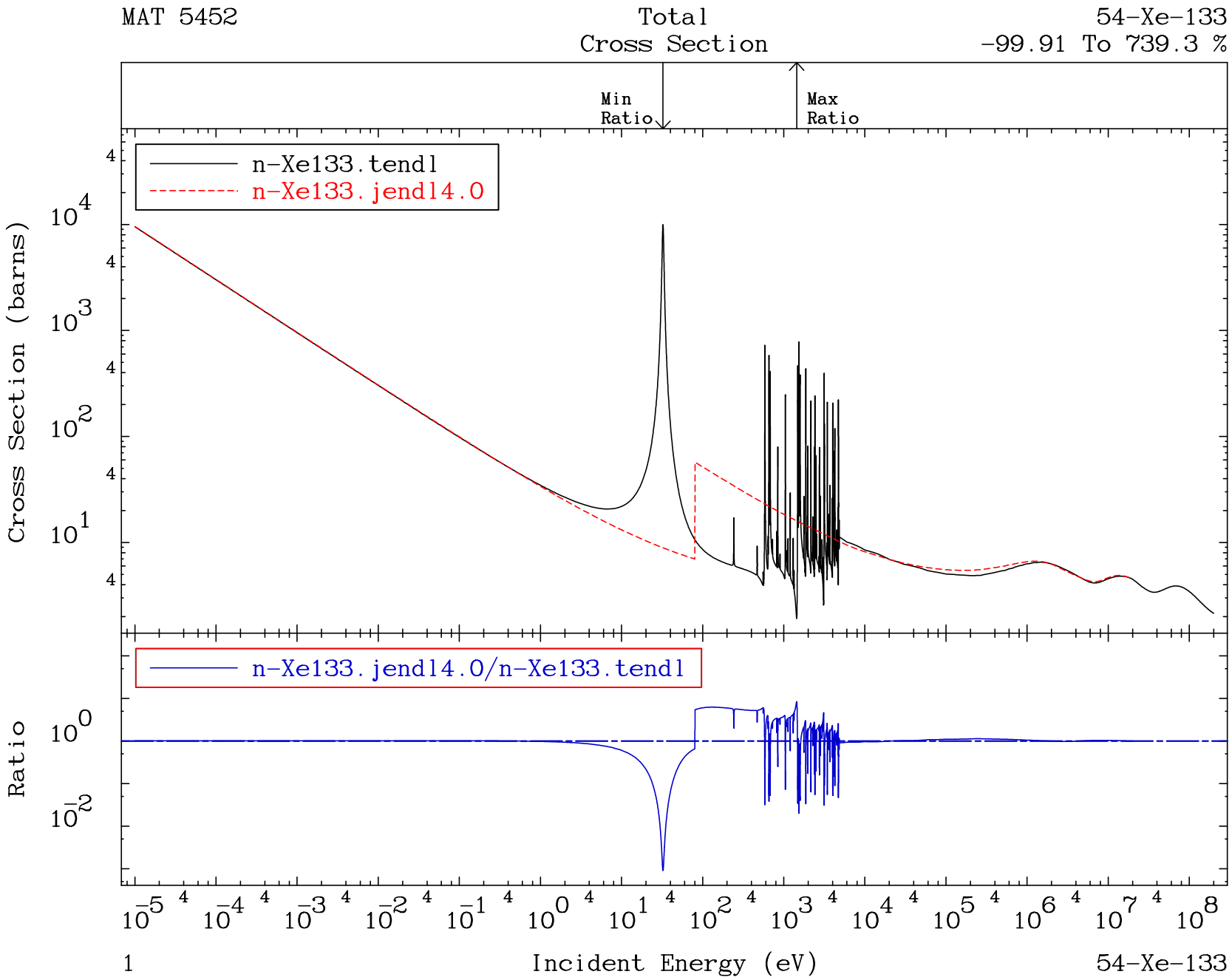
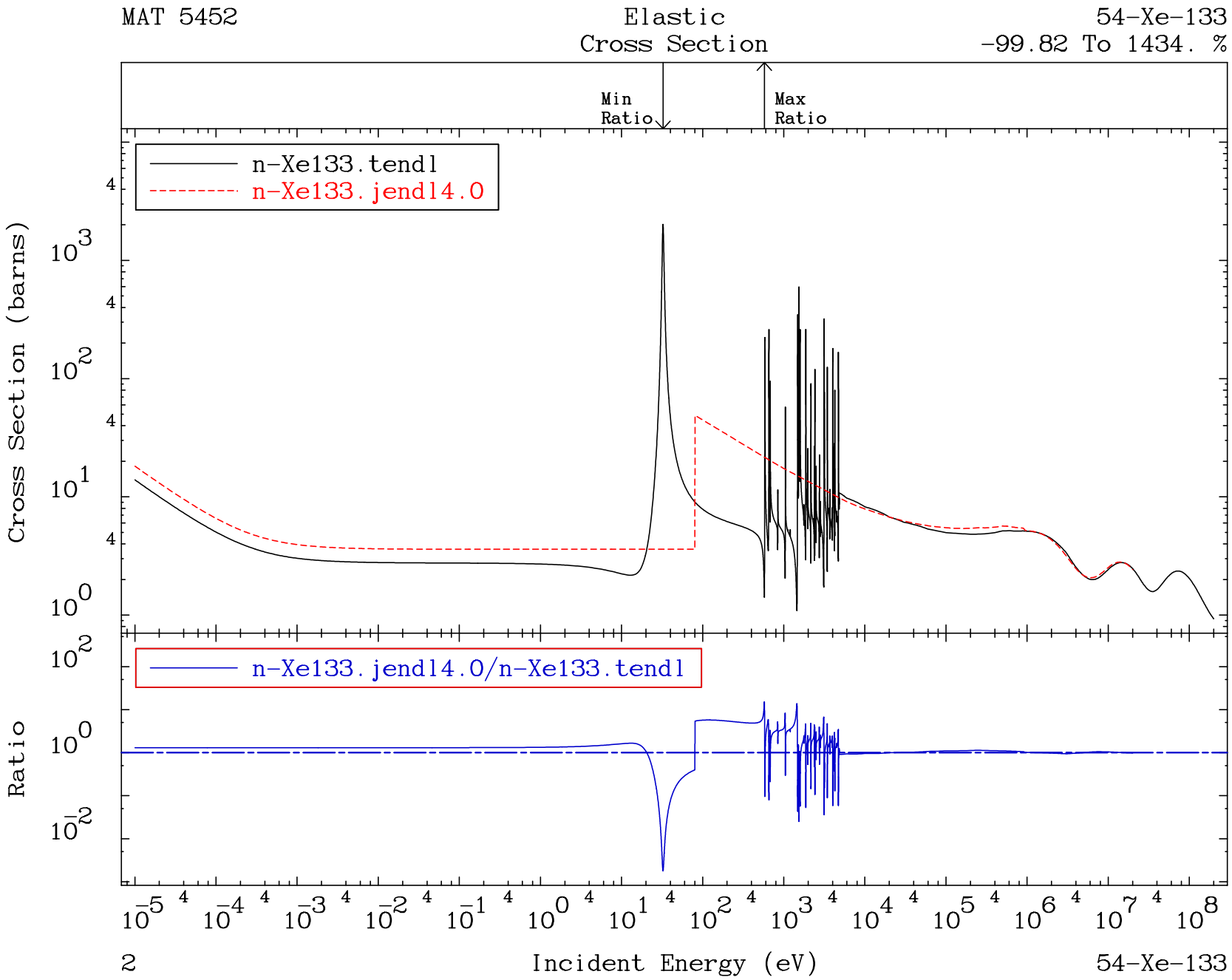
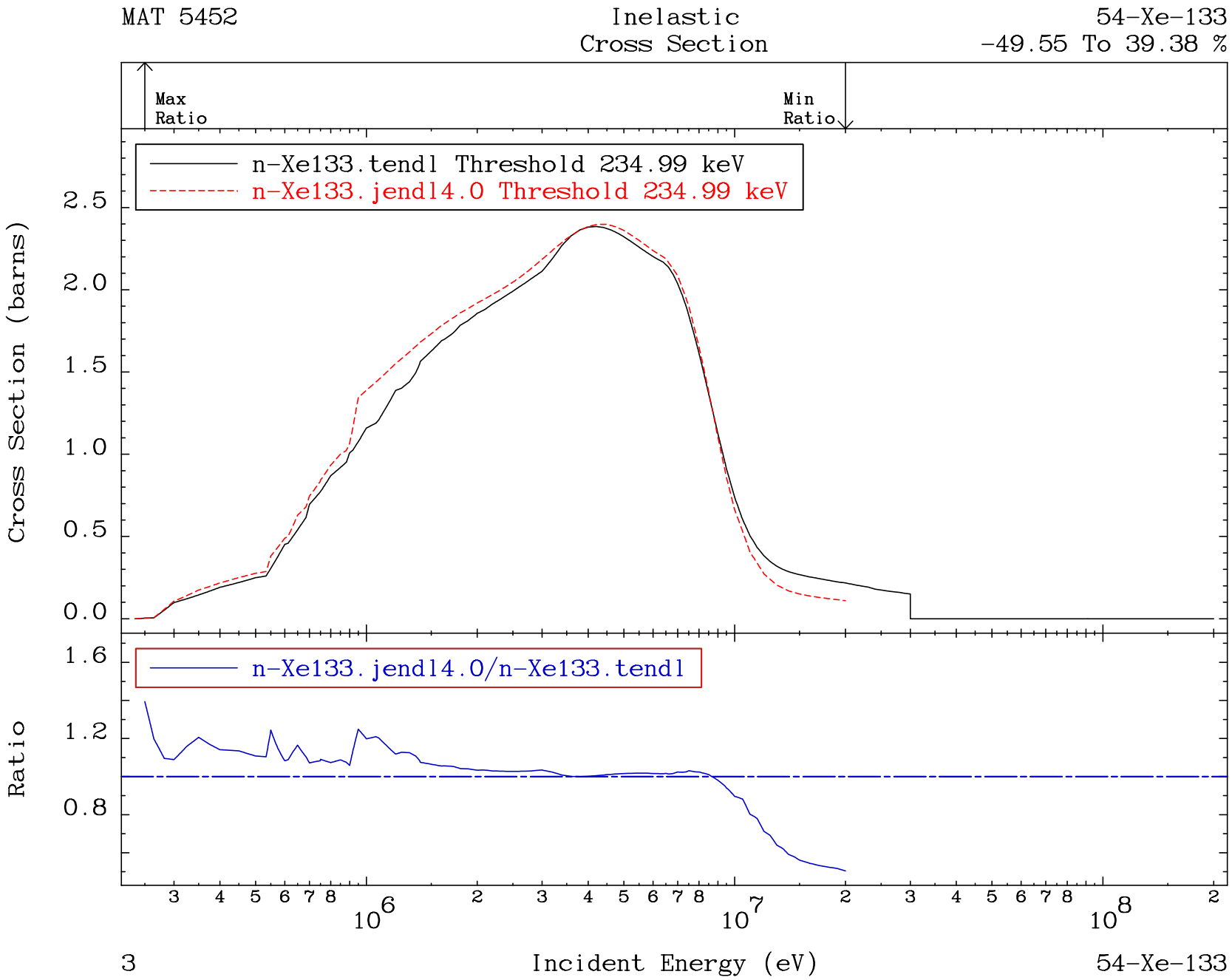
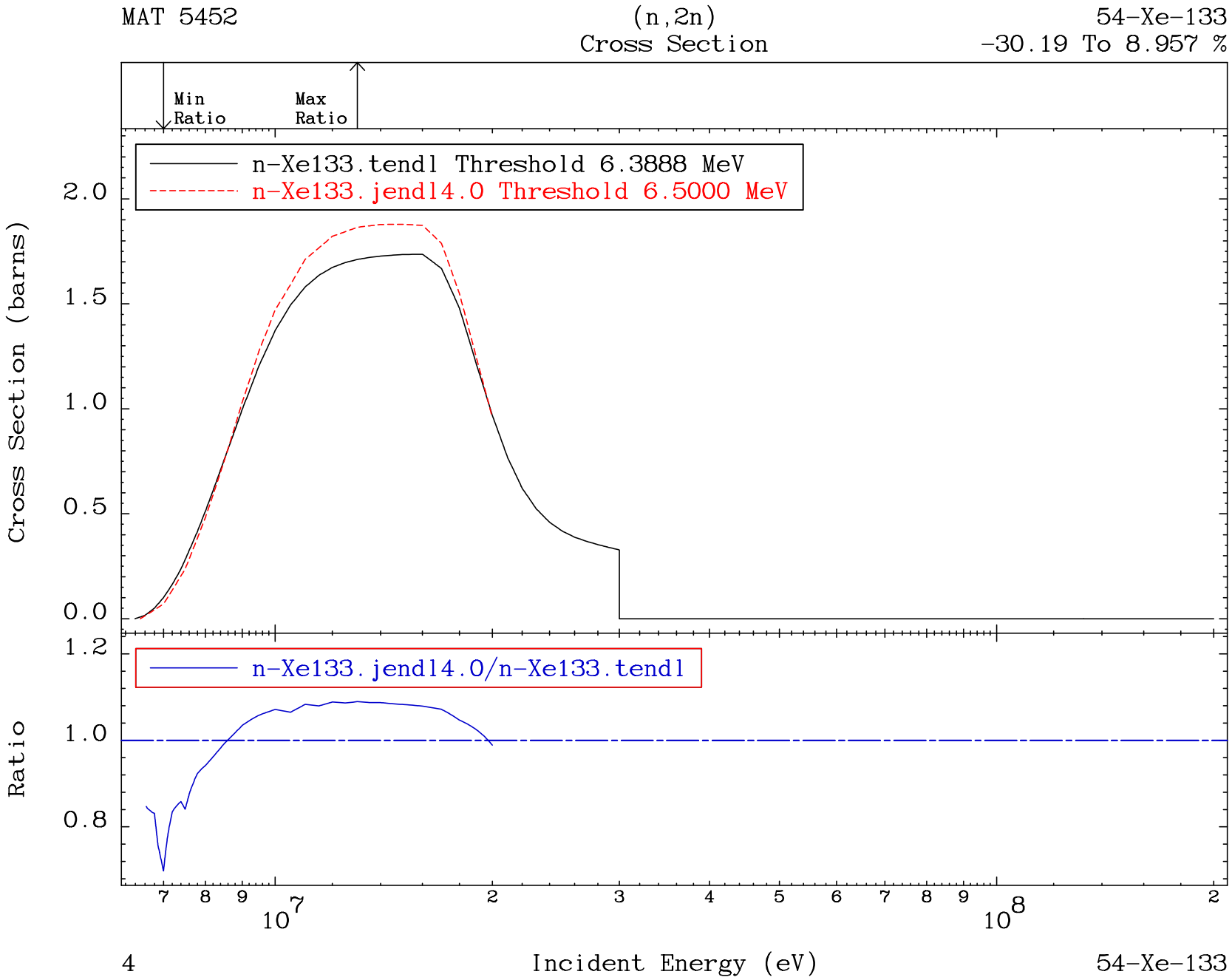
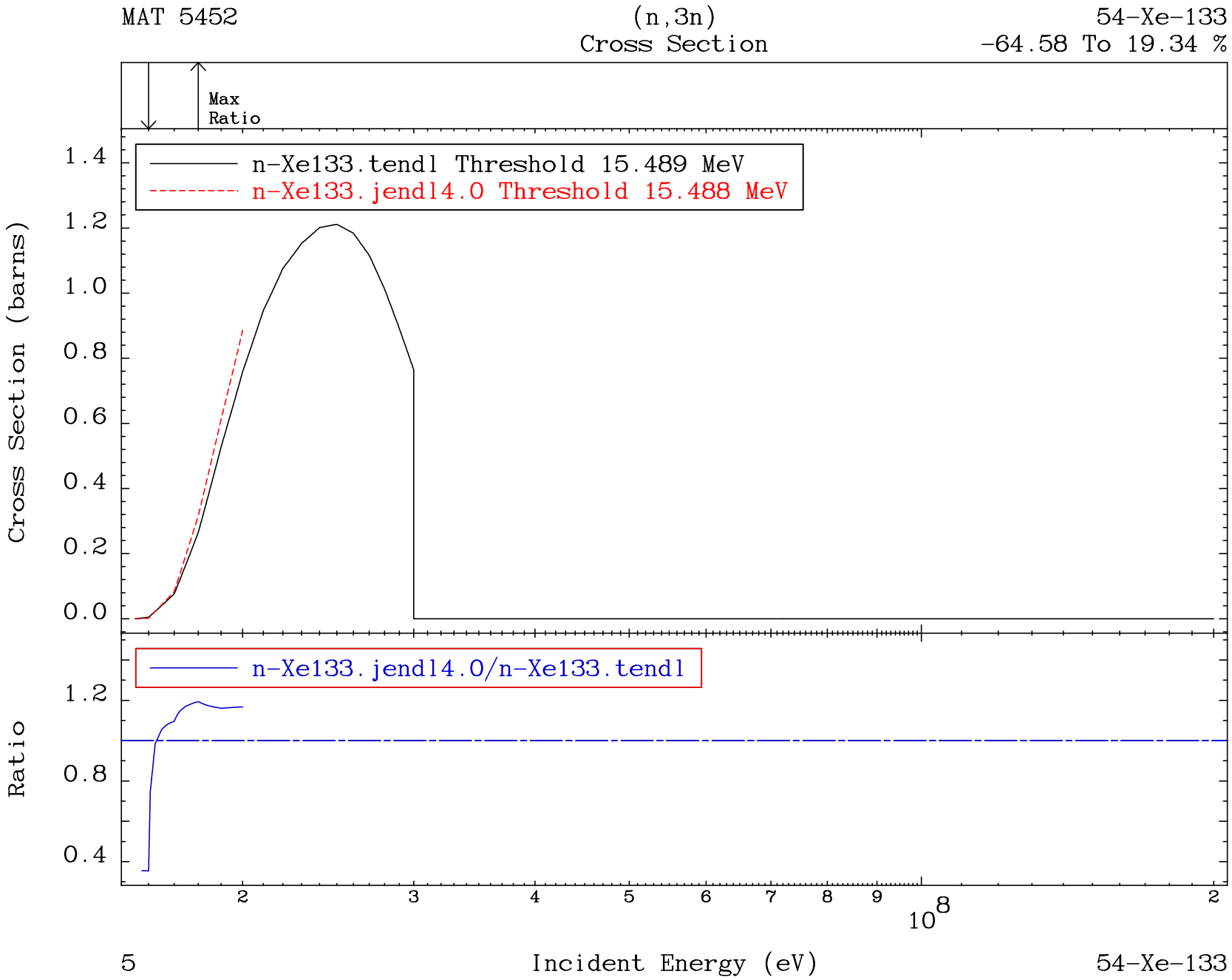
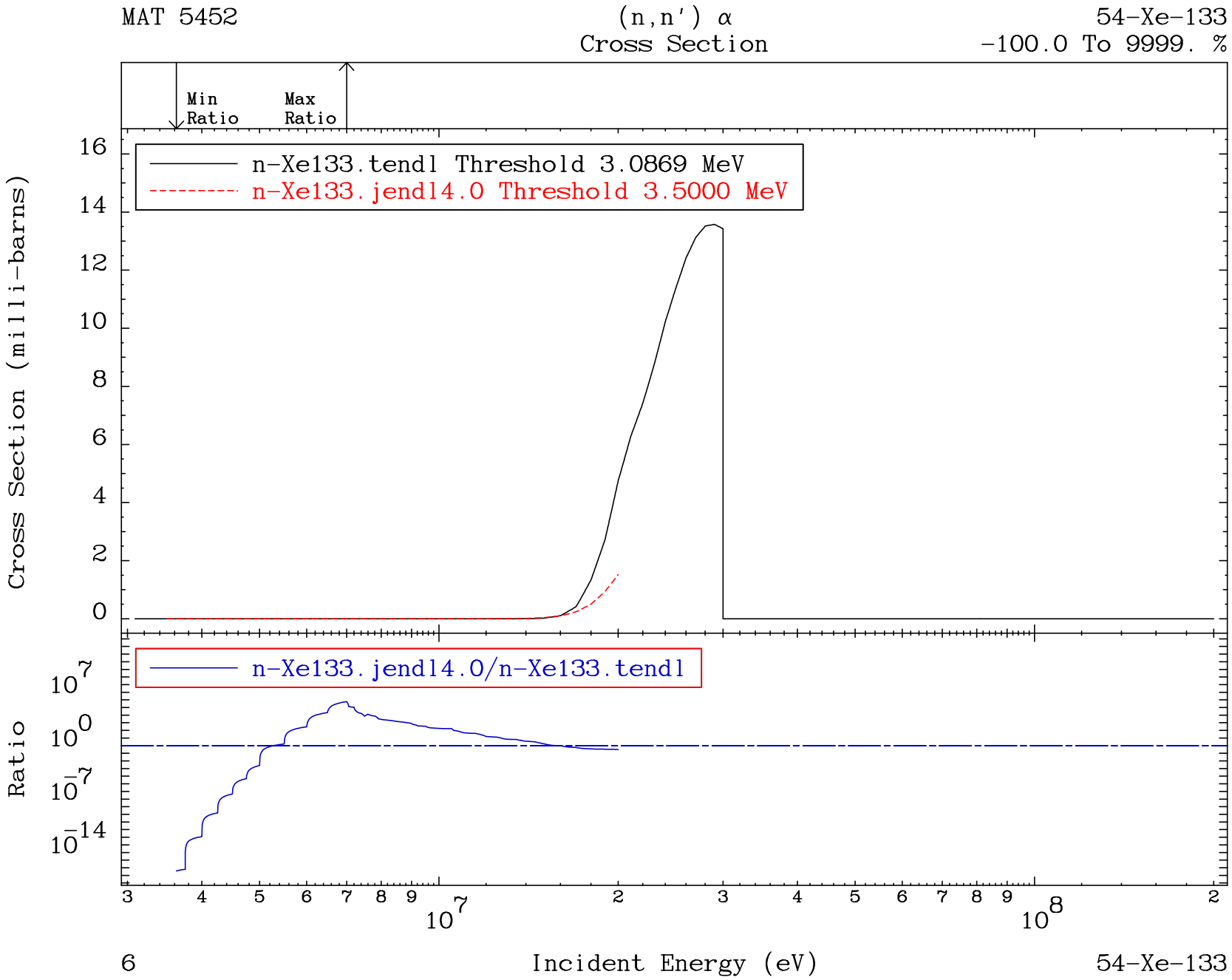

MAT 5452
Total
Cross Section
54-Xe-133
-99.91 To 739.3 %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
1
54-Xe-133

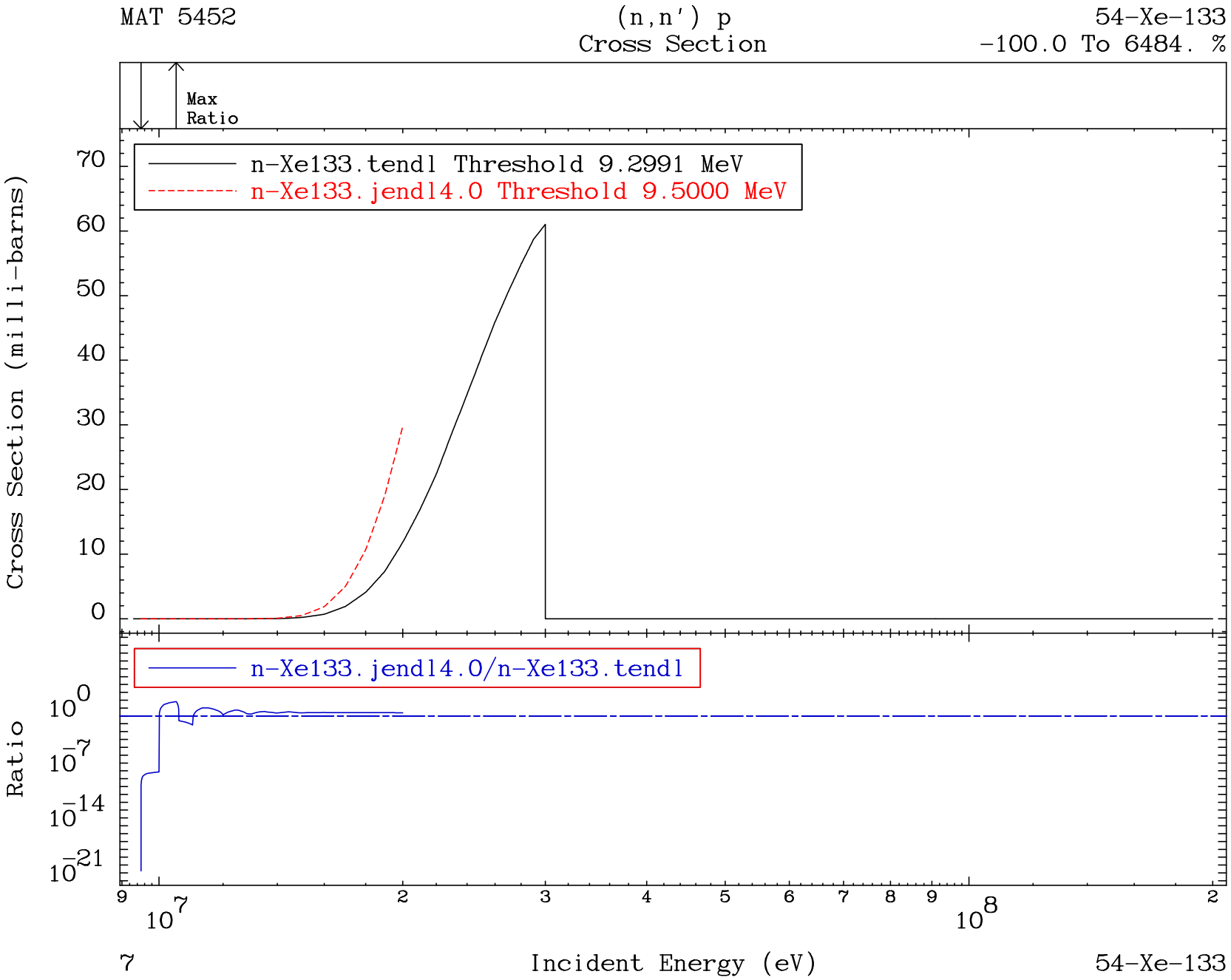

MAT 5452
Elastic
Cross Section
54-Xe-133
-99.82 To 1434. %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
2
54-Xe-133

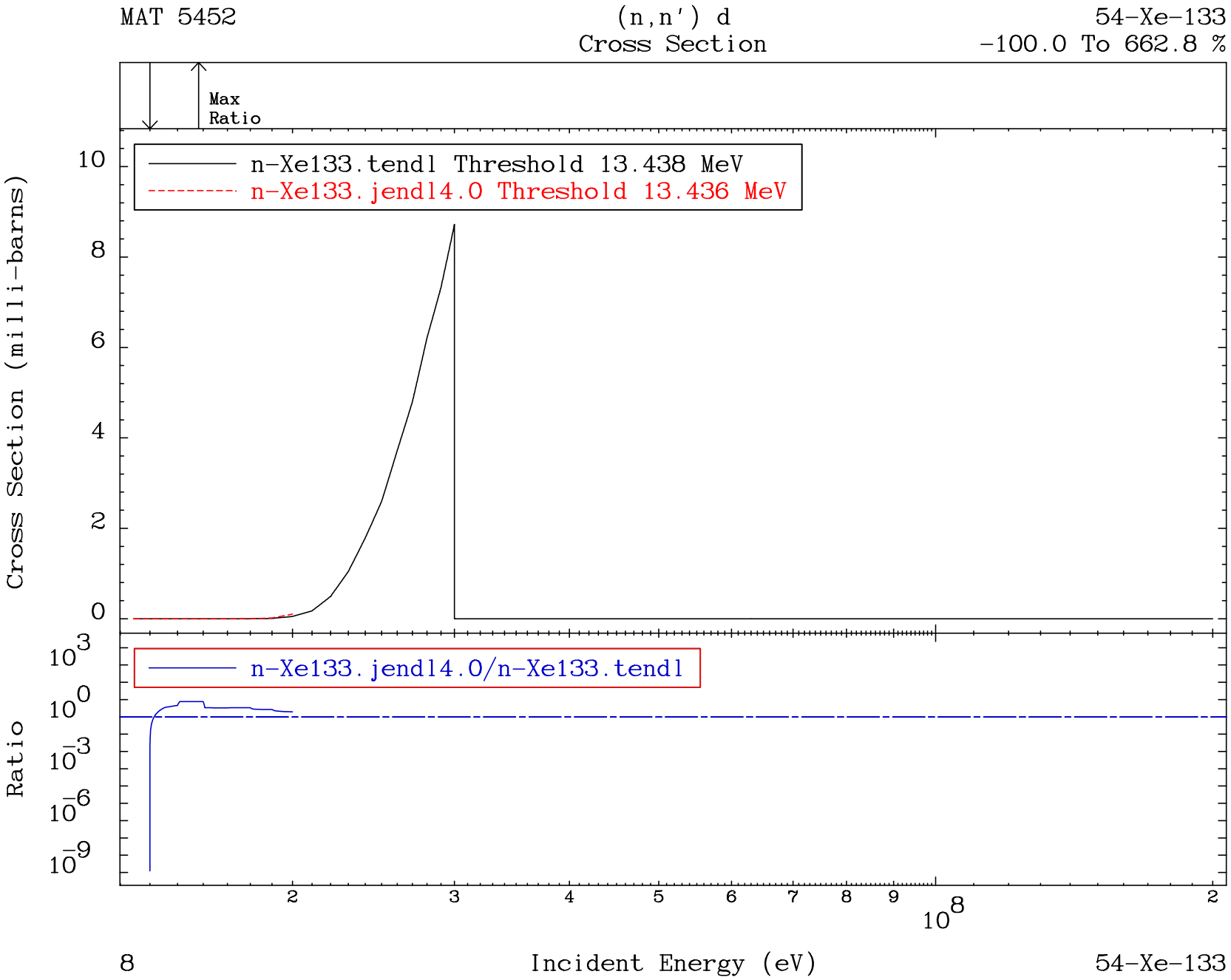

MAT 5452
Inelastic
Cross Section
54-Xe-133
-49.55 To 39.38 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 234.99 keV
n-Xe133.jendl4.0 Threshold 234.99 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
1.6
1.2
0.8
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
54-Xe-133

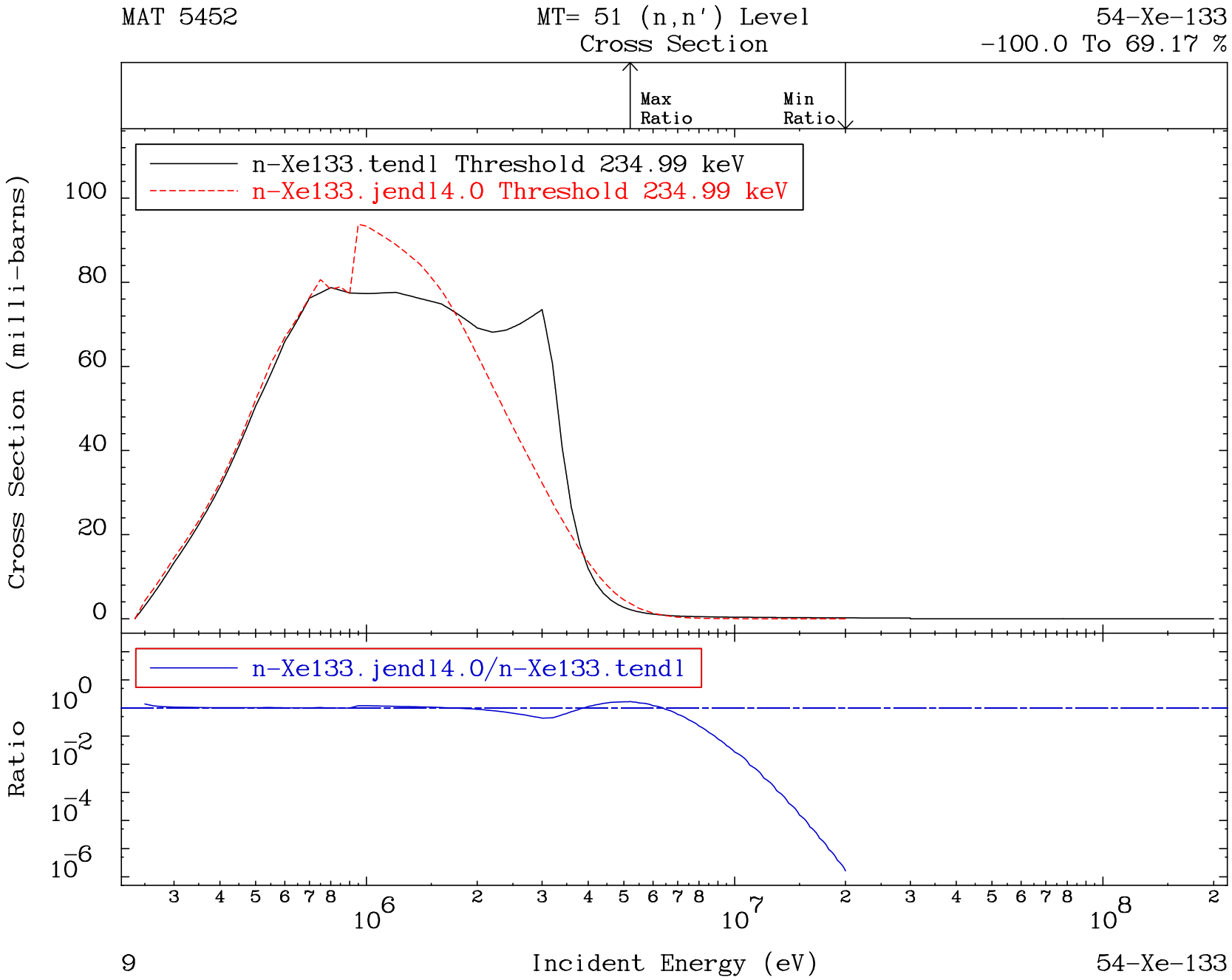

MAT 5452
(n,2n)
Cross Section
54-Xe-133
-30.19 To 8.957 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 6.3888 MeV
n-Xe133.jendl4.0 Threshold 6.5000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
1.2
1.0
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
54-Xe-133

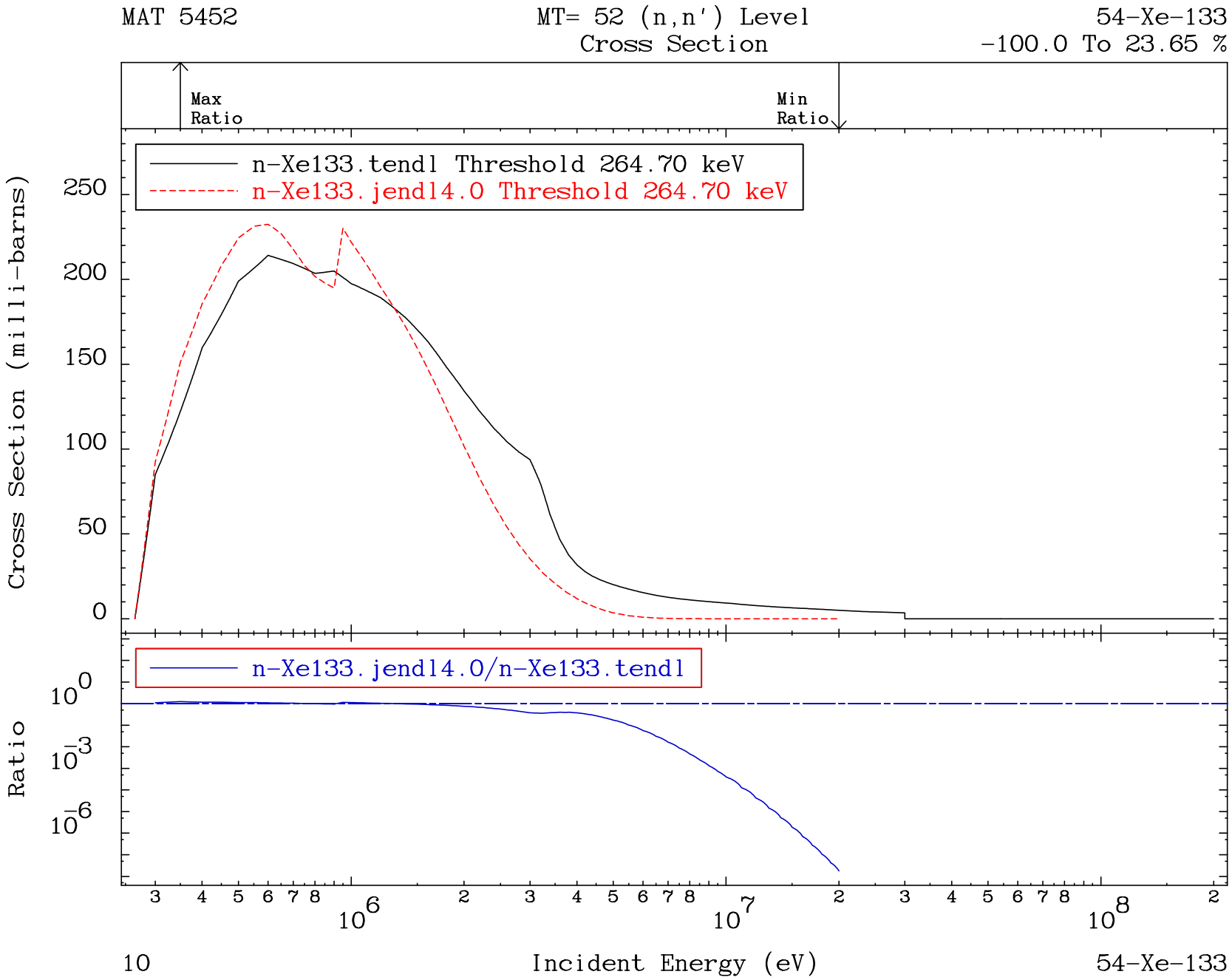

MAT 5452
(n,3n)
Cross Section
54-Xe-133
-64.58 To 19.34 %
Max
Ratio
n-Xe133.tendl Threshold 15.489 MeV
n-Xe133.jendl4.0 Threshold 15.488 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
54-Xe-133

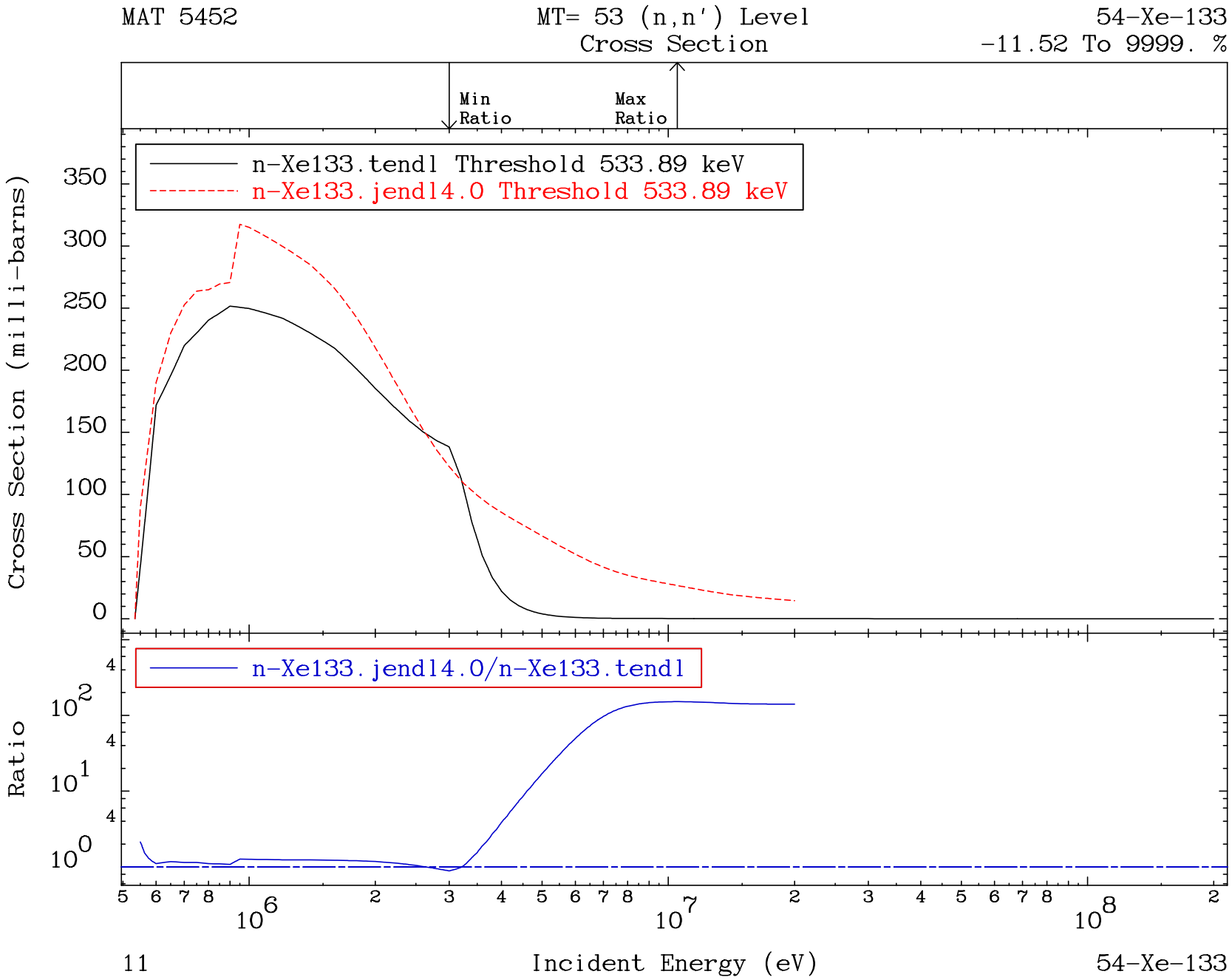

MAT 5452
(n,n') α
Cross Section
54-Xe-133
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 3.0869 MeV
n-Xe133.jendl4.0 Threshold 3.5000 MeV
Cross Section (milli-barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
6
54-Xe-133

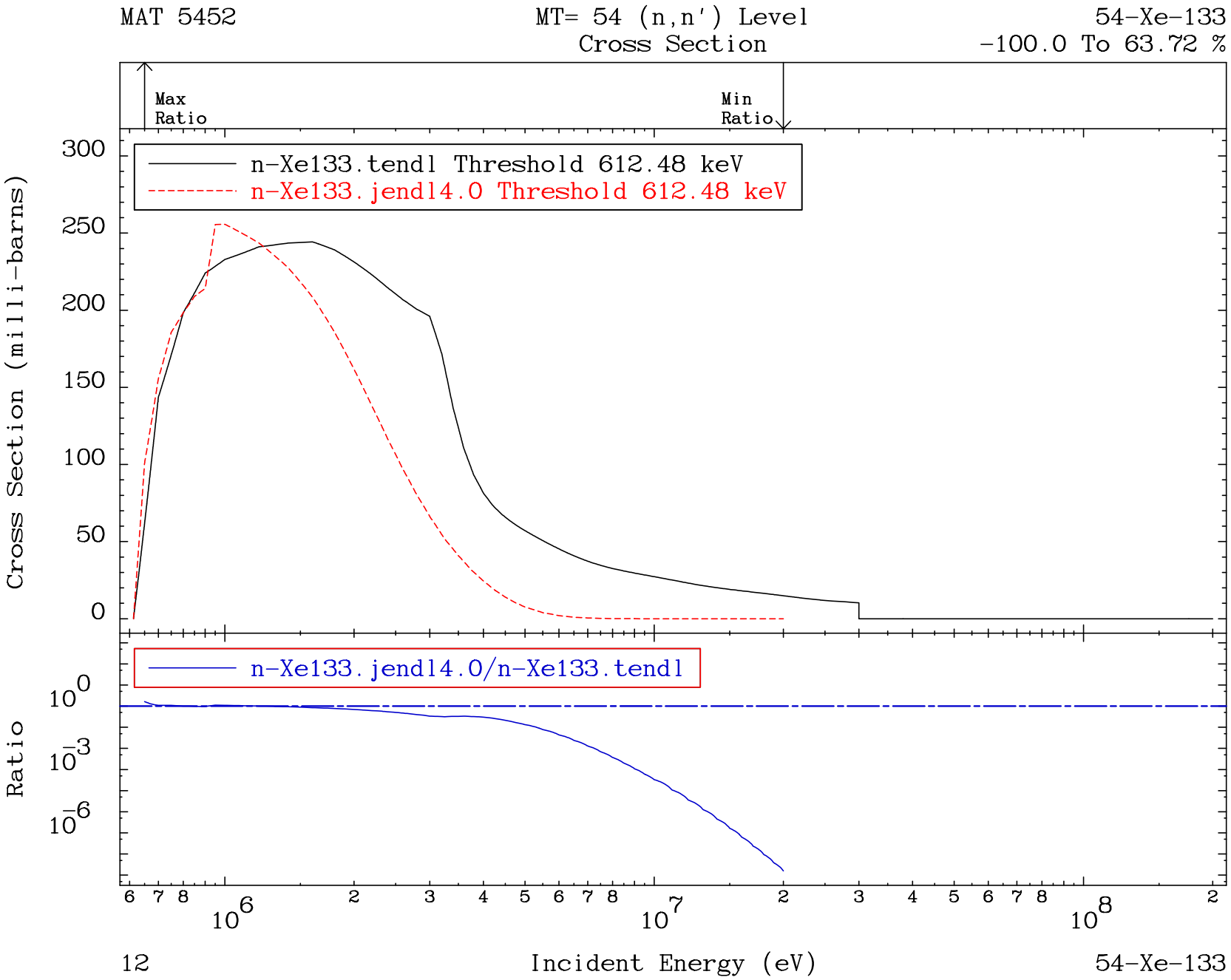

MAT 5452
(n,n') p
Cross Section
54-Xe-133
-100.0 To 6484. %
Max
Ratio
n-Xe133.tendl Threshold 9.2991 MeV
n-Xe133.jendl4.0 Threshold 9.5000 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-7
10^-14
10^-21
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
54-Xe-133

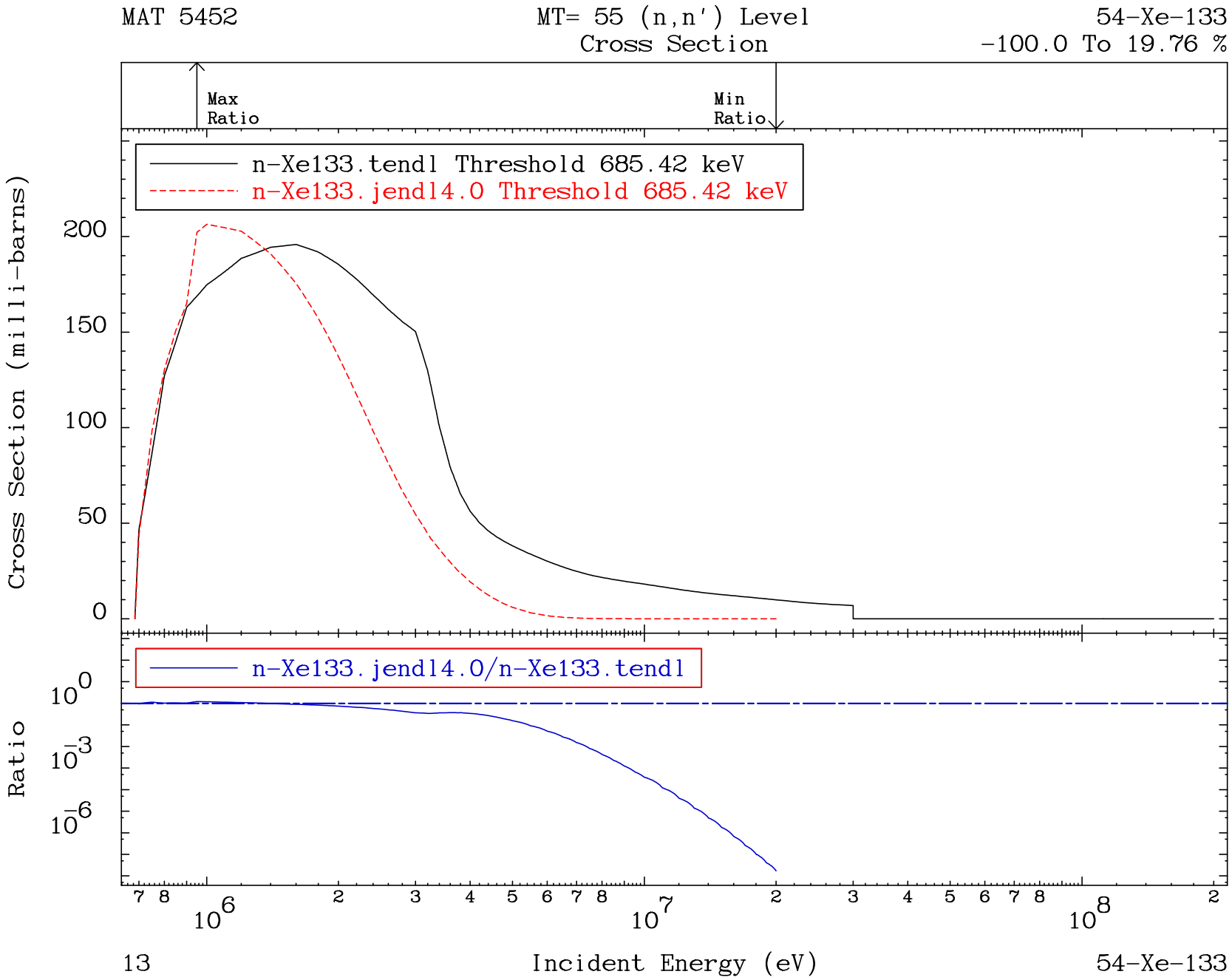

MAT 5452
(n,n') d
Cross Section
54-Xe-133
-100.0 To 662.8 %
Max
Ratio
n-Xe133.tendl Threshold 13.438 MeV
n-Xe133.jendl4.0 Threshold 13.436 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
54-Xe-133

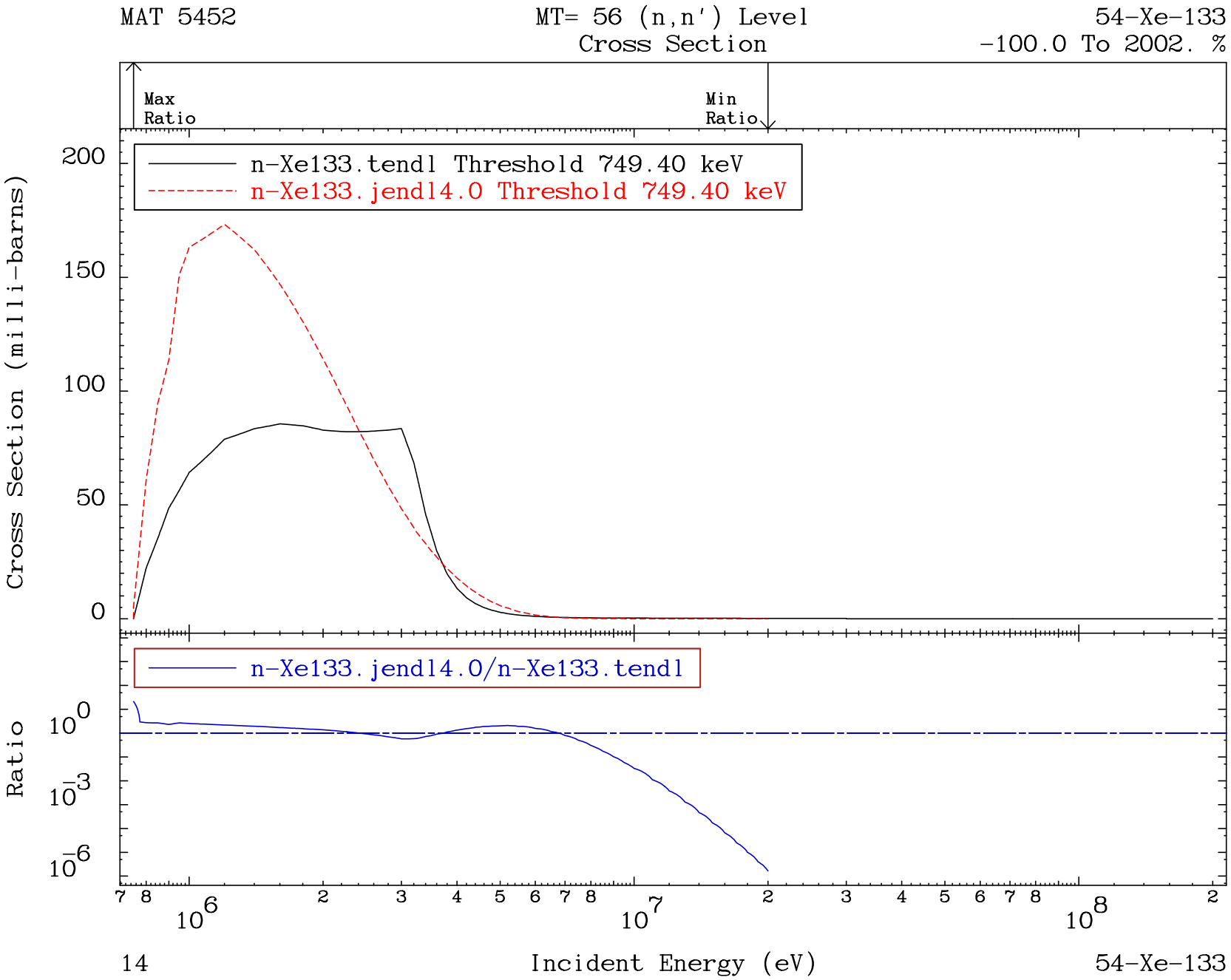

MAT 5452
MT= 51 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 69.17 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 234.99 keV
n-Xe133.jendl4.0 Threshold 234.99 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
54-Xe-133

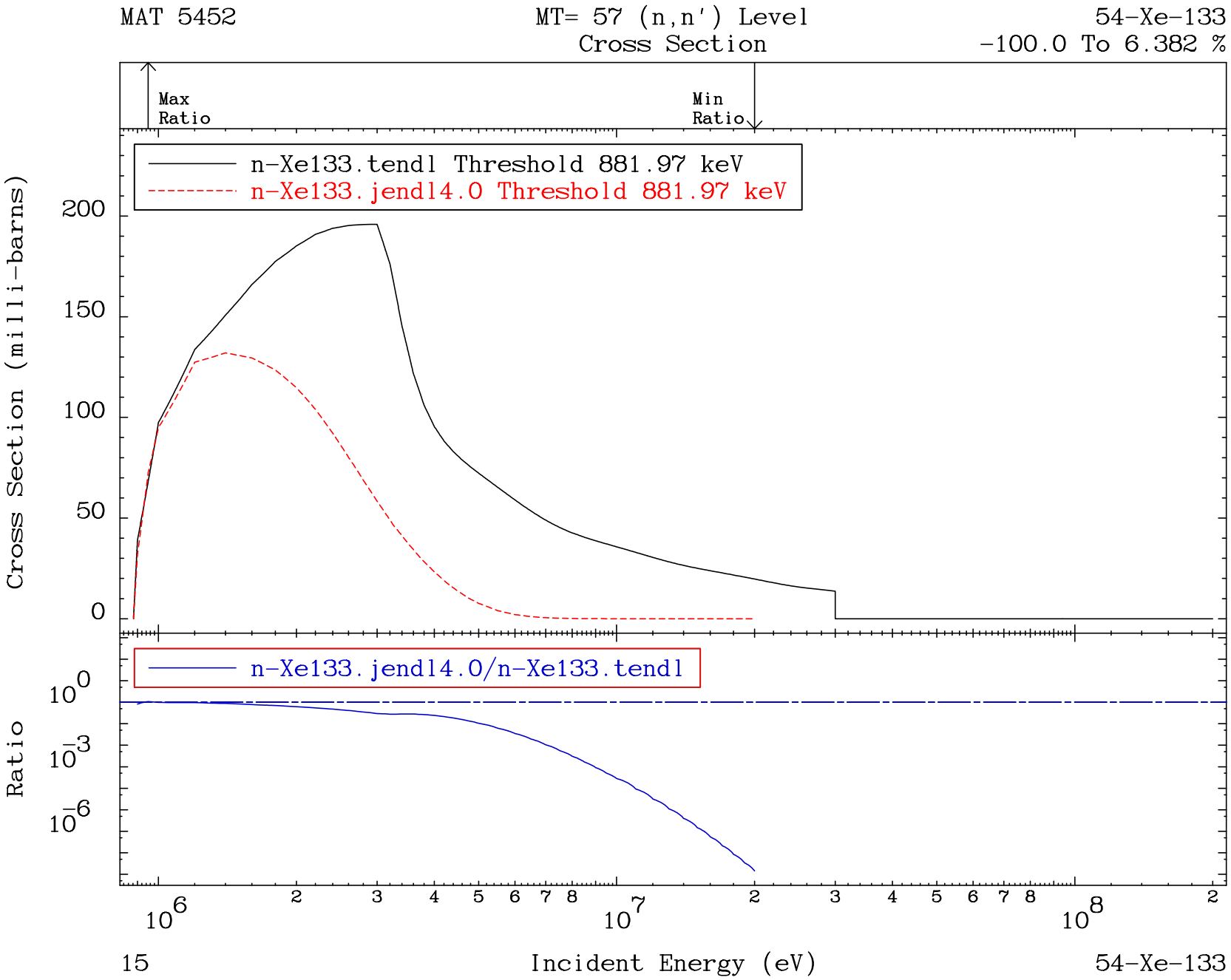

MAT 5452
MT= 52 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 23.65 %
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 264.70 keV
n-Xe133.jendl4.0 Threshold 264.70 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
54-Xe-133

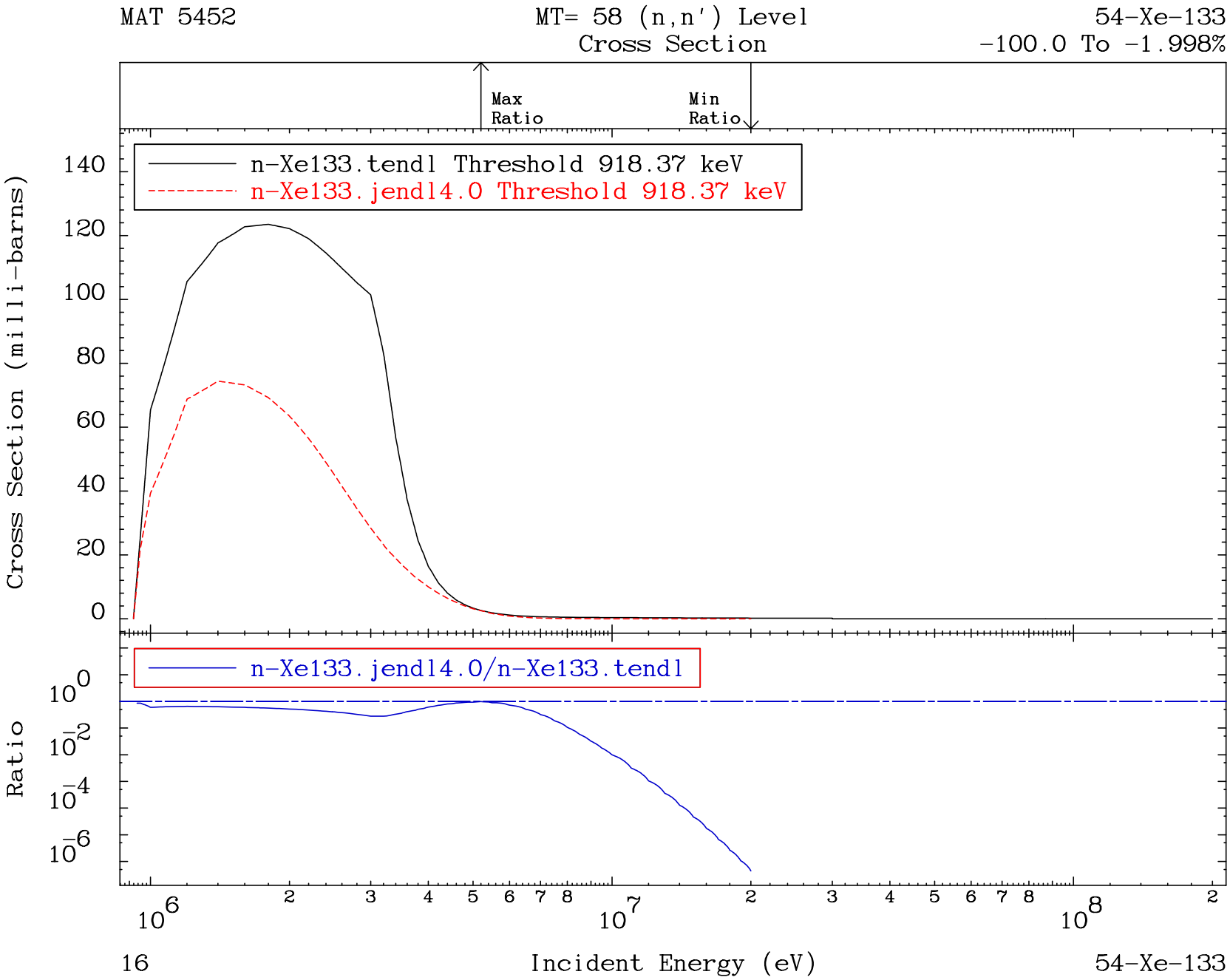

MAT 5452
MT= 53 (n,n') Level
Cross Section
54-Xe-133
-11.52 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 533.89 keV
n-Xe133.jendl4.0 Threshold 533.89 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^2
10^1
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
54-Xe-133

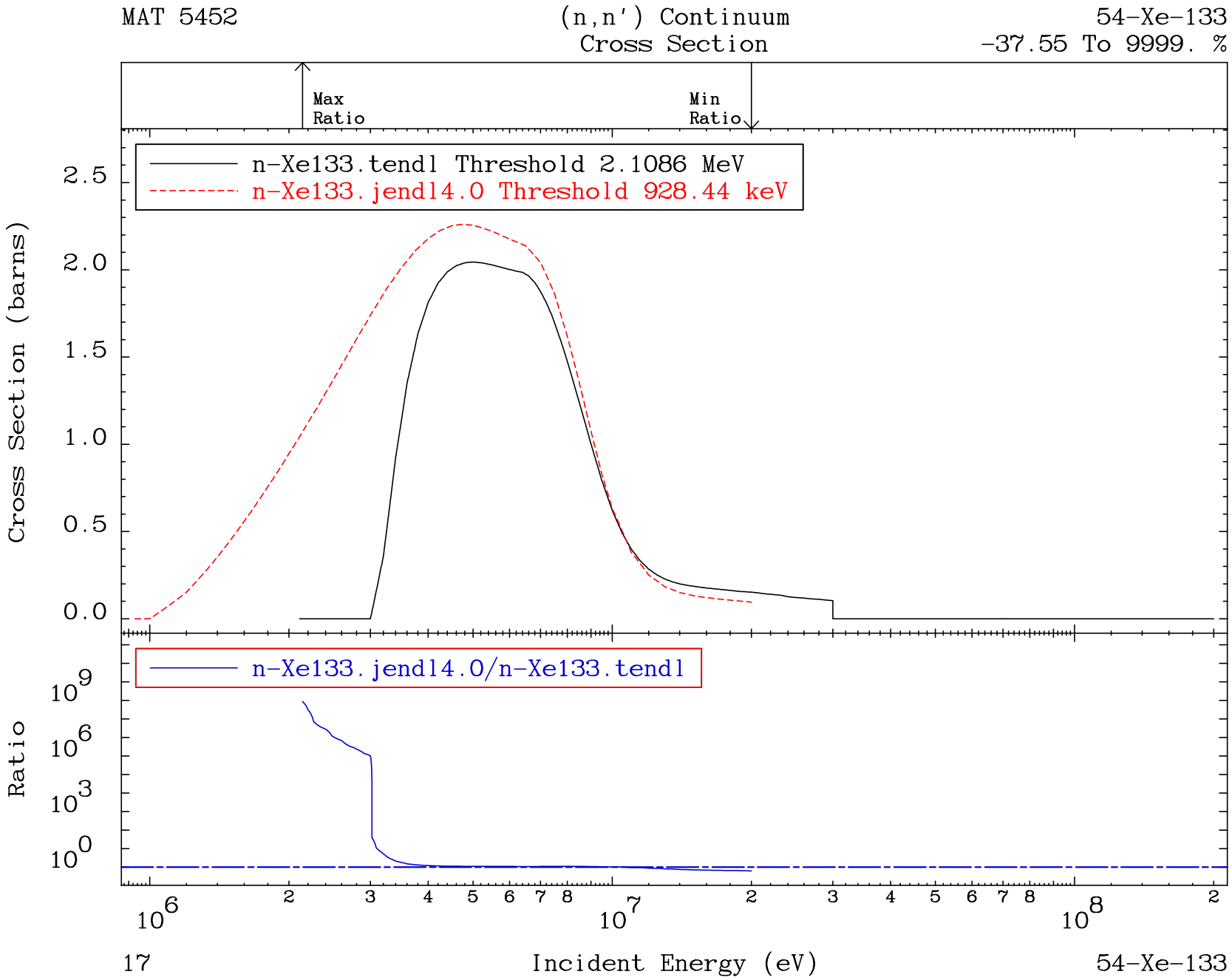

MAT 5452
MT= 54 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 63.72 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 612.48 keV
n-Xe133.jendl4.0 Threshold 612.48 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
54-Xe-133

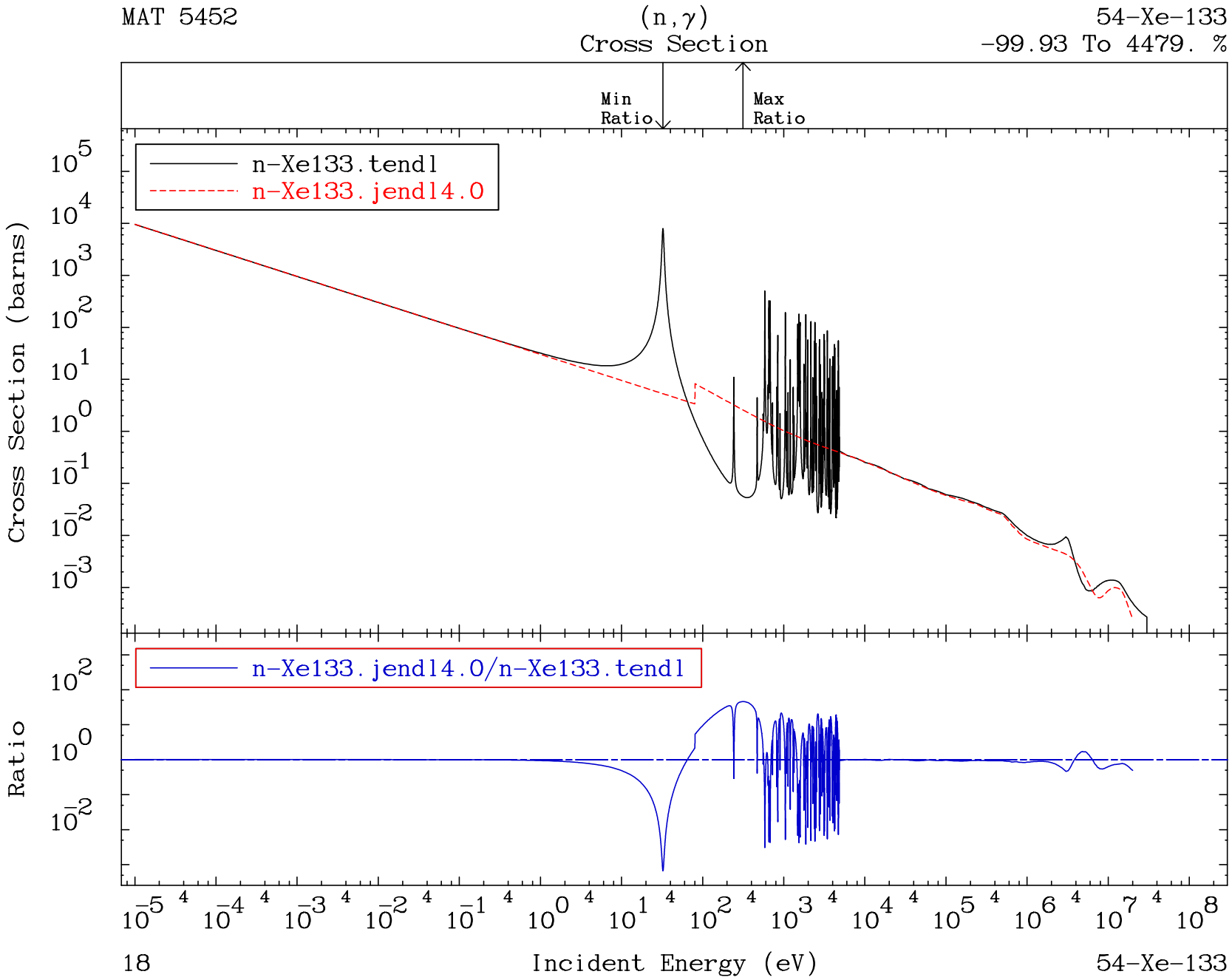

MAT 5452
MT= 55 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 19.76 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 685.42 keV
n-Xe133.jendl4.0 Threshold 685.42 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
54-Xe-133

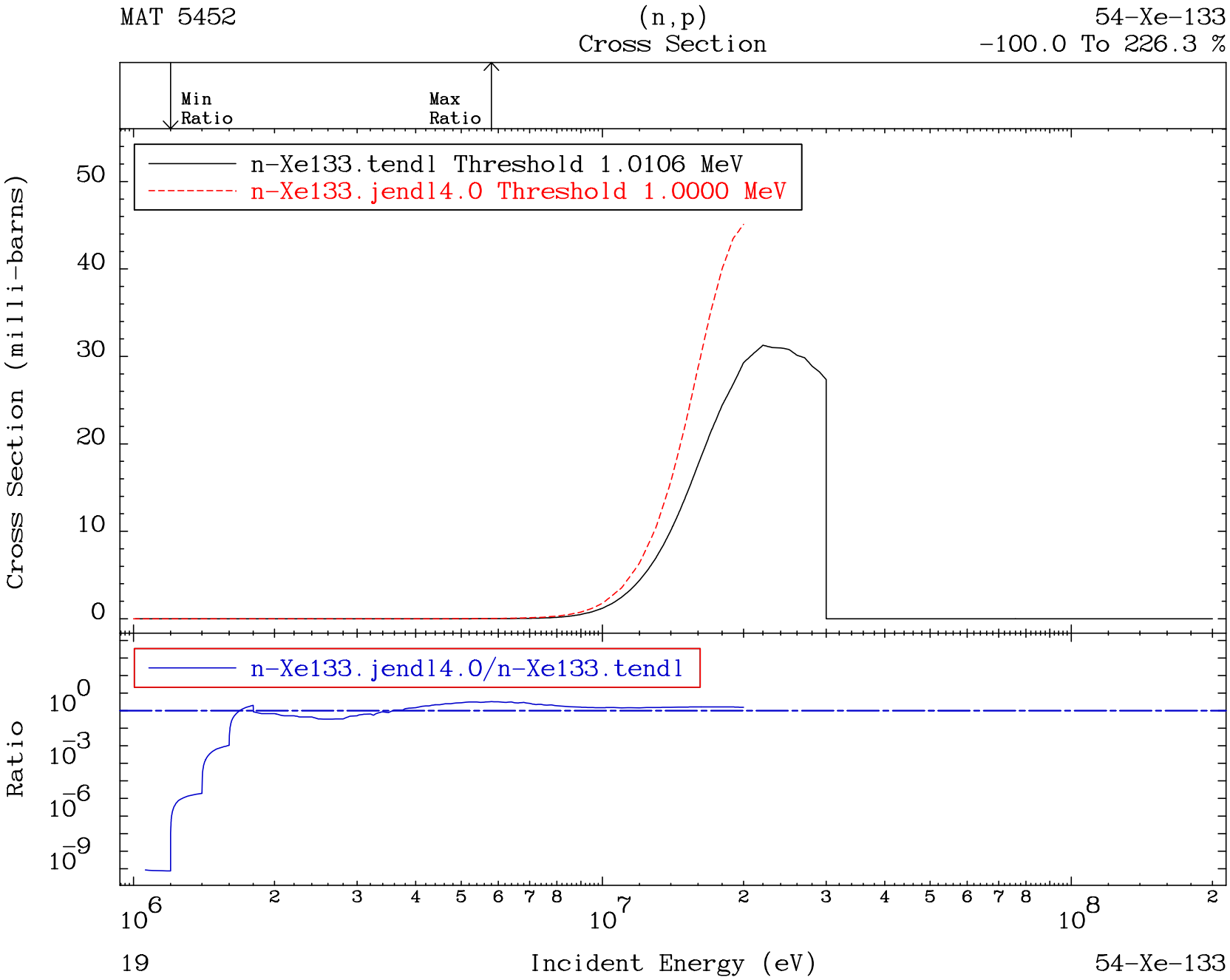

MAT 5452
MT= 56 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 2002. %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 749.40 keV
n-Xe133.jendl4.0 Threshold 749.40 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
54-Xe-133

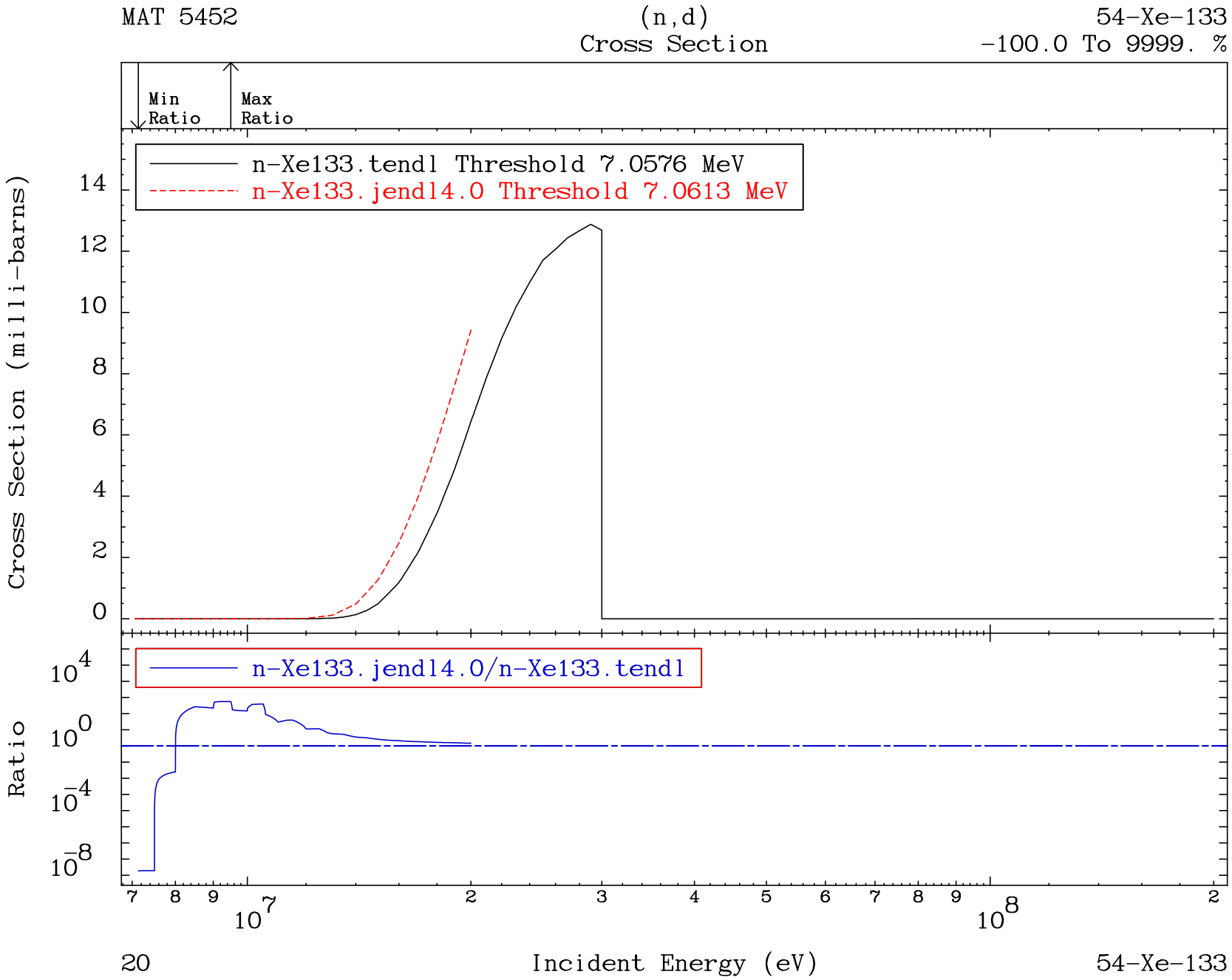

MAT 5452
MT= 57 (n,n') Level
Cross Section
54-Xe-133
-100.0 To 6.382 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 881.97 keV
n-Xe133.jendl4.0 Threshold 881.97 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
54-Xe-133

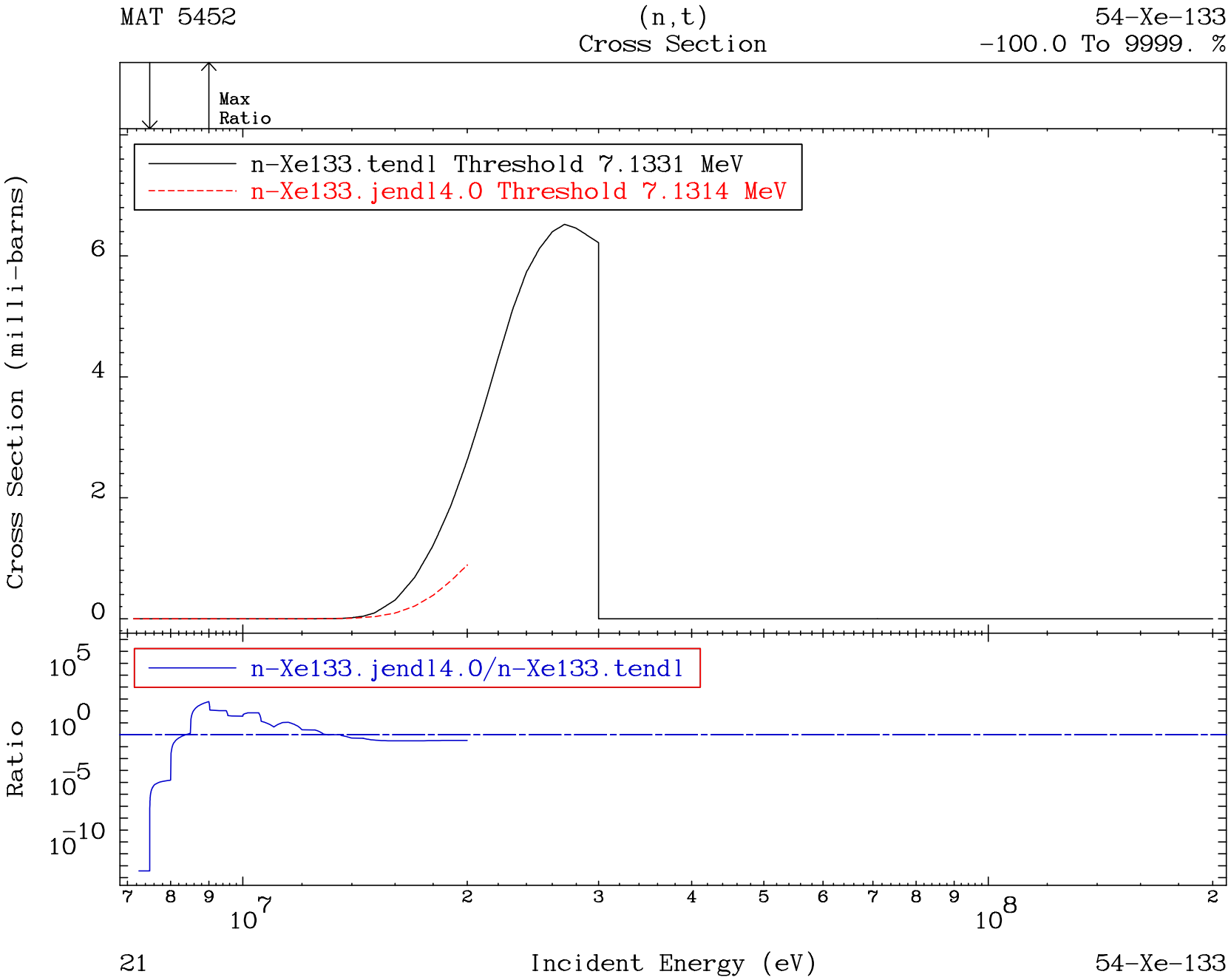

MAT 5452
MT= 58 (n,n') Level
Cross Section
54-Xe-133
-100.0 To -1.998%
Max
Ratio
Min
Ratio
n-Xe133.tendl Threshold 918.37 keV
n-Xe133.jendl4.0 Threshold 918.37 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-2
10^-4
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
54-Xe-133

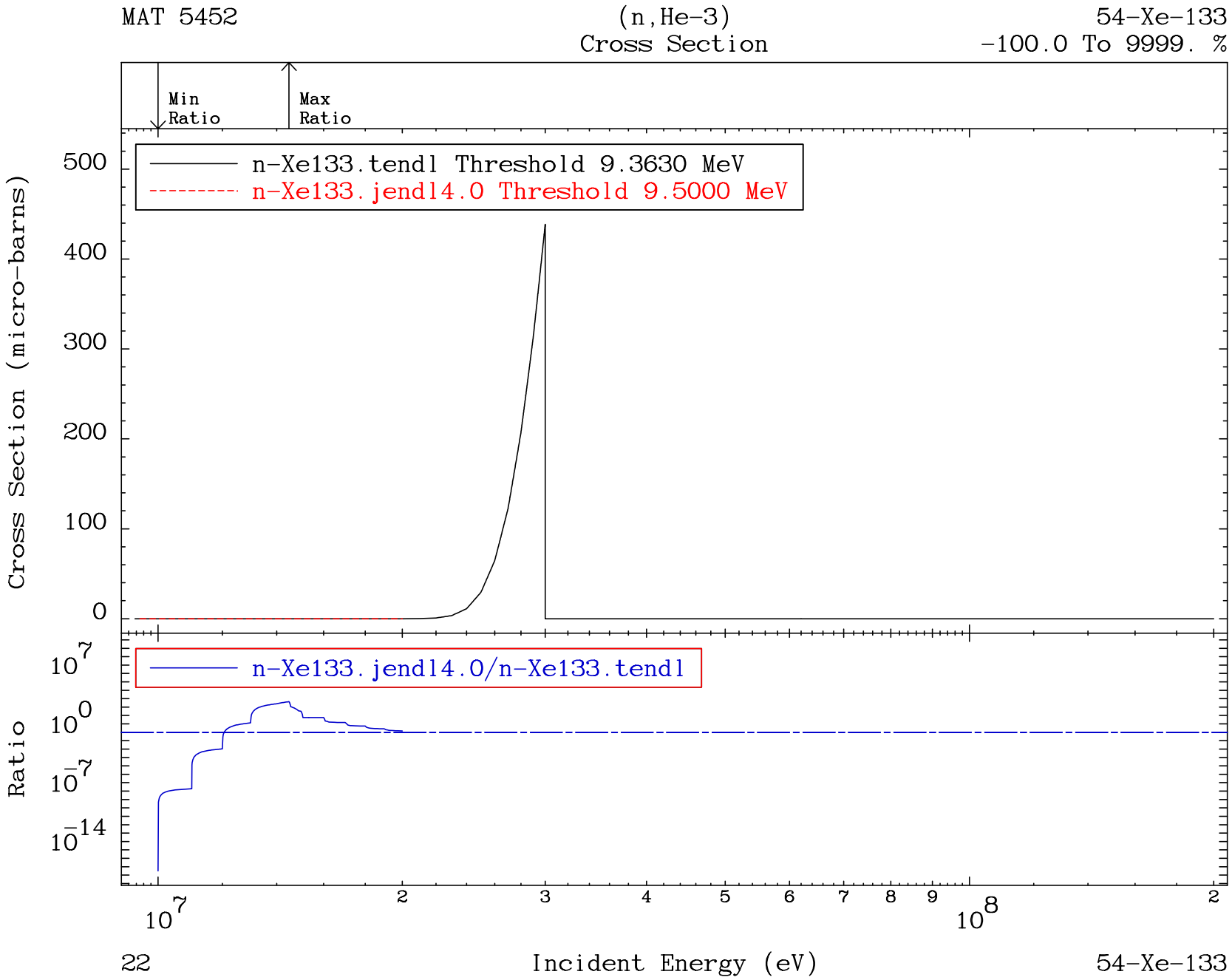

MAT 5452
(n,n') Continuum
Cross Section
54-Xe-133
-37.55 To 9999. %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 2.1086 MeV
n-Xe133.jendl4.0 Threshold 928.44 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^9
10^6
10^3
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
54-Xe-133

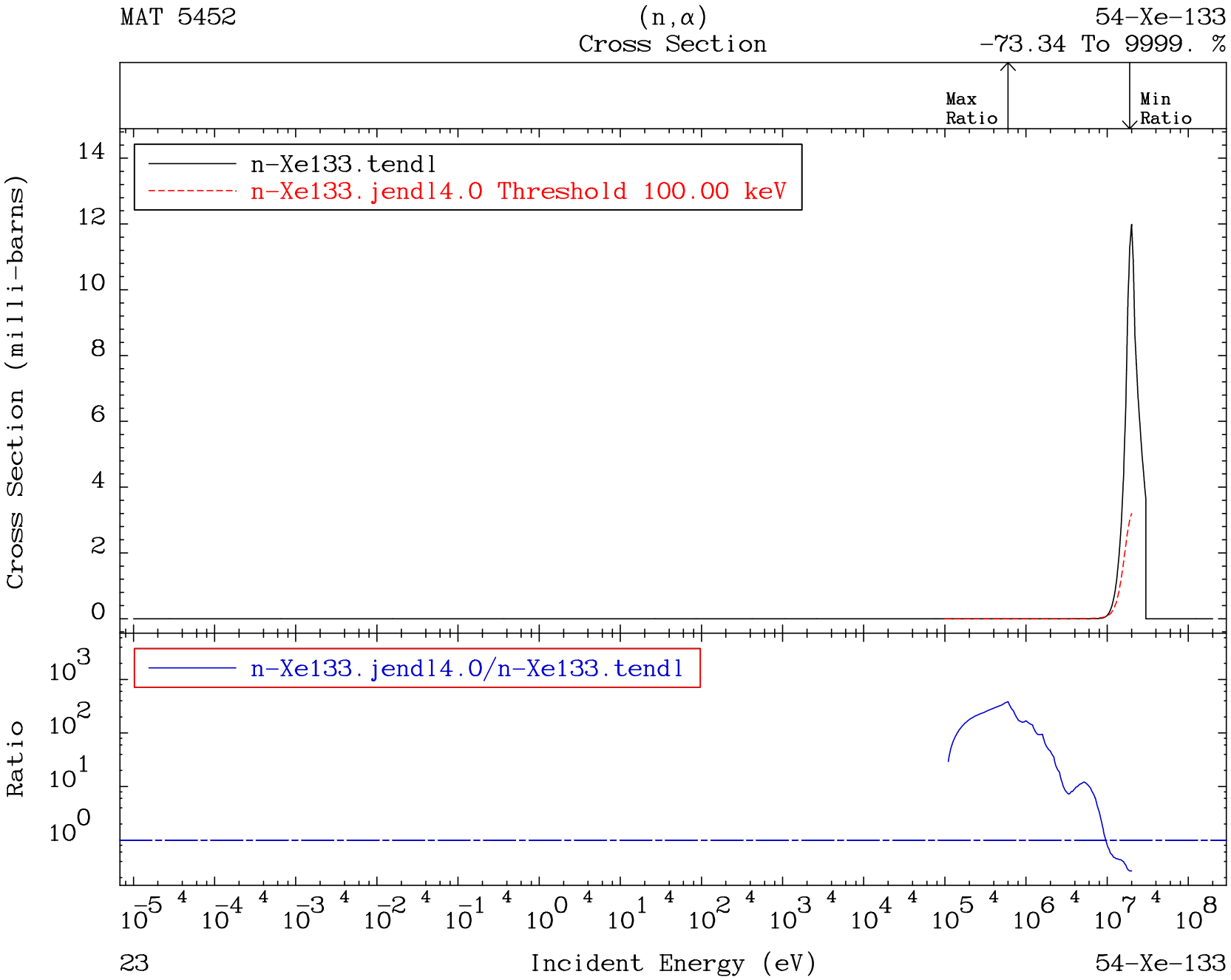

MAT 5452
(n,γ)
Cross Section
54-Xe-133
-99.93 To 4479. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
18
54-Xe-133

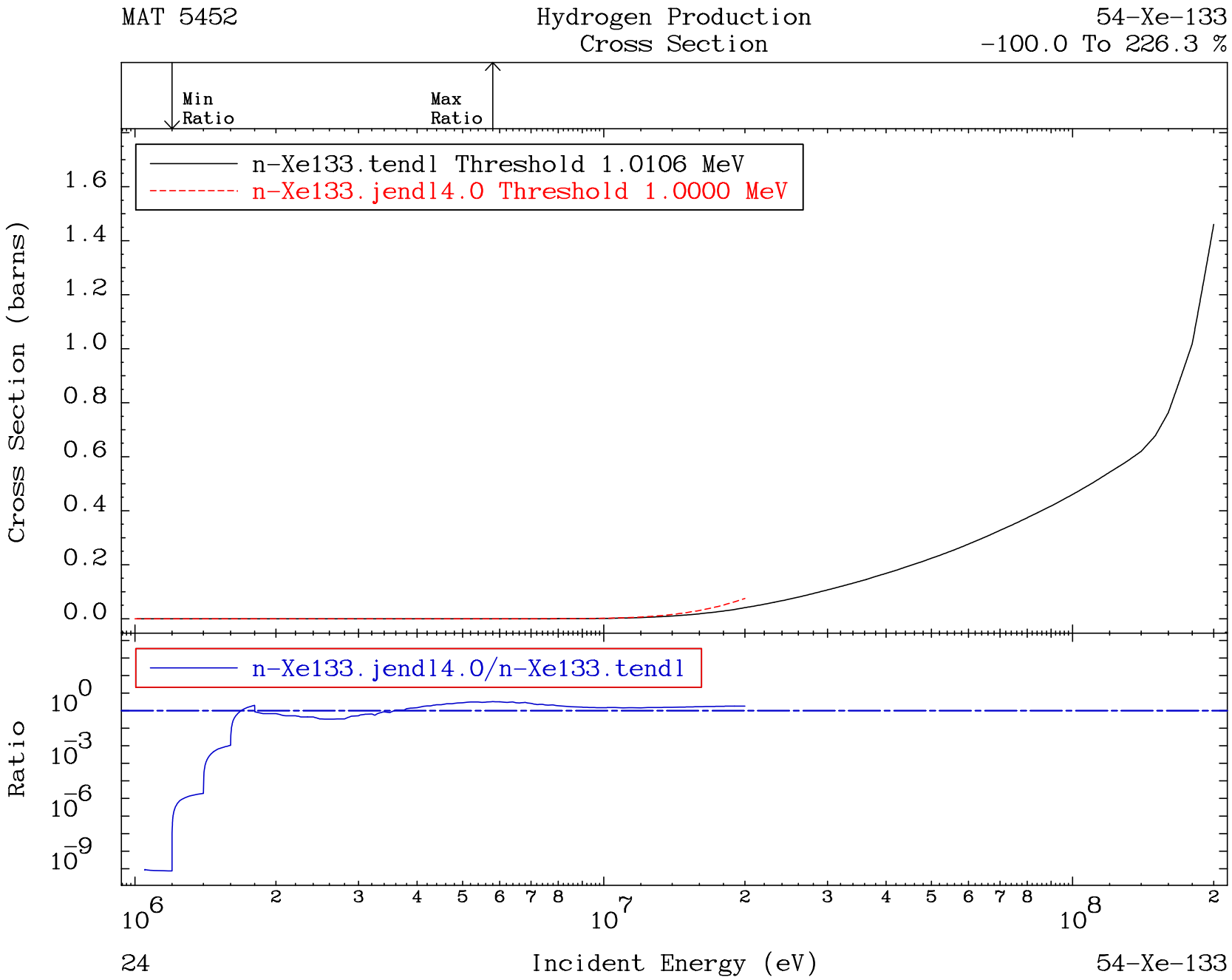

MAT 5452
(n,p)
Cross Section
54-Xe-133
-100.0 To 226.3 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 1.0106 MeV
n-Xe133.jendl4.0 Threshold 1.0000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
54-Xe-133

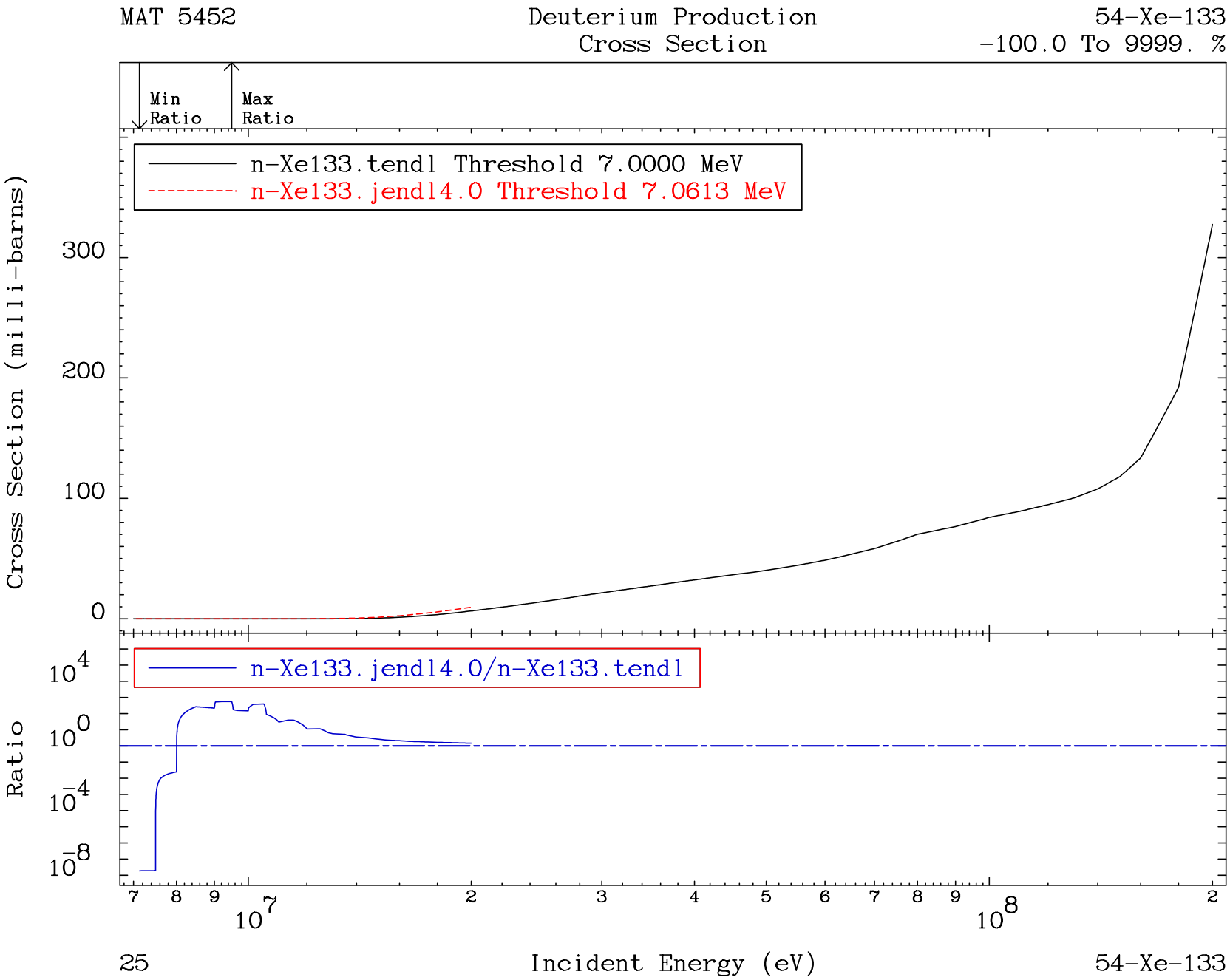

MAT 5452
(n,d)
Cross Section
54-Xe-133
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.0576 MeV
n-Xe133.jendl4.0 Threshold 7.0613 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^4
10^0
10^-4
10^-8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
54-Xe-133

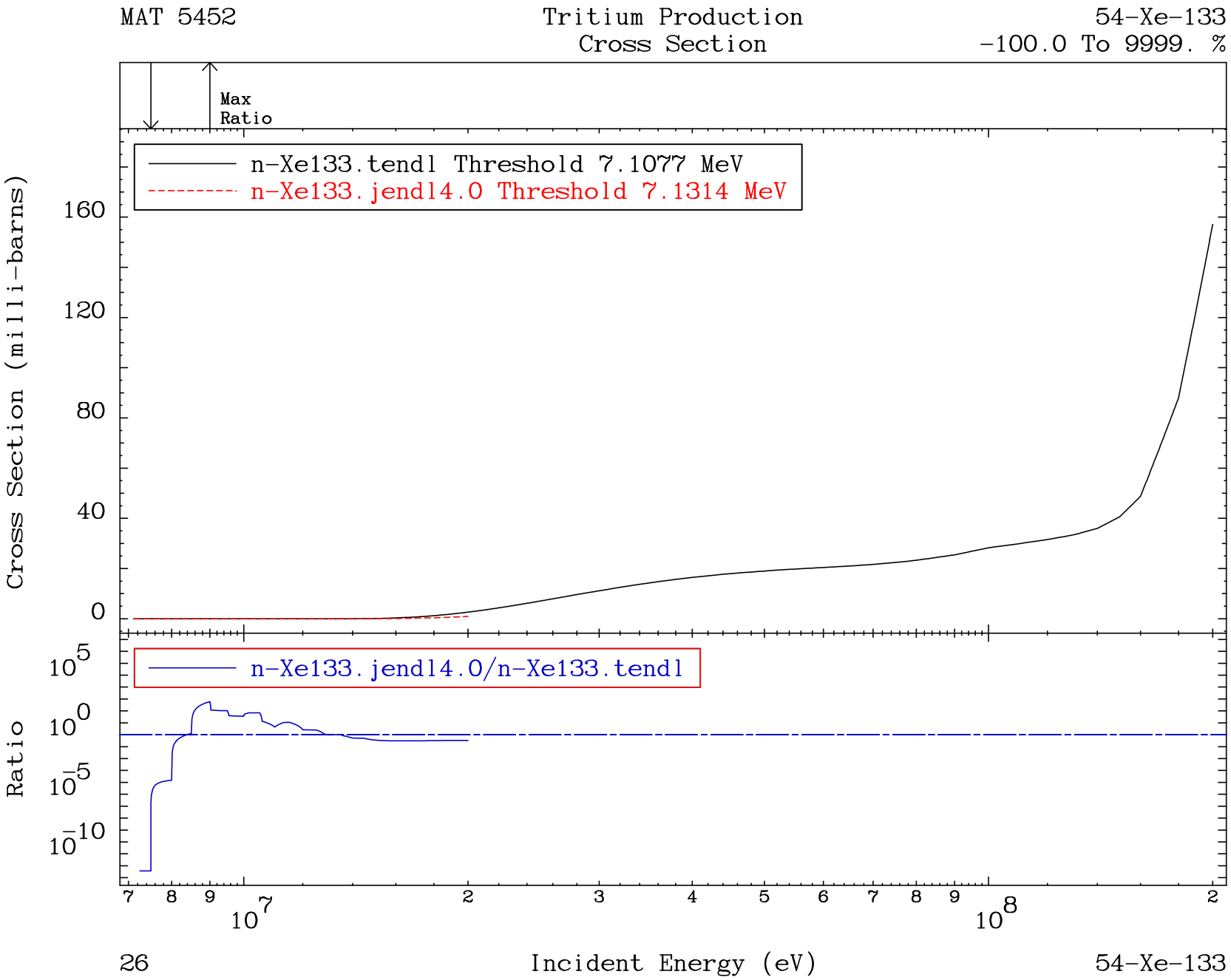

MAT 5452
(n,t)
Cross Section
54-Xe-133
-100.0 To 9999. %
Max
Ratio
n-Xe133.tendl Threshold 7.1331 MeV
n-Xe133.jendl4.0 Threshold 7.1314 MeV
Cross Section (milli-barns)
0
2
4
6
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^5
10^0
10^-5
10^-10
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
54-Xe-133

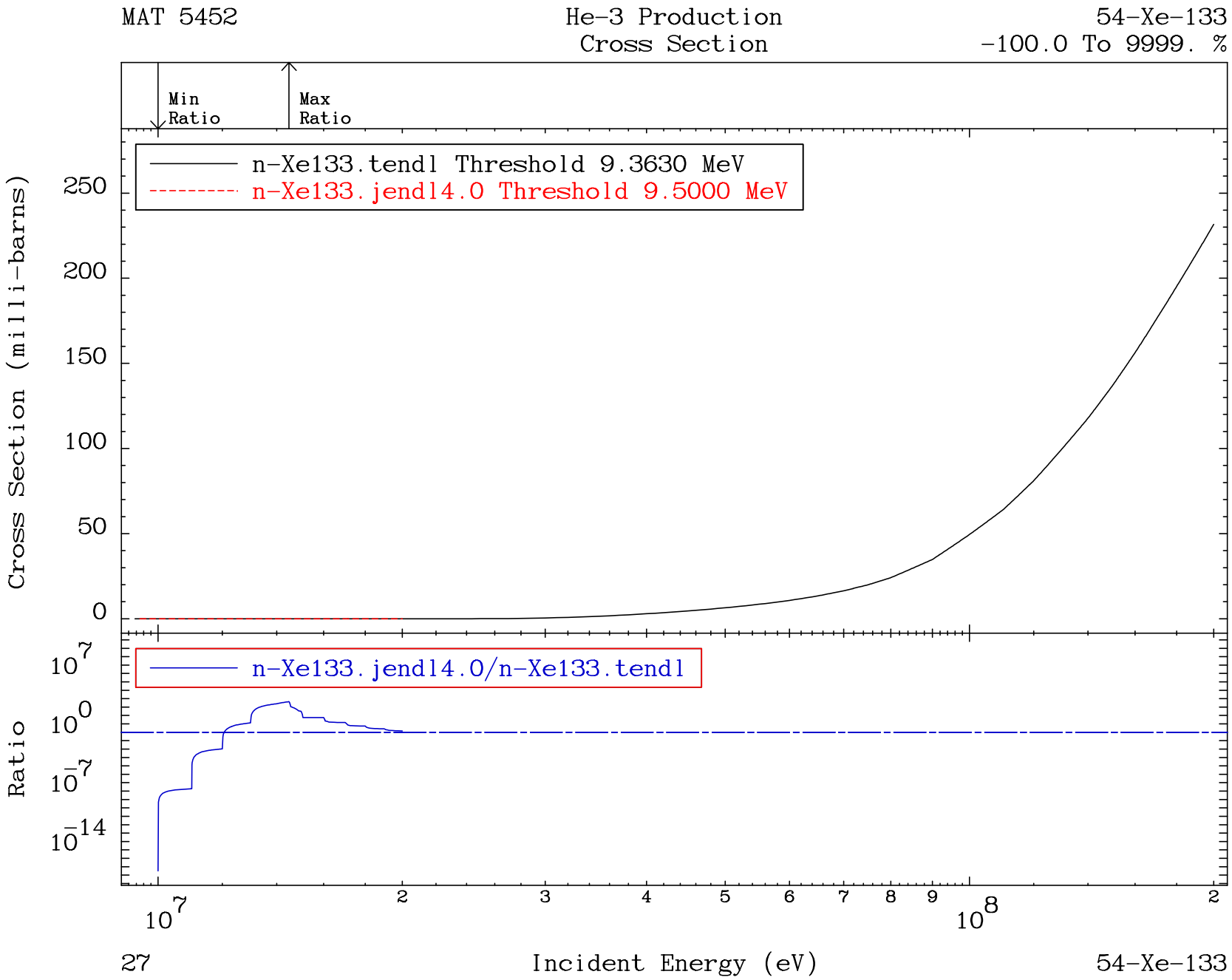

MAT 5452
(n,He-3)
Cross Section
54-Xe-133
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 9.3630 MeV
n-Xe133.jendl4.0 Threshold 9.5000 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^7
10^0
10^-7
10^-14
10^7
2
3
4
5
6
7
8
9
10^8
2
22
Incident Energy (eV)
54-Xe-133

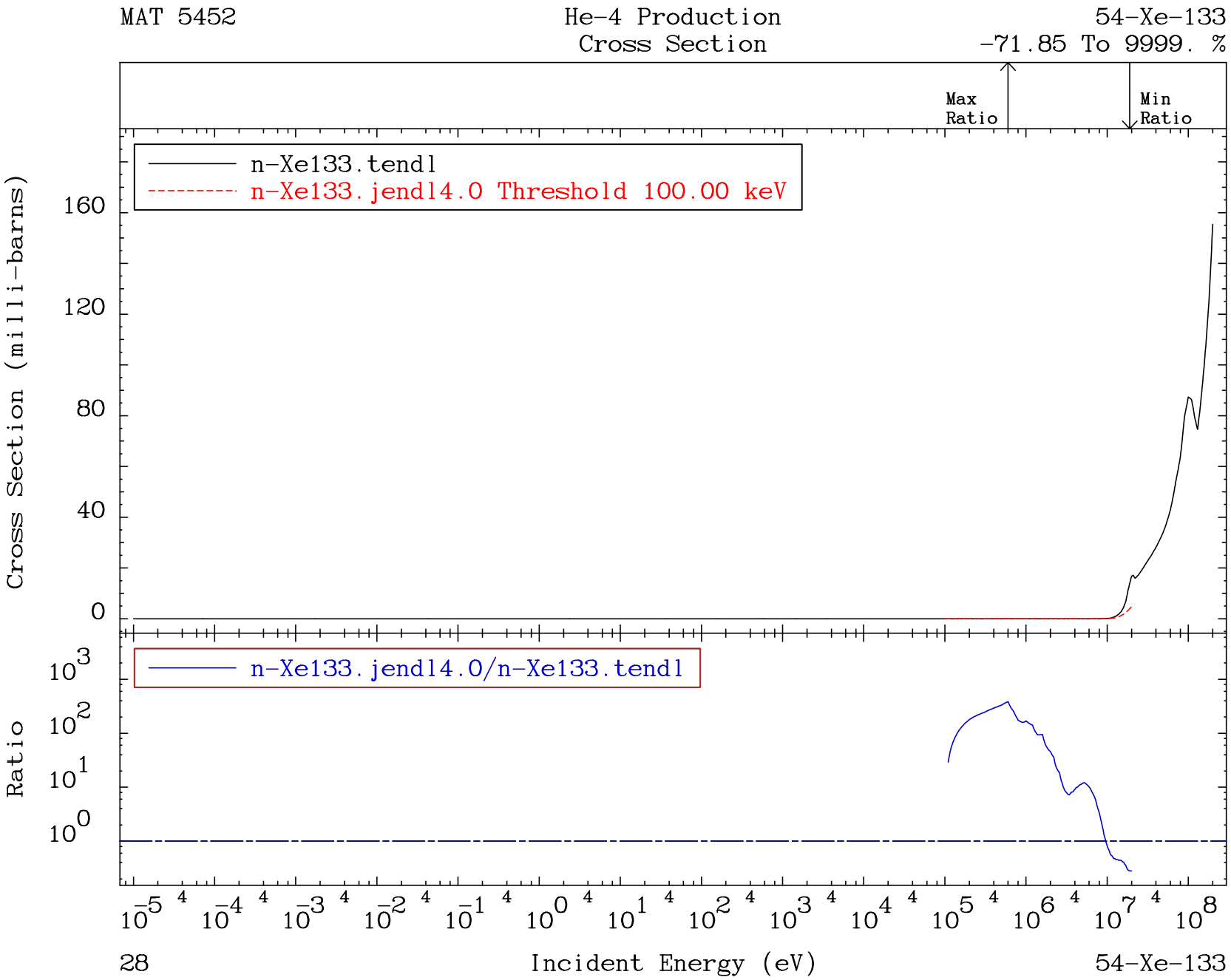

MAT 5452
(n,α)
Cross Section
54-Xe-133
-73.34 To 9999. %
Max Ratio
Min Ratio
n-Xe133.tendl
n-Xe133.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
23
54-Xe-133

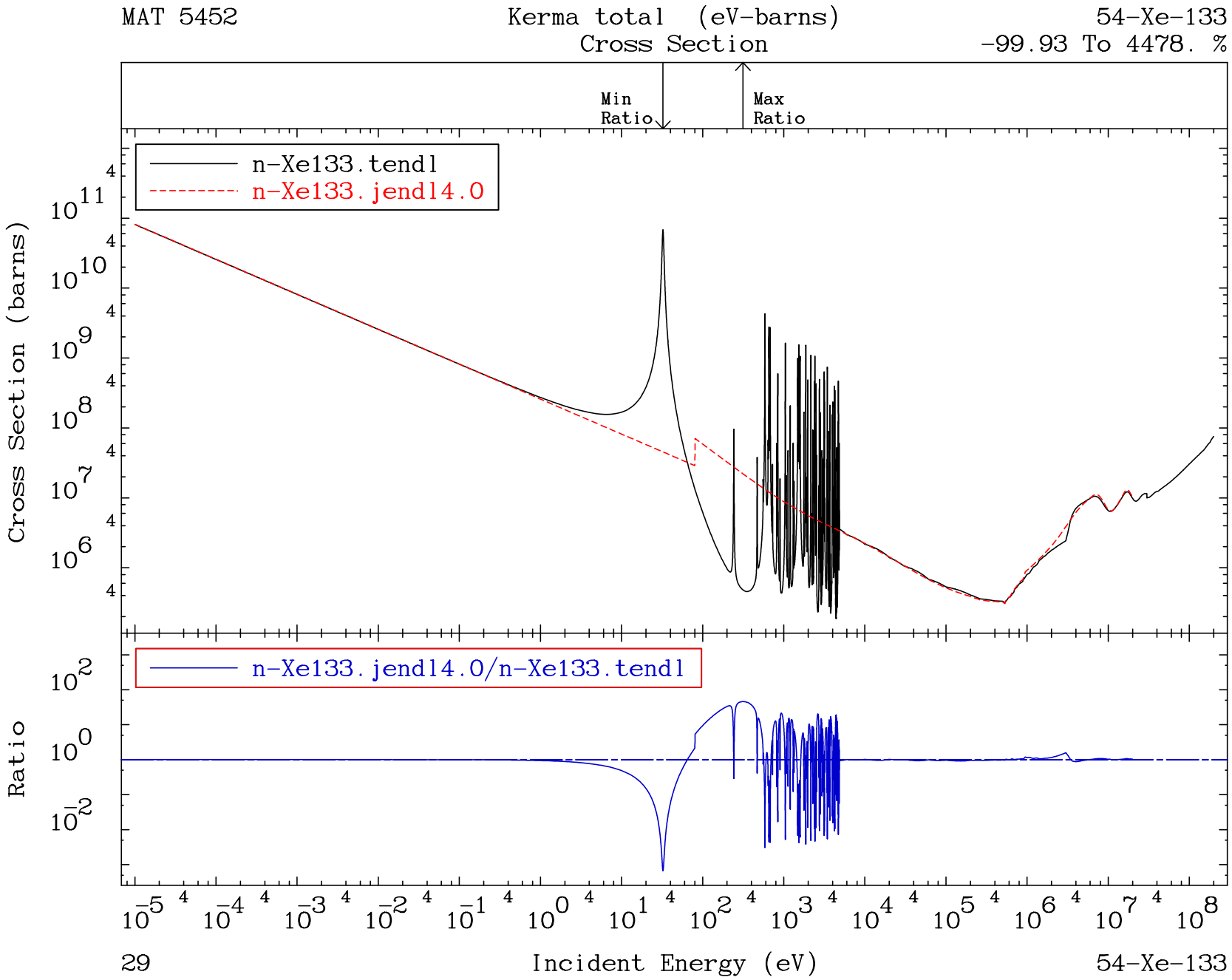

MAT 5452
Hydrogen Production
Cross Section
54-Xe-133
-100.0 To 226.3 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 1.0106 MeV
n-Xe133.jendl4.0 Threshold 1.0000 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
54-Xe-133

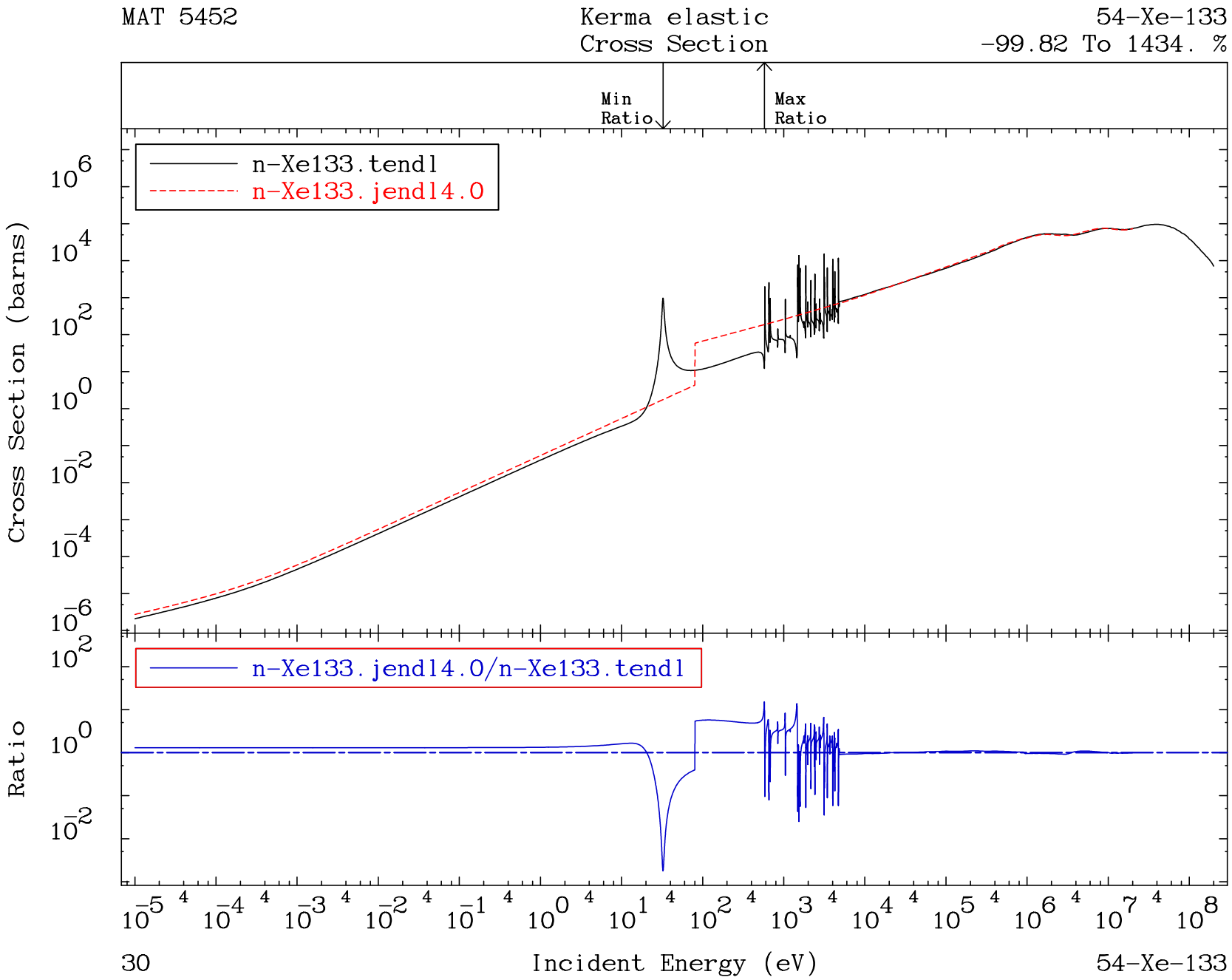

MAT 5452
Deuterium Production
Cross Section
54-Xe-133
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 7.0000 MeV
n-Xe133.jendl4.0 Threshold 7.0613 MeV
Cross Section (milli-barns)
300
200
100
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^4
10^0
10^-4
10^-8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
54-Xe-133

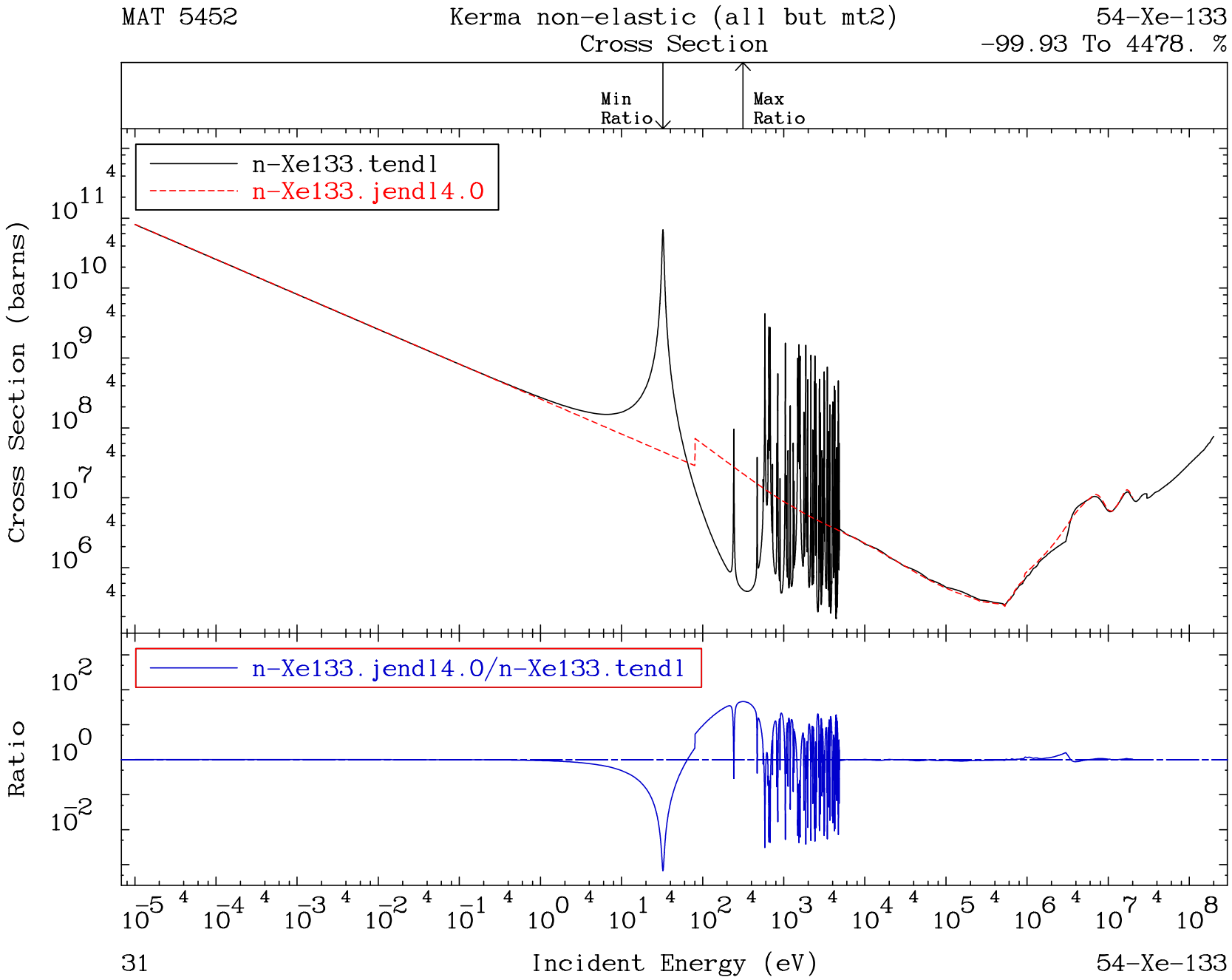

MAT 5452
Tritium Production
Cross Section
54-Xe-133
-100.0 To 9999. %
Max
Ratio
n-Xe133.tendl Threshold 7.1077 MeV
n-Xe133.jendl4.0 Threshold 7.1314 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^5
10^0
10^-5
10^-10
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
54-Xe-133

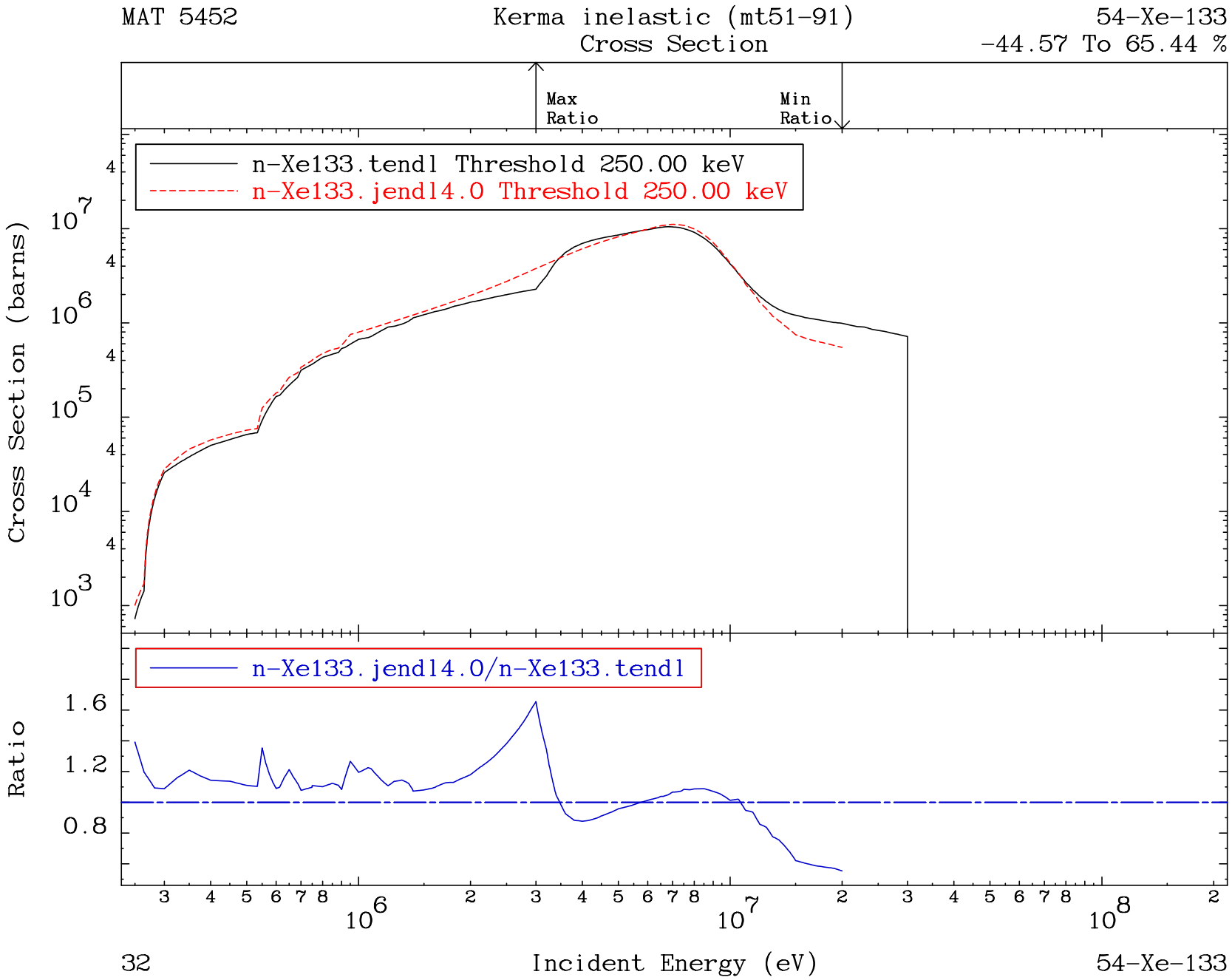

MAT 5452
He-3 Production
Cross Section
54-Xe-133
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 9.3630 MeV
n-Xe133.jendl4.0 Threshold 9.5000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^7
10^0
10^-7
10^-14
10^7
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
54-Xe-133

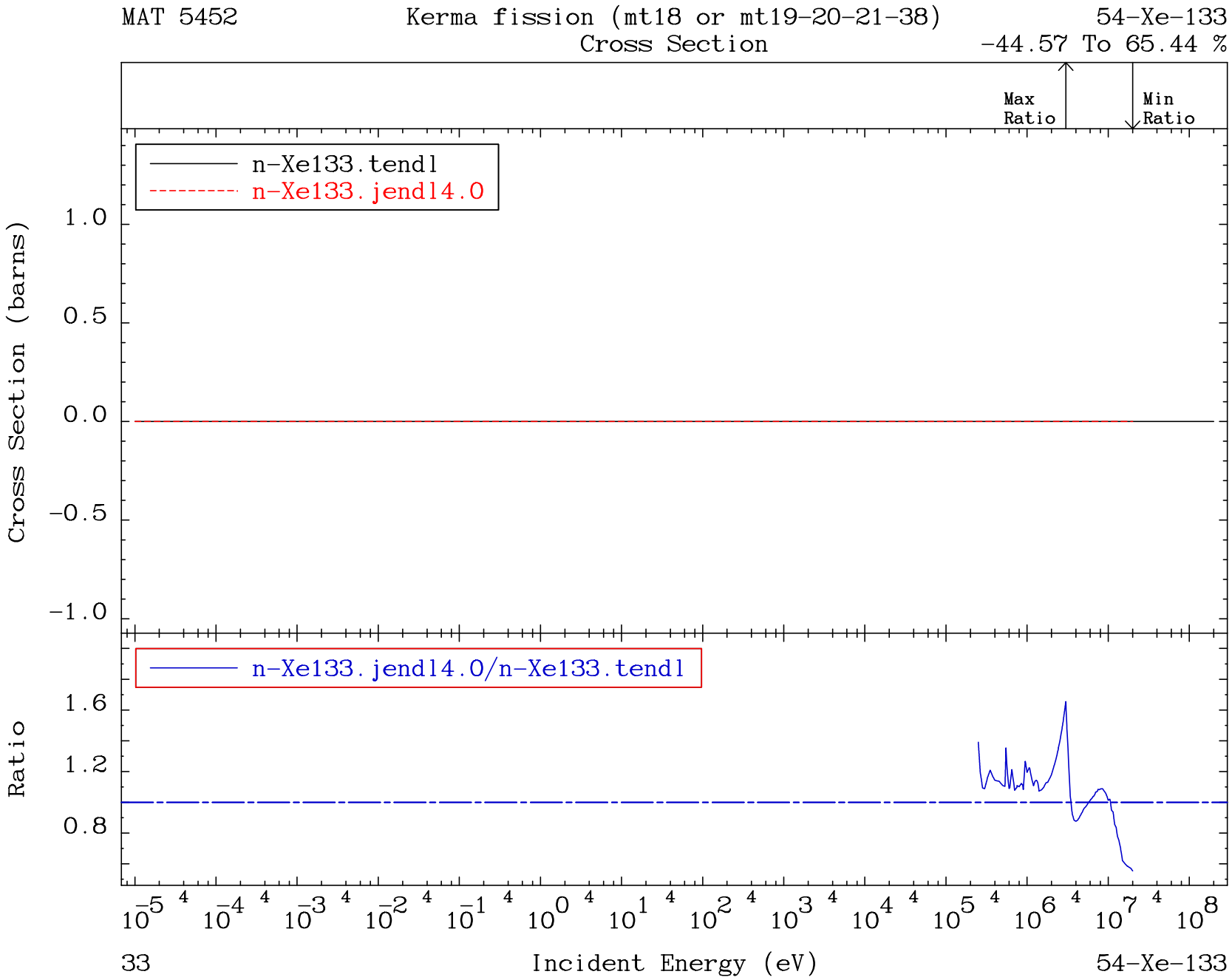

MAT 5452
He-4 Production
Cross Section
54-Xe-133
-71.85 To 9999. %
Max Ratio
Min Ratio
n-Xe133.tendl
n-Xe133.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
160
120
80
40
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^3
10^2
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
54-Xe-133

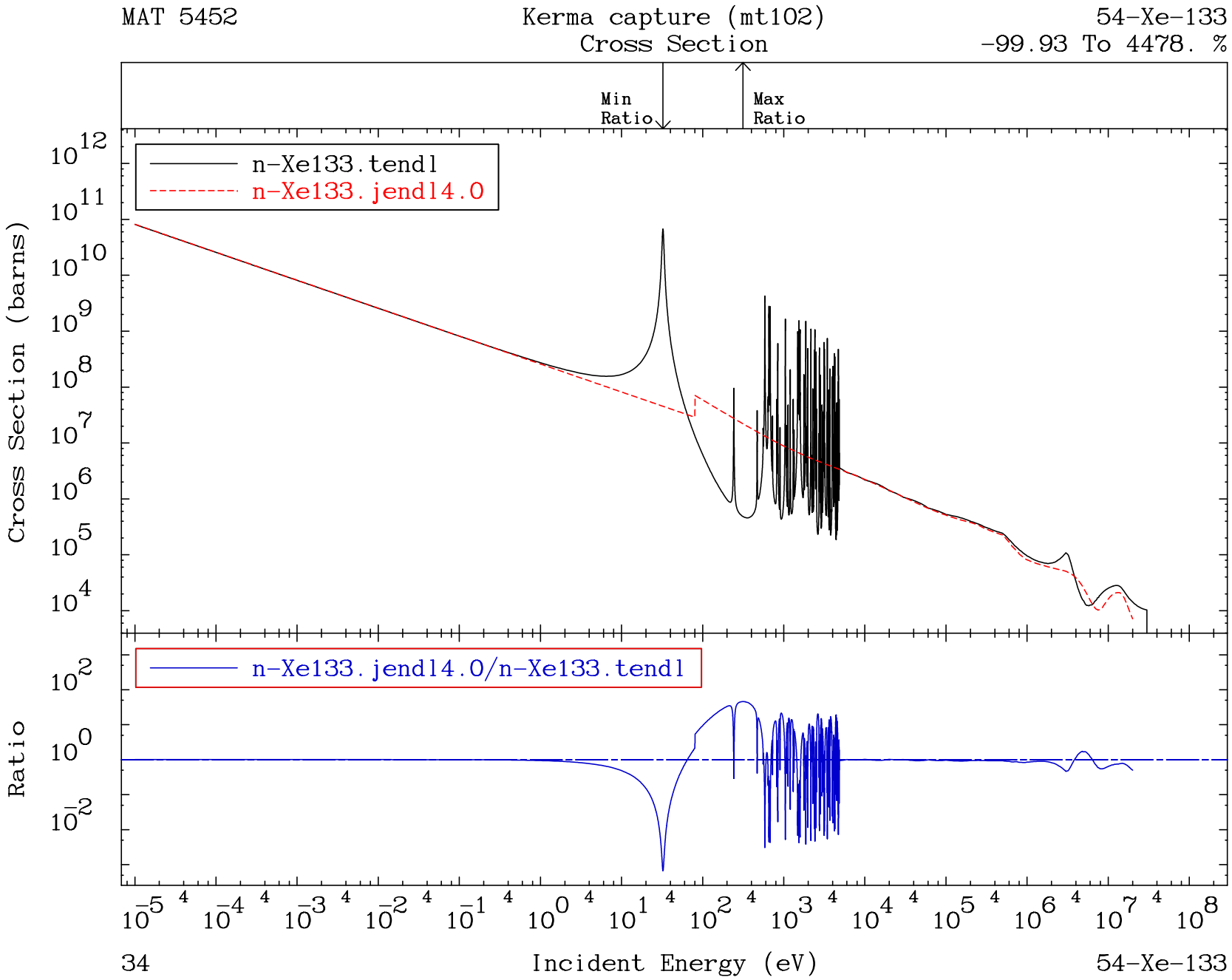

MAT 5452
Kerma total (eV-barns)
Cross Section
54-Xe-133
-99.93 To 4478. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
29
Incident Energy (eV)
54-Xe-133

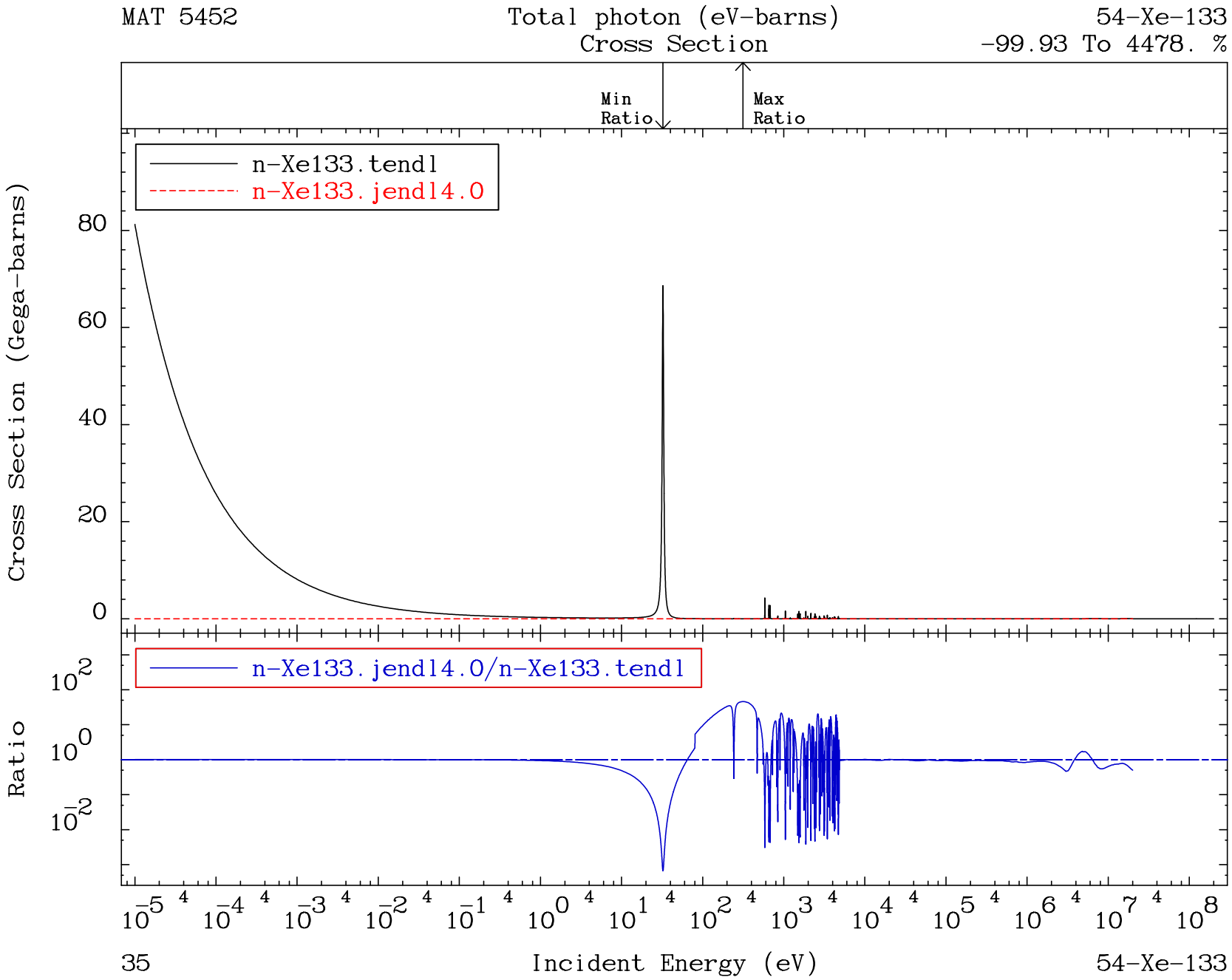

MAT 5452
Kerma elastic
Cross Section
54-Xe-133
-99.82 To 1434. %
Min
Ratio
Max
Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
30
Incident Energy (eV)
54-Xe-133

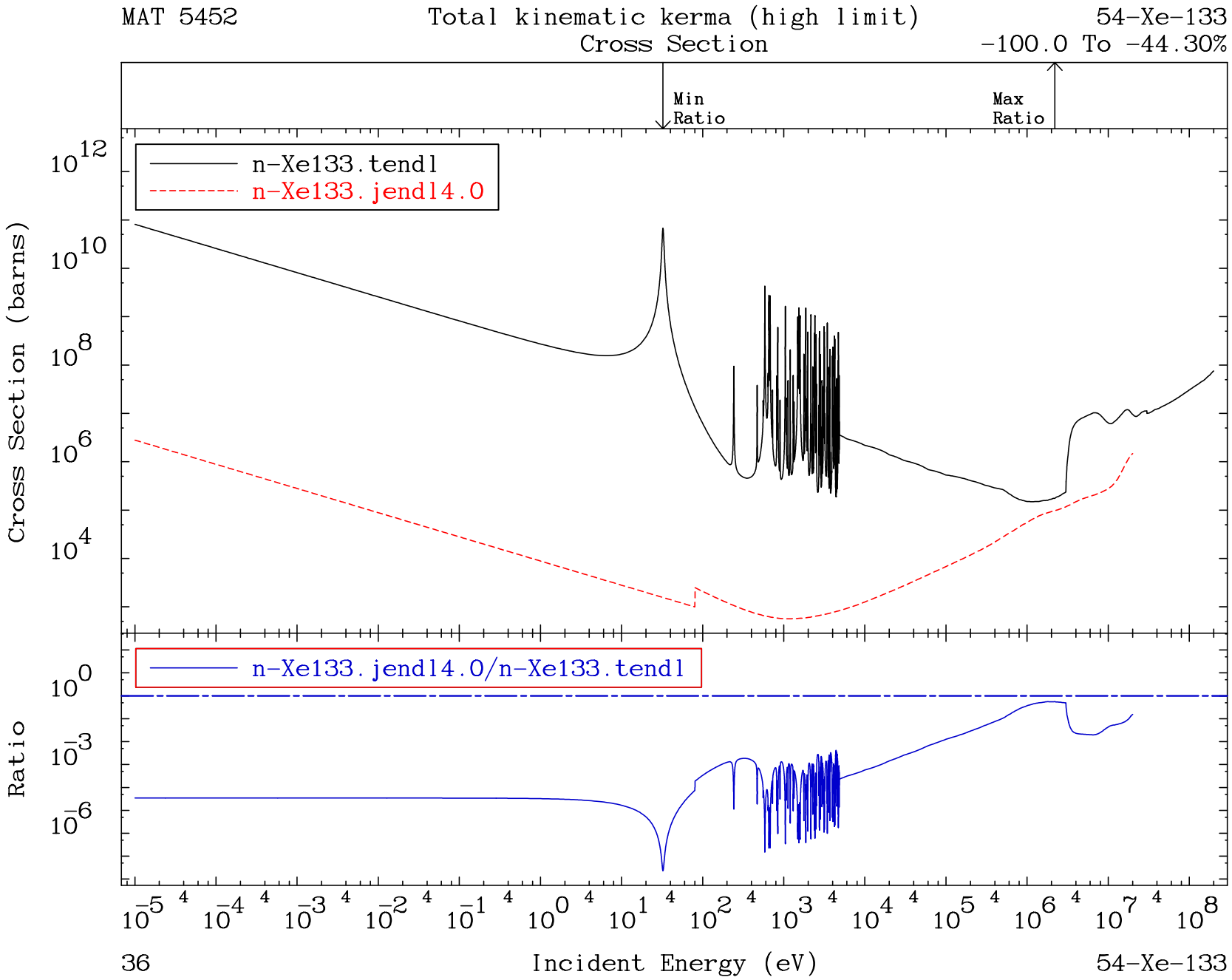

MAT 5452
Kerma non-elastic (all but mt2)
Cross Section
54-Xe-133
-99.93 To 4478. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
31
54-Xe-133

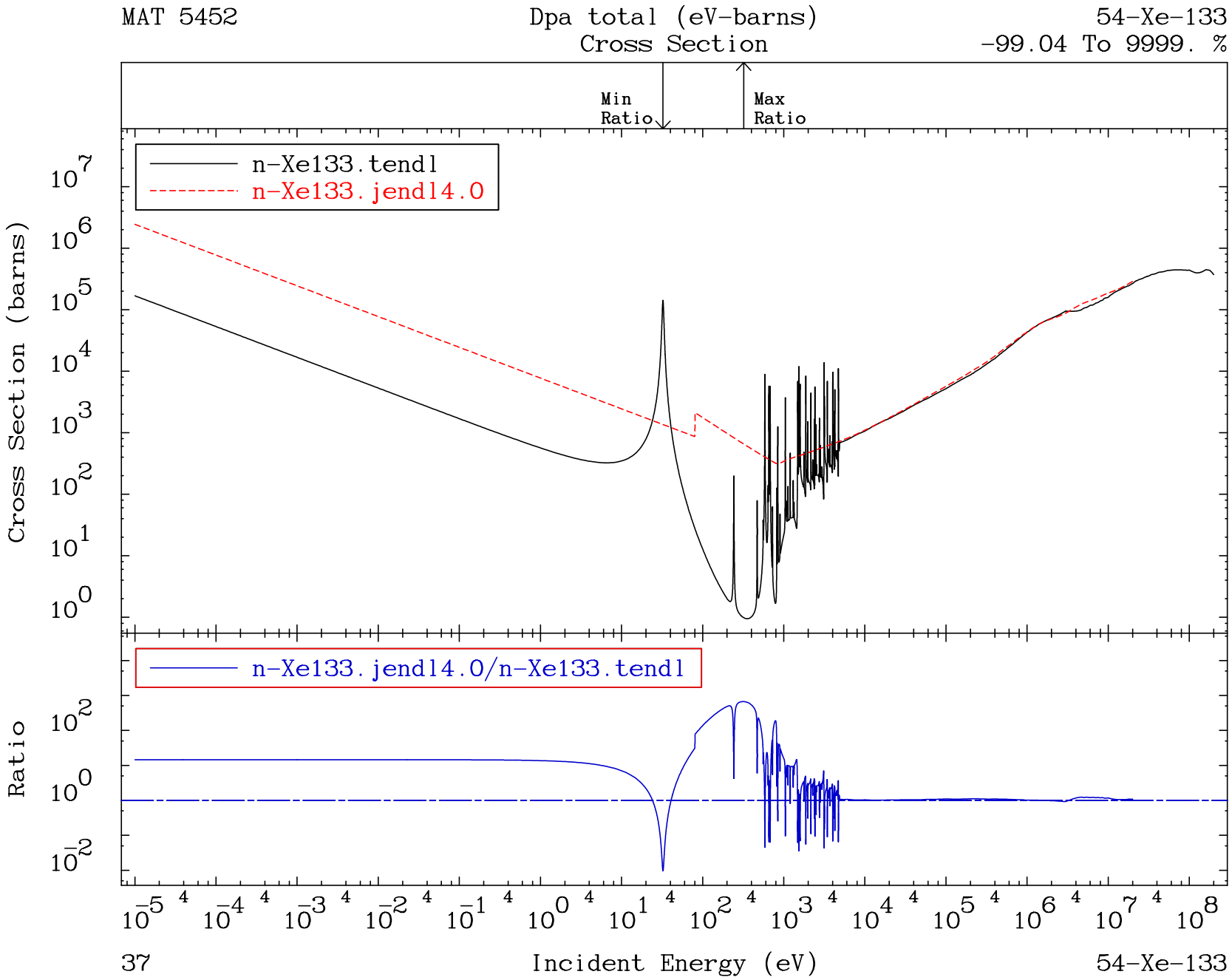

MAT 5452
Kerma inelastic (mt51-91)
Cross Section
54-Xe-133
-44.57 To 65.44 %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 250.00 keV
n-Xe133.jendl4.0 Threshold 250.00 keV
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
32
54-Xe-133

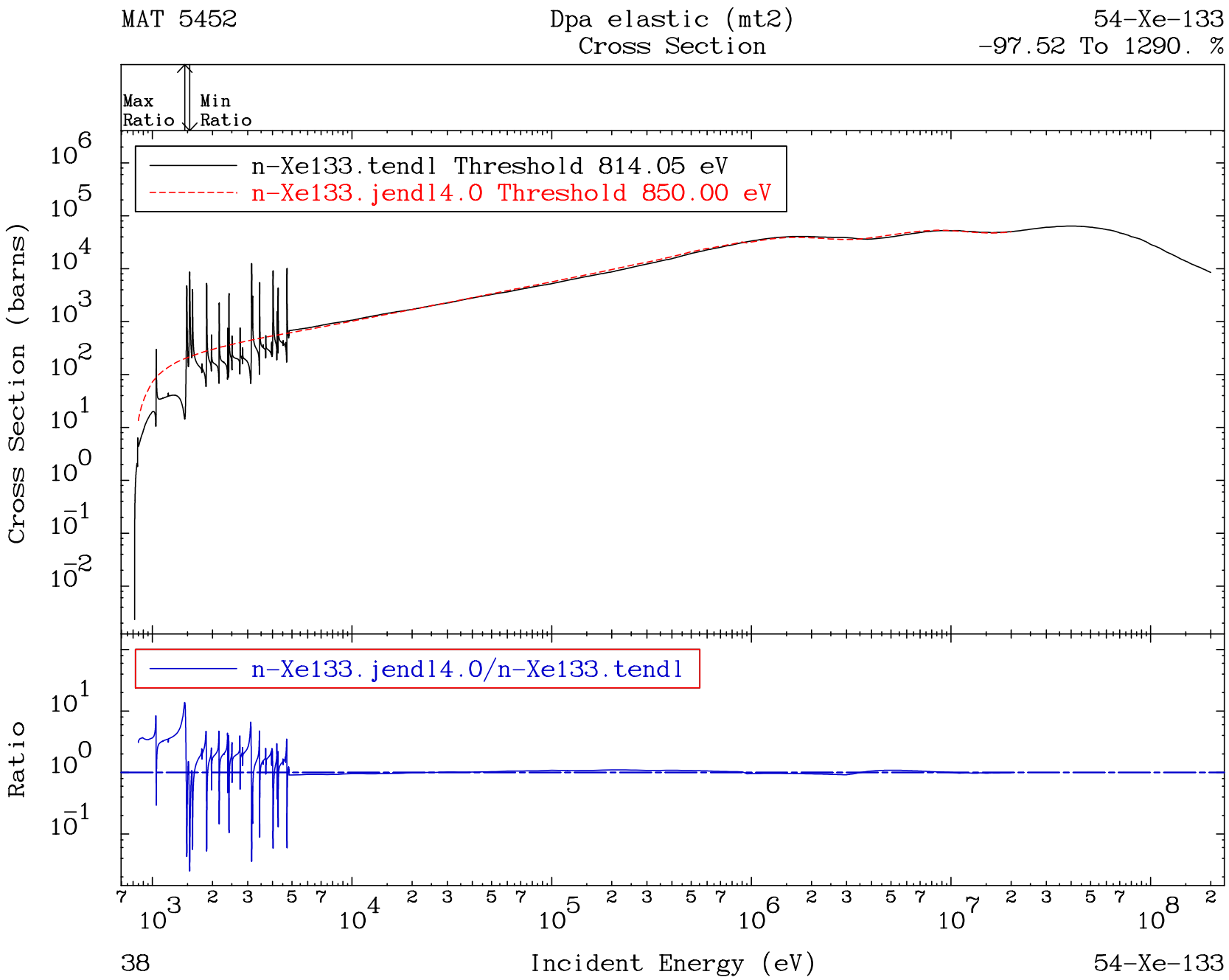

MAT 5452
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
54-Xe-133
-44.57 To 65.44 %
Max Ratio
Min Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
54-Xe-133

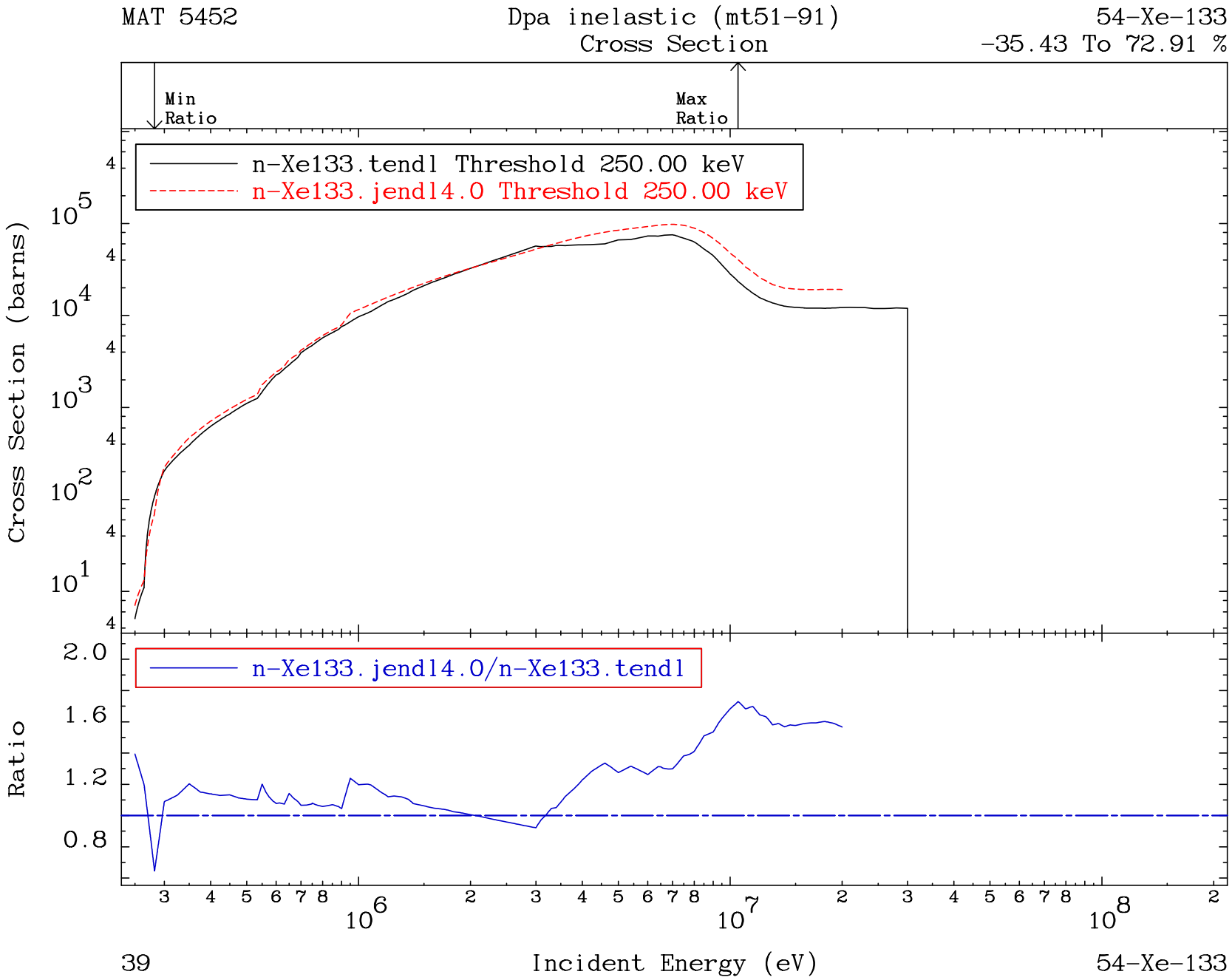

MAT 5452
Kerma capture (mt102)
Cross Section
54-Xe-133
-99.93 To 4478. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
34
Incident Energy (eV)
54-Xe-133

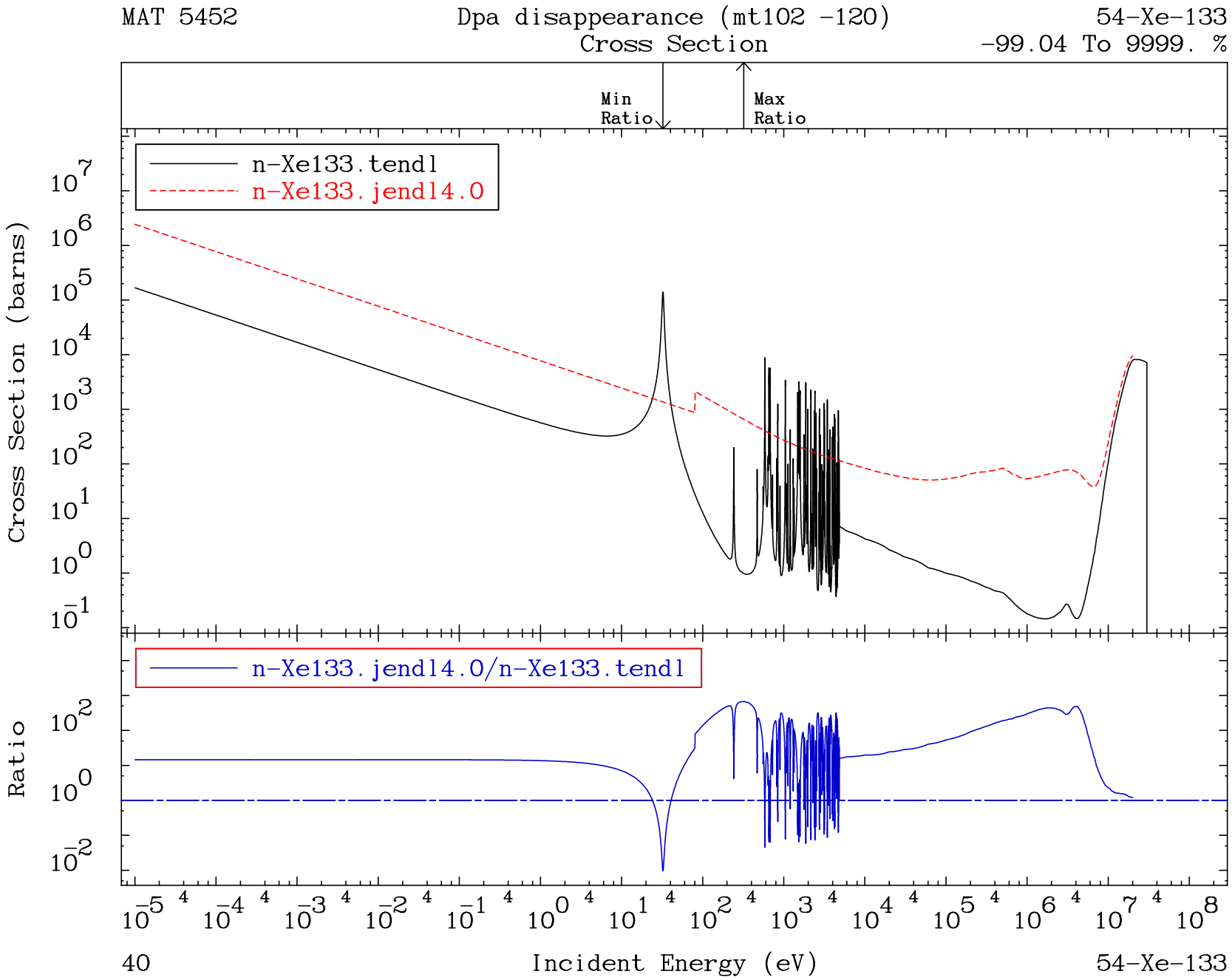

MAT 5452
Total photon (eV-barns)
Cross Section
54-Xe-133
-99.93 To 4478. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (Giga-barns)
80
60
40
20
0
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
10^2
10^0
10^-2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
54-Xe-133


MAT 5452
Total kinematic kerma (high limit)
Cross Section
54-Xe-133
-100.0 To -44.30%
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
36
54-Xe-133


MAT 5452
Dpa total (eV-barns)
Cross Section
54-Xe-133
-99.04 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
37
54-Xe-133


MAT 5452
Dpa elastic (mt2)
Cross Section
54-Xe-133
-97.52 To 1290. %
Max Ratio
Min Ratio
n-Xe133.tendl Threshold 814.05 eV
n-Xe133.jendl4.0 Threshold 850.00 eV
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
38
Incident Energy (eV)
54-Xe-133


MAT 5452
Dpa inelastic (mt51-91)
Cross Section
54-Xe-133
-35.43 To 72.91 %
Min Ratio
Max Ratio
n-Xe133.tendl Threshold 250.00 keV
n-Xe133.jendl4.0 Threshold 250.00 keV
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
39
54-Xe-133


MAT 5452
Dpa disappearance (mt102 -120)
Cross Section
54-Xe-133
-99.04 To 9999. %
Min Ratio
Max Ratio
n-Xe133.tendl
n-Xe133.jendl4.0
Cross Section (barns)
n-Xe133.jendl4.0/n-Xe133.tendl
Ratio
Incident Energy (eV)
40
54-Xe-133