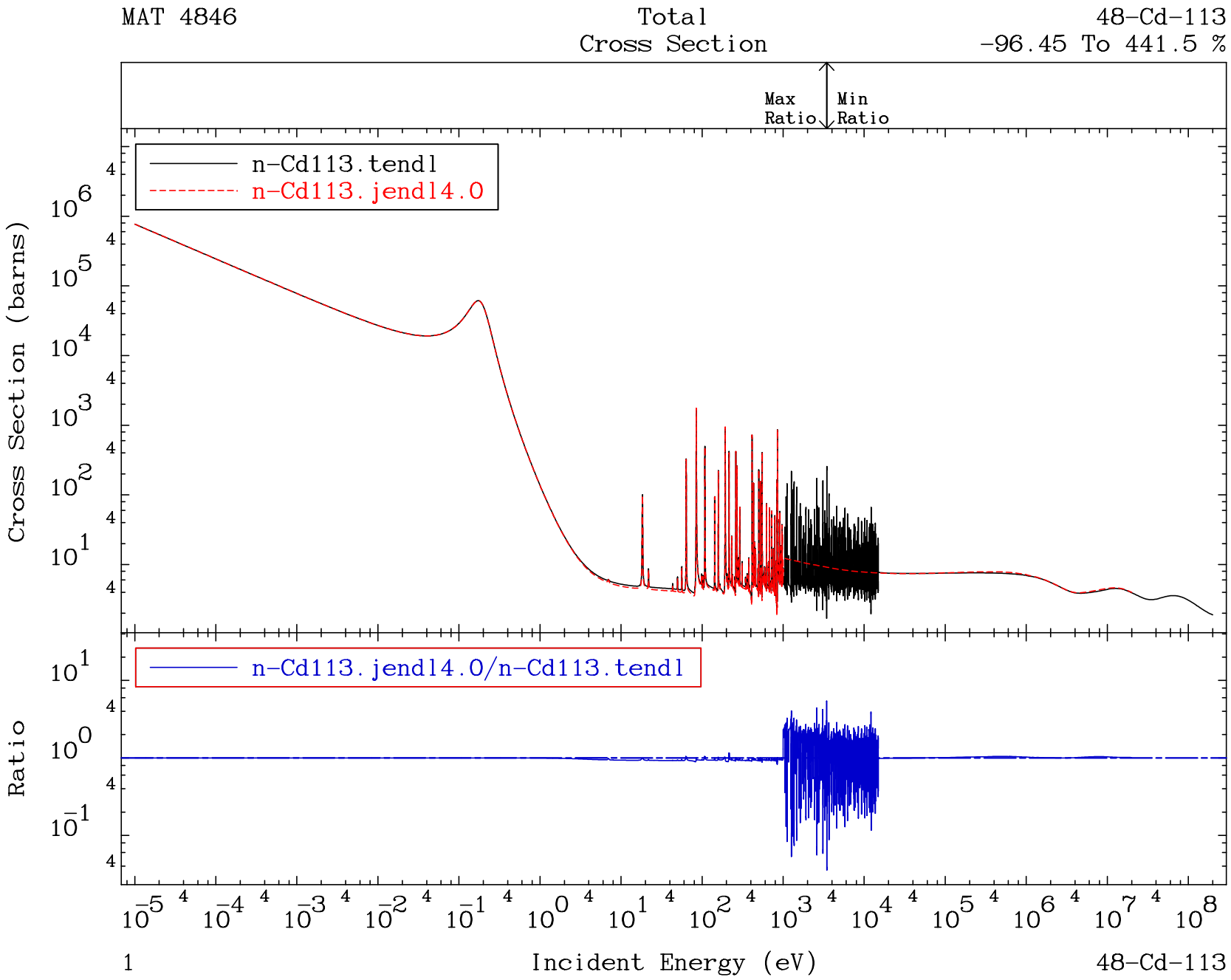
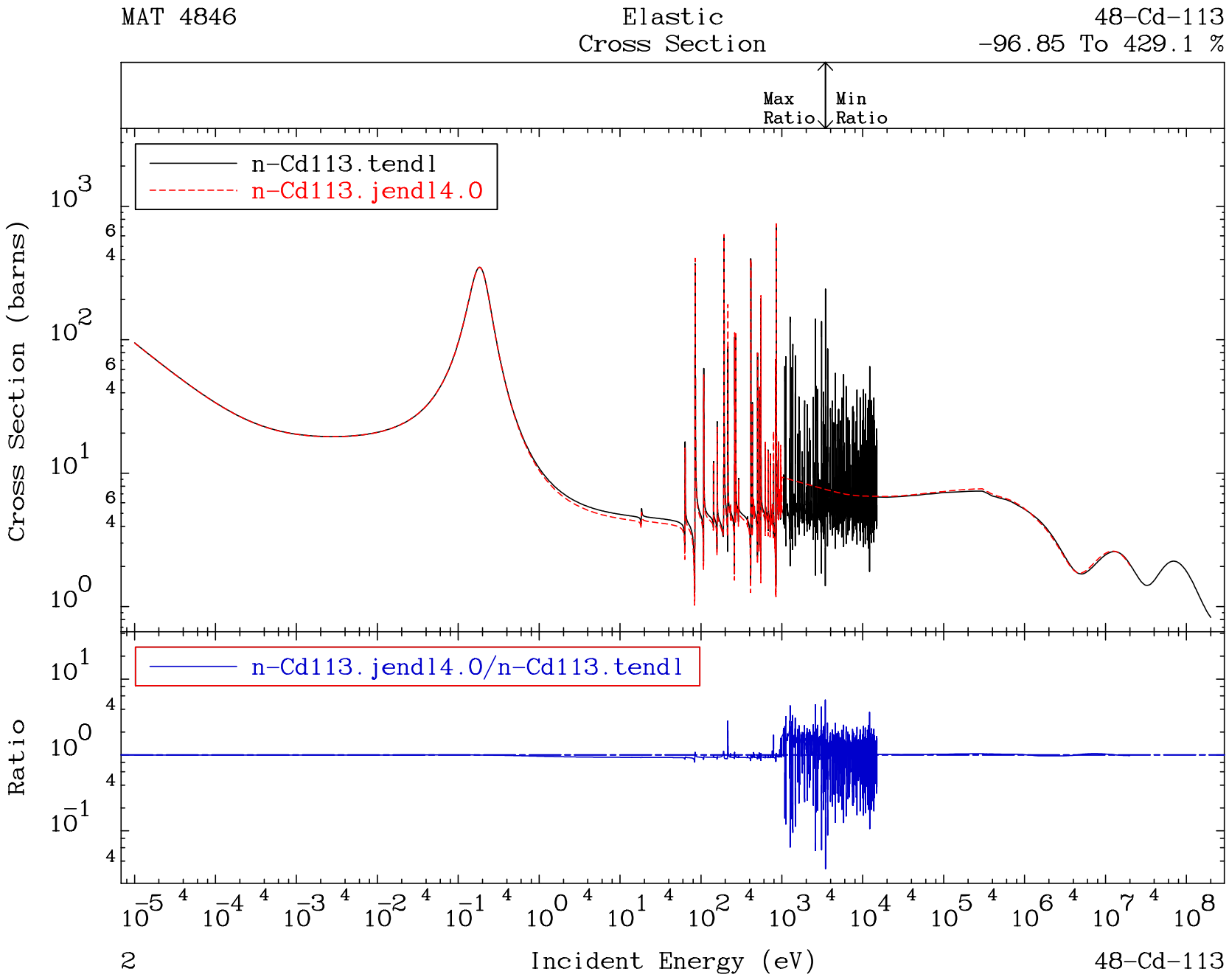
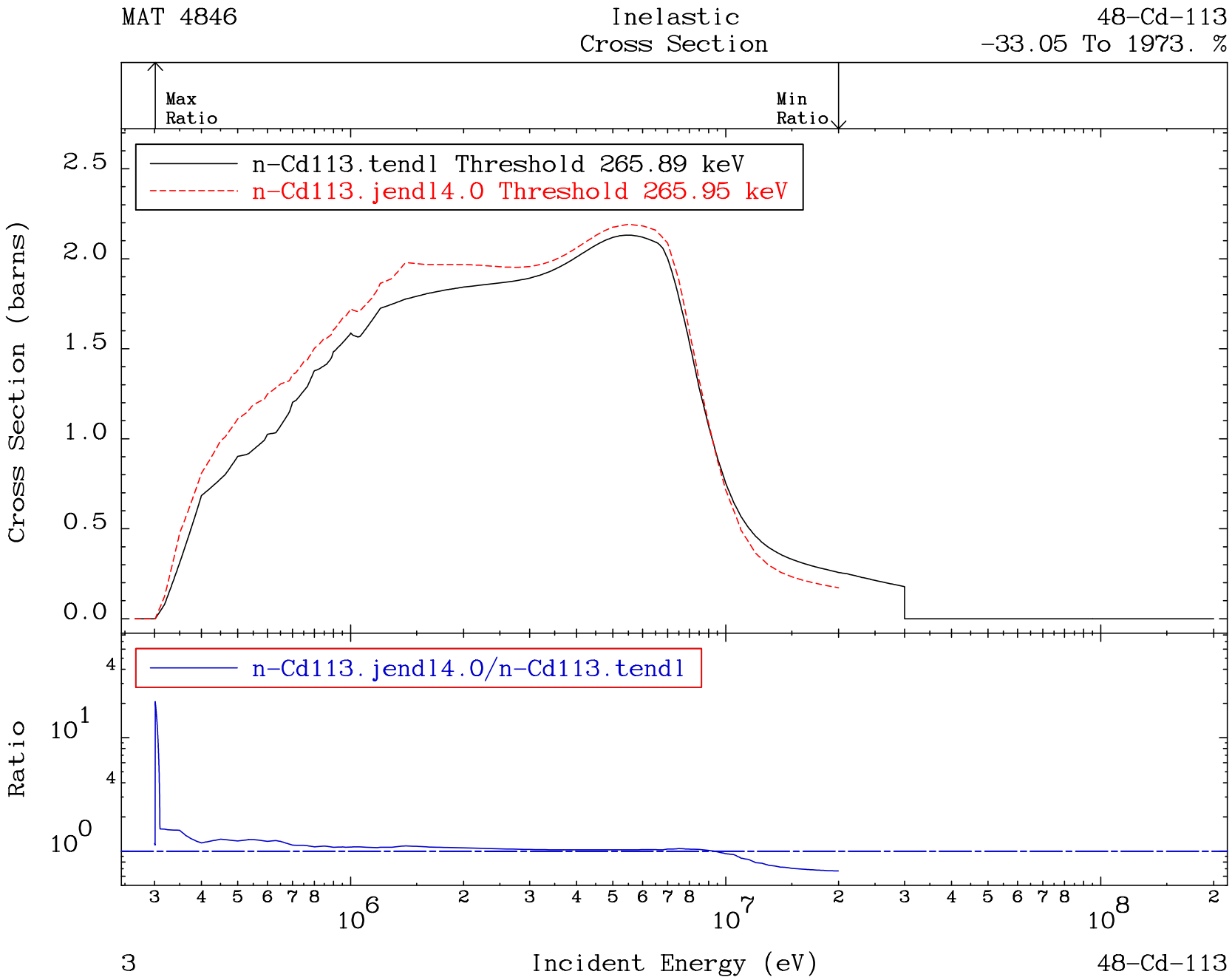
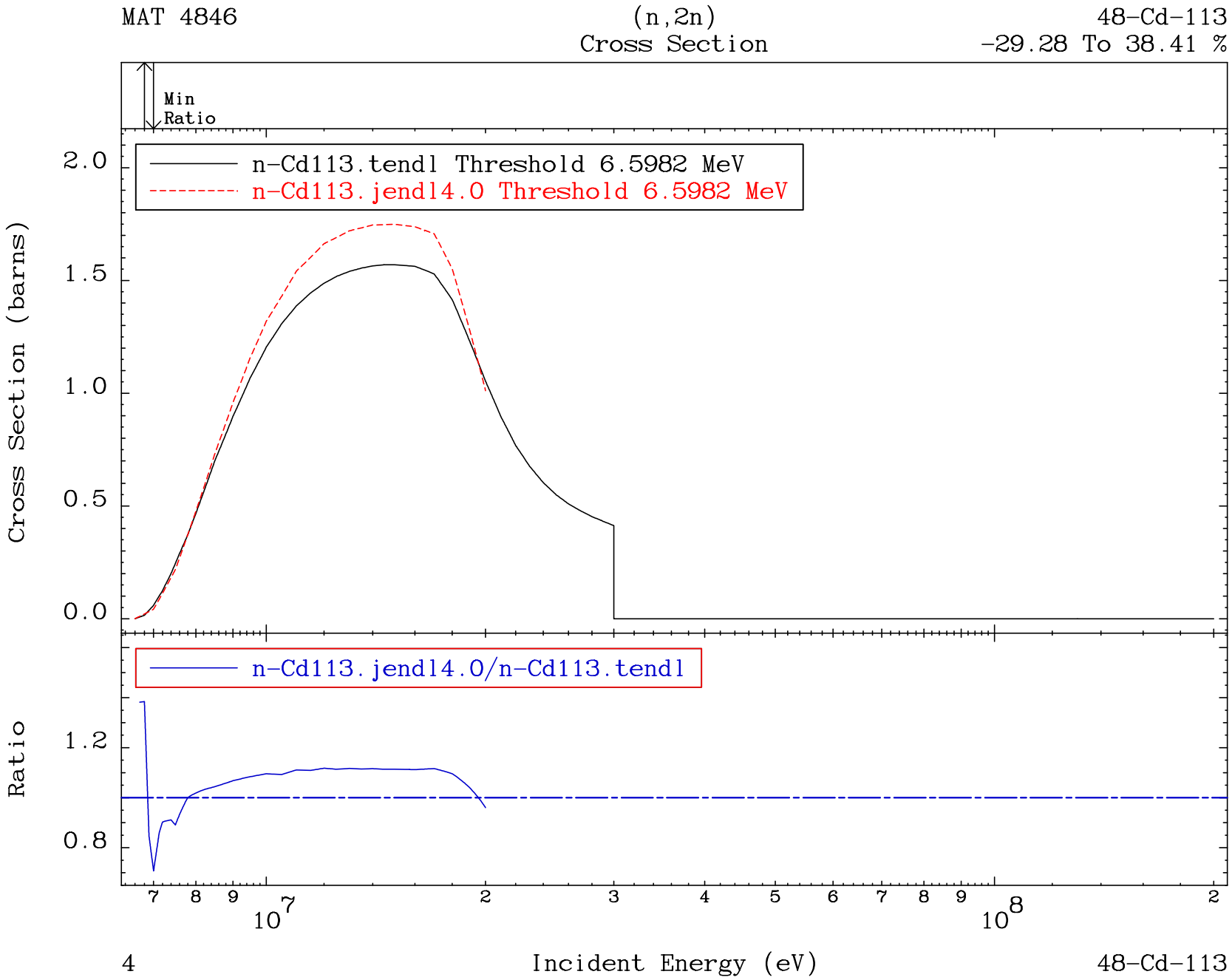
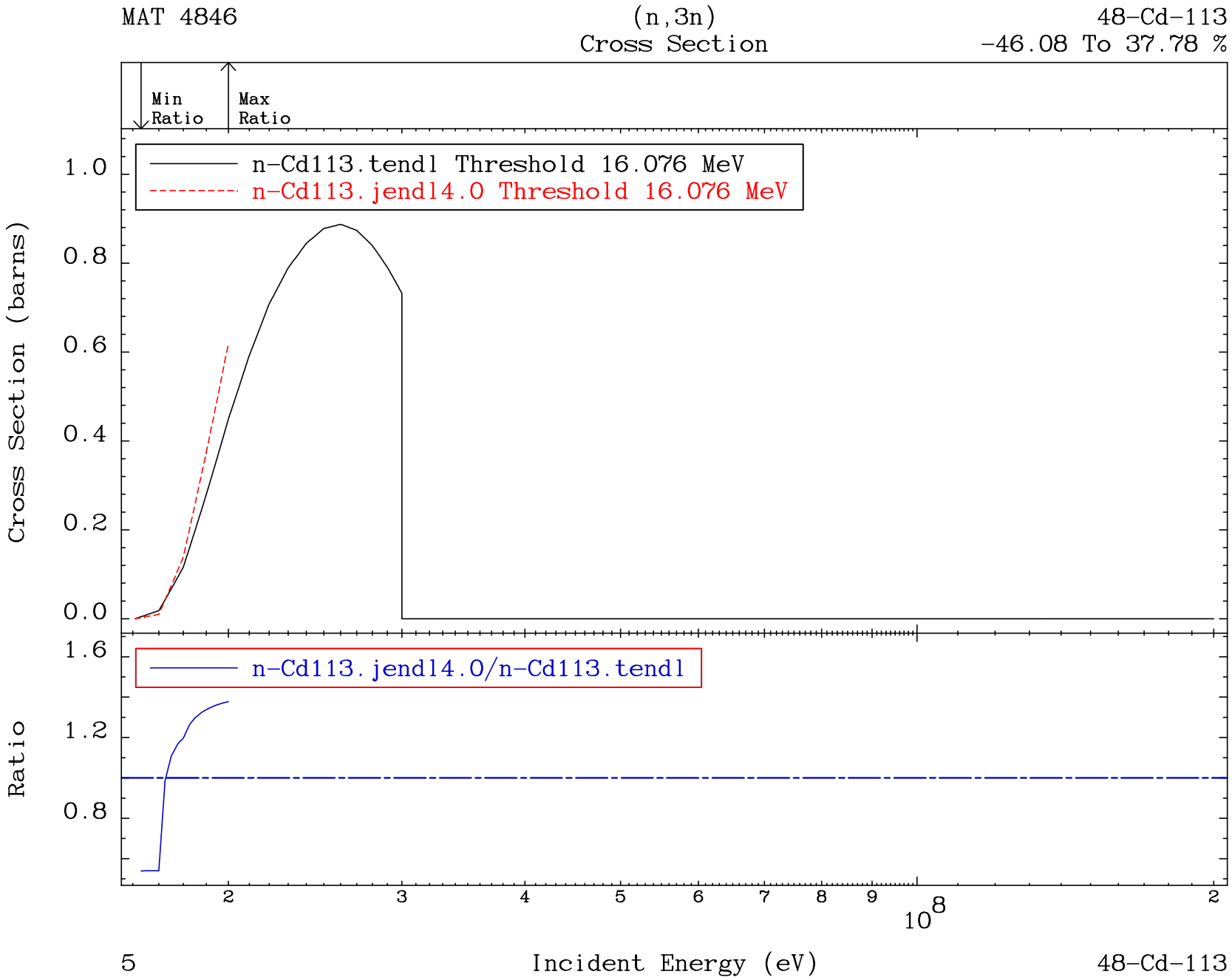
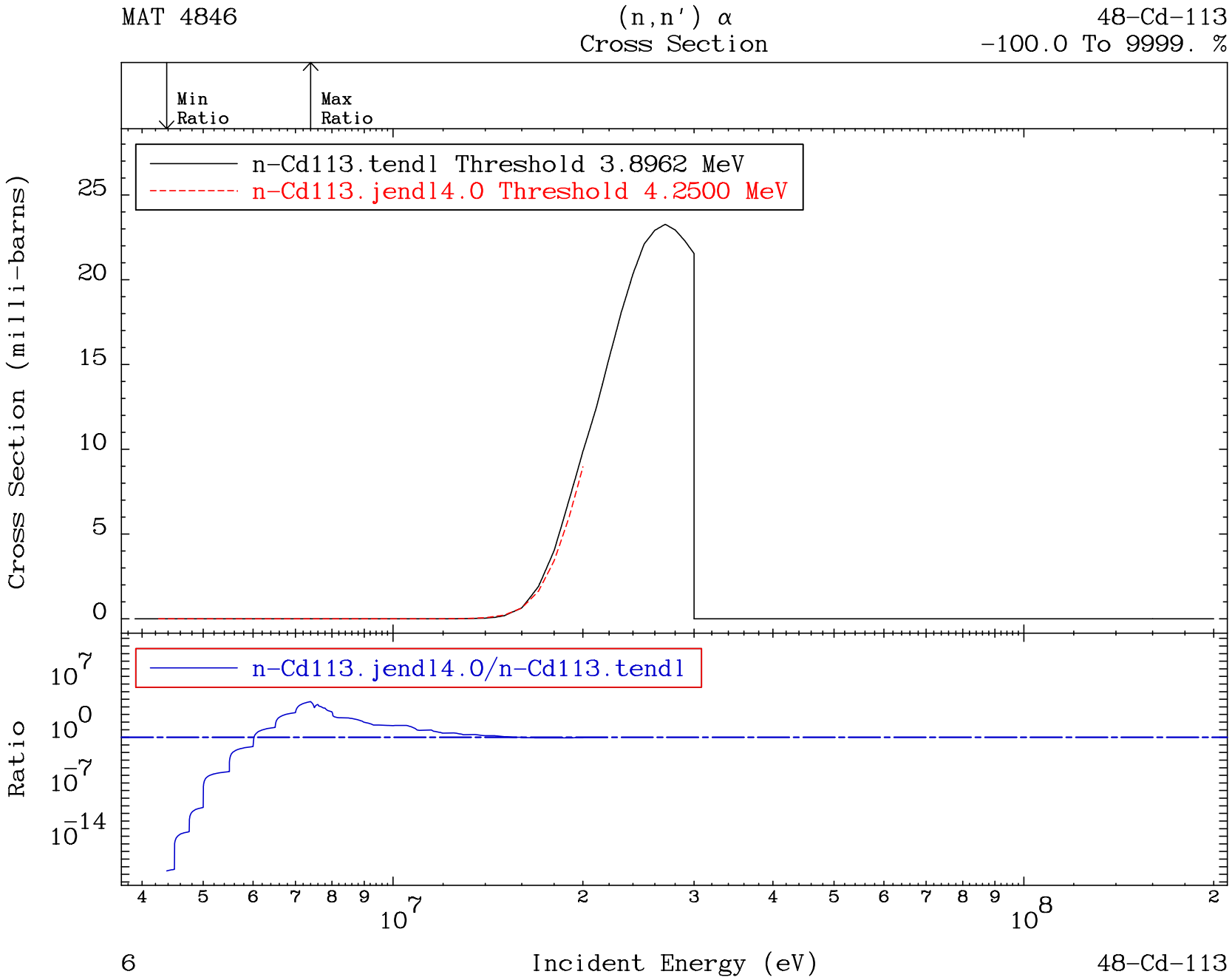

MAT 4846
Total
Cross Section
48-Cd-113
-96.45 To 441.5 %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
1
48-Cd-113

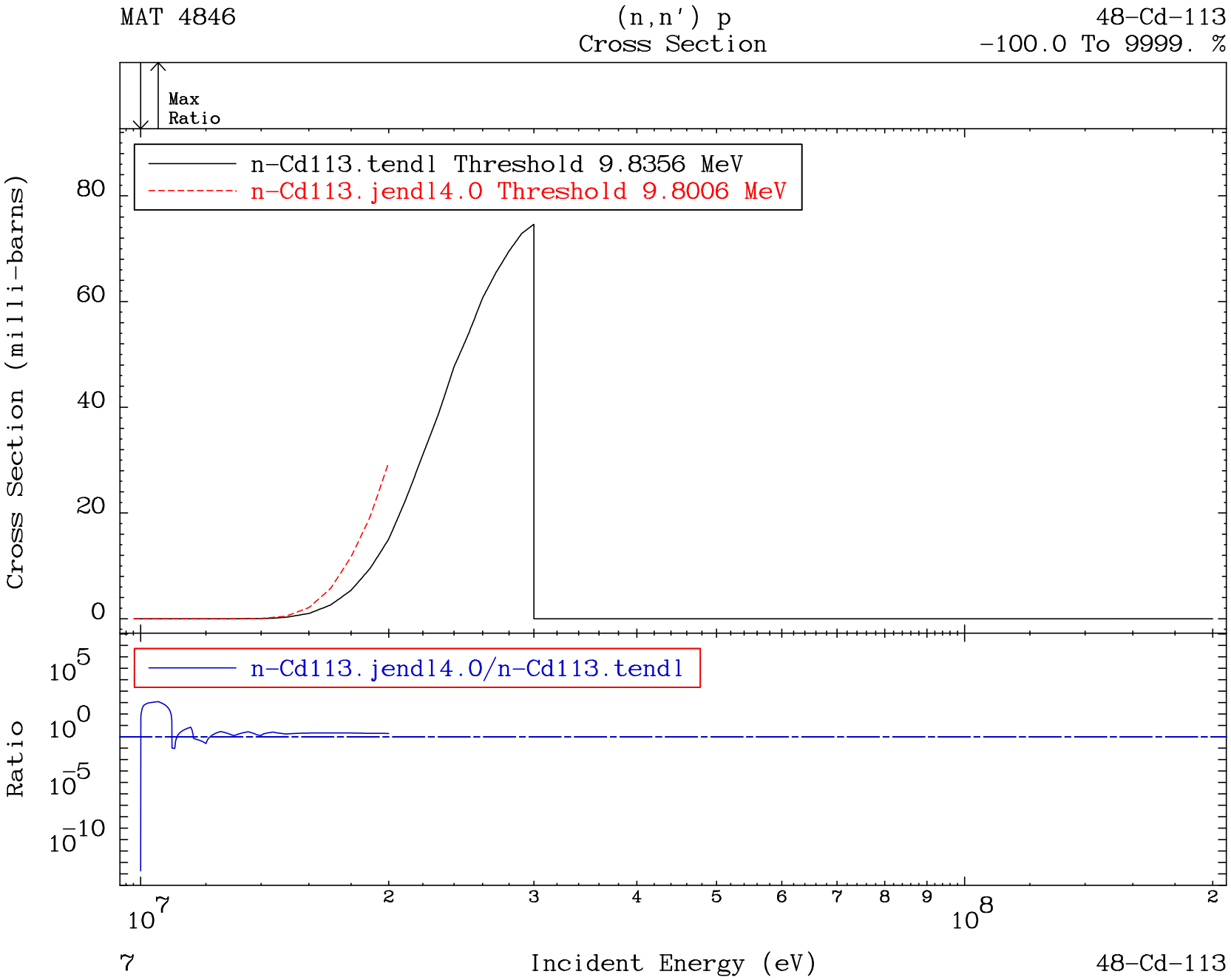

MAT 4846
Elastic
Cross Section
48-Cd-113
-96.85 To 429.1 %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
2
48-Cd-113

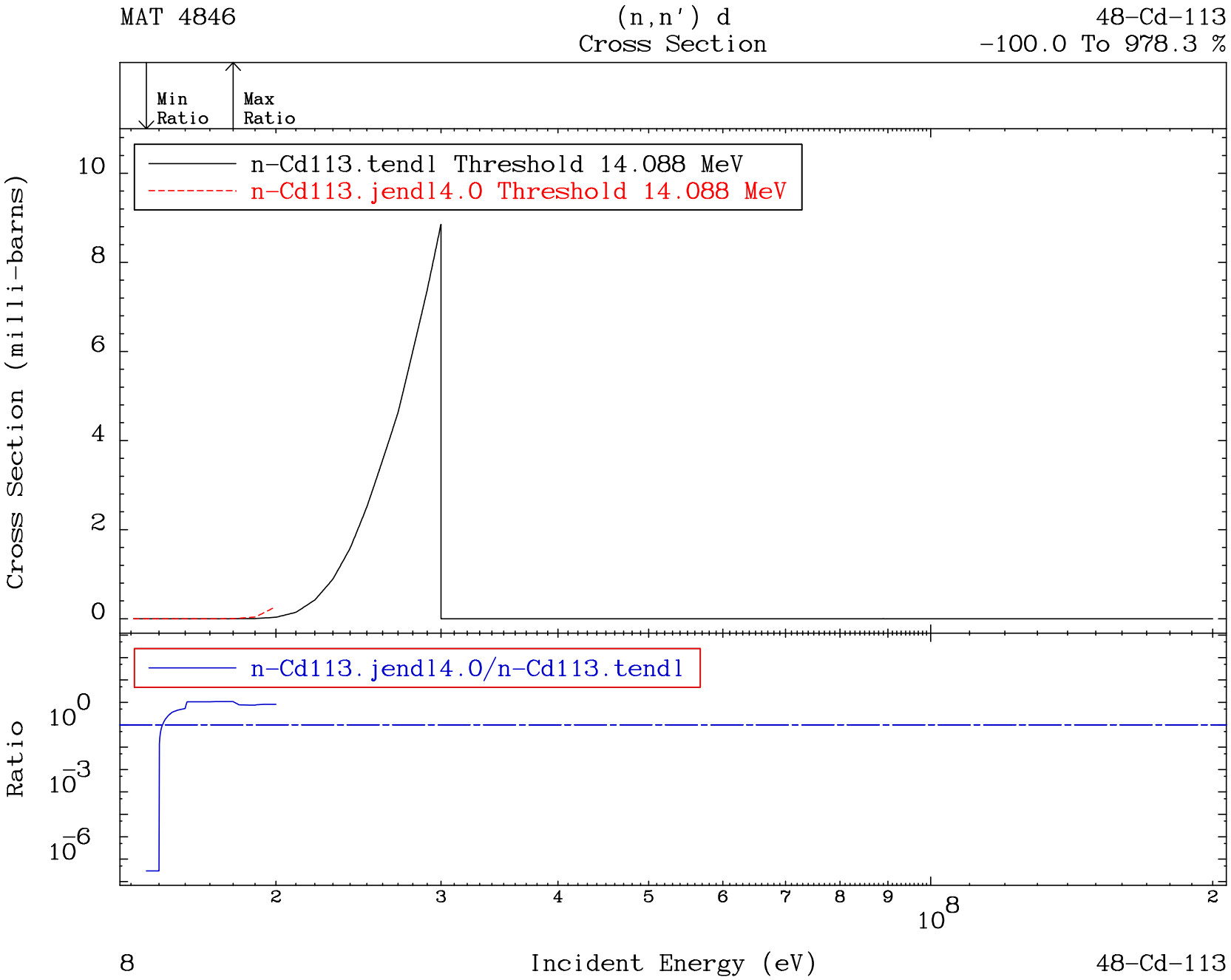

MAT 4846
Inelastic
Cross Section
48-Cd-113
-33.05 To 1973. %
Max
Ratio
Min
Ratio
n-Cd113.tendl Threshold 265.89 keV
n-Cd113.jendl4.0 Threshold 265.95 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
4
10^1
4
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
3
Incident Energy (eV)
48-Cd-113

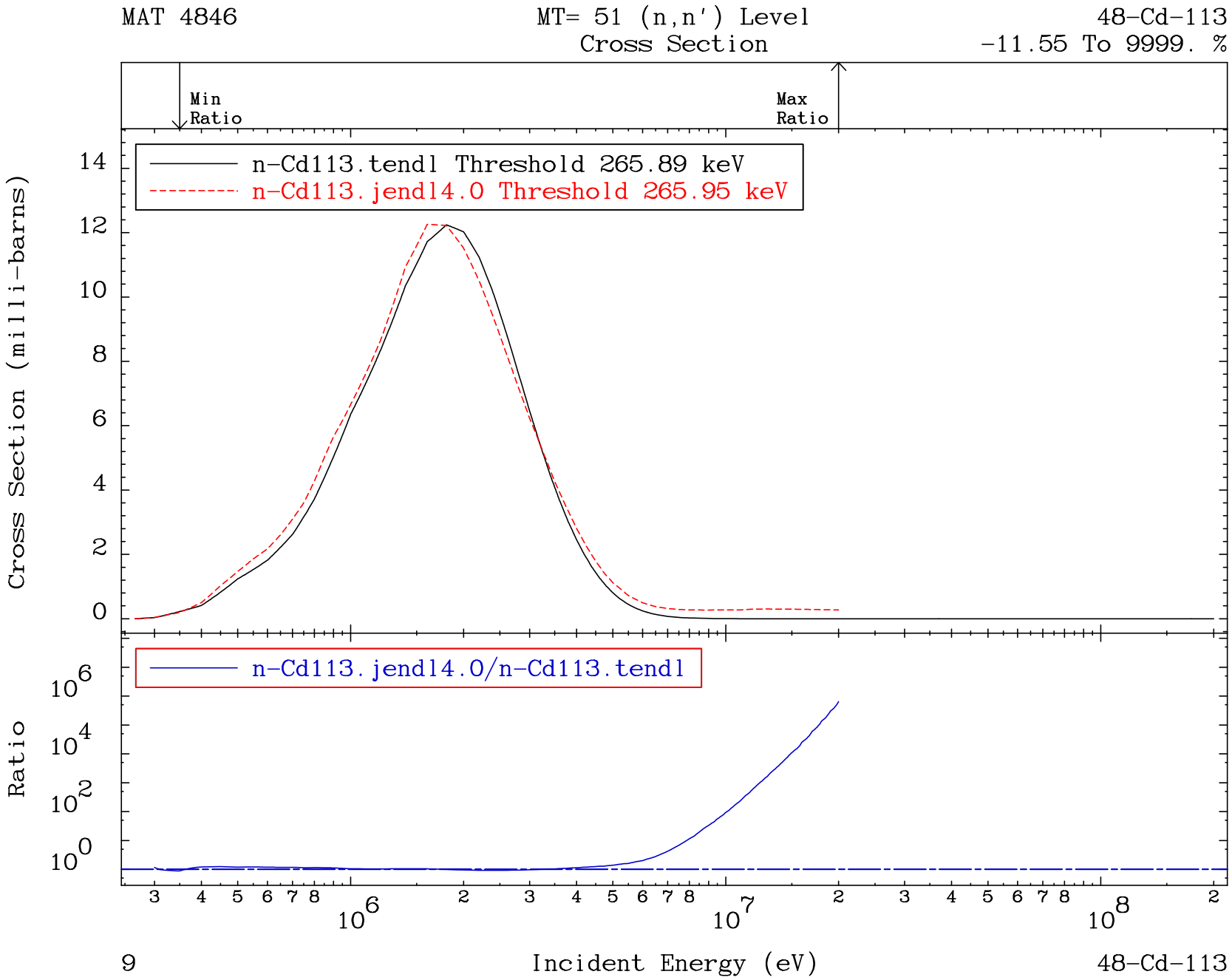

MAT 4846
(n,2n)
Cross Section
48-Cd-113
-29.28 To 38.41 %
Min
Ratio
n-Cd113.tendl Threshold 6.5982 MeV
n-Cd113.jendl4.0 Threshold 6.5982 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
1.2
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
48-Cd-113

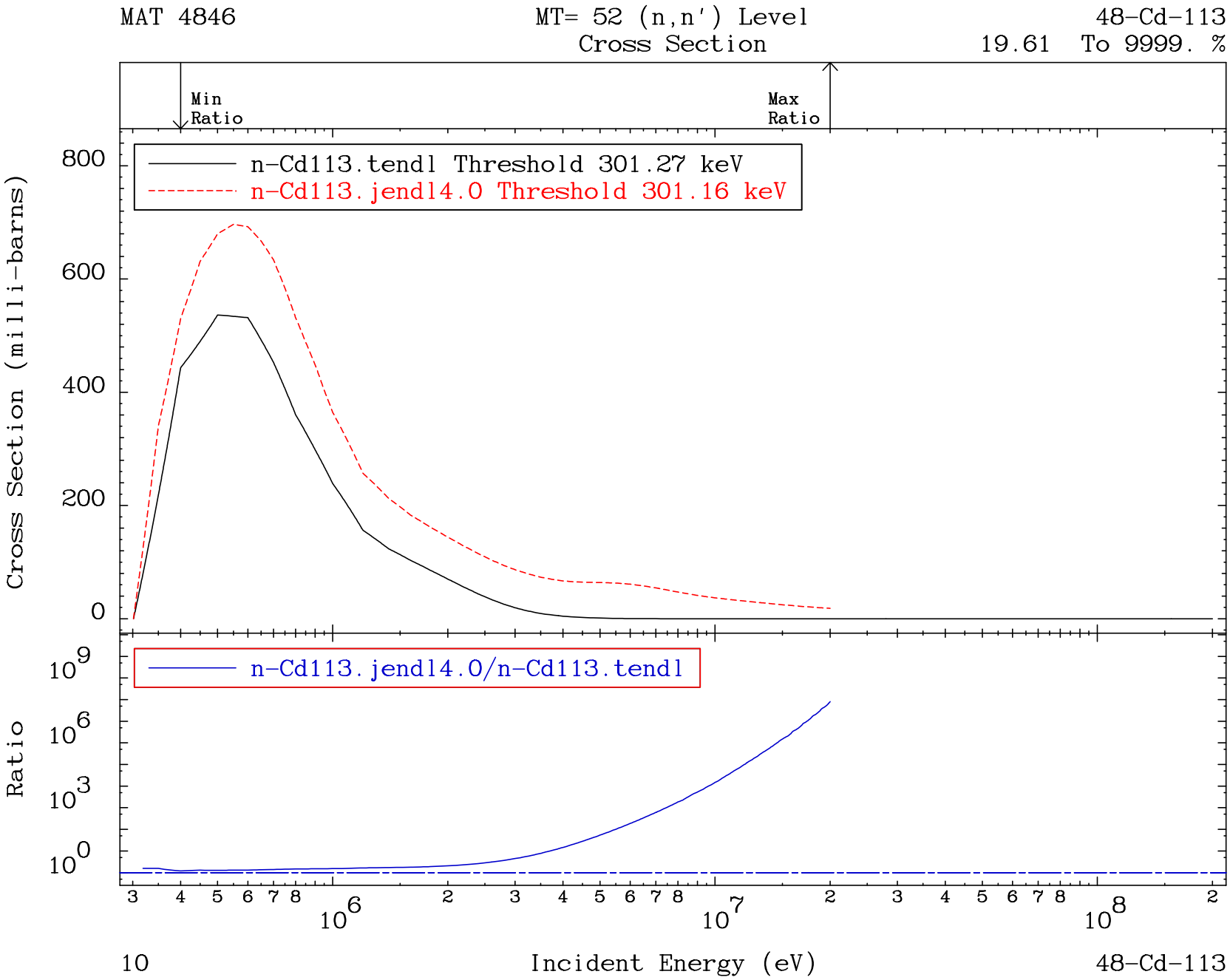

MAT 4846
(n,3n)
Cross Section
48-Cd-113
-46.08 To 37.78 %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 16.076 MeV
n-Cd113.jendl4.0 Threshold 16.076 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
48-Cd-113

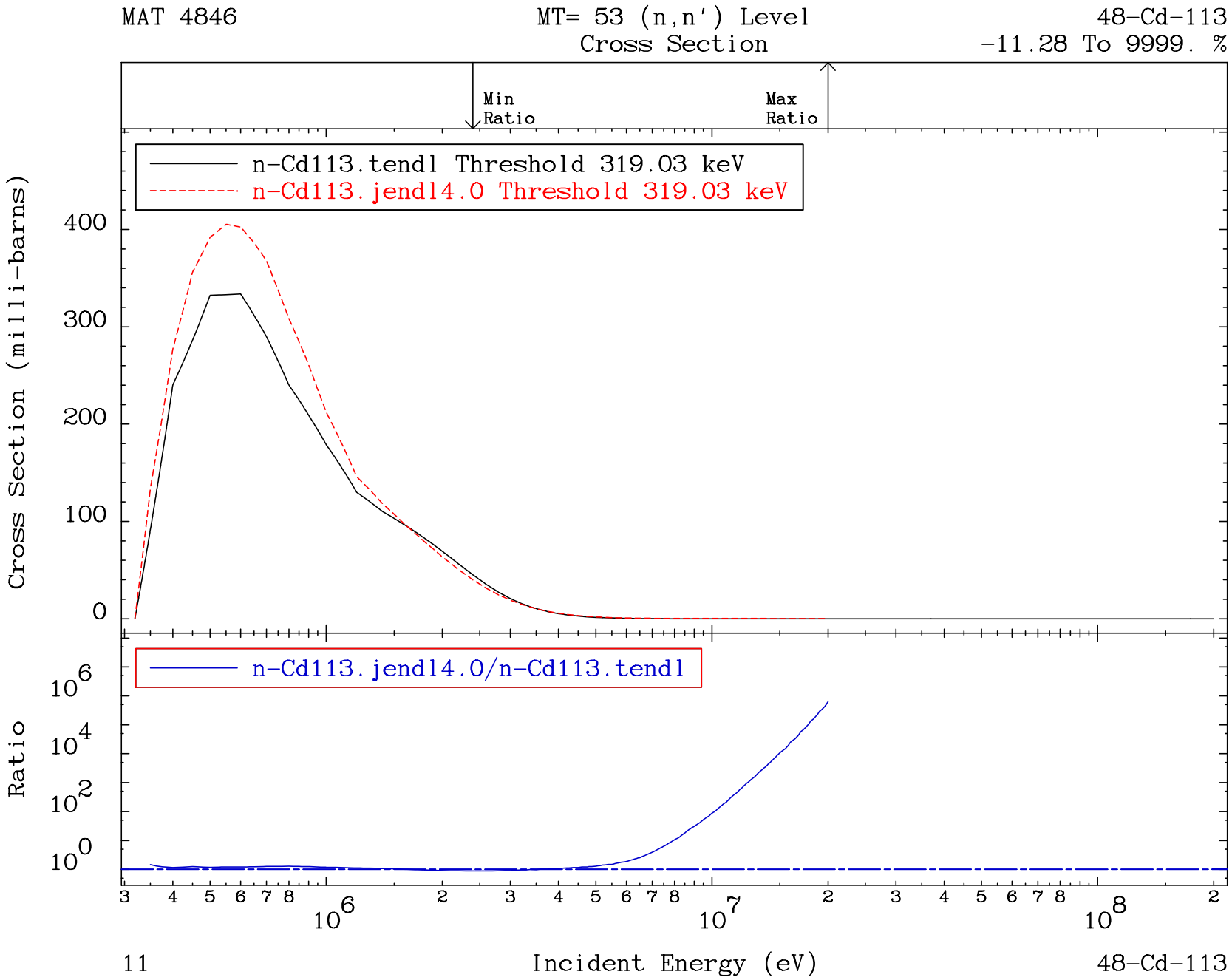

MAT 4846
(n,n') α
Cross Section
48-Cd-113
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 3.8962 MeV
n-Cd113.jendl4.0 Threshold 4.2500 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^7
10^0
10^-7
10^-14
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
48-Cd-113

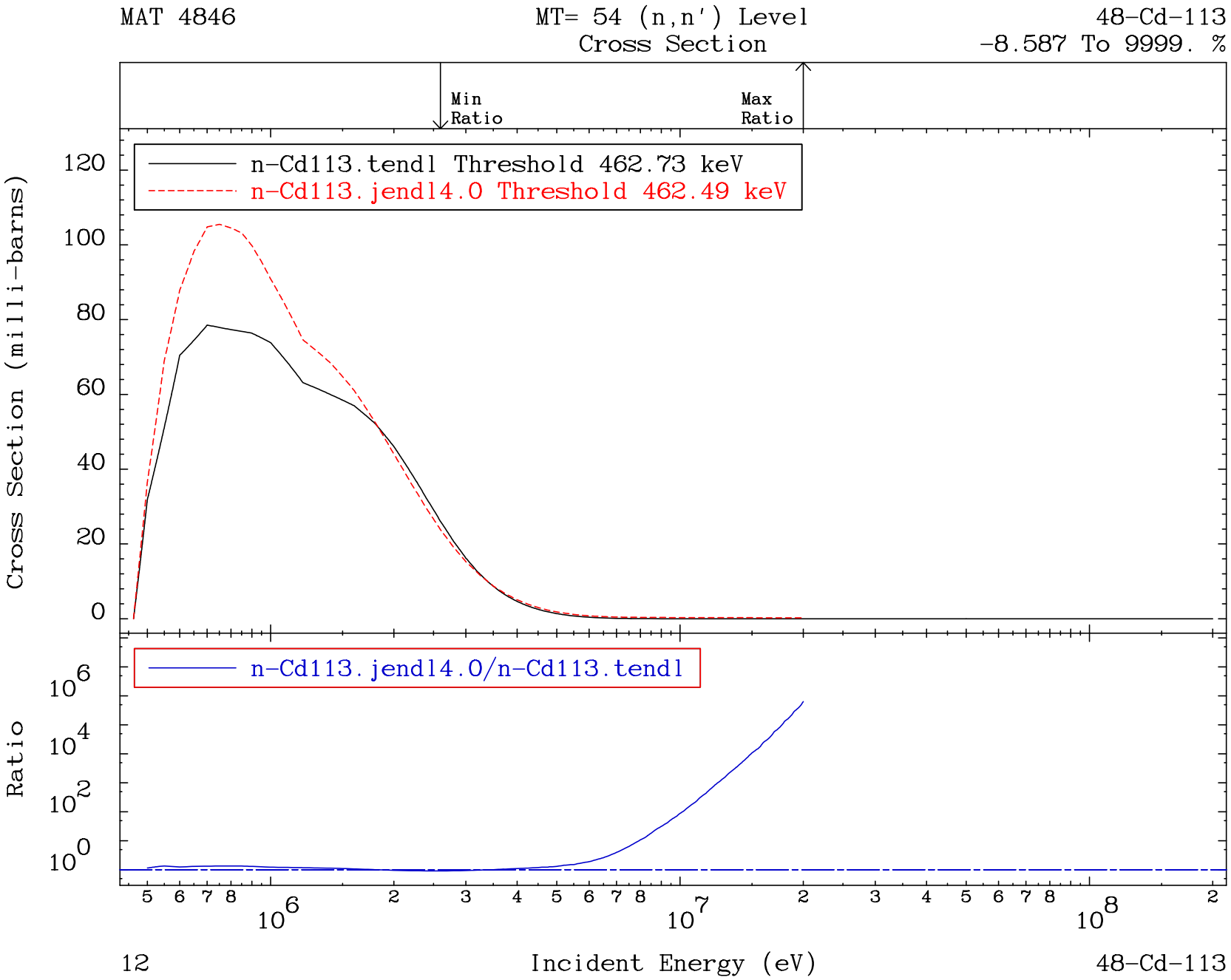

MAT 4846
(n,n') p
Cross Section
48-Cd-113
-100.0 To 9999. %
Max
Ratio
n-Cd113.tendl Threshold 9.8356 MeV
n-Cd113.jendl4.0 Threshold 9.8006 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^5
10^0
10^-5
10^-10
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
48-Cd-113

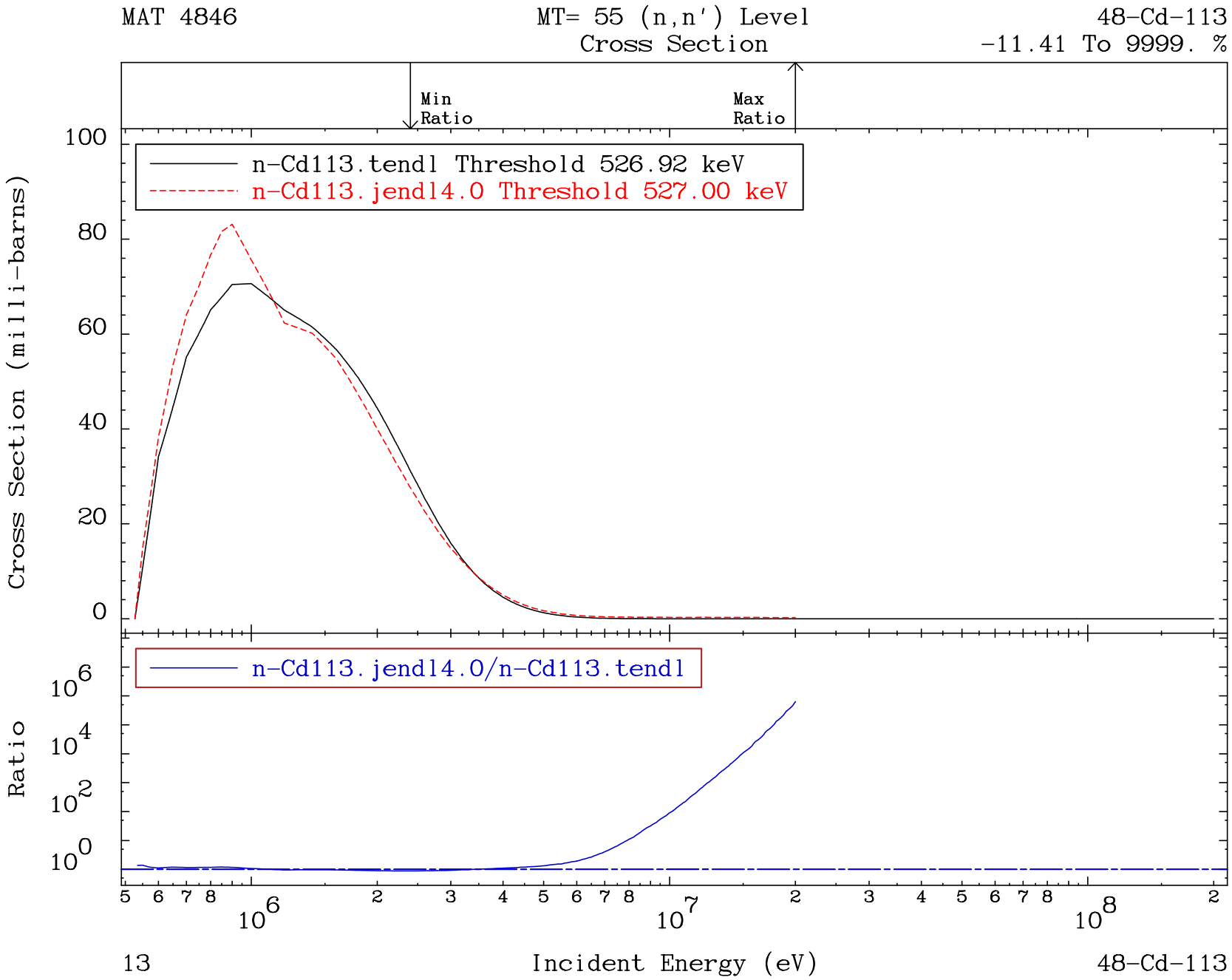

MAT 4846
(n,n') d
Cross Section
48-Cd-113
-100.0 To 978.3 %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 14.088 MeV
n-Cd113.jendl4.0 Threshold 14.088 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
48-Cd-113

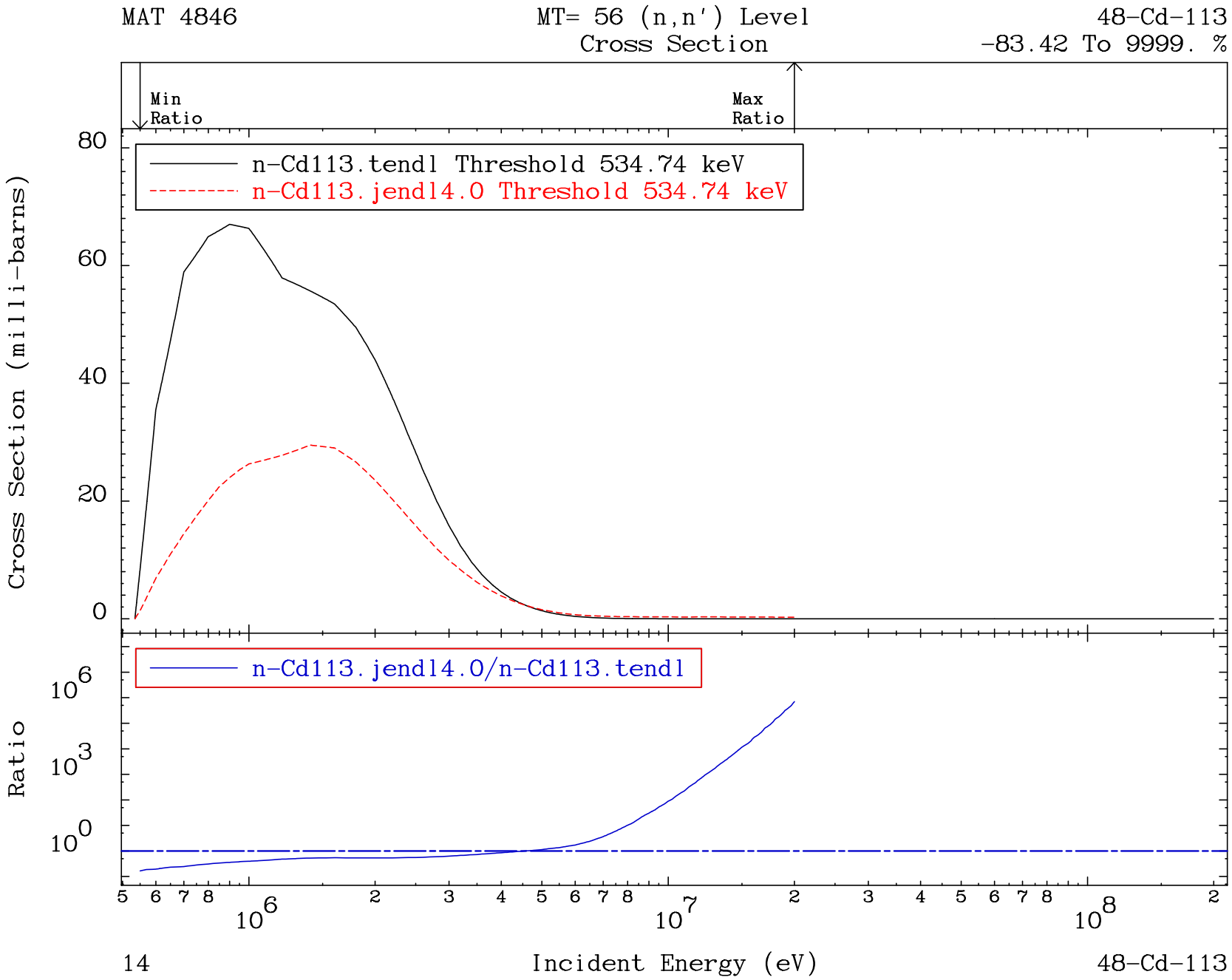

MAT 4846
MT= 51 (n,n') Level
Cross Section
48-Cd-113
-11.55 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 265.89 keV
n-Cd113.jendl4.0 Threshold 265.95 keV
Cross Section (milli-barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
9
48-Cd-113

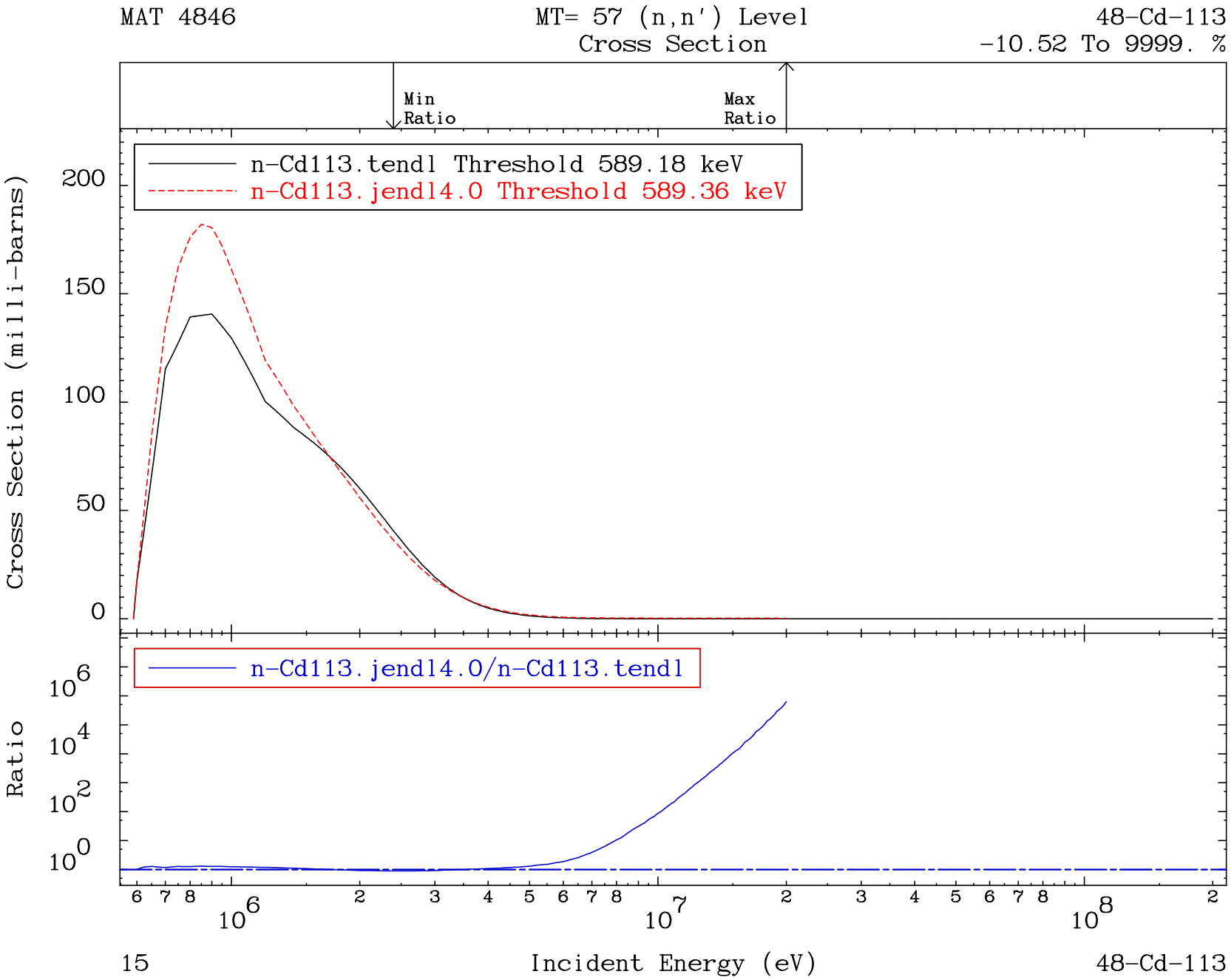

MAT 4846
MT= 52 (n,n') Level
Cross Section
48-Cd-113
19.61 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 301.27 keV
n-Cd113.jendl4.0 Threshold 301.16 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
48-Cd-113

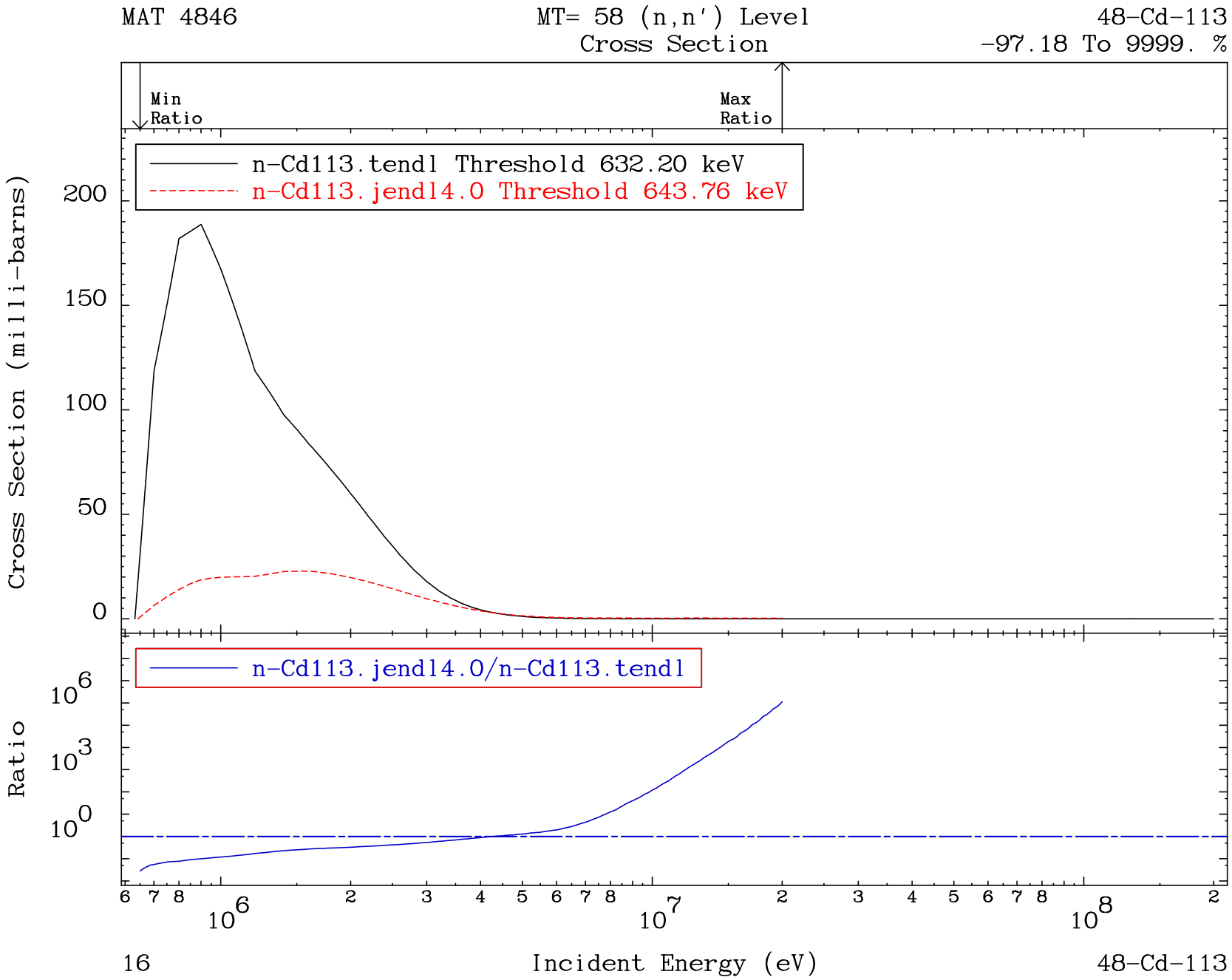

MAT 4846
MT= 53 (n,n') Level
Cross Section
48-Cd-113
-11.28 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 319.03 keV
n-Cd113.jendl4.0 Threshold 319.03 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
48-Cd-113

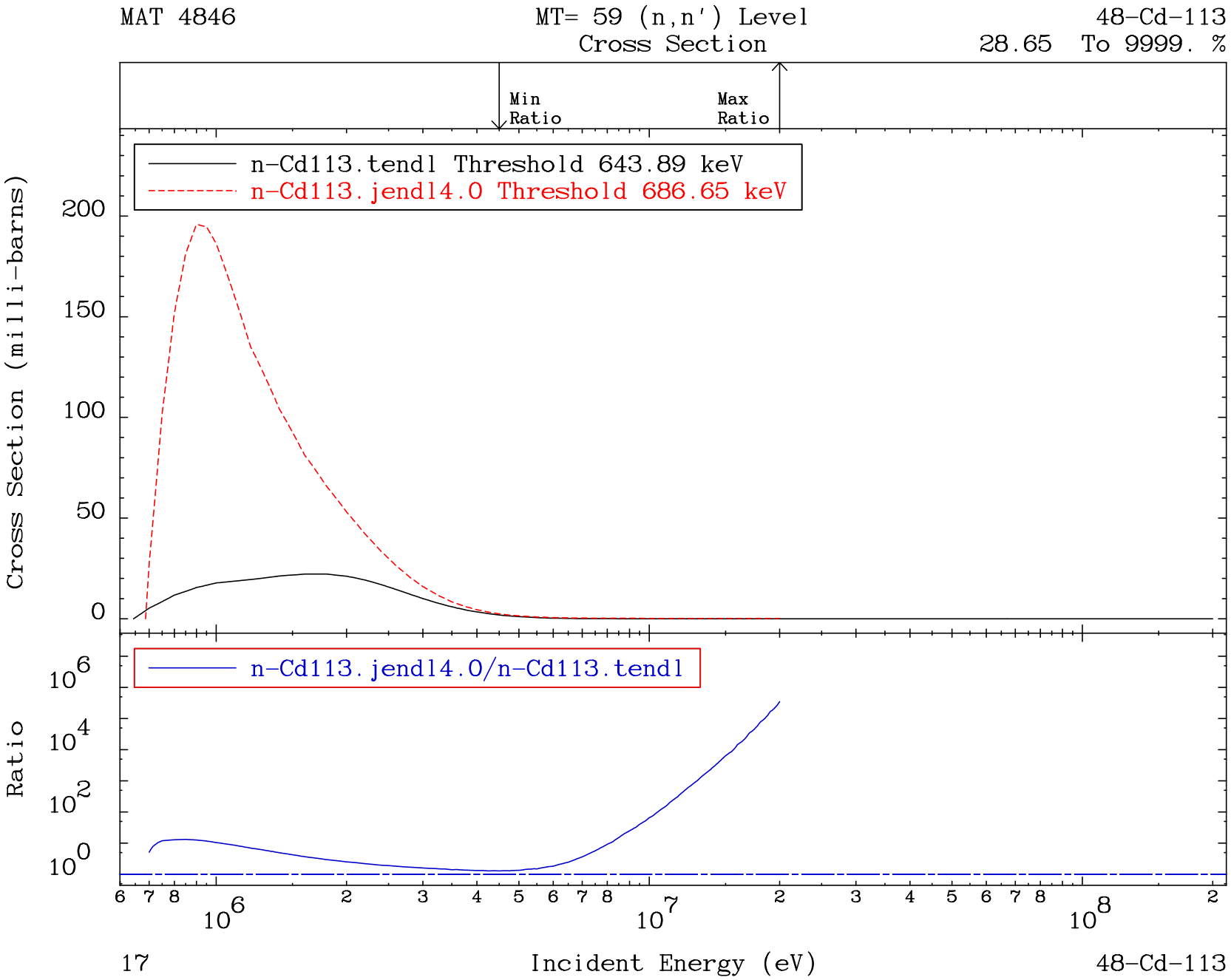

MAT 4846
MT= 54 (n,n') Level
Cross Section
48-Cd-113
-8.587 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 462.73 keV
n-Cd113.jendl4.0 Threshold 462.49 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
48-Cd-113

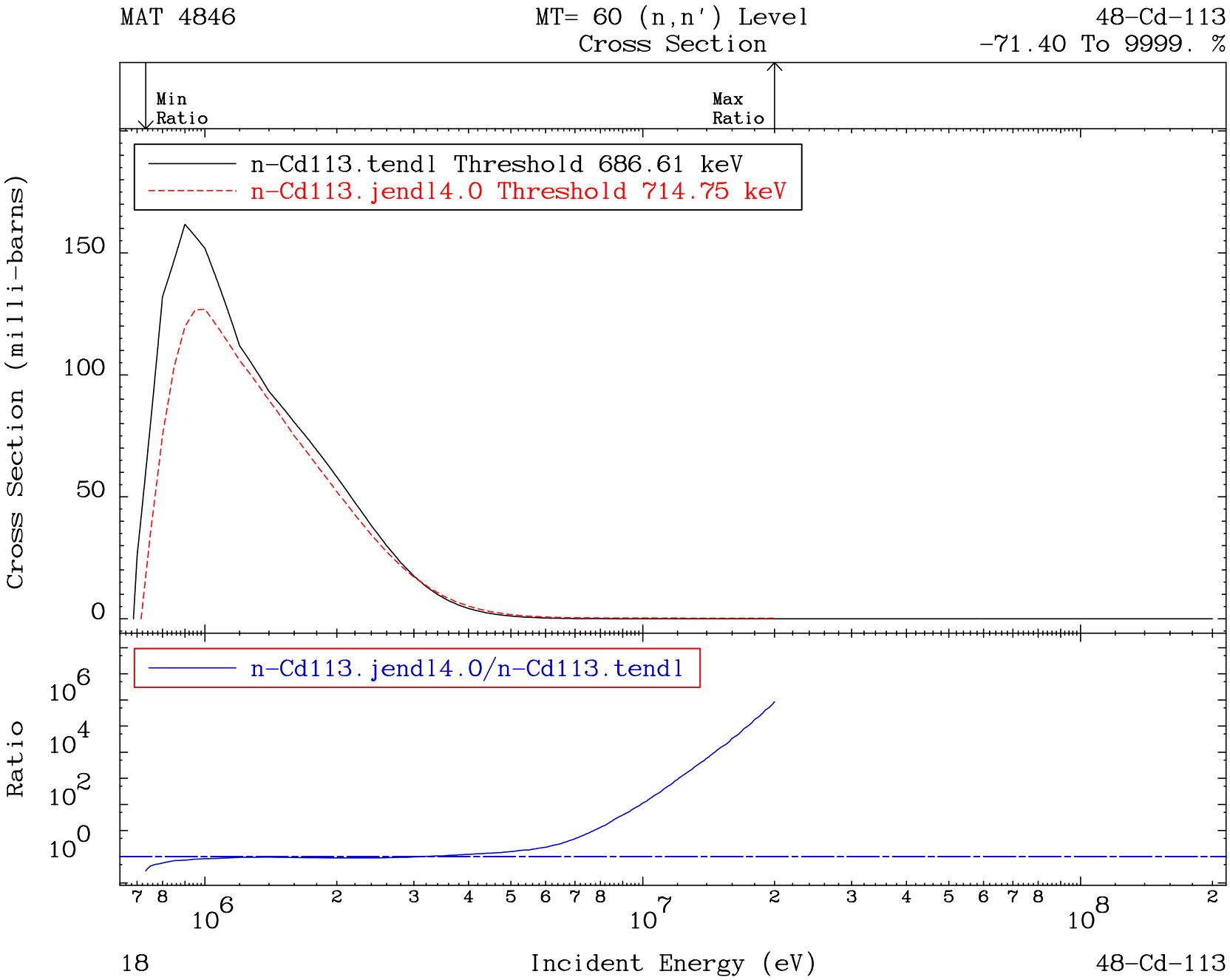

MAT 4846
MT= 55 (n,n') Level
Cross Section
48-Cd-113
-11.41 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 526.92 keV
n-Cd113.jendl4.0 Threshold 527.00 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
48-Cd-113

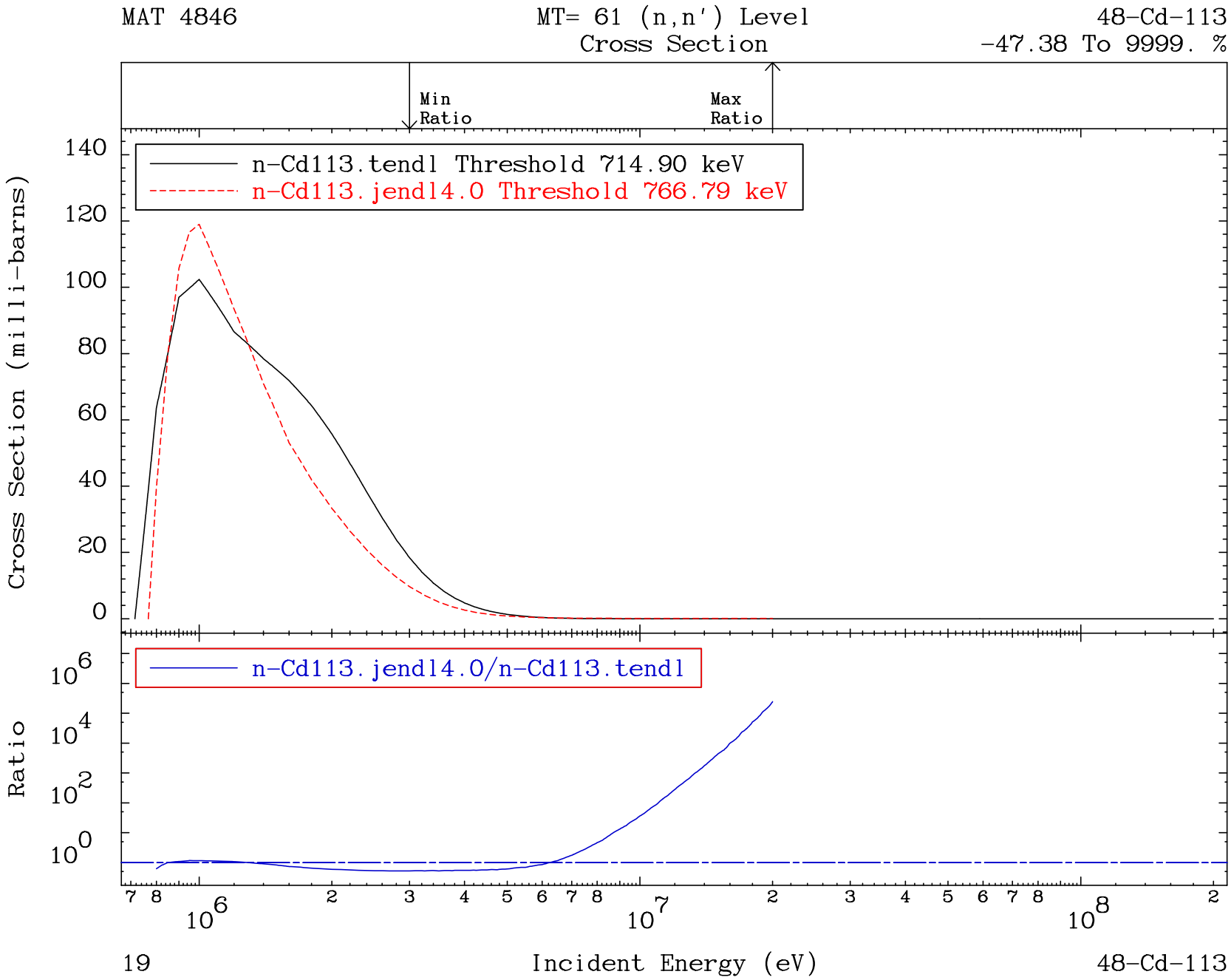

MAT 4846
MT= 56 (n,n') Level
Cross Section
48-Cd-113
-83.42 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 534.74 keV
n-Cd113.jendl4.0 Threshold 534.74 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
48-Cd-113

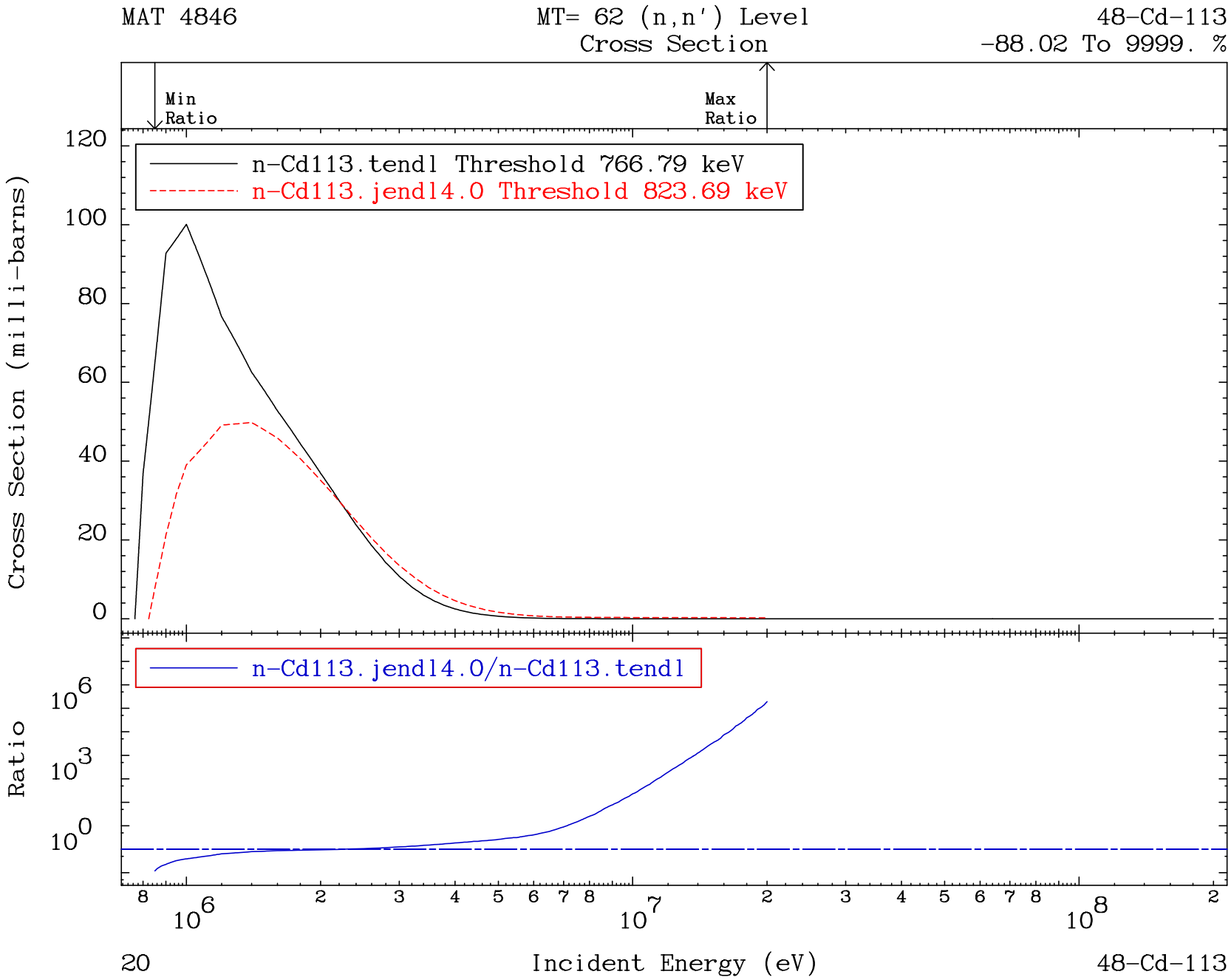

MAT 4846
MT= 57 (n,n') Level
Cross Section
48-Cd-113
-10.52 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 589.18 keV
n-Cd113.jendl4.0 Threshold 589.36 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
48-Cd-113

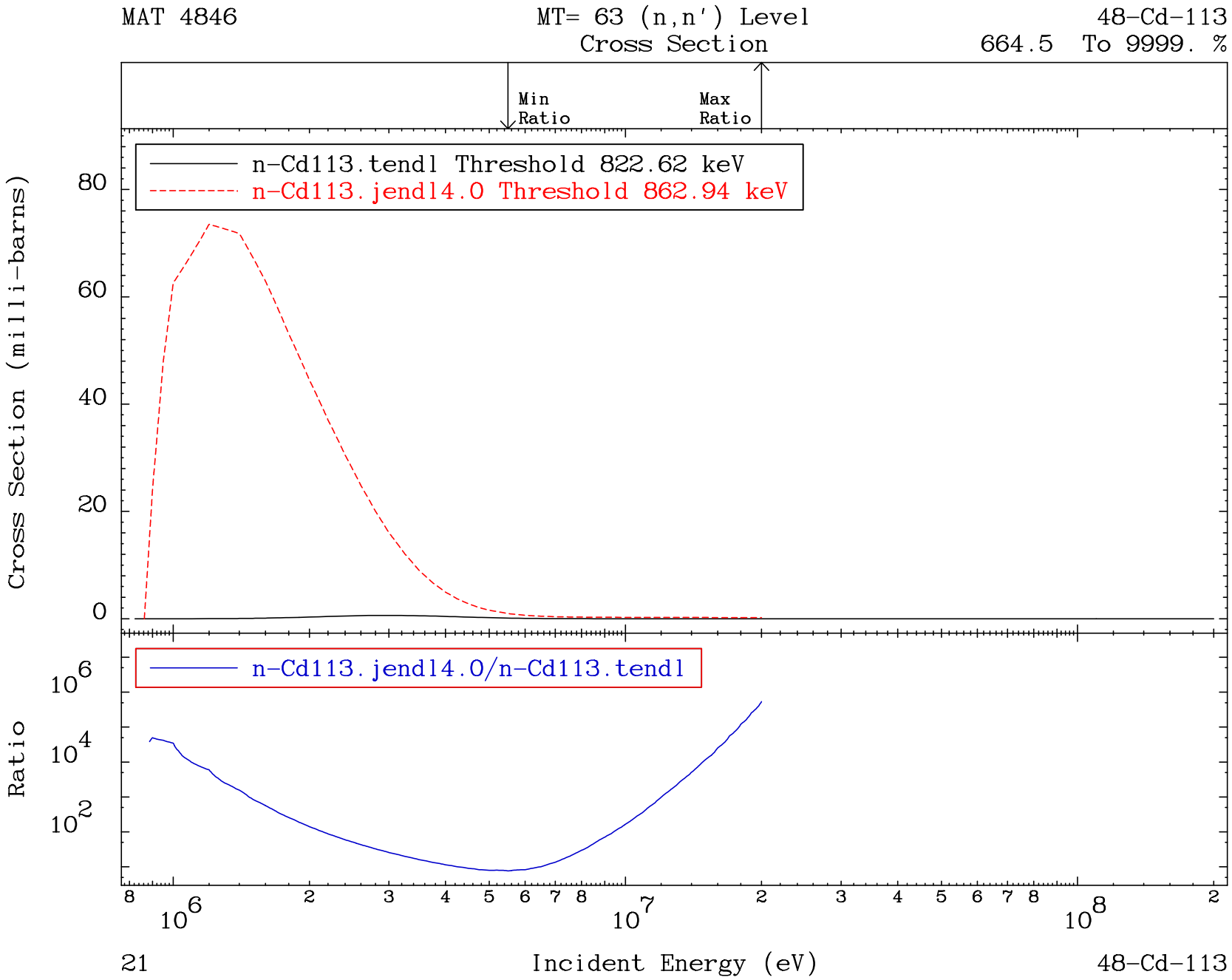

MAT 4846
MT= 58 (n,n') Level
Cross Section
48-Cd-113
-97.18 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 632.20 keV
n-Cd113.jendl4.0 Threshold 643.76 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
48-Cd-113

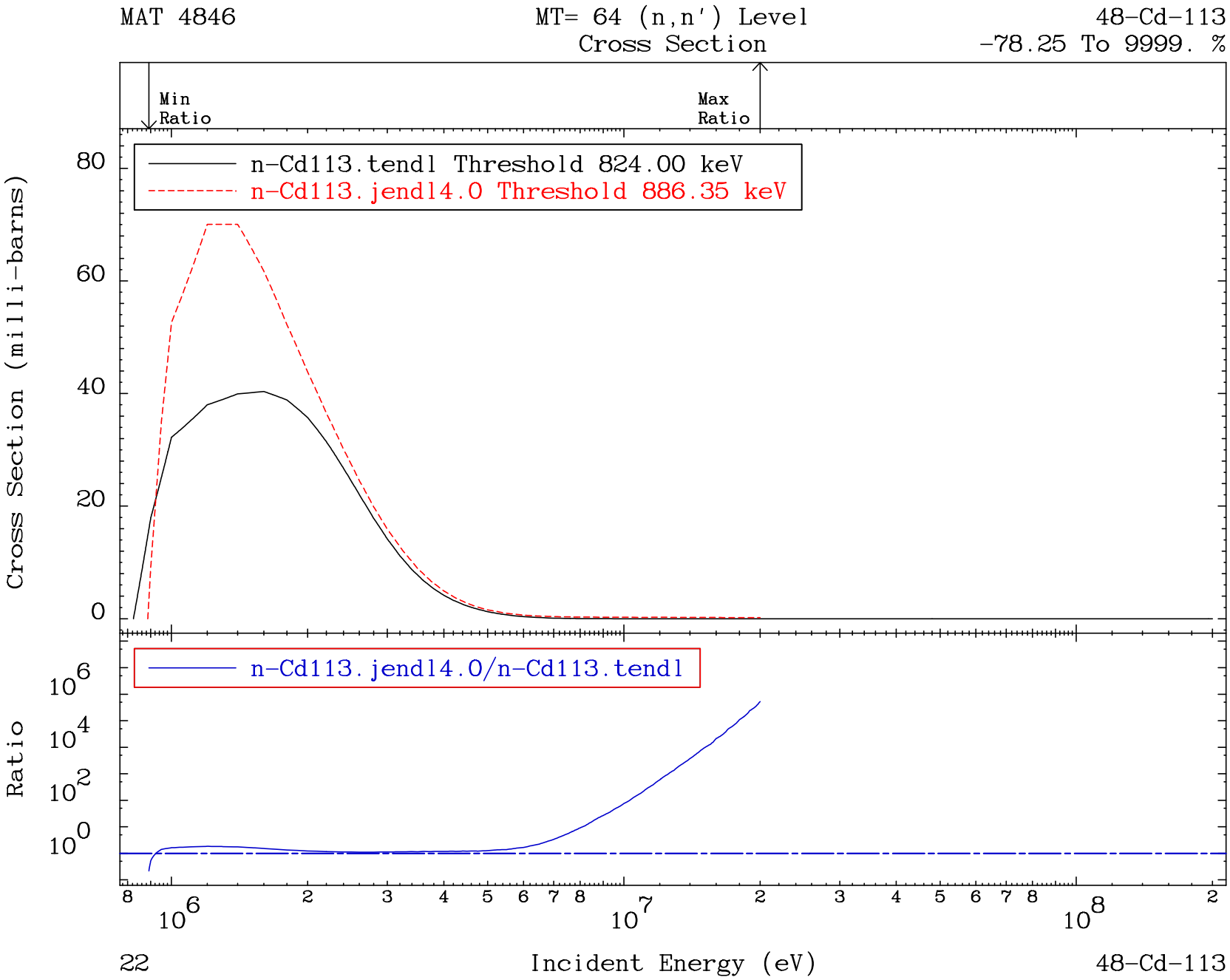

MAT 4846
MT= 59 (n,n') Level
Cross Section
48-Cd-113
28.65 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 643.89 keV
n-Cd113.jendl4.0 Threshold 686.65 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
48-Cd-113

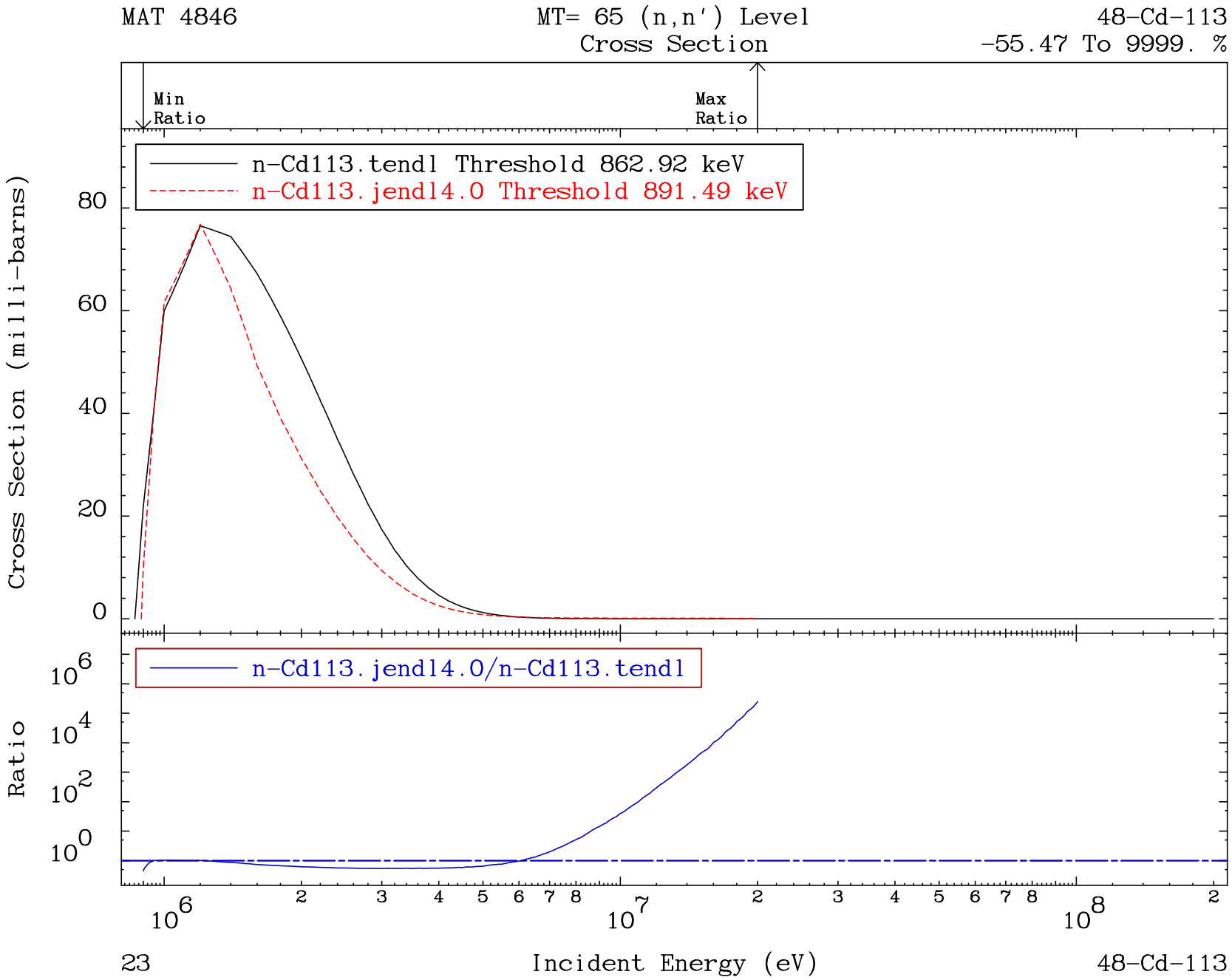

MAT 4846
MT= 60 (n,n') Level
Cross Section
48-Cd-113
-71.40 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 686.61 keV
n-Cd113.jendl4.0 Threshold 714.75 keV
Cross Section (milli-barns)
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
48-Cd-113

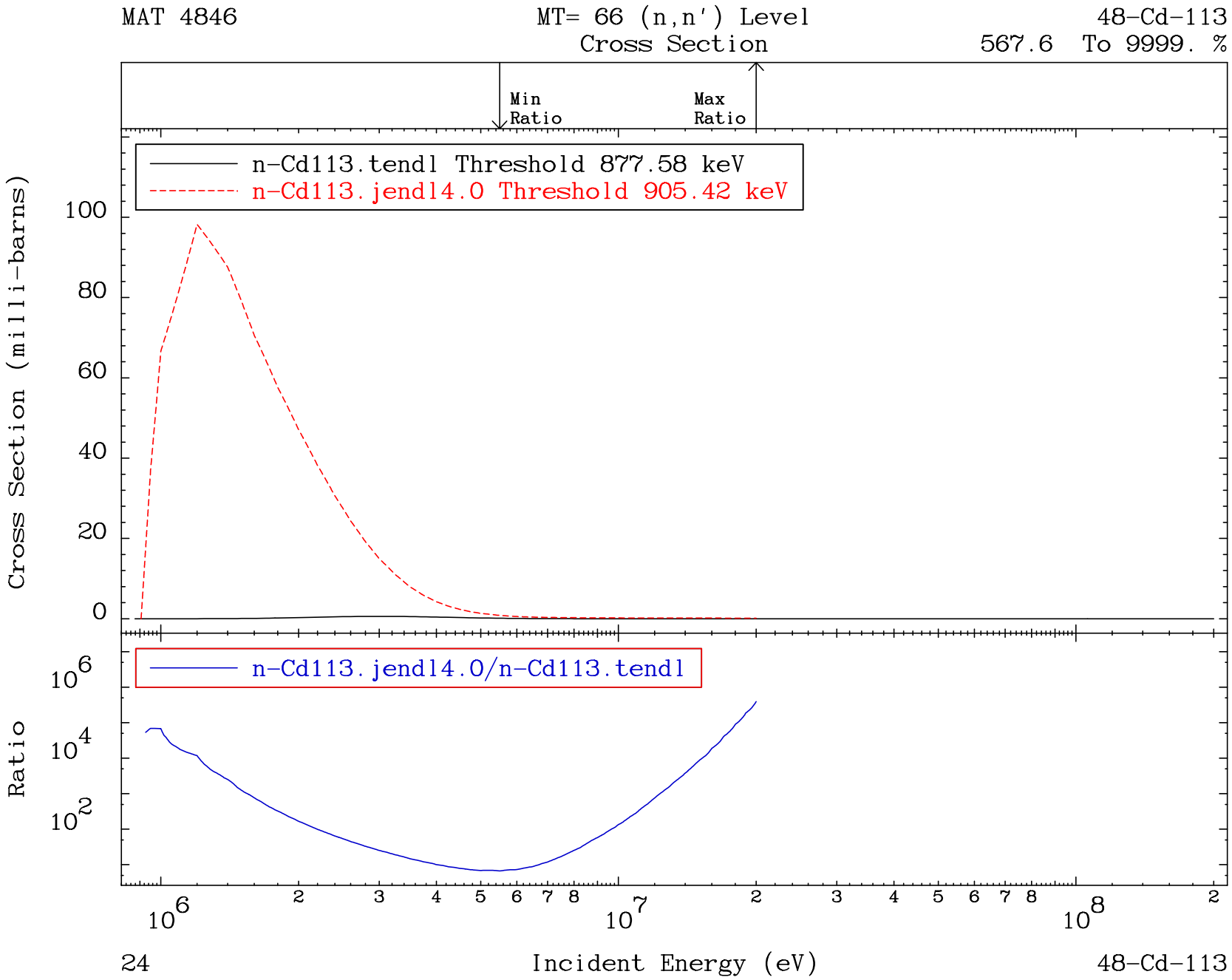

MAT 4846
MT= 61 (n,n') Level
Cross Section
48-Cd-113
-47.38 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 714.90 keV
n-Cd113.jendl4.0 Threshold 766.79 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
48-Cd-113

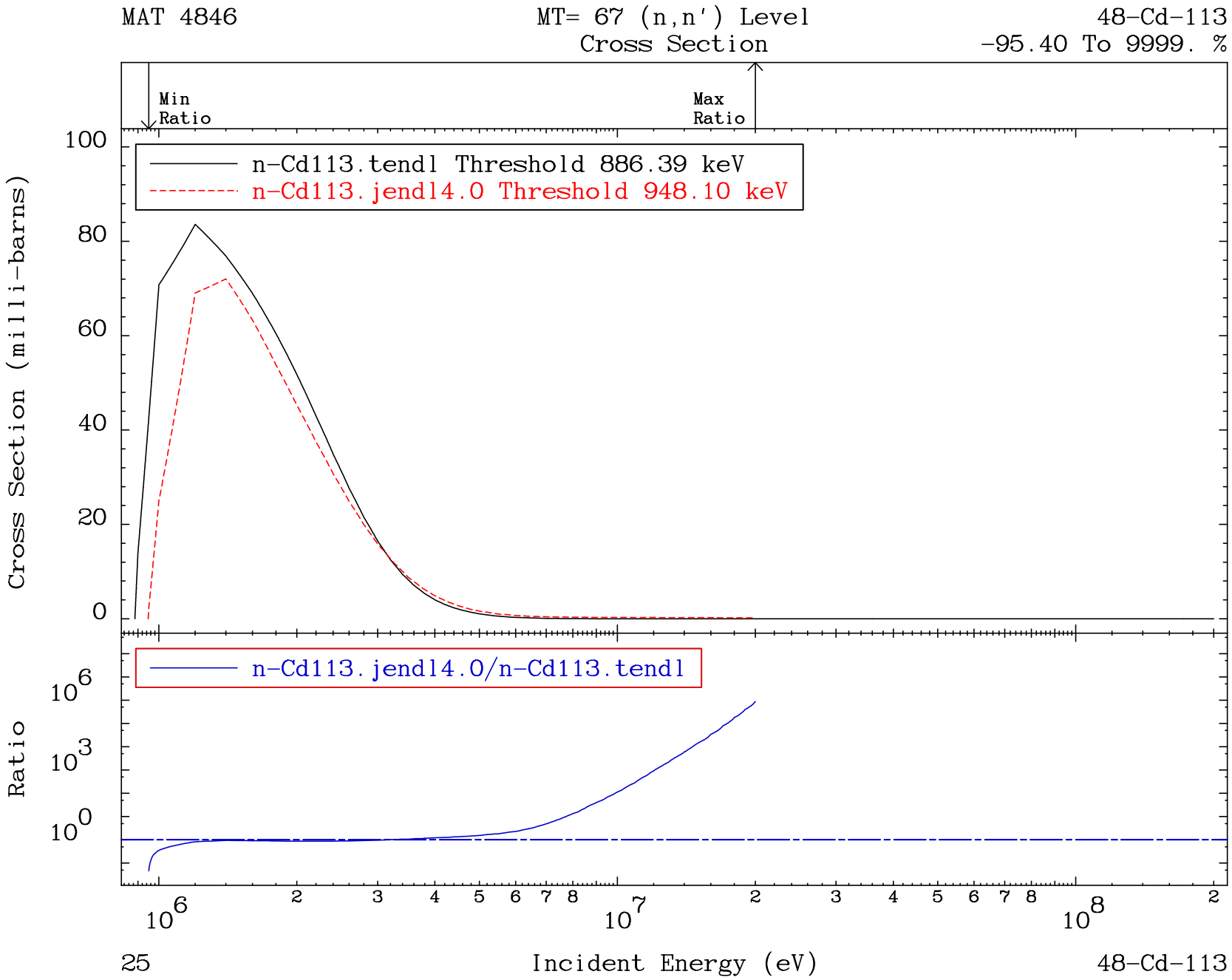

MAT 4846
MT= 62 (n,n') Level
Cross Section
48-Cd-113
-88.02 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 766.79 keV
n-Cd113.jendl4.0 Threshold 823.69 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
48-Cd-113

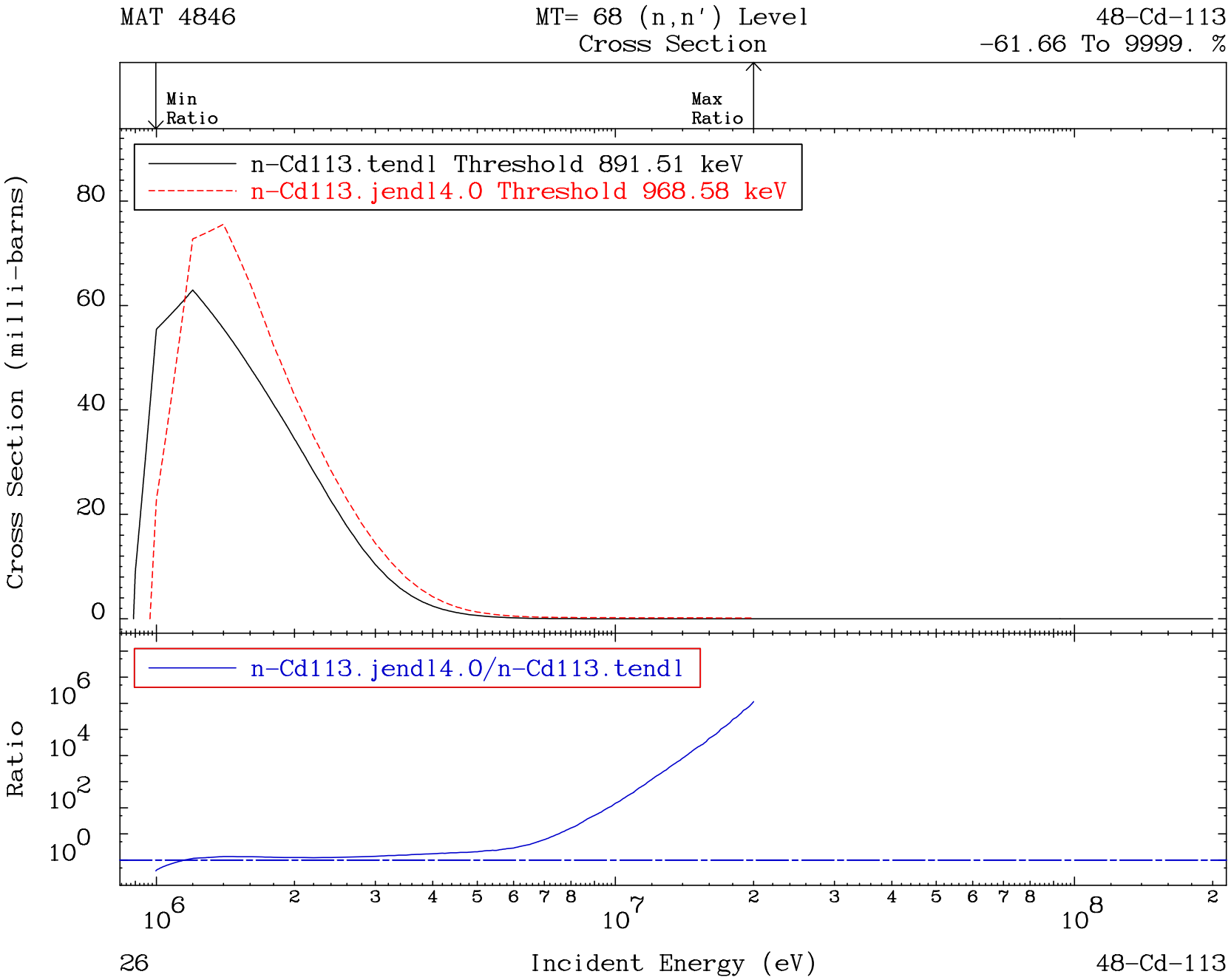

MAT 4846
MT= 63 (n,n') Level
Cross Section
48-Cd-113
664.5 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 822.62 keV
n-Cd113.jendl4.0 Threshold 862.94 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
48-Cd-113

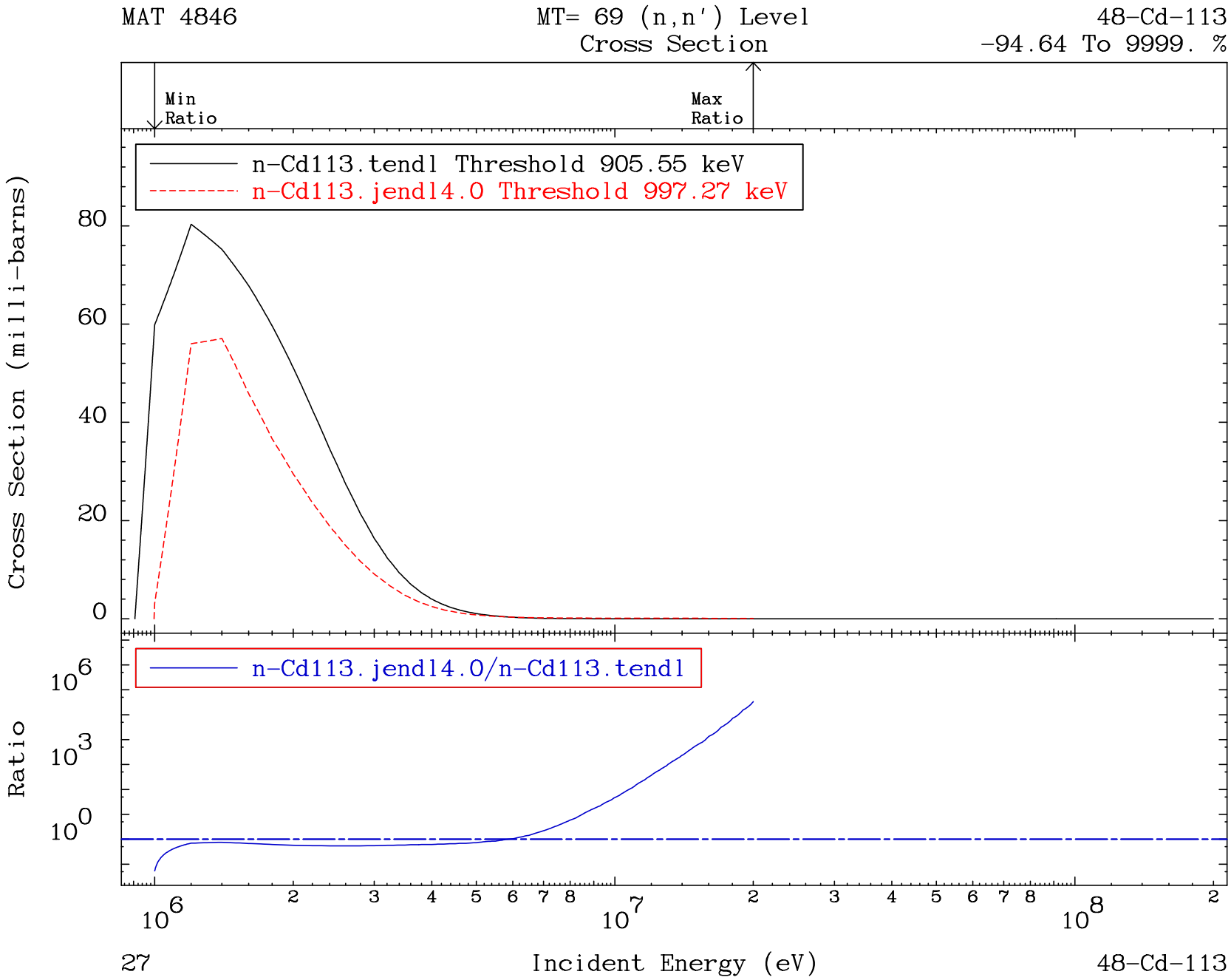

MAT 4846
MT= 64 (n,n') Level
Cross Section
48-Cd-113
-78.25 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 824.00 keV
n-Cd113.jendl4.0 Threshold 886.35 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
48-Cd-113

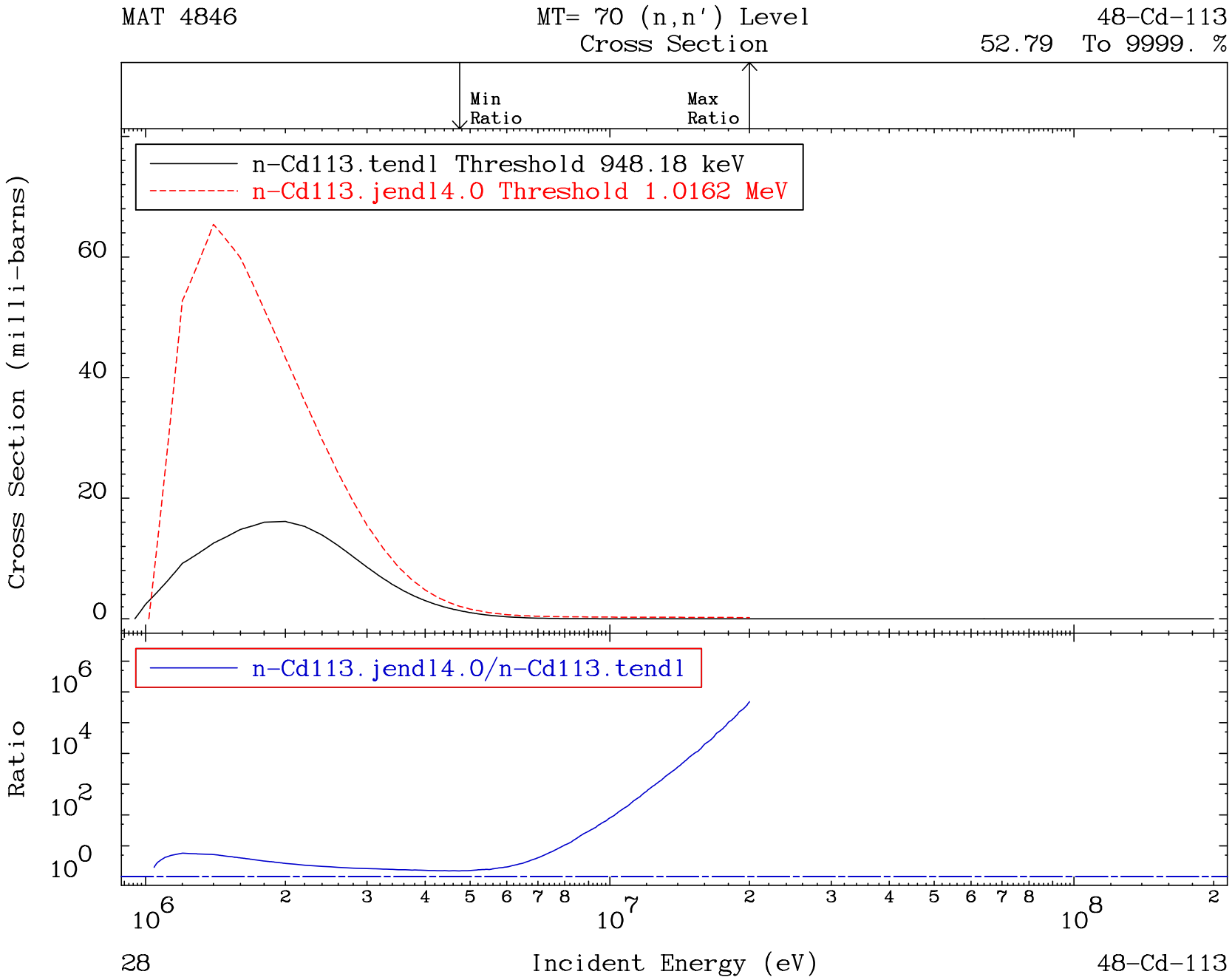

MAT 4846
MT= 65 (n,n') Level
Cross Section
48-Cd-113
-55.47 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 862.92 keV
n-Cd113.jendl4.0 Threshold 891.49 keV
Cross Section (milli-barns)
0
20
40
60
80
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^0
10^2
10^4
10^6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
48-Cd-113

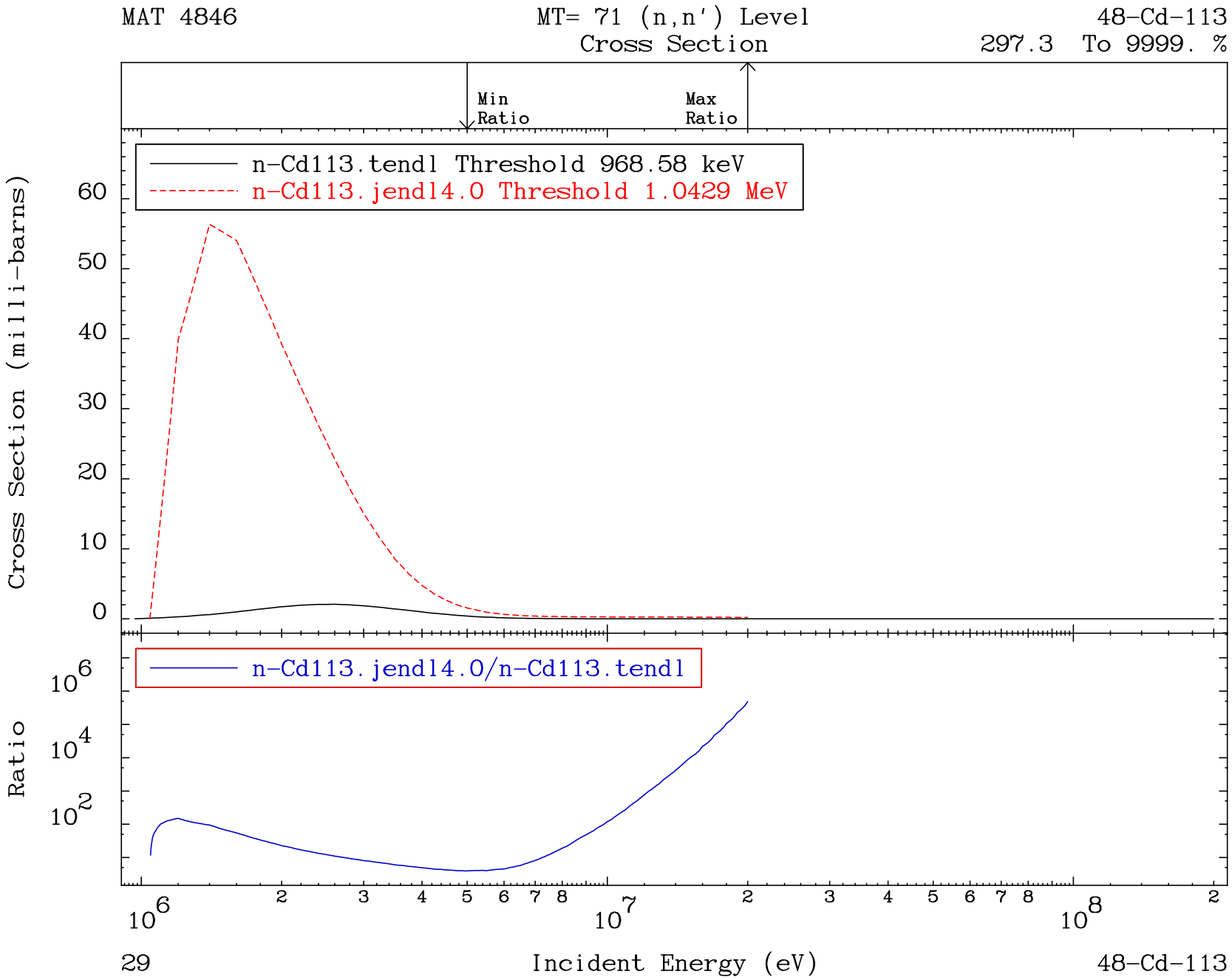

MAT 4846
MT= 66 (n,n') Level
Cross Section
48-Cd-113
567.6 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 877.58 keV
n-Cd113.jendl4.0 Threshold 905.42 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
48-Cd-113

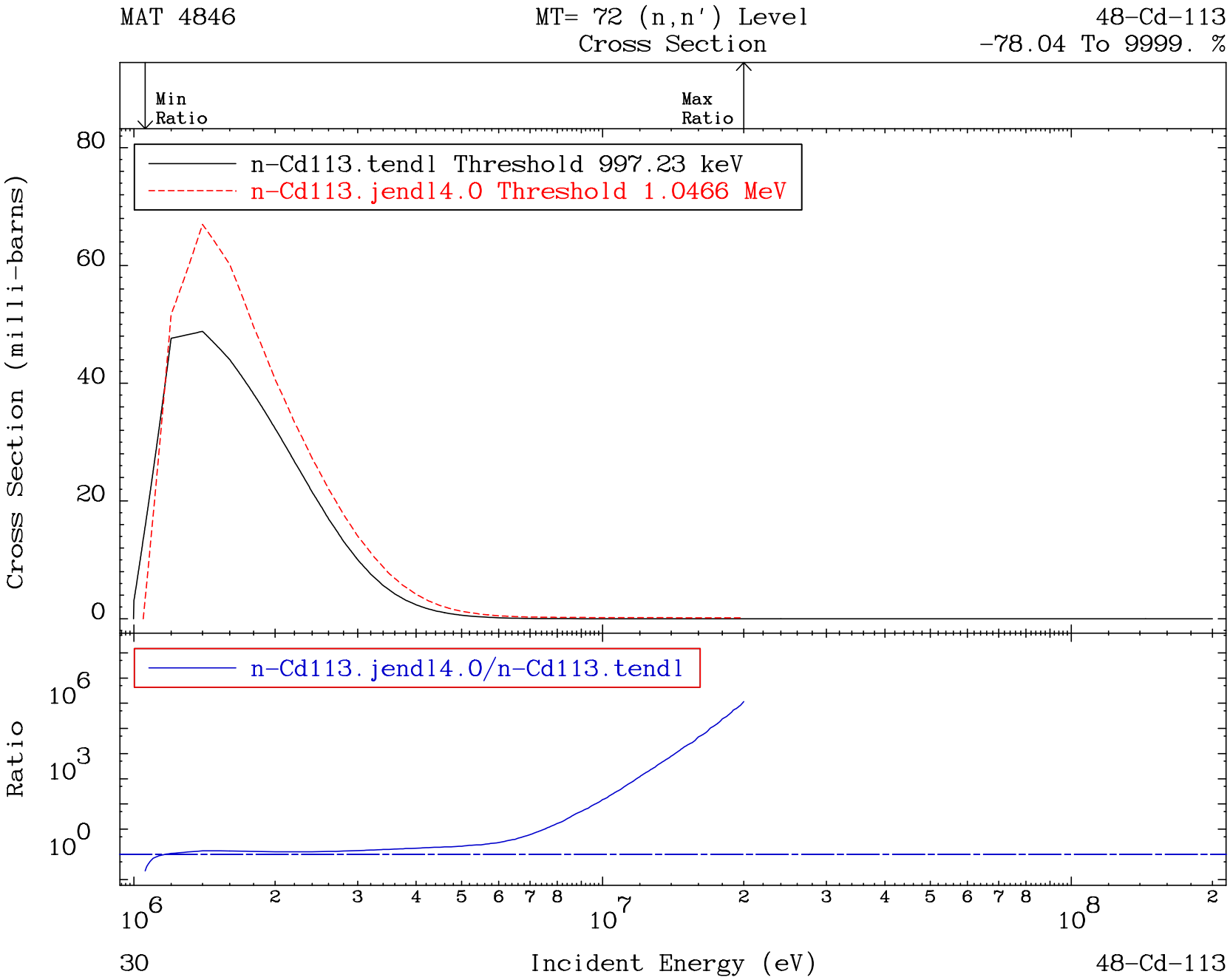

MAT 4846
MT= 67 (n,n') Level
Cross Section
48-Cd-113
-95.40 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 886.39 keV
n-Cd113.jendl4.0 Threshold 948.10 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
48-Cd-113

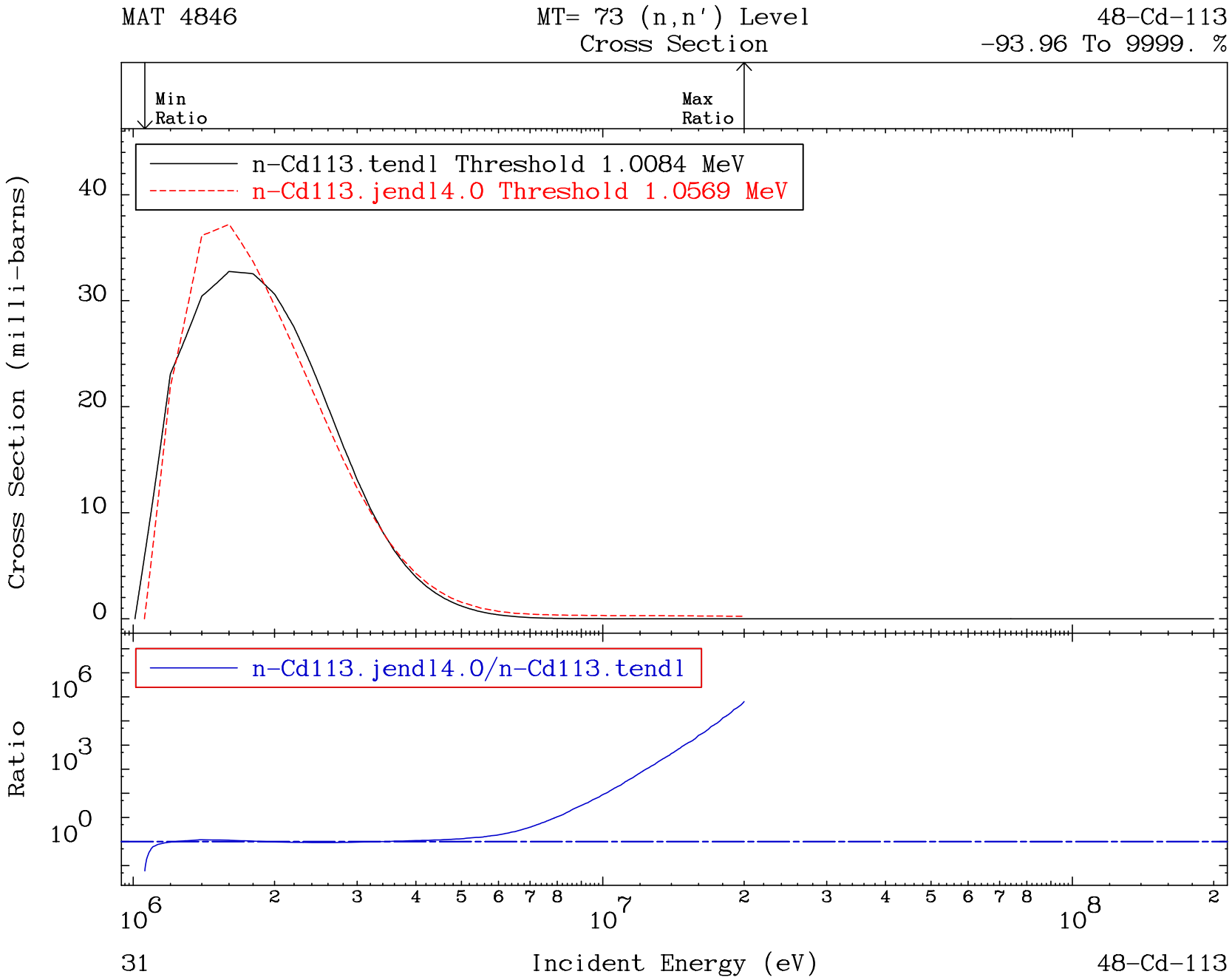

MAT 4846
MT= 68 (n,n') Level
Cross Section
48-Cd-113
-61.66 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 891.51 keV
n-Cd113.jendl4.0 Threshold 968.58 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
48-Cd-113

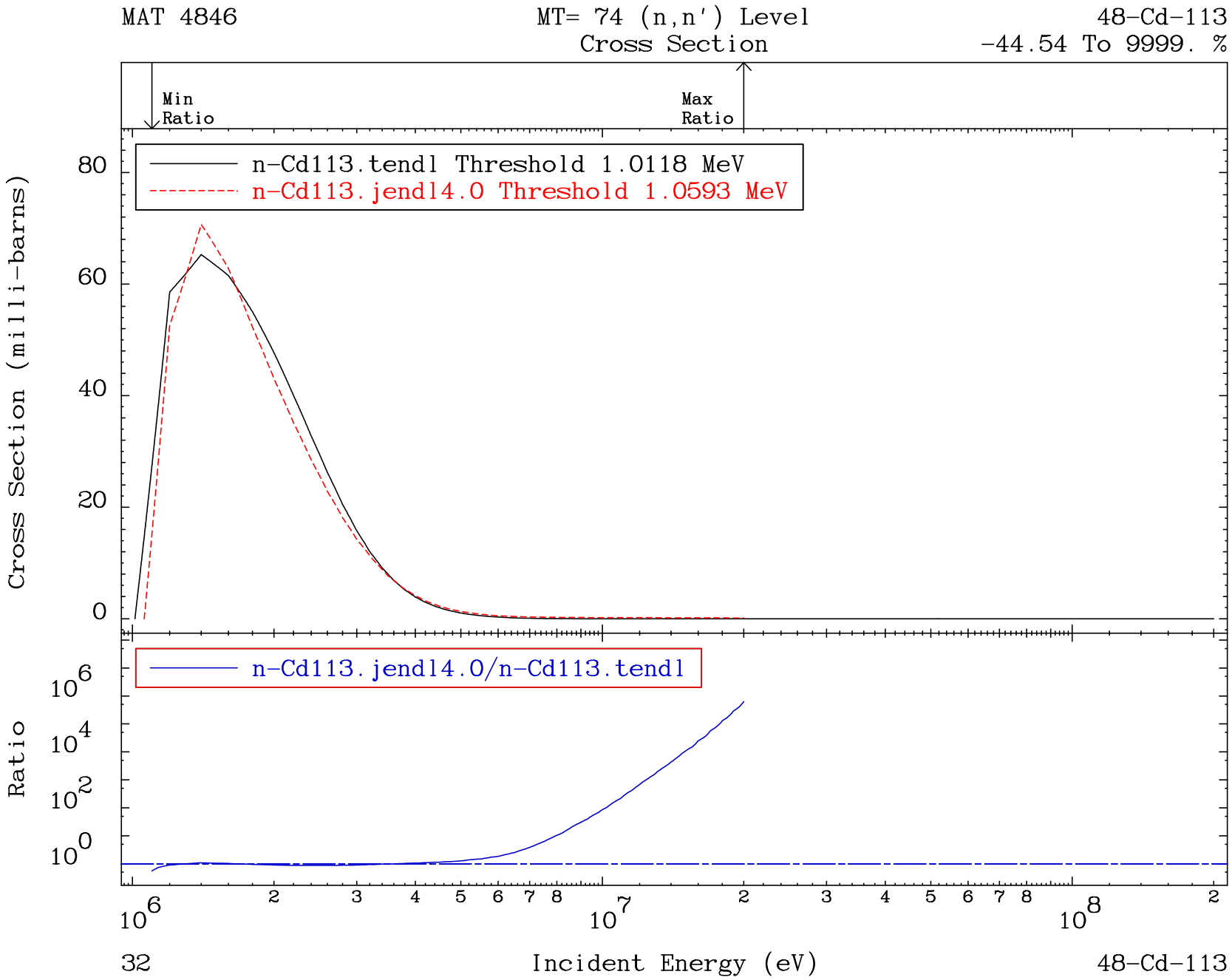

MAT 4846
MT= 69 (n,n') Level
Cross Section
48-Cd-113
-94.64 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 905.55 keV
n-Cd113.jendl4.0 Threshold 997.27 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
48-Cd-113

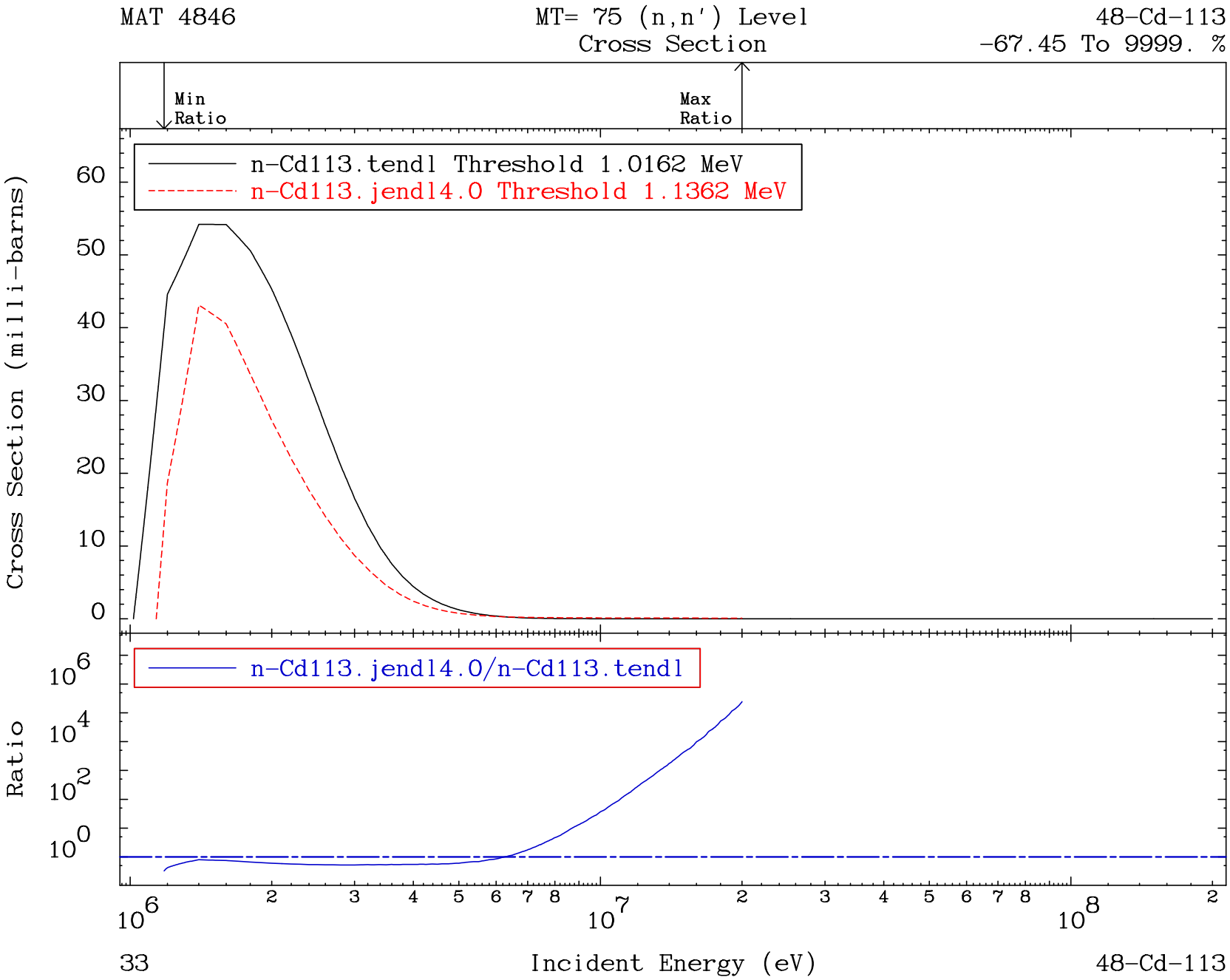

MAT 4846
MT= 70 (n,n') Level
Cross Section
48-Cd-113
52.79 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 948.18 keV
n-Cd113.jendl4.0 Threshold 1.0162 MeV
Cross Section (milli-barns)
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
48-Cd-113

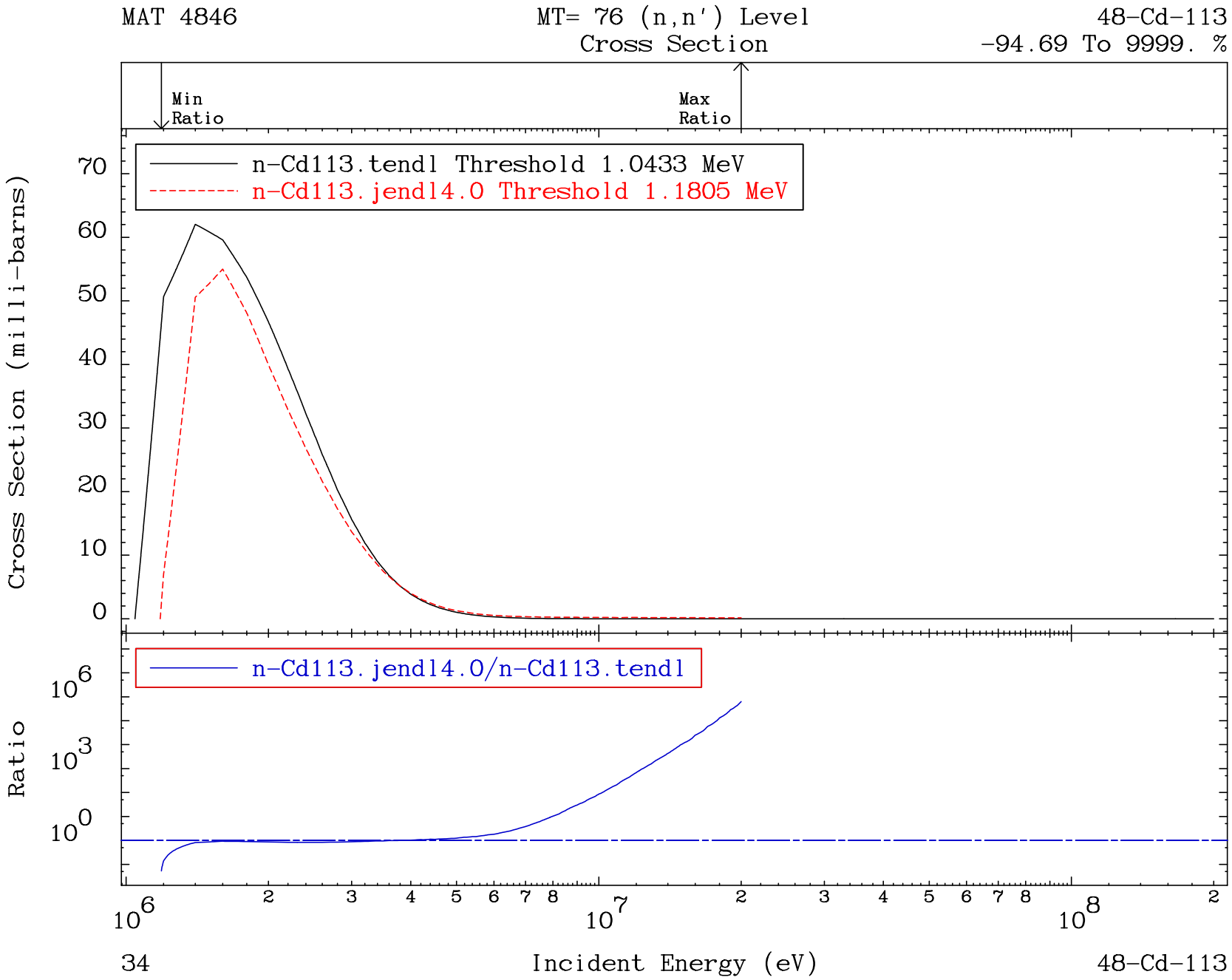

MAT 4846
MT= 71 (n,n') Level
Cross Section
48-Cd-113
297.3 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 968.58 keV
n-Cd113.jendl4.0 Threshold 1.0429 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
48-Cd-113

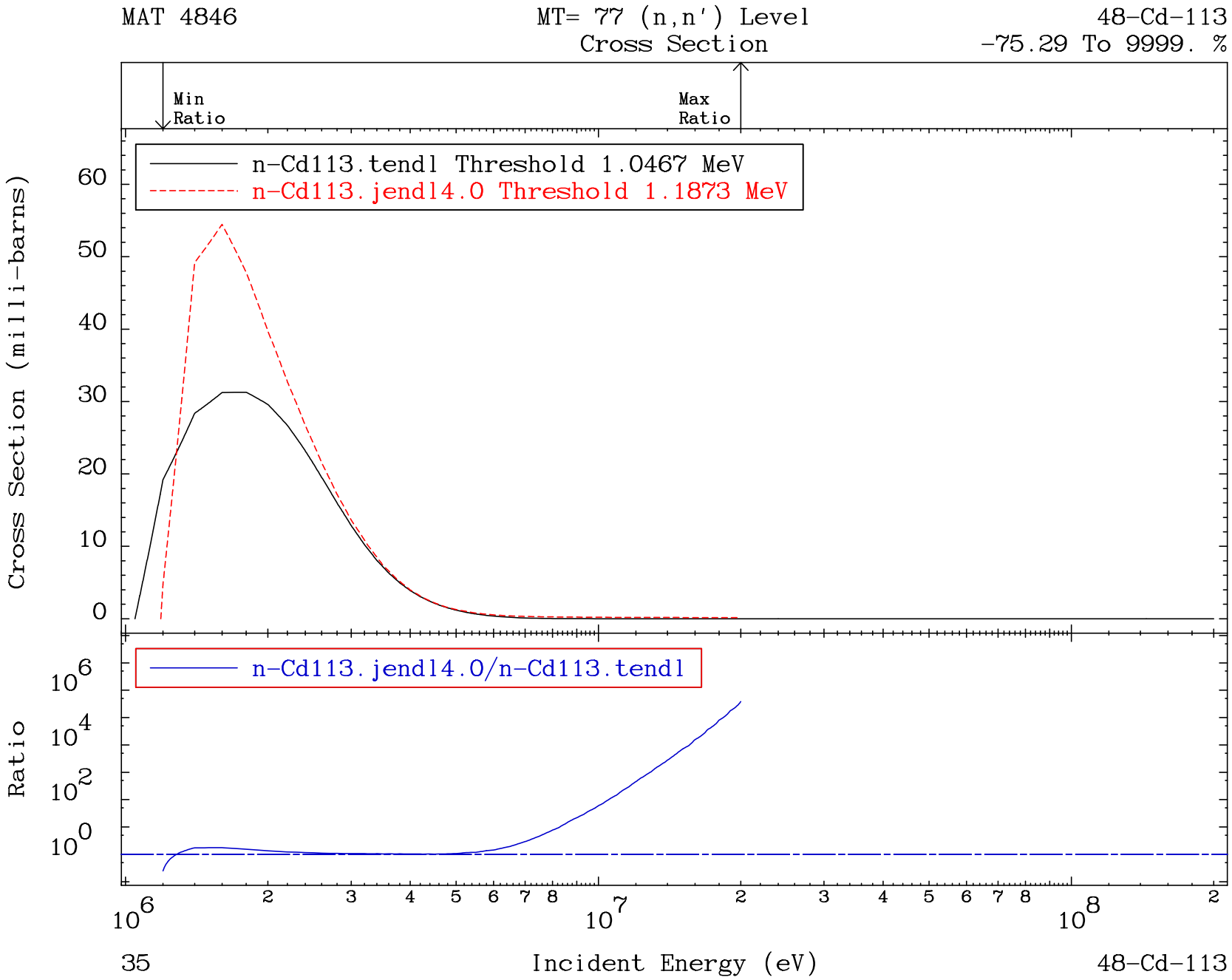

MAT 4846
MT= 72 (n,n') Level
Cross Section
48-Cd-113
-78.04 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 997.23 keV
n-Cd113.jendl4.0 Threshold 1.0466 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
48-Cd-113

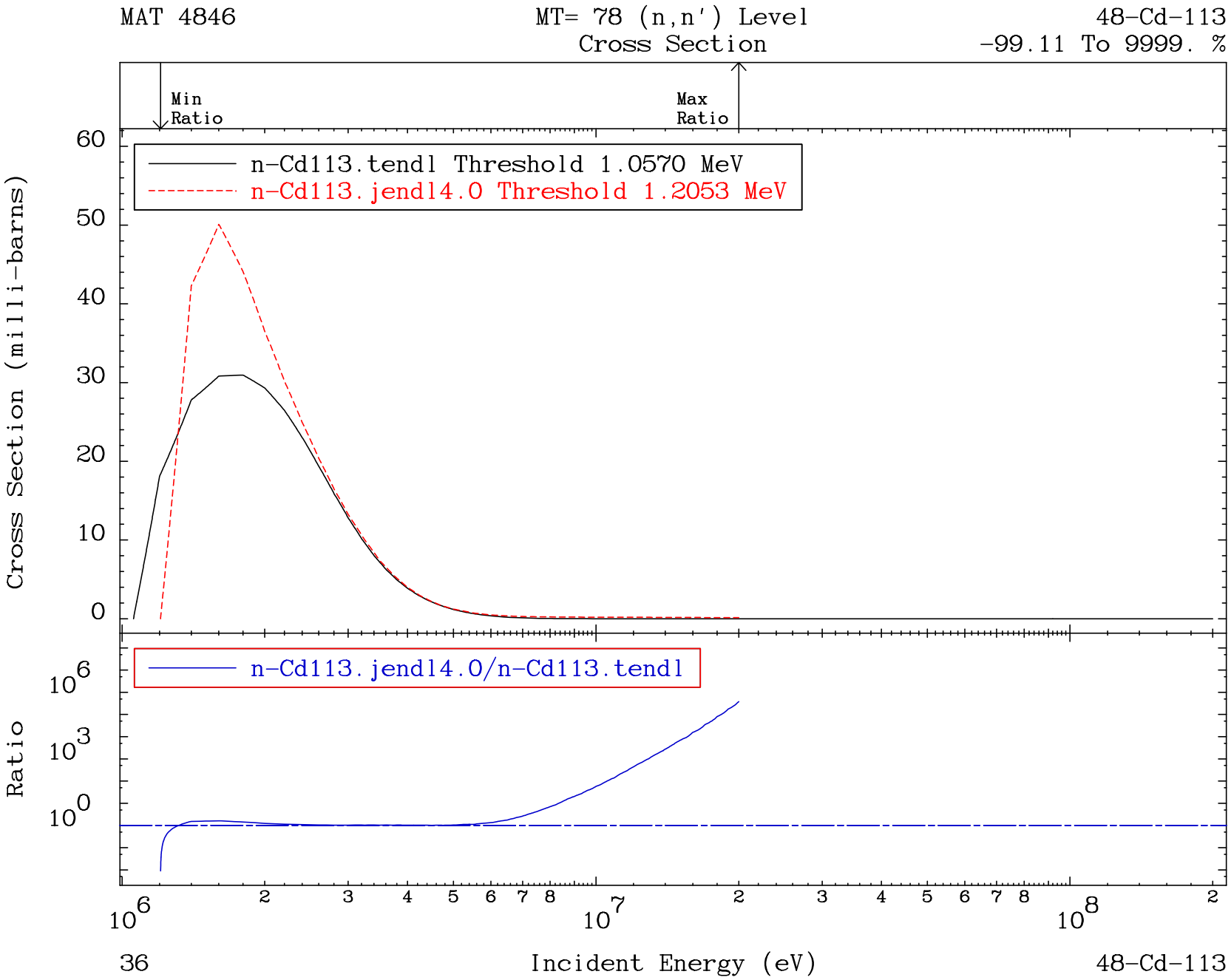

MAT 4846
MT= 73 (n,n') Level
Cross Section
48-Cd-113
-93.96 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 1.0084 MeV
n-Cd113.jendl4.0 Threshold 1.0569 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
31
Incident Energy (eV)
48-Cd-113

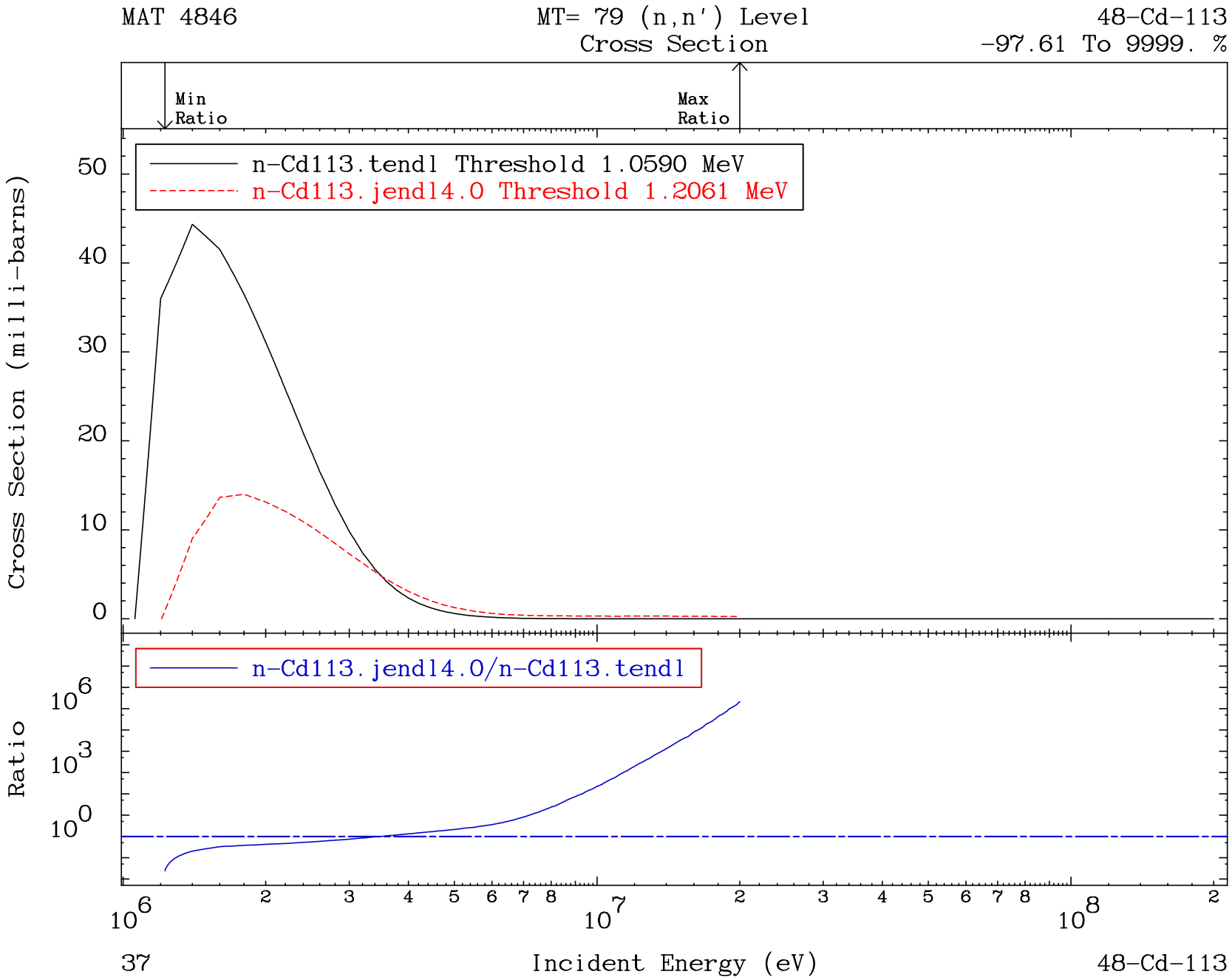

MAT 4846
MT= 74 (n,n') Level
Cross Section
48-Cd-113
-44.54 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0118 MeV
n-Cd113.jendl4.0 Threshold 1.0593 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
48-Cd-113

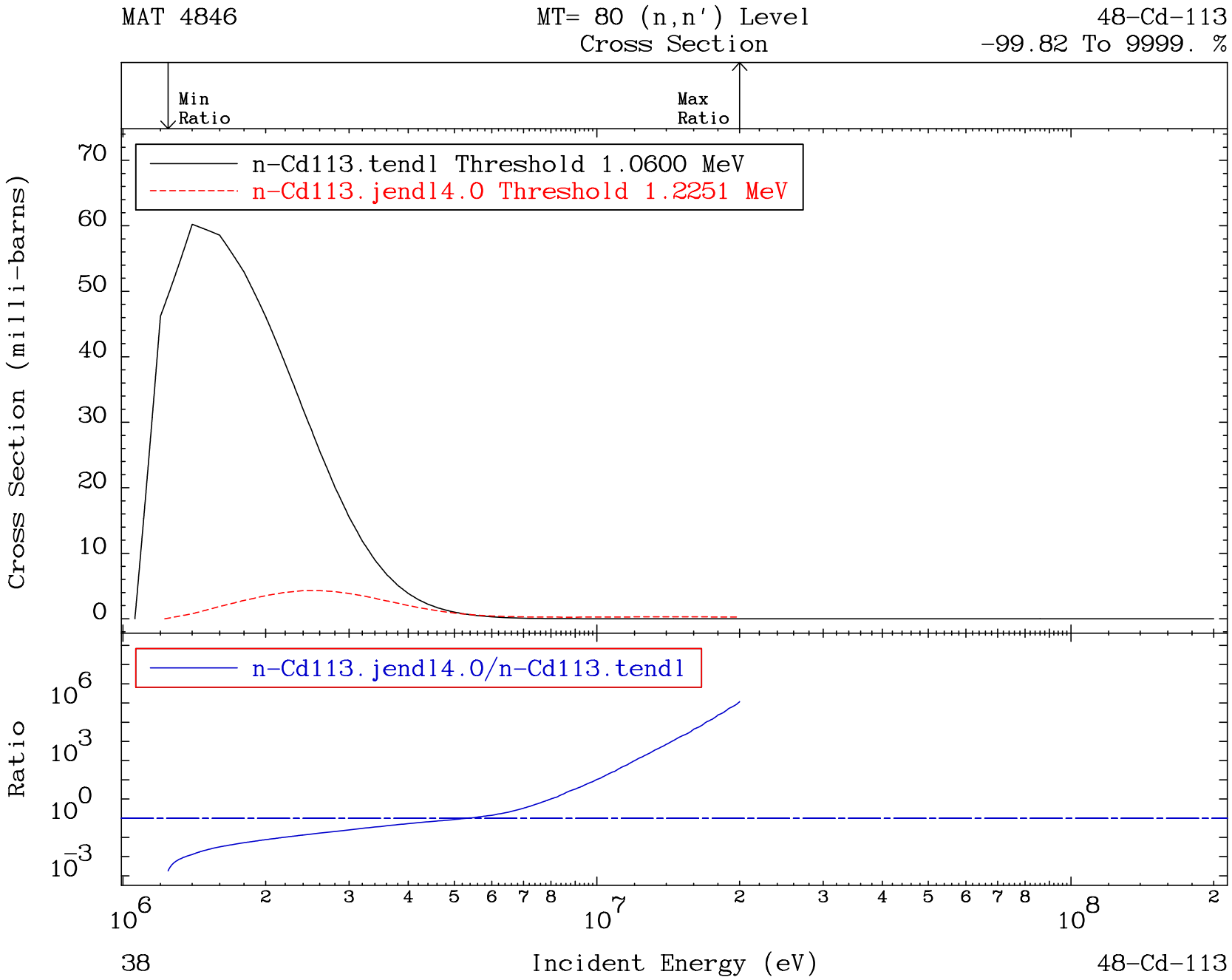

MAT 4846
MT= 75 (n,n') Level
Cross Section
48-Cd-113
-67.45 To 9999. %
Min
Ratio
Max
Ratio
n-Cd113.tendl Threshold 1.0162 MeV
n-Cd113.jendl4.0 Threshold 1.1362 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
33
Incident Energy (eV)
48-Cd-113

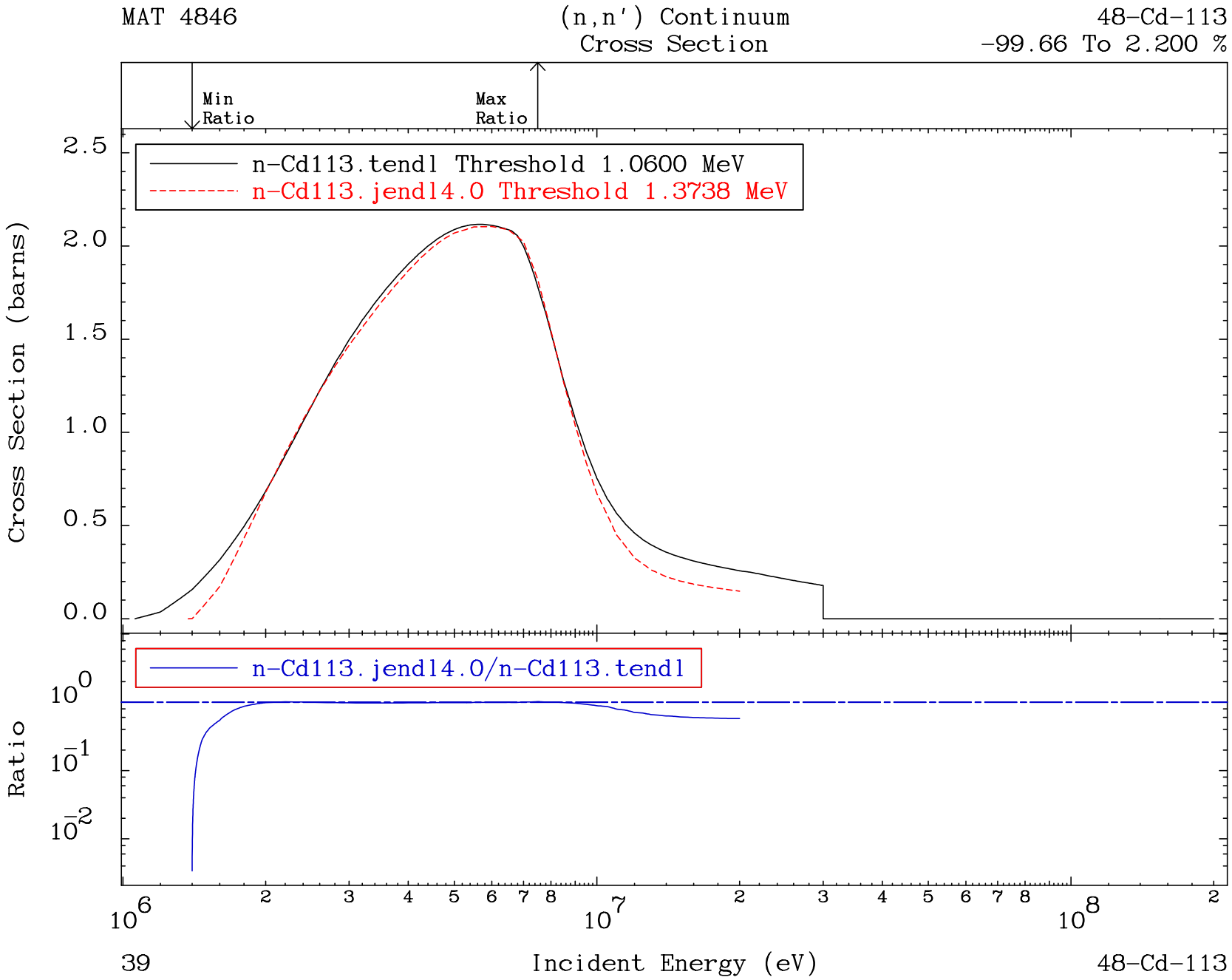

MAT 4846
MT= 76 (n,n') Level
Cross Section
48-Cd-113
-94.69 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0433 MeV
n-Cd113.jendl4.0 Threshold 1.1805 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
34
Incident Energy (eV)
48-Cd-113

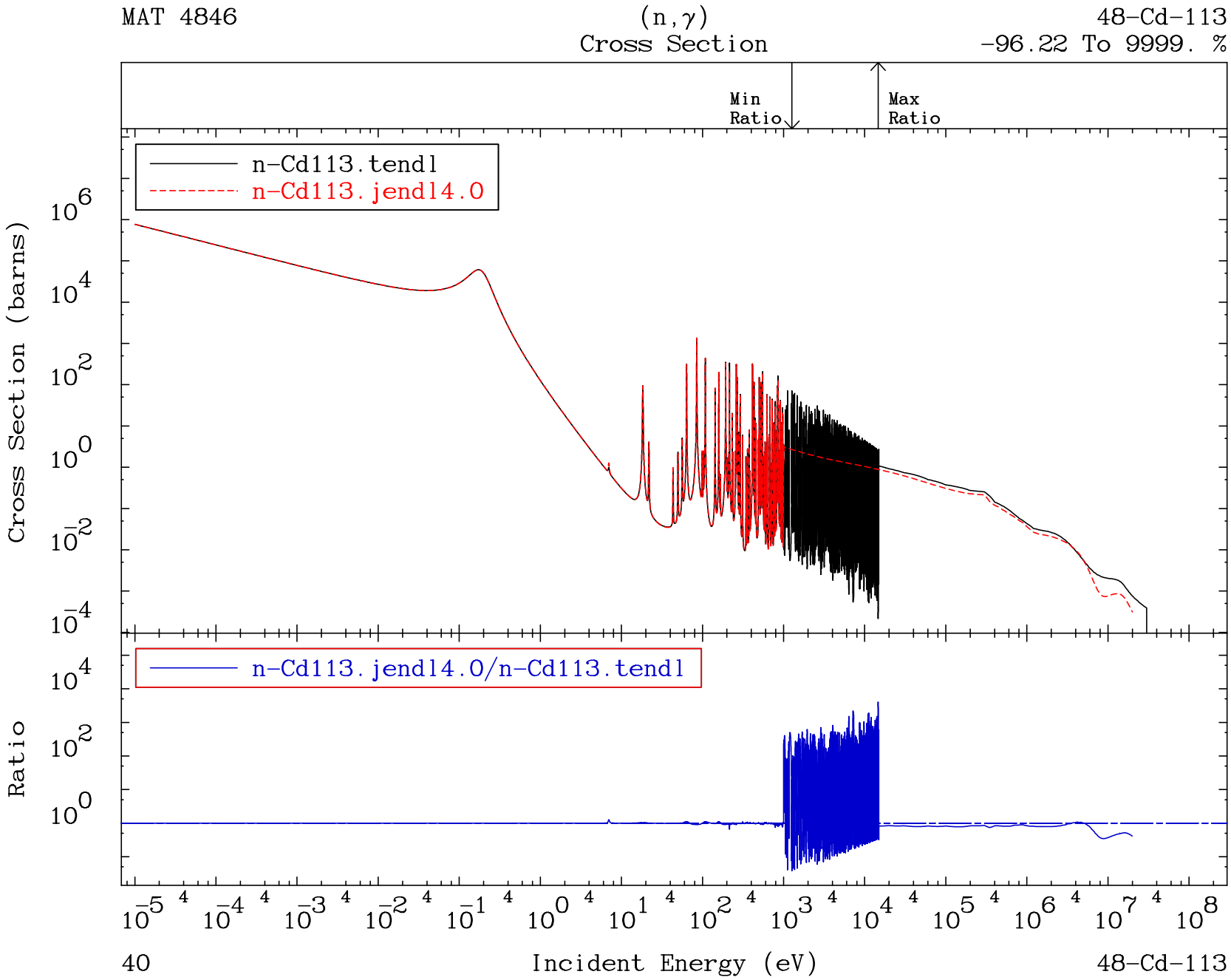

MAT 4846
MT= 77 (n,n') Level
Cross Section
48-Cd-113
-75.29 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0467 MeV
n-Cd113.jendl4.0 Threshold 1.1873 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
48-Cd-113

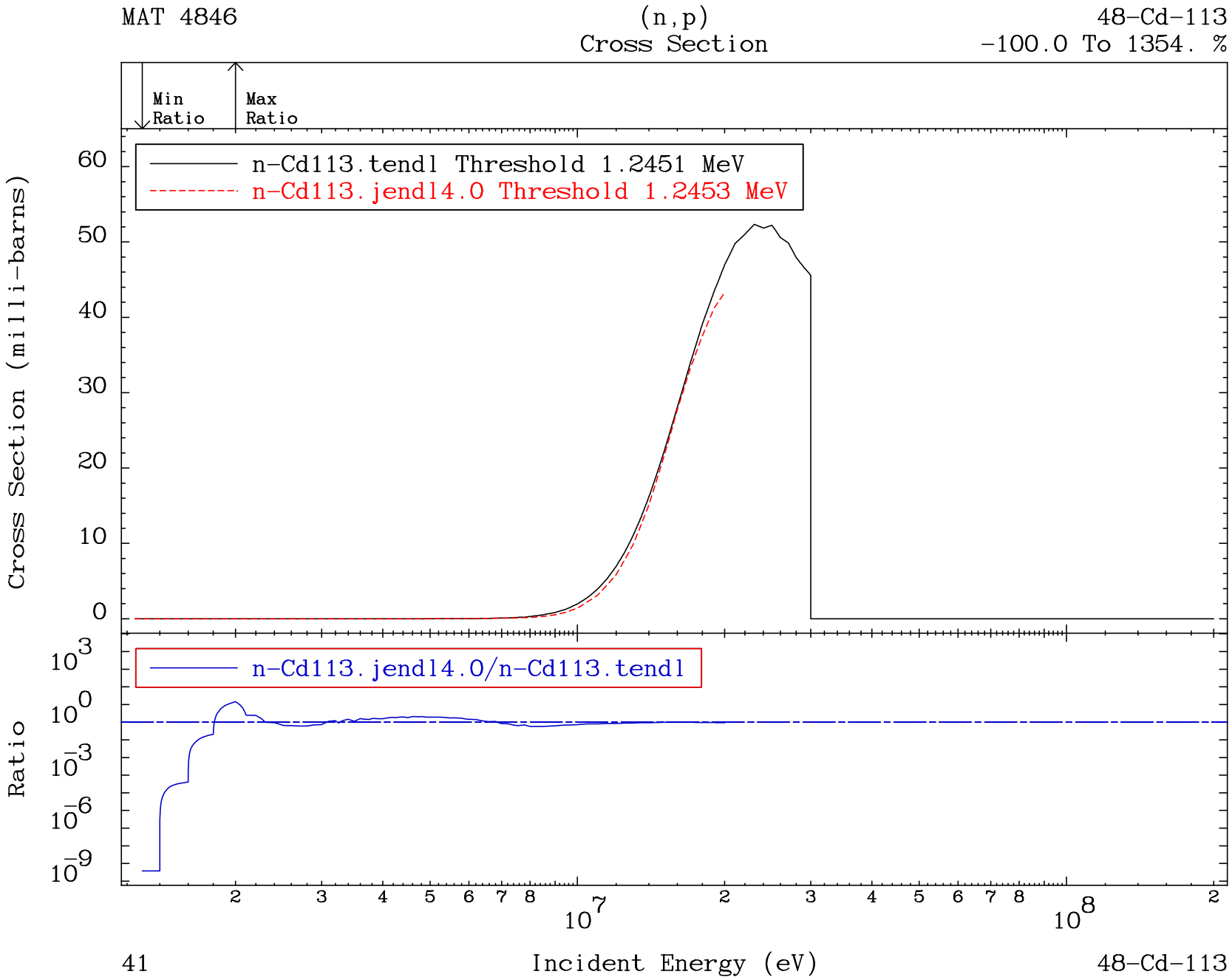

MAT 4846
MT= 78 (n,n') Level
Cross Section
48-Cd-113
-99.11 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0570 MeV
n-Cd113.jendl4.0 Threshold 1.2053 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
48-Cd-113

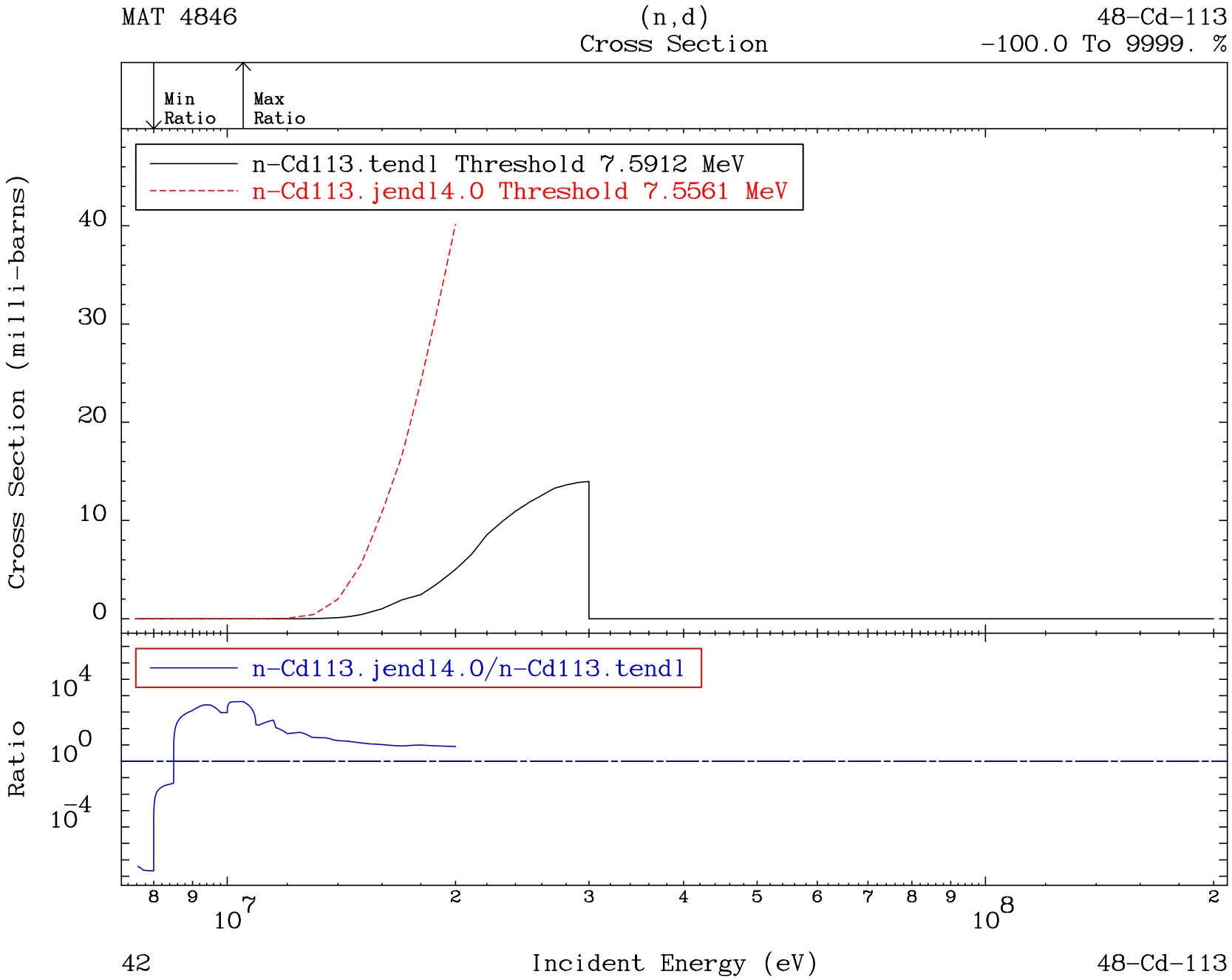

MAT 4846
MT= 79 (n,n') Level
Cross Section
48-Cd-113
-97.61 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0590 MeV
n-Cd113.jendl4.0 Threshold 1.2061 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
48-Cd-113

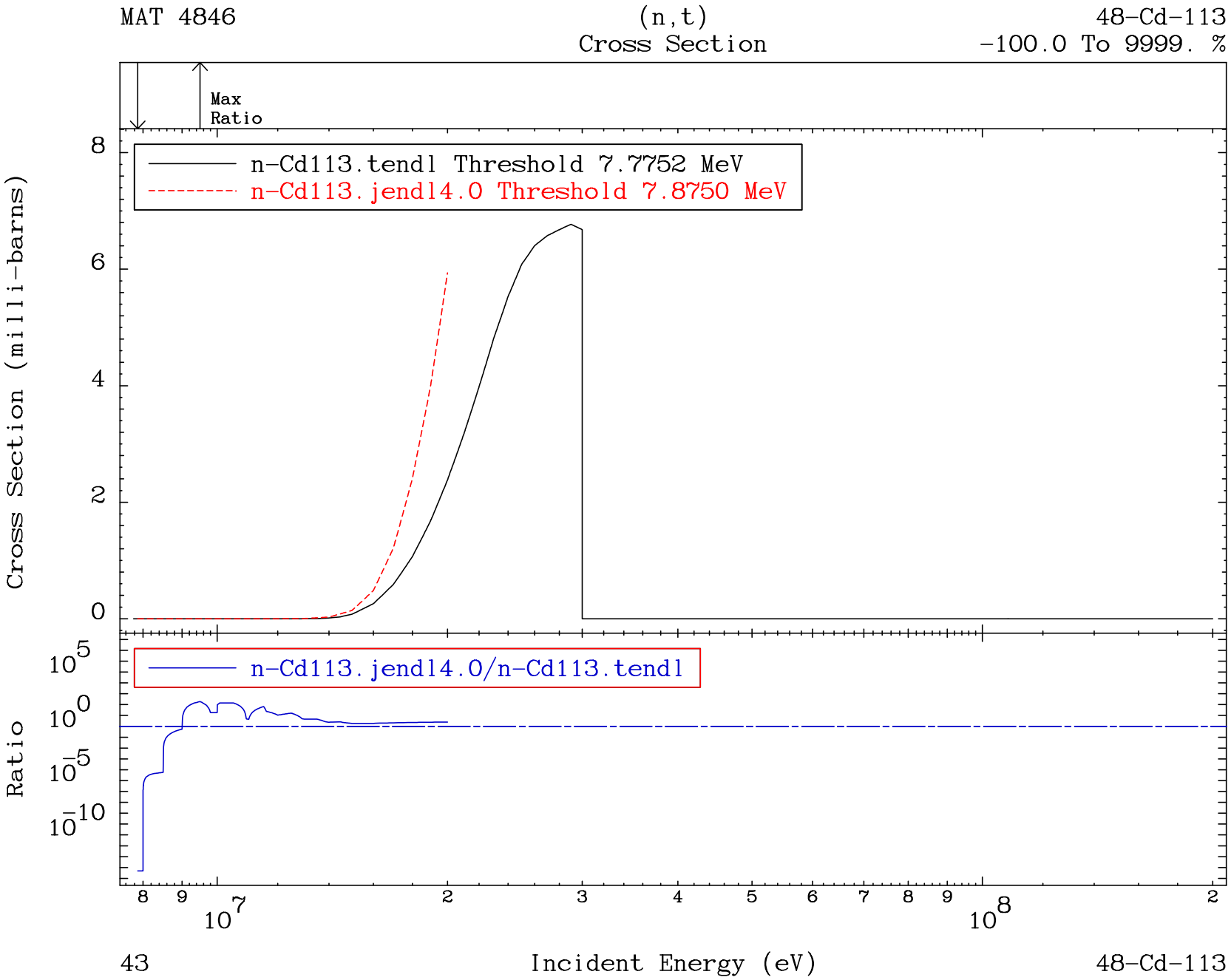

MAT 4846
MT= 80 (n,n') Level
Cross Section
48-Cd-113
-99.82 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0600 MeV
n-Cd113.jendl4.0 Threshold 1.2251 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^6
10^3
10^0
10^-3
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
38
Incident Energy (eV)
48-Cd-113

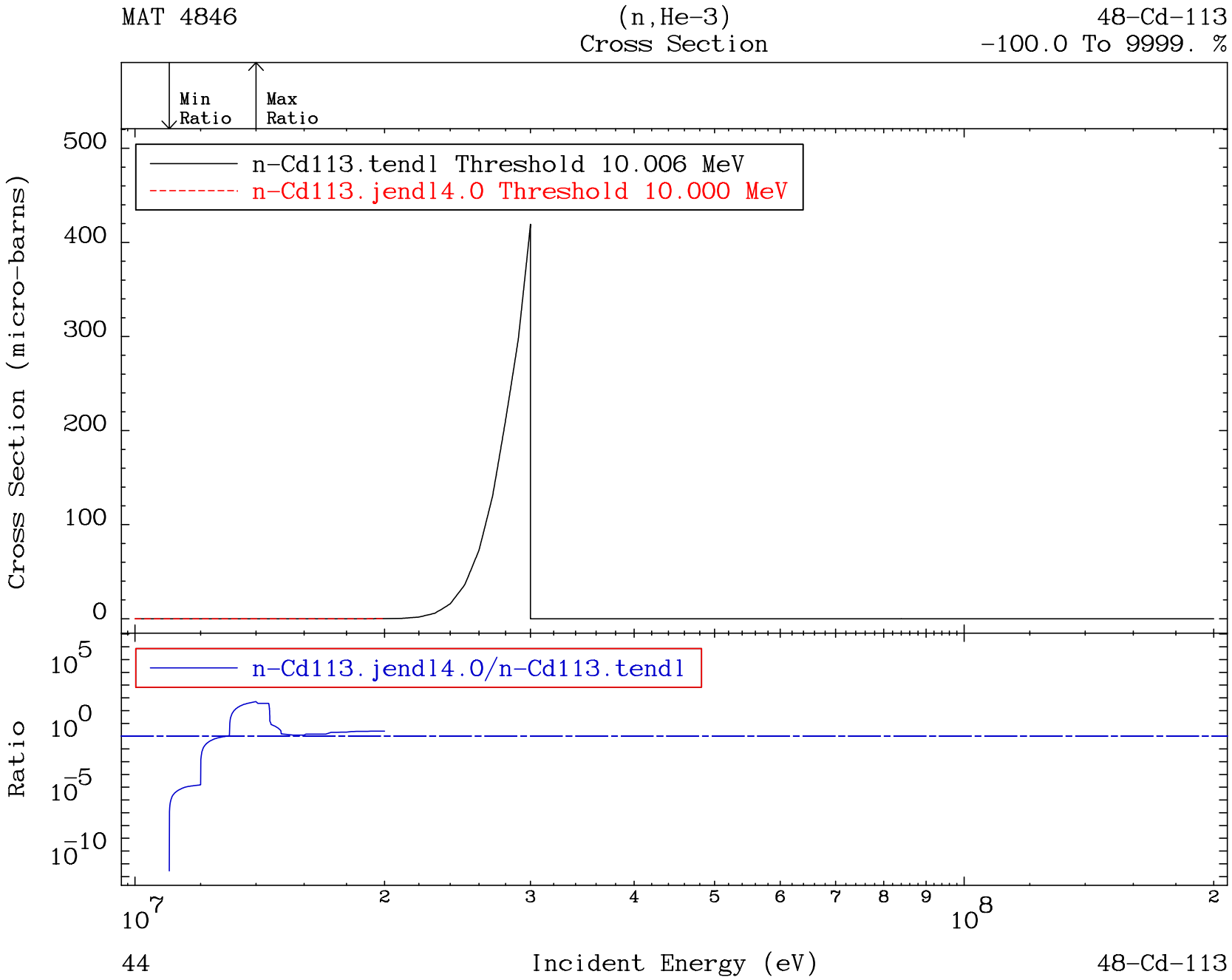

MAT 4846
(n,n') Continuum
Cross Section
48-Cd-113
-99.66 To 2.200 %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.0600 MeV
n-Cd113.jendl4.0 Threshold 1.3738 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^0
10^-1
10^-2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
39
Incident Energy (eV)
48-Cd-113

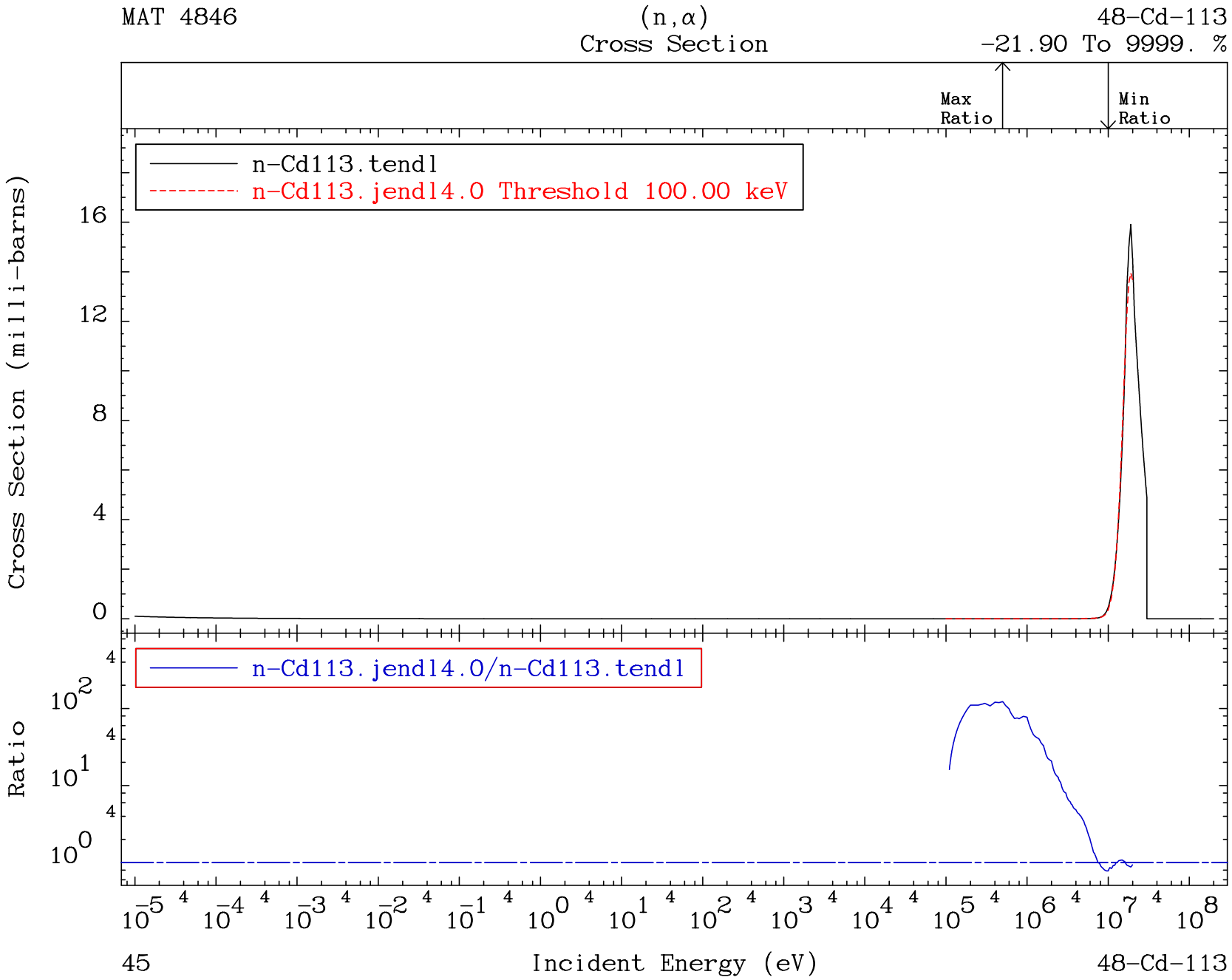

MAT 4846
(n,γ)
Cross Section
48-Cd-113
-96.22 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
40
48-Cd-113

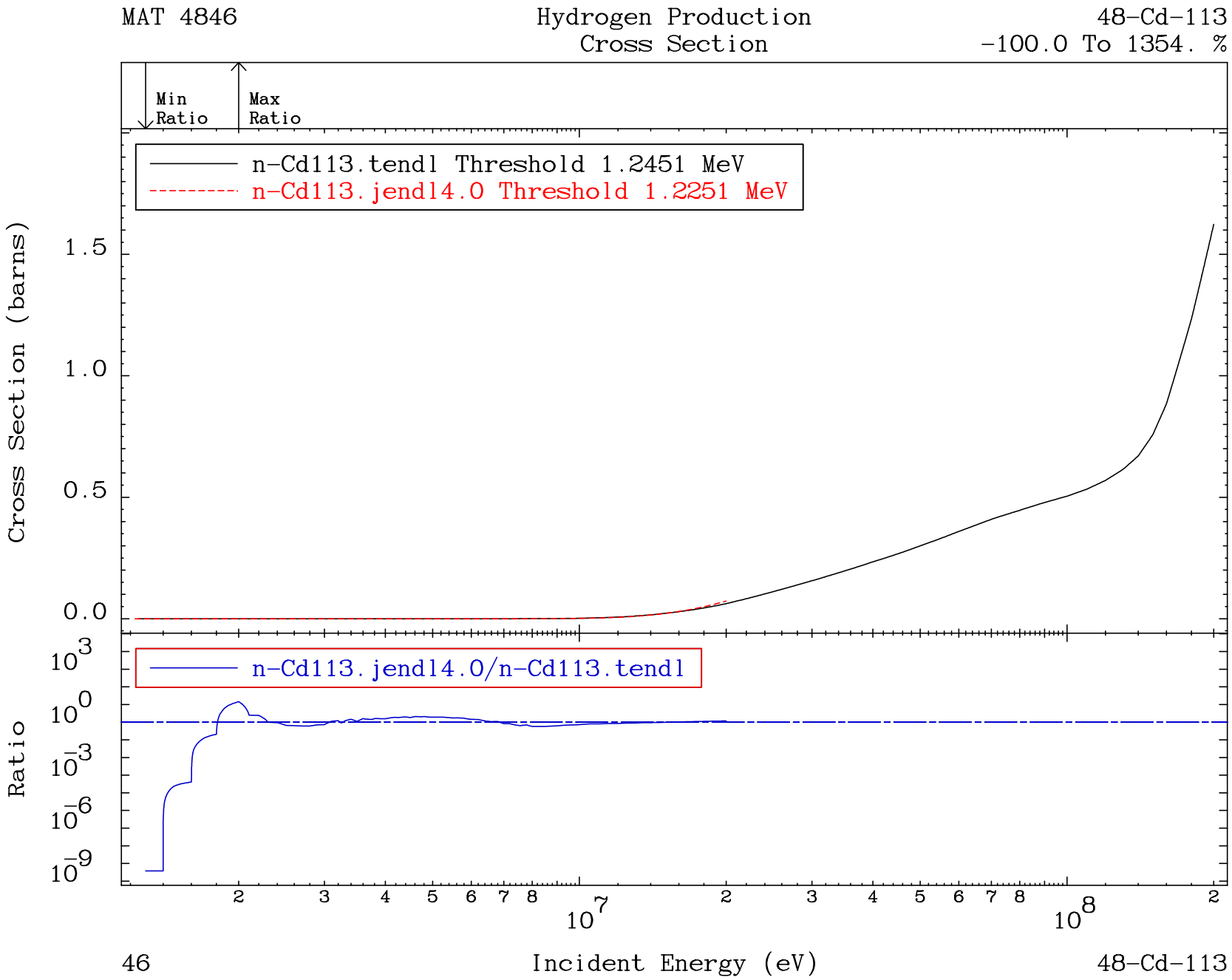

MAT 4846
(n,p)
Cross Section
48-Cd-113
-100.0 To 1354. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.2451 MeV
n-Cd113.jendl4.0 Threshold 1.2453 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
48-Cd-113

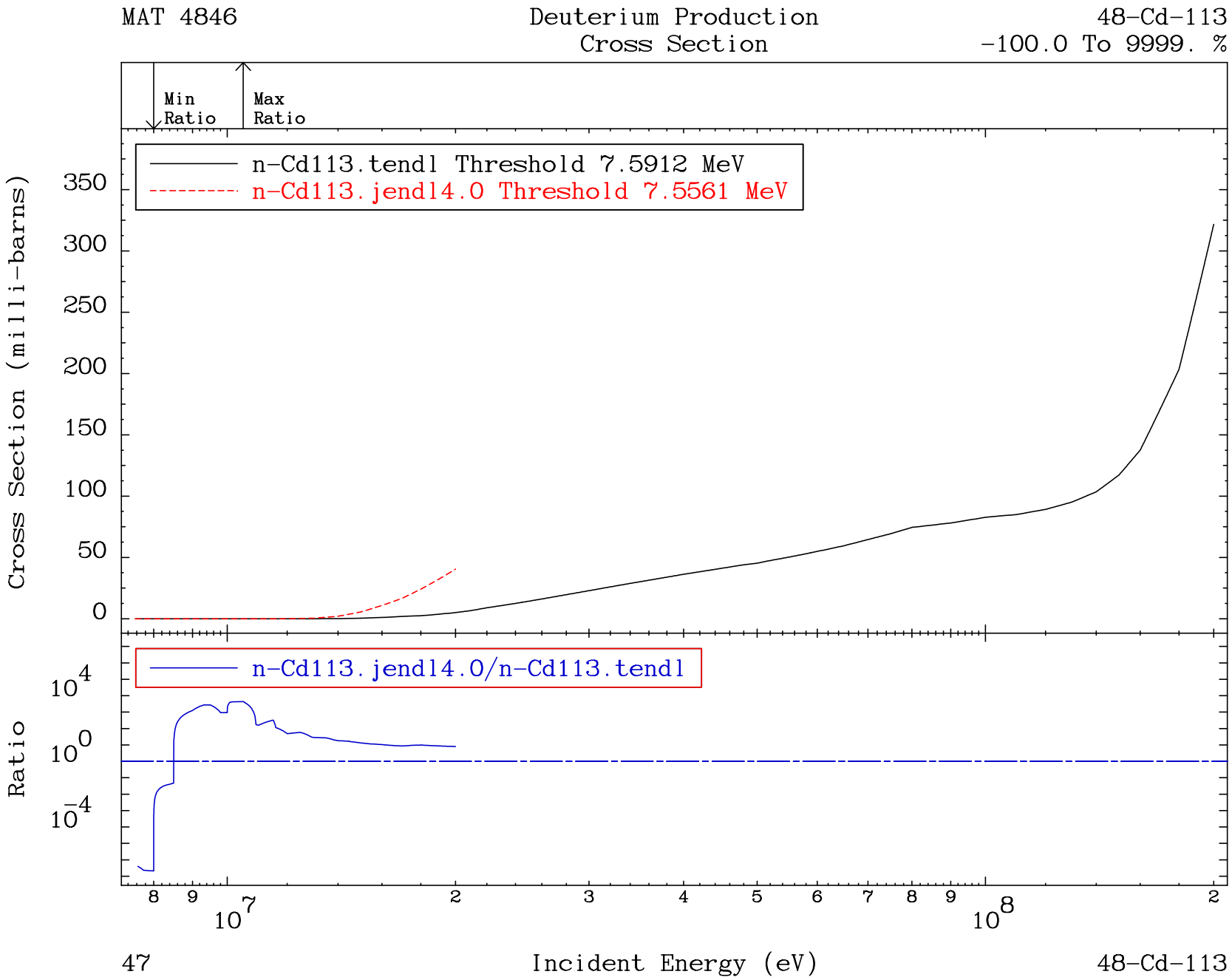

MAT 4846
(n,d)
Cross Section
48-Cd-113
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 7.5912 MeV
n-Cd113.jendl4.0 Threshold 7.5561 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^4
10^0
10^-4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
48-Cd-113

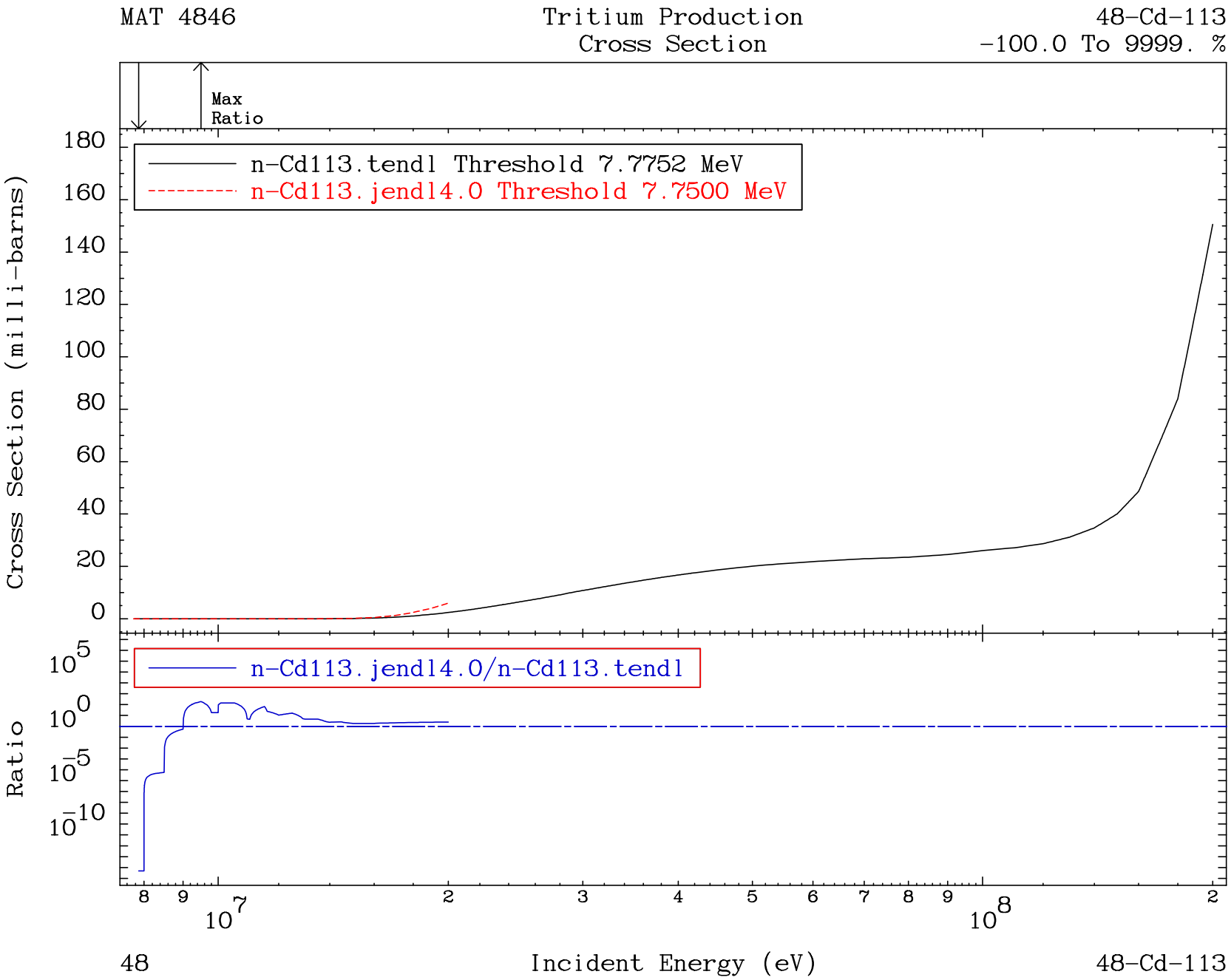

MAT 4846
(n,t)
Cross Section
48-Cd-113
-100.0 To 9999. %
Max
Ratio
n-Cd113.tendl Threshold 7.7752 MeV
n-Cd113.jendl4.0 Threshold 7.8750 MeV
Cross Section (milli-barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
43
48-Cd-113

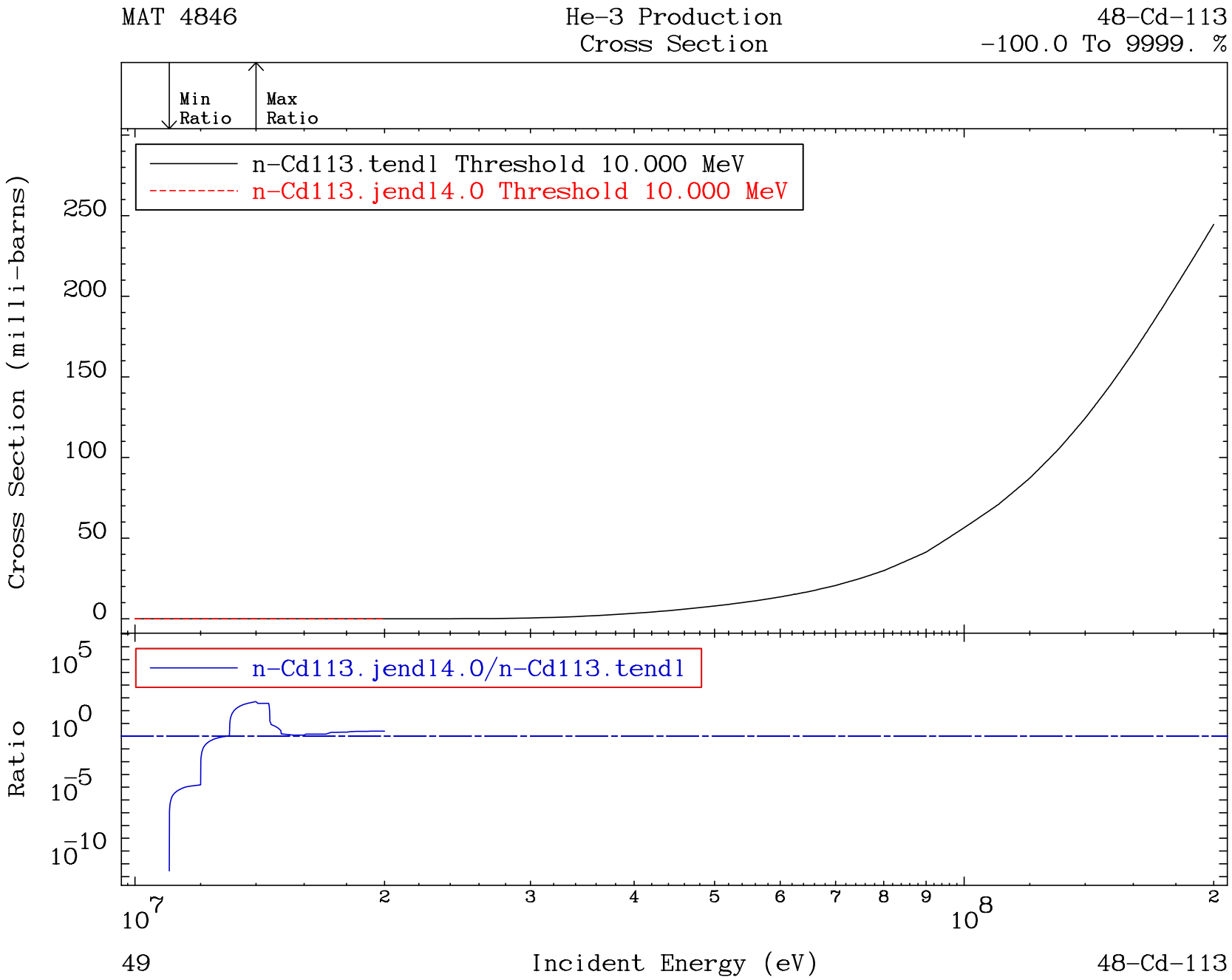

MAT 4846
(n,He-3)
Cross Section
48-Cd-113
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 10.006 MeV
n-Cd113.jendl4.0 Threshold 10.000 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^5
10^0
10^-5
10^-10
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
48-Cd-113

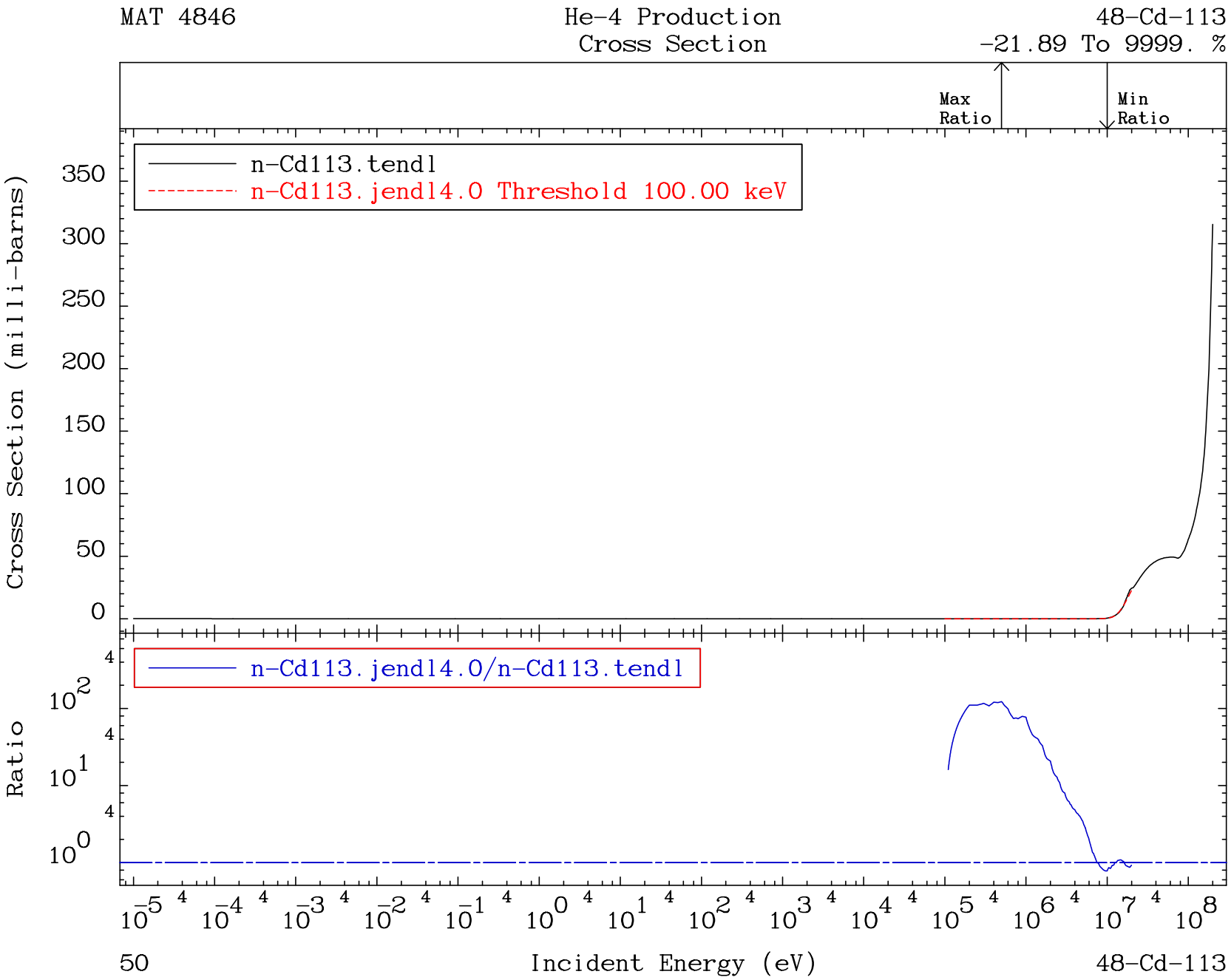

MAT 4846
(n,α)
Cross Section
48-Cd-113
-21.90 To 9999. %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
16
12
8
4
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^2
10^1
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
48-Cd-113

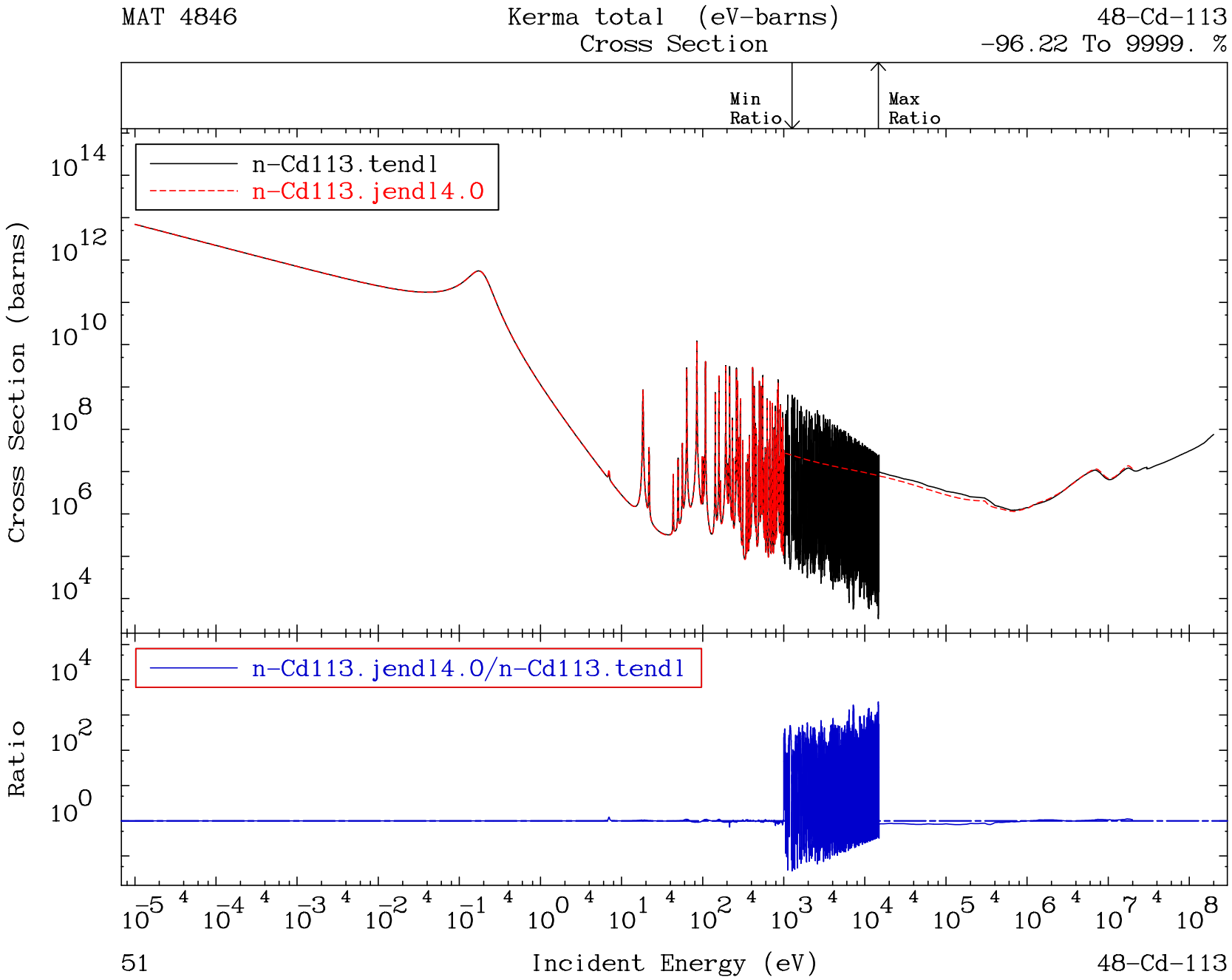

MAT 4846
Hydrogen Production
Cross Section
48-Cd-113
-100.0 To 1354. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 1.2451 MeV
n-Cd113.jendl4.0 Threshold 1.2251 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^3
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
48-Cd-113

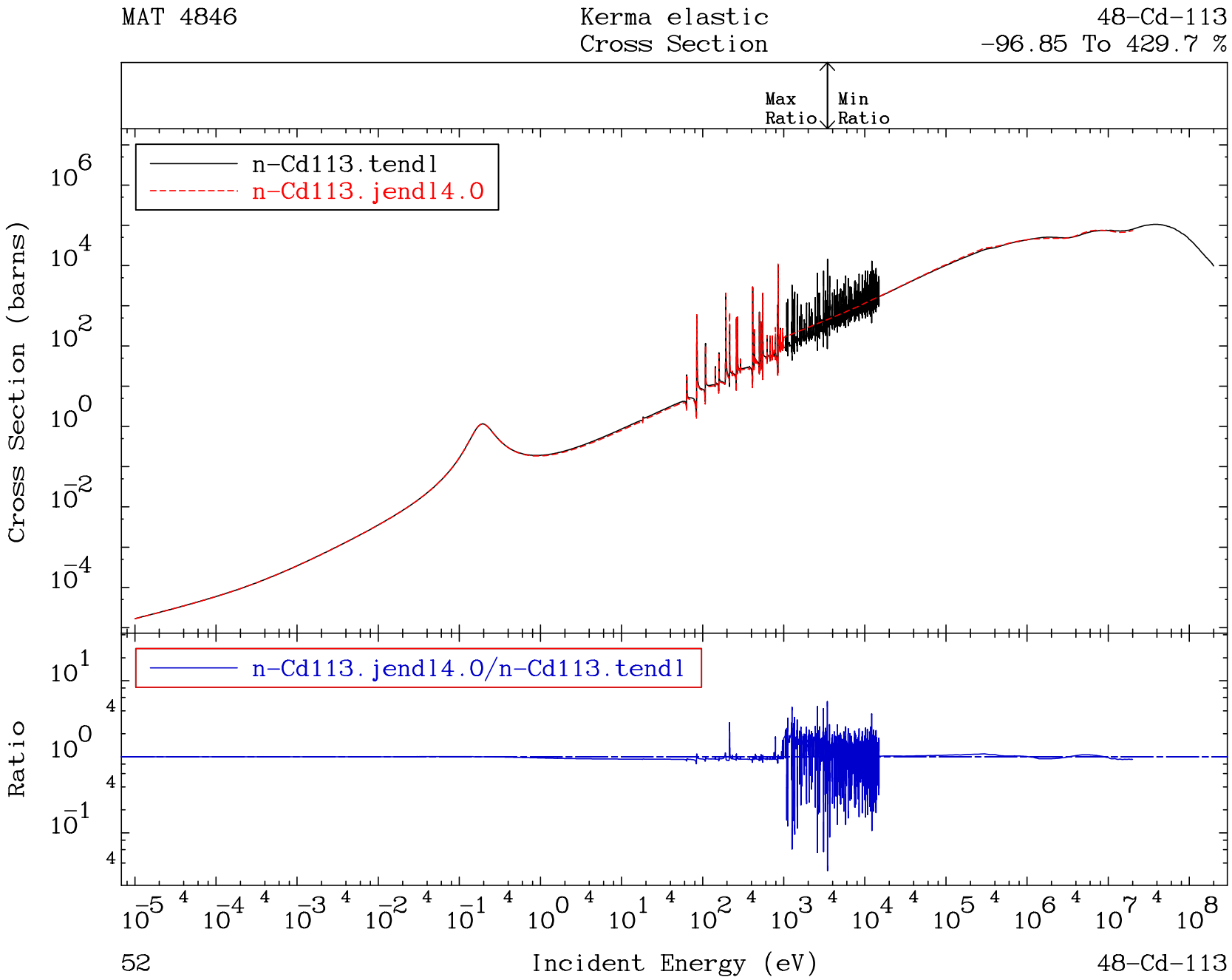

MAT 4846
Deuterium Production
Cross Section
48-Cd-113
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 7.5912 MeV
n-Cd113.jendl4.0 Threshold 7.5561 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^4
10^0
10^-4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
48-Cd-113

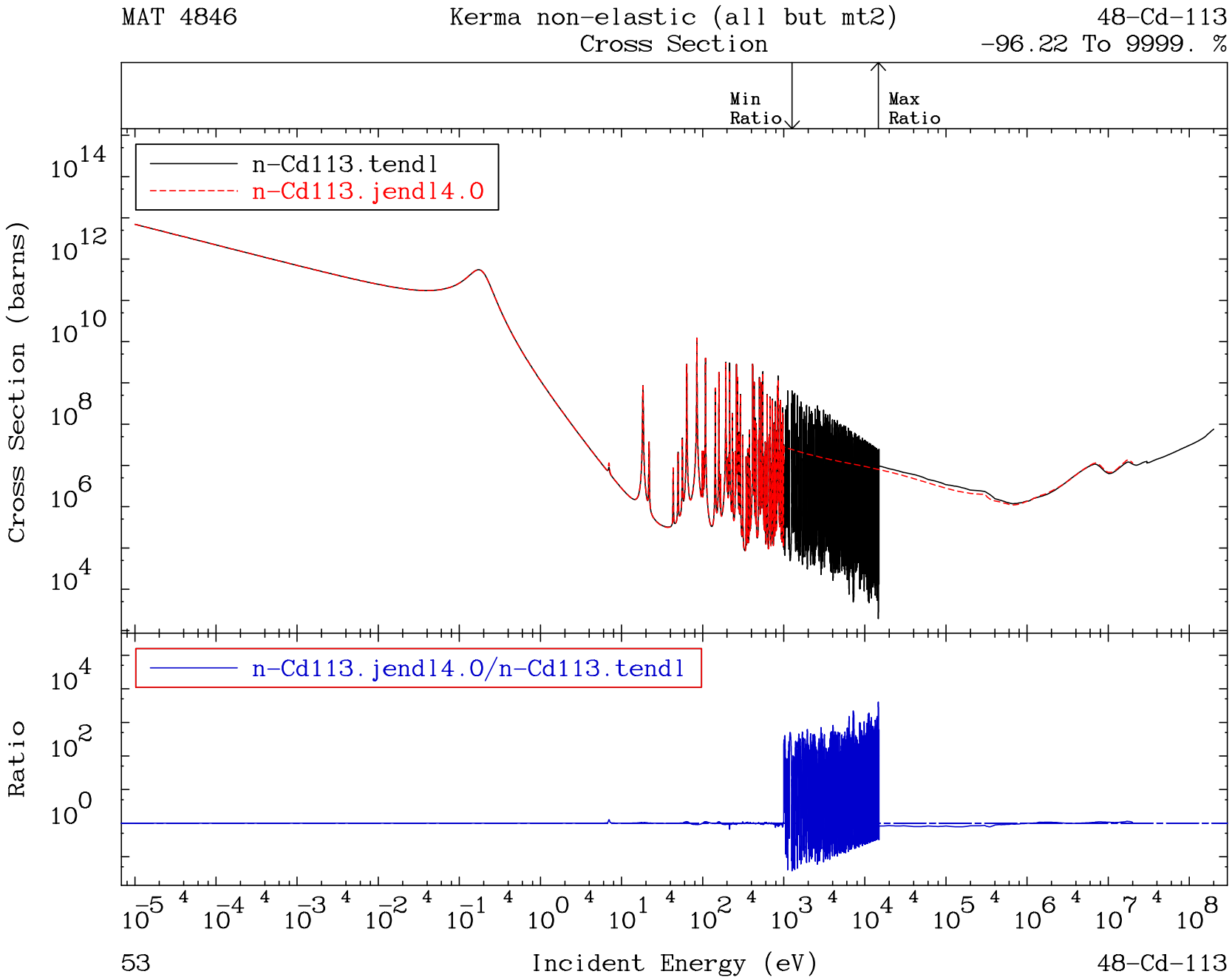

MAT 4846
Tritium Production
Cross Section
48-Cd-113
-100.0 To 9999. %
Max
Ratio
n-Cd113.tendl Threshold 7.7752 MeV
n-Cd113.jendl4.0 Threshold 7.7500 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^5
10^0
10^-5
10^-10
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
48-Cd-113

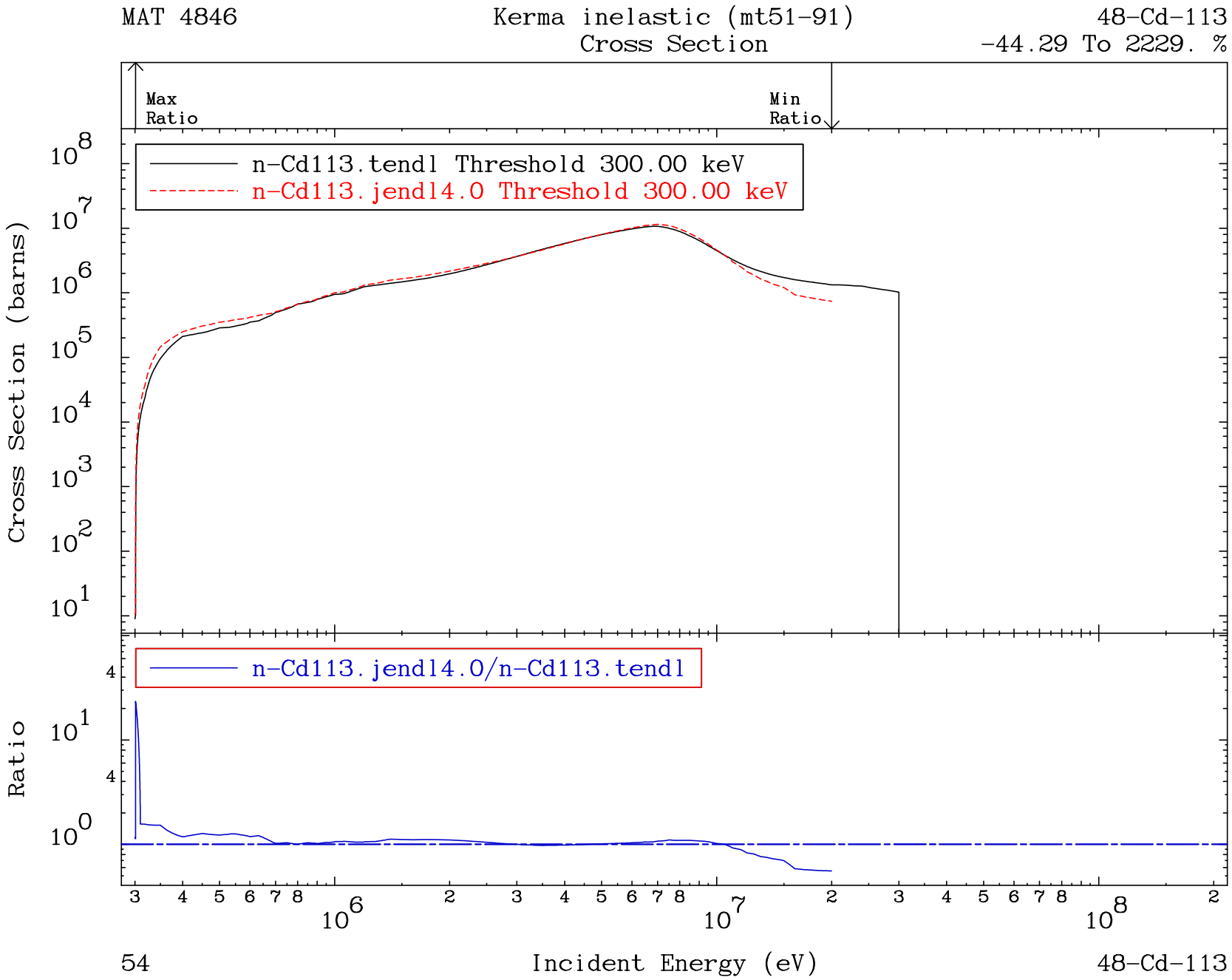

MAT 4846
He-3 Production
Cross Section
48-Cd-113
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl Threshold 10.000 MeV
n-Cd113.jendl4.0 Threshold 10.000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^5
10^0
10^-5
10^-10
10^7
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
48-Cd-113

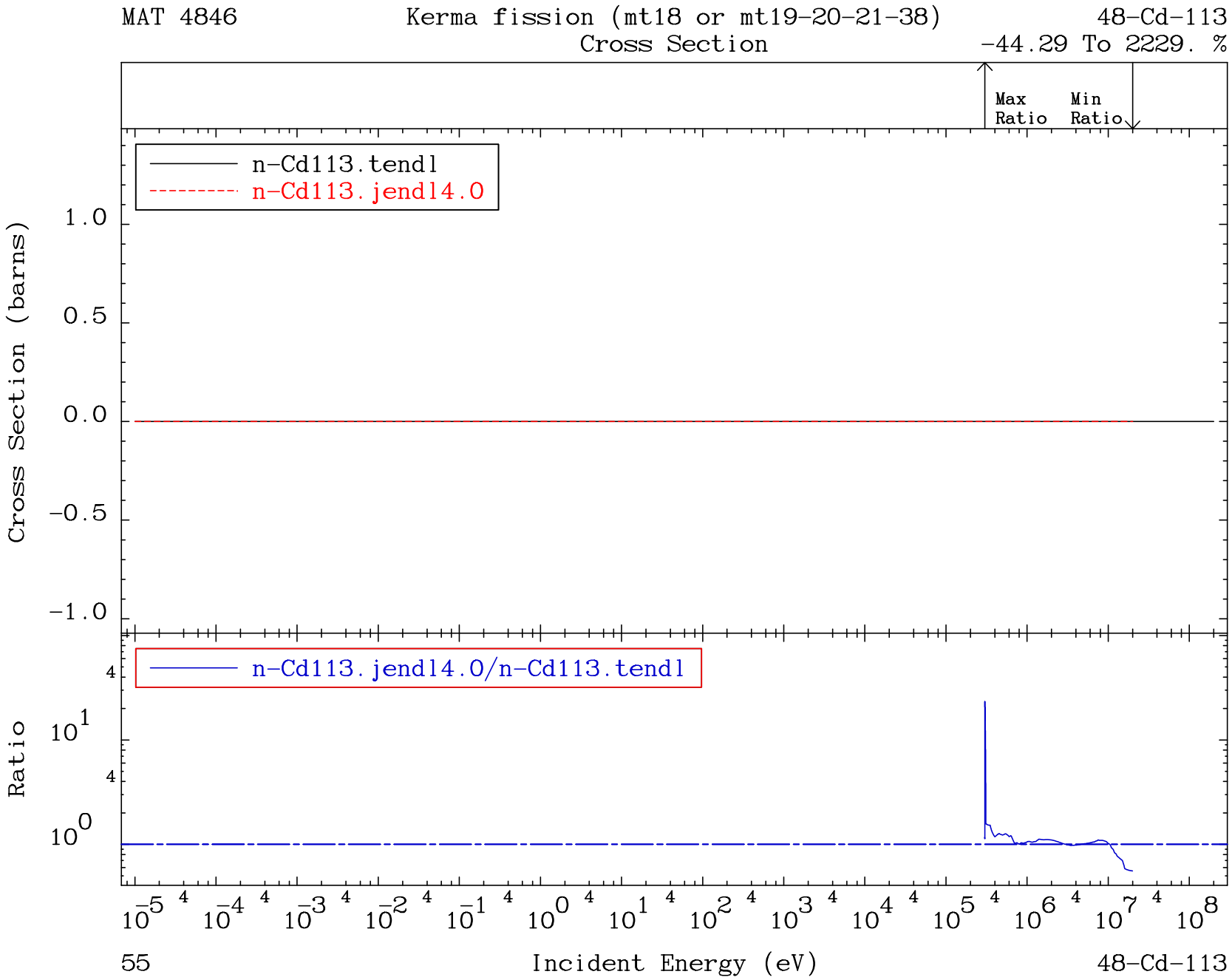

MAT 4846
He-4 Production
Cross Section
48-Cd-113
-21.89 To 9999. %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
50
48-Cd-113

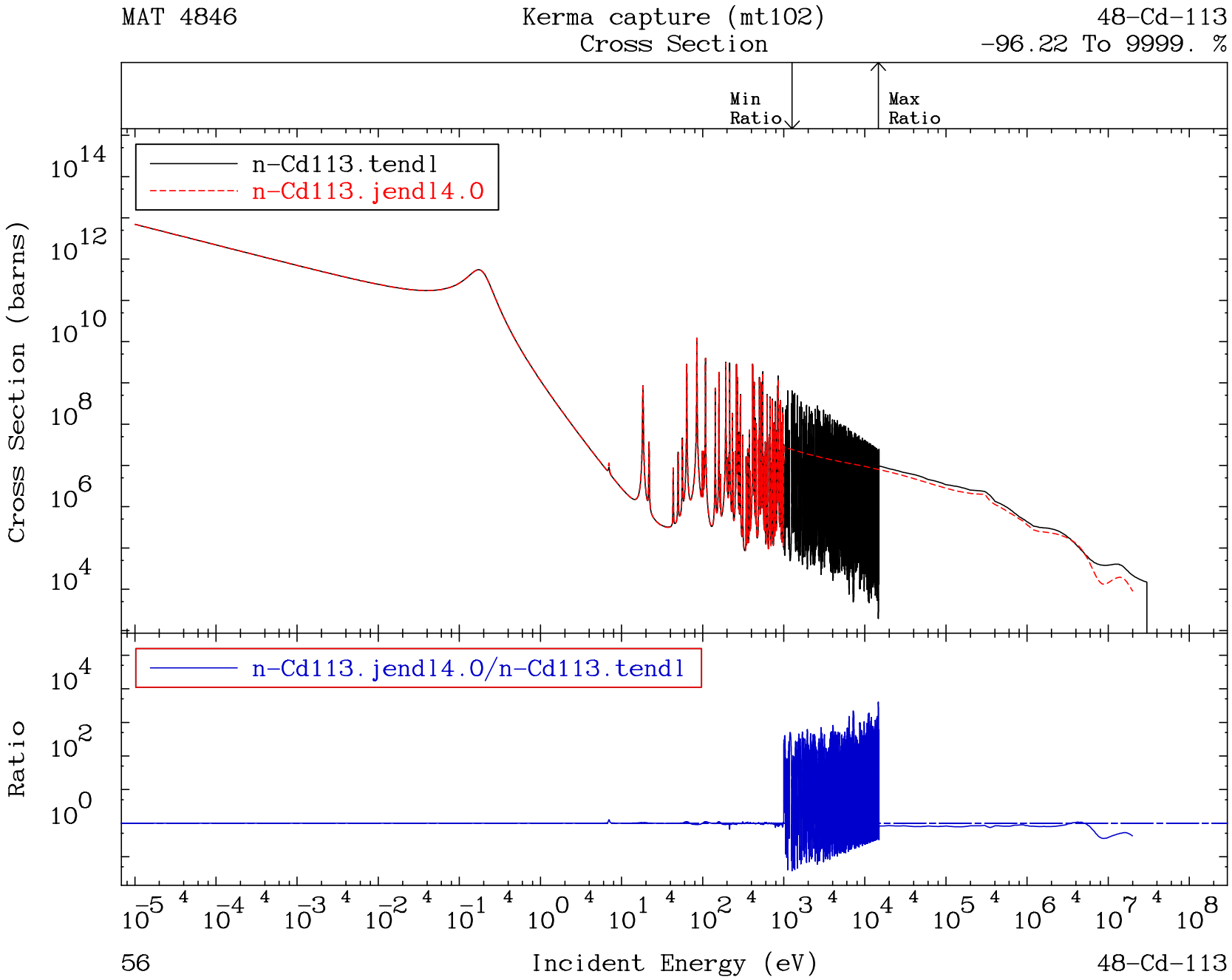

MAT 4846
Kerma total (eV-barns)
Cross Section
48-Cd-113
-96.22 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
51
48-Cd-113

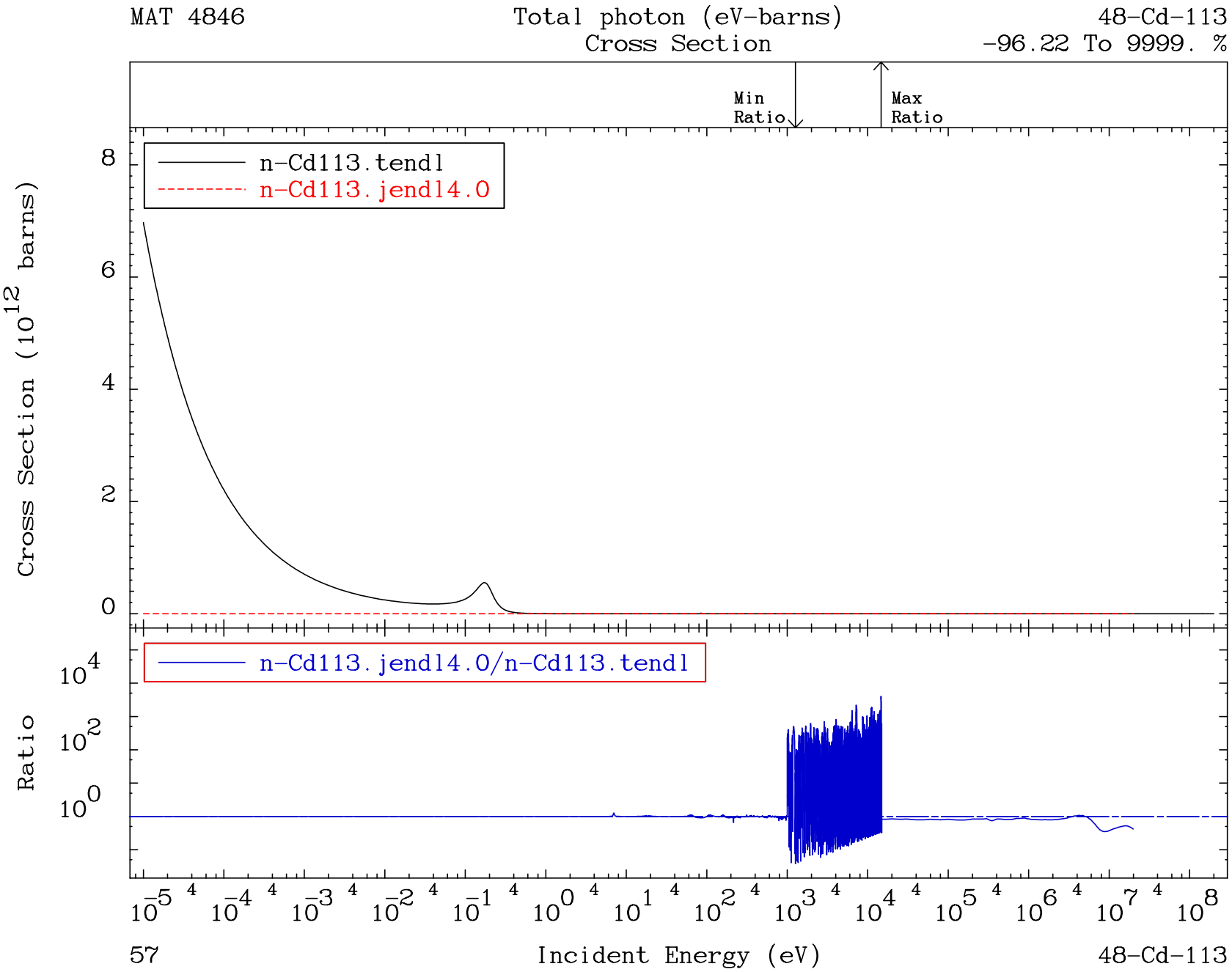

MAT 4846
Kerma elastic
Cross Section
48-Cd-113
-96.85 To 429.7 %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
52
48-Cd-113

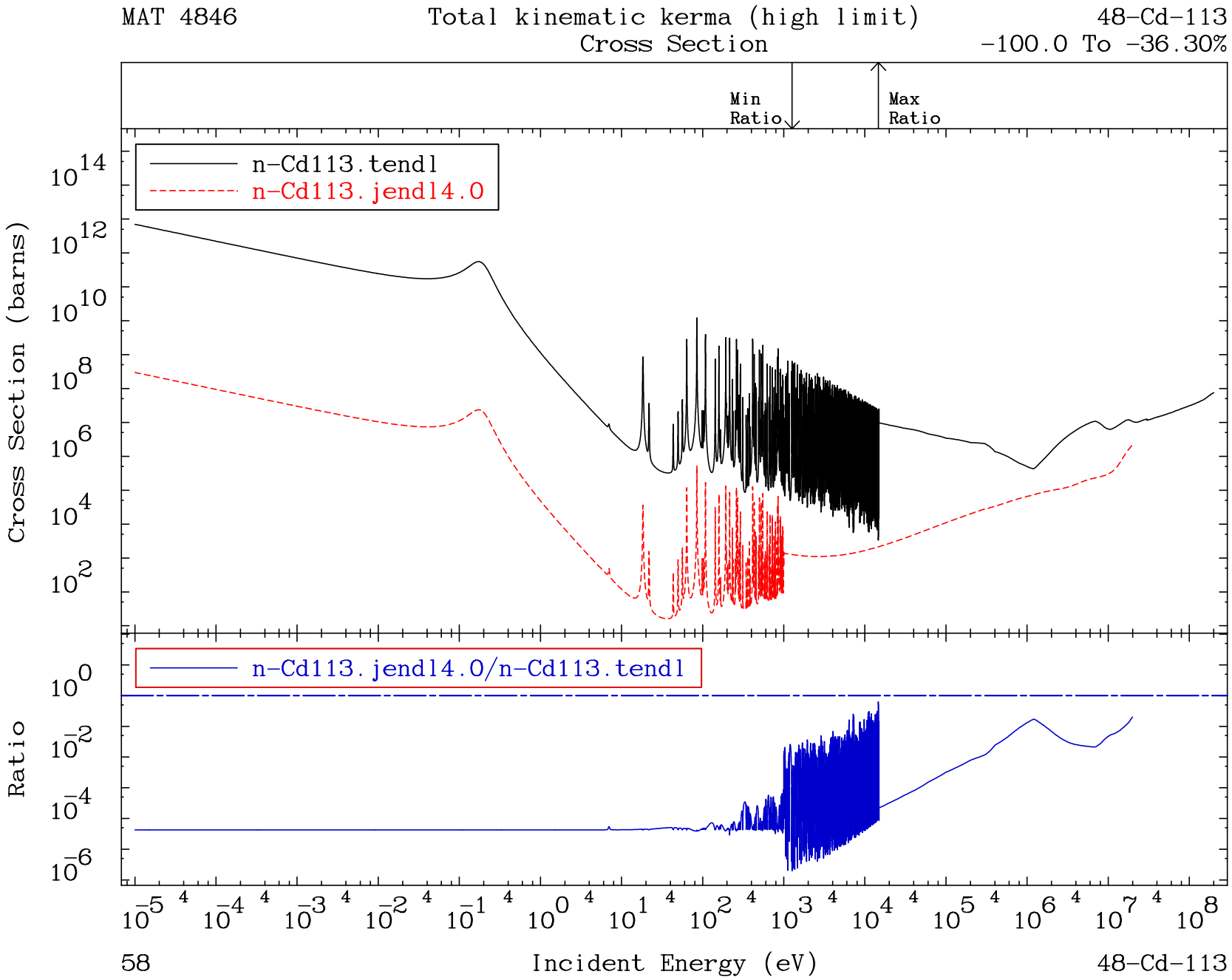

MAT 4846
Kerma non-elastic (all but mt2)
Cross Section
48-Cd-113
-96.22 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
53
48-Cd-113

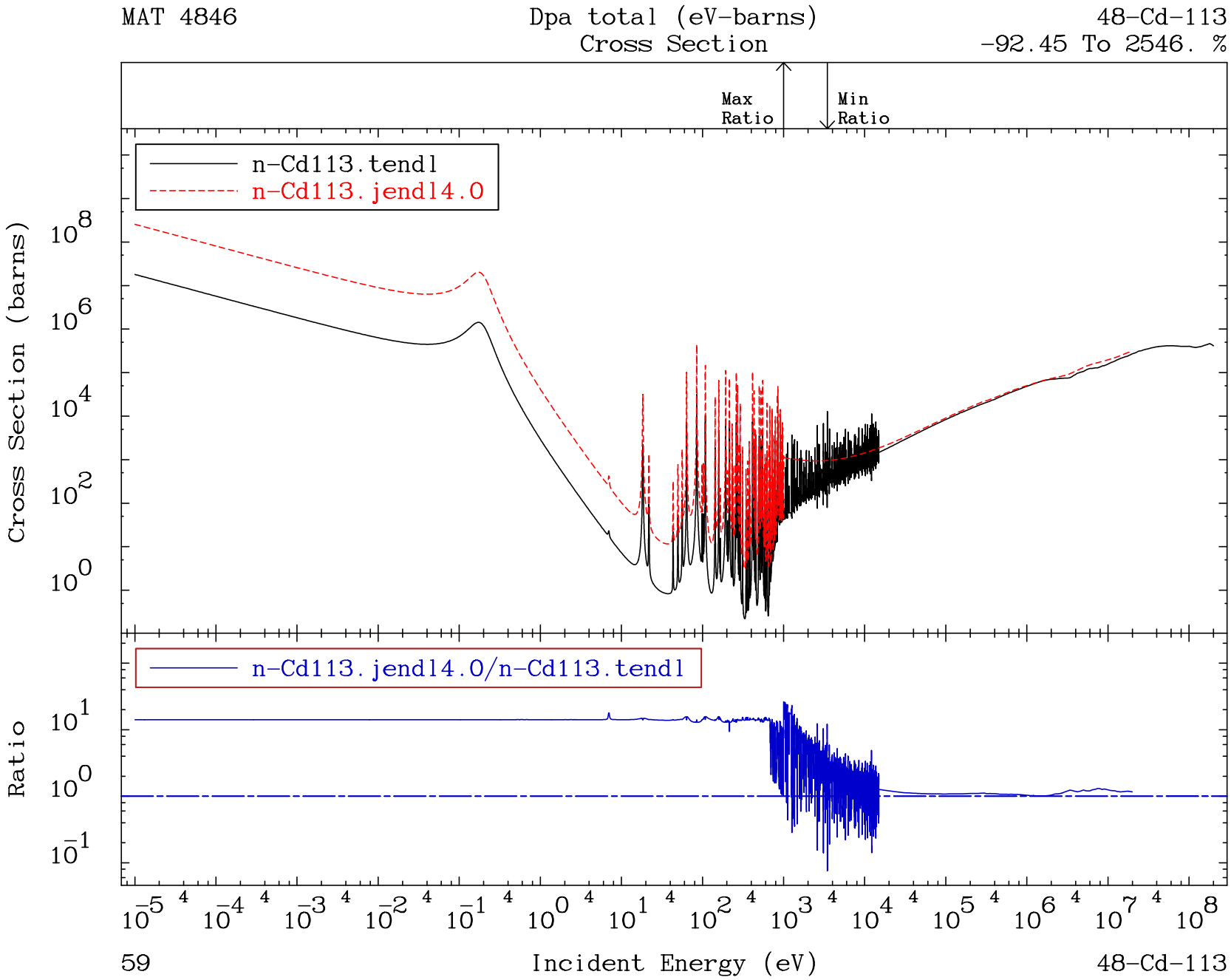

MAT 4846
Kerma inelastic (mt51-91)
Cross Section
48-Cd-113
-44.29 To 2229. %
Max Ratio
Min Ratio
n-Cd113.tendl Threshold 300.00 keV
n-Cd113.jendl4.0 Threshold 300.00 keV
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
54
48-Cd-113

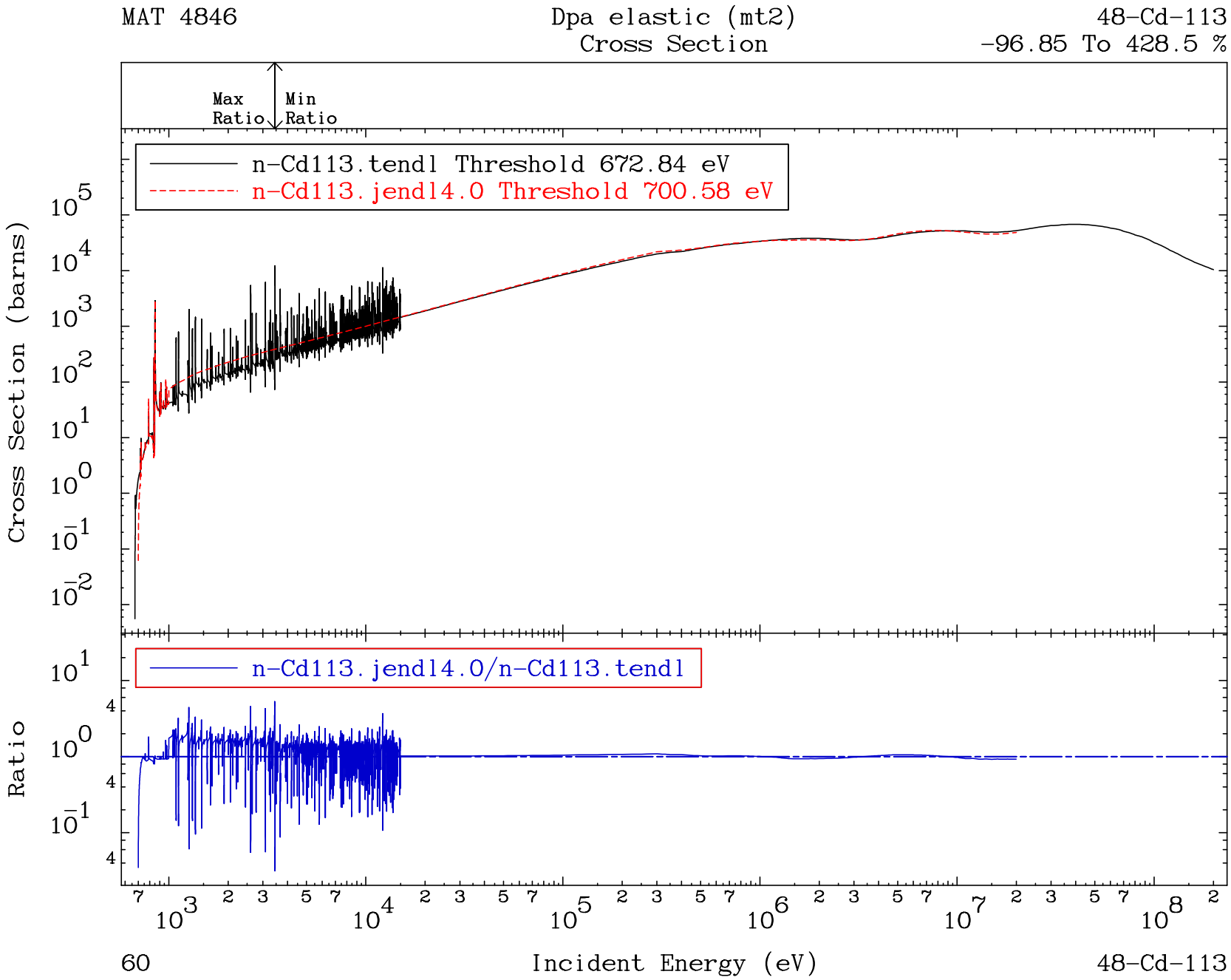

MAT 4846
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
48-Cd-113
-44.29 To 2229. %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
4
10^1
4
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
55
Incident Energy (eV)
48-Cd-113

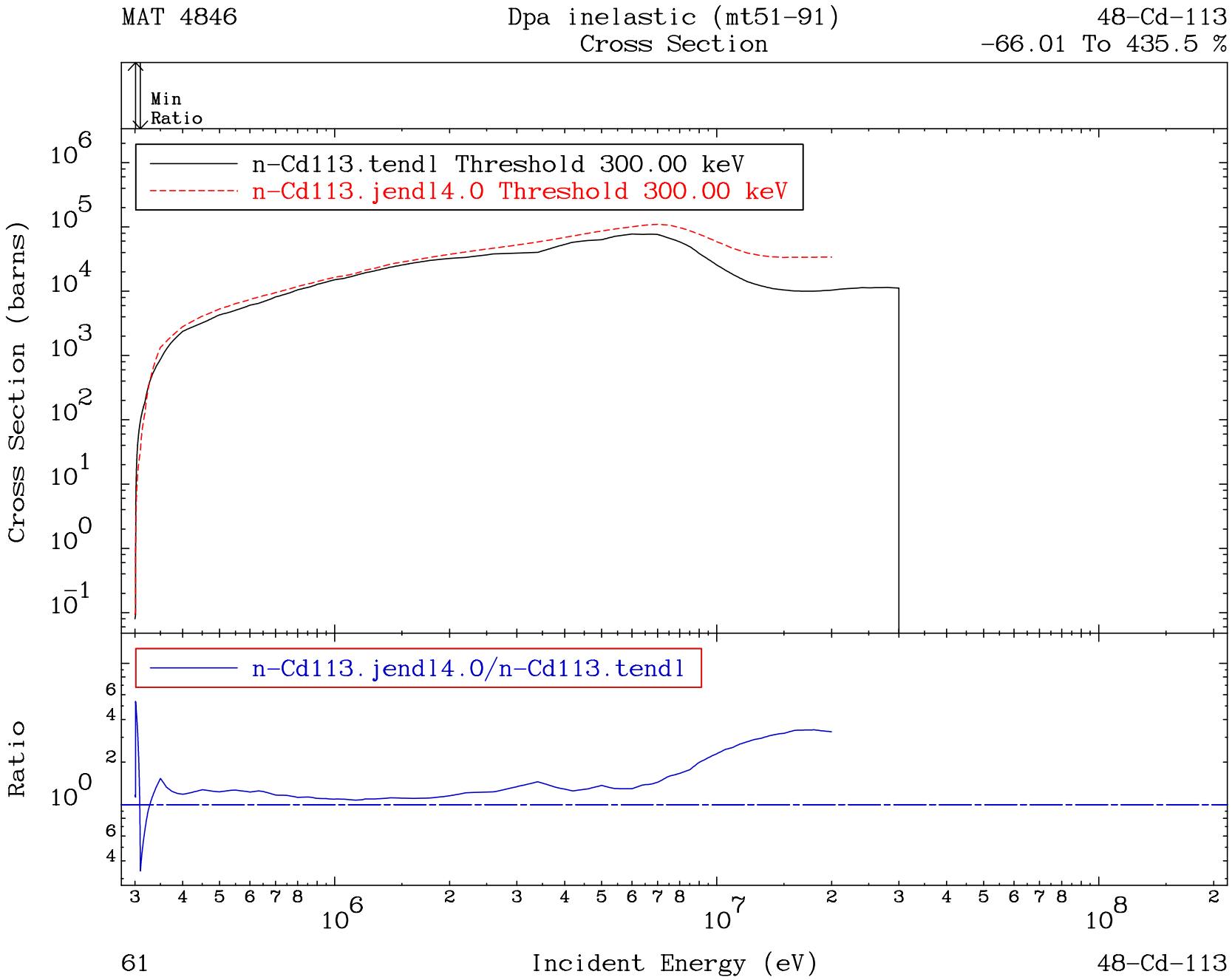

MAT 4846
Kerma capture (mt102)
Cross Section
48-Cd-113
-96.22 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
56
48-Cd-113

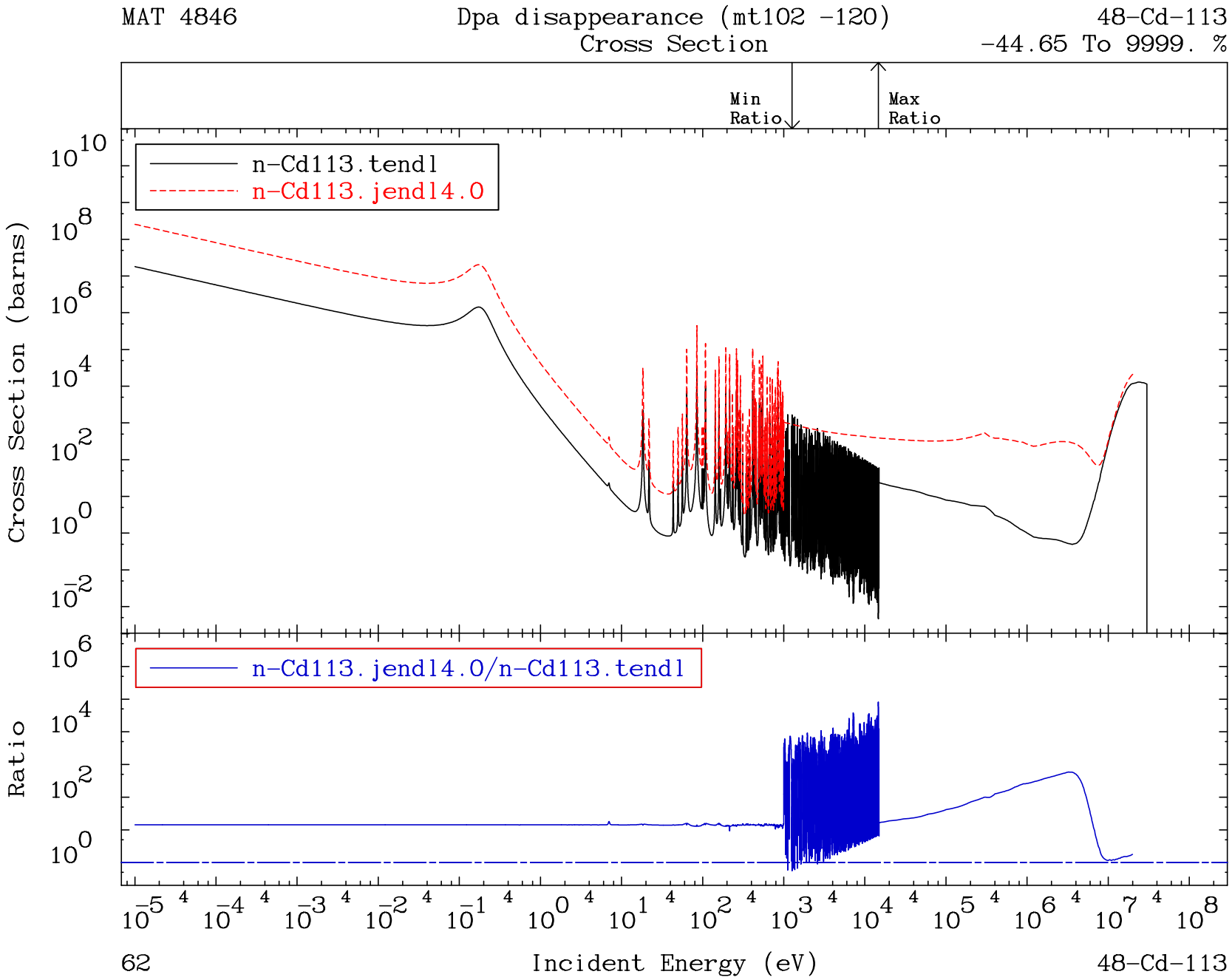

MAT 4846
Total photon (eV-barns)
Cross Section
48-Cd-113
-96.22 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (10^{12} barns)
0
2
4
6
8
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
10^{0}
10^{2}
10^{4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
57
Incident Energy (eV)
48-Cd-113


MAT 4846
Total kinematic kerma (high limit)
Cross Section
48-Cd-113
-100.0 To -36.30%
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
58
48-Cd-113


MAT 4846
Dpa total (eV-barns)
Cross Section
48-Cd-113
-92.45 To 2546. %
Max Ratio
Min Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
59
Incident Energy (eV)
48-Cd-113


MAT 4846
Dpa elastic (mt2)
Cross Section
48-Cd-113
-96.85 To 428.5 %
Max Ratio
Min Ratio
n-Cd113.tendl Threshold 672.84 eV
n-Cd113.jendl4.0 Threshold 700.58 eV
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
60
48-Cd-113


MAT 4846
Dpa inelastic (mt51-91)
Cross Section
48-Cd-113
-66.01 To 435.5 %
Min
Ratio
n-Cd113.tendl Threshold 300.00 keV
n-Cd113.jendl4.0 Threshold 300.00 keV
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
61
48-Cd-113


MAT 4846
Dpa disappearance (mt102 -120)
Cross Section
48-Cd-113
-44.65 To 9999. %
Min Ratio
Max Ratio
n-Cd113.tendl
n-Cd113.jendl4.0
Cross Section (barns)
n-Cd113.jendl4.0/n-Cd113.tendl
Ratio
Incident Energy (eV)
62
48-Cd-113