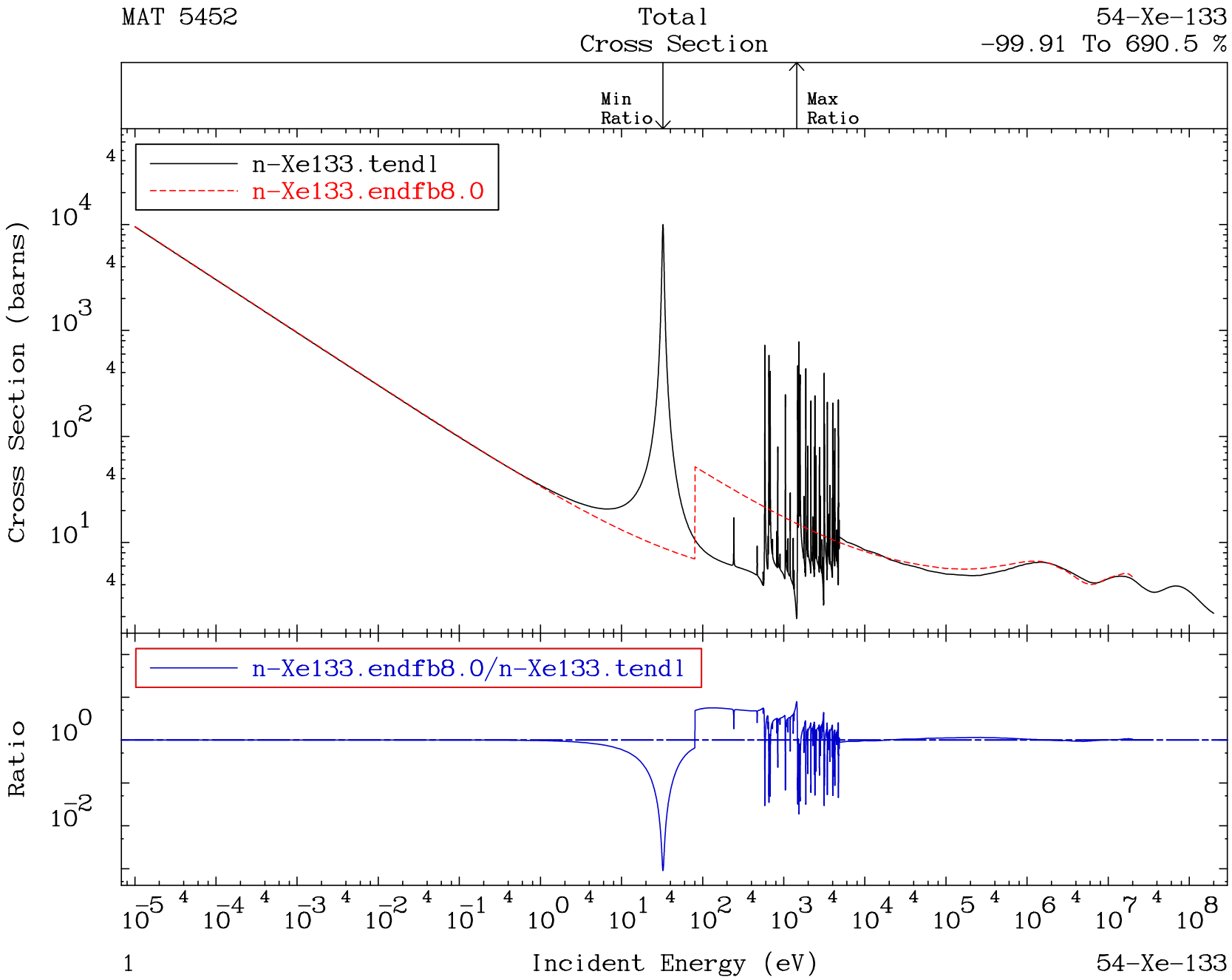
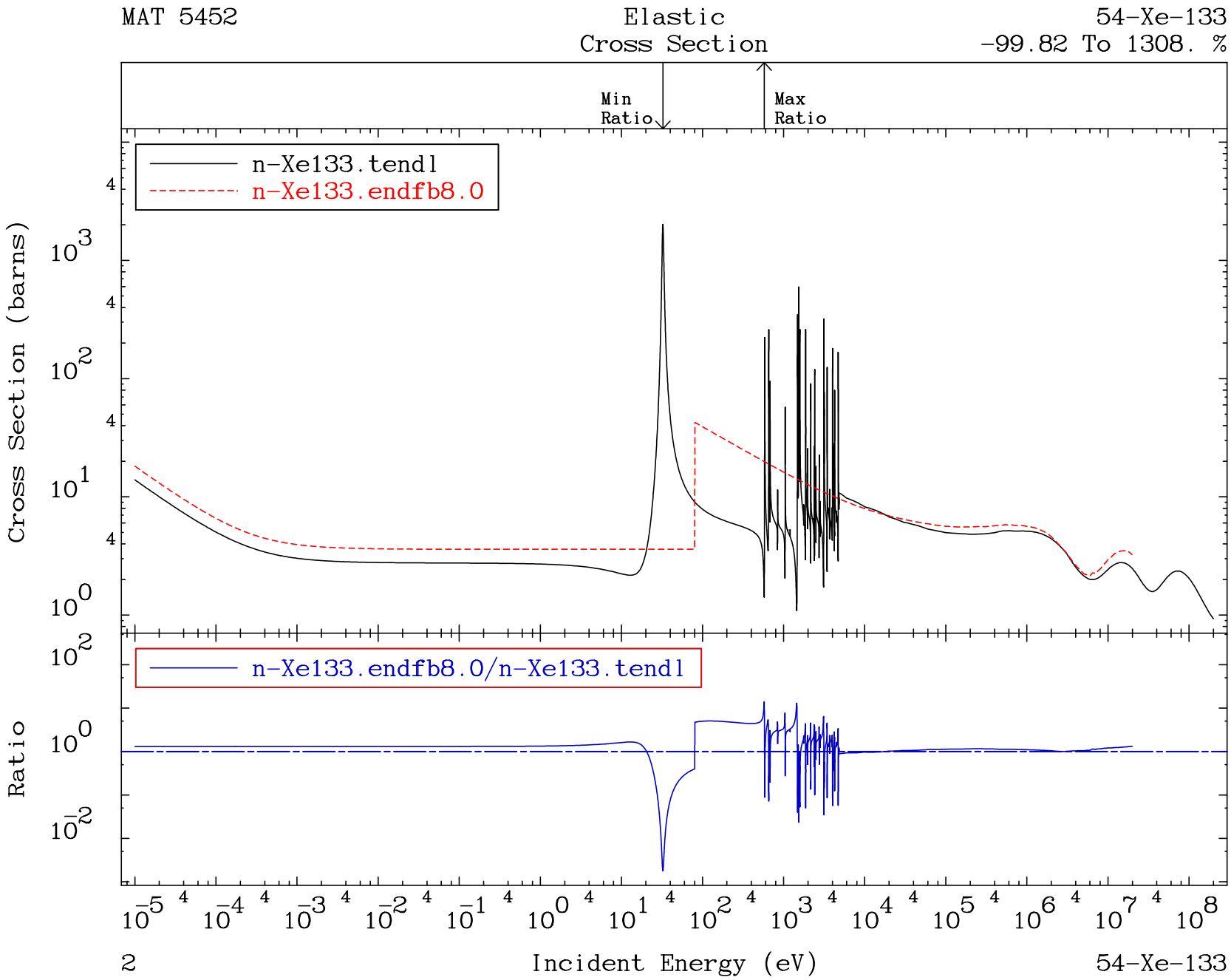
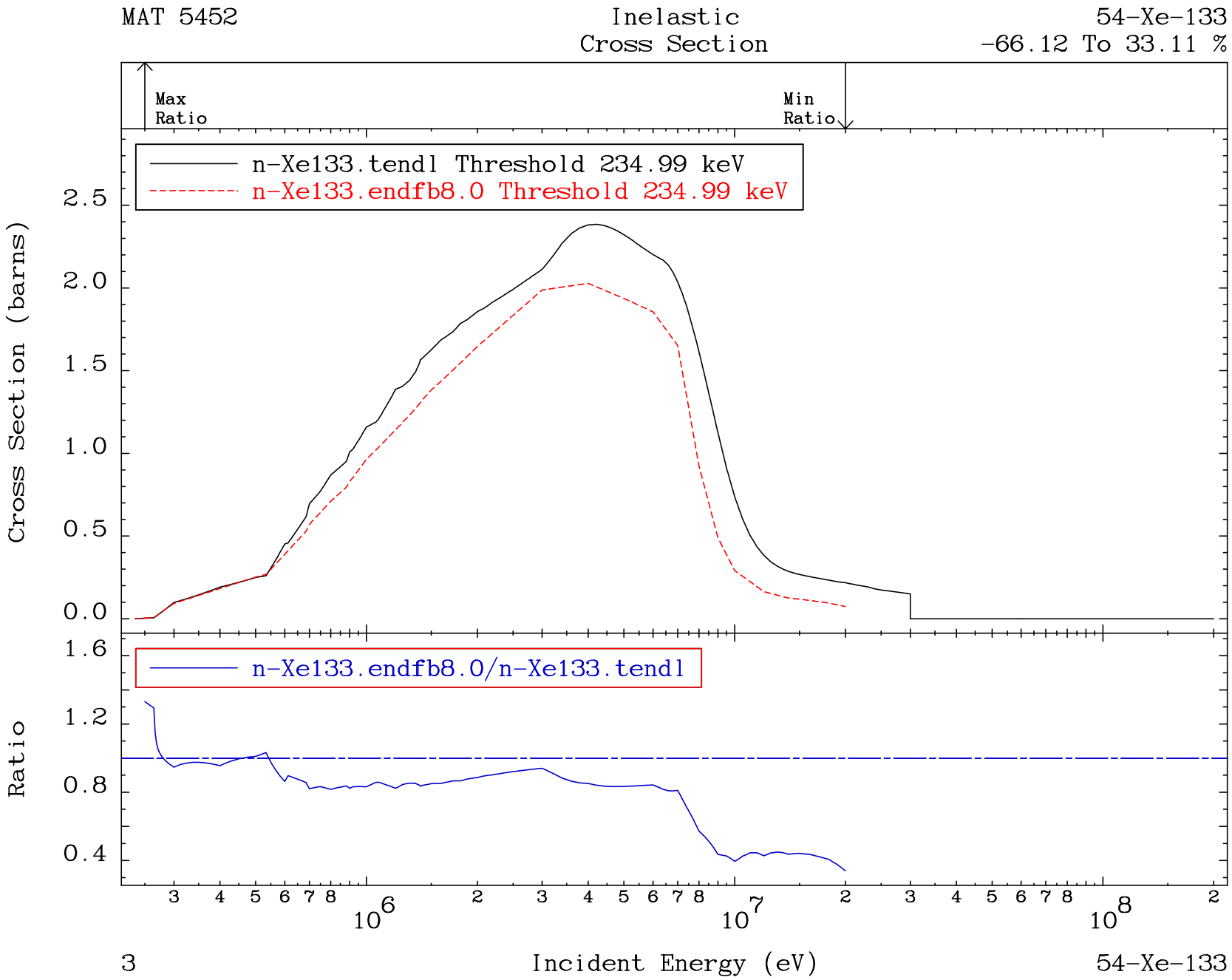
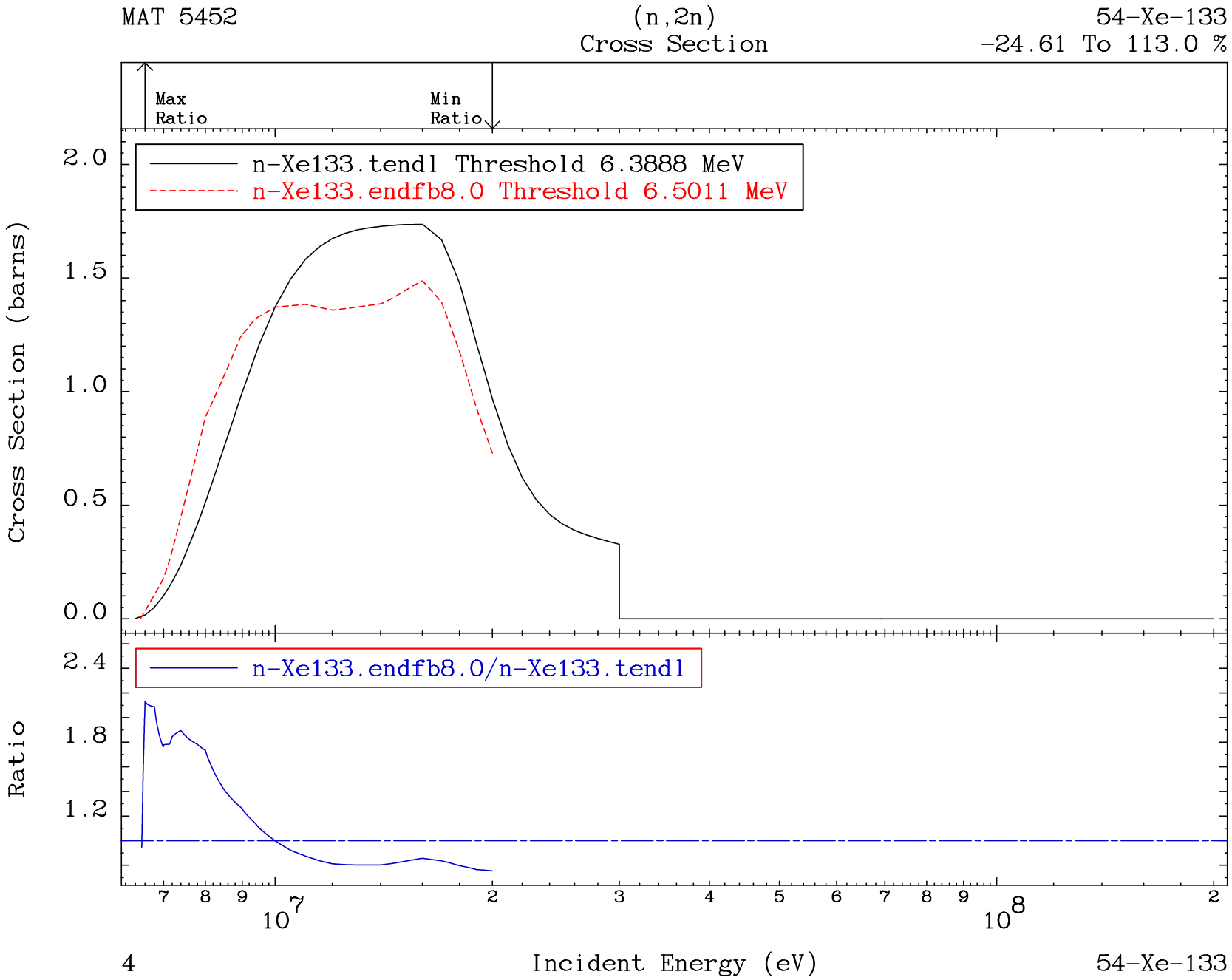
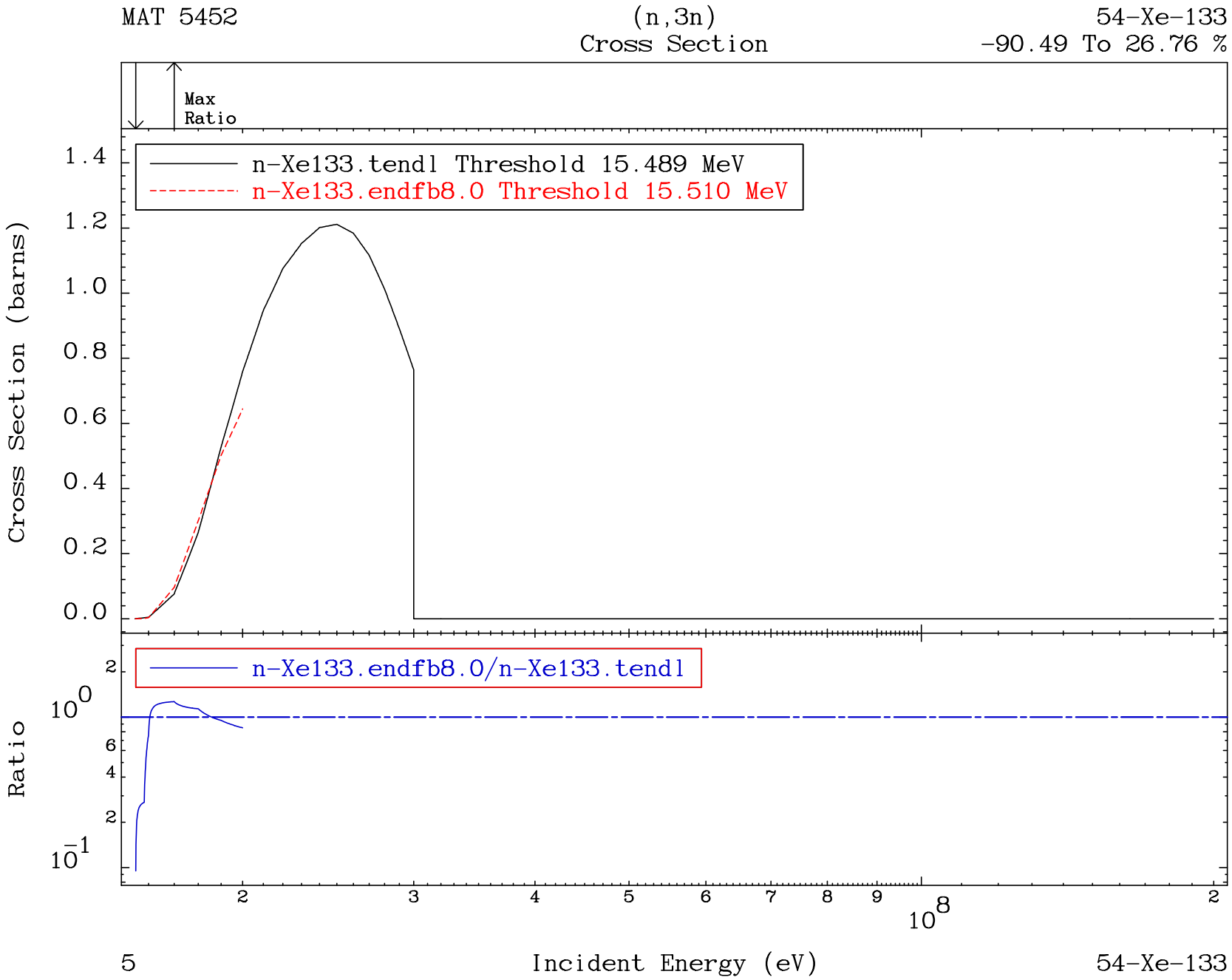
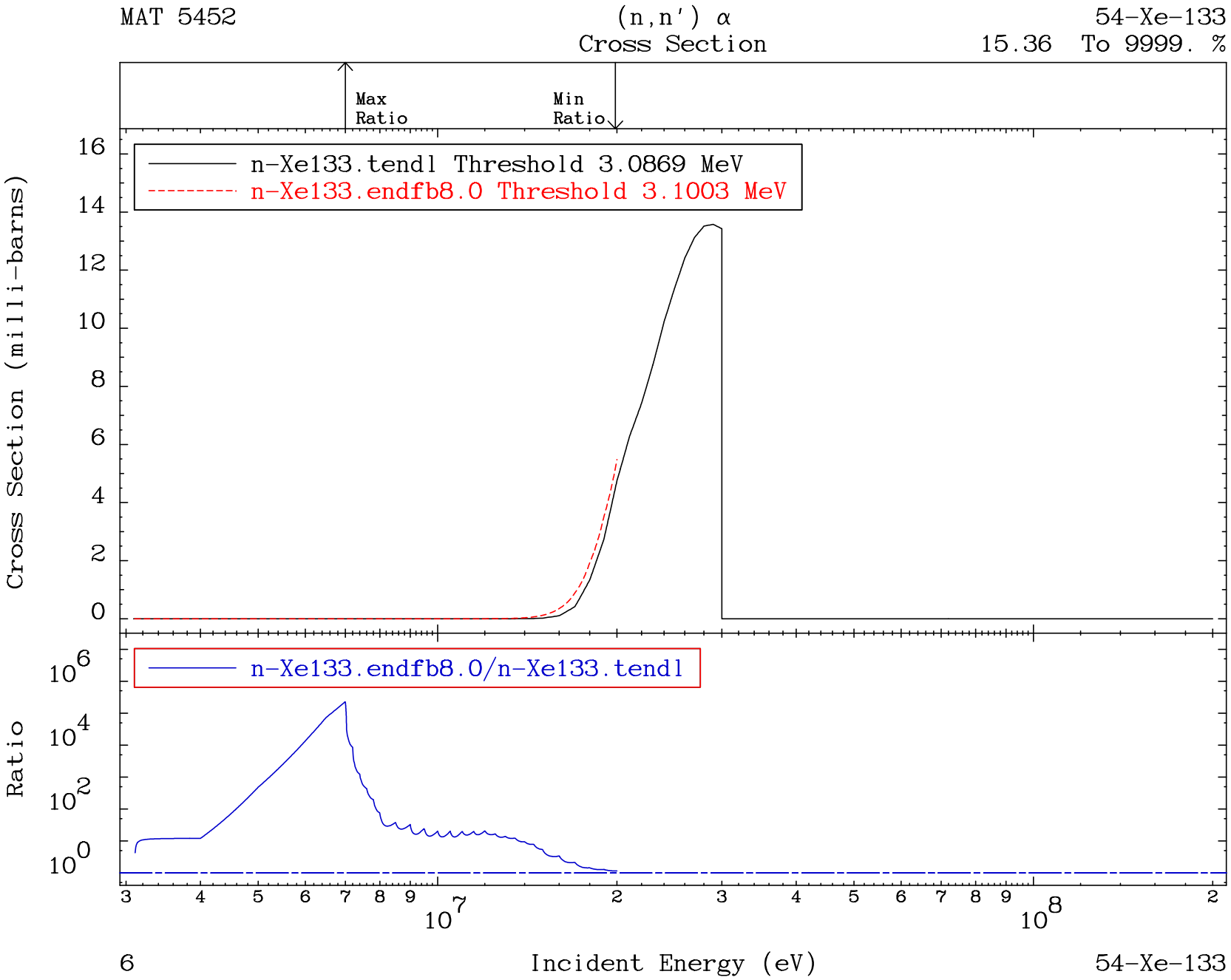

MAT 5452
Total
Cross Section
54-Xe-133
-99.91 To 690.5 %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
1
54-Xe-133

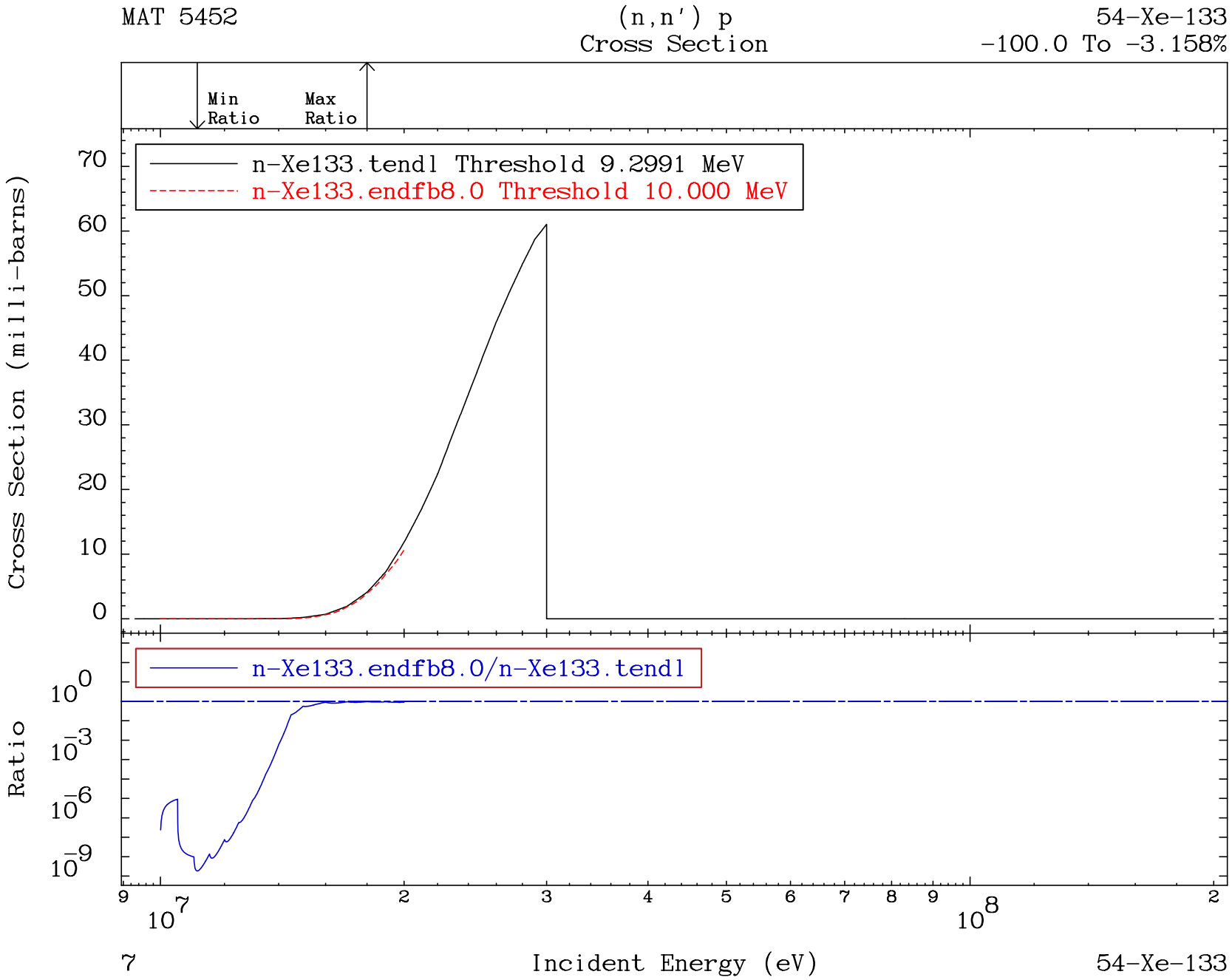

MAT 5452
Elastic
Cross Section
54-Xe-133
-99.82 To 1308. %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
2
54-Xe-133

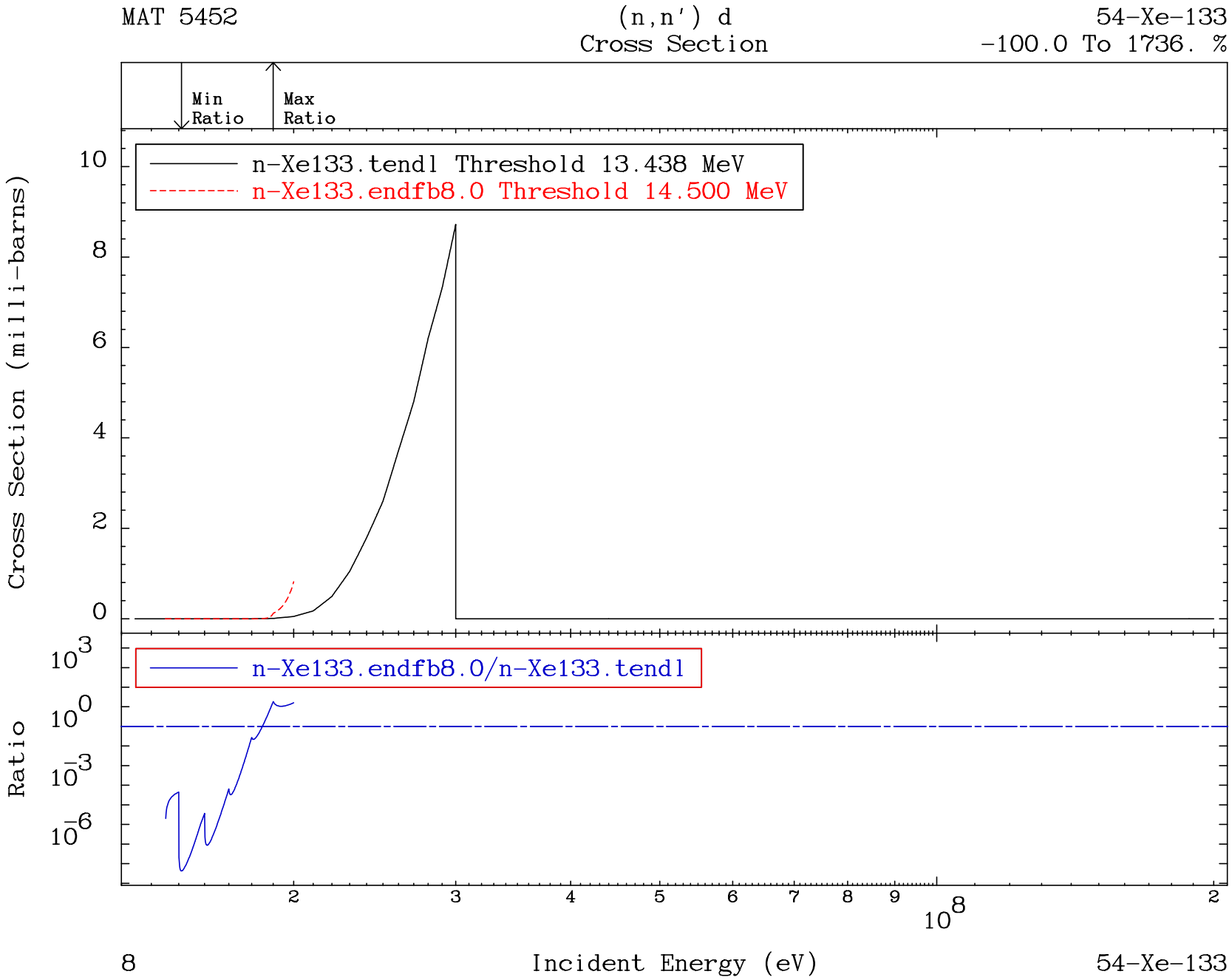

MAT 5452
Inelastic
Cross Section
54-Xe-133
-66.12 To 33.11 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 234.99 keV
n-Xe133.endfb8.0 Threshold 234.99 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
54-Xe-133

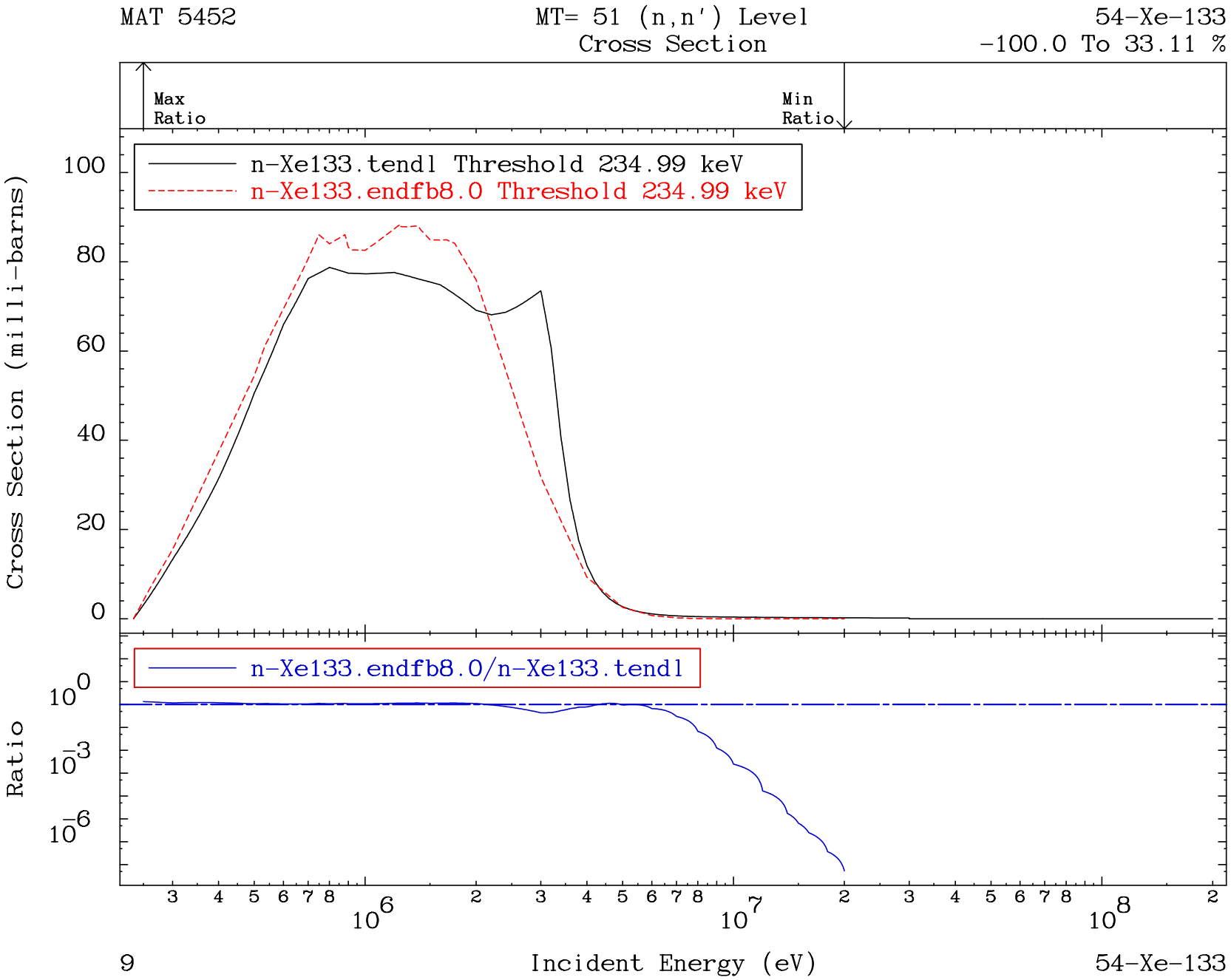

MAT 5452
(n,2n)
Cross Section
54-Xe-133
-24.61 To 113.0 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 6.3888 MeV
n-Xe133.endfb8.0 Threshold 6.5011 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
2.4
1.8
1.2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
54-Xe-133

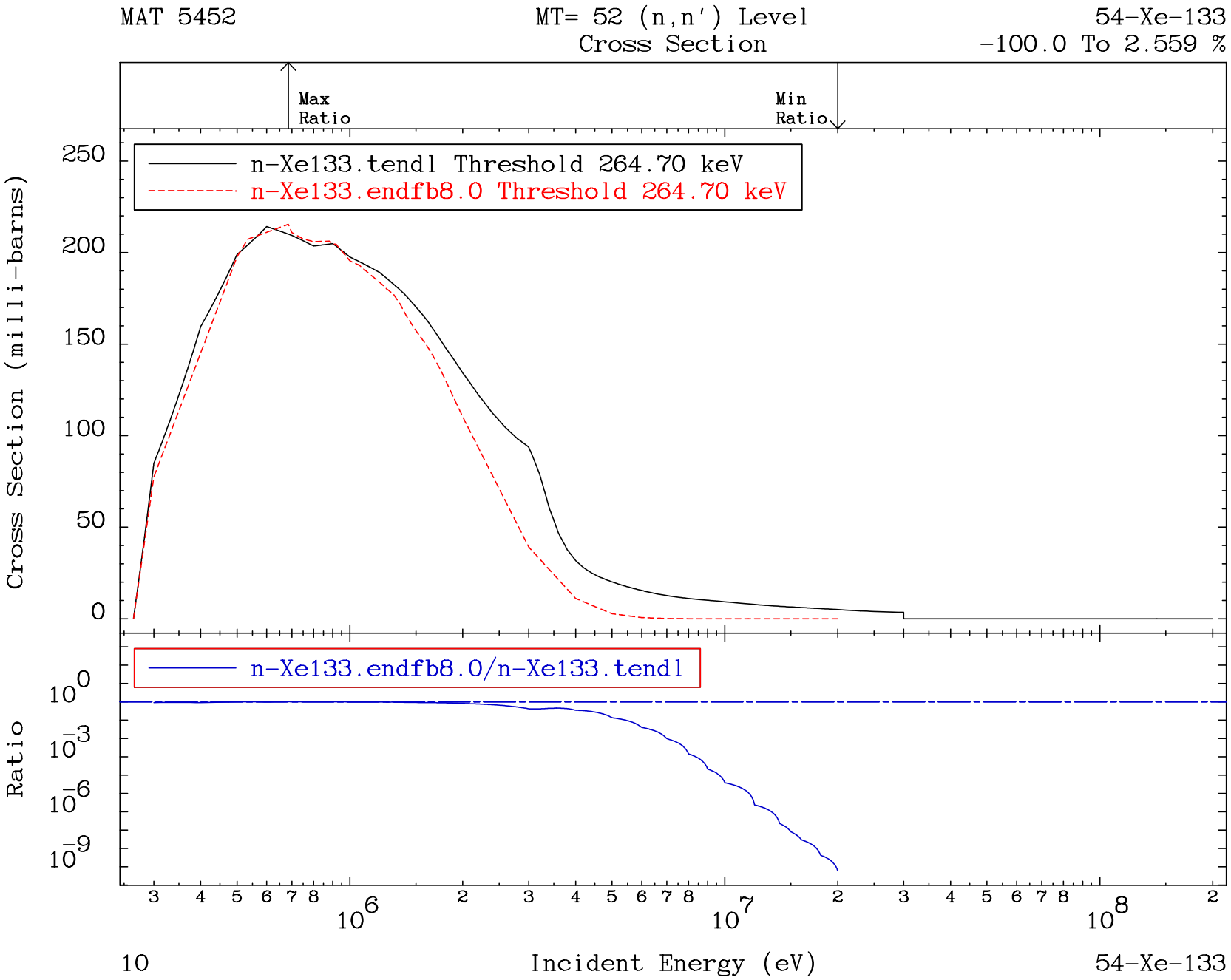

MAT 5452
(n,3n)
Cross Section
54-Xe-133
-90.49 To 26.76 %
Max
Ratio
n-Xe133.tendl Threshold 15.489 MeV
n-Xe133.endfb8.0 Threshold 15.510 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
2
10^0
6
4
2
10^-1
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
54-Xe-133

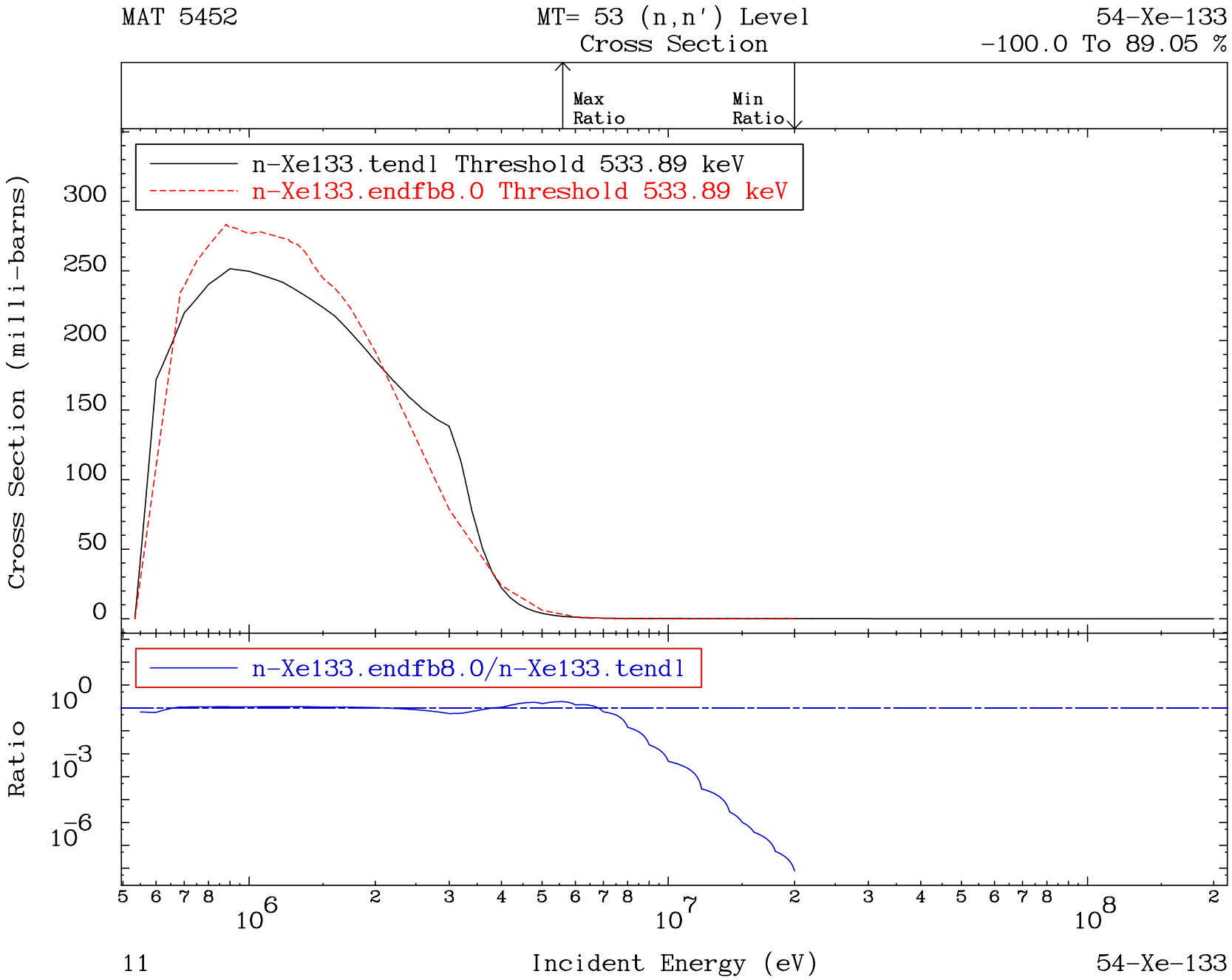

MAT 5452
(n,n') α
Cross Section
54-Xe-133
15.36 To 9999. %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 3.0869 MeV
n-Xe133.endfb8.0 Threshold 3.1003 MeV
Cross Section (milli-barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
6
54-Xe-133

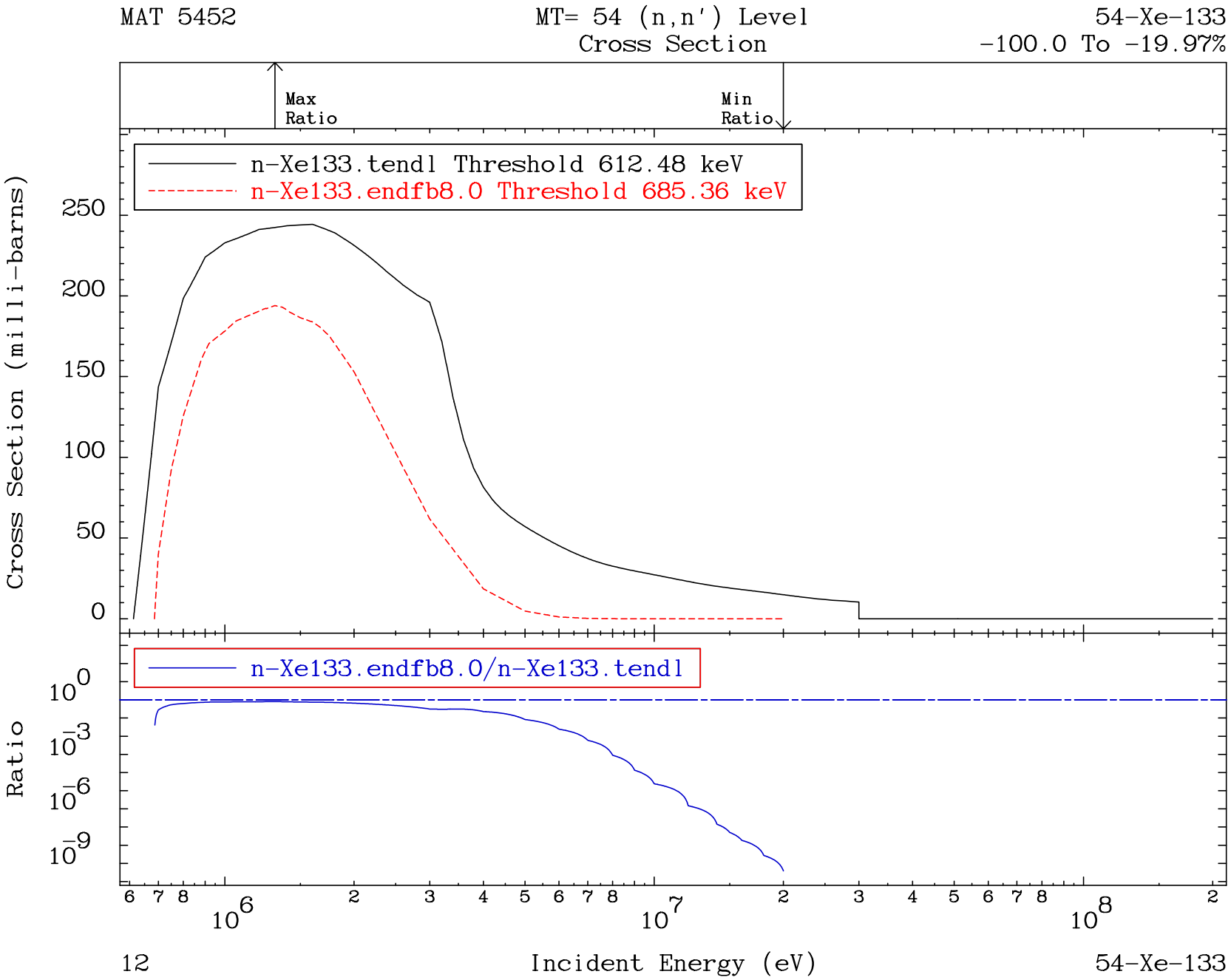

MAT 5452
(n,n') p
Cross Section
54-Xe-133
-100.0 To -3.158%
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 9.2991 MeV
n-Xe133.endfb8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
54-Xe-133

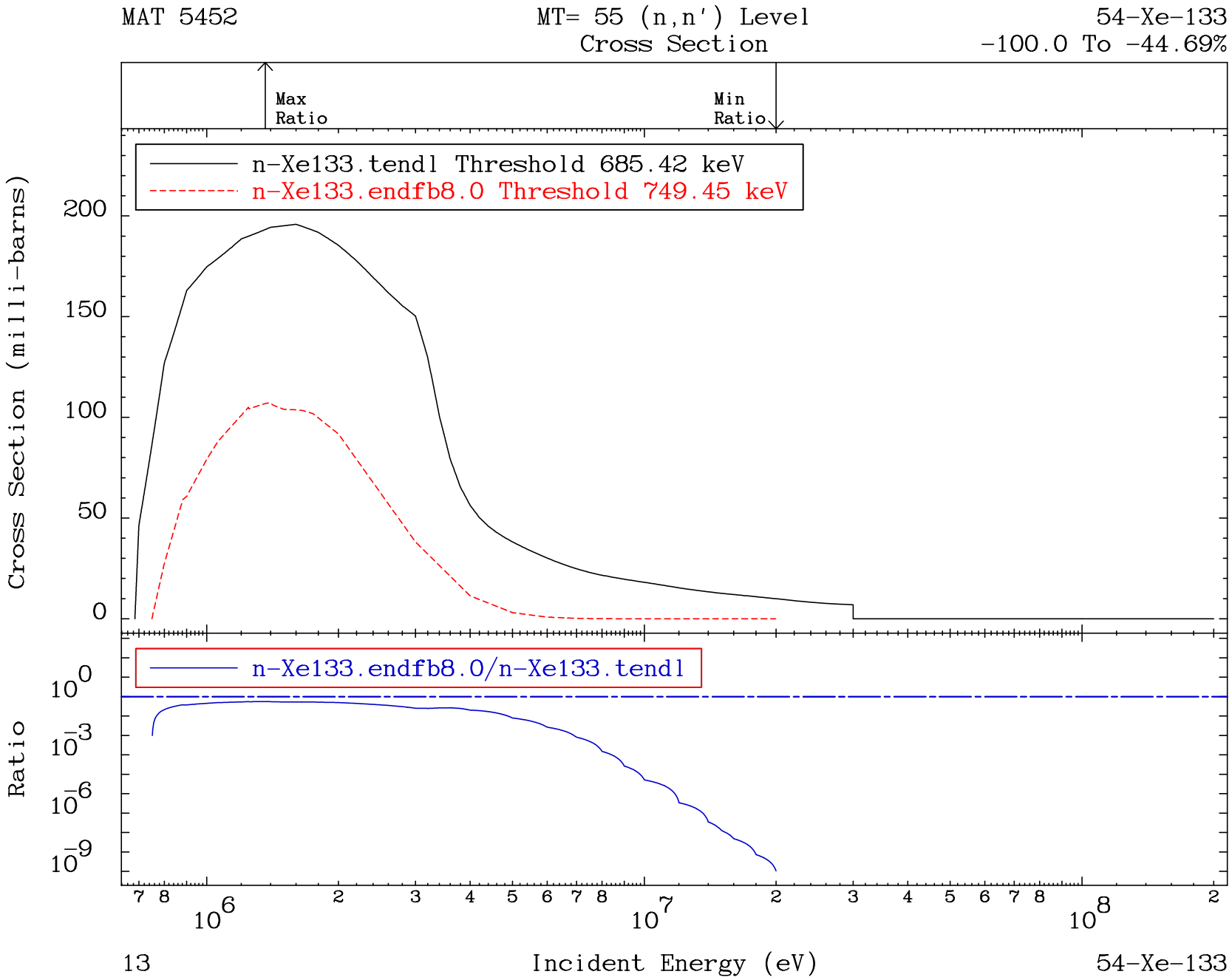

MAT 5452
(n,n') d
Cross Section
54-Xe-133
-100.0 To 1736. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 13.438 MeV
n-Xe133.endfb8.0 Threshold 14.500 MeV
Cross Section (milli-barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
8
54-Xe-133

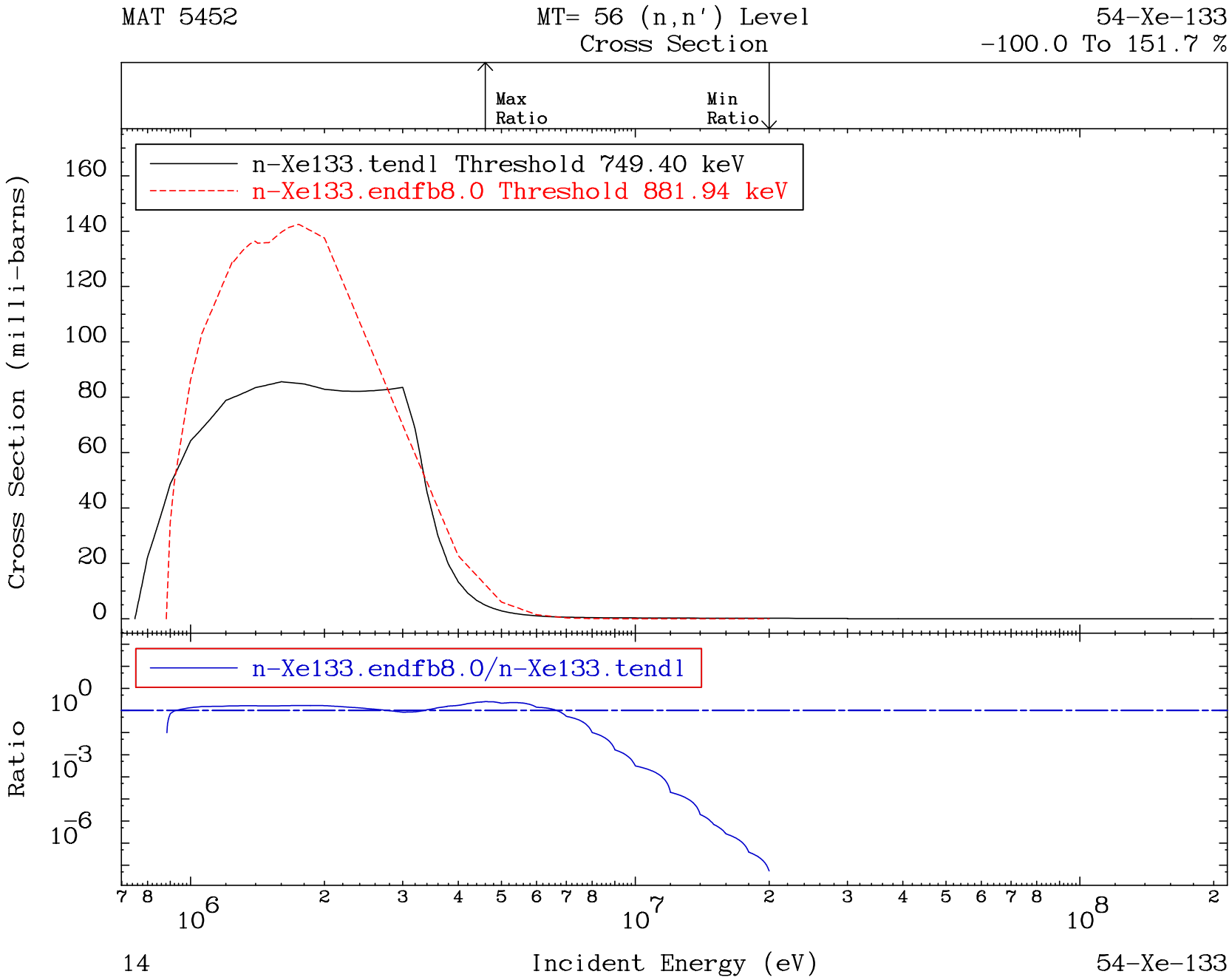

MAT 5452
MT= 51 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 33.11 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 234.99 keV
n-Xe133.endfb8.0 Threshold 234.99 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
54-Xe-133

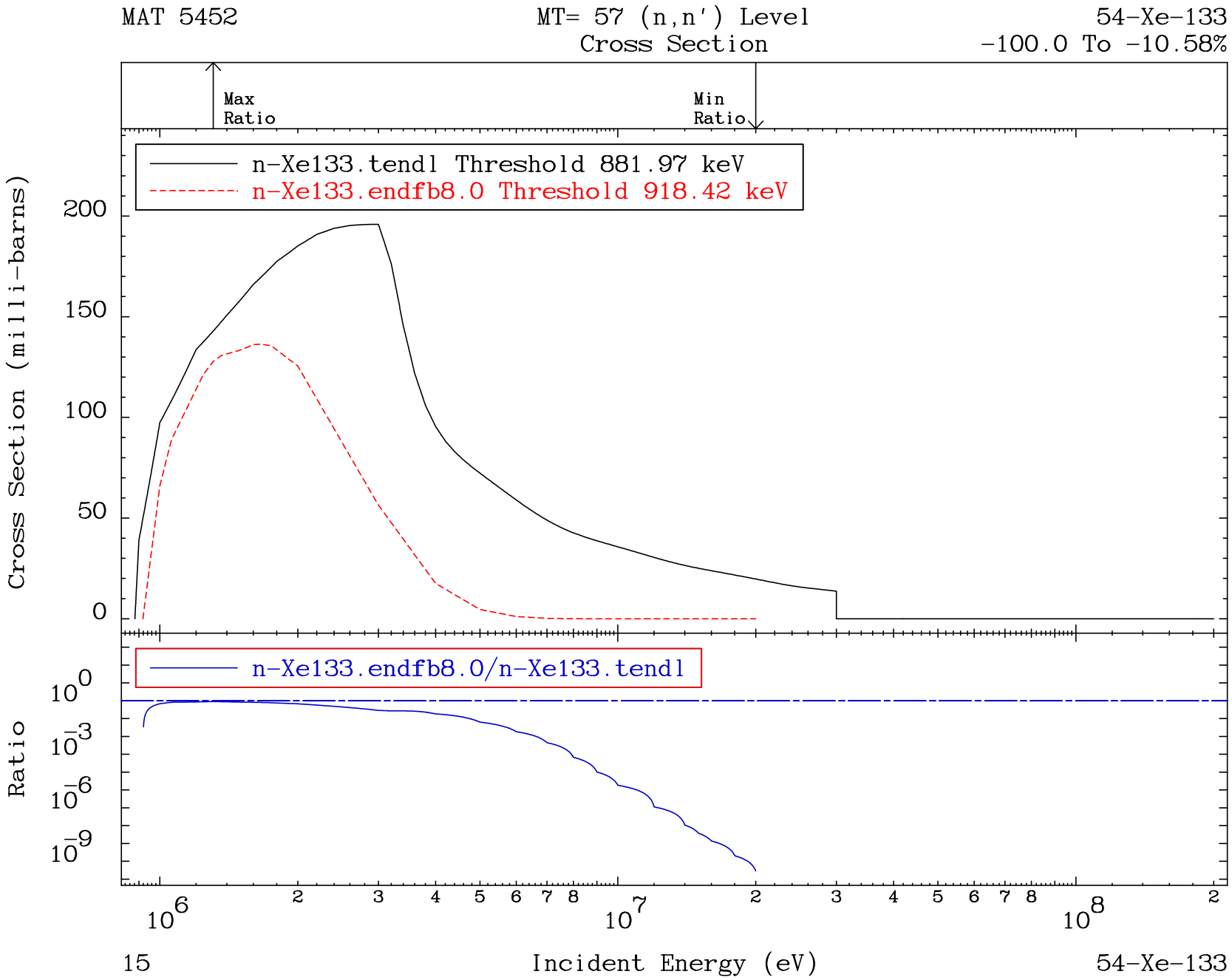

MAT 5452
MT= 52 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 2.559 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 264.70 keV
n-Xe133.endfb8.0 Threshold 264.70 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
54-Xe-133

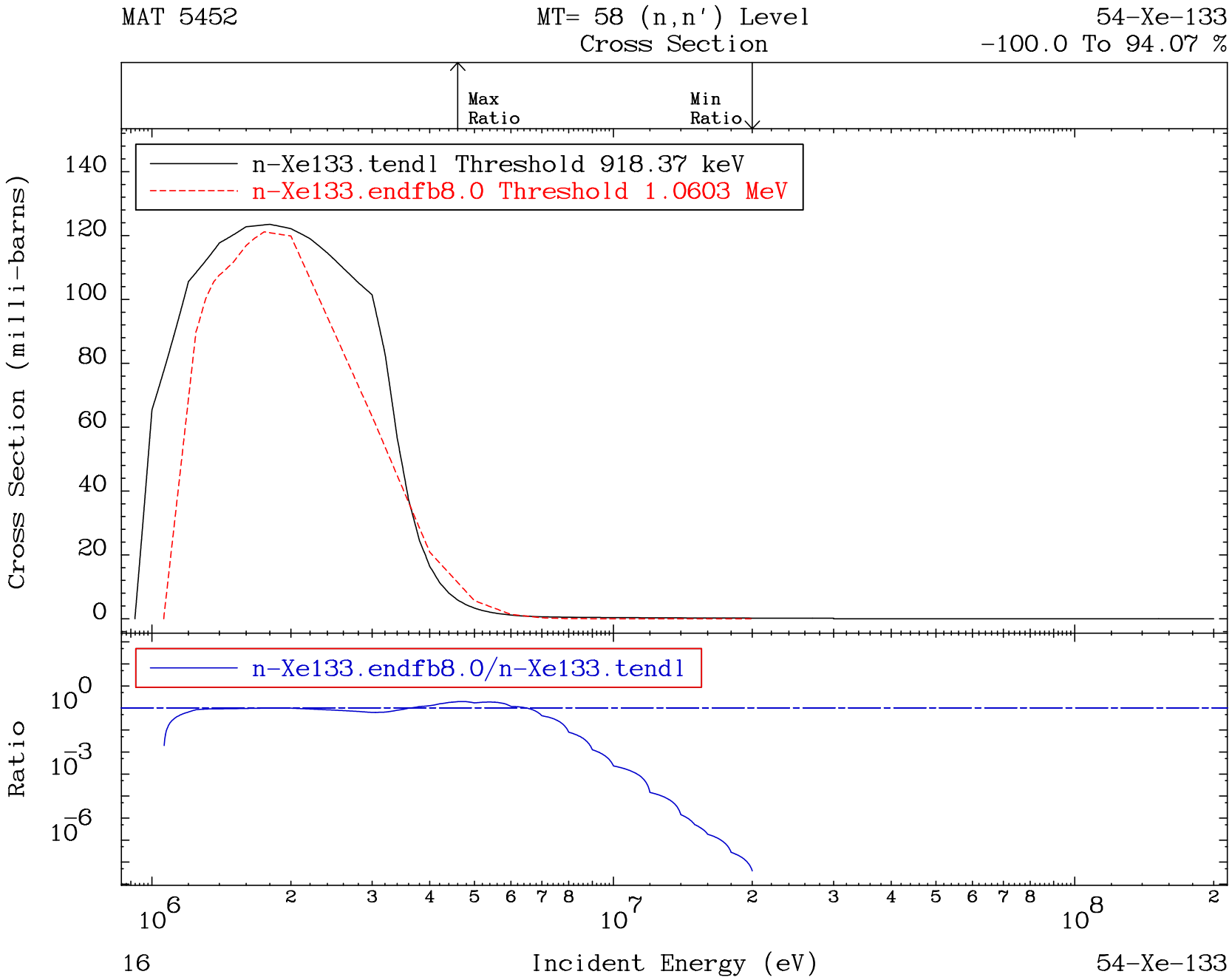

MAT 5452
MT= 53 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 89.05 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 533.89 keV
n-Xe133.endfb8.0 Threshold 533.89 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
54-Xe-133

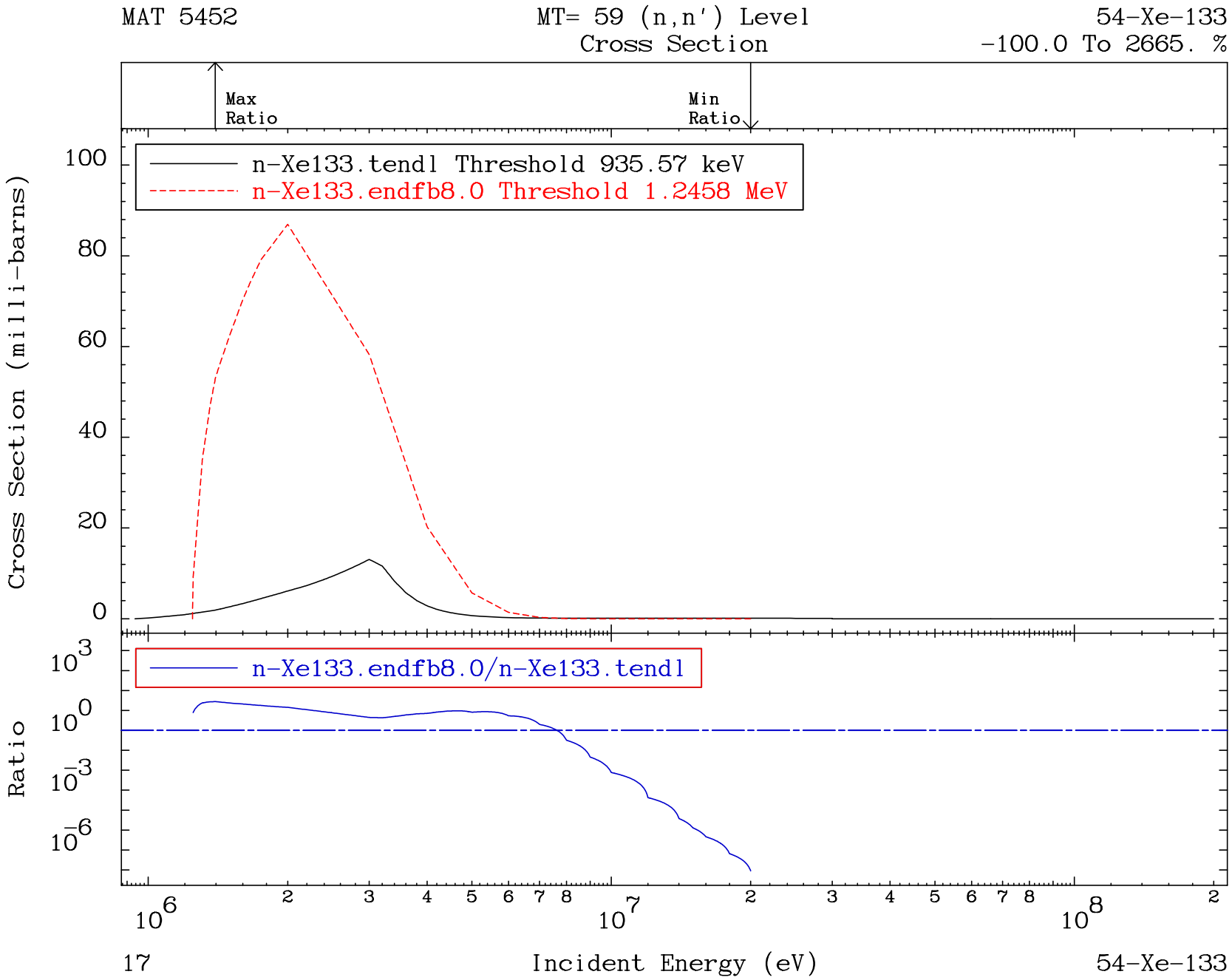

MAT 5452
MT= 54 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -19.97%
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 612.48 keV
n-Xe133.endfb8.0 Threshold 685.36 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
54-Xe-133

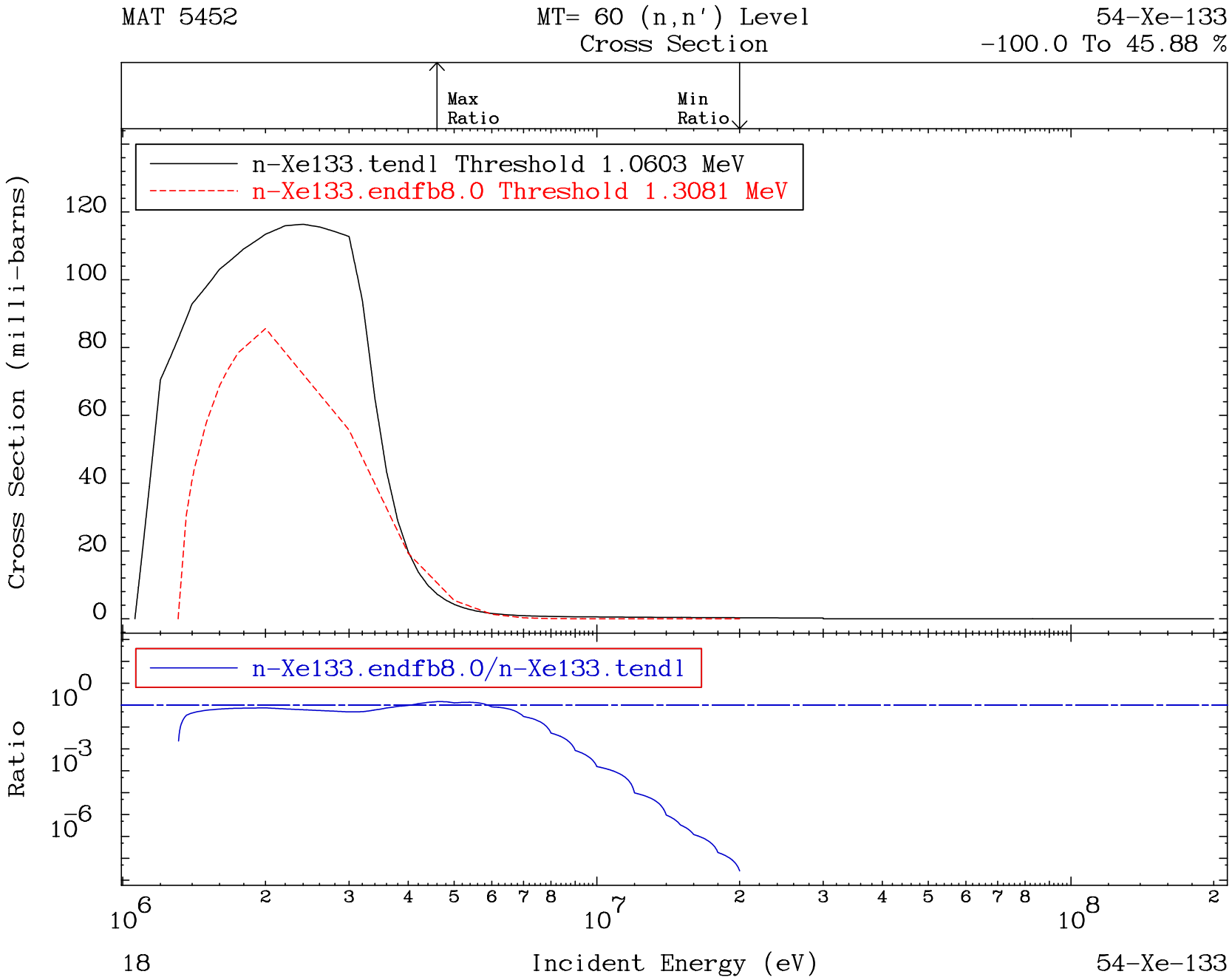

MAT 5452
MT= 55 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -44.69%
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 685.42 keV
n-Xe133.endfb8.0 Threshold 749.45 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
54-Xe-133

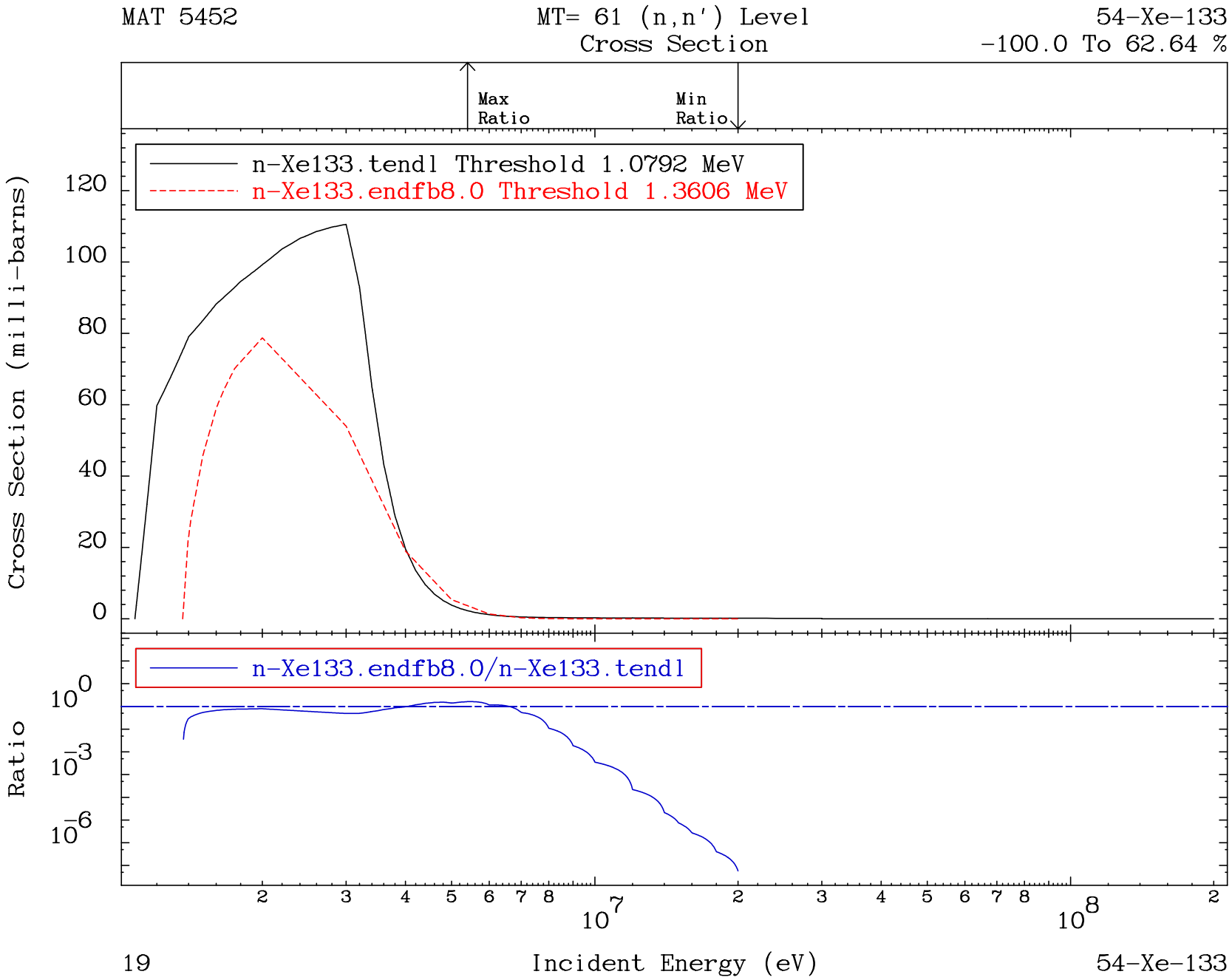

MAT 5452
MT= 56 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 151.7 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 749.40 keV
n-Xe133.endfb8.0 Threshold 881.94 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
54-Xe-133

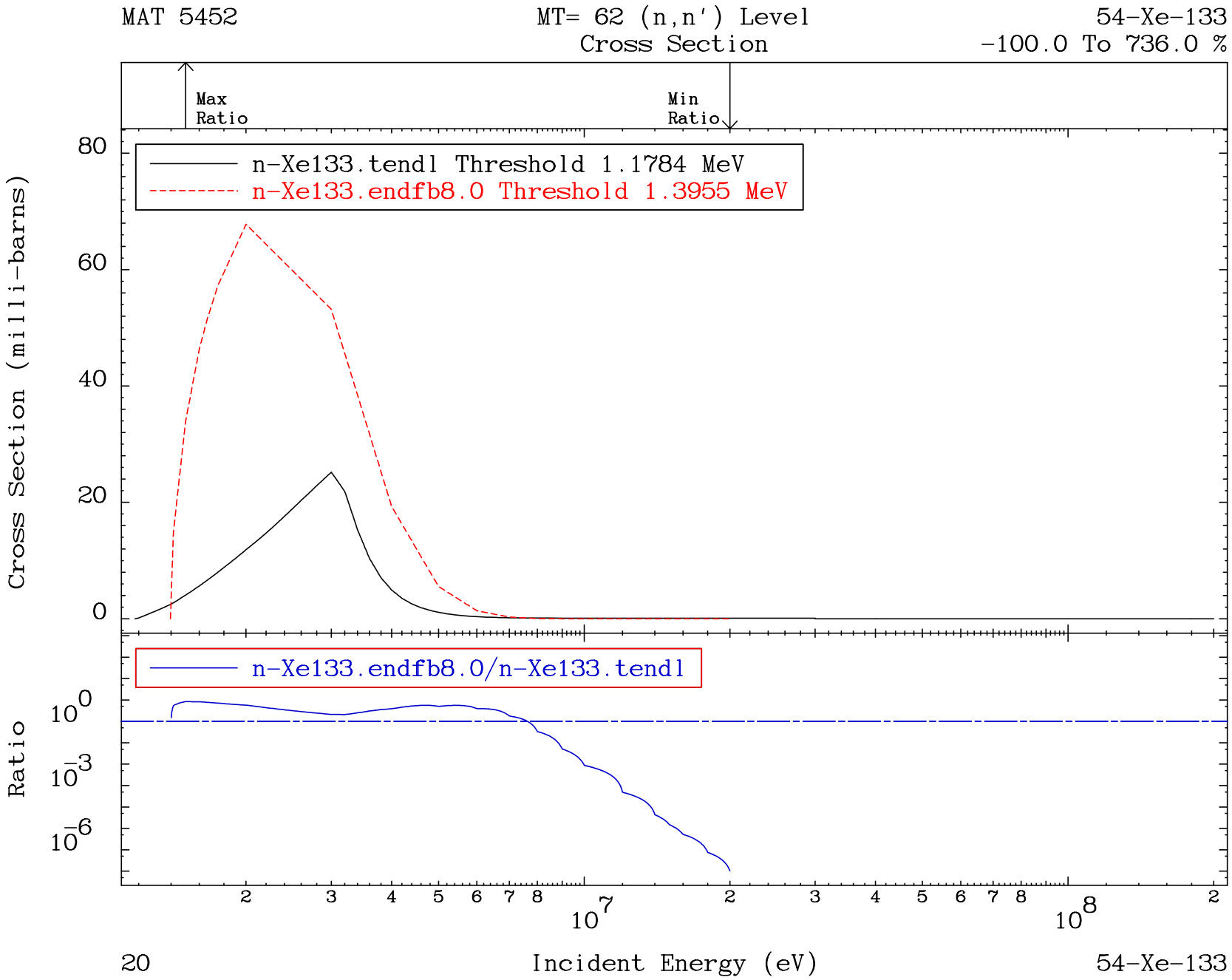

MAT 5452
MT= 57 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -10.58%
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 881.97 keV
n-Xe133.endfb8.0 Threshold 918.42 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
54-Xe-133

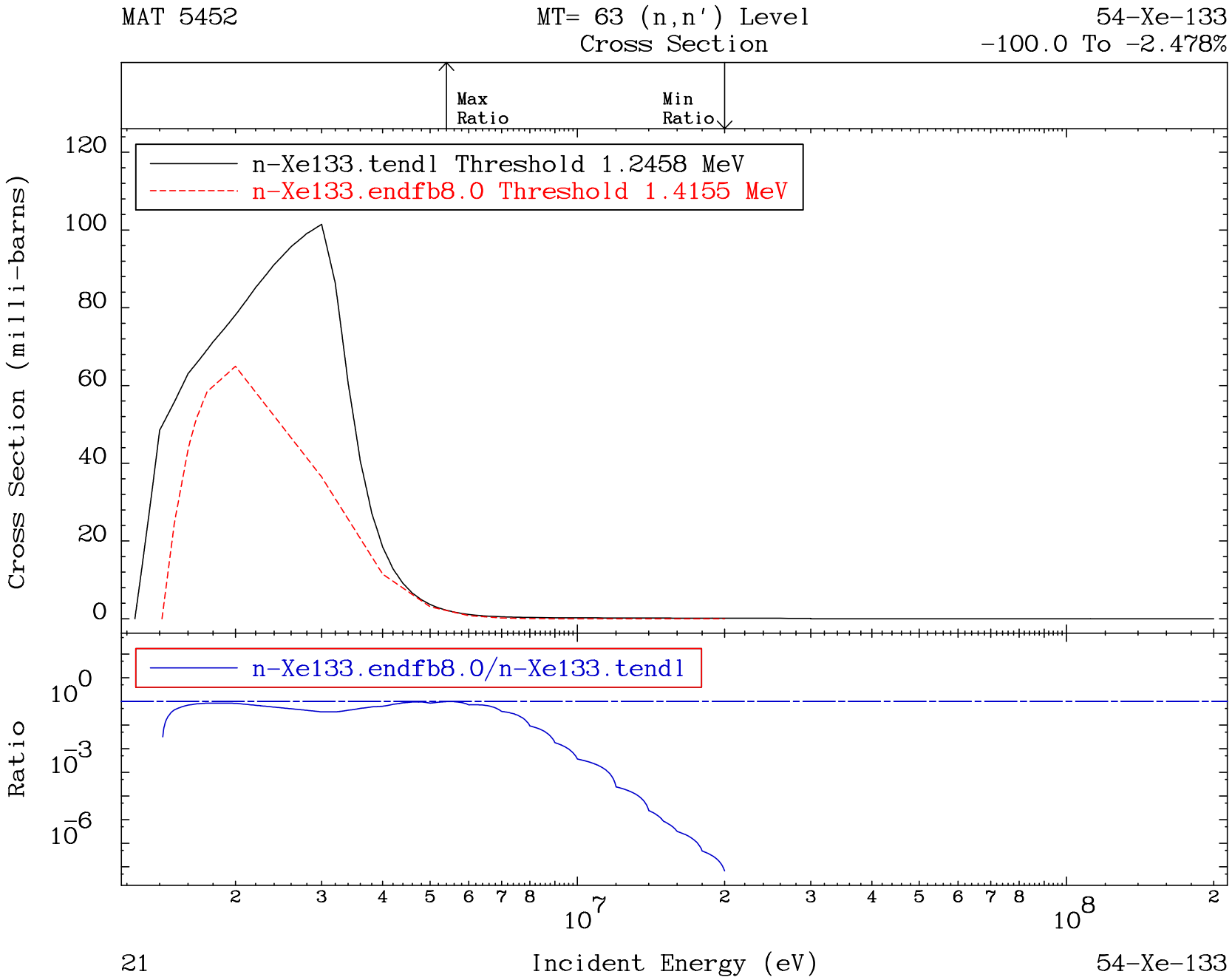

MAT 5452
MT= 58 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 94.07 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 918.37 keV
n-Xe133.endfb8.0 Threshold 1.0603 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
54-Xe-133

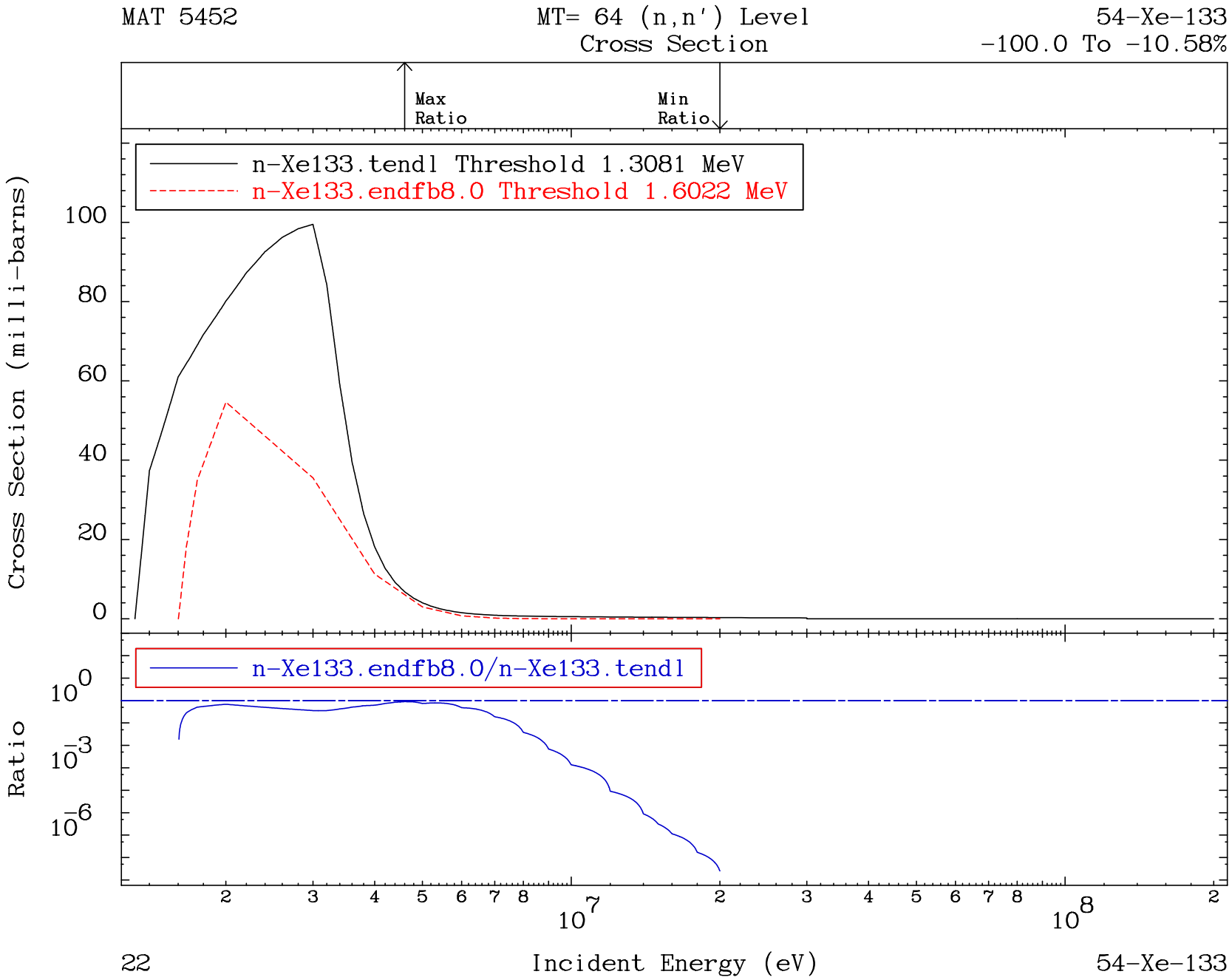

MAT 5452
MT= 59 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 2665. %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 935.57 keV
n-Xe133.endfb8.0 Threshold 1.2458 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
54-Xe-133

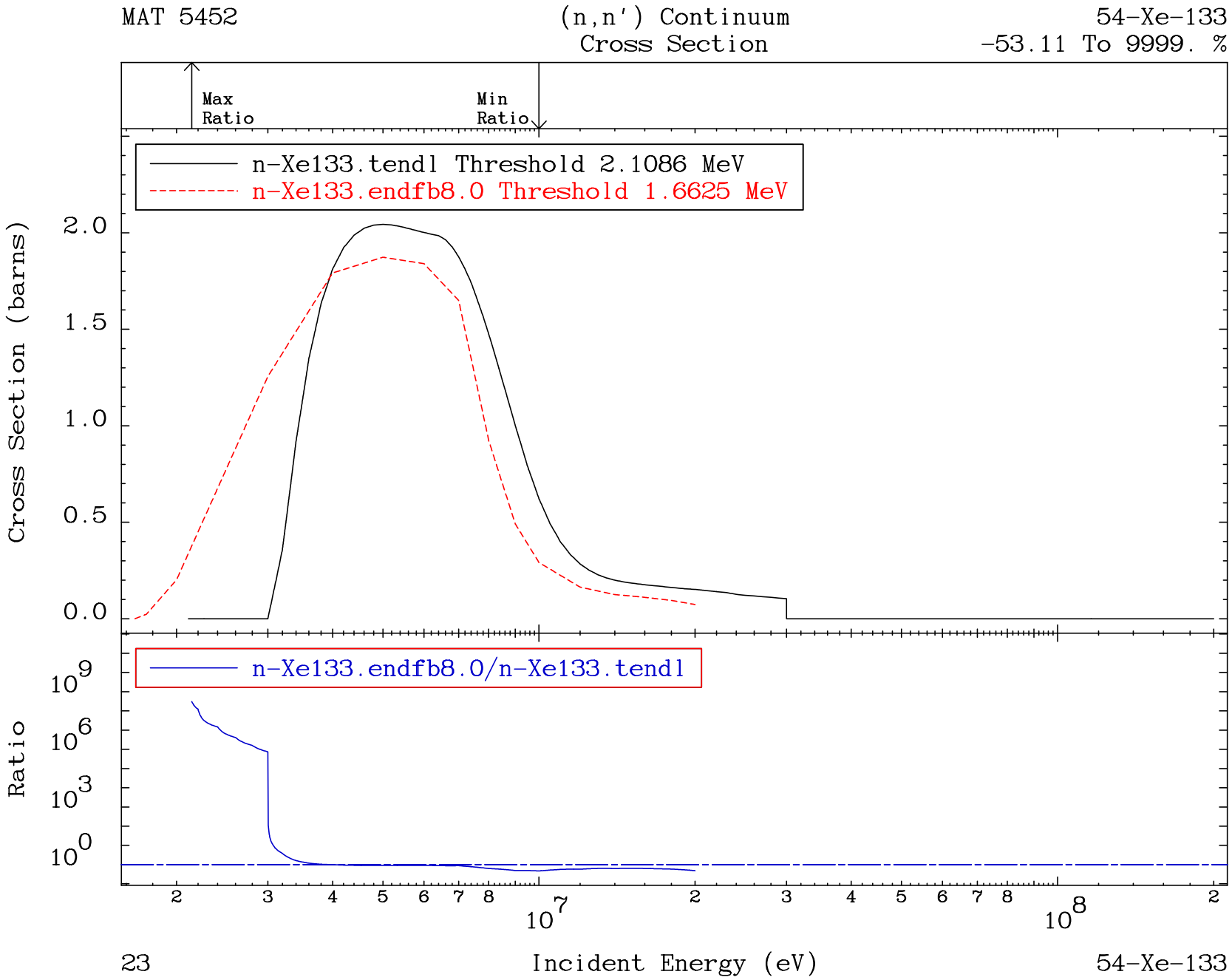

MAT 5452
MT= 60 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 45.88 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 1.0603 MeV
n-Xe133.endfb8.0 Threshold 1.3081 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
54-Xe-133

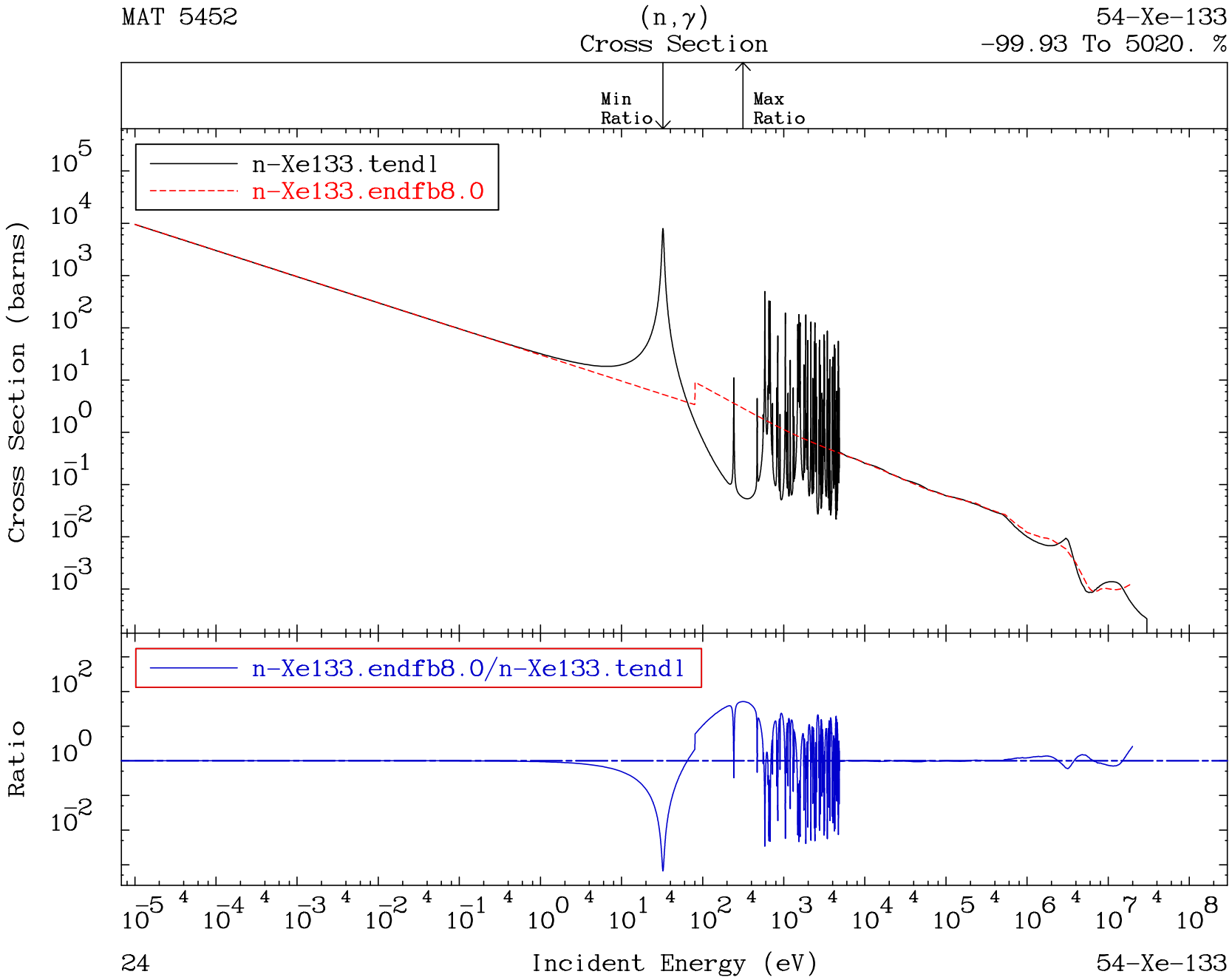

MAT 5452
MT= 61 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 62.64 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 1.0792 MeV
n-Xe133.endfb8.0 Threshold 1.3606 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
54-Xe-133

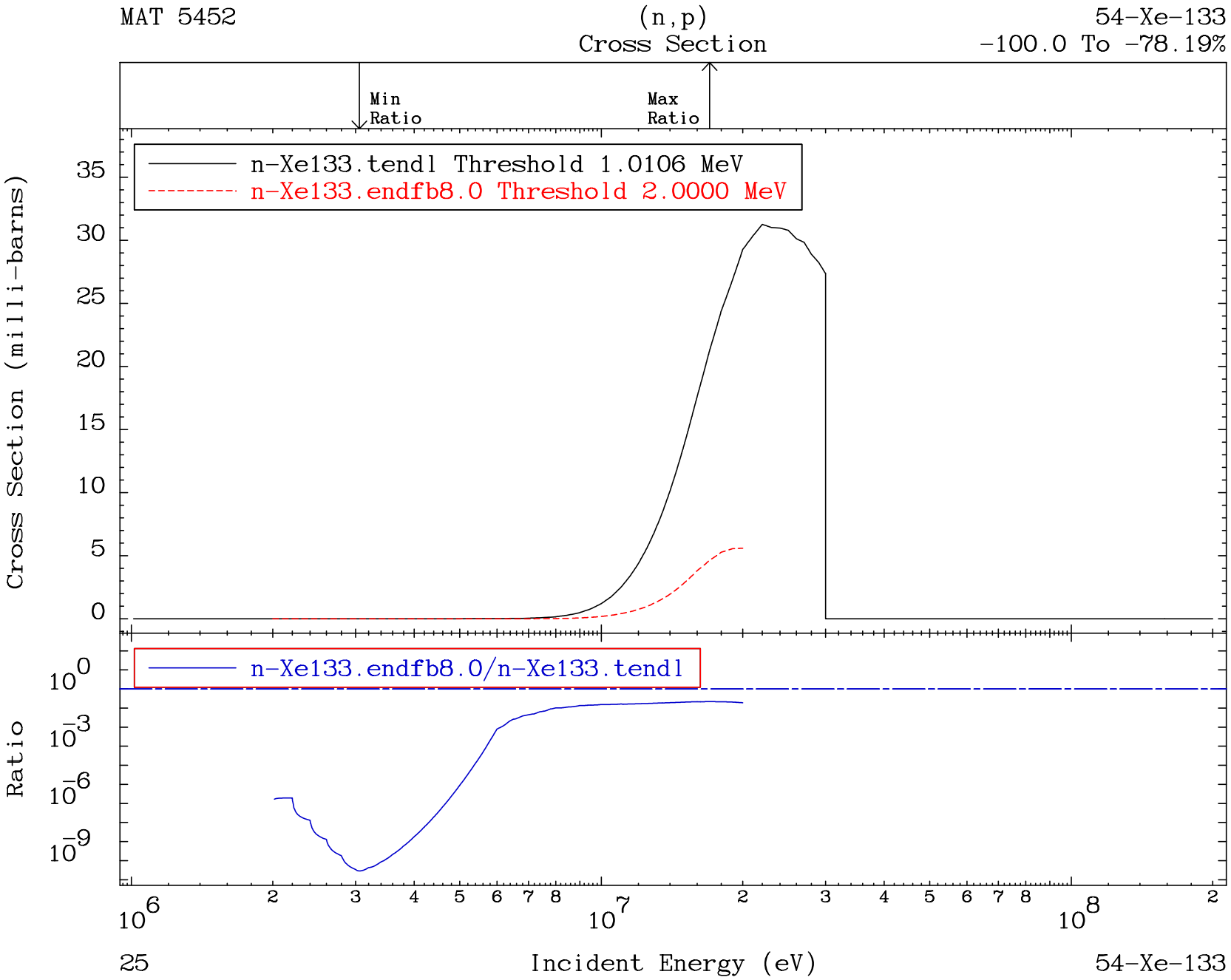

MAT 5452
MT= 62 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 736.0 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 1.1784 MeV
n-Xe133.endfb8.0 Threshold 1.3955 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
54-Xe-133

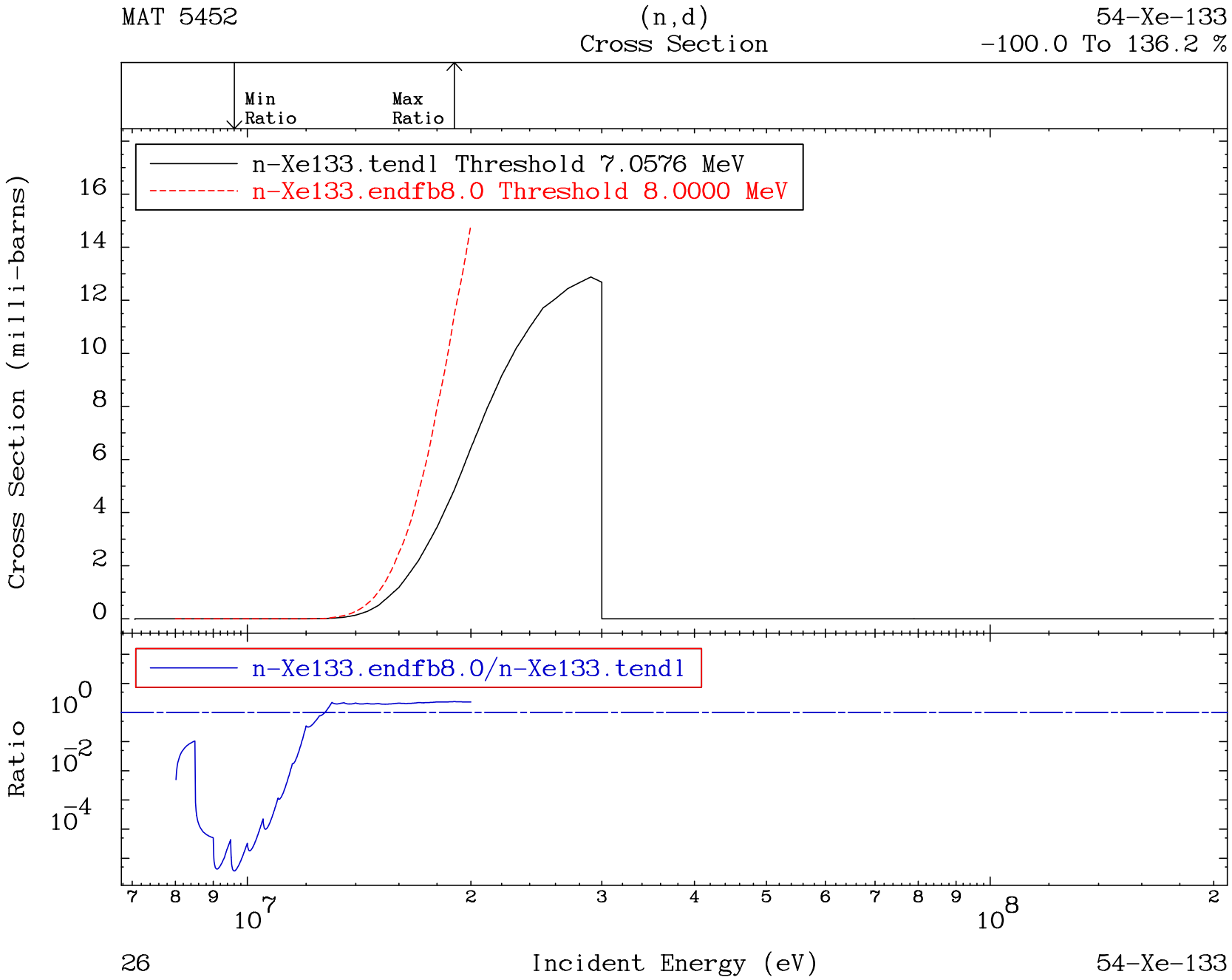

MAT 5452
MT= 63 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -2.478%
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 1.2458 MeV
n-Xe133.endfb8.0 Threshold 1.4155 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
54-Xe-133

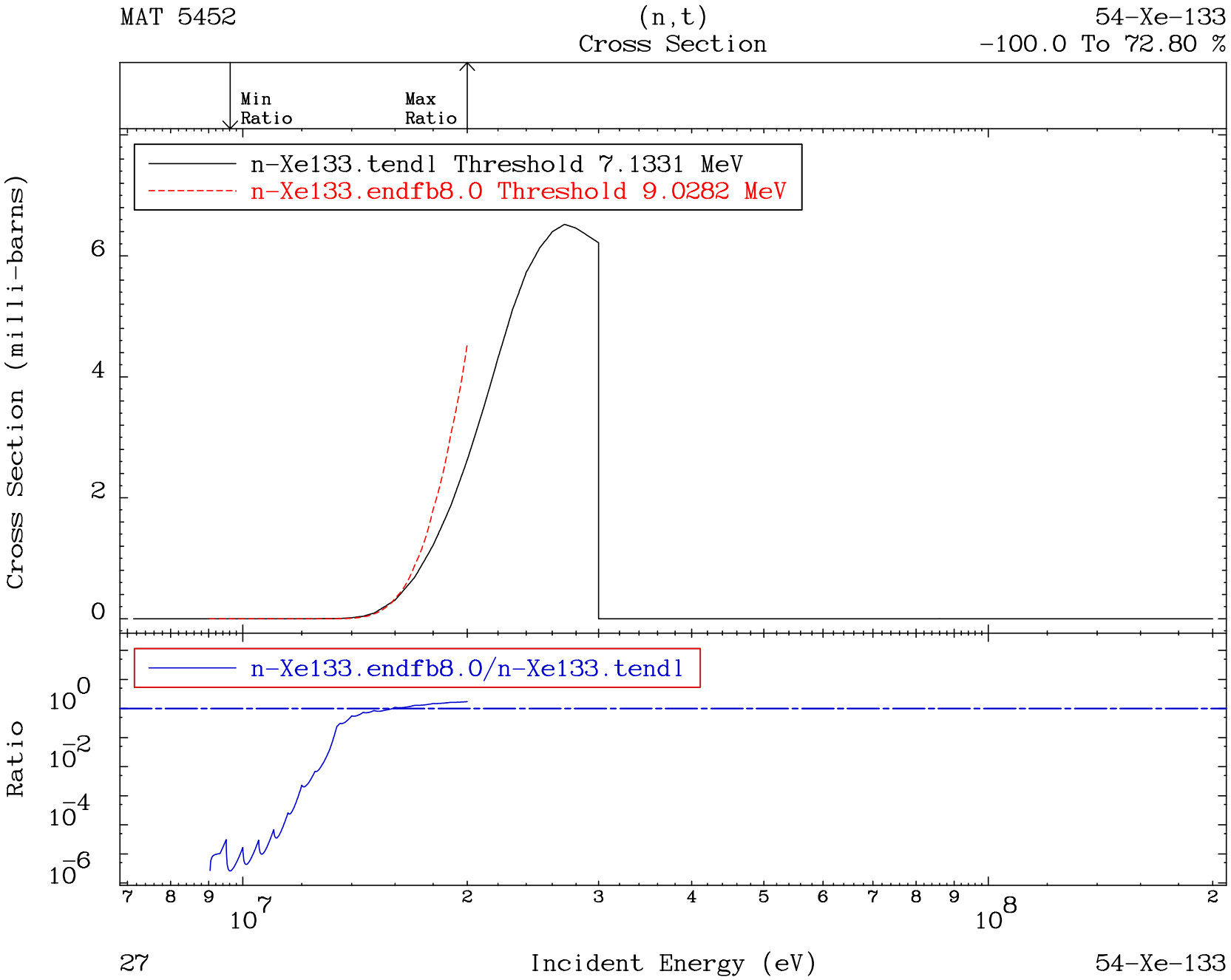

MAT 5452
MT= 64 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -10.58%
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 1.3081 MeV
n-Xe133.endfb8.0 Threshold 1.6022 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
54-Xe-133

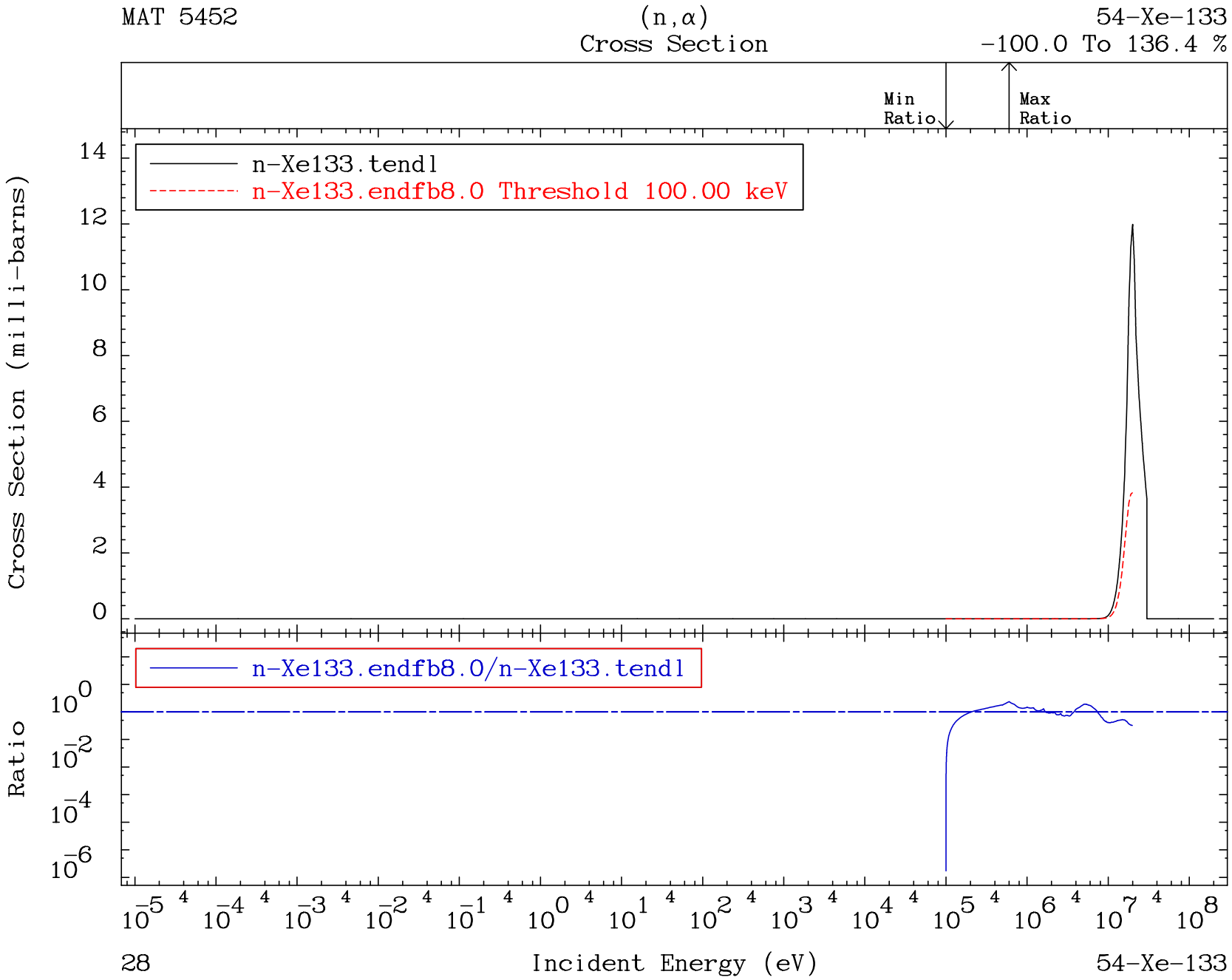

MAT 5452
(n,n') Continuum
Cross Section
54-Xe-133
-53.11 To 9999. %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 2.1086 MeV
n-Xe133.endfb8.0 Threshold 1.6625 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
54-Xe-133

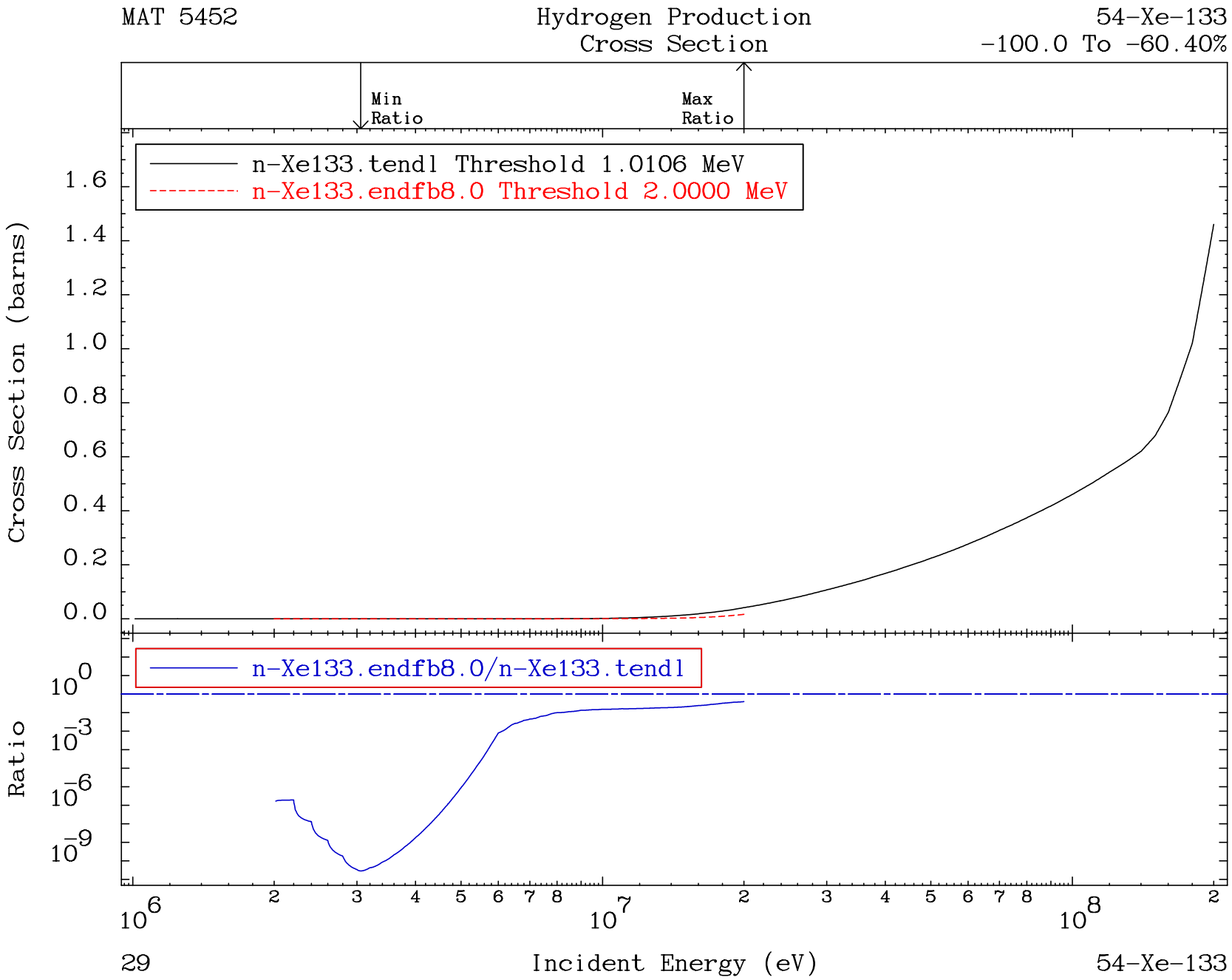

MAT 5452
(n,γ)
Cross Section
54-Xe-133
-99.93 To 5020. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
24
54-Xe-133

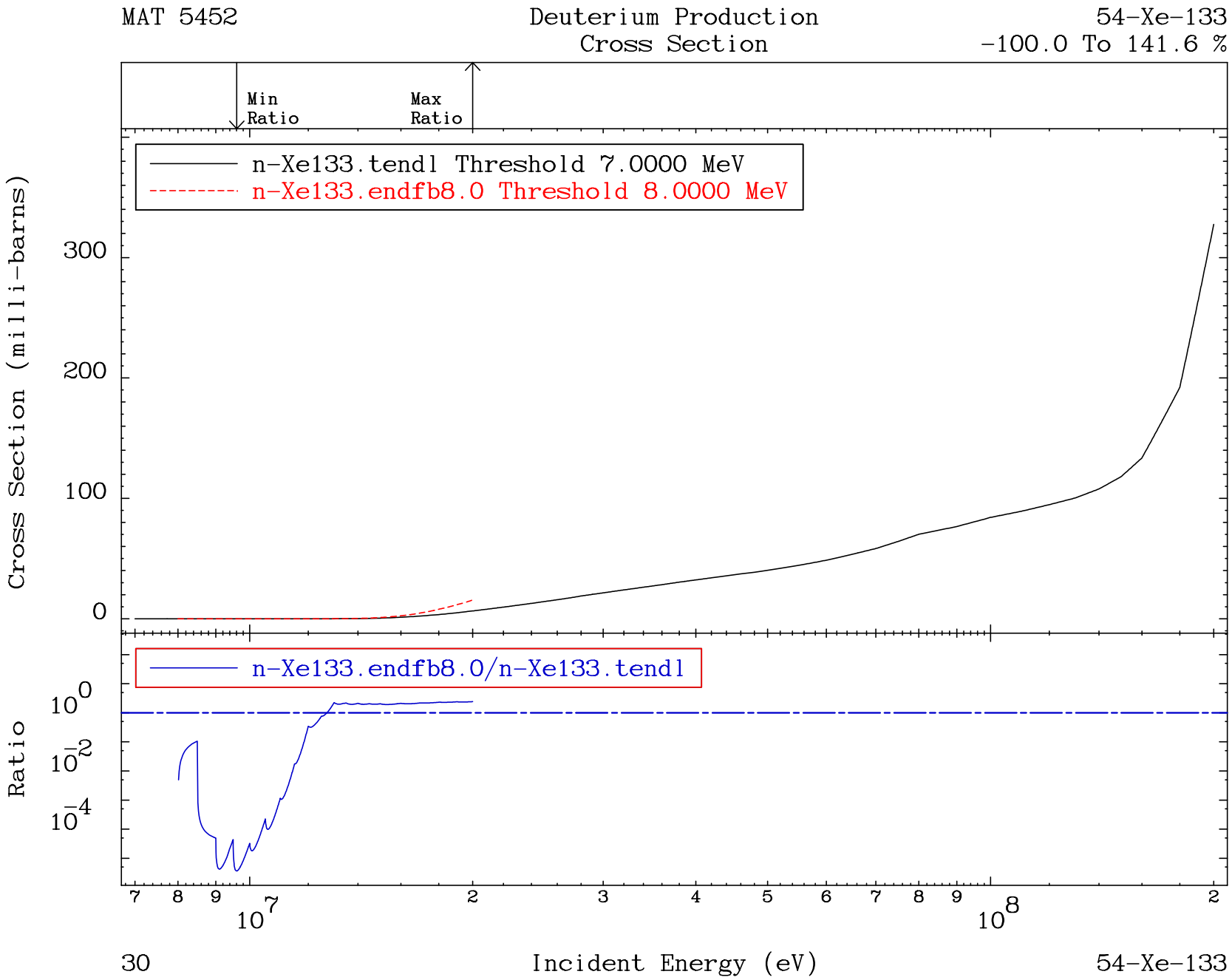

MAT 5452
(n,p)
Cross Section
54-Xe-133
-100.0 To -78.19%
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 1.0106 MeV
n-Xe133.endfb8.0 Threshold 2.0000 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
54-Xe-133

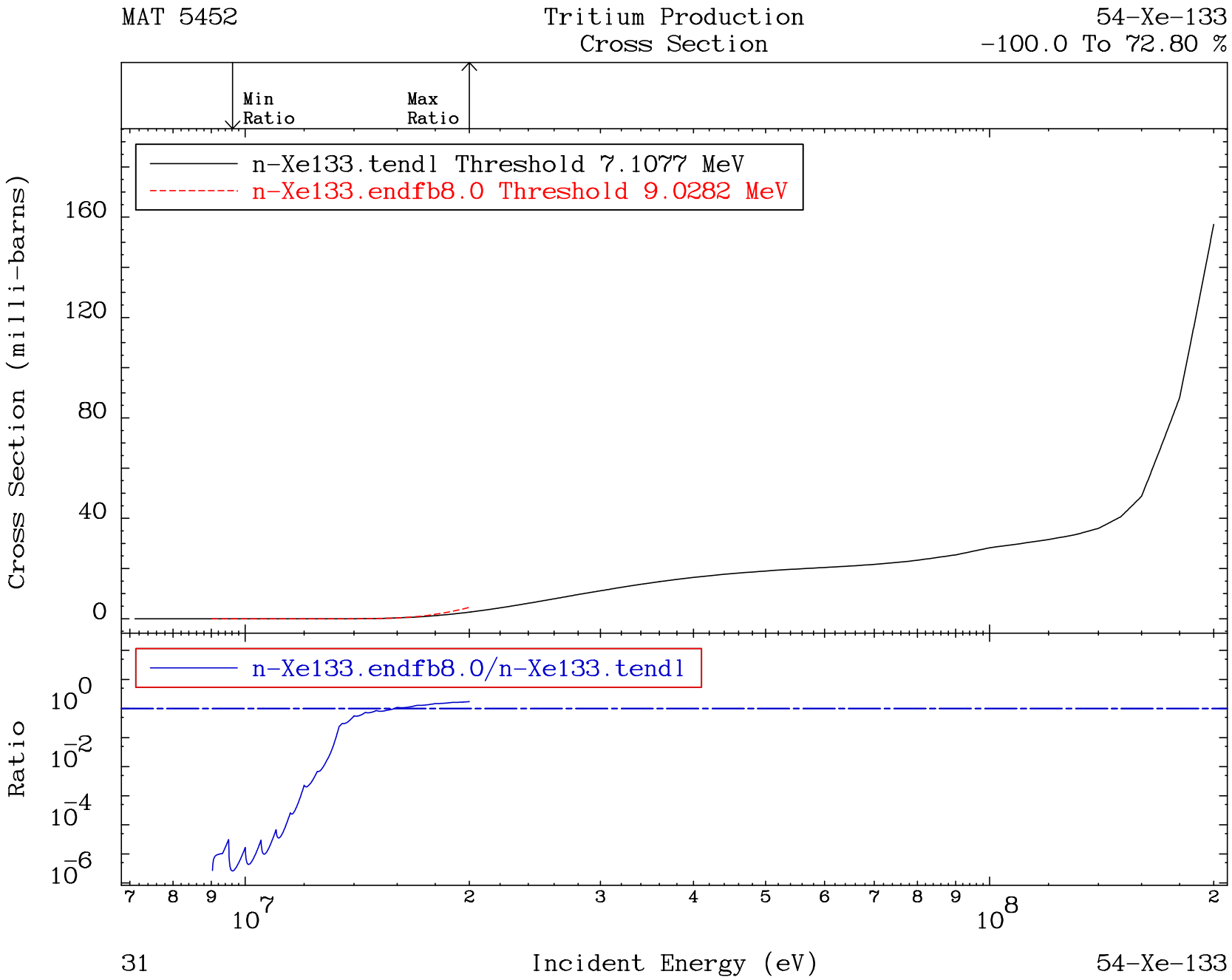

MAT 5452
(n,d)
Cross Section
54-Xe-133
-100.0 To 136.2 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.0576 MeV
n-Xe133.endfb8.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
54-Xe-133

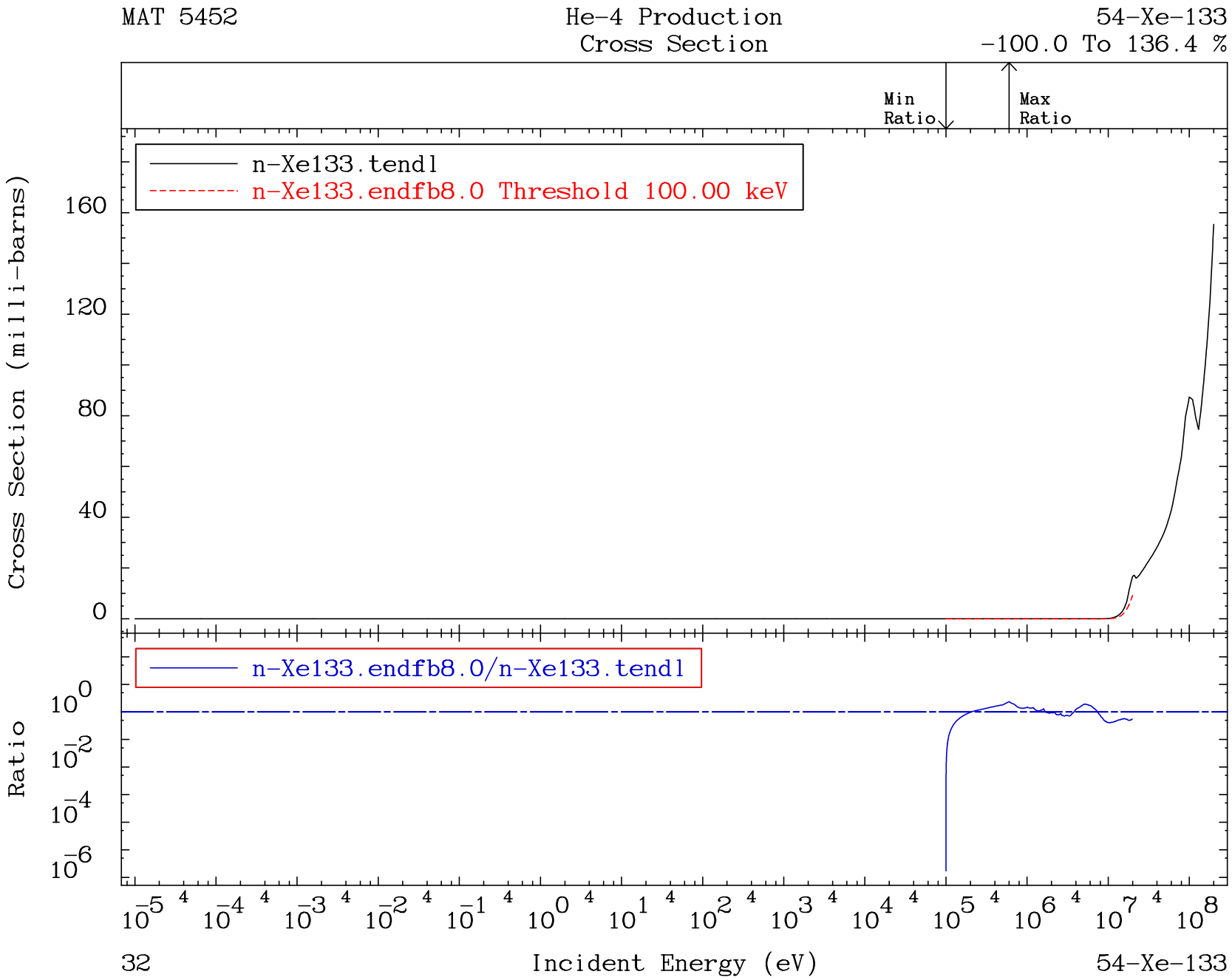

MAT 5452
(n,t)
Cross Section
54-Xe-133
-100.0 To 72.80 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.1331 MeV
n-Xe133.endfb8.0 Threshold 9.0282 MeV
Cross Section (milli-barns)
0
2
4
6
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
54-Xe-133

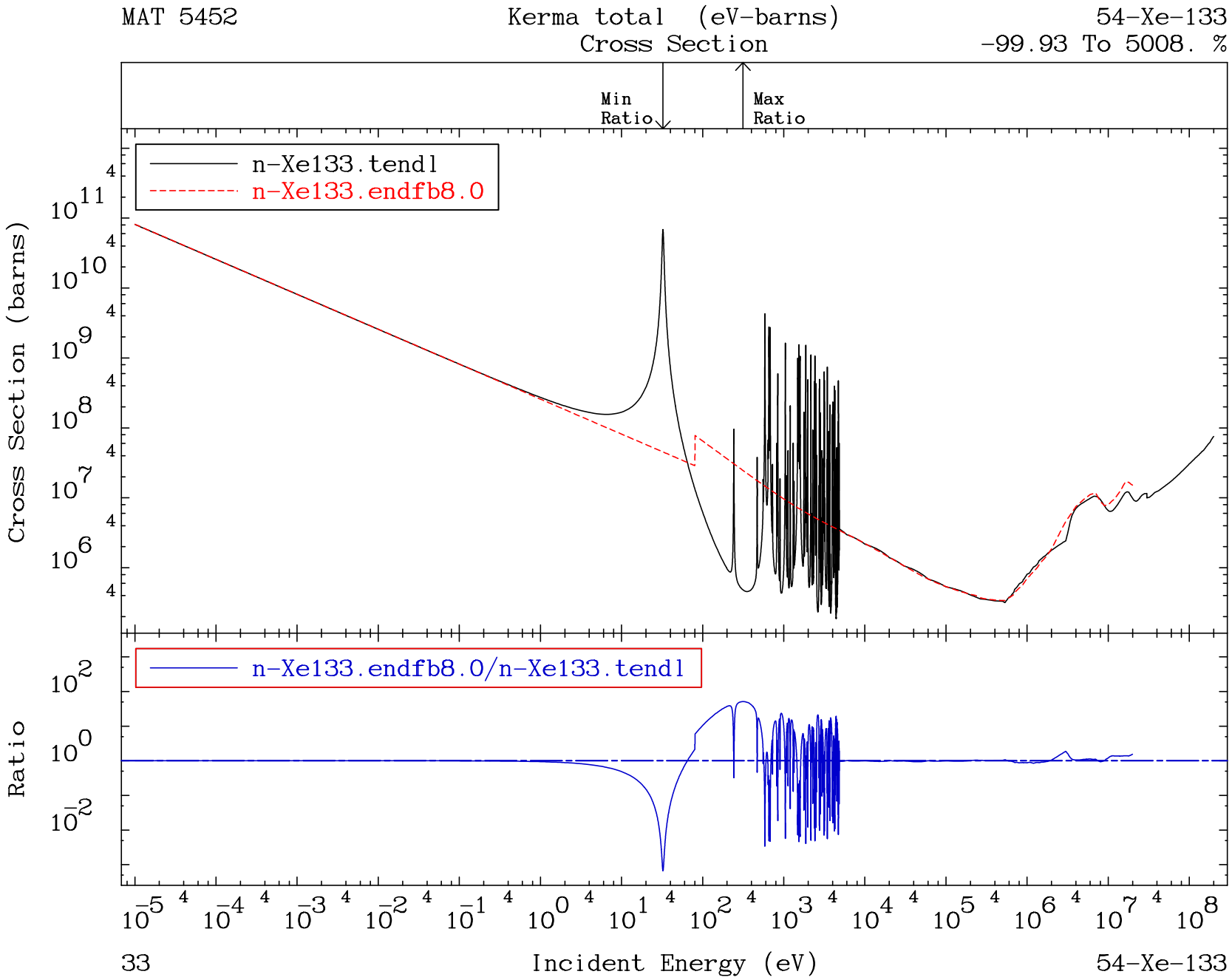

MAT 5452
(n,α)
Cross Section
54-Xe-133
-100.0 To 136.4 %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
28
Incident Energy (eV)
54-Xe-133

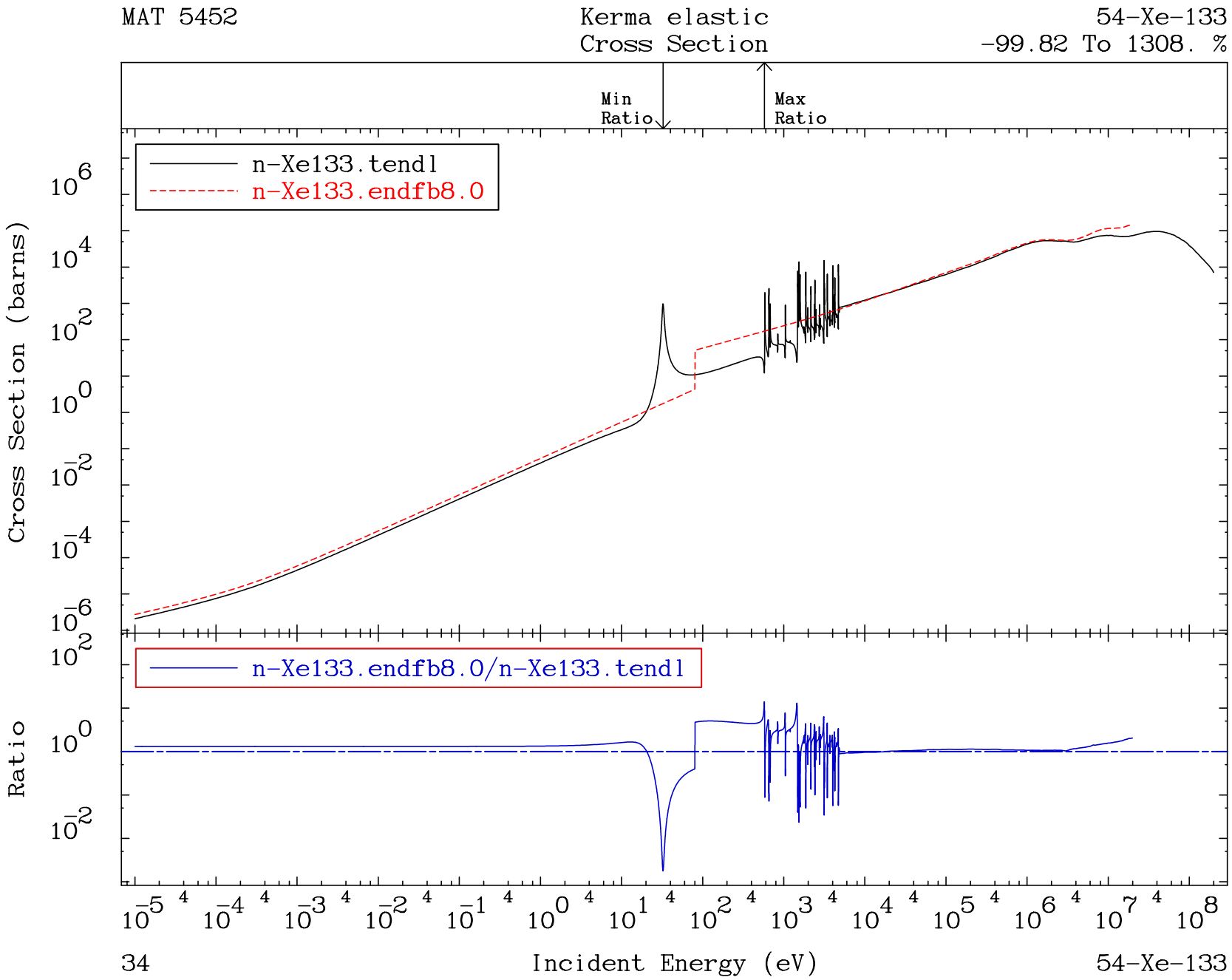

MAT 5452
Hydrogen Production
Cross Section
54-Xe-133
-100.0 To -60.40%
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 1.0106 MeV
n-Xe133.endfb8.0 Threshold 2.0000 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
54-Xe-133

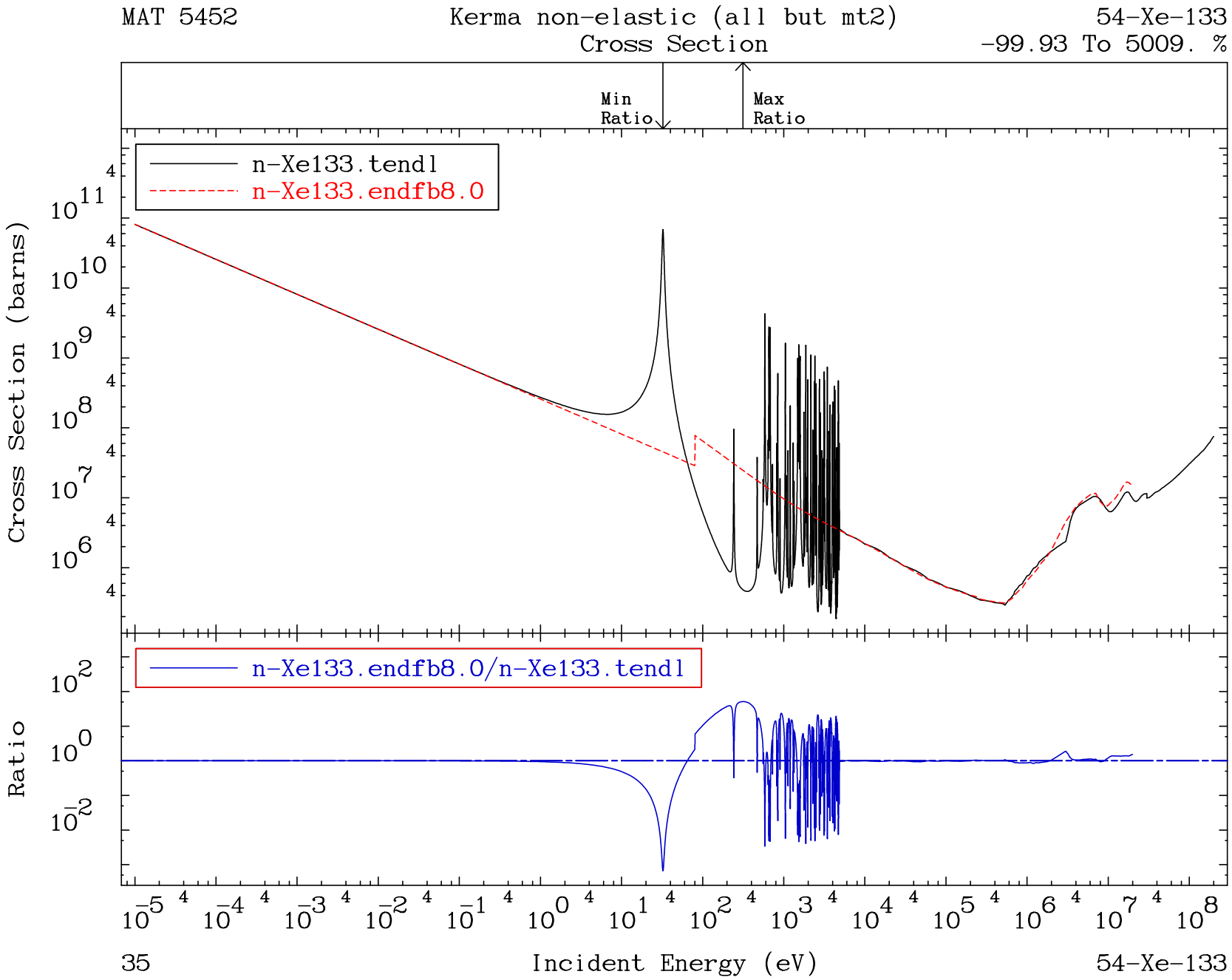

MAT 5452
Deuterium Production
Cross Section
54-Xe-133
-100.0 To 141.6 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.0000 MeV
n-Xe133.endfb8.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
300
200
100
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
54-Xe-133

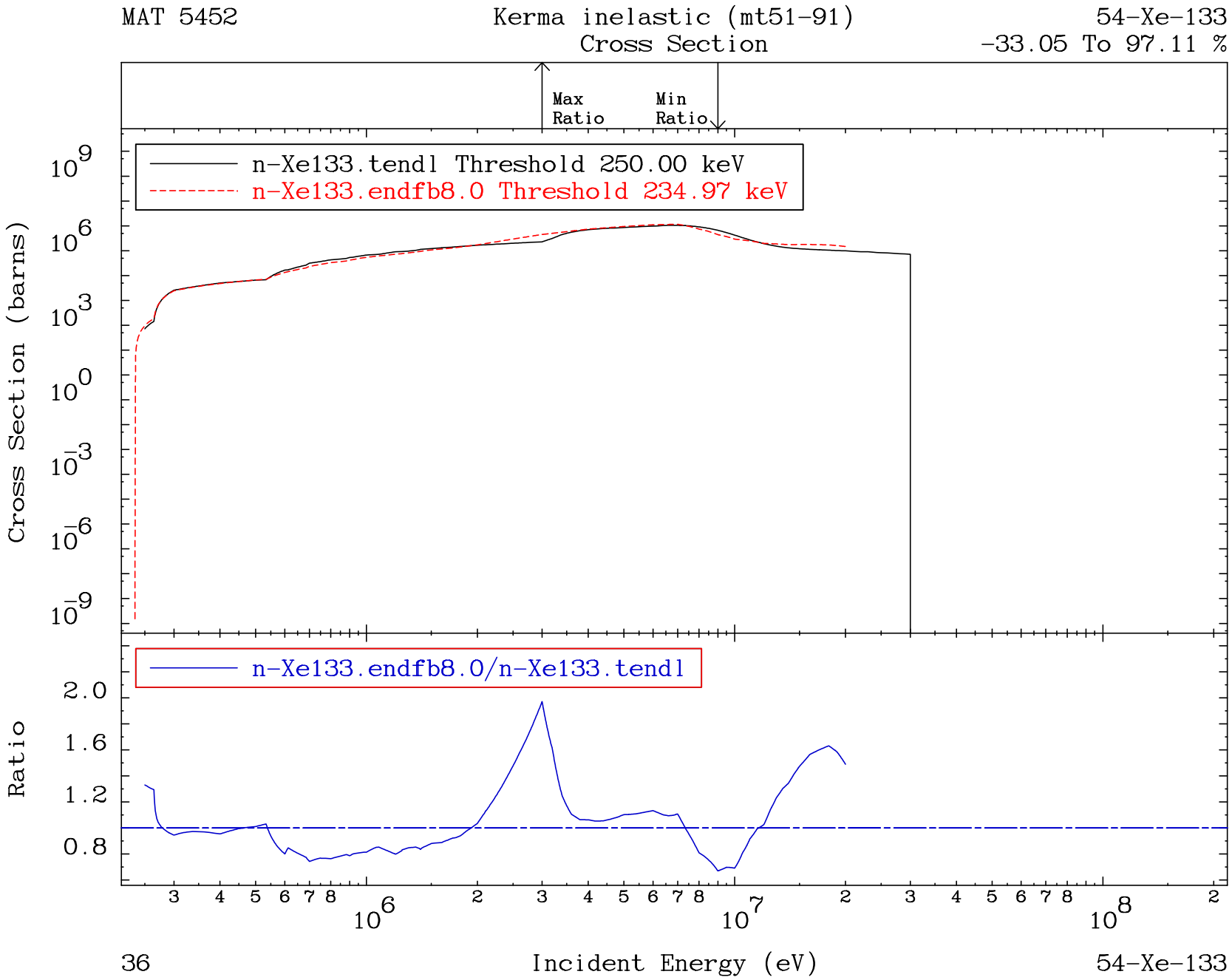

MAT 5452
Tritium Production
Cross Section
54-Xe-133
-100.0 To 72.80 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.1077 MeV
n-Xe133.endfb8.0 Threshold 9.0282 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
54-Xe-133

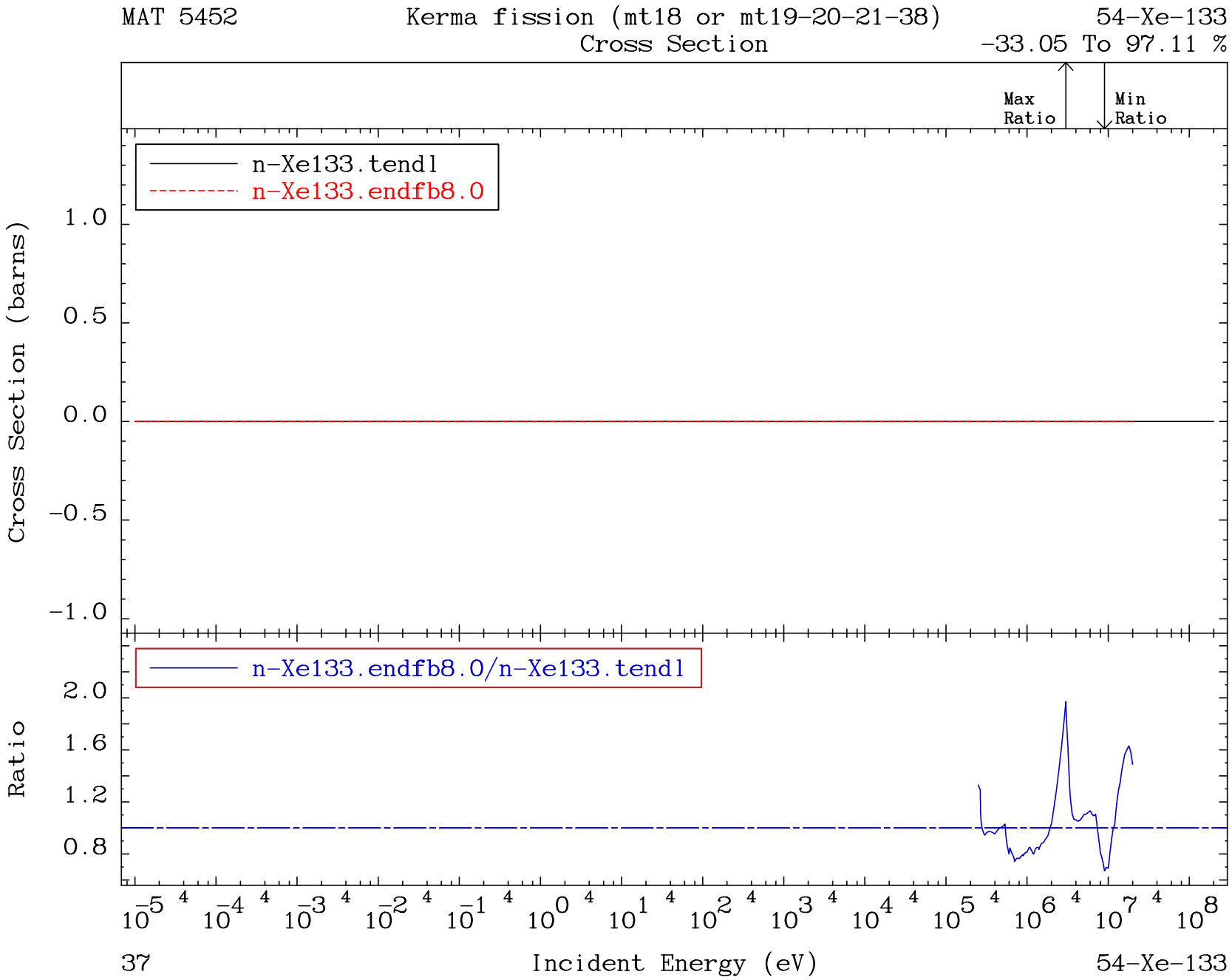

MAT 5452
He-4 Production
Cross Section
54-Xe-133
-100.0 To 136.4 %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
160
120
80
40
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
54-Xe-133

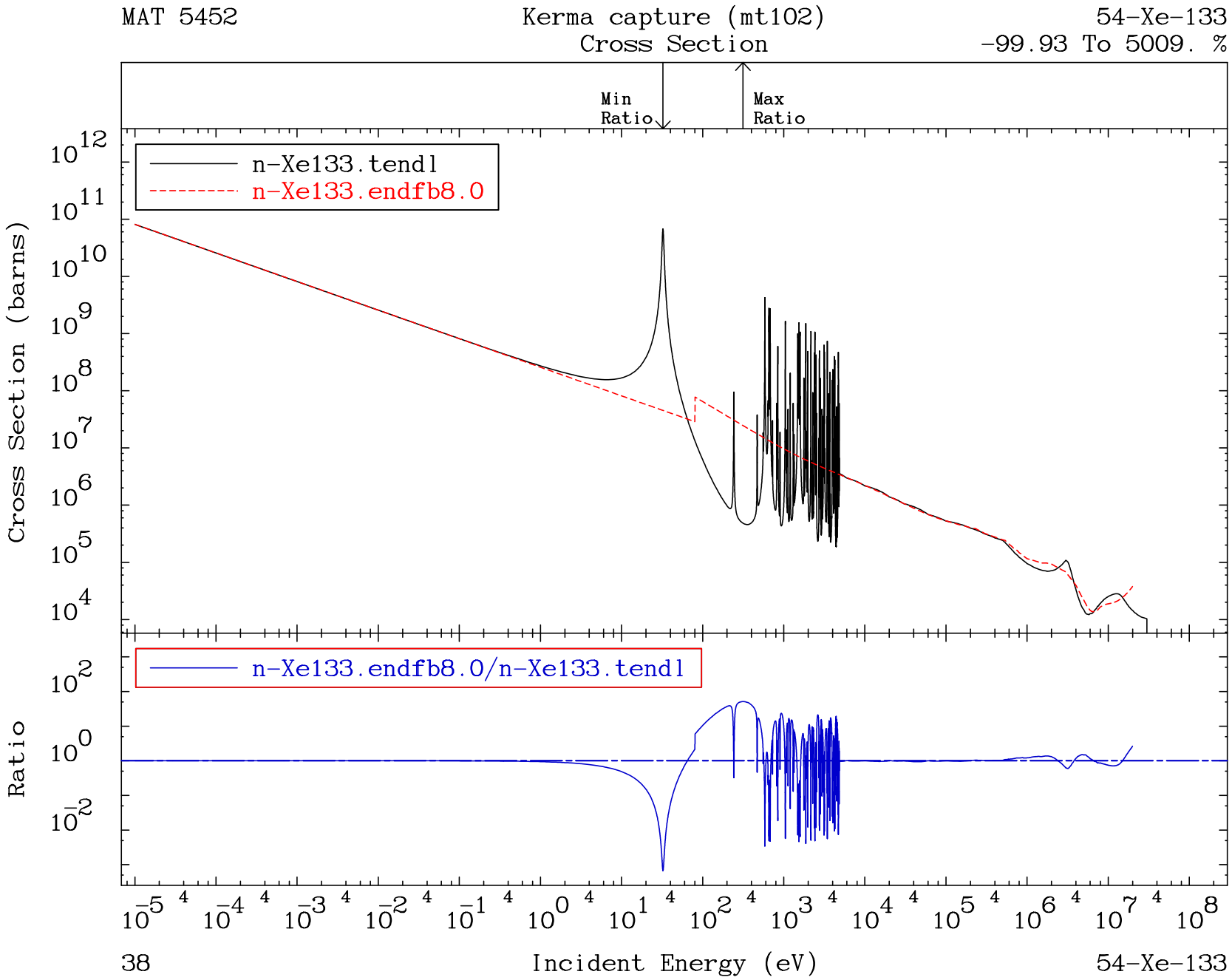

MAT 5452
Kerma total (eV-barns)
Cross Section
54-Xe-133
-99.93 To 5008. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
33
54-Xe-133

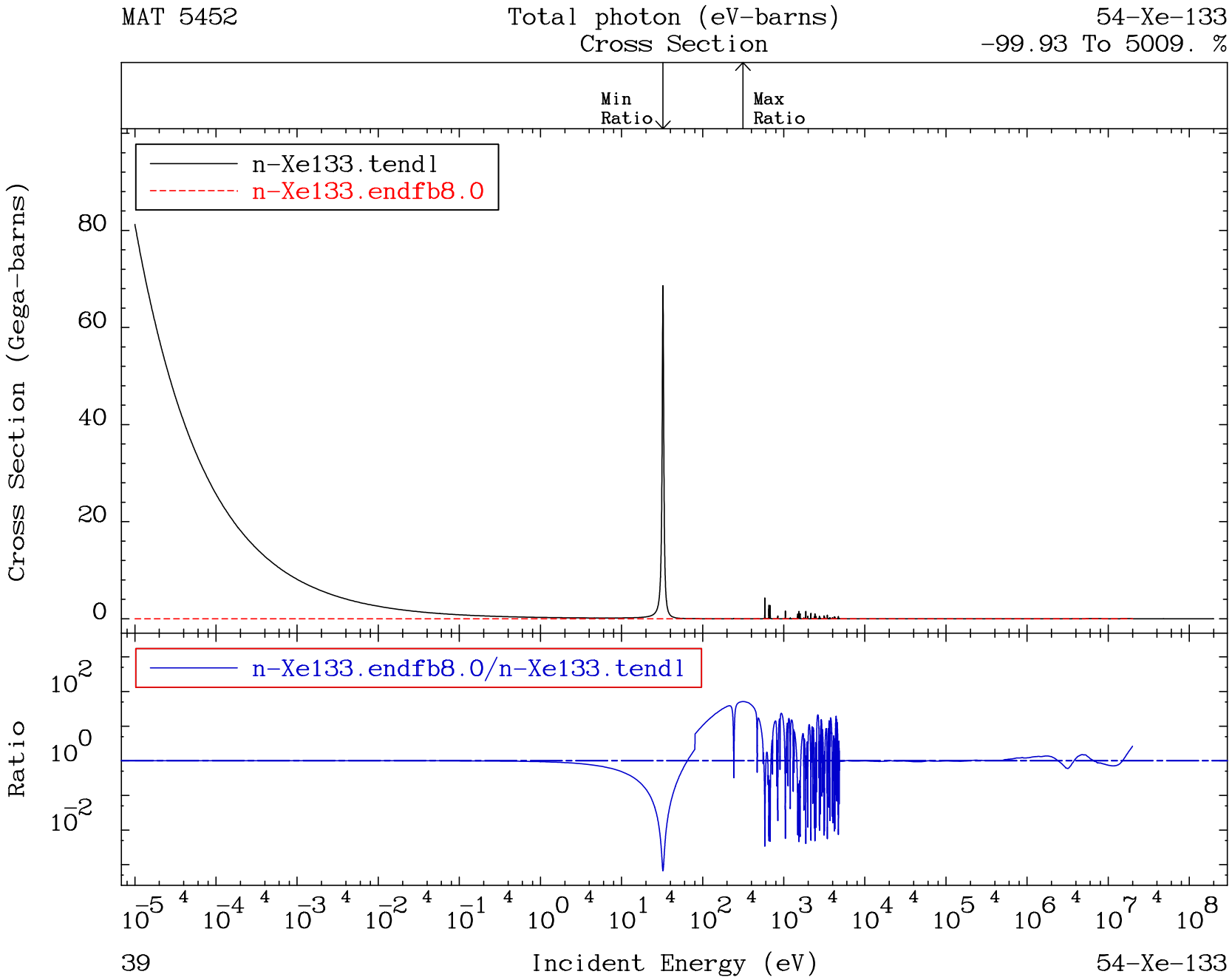

MAT 5452
Kerma elastic
Cross Section
54-Xe-133
-99.82 To 1308. %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
34
Incident Energy (eV)
54-Xe-133

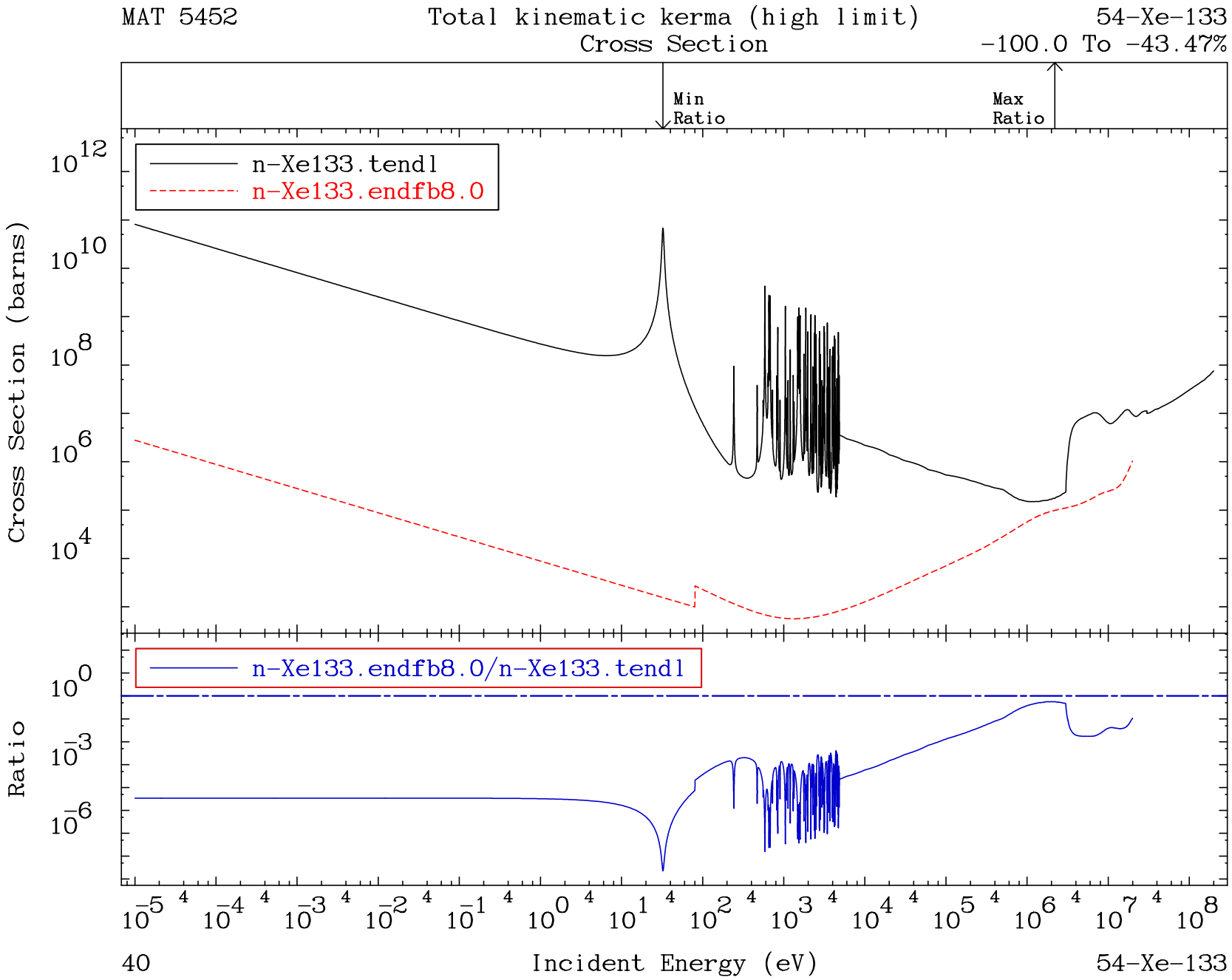

MAT 5452
Kerma non-elastic (all but mt2)
Cross Section
54-Xe-133
-99.93 To 5009. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
35
54-Xe-133

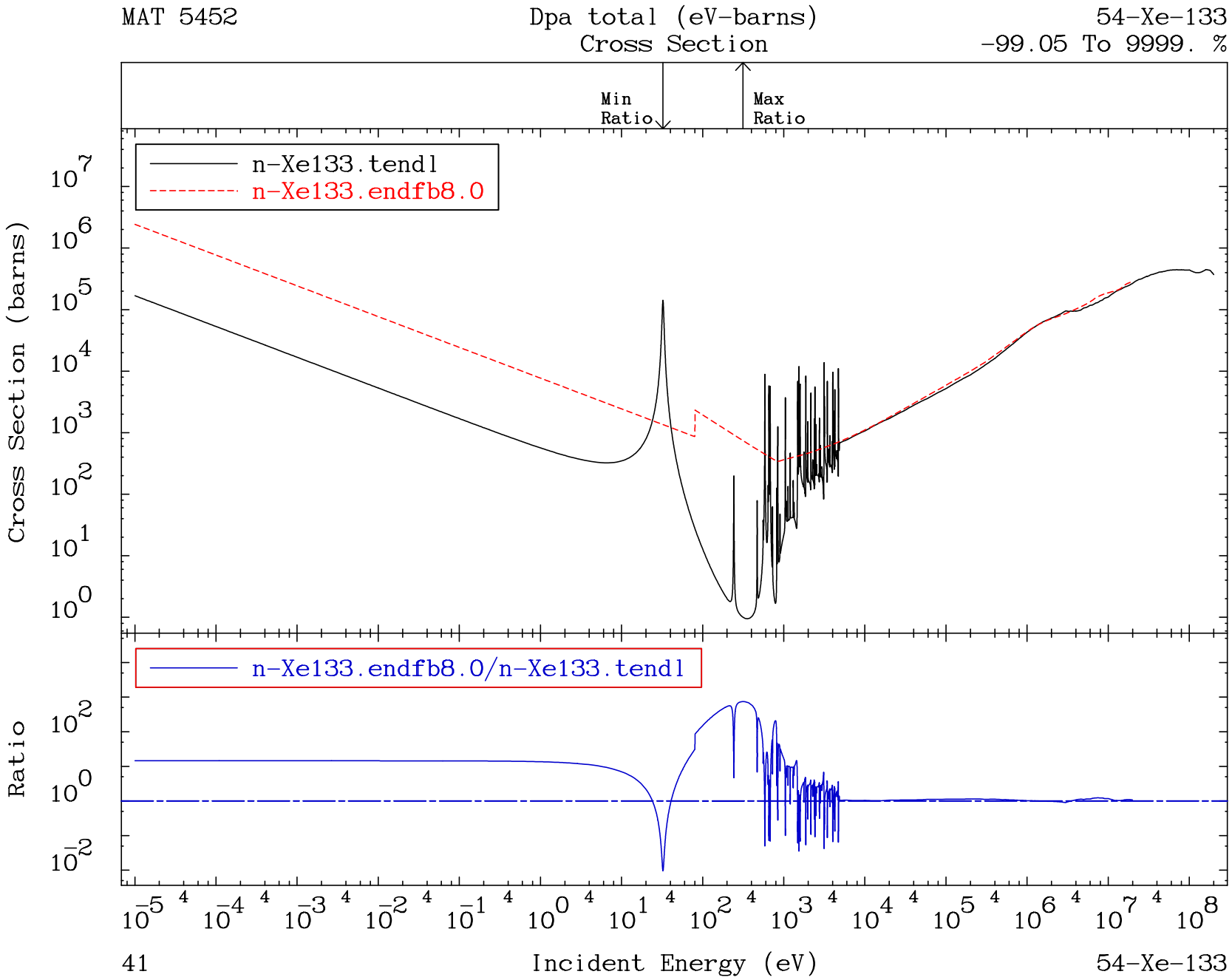

MAT 5452
Kerma inelastic (mt51-91)
Cross Section
54-Xe-133
-33.05 To 97.11 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 250.00 keV
n-Xe133.endfb8.0 Threshold 234.97 keV
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
36
54-Xe-133

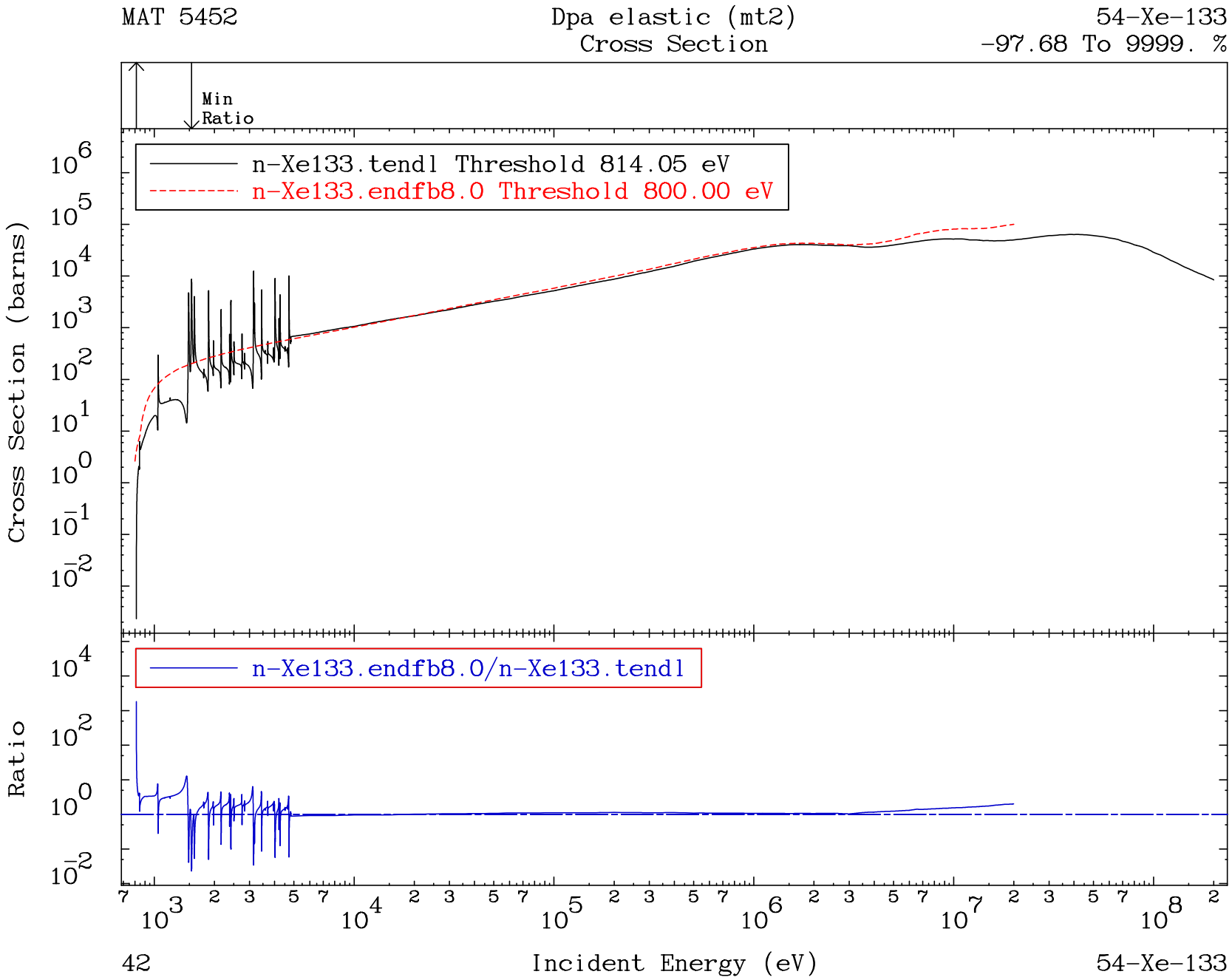

MAT 5452
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
54-Xe-133
-33.05 To 97.11 %
Max Ratio
Min Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
2.0
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
54-Xe-133

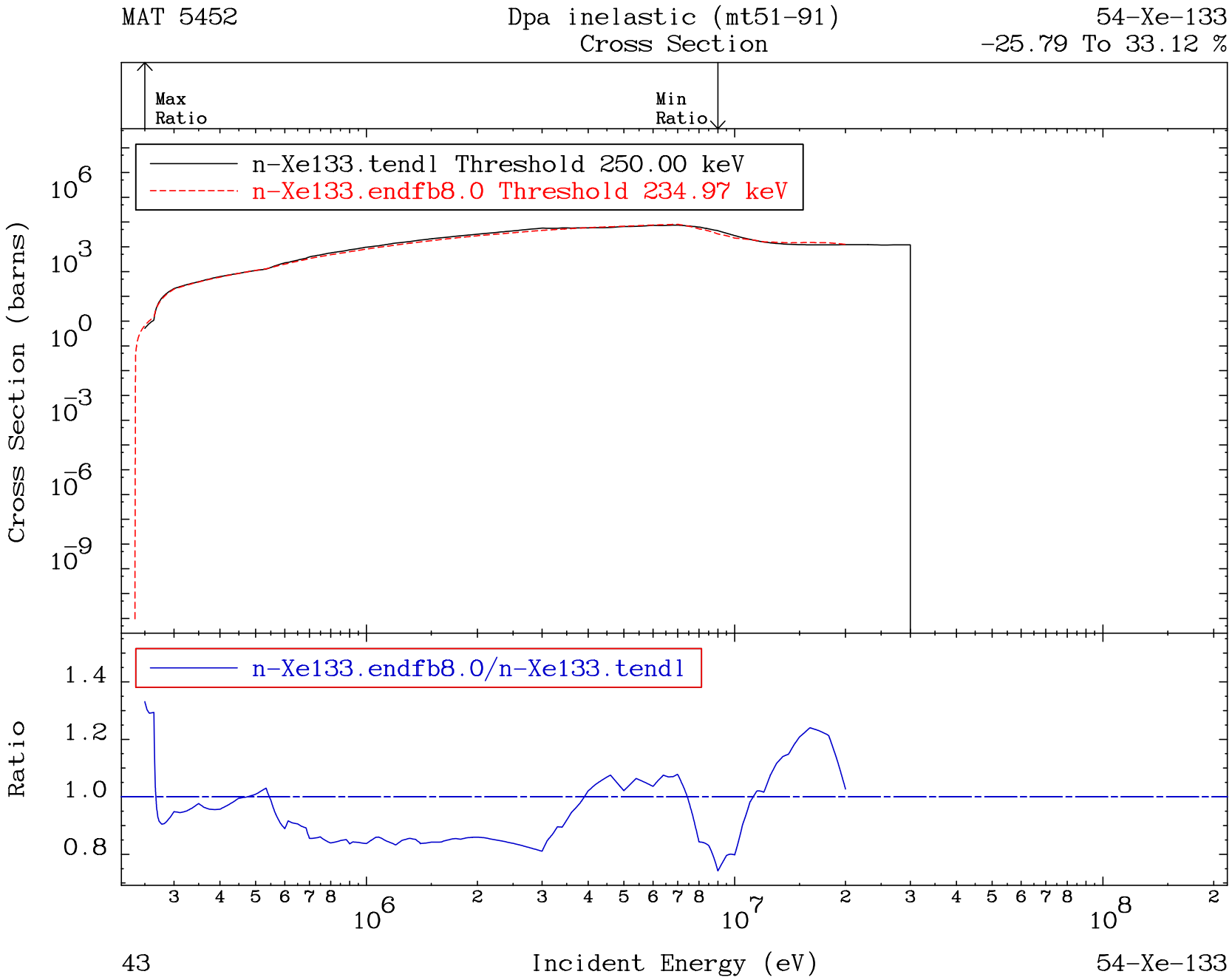

MAT 5452
Kerma capture (mt102)
Cross Section
54-Xe-133
-99.93 To 5009. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
38
54-Xe-133

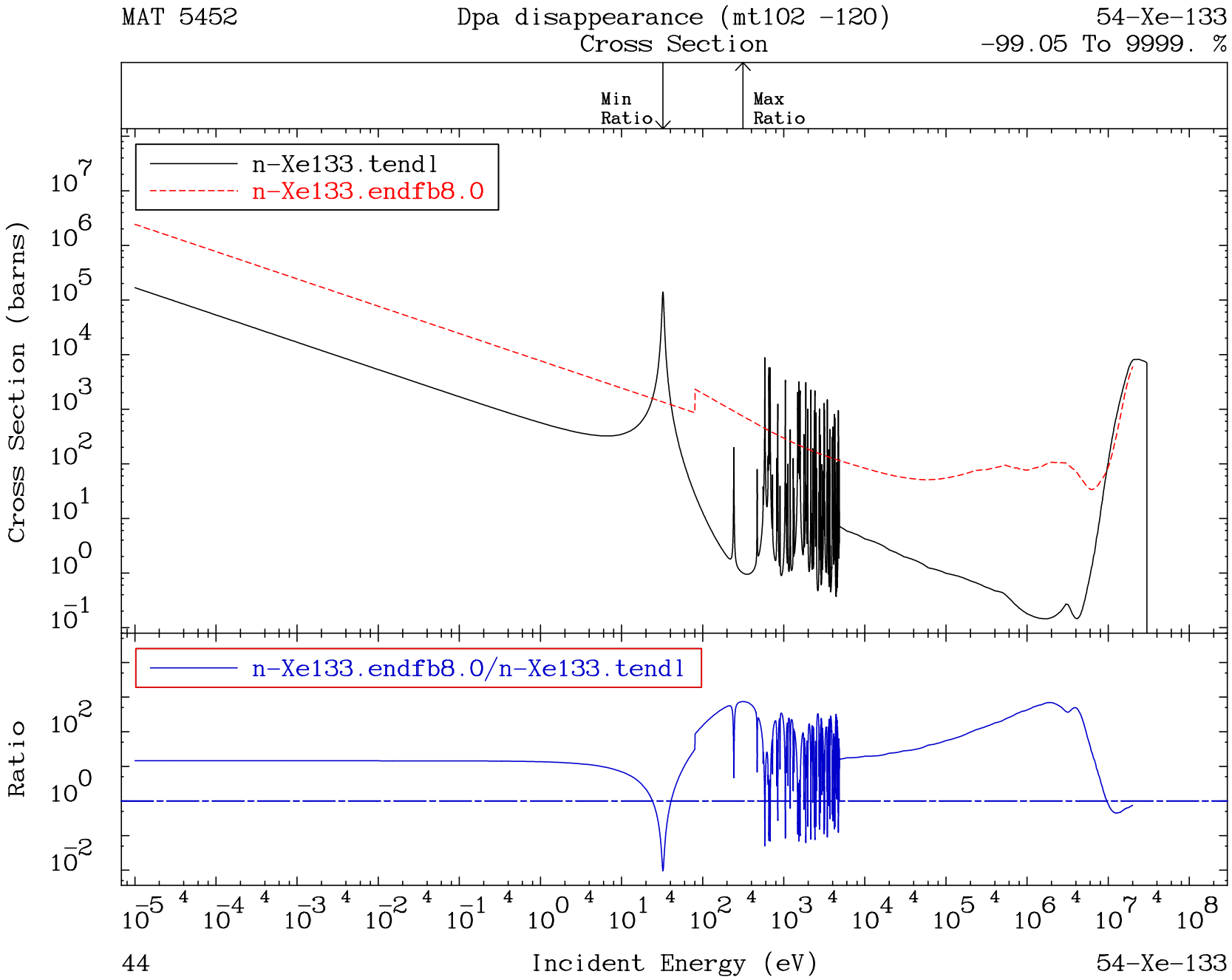

MAT 5452
Total photon (eV-barns)
Cross Section
54-Xe-133
-99.93 To 5009. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (Giga-barns)
80
60
40
20
0
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
10^2
10^0
10^-2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
54-Xe-133


MAT 5452
Total kinematic kerma (high limit)
Cross Section
54-Xe-133
-100.0 To -43.47%
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
40
54-Xe-133


MAT 5452
Dpa total (eV-barns)
Cross Section
54-Xe-133
-99.05 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
41
54-Xe-133


MAT 5452
Dpa elastic (mt2)
Cross Section
54-Xe-133
-97.68 To 9999. %
Min
Ratio
n-Xe133.tendl Threshold 814.05 eV
n-Xe133.endfb8.0 Threshold 800.00 eV
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
42
Incident Energy (eV)
54-Xe-133


MAT 5452
Dpa inelastic (mt51-91)
Cross Section
54-Xe-133
-25.79 To 33.12 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 250.00 keV
n-Xe133.endfb8.0 Threshold 234.97 keV
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
1.4
1.2
1.0
0.8
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
43
Incident Energy (eV)
54-Xe-133


MAT 5452
Dpa disappearance (mt102 -120)
Cross Section
54-Xe-133
-99.05 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.endfb8.0
Cross Section (barns)
n-Xe133.endfb8.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
44
54-Xe-133