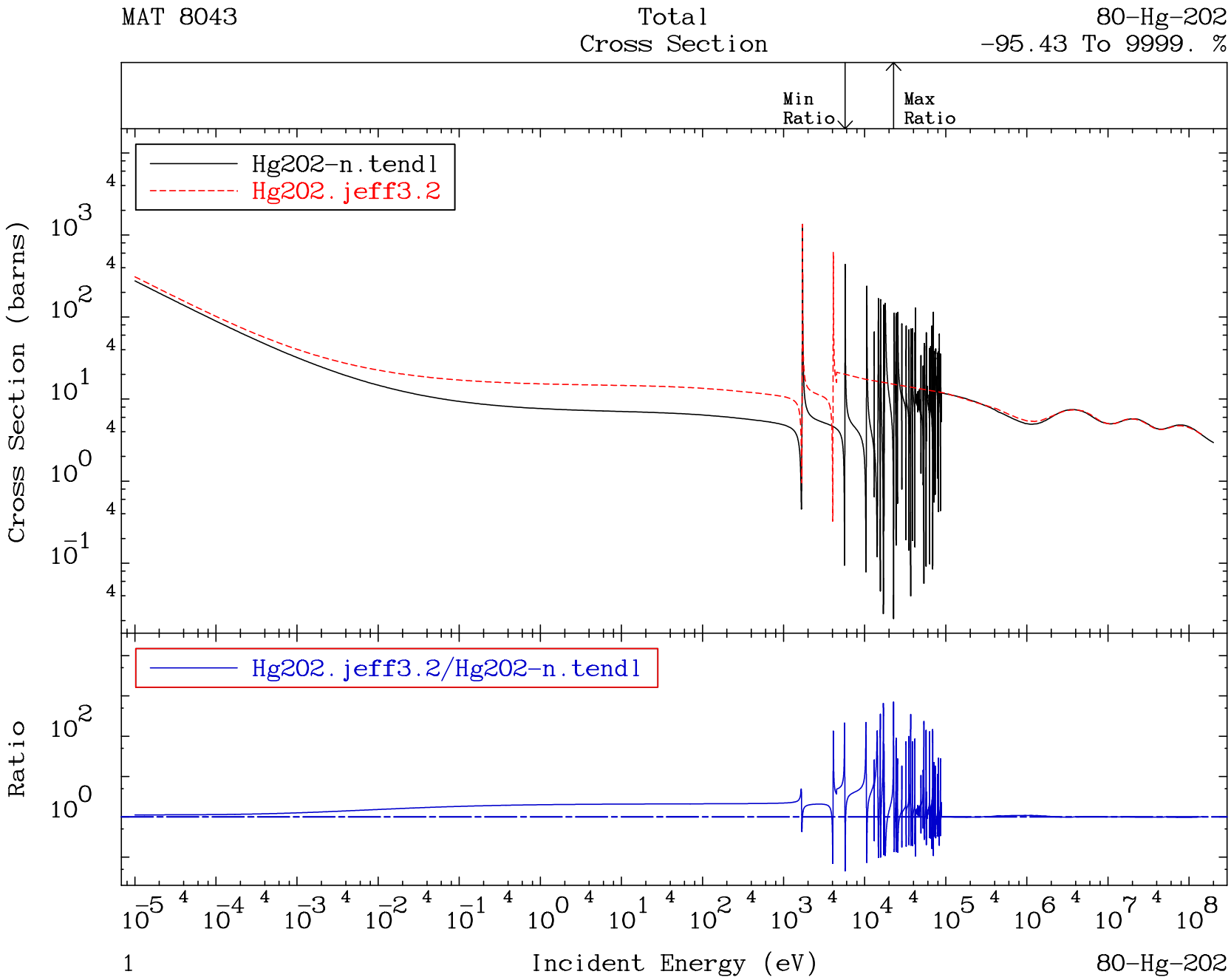
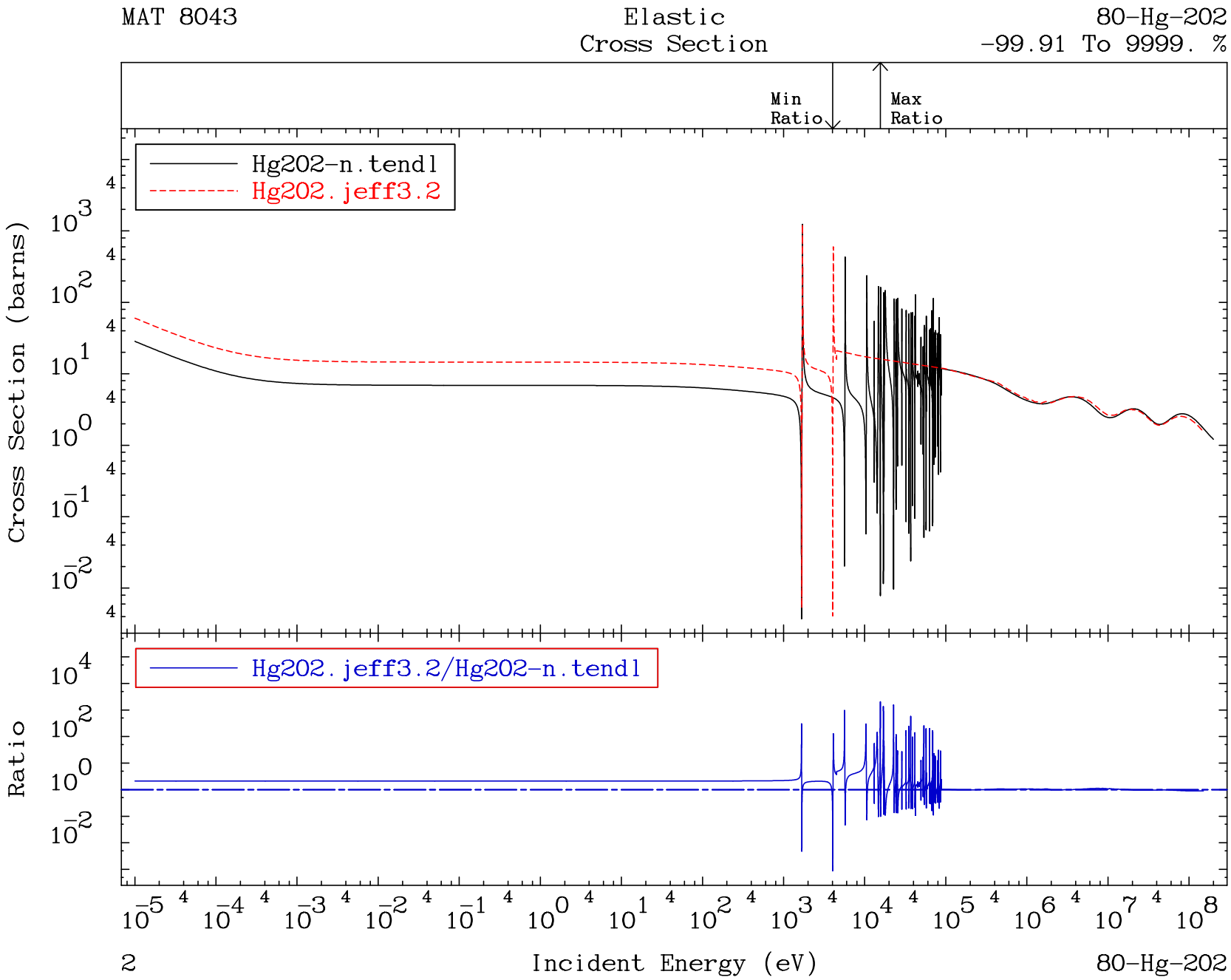
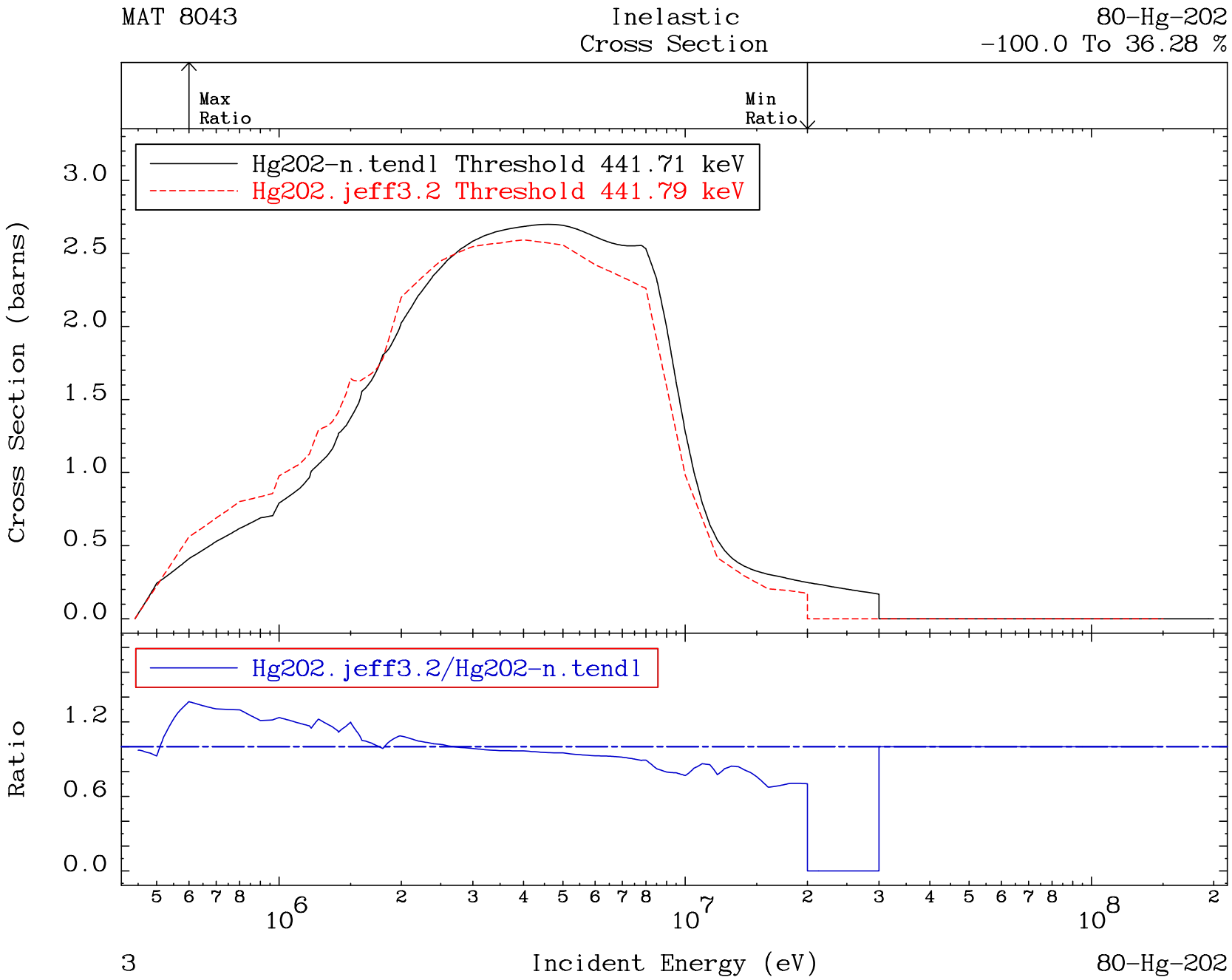
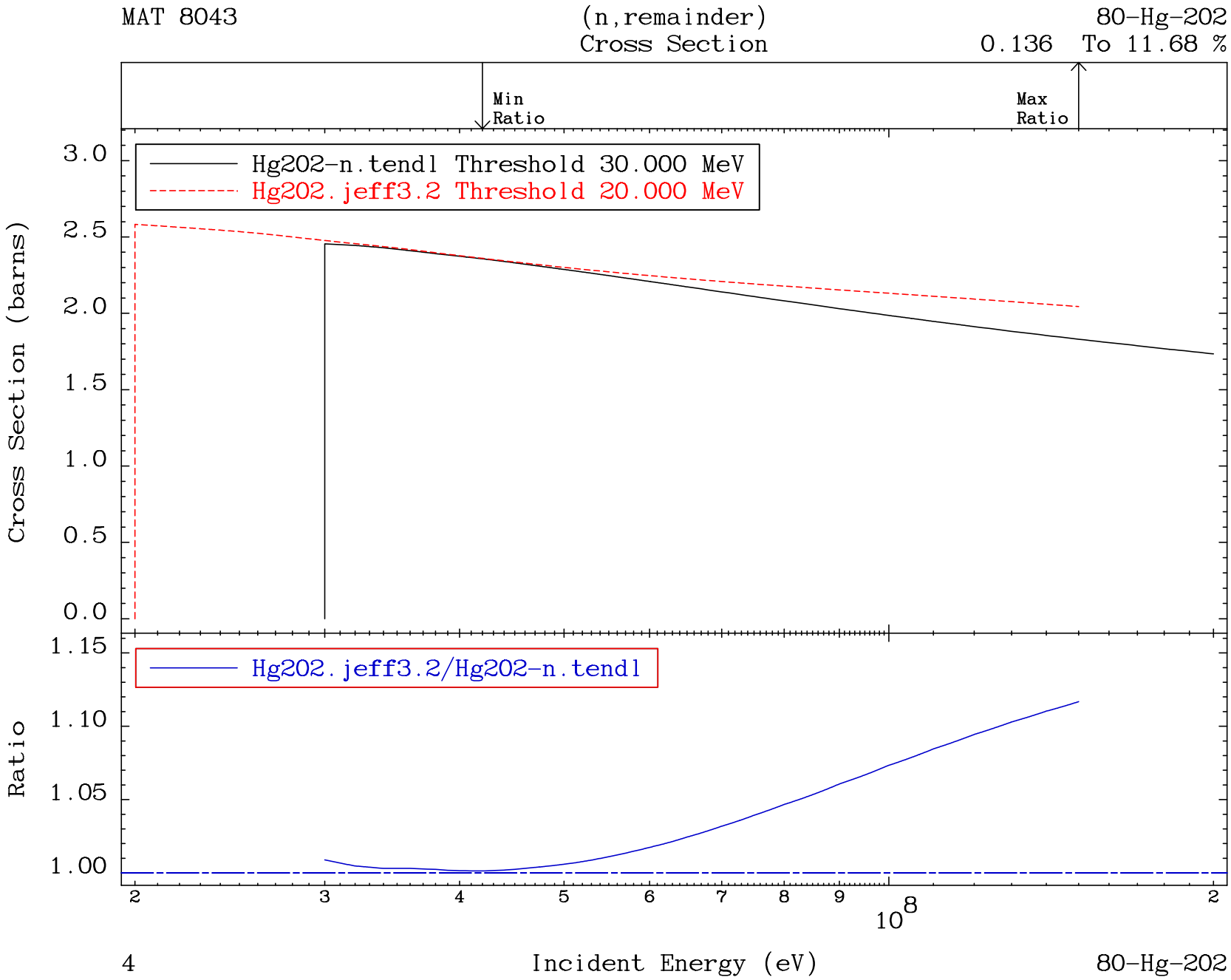
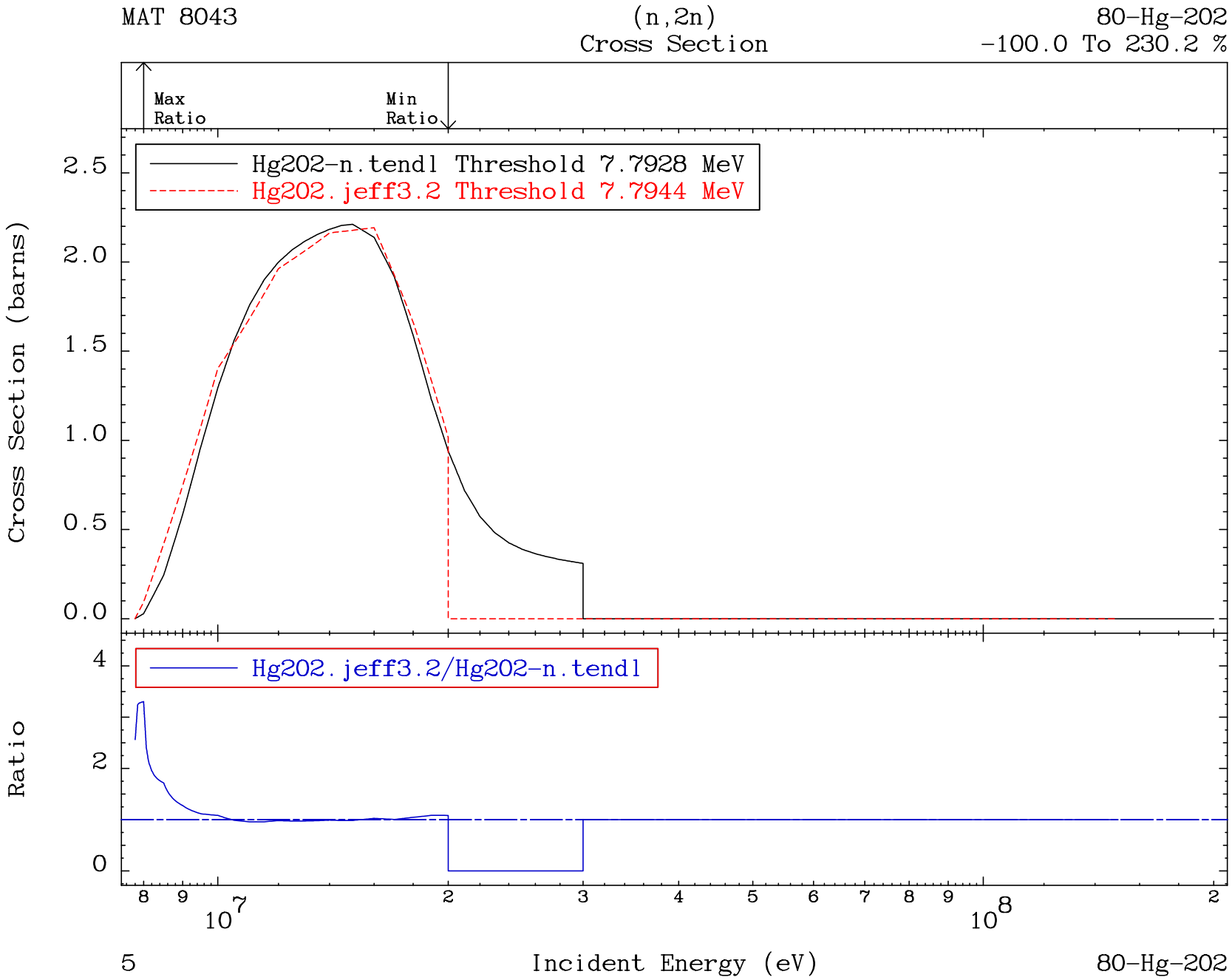
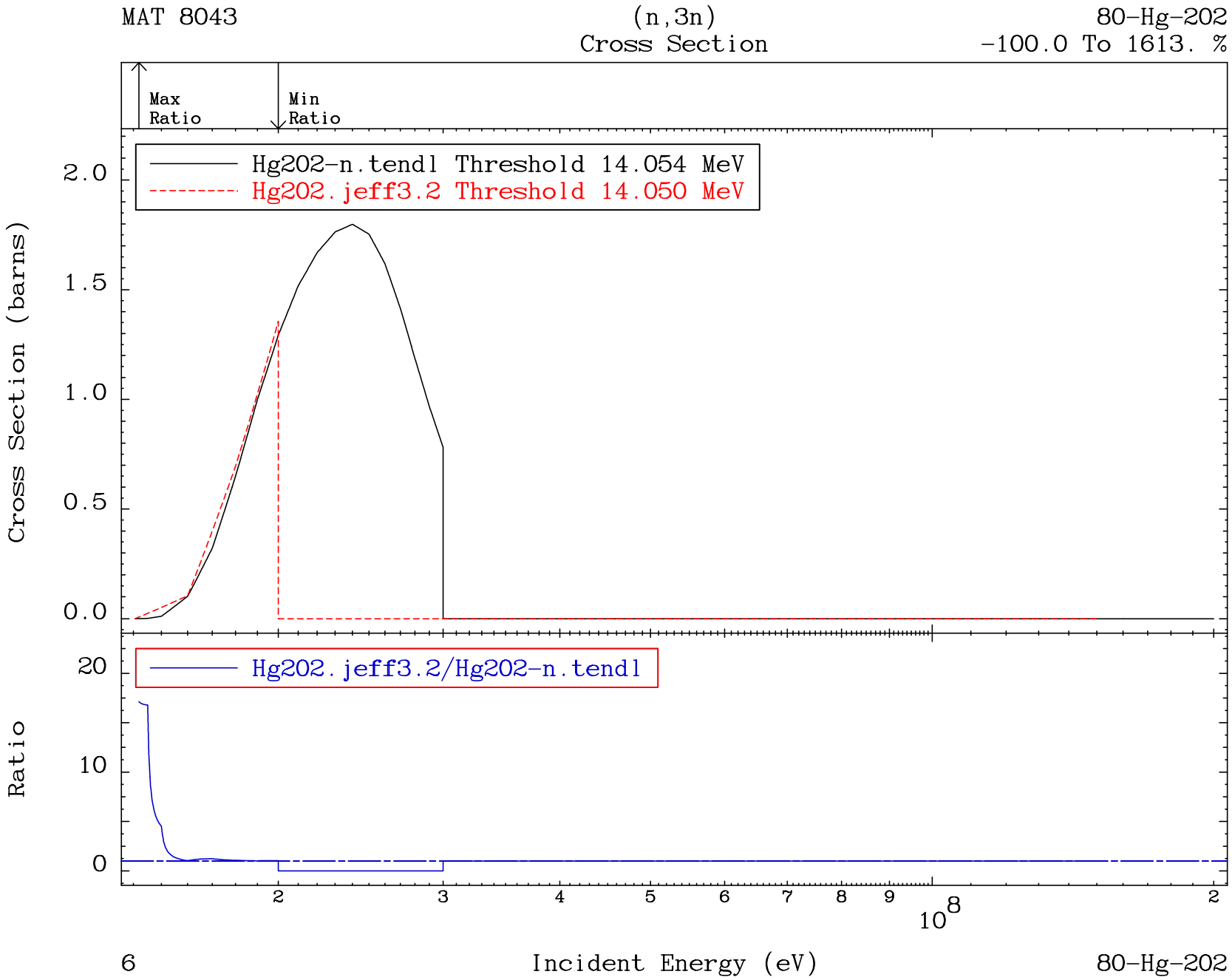

MAT 8043
Total
Cross Section
80-Hg-202
-95.43 To 9999. %
Min
Ratio
Max
Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
1
80-Hg-202

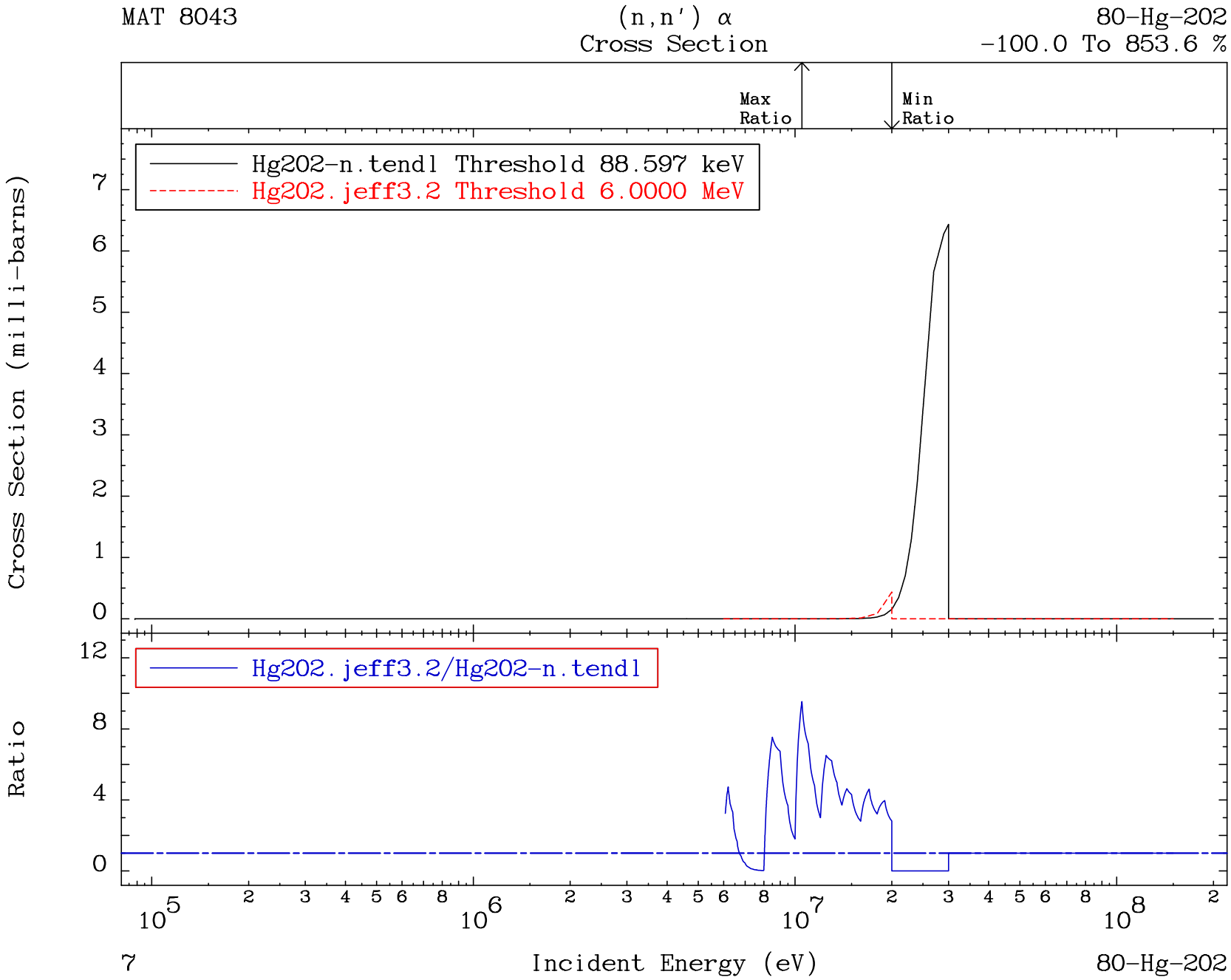

MAT 8043
Elastic
Cross Section
80-Hg-202
-99.91 To 9999. %
Min Ratio
Max Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
2
80-Hg-202

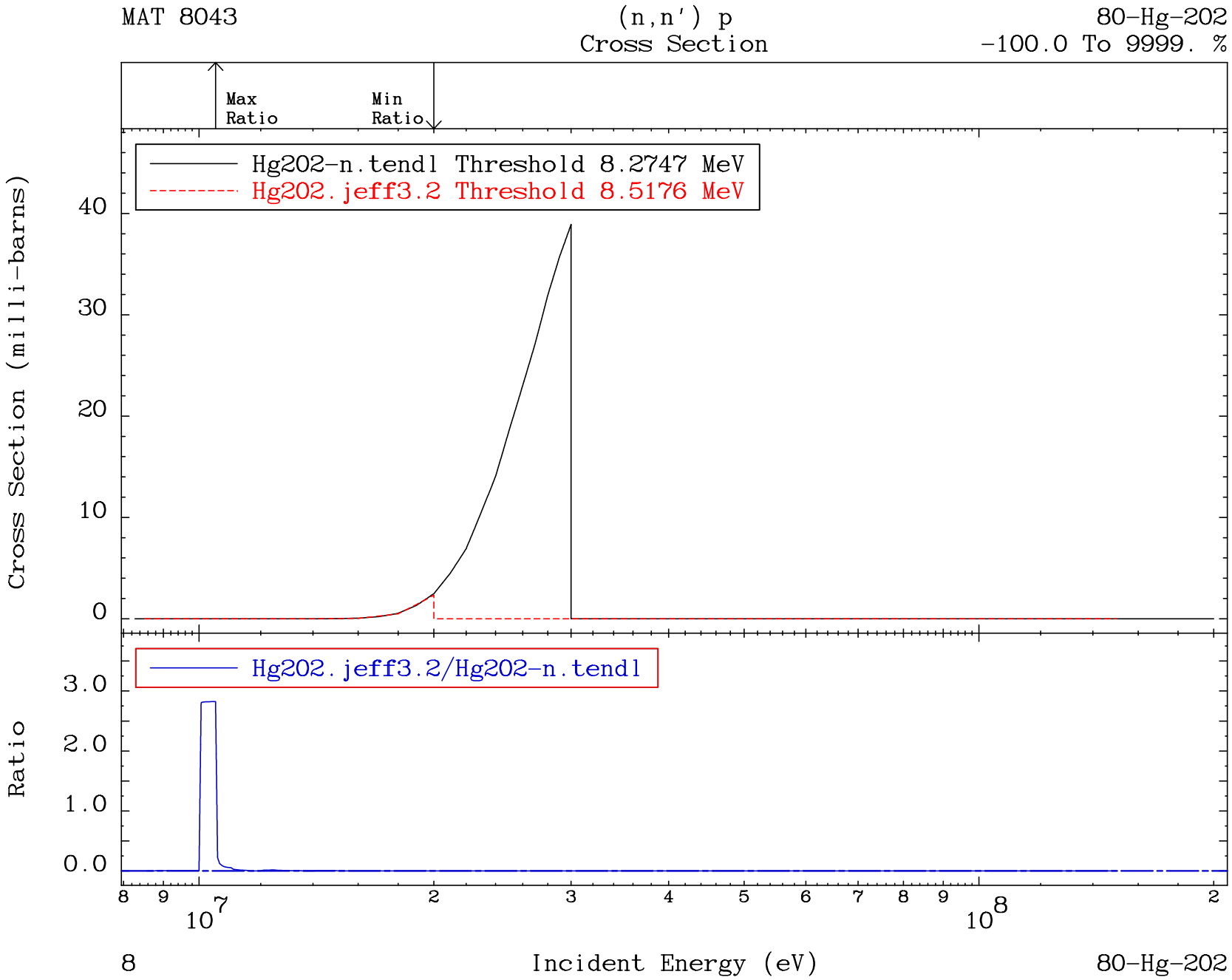

MAT 8043
Inelastic
Cross Section
80-Hg-202
-100.0 To 36.28 %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 441.71 keV
Hg202.jeff3.2 Threshold 441.79 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.6
0.0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
80-Hg-202

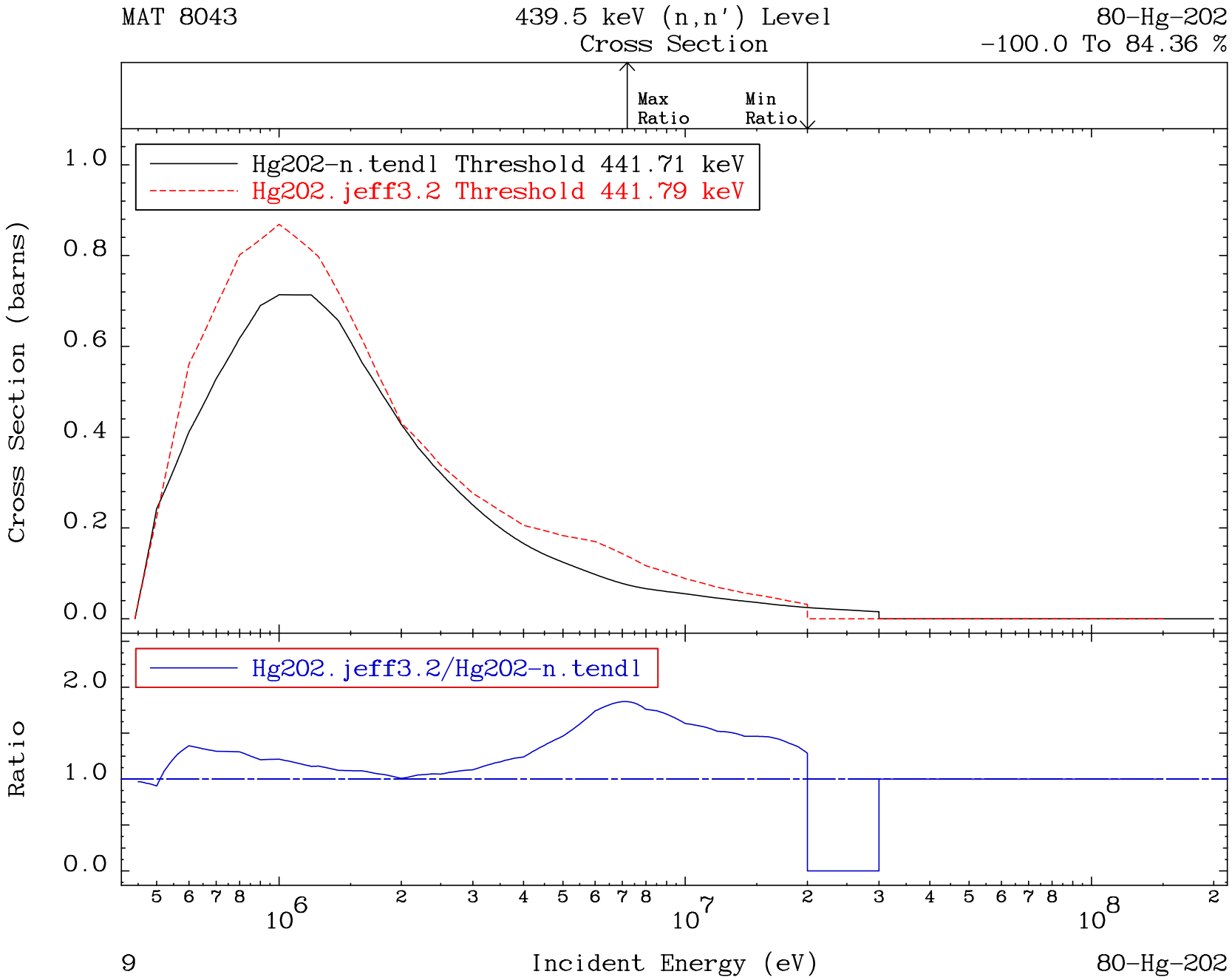

MAT 8043
(n,remainder)
Cross Section
80-Hg-202
0.136 To 11.68 %
Min Ratio
Max Ratio
Hg202-n.tendl Threshold 30.000 MeV
Hg202.jeff3.2 Threshold 20.000 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
80-Hg-202

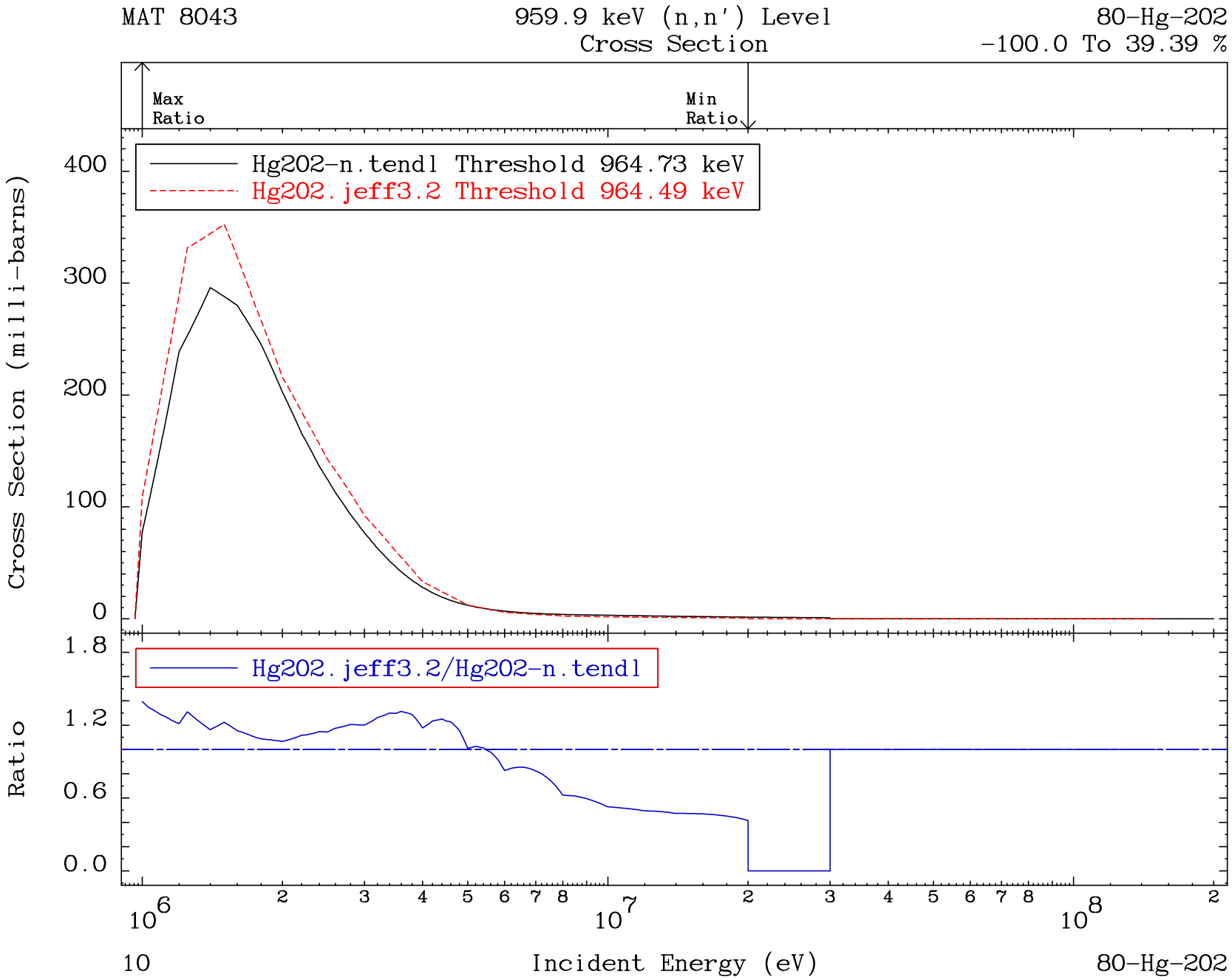

MAT 8043
(n,2n)
Cross Section
80-Hg-202
-100.0 To 230.2 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 7.7928 MeV
Hg202.jeff3.2 Threshold 7.7944 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
4
2
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
80-Hg-202

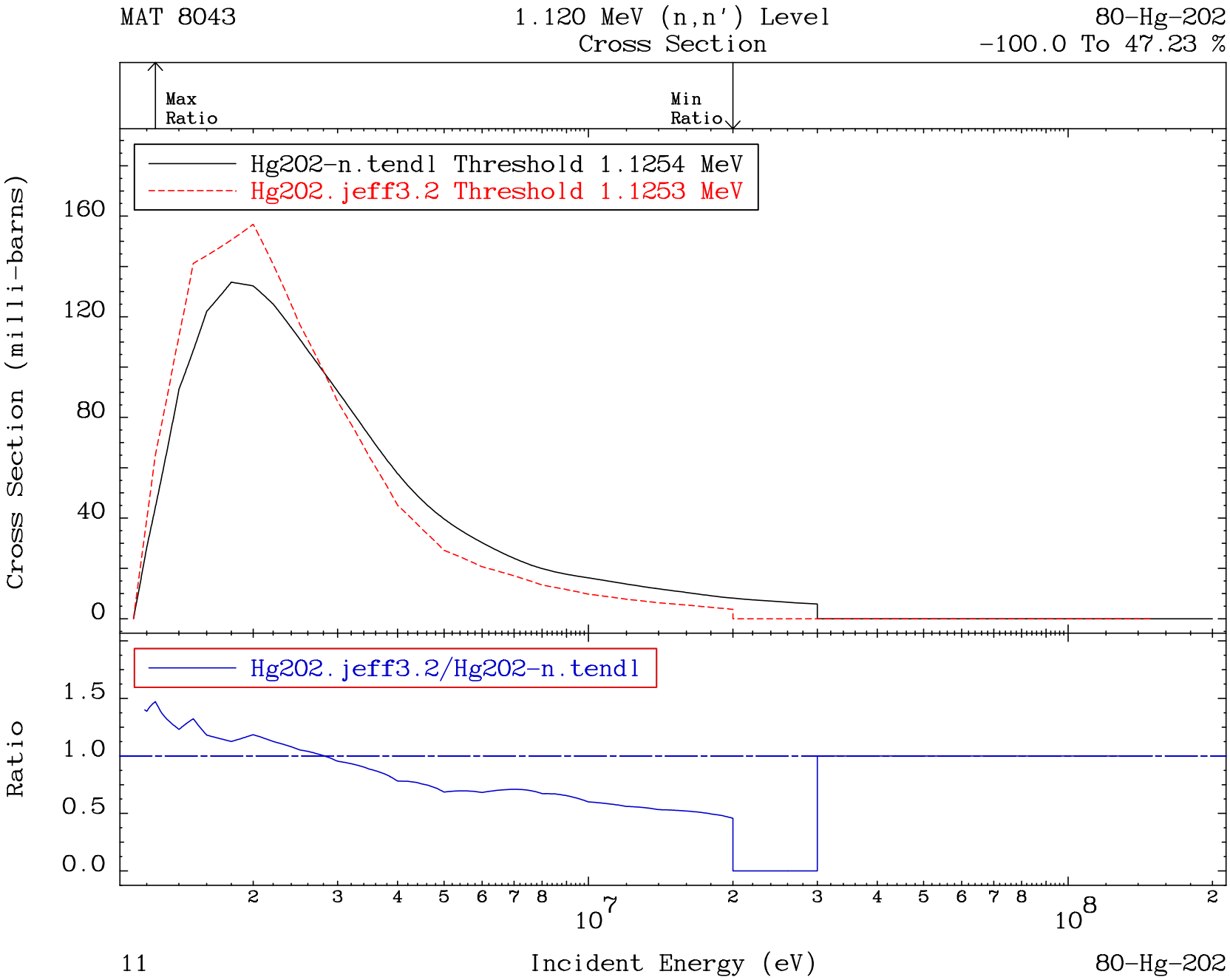

MAT 8043
(n,3n)
Cross Section
80-Hg-202
-100.0 To 1613. %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 14.054 MeV
Hg202.jeff3.2 Threshold 14.050 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
20
10
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
80-Hg-202

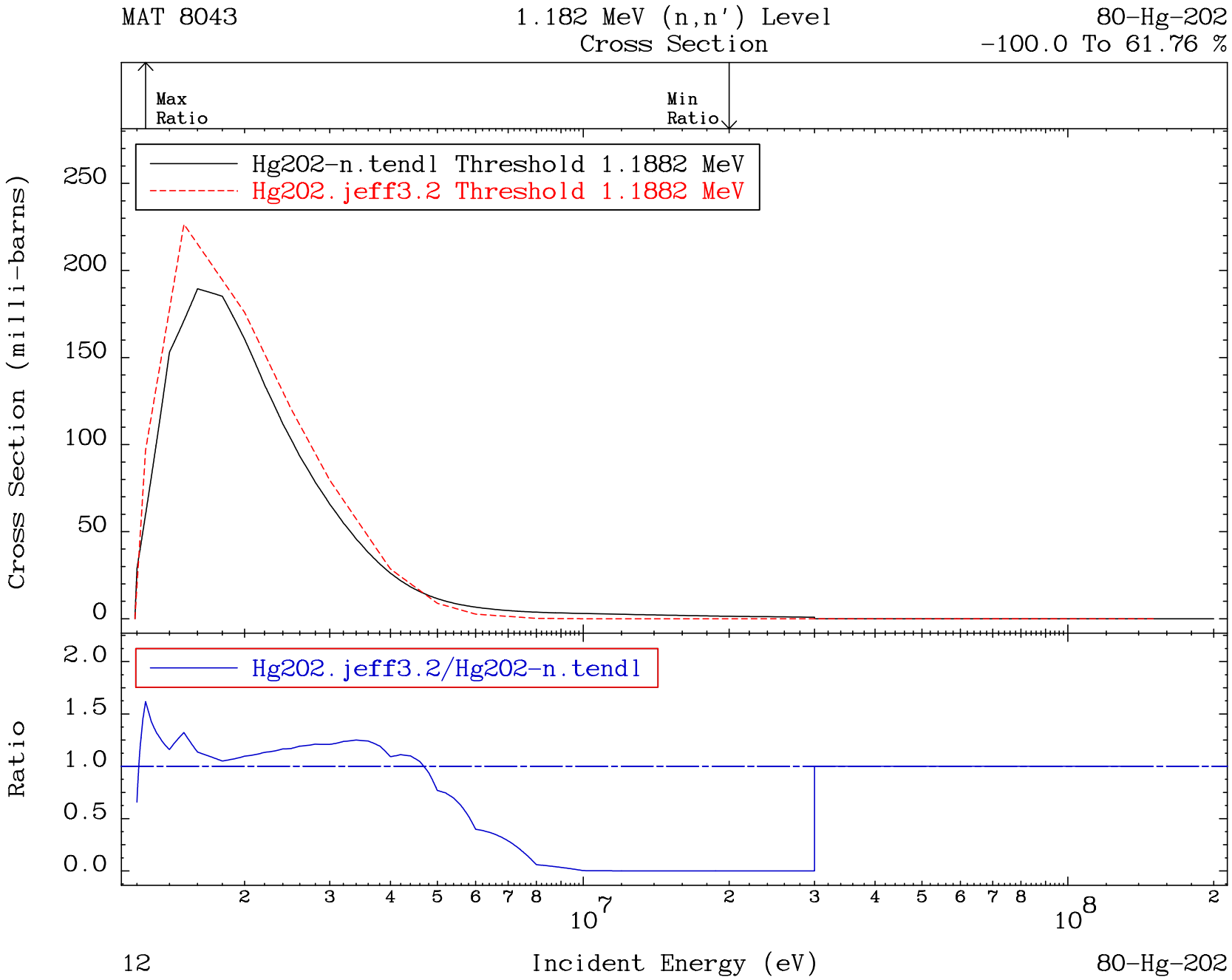

MAT 8043
(n,n') α
Cross Section
80-Hg-202
-100.0 To 853.6 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 88.597 keV
Hg202.jeff3.2 Threshold 6.0000 MeV
Cross Section (milli-barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
80-Hg-202

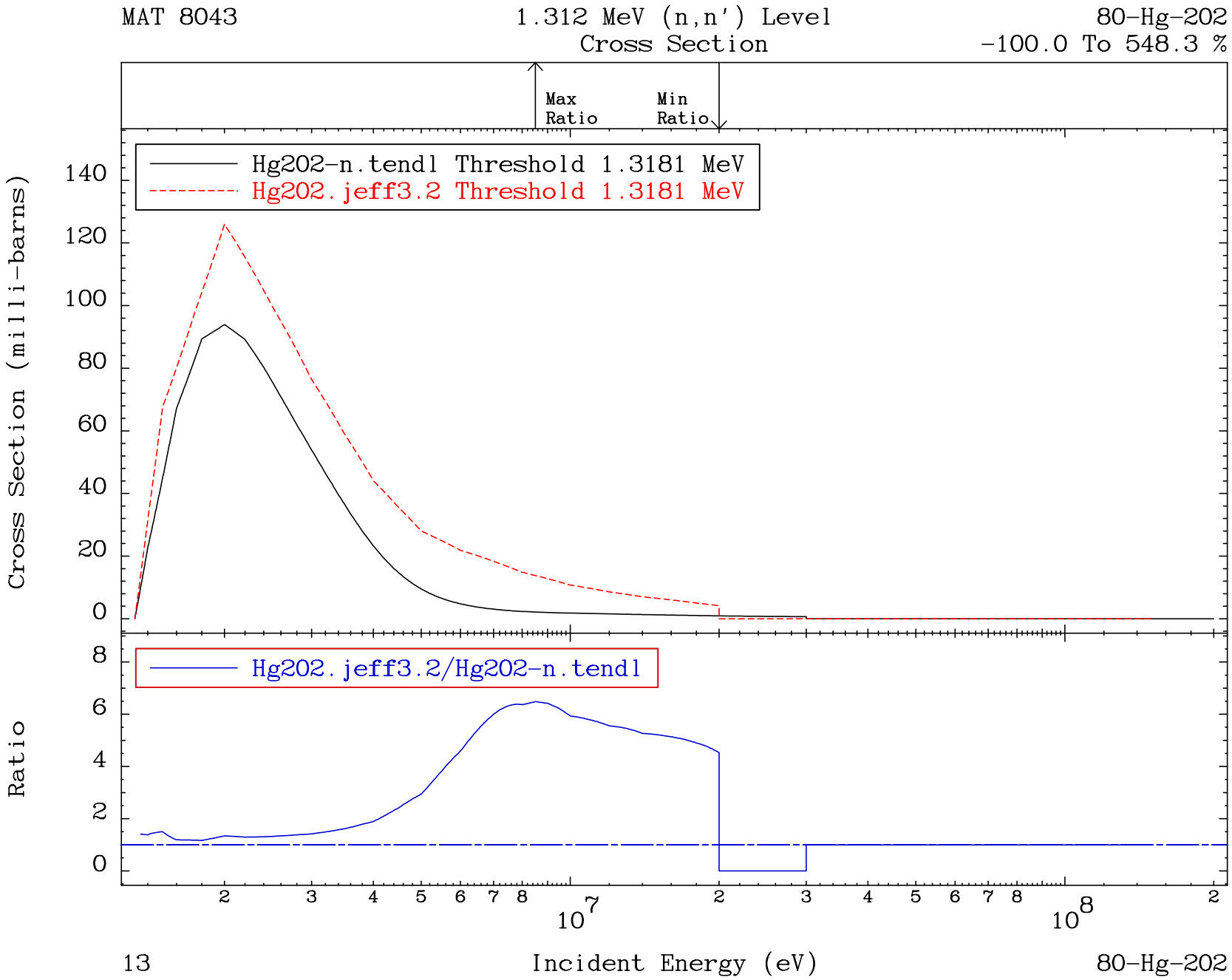

MAT 8043
(n,n') p
Cross Section
80-Hg-202
-100.0 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 8.2747 MeV
Hg202.jeff3.2 Threshold 8.5176 MeV
Cross Section (milli-barns)
40
30
20
10
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
3.0
2.0
1.0
0.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
80-Hg-202

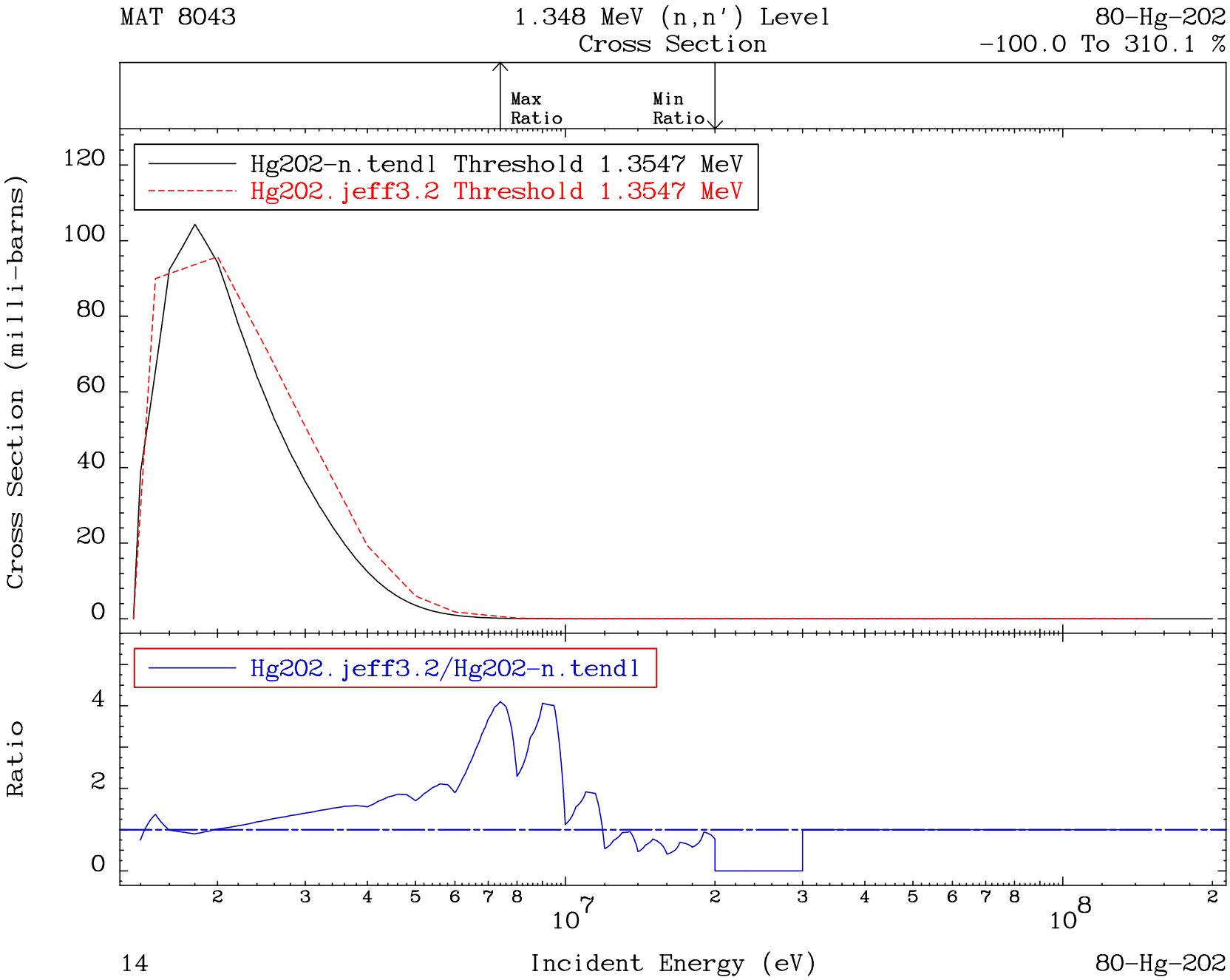

MAT 8043
439.5 keV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 84.36 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 441.71 keV
Hg202.jeff3.2 Threshold 441.79 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
2.0
1.0
0.0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
80-Hg-202

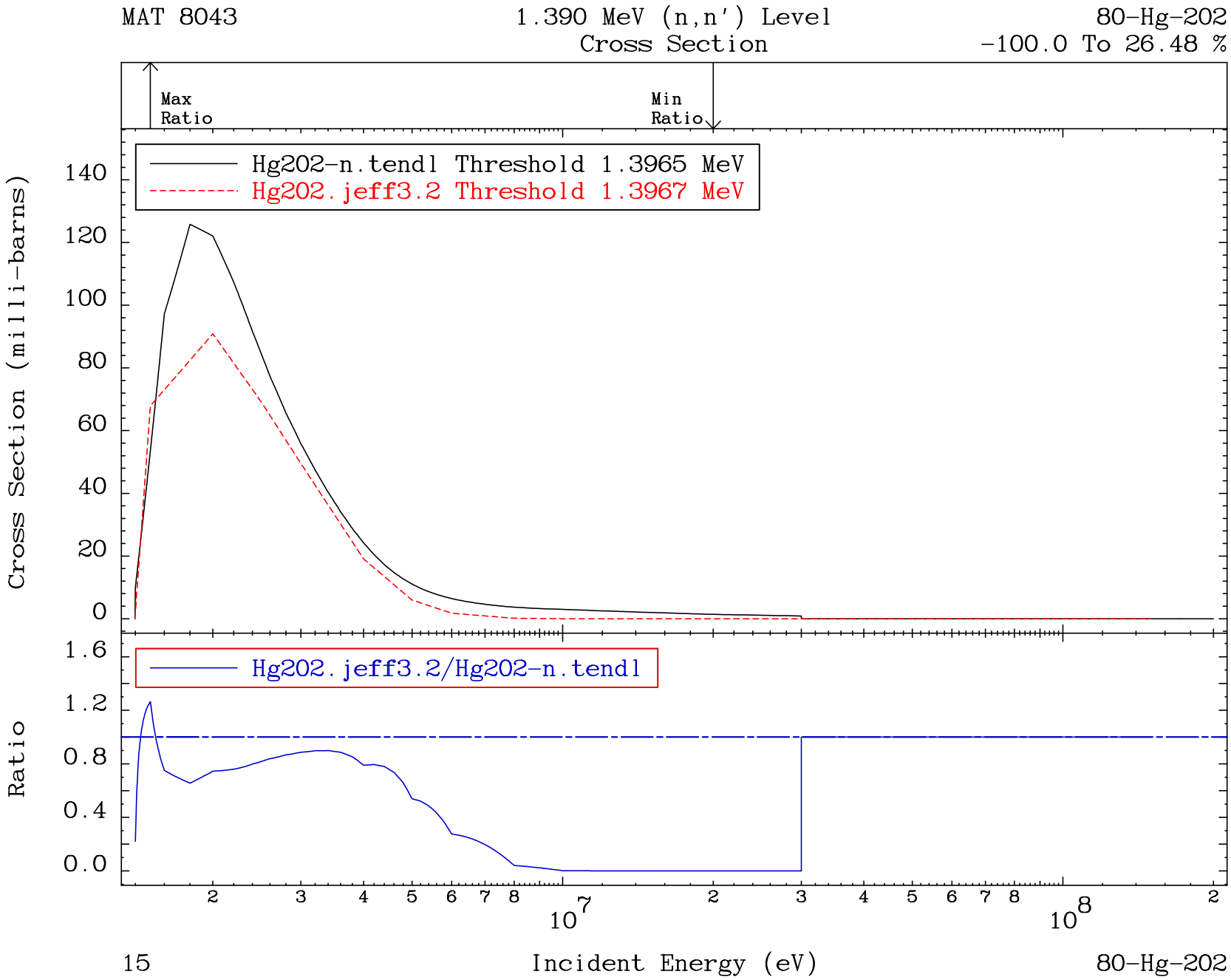

MAT 8043
959.9 keV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 39.39 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 964.73 keV
Hg202.jeff3.2 Threshold 964.49 keV
Cross Section (milli-barns)
400
300
200
100
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.8
1.2
0.6
0.0
10^6
10^7
10^8
10
Incident Energy (eV)
80-Hg-202

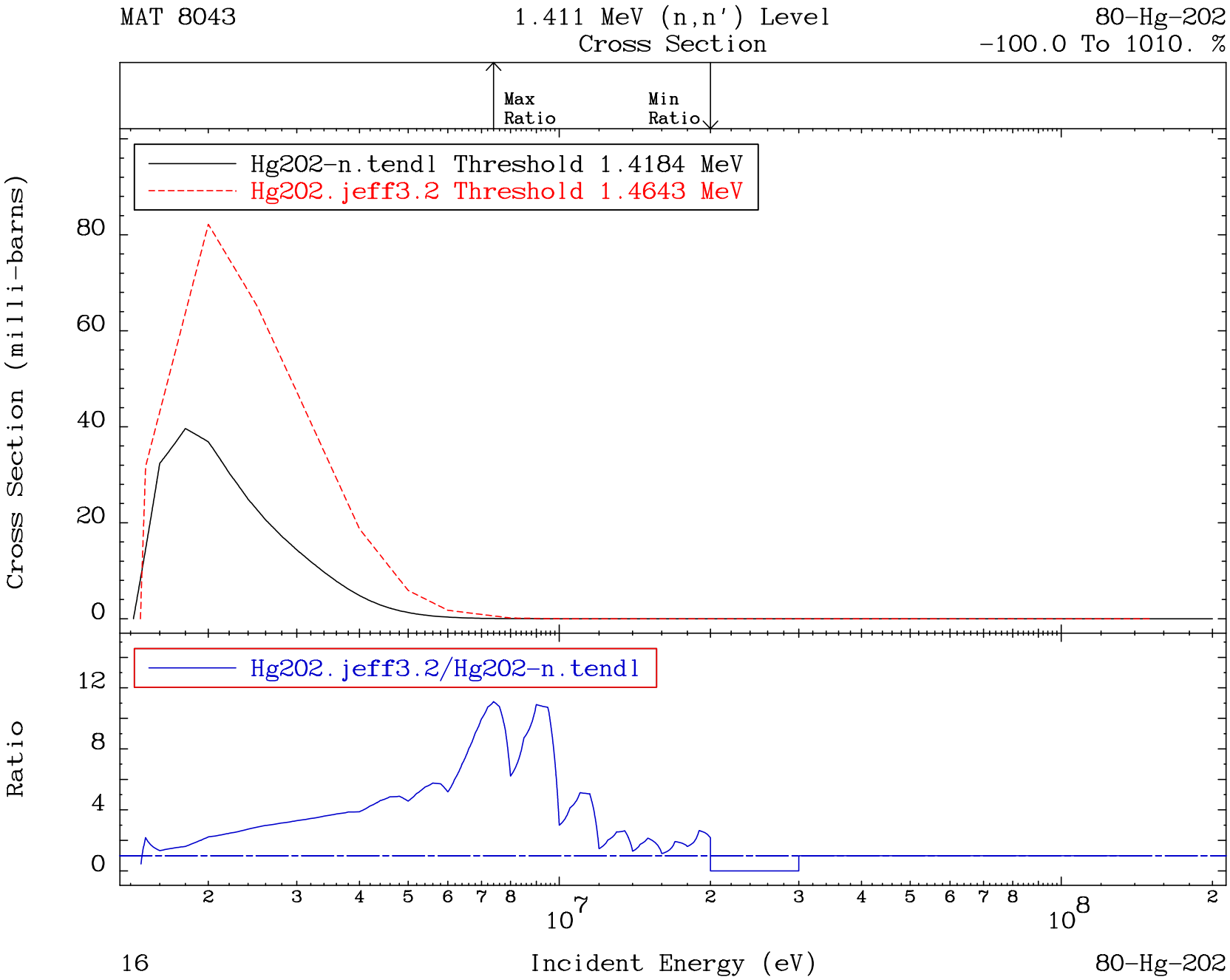

MAT 8043
1.120 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 47.23 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.1254 MeV
Hg202.jeff3.2 Threshold 1.1253 MeV
Cross Section (milli-barns)
160
120
80
40
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.5
1.0
0.5
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
80-Hg-202

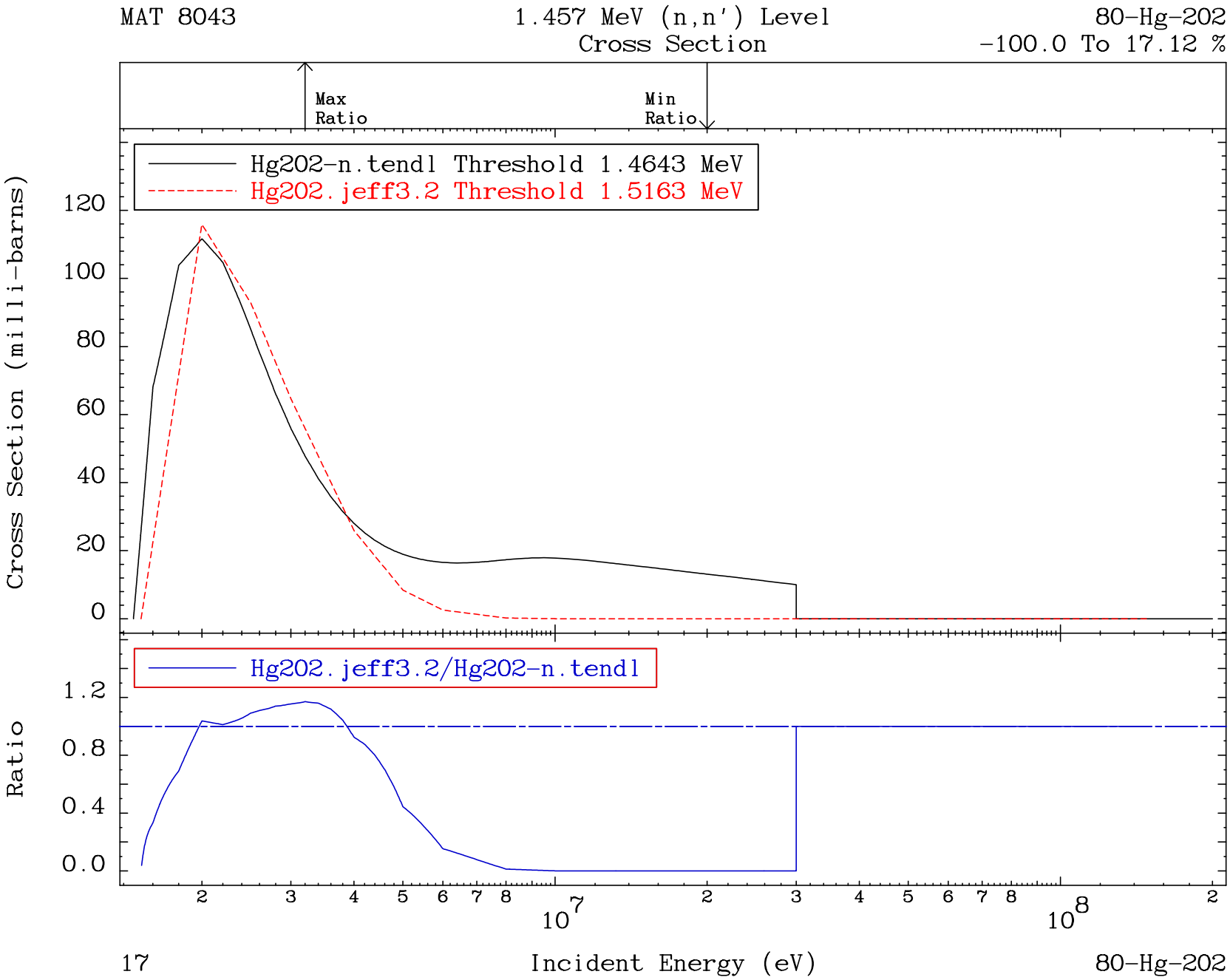

MAT 8043
1.182 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 61.76 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.1882 MeV
Hg202.jeff3.2 Threshold 1.1882 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
2.0
1.5
1.0
0.5
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
80-Hg-202

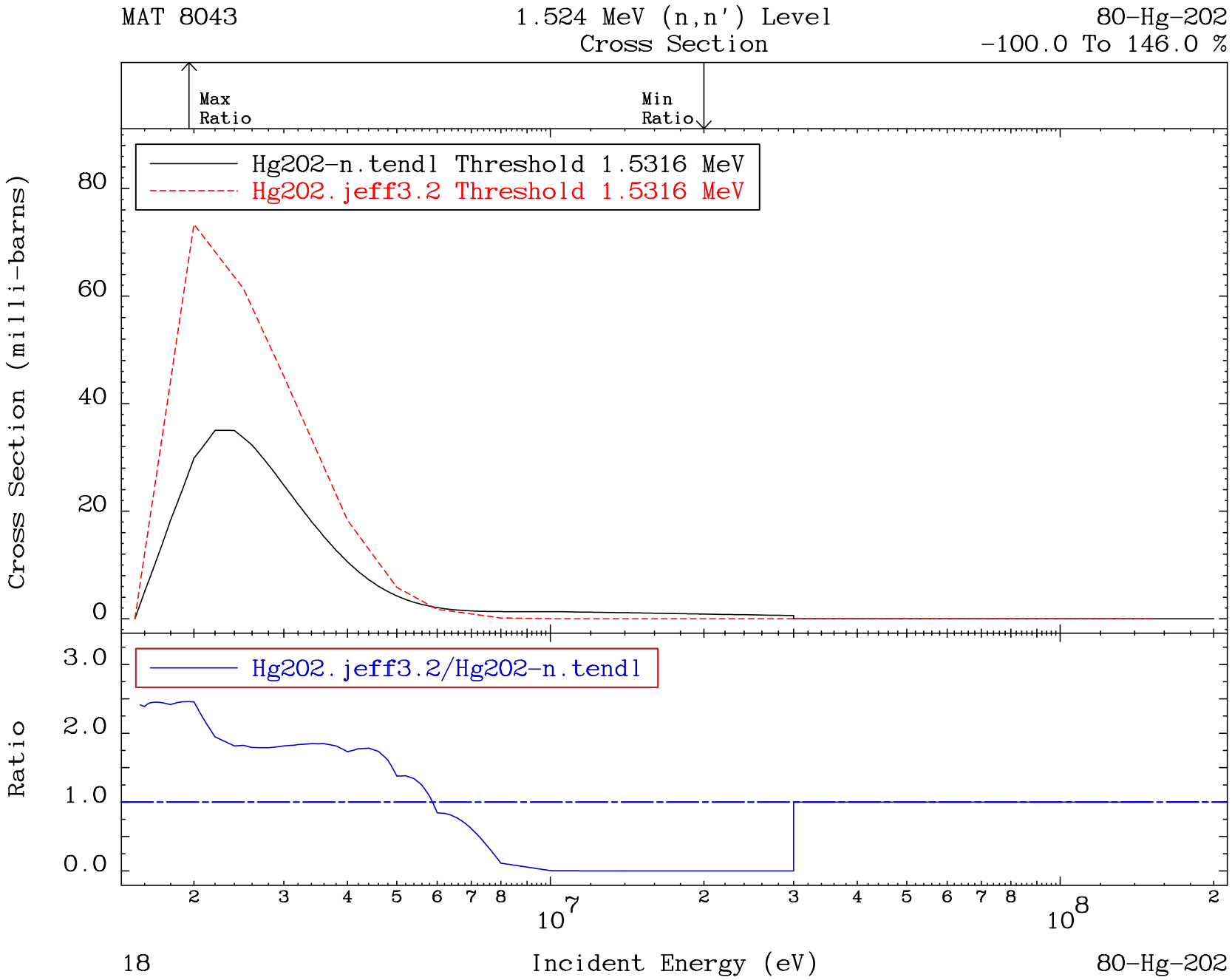

MAT 8043
1.312 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 548.3 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.3181 MeV
Hg202.jeff3.2 Threshold 1.3181 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
8
6
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
80-Hg-202

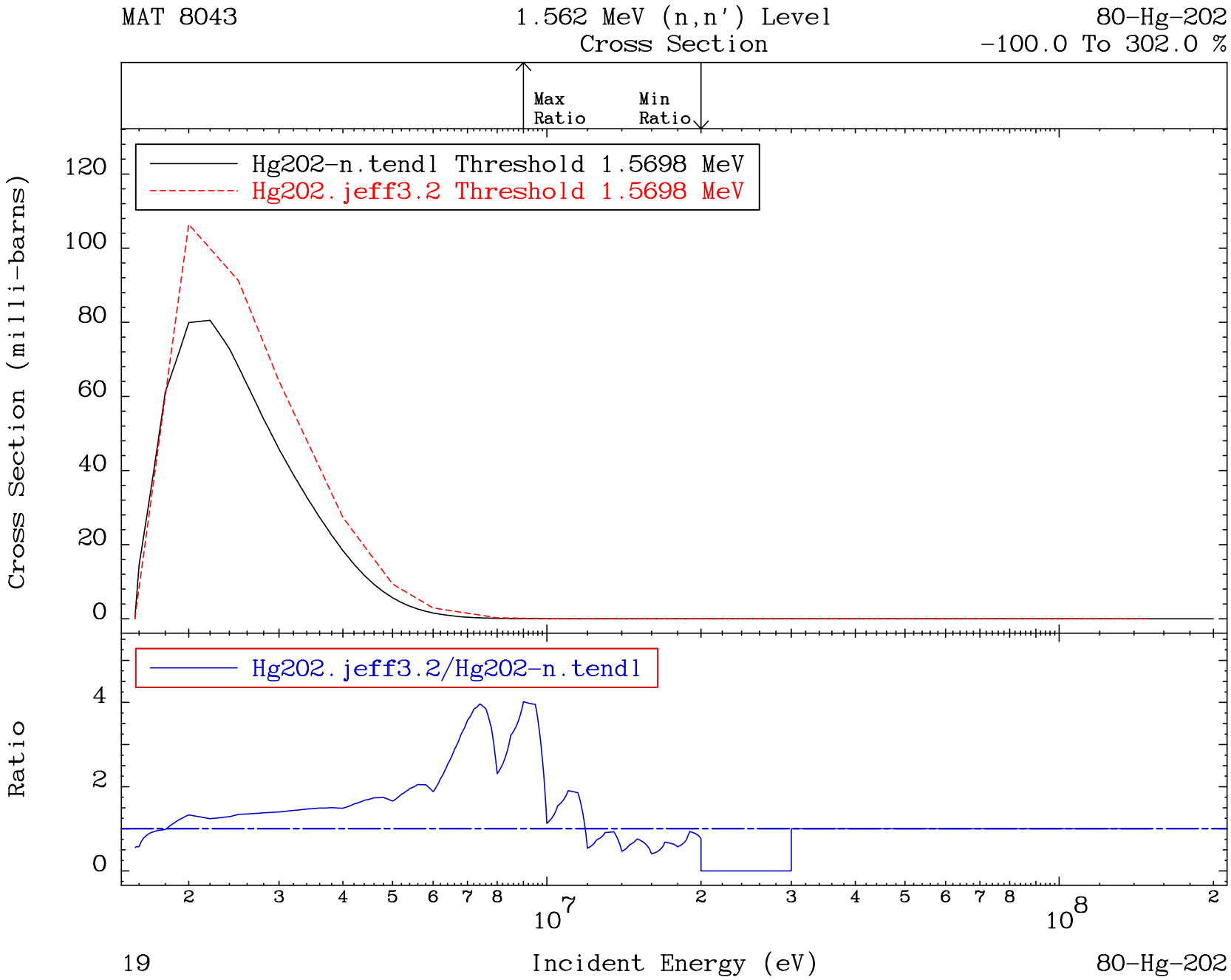

MAT 8043
1.348 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 310.1 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.3547 MeV
Hg202.jeff3.2 Threshold 1.3547 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
80-Hg-202

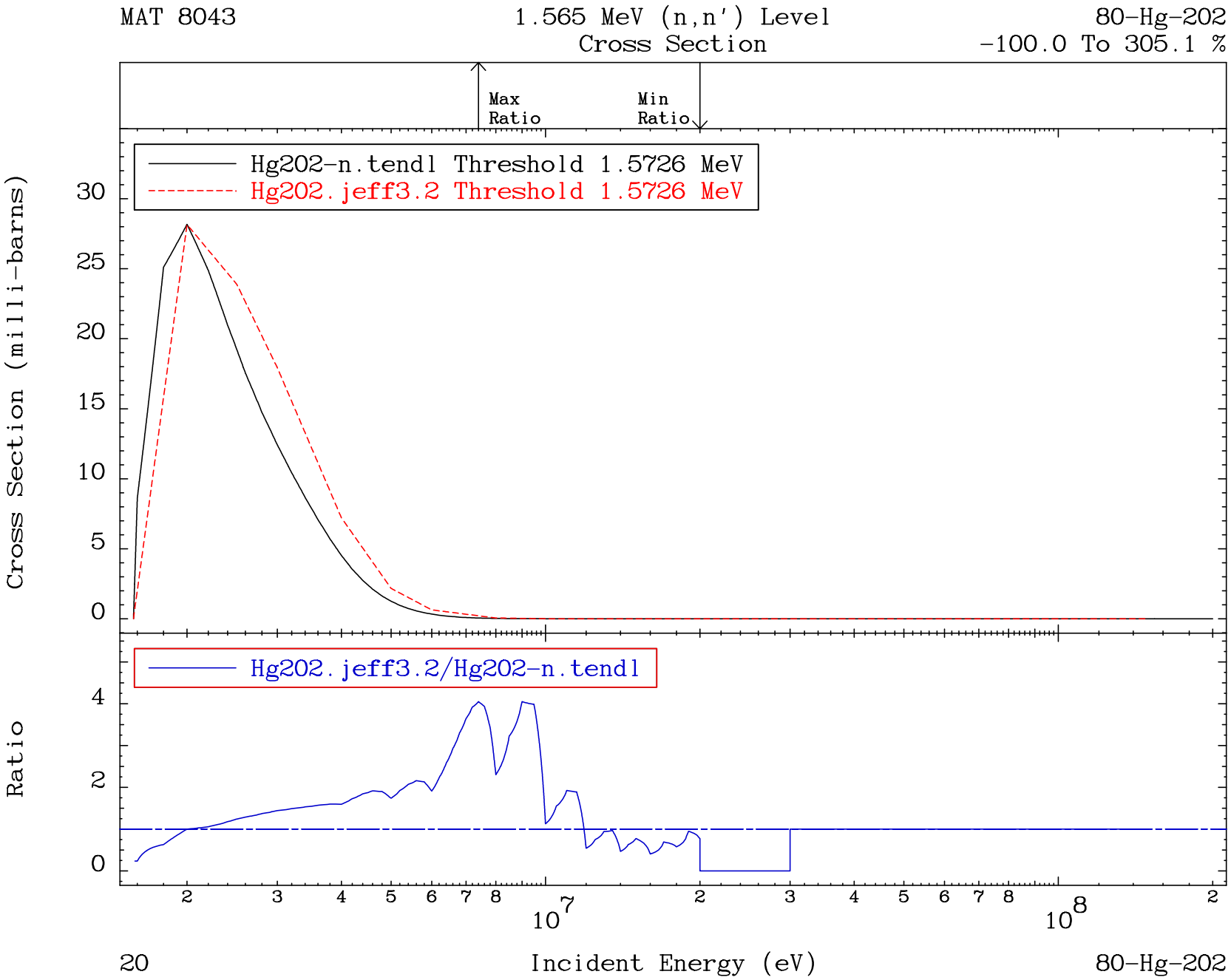

MAT 8043
1.390 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 26.48 %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 1.3965 MeV
Hg202.jeff3.2 Threshold 1.3967 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
80-Hg-202

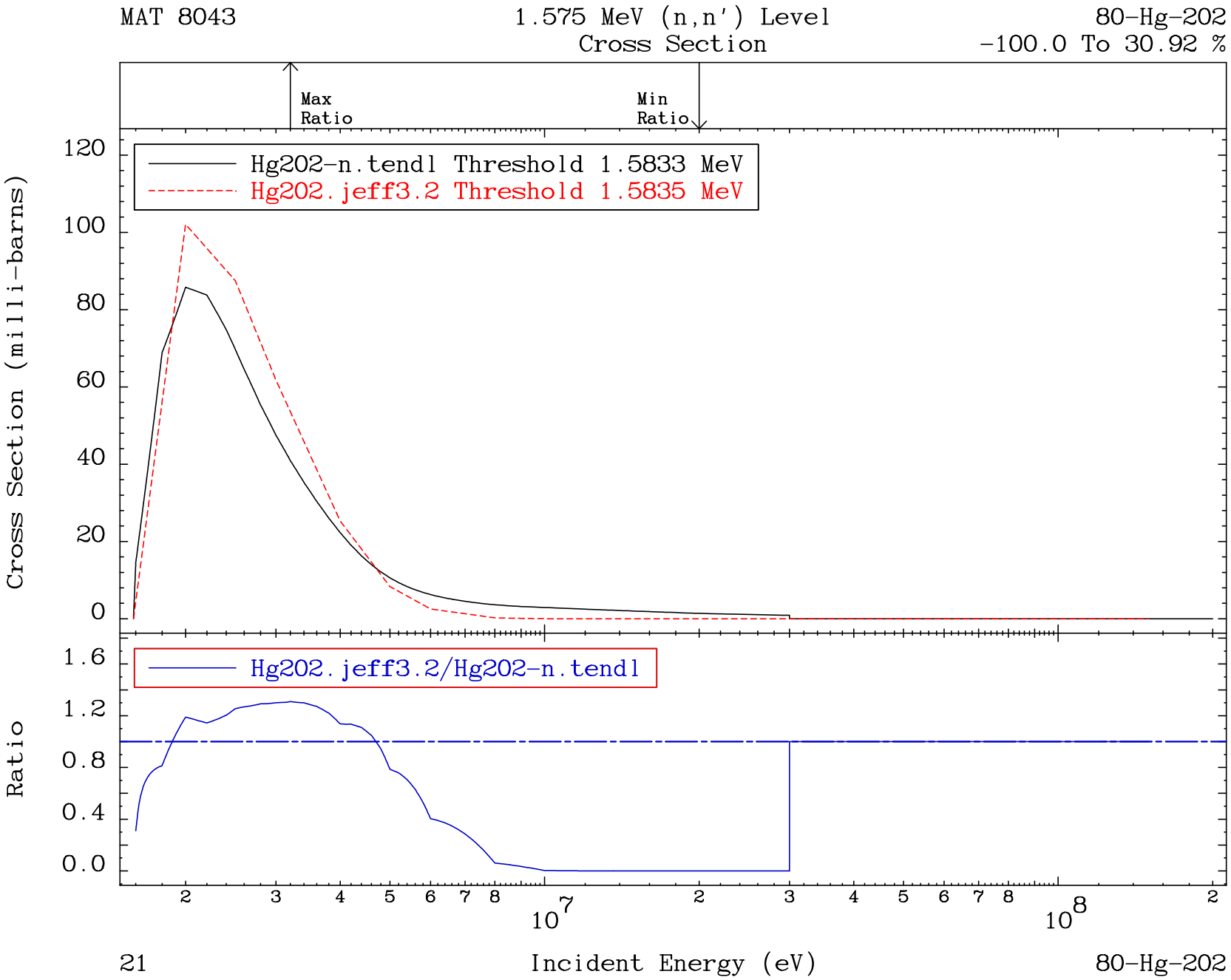

MAT 8043
1.411 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 1010. %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 1.4184 MeV
Hg202.jeff3.2 Threshold 1.4643 MeV
Cross Section (milli-barns)
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
12
8
4
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
80-Hg-202

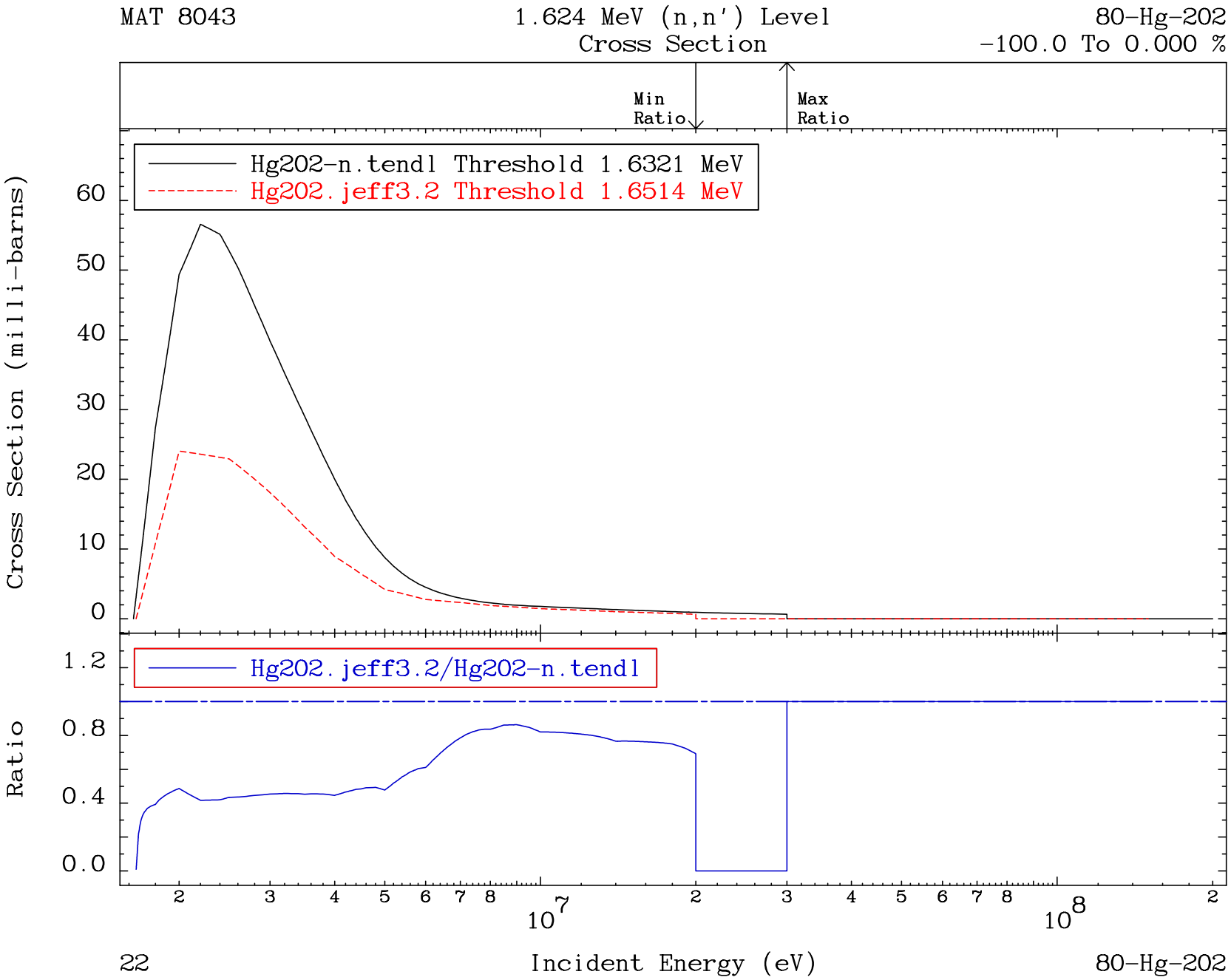

MAT 8043
1.457 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 17.12 %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 1.4643 MeV
Hg202.jeff3.2 Threshold 1.5163 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
80-Hg-202

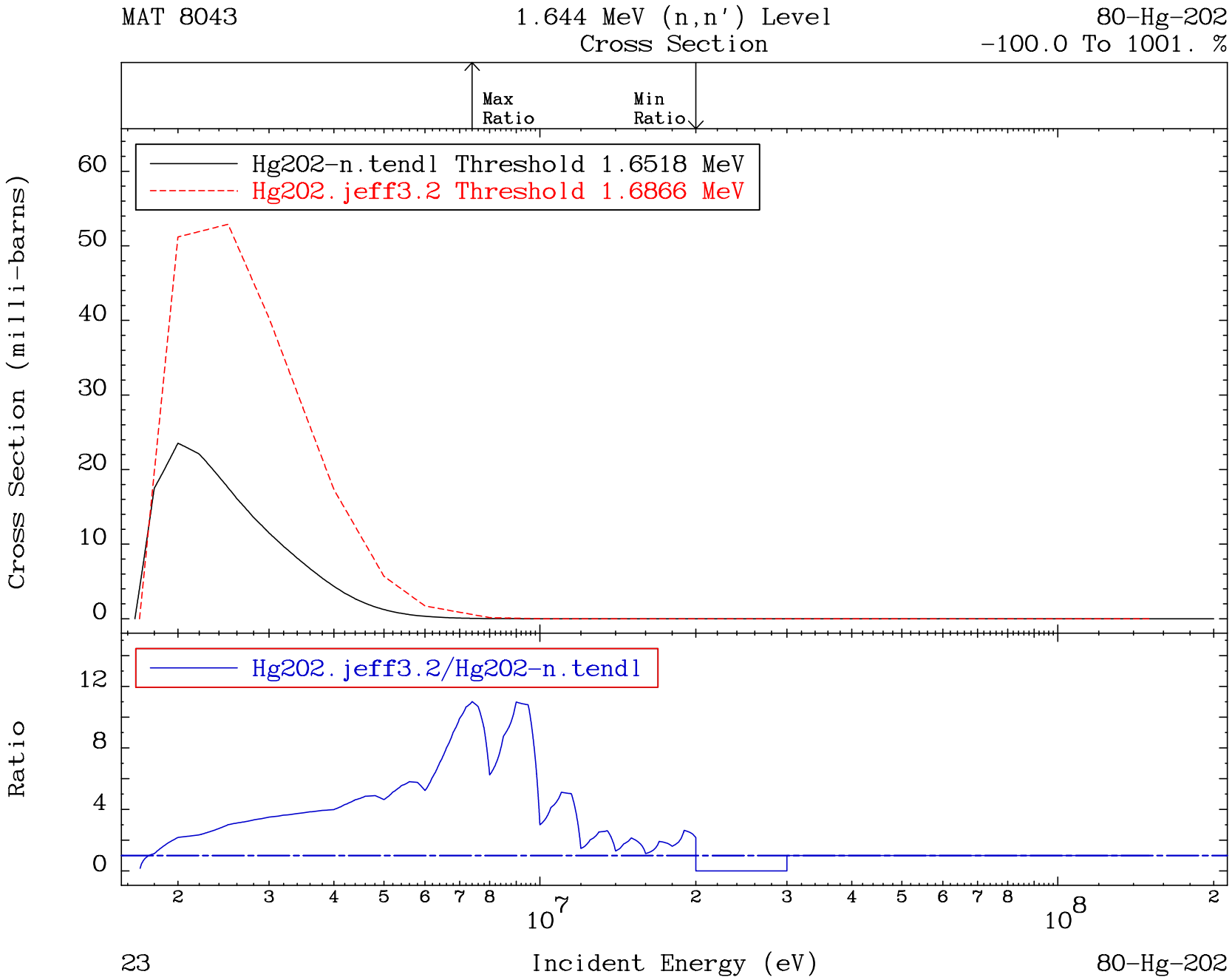

MAT 8043
1.524 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 146.0 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.5316 MeV
Hg202.jeff3.2 Threshold 1.5316 MeV
Cross Section (milli-barns)
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
80-Hg-202

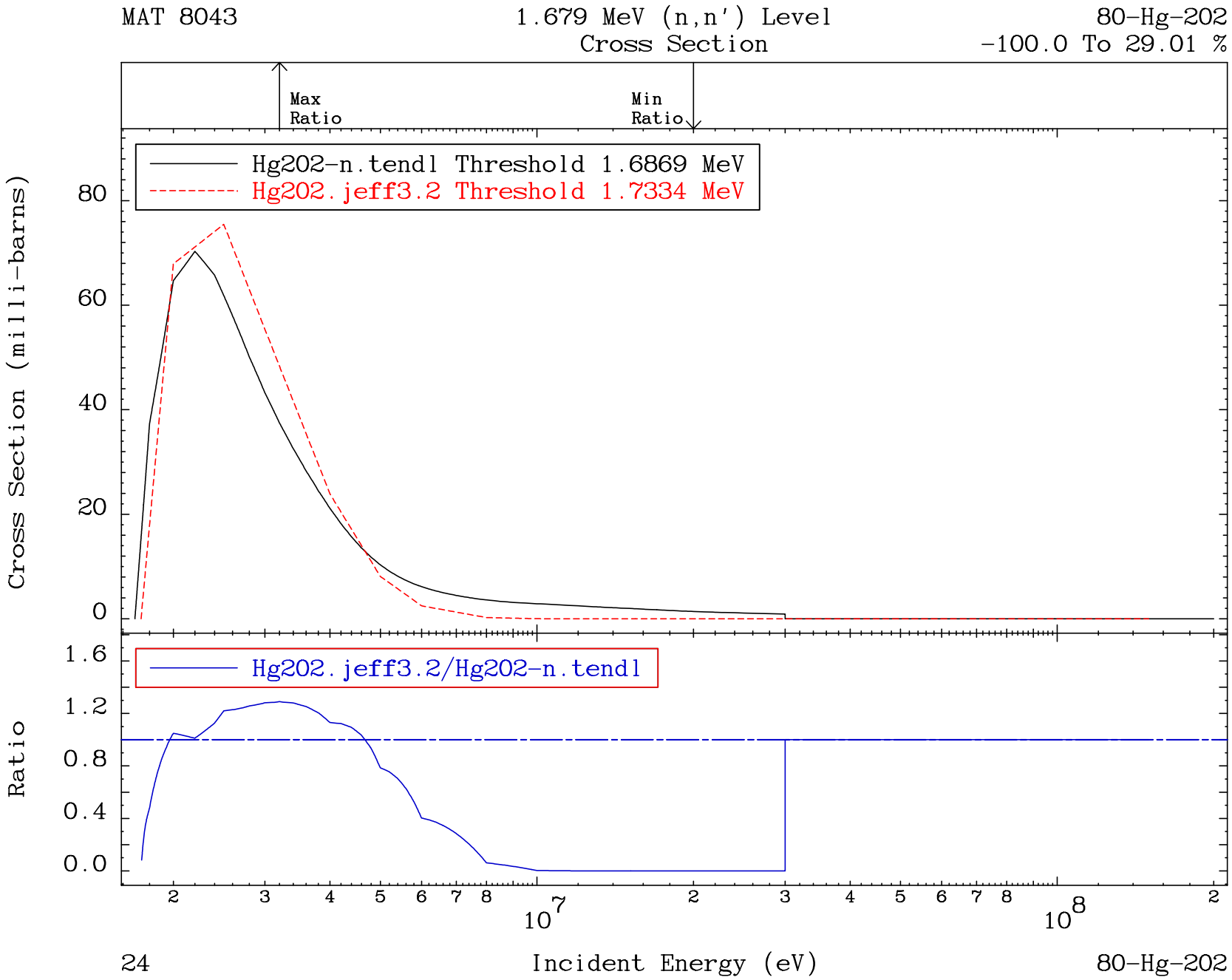

MAT 8043
1.562 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 302.0 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.5698 MeV
Hg202.jeff3.2 Threshold 1.5698 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
80-Hg-202

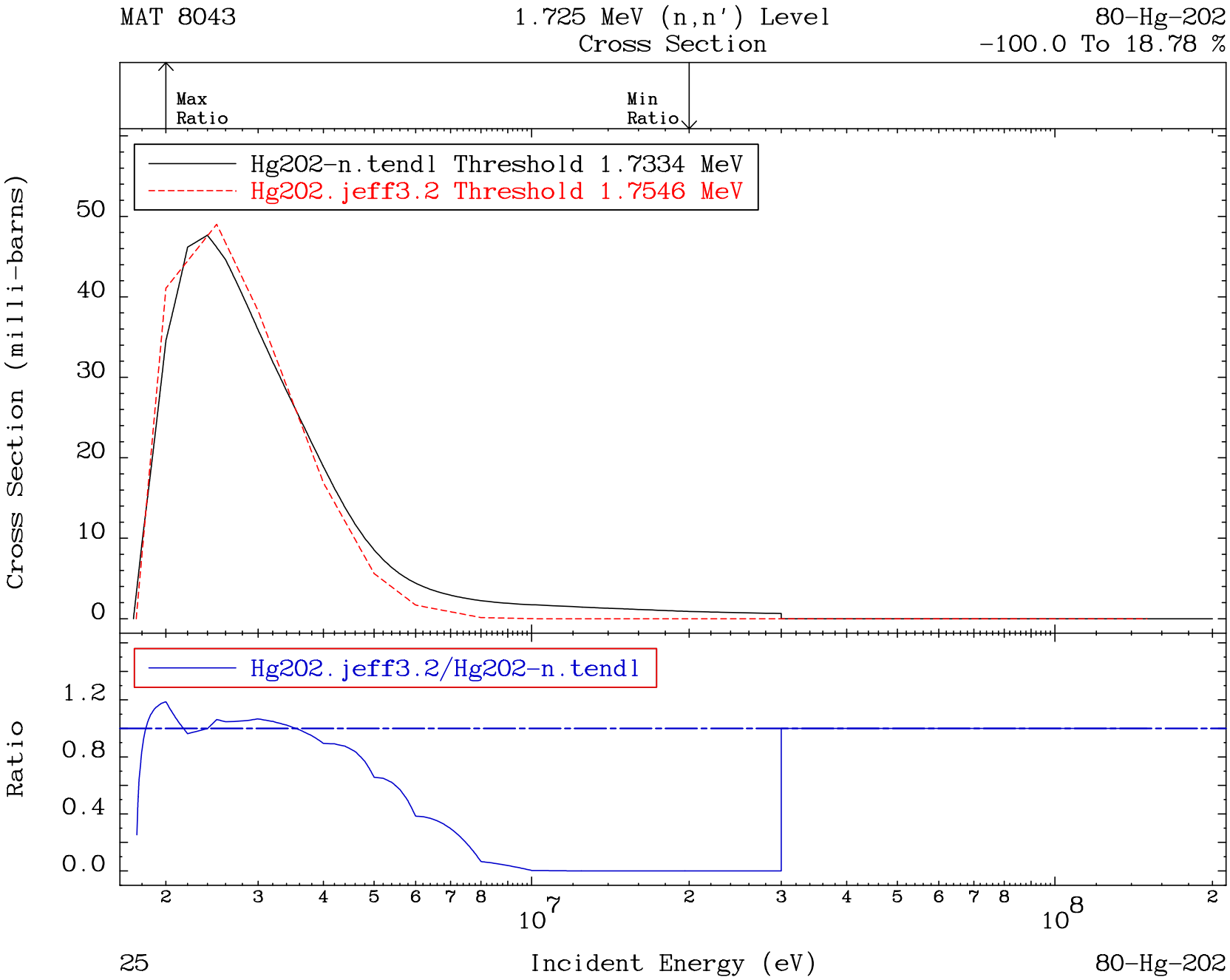

MAT 8043
1.565 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 305.1 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.5726 MeV
Hg202.jeff3.2 Threshold 1.5726 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
80-Hg-202

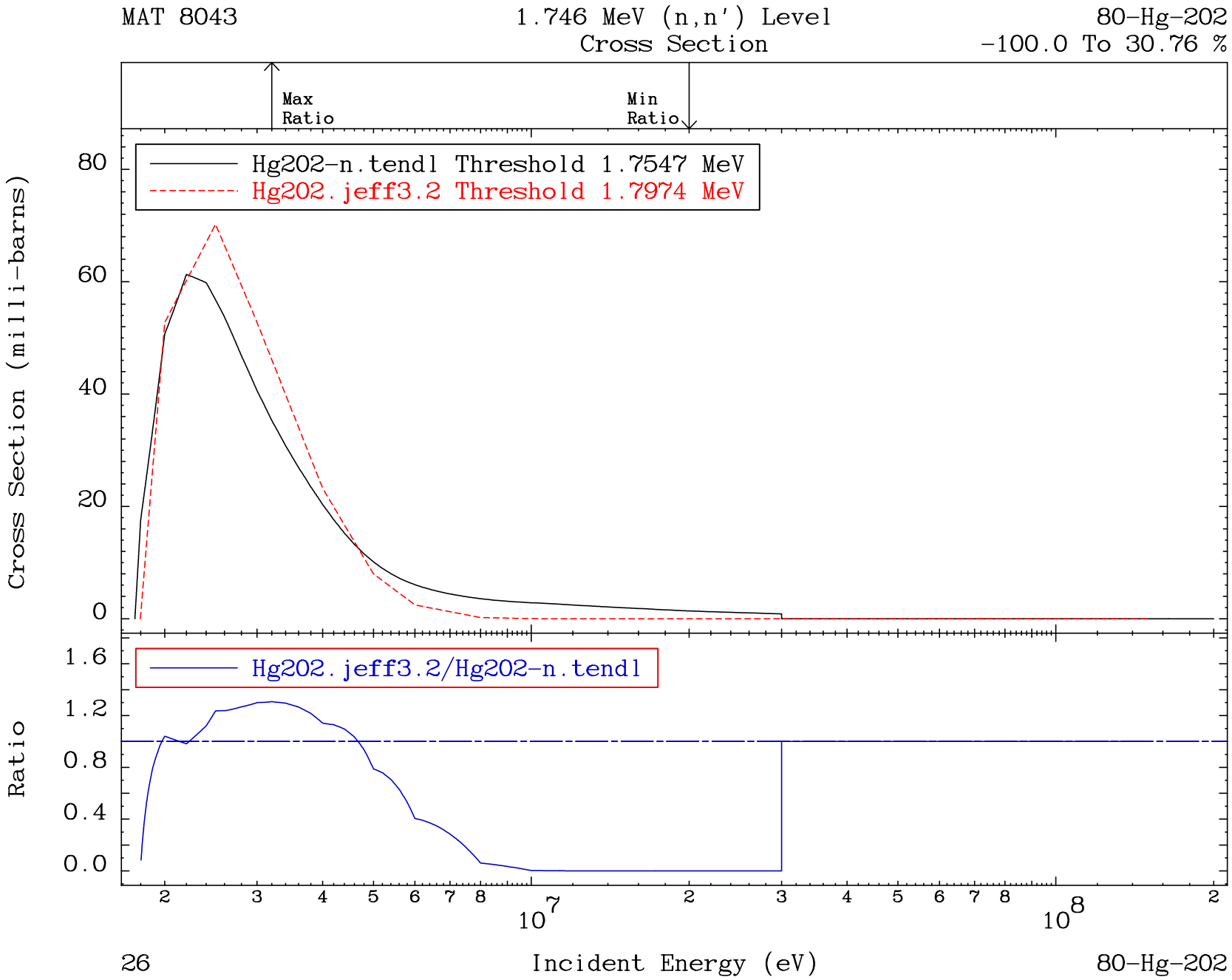

MAT 8043
1.575 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 30.92 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.5833 MeV
Hg202.jeff3.2 Threshold 1.5835 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
80-Hg-202

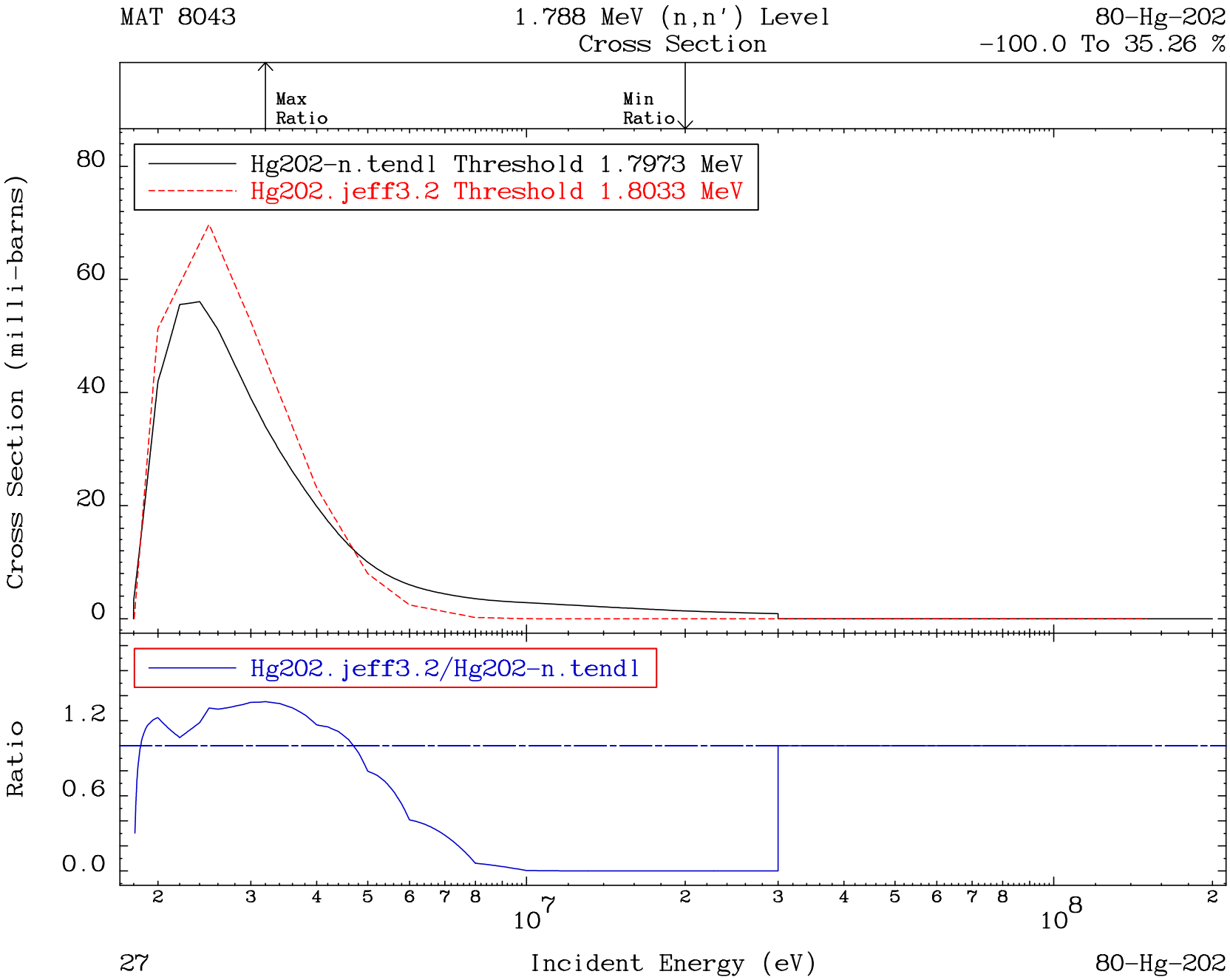

MAT 8043
1.624 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 0.000 %
Min Ratio
Max Ratio
Hg202-n.tendl Threshold 1.6321 MeV
Hg202.jeff3.2 Threshold 1.6514 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
80-Hg-202

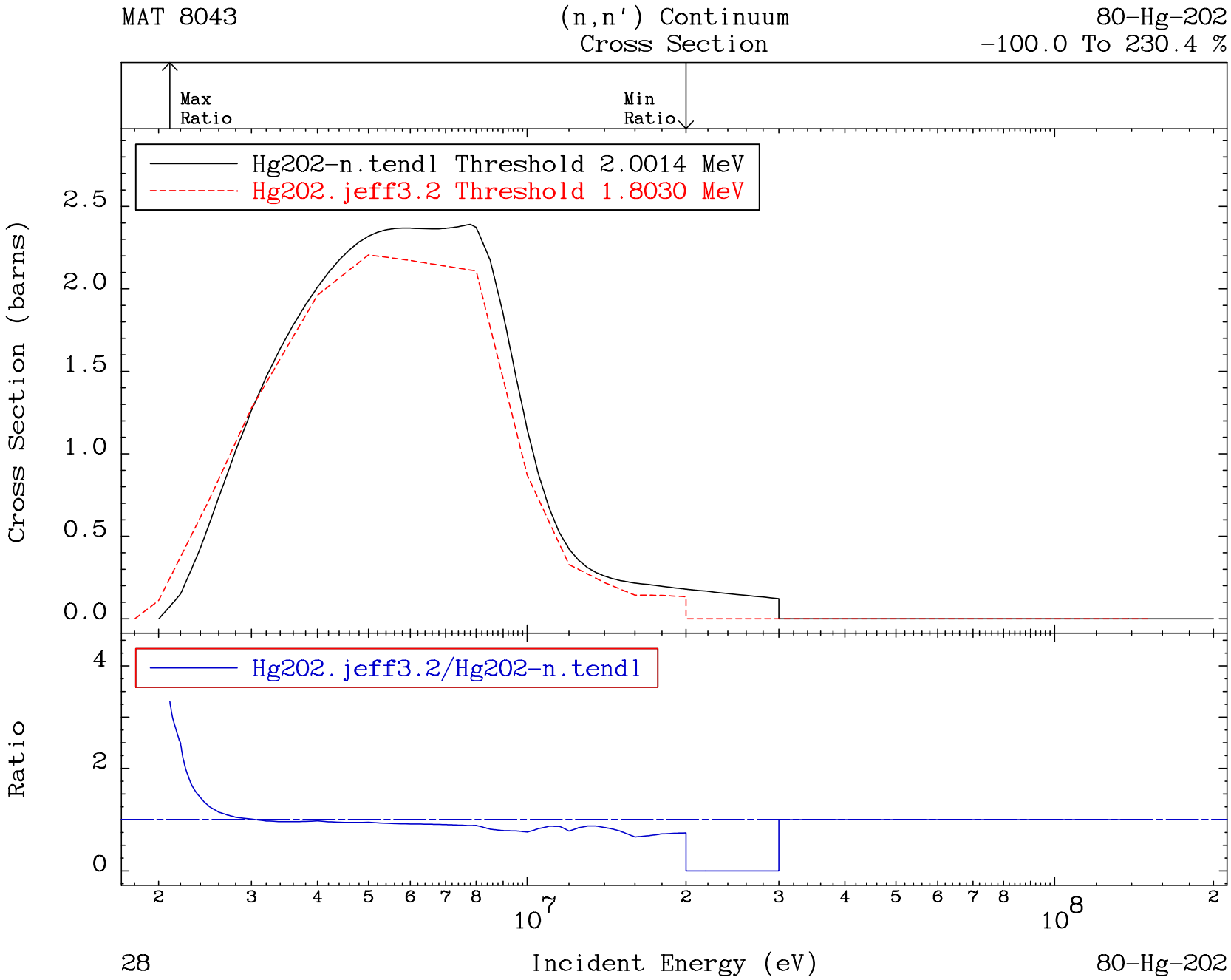

MAT 8043
1.644 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 1001. %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.6518 MeV
Hg202.jeff3.2 Threshold 1.6866 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
12
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
80-Hg-202

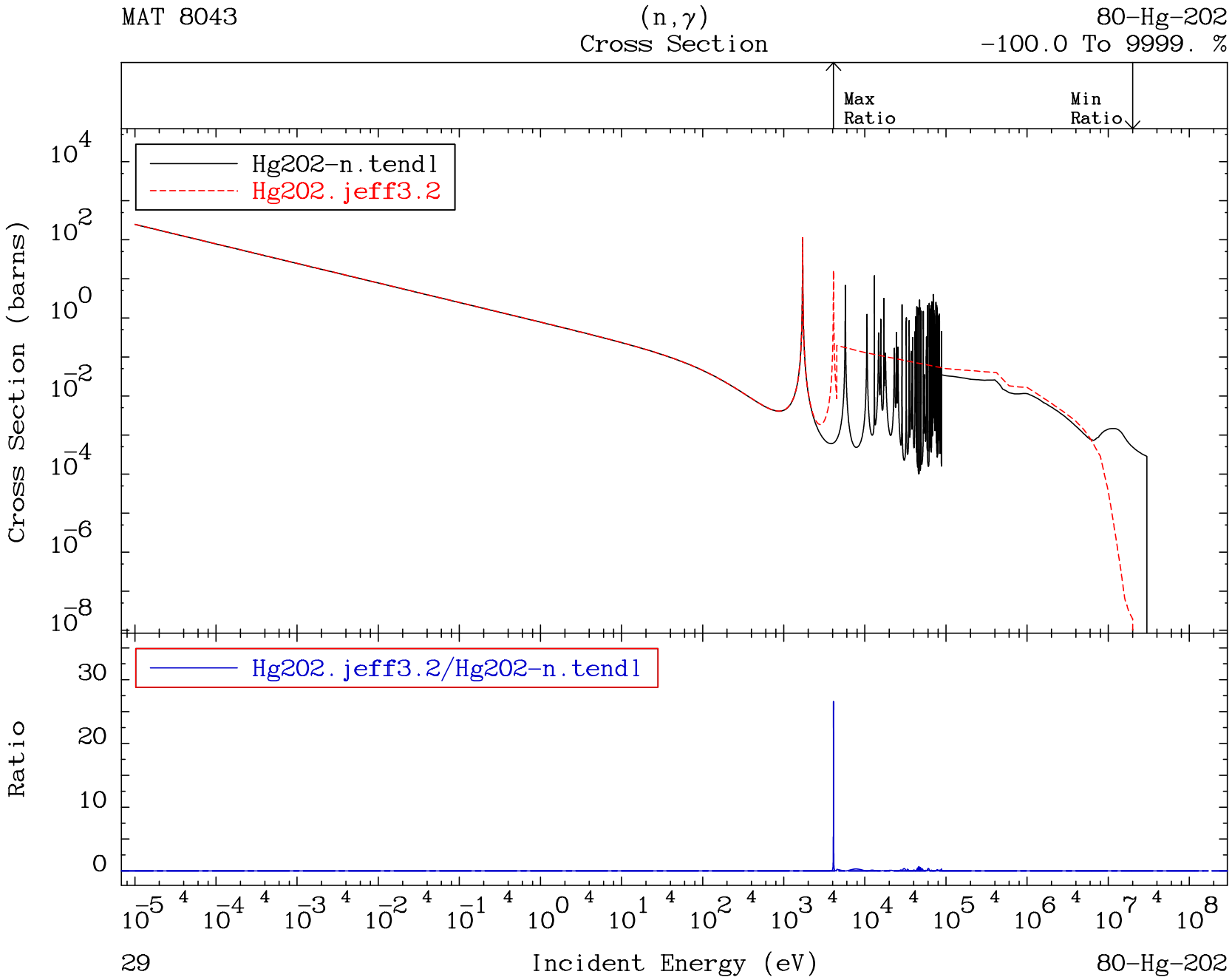

MAT 8043
1.679 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 29.01 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.6869 MeV
Hg202.jeff3.2 Threshold 1.7334 MeV
Cross Section (milli-barns)
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
80-Hg-202

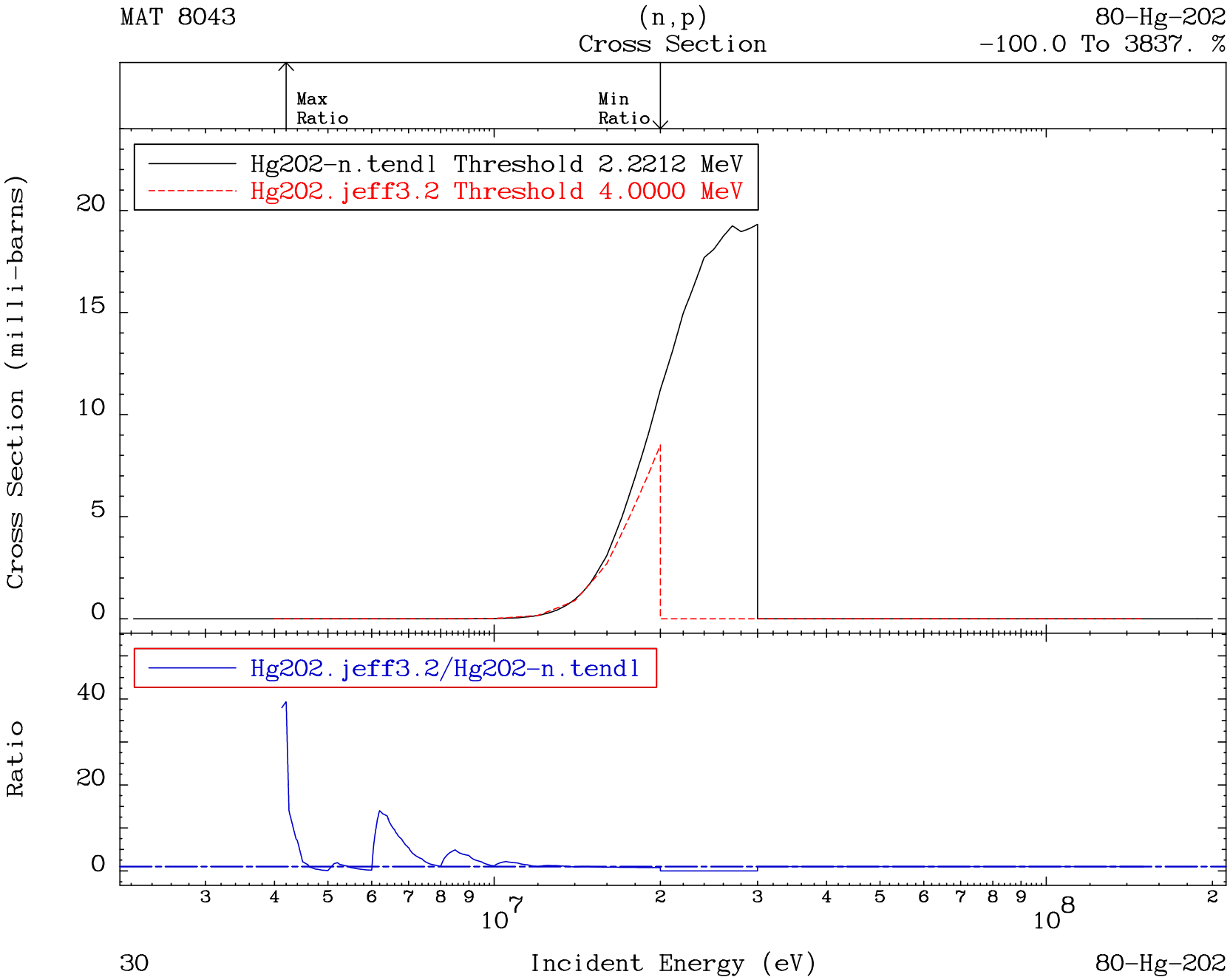

MAT 8043
1.725 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 18.78 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 1.7334 MeV
Hg202.jeff3.2 Threshold 1.7546 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
80-Hg-202

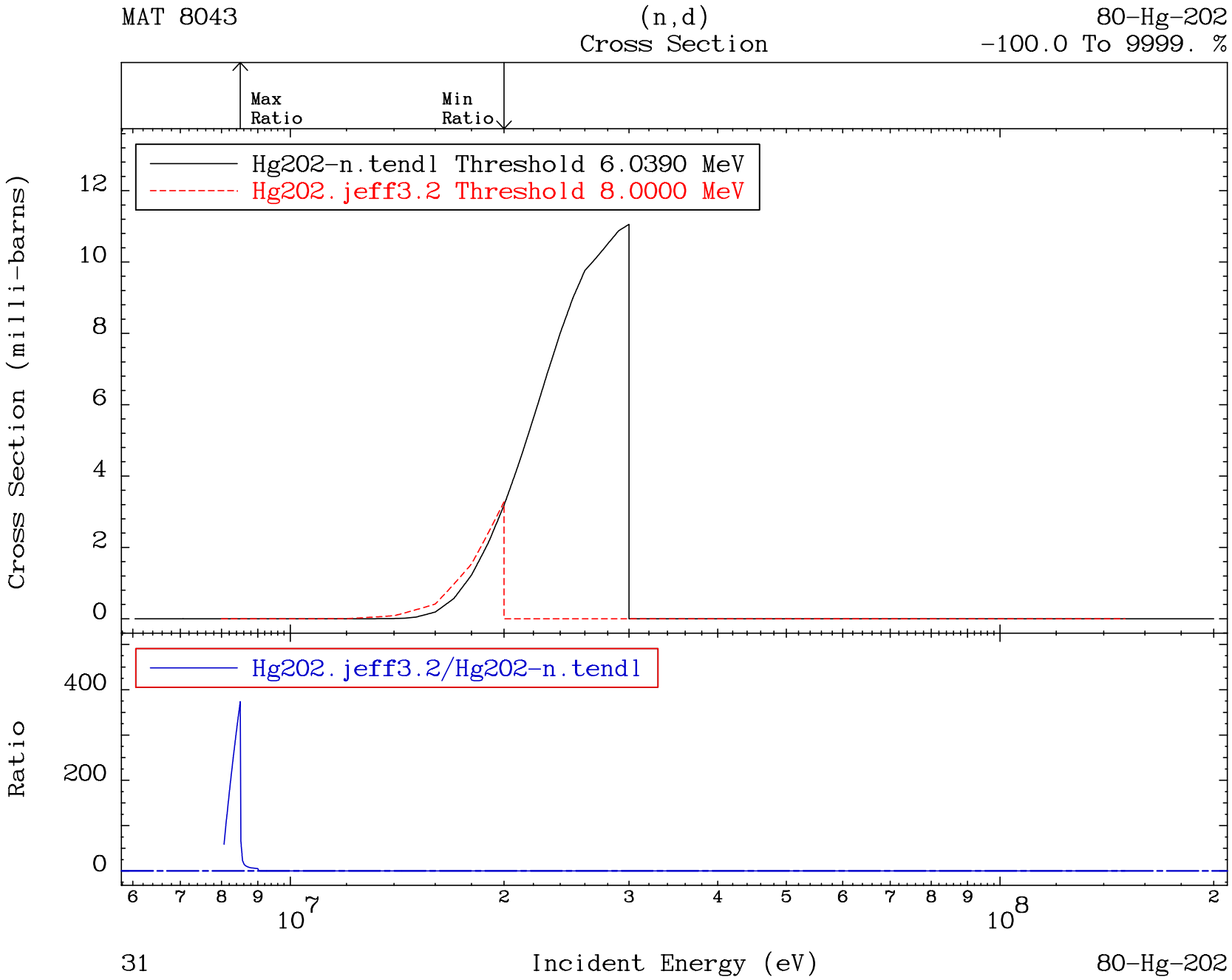

MAT 8043
1.746 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 30.76 %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 1.7547 MeV
Hg202.jeff3.2 Threshold 1.7974 MeV
Cross Section (milli-barns)
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
80-Hg-202

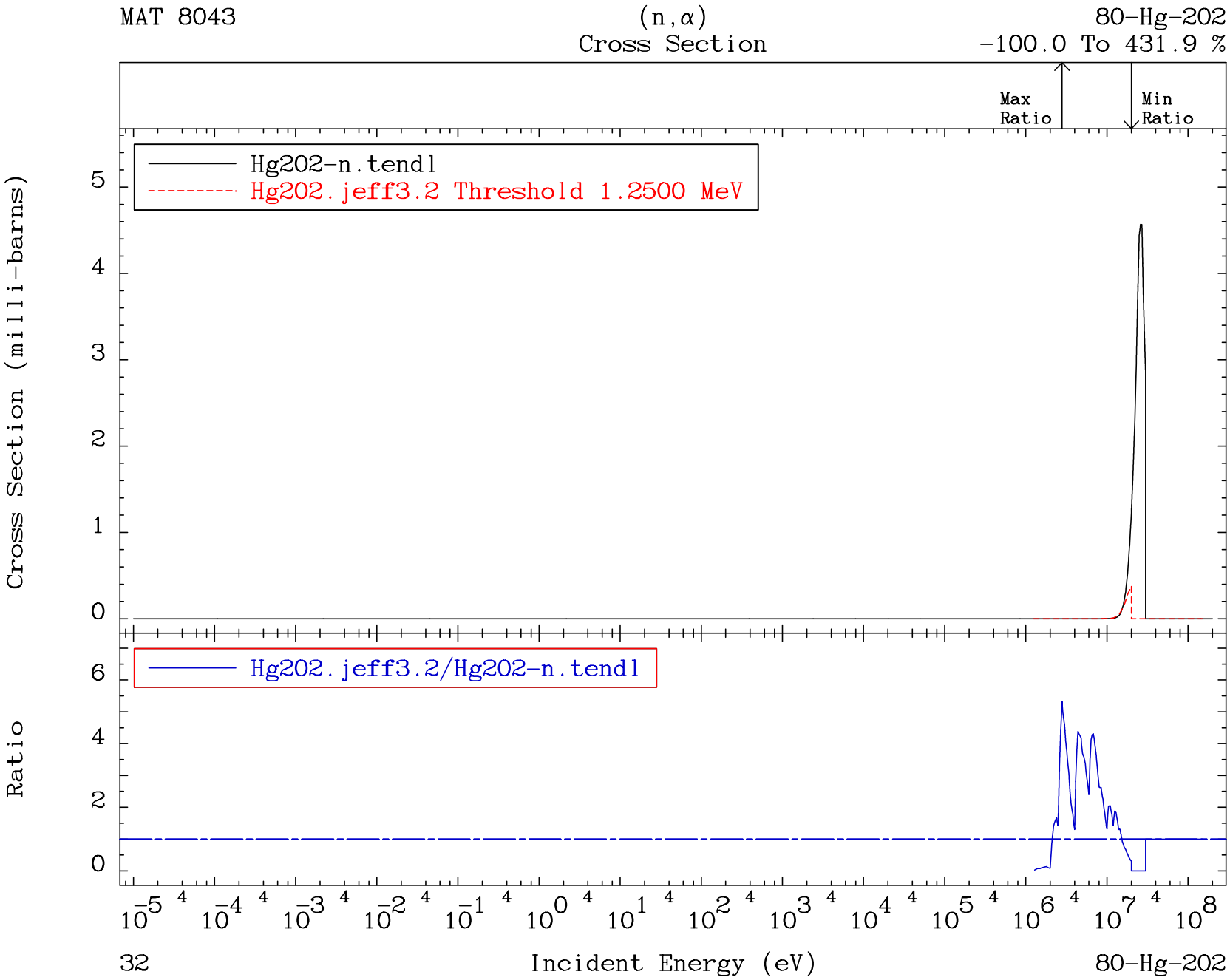

MAT 8043
1.788 MeV (n,n') Level
Cross Section
80-Hg-202
-100.0 To 35.26 %
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 1.7973 MeV
Hg202.jeff3.2 Threshold 1.8033 MeV
Cross Section (milli-barns)
80
60
40
20
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
80-Hg-202

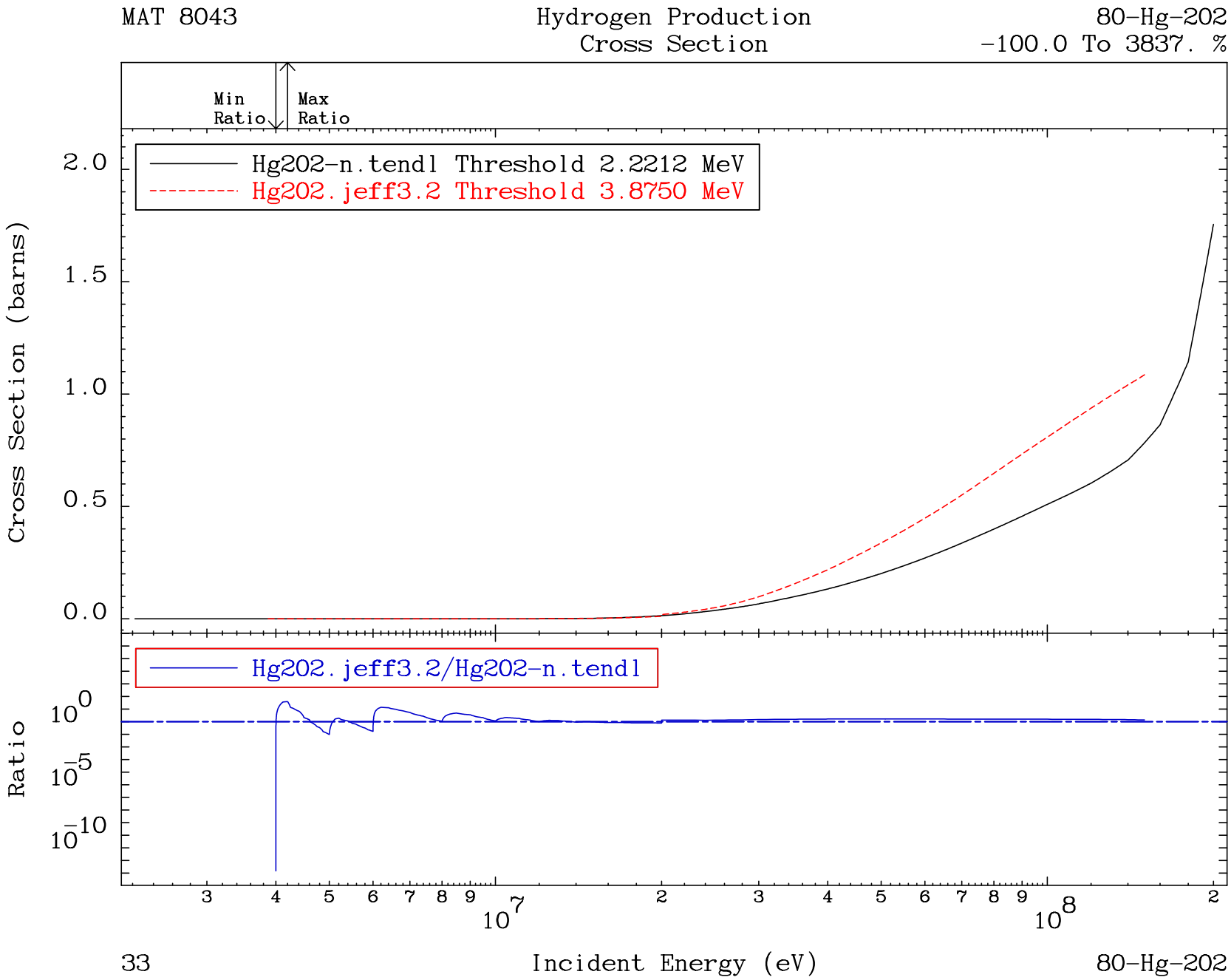

MAT 8043
(n,n') Continuum
Cross Section
80-Hg-202
-100.0 To 230.4 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 2.0014 MeV
Hg202.jeff3.2 Threshold 1.8030 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
80-Hg-202

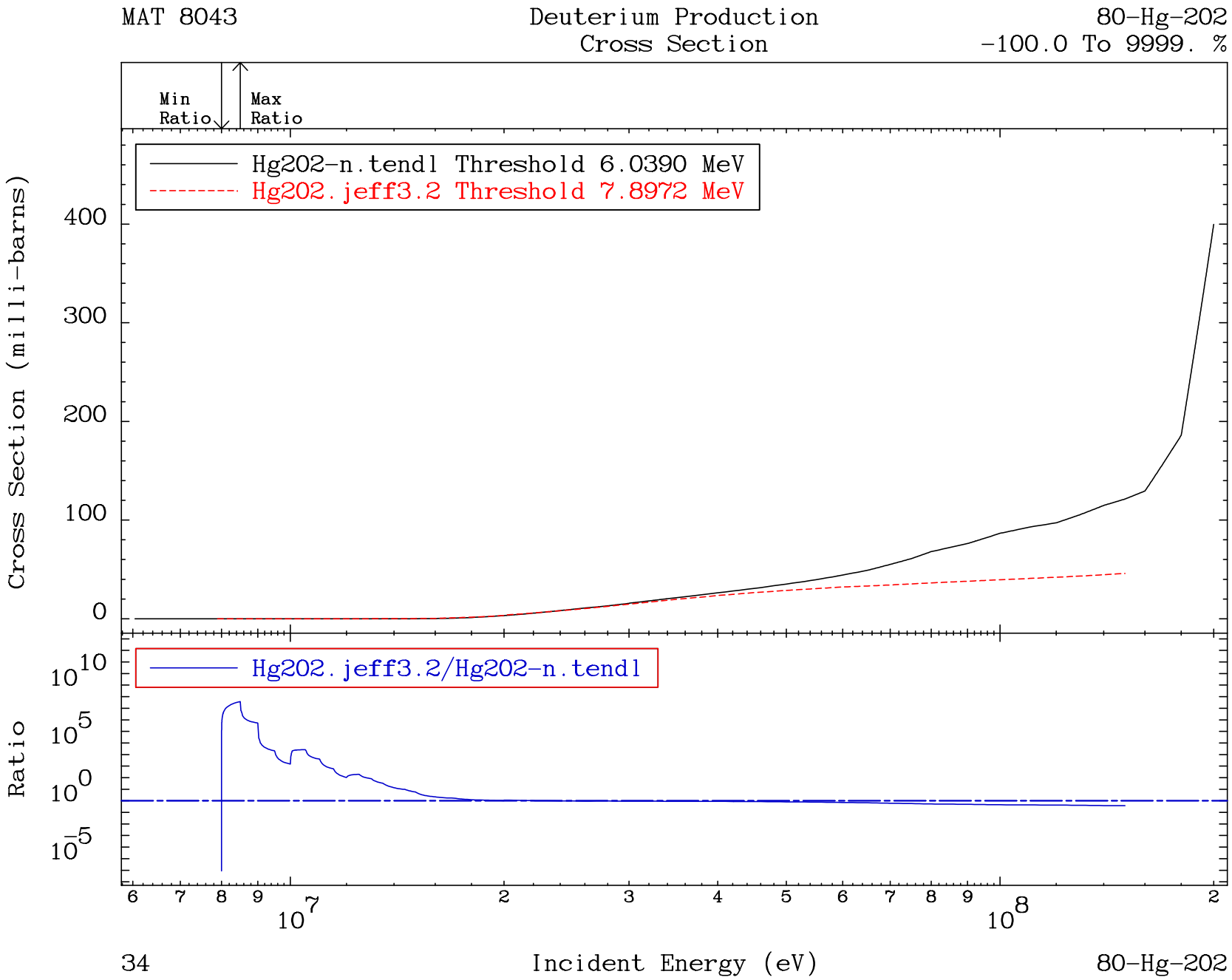

MAT 8043
(n,γ)
Cross Section
80-Hg-202
-100.0 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
29
80-Hg-202

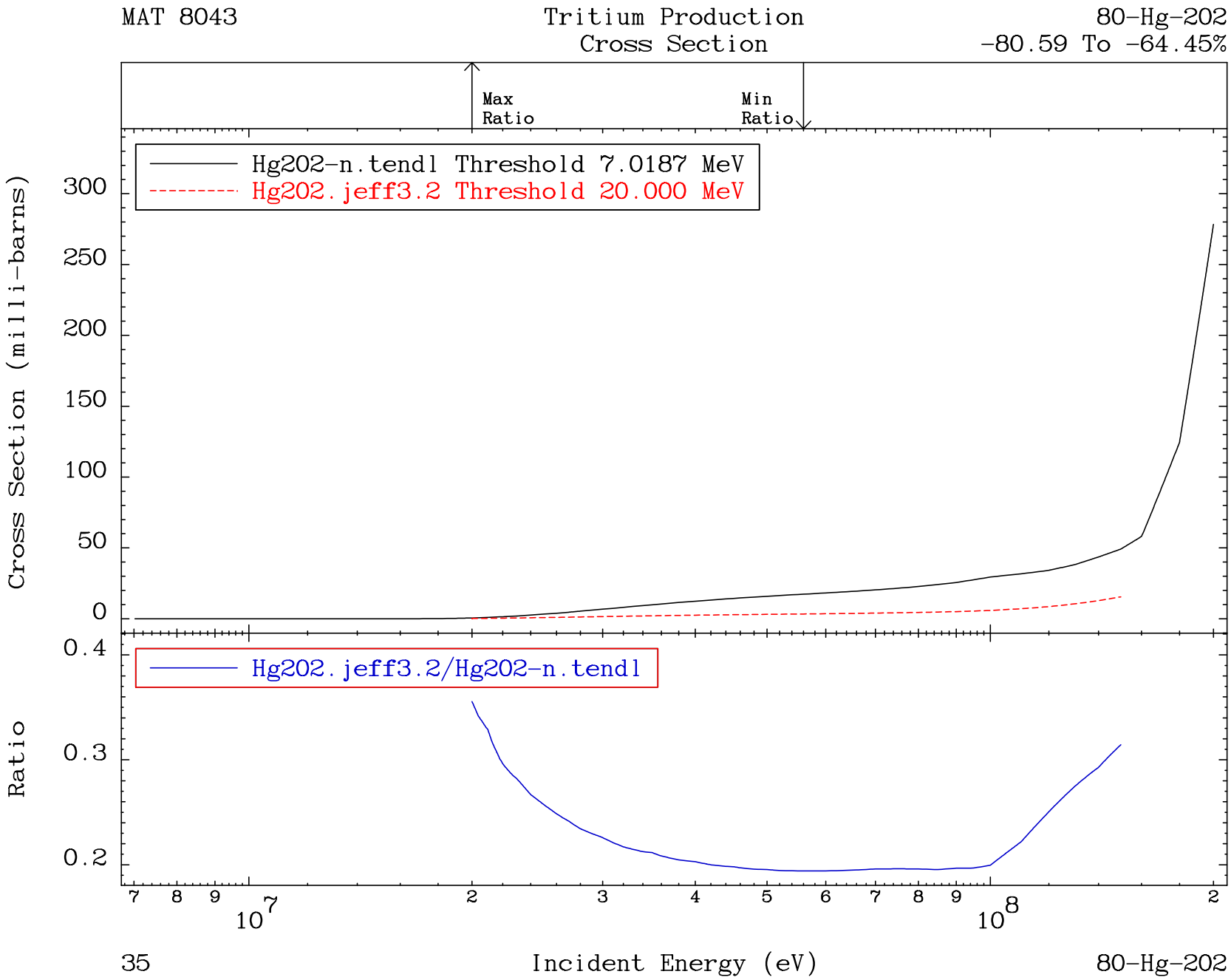

MAT 8043
(n,p)
Cross Section
80-Hg-202
-100.0 To 3837. %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 2.2212 MeV
Hg202.jeff3.2 Threshold 4.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
40
20
0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
80-Hg-202

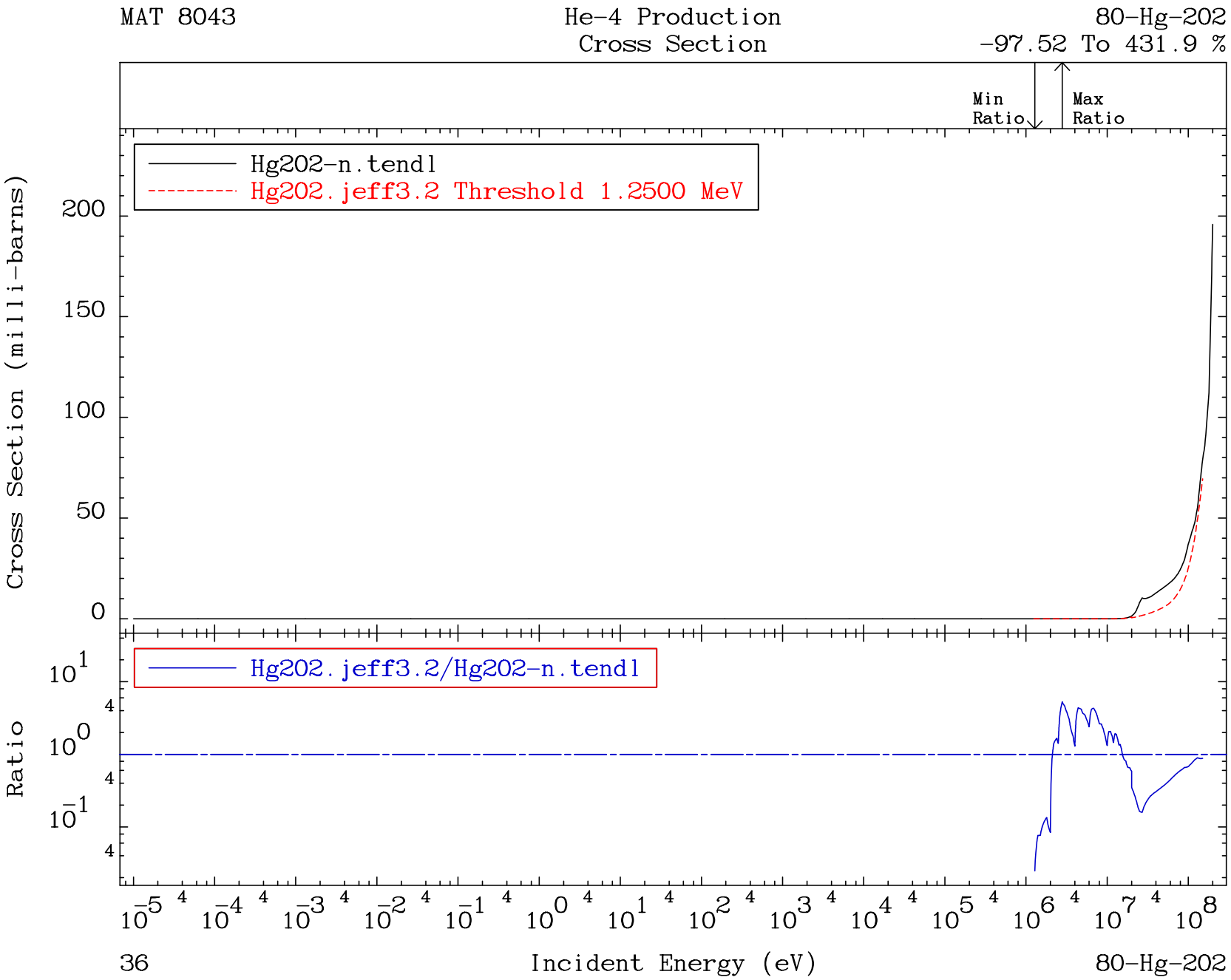

MAT 8043
(n,d)
Cross Section
80-Hg-202
-100.0 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 6.0390 MeV
Hg202.jeff3.2 Threshold 8.0000 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
Hg202.jeff3.2/Hg202-n.tendl
Ratio
0
200
400
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
80-Hg-202

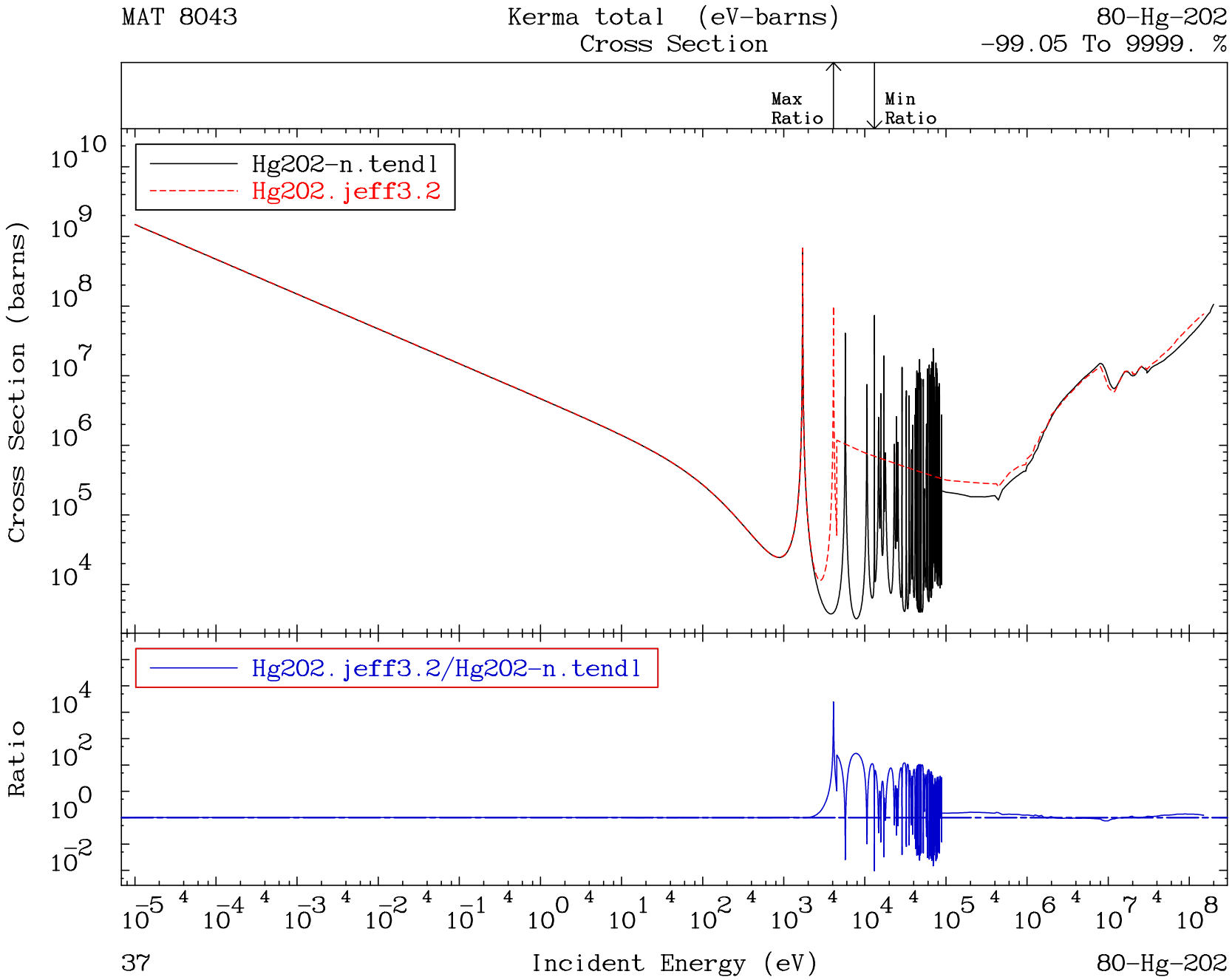

MAT 8043
(n,α)
Cross Section
80-Hg-202
-100.0 To 431.9 %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2 Threshold 1.2500 MeV
Cross Section (milli-barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
32
80-Hg-202

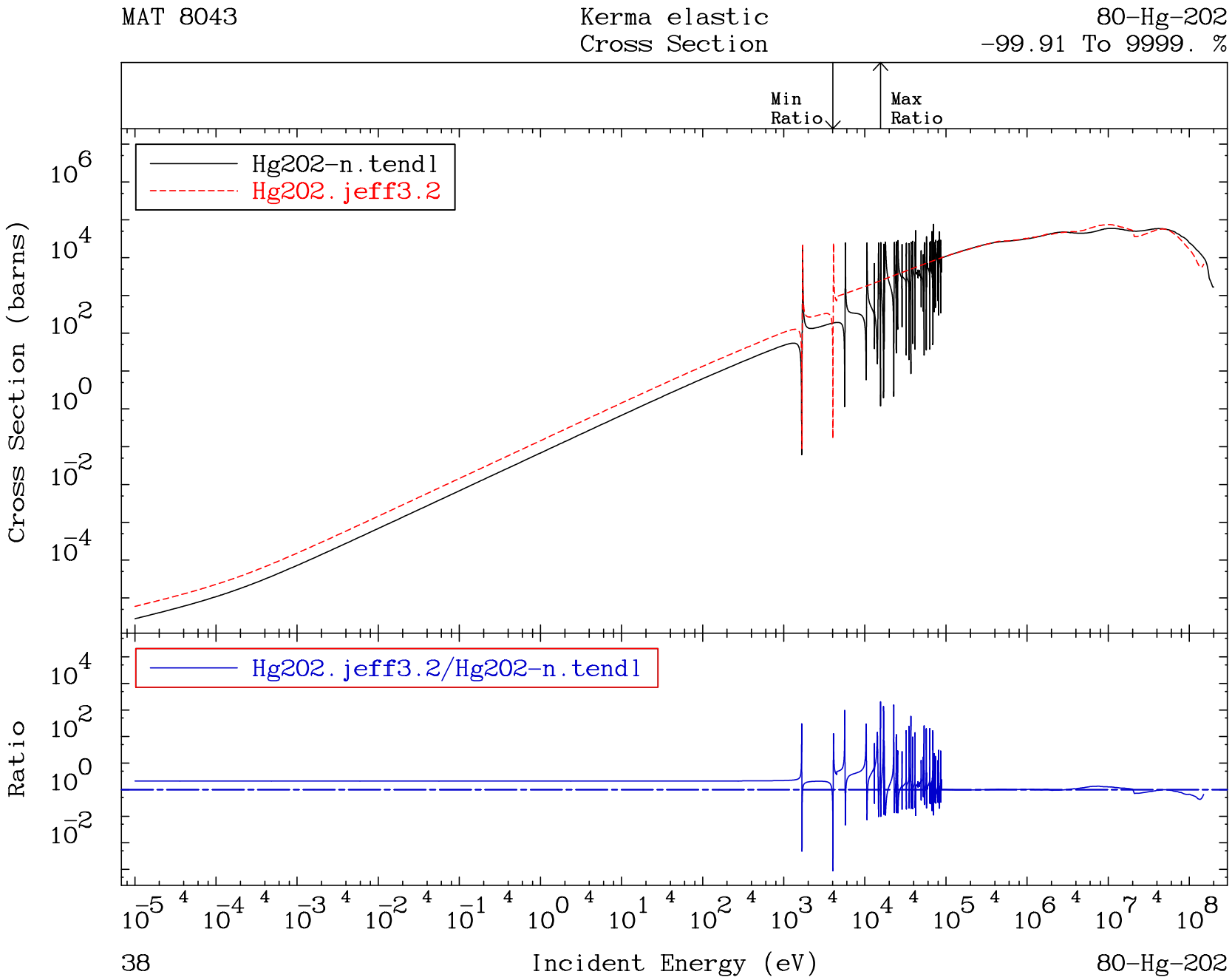

MAT 8043
Hydrogen Production
Cross Section
80-Hg-202
-100.0 To 3837. %
Min Ratio
Max Ratio
Hg202-n.tendl Threshold 2.2212 MeV
Hg202.jeff3.2 Threshold 3.8750 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
10^0
10^-5
10^-10
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
80-Hg-202

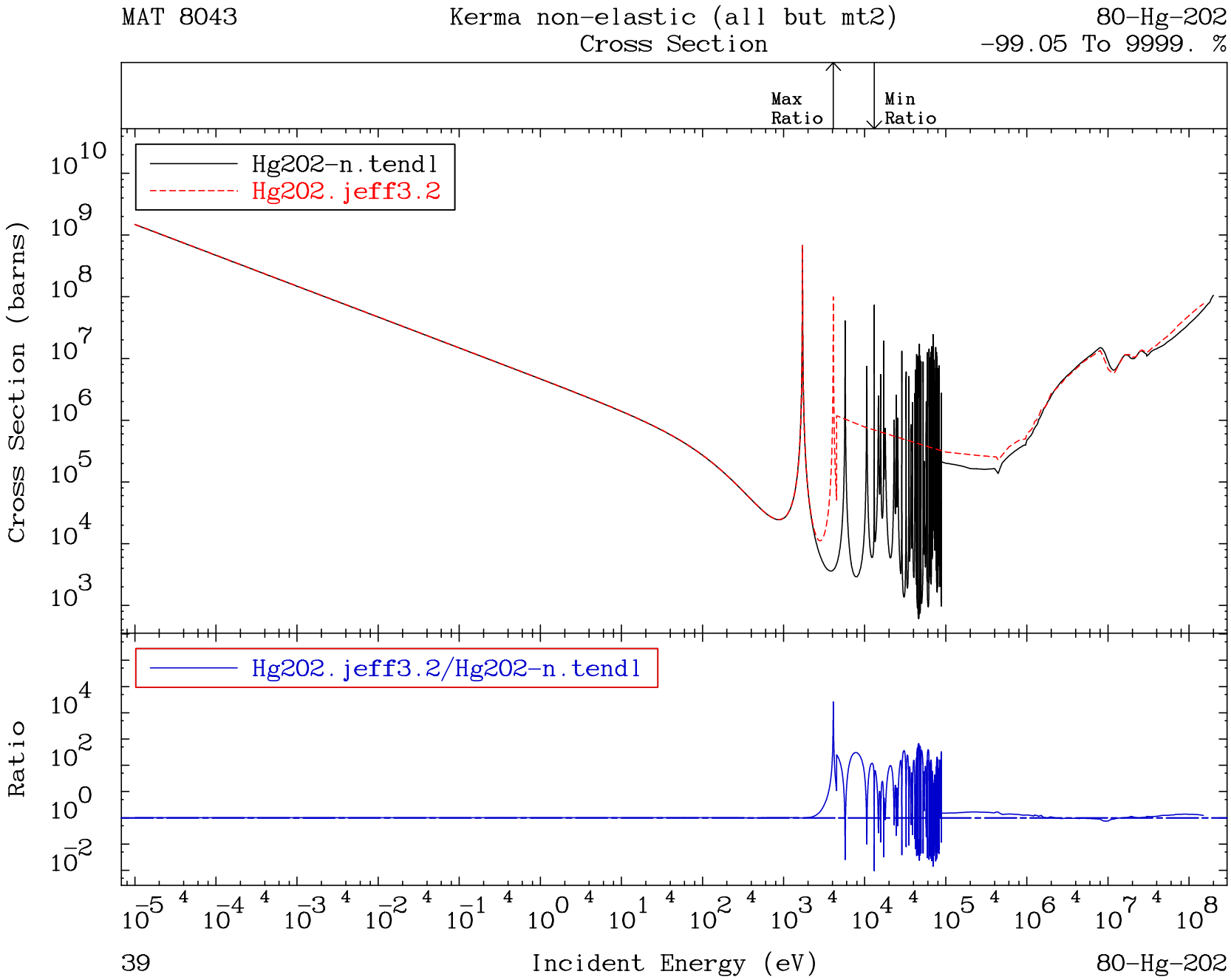

MAT 8043
Deuterium Production
Cross Section
80-Hg-202
-100.0 To 9999. %
Min Ratio
Max Ratio
Hg202-n.tendl Threshold 6.0390 MeV
Hg202.jeff3.2 Threshold 7.8972 MeV
Cross Section (milli-barns)
400
300
200
100
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
10^10
10^5
10^0
10^-5
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
80-Hg-202

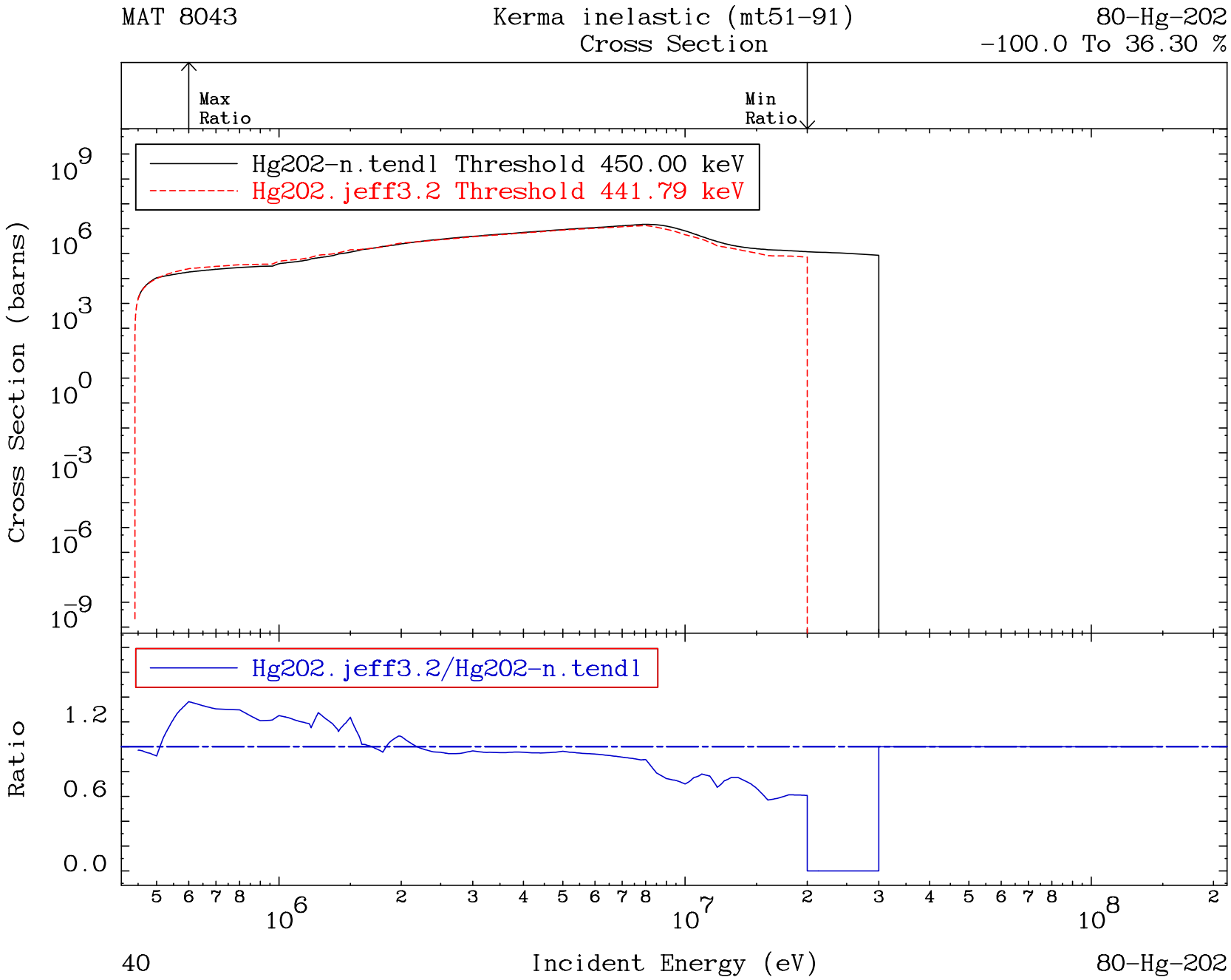

MAT 8043
Tritium Production
Cross Section
80-Hg-202
-80.59 To -64.45%
Max
Ratio
Min
Ratio
Hg202-n.tendl Threshold 7.0187 MeV
Hg202.jeff3.2 Threshold 20.000 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
0.4
0.3
0.2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
80-Hg-202

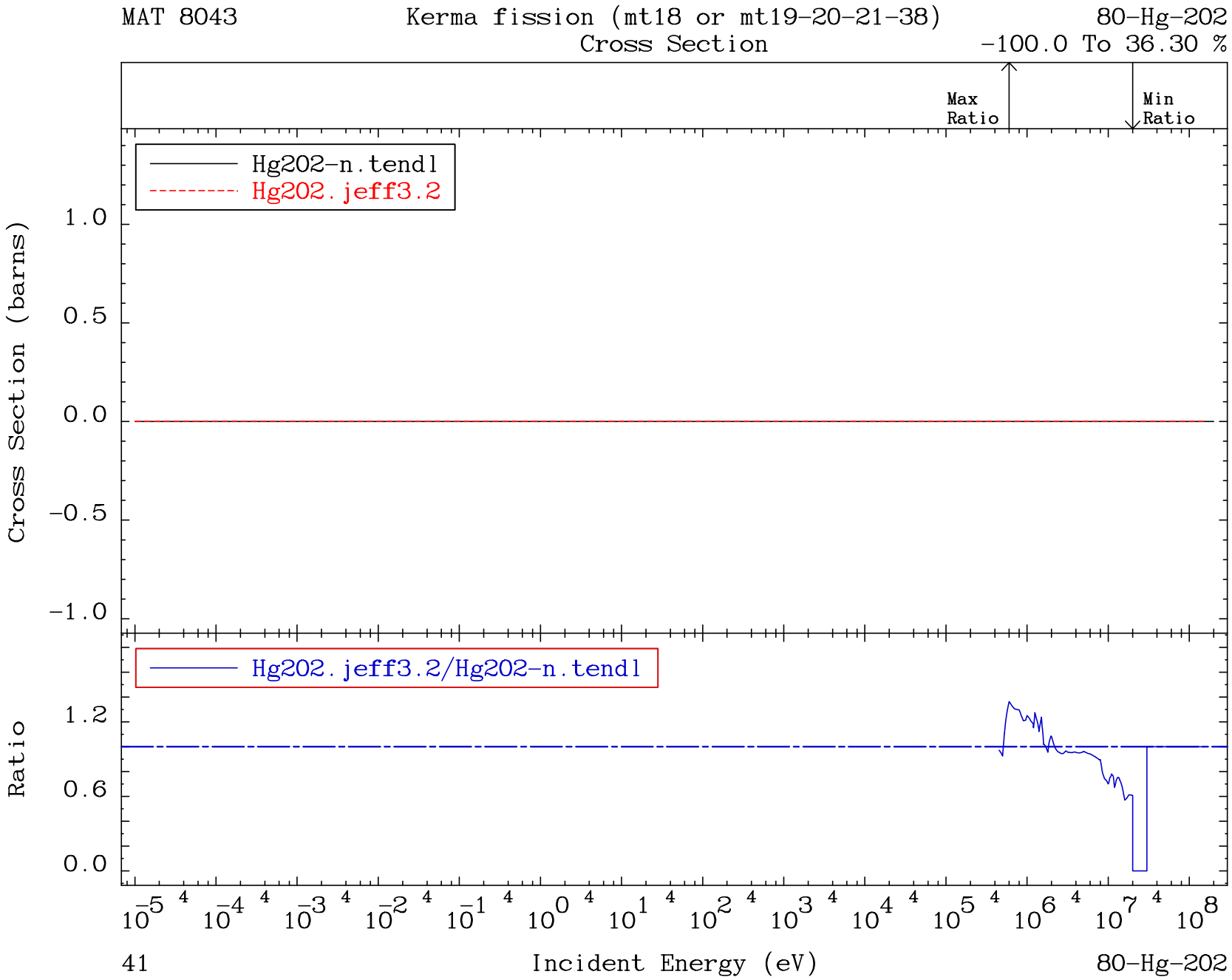

MAT 8043
He-4 Production
Cross Section
80-Hg-202
-97.52 To 431.9 %
Min Ratio
Max Ratio
Hg202-n.tendl
Hg202.jeff3.2 Threshold 1.2500 MeV
Cross Section (milli-barns)
200
150
100
50
0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
10^{1}
10^{0}
10^{-1}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
36
Incident Energy (eV)
80-Hg-202

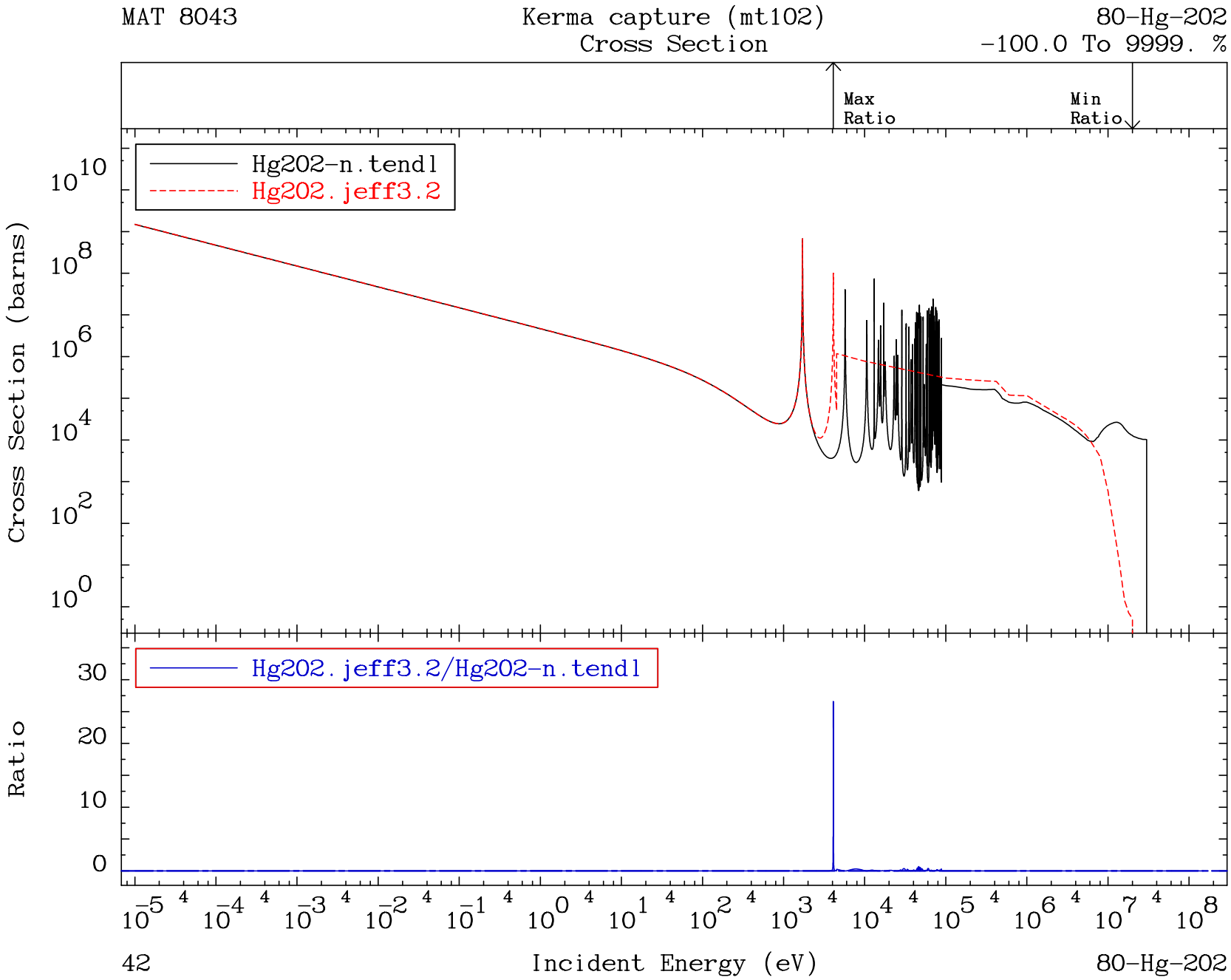

MAT 8043
Kerma total (eV-barns)
Cross Section
80-Hg-202
-99.05 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
37
80-Hg-202

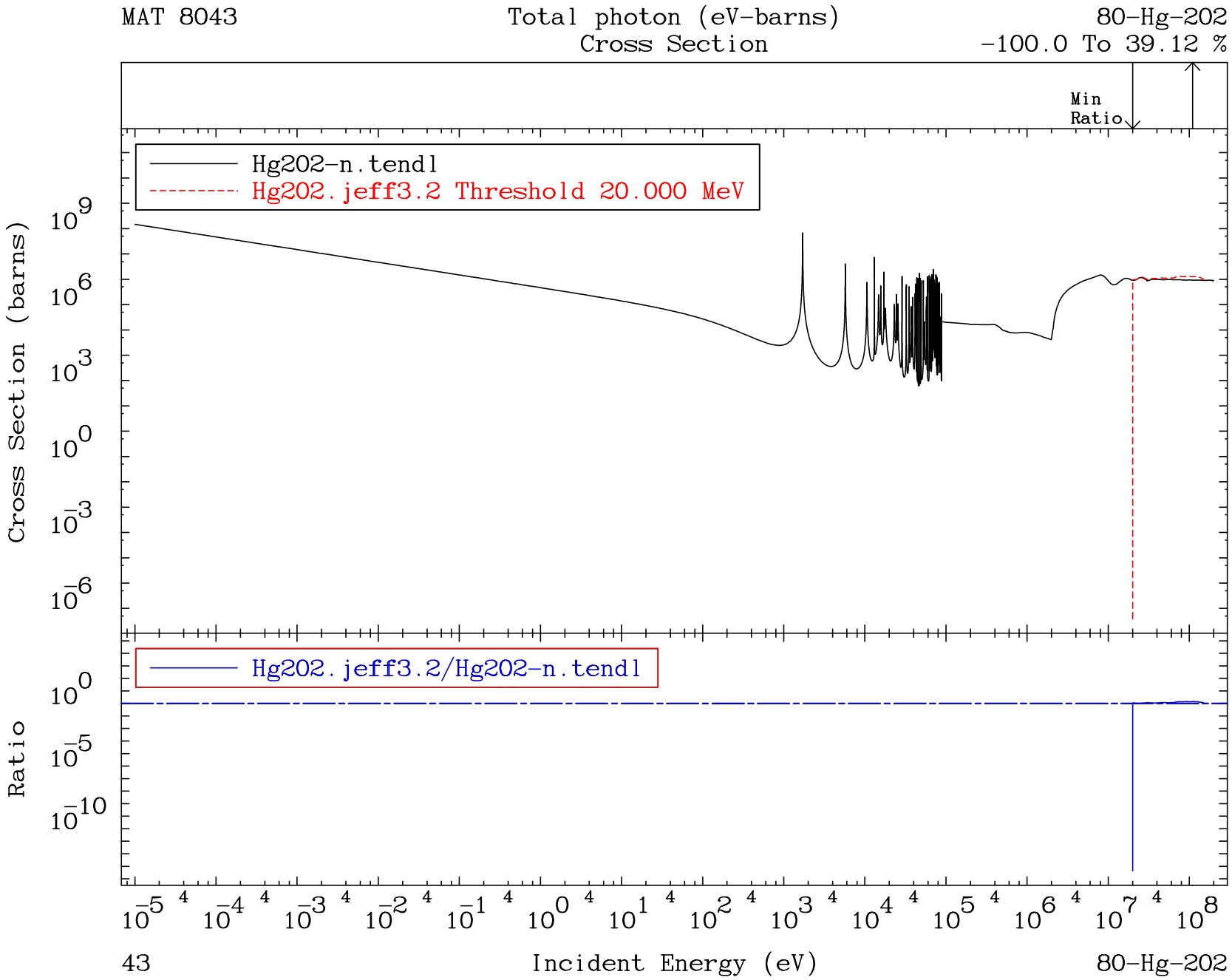

MAT 8043
Kerma elastic
Cross Section
80-Hg-202
-99.91 To 9999. %
Min
Ratio
Max
Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
38
Incident Energy (eV)
80-Hg-202

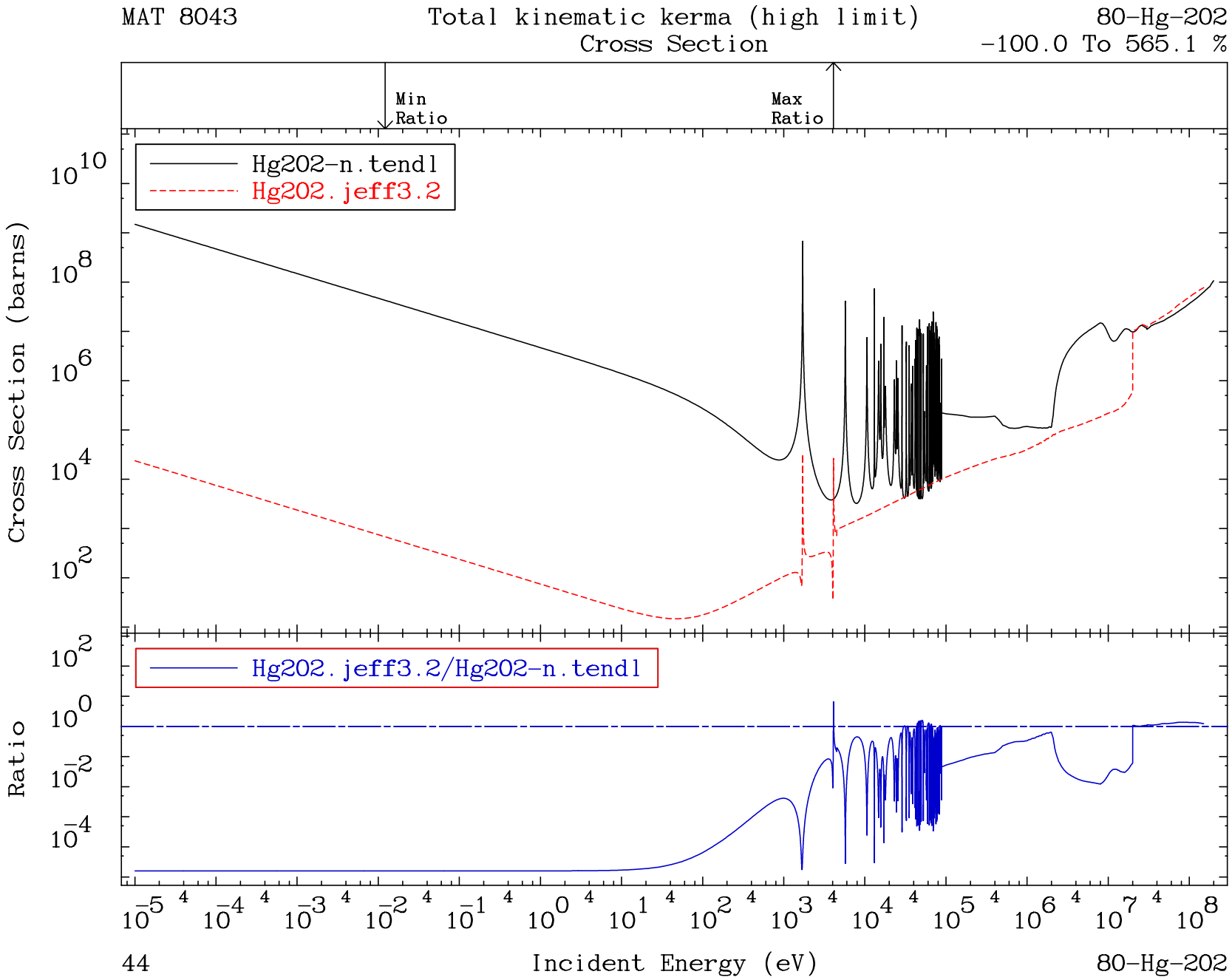

MAT 8043
Kerma non-elastic (all but mt2)
Cross Section
80-Hg-202
-99.05 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
39
80-Hg-202

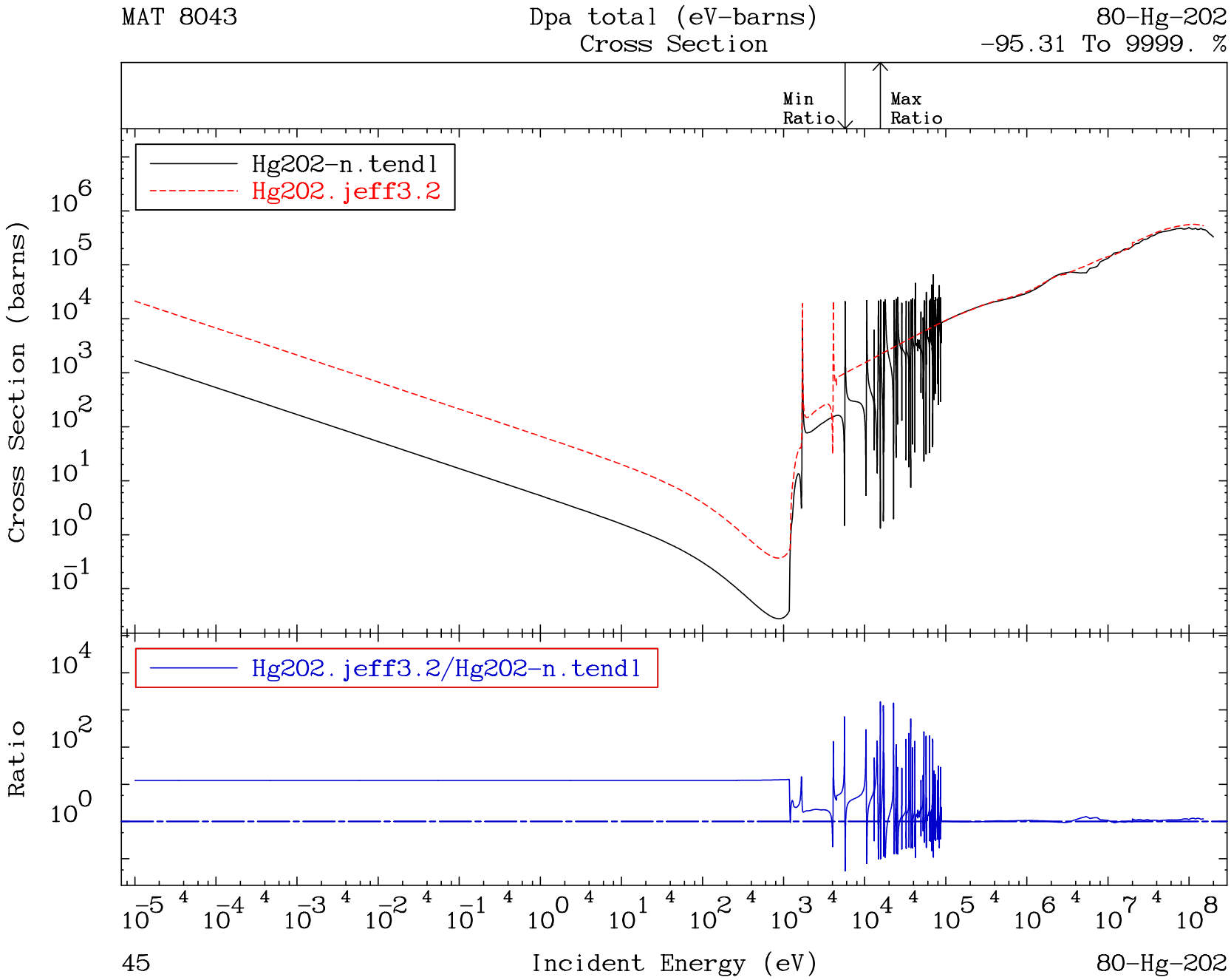

MAT 8043
Kerma inelastic (mt51-91)
Cross Section
80-Hg-202
-100.0 To 36.30 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 450.00 keV
Hg202.jeff3.2 Threshold 441.79 keV
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
40
80-Hg-202

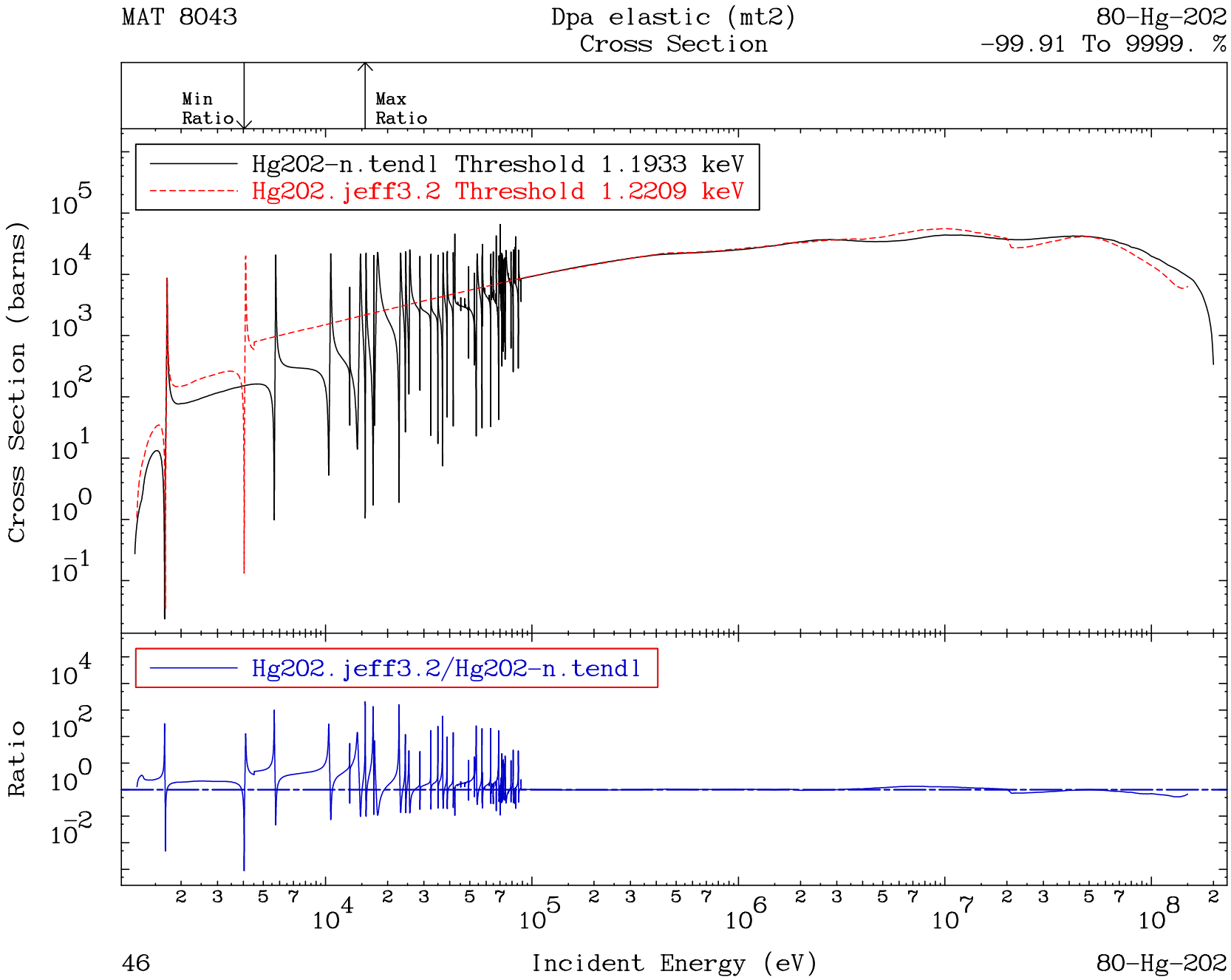

MAT 8043
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
80-Hg-202
-100.0 To 36.30 %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Hg202.jeff3.2/Hg202-n.tendl
Ratio
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
80-Hg-202

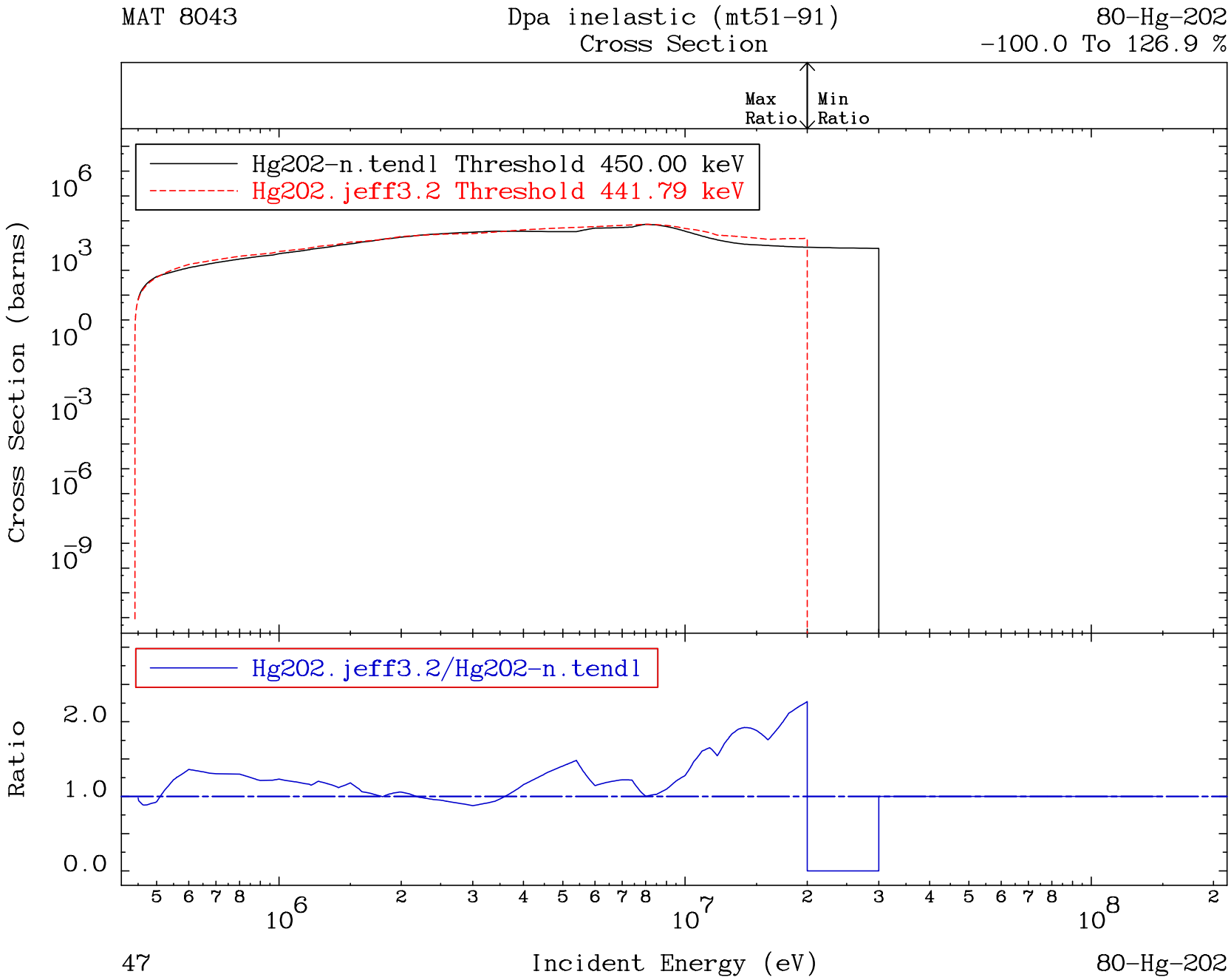

MAT 8043
Kerma capture (mt102)
Cross Section
80-Hg-202
-100.0 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
42
80-Hg-202

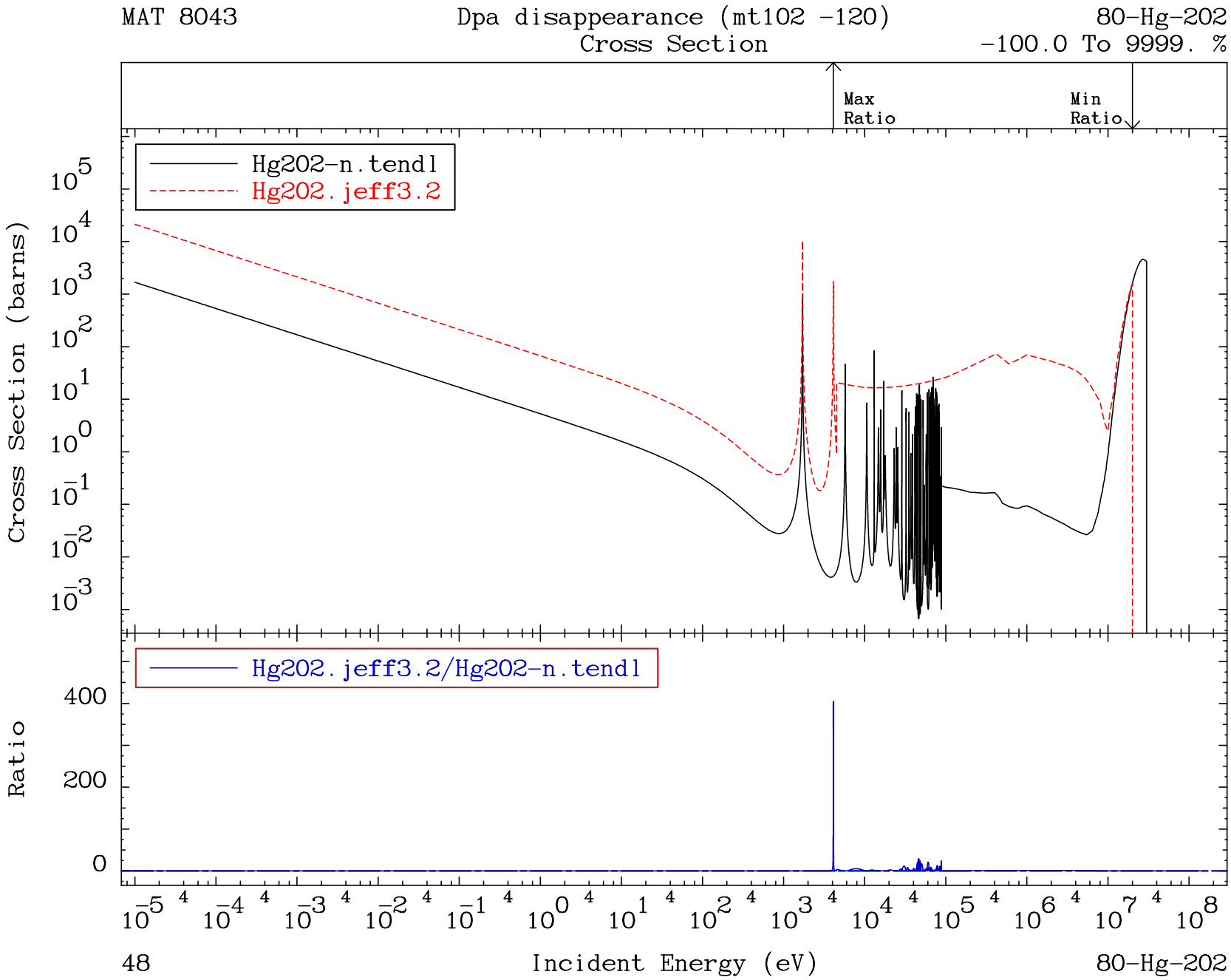

MAT 8043
Total photon (eV-barns)
Cross Section
80-Hg-202
-100.0 To 39.12 %
Min
Ratio
Hg202-n.tendl
Hg202.jeff3.2 Threshold 20.000 MeV
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
43
80-Hg-202


MAT 8043
Total kinematic kerma (high limit)
Cross Section
80-Hg-202
-100.0 To 565.1 %
Min Ratio
Max Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
44
80-Hg-202


MAT 8043
Dpa total (eV-barns)
Cross Section
80-Hg-202
-95.31 To 9999. %
Min Ratio
Max Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
45
80-Hg-202


MAT 8043
Dpa elastic (mt2)
Cross Section
80-Hg-202
-99.91 To 9999. %
Min Ratio
Max Ratio
Hg202-n.tendl Threshold 1.1933 keV
Hg202.jeff3.2 Threshold 1.2209 keV
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
46
80-Hg-202


MAT 8043
Dpa inelastic (mt51-91)
Cross Section
80-Hg-202
-100.0 To 126.9 %
Max Ratio
Min Ratio
Hg202-n.tendl Threshold 450.00 keV
Hg202.jeff3.2 Threshold 441.79 keV
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
47
80-Hg-202


MAT 8043
Dpa disappearance (mt102 -120)
Cross Section
80-Hg-202
-100.0 To 9999. %
Max Ratio
Min Ratio
Hg202-n.tendl
Hg202.jeff3.2
Cross Section (barns)
Hg202.jeff3.2/Hg202-n.tendl
Ratio
Incident Energy (eV)
48
80-Hg-202