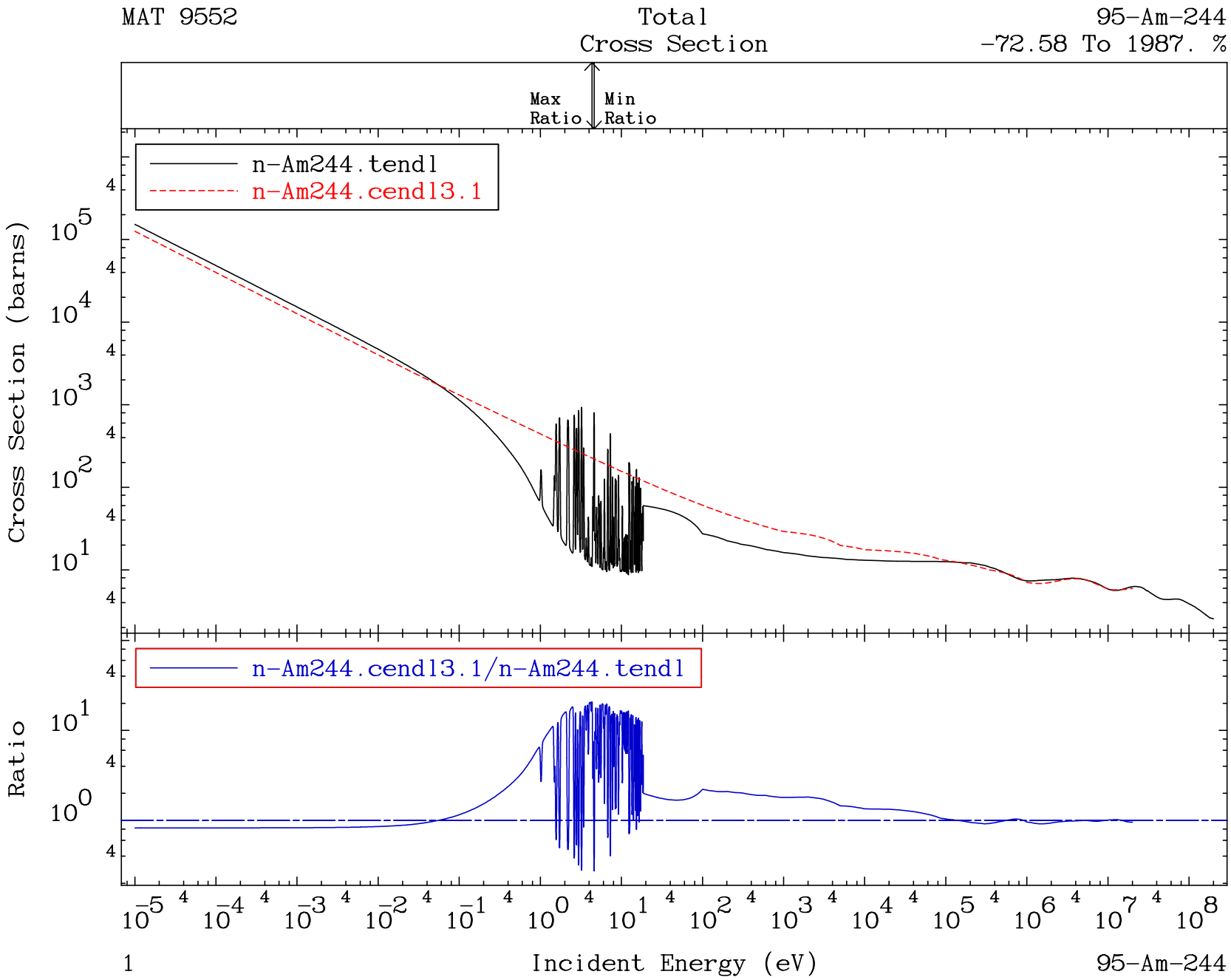
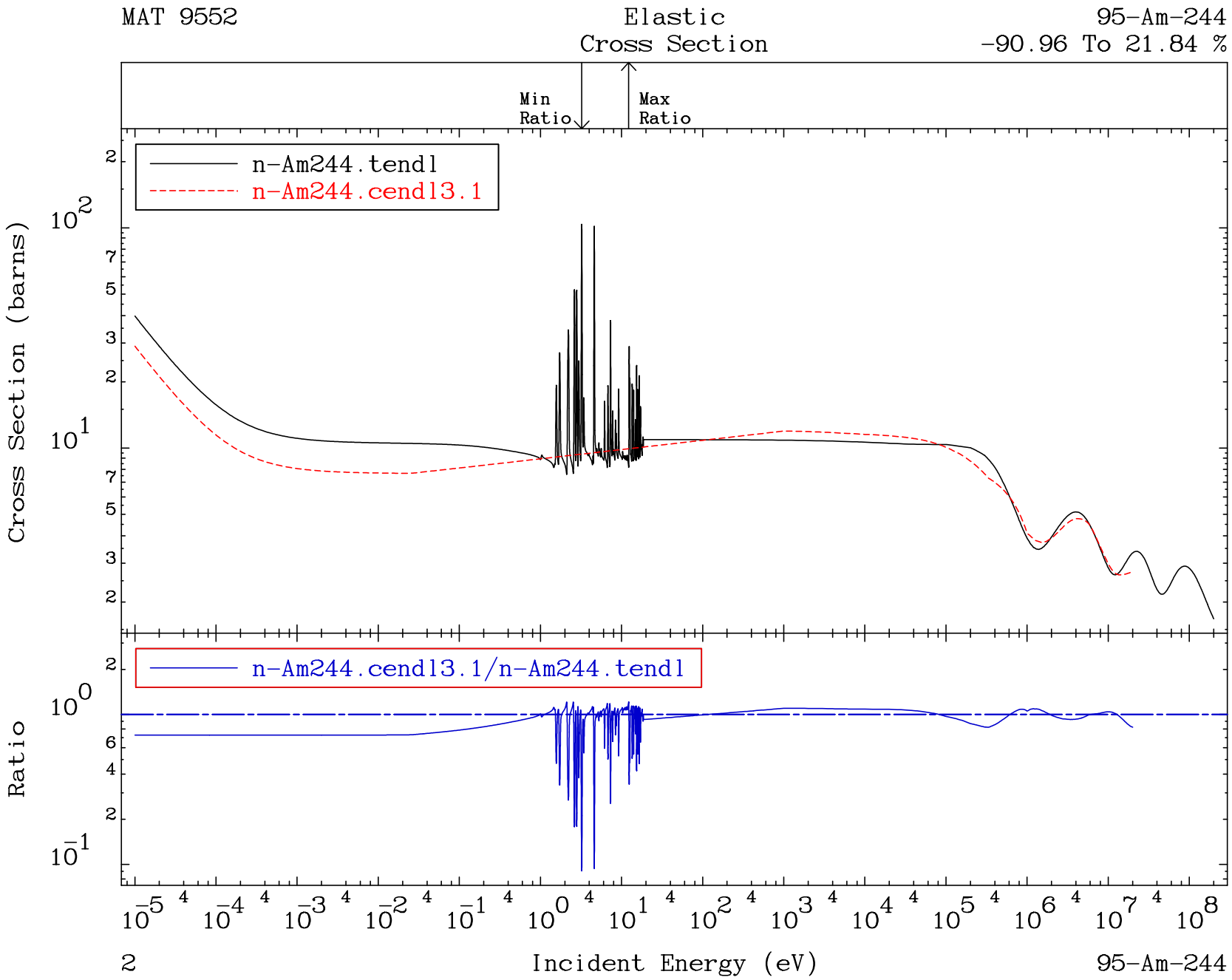
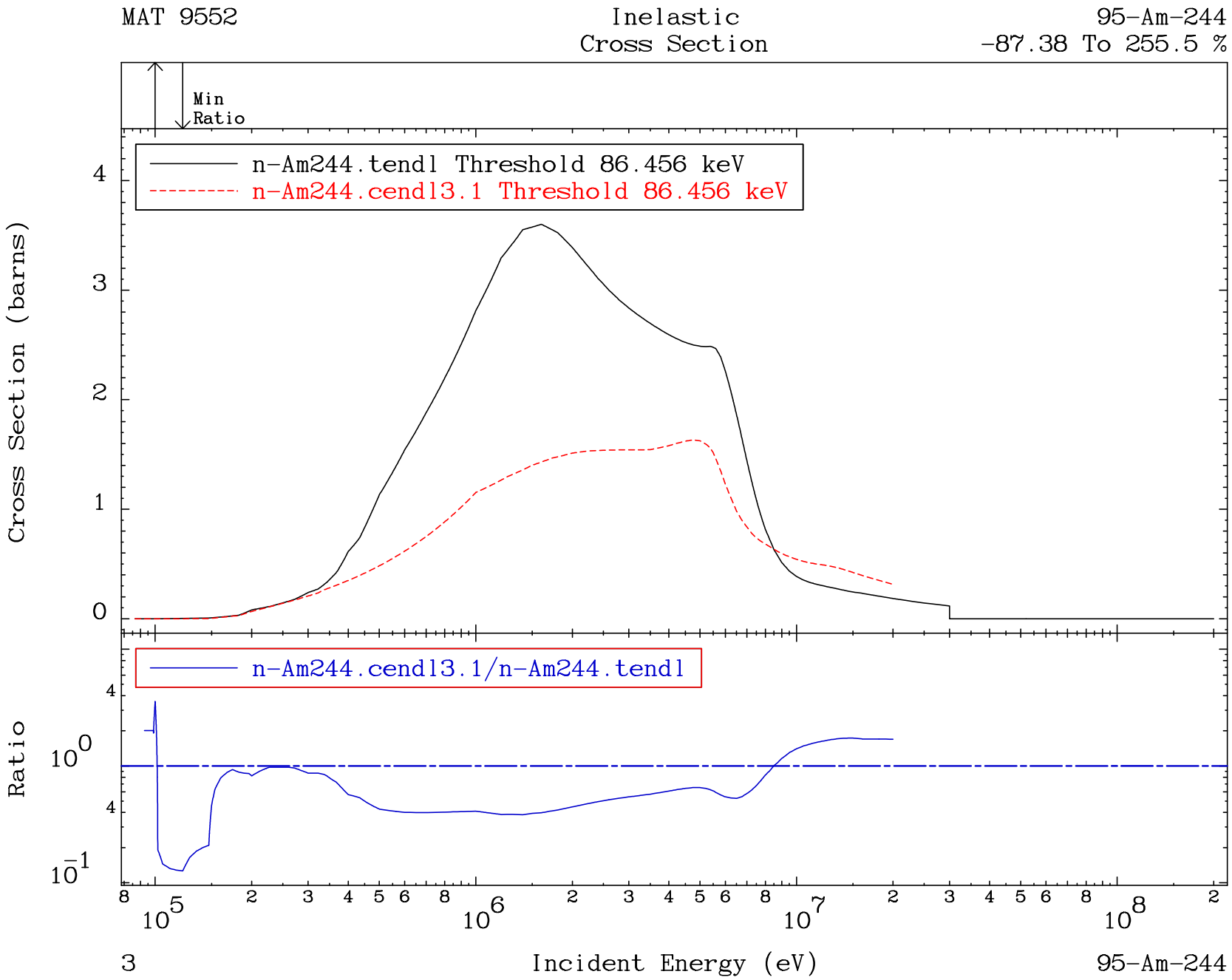
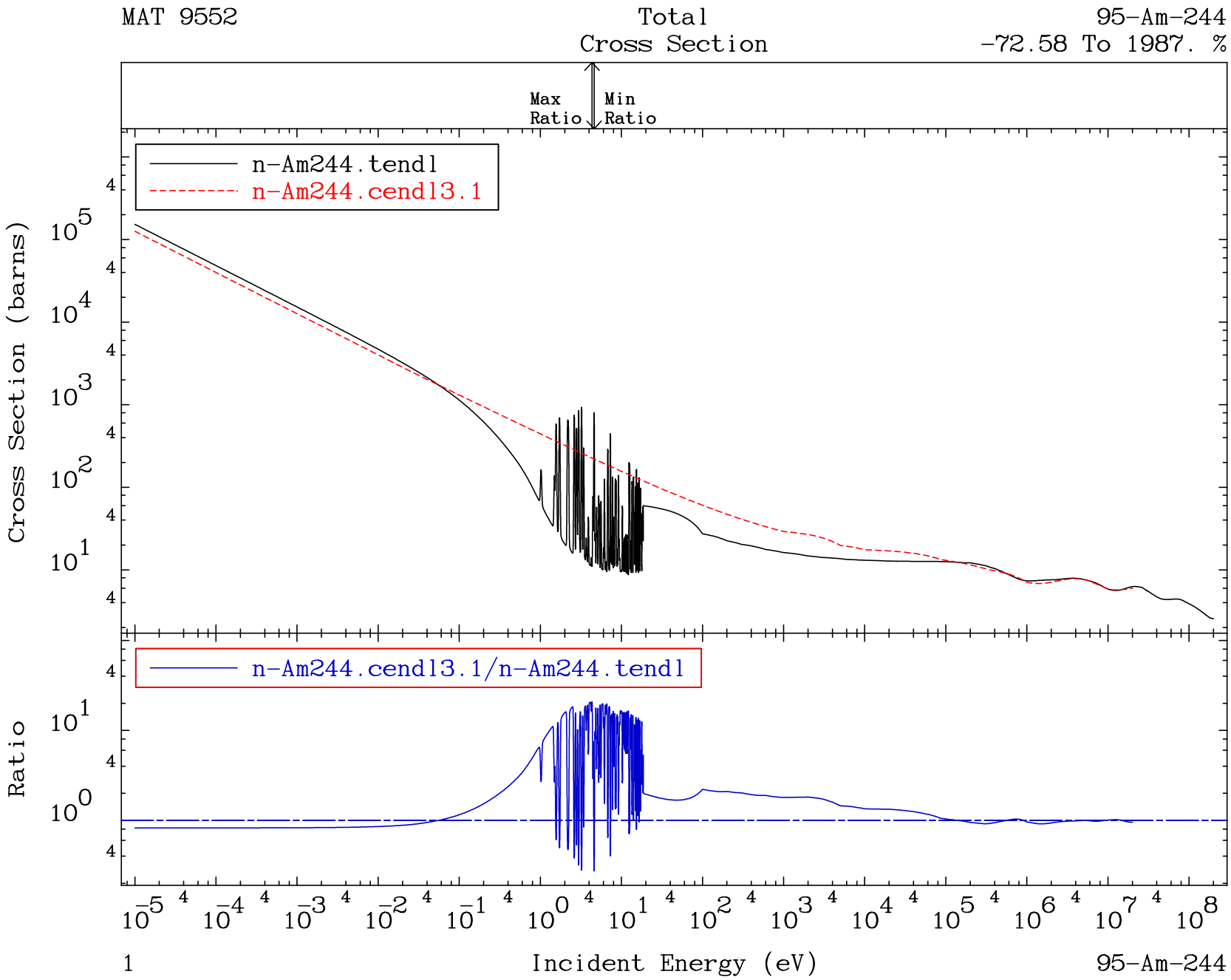
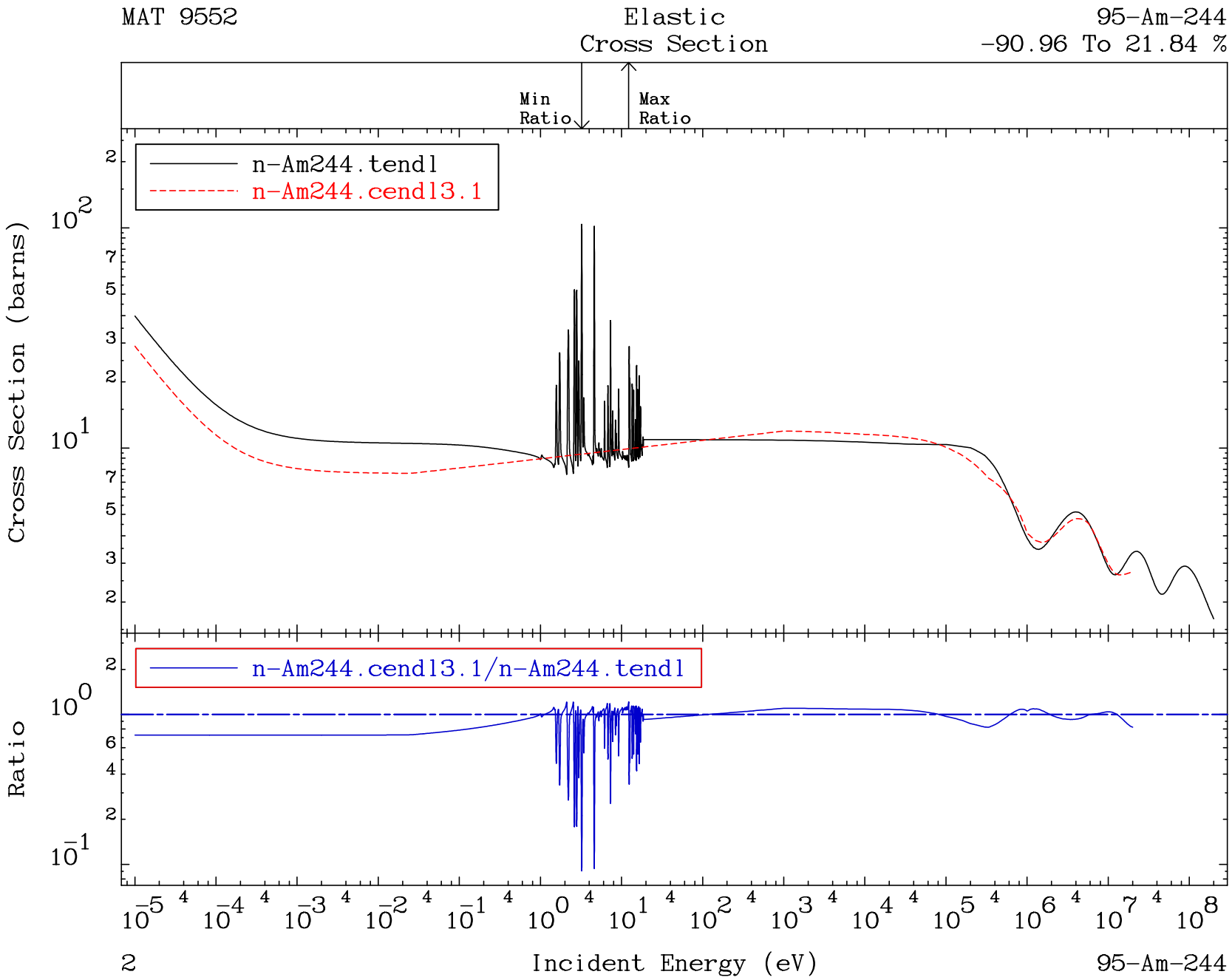
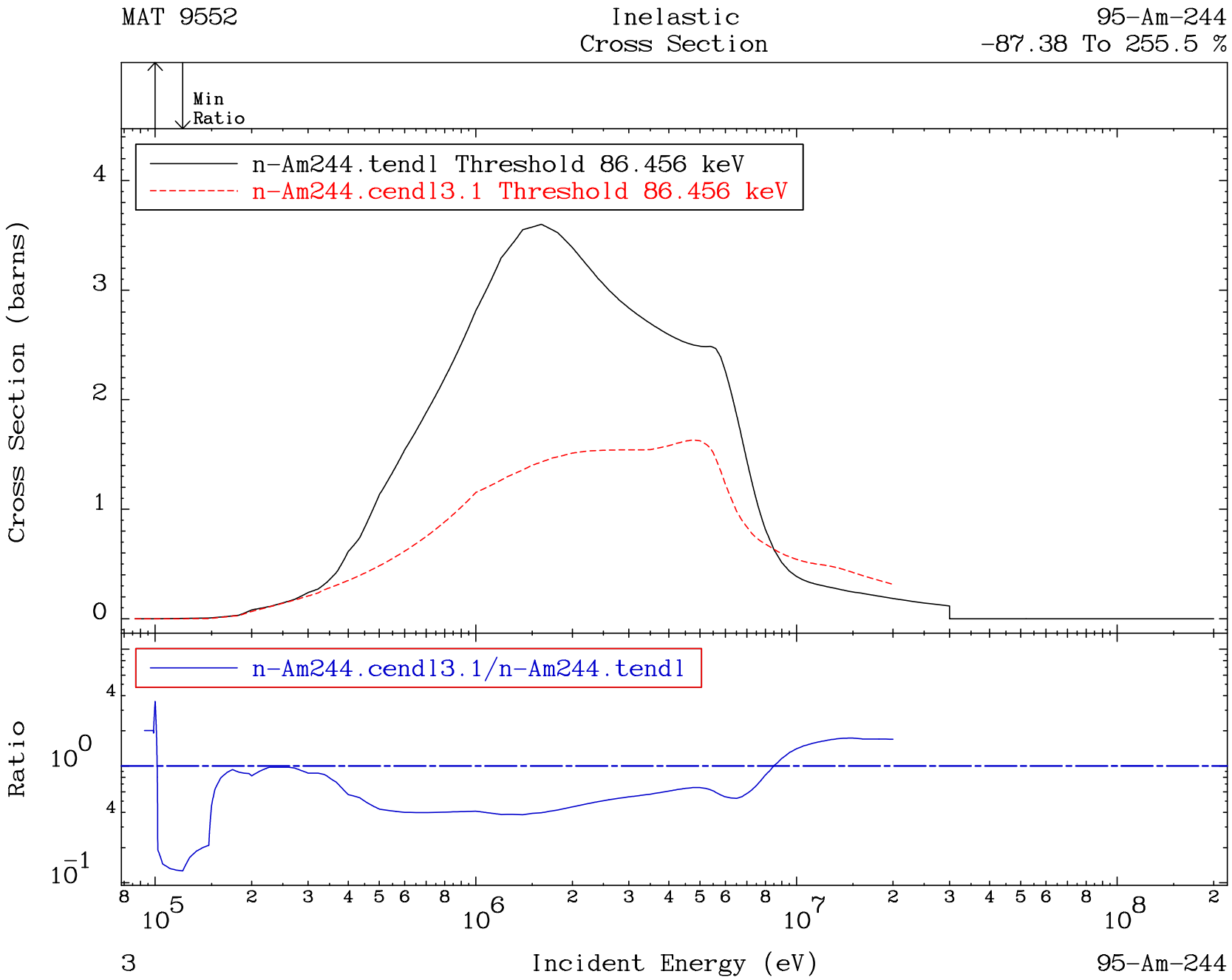

MAT 9552
Total
Cross Section
95-Am-244
-72.58 To 1987. %
Max Ratio
Min Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
1
95-Am-244

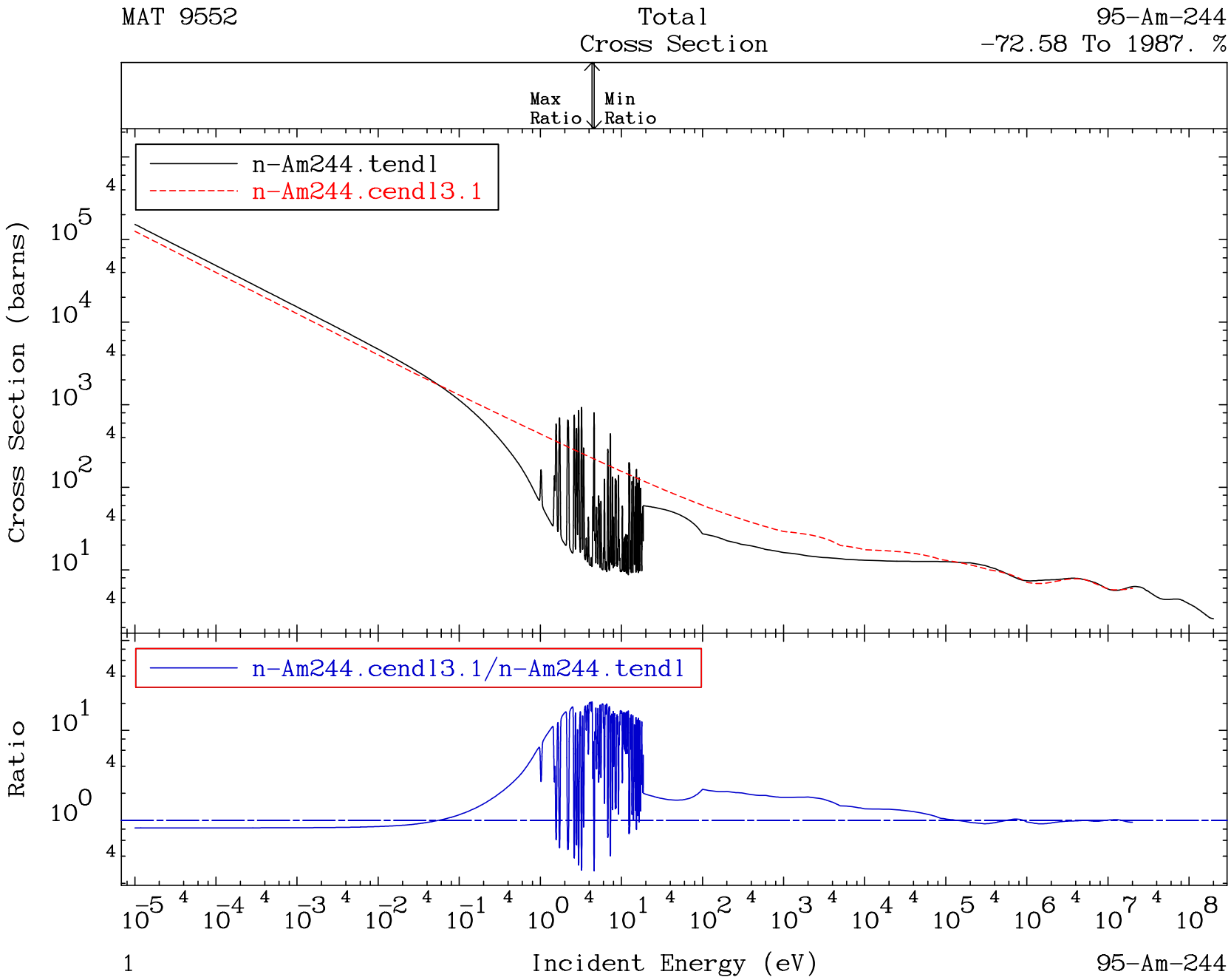

MAT 9552
Elastic
Cross Section
95-Am-244
-90.96 To 21.84 %
Min
Ratio
Max
Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
2
95-Am-244

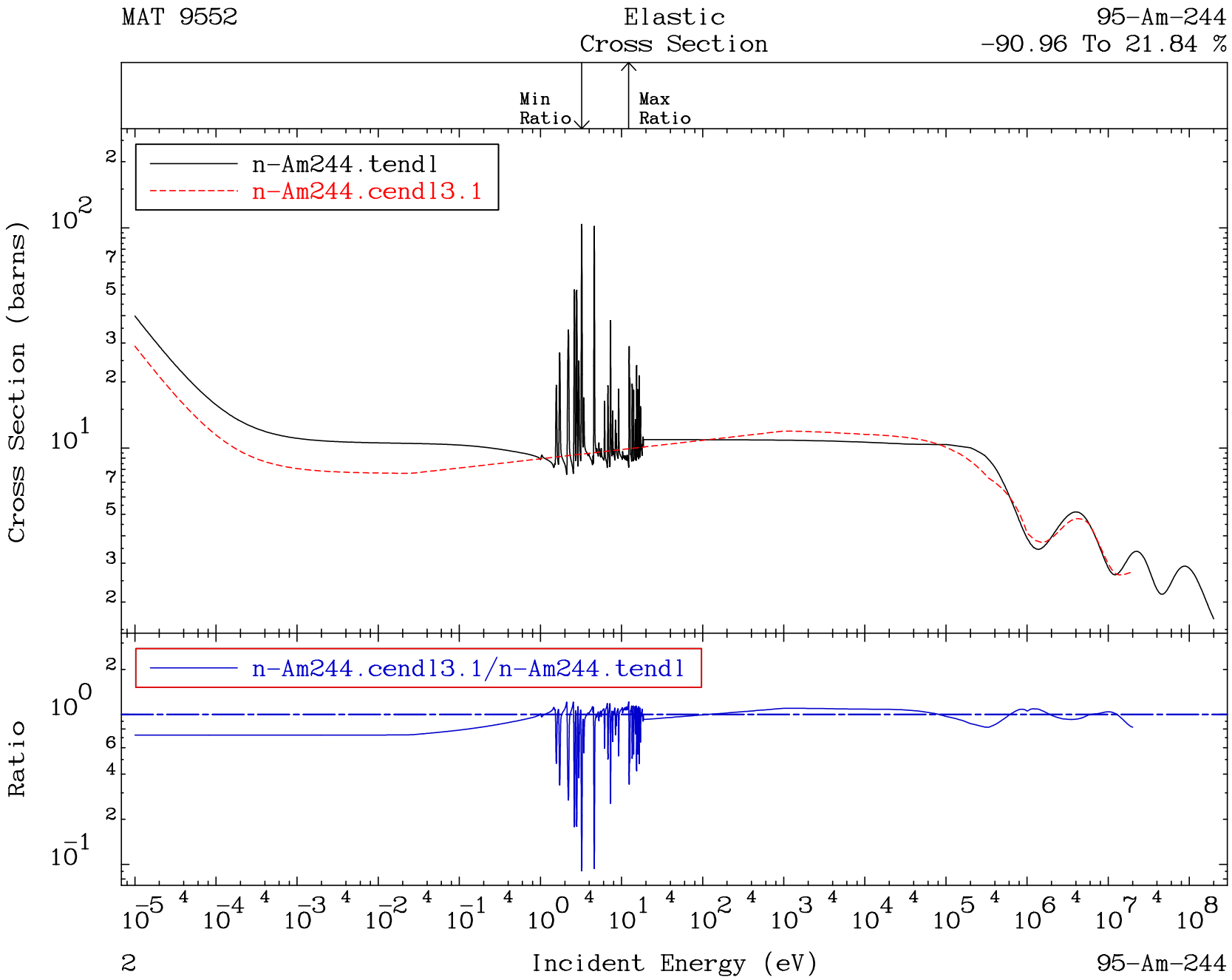

MAT 9552
Inelastic
Cross Section
95-Am-244
-87.38 To 255.5 %
Min
Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
3
95-Am-244

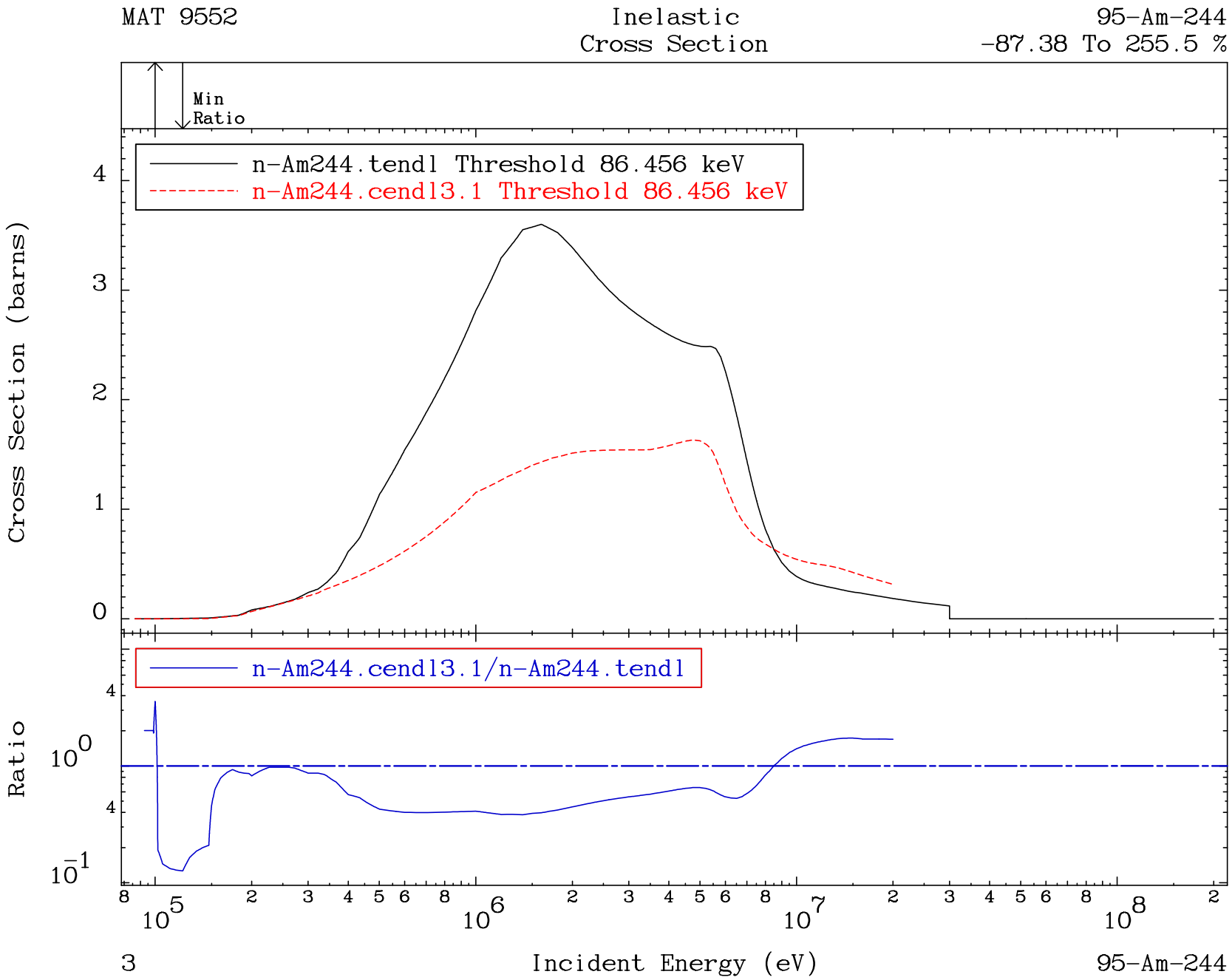

MAT 9552
Total
Cross Section
95-Am-244
-72.58 To 1987. %
Max Ratio
Min Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
1
95-Am-244

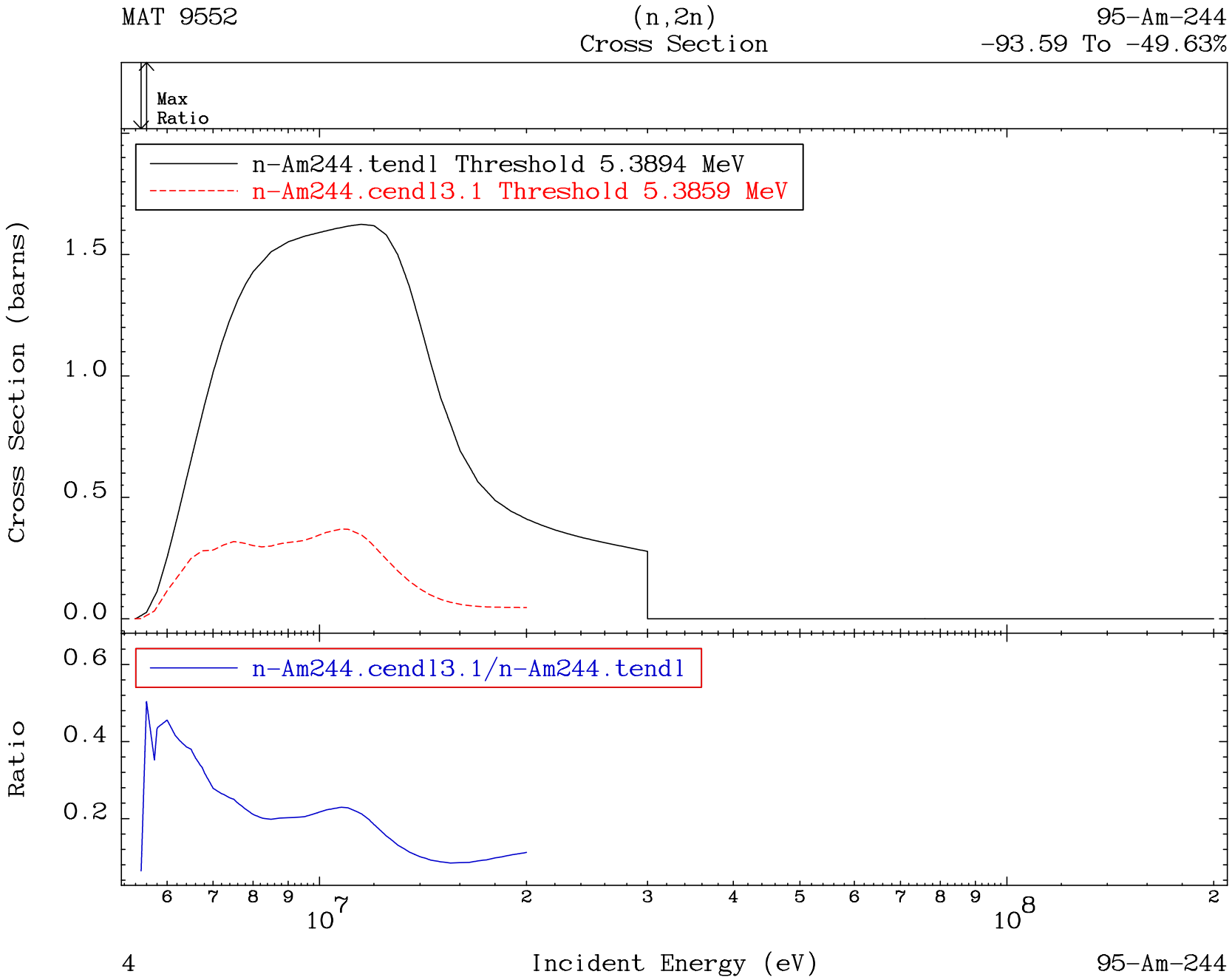

MAT 9552
Elastic
Cross Section
95-Am-244
-90.96 To 21.84 %
Min
Ratio
Max
Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
2
95-Am-244

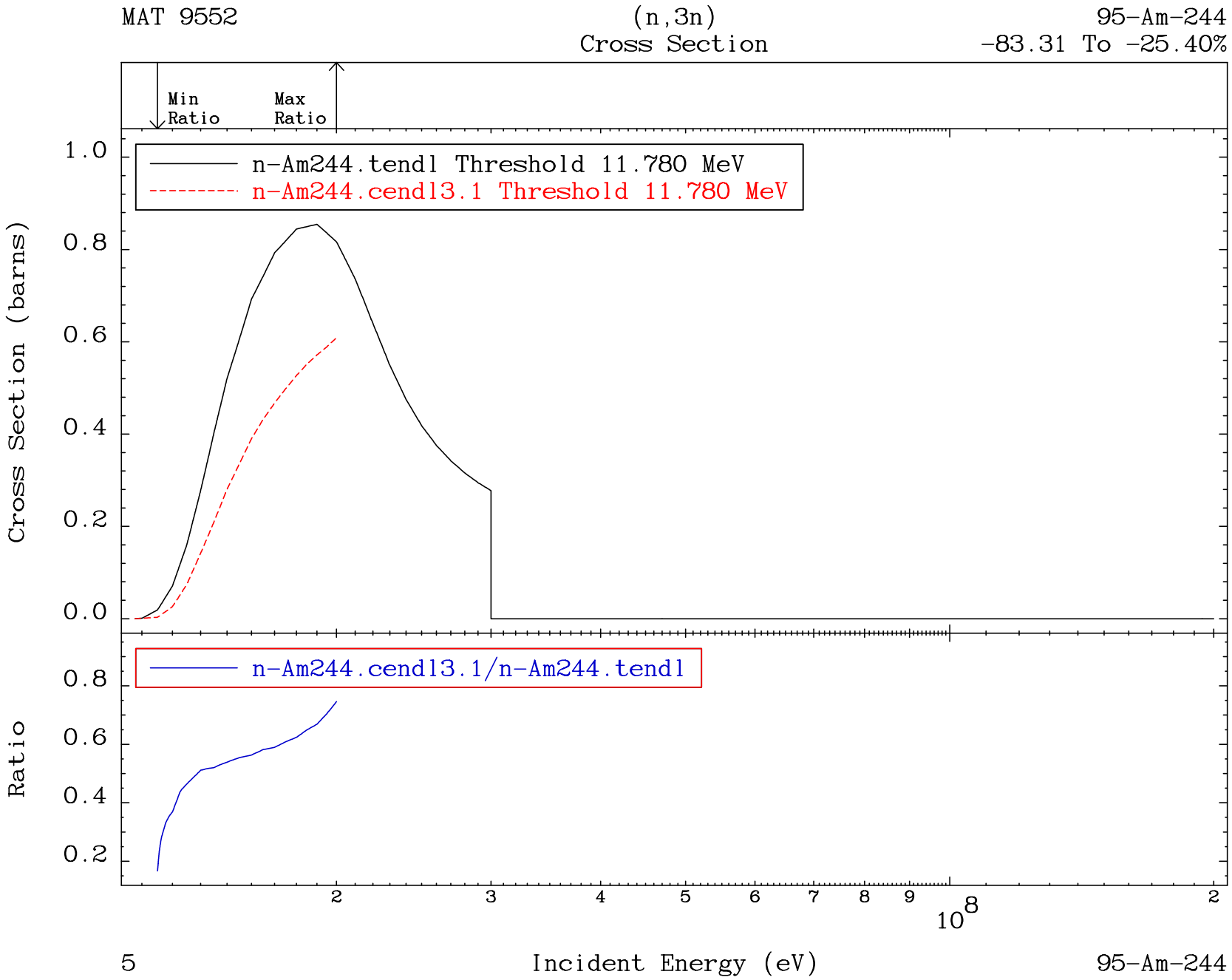

MAT 9552
Inelastic
Cross Section
95-Am-244
-87.38 To 255.5 %
Min
Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
3
95-Am-244

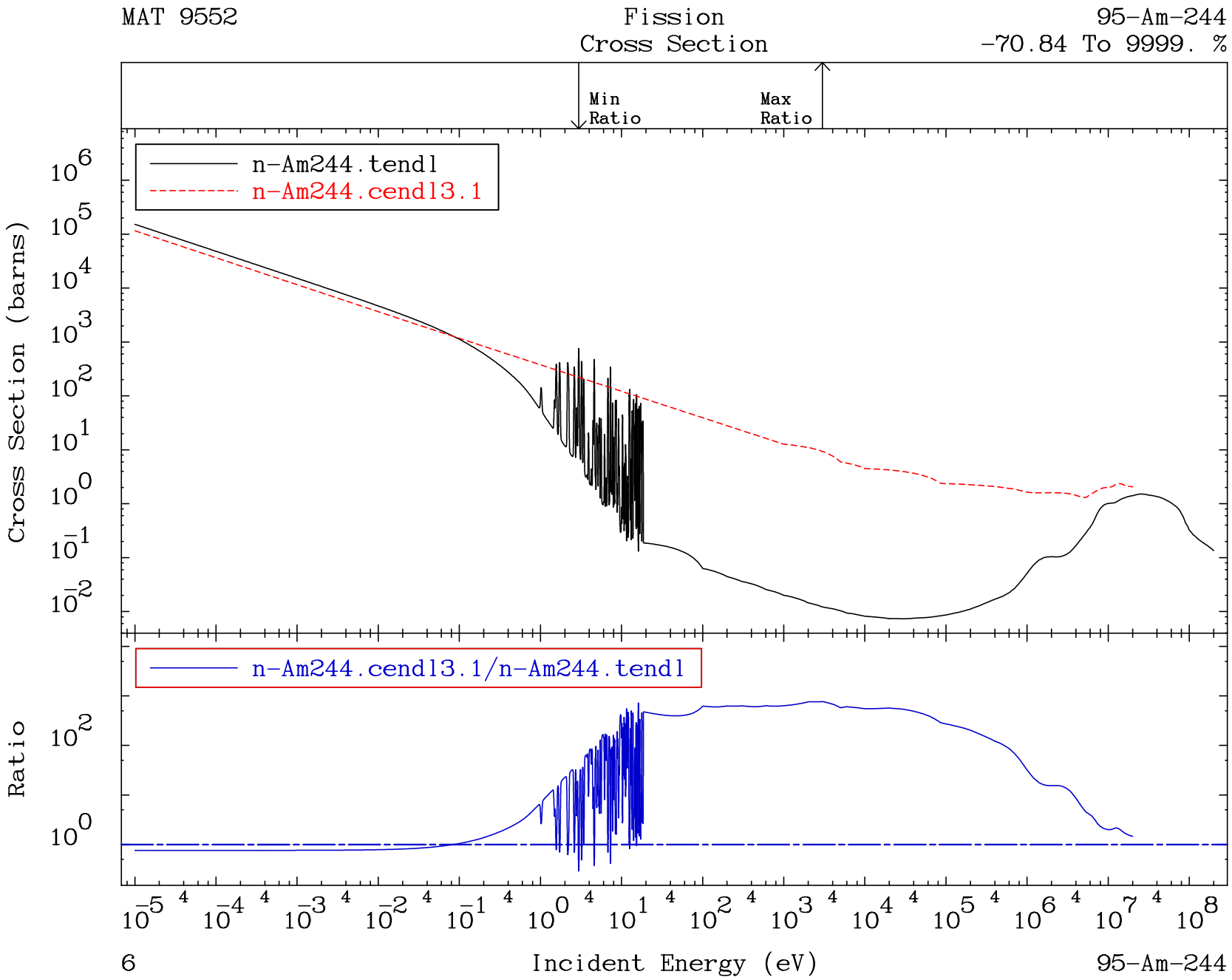

MAT 9552
Total
Cross Section
95-Am-244
-72.58 To 1987. %
Max Ratio
Min Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
1
95-Am-244

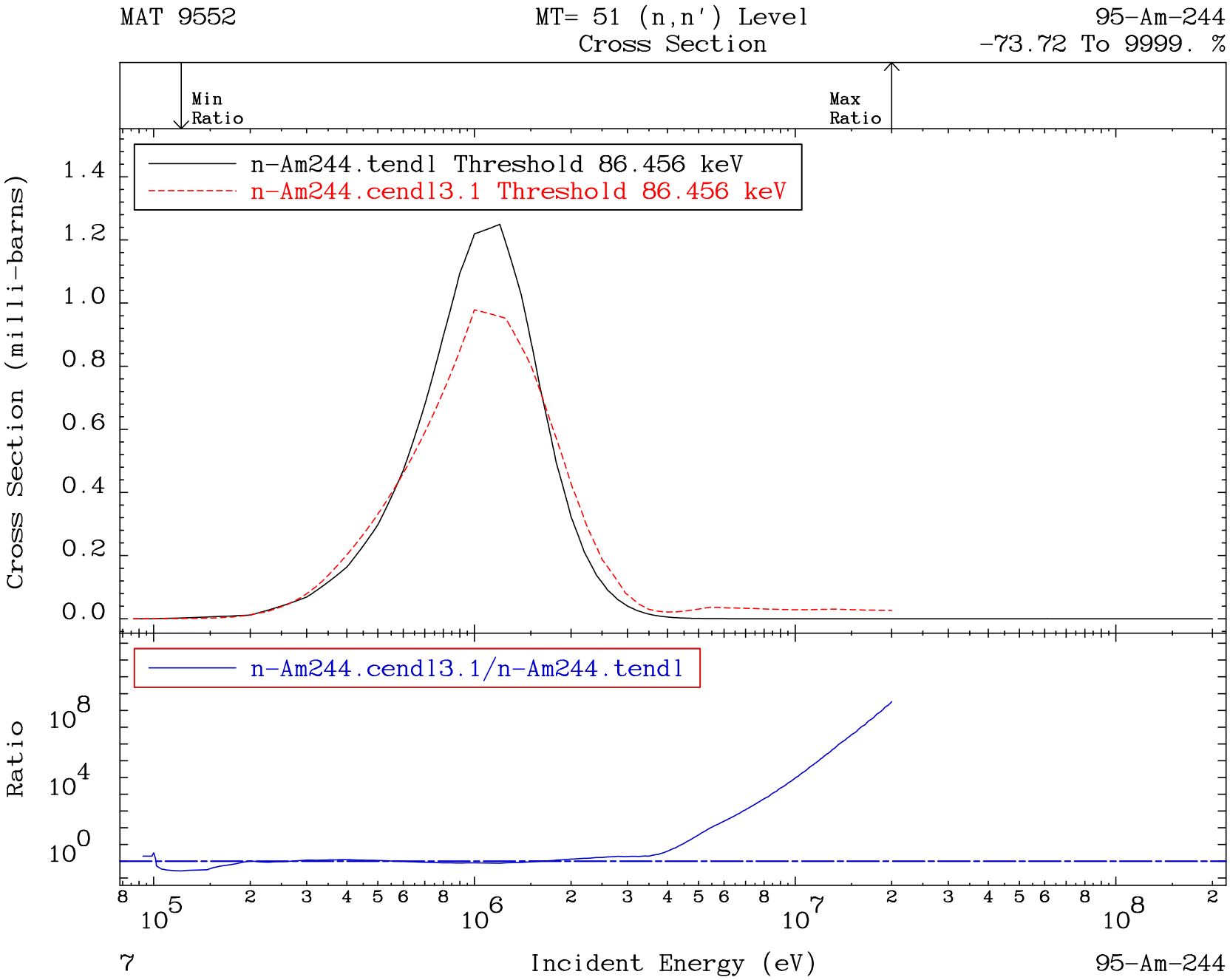

MAT 9552
Elastic
Cross Section
95-Am-244
-90.96 To 21.84 %
Min
Ratio
Max
Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
2
95-Am-244

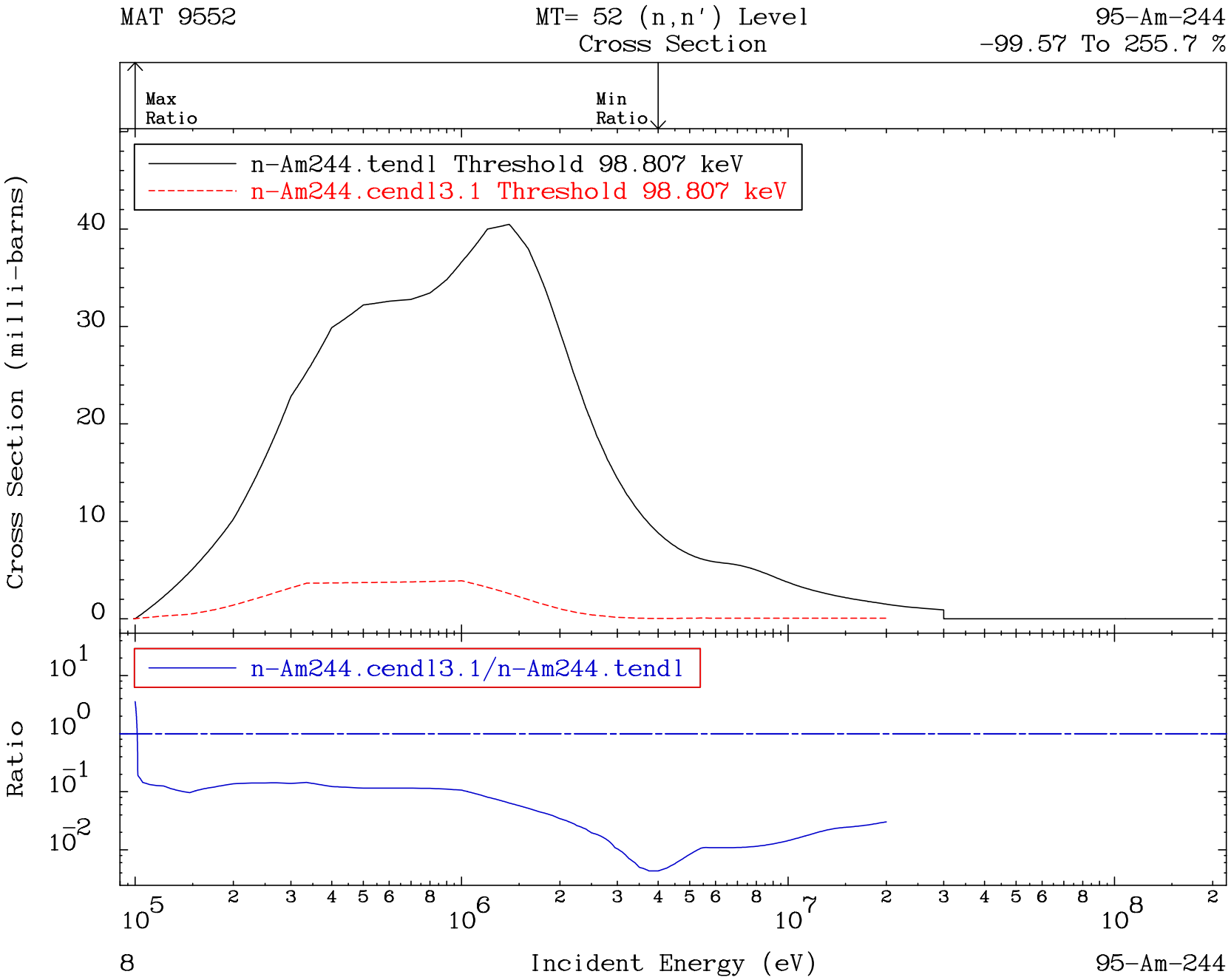

MAT 9552
Inelastic
Cross Section
95-Am-244
-87.38 To 255.5 %
Min
Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
3
95-Am-244

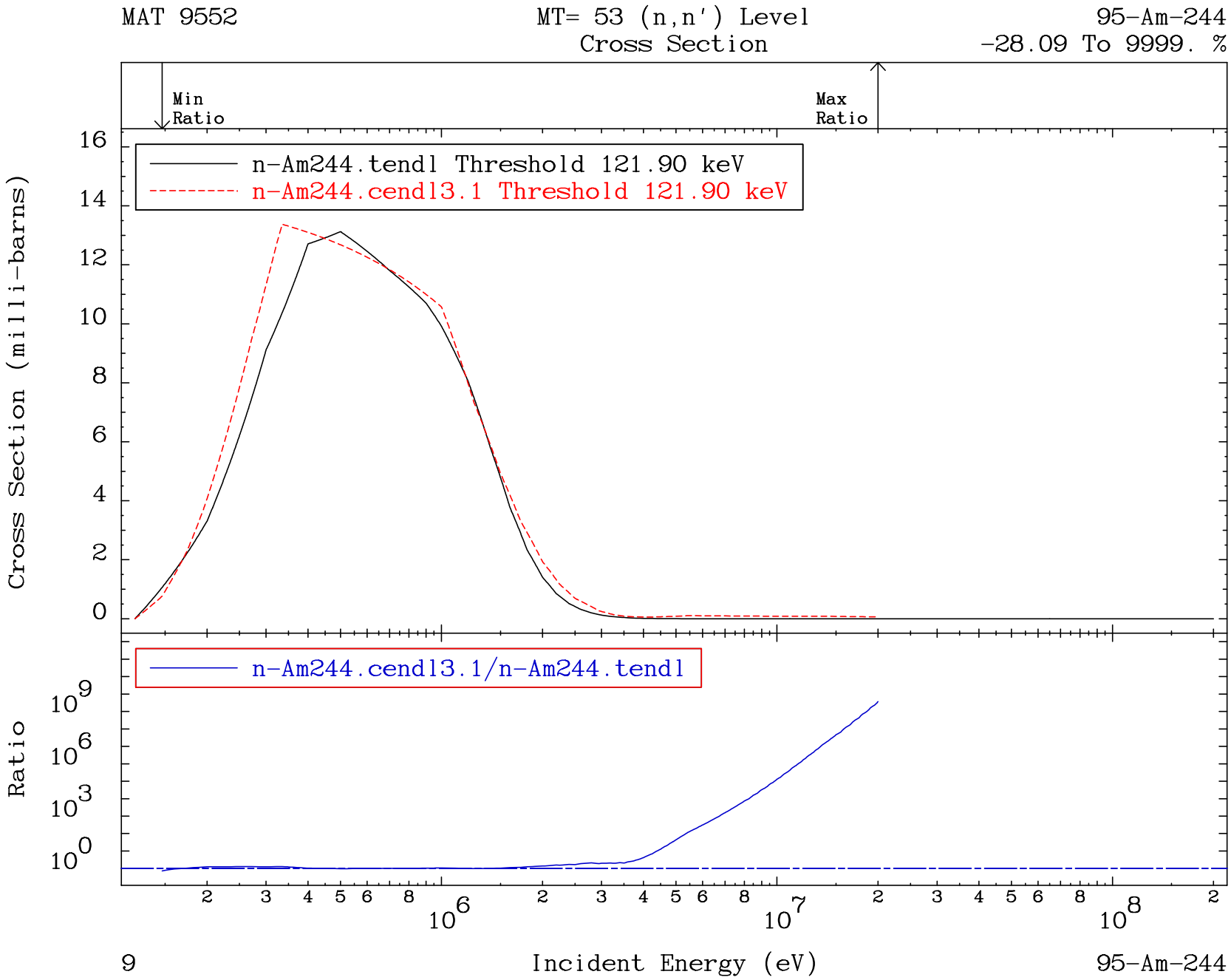

MAT 9552
(n,2n)
Cross Section
95-Am-244
-93.59 To -49.63%
Max
Ratio
n-Am244.tendl Threshold 5.3894 MeV
n-Am244.cendl3.1 Threshold 5.3859 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
0.6
0.4
0.2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
95-Am-244

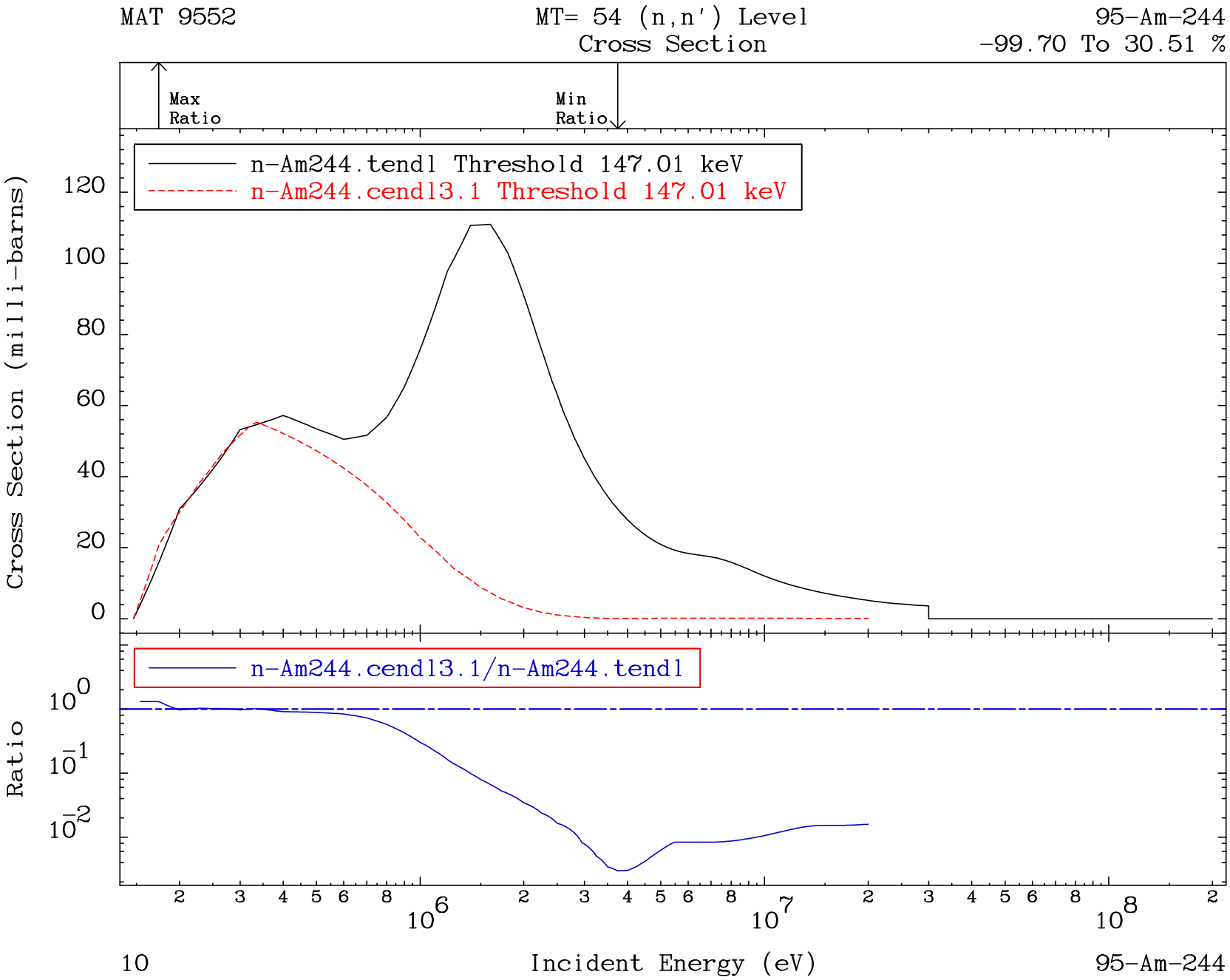

MAT 9552
(n,3n)
Cross Section
95-Am-244
-83.31 To -25.40%
Min Ratio
Max Ratio
n-Am244.tendl Threshold 11.780 MeV
n-Am244.cendl3.1 Threshold 11.780 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
0.8
0.6
0.4
0.2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
95-Am-244

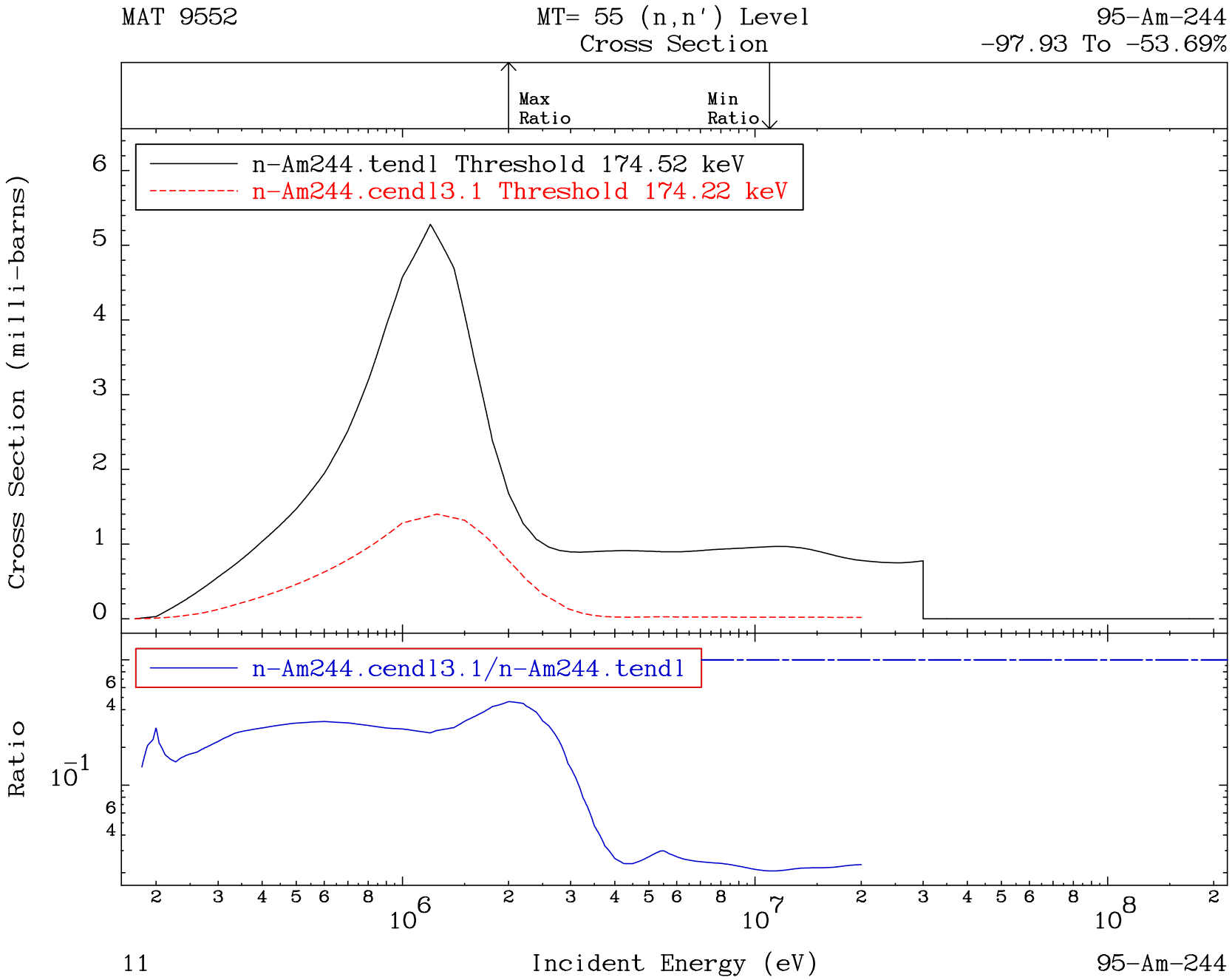

MAT 9552
Fission
Cross Section
95-Am-244
-70.84 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
6
95-Am-244

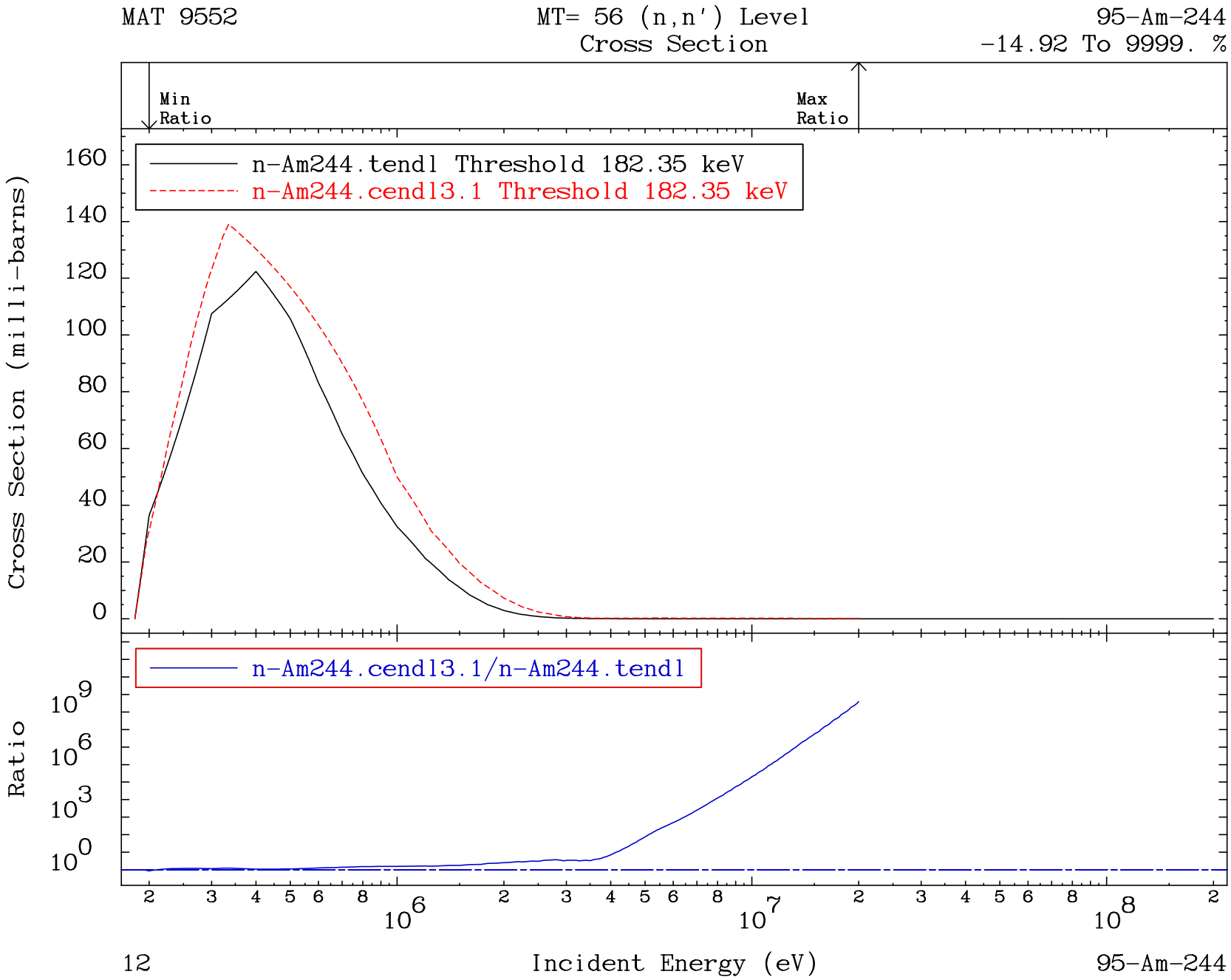

MAT 9552
MT= 51 (n,n') Level
Cross Section
95-Am-244
-73.72 To 9999. %
Min
Ratio
Max
Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^8
10^4
10^0
8
2
3
4
5
6
8
10^5
10^6
10^7
10^8
7
Incident Energy (eV)
95-Am-244

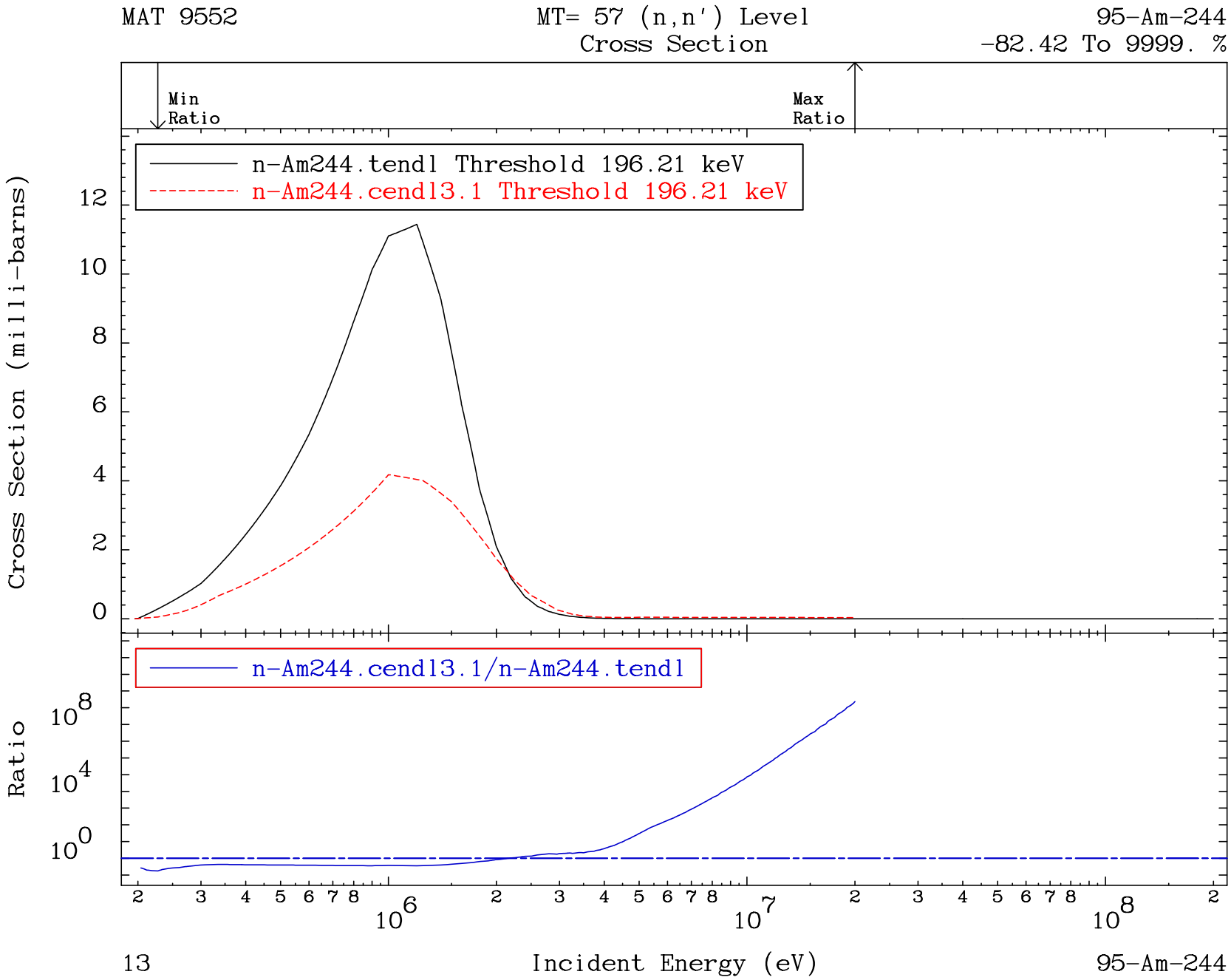

MAT 9552
MT= 52 (n,n') Level
Cross Section
95-Am-244
-99.57 To 255.7 %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 98.807 keV
n-Am244.cendl3.1 Threshold 98.807 keV
Cross Section (milli-barns)
40
30
20
10
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^1
10^0
10^-1
10^-2
10^5
2 3 4 5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
8
Incident Energy (eV)
95-Am-244

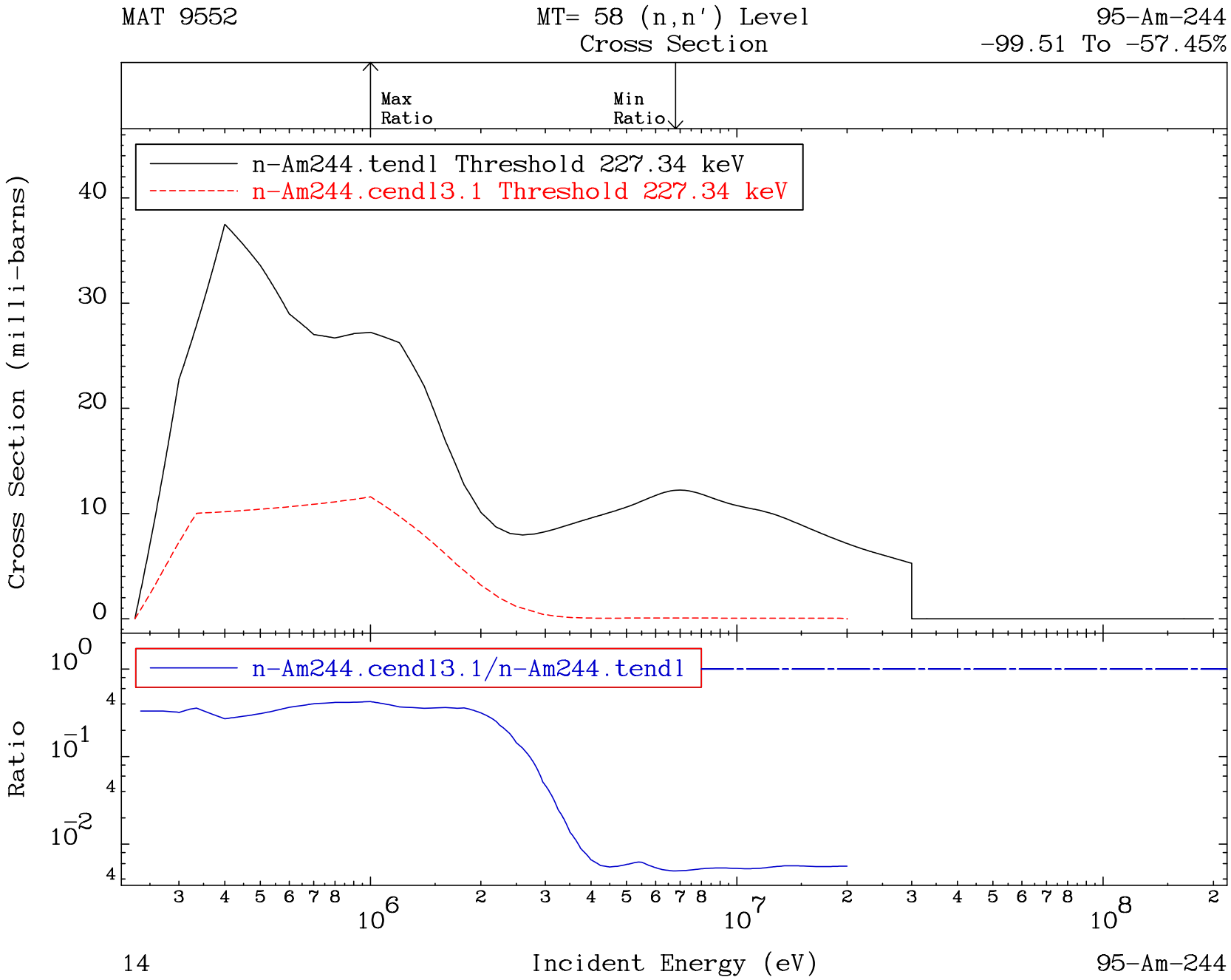

MAT 9552
MT= 53 (n,n') Level
Cross Section
95-Am-244
-28.09 To 9999. %
Min
Ratio
Max
Ratio
n-Am244.tendl Threshold 121.90 keV
n-Am244.cendl3.1 Threshold 121.90 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
95-Am-244

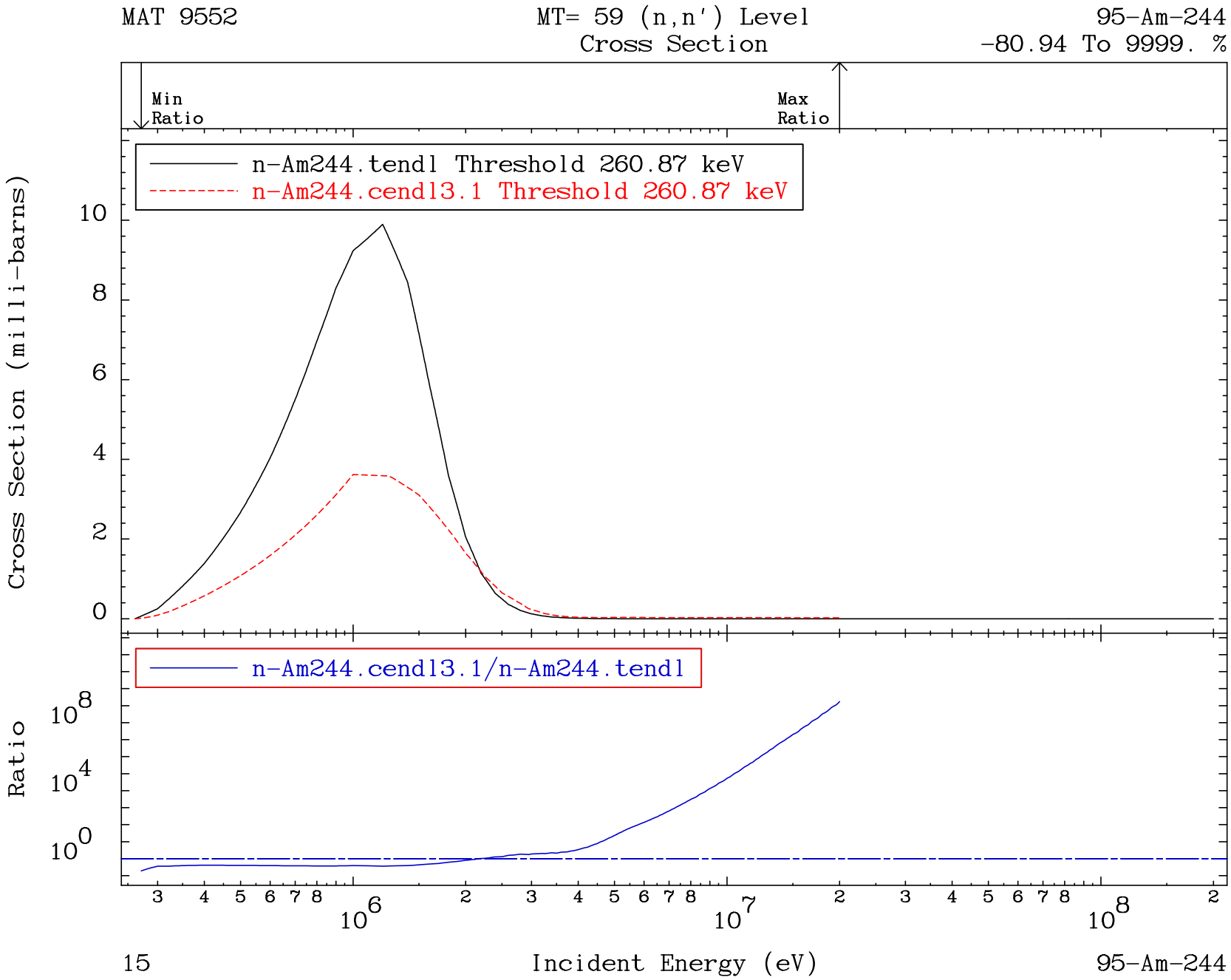

MAT 9552
MT= 54 (n,n') Level
Cross Section
95-Am-244
-99.70 To 30.51 %
Max
Ratio
Min
Ratio
n-Am244.tendl Threshold 147.01 keV
n-Am244.cendl3.1 Threshold 147.01 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
95-Am-244

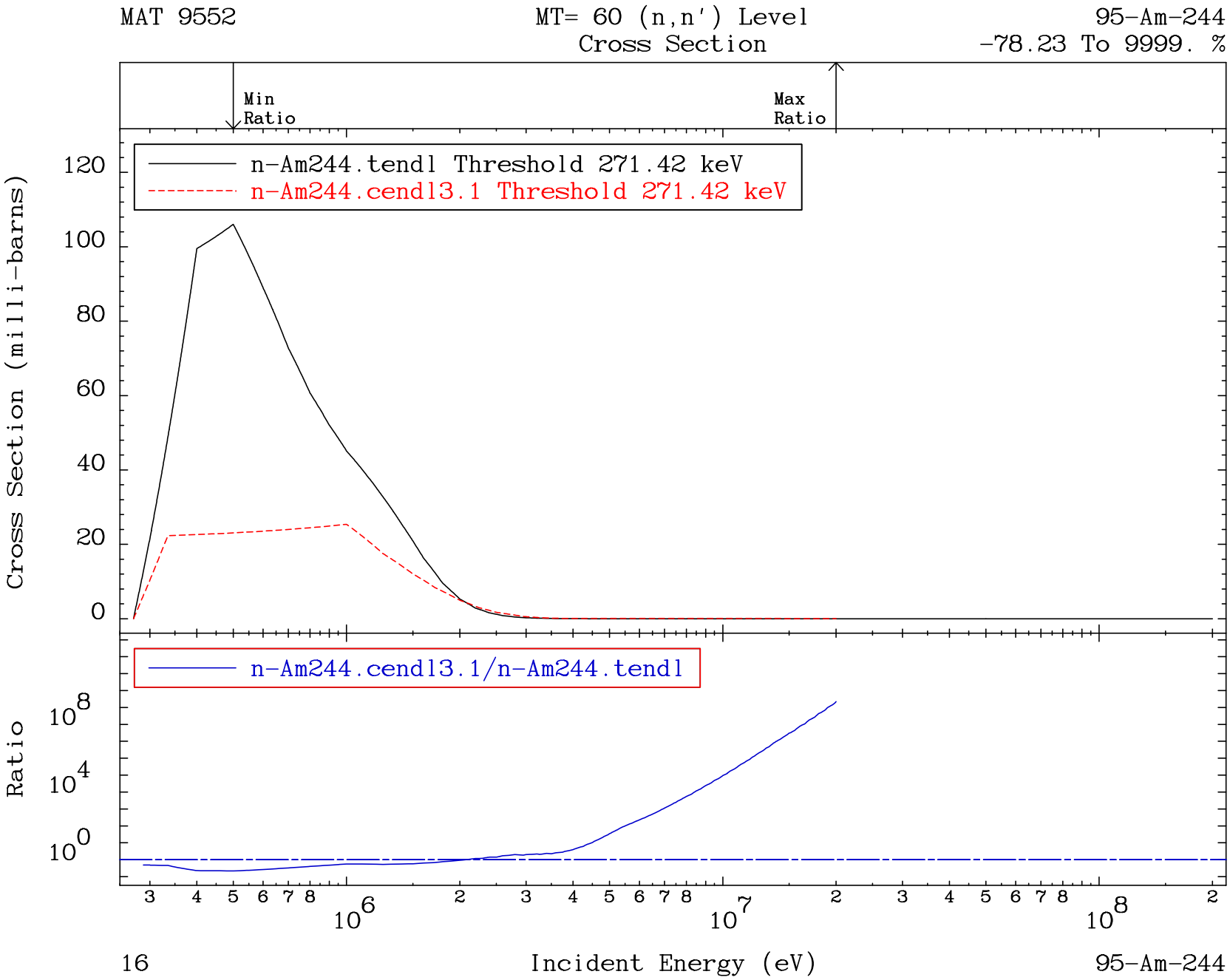

MAT 9552
MT= 55 (n,n') Level
Cross Section
95-Am-244
-97.93 To -53.69%
Max Ratio
Min Ratio
n-Am244.tendl Threshold 174.52 keV
n-Am244.cendl3.1 Threshold 174.22 keV
Cross Section (milli-barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
11
95-Am-244

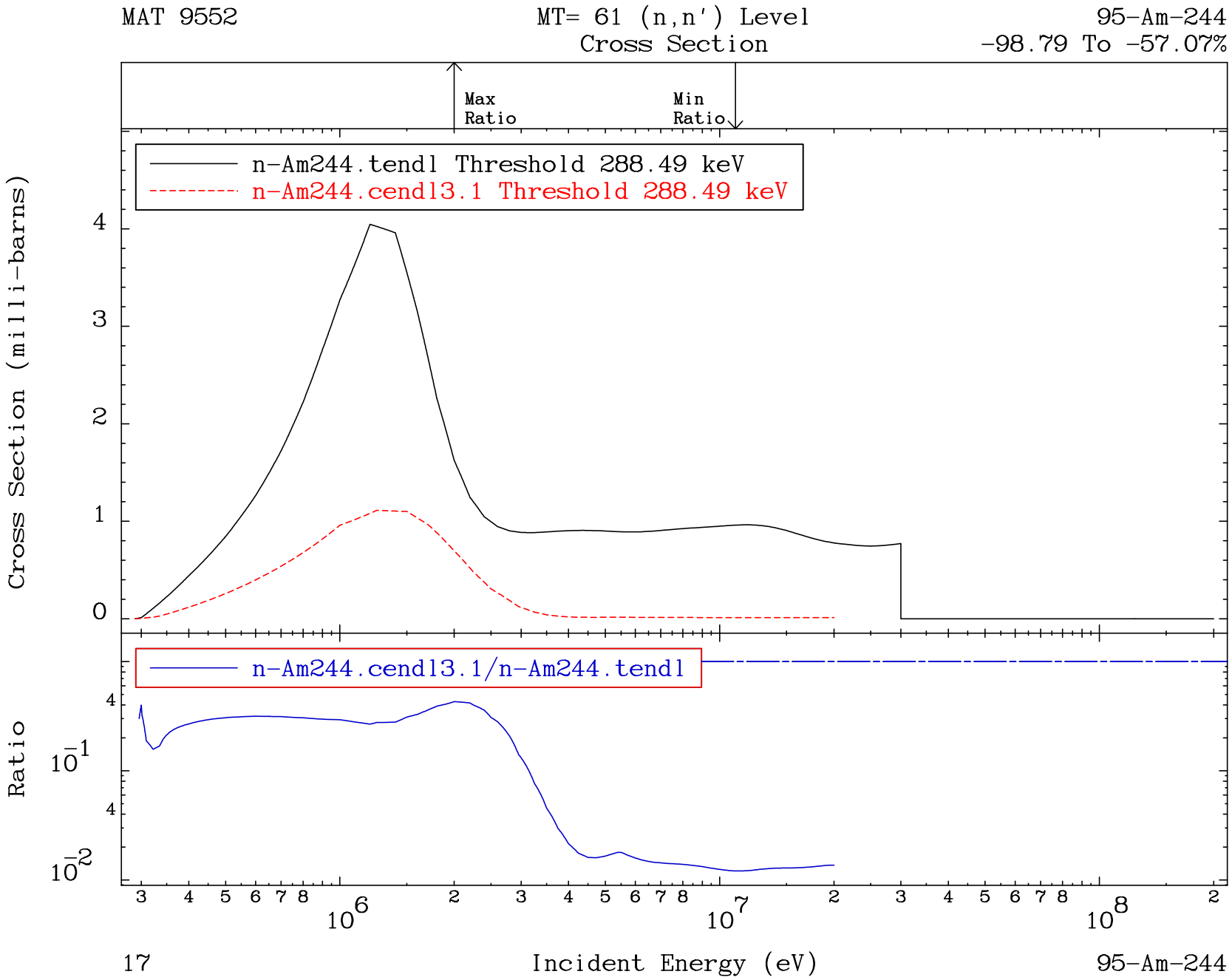

MAT 9552
MT= 56 (n,n') Level
Cross Section
95-Am-244
-14.92 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl Threshold 182.35 keV
n-Am244.cendl3.1 Threshold 182.35 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
95-Am-244

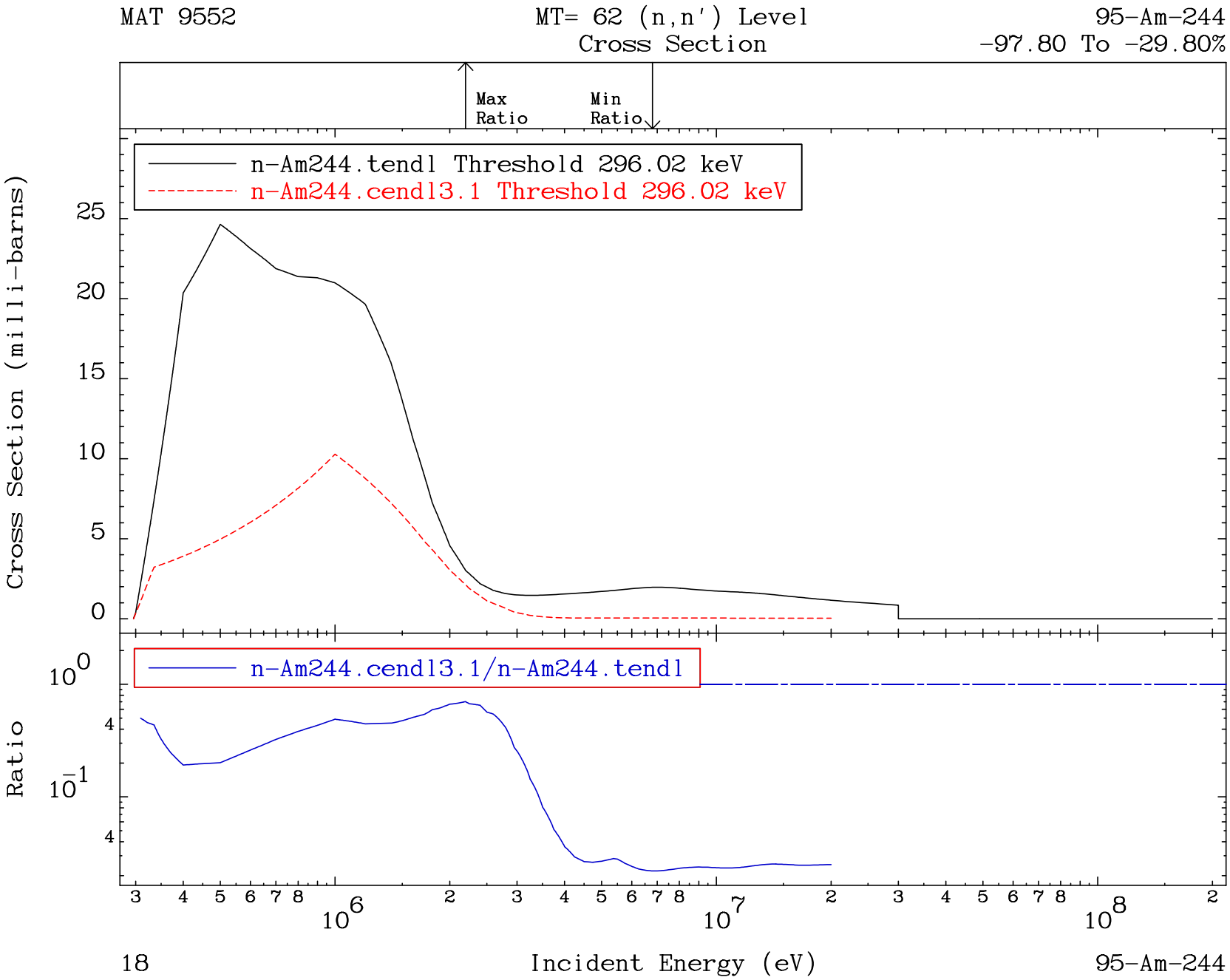

MAT 9552
MT= 57 (n,n') Level
Cross Section
95-Am-244
-82.42 To 9999. %
Min
Ratio
Max
Ratio
n-Am244.tendl Threshold 196.21 keV
n-Am244.cendl3.1 Threshold 196.21 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^0
10^4
10^8
2 3 4 5 6 7 8
10^6
10^7
10^8
13
Incident Energy (eV)
95-Am-244

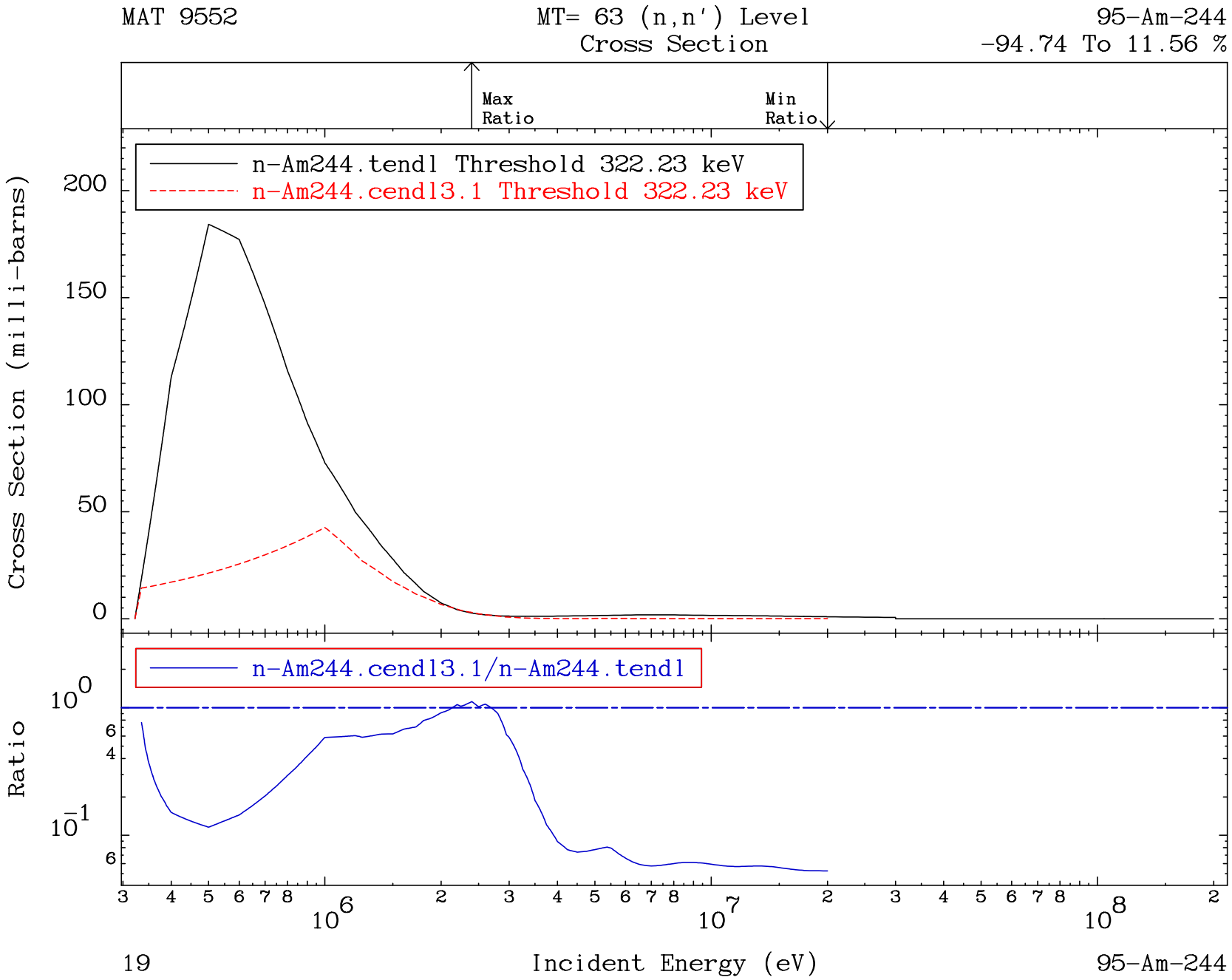

MAT 9552
MT= 58 (n,n') Level
Cross Section
95-Am-244
-99.51 To -57.45%
Max Ratio
Min Ratio
n-Am244.tendl Threshold 227.34 keV
n-Am244.cendl3.1 Threshold 227.34 keV
Cross Section (milli-barns)
0
10
20
30
40
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^{0}
10^{-1}
10^{-2}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
14
95-Am-244

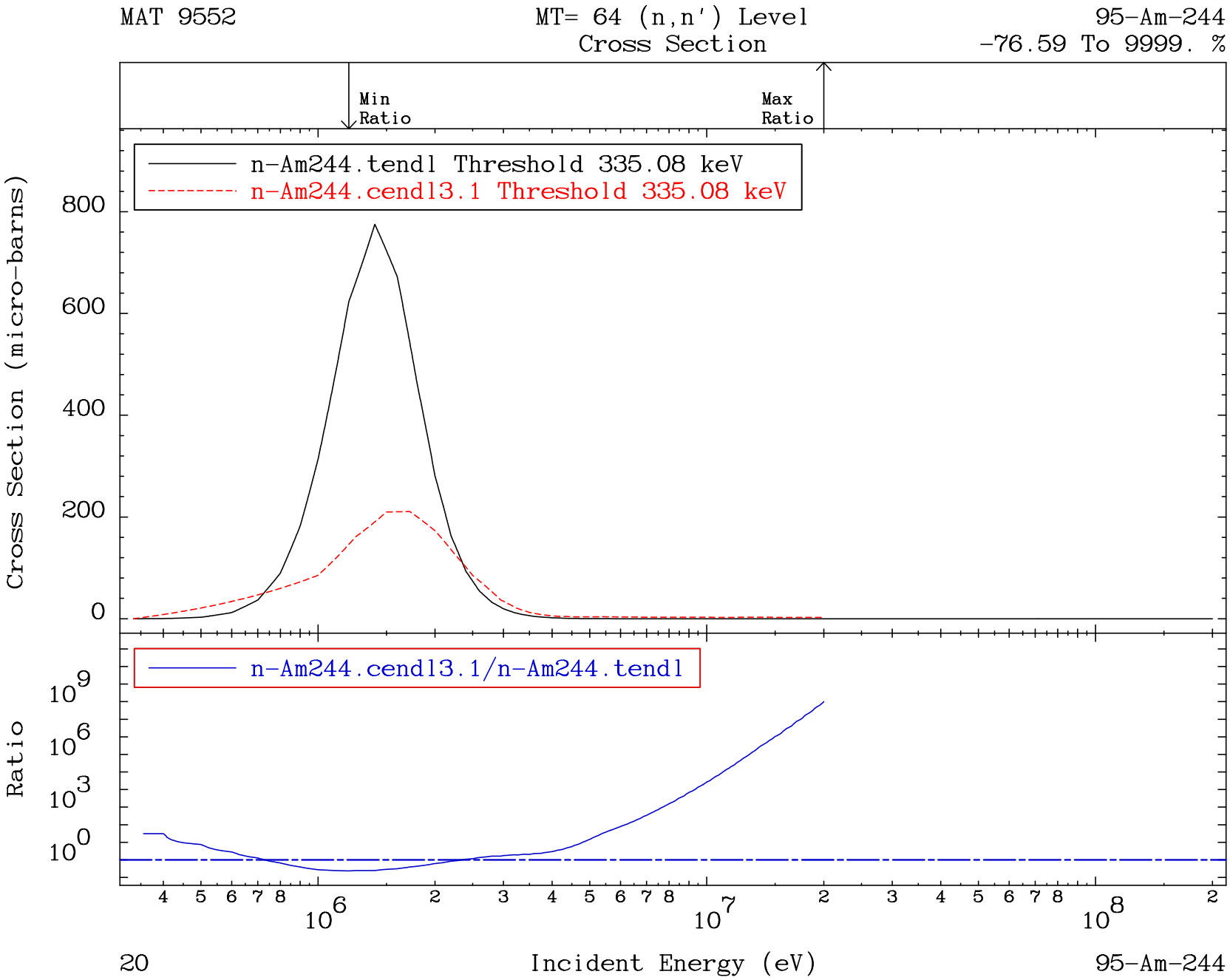

MAT 9552
MT= 59 (n,n') Level
Cross Section
95-Am-244
-80.94 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl Threshold 260.87 keV
n-Am244.cendl3.1 Threshold 260.87 keV
Cross Section (milli-barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
15
95-Am-244

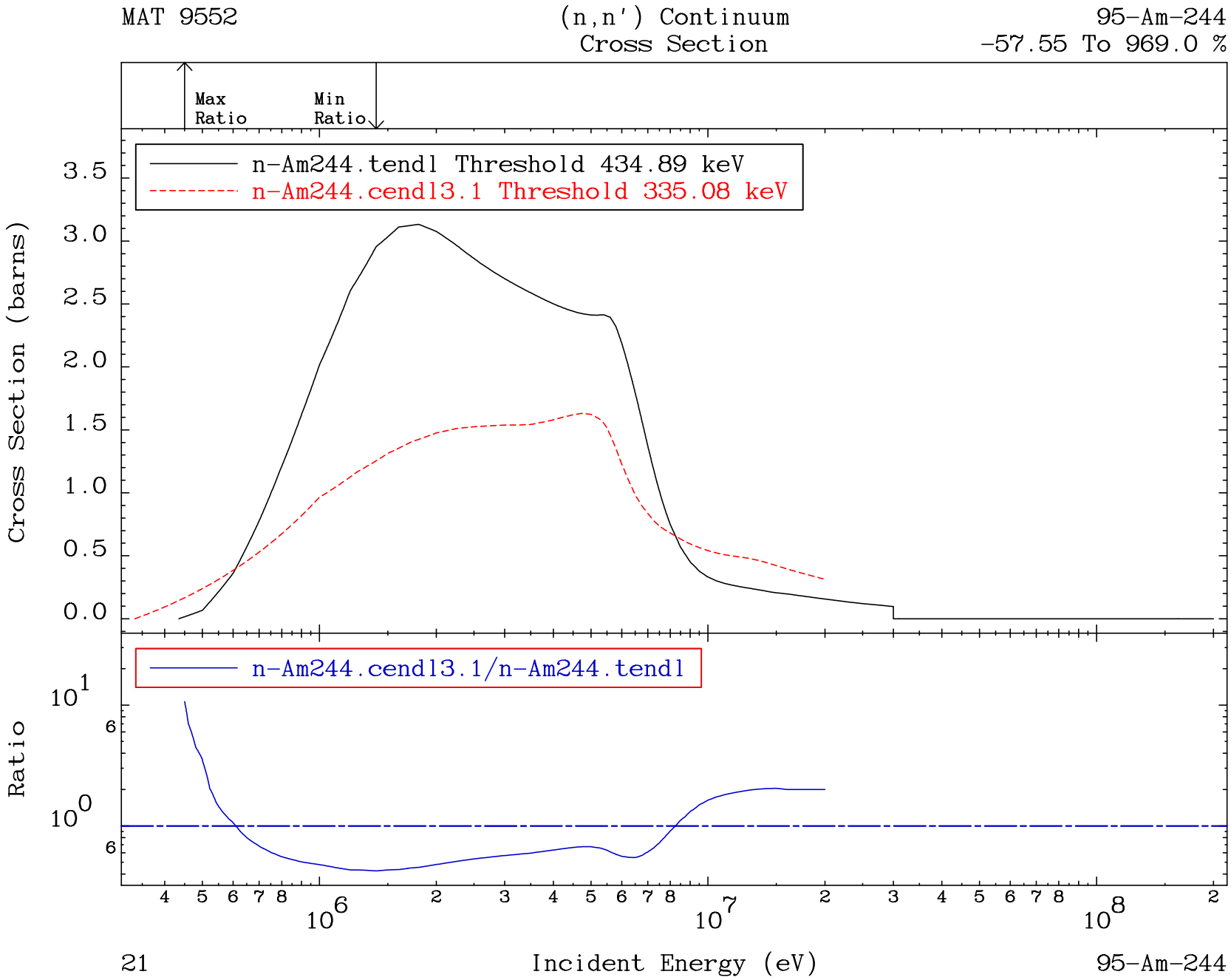

MAT 9552
MT= 60 (n,n') Level
Cross Section
95-Am-244
-78.23 To 9999. %
Min
Ratio
Max
Ratio
n-Am244.tendl Threshold 271.42 keV
n-Am244.cendl3.1 Threshold 271.42 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^8
10^4
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
95-Am-244

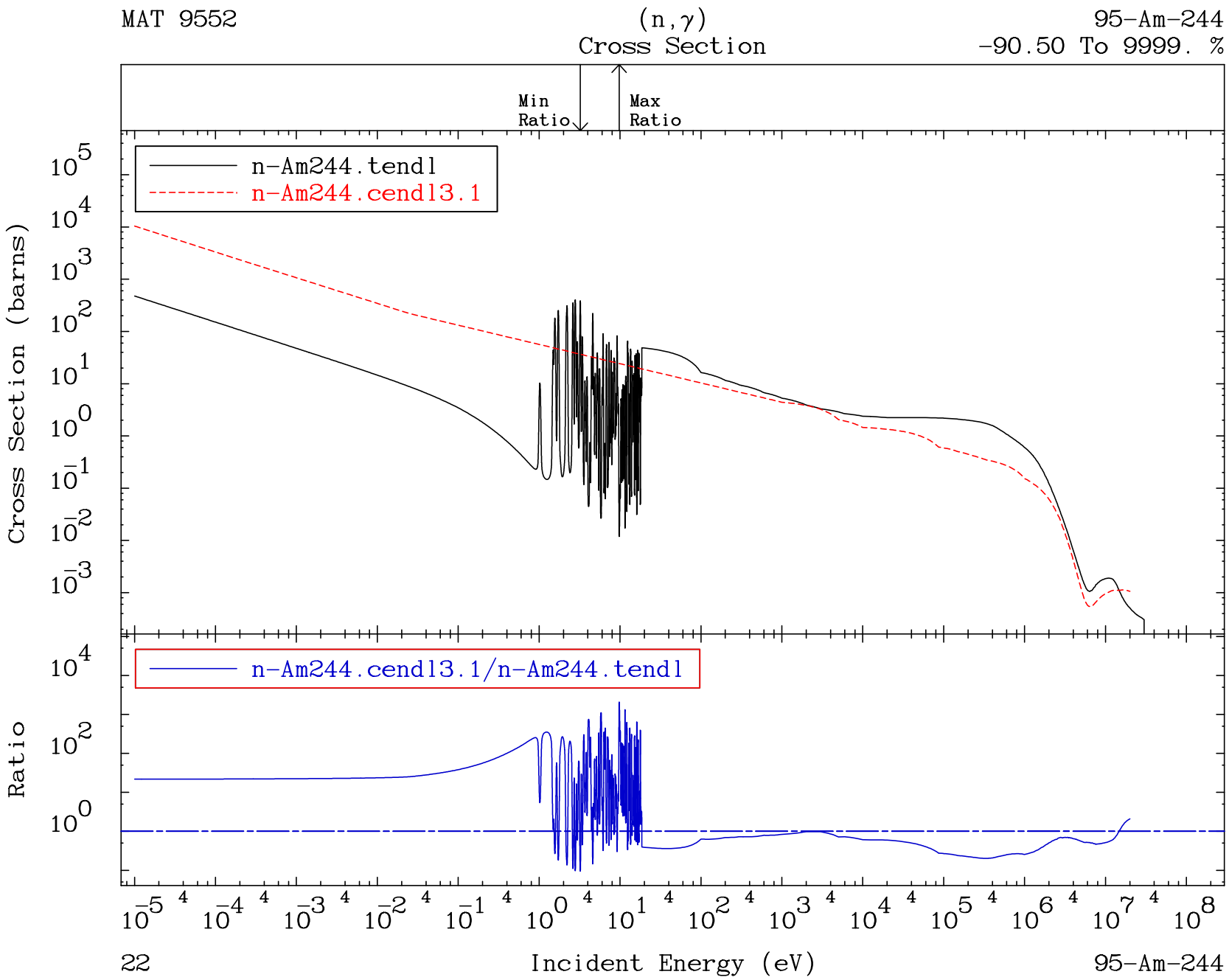

MAT 9552
MT= 61 (n,n') Level
Cross Section
95-Am-244
-98.79 To -57.07%
Max Ratio
Min Ratio
n-Am244.tendl Threshold 288.49 keV
n-Am244.cendl3.1 Threshold 288.49 keV
Cross Section (milli-barns)
0
1
2
3
4
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^{-1}
10^{-2}
10^{6}
10^{7}
10^{8}
17
Incident Energy (eV)
95-Am-244

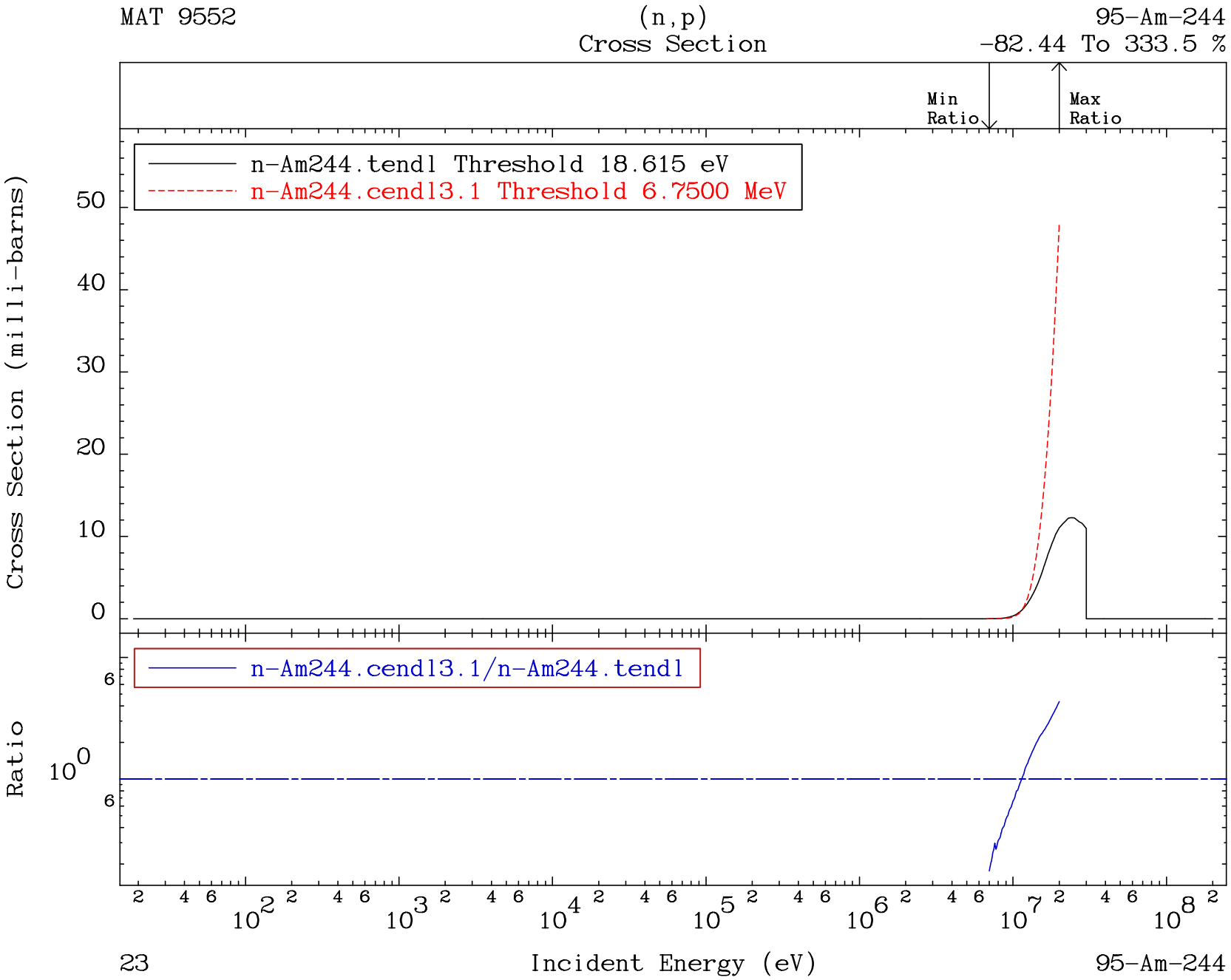

MAT 9552
MT= 62 (n,n') Level
Cross Section
95-Am-244
-97.80 To -29.80%
Max Ratio
Min Ratio
n-Am244.tendl Threshold 296.02 keV
n-Am244.cendl3.1 Threshold 296.02 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^0
4
10^-1
4
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
95-Am-244

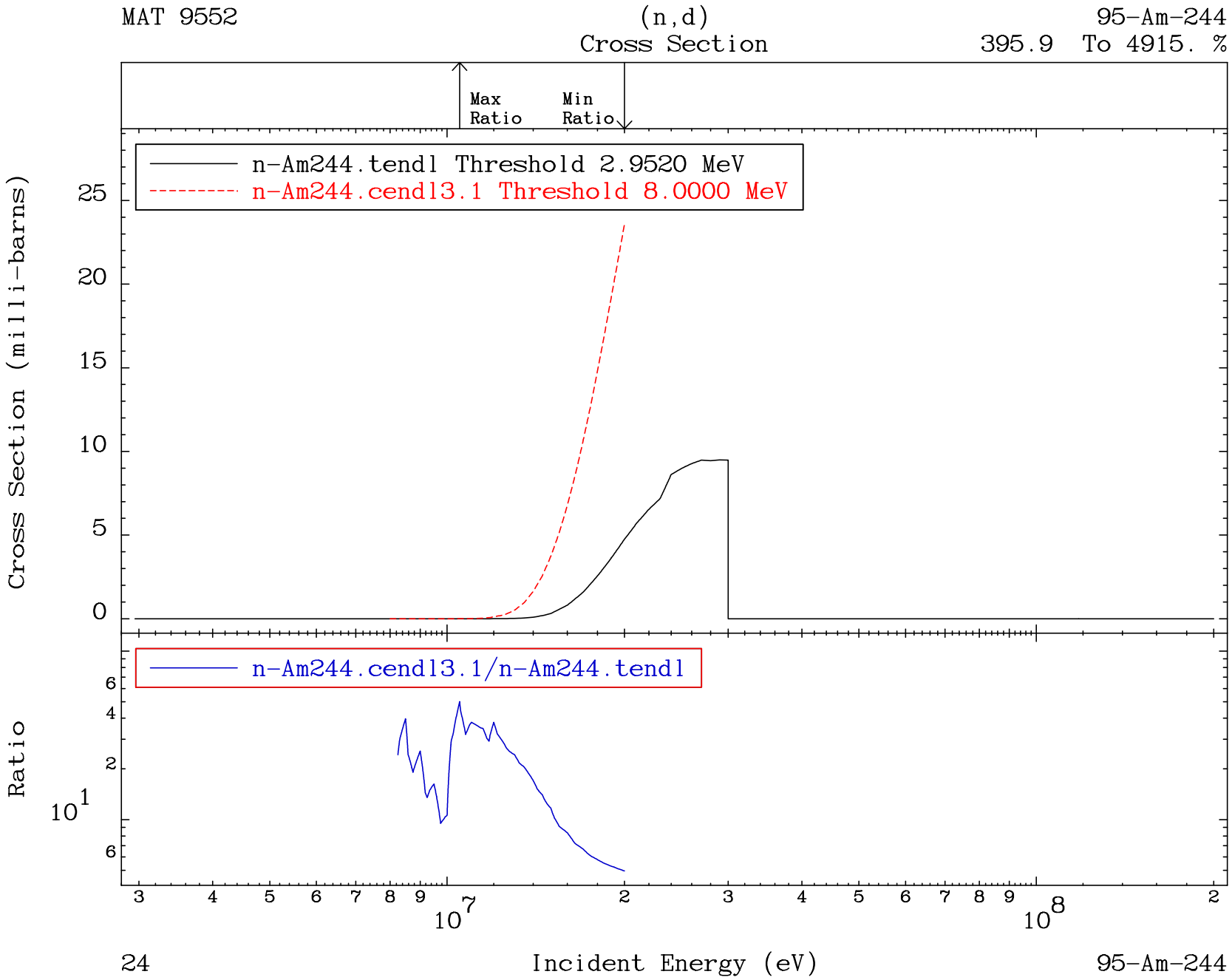

MAT 9552
MT= 63 (n,n') Level
Cross Section
95-Am-244
-94.74 To 11.56 %
Max
Ratio
Min
Ratio
n-Am244.tendl Threshold 322.23 keV
n-Am244.cendl3.1 Threshold 322.23 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^0
6
4
10^-1
6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
95-Am-244

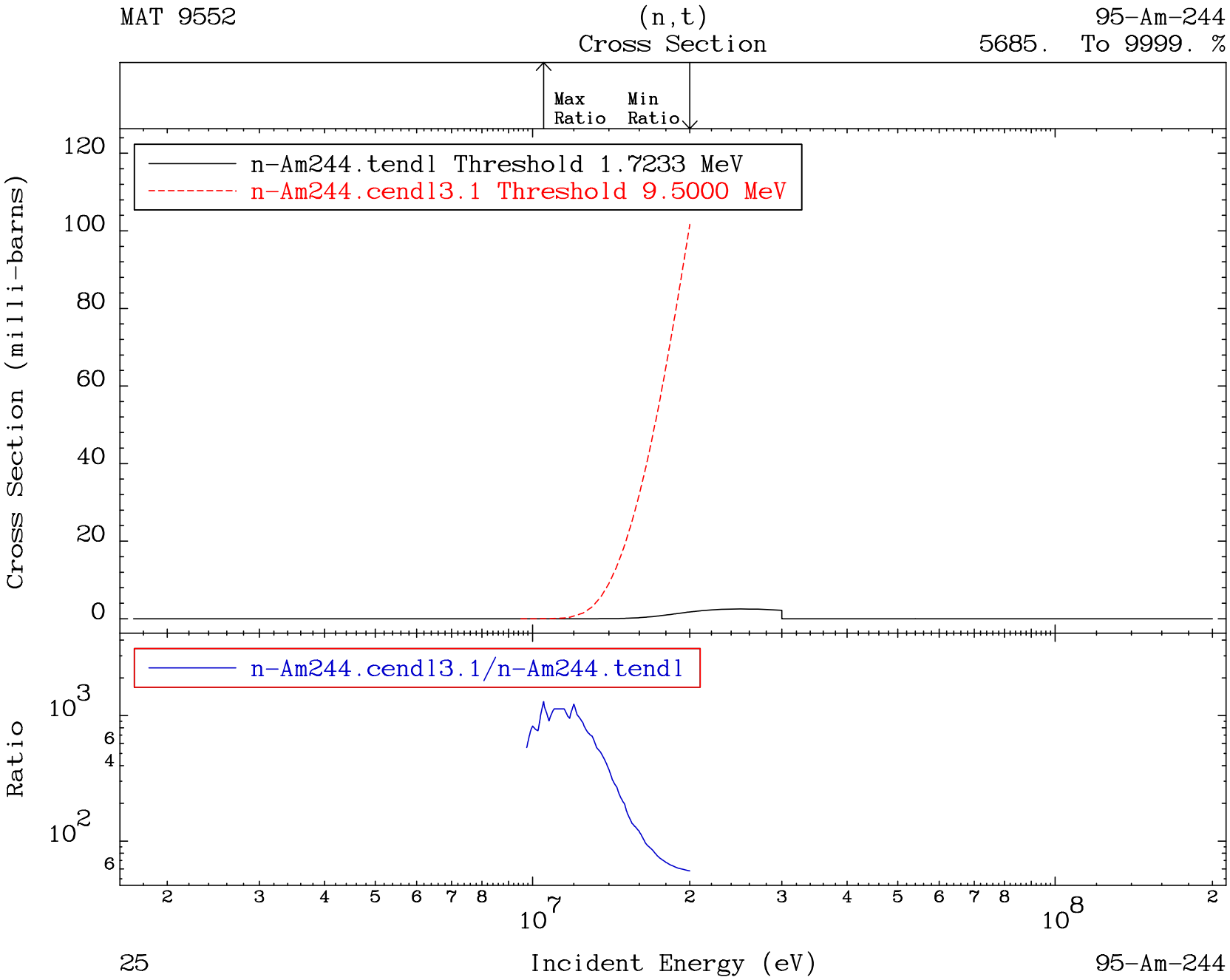

MAT 9552
MT= 64 (n,n') Level
Cross Section
95-Am-244
-76.59 To 9999. %
Min
Ratio
Max
Ratio
n-Am244.tendl Threshold 335.08 keV
n-Am244.cendl3.1 Threshold 335.08 keV
Cross Section (micro-barns)
800
600
400
200
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
95-Am-244

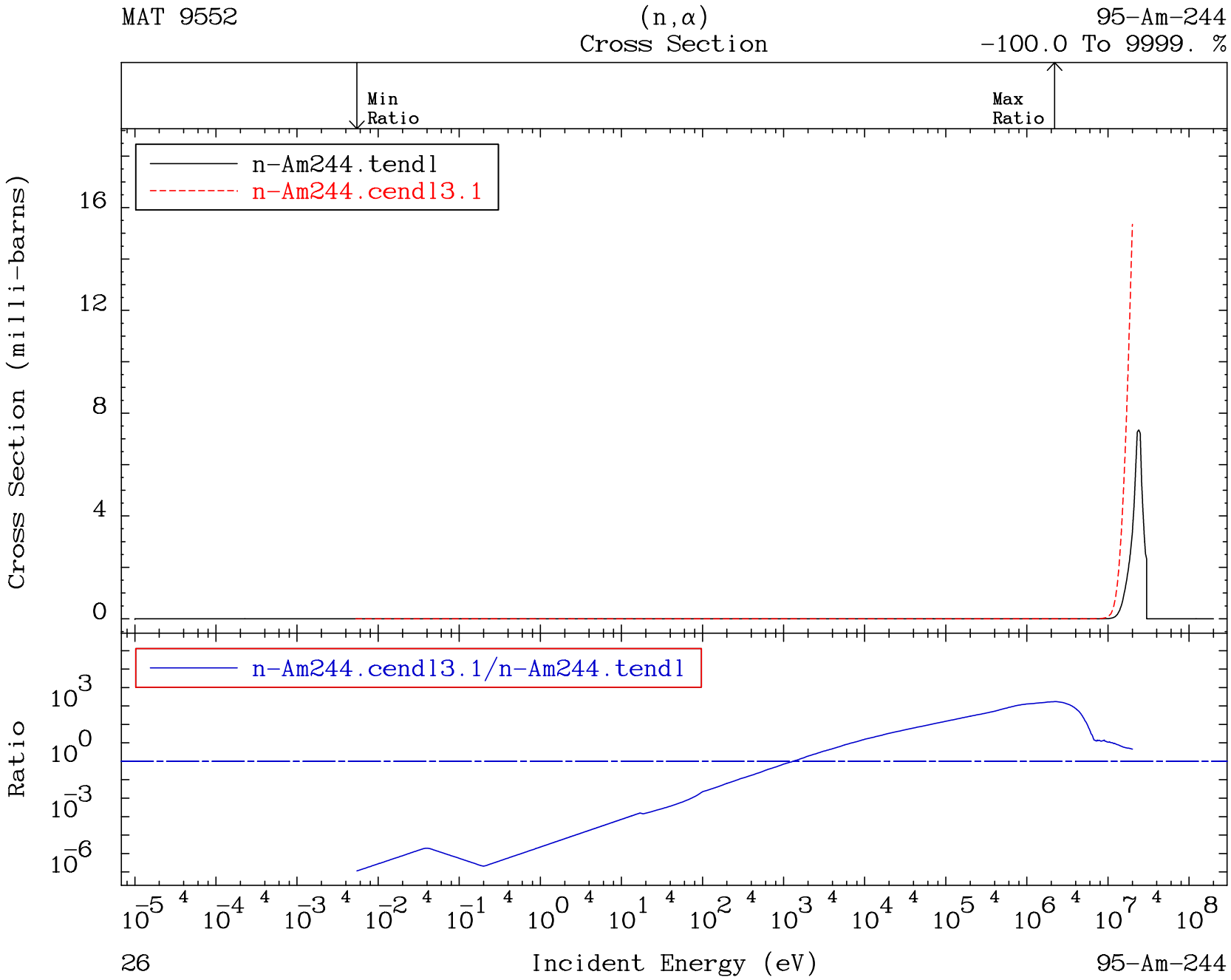

MAT 9552
(n,n') Continuum
Cross Section
95-Am-244
-57.55 To 969.0 %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 434.89 keV
n-Am244.cendl3.1 Threshold 335.08 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^1
10^0
6
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
95-Am-244

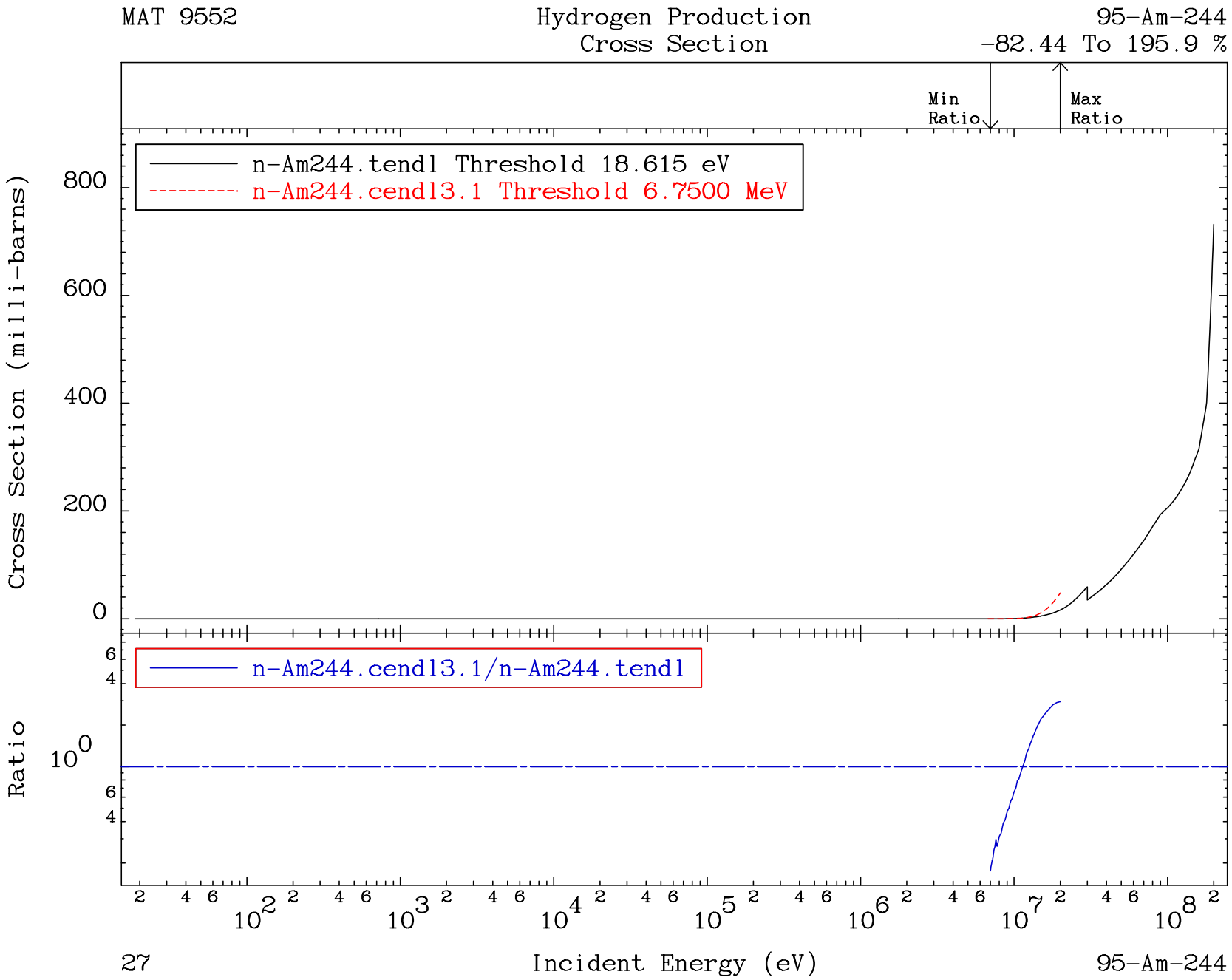

MAT 9552
(n,γ)
Cross Section
95-Am-244
-90.50 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
22
95-Am-244

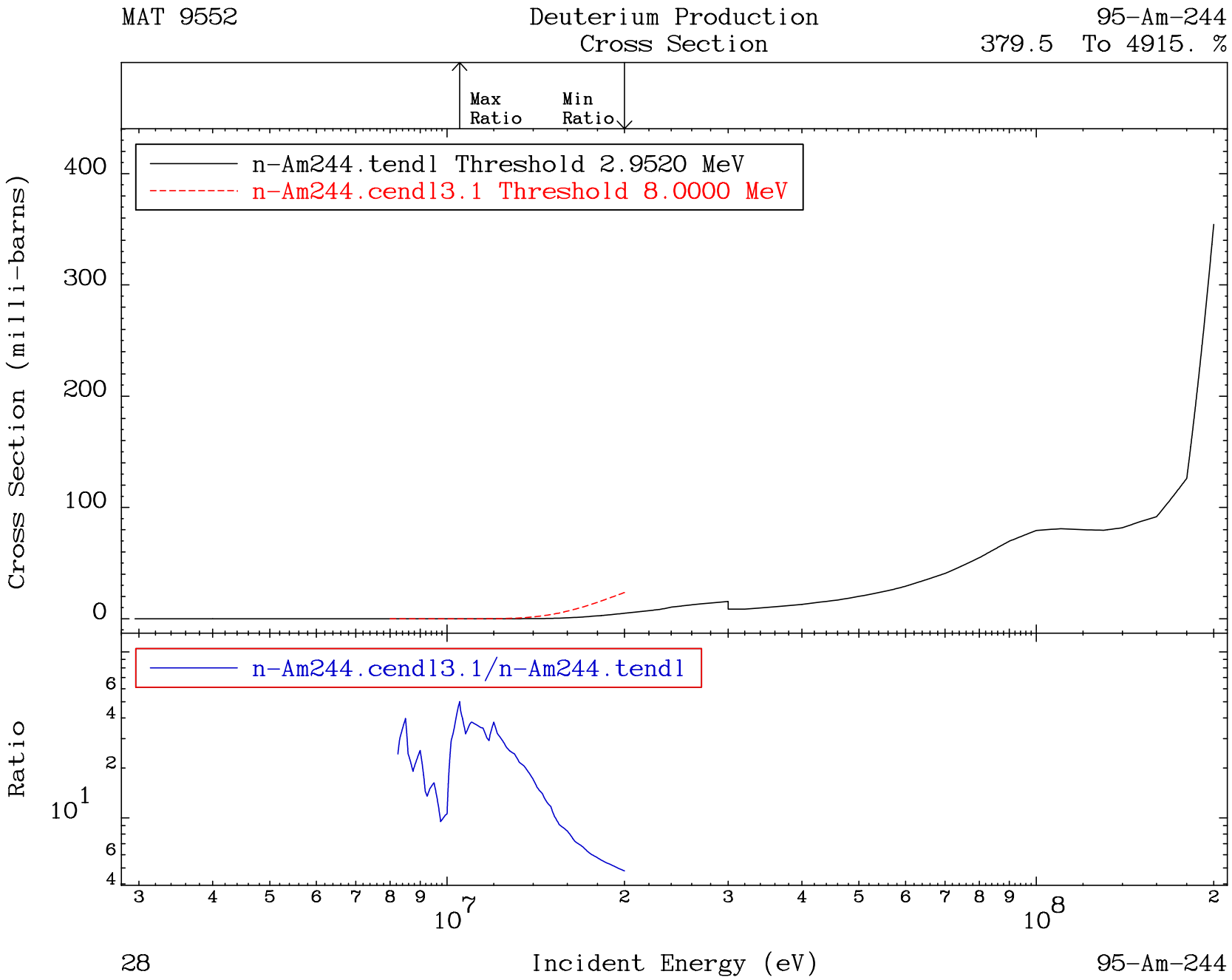

MAT 9552
(n,p)
Cross Section
95-Am-244
-82.44 To 333.5 %
Min Ratio
Max Ratio
n-Am244.tendl Threshold 18.615 eV
n-Am244.cendl3.1 Threshold 6.7500 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
6
10^0
6
2 4 6 10^2 2 4 6 10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
23
Incident Energy (eV)
95-Am-244

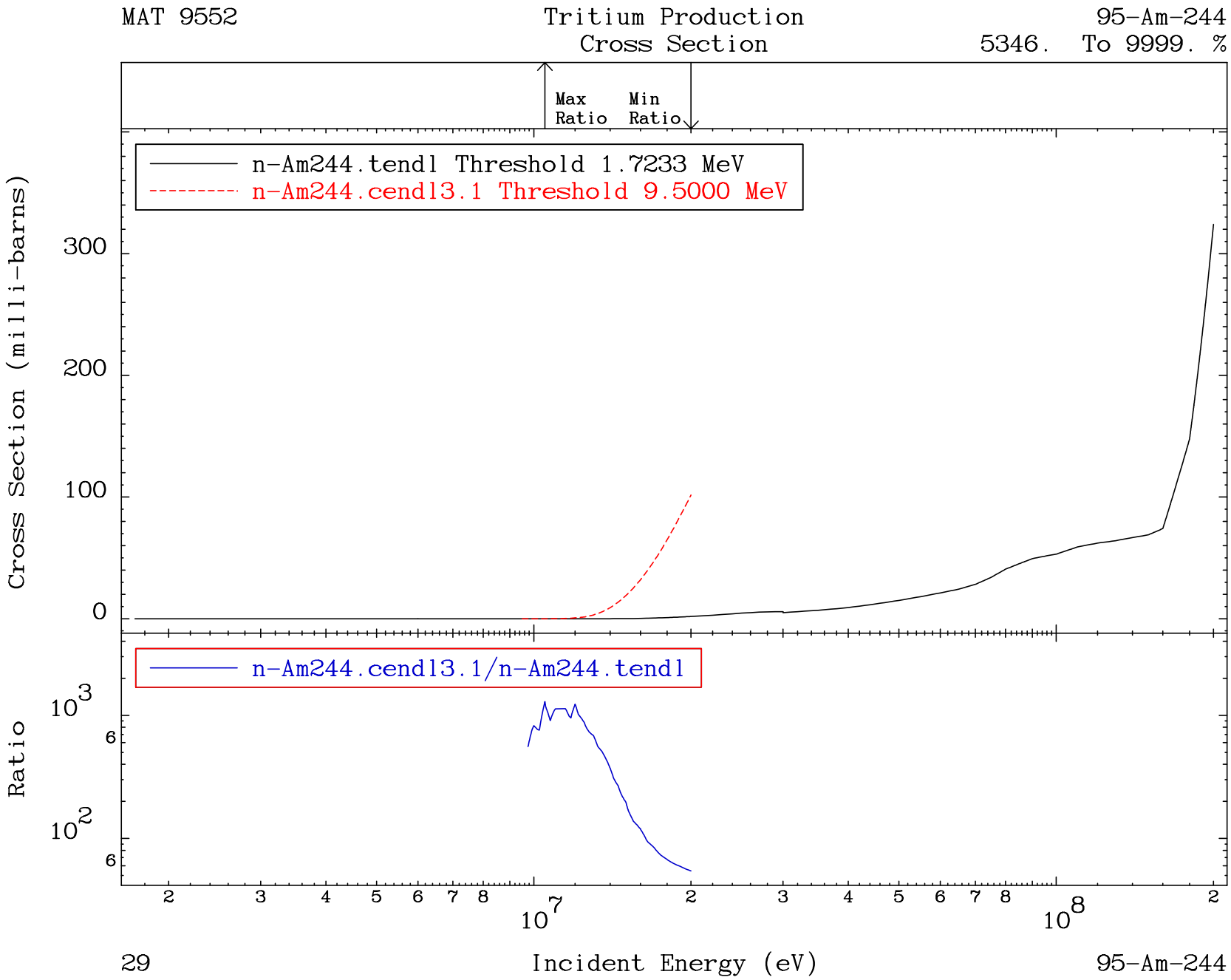

MAT 9552
(n,d)
Cross Section
95-Am-244
395.9 To 4915. %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 2.9520 MeV
n-Am244.cendl3.1 Threshold 8.0000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
6
4
2
10^1
6
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
95-Am-244

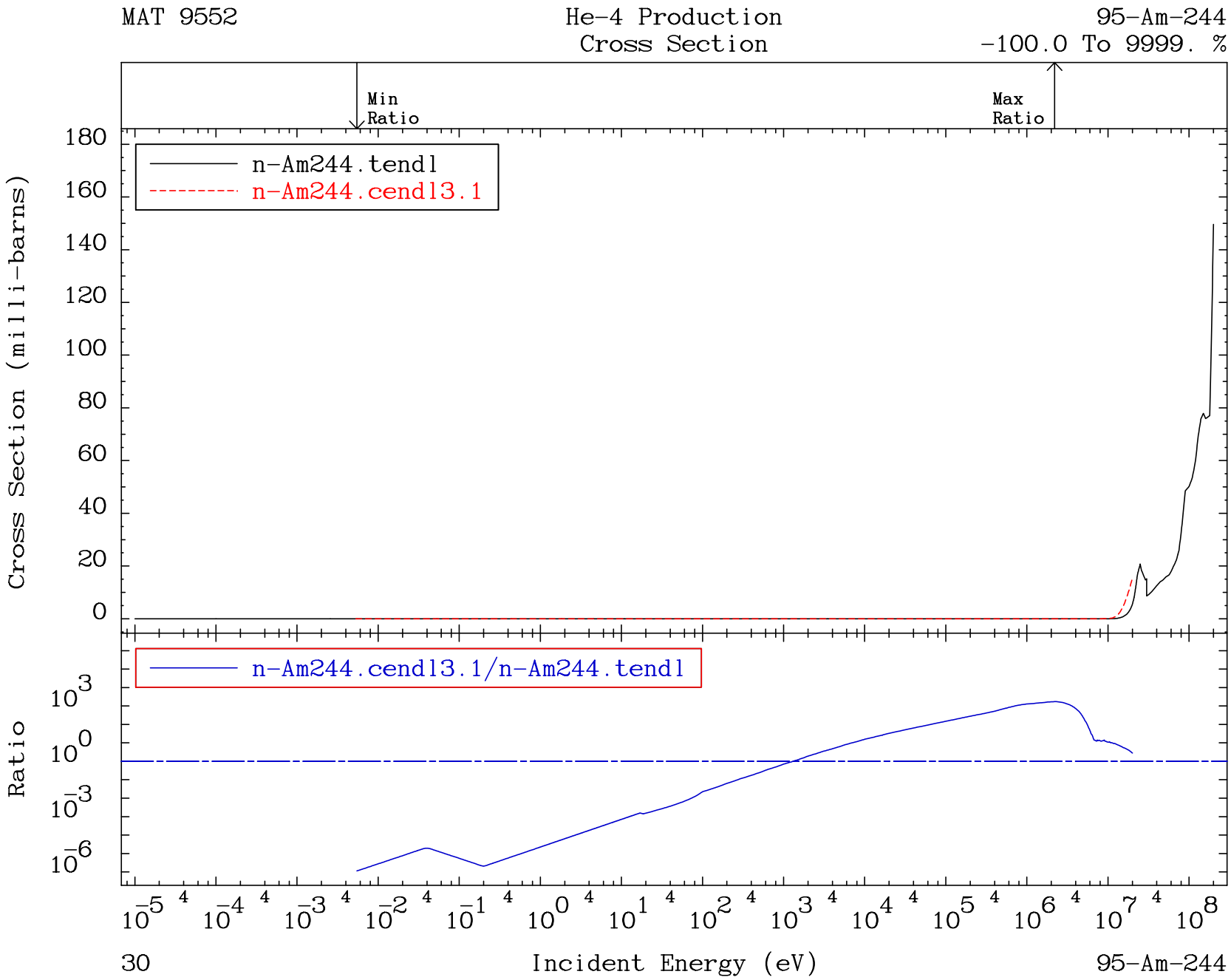

MAT 9552
(n,t)
Cross Section
95-Am-244
5685. To 9999. %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 1.7233 MeV
n-Am244.cendl3.1 Threshold 9.5000 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^3
6
4
10^2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
95-Am-244

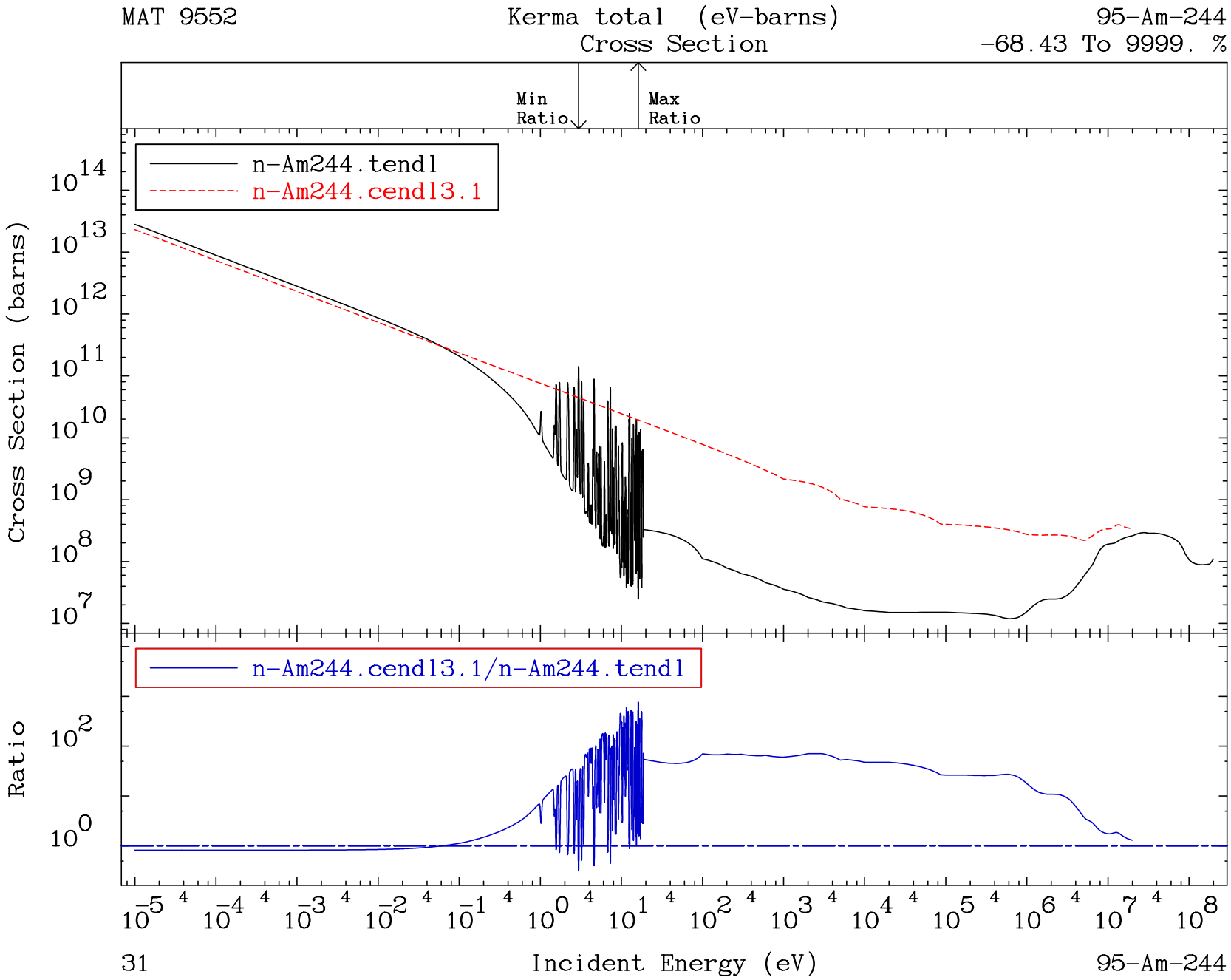

MAT 9552
(n,α)
Cross Section
95-Am-244
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (milli-barns)
16
12
8
4
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
26
Incident Energy (eV)
95-Am-244

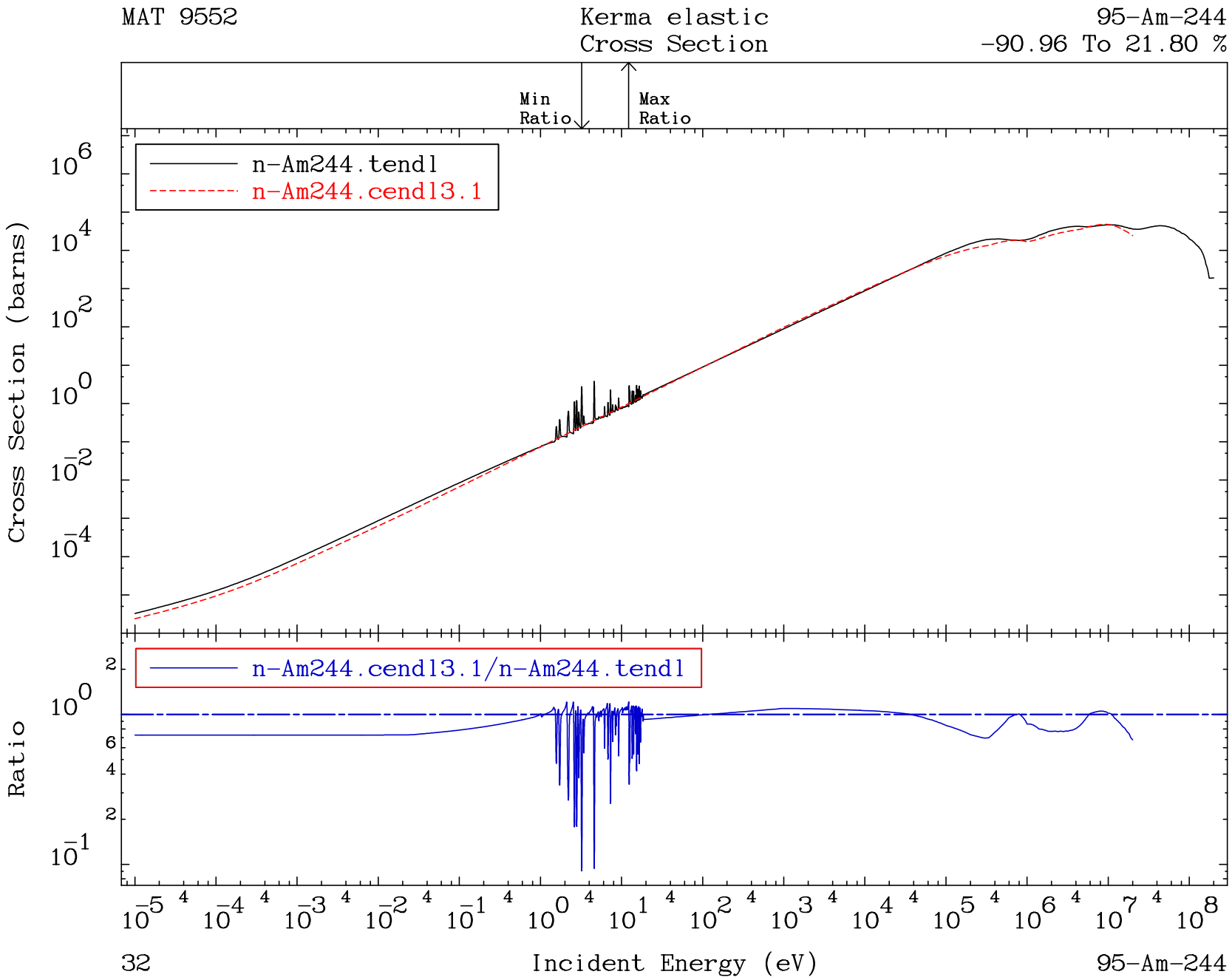

MAT 9552
Hydrogen Production
Cross Section
95-Am-244
-82.44 To 195.9 %
Min Ratio
Max Ratio
n-Am244.tendl Threshold 18.615 eV
n-Am244.cendl3.1 Threshold 6.7500 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
6
4
10^0
6
4
2 4 6 10^2 2 4 6 10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
27
Incident Energy (eV)
95-Am-244

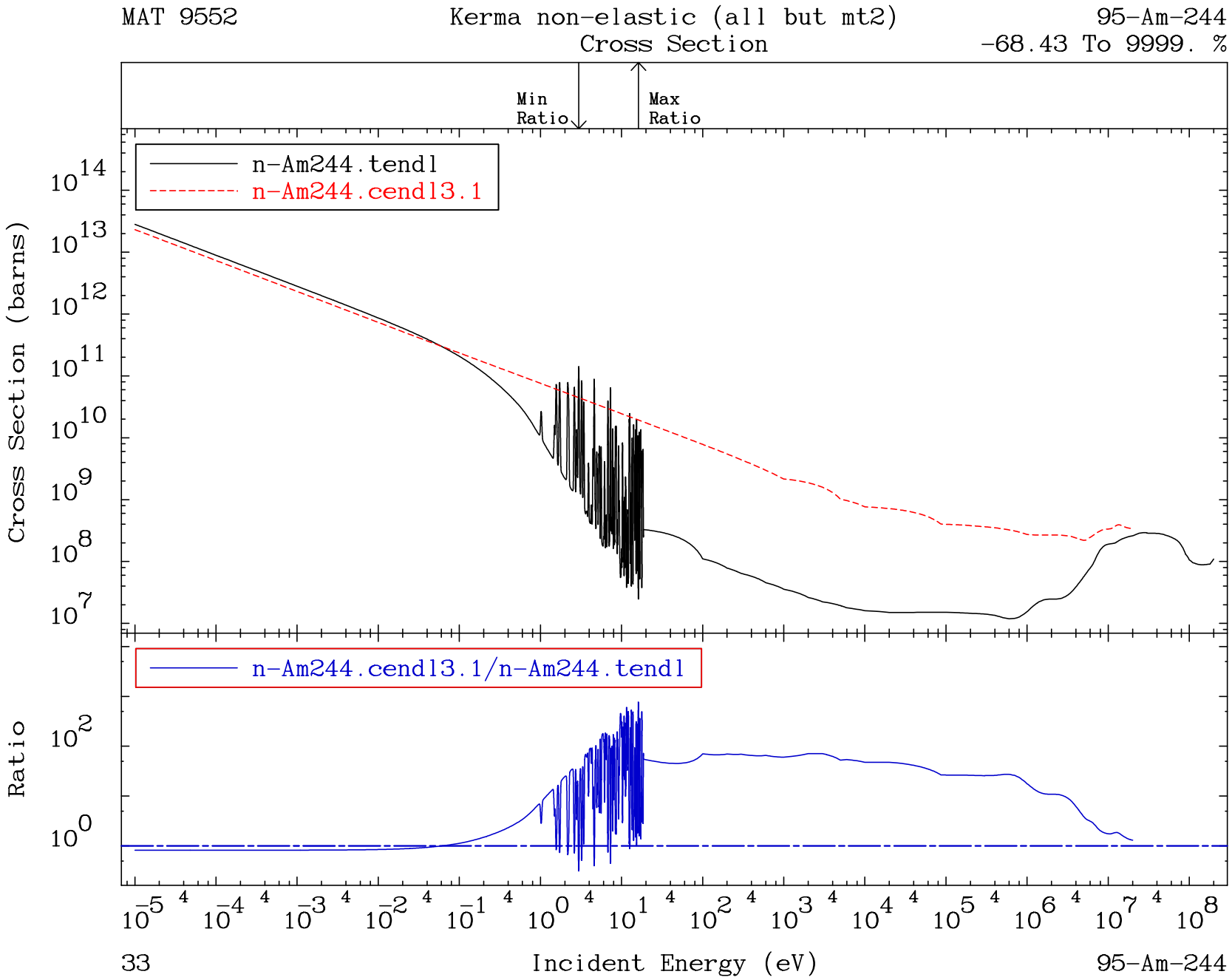

MAT 9552
Deuterium Production
Cross Section
95-Am-244
379.5 To 4915. %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 2.9520 MeV
n-Am244.cendl3.1 Threshold 8.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^1
6
4
2
6
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
95-Am-244

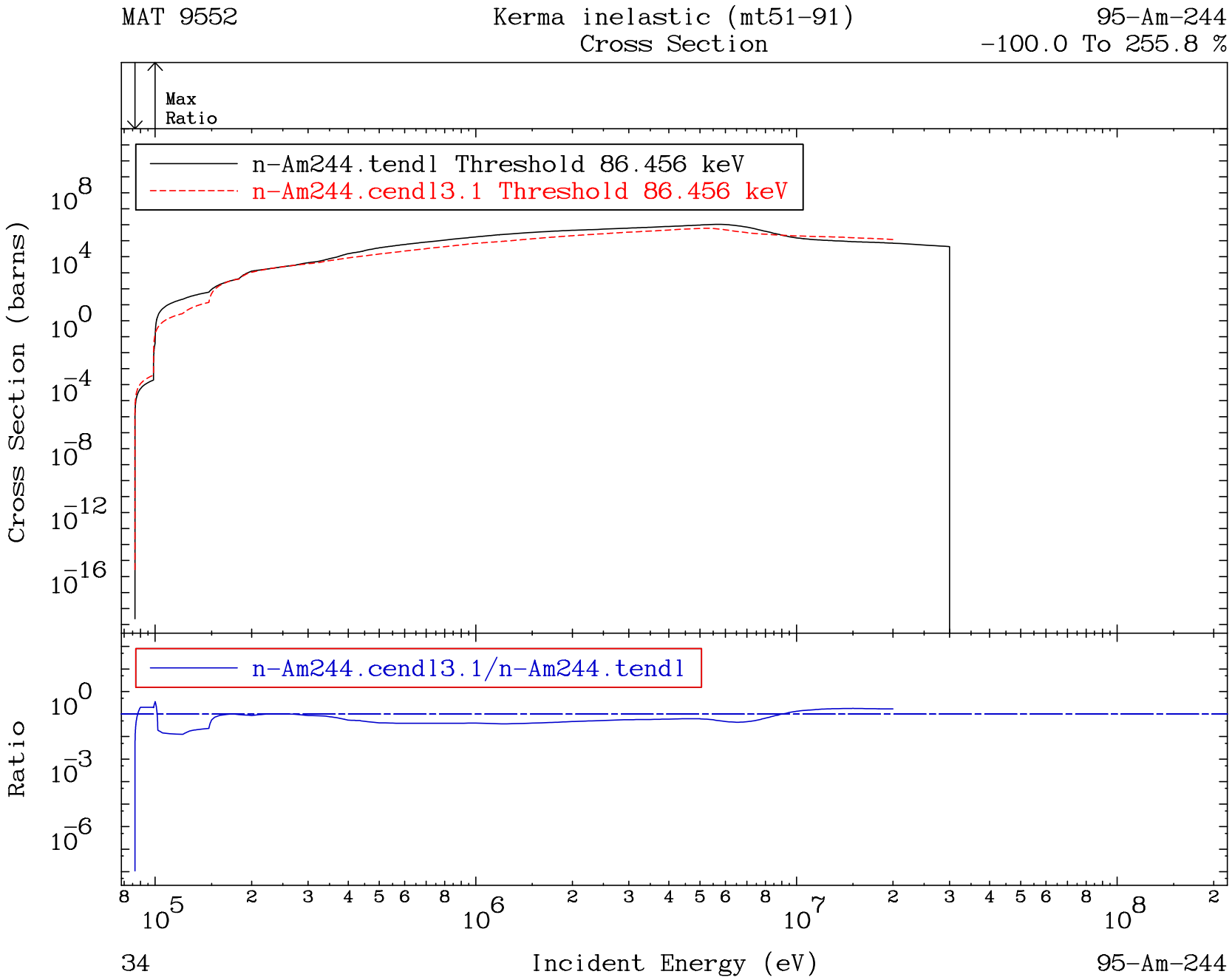

MAT 9552
Tritium Production
Cross Section
95-Am-244
5346. To 9999. %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 1.7233 MeV
n-Am244.cendl3.1 Threshold 9.5000 MeV
Cross Section (milli-barns)
300
200
100
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^3
6
10^2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
95-Am-244

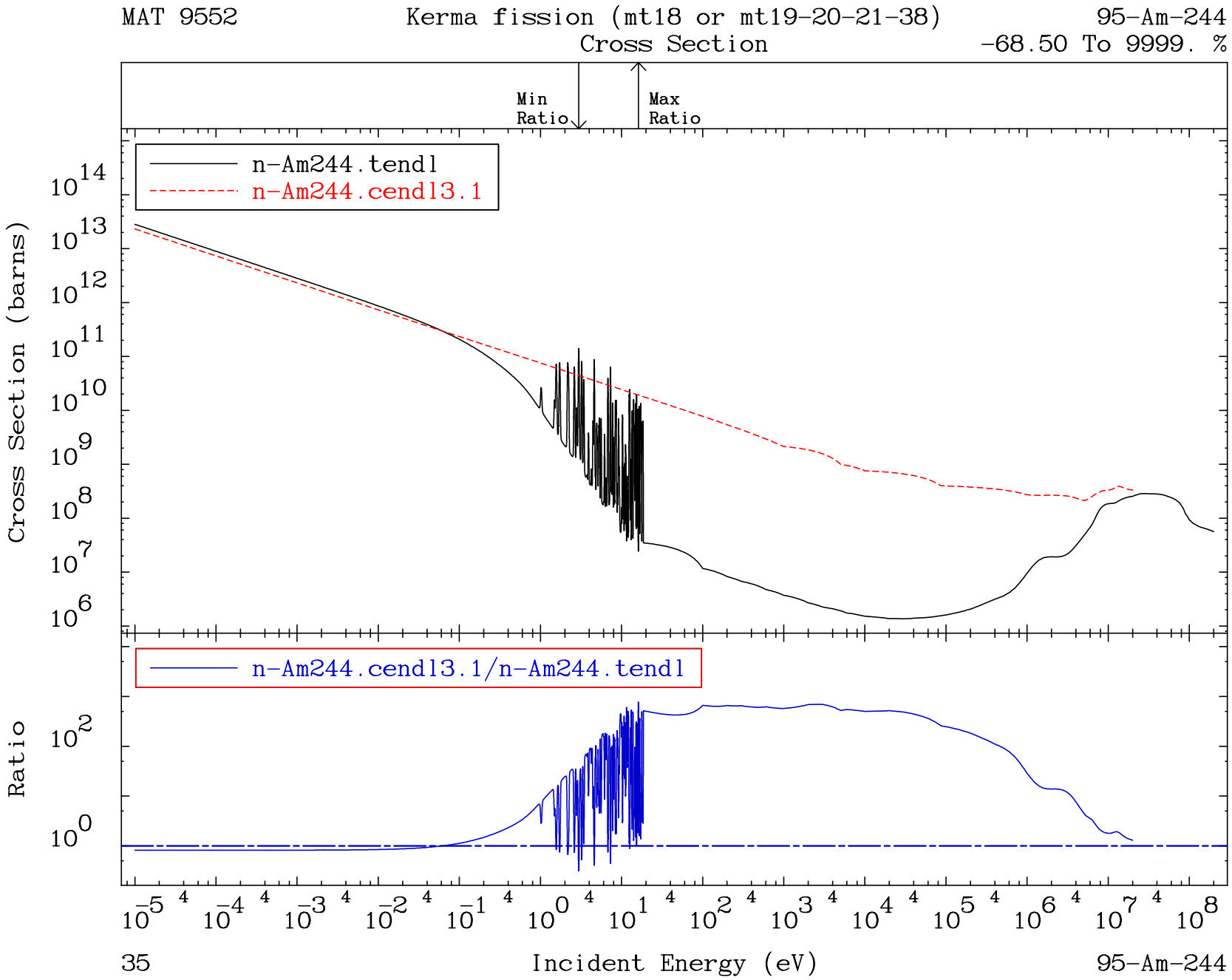

MAT 9552
He-4 Production
Cross Section
95-Am-244
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
95-Am-244

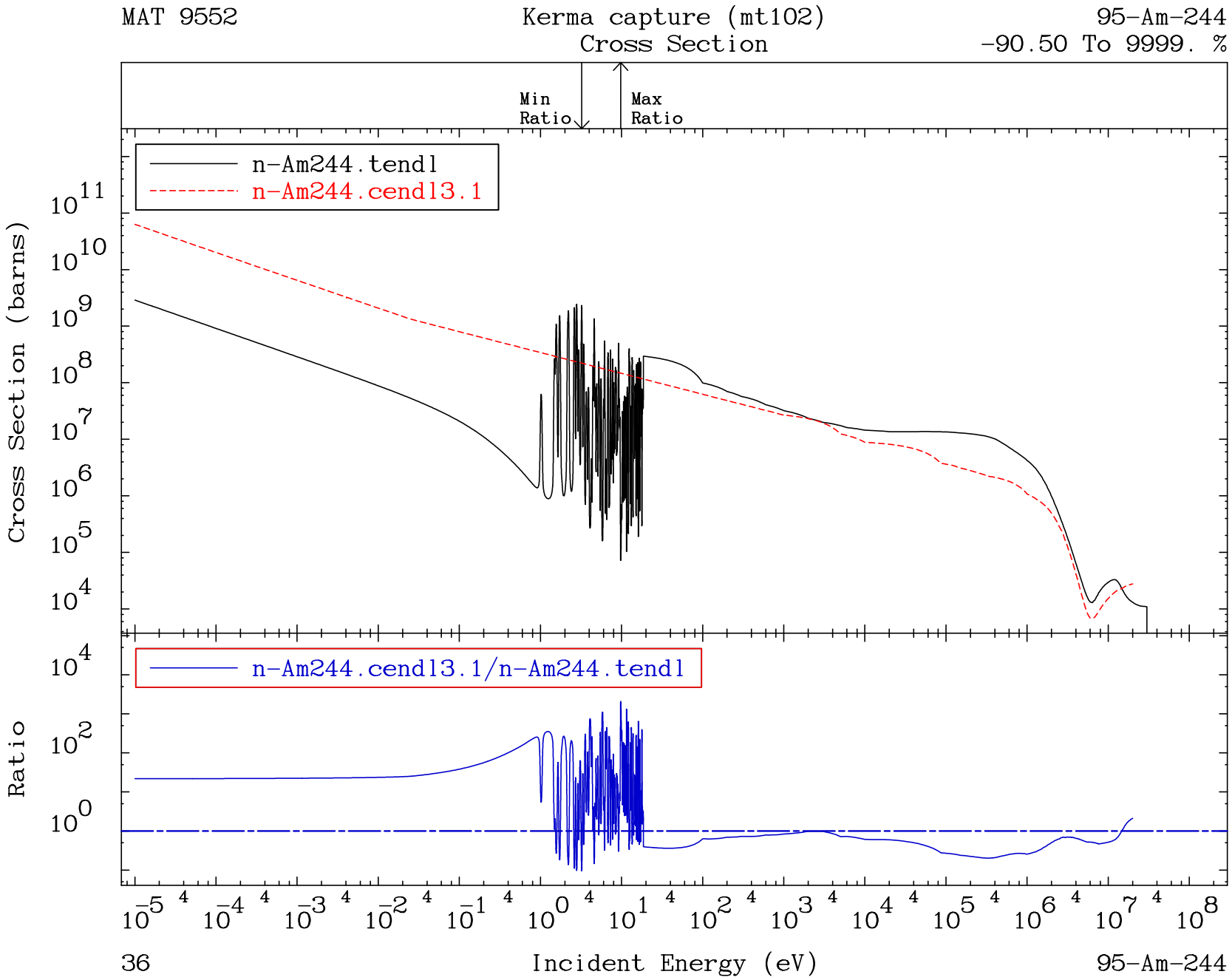

MAT 9552
Kerma total (eV-barns)
Cross Section
95-Am-244
-68.43 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
31
95-Am-244

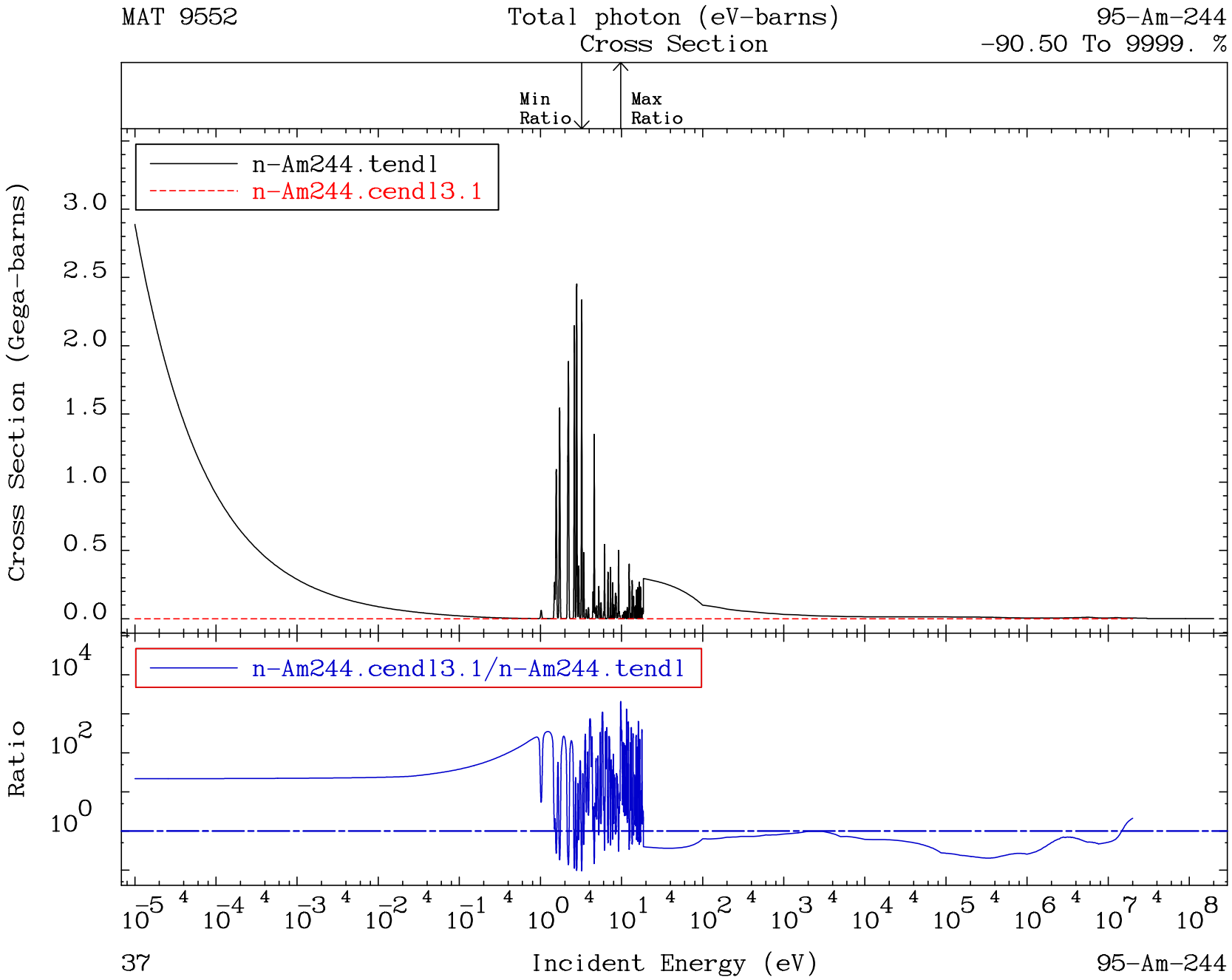

MAT 9552
Kerma elastic
Cross Section
95-Am-244
-90.96 To 21.80 %
Min
Ratio
Max
Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
Ratio
n-Am244.cendl3.1/n-Am244.tendl
Incident Energy (eV)
32
95-Am-244

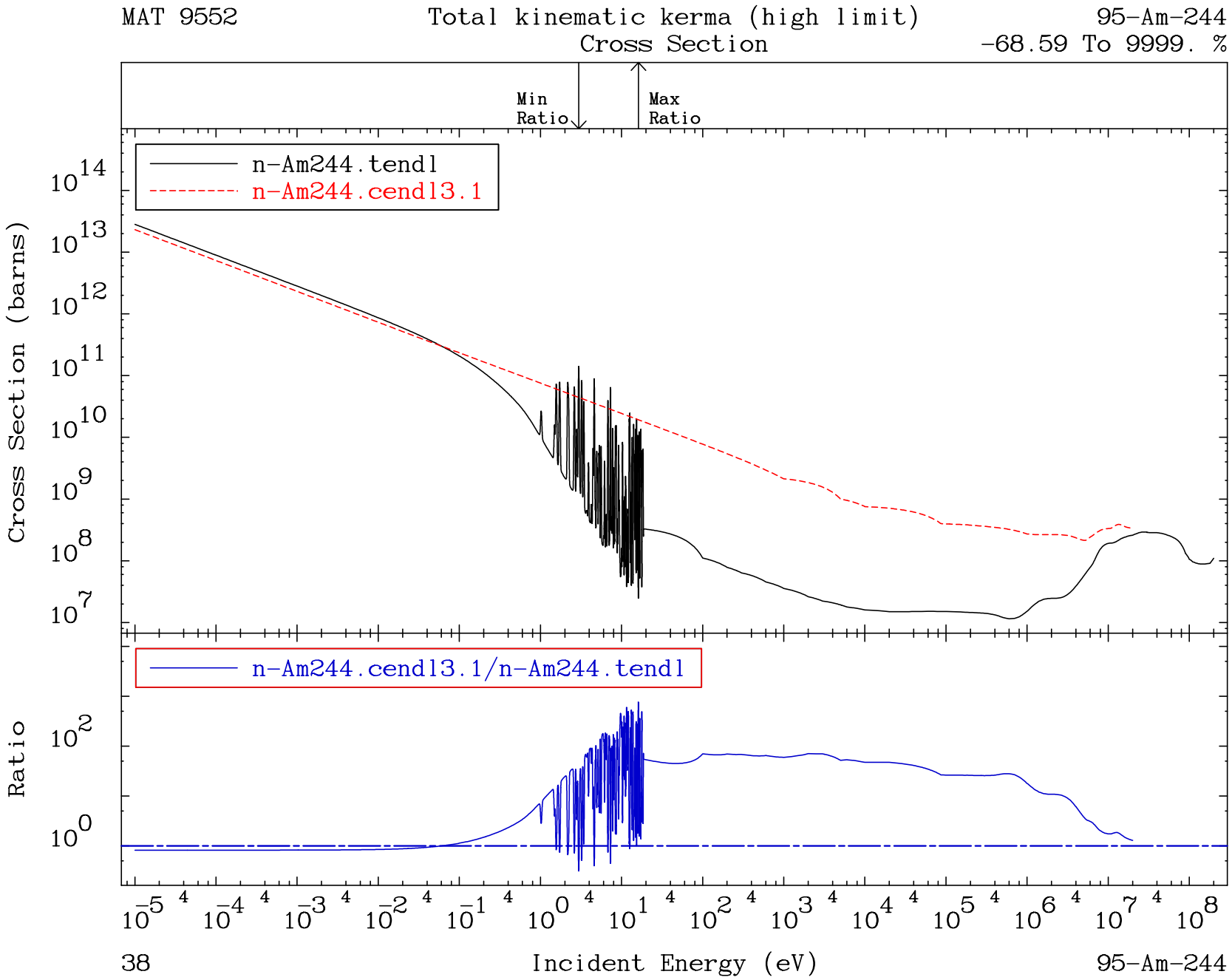

MAT 9552
Kerma non-elastic (all but mt2)
Cross Section
95-Am-244
-68.43 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
33
95-Am-244

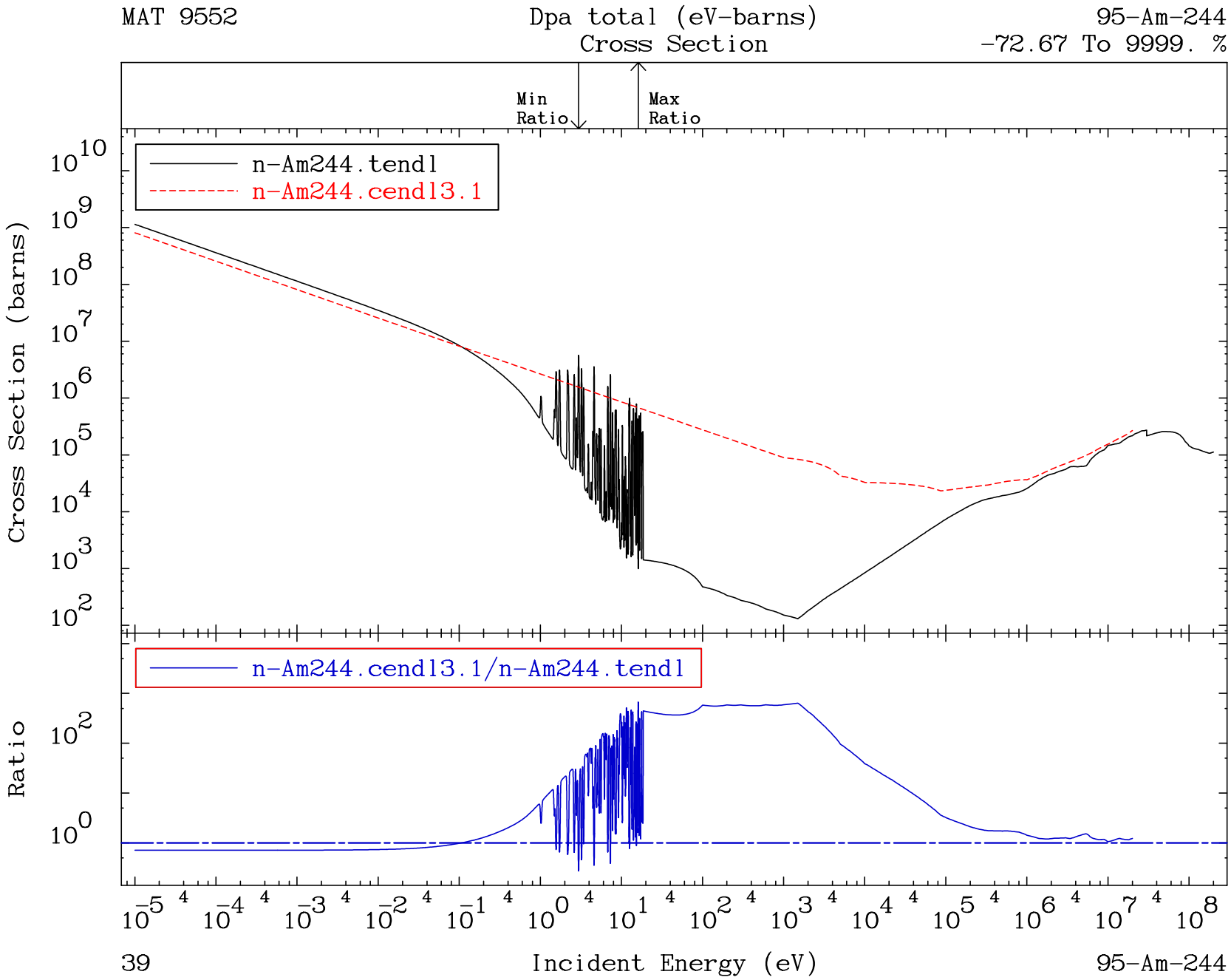

MAT 9552
Kerma inelastic (mt51-91)
Cross Section
95-Am-244
-100.0 To 255.8 %
Max
Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
34
95-Am-244

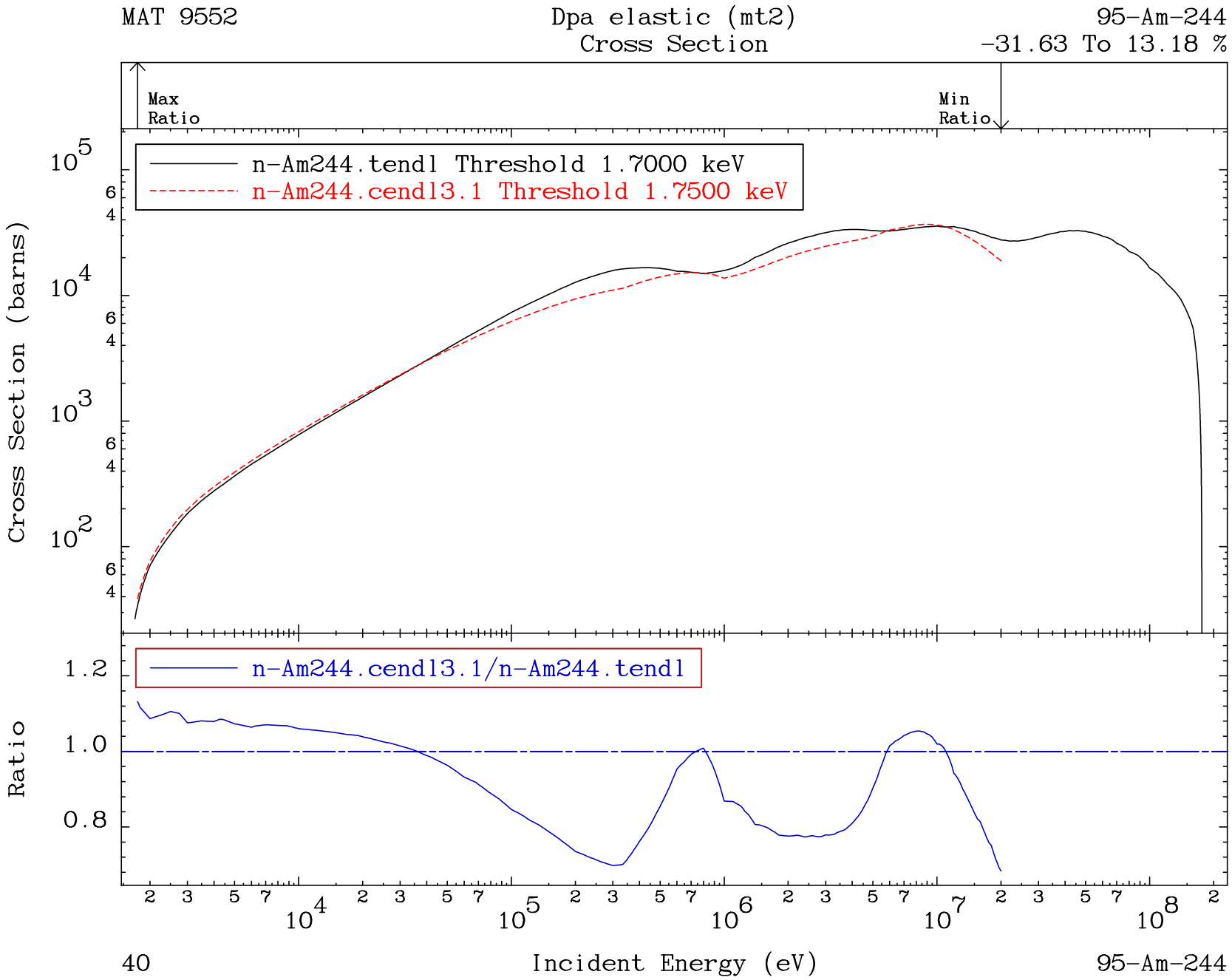

MAT 9552
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
95-Am-244
-68.50 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
35
95-Am-244

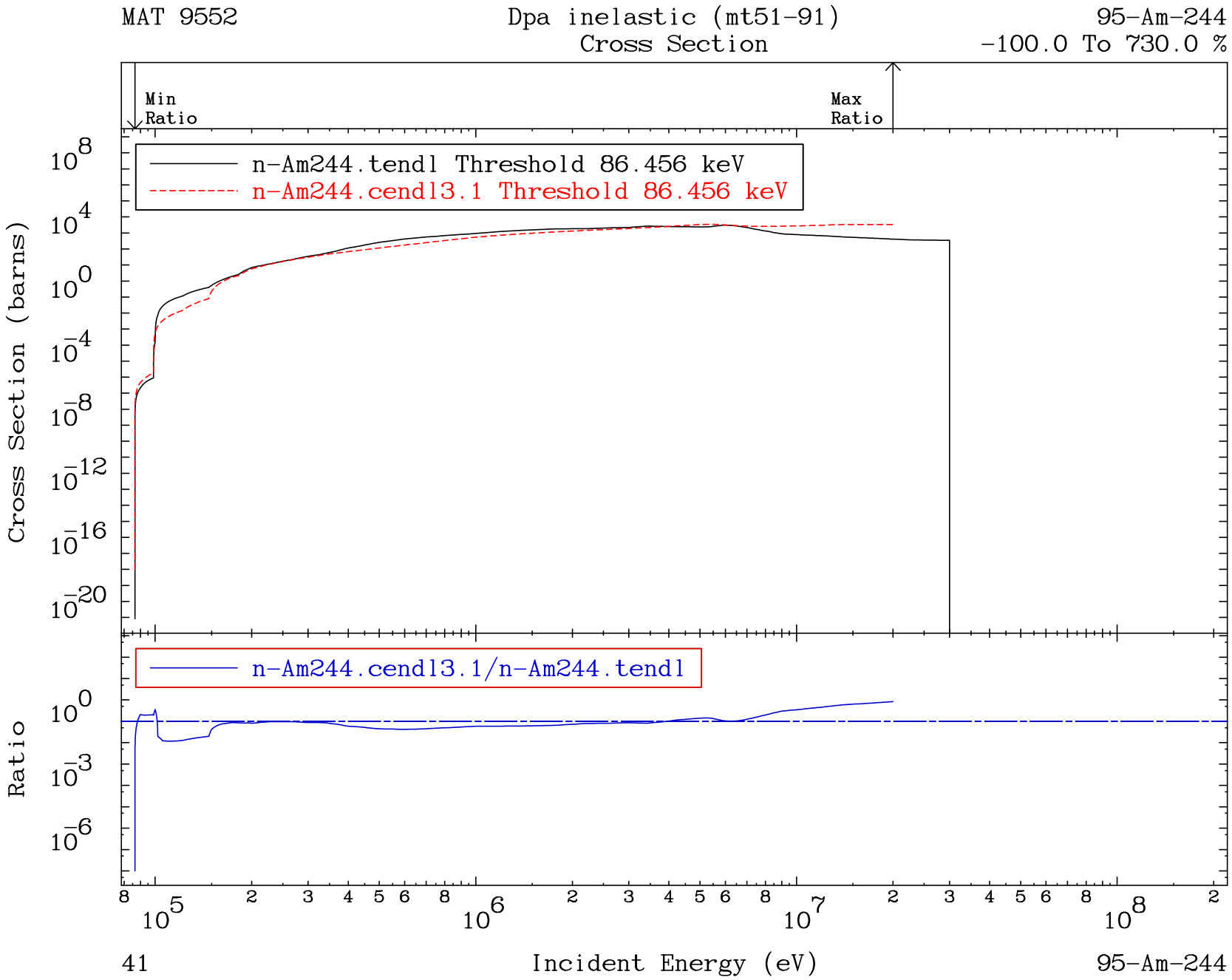

MAT 9552
Kerma capture (mt102)
Cross Section
95-Am-244
-90.50 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
36
95-Am-244

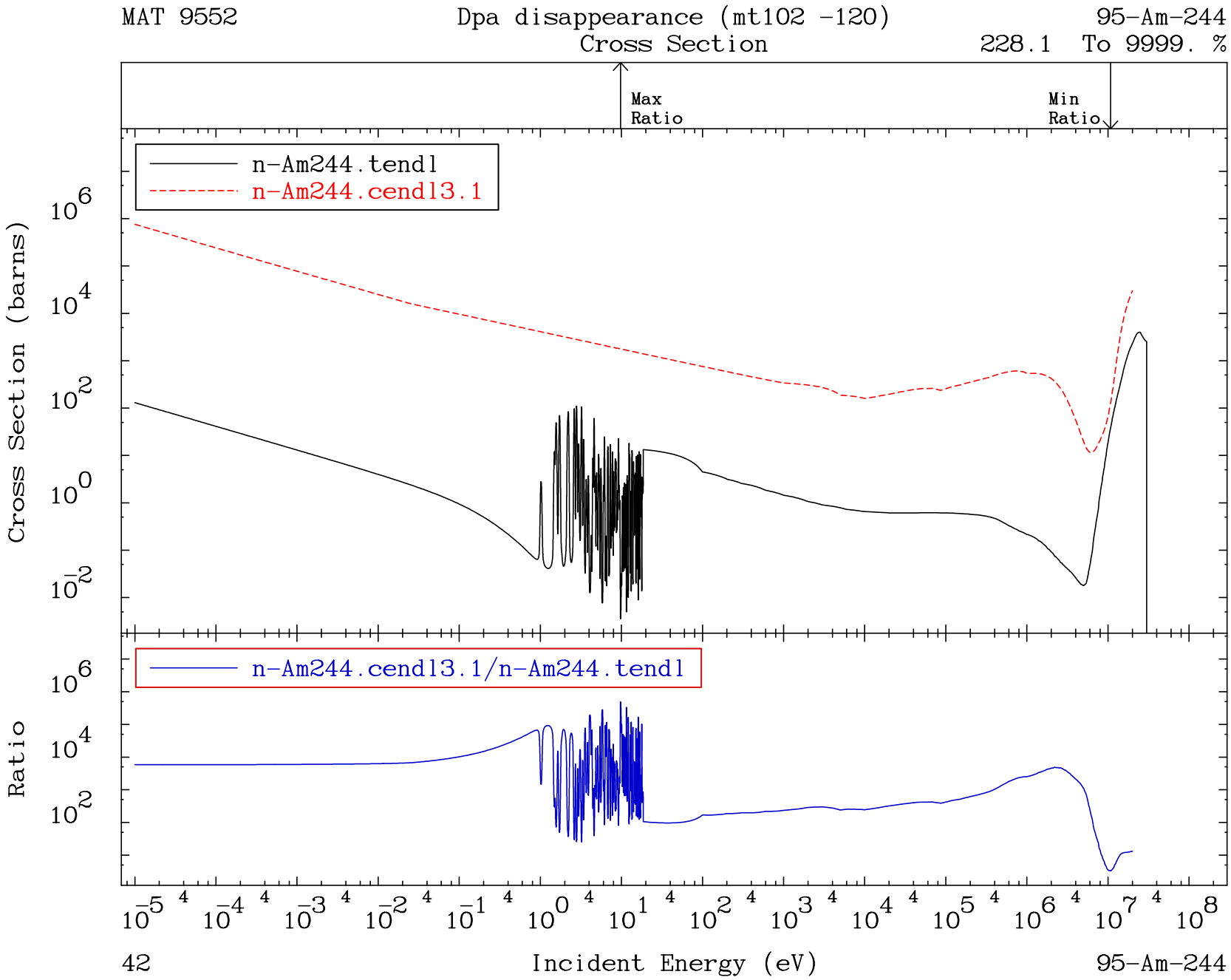

MAT 9552
Total photon (eV-barns)
Cross Section
95-Am-244
-90.50 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (Giga-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Am244.cendl3.1/n-Am244.tendl
Ratio
10^4
10^2
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
95-Am-244


MAT 9552
Total kinematic kerma (high limit)
Cross Section
95-Am-244
-68.59 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
38
95-Am-244


MAT 9552
Dpa total (eV-barns)
Cross Section
95-Am-244
-72.67 To 9999. %
Min Ratio
Max Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
39
95-Am-244


MAT 9552
Dpa elastic (mt2)
Cross Section
95-Am-244
-31.63 To 13.18 %
Max Ratio
Min Ratio
n-Am244.tendl Threshold 1.7000 keV
n-Am244.cendl3.1 Threshold 1.7500 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
40
95-Am-244


MAT 9552
Dpa inelastic (mt51-91)
Cross Section
95-Am-244
-100.0 To 730.0 %
Min Ratio
Max Ratio
n-Am244.tendl Threshold 86.456 keV
n-Am244.cendl3.1 Threshold 86.456 keV
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
41
95-Am-244


MAT 9552
Dpa disappearance (mt102 -120)
Cross Section
95-Am-244
228.1 To 9999. %
Max Ratio
Min Ratio
n-Am244.tendl
n-Am244.cendl3.1
Cross Section (barns)
n-Am244.cendl3.1/n-Am244.tendl
Ratio
Incident Energy (eV)
42
95-Am-244