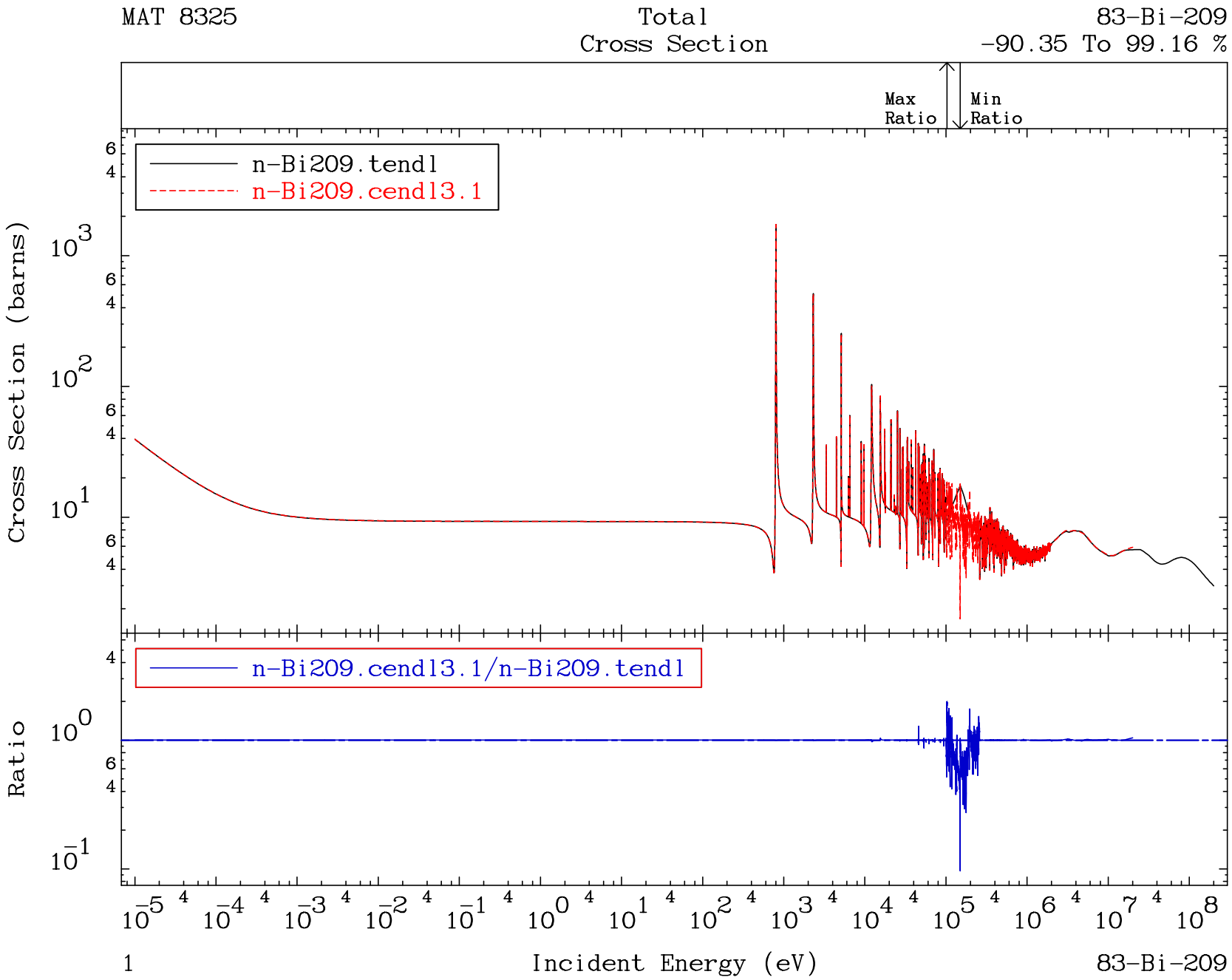
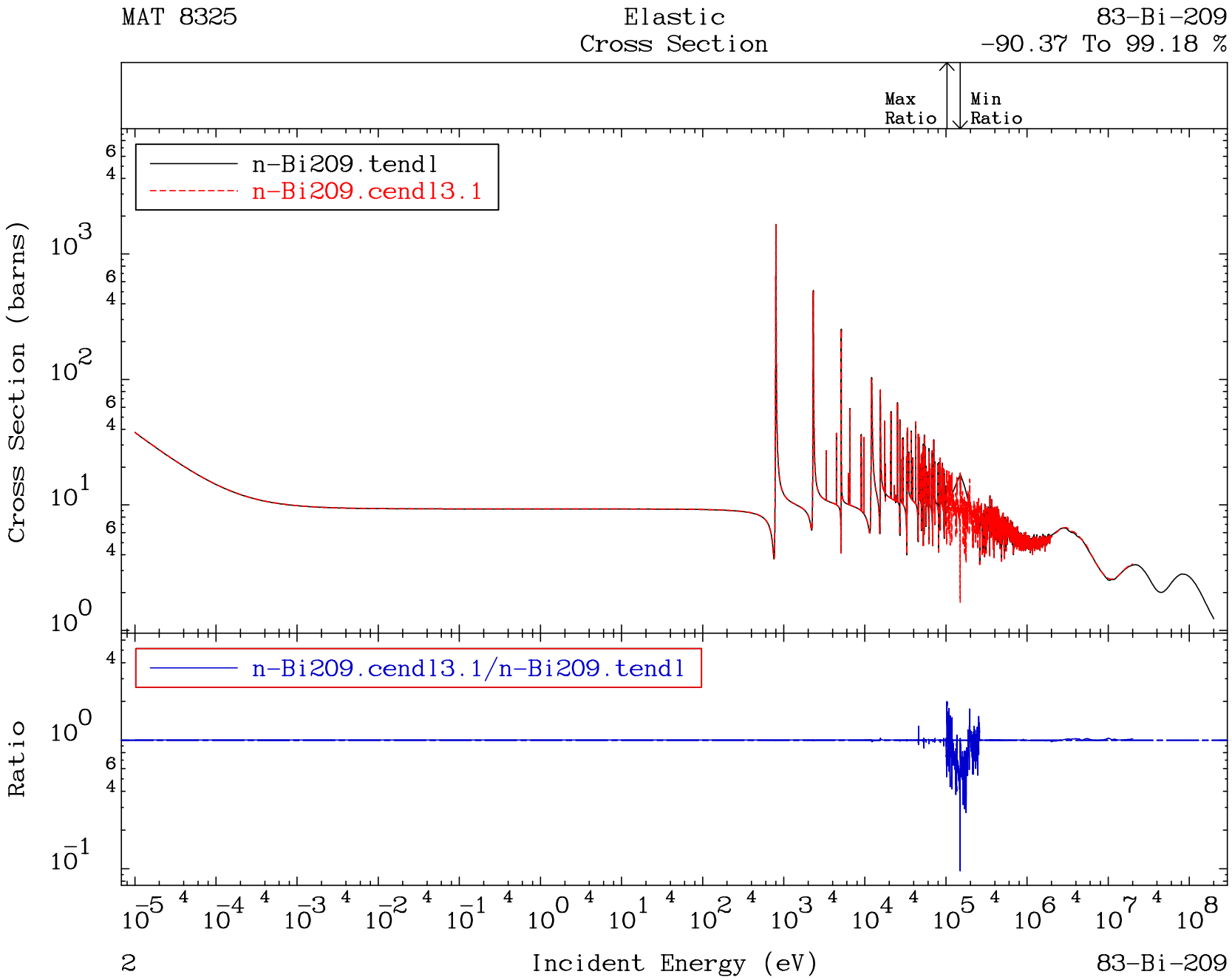
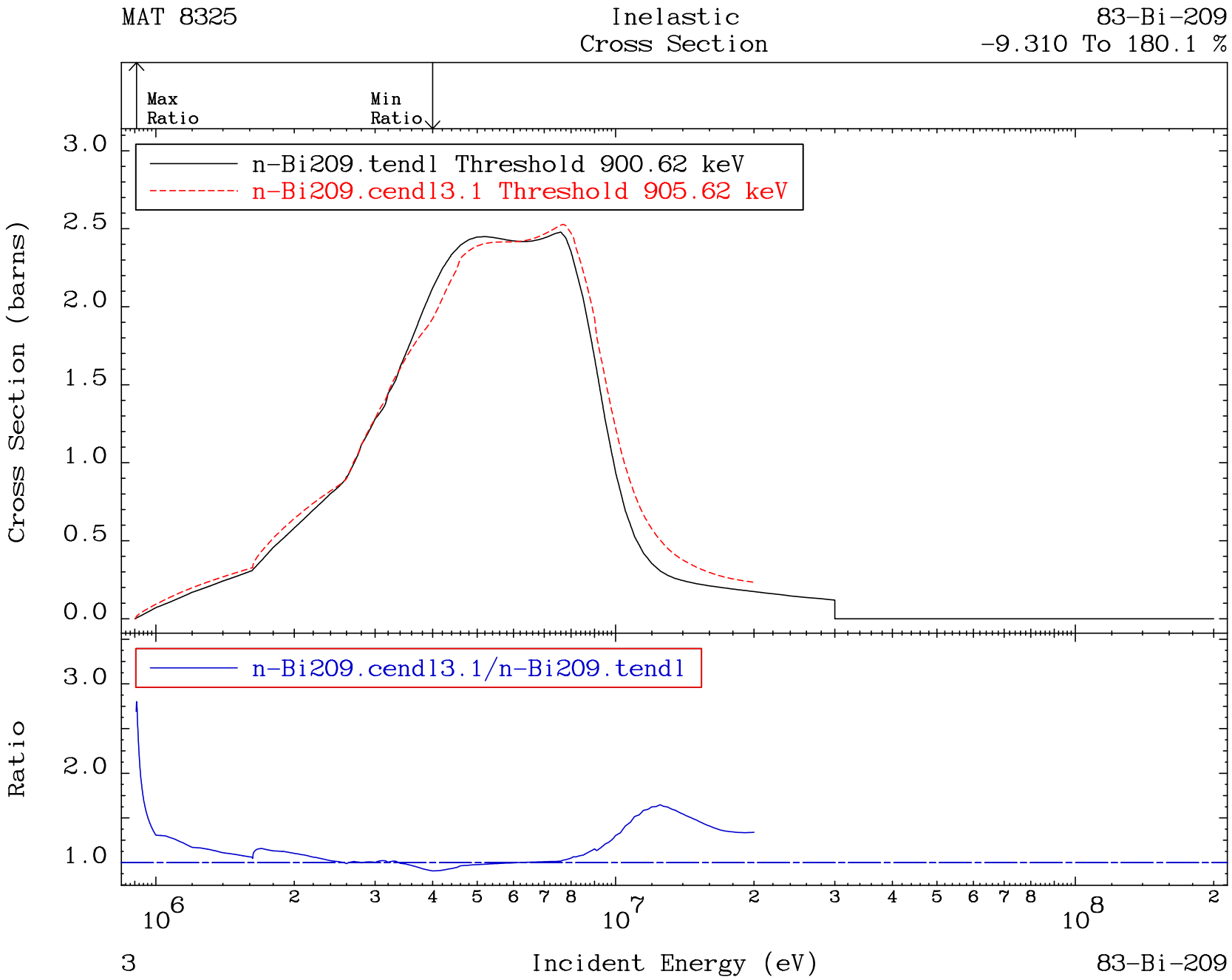
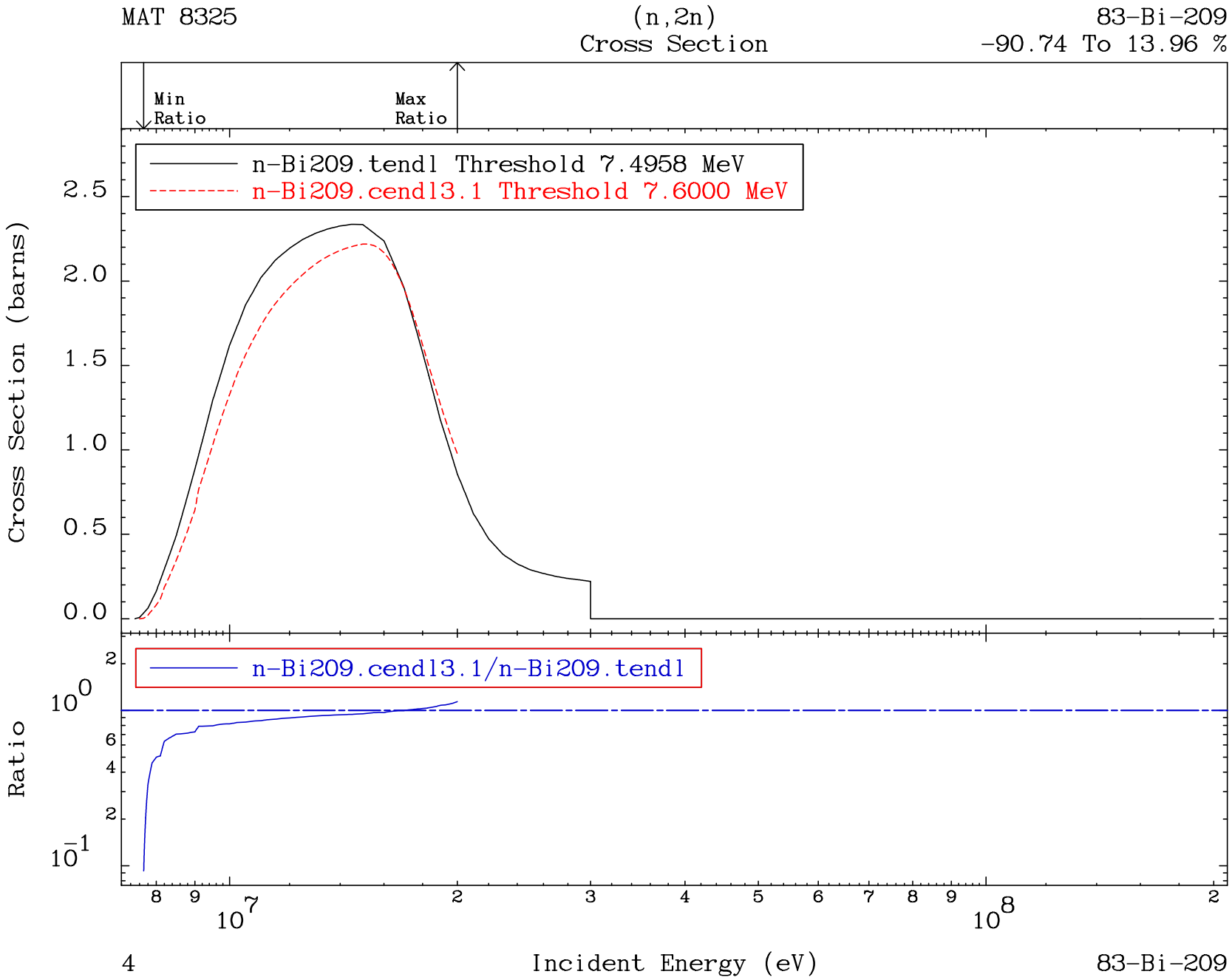
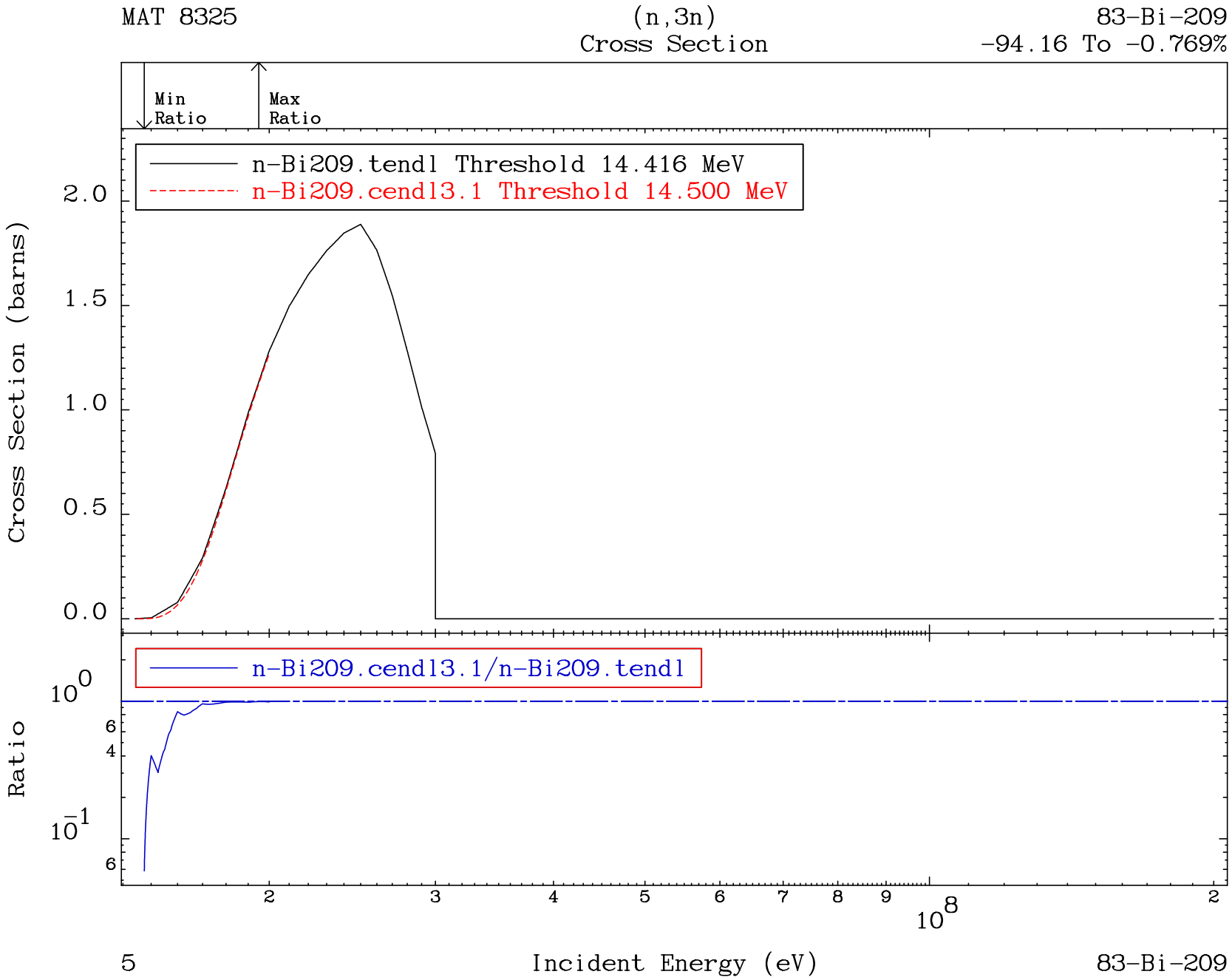
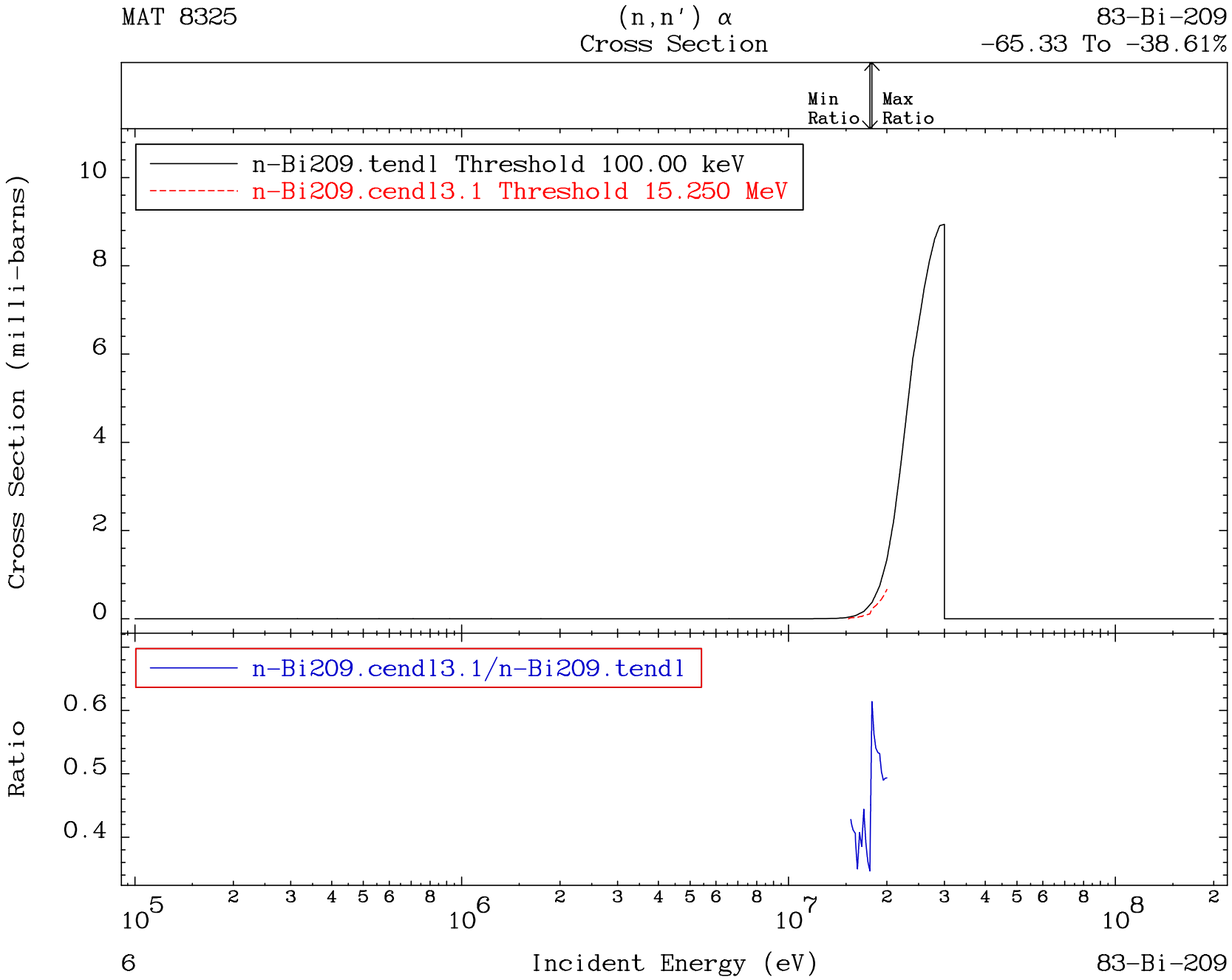

MAT 8325
Total
Cross Section
83-Bi-209
-90.35 To 99.16 %
Max
Ratio
Min
Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
1
83-Bi-209

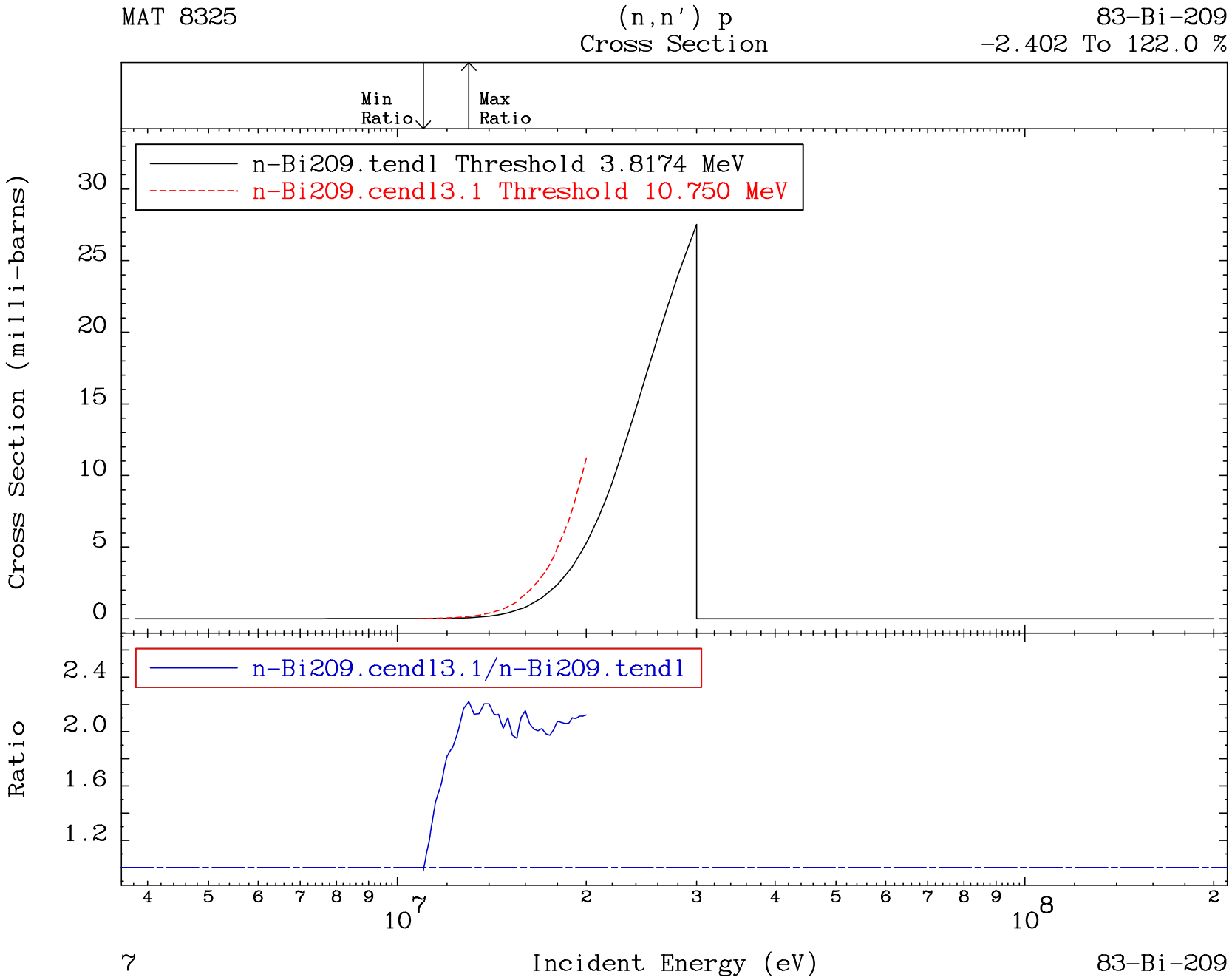

MAT 8325
Elastic
Cross Section
83-Bi-209
-90.37 To 99.18 %
Max
Ratio
Min
Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
2
83-Bi-209

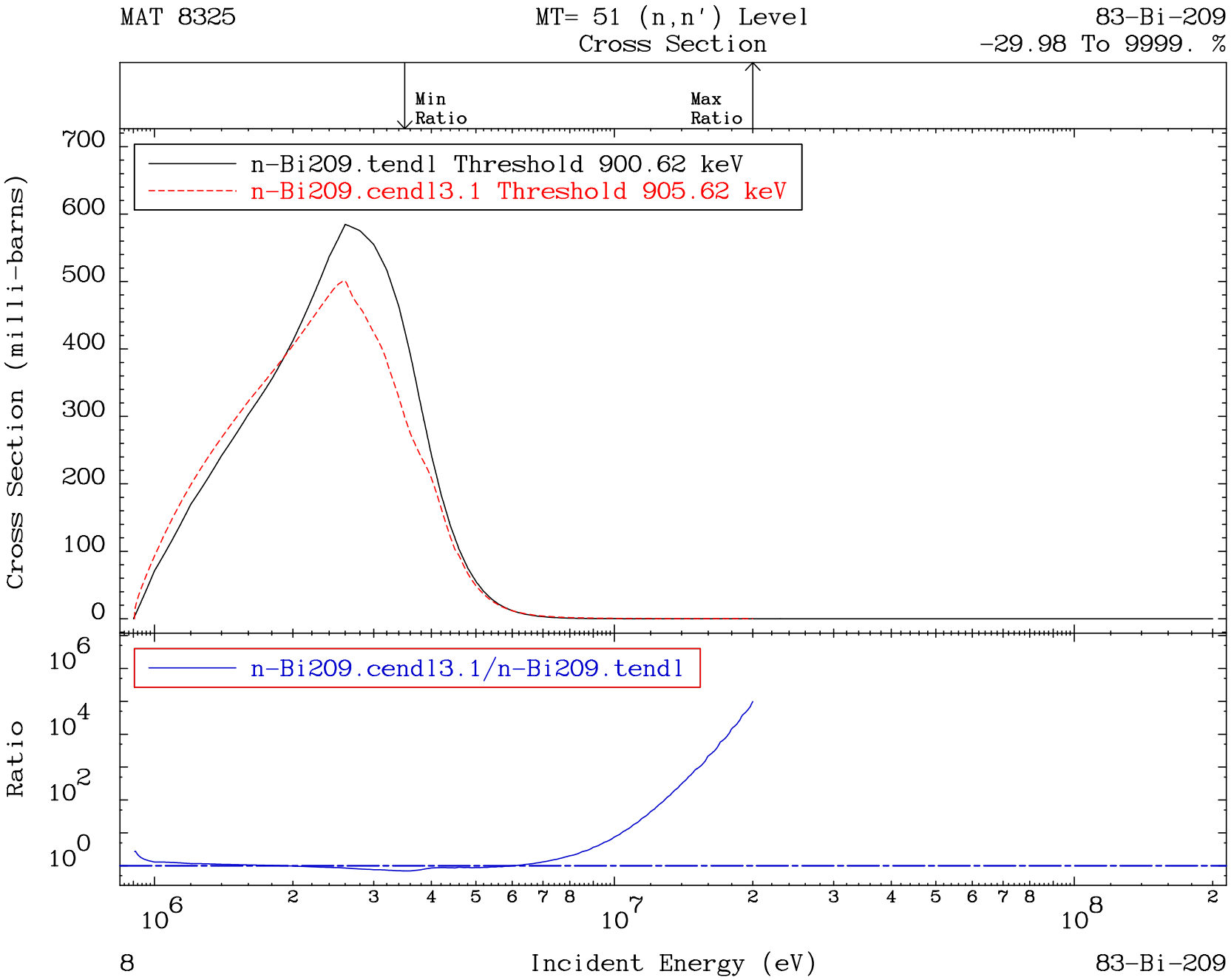

MAT 8325
Inelastic
Cross Section
83-Bi-209
-9.310 To 180.1 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 900.62 keV
n-Bi209.cendl3.1 Threshold 905.62 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
3.0
2.0
1.0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
83-Bi-209

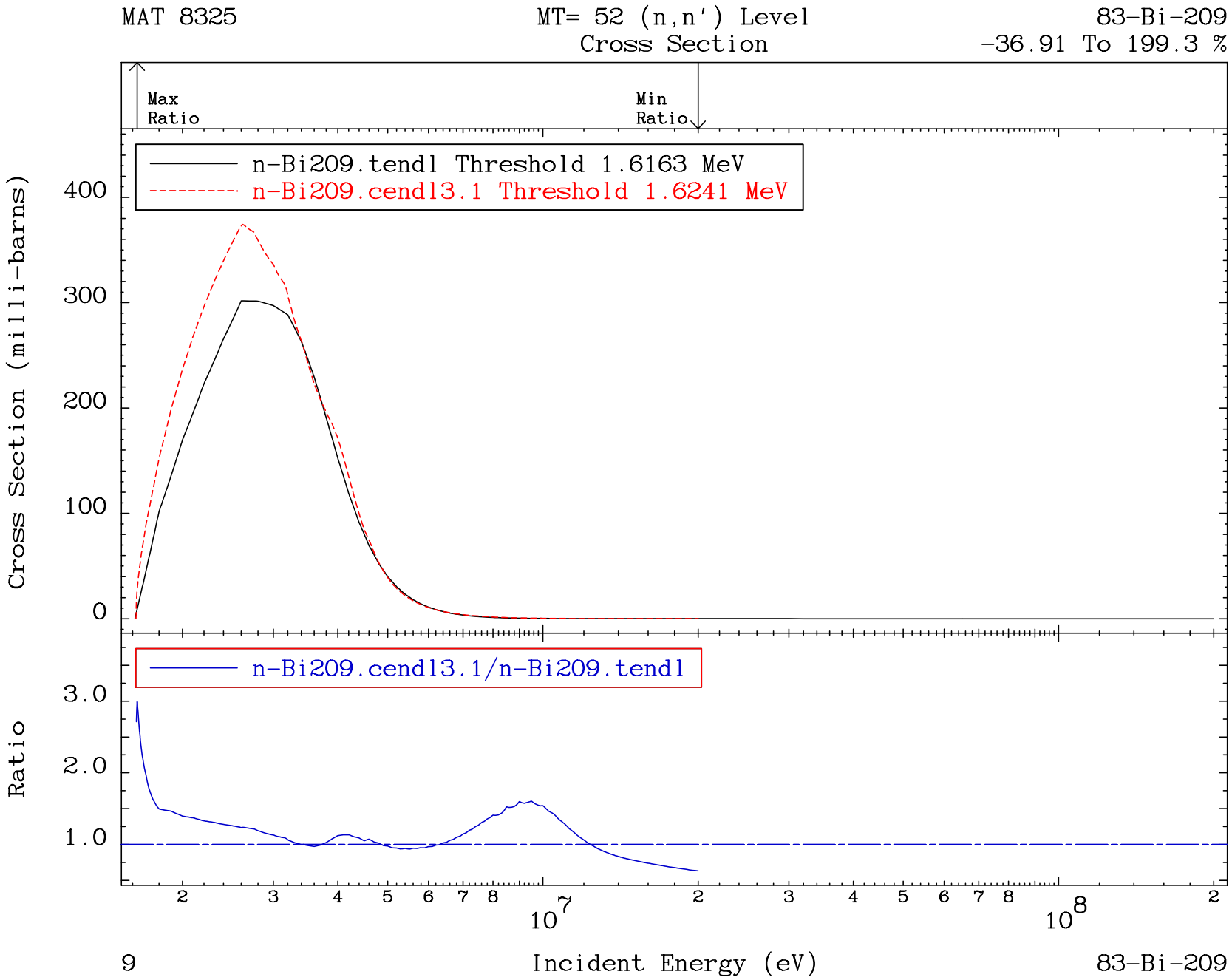

MAT 8325
(n,2n)
Cross Section
83-Bi-209
-90.74 To 13.96 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 7.4958 MeV
n-Bi209.cendl3.1 Threshold 7.6000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
2
10^0
6
4
2
10^-1
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
83-Bi-209

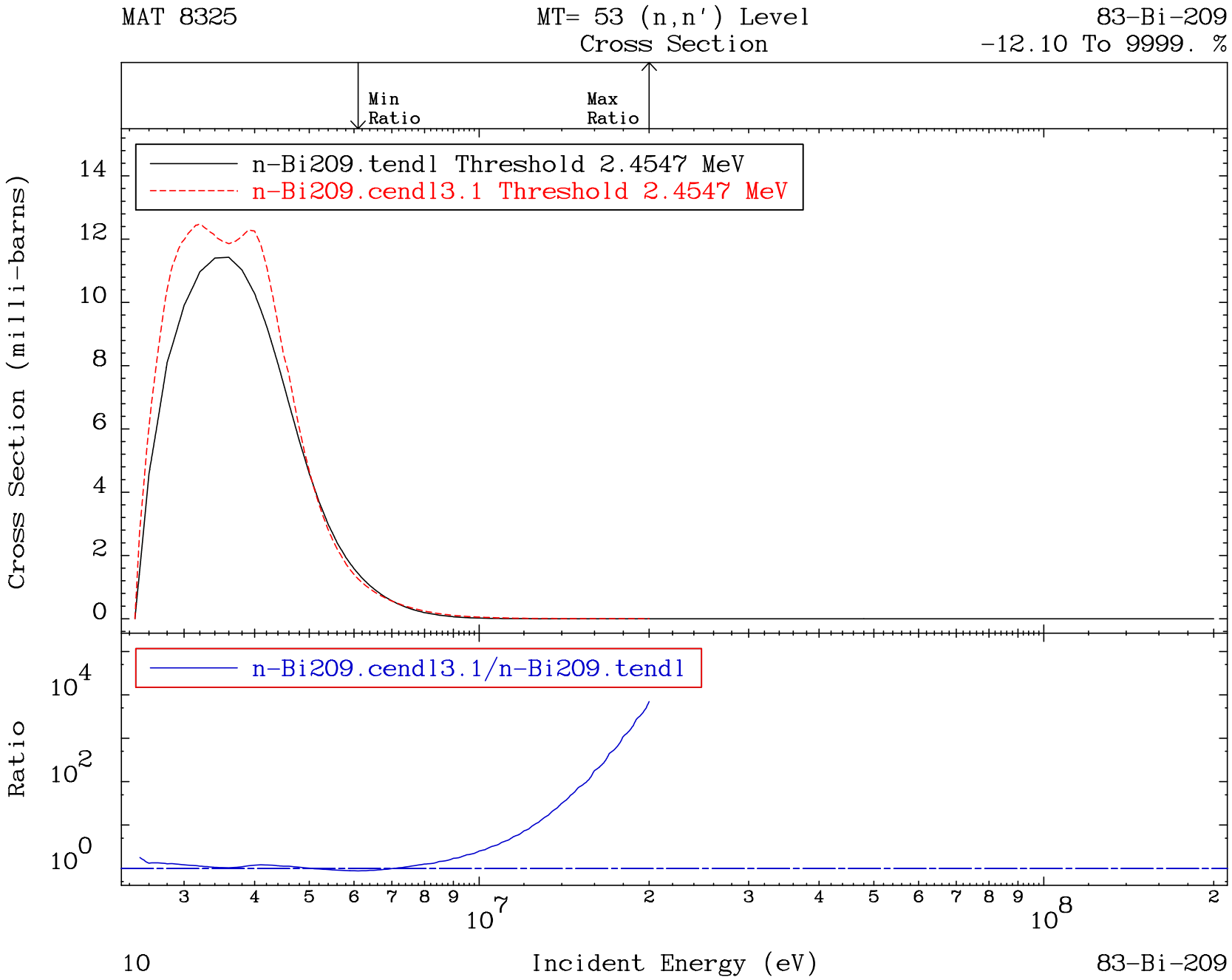

MAT 8325
(n,3n)
Cross Section
83-Bi-209
-94.16 To -0.769%
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 14.416 MeV
n-Bi209.cendl3.1 Threshold 14.500 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
6
4
10^-1
6
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
83-Bi-209

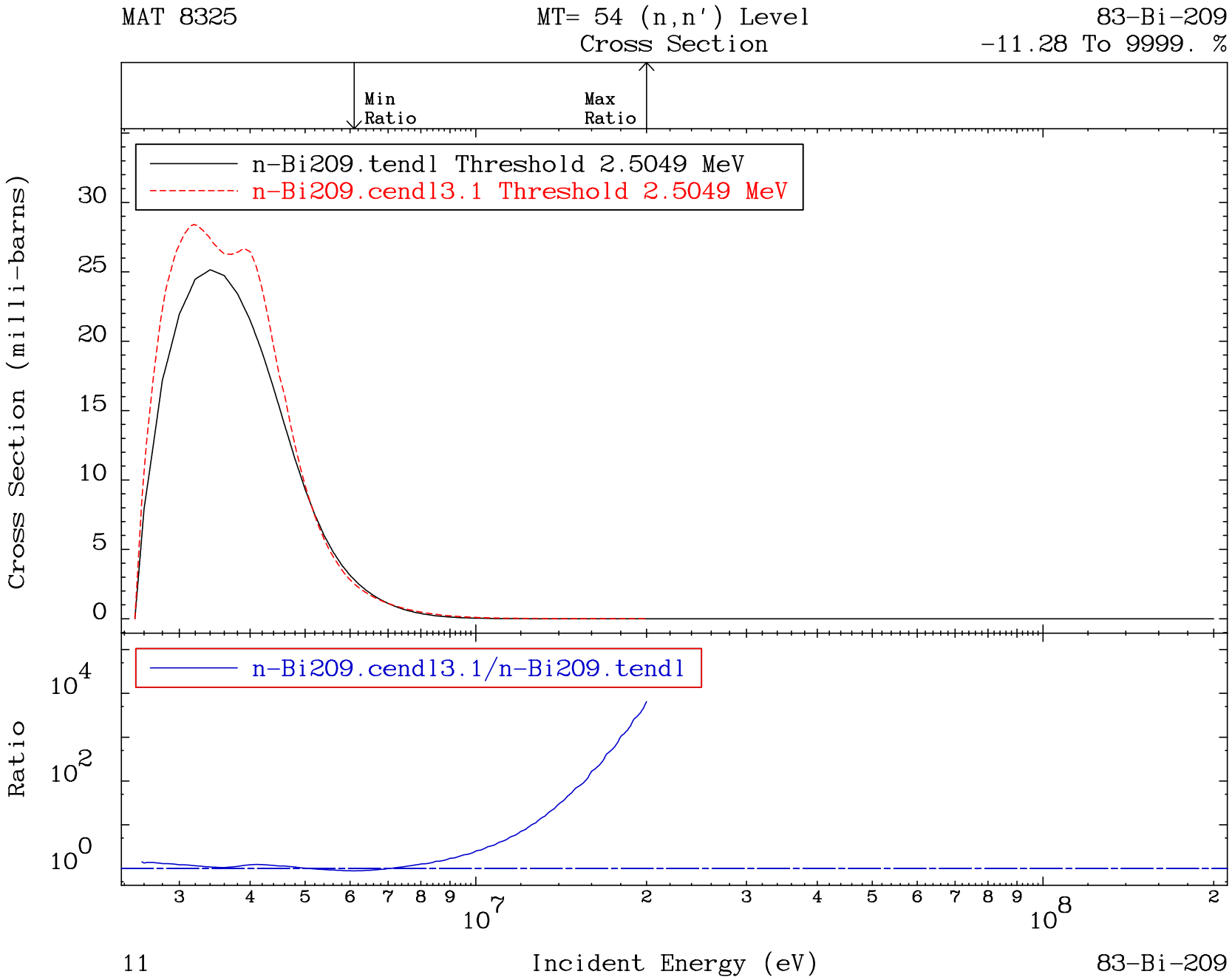

MAT 8325
(n,n') α
Cross Section
83-Bi-209
-65.33 To -38.61%
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 100.00 keV
n-Bi209.cendl3.1 Threshold 15.250 MeV
Cross Section (milli-barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
83-Bi-209
6

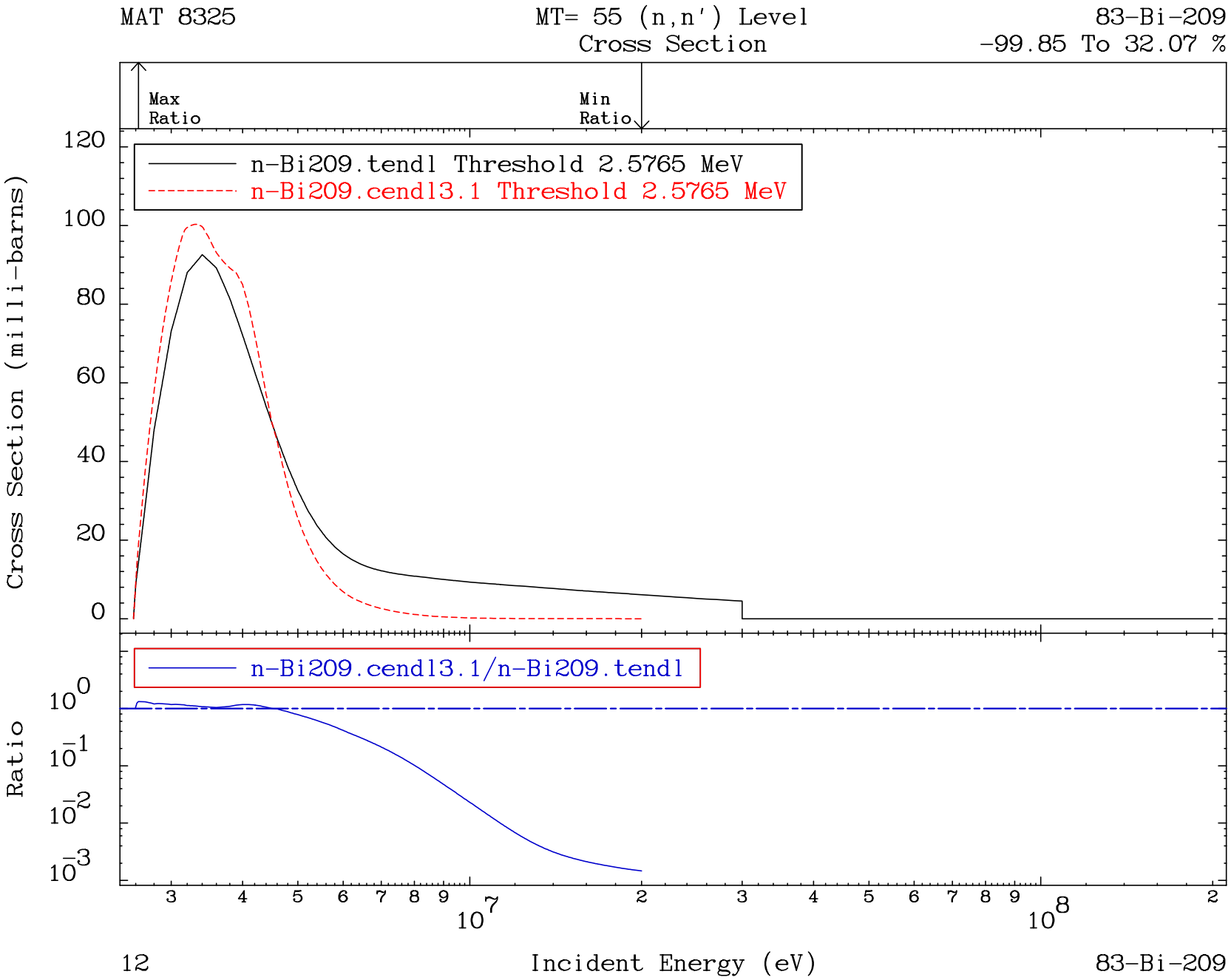

MAT 8325
(n,n') p
Cross Section
83-Bi-209
-2.402 To 122.0 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 3.8174 MeV
n-Bi209.cendl3.1 Threshold 10.750 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
2.4
2.0
1.6
1.2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
83-Bi-209

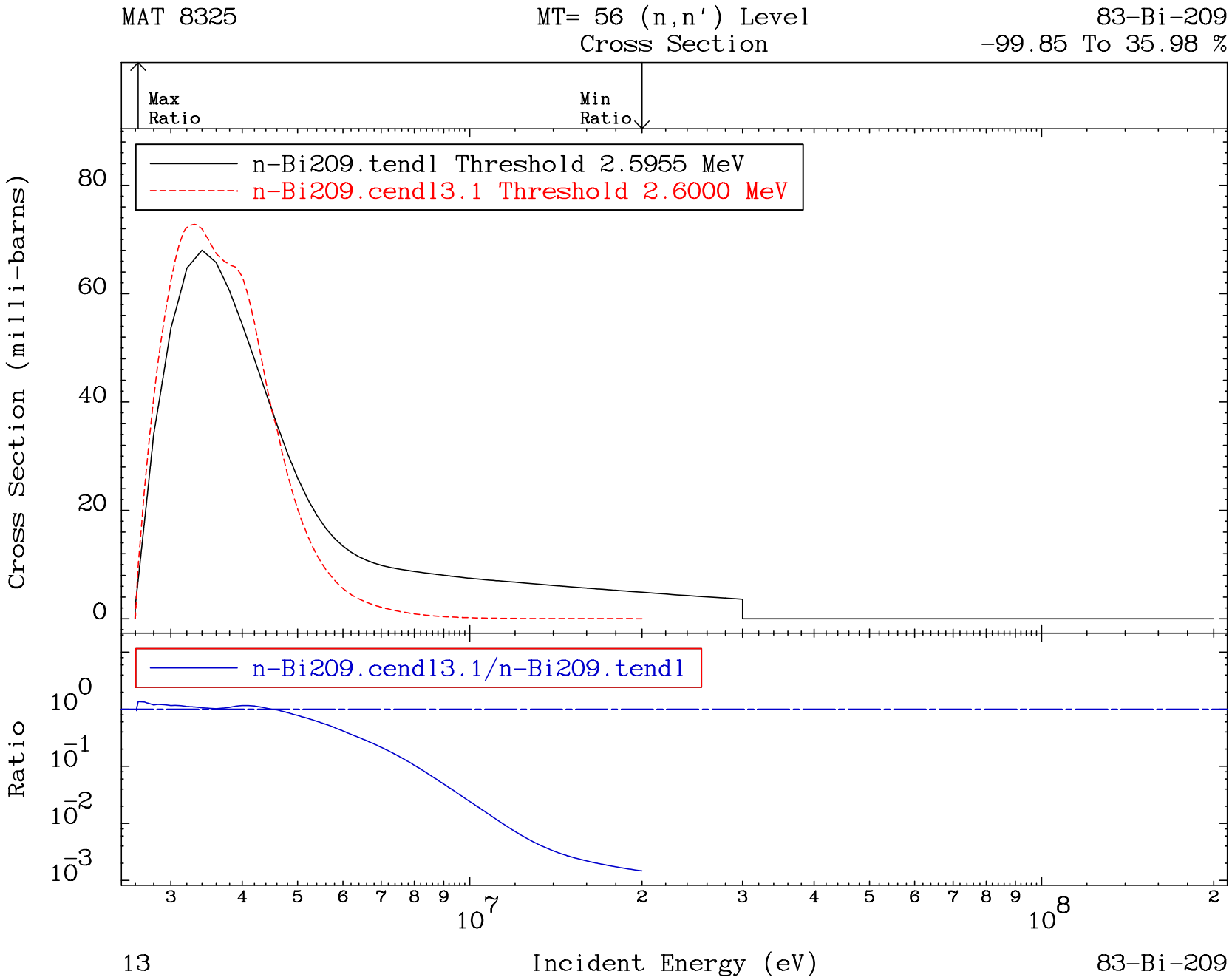

MAT 8325
MT= 51 (n,n') Level
Cross Section
83-Bi-209
-29.98 To 9999. %
Min
Ratio
Max
Ratio
n-Bi209.tendl Threshold 900.62 keV
n-Bi209.cendl3.1 Threshold 905.62 keV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
8
Incident Energy (eV)
83-Bi-209

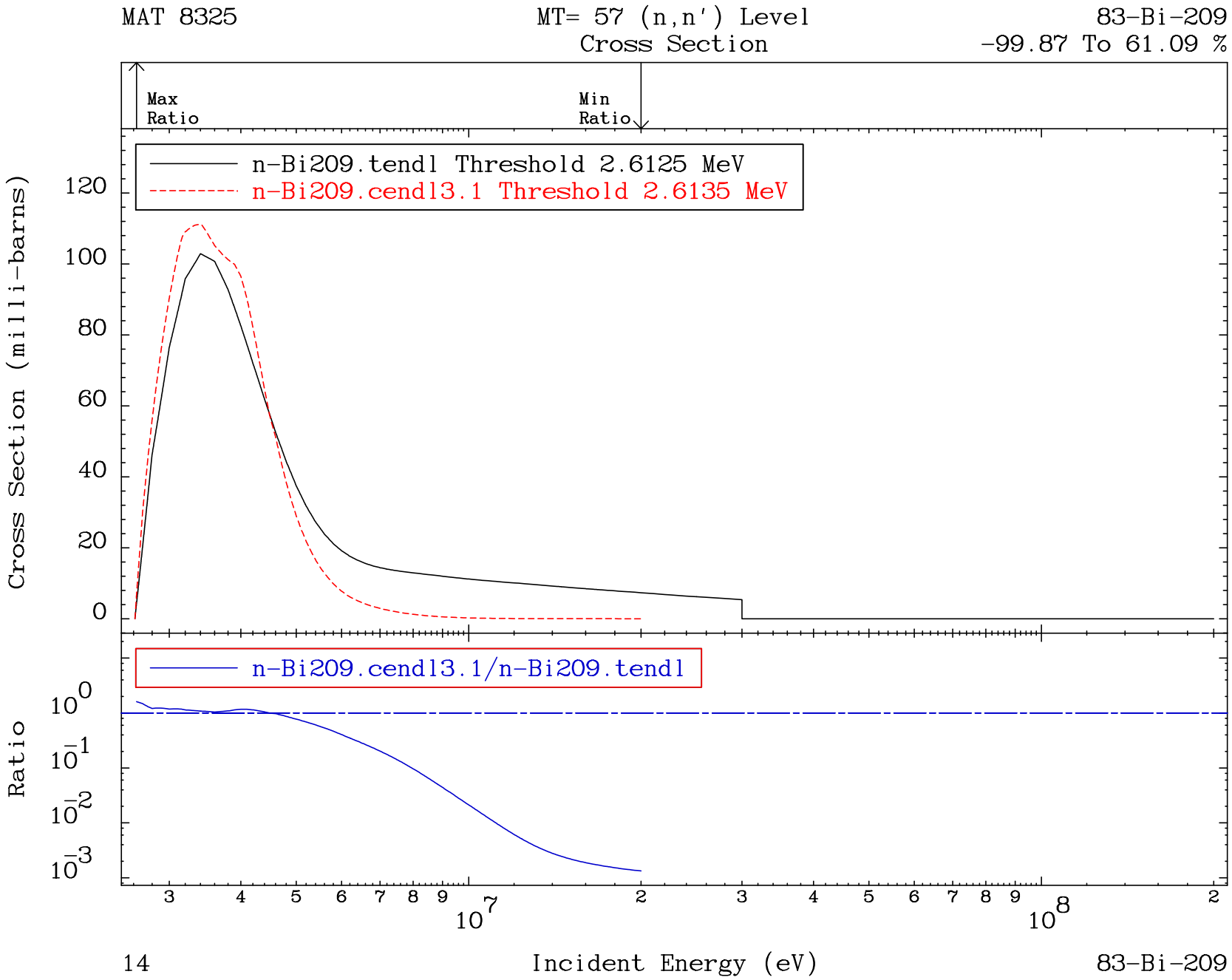

MAT 8325
MT= 52 (n,n') Level
Cross Section
83-Bi-209
-36.91 To 199.3 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 1.6163 MeV
n-Bi209.cendl3.1 Threshold 1.6241 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
3.0
2.0
1.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
83-Bi-209

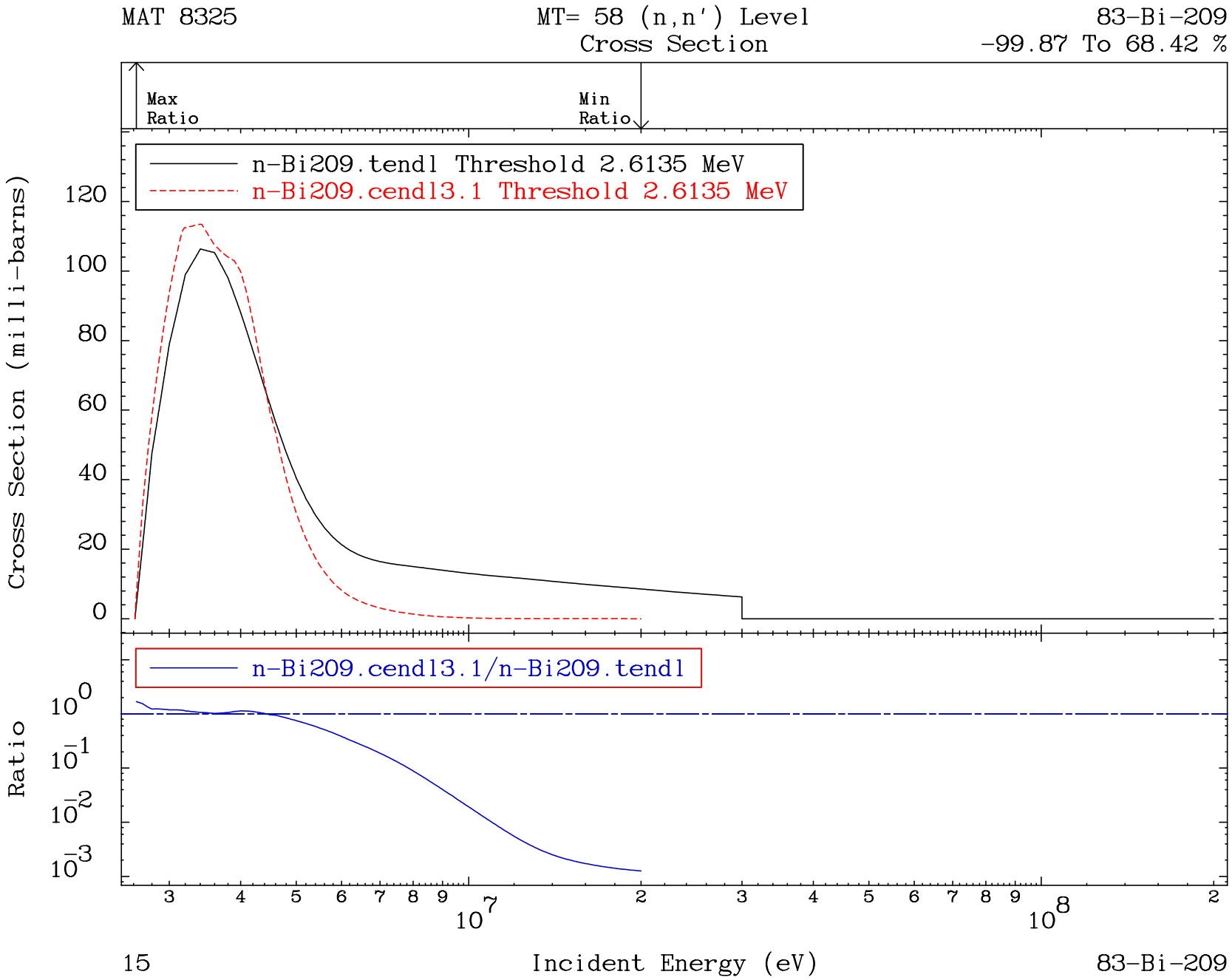

MAT 8325
MT= 53 (n,n') Level
Cross Section
83-Bi-209
-12.10 To 9999. %
Min
Ratio
Max
Ratio
n-Bi209.tendl Threshold 2.4547 MeV
n-Bi209.cendl3.1 Threshold 2.4547 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^2
10^4
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
10
Incident Energy (eV)
83-Bi-209

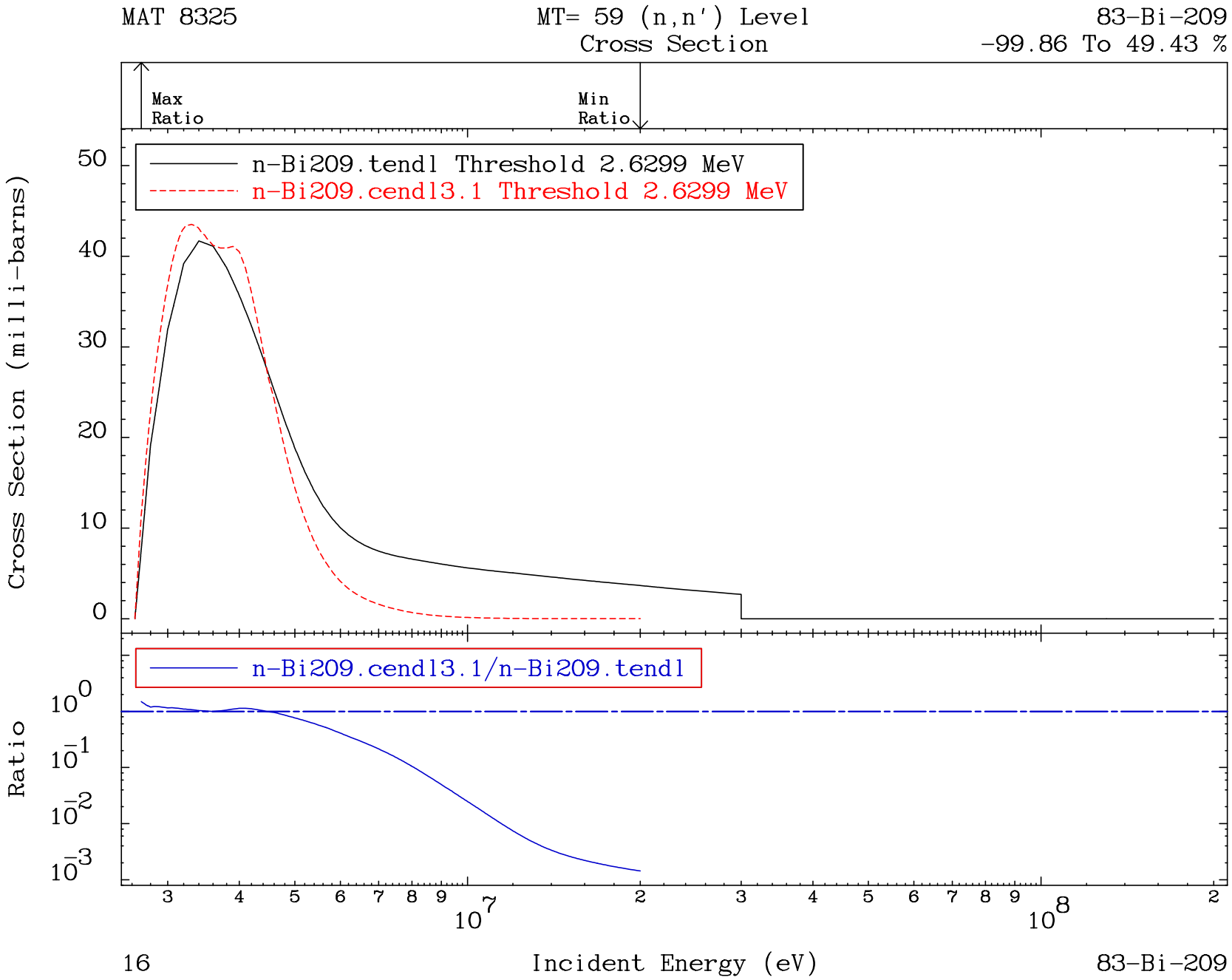

MAT 8325
MT= 54 (n,n') Level
Cross Section
83-Bi-209
-11.28 To 9999. %
Min
Ratio
Max
Ratio
n-Bi209.tendl Threshold 2.5049 MeV
n-Bi209.cendl3.1 Threshold 2.5049 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
11
Incident Energy (eV)
83-Bi-209

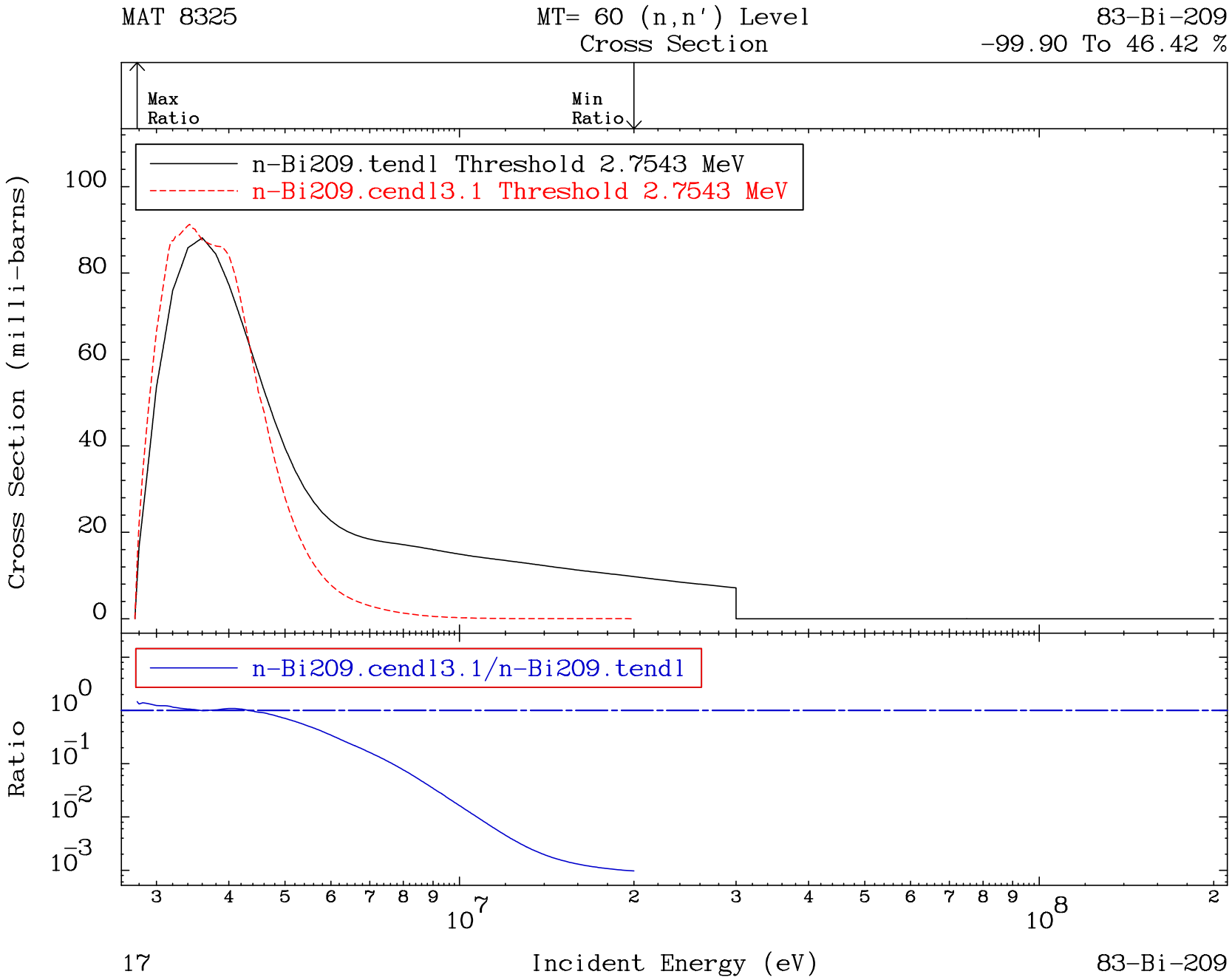

MAT 8325
MT= 55 (n,n') Level
Cross Section
83-Bi-209
-99.85 To 32.07 %
Max
Ratio
Min
Ratio
n-Bi209.tendl Threshold 2.5765 MeV
n-Bi209.cendl3.1 Threshold 2.5765 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
83-Bi-209

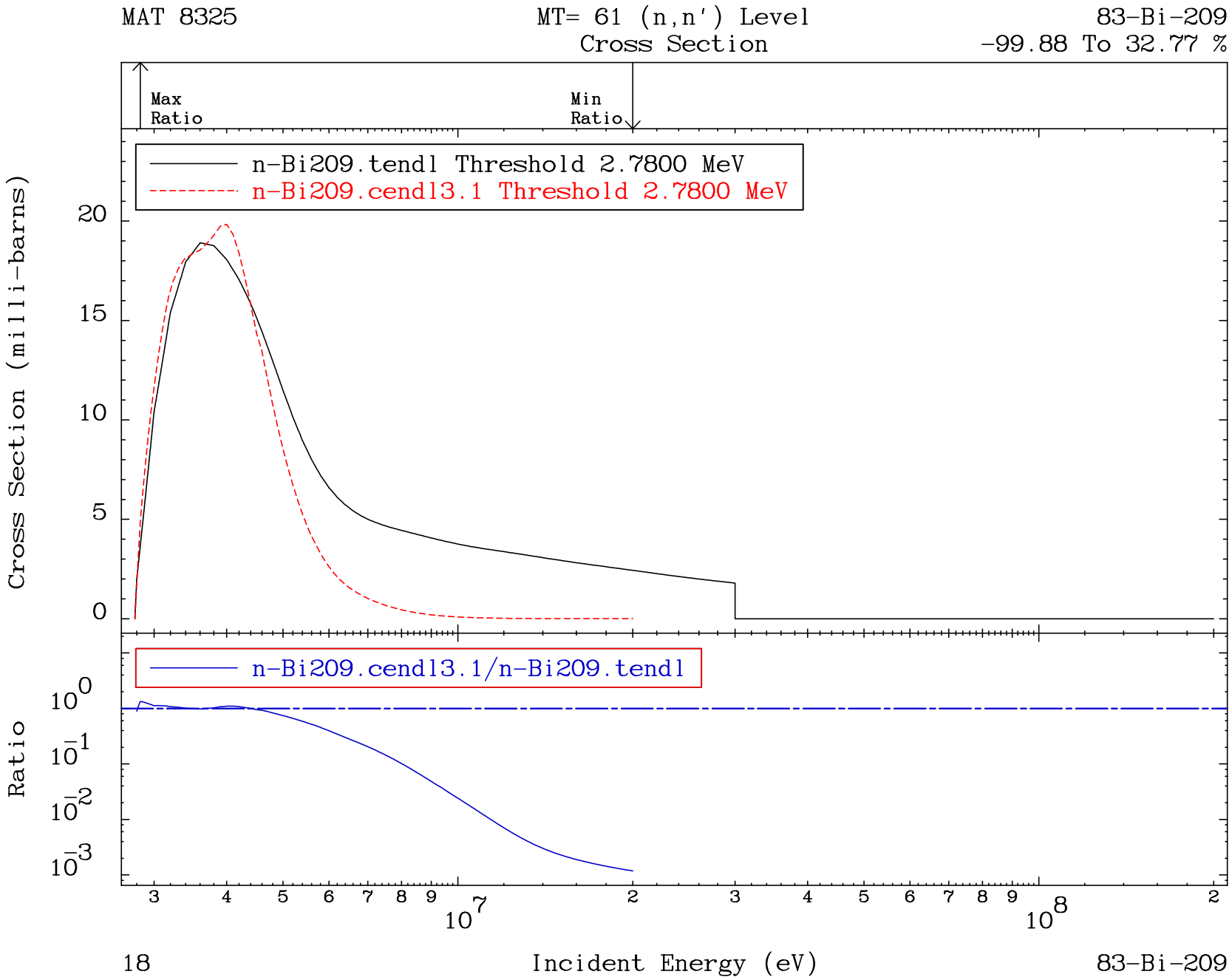

MAT 8325
MT= 56 (n,n') Level
Cross Section
83-Bi-209
-99.85 To 35.98 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.5955 MeV
n-Bi209.cendl3.1 Threshold 2.6000 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
83-Bi-209

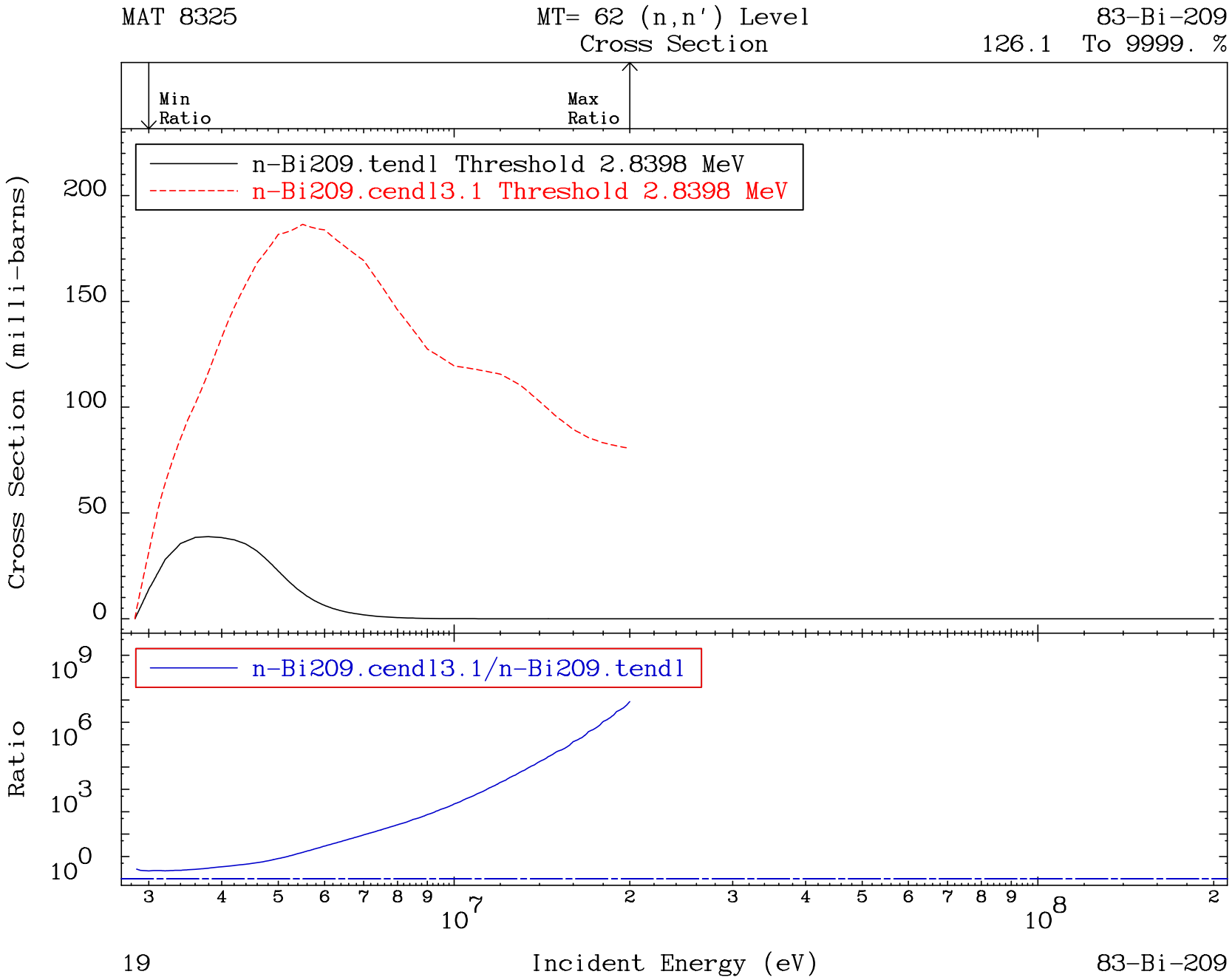

MAT 8325
MT= 57 (n,n') Level
Cross Section
83-Bi-209
-99.87 To 61.09 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.6125 MeV
n-Bi209.cendl3.1 Threshold 2.6135 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
83-Bi-209

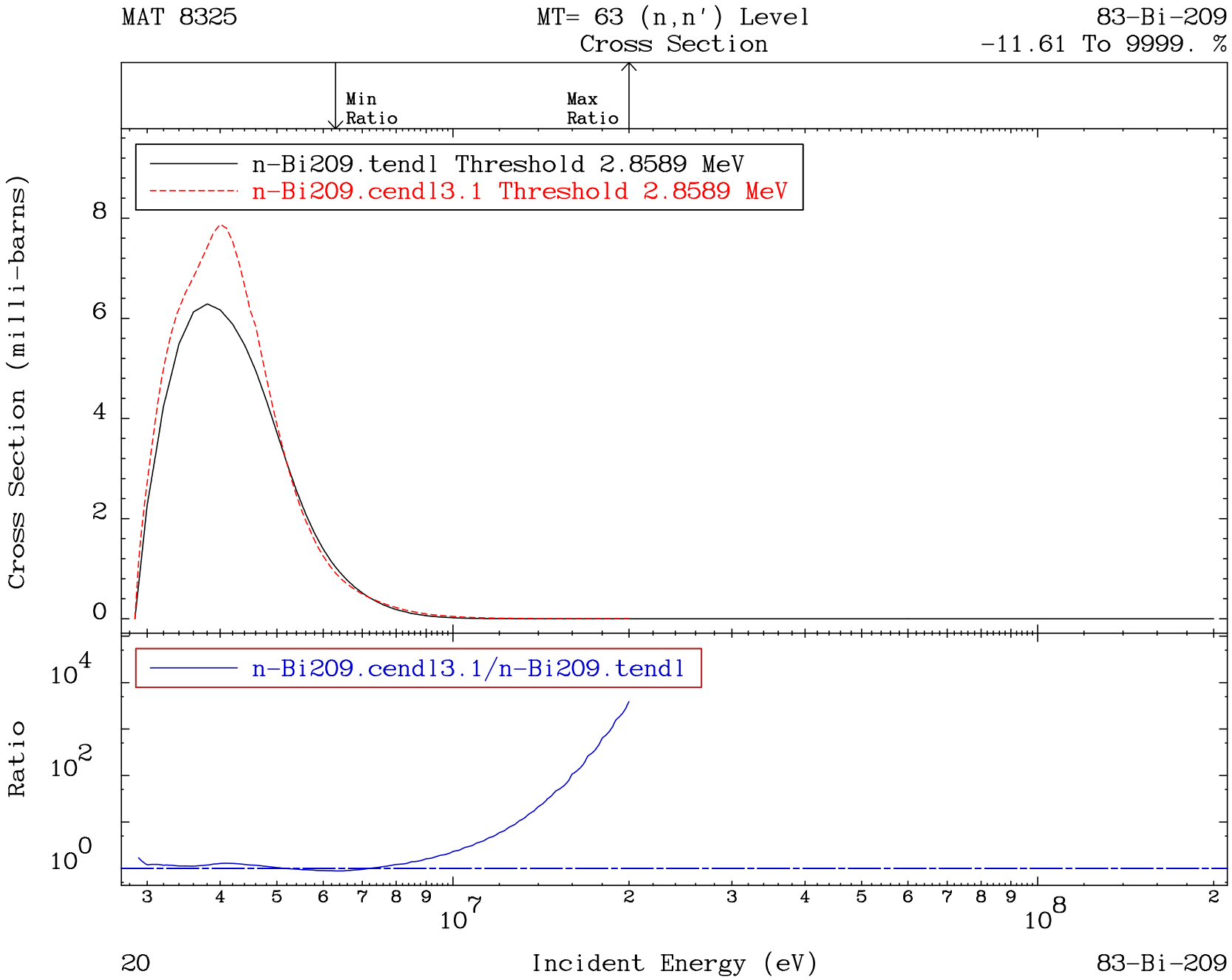

MAT 8325
MT= 58 (n,n') Level
Cross Section
83-Bi-209
-99.87 To 68.42 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.6135 MeV
n-Bi209.cendl3.1 Threshold 2.6135 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
83-Bi-209

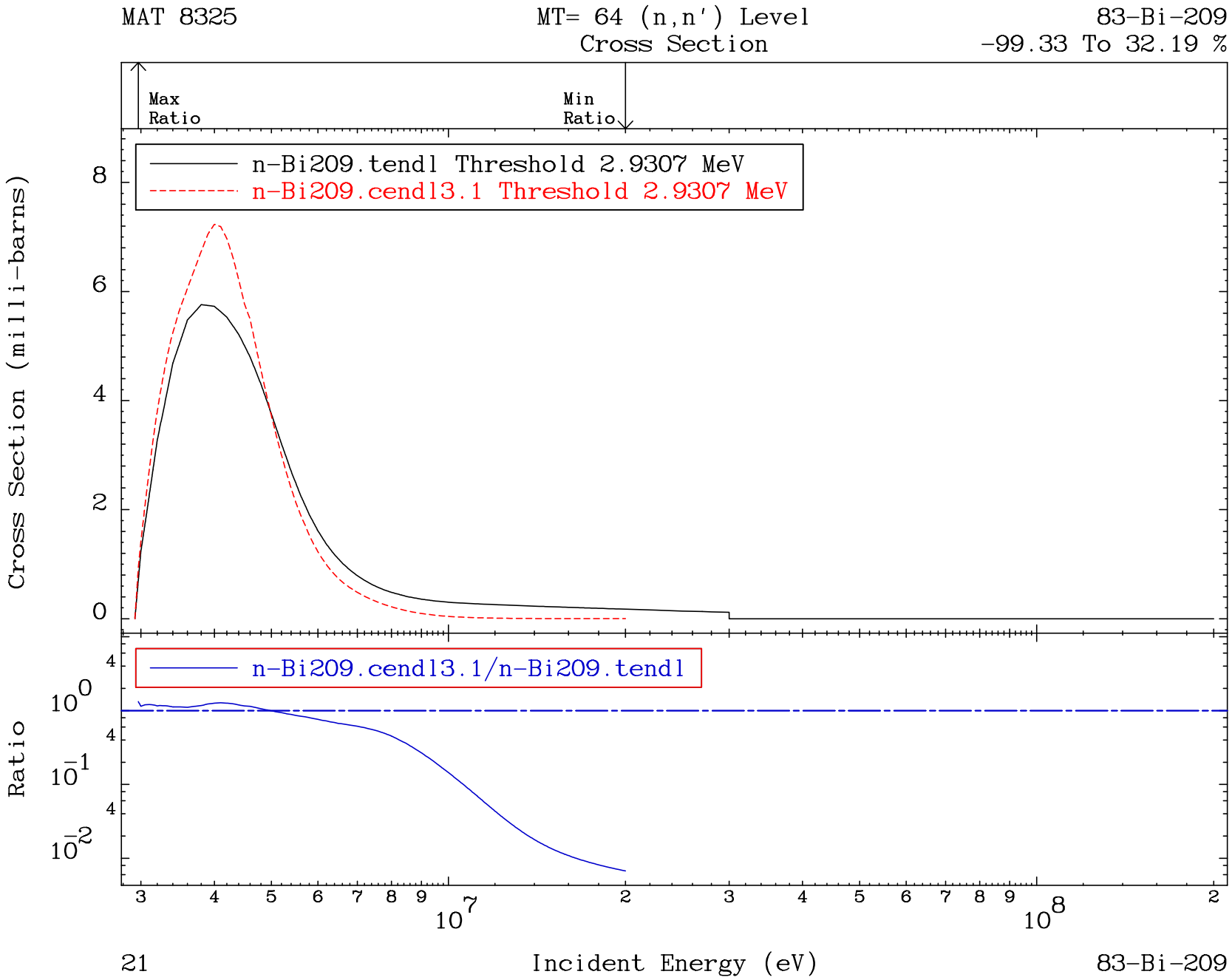

MAT 8325
MT= 59 (n,n') Level
Cross Section
83-Bi-209
-99.86 To 49.43 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.6299 MeV
n-Bi209.cendl3.1 Threshold 2.6299 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
83-Bi-209

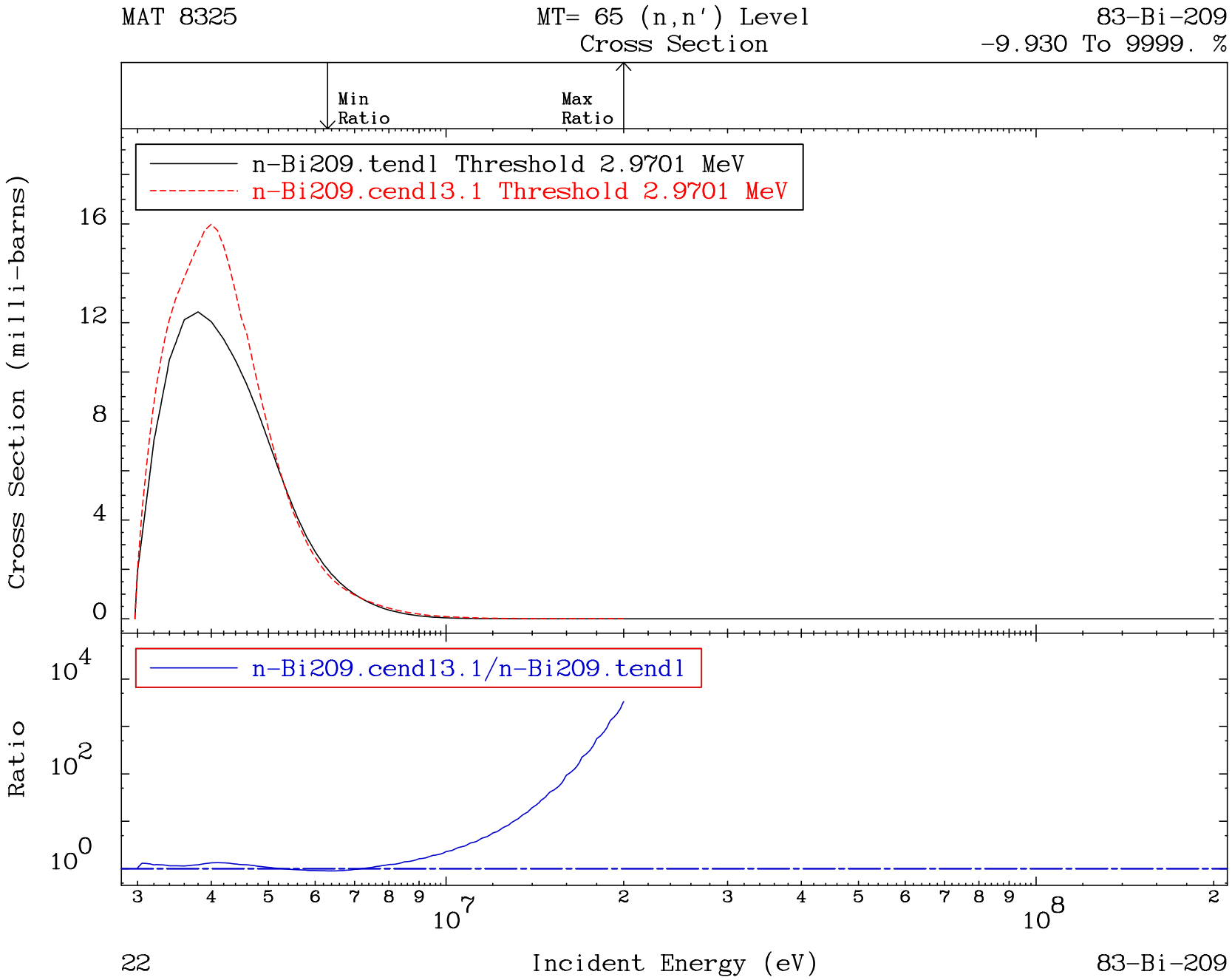

MAT 8325
MT= 60 (n,n') Level
Cross Section
83-Bi-209
-99.90 To 46.42 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.7543 MeV
n-Bi209.cendl3.1 Threshold 2.7543 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
83-Bi-209

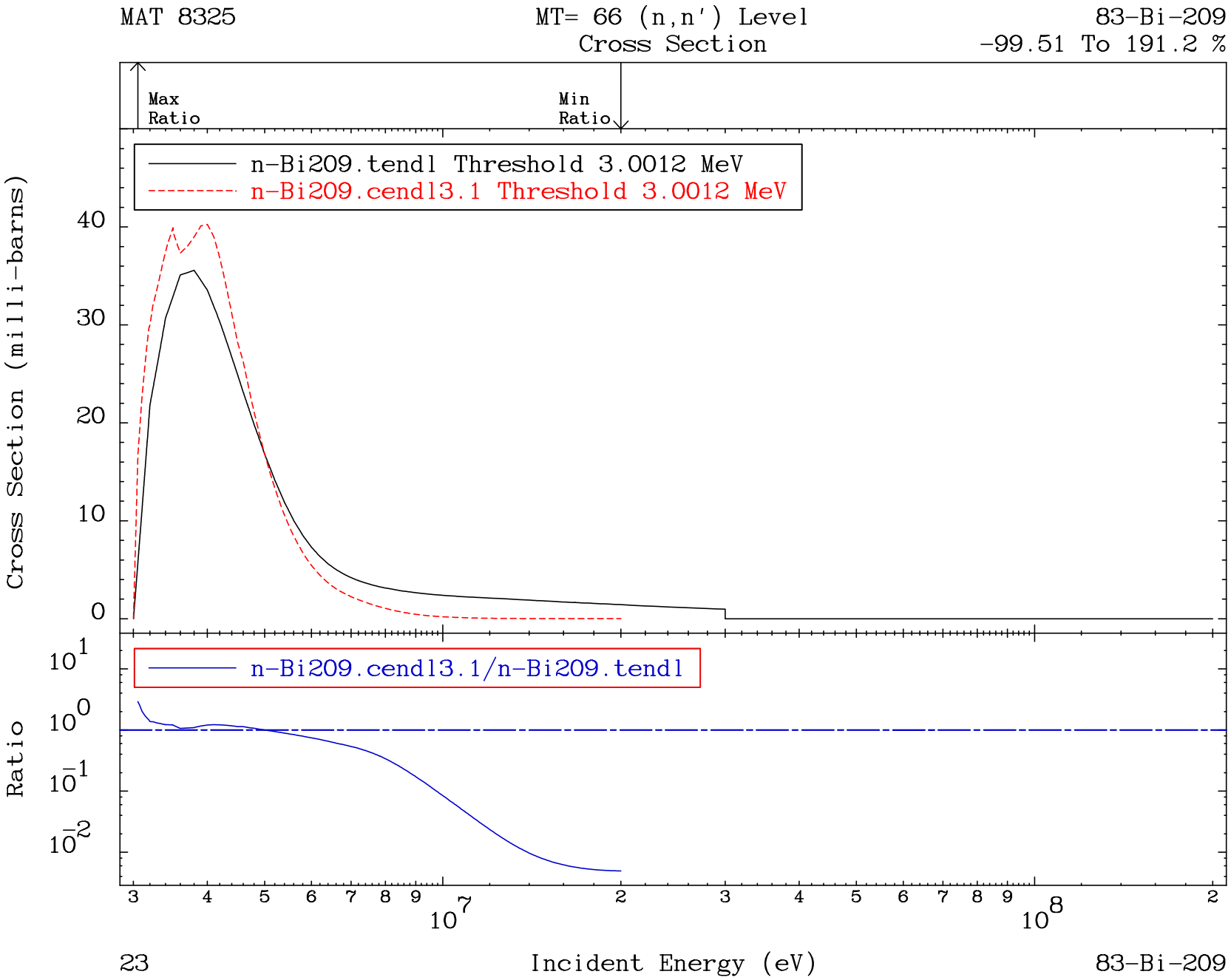

MAT 8325
MT= 61 (n,n') Level
Cross Section
83-Bi-209
-99.88 To 32.77 %
Max
Ratio
Min
Ratio
n-Bi209.tendl Threshold 2.7800 MeV
n-Bi209.cendl3.1 Threshold 2.7800 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
83-Bi-209

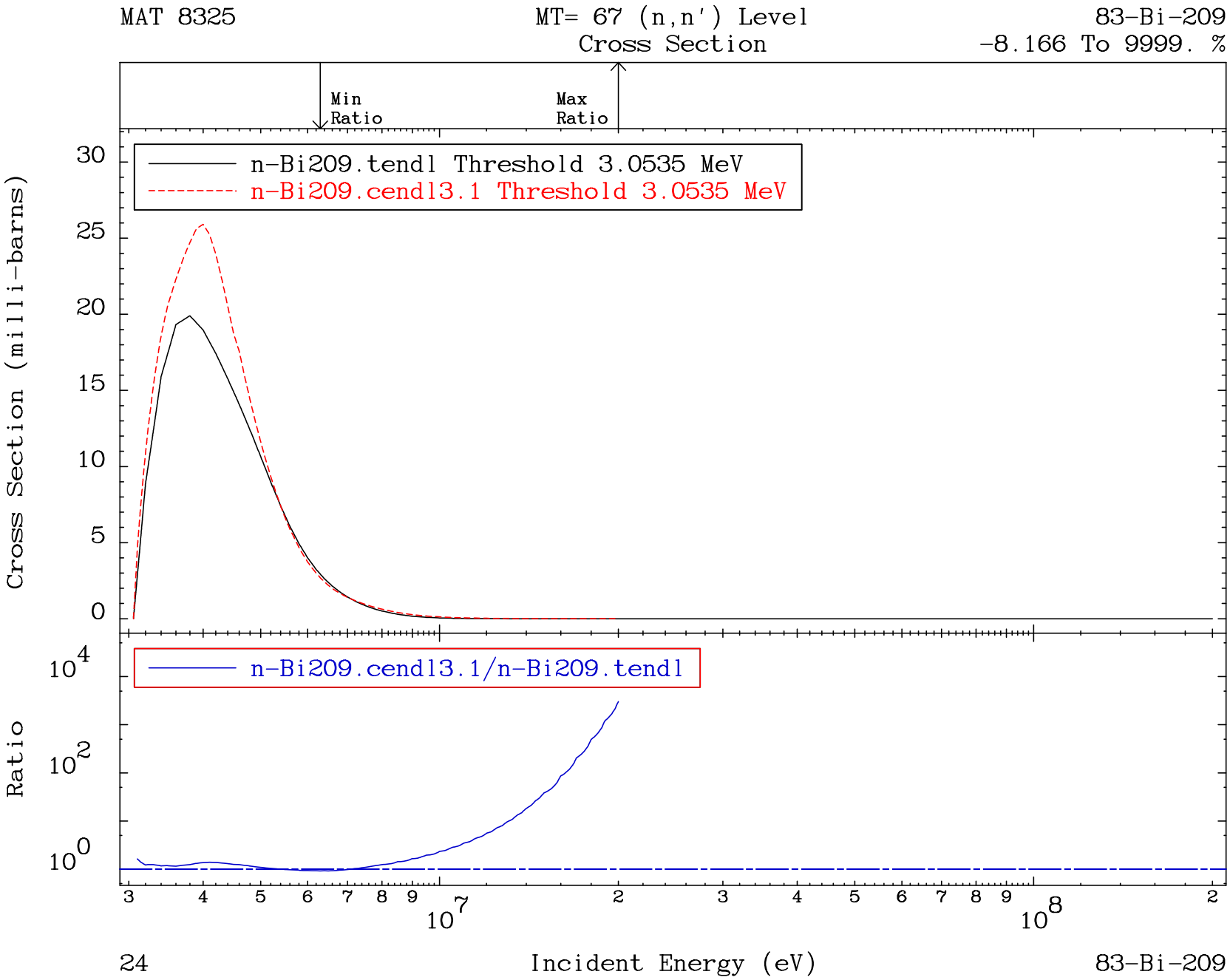

MAT 8325
MT= 62 (n,n') Level
Cross Section
83-Bi-209
126.1 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 2.8398 MeV
n-Bi209.cendl3.1 Threshold 2.8398 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
83-Bi-209

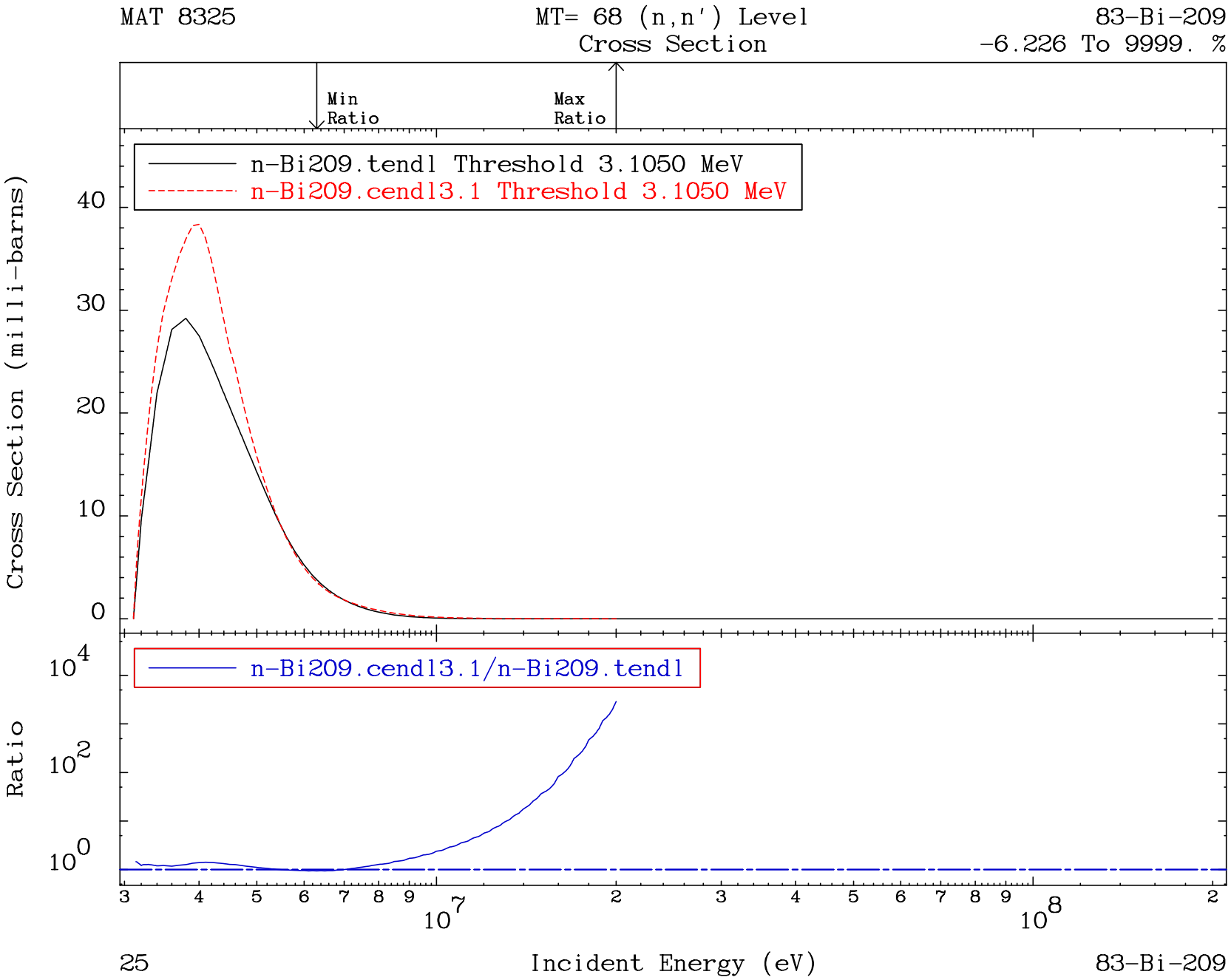

MAT 8325
MT= 63 (n,n') Level
Cross Section
83-Bi-209
-11.61 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 2.8589 MeV
n-Bi209.cendl3.1 Threshold 2.8589 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^2
10^4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
20
83-Bi-209

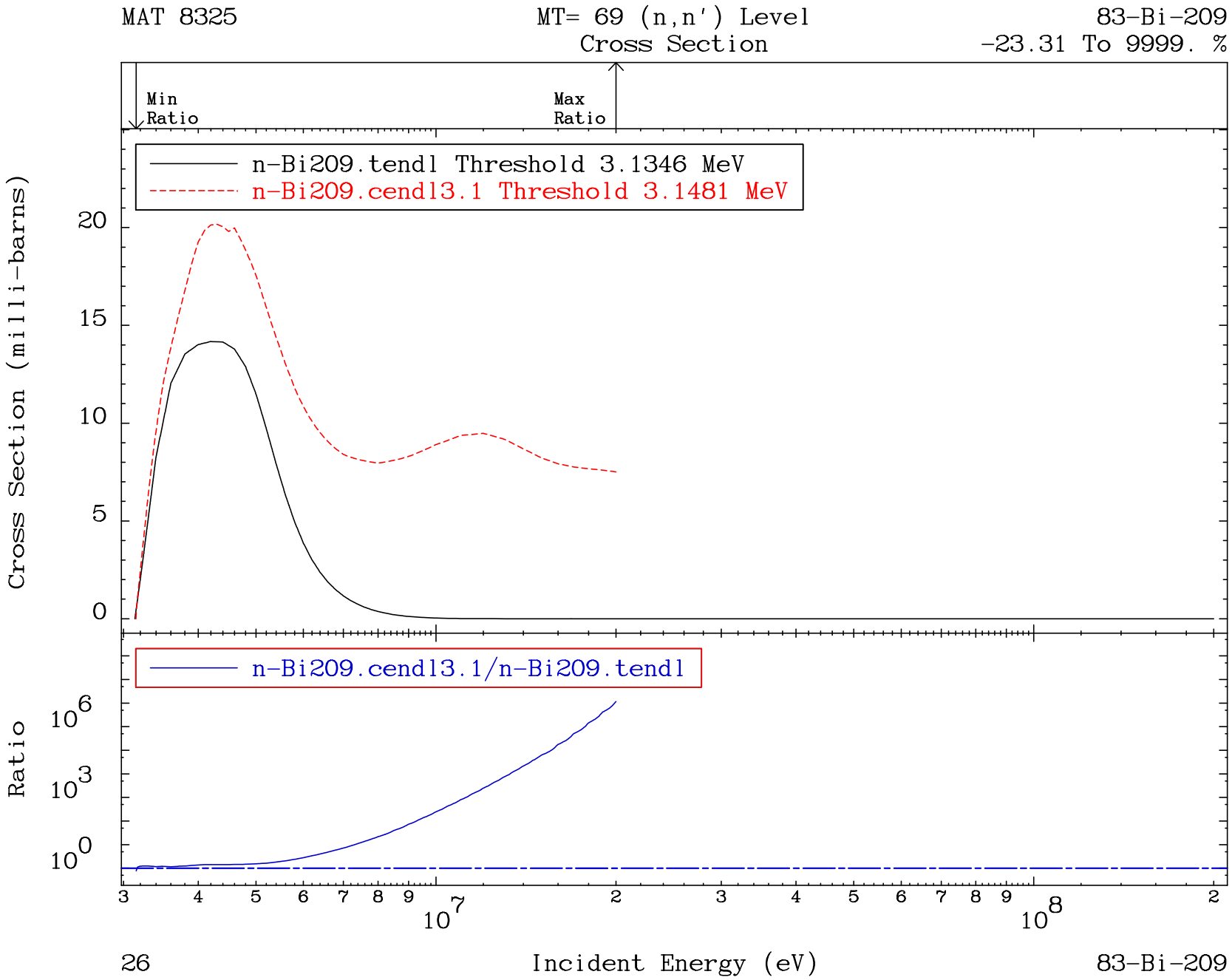

MAT 8325
MT= 64 (n,n') Level
Cross Section
83-Bi-209
-99.33 To 32.19 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.9307 MeV
n-Bi209.cendl3.1 Threshold 2.9307 MeV
Cross Section (milli-barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
21
83-Bi-209

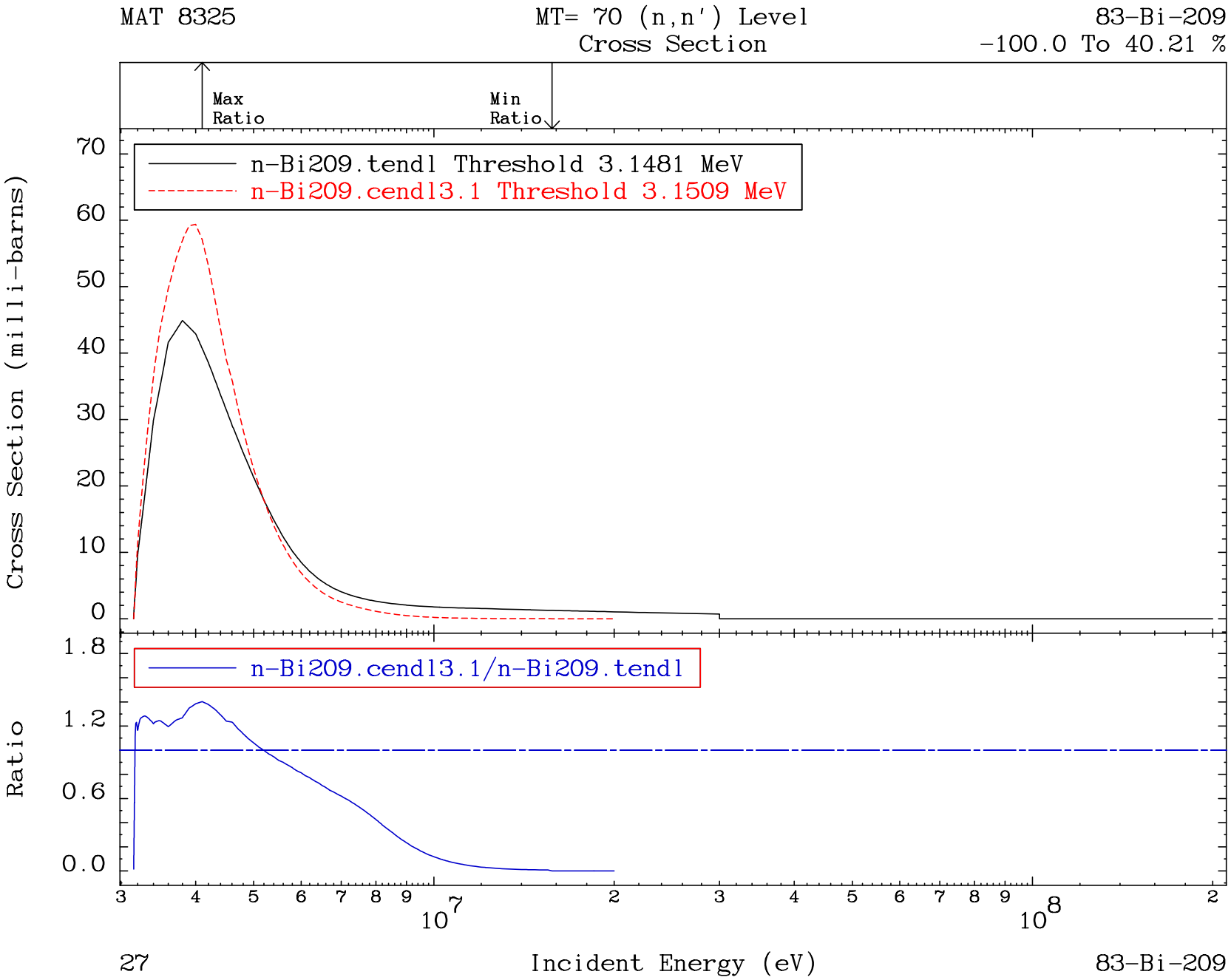

MAT 8325
MT= 65 (n,n') Level
Cross Section
83-Bi-209
-9.930 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 2.9701 MeV
n-Bi209.cendl3.1 Threshold 2.9701 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
83-Bi-209

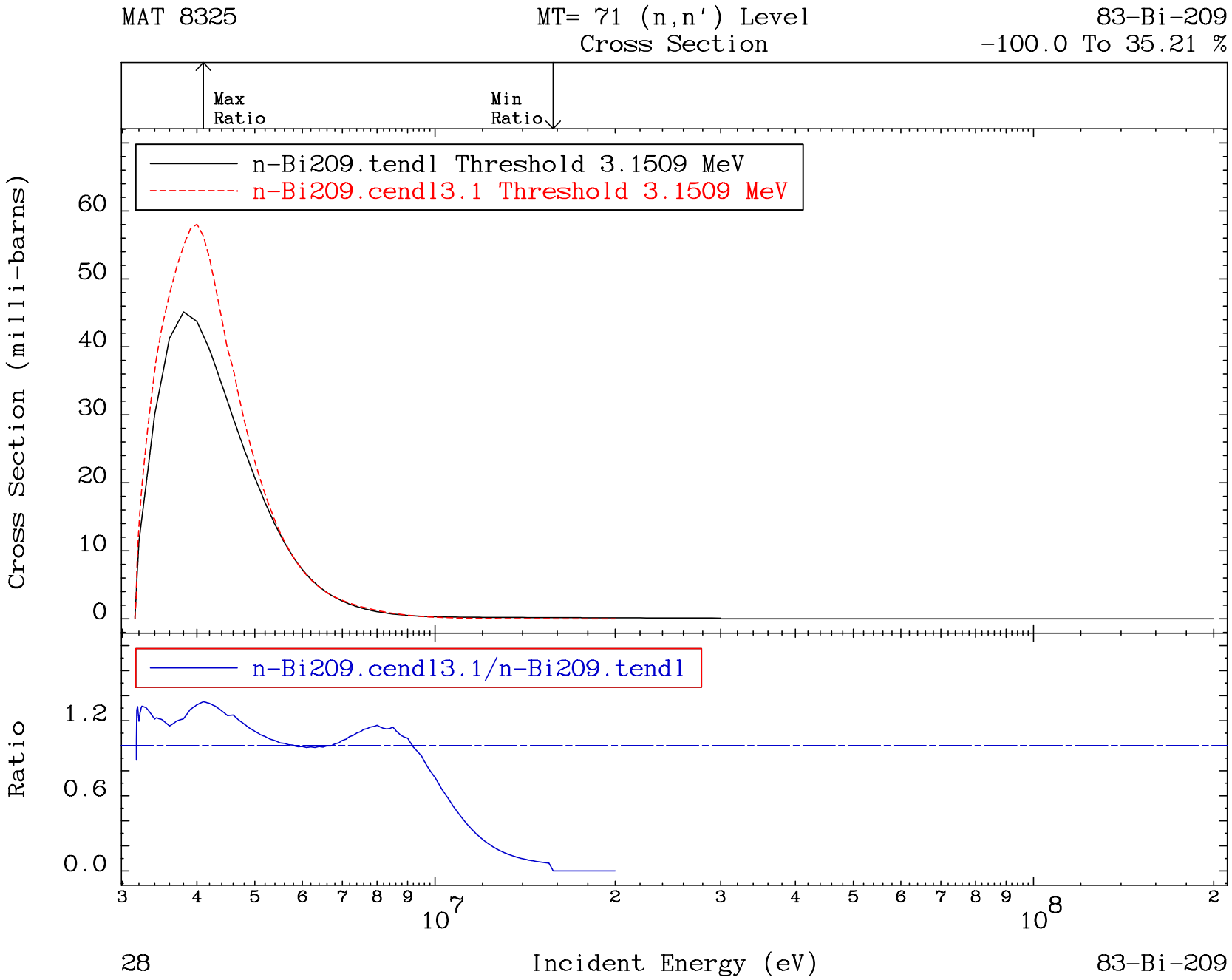

MAT 8325
MT= 66 (n,n') Level
Cross Section
83-Bi-209
-99.51 To 191.2 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.0012 MeV
n-Bi209.cendl3.1 Threshold 3.0012 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^1
10^0
10^-1
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
83-Bi-209

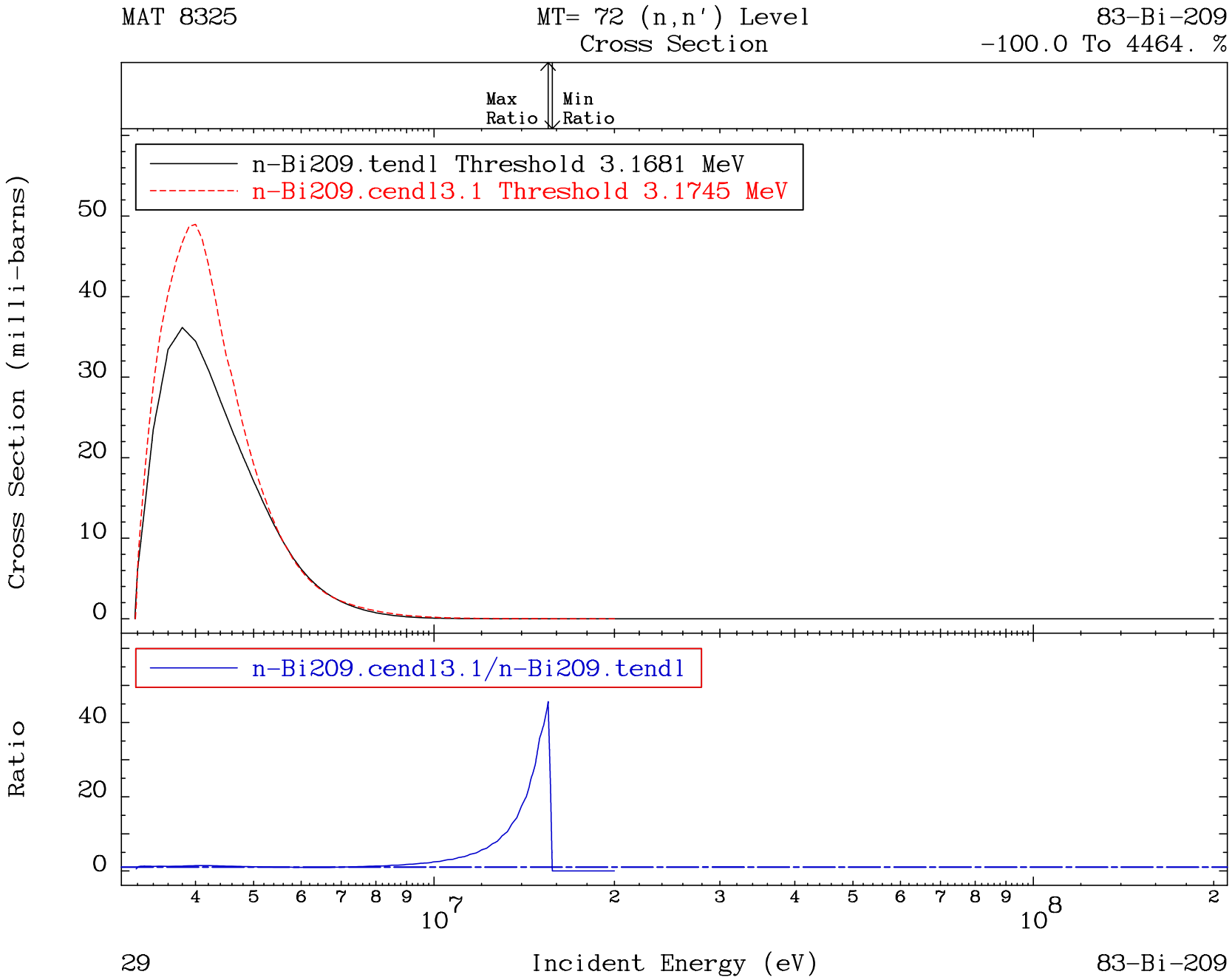

MAT 8325
MT= 67 (n,n') Level
Cross Section
83-Bi-209
-8.166 To 9999. %
Min
Ratio
Max
Ratio
n-Bi209.tendl Threshold 3.0535 MeV
n-Bi209.cendl3.1 Threshold 3.0535 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
24
Incident Energy (eV)
83-Bi-209

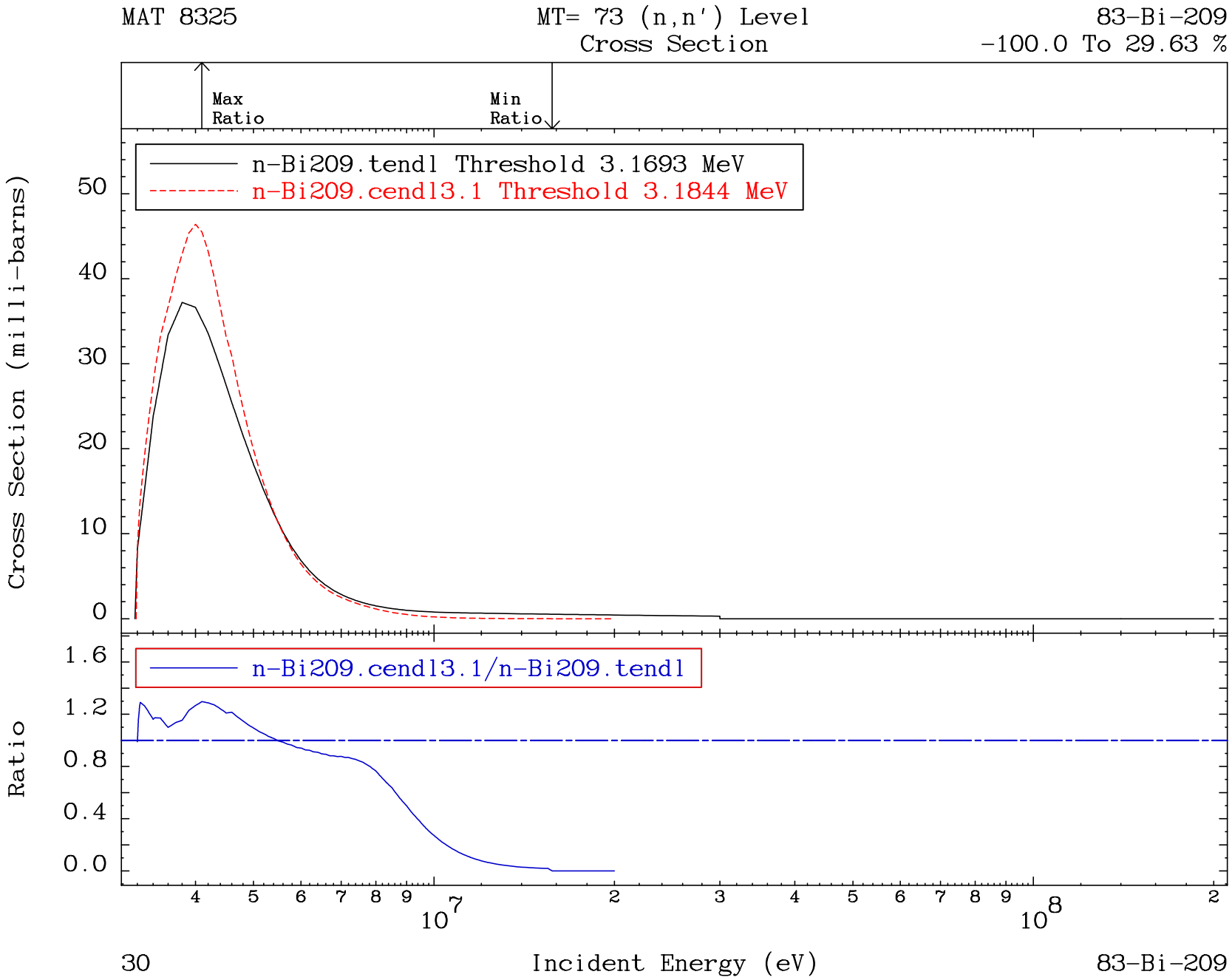

MAT 8325
MT= 68 (n,n') Level
Cross Section
83-Bi-209
-6.226 To 9999. %
Min
Ratio
Max
Ratio
n-Bi209.tendl Threshold 3.1050 MeV
n-Bi209.cendl3.1 Threshold 3.1050 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
25
Incident Energy (eV)
83-Bi-209

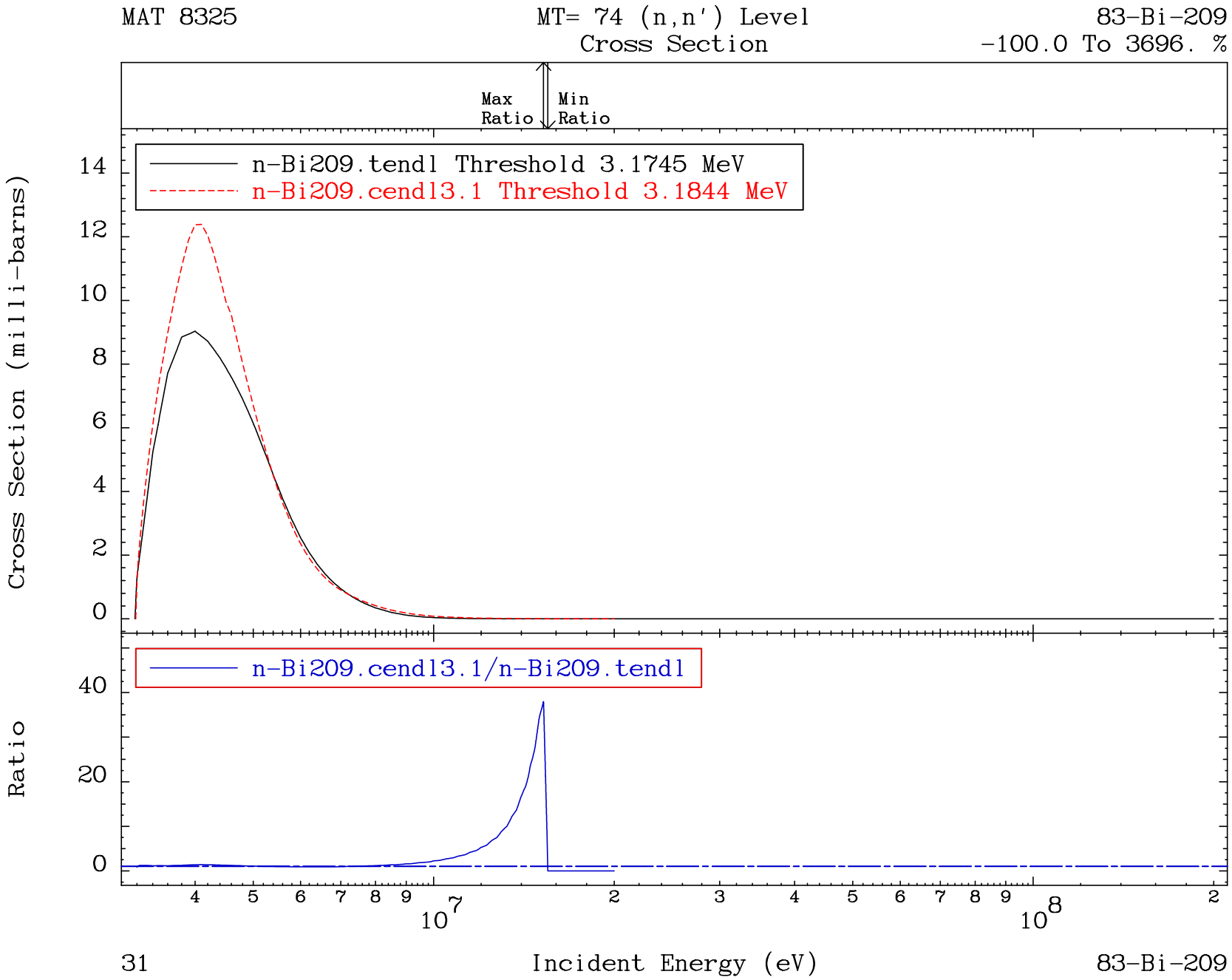

MAT 8325
MT= 69 (n,n') Level
Cross Section
83-Bi-209
-23.31 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 3.1346 MeV
n-Bi209.cendl3.1 Threshold 3.1481 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
83-Bi-209

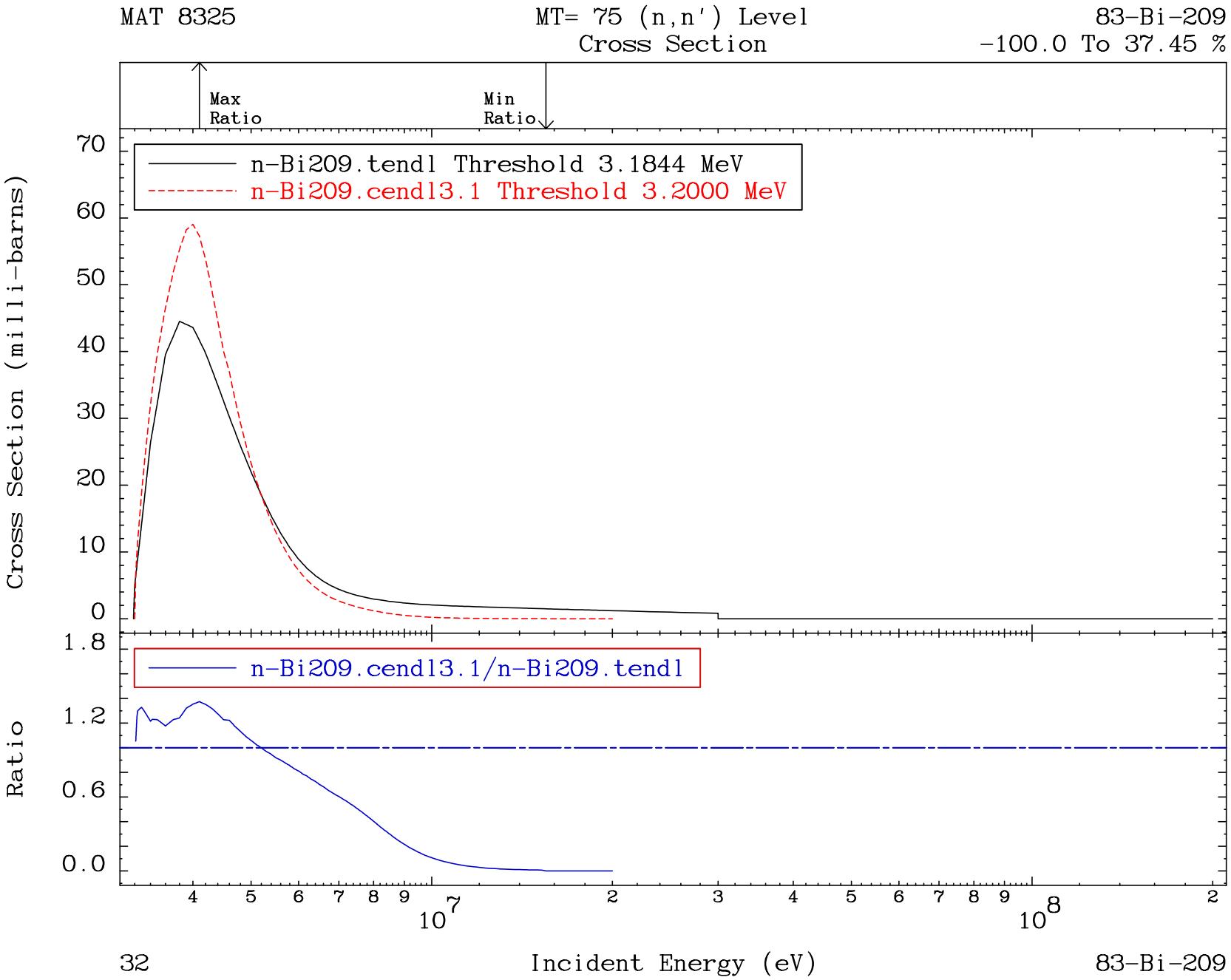

MAT 8325
MT= 70 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 40.21 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.1481 MeV
n-Bi209.cendl3.1 Threshold 3.1509 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
1.8
1.2
0.6
0.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
83-Bi-209

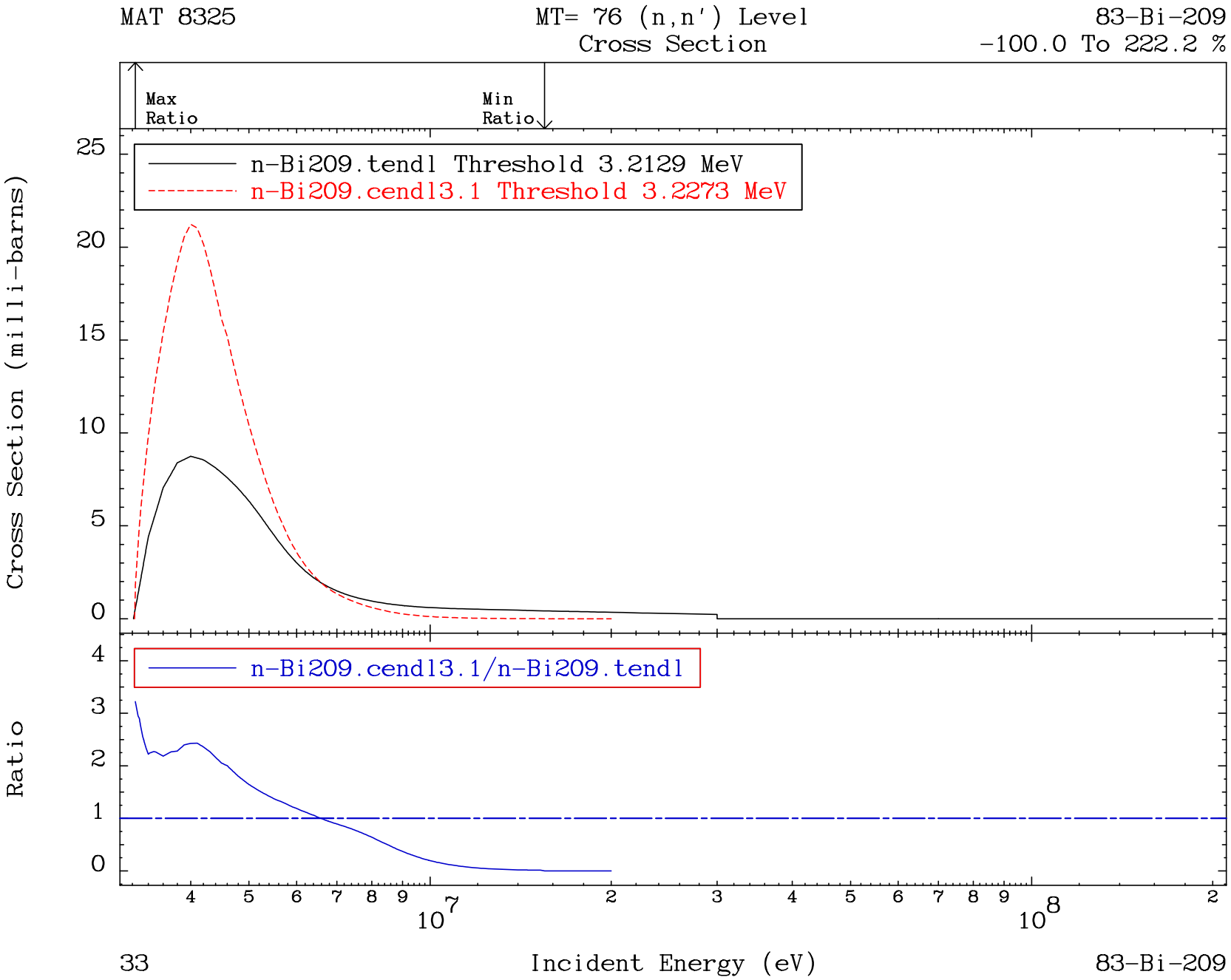

MAT 8325
MT= 71 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 35.21 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.1509 MeV
n-Bi209.cendl3.1 Threshold 3.1509 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
1.2
0.6
0.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
83-Bi-209

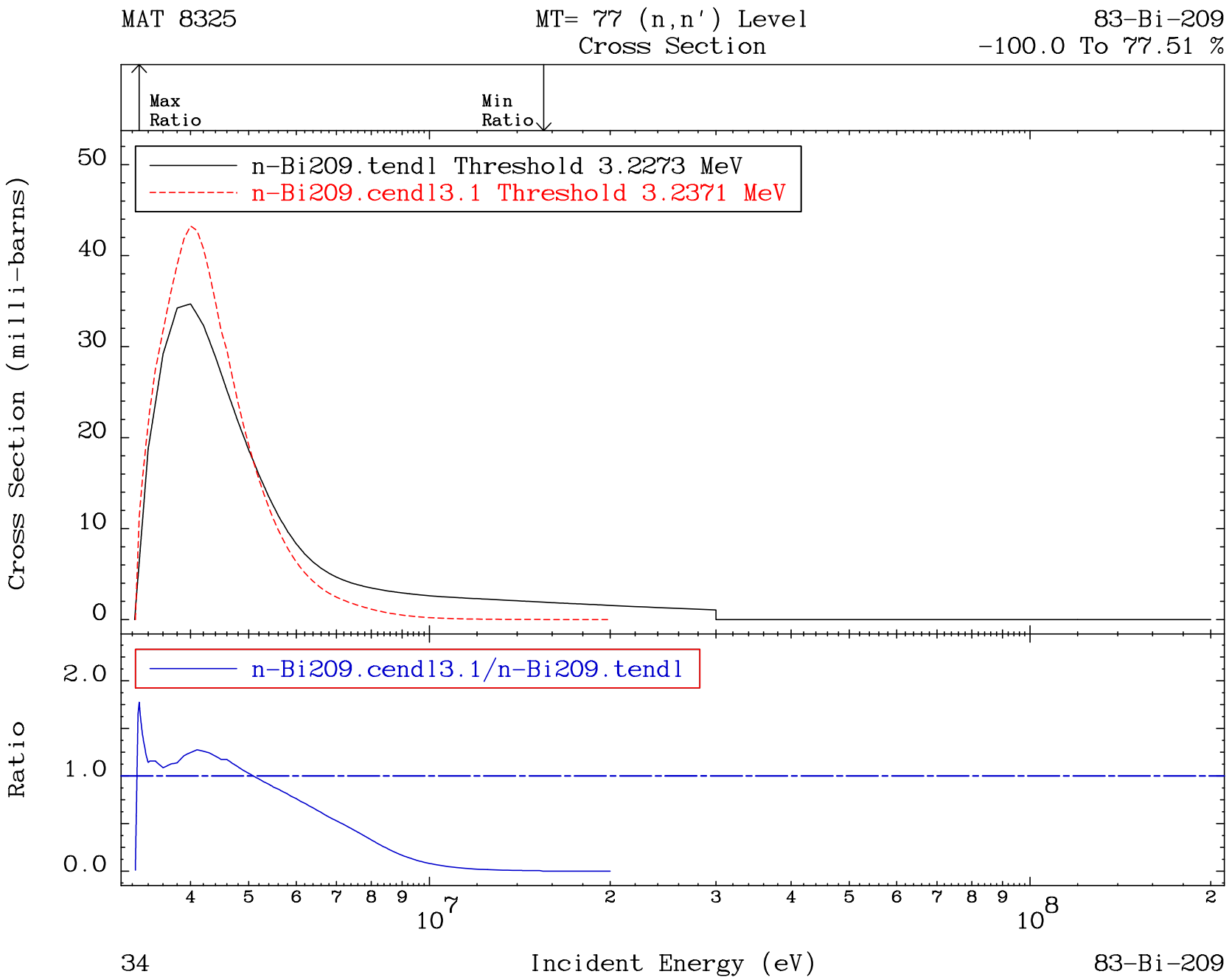

MAT 8325
MT= 72 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 4464. %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.1681 MeV
n-Bi209.cendl3.1 Threshold 3.1745 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
40
20
0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
83-Bi-209

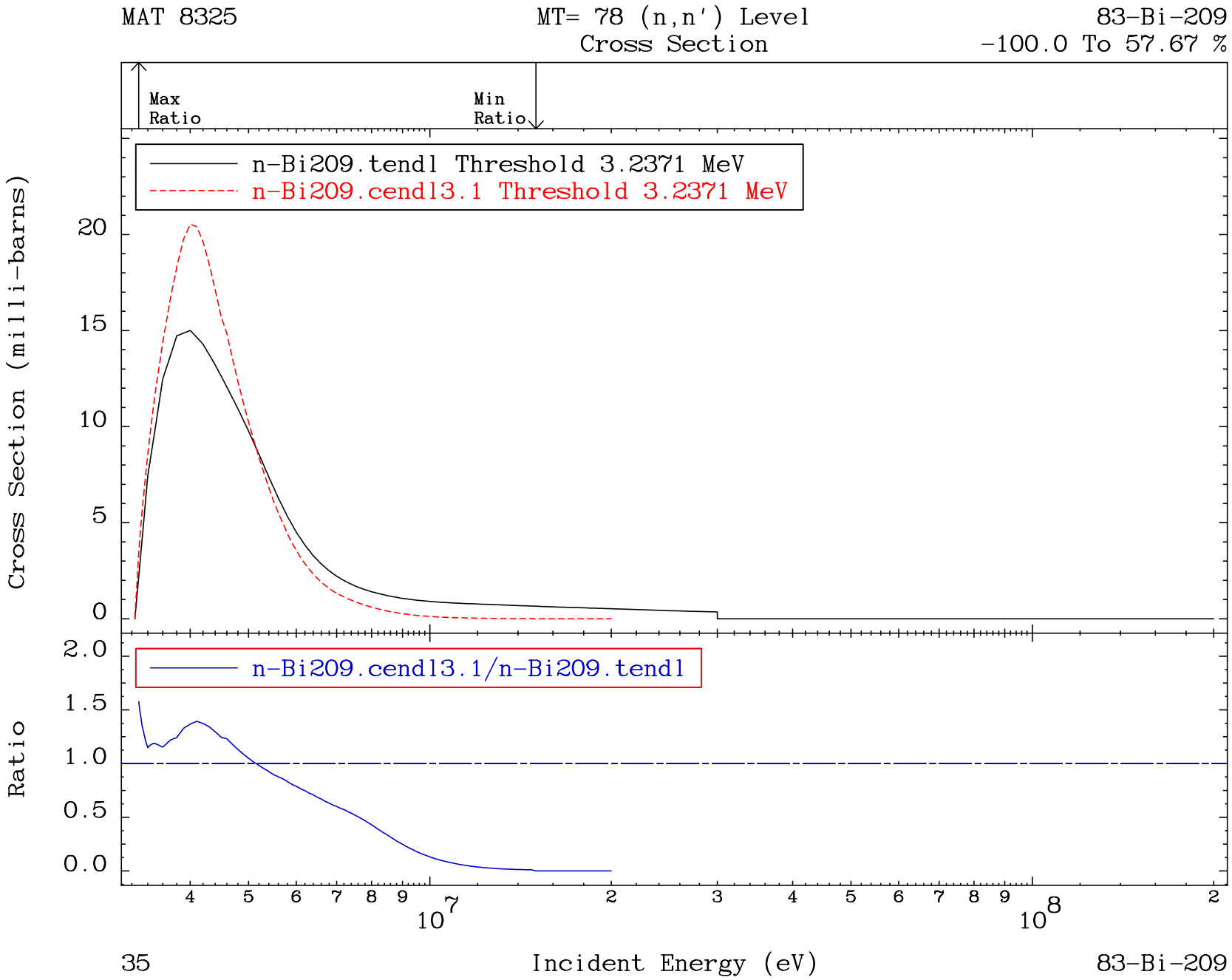

MAT 8325
MT= 73 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 29.63 %
Max
Ratio
Min
Ratio
n-Bi209.tendl Threshold 3.1693 MeV
n-Bi209.cendl3.1 Threshold 3.1844 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
83-Bi-209

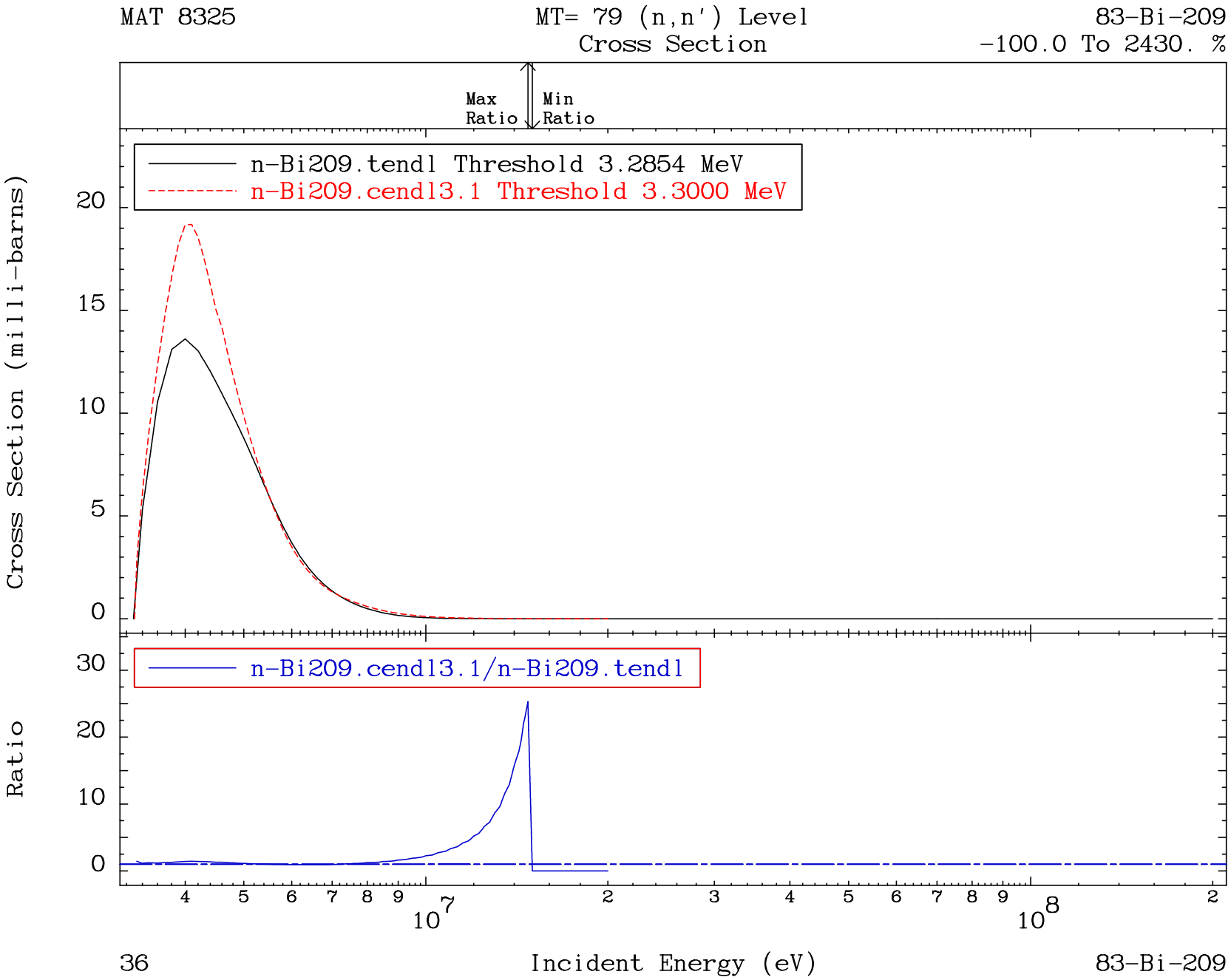

MAT 8325
MT= 74 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 3696. %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.1745 MeV
n-Bi209.cendl3.1 Threshold 3.1844 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
0
20
40
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
83-Bi-209

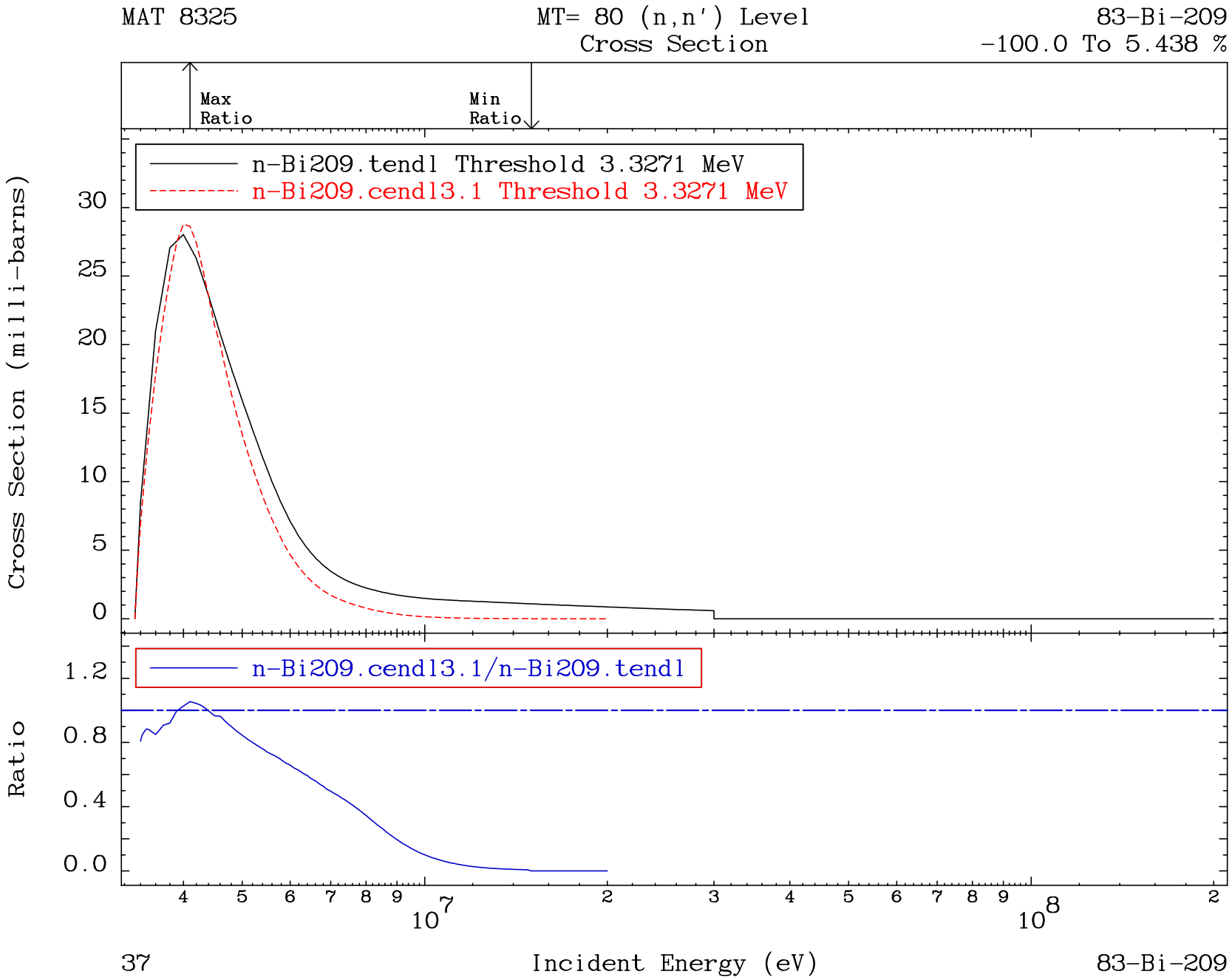

MAT 8325
MT= 75 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 37.45 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.1844 MeV
n-Bi209.cendl3.1 Threshold 3.2000 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
1.8
1.2
0.6
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
83-Bi-209

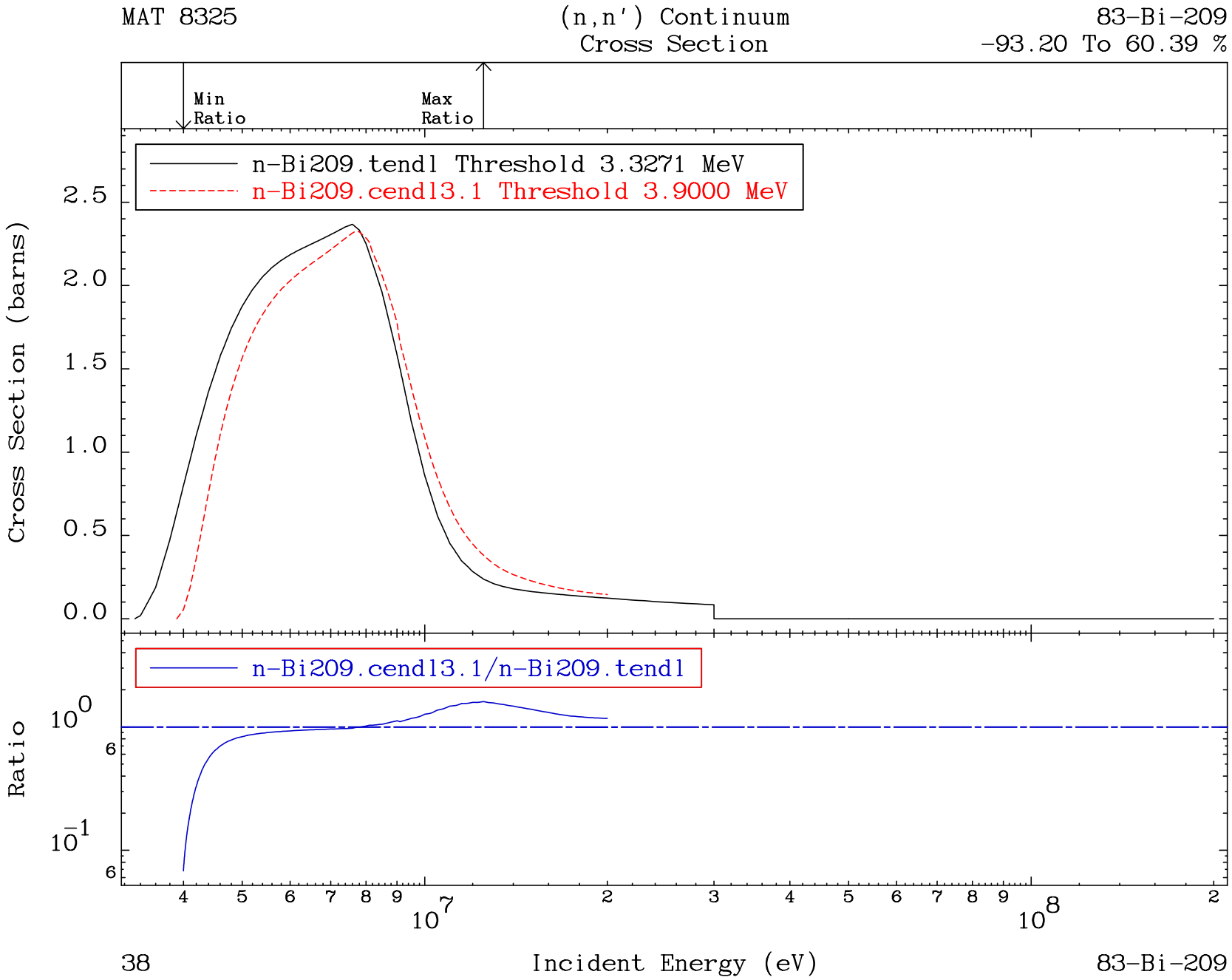

MAT 8325
MT= 76 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 222.2 %
Max
Ratio
Min
Ratio
n-Bi209.tendl Threshold 3.2129 MeV
n-Bi209.cendl3.1 Threshold 3.2273 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
4
3
2
1
0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
83-Bi-209

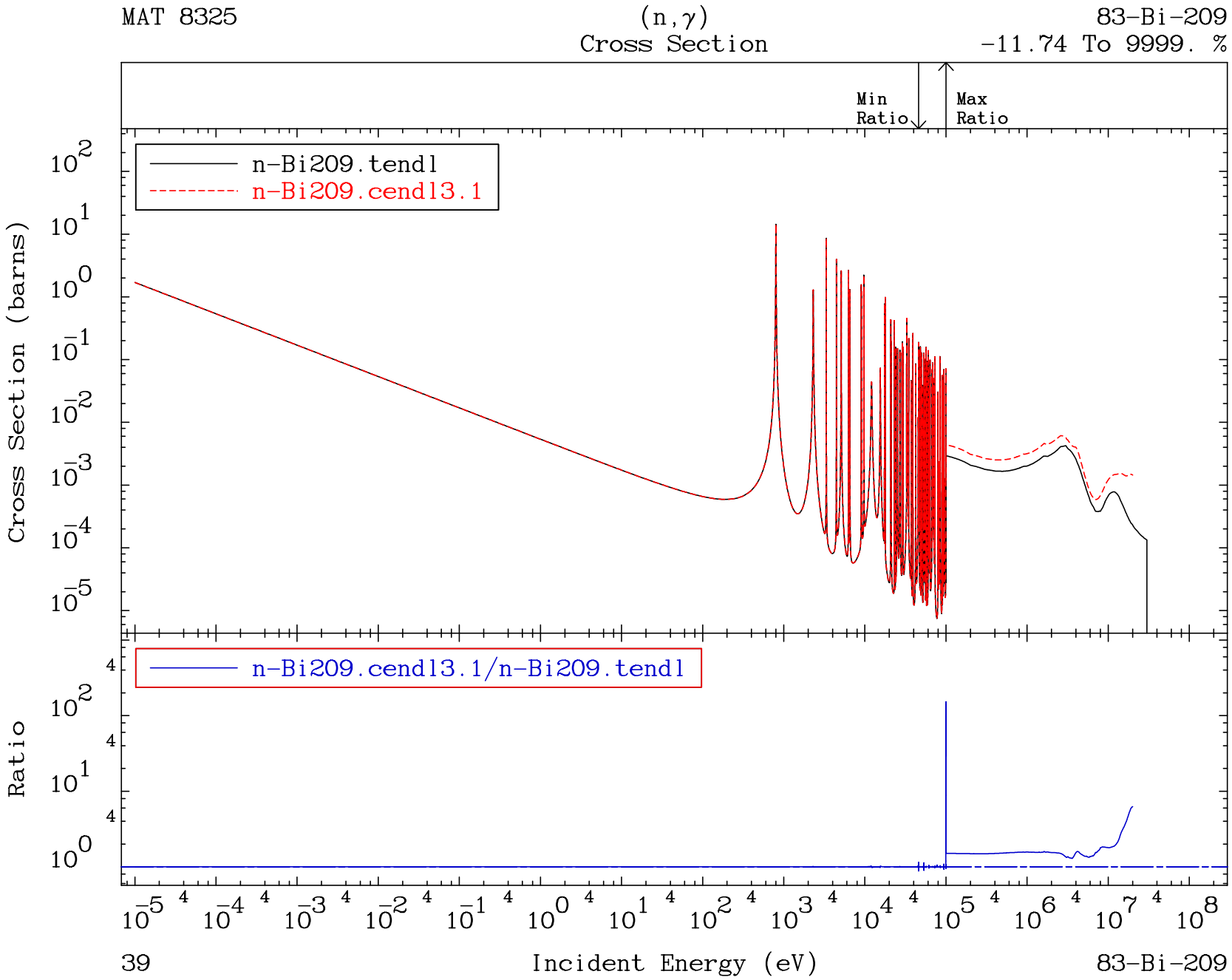

MAT 8325
MT= 77 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 77.51 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.2273 MeV
n-Bi209.cendl3.1 Threshold 3.2371 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
2.0
1.0
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
83-Bi-209

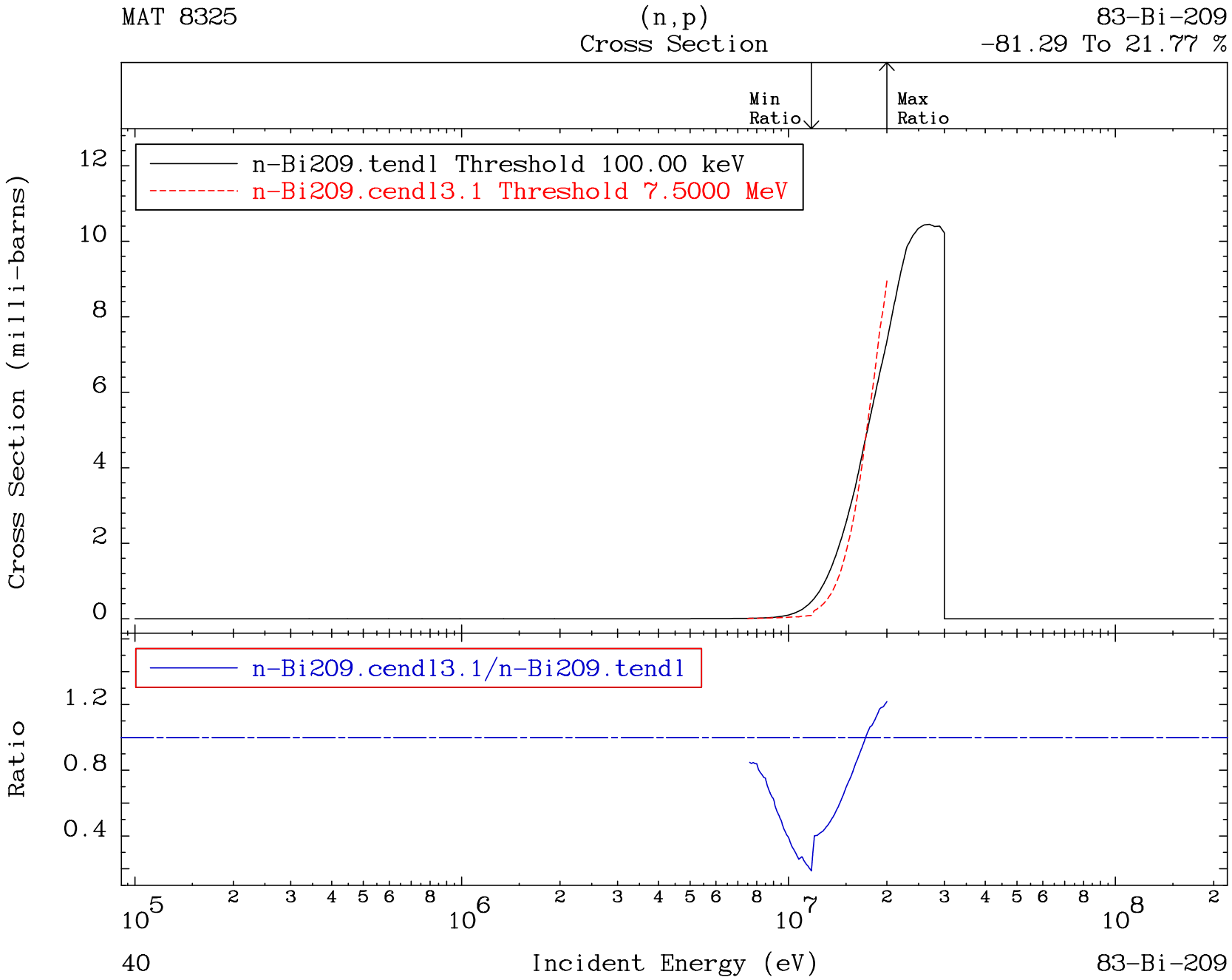

MAT 8325
MT= 78 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 57.67 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.2371 MeV
n-Bi209.cendl3.1 Threshold 3.2371 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
2.0
1.5
1.0
0.5
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
83-Bi-209

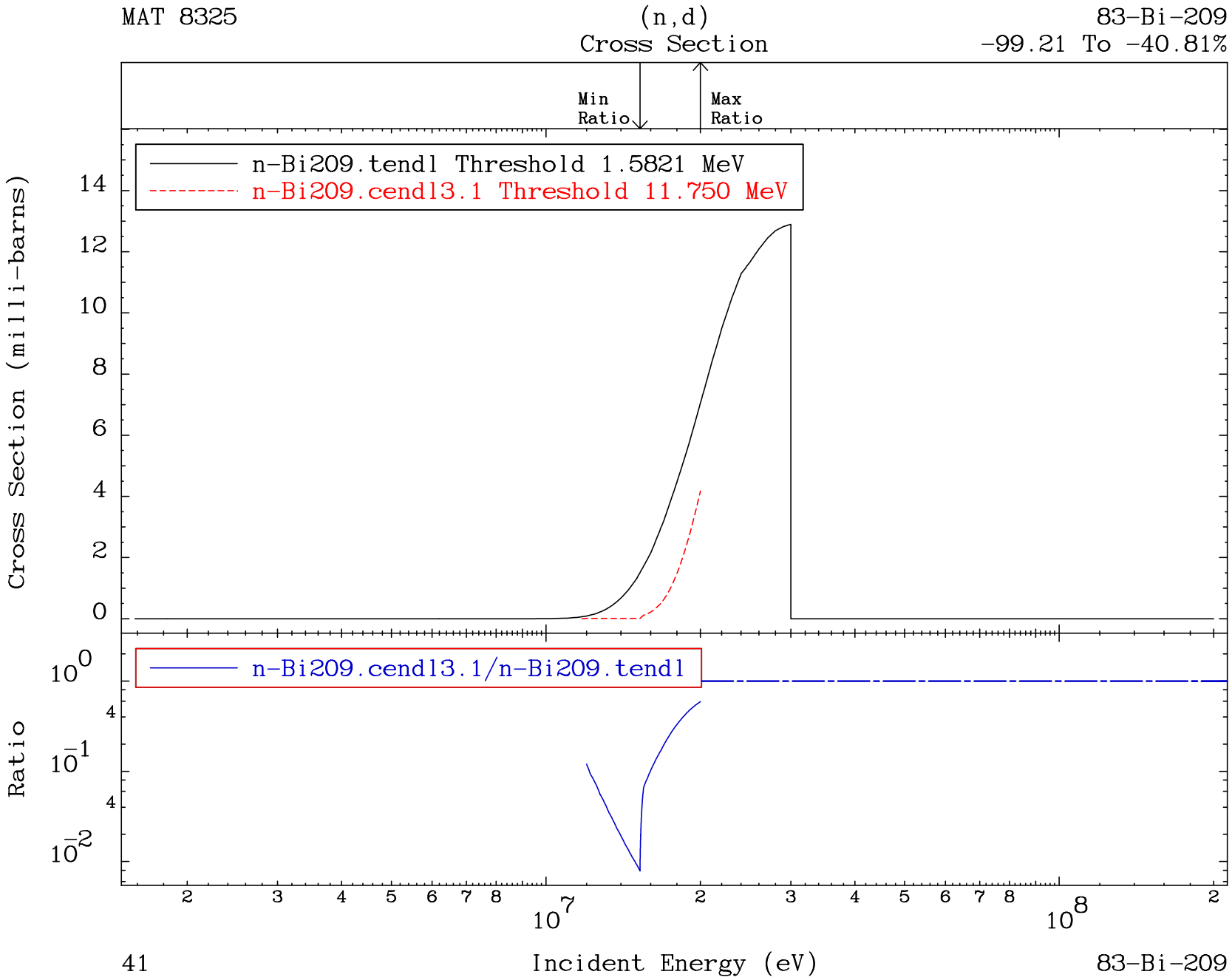

MAT 8325
MT= 79 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 2430. %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.2854 MeV
n-Bi209.cendl3.1 Threshold 3.3000 MeV
Cross Section (milli-barns)
0
5
10
15
20
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
0
10
20
30
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
36
83-Bi-209

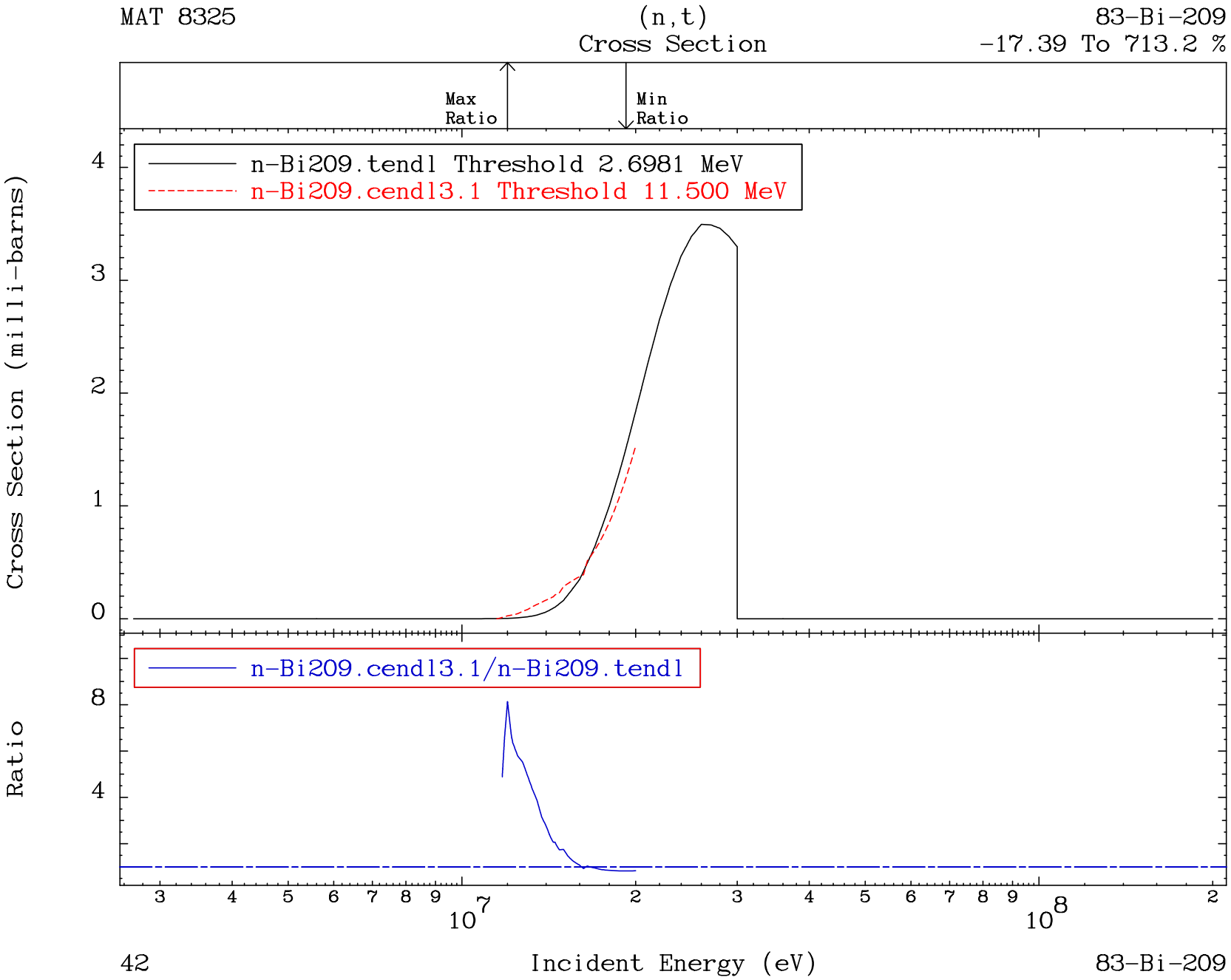

MAT 8325
MT= 80 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 5.438 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 3.3271 MeV
n-Bi209.cendl3.1 Threshold 3.3271 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
1.2
0.8
0.4
0.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
83-Bi-209

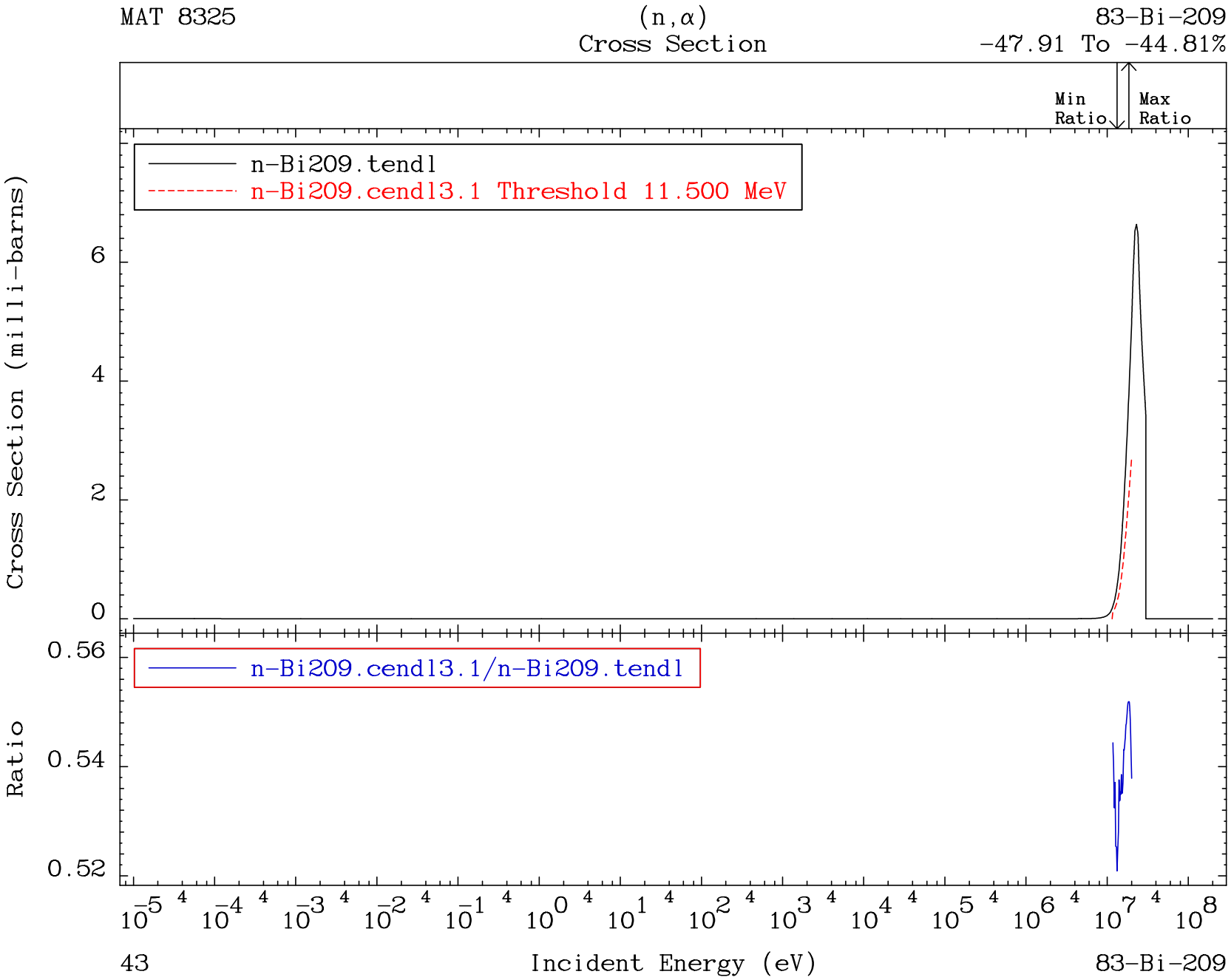

MAT 8325
(n,n') Continuum
Cross Section
83-Bi-209
-93.20 To 60.39 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 3.3271 MeV
n-Bi209.cendl3.1 Threshold 3.9000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
83-Bi-209

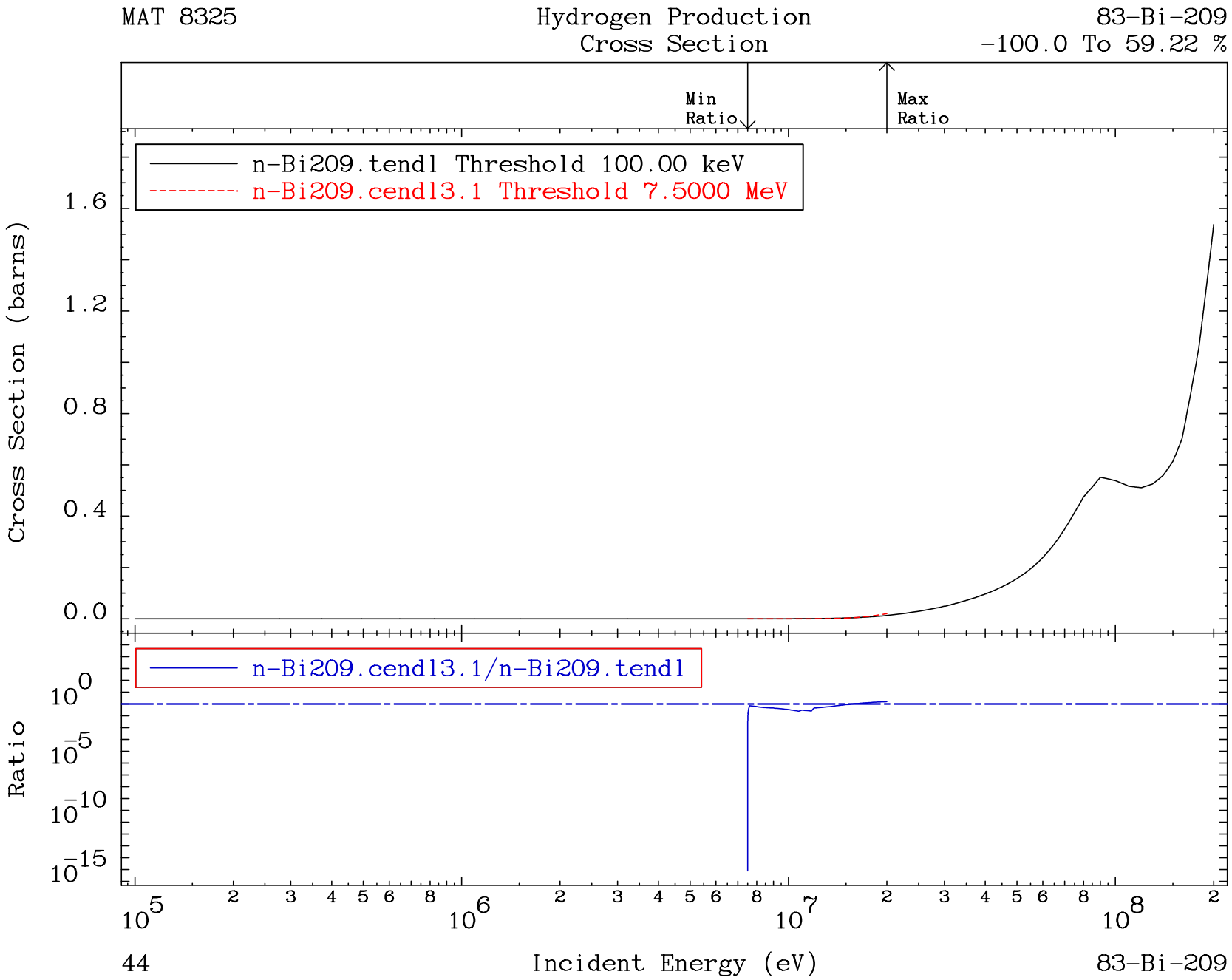

MAT 8325
(n,γ)
Cross Section
83-Bi-209
-11.74 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
39
Incident Energy (eV)
83-Bi-209

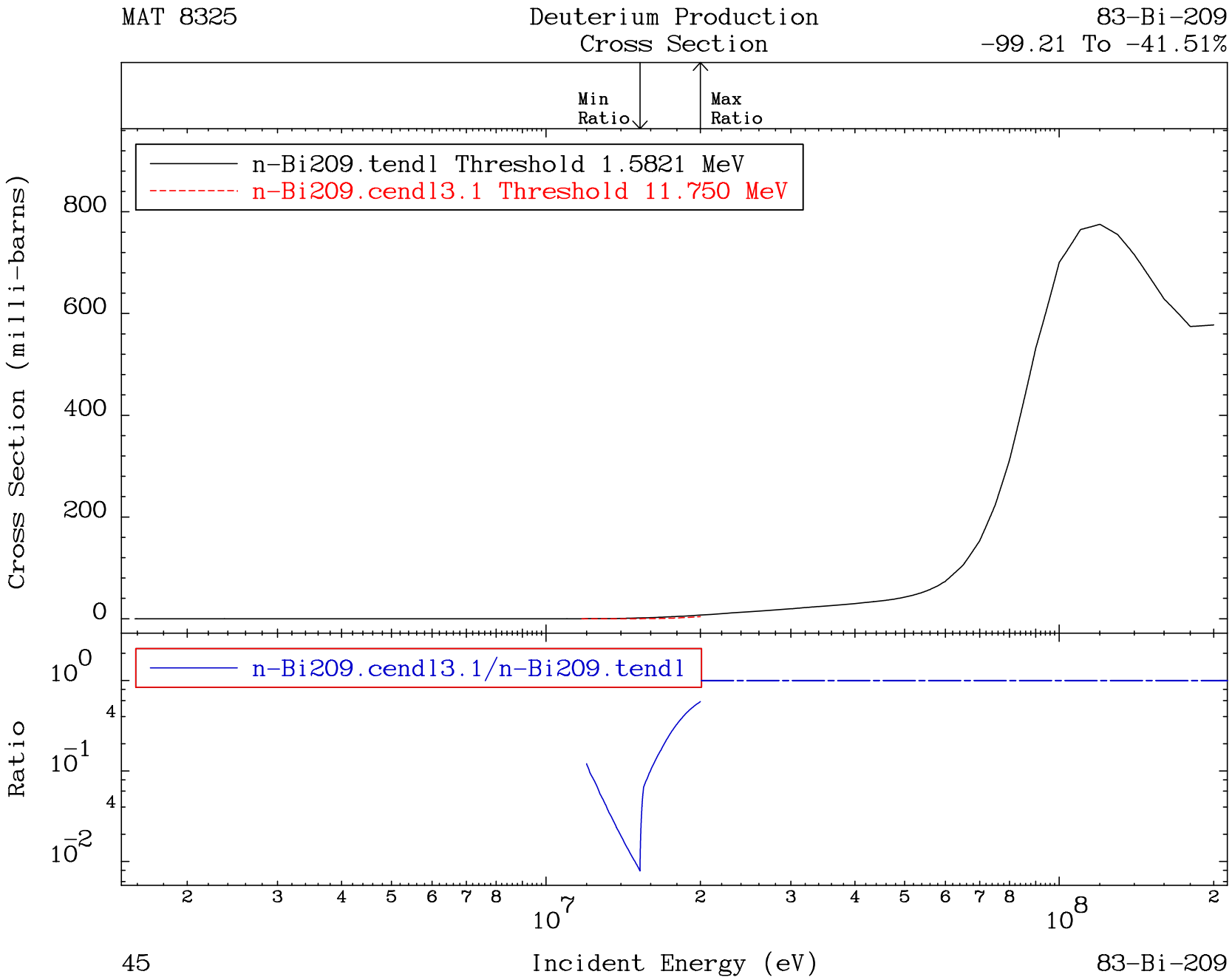

MAT 8325
(n,p)
Cross Section
83-Bi-209
-81.29 To 21.77 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 100.00 keV
n-Bi209.cendl3.1 Threshold 7.5000 MeV
Cross Section (milli-barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
40
83-Bi-209

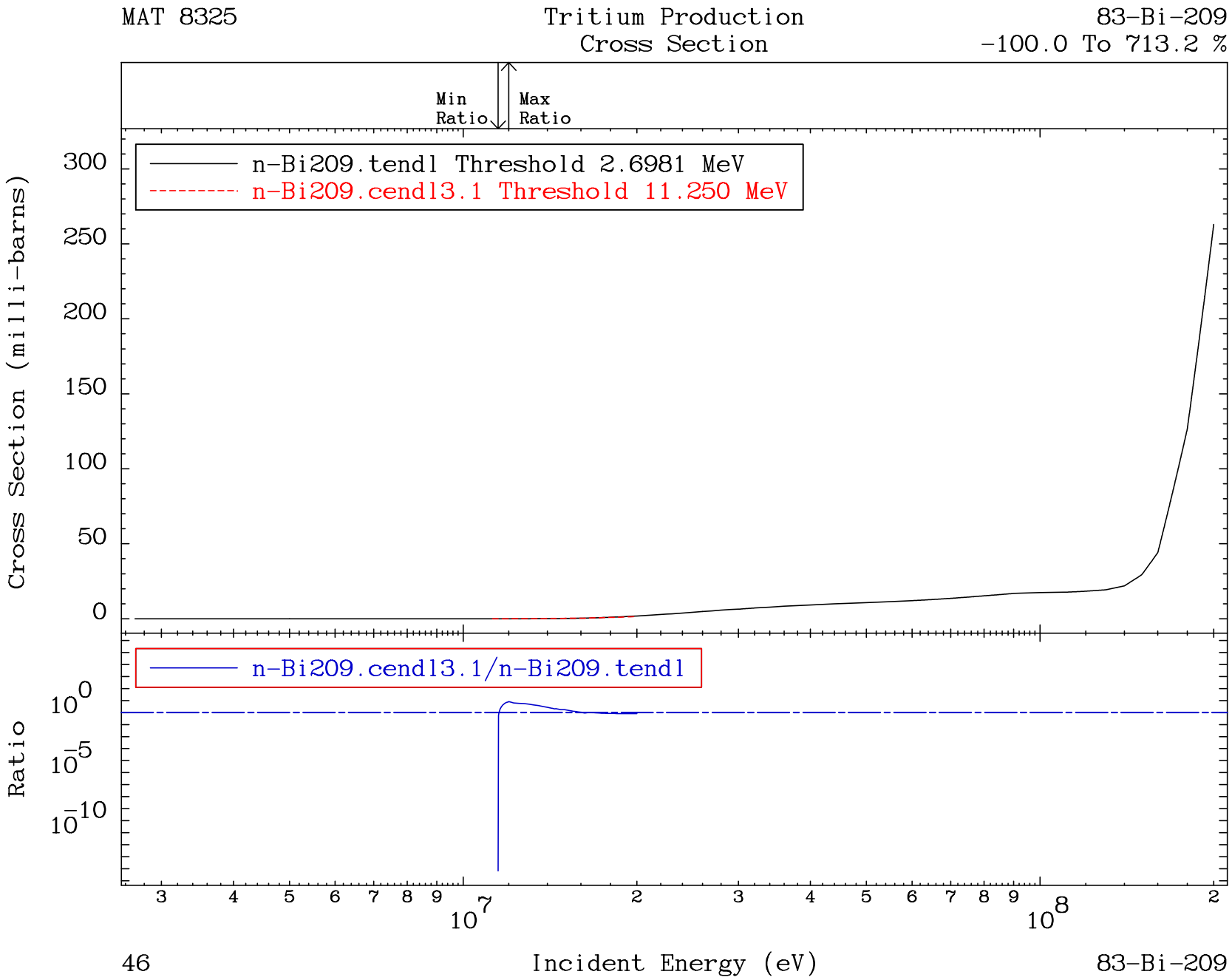

MAT 8325
(n,d)
Cross Section
83-Bi-209
-99.21 To -40.81%
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 1.5821 MeV
n-Bi209.cendl3.1 Threshold 11.750 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
4
10^-1
4
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
83-Bi-209

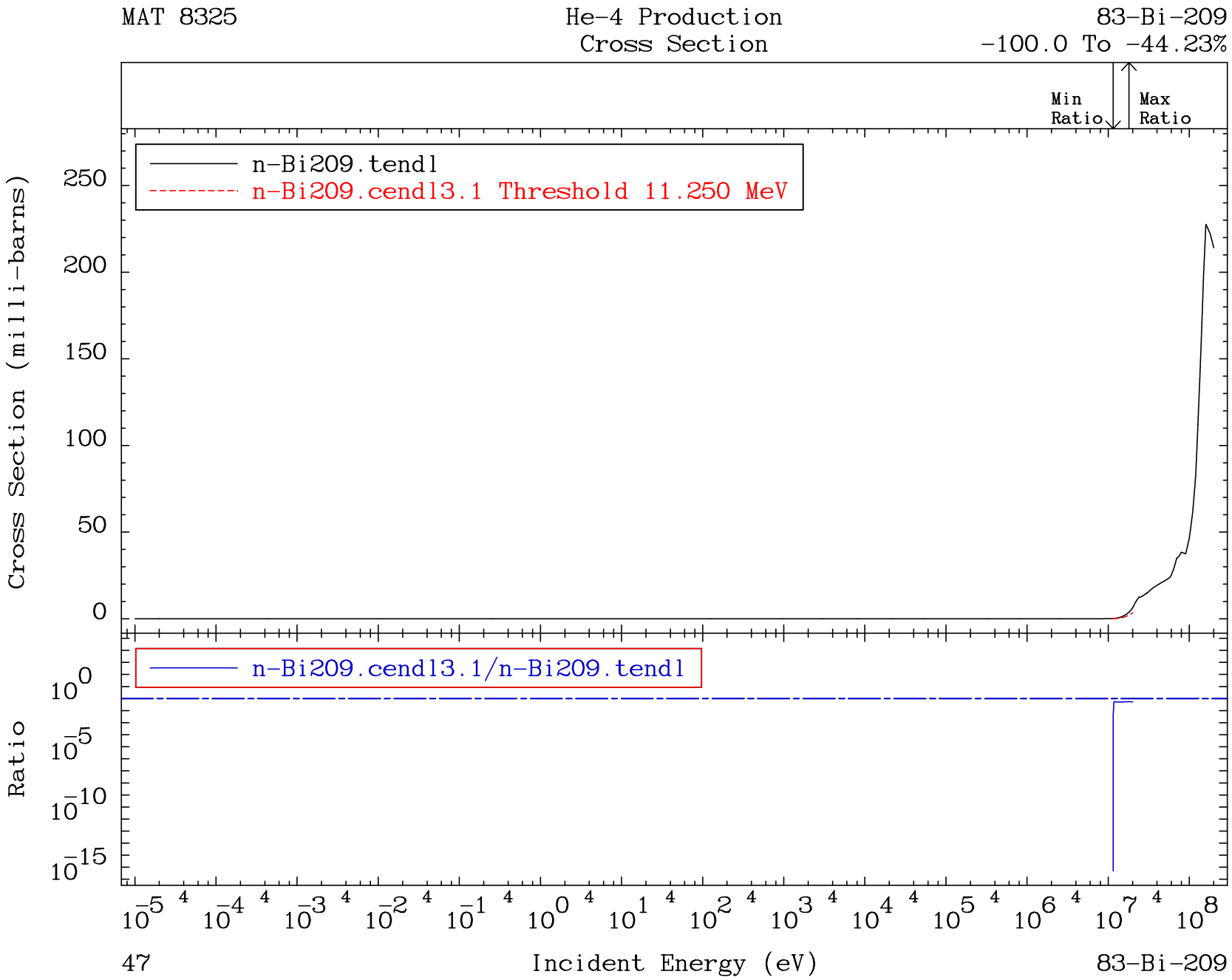

MAT 8325
(n,t)
Cross Section
83-Bi-209
-17.39 To 713.2 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 2.6981 MeV
n-Bi209.cendl3.1 Threshold 11.500 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
4
8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
83-Bi-209

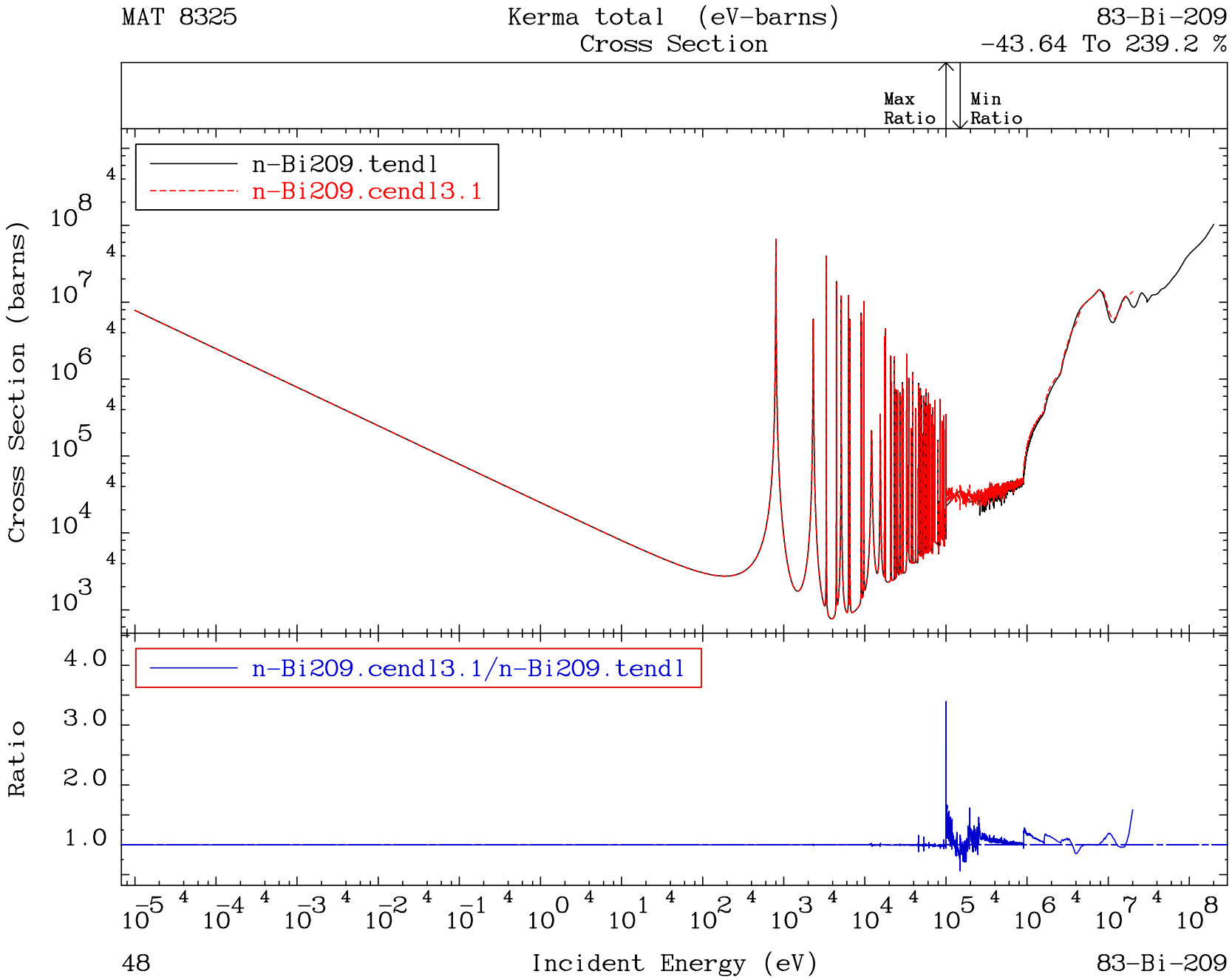

MAT 8325
(n,α)
Cross Section
83-Bi-209
-47.91 To -44.81%
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1 Threshold 11.500 MeV
Cross Section (milli-barns)
0
2
4
6
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
0.52
0.54
0.56
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
43
Incident Energy (eV)
83-Bi-209

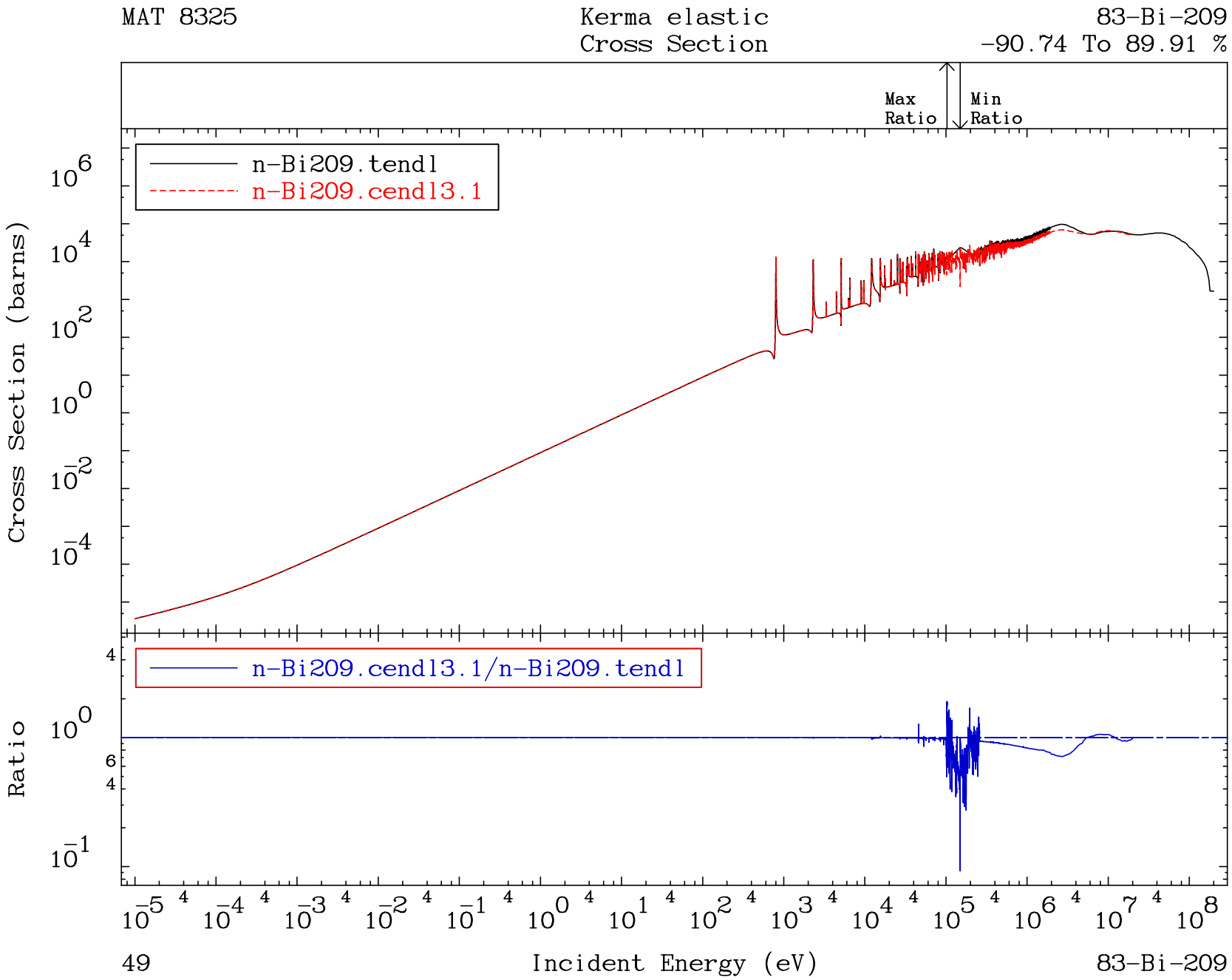

MAT 8325
Hydrogen Production
Cross Section
83-Bi-209
-100.0 To 59.22 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 100.00 keV
n-Bi209.cendl3.1 Threshold 7.5000 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-5
10^-10
10^-15
10^5
2 3 4 5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
44
Incident Energy (eV)
83-Bi-209

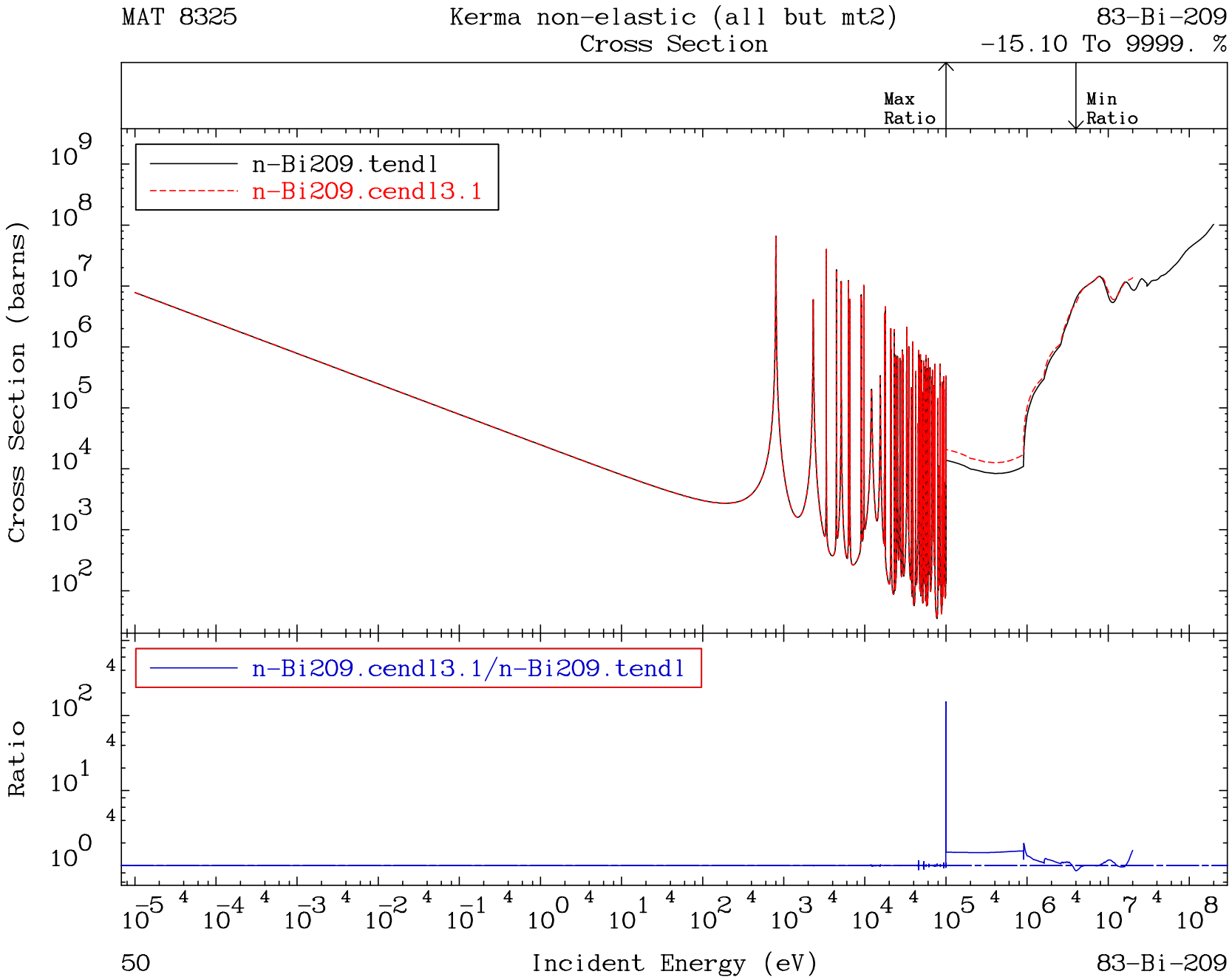

MAT 8325
Deuterium Production
Cross Section
83-Bi-209
-99.21 To -41.51%
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 1.5821 MeV
n-Bi209.cendl3.1 Threshold 11.750 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
83-Bi-209

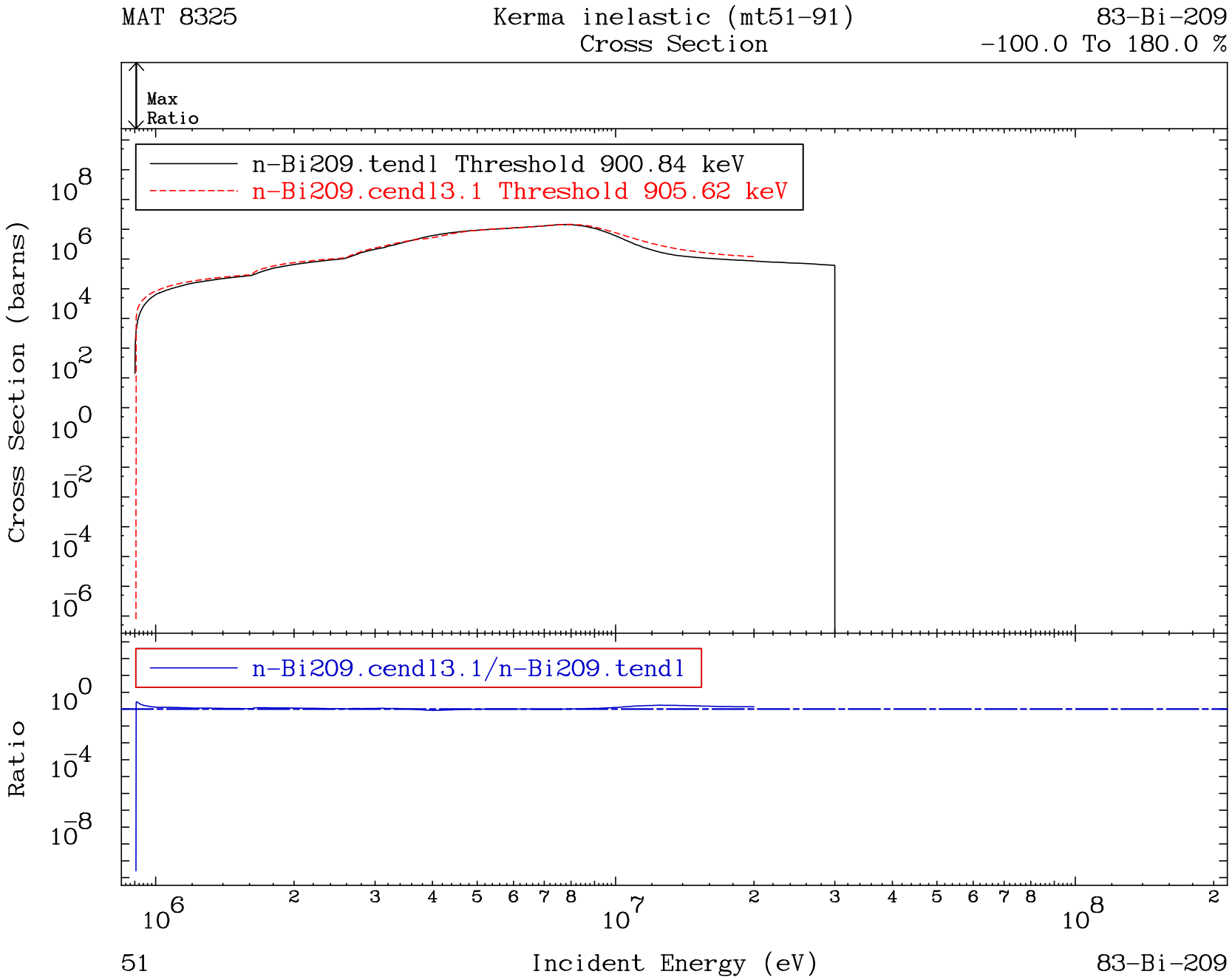

MAT 8325
Tritium Production
Cross Section
83-Bi-209
-100.0 To 713.2 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 2.6981 MeV
n-Bi209.cendl3.1 Threshold 11.250 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-5
10^-10
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
83-Bi-209

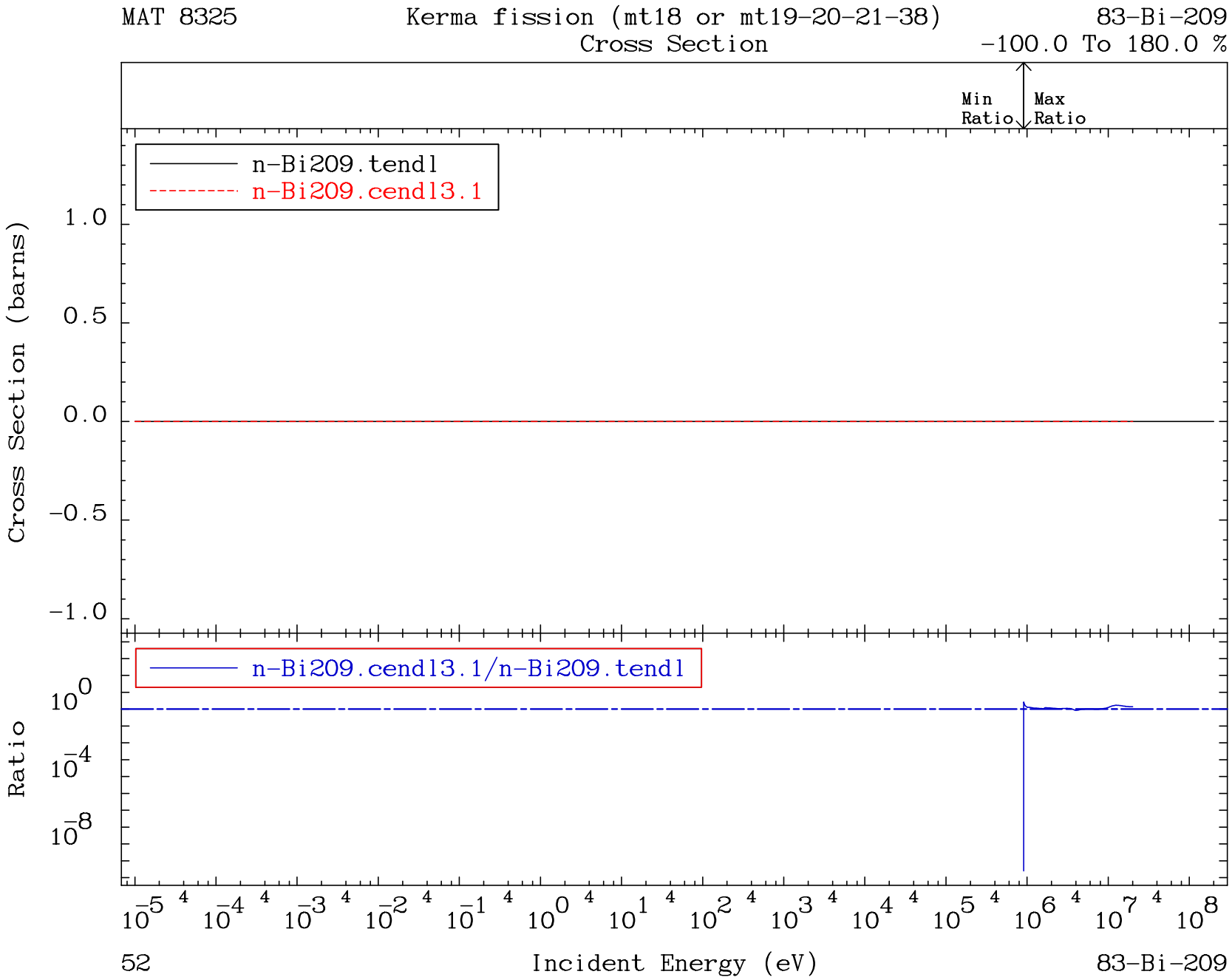

MAT 8325
He-4 Production
Cross Section
83-Bi-209
-100.0 To -44.23%
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1 Threshold 11.250 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-5
10^-10
10^-15
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
47
Incident Energy (eV)
83-Bi-209

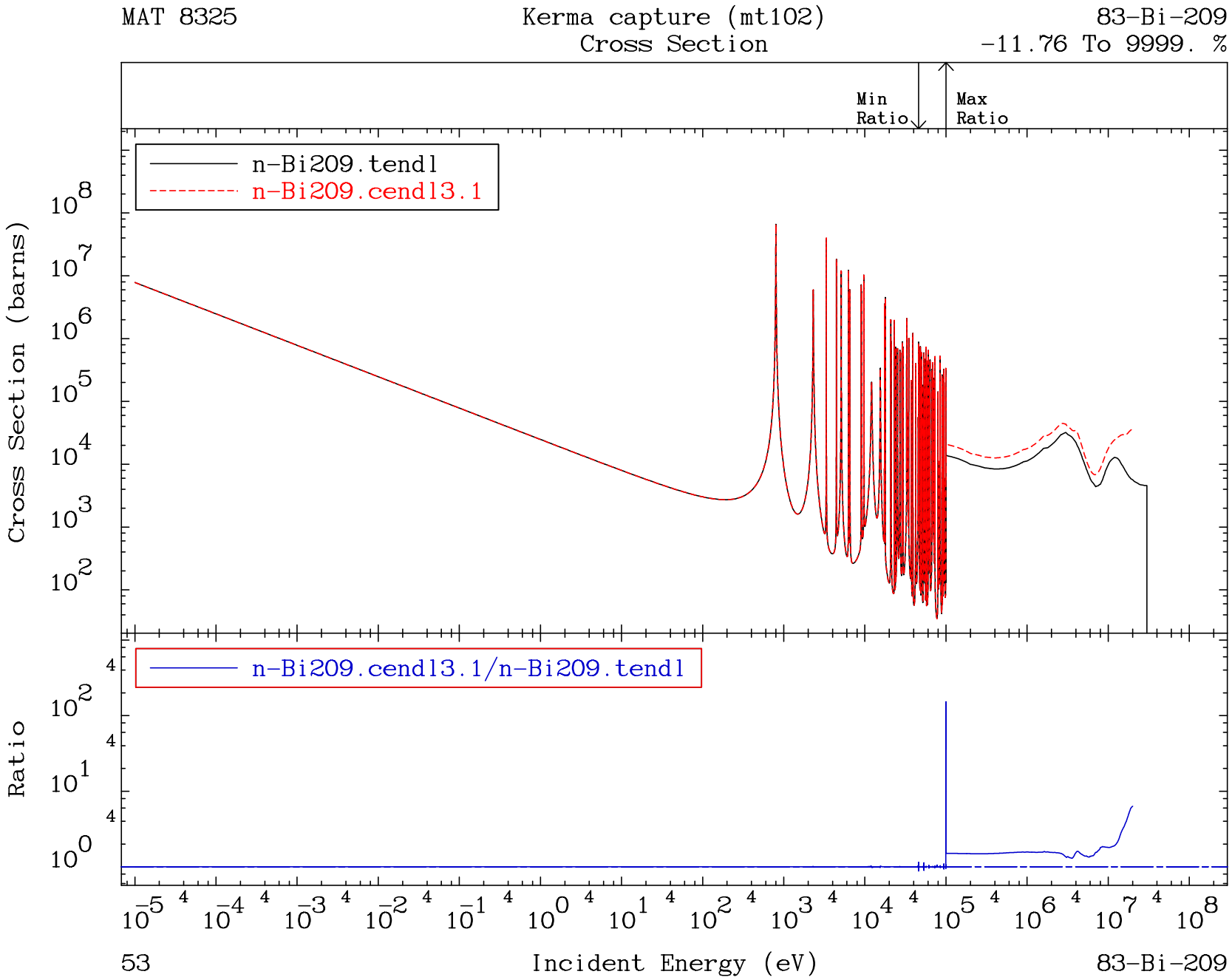

MAT 8325
Kerma total (eV-barns)
Cross Section
83-Bi-209
-43.64 To 239.2 %
Max Ratio
Min Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
48
83-Bi-209

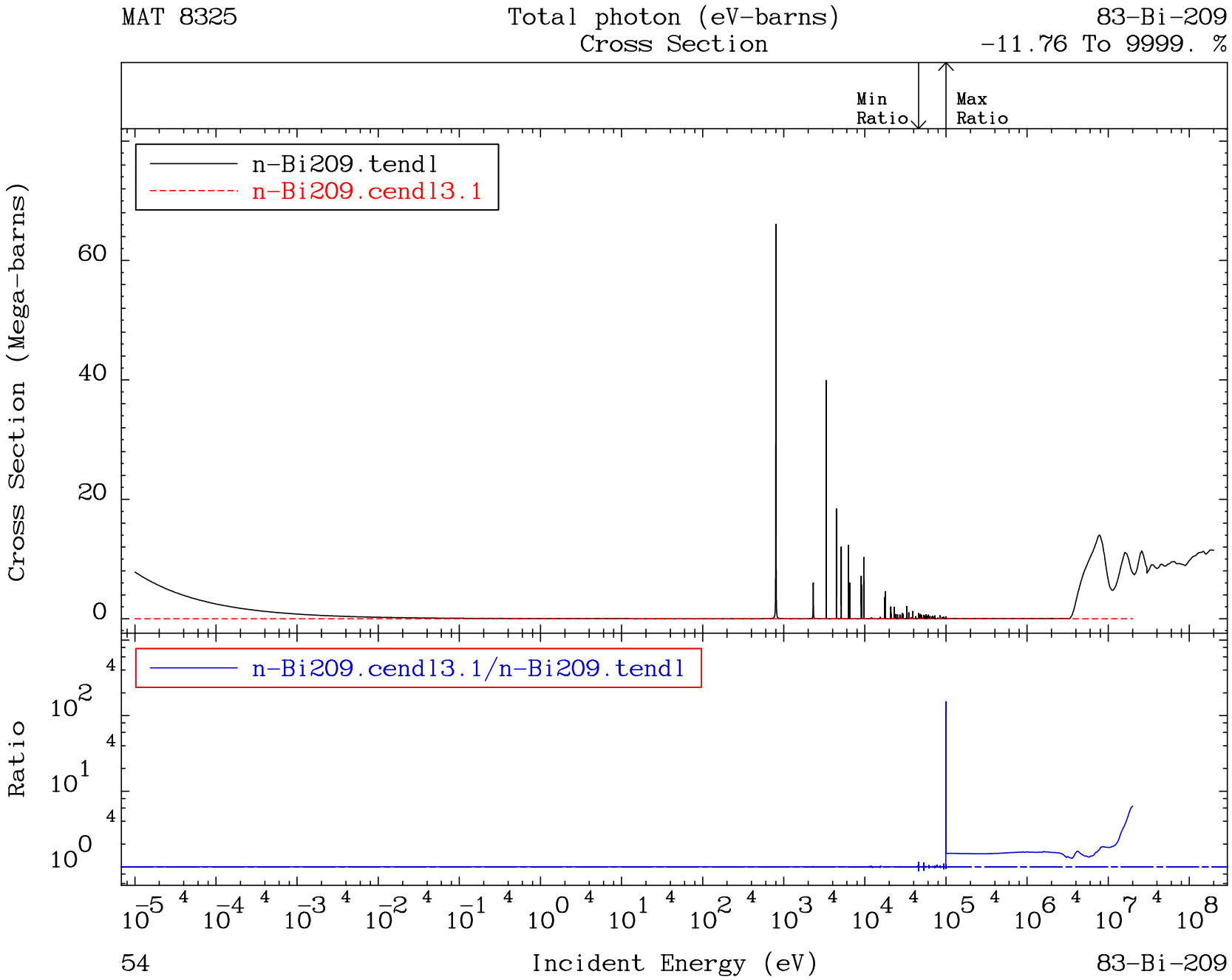

MAT 8325
Kerma elastic
Cross Section
83-Bi-209
-90.74 To 89.91 %
Max Ratio
Min Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
49
83-Bi-209

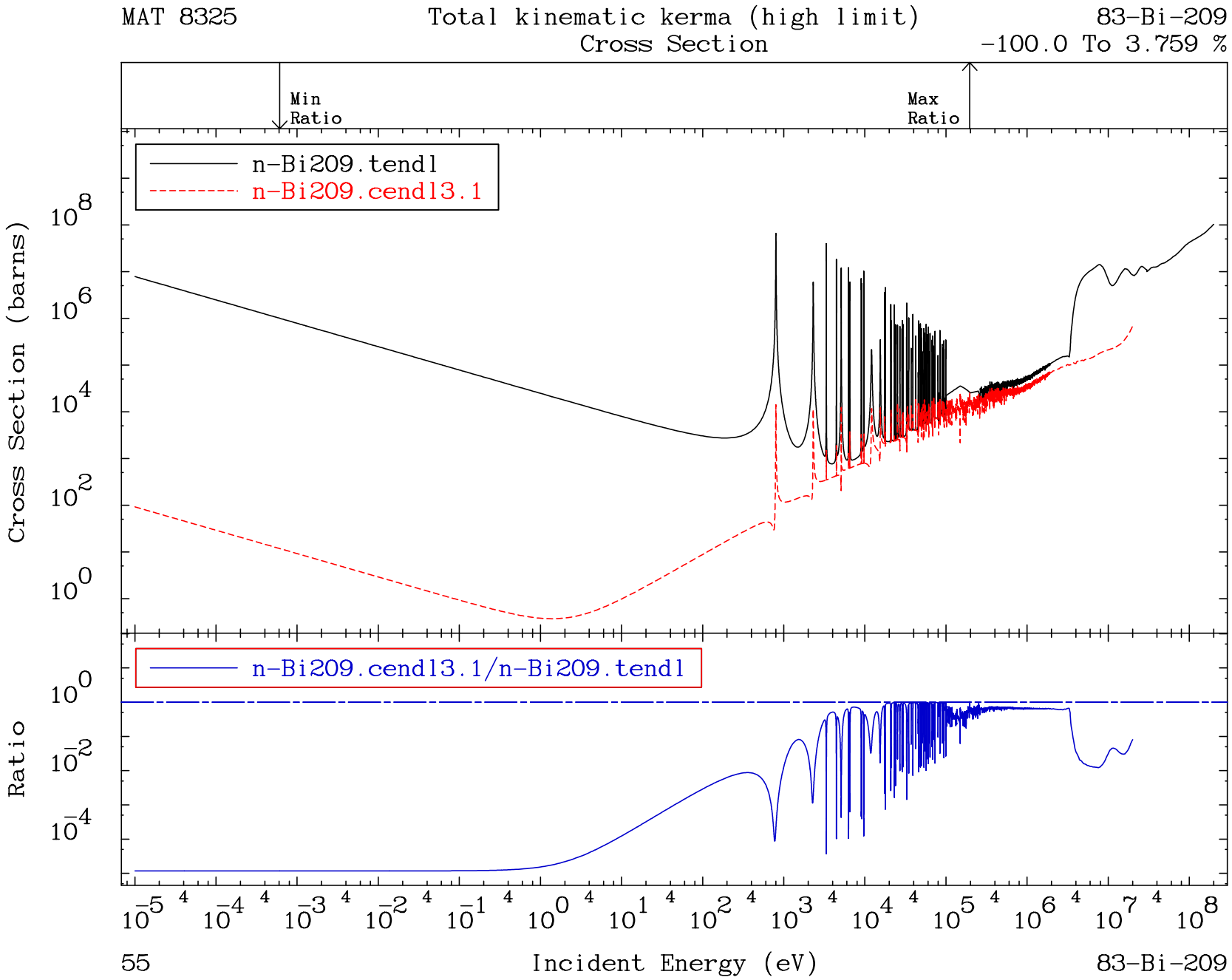

MAT 8325
Kerma non-elastic (all but mt2)
Cross Section
83-Bi-209
-15.10 To 9999. %
Max Ratio
Min Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
50
83-Bi-209

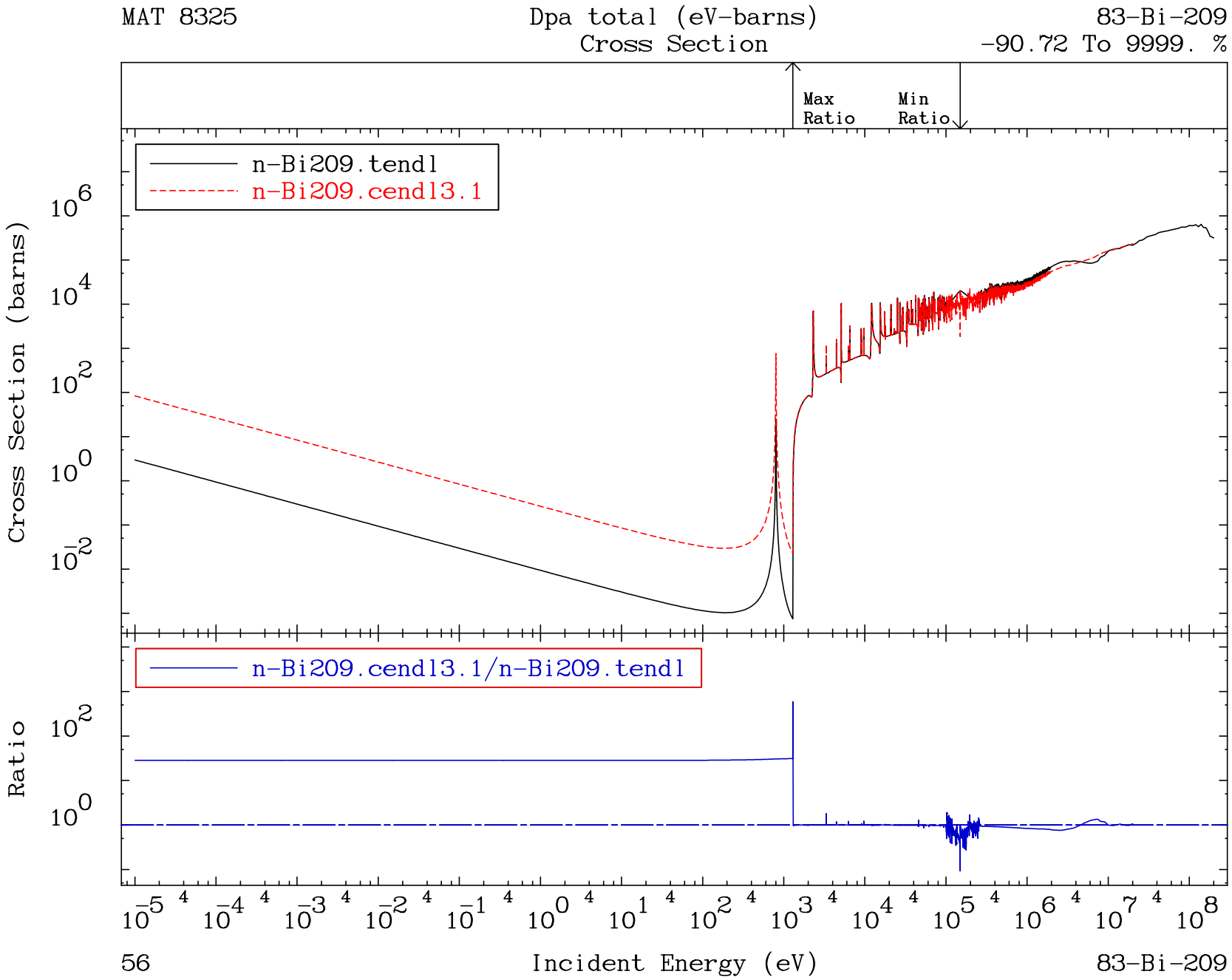

MAT 8325
Kerma inelastic (mt51-91)
Cross Section
83-Bi-209
-100.0 To 180.0 %
Max
Ratio
n-Bi209.tendl Threshold 900.84 keV
n-Bi209.cendl3.1 Threshold 905.62 keV
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
51
83-Bi-209

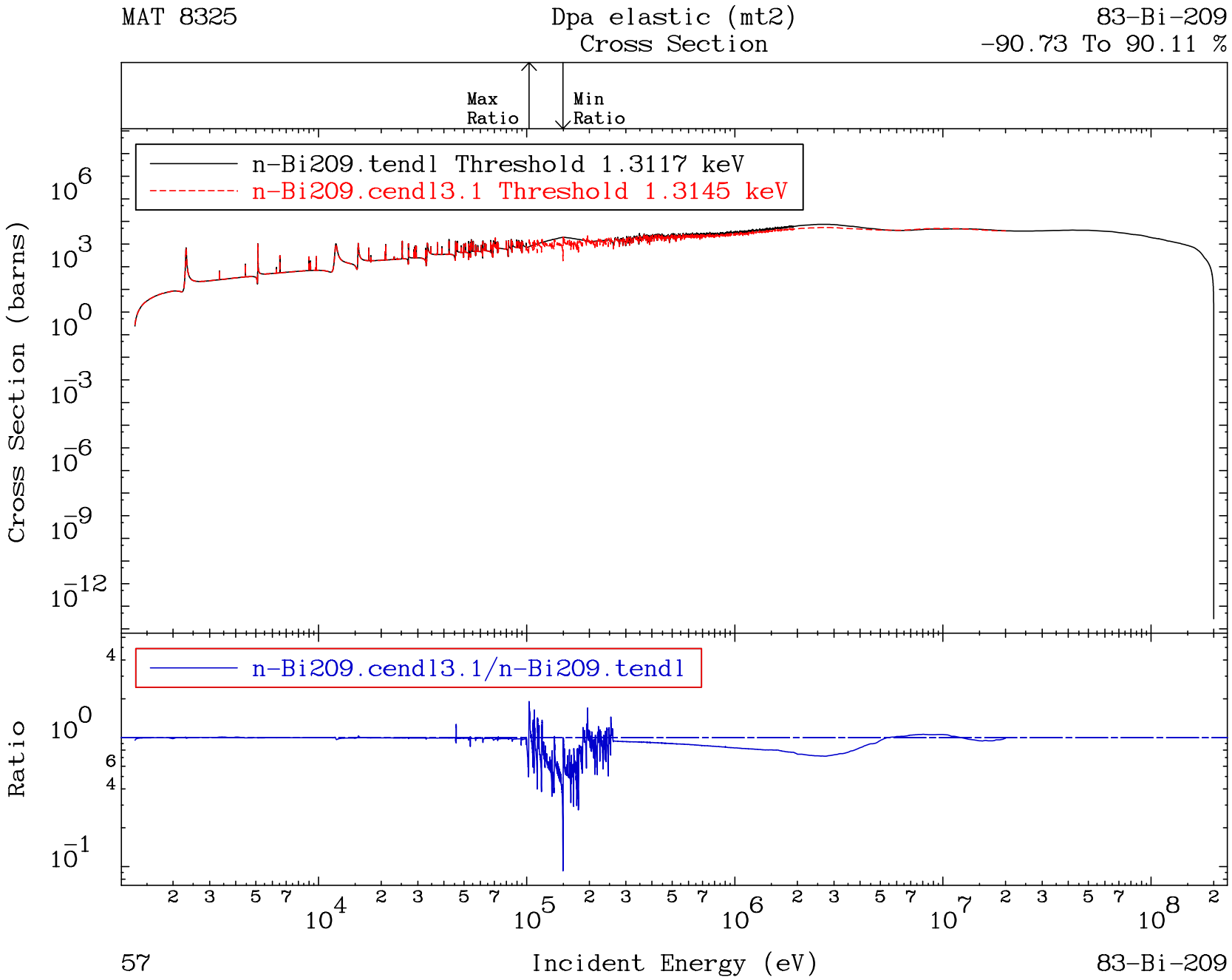

MAT 8325
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
83-Bi-209
-100.0 To 180.0 %
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
52
Incident Energy (eV)
83-Bi-209

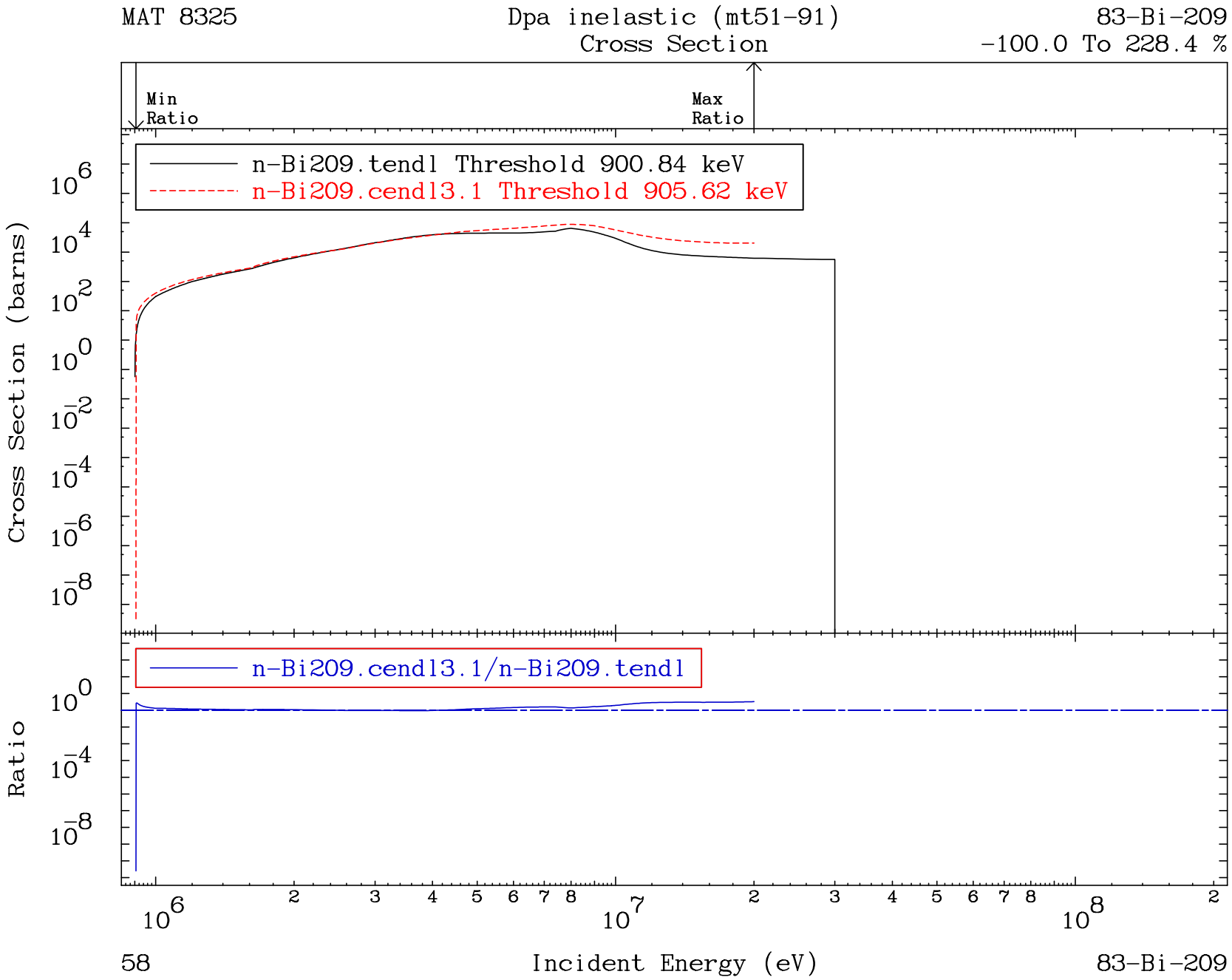

MAT 8325
Kerma capture (mt102)
Cross Section
83-Bi-209
-11.76 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
53
83-Bi-209

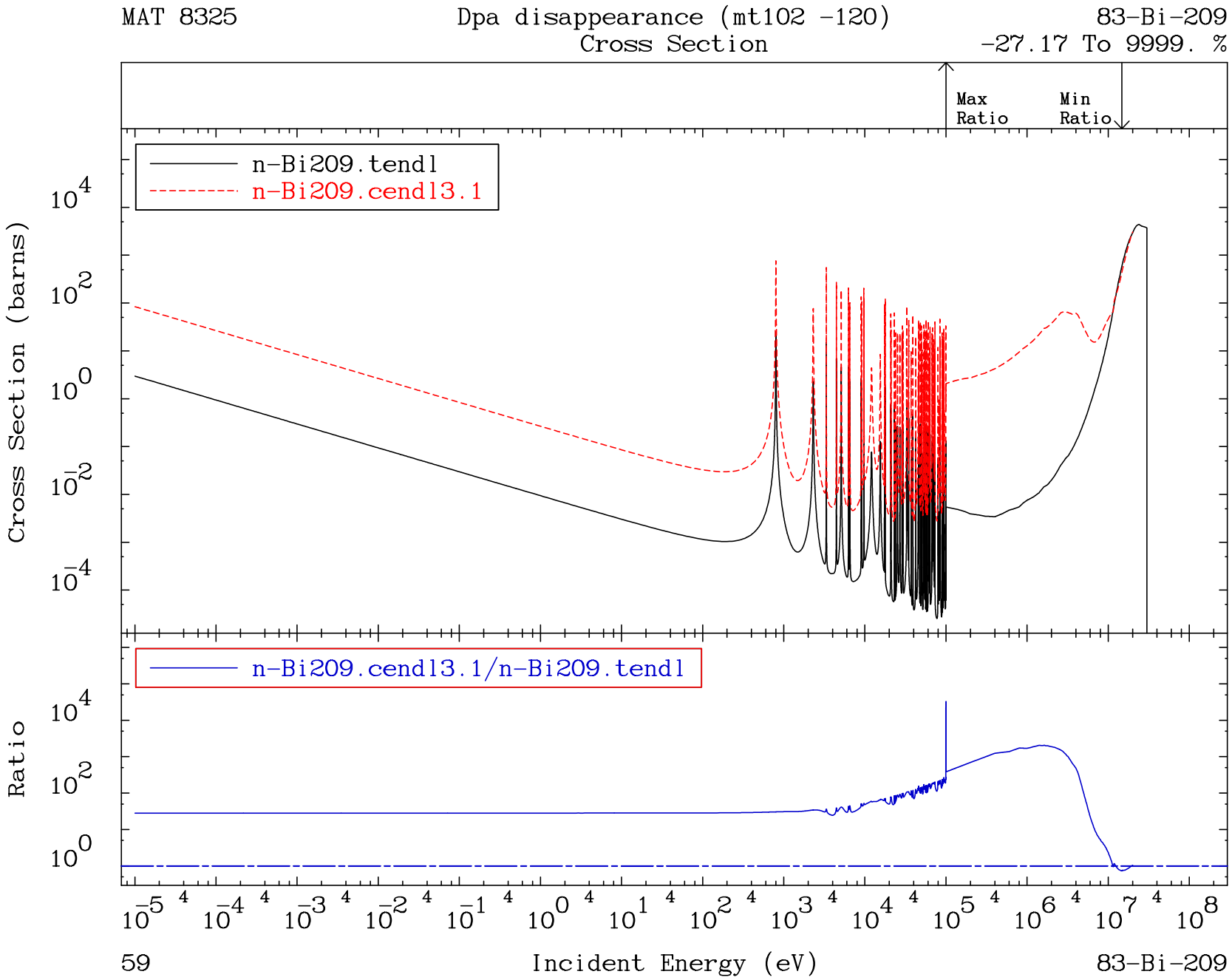

MAT 8325
Total photon (eV-barns)
Cross Section
83-Bi-209
-11.76 To 9999. %
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (Mega-barns)
0
20
40
60
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
10^0
10^1
10^2
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
83-Bi-209


MAT 8325
Total kinematic kerma (high limit)
Cross Section
83-Bi-209
-100.0 To 3.759 %
Min Ratio
Max Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
55
83-Bi-209


MAT 8325
Dpa total (eV-barns)
Cross Section
83-Bi-209
-90.72 To 9999. %
Max Ratio
Min Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
56
83-Bi-209


MAT 8325
Dpa elastic (mt2)
Cross Section
83-Bi-209
-90.73 To 90.11 %
Max Ratio
Min Ratio
n-Bi209.tendl Threshold 1.3117 keV
n-Bi209.cendl3.1 Threshold 1.3145 keV
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
57
83-Bi-209


MAT 8325
Dpa inelastic (mt51-91)
Cross Section
83-Bi-209
-100.0 To 228.4 %
Min Ratio
Max Ratio
n-Bi209.tendl Threshold 900.84 keV
n-Bi209.cendl3.1 Threshold 905.62 keV
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
58
83-Bi-209


MAT 8325
Dpa disappearance (mt102 -120)
Cross Section
83-Bi-209
-27.17 To 9999. %
Max Ratio
Min Ratio
n-Bi209.tendl
n-Bi209.cendl3.1
Cross Section (barns)
n-Bi209.cendl3.1/n-Bi209.tendl
Ratio
Incident Energy (eV)
59
83-Bi-209