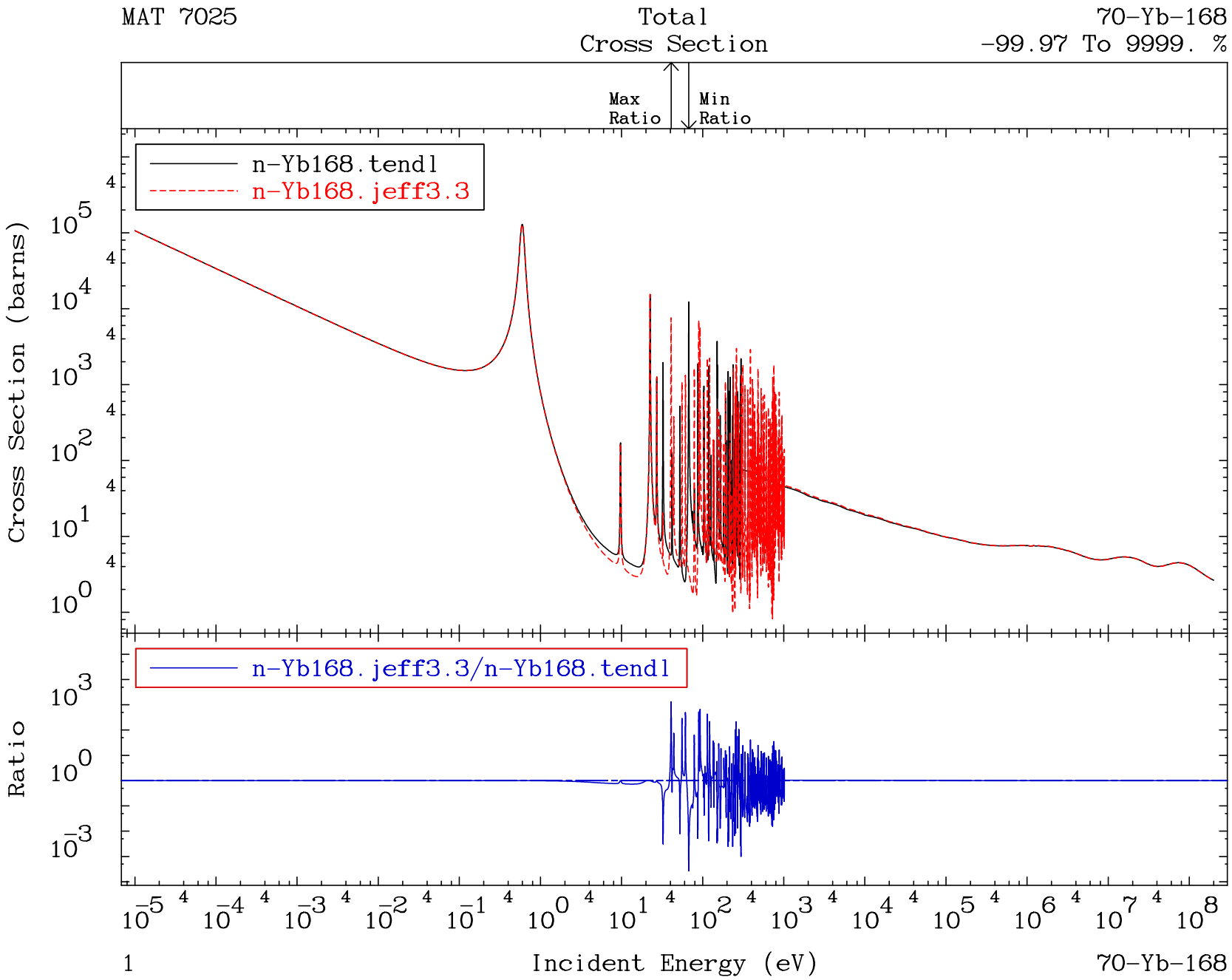
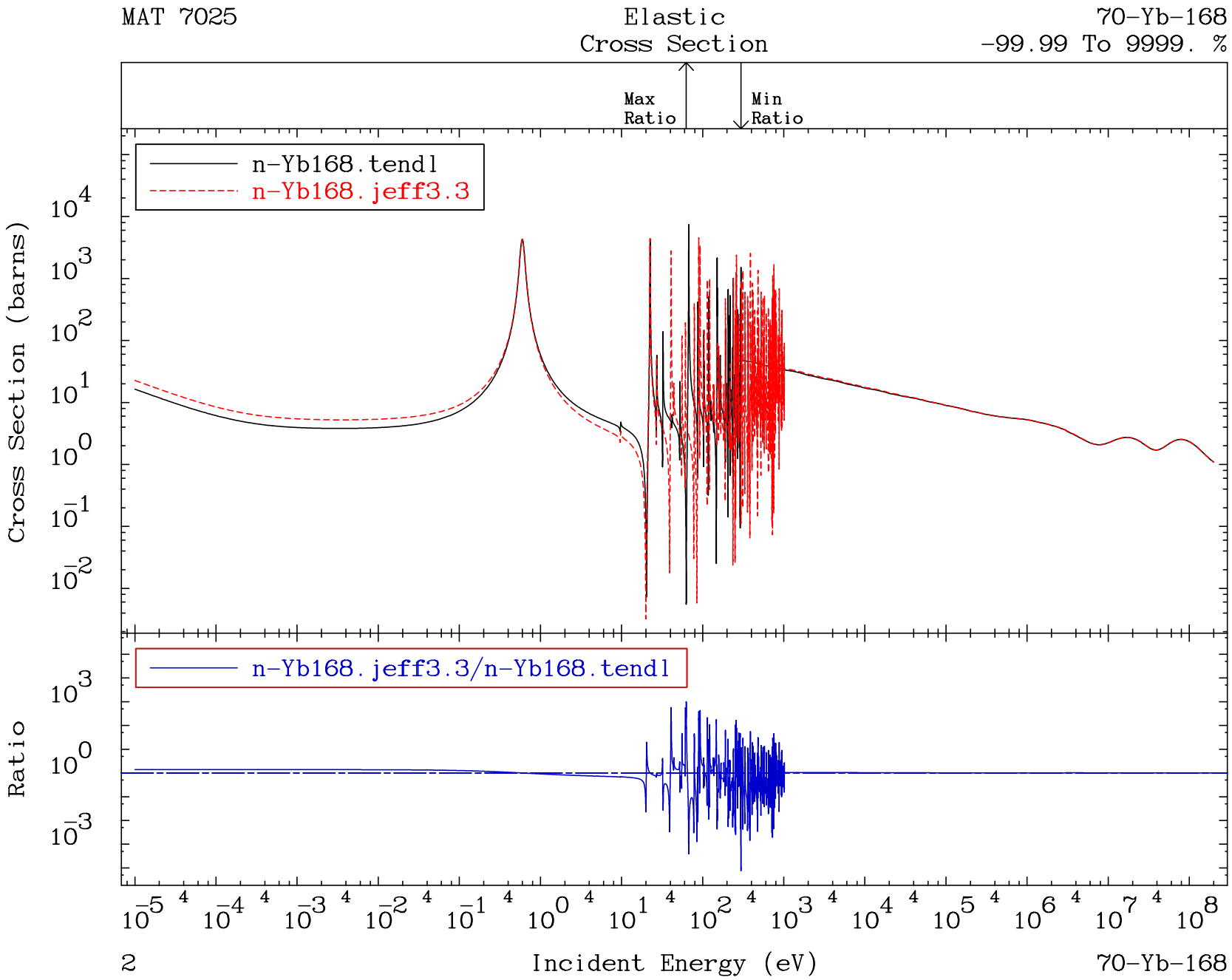
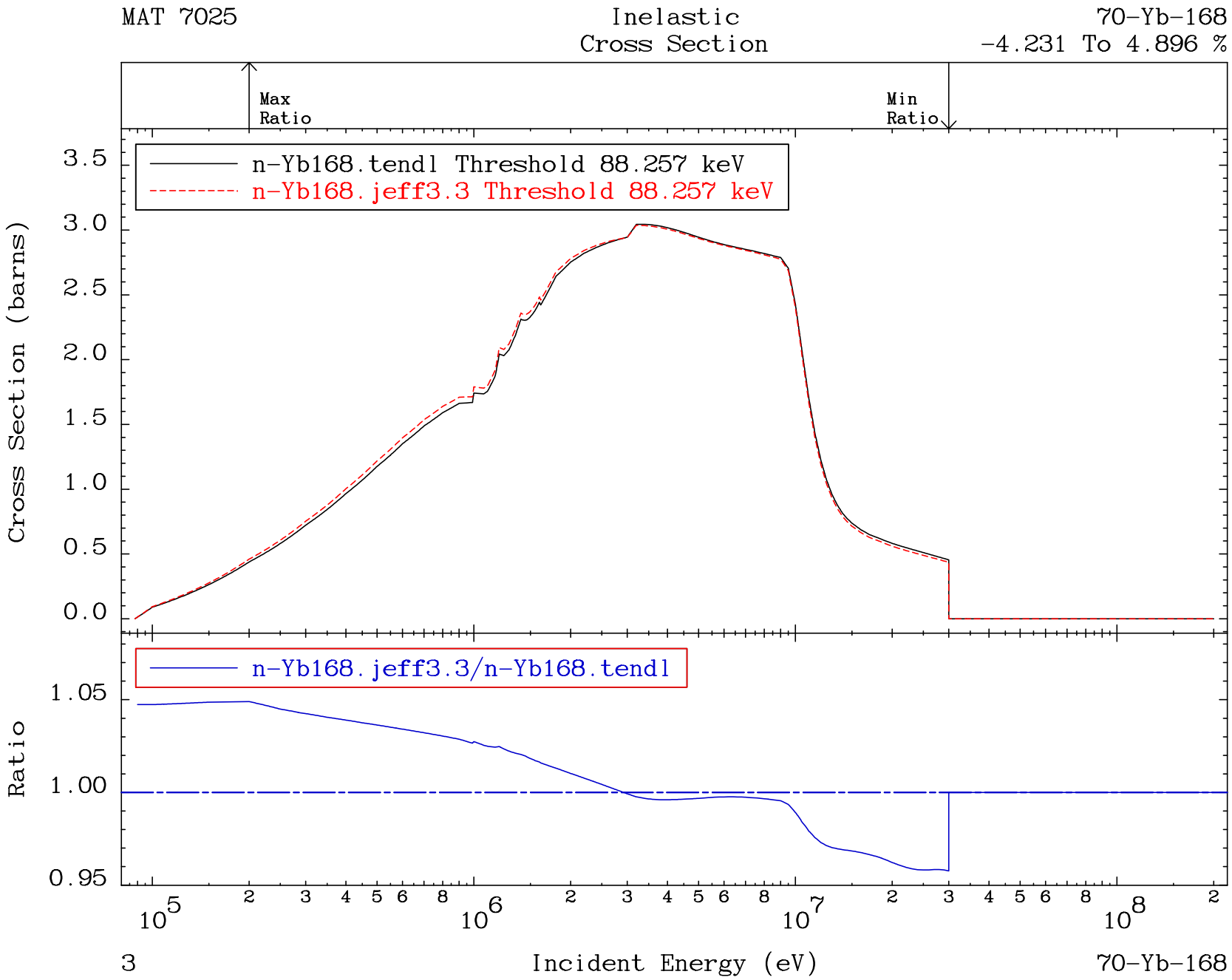
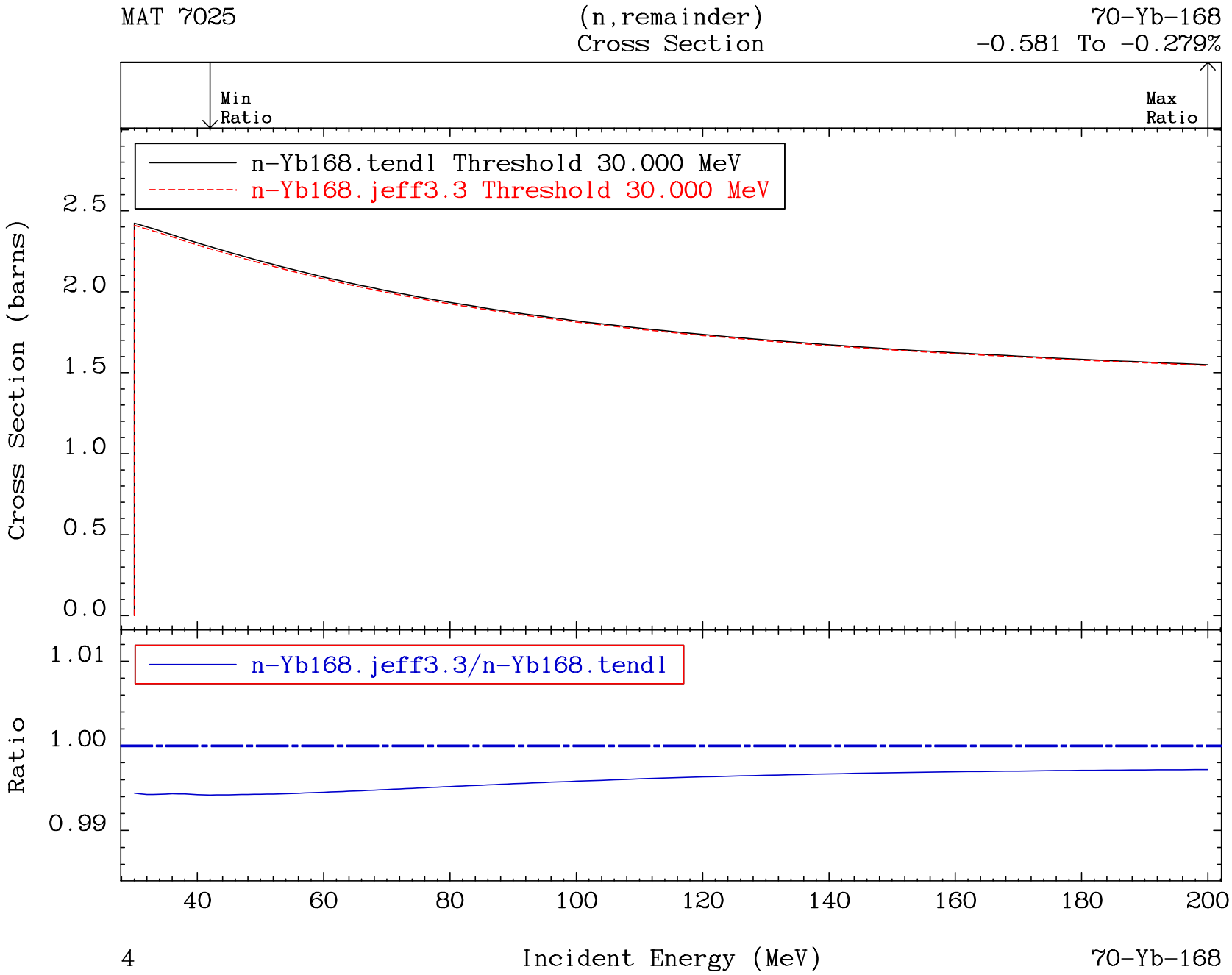
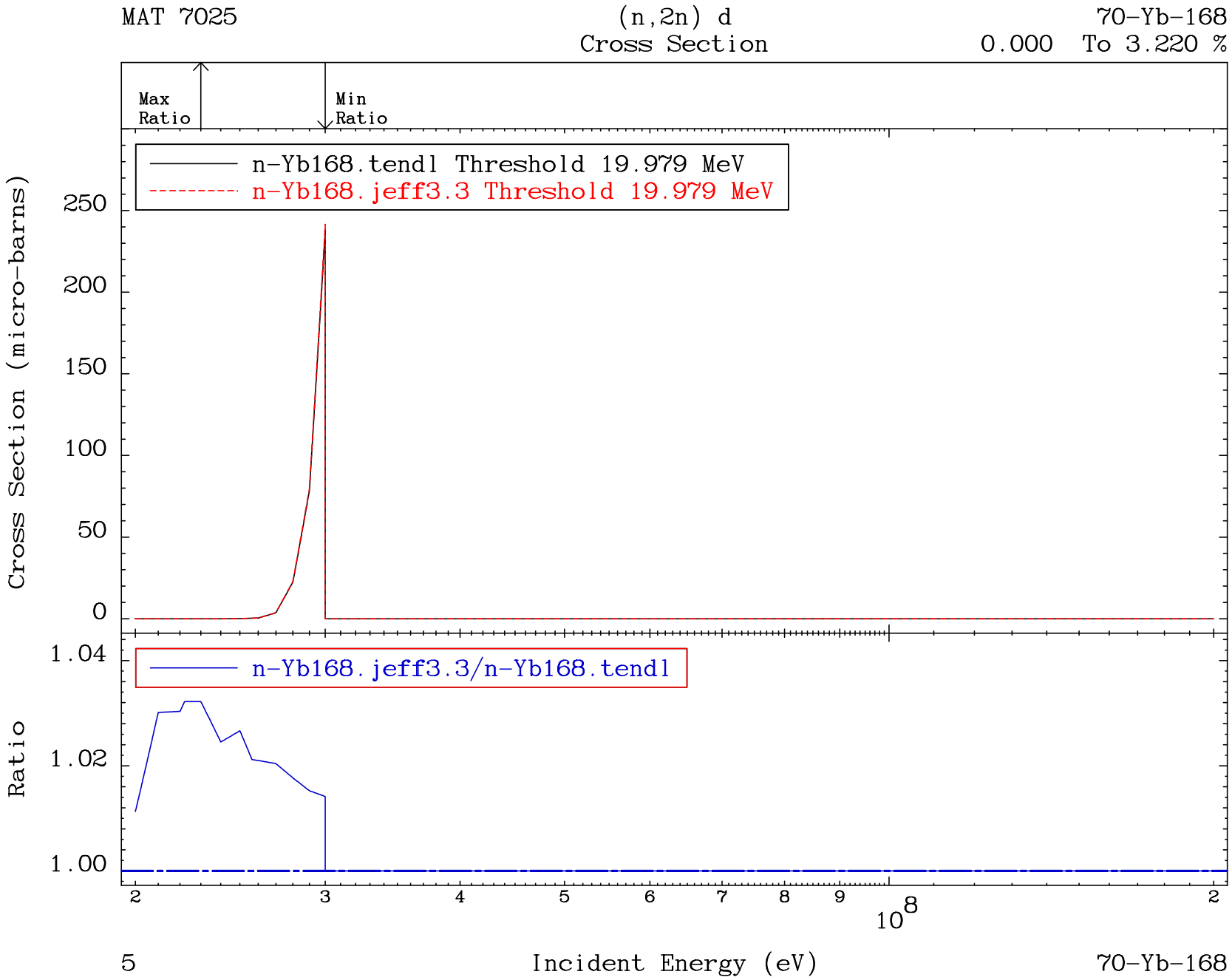
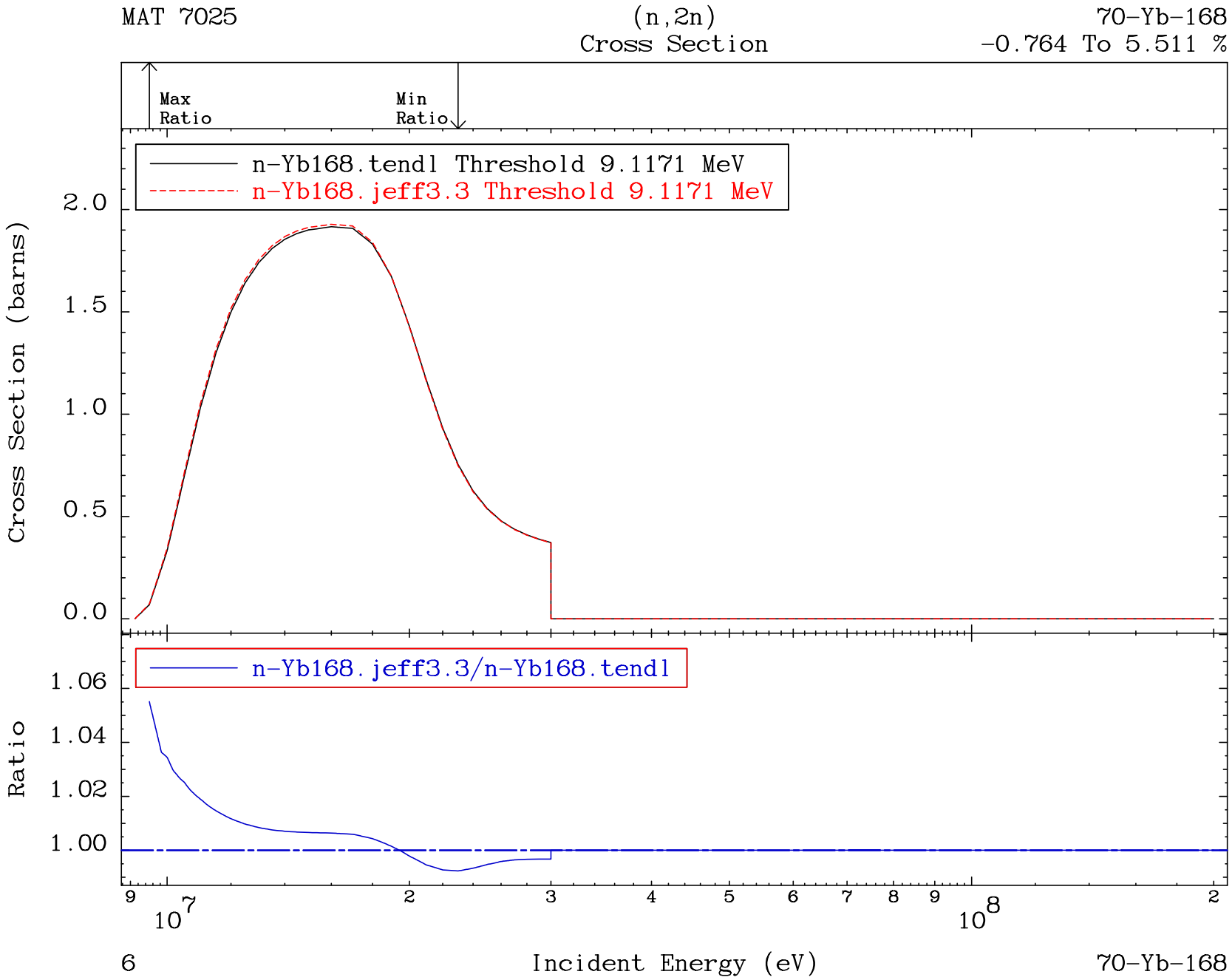

MAT 7025
Total
Cross Section
70-Yb-168
-99.97 To 9999. %
Max
Ratio
Min
Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
1
70-Yb-168

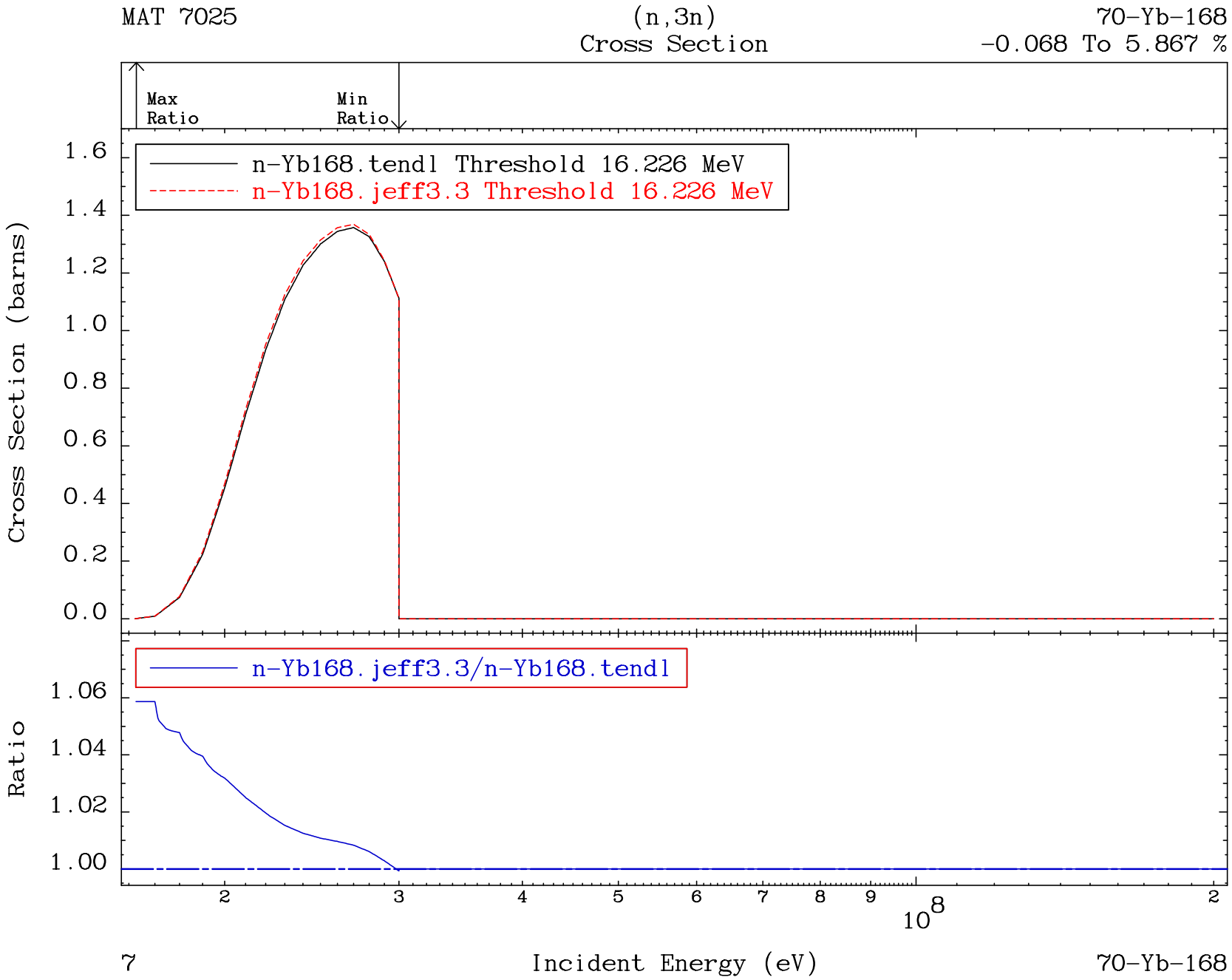

MAT 7025
Elastic
Cross Section
70-Yb-168
-99.99 To 9999. %
Max
Ratio
Min
Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
2
70-Yb-168

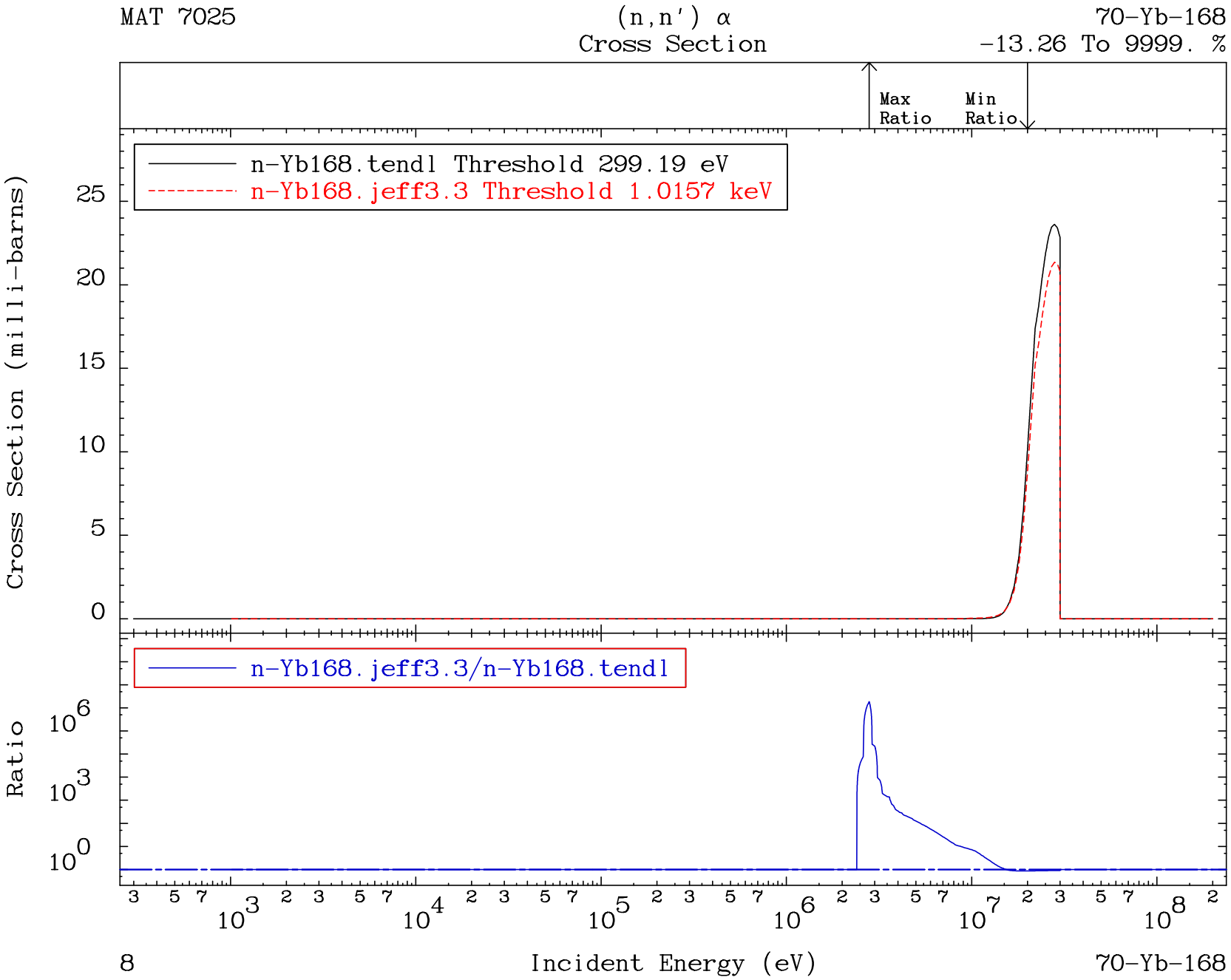

MAT 7025
Inelastic
Cross Section
70-Yb-168
-4.231 To 4.896 %
Max
Ratio
Min
Ratio
n-Yb168.tendl Threshold 88.257 keV
n-Yb168.jeff3.3 Threshold 88.257 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.05
1.00
0.95
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
70-Yb-168

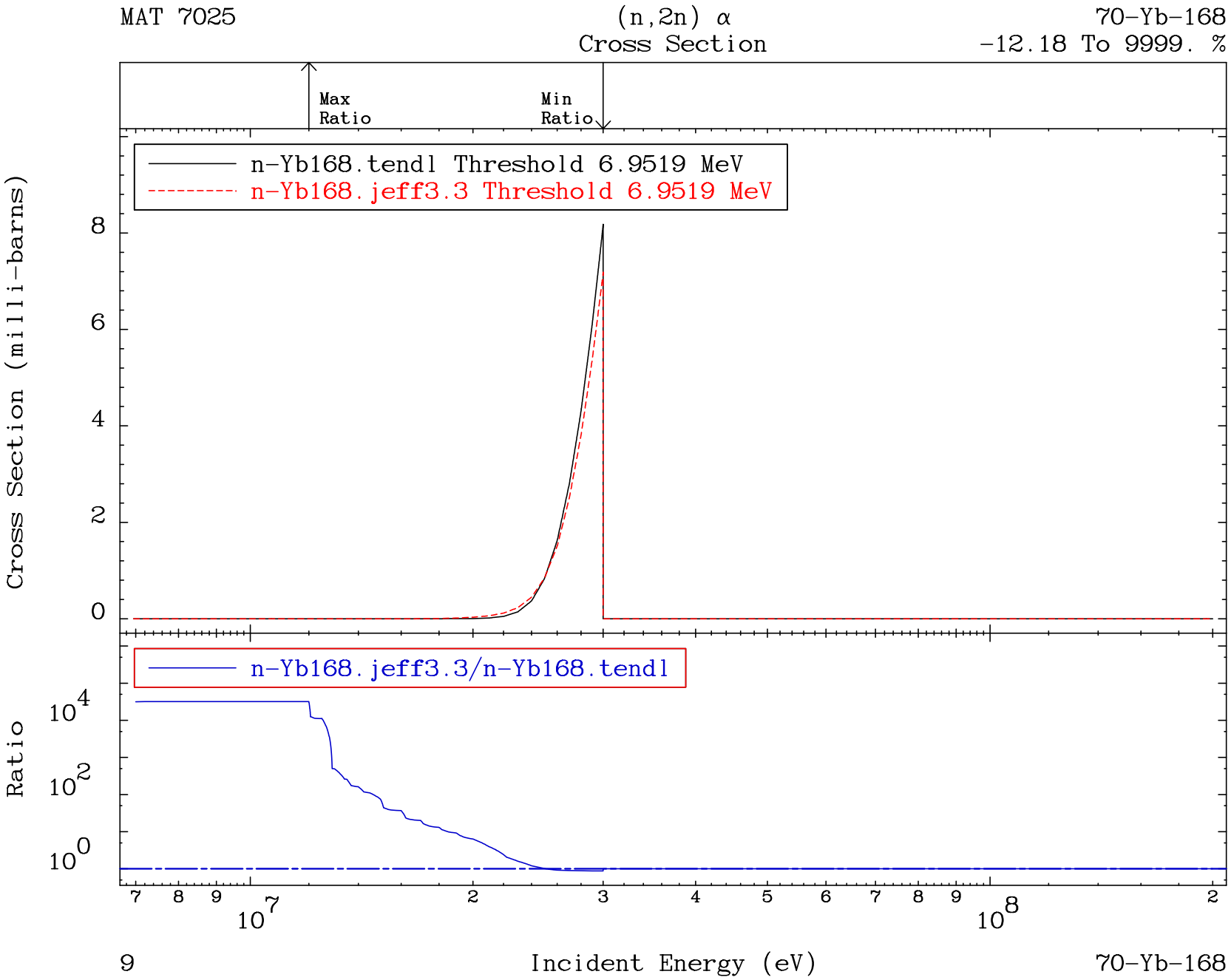

MAT 7025
(n,remainder)
Cross Section
70-Yb-168
-0.581 To -0.279%
Min
Ratio
Max
Ratio
n-Yb168.tendl Threshold 30.000 MeV
n-Yb168.jeff3.3 Threshold 30.000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
70-Yb-168

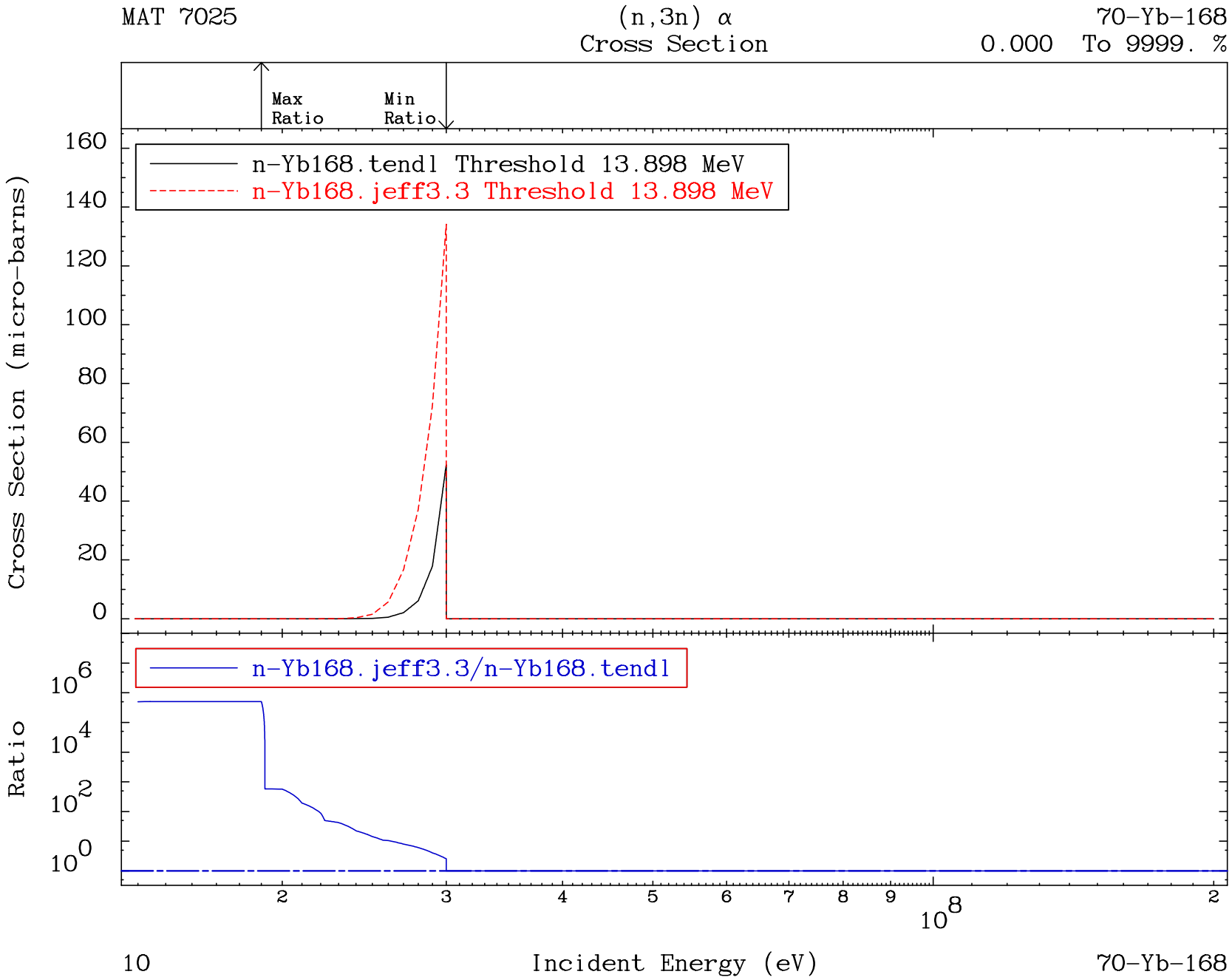

MAT 7025
(n,2n) d
Cross Section
70-Yb-168
0.000 To 3.220 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 19.979 MeV
n-Yb168.jeff3.3 Threshold 19.979 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
70-Yb-168

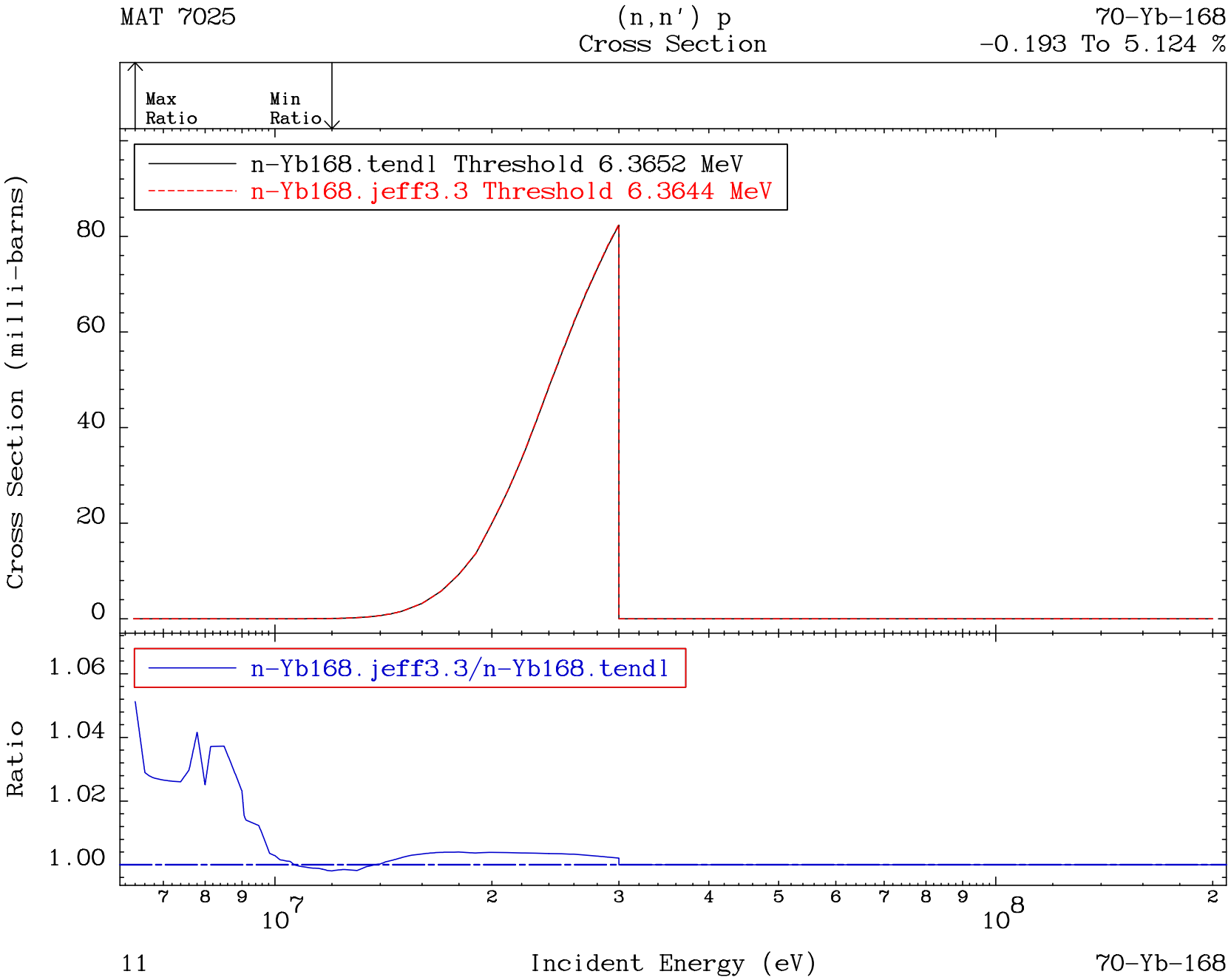

MAT 7025
(n,2n)
Cross Section
70-Yb-168
-0.764 To 5.511 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 9.1171 MeV
n-Yb168.jeff3.3 Threshold 9.1171 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
70-Yb-168

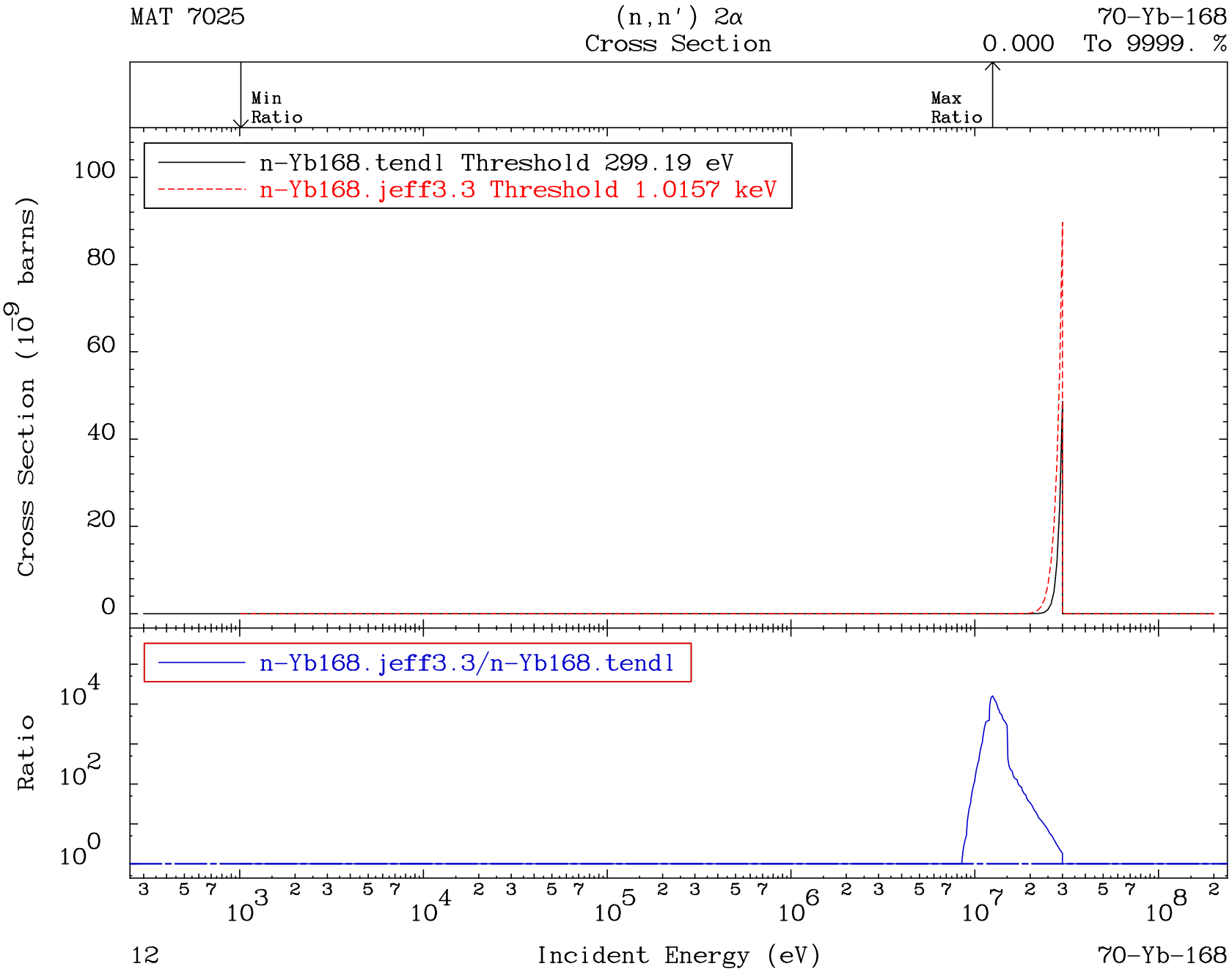

MAT 7025
(n,3n)
Cross Section
70-Yb-168
-0.068 To 5.867 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 16.226 MeV
n-Yb168.jeff3.3 Threshold 16.226 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
70-Yb-168

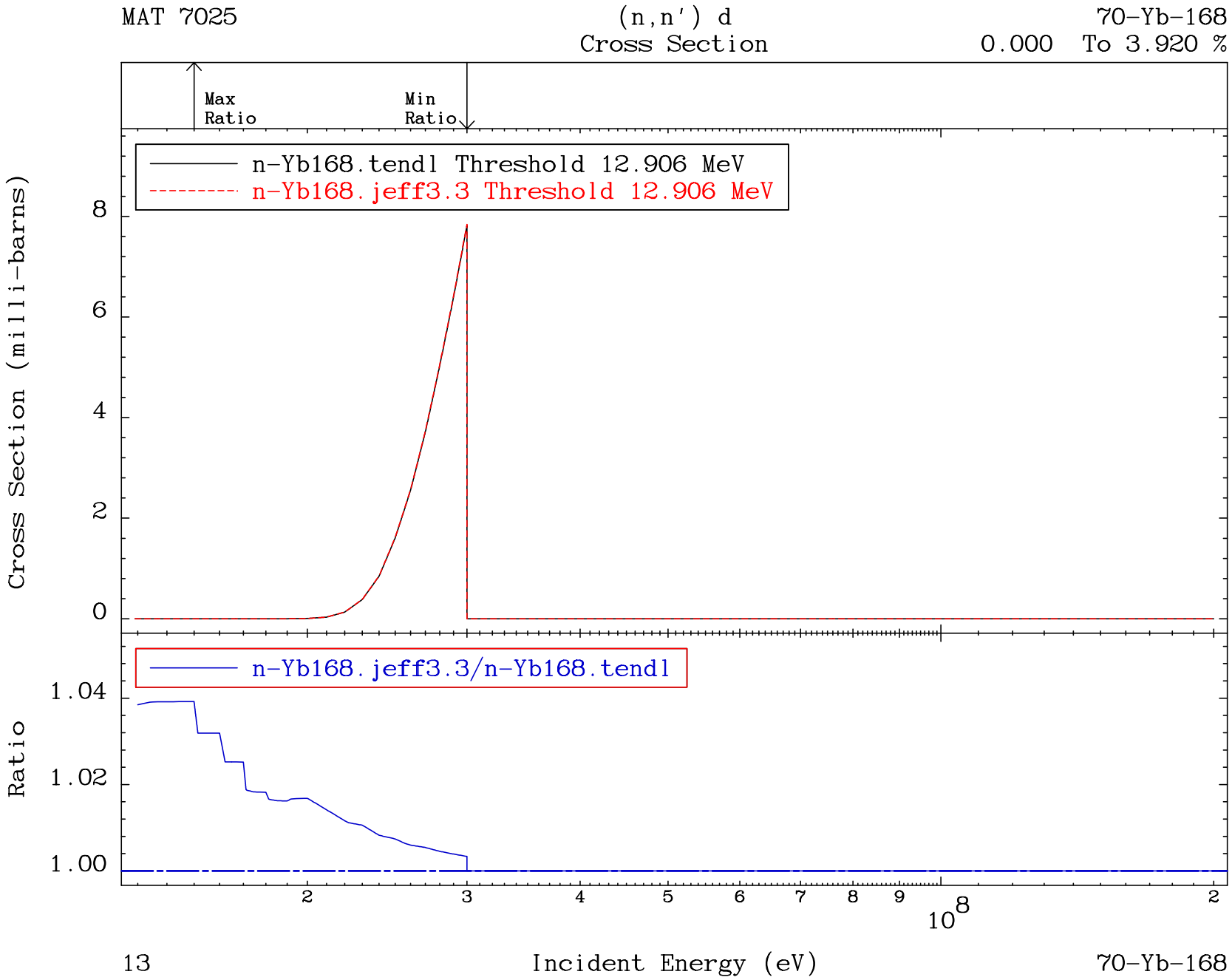

MAT 7025
(n,n') α
Cross Section
70-Yb-168
-13.26 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (milli-barns)
0
5
10
15
20
25
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^0
10^3
10^6
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
8
Incident Energy (eV)
70-Yb-168

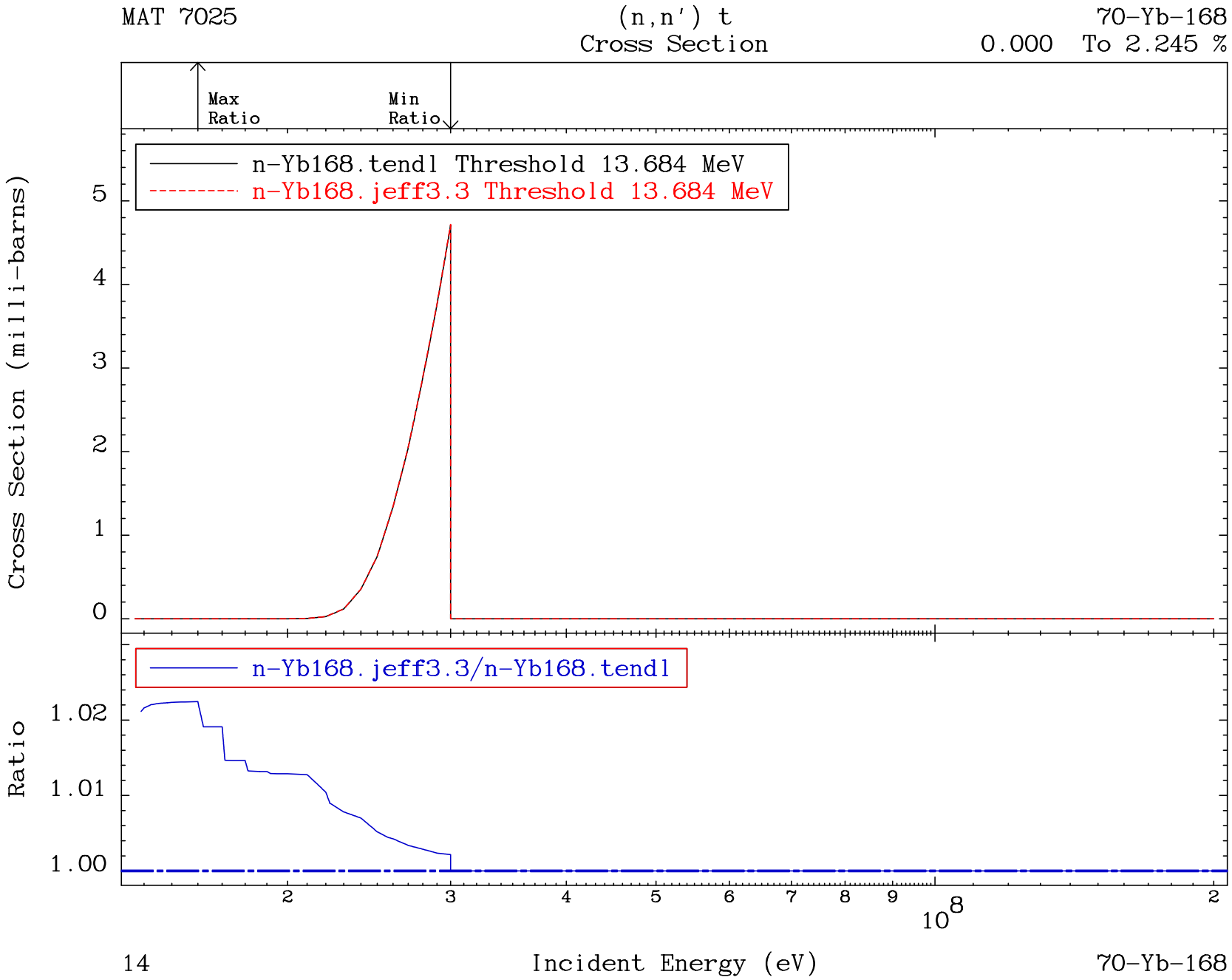

MAT 7025
(n,2n) α
Cross Section
70-Yb-168
-12.18 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 6.9519 MeV
n-Yb168.jeff3.3 Threshold 6.9519 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^0
10^2
10^4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
9
70-Yb-168

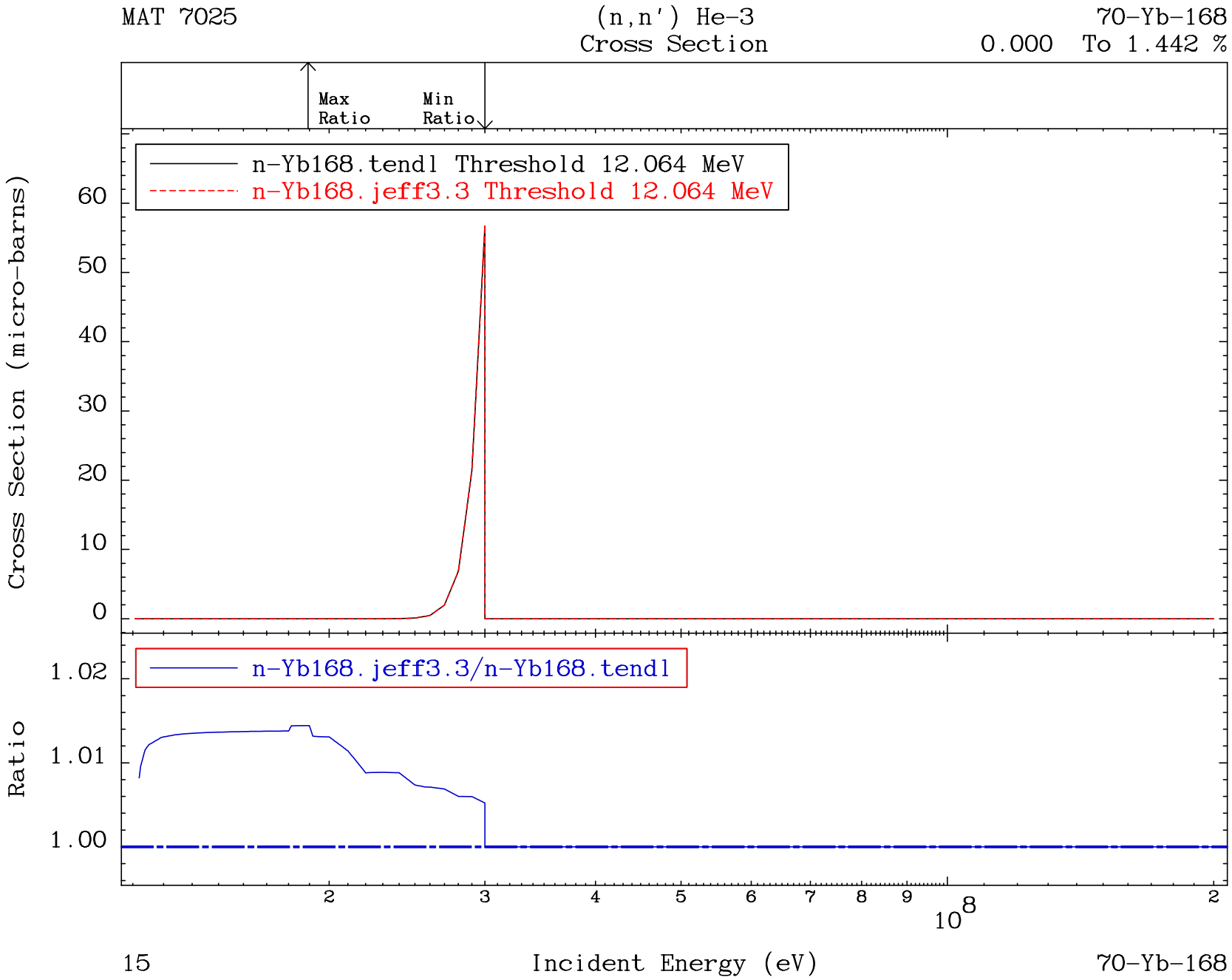

MAT 7025
(n,3n) α
Cross Section
70-Yb-168
0.000 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 13.898 MeV
n-Yb168.jeff3.3 Threshold 13.898 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
70-Yb-168

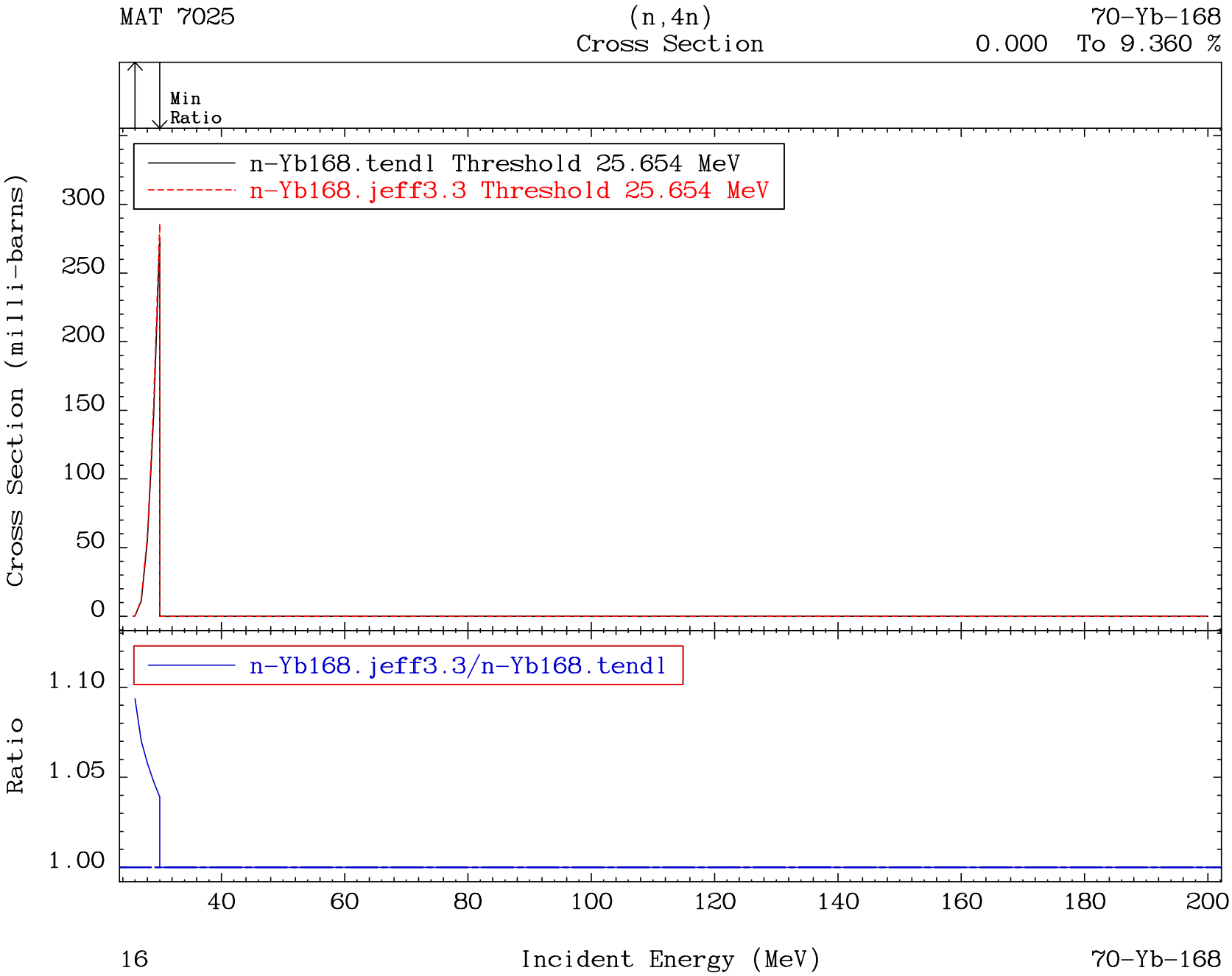

MAT 7025
(n,n') p
Cross Section
70-Yb-168
-0.193 To 5.124 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 6.3652 MeV
n-Yb168.jeff3.3 Threshold 6.3644 MeV
Cross Section (milli-barns)
0
20
40
60
80
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
1.02
1.04
1.06
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
70-Yb-168

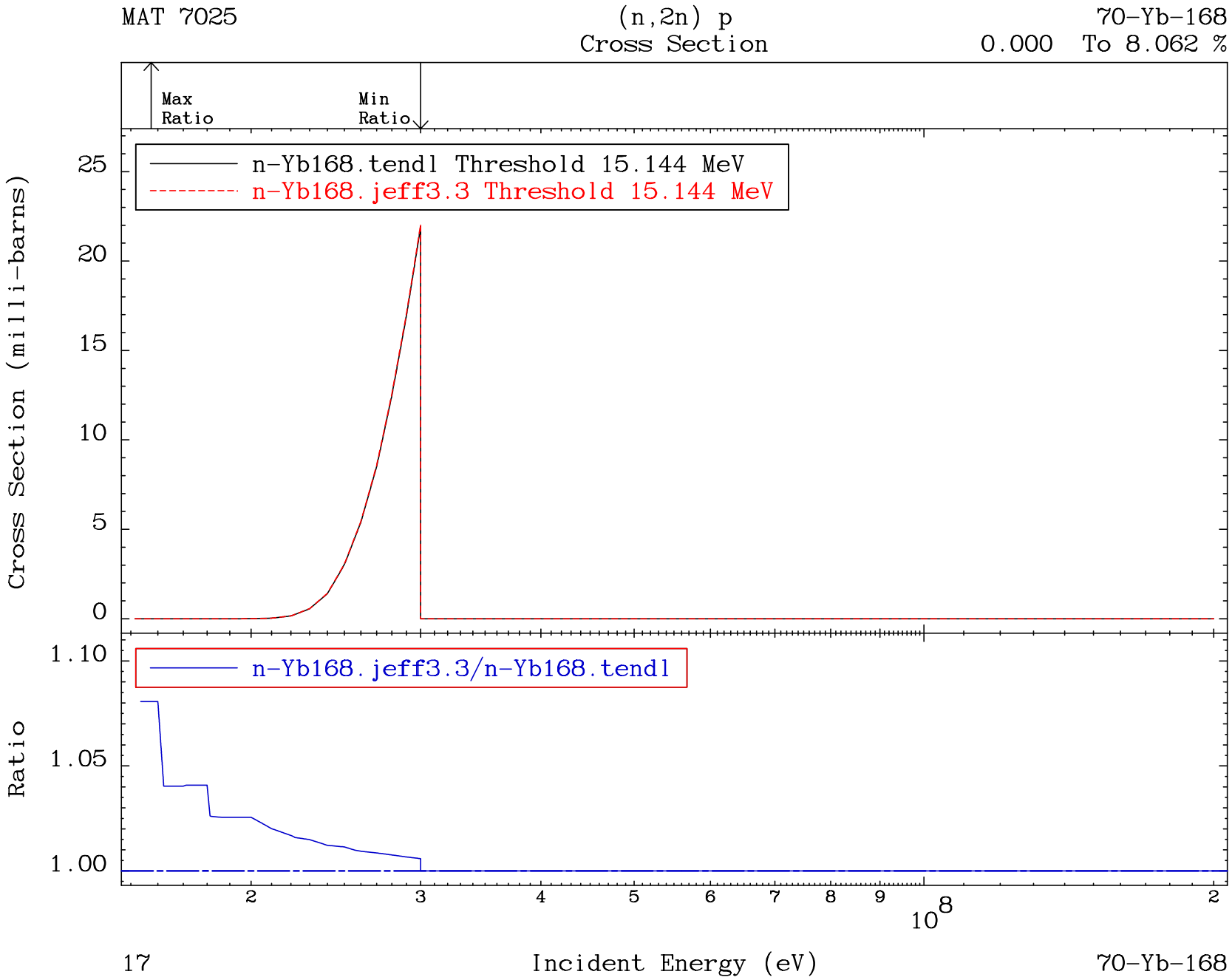

MAT 7025
(n,n') 2α
Cross Section
70-Yb-168
0.000 To 9999. %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (10^-9 barns)
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^4
10^2
10^0
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
12
Incident Energy (eV)
70-Yb-168

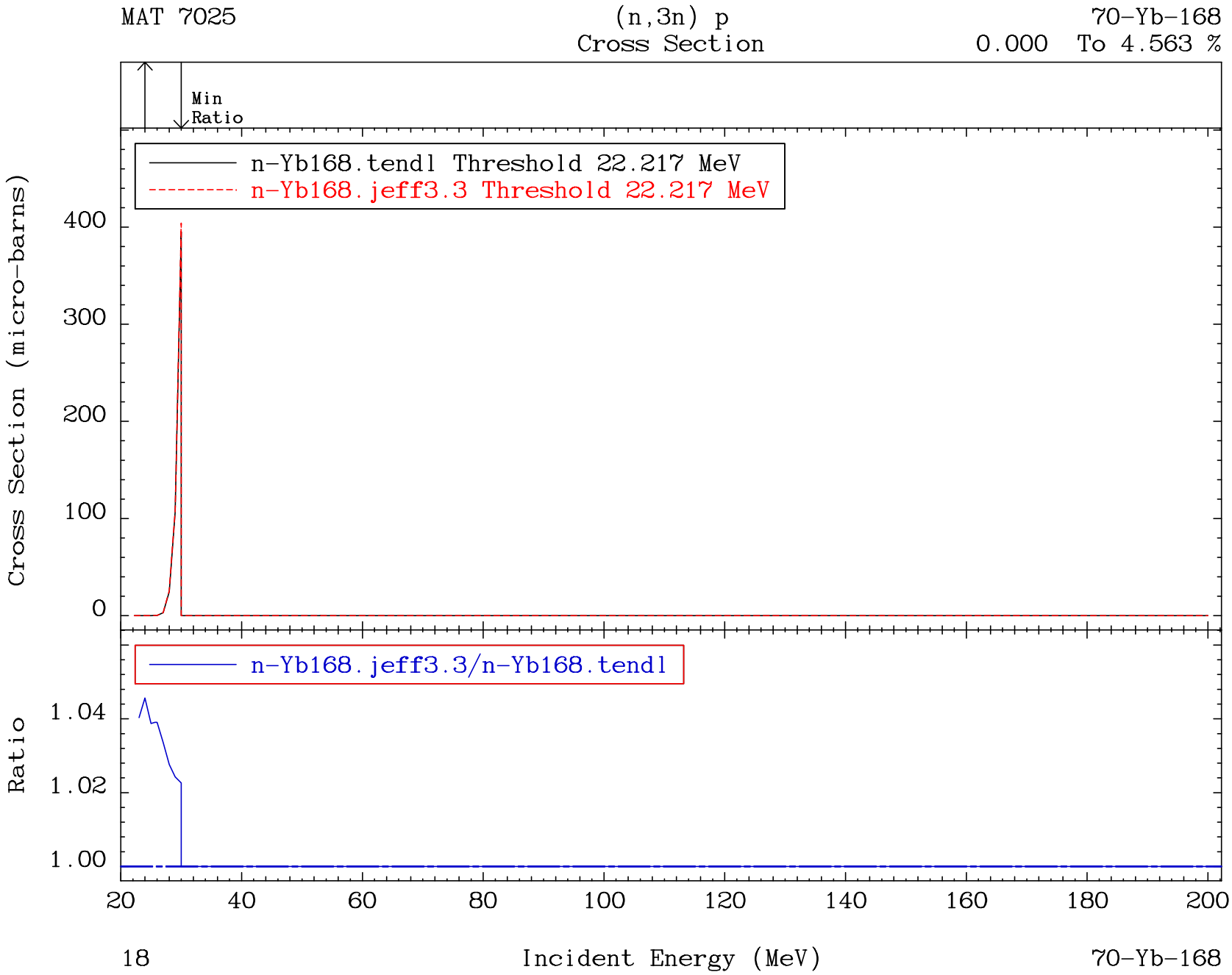

MAT 7025
(n,n') d
Cross Section
70-Yb-168
0.000 To 3.920 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 12.906 MeV
n-Yb168.jeff3.3 Threshold 12.906 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
1.02
1.04
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
70-Yb-168

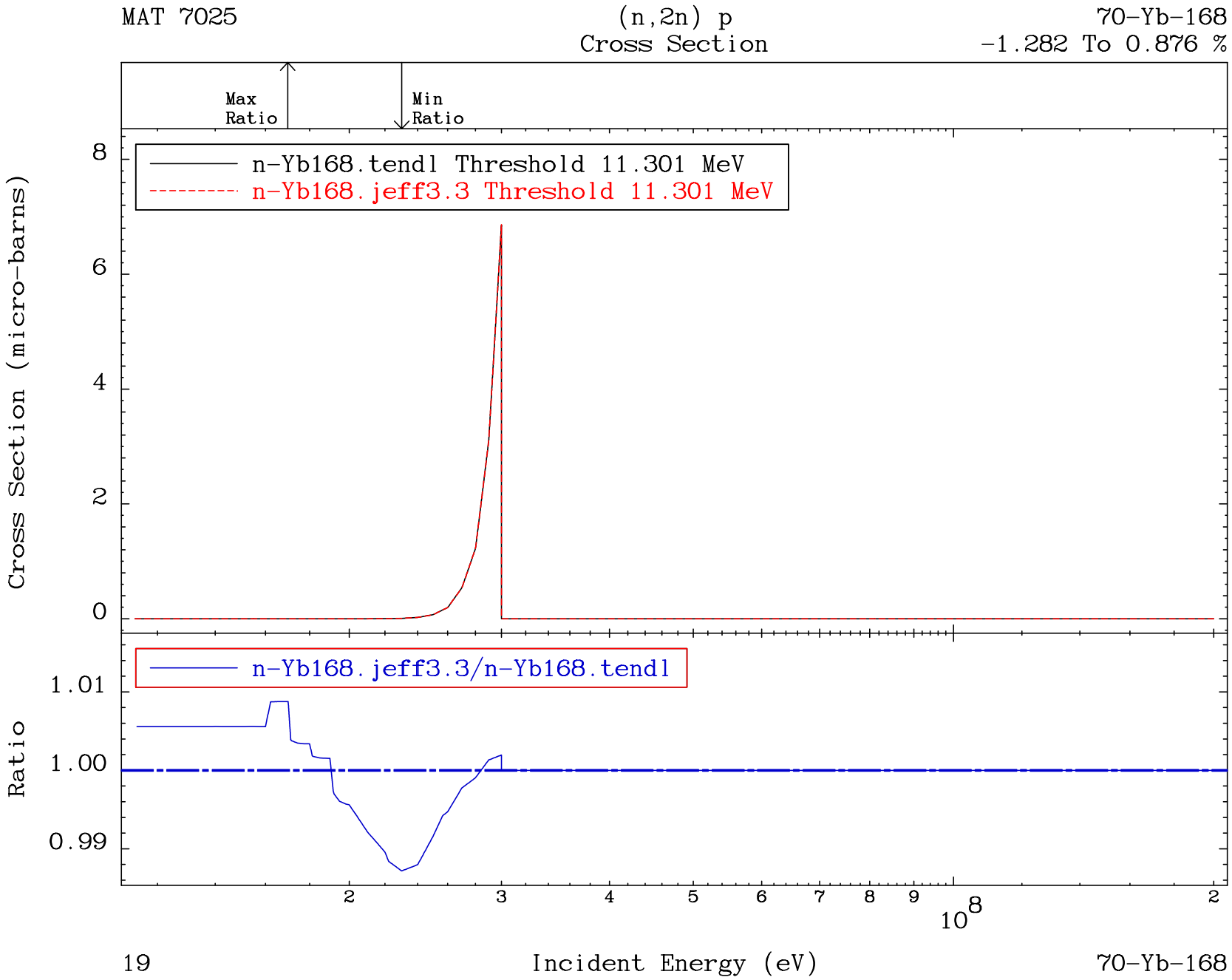

MAT 7025
(n,n') t
Cross Section
70-Yb-168
0.000 To 2.245 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 13.684 MeV
n-Yb168.jeff3.3 Threshold 13.684 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
1.01
1.02
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
70-Yb-168

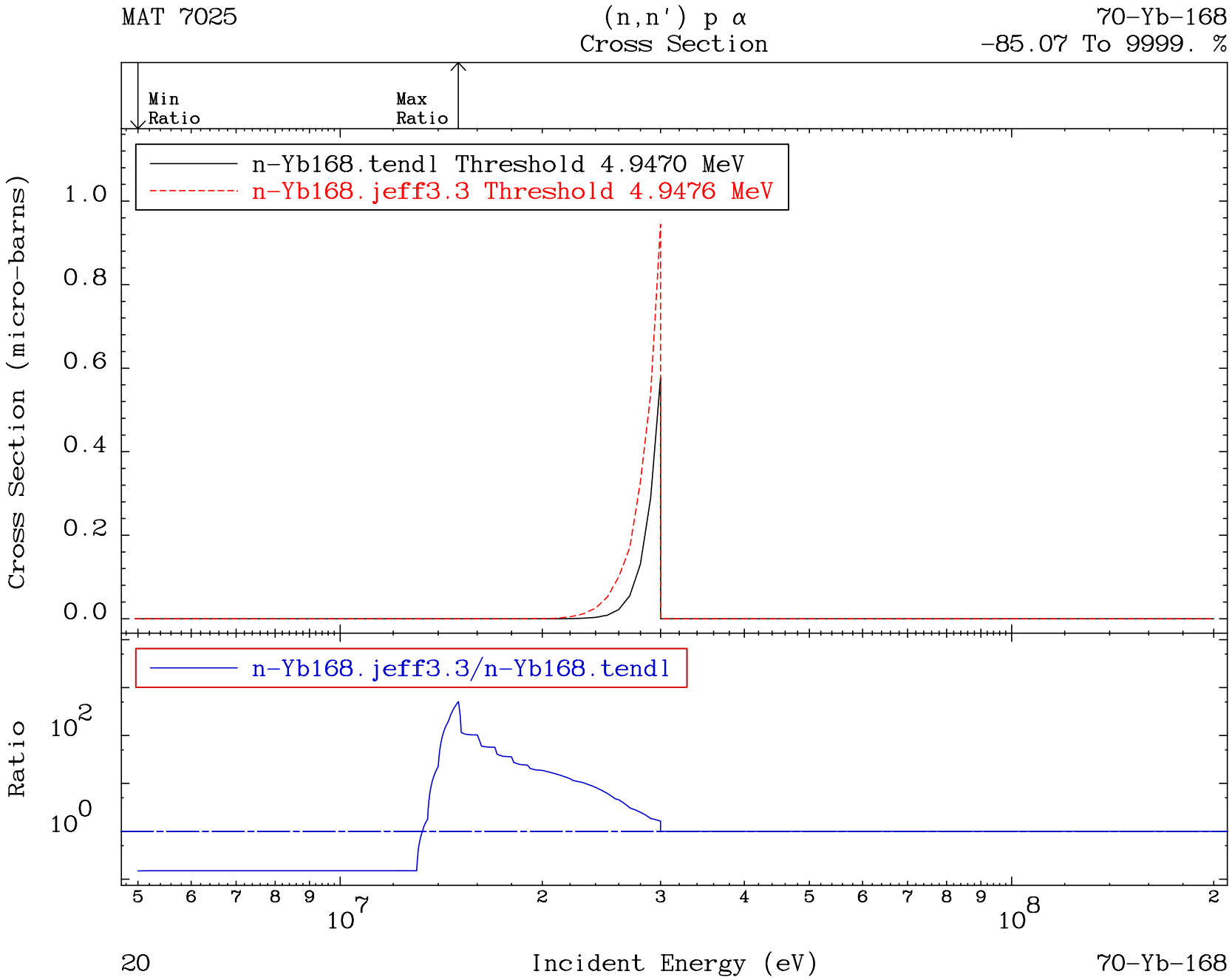

MAT 7025
(n,n') He-3
Cross Section
70-Yb-168
0.000 To 1.442 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 12.064 MeV
n-Yb168.jeff3.3 Threshold 12.064 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
2
10^8
15
Incident Energy (eV)
70-Yb-168

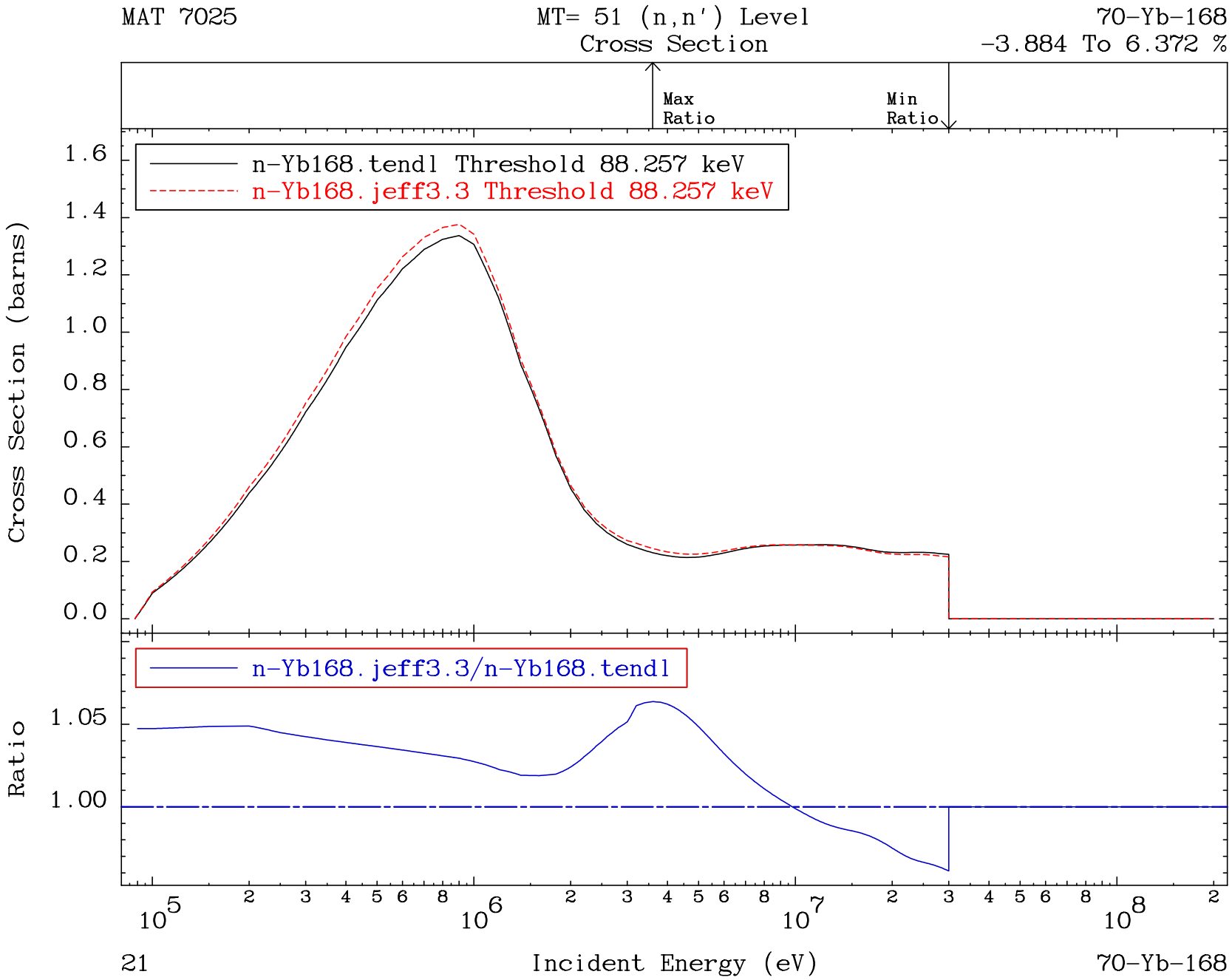

MAT 7025
(n,4n)
Cross Section
70-Yb-168
0.000 To 9.360 %
Min
Ratio
n-Yb168.tendl Threshold 25.654 MeV
n-Yb168.jeff3.3 Threshold 25.654 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.10
1.05
1.00
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
70-Yb-168

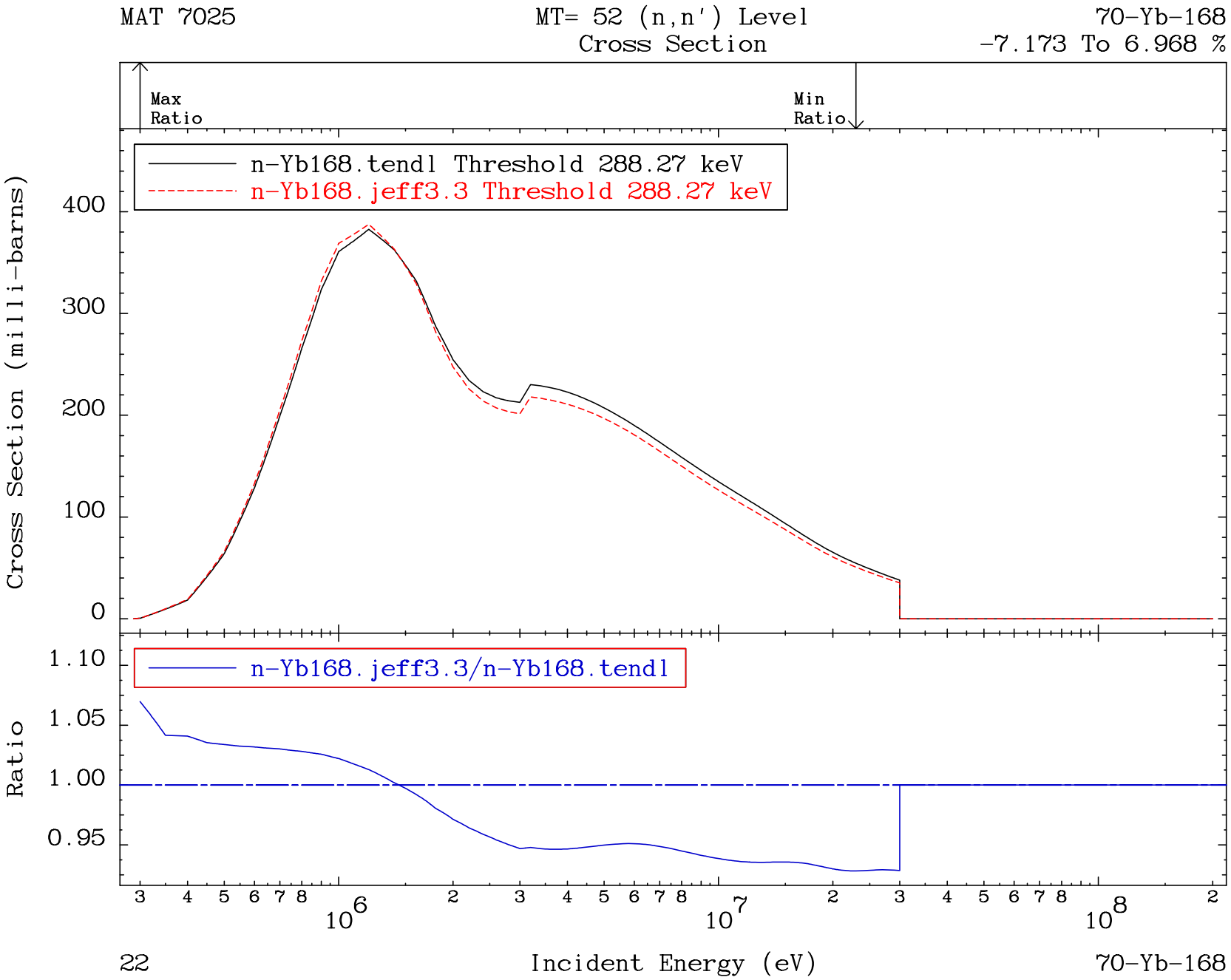

MAT 7025
(n,2n) p
Cross Section
70-Yb-168
0.000 To 8.062 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 15.144 MeV
n-Yb168.jeff3.3 Threshold 15.144 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
70-Yb-168

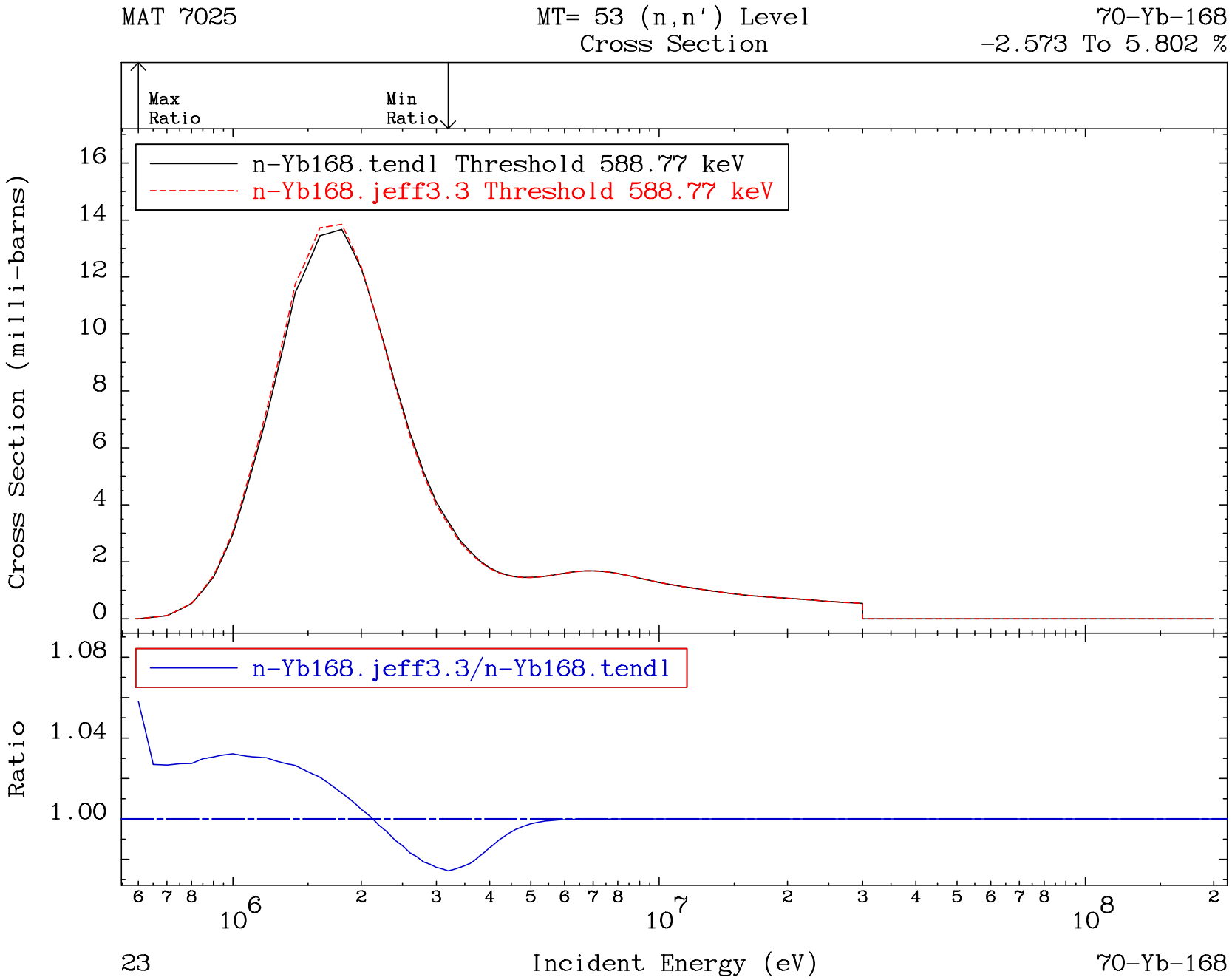

MAT 7025
(n,3n) p
Cross Section
70-Yb-168
0.000 To 4.563 %
Min
Ratio
n-Yb168.tendl Threshold 22.217 MeV
n-Yb168.jeff3.3 Threshold 22.217 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
70-Yb-168

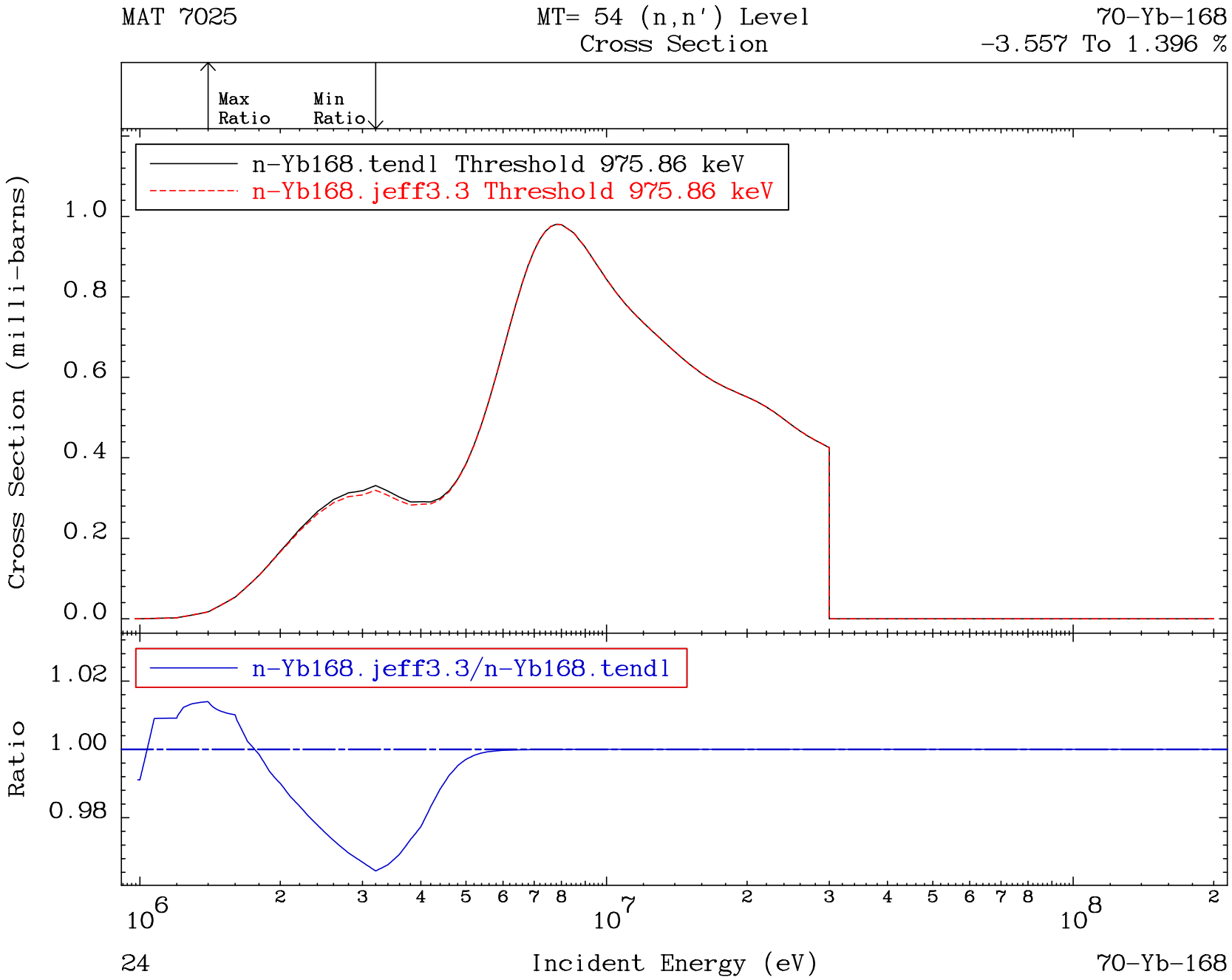

MAT 7025
(n,2n) p
Cross Section
70-Yb-168
-1.282 To 0.876 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 11.301 MeV
n-Yb168.jeff3.3 Threshold 11.301 MeV
Cross Section (micro-barns)
0
2
4
6
8
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
70-Yb-168

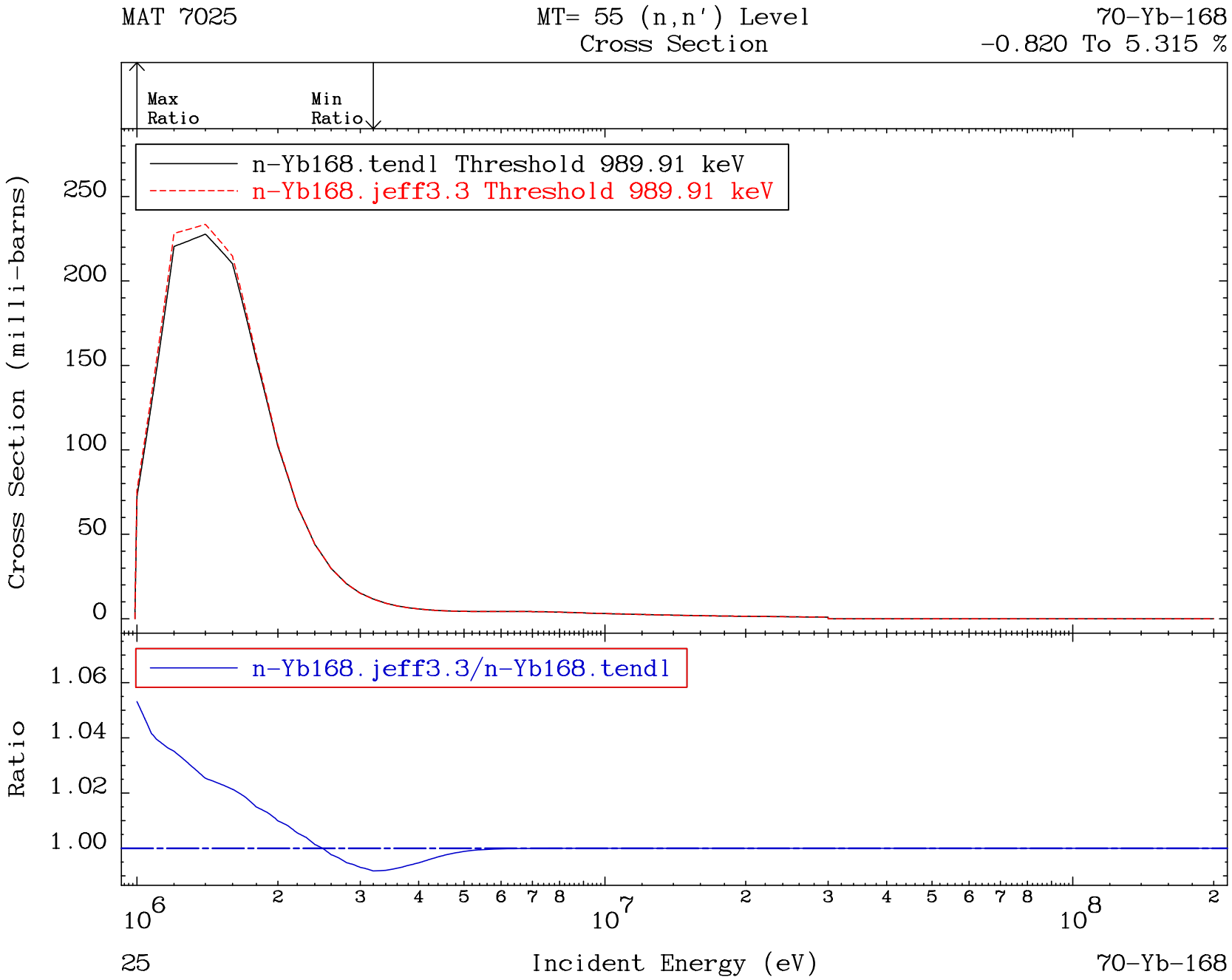

MAT 7025
(n,n') p α
Cross Section
70-Yb-168
-85.07 To 9999. %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 4.9470 MeV
n-Yb168.jeff3.3 Threshold 4.9476 MeV
Cross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
70-Yb-168

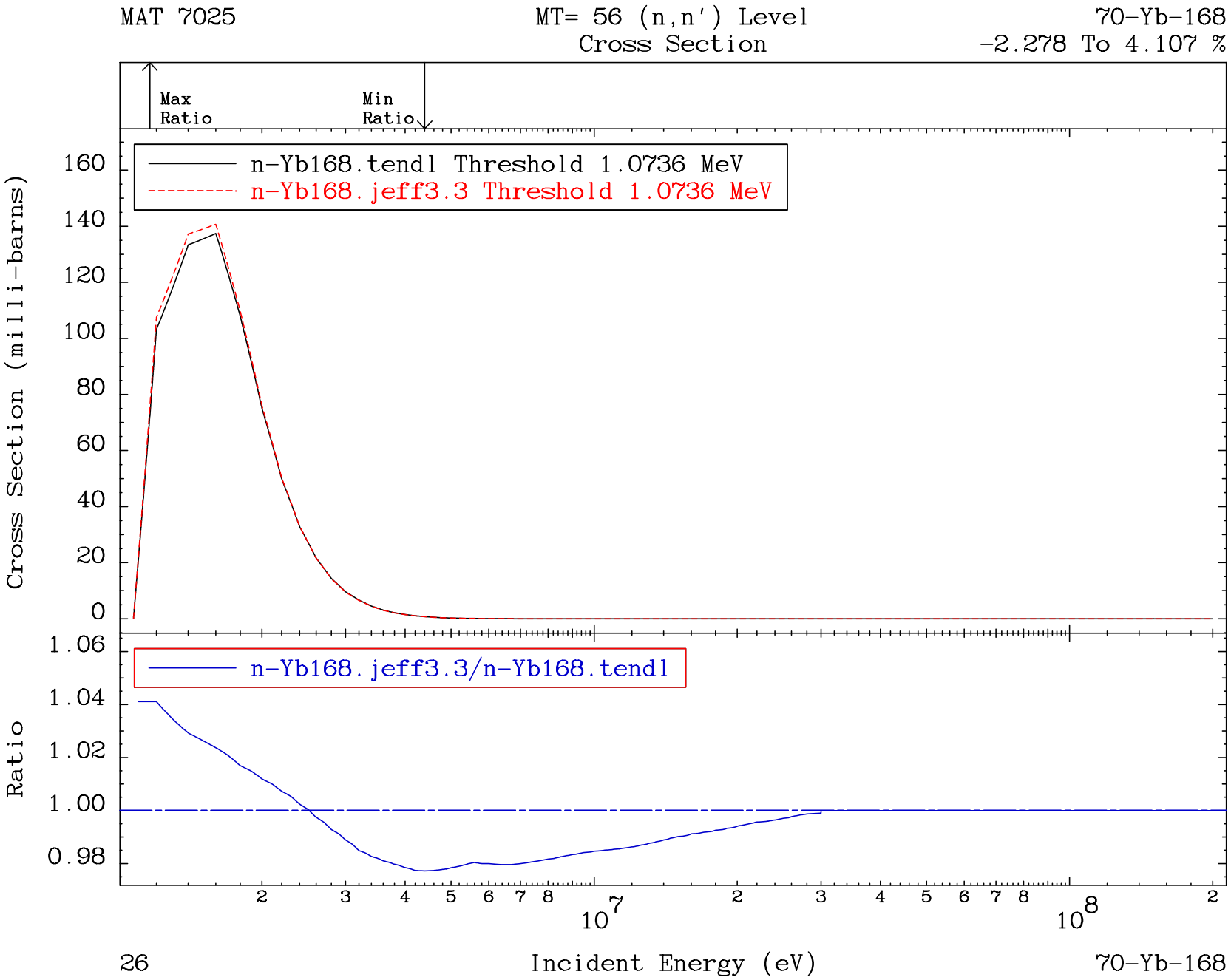

MAT 7025
MT= 51 (n,n') Level
Cross Section
70-Yb-168
-3.884 To 6.372 %
Max
Ratio
Min
Ratio
n-Yb168.tendl Threshold 88.257 keV
n-Yb168.jeff3.3 Threshold 88.257 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.05
1.00
10^5
10^6
10^7
10^8
21
Incident Energy (eV)
70-Yb-168

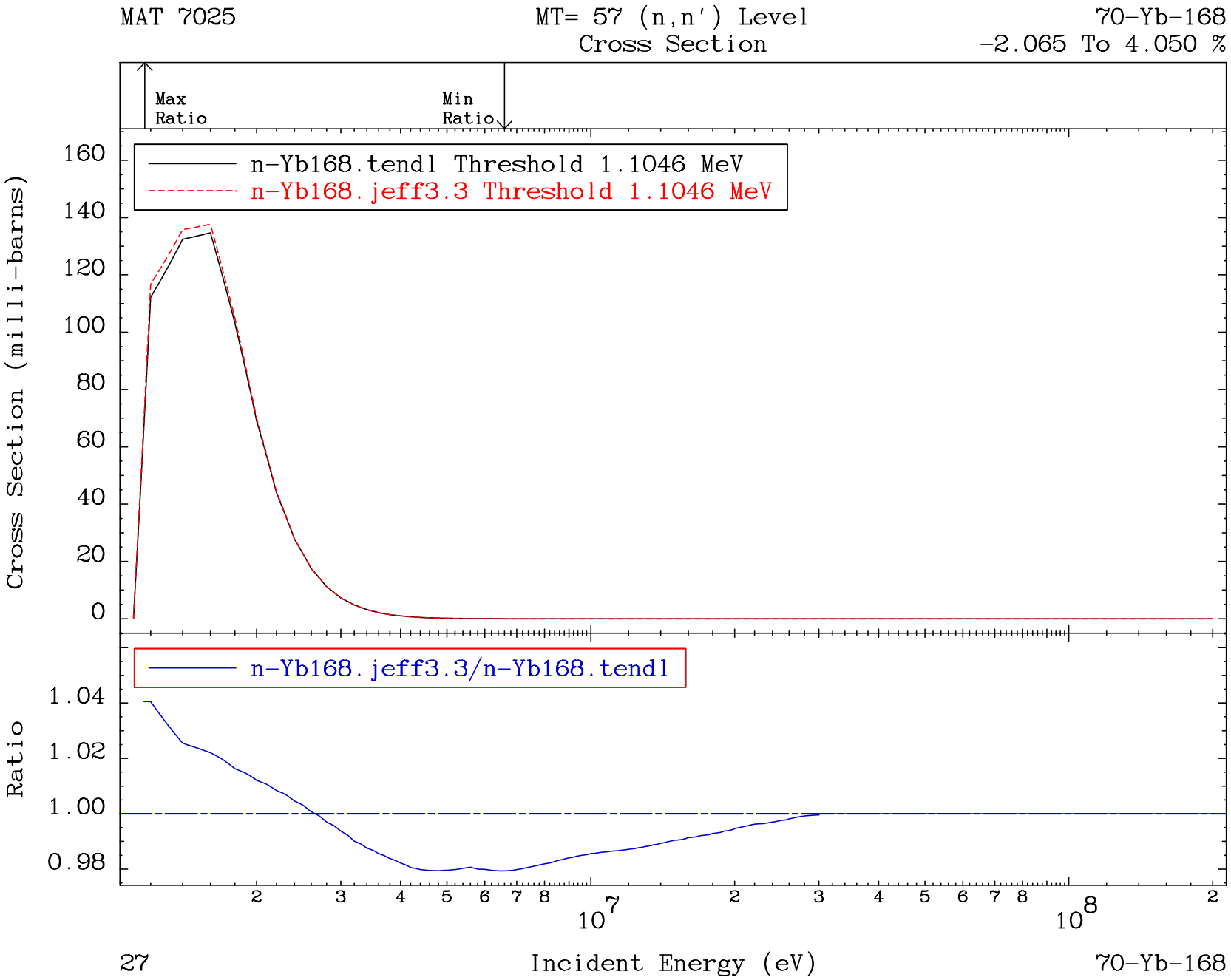

MAT 7025
MT= 52 (n,n') Level
Cross Section
70-Yb-168
-7.173 To 6.968 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 288.27 keV
n-Yb168.jeff3.3 Threshold 288.27 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.10
1.05
1.00
0.95
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
70-Yb-168

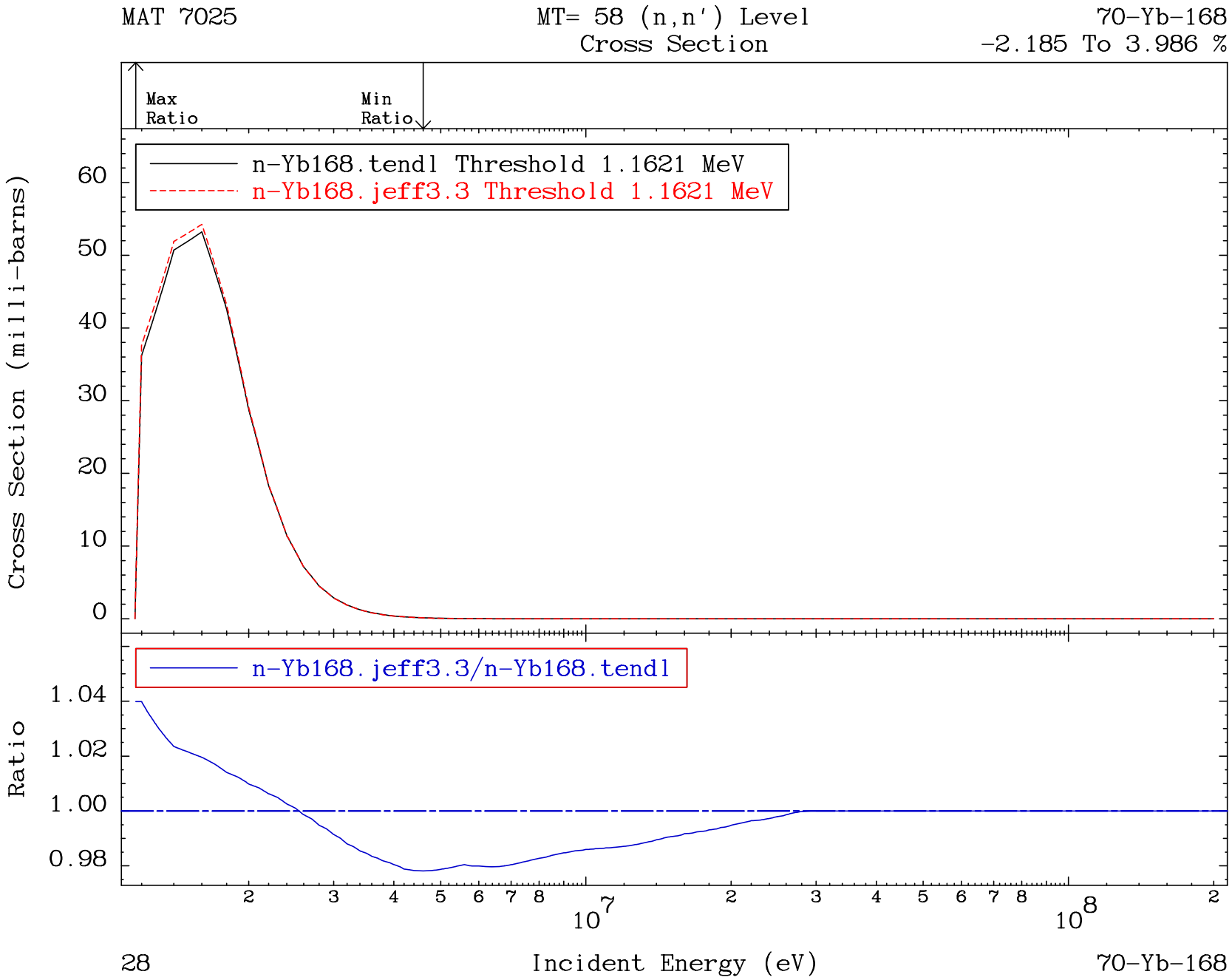

MAT 7025
MT= 53 (n,n') Level
Cross Section
70-Yb-168
-2.573 To 5.802 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 588.77 keV
n-Yb168.jeff3.3 Threshold 588.77 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.08
1.04
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
70-Yb-168

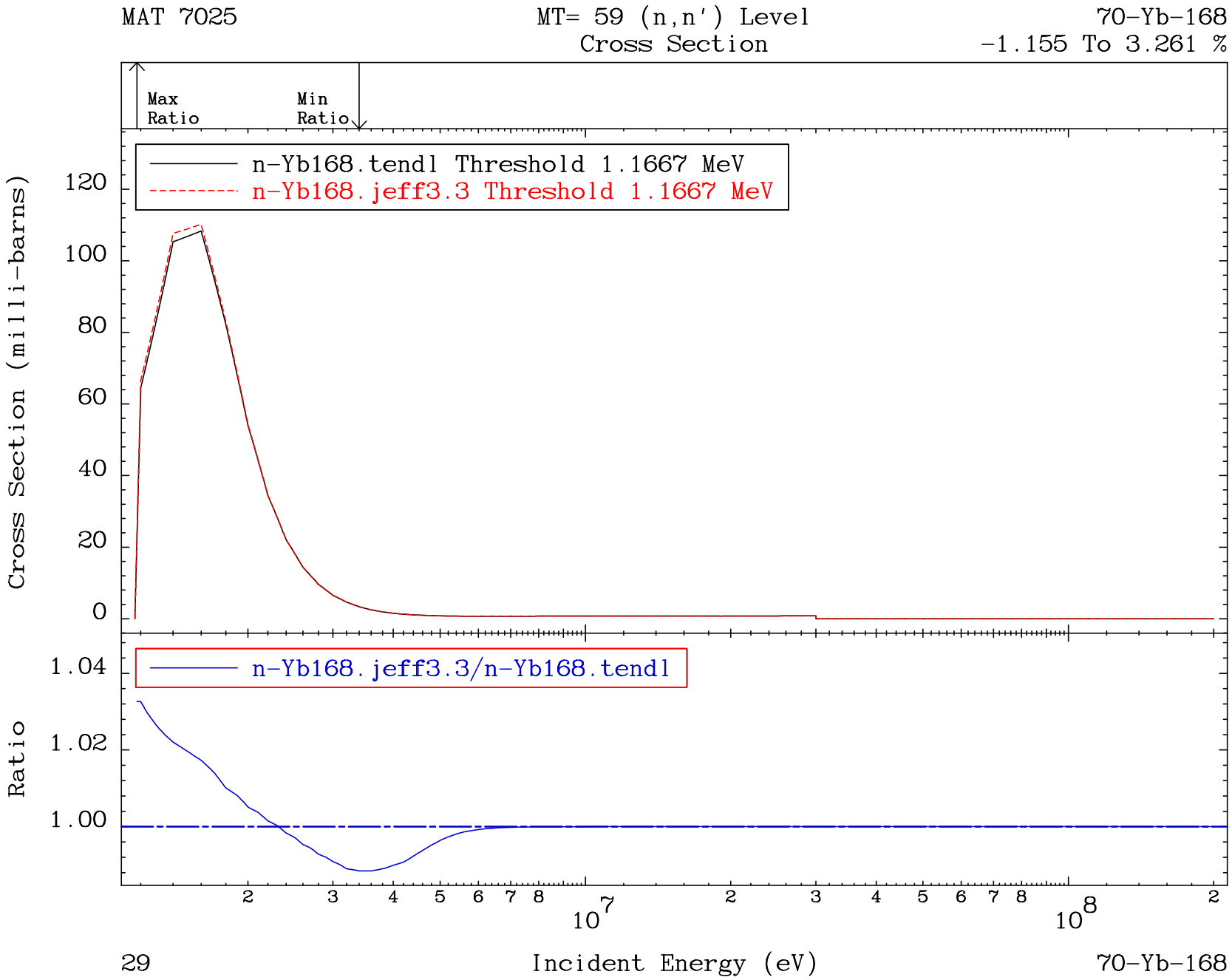

MAT 7025
MT= 54 (n,n') Level
Cross Section
70-Yb-168
-3.557 To 1.396 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 975.86 keV
n-Yb168.jeff3.3 Threshold 975.86 keV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.02
1.00
0.98
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
70-Yb-168

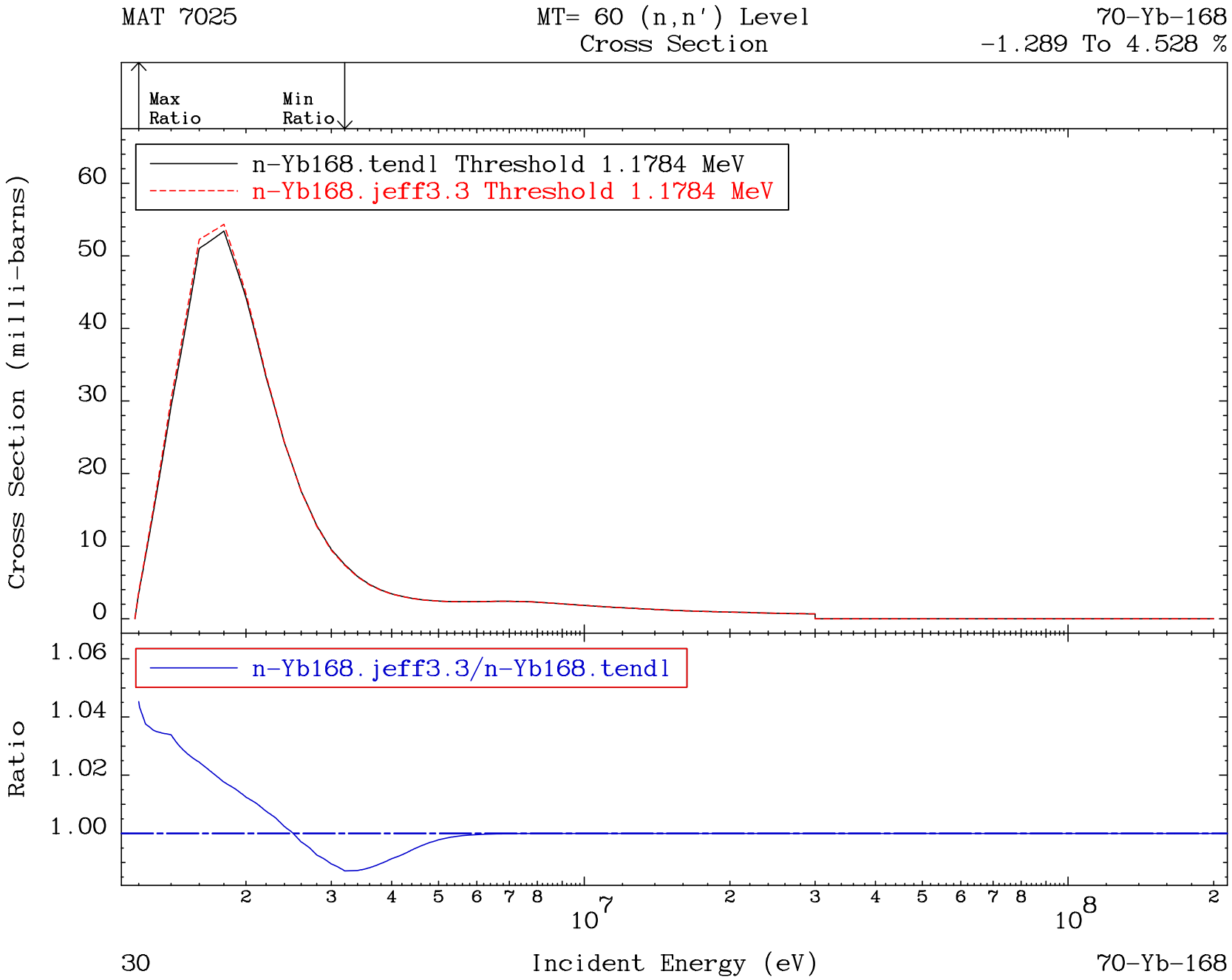

MAT 7025
MT= 55 (n,n') Level
Cross Section
70-Yb-168
-0.820 To 5.315 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 989.91 keV
n-Yb168.jeff3.3 Threshold 989.91 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
10^6
10^7
10^8
25
Incident Energy (eV)
70-Yb-168

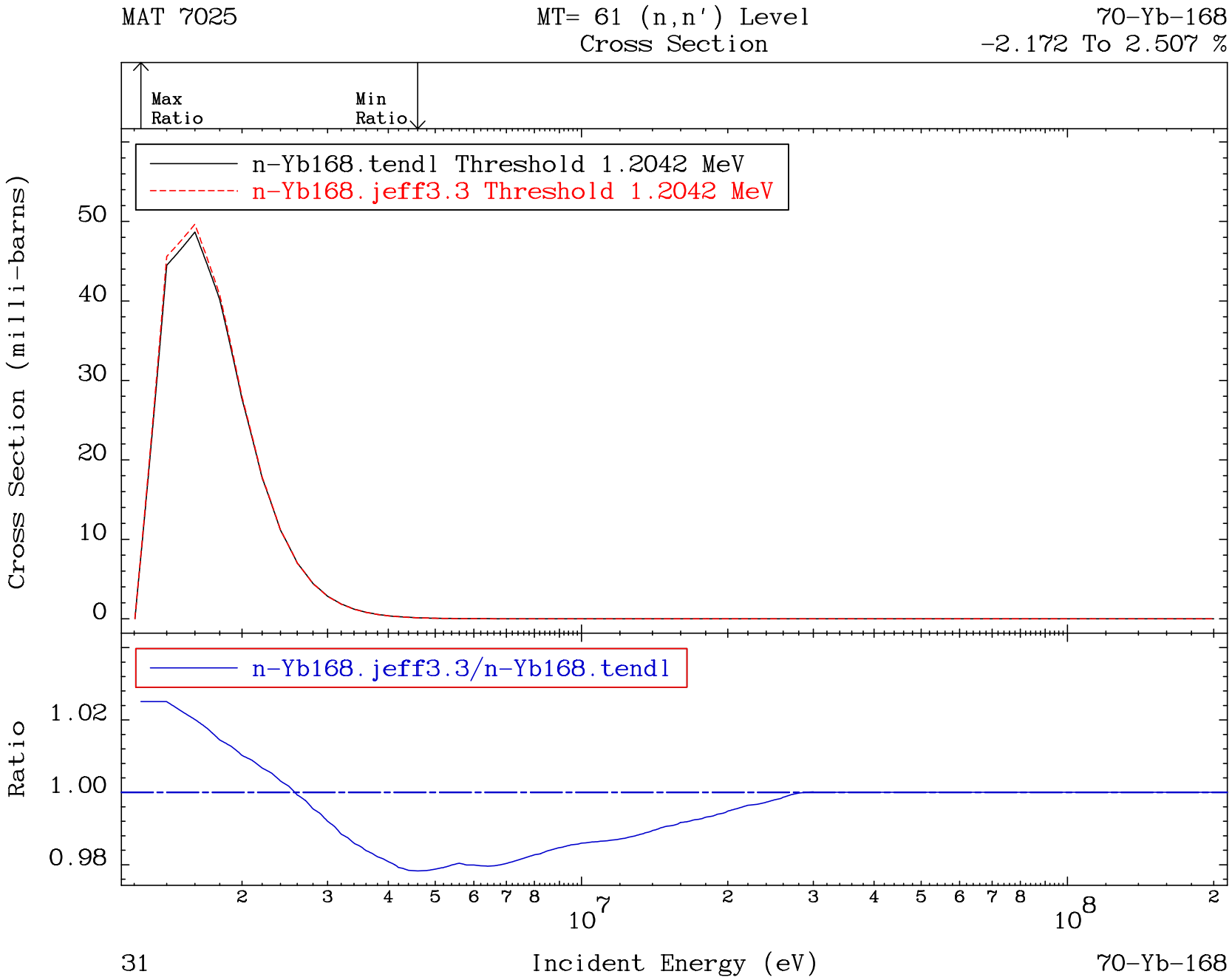

MAT 7025
MT= 56 (n,n') Level
Cross Section
70-Yb-168
-2.278 To 4.107 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.0736 MeV
n-Yb168.jeff3.3 Threshold 1.0736 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
70-Yb-168

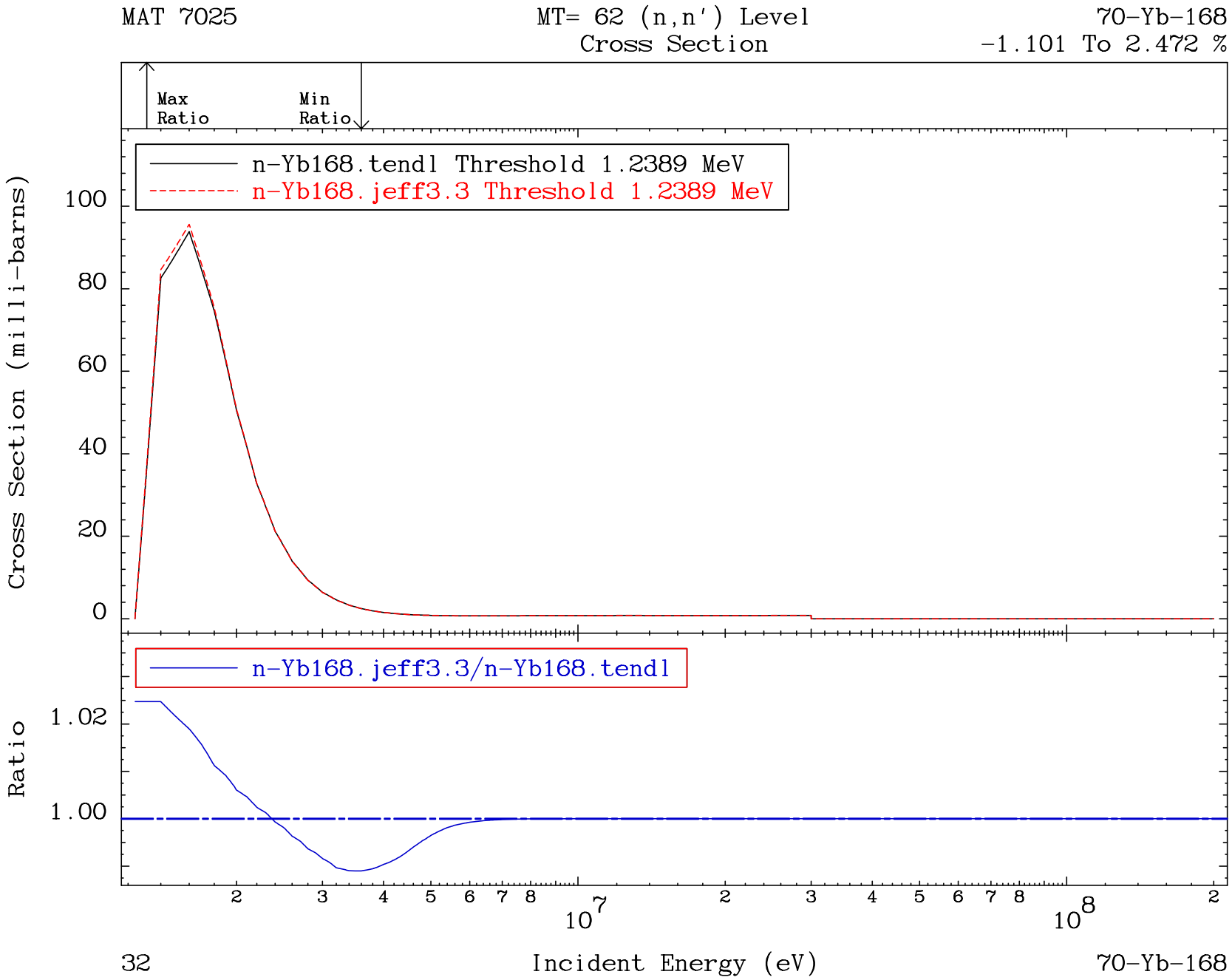

MAT 7025
MT= 57 (n,n') Level
Cross Section
70-Yb-168
-2.065 To 4.050 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.1046 MeV
n-Yb168.jeff3.3 Threshold 1.1046 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
70-Yb-168

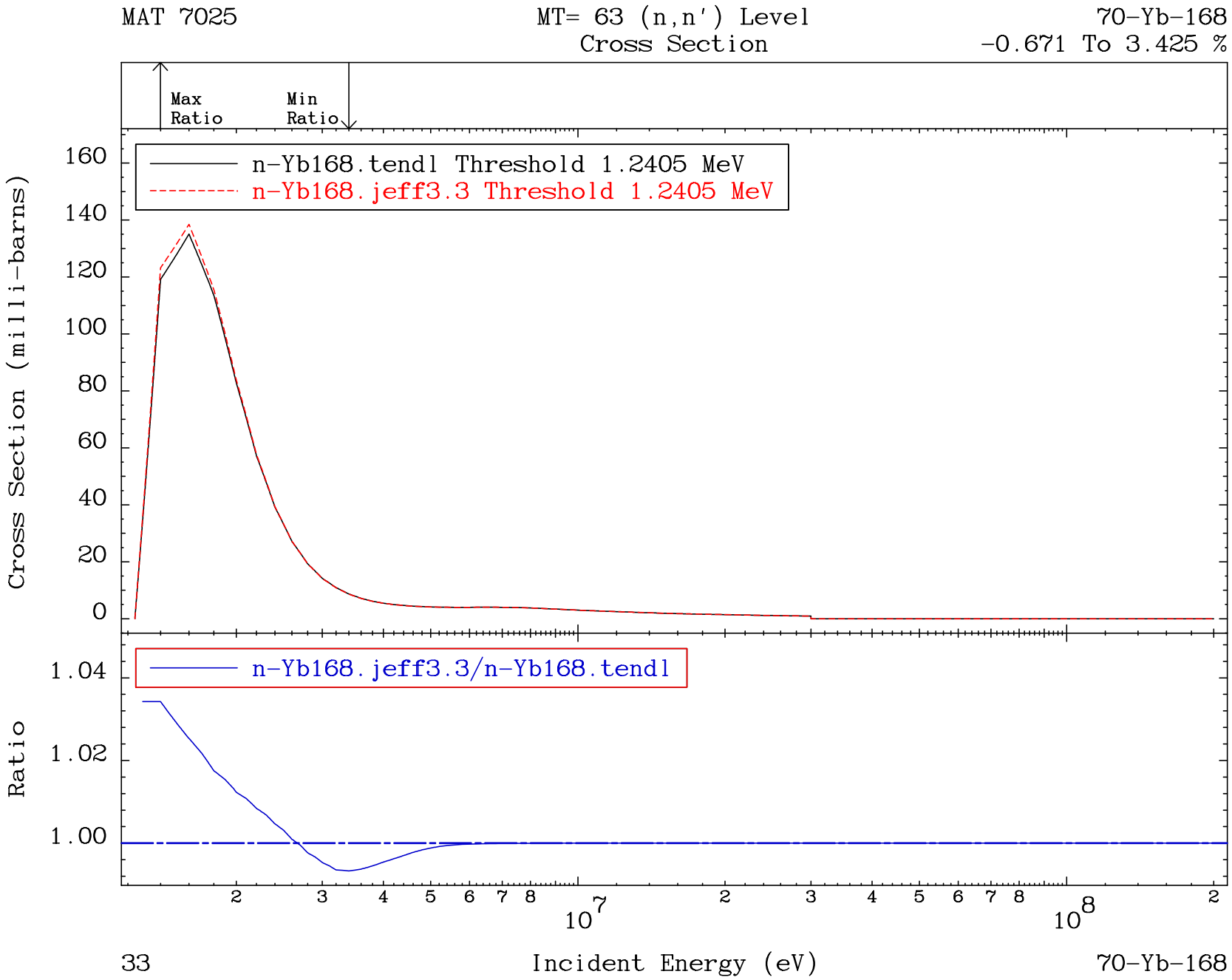

MAT 7025
MT= 58 (n,n') Level
Cross Section
70-Yb-168
-2.185 To 3.986 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.1621 MeV
n-Yb168.jeff3.3 Threshold 1.1621 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
70-Yb-168

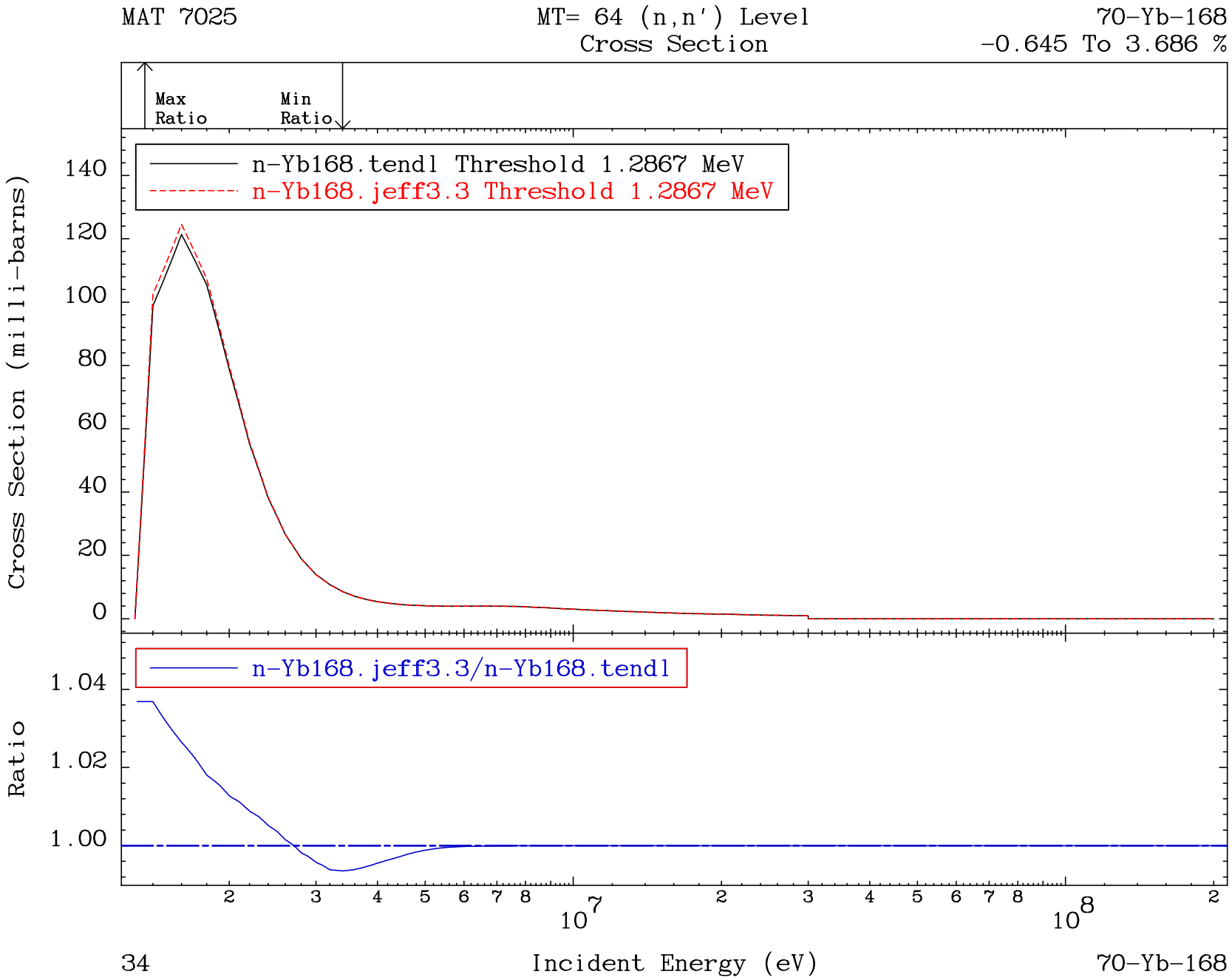

MAT 7025
MT= 59 (n,n') Level
Cross Section
70-Yb-168
-1.155 To 3.261 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.1667 MeV
n-Yb168.jeff3.3 Threshold 1.1667 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
70-Yb-168

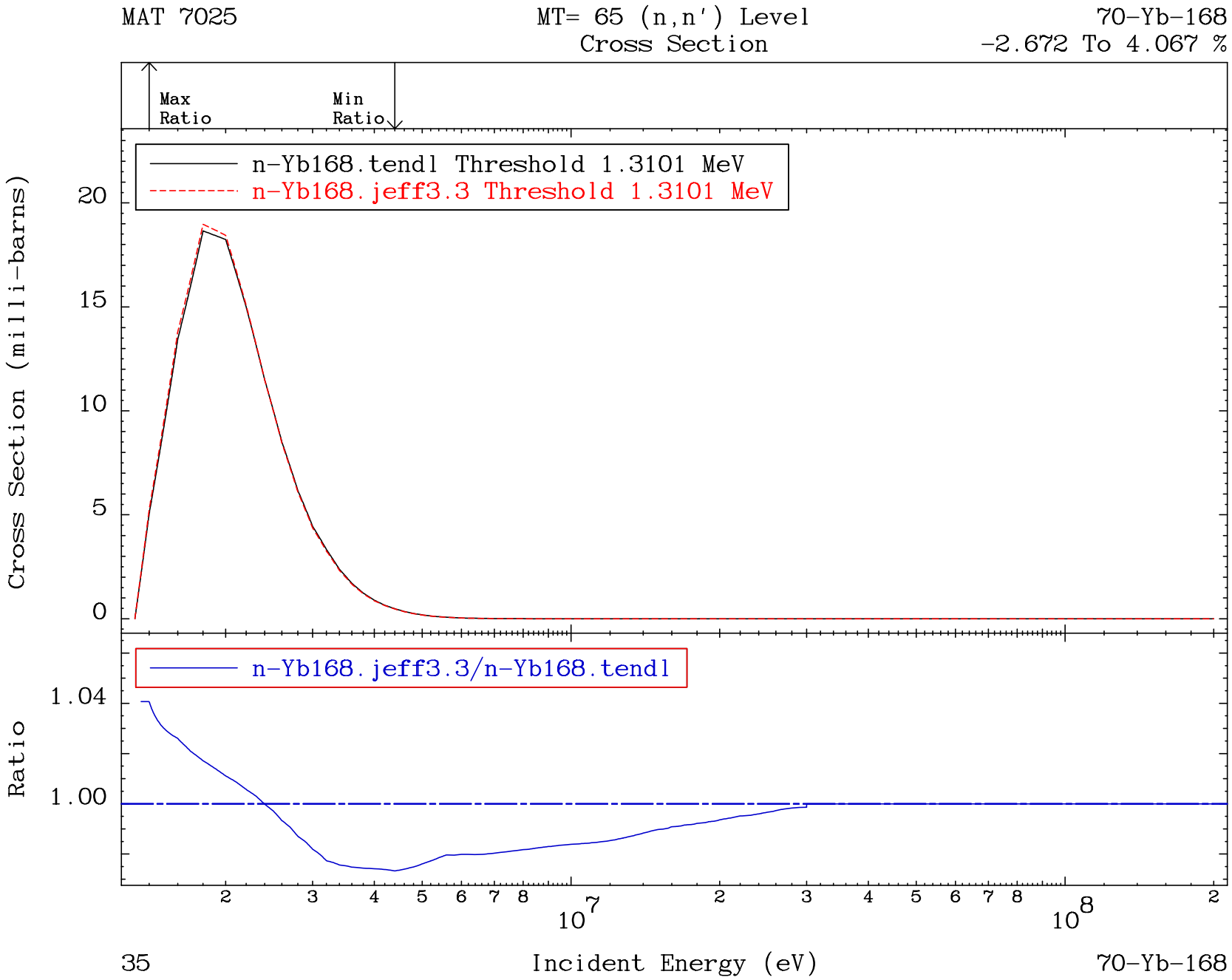

MAT 7025
MT= 60 (n,n') Level
Cross Section
70-Yb-168
-1.289 To 4.528 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.1784 MeV
n-Yb168.jeff3.3 Threshold 1.1784 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
70-Yb-168

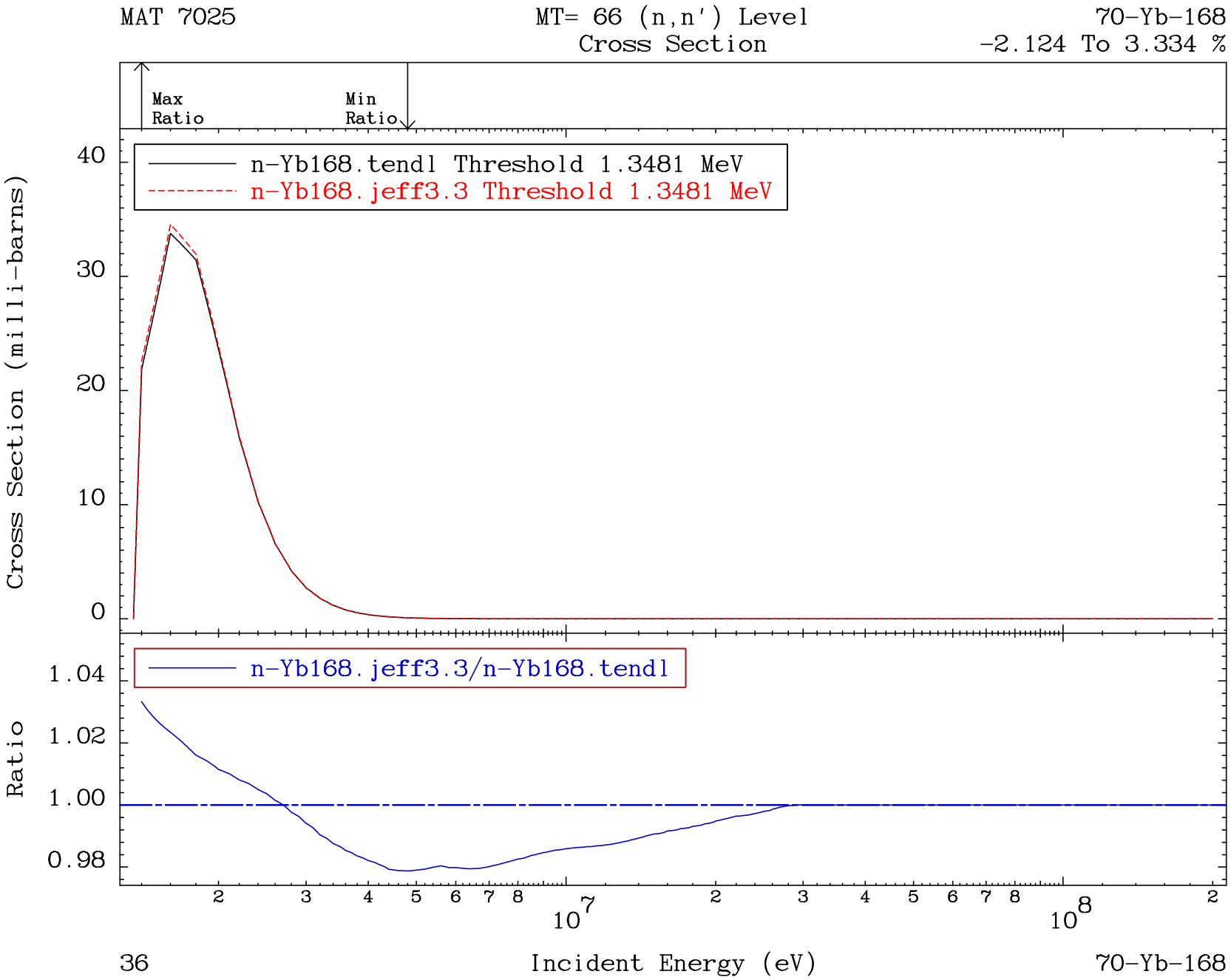

MAT 7025
MT= 61 (n,n') Level
Cross Section
70-Yb-168
-2.172 To 2.507 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.2042 MeV
n-Yb168.jeff3.3 Threshold 1.2042 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
70-Yb-168

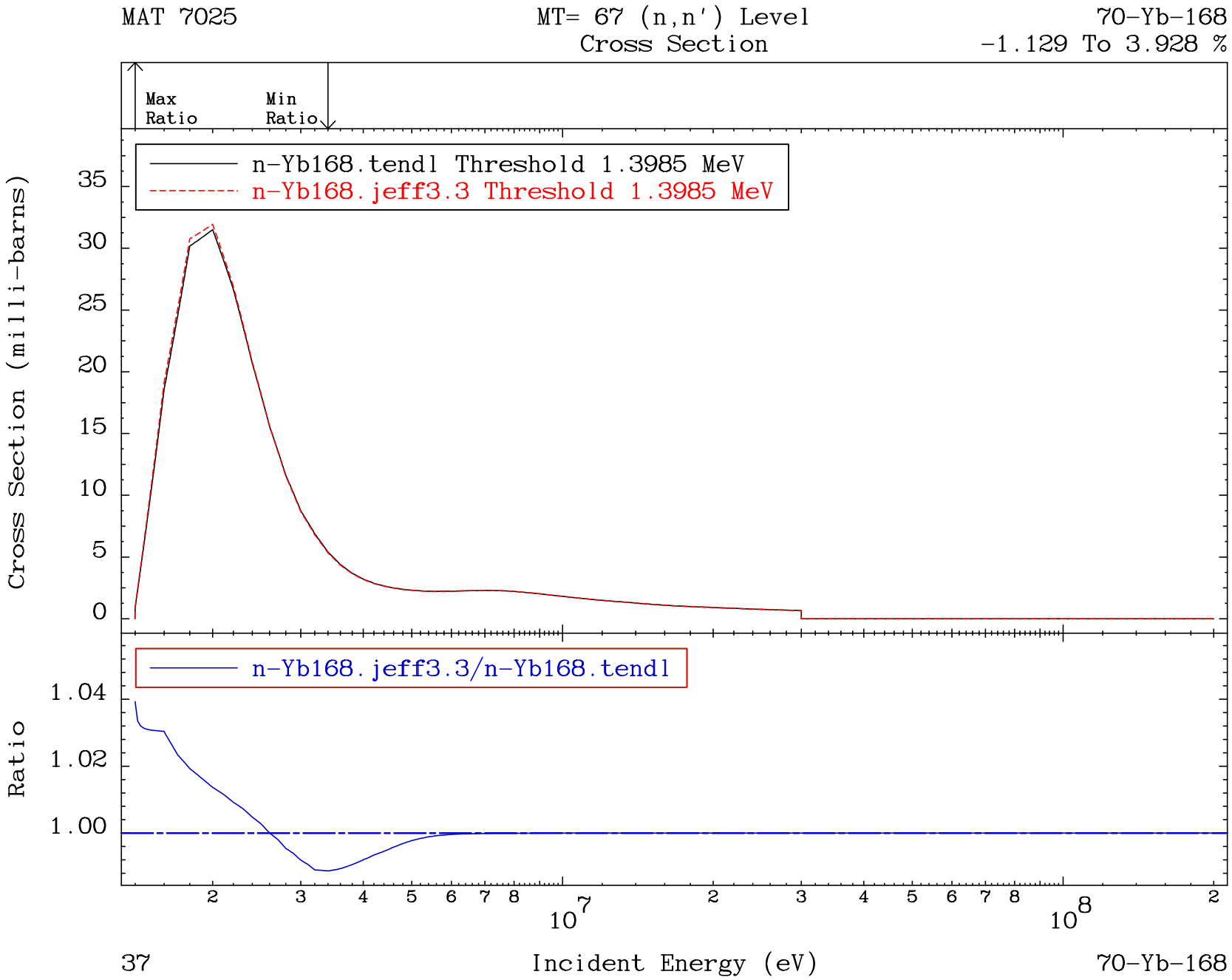

MAT 7025
MT= 62 (n,n') Level
Cross Section
70-Yb-168
-1.101 To 2.472 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.2389 MeV
n-Yb168.jeff3.3 Threshold 1.2389 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
70-Yb-168

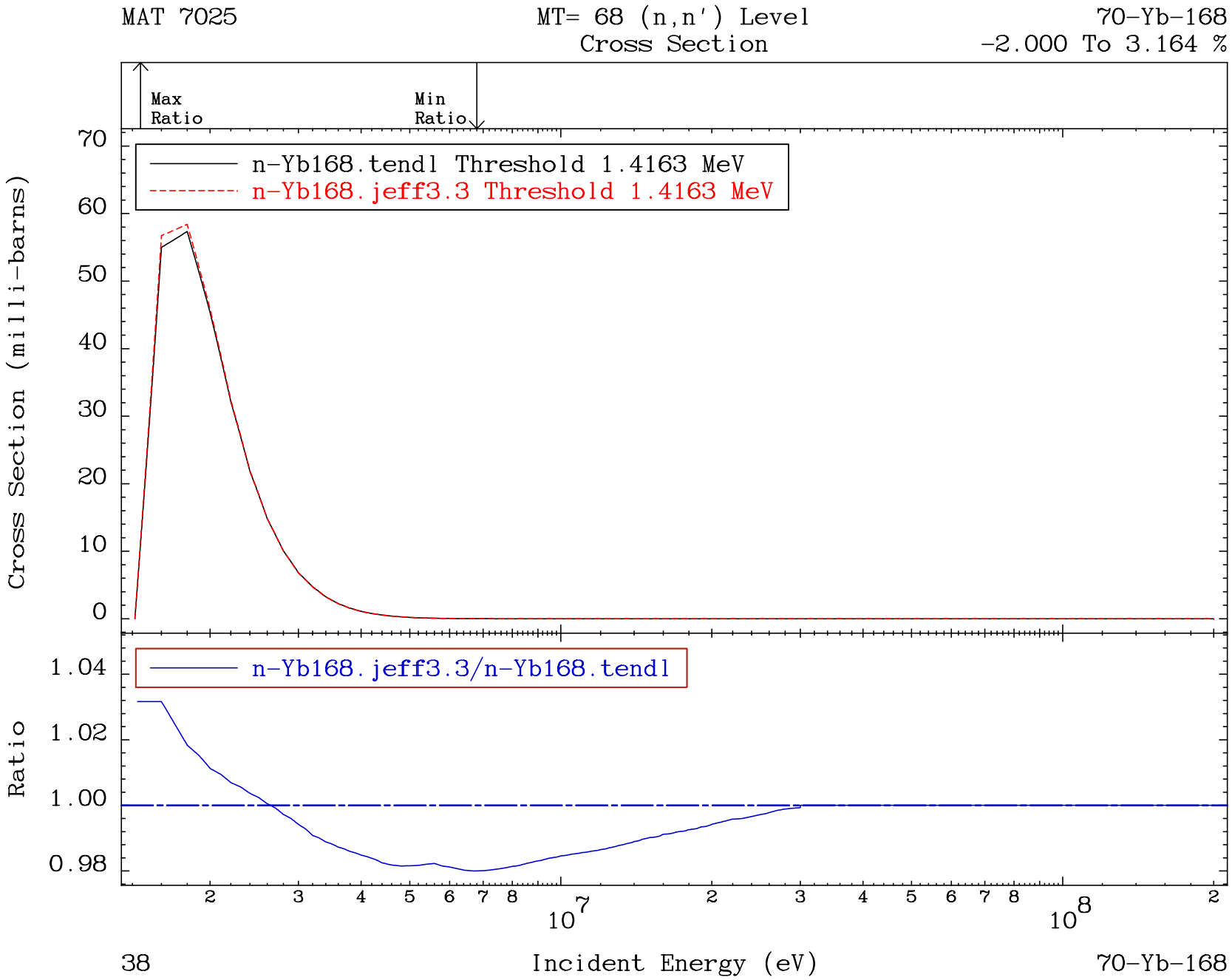

MAT 7025
MT= 63 (n,n') Level
Cross Section
70-Yb-168
-0.671 To 3.425 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.2405 MeV
n-Yb168.jeff3.3 Threshold 1.2405 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
33
Incident Energy (eV)
70-Yb-168

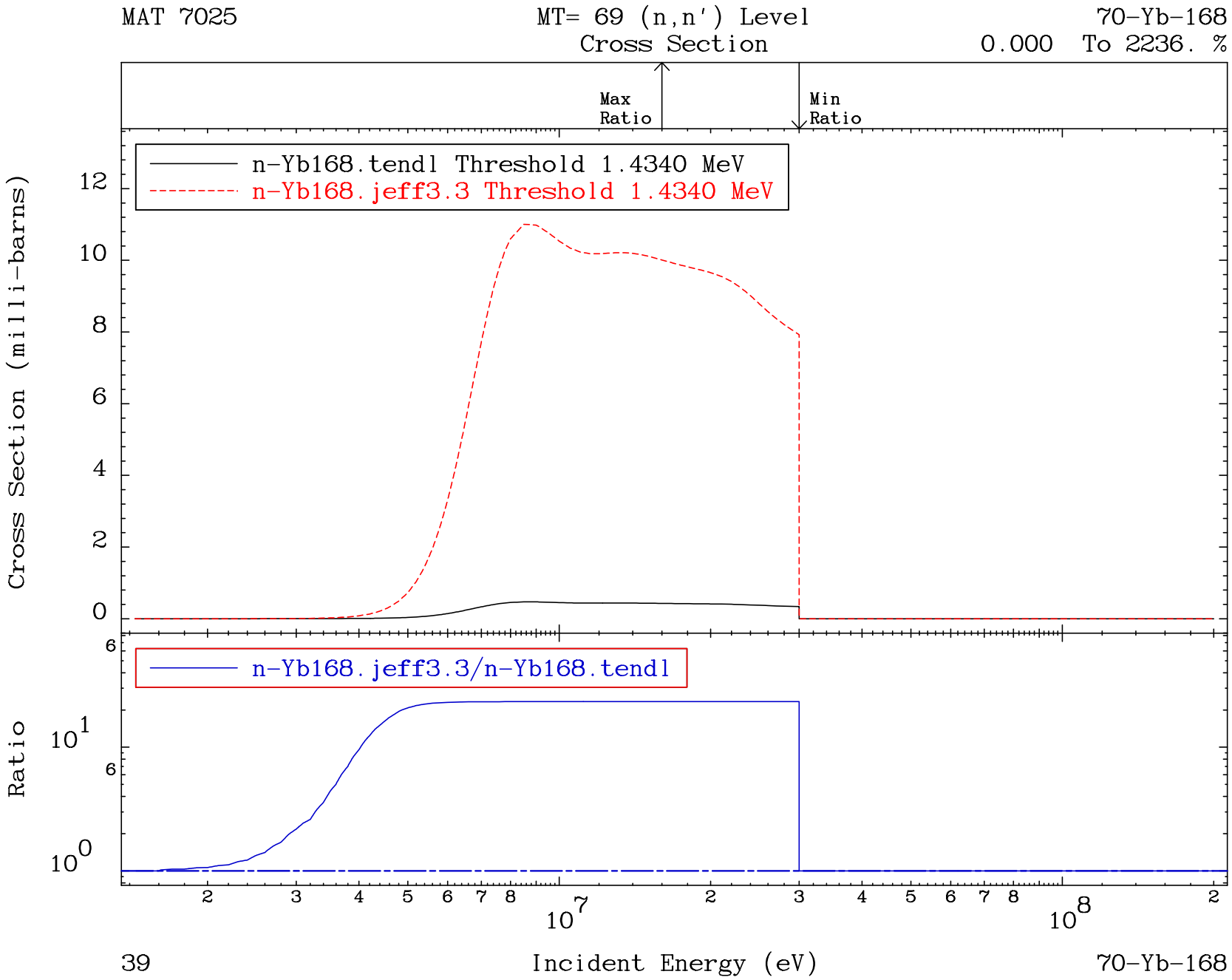

MAT 7025
MT= 64 (n,n') Level
Cross Section
70-Yb-168
-0.645 To 3.686 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.2867 MeV
n-Yb168.jeff3.3 Threshold 1.2867 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
70-Yb-168

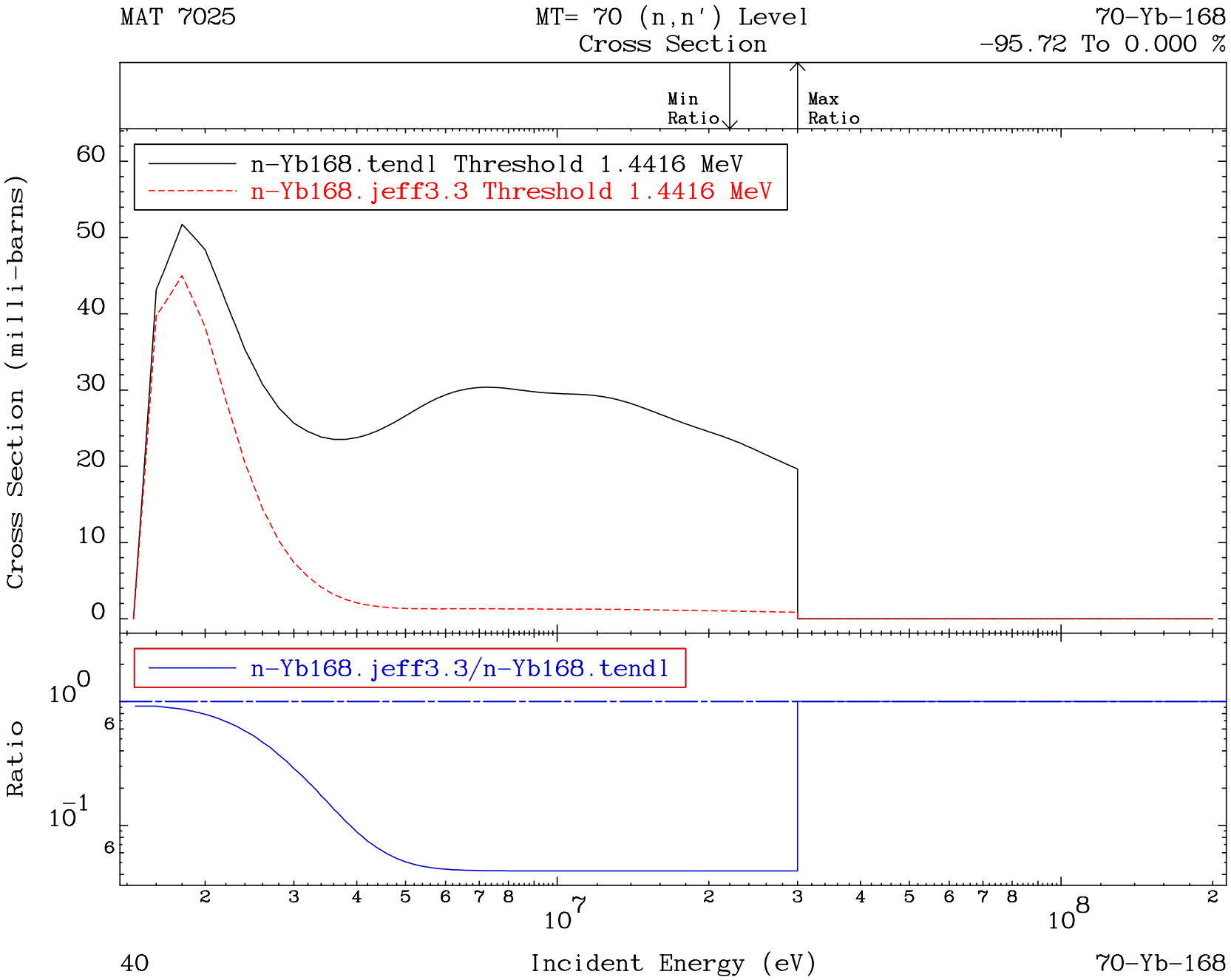

MAT 7025
MT= 65 (n,n') Level
Cross Section
70-Yb-168
-2.672 To 4.067 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.3101 MeV
n-Yb168.jeff3.3 Threshold 1.3101 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
70-Yb-168

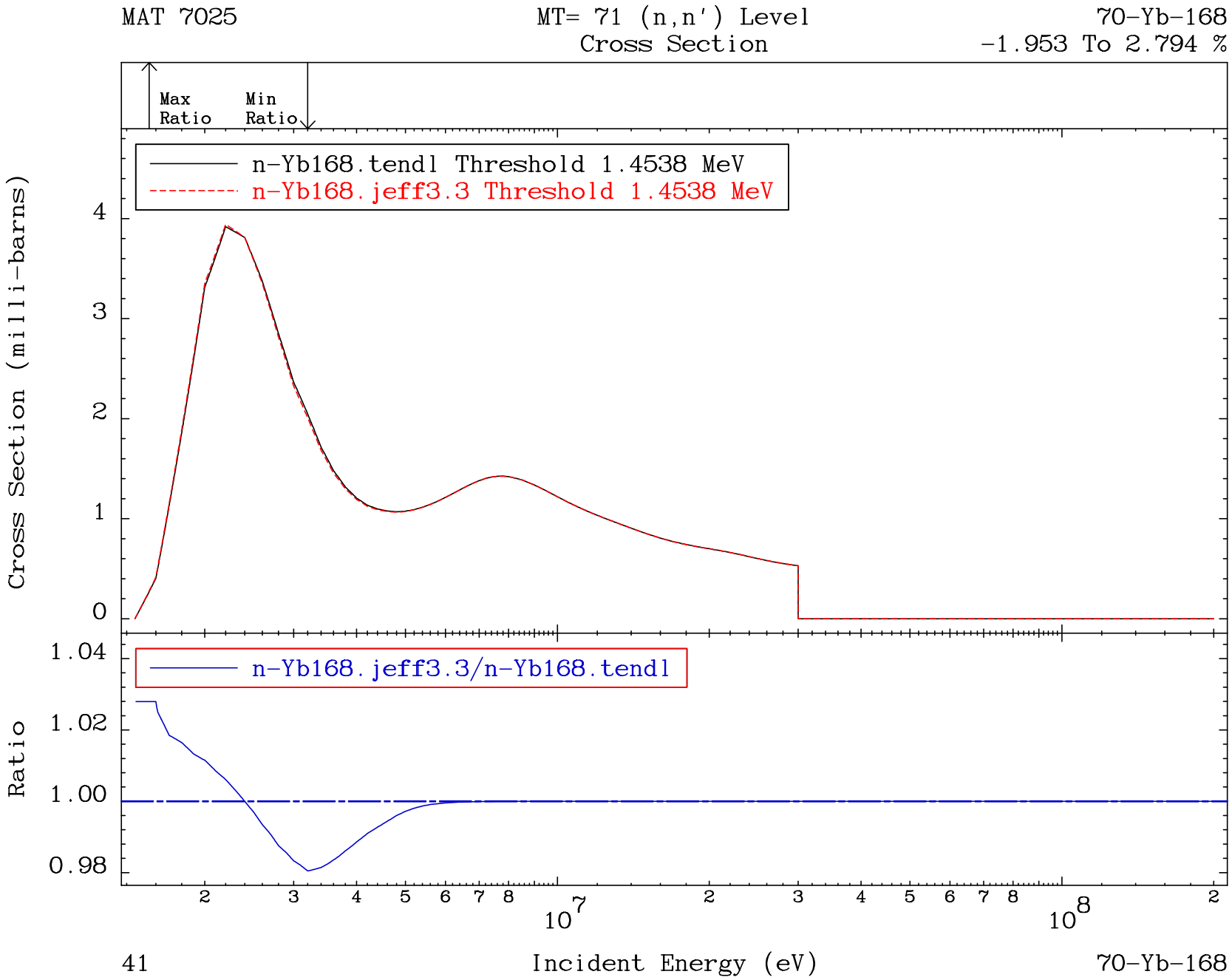

MAT 7025
MT= 66 (n,n') Level
Cross Section
70-Yb-168
-2.124 To 3.334 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.3481 MeV
n-Yb168.jeff3.3 Threshold 1.3481 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
70-Yb-168

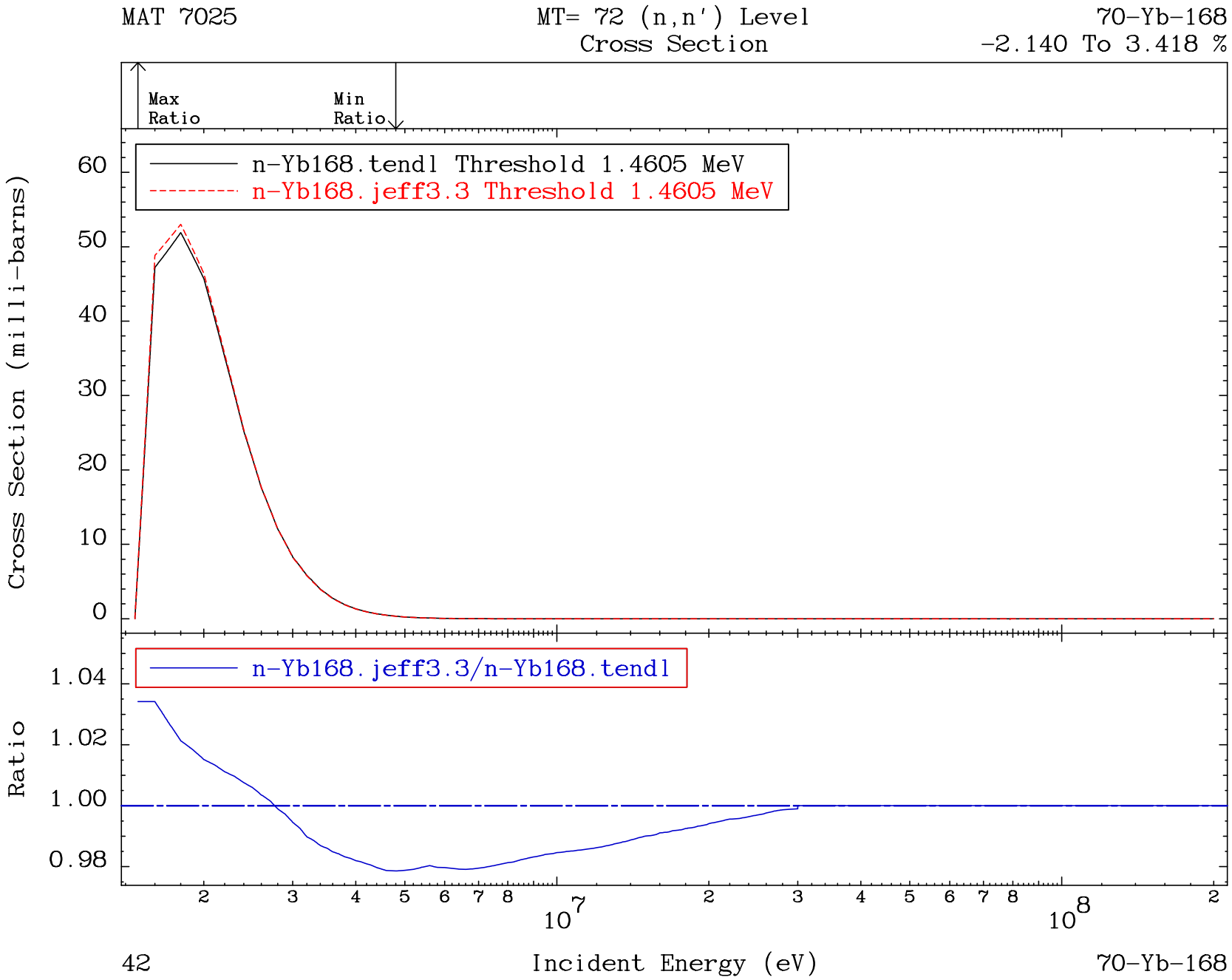

MAT 7025
MT= 67 (n,n') Level
Cross Section
70-Yb-168
-1.129 To 3.928 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.3985 MeV
n-Yb168.jeff3.3 Threshold 1.3985 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
70-Yb-168

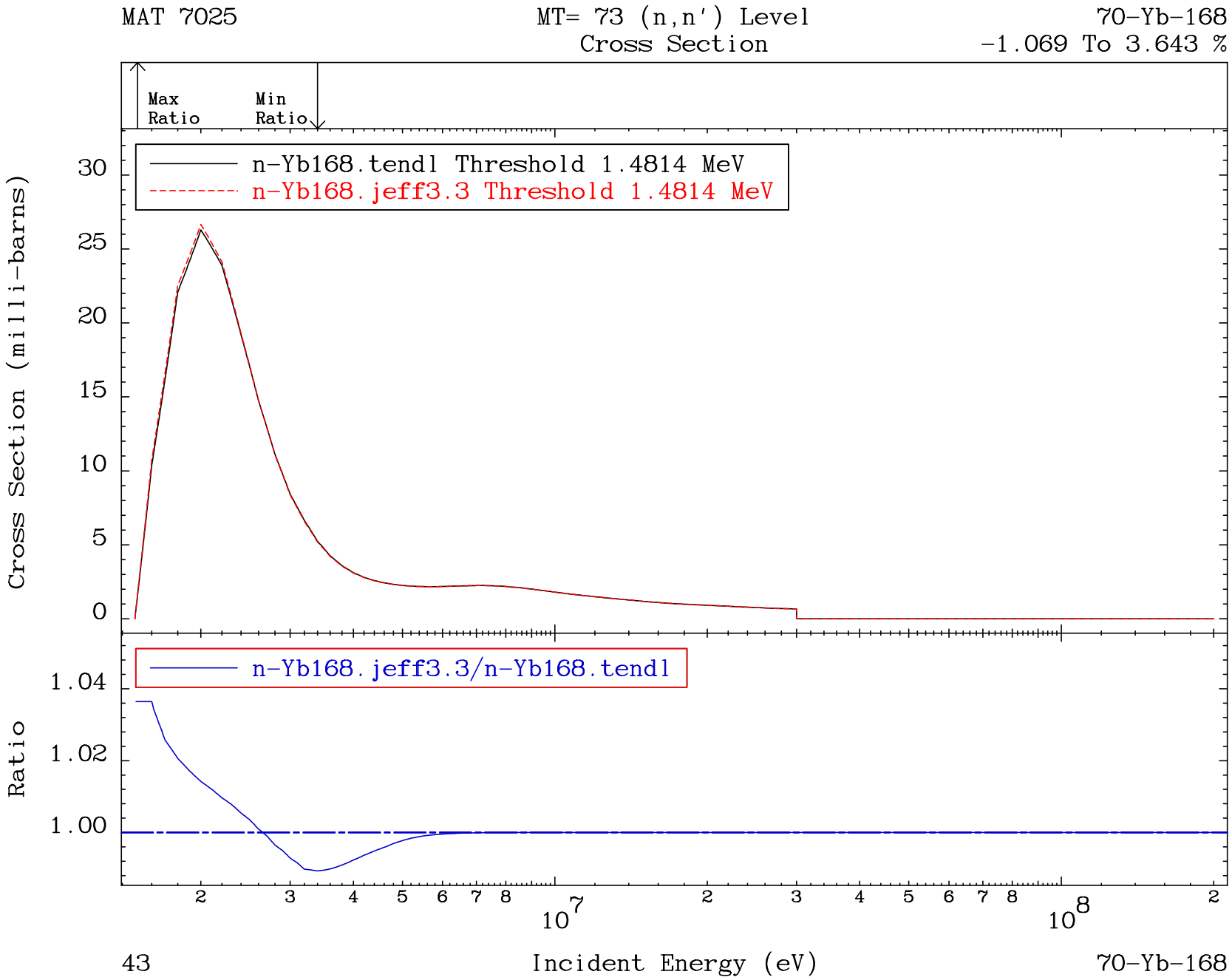

MAT 7025
MT= 68 (n,n') Level
Cross Section
70-Yb-168
-2.000 To 3.164 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4163 MeV
n-Yb168.jeff3.3 Threshold 1.4163 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
70-Yb-168

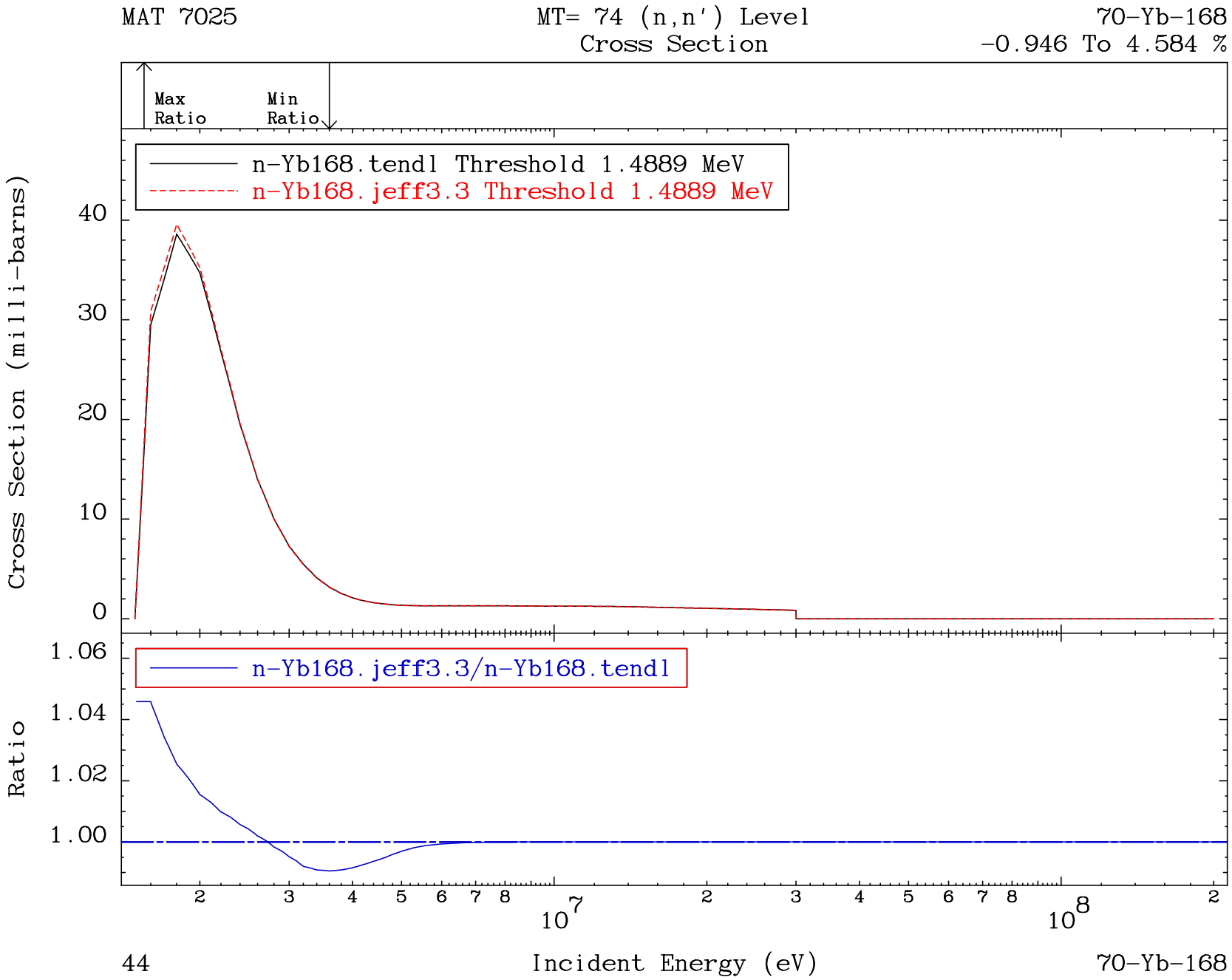

MAT 7025
MT= 69 (n,n') Level
Cross Section
70-Yb-168
0.000 To 2236. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4340 MeV
n-Yb168.jeff3.3 Threshold 1.4340 MeV
Cross Section (milli-barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
39
70-Yb-168

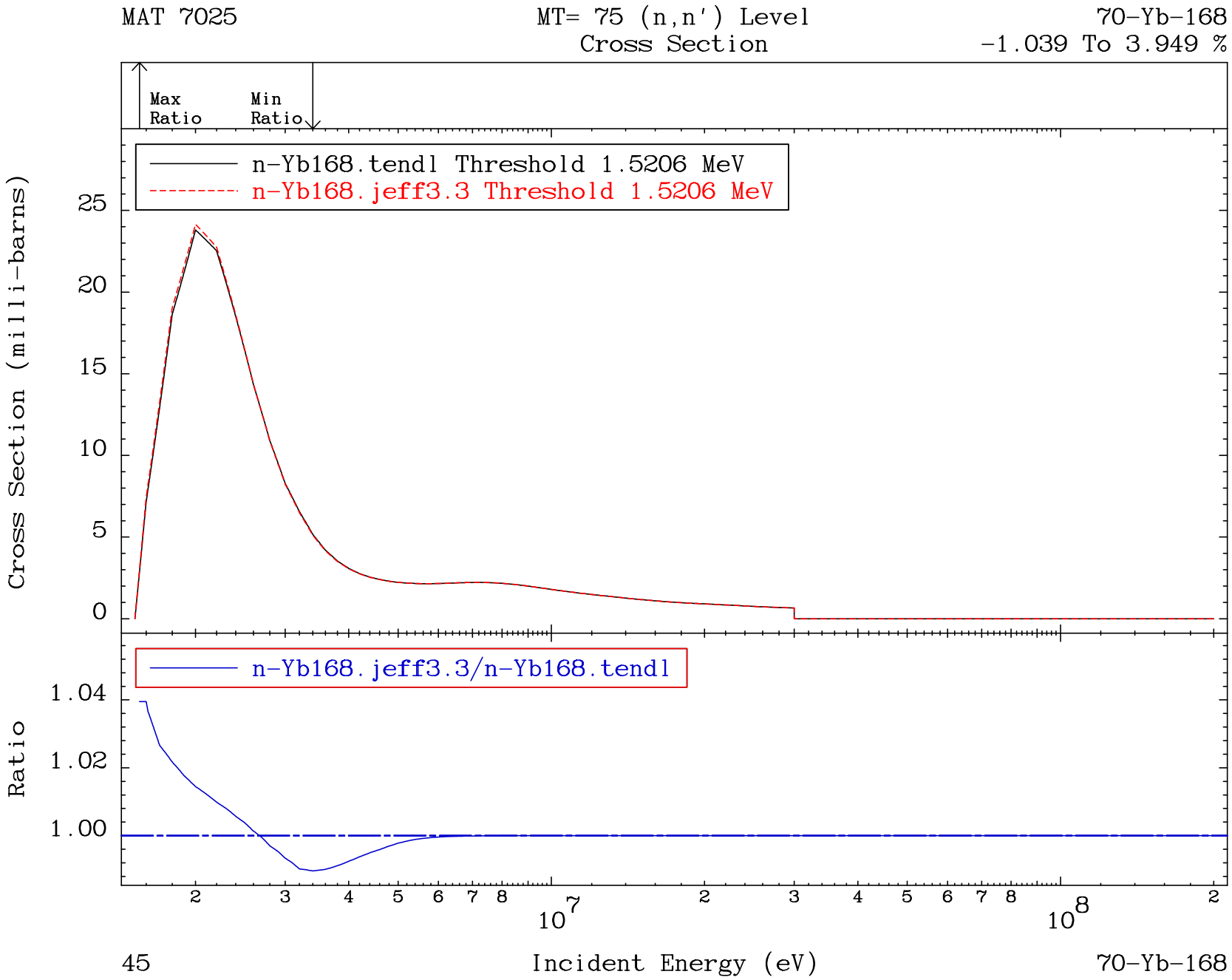

MAT 7025
MT= 70 (n,n') Level
Cross Section
70-Yb-168
-95.72 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 1.4416 MeV
n-Yb168.jeff3.3 Threshold 1.4416 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^0
6
10^-1
6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
40
Incident Energy (eV)
70-Yb-168

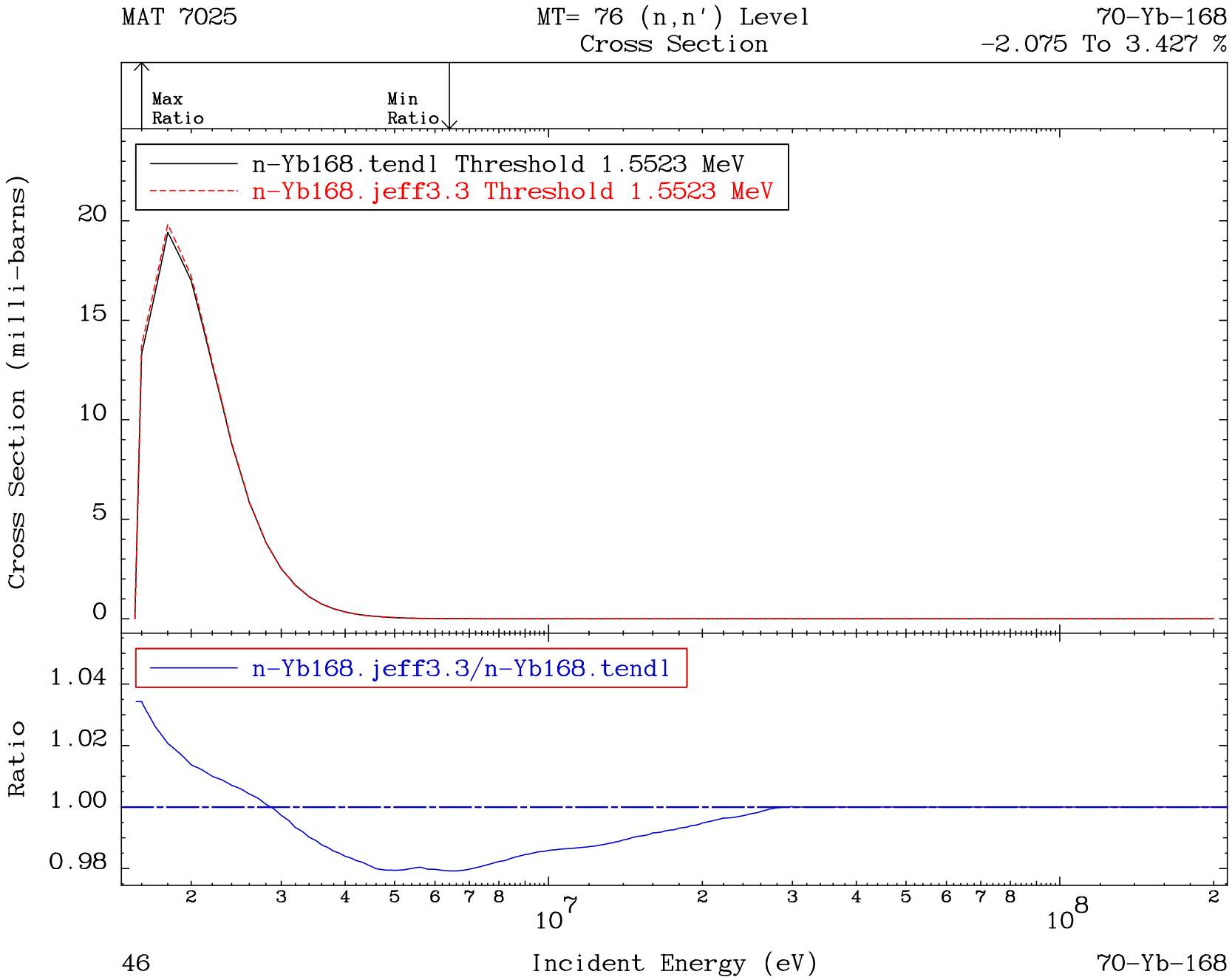

MAT 7025
MT= 71 (n,n') Level
Cross Section
70-Yb-168
-1.953 To 2.794 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4538 MeV
n-Yb168.jeff3.3 Threshold 1.4538 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
0.98
1.00
1.02
1.04
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
41
Incident Energy (eV)
70-Yb-168

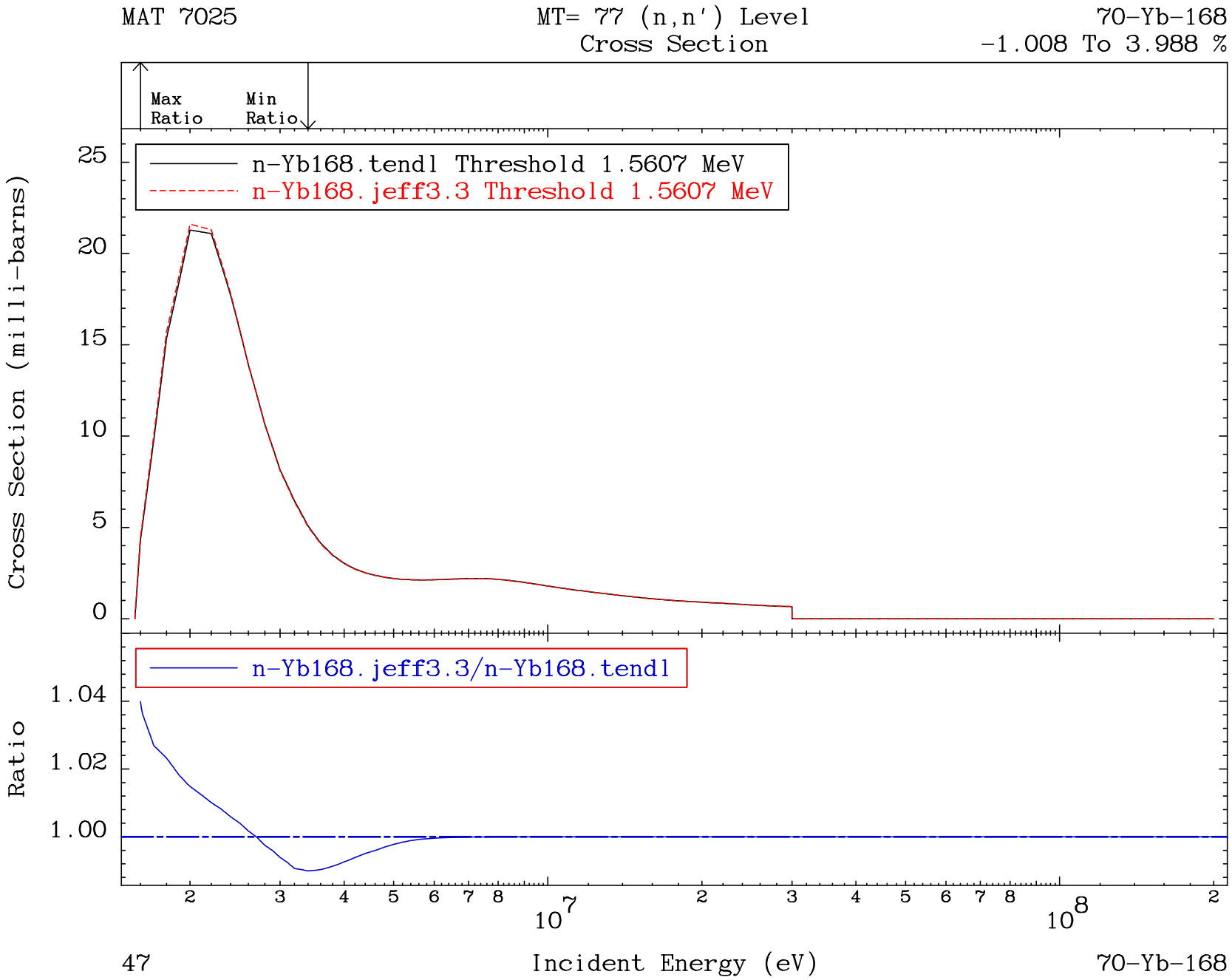

MAT 7025
MT= 72 (n,n') Level
Cross Section
70-Yb-168
-2.140 To 3.418 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4605 MeV
n-Yb168.jeff3.3 Threshold 1.4605 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
42
Incident Energy (eV)
70-Yb-168

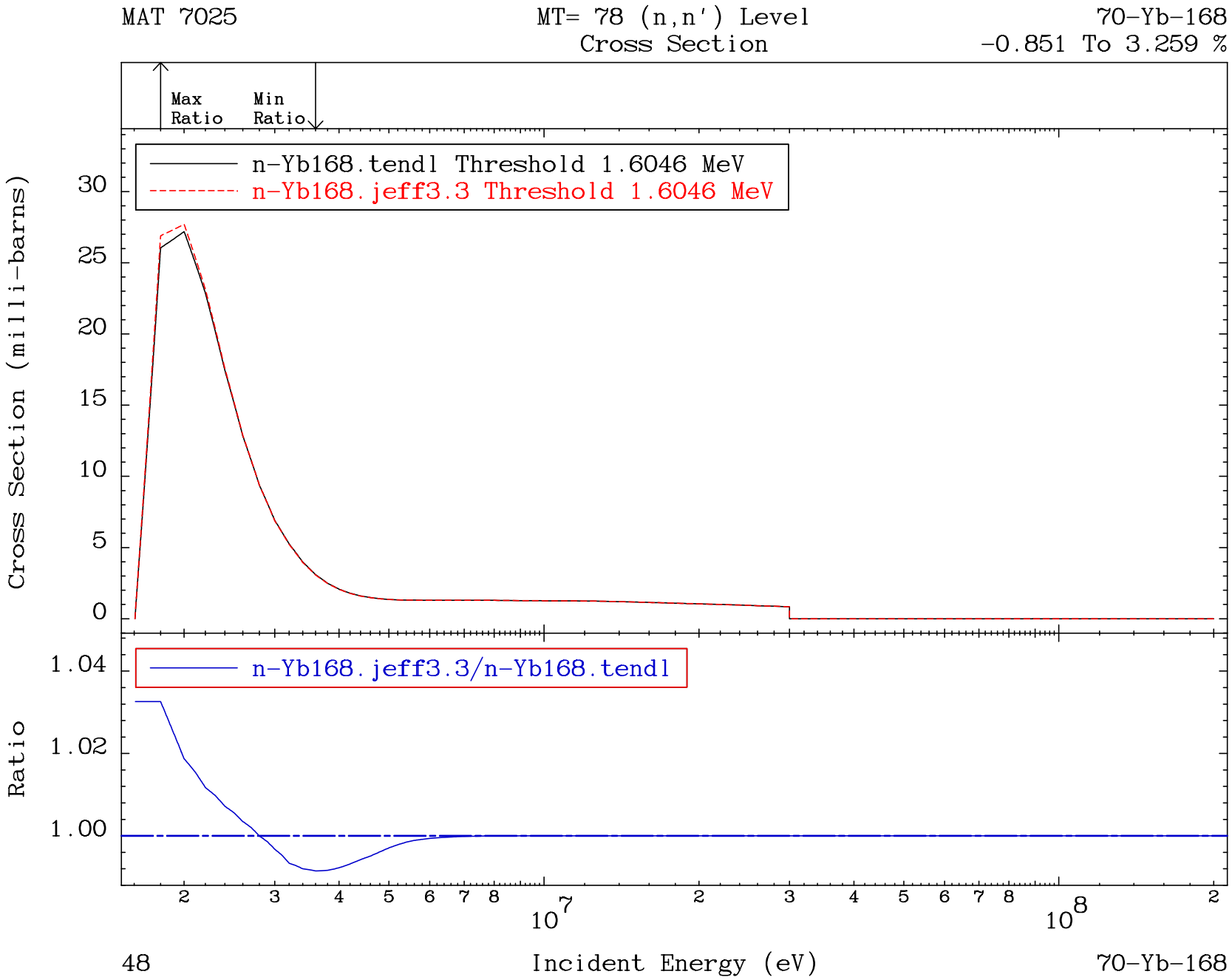

MAT 7025
MT= 73 (n,n') Level
Cross Section
70-Yb-168
-1.069 To 3.643 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4814 MeV
n-Yb168.jeff3.3 Threshold 1.4814 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
70-Yb-168

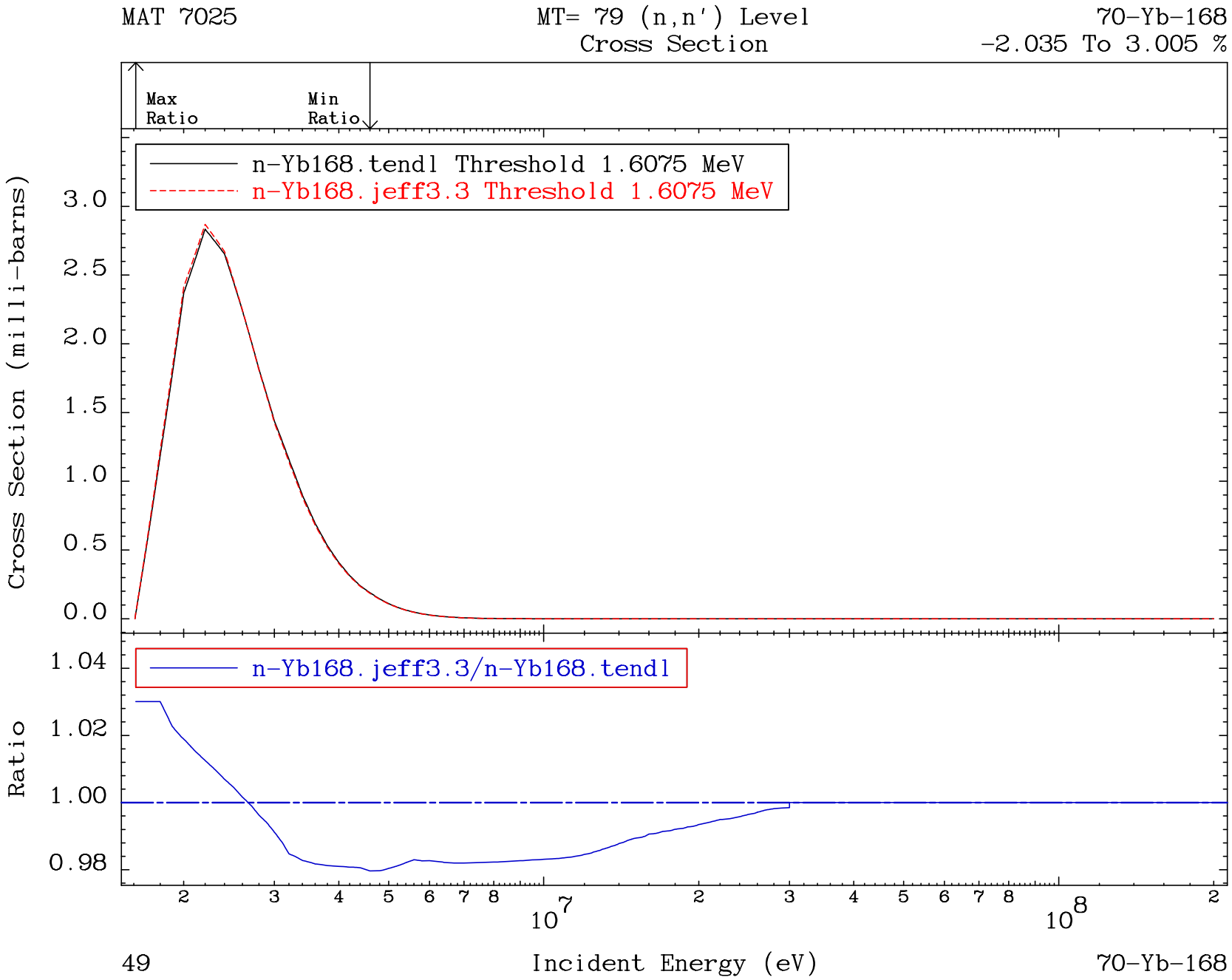

MAT 7025
MT= 74 (n,n') Level
Cross Section
70-Yb-168
-0.946 To 4.584 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.4889 MeV
n-Yb168.jeff3.3 Threshold 1.4889 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
44
Incident Energy (eV)
70-Yb-168

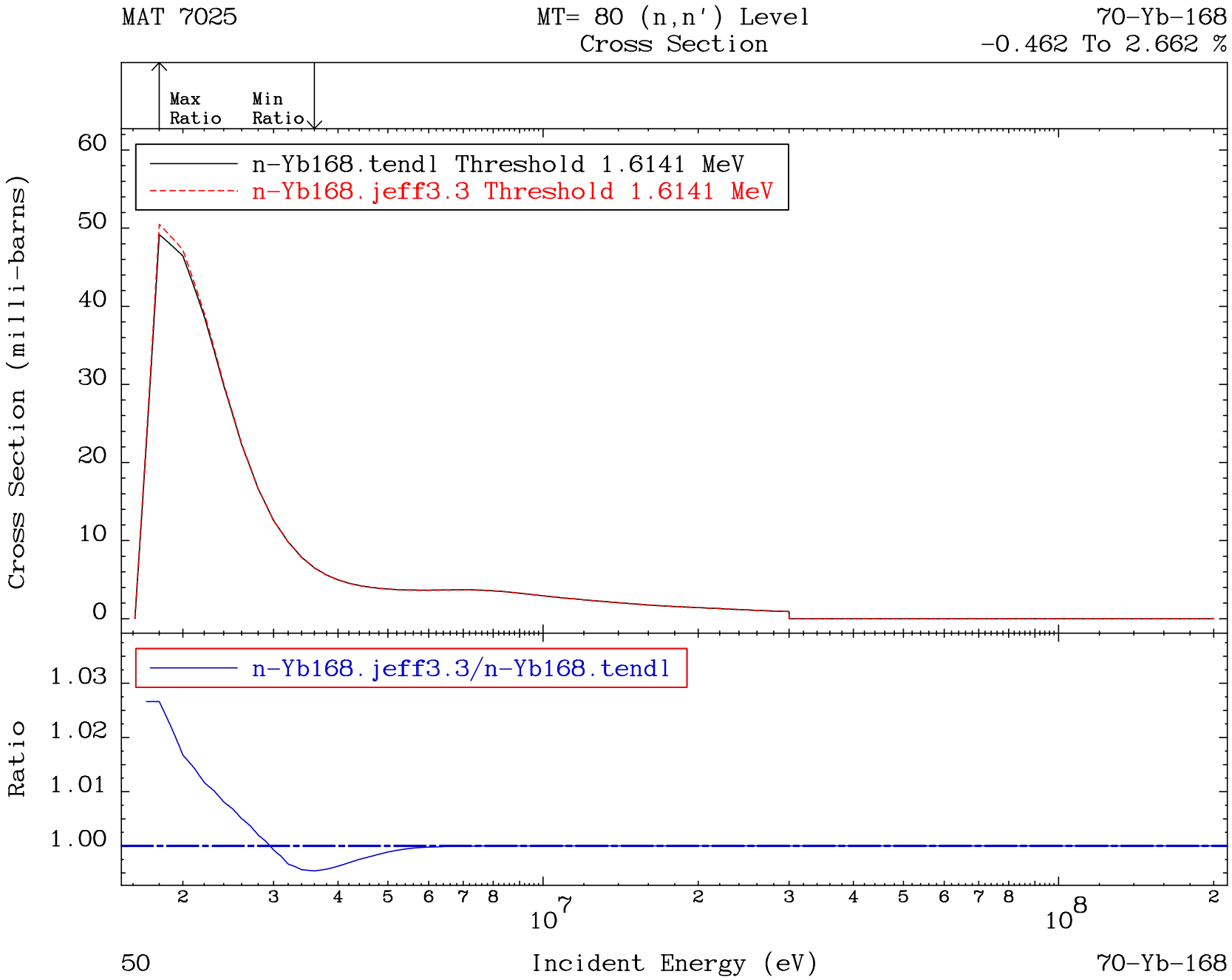

MAT 7025
MT= 75 (n,n') Level
Cross Section
70-Yb-168
-1.039 To 3.949 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.5206 MeV
n-Yb168.jeff3.3 Threshold 1.5206 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
70-Yb-168

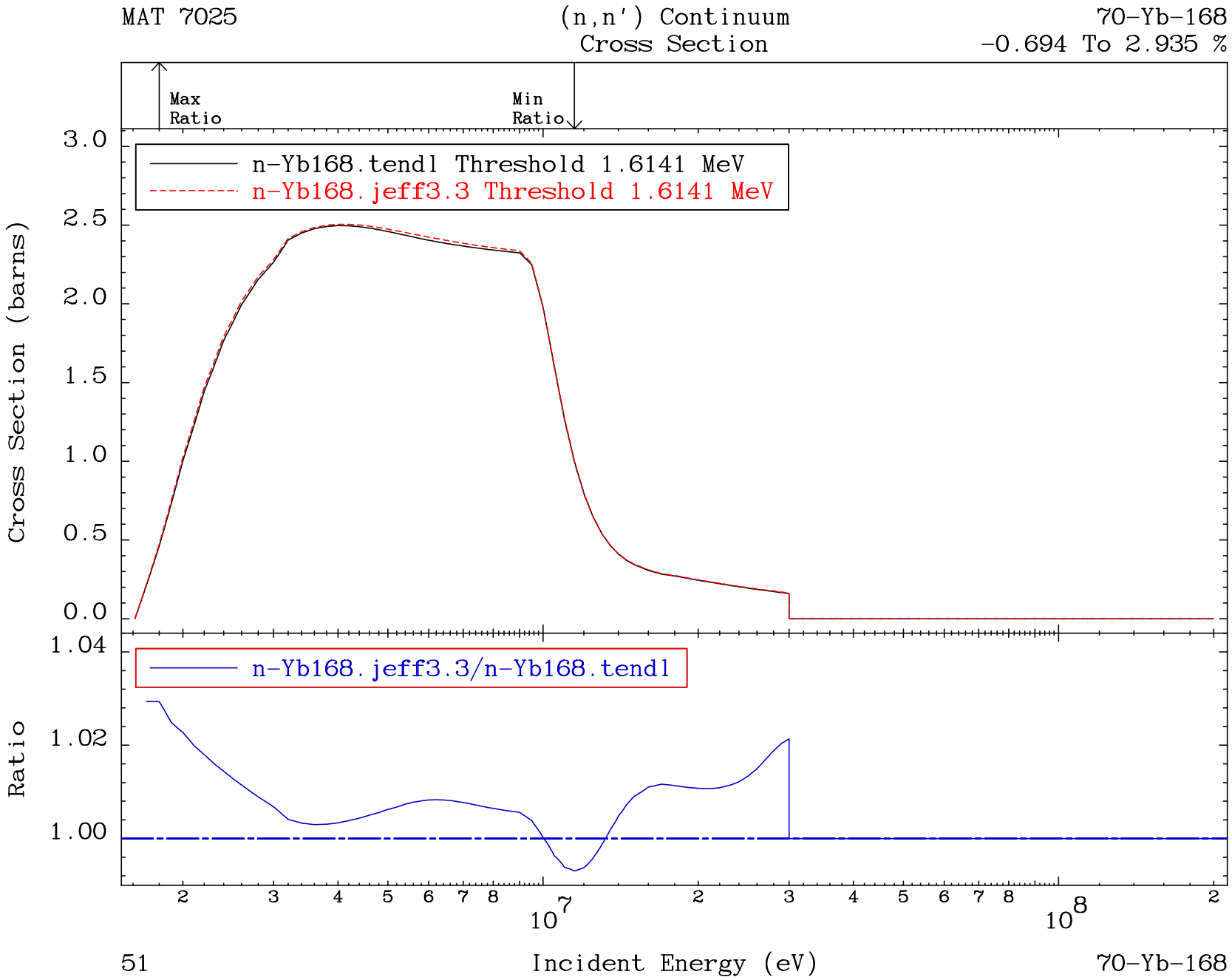

MAT 7025
MT= 76 (n,n') Level
Cross Section
70-Yb-168
-2.075 To 3.427 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.5523 MeV
n-Yb168.jeff3.3 Threshold 1.5523 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
46
Incident Energy (eV)
70-Yb-168

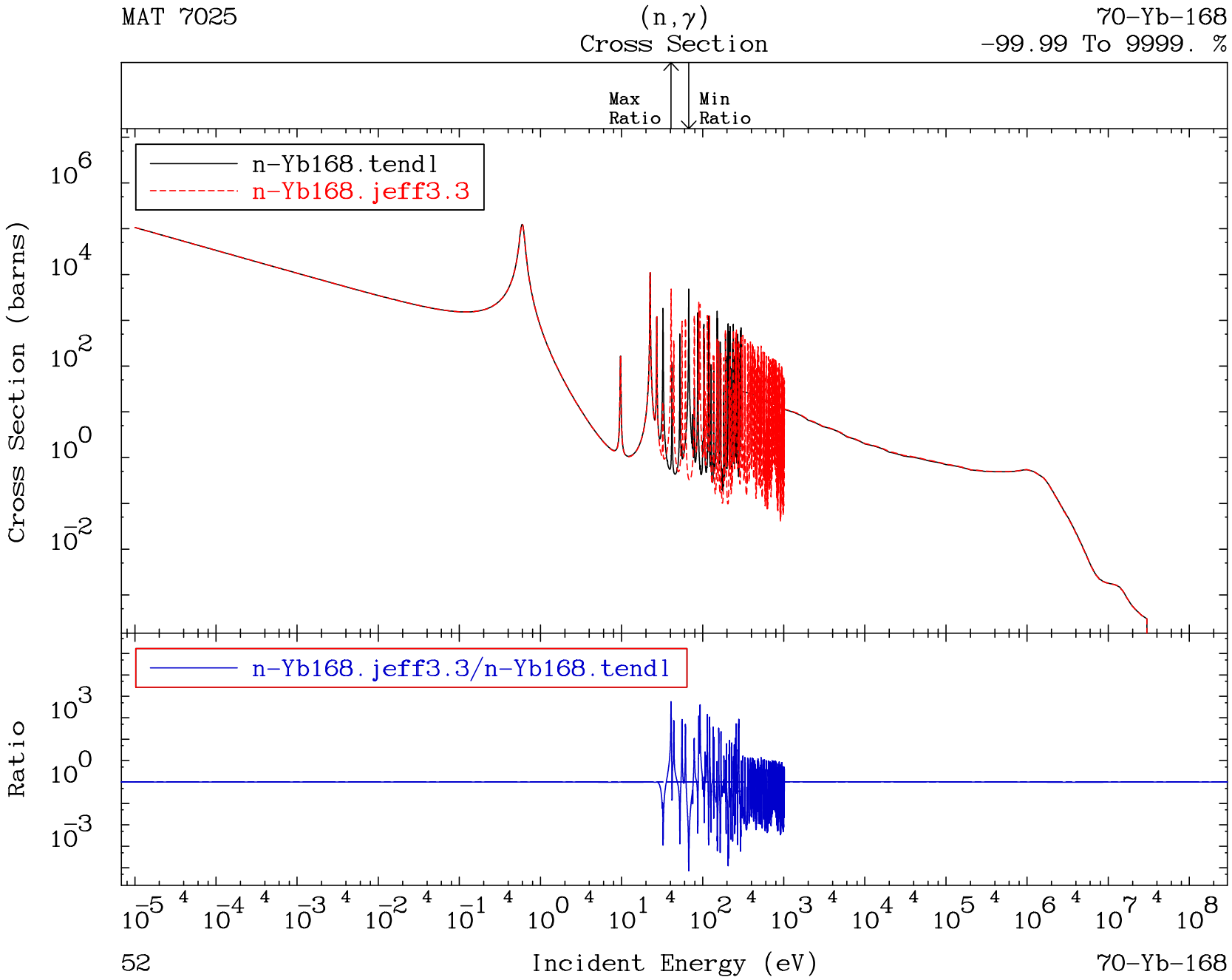

MAT 7025
MT= 77 (n,n') Level
Cross Section
70-Yb-168
-1.008 To 3.988 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.5607 MeV
n-Yb168.jeff3.3 Threshold 1.5607 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
47
Incident Energy (eV)
70-Yb-168

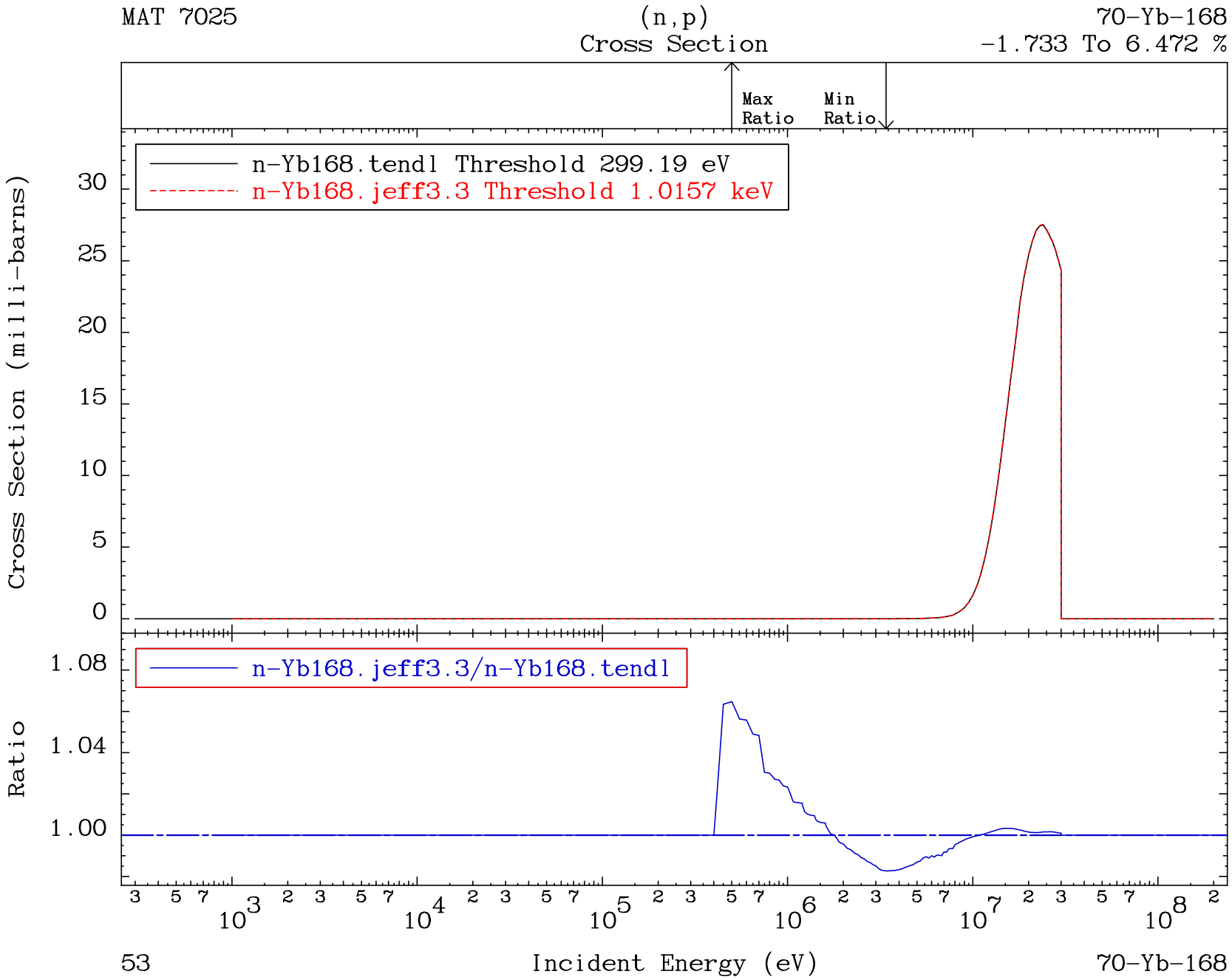

MAT 7025
MT= 78 (n,n') Level
Cross Section
70-Yb-168
-0.851 To 3.259 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.6046 MeV
n-Yb168.jeff3.3 Threshold 1.6046 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
70-Yb-168

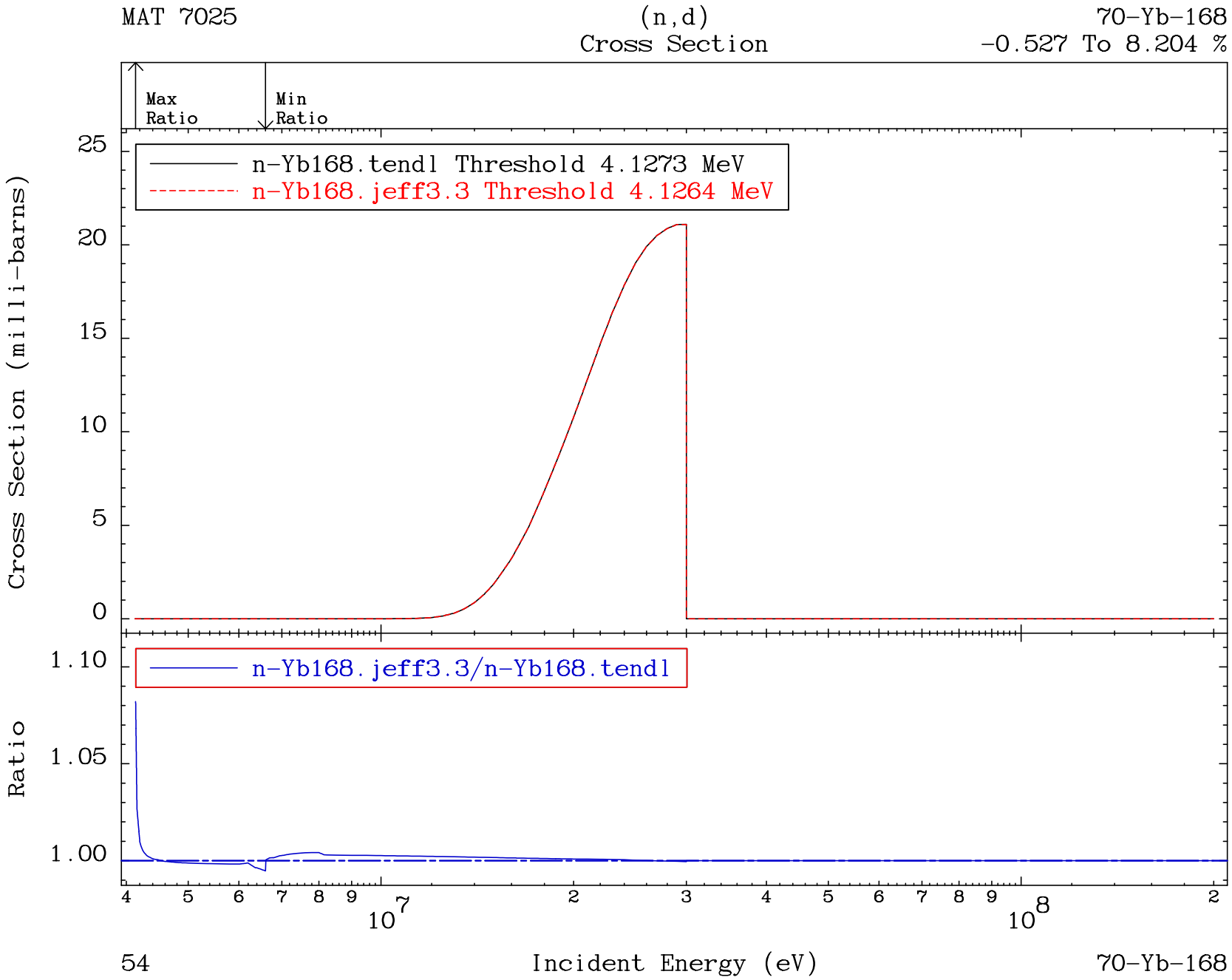

MAT 7025
MT= 79 (n,n') Level
Cross Section
70-Yb-168
-2.035 To 3.005 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.6075 MeV
n-Yb168.jeff3.3 Threshold 1.6075 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
49
Incident Energy (eV)
70-Yb-168

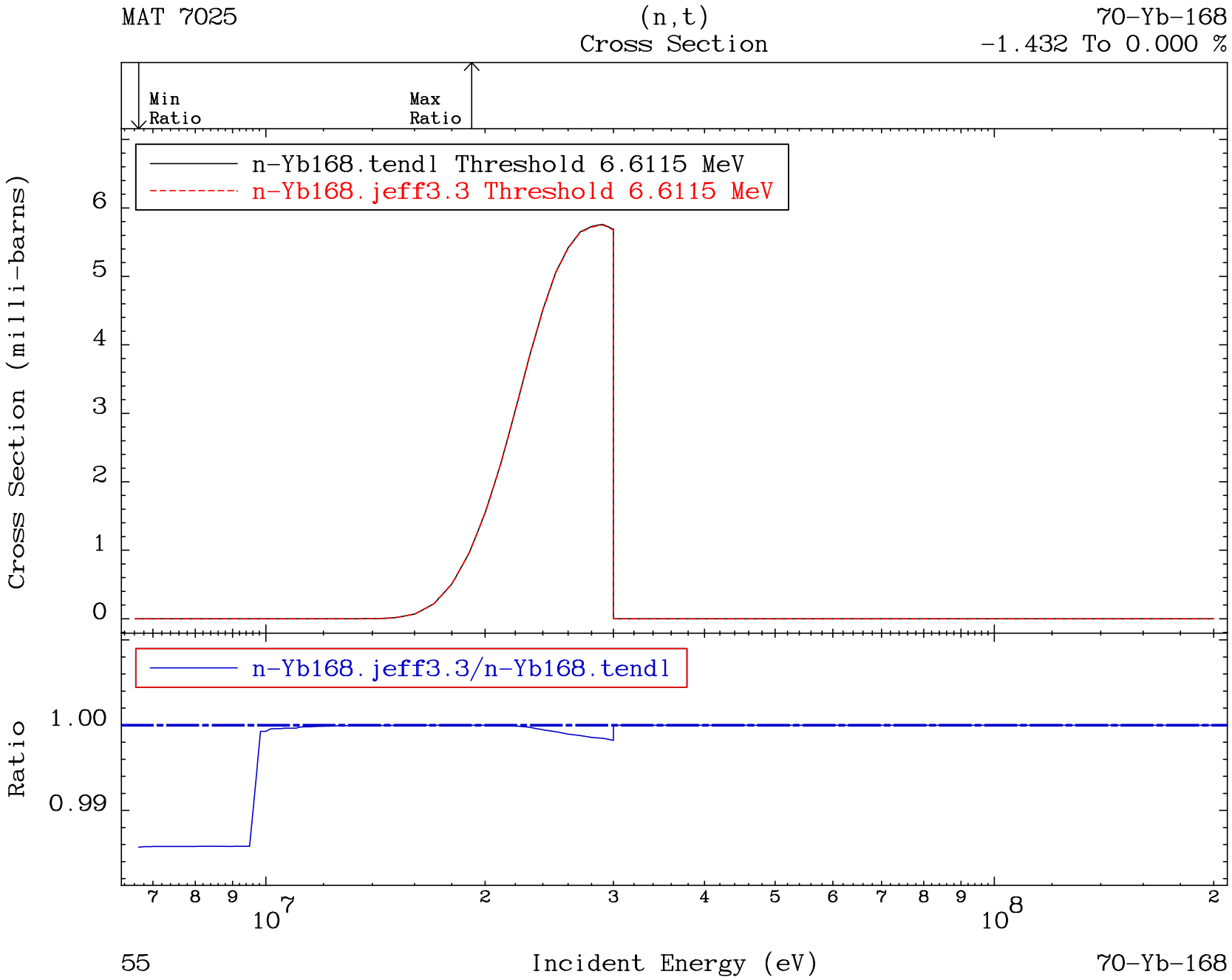

MAT 7025
MT= 80 (n,n') Level
Cross Section
70-Yb-168
-0.462 To 2.662 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.6141 MeV
n-Yb168.jeff3.3 Threshold 1.6141 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.03
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
50
Incident Energy (eV)
70-Yb-168

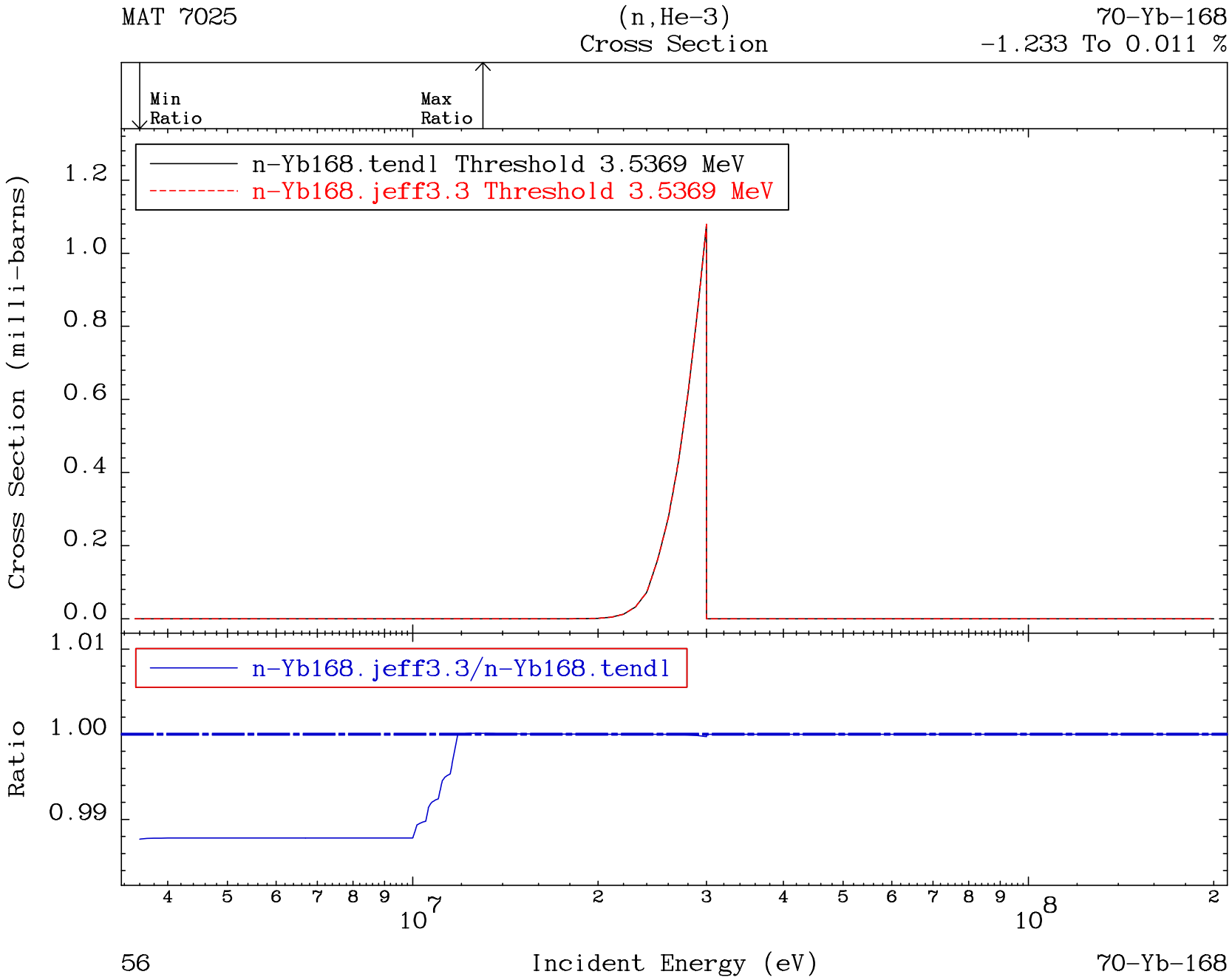

MAT 7025
(n,n') Continuum
Cross Section
70-Yb-168
-0.694 To 2.935 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.6141 MeV
n-Yb168.jeff3.3 Threshold 1.6141 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
51
Incident Energy (eV)
70-Yb-168

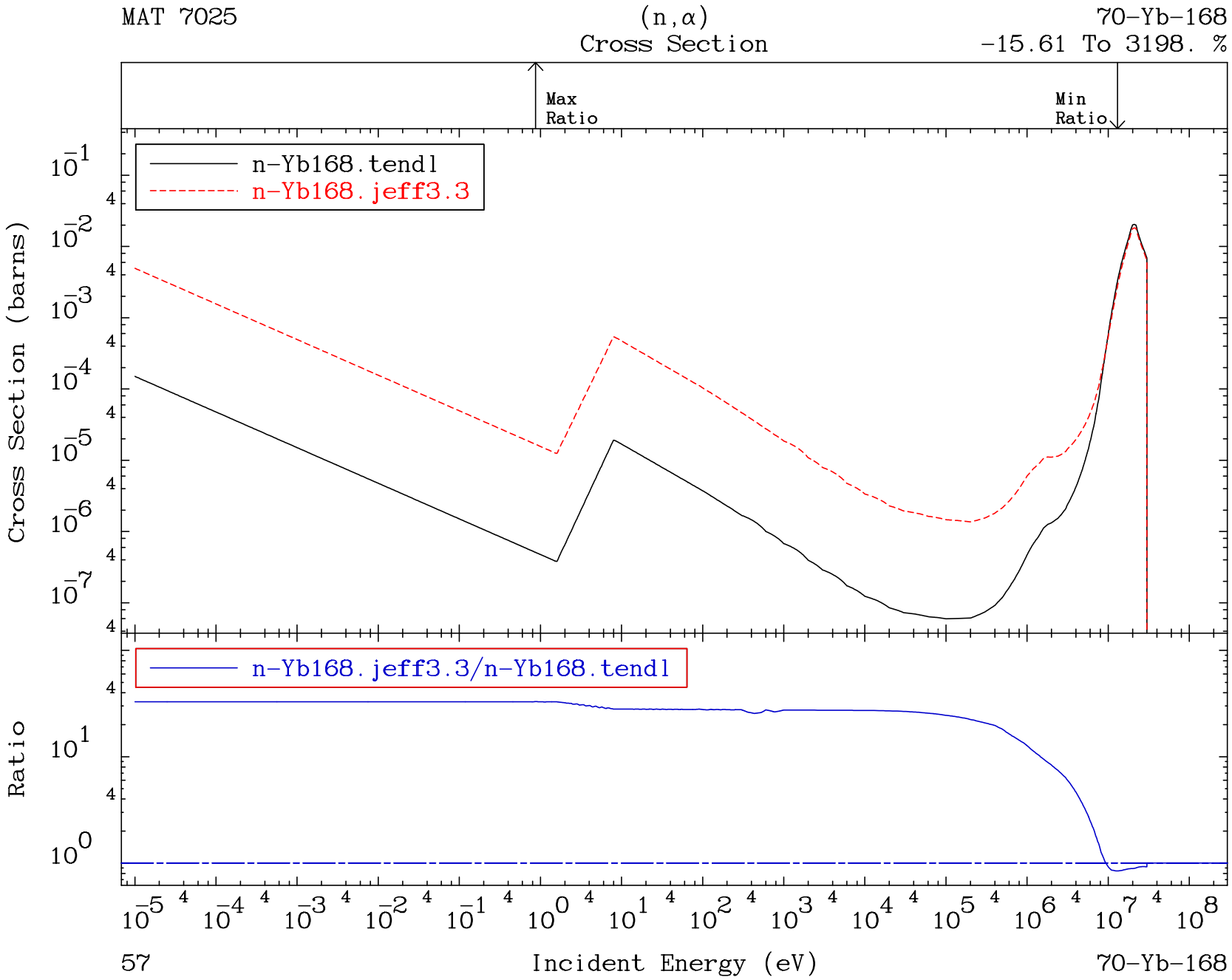

MAT 7025
(n,γ)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
52
70-Yb-168

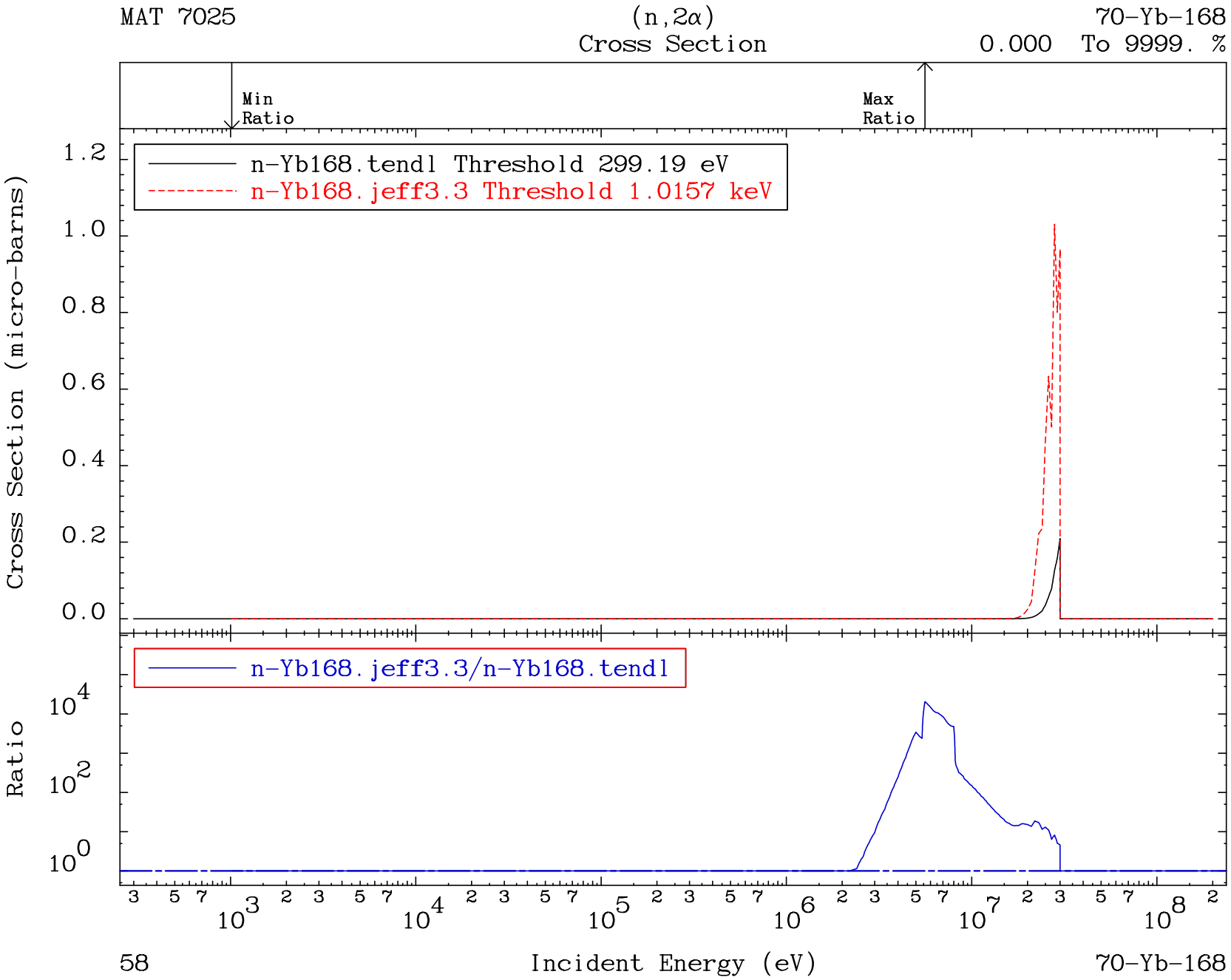

MAT 7025
(n,p)
Cross Section
70-Yb-168
-1.733 To 6.472 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.08
1.04
1.00
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
53
Incident Energy (eV)
70-Yb-168

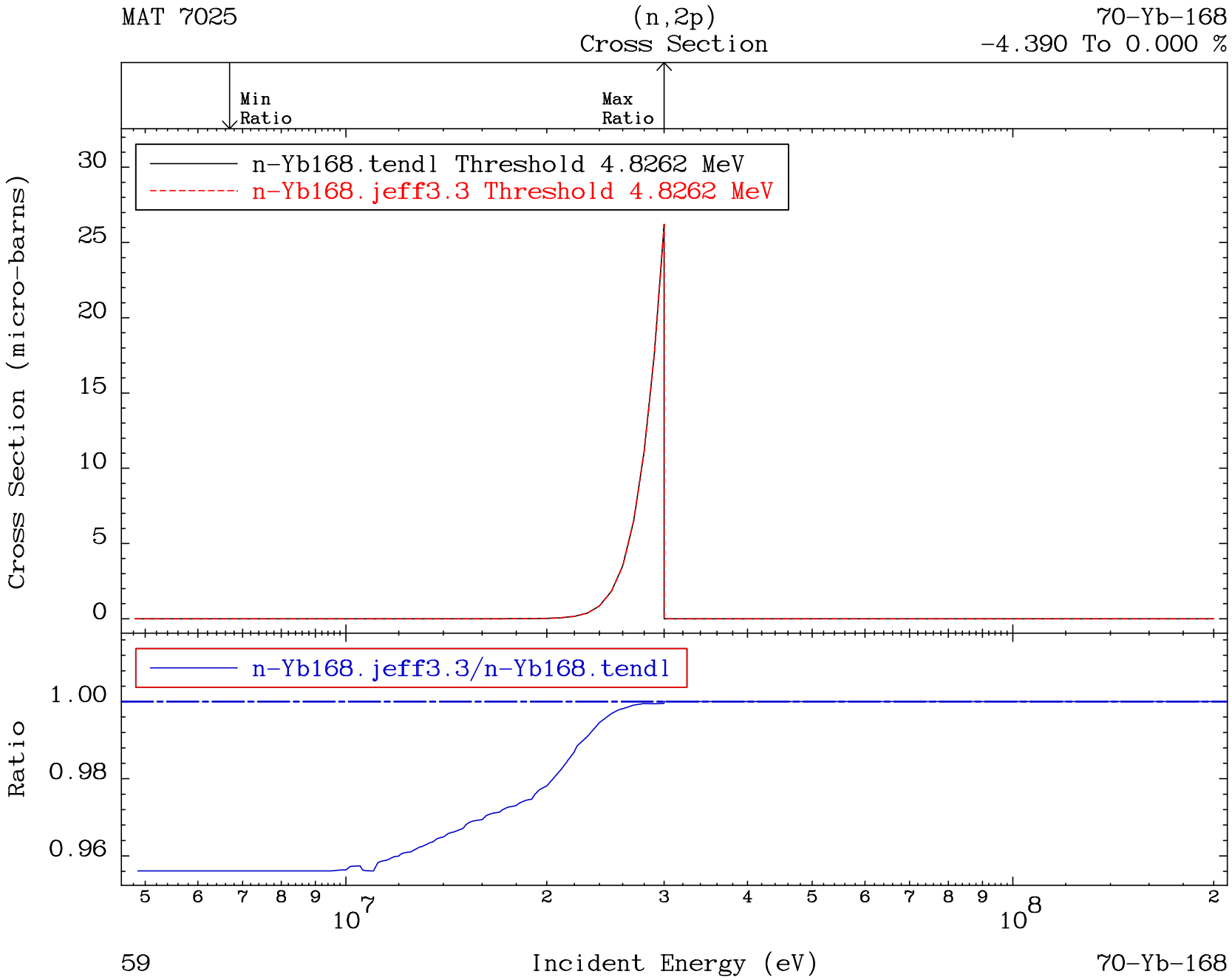

MAT 7025
(n,d)
Cross Section
70-Yb-168
-0.527 To 8.204 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 4.1273 MeV
n-Yb168.jeff3.3 Threshold 4.1264 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.10
1.05
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
70-Yb-168

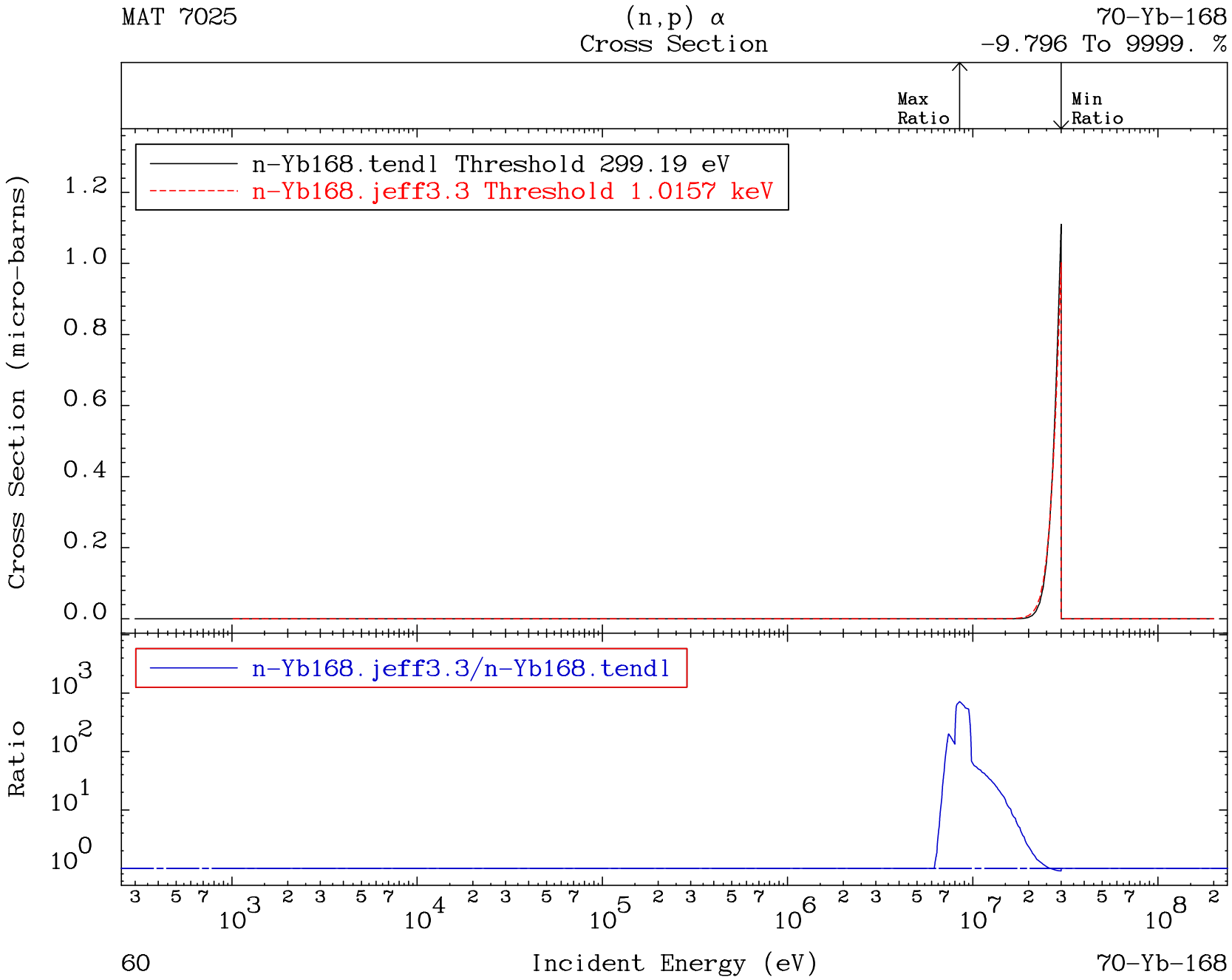

MAT 7025
(n,t)
Cross Section
70-Yb-168
-1.432 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 6.6115 MeV
n-Yb168.jeff3.3 Threshold 6.6115 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
70-Yb-168

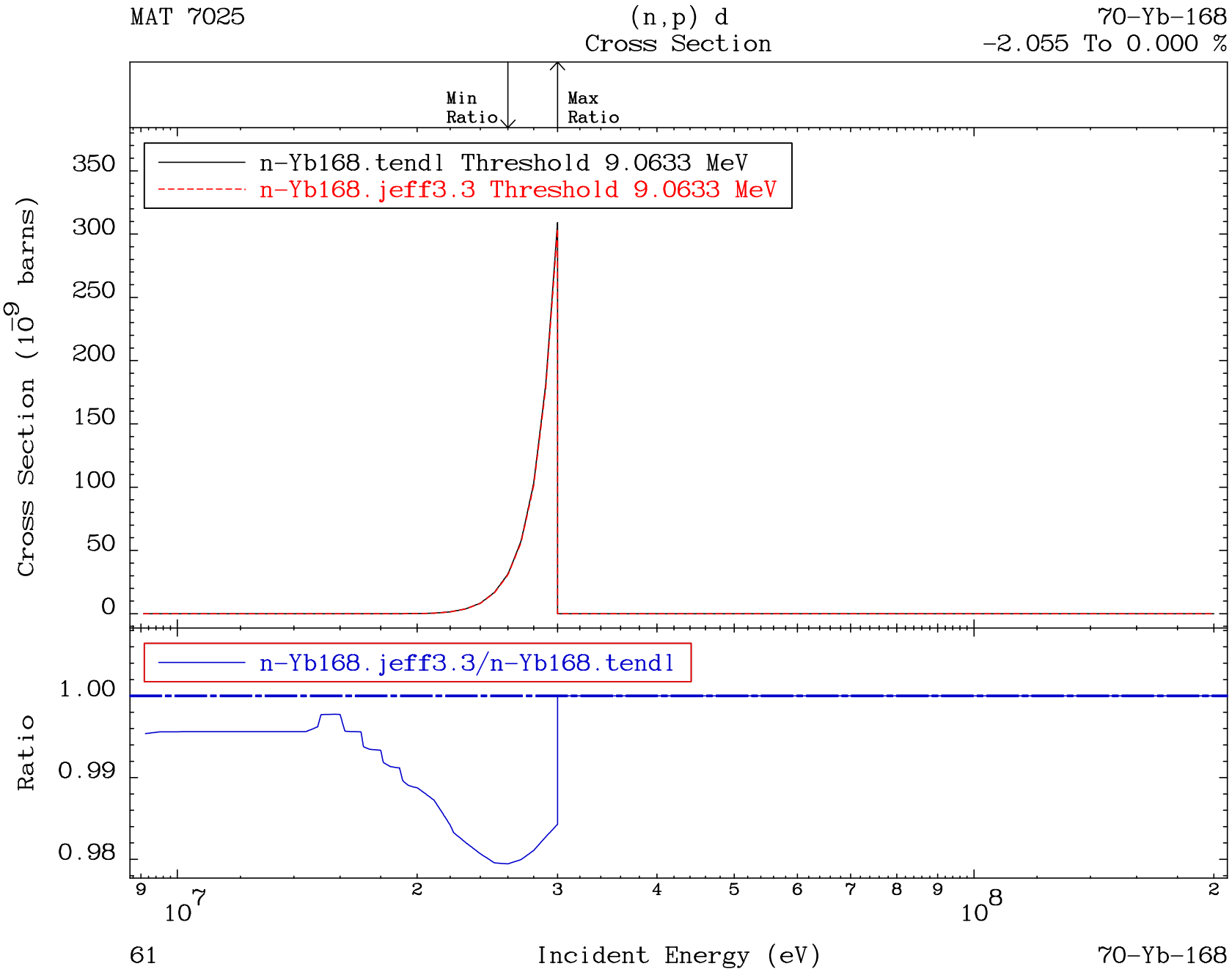

MAT 7025
(n,He-3)
Cross Section
70-Yb-168
-1.233 To 0.011 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 3.5369 MeV
n-Yb168.jeff3.3 Threshold 3.5369 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
70-Yb-168

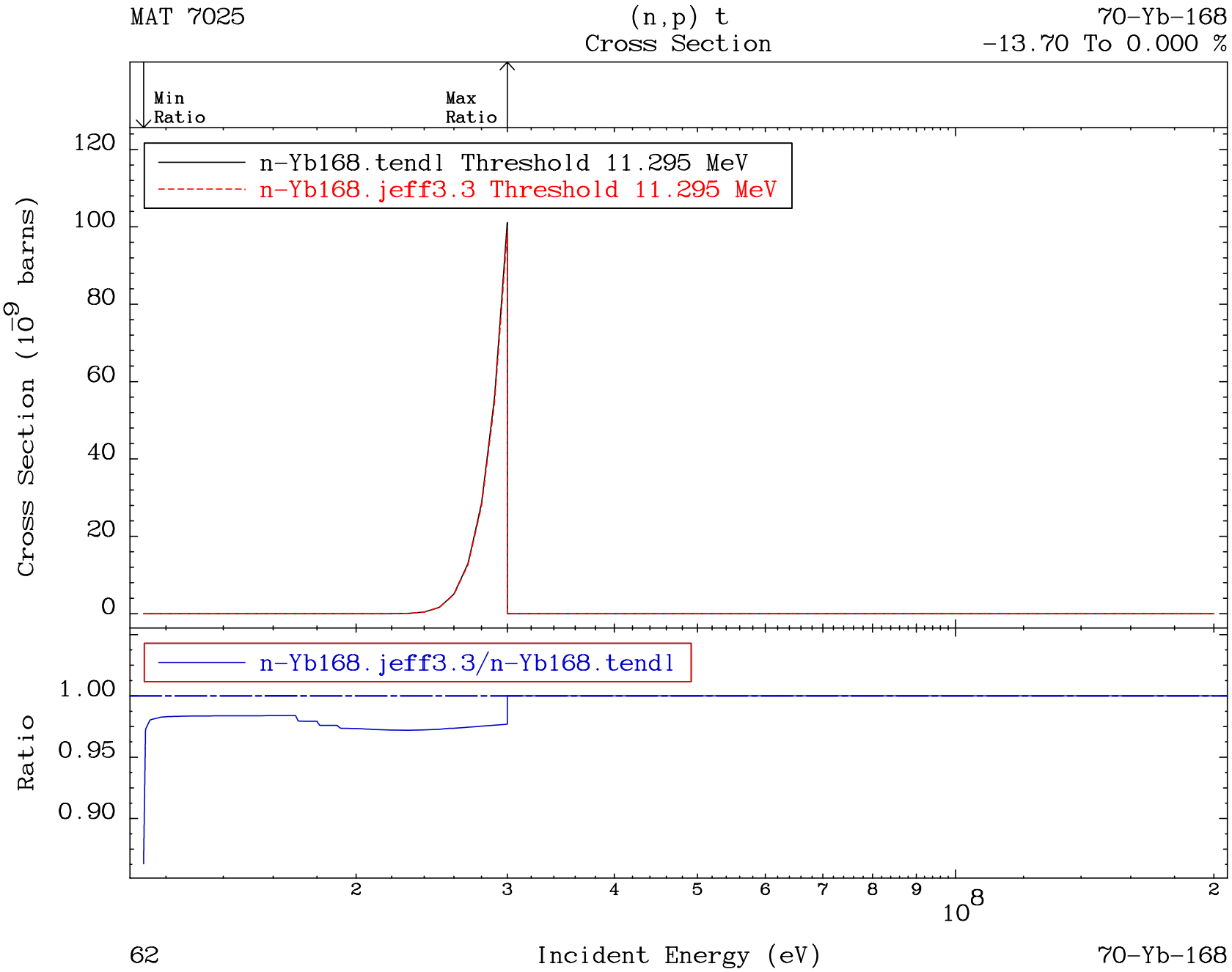

MAT 7025
(n,α)
Cross Section
70-Yb-168
-15.61 To 3198. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
57
Incident Energy (eV)
70-Yb-168

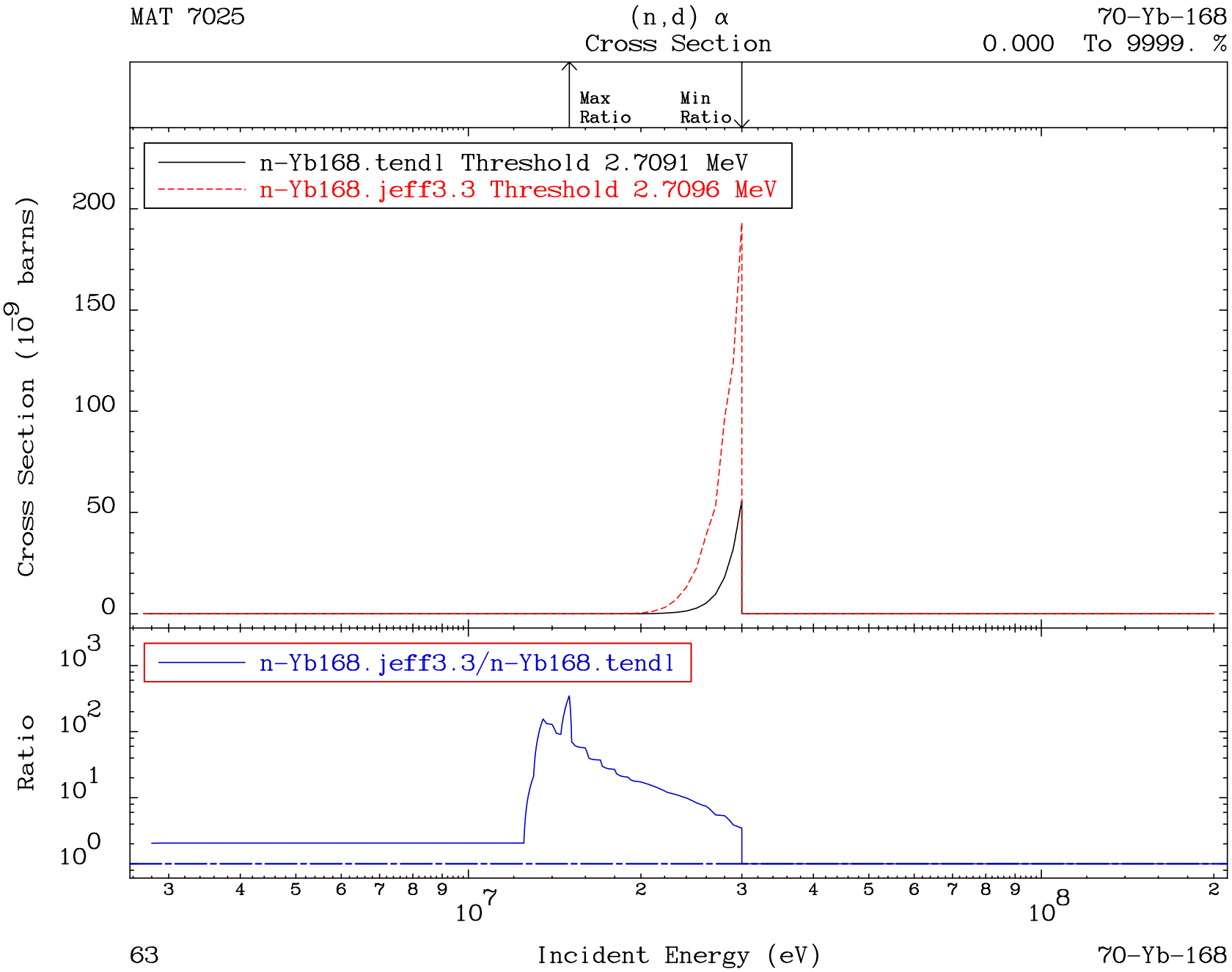

MAT 7025
(n,2α)
Cross Section
70-Yb-168
0.000 To 9999. %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^4
10^2
10^0
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
58
Incident Energy (eV)
70-Yb-168

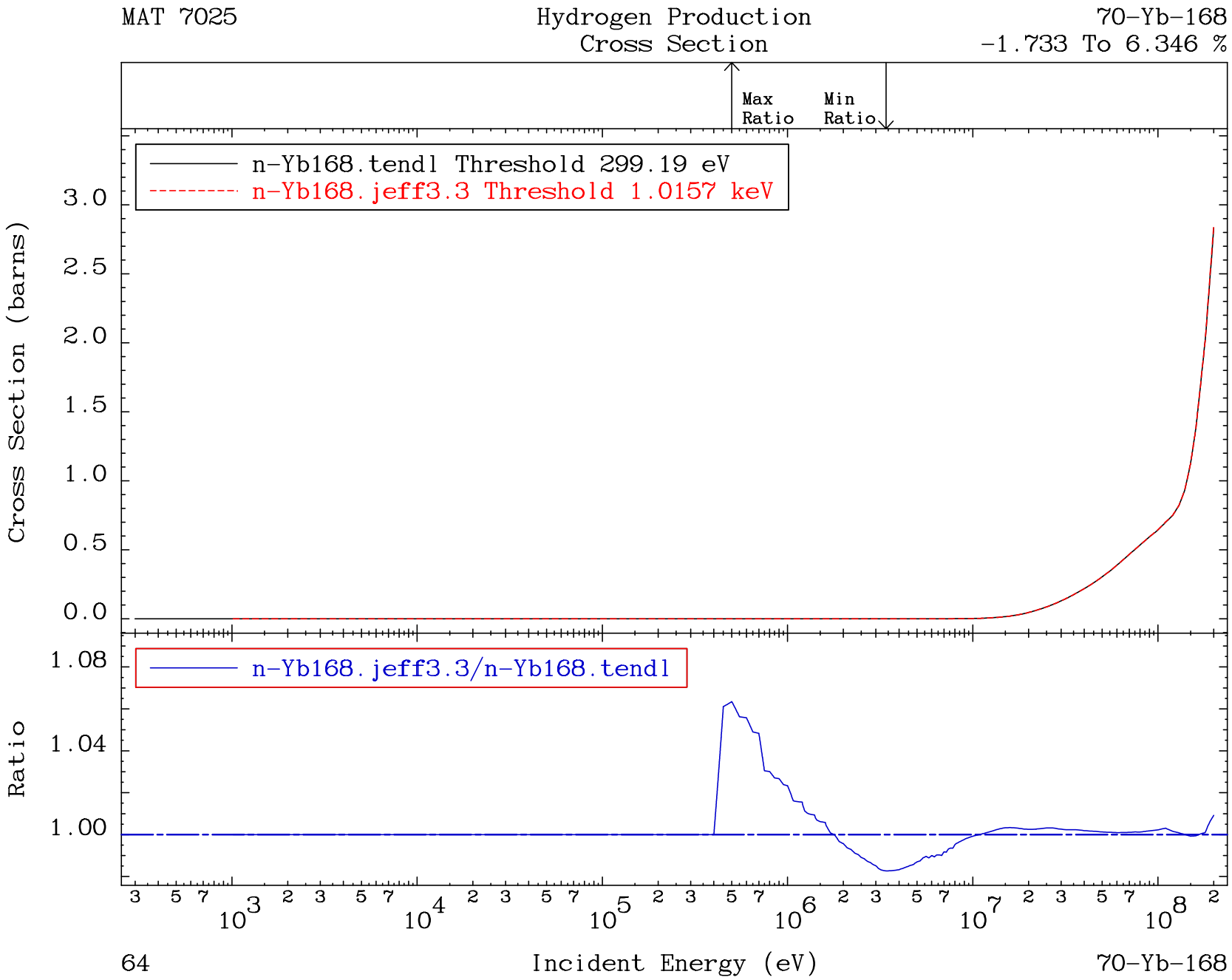

MAT 7025
(n,2p)
Cross Section
70-Yb-168
-4.390 To 0.000 %
Min
Ratio
Max
Ratio
n-Yb168.tendl Threshold 4.8262 MeV
n-Yb168.jeff3.3 Threshold 4.8262 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.98
0.96
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
59
Incident Energy (eV)
70-Yb-168

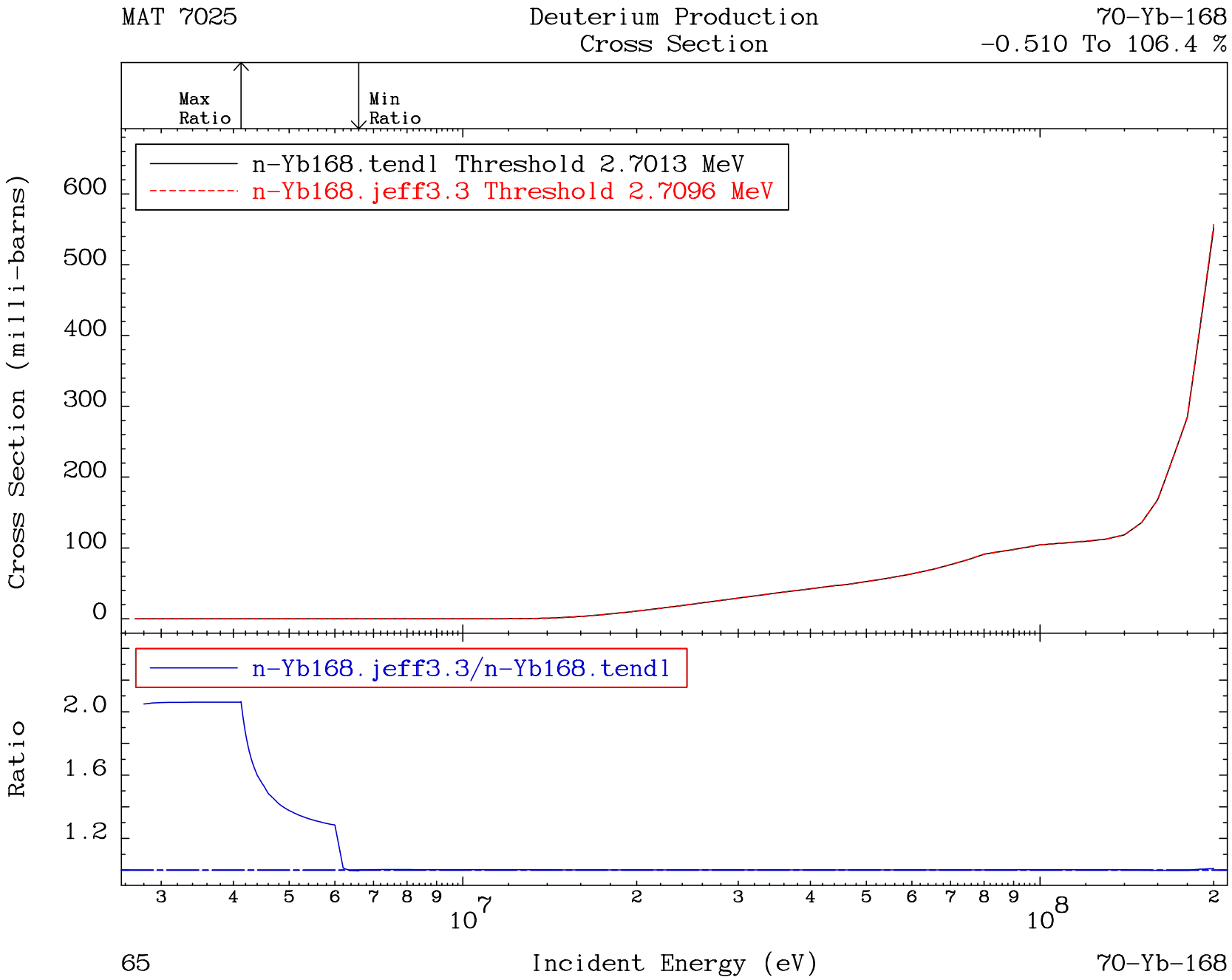

MAT 7025
(n,p) α
Cross Section
70-Yb-168
-9.796 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^3
10^2
10^1
10^0
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
60
Incident Energy (eV)
70-Yb-168

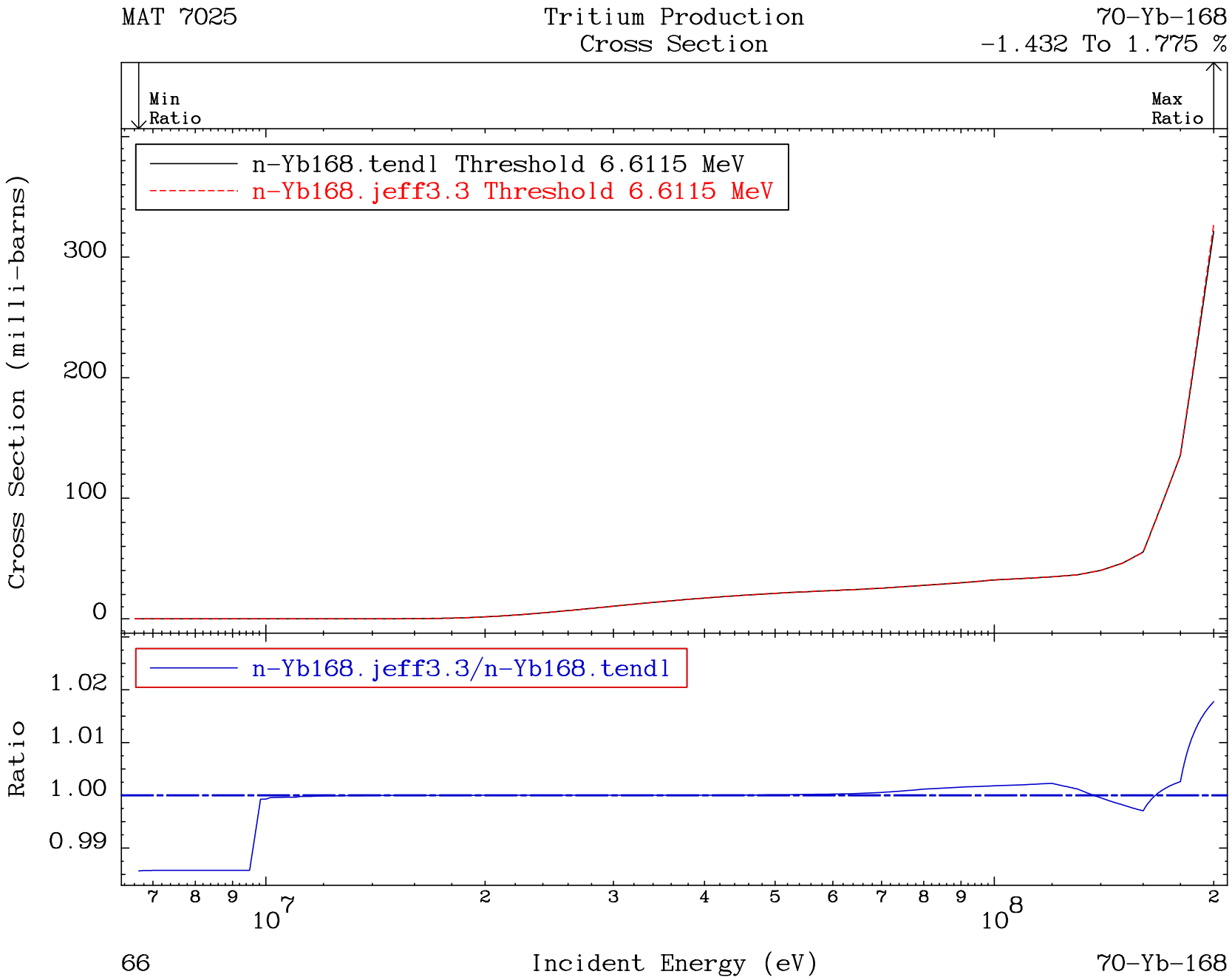

MAT 7025
(n,p) d
Cross Section
70-Yb-168
-2.055 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 9.0633 MeV
n-Yb168.jeff3.3 Threshold 9.0633 MeV
Cross Section (10^-9 barns)
350
300
250
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.99
0.98
9
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
70-Yb-168

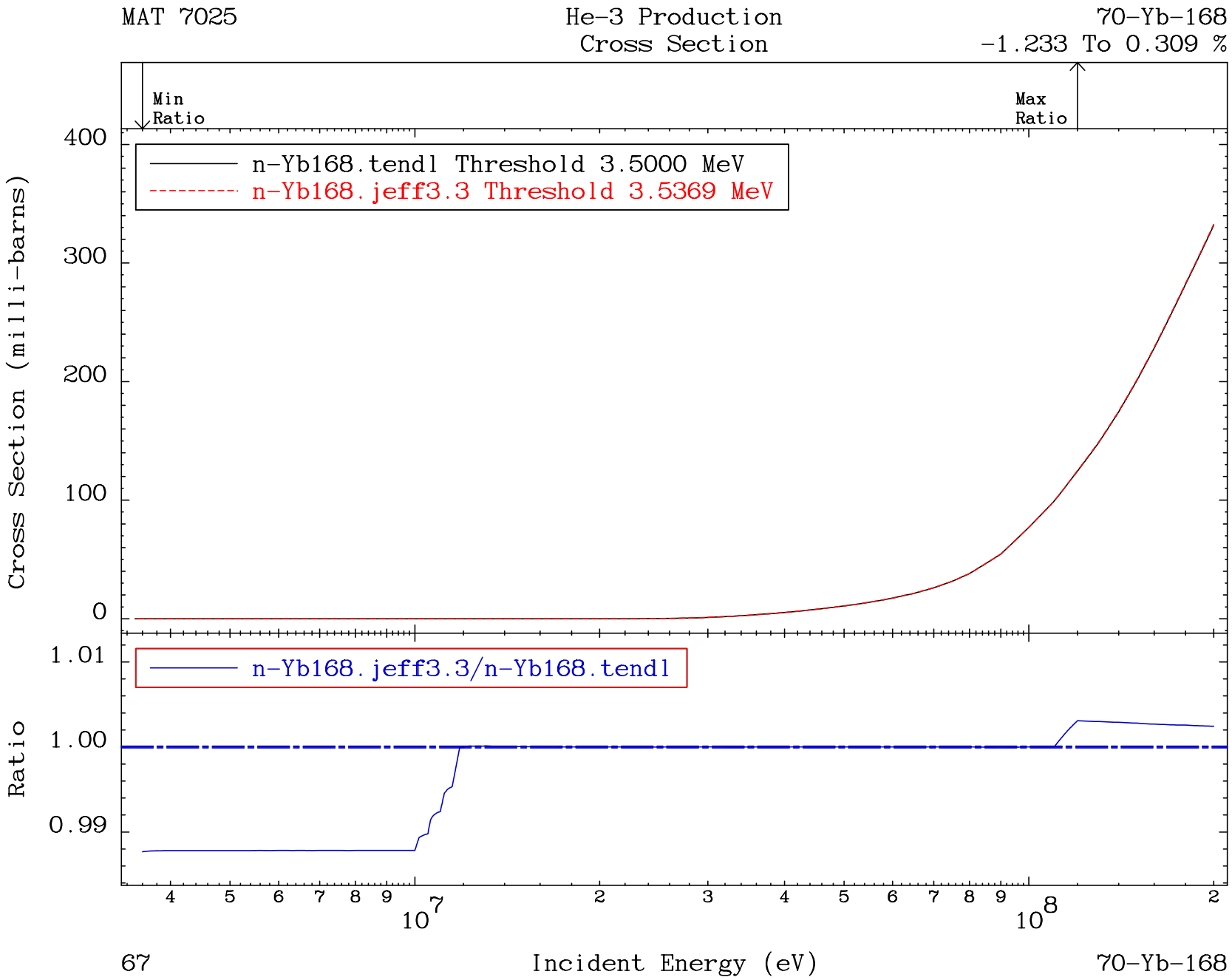

MAT 7025
(n,p) t
Cross Section
70-Yb-168
-13.70 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 11.295 MeV
n-Yb168.jeff3.3 Threshold 11.295 MeV
Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^{8}
2
62
Incident Energy (eV)
70-Yb-168

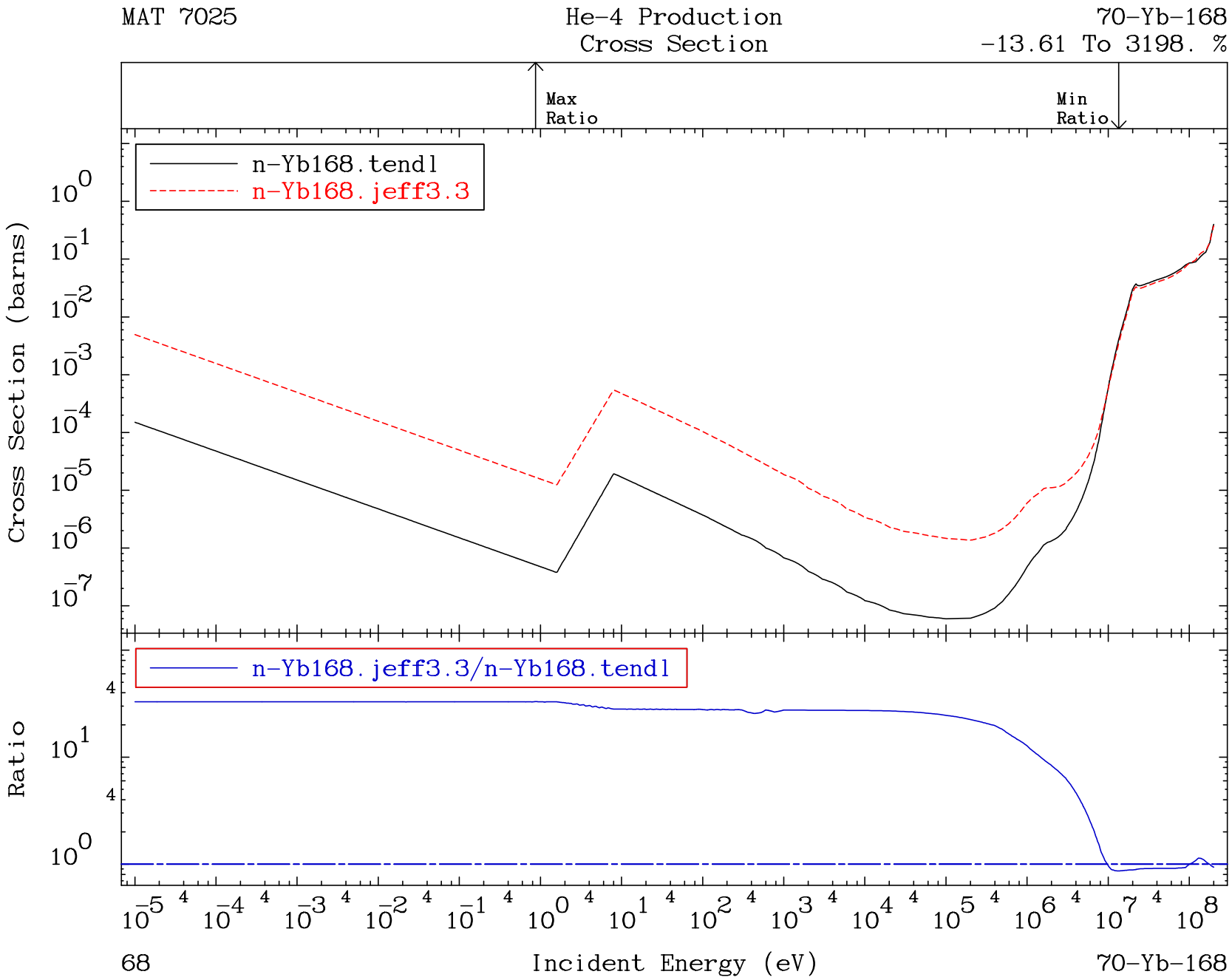

MAT 7025
(n,d) α
Cross Section
70-Yb-168
0.000 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 2.7091 MeV
n-Yb168.jeff3.3 Threshold 2.7096 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
63
Incident Energy (eV)
70-Yb-168

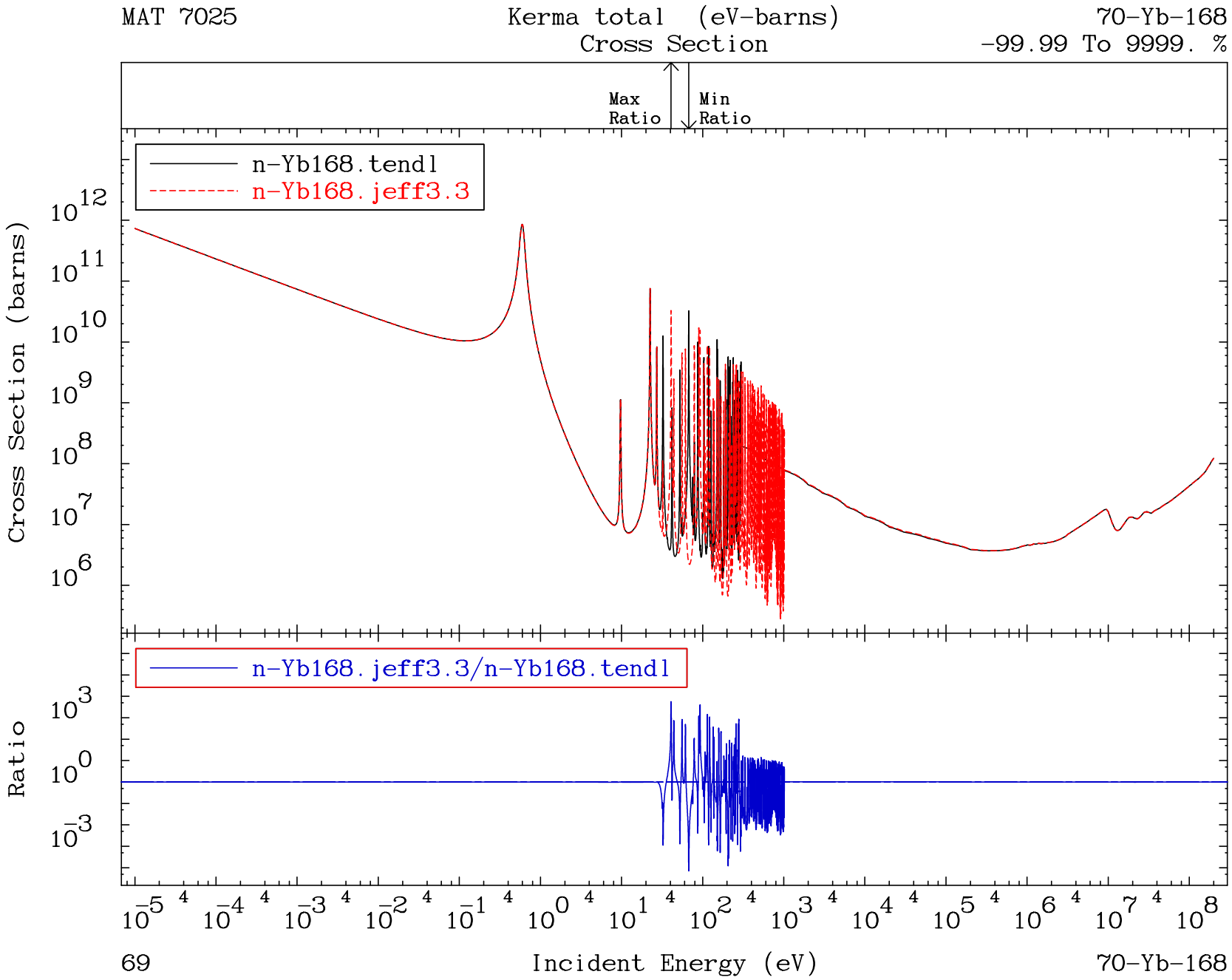

MAT 7025
Hydrogen Production
Cross Section
70-Yb-168
-1.733 To 6.346 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 299.19 eV
n-Yb168.jeff3.3 Threshold 1.0157 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.08
1.04
1.00
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
64
Incident Energy (eV)
70-Yb-168

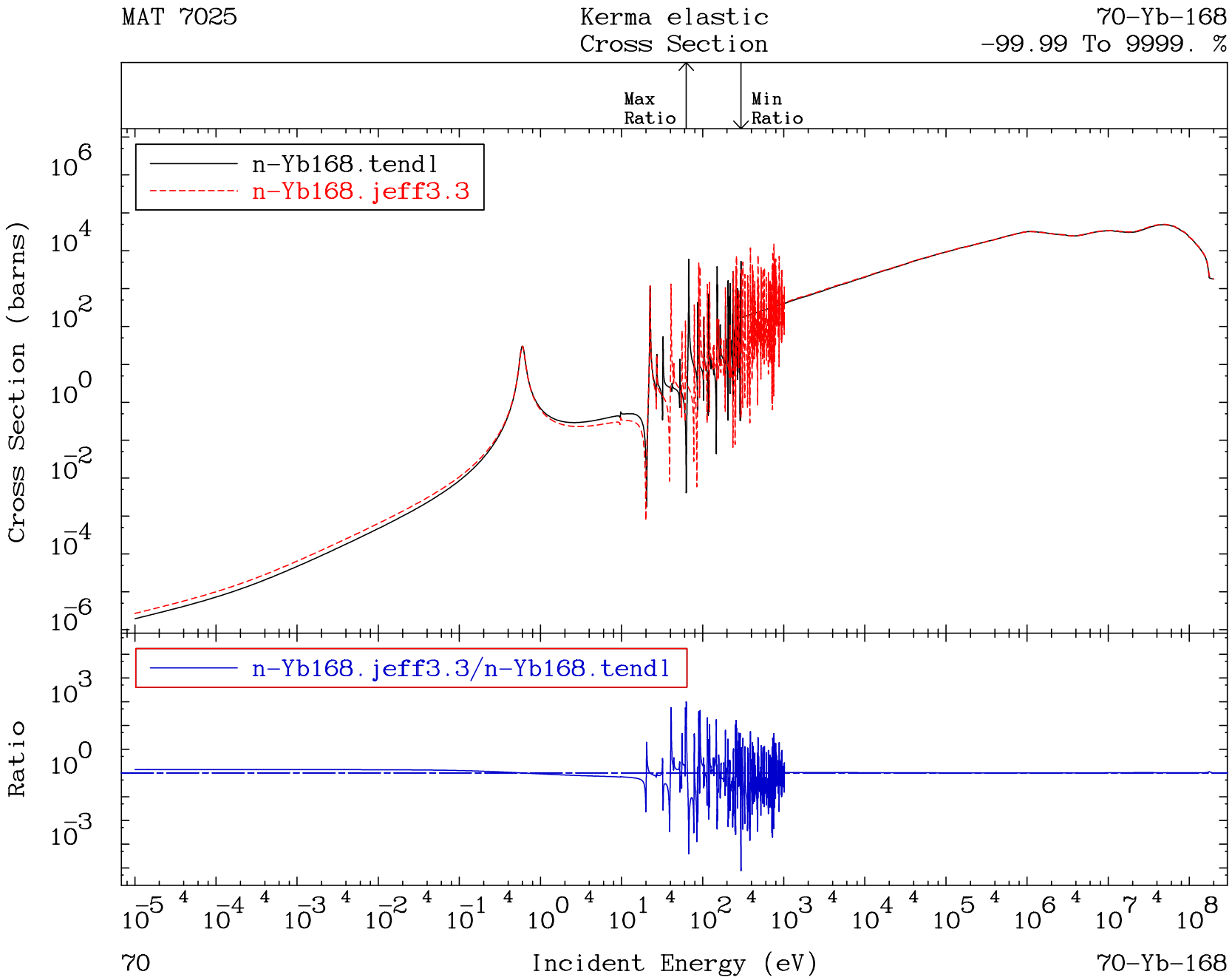

MAT 7025
Deuterium Production
Cross Section
70-Yb-168
-0.510 To 106.4 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 2.7013 MeV
n-Yb168.jeff3.3 Threshold 2.7096 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
70-Yb-168

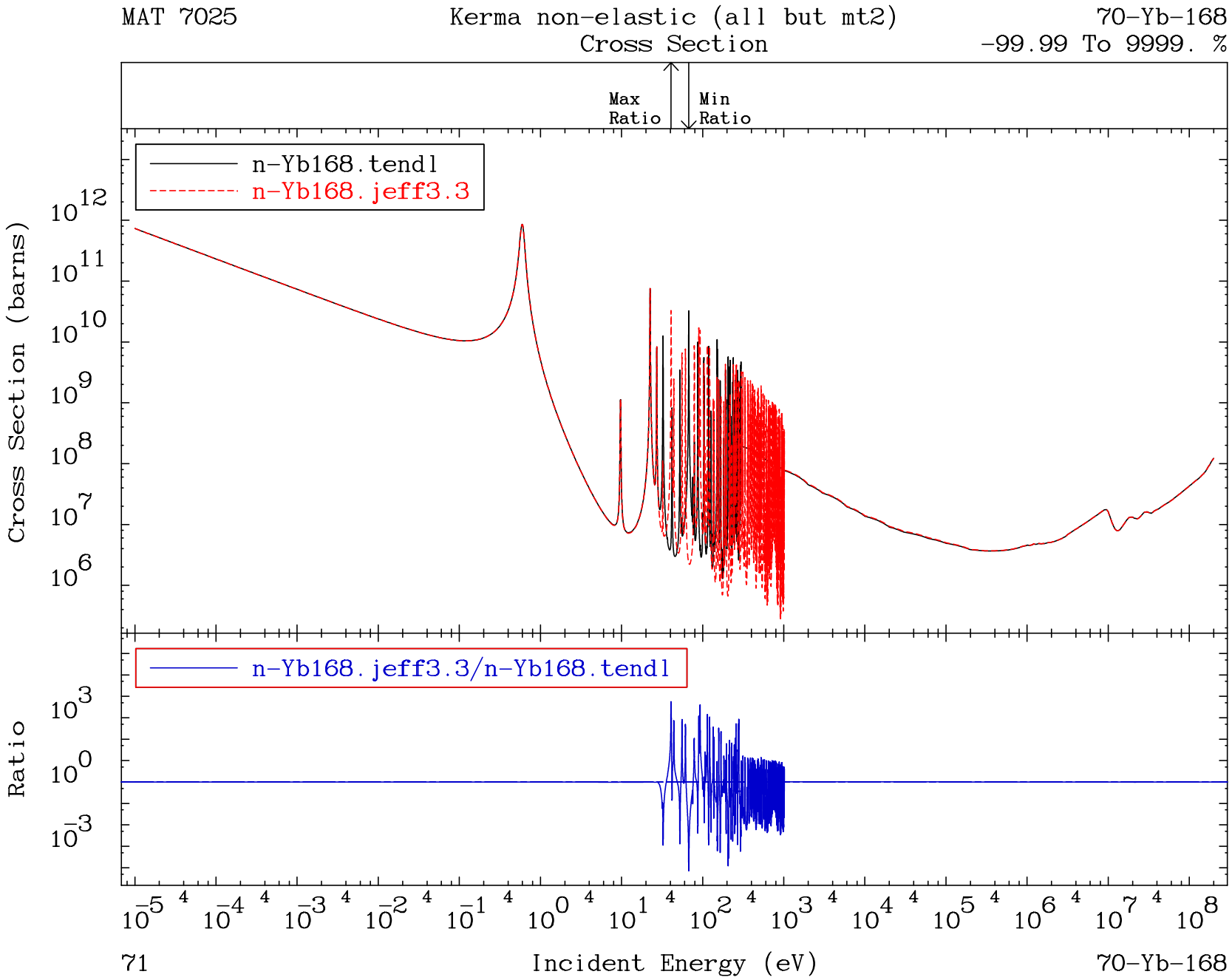

MAT 7025
Tritium Production
Cross Section
70-Yb-168
-1.432 To 1.775 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 6.6115 MeV
n-Yb168.jeff3.3 Threshold 6.6115 MeV
Cross Section (milli-barns)
300
200
100
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.02
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
70-Yb-168

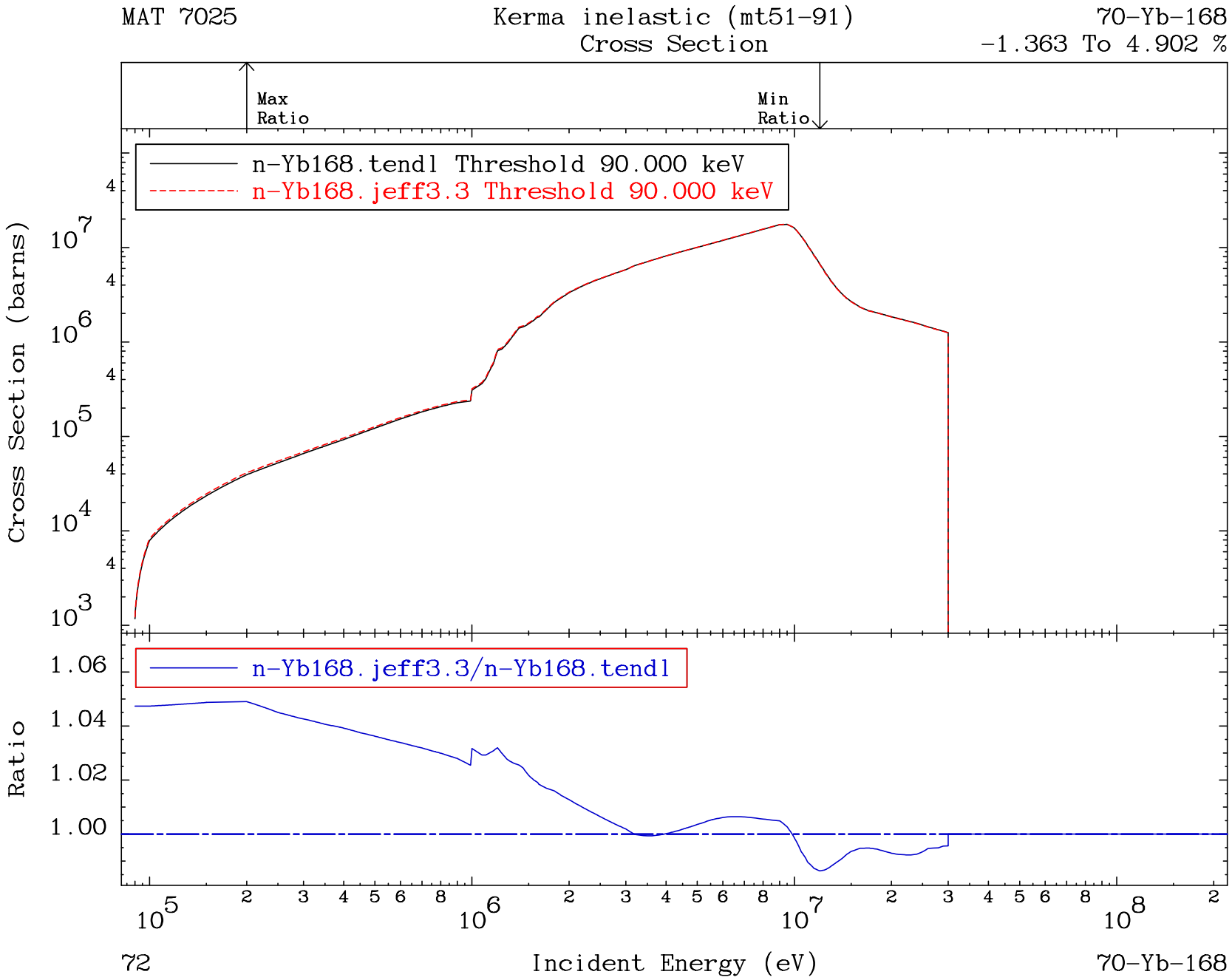

MAT 7025
He-3 Production
Cross Section
70-Yb-168
-1.233 To 0.309 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 3.5000 MeV
n-Yb168.jeff3.3 Threshold 3.5369 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
67
Incident Energy (eV)
70-Yb-168

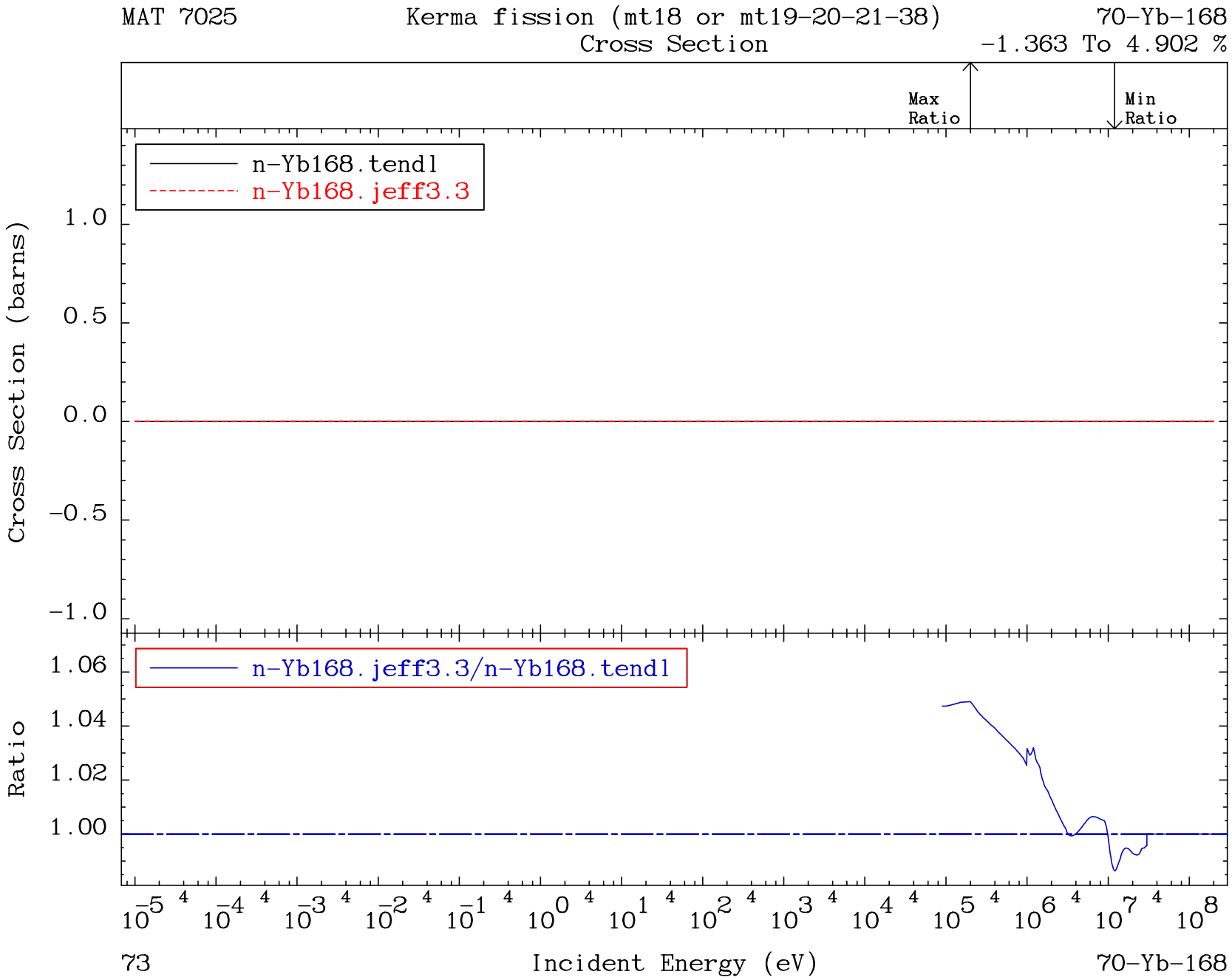

MAT 7025
He-4 Production
Cross Section
70-Yb-168
-13.61 To 3198. %
Max
Ratio
Min
Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
68
70-Yb-168

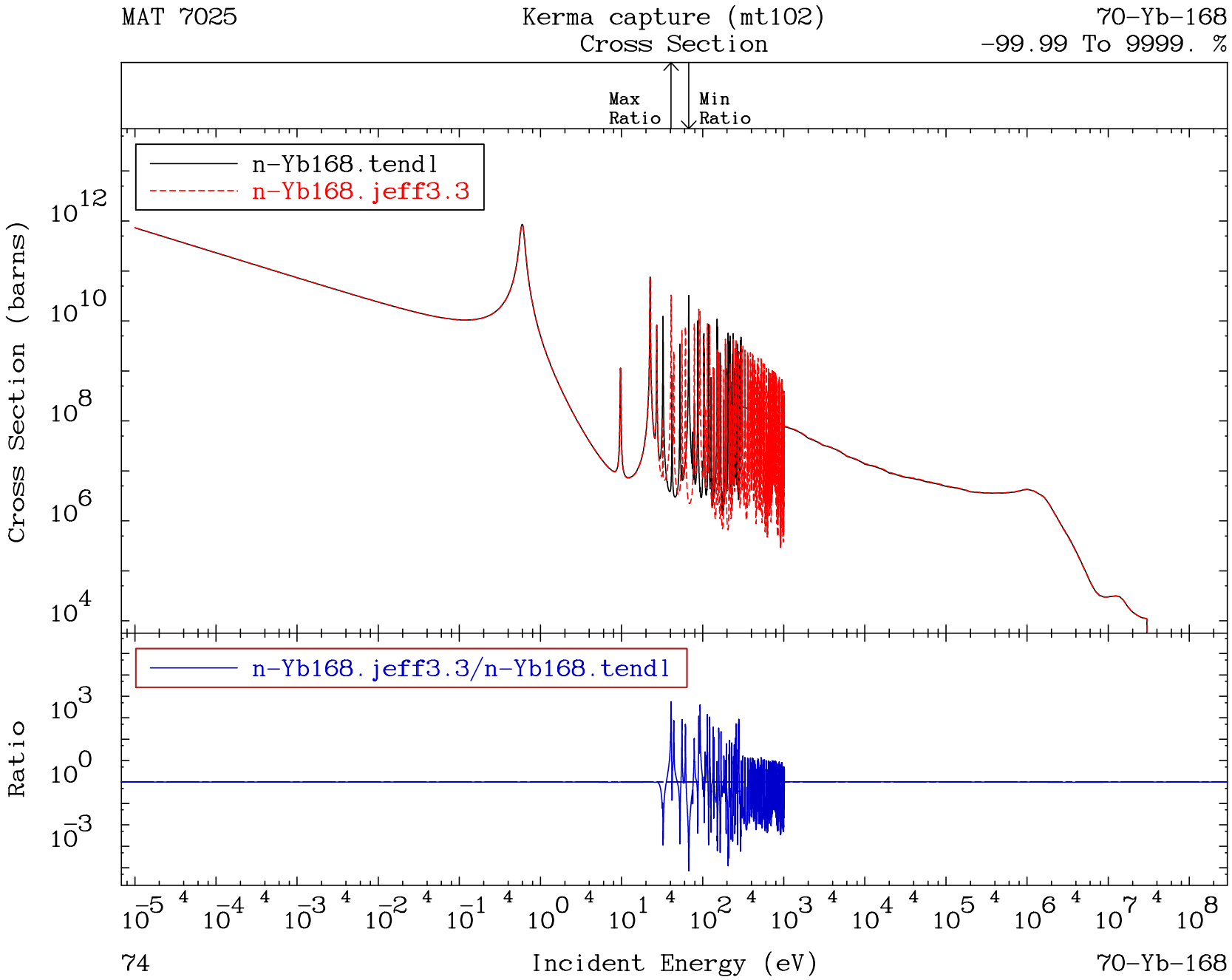

MAT 7025
Kerma total (eV-barns)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
Ratio
n-Yb168.jeff3.3/n-Yb168.tendl
Incident Energy (eV)
69
70-Yb-168

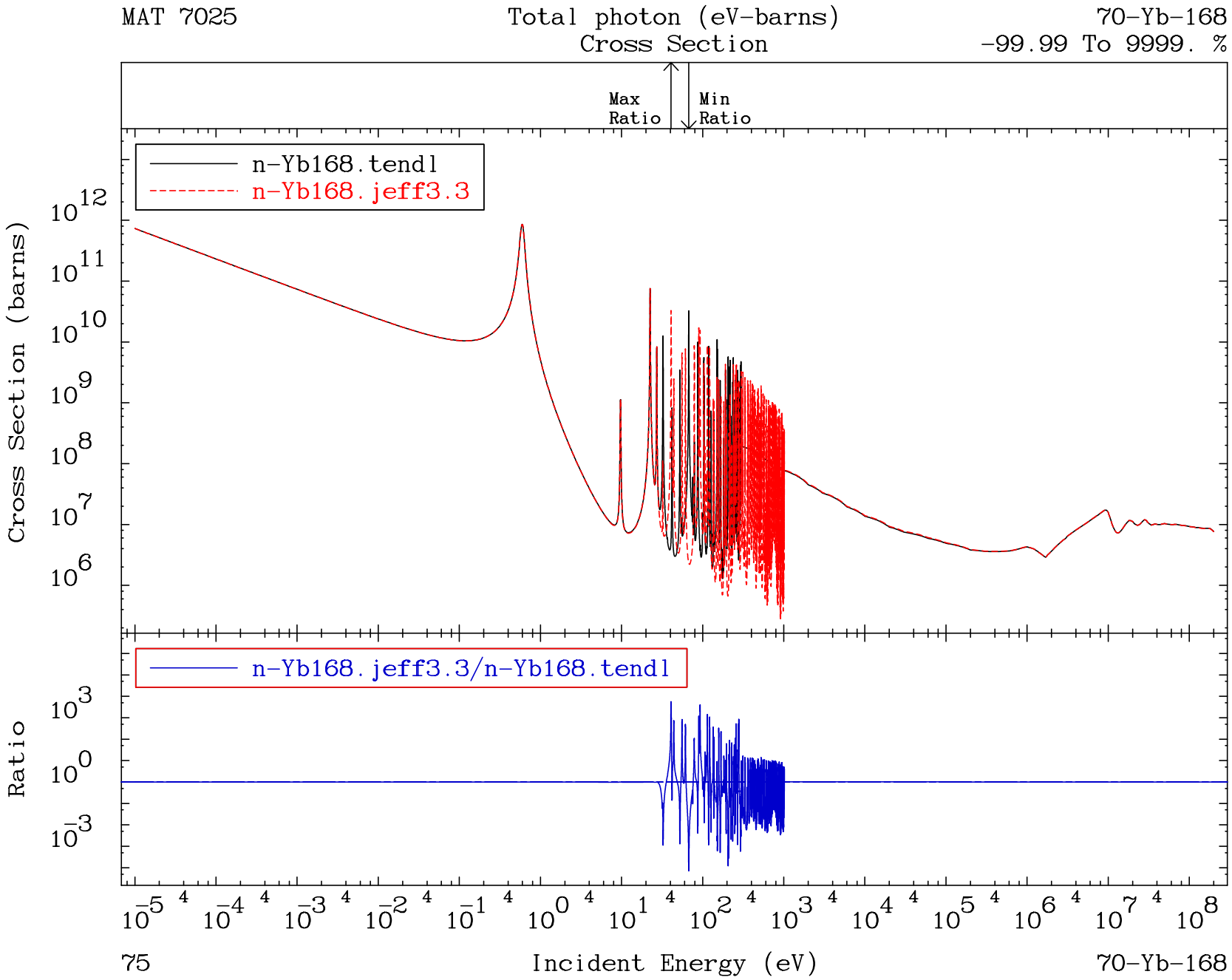

MAT 7025
Kerma elastic
Cross Section
70-Yb-168
-99.99 To 9999. %
Max
Ratio
Min
Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
70
70-Yb-168

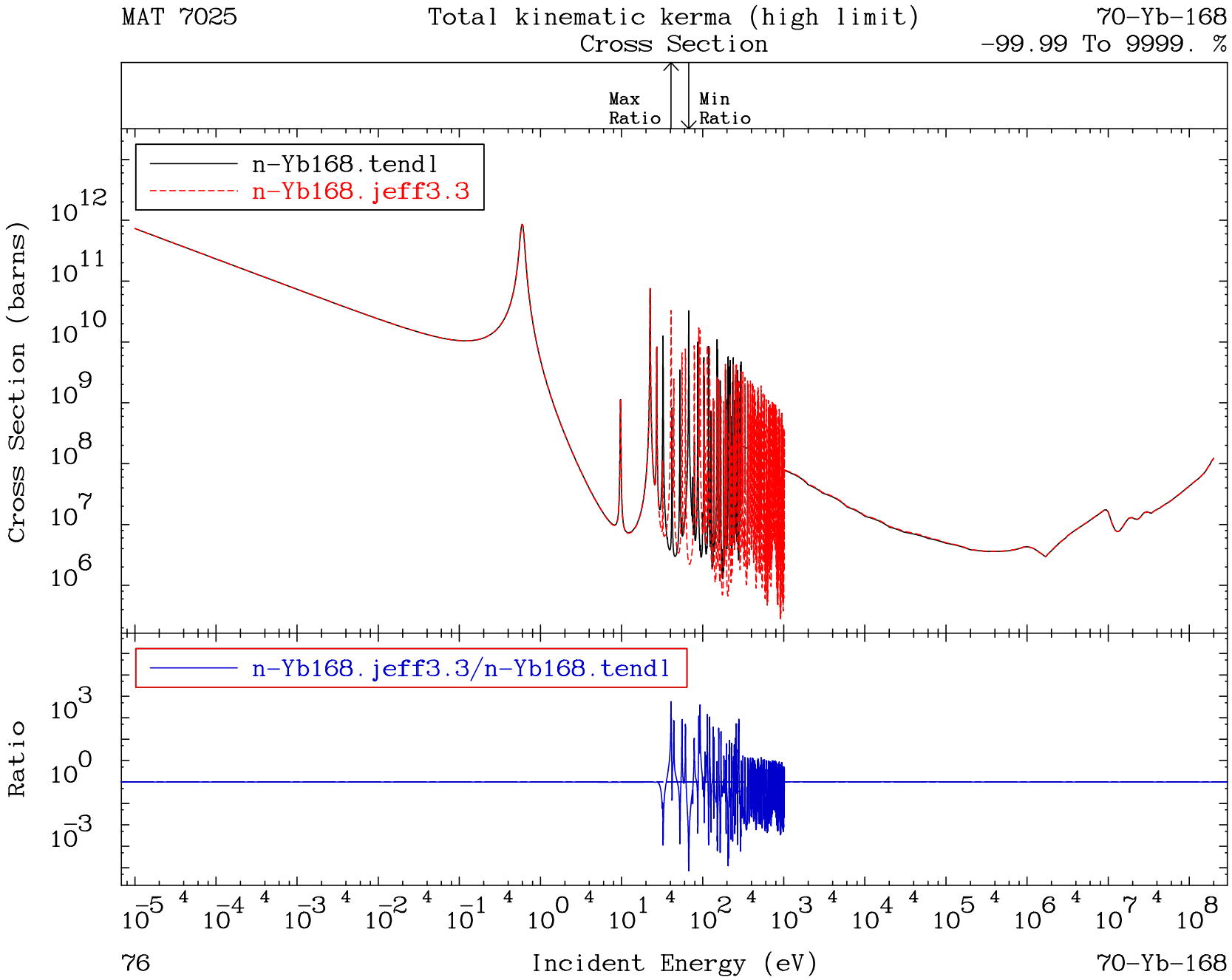

MAT 7025
Kerma non-elastic (all but mt2)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
71
70-Yb-168

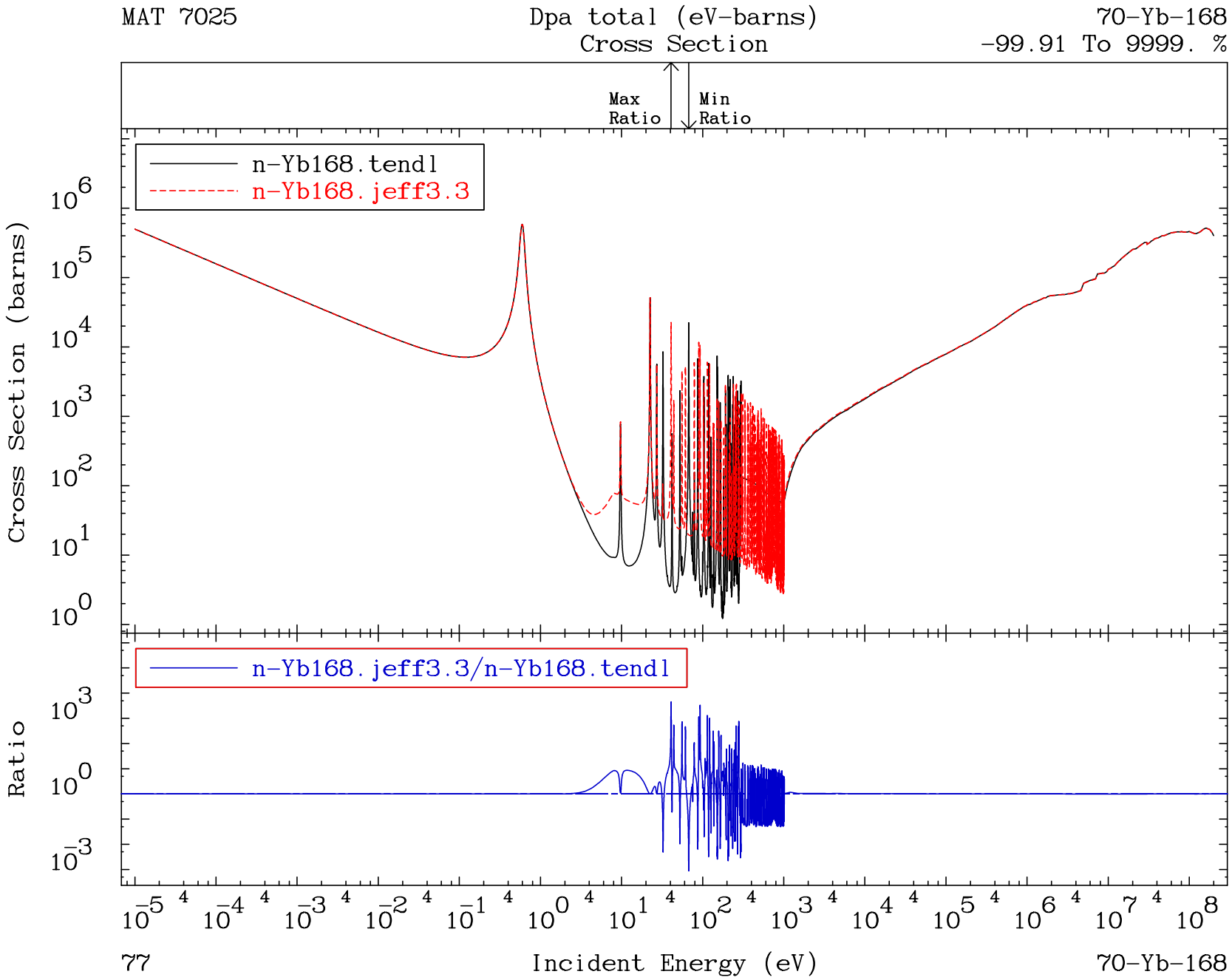

MAT 7025
Kerma inelastic (mt51-91)
Cross Section
70-Yb-168
-1.363 To 4.902 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 90.000 keV
n-Yb168.jeff3.3 Threshold 90.000 keV
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
72
70-Yb-168

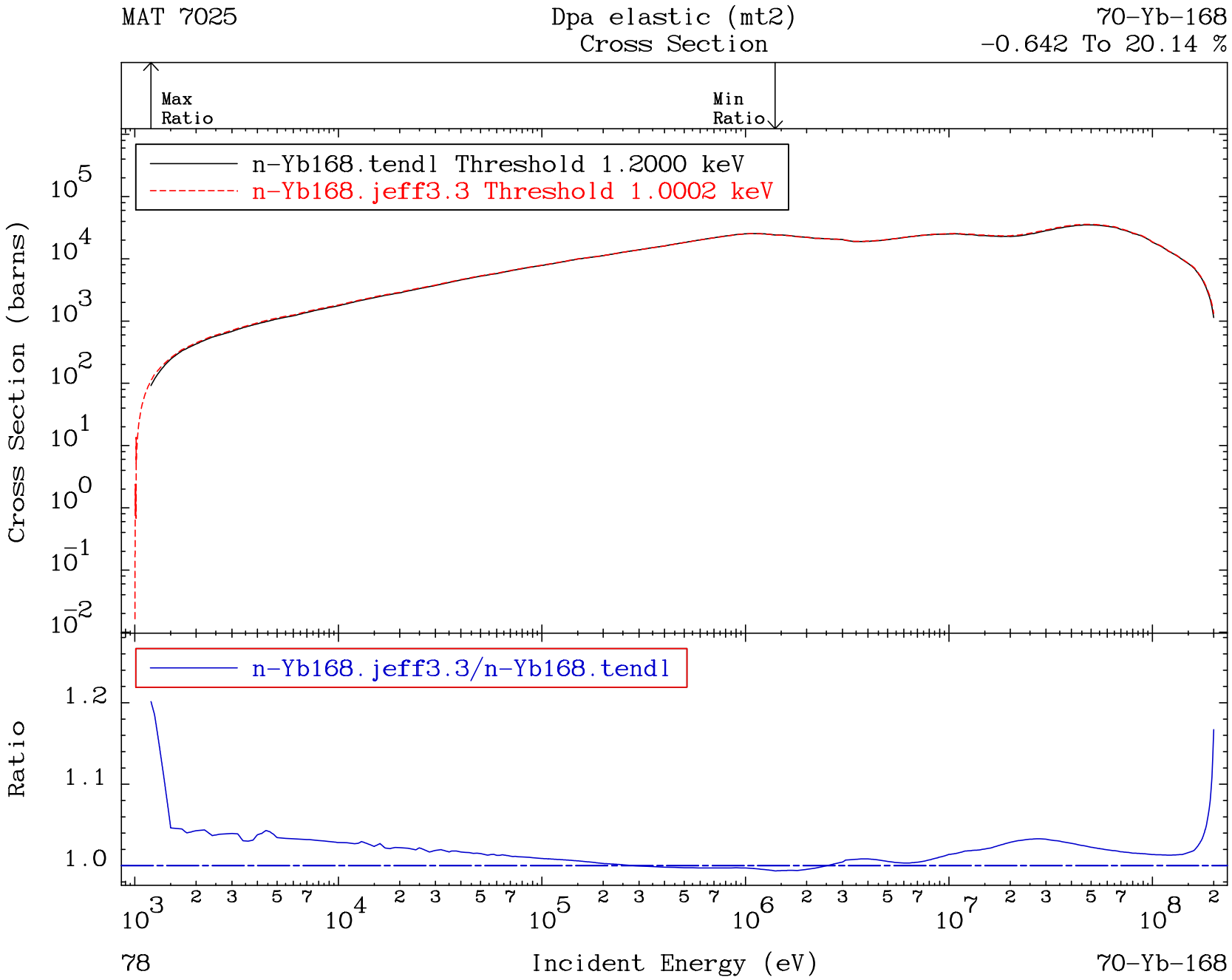

MAT 7025
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
70-Yb-168
-1.363 To 4.902 %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.06
1.04
1.02
1.00
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
73
Incident Energy (eV)
70-Yb-168

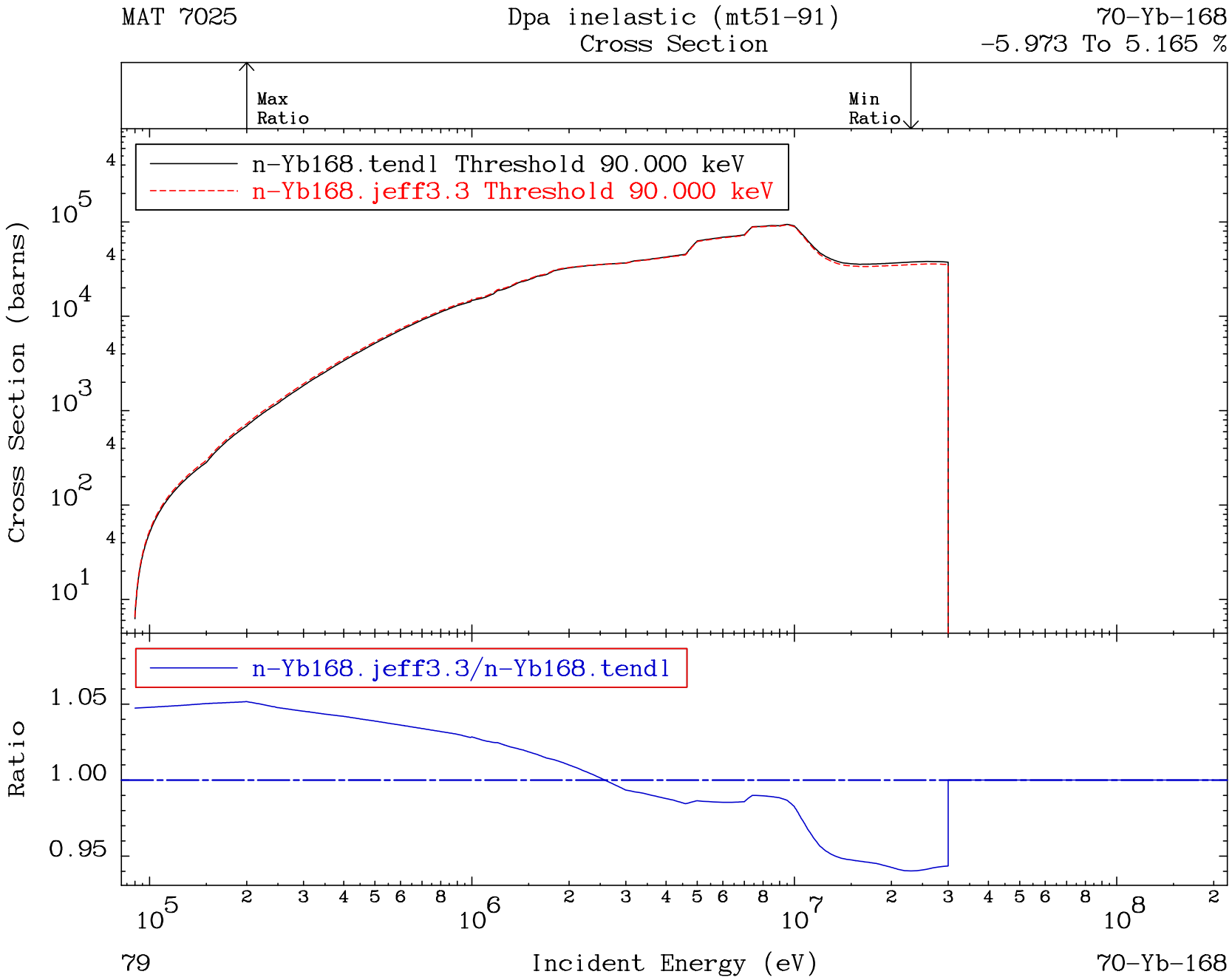

MAT 7025
Kerma capture (mt102)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
Ratio
n-Yb168.jeff3.3/n-Yb168.tendl
74
Incident Energy (eV)
70-Yb-168

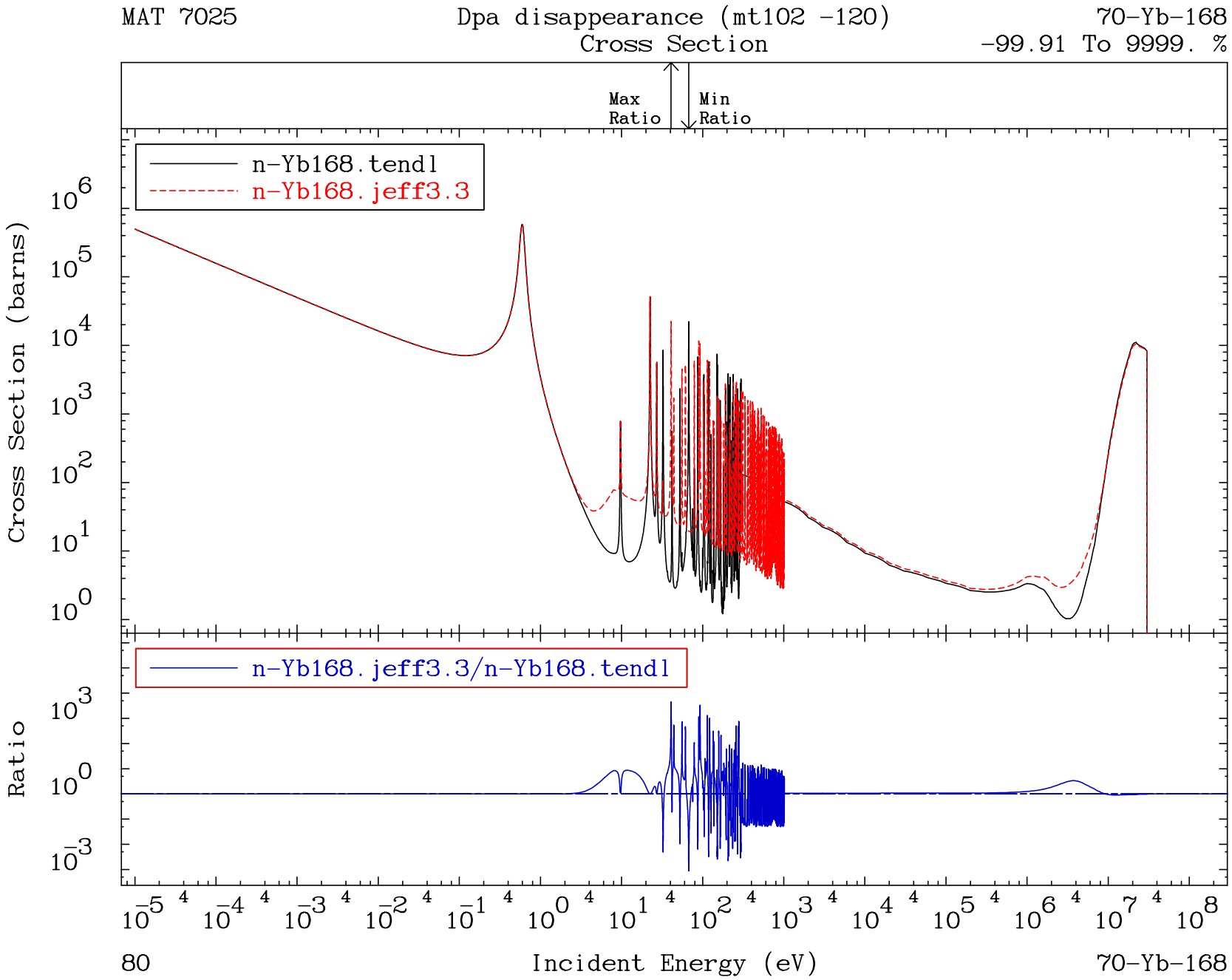

MAT 7025
Total photon (eV-barns)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
75
70-Yb-168

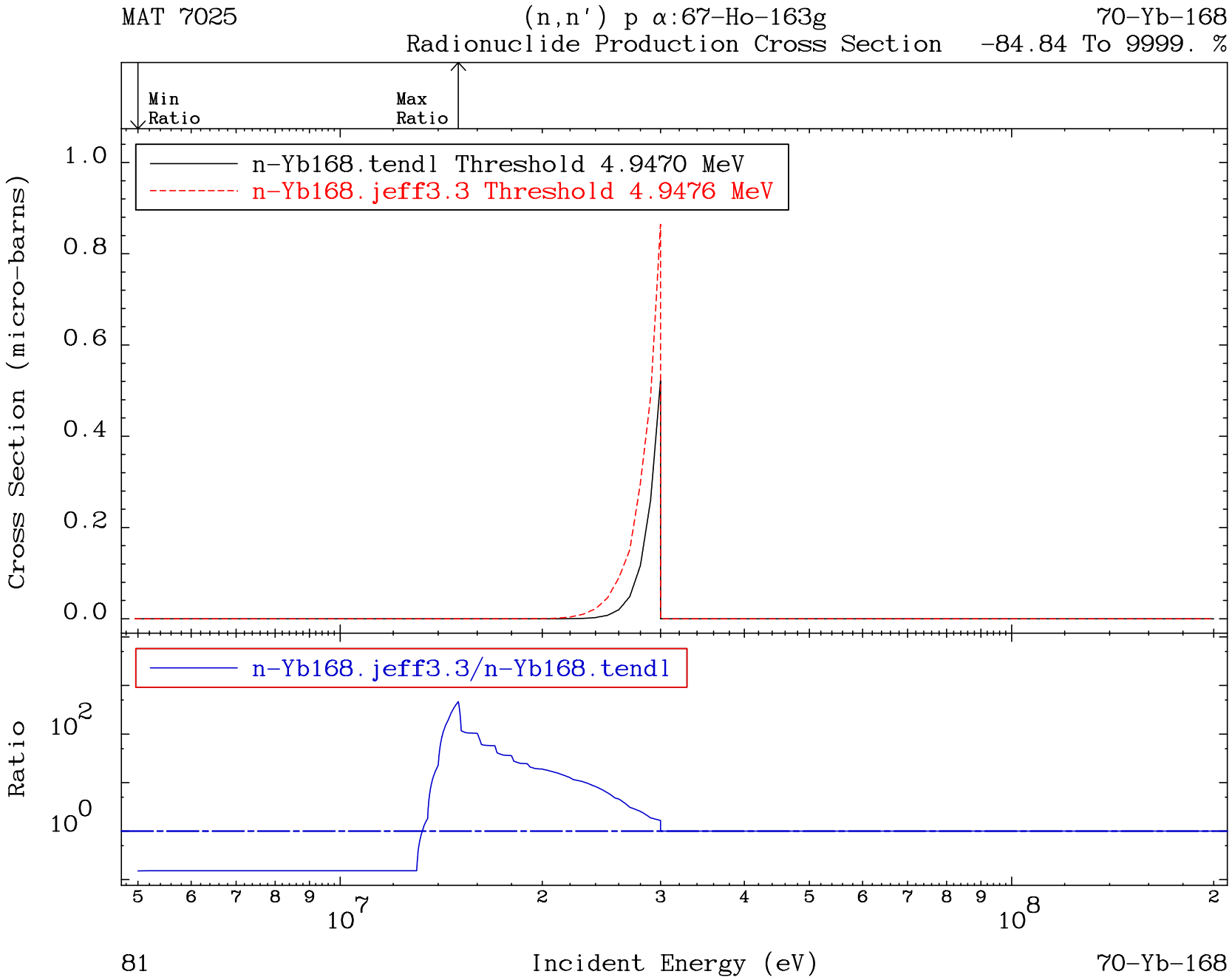

MAT 7025
Total kinematic kerma (high limit)
Cross Section
70-Yb-168
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
76
70-Yb-168

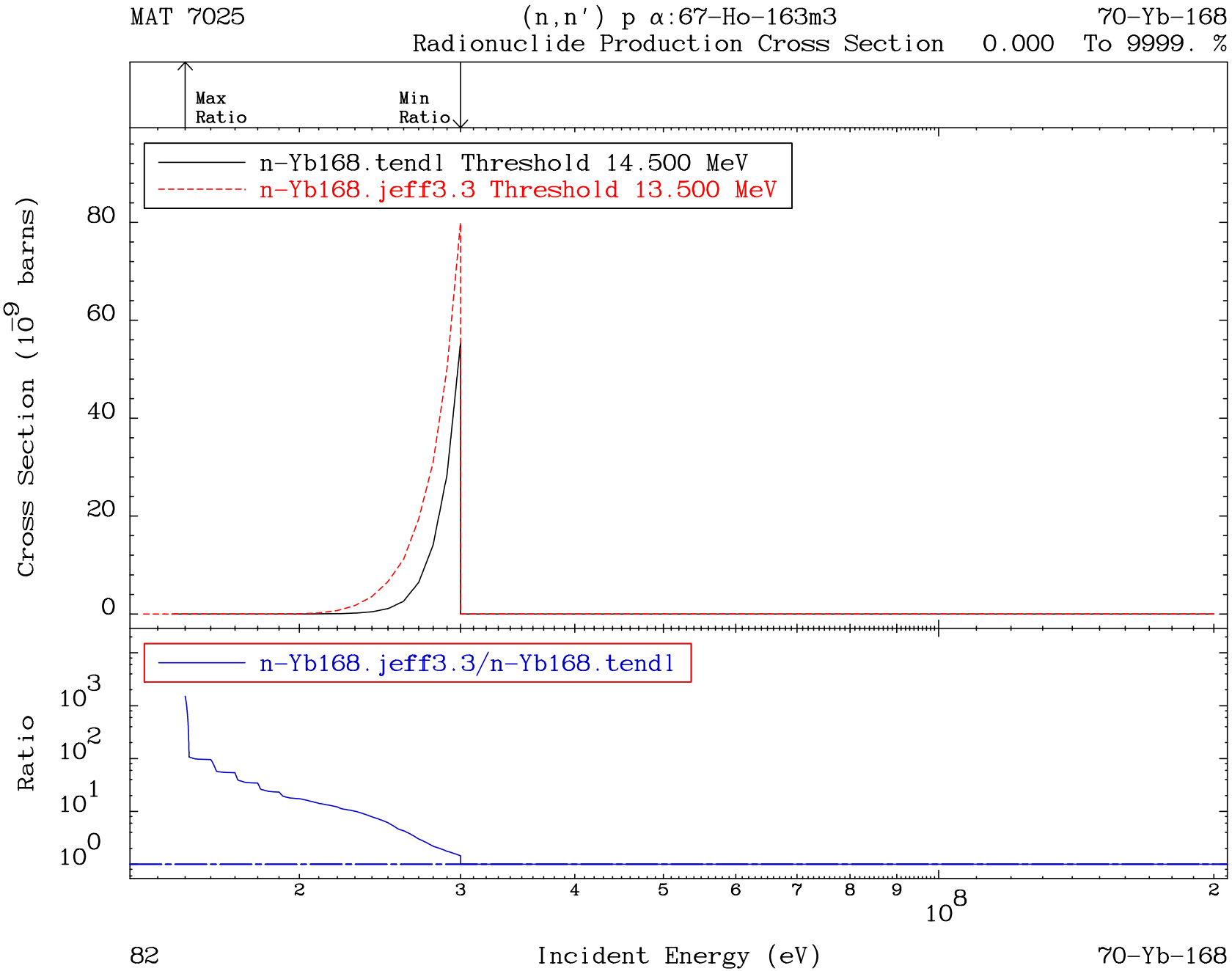

MAT 7025
Dpa total (eV-barns)
Cross Section
70-Yb-168
-99.91 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
77
70-Yb-168

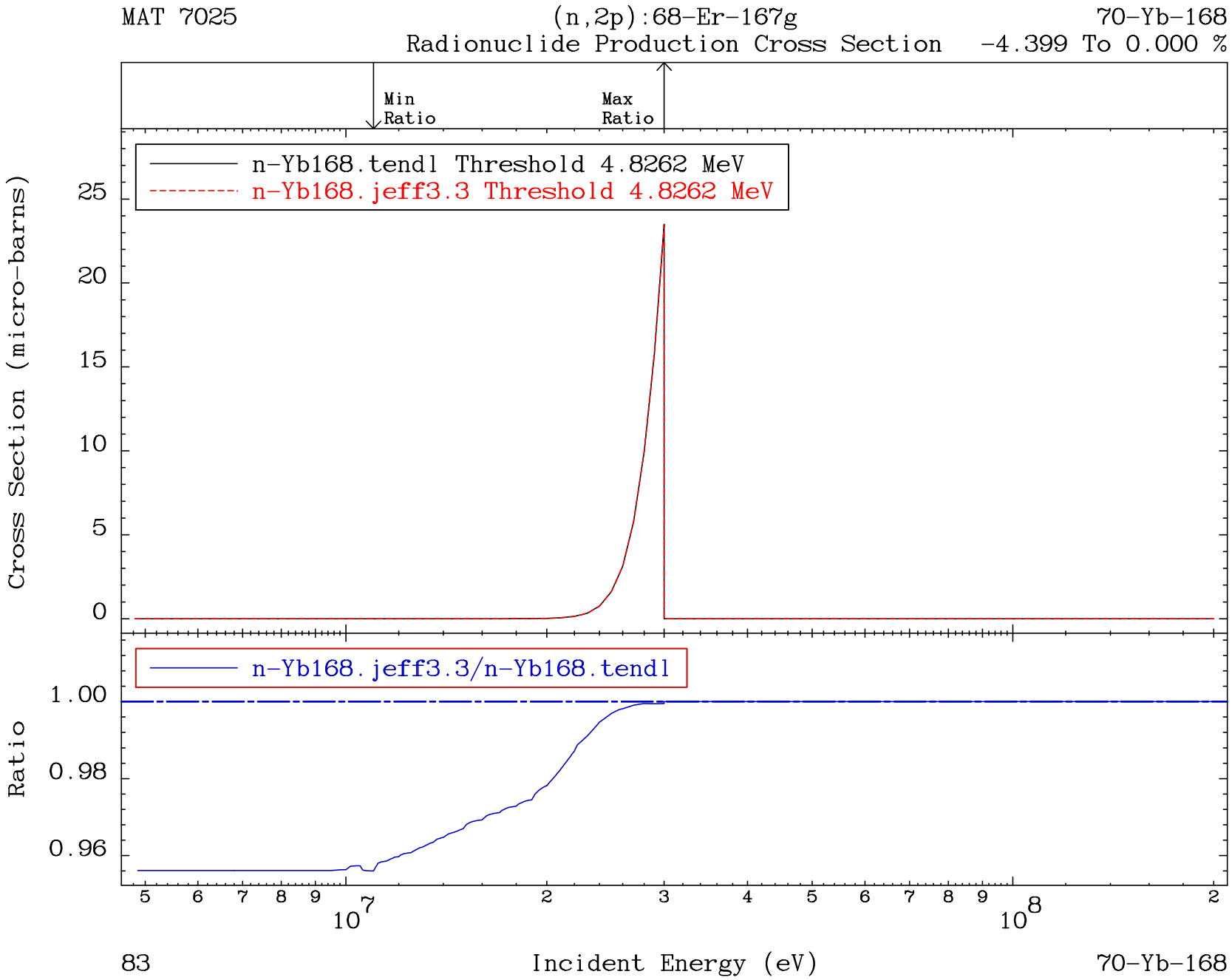

MAT 7025
Dpa elastic (mt2)
Cross Section
70-Yb-168
-0.642 To 20.14 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 1.2000 keV
n-Yb168.jeff3.3 Threshold 1.0002 keV
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
78
70-Yb-168

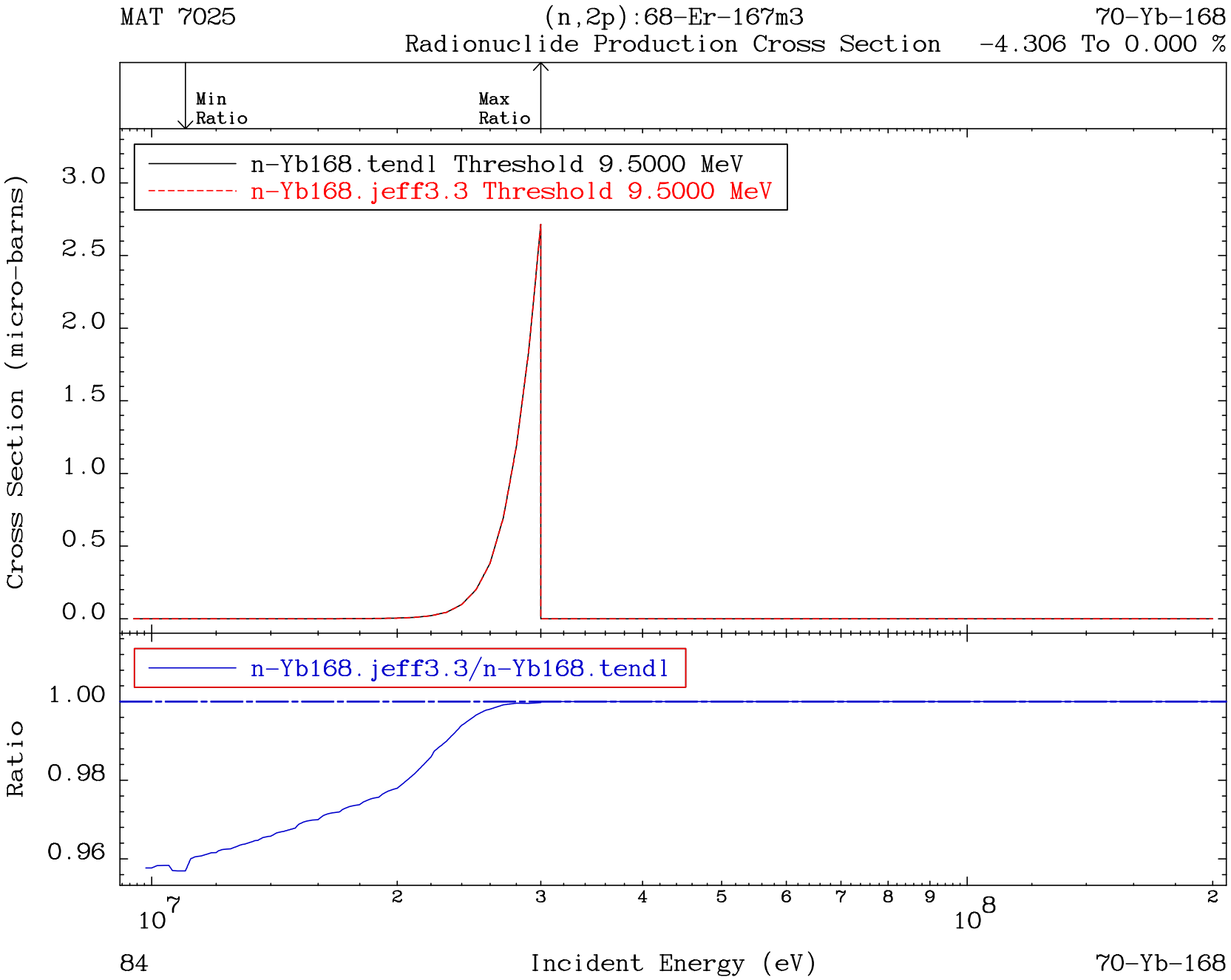

MAT 7025
Dpa inelastic (mt51-91)
Cross Section
70-Yb-168
-5.973 To 5.165 %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 90.000 keV
n-Yb168.jeff3.3 Threshold 90.000 keV
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
79
70-Yb-168

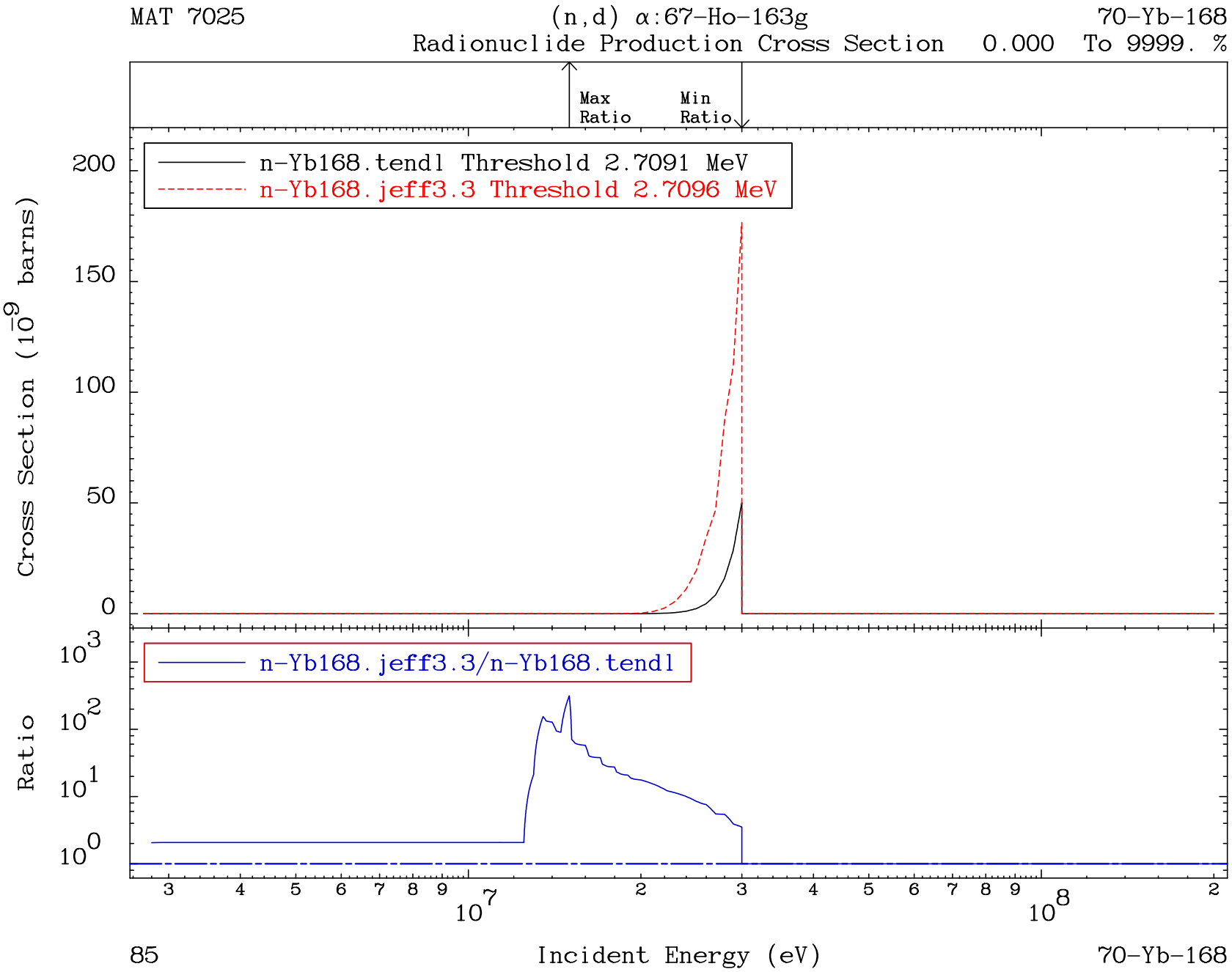

MAT 7025
Dpa disappearance (mt102 -120)
Cross Section
70-Yb-168
-99.91 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl
n-Yb168.jeff3.3
Cross Section (barns)
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
Incident Energy (eV)
80
70-Yb-168

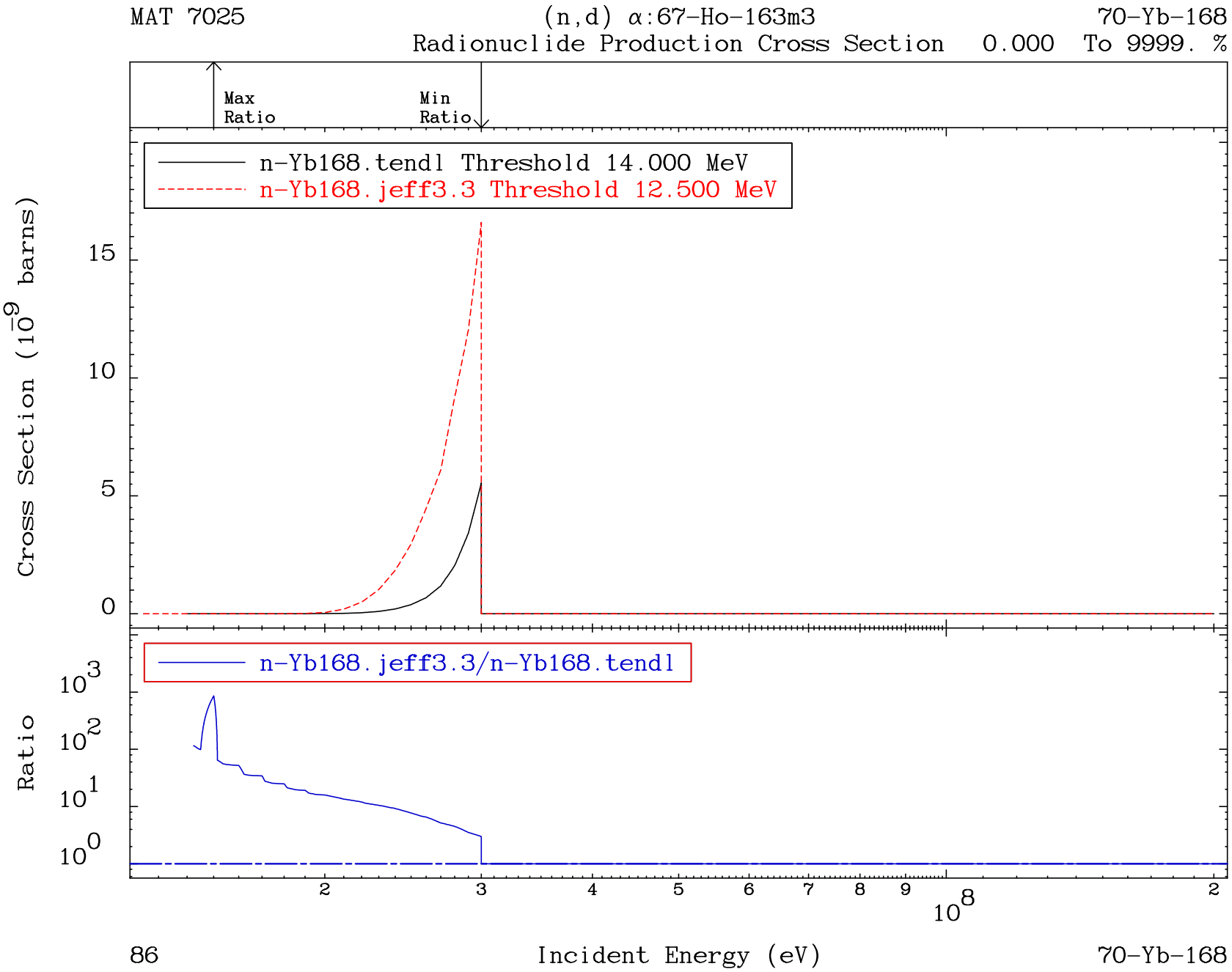

MAT 7025
(n,n') p α:67-Ho-163g
70-Yb-168
Radionuclide Production Cross Section -84.84 To 9999. %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 4.9470 MeV
n-Yb168.jeff3.3 Threshold 4.9476 MeV
Cross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
81
Incident Energy (eV)
70-Yb-168


MAT 7025
(n,n') p α:67-Ho-163m3
70-Yb-168
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 14.500 MeV
n-Yb168.jeff3.3 Threshold 13.500 MeV
Cross Section (10^{-9} barns)
80
60
40
20
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
70-Yb-168


MAT 7025
(n,2p):68-Er-167g
70-Yb-168
Radionuclide Production Cross Section
-4.399 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 4.8262 MeV
n-Yb168.jeff3.3 Threshold 4.8262 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.98
0.96
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
70-Yb-168


MAT 7025
(n,2p):68-Er-167m3
70-Yb-168
Radionuclide Production Cross Section -4.306 To 0.000 %
Min Ratio
Max Ratio
n-Yb168.tendl Threshold 9.5000 MeV
n-Yb168.jeff3.3 Threshold 9.5000 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
1.00
0.98
0.96
10^7
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
70-Yb-168


MAT 7025
(n,d) α:67-Ho-163g
70-Yb-168
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 2.7091 MeV
n-Yb168.jeff3.3 Threshold 2.7096 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
70-Yb-168


MAT 7025
(n,d) α:67-Ho-163m3
70-Yb-168
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Yb168.tendl Threshold 14.000 MeV
n-Yb168.jeff3.3 Threshold 12.500 MeV
Cross Section (10^{-9} barns)
15
10
5
0
n-Yb168.jeff3.3/n-Yb168.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
70-Yb-168