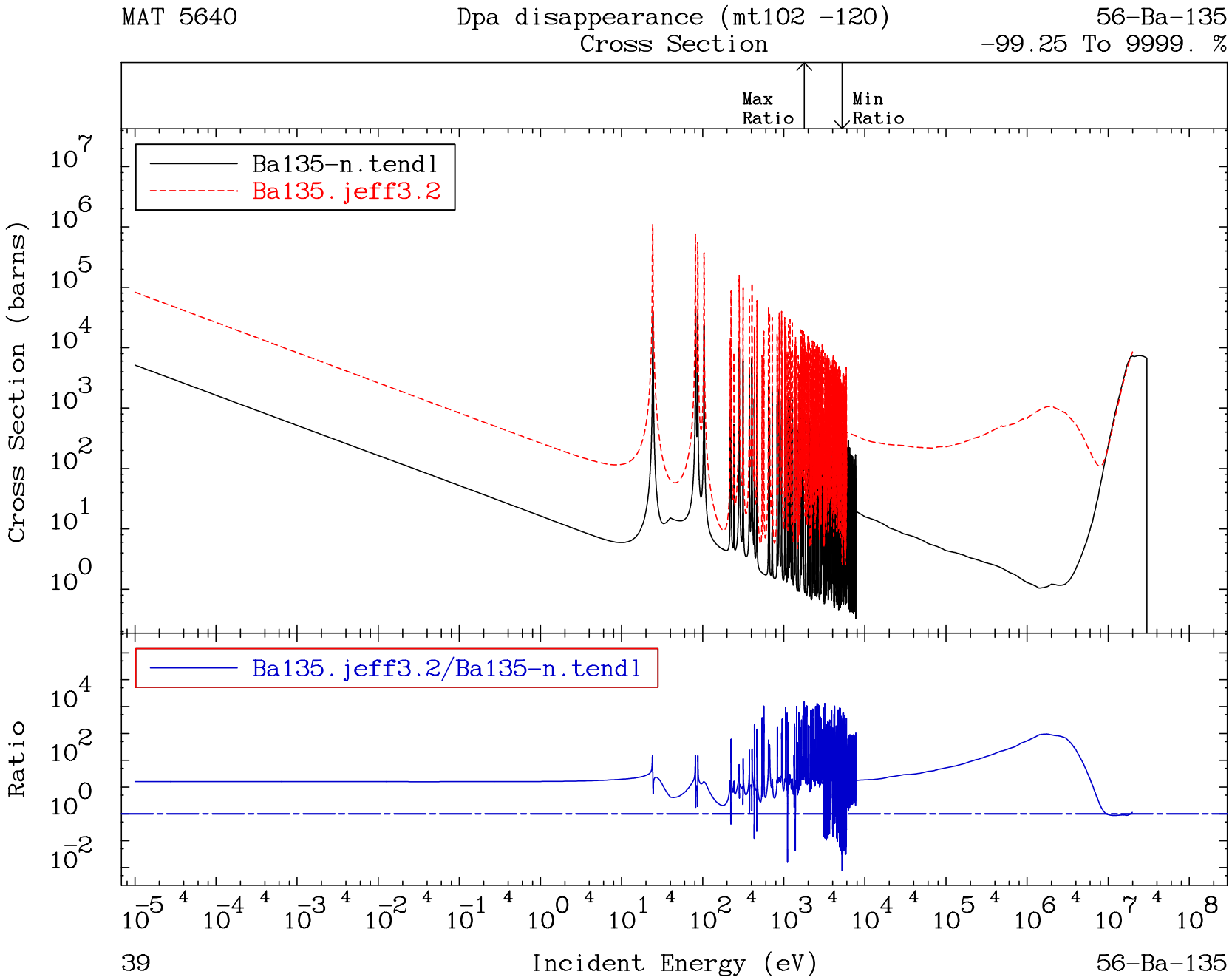

MAT 5640
Total photon (eV-barns)
Cross Section
56-Ba-135
-99.96 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (Giga-barns)
25
20
15
10
5
0
Ba135.jeff3.2/Ba135-n.tendl
Ratio
10^3
10^0
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
34
Incident Energy (eV)
56-Ba-135


MAT 5640
Total kinematic kerma (high limit)
Cross Section
56-Ba-135
-100.0 To -67.09%
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
35
56-Ba-135


MAT 5640
Dpa total (eV-barns)
Cross Section
56-Ba-135
-98.44 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
36
56-Ba-135


MAT 5640
Dpa elastic (mt2)
Cross Section
56-Ba-135
-99.49 To 9999. %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 814.35 eV
Ba135.jeff3.2 Threshold 779.73 eV
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
37
56-Ba-135


MAT 5640
Dpa inelastic (mt51-91)
Cross Section
56-Ba-135
-51.89 To 359.0 %
Min Ratio
Max Ratio
Ba135-n.tendl Threshold 250.00 keV
Ba135.jeff3.2 Threshold 223.51 keV
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
38
56-Ba-135


MAT 5640
Dpa disappearance (mt102 -120)
Cross Section
56-Ba-135
-99.25 To 9999. %
Max Ratio
Min Ratio
Ba135-n.tendl
Ba135.jeff3.2
Cross Section (barns)
Ba135.jeff3.2/Ba135-n.tendl
Ratio
Incident Energy (eV)
39
56-Ba-135