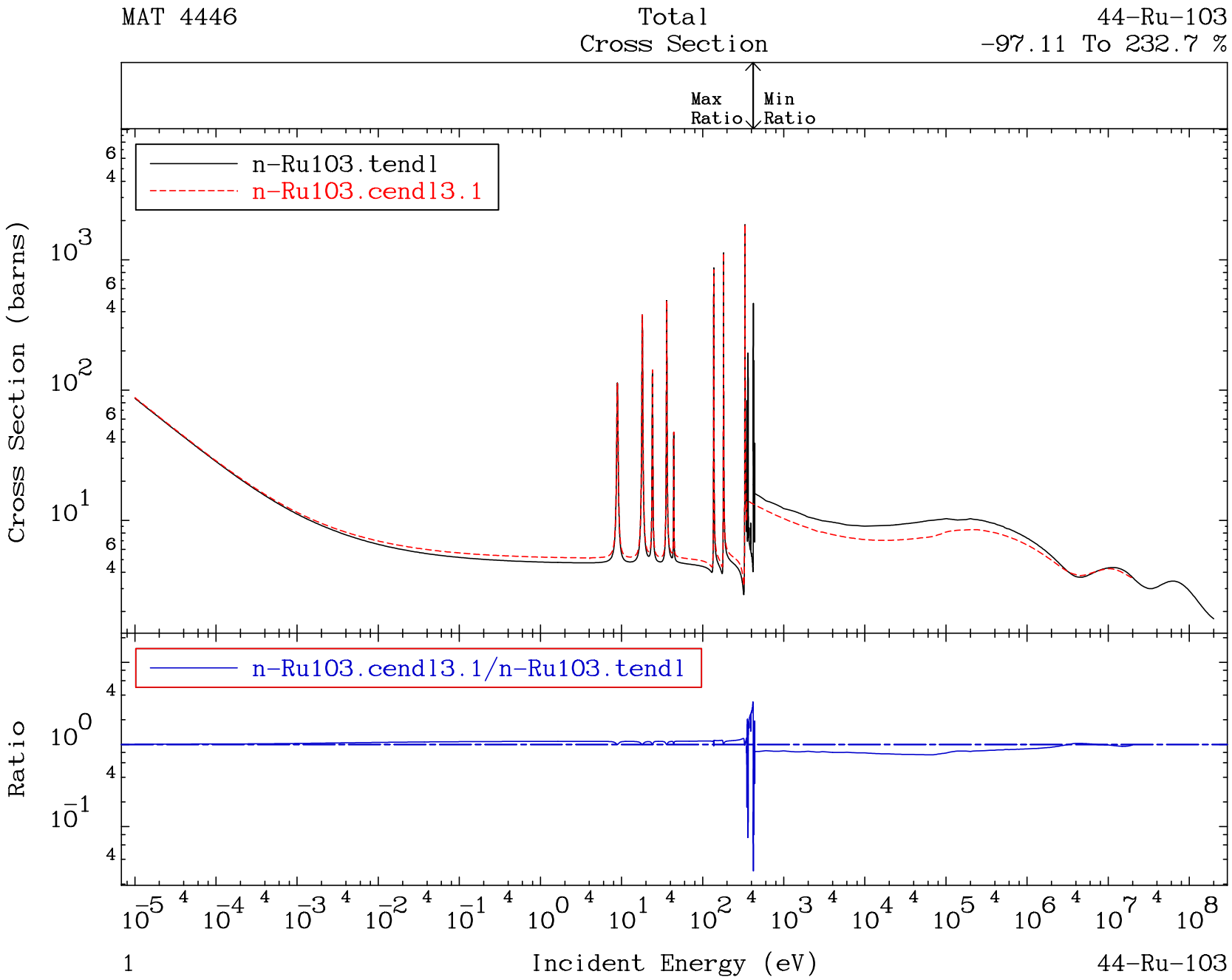
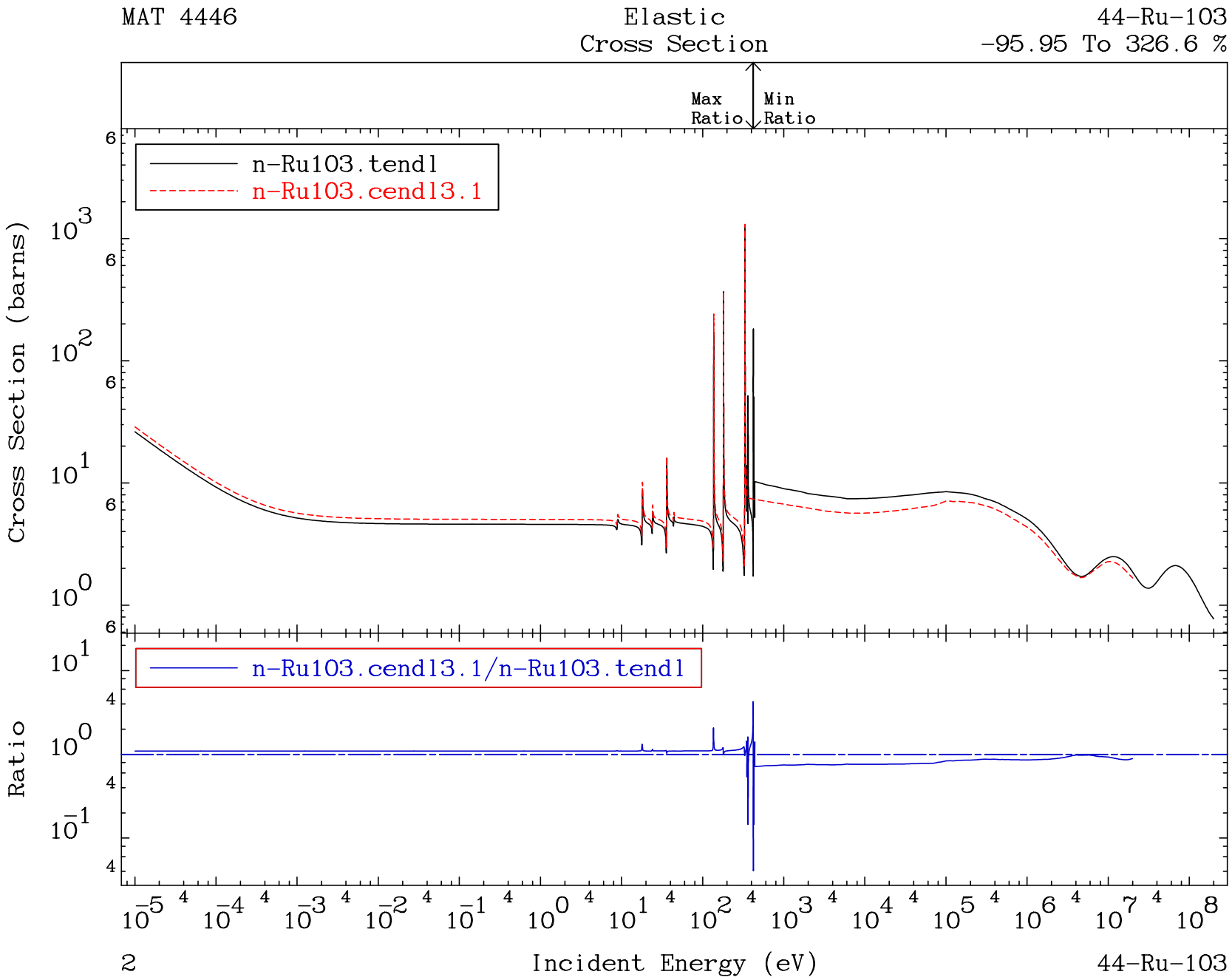
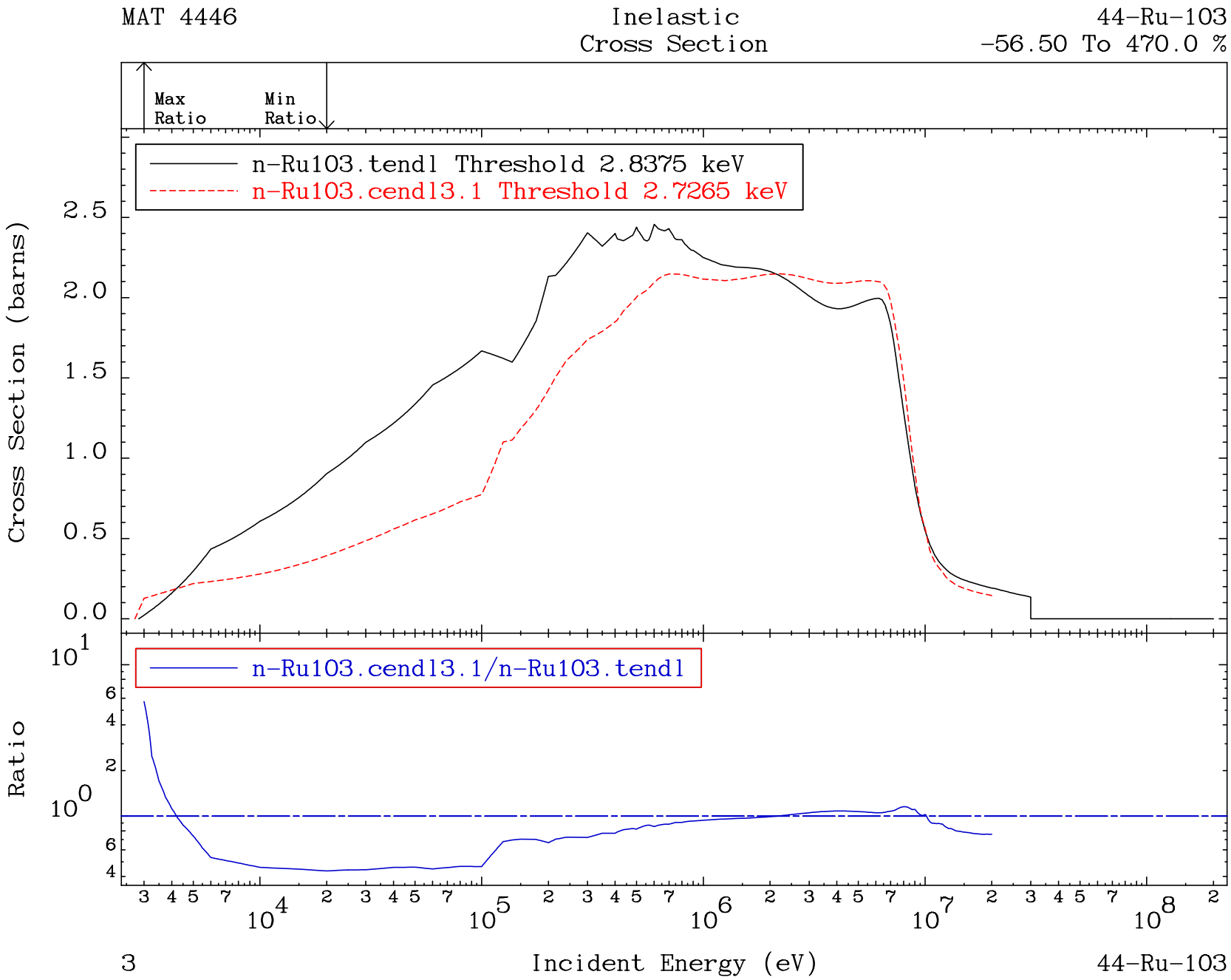
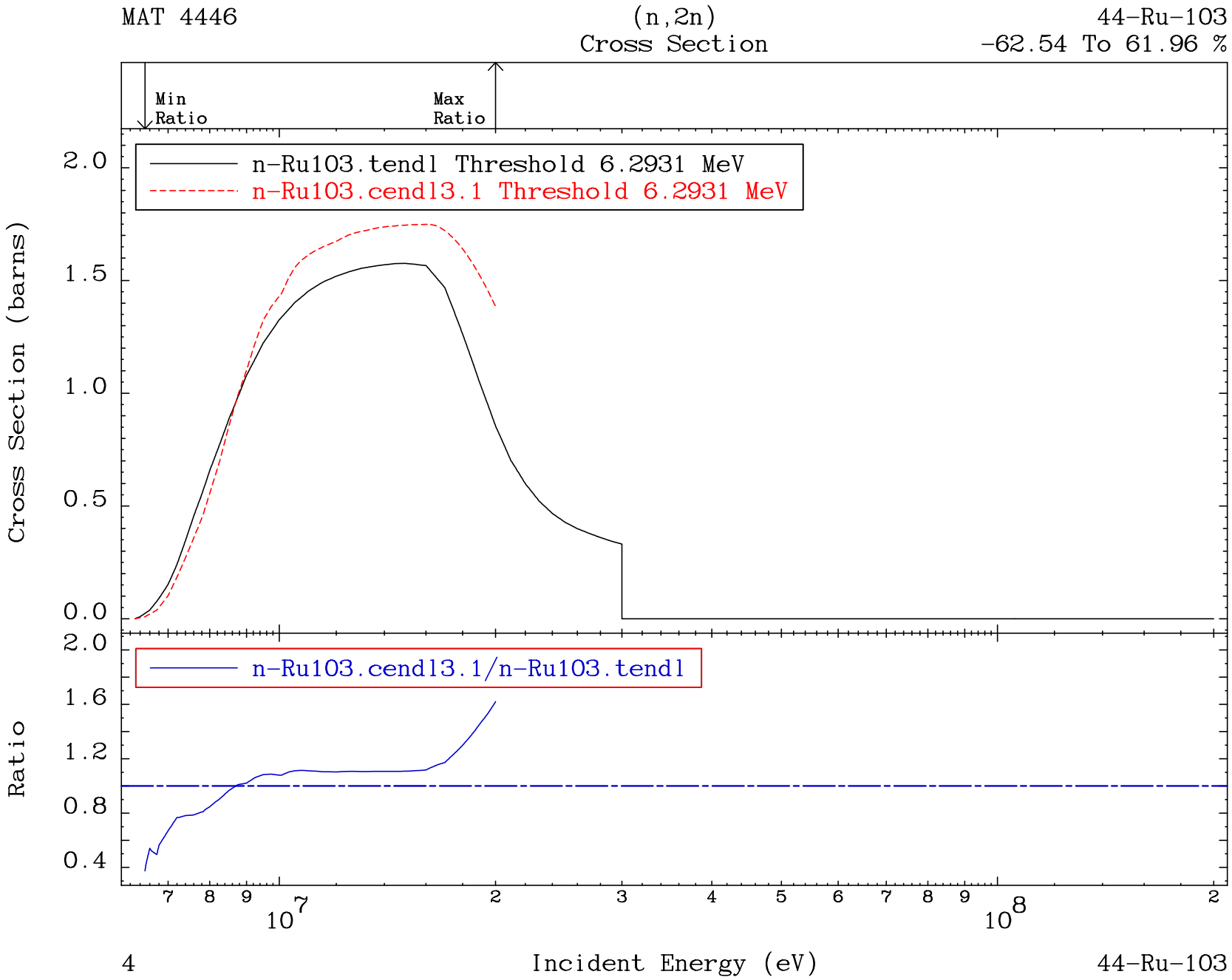
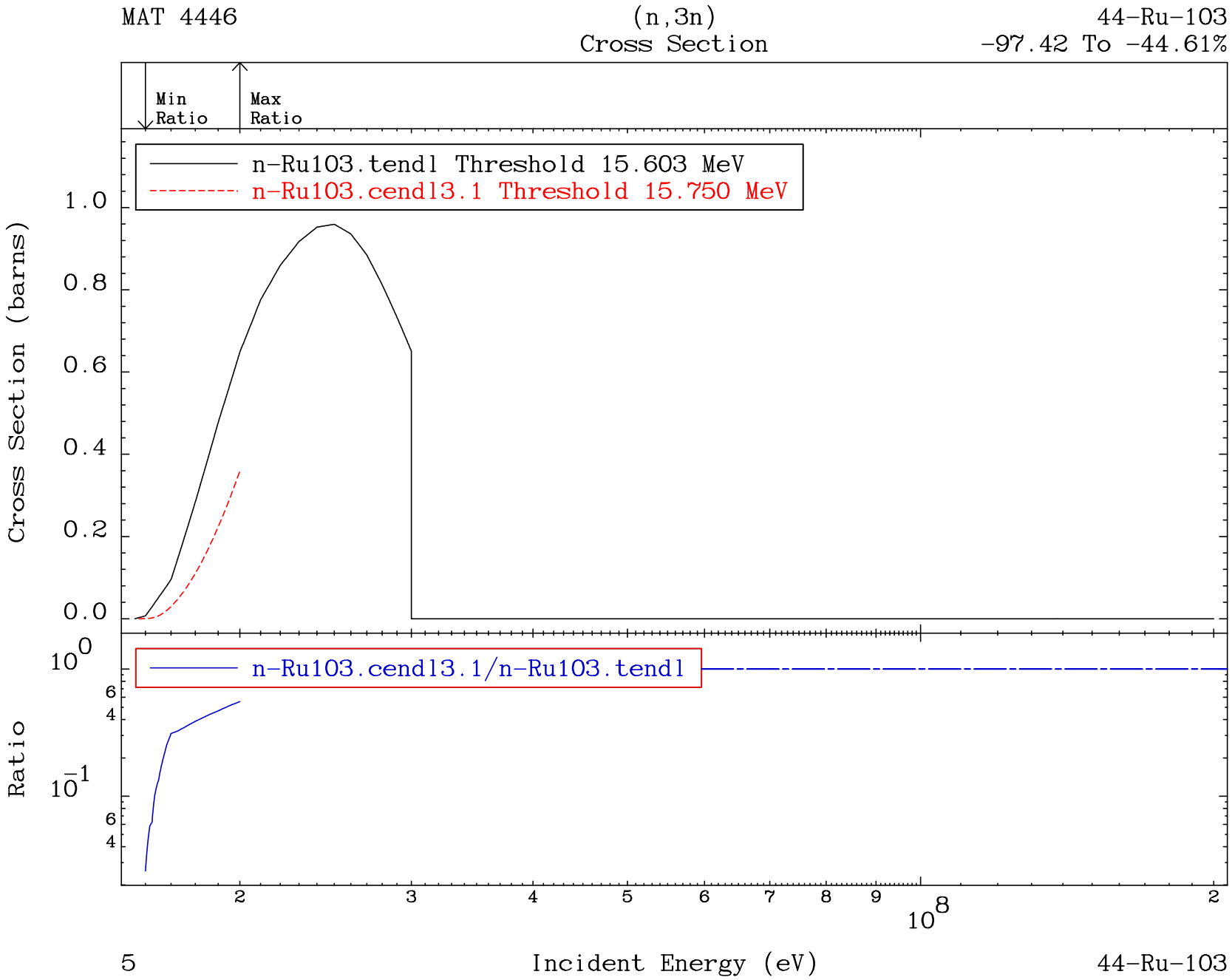
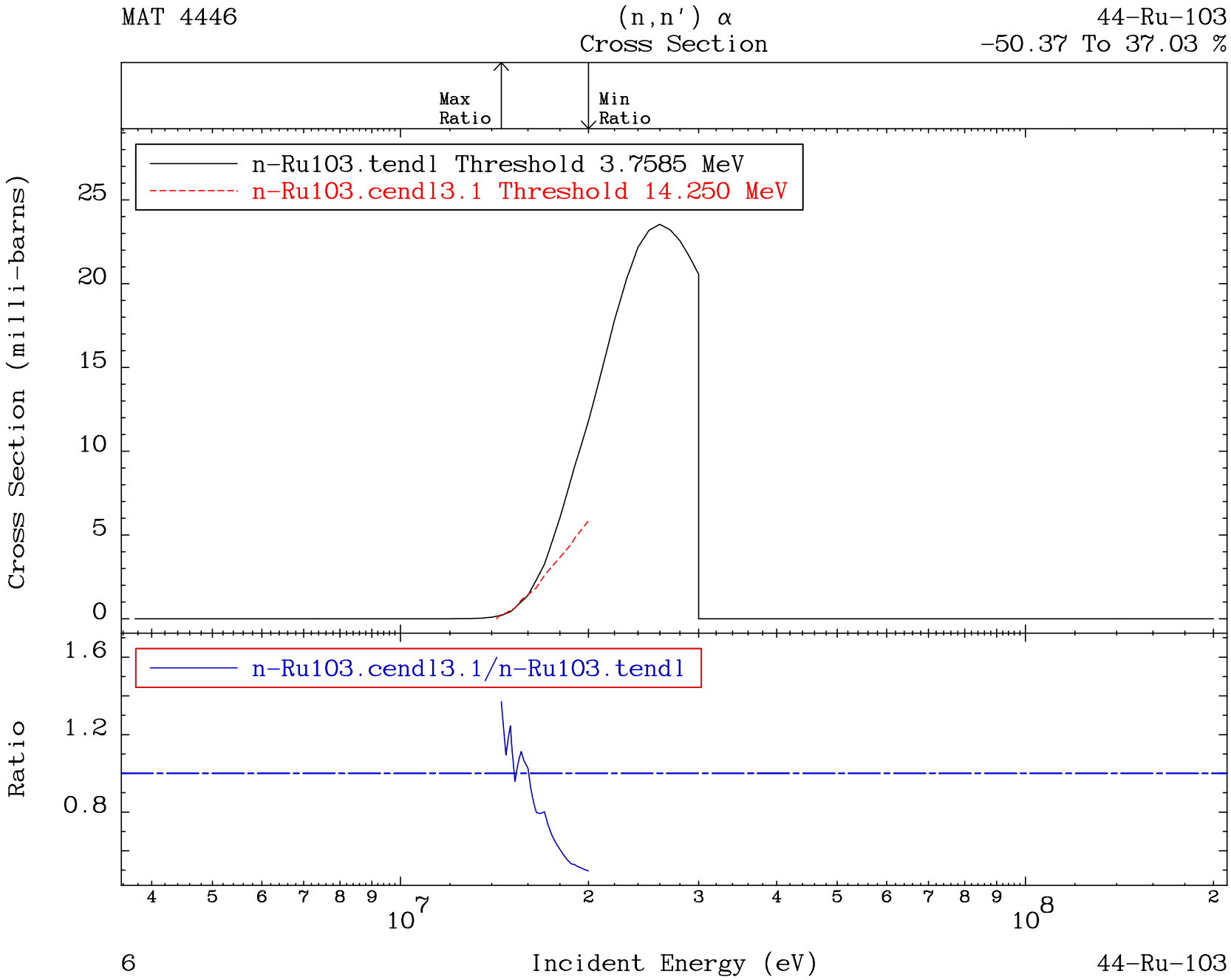

MAT 4446
Total
Cross Section
44-Ru-103
-97.11 To 232.7 %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
1
44-Ru-103

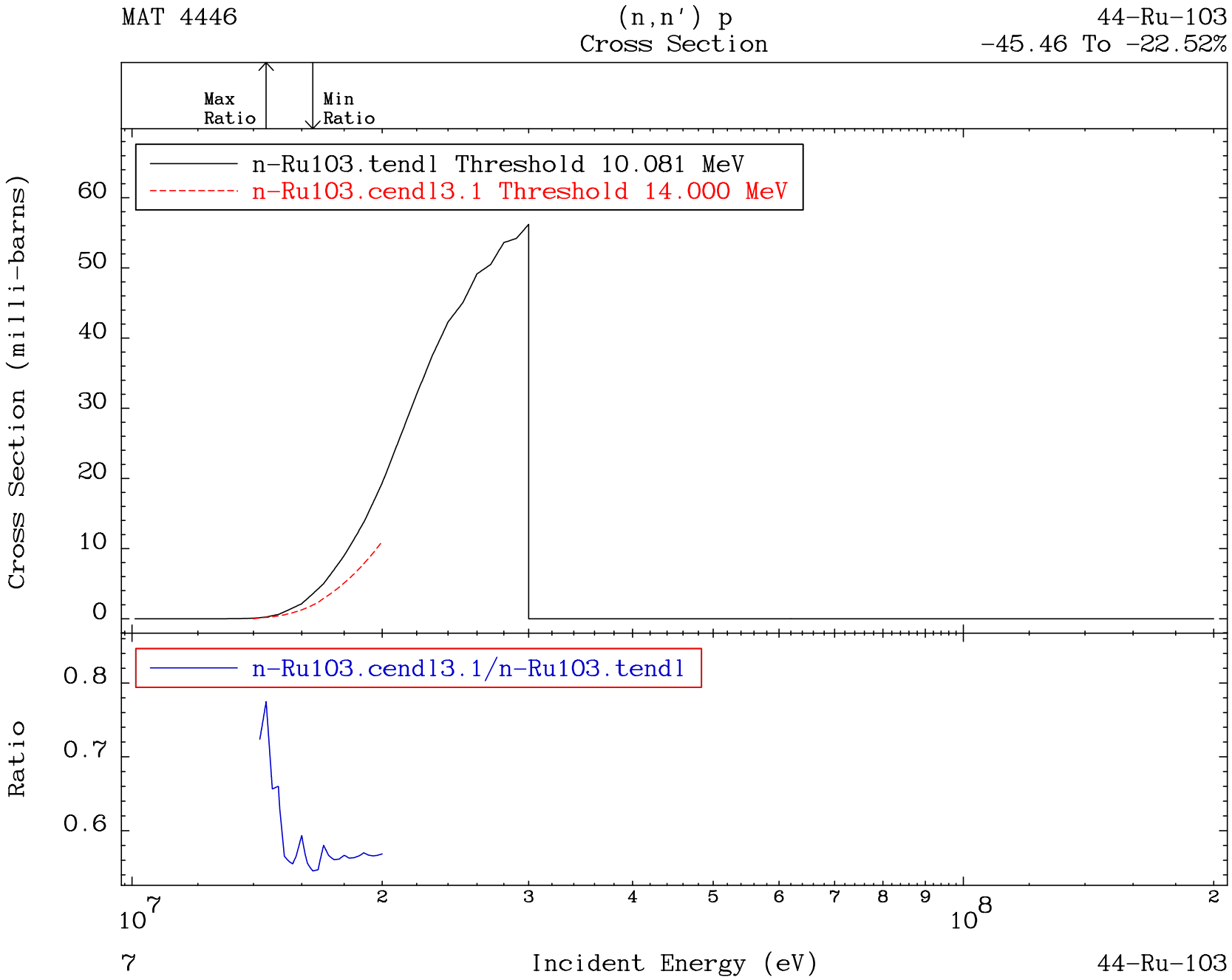

MAT 4446
Elastic
Cross Section
44-Ru-103
-95.95 To 326.6 %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
2
44-Ru-103

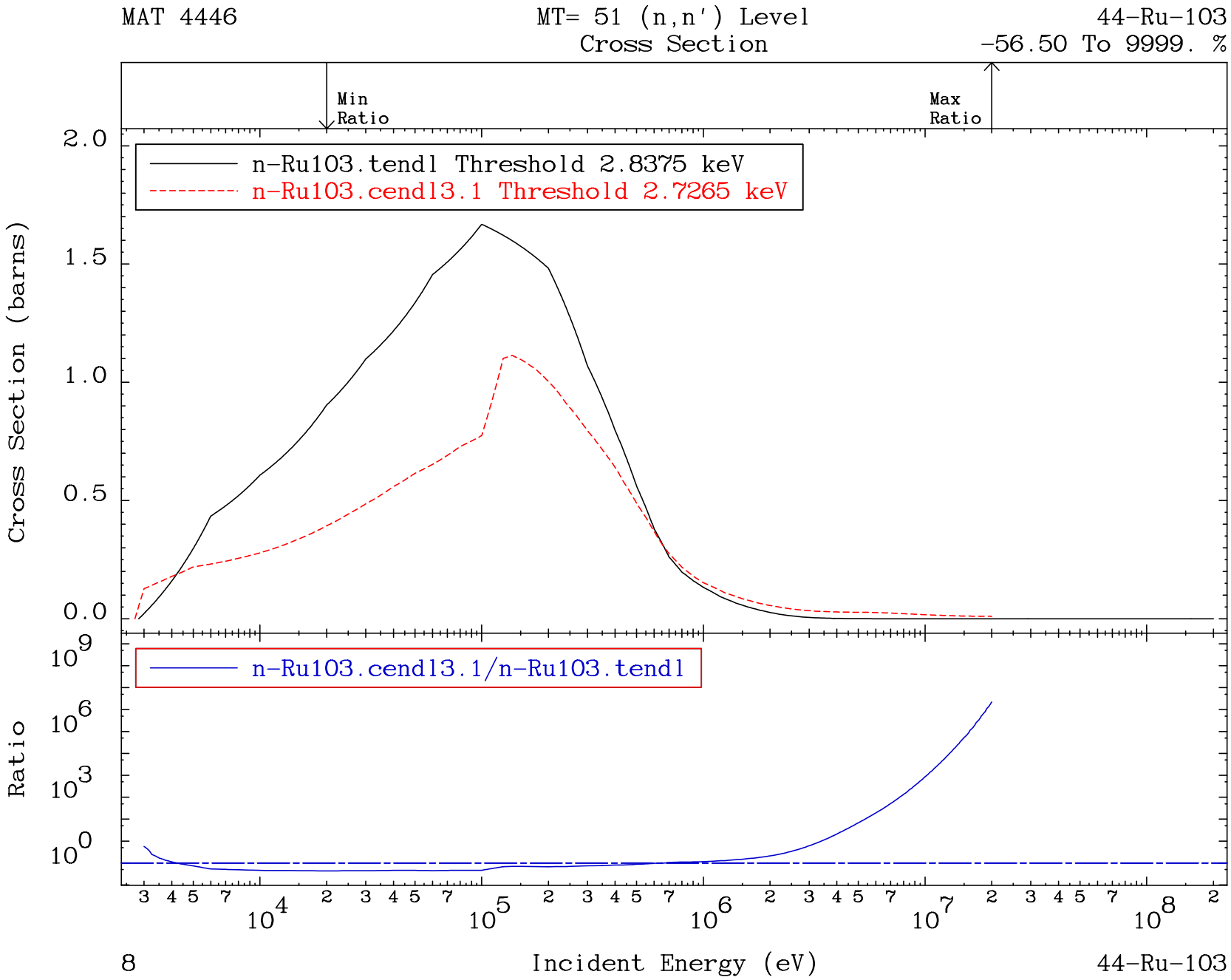

MAT 4446
Inelastic
Cross Section
44-Ru-103
-56.50 To 470.0 %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 2.8375 keV
n-Ru103.cendl3.1 Threshold 2.7265 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^1
10^0
6
4
2
6
4
3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
3
Incident Energy (eV)
44-Ru-103

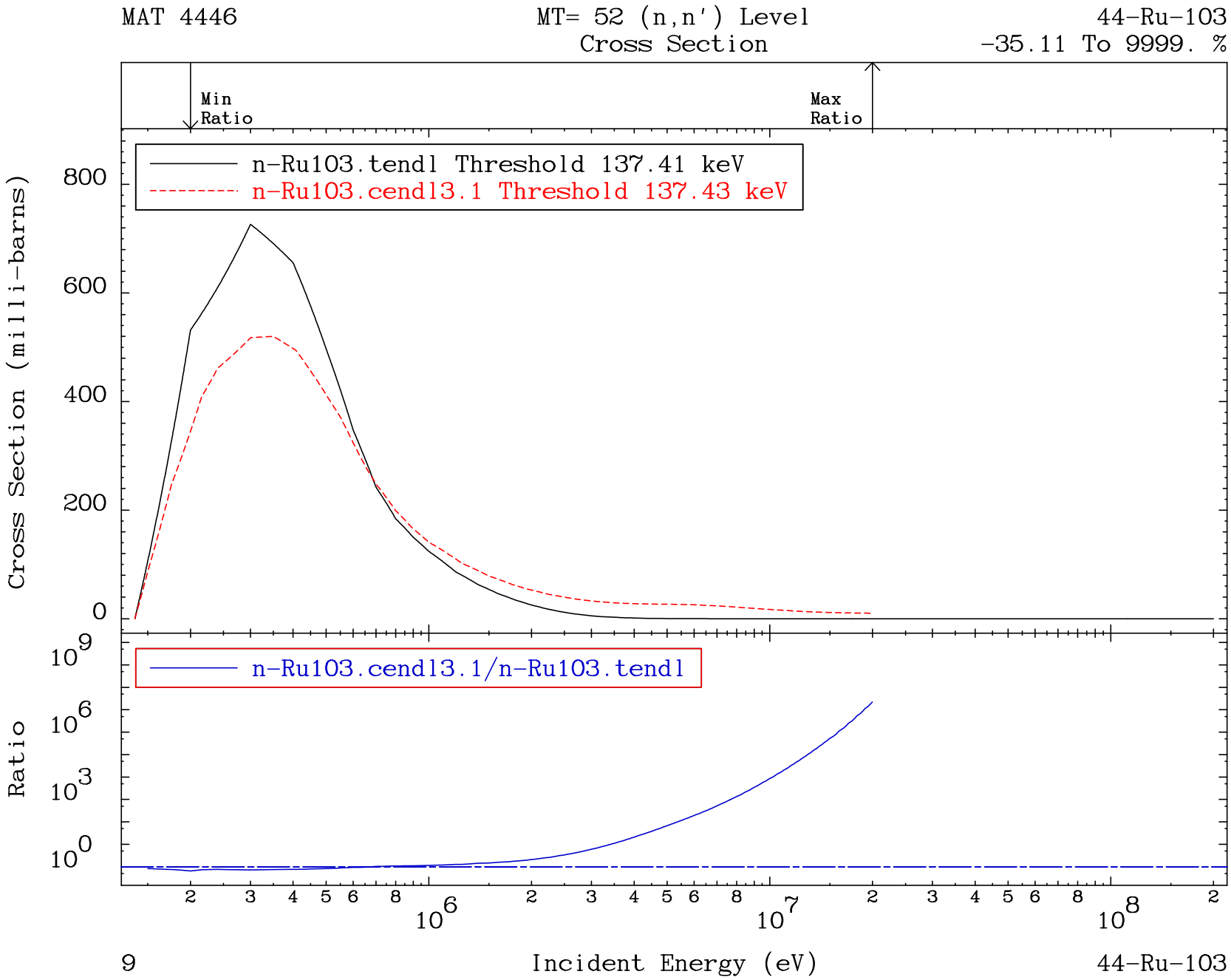

MAT 4446
(n,2n)
Cross Section
44-Ru-103
-62.54 To 61.96 %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 6.2931 MeV
n-Ru103.cendl3.1 Threshold 6.2931 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
2.0
1.6
1.2
0.8
0.4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
44-Ru-103

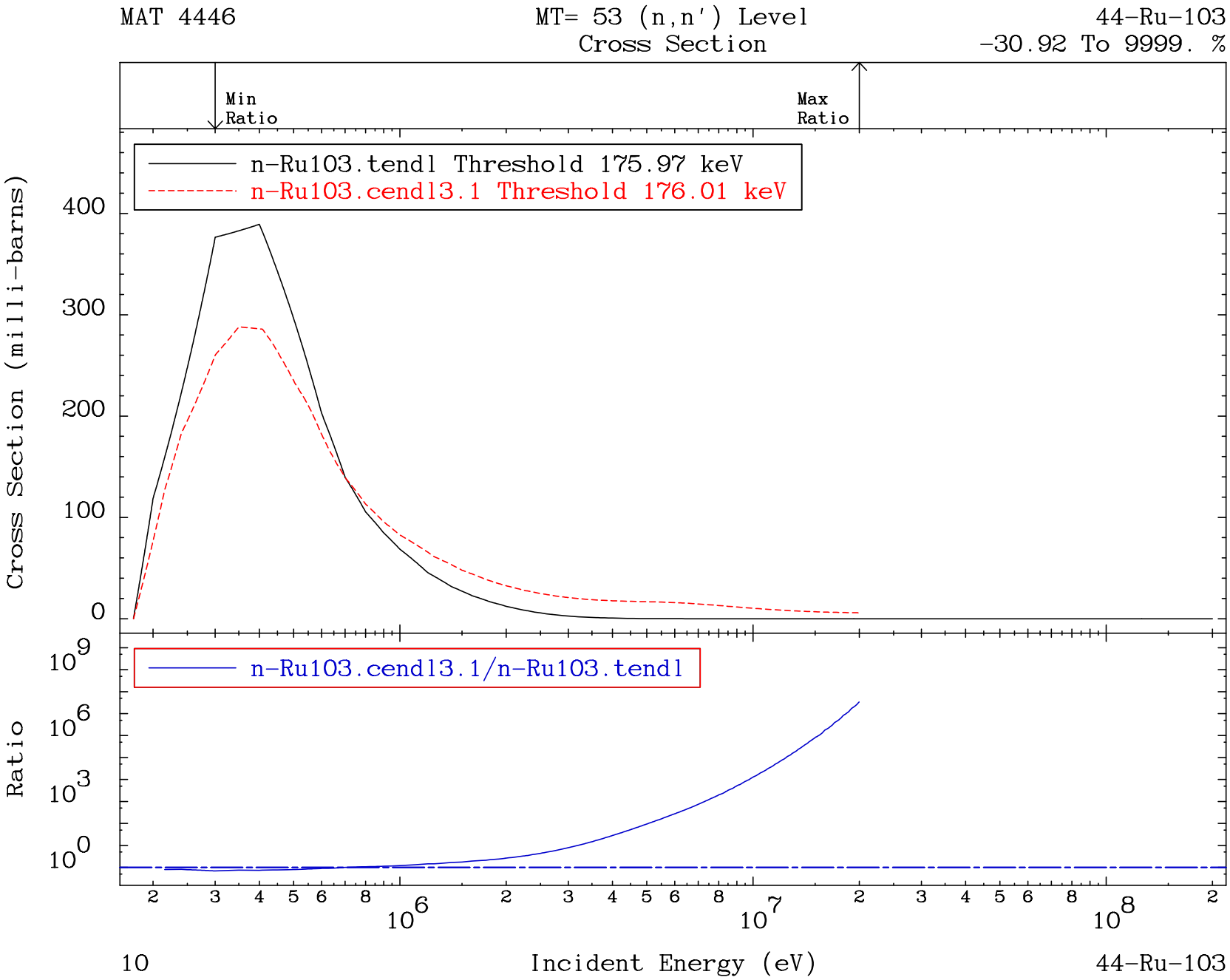

MAT 4446
(n,3n)
Cross Section
44-Ru-103
-97.42 To -44.61%
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 15.603 MeV
n-Ru103.cendl3.1 Threshold 15.750 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^0
10^-1
6
4
6
4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
44-Ru-103

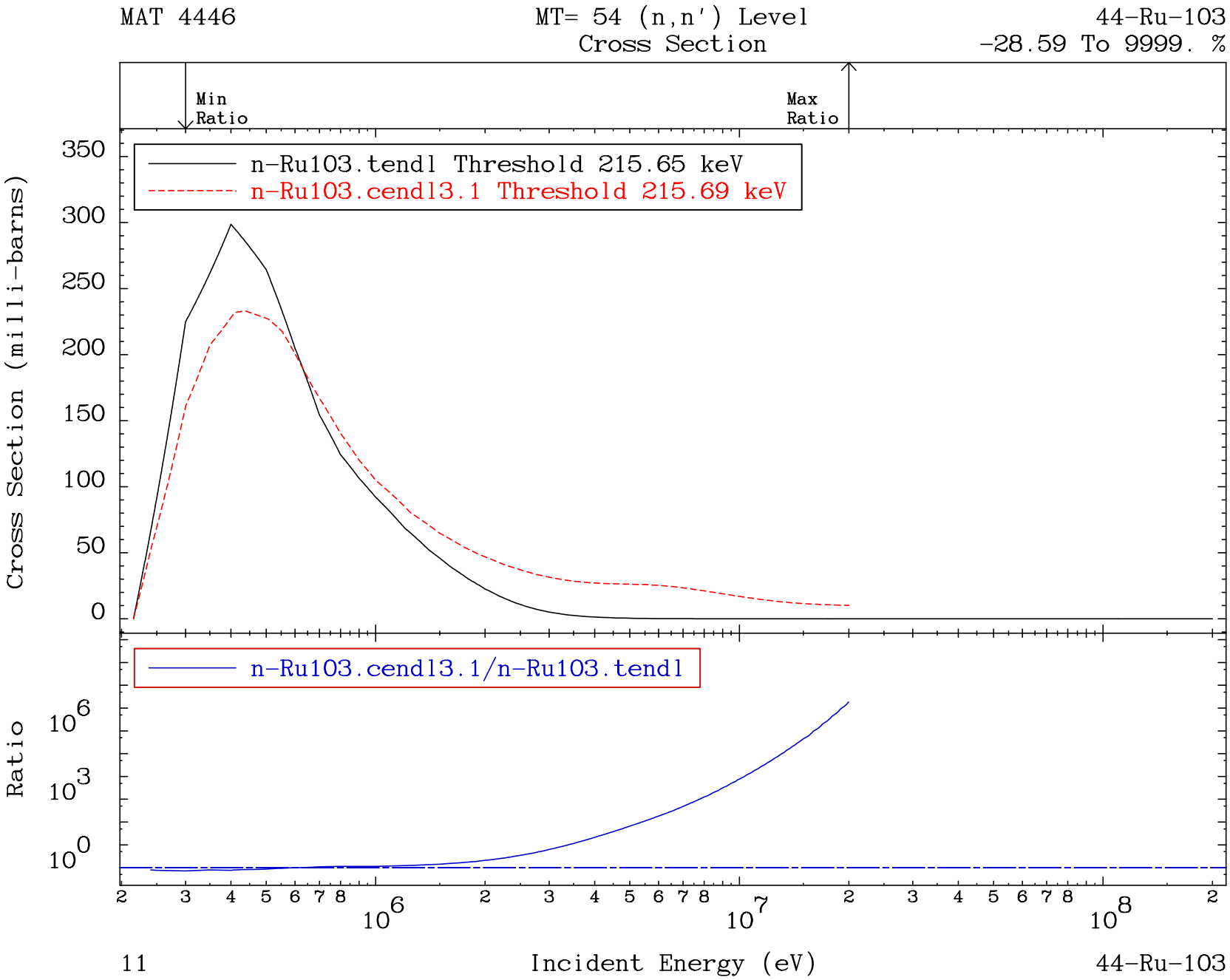

MAT 4446
(n,n') α
Cross Section
44-Ru-103
-50.37 To 37.03 %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 3.7585 MeV
n-Ru103.cendl3.1 Threshold 14.250 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
1.6
1.2
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
44-Ru-103

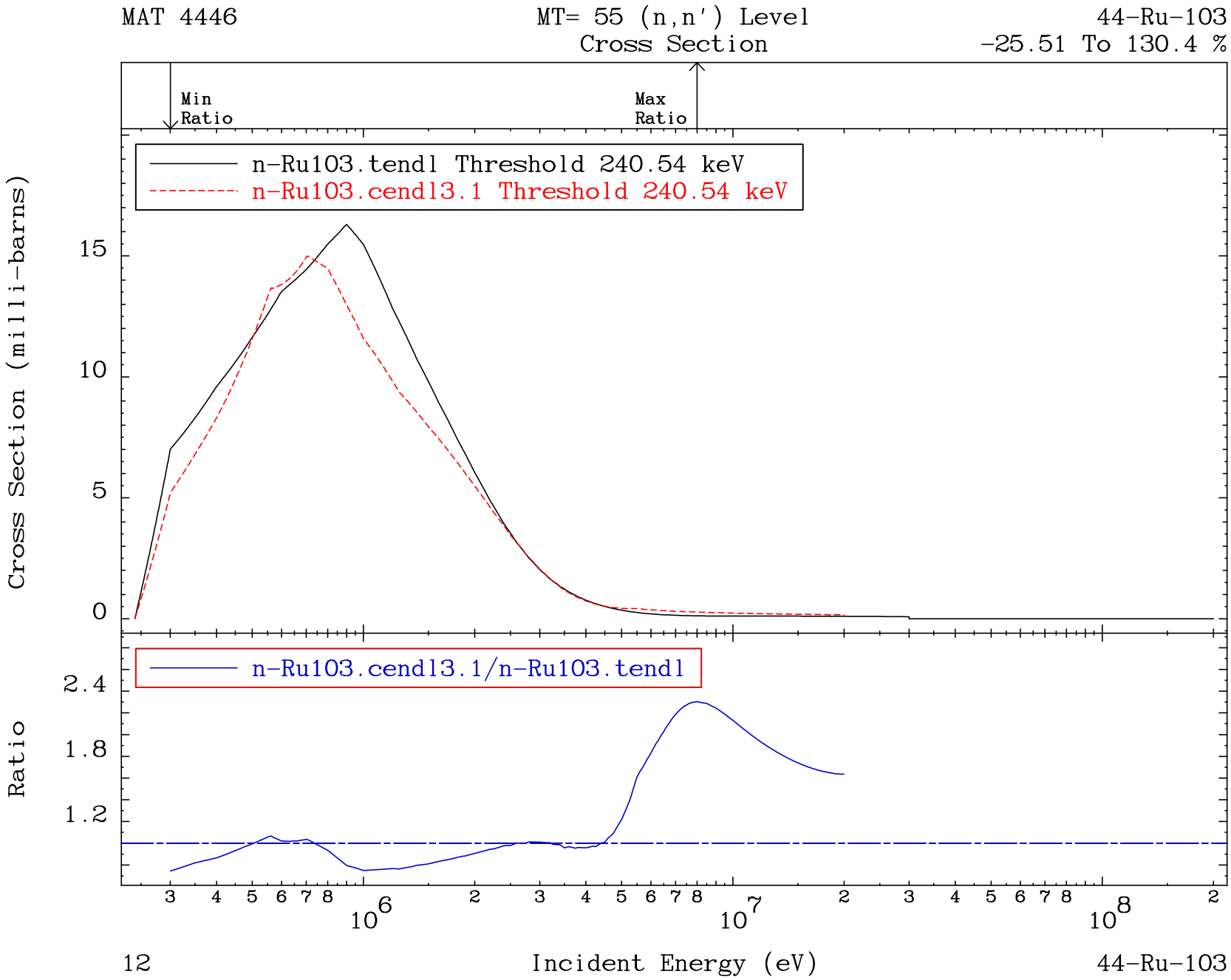

MAT 4446
(n,n') p
Cross Section
44-Ru-103
-45.46 To -22.52%
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 10.081 MeV
n-Ru103.cendl3.1 Threshold 14.000 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
0.8
0.7
0.6
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
44-Ru-103

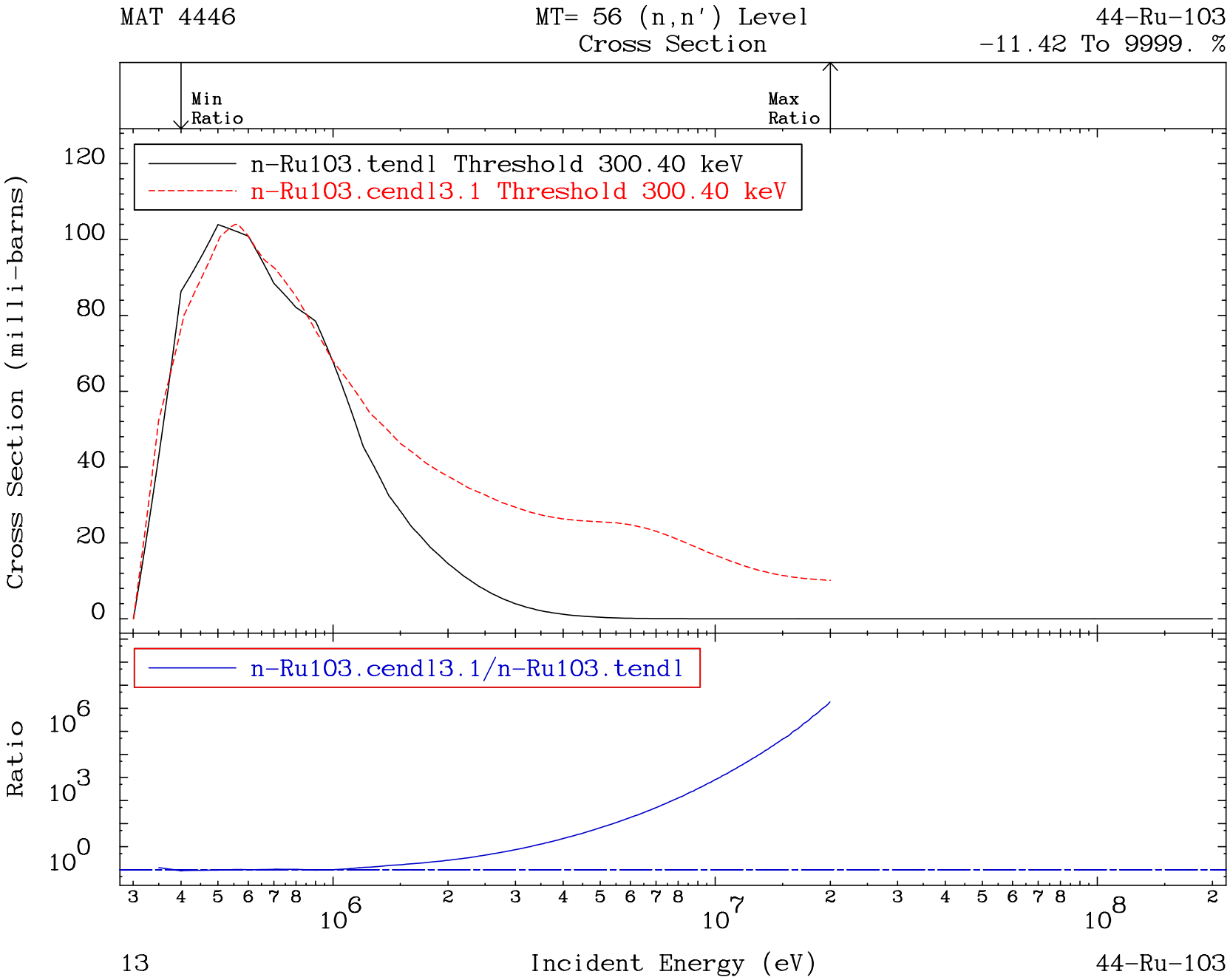

MAT 4446
MT= 51 (n,n') Level
Cross Section
44-Ru-103
-56.50 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 2.8375 keV
n-Ru103.cendl3.1 Threshold 2.7265 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
8
Incident Energy (eV)
44-Ru-103

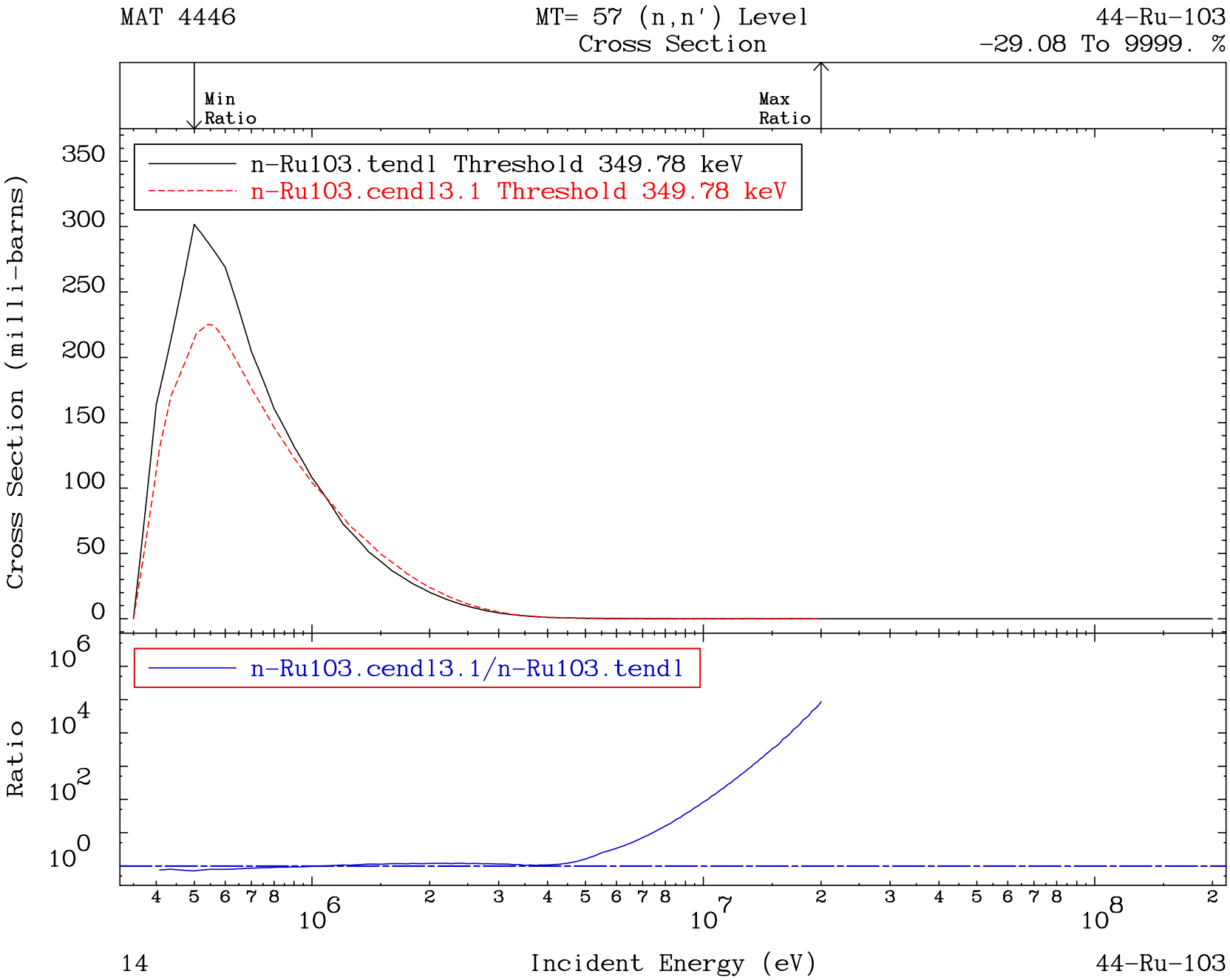

MAT 4446
MT= 52 (n,n') Level
Cross Section
44-Ru-103
-35.11 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 137.41 keV
n-Ru103.cendl3.1 Threshold 137.43 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
44-Ru-103

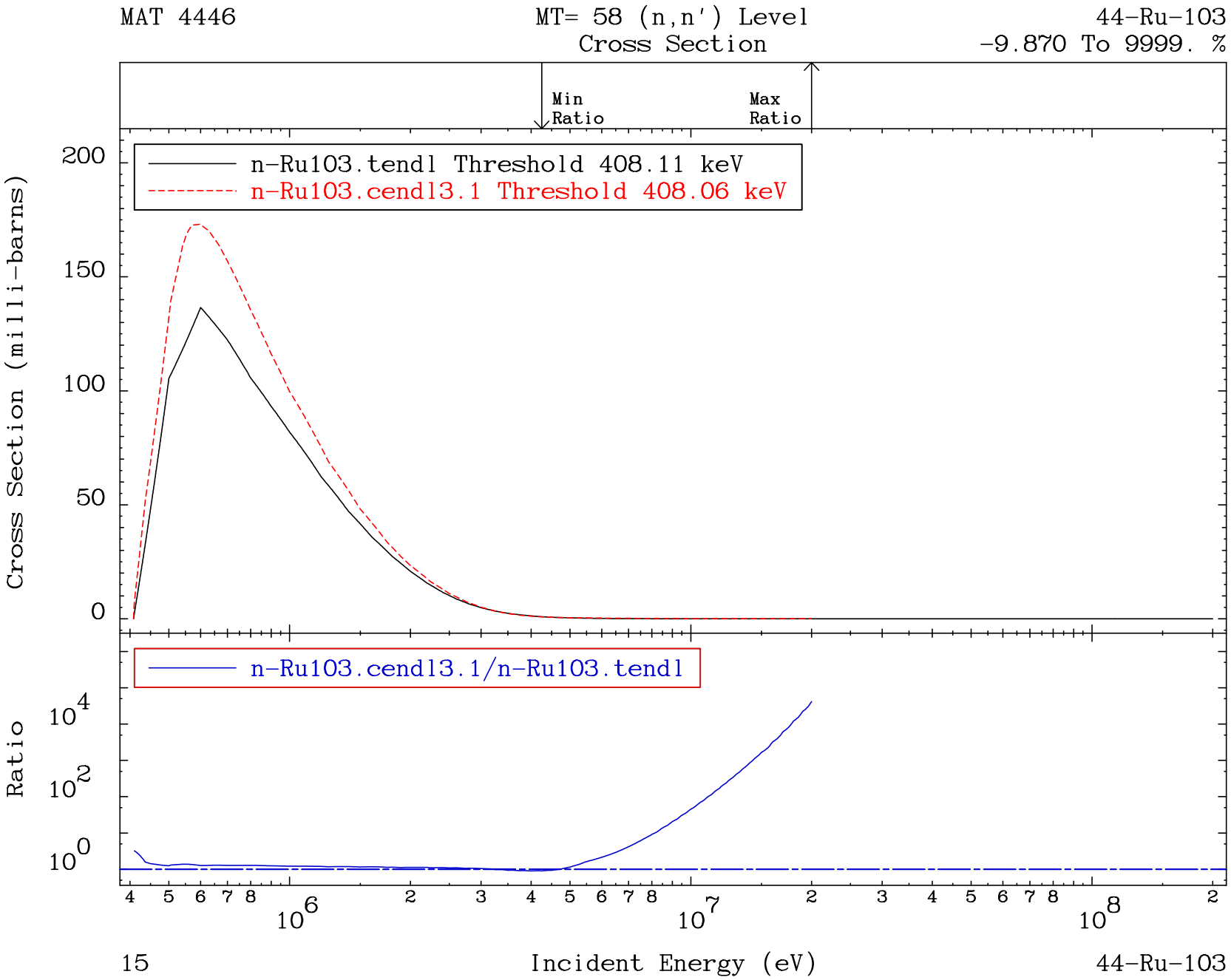

MAT 4446
MT= 53 (n,n') Level
Cross Section
44-Ru-103
-30.92 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 175.97 keV
n-Ru103.cendl3.1 Threshold 176.01 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
44-Ru-103

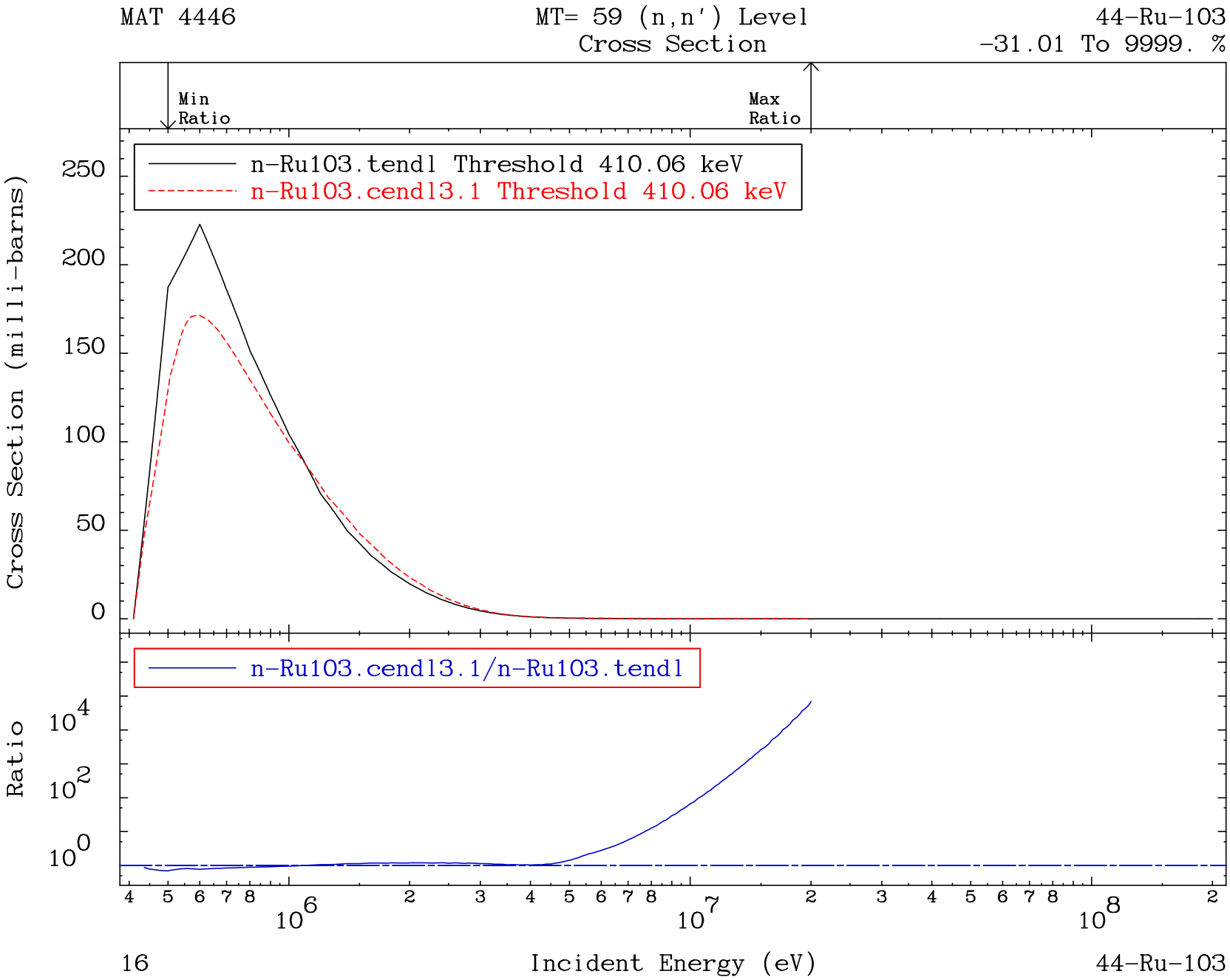

MAT 4446
MT= 54 (n,n') Level
Cross Section
44-Ru-103
-28.59 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 215.65 keV
n-Ru103.cendl3.1 Threshold 215.69 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
44-Ru-103

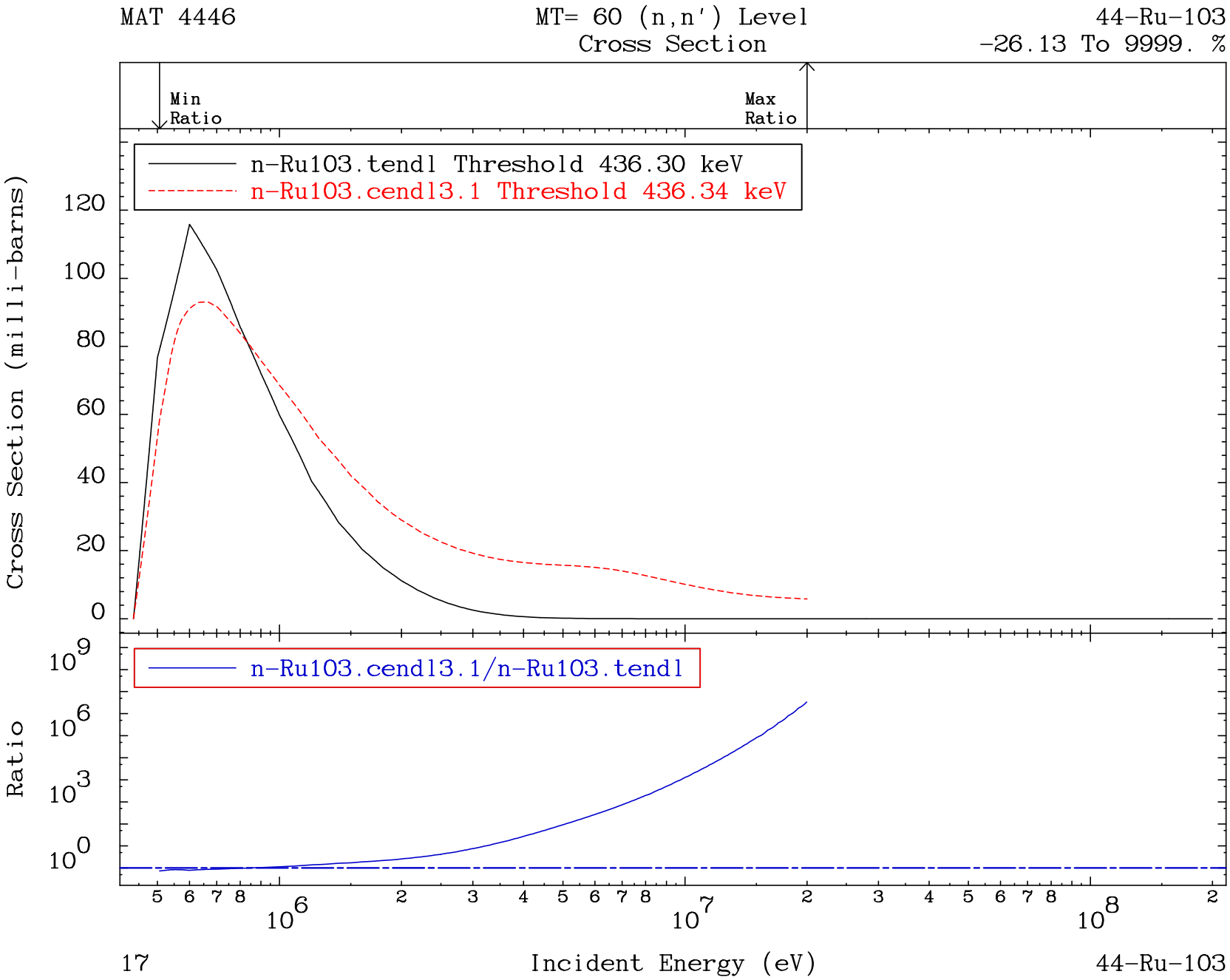

MAT 4446
MT= 55 (n,n') Level
Cross Section
44-Ru-103
-25.51 To 130.4 %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 240.54 keV
n-Ru103.cendl3.1 Threshold 240.54 keV
Cross Section (milli-barns)
15
10
5
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
2.4
1.8
1.2
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
44-Ru-103

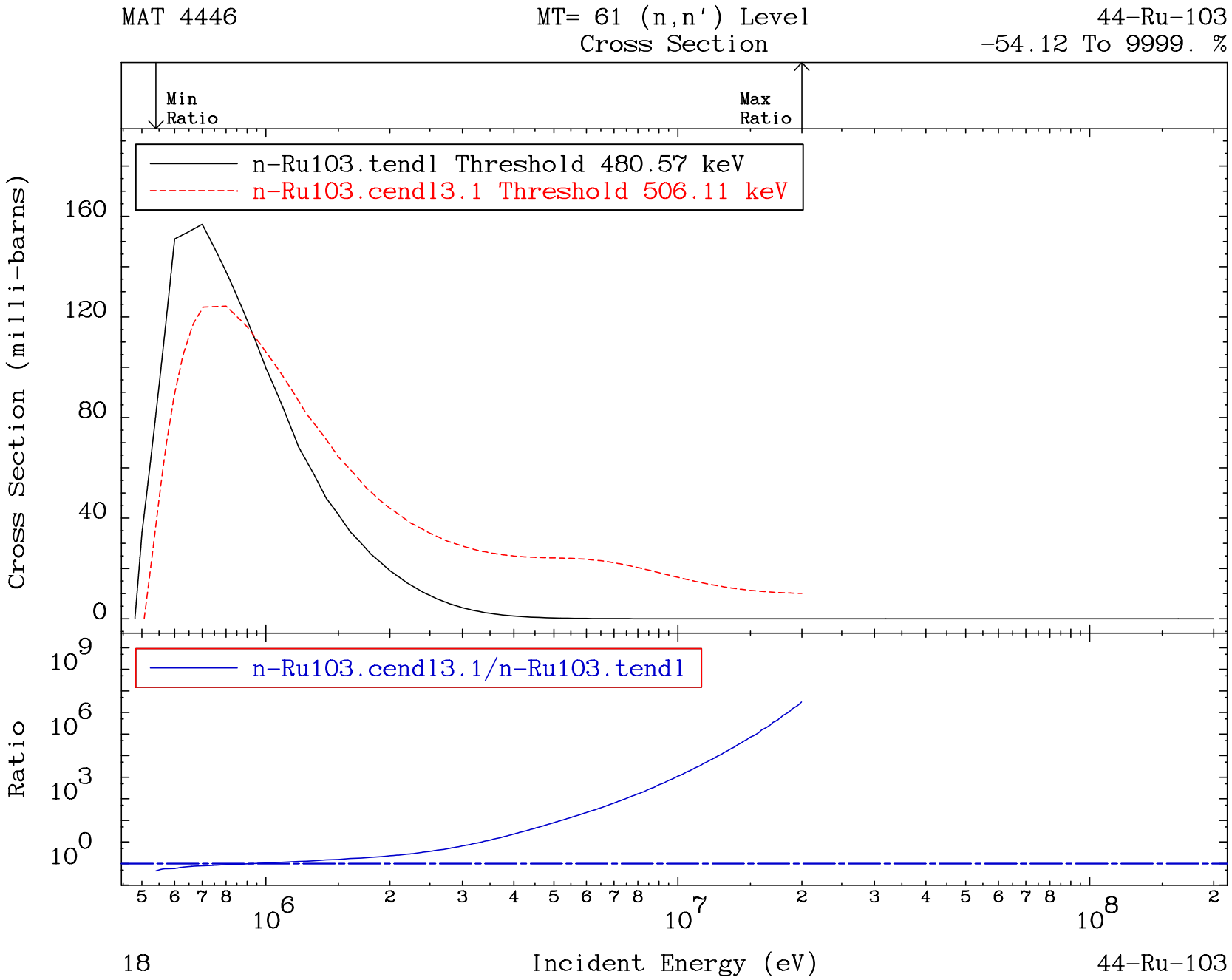

MAT 4446
MT= 56 (n,n') Level
Cross Section
44-Ru-103
-11.42 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 300.40 keV
n-Ru103.cendl3.1 Threshold 300.40 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
44-Ru-103

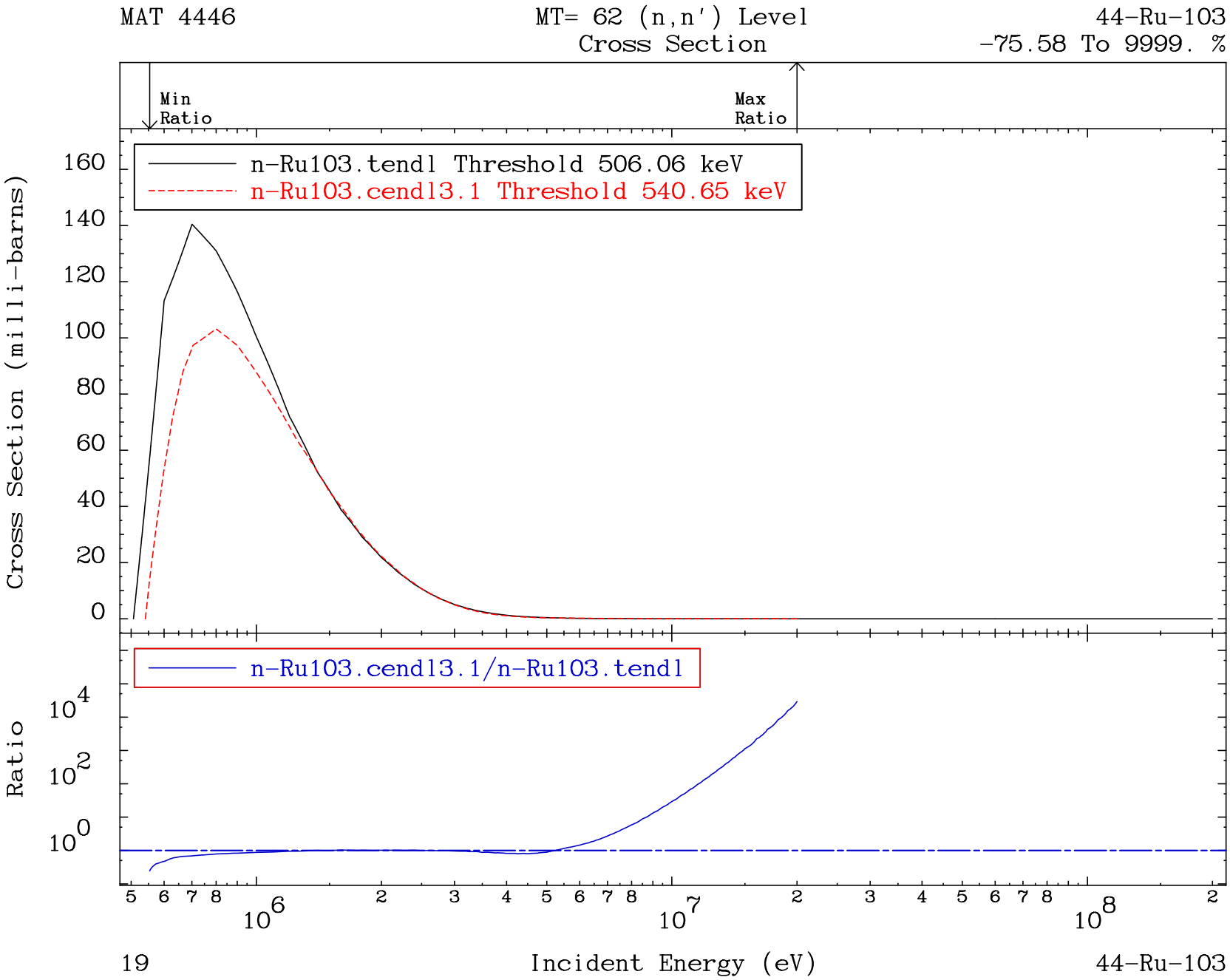

MAT 4446
MT= 57 (n,n') Level
Cross Section
44-Ru-103
-29.08 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 349.78 keV
n-Ru103.cendl3.1 Threshold 349.78 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
44-Ru-103

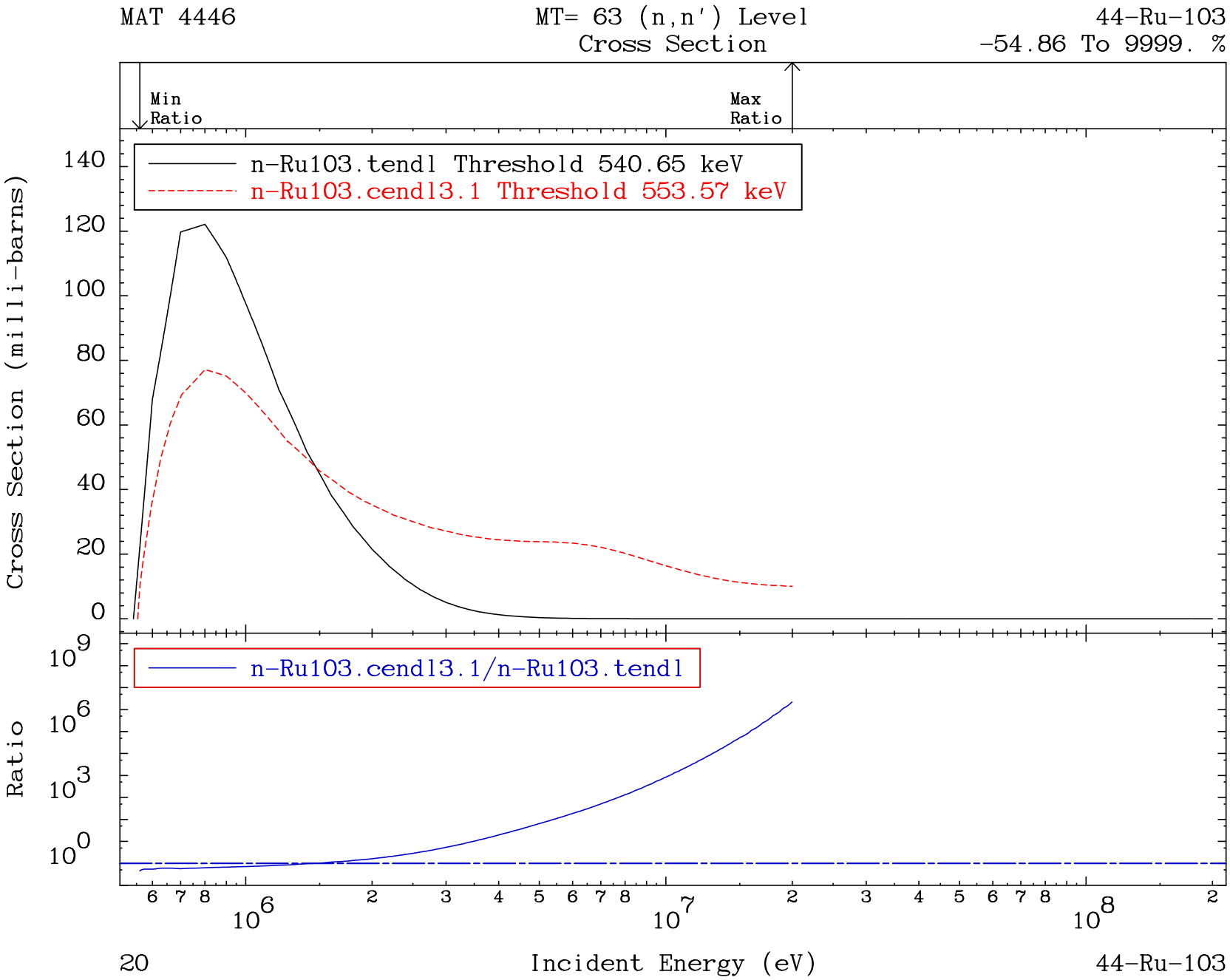

MAT 4446
MT= 58 (n,n') Level
Cross Section
44-Ru-103
-9.870 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 408.11 keV
n-Ru103.cendl3.1 Threshold 408.06 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
44-Ru-103

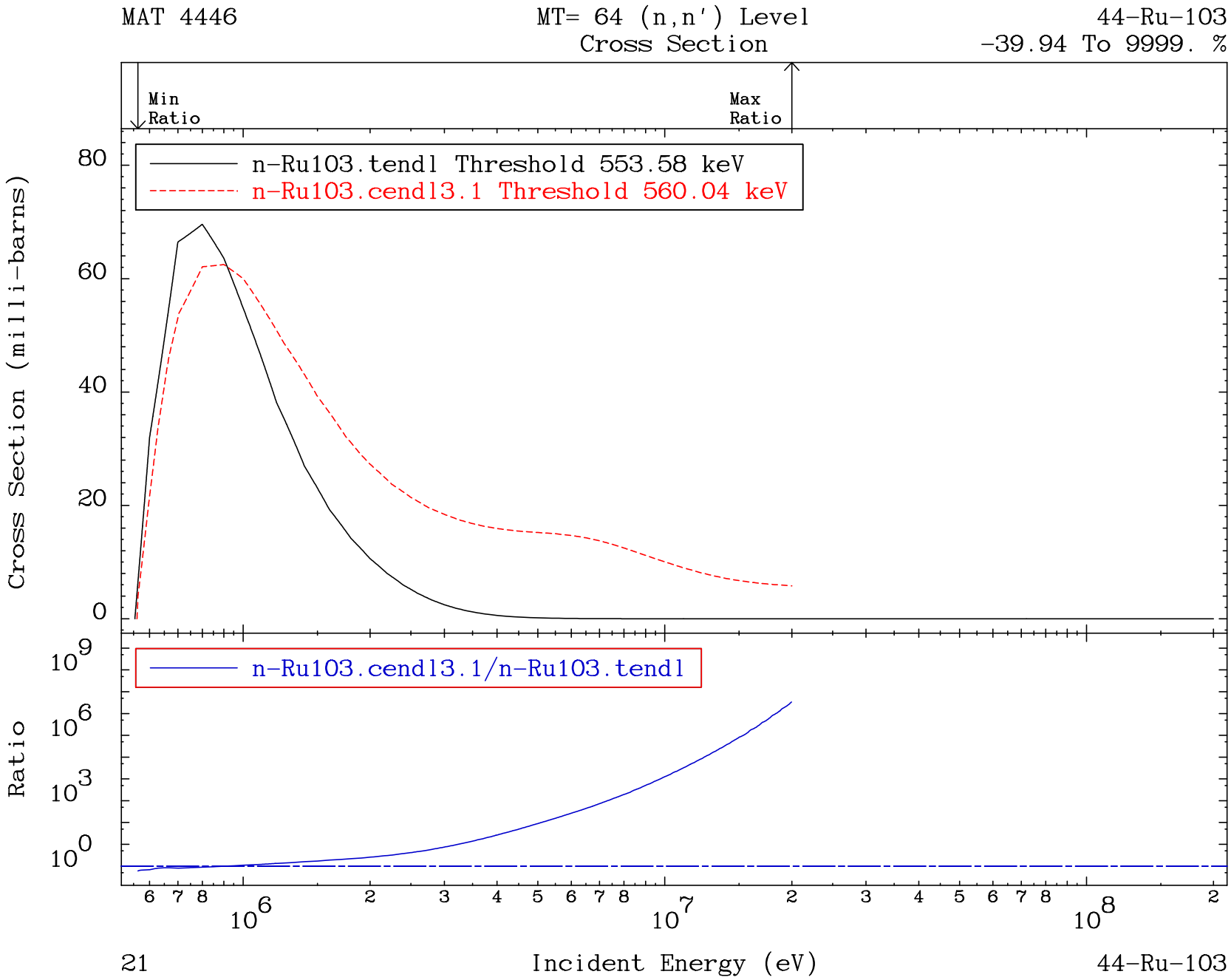

MAT 4446
MT= 59 (n,n') Level
Cross Section
44-Ru-103
-31.01 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 410.06 keV
n-Ru103.cendl3.1 Threshold 410.06 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
44-Ru-103

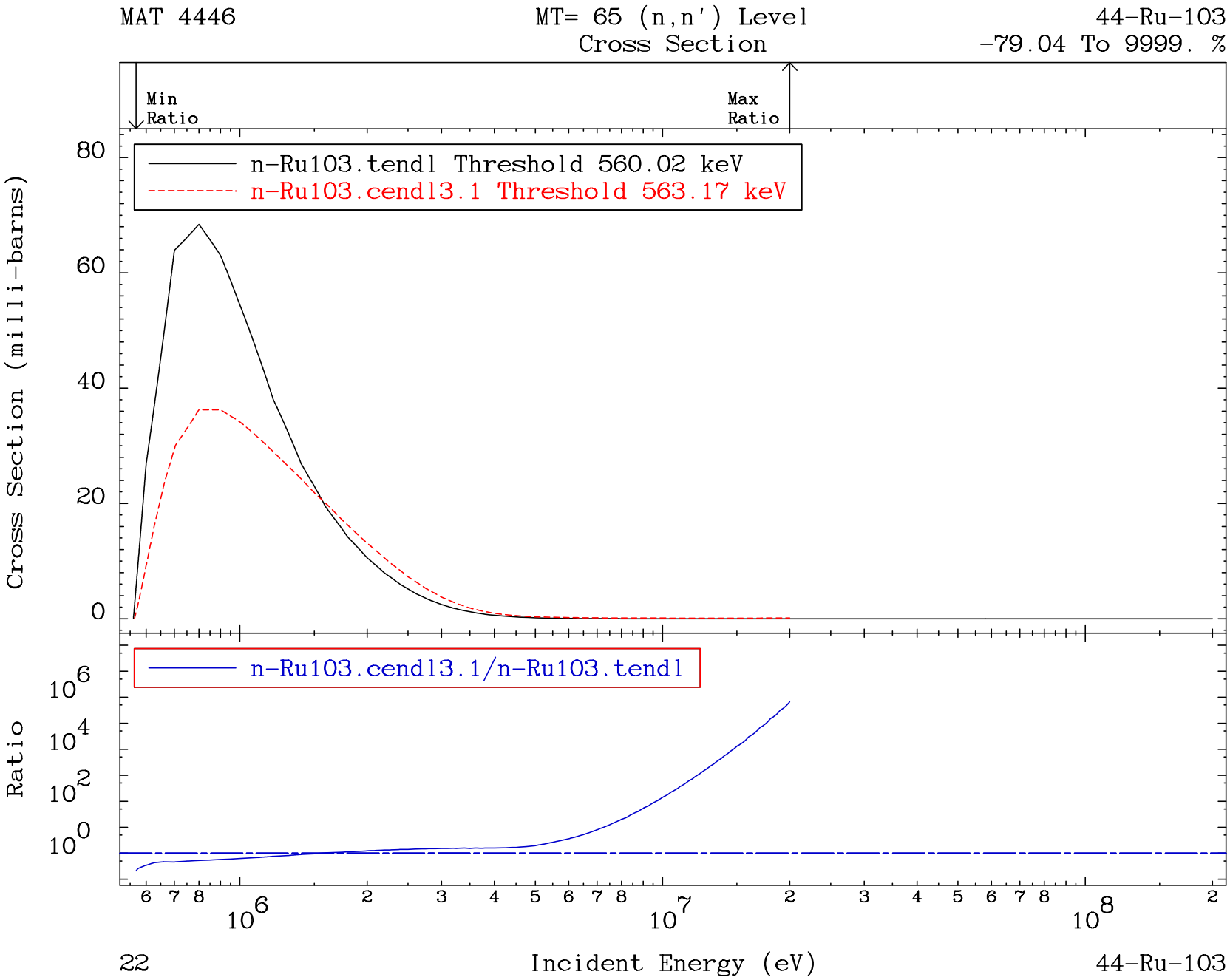

MAT 4446
MT= 60 (n,n') Level
Cross Section
44-Ru-103
-26.13 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 436.30 keV
n-Ru103.cendl3.1 Threshold 436.34 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
44-Ru-103

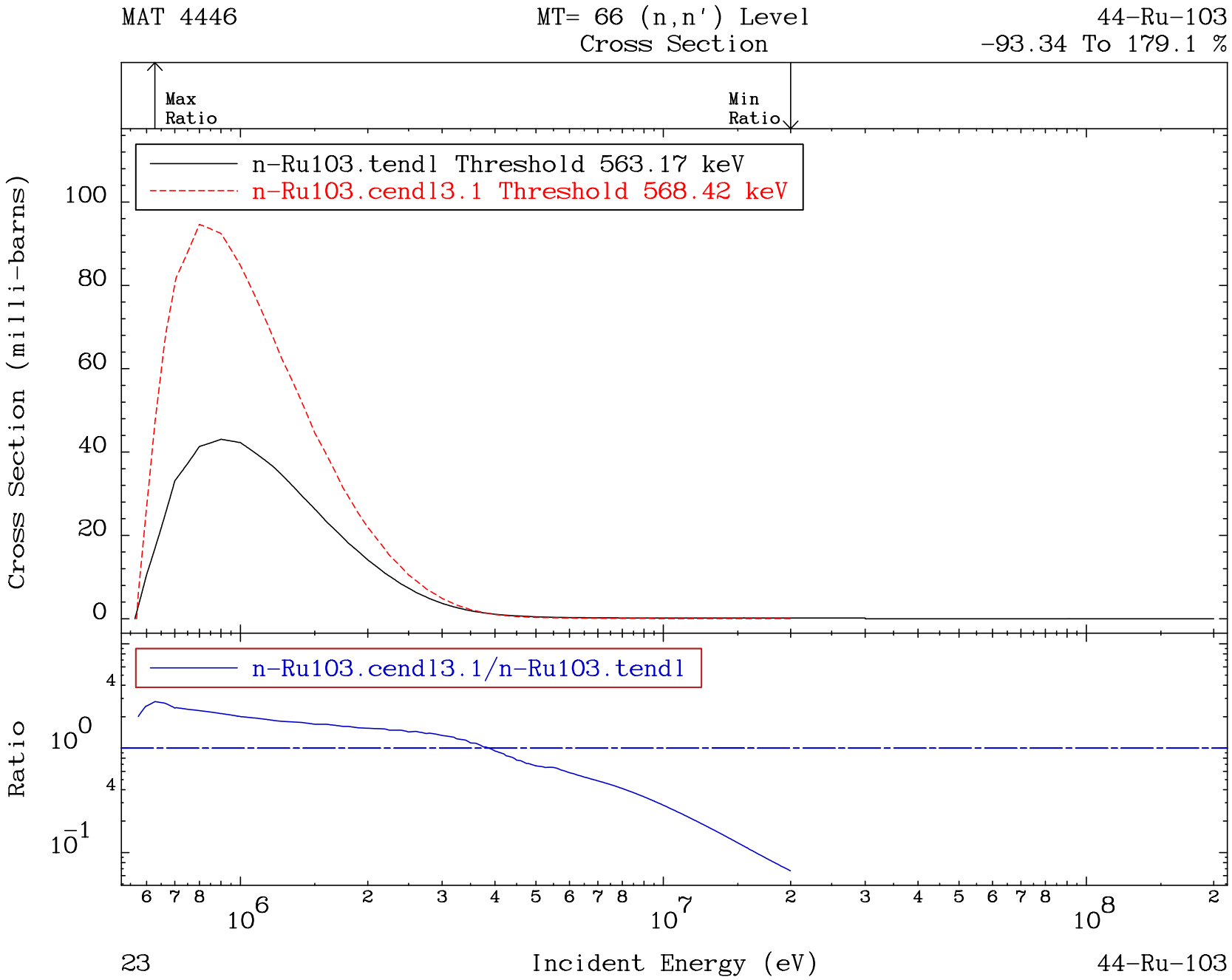

MAT 4446
MT= 61 (n,n') Level
Cross Section
44-Ru-103
-54.12 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 480.57 keV
n-Ru103.cendl3.1 Threshold 506.11 keV
Cross Section (milli-barns)
160
120
80
40
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
44-Ru-103

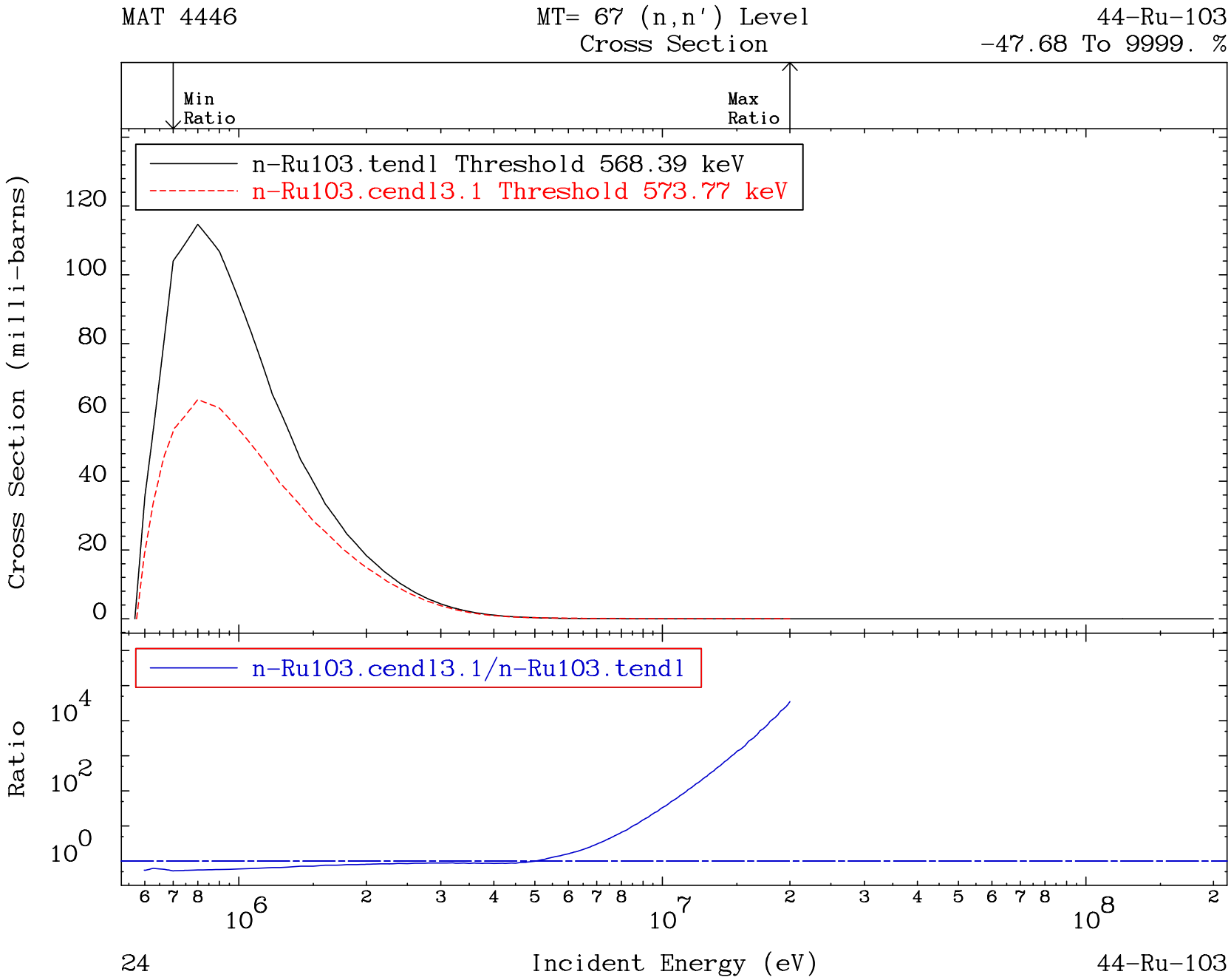

MAT 4446
MT= 62 (n,n') Level
Cross Section
44-Ru-103
-75.58 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 506.06 keV
n-Ru103.cendl3.1 Threshold 540.65 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
44-Ru-103

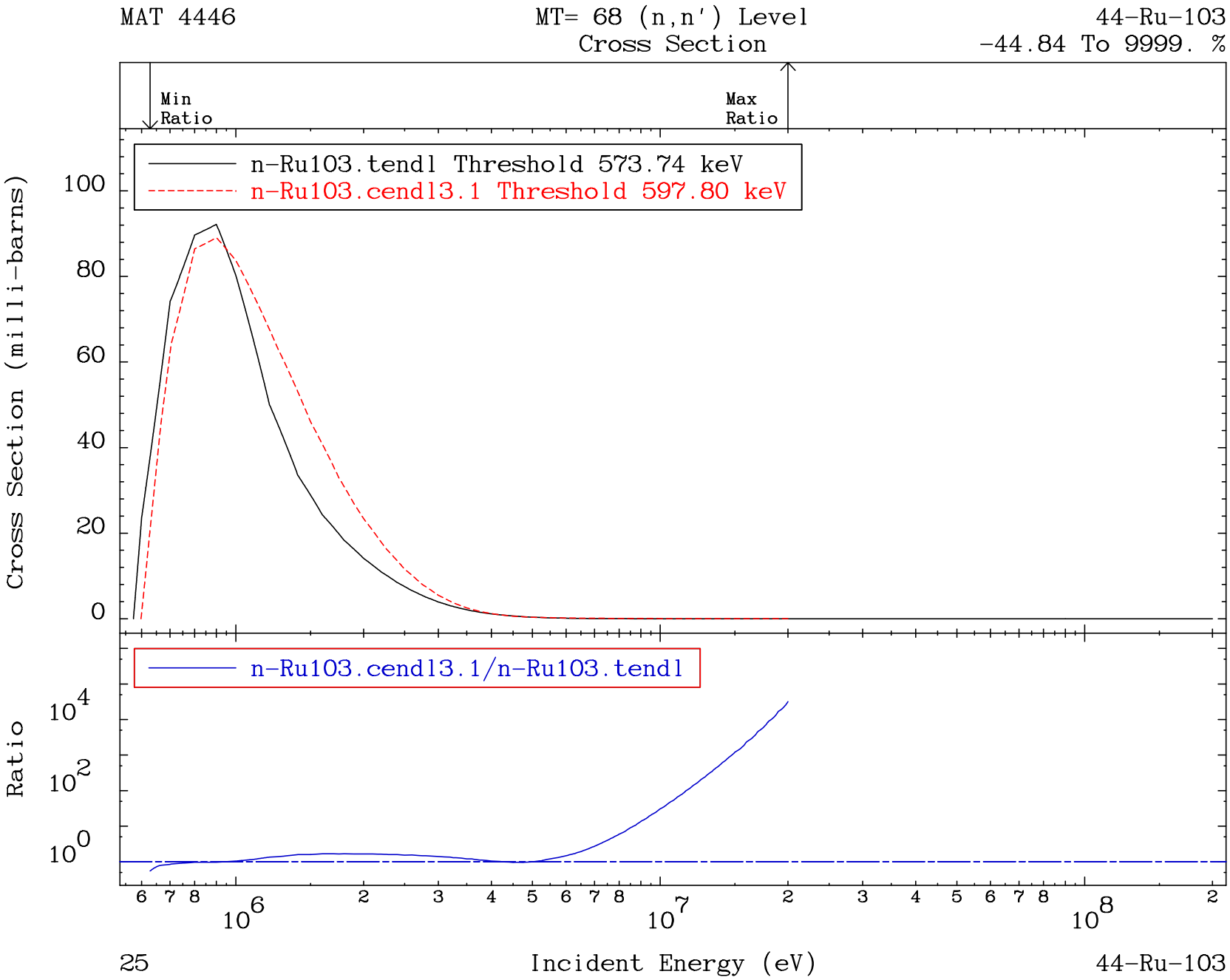

MAT 4446
MT= 63 (n,n') Level
Cross Section
44-Ru-103
-54.86 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 540.65 keV
n-Ru103.cendl3.1 Threshold 553.57 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
44-Ru-103

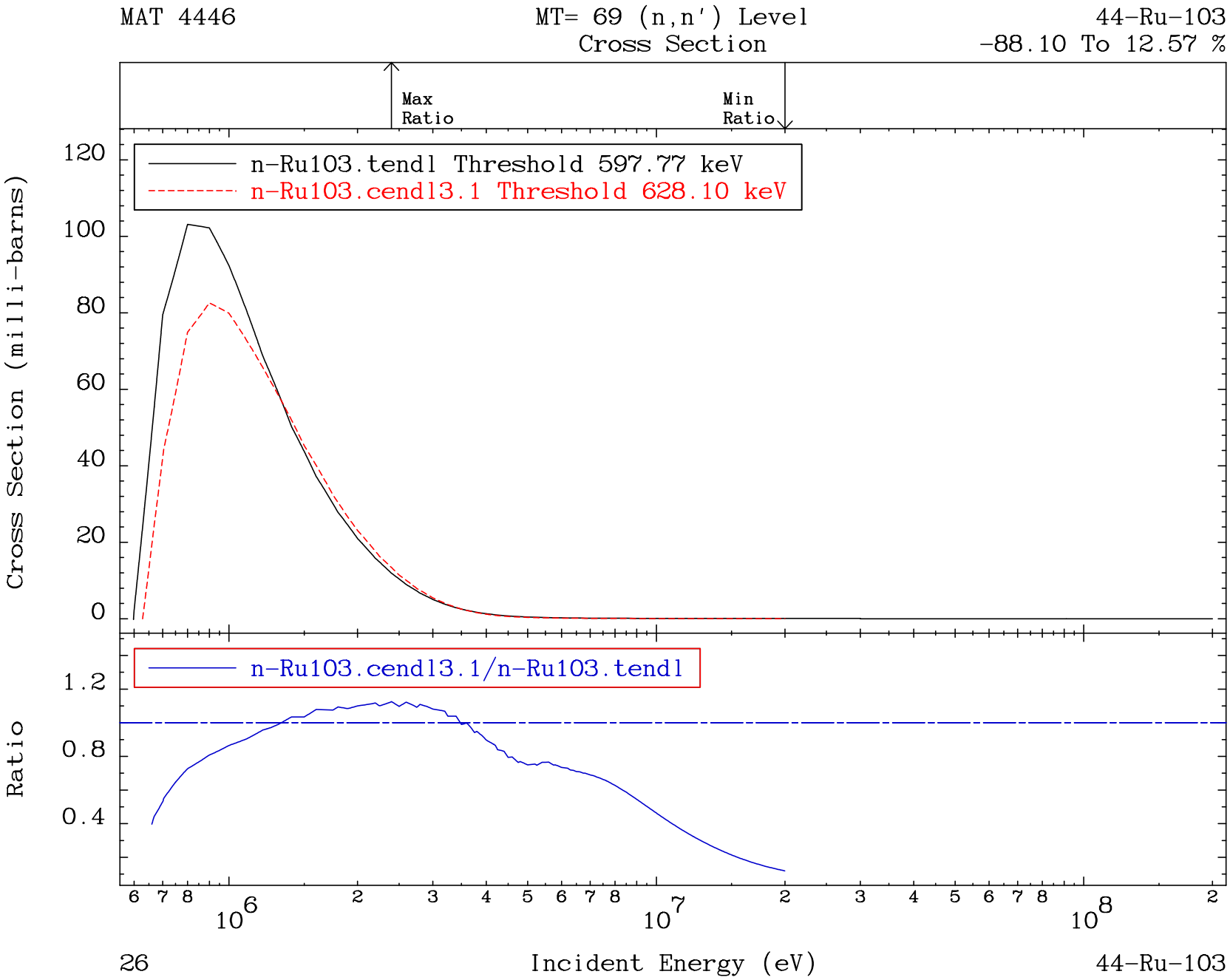

MAT 4446
MT= 64 (n,n') Level
Cross Section
44-Ru-103
-39.94 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 553.58 keV
n-Ru103.cendl3.1 Threshold 560.04 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^9
10^6
10^3
10^0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
44-Ru-103

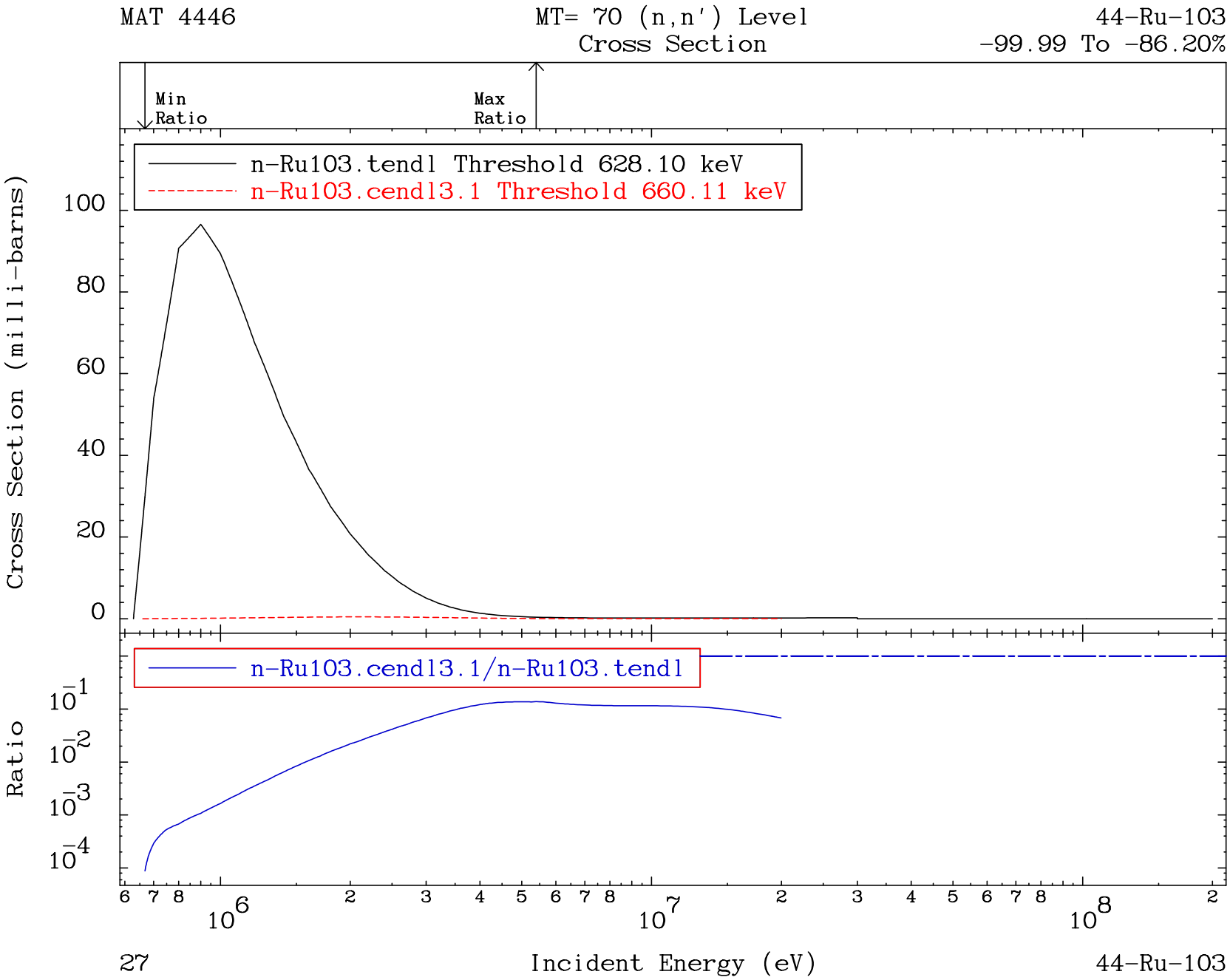

MAT 4446
MT= 65 (n,n') Level
Cross Section
44-Ru-103
-79.04 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 560.02 keV
n-Ru103.cendl3.1 Threshold 563.17 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
44-Ru-103

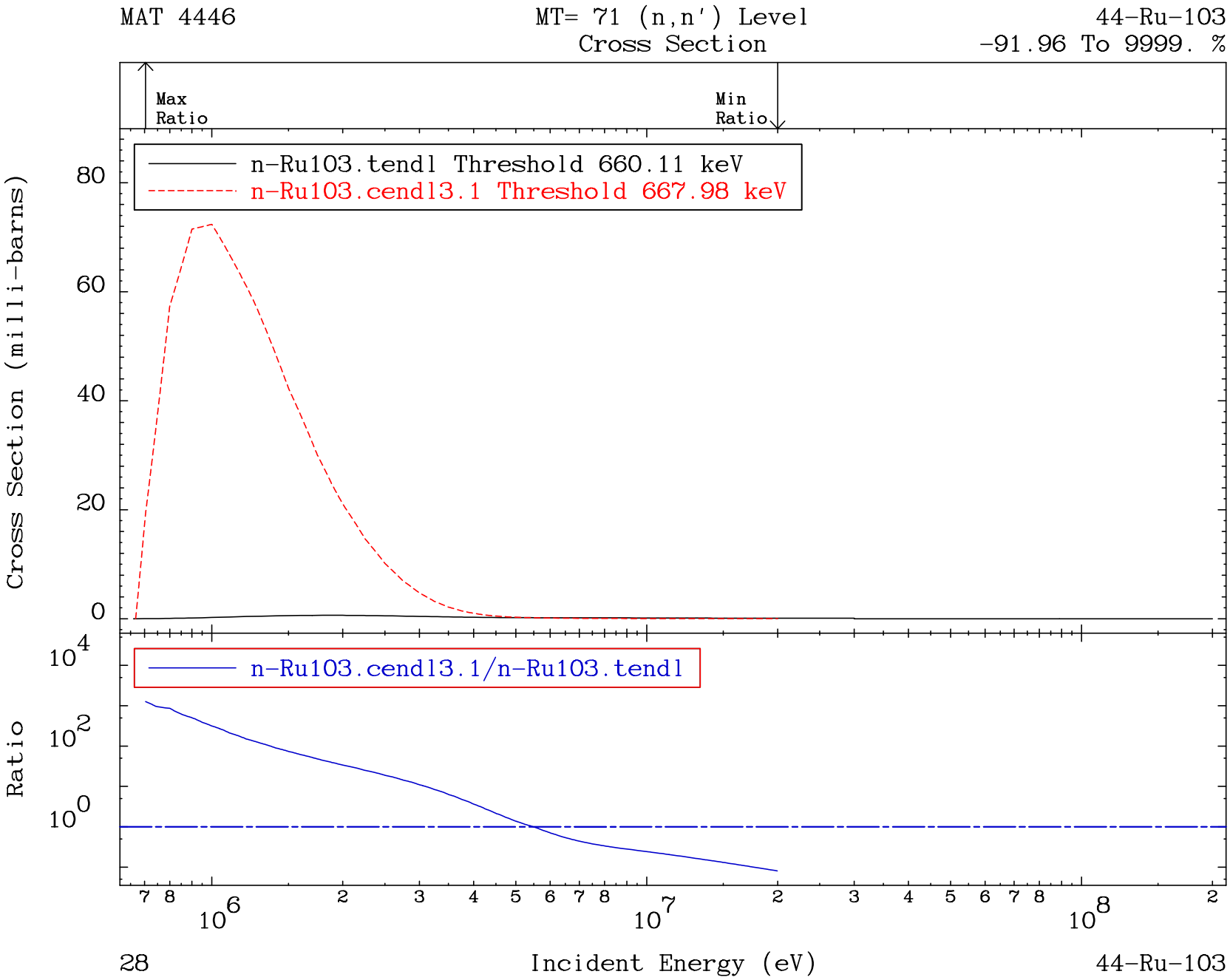

MAT 4446
MT= 66 (n,n') Level
Cross Section
44-Ru-103
-93.34 To 179.1 %
Max
Ratio
Min
Ratio
n-Ru103.tendl Threshold 563.17 keV
n-Ru103.cendl3.1 Threshold 568.42 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
4
10^{0}
4
10^{-1}
6 7 8
10^{6}
2 3 4 5 6 7 8
10^{7}
2 3 4 5 6 7 8
10^{8}
2
23
Incident Energy (eV)
44-Ru-103

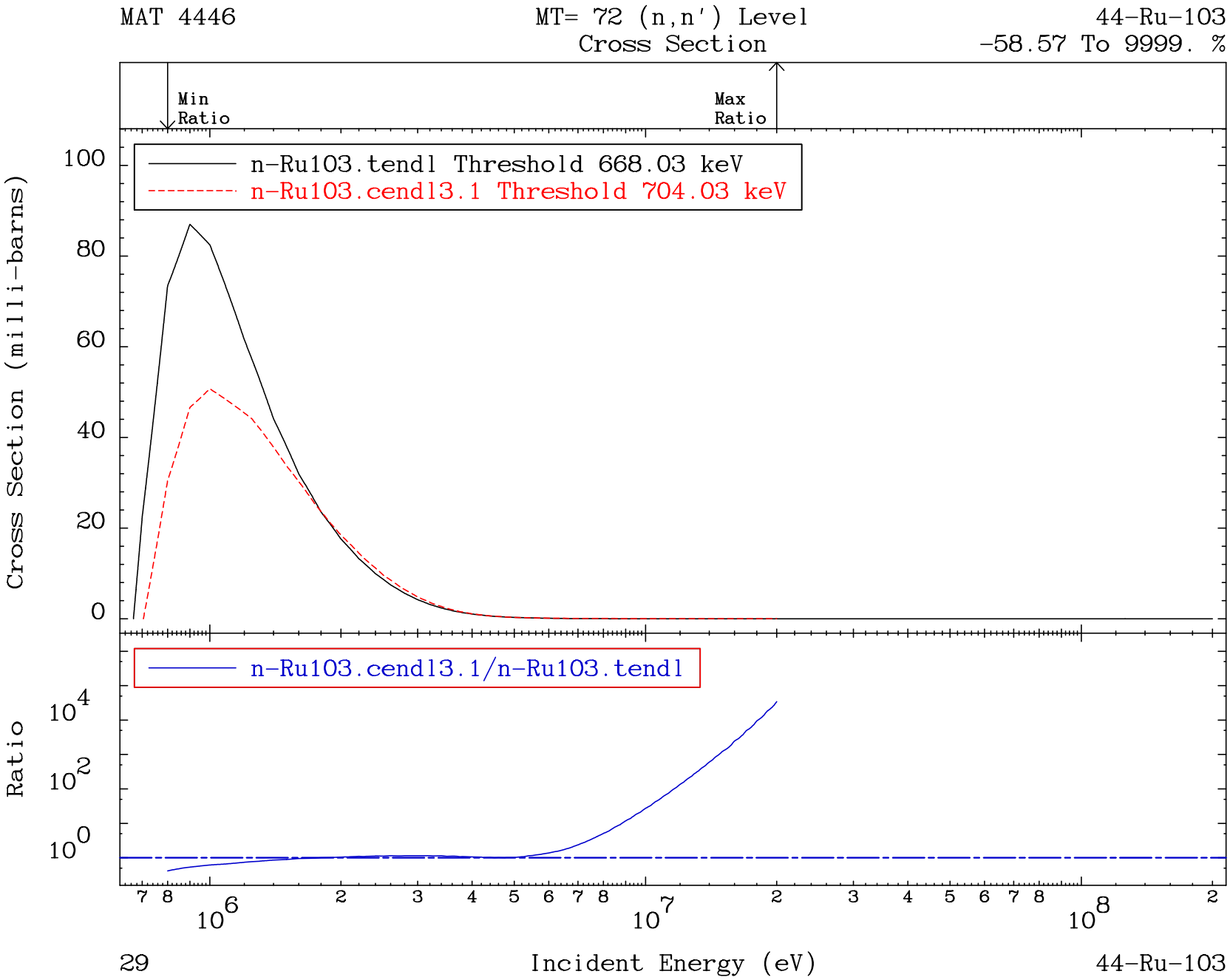

MAT 4446
MT= 67 (n,n') Level
Cross Section
44-Ru-103
-47.68 To 9999. %
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 568.39 keV
n-Ru103.cendl3.1 Threshold 573.77 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
44-Ru-103

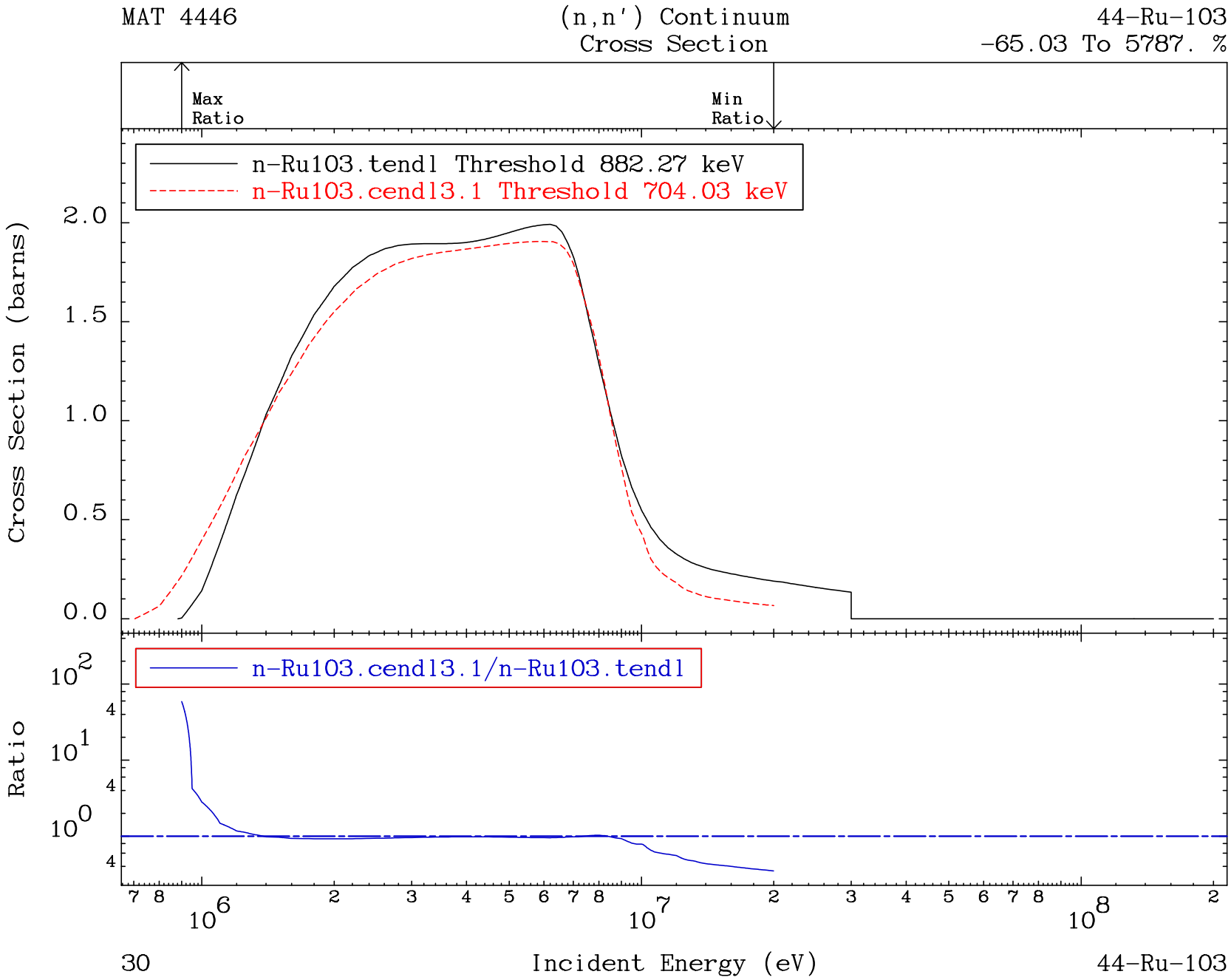

MAT 4446
MT= 68 (n,n') Level
Cross Section
44-Ru-103
-44.84 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 573.74 keV
n-Ru103.cendl3.1 Threshold 597.80 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
44-Ru-103

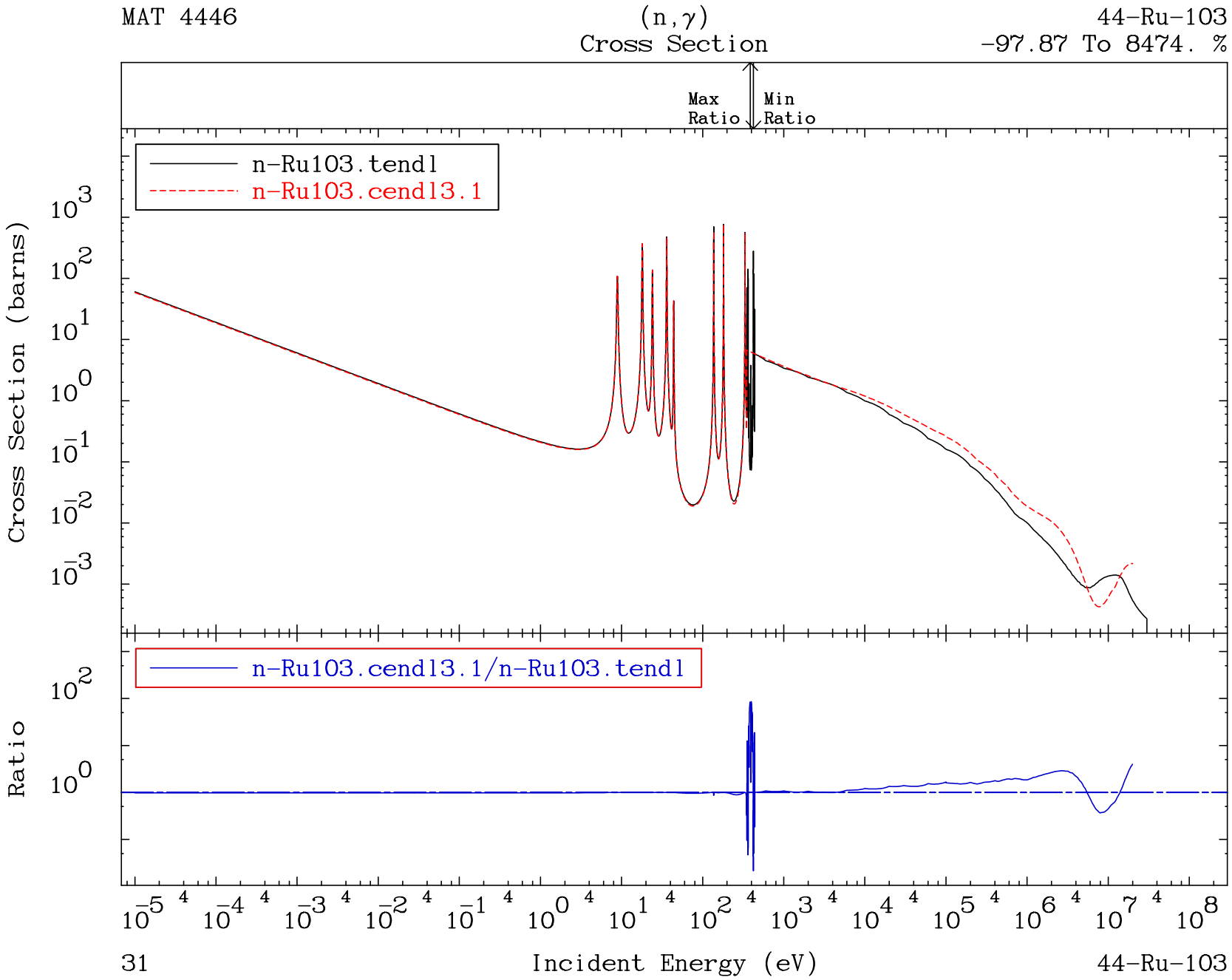

MAT 4446
MT= 69 (n,n') Level
Cross Section
44-Ru-103
-88.10 To 12.57 %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 597.77 keV
n-Ru103.cendl3.1 Threshold 628.10 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
1.2
0.8
0.4
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
44-Ru-103

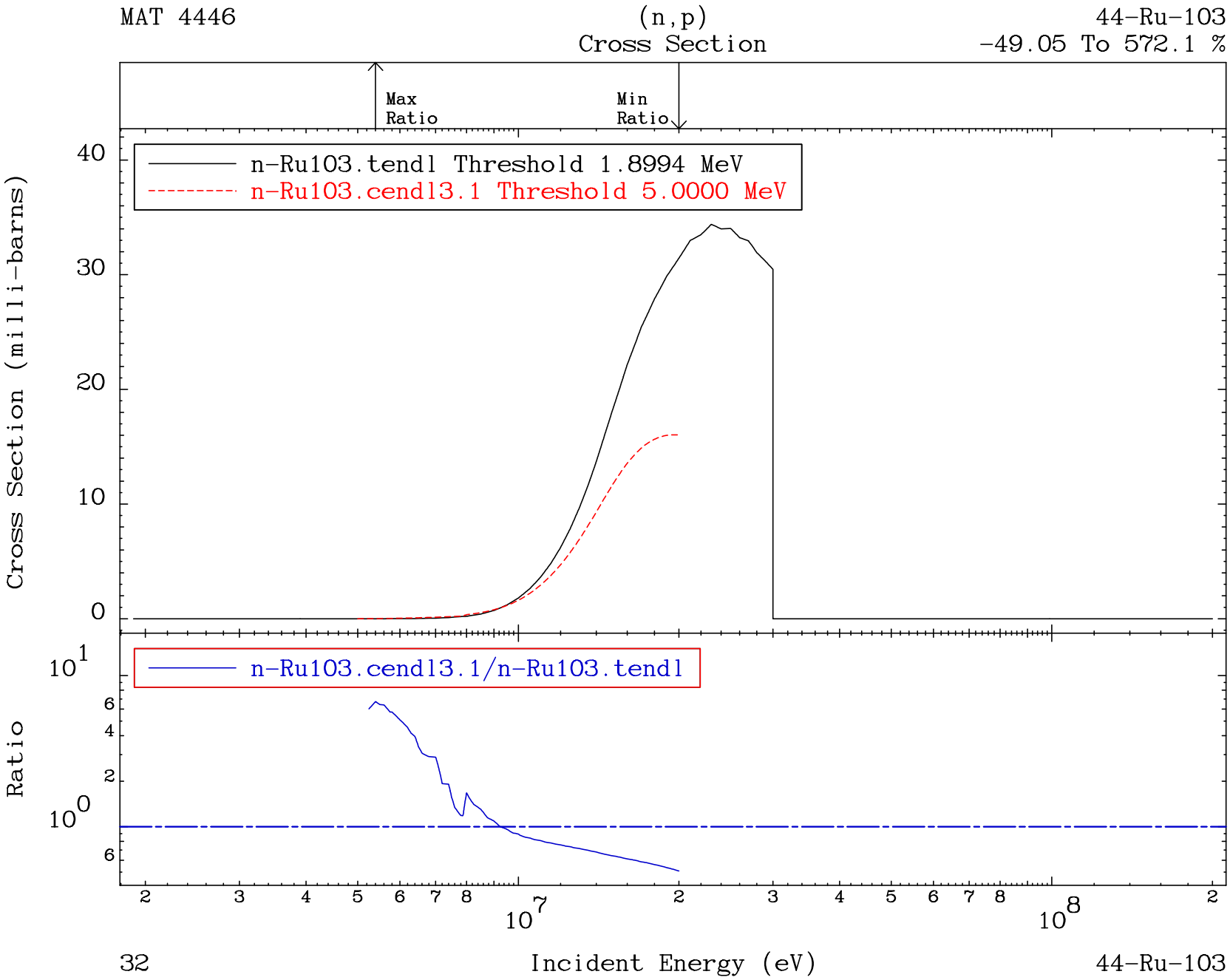

MAT 4446
MT= 70 (n,n') Level
Cross Section
44-Ru-103
-99.99 To -86.20%
Min
Ratio
Max
Ratio
n-Ru103.tendl Threshold 628.10 keV
n-Ru103.cendl3.1 Threshold 660.11 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^-1
10^-2
10^-3
10^-4
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
44-Ru-103

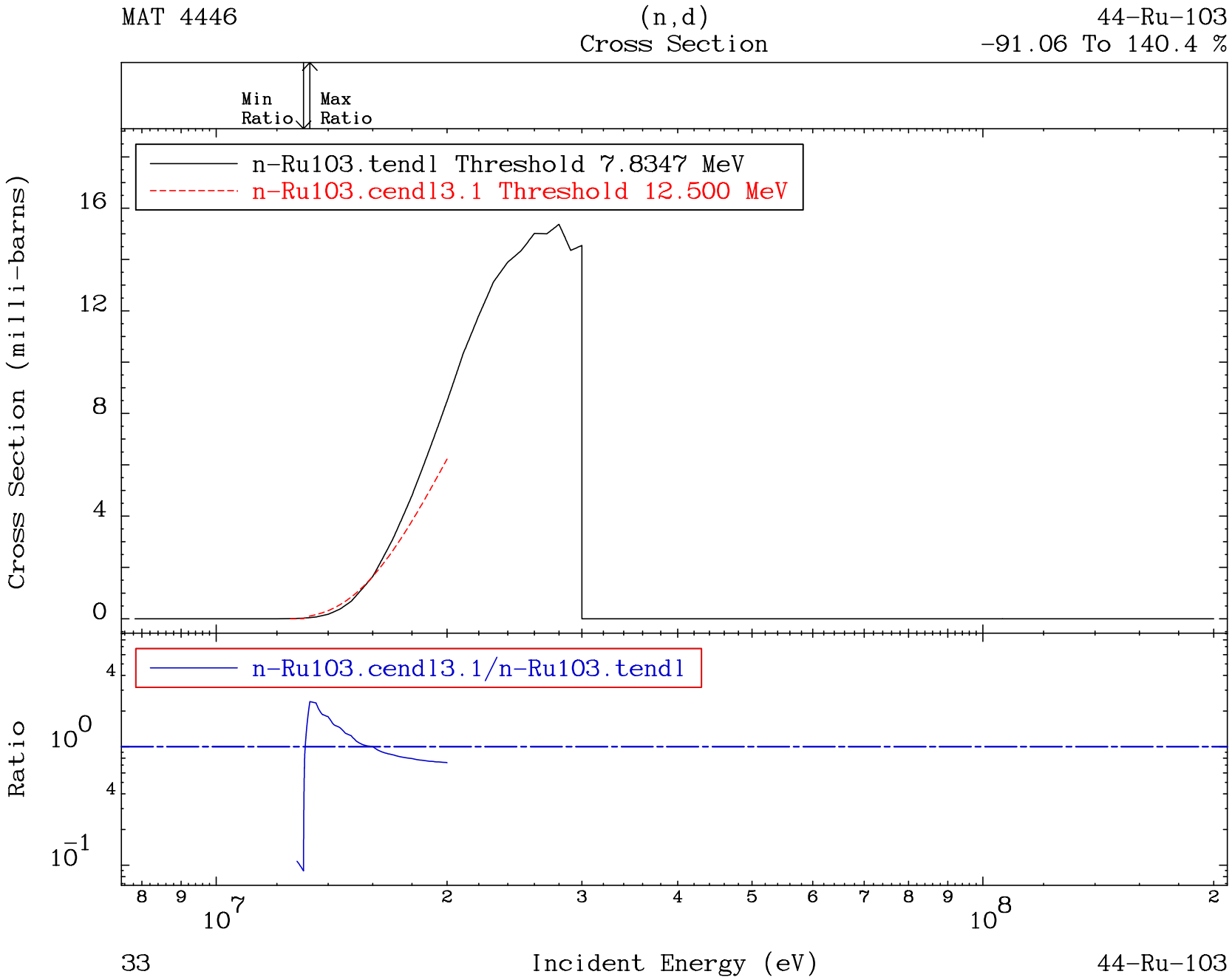

MAT 4446
MT= 71 (n,n') Level
Cross Section
44-Ru-103
-91.96 To 9999. %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 660.11 keV
n-Ru103.cendl3.1 Threshold 667.98 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
44-Ru-103

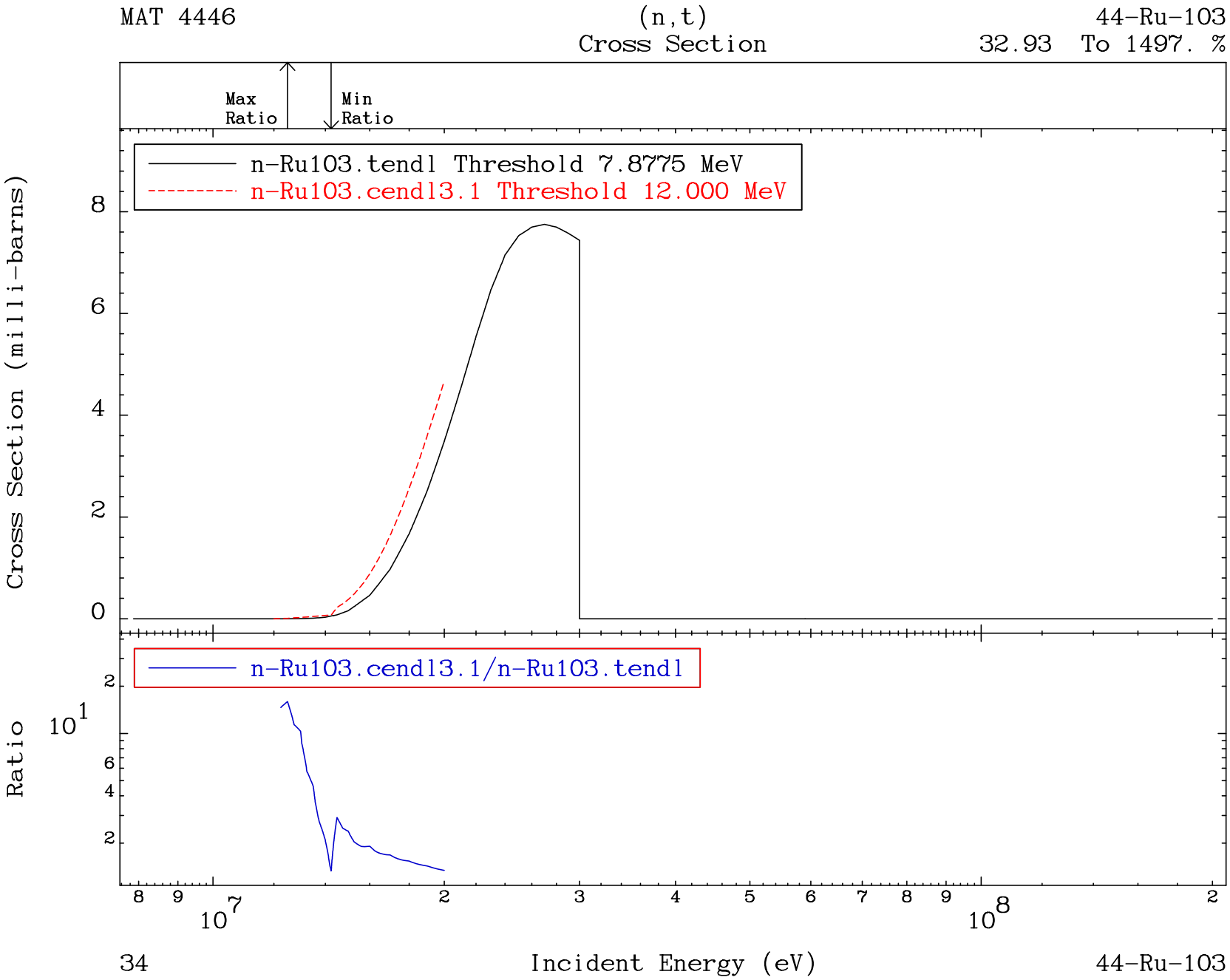

MAT 4446
MT= 72 (n,n') Level
Cross Section
44-Ru-103
-58.57 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 668.03 keV
n-Ru103.cendl3.1 Threshold 704.03 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
44-Ru-103

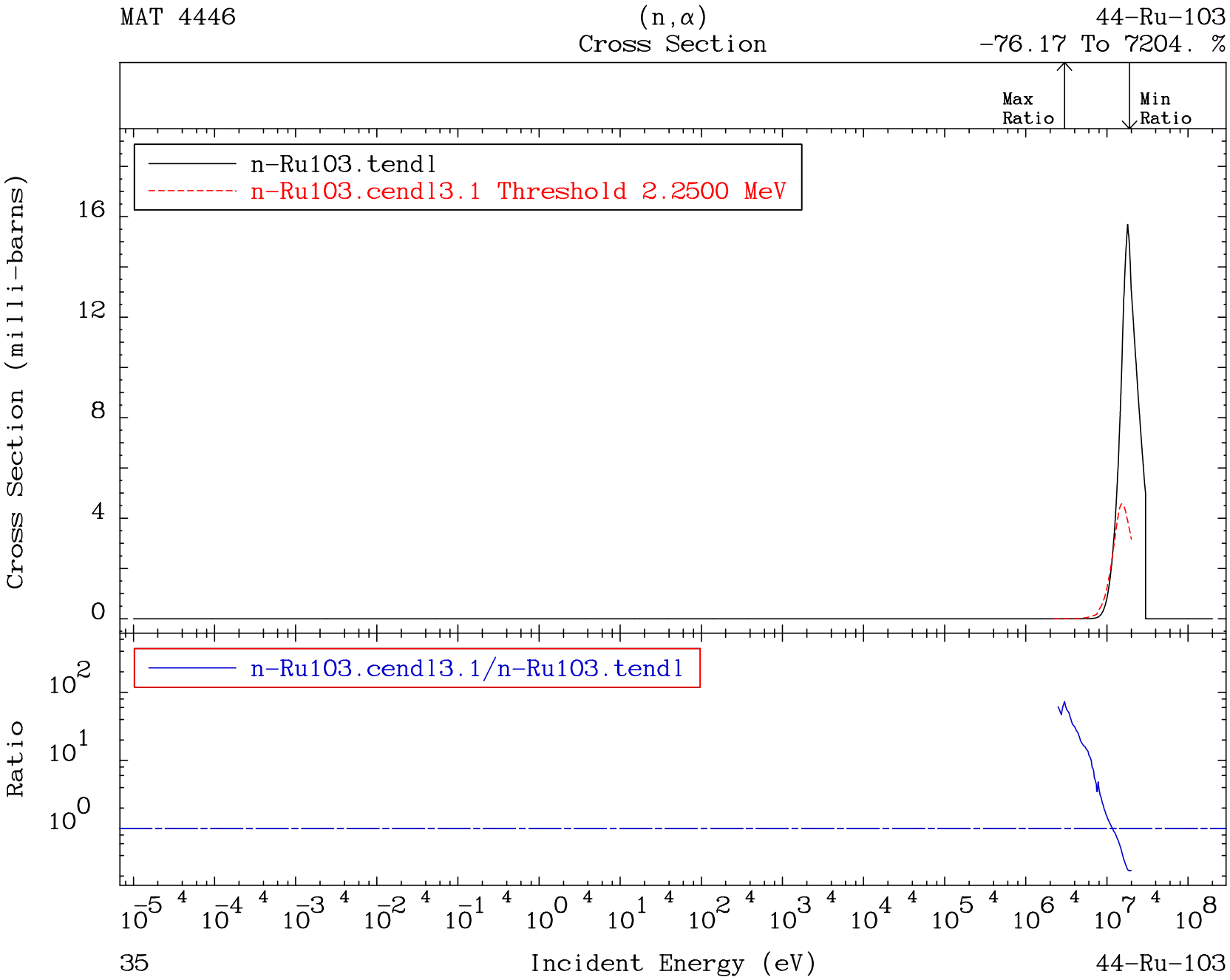

MAT 4446
(n,n') Continuum
Cross Section
44-Ru-103
-65.03 To 5787. %
Max
Ratio
Min
Ratio
n-Ru103.tendl Threshold 882.27 keV
n-Ru103.cendl3.1 Threshold 704.03 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^2
10^1
10^0
4
4
4
7 8
10^6
2
3
4
5
6
7 8
10^7
2
3
4
5
6
7 8
10^8
2
30
Incident Energy (eV)
44-Ru-103

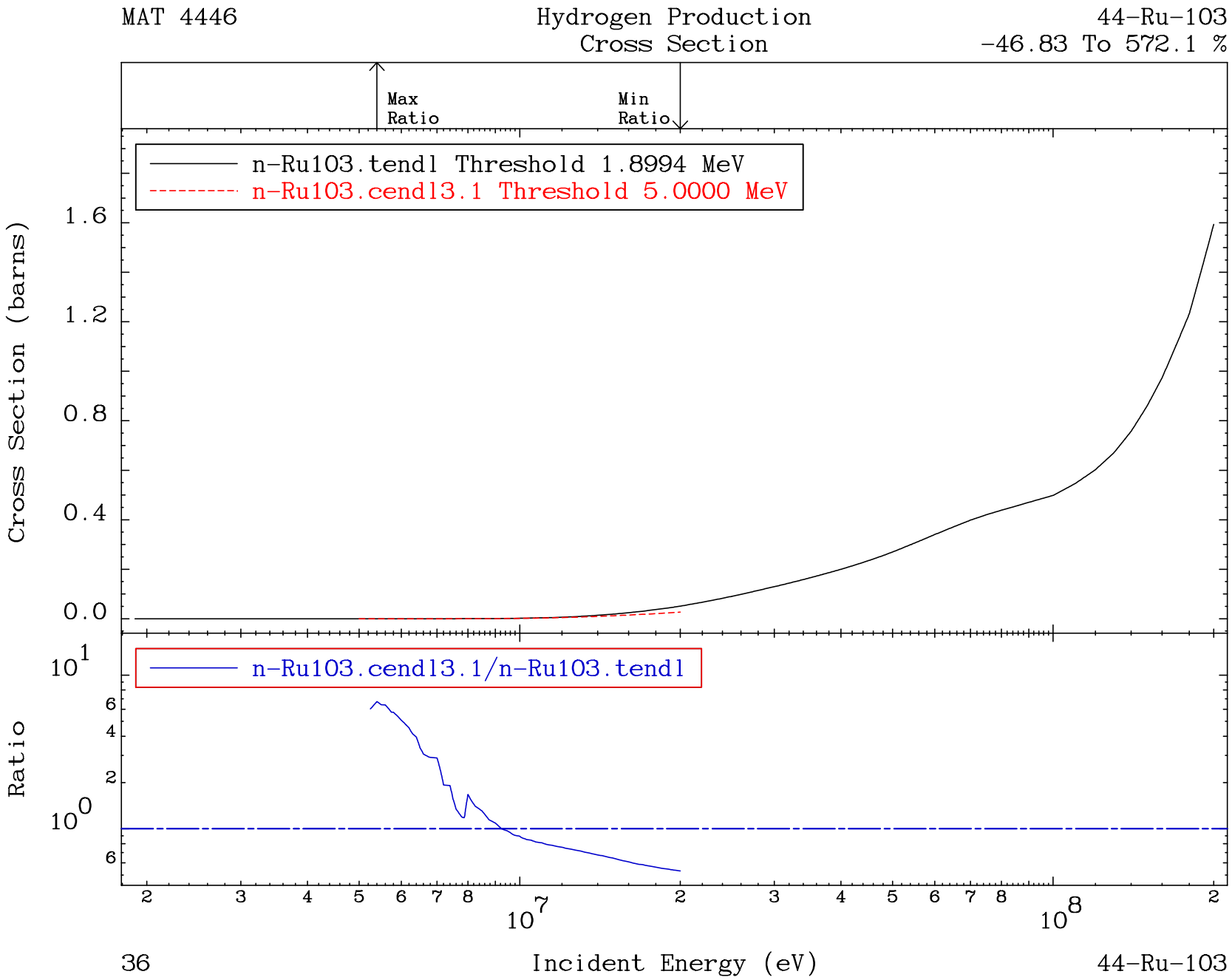

MAT 4446
(n,γ)
Cross Section
44-Ru-103
-97.87 To 8474. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
31
44-Ru-103

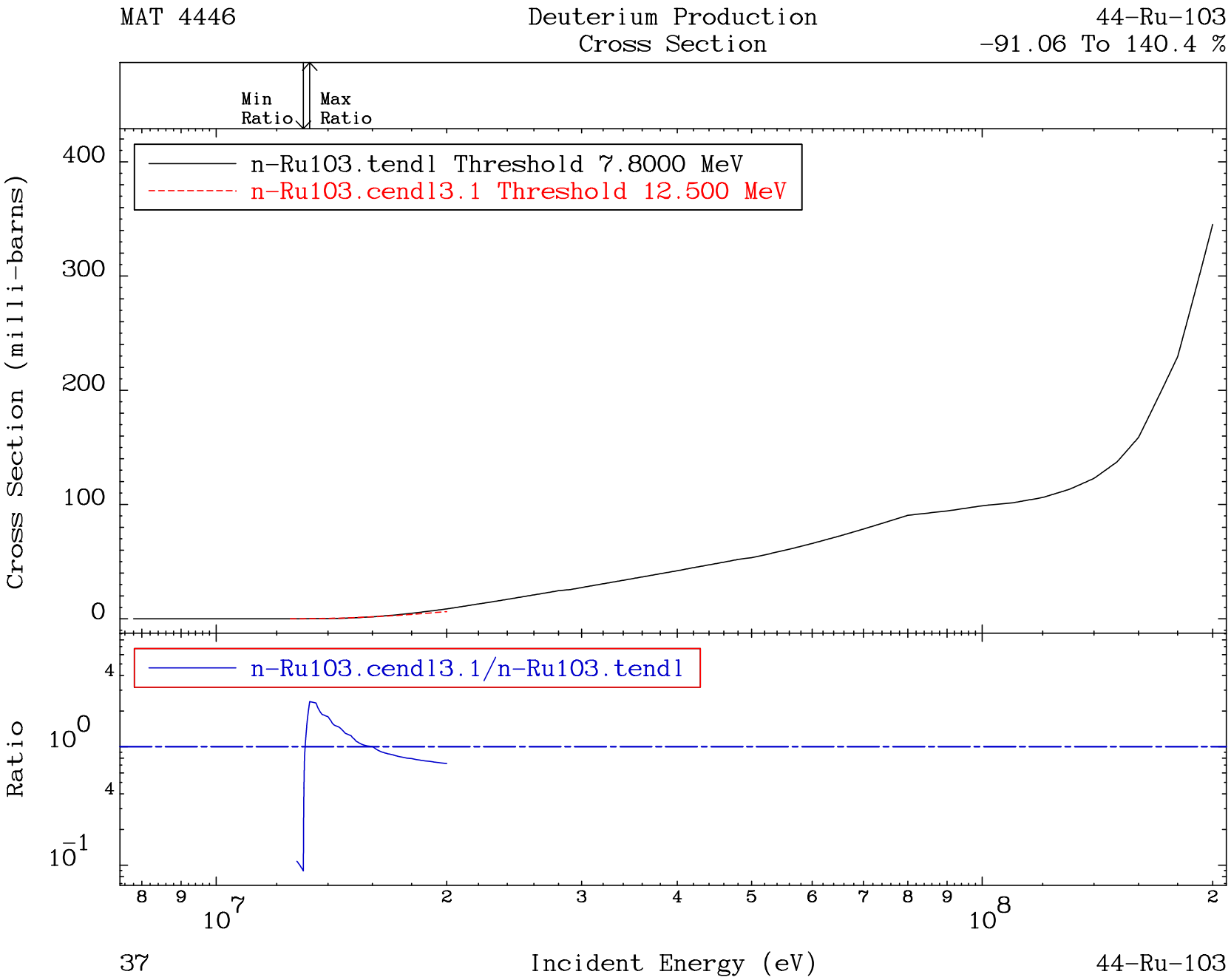

MAT 4446
(n,p)
Cross Section
44-Ru-103
-49.05 To 572.1 %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 1.8994 MeV
n-Ru103.cendl3.1 Threshold 5.0000 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^1
10^0
6
4
2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
44-Ru-103

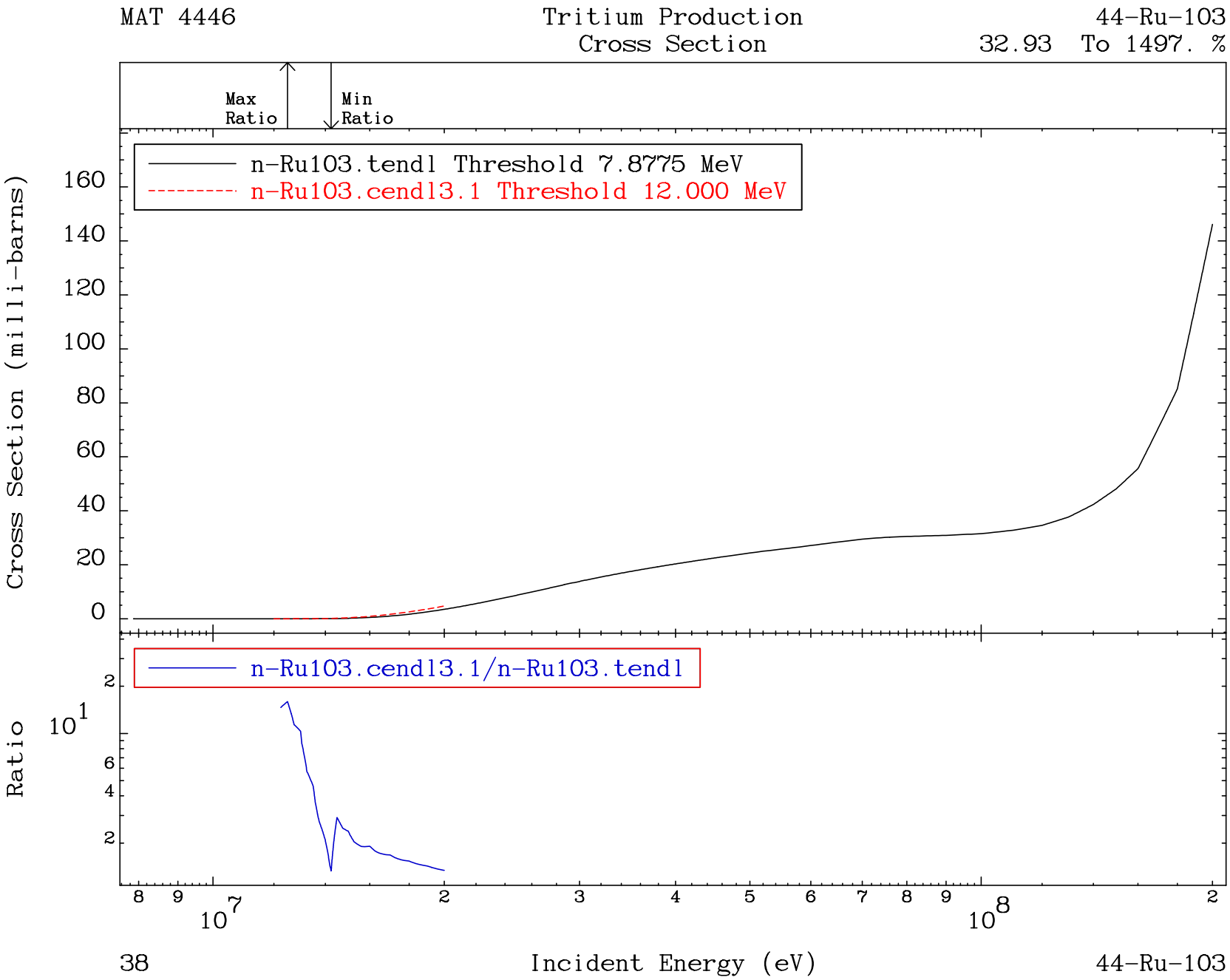

MAT 4446
(n,d)
Cross Section
44-Ru-103
-91.06 To 140.4 %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 7.8347 MeV
n-Ru103.cendl3.1 Threshold 12.500 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
4
10^0
4
10^-1
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
44-Ru-103

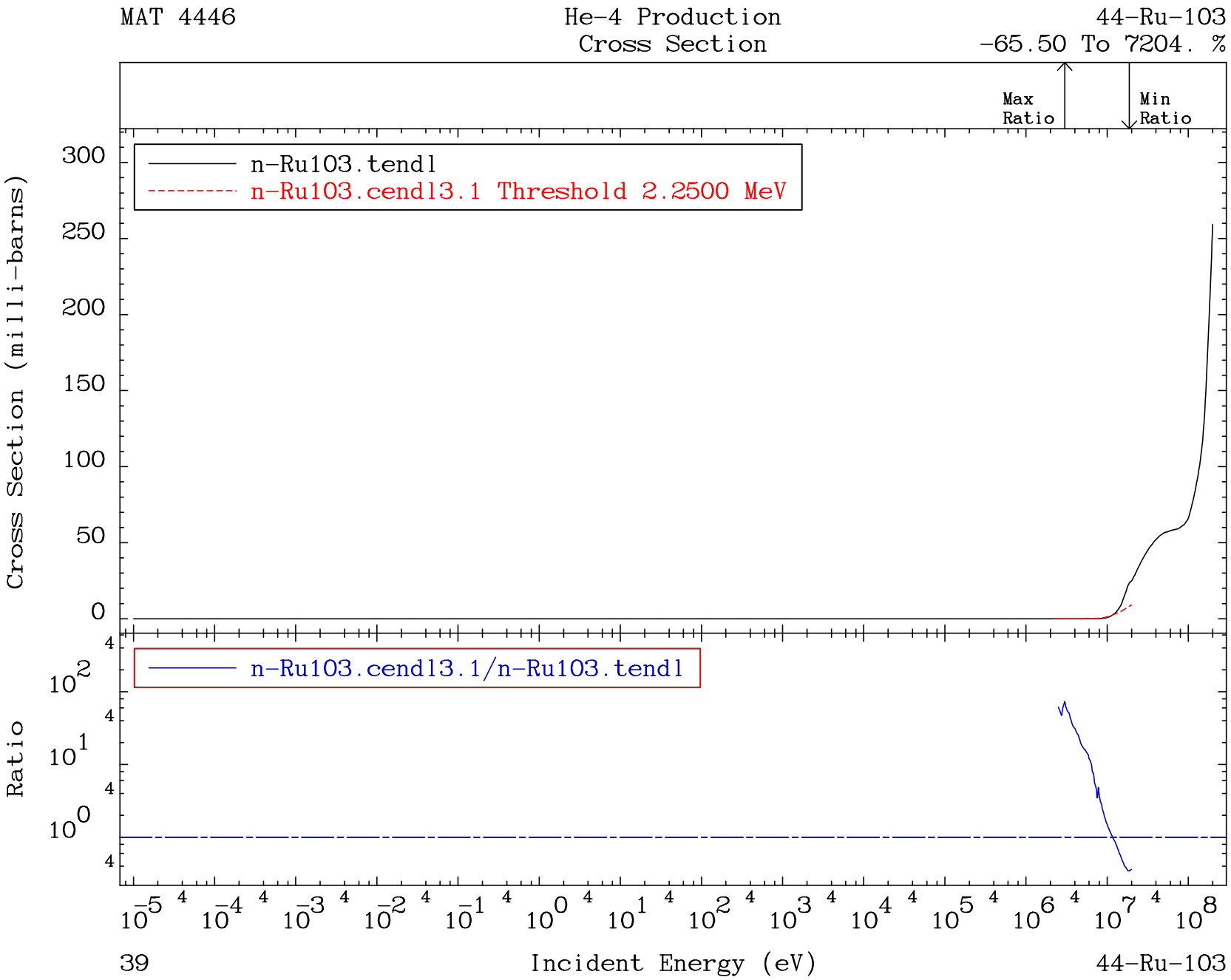

MAT 4446
(n,t)
Cross Section
44-Ru-103
32.93 To 1497. %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 7.8775 MeV
n-Ru103.cendl3.1 Threshold 12.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^1
2
6
4
2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
44-Ru-103

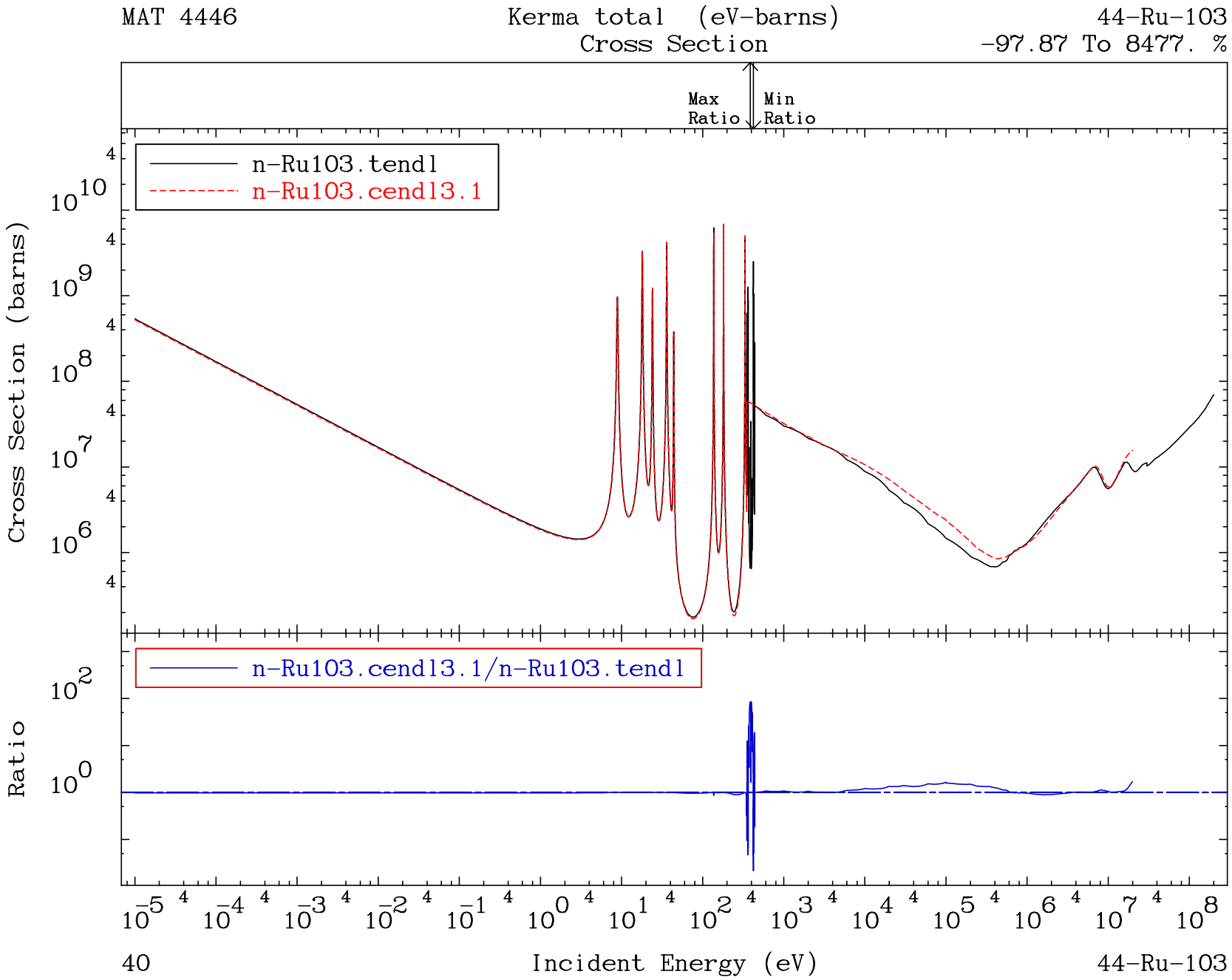

MAT 4446
(n,α)
Cross Section
44-Ru-103
-76.17 To 7204. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1 Threshold 2.2500 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^2
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
44-Ru-103

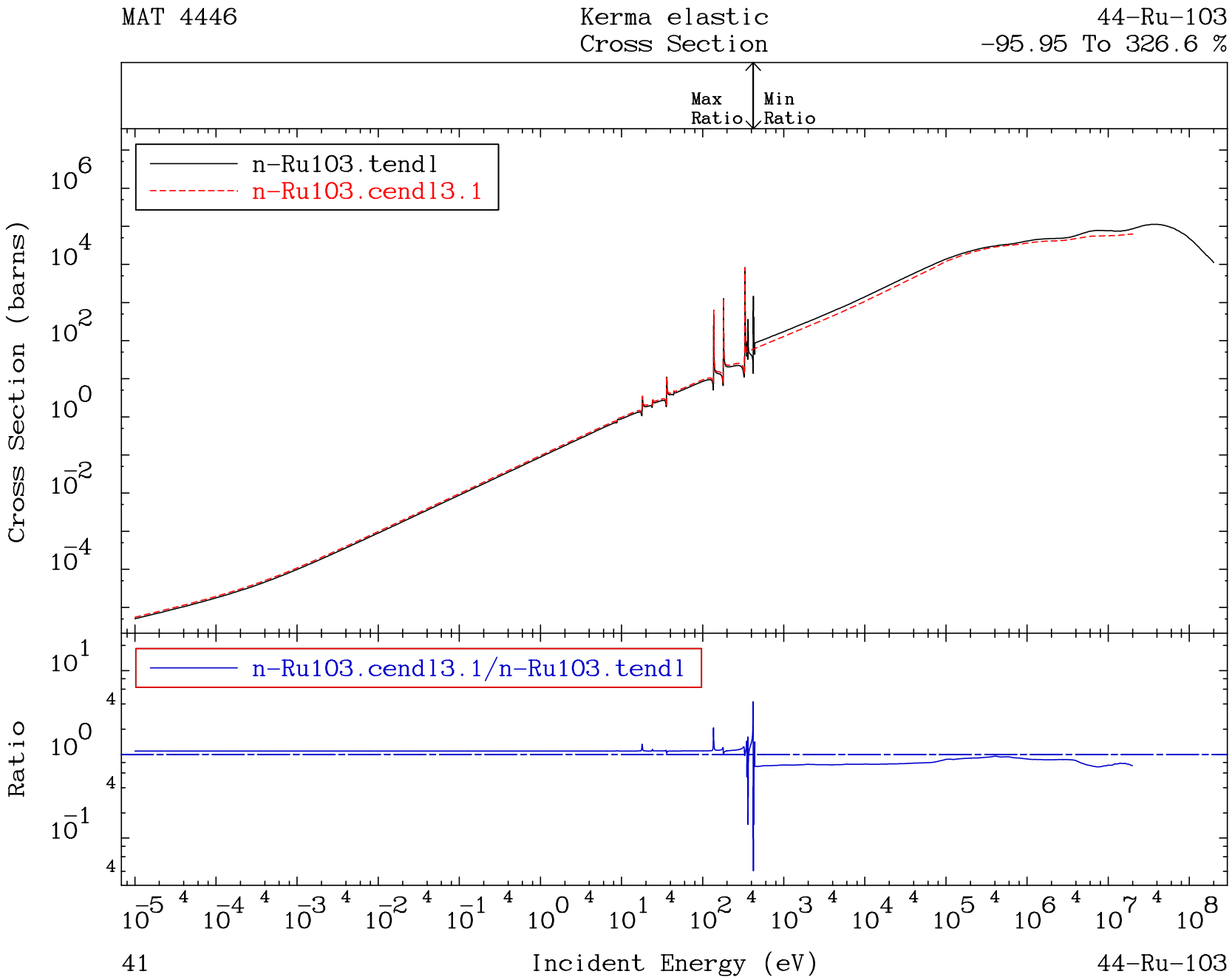

MAT 4446
Hydrogen Production
Cross Section
44-Ru-103
-46.83 To 572.1 %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 1.8994 MeV
n-Ru103.cendl3.1 Threshold 5.0000 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^1
10^0
6
4
2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
44-Ru-103

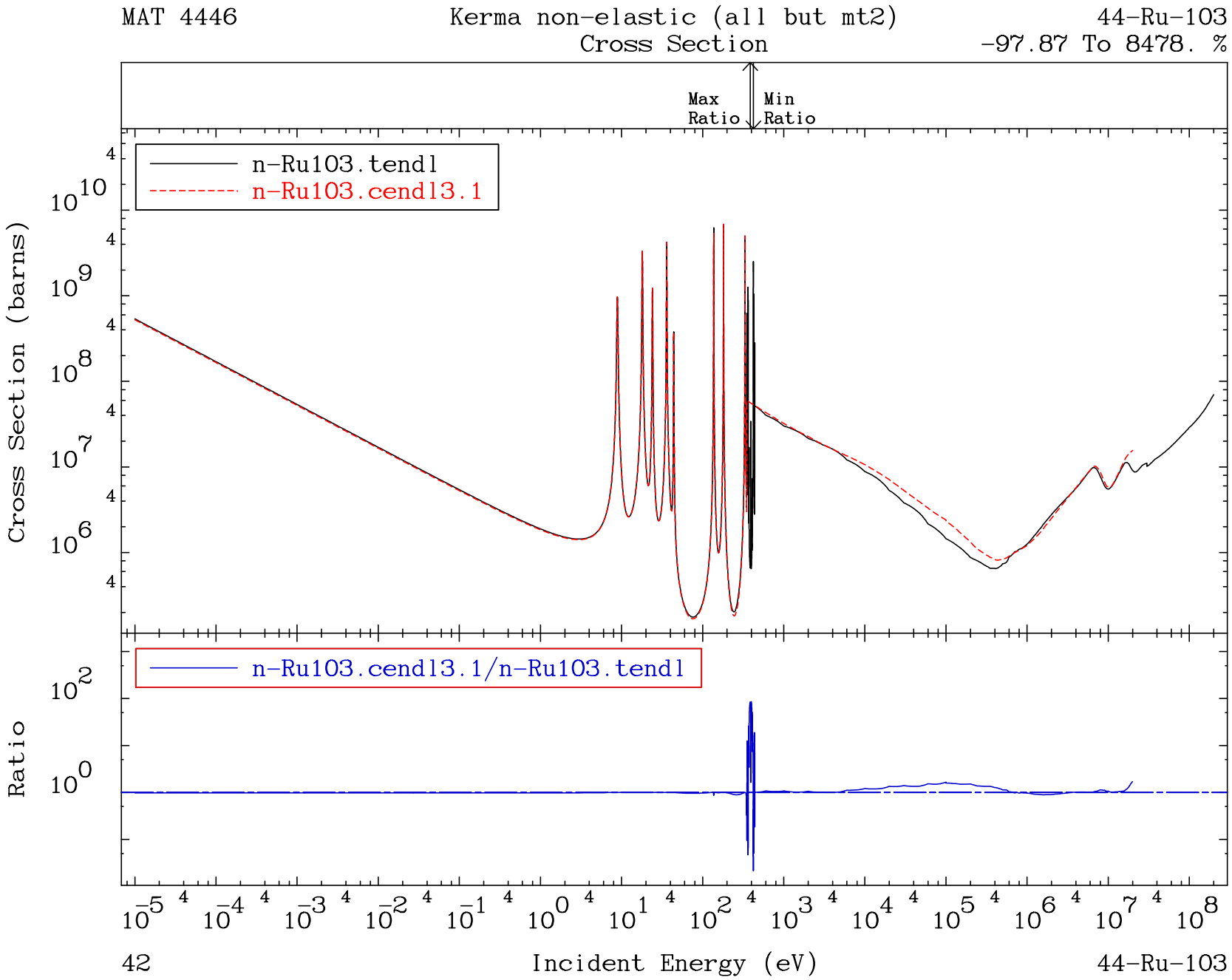

MAT 4446
Deuterium Production
Cross Section
44-Ru-103
-91.06 To 140.4 %
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 7.8000 MeV
n-Ru103.cendl3.1 Threshold 12.500 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
4
10^0
4
10^{-1}
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
44-Ru-103

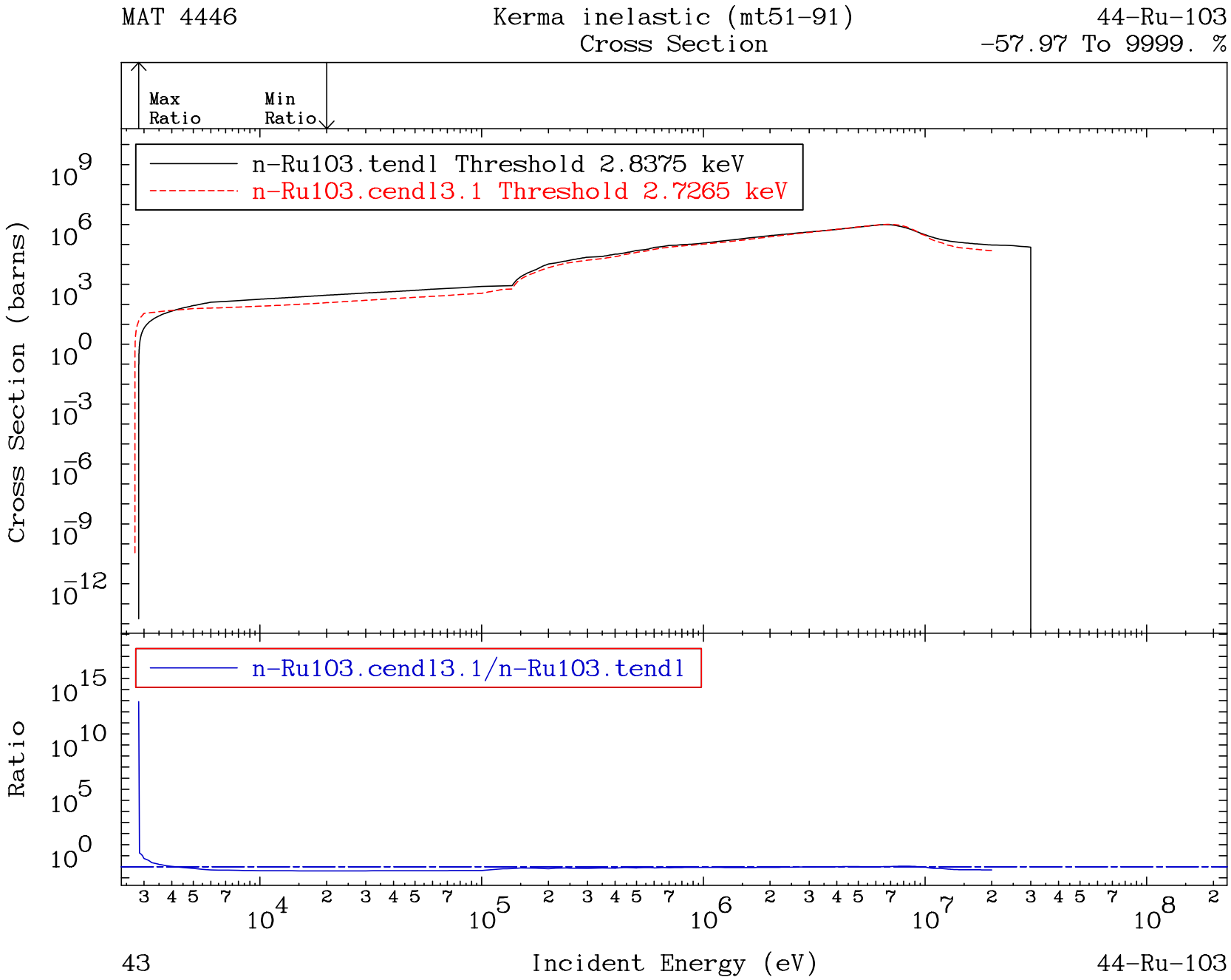

MAT 4446
Tritium Production
Cross Section
44-Ru-103
32.93 To 1497. %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 7.8775 MeV
n-Ru103.cendl3.1 Threshold 12.000 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^1
2
6
4
2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
44-Ru-103

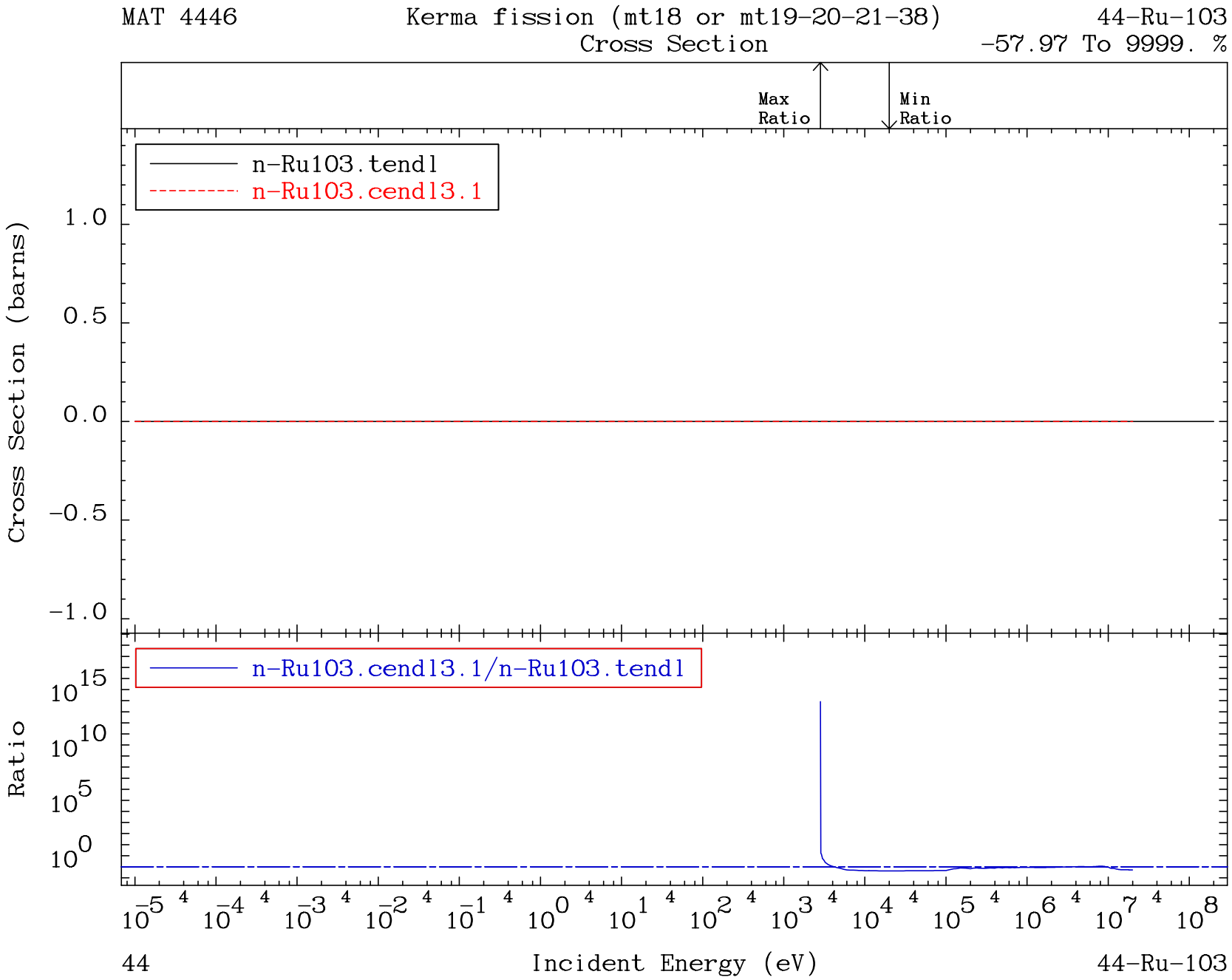

MAT 4446
He-4 Production
Cross Section
44-Ru-103
-65.50 To 7204. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1 Threshold 2.2500 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^{2}
10^{1}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
39
Incident Energy (eV)
44-Ru-103

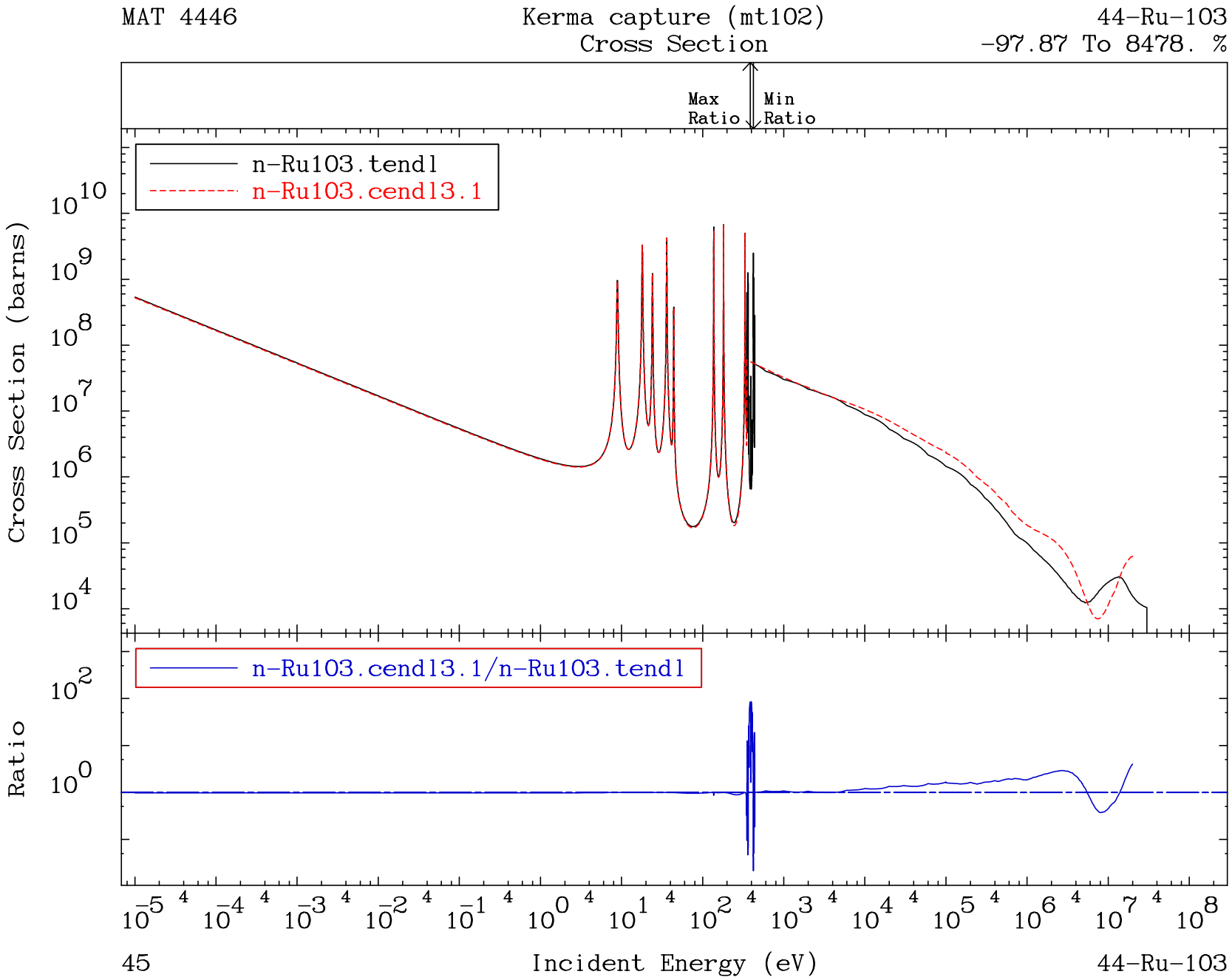

MAT 4446
Kerma total (eV-barns)
Cross Section
44-Ru-103
-97.87 To 8477. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
40
44-Ru-103

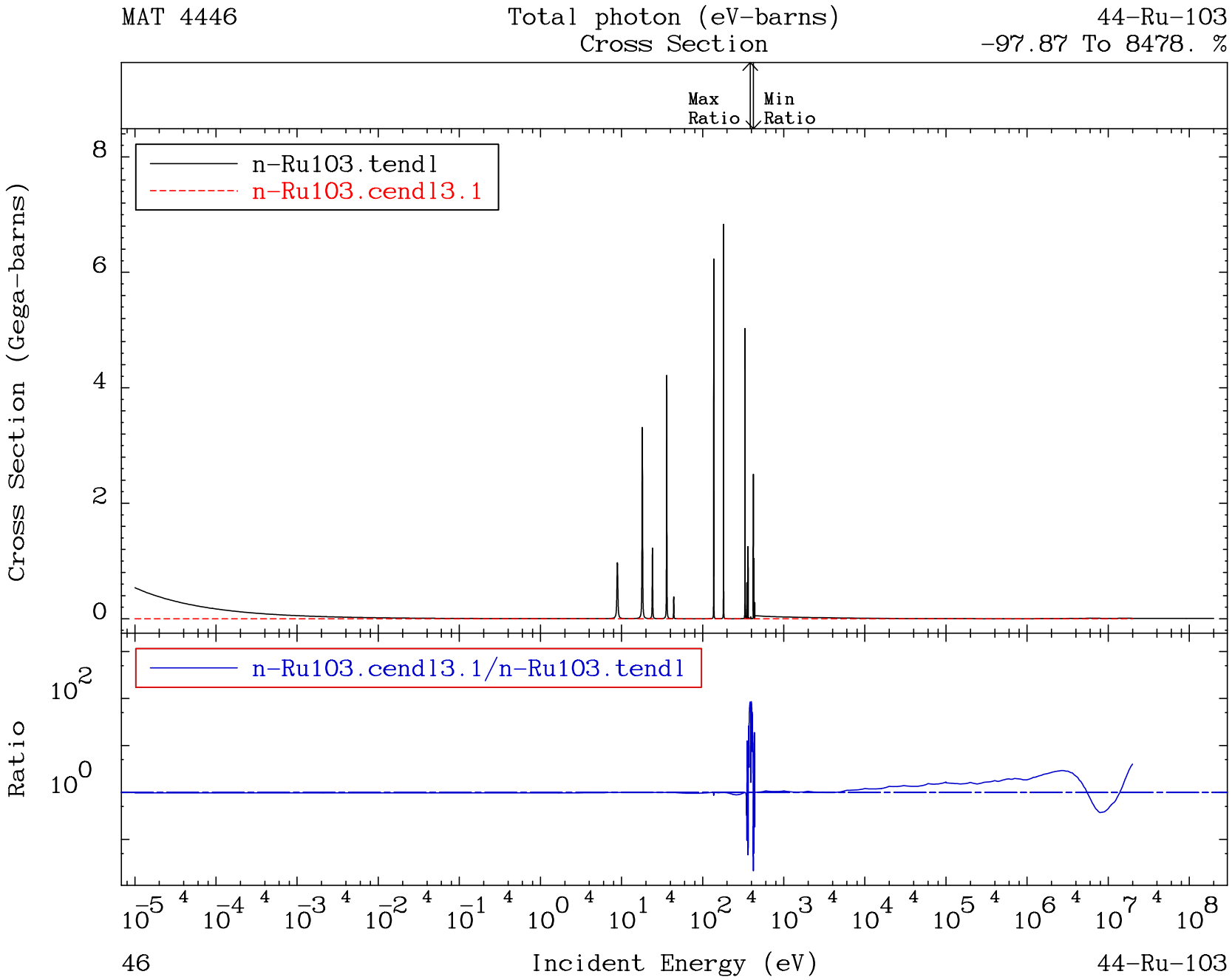

MAT 4446
Kerma elastic
Cross Section
44-Ru-103
-95.95 To 326.6 %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
41
44-Ru-103

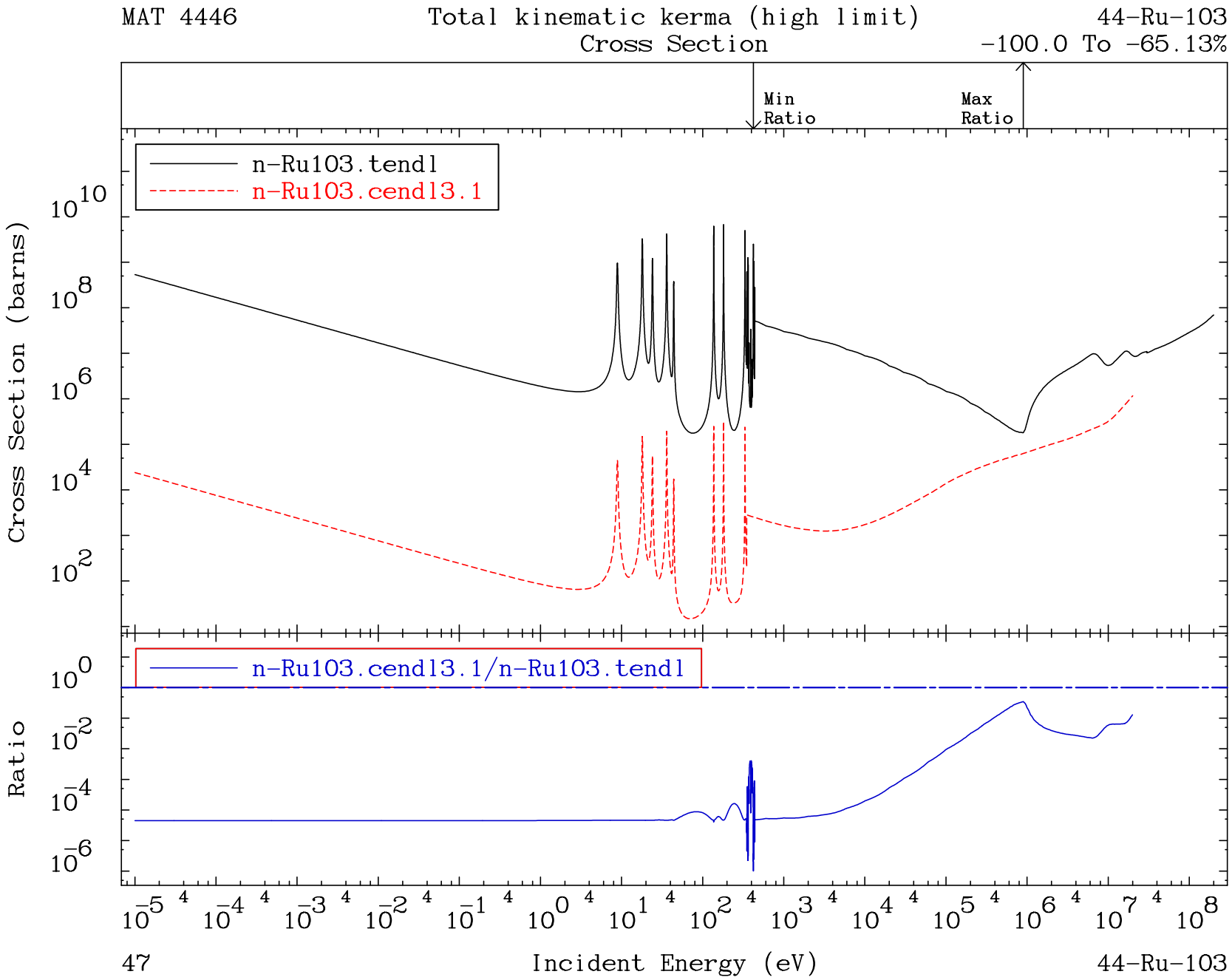

MAT 4446
Kerma non-elastic (all but mt2)
Cross Section
44-Ru-103
-97.87 To 8478. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
42
44-Ru-103

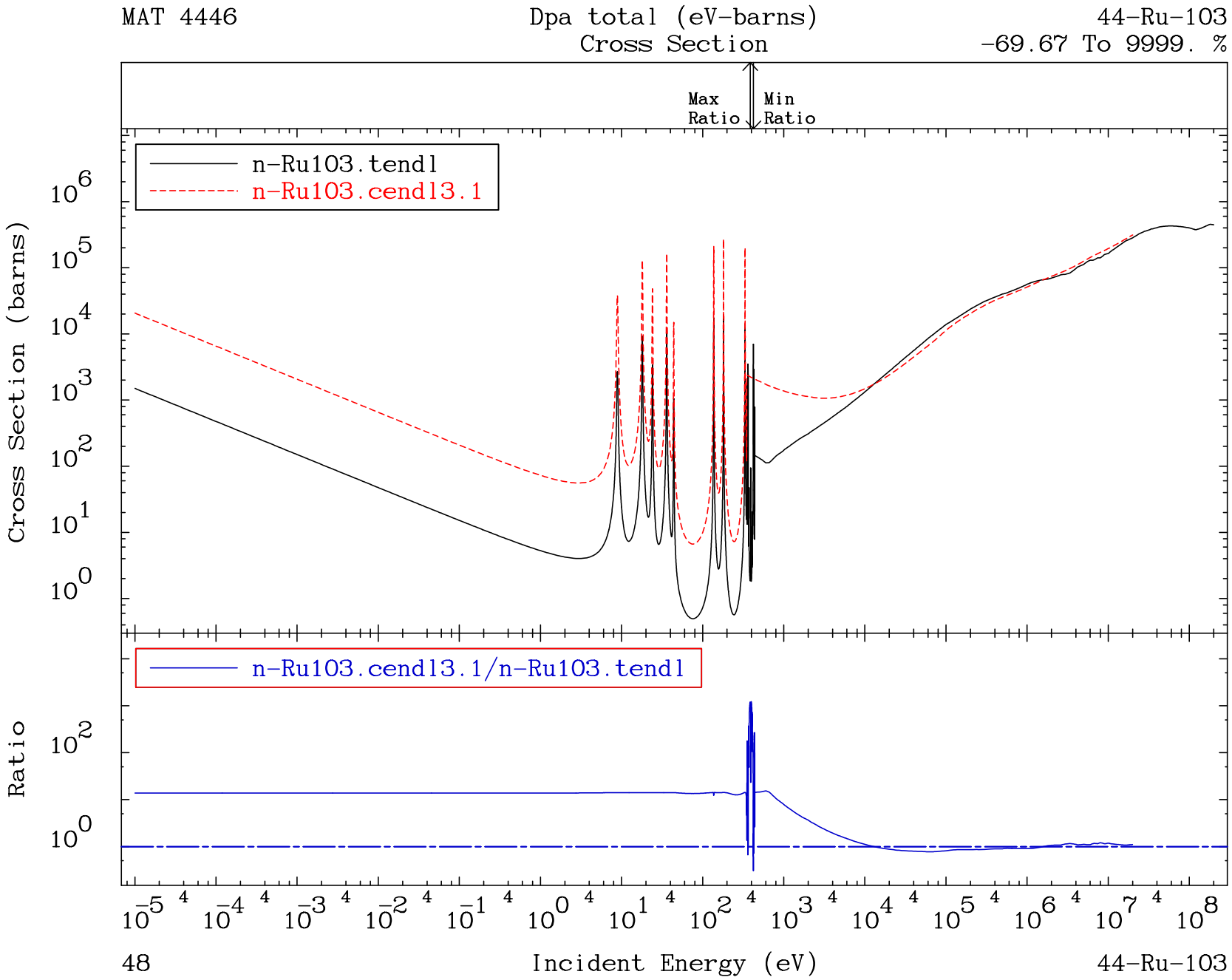

MAT 4446
Kerma inelastic (mt51-91)
Cross Section
44-Ru-103
-57.97 To 9999. %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 2.8375 keV
n-Ru103.cendl3.1 Threshold 2.7265 keV
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
43
44-Ru-103

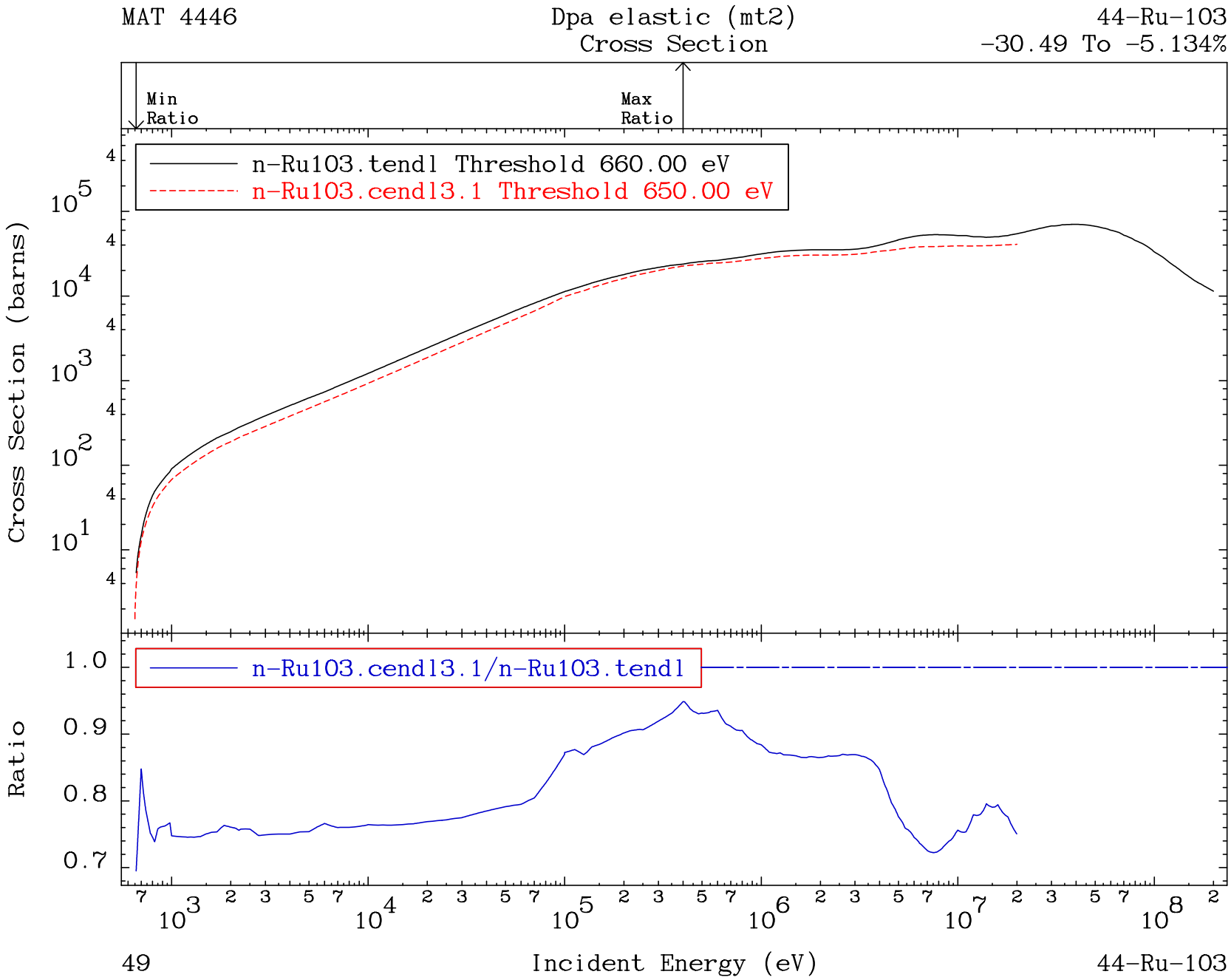

MAT 4446
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
44-Ru-103
-57.97 To 9999. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^15
10^10
10^5
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
44
Incident Energy (eV)
44-Ru-103

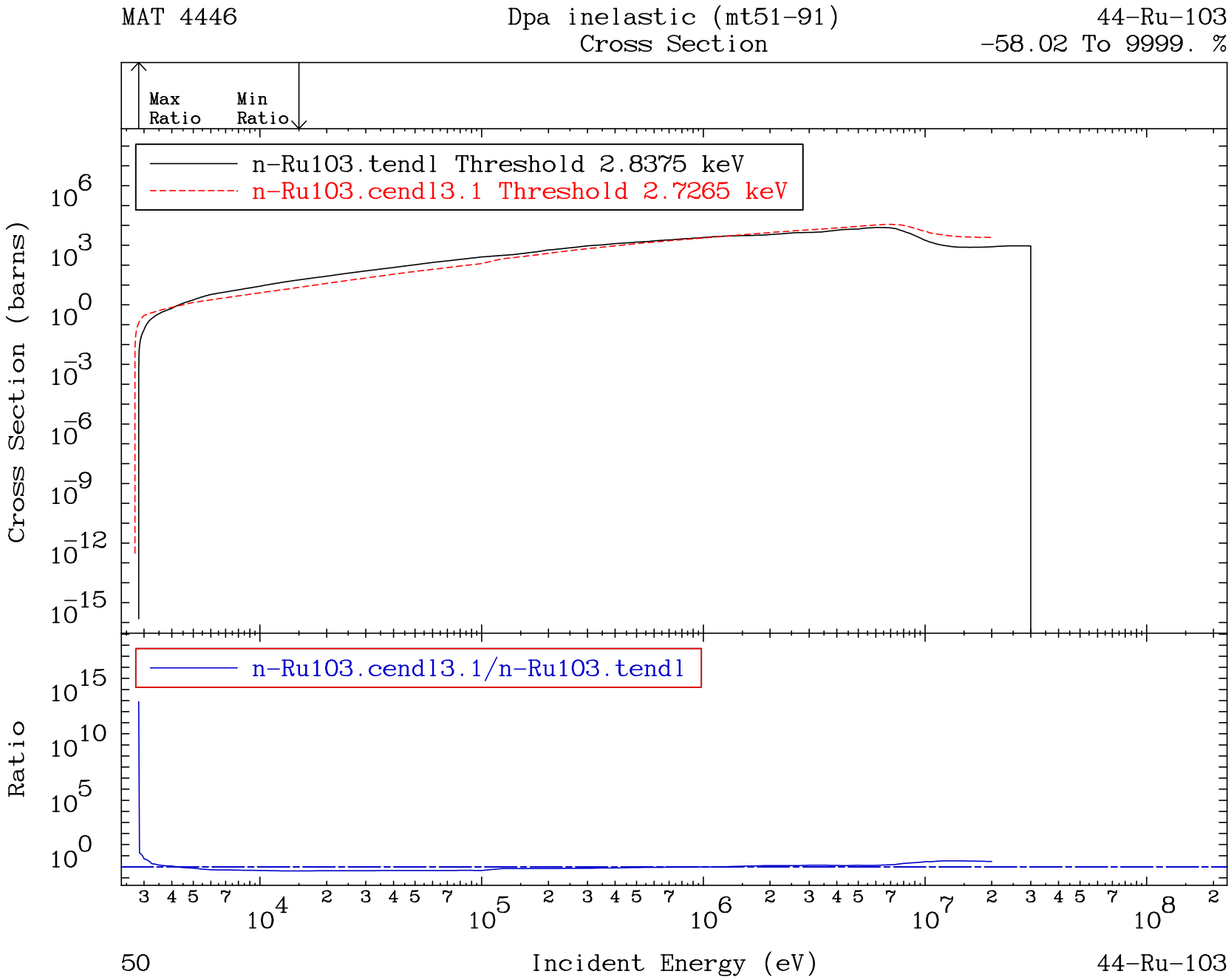

MAT 4446
Kerma capture (mt102)
Cross Section
44-Ru-103
-97.87 To 8478. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
45
44-Ru-103

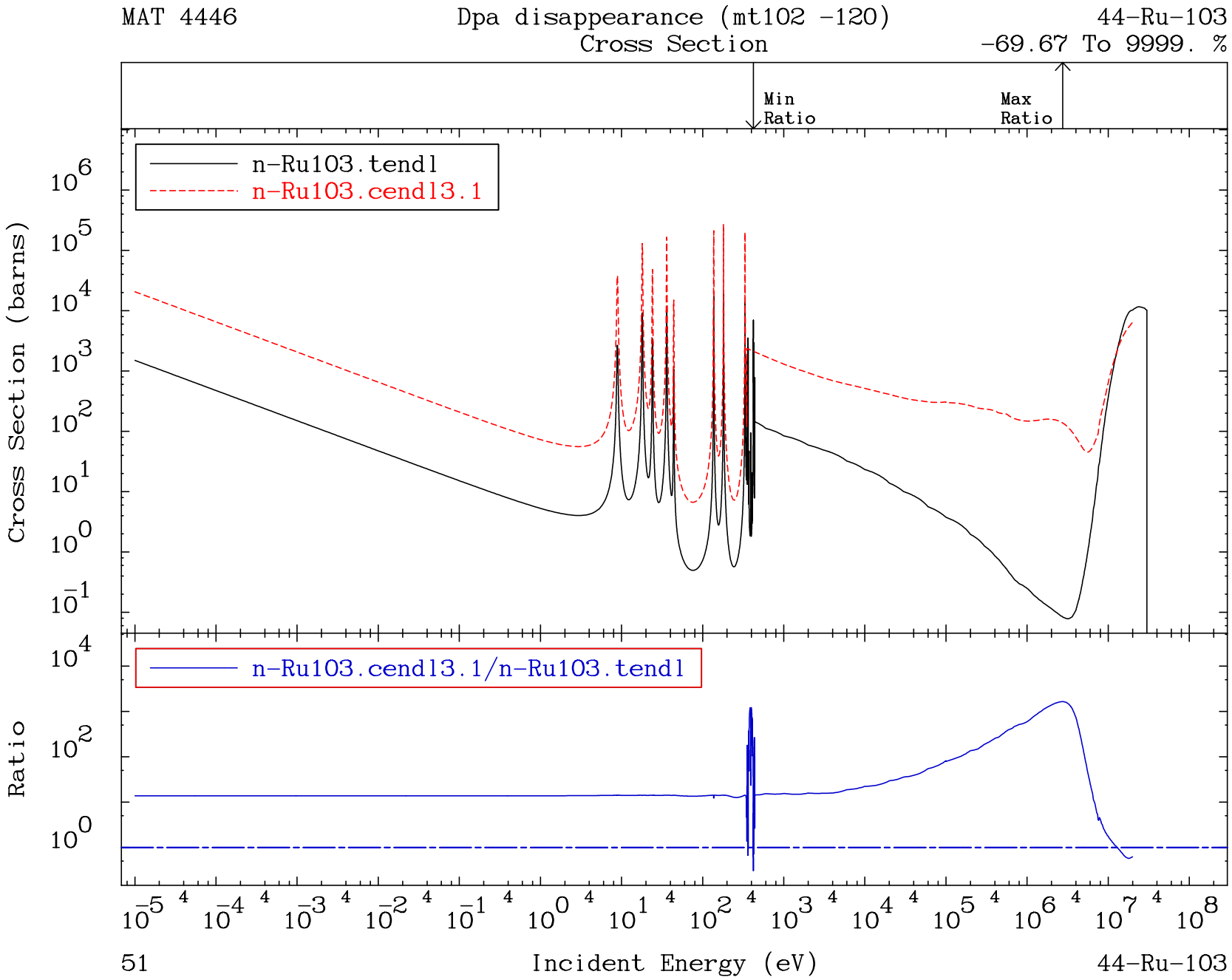

MAT 4446
Total photon (eV-barns)
Cross Section
44-Ru-103
-97.87 To 8478. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (Gega-barns)
0
2
4
6
8
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^{2}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
46
Incident Energy (eV)
44-Ru-103


MAT 4446
Total kinematic kerma (high limit)
Cross Section
44-Ru-103
-100.0 To -65.13%
Min Ratio
Max Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
10^10
10^8
10^6
10^4
10^2
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
10^0
10^-2
10^-4
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
47
Incident Energy (eV)
44-Ru-103


MAT 4446
Dpa total (eV-barns)
Cross Section
44-Ru-103
-69.67 To 9999. %
Max Ratio
Min Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
48
44-Ru-103


MAT 4446
Dpa elastic (mt2)
Cross Section
44-Ru-103
-30.49 To -5.134%
Min Ratio
Max Ratio
n-Ru103.tendl Threshold 660.00 eV
n-Ru103.cendl3.1 Threshold 650.00 eV
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
49
44-Ru-103


MAT 4446
Dpa inelastic (mt51-91)
Cross Section
44-Ru-103
-58.02 To 9999. %
Max Ratio
Min Ratio
n-Ru103.tendl Threshold 2.8375 keV
n-Ru103.cendl3.1 Threshold 2.7265 keV
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
50
44-Ru-103


MAT 4446
Dpa disappearance (mt102 -120)
Cross Section
44-Ru-103
-69.67 To 9999. %
Min Ratio
Max Ratio
n-Ru103.tendl
n-Ru103.cendl3.1
Cross Section (barns)
n-Ru103.cendl3.1/n-Ru103.tendl
Ratio
Incident Energy (eV)
51
44-Ru-103