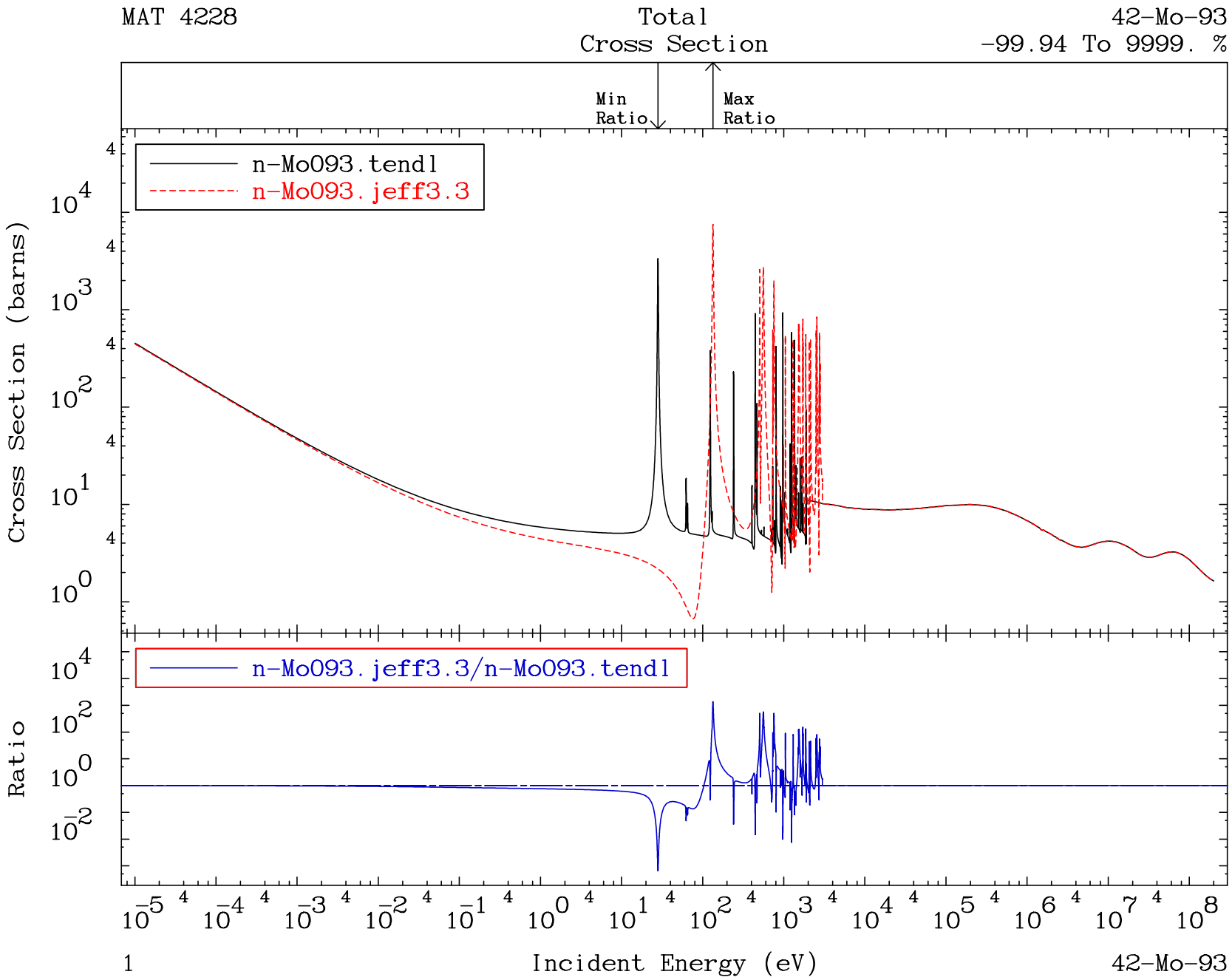
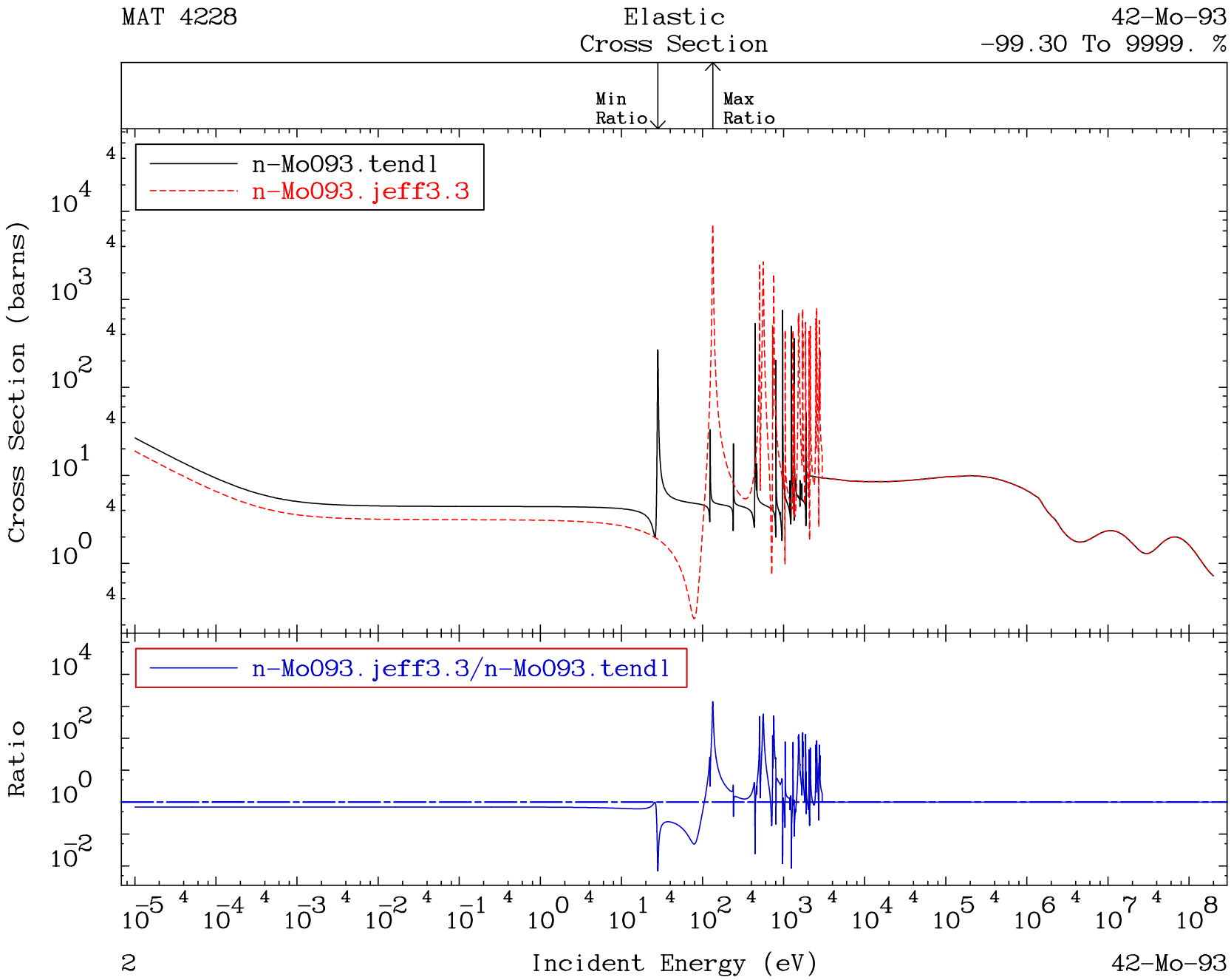
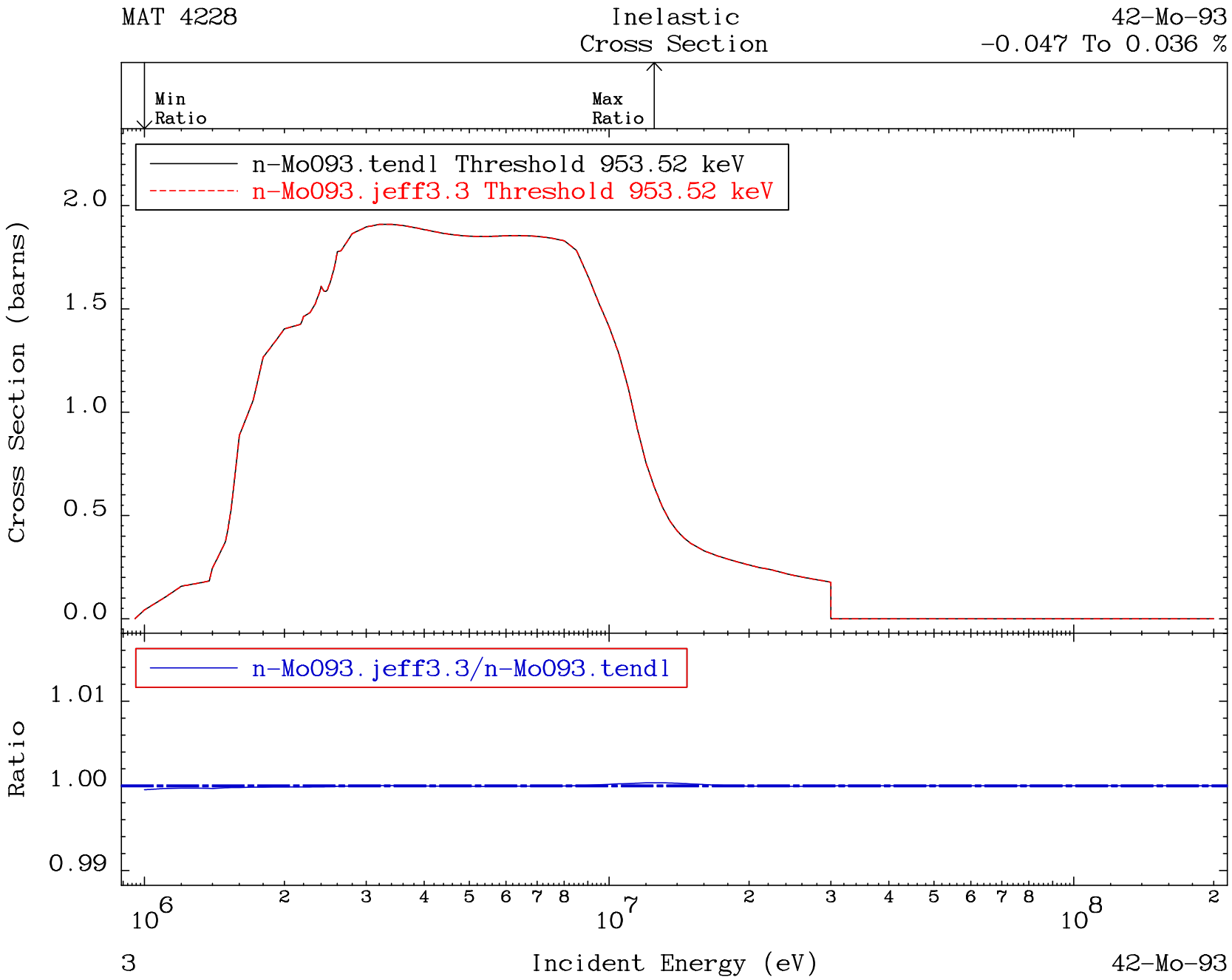
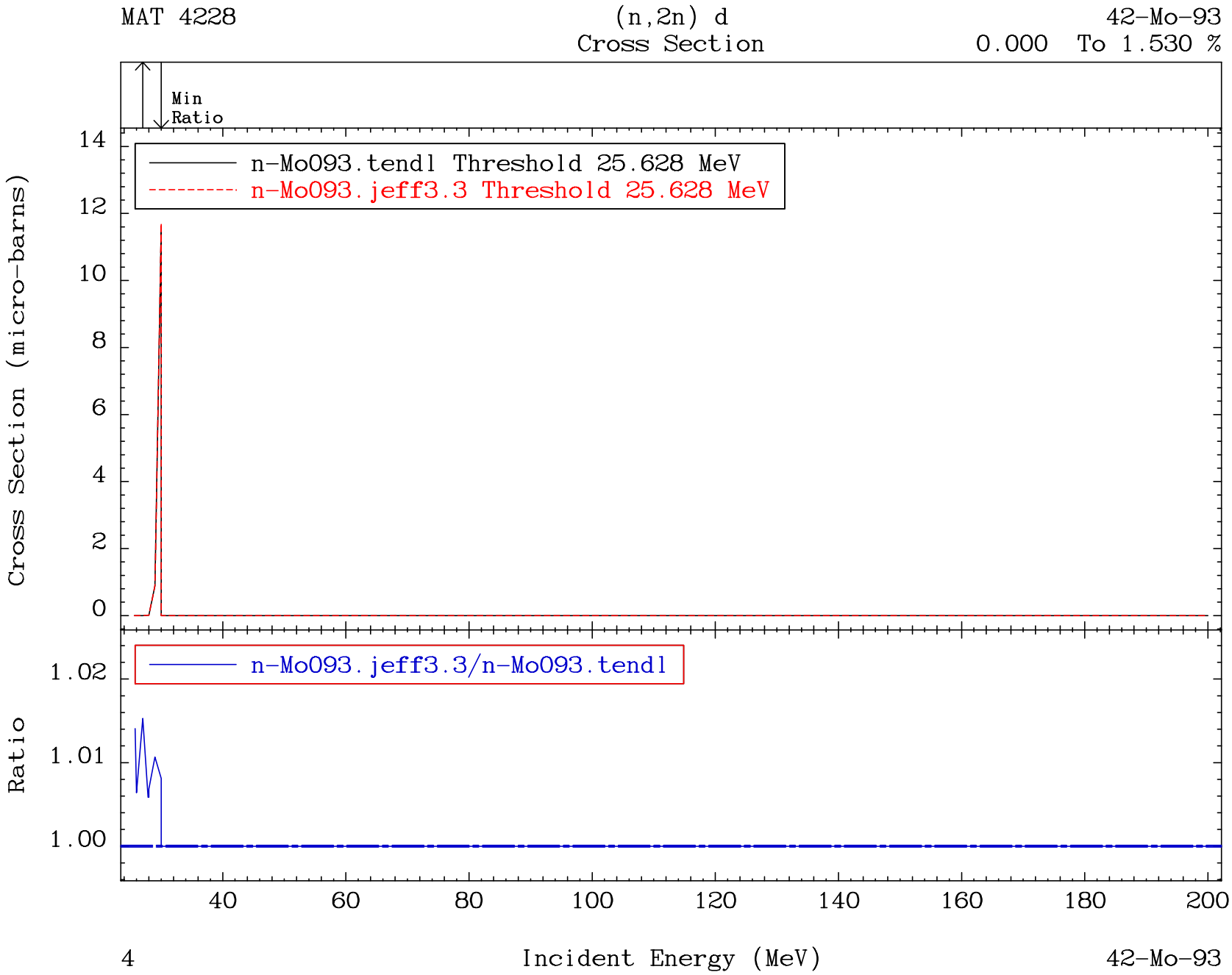
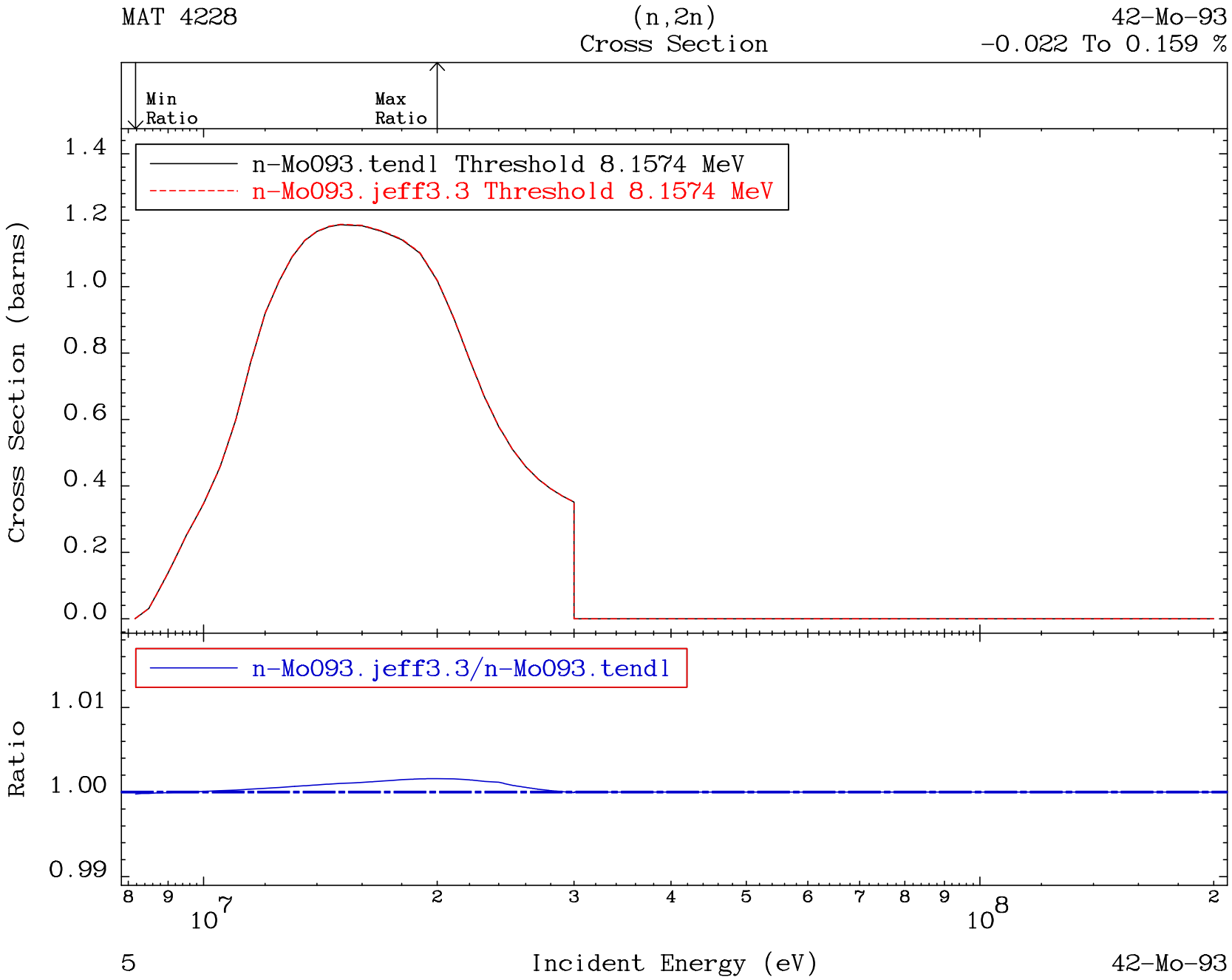
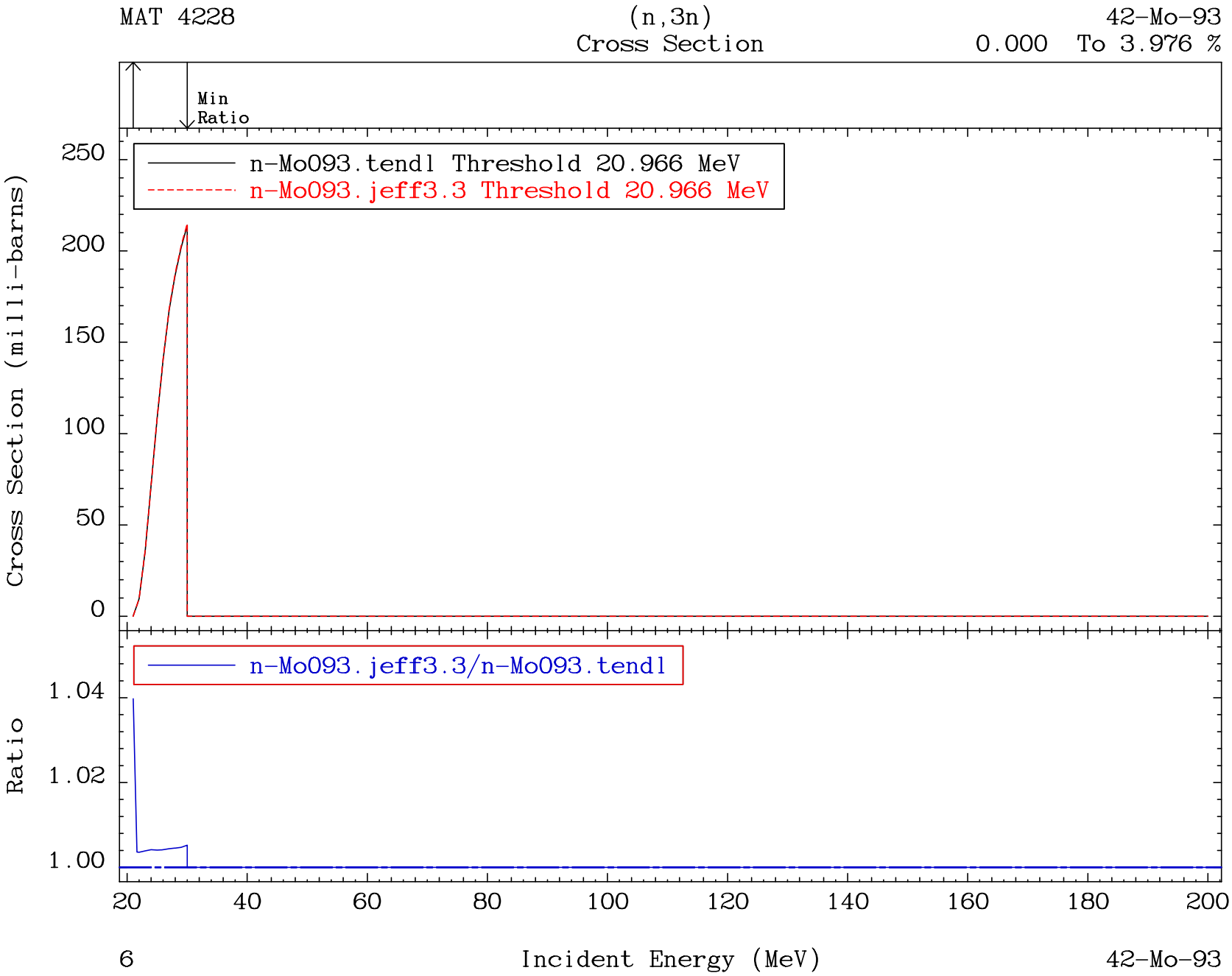

MAT 4228
Total
Cross Section
42-Mo-93
-99.94 To 9999. %
Min
Ratio
Max
Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
1
42-Mo-93

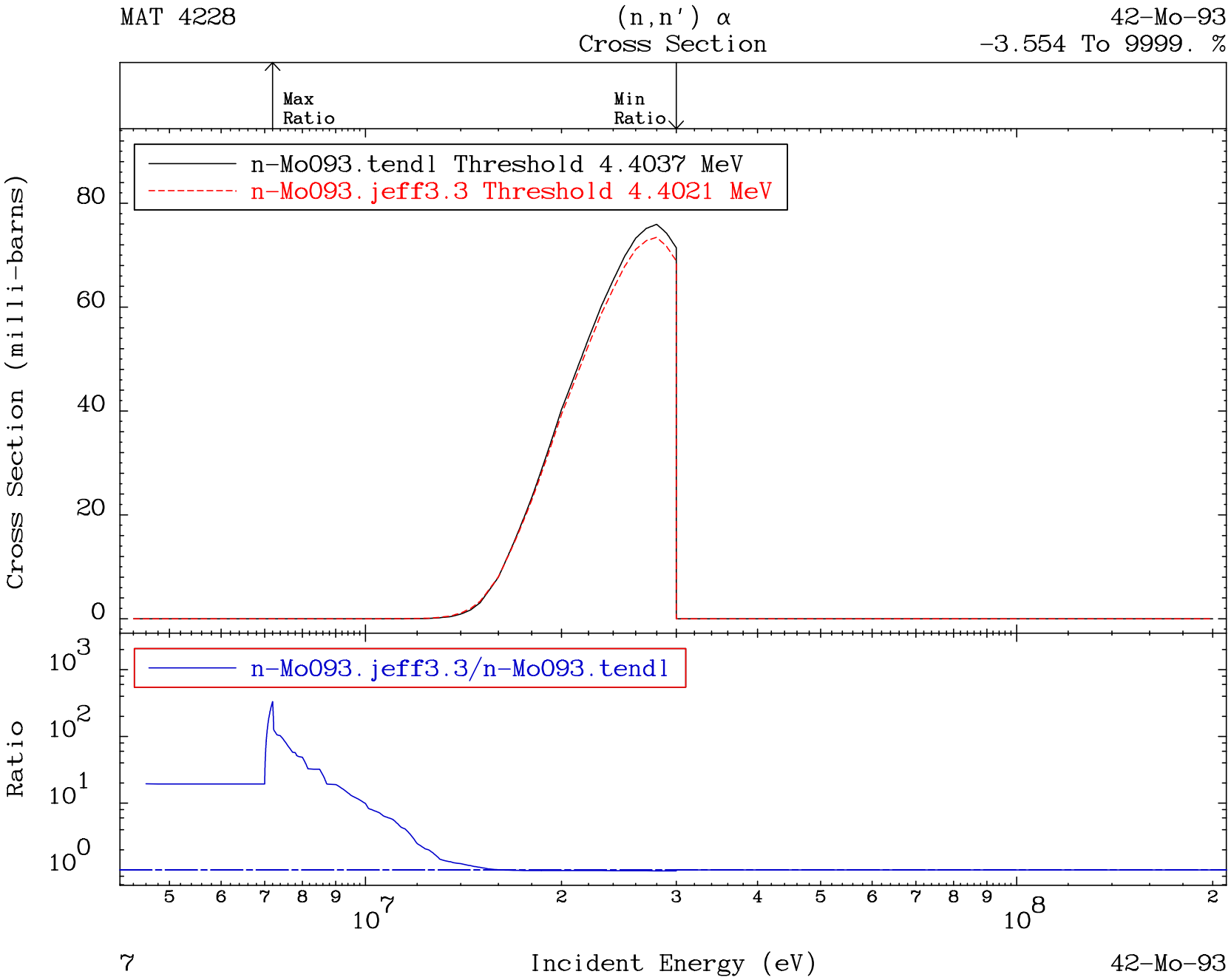

MAT 4228
Elastic
Cross Section
42-Mo-93
-99.30 To 9999. %
Min
Ratio
Max
Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
2
42-Mo-93

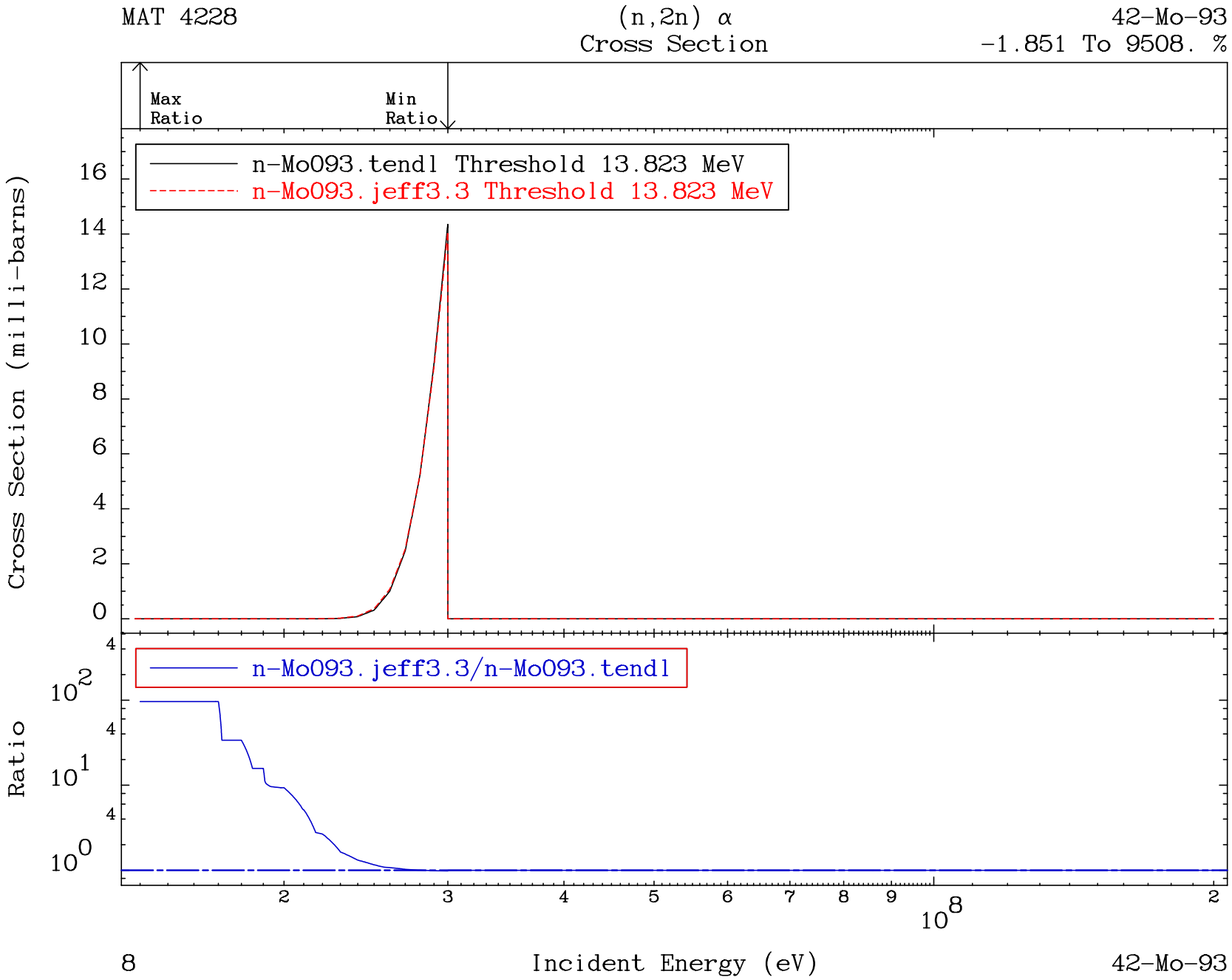

MAT 4228
Inelastic
Cross Section
42-Mo-93
-0.047 To 0.036 %
Min
Ratio
Max
Ratio
n-Mo093.tendl Threshold 953.52 keV
n-Mo093.jeff3.3 Threshold 953.52 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
Incident Energy (eV)
3
42-Mo-93

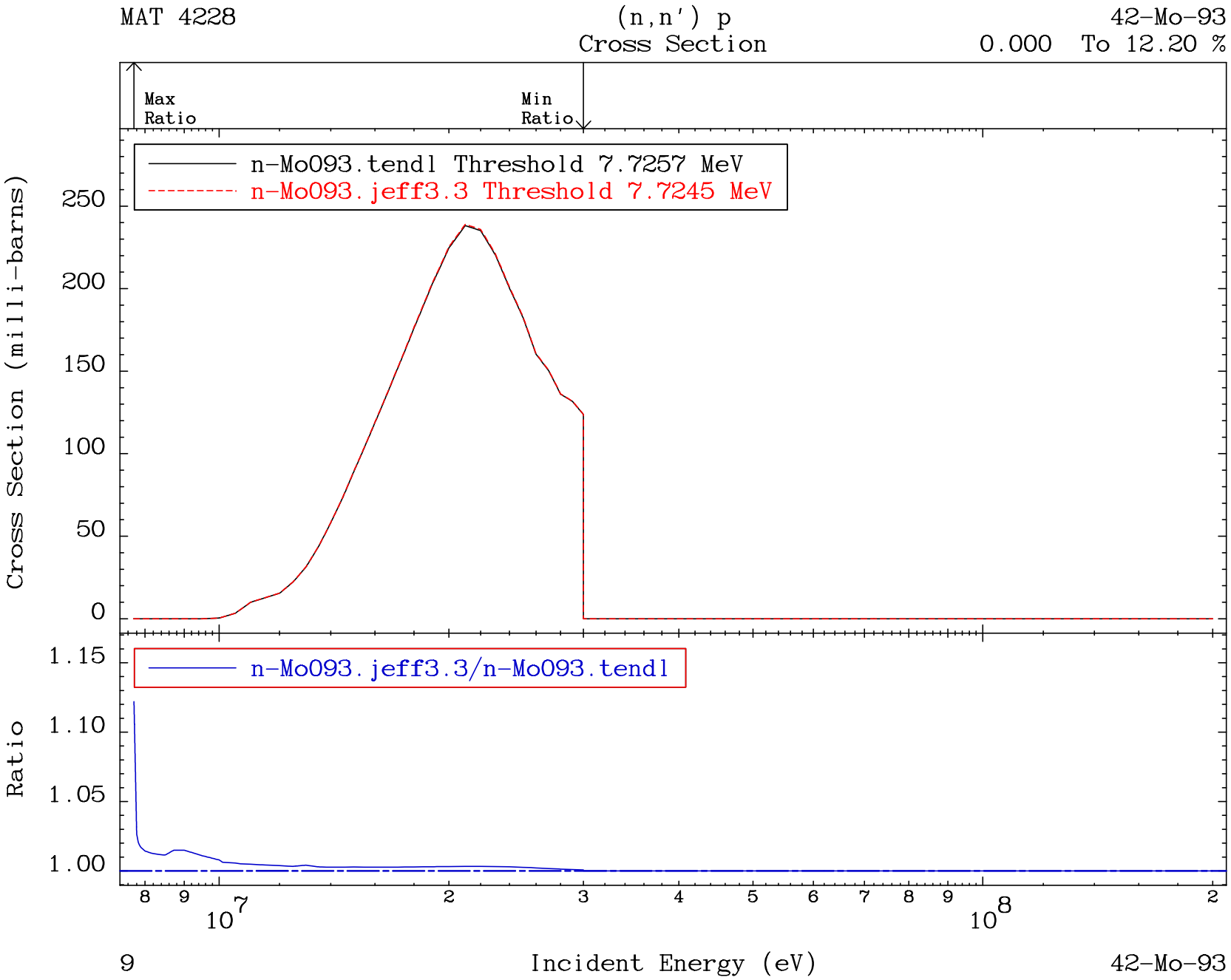

MAT 4228
(n,2n) d
Cross Section
42-Mo-93
0.000 To 1.530 %
Min
Ratio
n-Mo093.tendl Threshold 25.628 MeV
n-Mo093.jeff3.3 Threshold 25.628 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
12
14
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.00
1.01
1.02
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
4
42-Mo-93

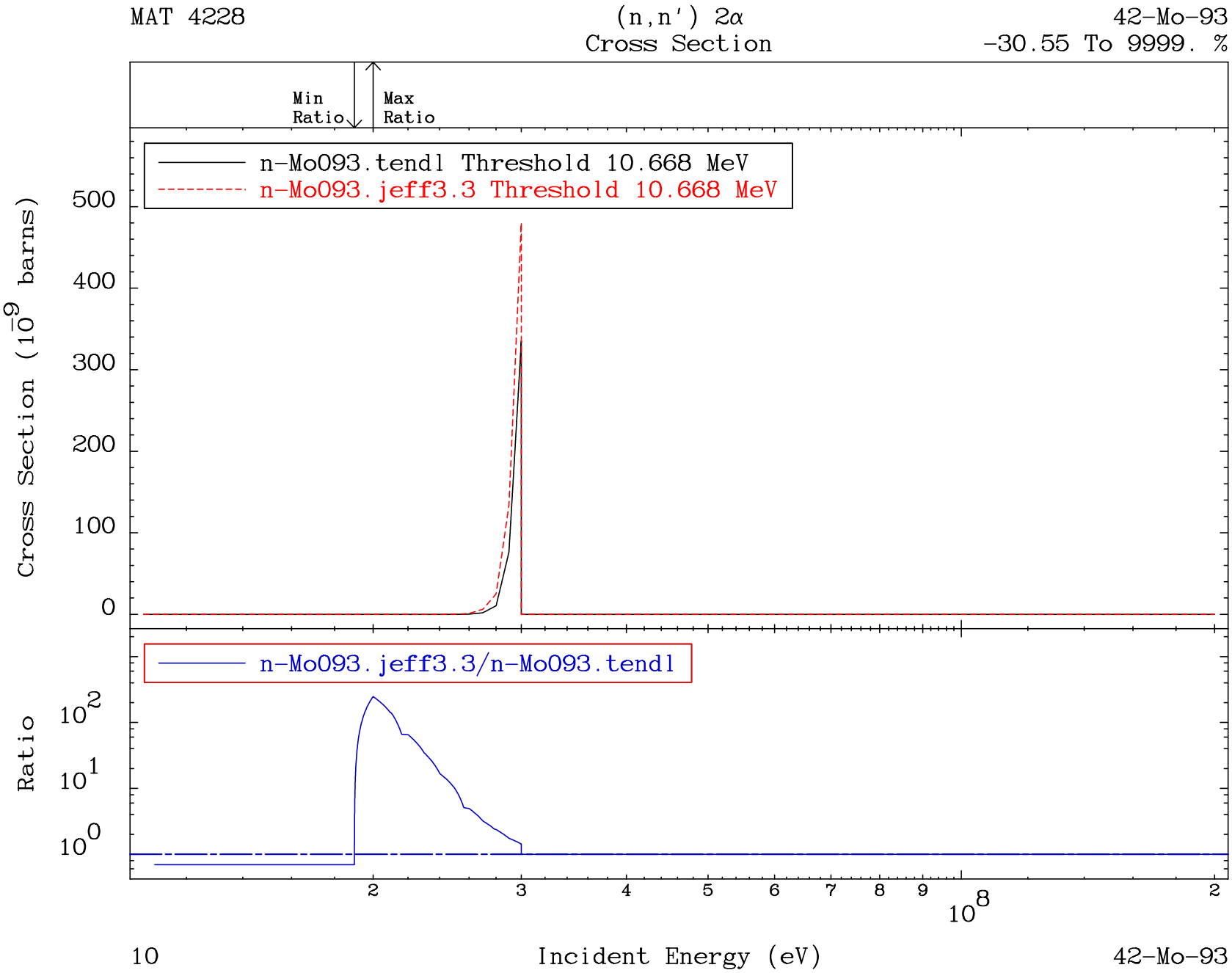

MAT 4228
(n,2n)
Cross Section
42-Mo-93
-0.022 To 0.159 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 8.1574 MeV
n-Mo093.jeff3.3 Threshold 8.1574 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
42-Mo-93

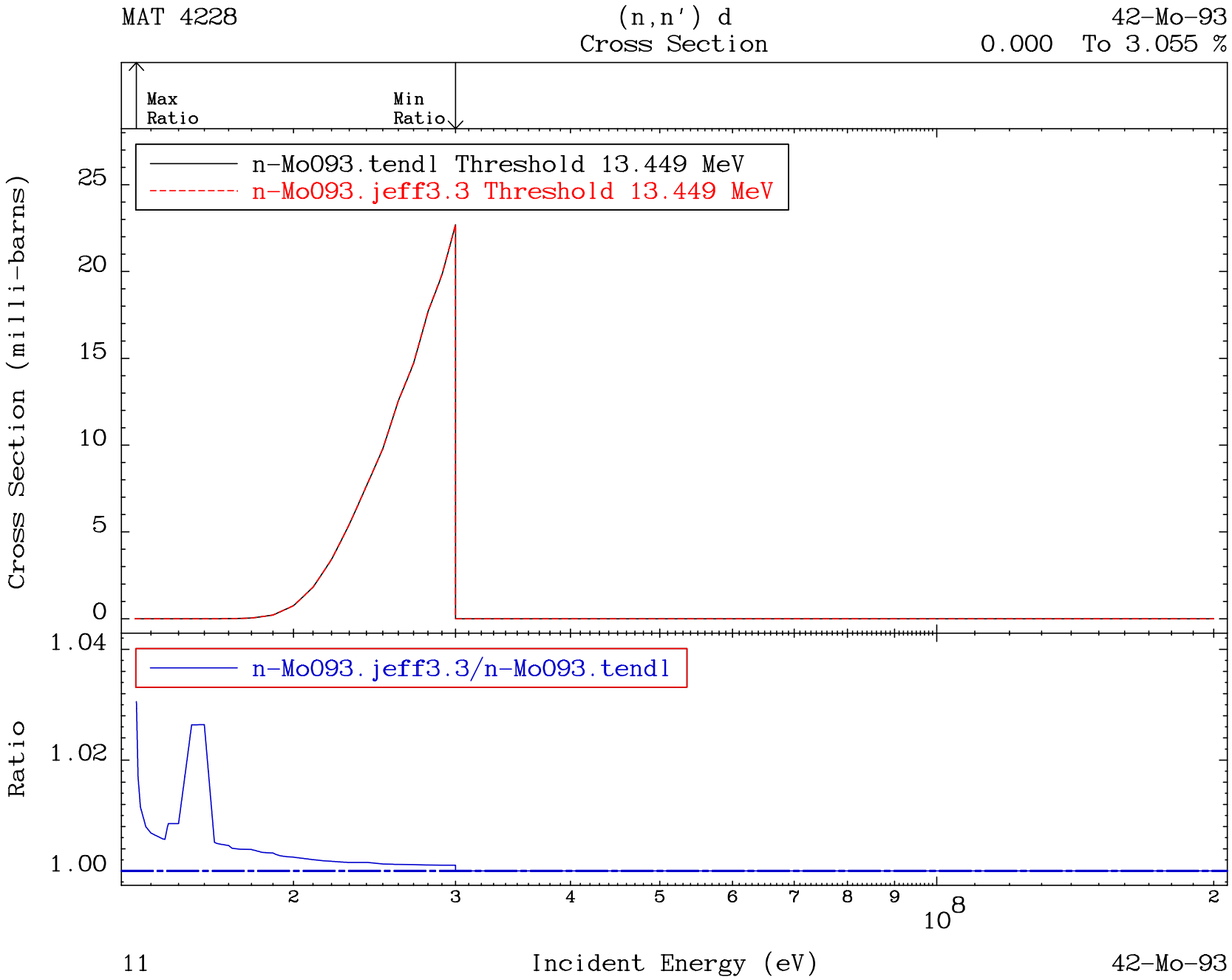

MAT 4228
(n,3n)
Cross Section
42-Mo-93
0.000 To 3.976 %
Min
Ratio
n-Mo093.tendl Threshold 20.966 MeV
n-Mo093.jeff3.3 Threshold 20.966 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
6
Incident Energy (MeV)
42-Mo-93

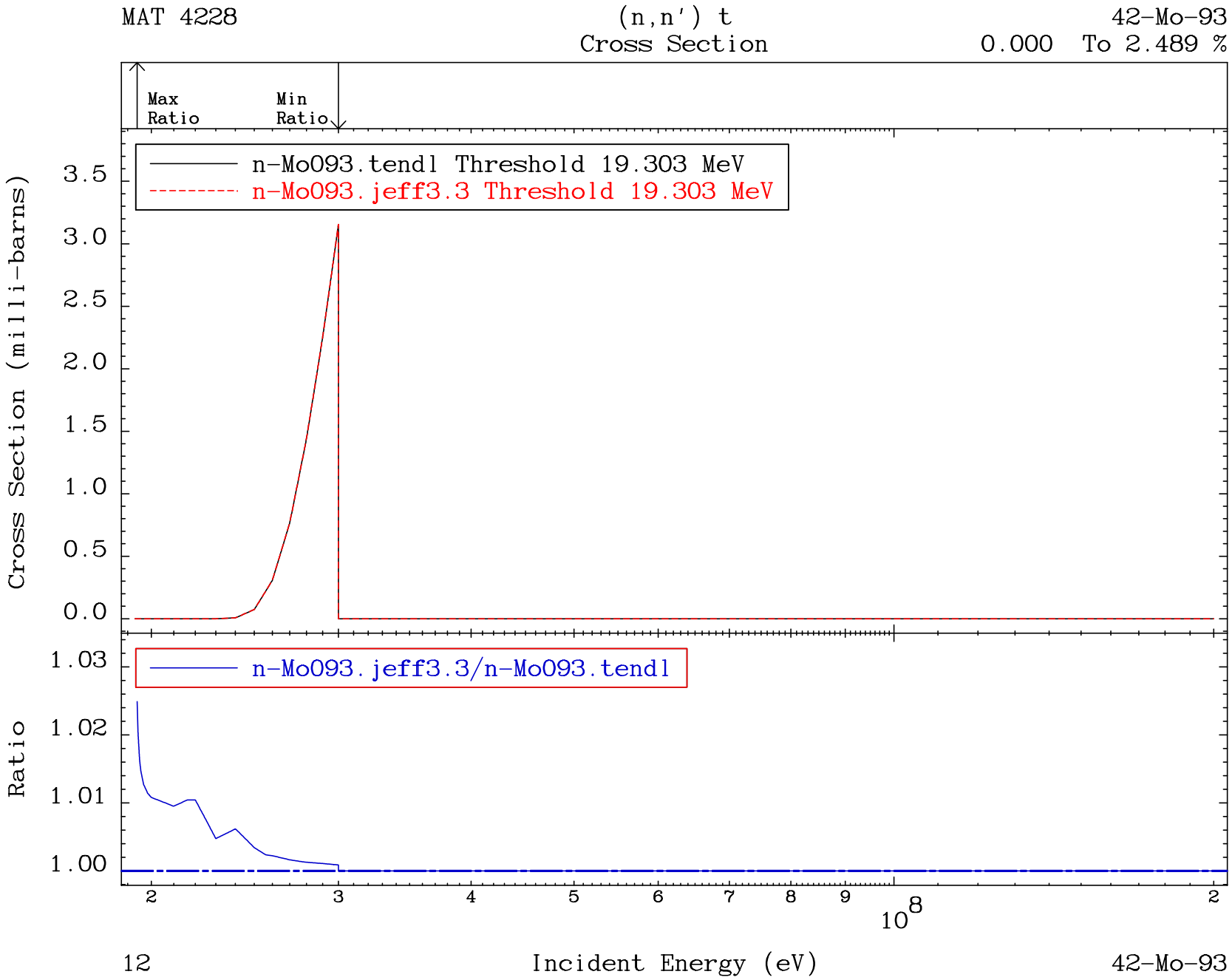

MAT 4228
(n,n') α
Cross Section
42-Mo-93
-3.554 To 9999. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 4.4037 MeV
n-Mo093.jeff3.3 Threshold 4.4021 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^3
10^2
10^1
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
42-Mo-93

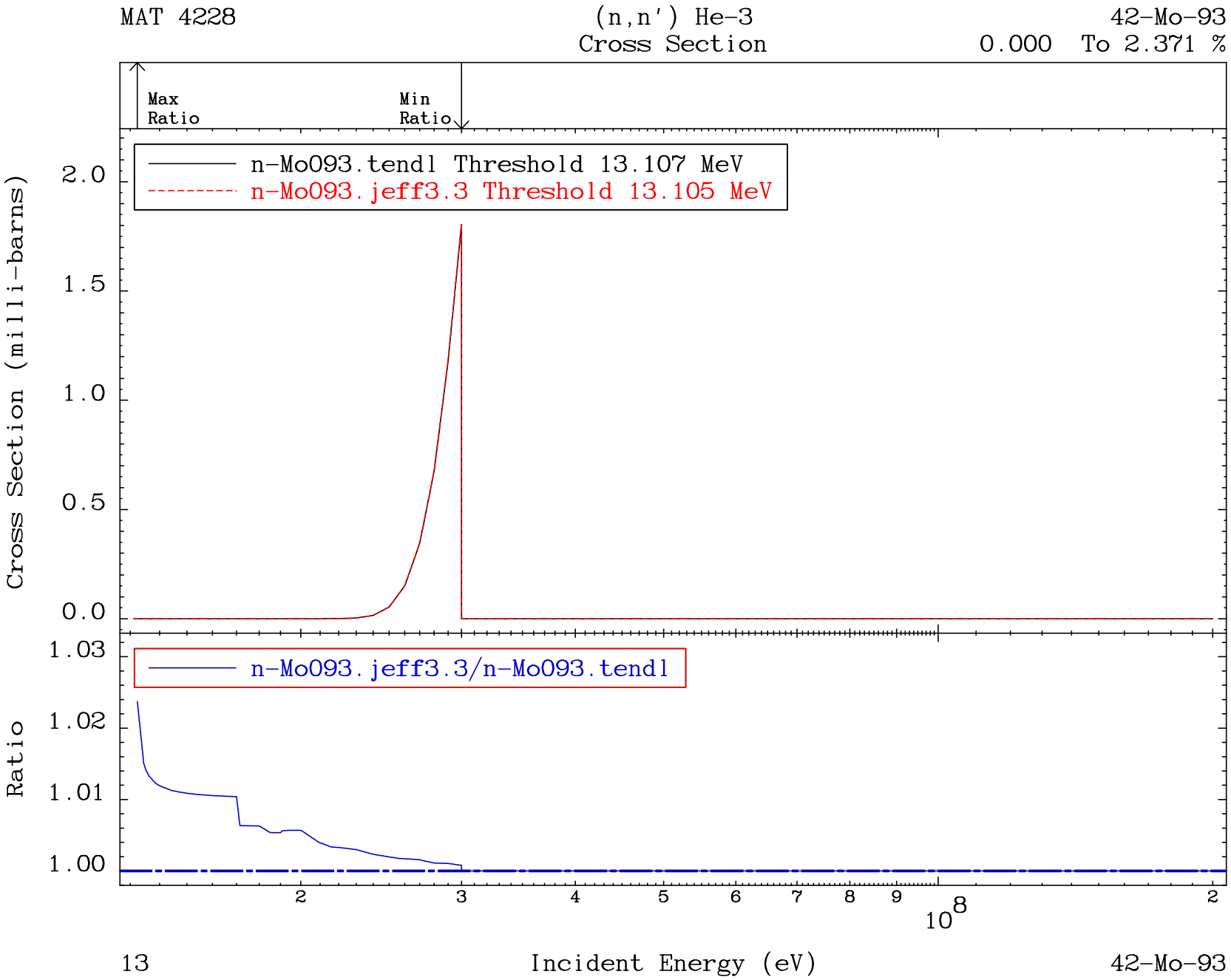

MAT 4228
(n,2n) α
Cross Section
42-Mo-93
-1.851 To 9508. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.823 MeV
n-Mo093.jeff3.3 Threshold 13.823 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
42-Mo-93

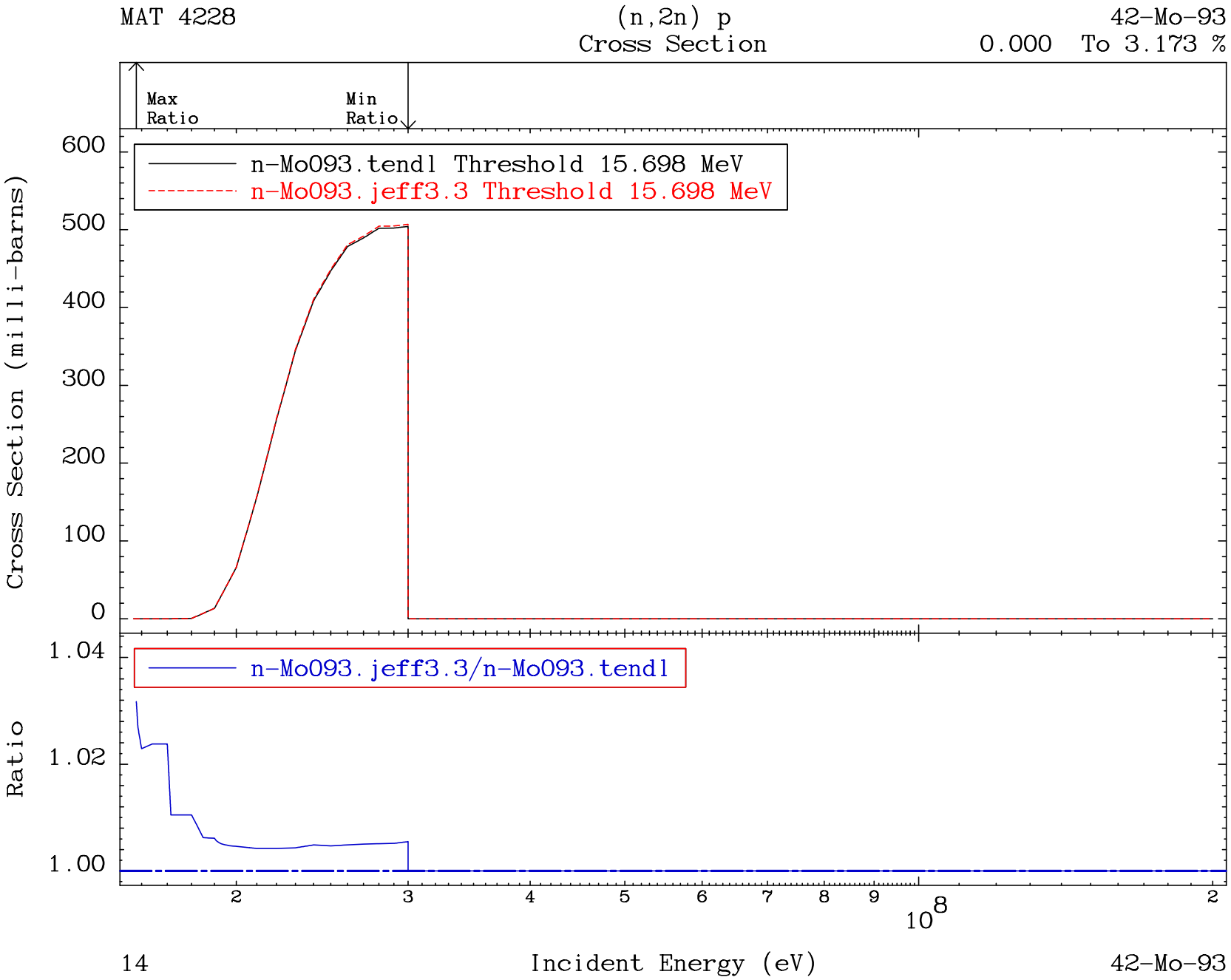

MAT 4228
(n,n') p
Cross Section
42-Mo-93
0.000 To 12.20 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.7257 MeV
n-Mo093.jeff3.3 Threshold 7.7245 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.15
1.10
1.05
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
42-Mo-93

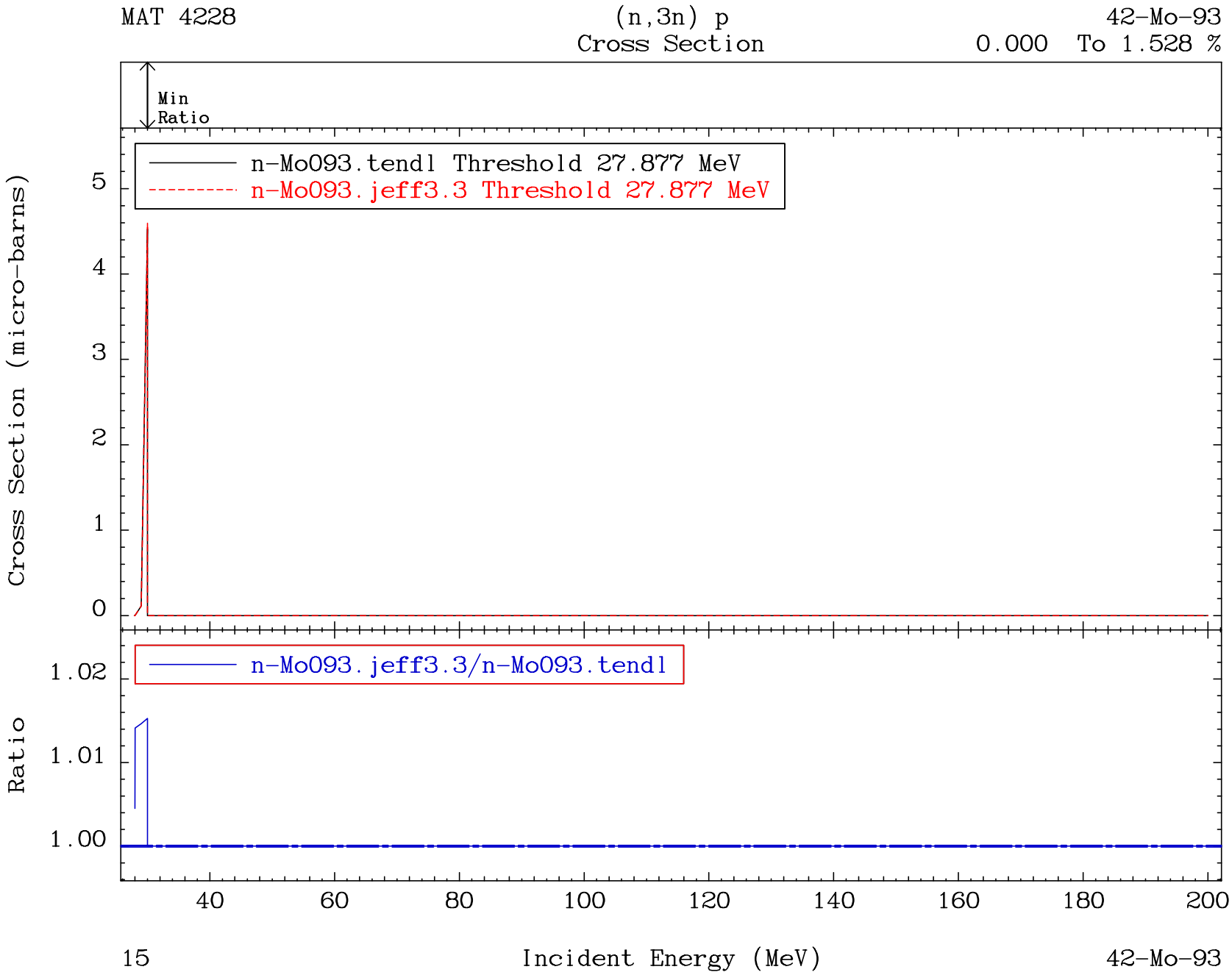

MAT 4228
(n,n') 2α
Cross Section
42-Mo-93
-30.55 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 10.668 MeV
n-Mo093.jeff3.3 Threshold 10.668 MeV
Cross Section (10^{-9} barns)
500
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
42-Mo-93

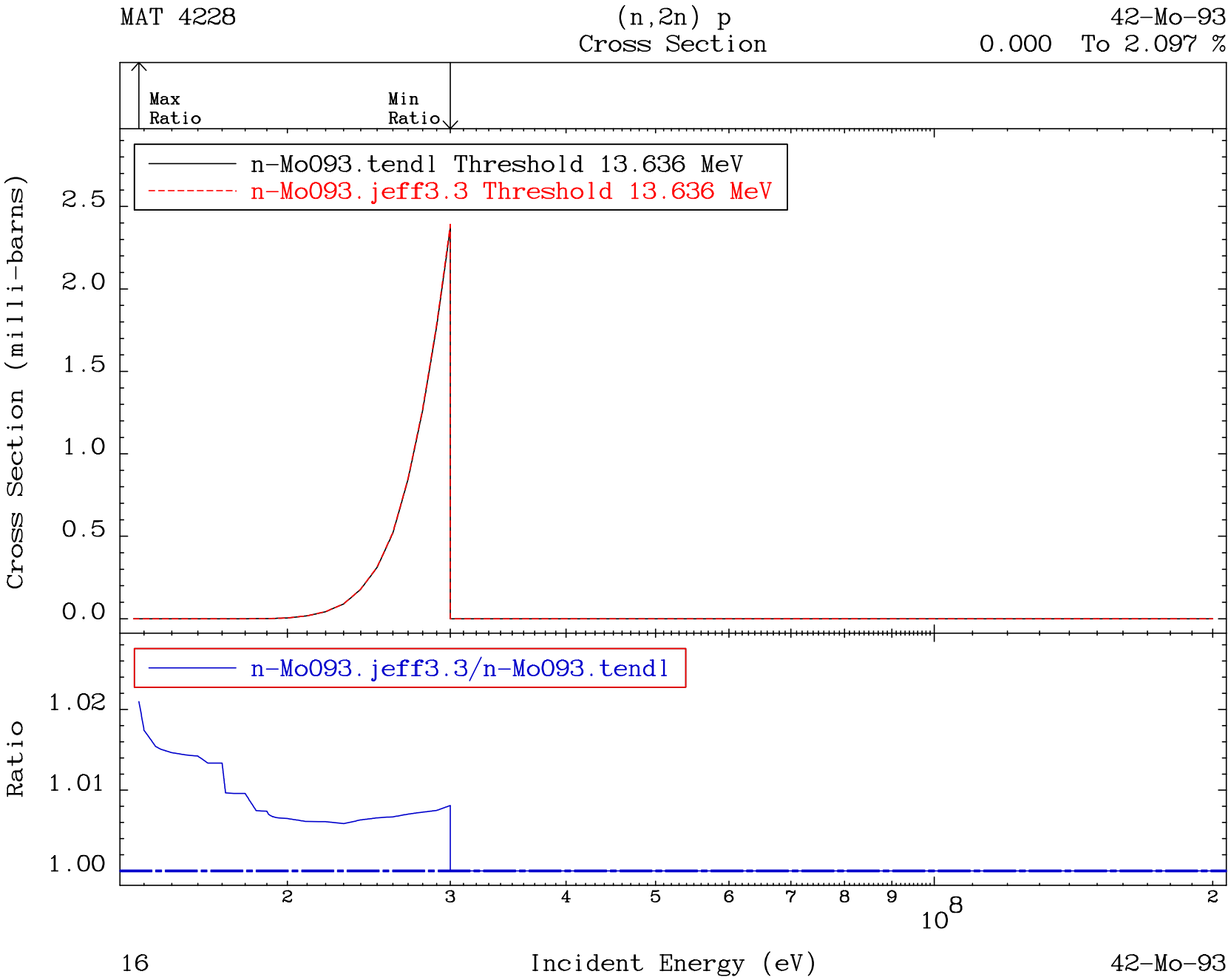

MAT 4228
(n,n') d
Cross Section
42-Mo-93
0.000 To 3.055 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.449 MeV
n-Mo093.jeff3.3 Threshold 13.449 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
42-Mo-93

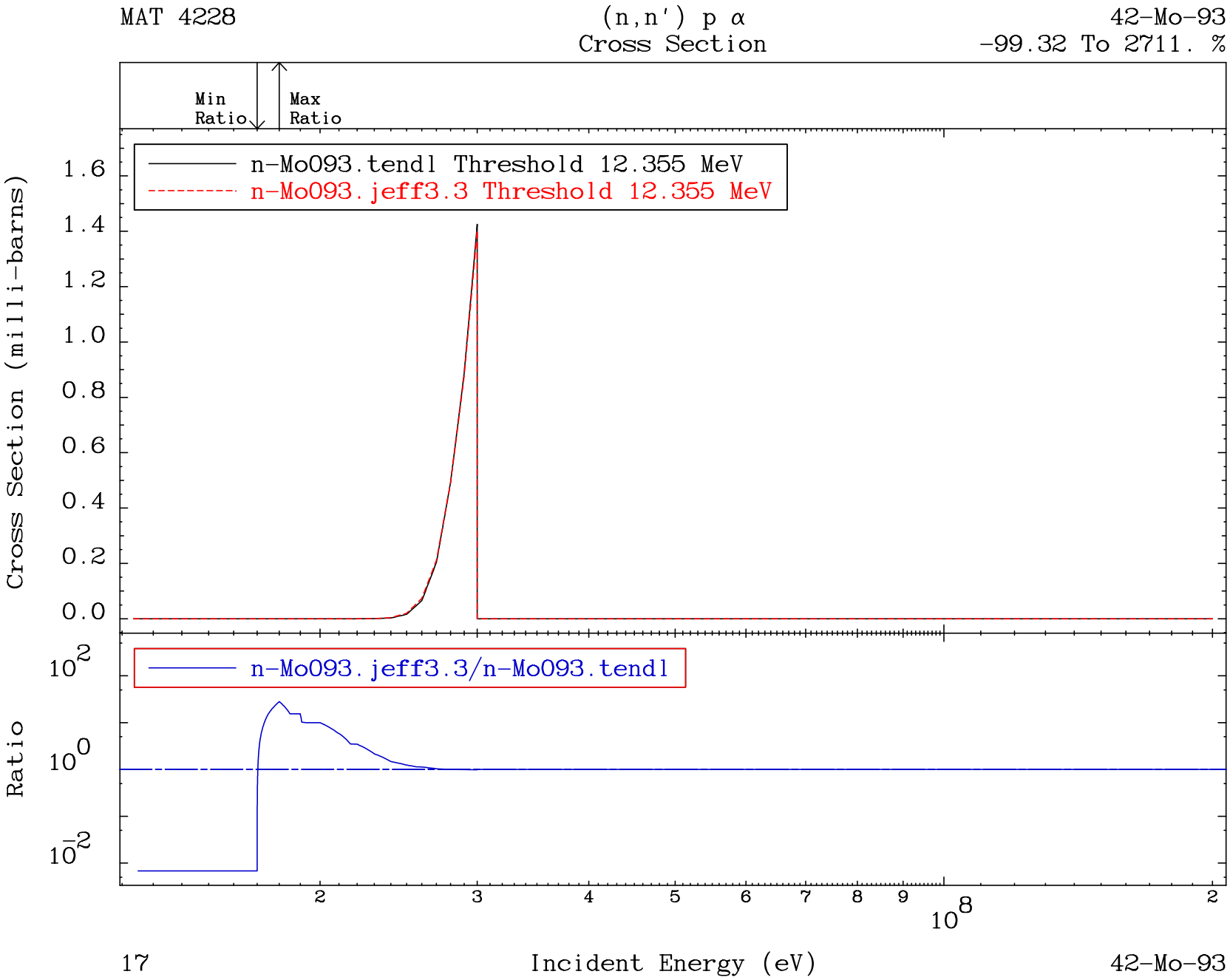

MAT 4228
(n,n') t
Cross Section
42-Mo-93
0.000 To 2.489 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 19.303 MeV
n-Mo093.jeff3.3 Threshold 19.303 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
42-Mo-93

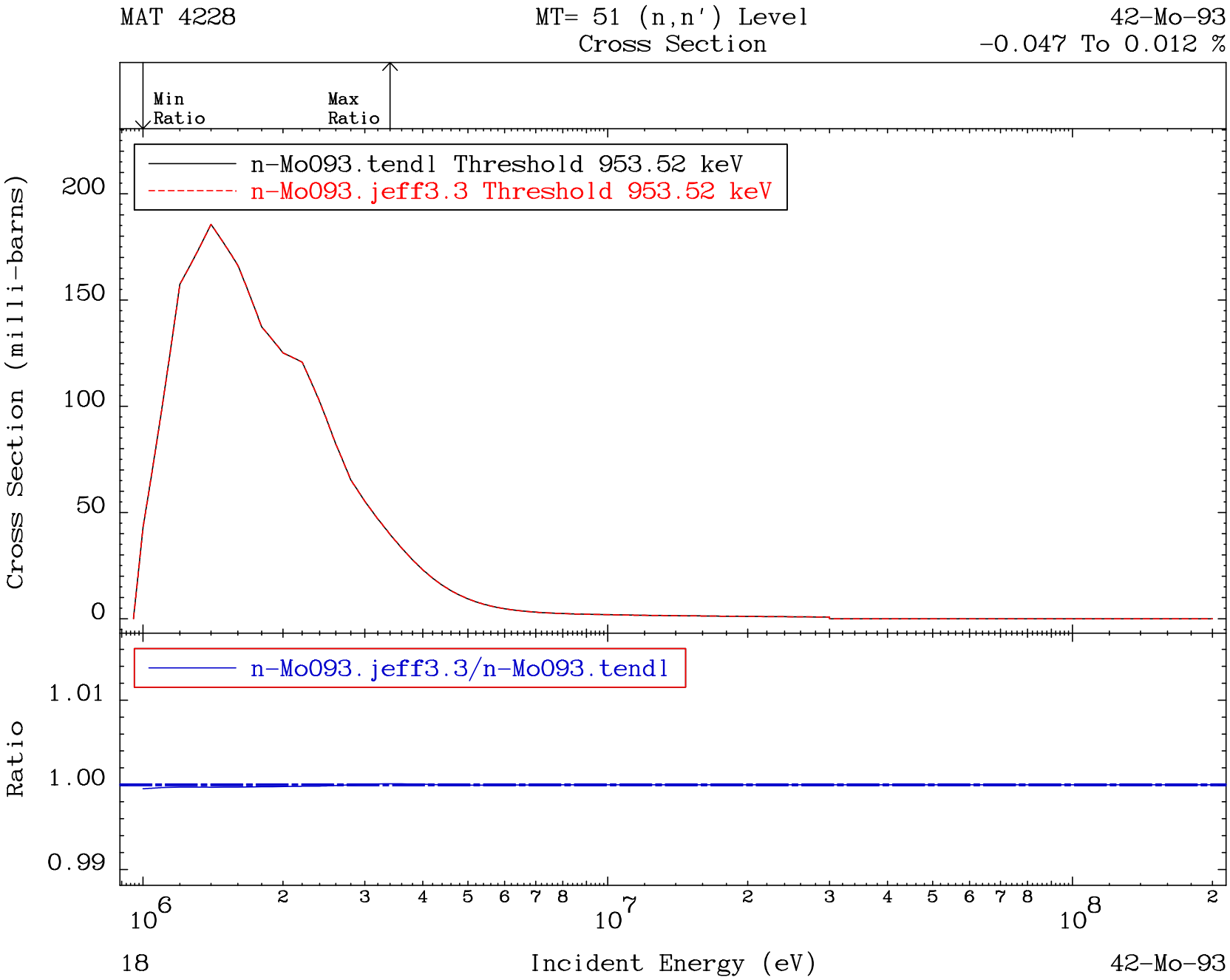

MAT 4228
(n,n') He-3
Cross Section
42-Mo-93
0.000 To 2.371 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.107 MeV
n-Mo093.jeff3.3 Threshold 13.105 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
42-Mo-93

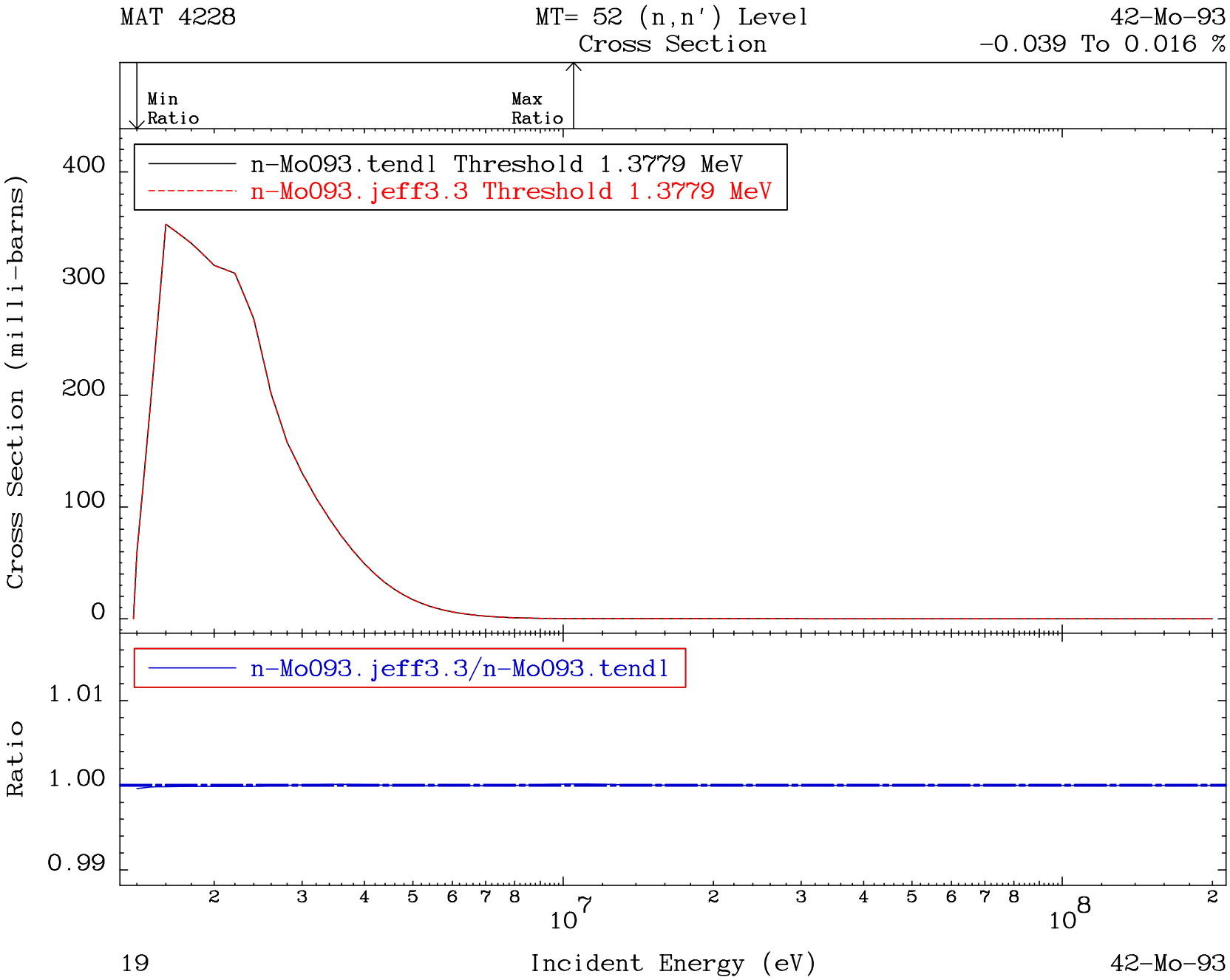

MAT 4228
(n,2n) p
Cross Section
42-Mo-93
0.000 To 3.173 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 15.698 MeV
n-Mo093.jeff3.3 Threshold 15.698 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
42-Mo-93

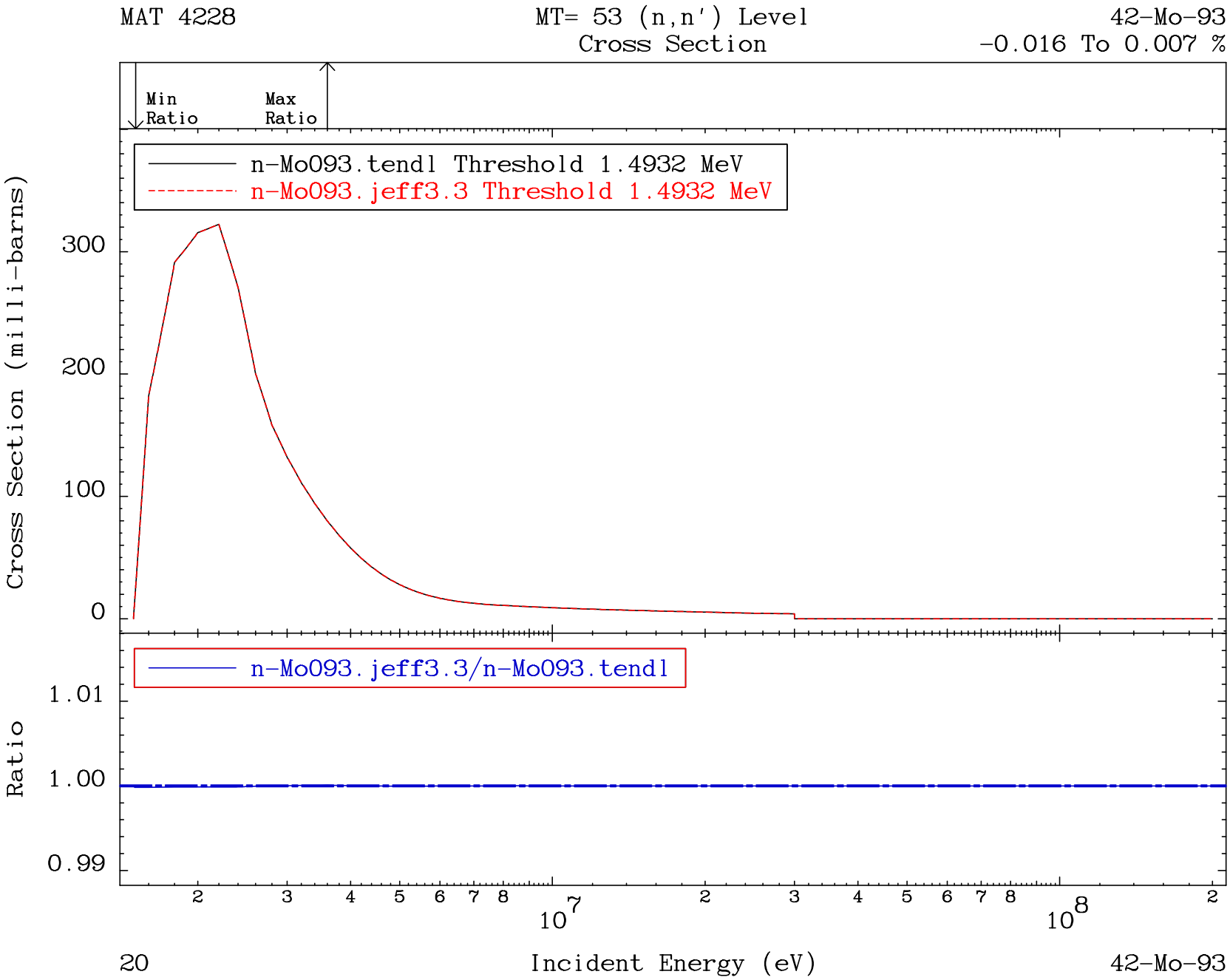

MAT 4228
(n,3n) p
Cross Section
42-Mo-93
0.000 To 1.528 %
Min
Ratio
n-Mo093.tendl Threshold 27.877 MeV
n-Mo093.jeff3.3 Threshold 27.877 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.00
1.01
1.02
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
42-Mo-93

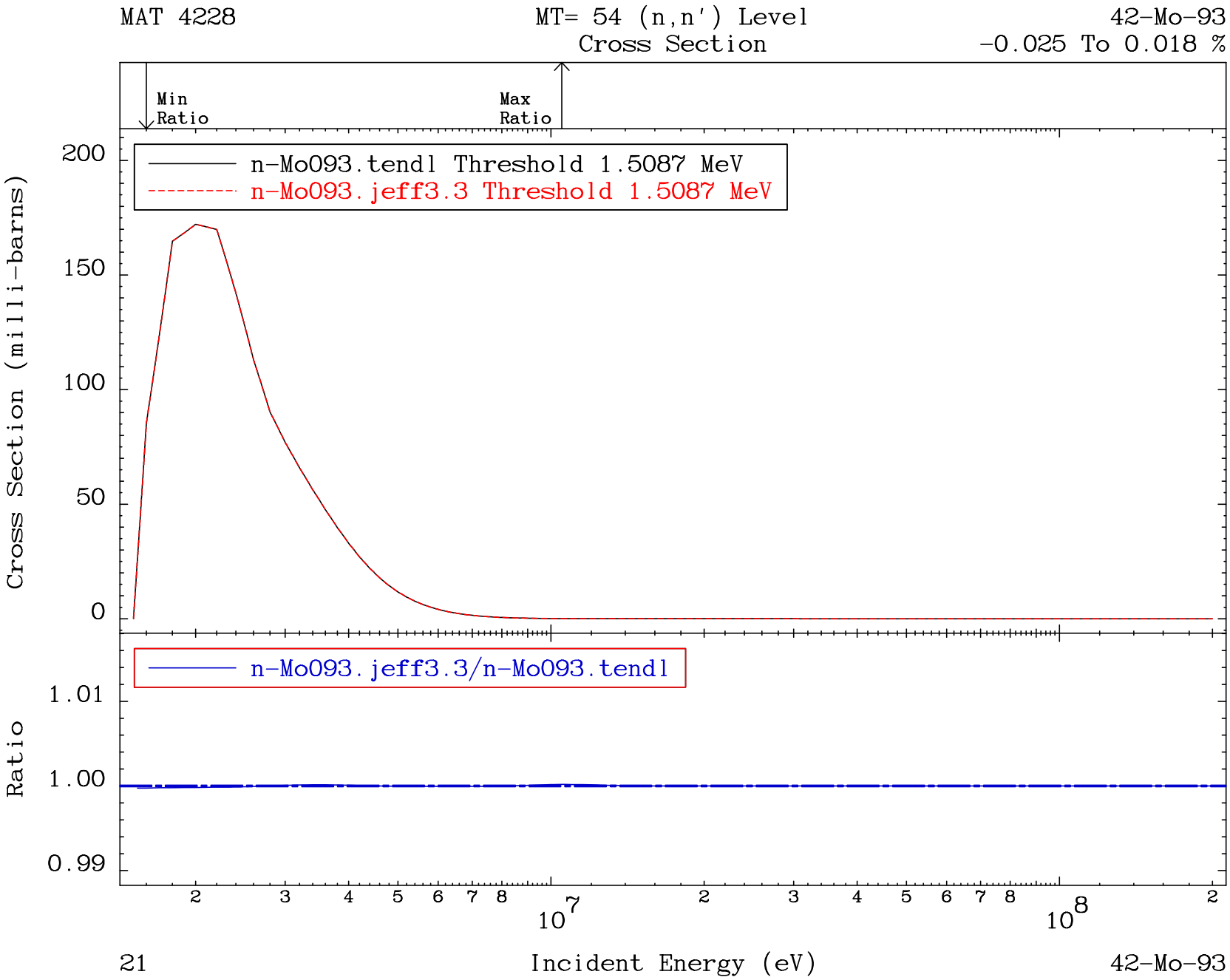

MAT 4228
(n,2n) p
Cross Section
42-Mo-93
0.000 To 2.097 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.636 MeV
n-Mo093.jeff3.3 Threshold 13.636 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
42-Mo-93

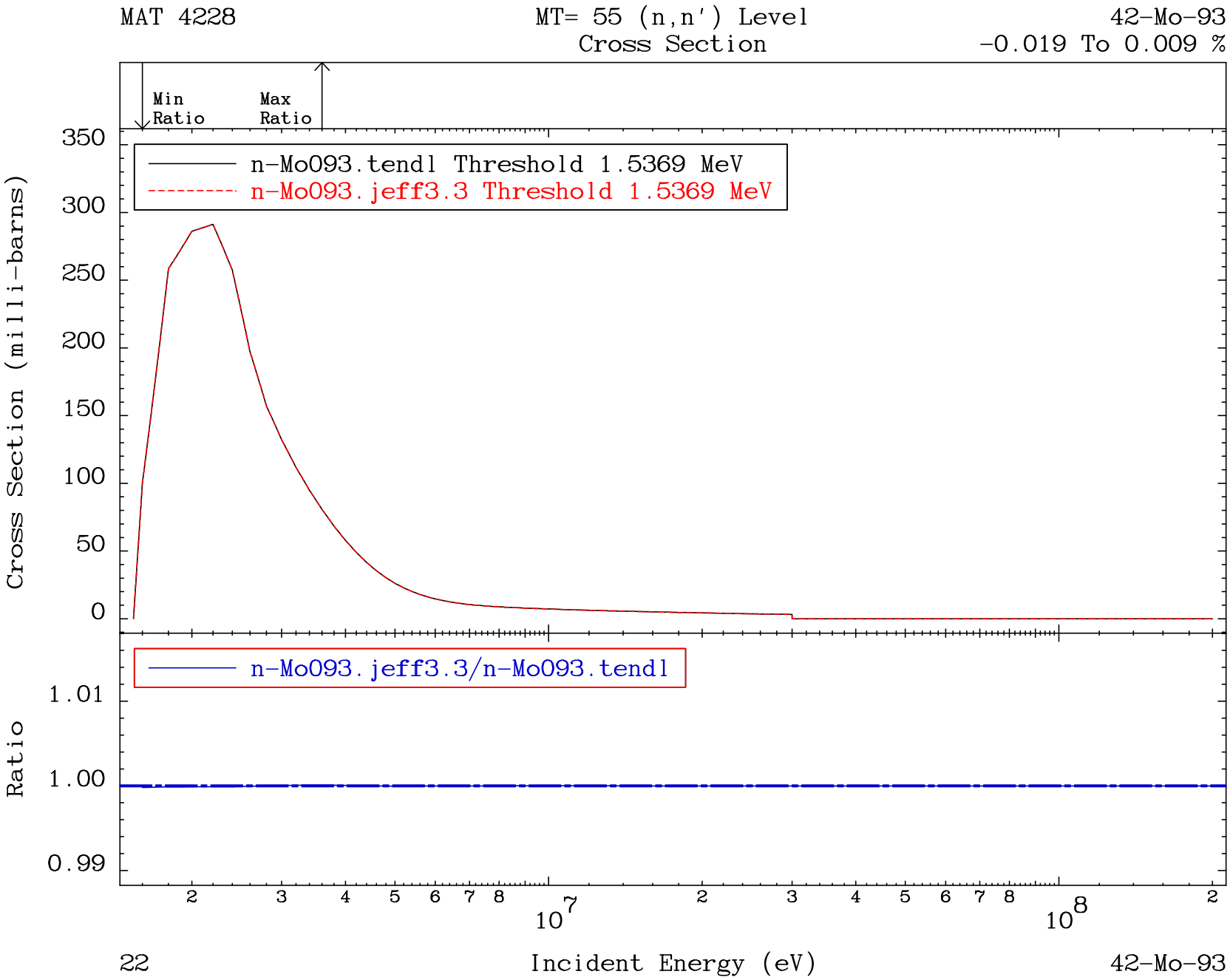

MAT 4228
(n,n') p α
Cross Section
42-Mo-93
-99.32 To 2711. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 12.355 MeV
n-Mo093.jeff3.3 Threshold 12.355 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
42-Mo-93

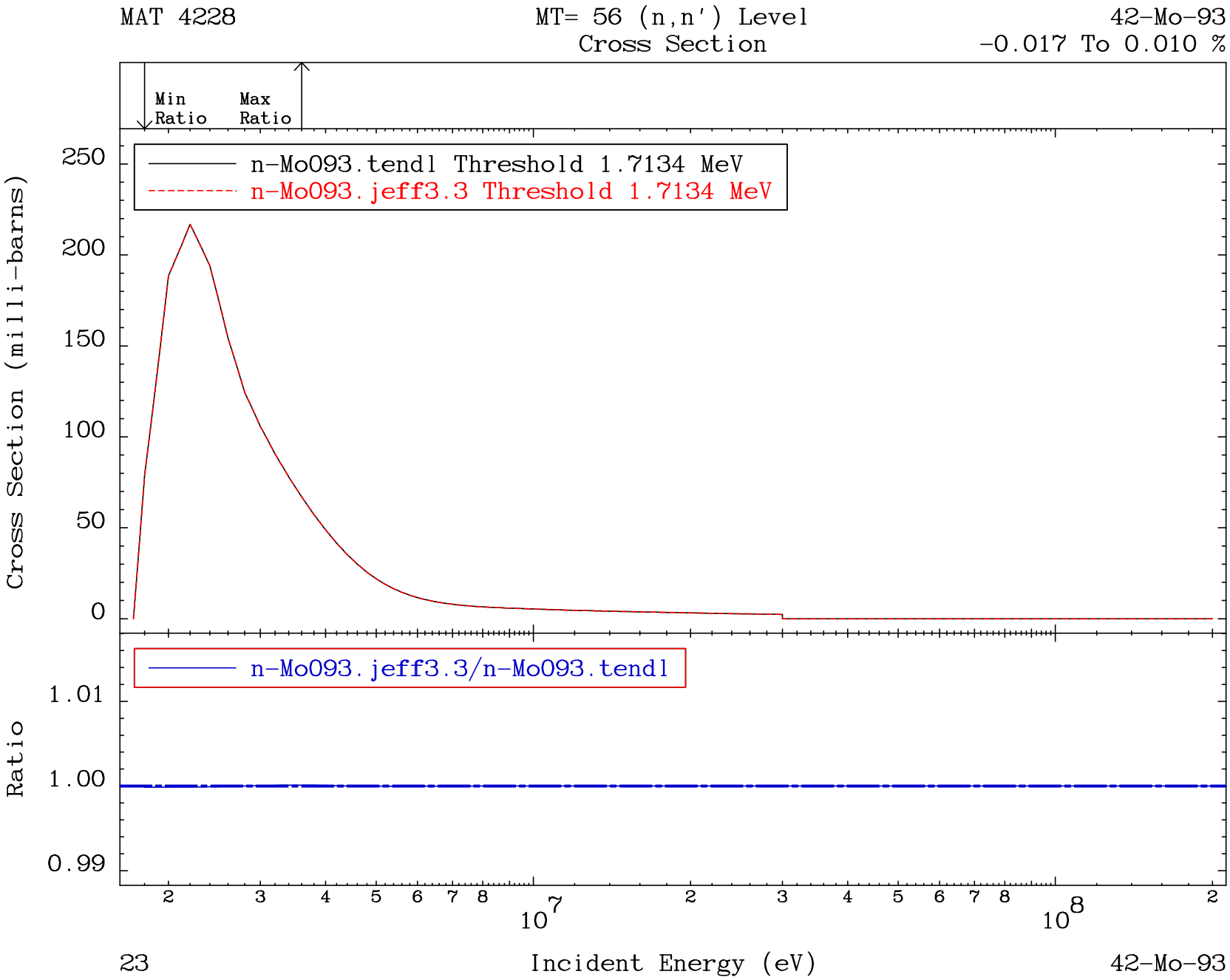

MAT 4228
MT= 51 (n,n') Level
Cross Section
42-Mo-93
-0.047 To 0.012 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 953.52 keV
n-Mo093.jeff3.3 Threshold 953.52 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
18
Incident Energy (eV)
42-Mo-93

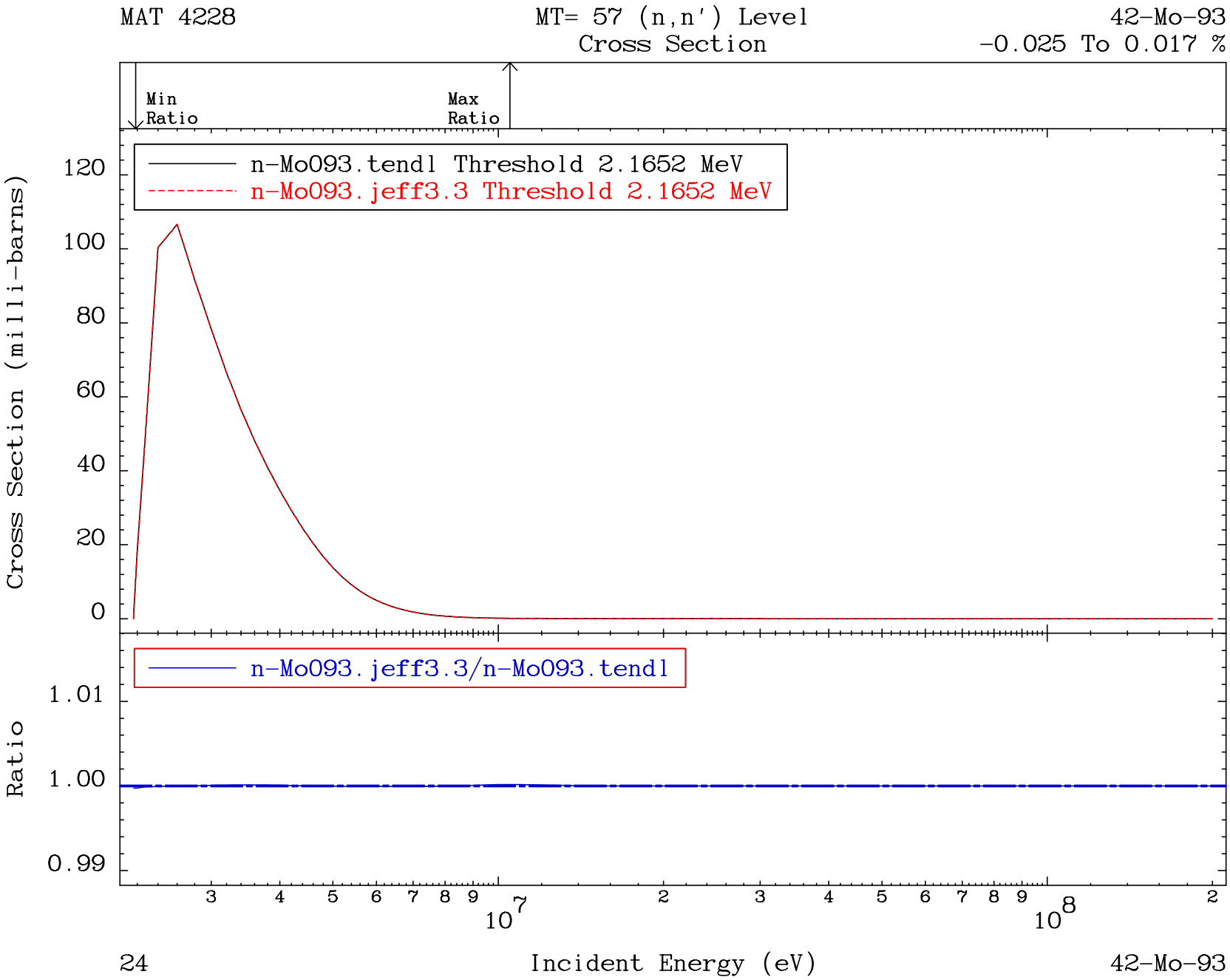

MAT 4228
MT= 52 (n,n') Level
Cross Section
42-Mo-93
-0.039 To 0.016 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 1.3779 MeV
n-Mo093.jeff3.3 Threshold 1.3779 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
42-Mo-93

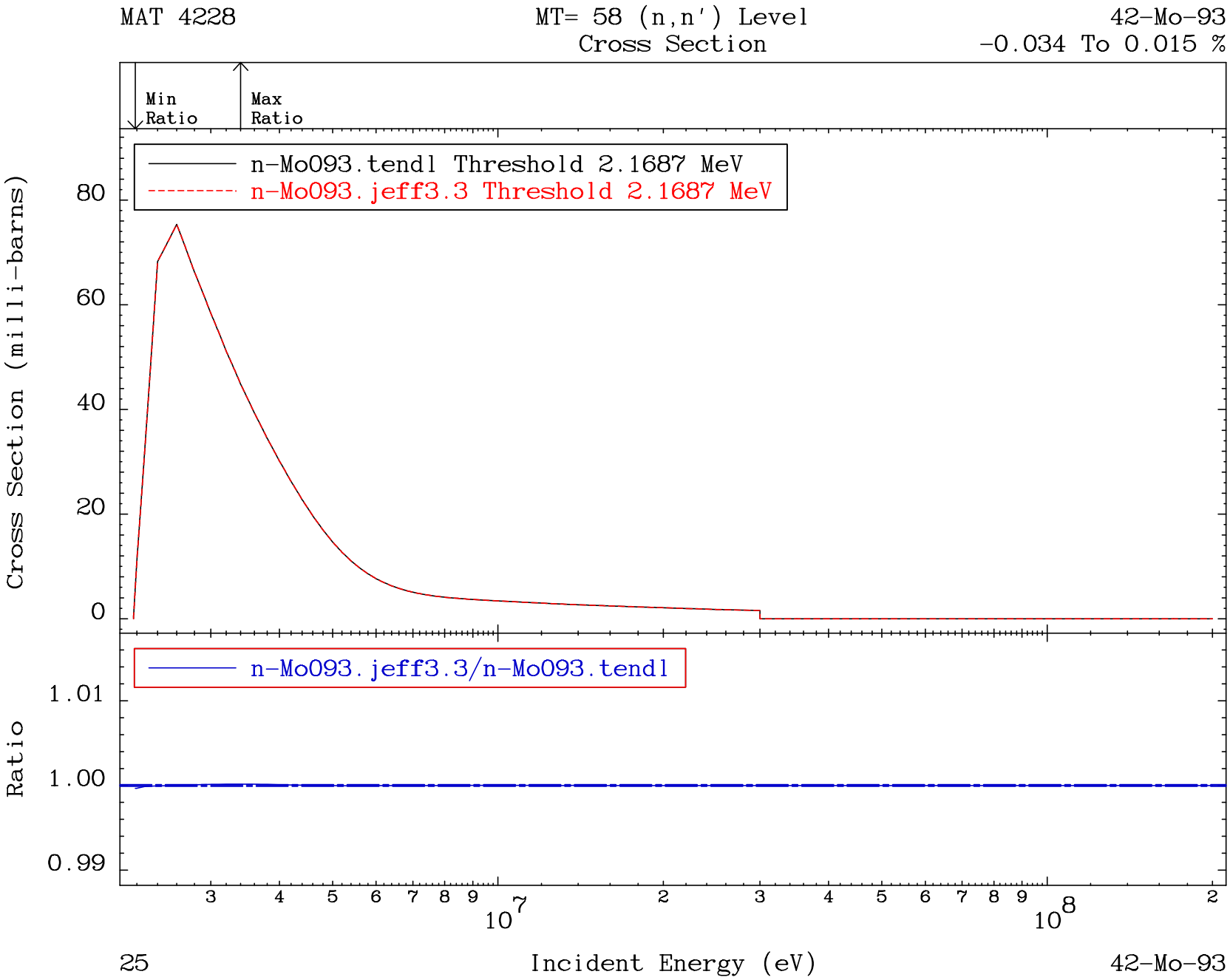

MAT 4228
MT= 53 (n,n') Level
Cross Section
42-Mo-93
-0.016 To 0.007 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 1.4932 MeV
n-Mo093.jeff3.3 Threshold 1.4932 MeV
Cross Section (milli-barns)
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
42-Mo-93

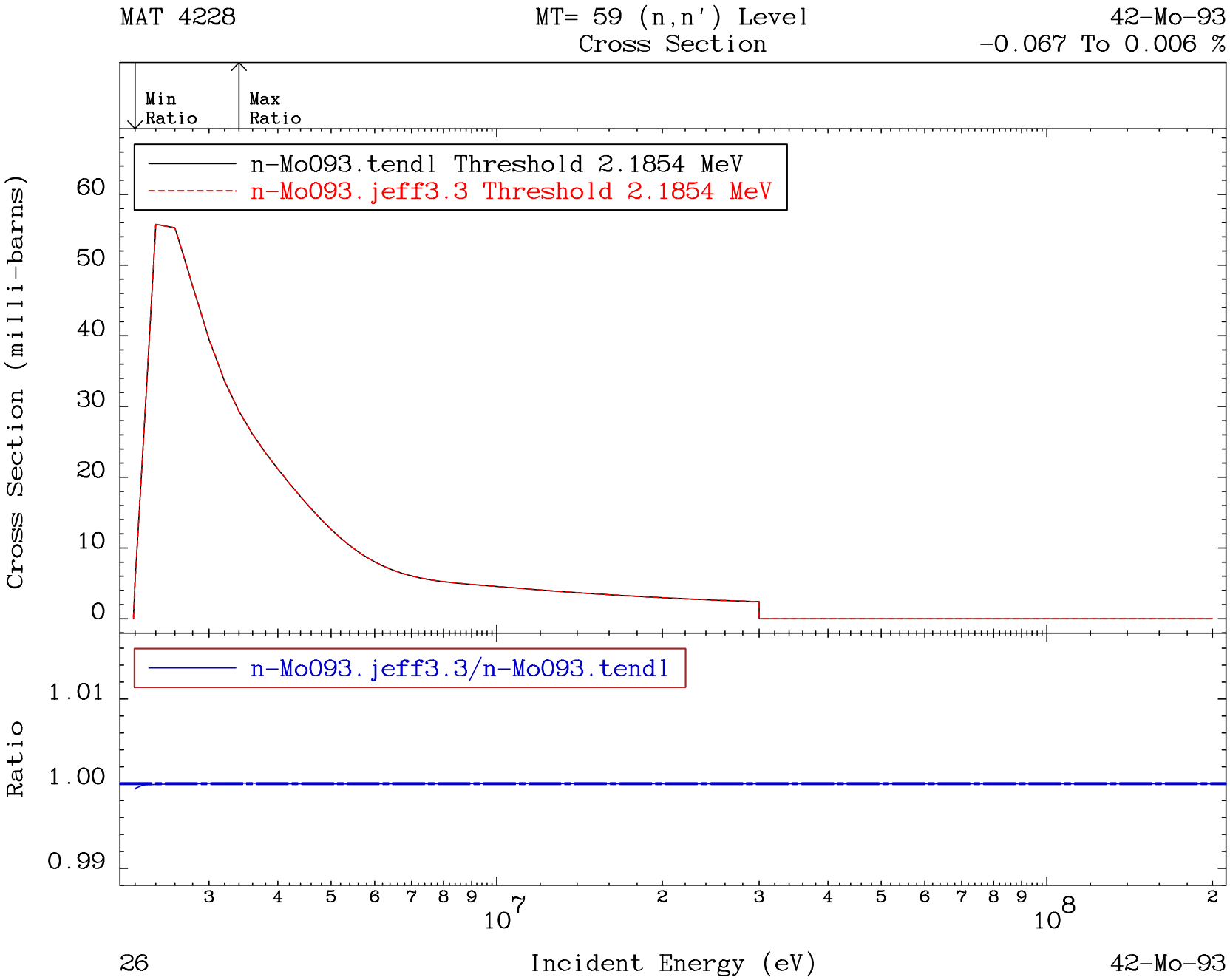

MAT 4228
MT= 54 (n,n') Level
Cross Section
42-Mo-93
-0.025 To 0.018 %
Min
Ratio
Max
Ratio
n-Mo093.tendl Threshold 1.5087 MeV
n-Mo093.jeff3.3 Threshold 1.5087 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
21
Incident Energy (eV)
42-Mo-93

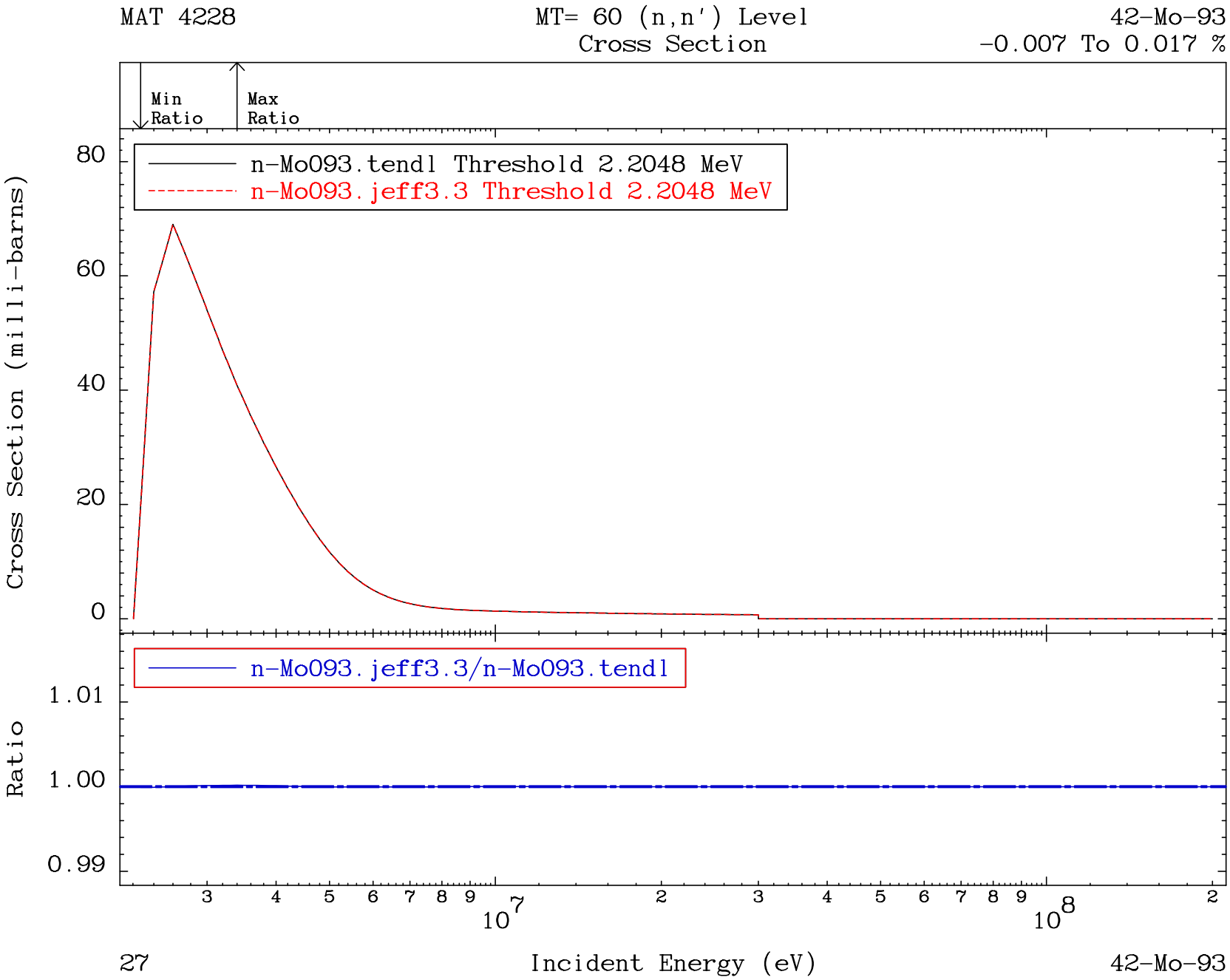

MAT 4228
MT= 55 (n,n') Level
Cross Section
42-Mo-93
-0.019 To 0.009 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 1.5369 MeV
n-Mo093.jeff3.3 Threshold 1.5369 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
42-Mo-93

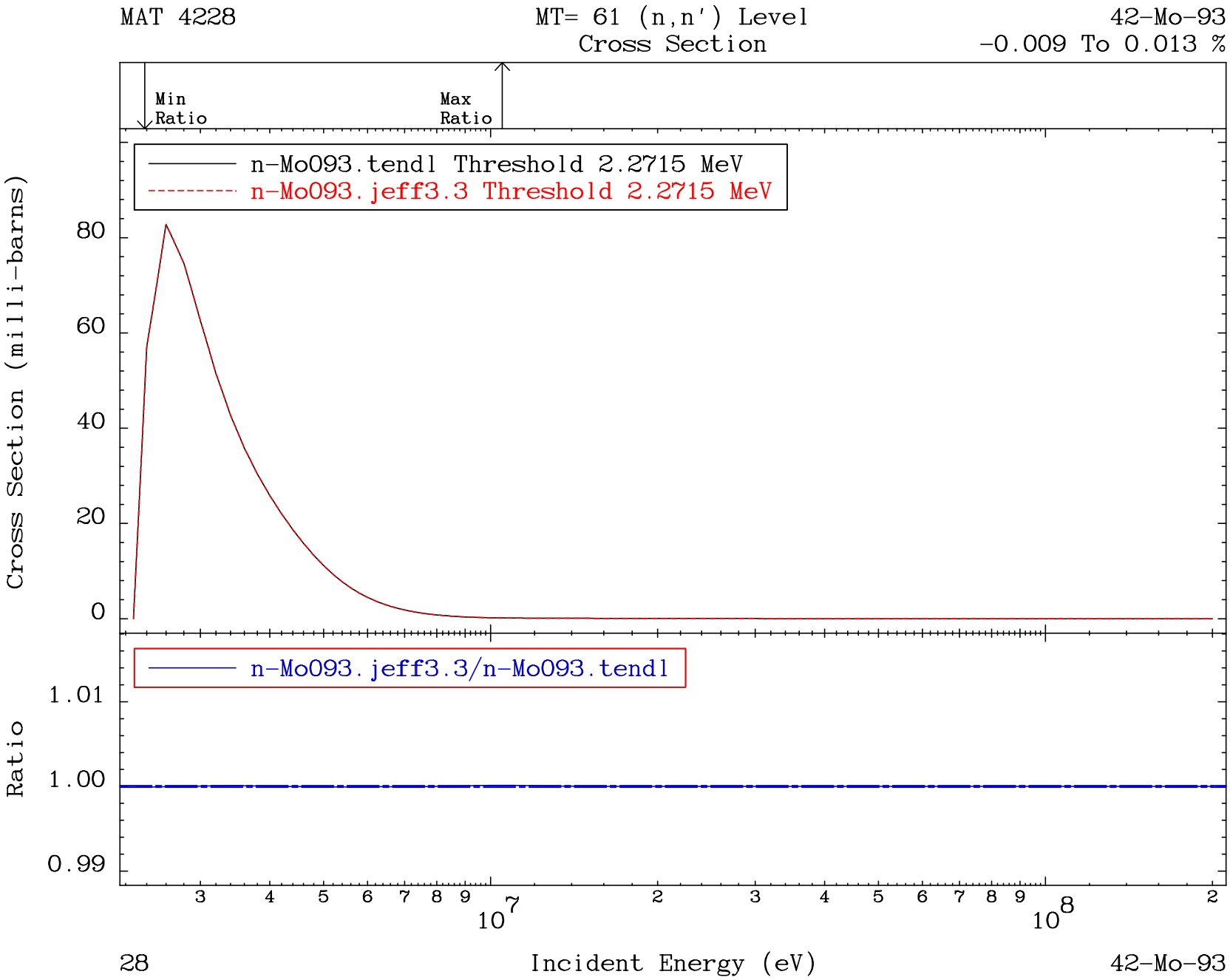

MAT 4228
MT= 56 (n,n') Level
Cross Section
42-Mo-93
-0.017 To 0.010 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 1.7134 MeV
n-Mo093.jeff3.3 Threshold 1.7134 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
42-Mo-93

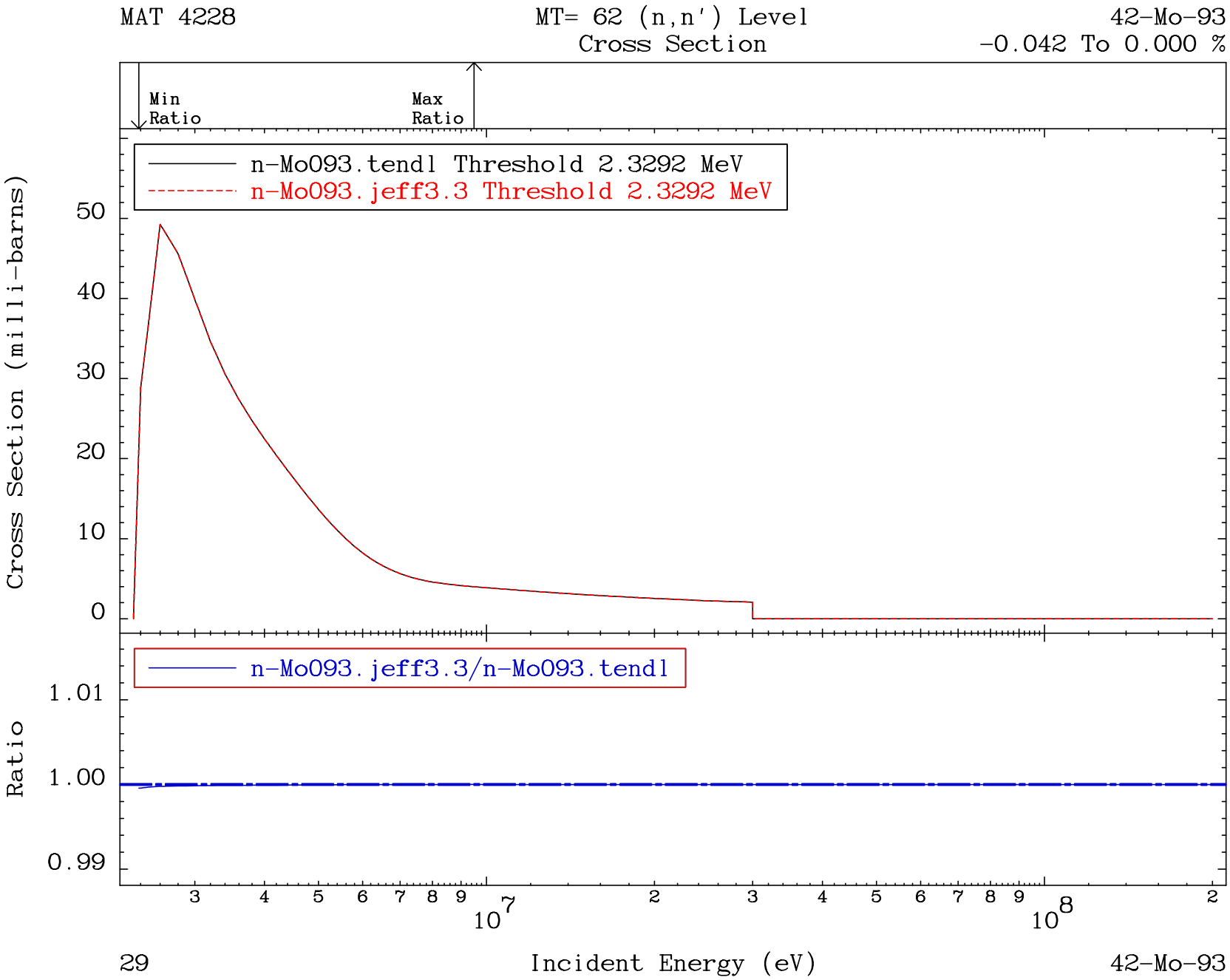

MAT 4228
MT= 57 (n,n') Level
Cross Section
42-Mo-93
-0.025 To 0.017 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.1652 MeV
n-Mo093.jeff3.3 Threshold 2.1652 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
42-Mo-93

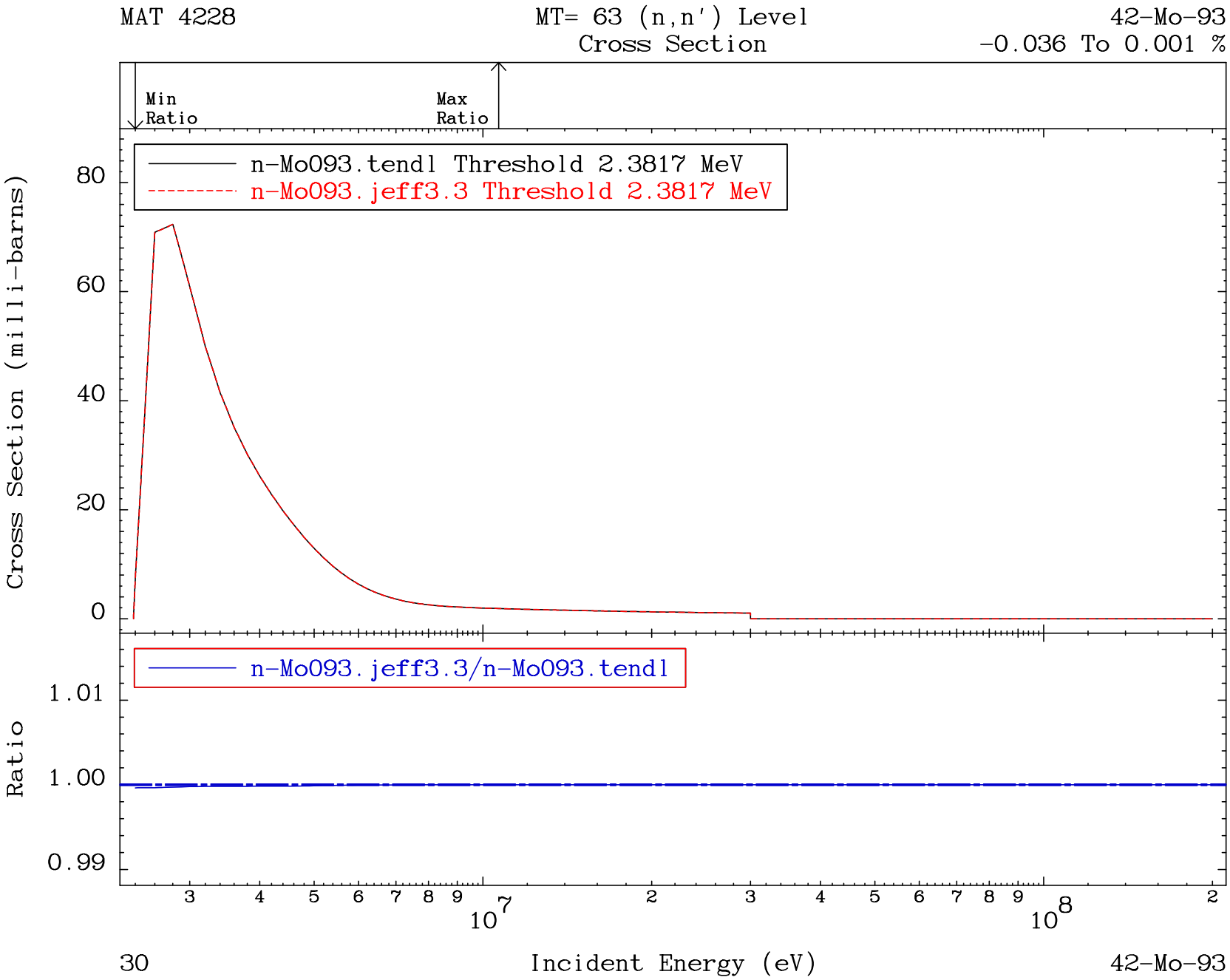

MAT 4228
MT= 58 (n,n') Level
Cross Section
42-Mo-93
-0.034 To 0.015 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.1687 MeV
n-Mo093.jeff3.3 Threshold 2.1687 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
42-Mo-93

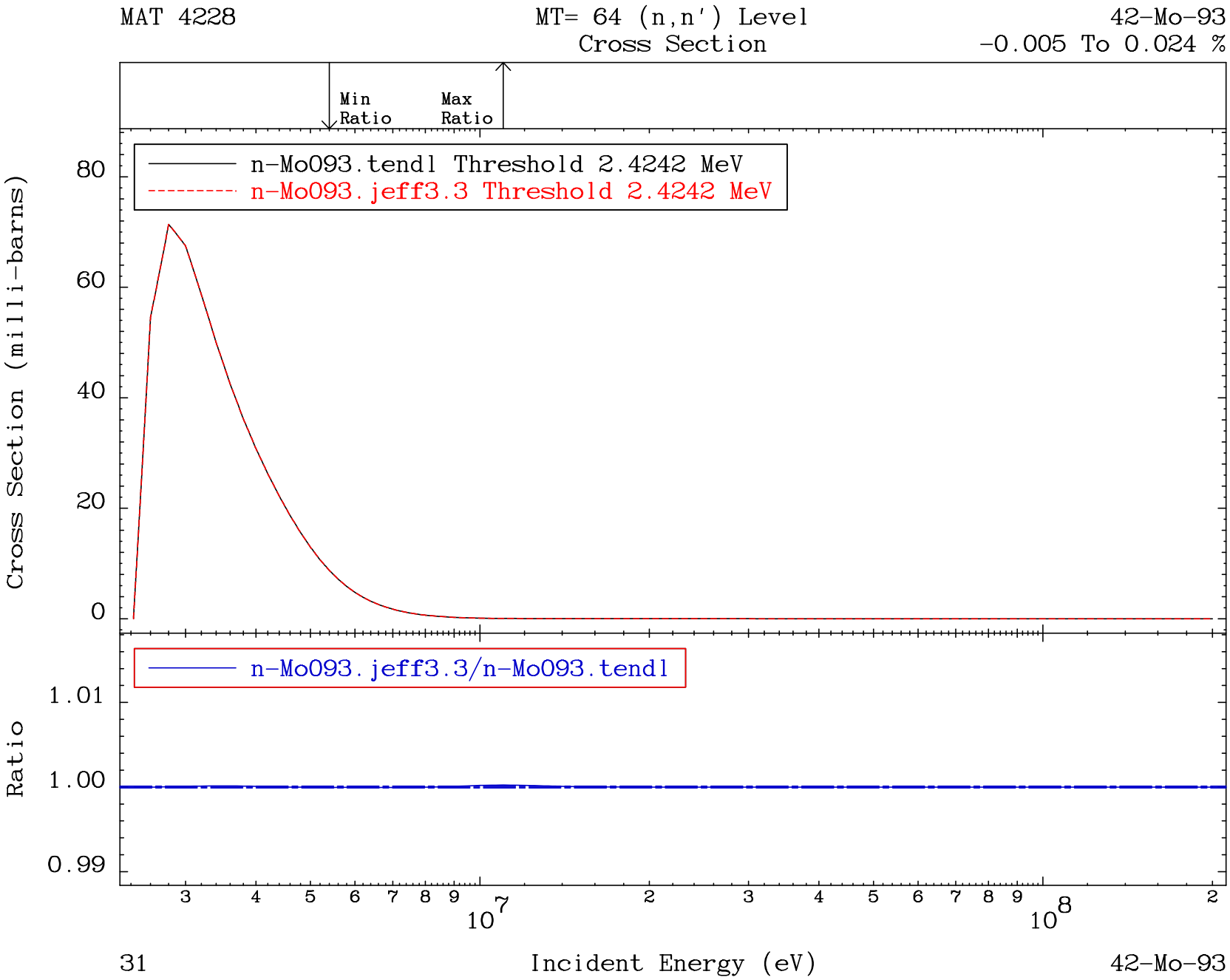

MAT 4228
MT= 59 (n,n') Level
Cross Section
42-Mo-93
-0.067 To 0.006 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.1854 MeV
n-Mo093.jeff3.3 Threshold 2.1854 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
42-Mo-93

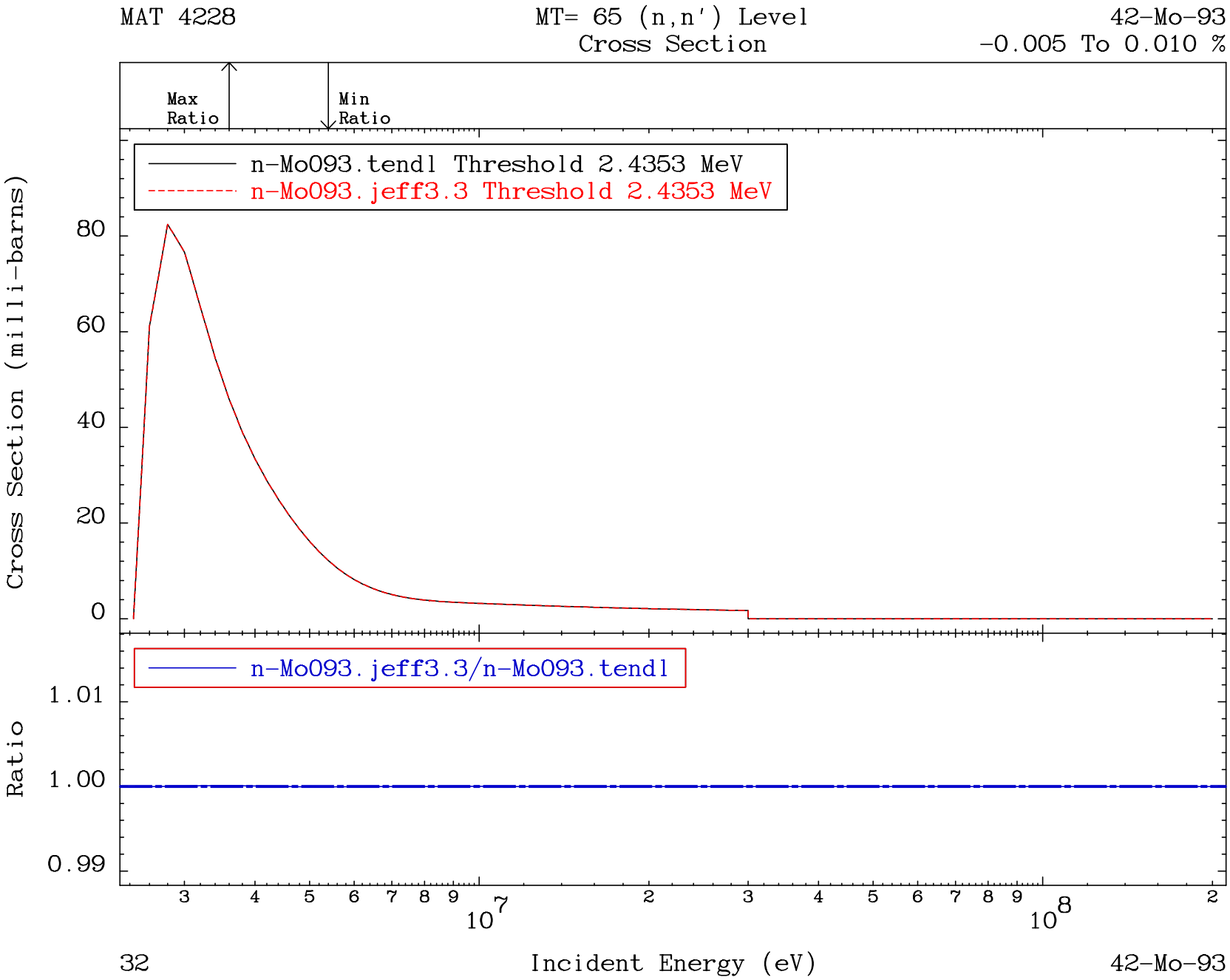

MAT 4228
MT= 60 (n,n') Level
Cross Section
42-Mo-93
-0.007 To 0.017 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.2048 MeV
n-Mo093.jeff3.3 Threshold 2.2048 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
42-Mo-93

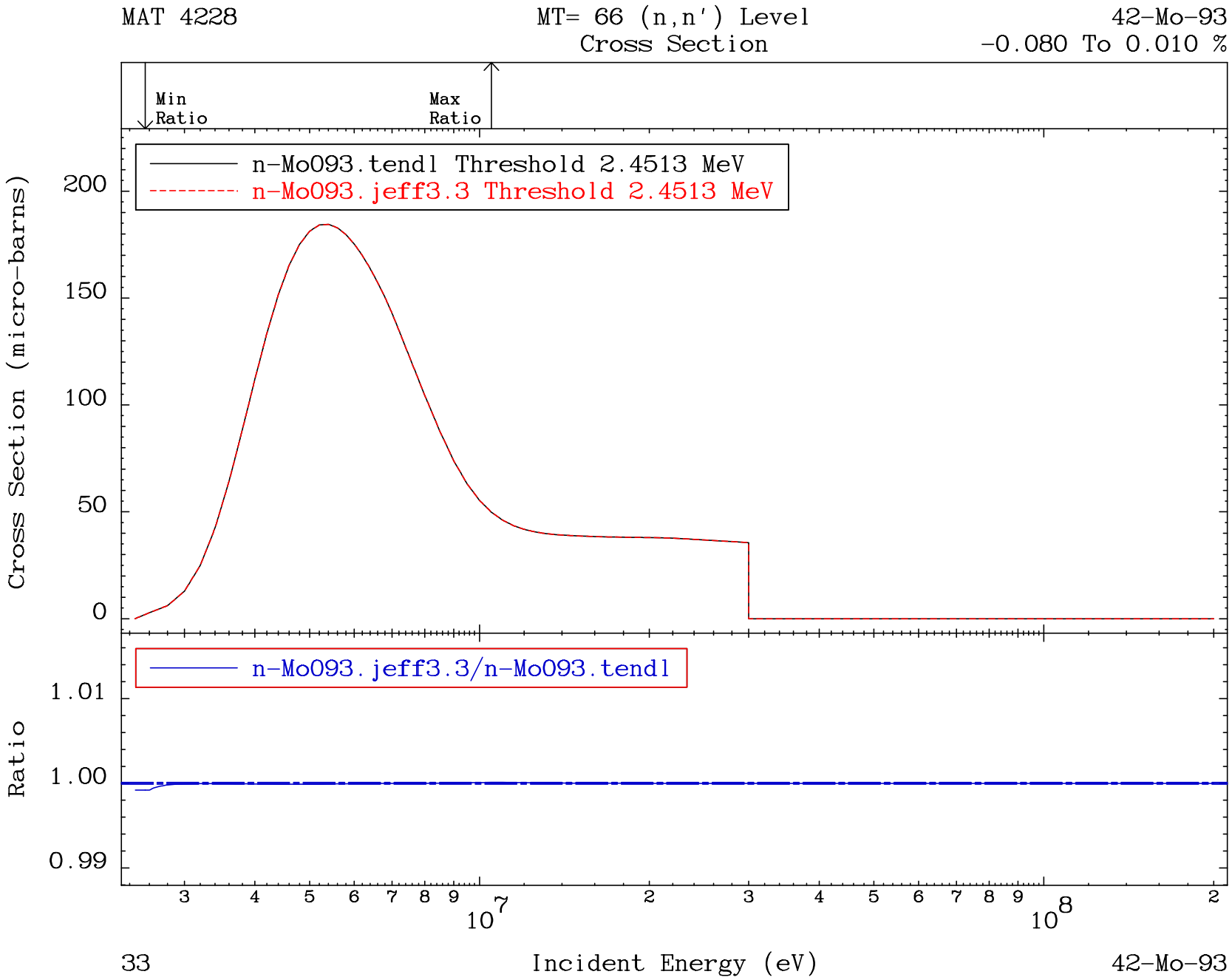

MAT 4228
MT= 61 (n,n') Level
Cross Section
42-Mo-93
-0.009 To 0.013 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.2715 MeV
n-Mo093.jeff3.3 Threshold 2.2715 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
42-Mo-93

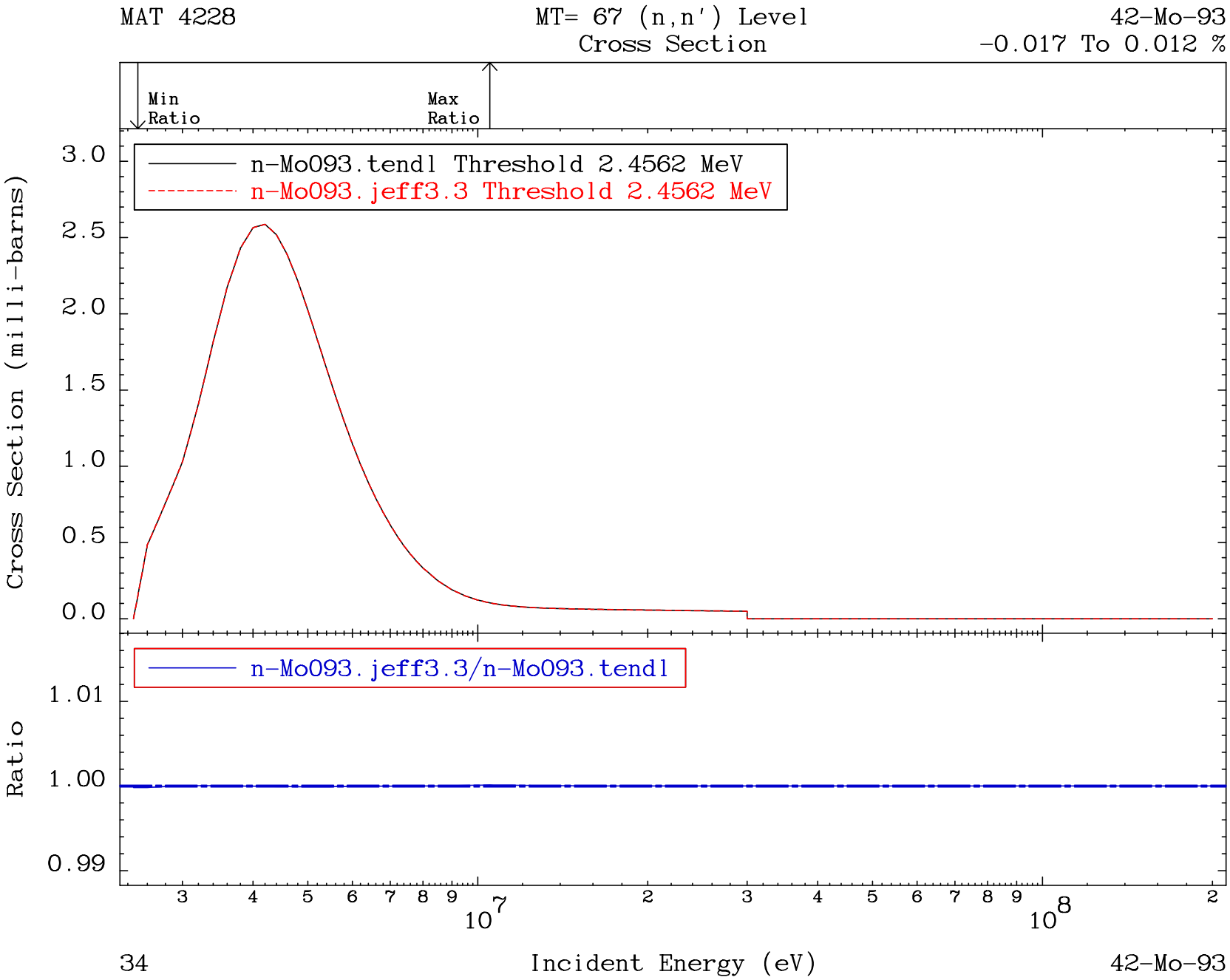

MAT 4228
MT= 62 (n,n') Level
Cross Section
42-Mo-93
-0.042 To 0.000 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.3292 MeV
n-Mo093.jeff3.3 Threshold 2.3292 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
42-Mo-93

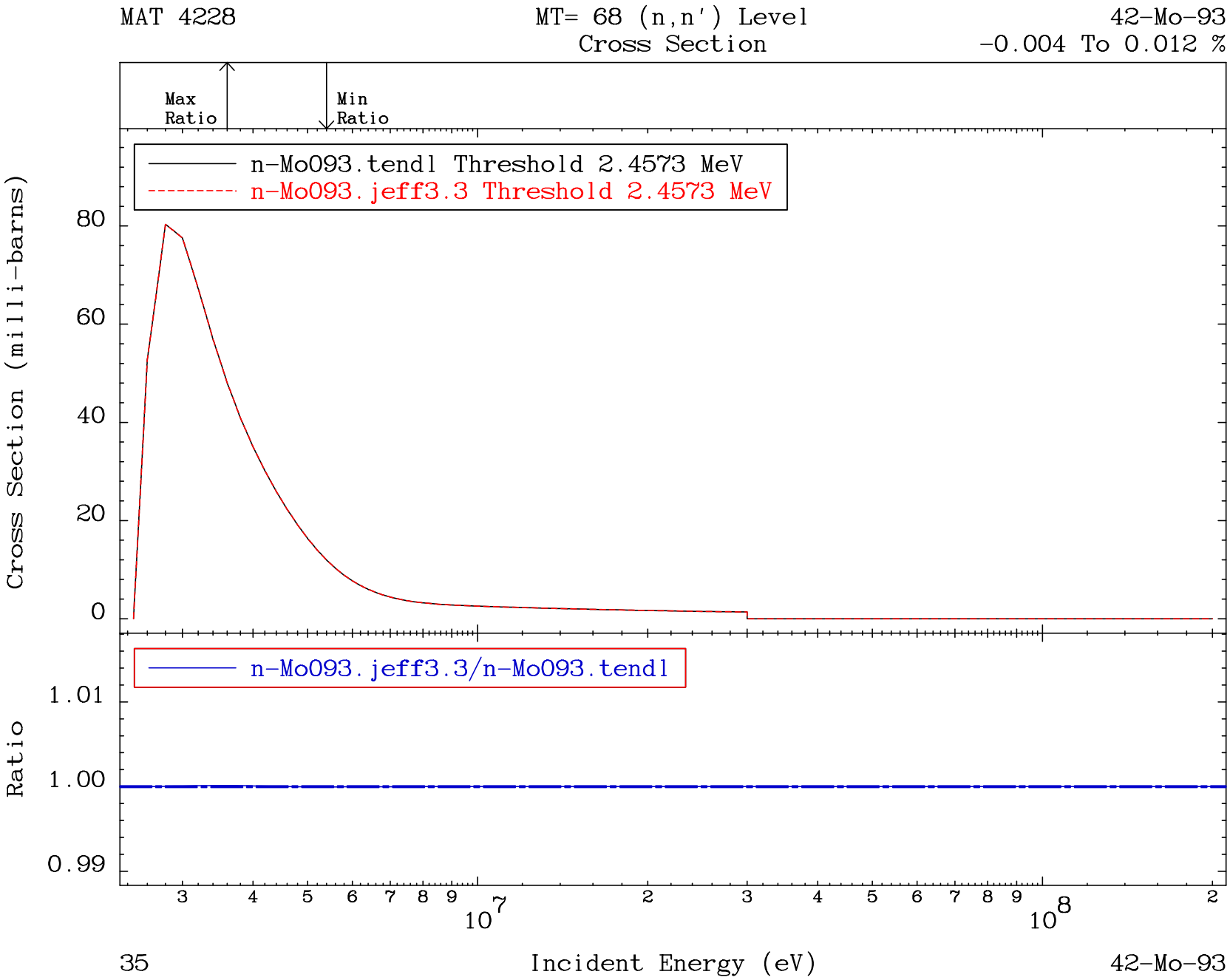

MAT 4228
MT= 63 (n,n') Level
Cross Section
42-Mo-93
-0.036 To 0.001 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.3817 MeV
n-Mo093.jeff3.3 Threshold 2.3817 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
42-Mo-93

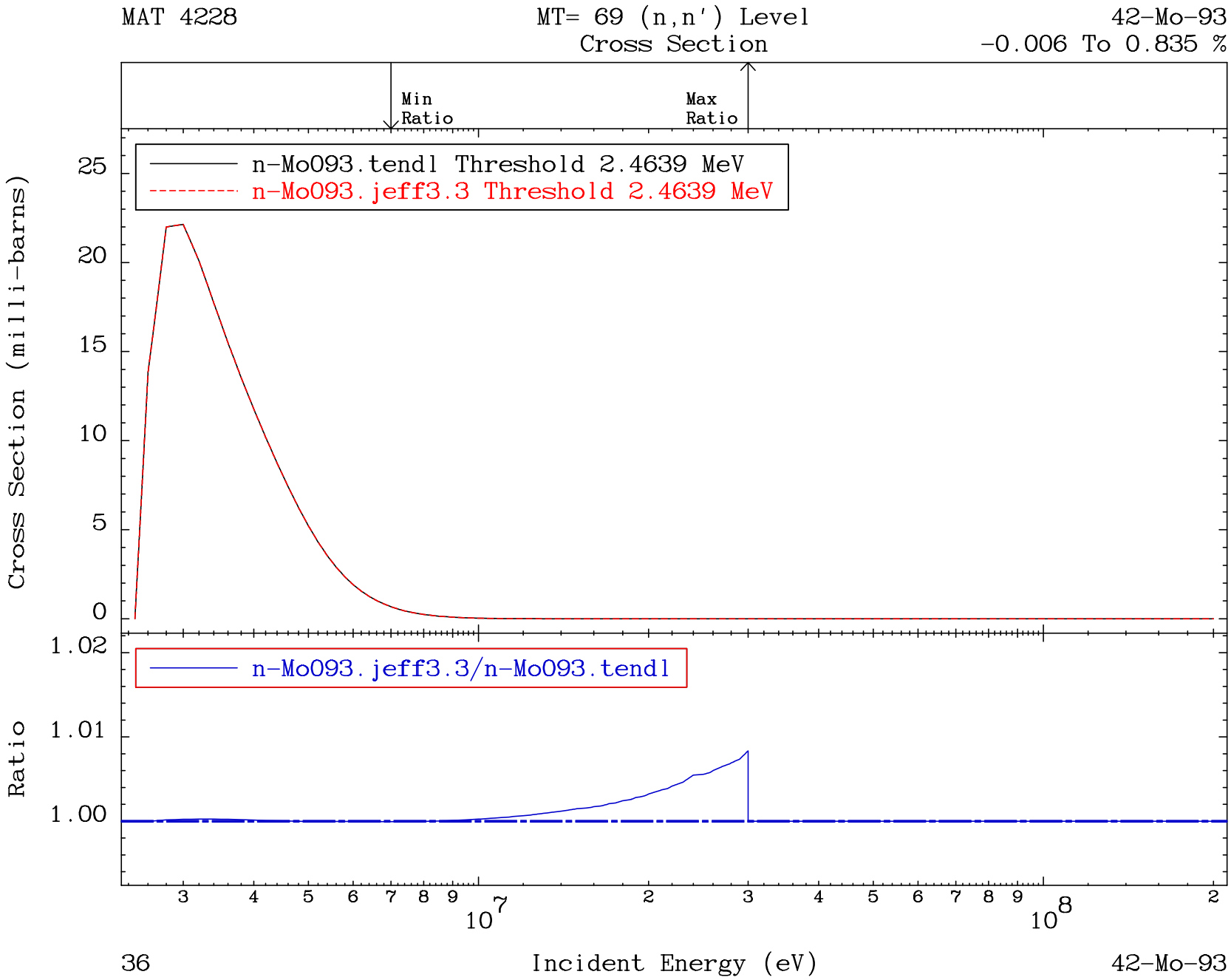

MAT 4228
MT= 64 (n,n') Level
Cross Section
42-Mo-93
-0.005 To 0.024 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4242 MeV
n-Mo093.jeff3.3 Threshold 2.4242 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
31
Incident Energy (eV)
42-Mo-93

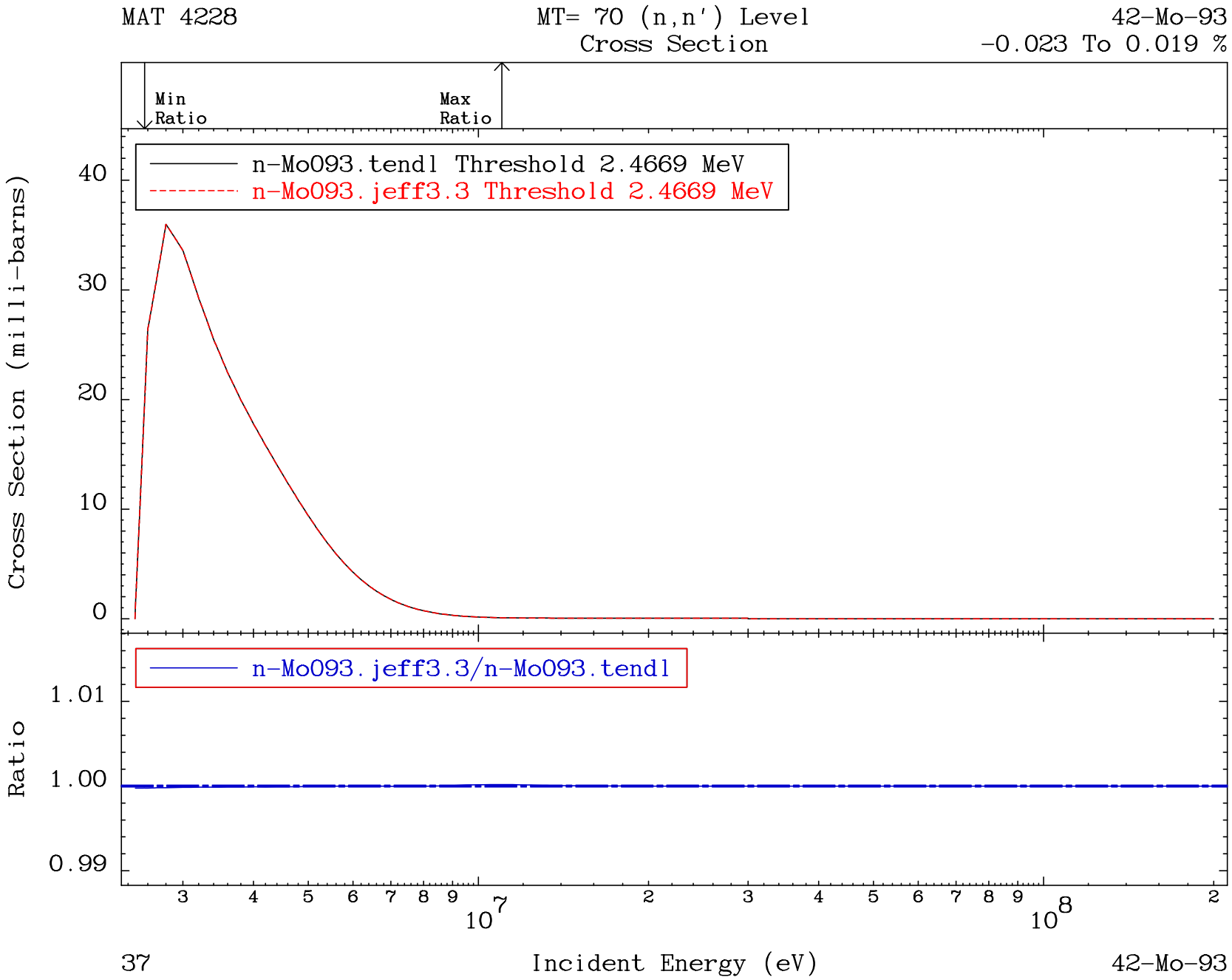

MAT 4228
MT= 65 (n,n') Level
Cross Section
42-Mo-93
-0.005 To 0.010 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 2.4353 MeV
n-Mo093.jeff3.3 Threshold 2.4353 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
42-Mo-93

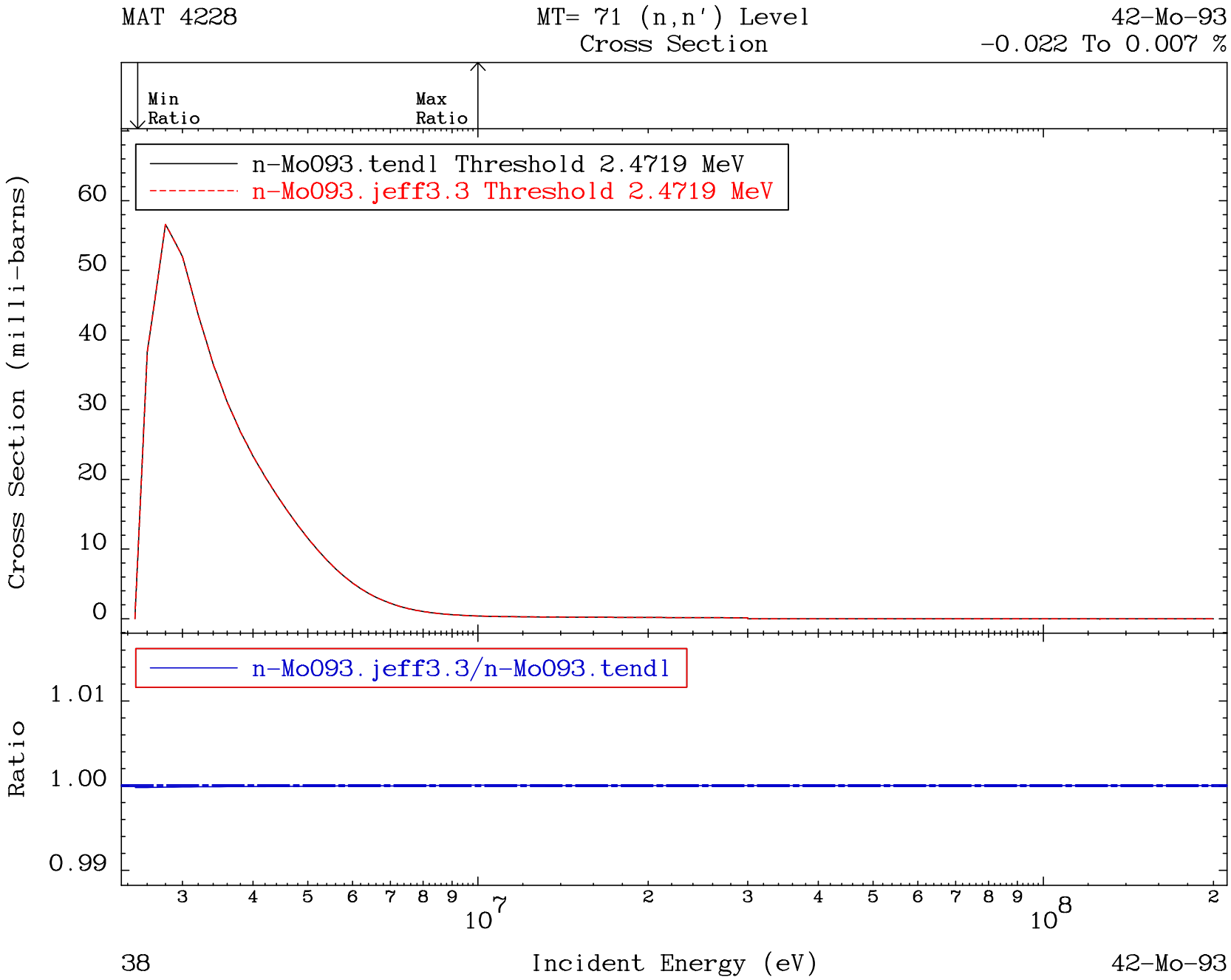

MAT 4228
MT= 66 (n,n') Level
Cross Section
42-Mo-93
-0.080 To 0.010 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4513 MeV
n-Mo093.jeff3.3 Threshold 2.4513 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
42-Mo-93

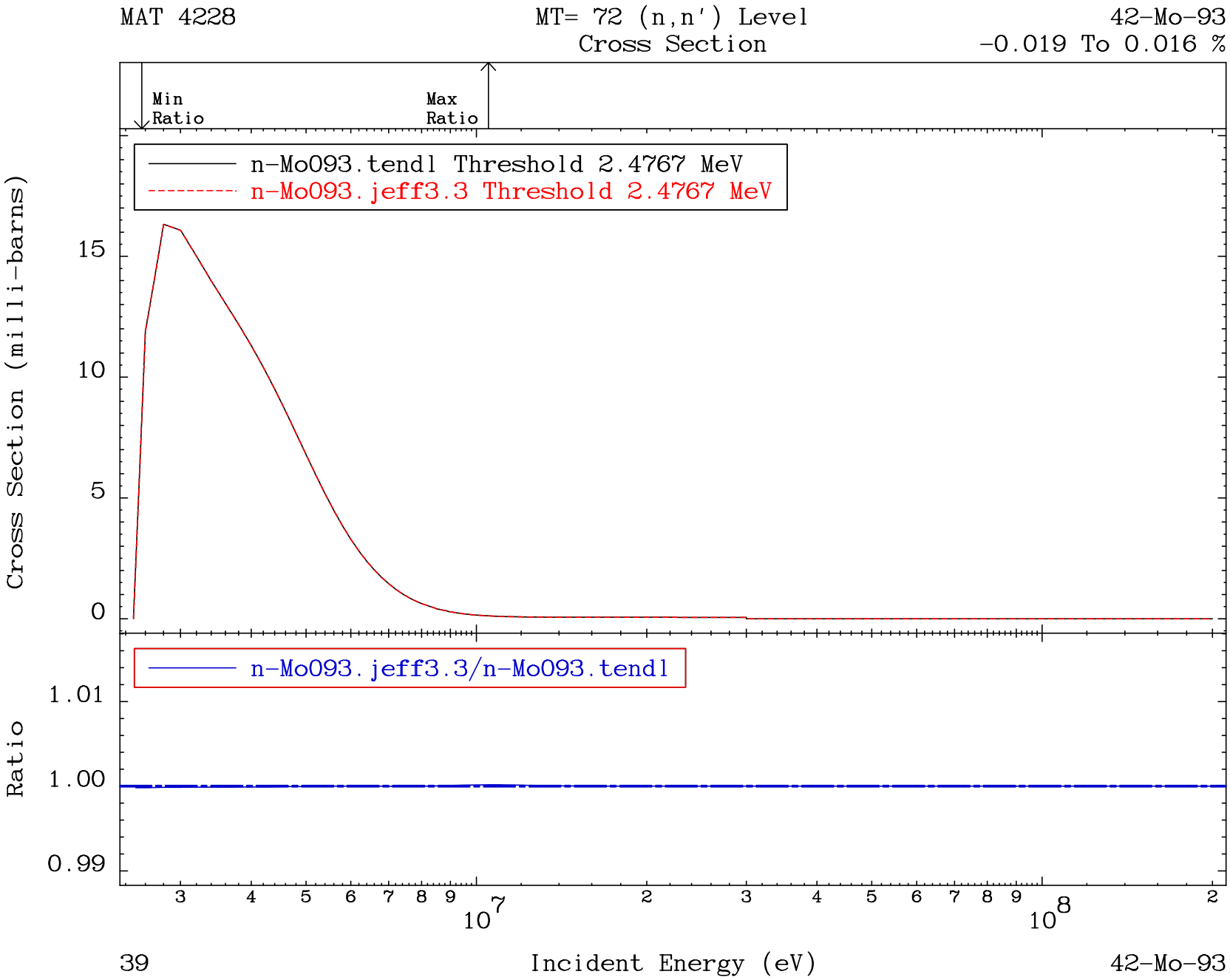

MAT 4228
MT= 67 (n,n') Level
Cross Section
42-Mo-93
-0.017 To 0.012 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4562 MeV
n-Mo093.jeff3.3 Threshold 2.4562 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
42-Mo-93

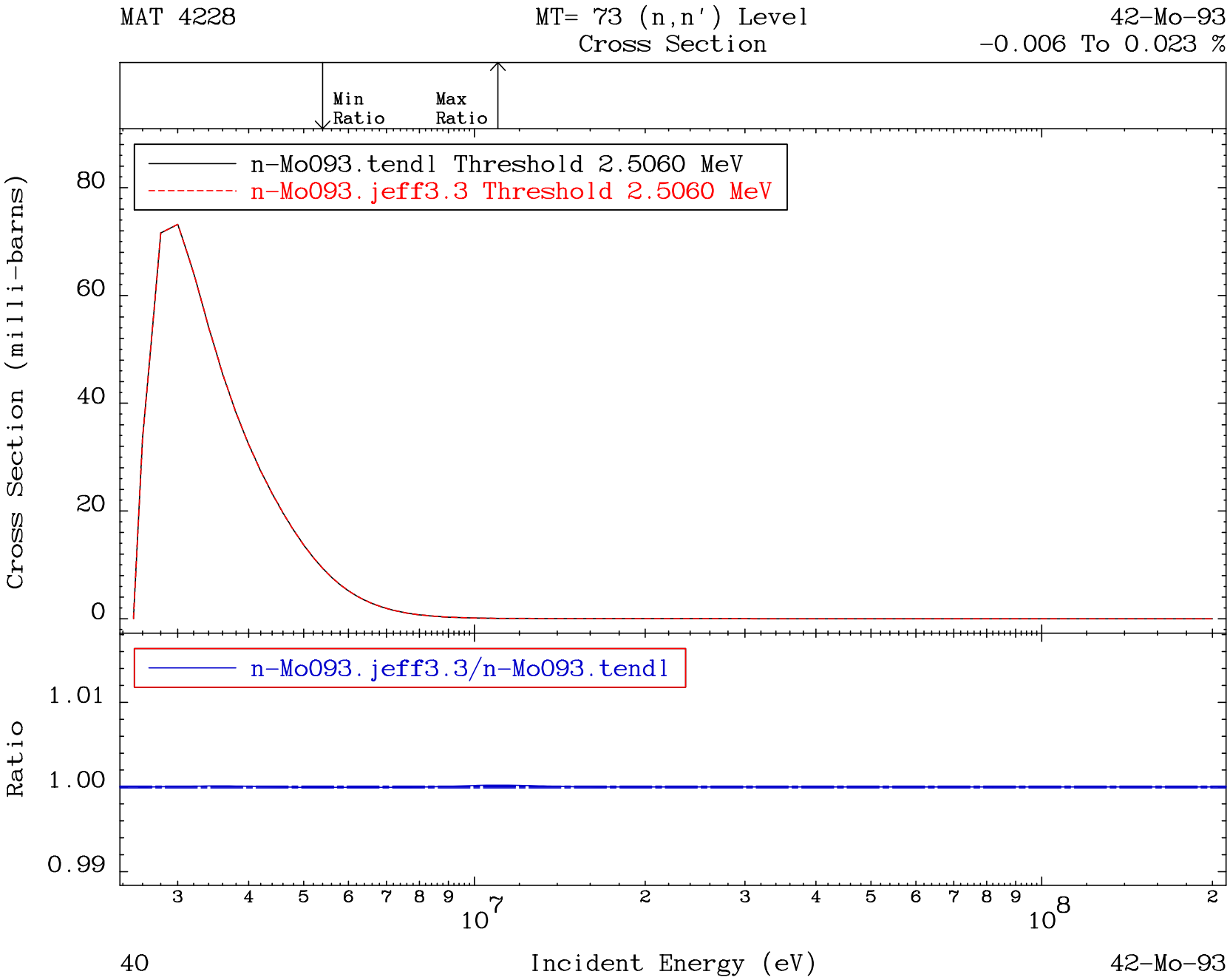

MAT 4228
MT= 68 (n,n') Level
Cross Section
42-Mo-93
-0.004 To 0.012 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 2.4573 MeV
n-Mo093.jeff3.3 Threshold 2.4573 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
42-Mo-93

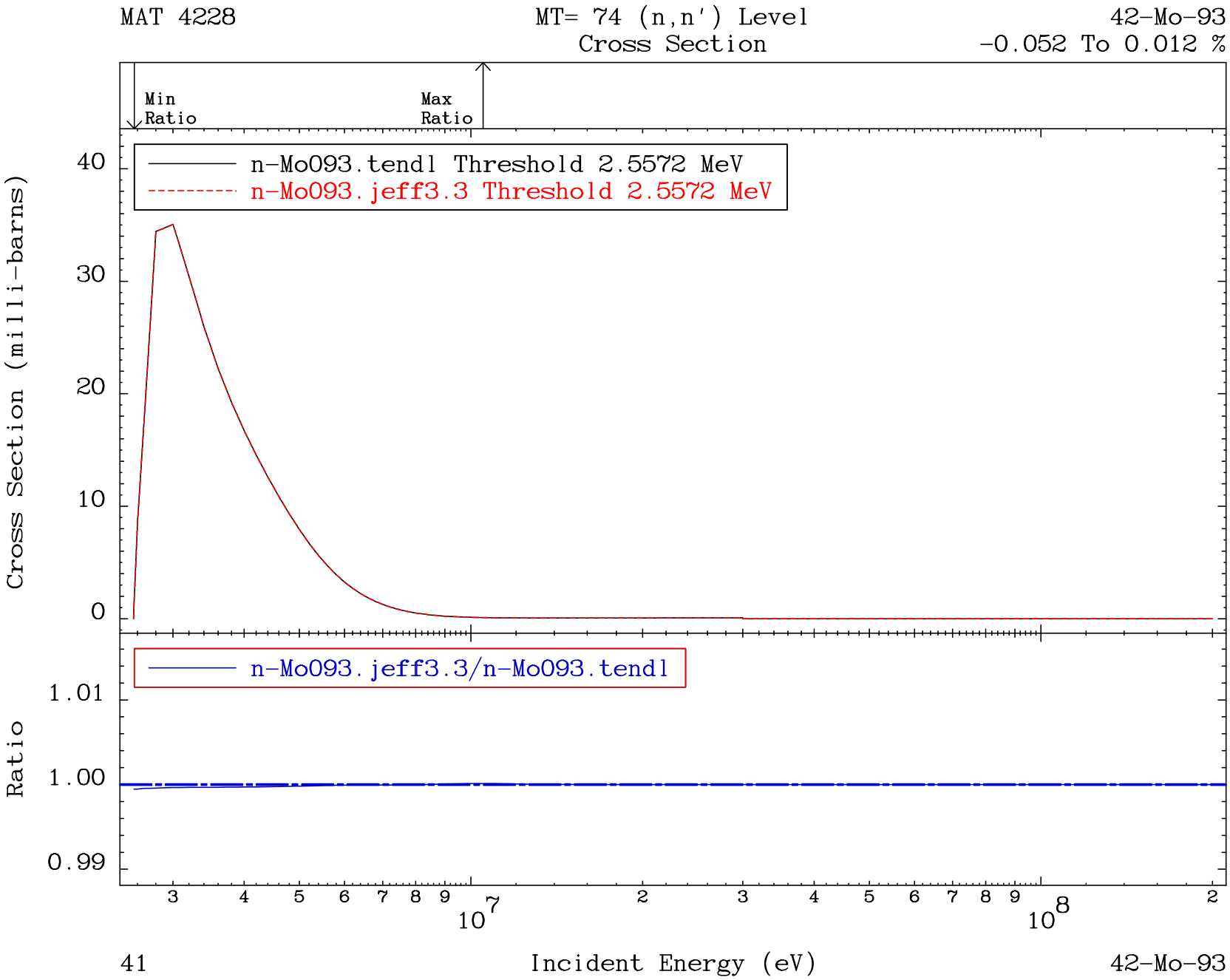

MAT 4228
MT= 69 (n,n') Level
Cross Section
42-Mo-93
-0.006 To 0.835 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4639 MeV
n-Mo093.jeff3.3 Threshold 2.4639 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
36
Incident Energy (eV)
42-Mo-93

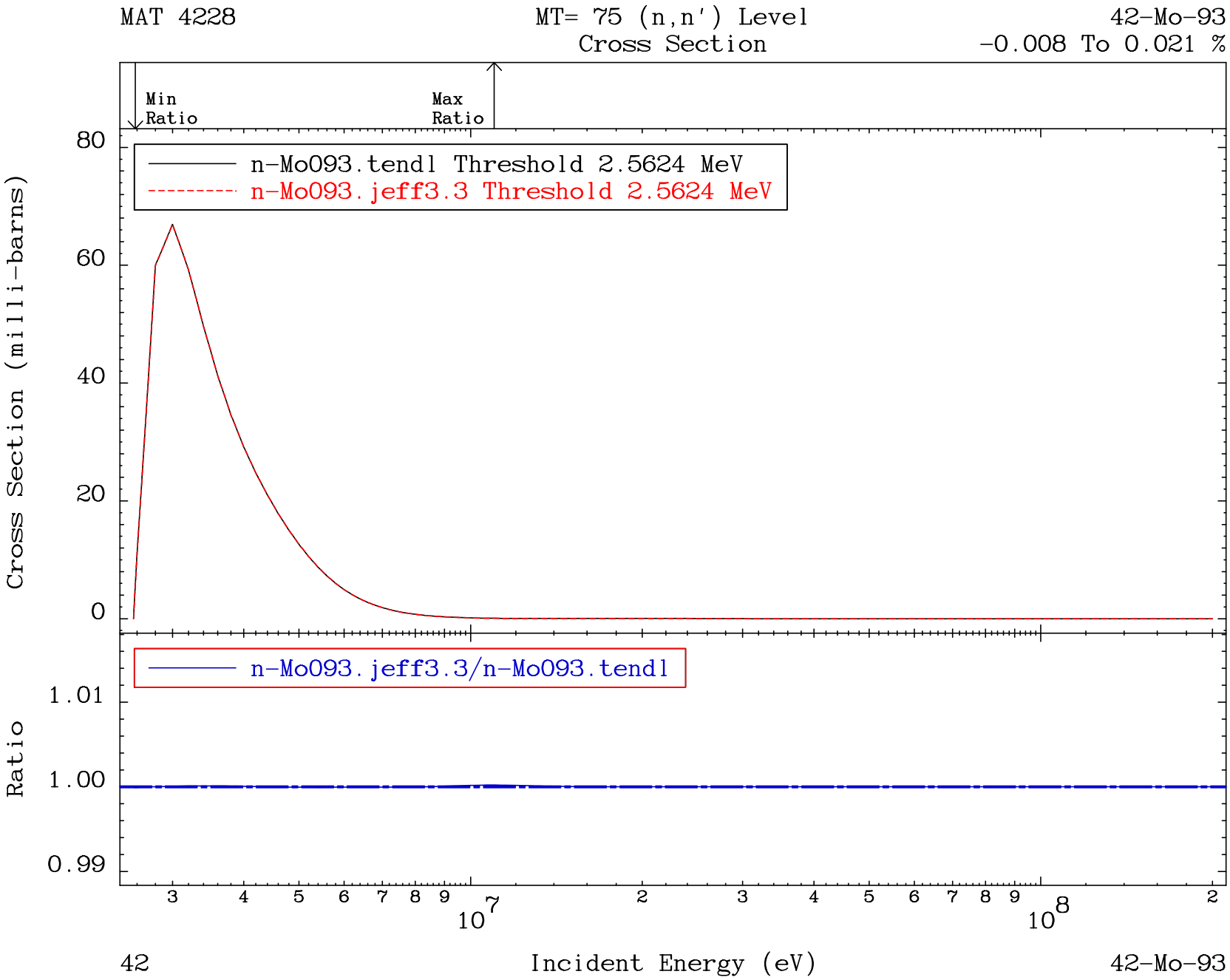

MAT 4228
MT= 70 (n,n') Level
Cross Section
42-Mo-93
-0.023 To 0.019 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4669 MeV
n-Mo093.jeff3.3 Threshold 2.4669 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
42-Mo-93

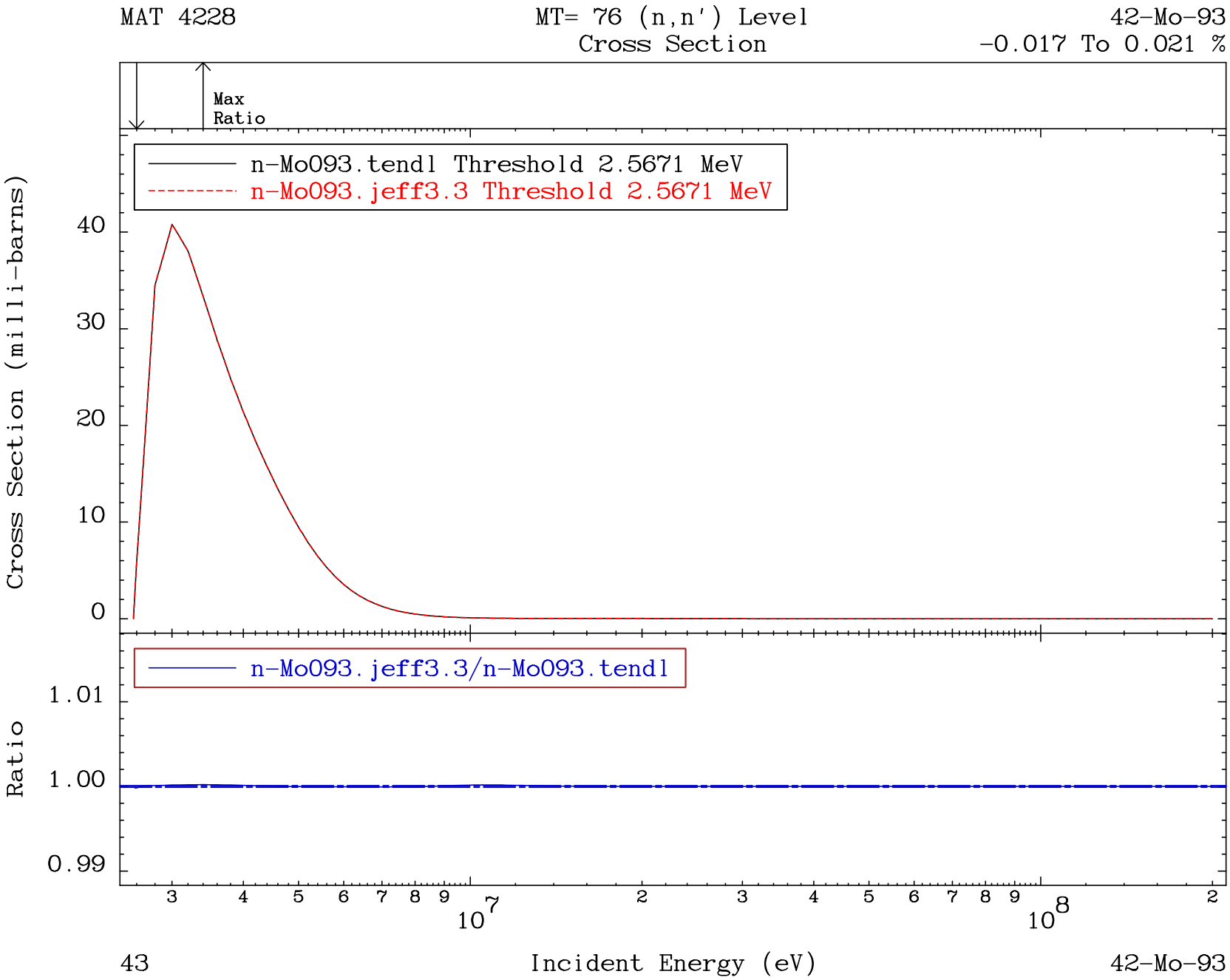

MAT 4228
MT= 71 (n,n') Level
Cross Section
42-Mo-93
-0.022 To 0.007 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4719 MeV
n-Mo093.jeff3.3 Threshold 2.4719 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
42-Mo-93

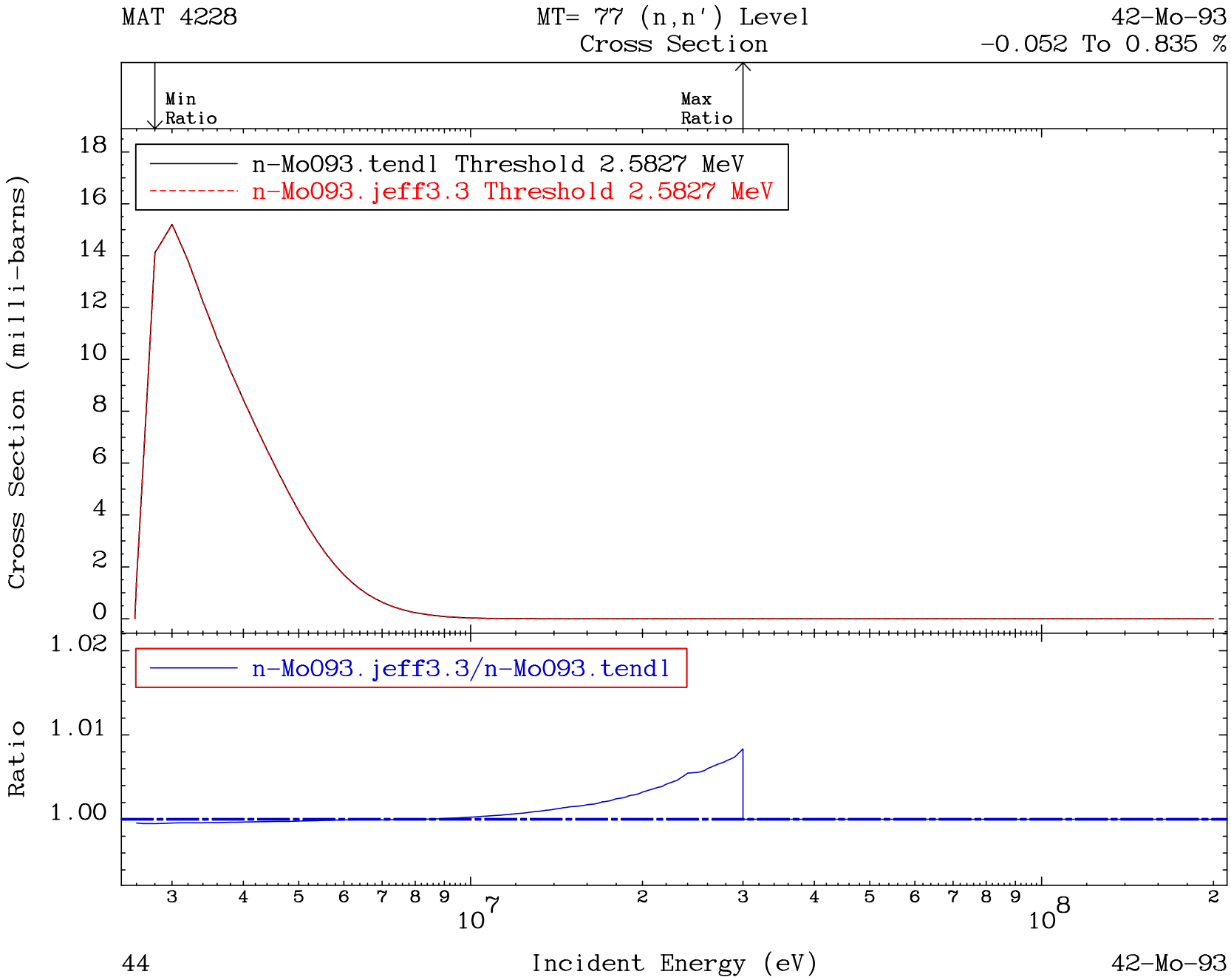

MAT 4228
MT= 72 (n,n') Level
Cross Section
42-Mo-93
-0.019 To 0.016 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.4767 MeV
n-Mo093.jeff3.3 Threshold 2.4767 MeV
Cross Section (milli-barns)
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
42-Mo-93

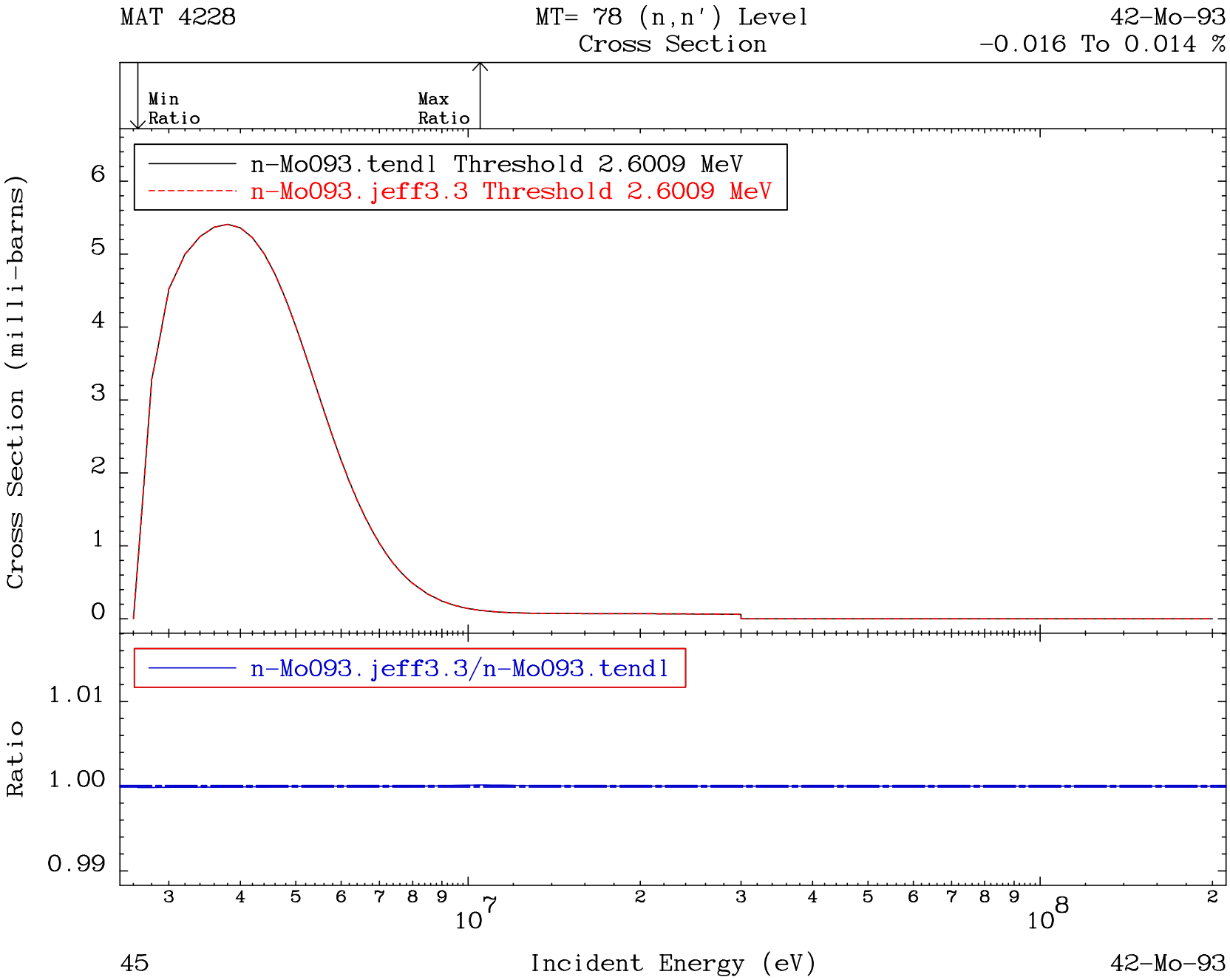

MAT 4228
MT= 73 (n,n') Level
Cross Section
42-Mo-93
-0.006 To 0.023 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.5060 MeV
n-Mo093.jeff3.3 Threshold 2.5060 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
42-Mo-93

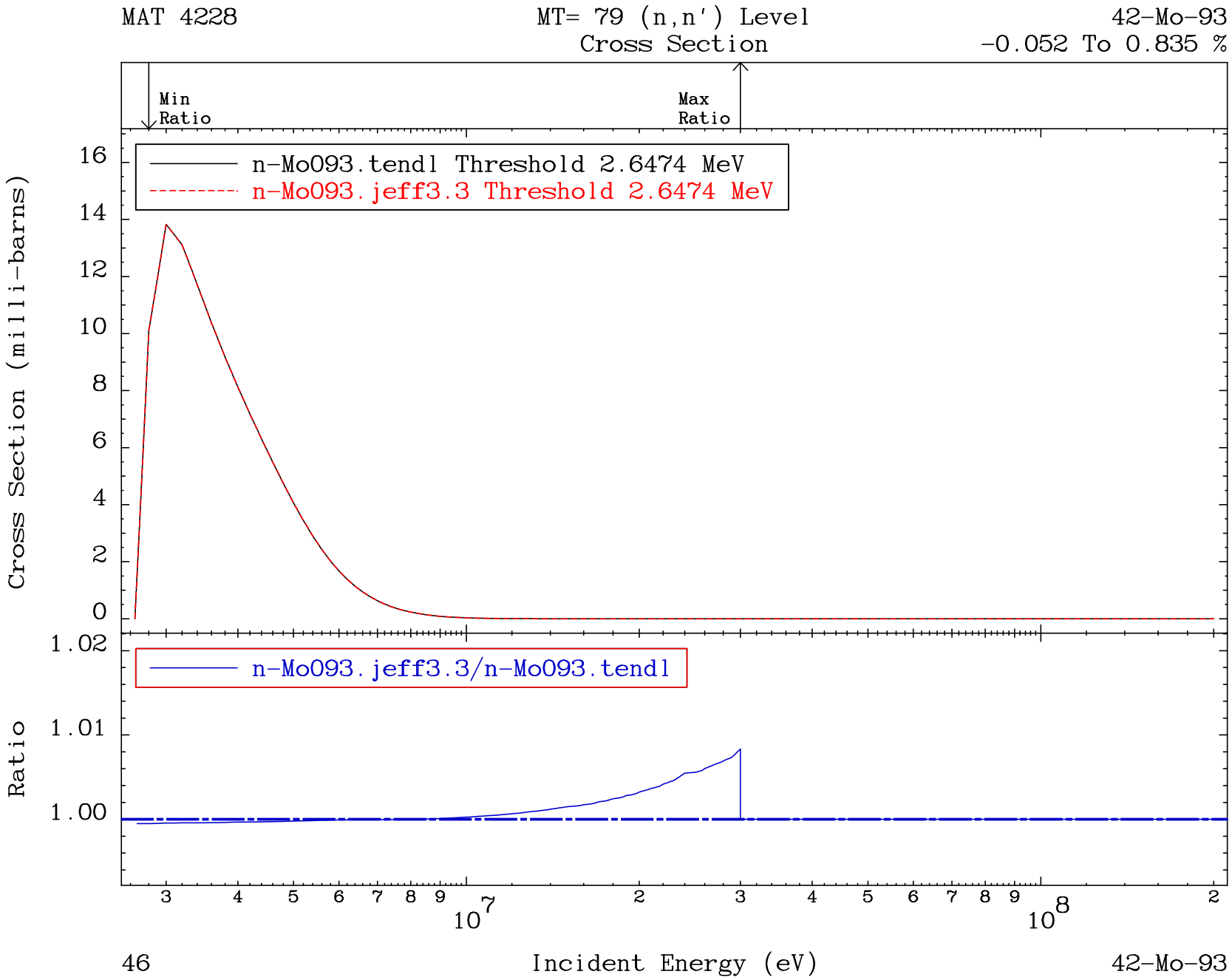

MAT 4228
MT= 74 (n,n') Level
Cross Section
42-Mo-93
-0.052 To 0.012 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.5572 MeV
n-Mo093.jeff3.3 Threshold 2.5572 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
42-Mo-93

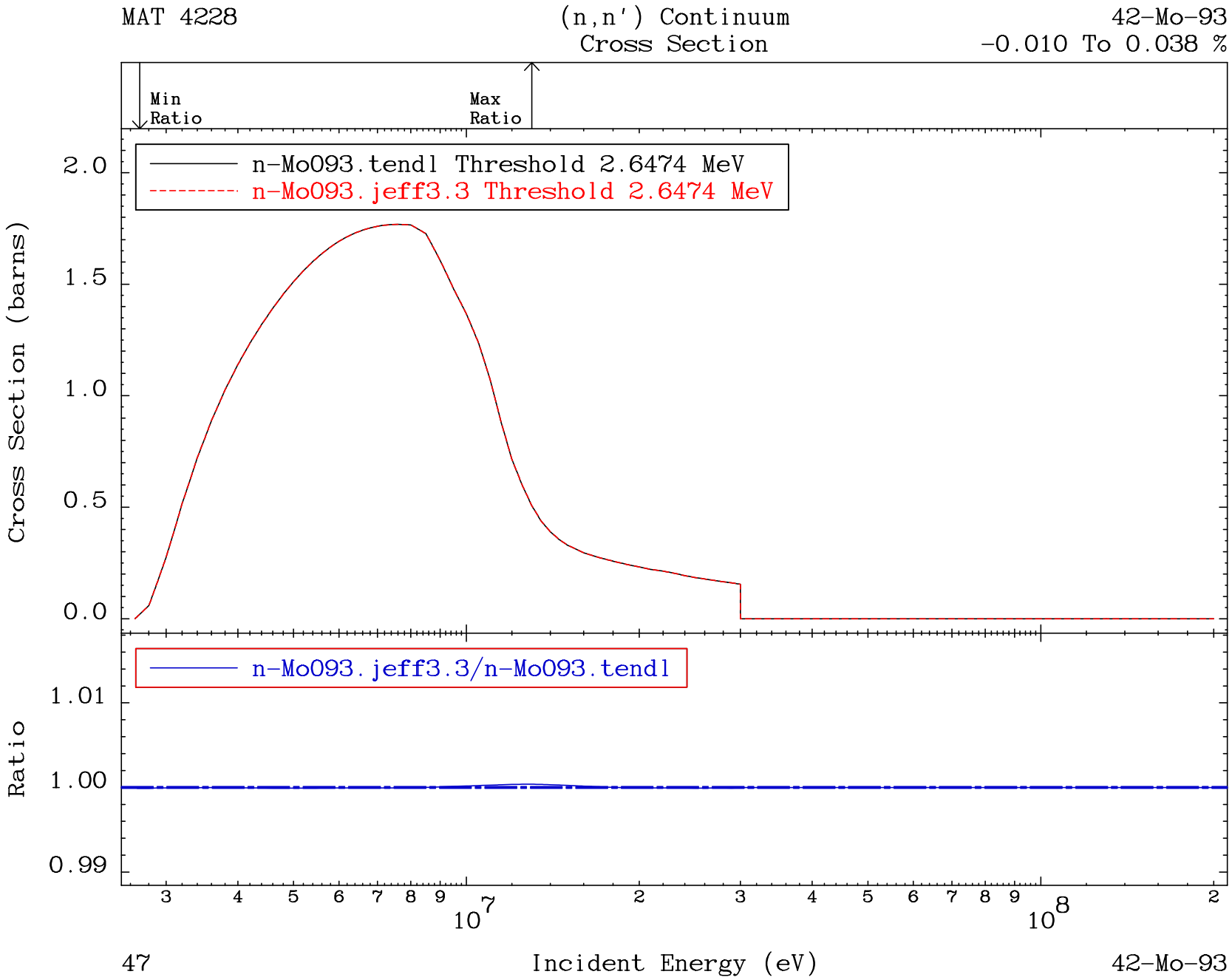

MAT 4228
MT= 75 (n,n') Level
Cross Section
42-Mo-93
-0.008 To 0.021 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.5624 MeV
n-Mo093.jeff3.3 Threshold 2.5624 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
42-Mo-93

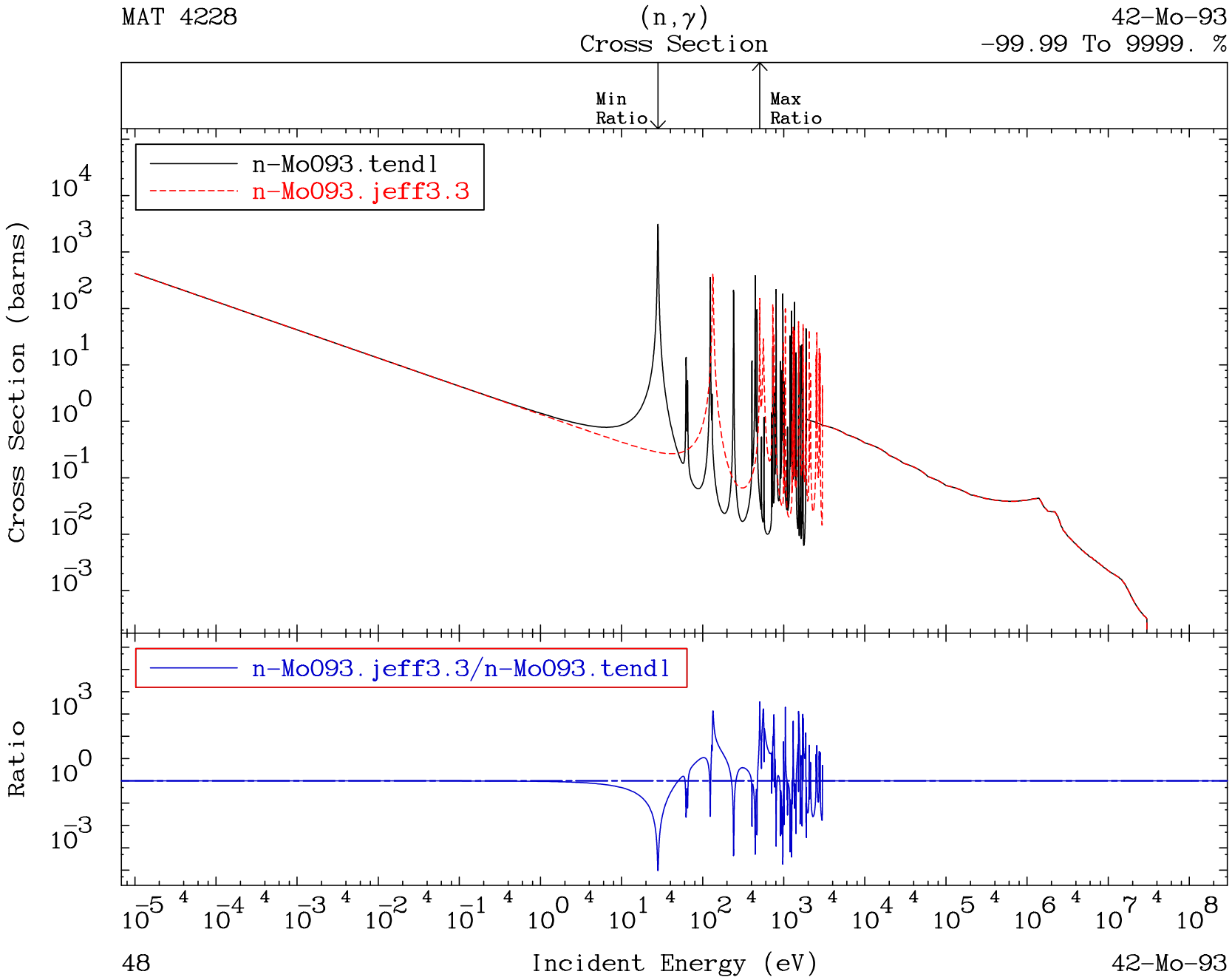

MAT 4228
MT= 76 (n,n') Level
Cross Section
42-Mo-93
-0.017 To 0.021 %
Max
Ratio
n-Mo093.tendl Threshold 2.5671 MeV
n-Mo093.jeff3.3 Threshold 2.5671 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
43
Incident Energy (eV)
42-Mo-93

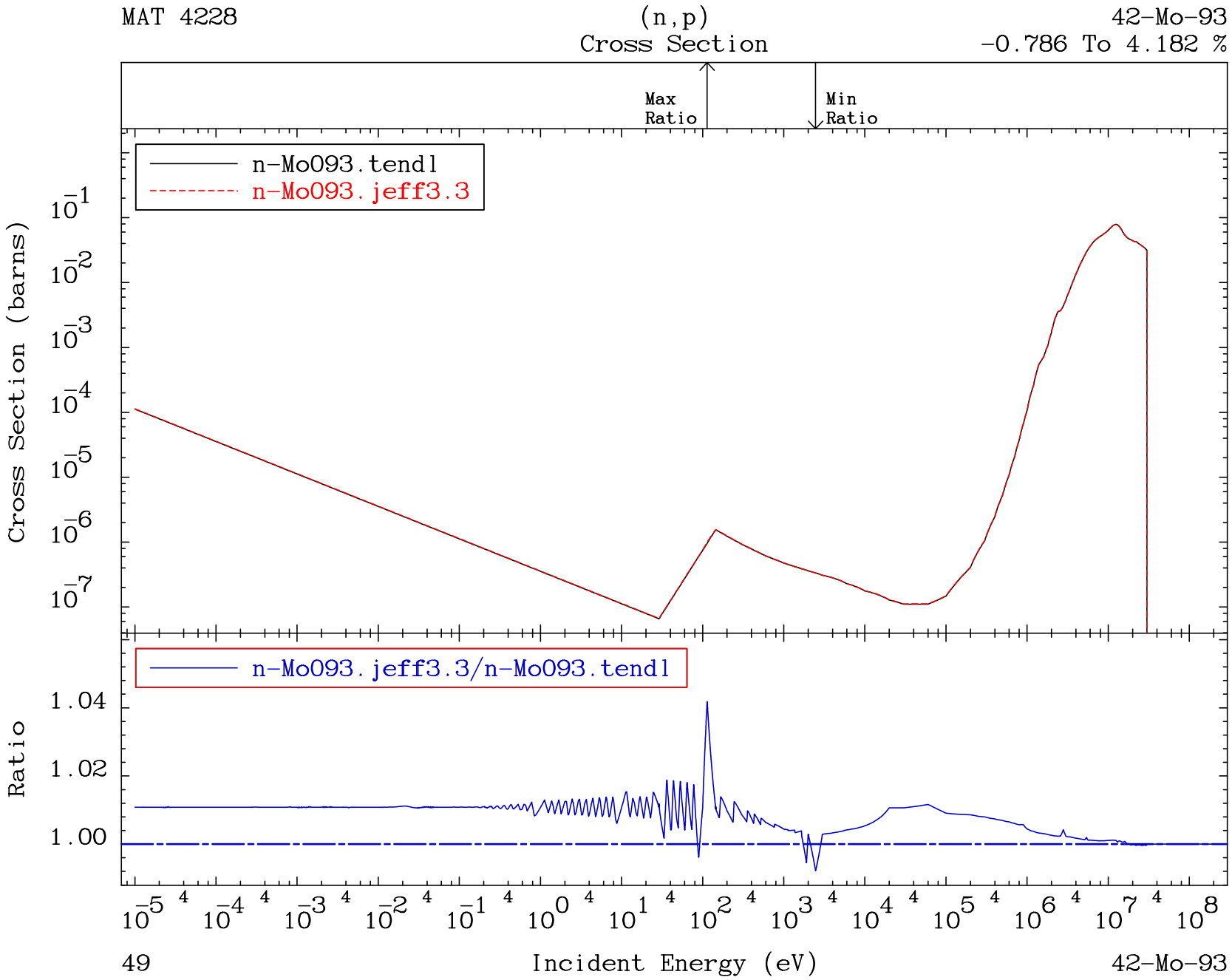

MAT 4228
MT= 77 (n,n') Level
Cross Section
42-Mo-93
-0.052 To 0.835 %
Min
Ratio
Max
Ratio
n-Mo093.tendl Threshold 2.5827 MeV
n-Mo093.jeff3.3 Threshold 2.5827 MeV
Cross Section (milli-barns)
18
16
14
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
44
Incident Energy (eV)
42-Mo-93

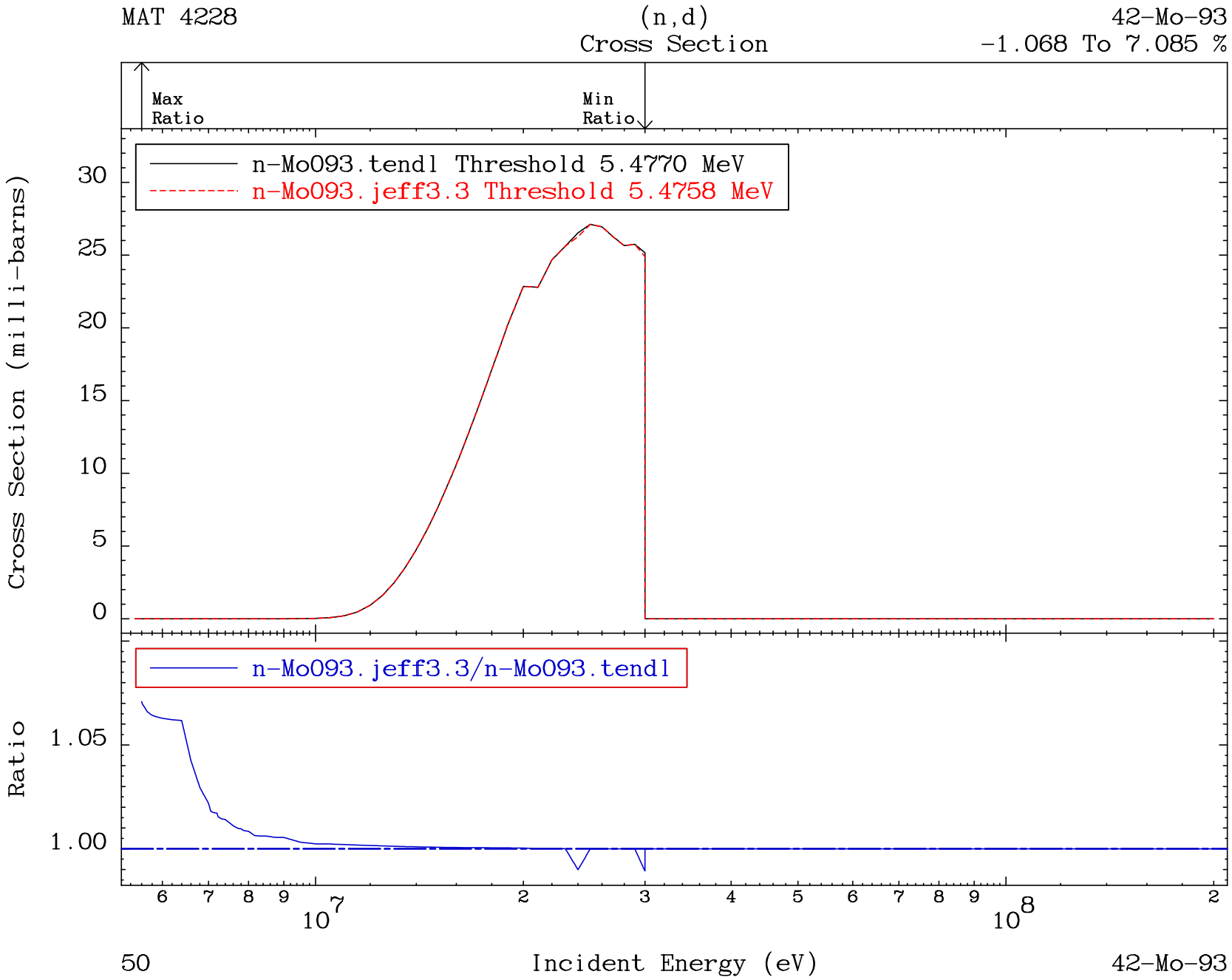

MAT 4228
MT= 78 (n,n') Level
Cross Section
42-Mo-93
-0.016 To 0.014 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.6009 MeV
n-Mo093.jeff3.3 Threshold 2.6009 MeV
Cross Section (milli-barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
45
42-Mo-93

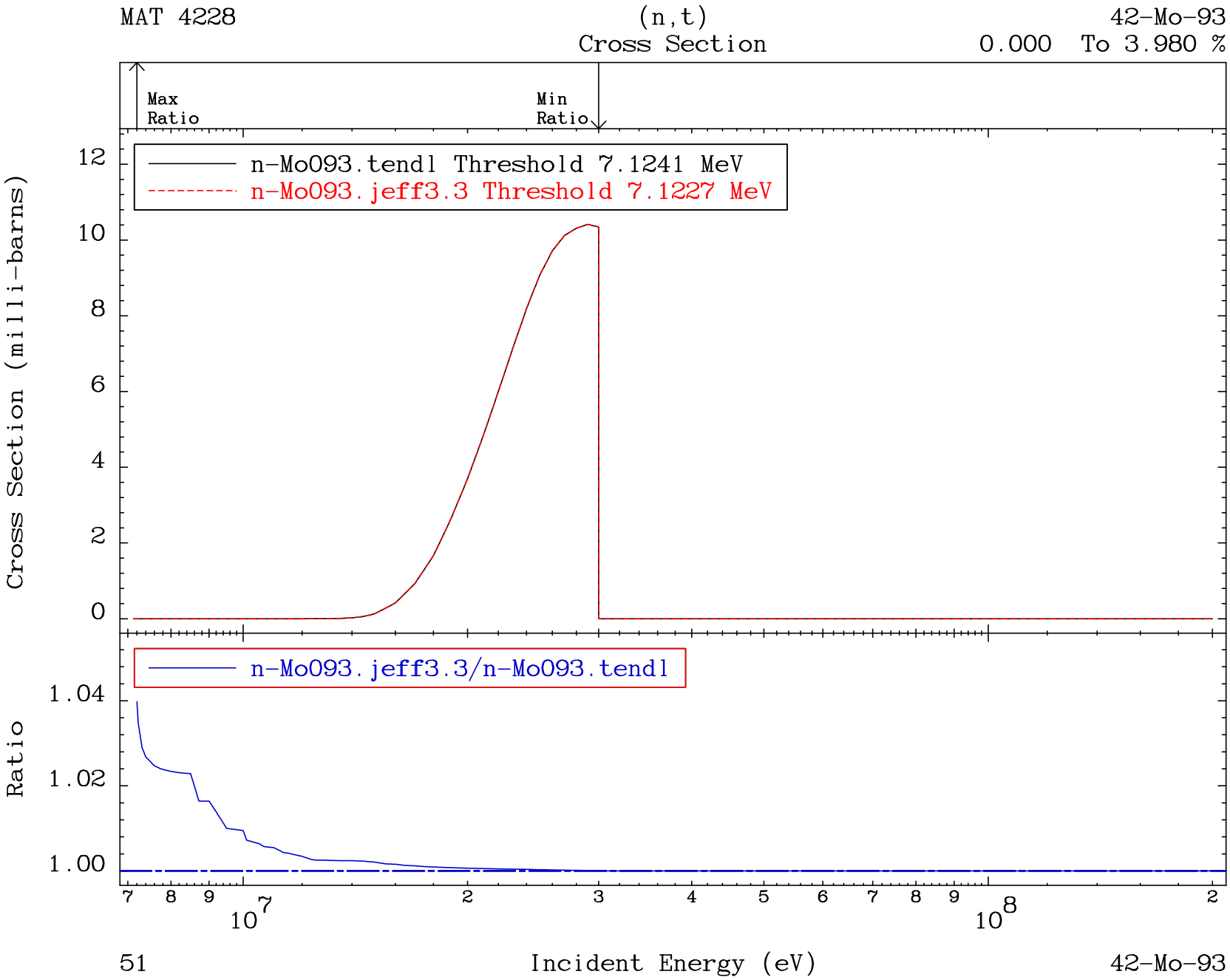

MAT 4228
MT= 79 (n,n') Level
Cross Section
42-Mo-93
-0.052 To 0.835 %
Min
Ratio
Max
Ratio
n-Mo093.tendl Threshold 2.6474 MeV
n-Mo093.jeff3.3 Threshold 2.6474 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
46
Incident Energy (eV)
42-Mo-93

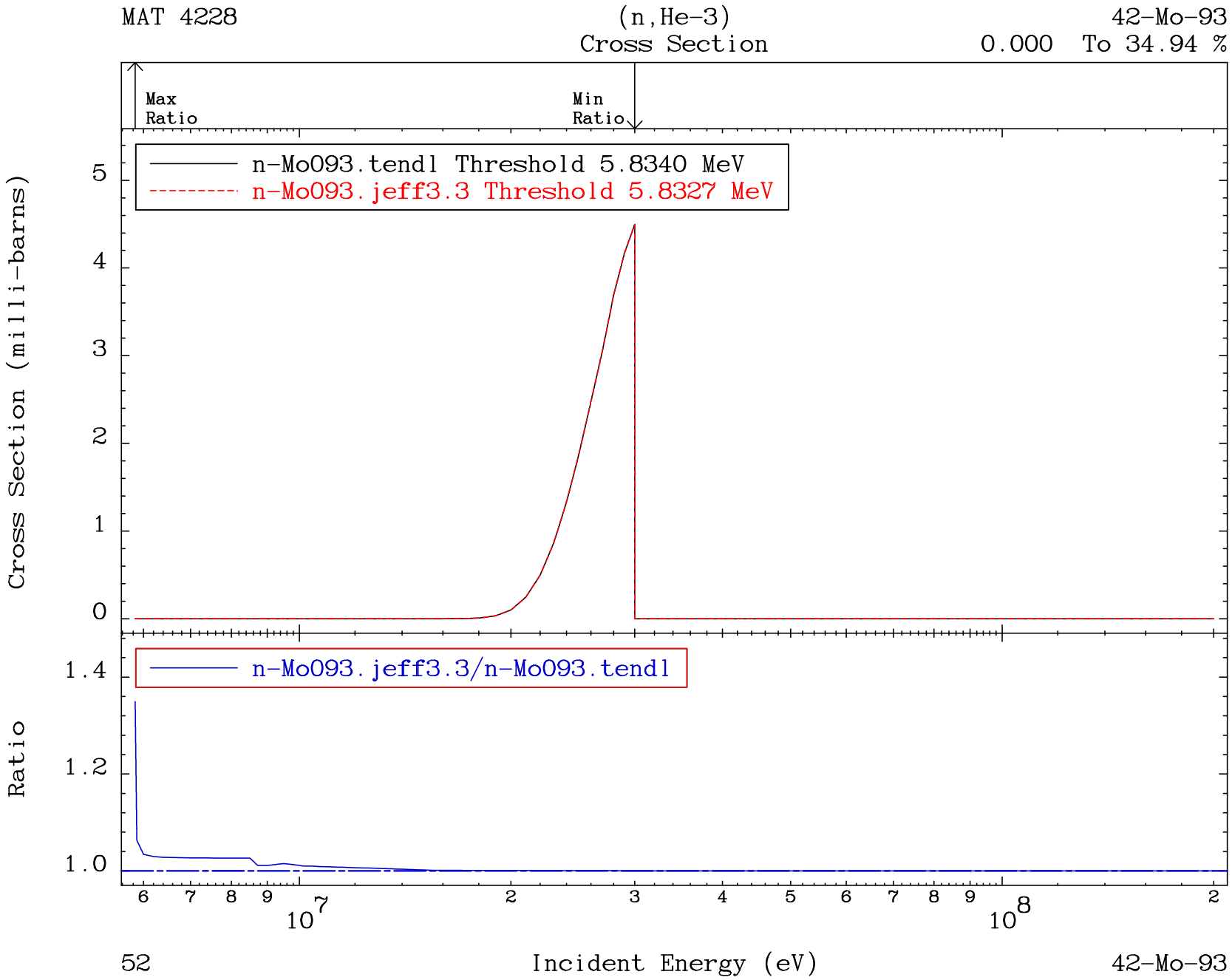

MAT 4228
(n,n') Continuum
Cross Section
42-Mo-93
-0.010 To 0.038 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 2.6474 MeV
n-Mo093.jeff3.3 Threshold 2.6474 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
42-Mo-93

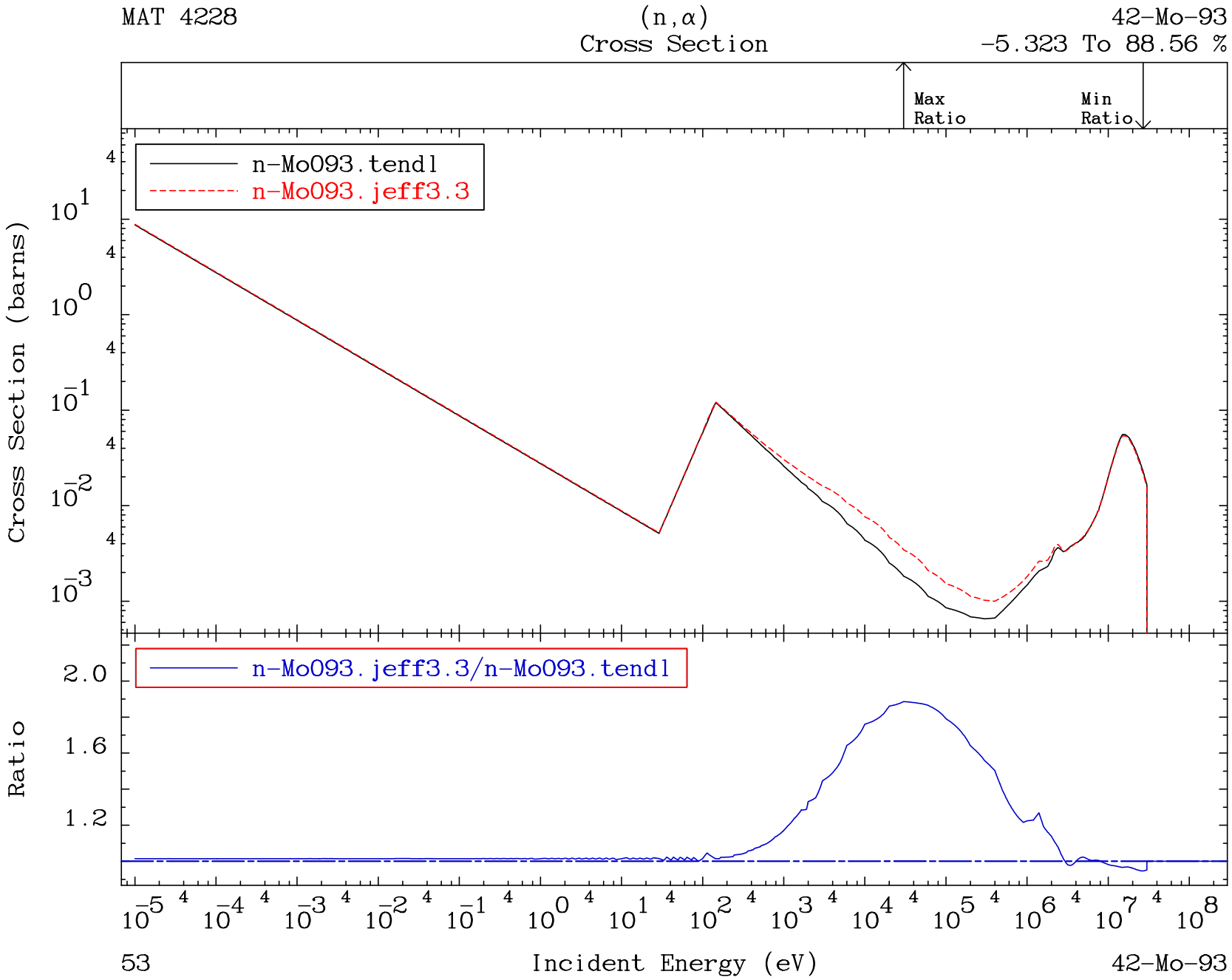

MAT 4228
(n,γ)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
48
42-Mo-93

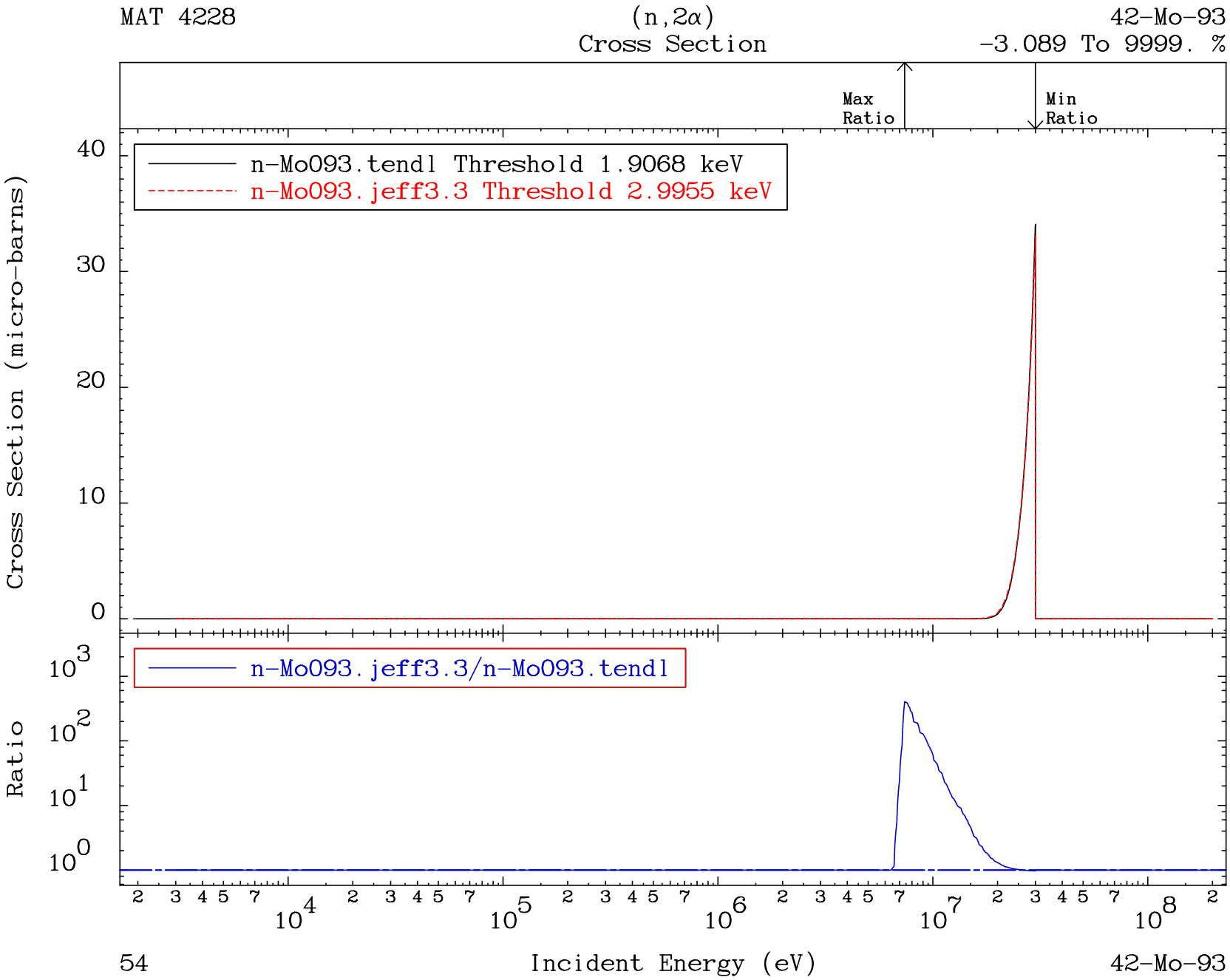

MAT 4228
(n,p)
Cross Section
42-Mo-93
-0.786 To 4.182 %
Max Ratio
Min Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
49
42-Mo-93

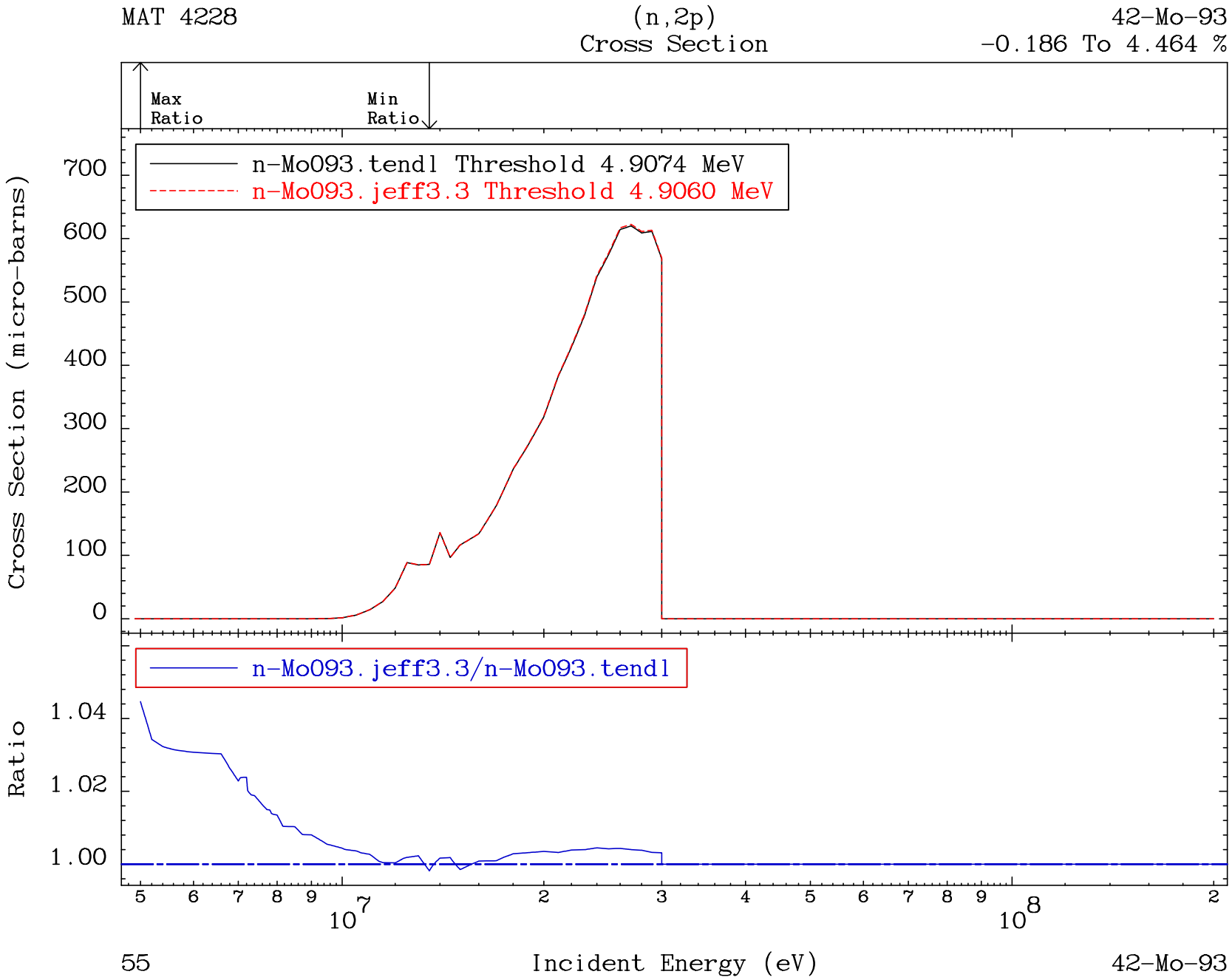

MAT 4228
(n,d)
Cross Section
42-Mo-93
-1.068 To 7.085 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.4770 MeV
n-Mo093.jeff3.3 Threshold 5.4758 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.05
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
42-Mo-93

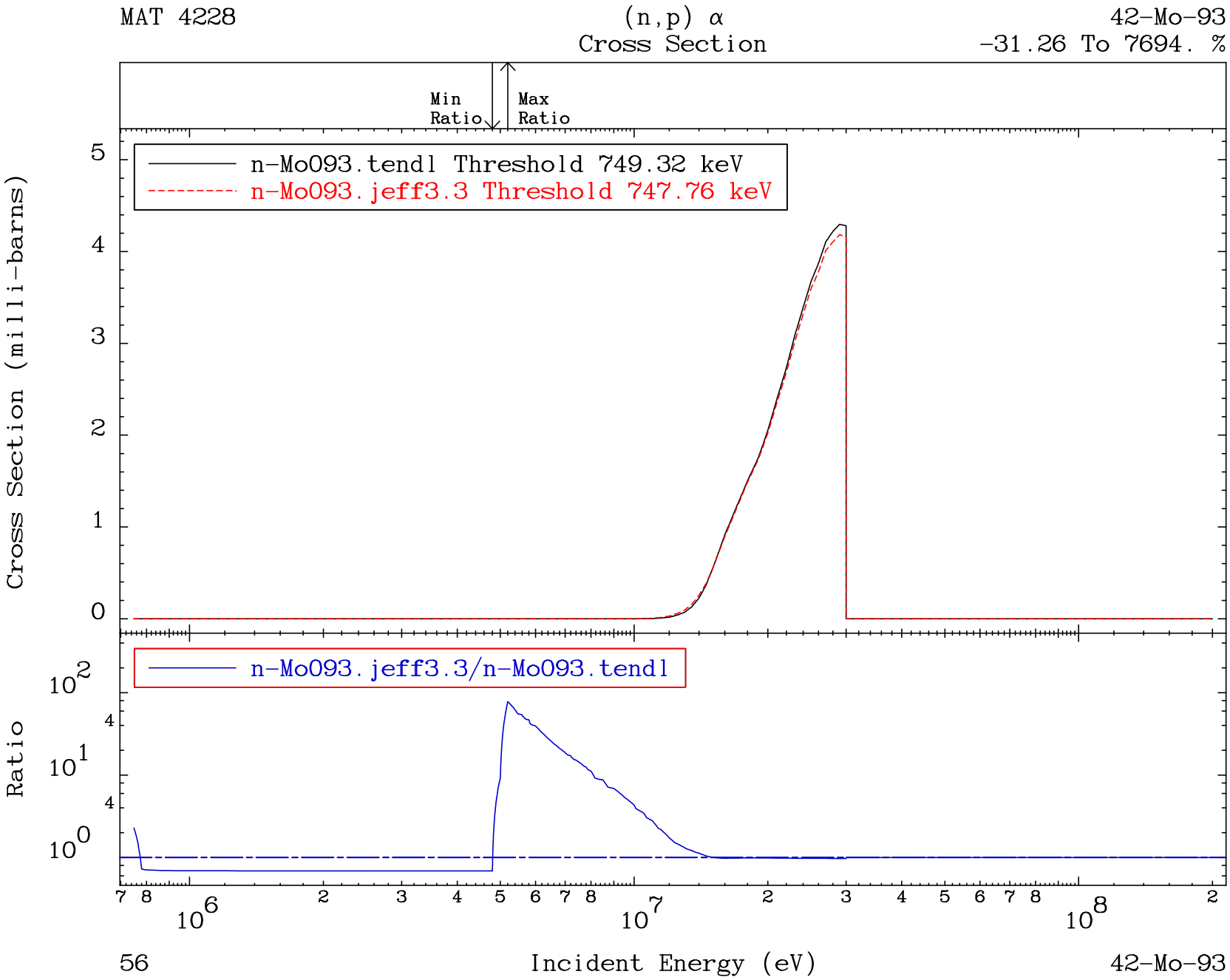

MAT 4228
(n,t)
Cross Section
42-Mo-93
0.000 To 3.980 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.1241 MeV
n-Mo093.jeff3.3 Threshold 7.1227 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
42-Mo-93

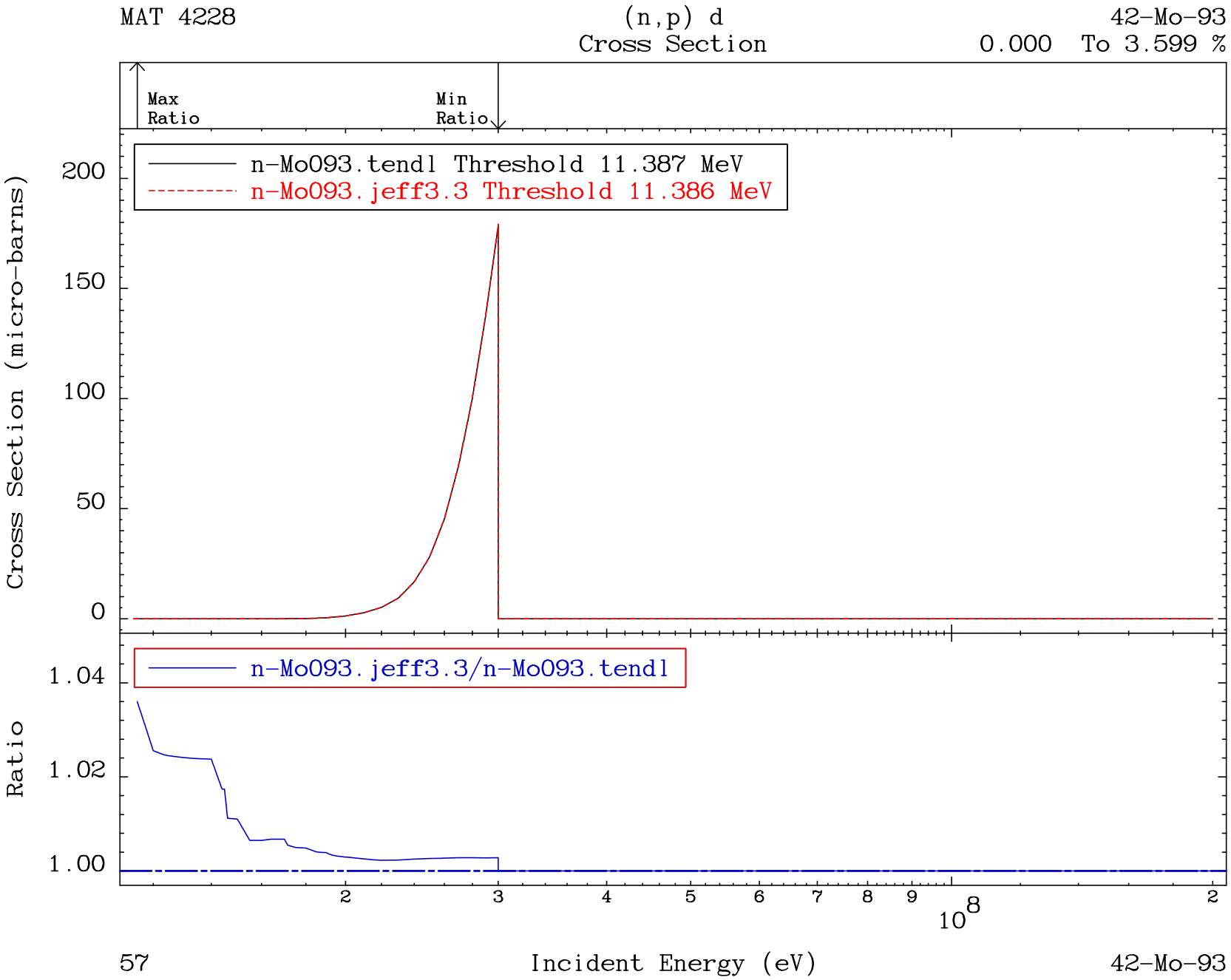

MAT 4228
(n,He-3)
Cross Section
42-Mo-93
0.000 To 34.94 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.8340 MeV
n-Mo093.jeff3.3 Threshold 5.8327 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.0
1.2
1.4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
42-Mo-93

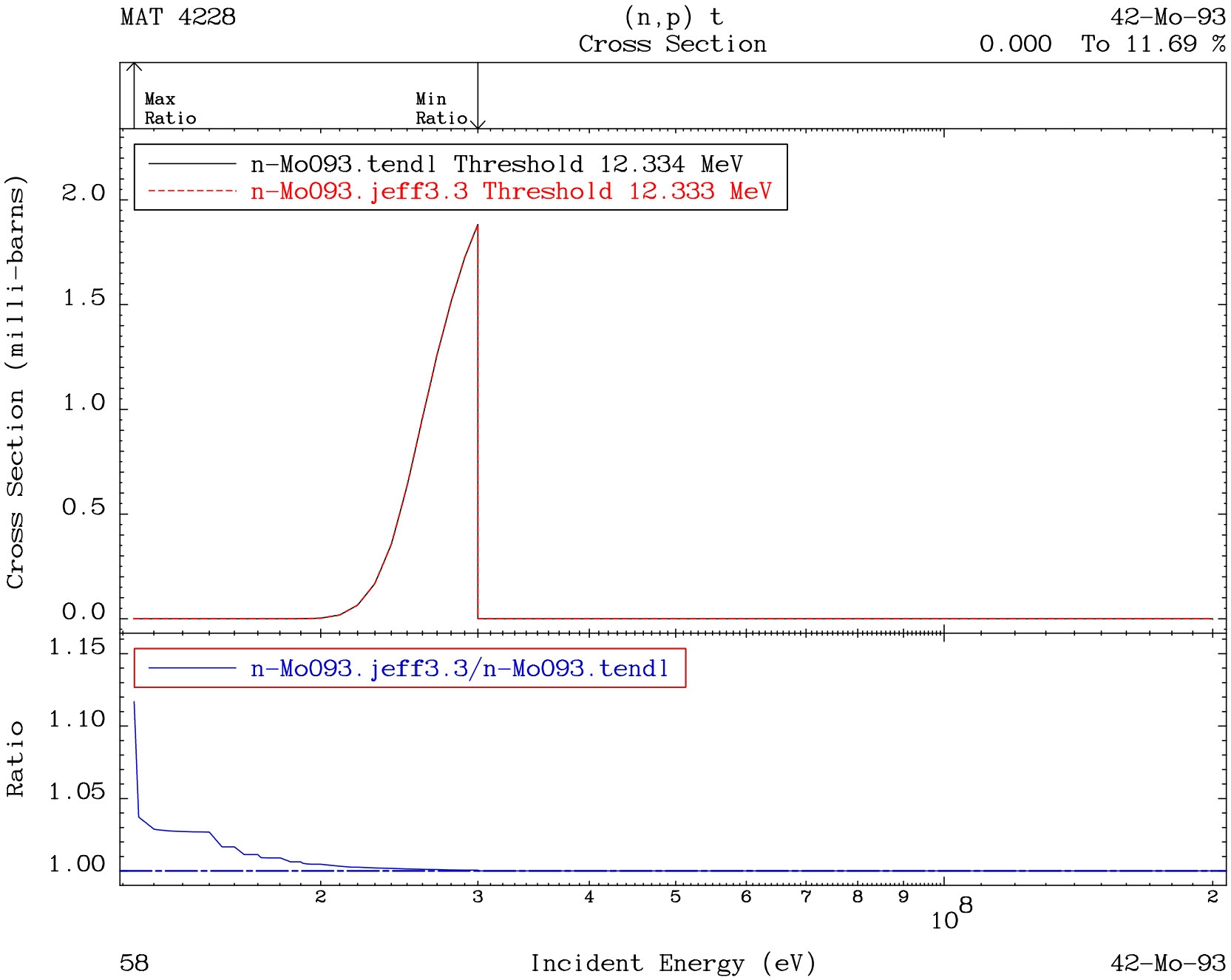

MAT 4228
(n,α)
Cross Section
42-Mo-93
-5.323 To 88.56 %
Max Ratio
Min Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
53
Incident Energy (eV)
42-Mo-93

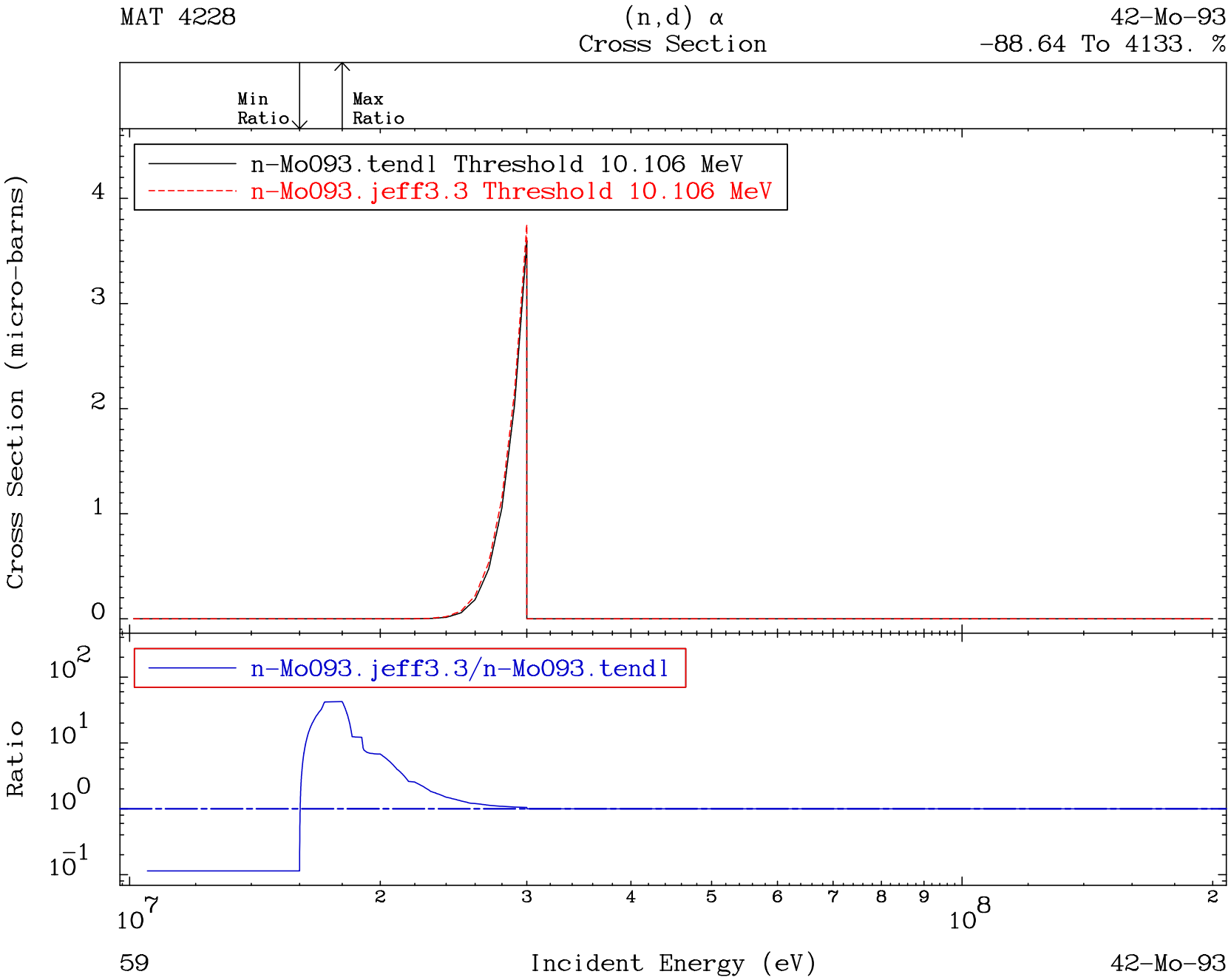

MAT 4228
(n,2α)
Cross Section
42-Mo-93
-3.089 To 9999. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 1.9068 keV
n-Mo093.jeff3.3 Threshold 2.9955 keV
Cross Section (micro-barns)
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^3
10^2
10^1
10^0
2 3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
54
Incident Energy (eV)
42-Mo-93

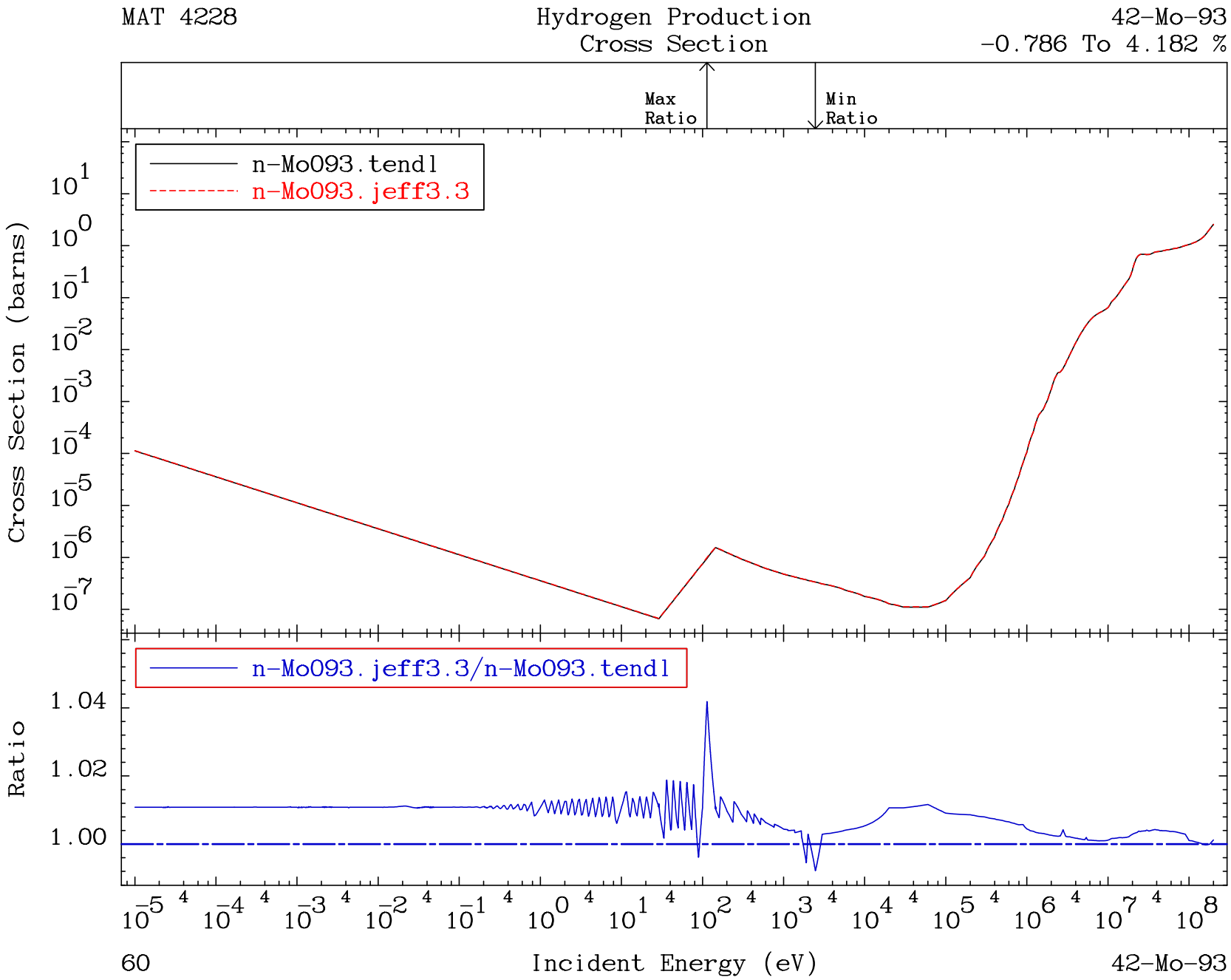

MAT 4228
(n,2p)
Cross Section
42-Mo-93
-0.186 To 4.464 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 4.9074 MeV
n-Mo093.jeff3.3 Threshold 4.9060 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
42-Mo-93

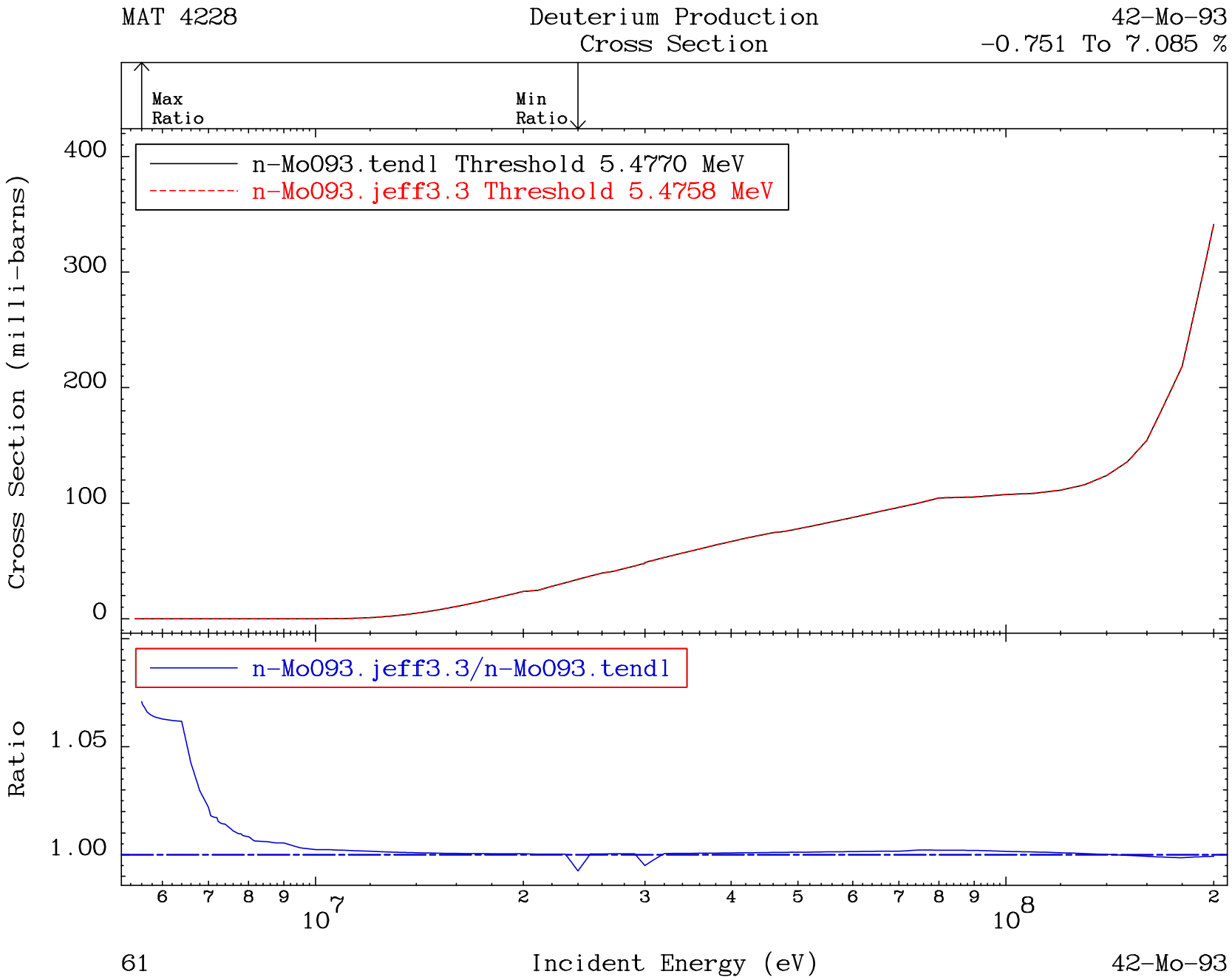

MAT 4228
(n,p) α
Cross Section
42-Mo-93
-31.26 To 7694. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 749.32 keV
n-Mo093.jeff3.3 Threshold 747.76 keV
Cross Section (milli-barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
56
42-Mo-93

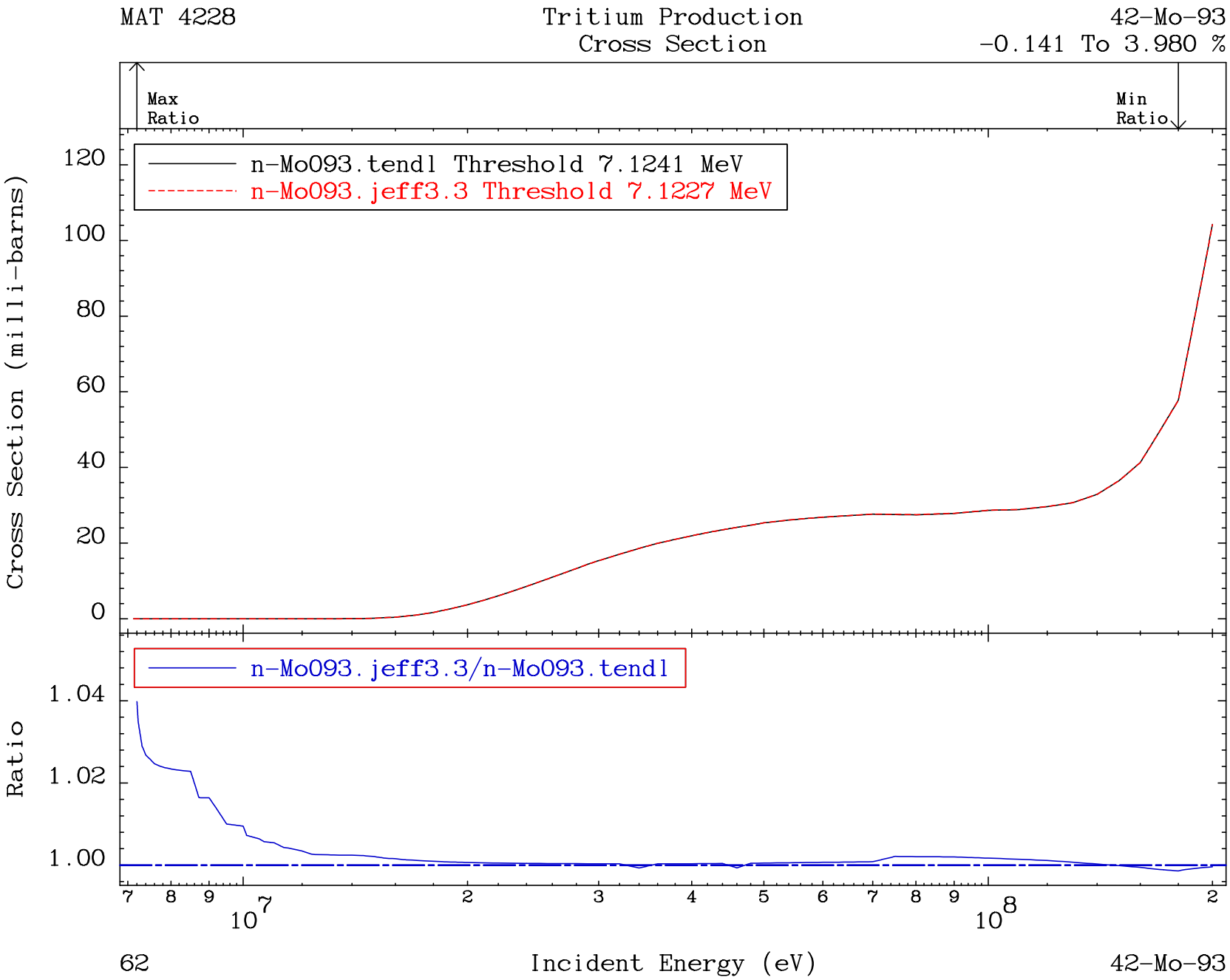

MAT 4228
(n,p) d
Cross Section
42-Mo-93
0.000 To 3.599 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 11.387 MeV
n-Mo093.jeff3.3 Threshold 11.386 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
42-Mo-93

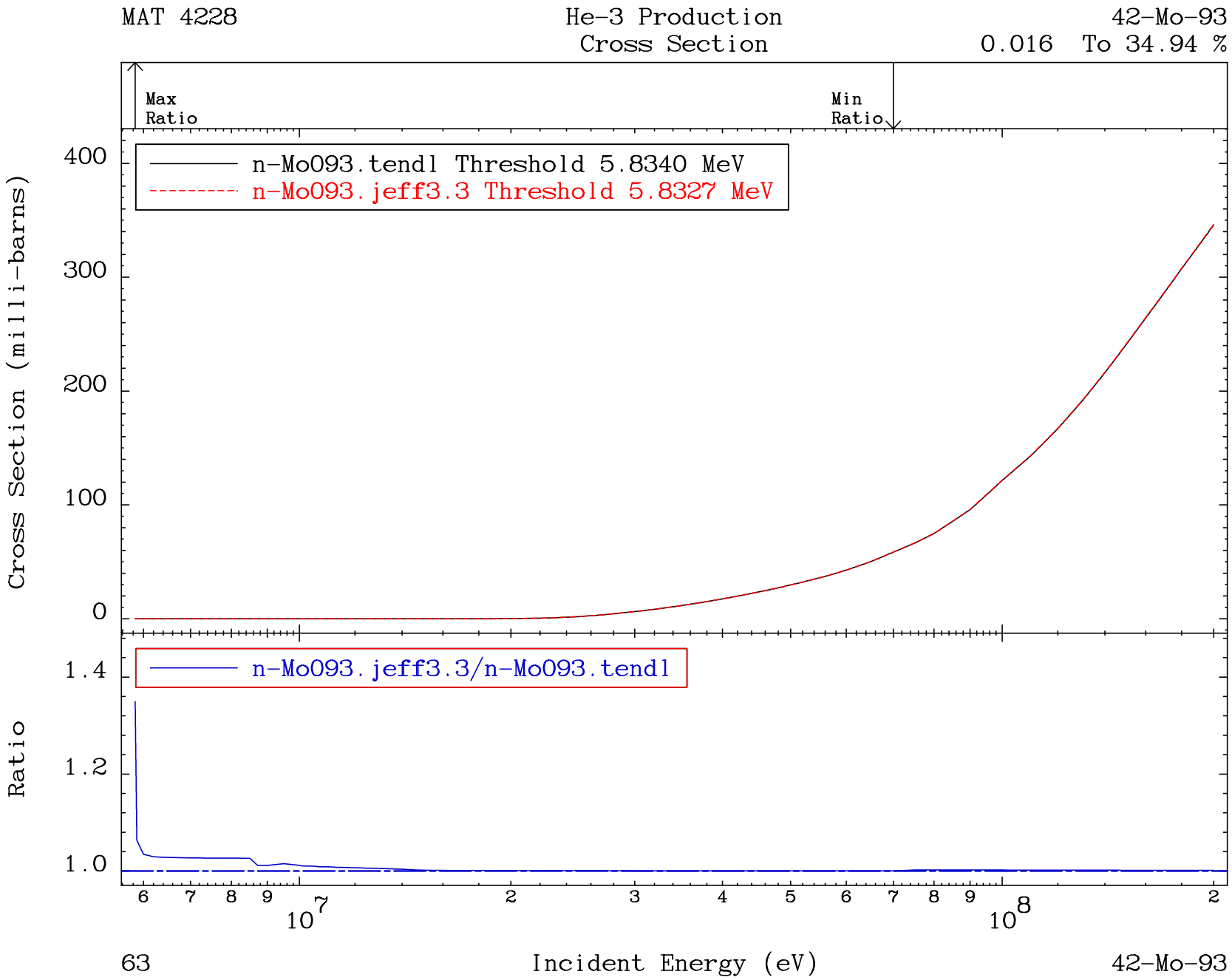

MAT 4228
(n,p) t
Cross Section
42-Mo-93
0.000 To 11.69 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 12.334 MeV
n-Mo093.jeff3.3 Threshold 12.333 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
42-Mo-93

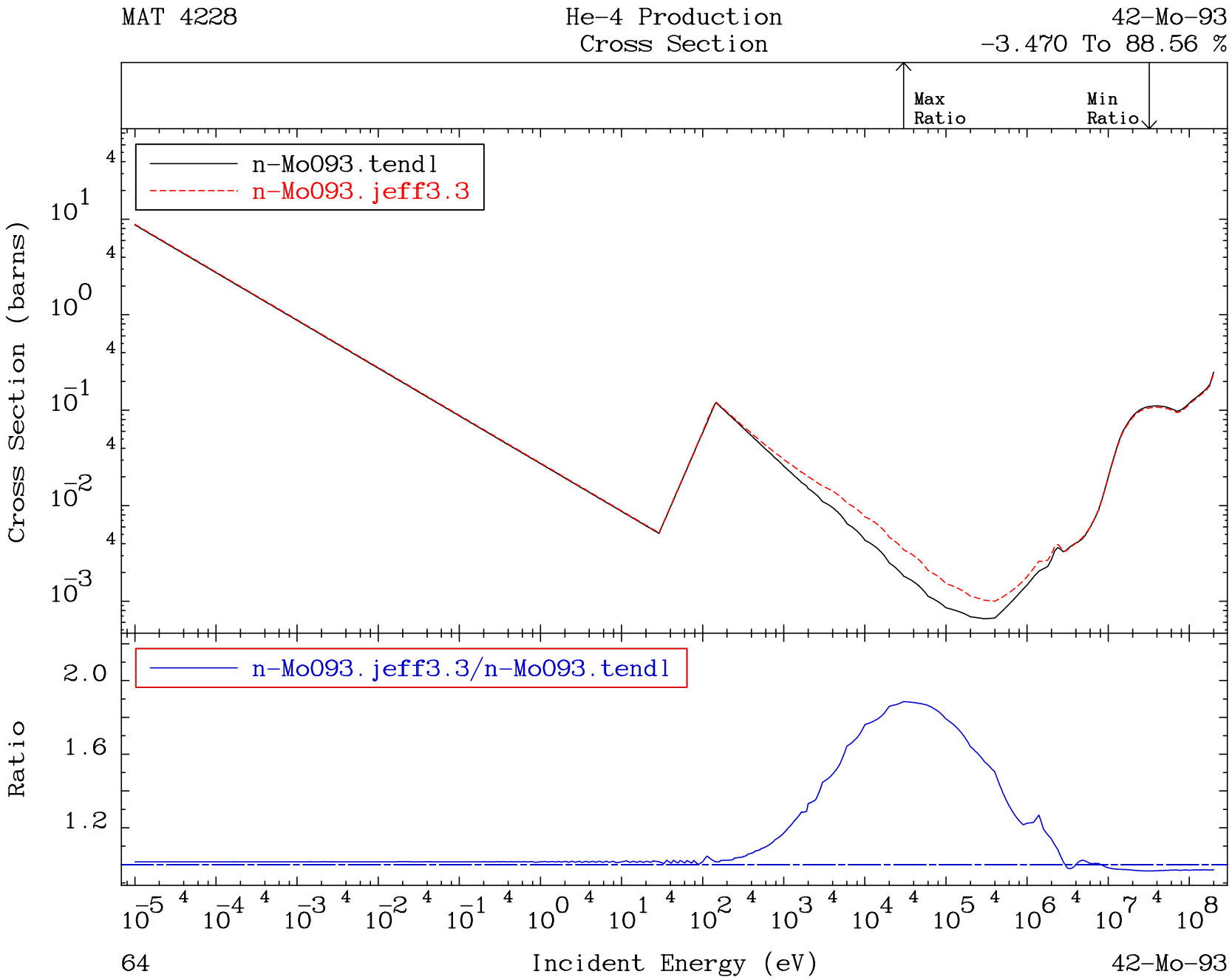

MAT 4228
(n,d) α
Cross Section
42-Mo-93
-88.64 To 4133. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 10.106 MeV
n-Mo093.jeff3.3 Threshold 10.106 MeV
Cross Section (micro-barns)
0
1
2
3
4
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
42-Mo-93

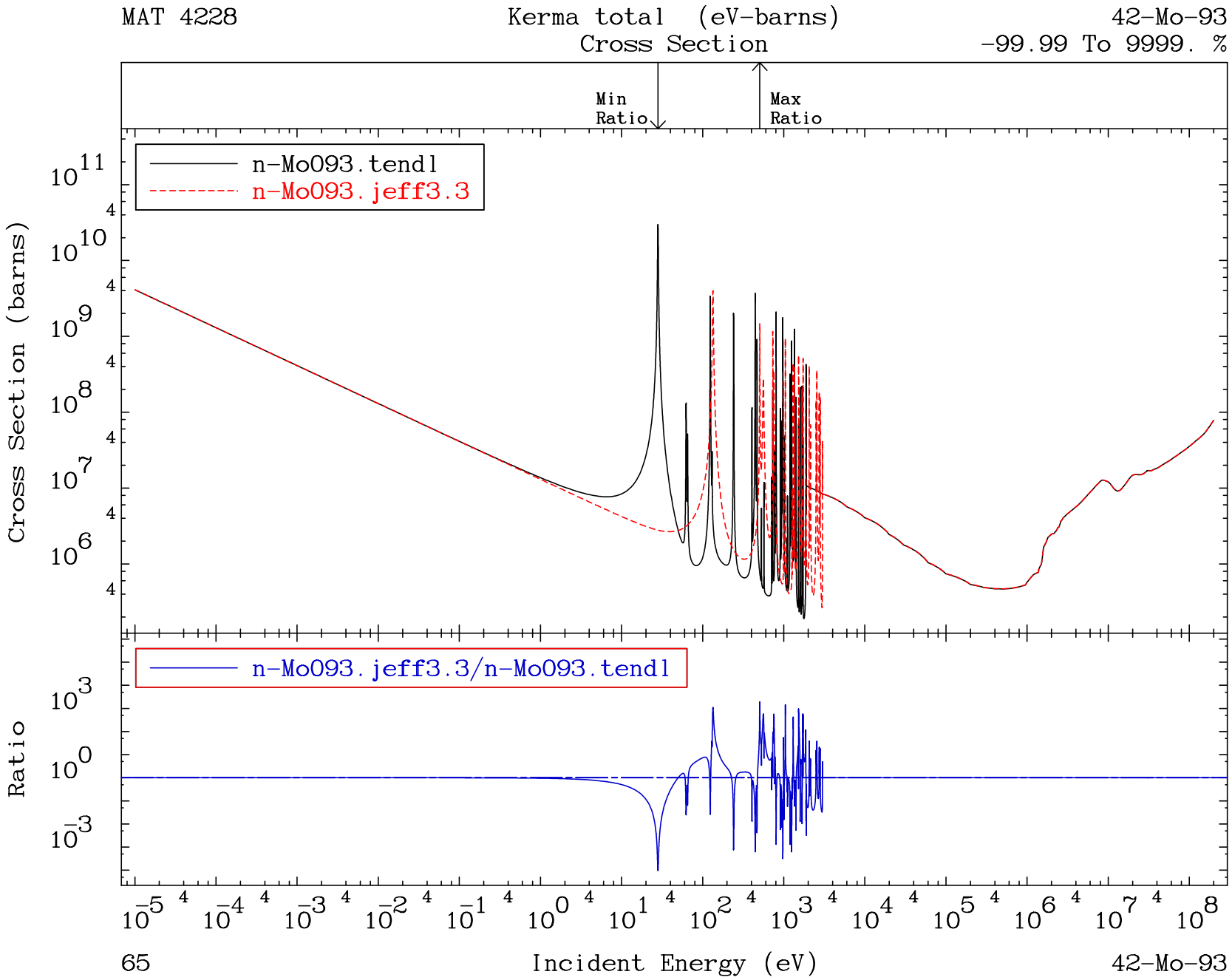

MAT 4228
Hydrogen Production
Cross Section
42-Mo-93
-0.786 To 4.182 %
Max Ratio
Min Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
60
42-Mo-93

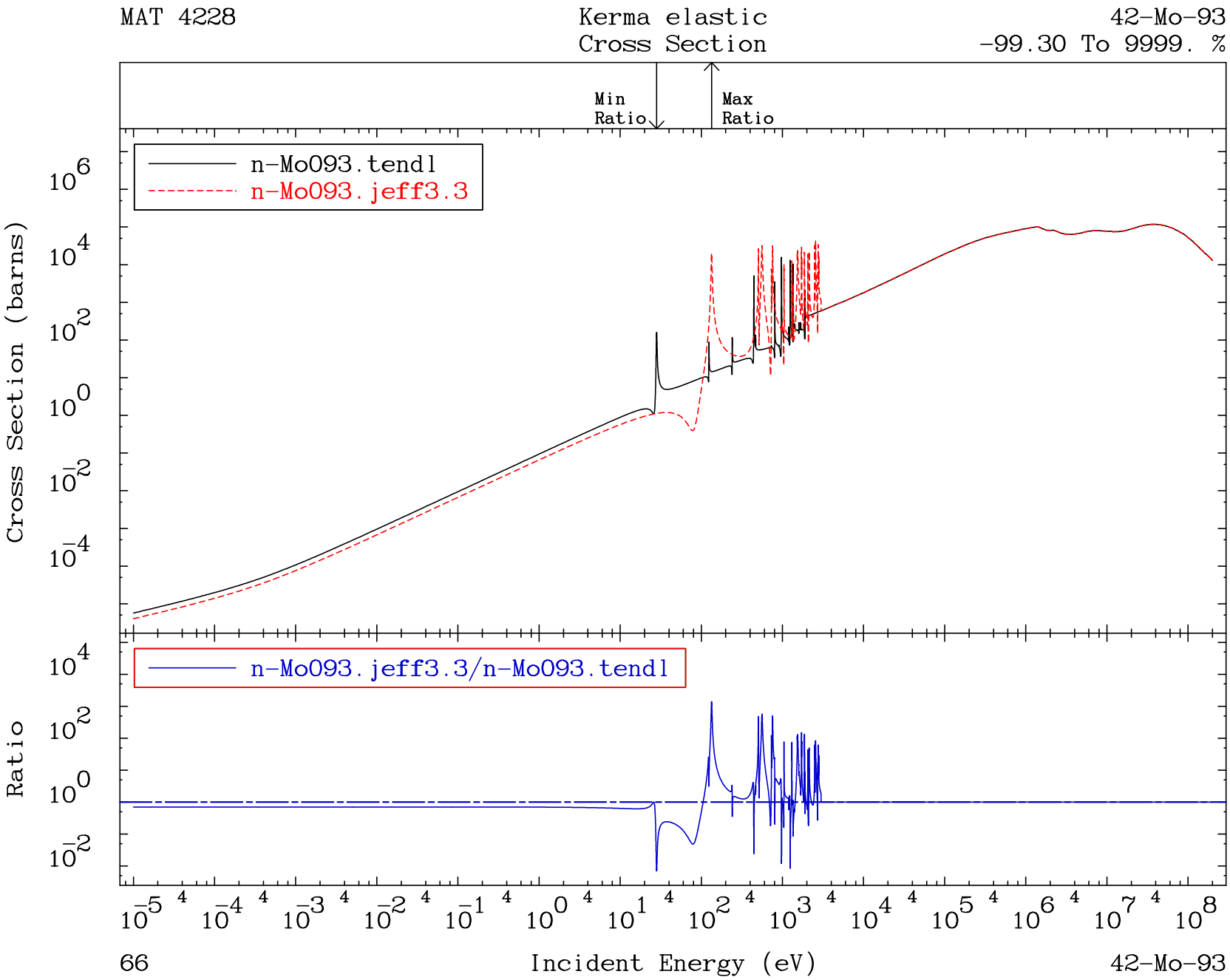

MAT 4228
Deuterium Production
Cross Section
42-Mo-93
-0.751 To 7.085 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.4770 MeV
n-Mo093.jeff3.3 Threshold 5.4758 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.05
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
61
Incident Energy (eV)
42-Mo-93

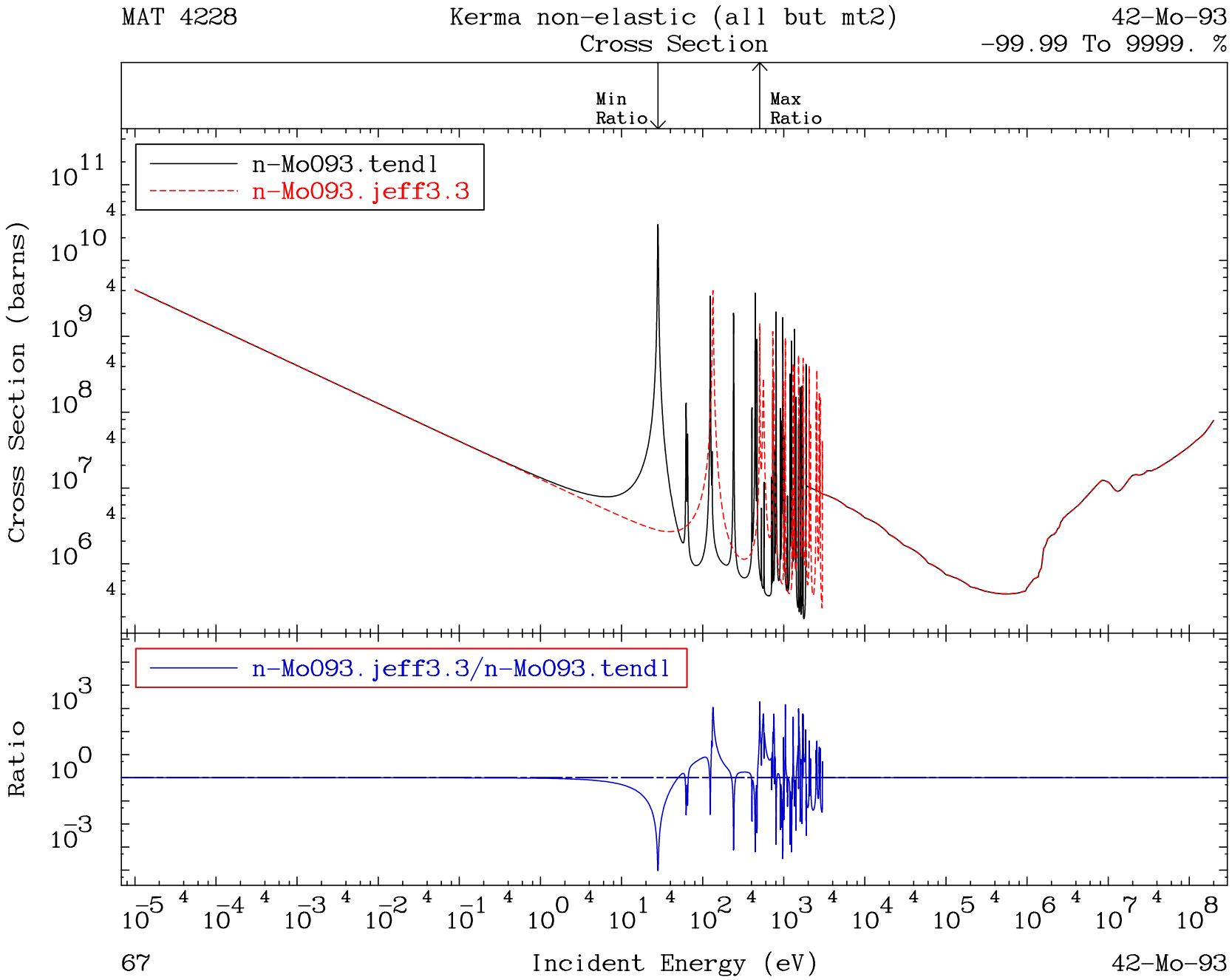

MAT 4228
Tritium Production
Cross Section
42-Mo-93
-0.141 To 3.980 %
Max
Ratio
Min
Ratio
n-Mo093.tendl Threshold 7.1241 MeV
n-Mo093.jeff3.3 Threshold 7.1227 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
42-Mo-93

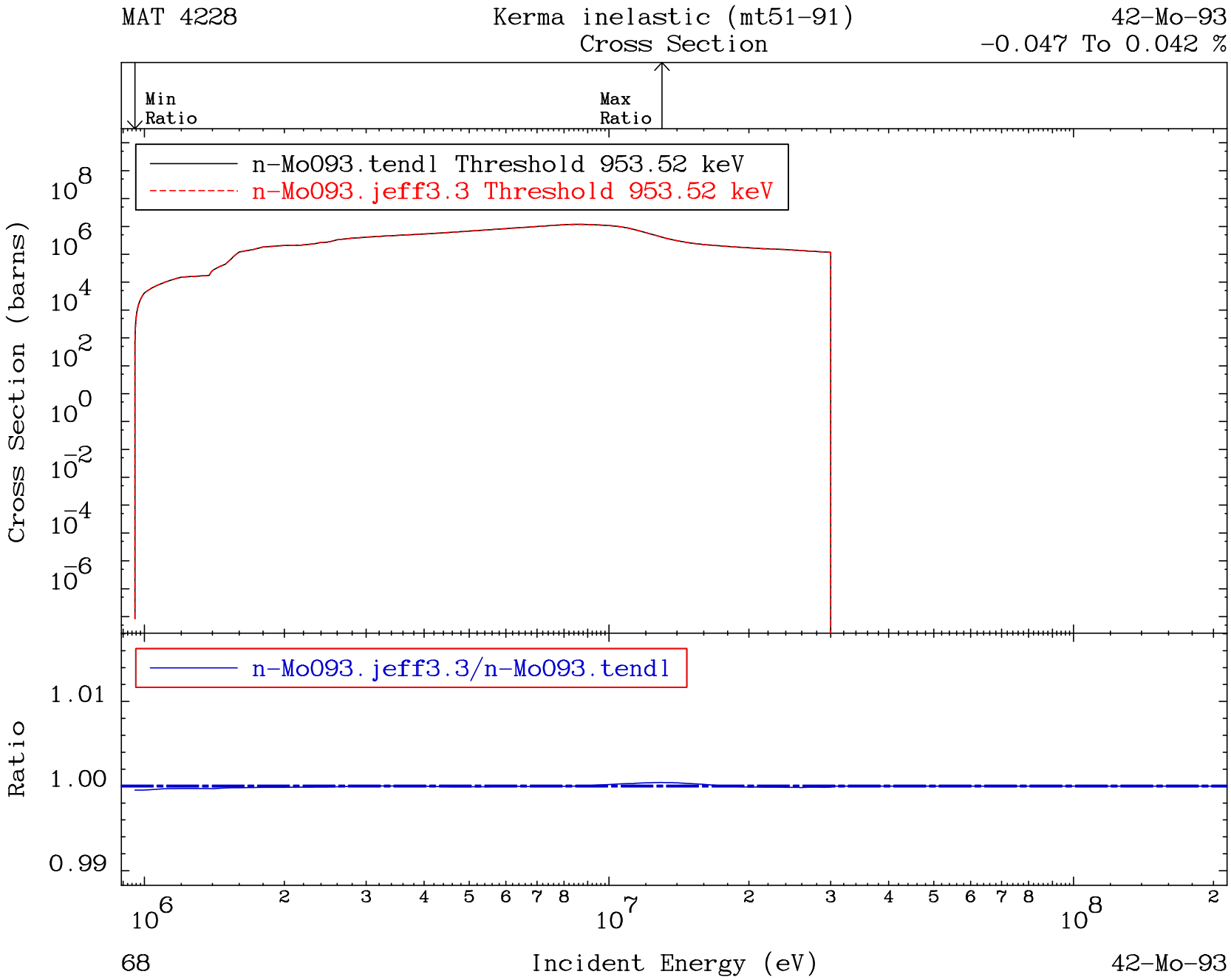

MAT 4228
He-3 Production
Cross Section
42-Mo-93
0.016 To 34.94 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.8340 MeV
n-Mo093.jeff3.3 Threshold 5.8327 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.4
1.2
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
63
Incident Energy (eV)
42-Mo-93

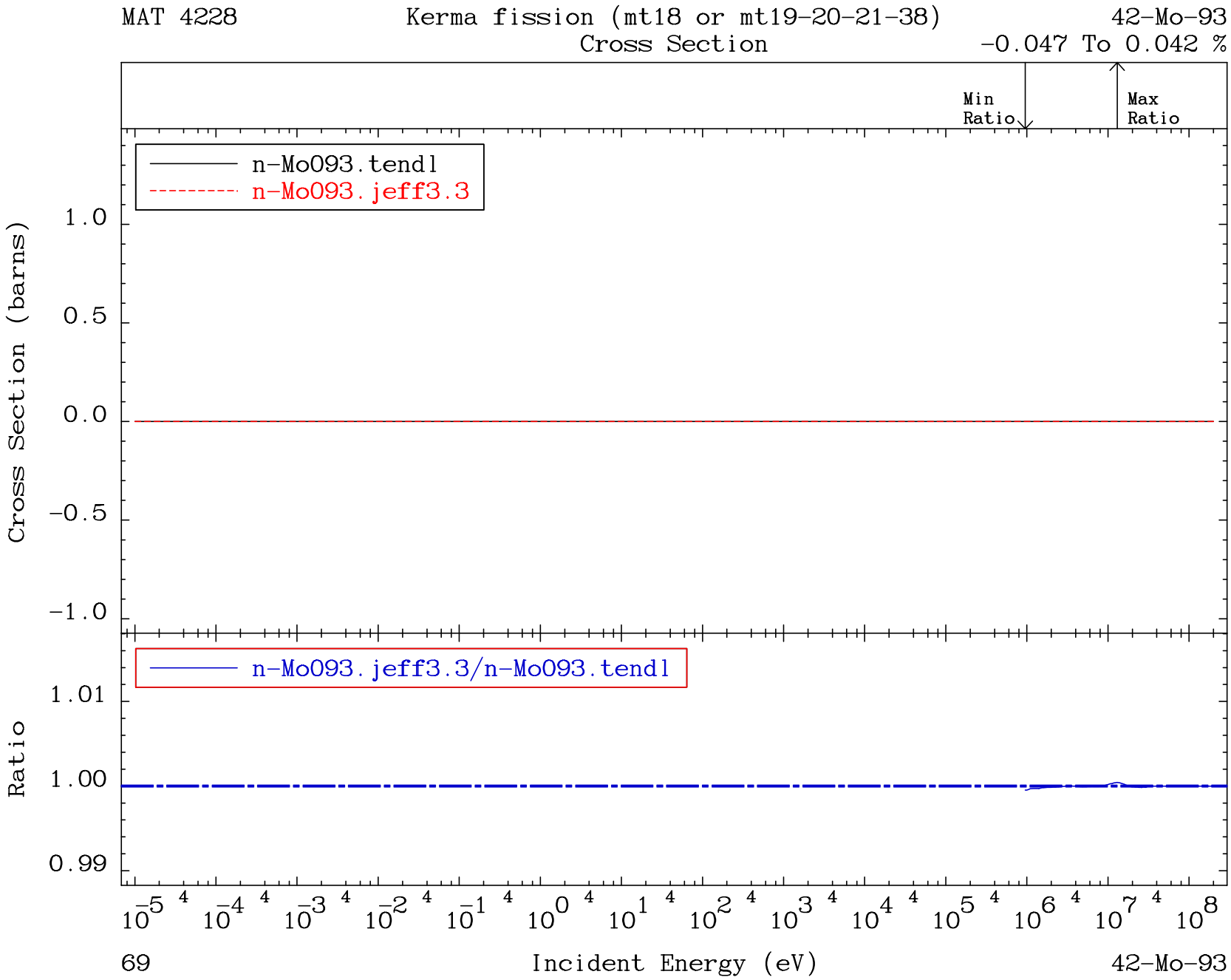

MAT 4228
He-4 Production
Cross Section
42-Mo-93
-3.470 To 88.56 %
Max Ratio
Min Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
64
42-Mo-93

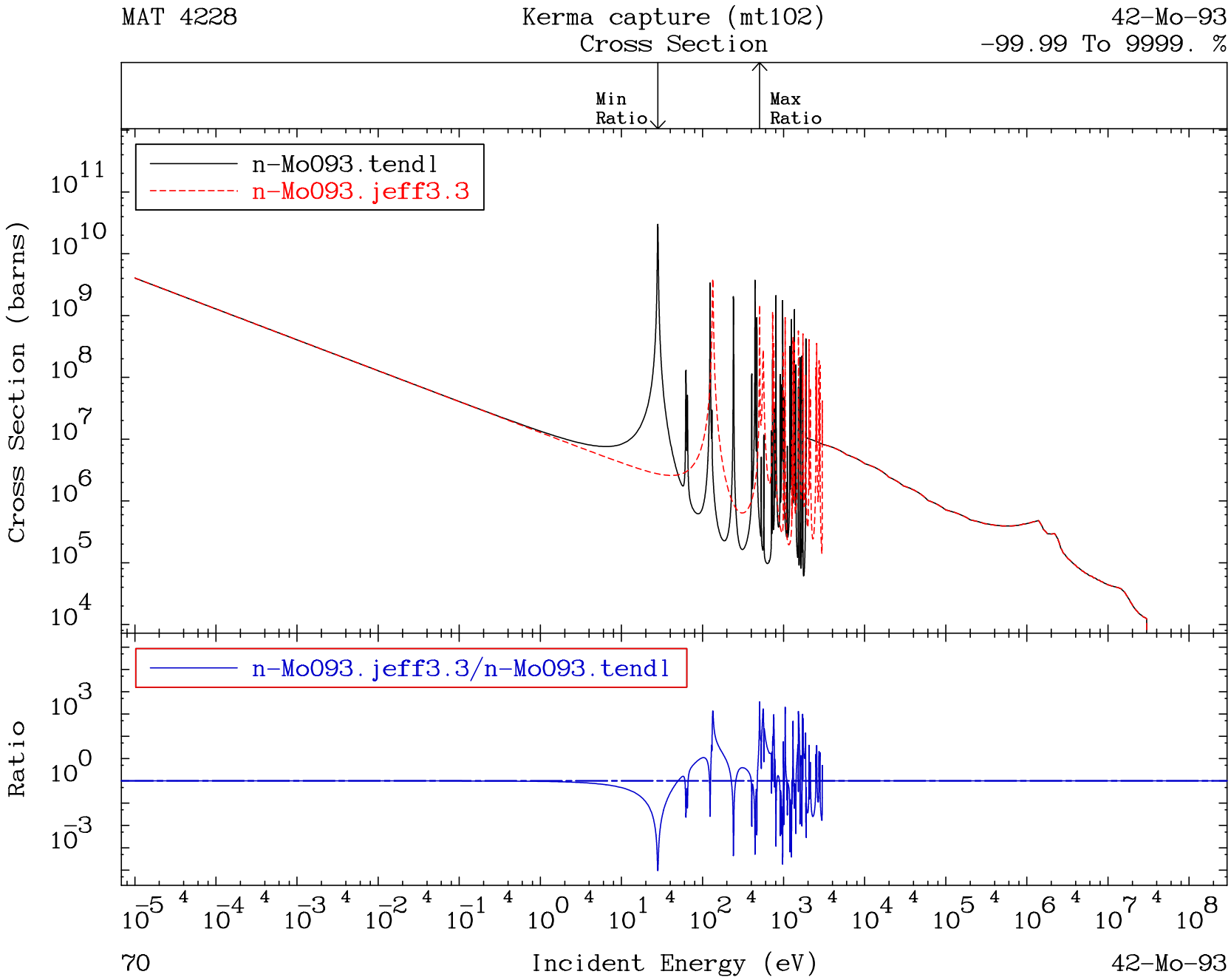

MAT 4228
Kerma total (eV-barns)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
65
Incident Energy (eV)
42-Mo-93

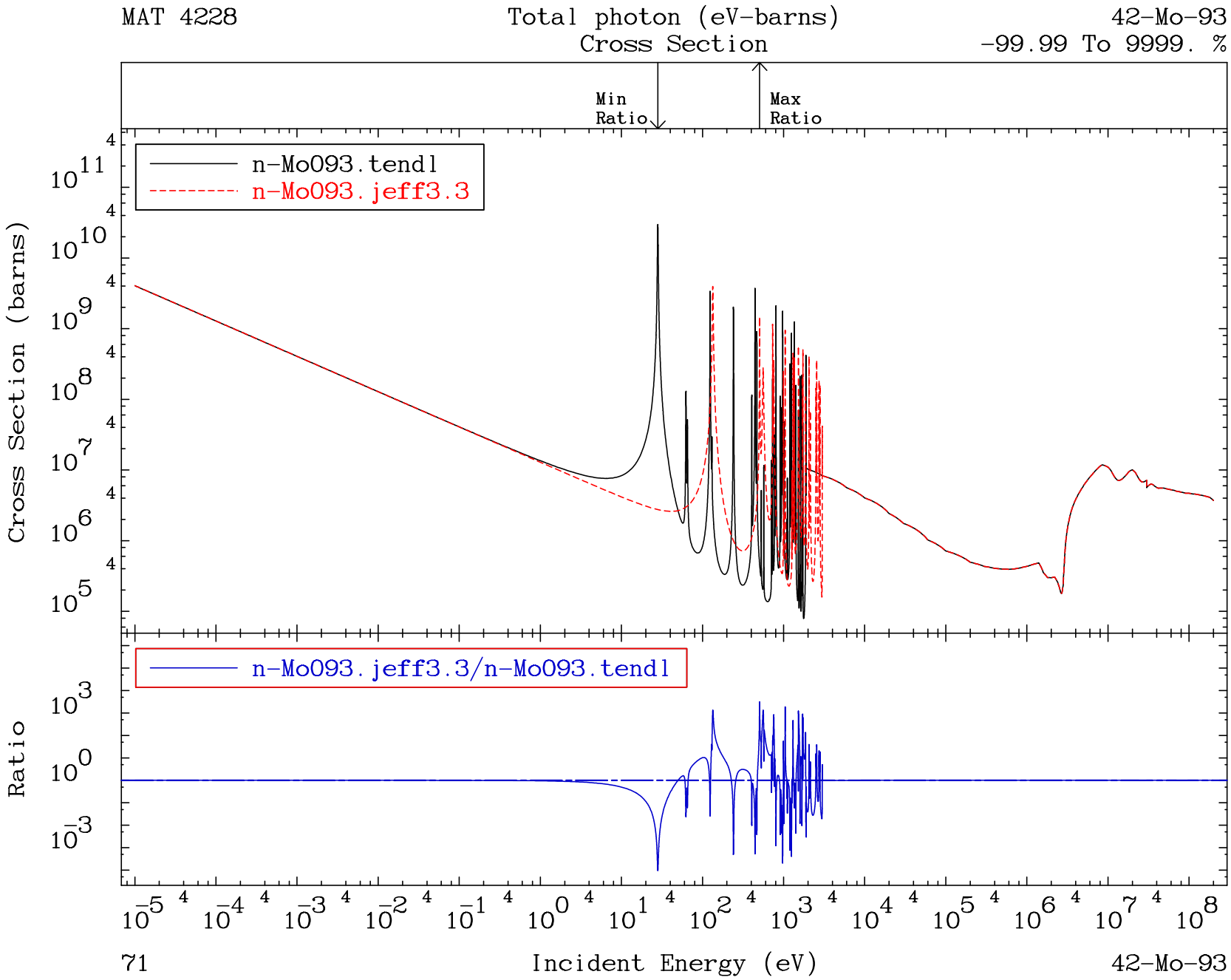

MAT 4228
Kerma elastic
Cross Section
42-Mo-93
-99.30 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
66
42-Mo-93

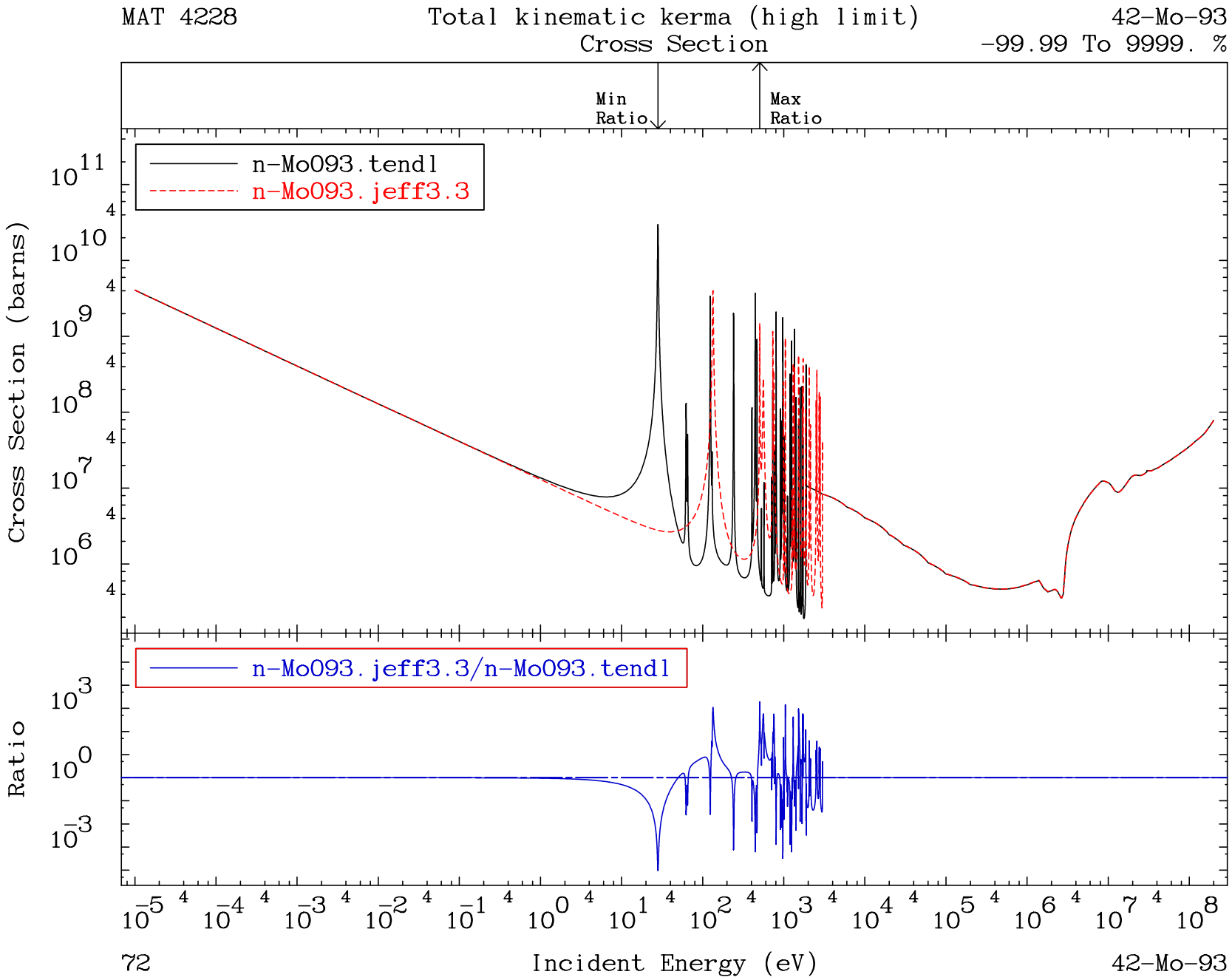

MAT 4228
Kerma non-elastic (all but mt2)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
67
42-Mo-93

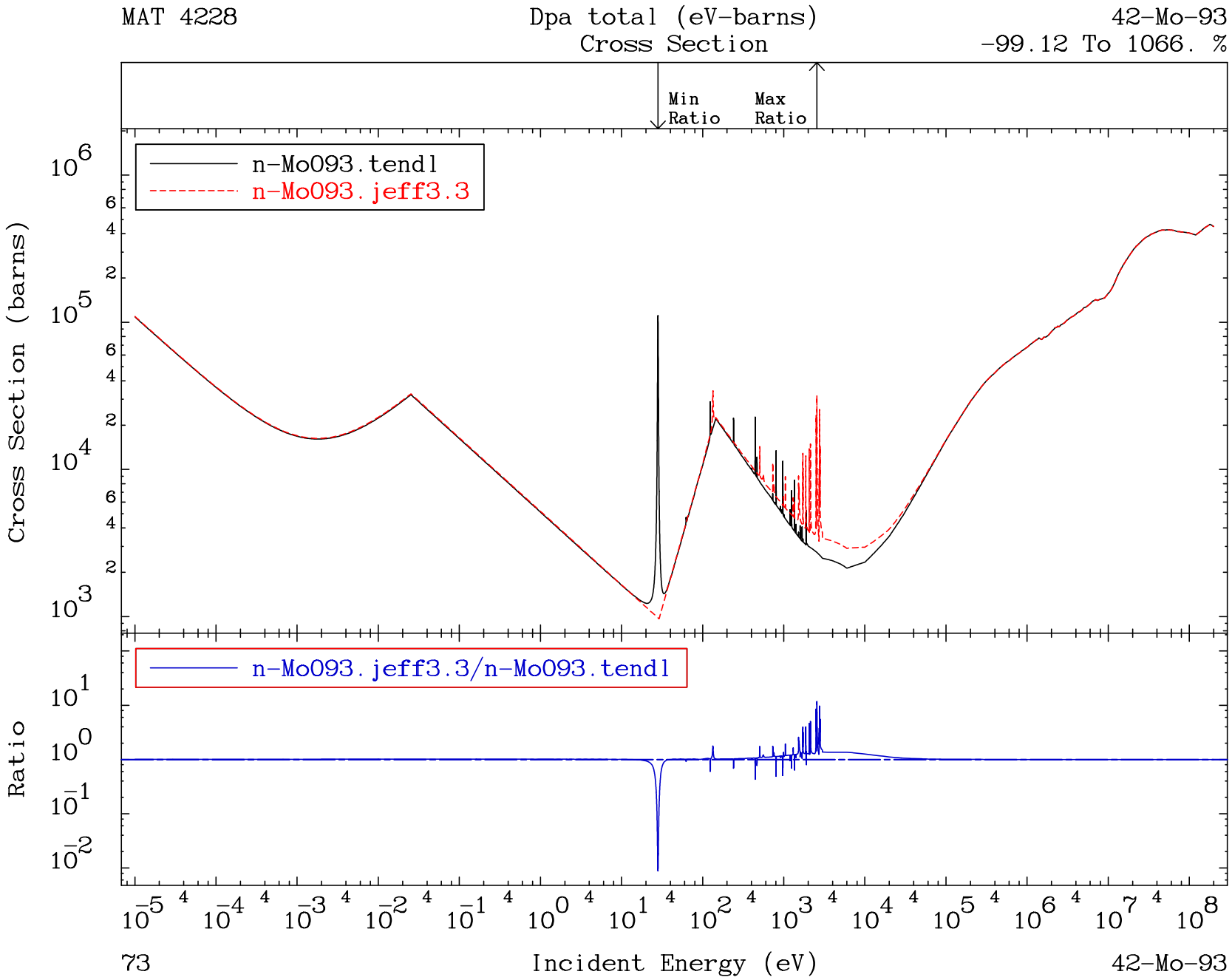

MAT 4228
Kerma inelastic (mt51-91)
Cross Section
42-Mo-93
-0.047 To 0.042 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 953.52 keV
n-Mo093.jeff3.3 Threshold 953.52 keV
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
68
42-Mo-93

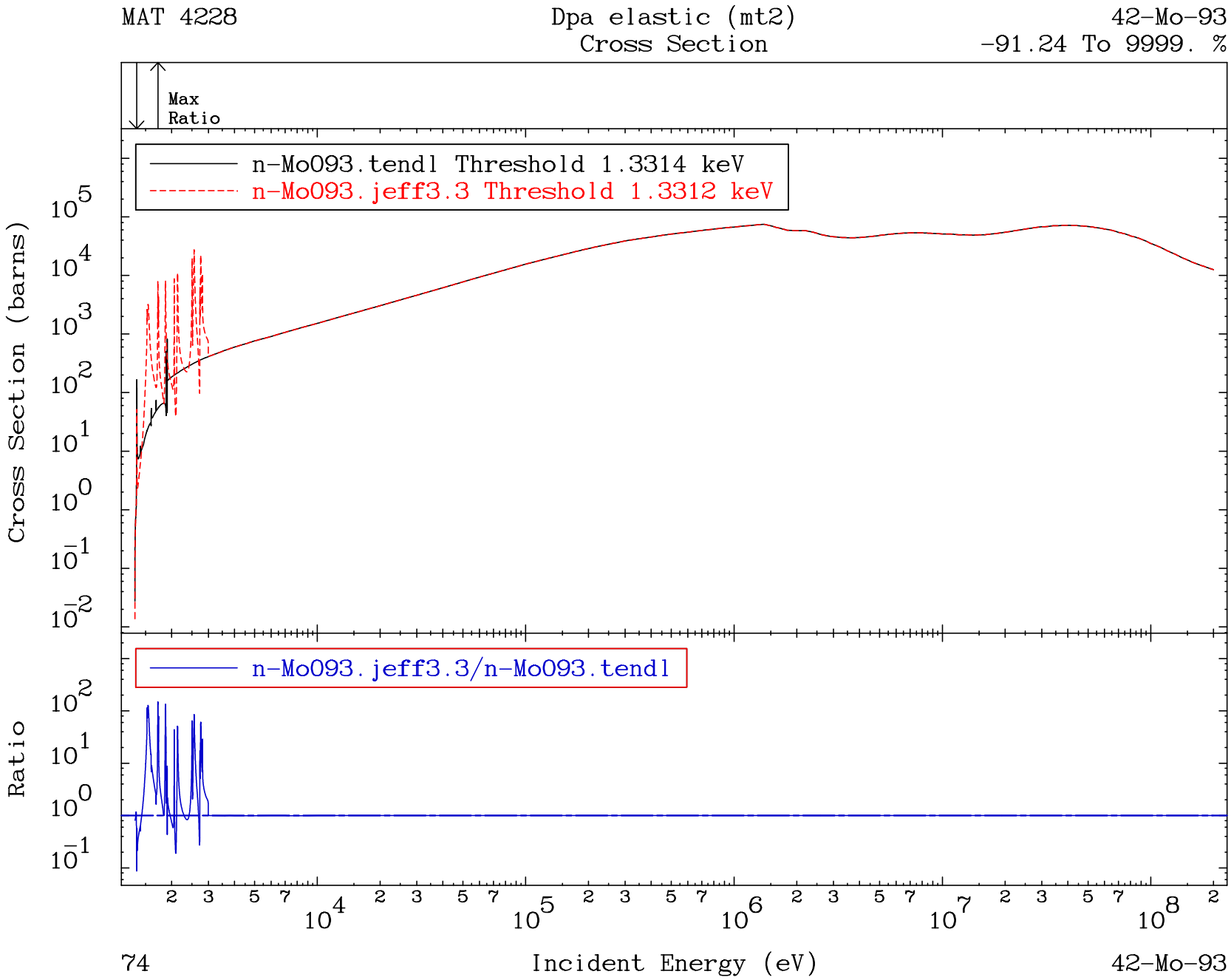

MAT 4228
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
42-Mo-93
-0.047 To 0.042 %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
69
Incident Energy (eV)
42-Mo-93

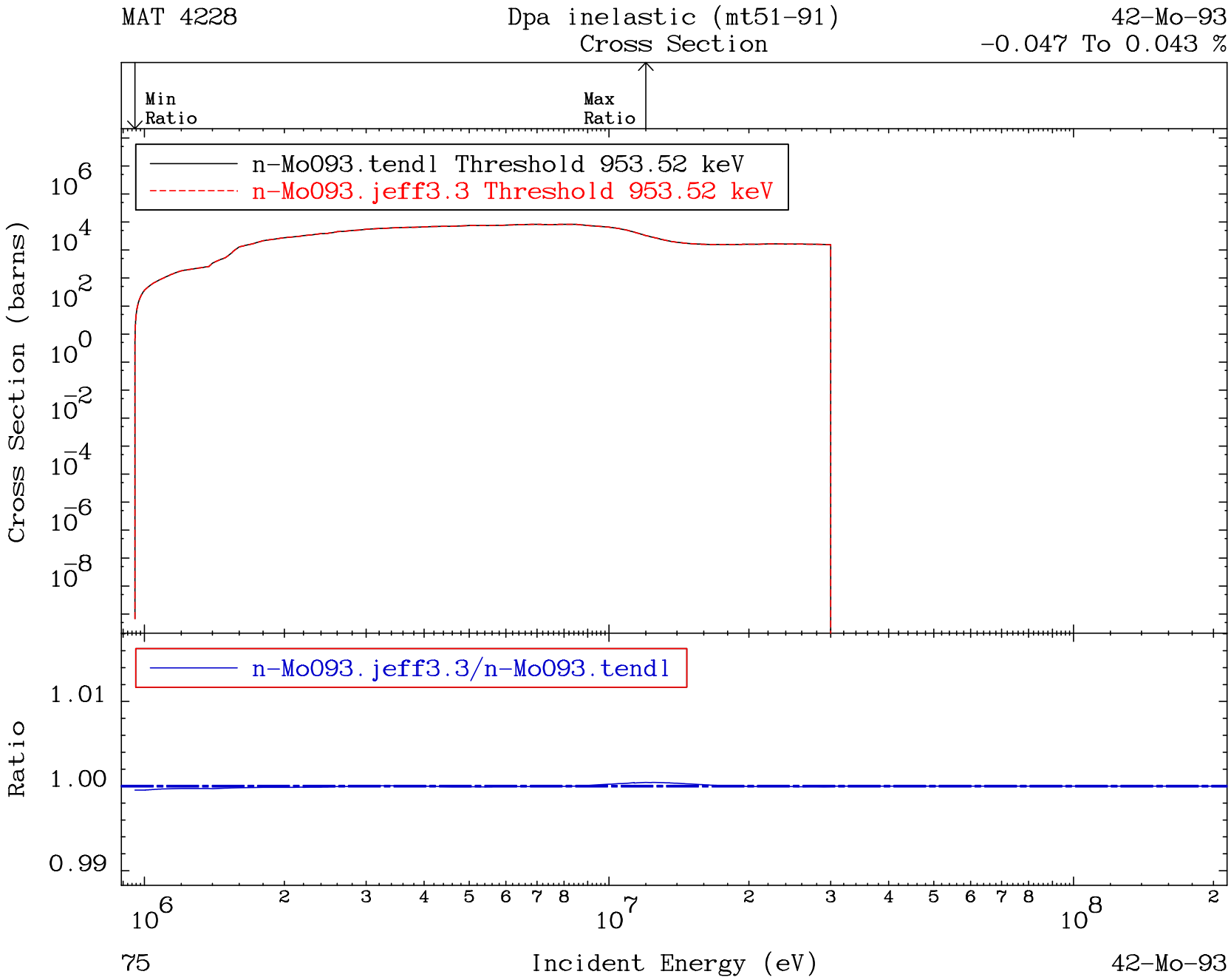

MAT 4228
Kerma capture (mt102)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
70
42-Mo-93

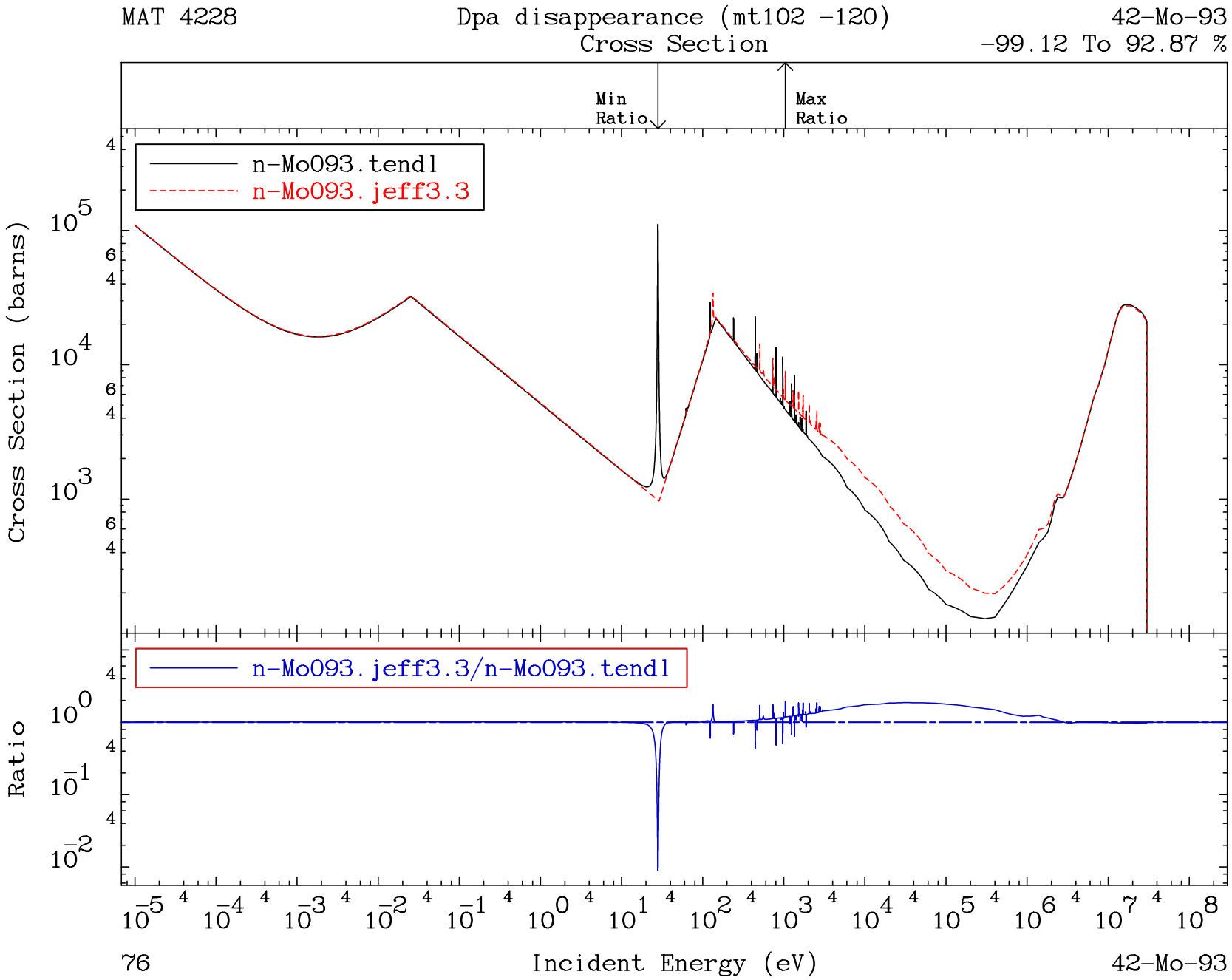

MAT 4228
Total photon (eV-barns)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
71
Incident Energy (eV)
42-Mo-93

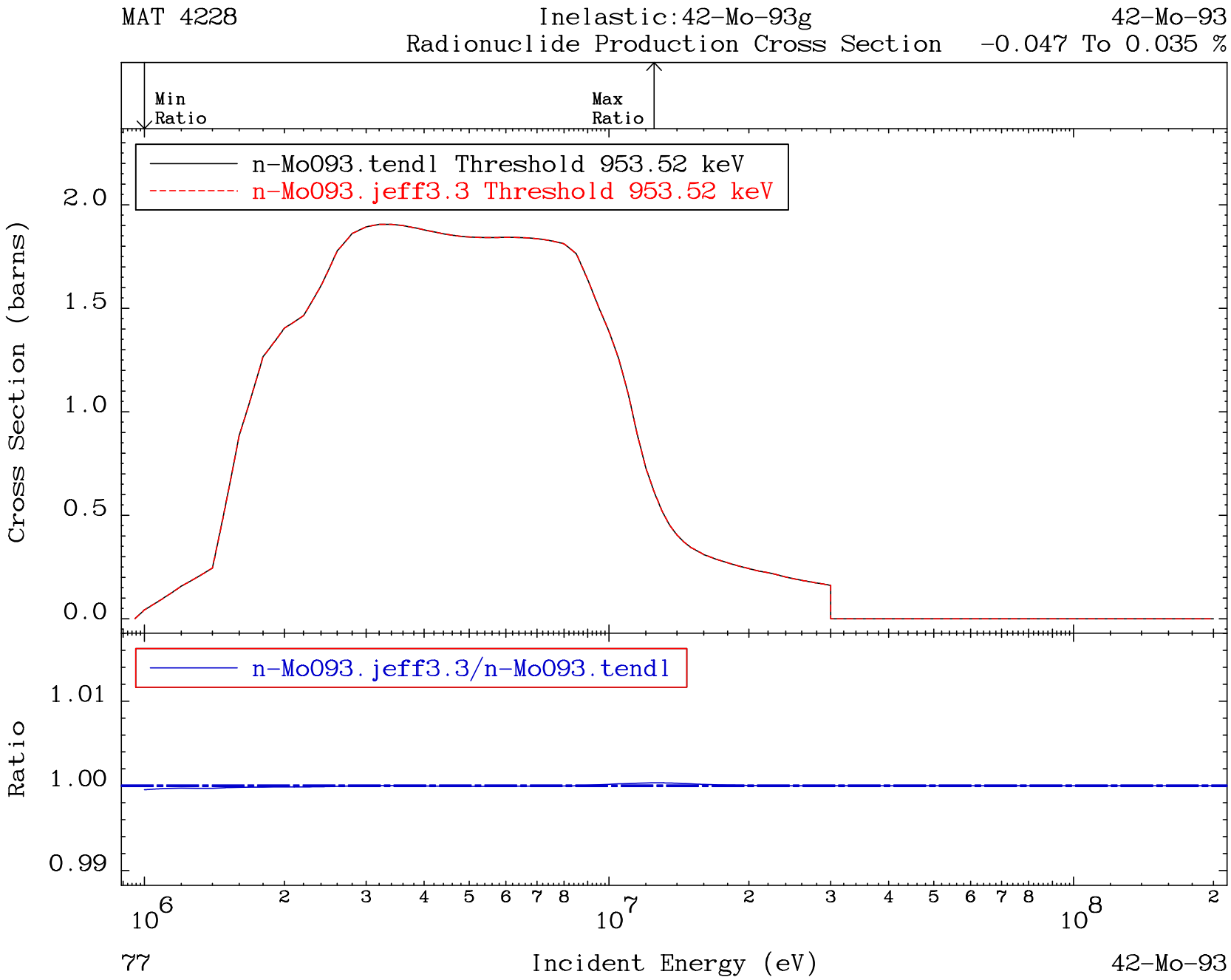

MAT 4228
Total kinematic kerma (high limit)
Cross Section
42-Mo-93
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
72
42-Mo-93

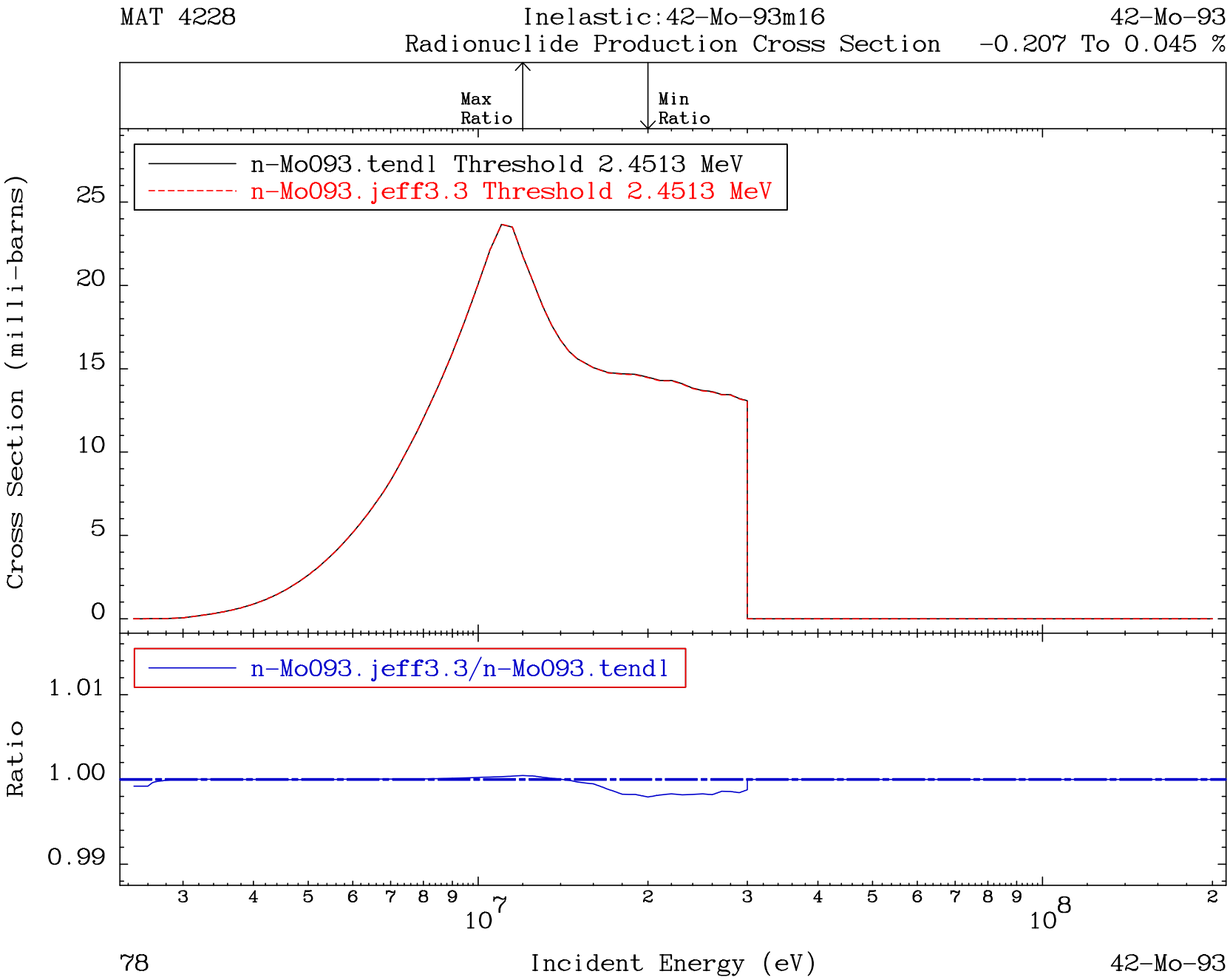

MAT 4228
Dpa total (eV-barns)
Cross Section
42-Mo-93
-99.12 To 1066. %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
73
Incident Energy (eV)
42-Mo-93

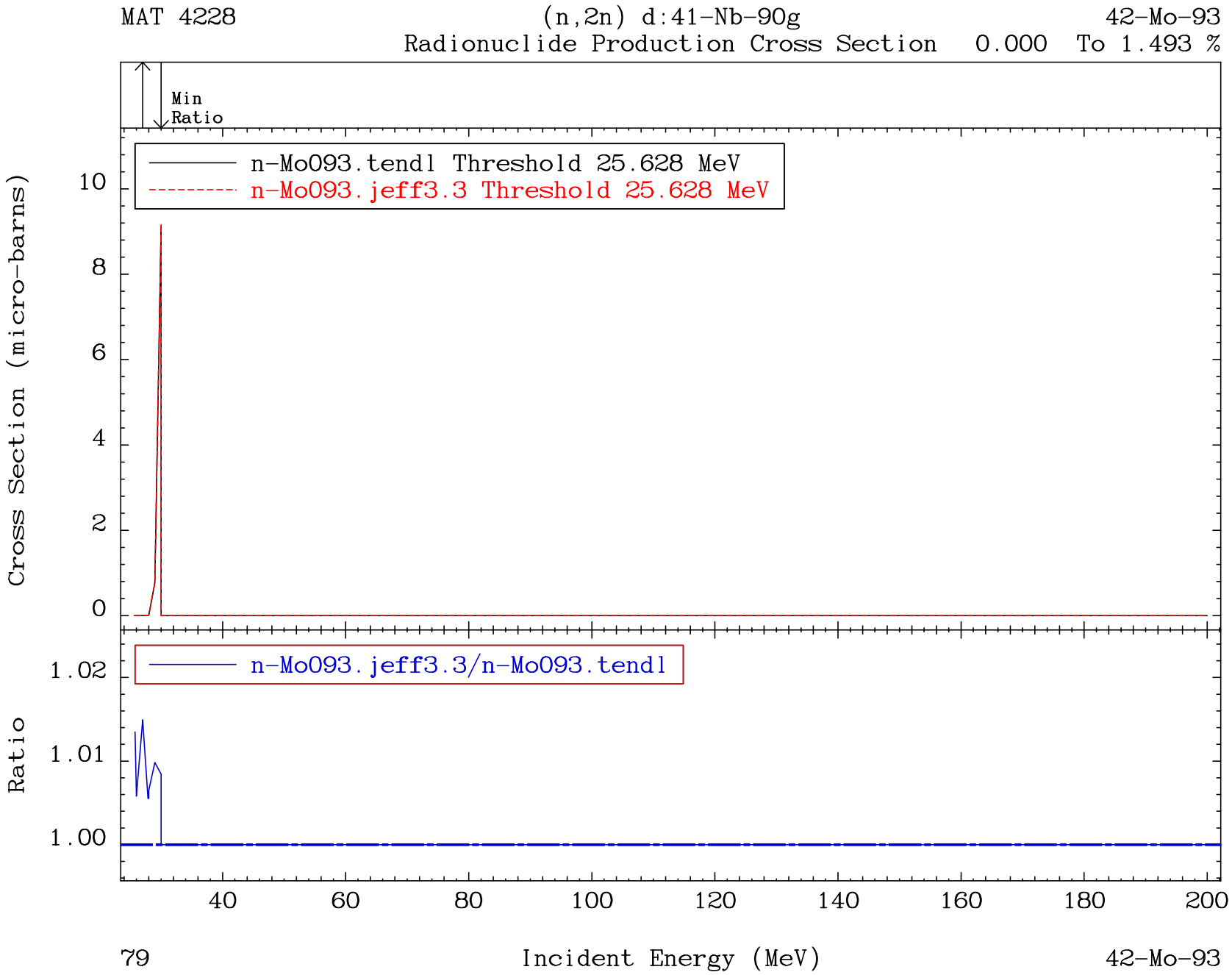

MAT 4228
Dpa elastic (mt2)
Cross Section
42-Mo-93
-91.24 To 9999. %
Max
Ratio
n-Mo093.tendl Threshold 1.3314 keV
n-Mo093.jeff3.3 Threshold 1.3312 keV
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
74
42-Mo-93

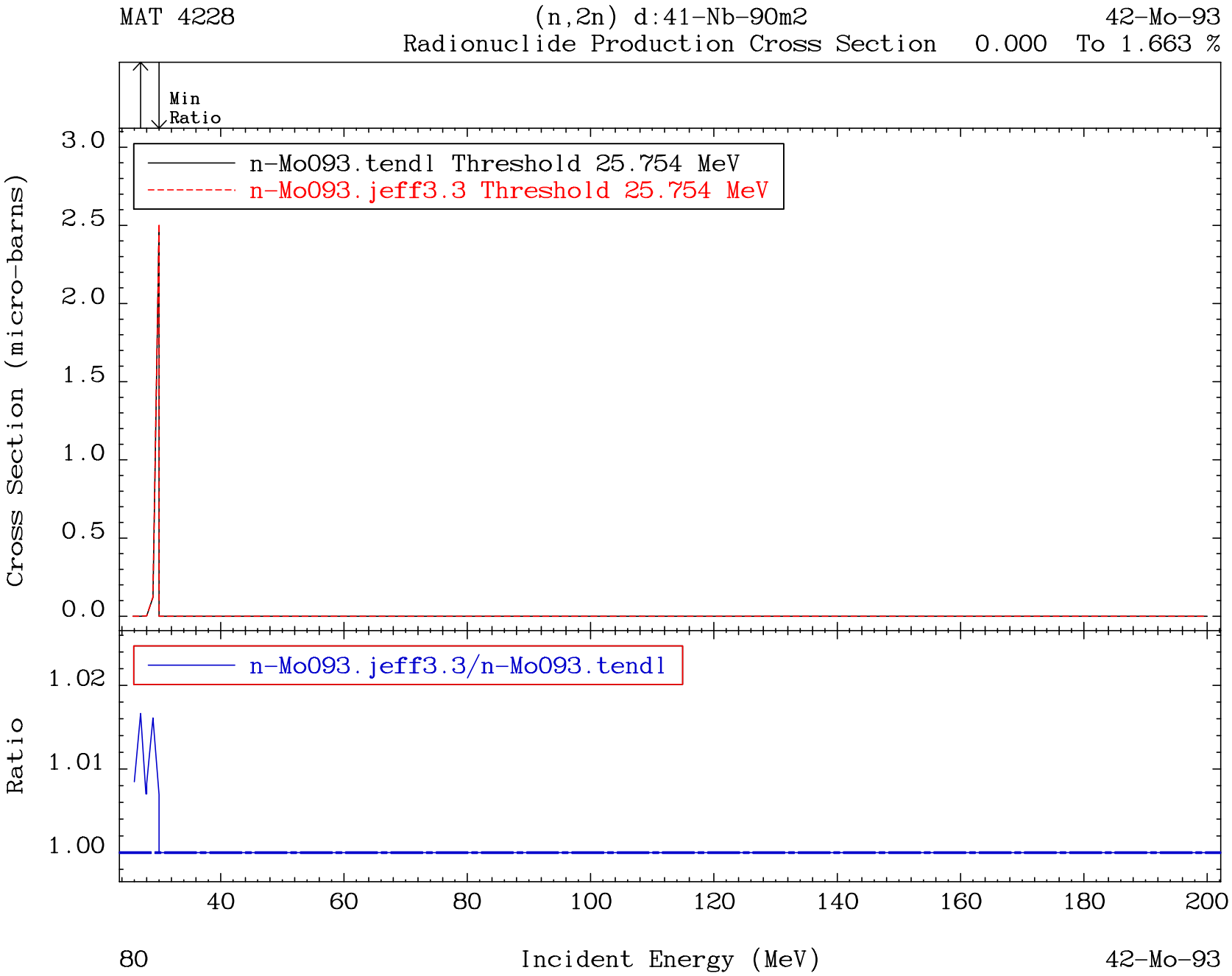

MAT 4228
Dpa inelastic (mt51-91)
Cross Section
42-Mo-93
-0.047 To 0.043 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 953.52 keV
n-Mo093.jeff3.3 Threshold 953.52 keV
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
75
42-Mo-93

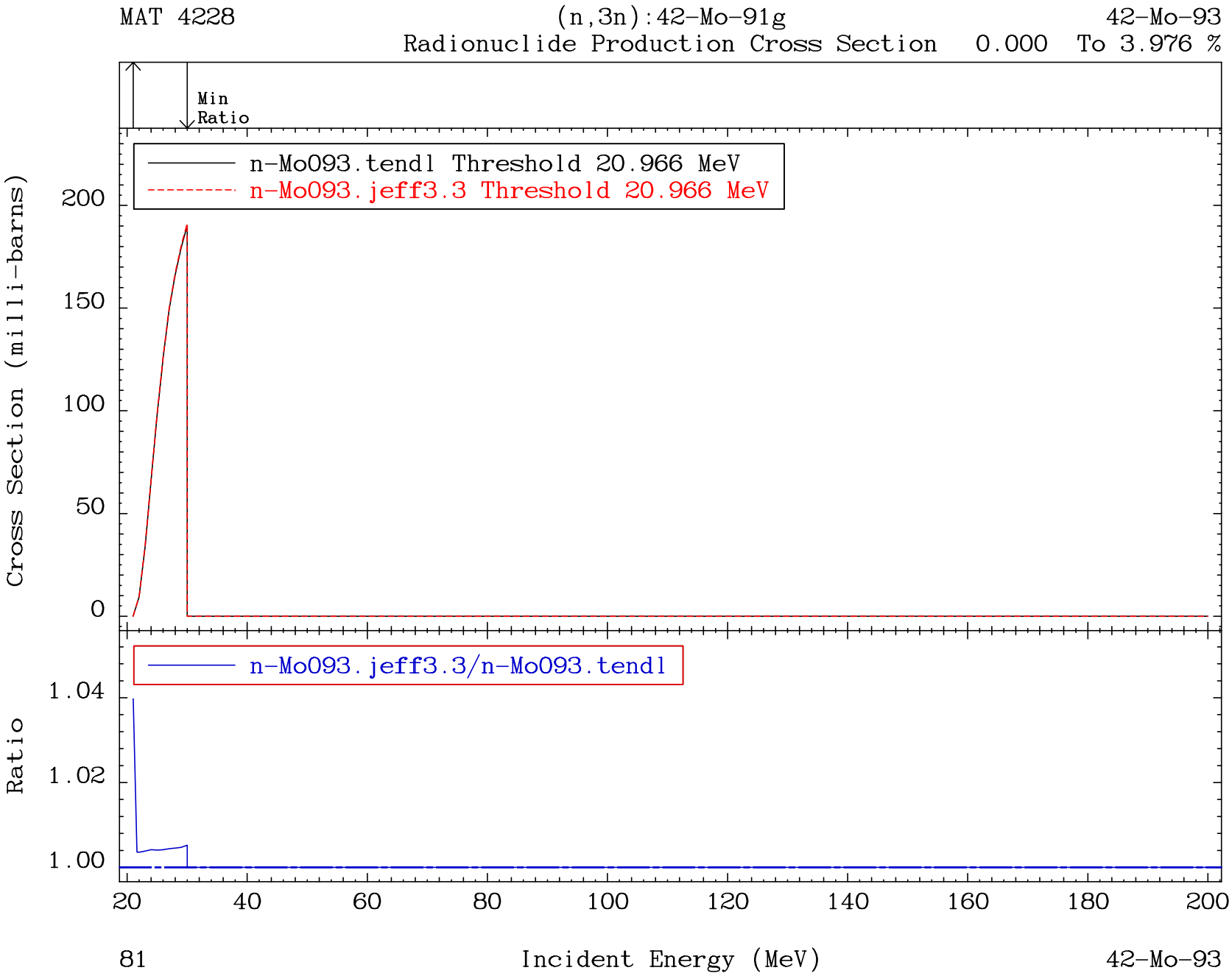

MAT 4228
Dpa disappearance (mt102 -120)
Cross Section
42-Mo-93
-99.12 To 92.87 %
Min Ratio
Max Ratio
n-Mo093.tendl
n-Mo093.jeff3.3
Cross Section (barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
76
42-Mo-93

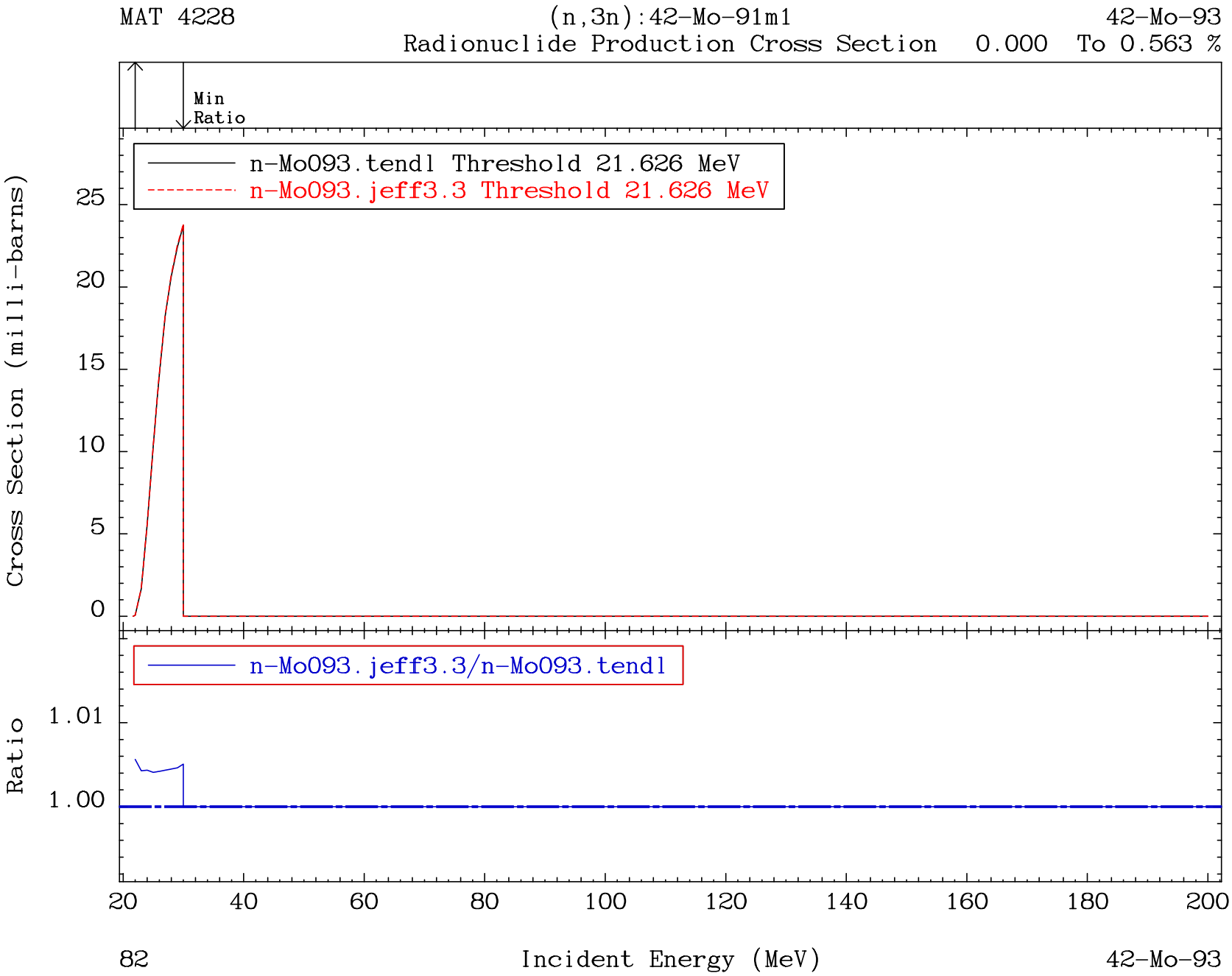

MAT 4228
Inelastic:42-Mo-93g
42-Mo-93
Radionuclide Production Cross Section
-0.047 To 0.035 %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 953.52 keV
n-Mo093.jeff3.3 Threshold 953.52 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
77
Incident Energy (eV)
42-Mo-93

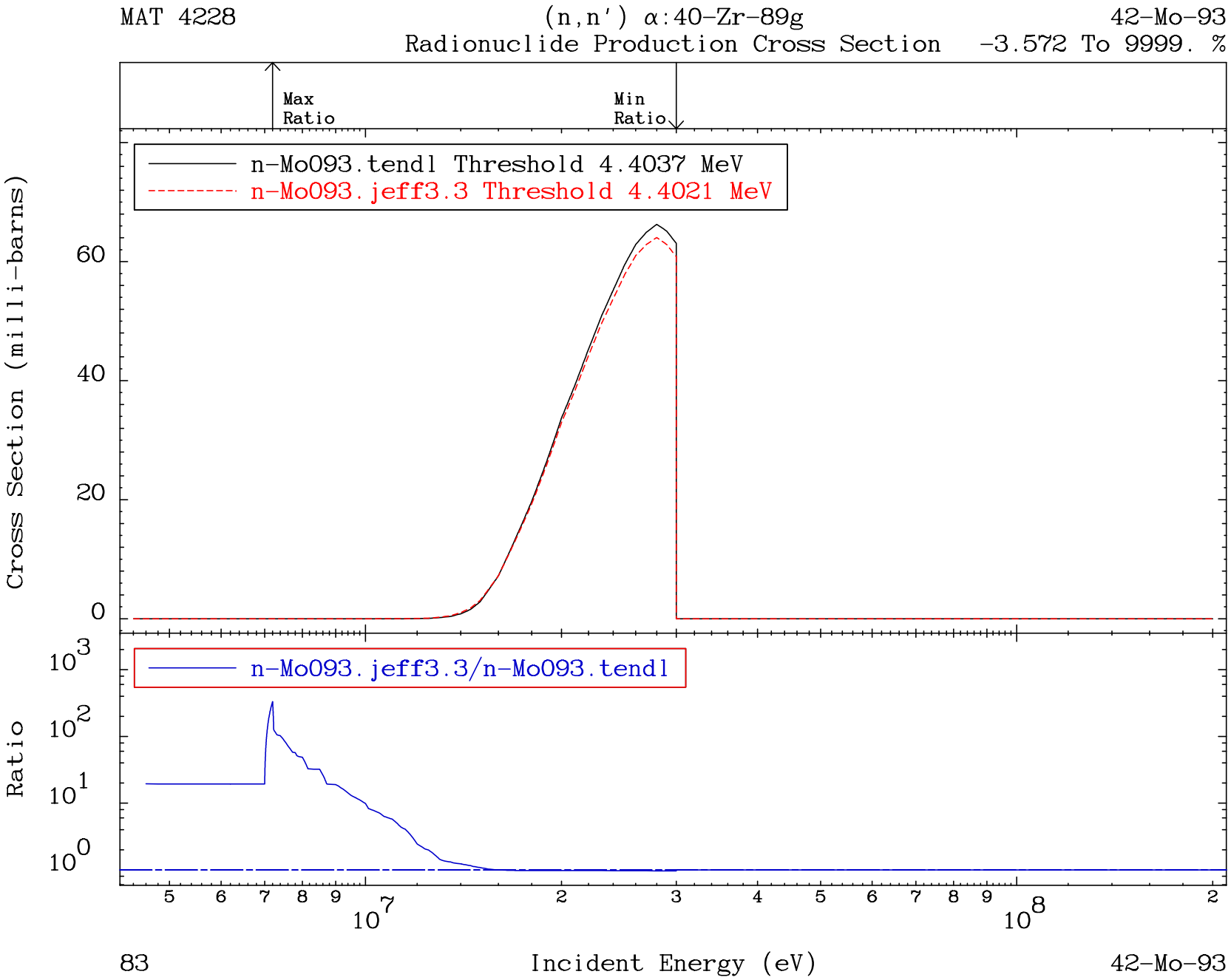

MAT 4228
Inelastic:42-Mo-93m16
42-Mo-93
Radionuclide Production Cross Section
-0.207 To 0.045 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 2.4513 MeV
n-Mo093.jeff3.3 Threshold 2.4513 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
78
Incident Energy (eV)
42-Mo-93

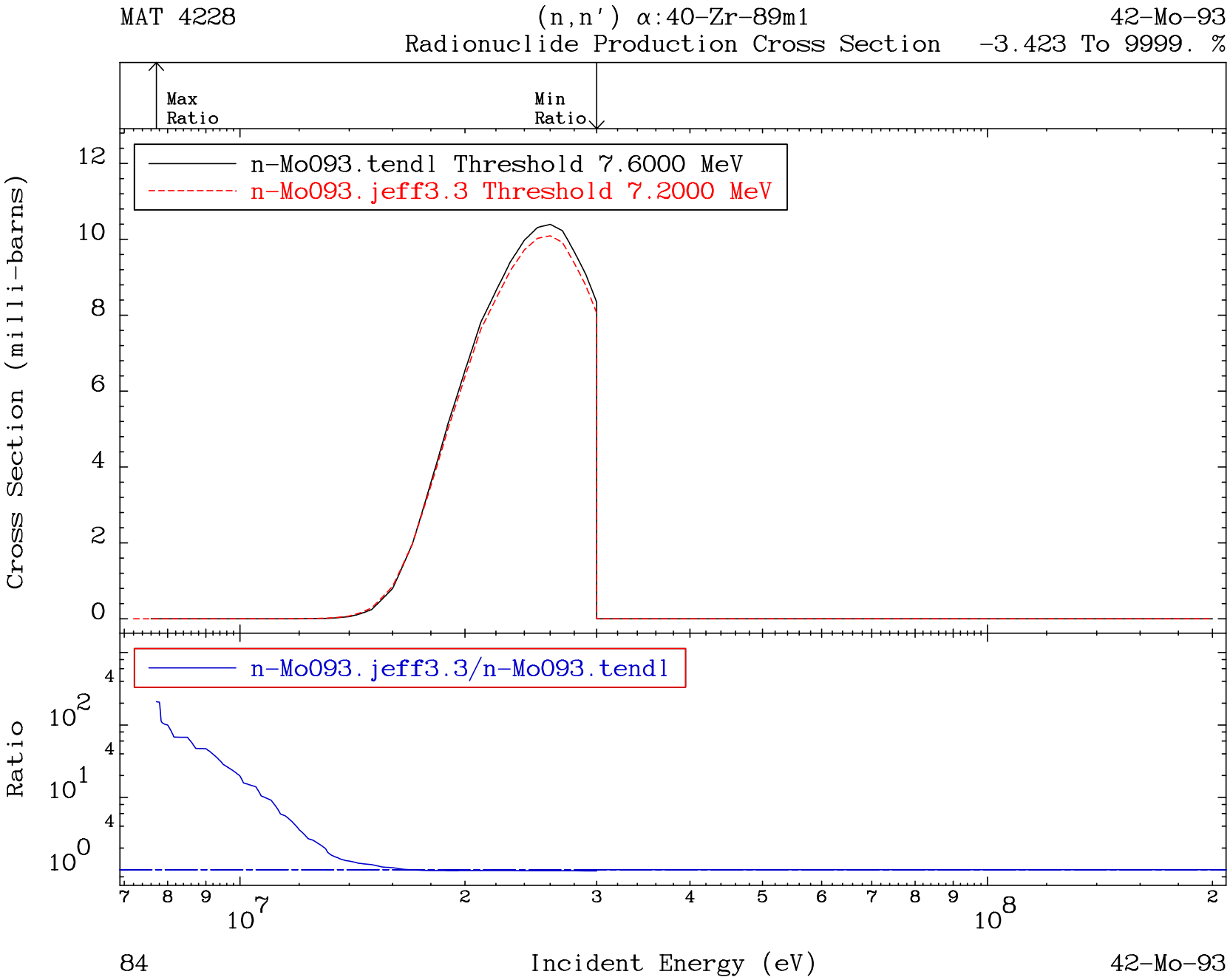

MAT 4228
(n,2n) d:41-Nb-90g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 1.493 %
Min
Ratio
n-Mo093.tendl Threshold 25.628 MeV
n-Mo093.jeff3.3 Threshold 25.628 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
42-Mo-93

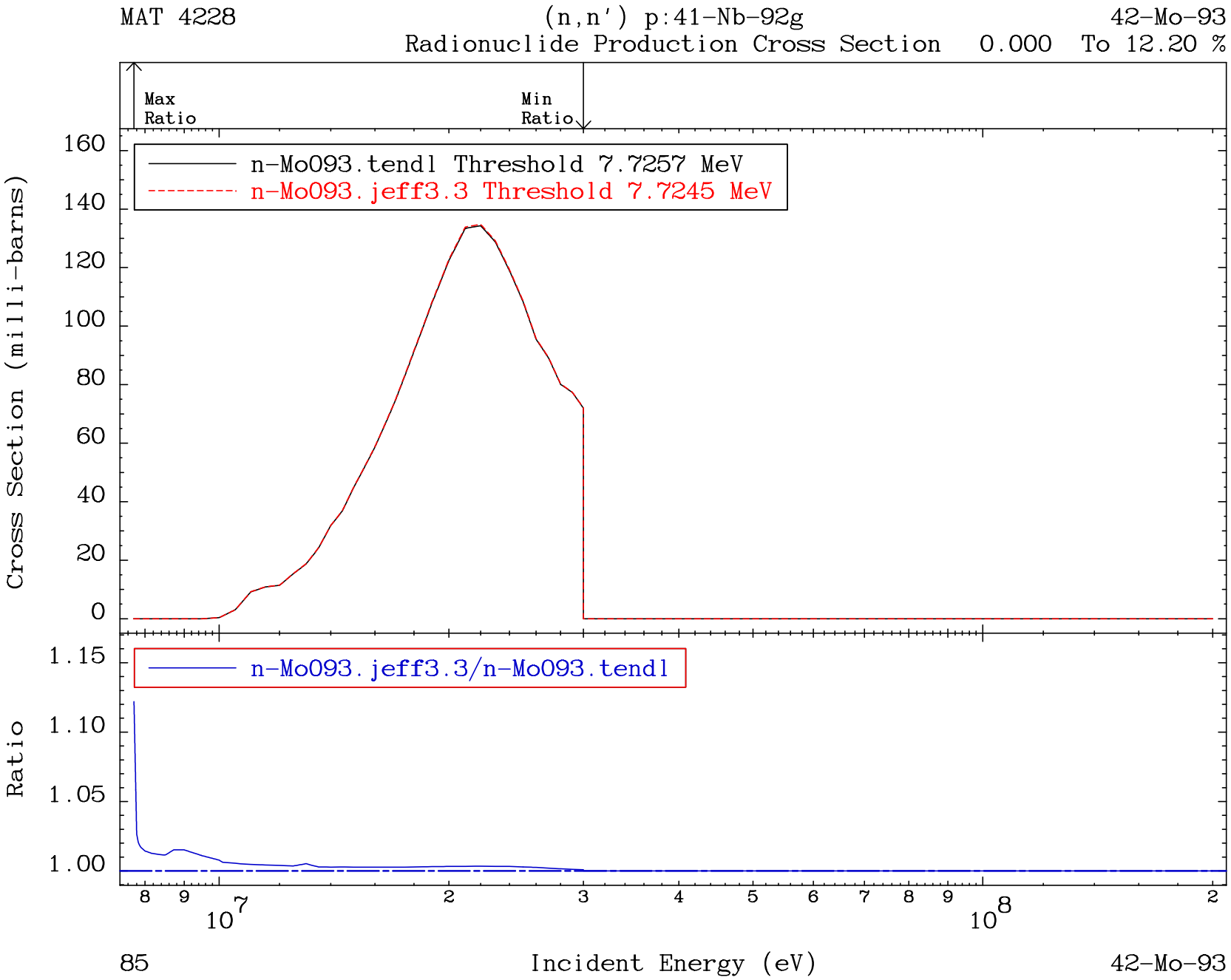

MAT 4228
(n,2n) d:41-Nb-90m2
42-Mo-93
Radionuclide Production Cross Section 0.000 To 1.663 %
Min
Ratio
n-Mo093.tendl Threshold 25.754 MeV
n-Mo093.jeff3.3 Threshold 25.754 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
42-Mo-93

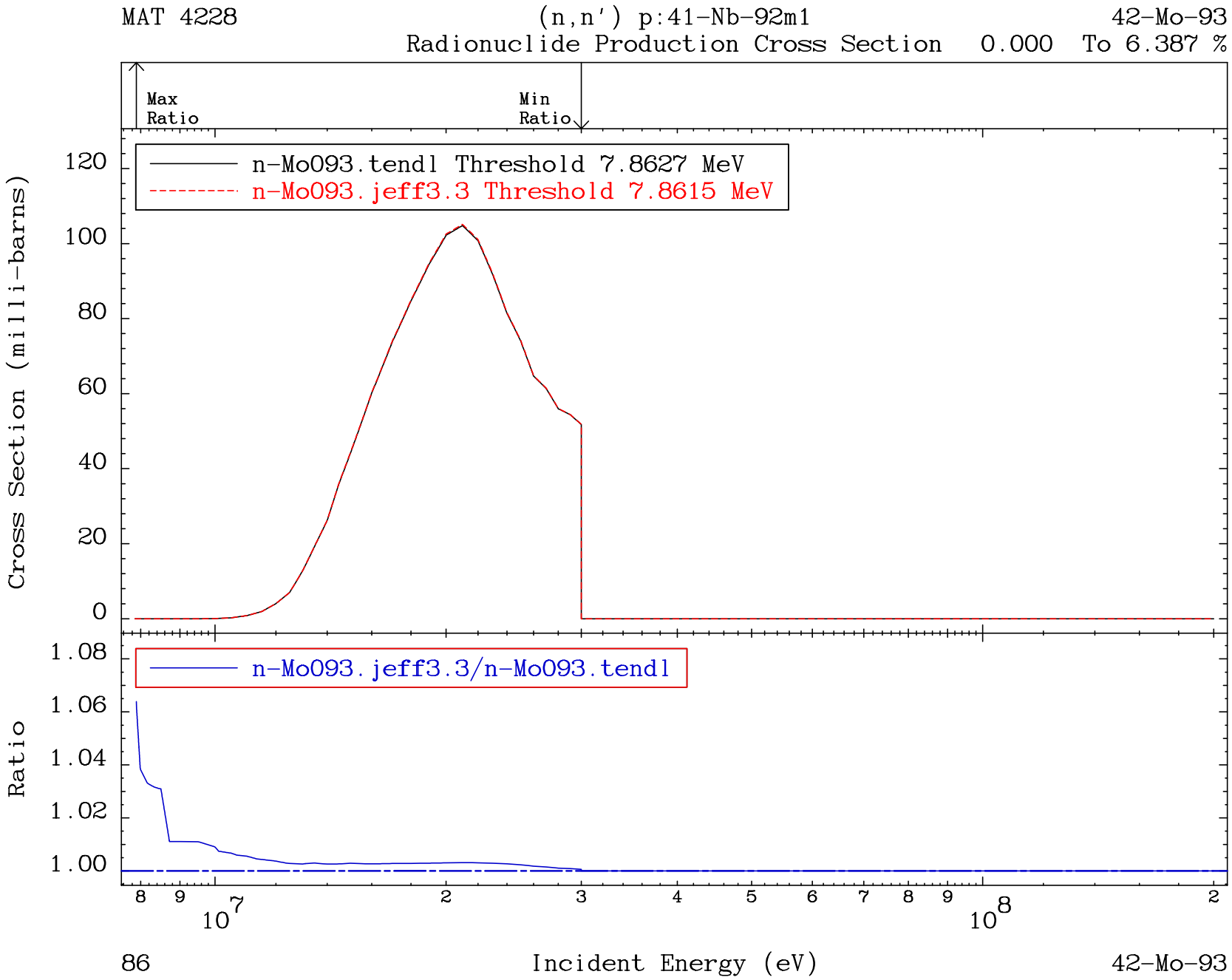

MAT 4228
(n,3n):42-Mo-91g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.976 %
Min Ratio
n-Mo093.tendl Threshold 20.966 MeV
n-Mo093.jeff3.3 Threshold 20.966 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
42-Mo-93

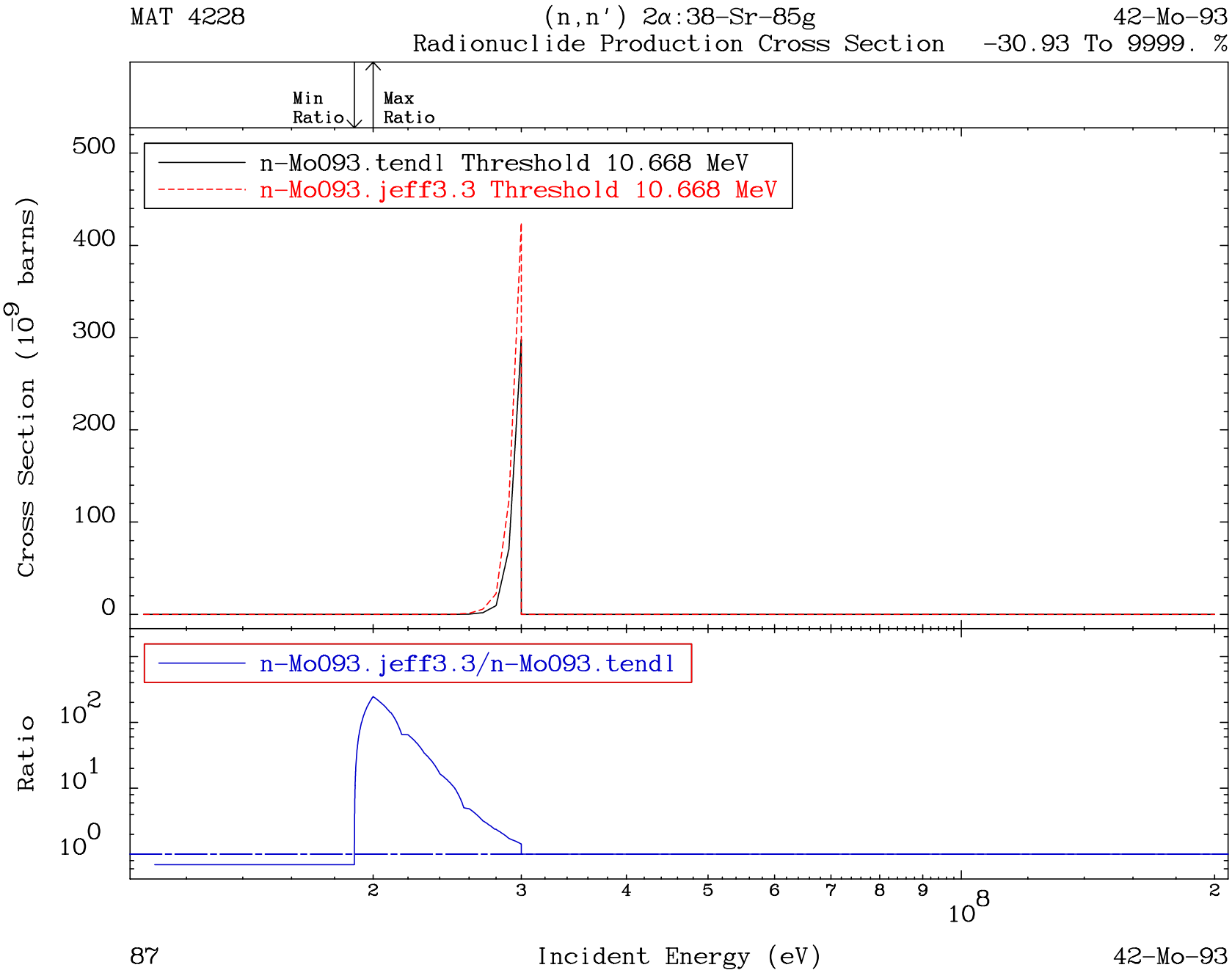

MAT 4228
(n,3n):42-Mo-91m1
42-Mo-93
Radionuclide Production Cross Section 0.000 To 0.563 %
Min Ratio
n-Mo093.tendl Threshold 21.626 MeV
n-Mo093.jeff3.3 Threshold 21.626 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
82
Incident Energy (MeV)
42-Mo-93

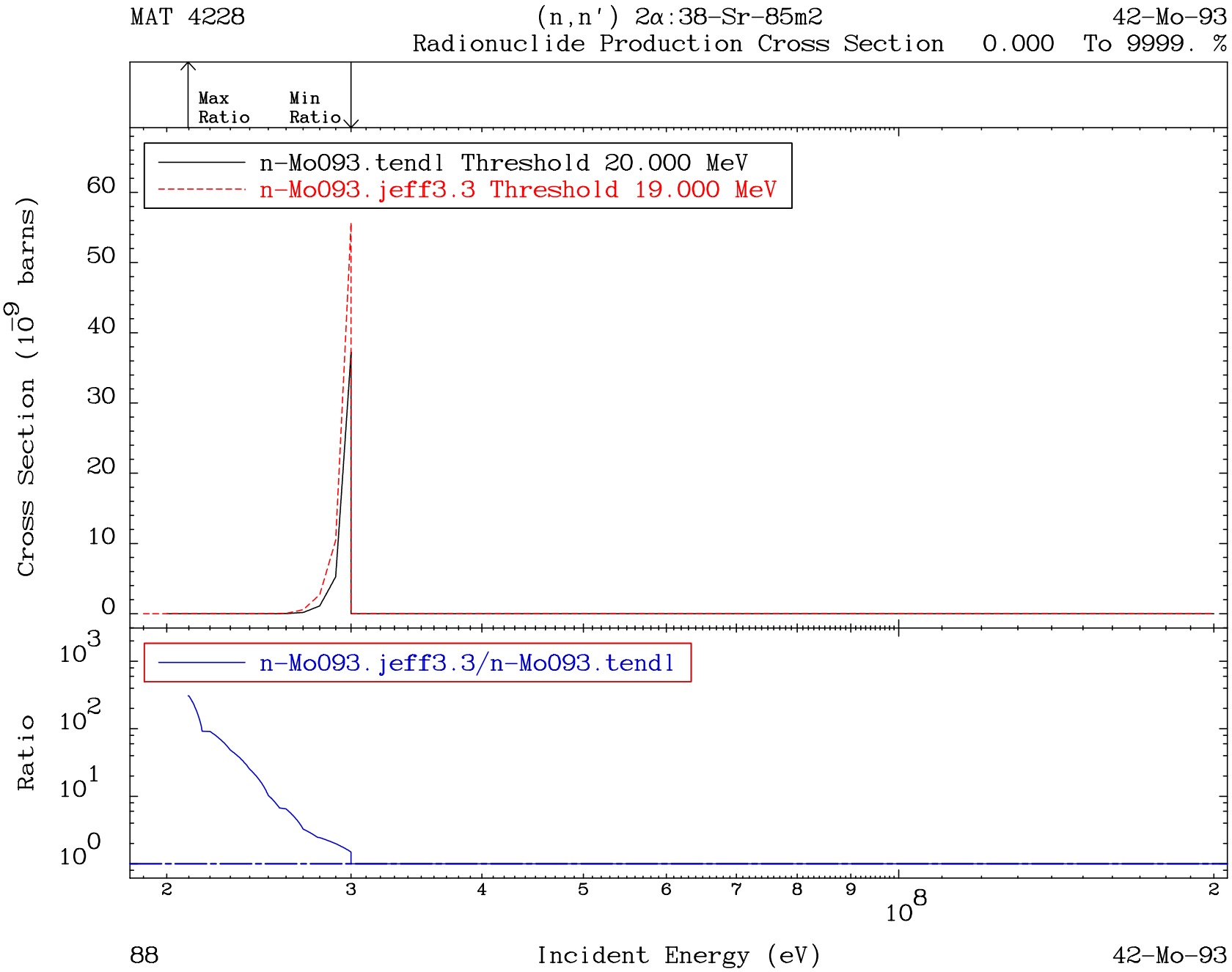

MAT 4228
(n,n') α:40-Zr-89g
42-Mo-93
Radionuclide Production Cross Section -3.572 To 9999. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 4.4037 MeV
n-Mo093.jeff3.3 Threshold 4.4021 MeV
Cross Section (milli-barns)
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^3
10^2
10^1
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
42-Mo-93

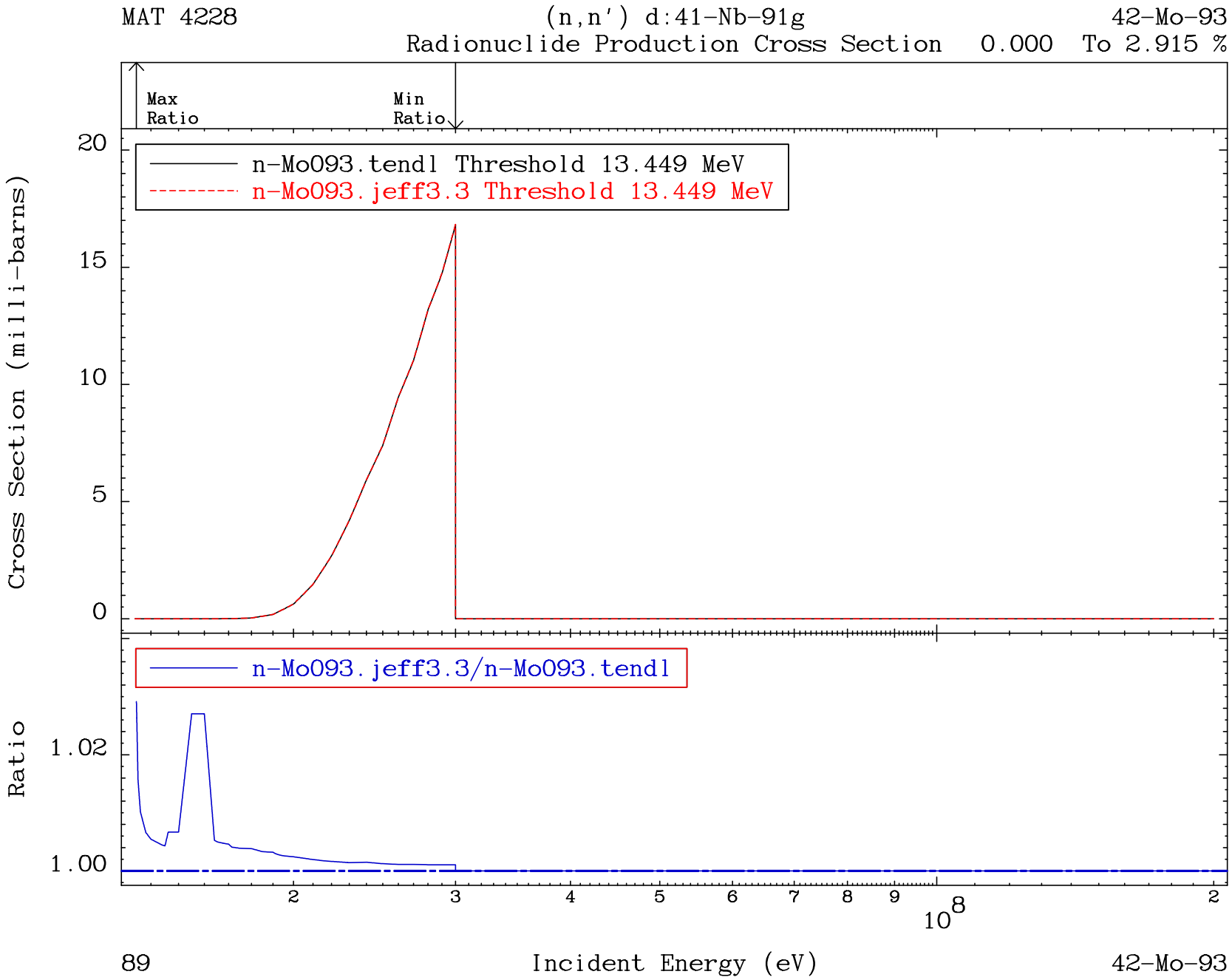

MAT 4228
(n,n') α:40-Zr-89m1
42-Mo-93
Radionuclide Production Cross Section -3.423 To 9999. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.6000 MeV
n-Mo093.jeff3.3 Threshold 7.2000 MeV
Cross Section (milli-barns)
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
Incident Energy (eV)
84
42-Mo-93

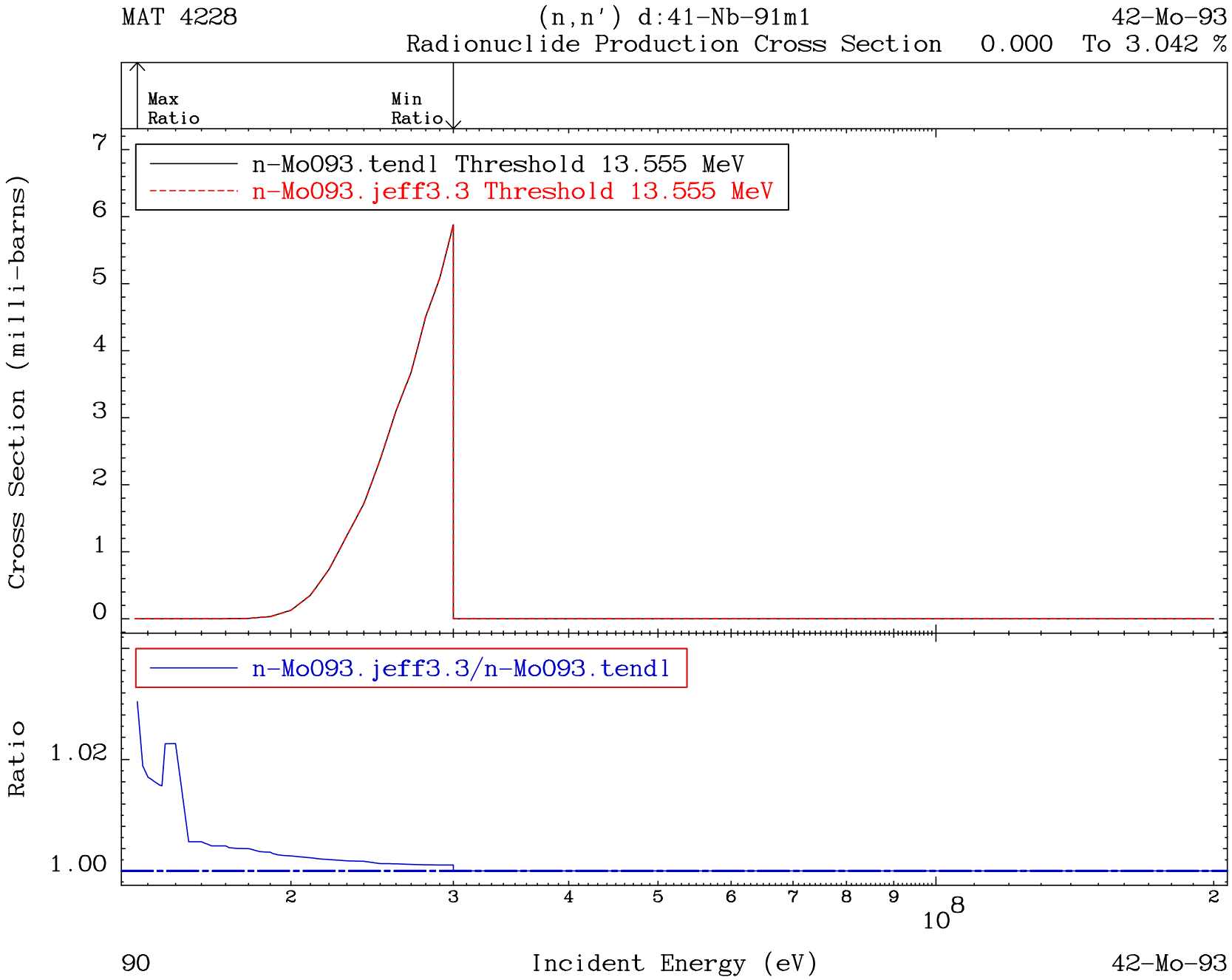

MAT 4228
(n,n') p:41-Nb-92g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 12.20 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.7257 MeV
n-Mo093.jeff3.3 Threshold 7.7245 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.15
1.10
1.05
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
42-Mo-93

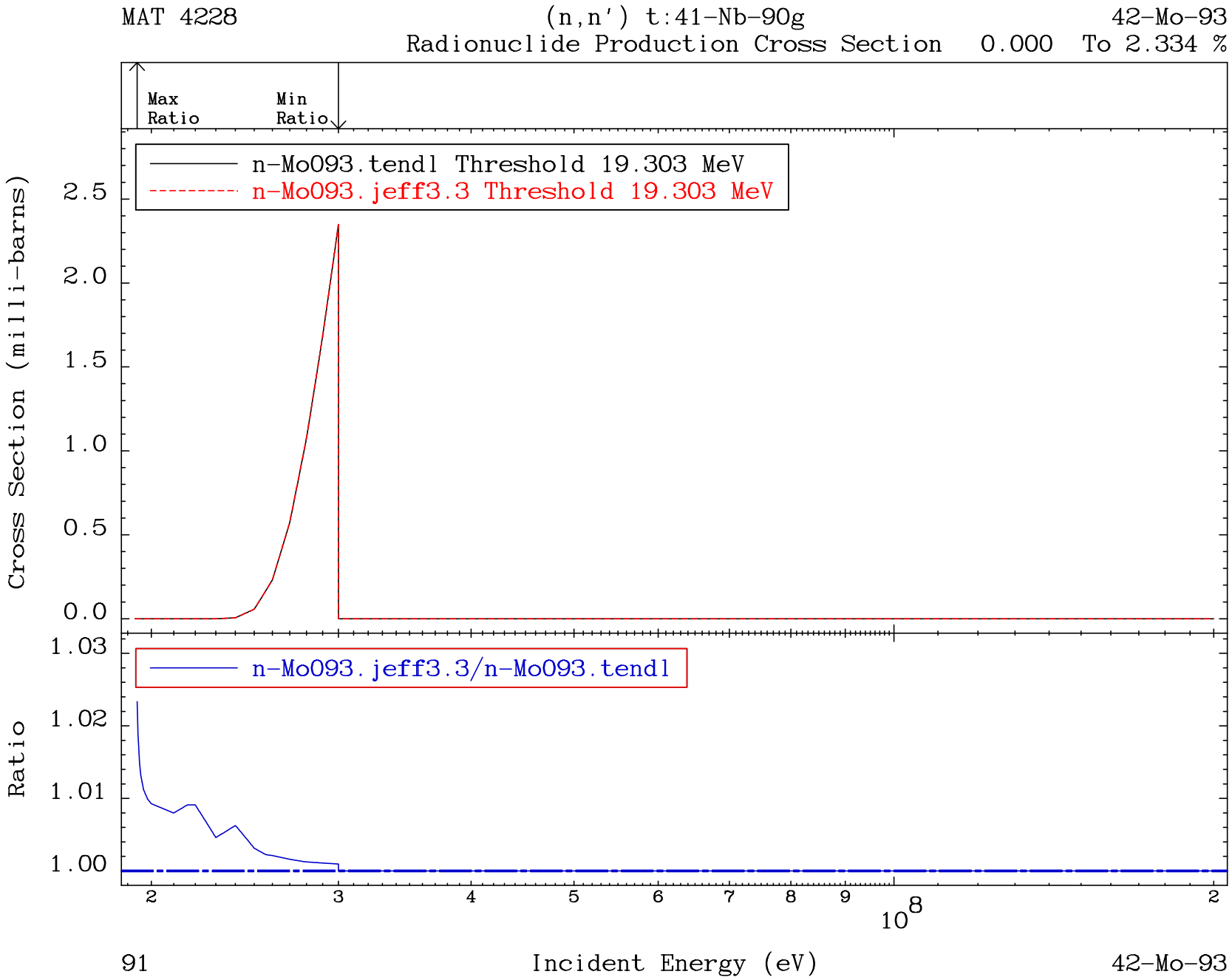

MAT 4228
(n,n') p:41-Nb-92m1
42-Mo-93
Radionuclide Production Cross Section 0.000 To 6.387 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.8627 MeV
n-Mo093.jeff3.3 Threshold 7.8615 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.08
1.06
1.04
1.02
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
86
Incident Energy (eV)
42-Mo-93

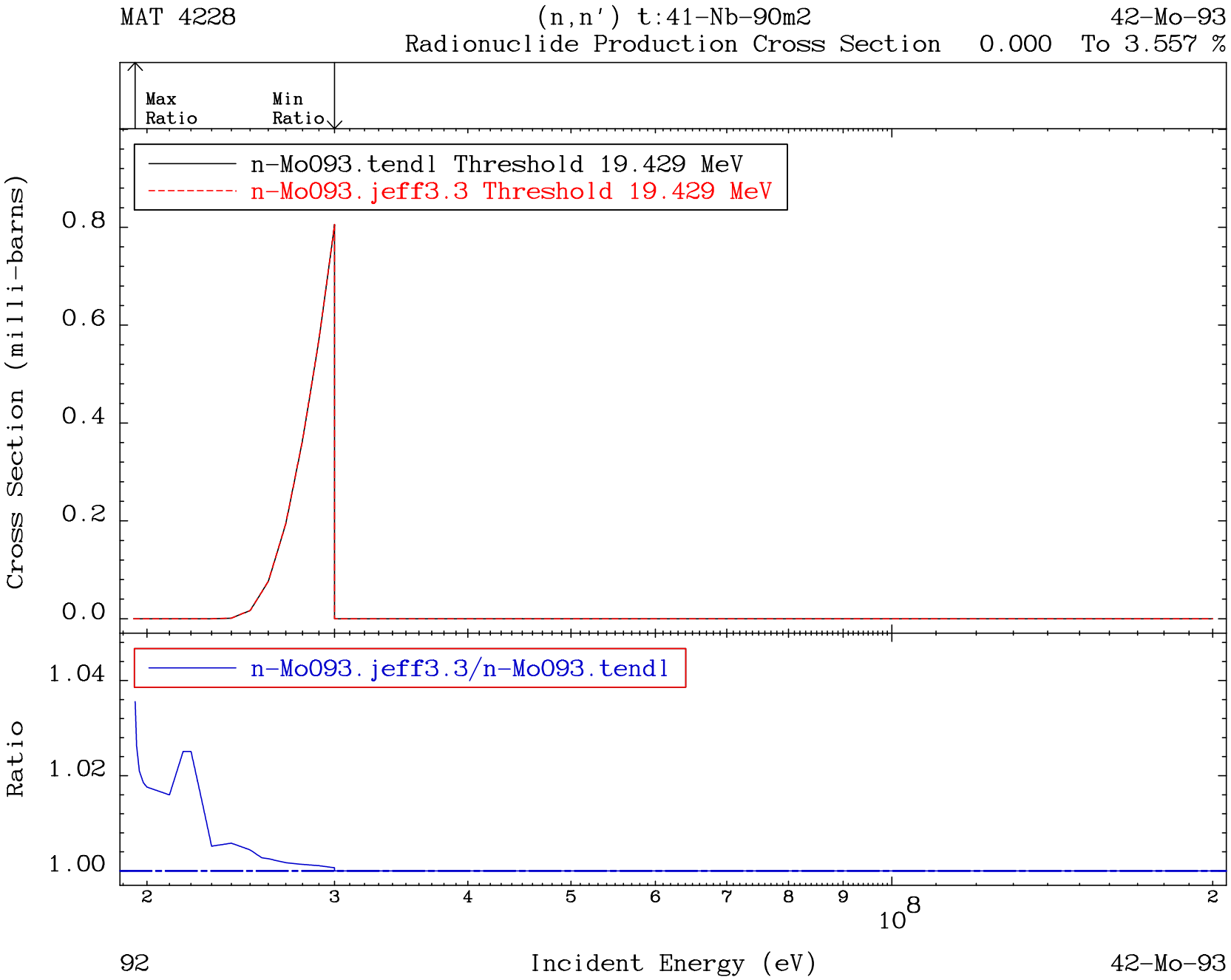

MAT 4228
(n,n') 2α:38-Sr-85g
42-Mo-93
Radionuclide Production Cross Section -30.93 To 9999. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 10.668 MeV
n-Mo093.jeff3.3 Threshold 10.668 MeV
Cross Section (10^{-9} barns)
500
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
42-Mo-93

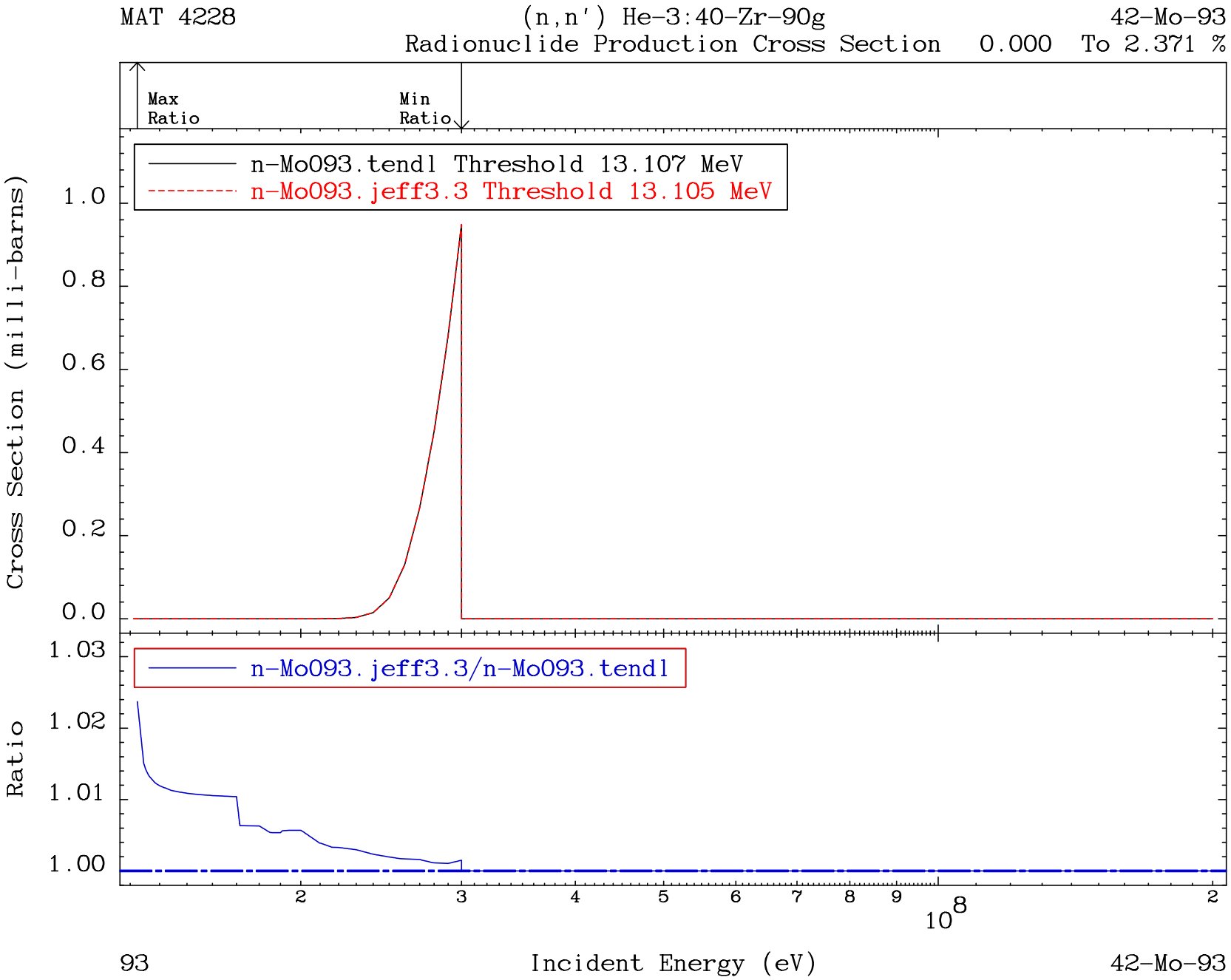

MAT 4228
(n,n') 2α:38-Sr-85m2
42-Mo-93
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 20.000 MeV
n-Mo093.jeff3.3 Threshold 19.000 MeV
Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
42-Mo-93

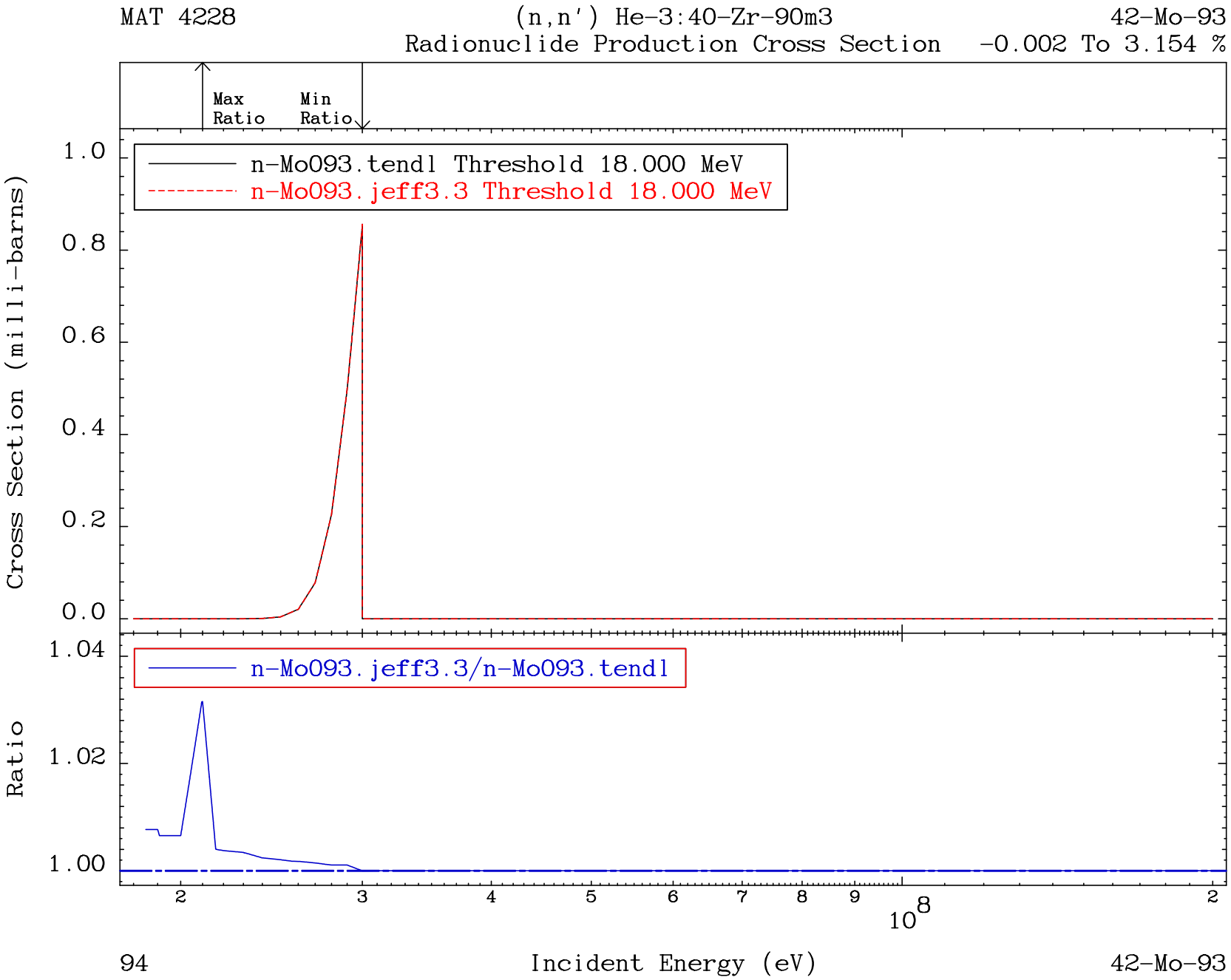

MAT 4228
(n,n') d:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 2.915 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.449 MeV
n-Mo093.jeff3.3 Threshold 13.449 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
42-Mo-93

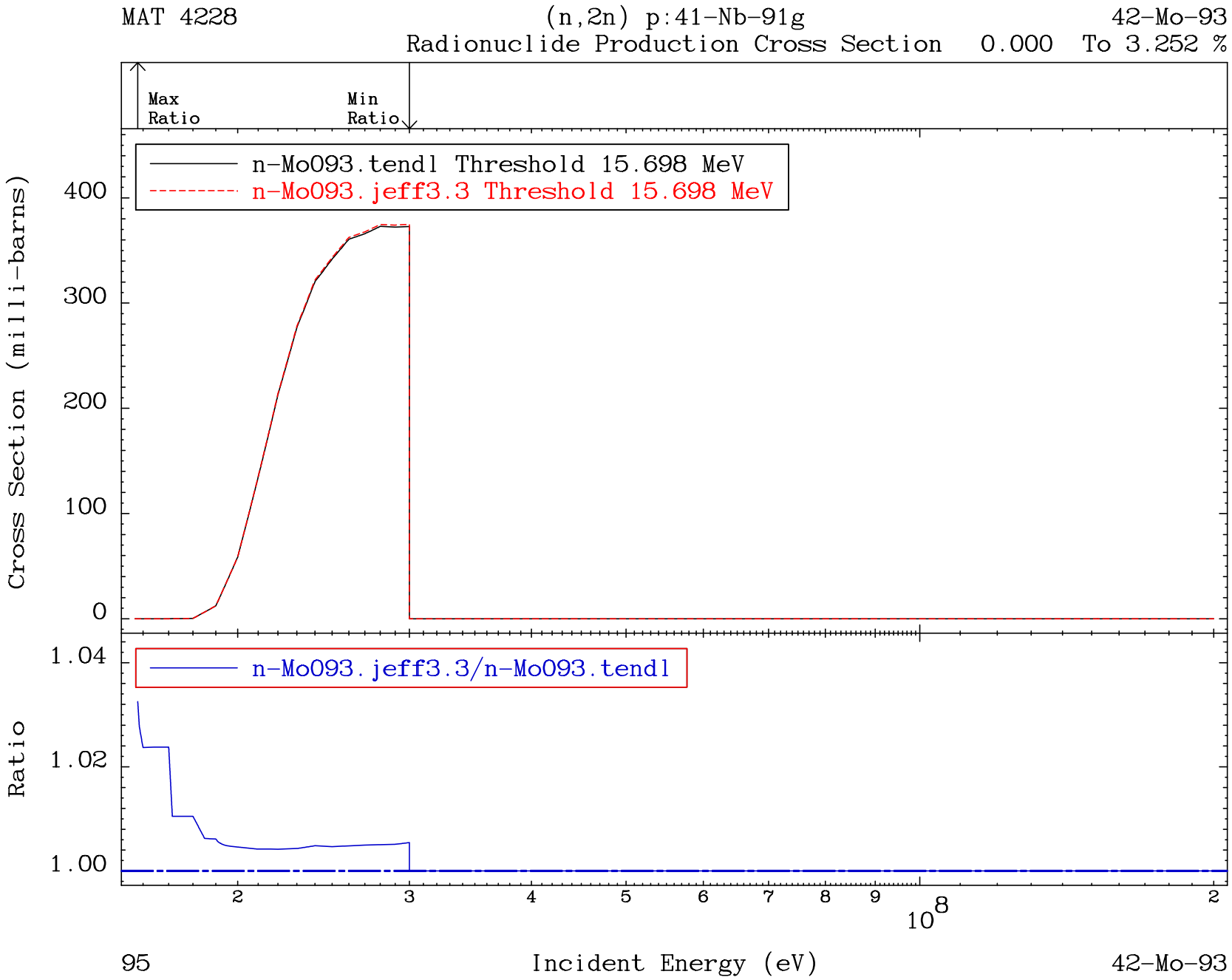

MAT 4228
(n,n') d:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.042 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.555 MeV
n-Mo093.jeff3.3 Threshold 13.555 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.00
1.02
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
42-Mo-93

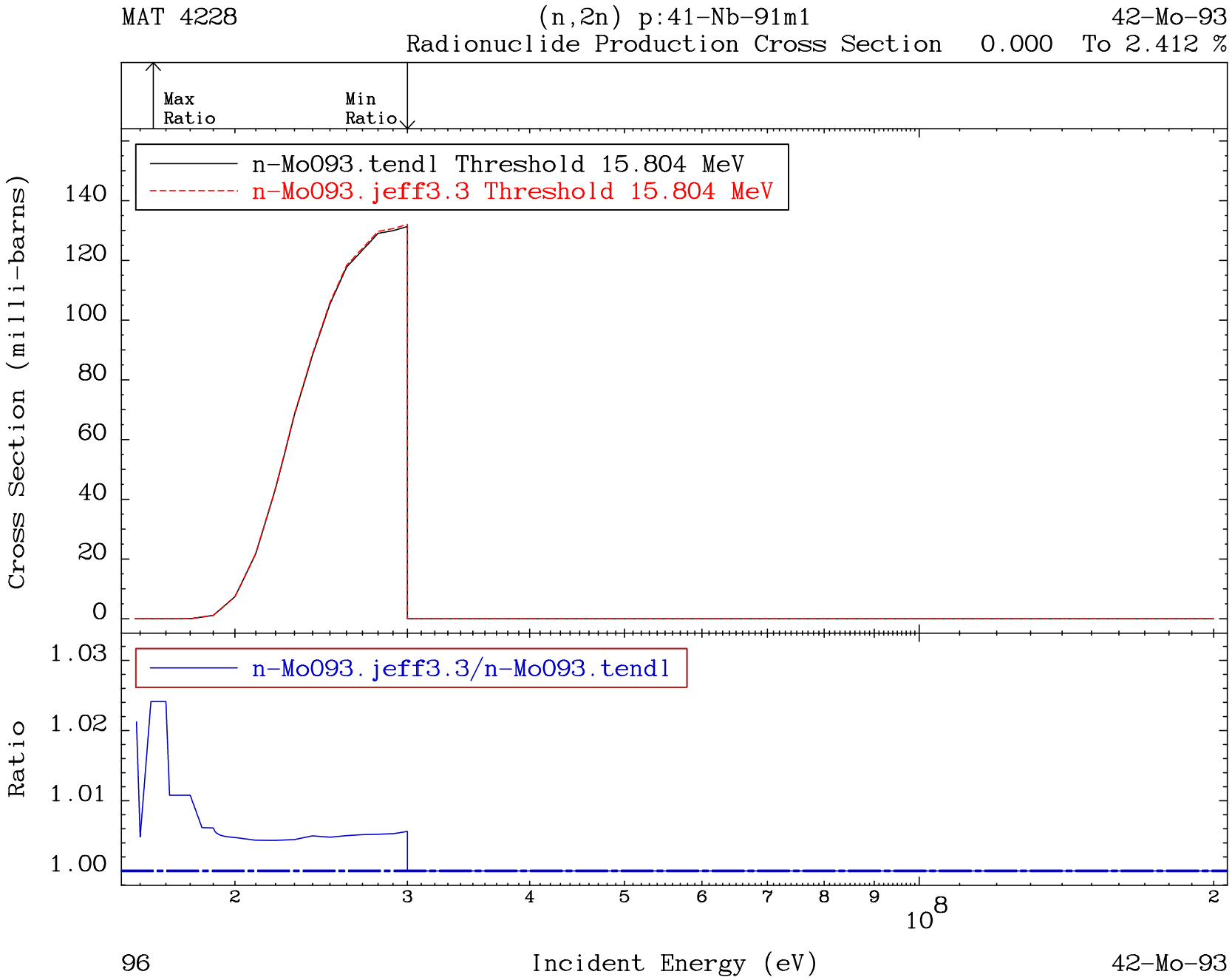

MAT 4228
(n,n') t:41-Nb-90g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 2.334 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 19.303 MeV
n-Mo093.jeff3.3 Threshold 19.303 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
42-Mo-93

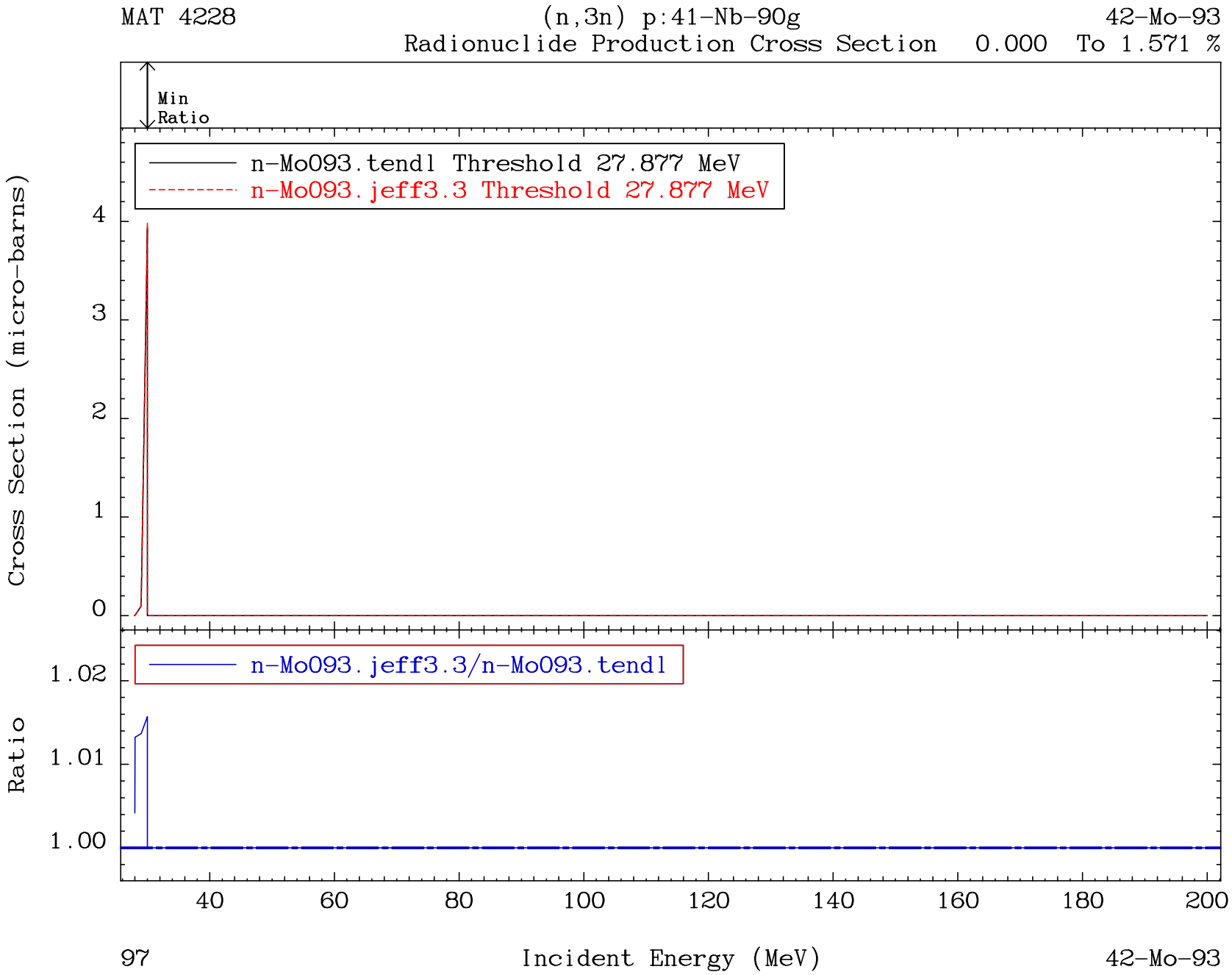

MAT 4228
(n,n') t:41-Nb-90m2
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.557 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 19.429 MeV
n-Mo093.jeff3.3 Threshold 19.429 MeV
Cross Section (milli-barns)
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
42-Mo-93

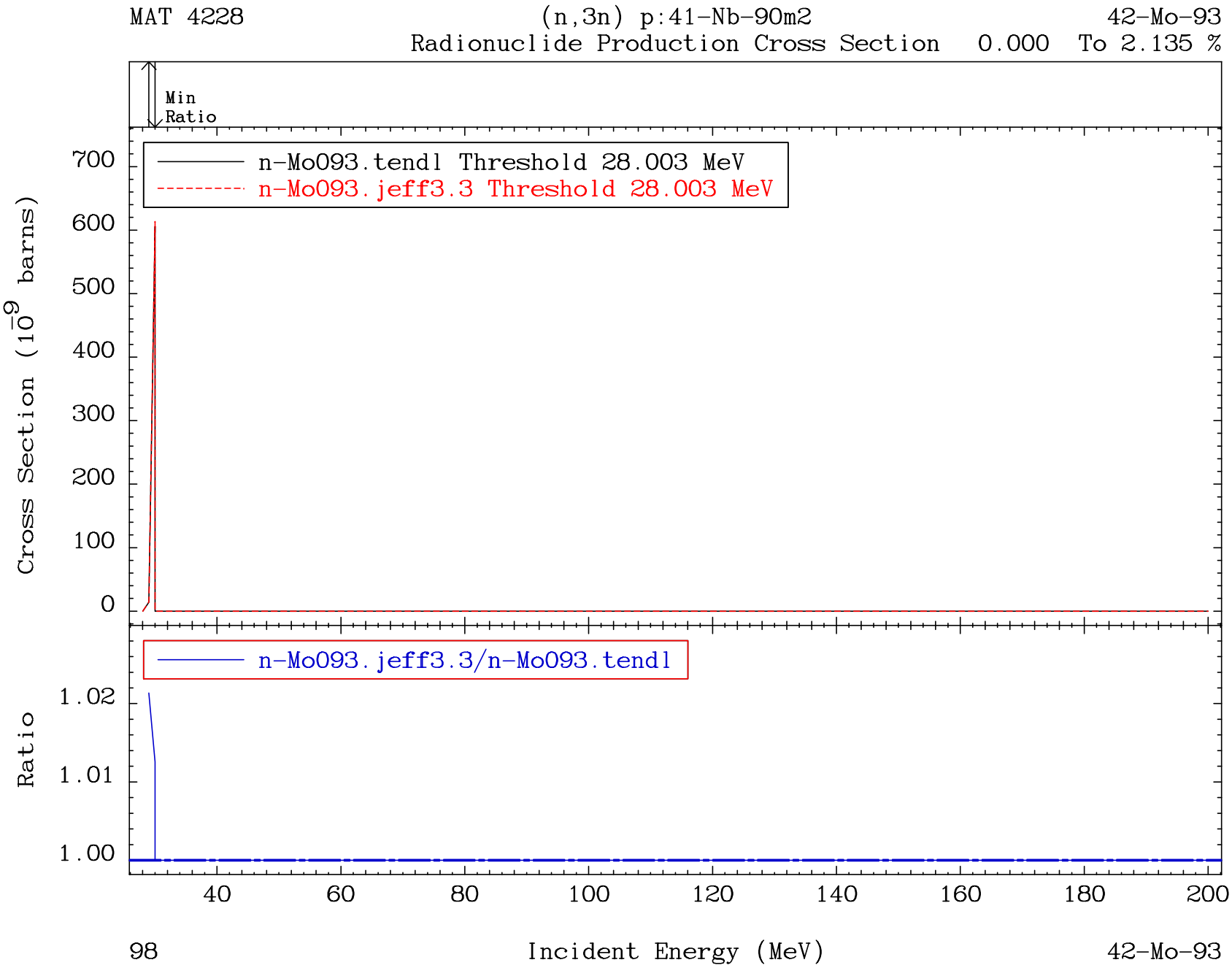

MAT 4228
(n,n') He-3:40-Zr-90g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 2.371 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 13.107 MeV
n-Mo093.jeff3.3 Threshold 13.105 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
42-Mo-93

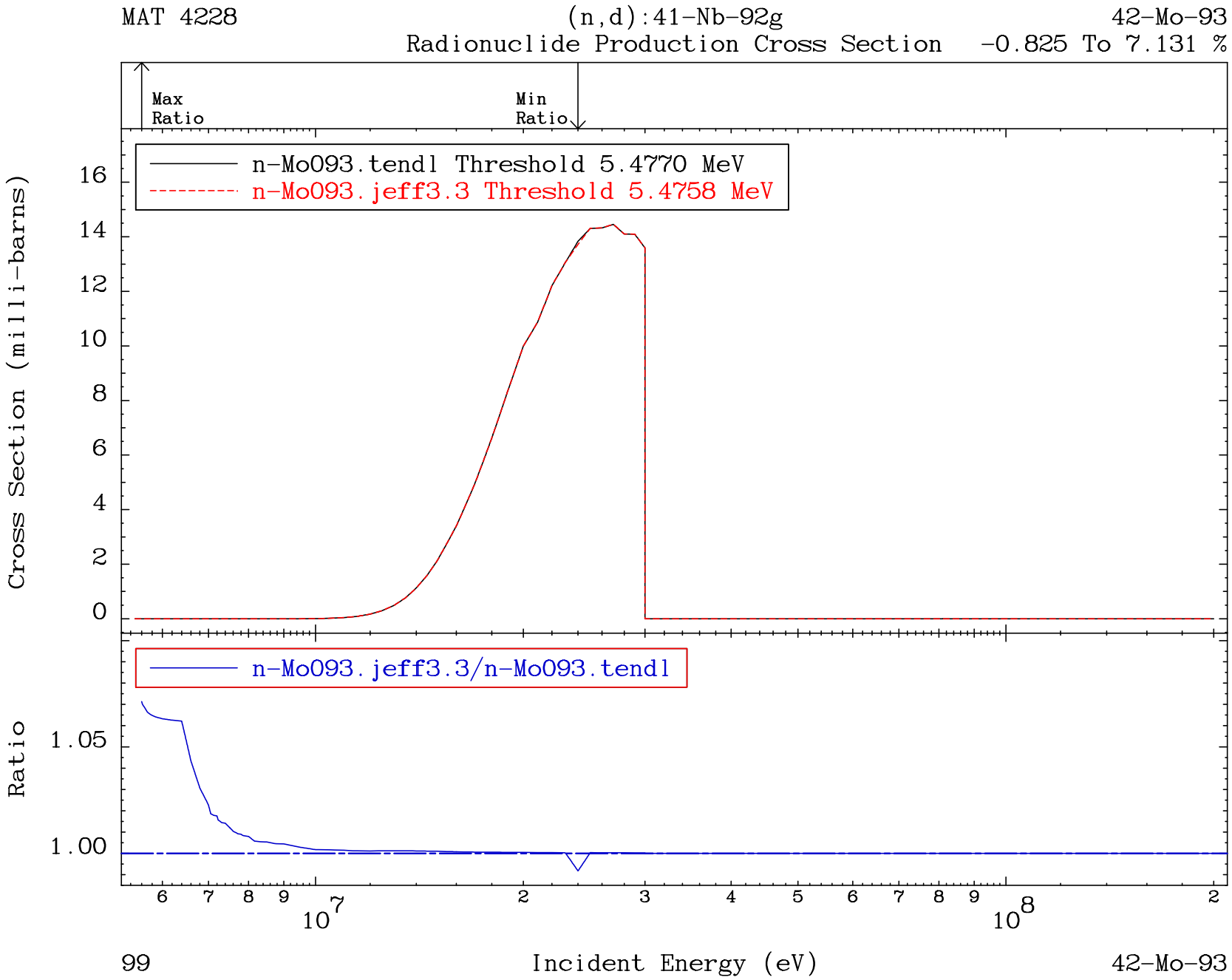

MAT 4228
(n,n') He-3:40-Zr-90m3
42-Mo-93
Radionuclide Production Cross Section
-0.002 To 3.154 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 18.000 MeV
n-Mo093.jeff3.3 Threshold 18.000 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
42-Mo-93

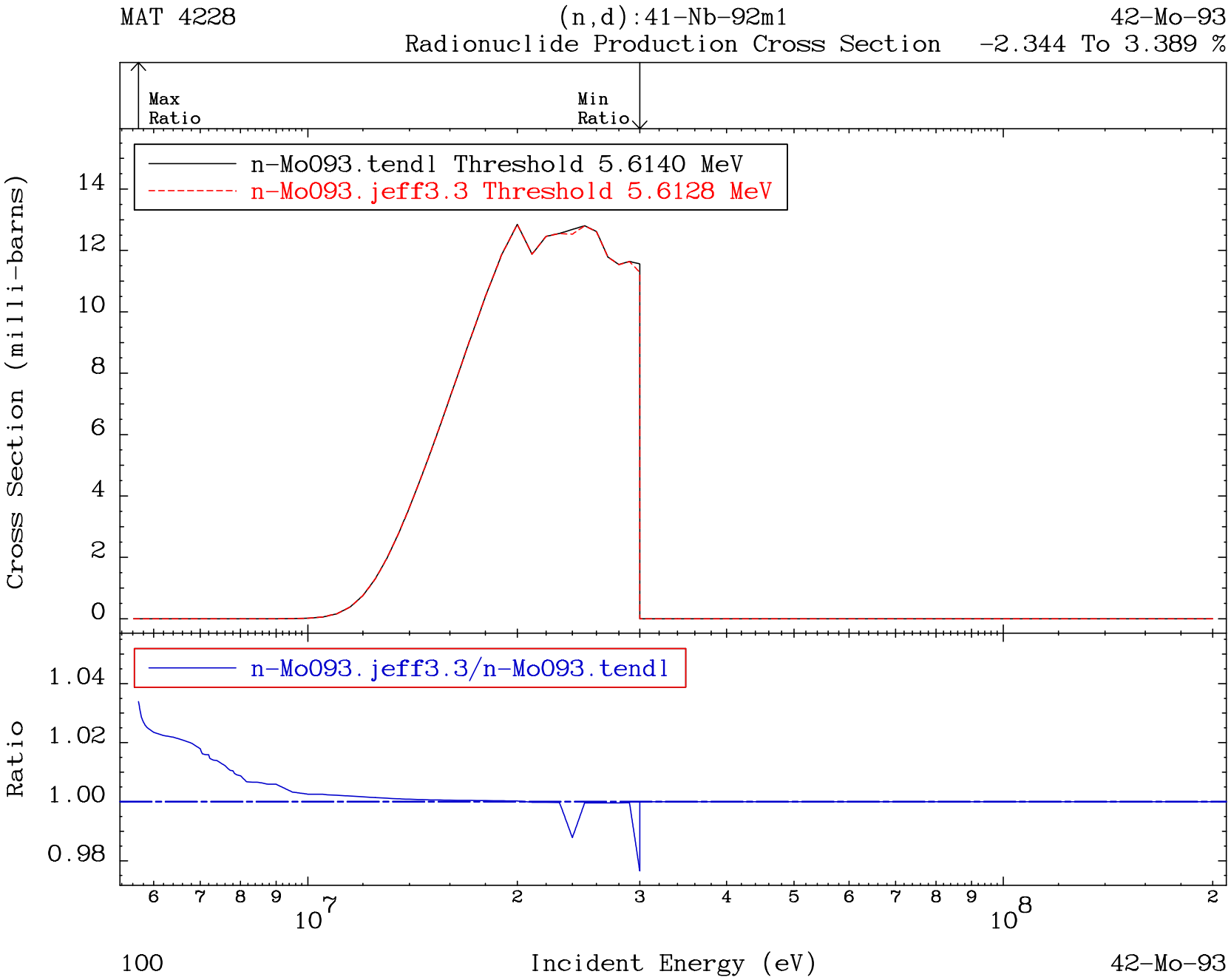

MAT 4228
(n,2n) p:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.252 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 15.698 MeV
n-Mo093.jeff3.3 Threshold 15.698 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
42-Mo-93

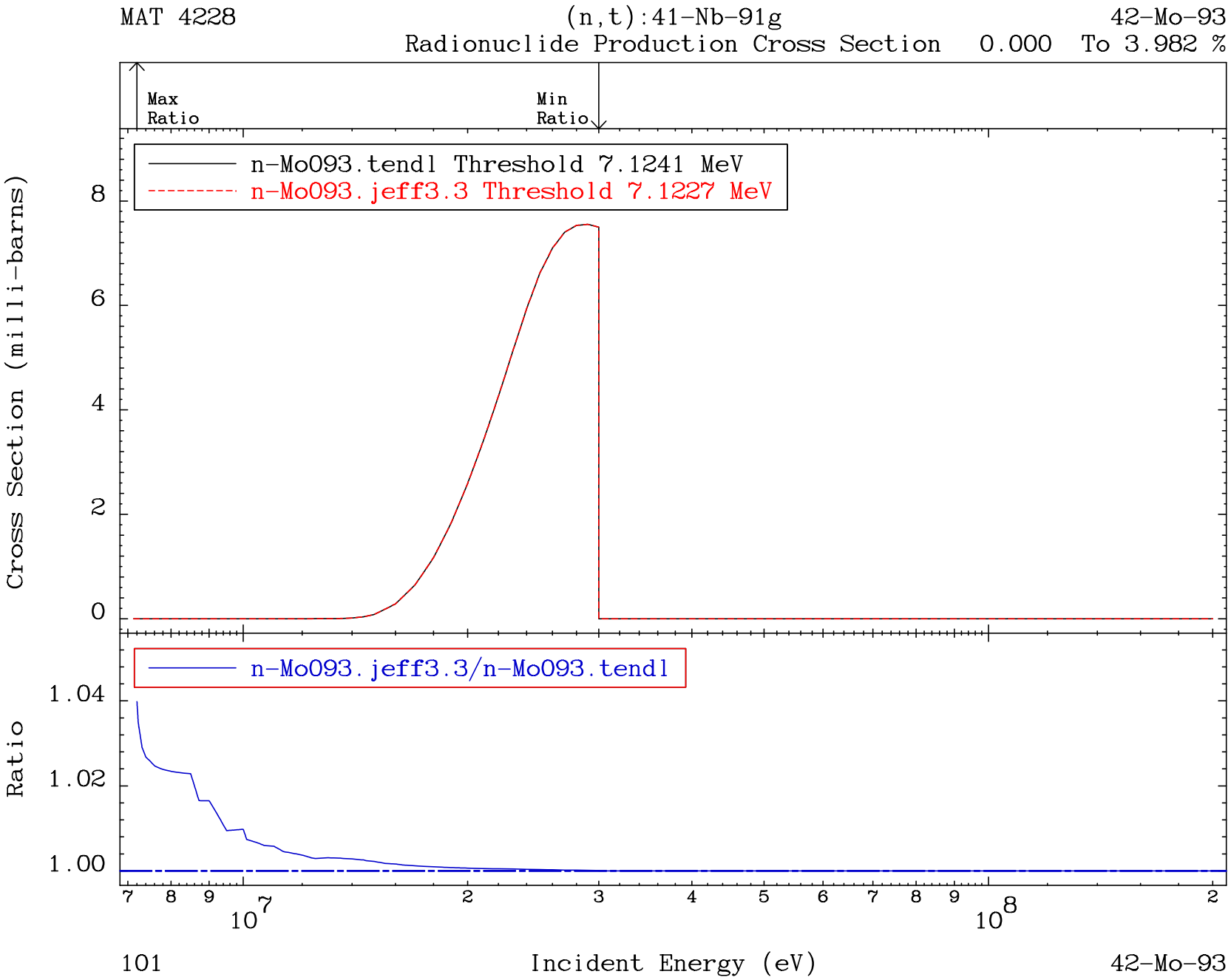

MAT 4228
(n,2n) p:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section 0.000 To 2.412 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 15.804 MeV
n-Mo093.jeff3.3 Threshold 15.804 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
42-Mo-93

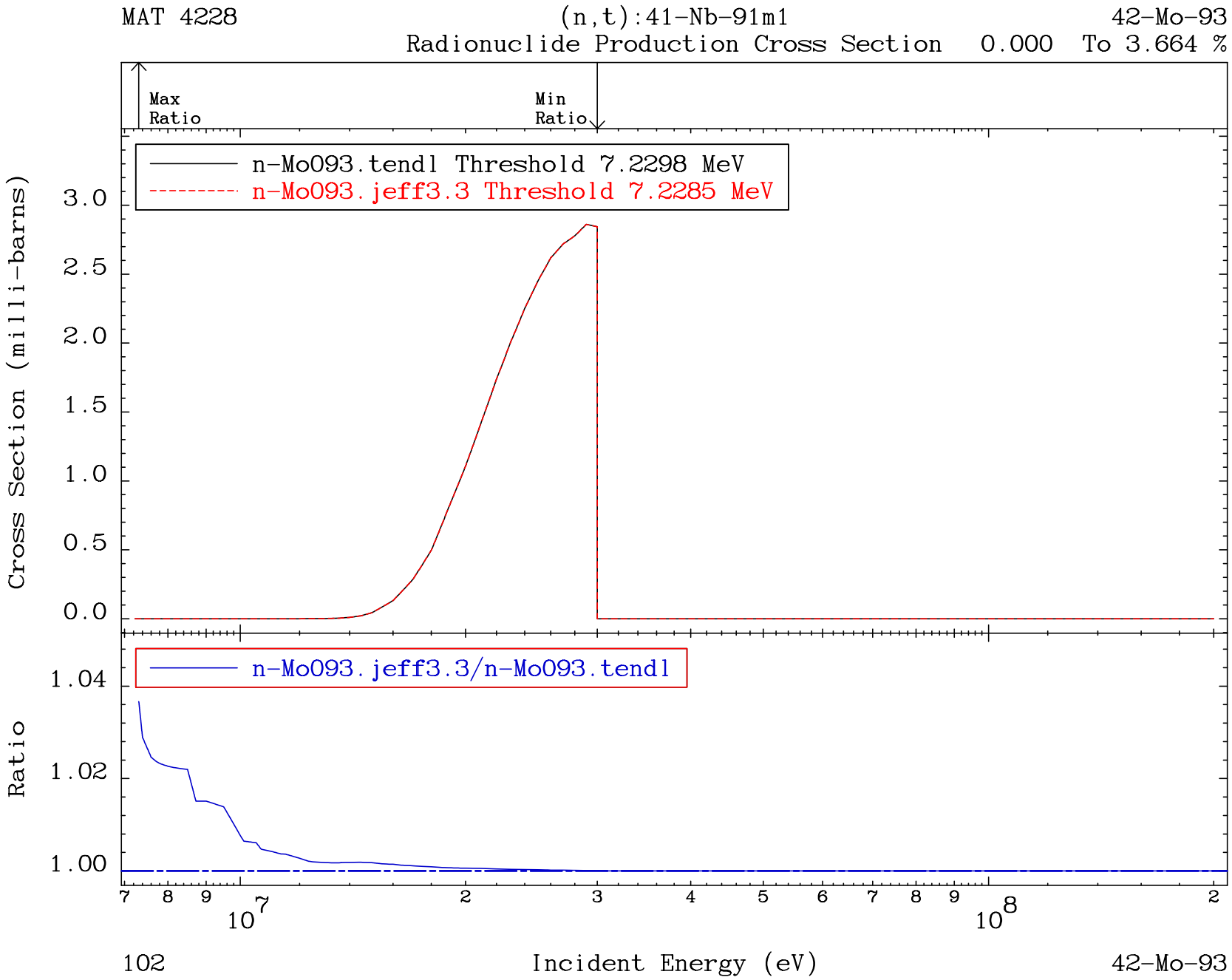

MAT 4228
(n,3n) p:41-Nb-90g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 1.571 %
Min Ratio
n-Mo093.tendl Threshold 27.877 MeV
n-Mo093.jeff3.3 Threshold 27.877 MeV
Cross Section (micro-barns)
0
1
2
3
4
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.00
1.01
1.02
40
60
80
100
120
140
160
180
200
97
Incident Energy (MeV)
42-Mo-93

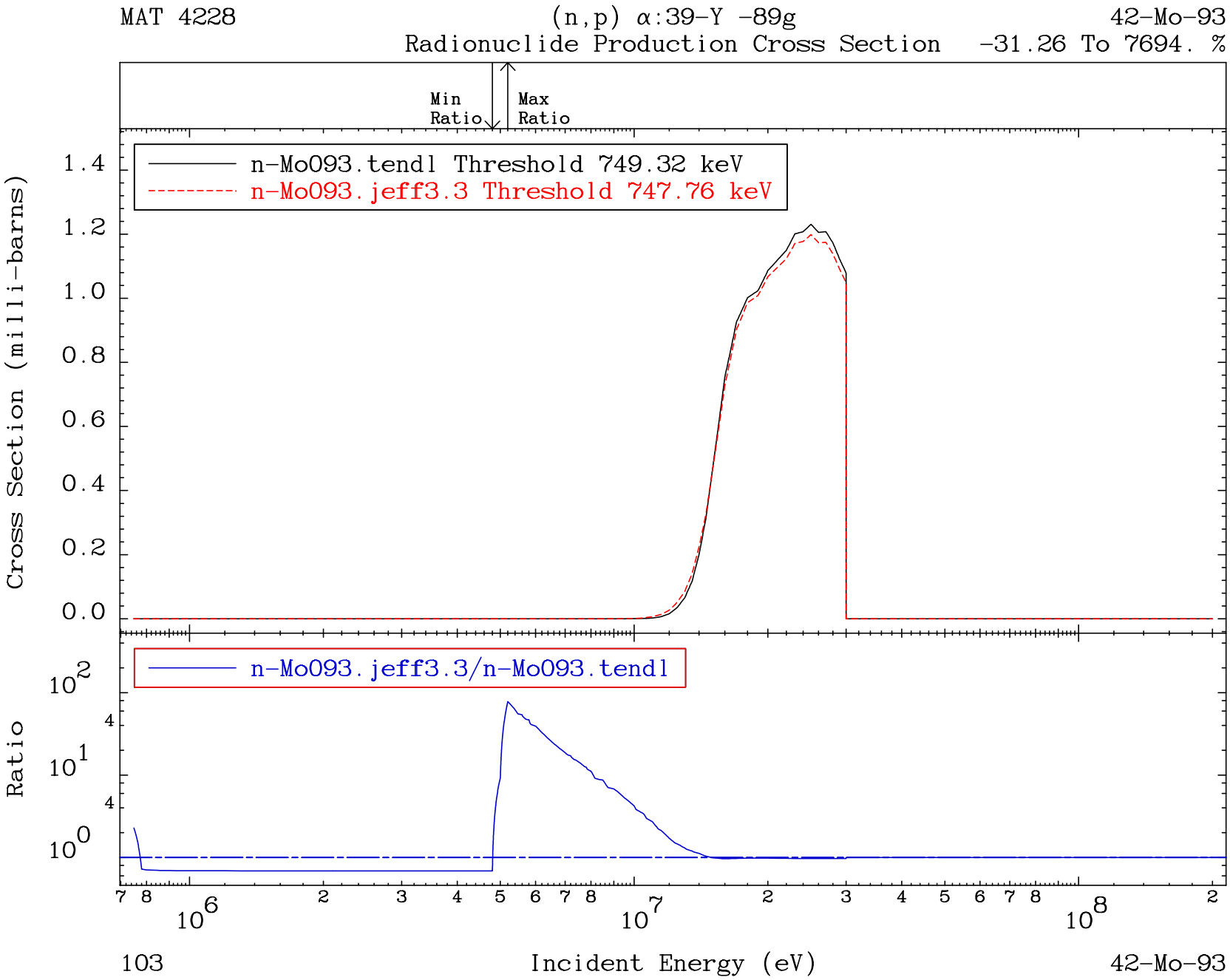

MAT 4228
(n,3n) p:41-Nb-90m2
42-Mo-93
Radionuclide Production Cross Section 0.000 To 2.135 %
Min Ratio
n-Mo093.tendl Threshold 28.003 MeV
n-Mo093.jeff3.3 Threshold 28.003 MeV
Cross Section (10^{-9} barns)
700
600
500
400
300
200
100
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
98
Incident Energy (MeV)
42-Mo-93

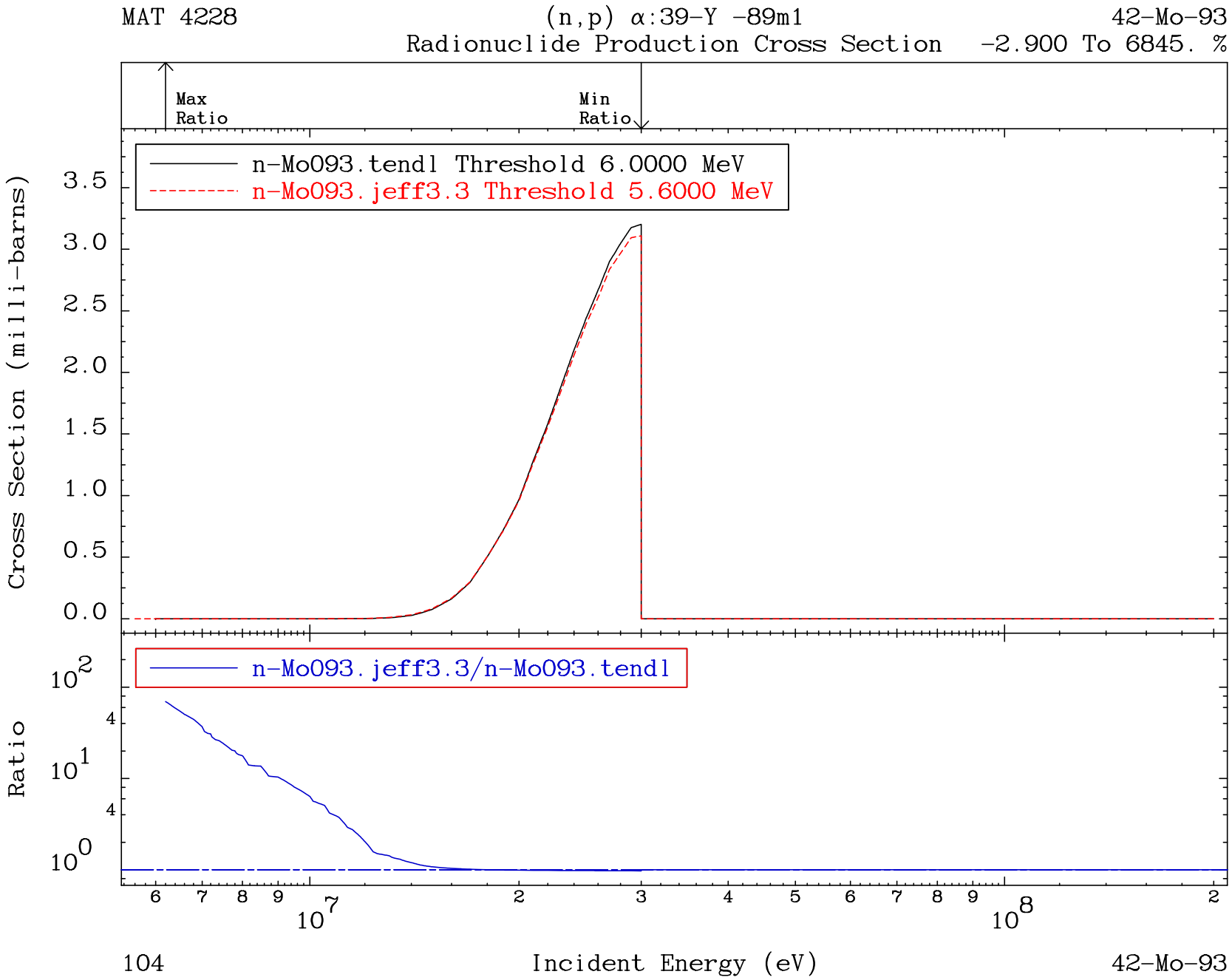

MAT 4228
(n,d):41-Nb-92g
42-Mo-93
Radionuclide Production Cross Section -0.825 To 7.131 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.4770 MeV
n-Mo093.jeff3.3 Threshold 5.4758 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.05
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
99
Incident Energy (eV)
42-Mo-93

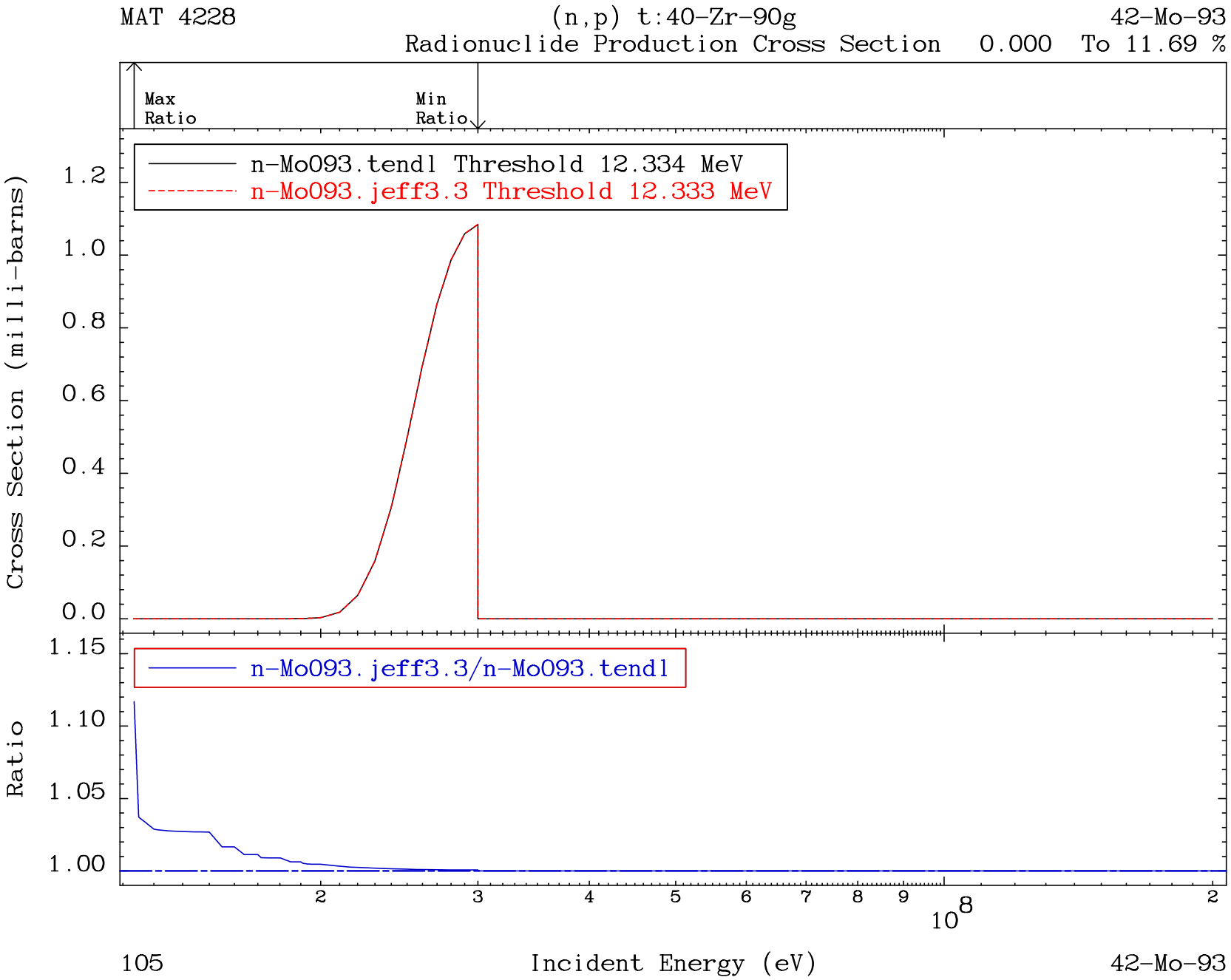

MAT 4228
(n,d):41-Nb-92m1
42-Mo-93
Radionuclide Production Cross Section
-2.344 To 3.389 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 5.6140 MeV
n-Mo093.jeff3.3 Threshold 5.6128 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
0.98
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
100
Incident Energy (eV)
42-Mo-93

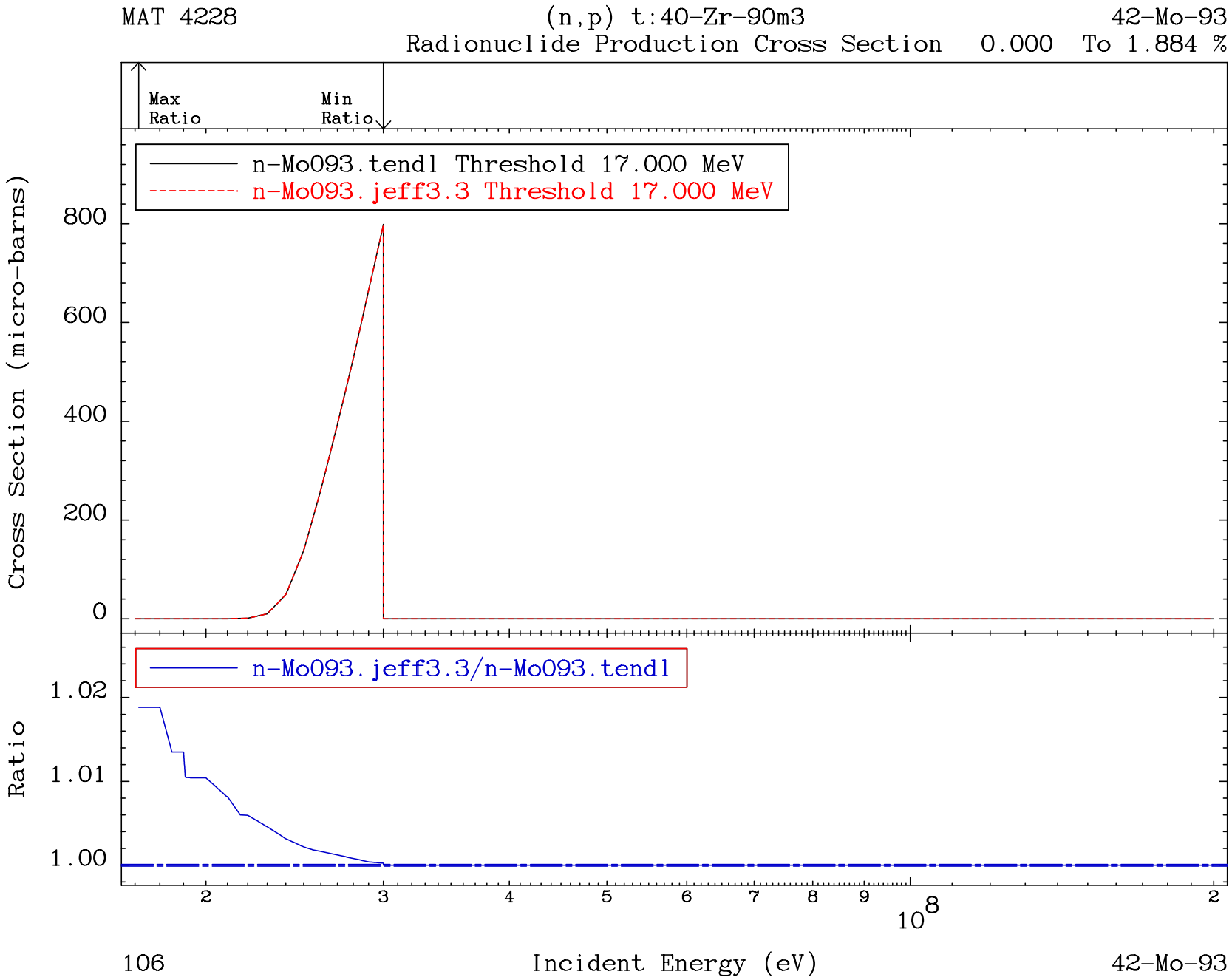

MAT 4228
(n,t):41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.982 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.1241 MeV
n-Mo093.jeff3.3 Threshold 7.1227 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.00
1.02
1.04
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
101
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,t):41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section 0.000 To 3.664 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 7.2298 MeV
n-Mo093.jeff3.3 Threshold 7.2285 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
102
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,p) α:39-Y -89g
42-Mo-93
Radionuclide Production Cross Section -31.26 To 7694. %
Min Ratio
Max Ratio
n-Mo093.tendl Threshold 749.32 keV
n-Mo093.jeff3.3 Threshold 747.76 keV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
103
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,p) α:39-Y -89m1
42-Mo-93
Radionuclide Production Cross Section -2.900 To 6845. %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 6.0000 MeV
n-Mo093.jeff3.3 Threshold 5.6000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
10^2
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
104
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,p) t:40-Zr-90g
42-Mo-93
Radionuclide Production Cross Section 0.000 To 11.69 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 12.334 MeV
n-Mo093.jeff3.3 Threshold 12.333 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,p) t:40-Zr-90m3
42-Mo-93
Radionuclide Production Cross Section 0.000 To 1.884 %
Max Ratio
Min Ratio
n-Mo093.tendl Threshold 17.000 MeV
n-Mo093.jeff3.3 Threshold 17.000 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Mo093.jeff3.3/n-Mo093.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
106
Incident Energy (eV)
42-Mo-93