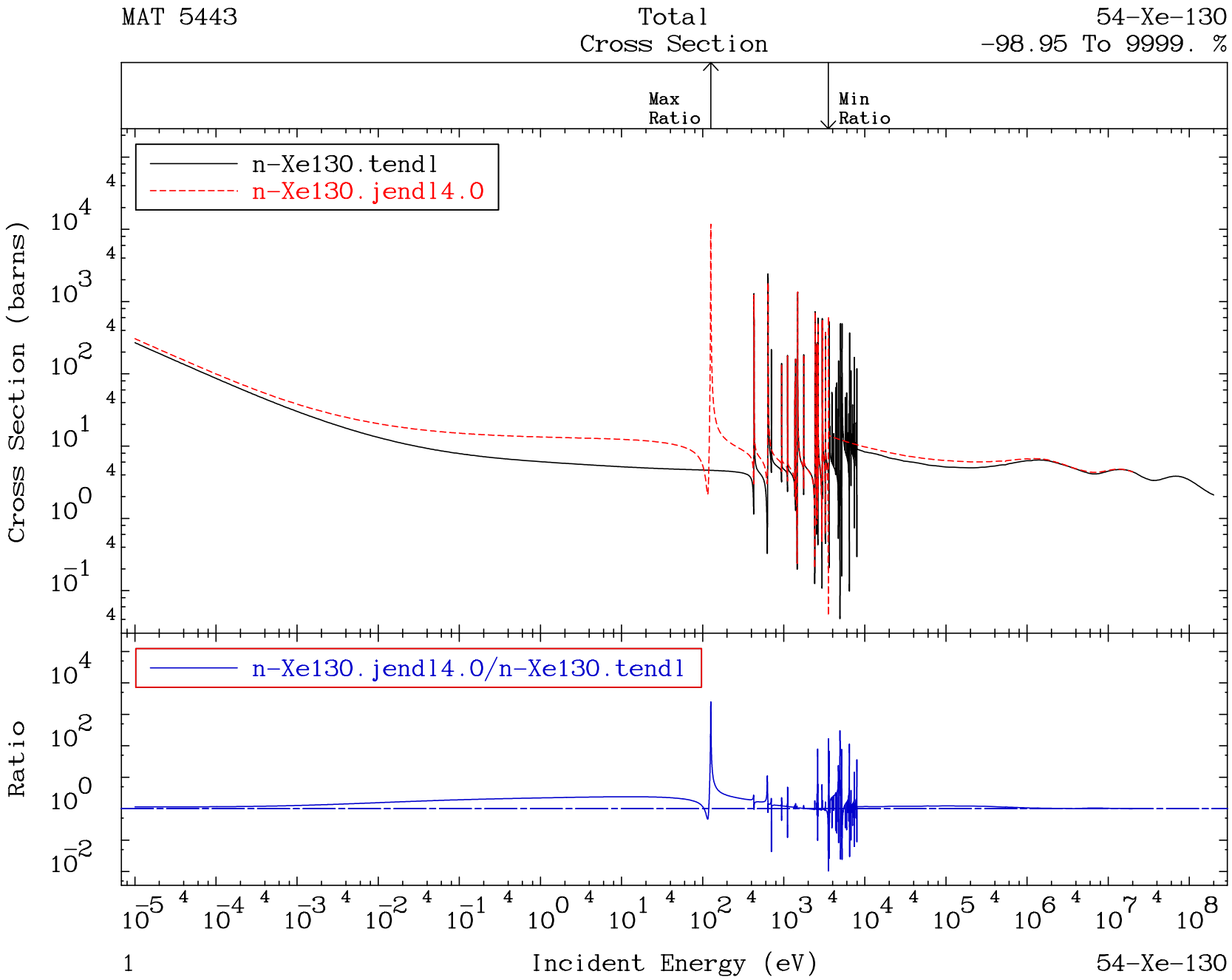
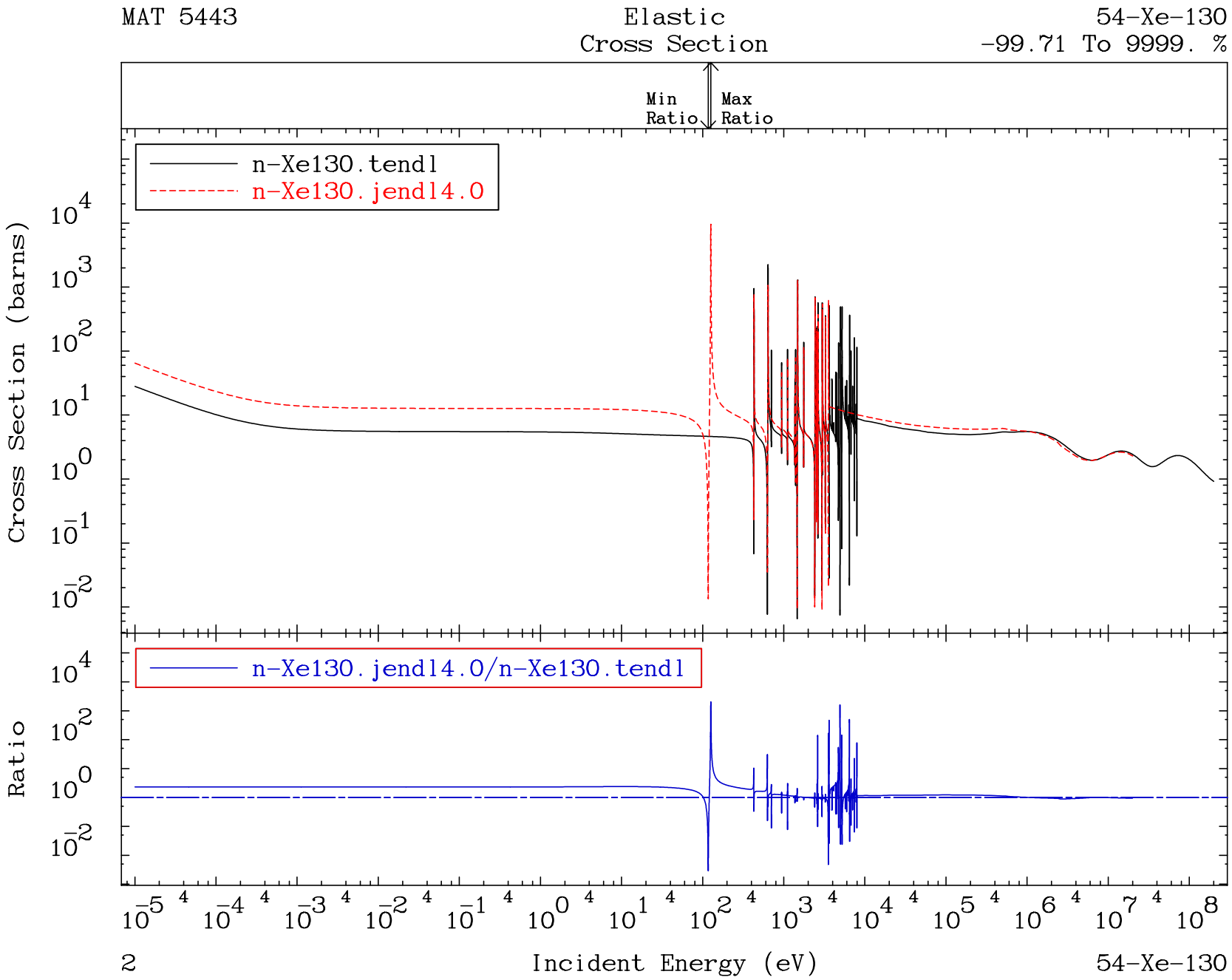
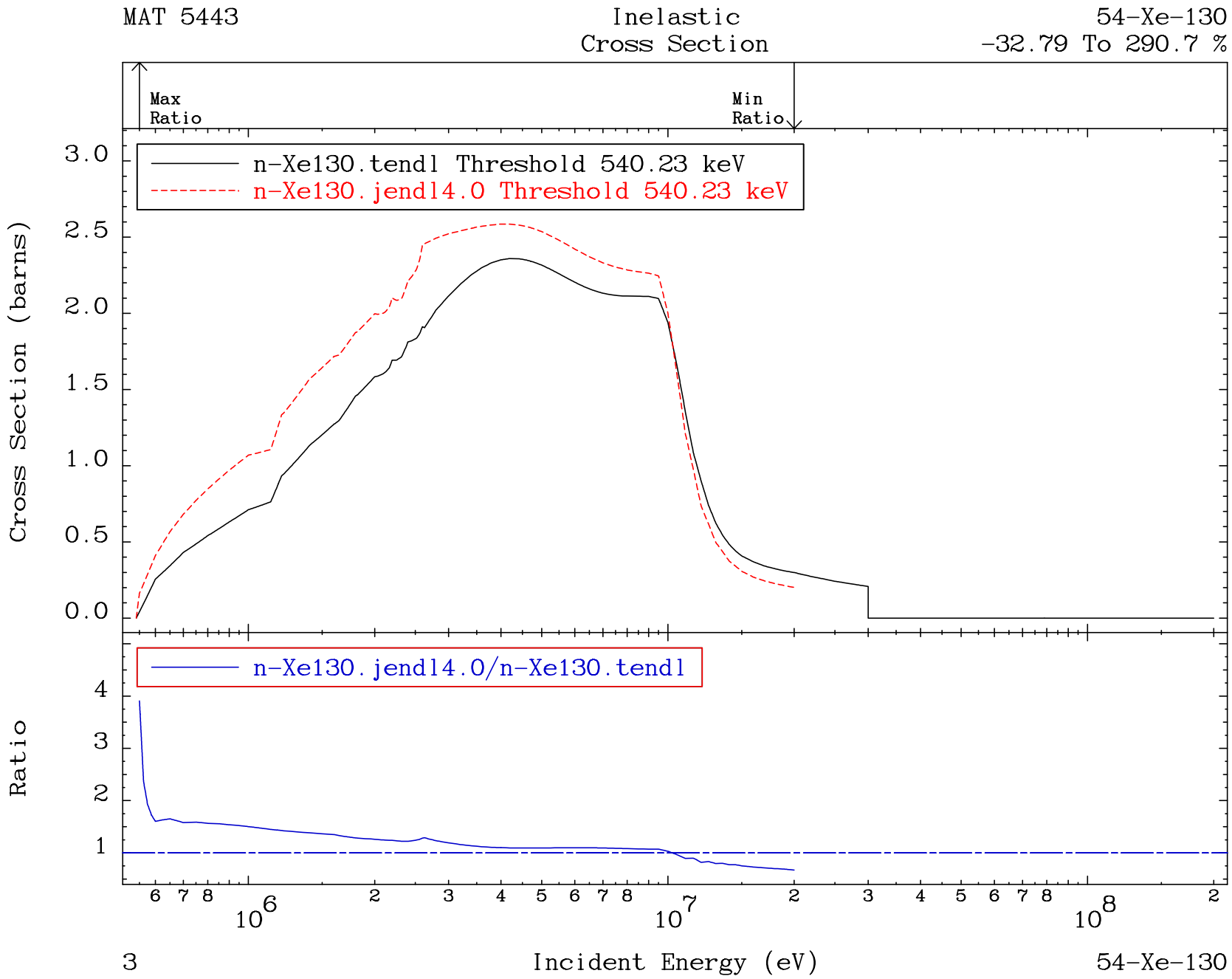
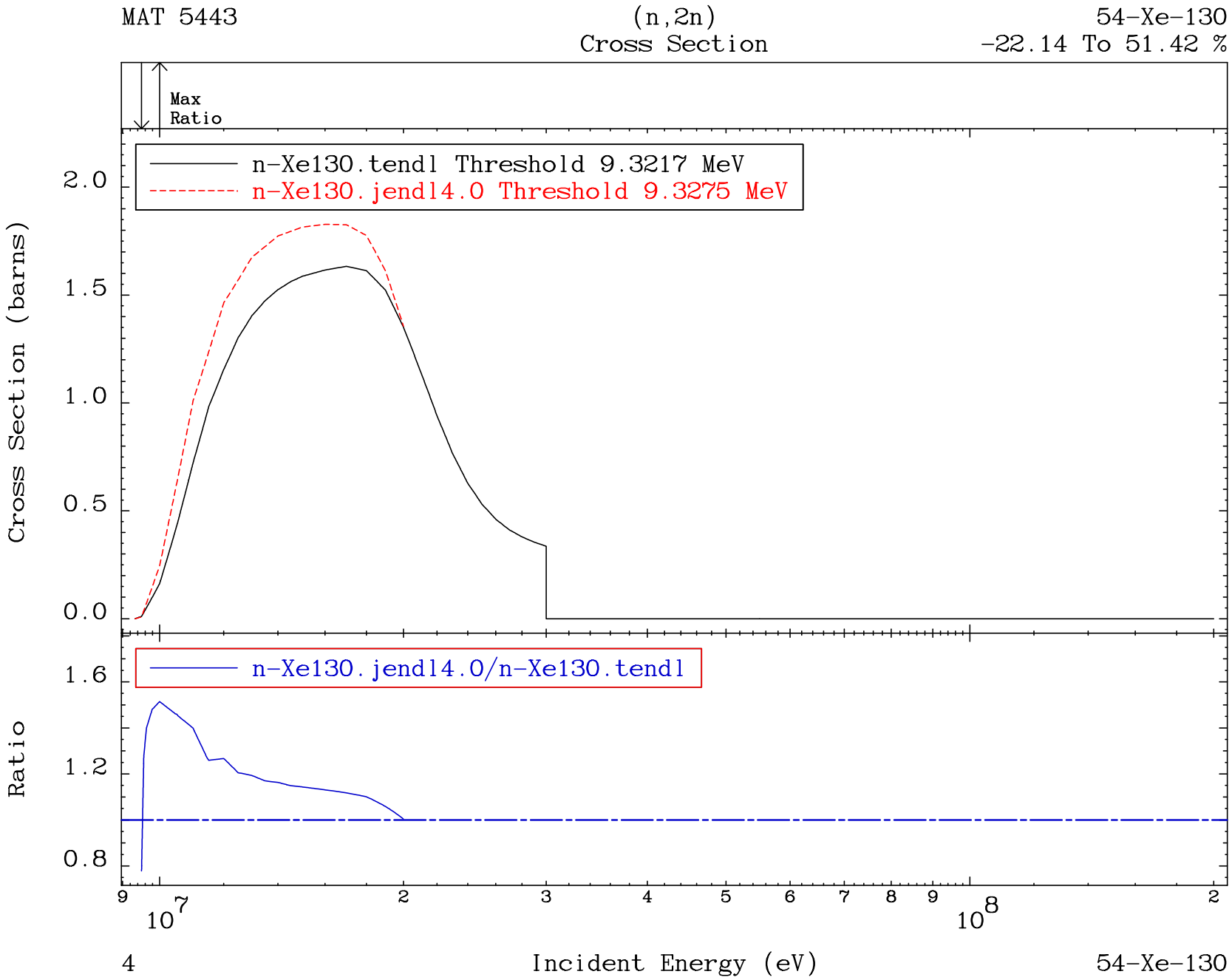
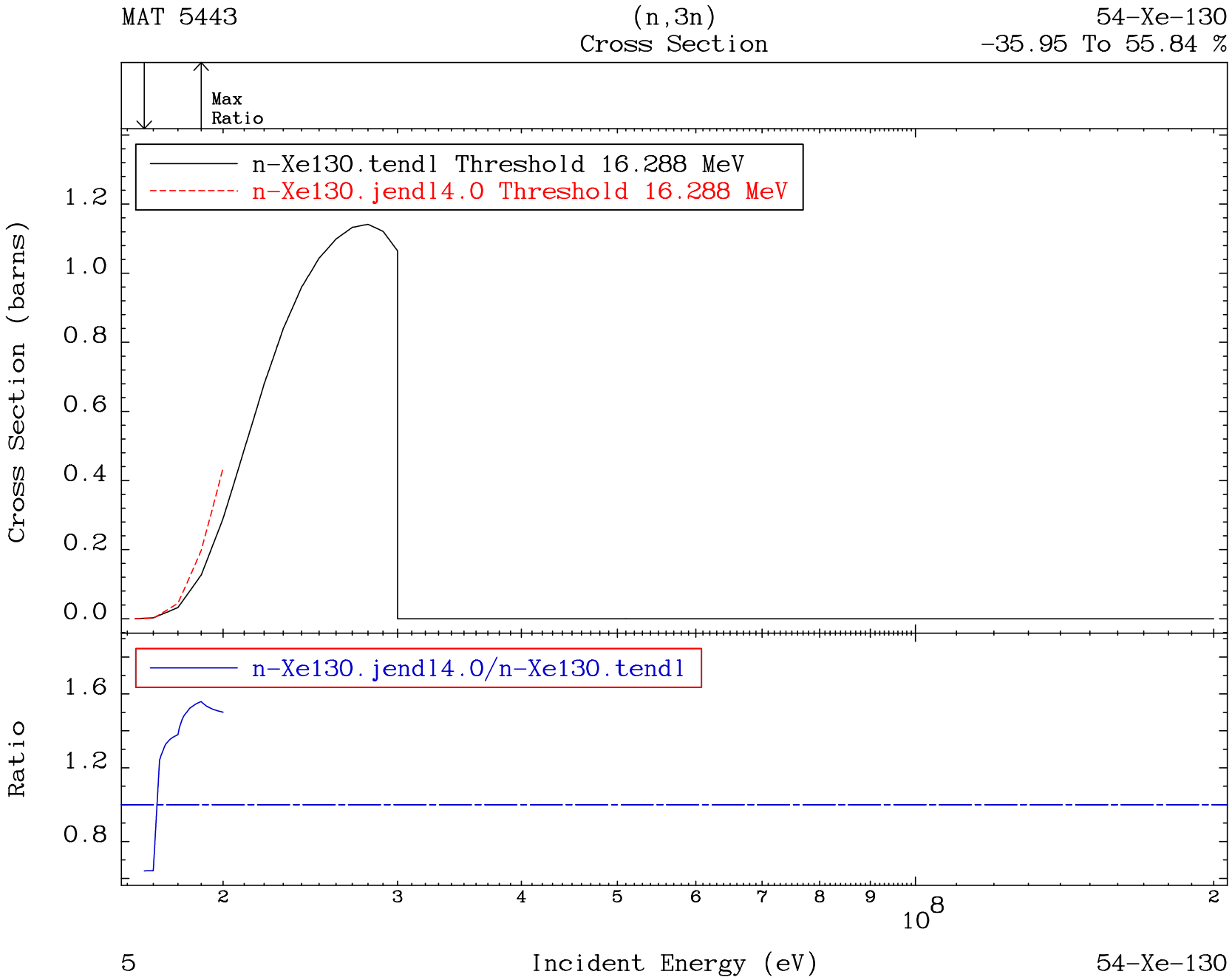
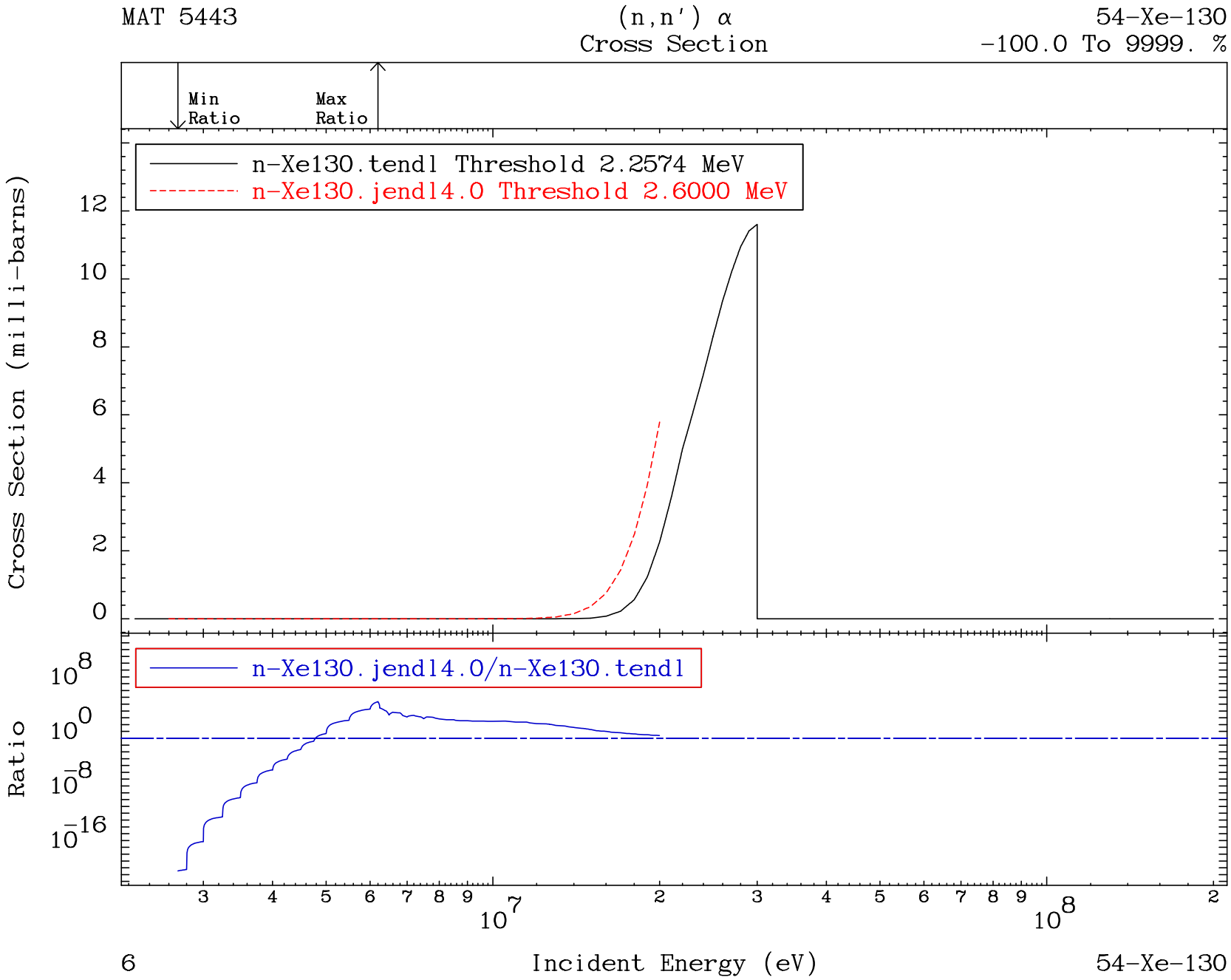

MAT 5443
Total
Cross Section
54-Xe-130
-98.95 To 9999. %
Max
Ratio
Min
Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
1
54-Xe-130

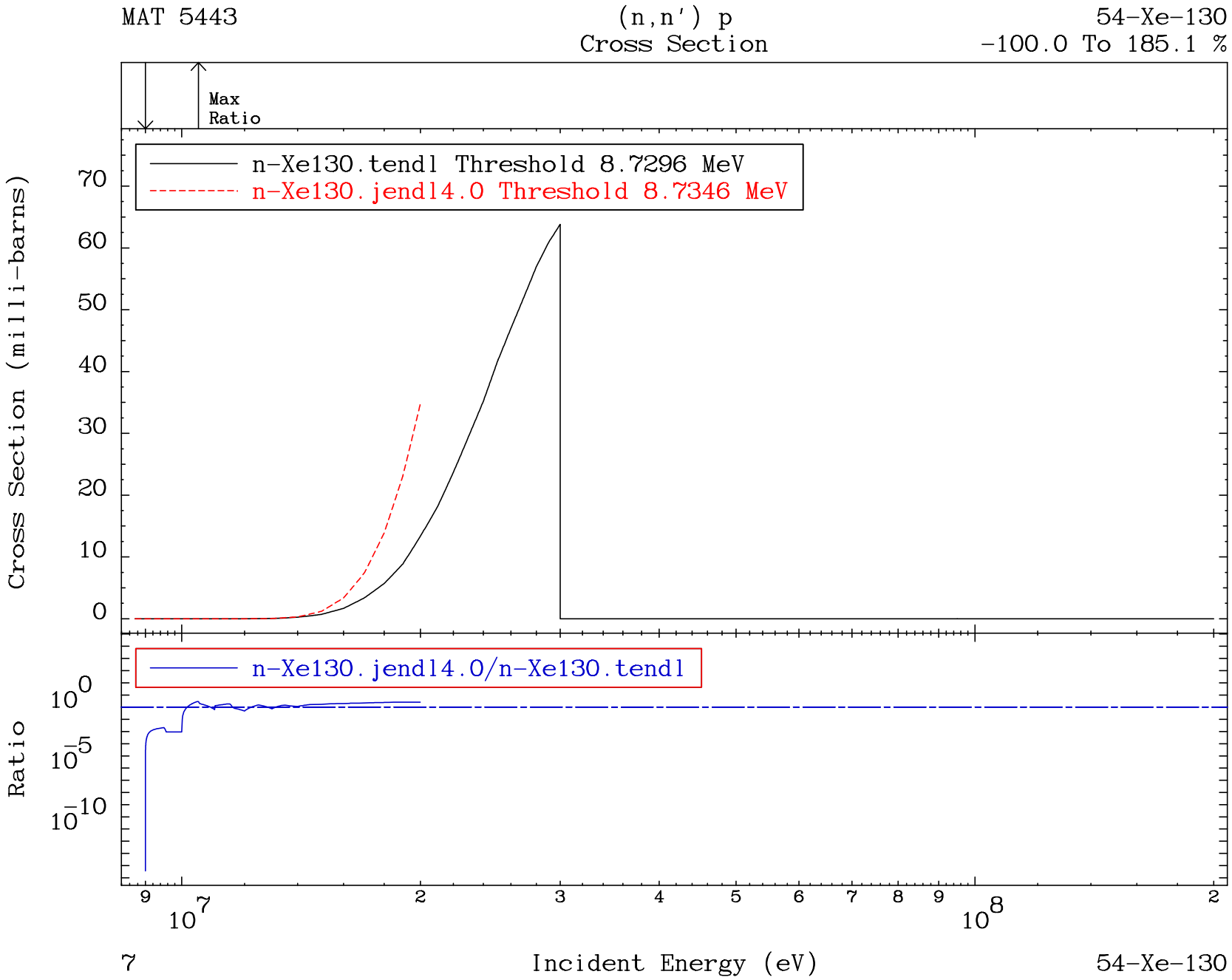

MAT 5443
Elastic
Cross Section
54-Xe-130
-99.71 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
2
54-Xe-130

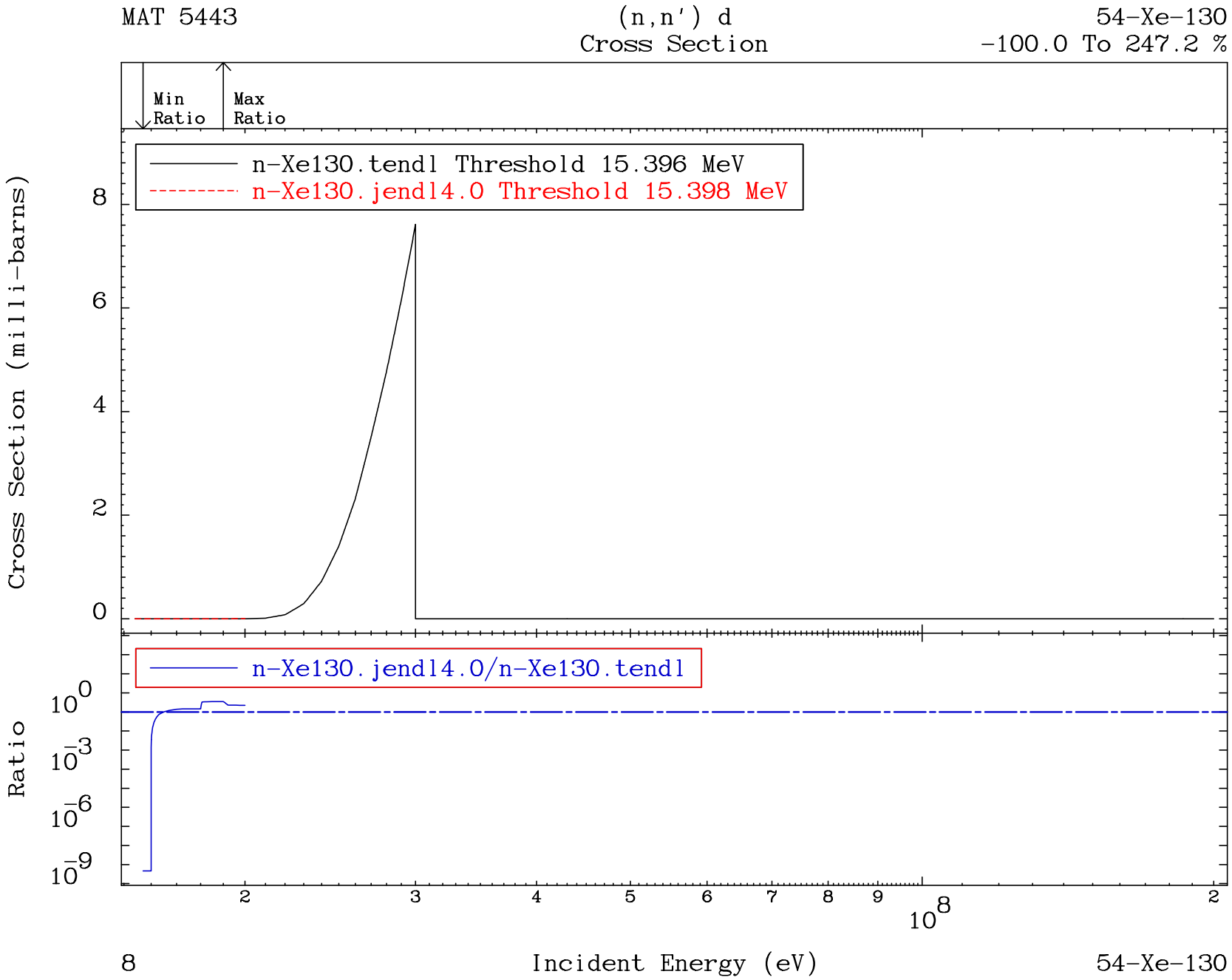

MAT 5443
Inelastic
Cross Section
54-Xe-130
-32.79 To 290.7 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 540.23 keV
n-Xe130.jendl4.0 Threshold 540.23 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
4
3
2
1
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
54-Xe-130

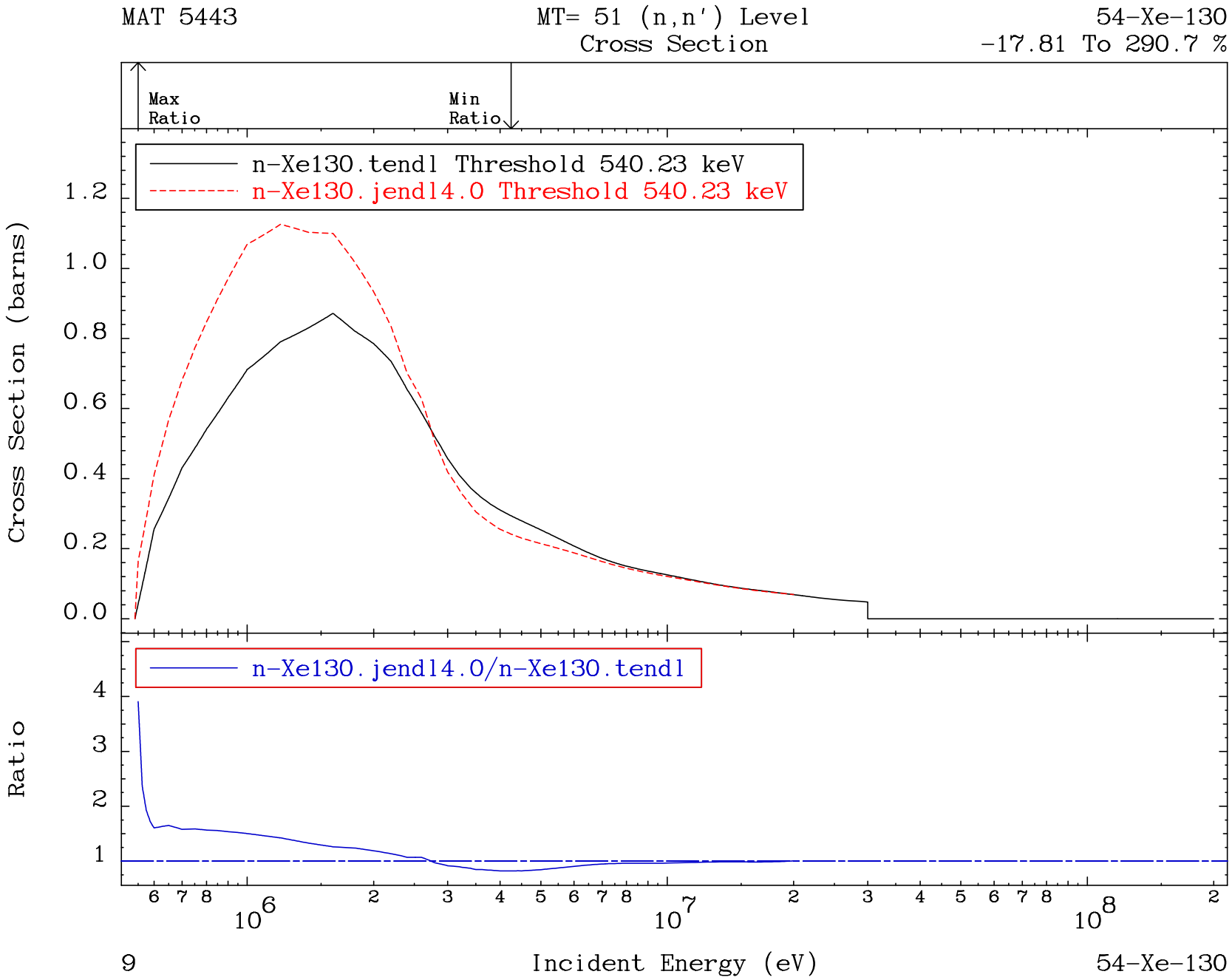

MAT 5443
(n,2n)
Cross Section
54-Xe-130
-22.14 To 51.42 %
Max
Ratio
n-Xe130.tendl Threshold 9.3217 MeV
n-Xe130.jendl4.0 Threshold 9.3275 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
1.6
1.2
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
54-Xe-130

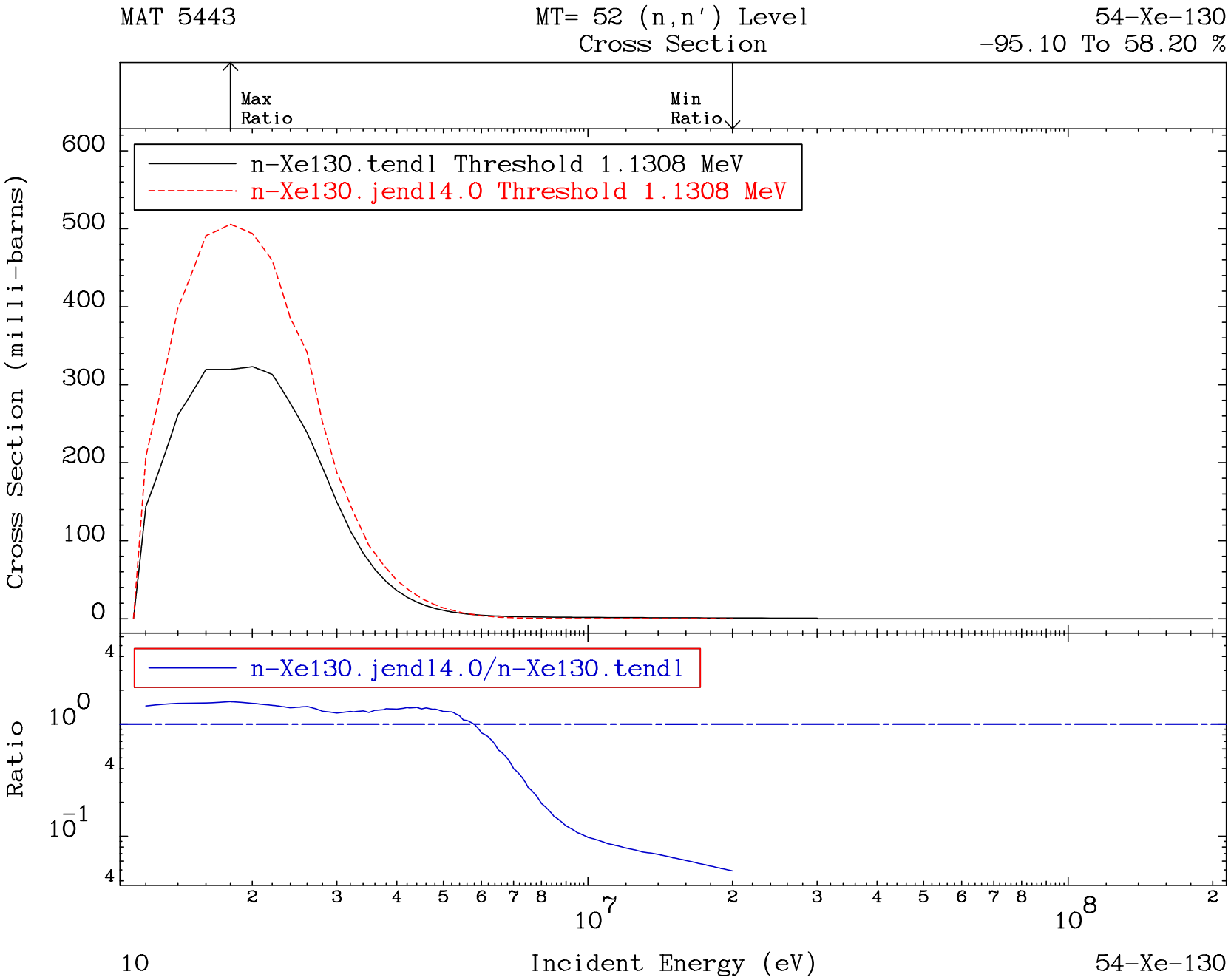

MAT 5443
(n,3n)
Cross Section
54-Xe-130
-35.95 To 55.84 %
Max
Ratio
n-Xe130.tendl Threshold 16.288 MeV
n-Xe130.jendl4.0 Threshold 16.288 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
54-Xe-130

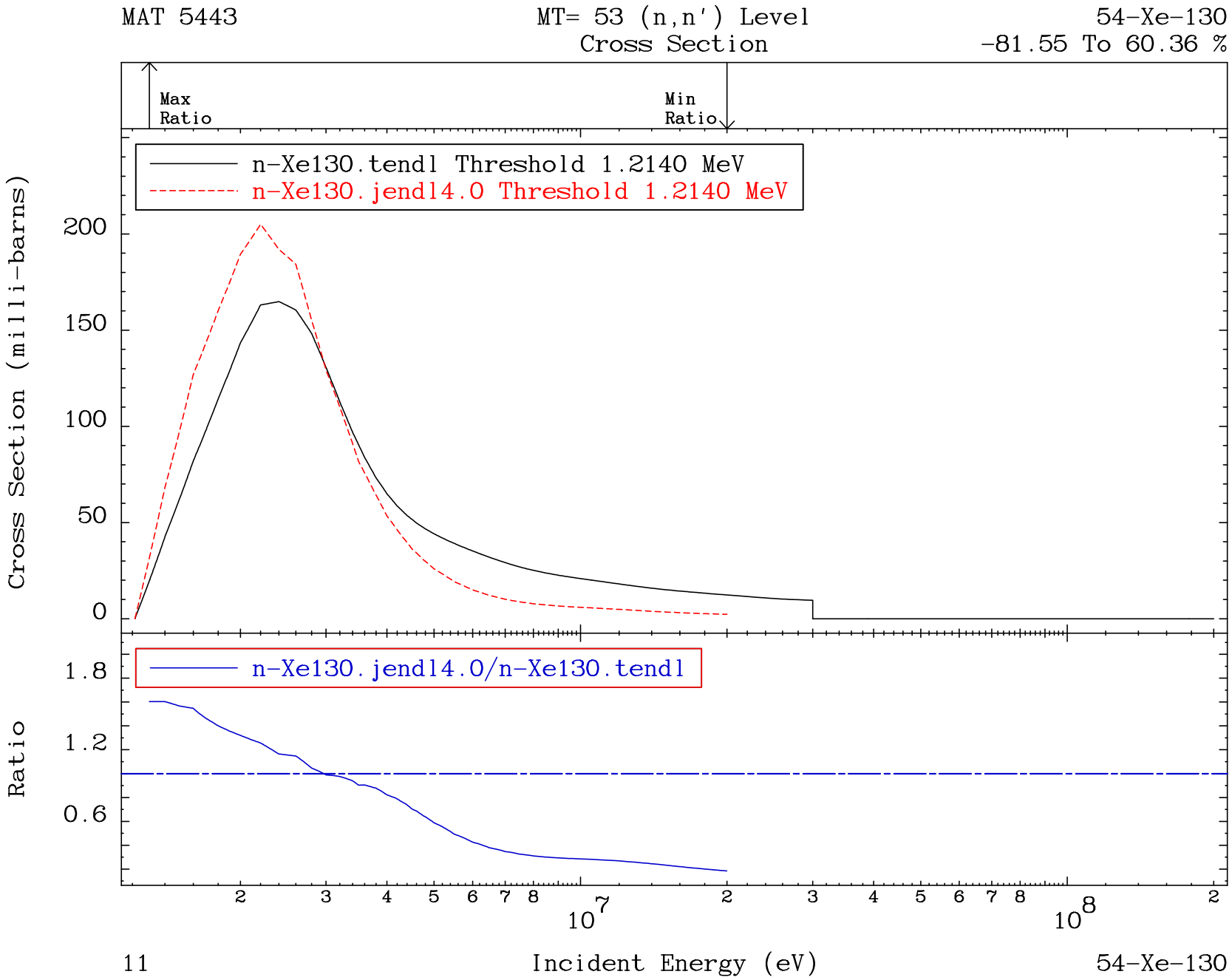

MAT 5443
(n,n') α
Cross Section
54-Xe-130
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.2574 MeV
n-Xe130.jendl4.0 Threshold 2.6000 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^{8}
10^{0}
10^{-8}
10^{-16}
3 4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
6
Incident Energy (eV)
54-Xe-130

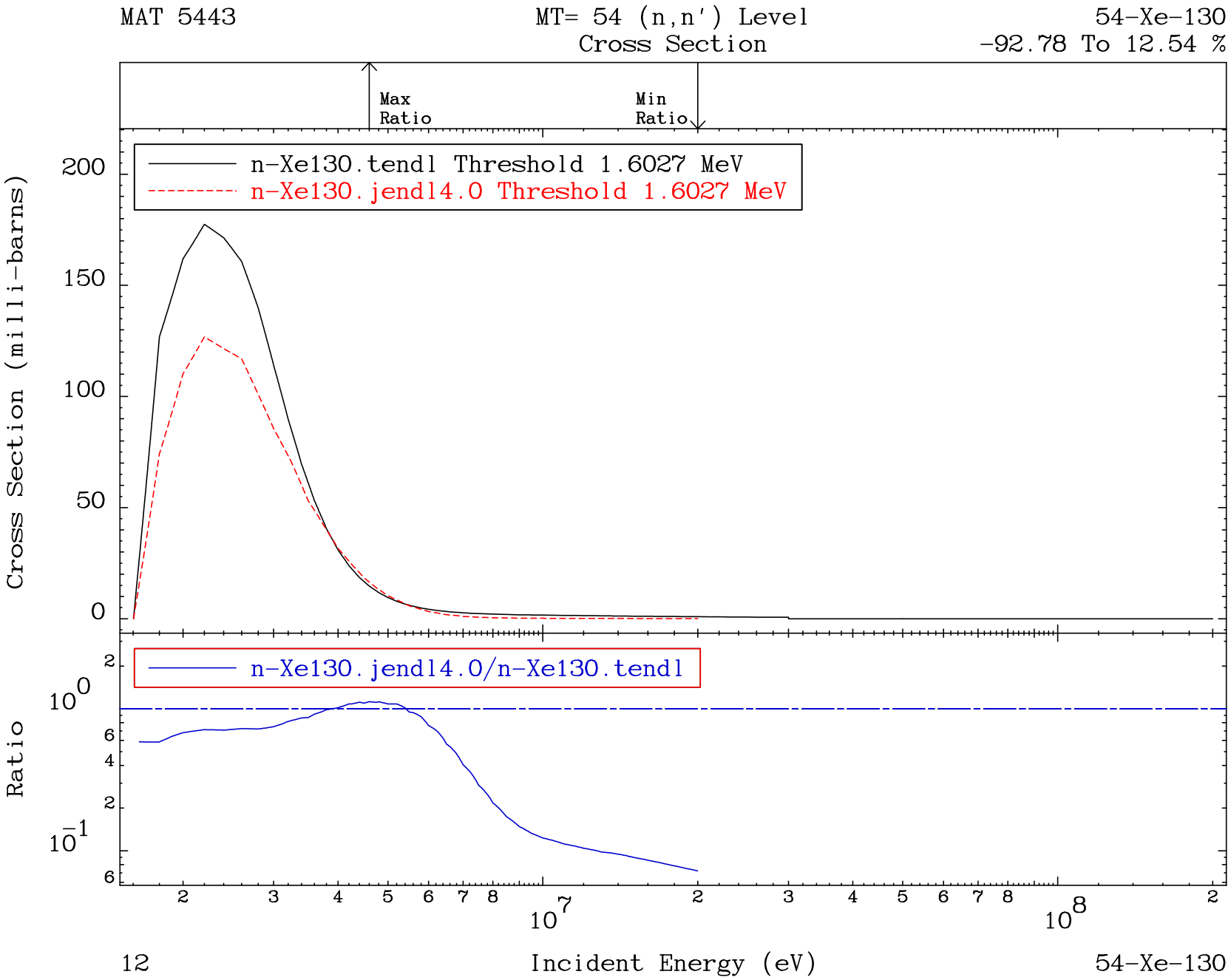

MAT 5443
(n,n') p
Cross Section
54-Xe-130
-100.0 To 185.1 %
Max
Ratio
n-Xe130.tendl Threshold 8.7296 MeV
n-Xe130.jendl4.0 Threshold 8.7346 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-5
10^-10
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
54-Xe-130

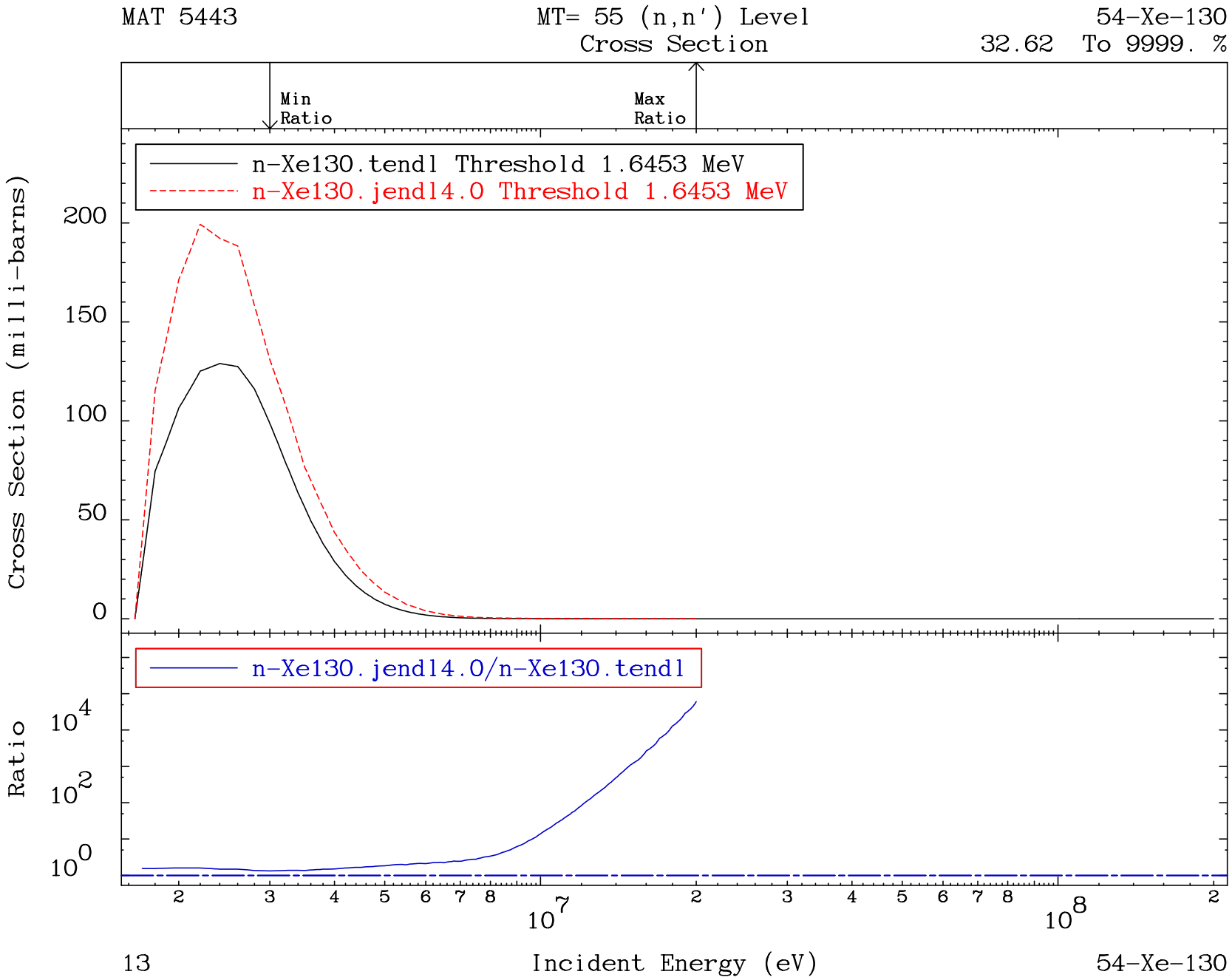

MAT 5443
(n,n') d
Cross Section
54-Xe-130
-100.0 To 247.2 %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 15.396 MeV
n-Xe130.jendl4.0 Threshold 15.398 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
54-Xe-130

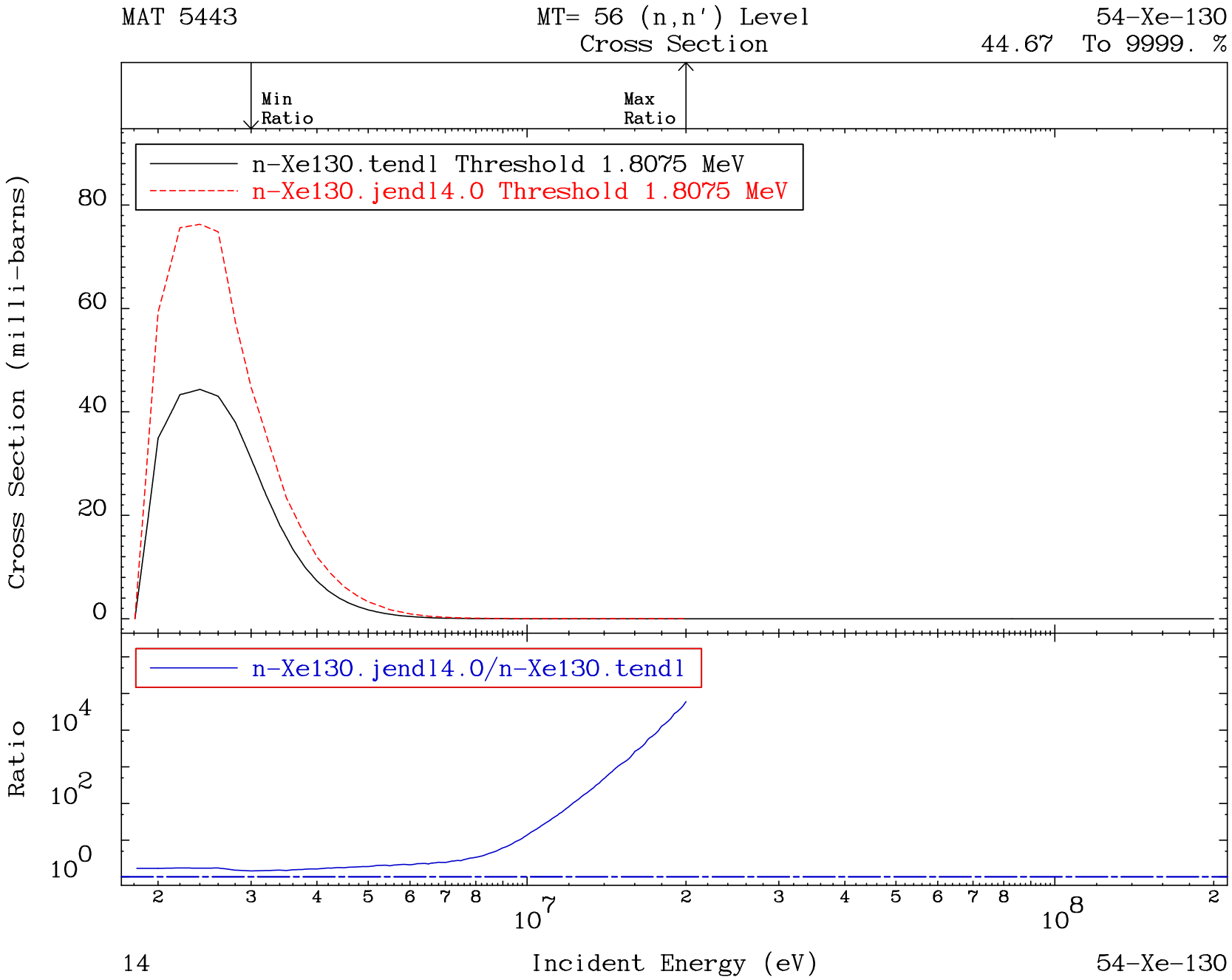

MAT 5443
MT= 51 (n,n') Level
Cross Section
54-Xe-130
-17.81 To 290.7 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 540.23 keV
n-Xe130.jendl4.0 Threshold 540.23 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
4
3
2
1
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
54-Xe-130

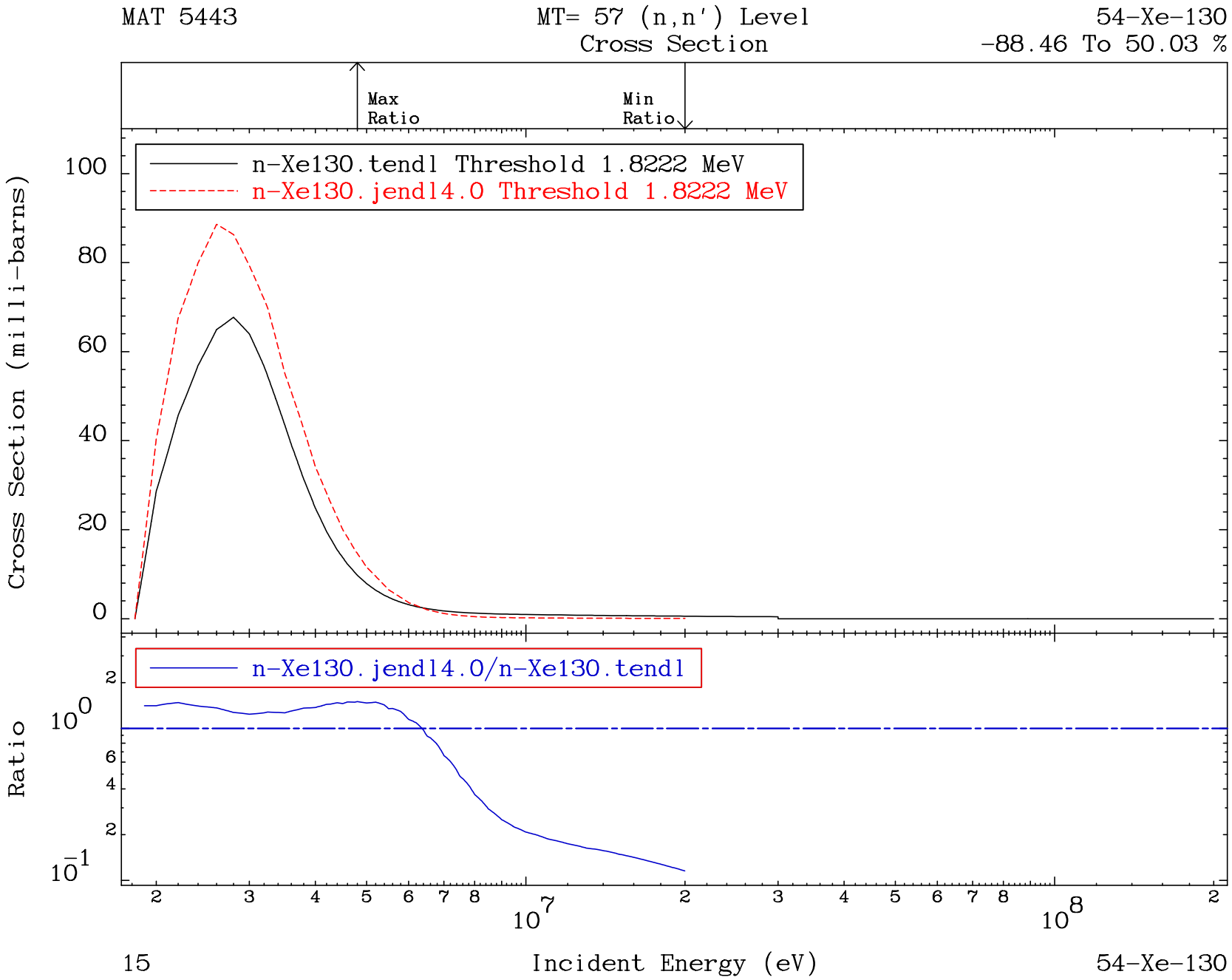

MAT 5443
MT= 52 (n,n') Level
Cross Section
54-Xe-130
-95.10 To 58.20 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 1.1308 MeV
n-Xe130.jendl4.0 Threshold 1.1308 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-1
4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
54-Xe-130

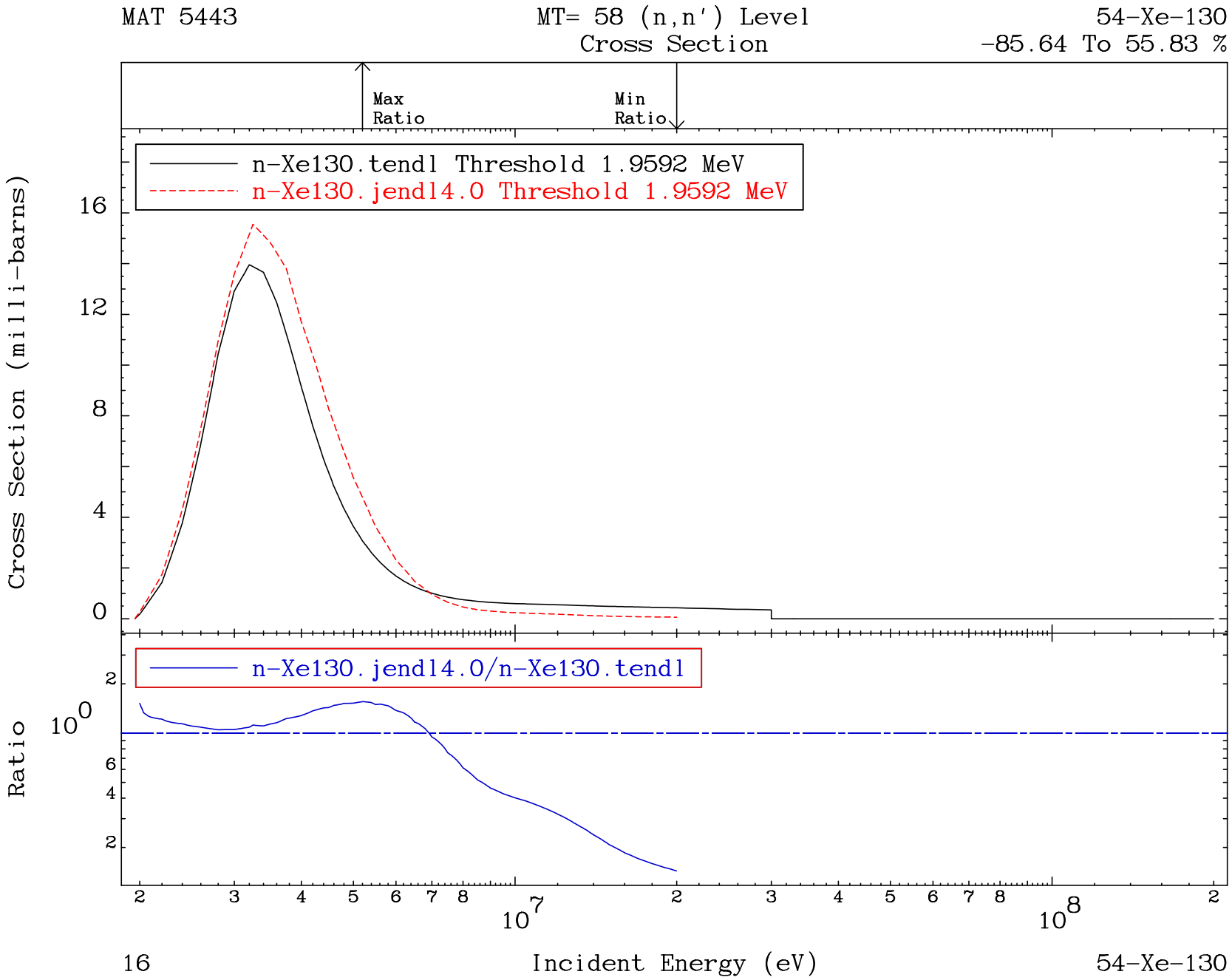

MAT 5443
MT= 53 (n,n') Level
Cross Section
54-Xe-130
-81.55 To 60.36 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 1.2140 MeV
n-Xe130.jendl4.0 Threshold 1.2140 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
1.8
1.2
0.6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
11
Incident Energy (eV)
54-Xe-130

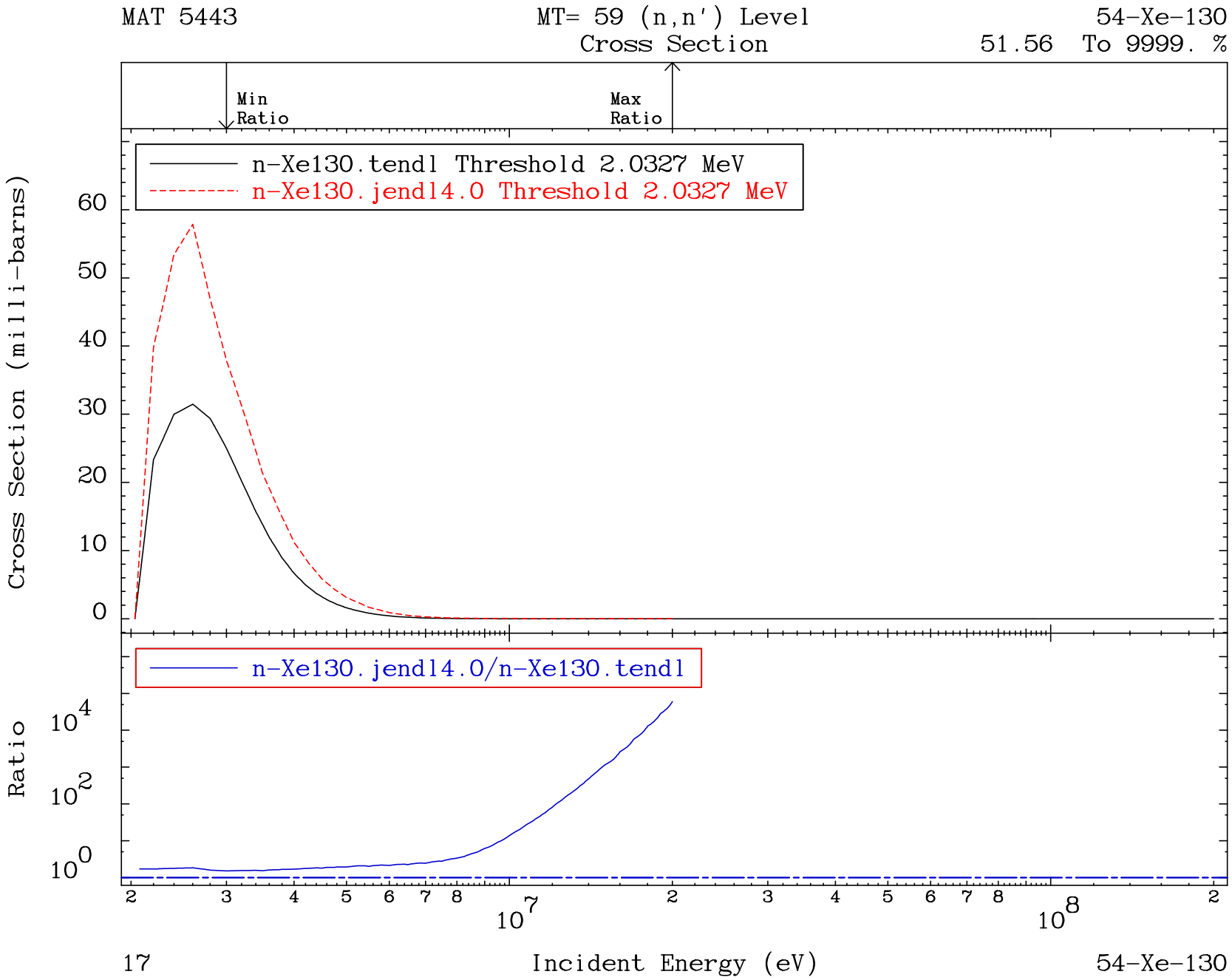

MAT 5443
MT= 54 (n,n') Level
Cross Section
54-Xe-130
-92.78 To 12.54 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 1.6027 MeV
n-Xe130.jendl4.0 Threshold 1.6027 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
2
10^0
6
4
2
10^-1
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
54-Xe-130

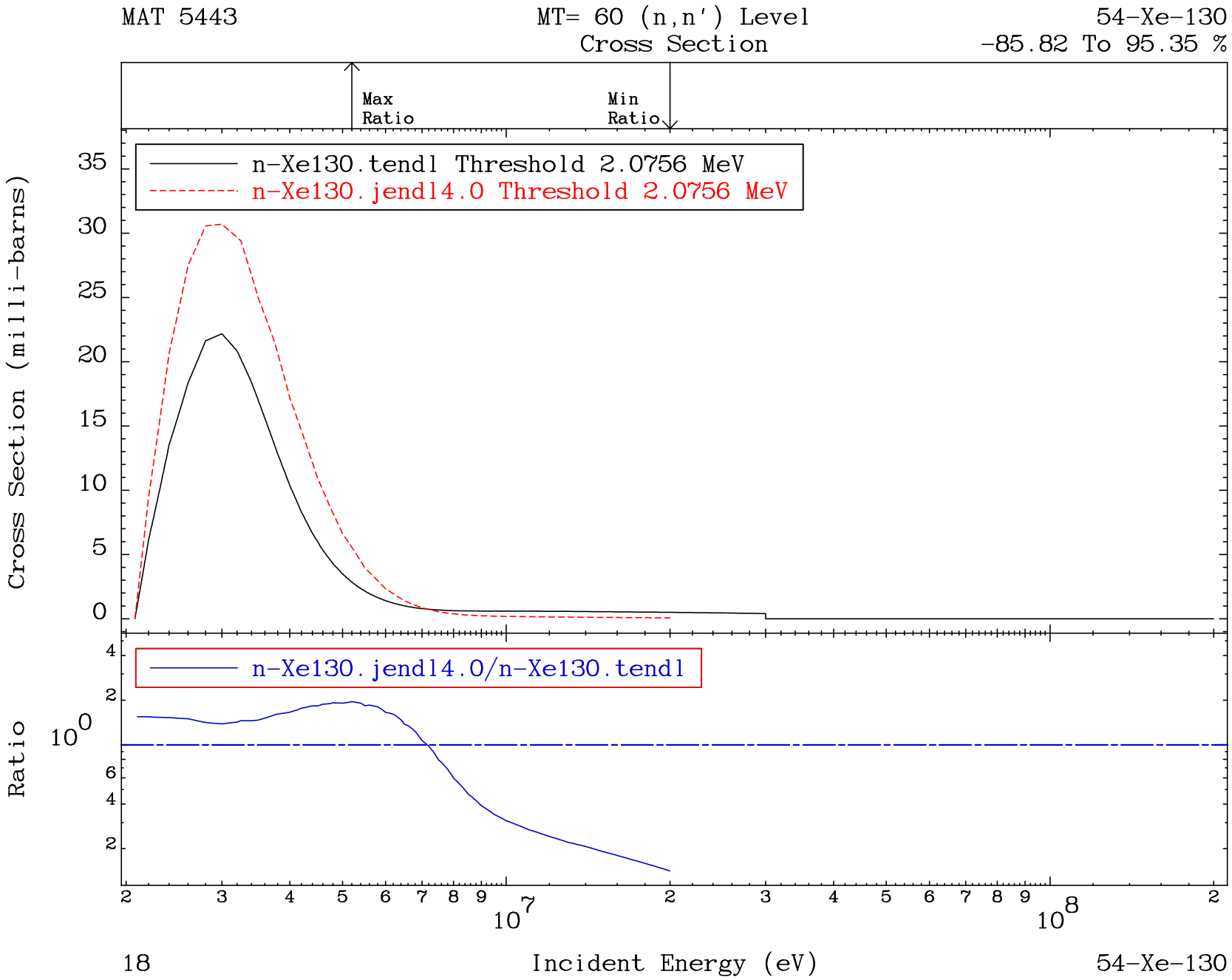

MAT 5443
MT= 55 (n,n') Level
Cross Section
54-Xe-130
32.62 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 1.6453 MeV
n-Xe130.jendl4.0 Threshold 1.6453 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
54-Xe-130

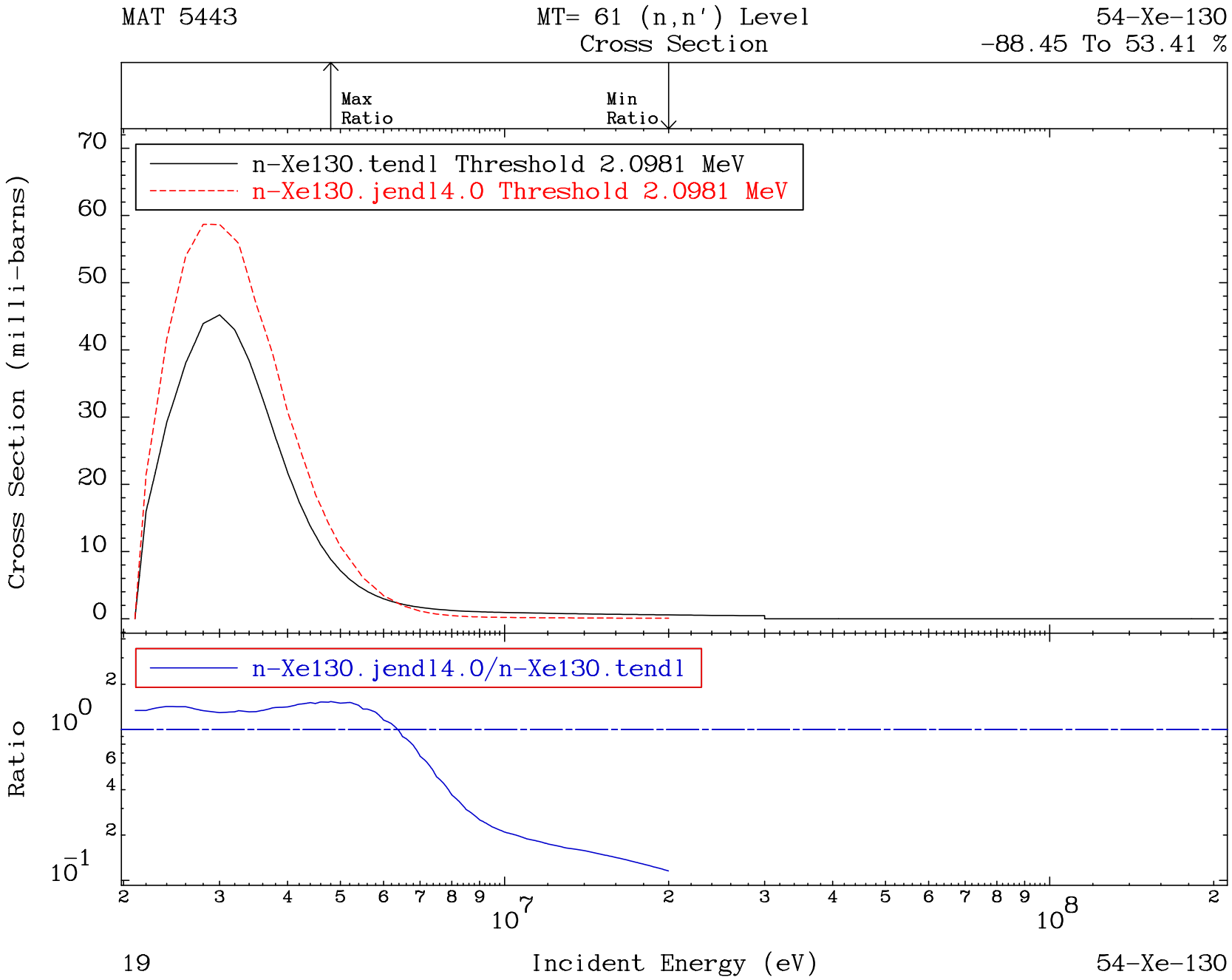

MAT 5443
MT= 56 (n,n') Level
Cross Section
54-Xe-130
44.67 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 1.8075 MeV
n-Xe130.jendl4.0 Threshold 1.8075 MeV
Cross Section (milli-barns)
0
20
40
60
80
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^2
10^4
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
54-Xe-130

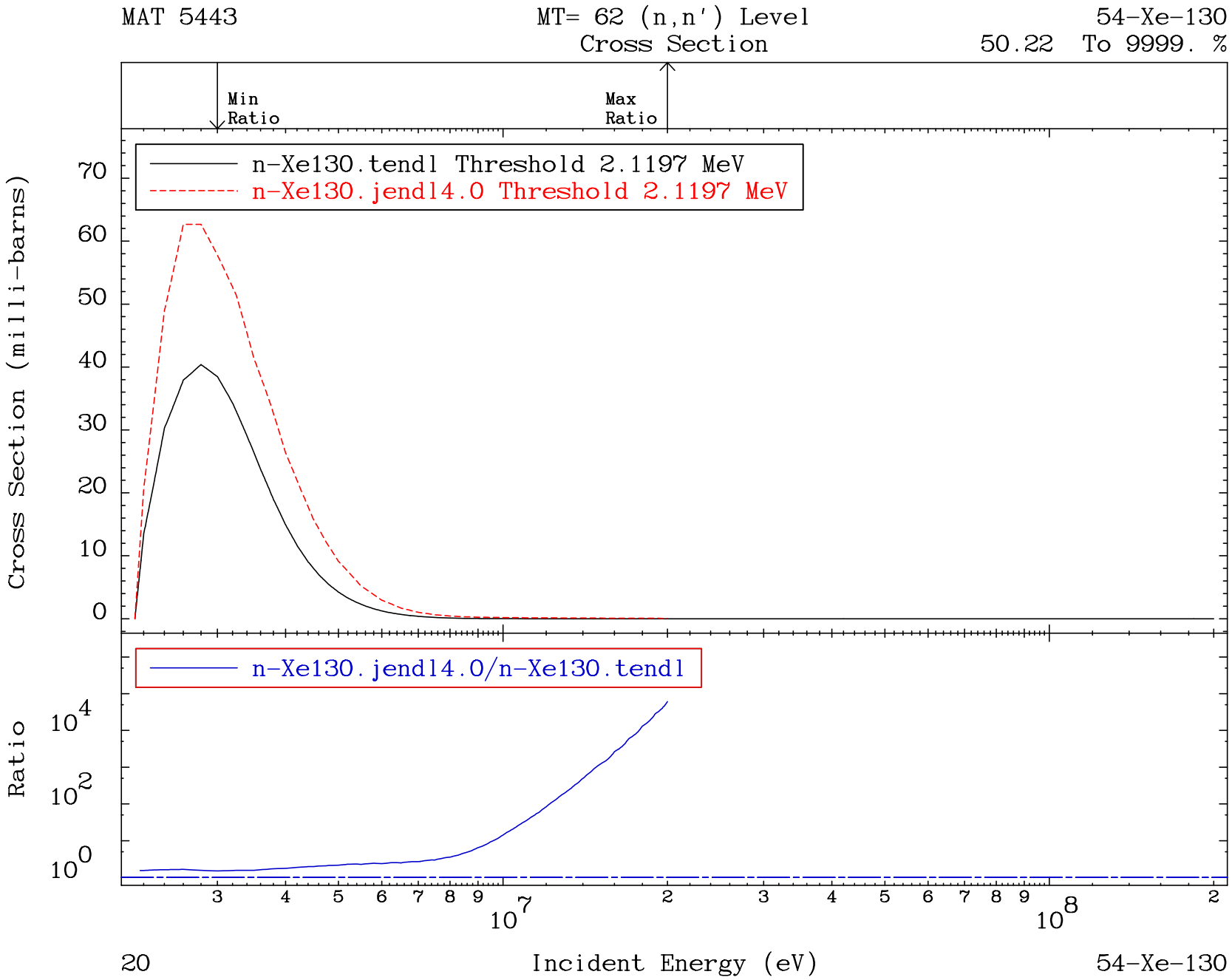

MAT 5443
MT= 57 (n,n') Level
Cross Section
54-Xe-130
-88.46 To 50.03 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 1.8222 MeV
n-Xe130.jendl4.0 Threshold 1.8222 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
2
10^0
6
4
2
10^{-1}
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
54-Xe-130

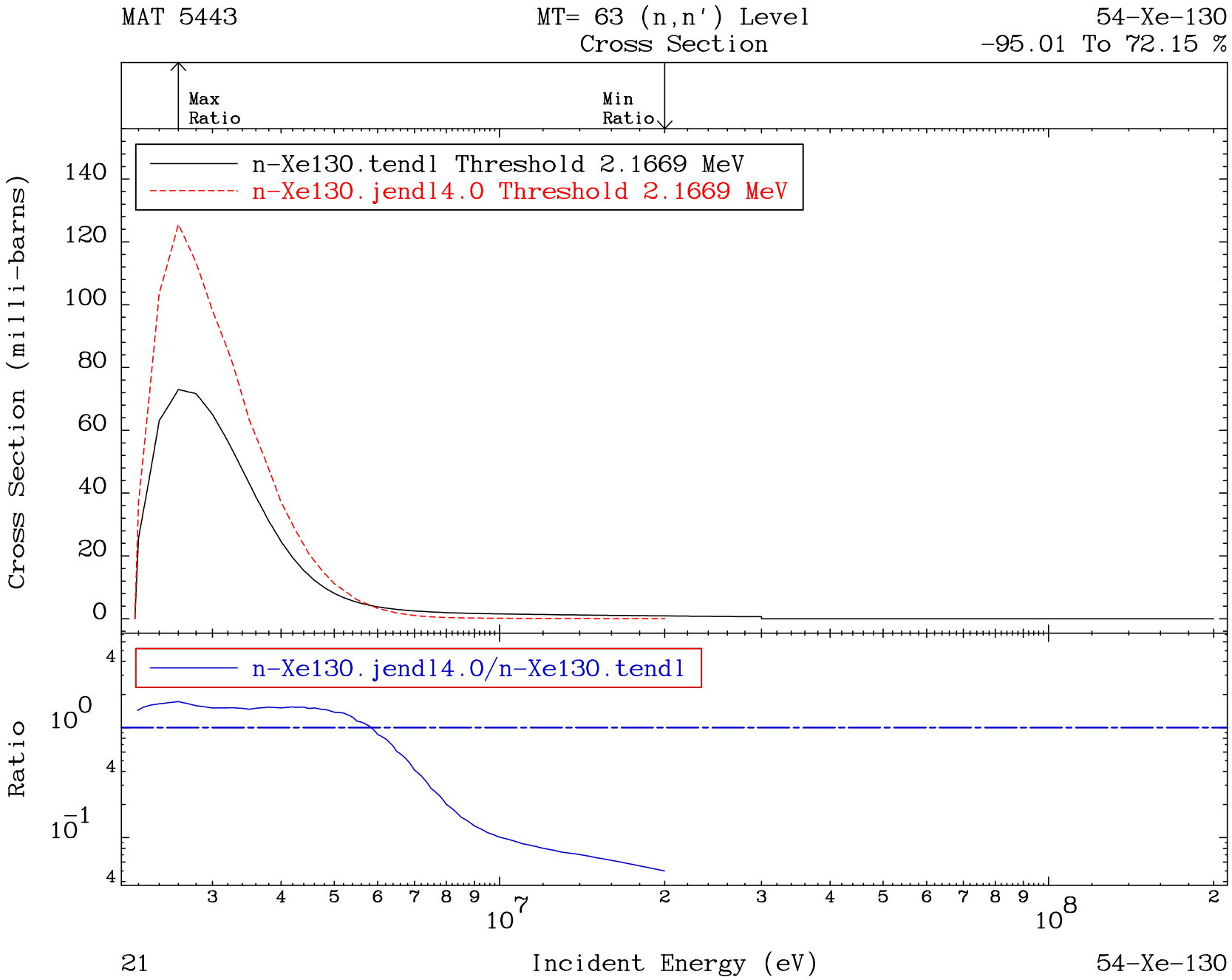

MAT 5443
MT= 58 (n,n') Level
Cross Section
54-Xe-130
-85.64 To 55.83 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 1.9592 MeV
n-Xe130.jendl4.0 Threshold 1.9592 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
2
6
4
2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
54-Xe-130

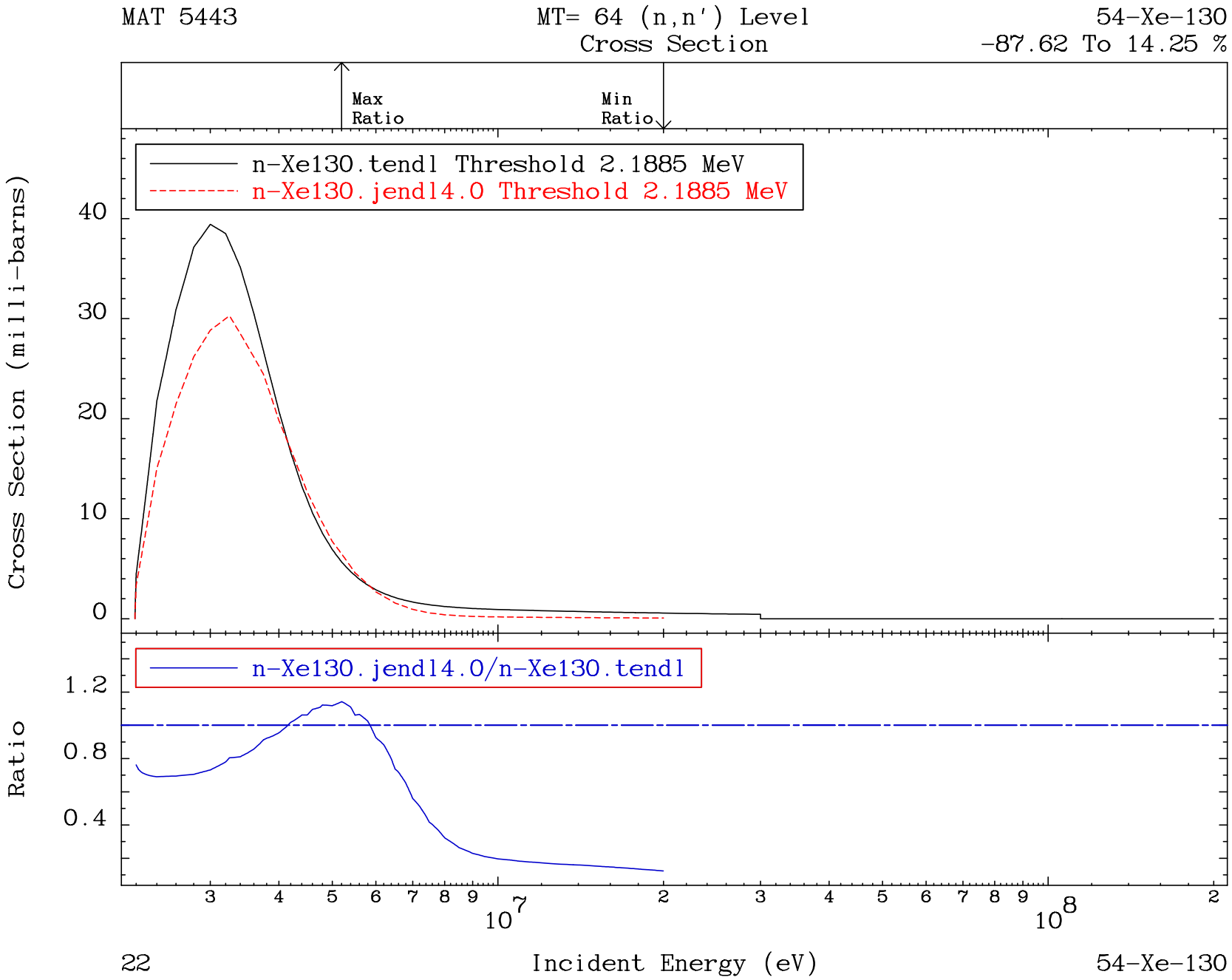

MAT 5443
MT= 59 (n,n') Level
Cross Section
54-Xe-130
51.56 To 9999. %
Min
Ratio
Max
Ratio
n-Xe130.tendl Threshold 2.0327 MeV
n-Xe130.jendl4.0 Threshold 2.0327 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
54-Xe-130

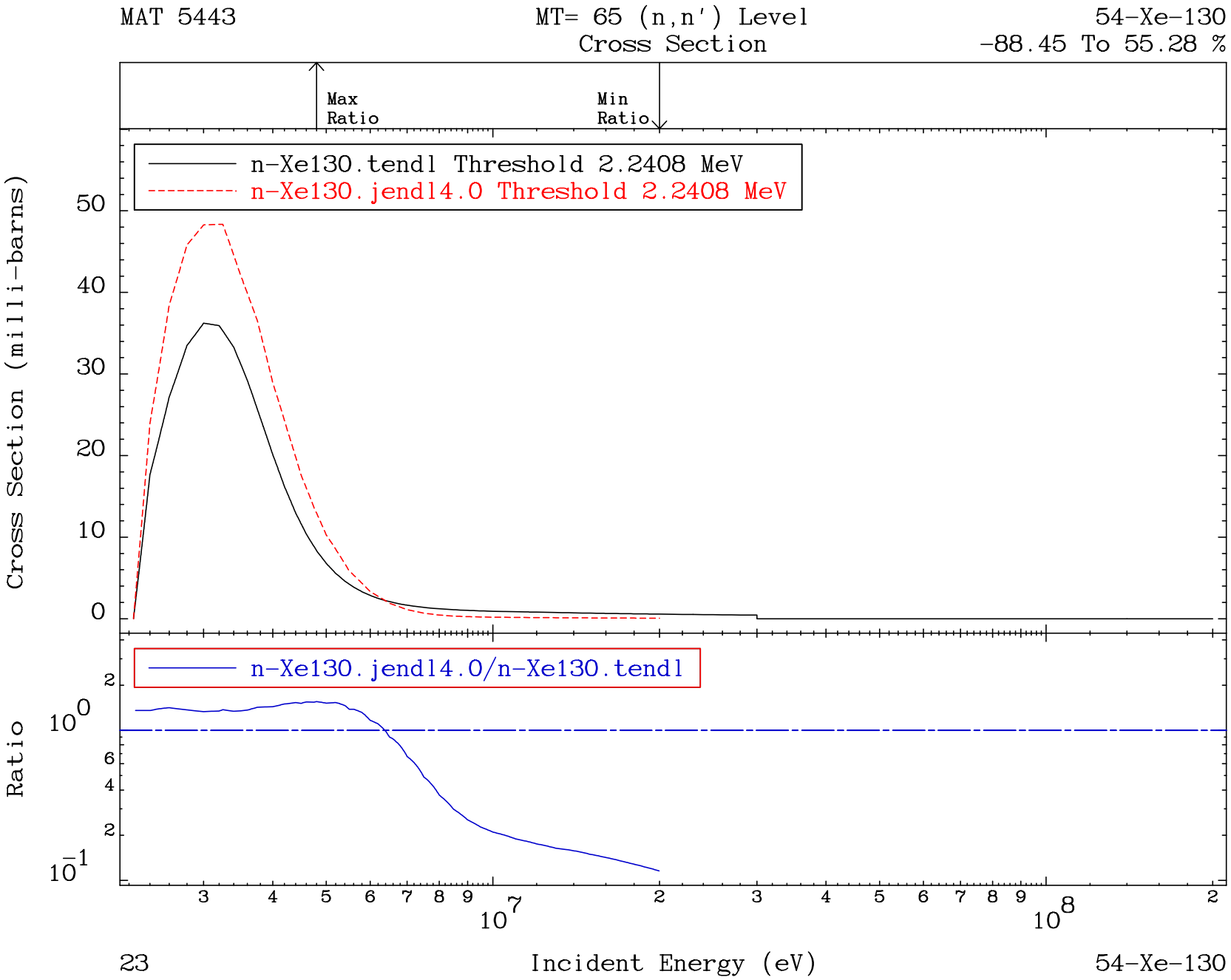

MAT 5443
MT= 60 (n,n') Level
Cross Section
54-Xe-130
-85.82 To 95.35 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.0756 MeV
n-Xe130.jendl4.0 Threshold 2.0756 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
4
2
6
4
2
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
54-Xe-130

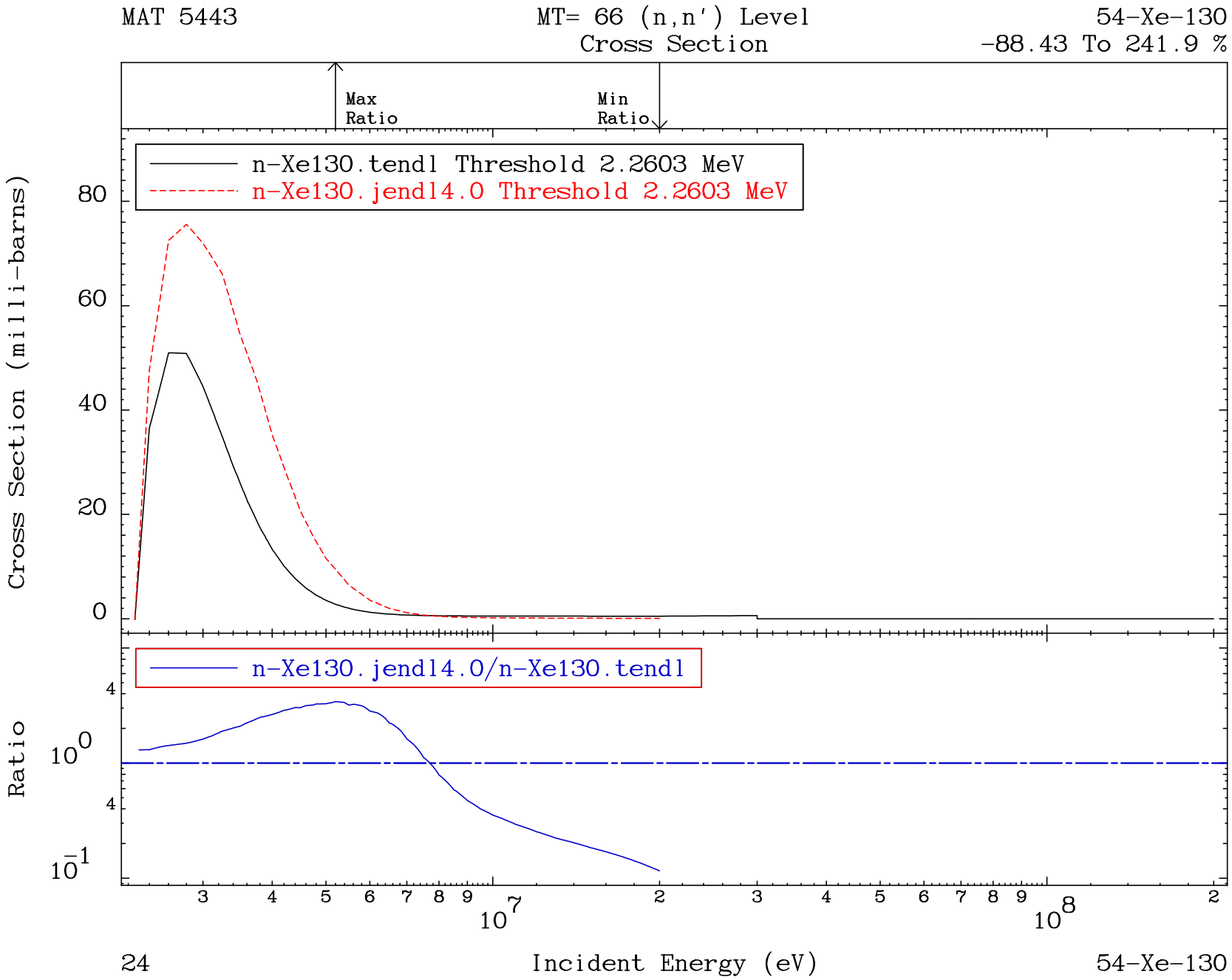

MAT 5443
MT= 61 (n,n') Level
Cross Section
54-Xe-130
-88.45 To 53.41 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.0981 MeV
n-Xe130.jendl4.0 Threshold 2.0981 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^{0}
10^{-1}
2
6
4
2
2 3 4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
19
Incident Energy (eV)
54-Xe-130

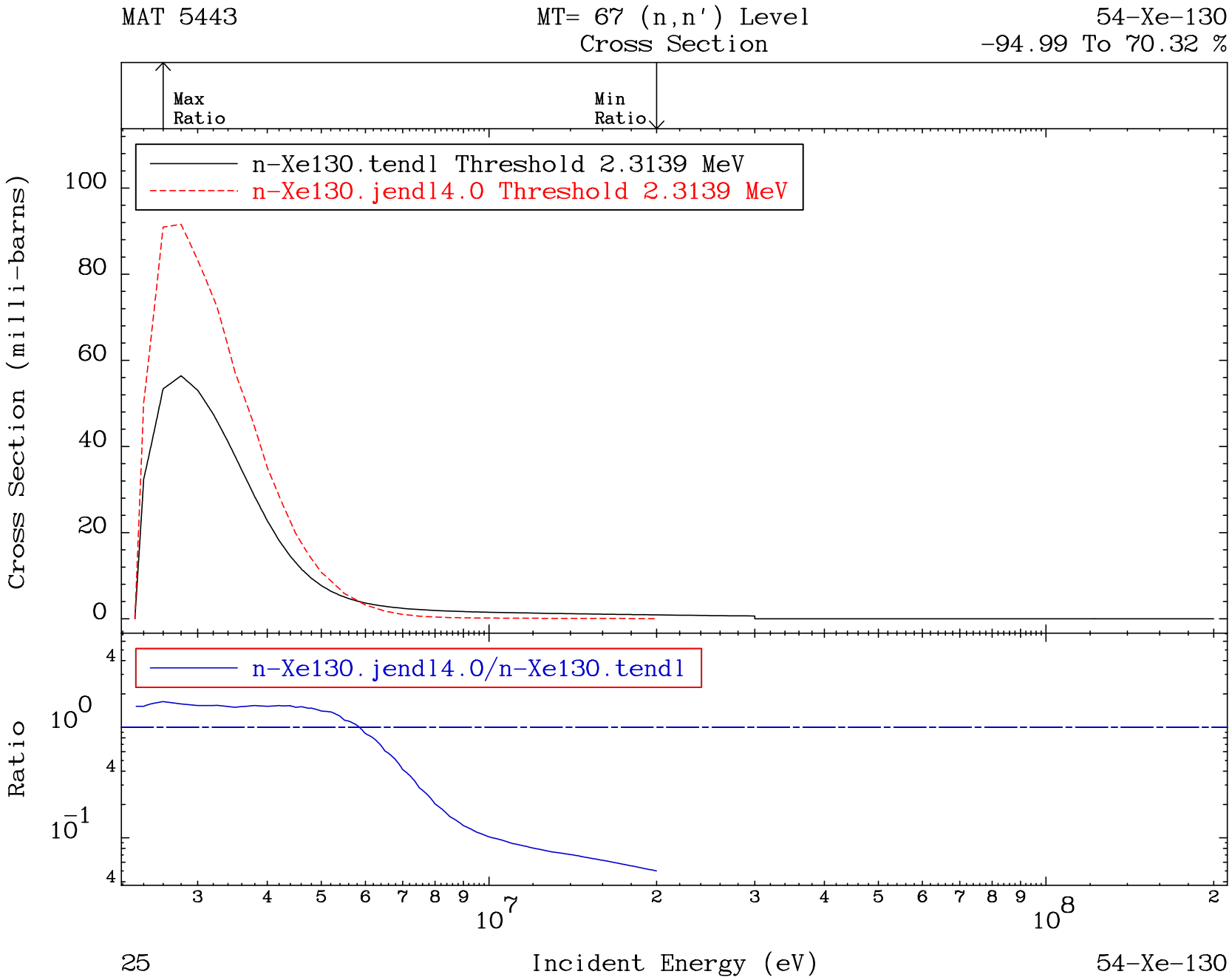

MAT 5443
MT= 62 (n,n') Level
Cross Section
54-Xe-130
50.22 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.1197 MeV
n-Xe130.jendl4.0 Threshold 2.1197 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
20
Incident Energy (eV)
54-Xe-130

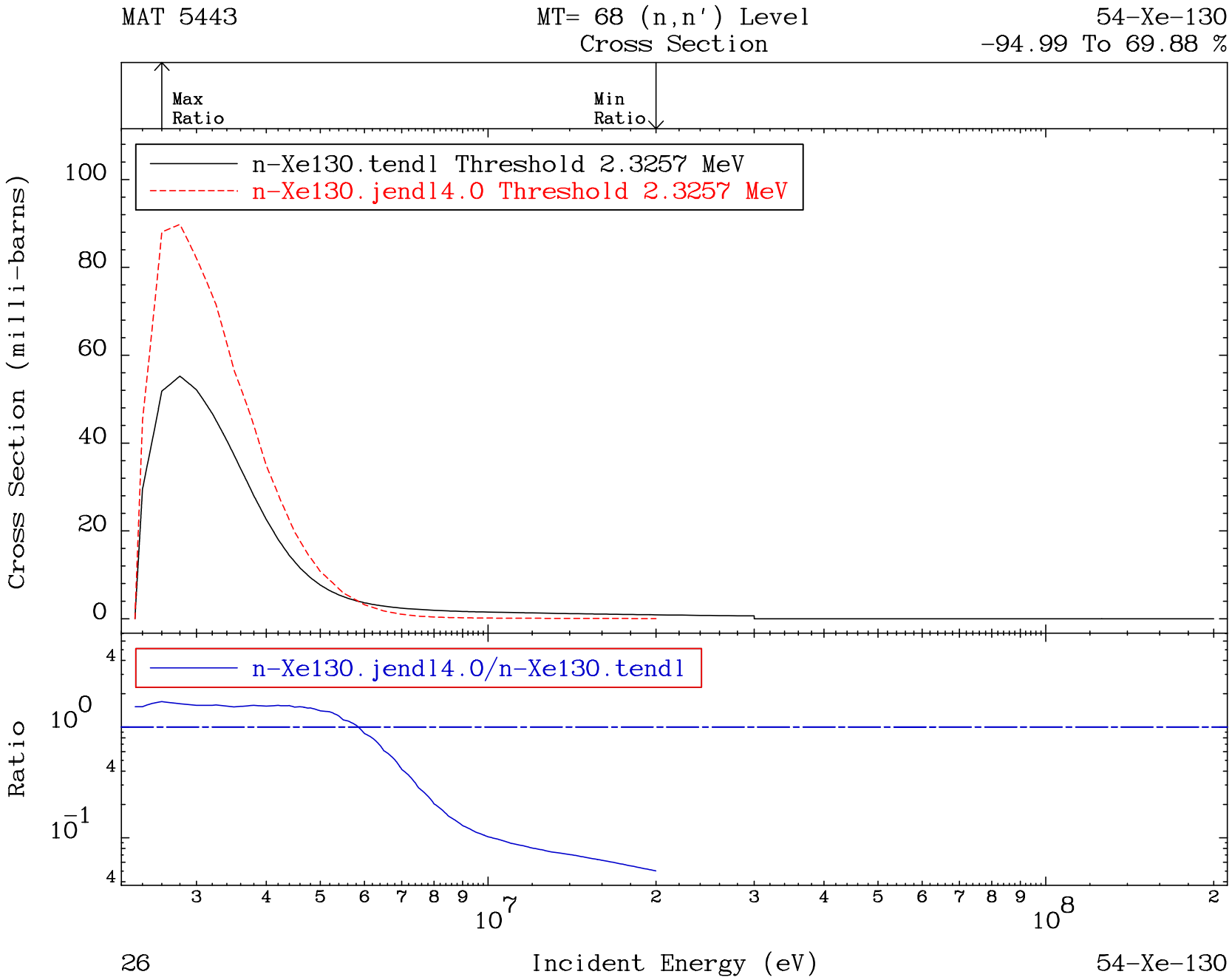

MAT 5443
MT= 63 (n,n') Level
Cross Section
54-Xe-130
-95.01 To 72.15 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 2.1669 MeV
n-Xe130.jendl4.0 Threshold 2.1669 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-1
4
3
5
6
7
8
9
10^7
2
10^8
21
Incident Energy (eV)
54-Xe-130

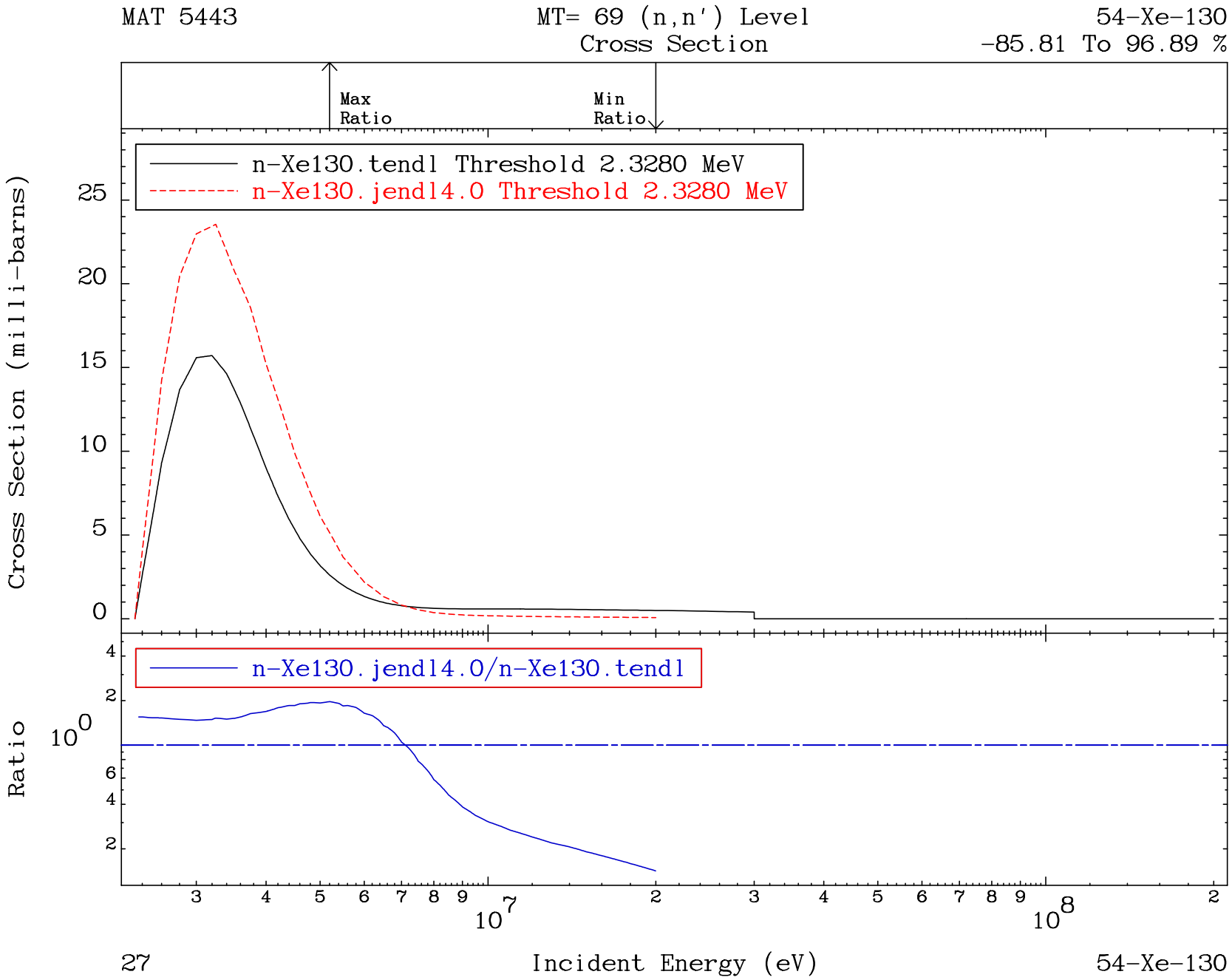

MAT 5443
MT= 64 (n,n') Level
Cross Section
54-Xe-130
-87.62 To 14.25 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 2.1885 MeV
n-Xe130.jendl4.0 Threshold 2.1885 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
54-Xe-130

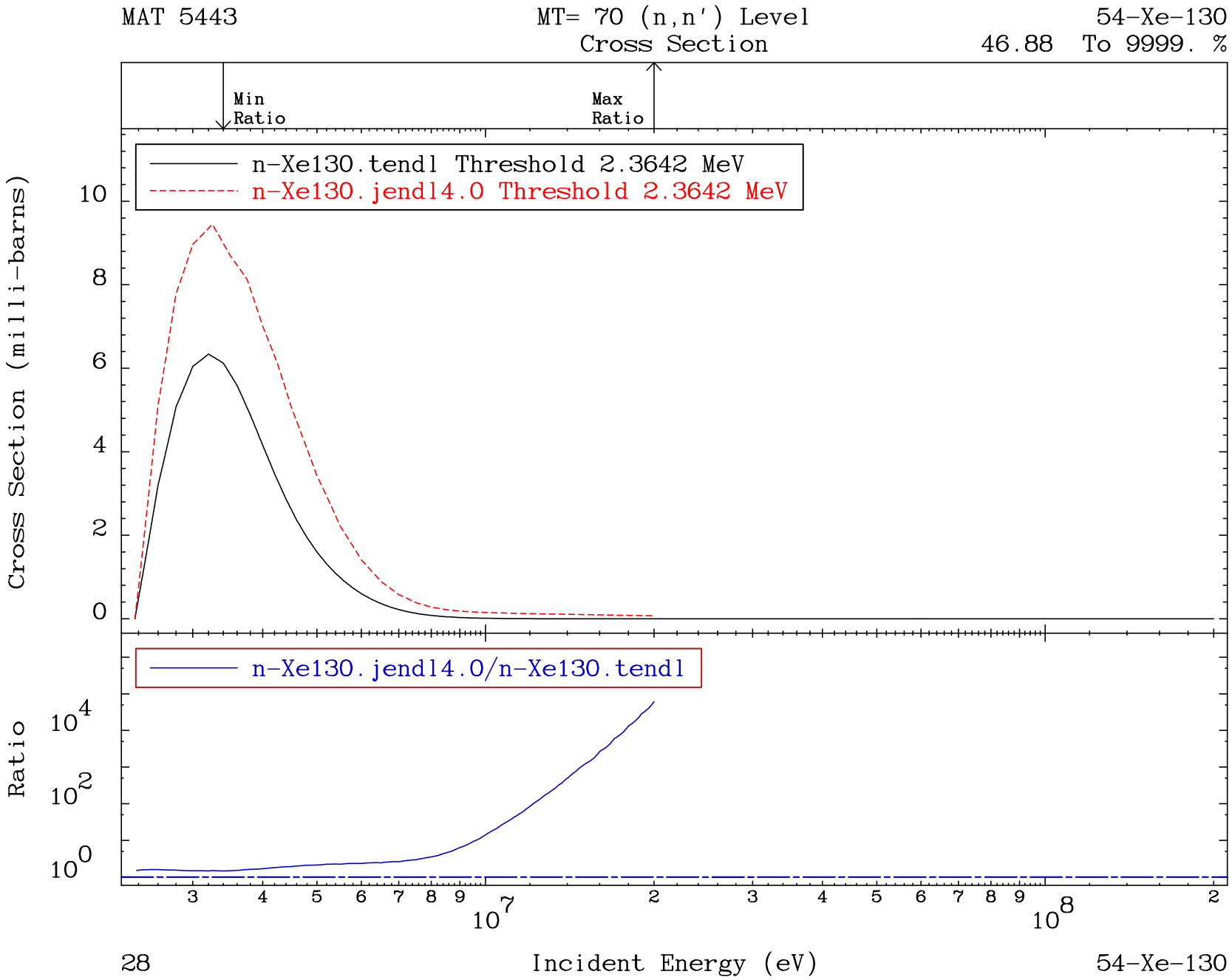

MAT 5443
MT= 65 (n,n') Level
Cross Section
54-Xe-130
-88.45 To 55.28 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.2408 MeV
n-Xe130.jendl4.0 Threshold 2.2408 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
2
10^0
6
4
2
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
54-Xe-130

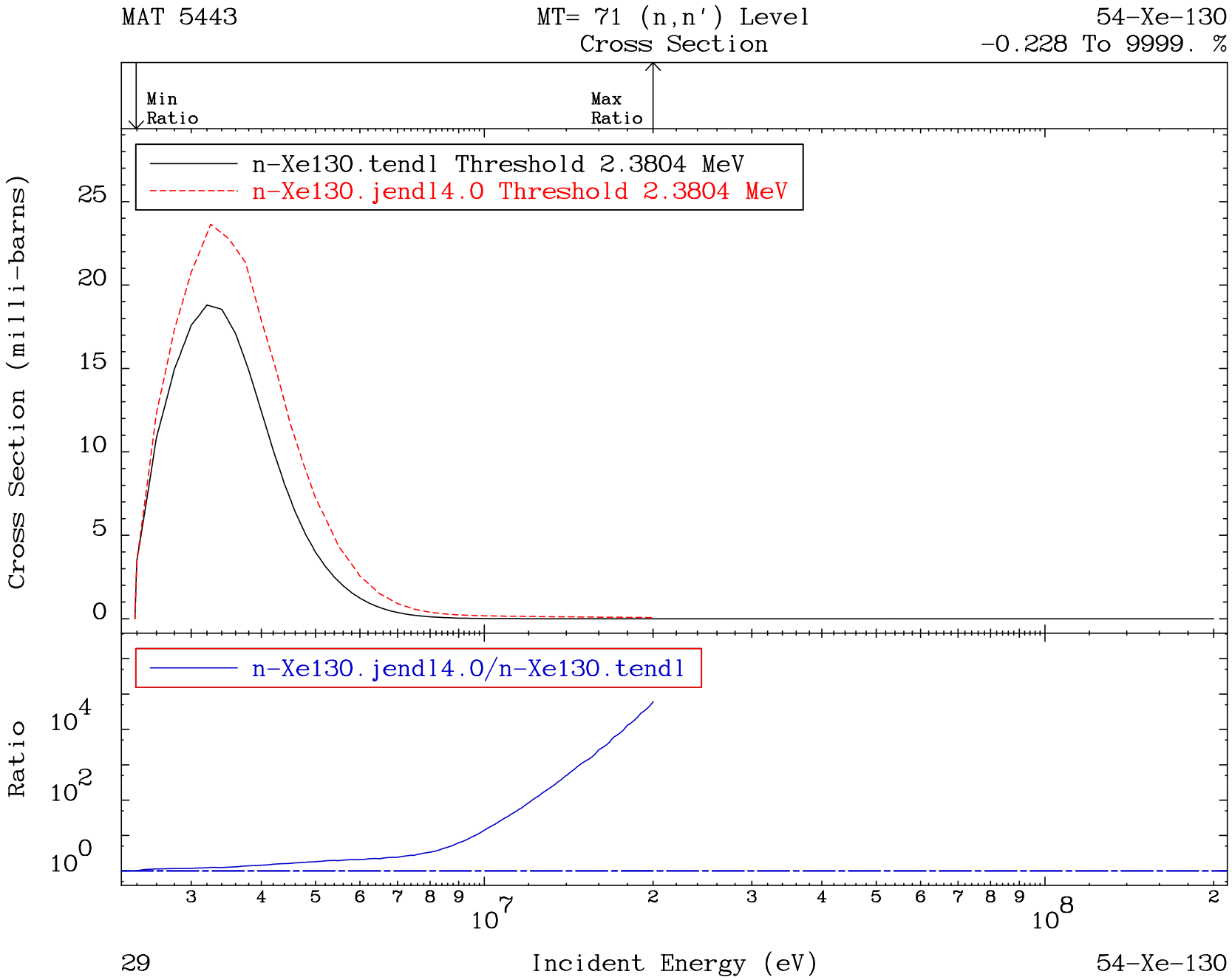

MAT 5443
MT= 66 (n,n') Level
Cross Section
54-Xe-130
-88.43 To 241.9 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.2603 MeV
n-Xe130.jendl4.0 Threshold 2.2603 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
4
10^{0}
4
10^{-1}
3 4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
24
Incident Energy (eV)
54-Xe-130

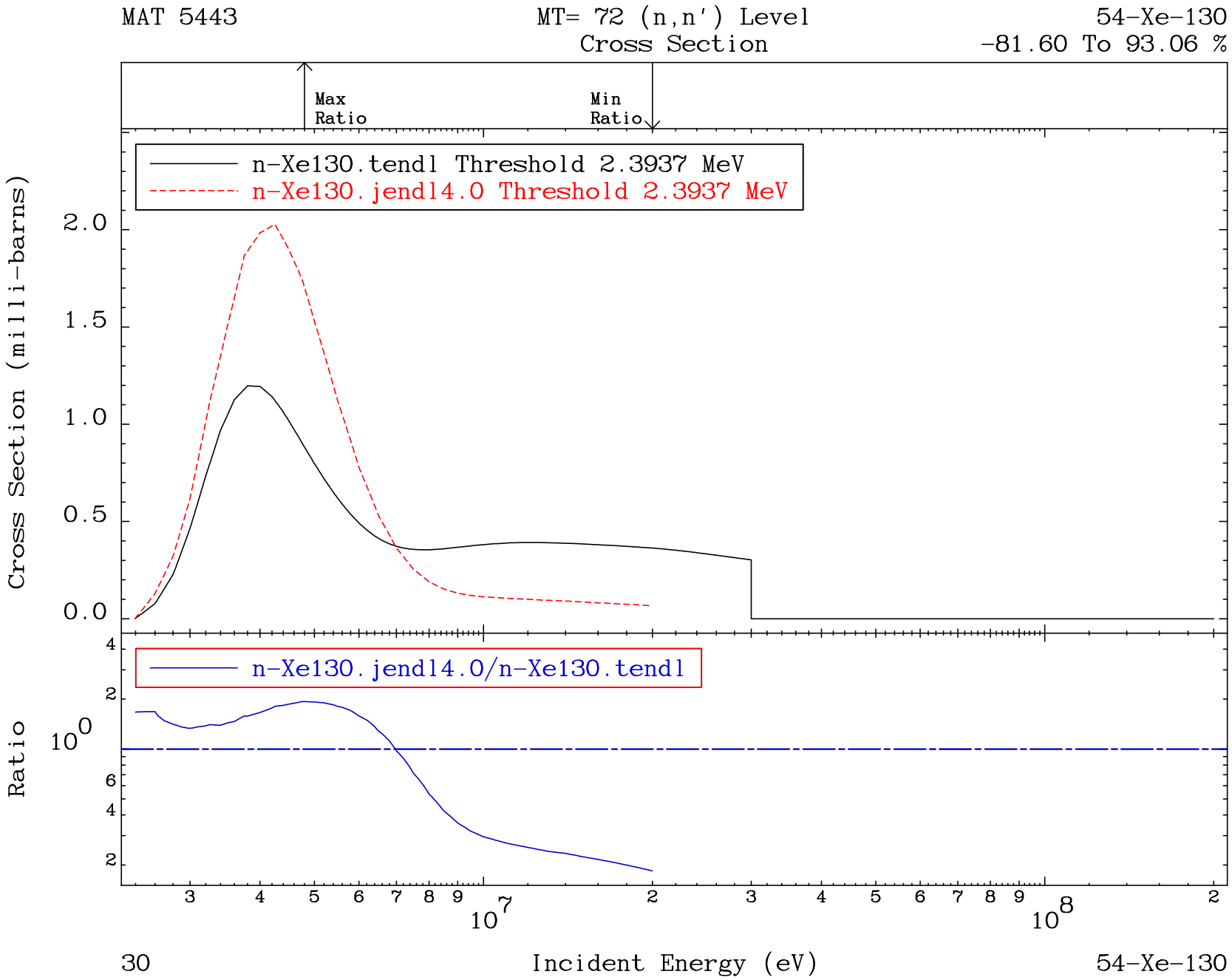

MAT 5443
MT= 67 (n,n') Level
Cross Section
54-Xe-130
-94.99 To 70.32 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.3139 MeV
n-Xe130.jendl4.0 Threshold 2.3139 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-1
4
3
5
6
7
8
9
10^7
2
10^8
25
Incident Energy (eV)
54-Xe-130

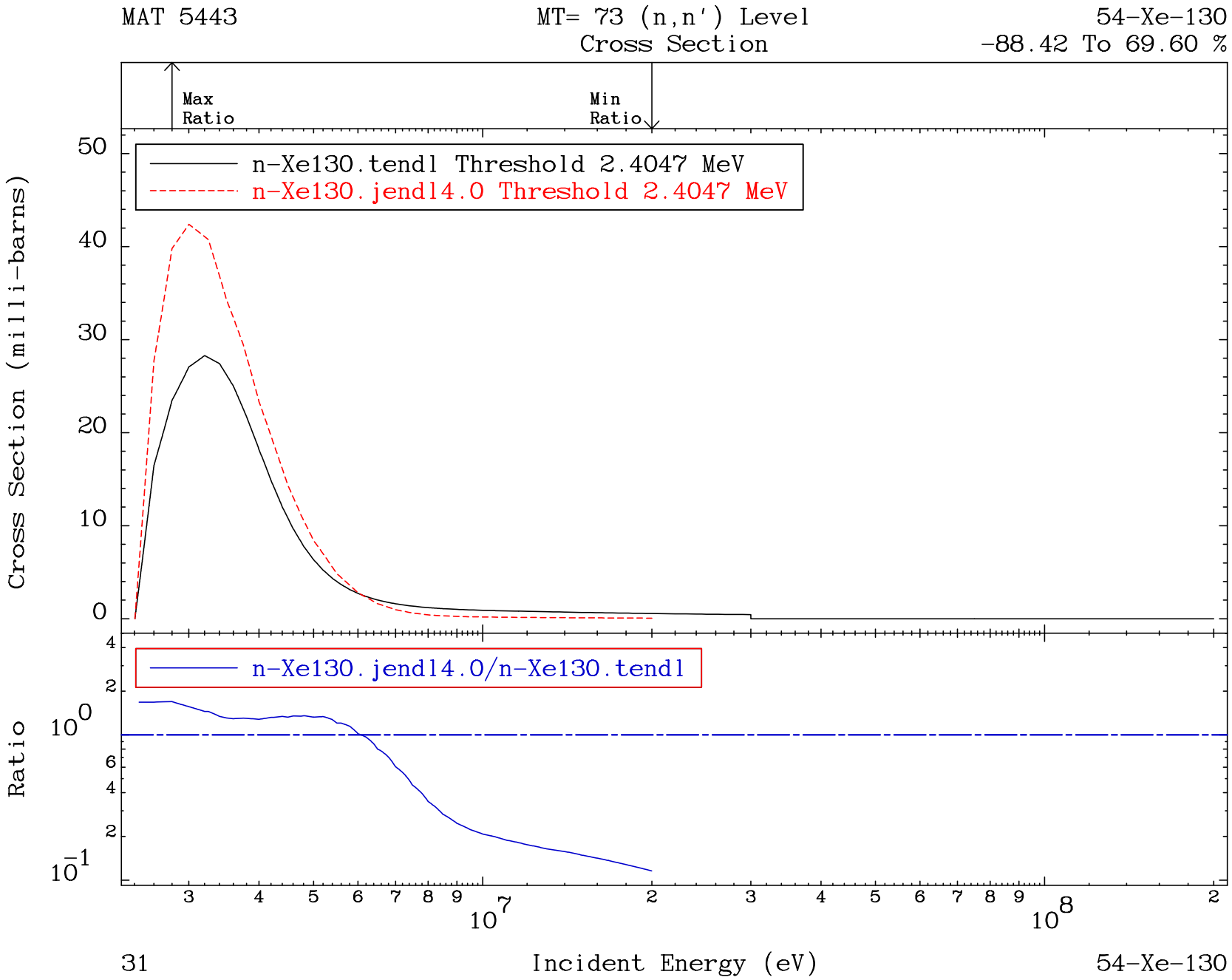

MAT 5443
MT= 68 (n,n') Level
Cross Section
54-Xe-130
-94.99 To 69.88 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.3257 MeV
n-Xe130.jendl4.0 Threshold 2.3257 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-1
4
3
5
6
7
8
9
10^7
2
10^8
26
Incident Energy (eV)
54-Xe-130

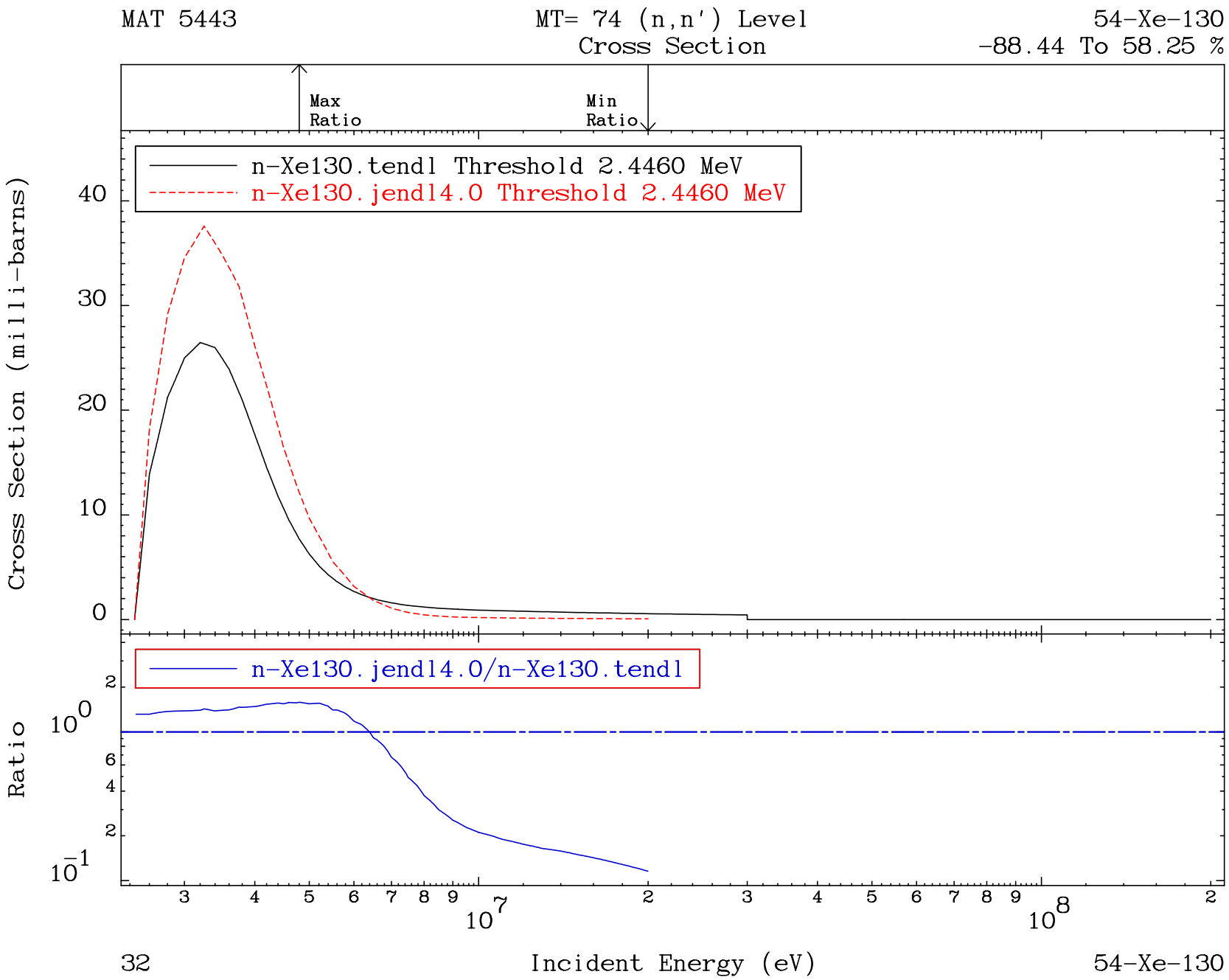

MAT 5443
MT= 69 (n,n') Level
Cross Section
54-Xe-130
-85.81 To 96.89 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.3280 MeV
n-Xe130.jendl4.0 Threshold 2.3280 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
4
2
6
4
2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
54-Xe-130

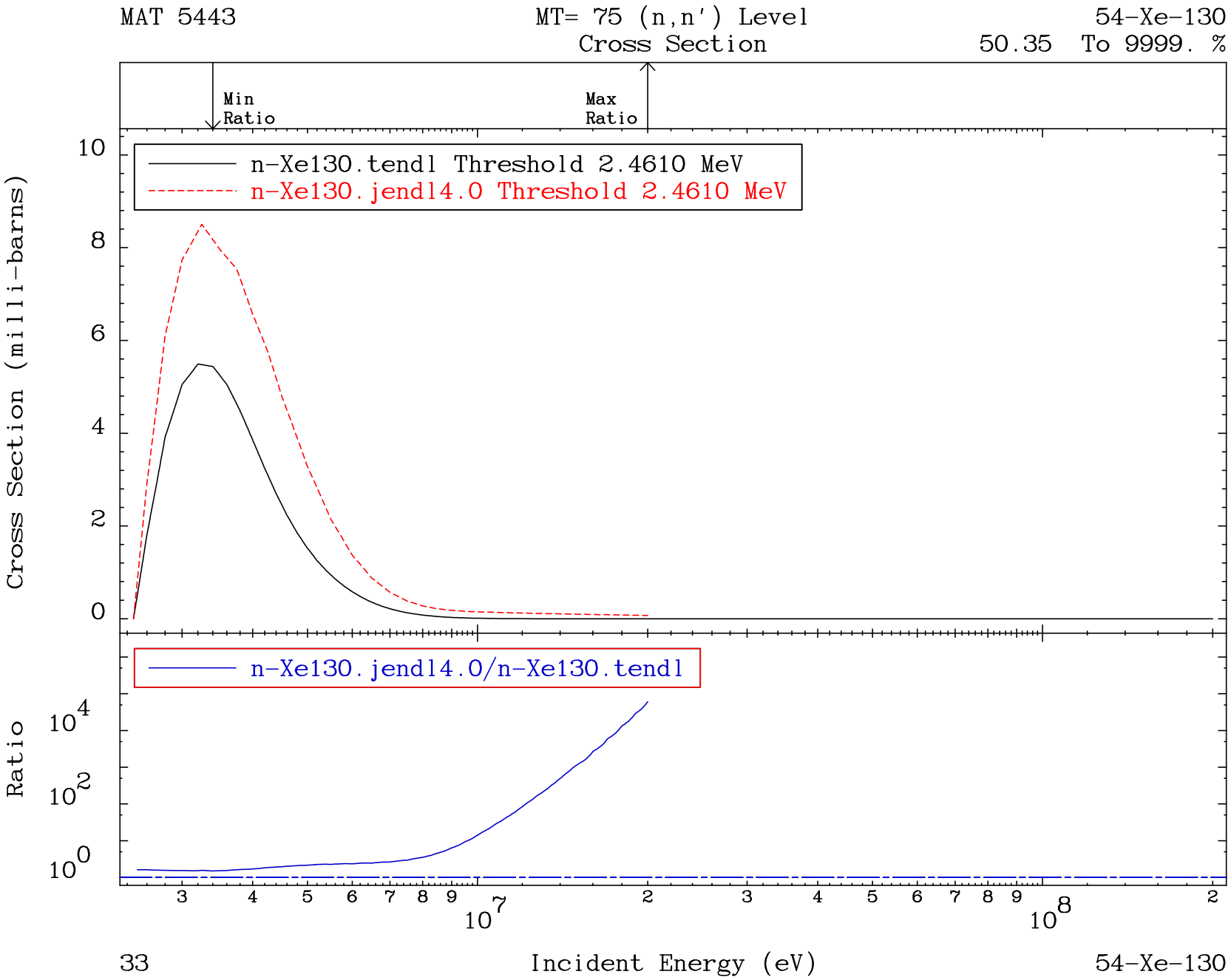

MAT 5443
MT= 70 (n,n') Level
Cross Section
54-Xe-130
46.88 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.3642 MeV
n-Xe130.jendl4.0 Threshold 2.3642 MeV
Cross Section (milli-barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
28
54-Xe-130

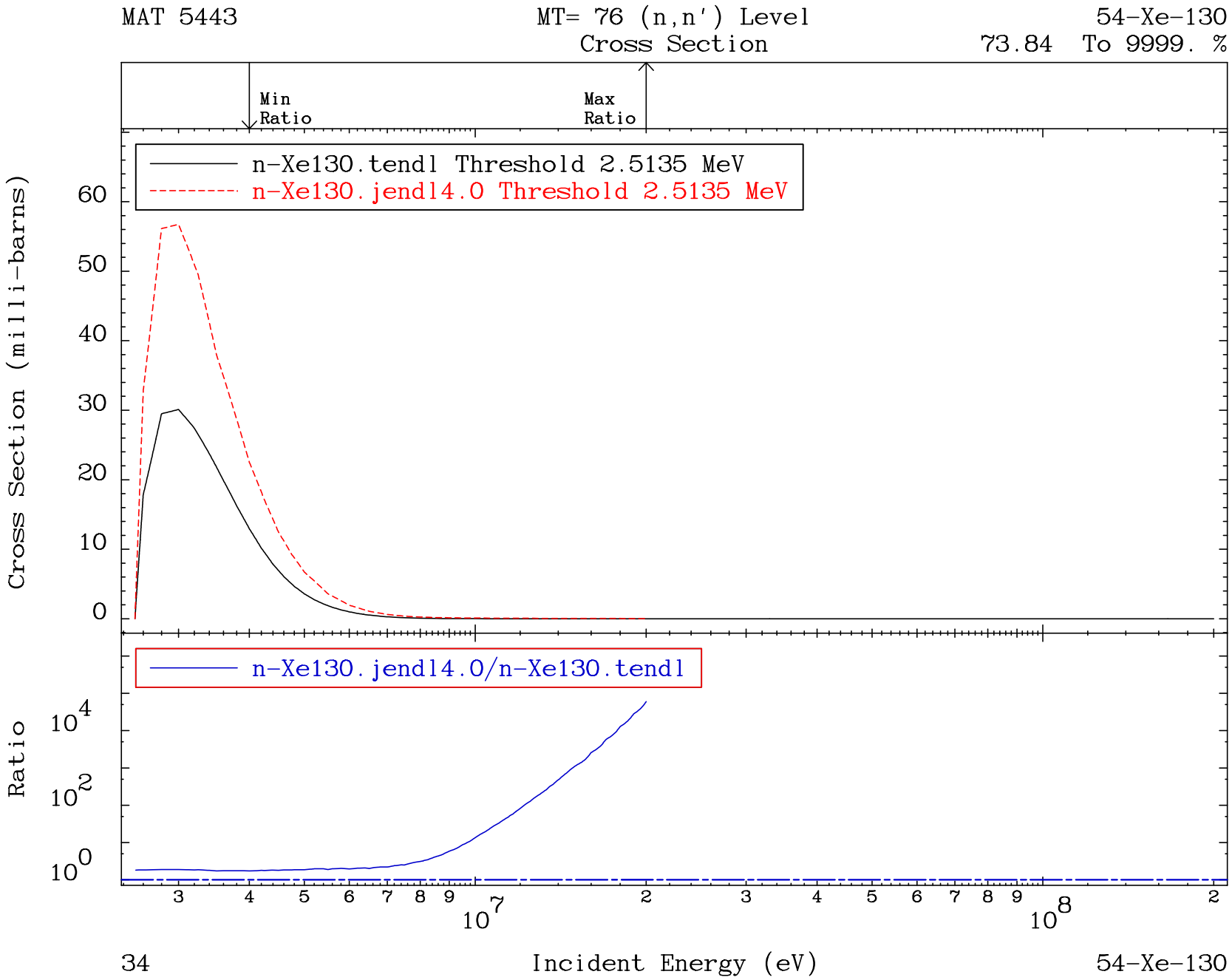

MAT 5443
MT= 71 (n,n') Level
Cross Section
54-Xe-130
-0.228 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.3804 MeV
n-Xe130.jendl4.0 Threshold 2.3804 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
54-Xe-130

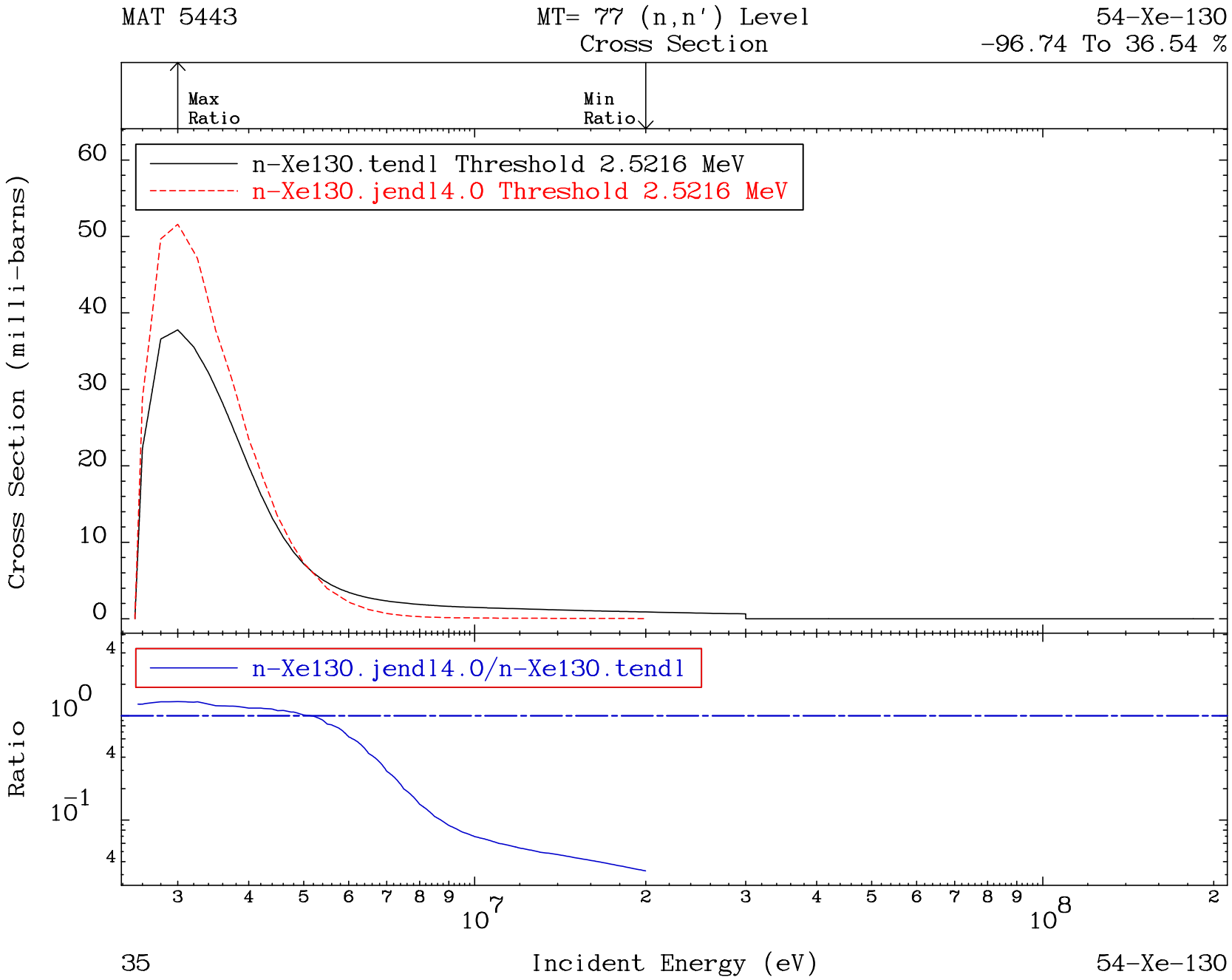

MAT 5443
MT= 72 (n,n') Level
Cross Section
54-Xe-130
-81.60 To 93.06 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 2.3937 MeV
n-Xe130.jendl4.0 Threshold 2.3937 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
4
2
10^0
6
4
2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
54-Xe-130

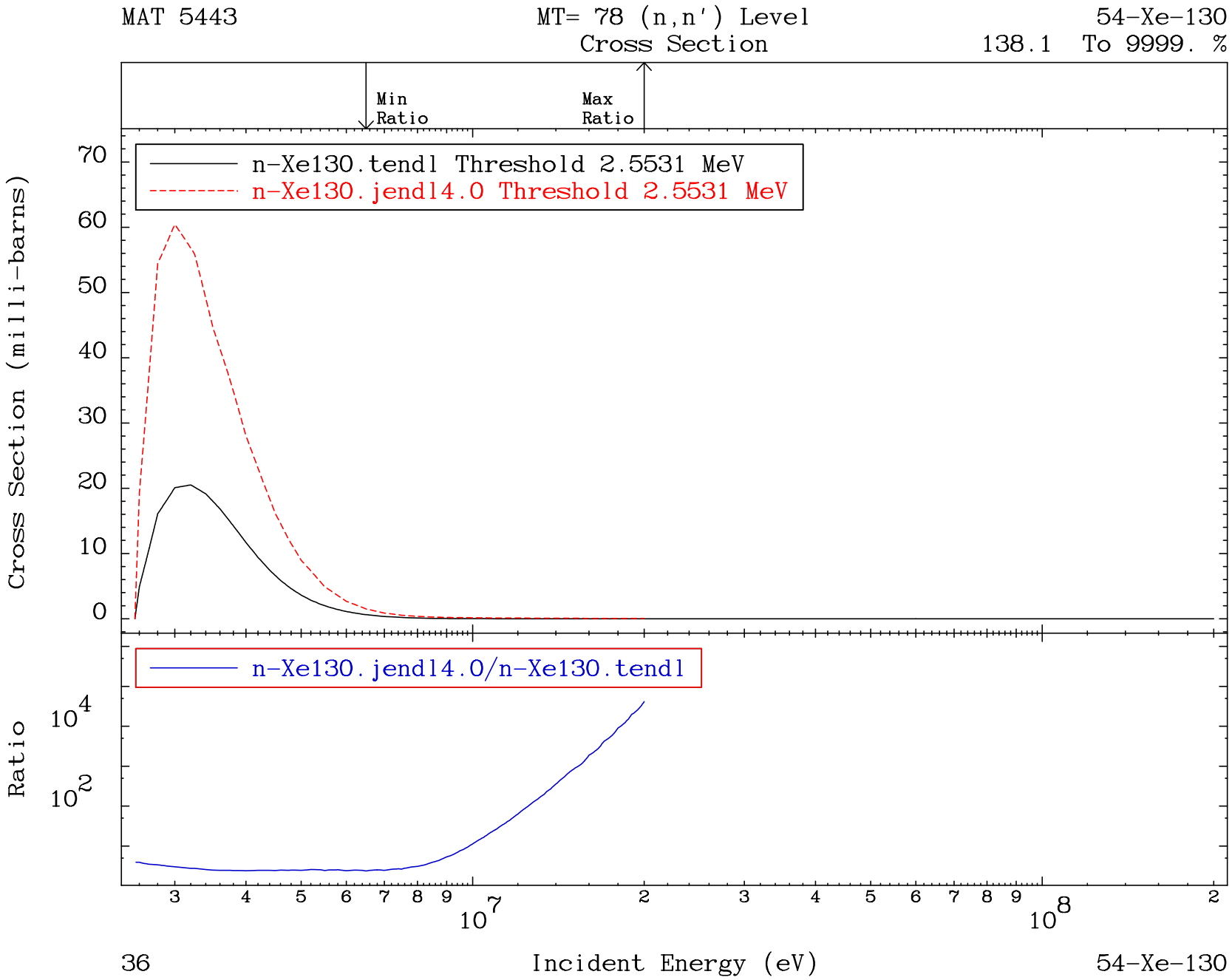

MAT 5443
MT= 73 (n,n') Level
Cross Section
54-Xe-130
-88.42 To 69.60 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.4047 MeV
n-Xe130.jendl4.0 Threshold 2.4047 MeV
Cross Section (milli-barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
31
54-Xe-130

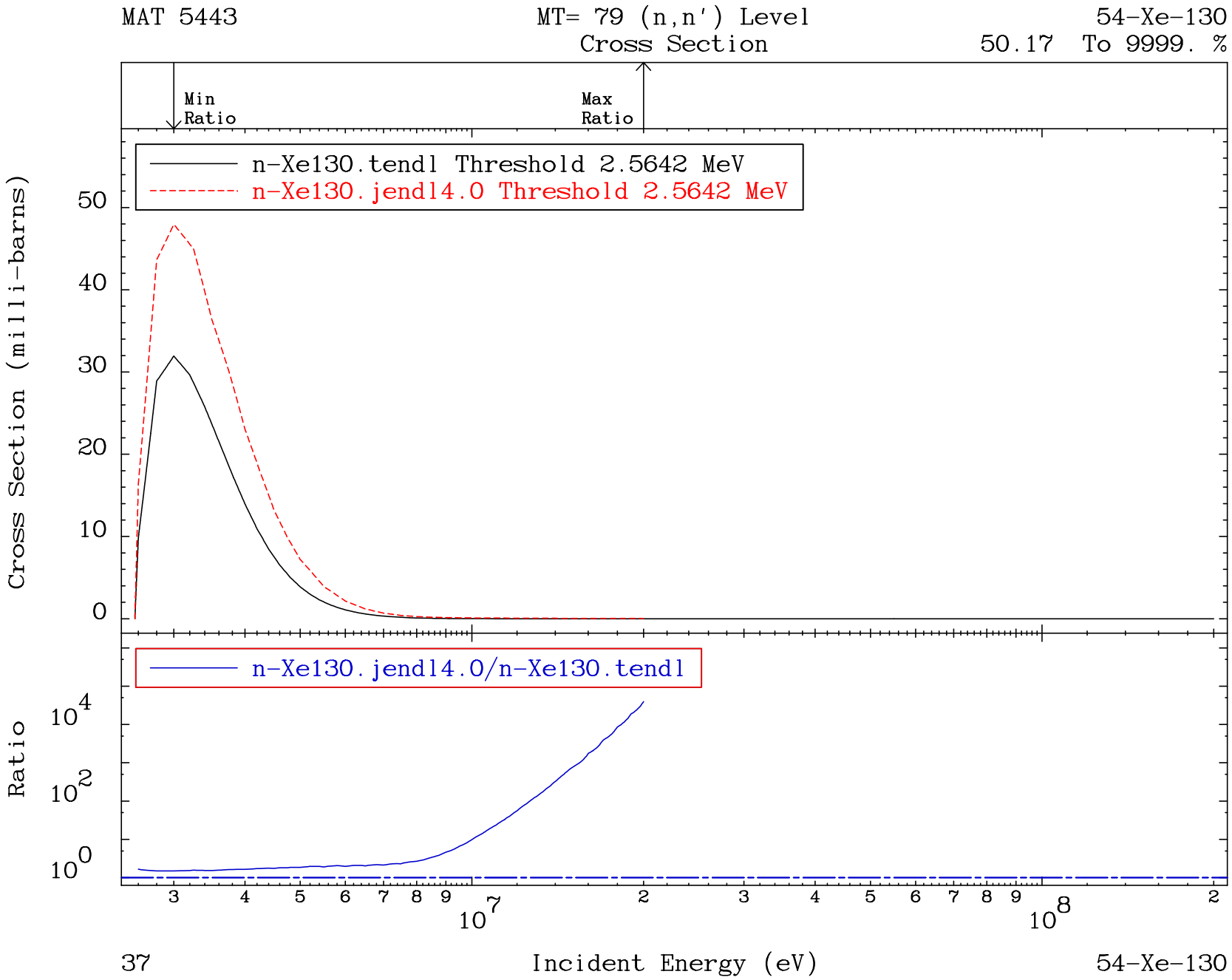

MAT 5443
MT= 74 (n,n') Level
Cross Section
54-Xe-130
-88.44 To 58.25 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.4460 MeV
n-Xe130.jendl4.0 Threshold 2.4460 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
2
10^0
6
4
2
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
54-Xe-130

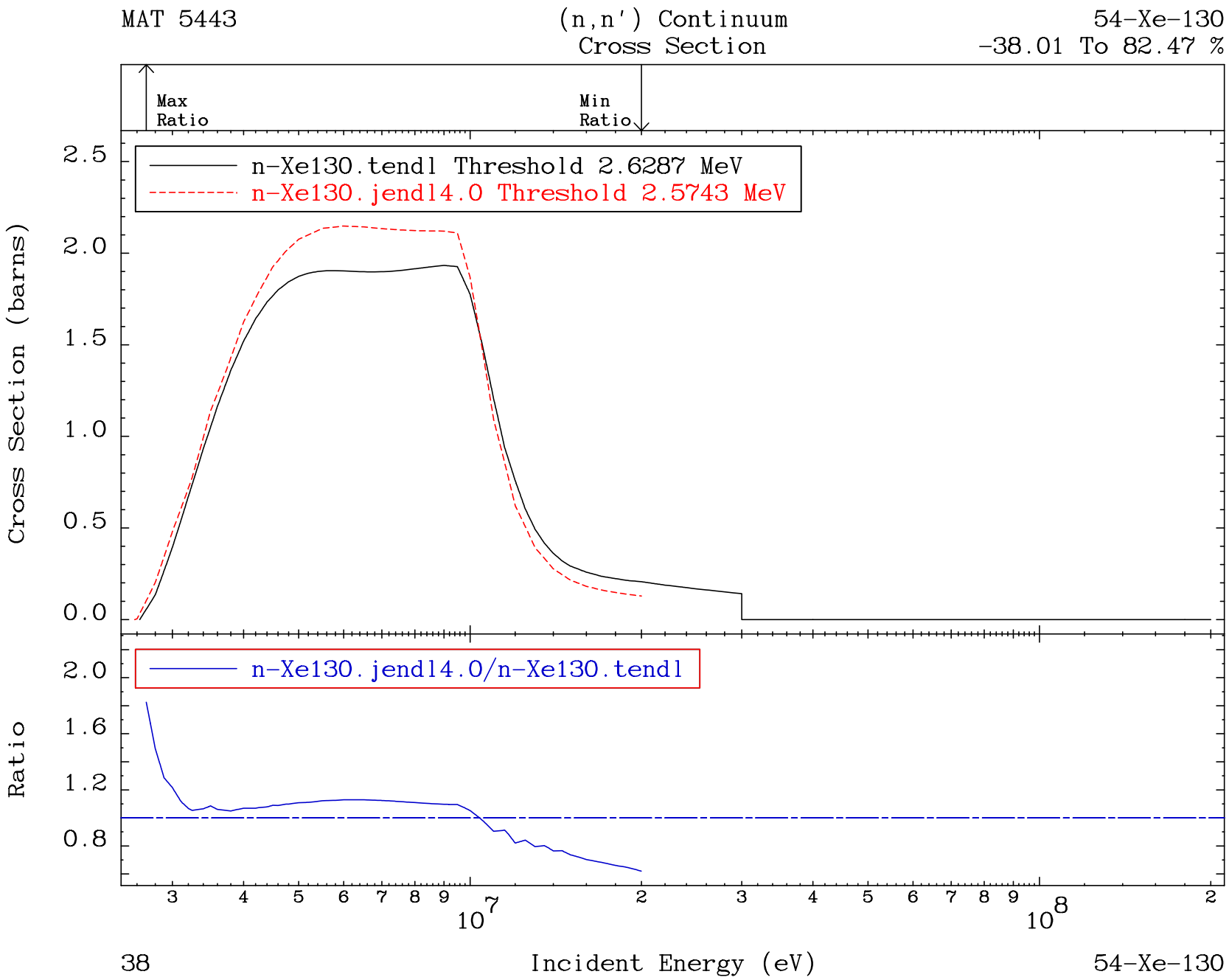

MAT 5443
MT= 75 (n,n') Level
Cross Section
54-Xe-130
50.35 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.4610 MeV
n-Xe130.jendl4.0 Threshold 2.4610 MeV
Cross Section (milli-barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
33
54-Xe-130

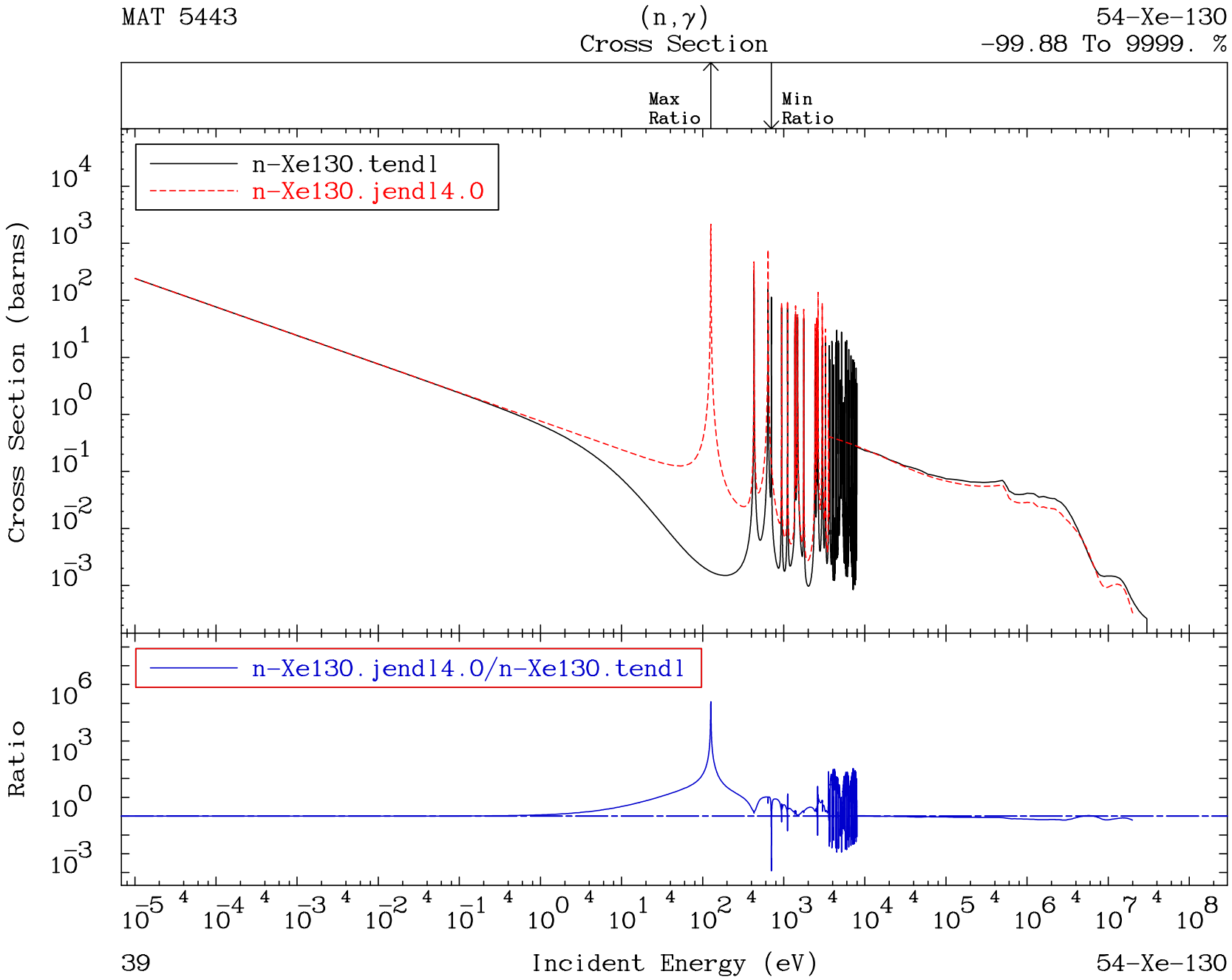

MAT 5443
MT= 76 (n,n') Level
Cross Section
54-Xe-130
73.84 To 9999. %
Min
Ratio
Max
Ratio
n-Xe130.tendl Threshold 2.5135 MeV
n-Xe130.jendl4.0 Threshold 2.5135 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
54-Xe-130

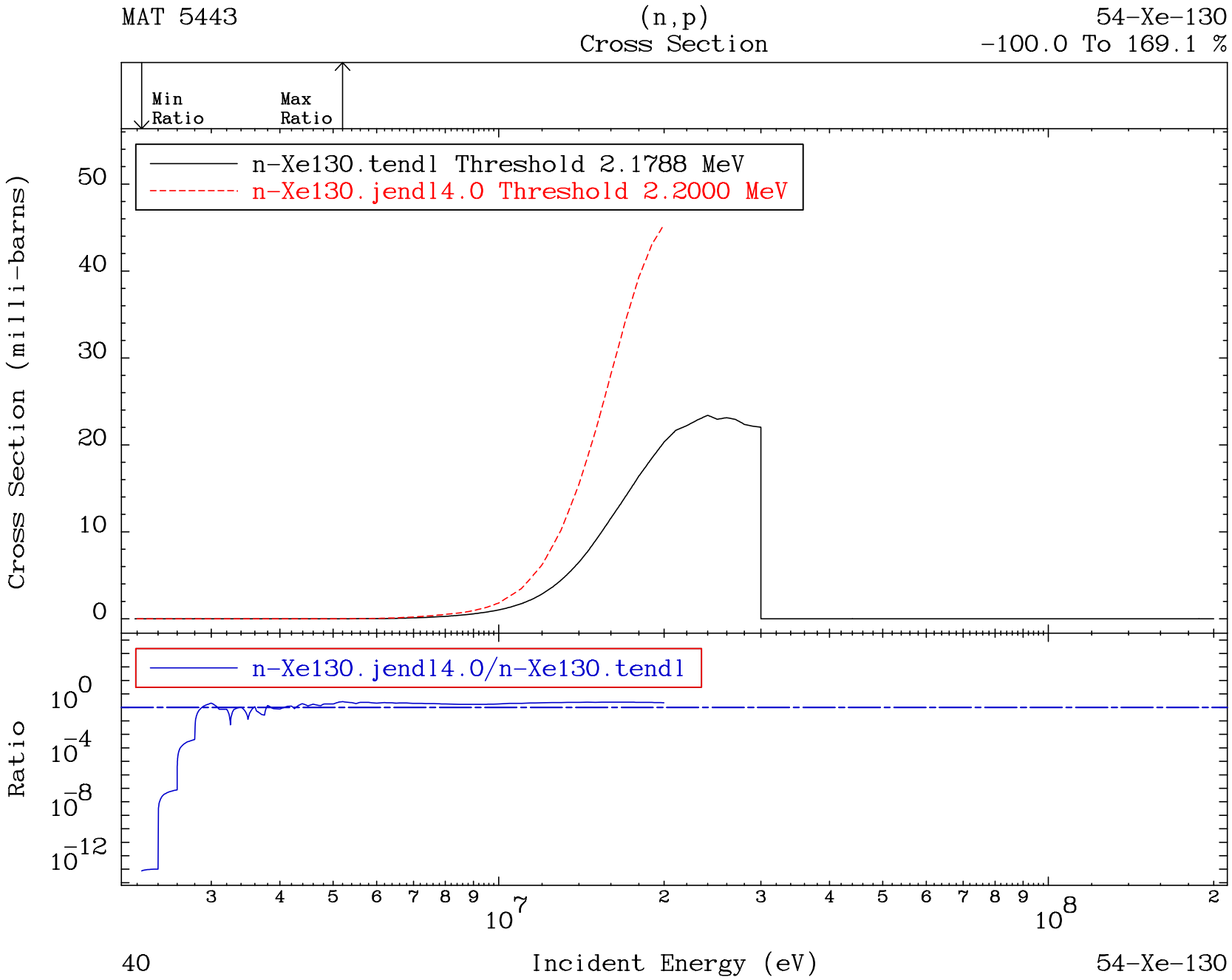

MAT 5443
MT= 77 (n,n') Level
Cross Section
54-Xe-130
-96.74 To 36.54 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 2.5216 MeV
n-Xe130.jendl4.0 Threshold 2.5216 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
54-Xe-130

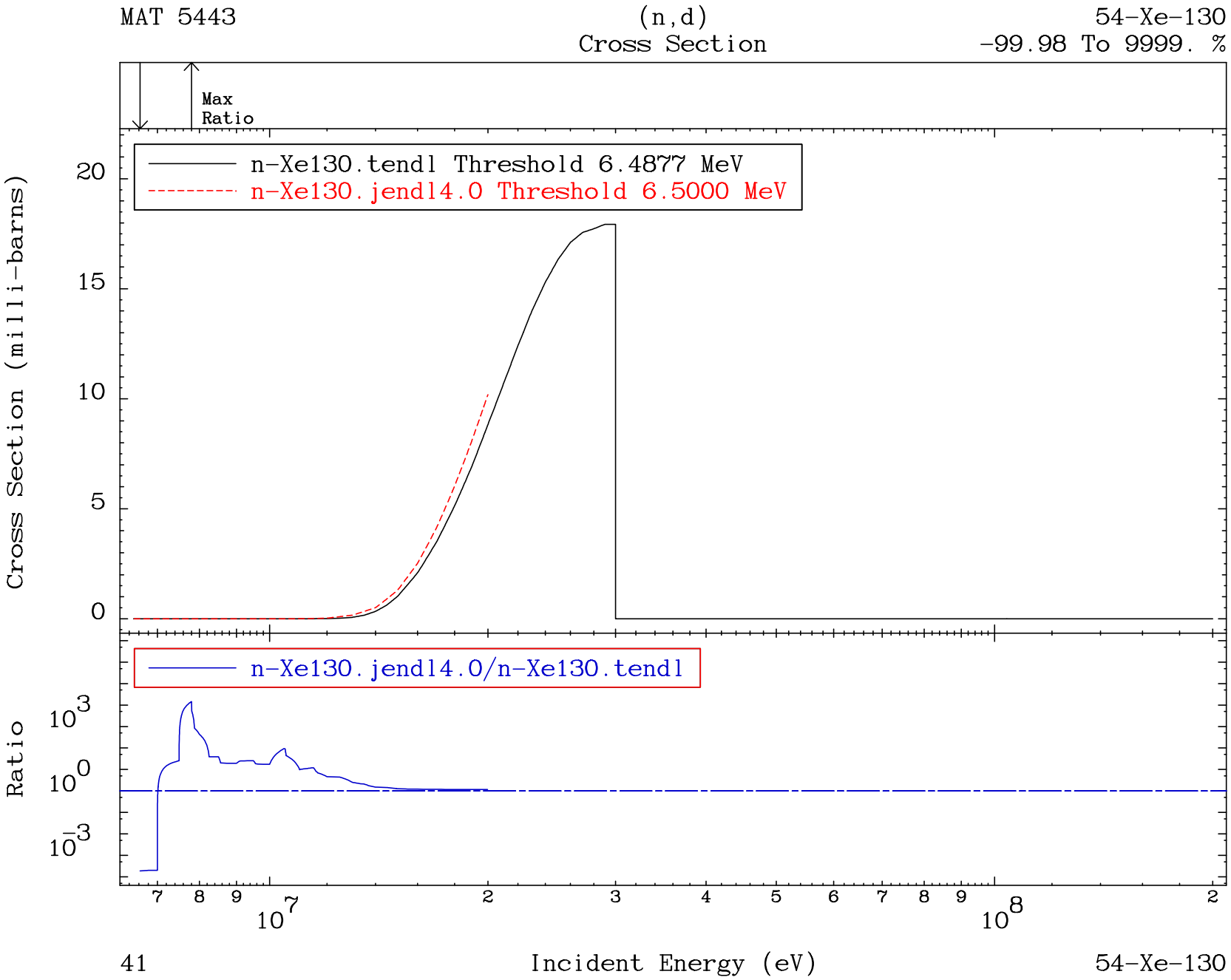

MAT 5443
MT= 78 (n,n') Level
Cross Section
54-Xe-130
138.1 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.5531 MeV
n-Xe130.jendl4.0 Threshold 2.5531 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
54-Xe-130

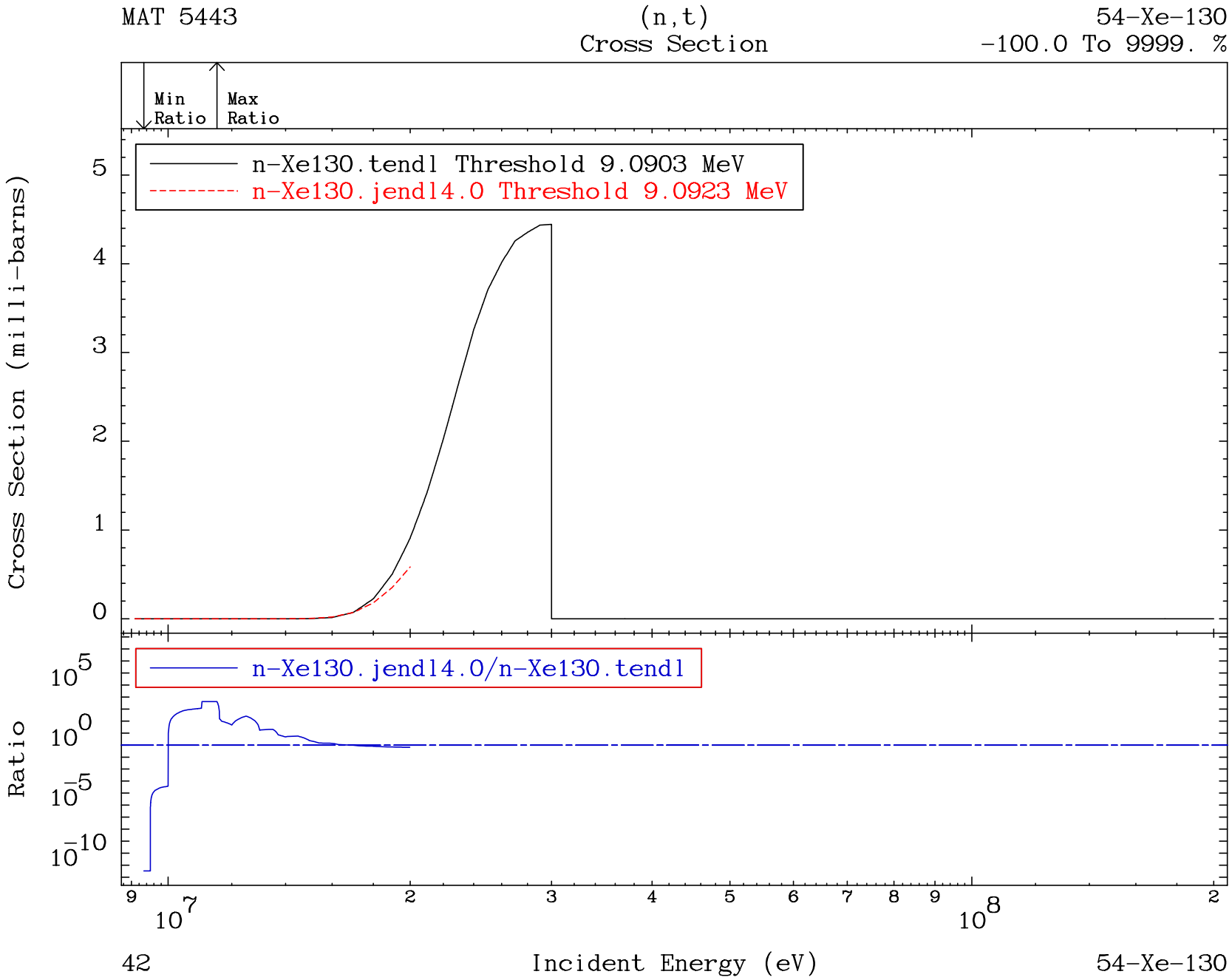

MAT 5443
MT= 79 (n,n') Level
Cross Section
54-Xe-130
50.17 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.5642 MeV
n-Xe130.jendl4.0 Threshold 2.5642 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
37
Incident Energy (eV)
54-Xe-130

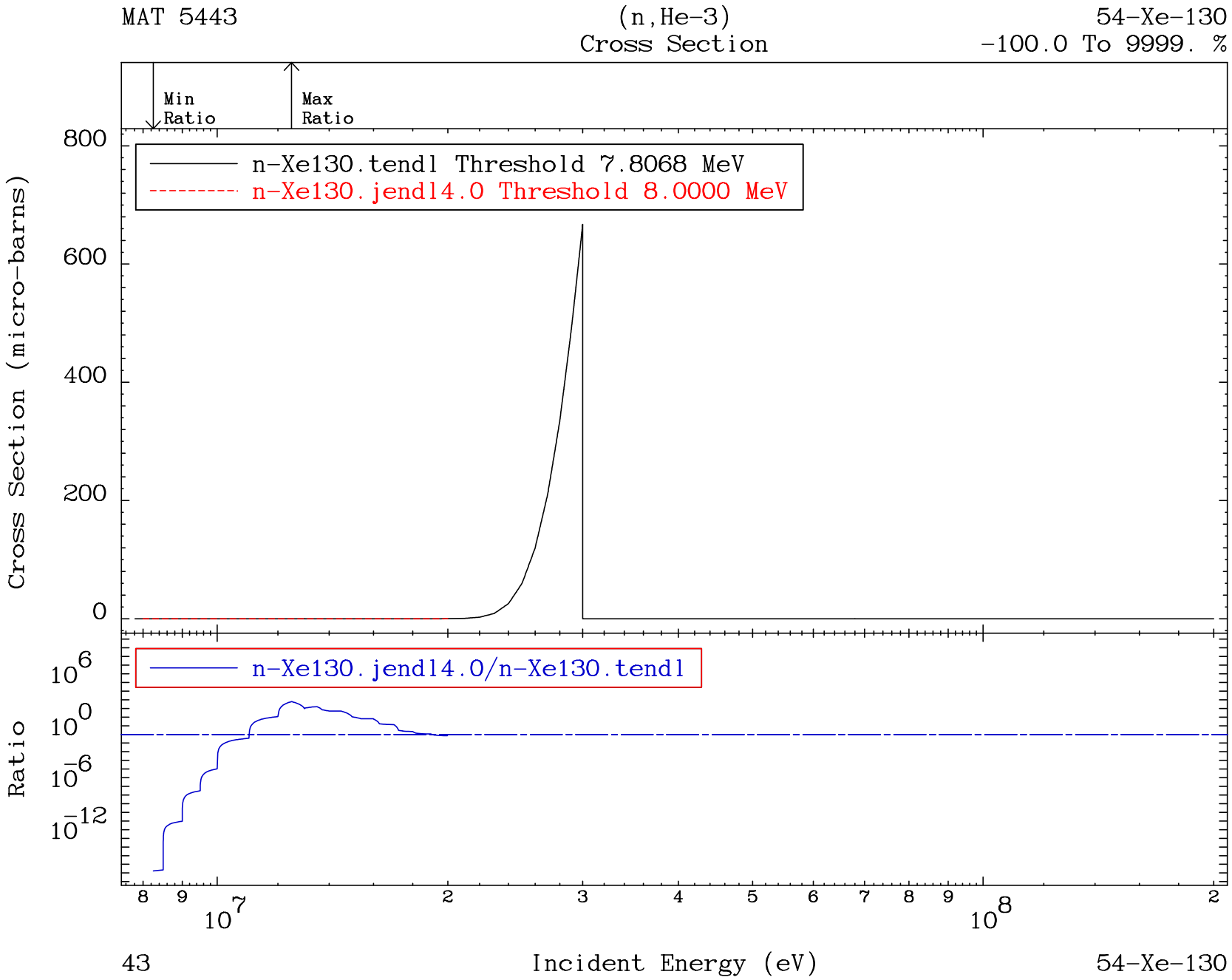

MAT 5443
(n,n') Continuum
Cross Section
54-Xe-130
-38.01 To 82.47 %
Max
Ratio
Min
Ratio
n-Xe130.tendl Threshold 2.6287 MeV
n-Xe130.jendl4.0 Threshold 2.5743 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
2.0
1.6
1.2
0.8
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
38
Incident Energy (eV)
54-Xe-130

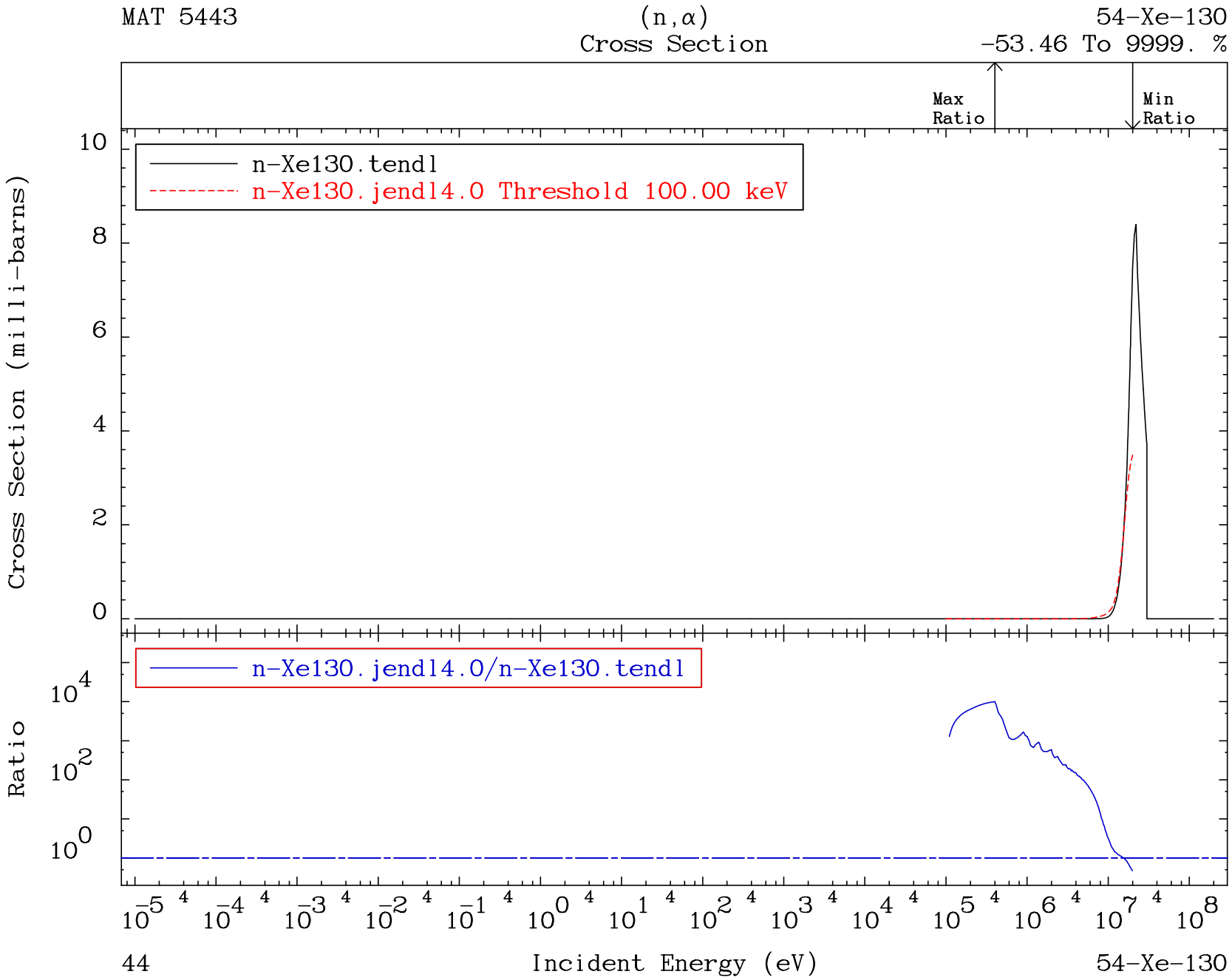

MAT 5443
(n,γ)
Cross Section
54-Xe-130
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
39
Incident Energy (eV)
54-Xe-130

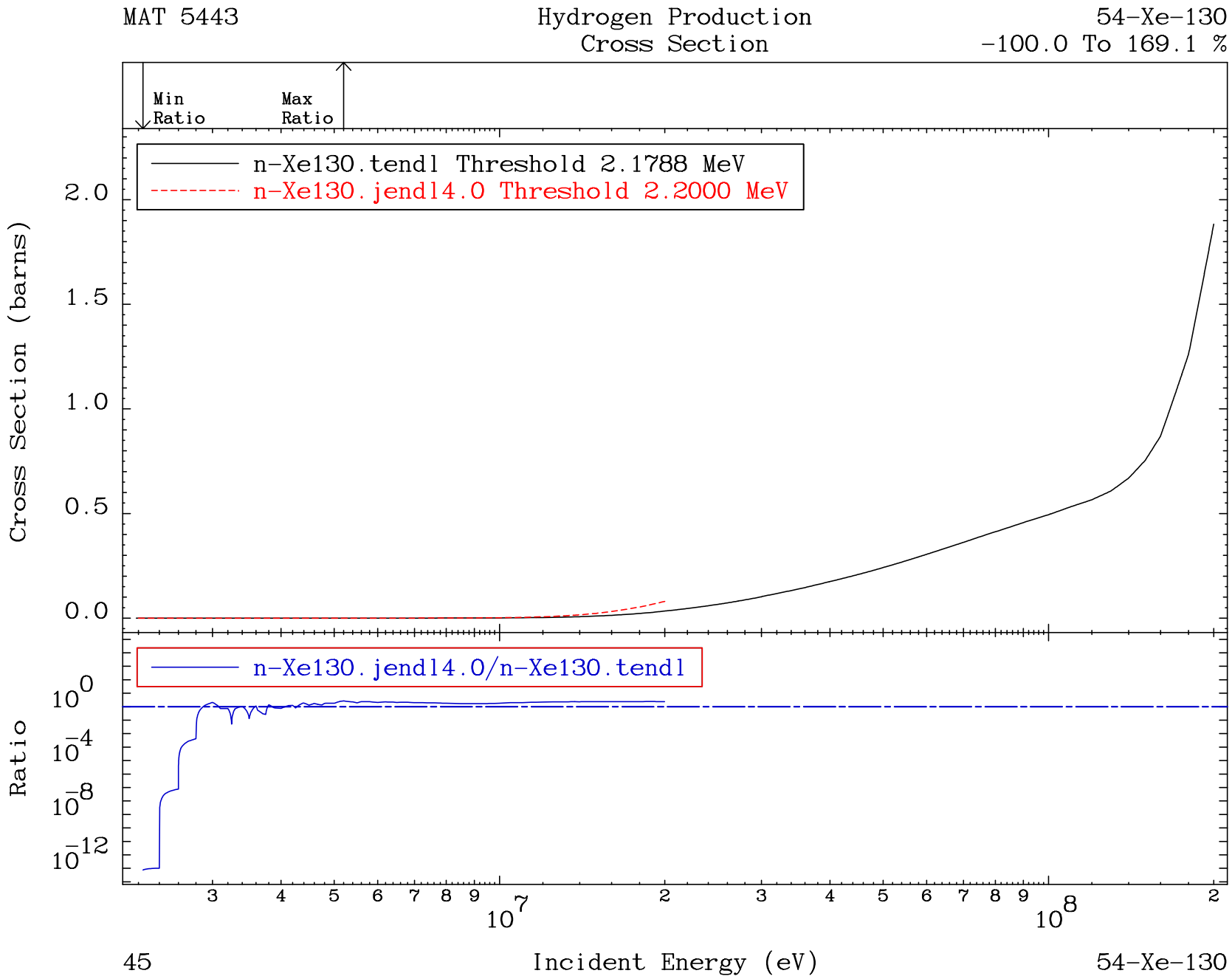

MAT 5443
(n,p)
Cross Section
54-Xe-130
-100.0 To 169.1 %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.1788 MeV
n-Xe130.jendl4.0 Threshold 2.2000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-4
10^-8
10^-12
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
54-Xe-130

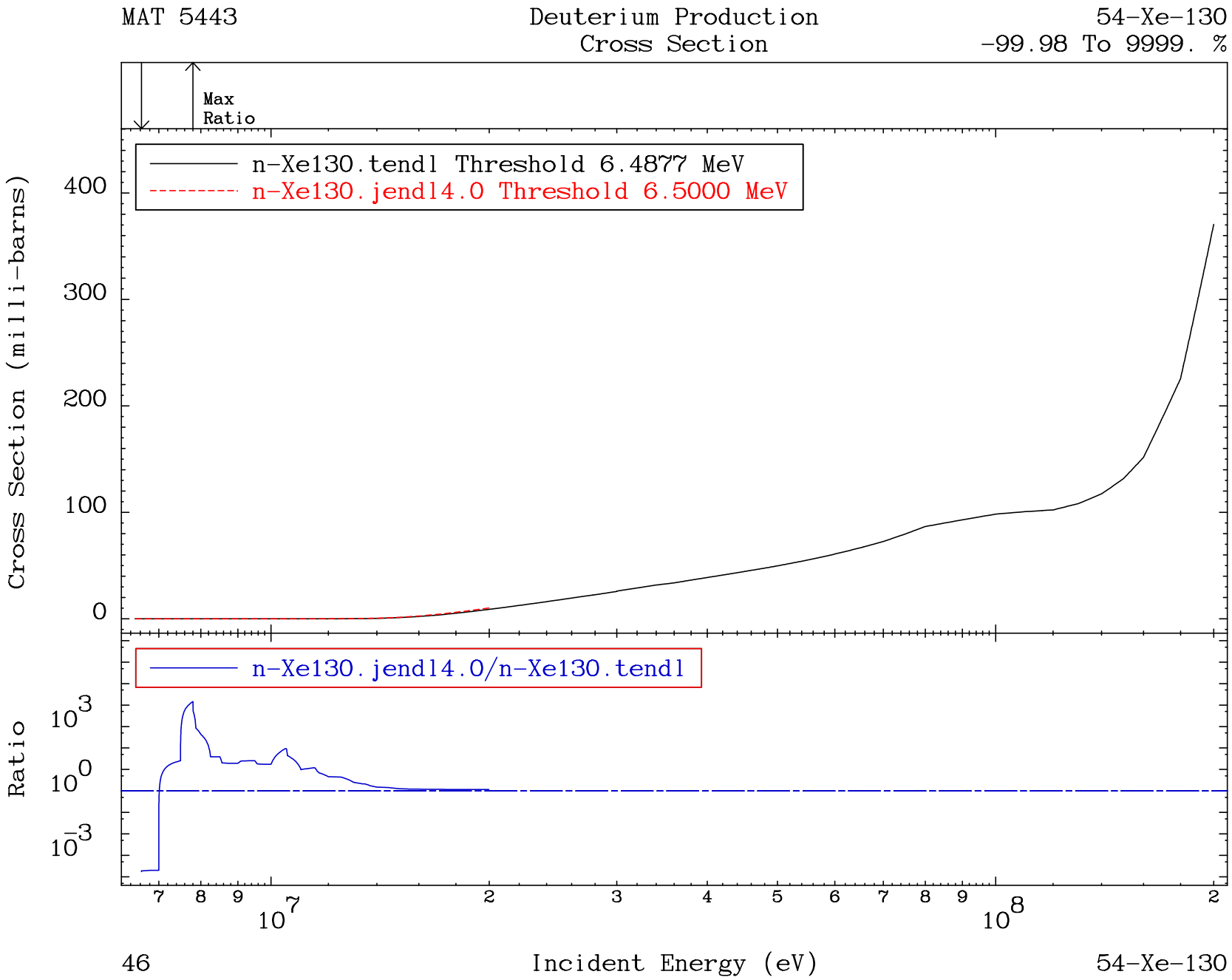

MAT 5443
(n,d)
Cross Section
54-Xe-130
-99.98 To 9999. %
Max
Ratio
n-Xe130.tendl Threshold 6.4877 MeV
n-Xe130.jendl4.0 Threshold 6.5000 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^3
10^0
10^-3
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
54-Xe-130

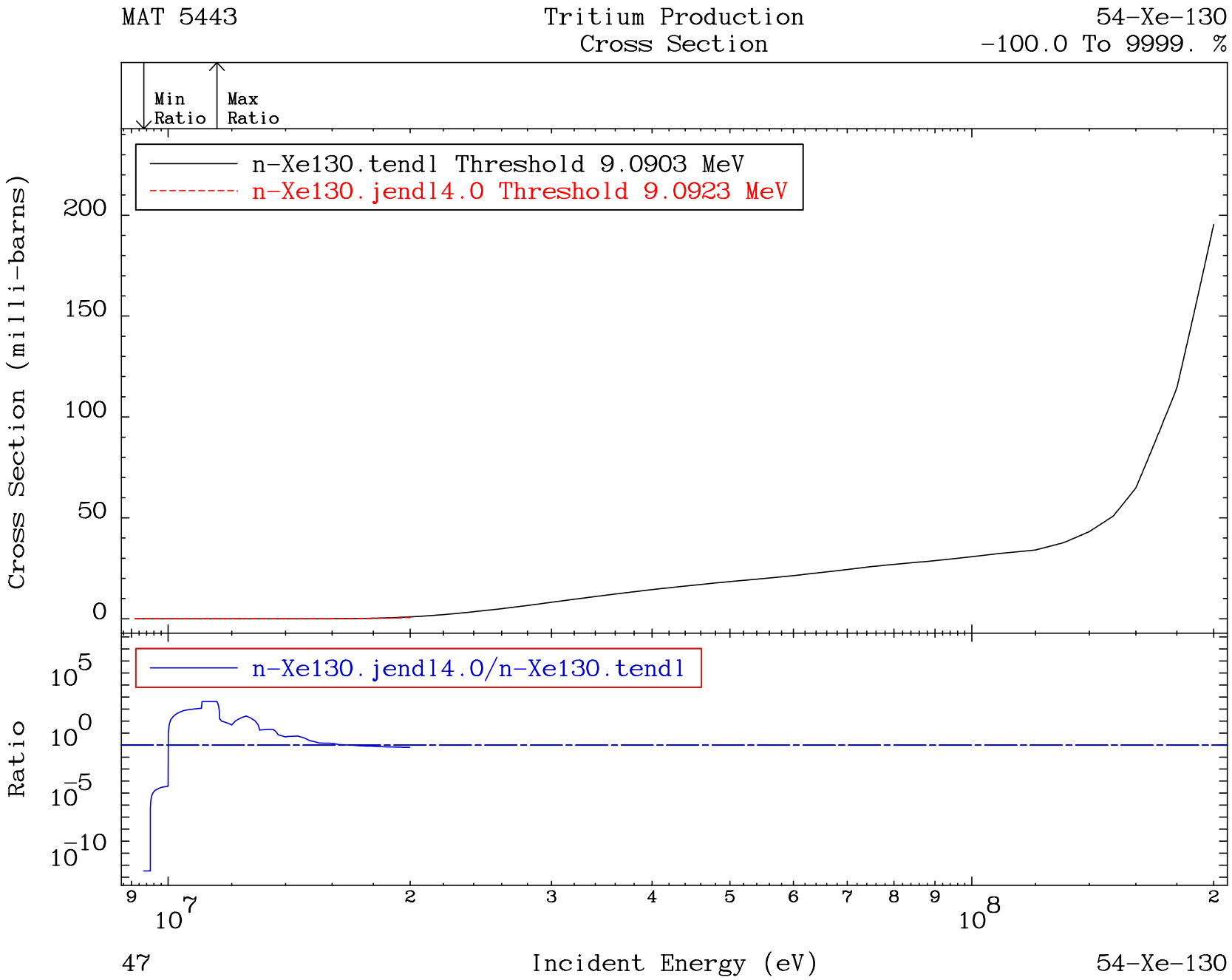

MAT 5443
(n,t)
Cross Section
54-Xe-130
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 9.0903 MeV
n-Xe130.jendl4.0 Threshold 9.0923 MeV
Cross Section (milli-barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
42
54-Xe-130

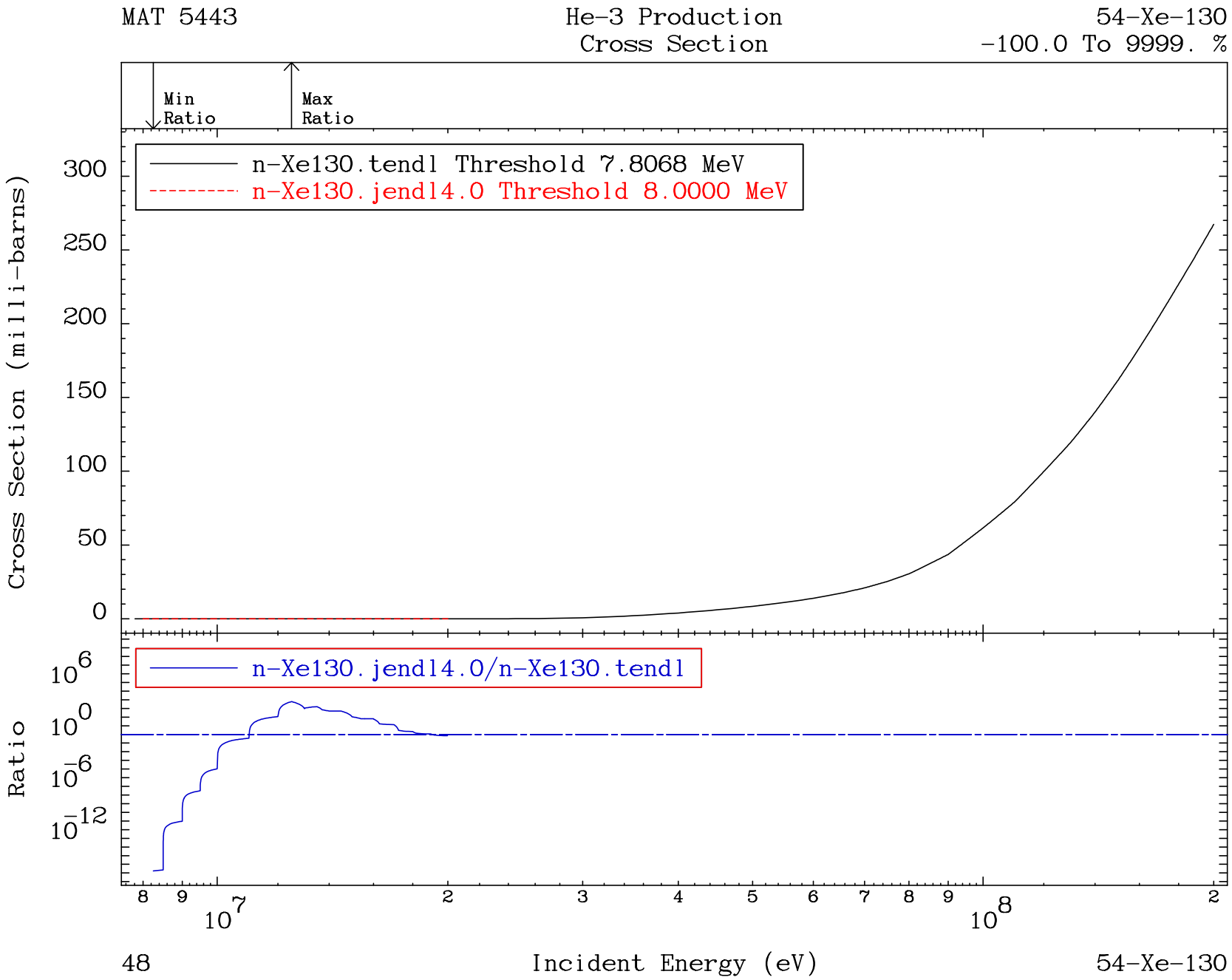

MAT 5443
(n,He-3)
Cross Section
54-Xe-130
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 7.8068 MeV
n-Xe130.jendl4.0 Threshold 8.0000 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^6
10^0
10^-6
10^-12
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
54-Xe-130

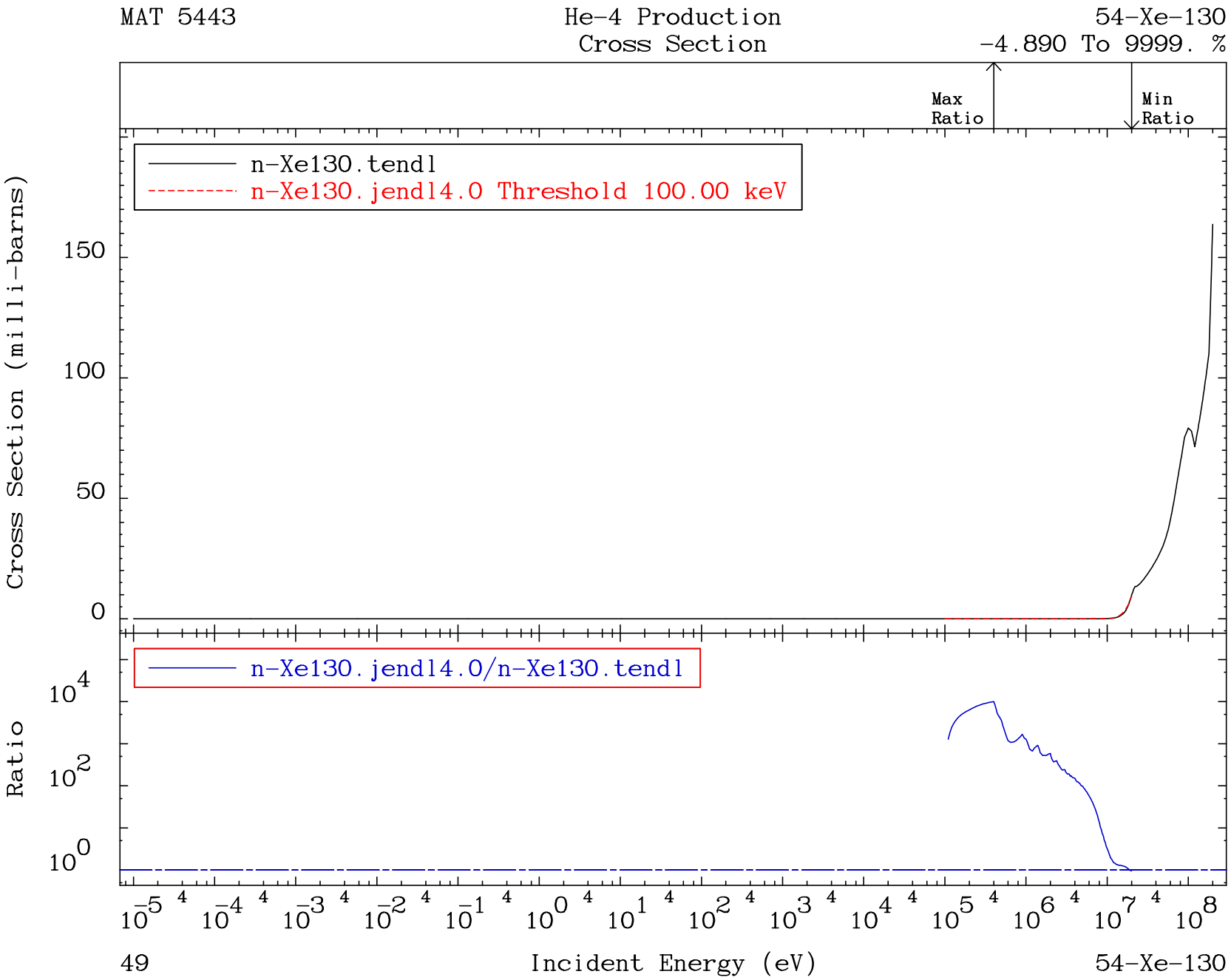

MAT 5443
(n,α)
Cross Section
54-Xe-130
-53.46 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
44
54-Xe-130

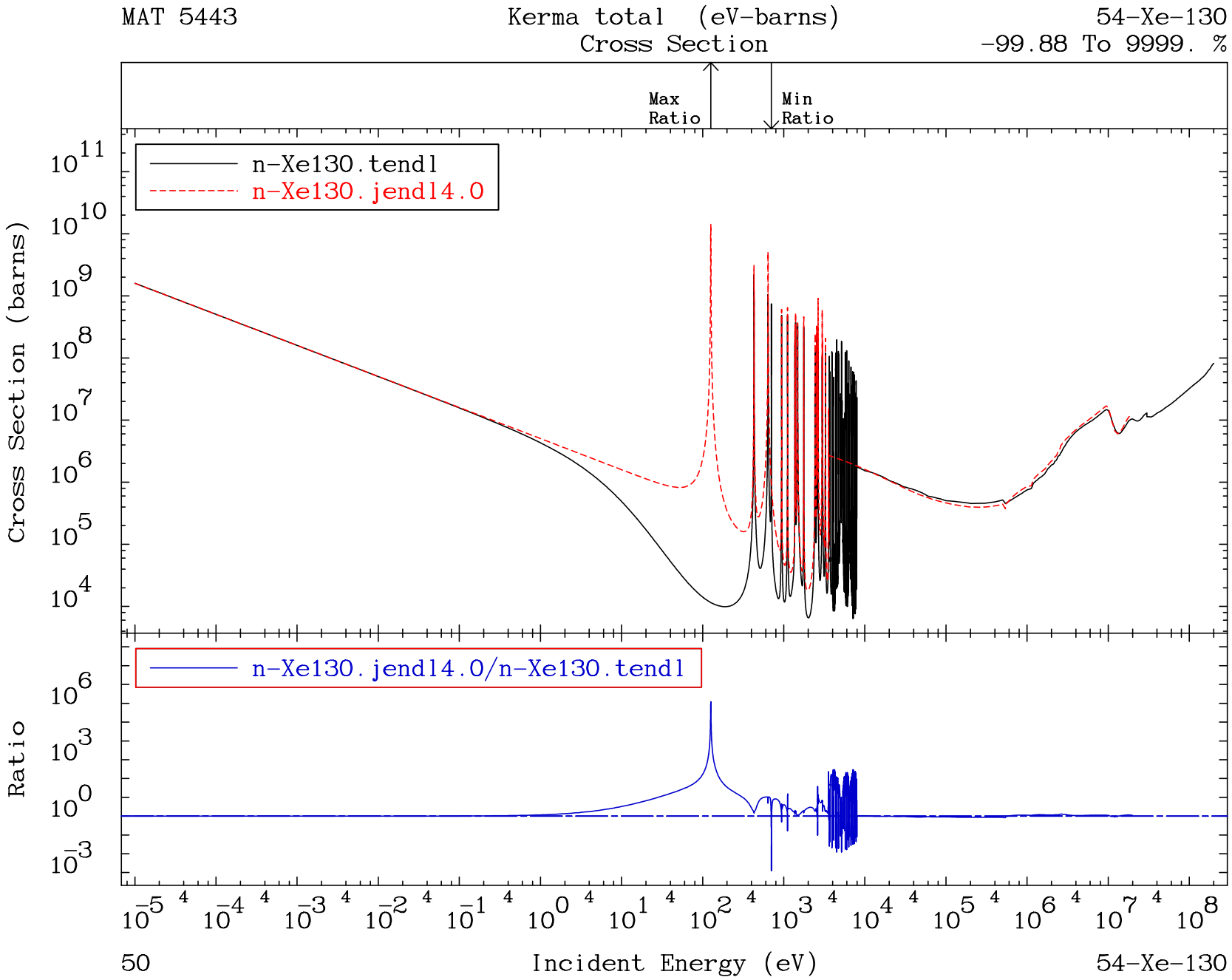

MAT 5443
Hydrogen Production
Cross Section
54-Xe-130
-100.0 To 169.1 %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 2.1788 MeV
n-Xe130.jendl4.0 Threshold 2.2000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^0
10^-4
10^-8
10^-12
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
54-Xe-130

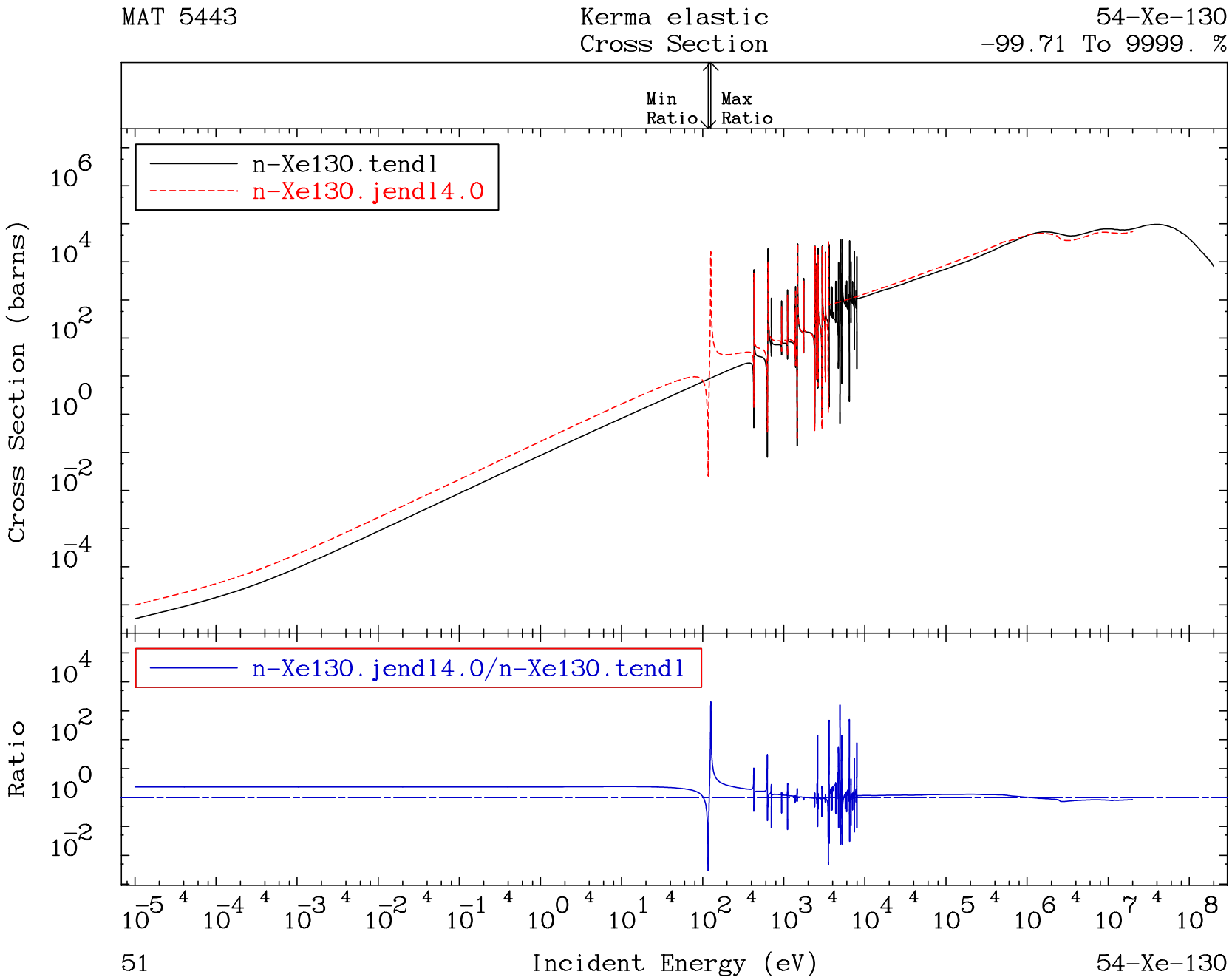

MAT 5443
Deuterium Production
Cross Section
54-Xe-130
-99.98 To 9999. %
Max
Ratio
n-Xe130.tendl Threshold 6.4877 MeV
n-Xe130.jendl4.0 Threshold 6.5000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^3
10^0
10^-3
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
54-Xe-130

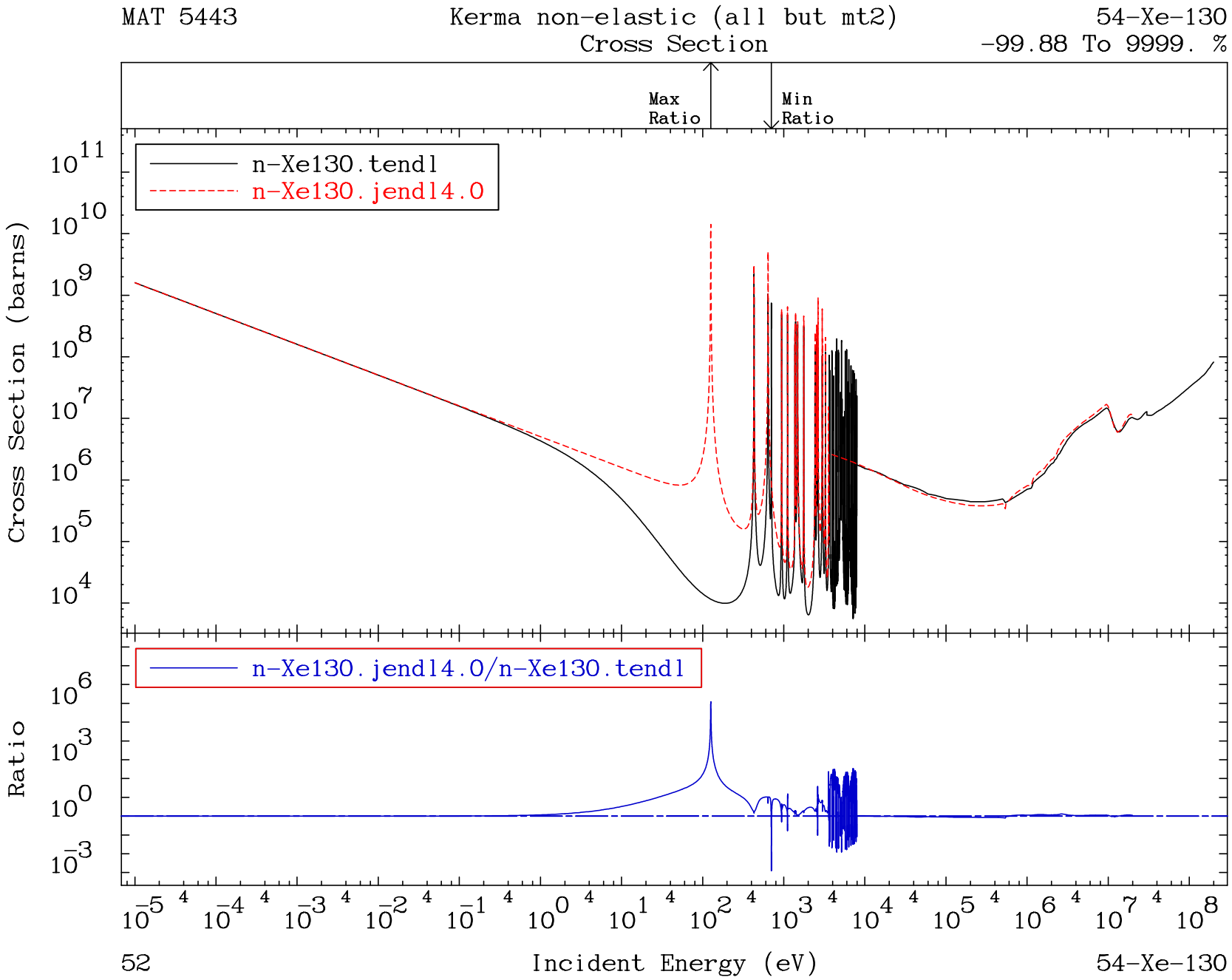

MAT 5443
Tritium Production
Cross Section
54-Xe-130
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 9.0903 MeV
n-Xe130.jendl4.0 Threshold 9.0923 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^5
10^0
10^-5
10^-10
9
10^7
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
54-Xe-130

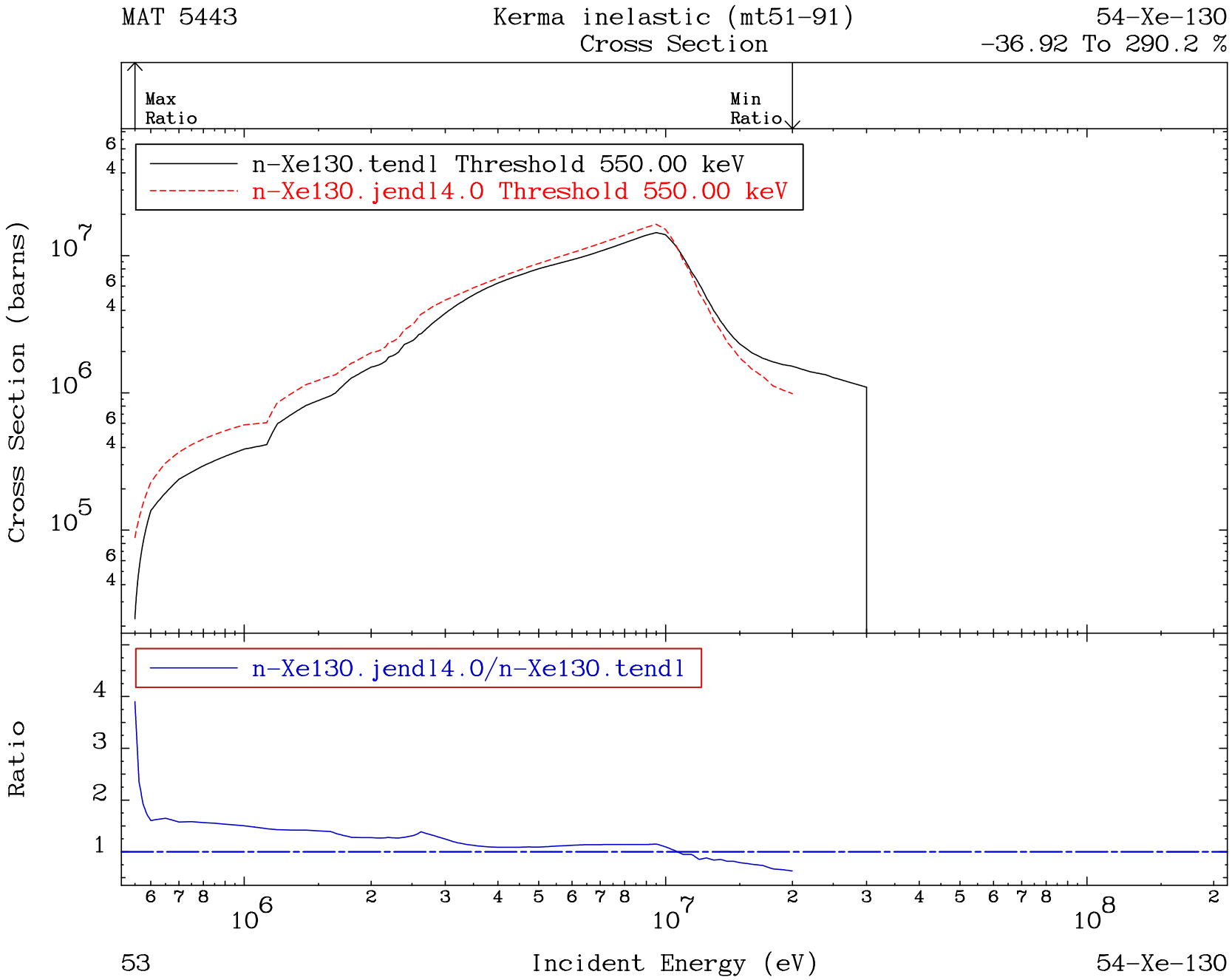

MAT 5443
He-3 Production
Cross Section
54-Xe-130
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 7.8068 MeV
n-Xe130.jendl4.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^6
10^0
10^-6
10^-12
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
54-Xe-130

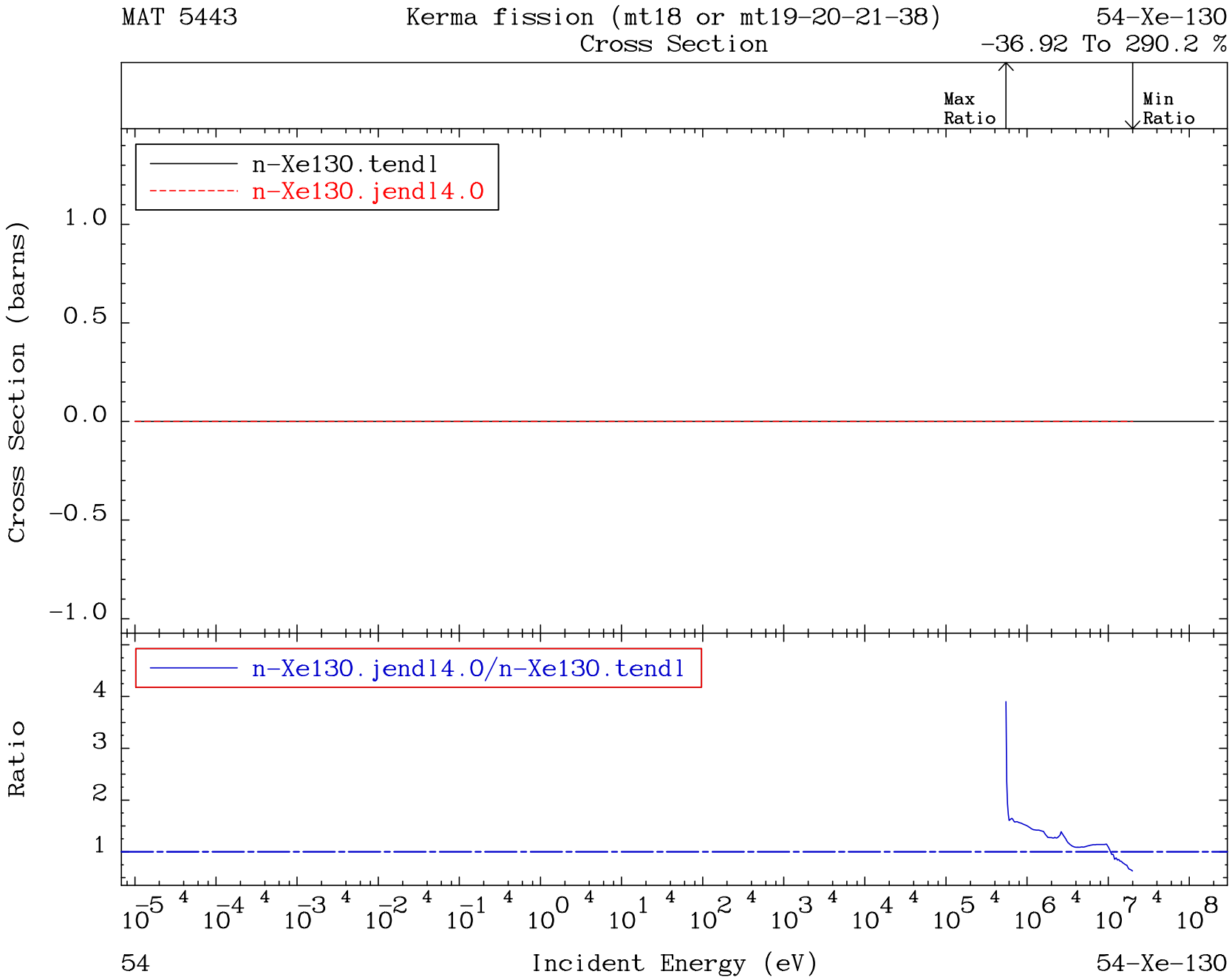

MAT 5443
He-4 Production
Cross Section
54-Xe-130
-4.890 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
150
100
50
0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^4
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
49
Incident Energy (eV)
54-Xe-130

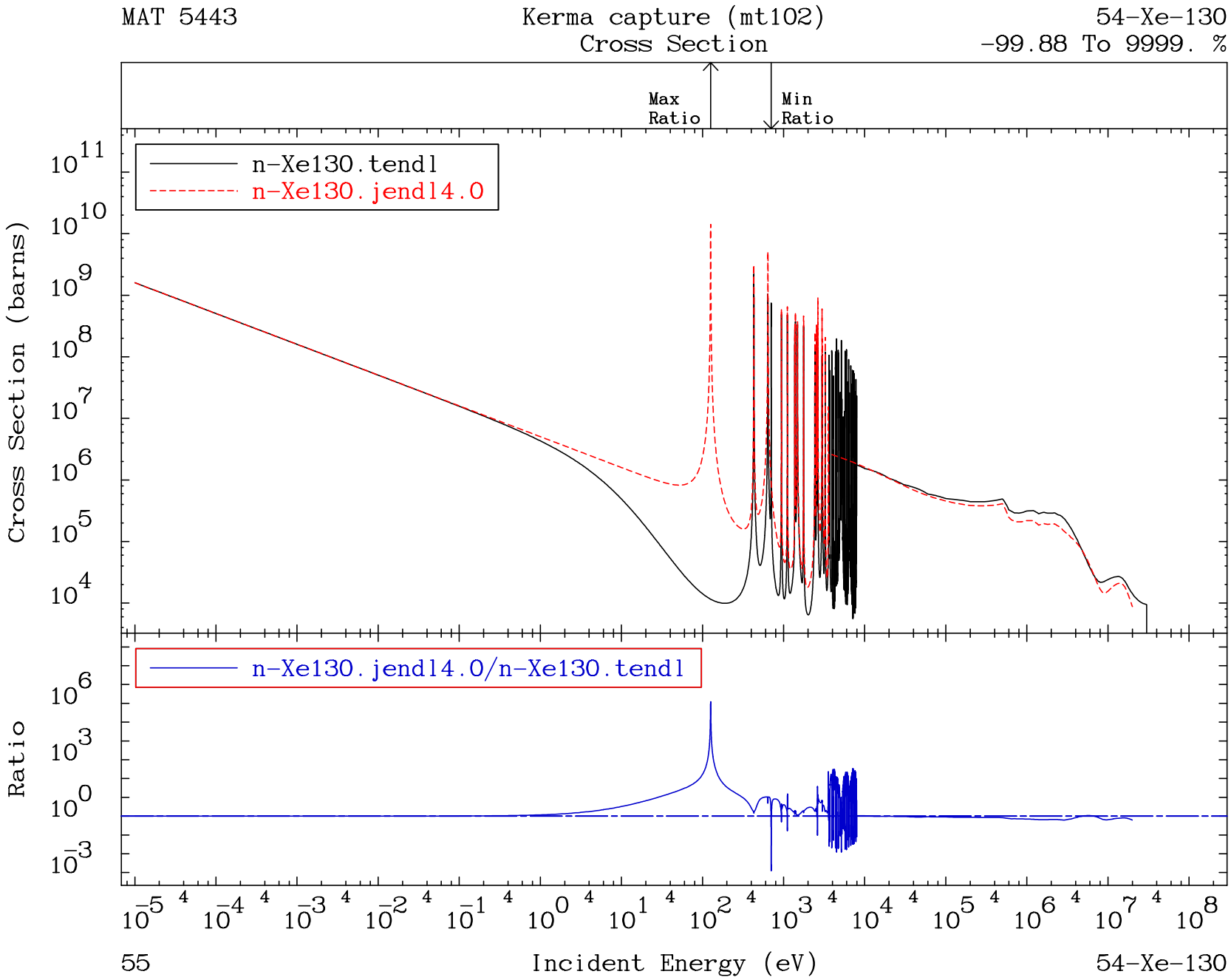

MAT 5443
Kerma total (eV-barns)
Cross Section
54-Xe-130
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
50
54-Xe-130

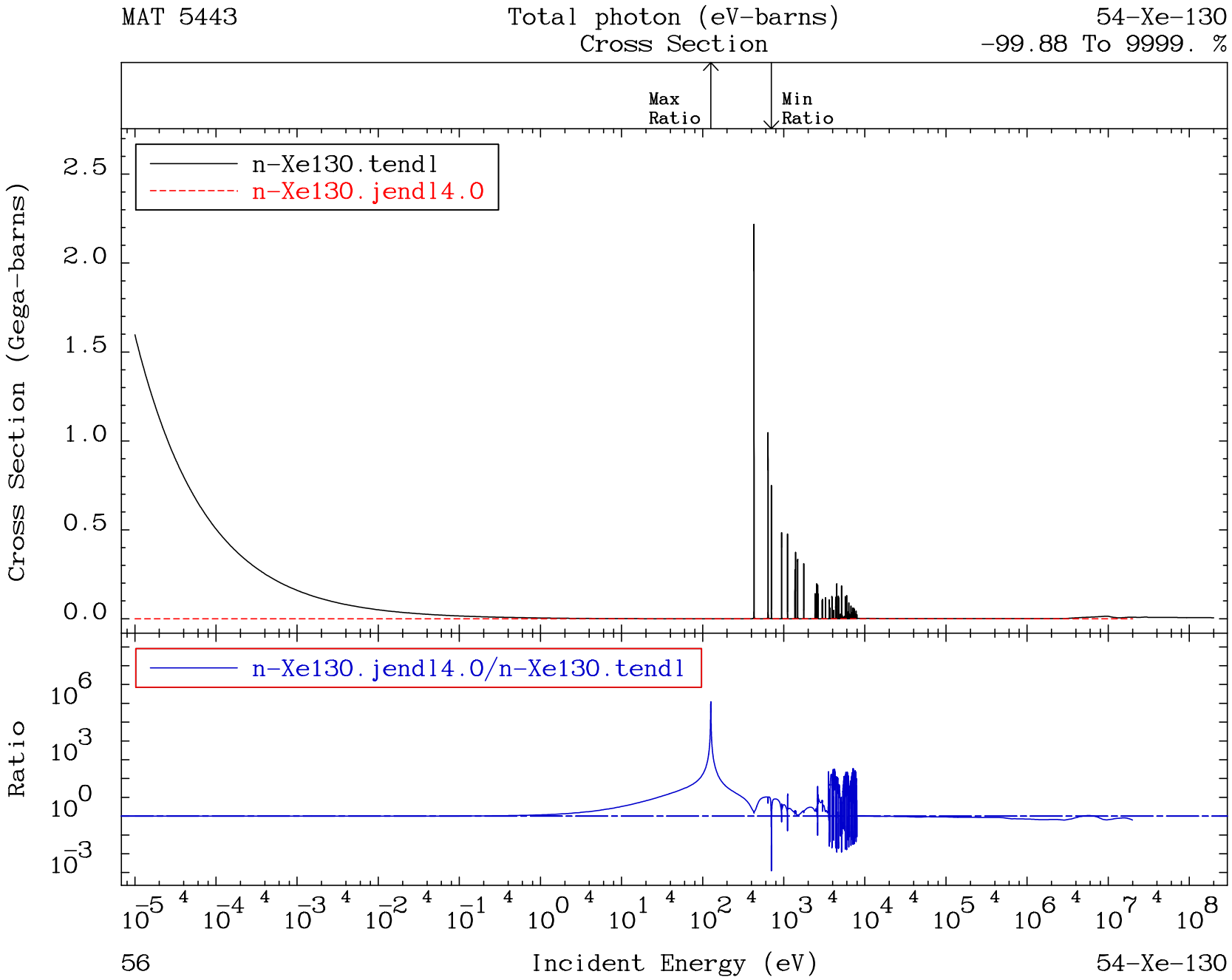

MAT 5443
Kerma elastic
Cross Section
54-Xe-130
-99.71 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
51
54-Xe-130

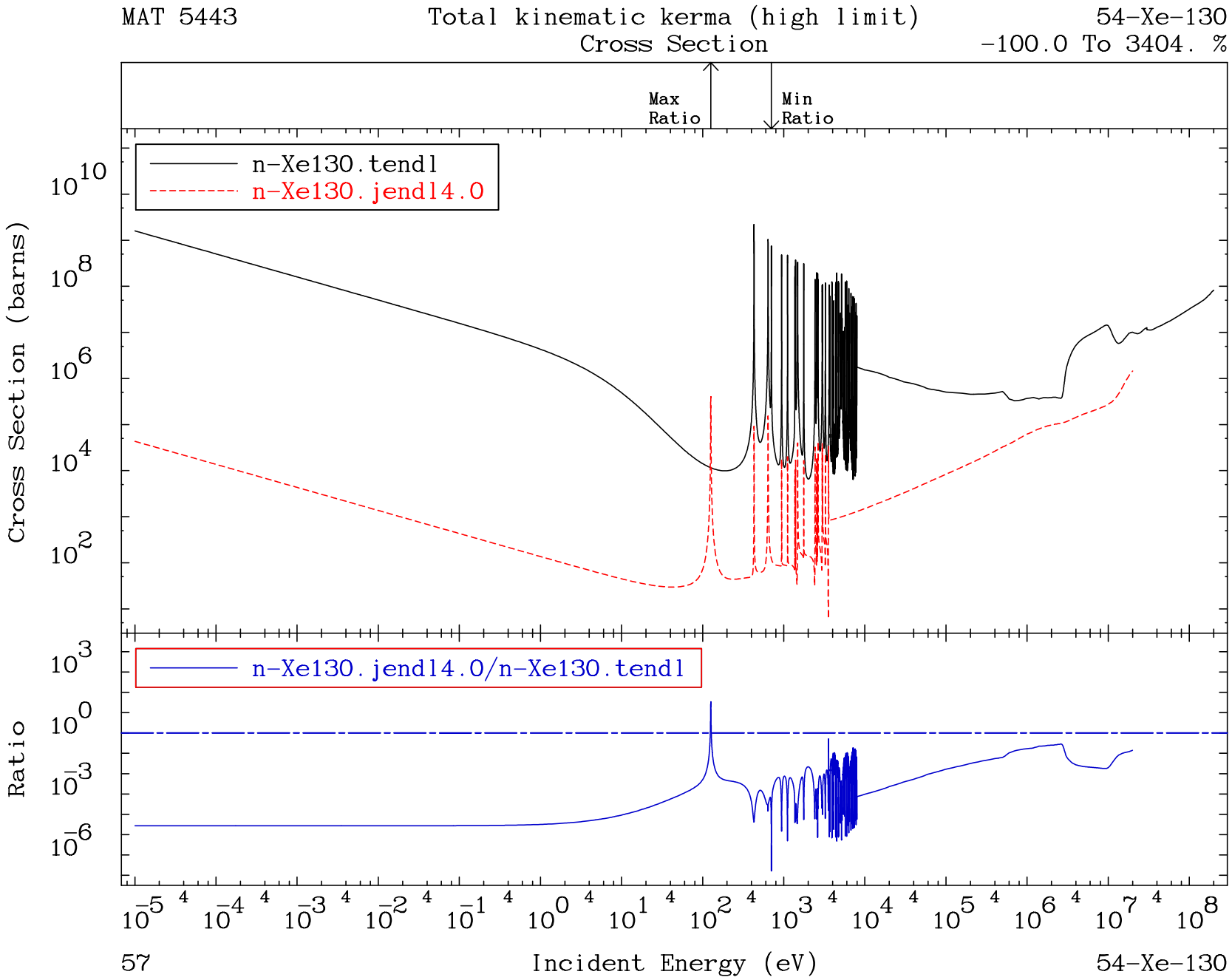

MAT 5443
Kerma non-elastic (all but mt2)
Cross Section
54-Xe-130
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
52
54-Xe-130

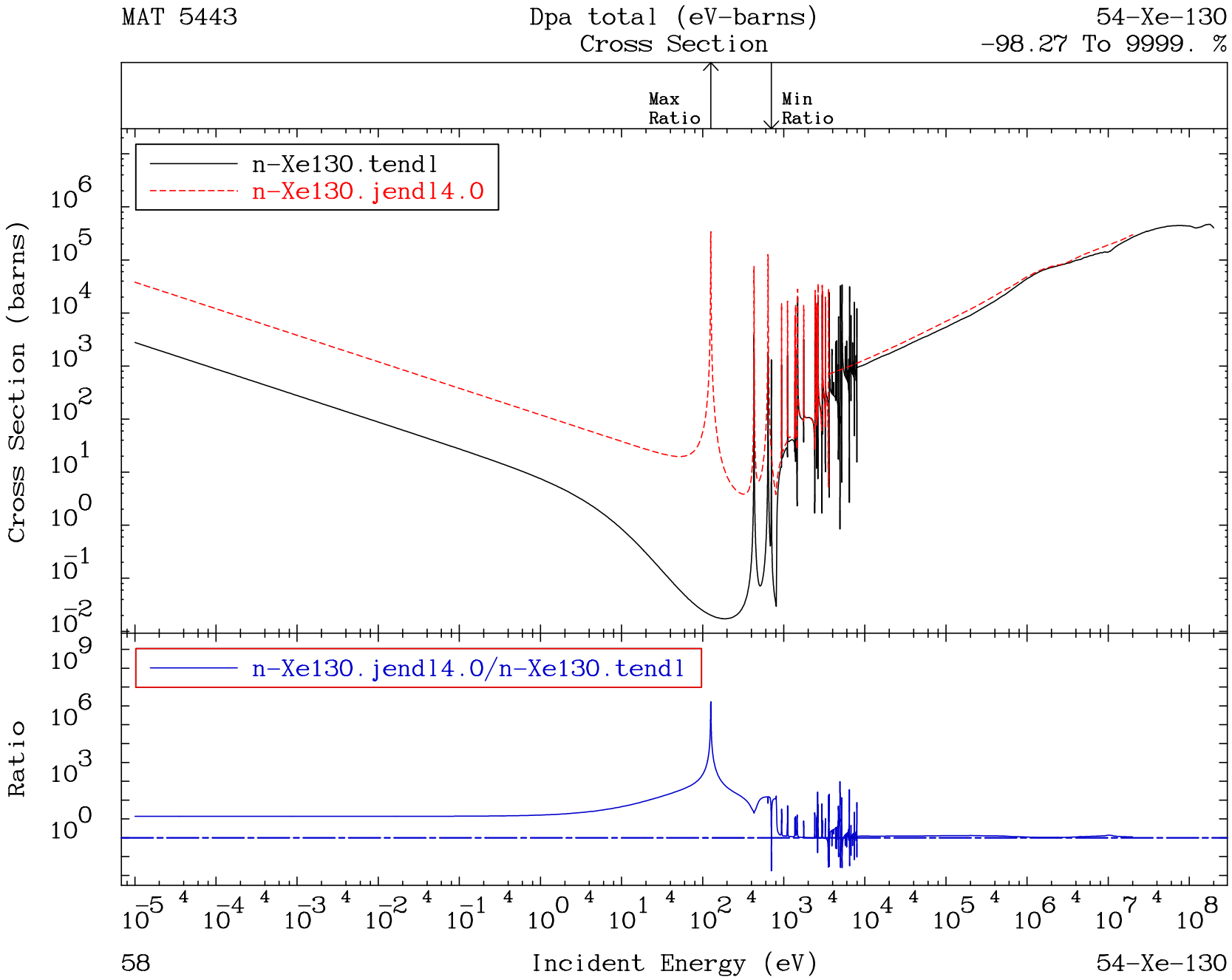

MAT 5443
Kerma inelastic (mt51-91)
Cross Section
54-Xe-130
-36.92 To 290.2 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 550.00 keV
n-Xe130.jendl4.0 Threshold 550.00 keV
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
53
54-Xe-130

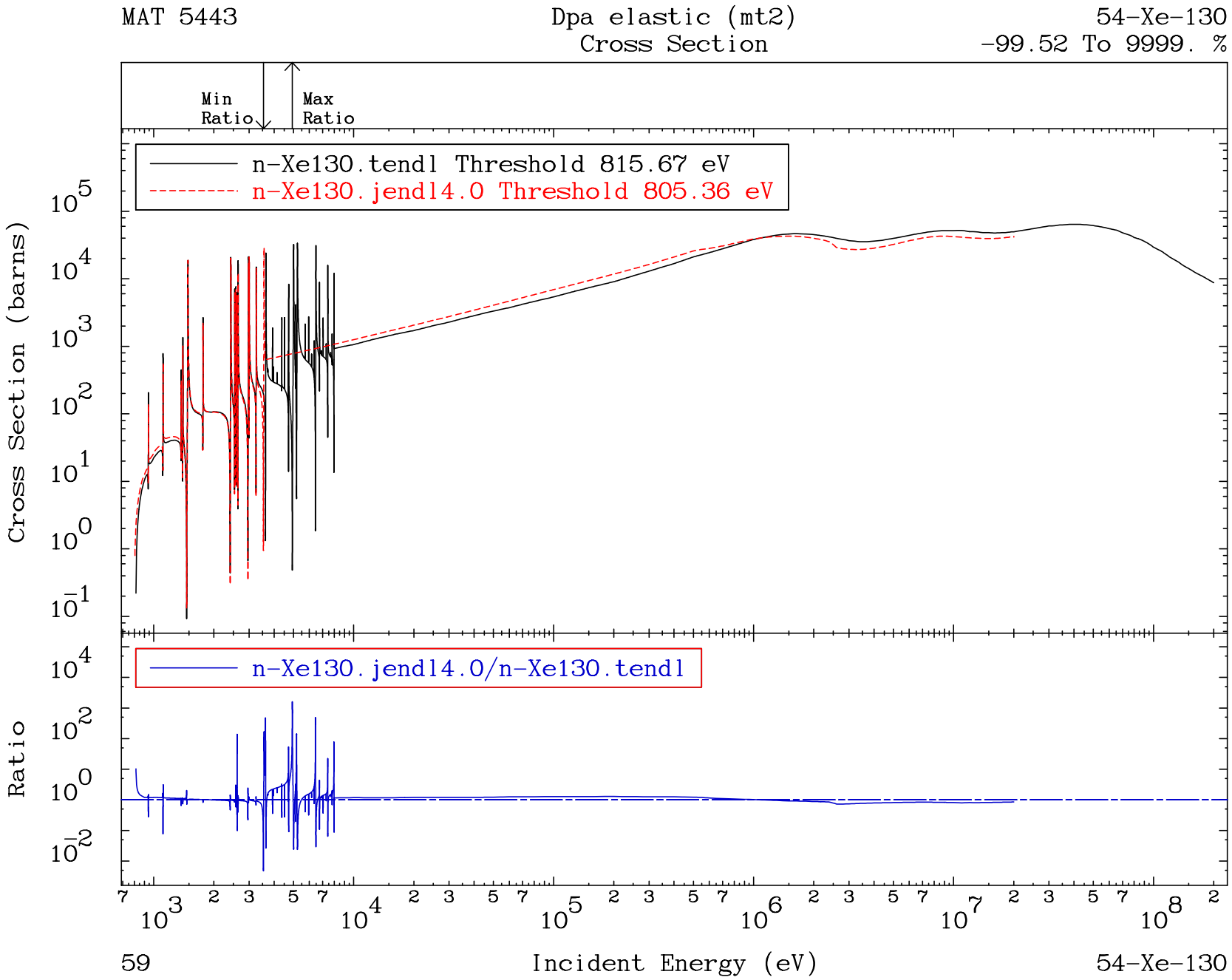

MAT 5443
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
54-Xe-130
-36.92 To 290.2 %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
4
3
2
1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
54-Xe-130

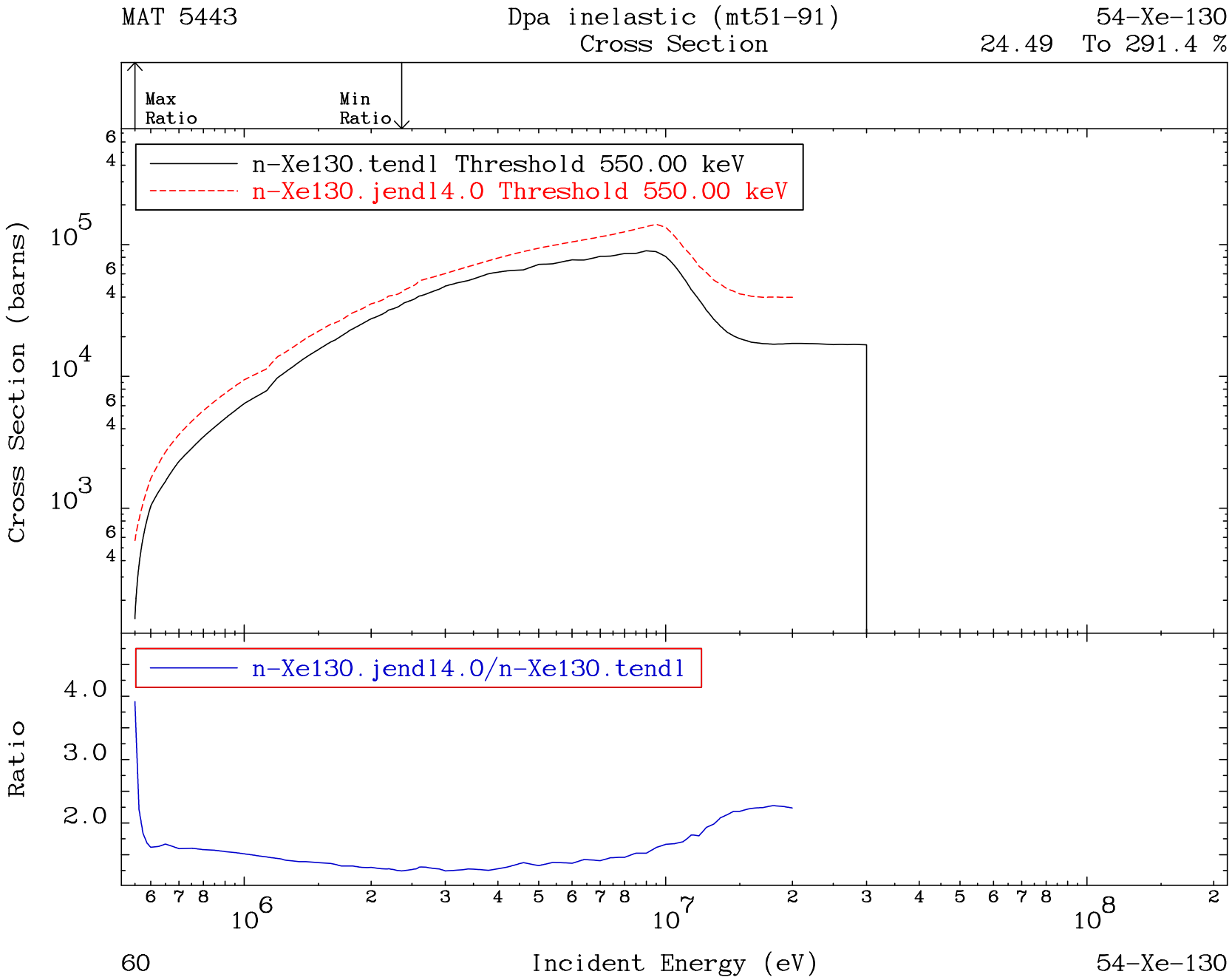

MAT 5443
Kerma capture (mt102)
Cross Section
54-Xe-130
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
55
54-Xe-130

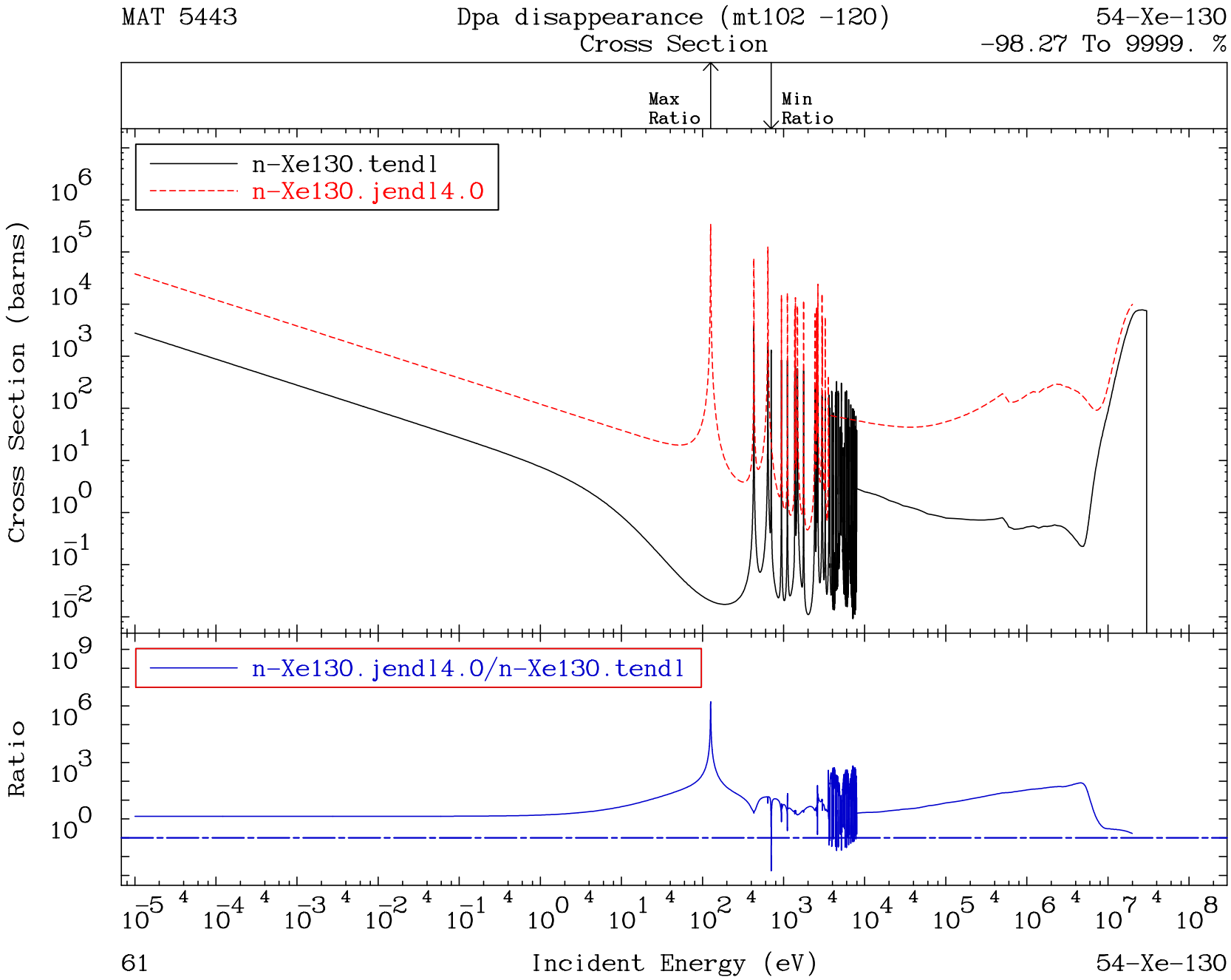

MAT 5443
Total photon (eV-barns)
Cross Section
54-Xe-130
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (Giga-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
10^6
10^3
10^0
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
56
Incident Energy (eV)
54-Xe-130


MAT 5443
Total kinematic kerma (high limit)
Cross Section
54-Xe-130
-100.0 To 3404. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
57
54-Xe-130


MAT 5443
Dpa total (eV-barns)
Cross Section
54-Xe-130
-98.27 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
58
Incident Energy (eV)
54-Xe-130


MAT 5443
Dpa elastic (mt2)
Cross Section
54-Xe-130
-99.52 To 9999. %
Min Ratio
Max Ratio
n-Xe130.tendl Threshold 815.67 eV
n-Xe130.jendl4.0 Threshold 805.36 eV
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
59
Incident Energy (eV)
54-Xe-130


MAT 5443
Dpa inelastic (mt51-91)
Cross Section
54-Xe-130
24.49 To 291.4 %
Max Ratio
Min Ratio
n-Xe130.tendl Threshold 550.00 keV
n-Xe130.jendl4.0 Threshold 550.00 keV
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
Incident Energy (eV)
60
54-Xe-130


MAT 5443
Dpa disappearance (mt102 -120)
Cross Section
54-Xe-130
-98.27 To 9999. %
Max Ratio
Min Ratio
n-Xe130.tendl
n-Xe130.jendl4.0
Cross Section (barns)
n-Xe130.jendl4.0/n-Xe130.tendl
Ratio
61
Incident Energy (eV)
54-Xe-130