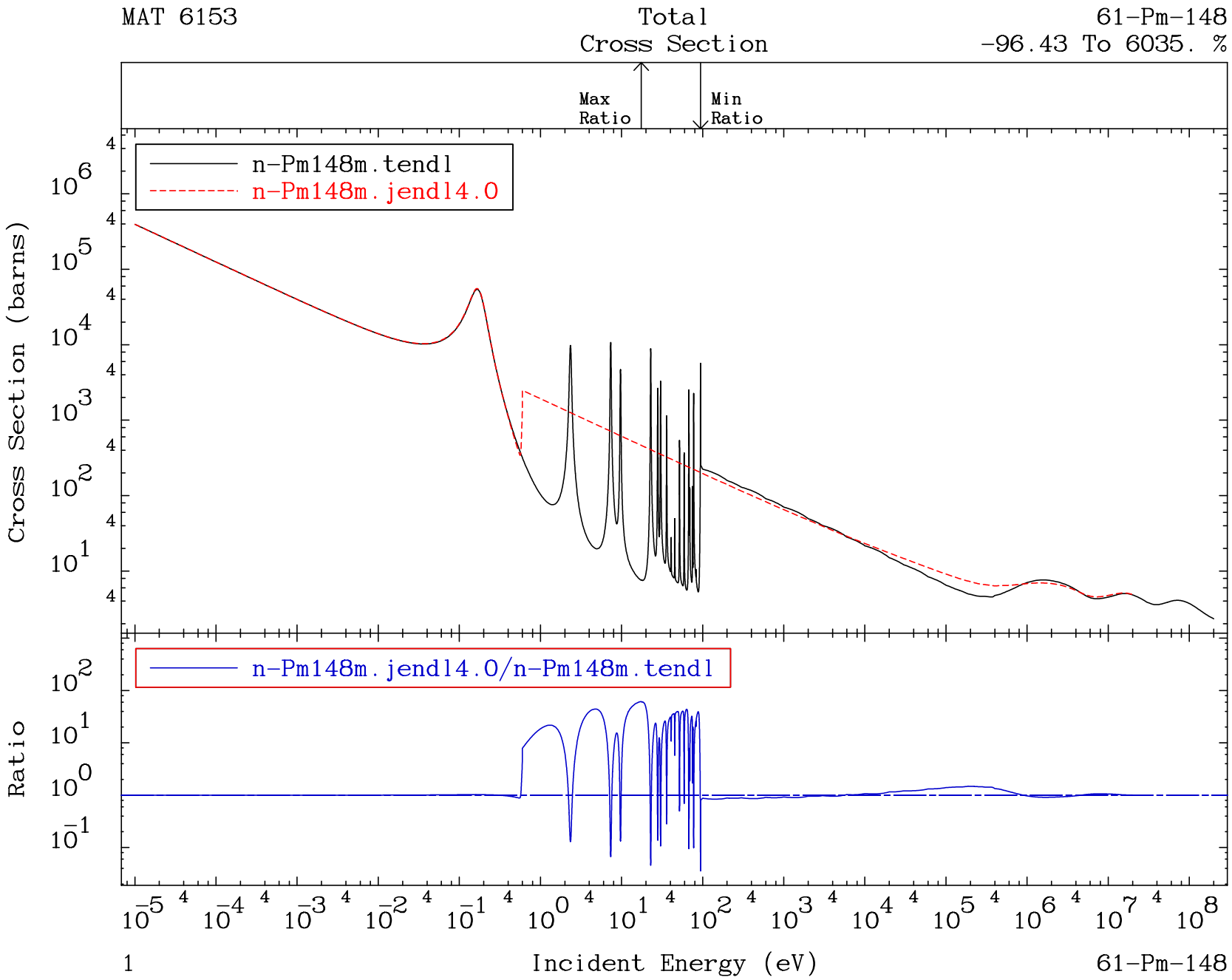
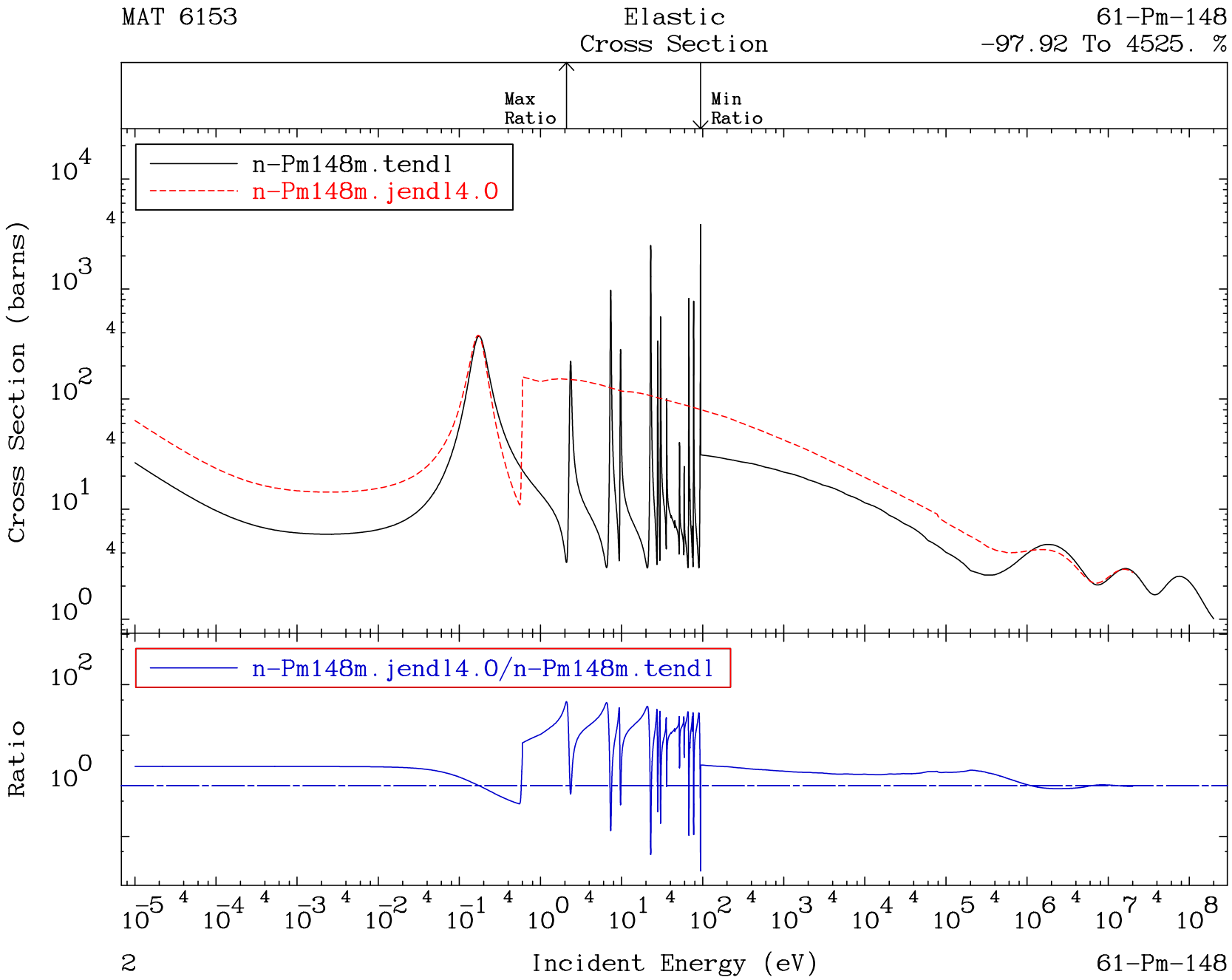
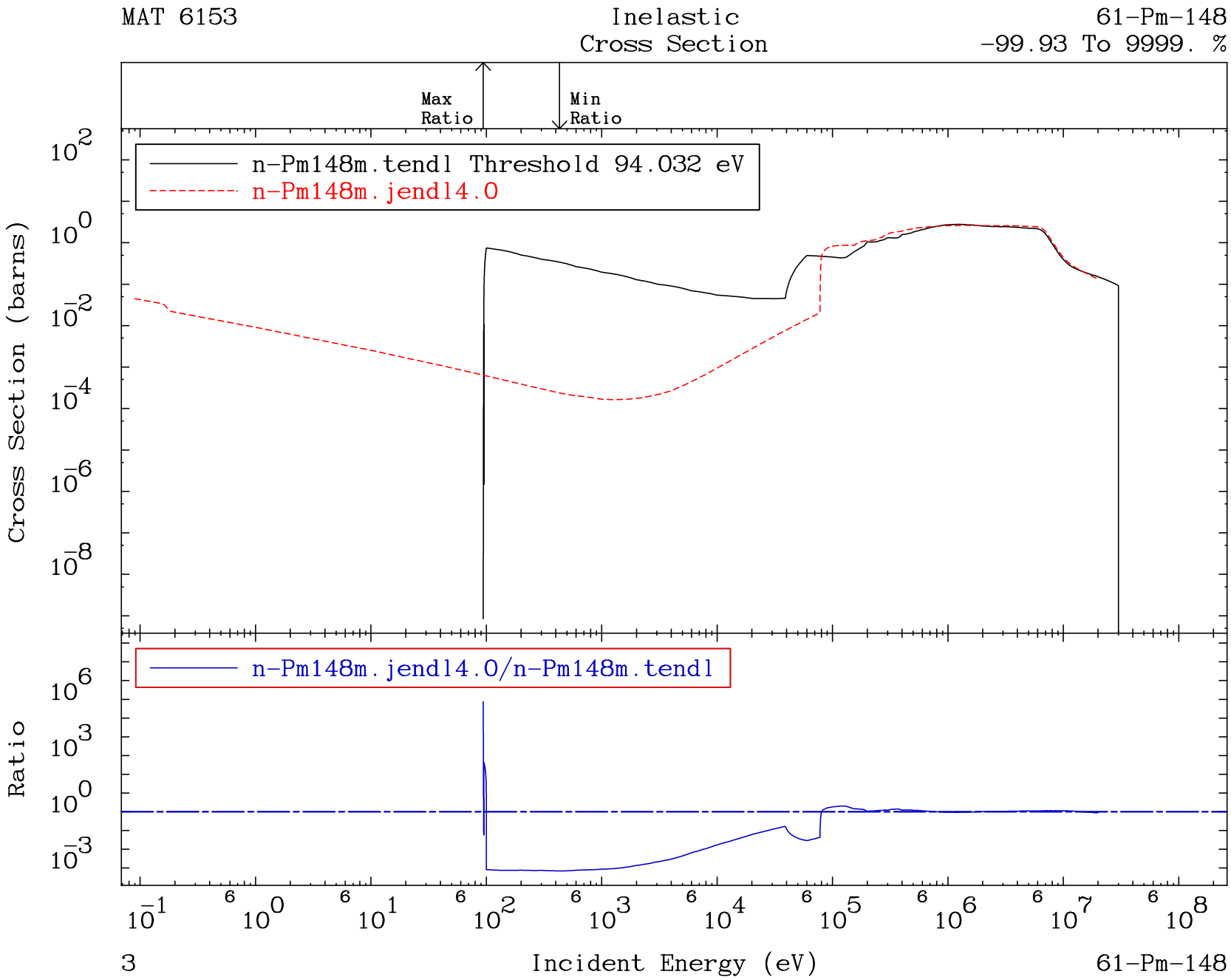
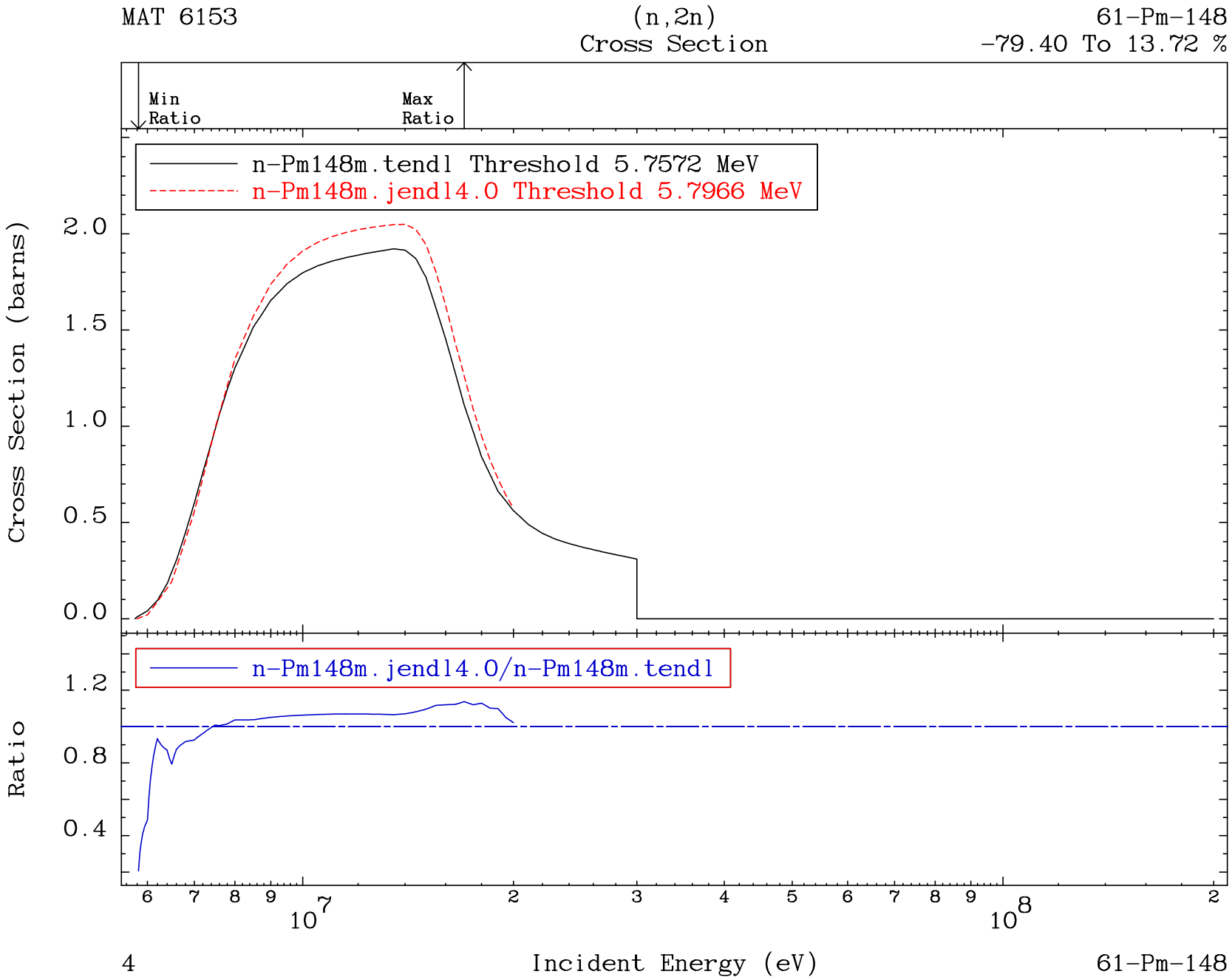
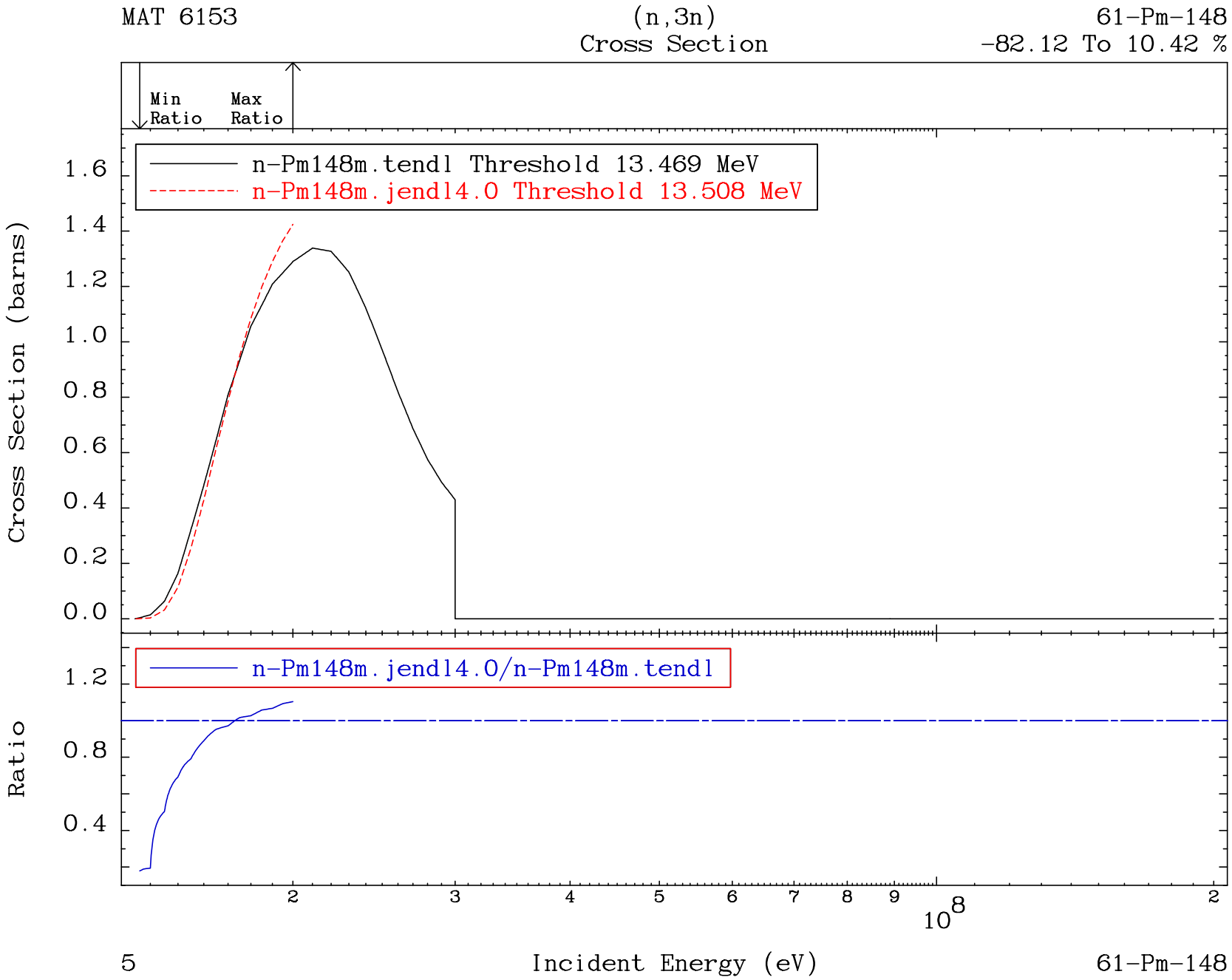
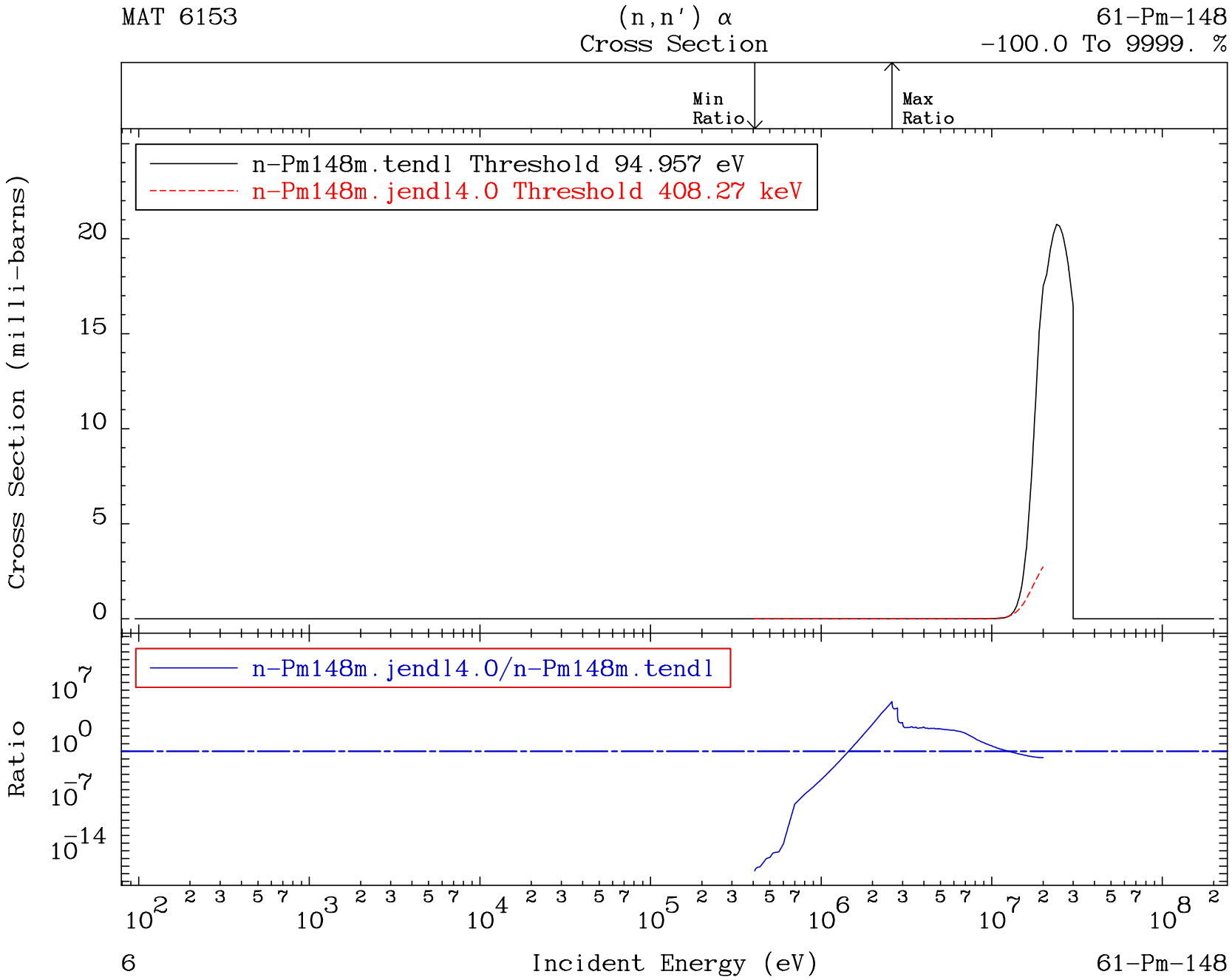

MAT 6153
Total
Cross Section
61-Pm-148
-96.43 To 6035. %
Max
Ratio
Min
Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
1
61-Pm-148

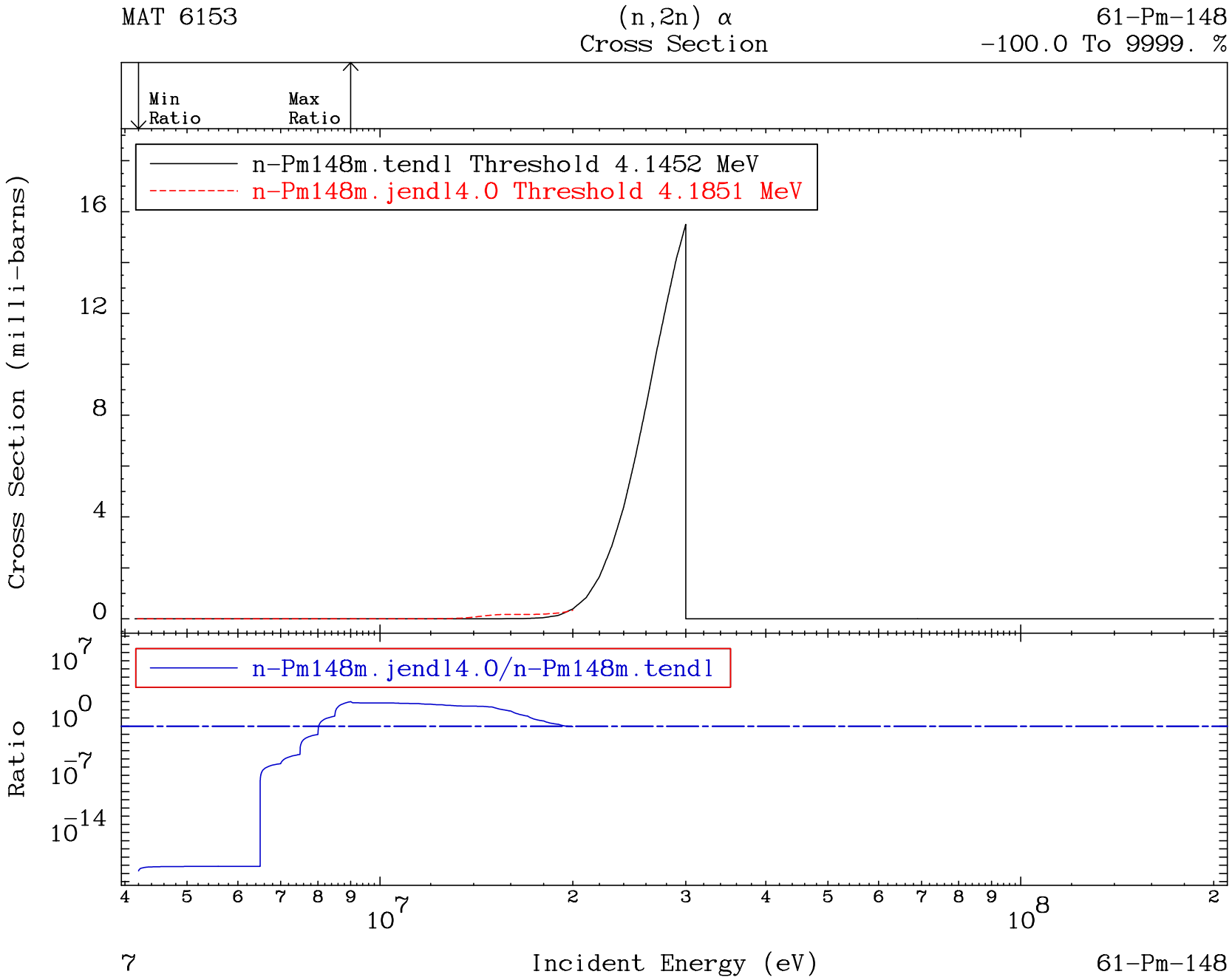

MAT 6153
Elastic
Cross Section
61-Pm-148
-97.92 To 4525. %
Max
Ratio
Min
Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
2
61-Pm-148

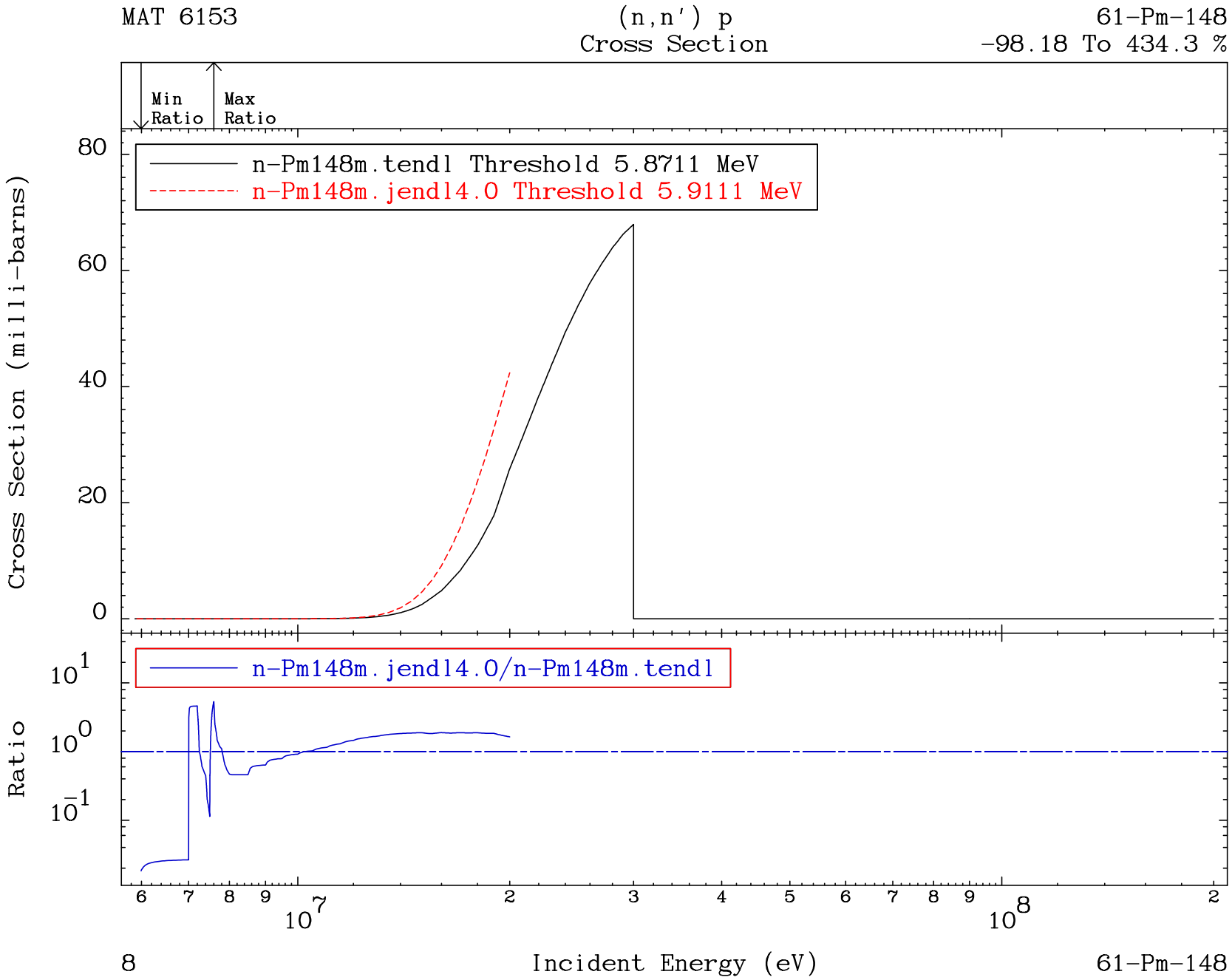

MAT 6153
Inelastic
Cross Section
61-Pm-148
-99.93 To 9999. %
Max
Ratio
Min
Ratio
n-Pm148m.tendl Threshold 94.032 eV
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
3
61-Pm-148

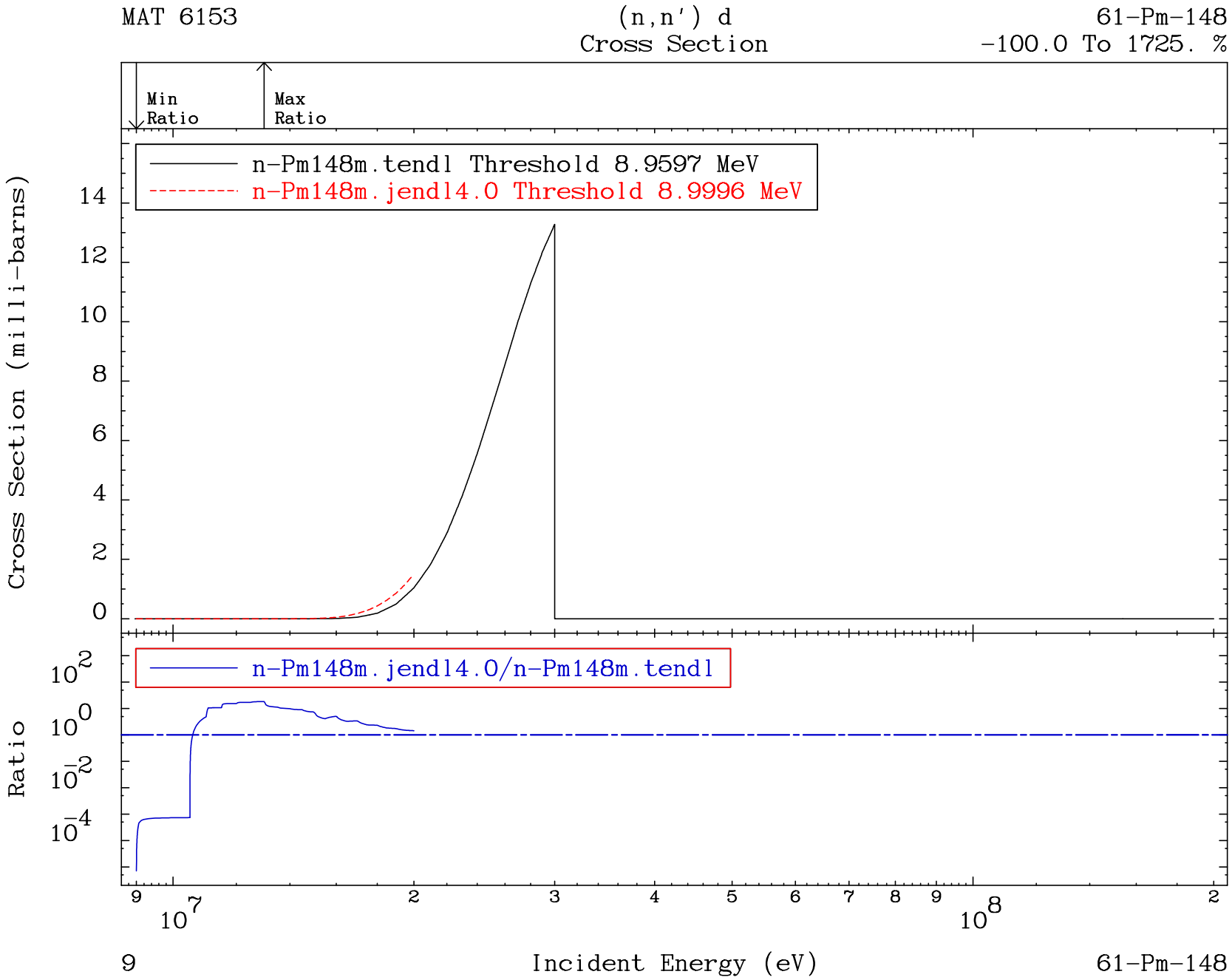

MAT 6153
(n,2n)
Cross Section
61-Pm-148
-79.40 To 13.72 %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 5.7572 MeV
n-Pm148m.jendl4.0 Threshold 5.7966 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
1.2
0.8
0.4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
61-Pm-148

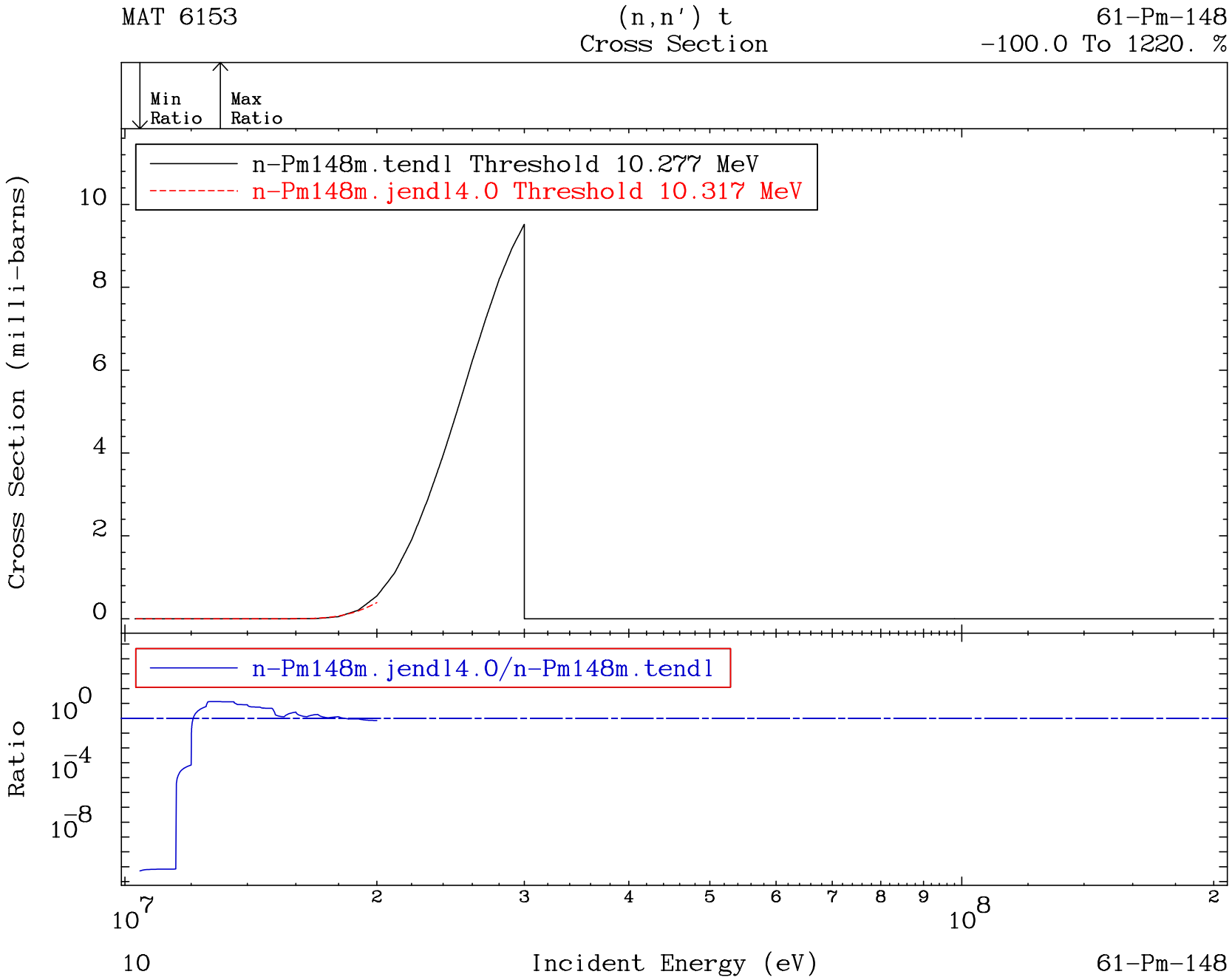

MAT 6153
(n,3n)
Cross Section
61-Pm-148
-82.12 To 10.42 %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 13.469 MeV
n-Pm148m.jendl4.0 Threshold 13.508 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
61-Pm-148

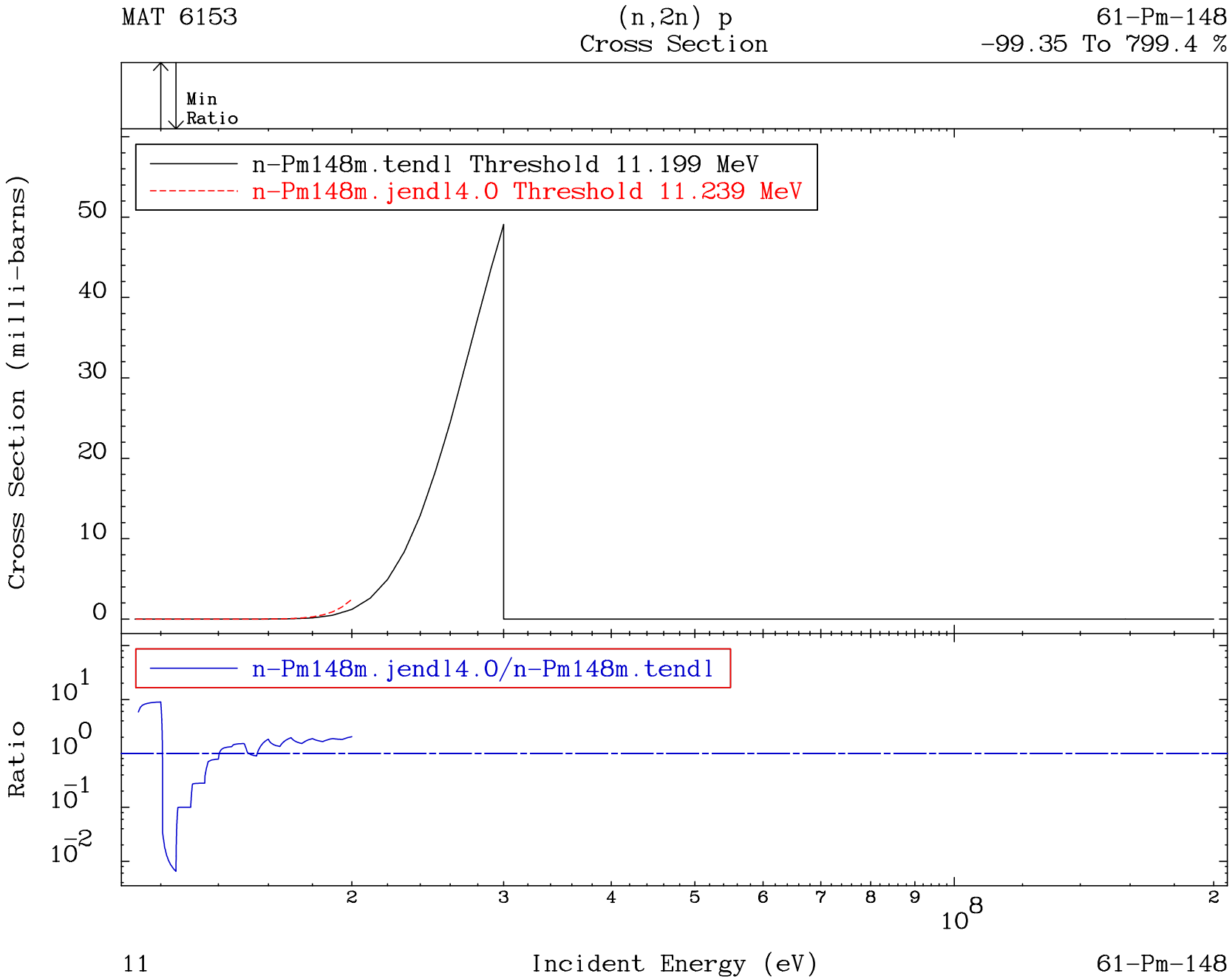

MAT 6153
(n,n') α
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 94.957 eV
n-Pm148m.jendl4.0 Threshold 408.27 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^7
10^0
10^-7
10^-14
10^2 2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
6
Incident Energy (eV)
61-Pm-148

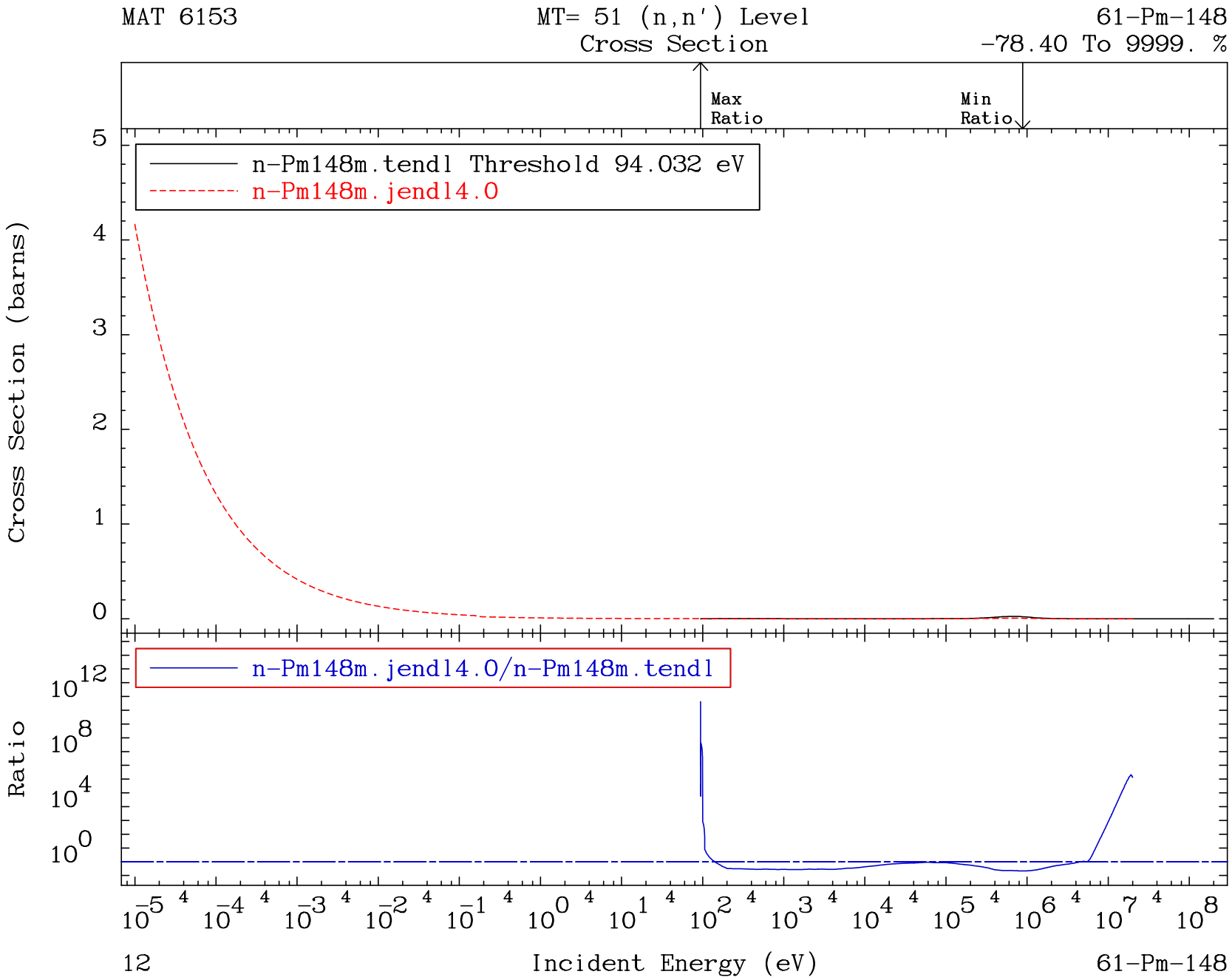

MAT 6153
(n,2n) α
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 4.1452 MeV
n-Pm148m.jendl4.0 Threshold 4.1851 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^7
10^0
10^-7
10^-14
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
61-Pm-148

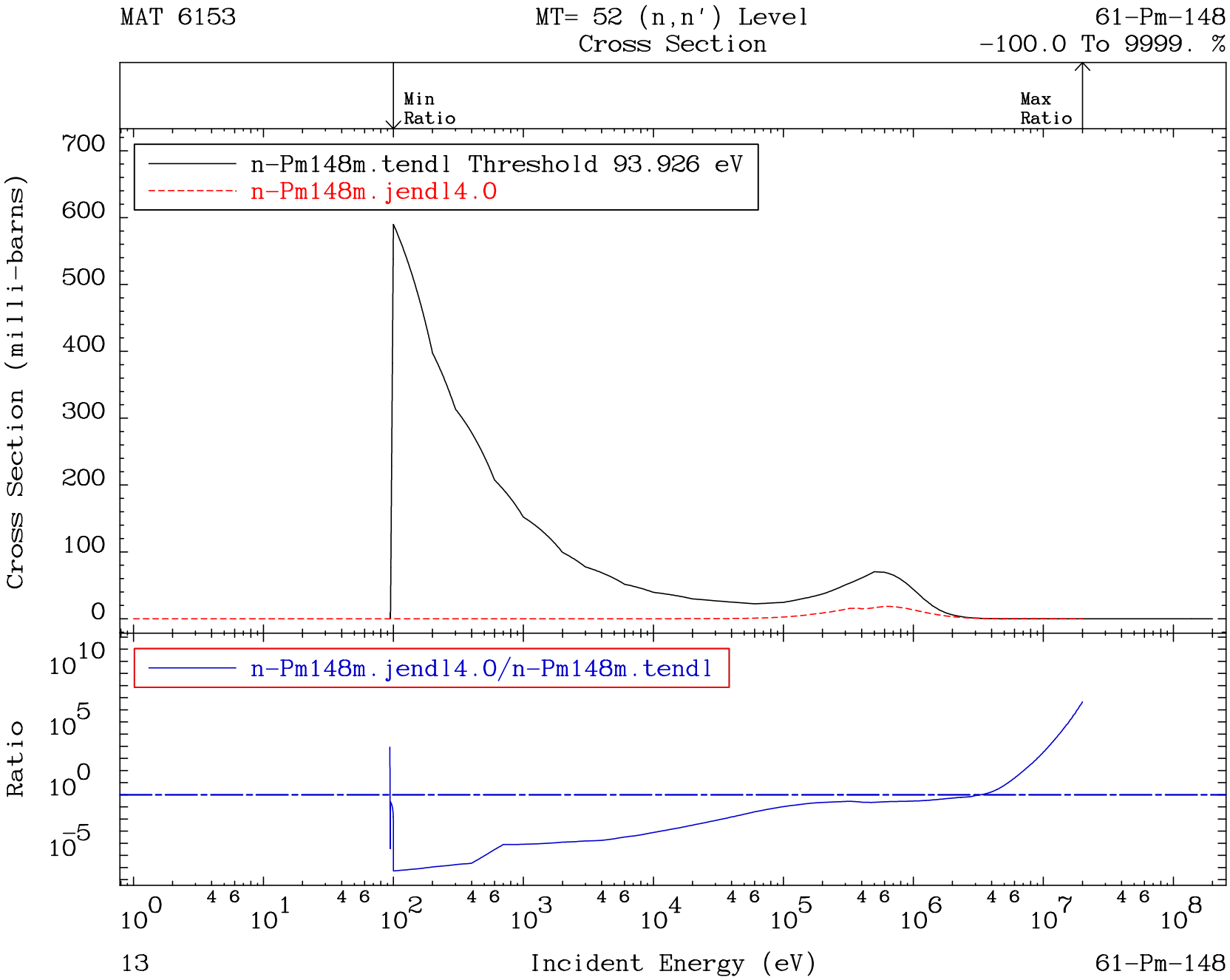

MAT 6153
(n,n') p
Cross Section
61-Pm-148
-98.18 To 434.3 %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 5.8711 MeV
n-Pm148m.jendl4.0 Threshold 5.9111 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^1
10^0
10^-1
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
8
61-Pm-148

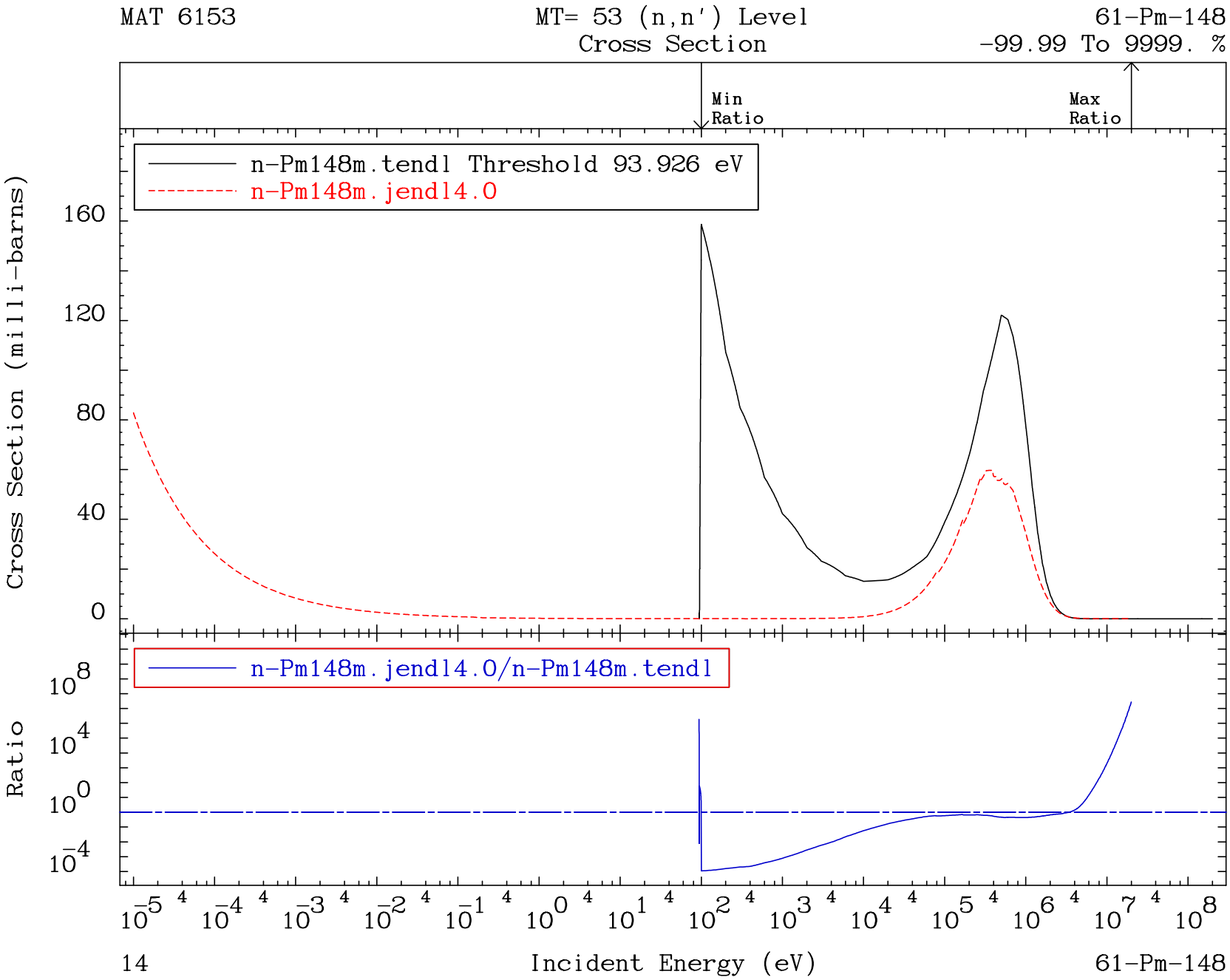

MAT 6153
(n,n') d
Cross Section
61-Pm-148
-100.0 To 1725. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 8.9597 MeV
n-Pm148m.jendl4.0 Threshold 8.9996 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^2
10^0
10^-2
10^-4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
61-Pm-148

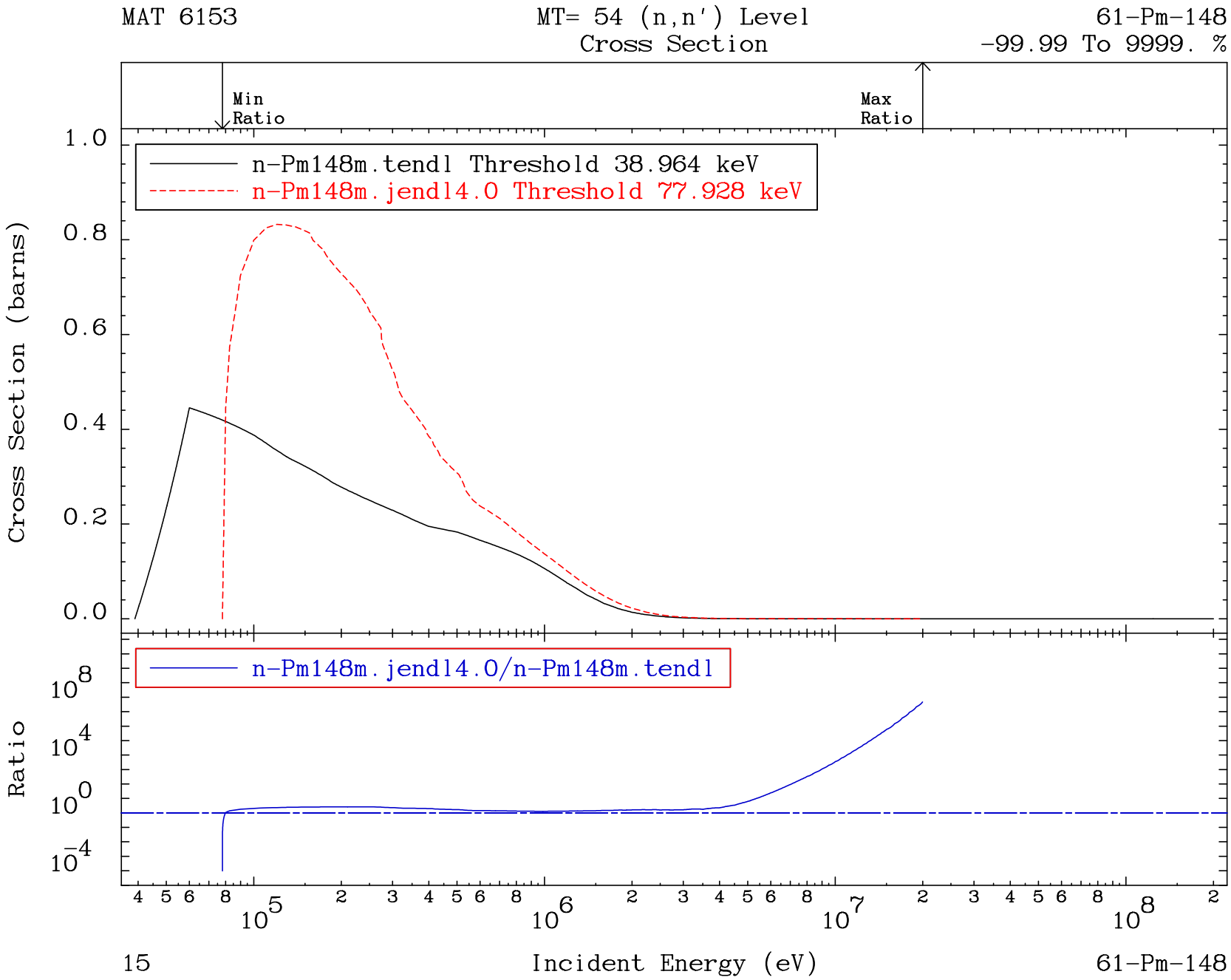

MAT 6153
(n,n') t
Cross Section
61-Pm-148
-100.0 To 1220. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 10.277 MeV
n-Pm148m.jendl4.0 Threshold 10.317 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^0
10^-4
10^-8
10^7
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
61-Pm-148

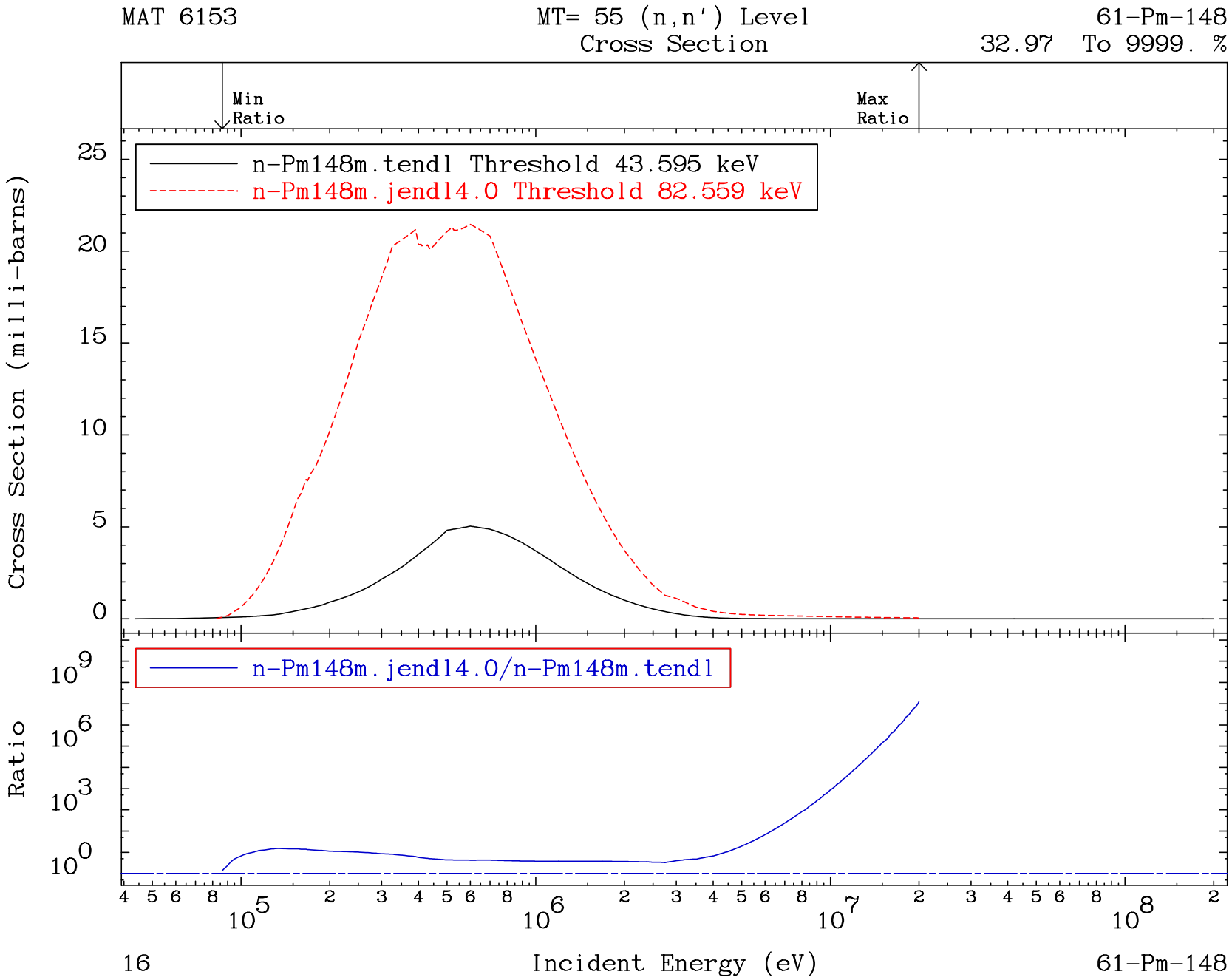

MAT 6153
(n,2n) p
Cross Section
61-Pm-148
-99.35 To 799.4 %
Min
Ratio
n-Pm148m.tendl Threshold 11.199 MeV
n-Pm148m.jendl4.0 Threshold 11.239 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^1
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
61-Pm-148

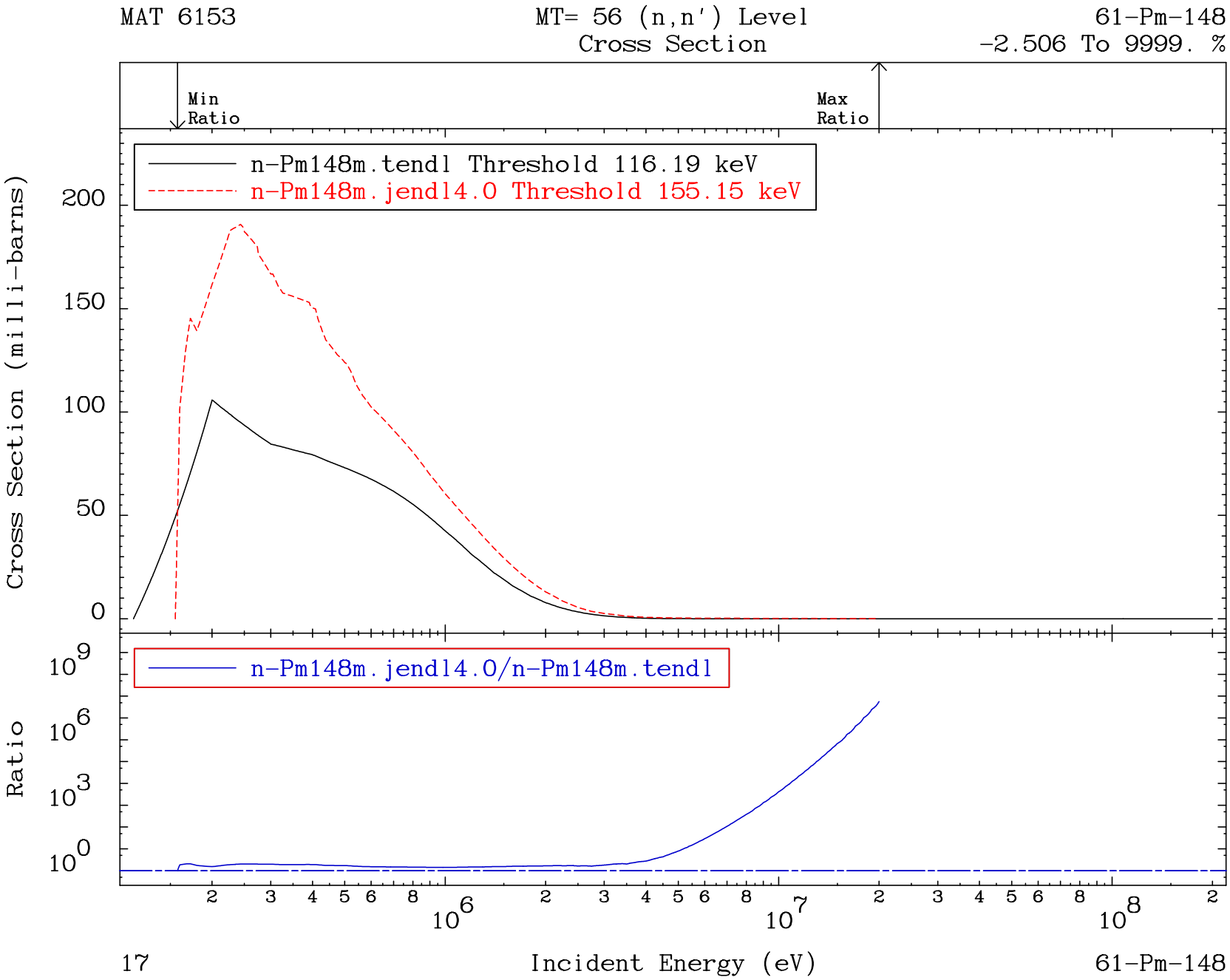

MAT 6153
MT= 51 (n,n') Level
Cross Section
61-Pm-148
-78.40 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl Threshold 94.032 eV
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
12
61-Pm-148

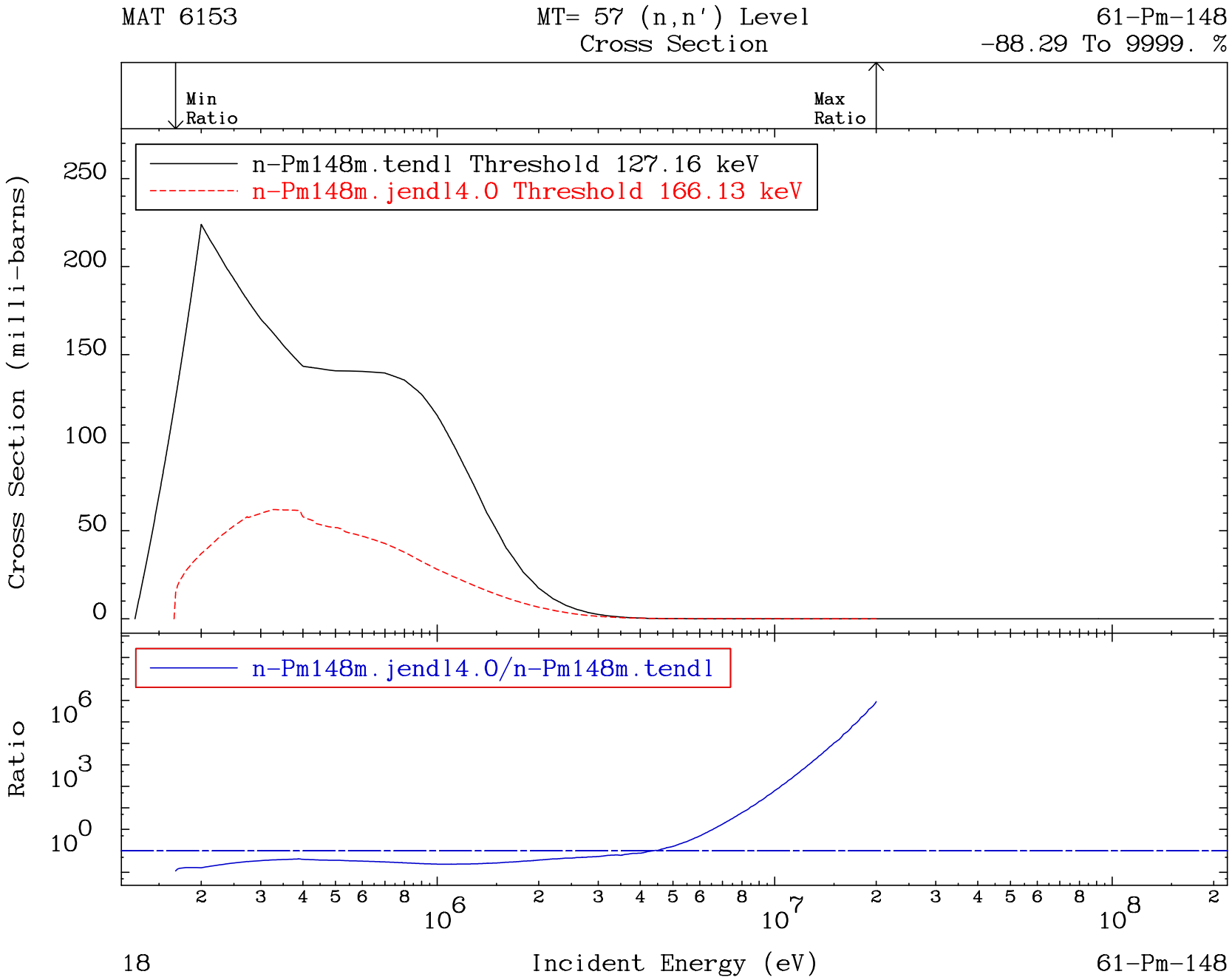

MAT 6153
MT= 52 (n,n') Level
Cross Section
61-Pm-148
-100.0 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 93.926 eV
n-Pm148m.jendl4.0
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^10
10^5
10^0
10^-5
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
13
Incident Energy (eV)
61-Pm-148

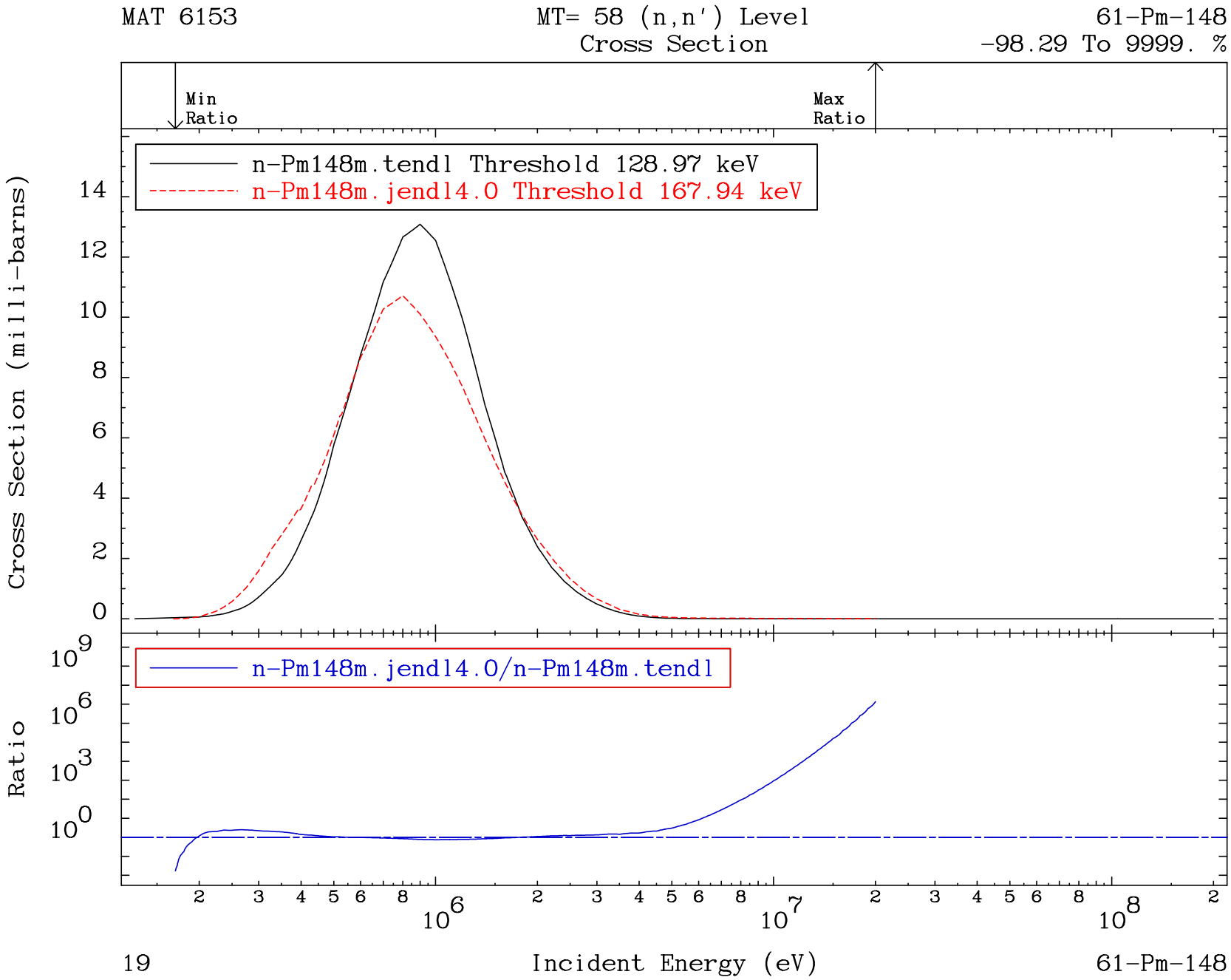

MAT 6153
MT= 53 (n,n') Level
Cross Section
61-Pm-148
-99.99 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 93.926 eV
n-Pm148m.jendl4.0
Cross Section (milli-barns)
160
120
80
40
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^8
10^4
10^0
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
14
Incident Energy (eV)
61-Pm-148

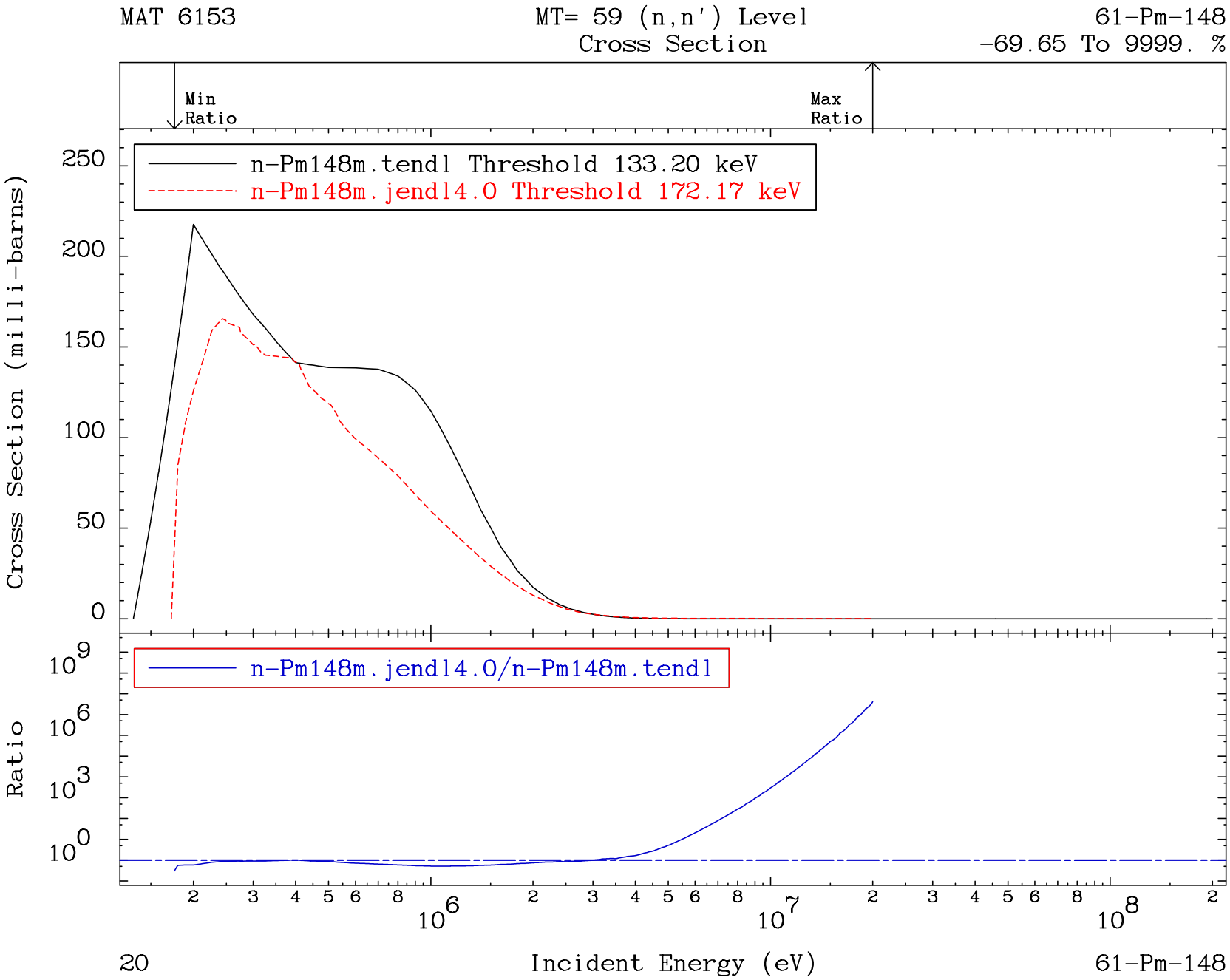

MAT 6153
MT= 54 (n,n') Level
Cross Section
61-Pm-148
-99.99 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 38.964 keV
n-Pm148m.jendl4.0 Threshold 77.928 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^8
10^4
10^0
10^-4
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
61-Pm-148

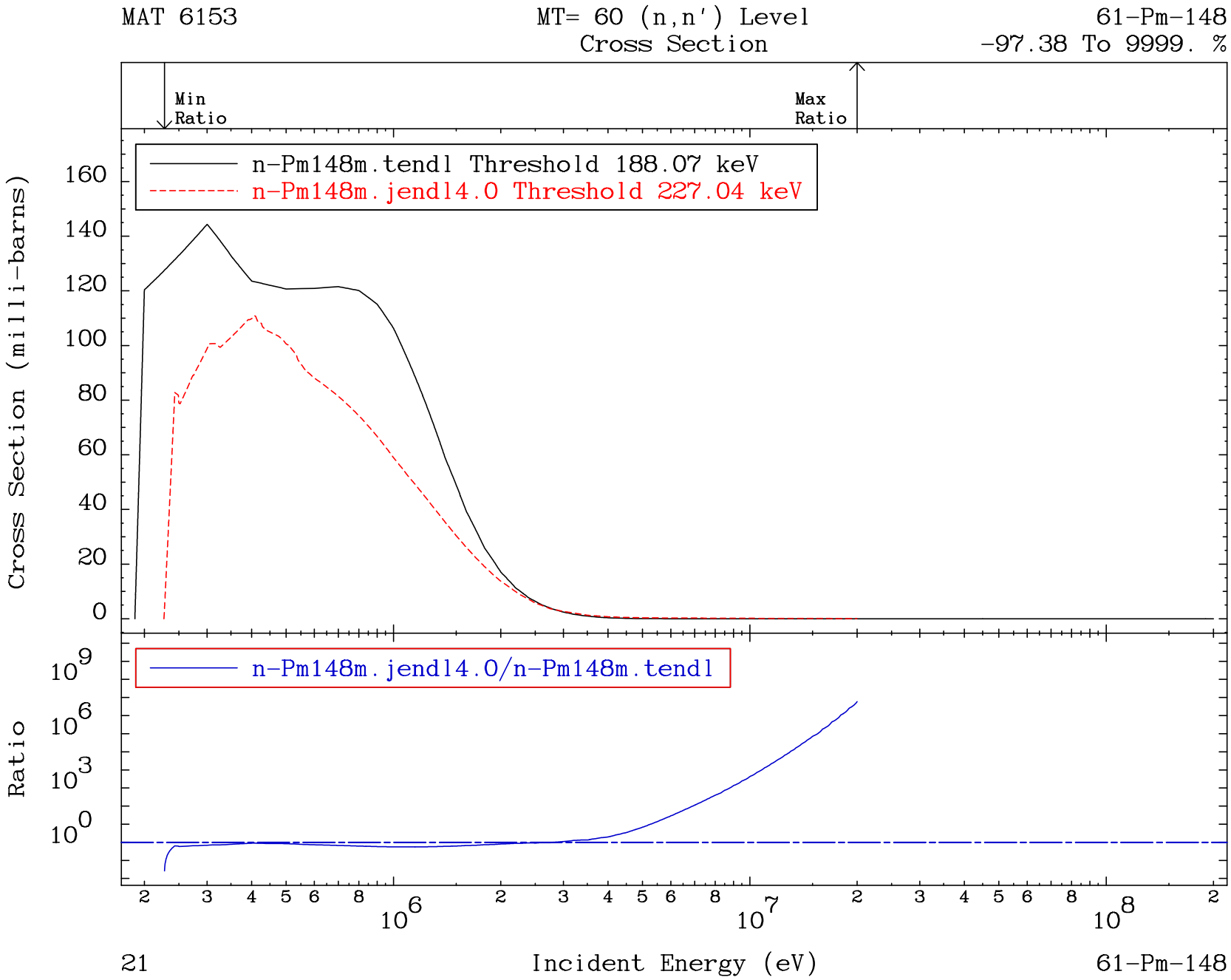

MAT 6153
MT= 55 (n,n') Level
Cross Section
61-Pm-148
32.97 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 43.595 keV
n-Pm148m.jendl4.0 Threshold 82.559 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
61-Pm-148

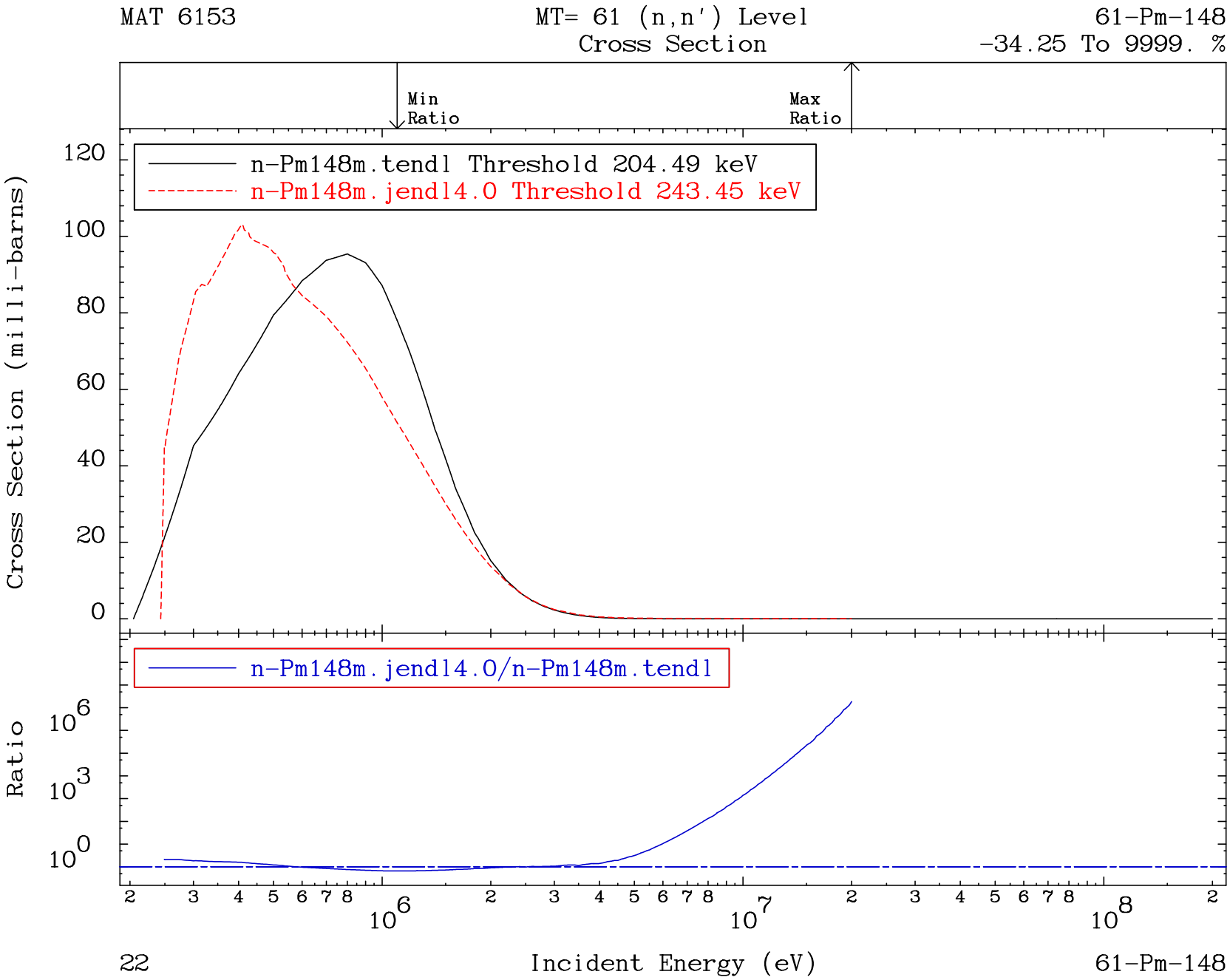

MAT 6153
MT= 56 (n,n') Level
Cross Section
61-Pm-148
-2.506 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 116.19 keV
n-Pm148m.jendl4.0 Threshold 155.15 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
61-Pm-148

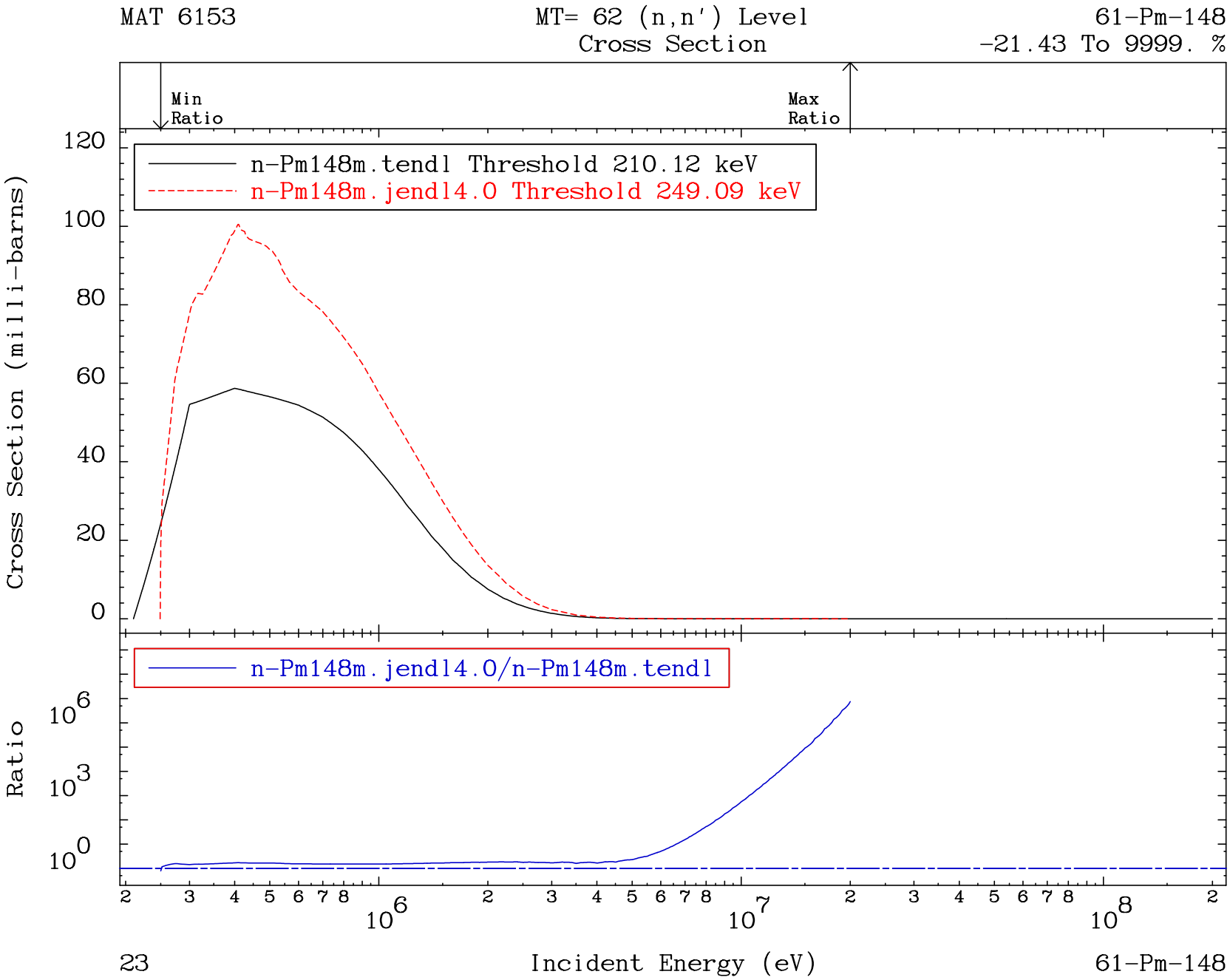

MAT 6153
MT= 57 (n,n') Level
Cross Section
61-Pm-148
-88.29 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 127.16 keV
n-Pm148m.jendl4.0 Threshold 166.13 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
61-Pm-148

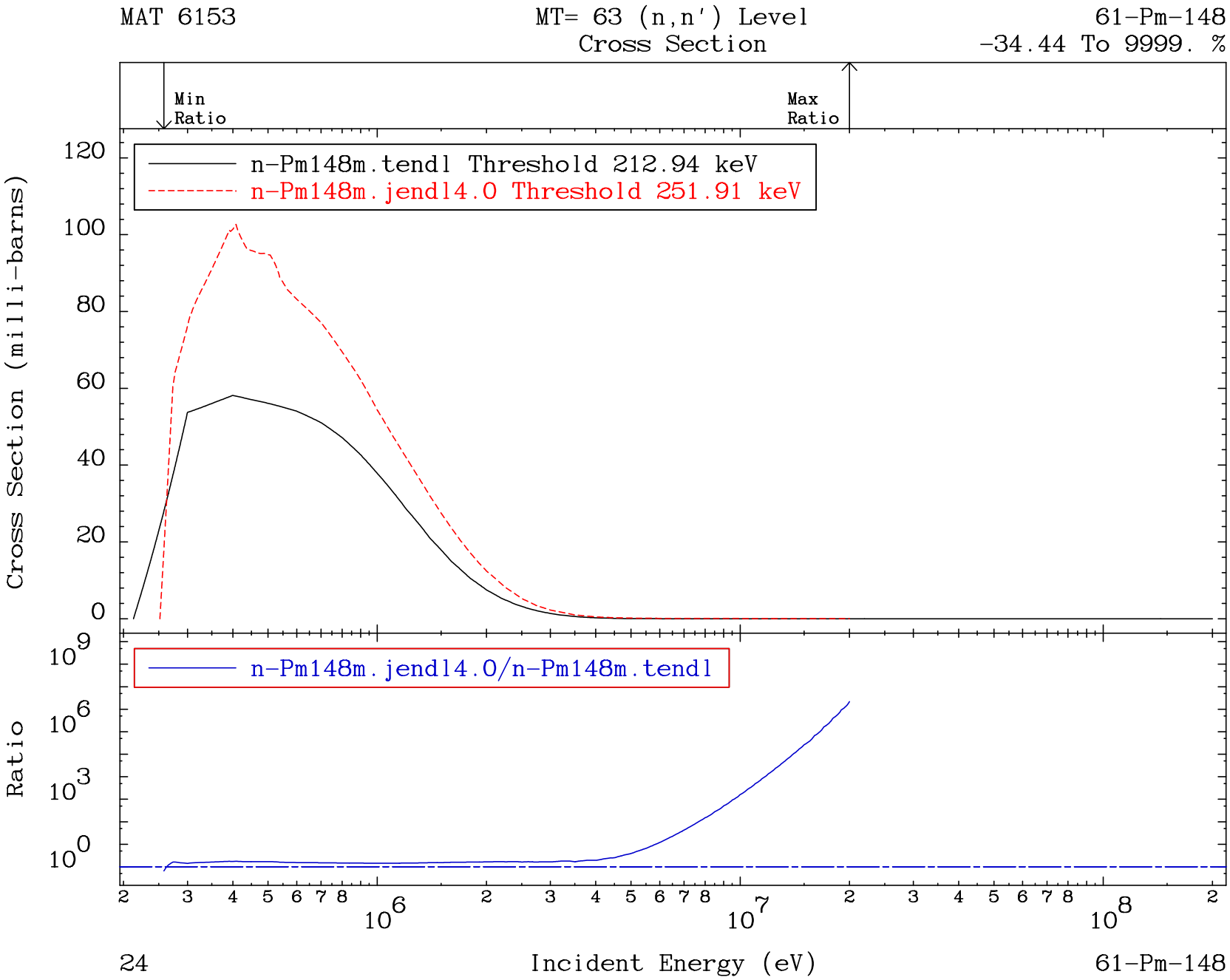

MAT 6153
MT= 58 (n,n') Level
Cross Section
61-Pm-148
-98.29 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 128.97 keV
n-Pm148m.jendl4.0 Threshold 167.94 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
61-Pm-148

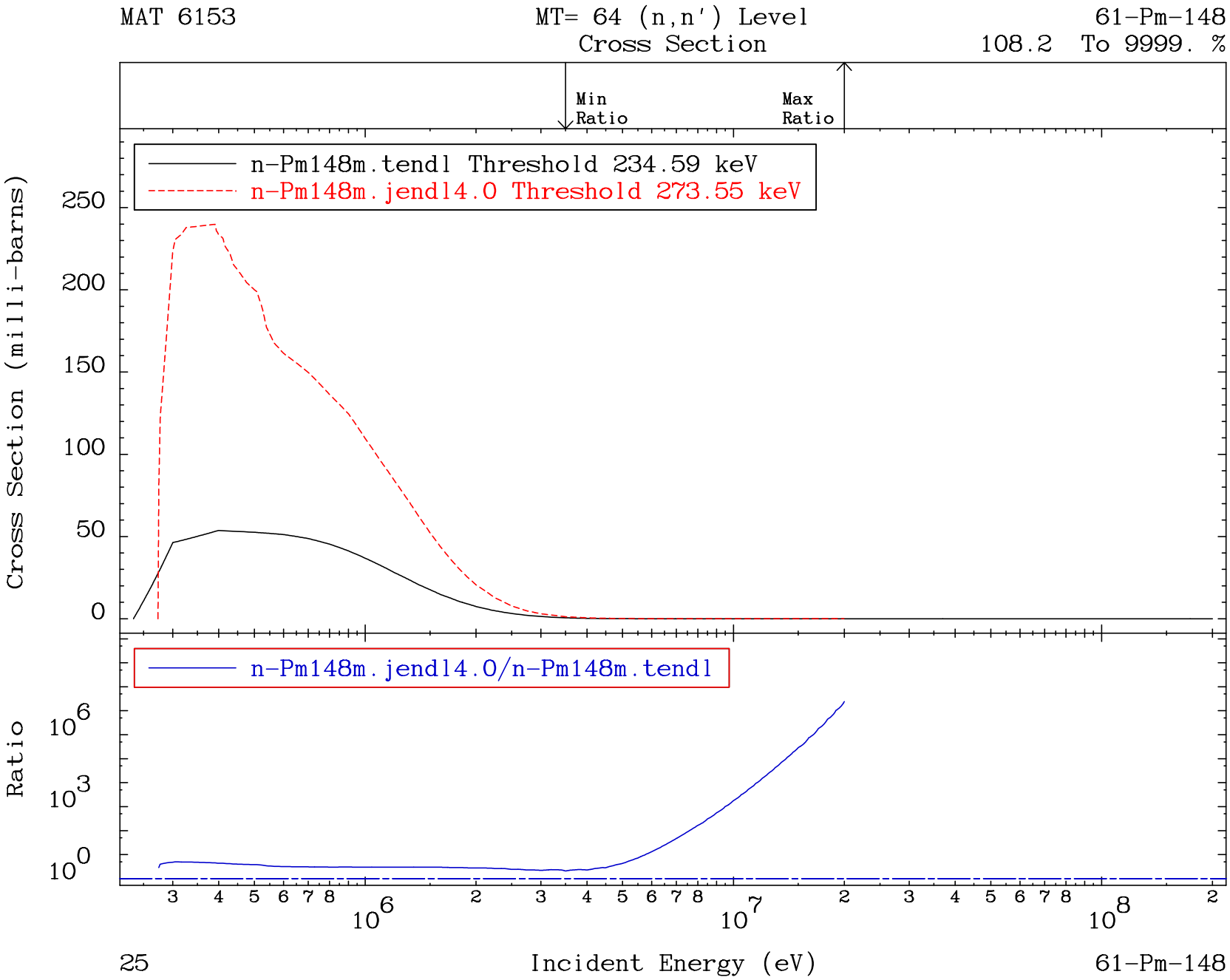

MAT 6153
MT= 59 (n,n') Level
Cross Section
61-Pm-148
-69.65 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 133.20 keV
n-Pm148m.jendl4.0 Threshold 172.17 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
61-Pm-148

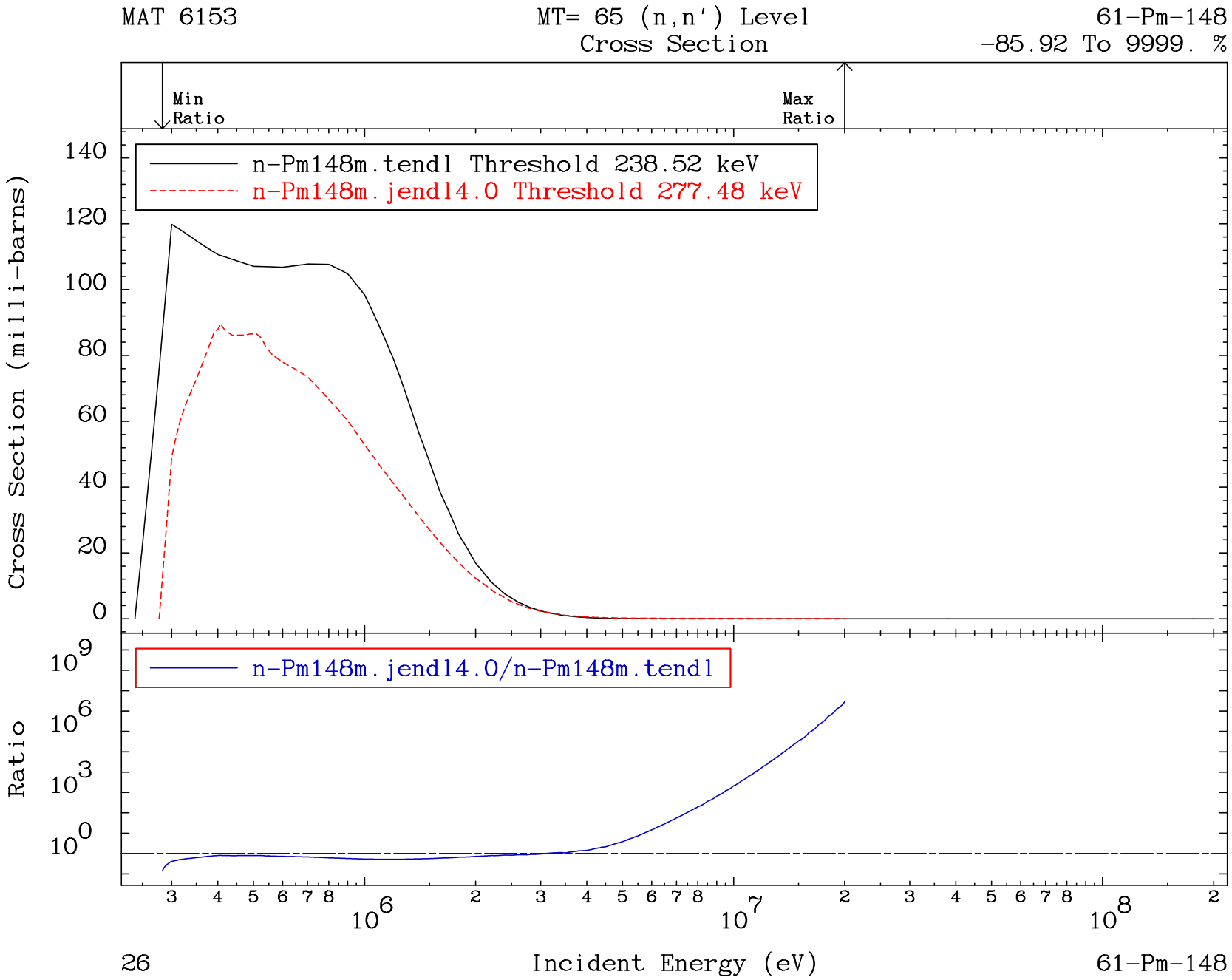

MAT 6153
MT= 60 (n,n') Level
Cross Section
61-Pm-148
-97.38 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 188.07 keV
n-Pm148m.jendl4.0 Threshold 227.04 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
61-Pm-148

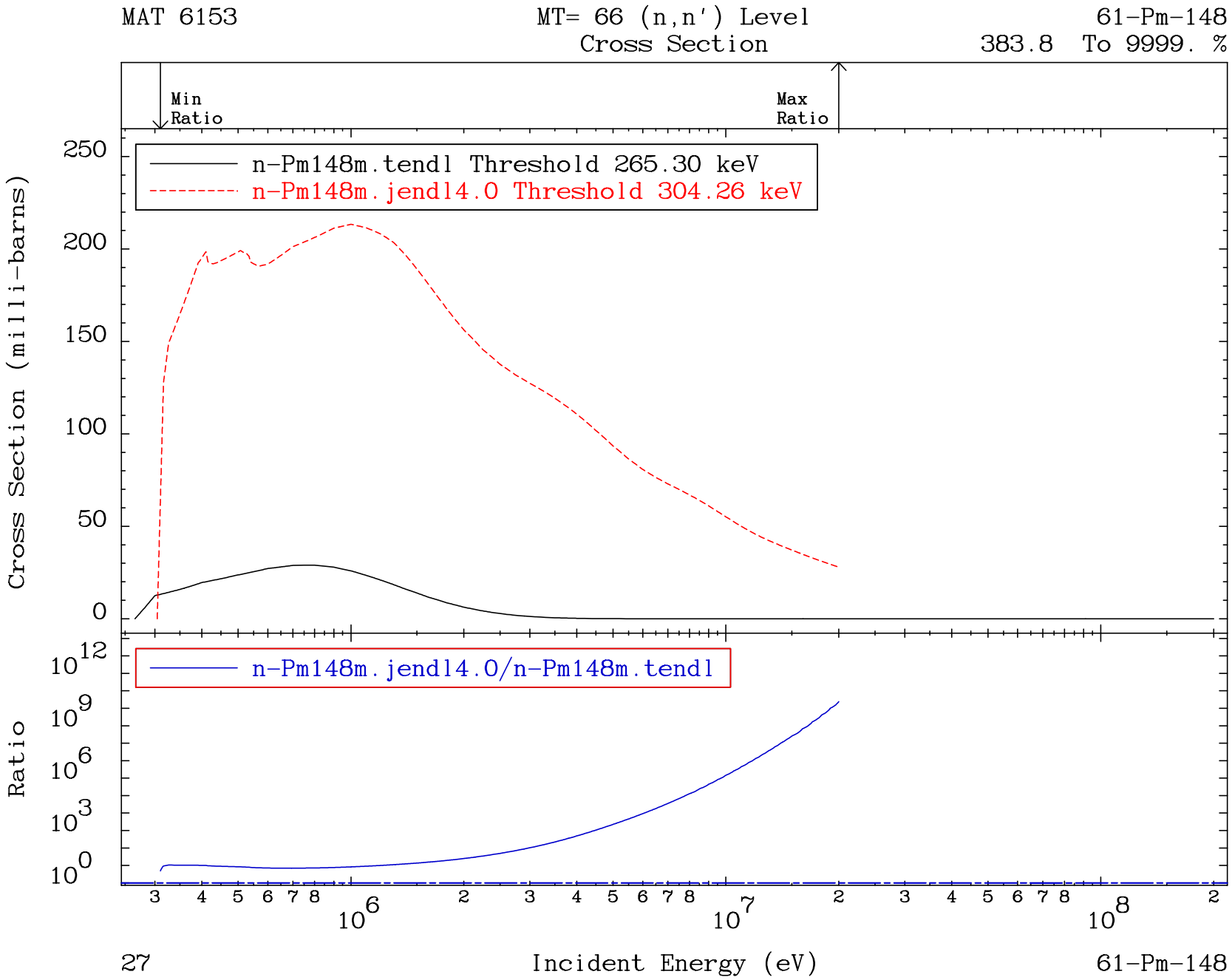

MAT 6153
MT= 61 (n,n') Level
Cross Section
61-Pm-148
-34.25 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 204.49 keV
n-Pm148m.jendl4.0 Threshold 243.45 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
61-Pm-148

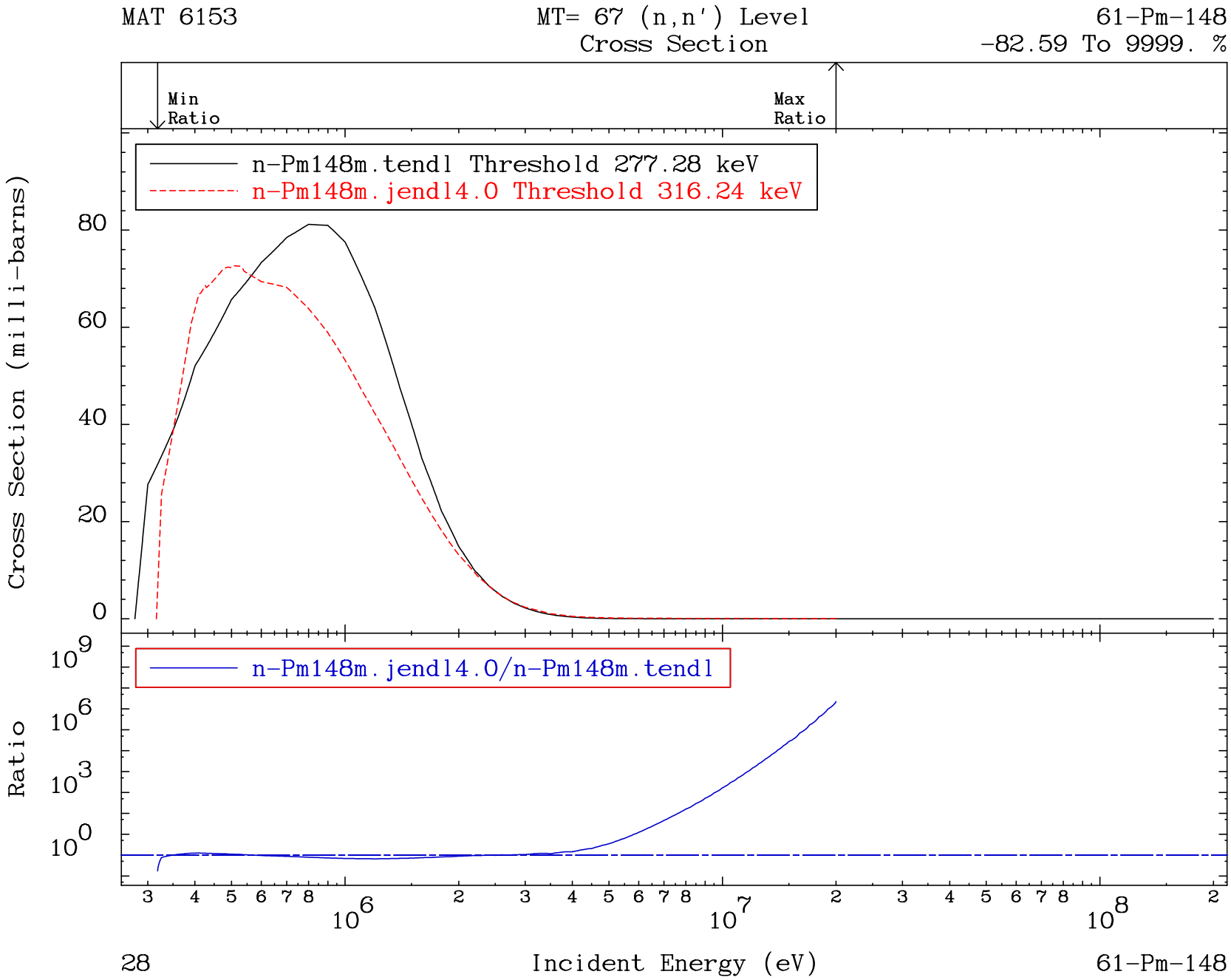

MAT 6153
MT= 62 (n,n') Level
Cross Section
61-Pm-148
-21.43 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 210.12 keV
n-Pm148m.jendl4.0 Threshold 249.09 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
61-Pm-148

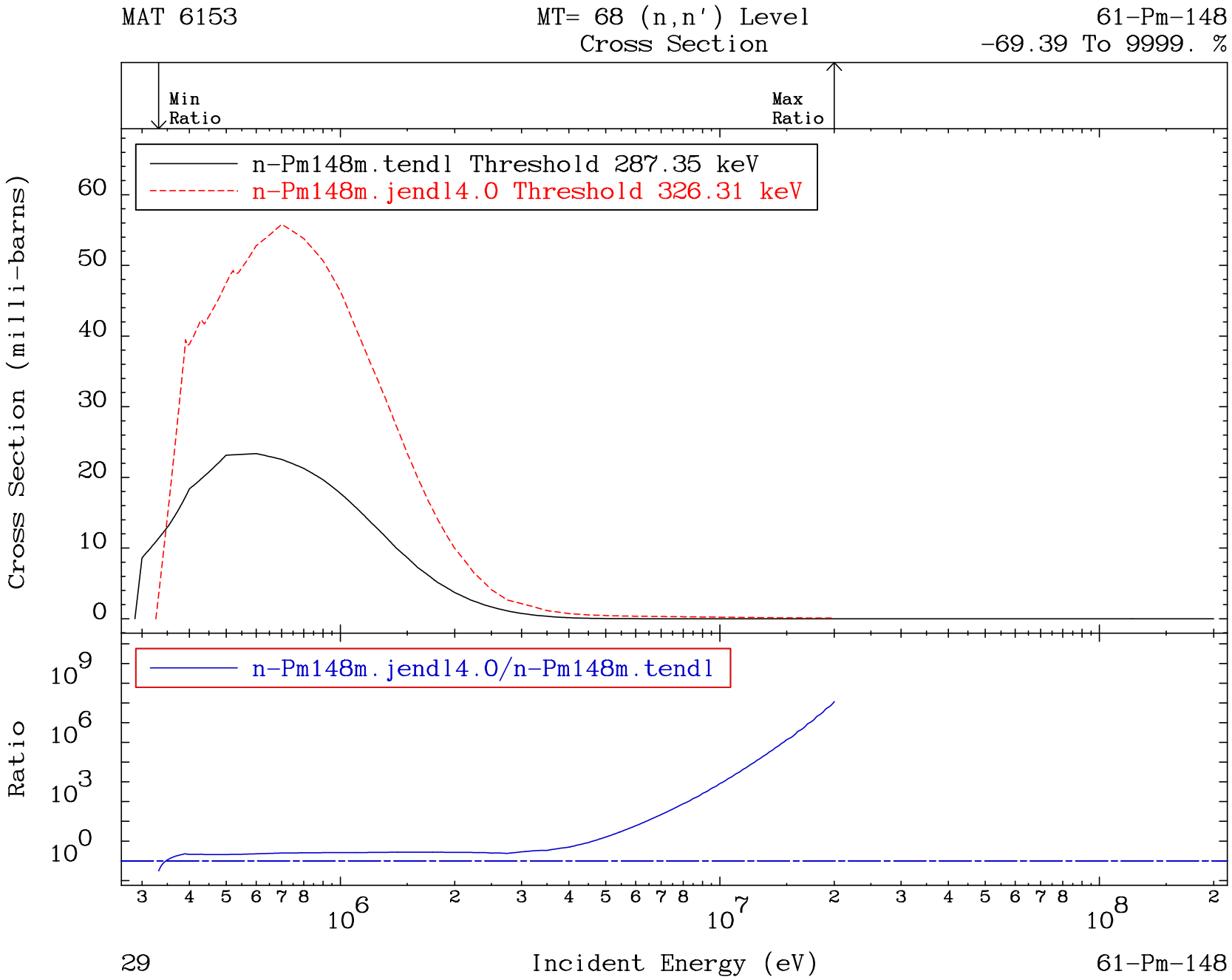

MAT 6153
MT= 63 (n,n') Level
Cross Section
61-Pm-148
-34.44 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 212.94 keV
n-Pm148m.jendl4.0 Threshold 251.91 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
61-Pm-148

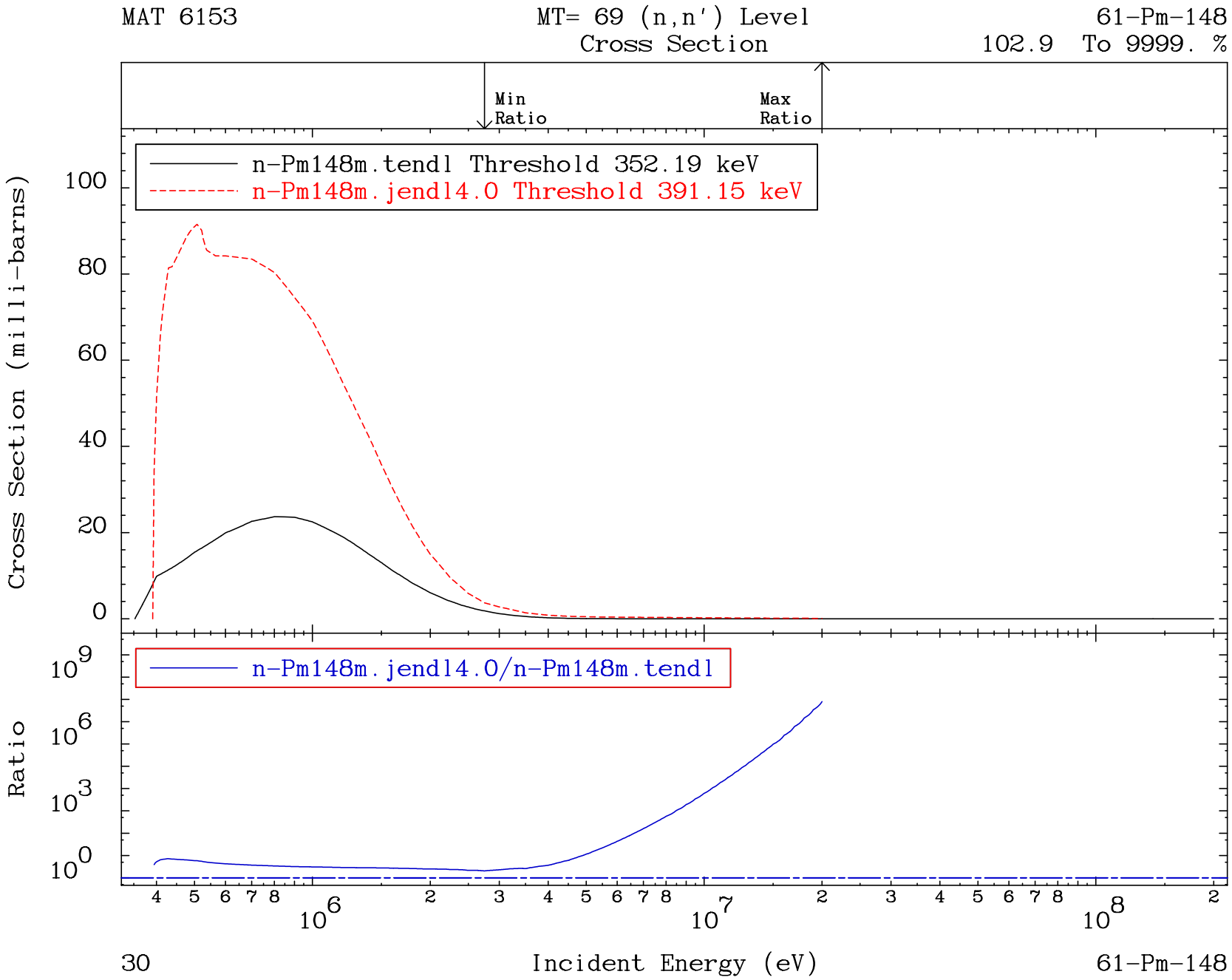

MAT 6153
MT= 64 (n,n') Level
Cross Section
61-Pm-148
108.2 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 234.59 keV
n-Pm148m.jendl4.0 Threshold 273.55 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
61-Pm-148

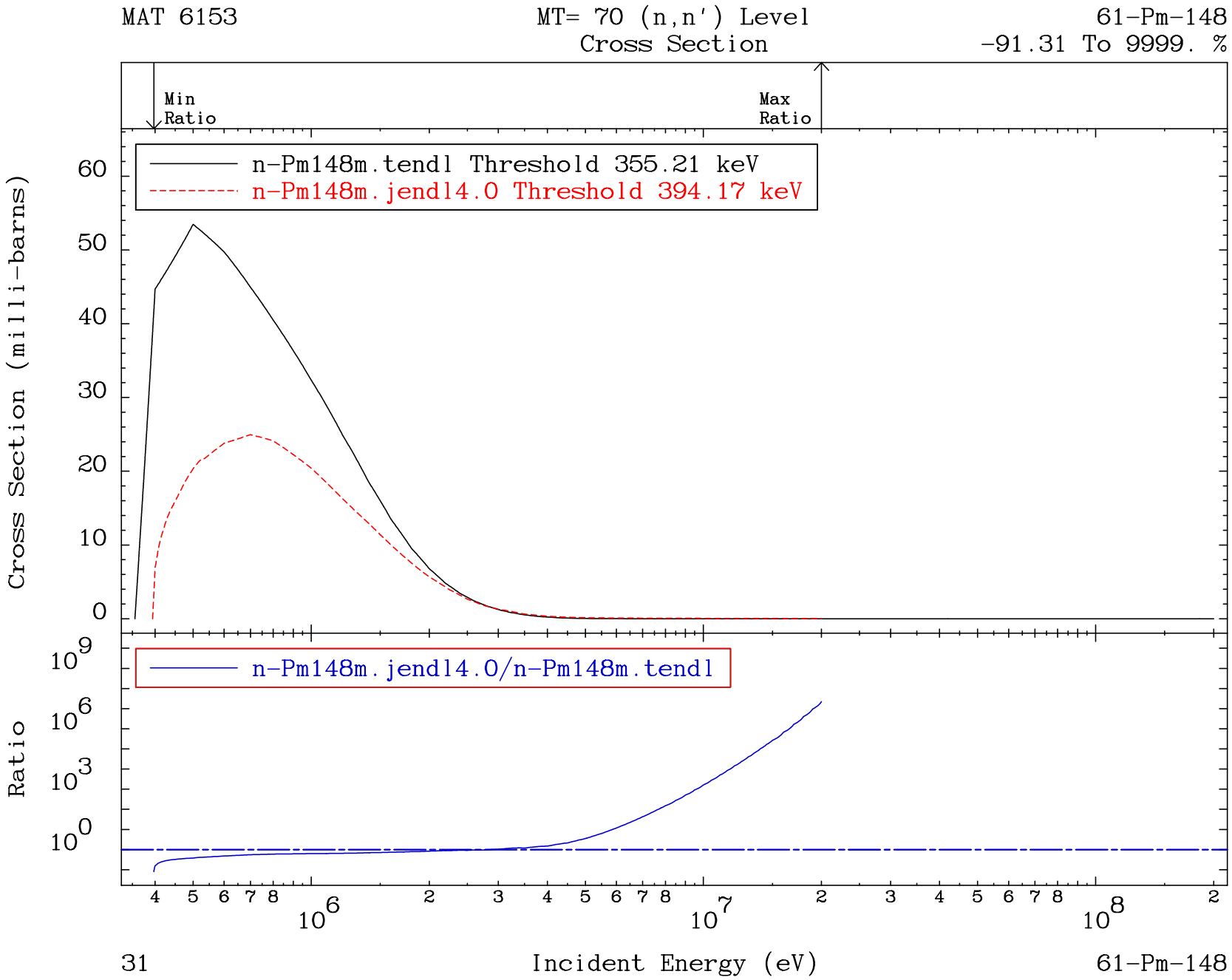

MAT 6153
MT= 65 (n,n') Level
Cross Section
61-Pm-148
-85.92 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 238.52 keV
n-Pm148m.jendl4.0 Threshold 277.48 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
61-Pm-148

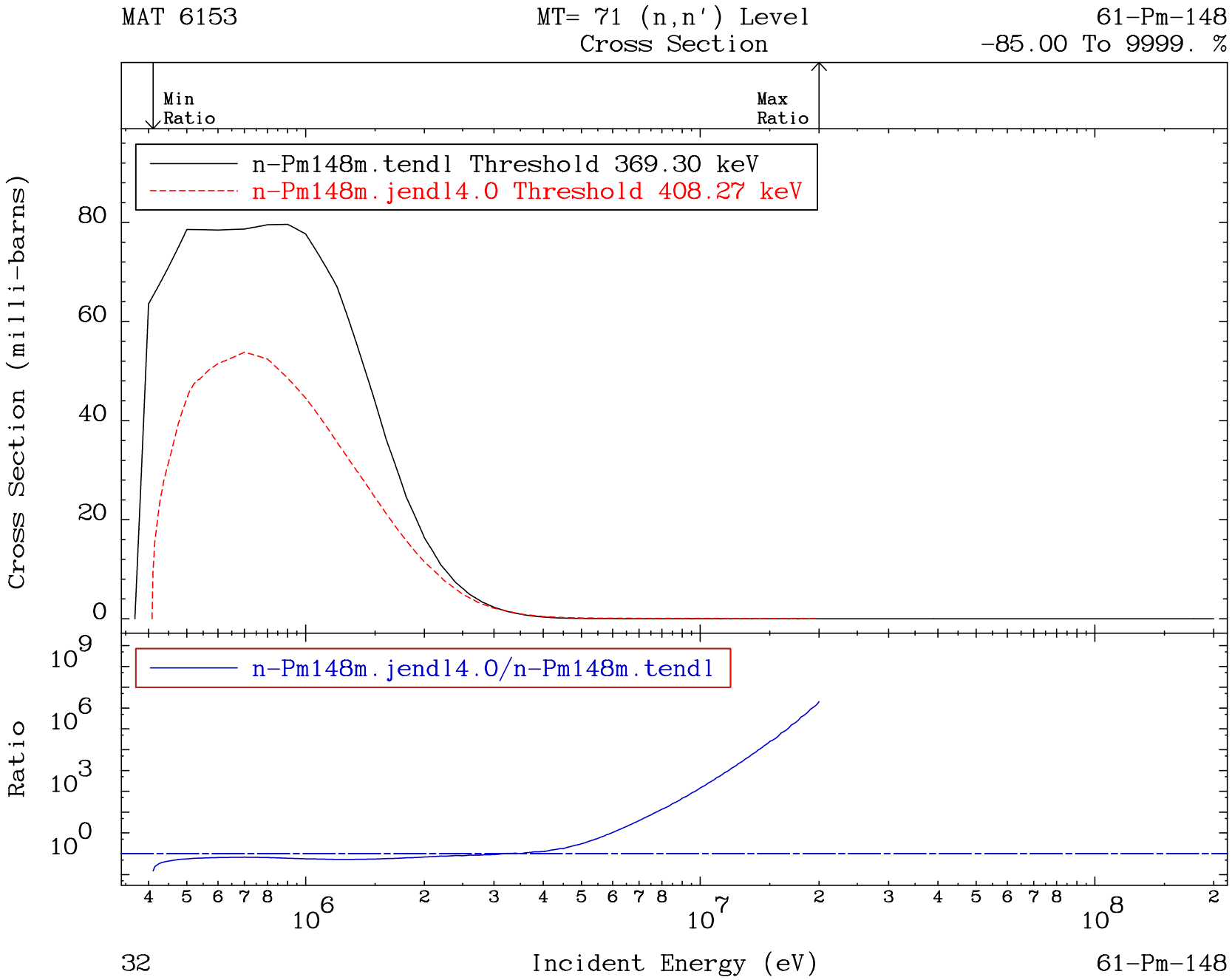

MAT 6153
MT= 66 (n,n') Level
Cross Section
61-Pm-148
383.8 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 265.30 keV
n-Pm148m.jendl4.0 Threshold 304.26 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^12
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
61-Pm-148

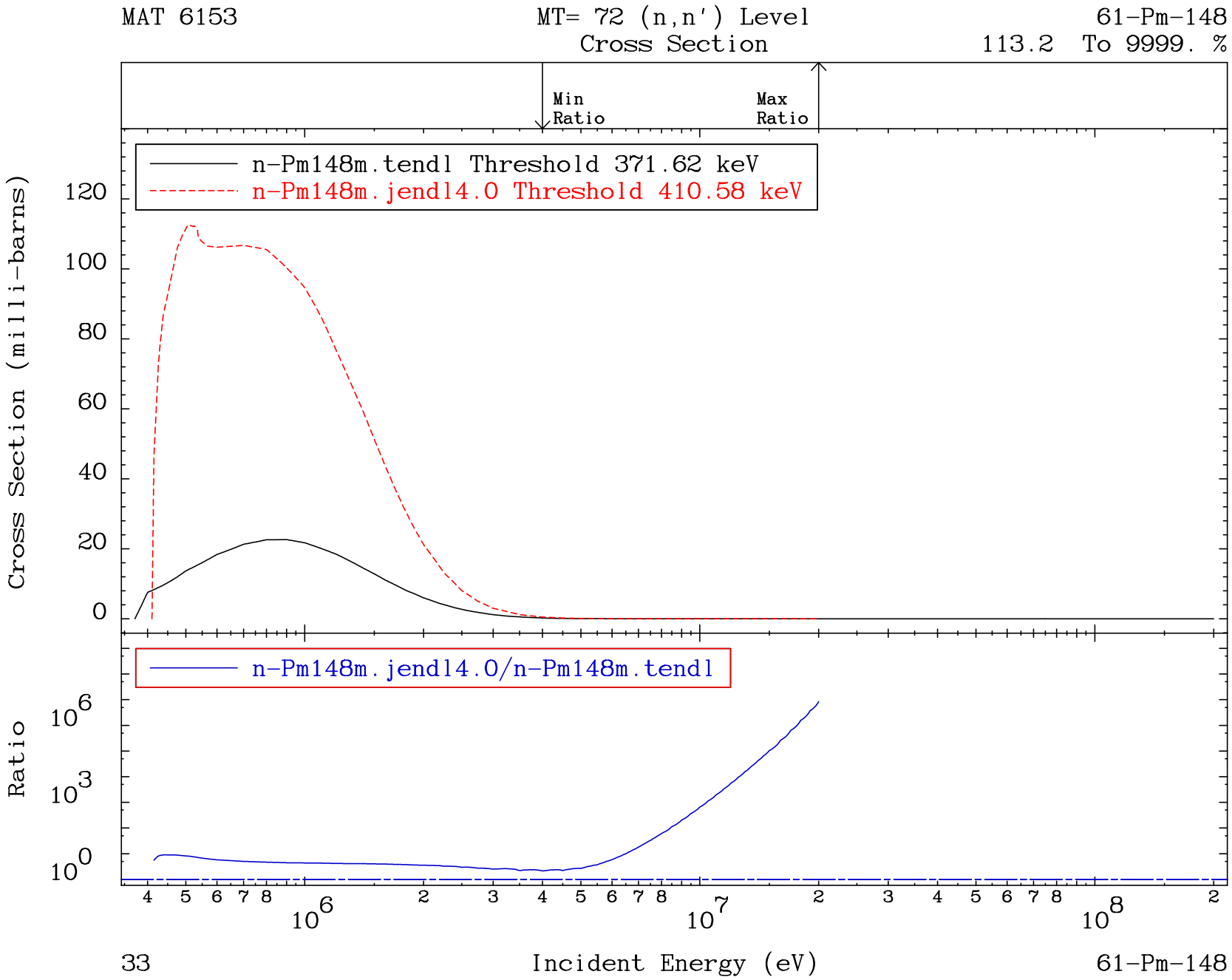

MAT 6153
MT= 67 (n,n') Level
Cross Section
61-Pm-148
-82.59 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 277.28 keV
n-Pm148m.jendl4.0 Threshold 316.24 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
61-Pm-148

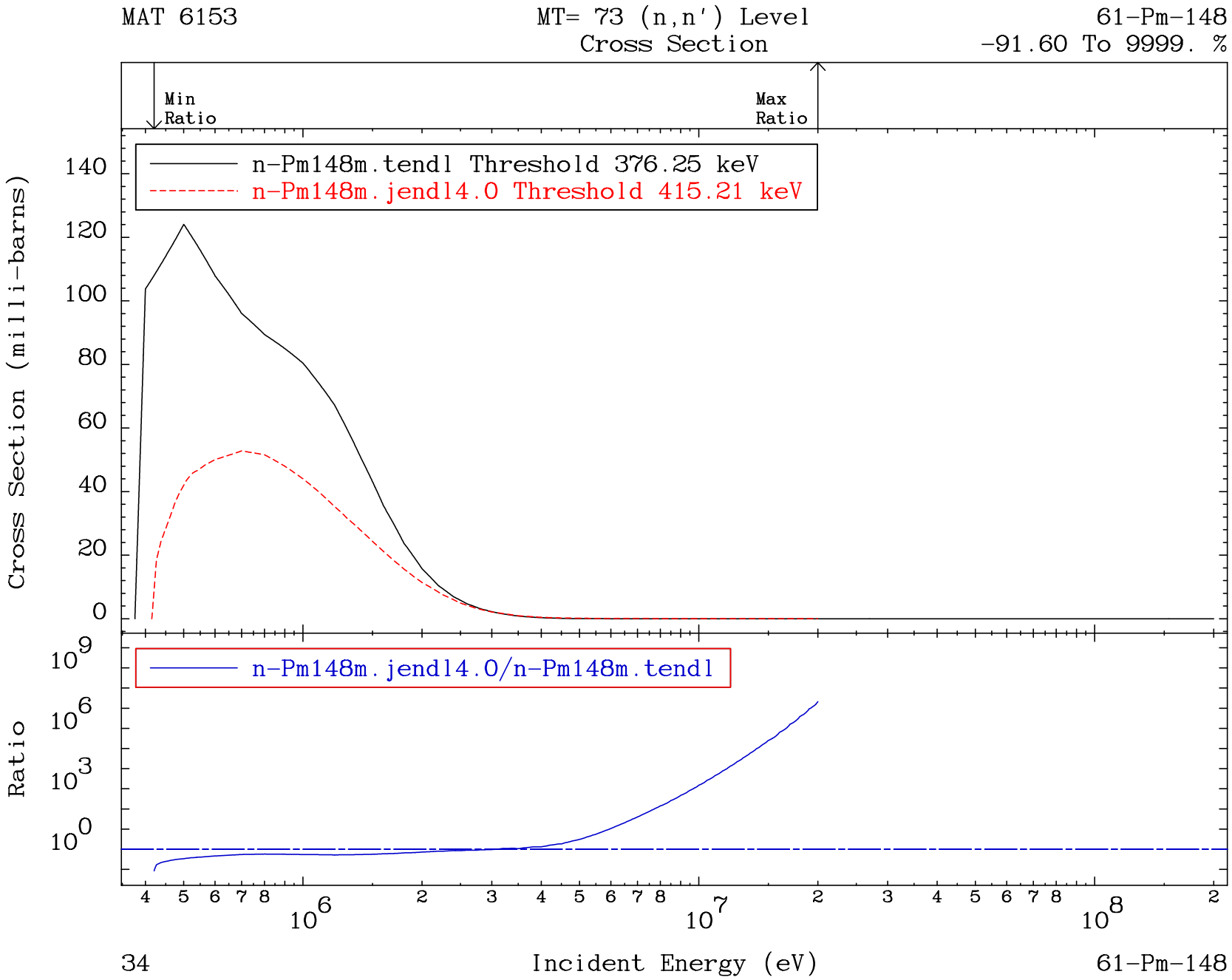

MAT 6153
MT= 68 (n,n') Level
Cross Section
61-Pm-148
-69.39 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 287.35 keV
n-Pm148m.jendl4.0 Threshold 326.31 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
61-Pm-148

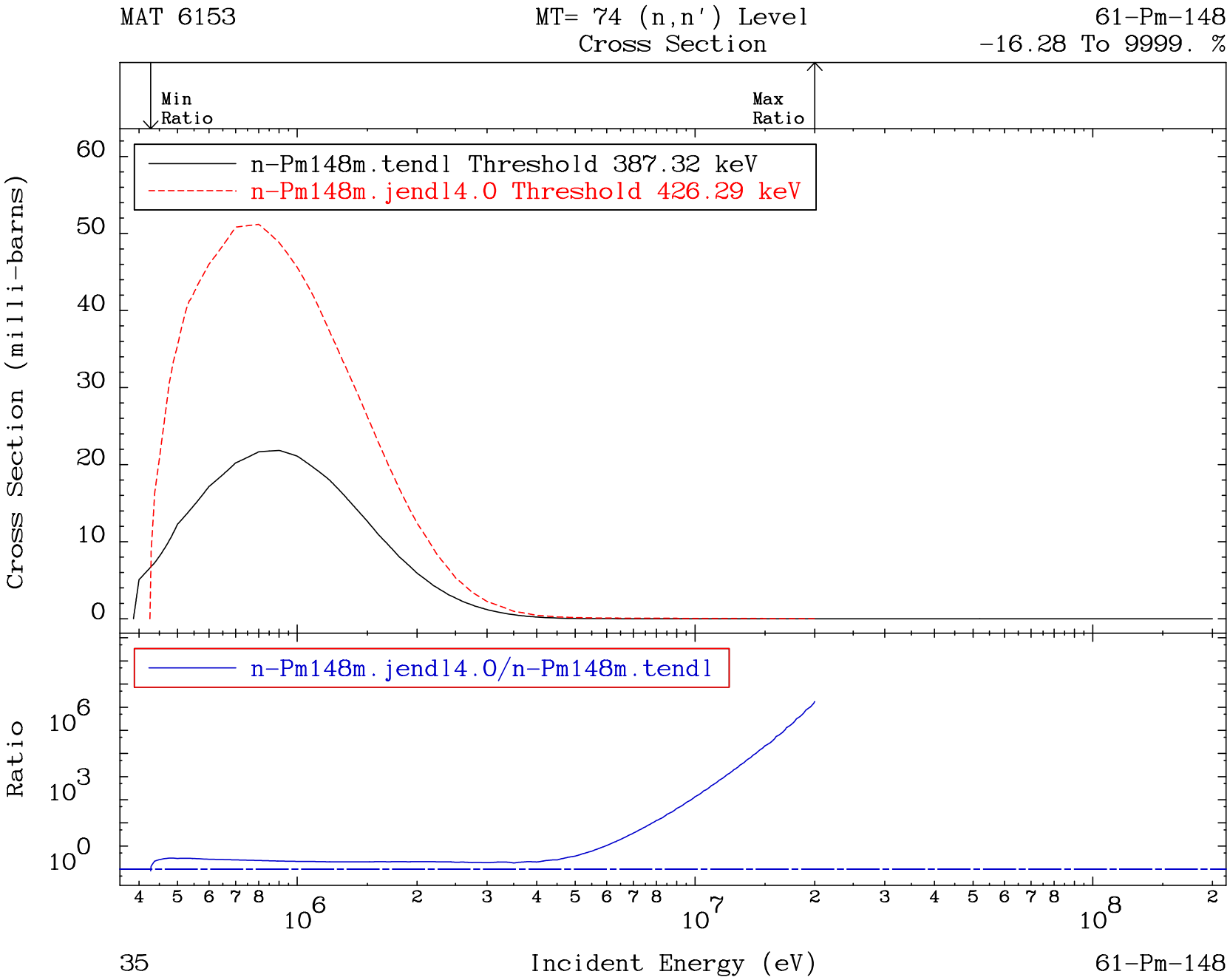

MAT 6153
MT= 69 (n,n') Level
Cross Section
61-Pm-148
102.9 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 352.19 keV
n-Pm148m.jendl4.0 Threshold 391.15 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
61-Pm-148

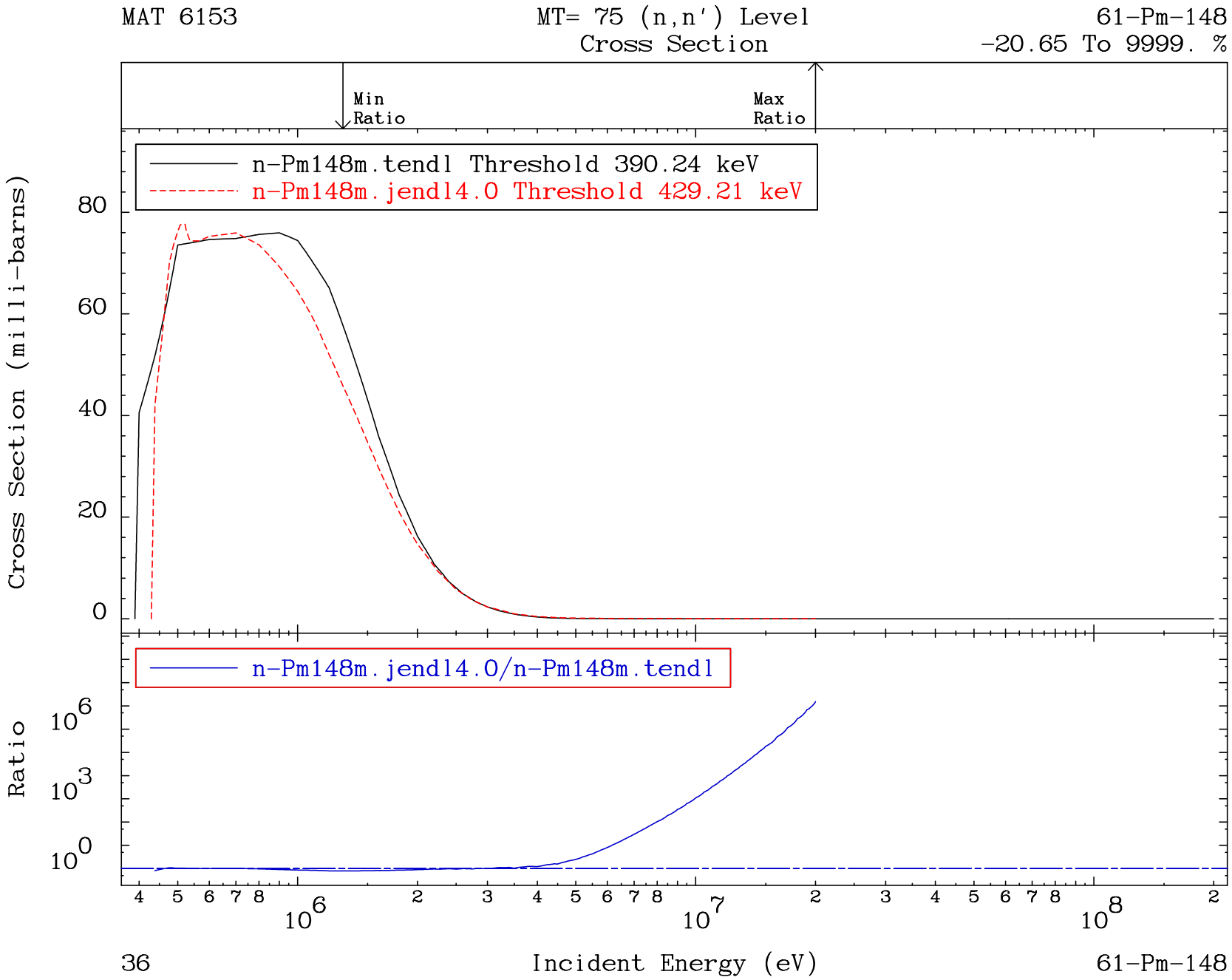

MAT 6153
MT= 70 (n,n') Level
Cross Section
61-Pm-148
-91.31 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 355.21 keV
n-Pm148m.jendl4.0 Threshold 394.17 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
61-Pm-148

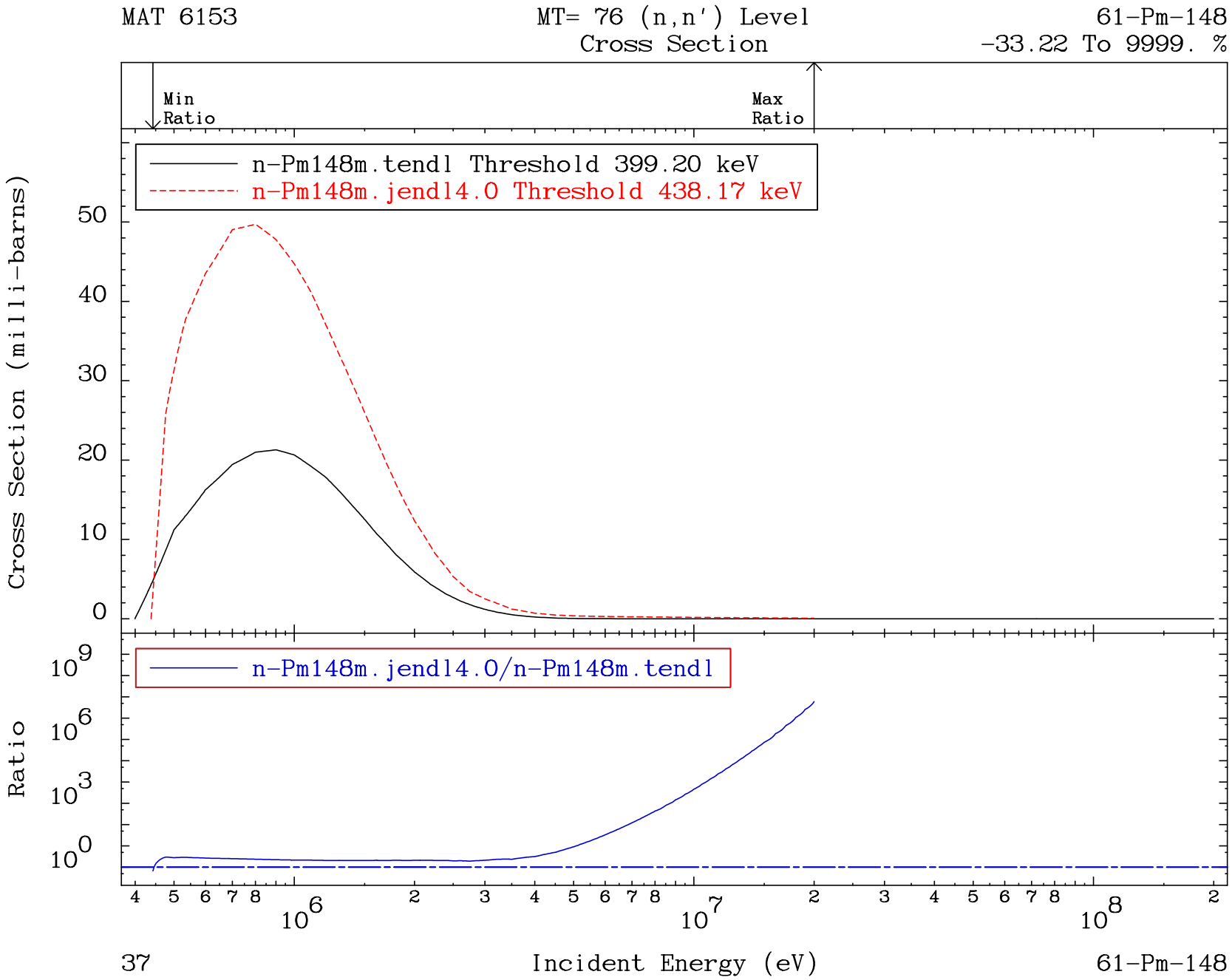

MAT 6153
MT= 71 (n,n') Level
Cross Section
61-Pm-148
-85.00 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 369.30 keV
n-Pm148m.jendl4.0 Threshold 408.27 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
61-Pm-148

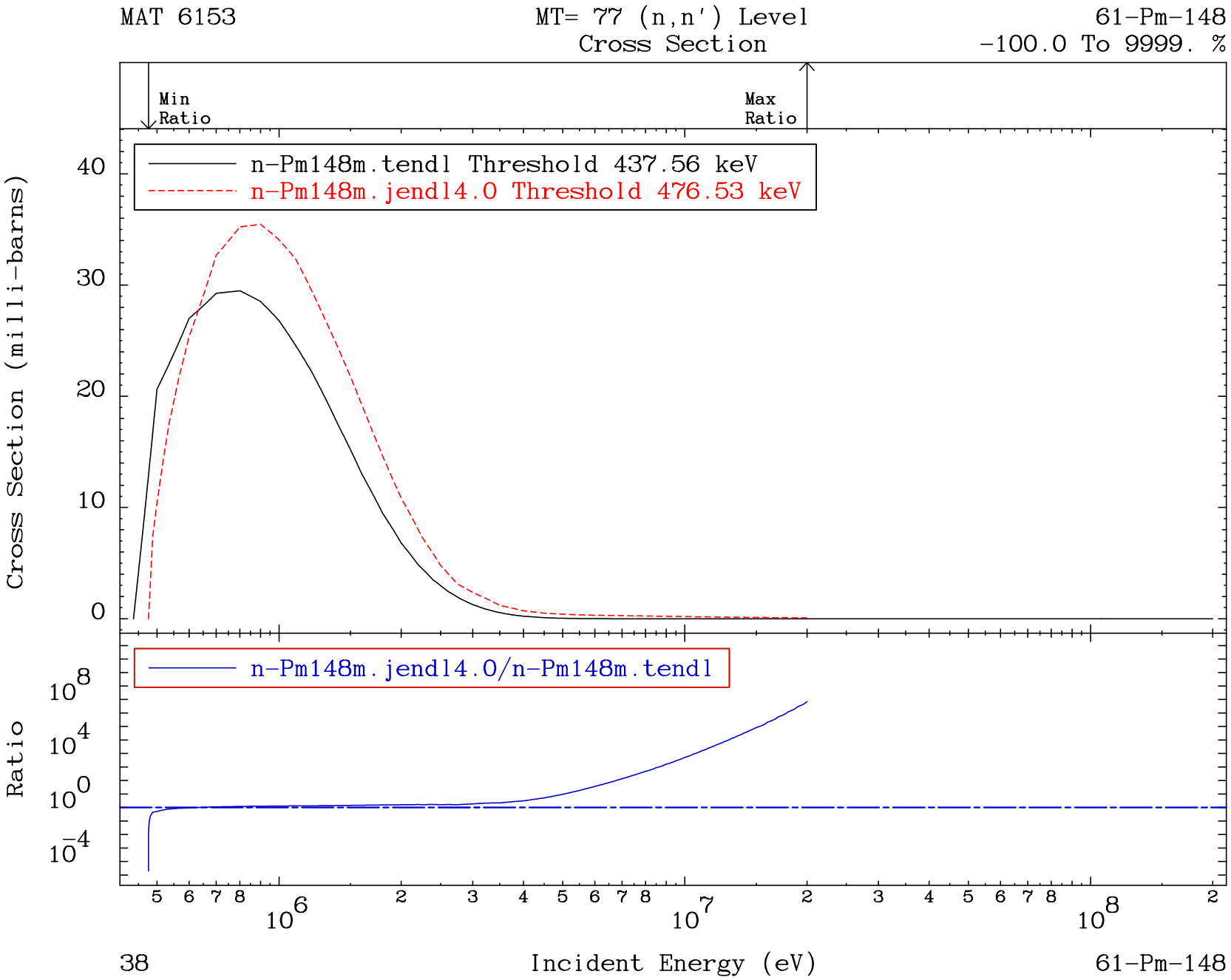

MAT 6153
MT= 72 (n,n') Level
Cross Section
61-Pm-148
113.2 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 371.62 keV
n-Pm148m.jendl4.0 Threshold 410.58 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
61-Pm-148

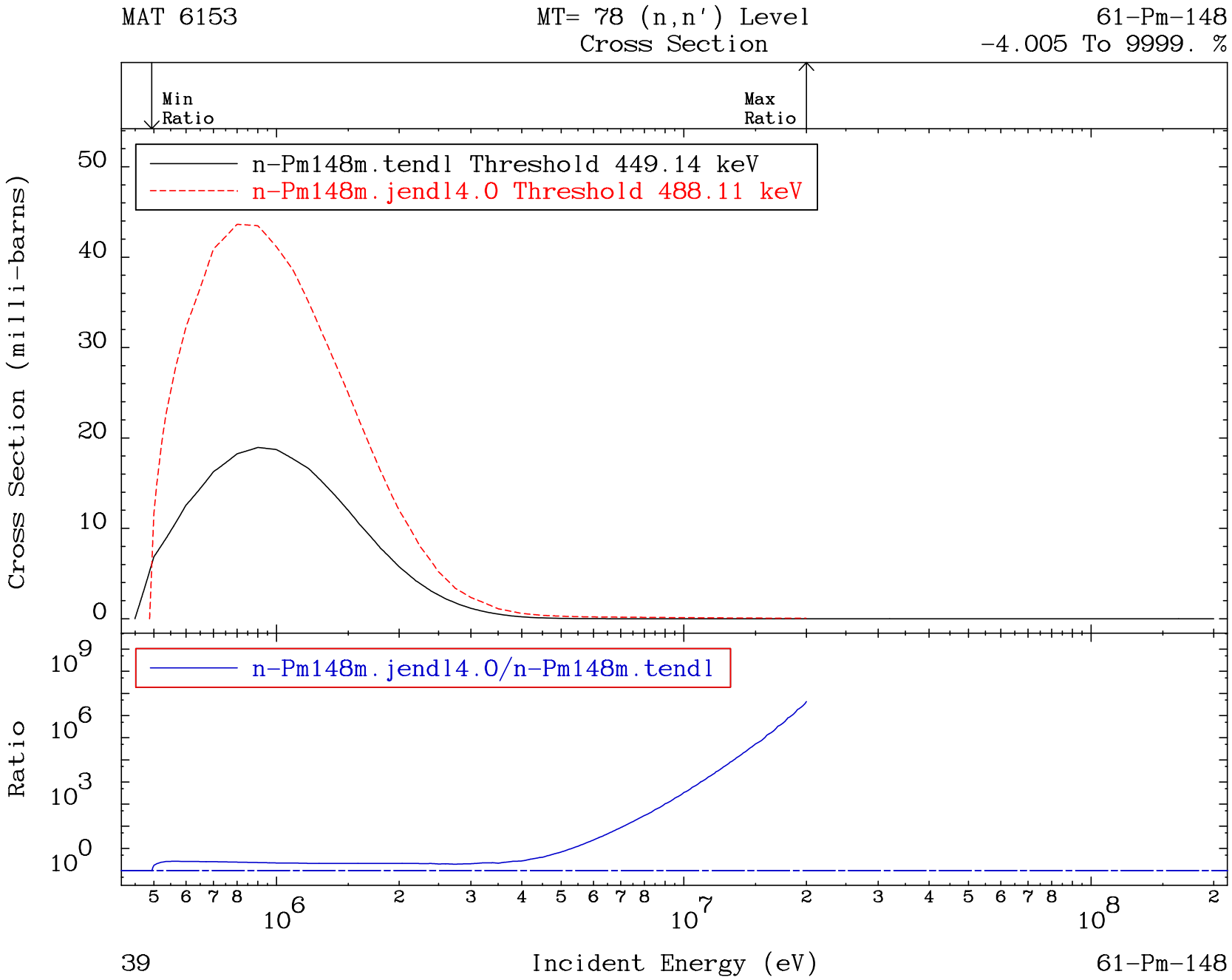

MAT 6153
MT= 73 (n,n') Level
Cross Section
61-Pm-148
-91.60 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 376.25 keV
n-Pm148m.jendl4.0 Threshold 415.21 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
61-Pm-148

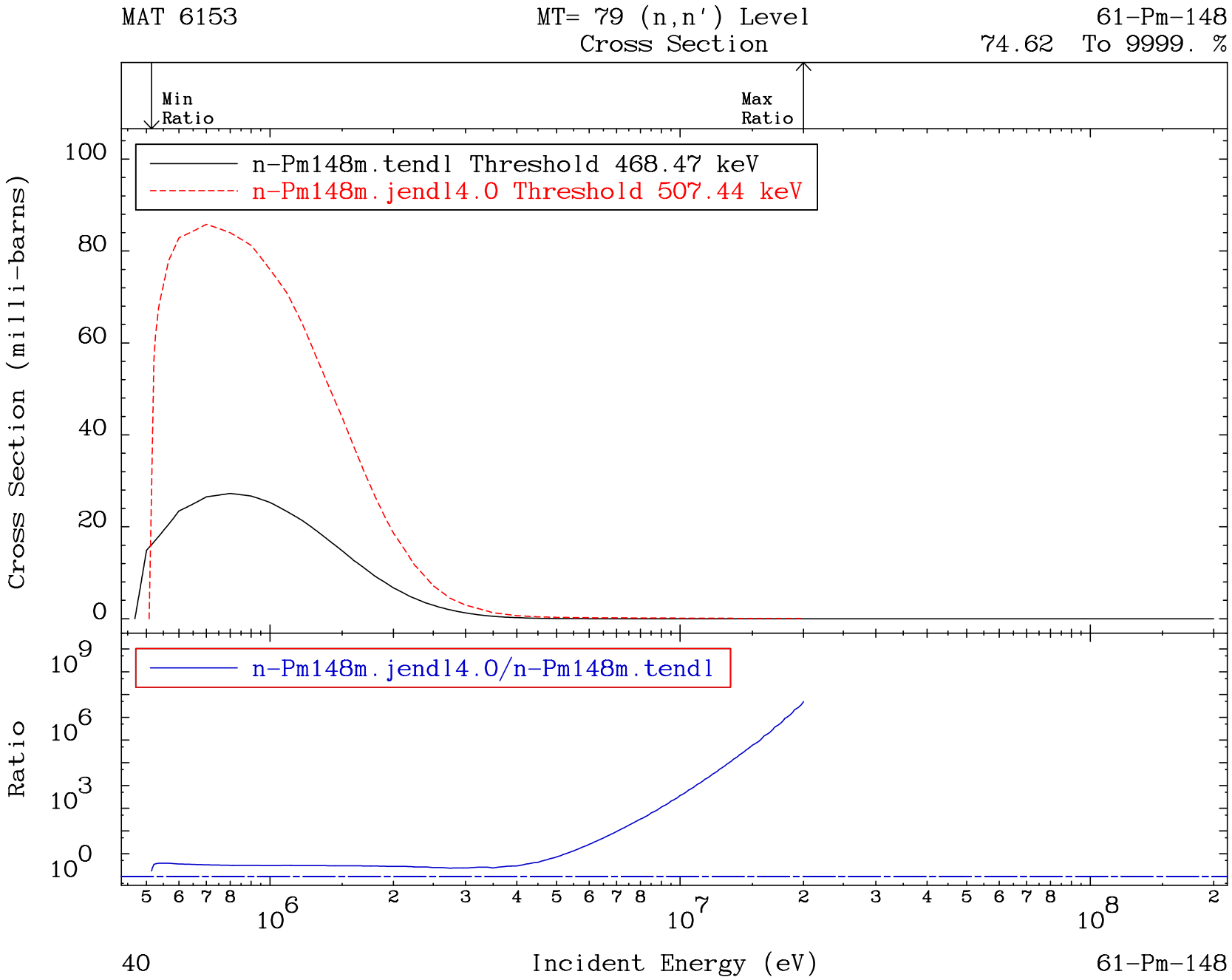

MAT 6153
MT= 74 (n,n') Level
Cross Section
61-Pm-148
-16.28 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 387.32 keV
n-Pm148m.jendl4.0 Threshold 426.29 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
61-Pm-148

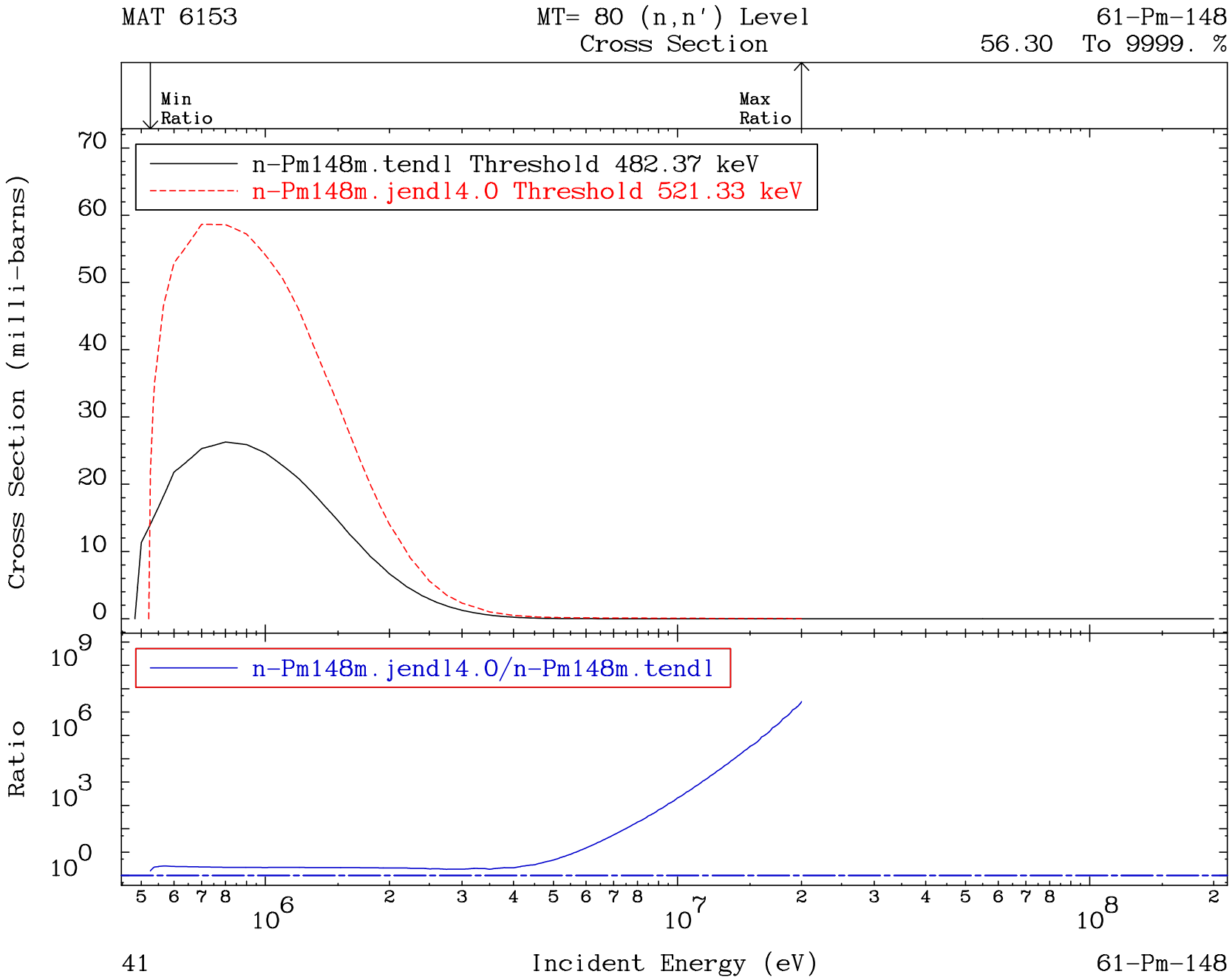

MAT 6153
MT= 75 (n,n') Level
Cross Section
61-Pm-148
-20.65 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 390.24 keV
n-Pm148m.jendl4.0 Threshold 429.21 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
61-Pm-148

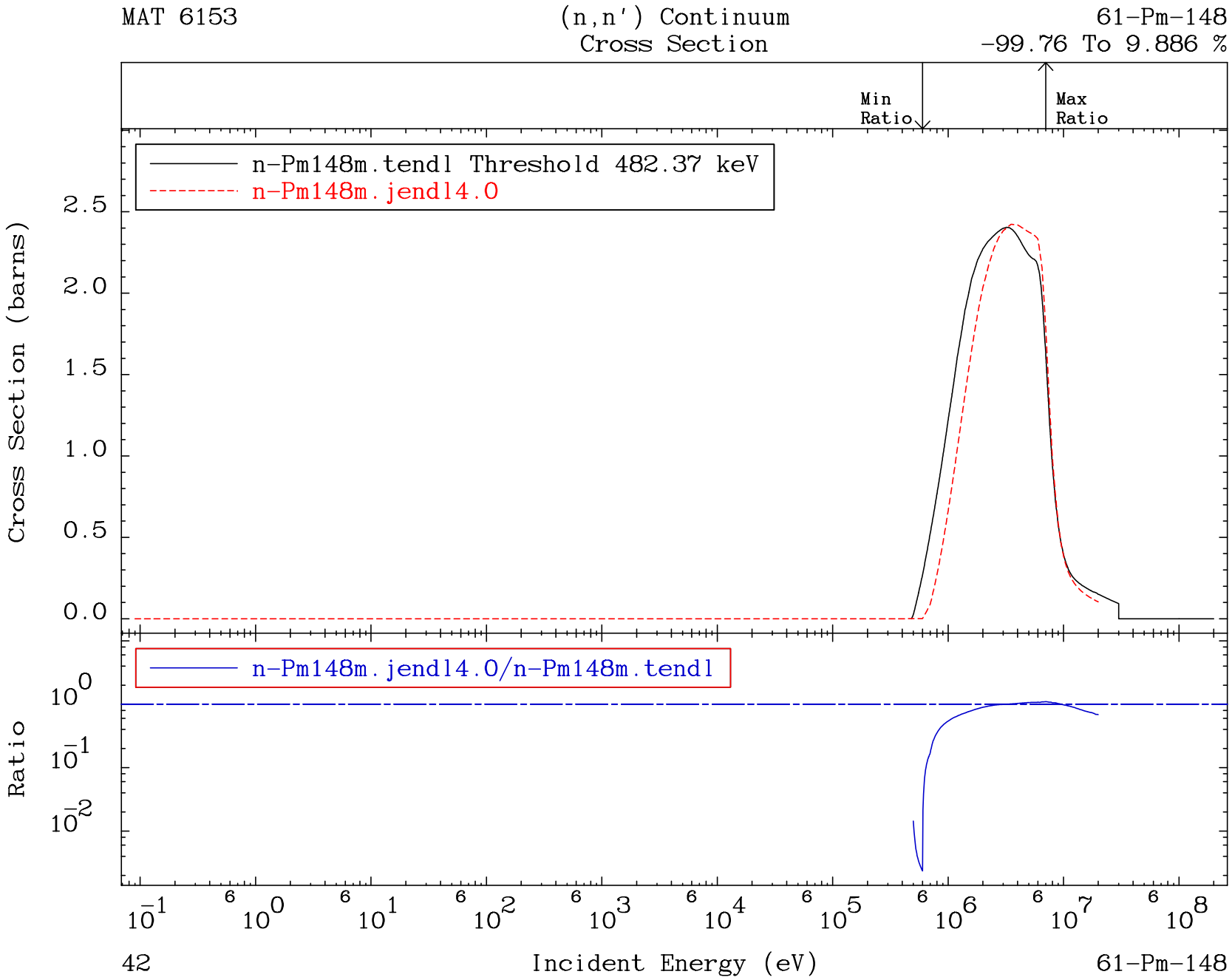

MAT 6153
MT= 76 (n,n') Level
Cross Section
61-Pm-148
-33.22 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 399.20 keV
n-Pm148m.jendl4.0 Threshold 438.17 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
61-Pm-148

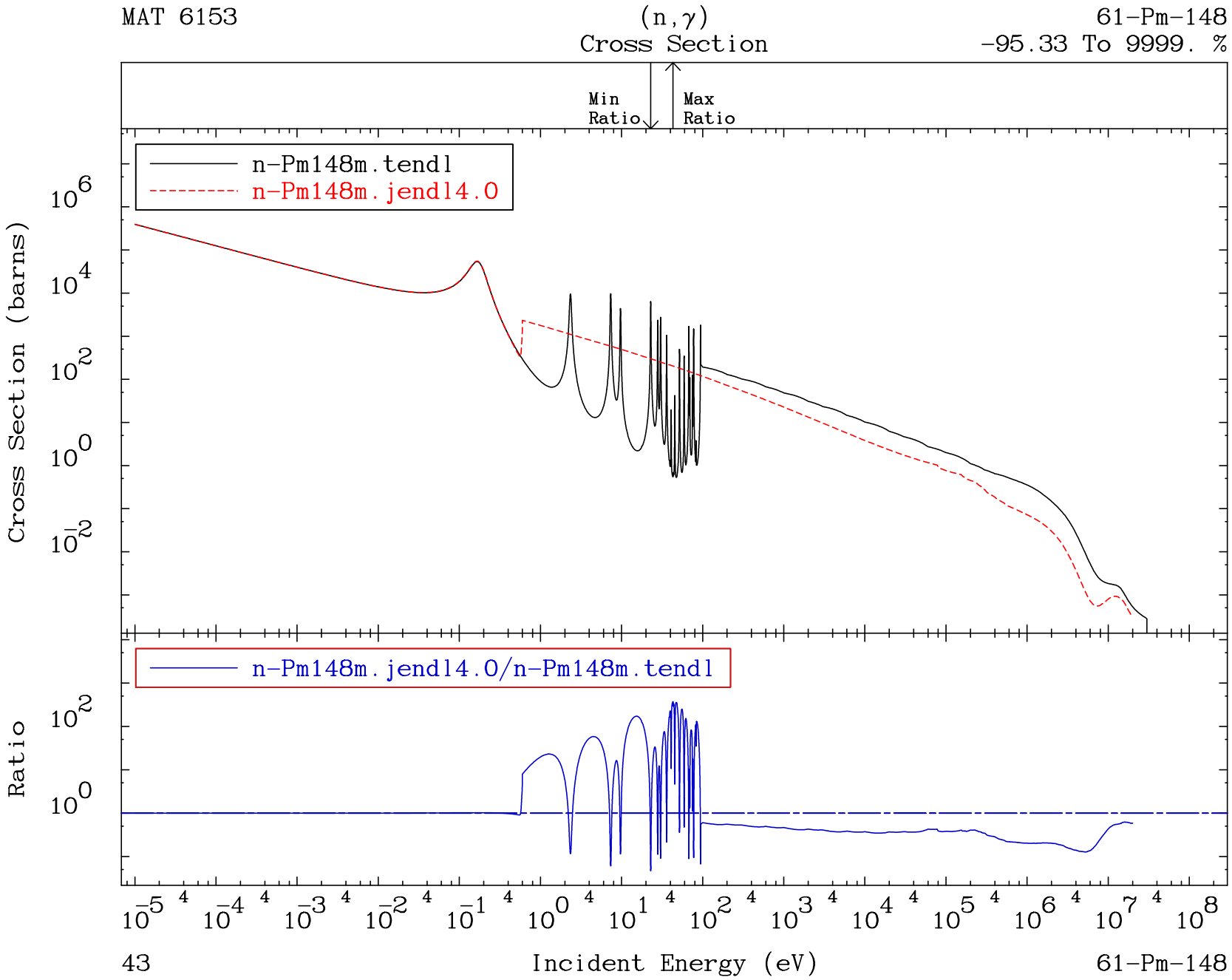

MAT 6153
MT= 77 (n,n') Level
Cross Section
61-Pm-148
-100.0 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 437.56 keV
n-Pm148m.jendl4.0 Threshold 476.53 keV
Cross Section (milli-barns)
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^8
10^4
10^0
10^-4
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
61-Pm-148

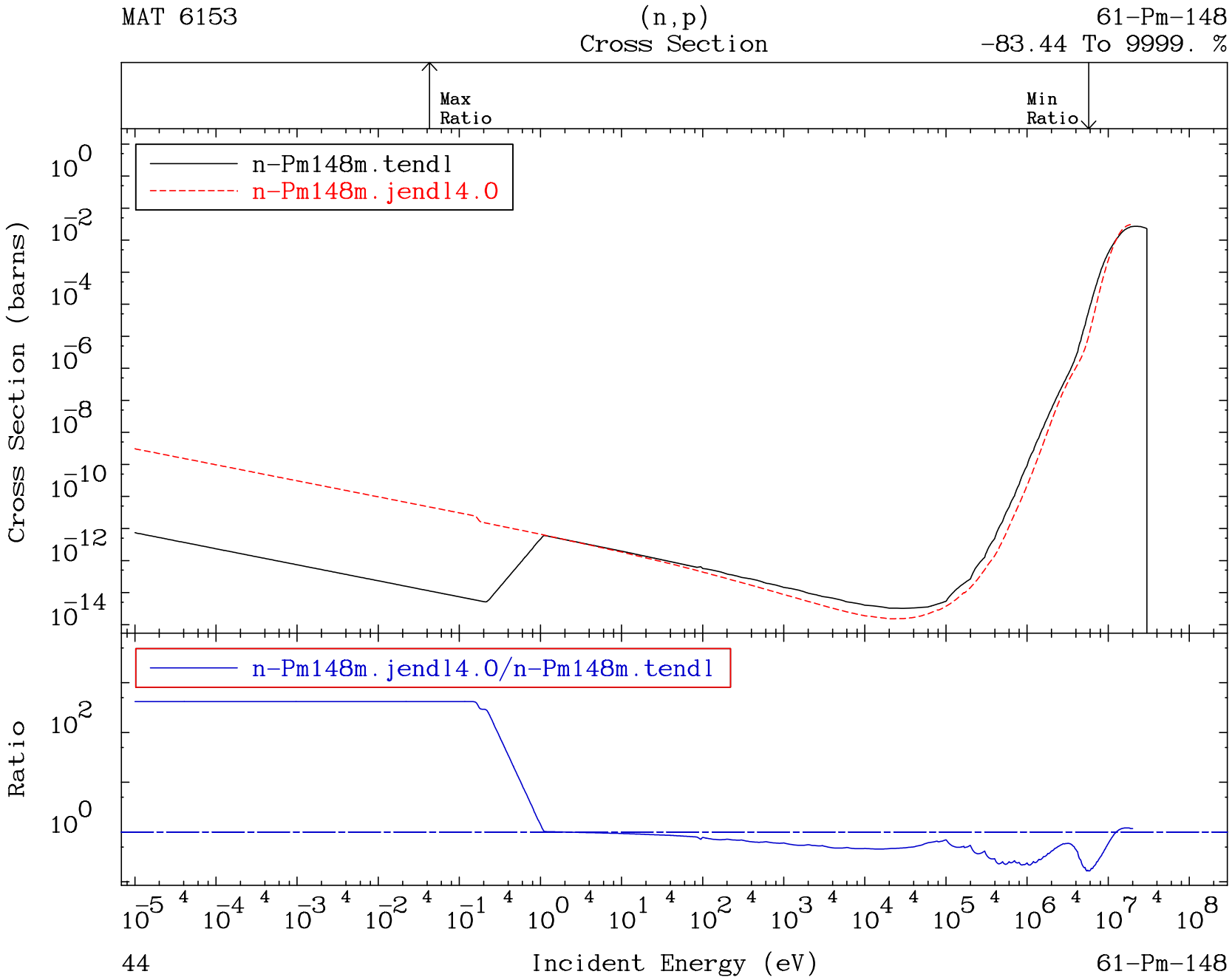

MAT 6153
MT= 78 (n,n') Level
Cross Section
61-Pm-148
-4.005 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148m.tendl Threshold 449.14 keV
n-Pm148m.jendl4.0 Threshold 488.11 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
61-Pm-148

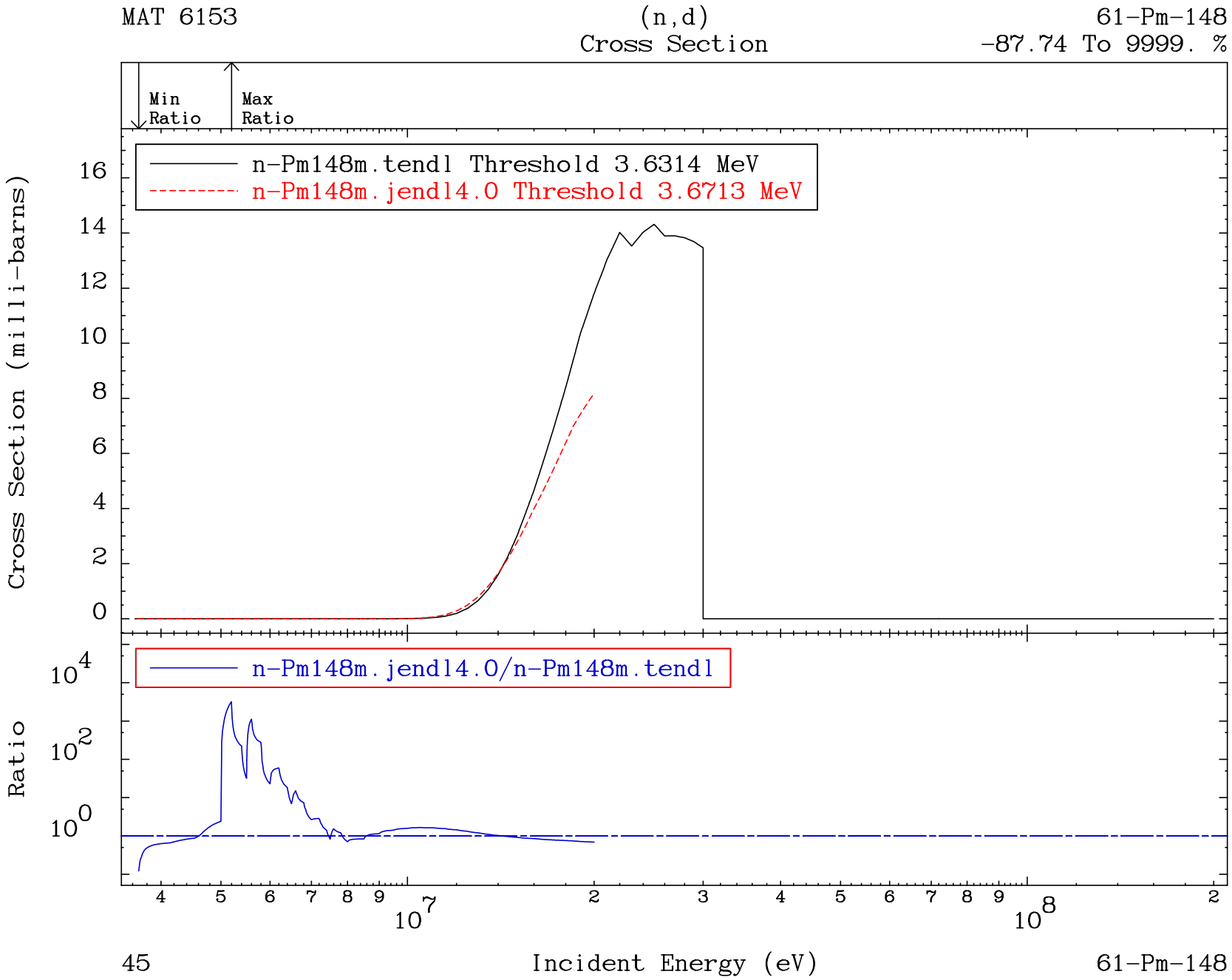

MAT 6153
MT= 79 (n,n') Level
Cross Section
61-Pm-148
74.62 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 468.47 keV
n-Pm148m.jendl4.0 Threshold 507.44 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
61-Pm-148

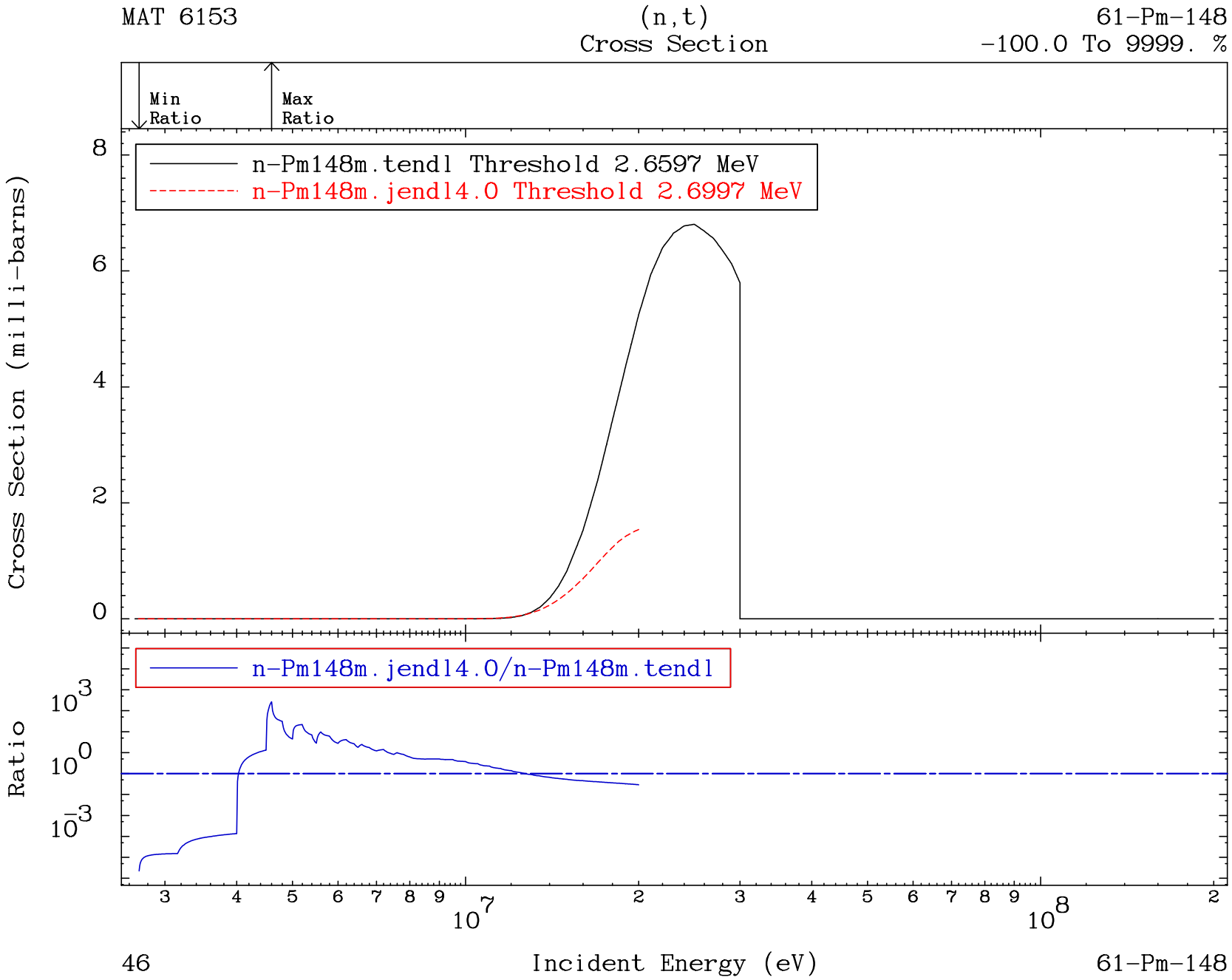

MAT 6153
MT= 80 (n,n') Level
Cross Section
61-Pm-148
56.30 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 482.37 keV
n-Pm148m.jendl4.0 Threshold 521.33 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
41
Incident Energy (eV)
61-Pm-148

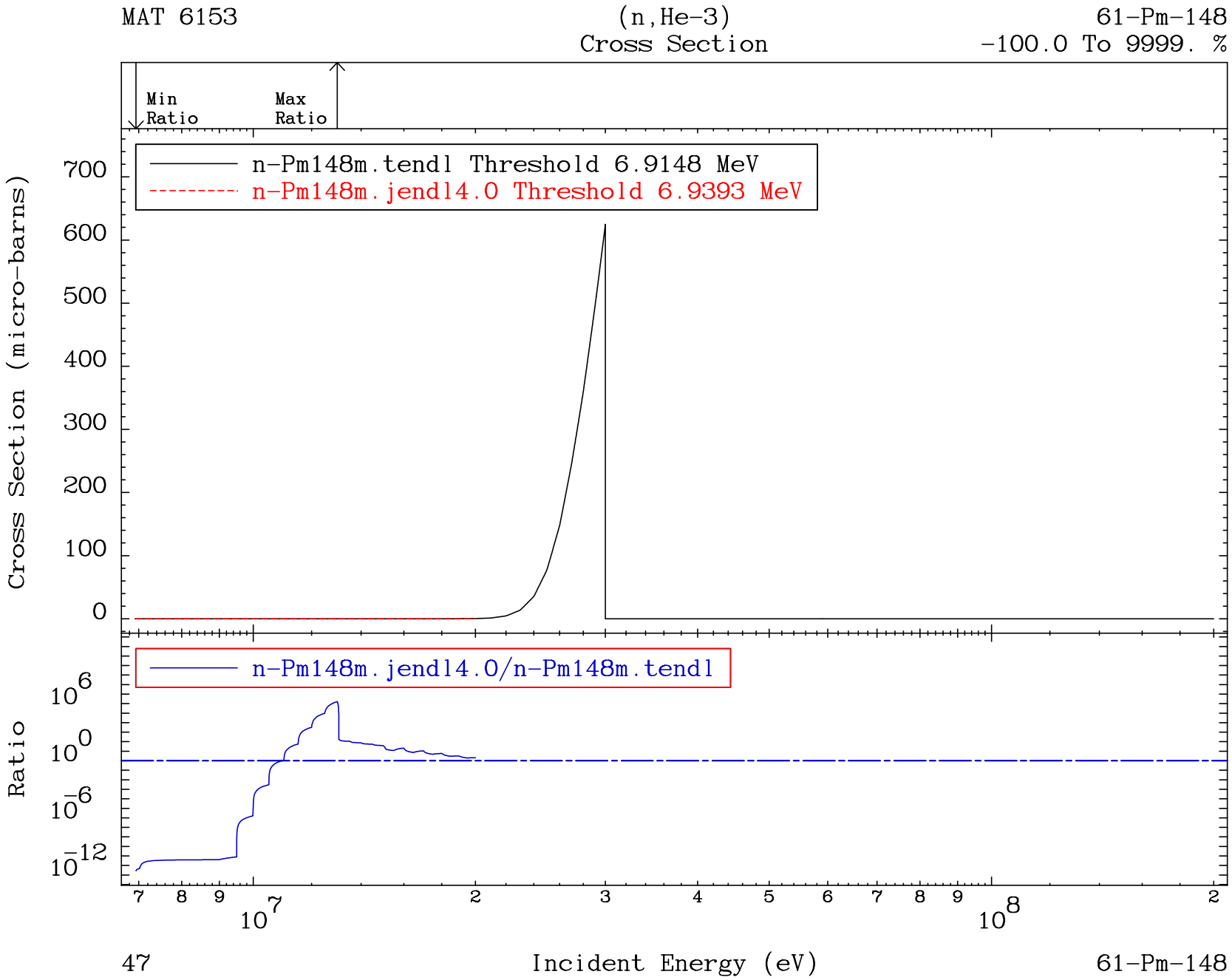

MAT 6153
(n,n') Continuum
Cross Section
61-Pm-148
-99.76 To 9.886 %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 482.37 keV
n-Pm148m.jendl4.0
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^0
10^-1
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
42
Incident Energy (eV)
61-Pm-148

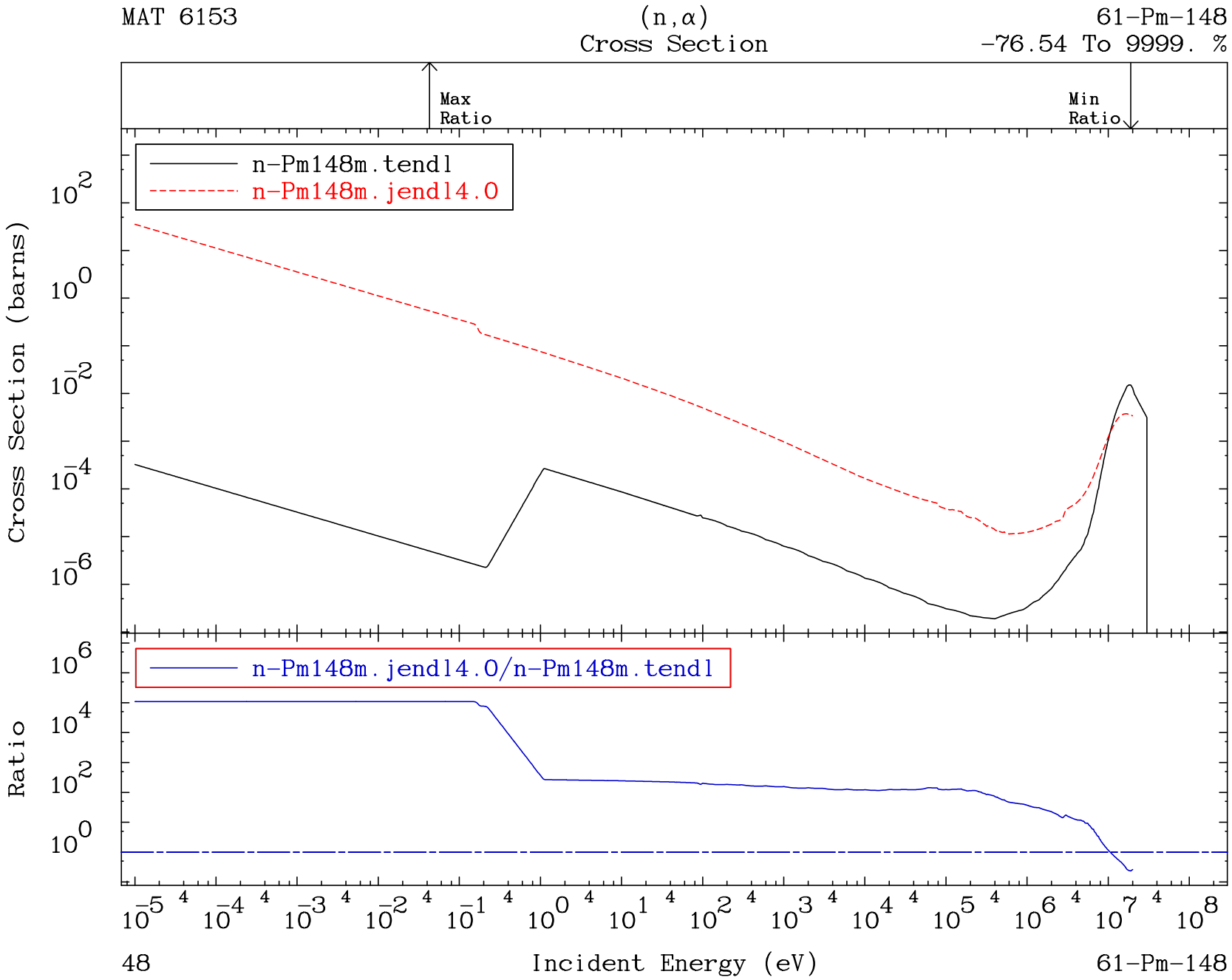

MAT 6153
(n,γ)
Cross Section
61-Pm-148
-95.33 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
43
61-Pm-148

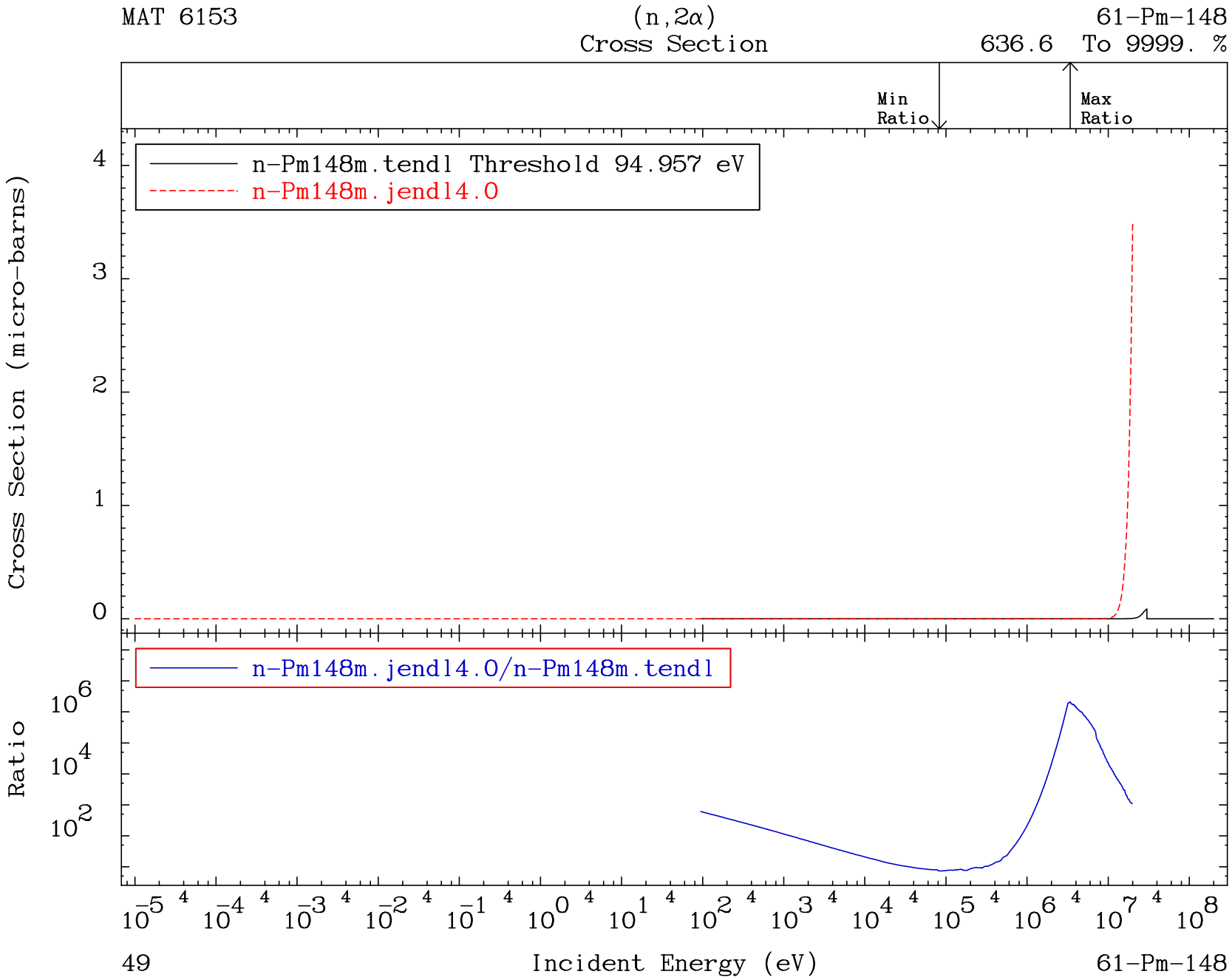

MAT 6153
(n,p)
Cross Section
61-Pm-148
-83.44 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
44
61-Pm-148

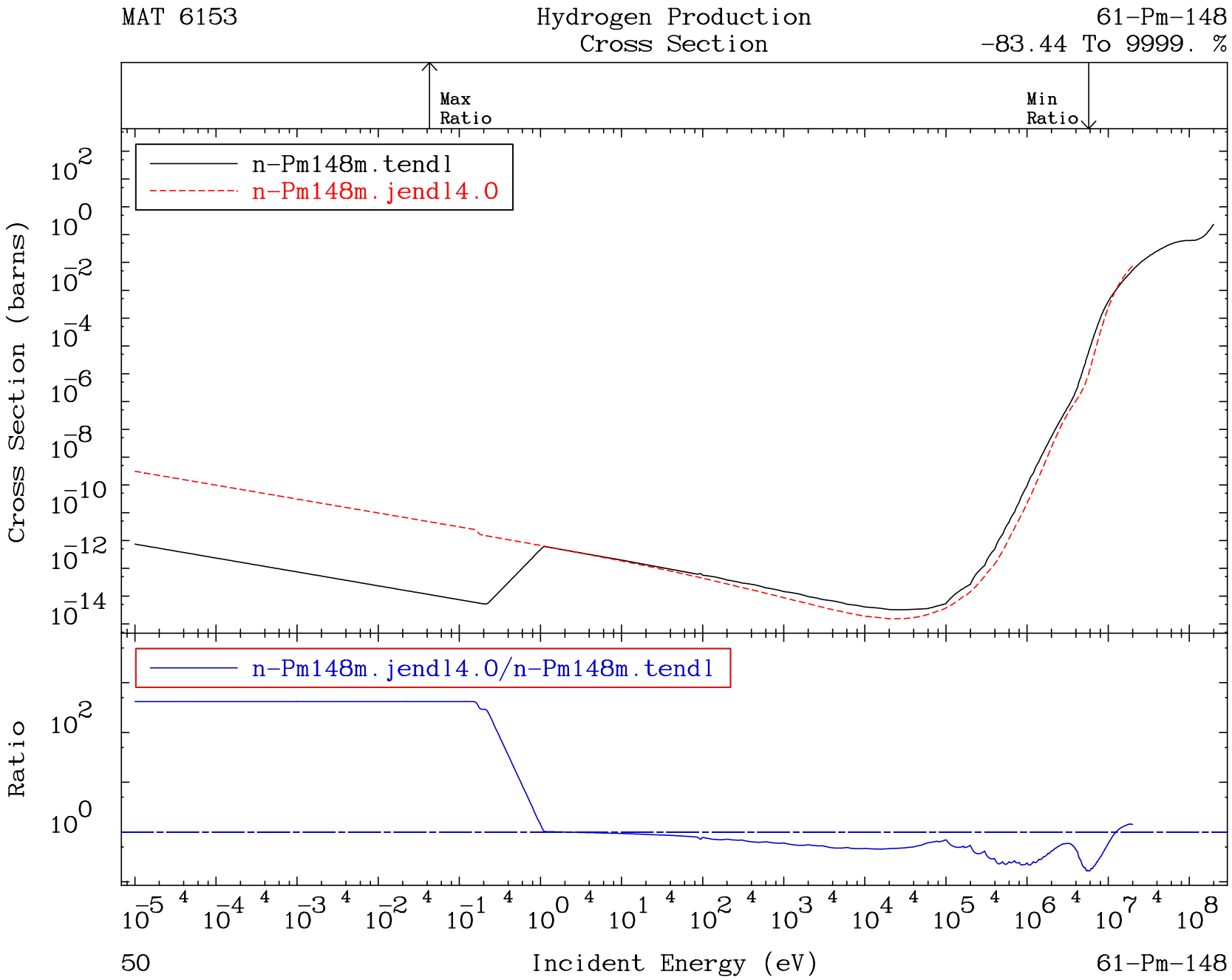

MAT 6153
(n,d)
Cross Section
61-Pm-148
-87.74 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 3.6314 MeV
n-Pm148m.jendl4.0 Threshold 3.6713 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
61-Pm-148

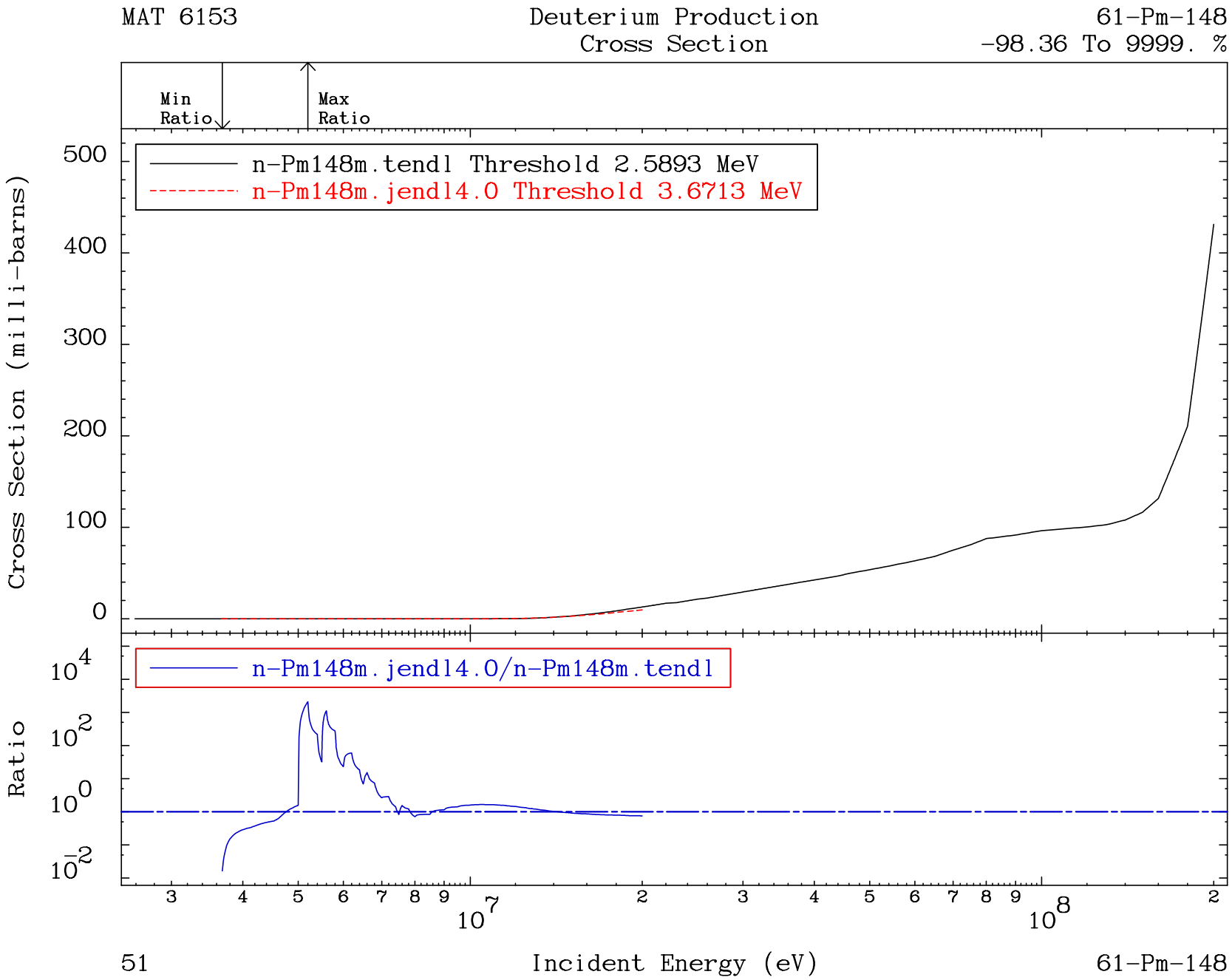

MAT 6153
(n,t)
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 2.6597 MeV
n-Pm148m.jendl4.0 Threshold 2.6997 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^3
10^0
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
61-Pm-148

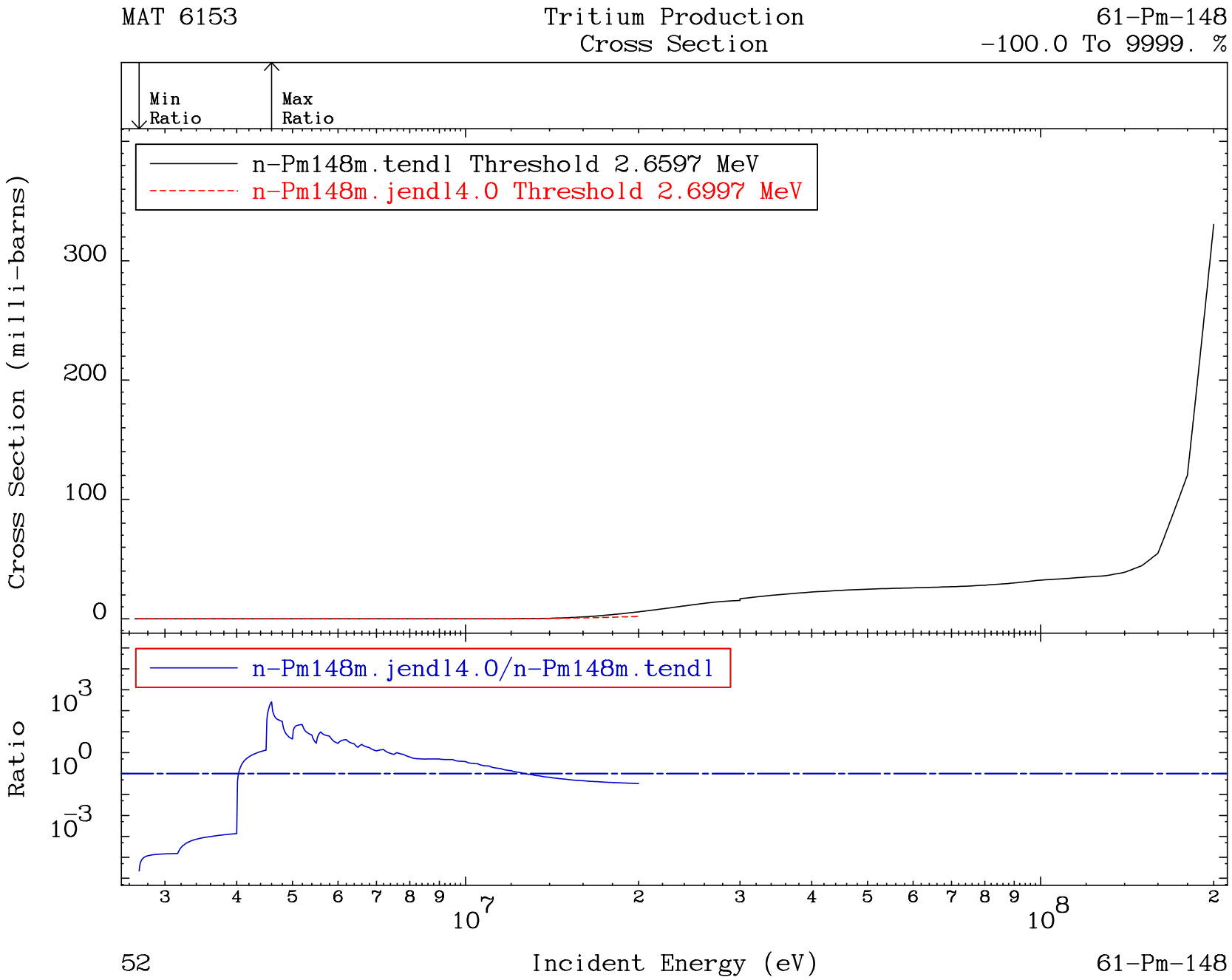

MAT 6153
(n,He-3)
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 6.9148 MeV
n-Pm148m.jendl4.0 Threshold 6.9393 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^6
10^0
10^-6
10^-12
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
61-Pm-148

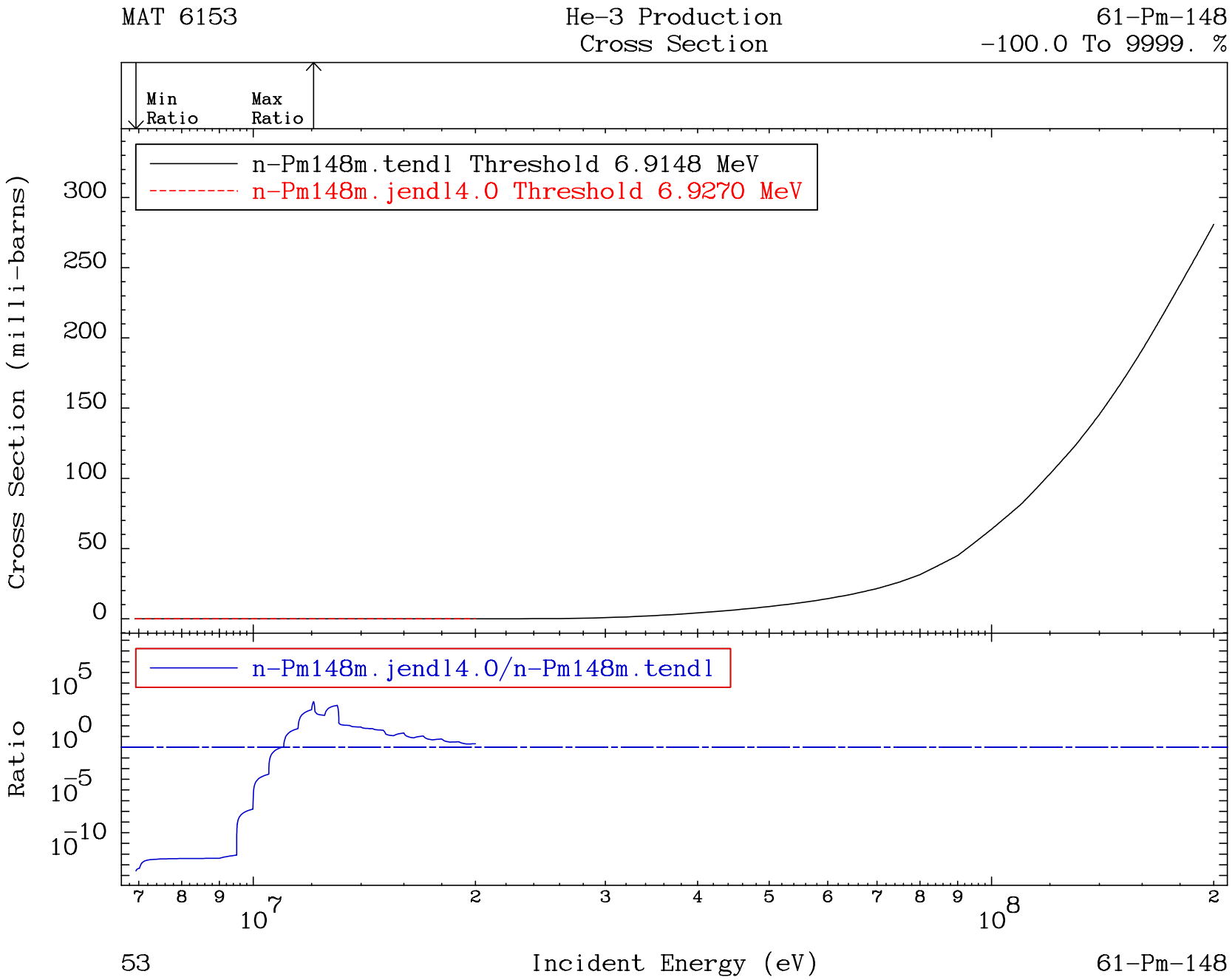

MAT 6153
(n,α)
Cross Section
61-Pm-148
-76.54 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
48
61-Pm-148

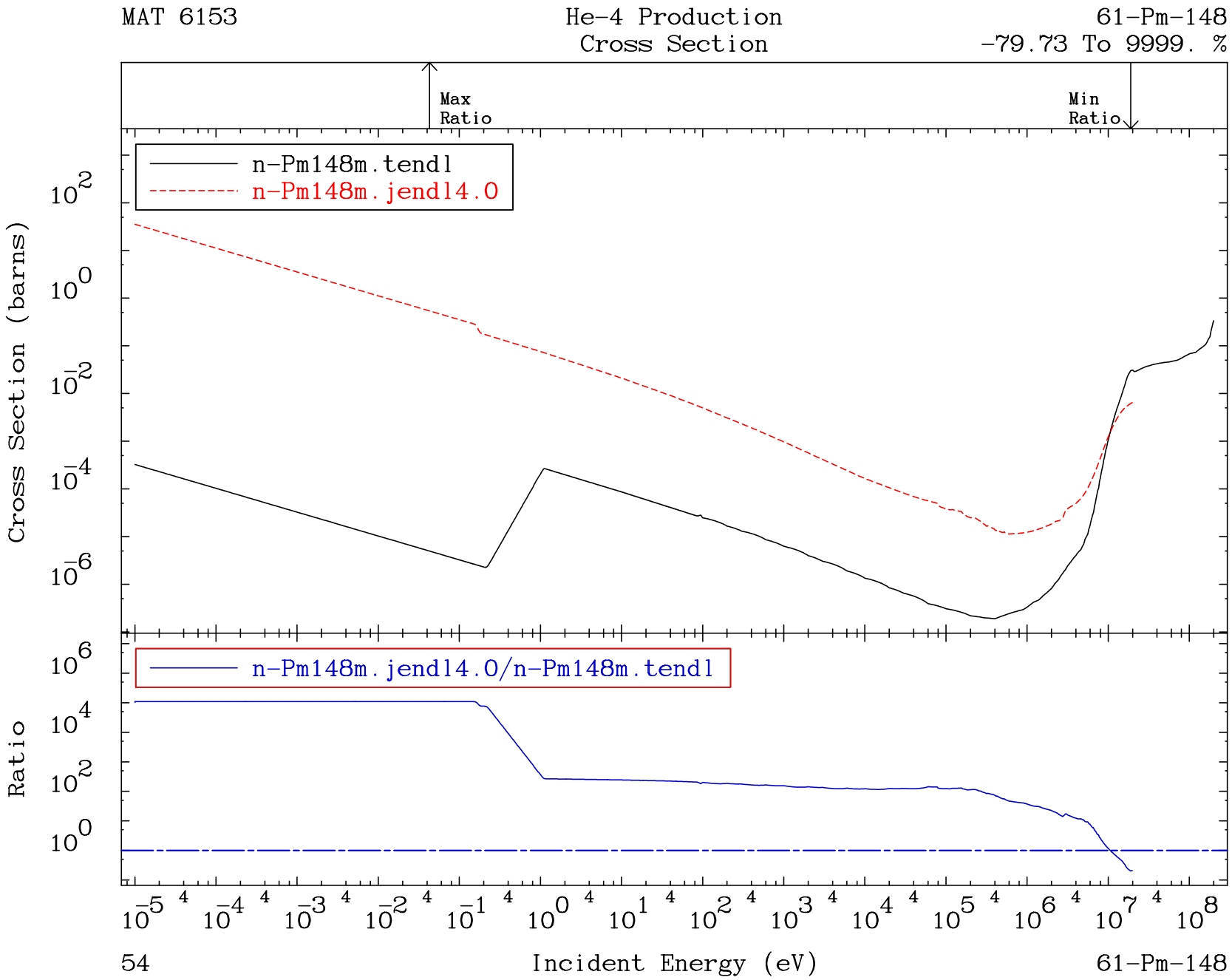

MAT 6153
(n,2α)
Cross Section
61-Pm-148
636.6 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 94.957 eV
n-Pm148m.jendl4.0
Cross Section (micro-barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
49
61-Pm-148

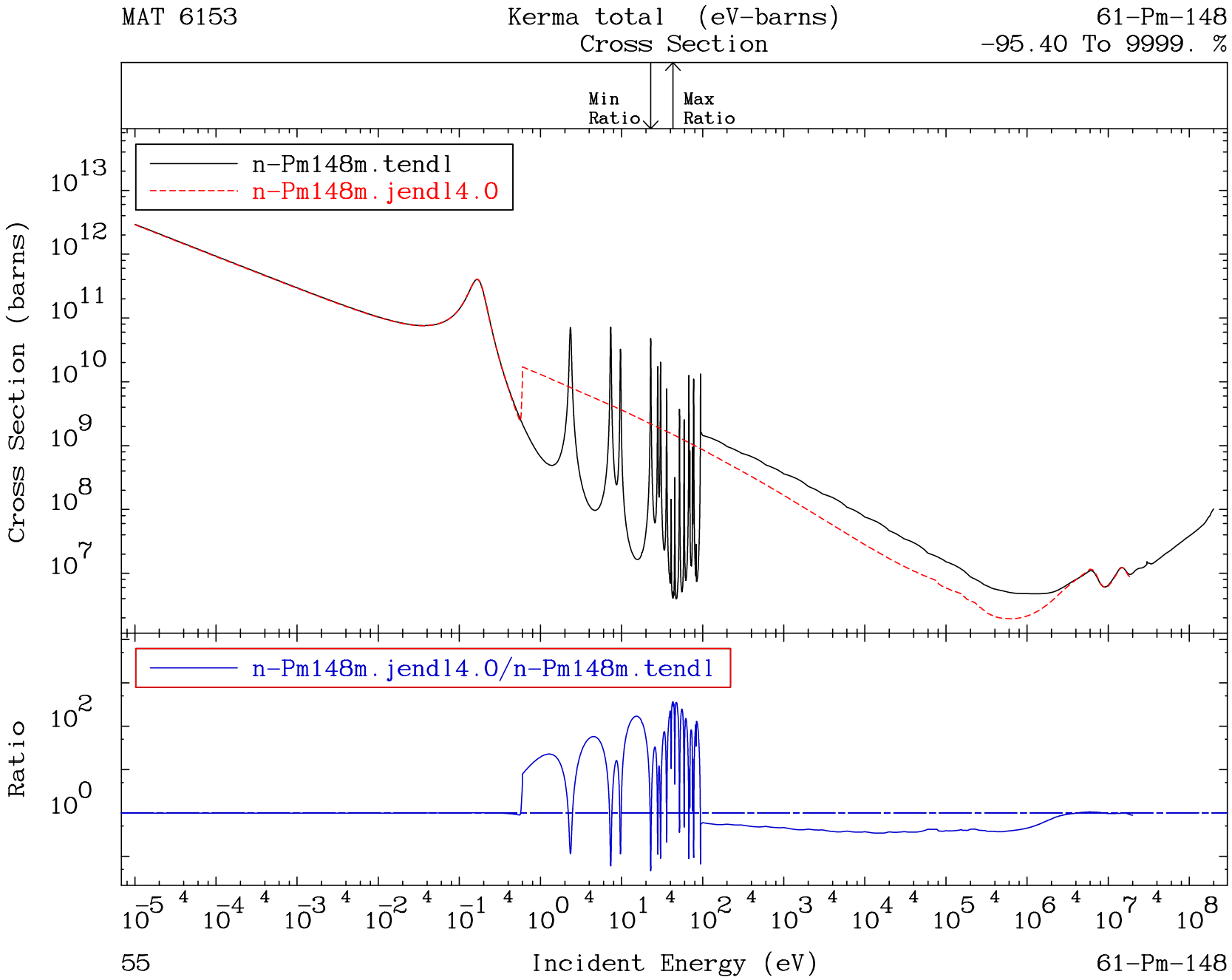

MAT 6153
Hydrogen Production
Cross Section
61-Pm-148
-83.44 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
50
61-Pm-148

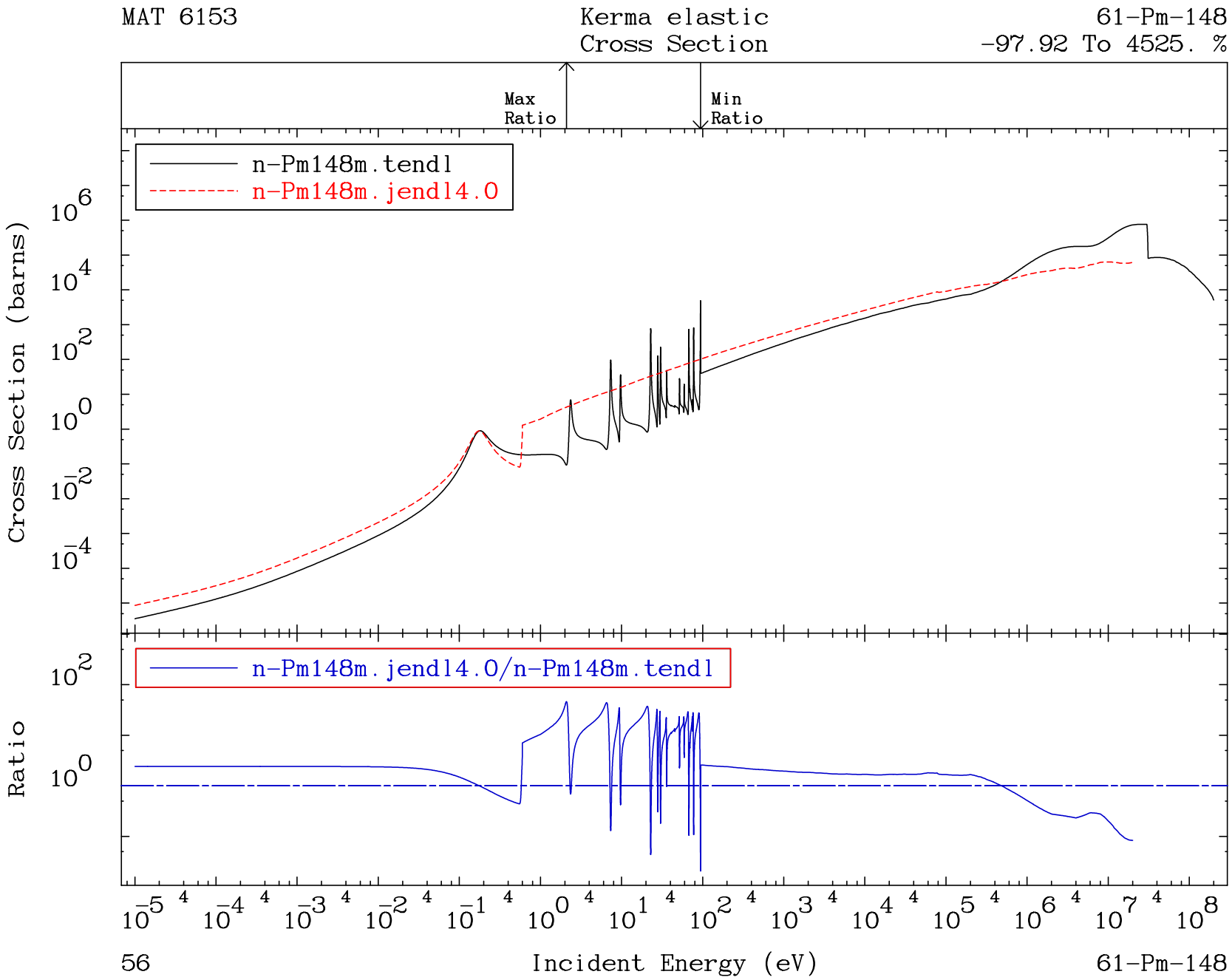

MAT 6153
Deuterium Production
Cross Section
61-Pm-148
-98.36 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 2.5893 MeV
n-Pm148m.jendl4.0 Threshold 3.6713 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^4
10^2
10^0
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
61-Pm-148

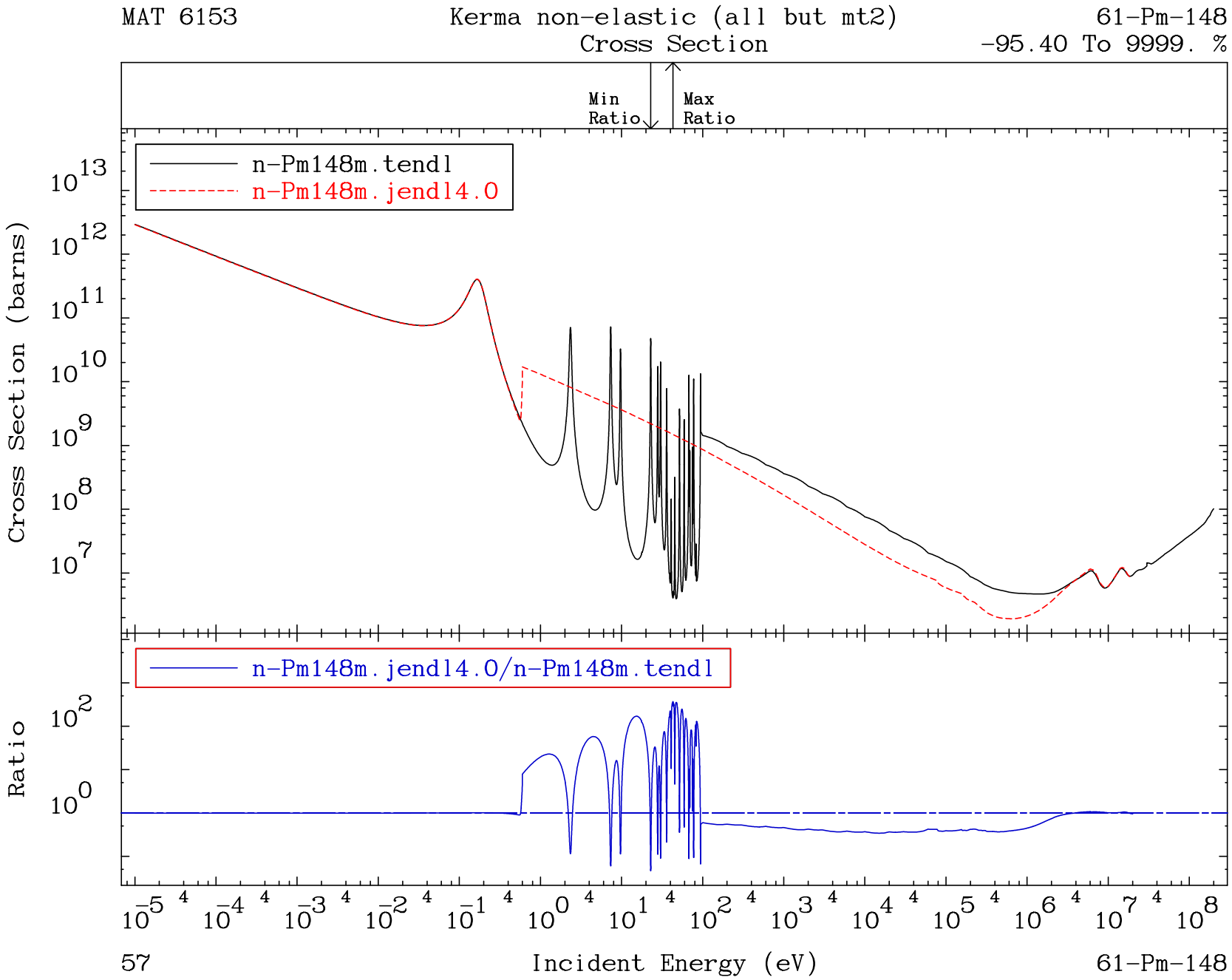

MAT 6153
Tritium Production
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 2.6597 MeV
n-Pm148m.jendl4.0 Threshold 2.6997 MeV
Cross Section (milli-barns)
300
200
100
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^3
10^0
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
61-Pm-148

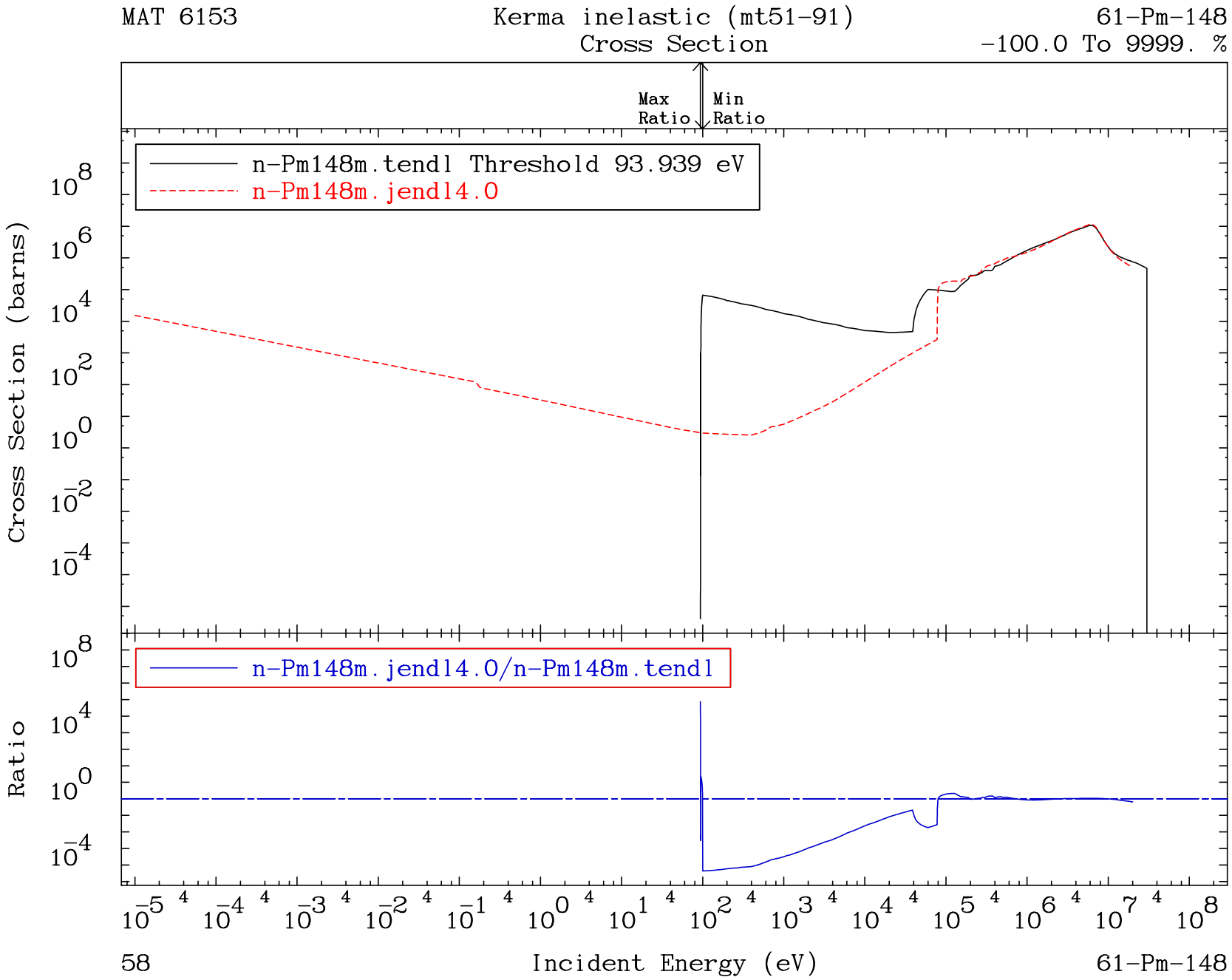

MAT 6153
He-3 Production
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl Threshold 6.9148 MeV
n-Pm148m.jendl4.0 Threshold 6.9270 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^5
10^0
10^-5
10^-10
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
61-Pm-148

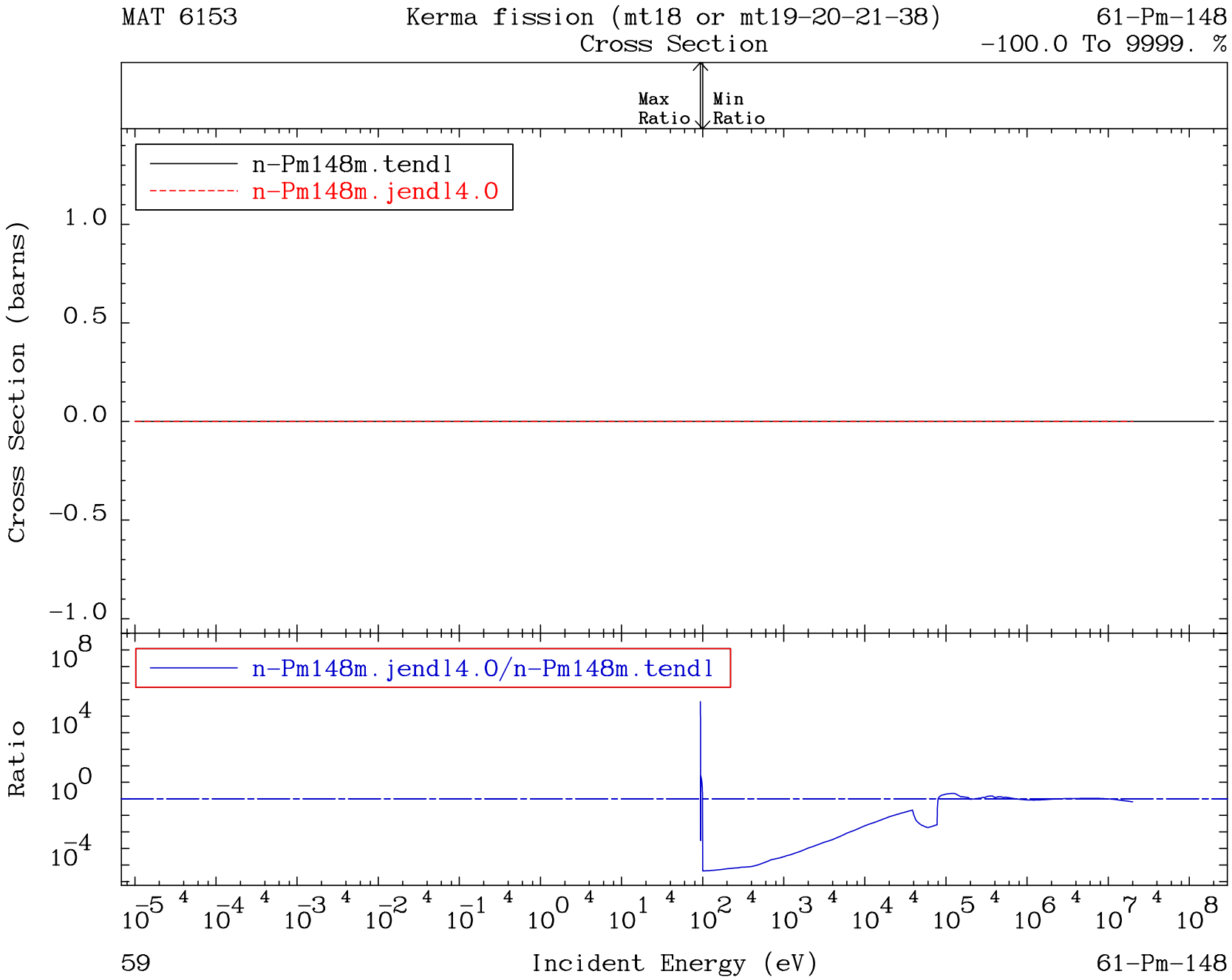

MAT 6153
He-4 Production
Cross Section
61-Pm-148
-79.73 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
54
61-Pm-148

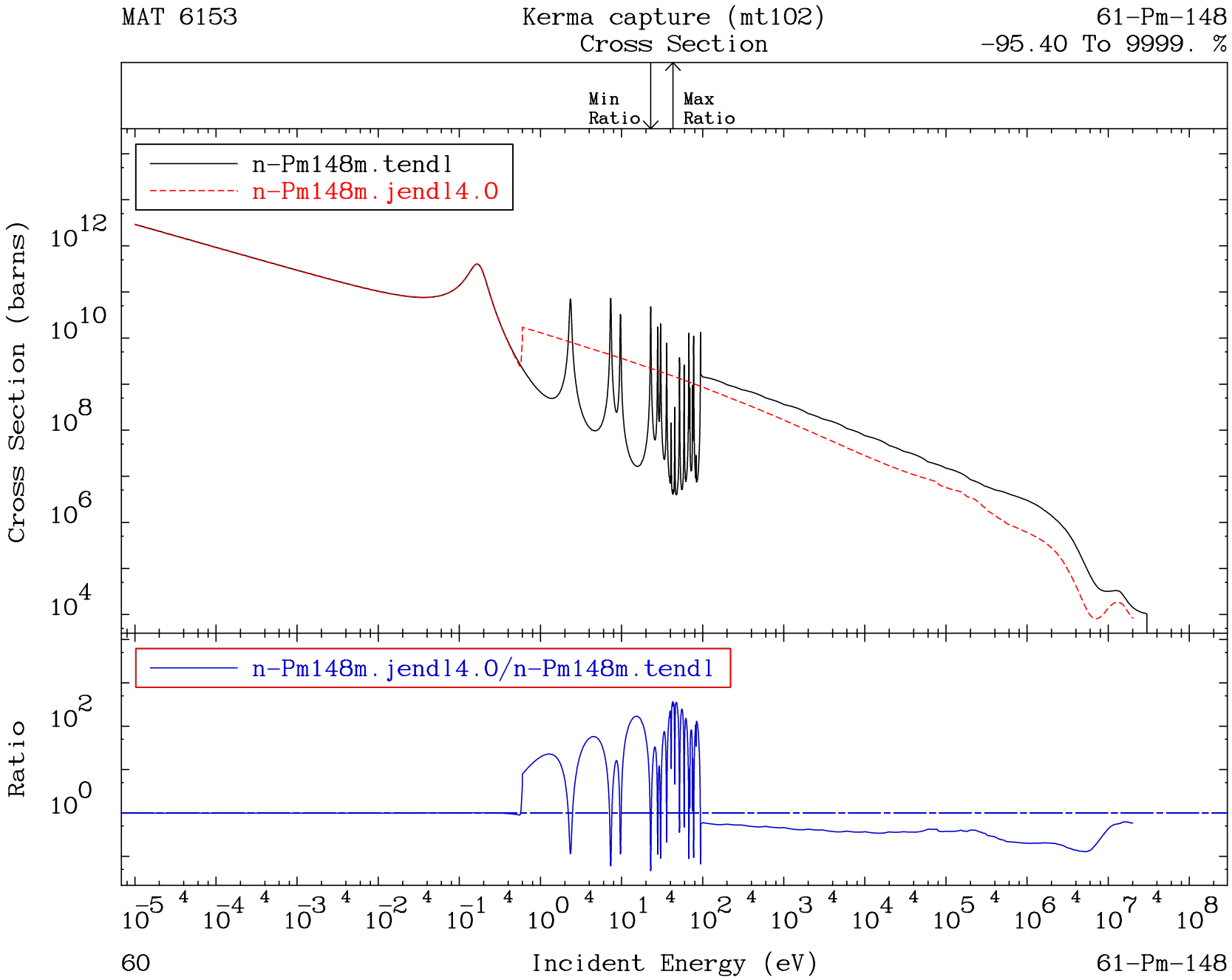

MAT 6153
Kerma total (eV-barns)
Cross Section
61-Pm-148
-95.40 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
55
61-Pm-148

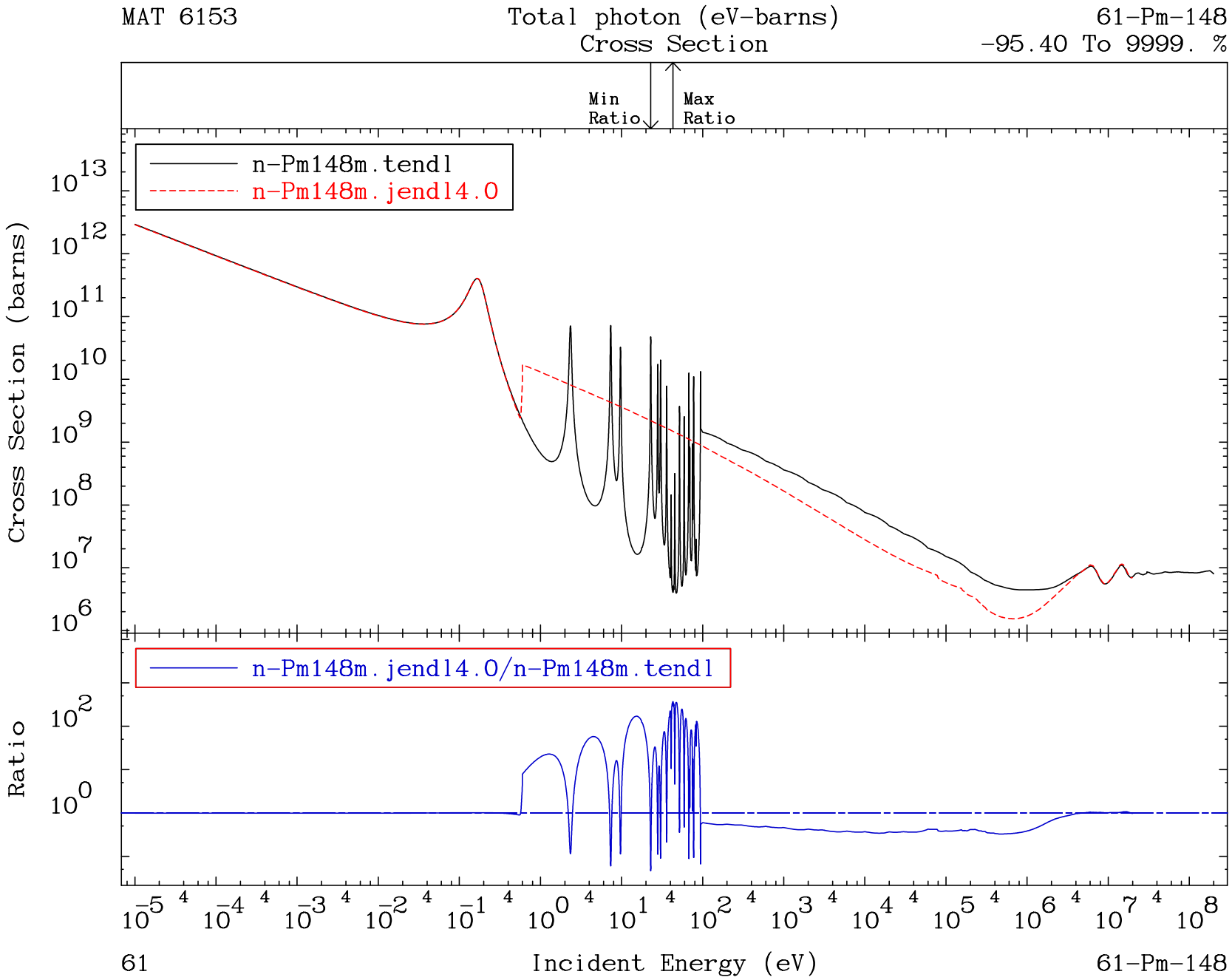

MAT 6153
Kerma elastic
Cross Section
61-Pm-148
-97.92 To 4525. %
Max
Ratio
Min
Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
Ratio
n-Pm148m.jendl4.0/n-Pm148m.tendl
Incident Energy (eV)
56
61-Pm-148

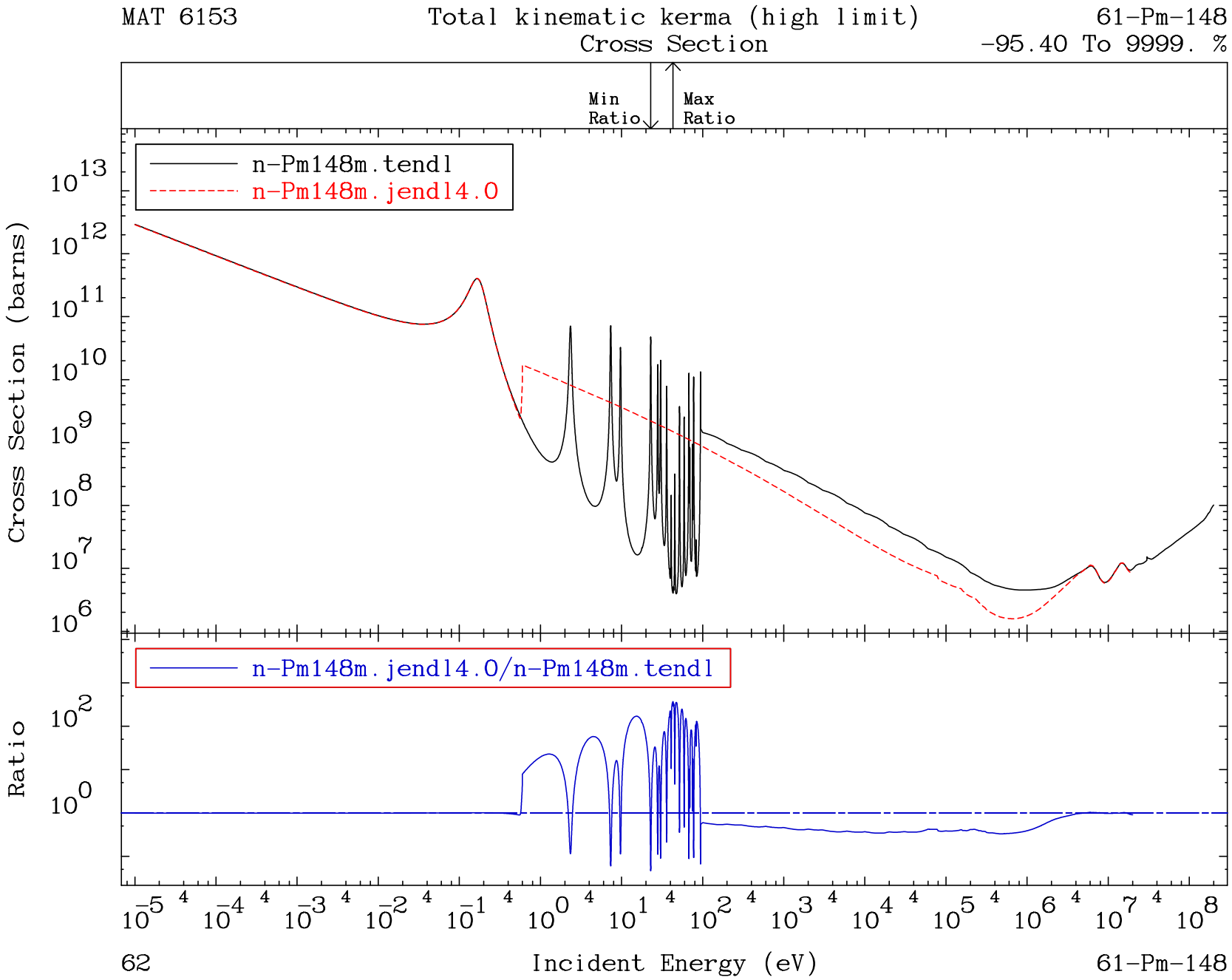

MAT 6153
Kerma non-elastic (all but mt2)
Cross Section
61-Pm-148
-95.40 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
57
61-Pm-148

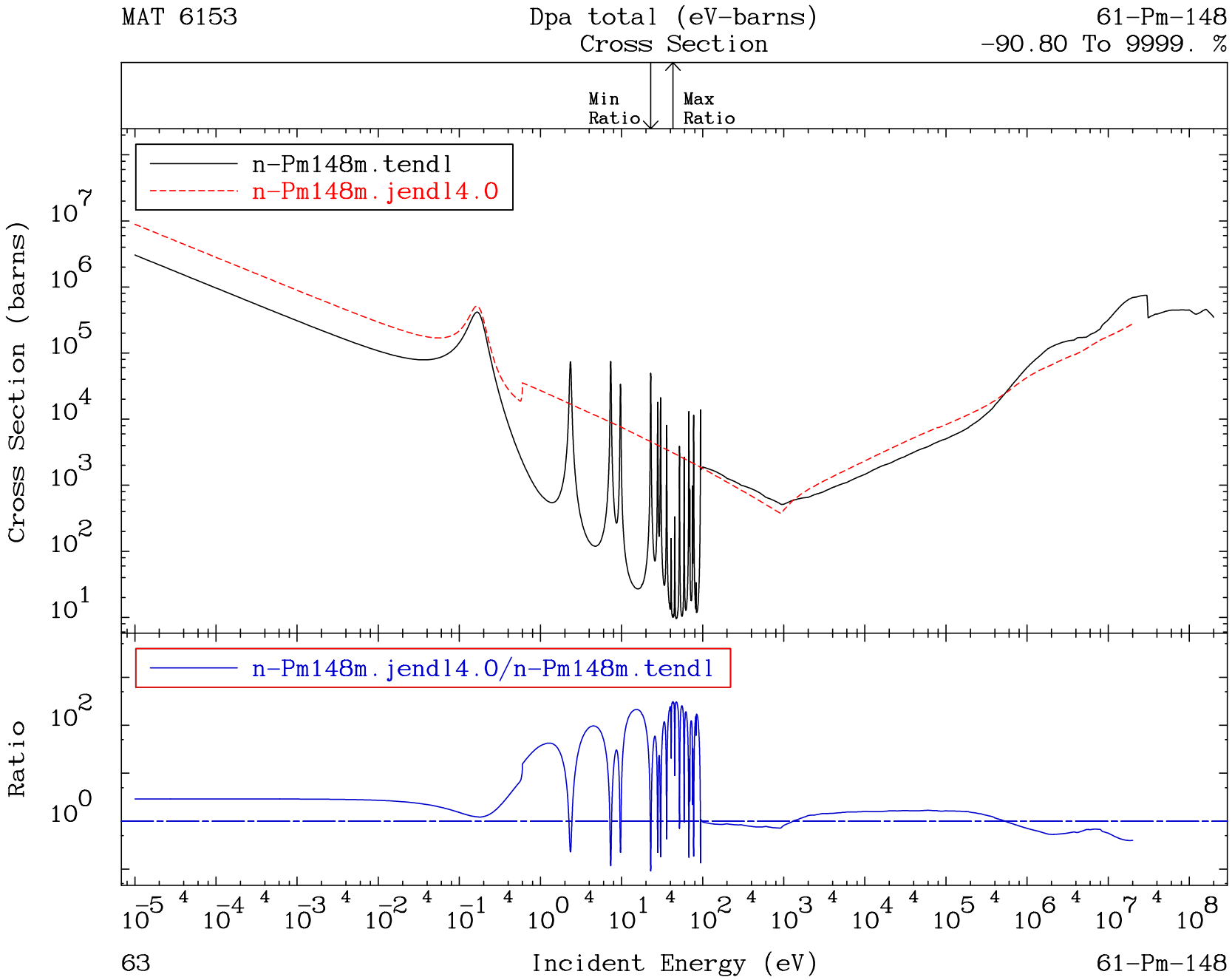

MAT 6153
Kerma inelastic (mt51-91)
Cross Section
61-Pm-148
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl Threshold 93.939 eV
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
58
61-Pm-148

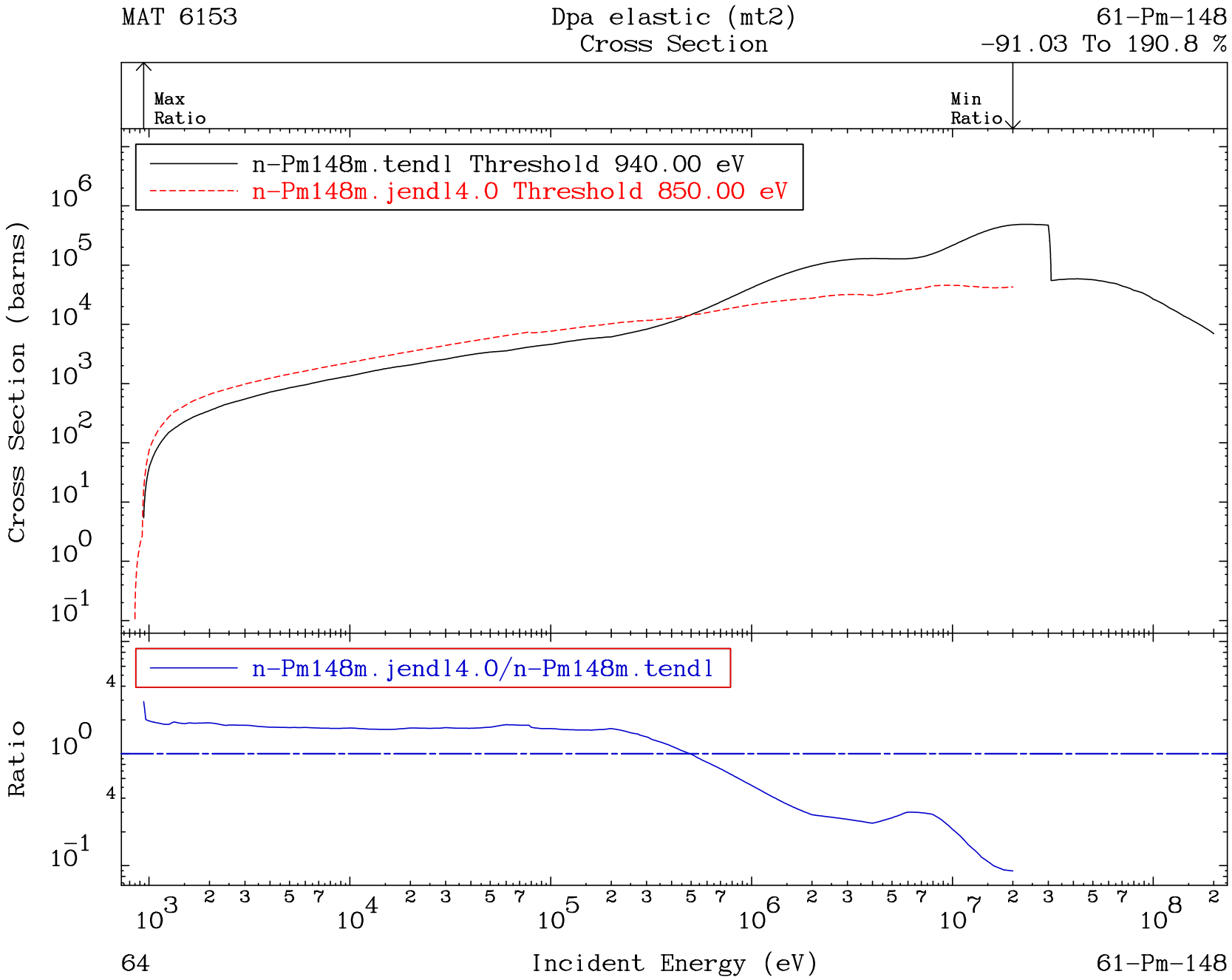

MAT 6153
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
61-Pm-148
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
10^8
10^4
10^0
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
59
Incident Energy (eV)
61-Pm-148

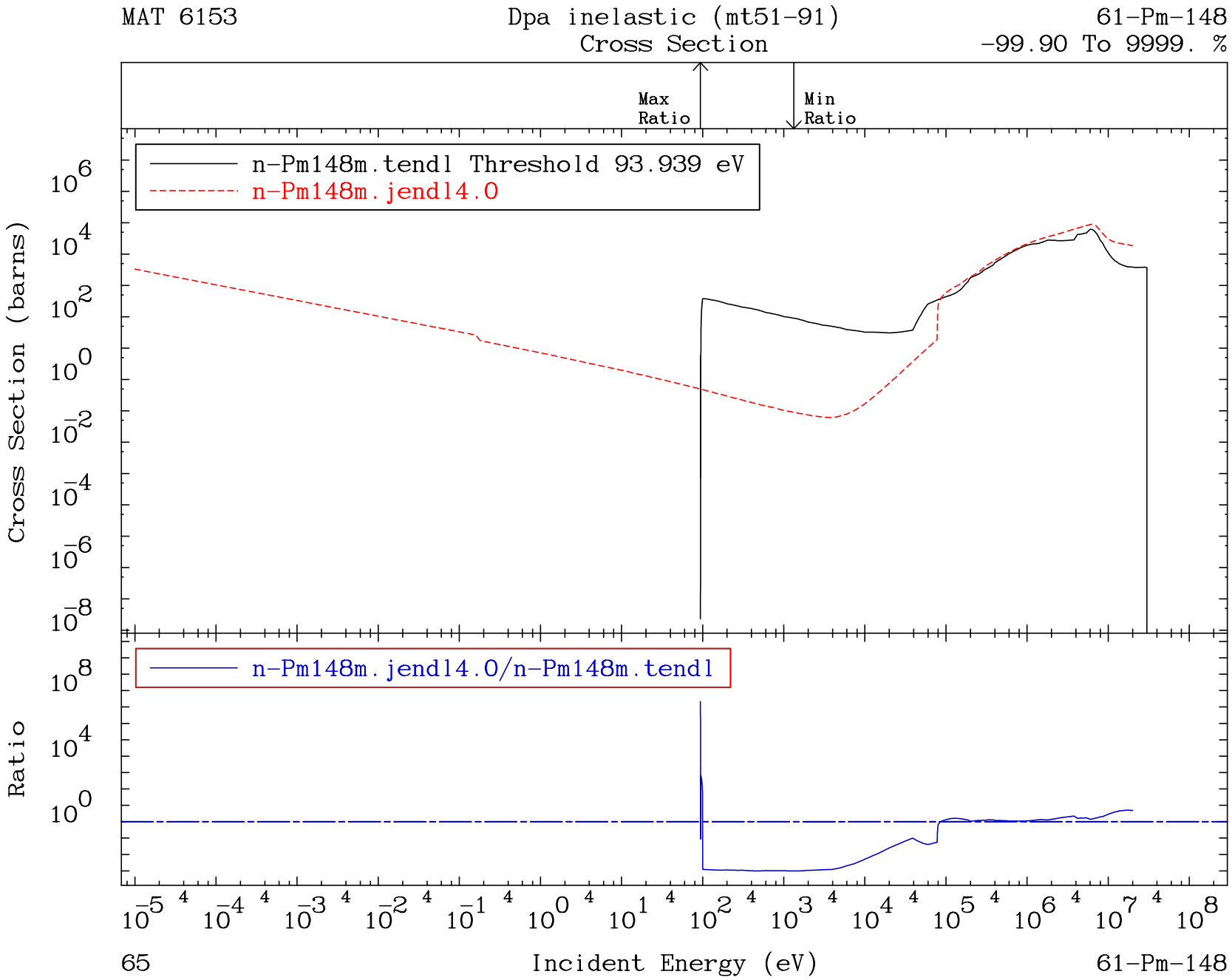

MAT 6153
Kerma capture (mt102)
Cross Section
61-Pm-148
-95.40 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
Ratio
n-Pm148m.jendl4.0/n-Pm148m.tendl
Incident Energy (eV)
60
61-Pm-148

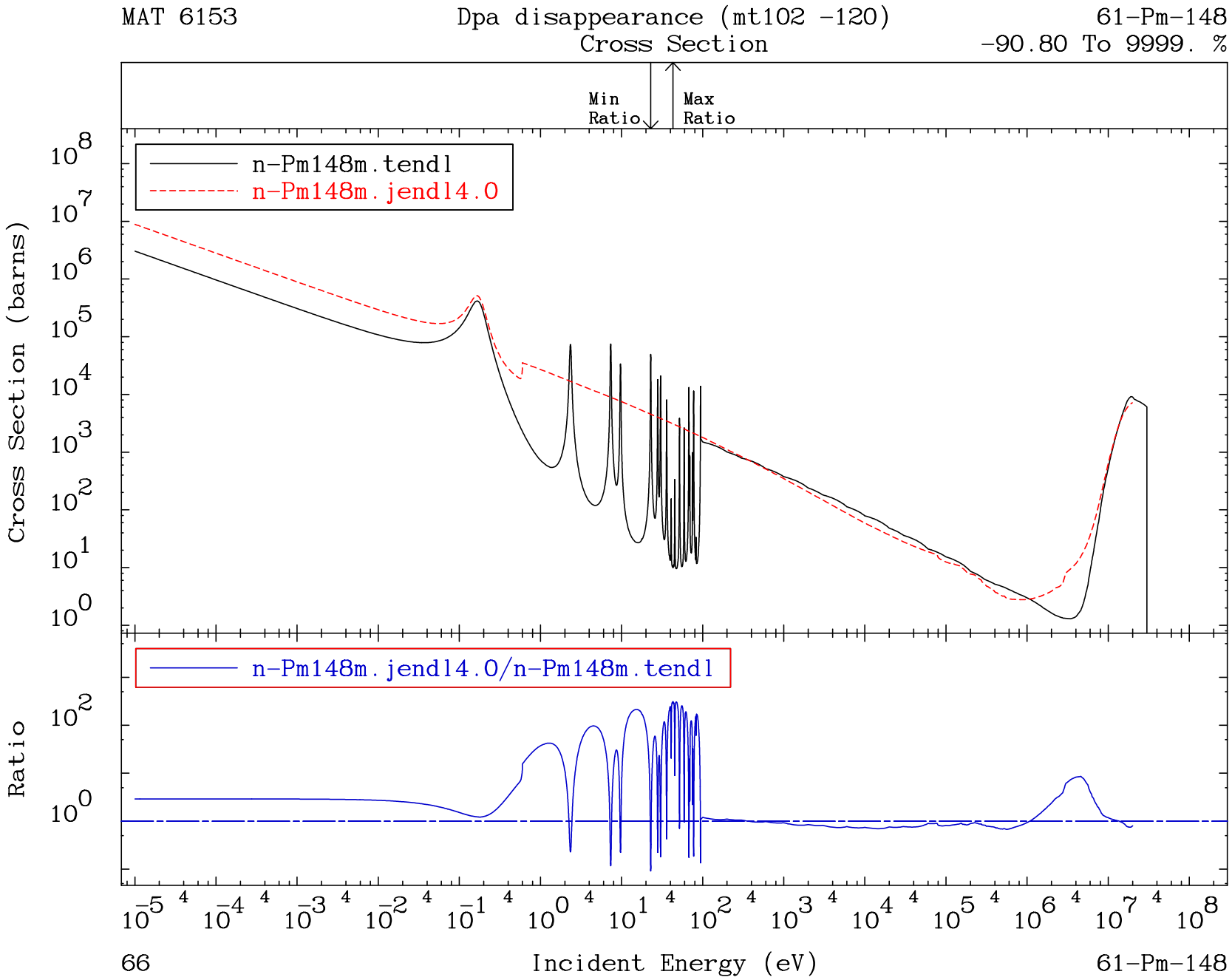

MAT 6153
Total photon (eV-barns)
Cross Section
61-Pm-148
-95.40 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
61
61-Pm-148


MAT 6153
Total kinematic kerma (high limit)
Cross Section
61-Pm-148
-95.40 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
62
61-Pm-148


MAT 6153
Dpa total (eV-barns)
Cross Section
61-Pm-148
-90.80 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
63
Incident Energy (eV)
61-Pm-148


MAT 6153
Dpa elastic (mt2)
Cross Section
61-Pm-148
-91.03 To 190.8 %
Max Ratio
Min Ratio
n-Pm148m.tendl Threshold 940.00 eV
n-Pm148m.jendl4.0 Threshold 850.00 eV
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
64
61-Pm-148


MAT 6153
Dpa inelastic (mt51-91)
Cross Section
61-Pm-148
-99.90 To 9999. %
Max Ratio
Min Ratio
n-Pm148m.tendl Threshold 93.939 eV
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
Incident Energy (eV)
65
61-Pm-148


MAT 6153
Dpa disappearance (mt102 -120)
Cross Section
61-Pm-148
-90.80 To 9999. %
Min Ratio
Max Ratio
n-Pm148m.tendl
n-Pm148m.jendl4.0
Cross Section (barns)
n-Pm148m.jendl4.0/n-Pm148m.tendl
Ratio
66
Incident Energy (eV)
61-Pm-148