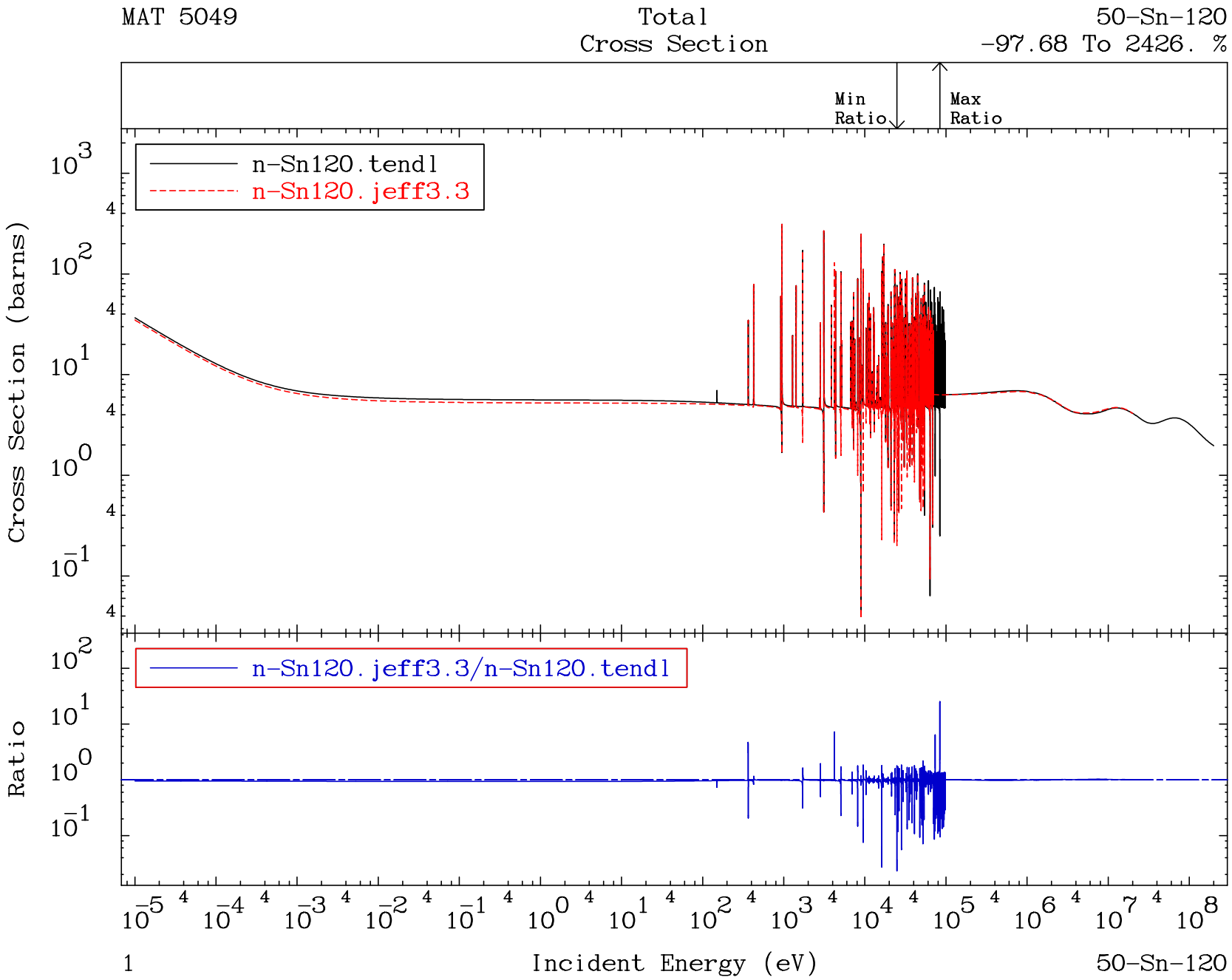
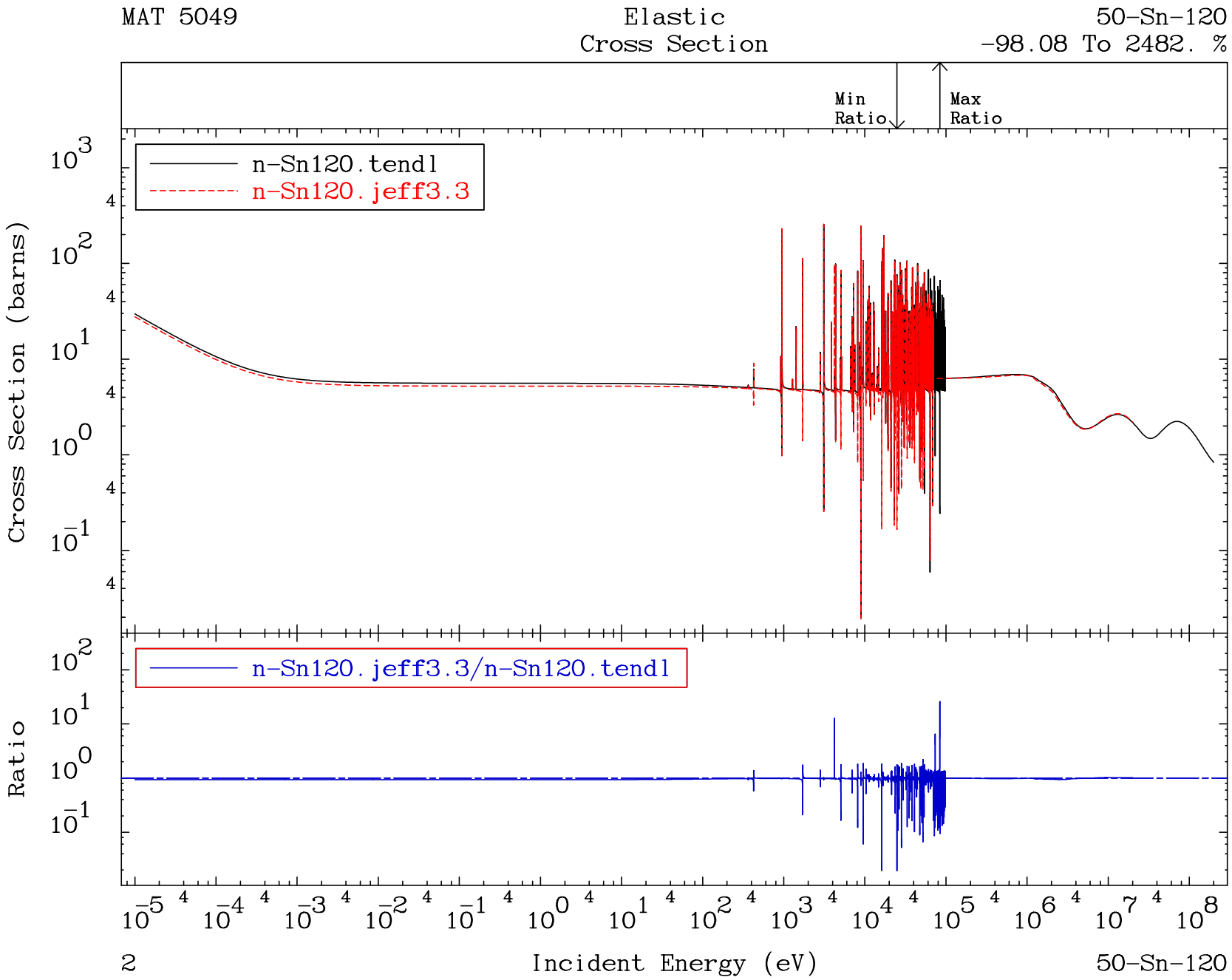
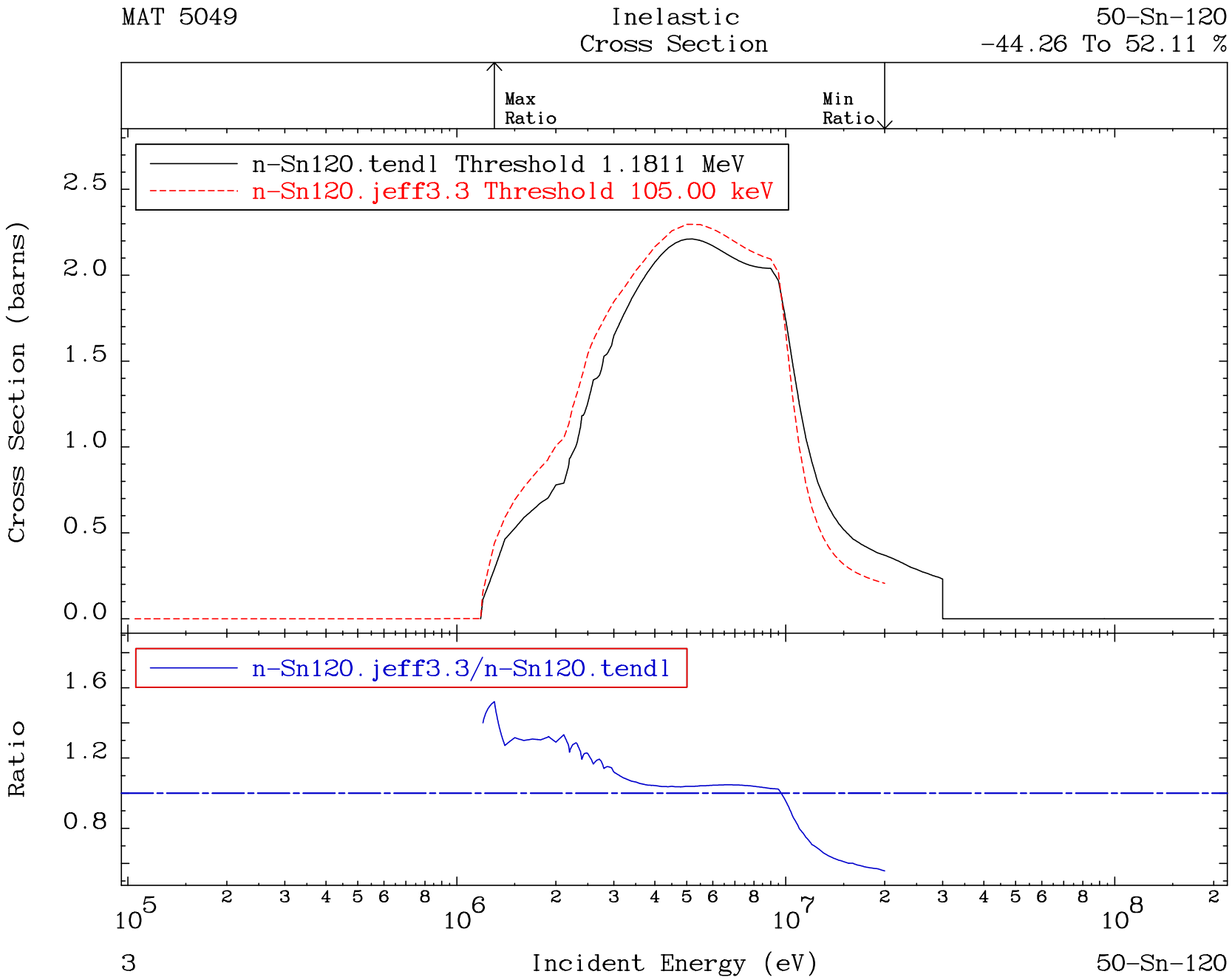
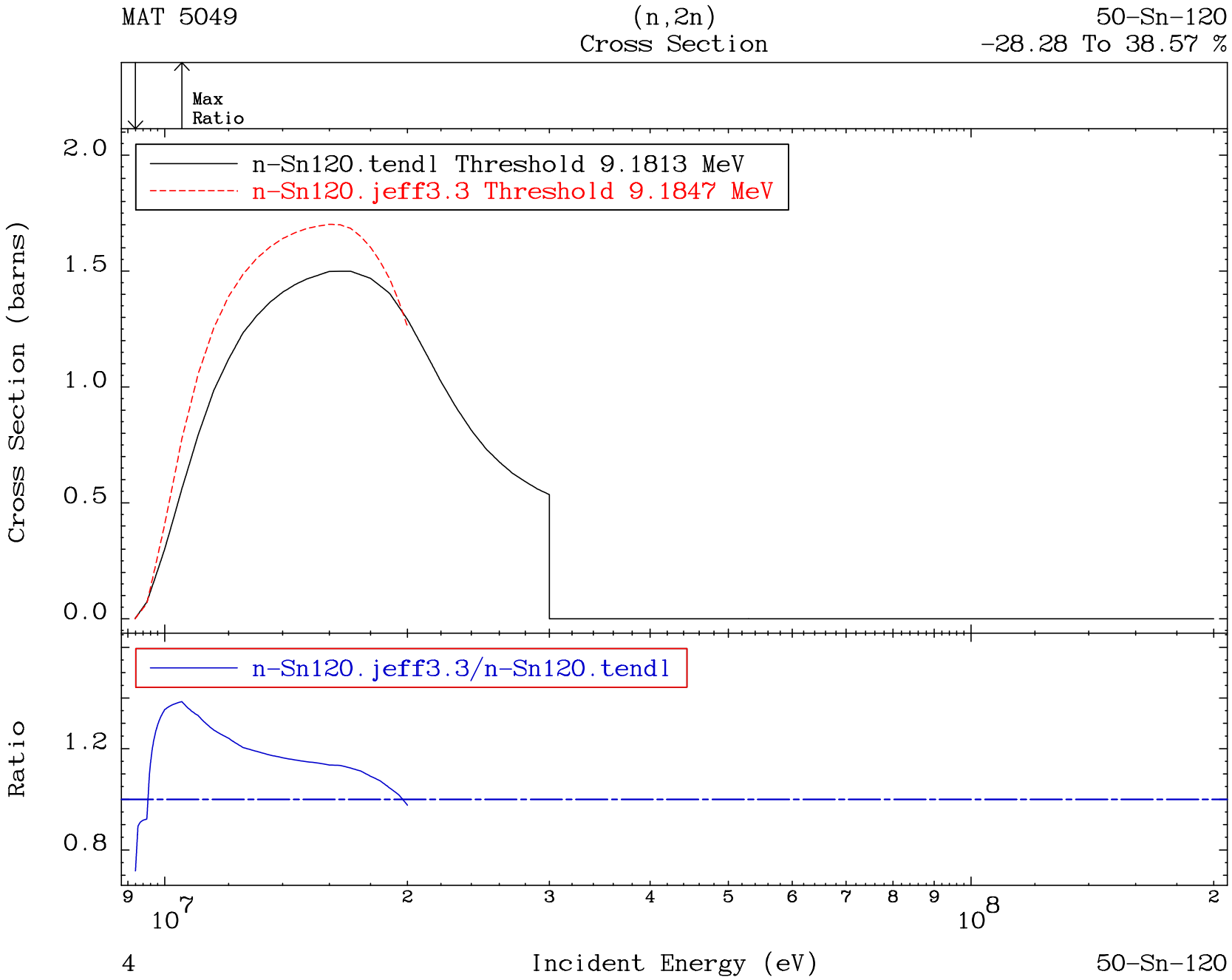
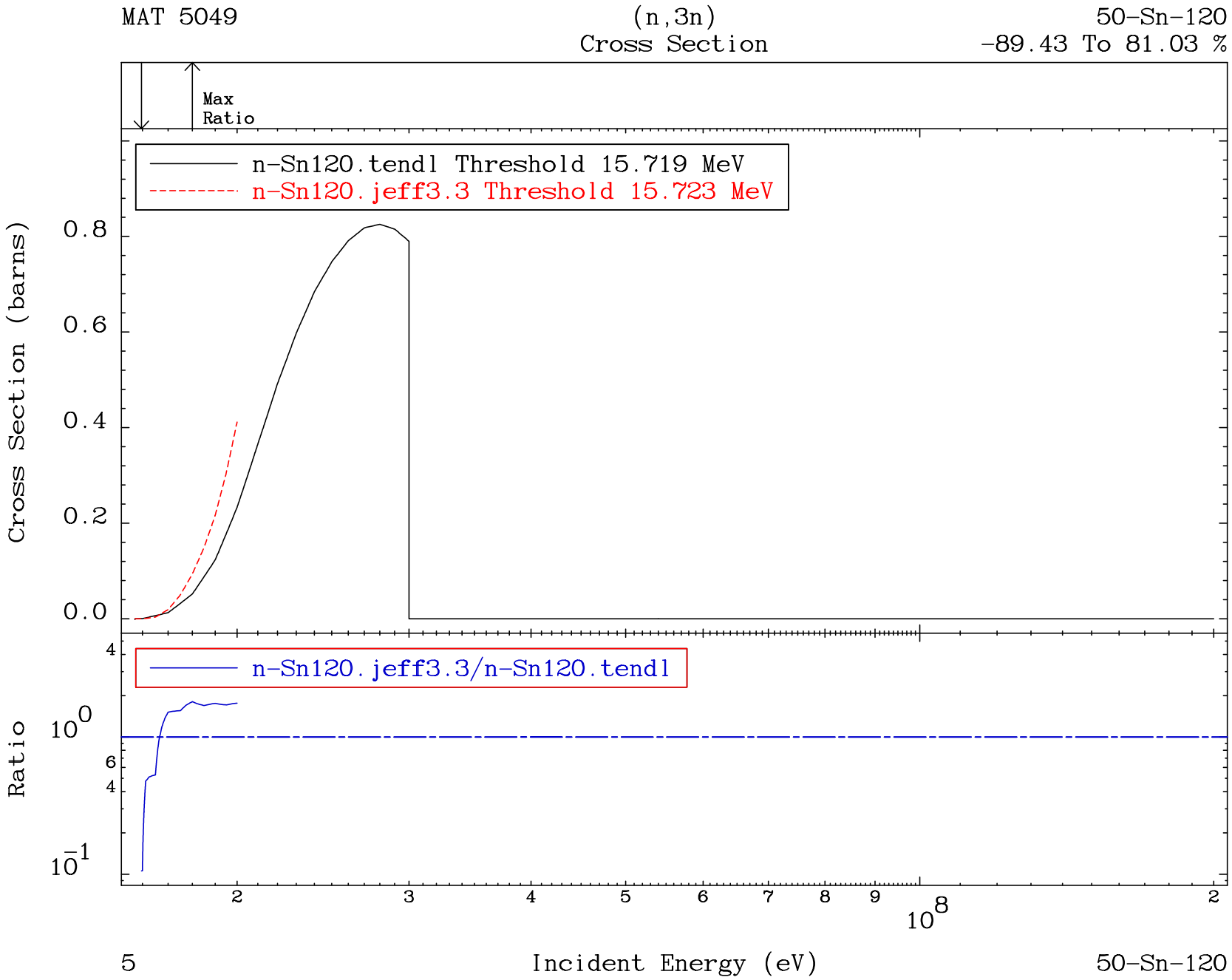
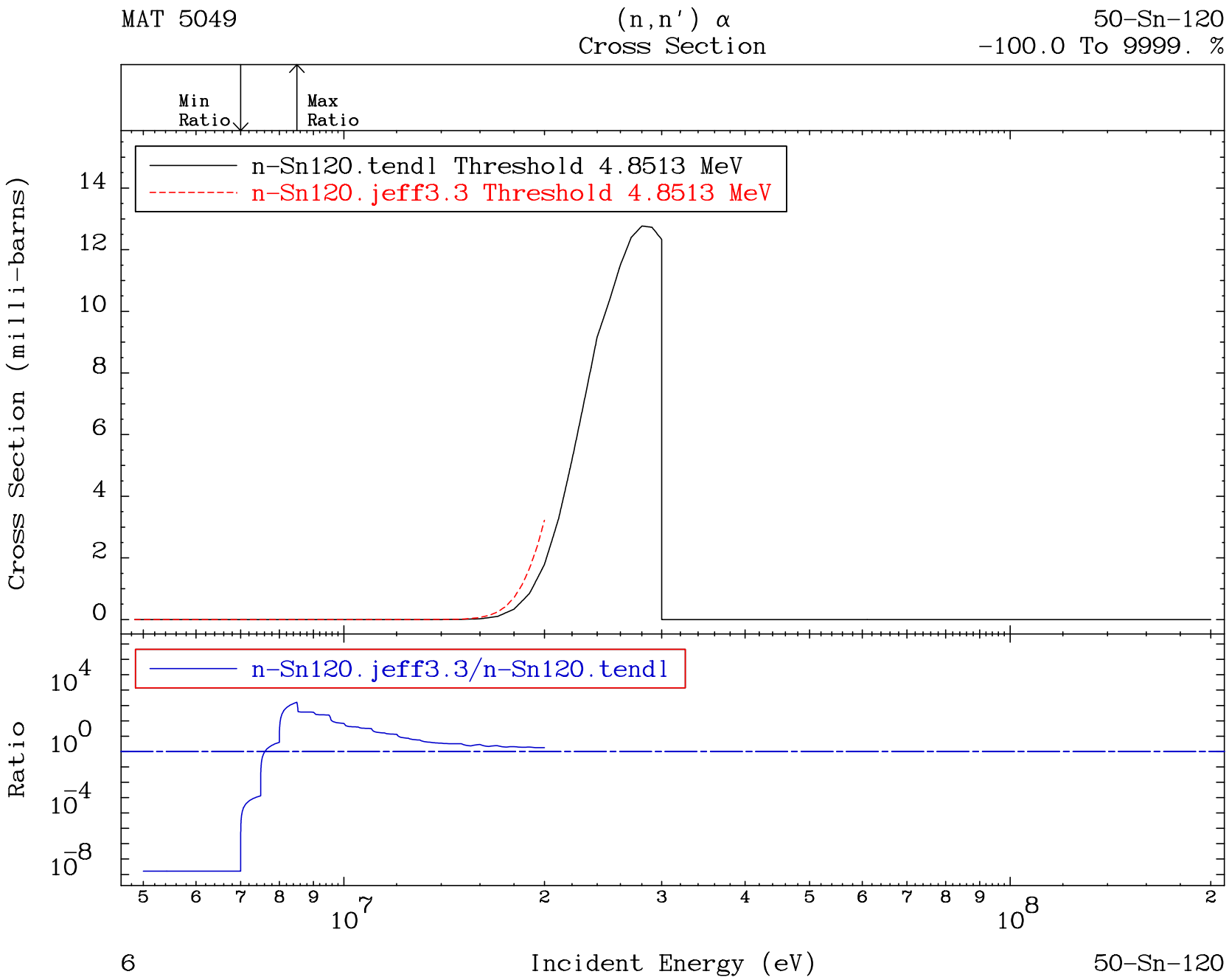

MAT 5049
Total
Cross Section
50-Sn-120
-97.68 To 2426. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
1
50-Sn-120

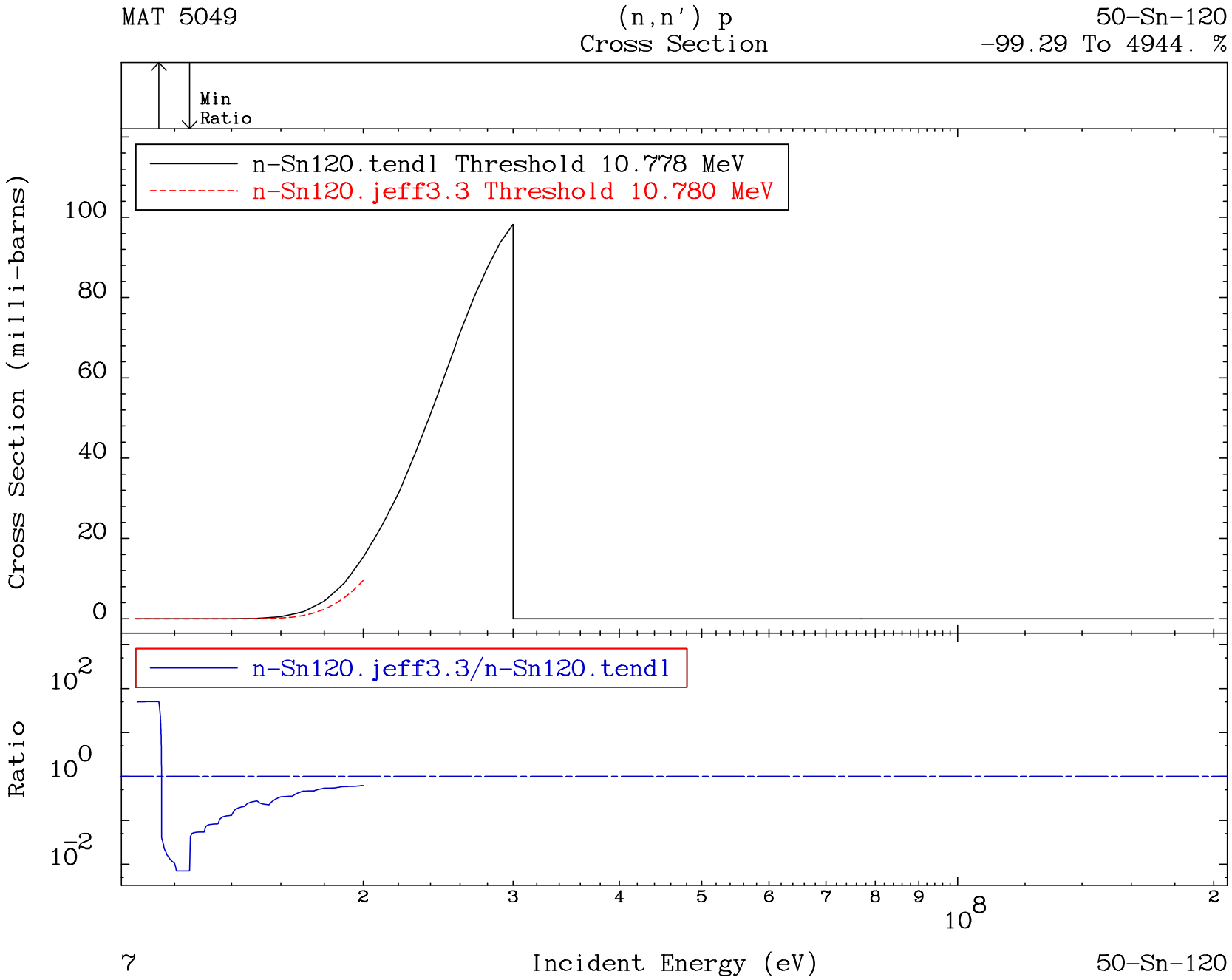

MAT 5049
Elastic
Cross Section
50-Sn-120
-98.08 To 2482. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
2
50-Sn-120

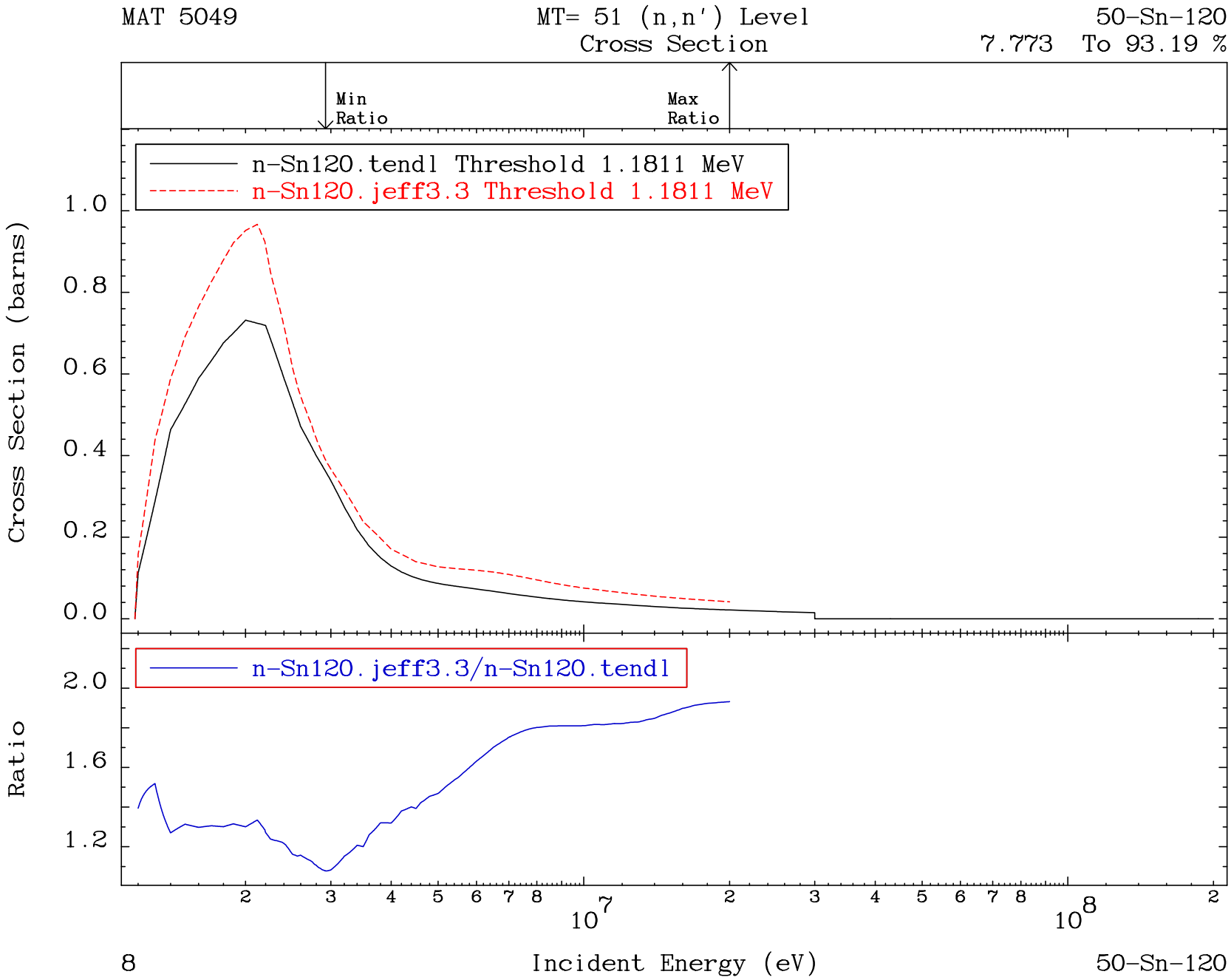

MAT 5049
Inelastic
Cross Section
50-Sn-120
-44.26 To 52.11 %
Max
Ratio
Min
Ratio
n-Sn120.tendl Threshold 1.1811 MeV
n-Sn120.jeff3.3 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
50-Sn-120

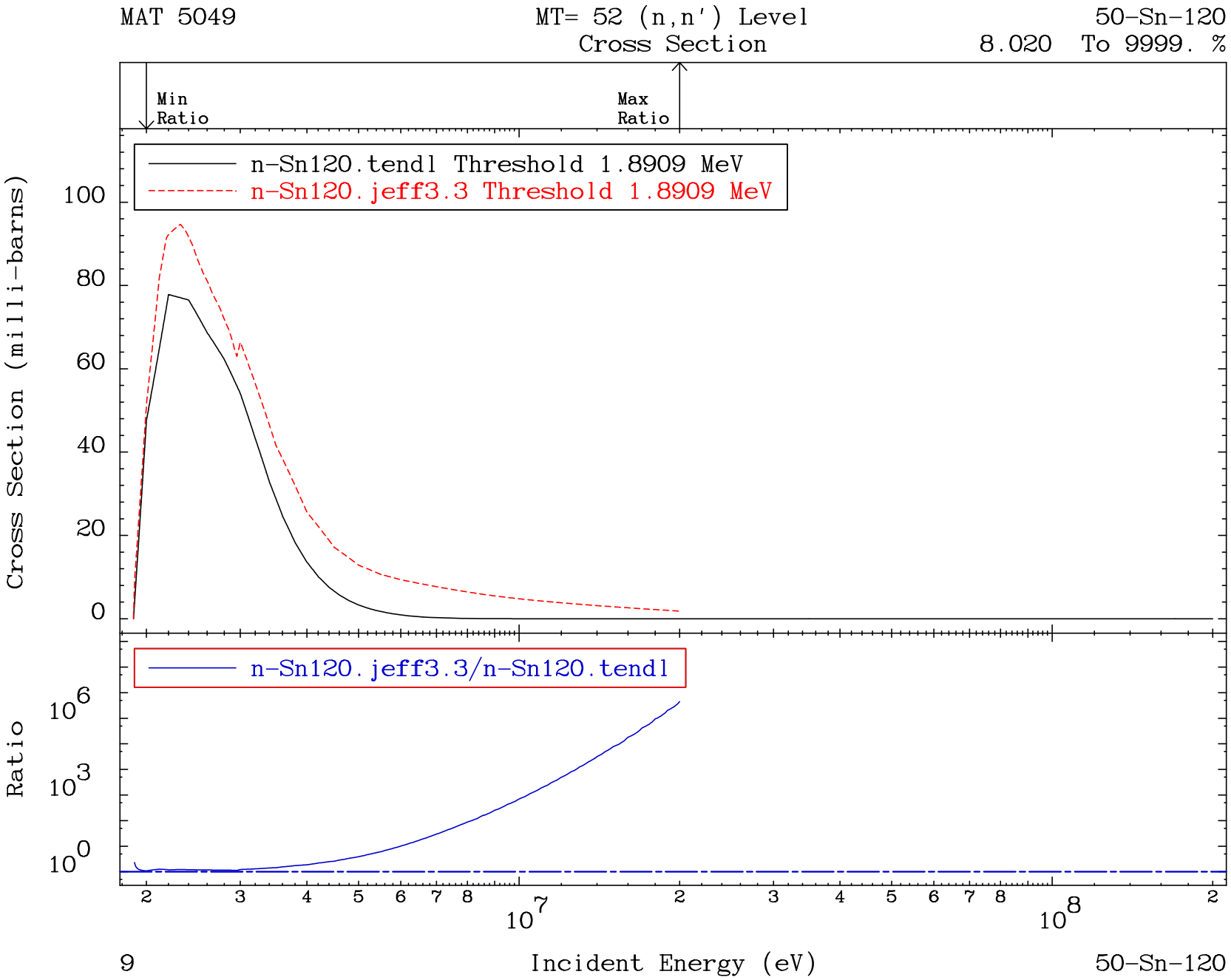

MAT 5049
(n,2n)
Cross Section
50-Sn-120
-28.28 To 38.57 %
Max
Ratio
n-Sn120.tendl Threshold 9.1813 MeV
n-Sn120.jeff3.3 Threshold 9.1847 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.2
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
50-Sn-120

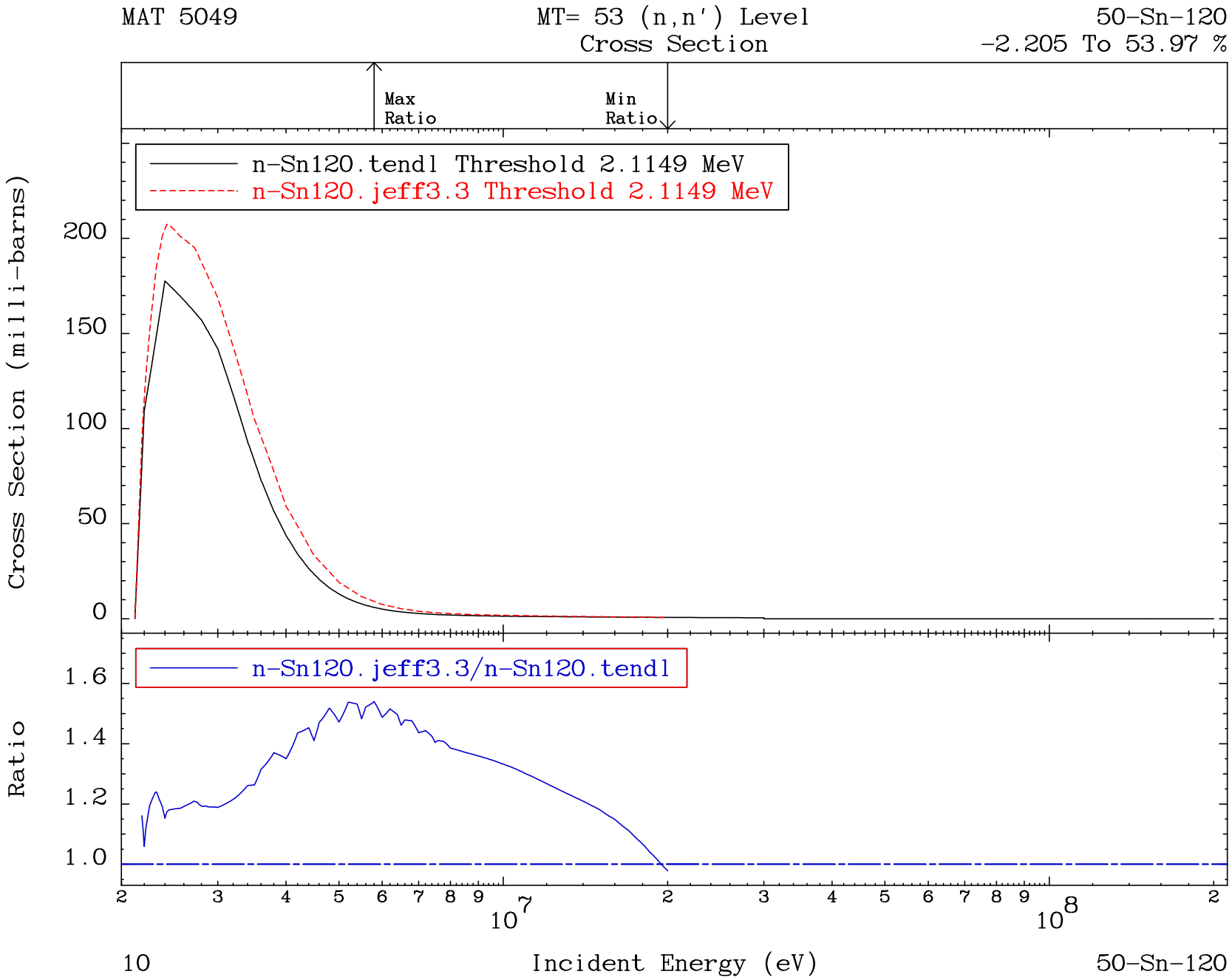

MAT 5049
(n,3n)
Cross Section
50-Sn-120
-89.43 To 81.03 %
Max
Ratio
n-Sn120.tendl Threshold 15.719 MeV
n-Sn120.jeff3.3 Threshold 15.723 MeV
Cross Section (barns)
0.8
0.6
0.4
0.2
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
4
10^0
6
4
10^-1
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
50-Sn-120

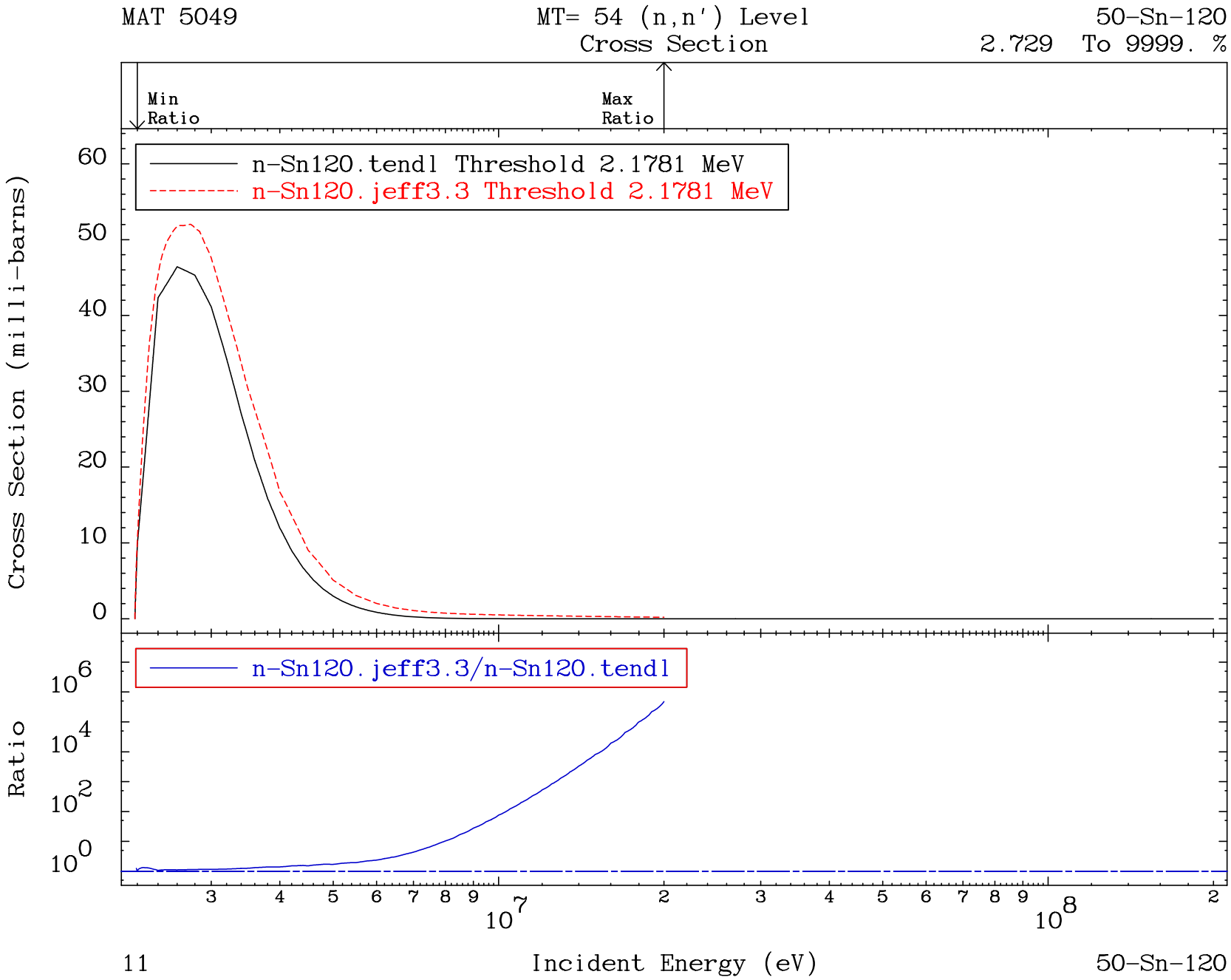

MAT 5049
(n,n') α
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 4.8513 MeV
n-Sn120.jeff3.3 Threshold 4.8513 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^0
10^-4
10^-8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
50-Sn-120

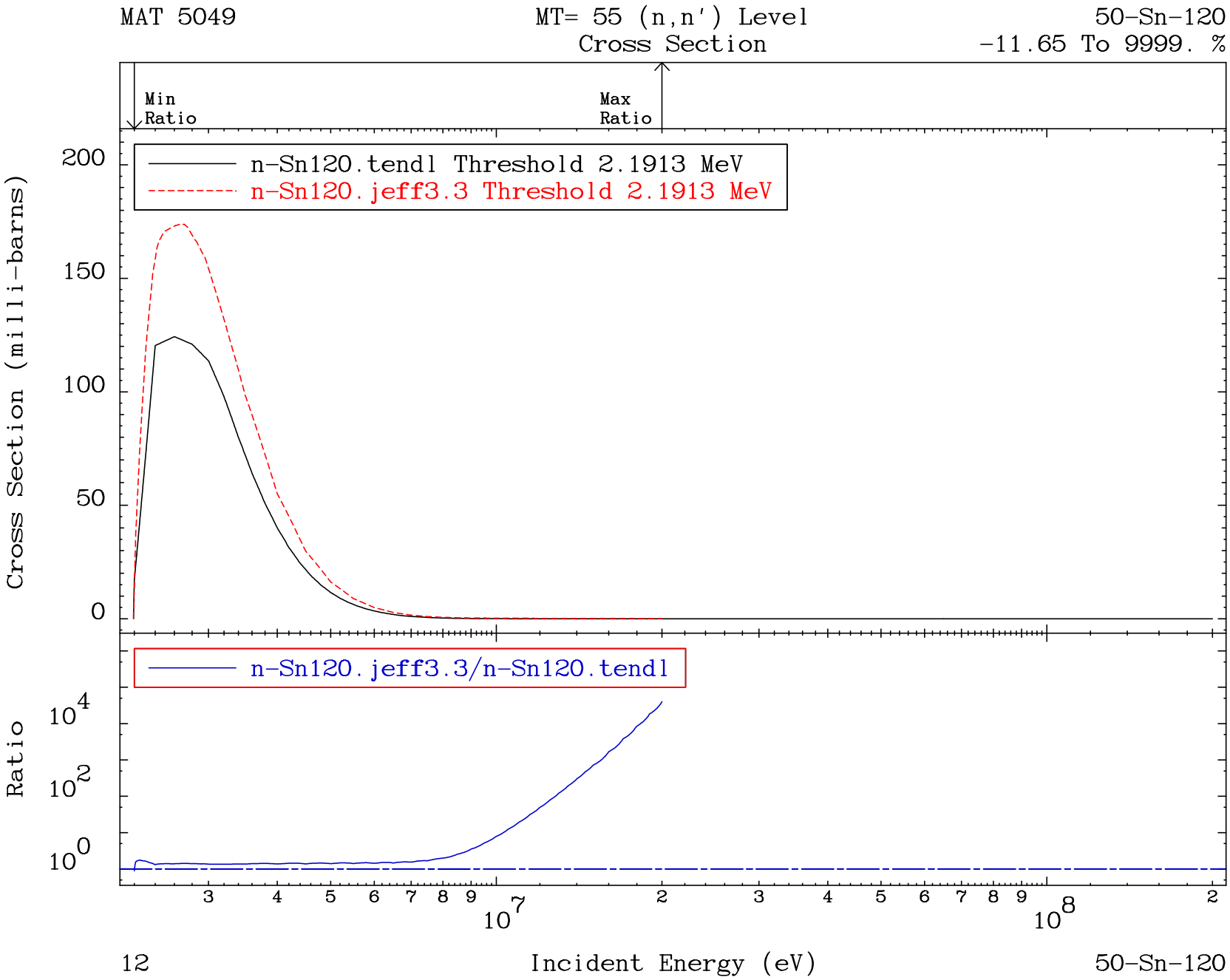

MAT 5049
(n,n') p
Cross Section
50-Sn-120
-99.29 To 4944. %
Min
Ratio
n-Sn120.tendl Threshold 10.778 MeV
n-Sn120.jeff3.3 Threshold 10.780 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
50-Sn-120

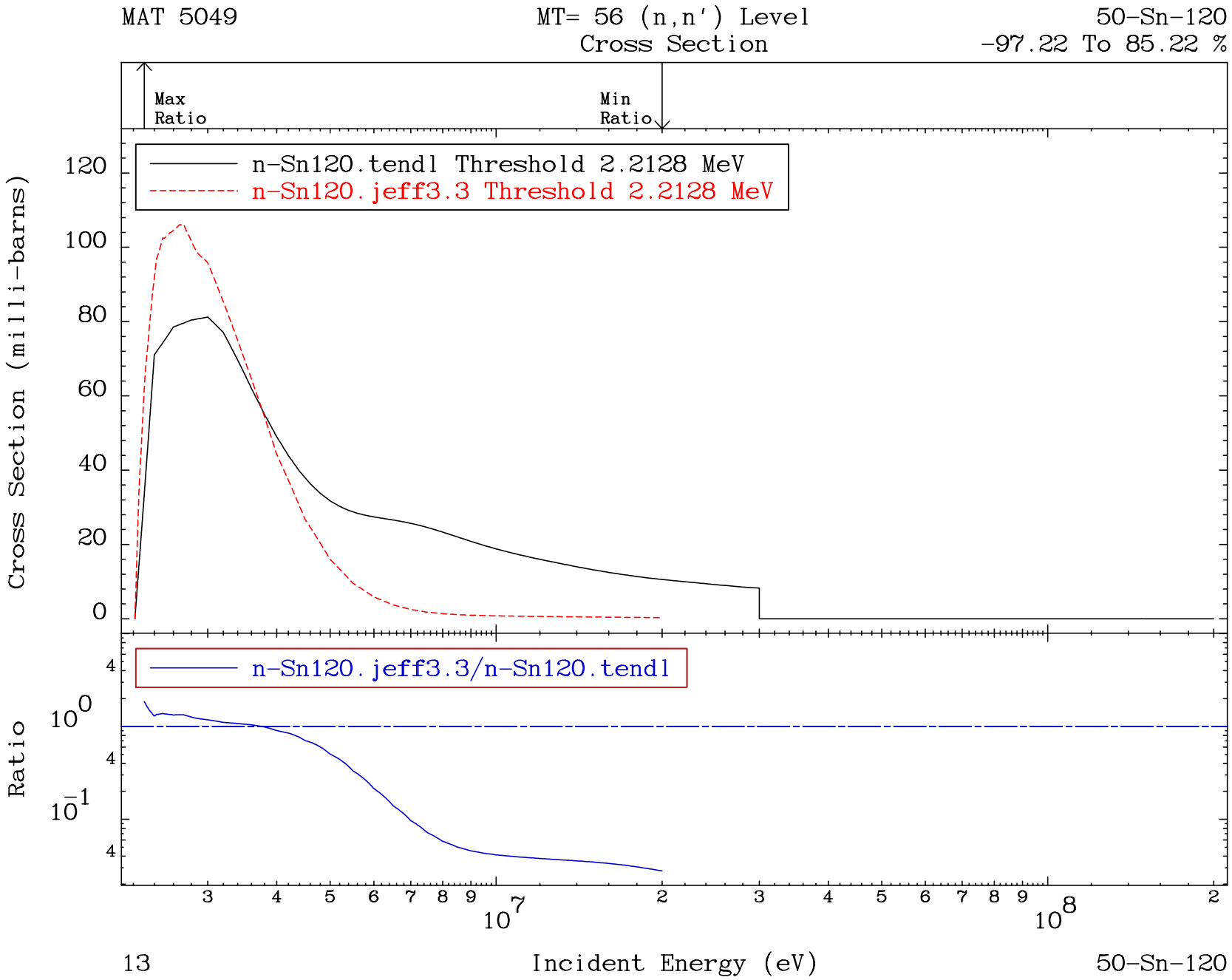

MAT 5049
MT= 51 (n,n') Level
Cross Section
50-Sn-120
7.773 To 93.19 %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 1.1811 MeV
n-Sn120.jeff3.3 Threshold 1.1811 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.0
1.6
1.2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
50-Sn-120

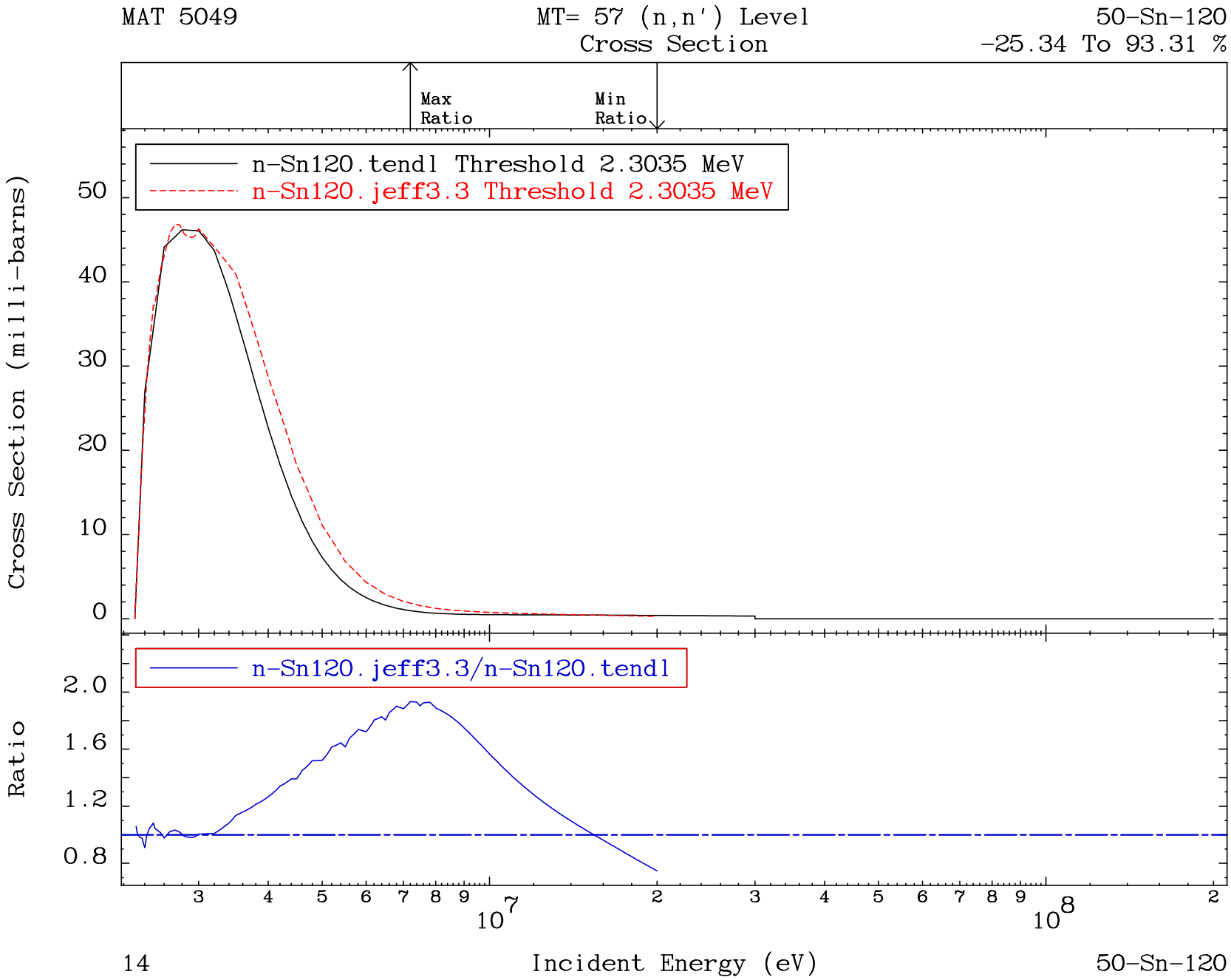

MAT 5049
MT= 52 (n,n') Level
Cross Section
50-Sn-120
8.020 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 1.8909 MeV
n-Sn120.jeff3.3 Threshold 1.8909 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
50-Sn-120

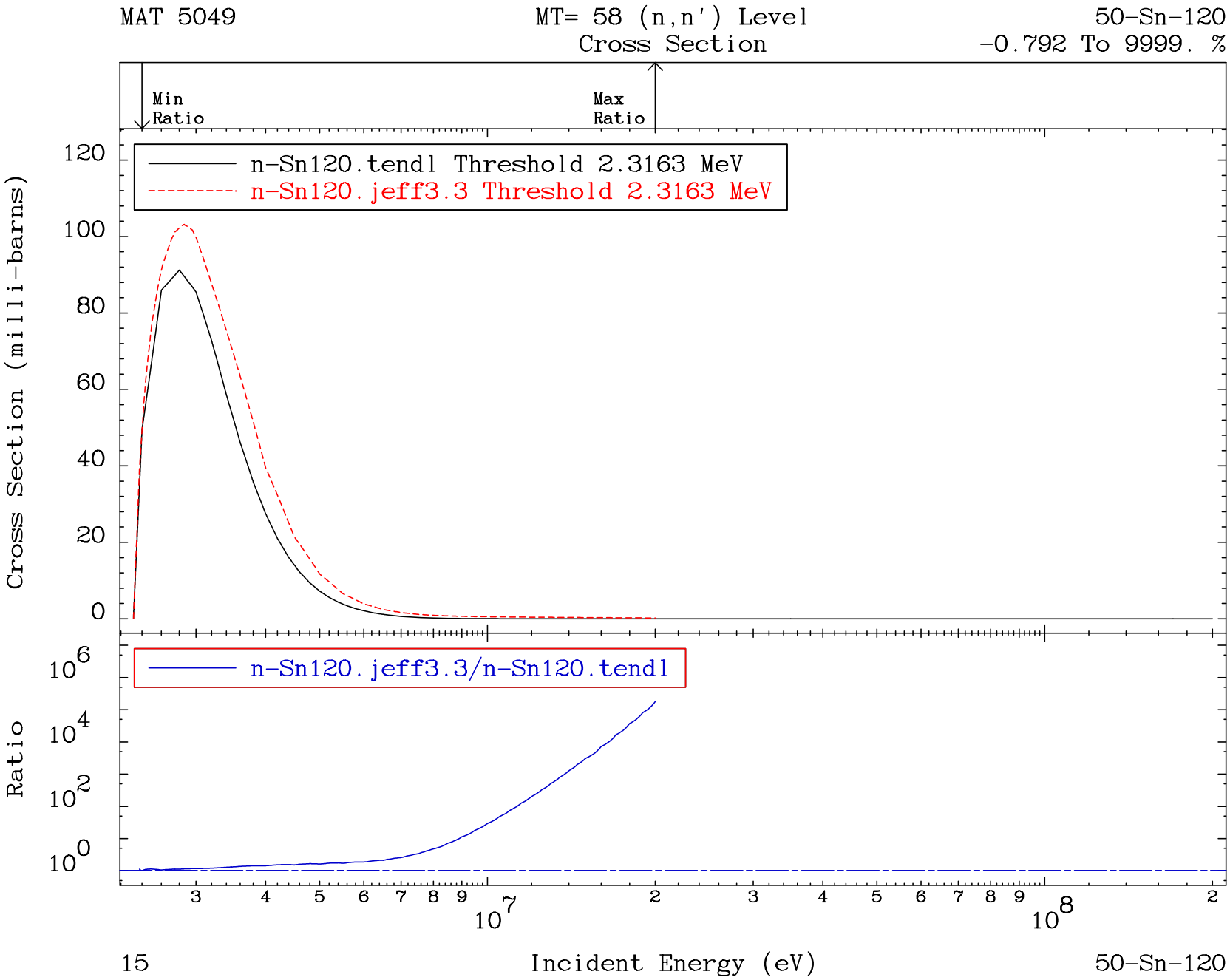

MAT 5049
MT= 53 (n,n') Level
Cross Section
50-Sn-120
-2.205 To 53.97 %
Max
Ratio
Min
Ratio
n-Sn120.tendl Threshold 2.1149 MeV
n-Sn120.jeff3.3 Threshold 2.1149 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
50-Sn-120

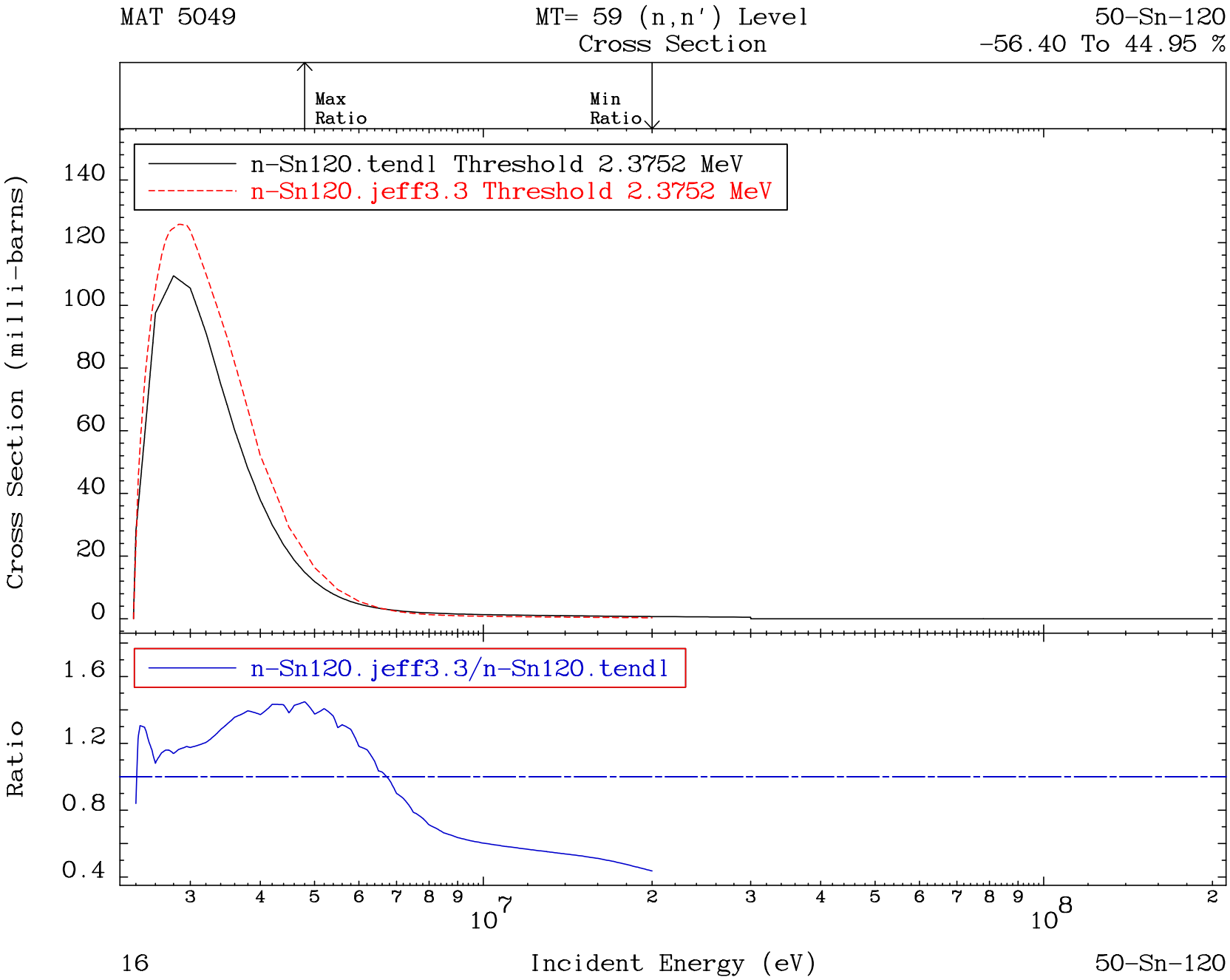

MAT 5049
MT= 54 (n,n') Level
Cross Section
50-Sn-120
2.729 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.1781 MeV
n-Sn120.jeff3.3 Threshold 2.1781 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
50-Sn-120

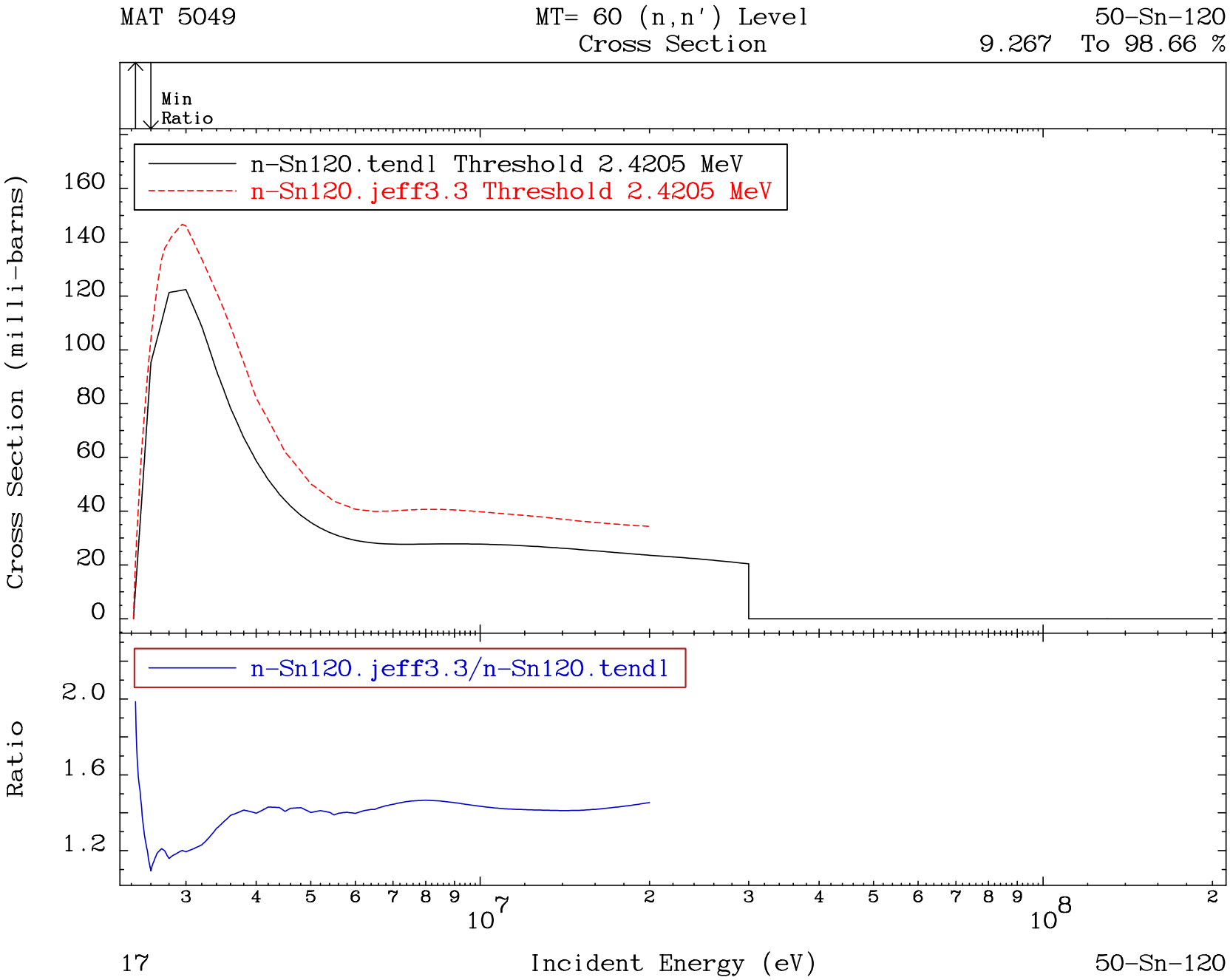

MAT 5049
MT= 55 (n,n') Level
Cross Section
50-Sn-120
-11.65 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.1913 MeV
n-Sn120.jeff3.3 Threshold 2.1913 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
50-Sn-120

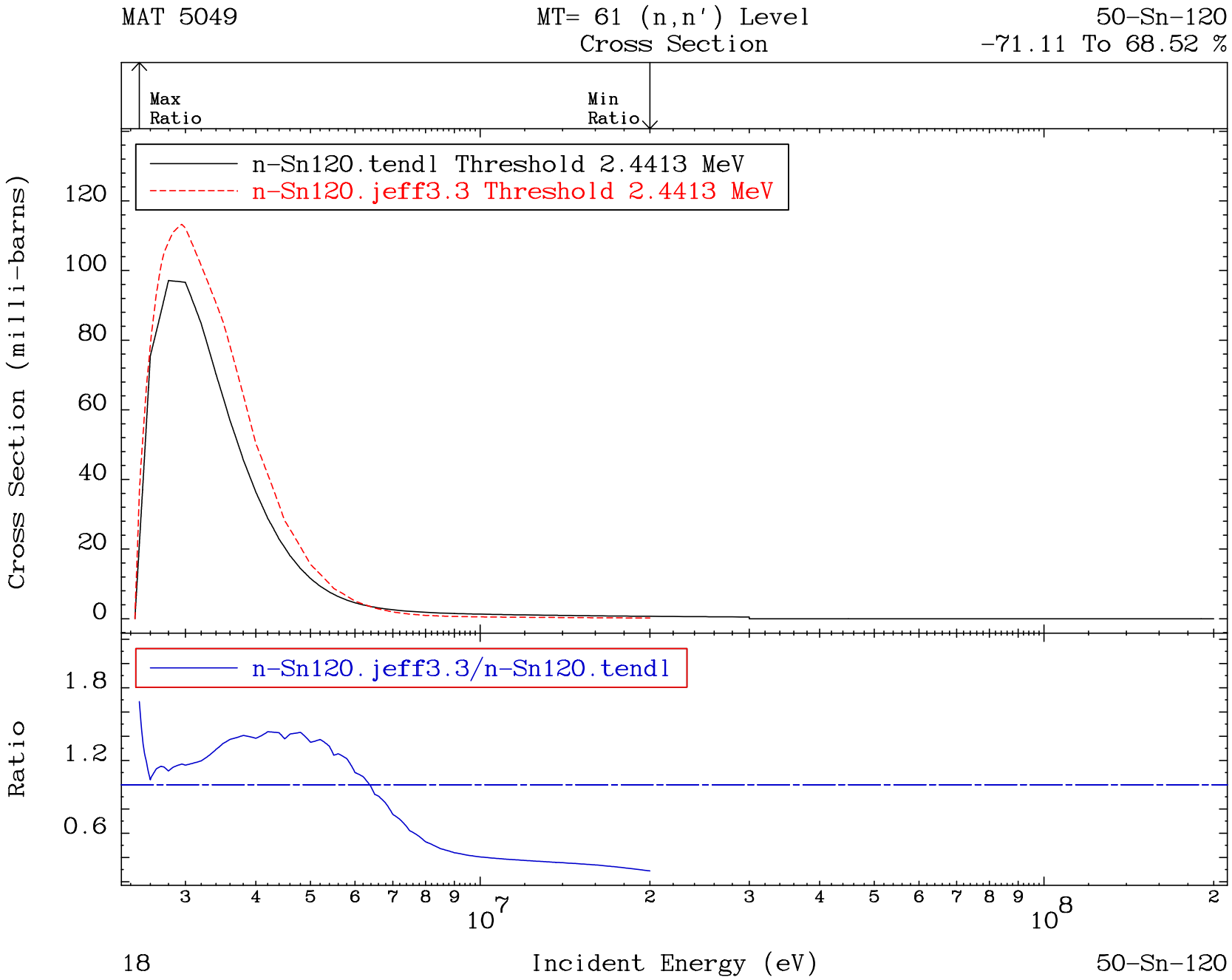

MAT 5049
MT= 56 (n,n') Level
Cross Section
50-Sn-120
-97.22 To 85.22 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.2128 MeV
n-Sn120.jeff3.3 Threshold 2.2128 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^0
10^-1
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
50-Sn-120

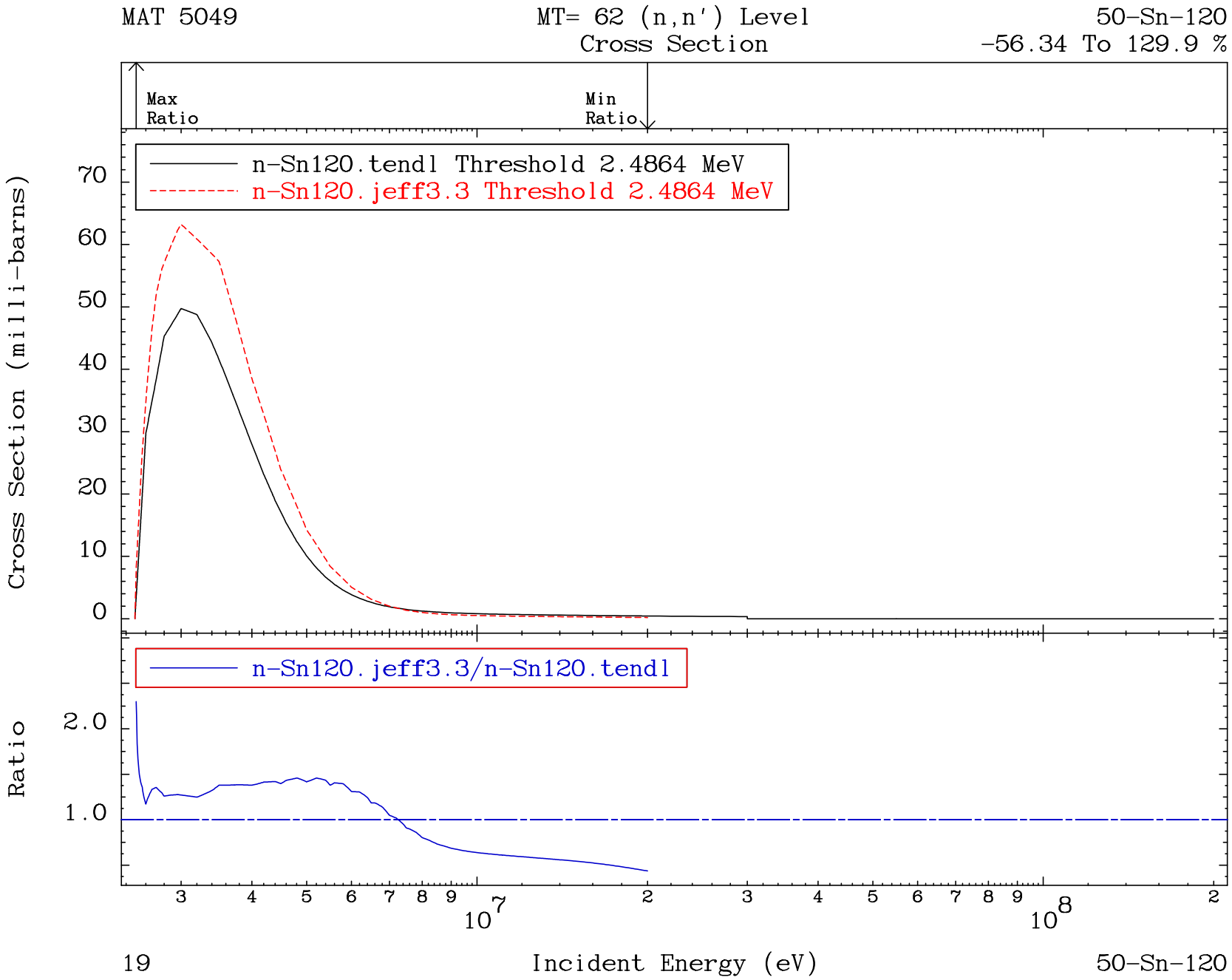

MAT 5049
MT= 57 (n,n') Level
Cross Section
50-Sn-120
-25.34 To 93.31 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.3035 MeV
n-Sn120.jeff3.3 Threshold 2.3035 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.0
1.6
1.2
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
50-Sn-120

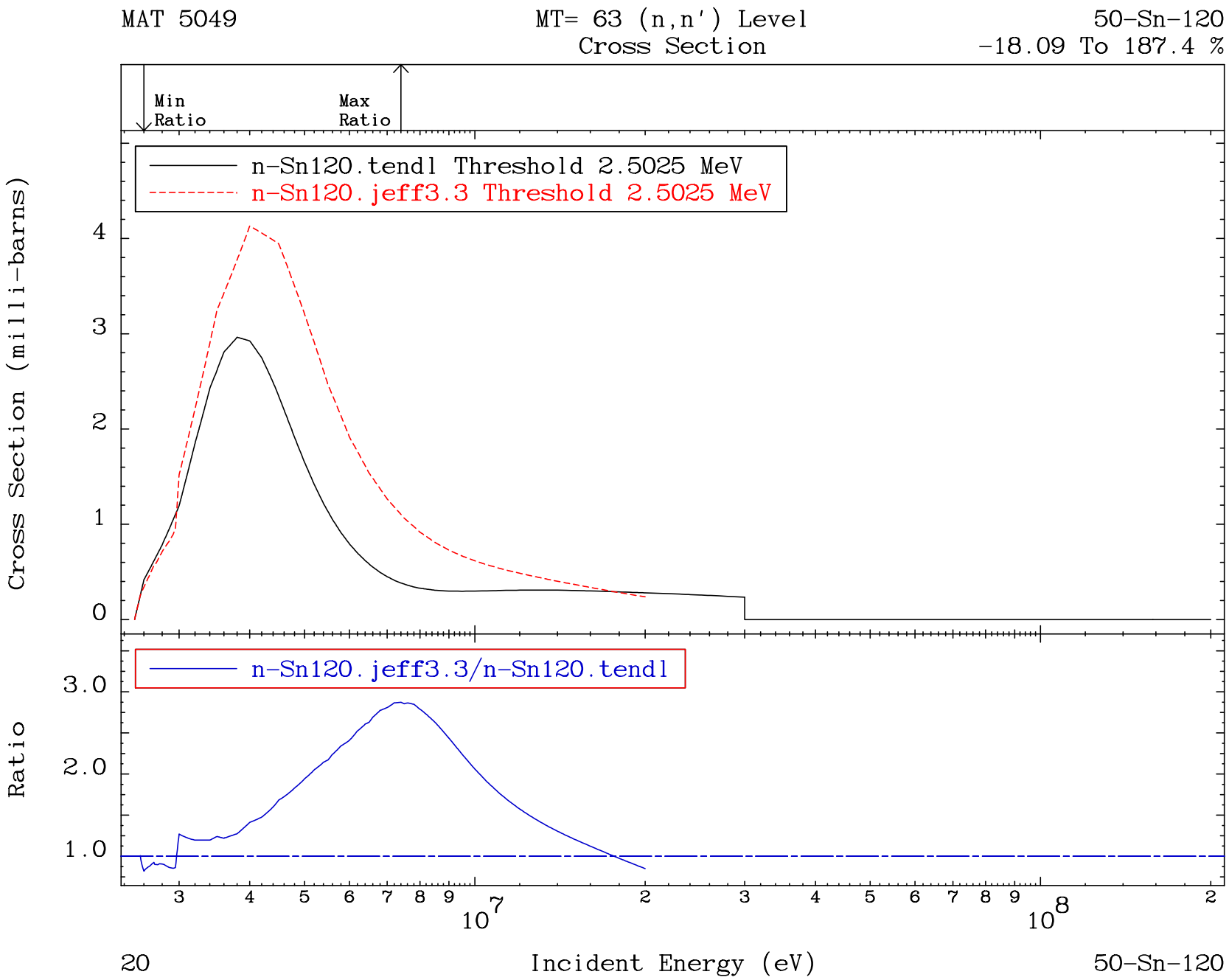

MAT 5049
MT= 58 (n,n') Level
Cross Section
50-Sn-120
-0.792 To 9999. %
Min
Ratio
Max
Ratio
n-Sn120.tendl Threshold 2.3163 MeV
n-Sn120.jeff3.3 Threshold 2.3163 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
15
Incident Energy (eV)
50-Sn-120

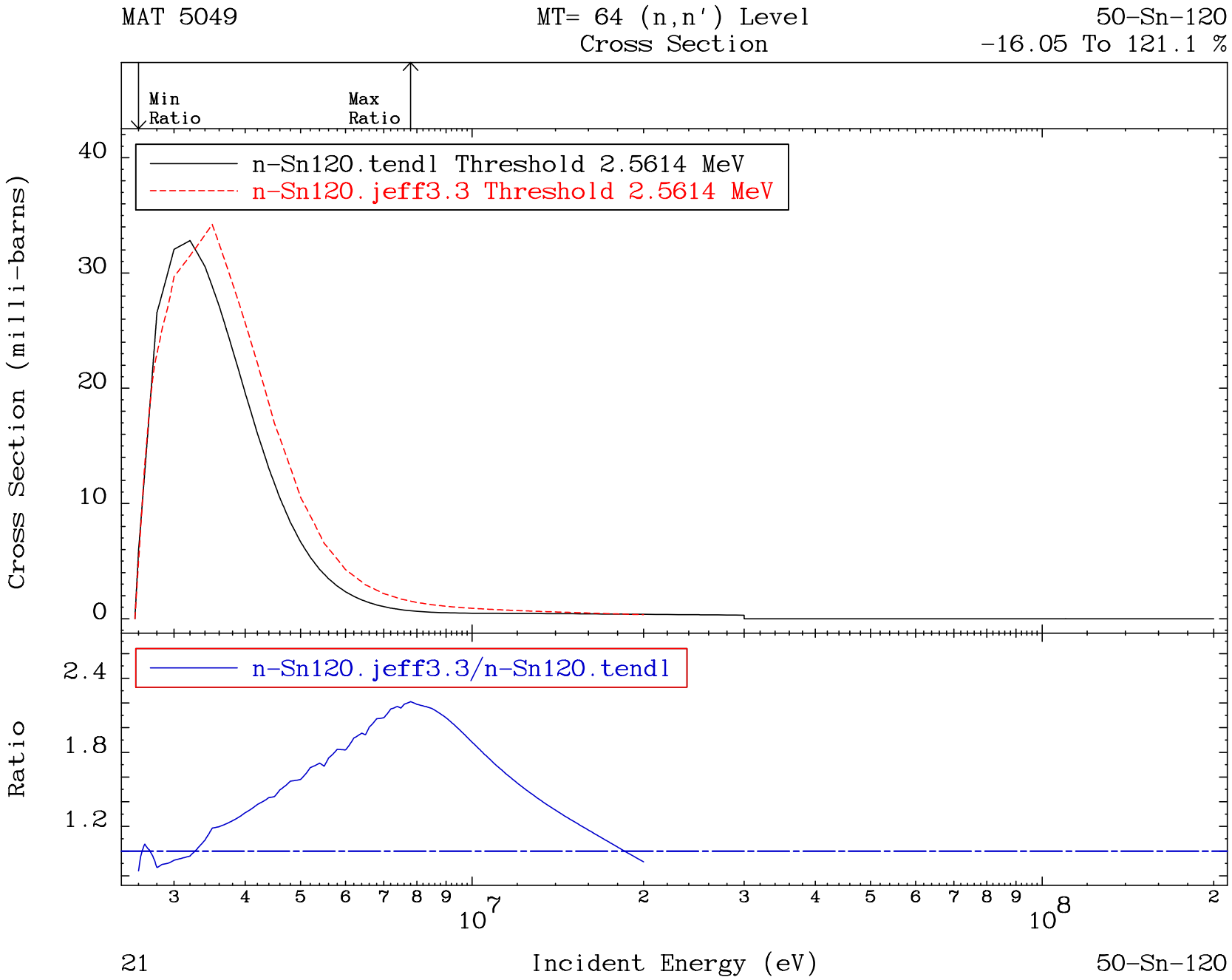

MAT 5049
MT= 59 (n,n') Level
Cross Section
50-Sn-120
-56.40 To 44.95 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.3752 MeV
n-Sn120.jeff3.3 Threshold 2.3752 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
50-Sn-120

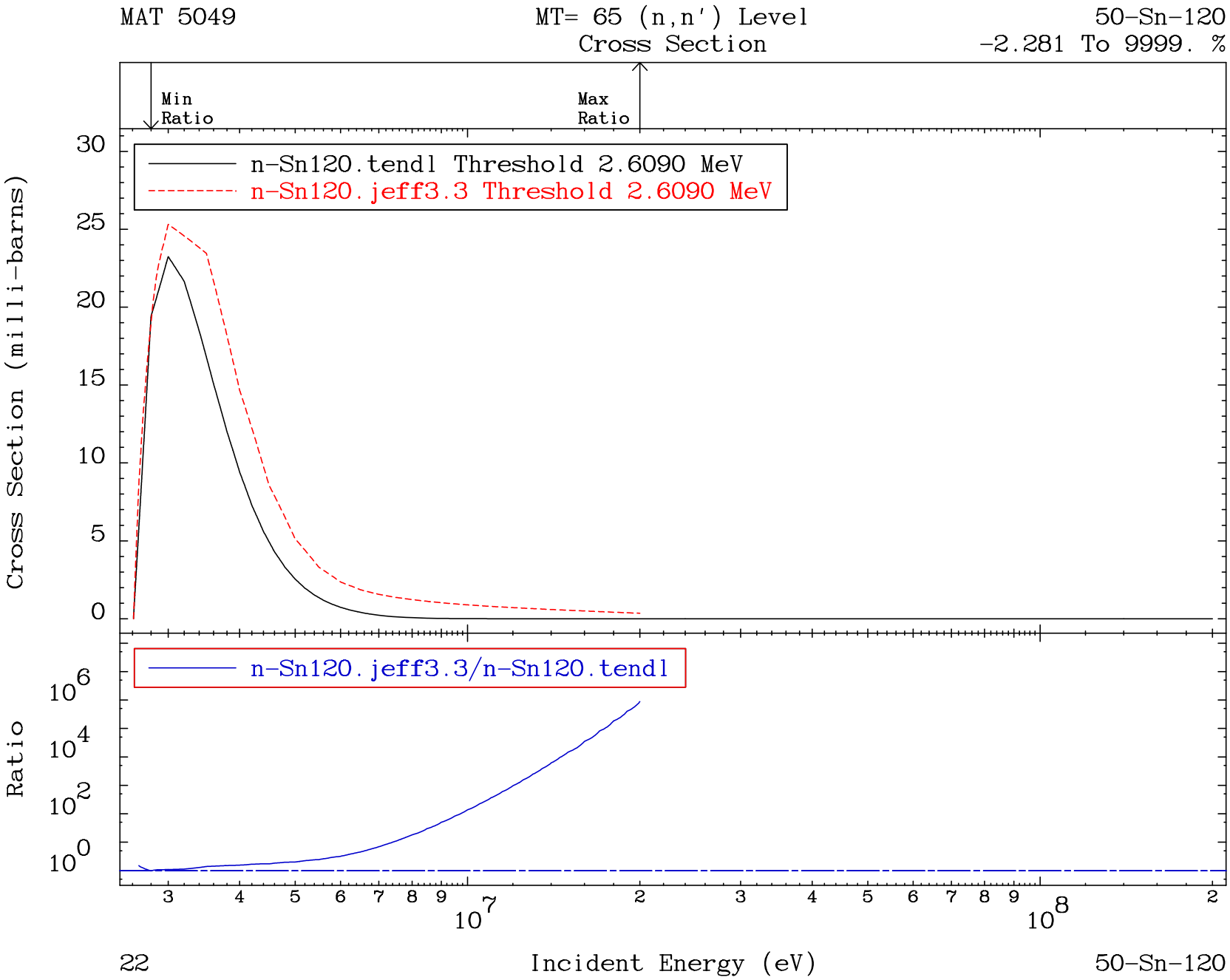

MAT 5049
MT= 60 (n,n') Level
Cross Section
50-Sn-120
9.267 To 98.66 %
Min
Ratio
n-Sn120.tendl Threshold 2.4205 MeV
n-Sn120.jeff3.3 Threshold 2.4205 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
50-Sn-120

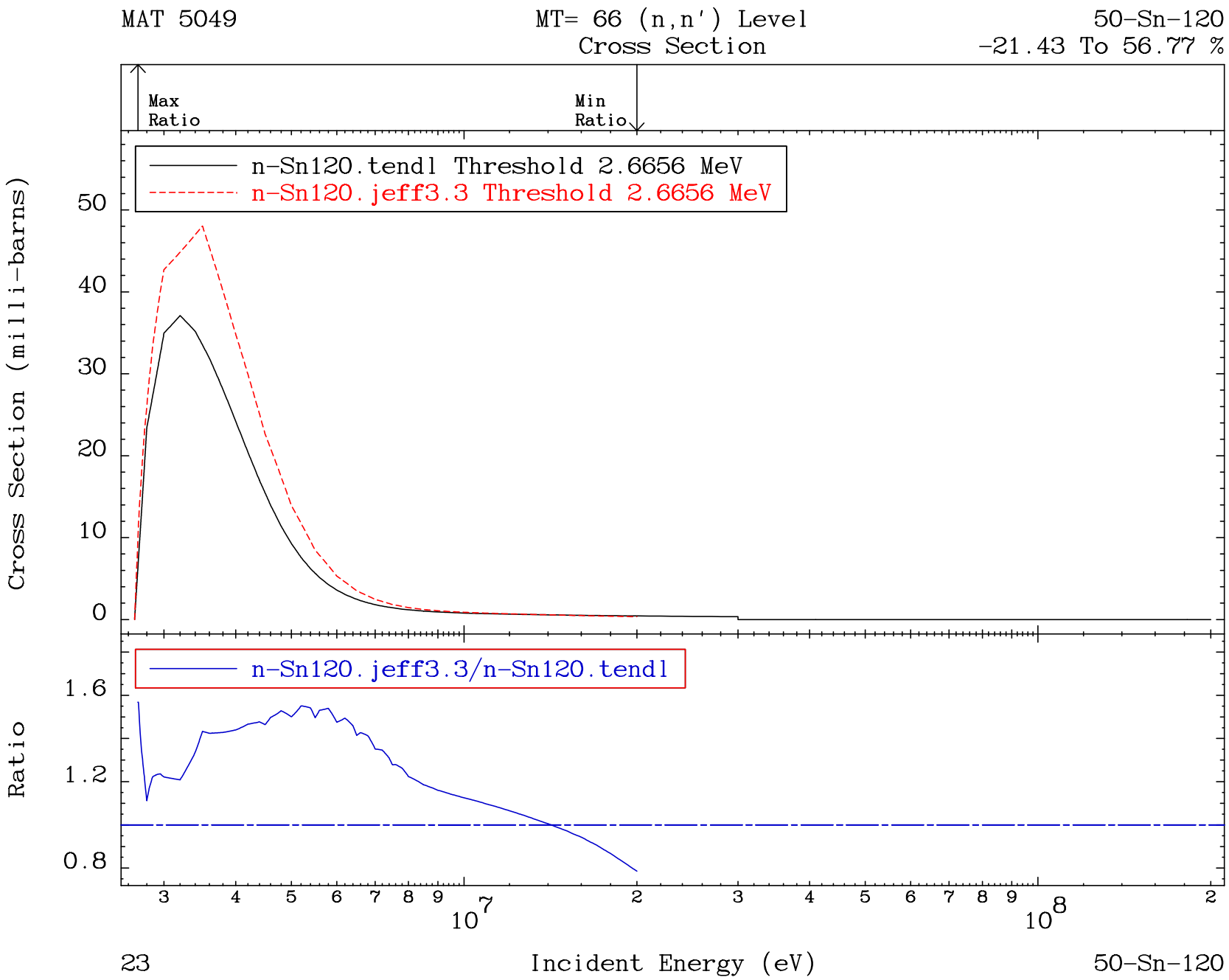

MAT 5049
MT= 61 (n,n') Level
Cross Section
50-Sn-120
-71.11 To 68.52 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.4413 MeV
n-Sn120.jeff3.3 Threshold 2.4413 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.8
1.2
0.6
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
18
Incident Energy (eV)
50-Sn-120

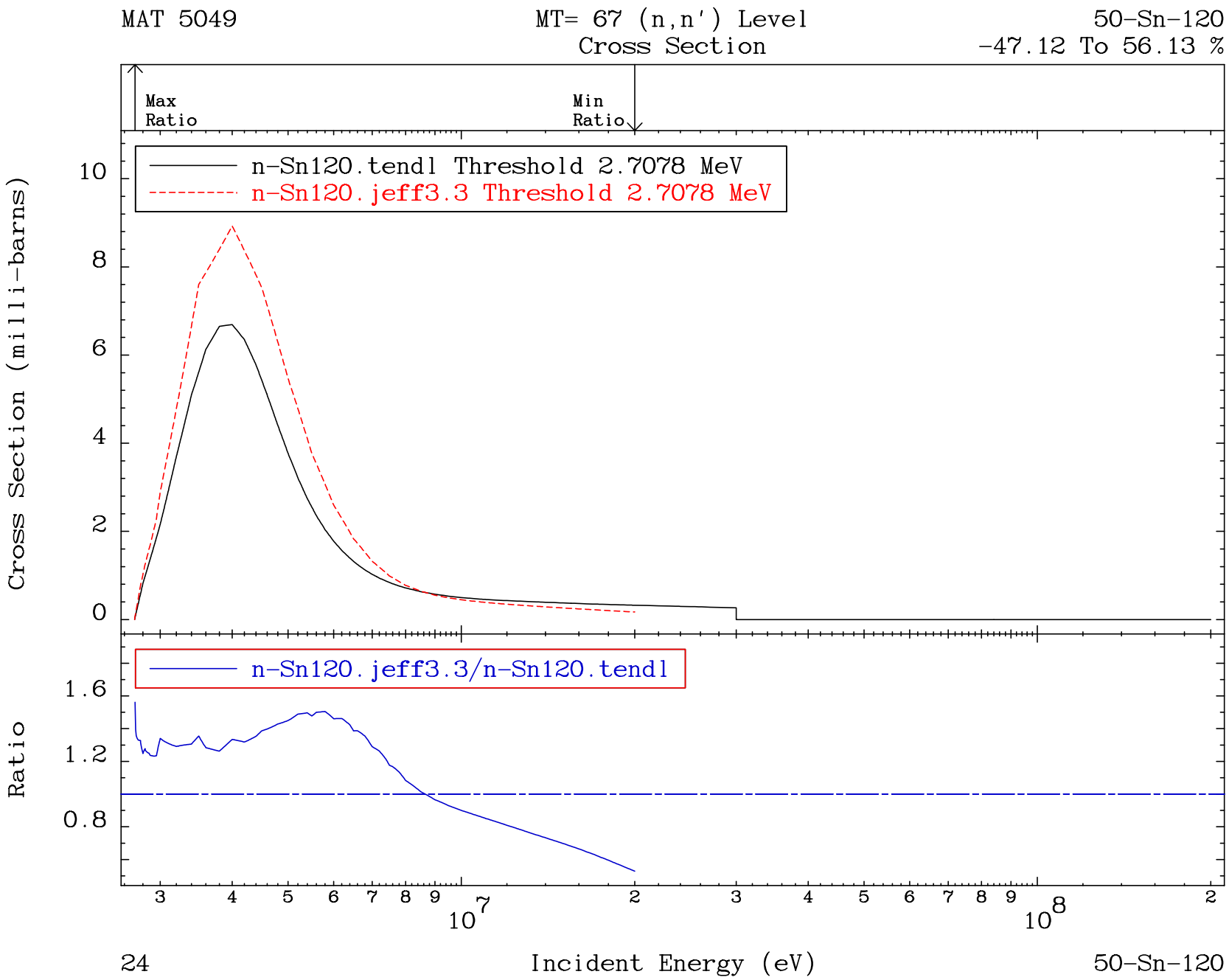

MAT 5049
MT= 62 (n,n') Level
Cross Section
50-Sn-120
-56.34 To 129.9 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.4864 MeV
n-Sn120.jeff3.3 Threshold 2.4864 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.0
1.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
19
Incident Energy (eV)
50-Sn-120

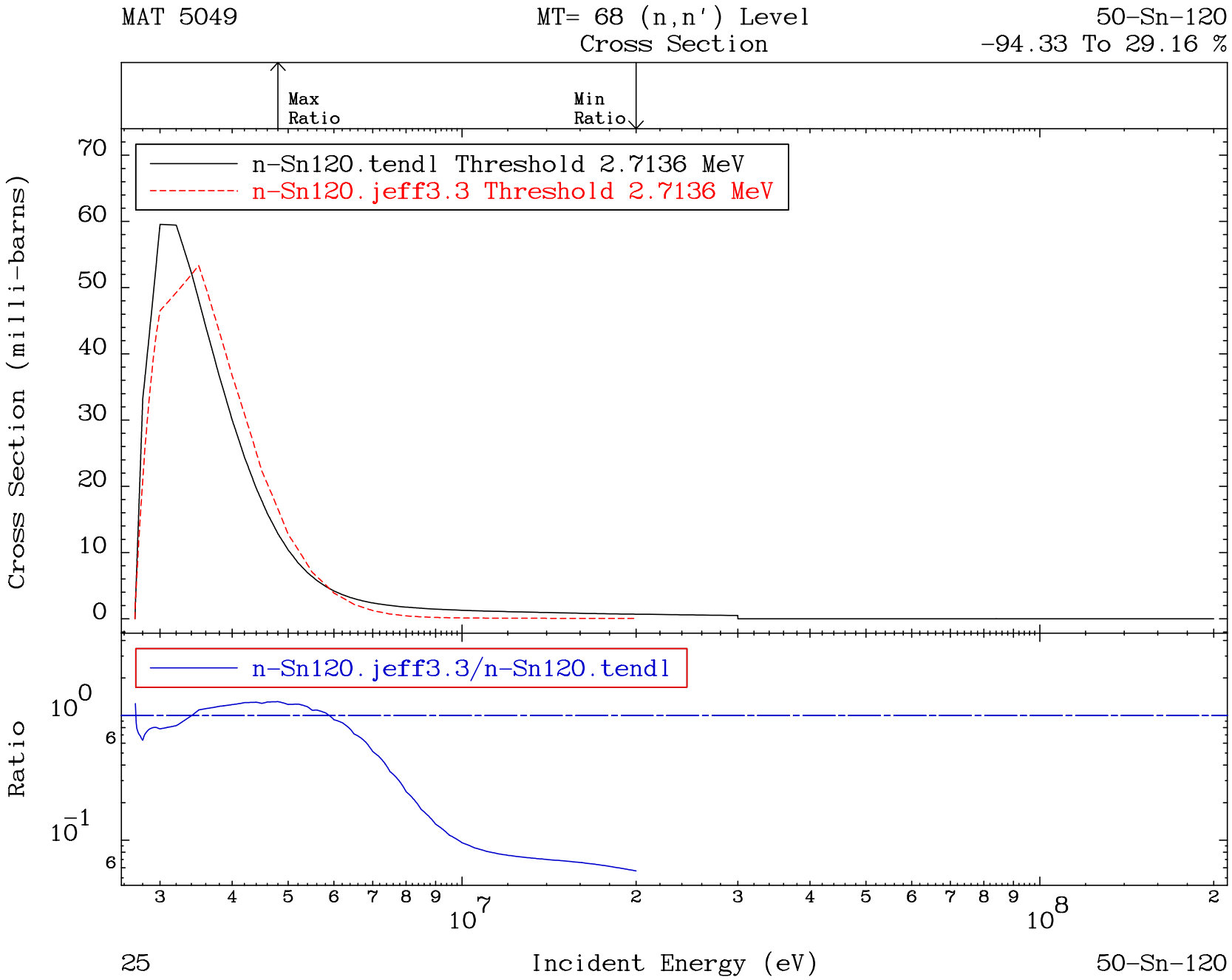

MAT 5049
MT= 63 (n,n') Level
Cross Section
50-Sn-120
-18.09 To 187.4 %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.5025 MeV
n-Sn120.jeff3.3 Threshold 2.5025 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.0
2.0
3.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
50-Sn-120

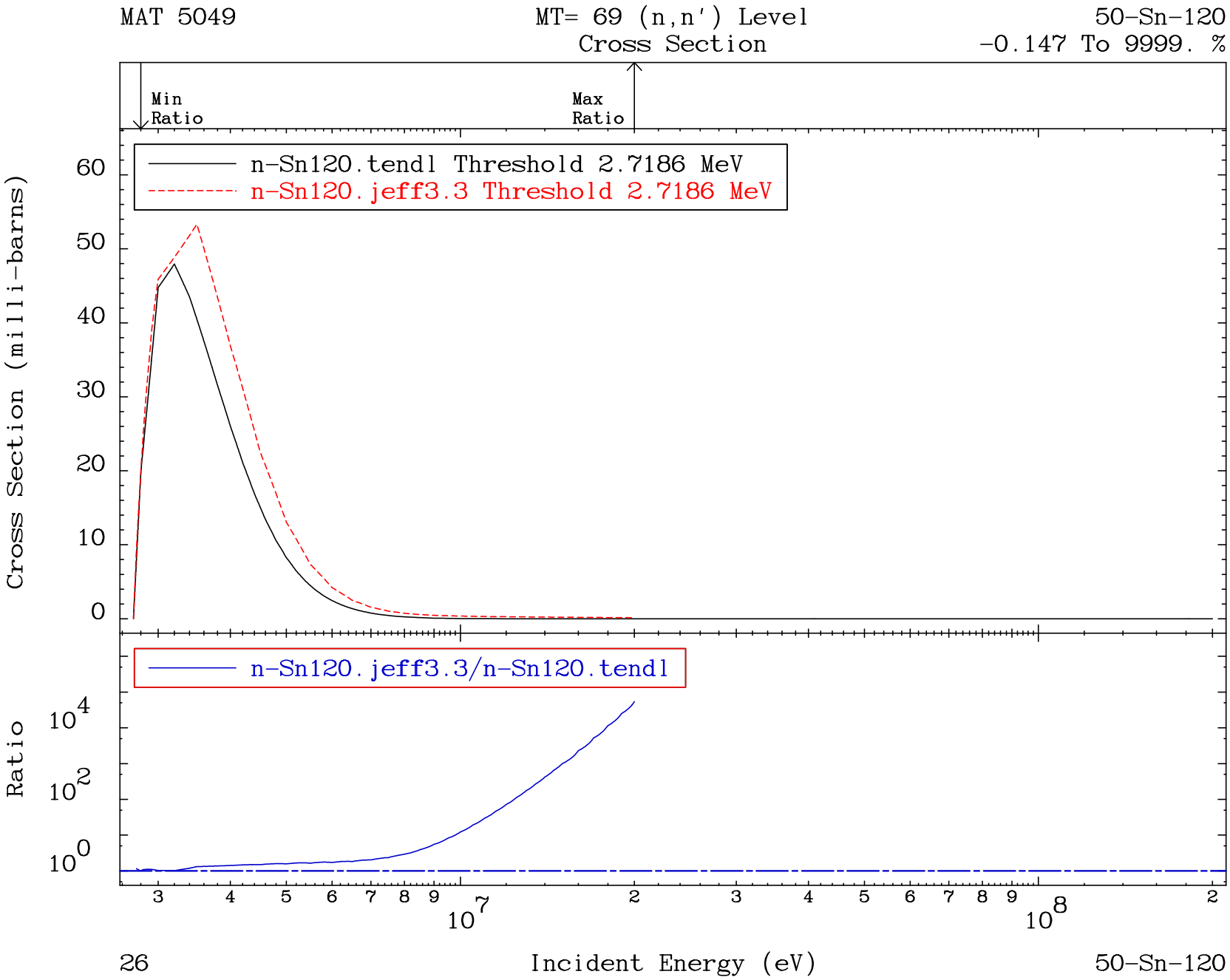

MAT 5049
MT= 64 (n,n') Level
Cross Section
50-Sn-120
-16.05 To 121.1 %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.5614 MeV
n-Sn120.jeff3.3 Threshold 2.5614 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.4
1.8
1.2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
50-Sn-120

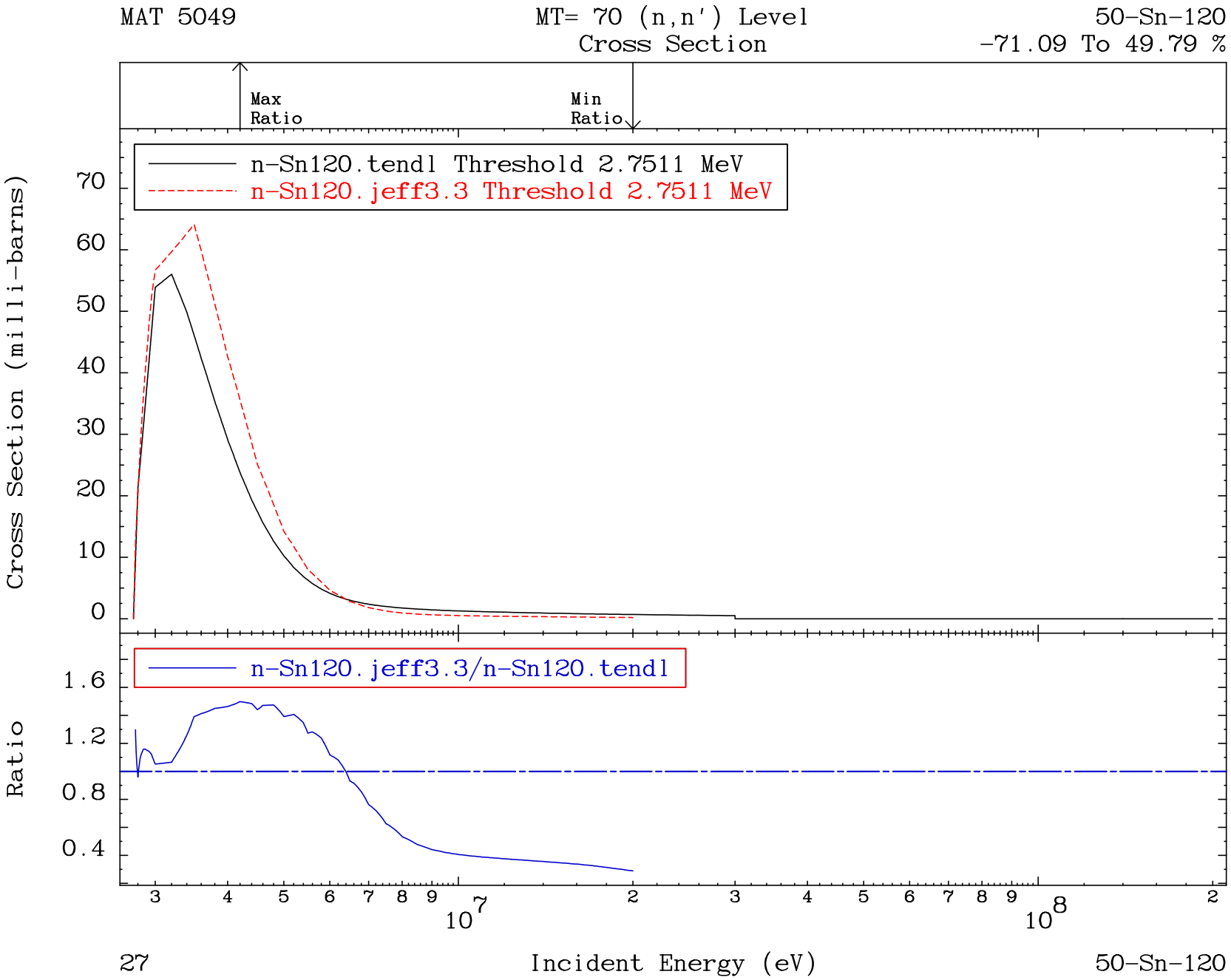

MAT 5049
MT= 65 (n,n') Level
Cross Section
50-Sn-120
-2.281 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.6090 MeV
n-Sn120.jeff3.3 Threshold 2.6090 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
22
Incident Energy (eV)
50-Sn-120

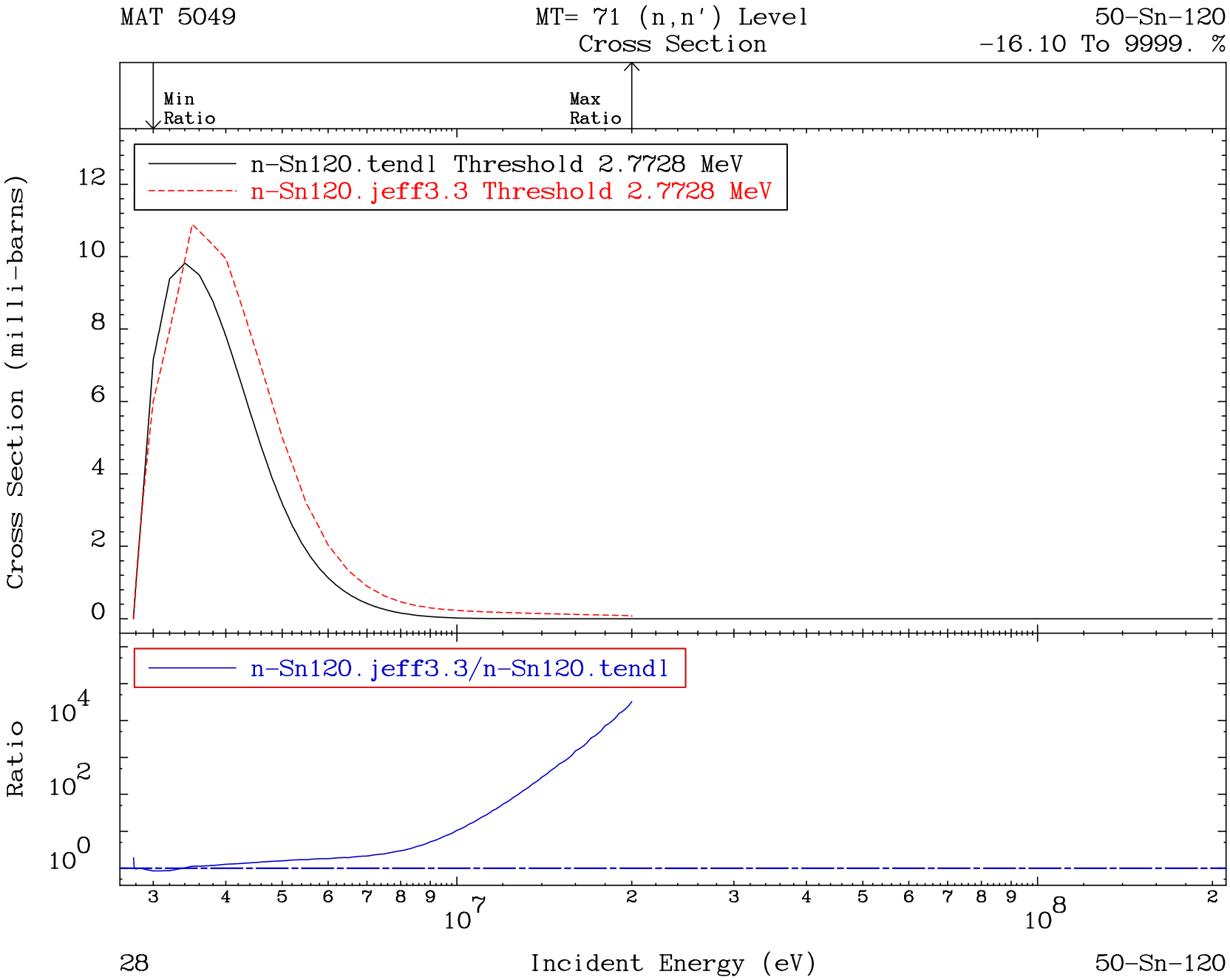

MAT 5049
MT= 66 (n,n') Level
Cross Section
50-Sn-120
-21.43 To 56.77 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.6656 MeV
n-Sn120.jeff3.3 Threshold 2.6656 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
50-Sn-120

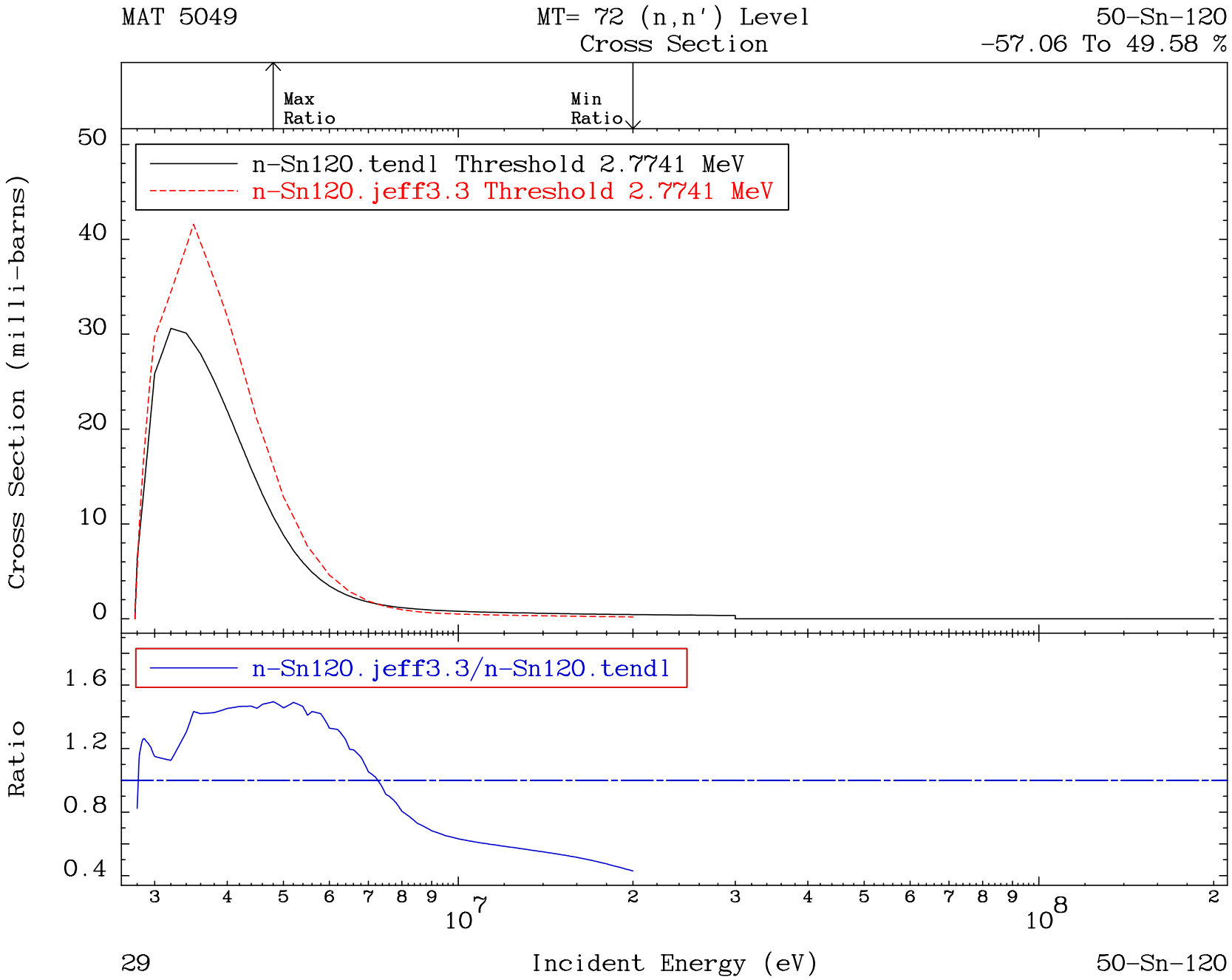

MAT 5049
MT= 67 (n,n') Level
Cross Section
50-Sn-120
-47.12 To 56.13 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.7078 MeV
n-Sn120.jeff3.3 Threshold 2.7078 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
50-Sn-120

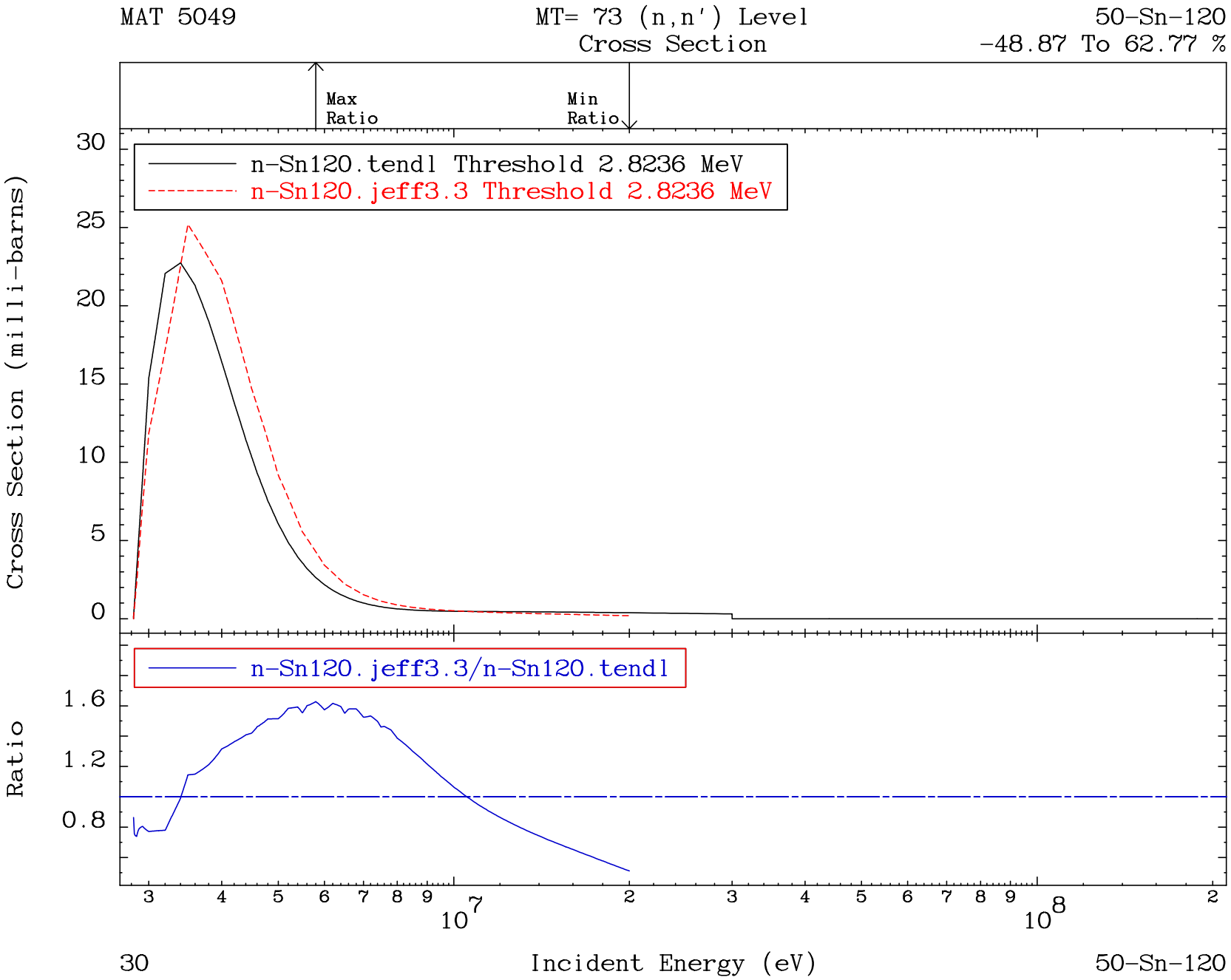

MAT 5049
MT= 68 (n,n') Level
Cross Section
50-Sn-120
-94.33 To 29.16 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.7136 MeV
n-Sn120.jeff3.3 Threshold 2.7136 MeV
Cross Section (milli-barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
25
50-Sn-120

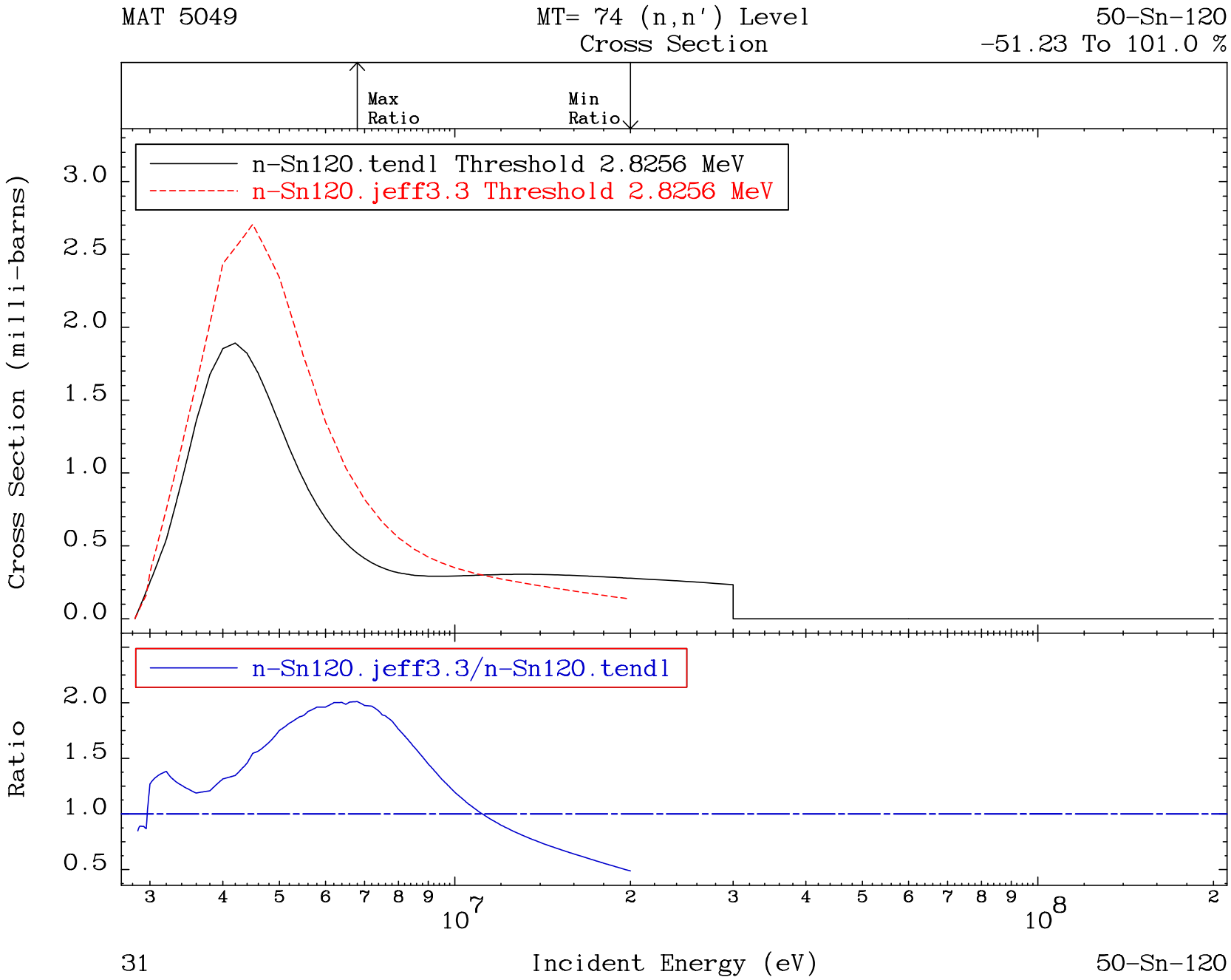

MAT 5049
MT= 69 (n,n') Level
Cross Section
50-Sn-120
-0.147 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.7186 MeV
n-Sn120.jeff3.3 Threshold 2.7186 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
50-Sn-120

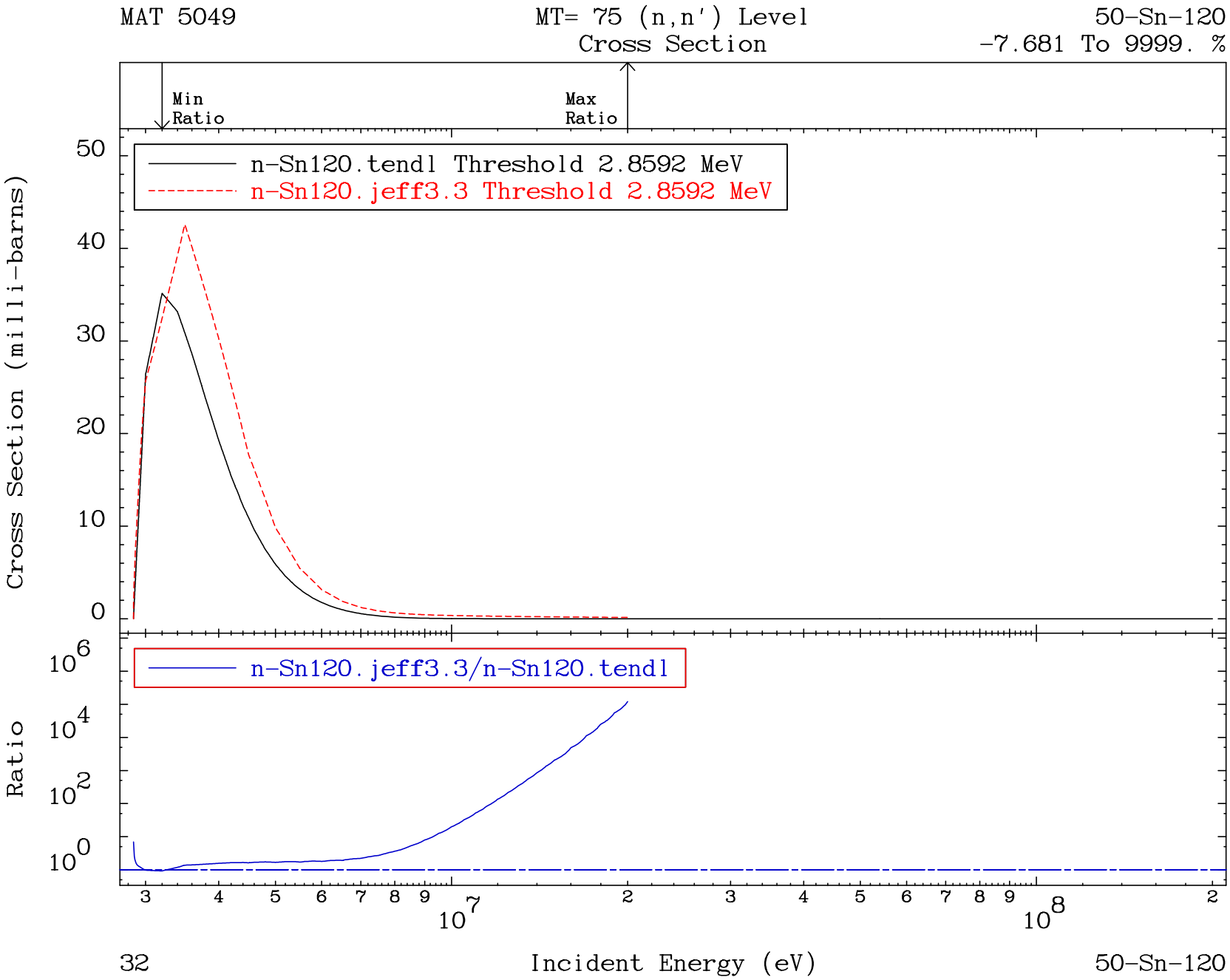

MAT 5049
MT= 70 (n,n') Level
Cross Section
50-Sn-120
-71.09 To 49.79 %
Max
Ratio
Min
Ratio
n-Sn120.tendl Threshold 2.7511 MeV
n-Sn120.jeff3.3 Threshold 2.7511 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
0.4
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
50-Sn-120

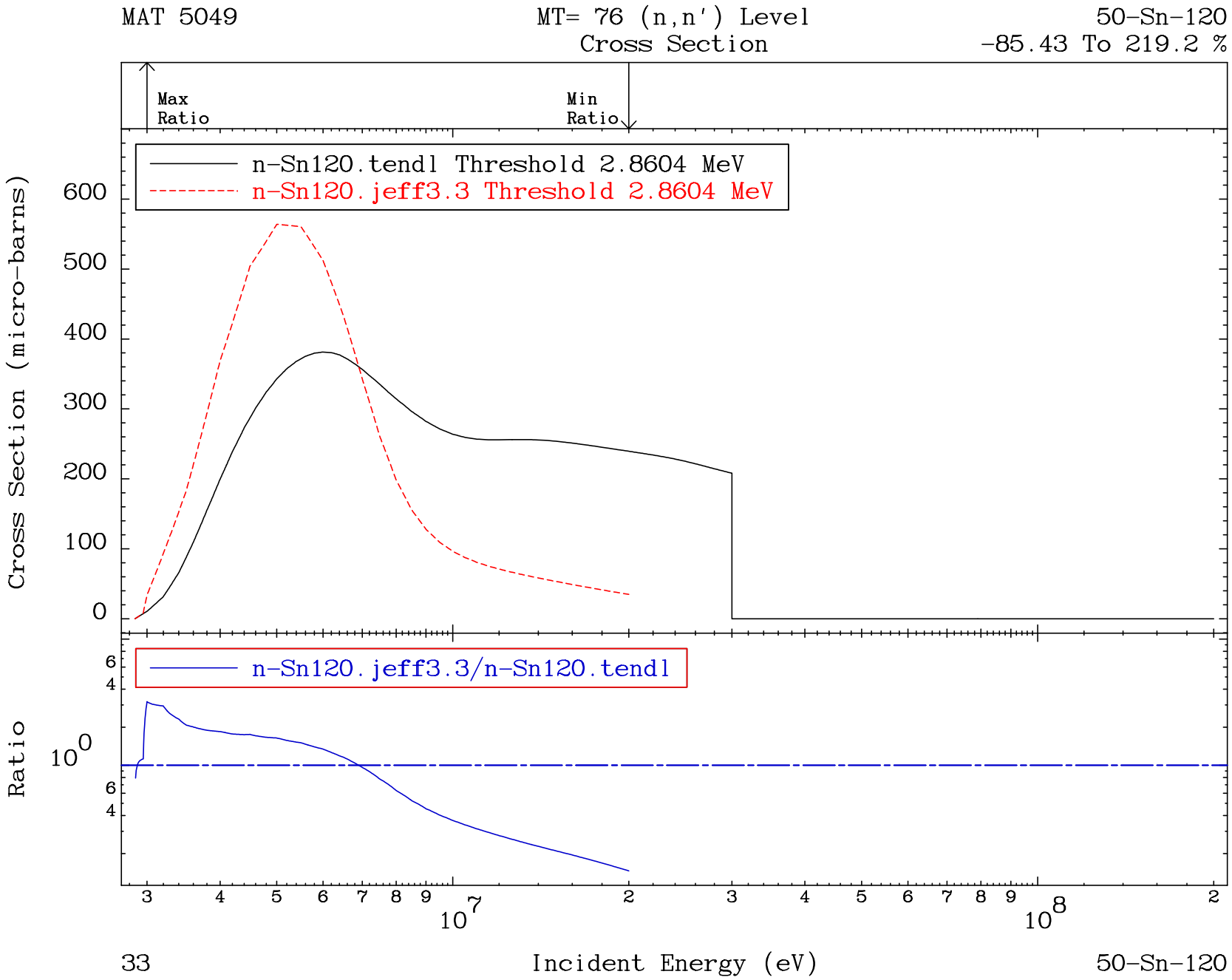

MAT 5049
MT= 71 (n,n') Level
Cross Section
50-Sn-120
-16.10 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.7728 MeV
n-Sn120.jeff3.3 Threshold 2.7728 MeV
Cross Section (milli-barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
28
50-Sn-120

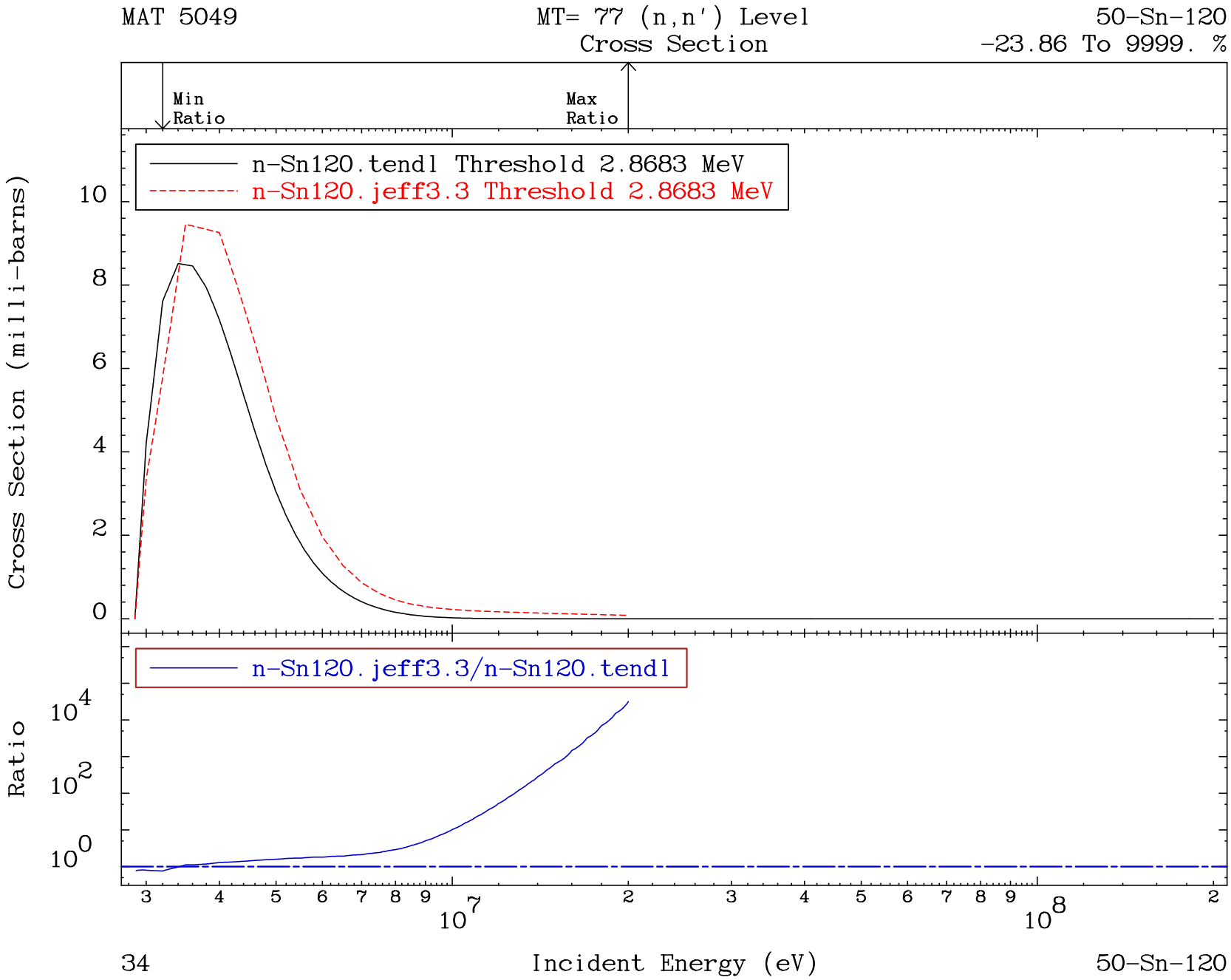

MAT 5049
MT= 72 (n,n') Level
Cross Section
50-Sn-120
-57.06 To 49.58 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.7741 MeV
n-Sn120.jeff3.3 Threshold 2.7741 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
50-Sn-120

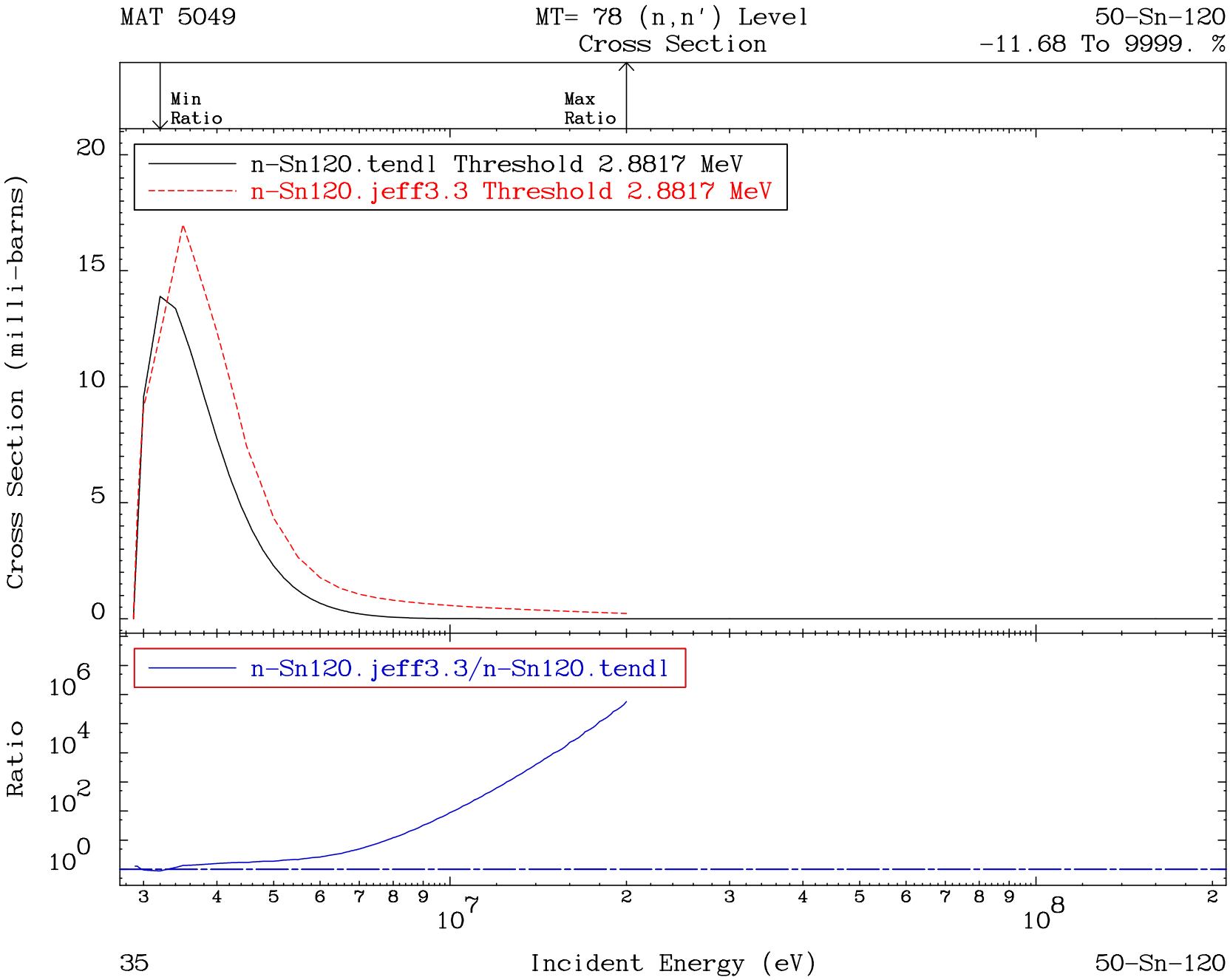

MAT 5049
MT= 73 (n,n') Level
Cross Section
50-Sn-120
-48.87 To 62.77 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.8236 MeV
n-Sn120.jeff3.3 Threshold 2.8236 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
50-Sn-120

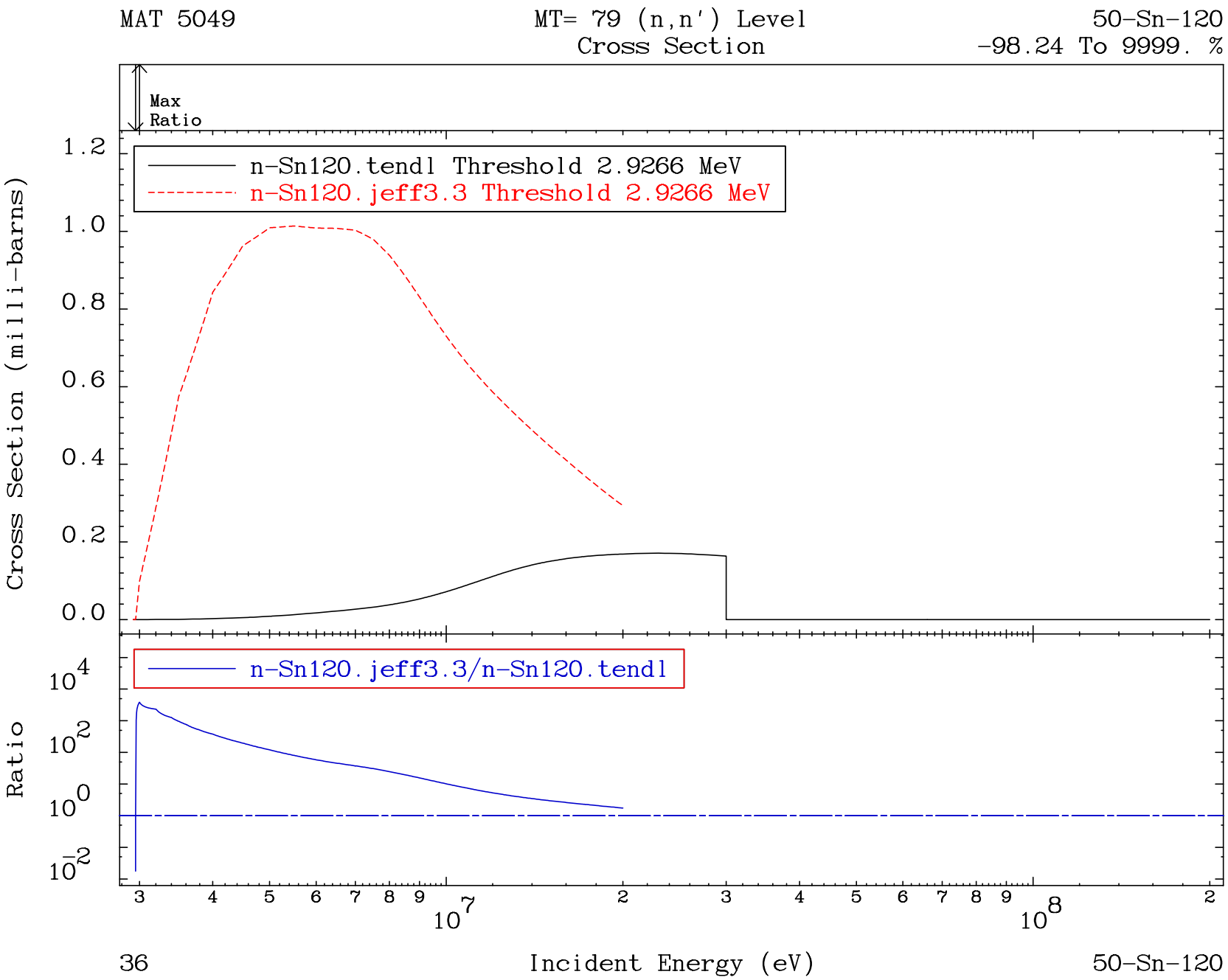

MAT 5049
MT= 74 (n,n') Level
Cross Section
50-Sn-120
-51.23 To 101.0 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.8256 MeV
n-Sn120.jeff3.3 Threshold 2.8256 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
2.0
1.5
1.0
0.5
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
50-Sn-120

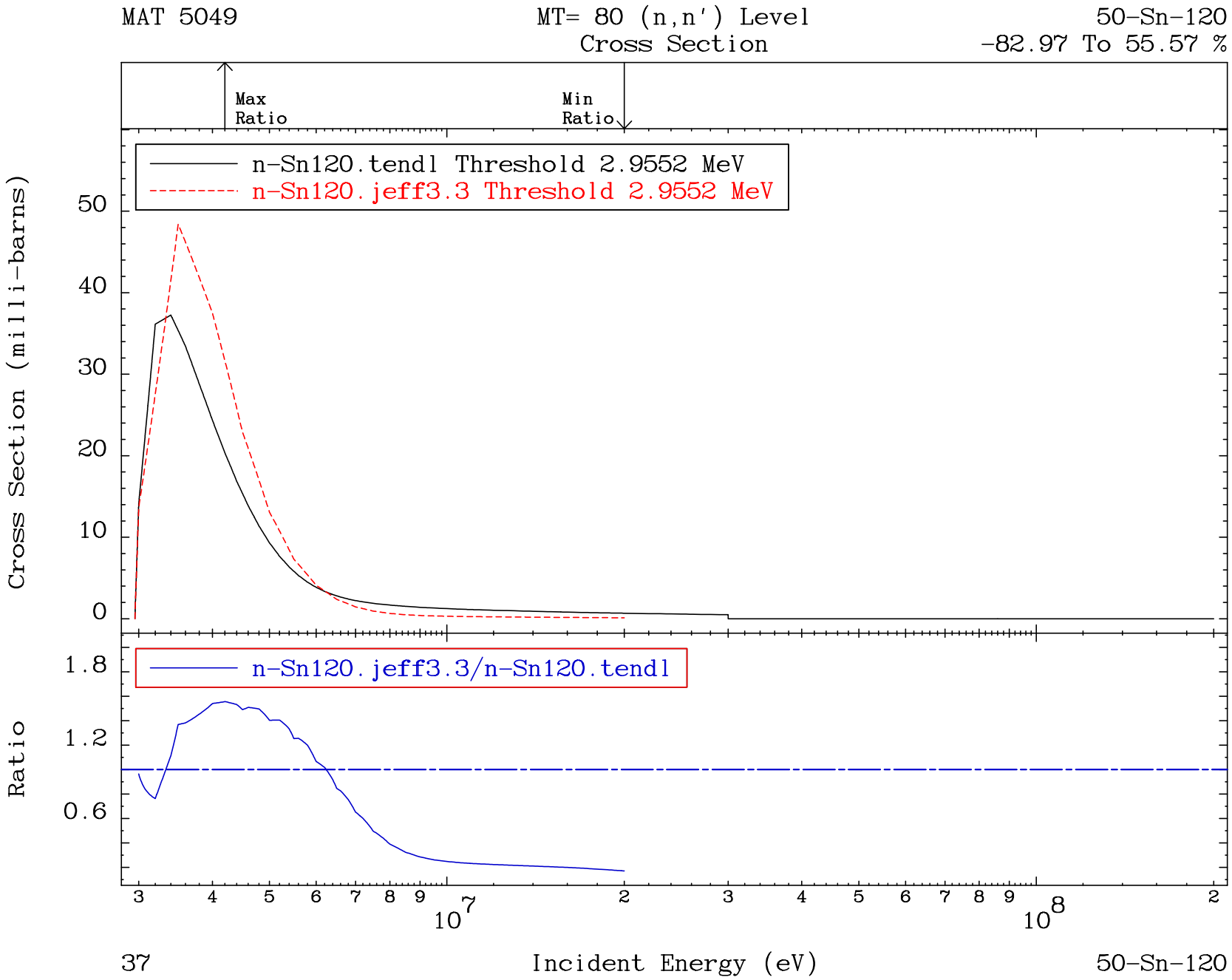

MAT 5049
MT= 75 (n,n') Level
Cross Section
50-Sn-120
-7.681 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.8592 MeV
n-Sn120.jeff3.3 Threshold 2.8592 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
50-Sn-120

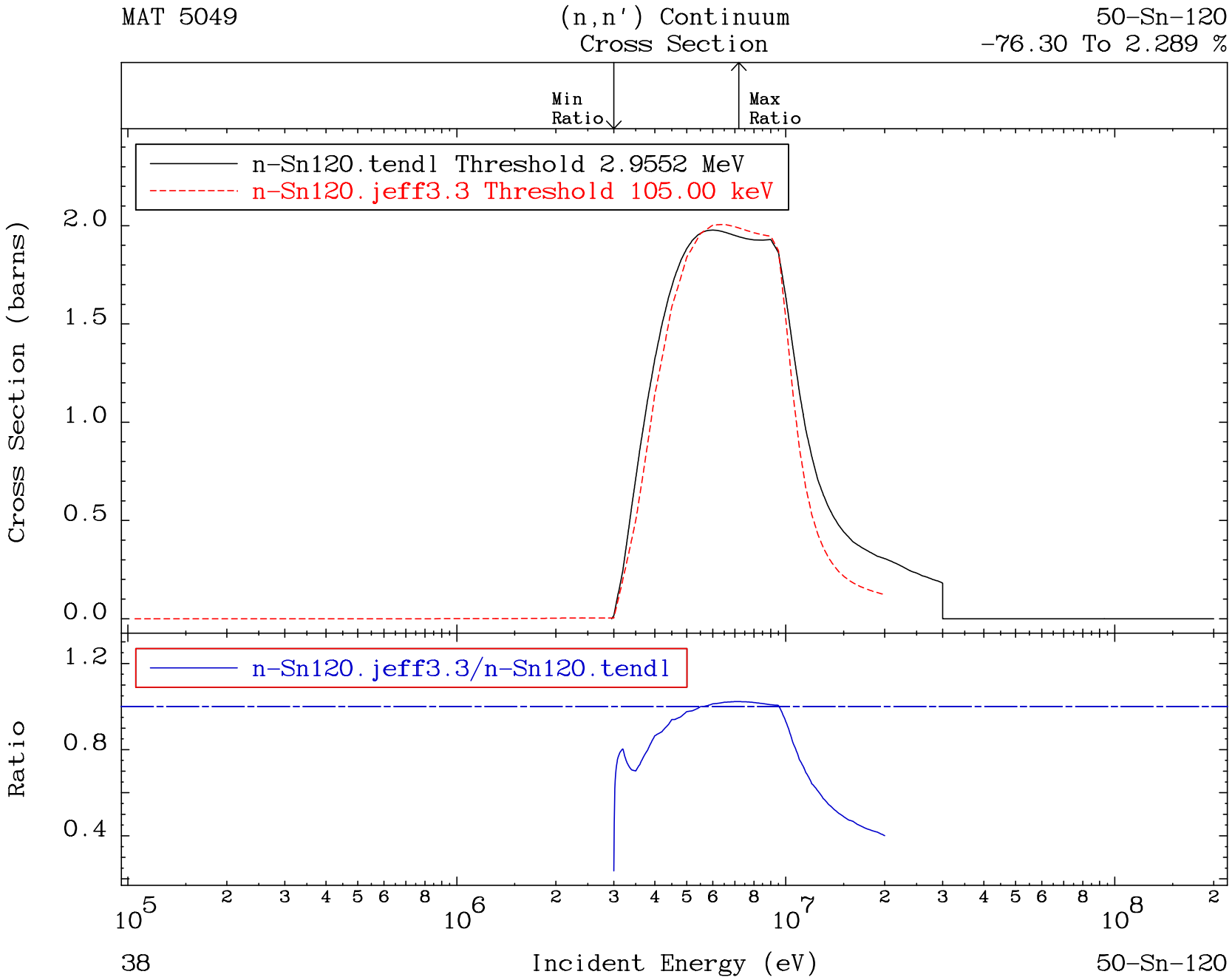

MAT 5049
MT= 76 (n,n') Level
Cross Section
50-Sn-120
-85.43 To 219.2 %
Max
Ratio
Min
Ratio
n-Sn120.tendl Threshold 2.8604 MeV
n-Sn120.jeff3.3 Threshold 2.8604 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
6
4
10^0
6
4
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
50-Sn-120

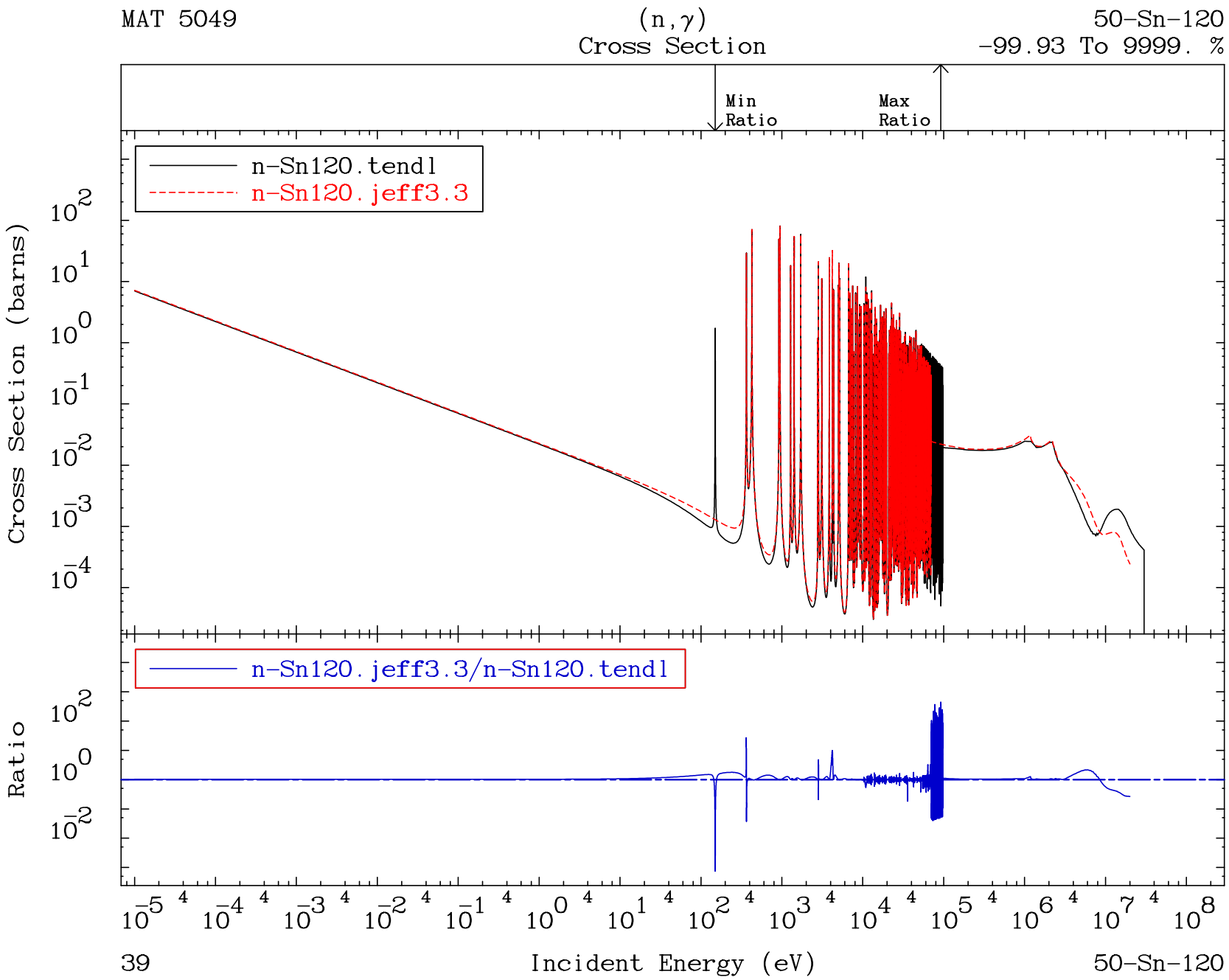

MAT 5049
MT= 77 (n,n') Level
Cross Section
50-Sn-120
-23.86 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.8683 MeV
n-Sn120.jeff3.3 Threshold 2.8683 MeV
Cross Section (milli-barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
34
50-Sn-120

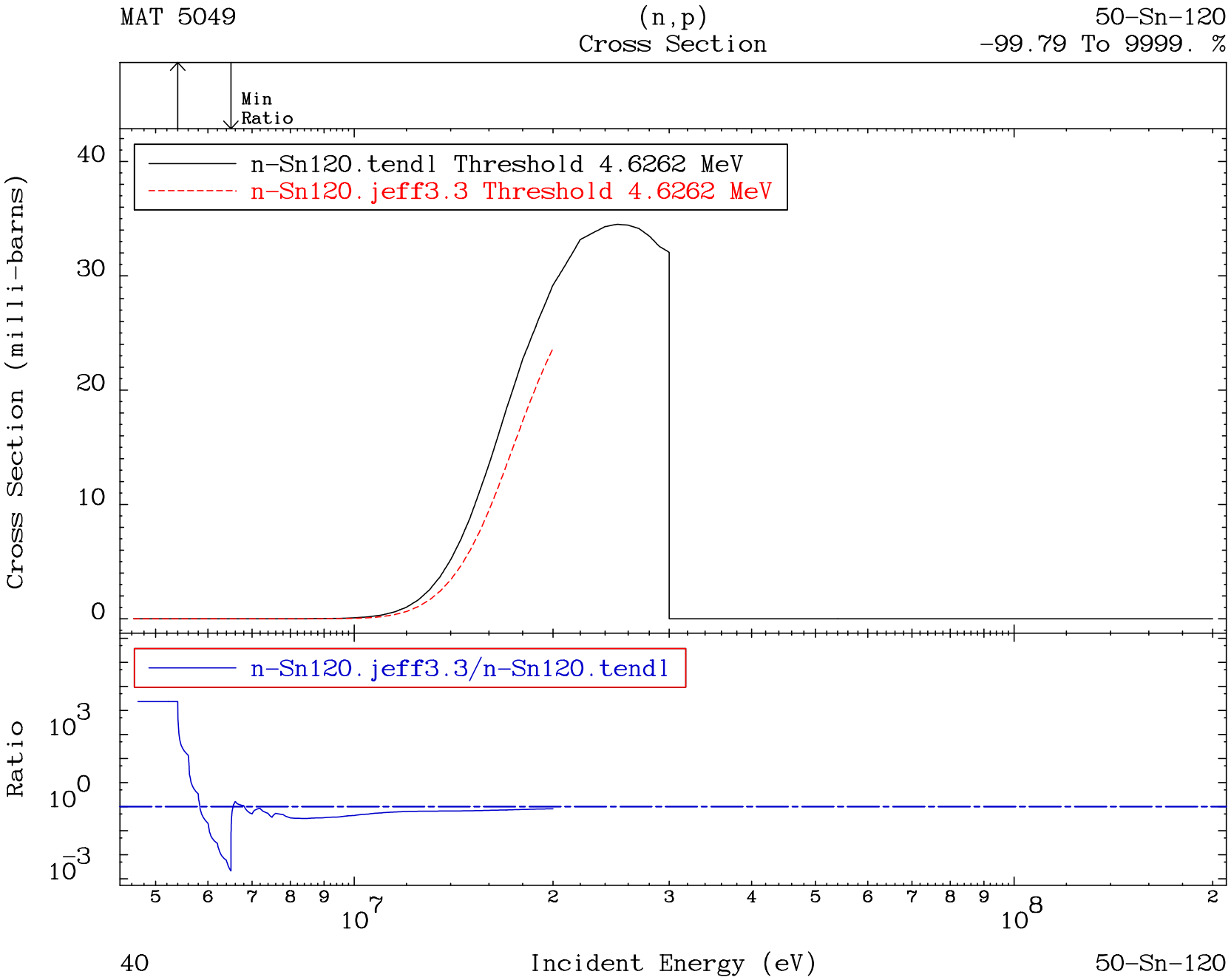

MAT 5049
MT= 78 (n,n') Level
Cross Section
50-Sn-120
-11.68 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.8817 MeV
n-Sn120.jeff3.3 Threshold 2.8817 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
50-Sn-120

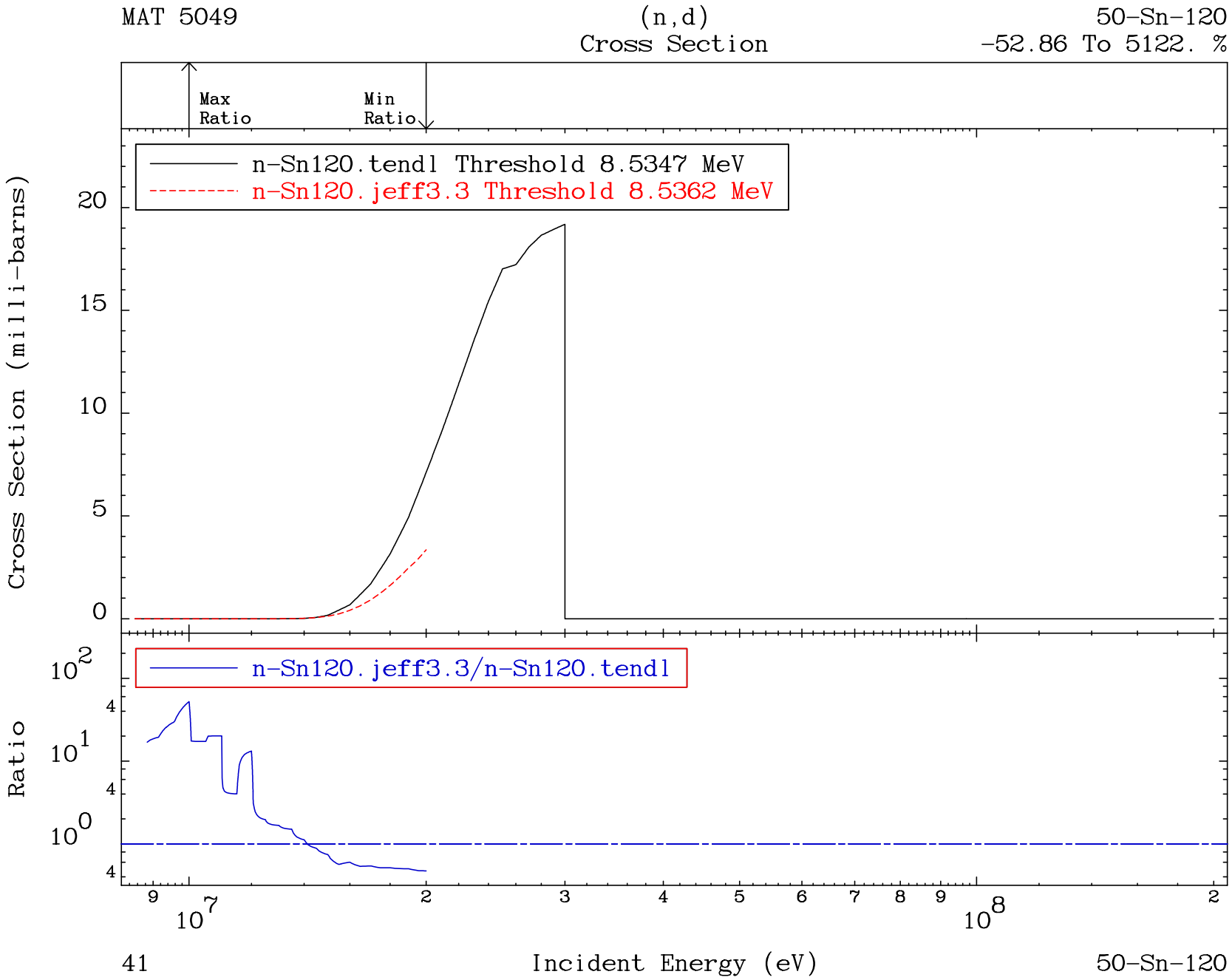

MAT 5049
MT= 79 (n,n') Level
Cross Section
50-Sn-120
-98.24 To 9999. %
Max
Ratio
n-Sn120.tendl Threshold 2.9266 MeV
n-Sn120.jeff3.3 Threshold 2.9266 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^2
10^0
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
50-Sn-120

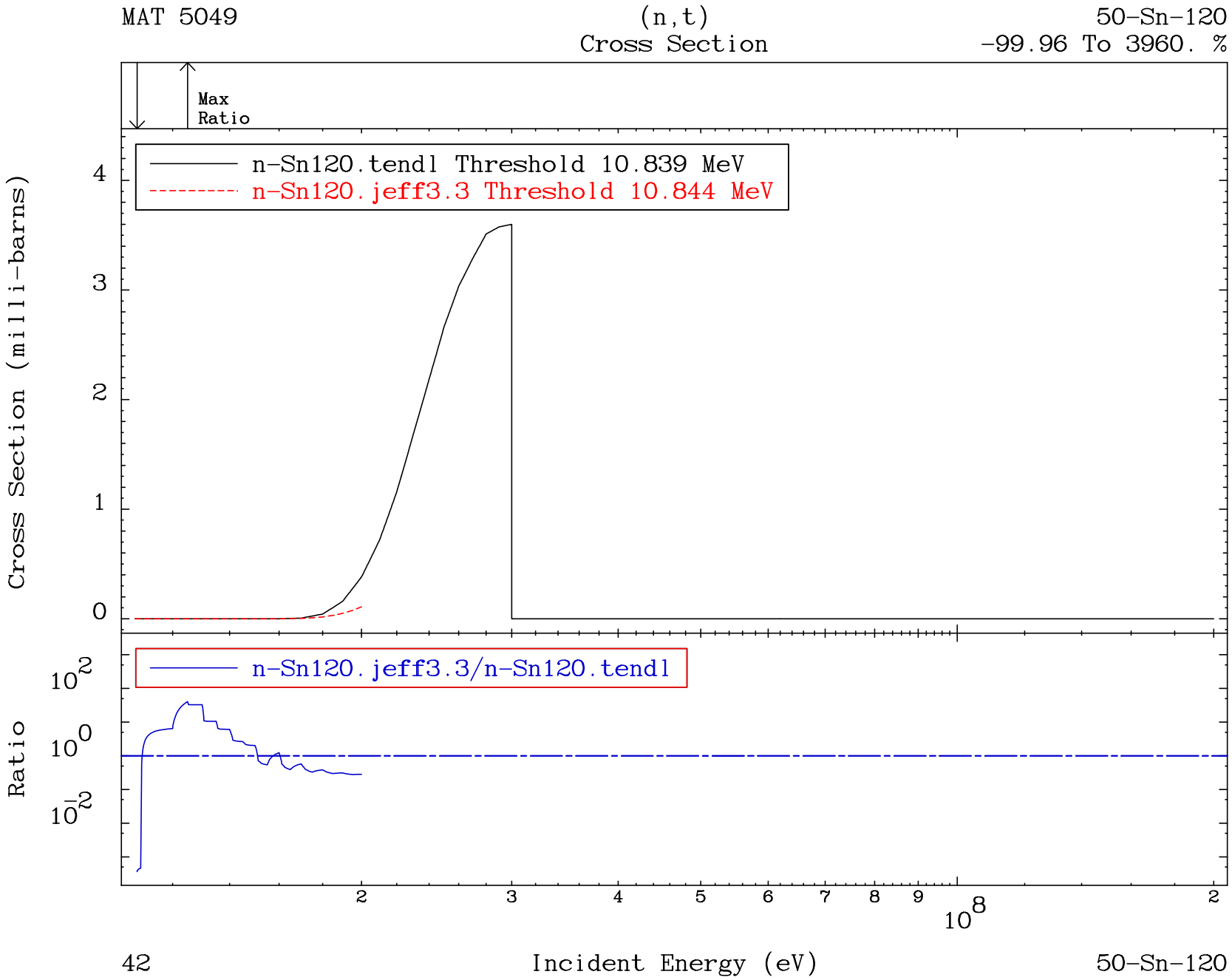

MAT 5049
MT= 80 (n,n') Level
Cross Section
50-Sn-120
-82.97 To 55.57 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 2.9552 MeV
n-Sn120.jeff3.3 Threshold 2.9552 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.8
1.2
0.6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
50-Sn-120

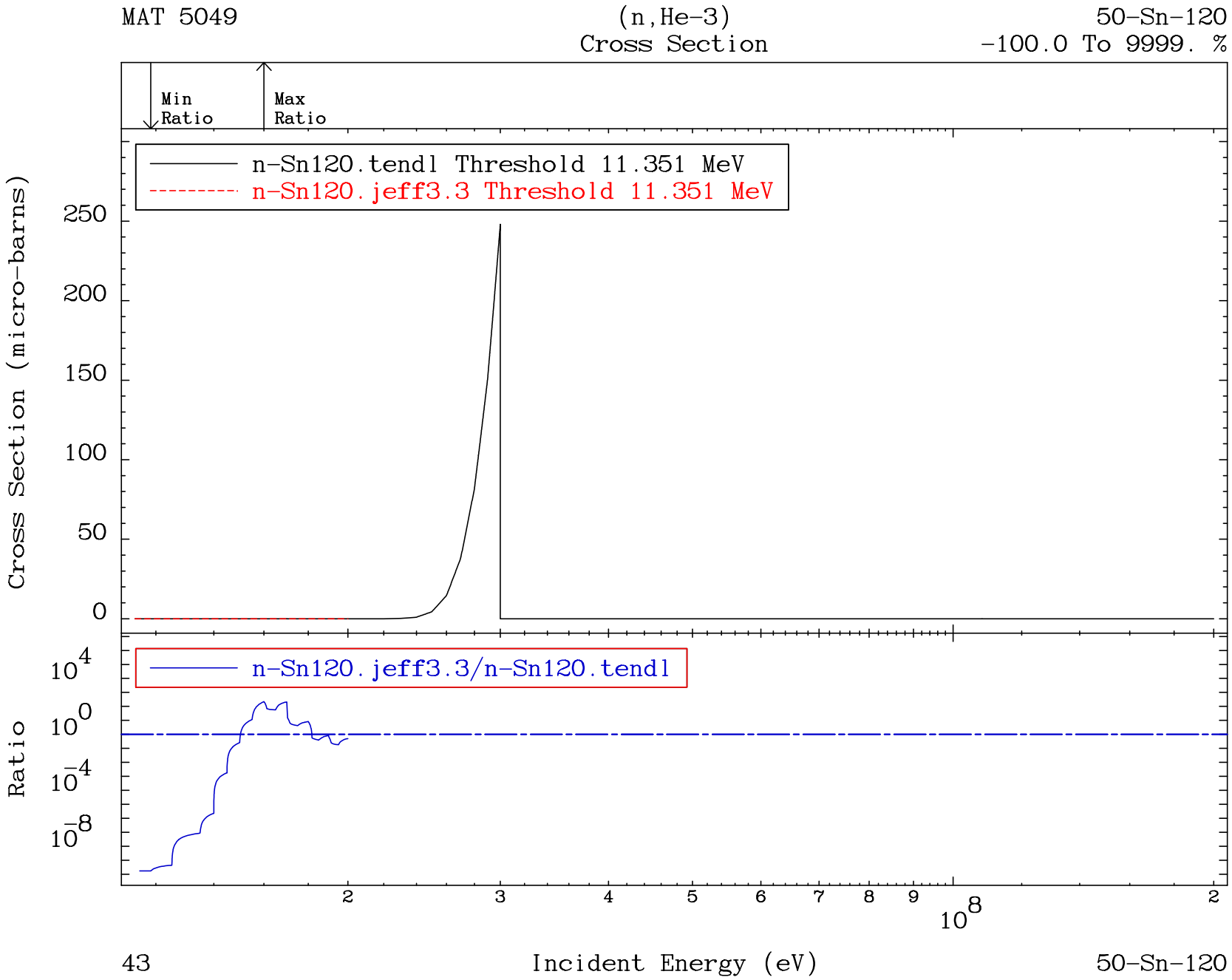

MAT 5049
(n,n') Continuum
Cross Section
50-Sn-120
-76.30 To 2.289 %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 2.9552 MeV
n-Sn120.jeff3.3 Threshold 105.00 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.2
0.8
0.4
10^5
10^6
10^7
10^8
Incident Energy (eV)
38
50-Sn-120

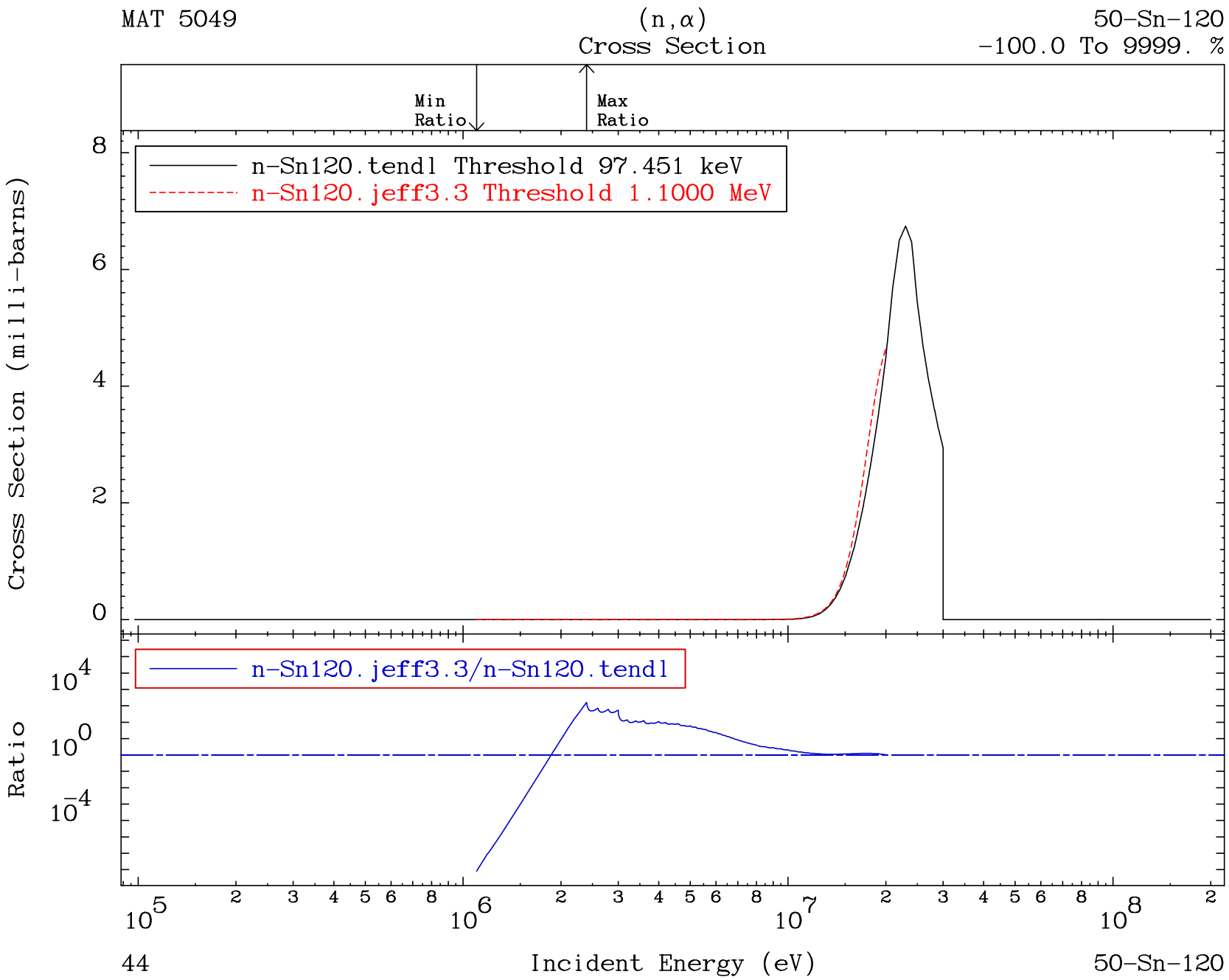

MAT 5049
(n,γ)
Cross Section
50-Sn-120
-99.93 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
39
50-Sn-120

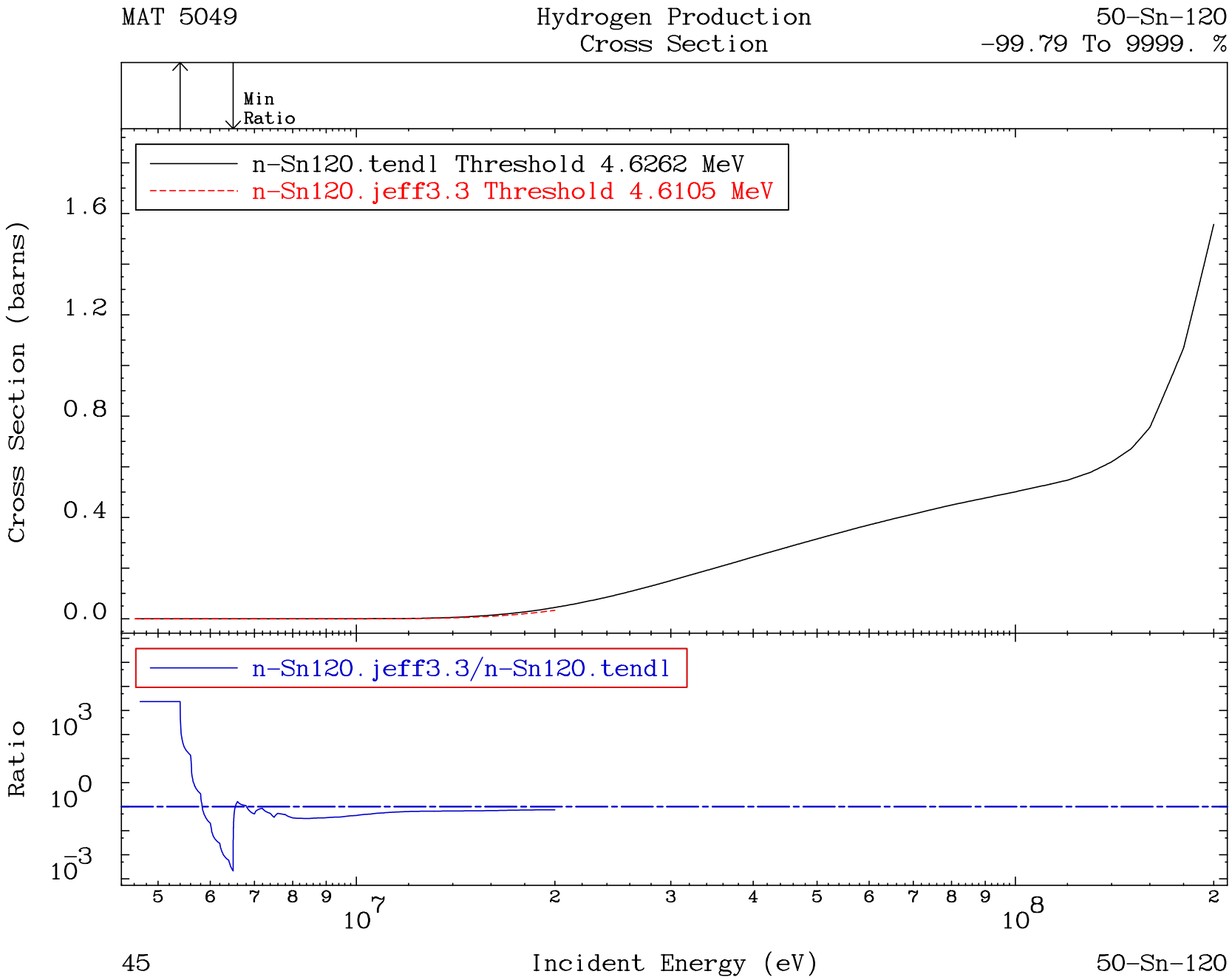

MAT 5049
(n,p)
Cross Section
50-Sn-120
-99.79 To 9999. %
Min
Ratio
n-Sn120.tendl Threshold 4.6262 MeV
n-Sn120.jeff3.3 Threshold 4.6262 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^3
10^0
10^-3
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
50-Sn-120

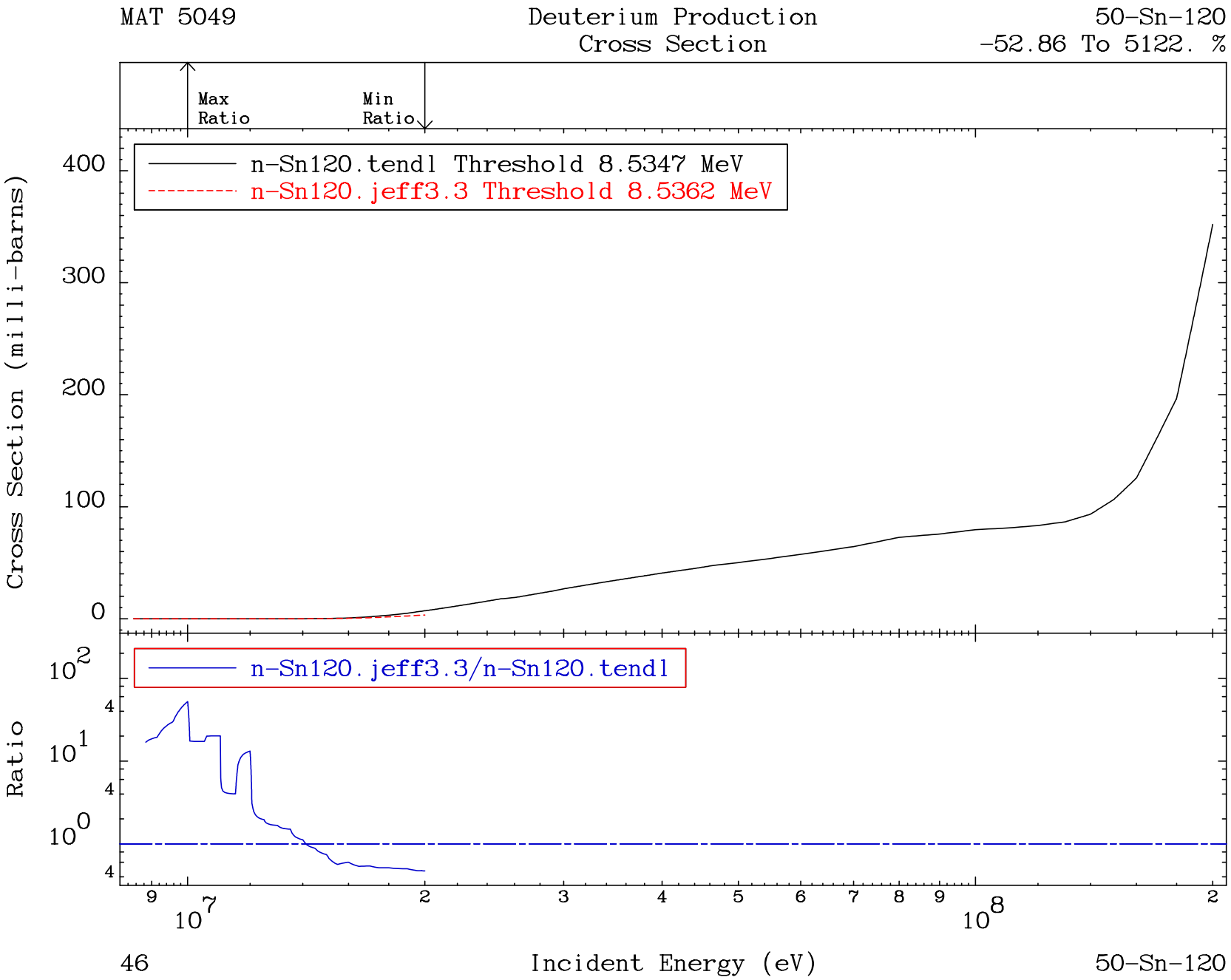

MAT 5049
(n,d)
Cross Section
50-Sn-120
-52.86 To 5122. %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 8.5347 MeV
n-Sn120.jeff3.3 Threshold 8.5362 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^2
10^1
10^0
4
4
4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
50-Sn-120

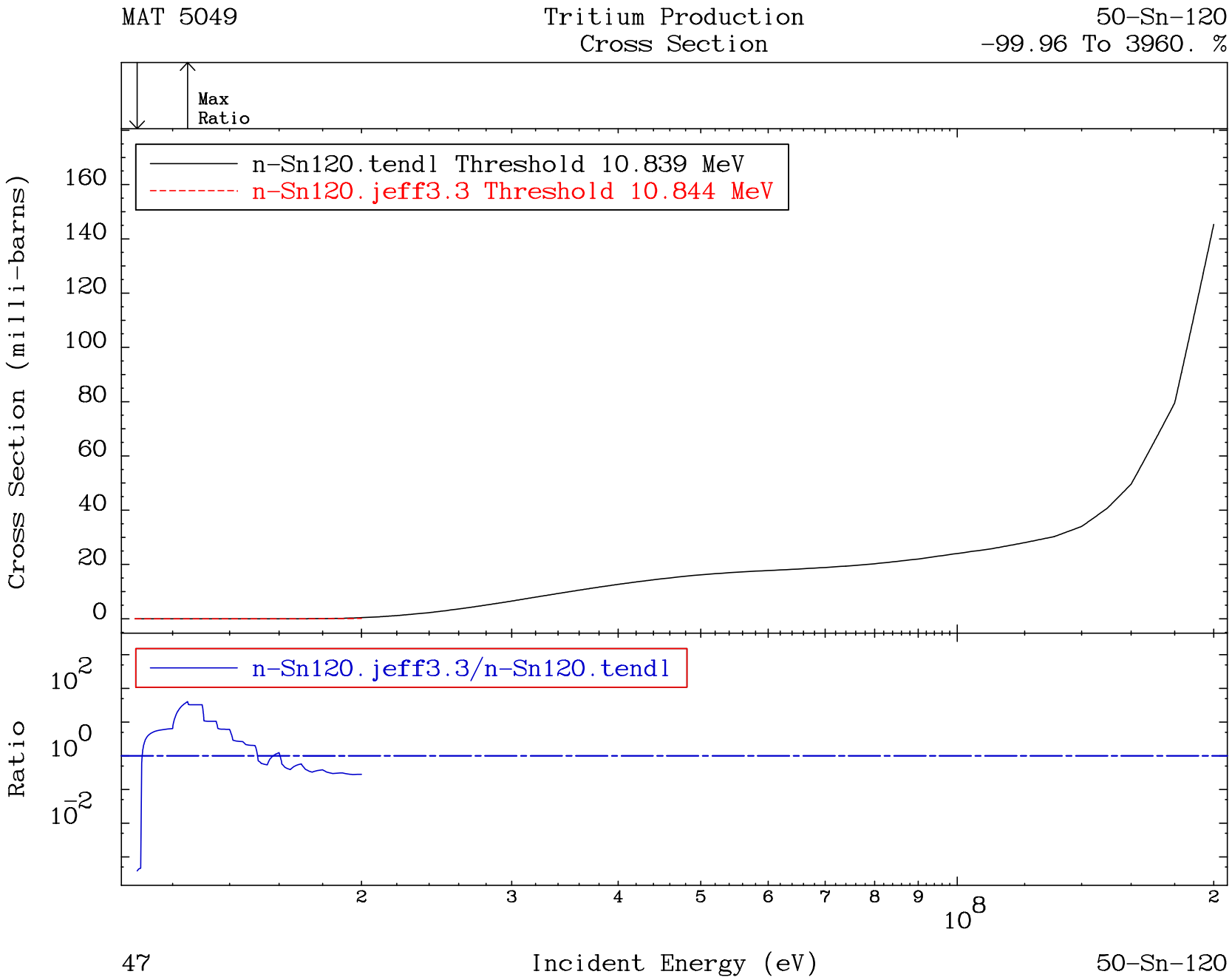

MAT 5049
(n,t)
Cross Section
50-Sn-120
-99.96 To 3960. %
Max
Ratio
n-Sn120.tendl Threshold 10.839 MeV
n-Sn120.jeff3.3 Threshold 10.844 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
50-Sn-120

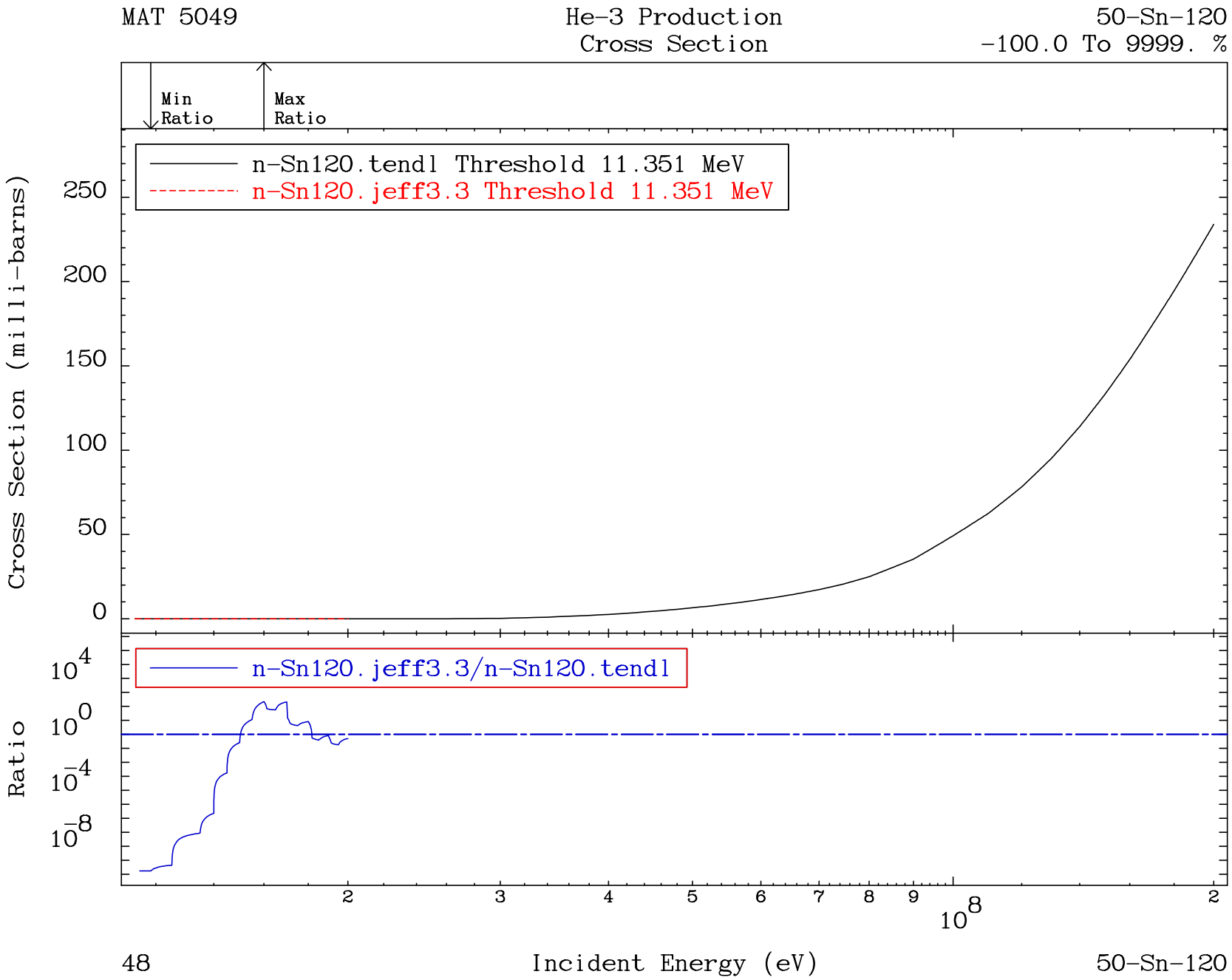

MAT 5049
(n,He-3)
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 11.351 MeV
n-Sn120.jeff3.3 Threshold 11.351 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^0
10^-4
10^-8
2
3
4
5
6
7
8
9
10^8
2
43
Incident Energy (eV)
50-Sn-120

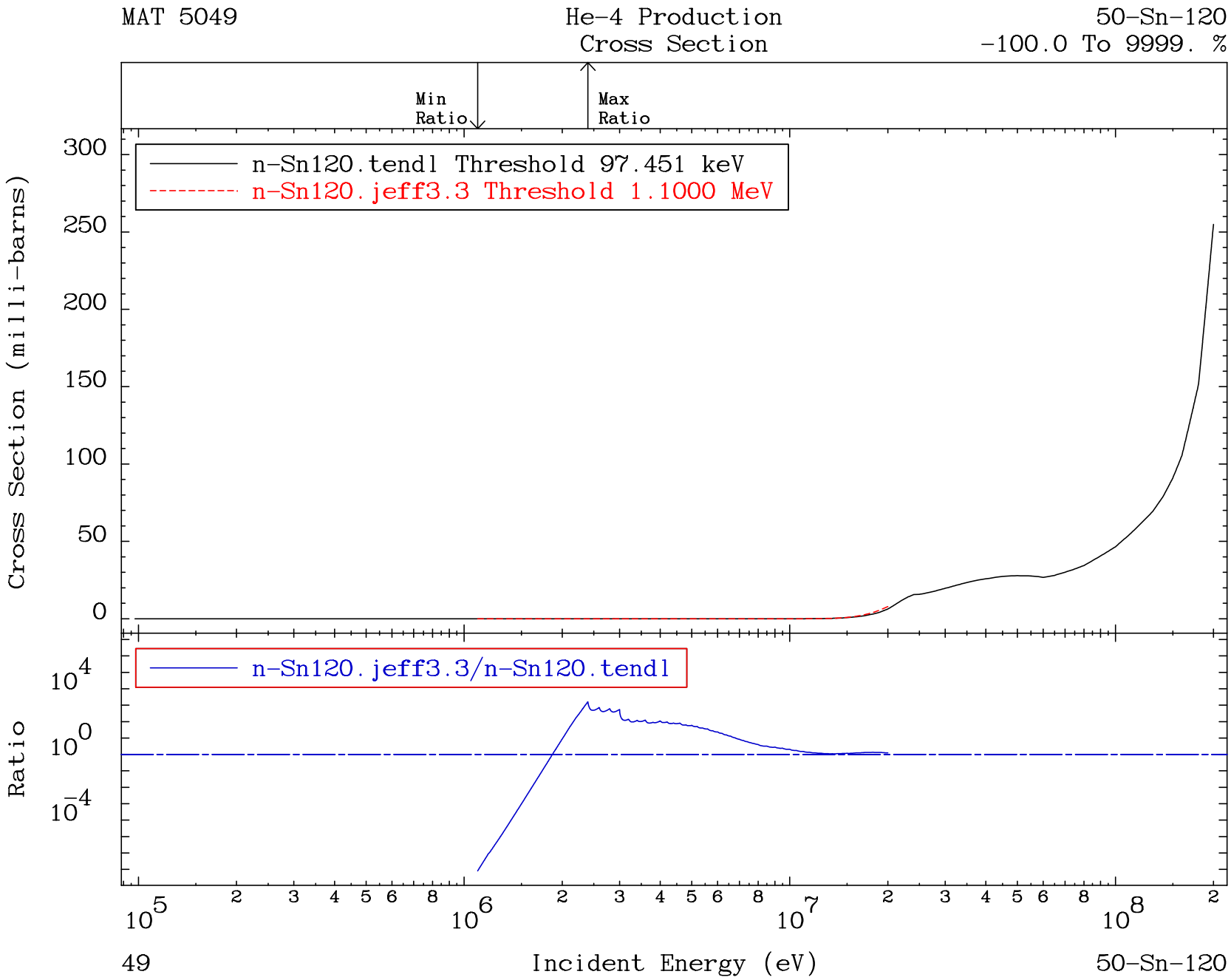

MAT 5049
(n,α)
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 97.451 keV
n-Sn120.jeff3.3 Threshold 1.1000 MeV
Cross Section (milli-barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
44
50-Sn-120

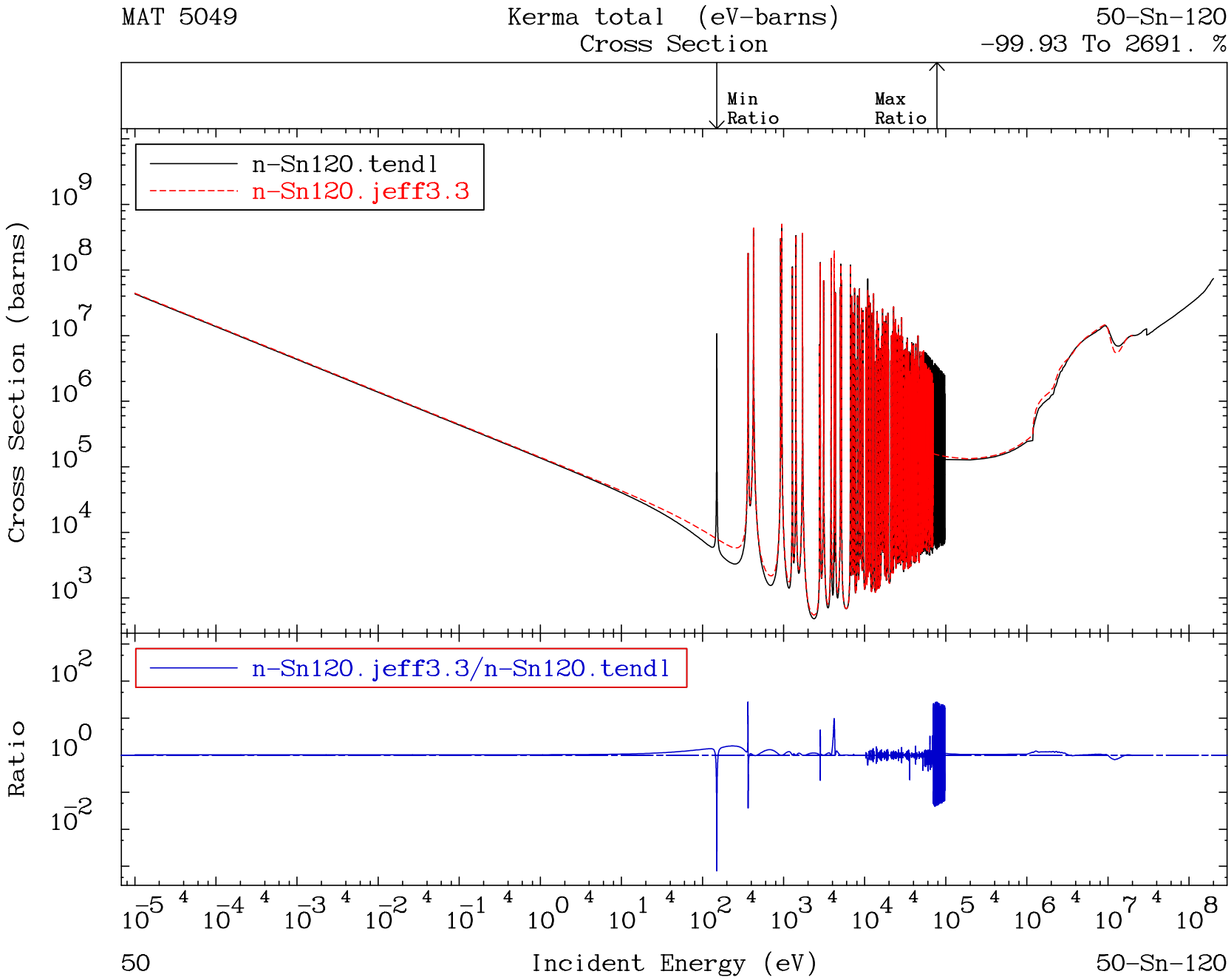

MAT 5049
Hydrogen Production
Cross Section
50-Sn-120
-99.79 To 9999. %
Min
Ratio
n-Sn120.tendl Threshold 4.6262 MeV
n-Sn120.jeff3.3 Threshold 4.6105 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^3
10^0
10^-3
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
50-Sn-120

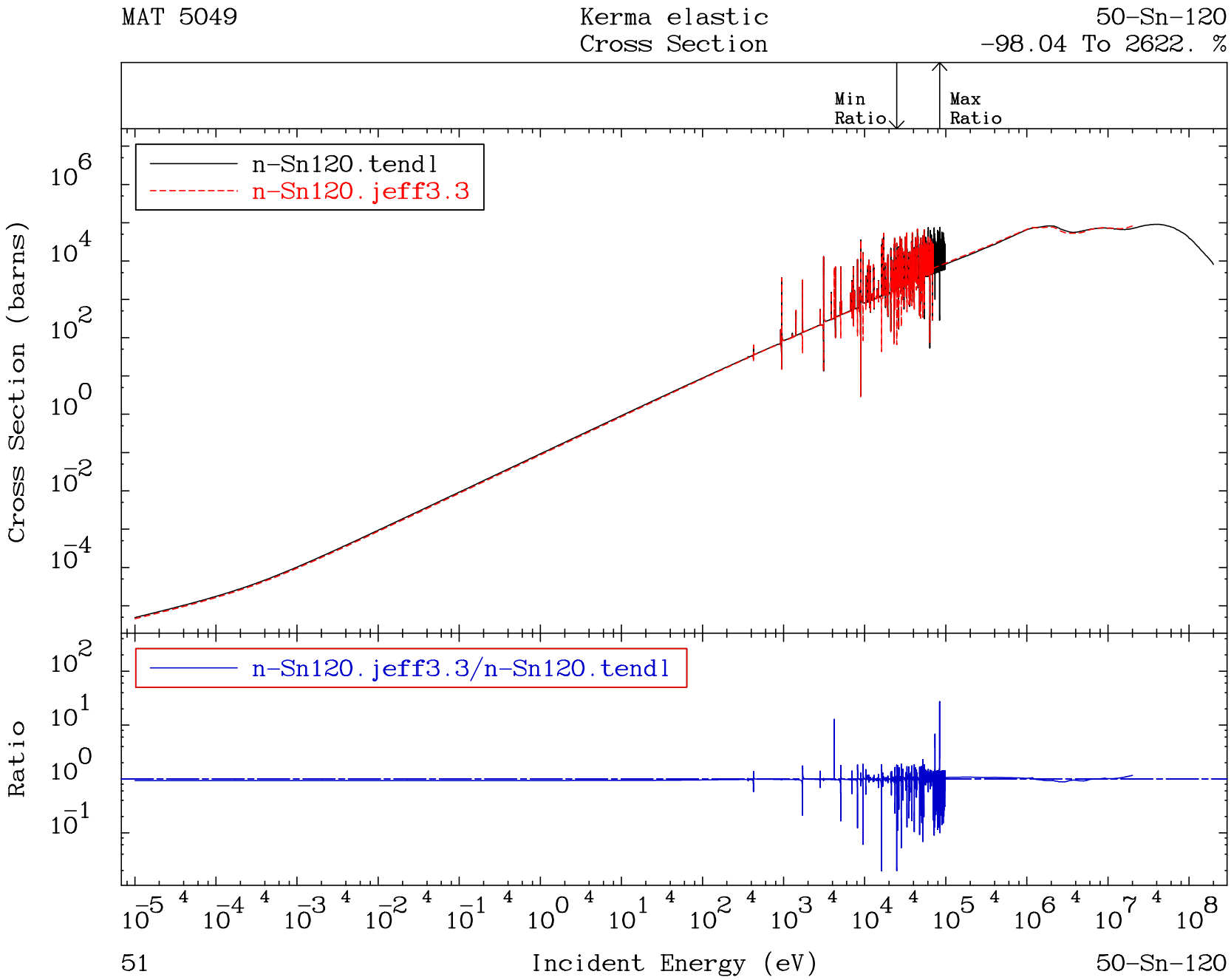

MAT 5049
Deuterium Production
Cross Section
50-Sn-120
-52.86 To 5122. %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 8.5347 MeV
n-Sn120.jeff3.3 Threshold 8.5362 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^2
10^1
10^0
4
4
4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
50-Sn-120

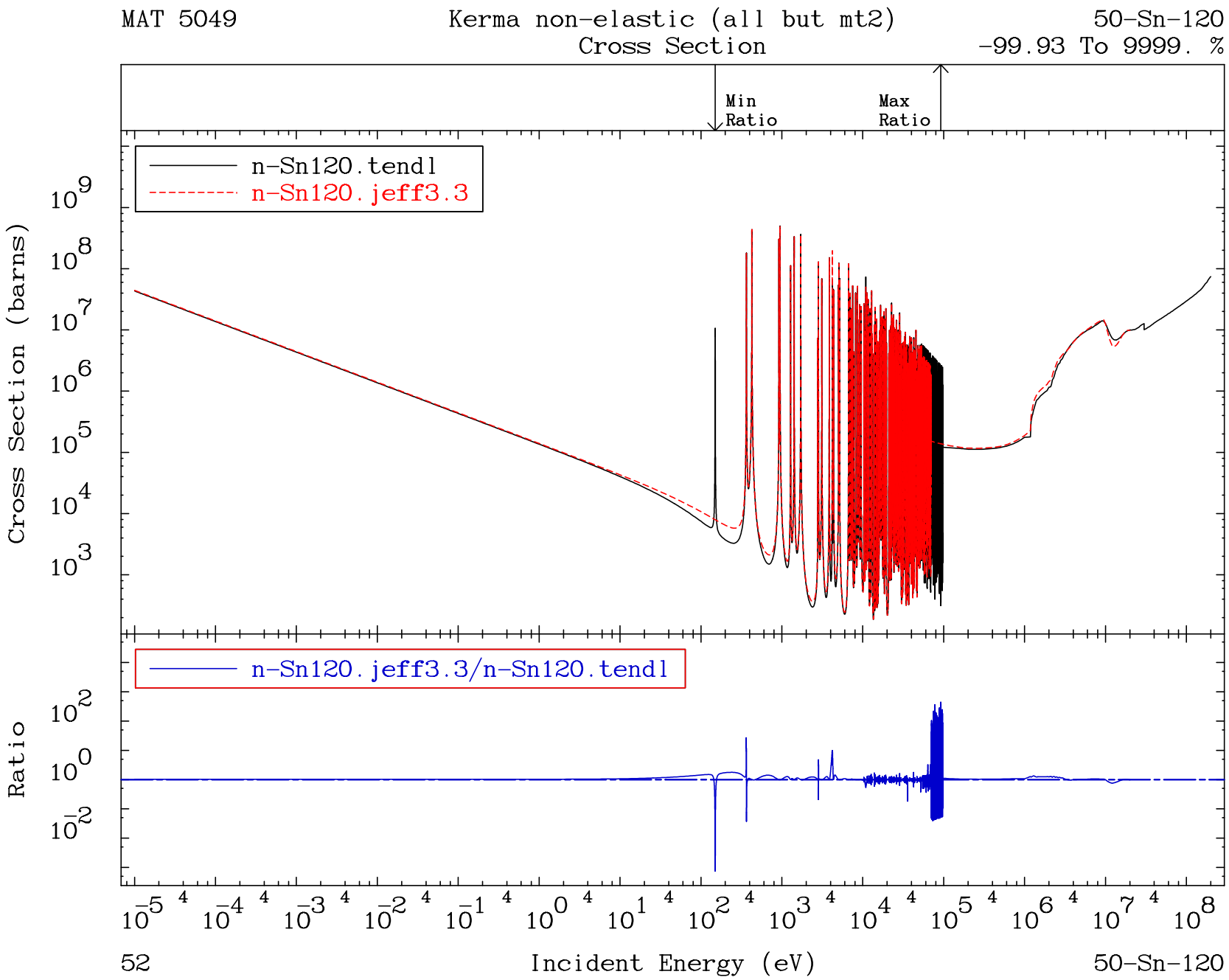

MAT 5049
Tritium Production
Cross Section
50-Sn-120
-99.96 To 3960. %
Max
Ratio
n-Sn120.tendl Threshold 10.839 MeV
n-Sn120.jeff3.3 Threshold 10.844 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
50-Sn-120

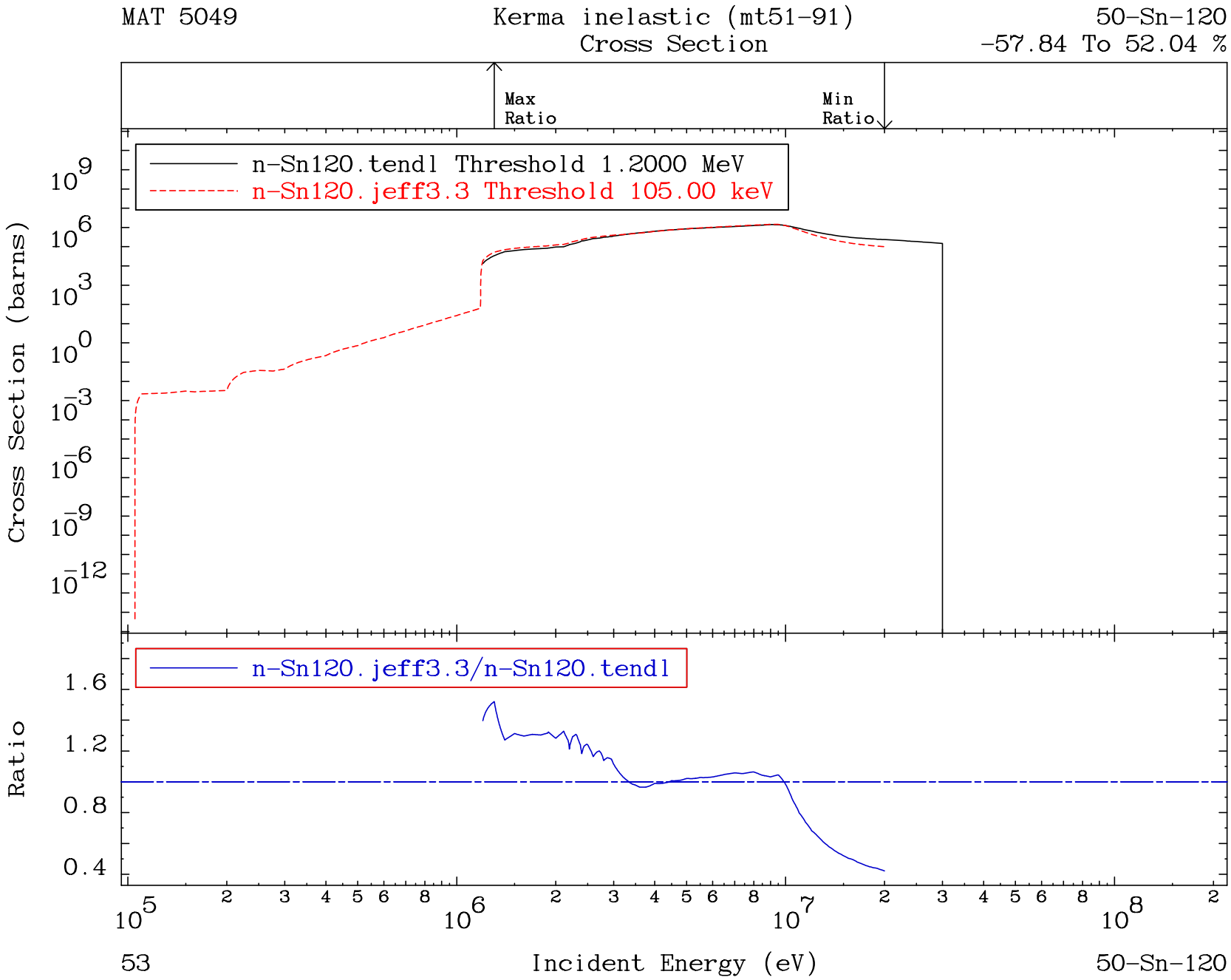

MAT 5049
He-3 Production
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 11.351 MeV
n-Sn120.jeff3.3 Threshold 11.351 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^0
10^-4
10^-8
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
50-Sn-120

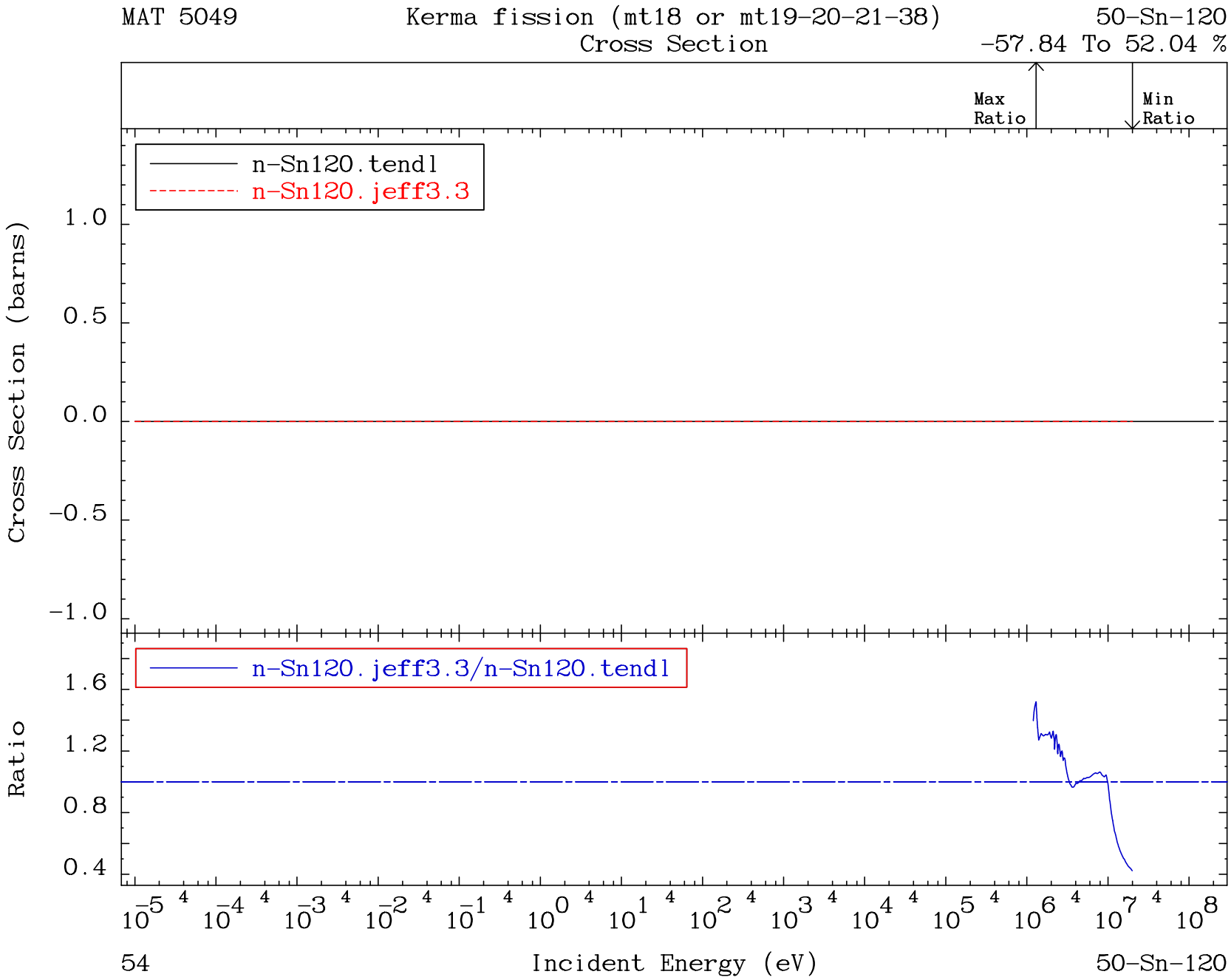

MAT 5049
He-4 Production
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 97.451 keV
n-Sn120.jeff3.3 Threshold 1.1000 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
10^4
10^0
10^-4
10^5
2 3 4 5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
49
Incident Energy (eV)
50-Sn-120

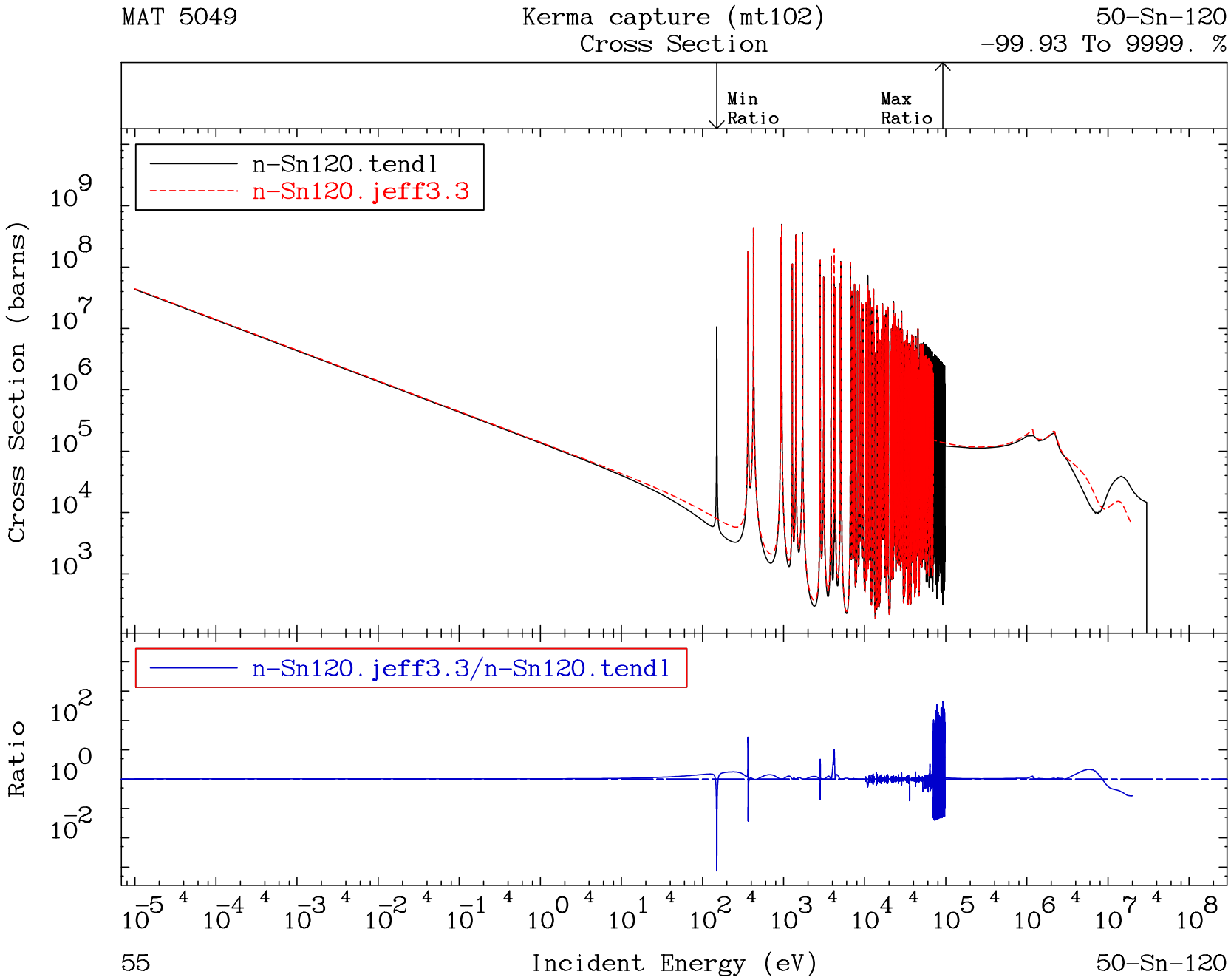

MAT 5049
Kerma total (eV-barns)
Cross Section
50-Sn-120
-99.93 To 2691. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
50
50-Sn-120

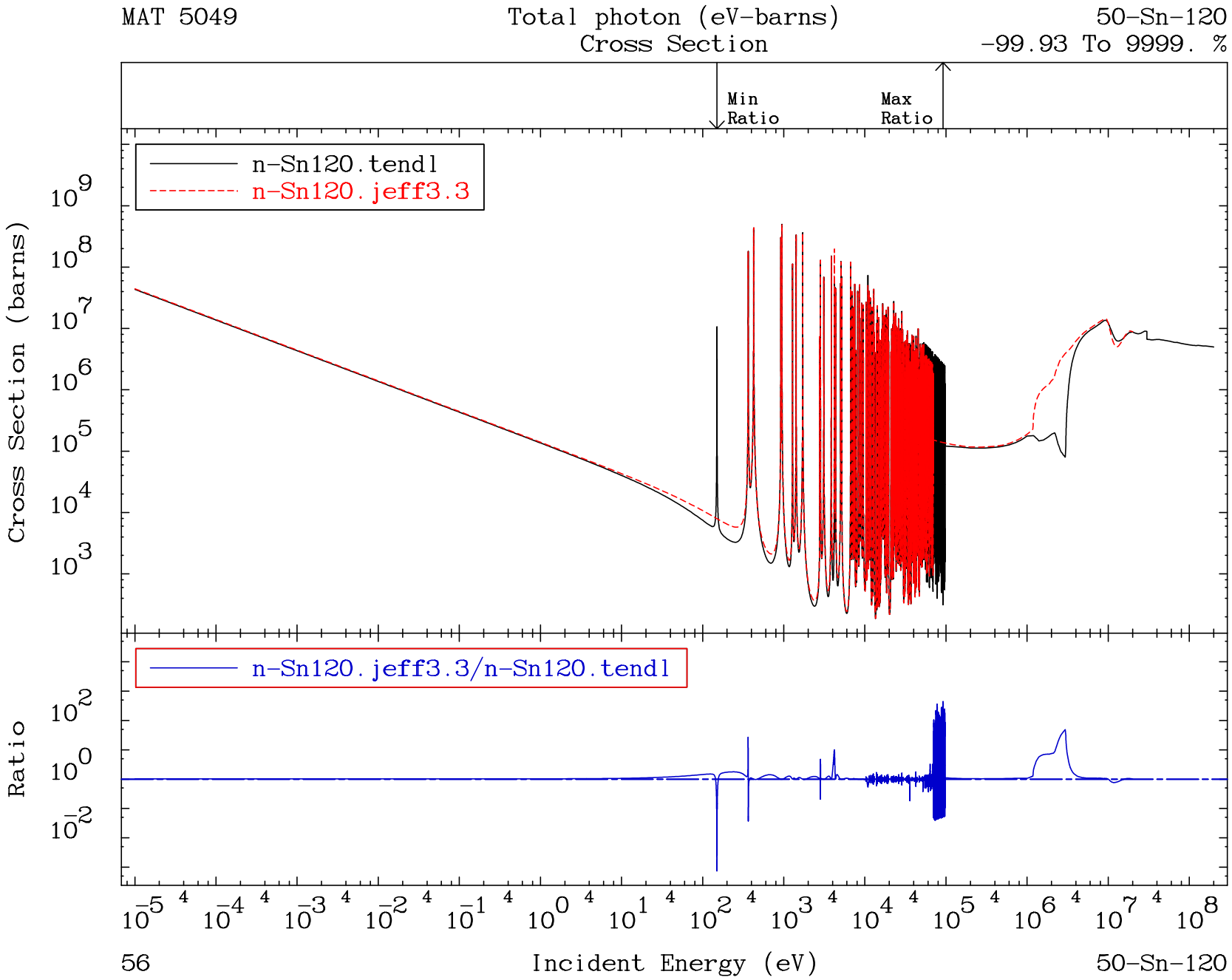

MAT 5049
Kerma elastic
Cross Section
50-Sn-120
-98.04 To 2622. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
51
50-Sn-120

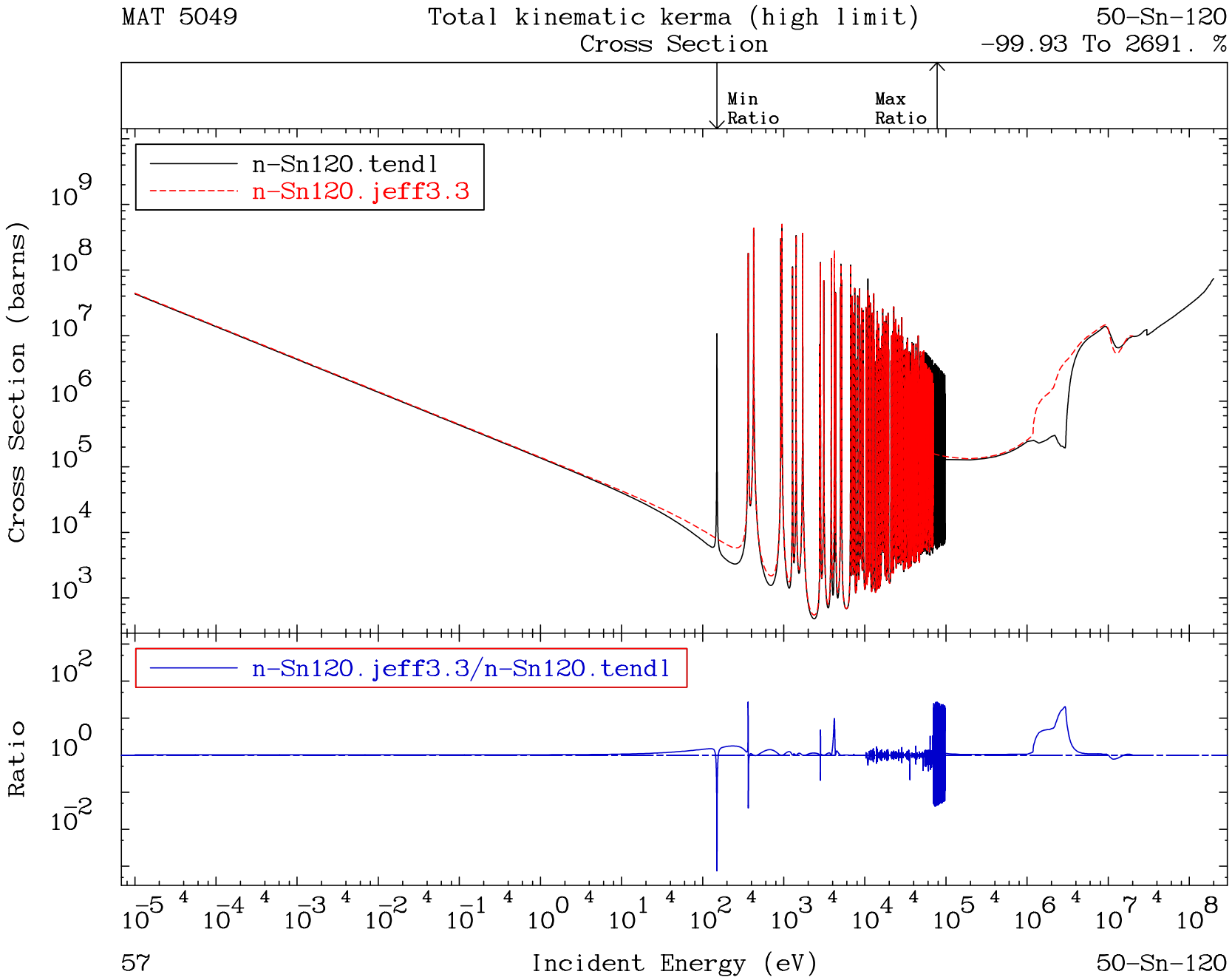

MAT 5049
Kerma non-elastic (all but mt2)
Cross Section
50-Sn-120
-99.93 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
52
50-Sn-120

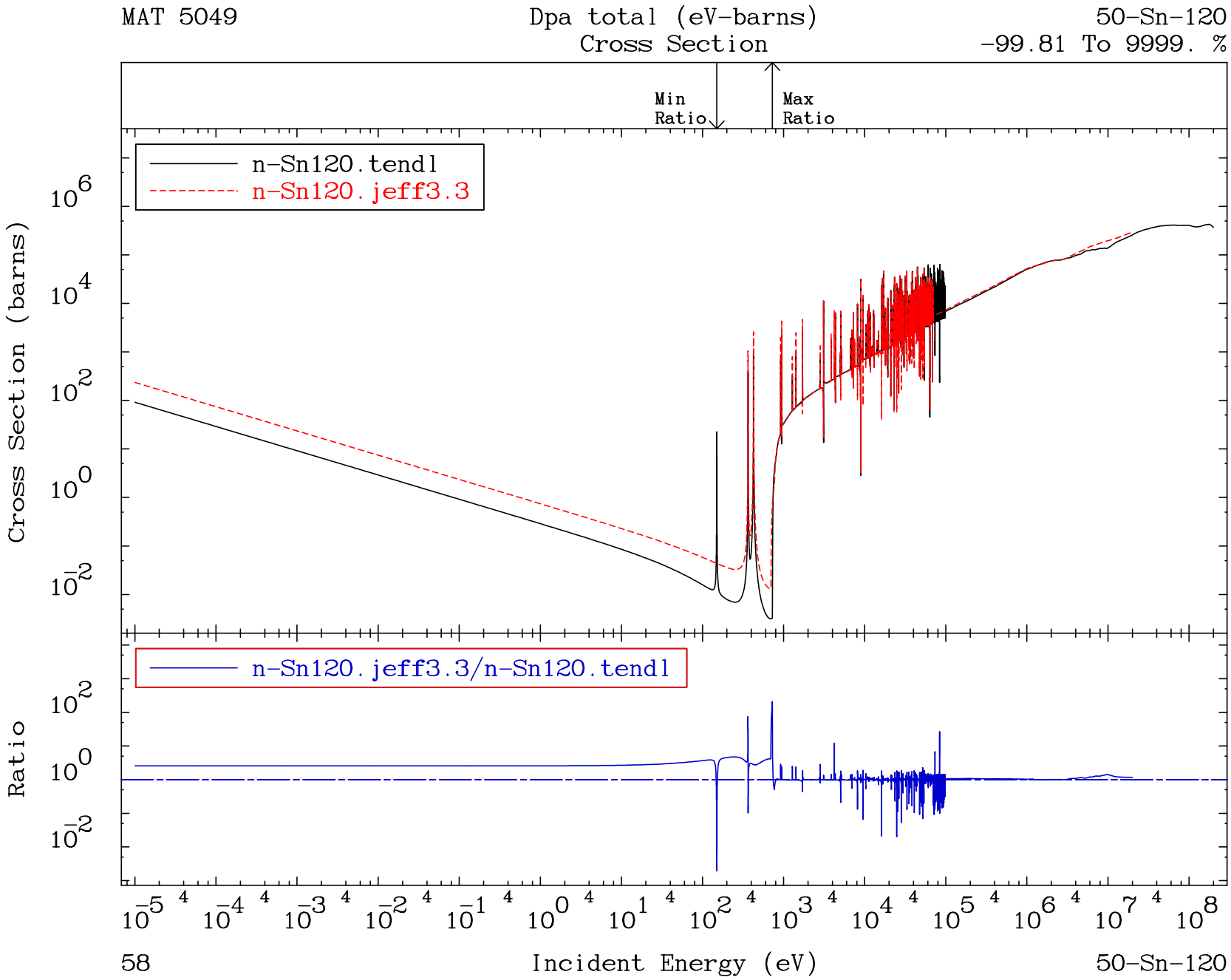

MAT 5049
Kerma inelastic (mt51-91)
Cross Section
50-Sn-120
-57.84 To 52.04 %
Max Ratio
Min Ratio
n-Sn120.tendl Threshold 1.2000 MeV
n-Sn120.jeff3.3 Threshold 105.00 keV
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
53
50-Sn-120

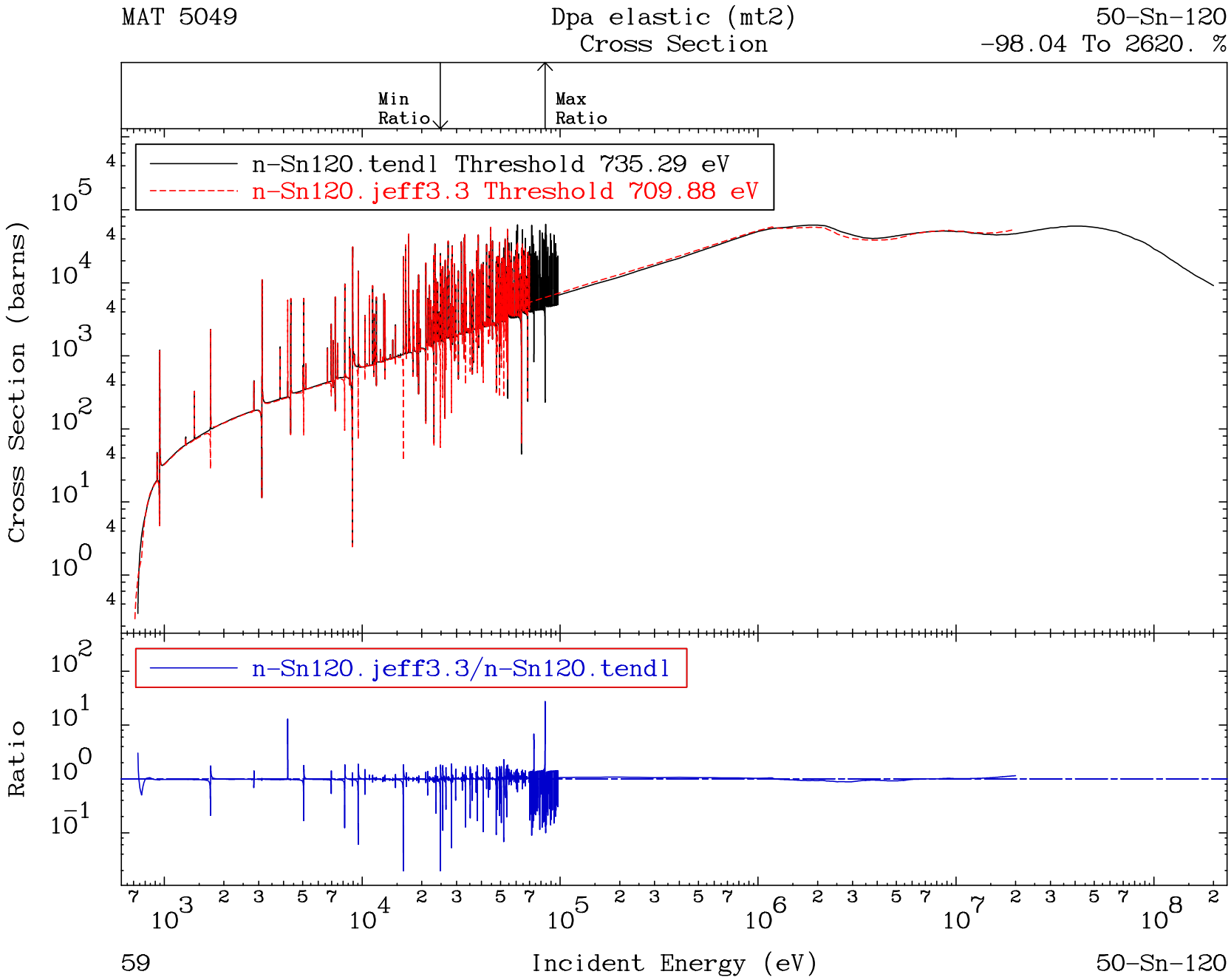

MAT 5049
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
50-Sn-120
-57.84 To 52.04 %
Max Ratio
Min Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
1.6
1.2
0.8
0.4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
50-Sn-120

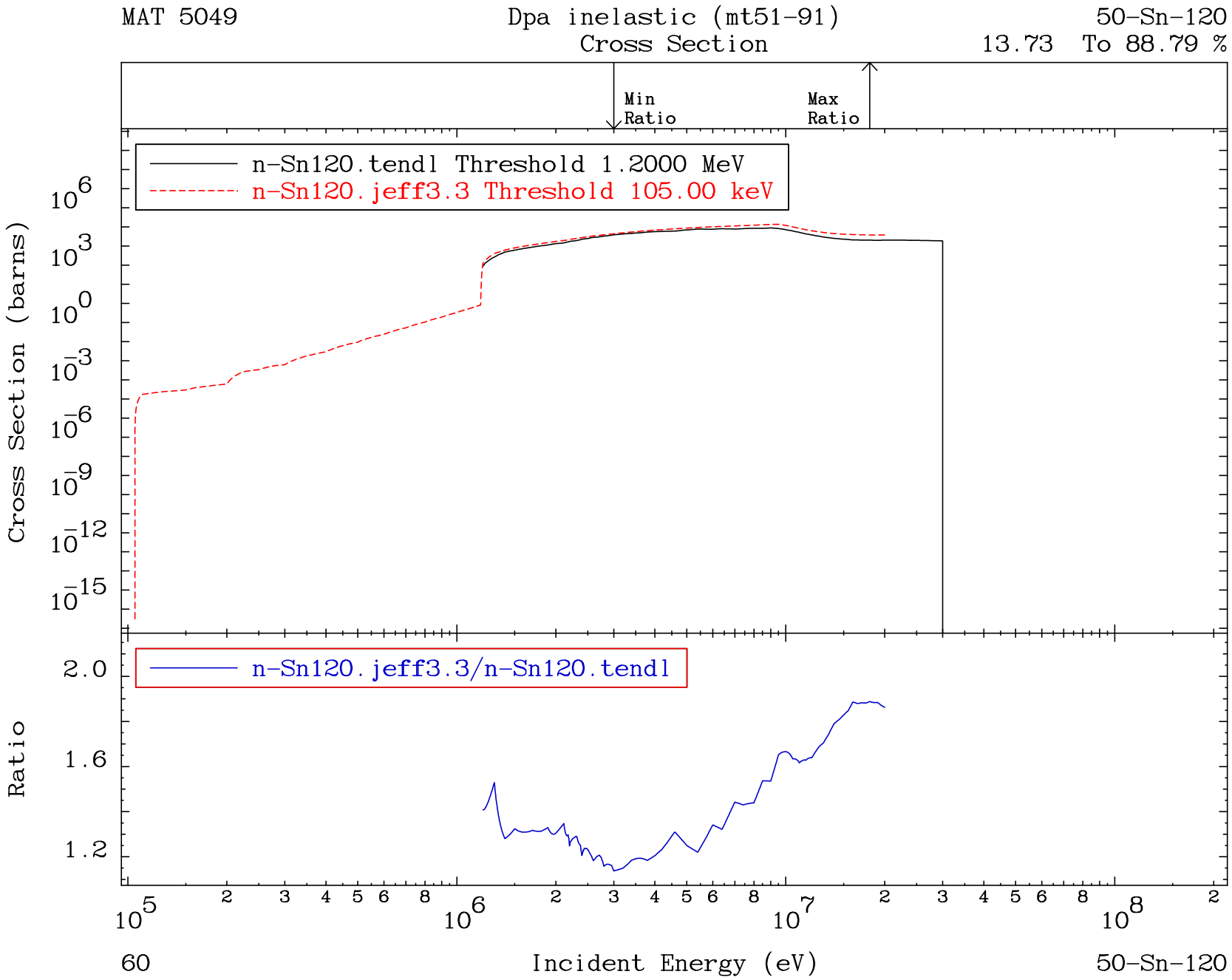

MAT 5049
Kerma capture (mt102)
Cross Section
50-Sn-120
-99.93 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
55
50-Sn-120

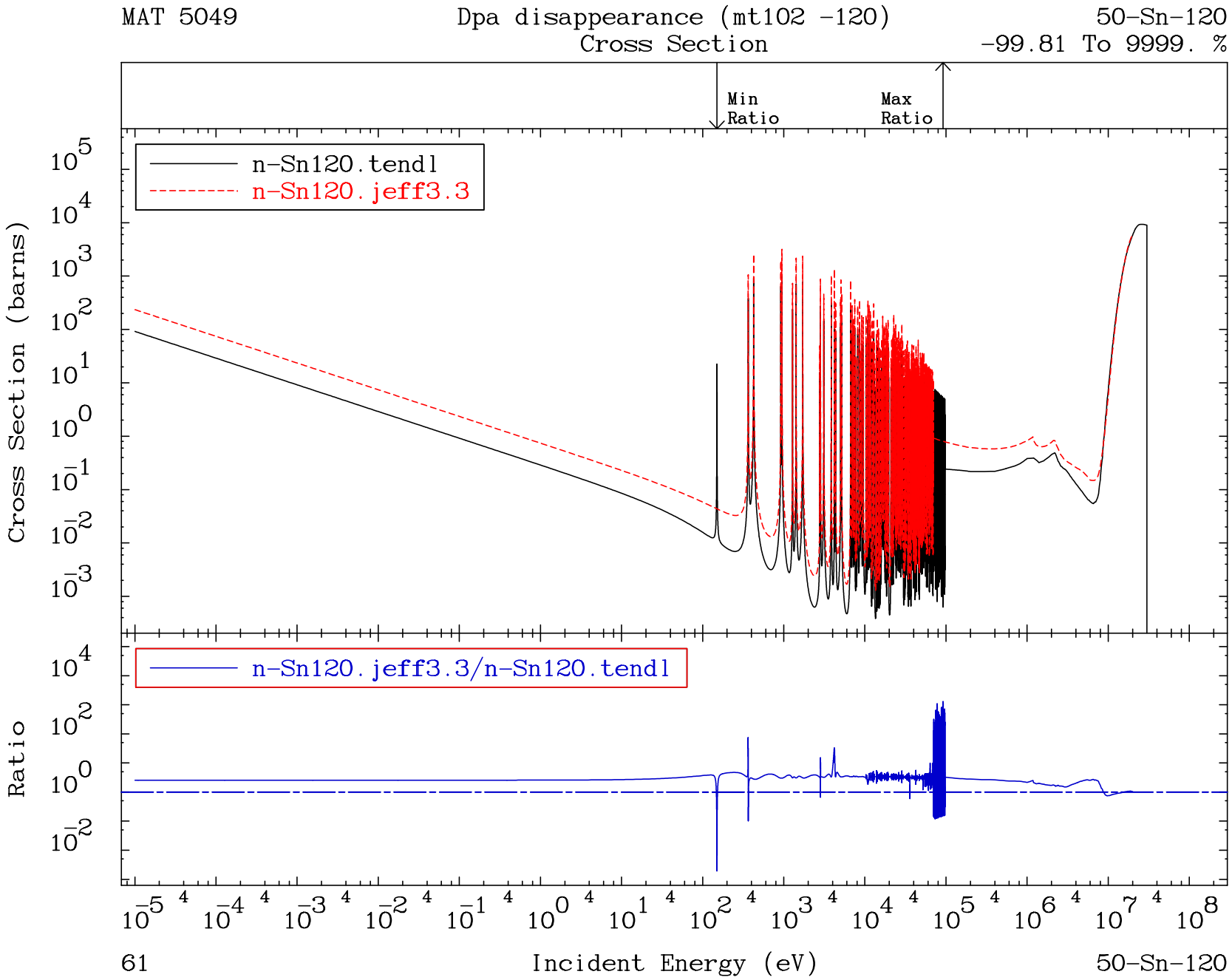

MAT 5049
Total photon (eV-barns)
Cross Section
50-Sn-120
-99.93 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
56
50-Sn-120


MAT 5049
Total kinematic kerma (high limit)
Cross Section
50-Sn-120
-99.93 To 2691. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
57
50-Sn-120


MAT 5049
Dpa total (eV-barns)
Cross Section
50-Sn-120
-99.81 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
58
50-Sn-120


MAT 5049
Dpa elastic (mt2)
Cross Section
50-Sn-120
-98.04 To 2620. %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 735.29 eV
n-Sn120.jeff3.3 Threshold 709.88 eV
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
59
50-Sn-120


MAT 5049
Dpa inelastic (mt51-91)
Cross Section
50-Sn-120
13.73 To 88.79 %
Min Ratio
Max Ratio
n-Sn120.tendl Threshold 1.2000 MeV
n-Sn120.jeff3.3 Threshold 105.00 keV
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
Incident Energy (eV)
60
50-Sn-120


MAT 5049
Dpa disappearance (mt102 -120)
Cross Section
50-Sn-120
-99.81 To 9999. %
Min Ratio
Max Ratio
n-Sn120.tendl
n-Sn120.jeff3.3
Cross Section (barns)
n-Sn120.jeff3.3/n-Sn120.tendl
Ratio
61
Incident Energy (eV)
50-Sn-120