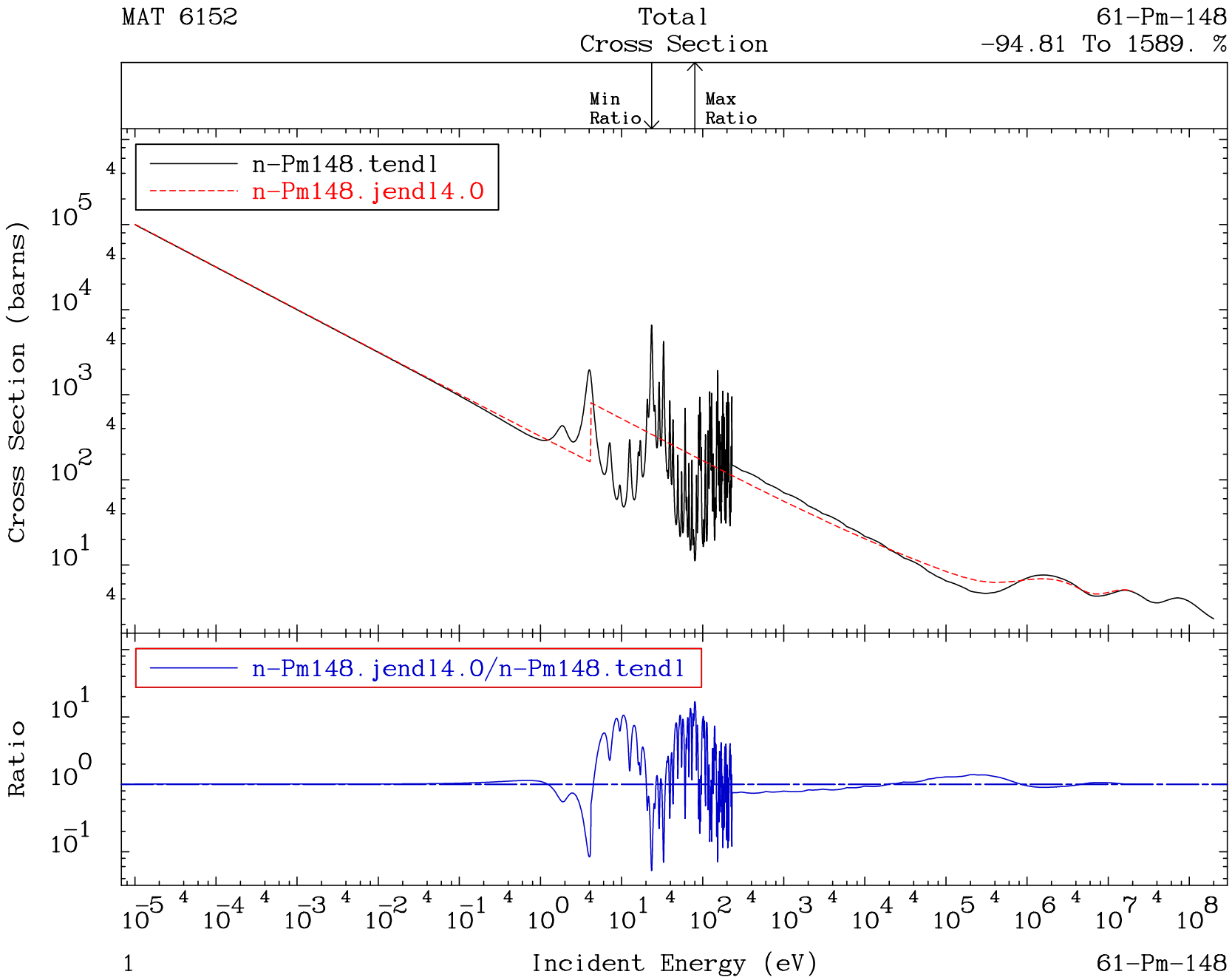
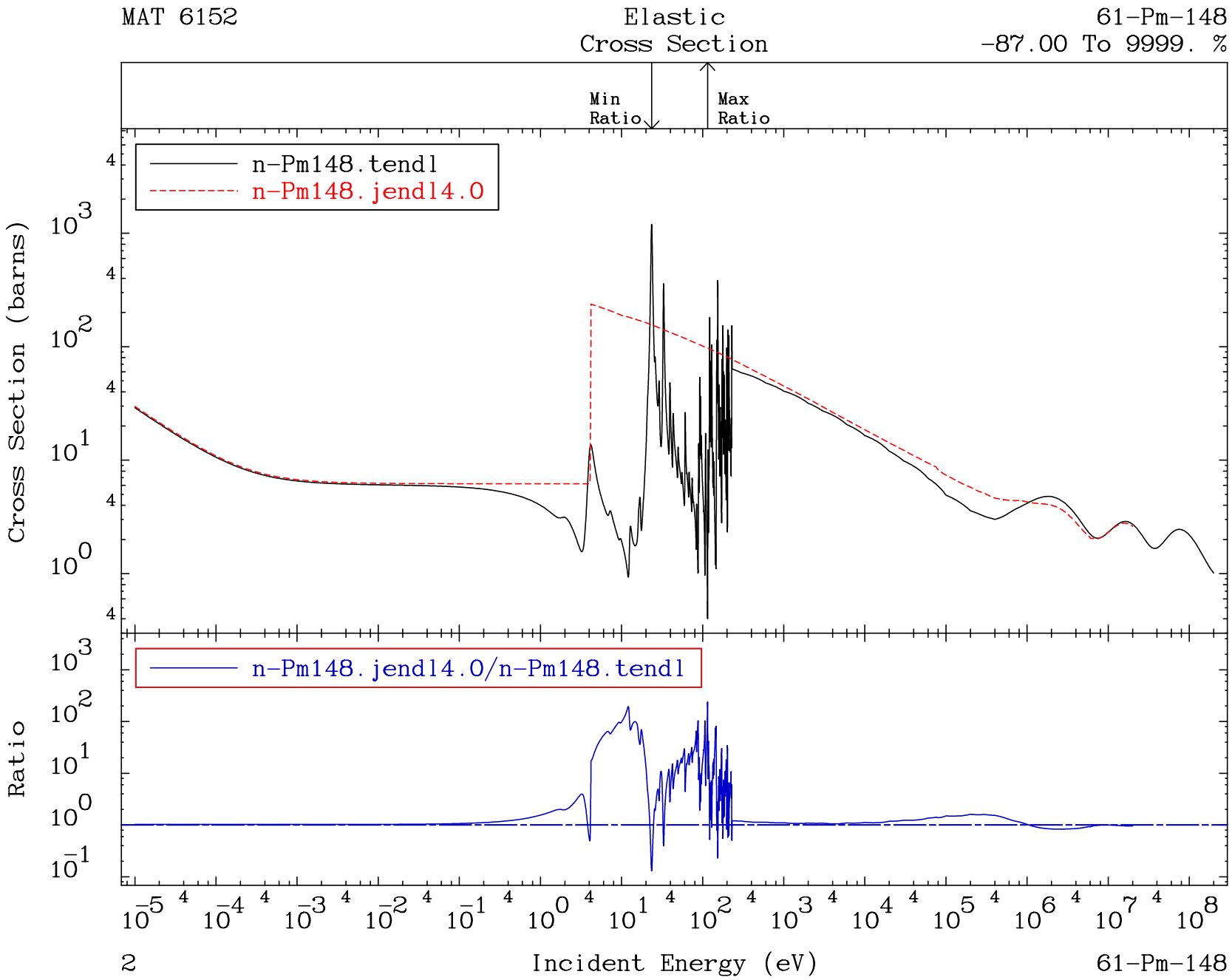
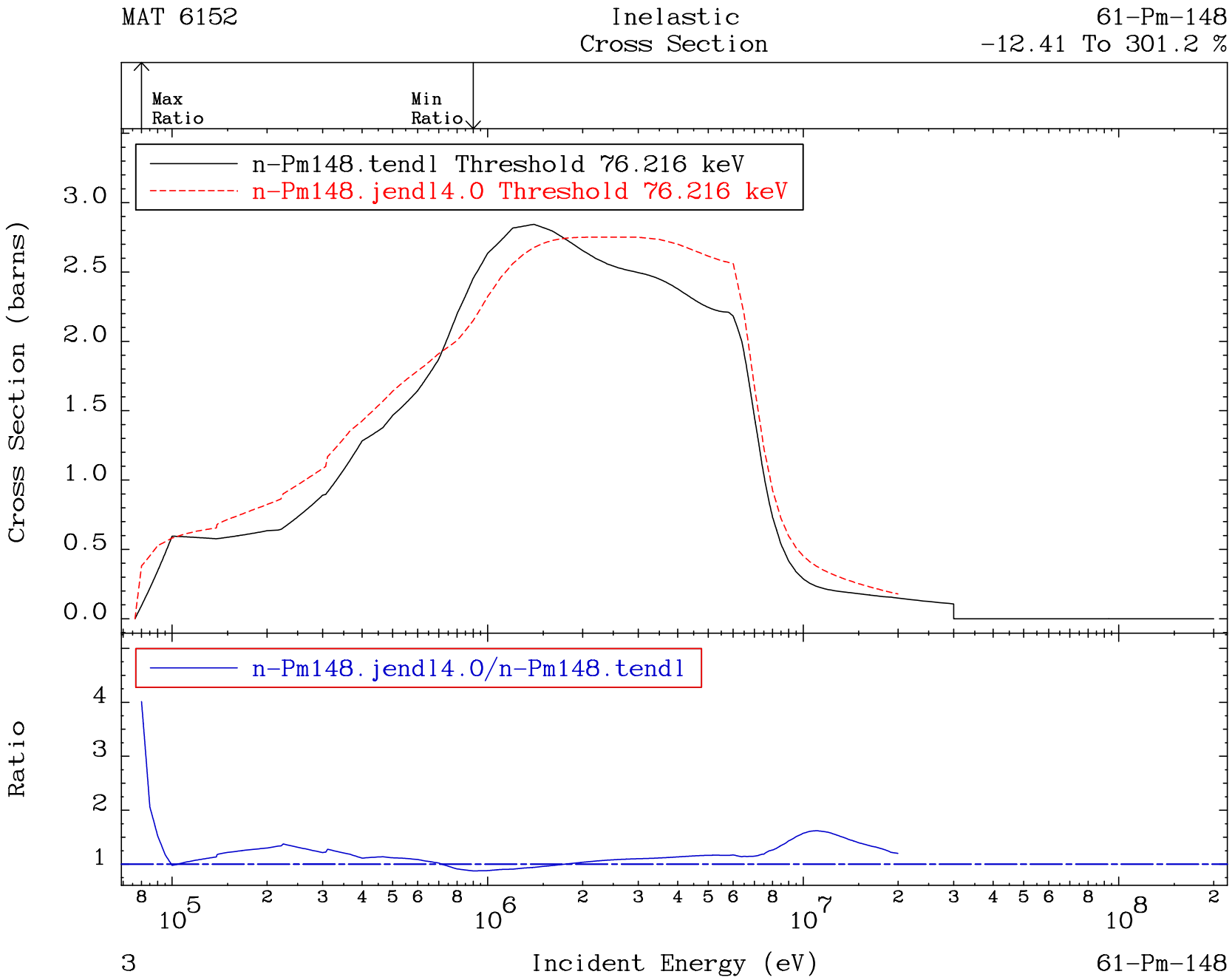
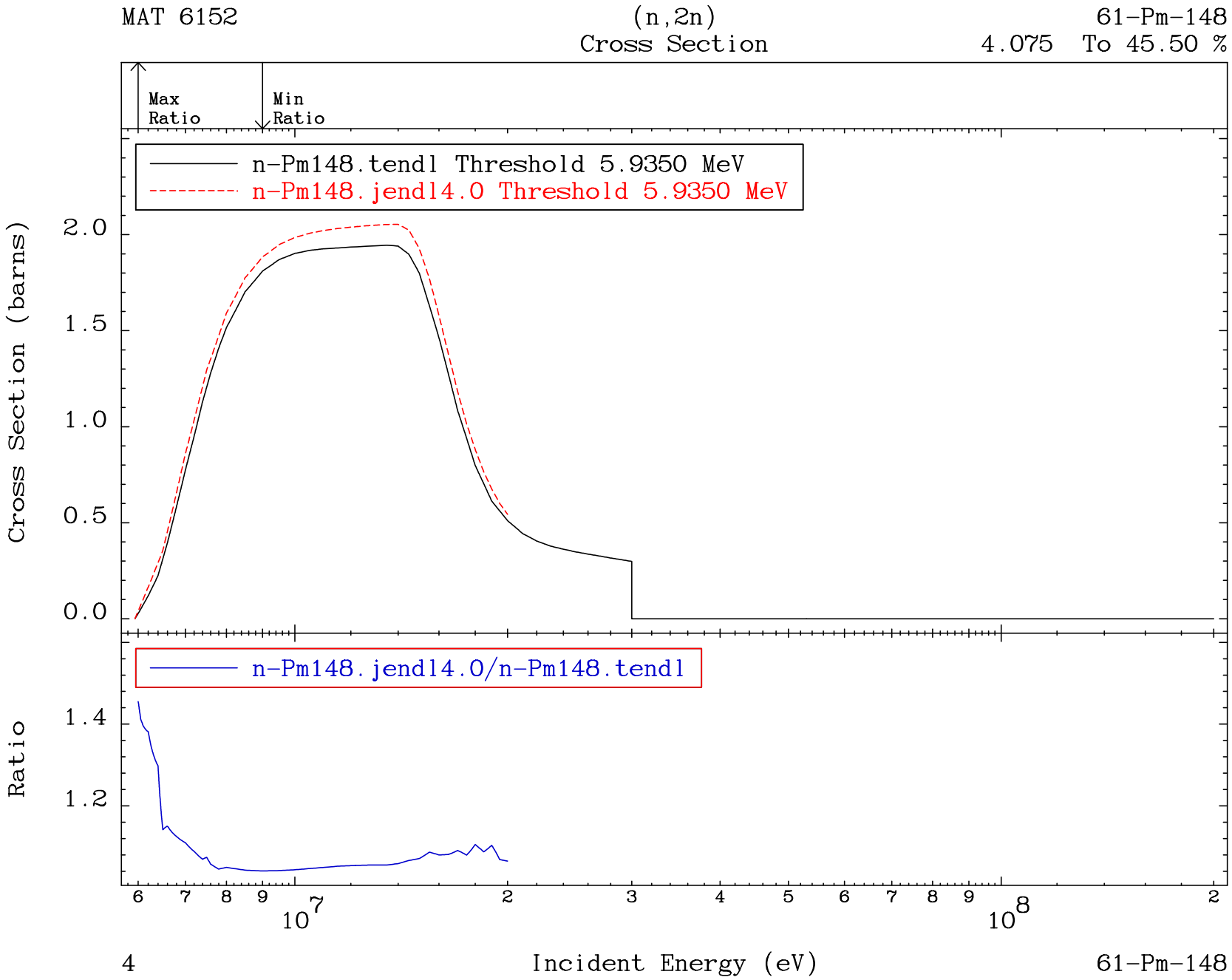
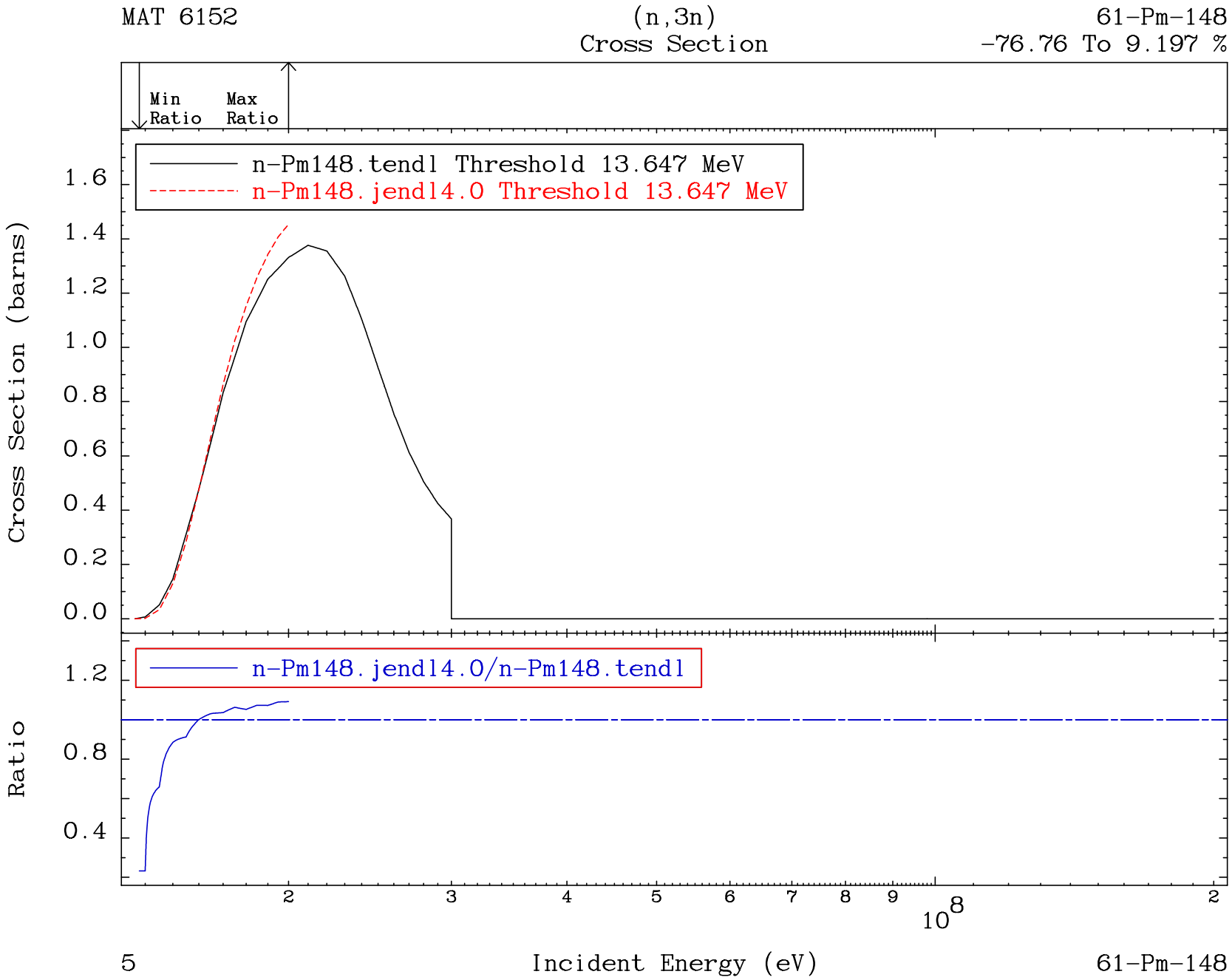
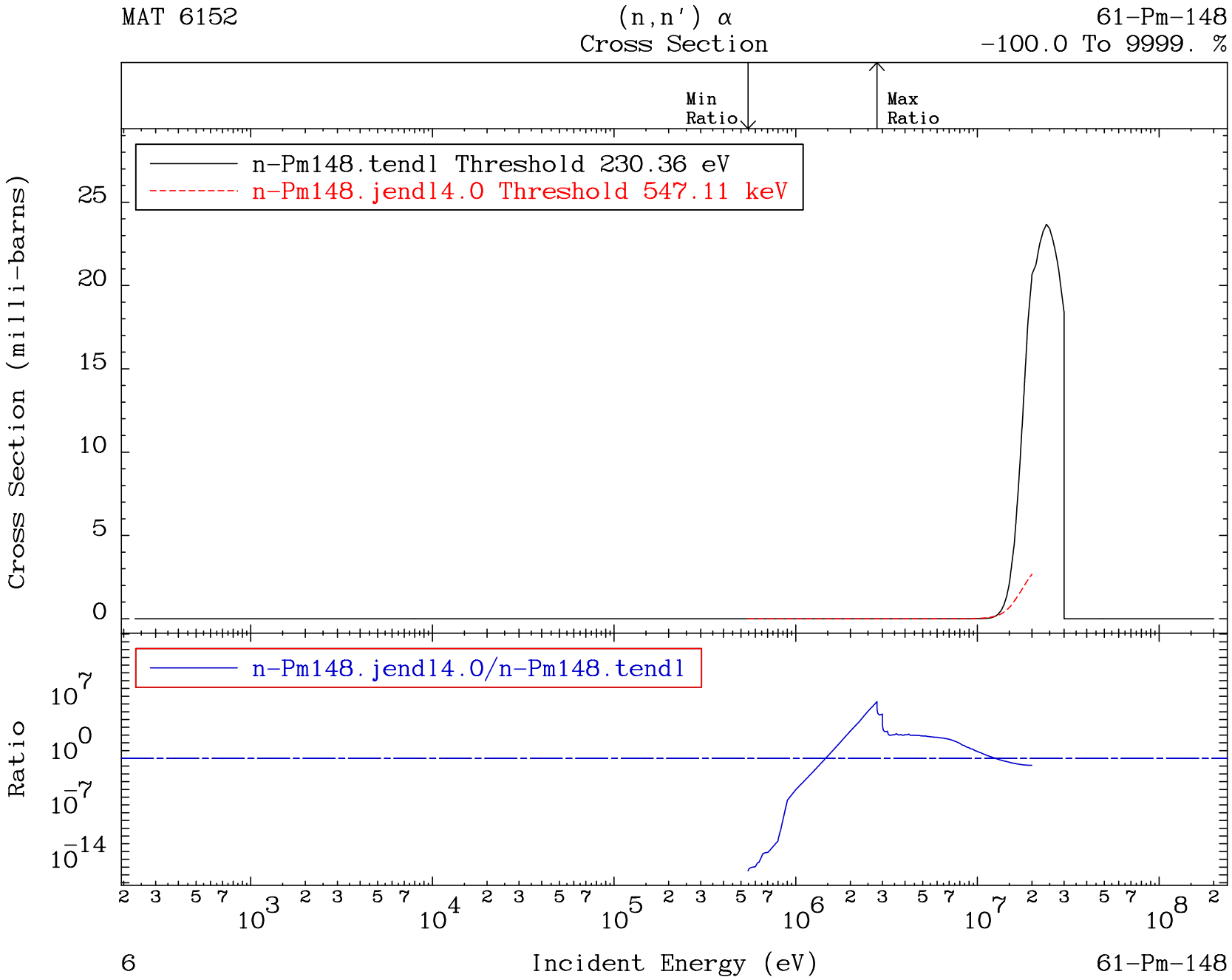

MAT 6152
Total
Cross Section
61-Pm-148
-94.81 To 1589. %
Min
Ratio
Max
Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
1
61-Pm-148

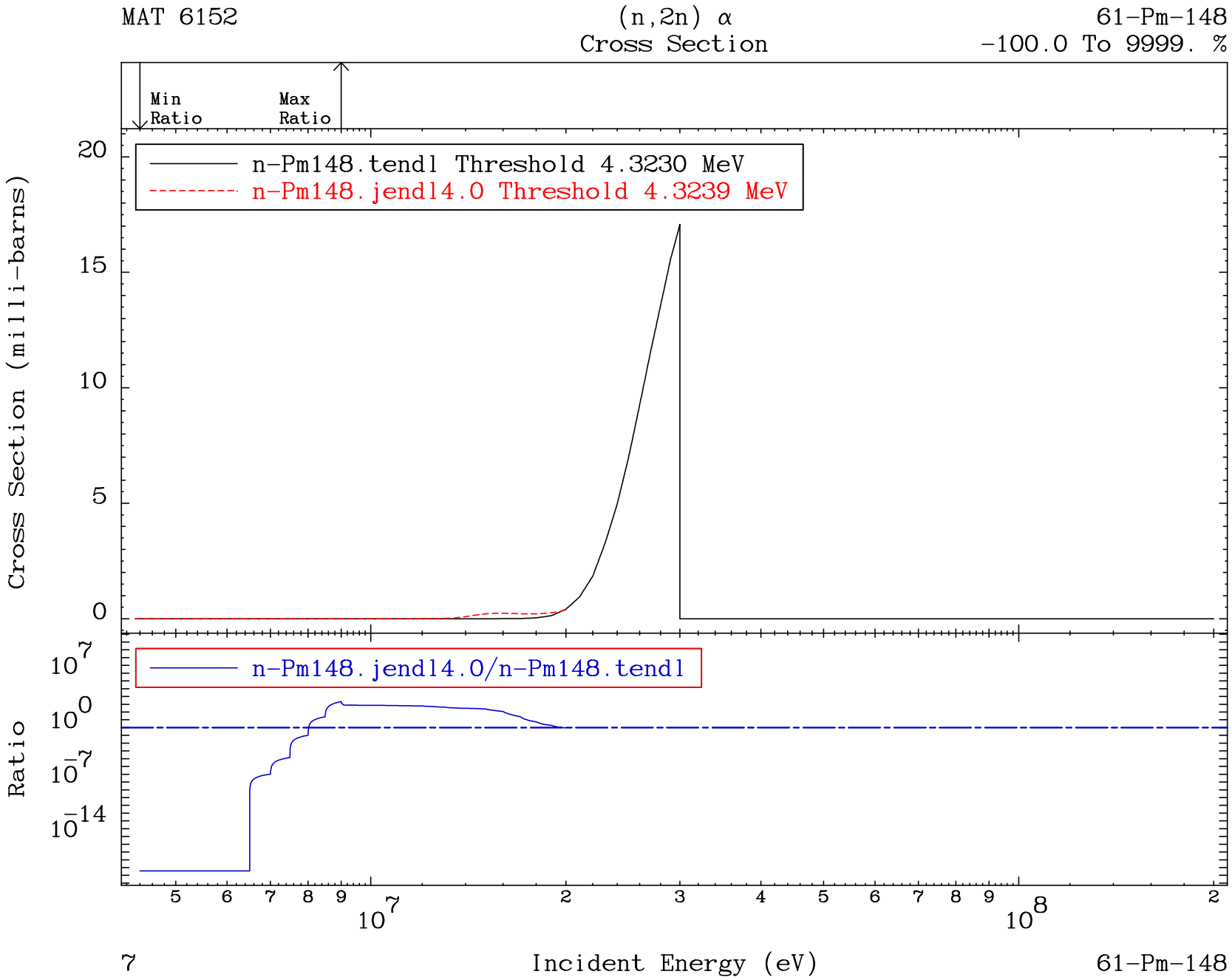

MAT 6152
Elastic
Cross Section
61-Pm-148
-87.00 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
2
61-Pm-148

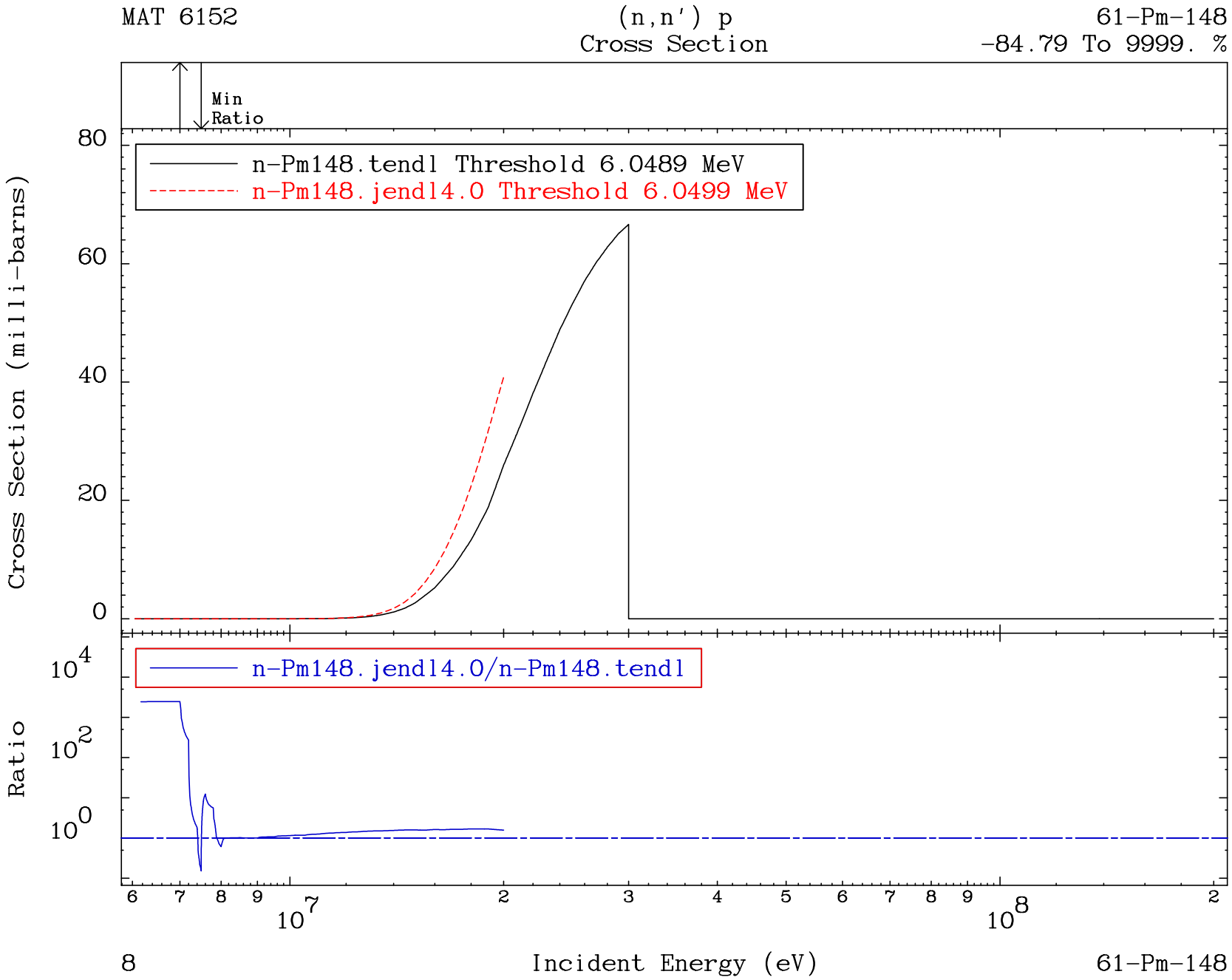

MAT 6152
Inelastic
Cross Section
61-Pm-148
-12.41 To 301.2 %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 76.216 keV
n-Pm148.jendl4.0 Threshold 76.216 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
4
3
2
1
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
61-Pm-148

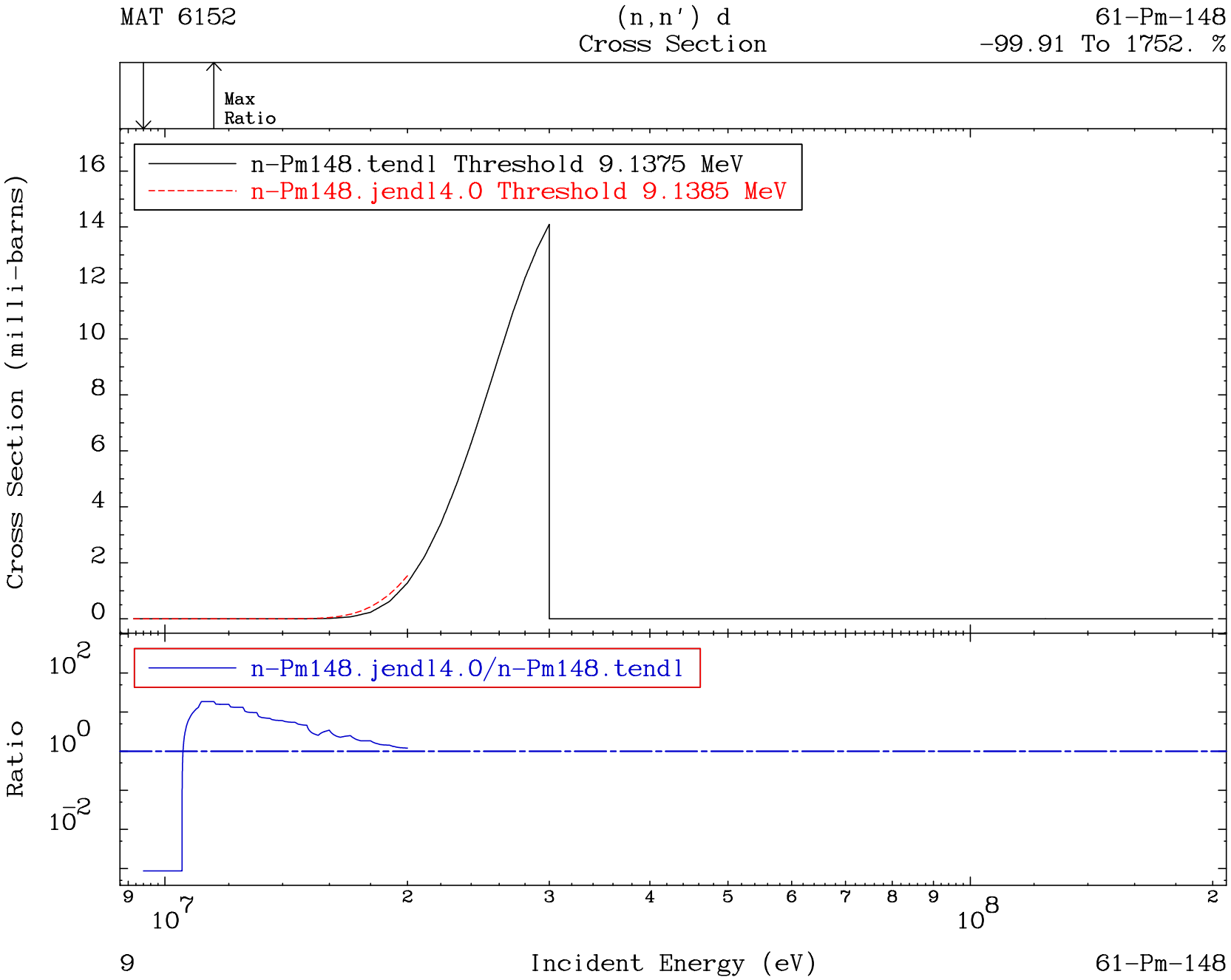

MAT 6152
(n,2n)
Cross Section
61-Pm-148
4.075 To 45.50 %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 5.9350 MeV
n-Pm148.jendl4.0 Threshold 5.9350 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
1.4
1.2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
61-Pm-148

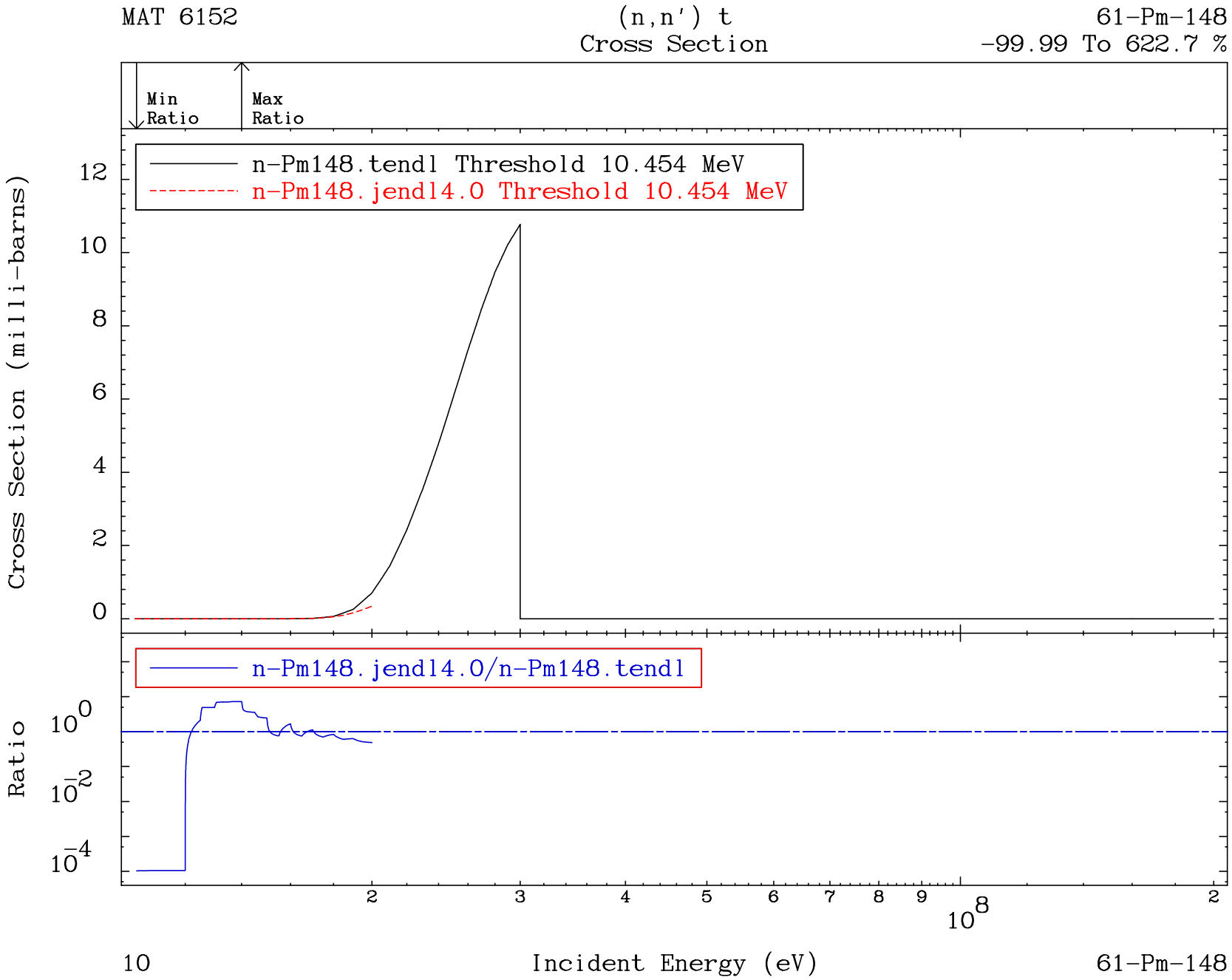

MAT 6152
(n,3n)
Cross Section
61-Pm-148
-76.76 To 9.197 %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 13.647 MeV
n-Pm148.jendl4.0 Threshold 13.647 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
61-Pm-148

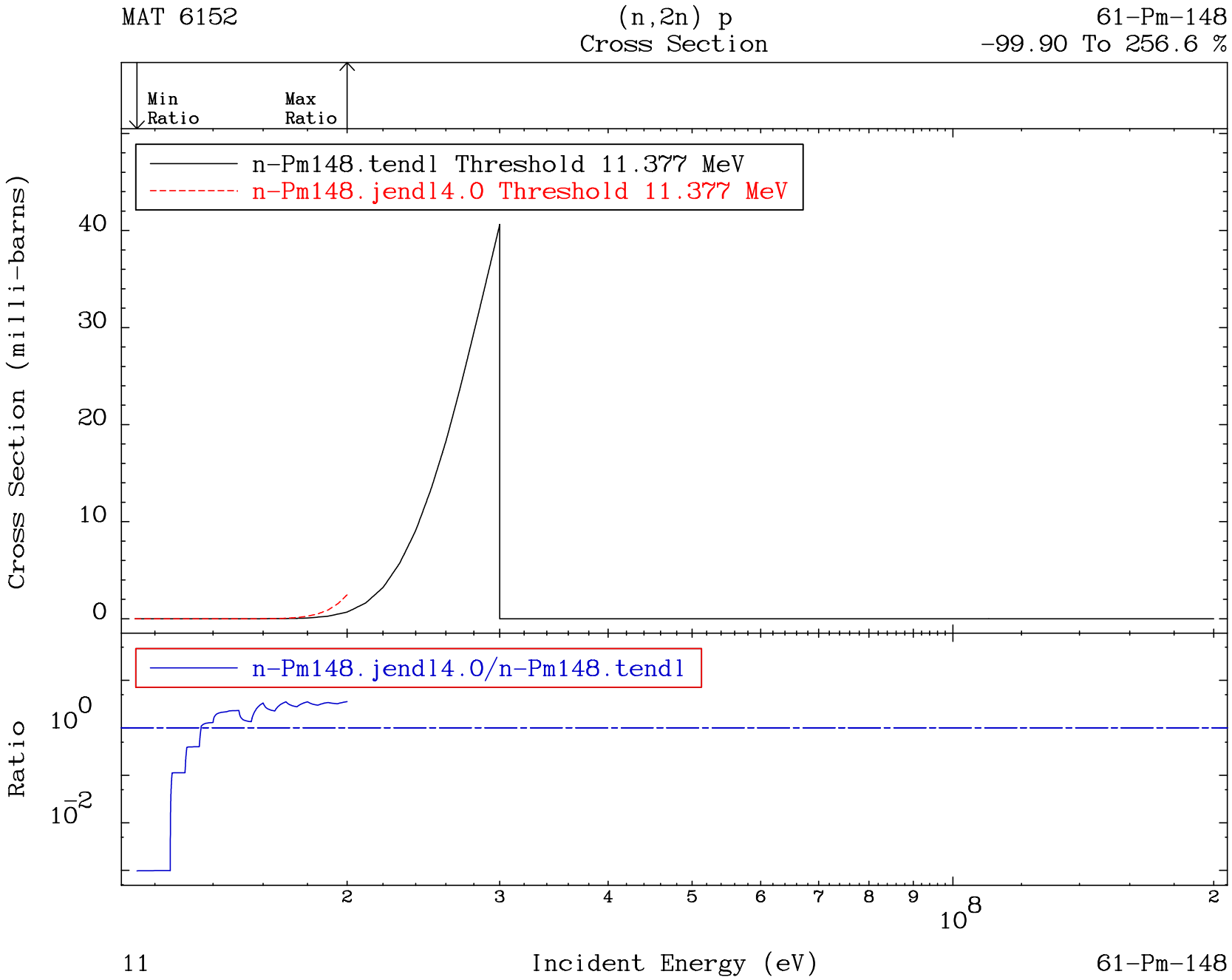

MAT 6152
(n,n') α
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 230.36 eV
n-Pm148.jendl4.0 Threshold 547.11 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^7
10^0
10^-7
10^-14
2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
6
Incident Energy (eV)
61-Pm-148

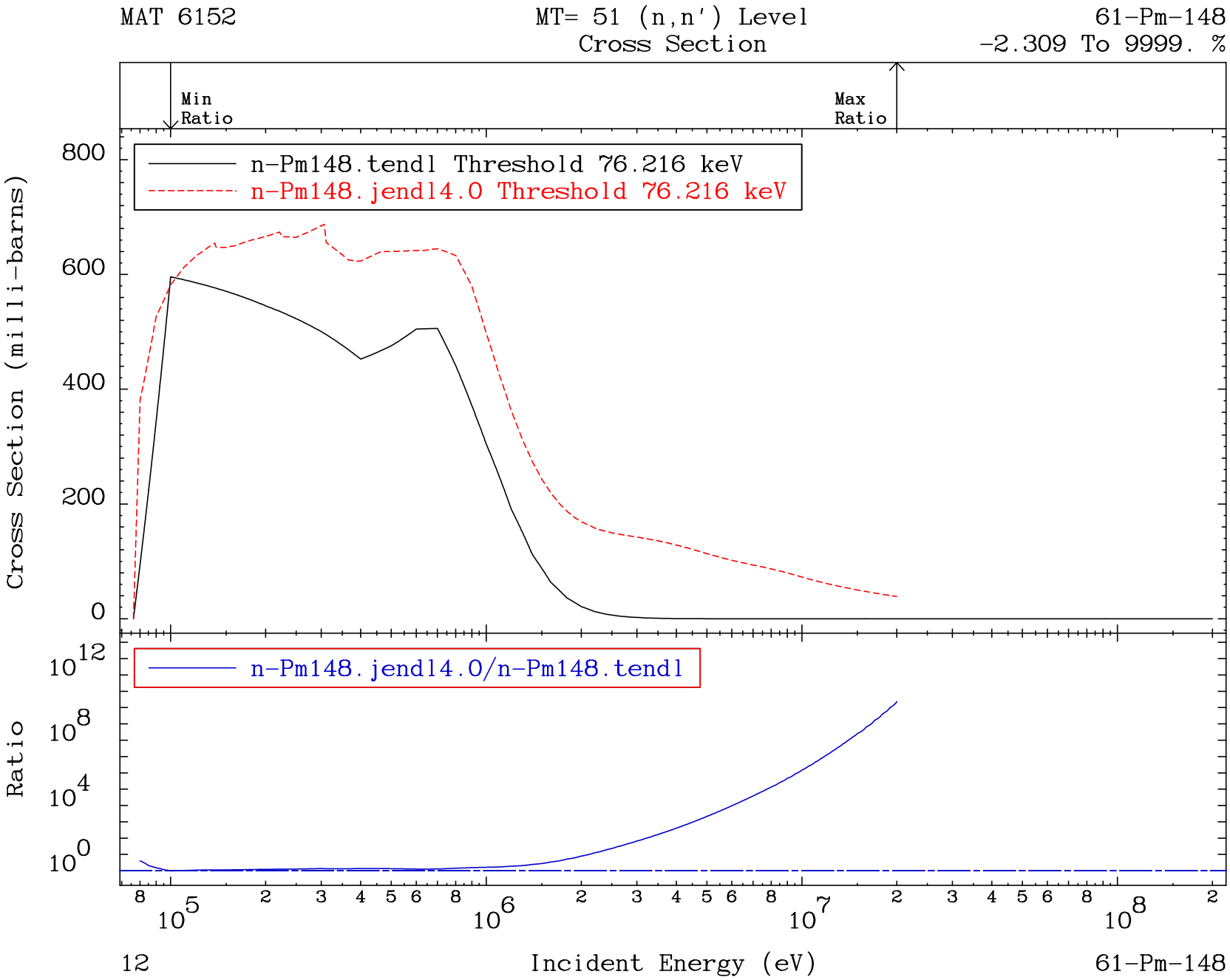

MAT 6152
(n,2n) α
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 4.3230 MeV
n-Pm148.jendl4.0 Threshold 4.3239 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^7
10^0
10^-7
10^-14
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
61-Pm-148

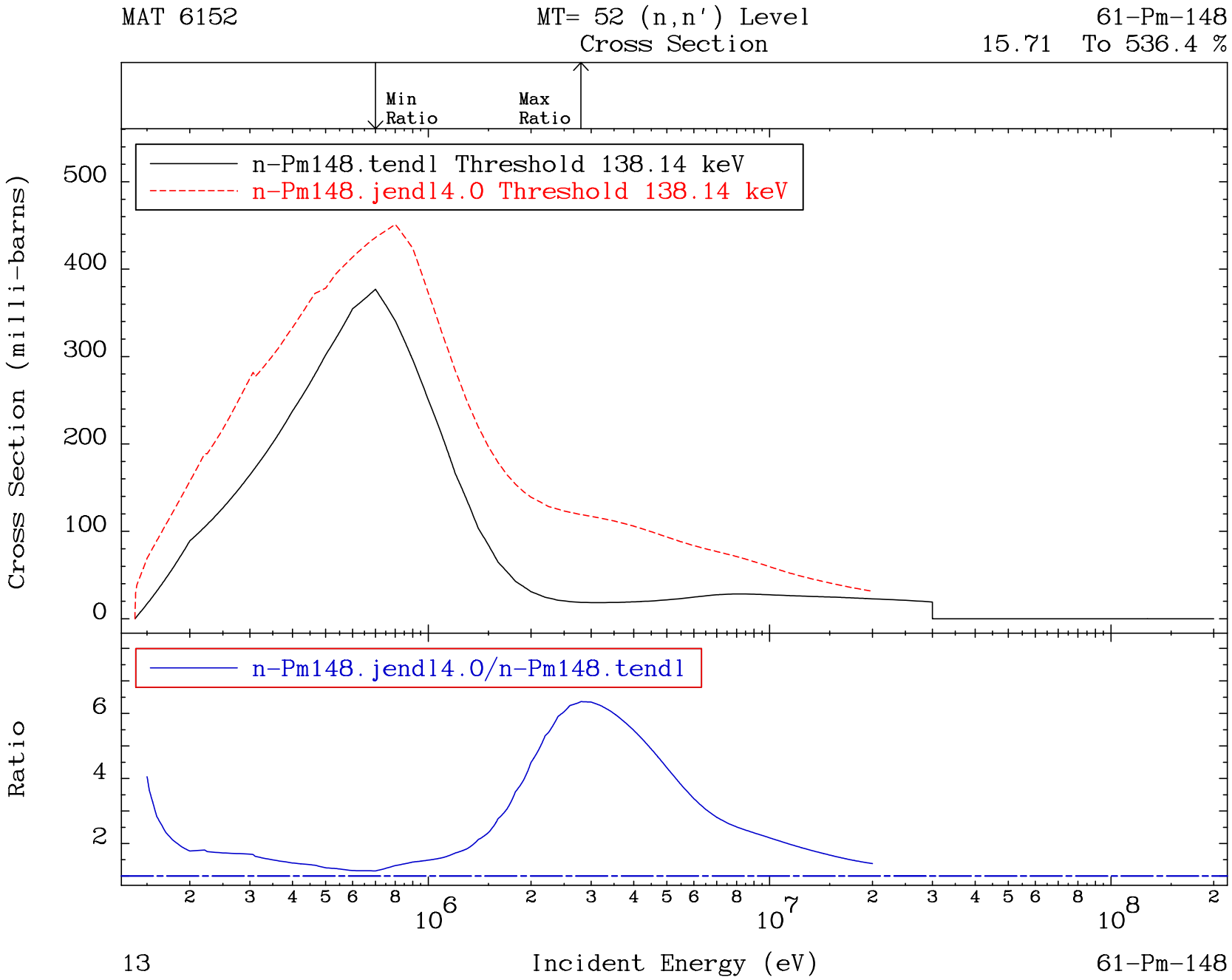

MAT 6152
(n,n') p
Cross Section
61-Pm-148
-84.79 To 9999. %
Min
Ratio
n-Pm148.tendl Threshold 6.0489 MeV
n-Pm148.jendl4.0 Threshold 6.0499 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
61-Pm-148

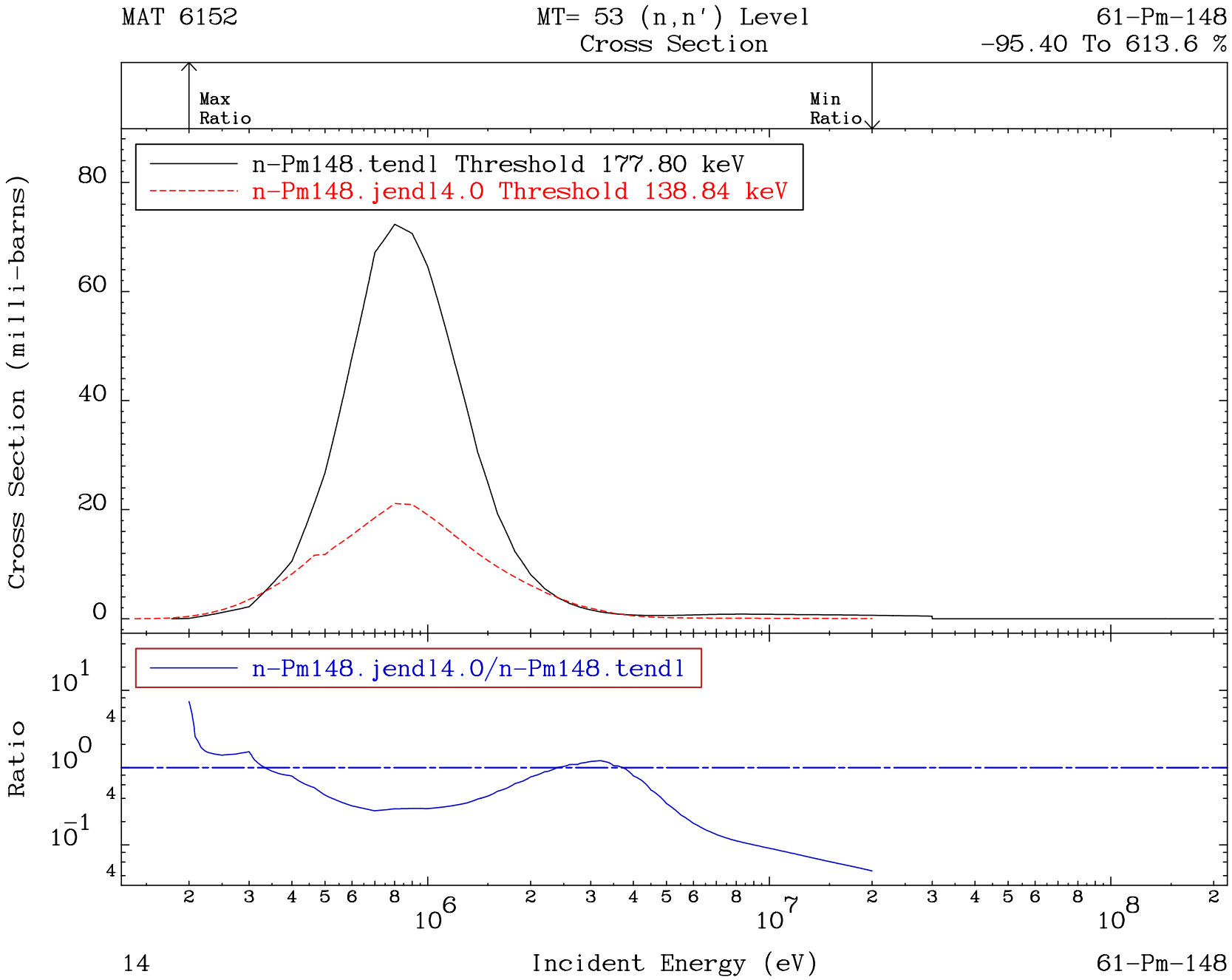

MAT 6152
(n,n') d
Cross Section
61-Pm-148
-99.91 To 1752. %
Max
Ratio
n-Pm148.tendl Threshold 9.1375 MeV
n-Pm148.jendl4.0 Threshold 9.1385 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^2
10^0
10^-2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
61-Pm-148

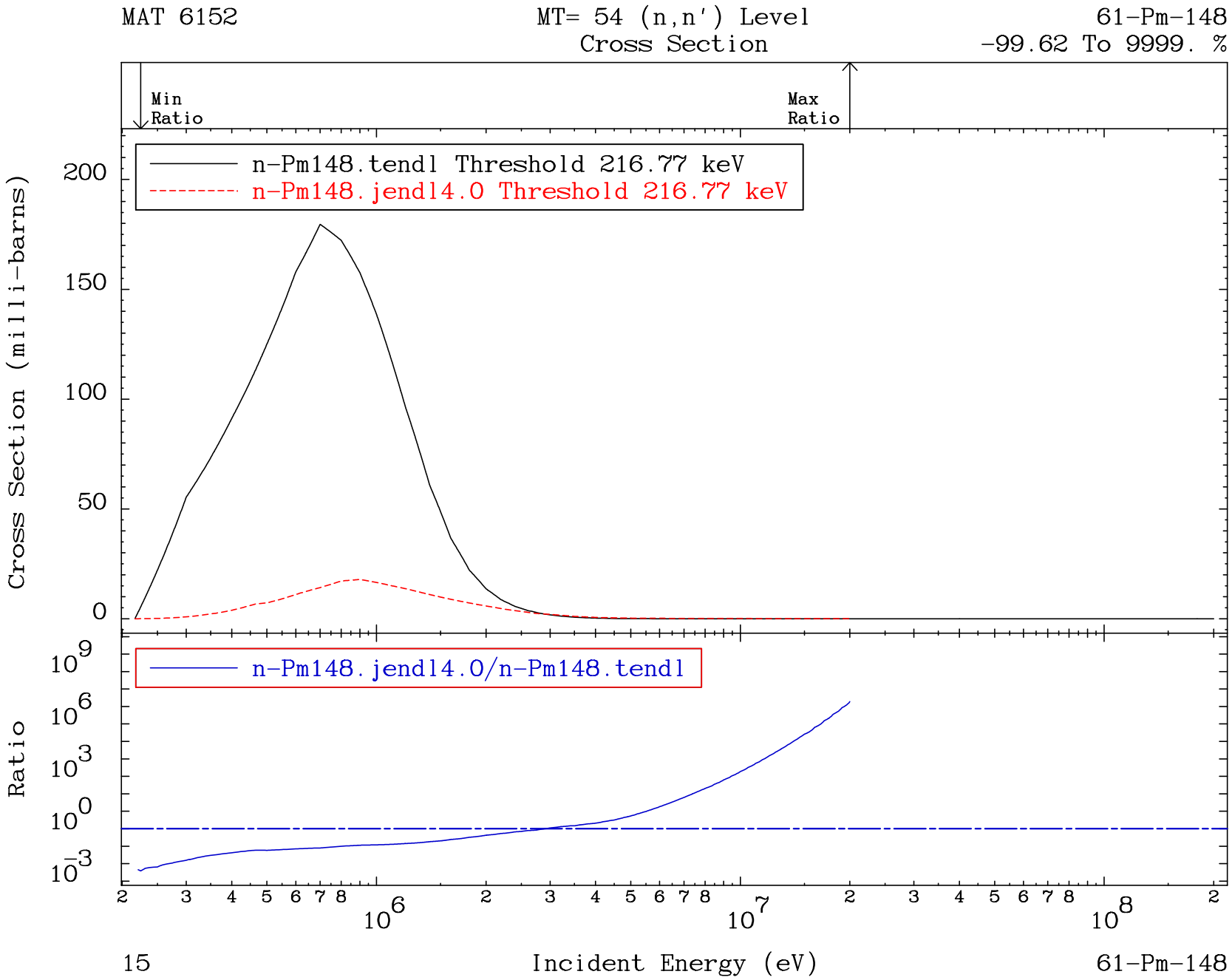

MAT 6152
(n,n') t
Cross Section
61-Pm-148
-99.99 To 622.7 %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 10.454 MeV
n-Pm148.jendl4.0 Threshold 10.454 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
61-Pm-148

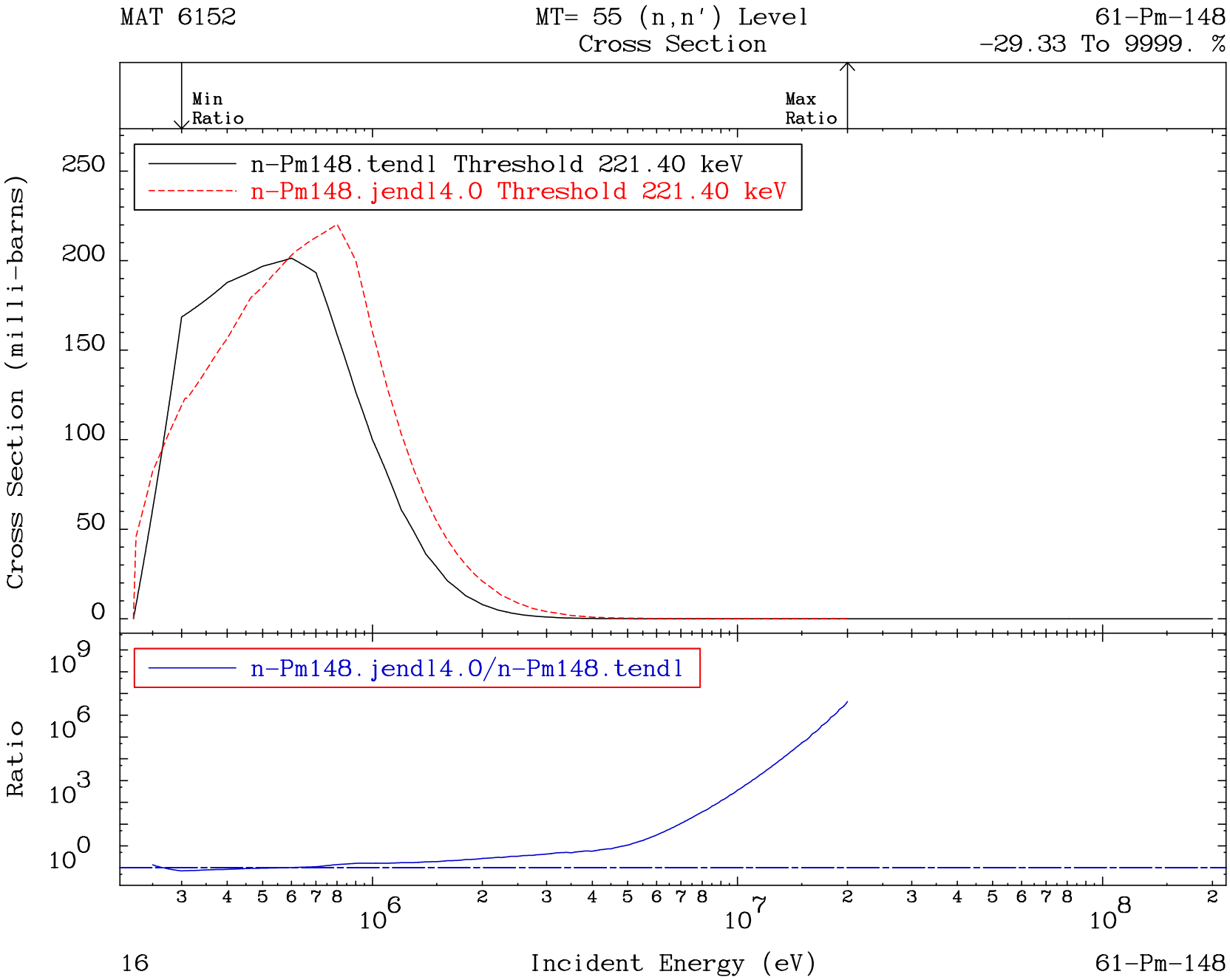

MAT 6152
(n,2n) p
Cross Section
61-Pm-148
-99.90 To 256.6 %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 11.377 MeV
n-Pm148.jendl4.0 Threshold 11.377 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
61-Pm-148

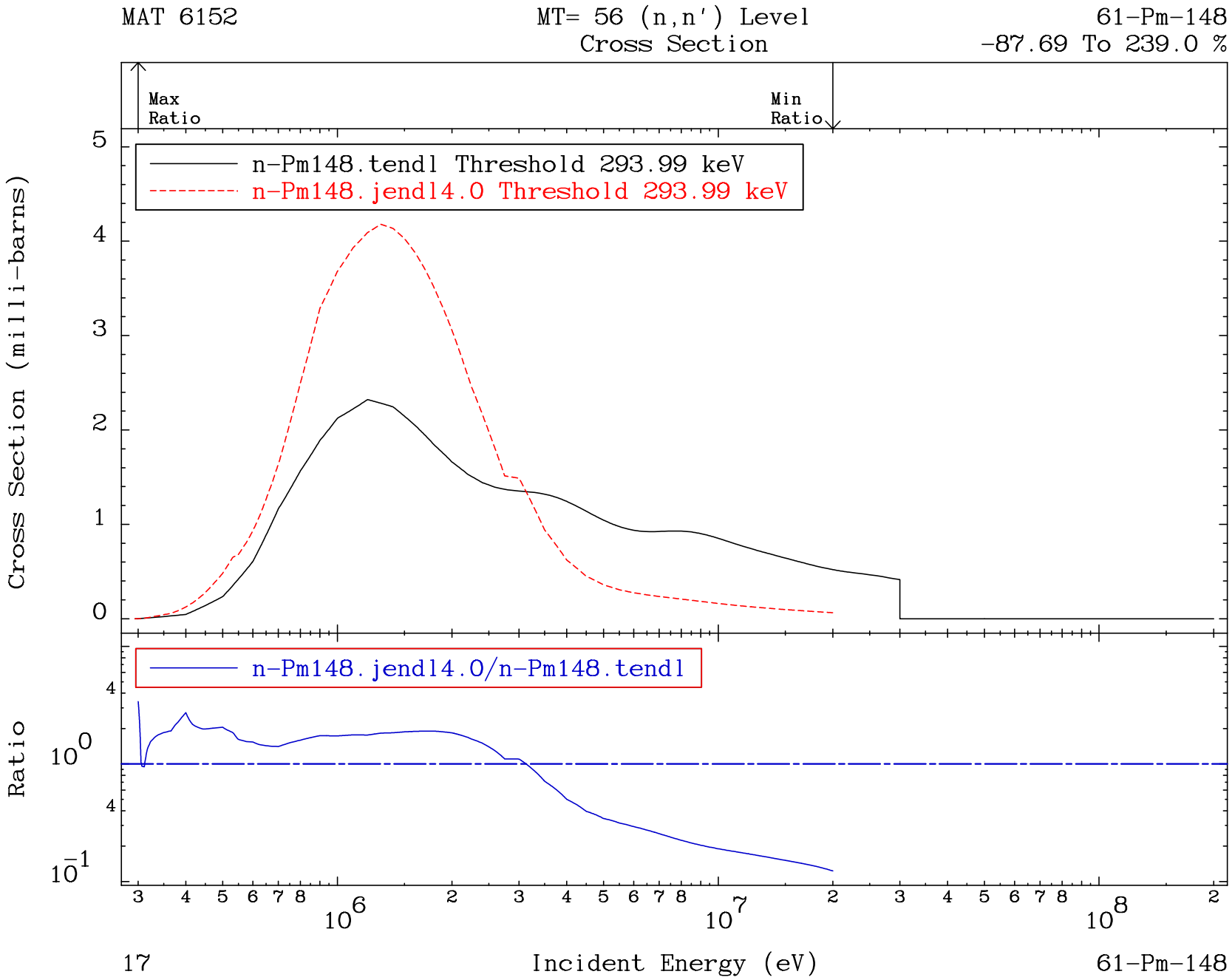

MAT 6152
MT= 51 (n,n') Level
Cross Section
61-Pm-148
-2.309 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148.tendl Threshold 76.216 keV
n-Pm148.jendl4.0 Threshold 76.216 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^{12}
10^{8}
10^{4}
10^{0}
8
10^{5}
2
3
4
5
6
8
10^{6}
2
3
4
5
6
8
10^{7}
2
3
4
5
6
8
10^{8}
2
12
Incident Energy (eV)
61-Pm-148

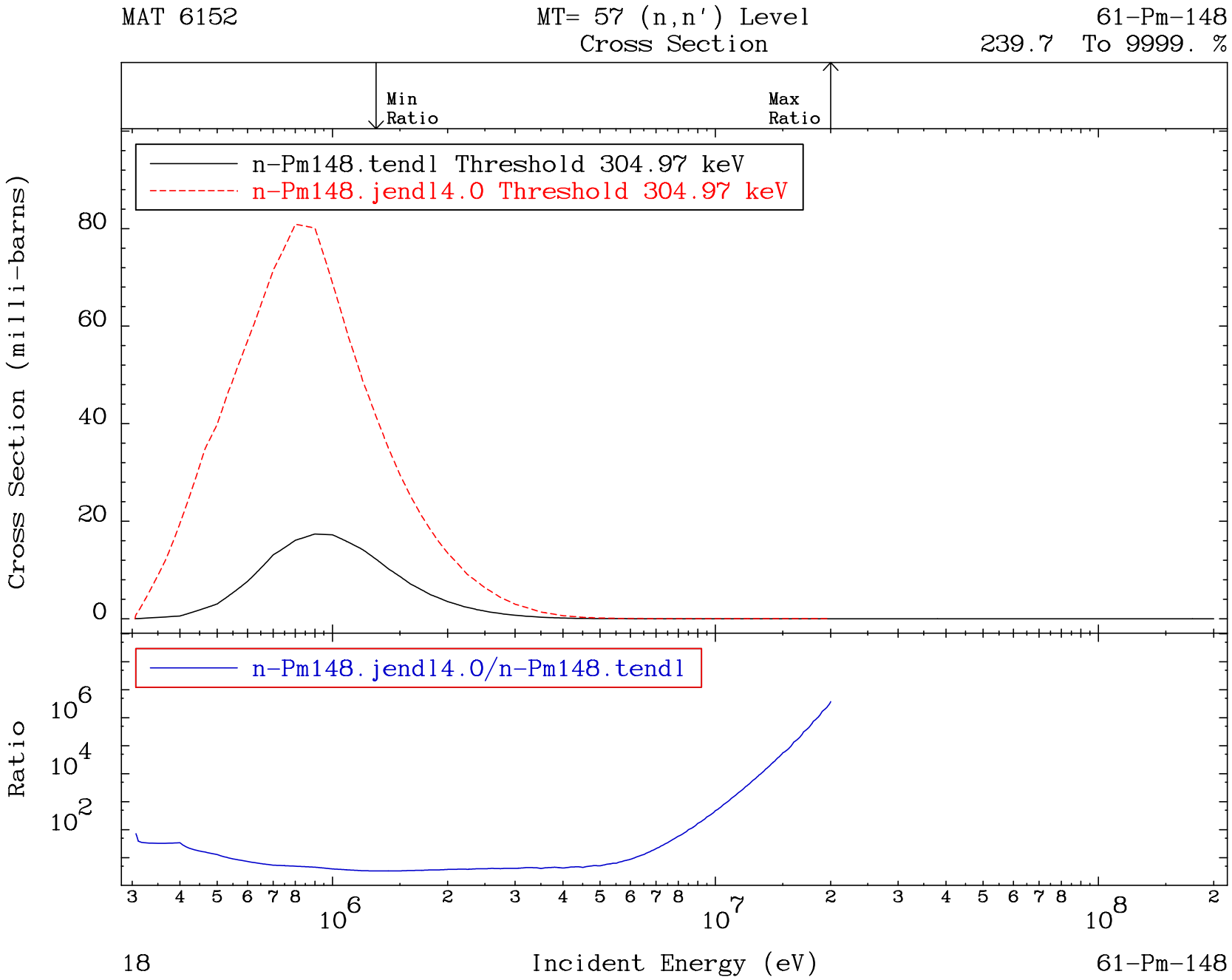

MAT 6152
MT= 52 (n,n') Level
Cross Section
61-Pm-148
15.71 To 536.4 %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 138.14 keV
n-Pm148.jendl4.0 Threshold 138.14 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
6
4
2
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
61-Pm-148

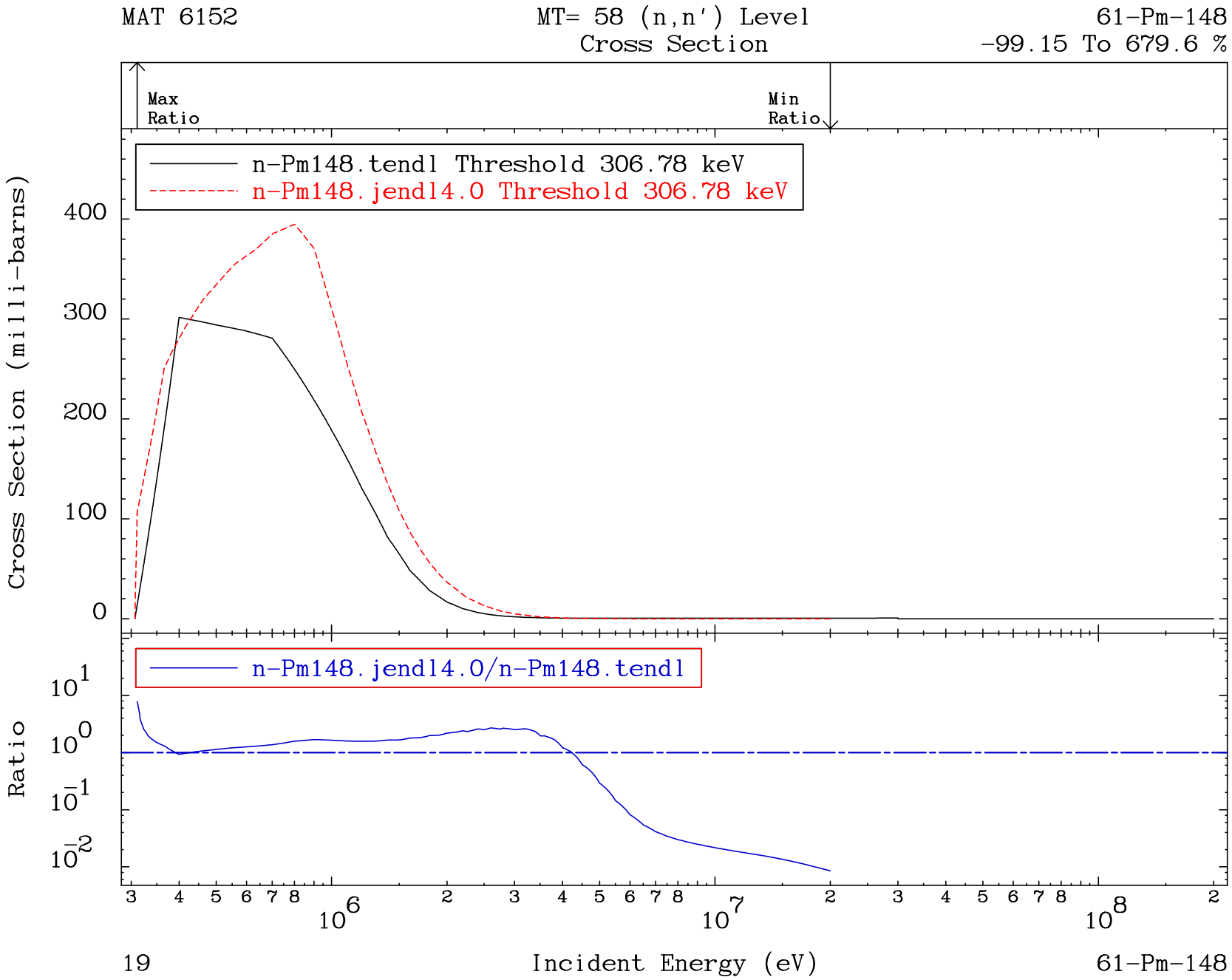

MAT 6152
MT= 53 (n,n') Level
Cross Section
61-Pm-148
-95.40 To 613.6 %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 177.80 keV
n-Pm148.jendl4.0 Threshold 138.84 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^1
10^0
10^-1
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
61-Pm-148

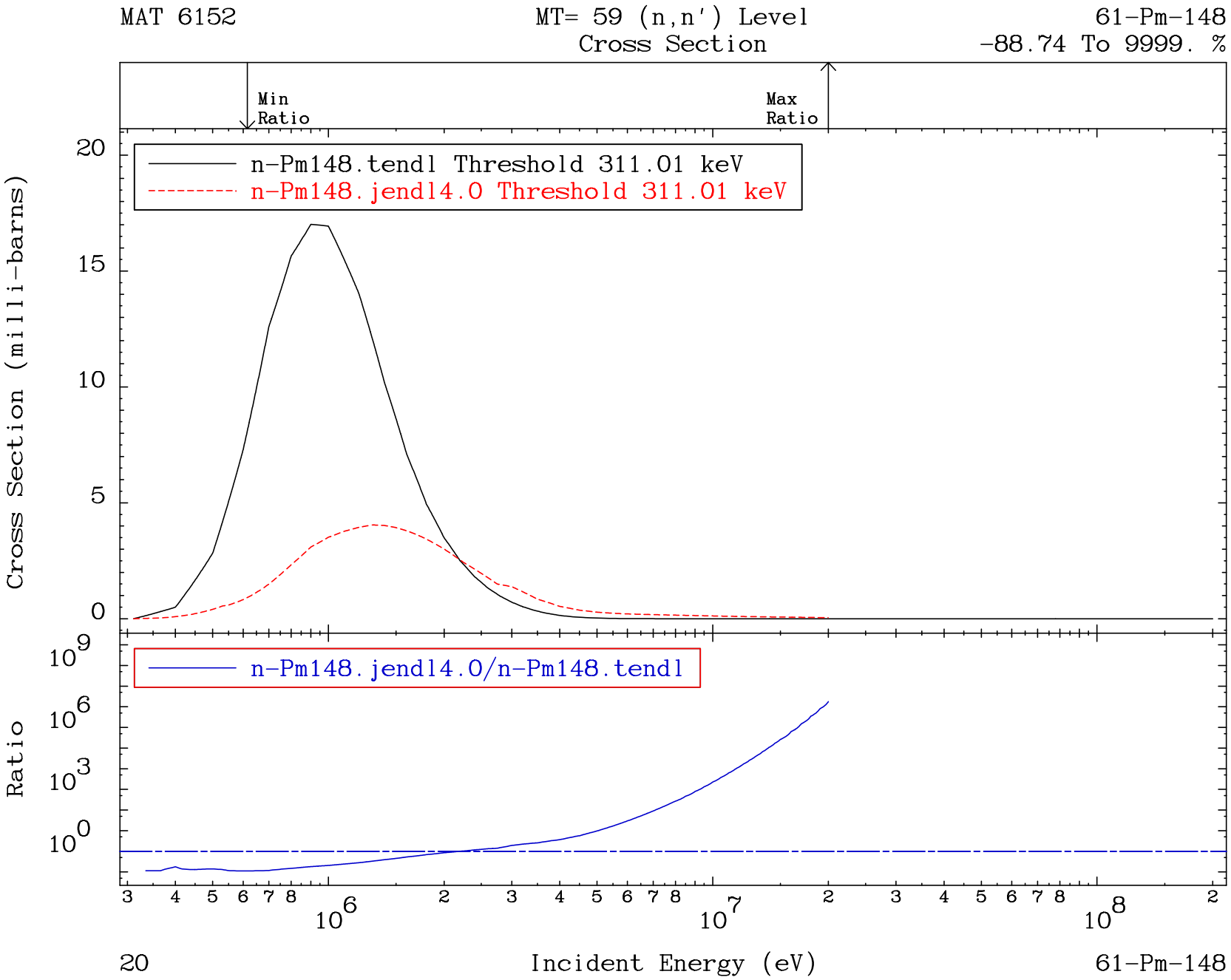

MAT 6152
MT= 54 (n,n') Level
Cross Section
61-Pm-148
-99.62 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 216.77 keV
n-Pm148.jendl4.0 Threshold 216.77 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
10^-3
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
61-Pm-148

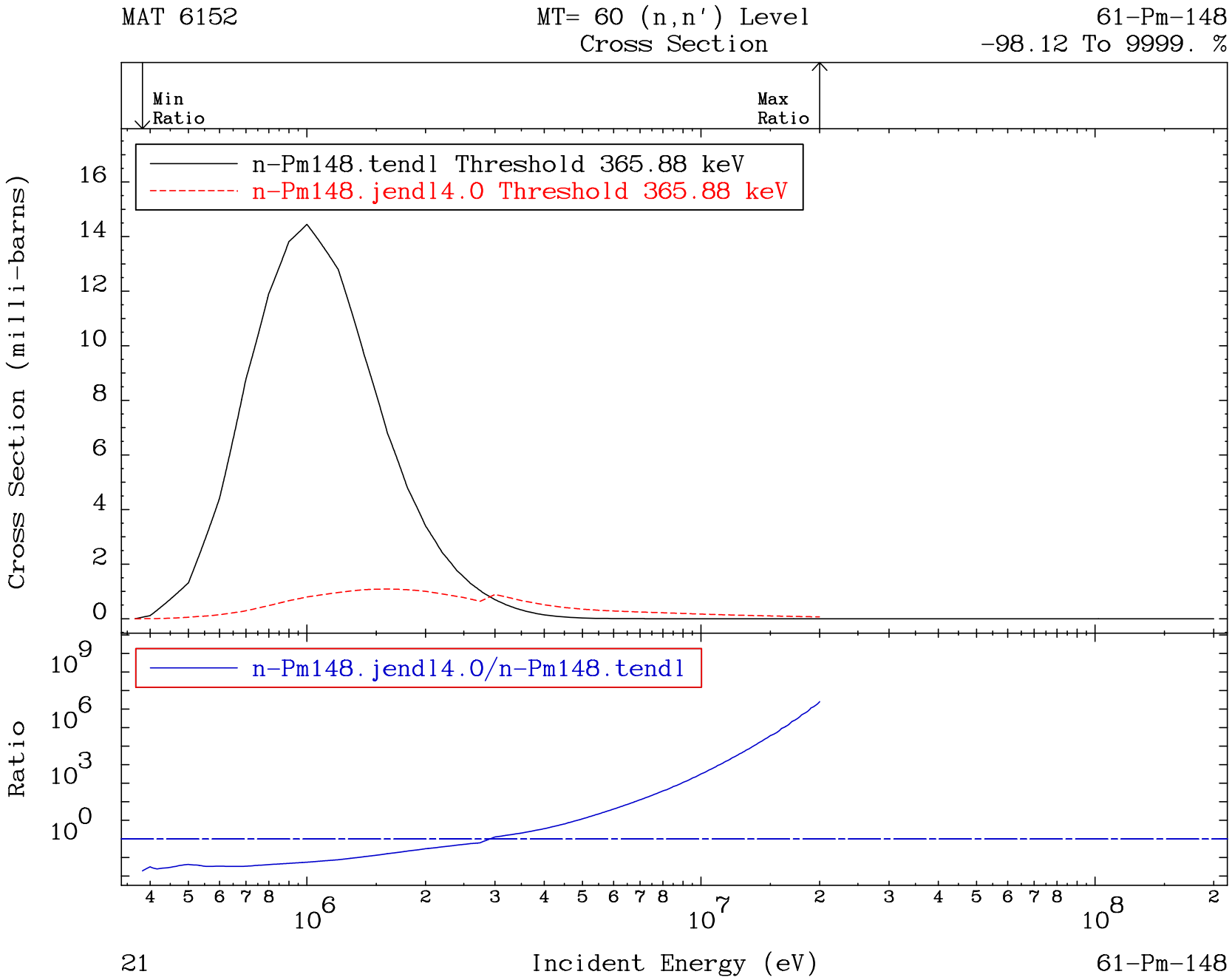

MAT 6152
MT= 55 (n,n') Level
Cross Section
61-Pm-148
-29.33 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 221.40 keV
n-Pm148.jendl4.0 Threshold 221.40 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
61-Pm-148

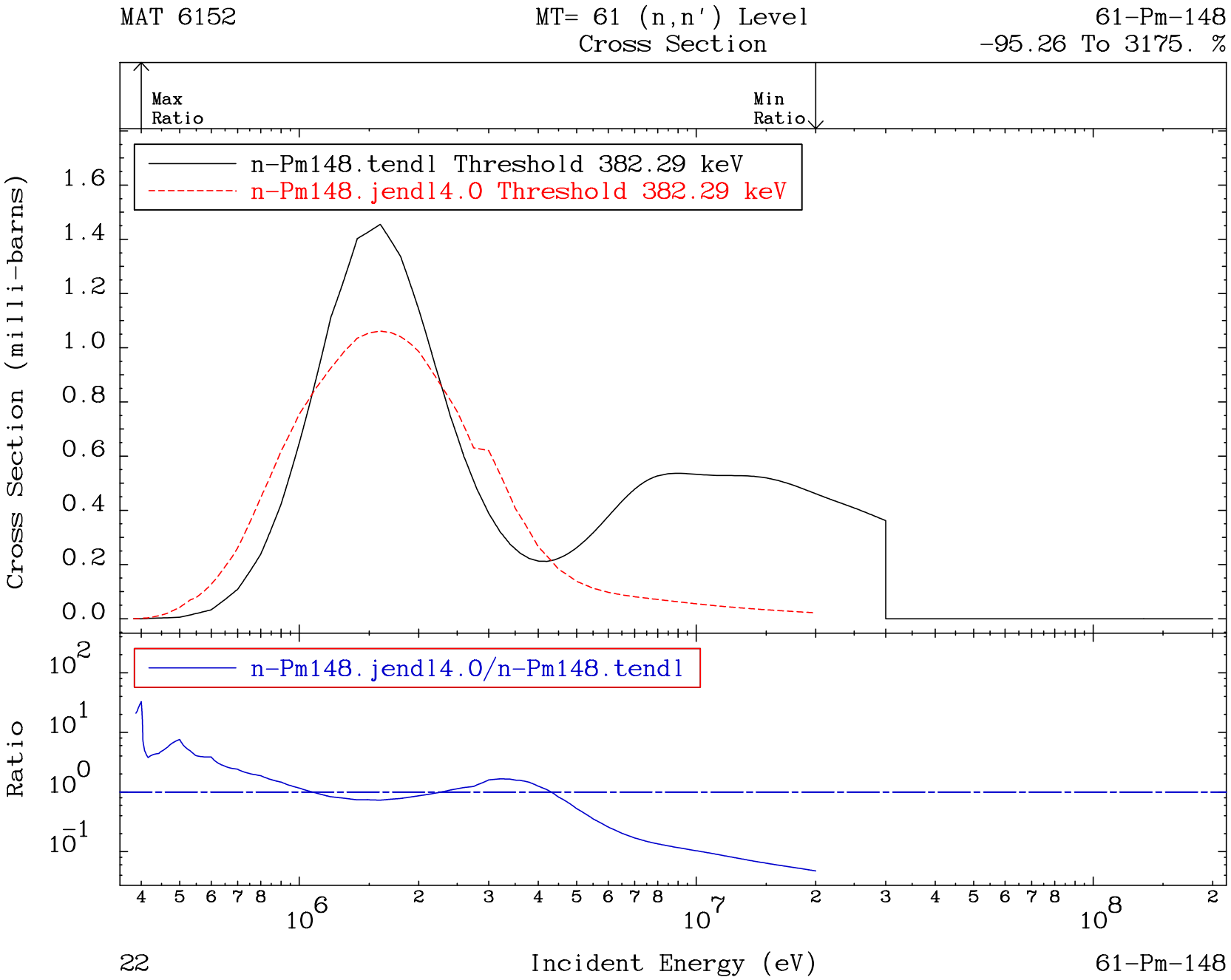

MAT 6152
MT= 56 (n,n') Level
Cross Section
61-Pm-148
-87.69 To 239.0 %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 293.99 keV
n-Pm148.jendl4.0 Threshold 293.99 keV
Cross Section (milli-barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
17
61-Pm-148

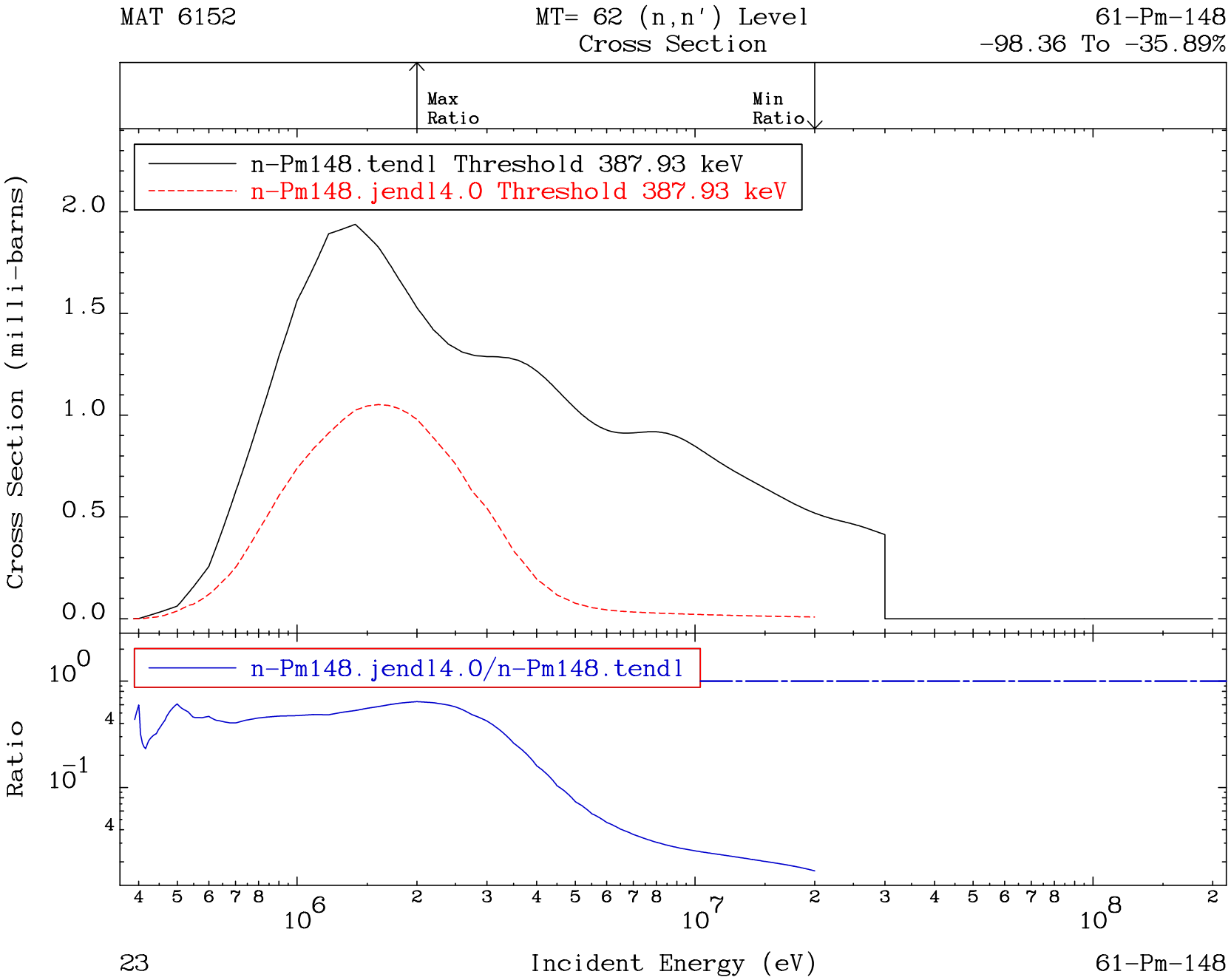

MAT 6152
MT= 57 (n,n') Level
Cross Section
61-Pm-148
239.7 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 304.97 keV
n-Pm148.jendl4.0 Threshold 304.97 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^6
10^4
10^2
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
61-Pm-148

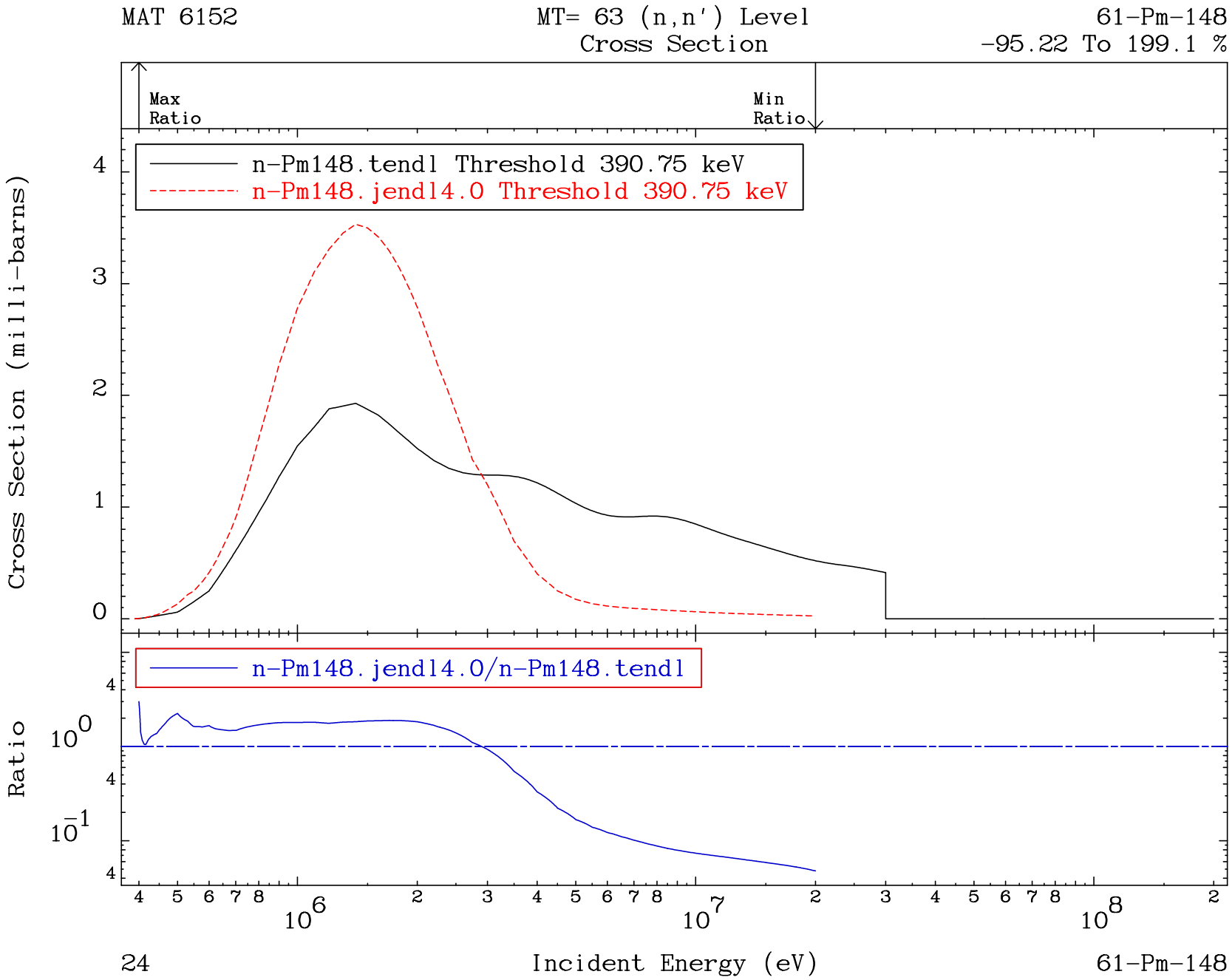

MAT 6152
MT= 58 (n,n') Level
Cross Section
61-Pm-148
-99.15 To 679.6 %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 306.78 keV
n-Pm148.jendl4.0 Threshold 306.78 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^1
10^0
10^-1
10^-2
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
61-Pm-148

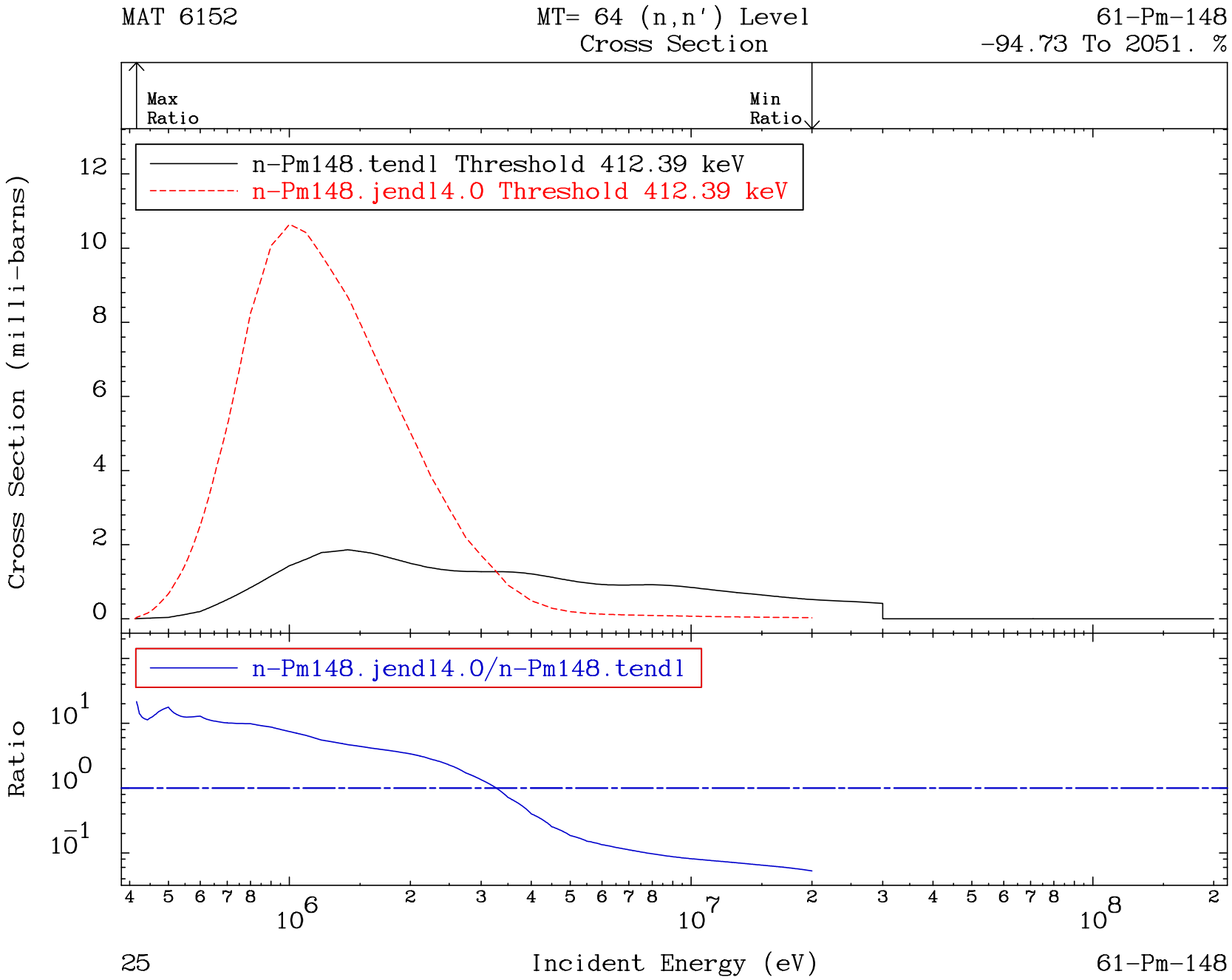

MAT 6152
MT= 59 (n,n') Level
Cross Section
61-Pm-148
-88.74 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148.tendl Threshold 311.01 keV
n-Pm148.jendl4.0 Threshold 311.01 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
61-Pm-148

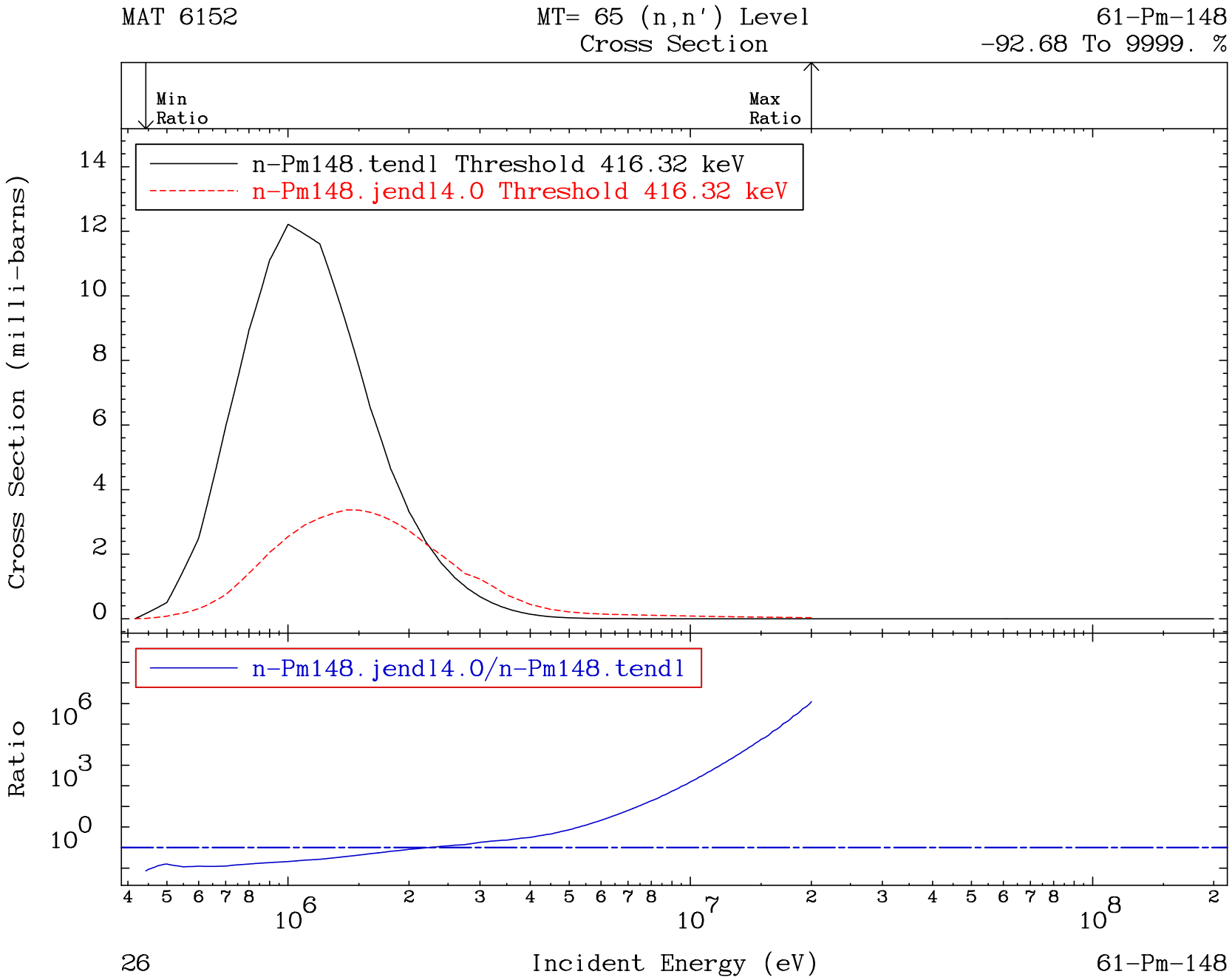

MAT 6152
MT= 60 (n,n') Level
Cross Section
61-Pm-148
-98.12 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 365.88 keV
n-Pm148.jendl4.0 Threshold 365.88 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
61-Pm-148

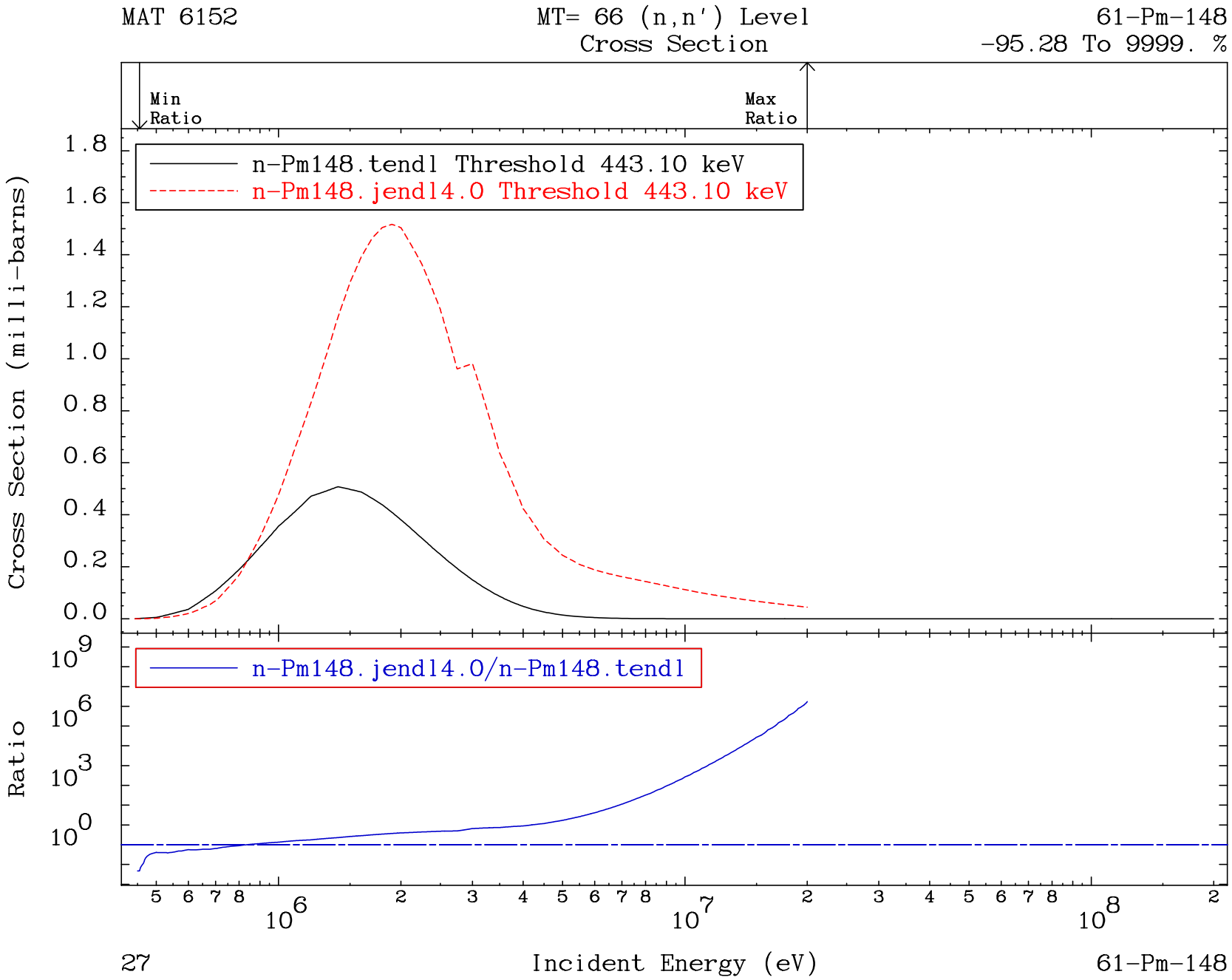

MAT 6152
MT= 61 (n,n') Level
Cross Section
61-Pm-148
-95.26 To 3175. %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 382.29 keV
n-Pm148.jendl4.0 Threshold 382.29 keV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^2
10^1
10^0
10^-1
4 5 6 7 8
10^6
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

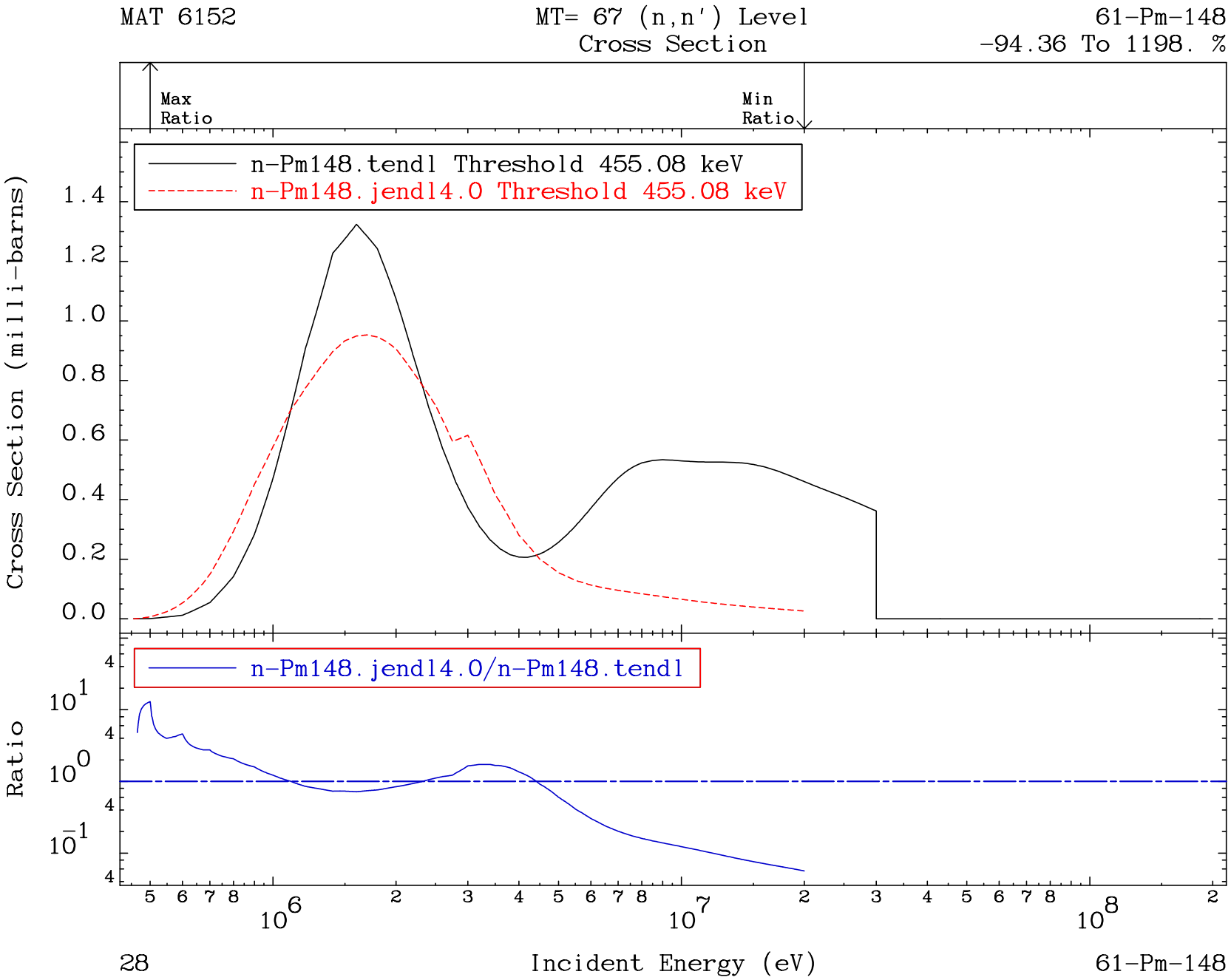

MAT 6152
MT= 62 (n,n') Level
Cross Section
61-Pm-148
-98.36 To -35.89%
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 387.93 keV
n-Pm148.jendl4.0 Threshold 387.93 keV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^0
10^-1
4
4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
61-Pm-148

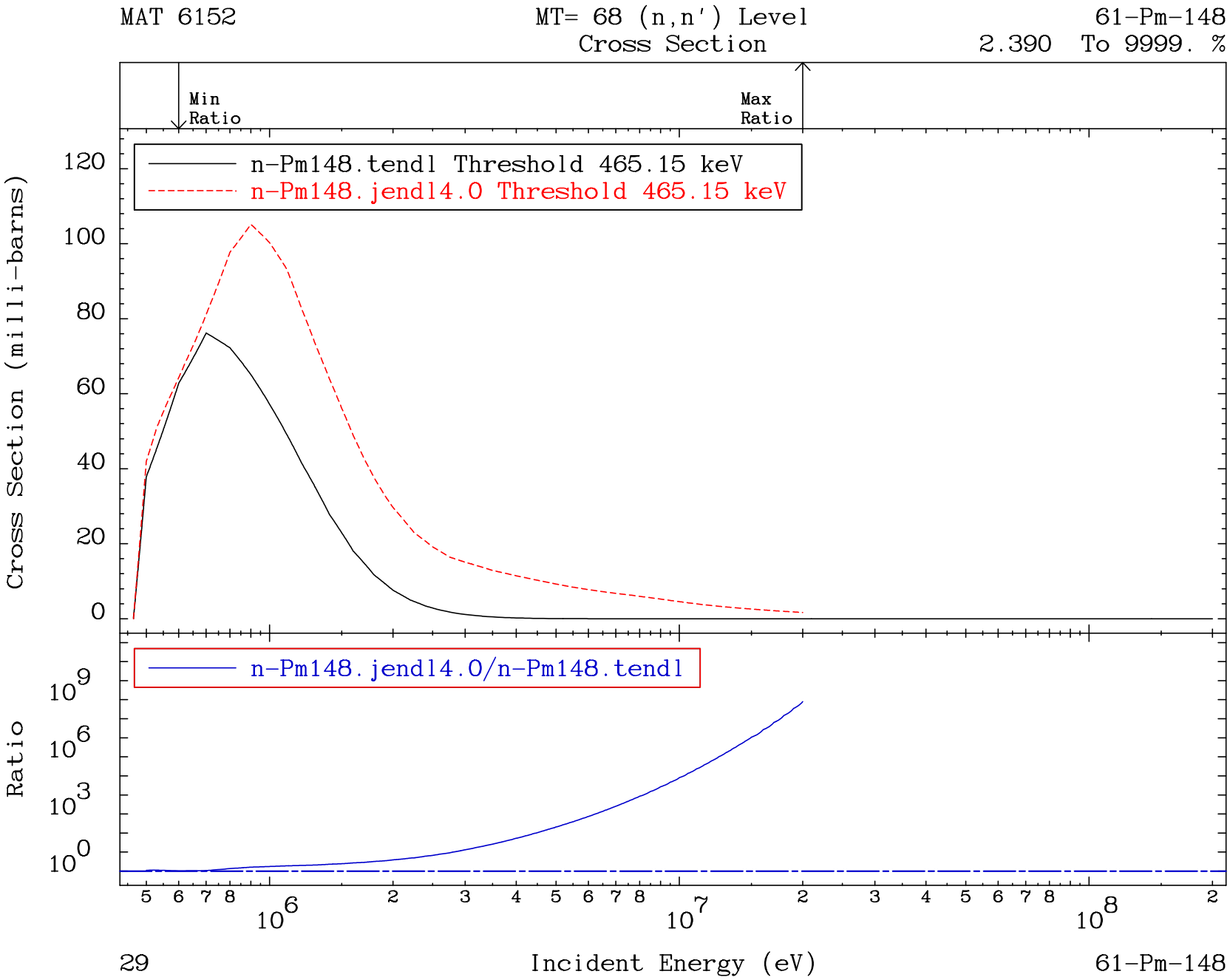

MAT 6152
MT= 63 (n,n') Level
Cross Section
61-Pm-148
-95.22 To 199.1 %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 390.75 keV
n-Pm148.jendl4.0 Threshold 390.75 keV
Cross Section (milli-barns)
0
1
2
3
4
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^0
10^-1
4
4 5 6 7 8
10^6
2
3
4 5 6 7 8
10^7
2
3
4 5 6 7 8
10^8
2
24
Incident Energy (eV)
61-Pm-148

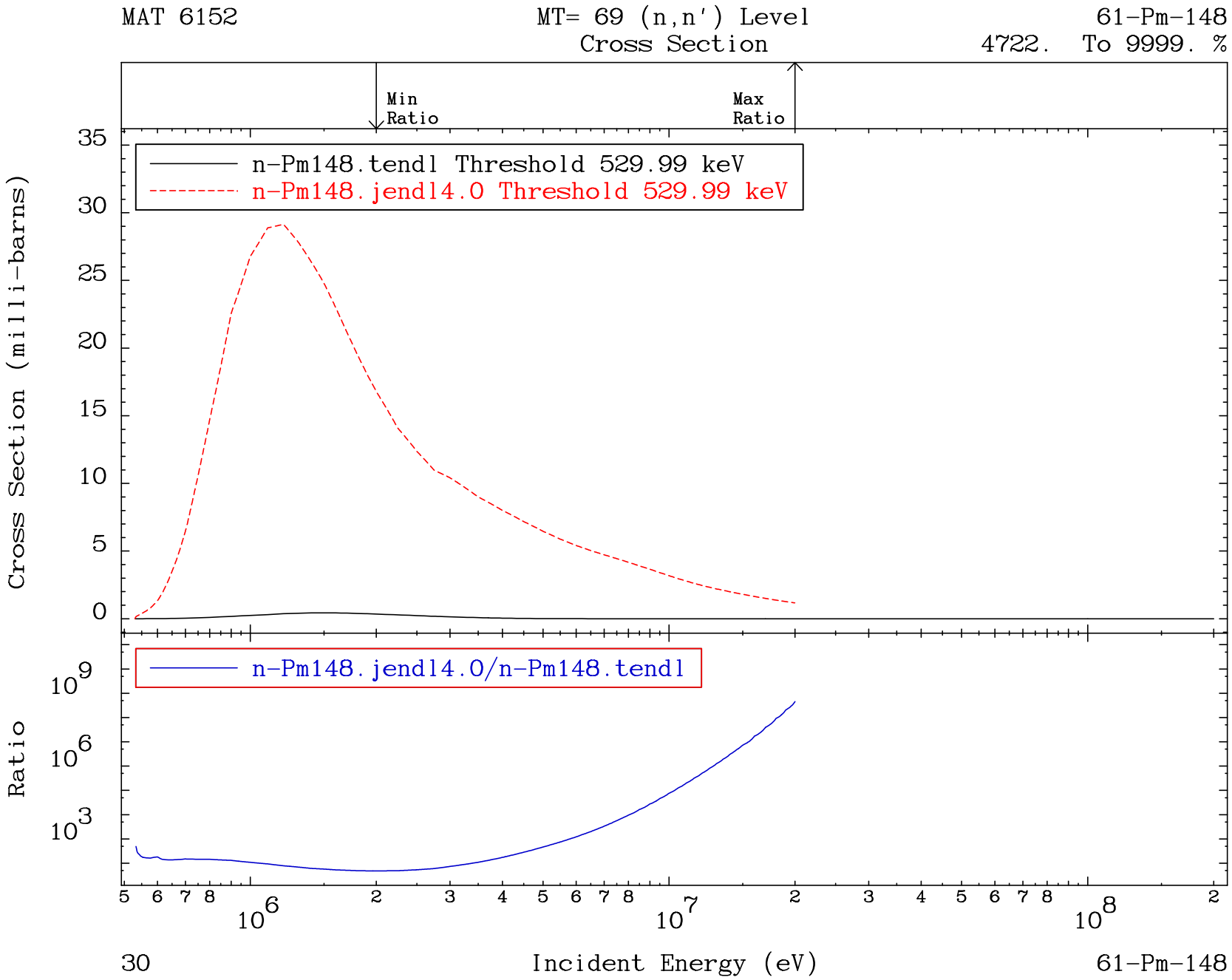

MAT 6152
MT= 64 (n,n') Level
Cross Section
61-Pm-148
-94.73 To 2051. %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 412.39 keV
n-Pm148.jendl4.0 Threshold 412.39 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^{1}
10^{0}
10^{-1}
4 5 6 7 8 10^{6} 2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
25
Incident Energy (eV)
61-Pm-148

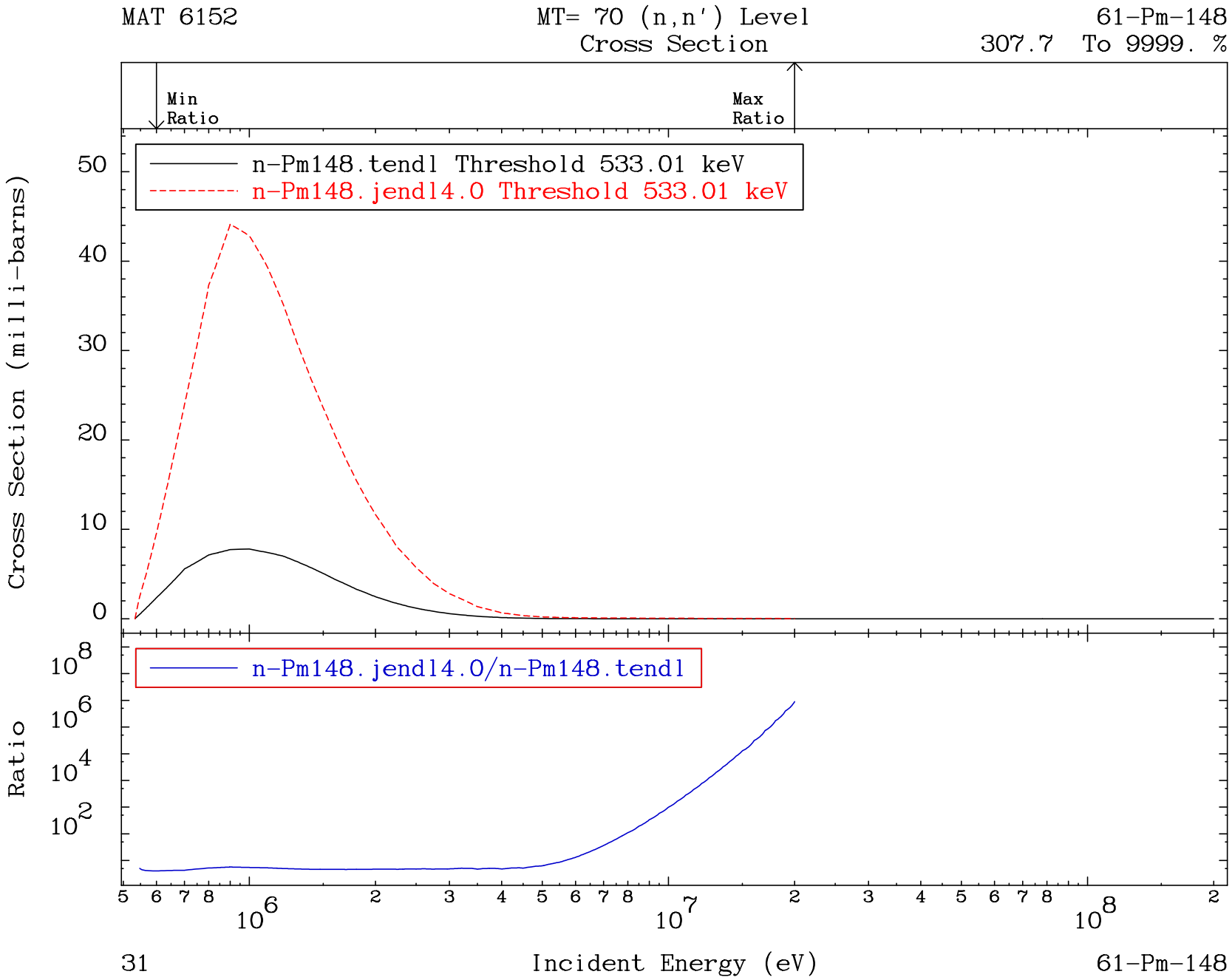

MAT 6152
MT= 65 (n,n') Level
Cross Section
61-Pm-148
-92.68 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148.tendl Threshold 416.32 keV
n-Pm148.jendl4.0 Threshold 416.32 keV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
61-Pm-148

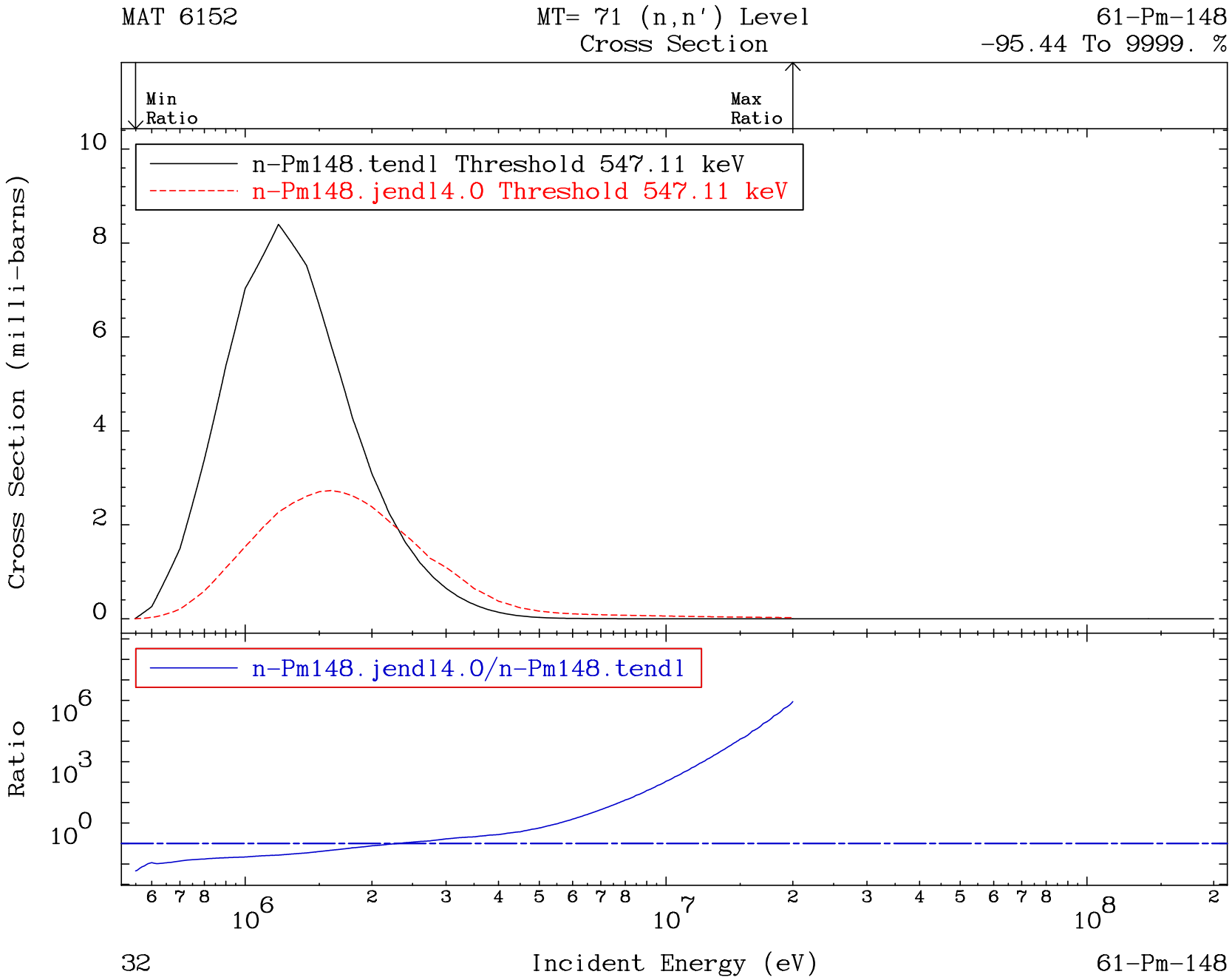

MAT 6152
MT= 66 (n,n') Level
Cross Section
61-Pm-148
-95.28 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 443.10 keV
n-Pm148.jendl4.0 Threshold 443.10 keV
Cross Section (milli-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
61-Pm-148

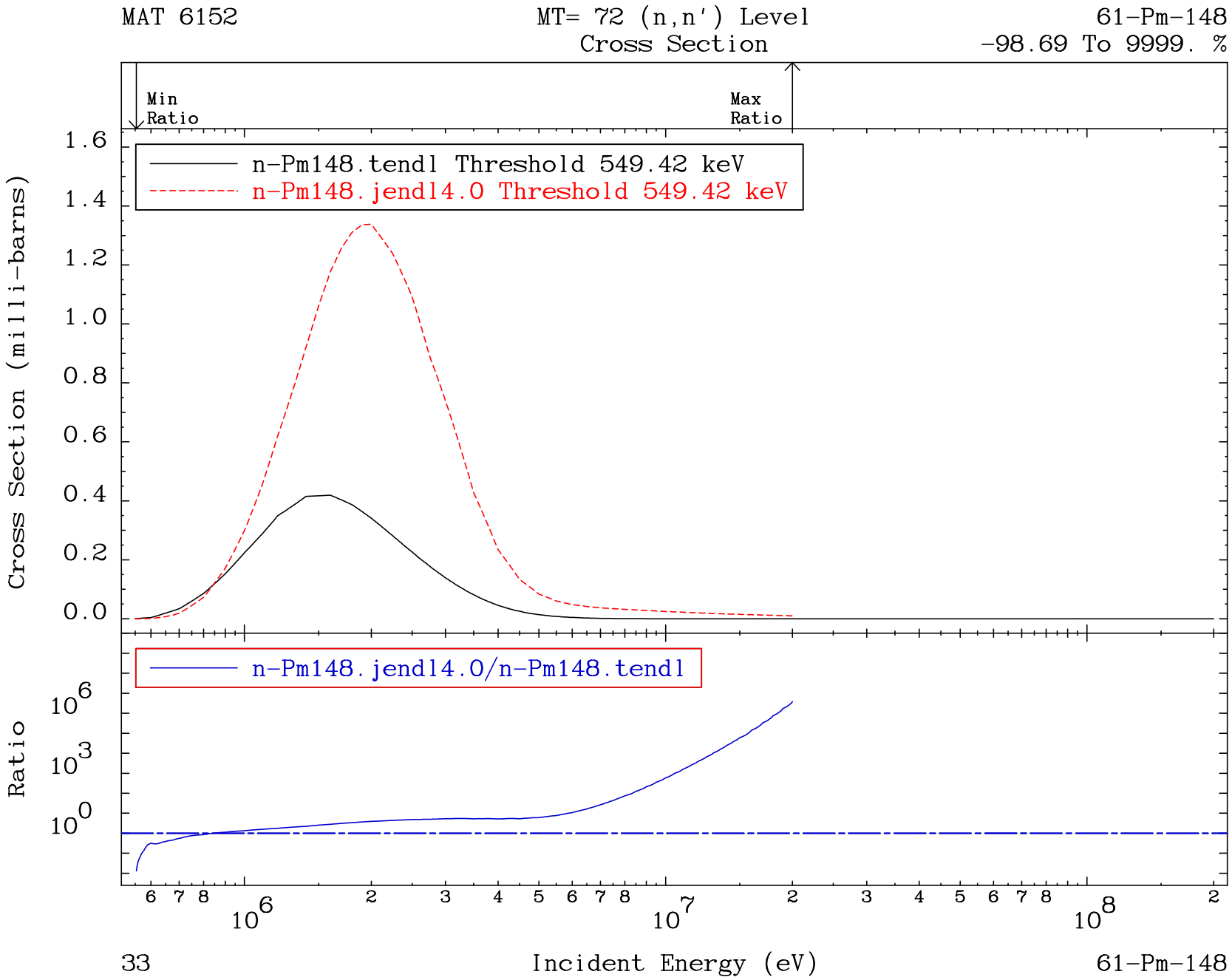

MAT 6152
MT= 67 (n,n') Level
Cross Section
61-Pm-148
-94.36 To 1198. %
Max
Ratio
Min
Ratio
n-Pm148.tendl Threshold 455.08 keV
n-Pm148.jendl4.0 Threshold 455.08 keV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^{1}
10^{0}
10^{-1}
5 6 7 8
10^{6}
2 3 4 5 6 7 8
10^{7}
2 3 4 5 6 7 8
10^{8}
2
28
Incident Energy (eV)
61-Pm-148

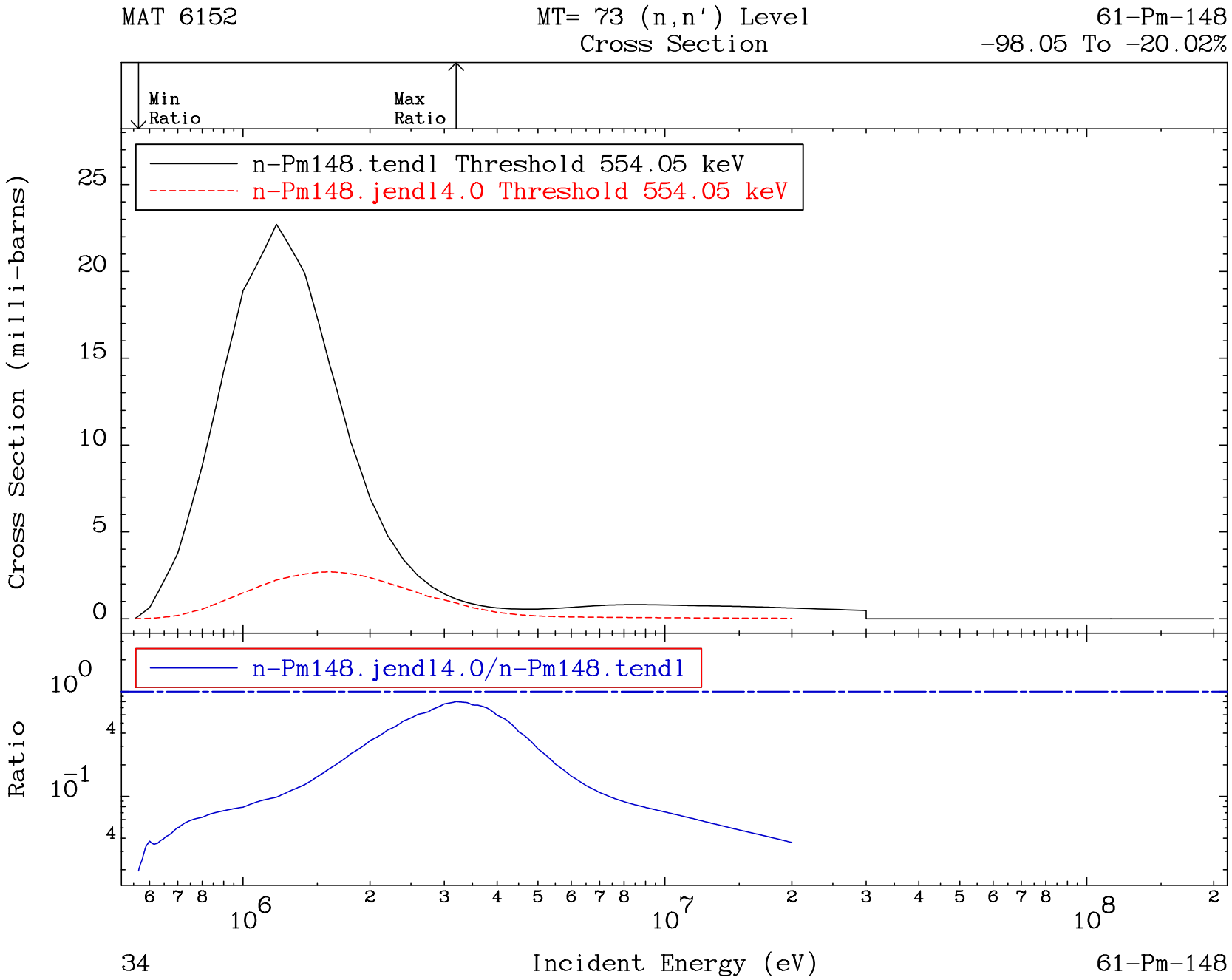

MAT 6152
MT= 68 (n,n') Level
Cross Section
61-Pm-148
2.390 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 465.15 keV
n-Pm148.jendl4.0 Threshold 465.15 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
61-Pm-148

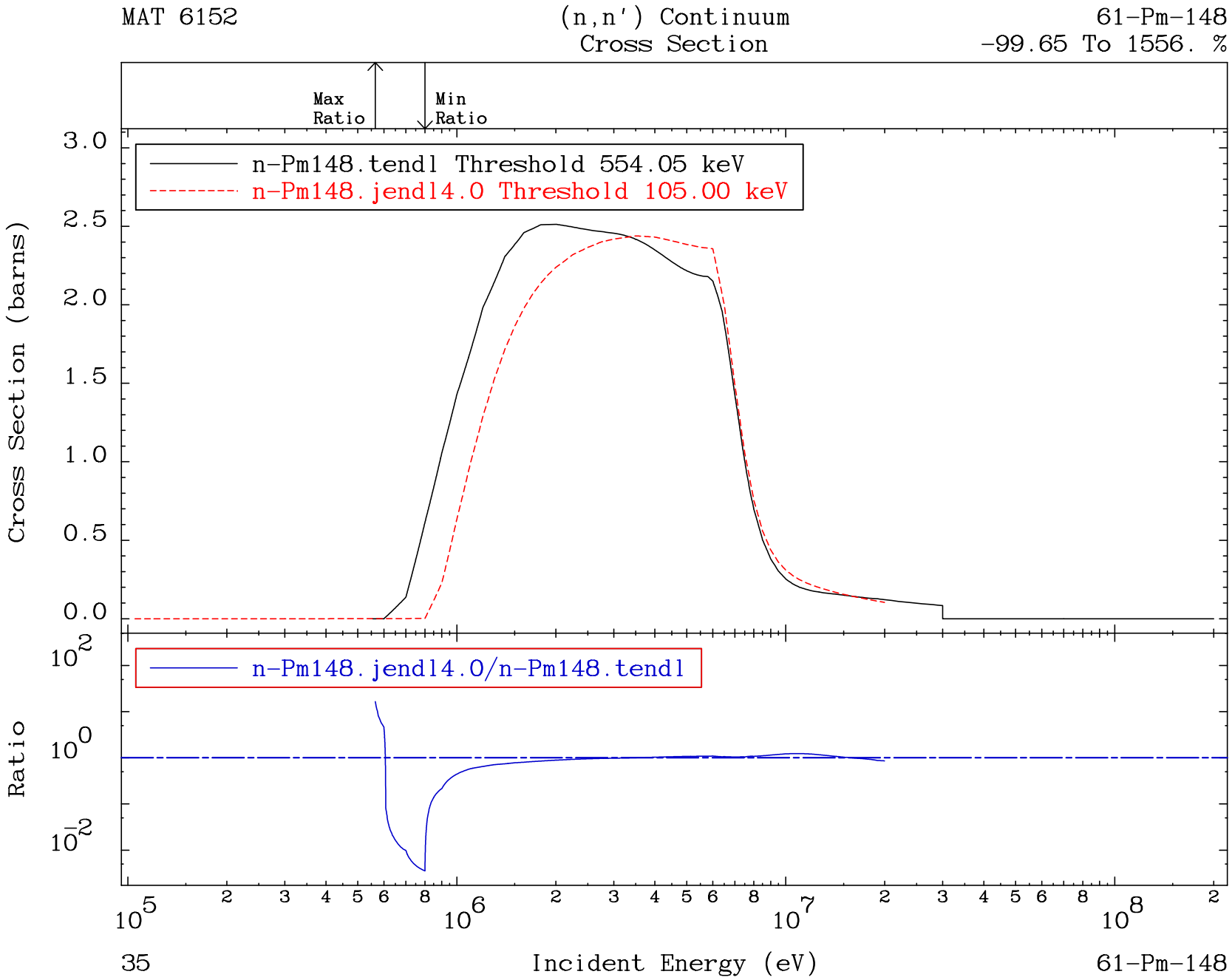

MAT 6152
MT= 69 (n,n') Level
Cross Section
61-Pm-148
4722. To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 529.99 keV
n-Pm148.jendl4.0 Threshold 529.99 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^9
10^6
10^3
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
61-Pm-148

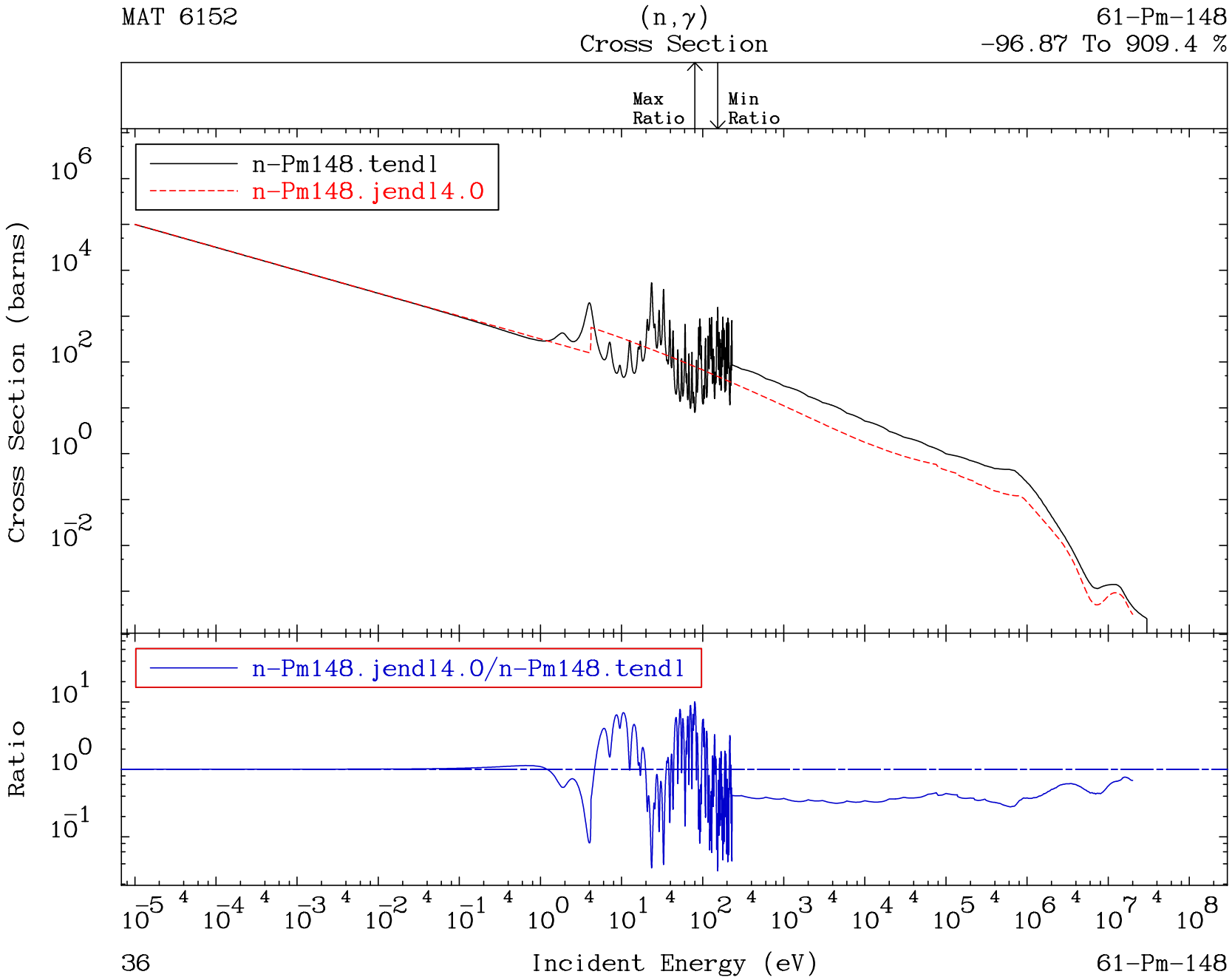

MAT 6152
MT= 70 (n,n') Level
Cross Section
61-Pm-148
307.7 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 533.01 keV
n-Pm148.jendl4.0 Threshold 533.01 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^8
10^6
10^4
10^2
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
61-Pm-148

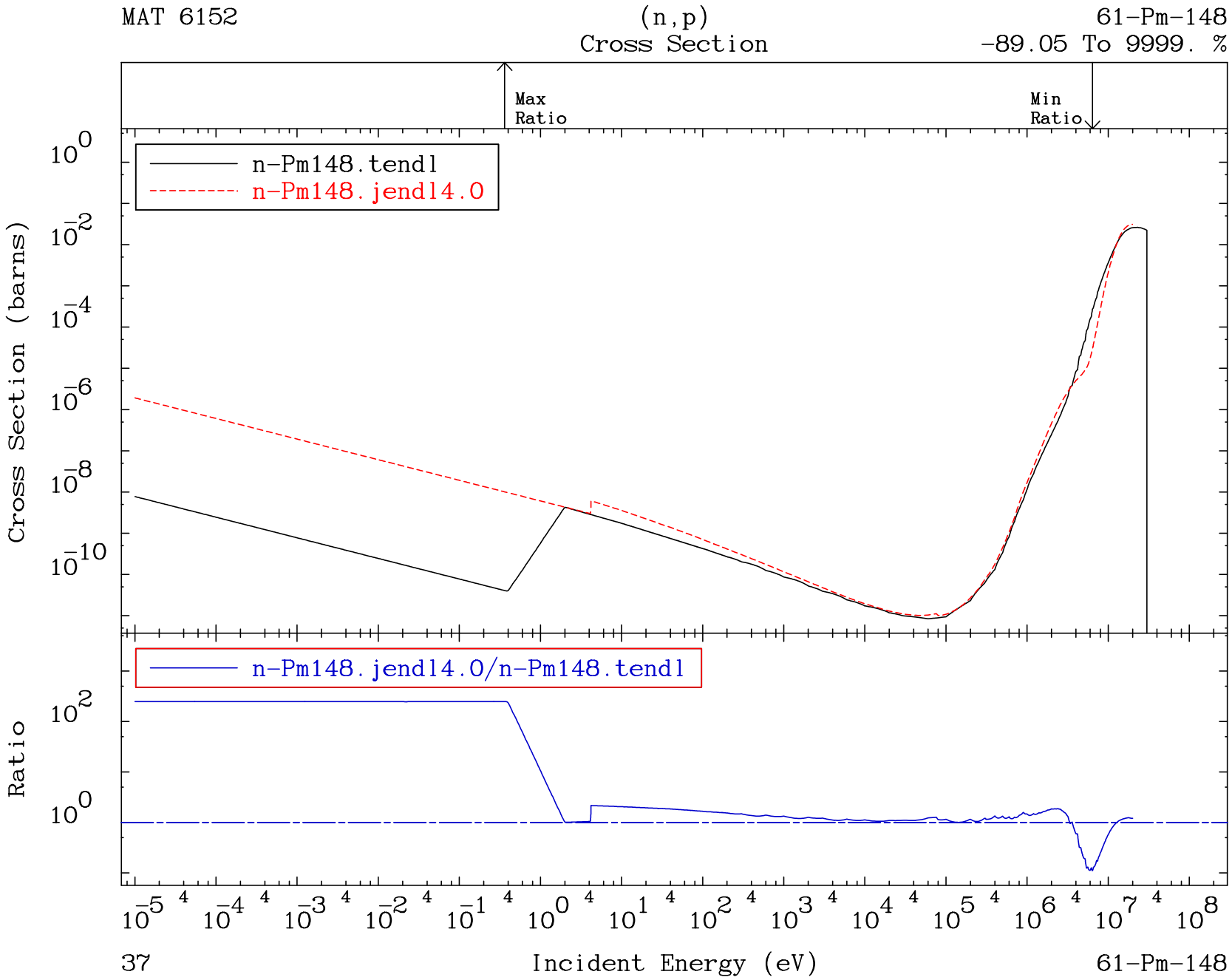

MAT 6152
MT= 71 (n,n') Level
Cross Section
61-Pm-148
-95.44 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 547.11 keV
n-Pm148.jendl4.0 Threshold 547.11 keV
Cross Section (milli-barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
32
61-Pm-148

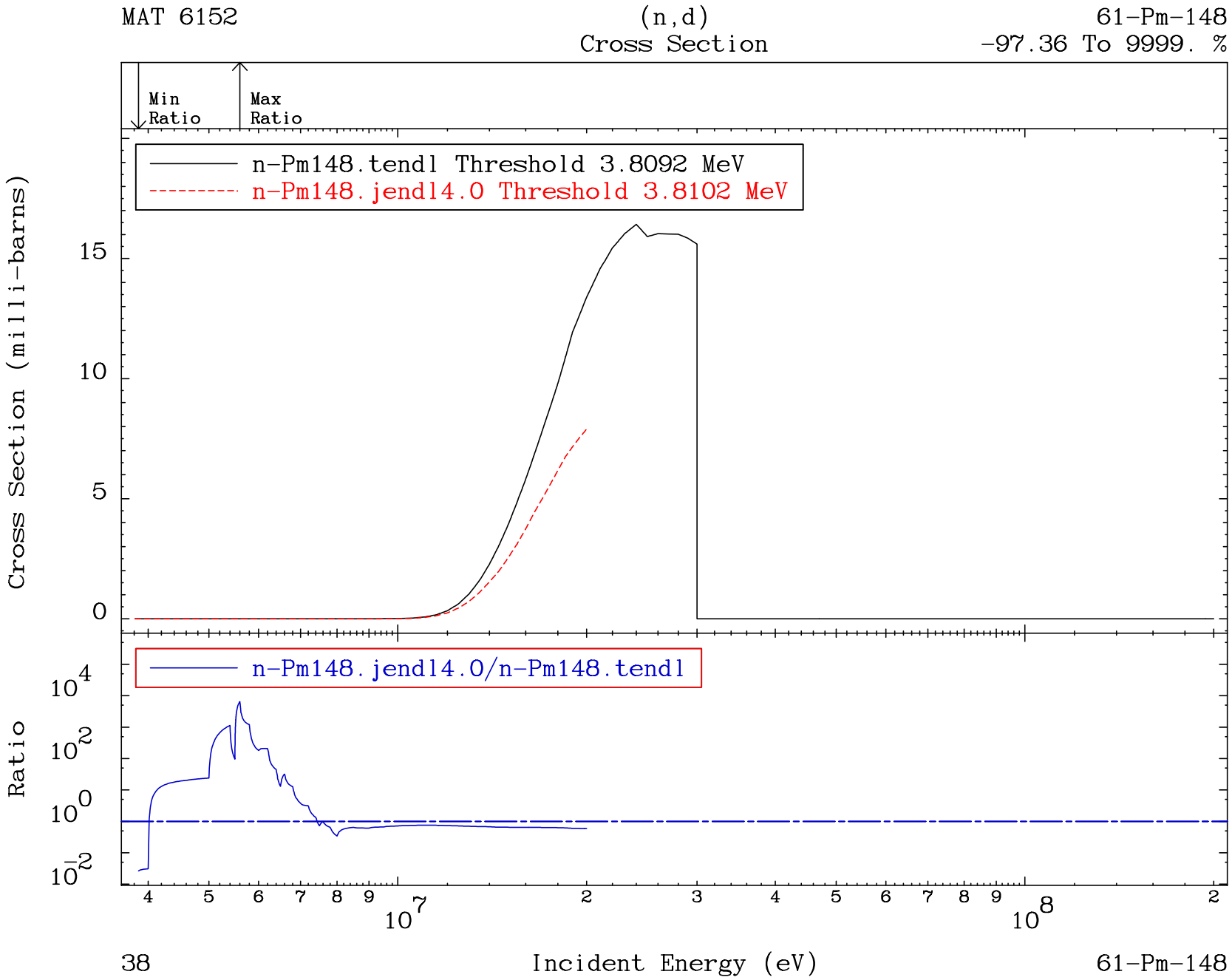

MAT 6152
MT= 72 (n,n') Level
Cross Section
61-Pm-148
-98.69 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 549.42 keV
n-Pm148.jendl4.0 Threshold 549.42 keV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^6
10^3
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
61-Pm-148

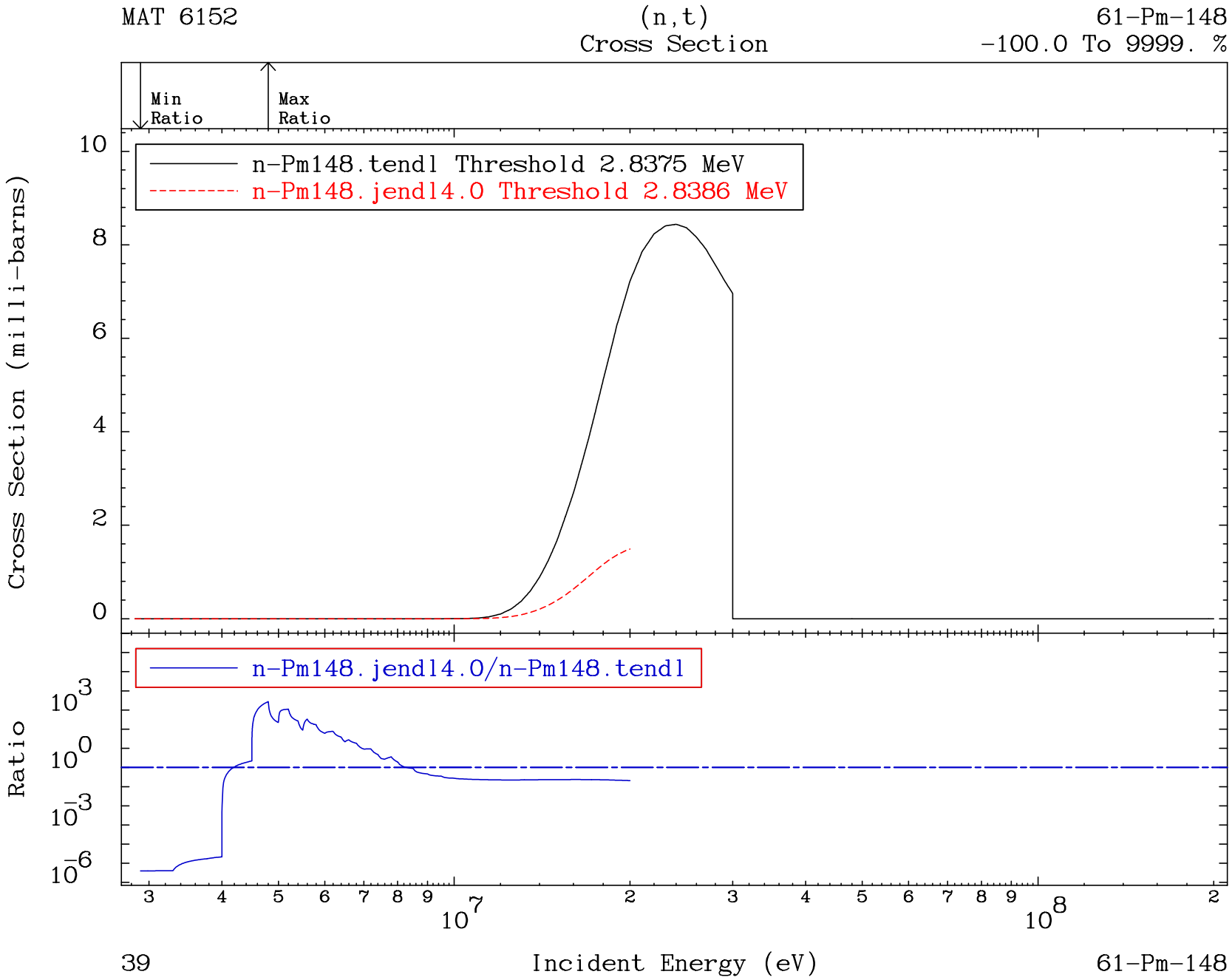

MAT 6152
MT= 73 (n,n') Level
Cross Section
61-Pm-148
-98.05 To -20.02%
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 554.05 keV
n-Pm148.jendl4.0 Threshold 554.05 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^0
10^-1
4
4
6 7 8
10^6
2
3
4
5
6 7 8
10^7
2
3
4
5
6 7 8
10^8
2
34
Incident Energy (eV)
61-Pm-148

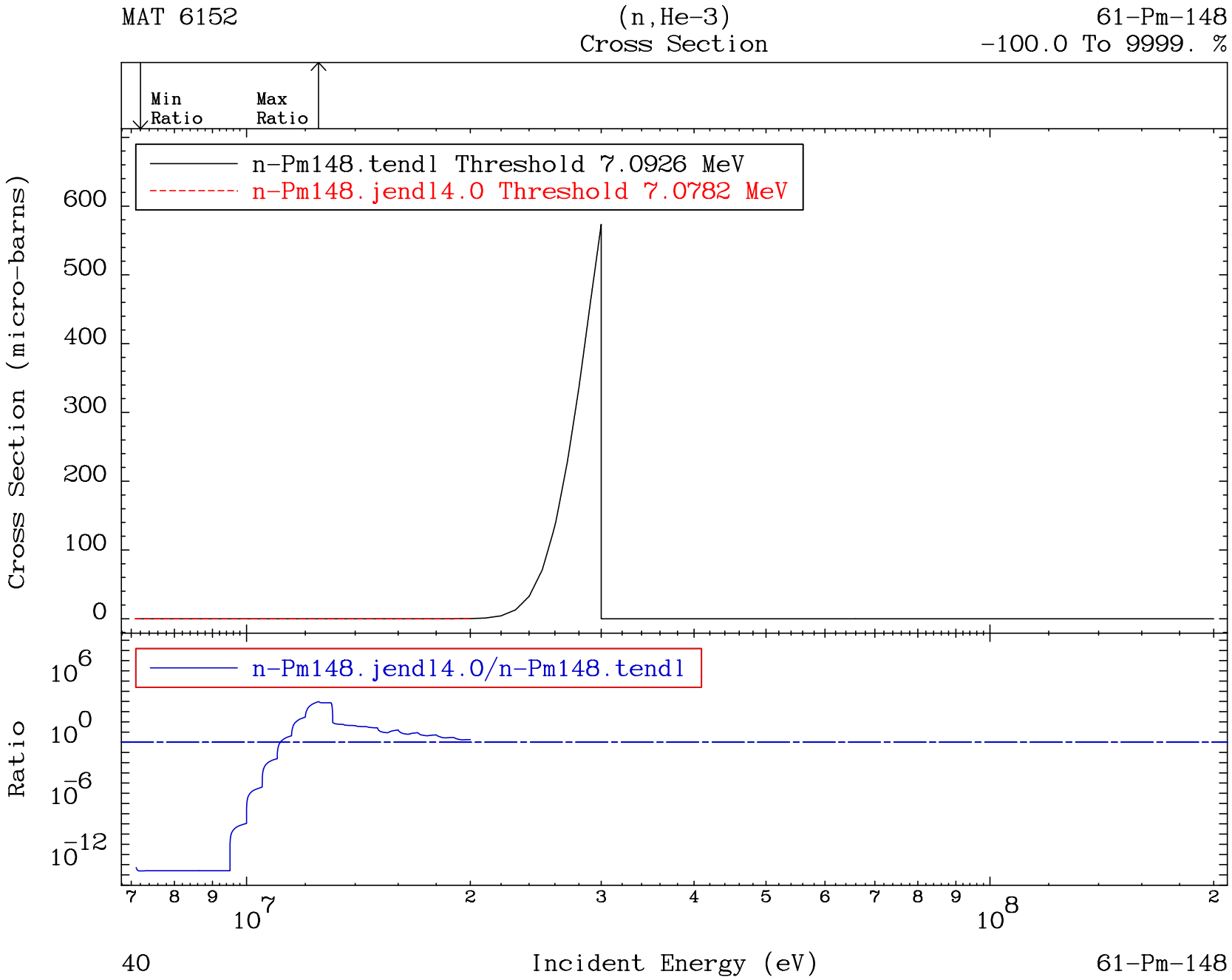

MAT 6152
(n,n') Continuum
Cross Section
61-Pm-148
-99.65 To 1556. %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 554.05 keV
n-Pm148.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^2
10^0
10^-2
10^5
10^6
10^7
10^8
Incident Energy (eV)
35
61-Pm-148

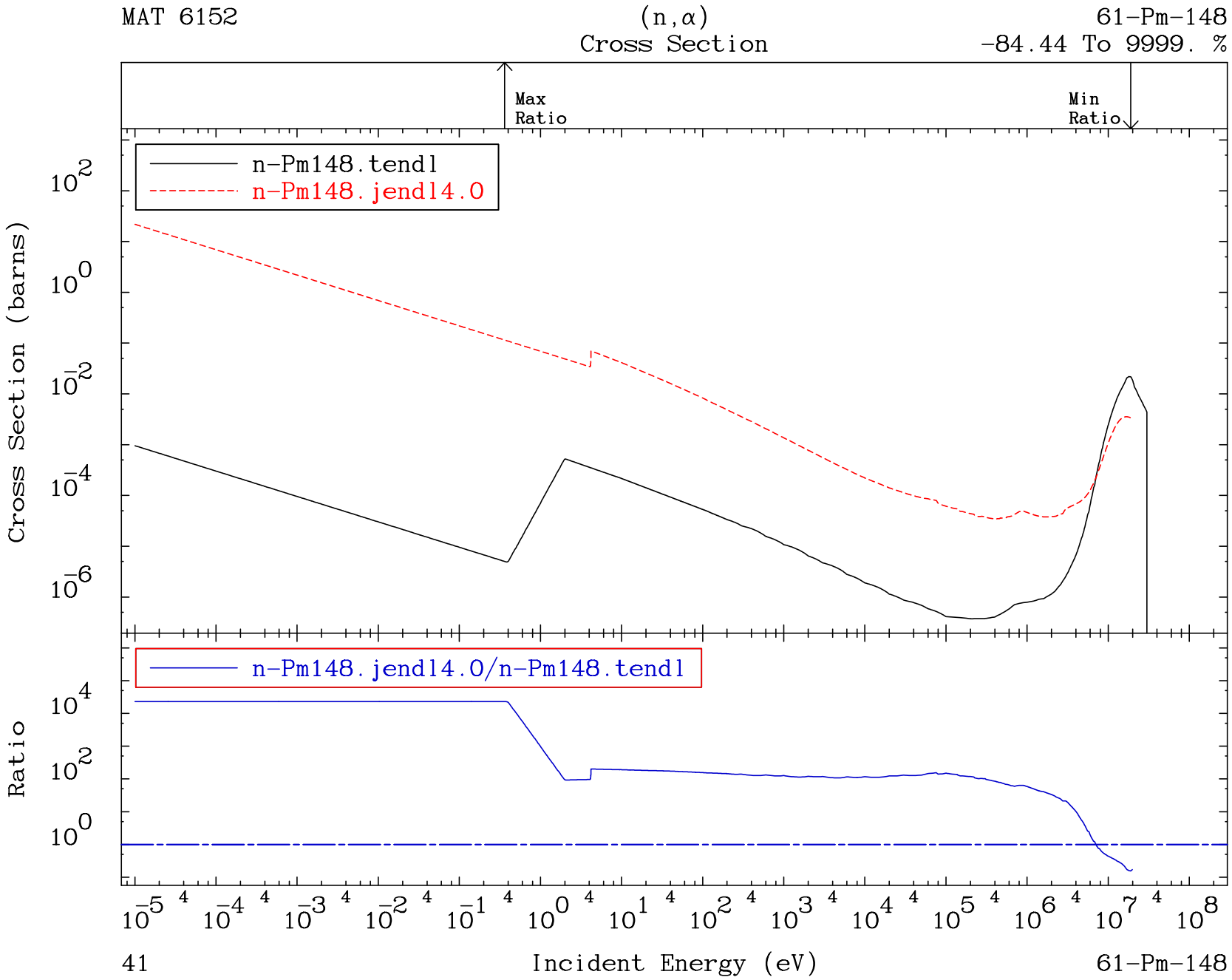

MAT 6152
(n,γ)
Cross Section
61-Pm-148
-96.87 To 909.4 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
36
61-Pm-148

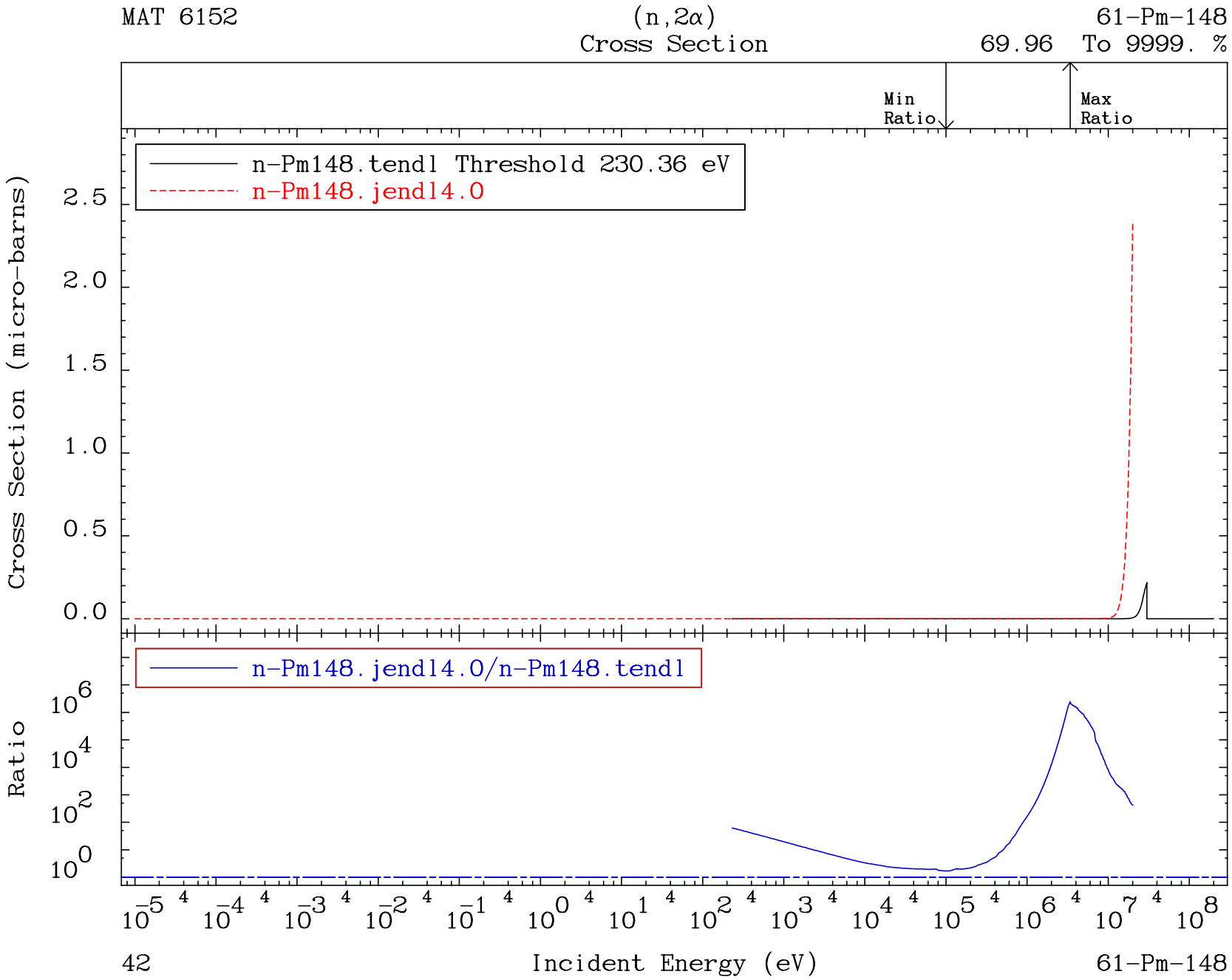

MAT 6152
(n,p)
Cross Section
61-Pm-148
-89.05 To 9999. %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
37
61-Pm-148

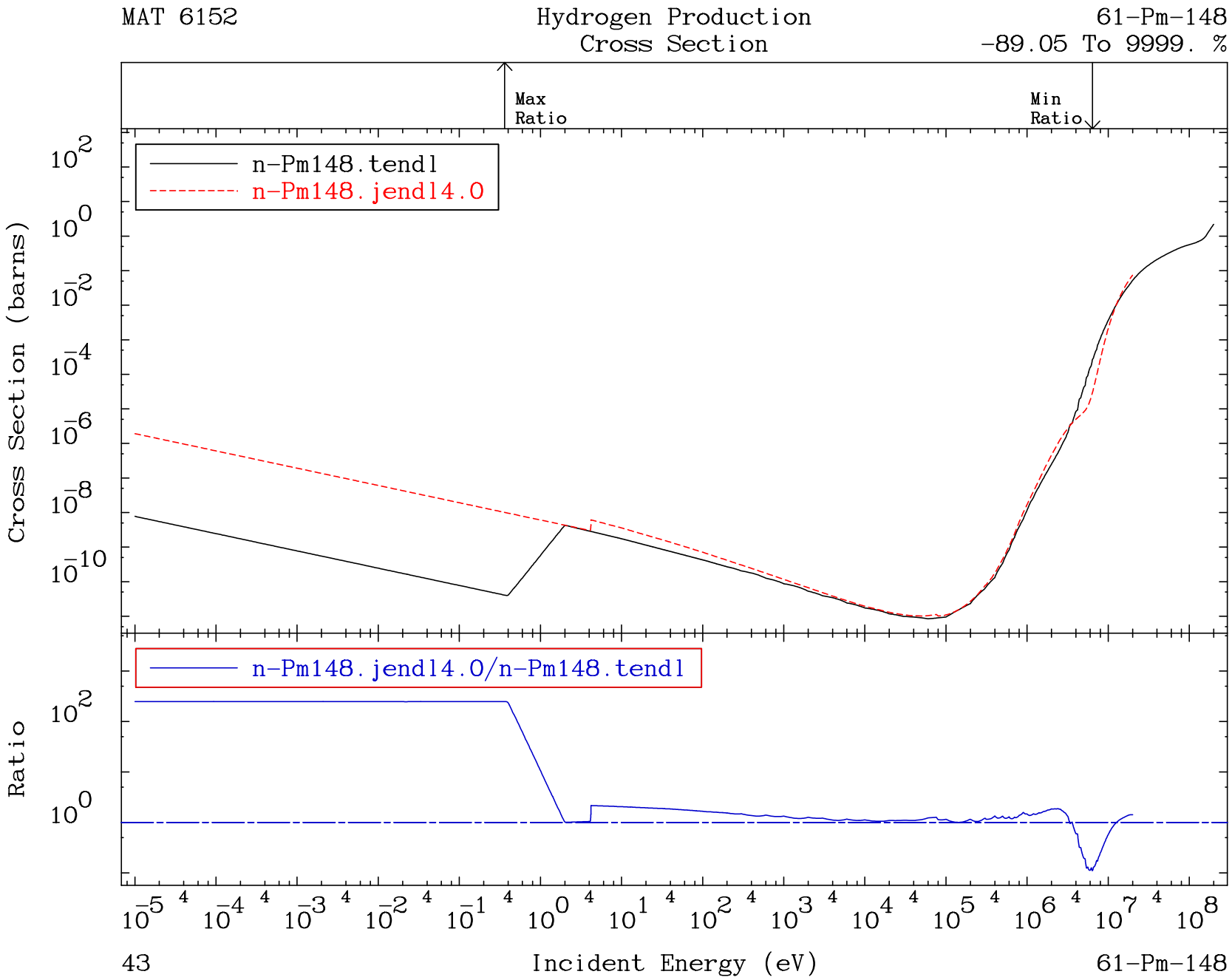

MAT 6152
(n,d)
Cross Section
61-Pm-148
-97.36 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 3.8092 MeV
n-Pm148.jendl4.0 Threshold 3.8102 MeV
Cross Section (milli-barns)
15
10
5
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^4
10^2
10^0
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
61-Pm-148

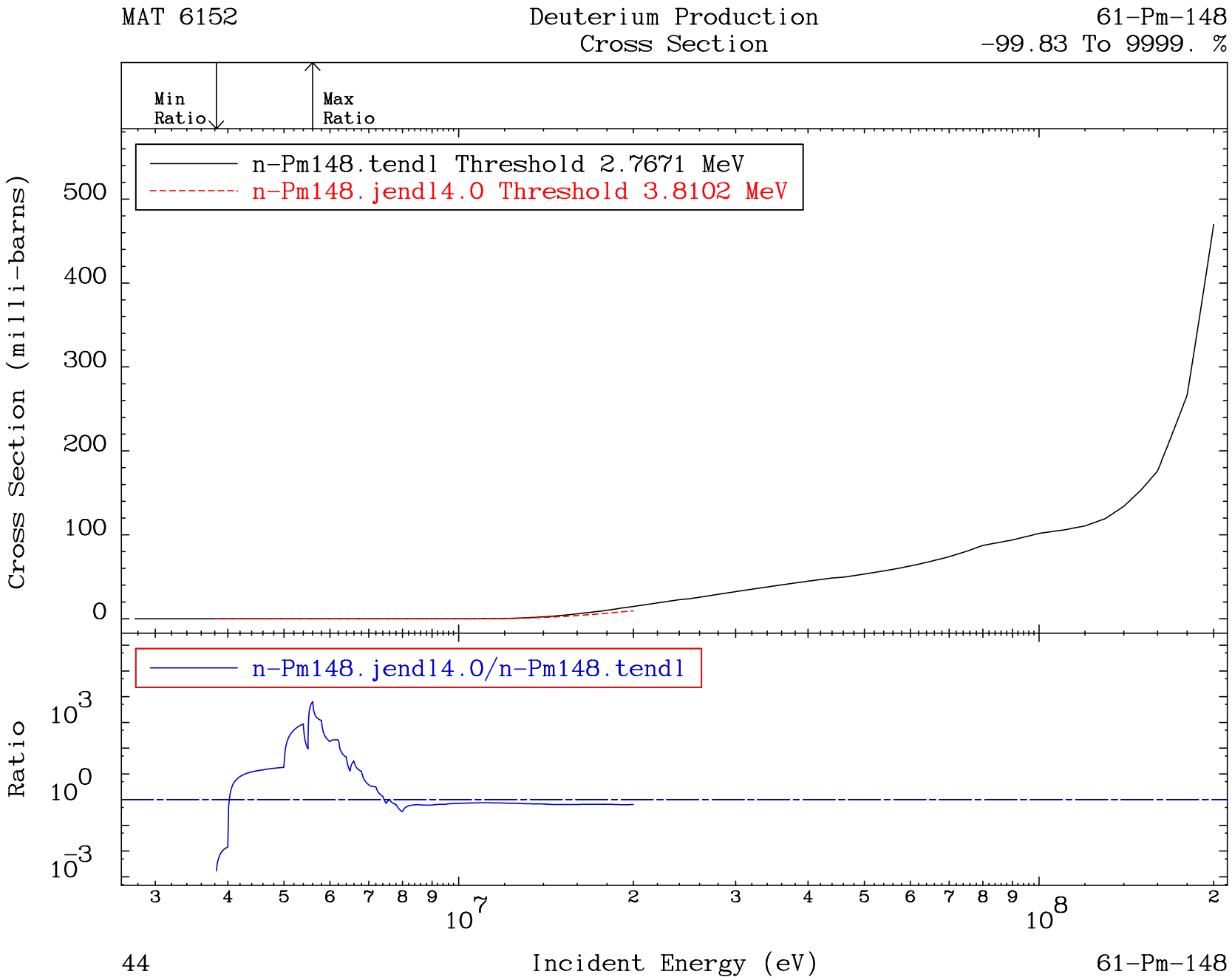

MAT 6152
(n,t)
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 2.8375 MeV
n-Pm148.jendl4.0 Threshold 2.8386 MeV
Cross Section (milli-barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
39
61-Pm-148

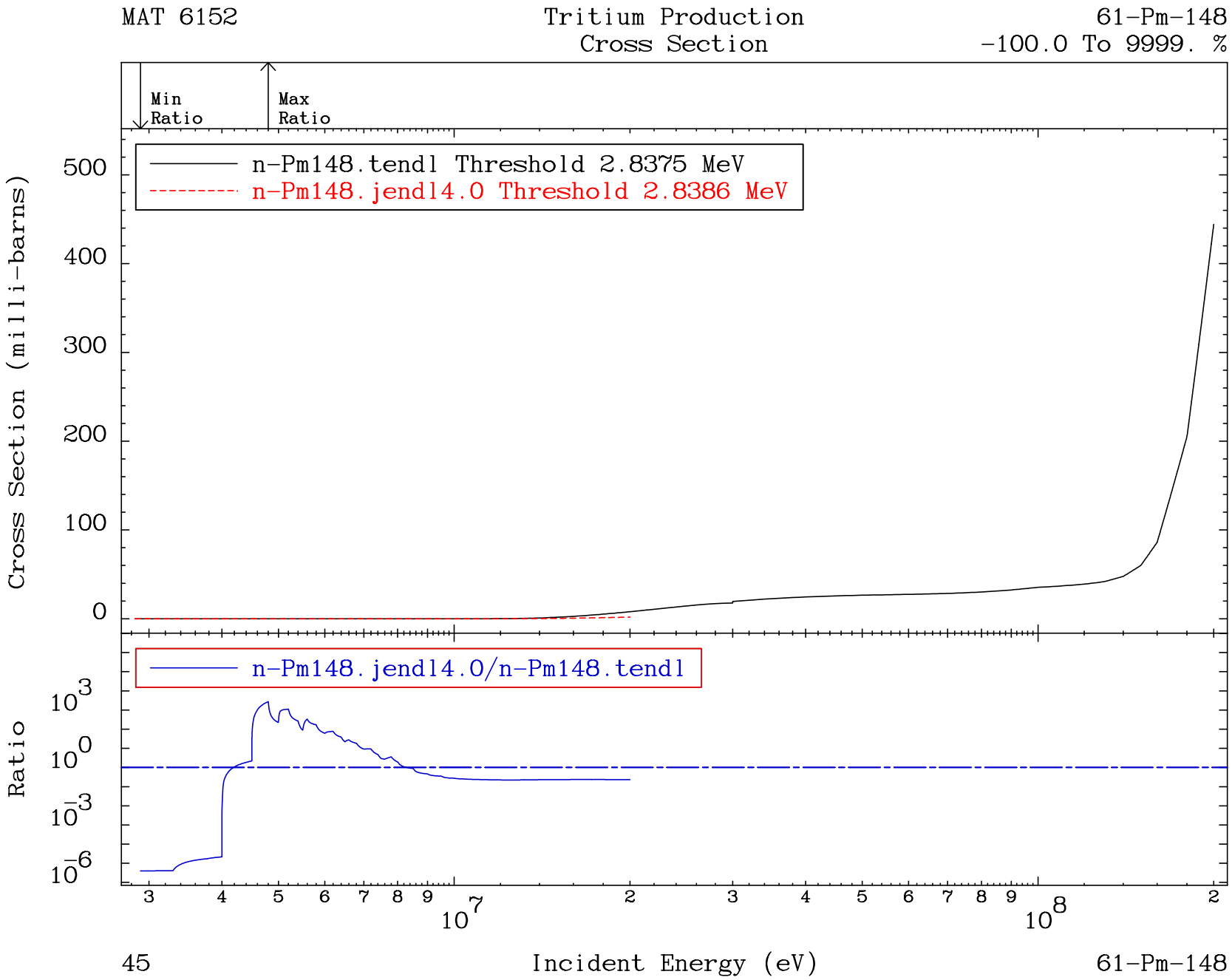

MAT 6152
(n,He-3)
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 7.0926 MeV
n-Pm148.jendl4.0 Threshold 7.0782 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^6
10^0
10^-6
10^-12
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
61-Pm-148

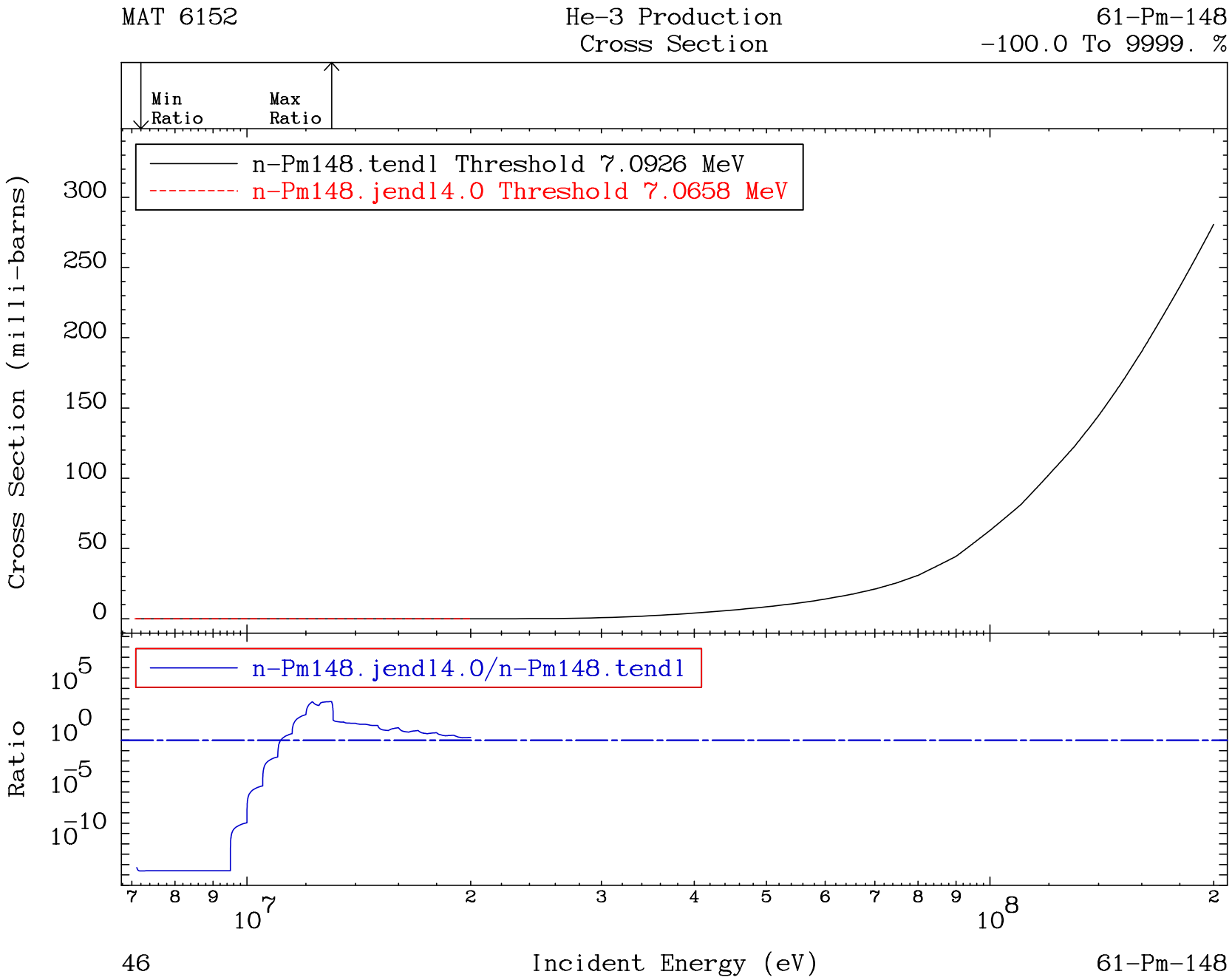

MAT 6152
(n,α)
Cross Section
61-Pm-148
-84.44 To 9999. %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
41
61-Pm-148

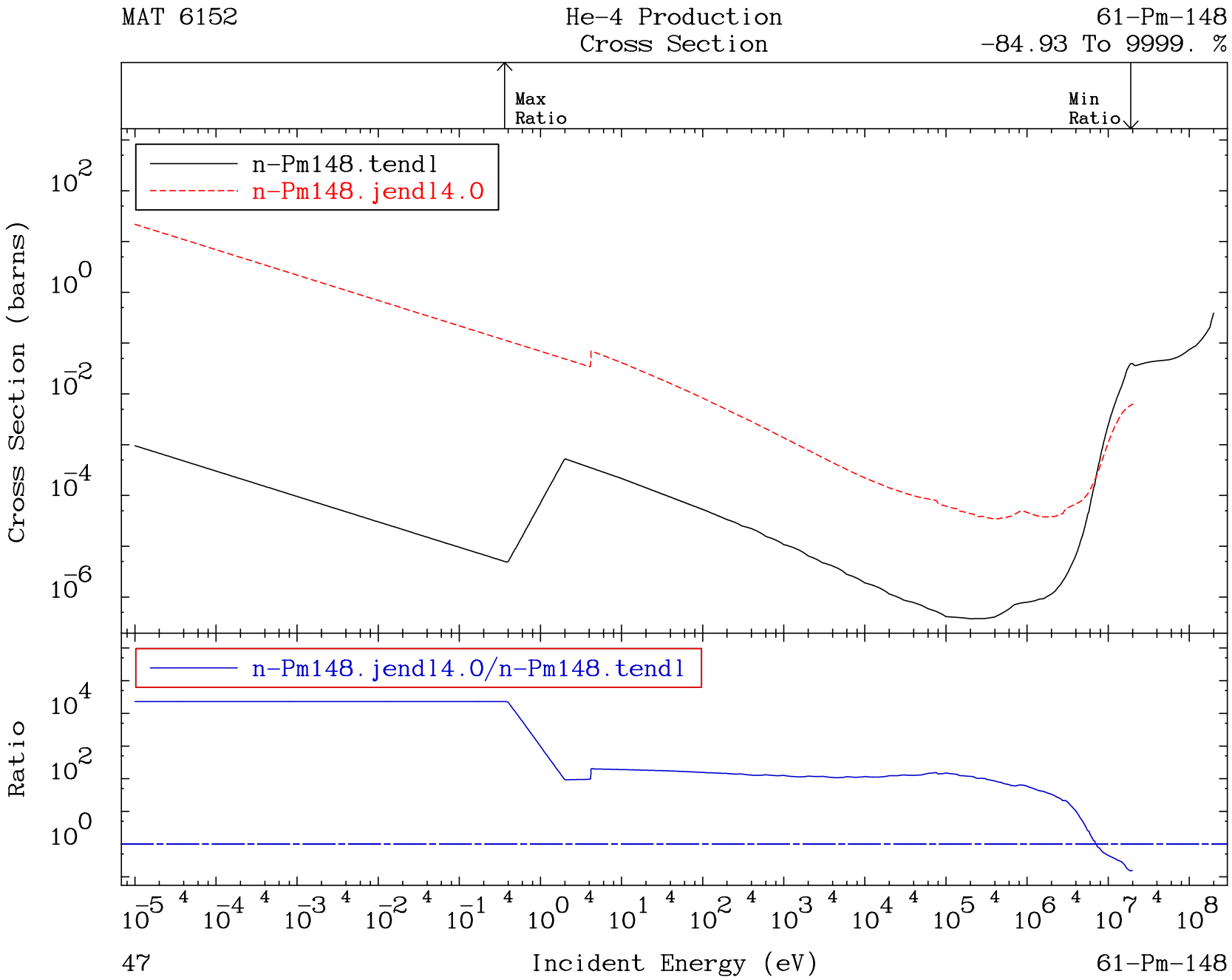

MAT 6152
(n,2α)
Cross Section
61-Pm-148
69.96 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 230.36 eV
n-Pm148.jendl4.0
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^6
10^4
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
42
Incident Energy (eV)
61-Pm-148

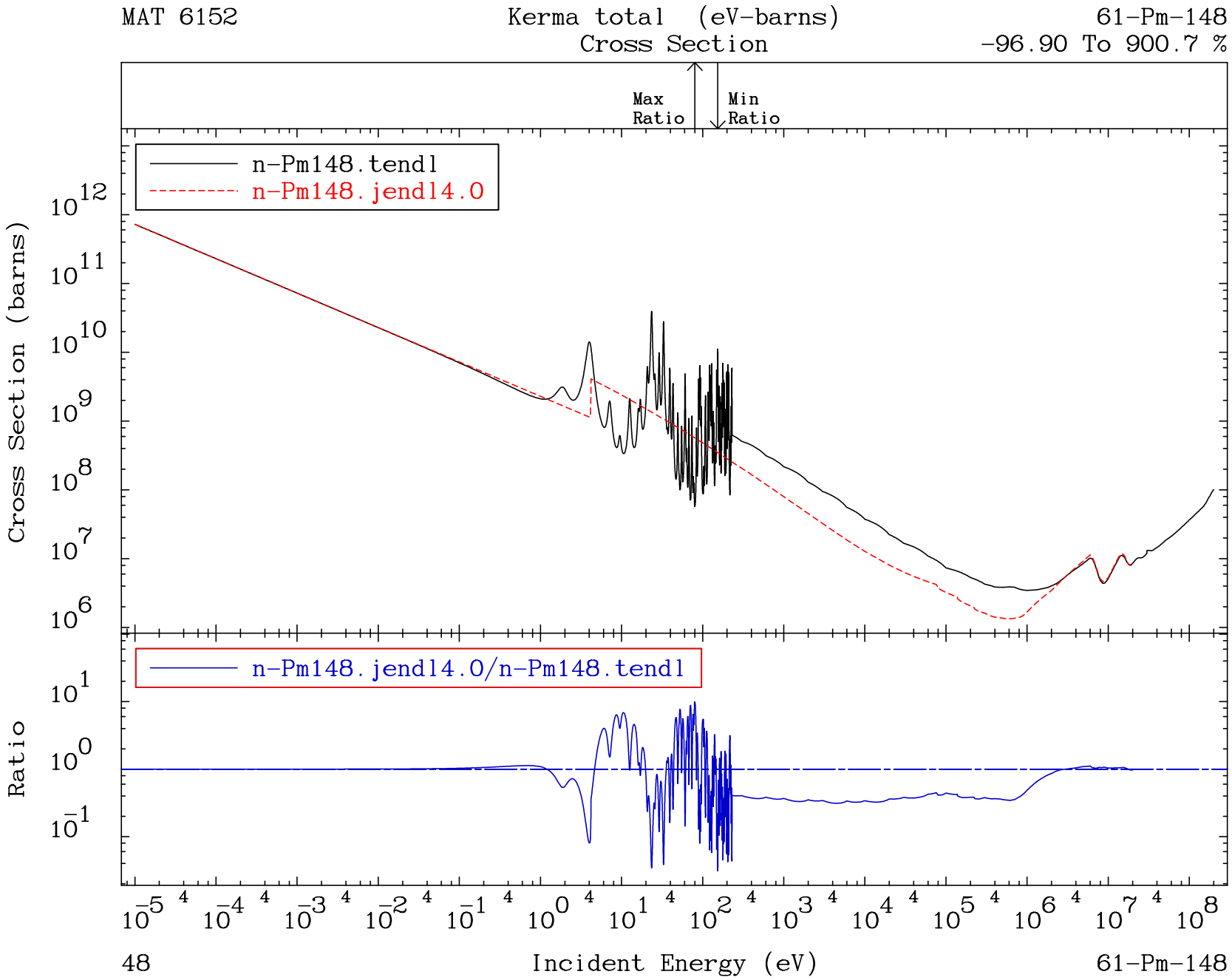

MAT 6152
Hydrogen Production
Cross Section
61-Pm-148
-89.05 To 9999. %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
43
61-Pm-148

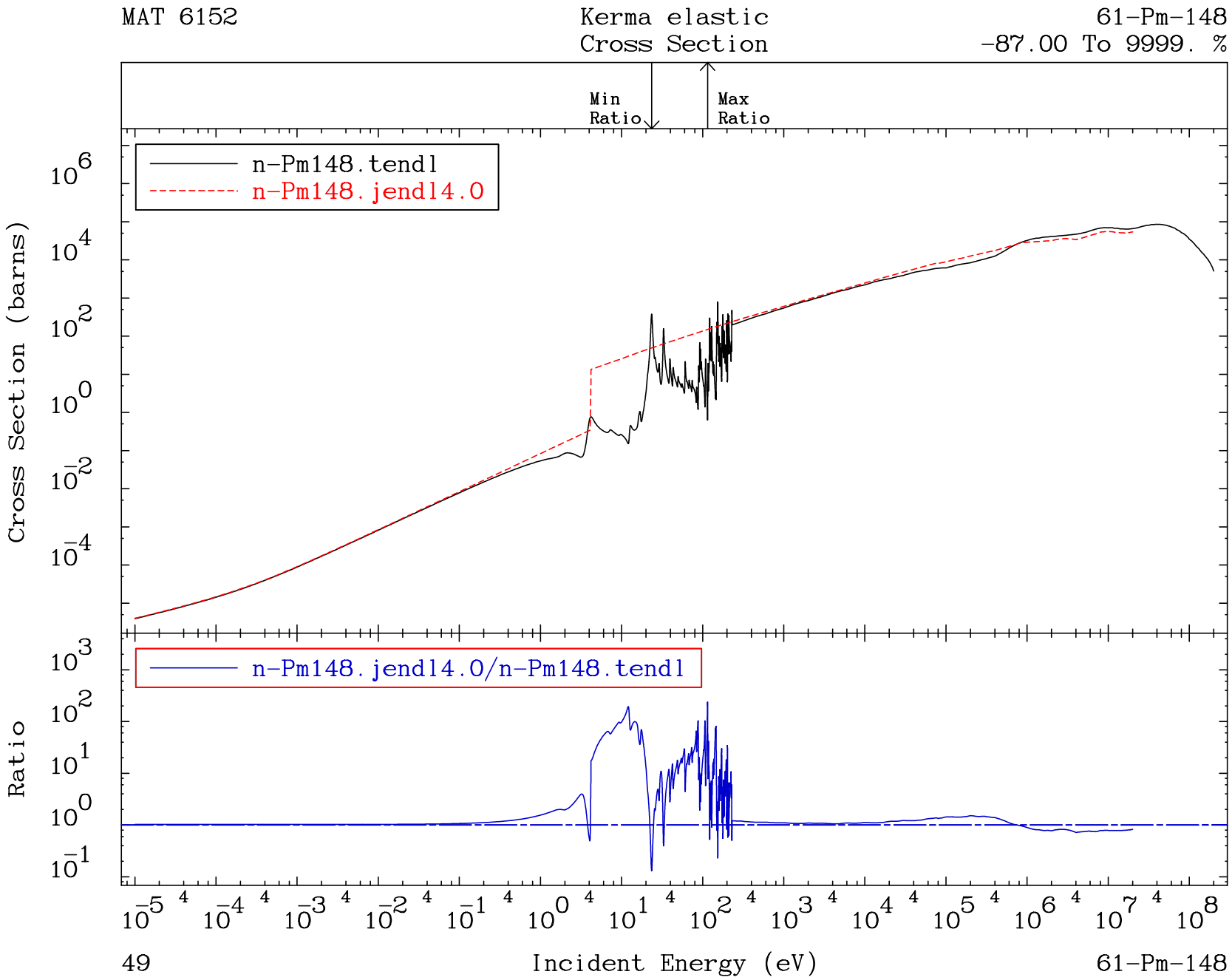

MAT 6152
Deuterium Production
Cross Section
61-Pm-148
-99.83 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 2.7671 MeV
n-Pm148.jendl4.0 Threshold 3.8102 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^3
10^0
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
61-Pm-148

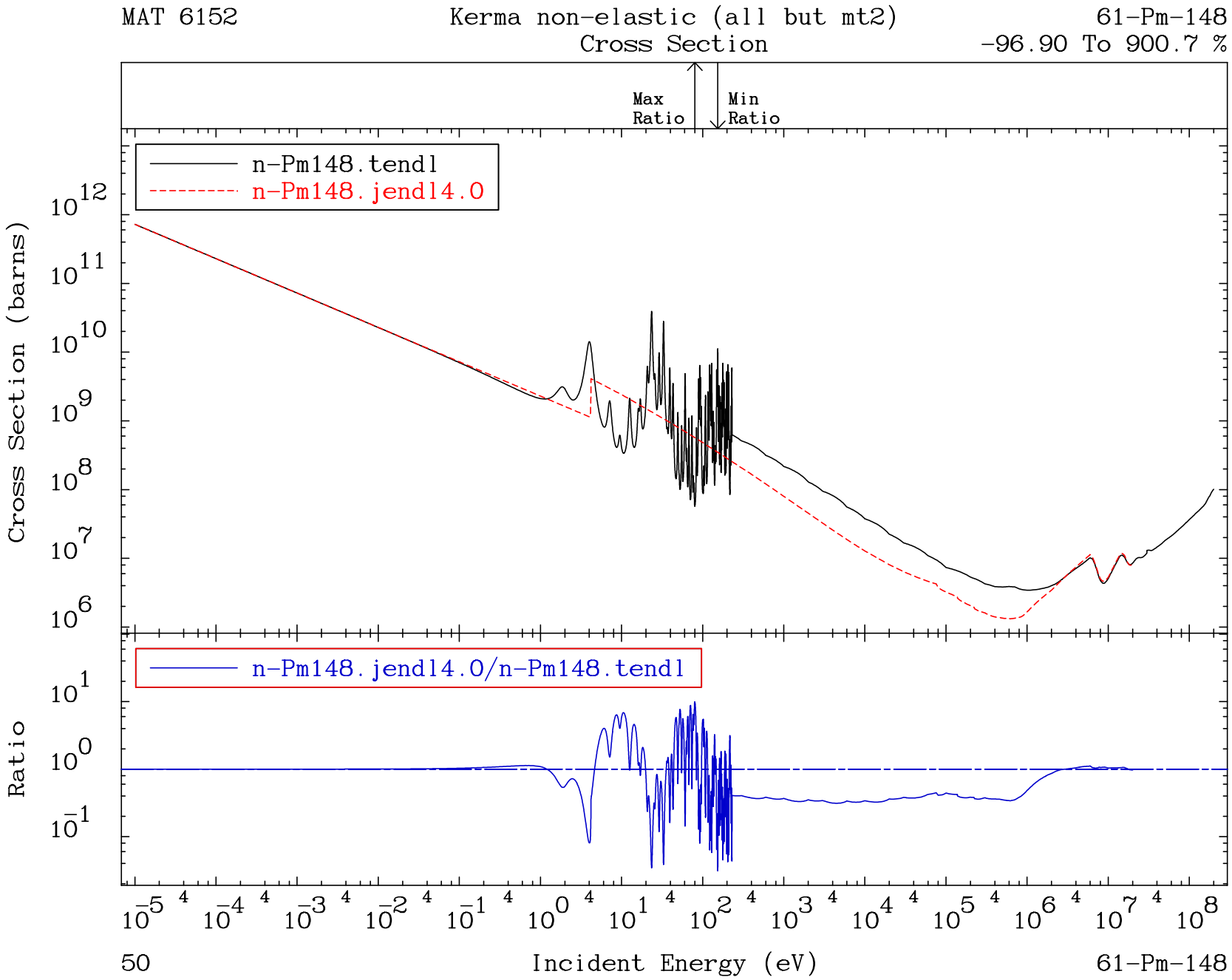

MAT 6152
Tritium Production
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 2.8375 MeV
n-Pm148.jendl4.0 Threshold 2.8386 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^3
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
61-Pm-148

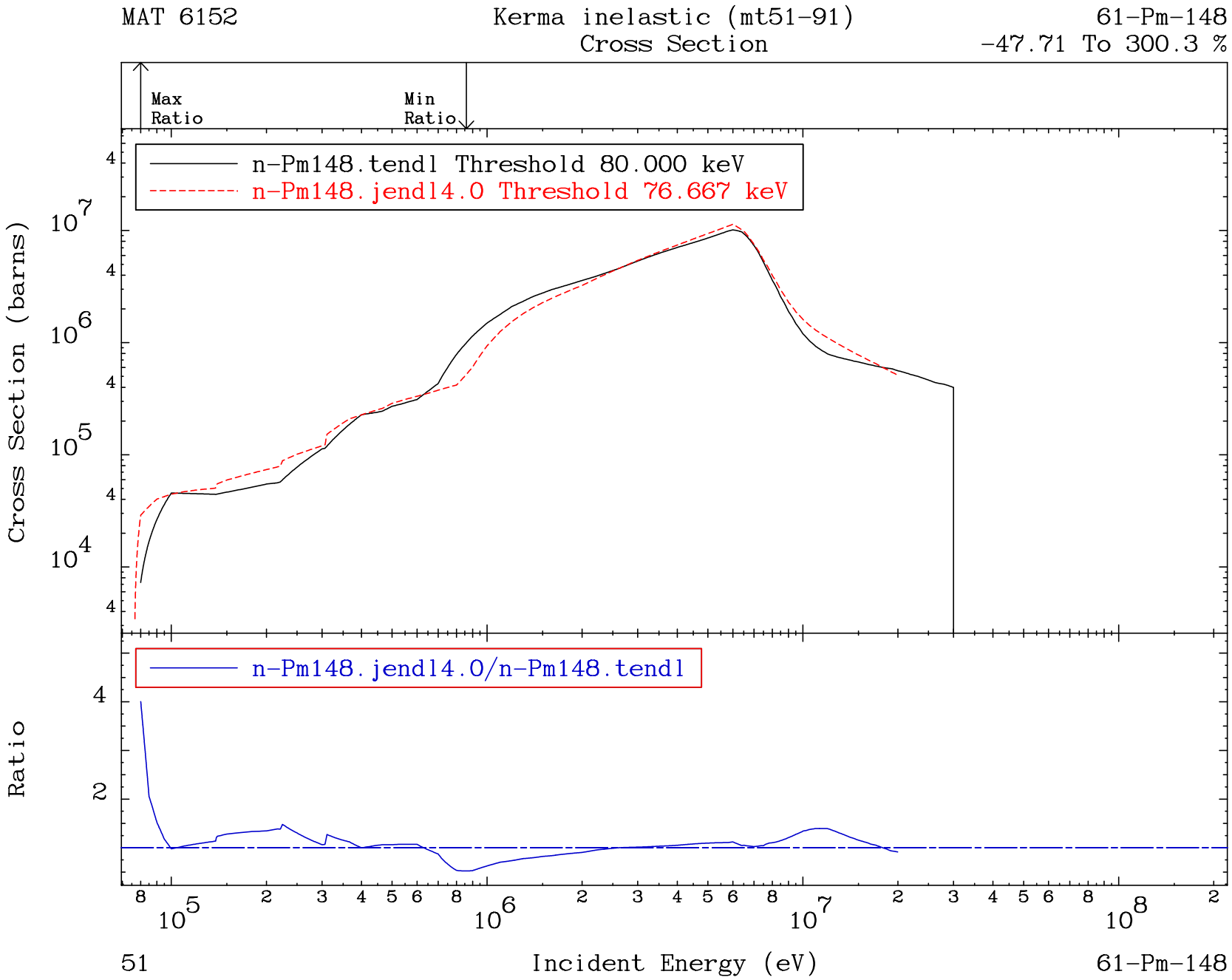

MAT 6152
He-3 Production
Cross Section
61-Pm-148
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 7.0926 MeV
n-Pm148.jendl4.0 Threshold 7.0658 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
10^5
10^0
10^-5
10^-10
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
61-Pm-148

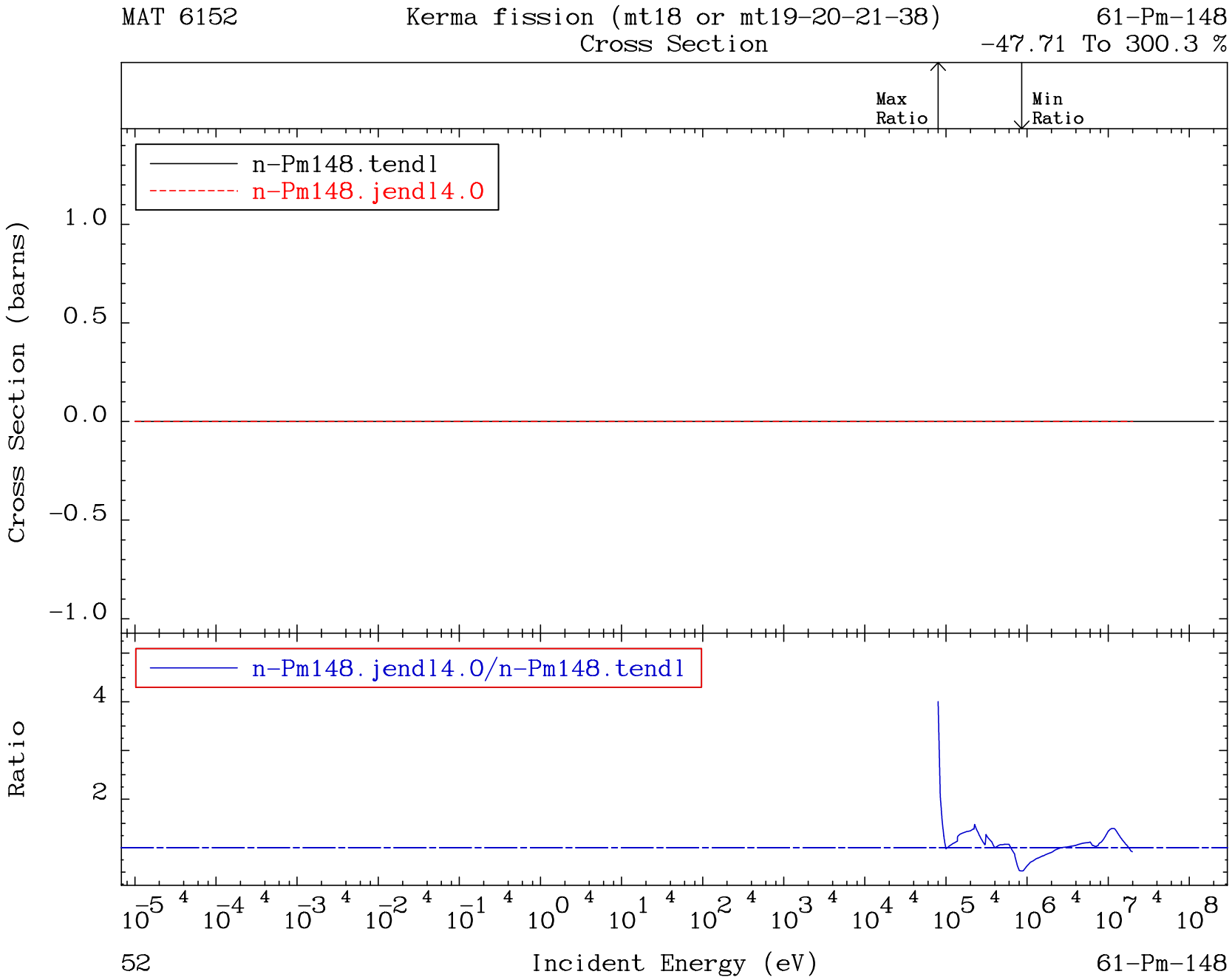

MAT 6152
He-4 Production
Cross Section
61-Pm-148
-84.93 To 9999. %
Max
Ratio
Min
Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
47
61-Pm-148

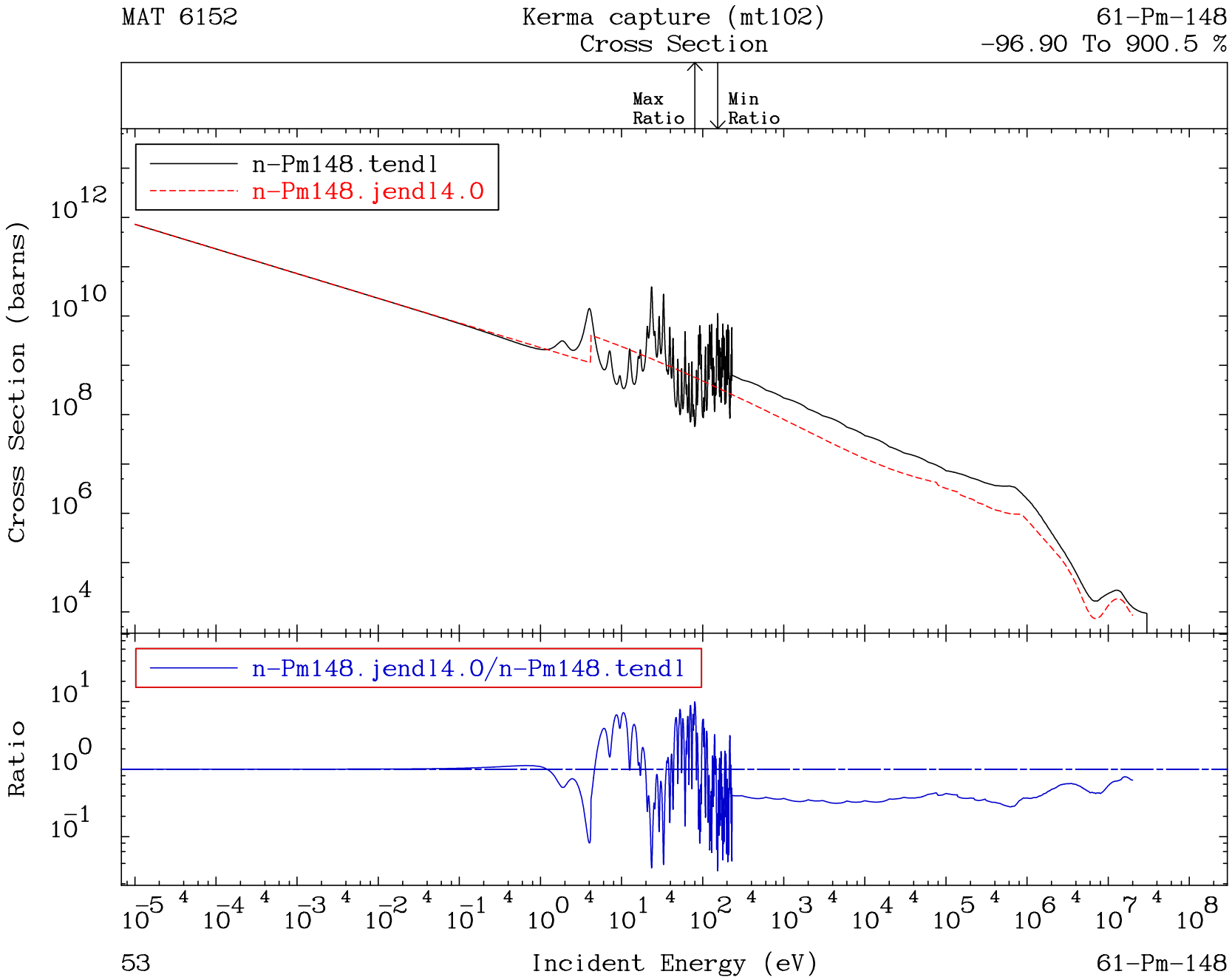

MAT 6152
Kerma total (eV-barns)
Cross Section
61-Pm-148
-96.90 To 900.7 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
Ratio
n-Pm148.jendl4.0/n-Pm148.tendl
Incident Energy (eV)
48
61-Pm-148

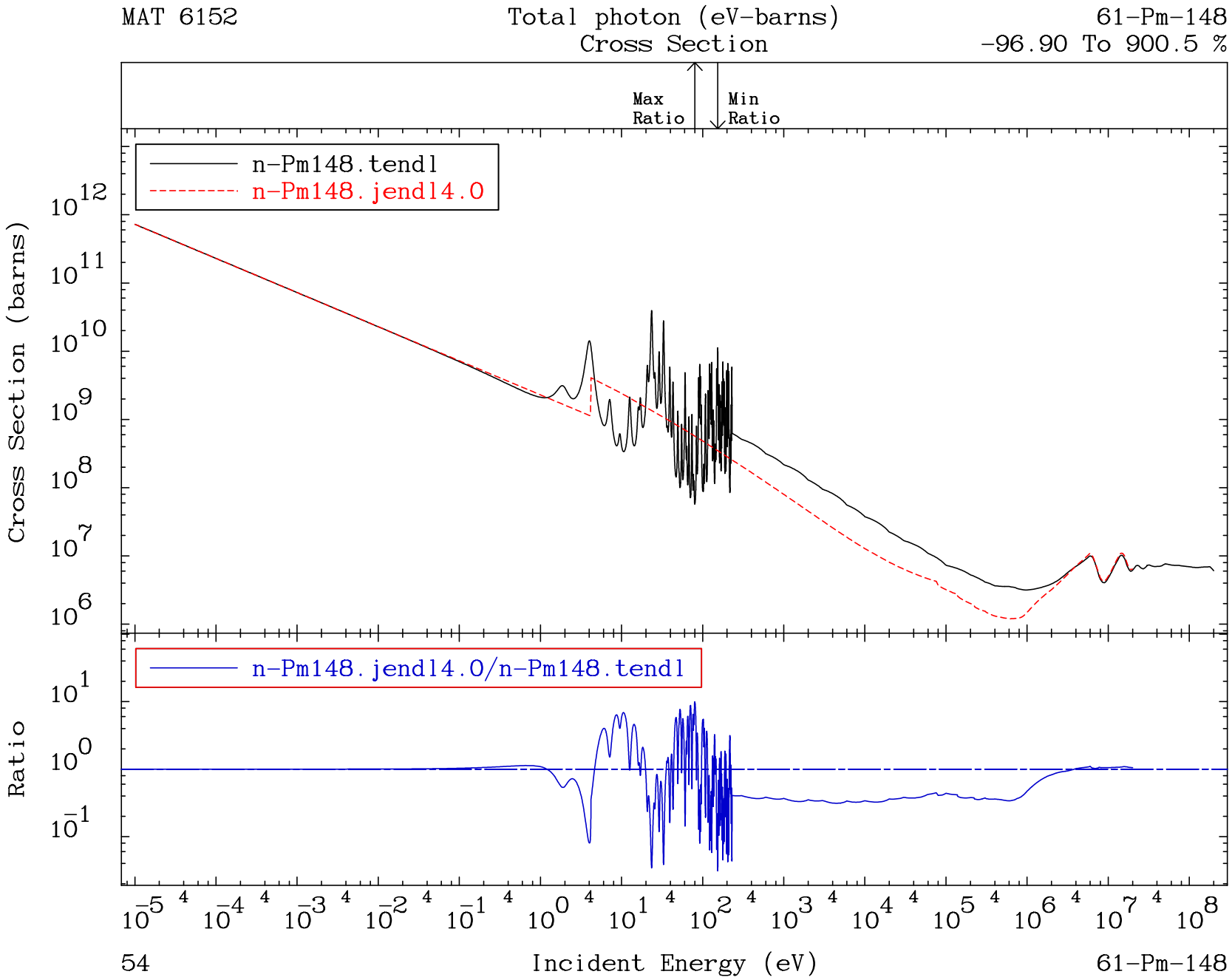

MAT 6152
Kerma elastic
Cross Section
61-Pm-148
-87.00 To 9999. %
Min
Ratio
Max
Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
49
61-Pm-148

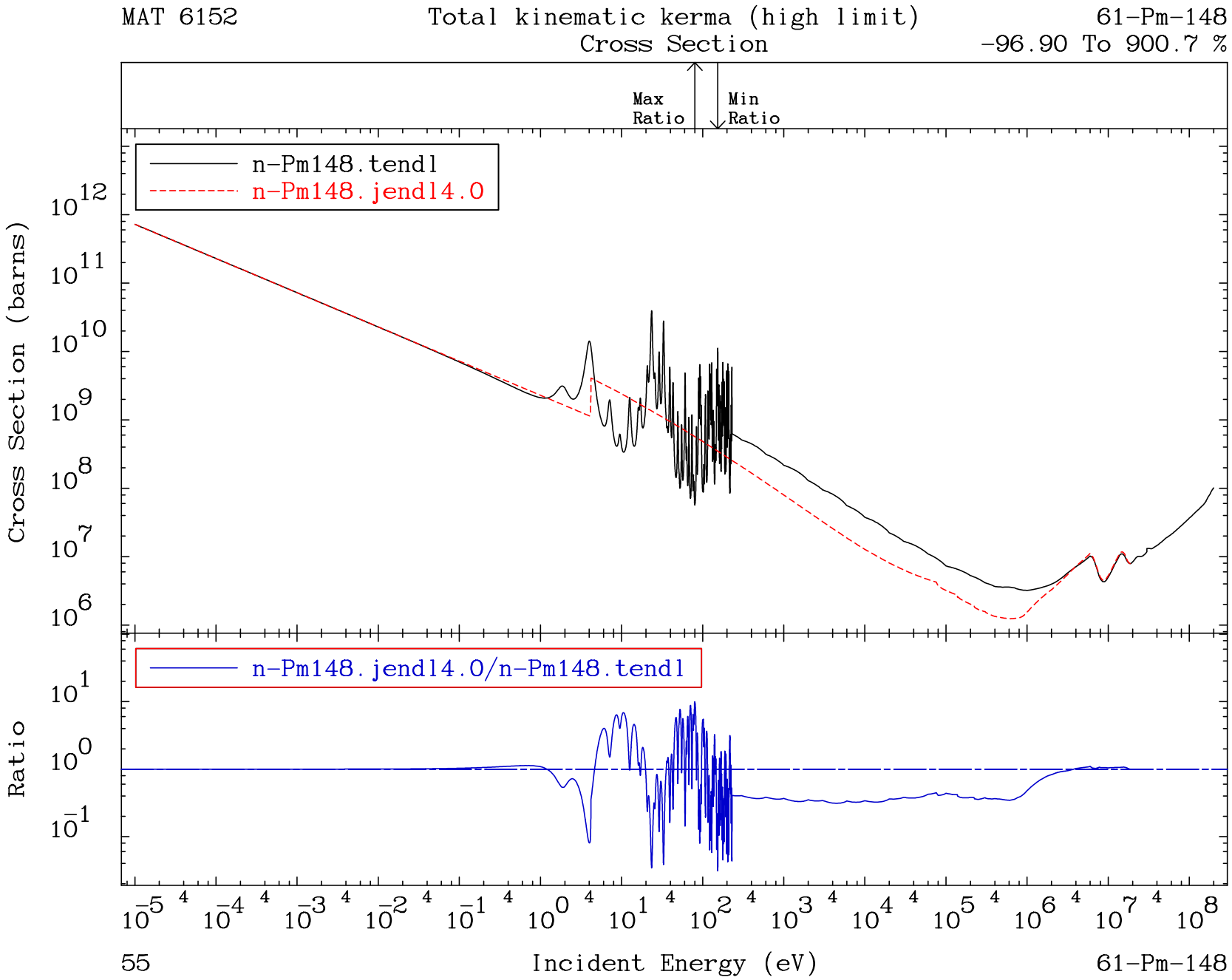

MAT 6152
Kerma non-elastic (all but mt2)
Cross Section
61-Pm-148
-96.90 To 900.7 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
50
61-Pm-148

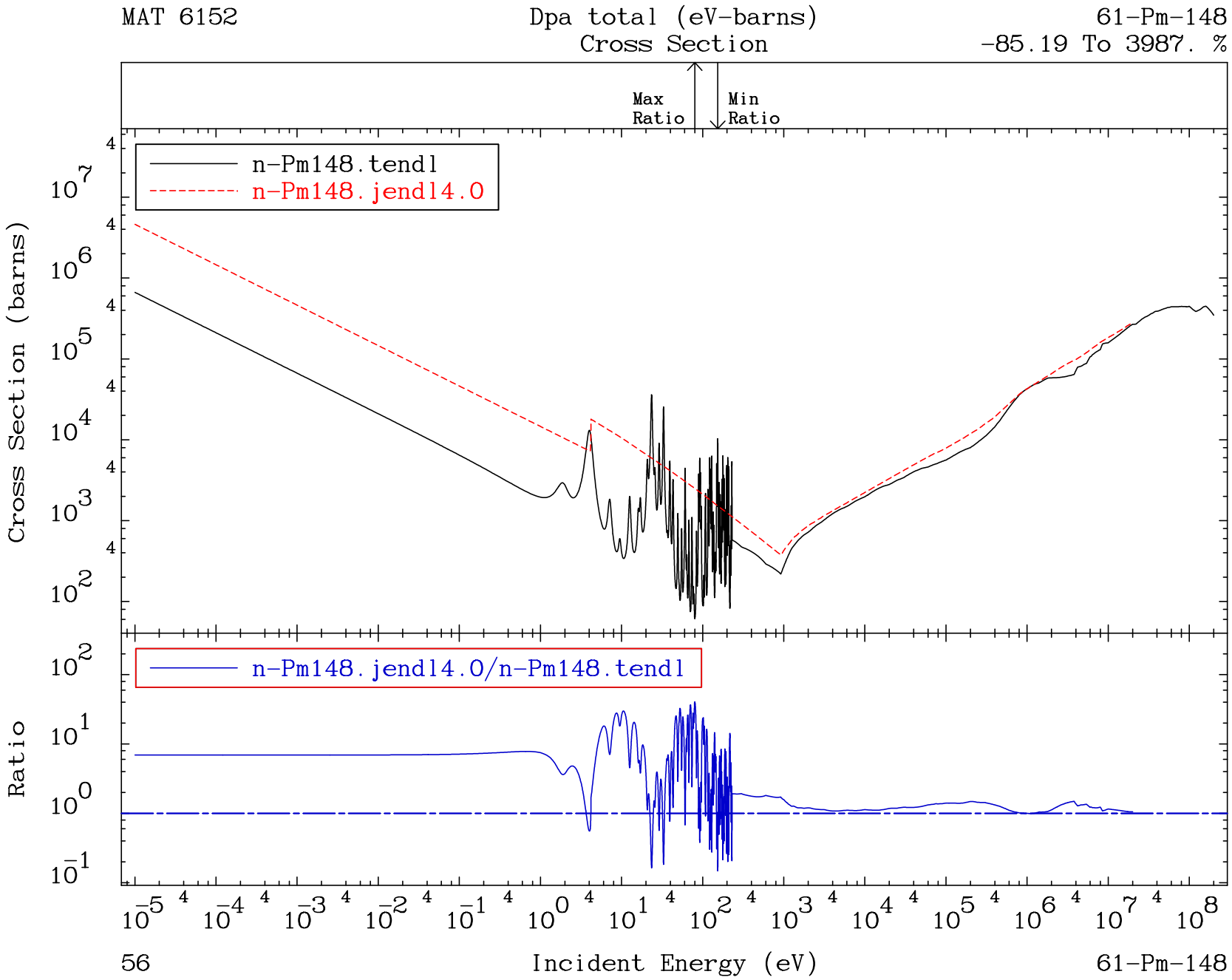

MAT 6152
Kerma inelastic (mt51-91)
Cross Section
61-Pm-148
-47.71 To 300.3 %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 80.000 keV
n-Pm148.jendl4.0 Threshold 76.667 keV
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
51
61-Pm-148

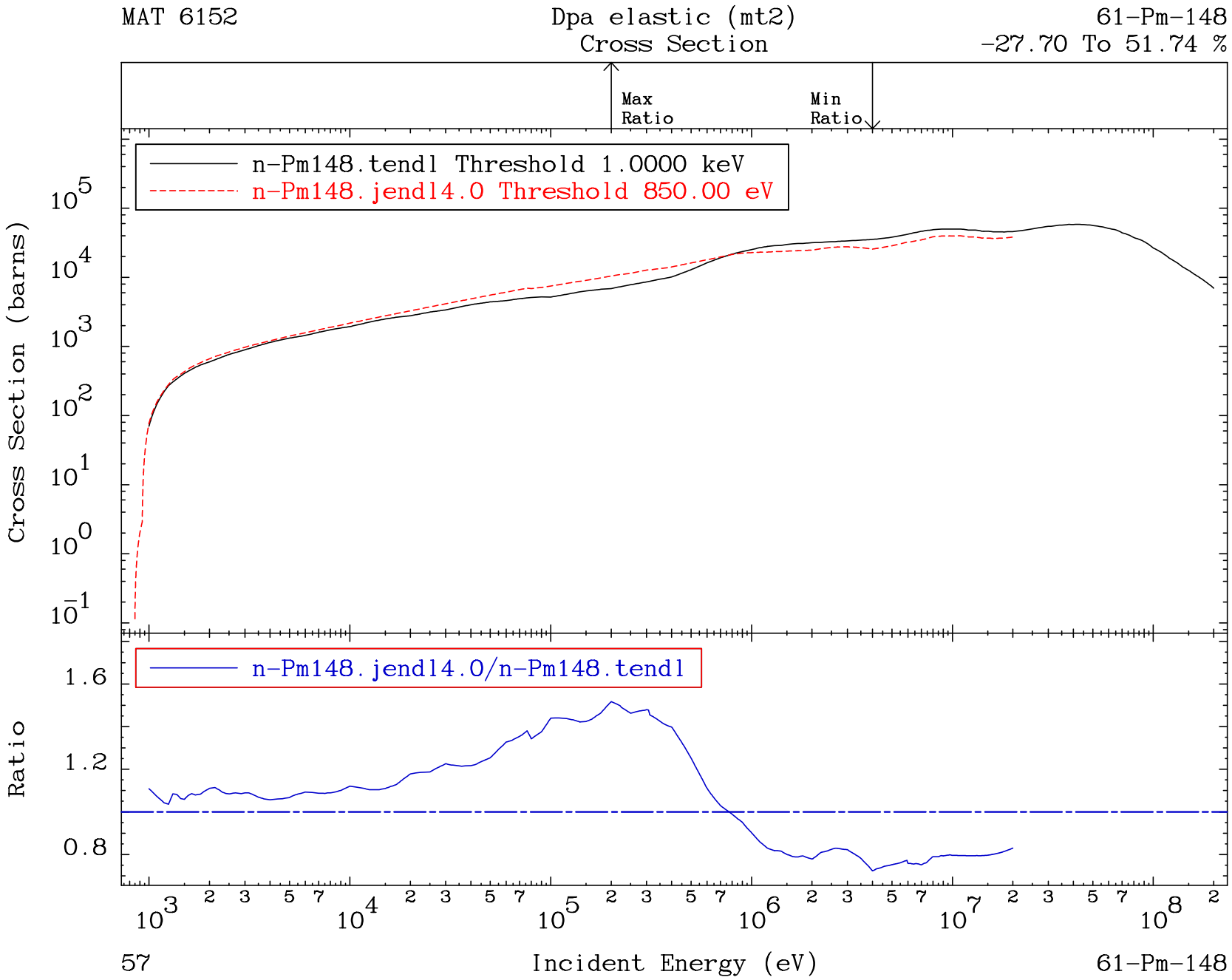

MAT 6152
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
61-Pm-148
-47.71 To 300.3 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
4
2
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107 108
52
Incident Energy (eV)
61-Pm-148

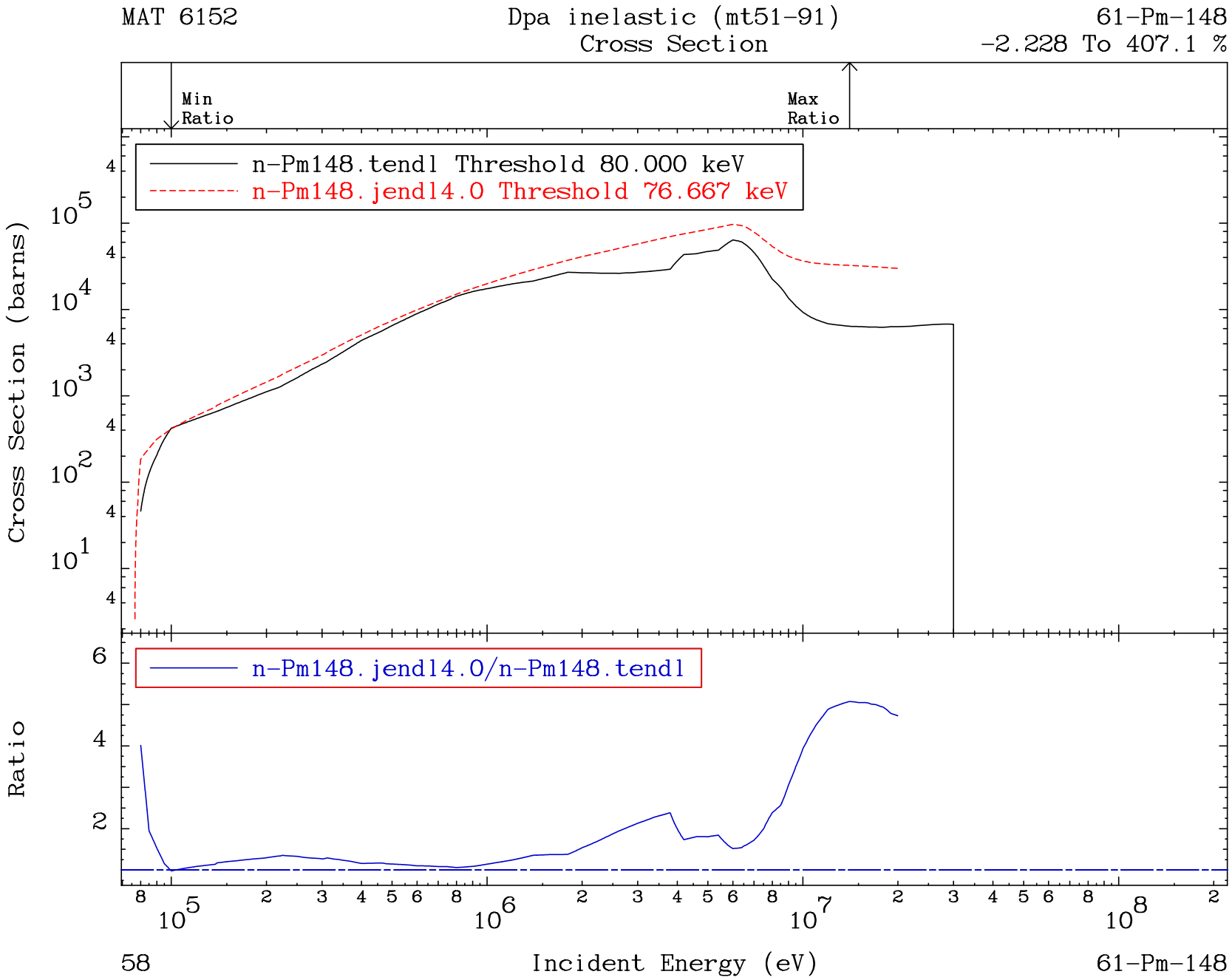

MAT 6152
Kerma capture (mt102)
Cross Section
61-Pm-148
-96.90 To 900.5 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
Ratio
n-Pm148.jendl4.0/n-Pm148.tendl
Incident Energy (eV)
53
61-Pm-148

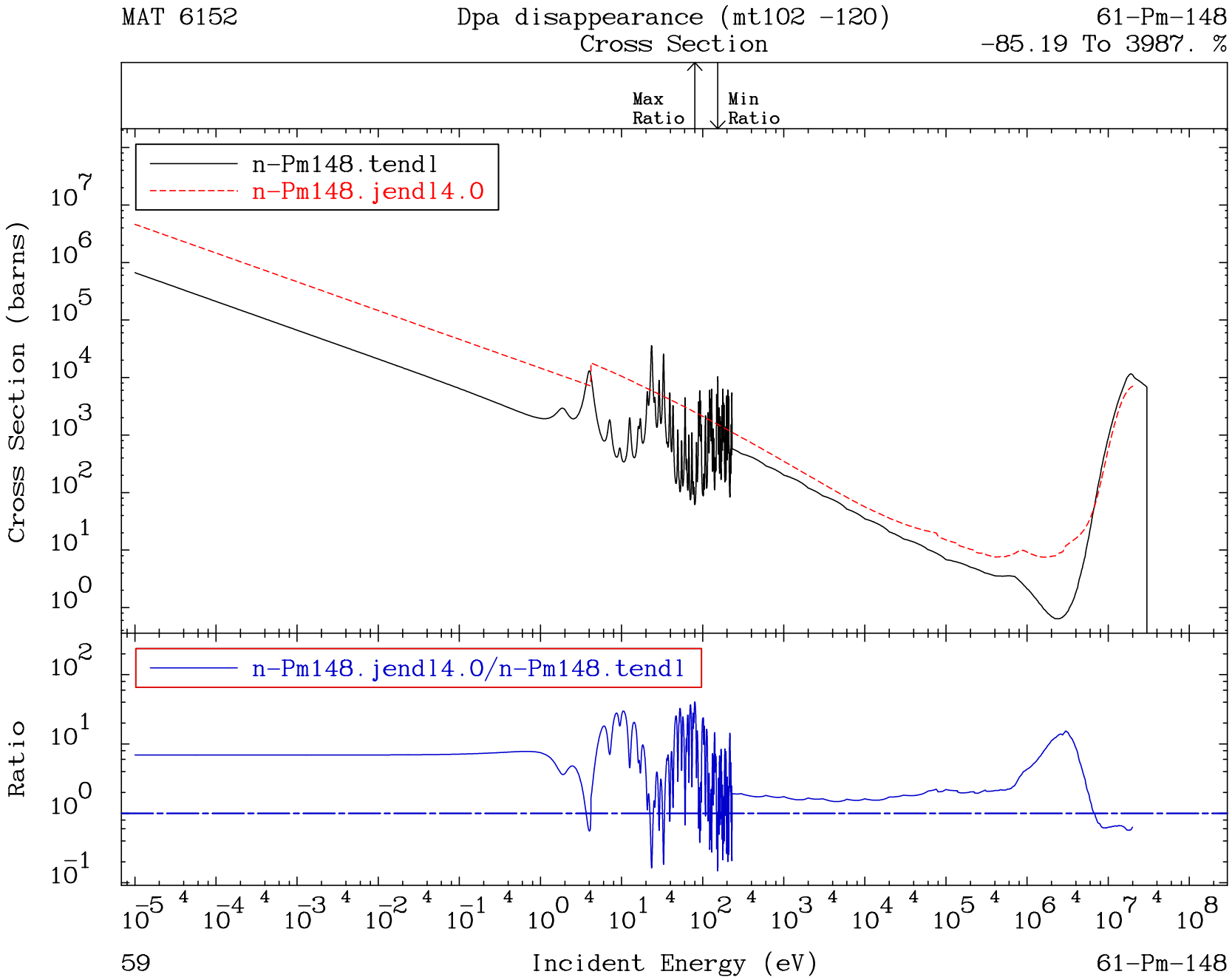

MAT 6152
Total photon (eV-barns)
Cross Section
61-Pm-148
-96.90 To 900.5 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
54
61-Pm-148


MAT 6152
Total kinematic kerma (high limit)
Cross Section
61-Pm-148
-96.90 To 900.7 %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
55
61-Pm-148


MAT 6152
Dpa total (eV-barns)
Cross Section
61-Pm-148
-85.19 To 3987. %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
56
Incident Energy (eV)
61-Pm-148


MAT 6152
Dpa elastic (mt2)
Cross Section
61-Pm-148
-27.70 To 51.74 %
Max Ratio
Min Ratio
n-Pm148.tendl Threshold 1.0000 keV
n-Pm148.jendl4.0 Threshold 850.00 eV
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
57
61-Pm-148


MAT 6152
Dpa inelastic (mt51-91)
Cross Section
61-Pm-148
-2.228 To 407.1 %
Min Ratio
Max Ratio
n-Pm148.tendl Threshold 80.000 keV
n-Pm148.jendl4.0 Threshold 76.667 keV
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
58
61-Pm-148


MAT 6152
Dpa disappearance (mt102 -120)
Cross Section
61-Pm-148
-85.19 To 3987. %
Max Ratio
Min Ratio
n-Pm148.tendl
n-Pm148.jendl4.0
Cross Section (barns)
n-Pm148.jendl4.0/n-Pm148.tendl
Ratio
Incident Energy (eV)
59
61-Pm-148