Program Complot
(Version 2021-1)
by
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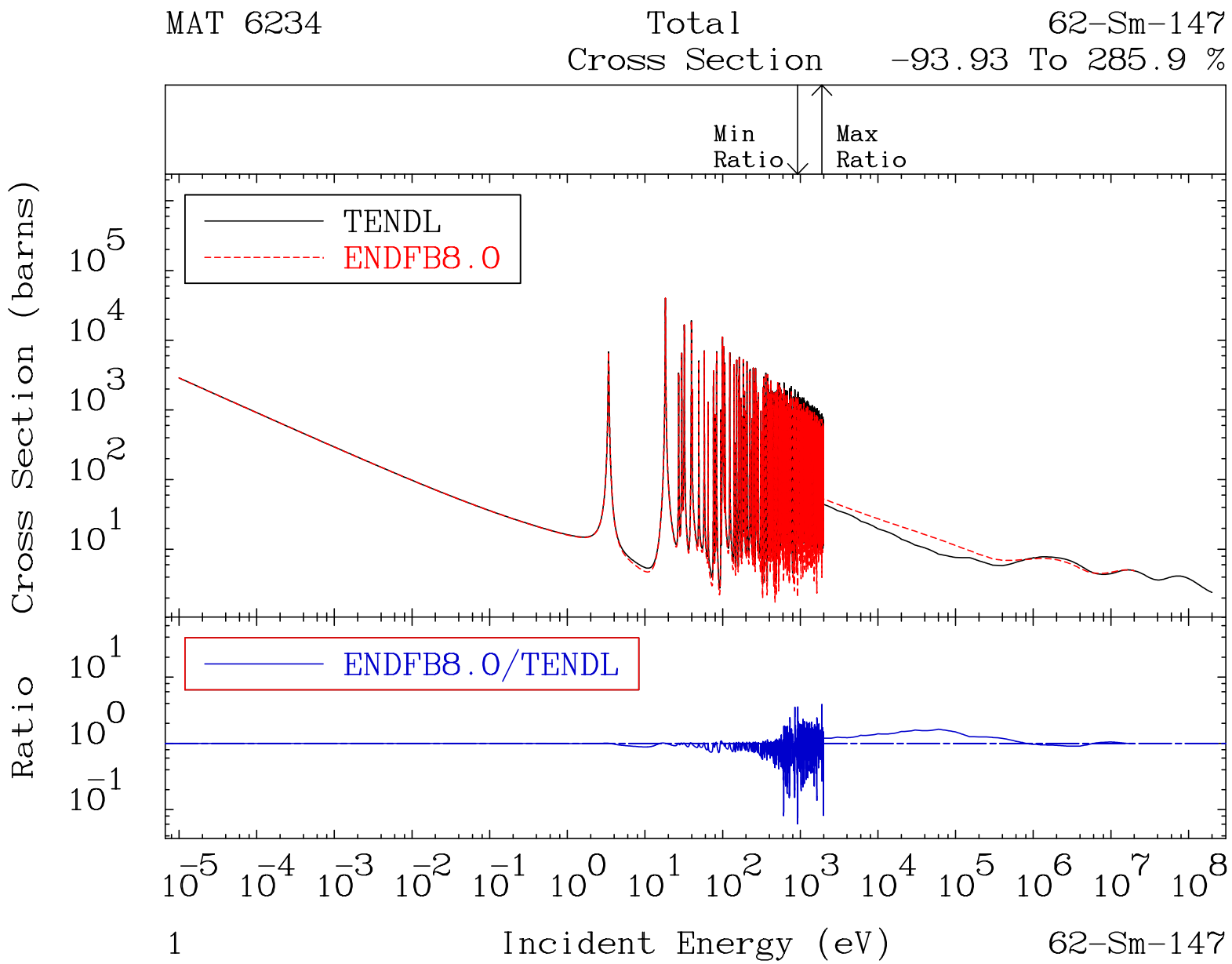
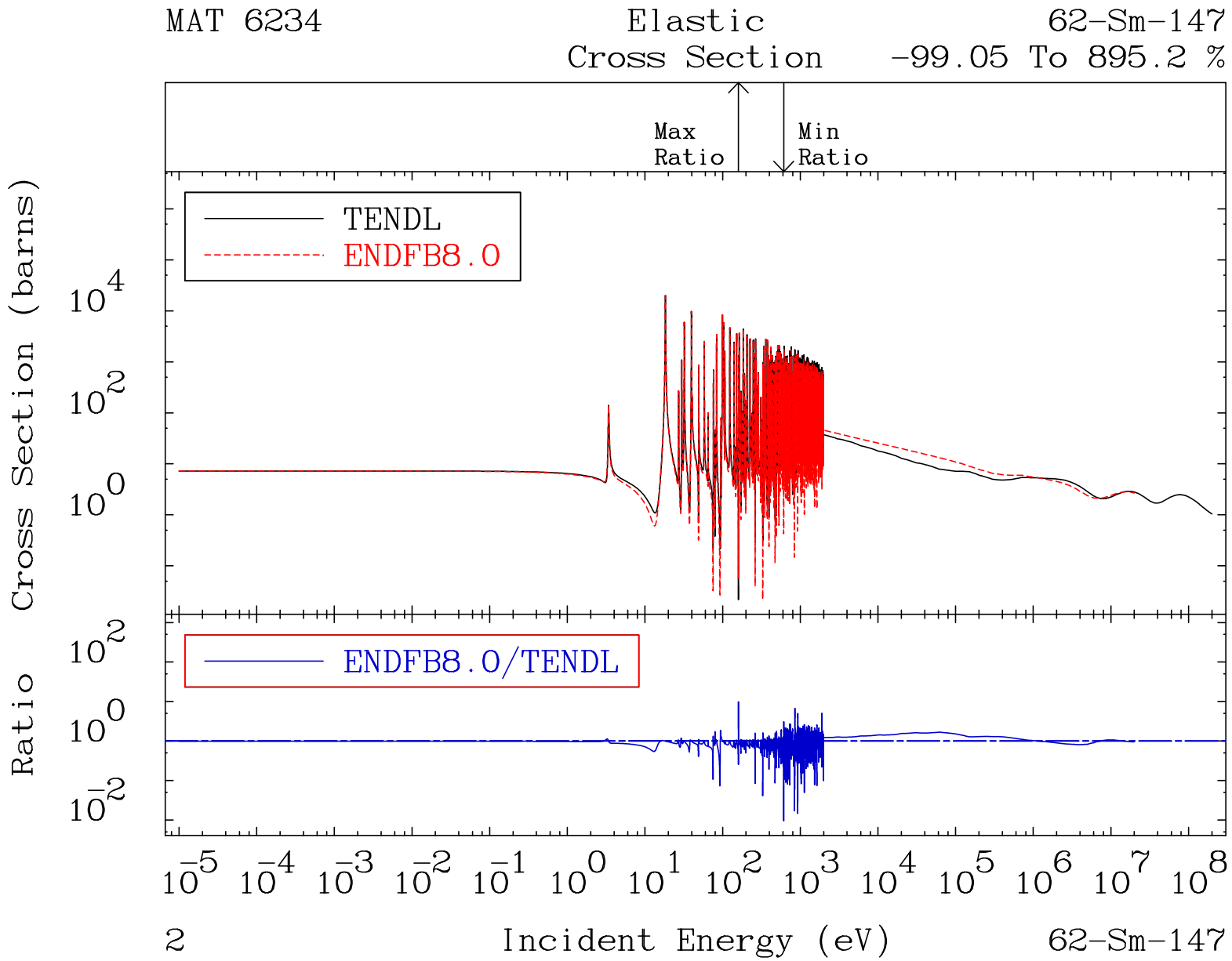
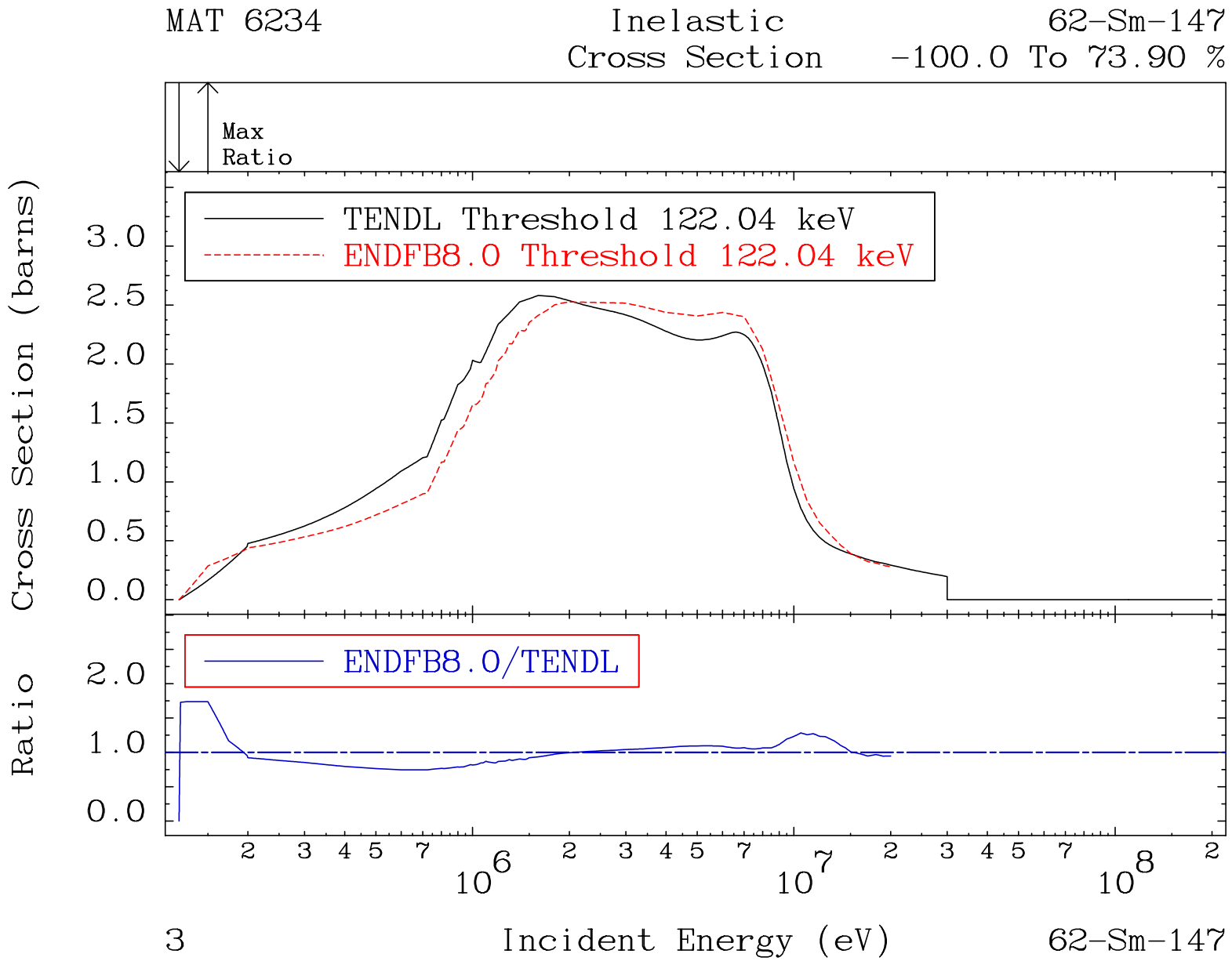
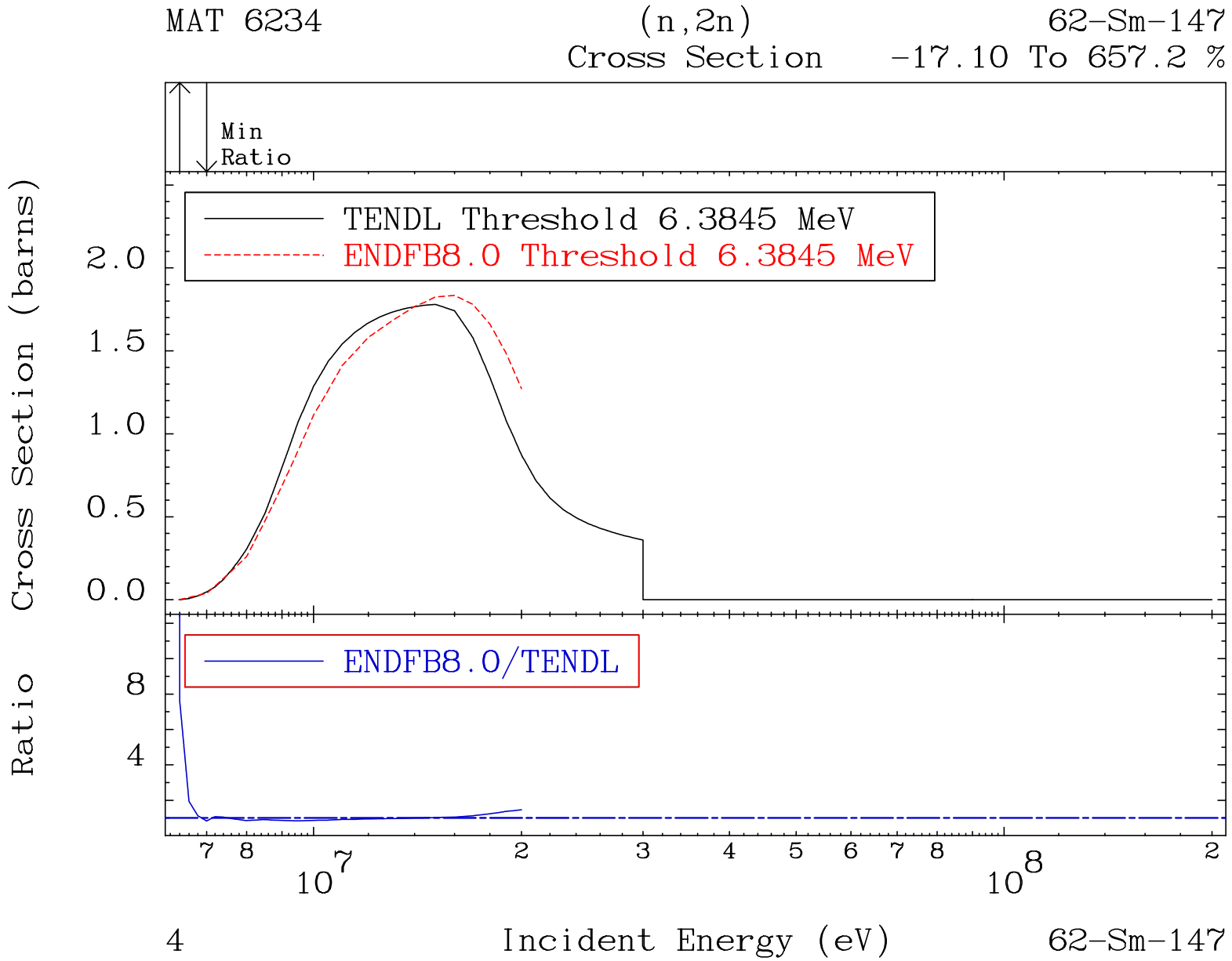
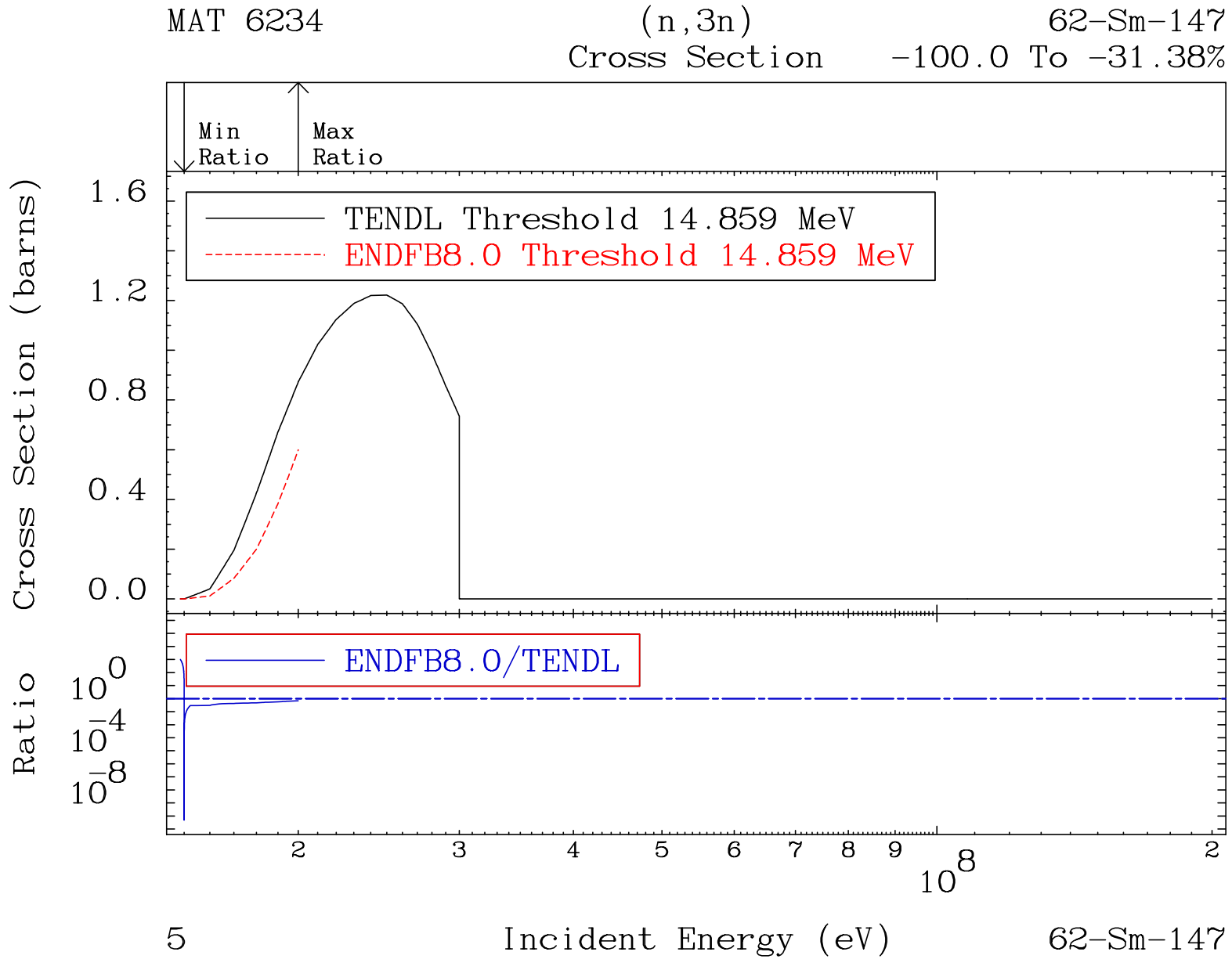
Press Mouse Button to Start

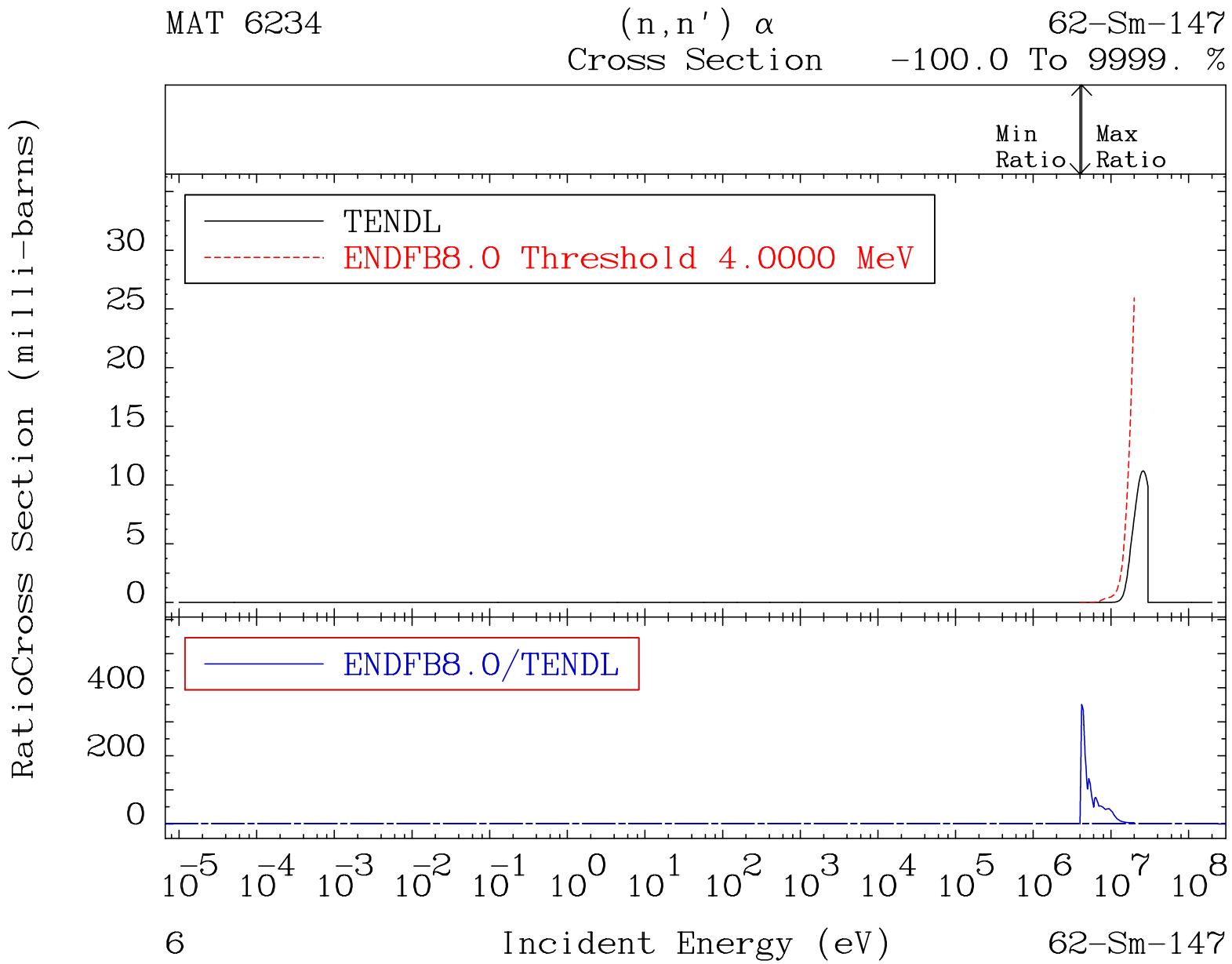

MAT 6234
Total
Cross Section
62-Sm-147
-93.93 To 285.9 %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
1
62-Sm-147

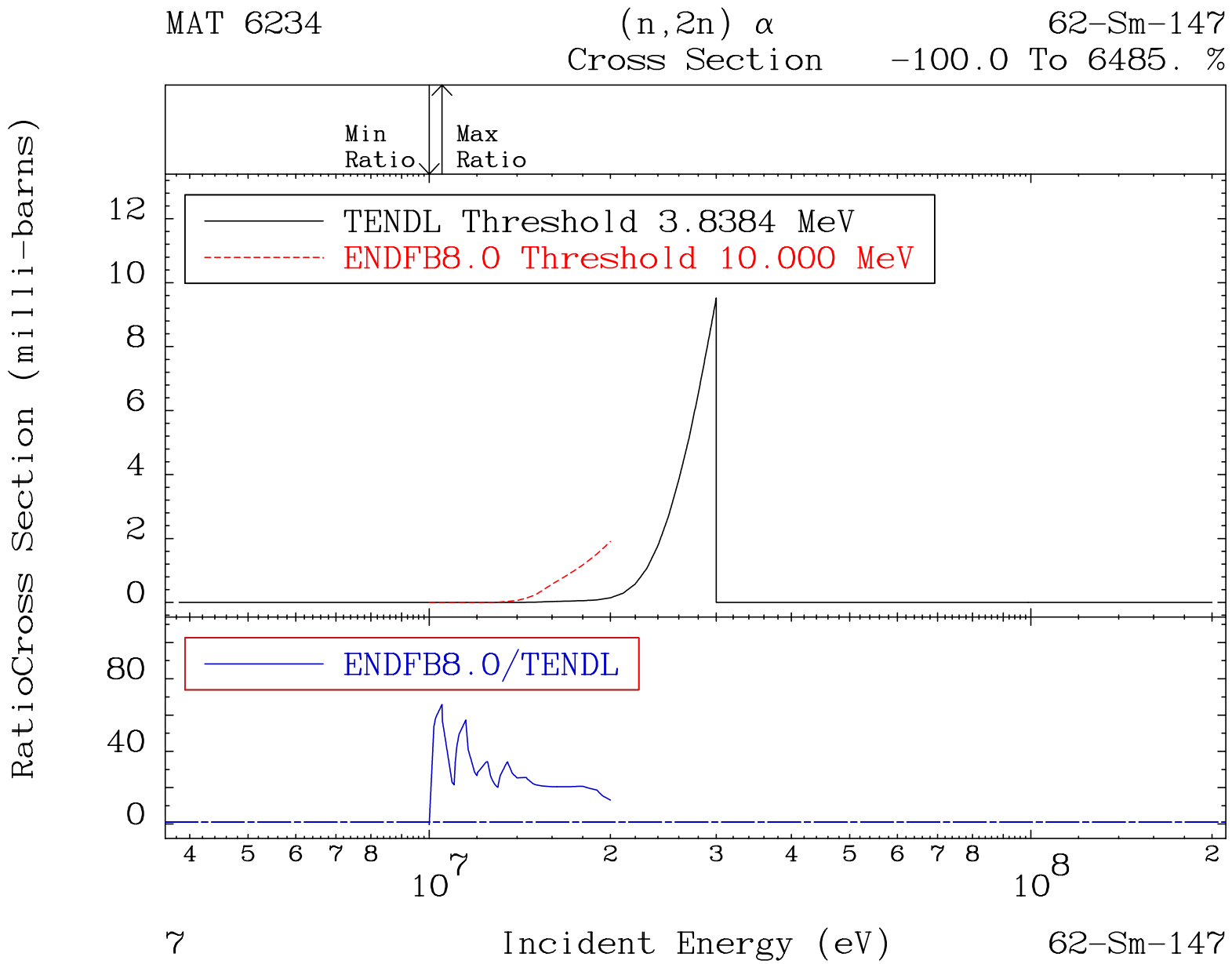

MAT 6234
Elastic
Cross Section
62-Sm-147
-99.05 To 895.2 %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
62-Sm-147

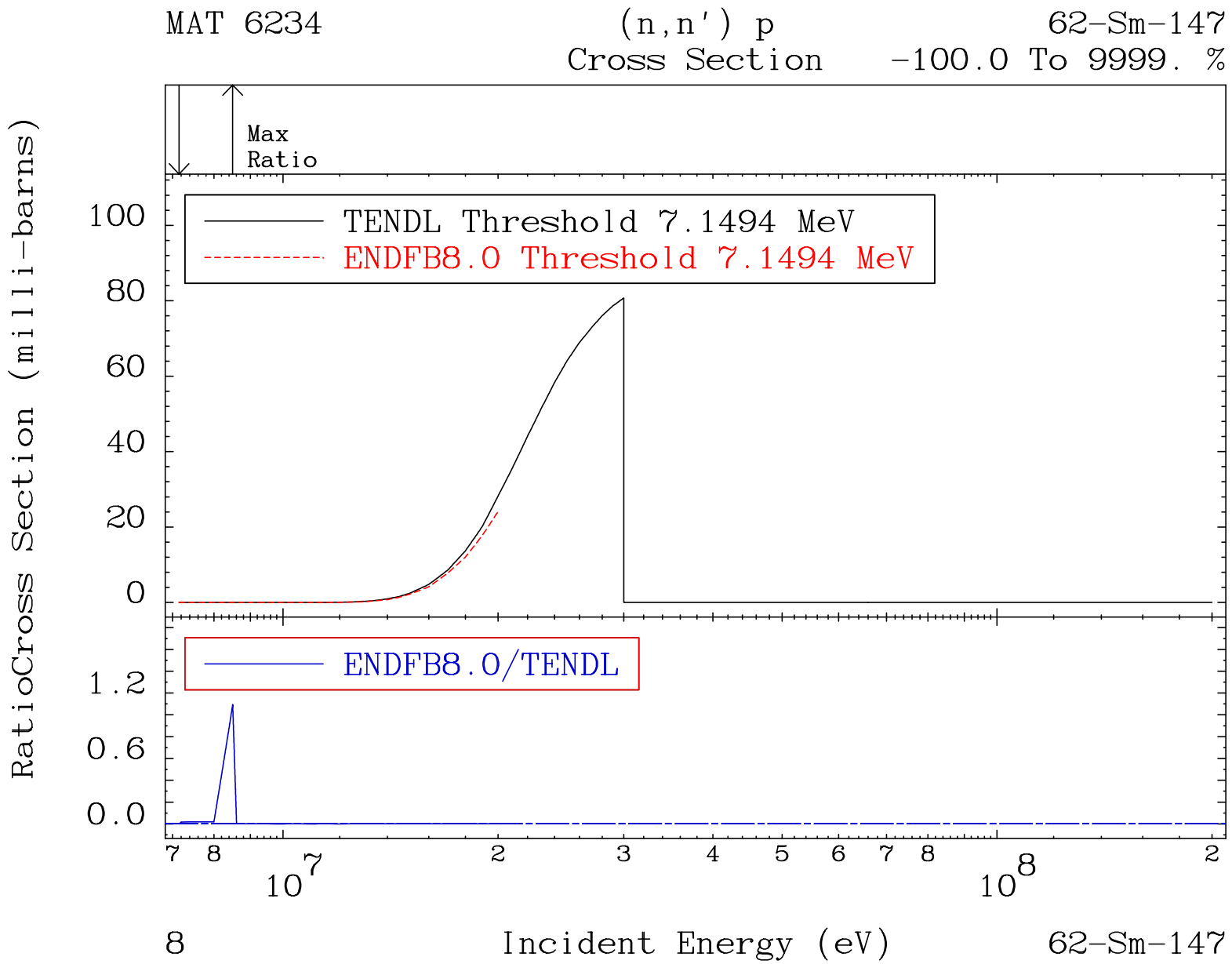

MAT 6234
Inelastic
Cross Section
62-Sm-147
-100.0 To 73.90 %
Max
Ratio
TENDL Threshold 122.04 keV
ENDFB8.0 Threshold 122.04 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
62-Sm-147

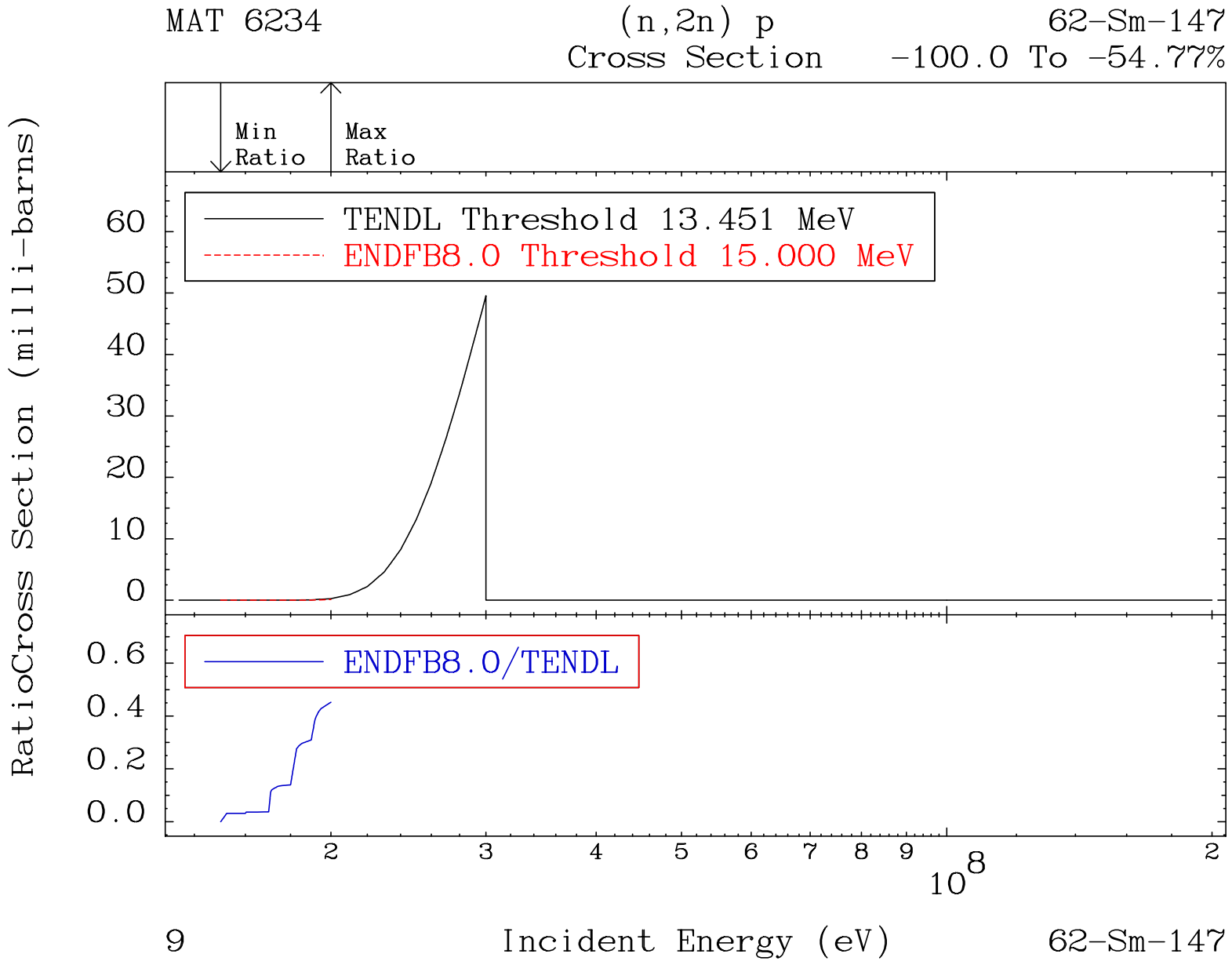

MAT 6234
(n,2n)
Cross Section
62-Sm-147
-17.10 To 657.2 %
Min
Ratio
TENDL Threshold 6.3845 MeV
ENDFB8.0 Threshold 6.3845 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
8
4
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
4
62-Sm-147

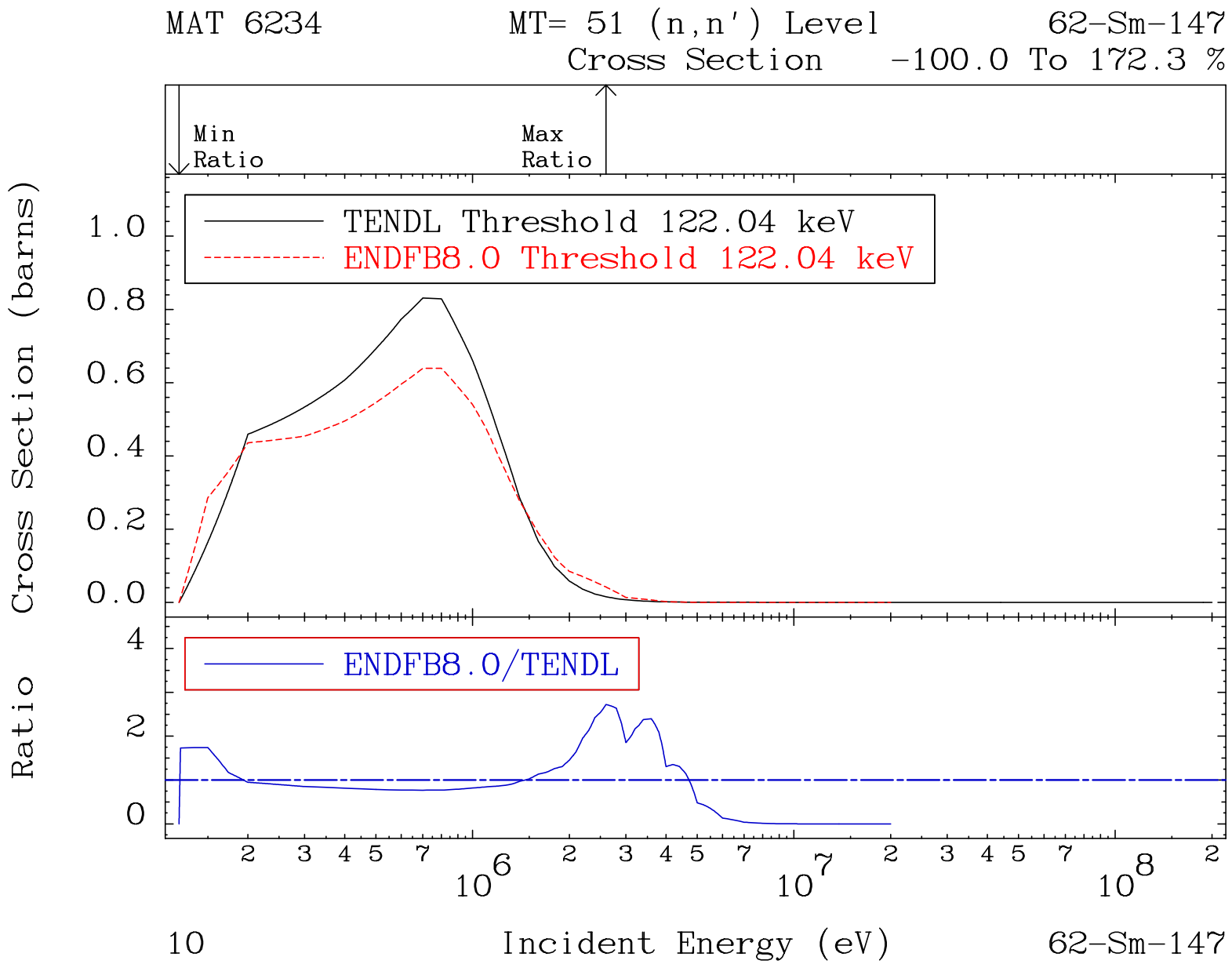

MAT 6234
(n,3n)
Cross Section
62-Sm-147
-100.0 To -31.38%
Min Ratio
Max Ratio
TENDL Threshold 14.859 MeV
ENDFB8.0 Threshold 14.859 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
10^0
10^-4
10^-8
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
5
62-Sm-147

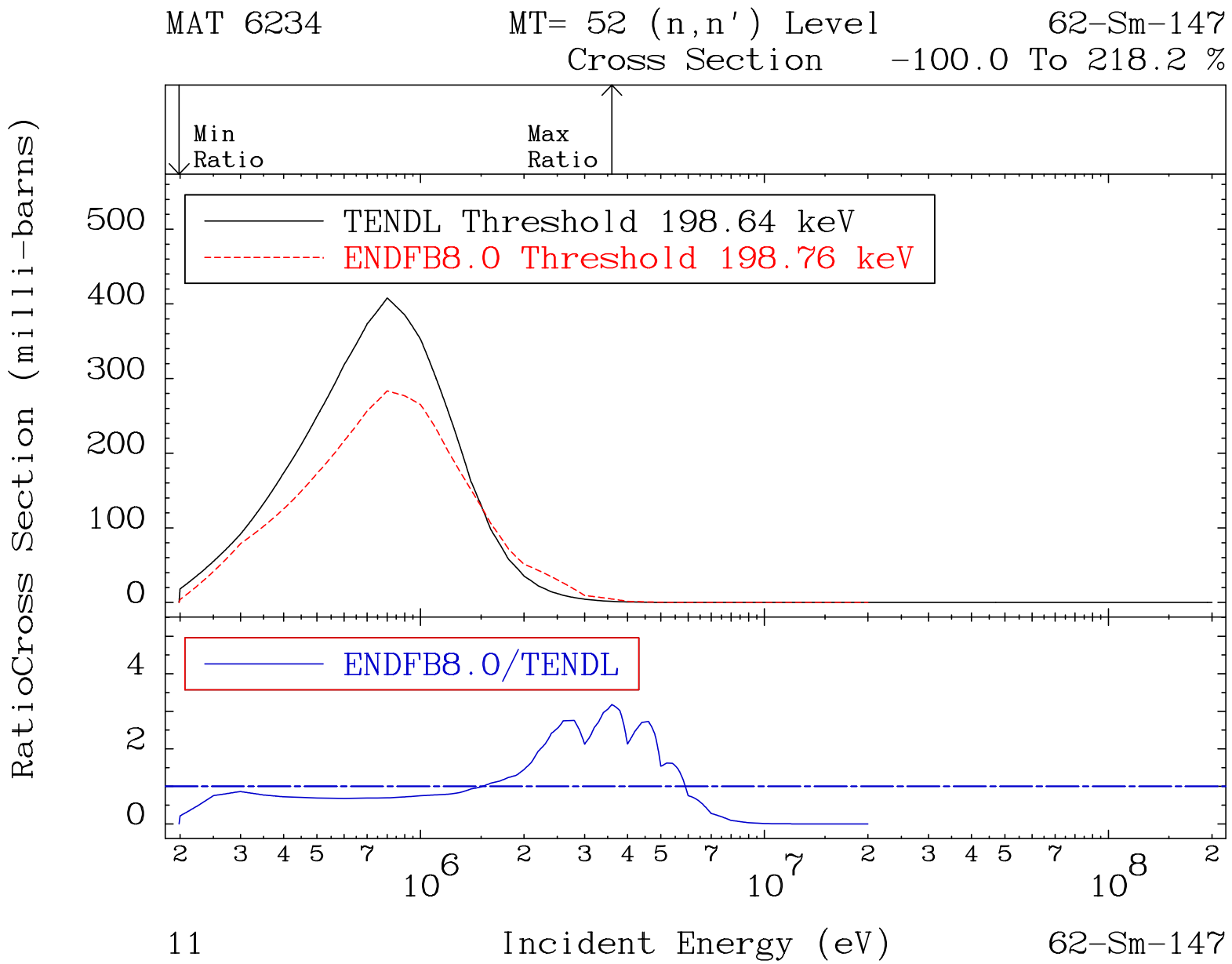

MAT 6234
(n,n') α
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 4.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
400
200
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
6
Incident Energy (eV)
62-Sm-147

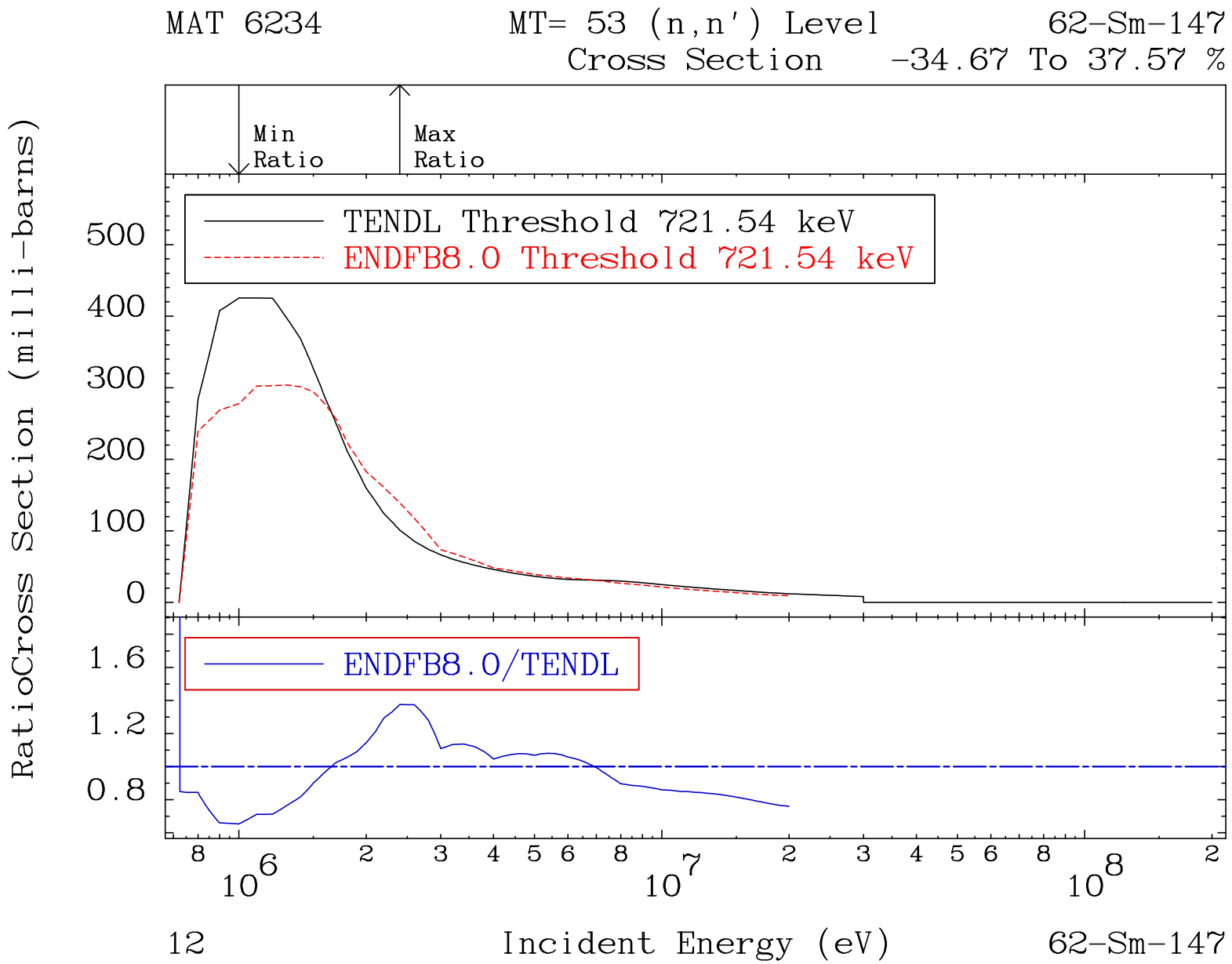

MAT 6234
(n,2n) α
Cross Section
62-Sm-147
-100.0 To 6485. %
Min Ratio
Max Ratio
TENDL Threshold 3.8384 MeV
ENDFB8.0 Threshold 10.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
62-Sm-147

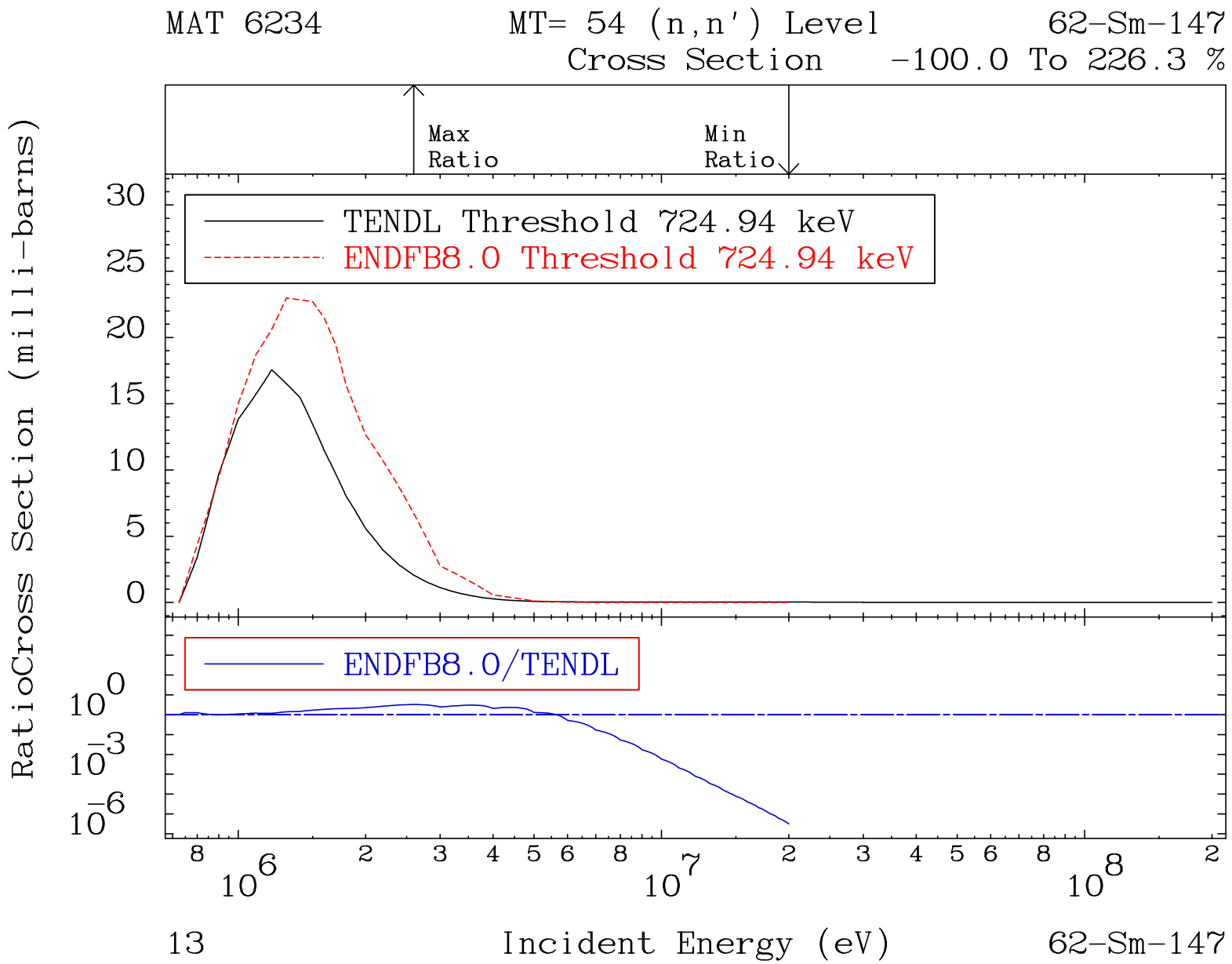

MAT 6234
(n,n') p
Cross Section
62-Sm-147
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.1494 MeV
ENDFB8.0 Threshold 7.1494 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
8
62-Sm-147

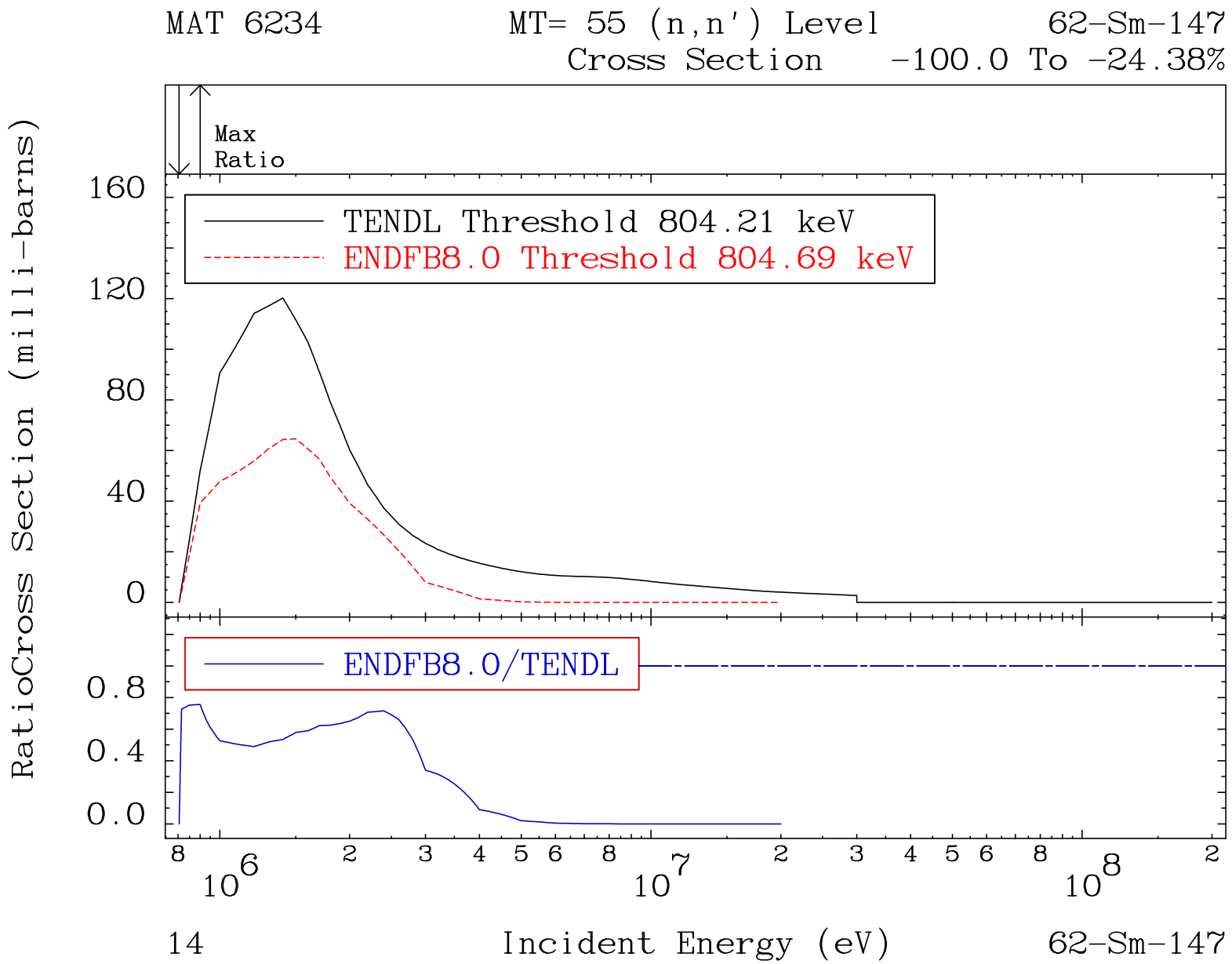

MAT 6234
(n,2n) p
Cross Section
62-Sm-147
-100.0 To -54.77%
Min Ratio
Max Ratio
TENDL Threshold 13.451 MeV
ENDFB8.0 Threshold 15.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
0.6
0.4
0.2
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
62-Sm-147

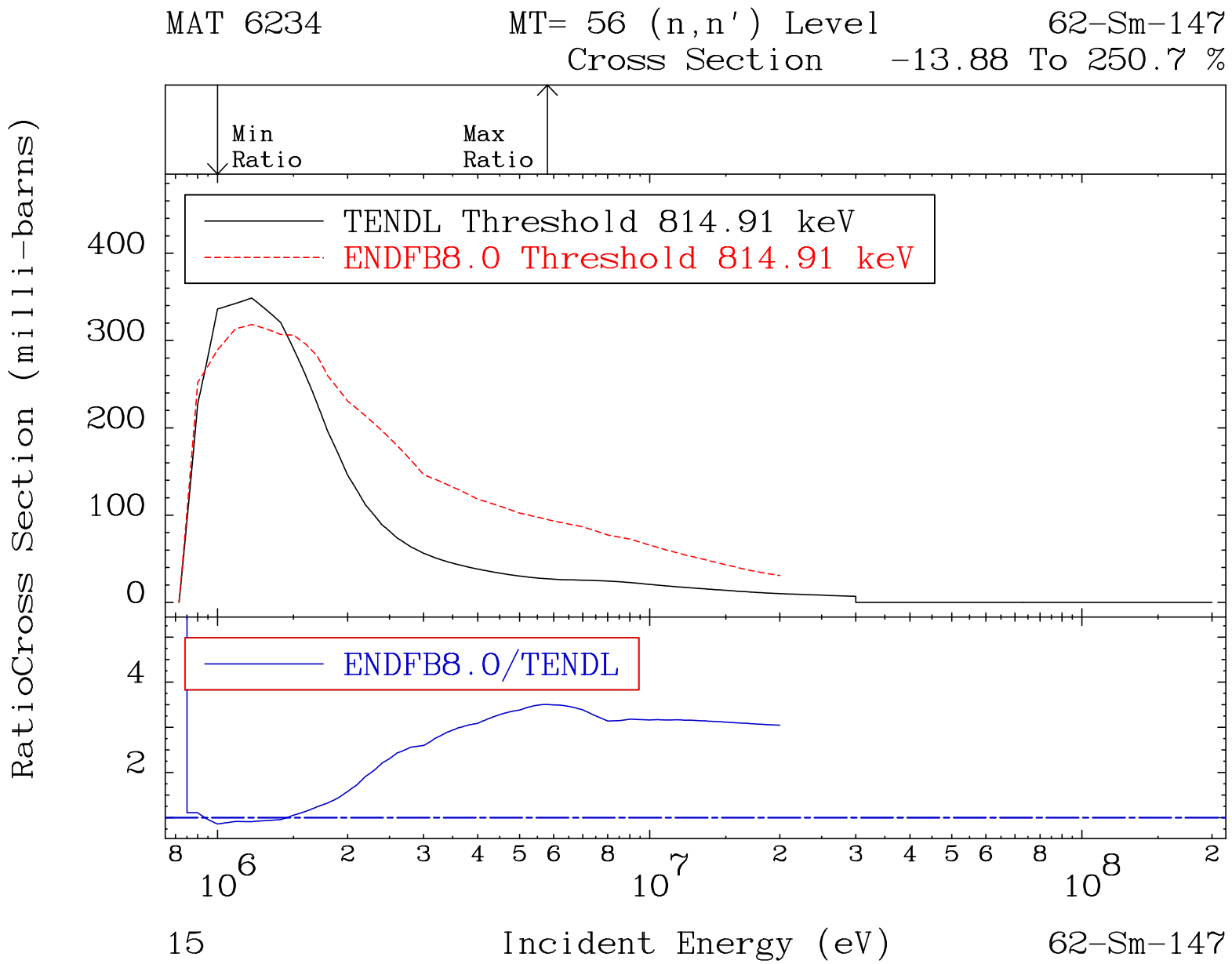

MAT 6234
MT= 51 (n,n') Level
62-Sm-147
Cross Section -100.0 To 172.3 %
Min Ratio
Max Ratio
TENDL Threshold 122.04 keV
ENDFB8.0 Threshold 122.04 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
10
62-Sm-147

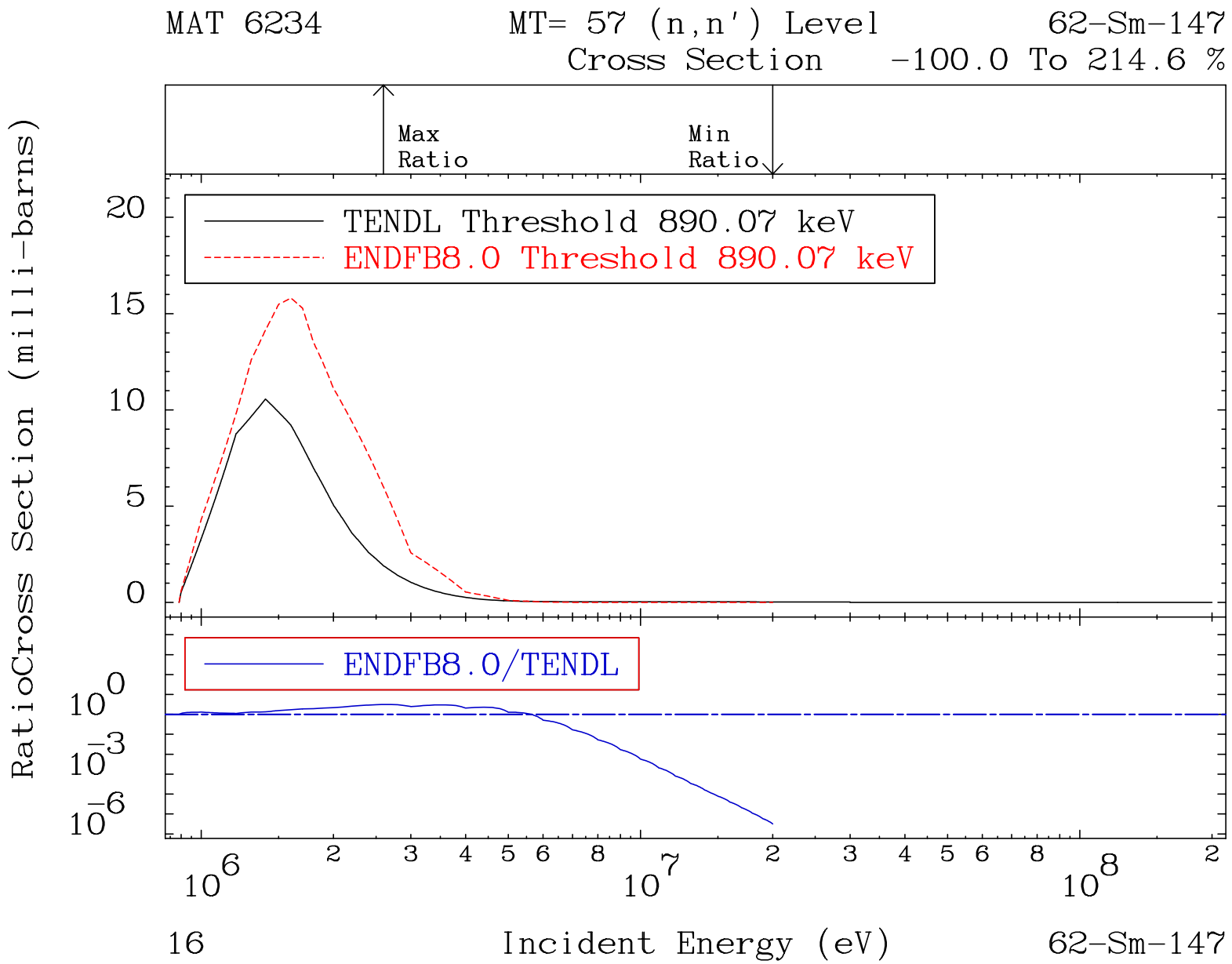

MAT 6234
MT= 52 (n,n') Level
62-Sm-147
Cross Section -100.0 To 218.2 %
Min Ratio
Max Ratio
TENDL Threshold 198.64 keV
ENDFB8.0 Threshold 198.76 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
4
2
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
11
Incident Energy (eV)
62-Sm-147

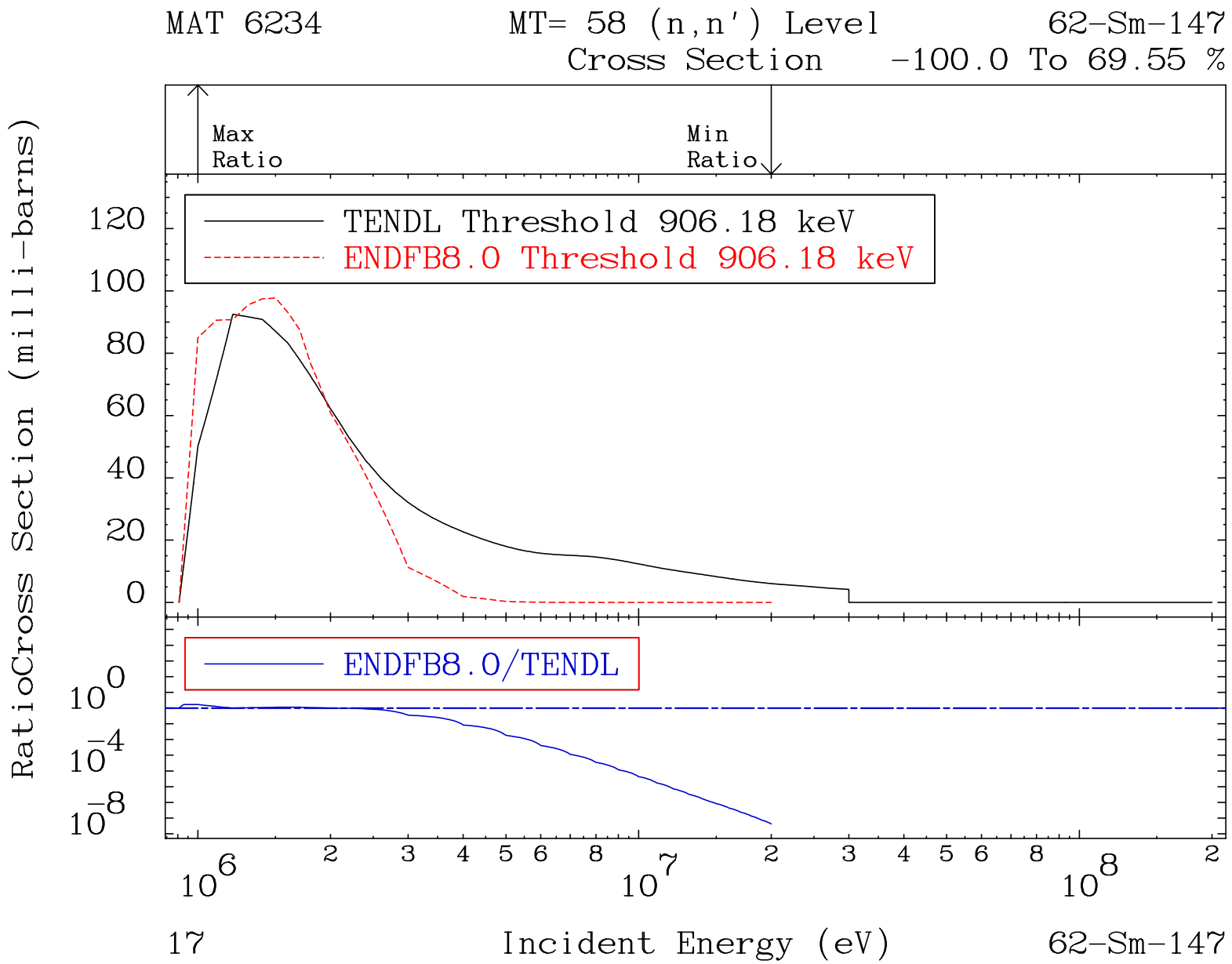

MAT 6234
MT= 53 (n,n') Level
62-Sm-147
Cross Section
-34.67 To 37.57 %
Min Ratio
Max Ratio
TENDL Threshold 721.54 keV
ENDFB8.0 Threshold 721.54 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.6
1.2
0.8
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
12
Incident Energy (eV)
62-Sm-147

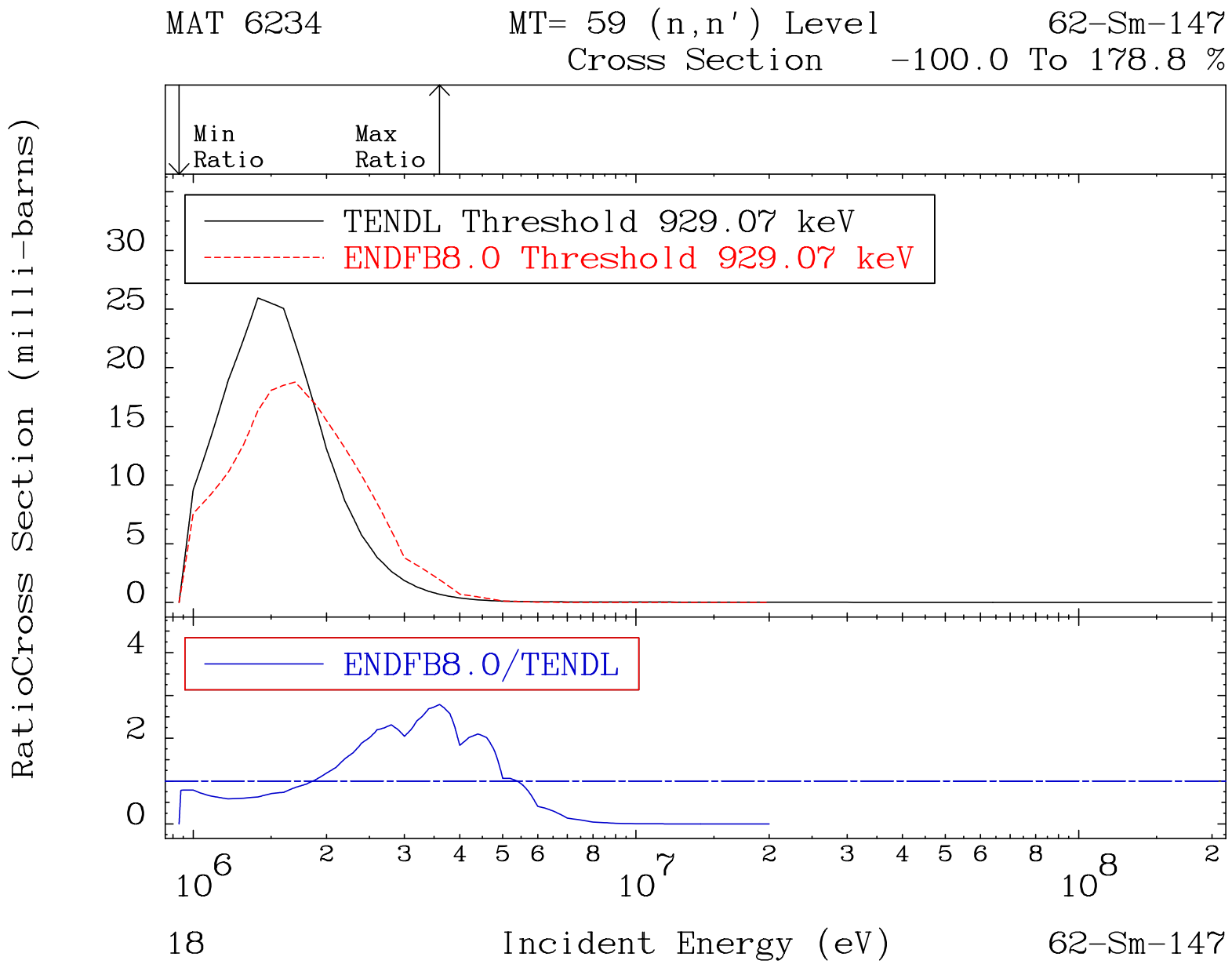

MAT 6234
MT= 54 (n,n') Level
62-Sm-147
Cross Section -100.0 To 226.3 %
Max Ratio
Min Ratio
TENDL Threshold 724.94 keV
ENDFB8.0 Threshold 724.94 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
13
62-Sm-147

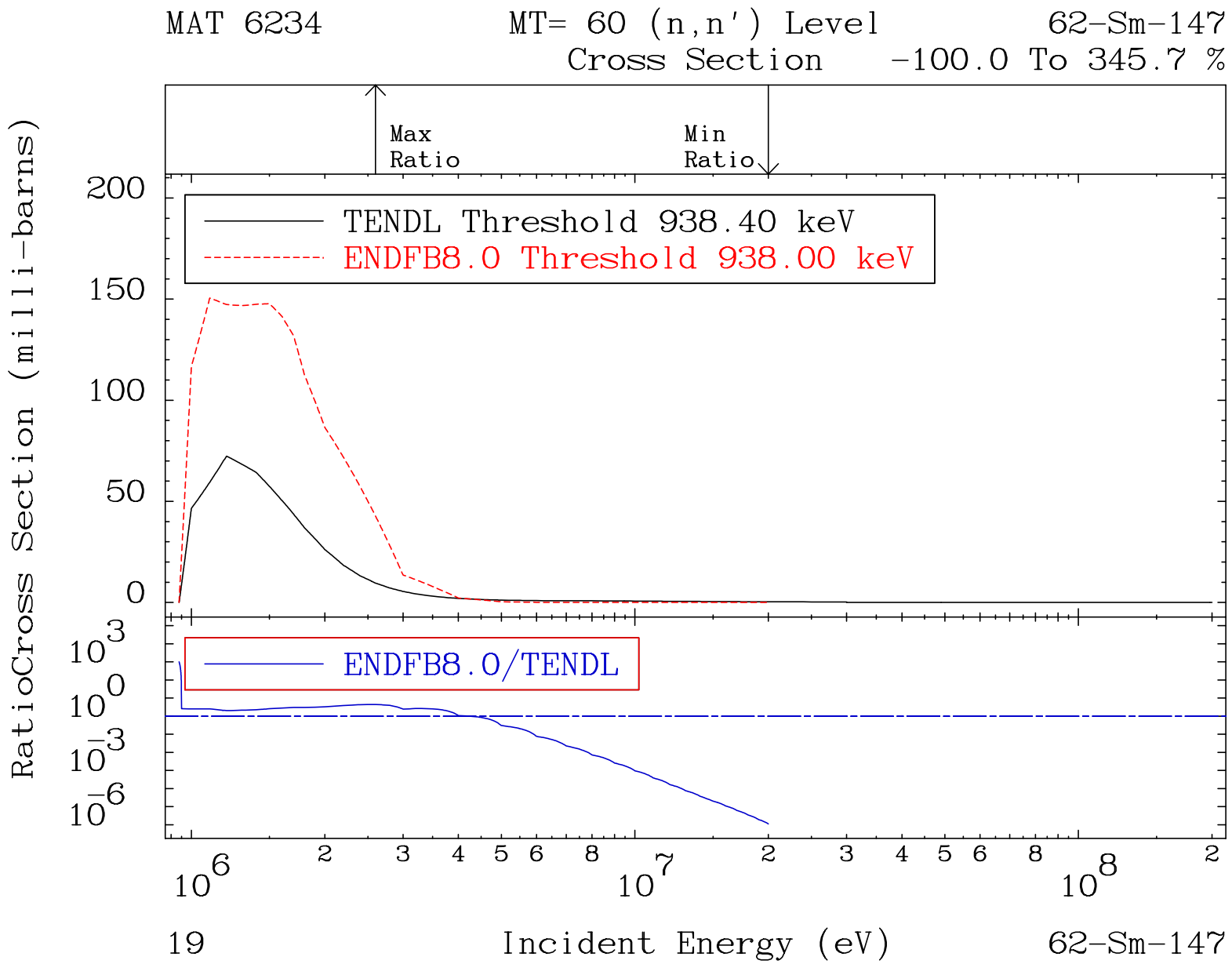

MAT 6234
MT= 55 (n,n') Level
Cross Section
62-Sm-147
-100.0 To -24.38%
Max
Ratio
TENDL Threshold 804.21 keV
ENDFB8.0 Threshold 804.69 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
0.8
0.4
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
14
Incident Energy (eV)
62-Sm-147

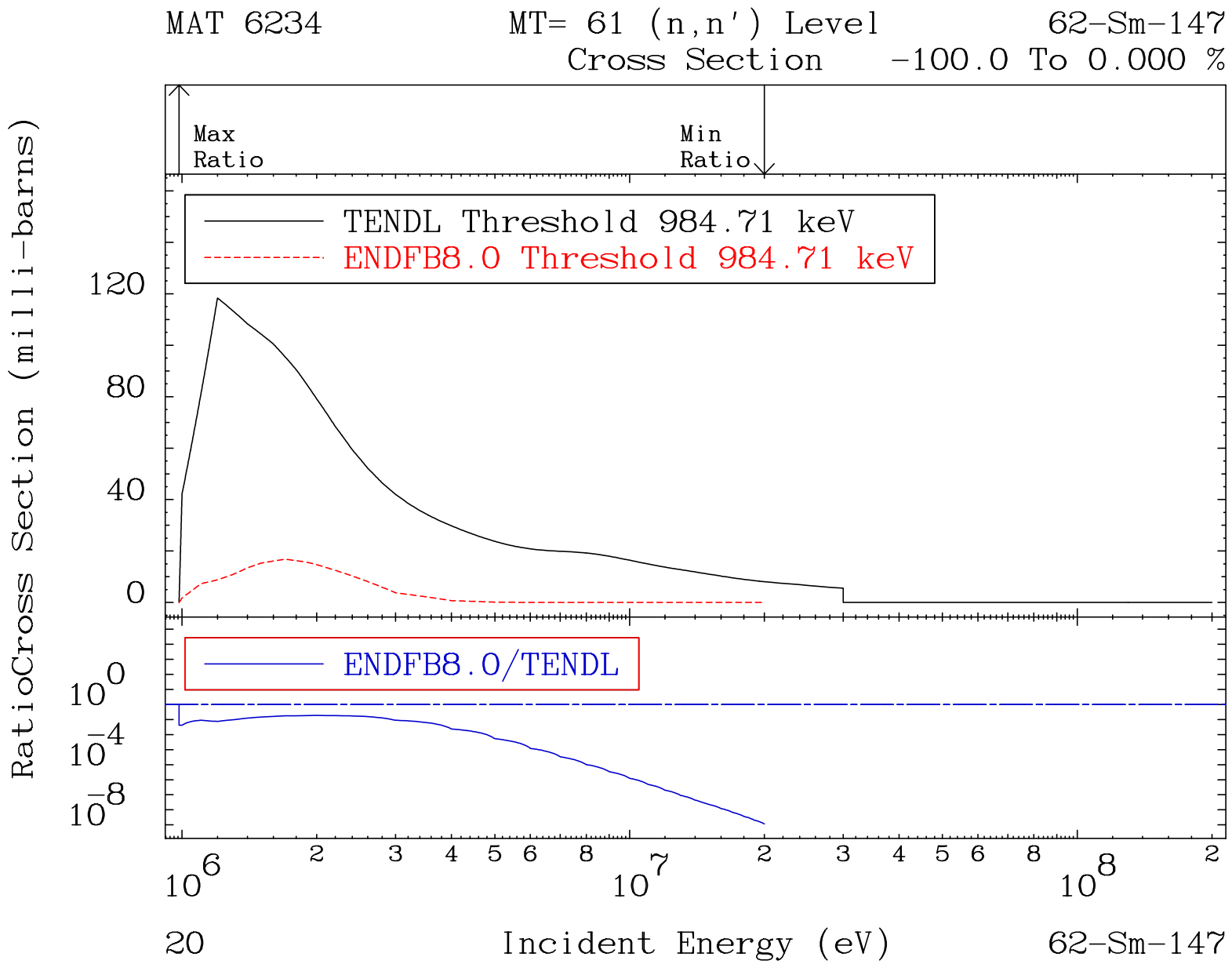

MAT 6234
MT= 56 (n,n') Level
62-Sm-147
Cross Section -13.88 To 250.7 %
Min Ratio
Max Ratio
TENDL Threshold 814.91 keV
ENDFB8.0 Threshold 814.91 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
4
2
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
15
Incident Energy (eV)
62-Sm-147

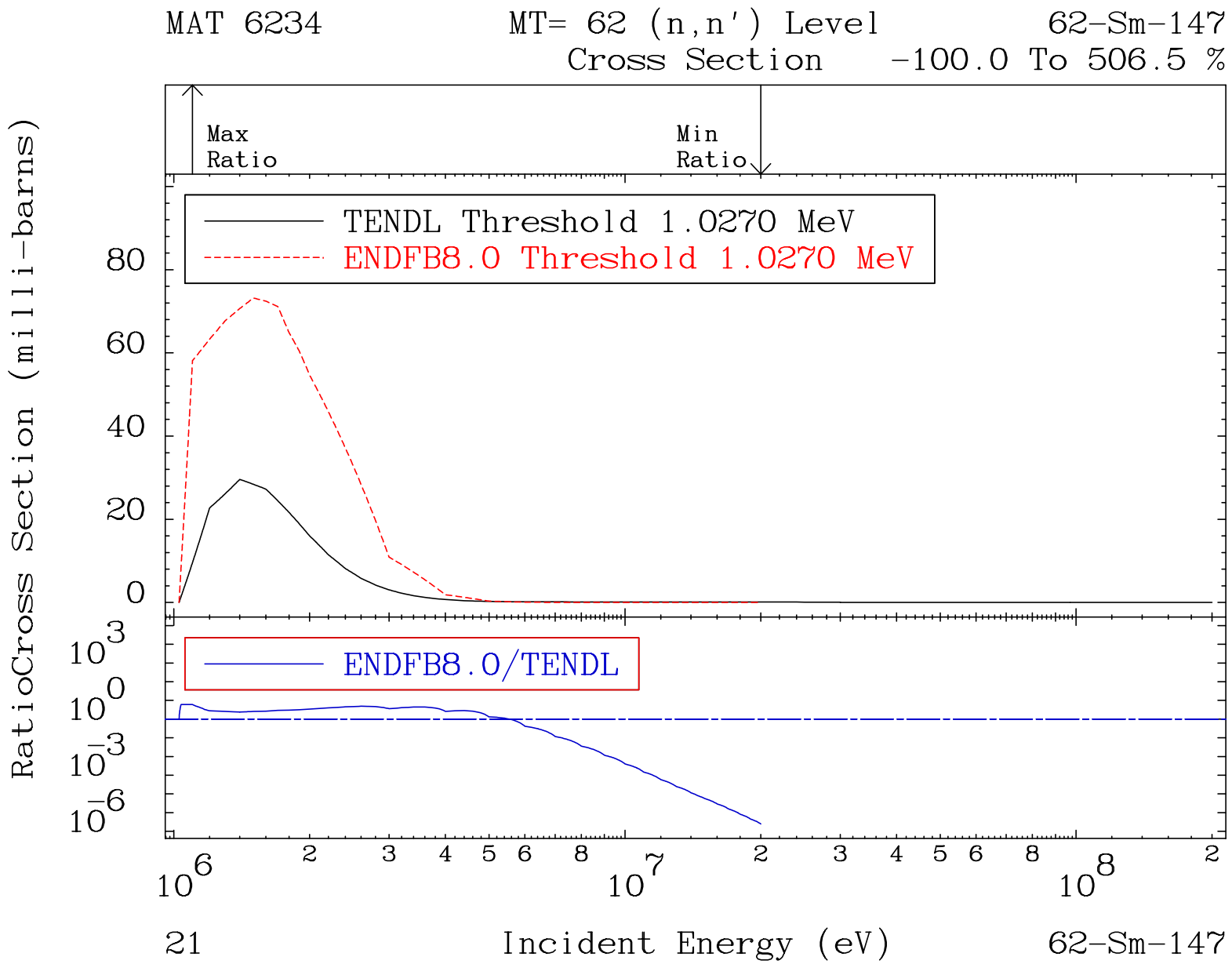

MAT 6234
MT= 57 (n,n') Level
Cross Section
62-Sm-147
-100.0 To 214.6 %
Max Ratio
Min Ratio
TENDL Threshold 890.07 keV
ENDFB8.0 Threshold 890.07 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
16
62-Sm-147

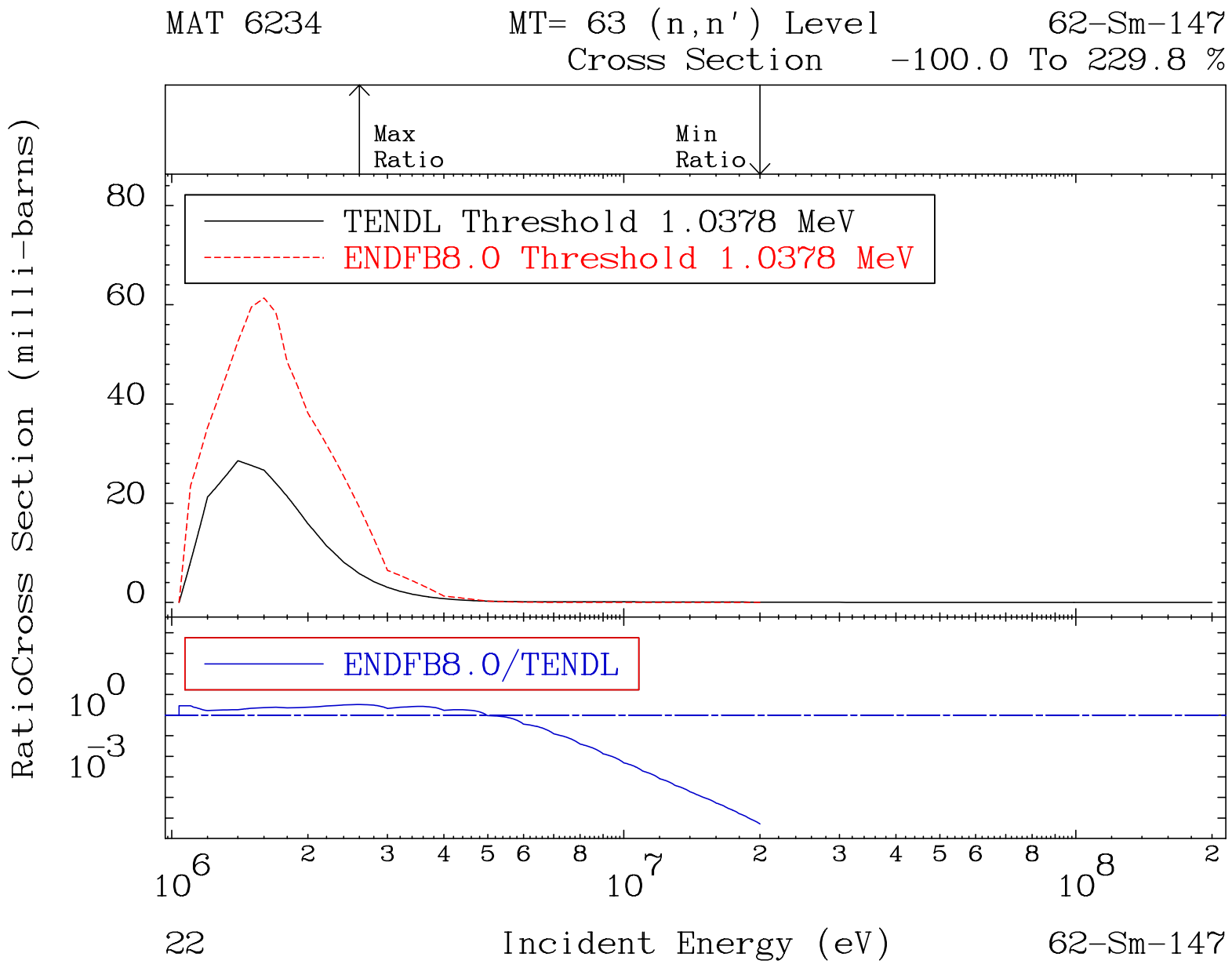

MAT 6234
MT= 58 (n,n') Level
62-Sm-147
Cross Section
-100.0 To 69.55 %
Max Ratio
Min Ratio
TENDL Threshold 906.18 keV
ENDFB8.0 Threshold 906.18 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^{0}
10^{-4}
10^{-8}
10^{6}
10^{7}
10^{8}
2 3 4 5 6 8
17
Incident Energy (eV)
62-Sm-147

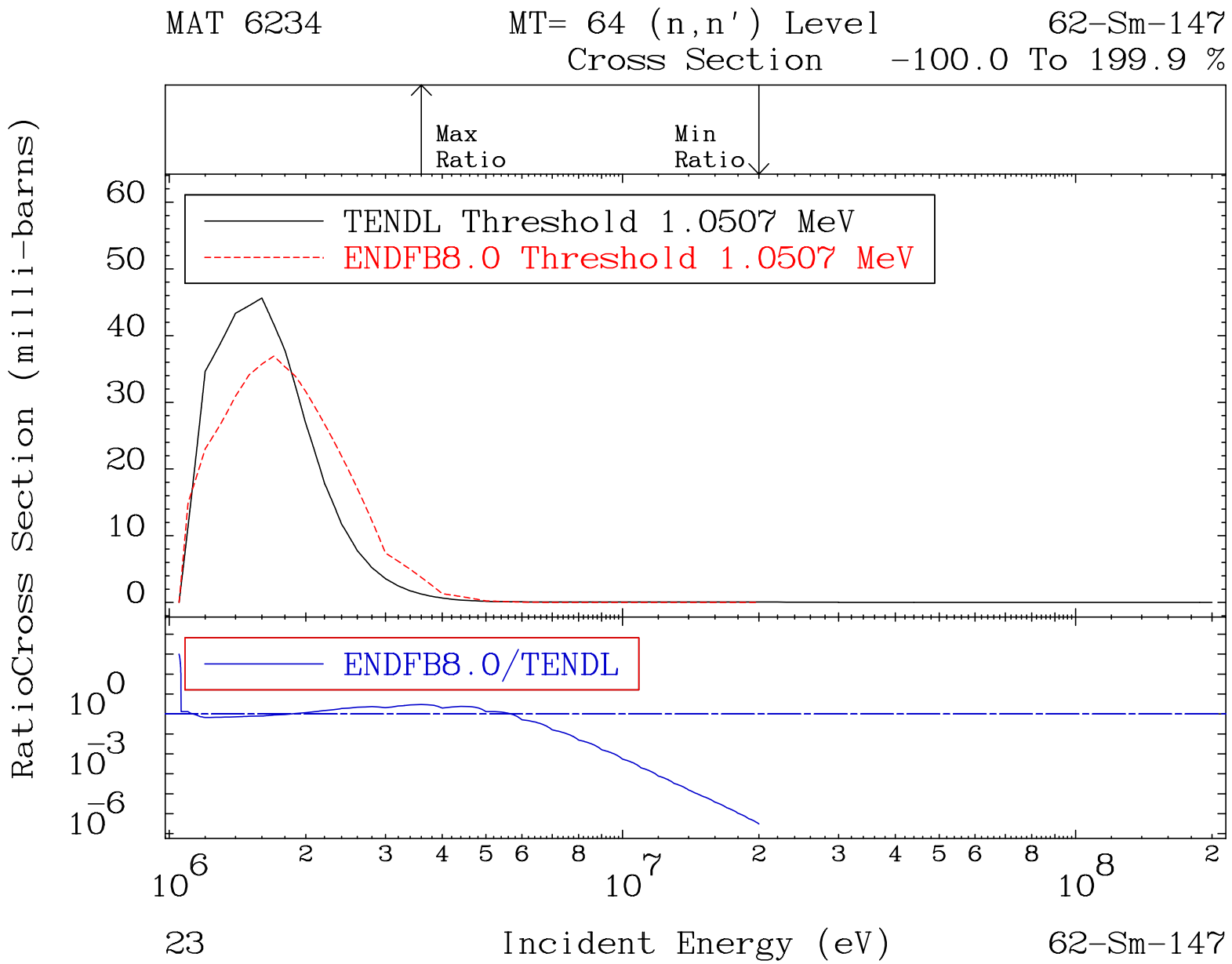

MAT 6234
MT= 59 (n,n') Level
62-Sm-147
Cross Section
-100.0 To 178.8 %
Min Ratio
Max Ratio
TENDL Threshold 929.07 keV
ENDFB8.0 Threshold 929.07 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
18
Incident Energy (eV)
62-Sm-147

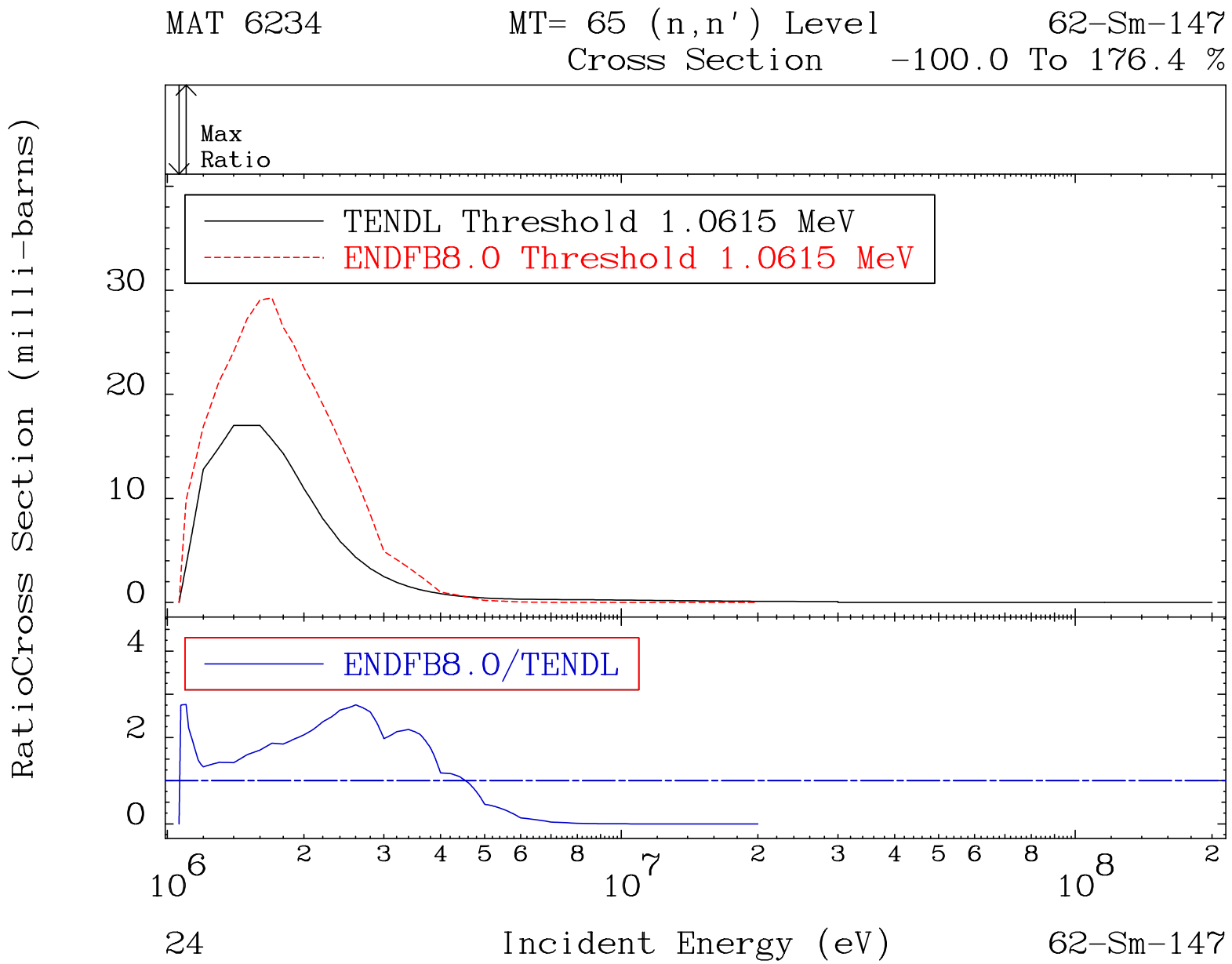

MAT 6234
MT= 60 (n,n') Level
62-Sm-147
Cross Section -100.0 To 345.7 %
Max Ratio
Min Ratio
TENDL Threshold 938.40 keV
ENDFB8.0 Threshold 938.00 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^3
10^0
10^-3
10^-6
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
19
Incident Energy (eV)
62-Sm-147

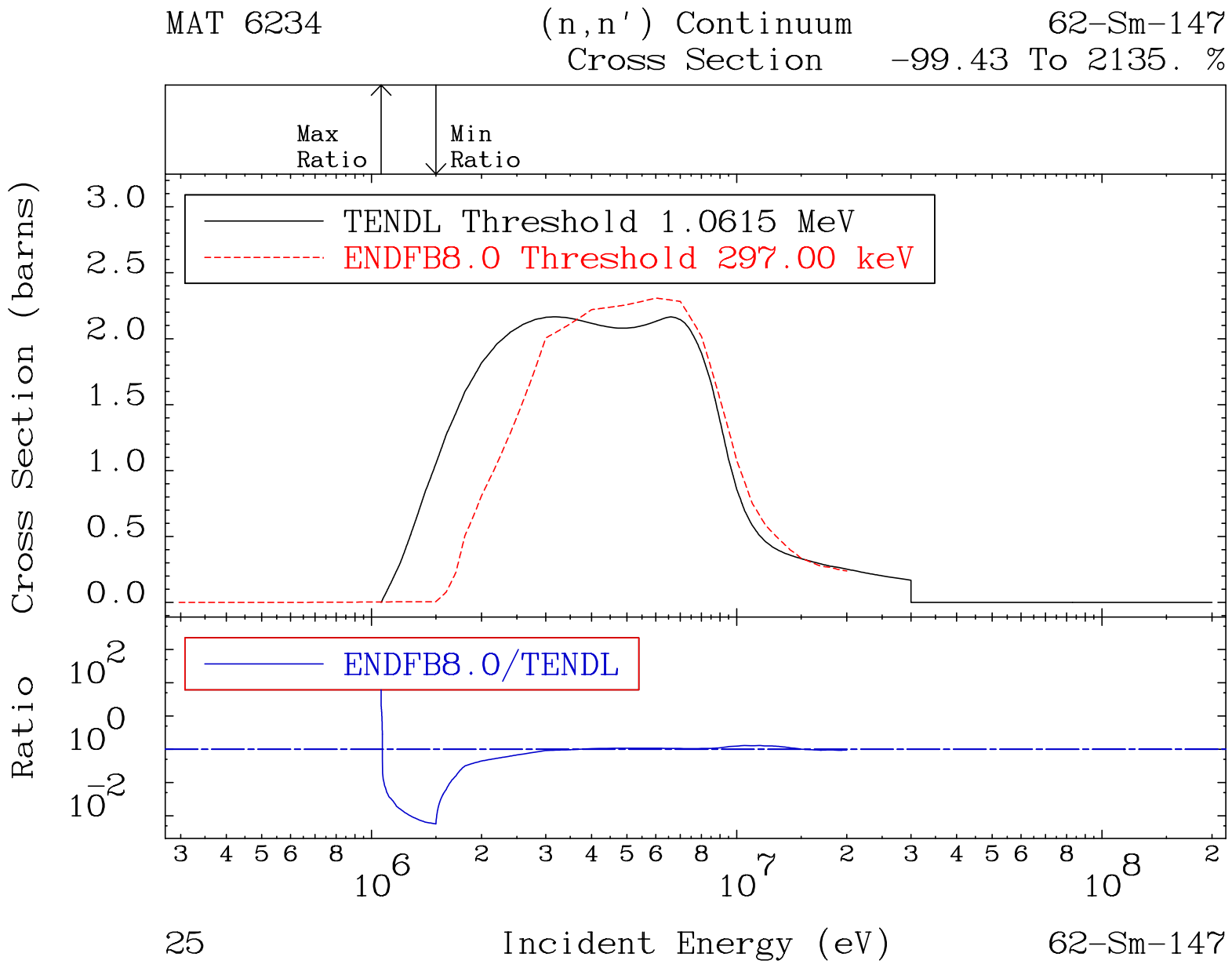

MAT 6234
MT= 61 (n,n') Level
62-Sm-147
Cross Section -100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 984.71 keV
ENDFB8.0 Threshold 984.71 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
80
40
0
10^0
10^-4
10^-8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
20
Incident Energy (eV)
62-Sm-147

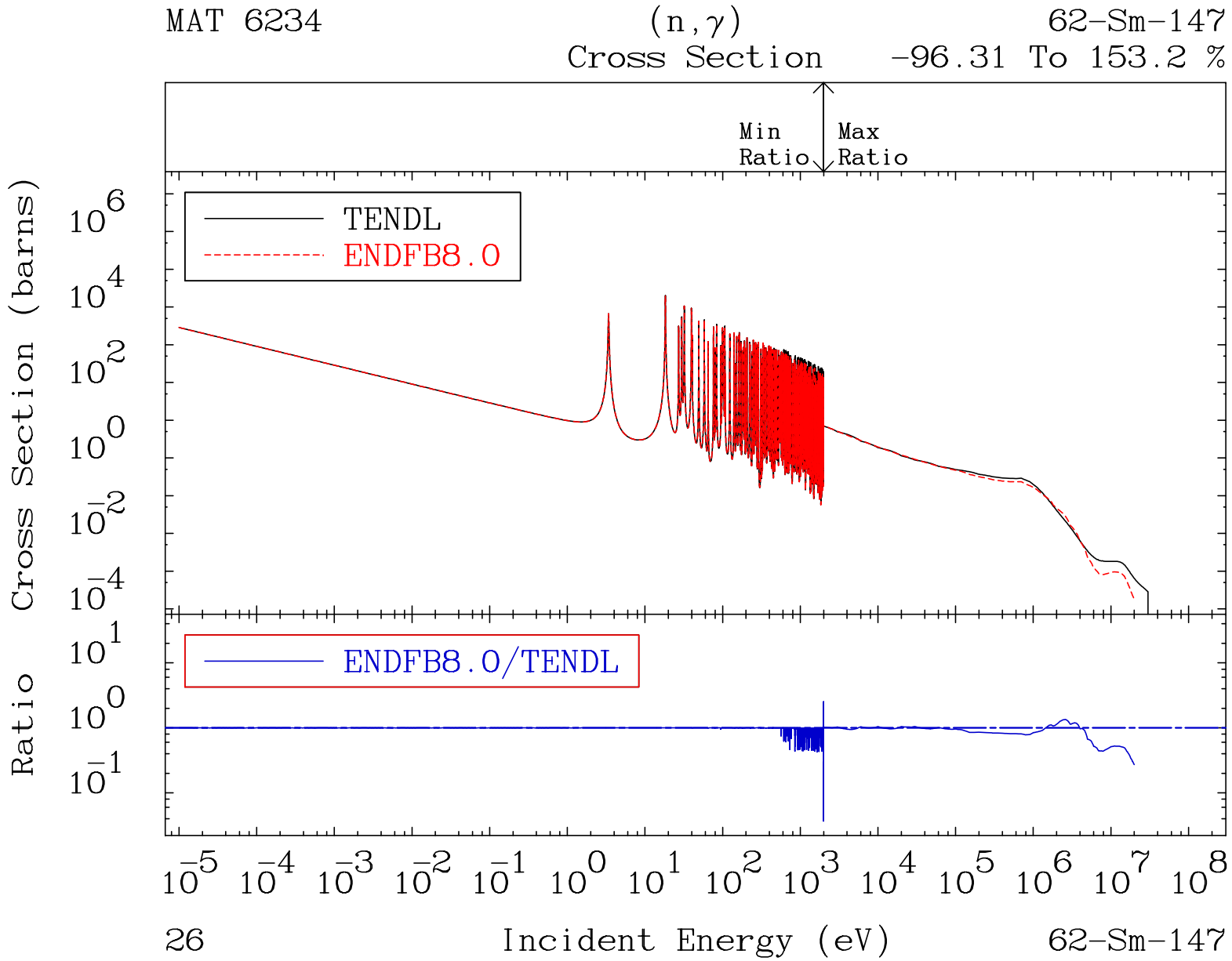

MAT 6234
MT= 62 (n,n') Level
62-Sm-147
Cross Section -100.0 To 506.5 %
Max Ratio
Min Ratio
TENDL Threshold 1.0270 MeV
ENDFB8.0 Threshold 1.0270 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
62-Sm-147

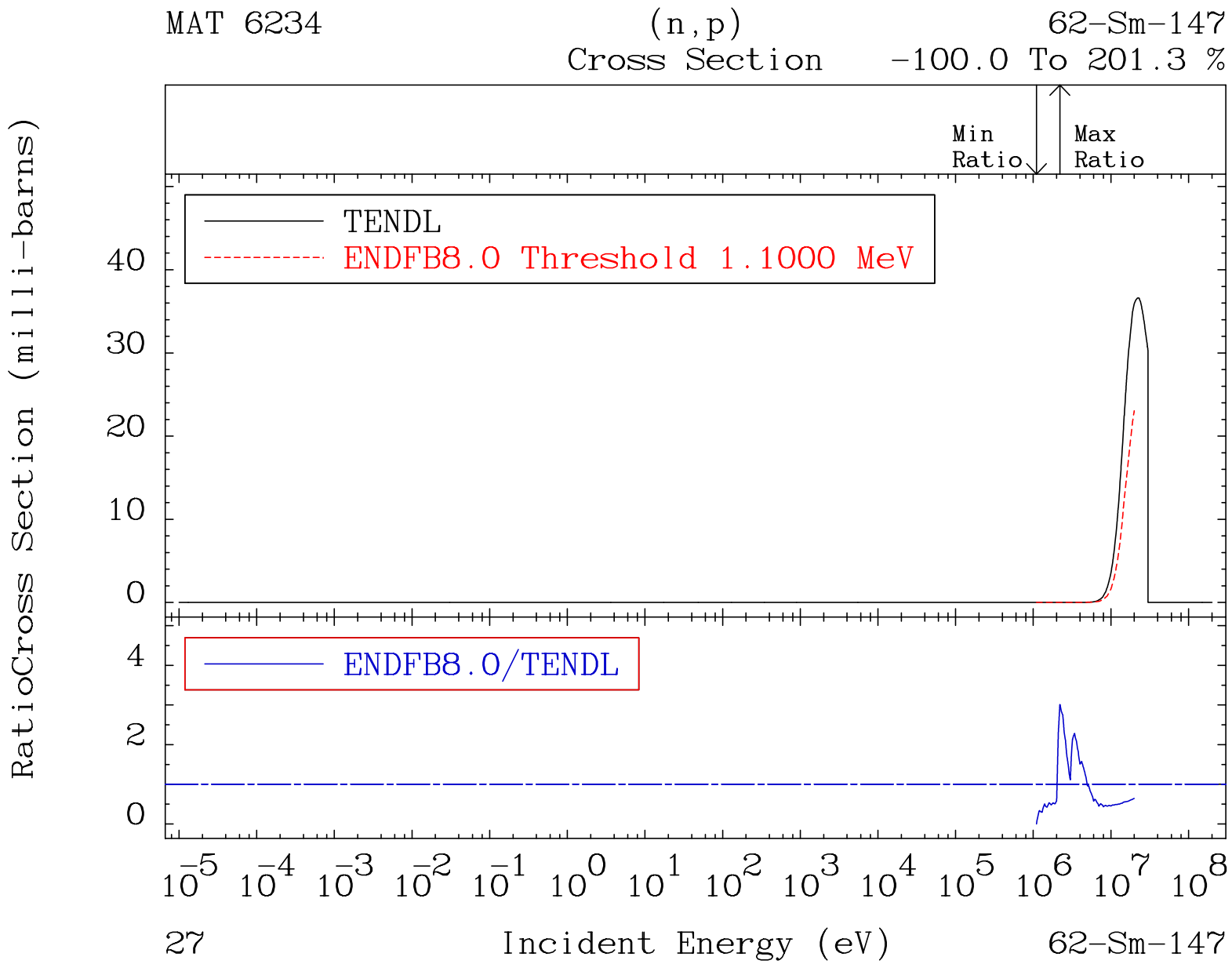

MAT 6234
MT= 63 (n,n') Level
62-Sm-147
Cross Section
-100.0 To 229.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.0378 MeV
ENDFB8.0 Threshold 1.0378 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22
62-Sm-147

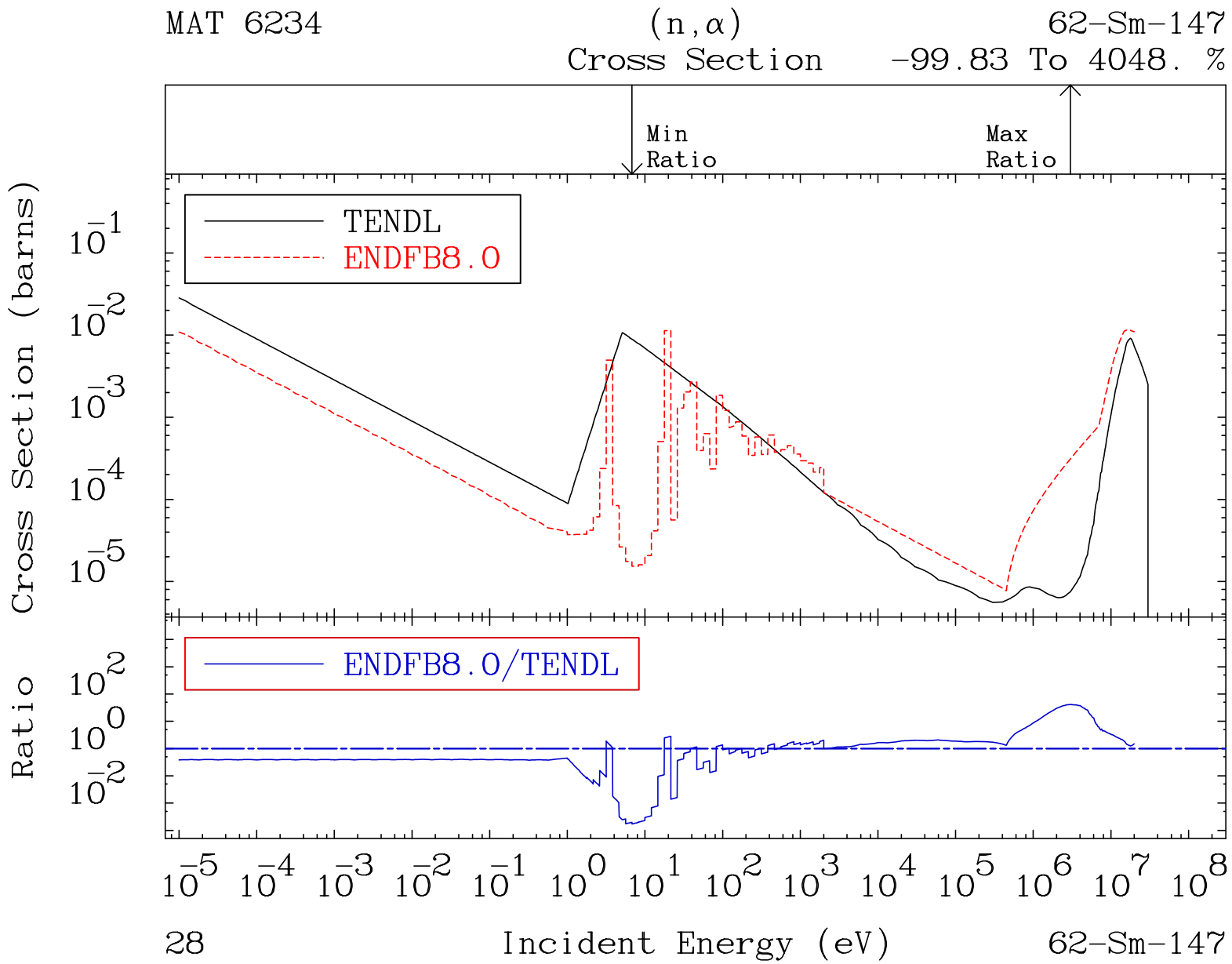

MAT 6234
MT= 64 (n,n') Level
62-Sm-147
Cross Section -100.0 To 199.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.0507 MeV
ENDFB8.0 Threshold 1.0507 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
62-Sm-147

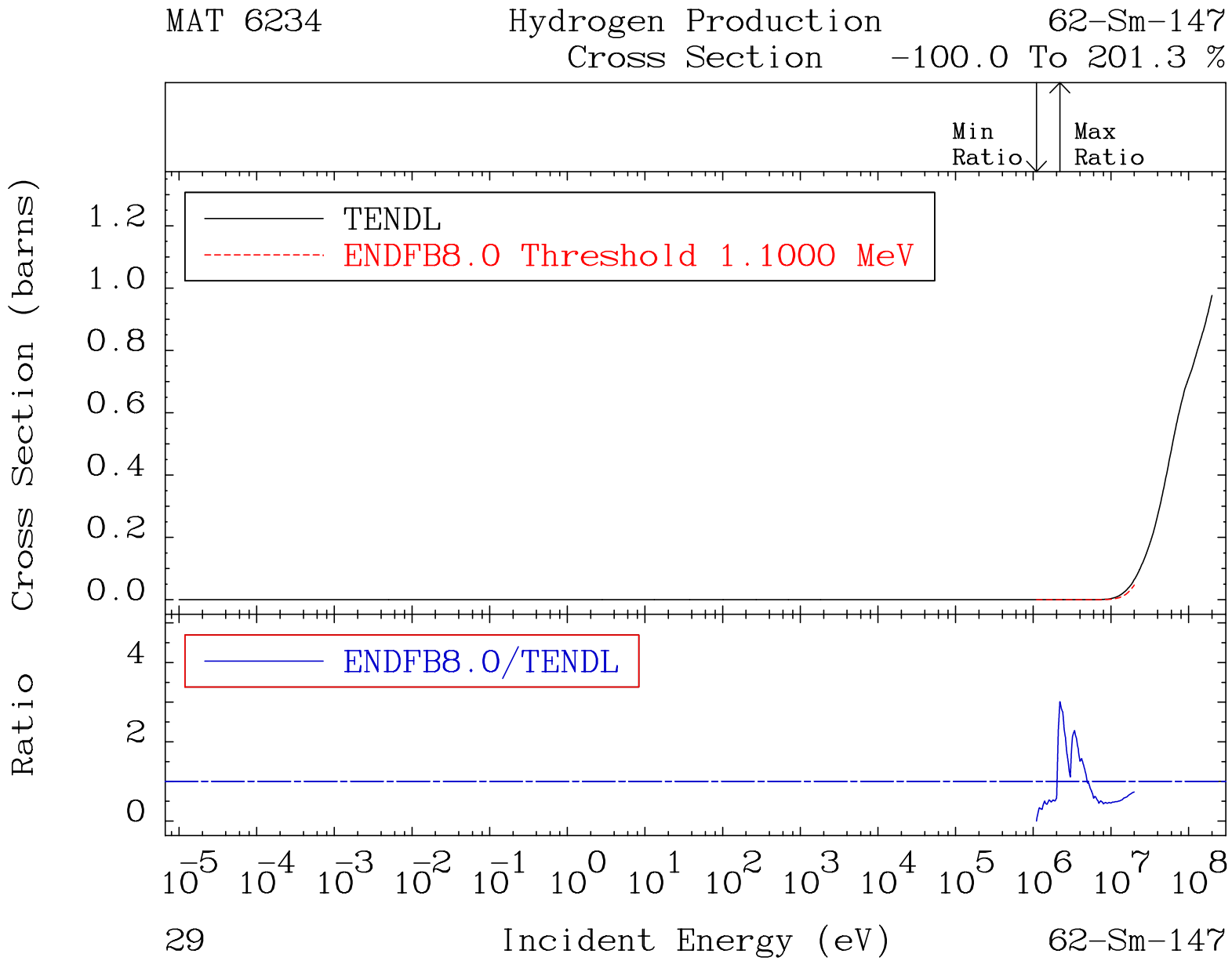

MAT 6234
MT= 65 (n,n') Level
62-Sm-147
Cross Section -100.0 To 176.4 %
Max
Ratio
TENDL Threshold 1.0615 MeV
ENDFB8.0 Threshold 1.0615 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
4
2
0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
24
Incident Energy (eV)
62-Sm-147

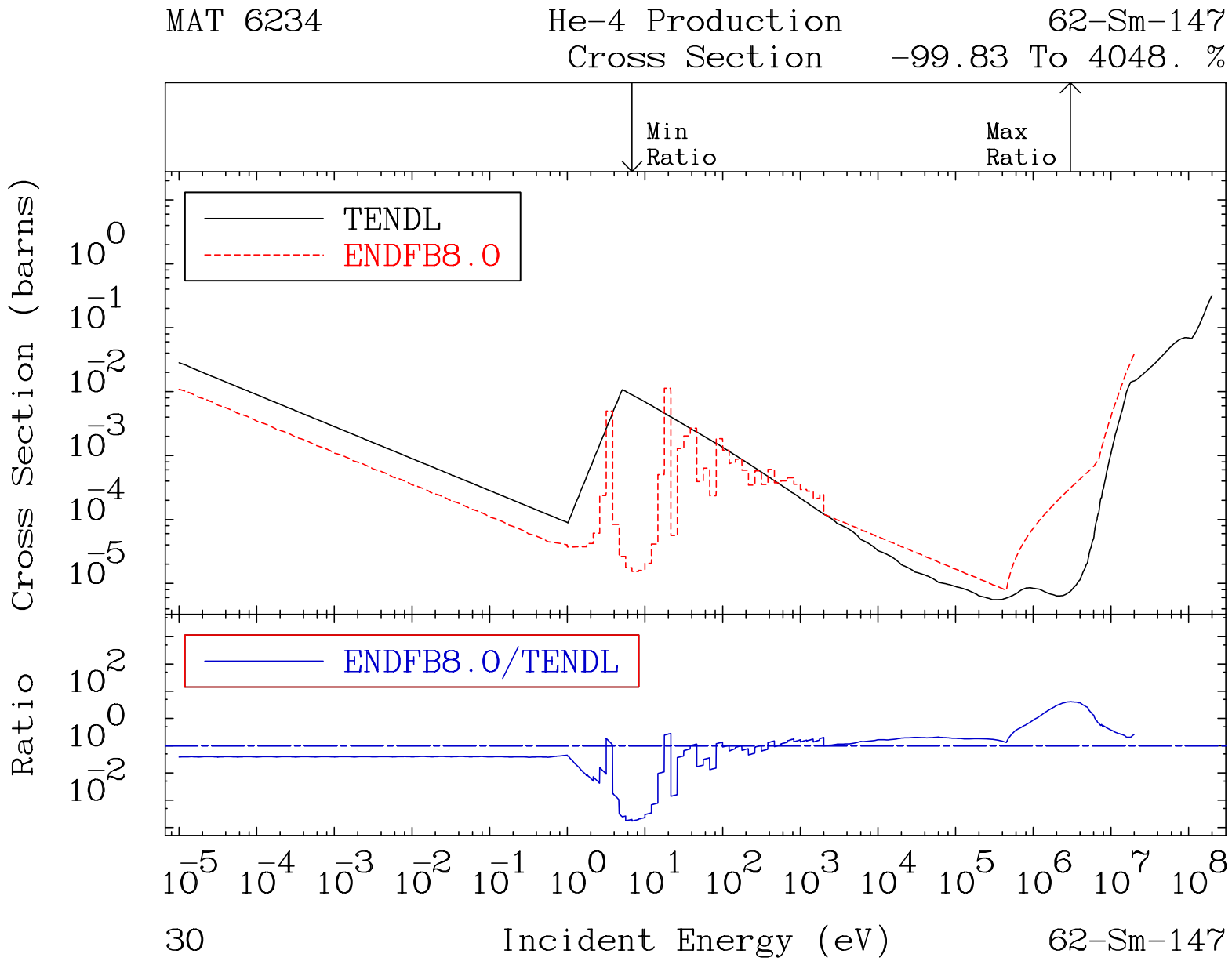

MAT 6234
(n,n') Continuum
Cross Section
62-Sm-147
-99.43 To 2135. %
Max Ratio
Min Ratio
TENDL Threshold 1.0615 MeV
ENDFB8.0 Threshold 297.00 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^2
10^0
10^-2
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
62-Sm-147

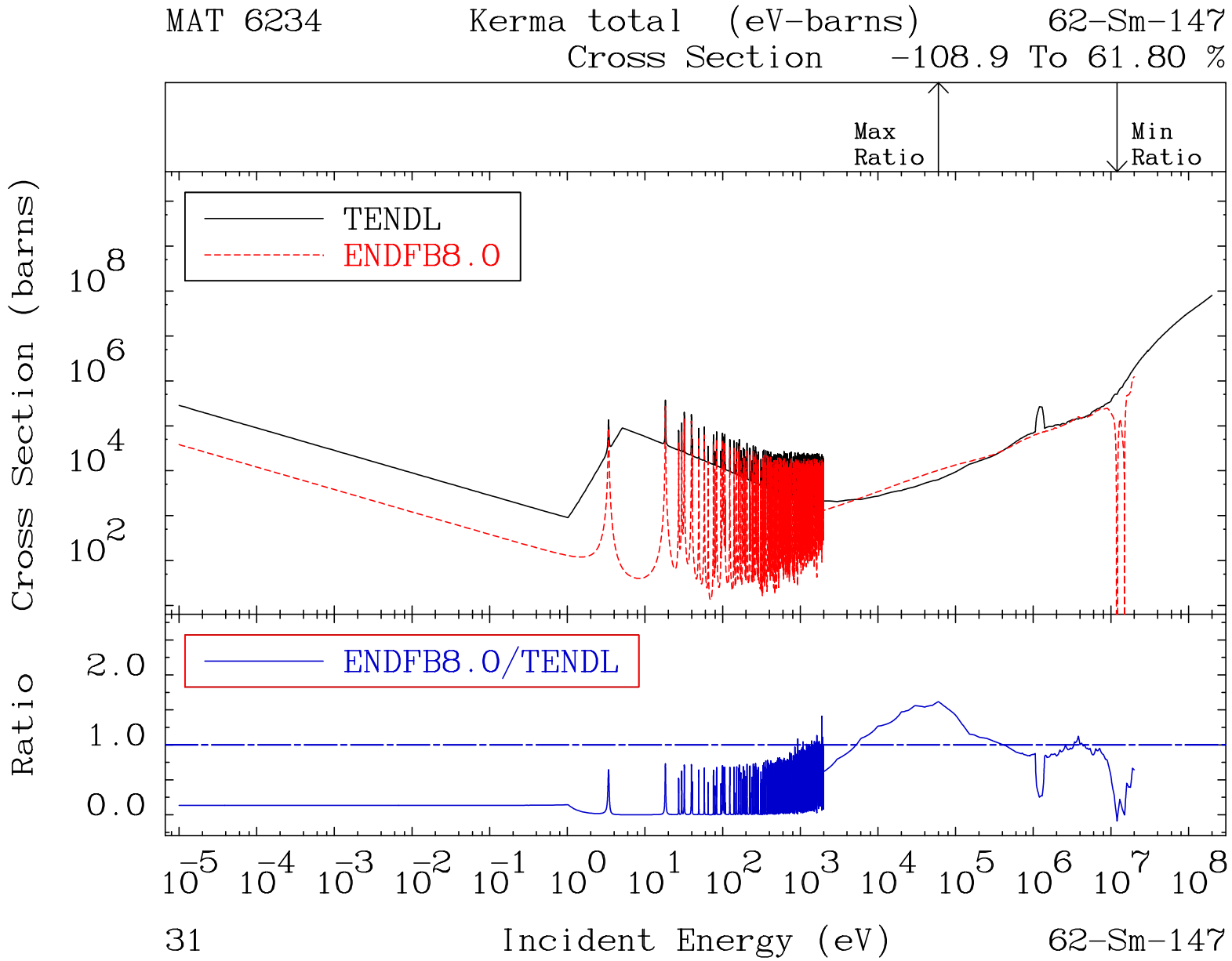

MAT 6234
(n,γ)
Cross Section
62-Sm-147
-96.31 To 153.2 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
26
62-Sm-147

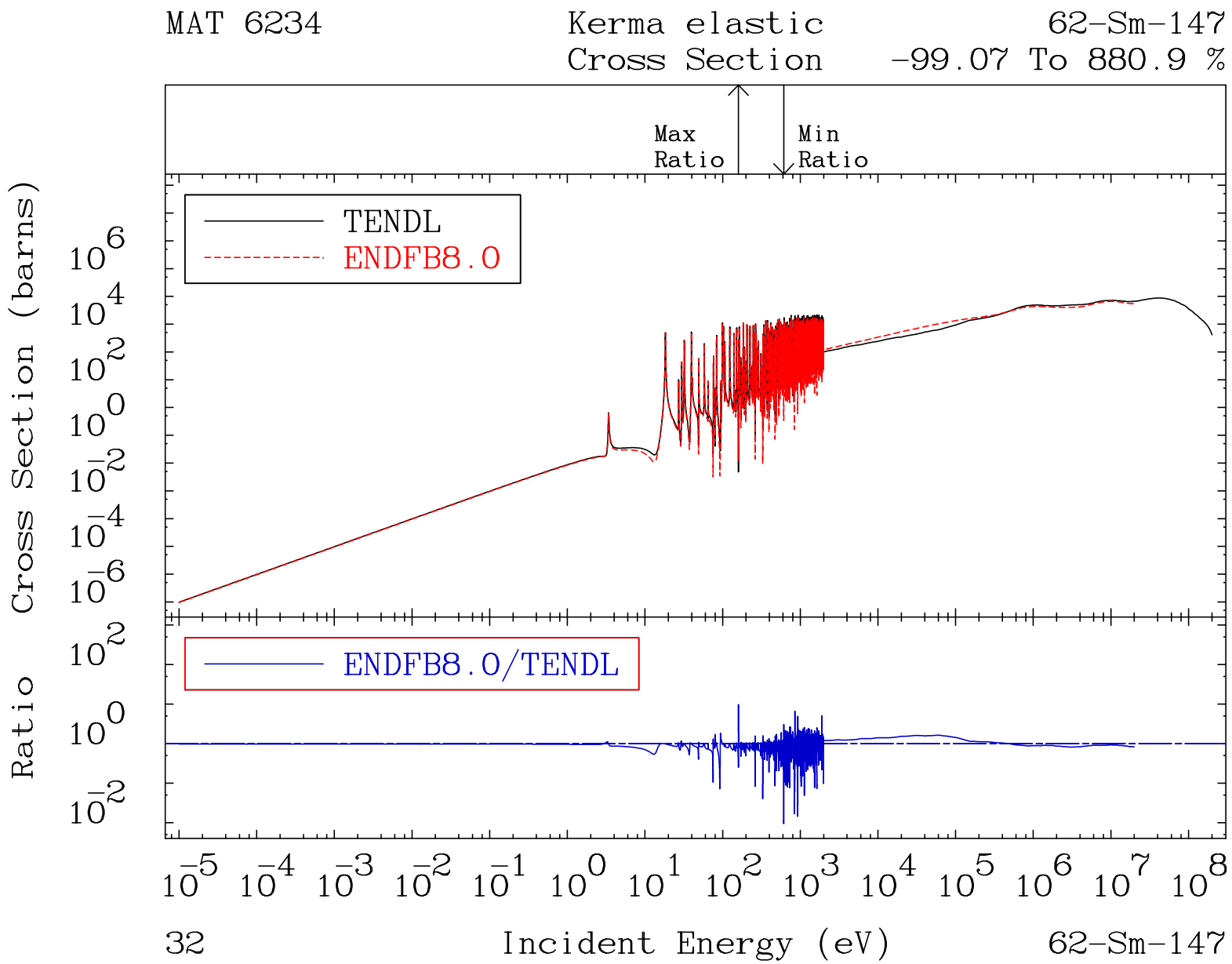

MAT 6234
(n,p)
Cross Section
62-Sm-147
-100.0 To 201.3 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 1.1000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
62-Sm-147

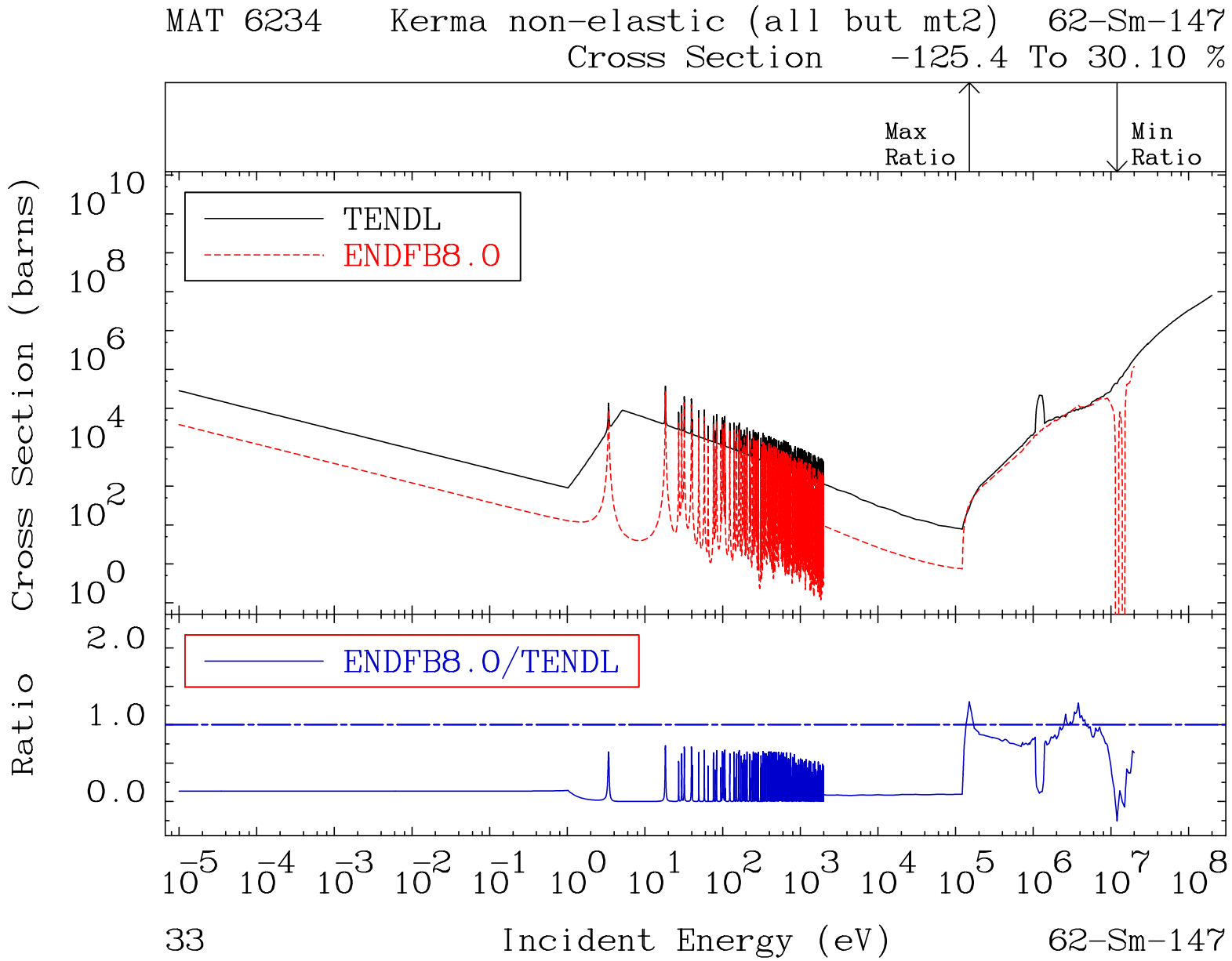

MAT 6234
(n,α)
Cross Section
62-Sm-147
-99.83 To 4048. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
28
62-Sm-147

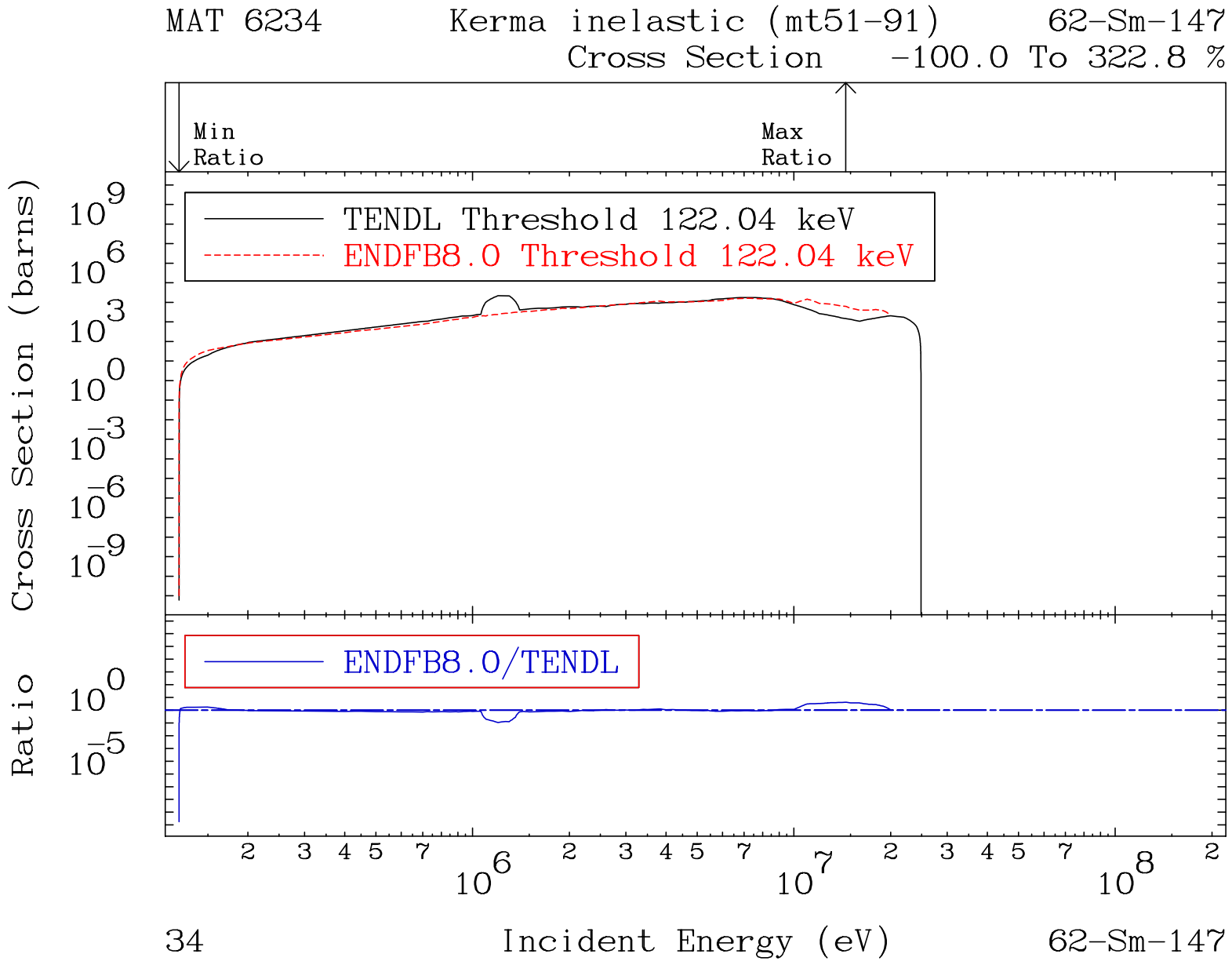

MAT 6234
Hydrogen Production
Cross Section
62-Sm-147
-100.0 To 201.3 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 1.1000 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
62-Sm-147

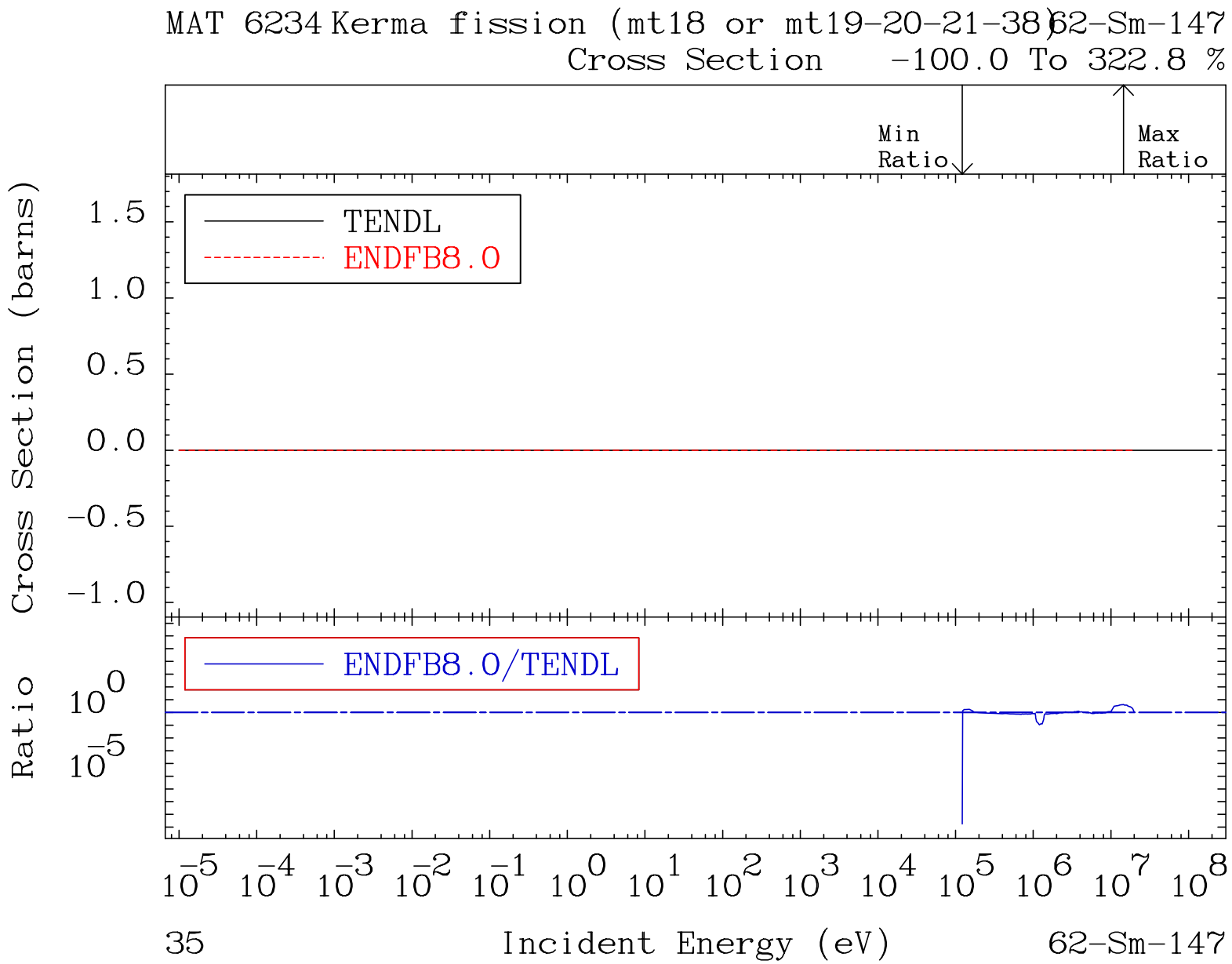

MAT 6234
He-4 Production
Cross Section
62-Sm-147
-99.83 To 4048. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
62-Sm-147

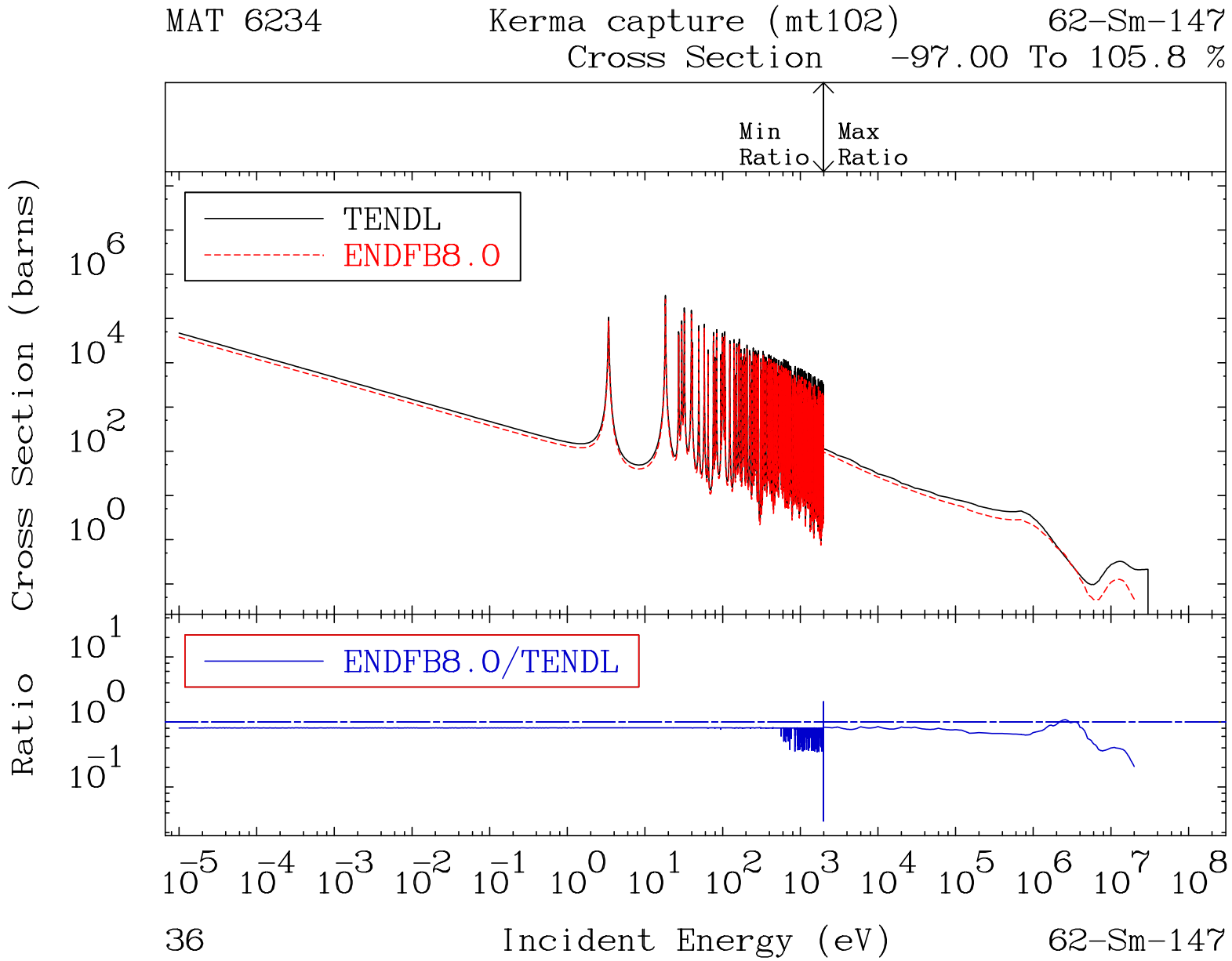

MAT 6234
Kerma total (eV-barns)
62-Sm-147
Cross Section -108.9 To 61.80 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
10^8
10^6
10^4
10^2
ENDFB8.0/TENDL
Ratio
2.0
1.0
0.0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
62-Sm-147

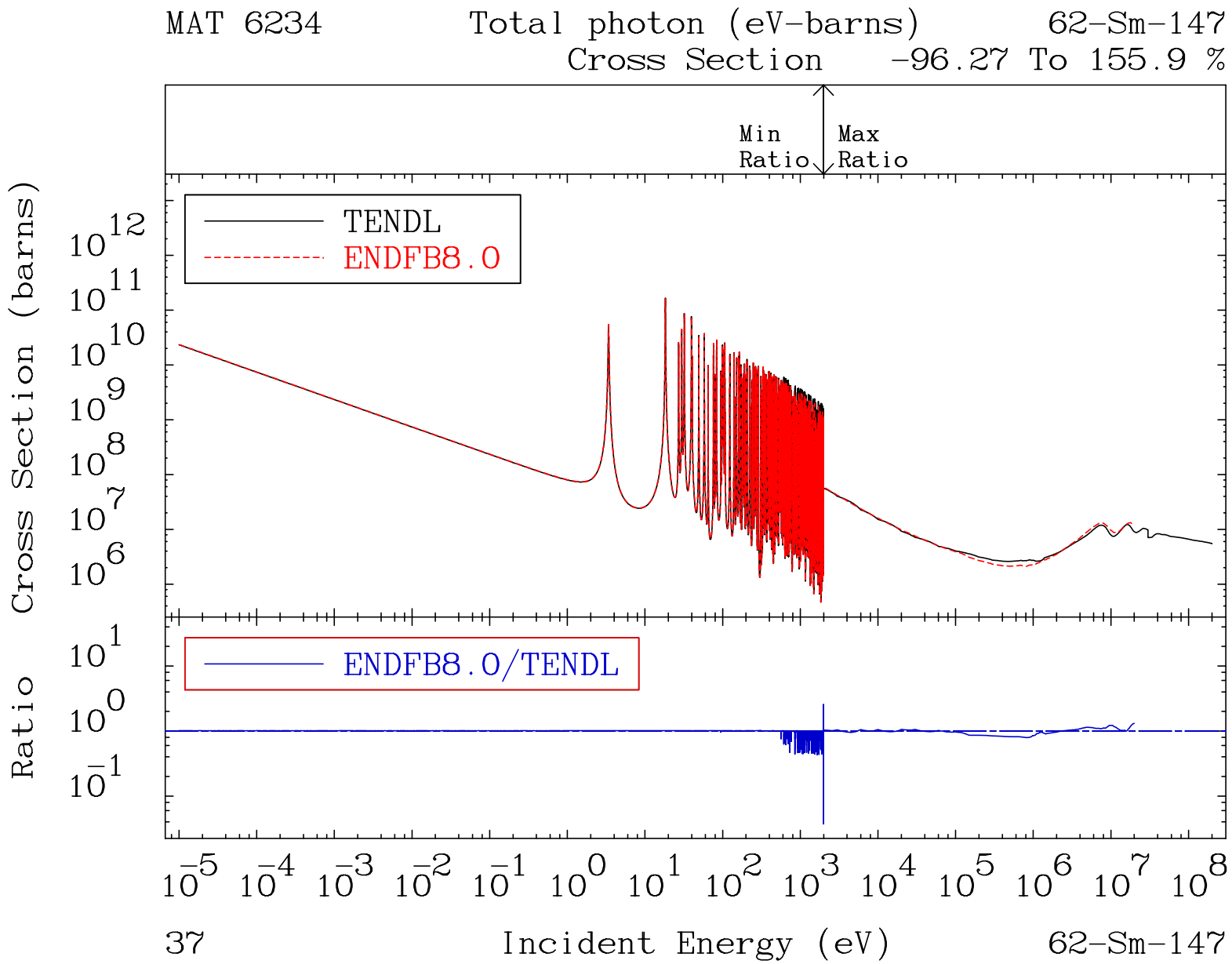

MAT 6234
Kerma elastic
Cross Section
62-Sm-147
-99.07 To 880.9 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
62-Sm-147

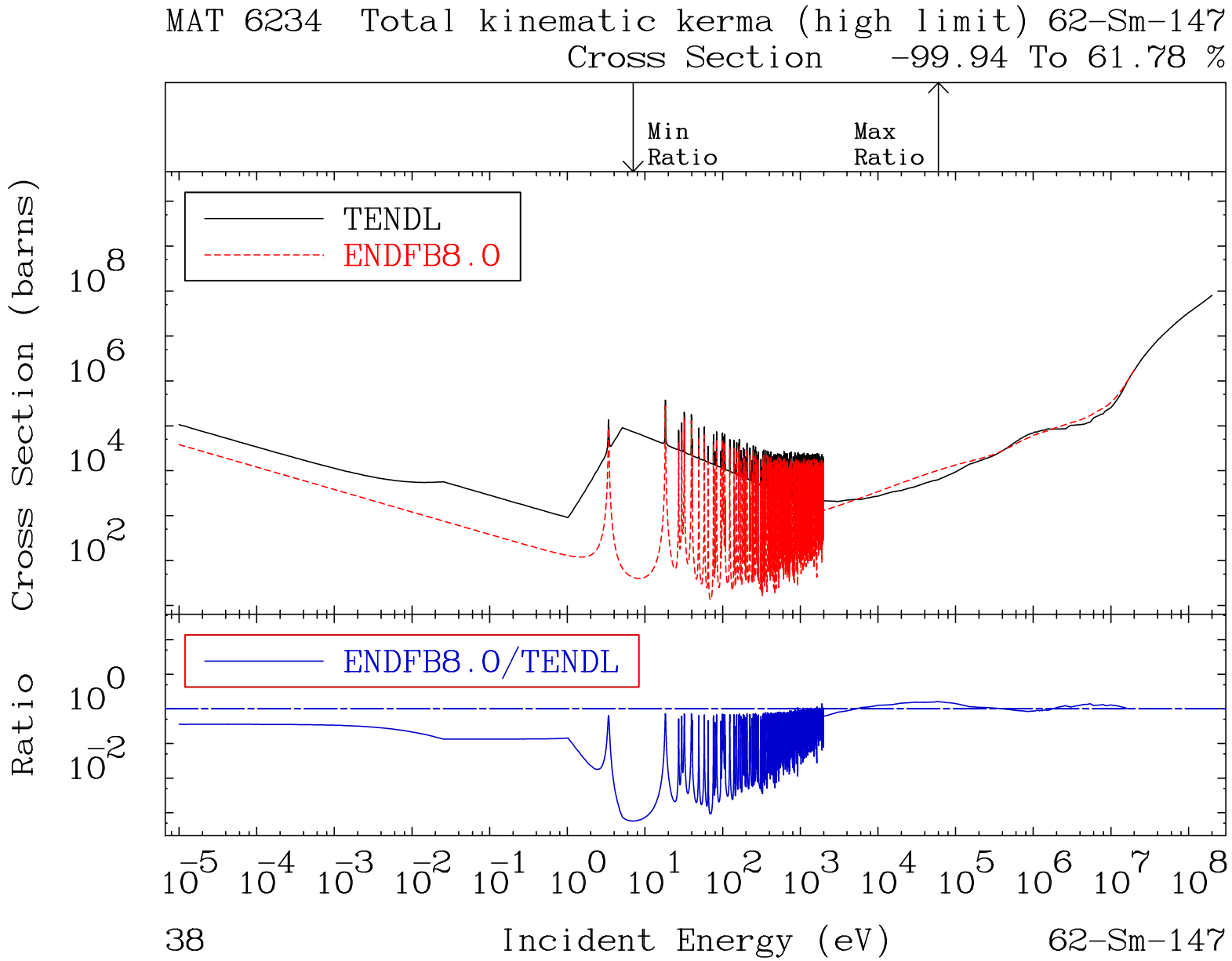

MAT 6234 Kerma non-elastic (all but mt2) 62-Sm-147
Cross Section -125.4 To 30.10 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
62-Sm-147

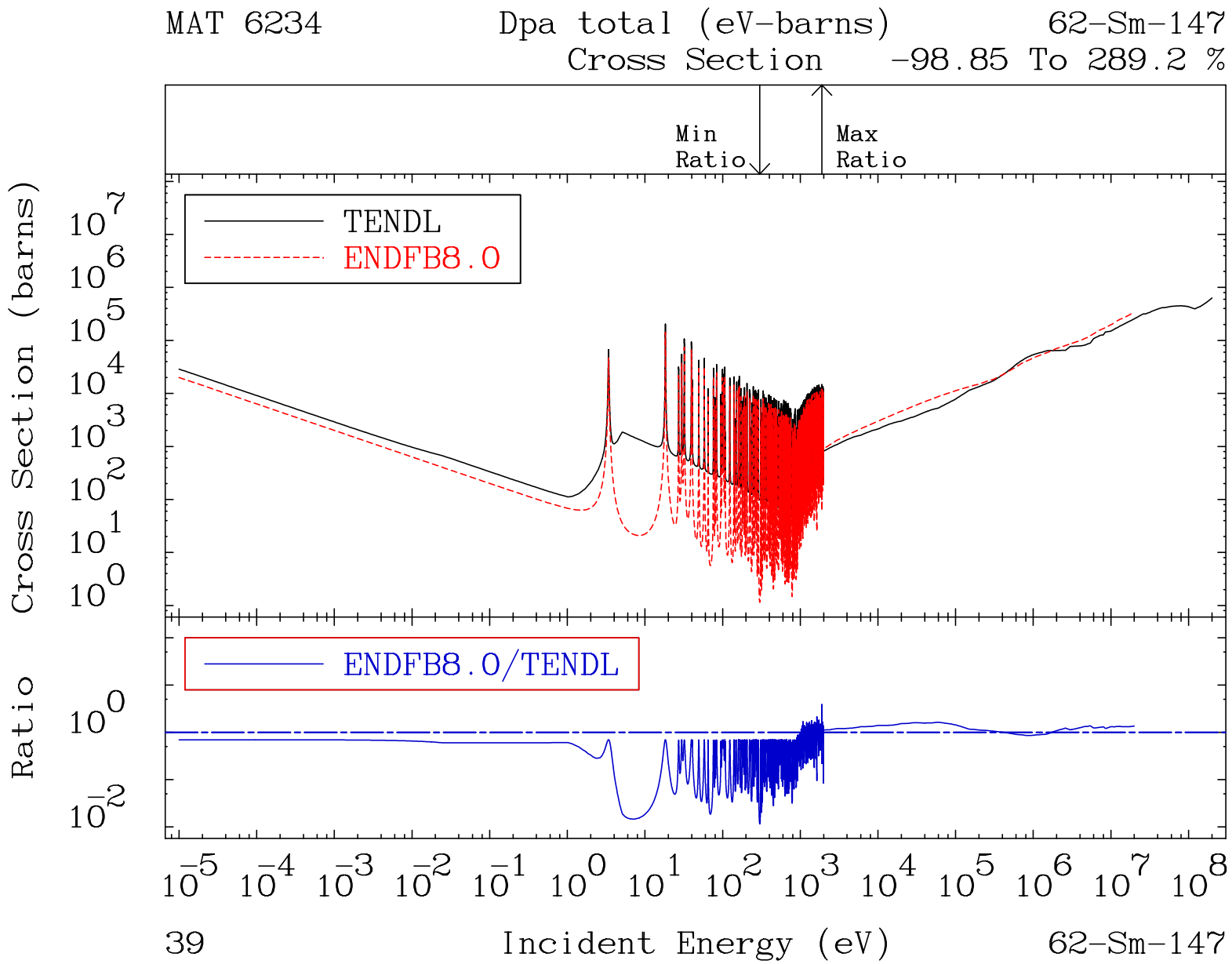

MAT 6234
Kerma inelastic (mt51-91)
62-Sm-147
Cross Section -100.0 To 322.8 %
Min Ratio
Max Ratio
TENDL Threshold 122.04 keV
ENDFB8.0 Threshold 122.04 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
62-Sm-147

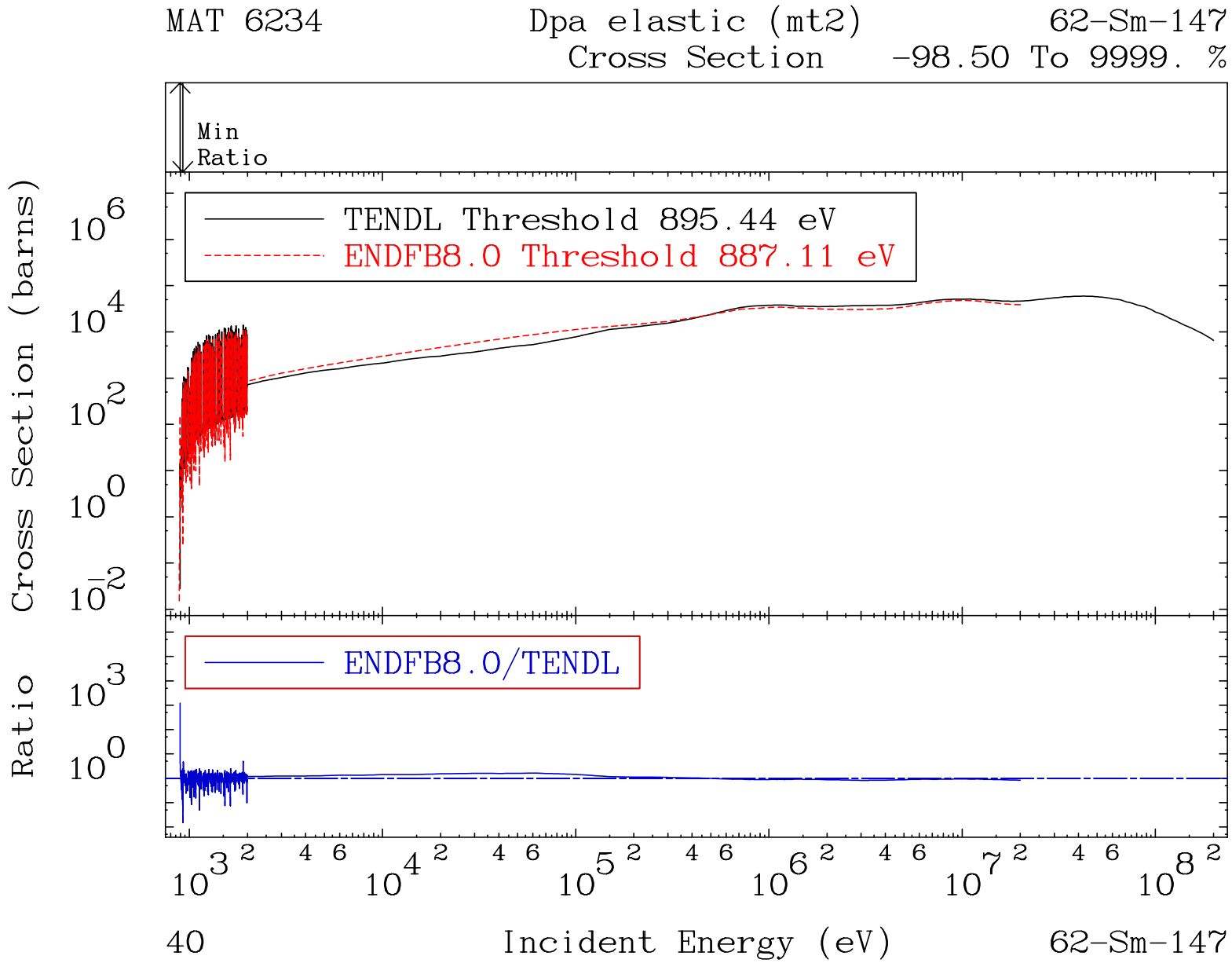

MAT 6234 Kerma fission (mt18 or mt19-20-21-38) 62-Sm-147
Cross Section -100.0 To 322.8 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
35
Incident Energy (eV)
62-Sm-147

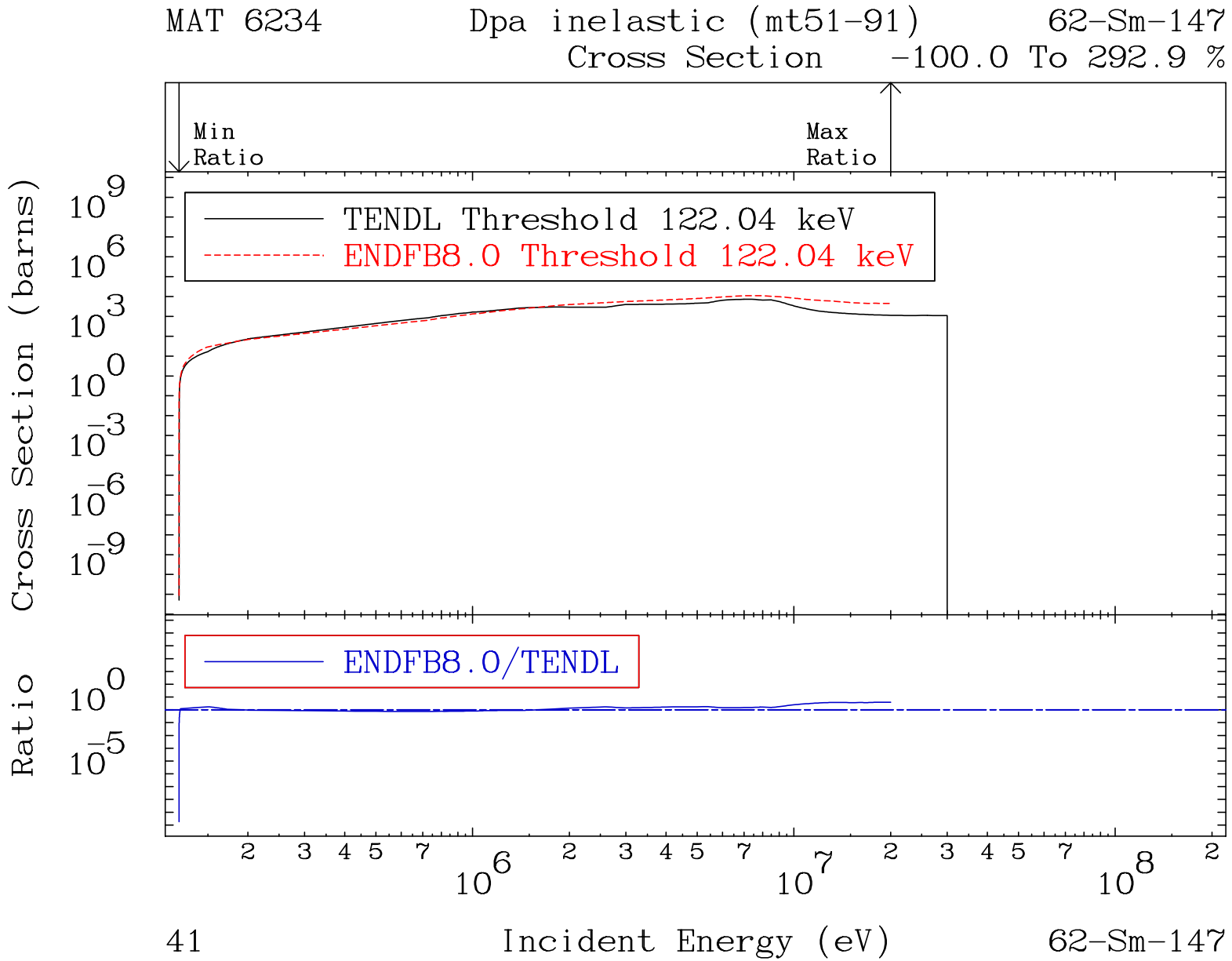

MAT 6234
Kerma capture (mt102)
62-Sm-147
Cross Section -97.00 To 105.8 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
62-Sm-147

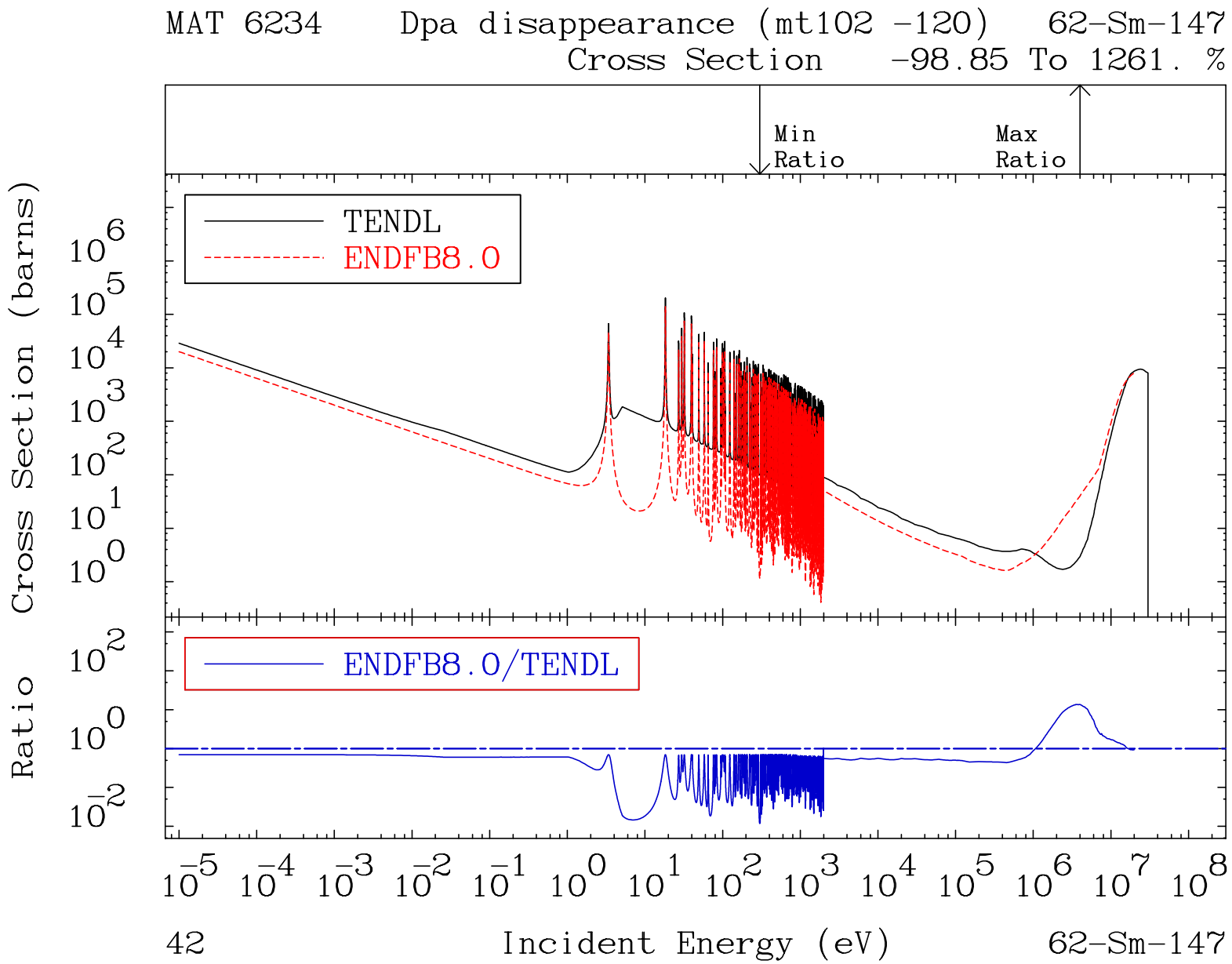

MAT 6234
Total photon (eV-barns)
62-Sm-147
Cross Section -96.27 To 155.9 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
62-Sm-147


MAT 6234 Total kinematic kerma (high limit) 62-Sm-147
Cross Section -99.94 To 61.78 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
62-Sm-147


MAT 6234
Dpa total (eV-barns)
62-Sm-147
Cross Section -98.85 To 289.2 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
39
Incident Energy (eV)
62-Sm-147


MAT 6234
Dpa elastic (mt2)
Cross Section
62-Sm-147
-98.50 To 9999. %
Min
Ratio
TENDL Threshold 895.44 eV
ENDFB8.0 Threshold 887.11 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
62-Sm-147


MAT 6234
Dpa inelastic (mt51-91)
62-Sm-147
Cross Section -100.0 To 292.9 %
Min Ratio
Max Ratio
TENDL Threshold 122.04 keV
ENDFB8.0 Threshold 122.04 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
62-Sm-147


MAT 6234 Dpa disappearance (mt102 -120) 62-Sm-147
Cross Section -98.85 To 1261. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
62-Sm-147