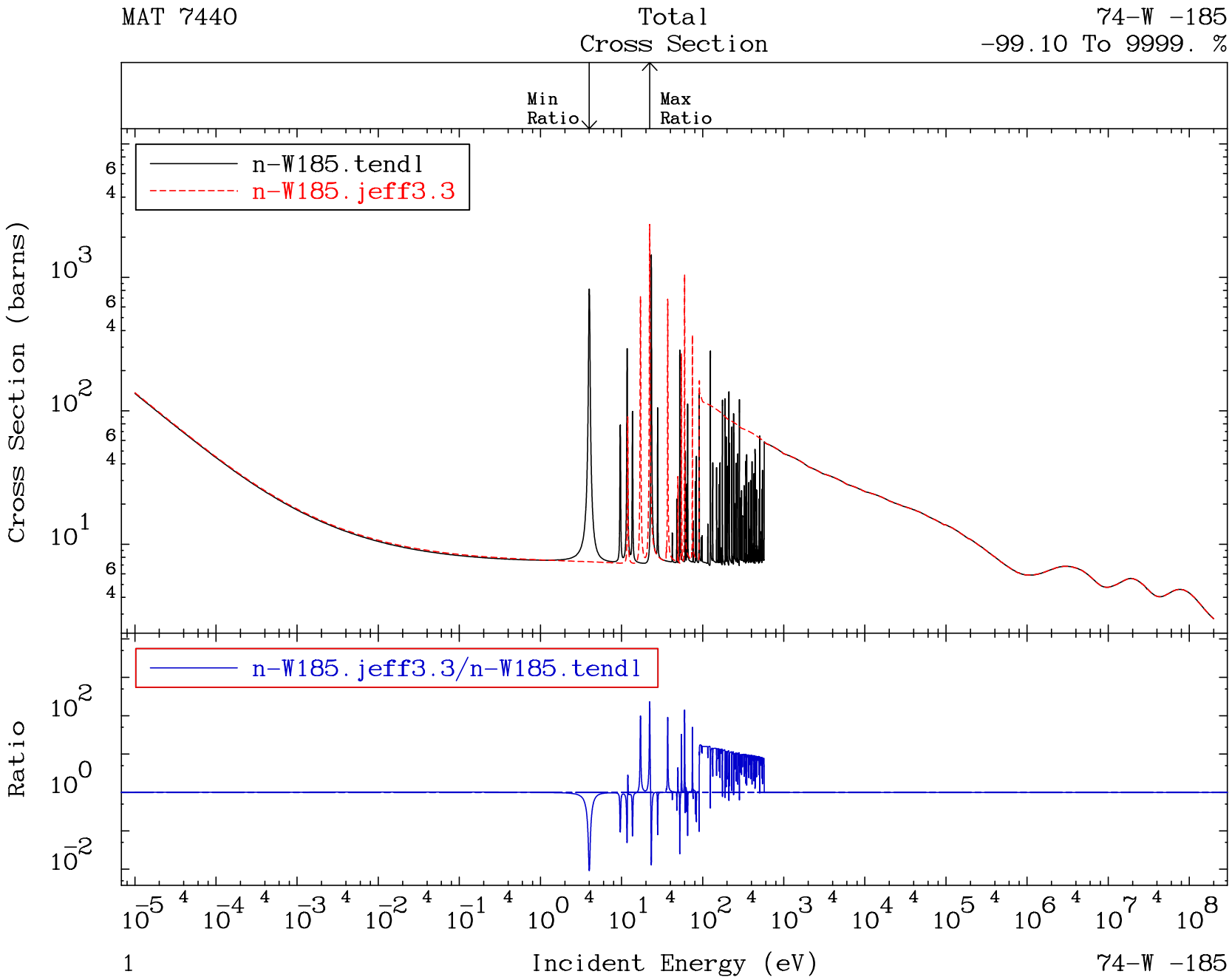
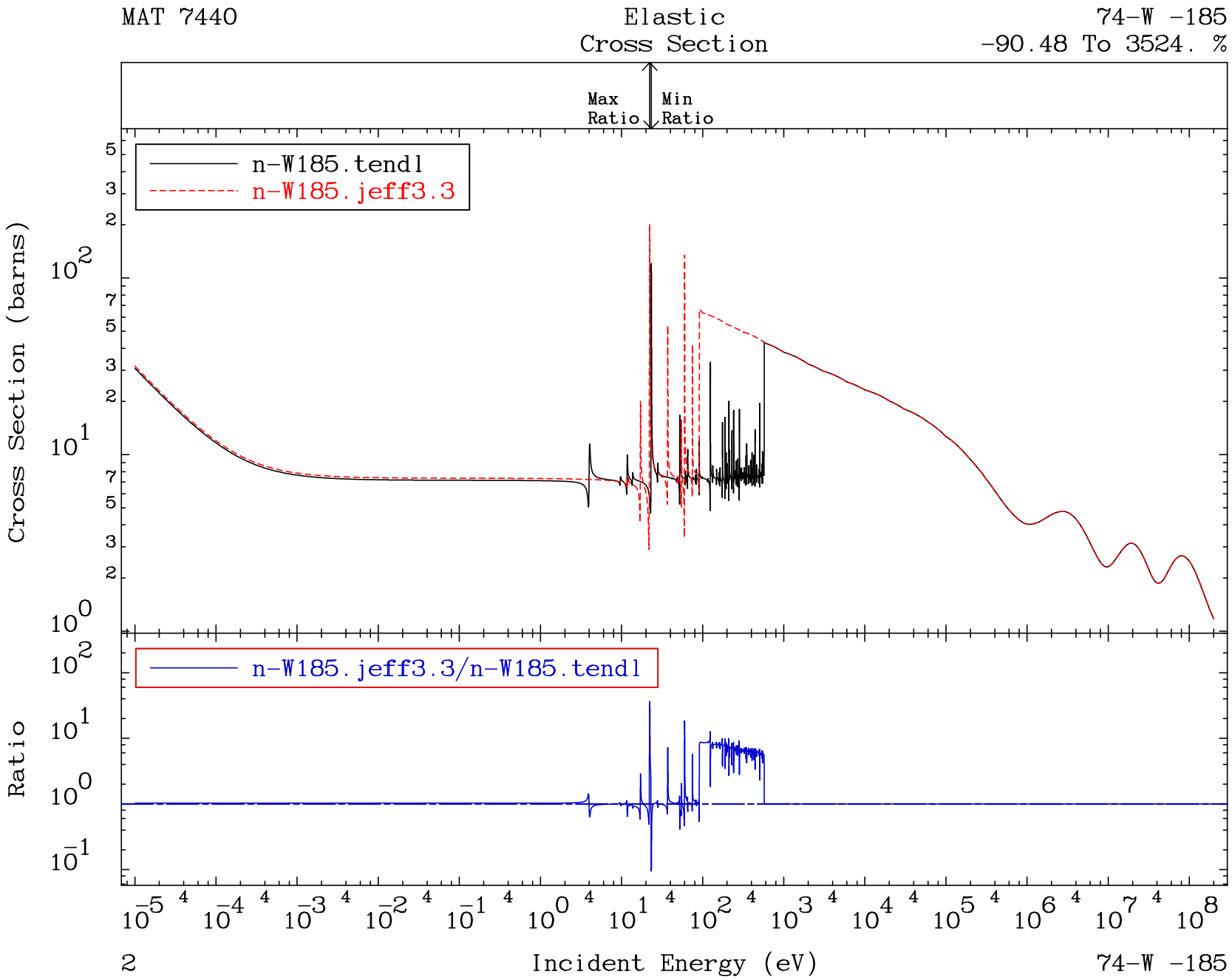
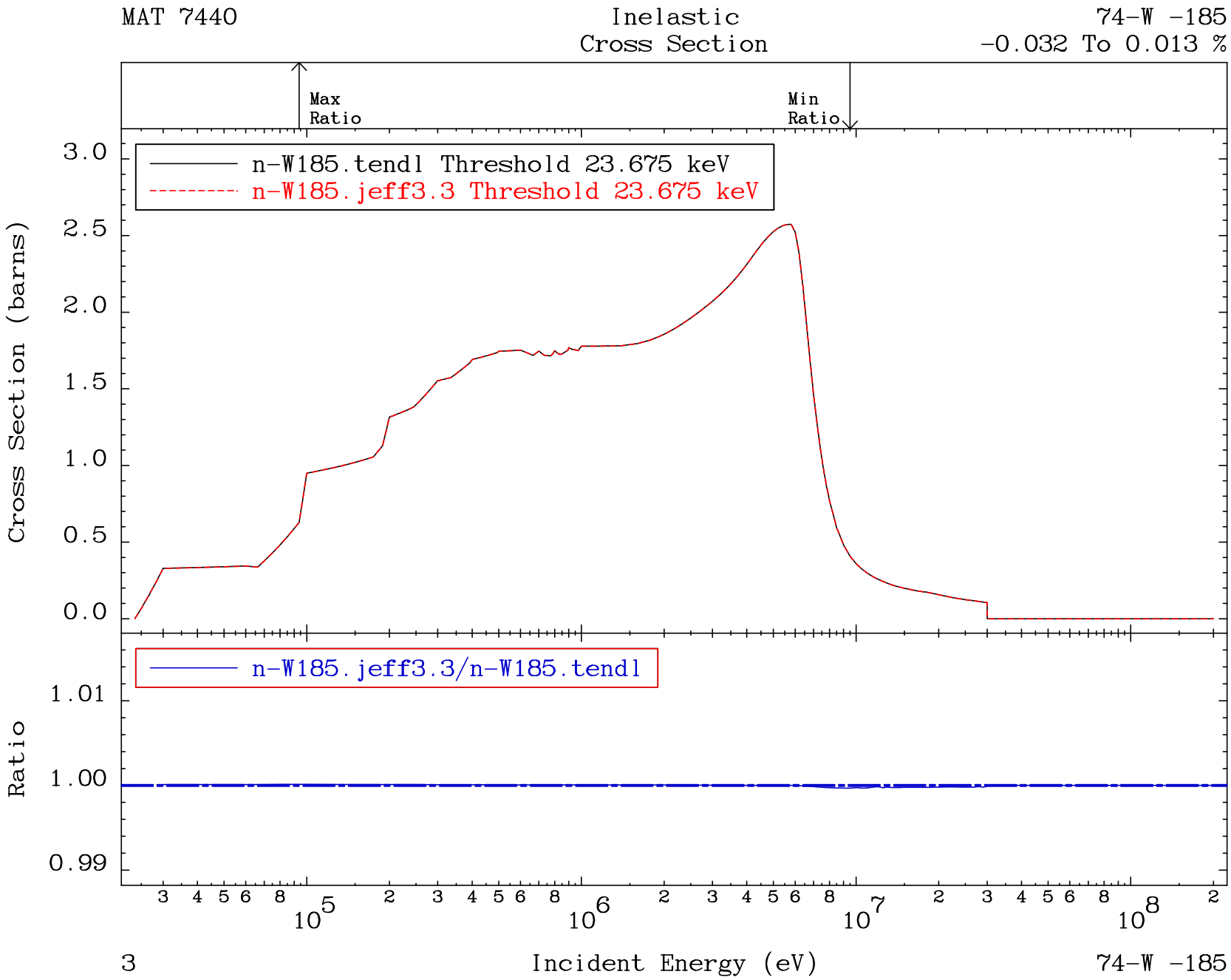
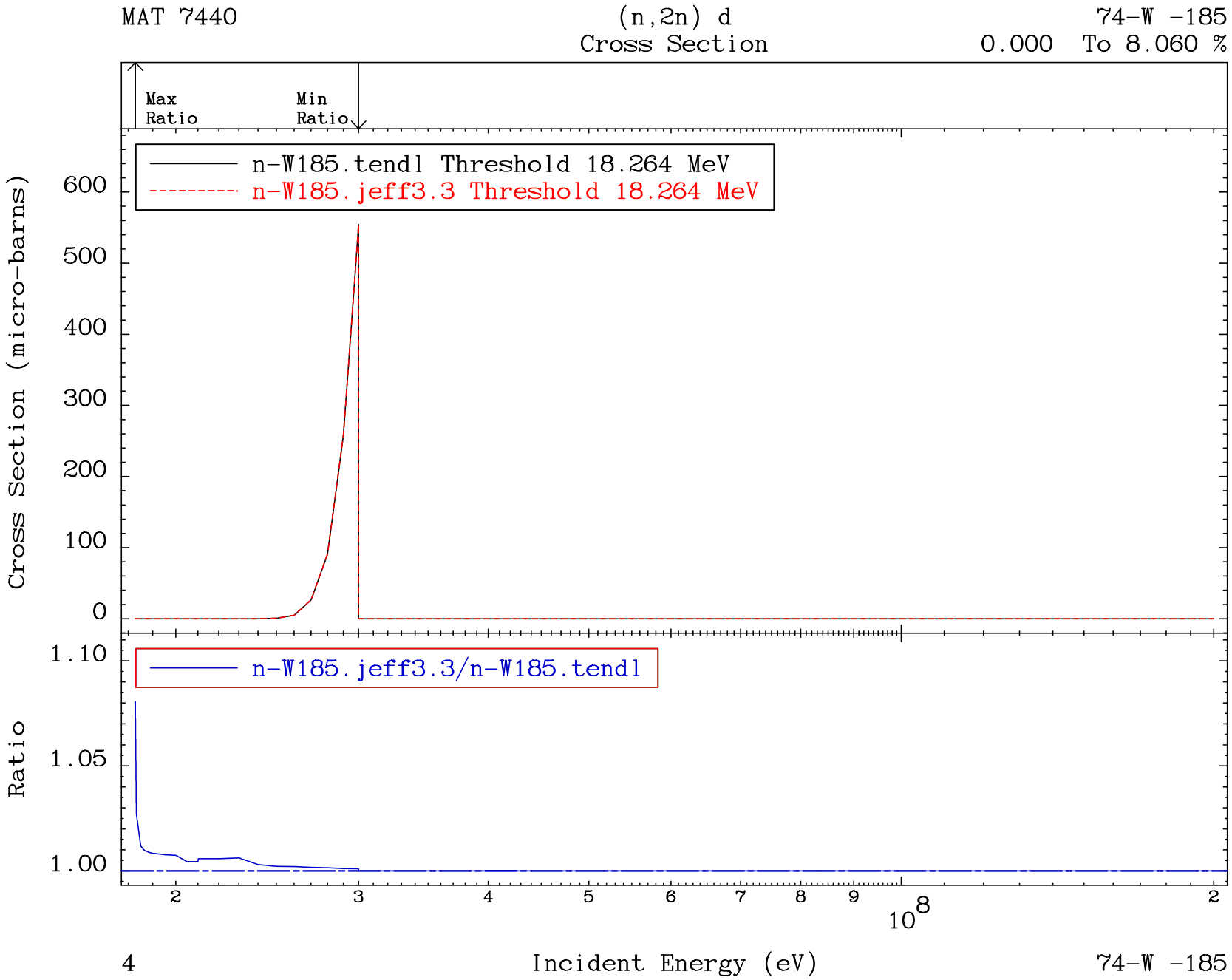
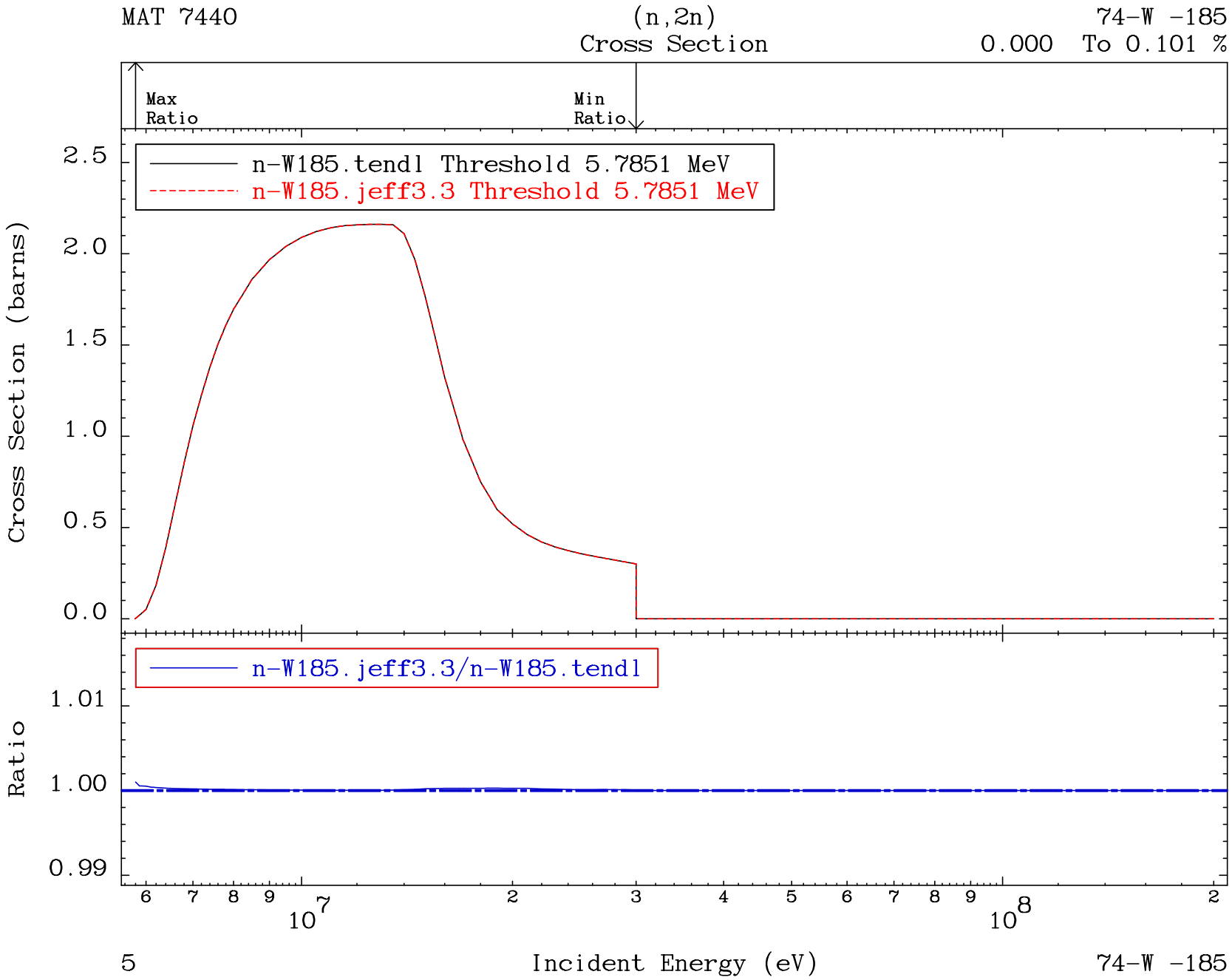
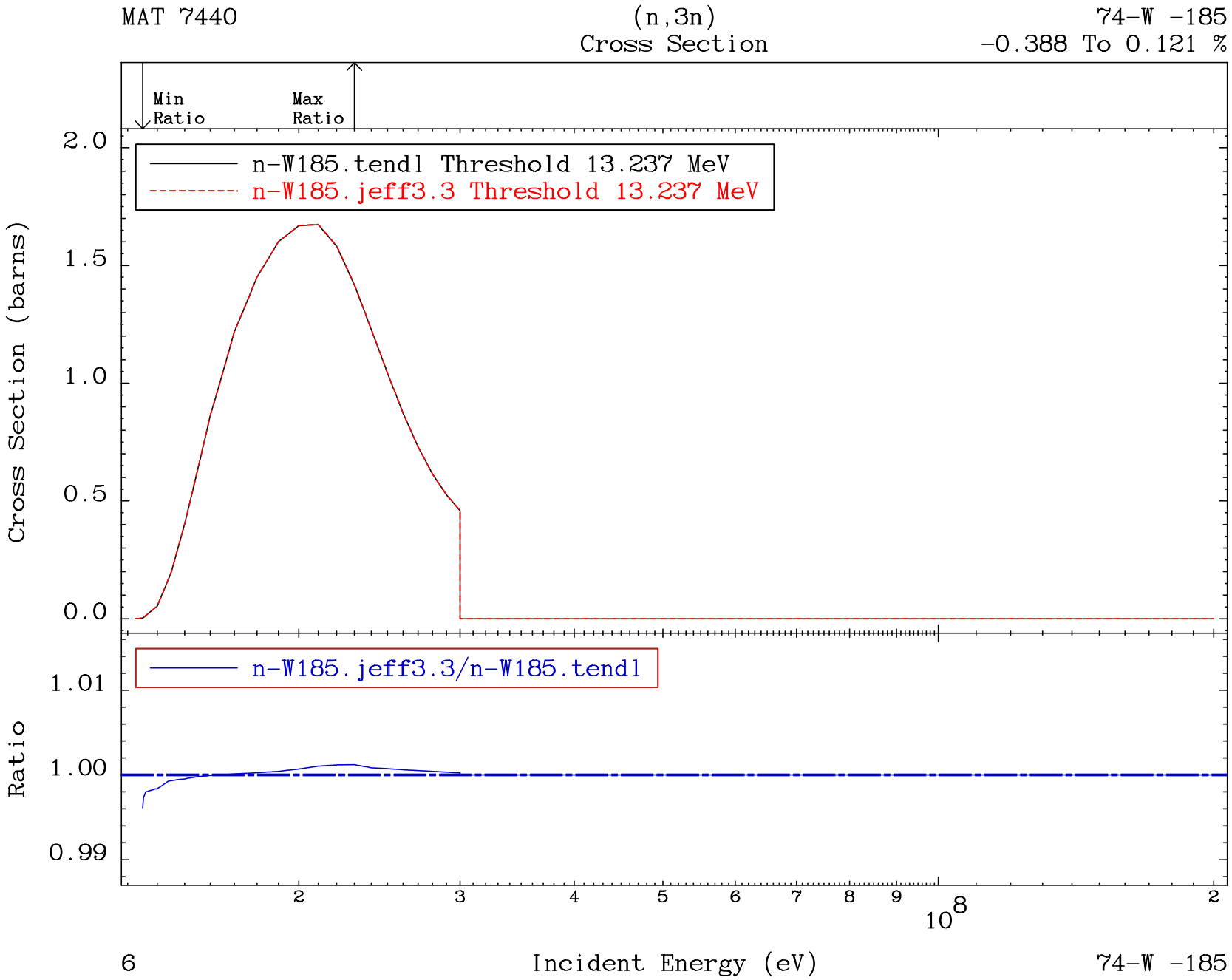

MAT 7440
Total
Cross Section
74-W -185
-99.10 To 9999. %
Min
Ratio
Max
Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
1
74-W -185

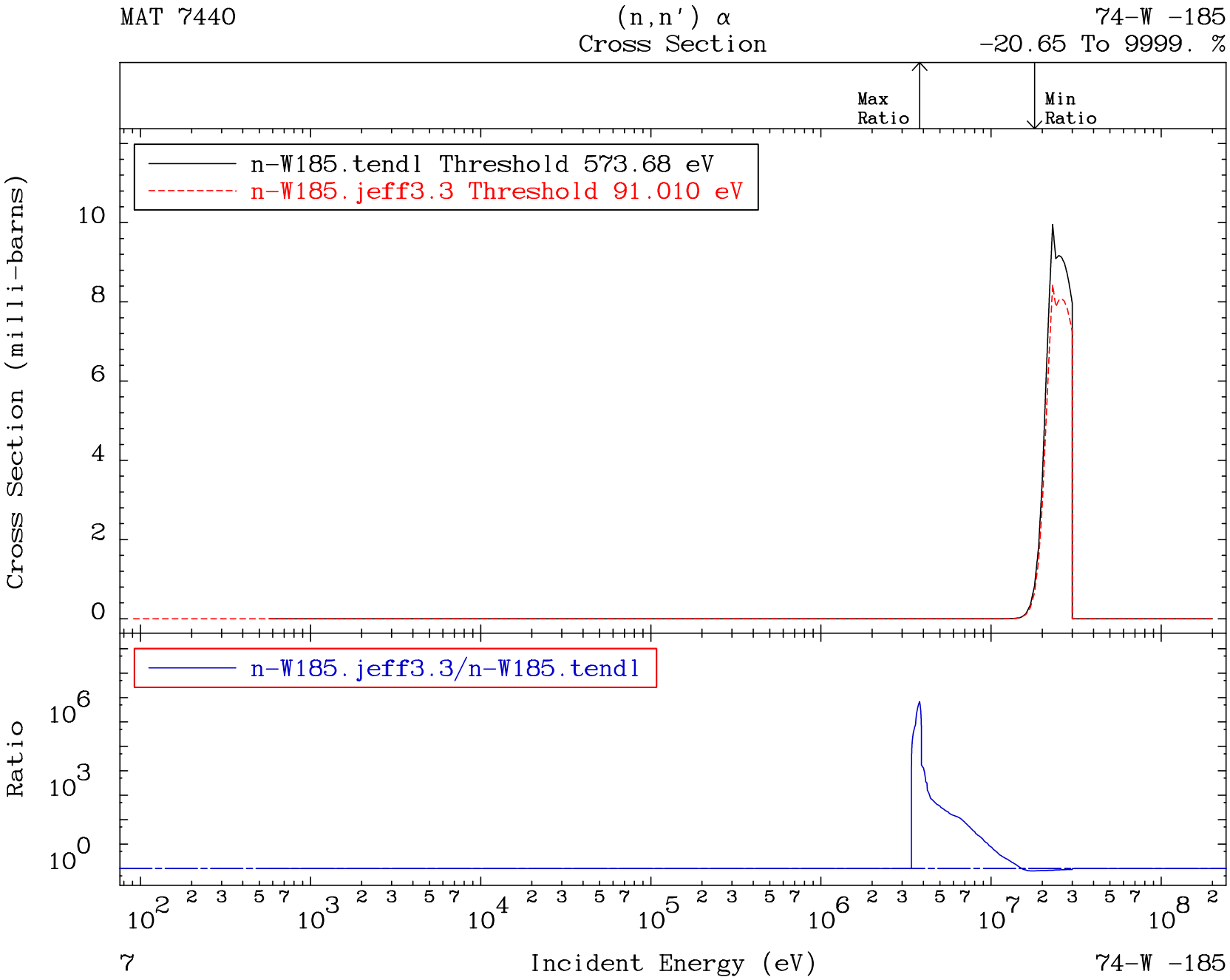

MAT 7440
Elastic
Cross Section
74-W -185
-90.48 To 3524. %
Max Ratio
Min Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
2
74-W -185

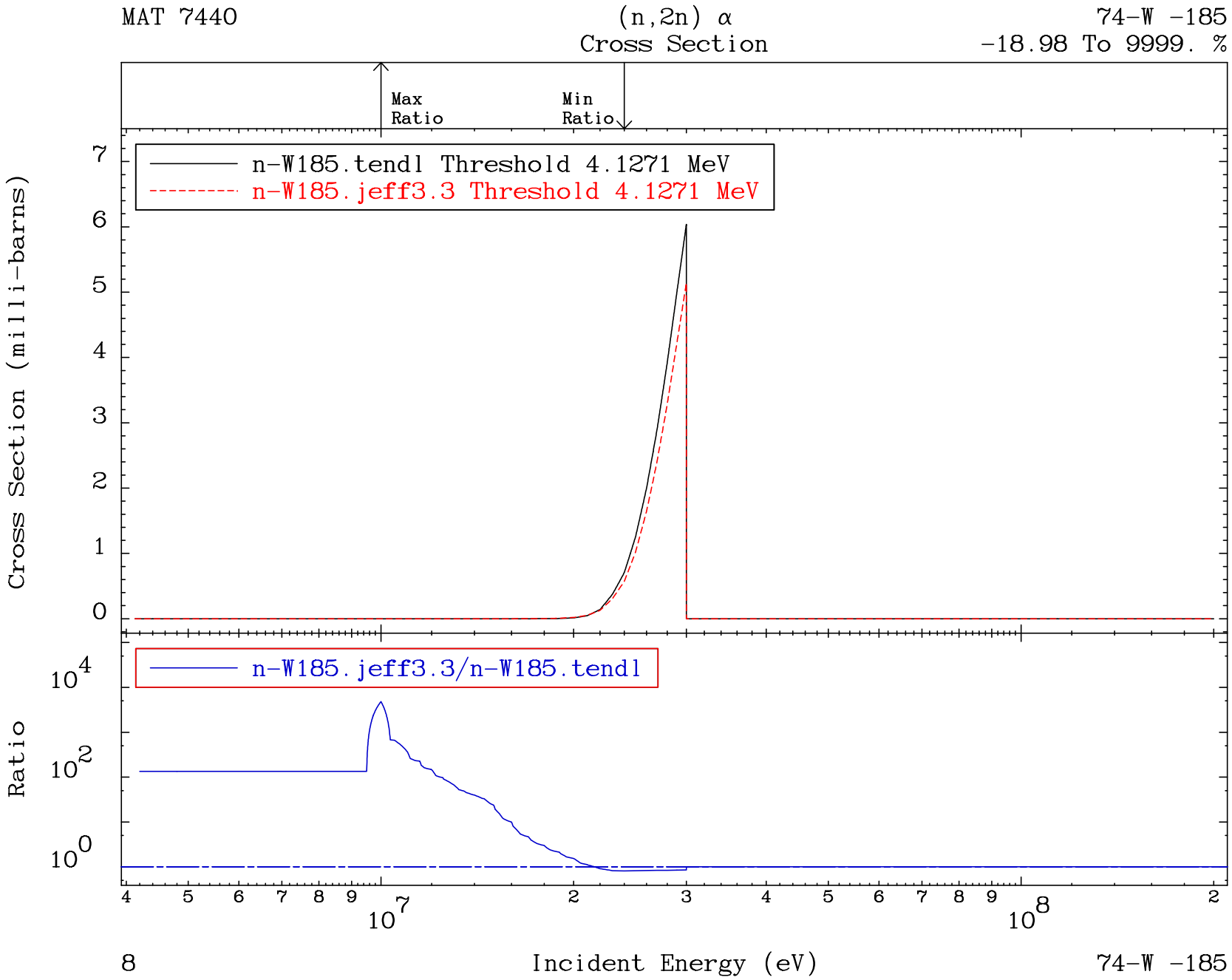

MAT 7440
Inelastic
Cross Section
74-W -185
-0.032 To 0.013 %
Max
Ratio
Min
Ratio
n-W185.tendl Threshold 23.675 keV
n-W185.jeff3.3 Threshold 23.675 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
74-W -185

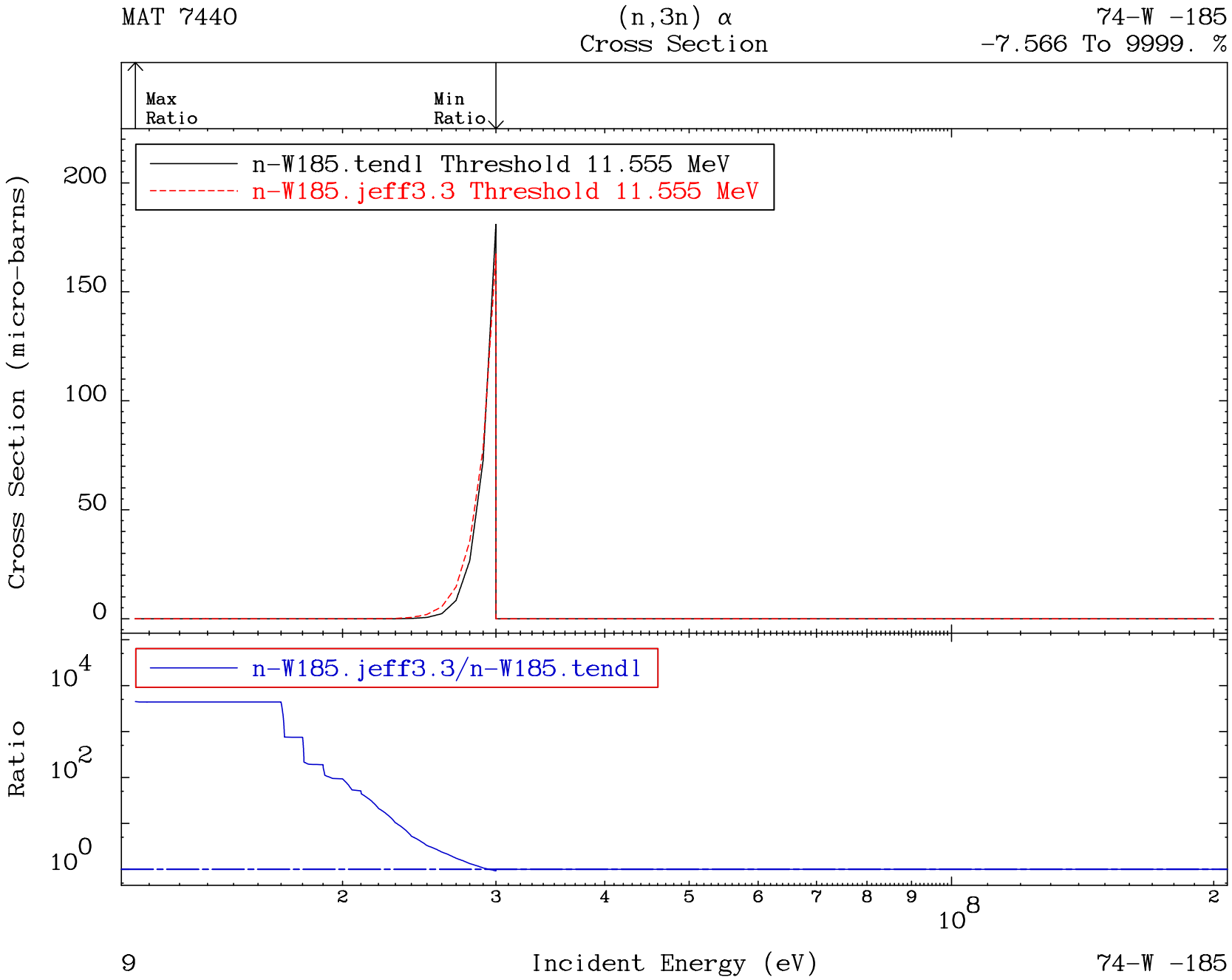

MAT 7440
(n,2n) d
Cross Section
74-W -185
0.000 To 8.060 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 18.264 MeV
n-W185.jeff3.3 Threshold 18.264 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
74-W -185

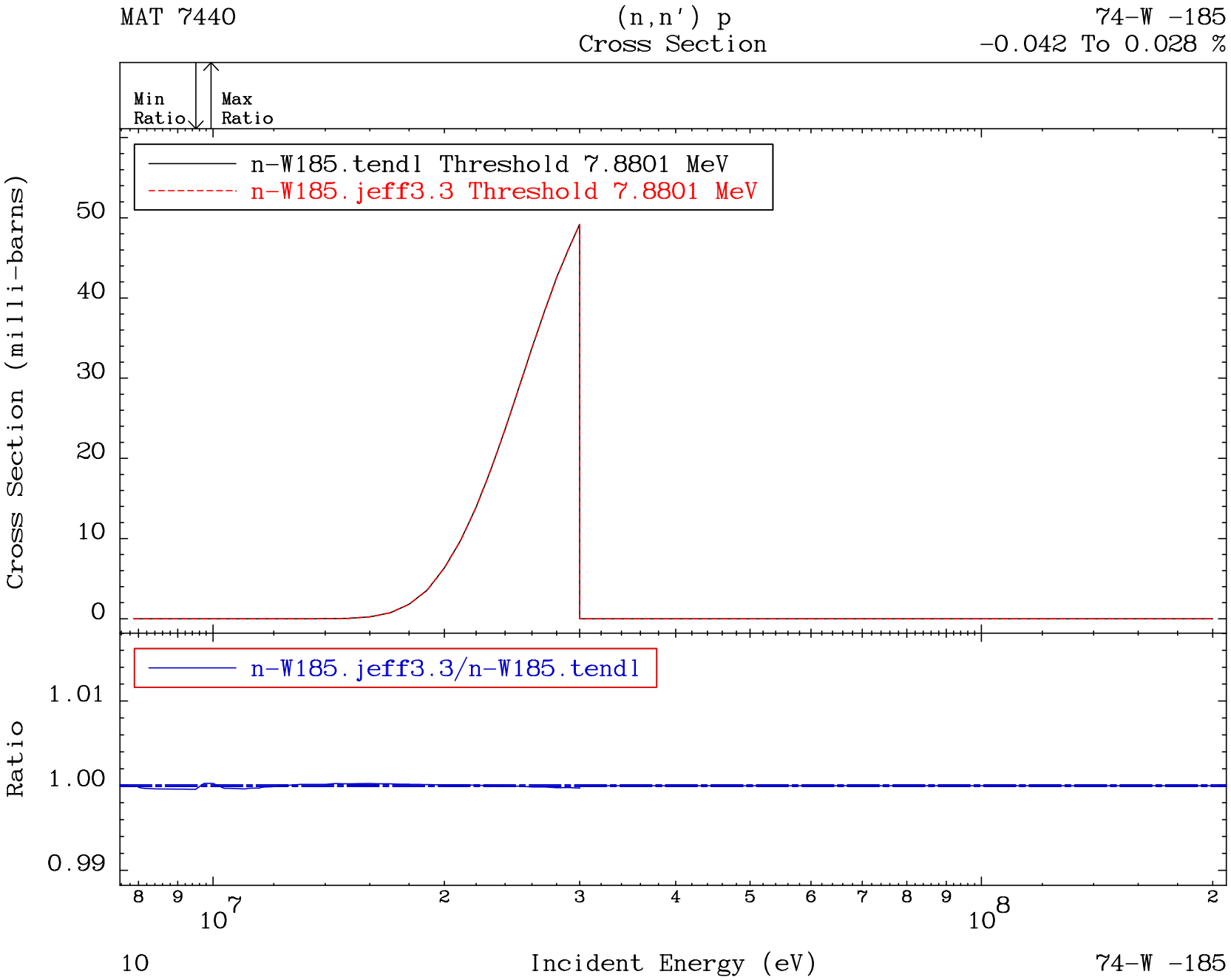

MAT 7440
(n,2n)
Cross Section
74-W -185
0.000 To 0.101 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 5.7851 MeV
n-W185.jeff3.3 Threshold 5.7851 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
74-W -185

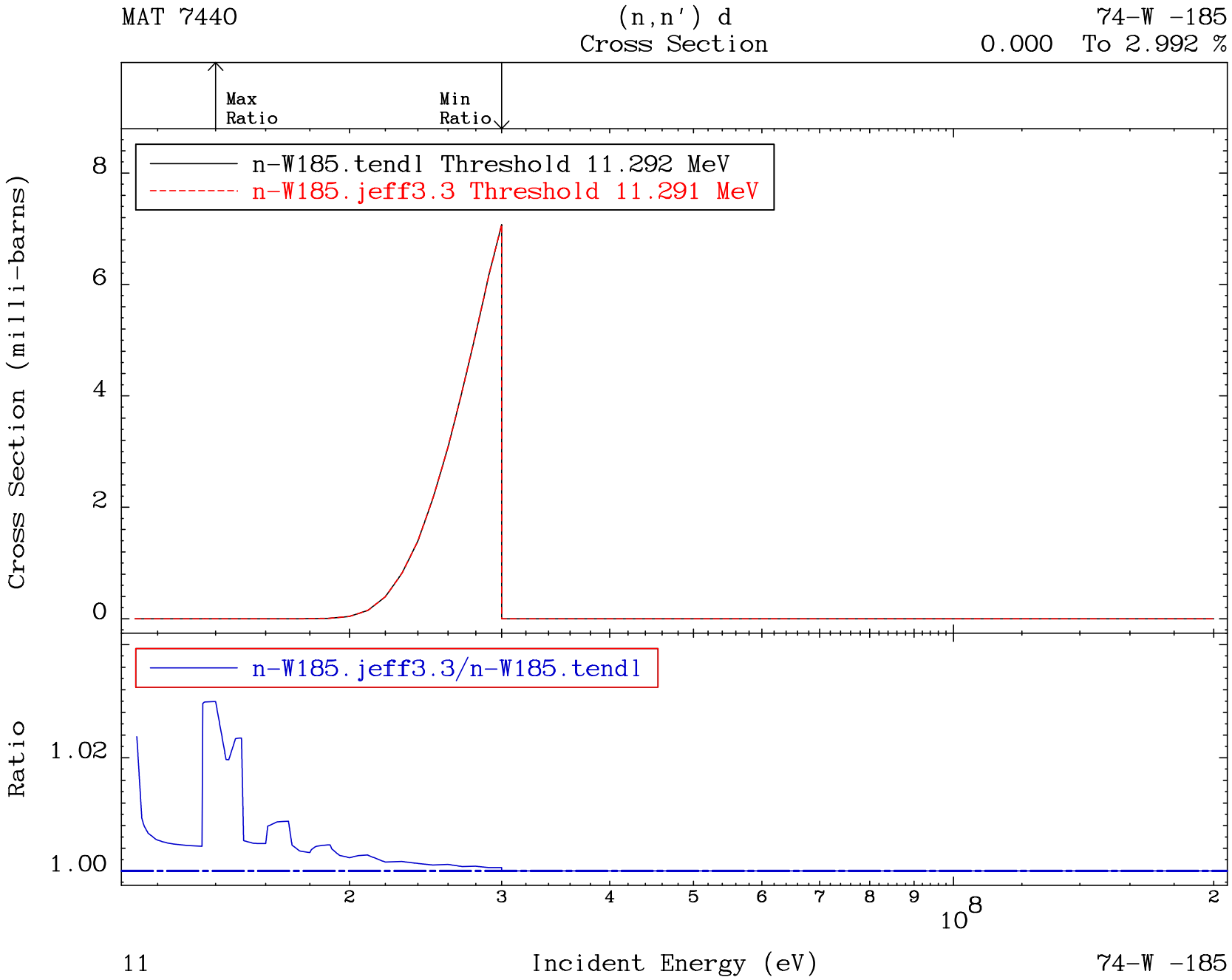

MAT 7440
(n,3n)
Cross Section
74-W -185
-0.388 To 0.121 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 13.237 MeV
n-W185.jeff3.3 Threshold 13.237 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
74-W -185

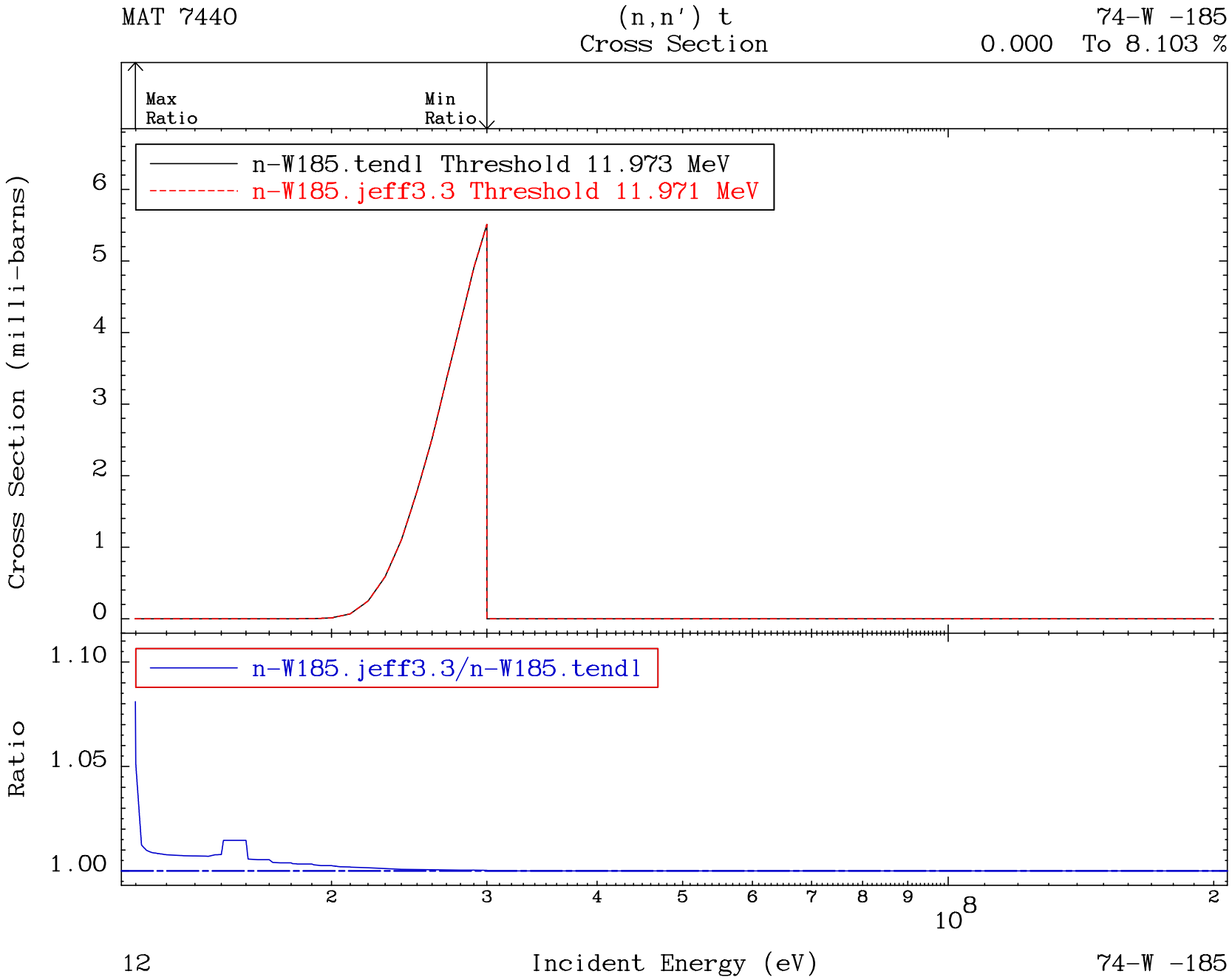

MAT 7440
(n,n') α
Cross Section
74-W -185
-20.65 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 573.68 eV
n-W185.jeff3.3 Threshold 91.010 eV
Cross Section (milli-barns)
0
2
4
6
8
10
n-W185.jeff3.3/n-W185.tendl
Ratio
10^0
10^3
10^6
10^2 2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
7
Incident Energy (eV)
74-W -185

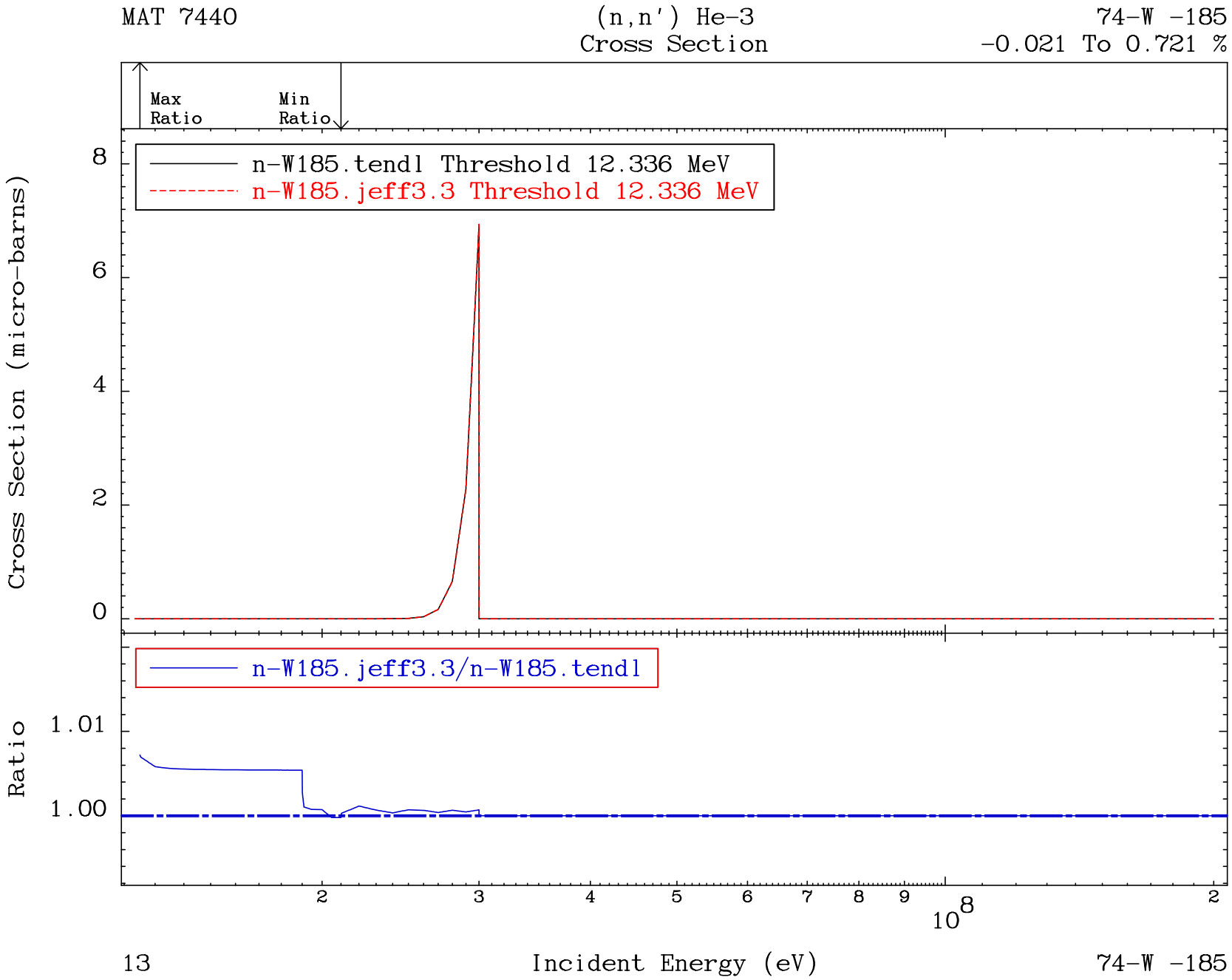

MAT 7440
(n,2n) α
Cross Section
74-W -185
-18.98 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 4.1271 MeV
n-W185.jeff3.3 Threshold 4.1271 MeV
Cross Section (milli-barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
8
74-W -185

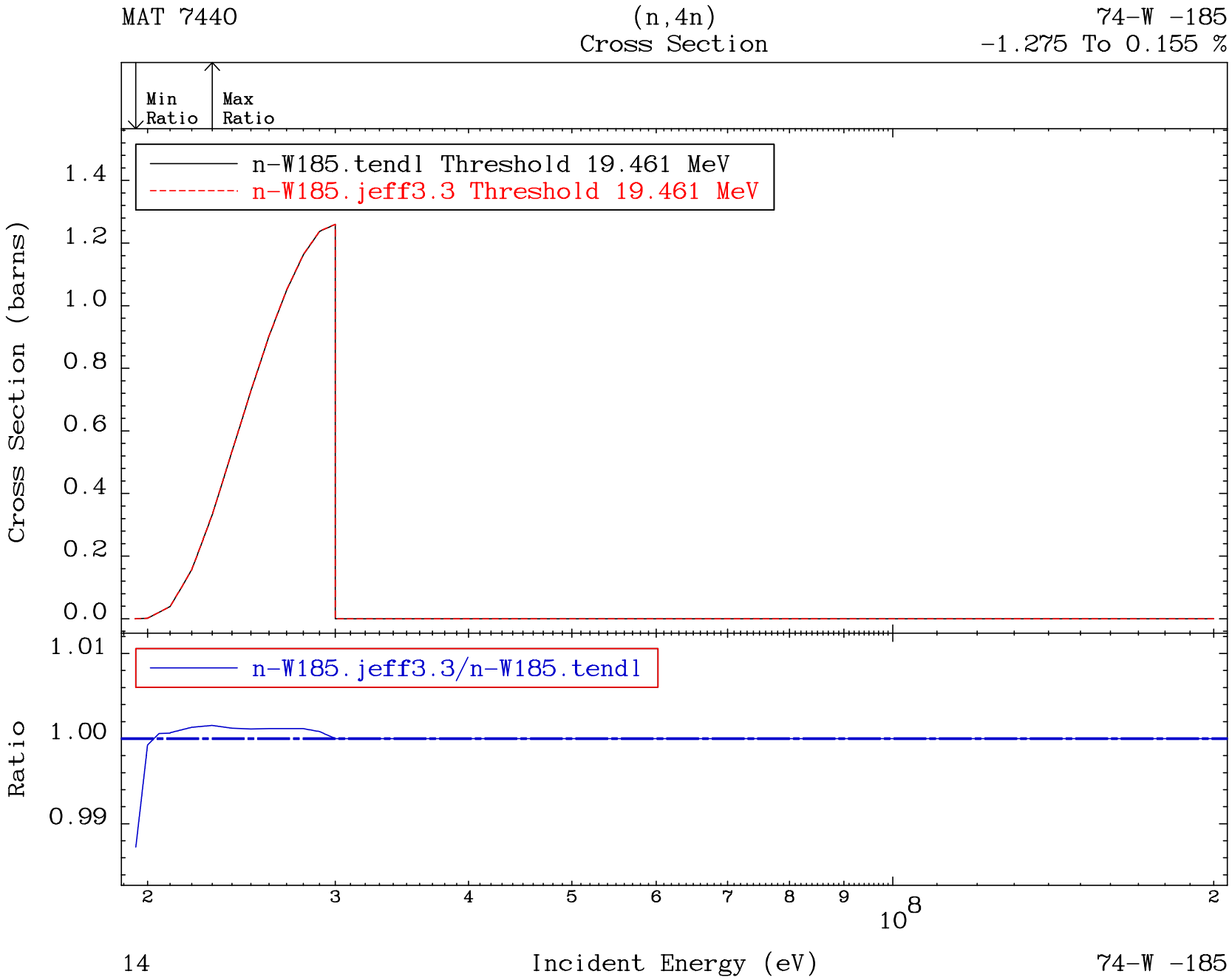

MAT 7440
(n,3n) α
Cross Section
74-W -185
-7.566 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.555 MeV
n-W185.jeff3.3 Threshold 11.555 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
74-W -185

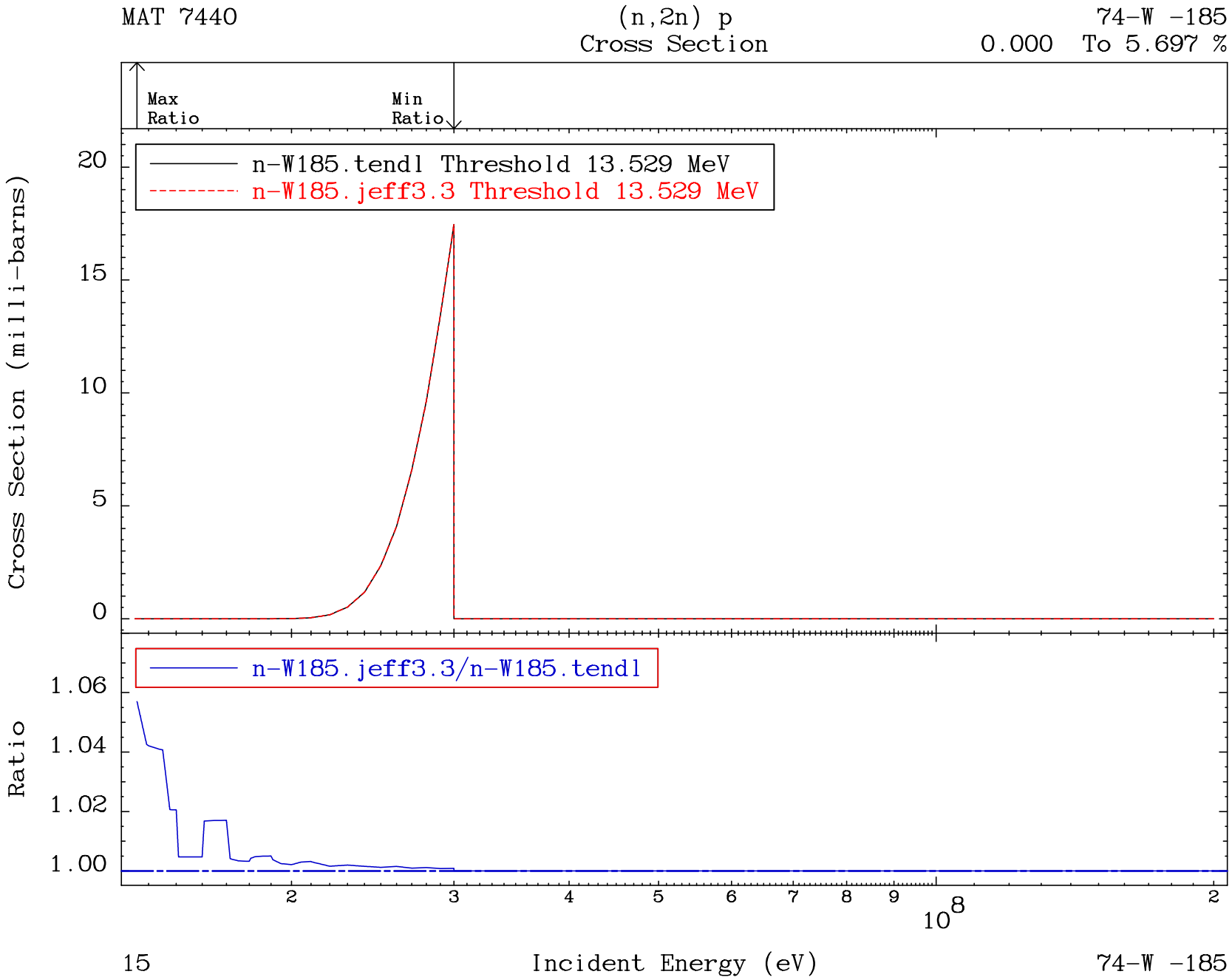

MAT 7440
(n,n') p
Cross Section
74-W -185
-0.042 To 0.028 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 7.8801 MeV
n-W185.jeff3.3 Threshold 7.8801 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
74-W -185

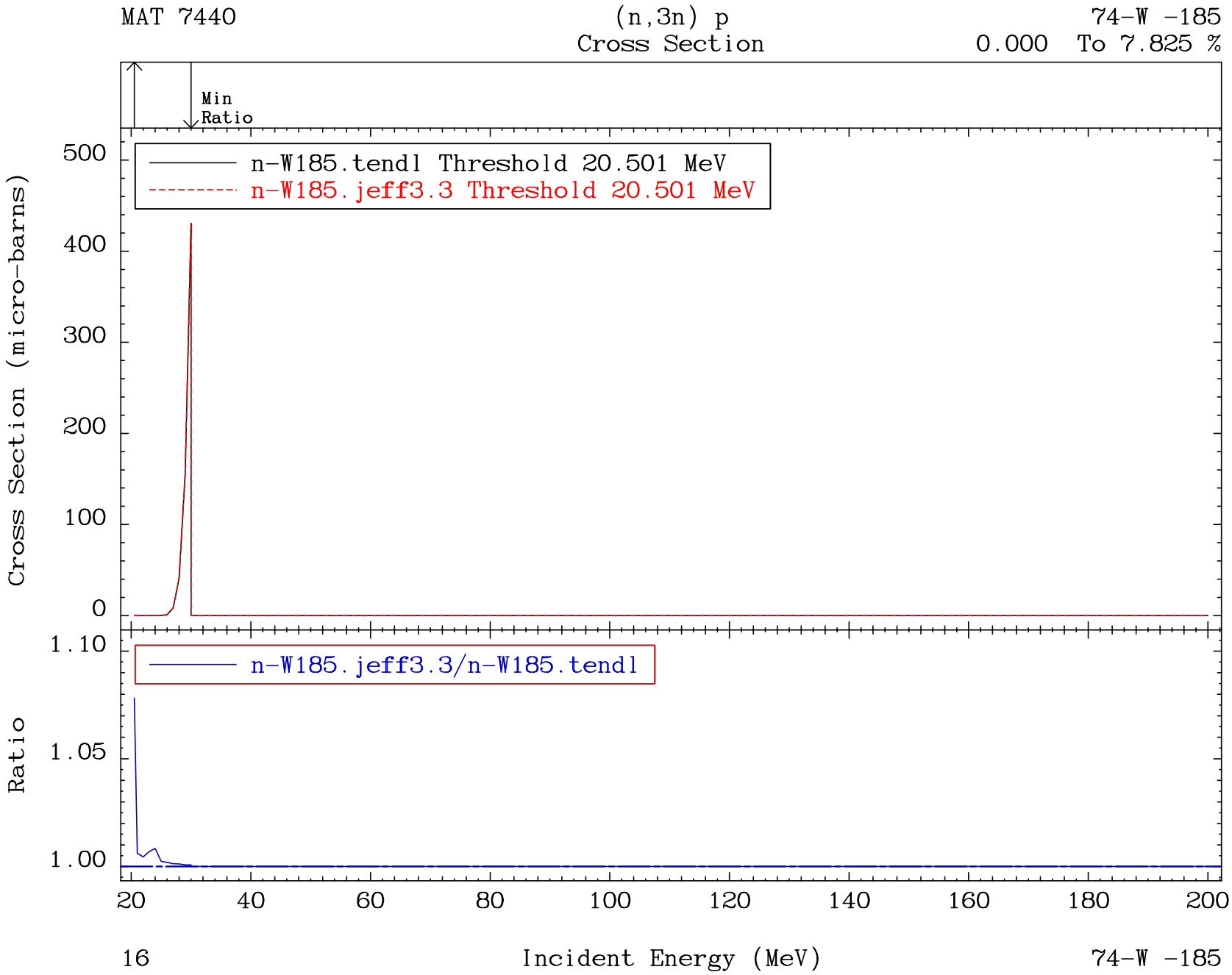

MAT 7440
(n,n') d
Cross Section
74-W -185
0.000 To 2.992 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.292 MeV
n-W185.jeff3.3 Threshold 11.291 MeV
Cross Section (milli-barns)
8
6
4
2
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
74-W -185

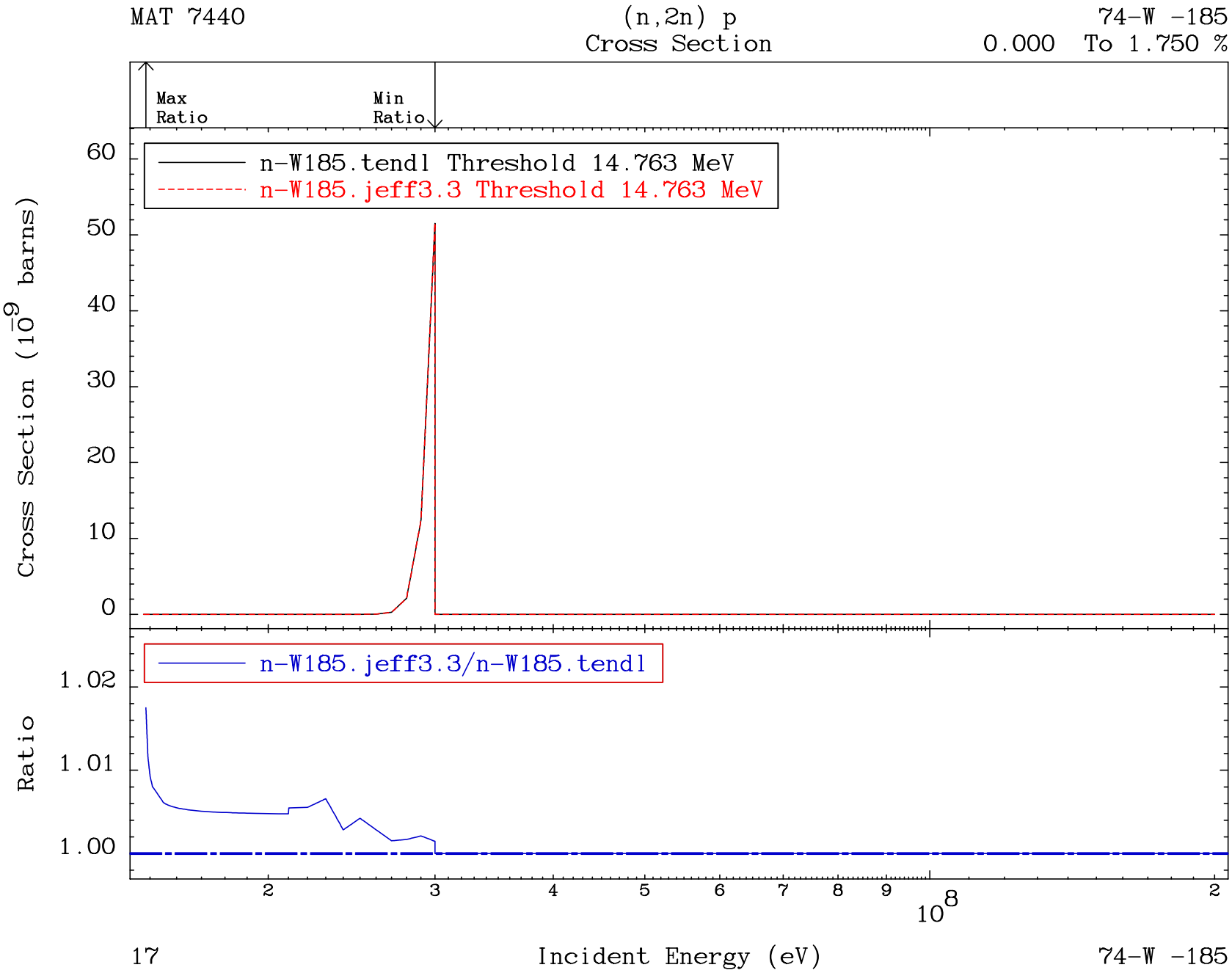

MAT 7440
(n,n') t
Cross Section
74-W -185
0.000 To 8.103 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.973 MeV
n-W185.jeff3.3 Threshold 11.971 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-W185.jeff3.3/n-W185.tendl
Ratio
1.00
1.05
1.10
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
74-W -185

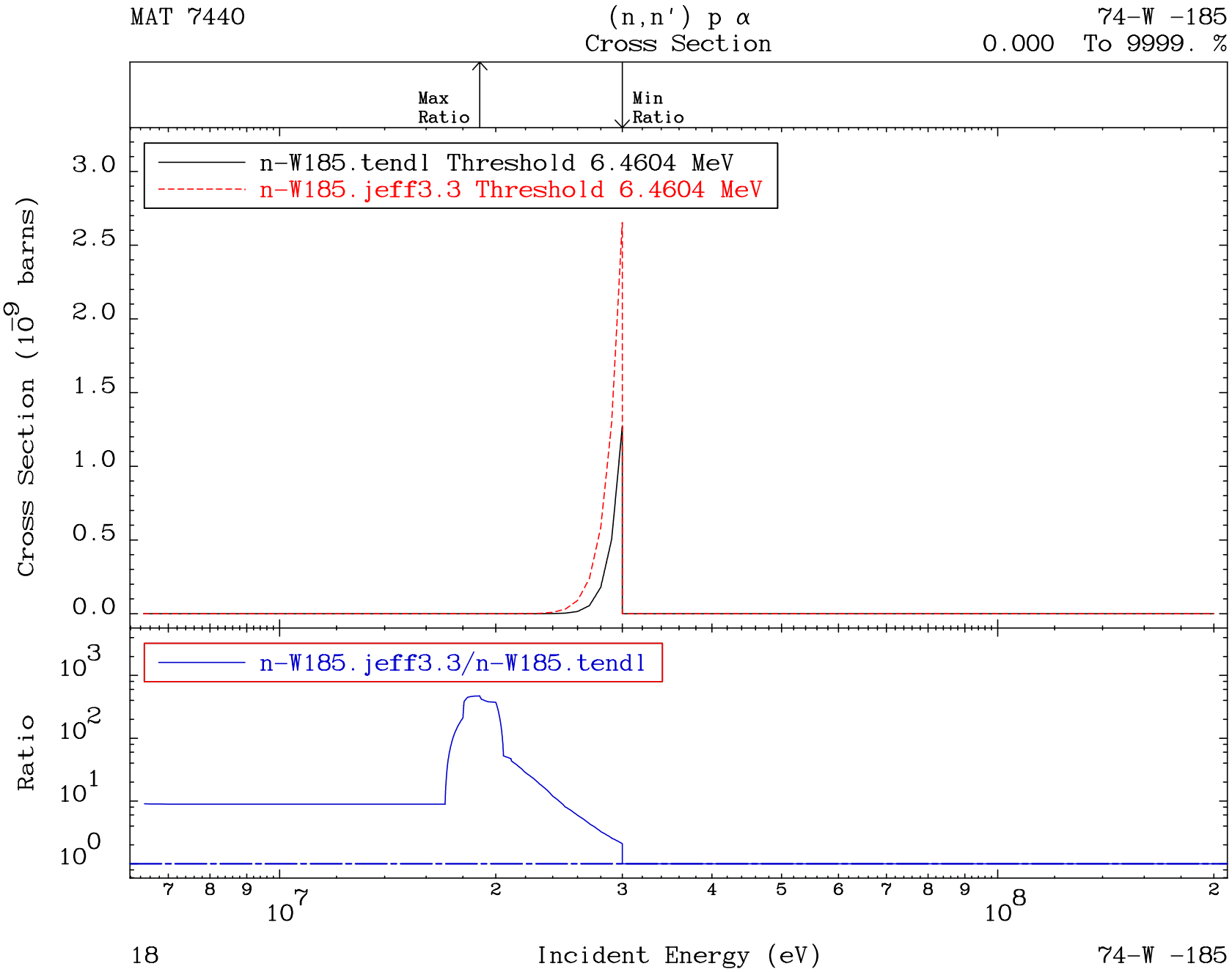

MAT 7440
(n,n') He-3
Cross Section
74-W -185
-0.021 To 0.721 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 12.336 MeV
n-W185.jeff3.3 Threshold 12.336 MeV
Cross Section (micro-barns)
0
2
4
6
8
n-W185.jeff3.3/n-W185.tendl
Ratio
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
74-W -185

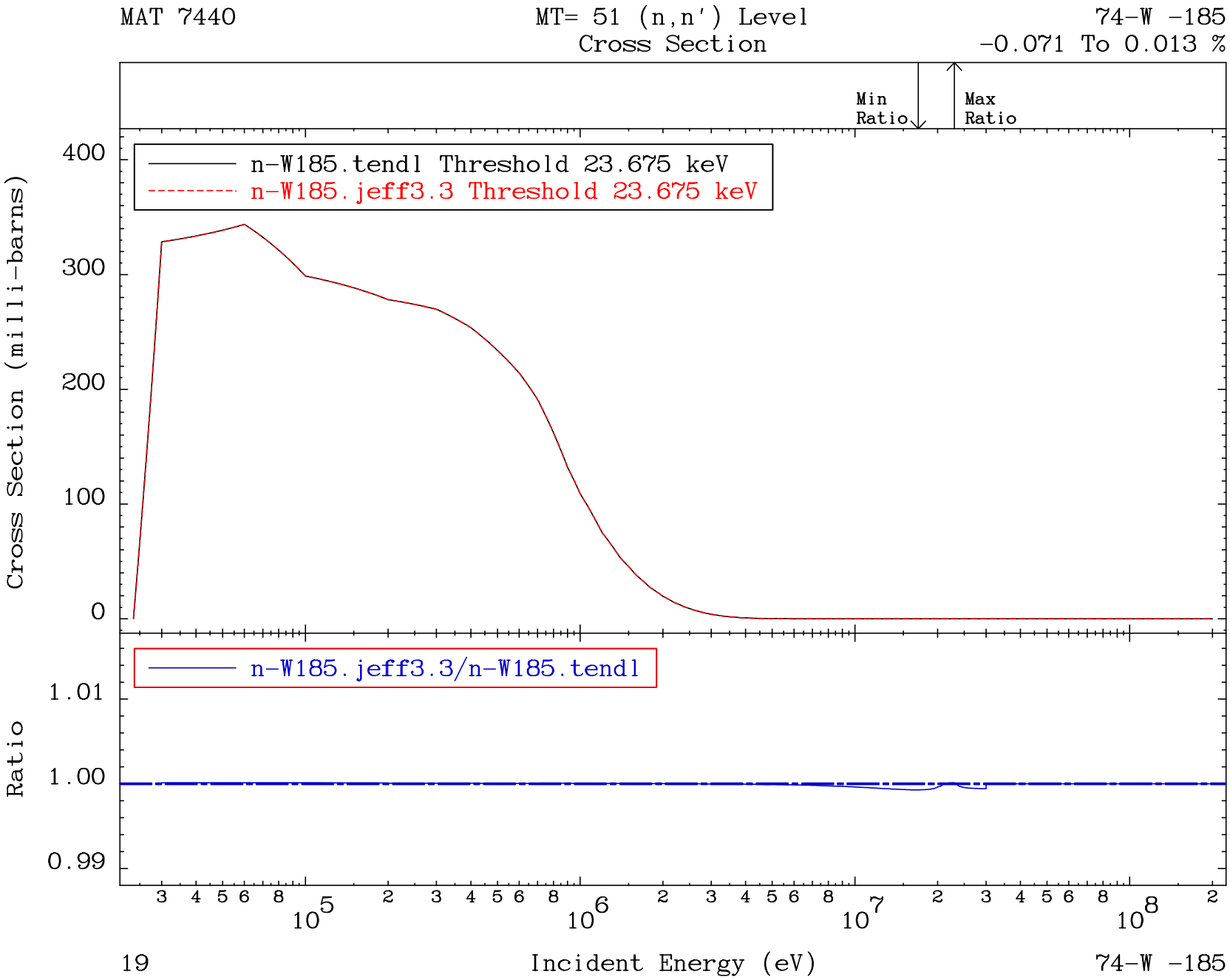

MAT 7440
(n,4n)
Cross Section
74-W -185
-1.275 To 0.155 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 19.461 MeV
n-W185.jeff3.3 Threshold 19.461 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
74-W -185

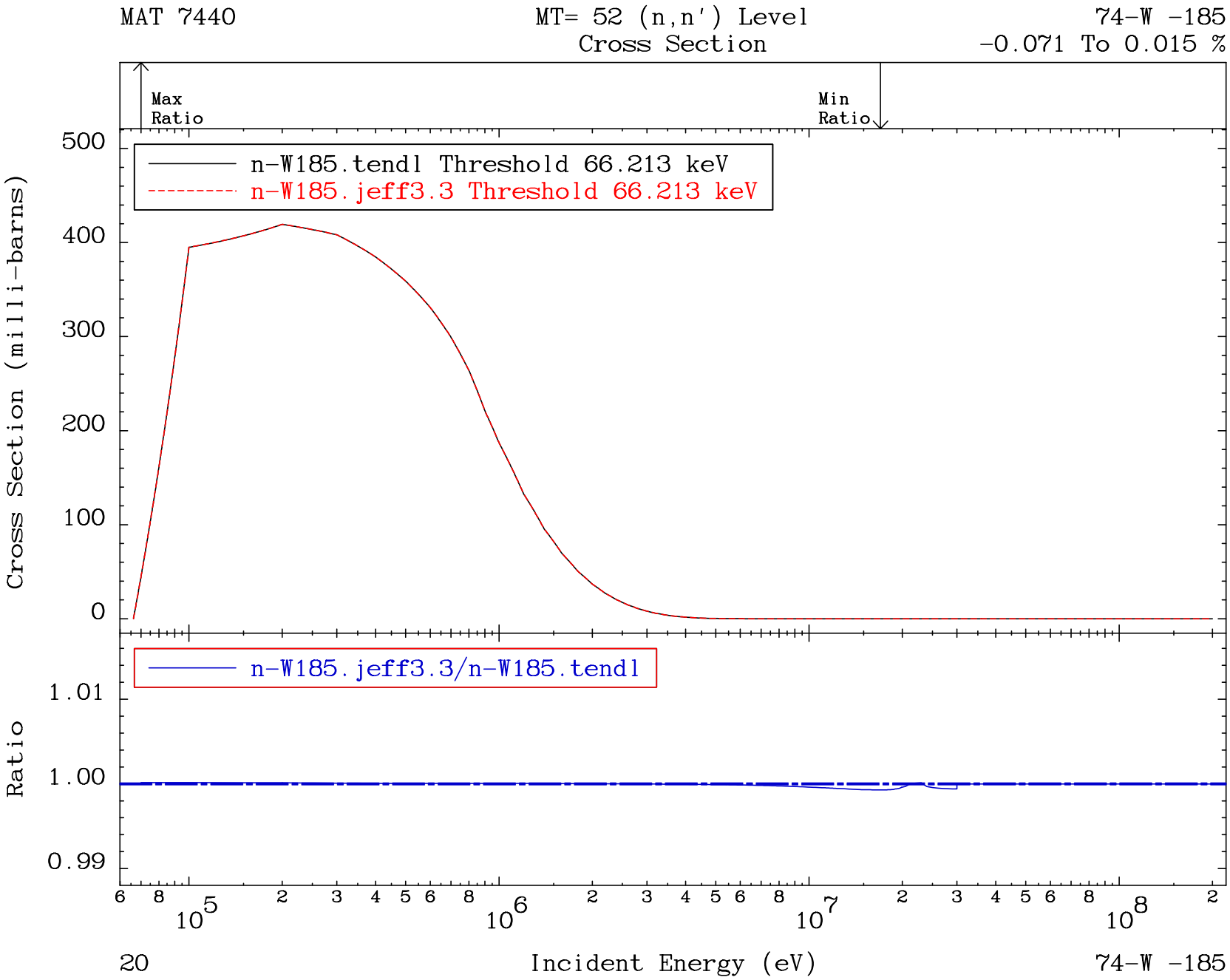

MAT 7440
(n,2n) p
Cross Section
74-W -185
0.000 To 5.697 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 13.529 MeV
n-W185.jeff3.3 Threshold 13.529 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
74-W -185

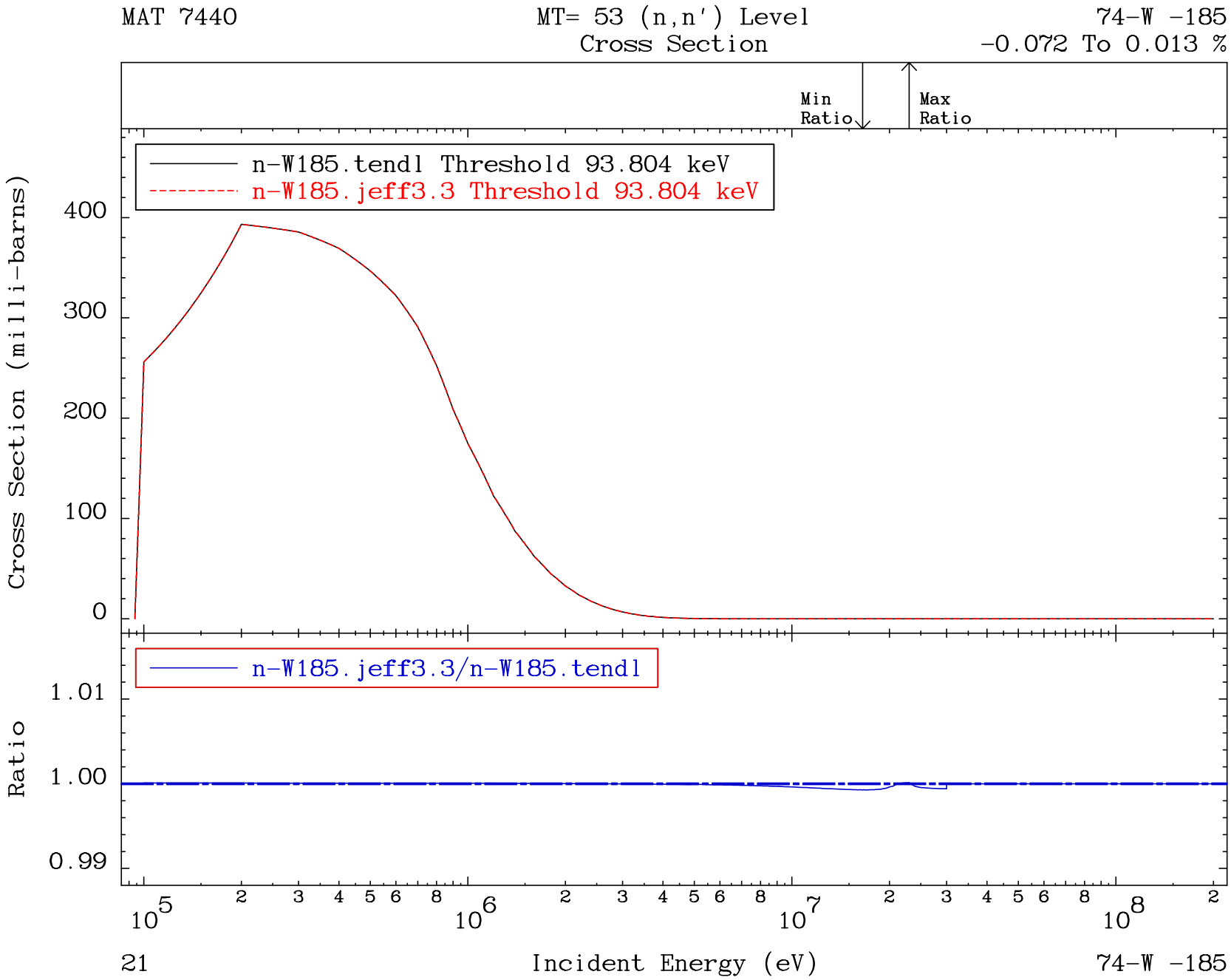

MAT 7440
(n,3n) p
Cross Section
74-W -185
0.000 To 7.825 %
Min
Ratio
n-W185.tendl Threshold 20.501 MeV
n-W185.jeff3.3 Threshold 20.501 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
74-W -185

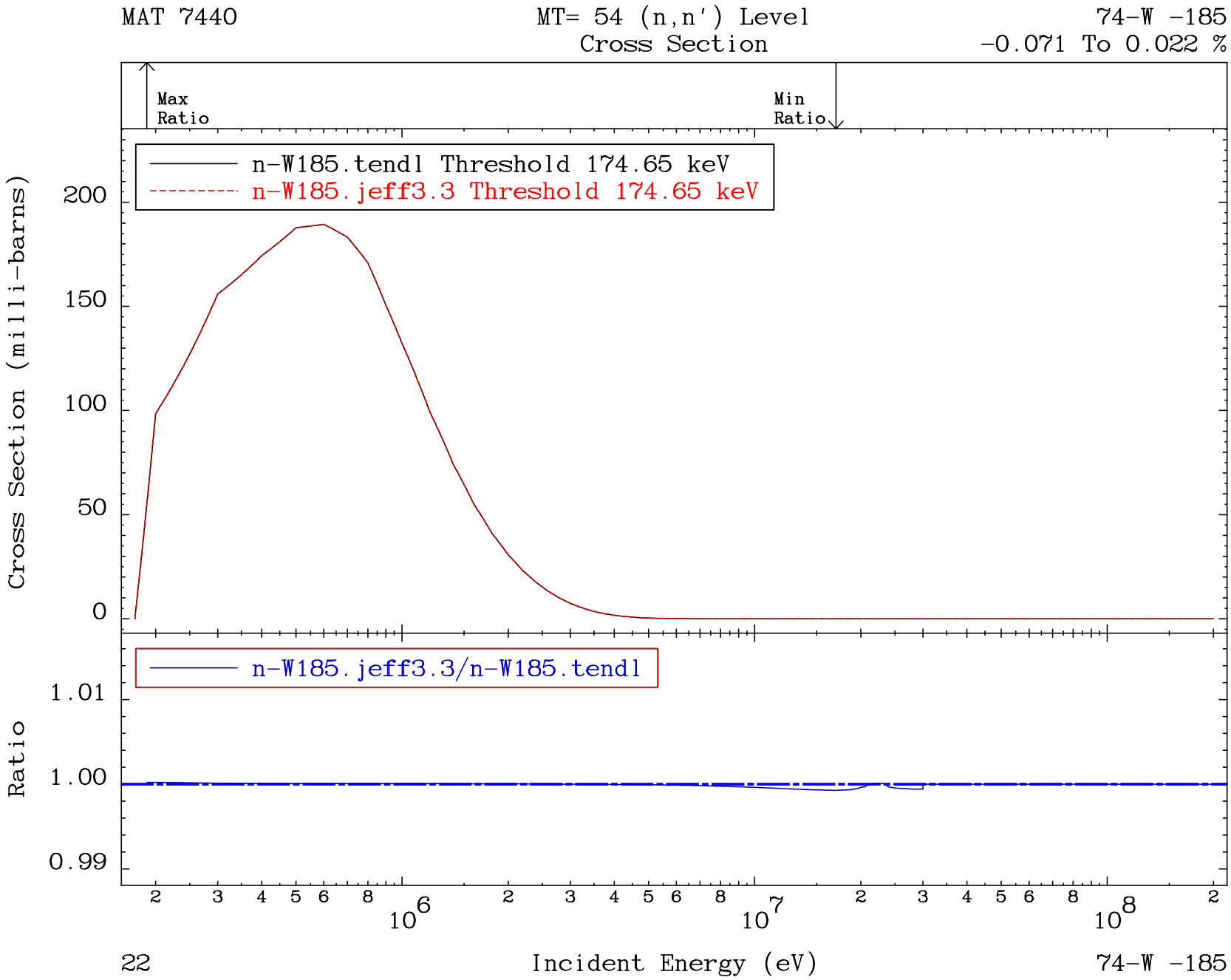

MAT 7440
(n,2n) p
Cross Section
74-W -185
0.000 To 1.750 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 14.763 MeV
n-W185.jeff3.3 Threshold 14.763 MeV
Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
74-W -185

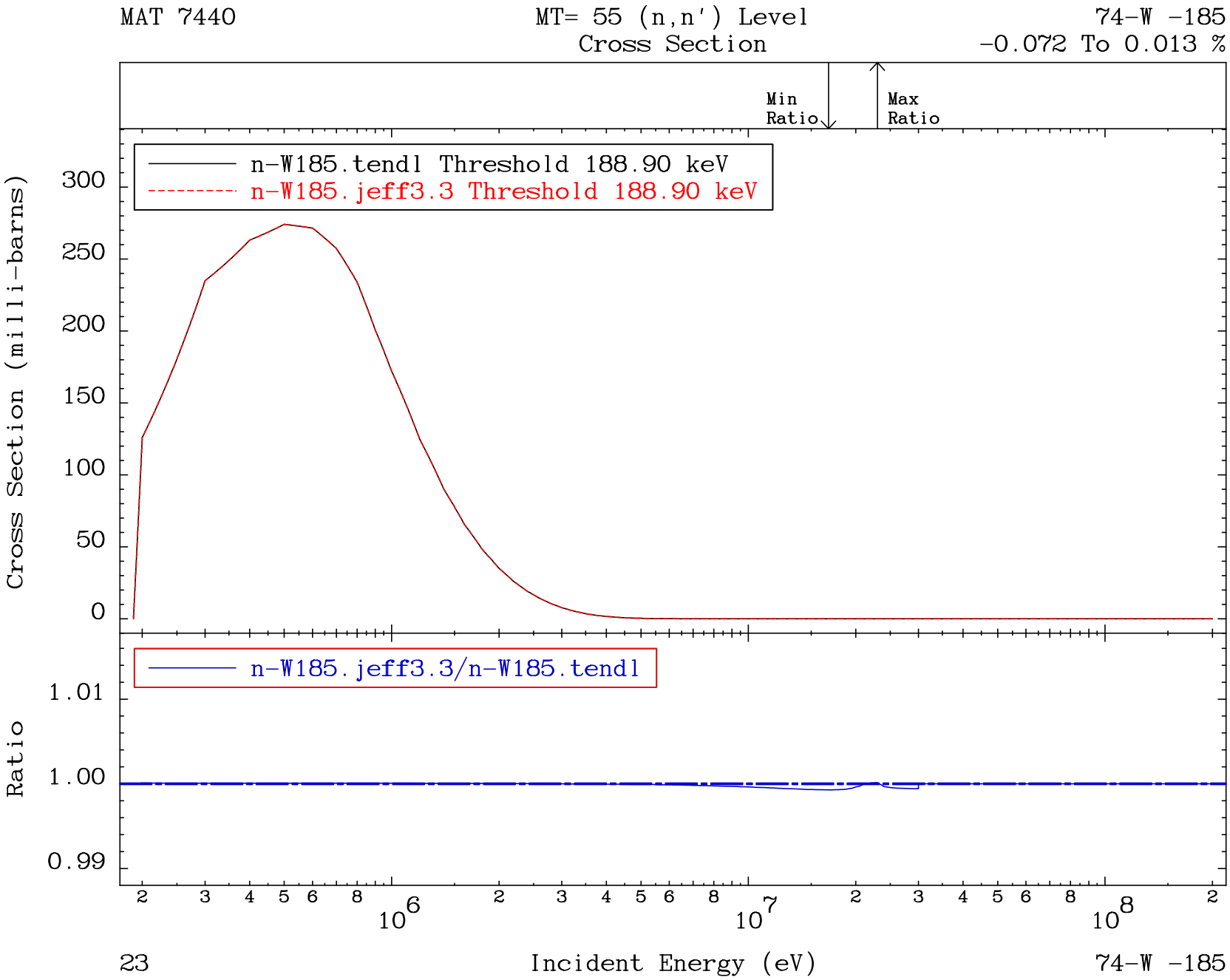

MAT 7440
(n,n') p α
Cross Section
74-W -185
0.000 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 6.4604 MeV
n-W185.jeff3.3 Threshold 6.4604 MeV
Cross Section (10^{-9} barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^3
10^2
10^1
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
74-W -185

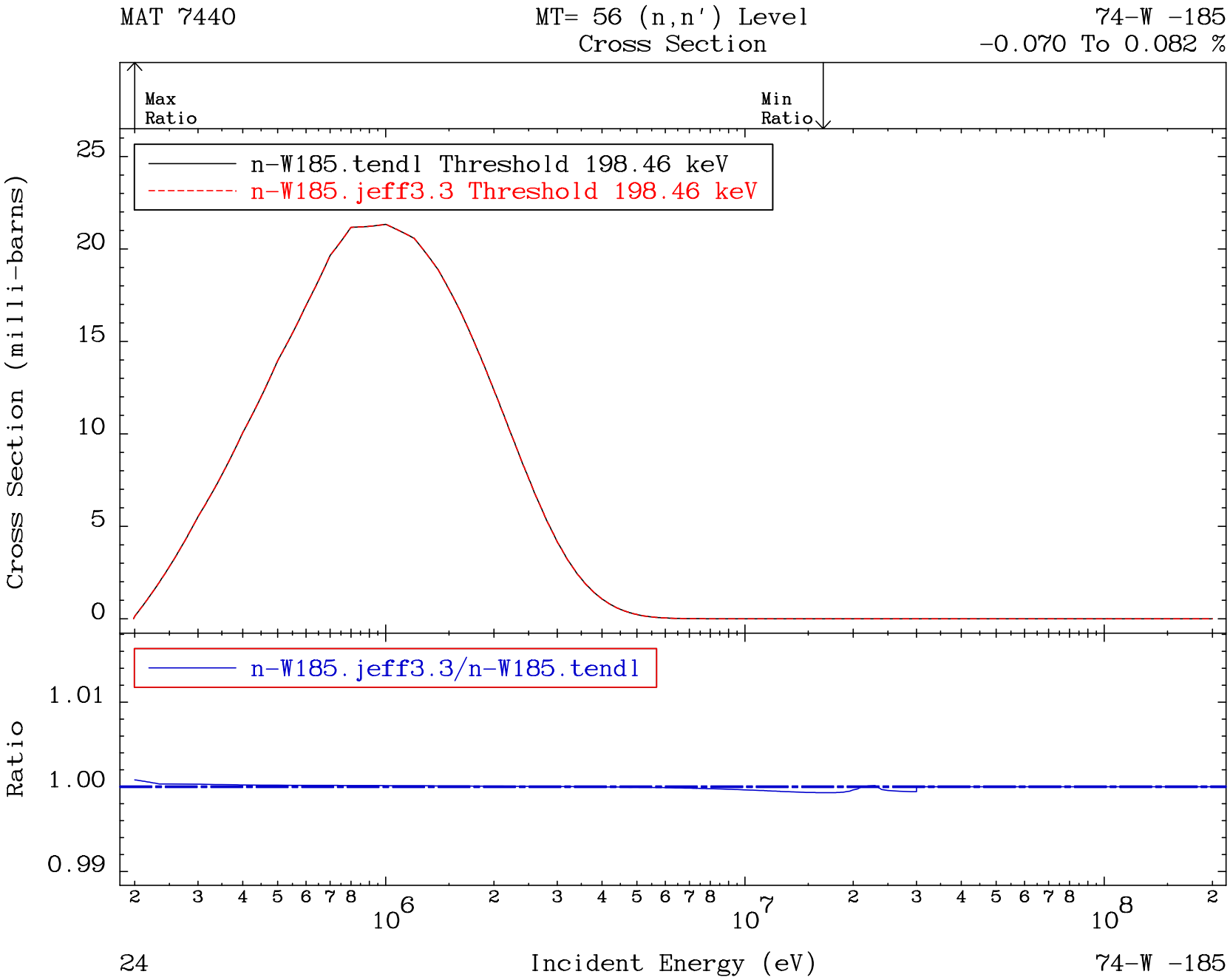

MAT 7440
MT= 51 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 23.675 keV
n-W185.jeff3.3 Threshold 23.675 keV
Cross Section (milli-barns)
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
74-W -185

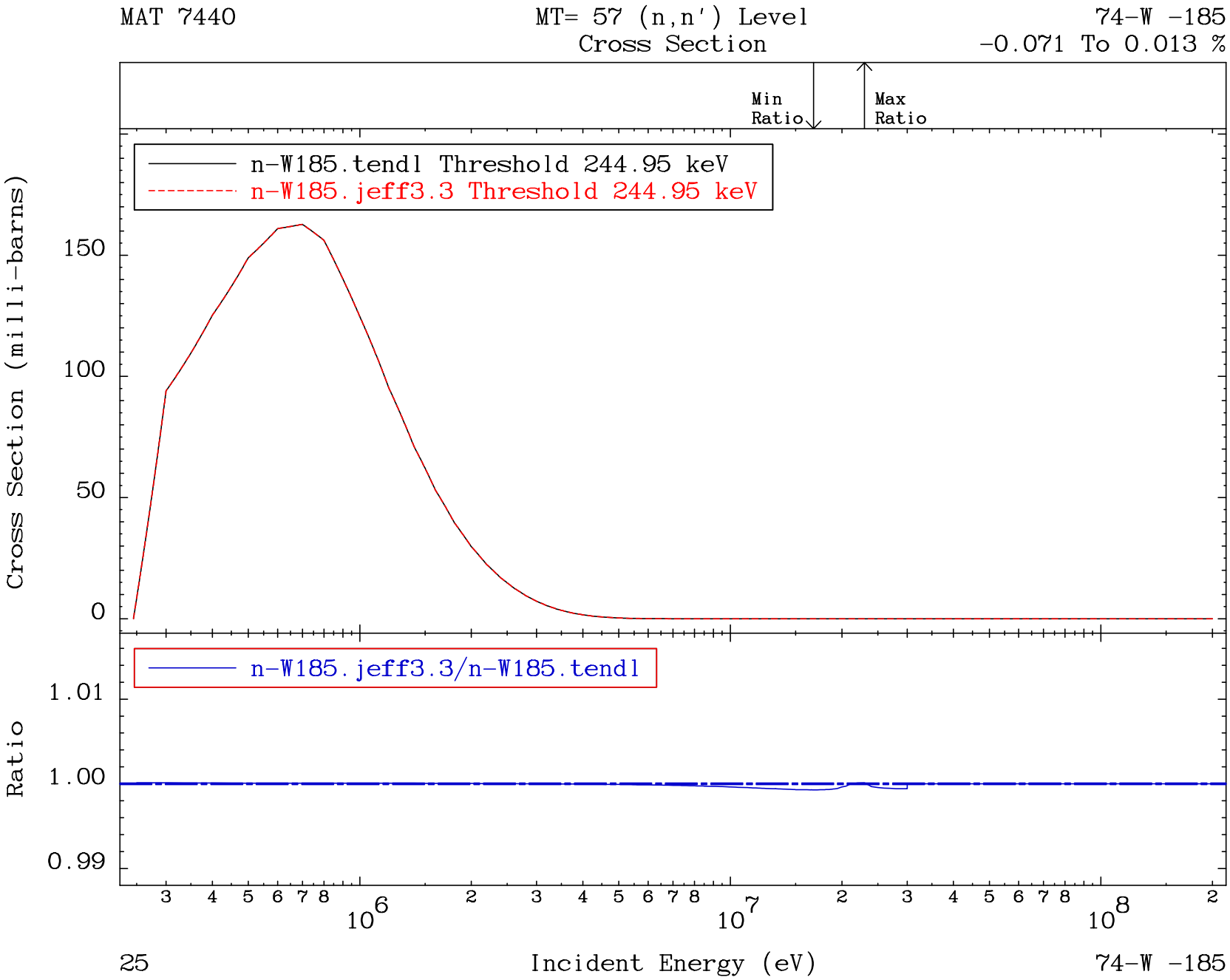

MAT 7440
MT= 52 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.015 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 66.213 keV
n-W185.jeff3.3 Threshold 66.213 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
20
74-W -185

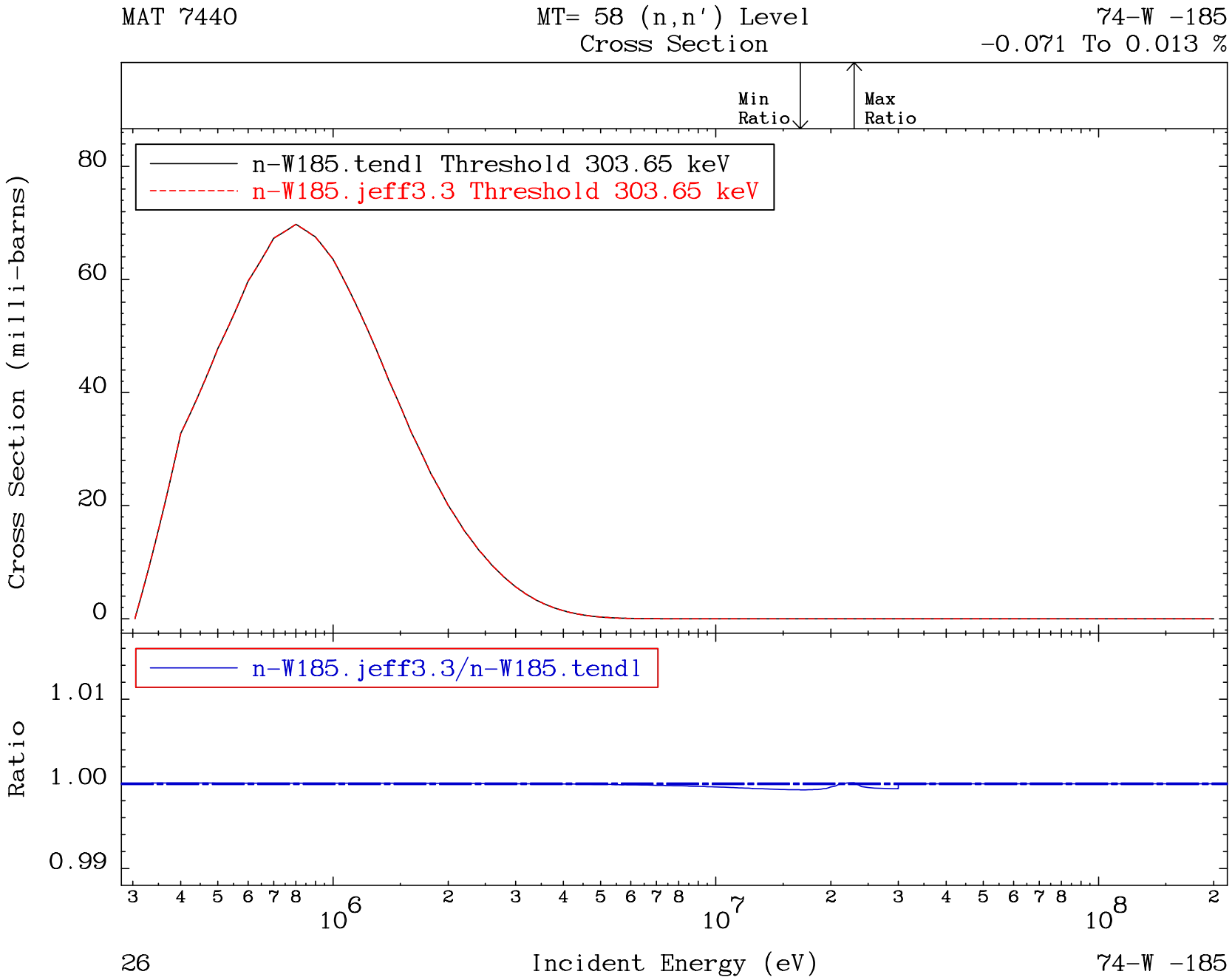

MAT 7440
MT= 53 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 93.804 keV
n-W185.jeff3.3 Threshold 93.804 keV
Cross Section (milli-barns)
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^5
10^6
10^7
10^8
21
Incident Energy (eV)
74-W -185

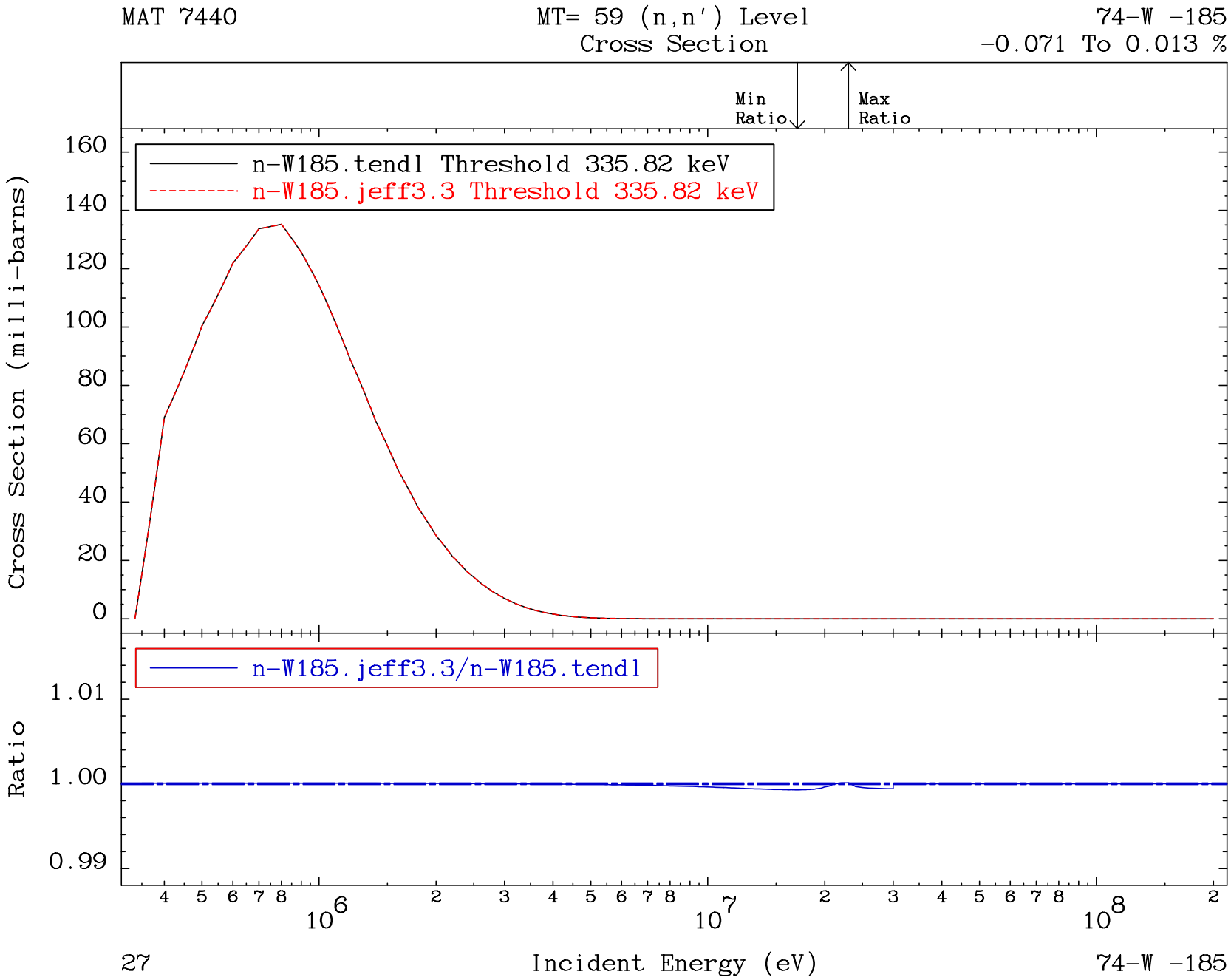

MAT 7440
MT= 54 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.022 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 174.65 keV
n-W185.jeff3.3 Threshold 174.65 keV
Cross Section (milli-barns)
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
74-W -185

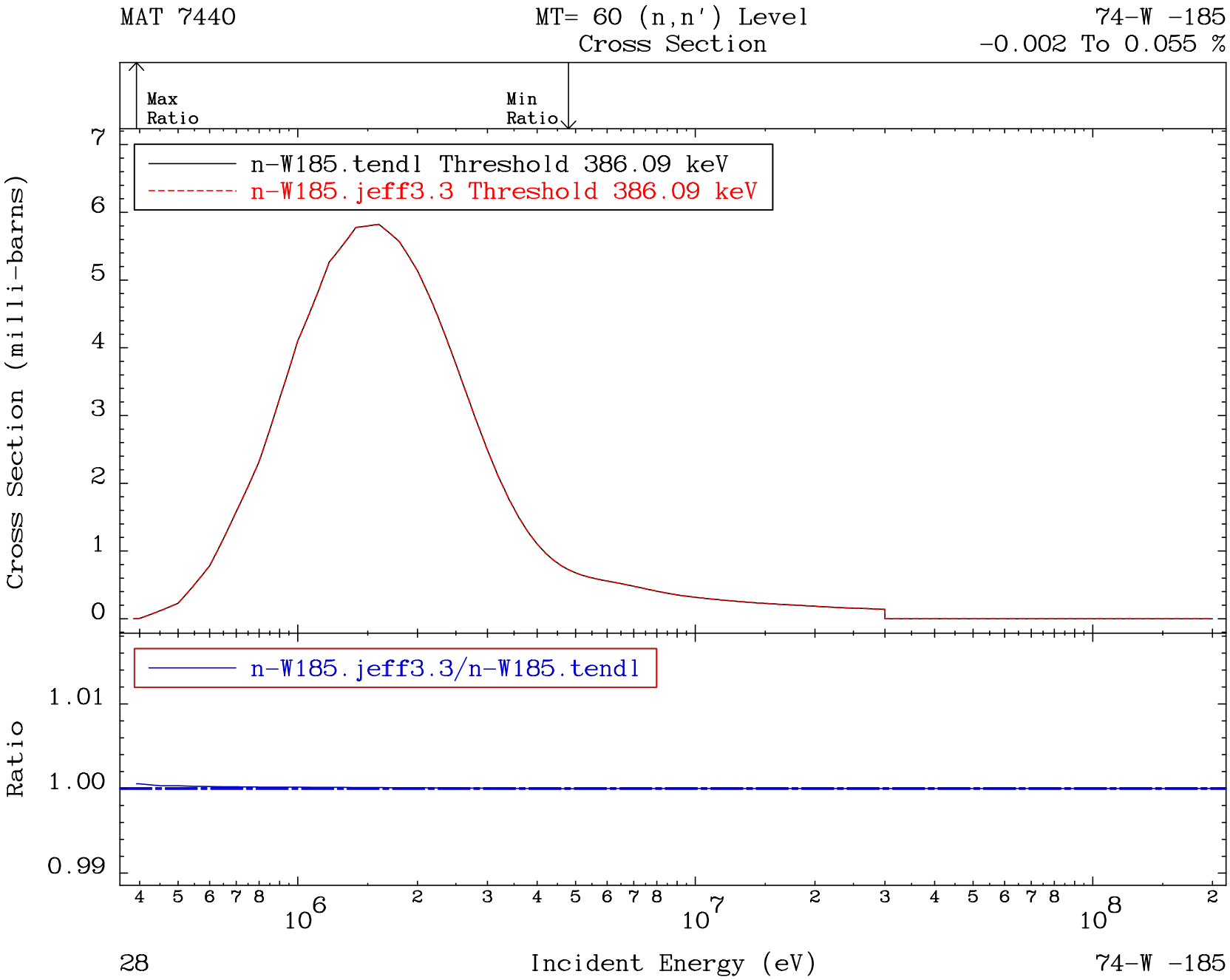

MAT 7440
MT= 55 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 188.90 keV
n-W185.jeff3.3 Threshold 188.90 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
74-W -185

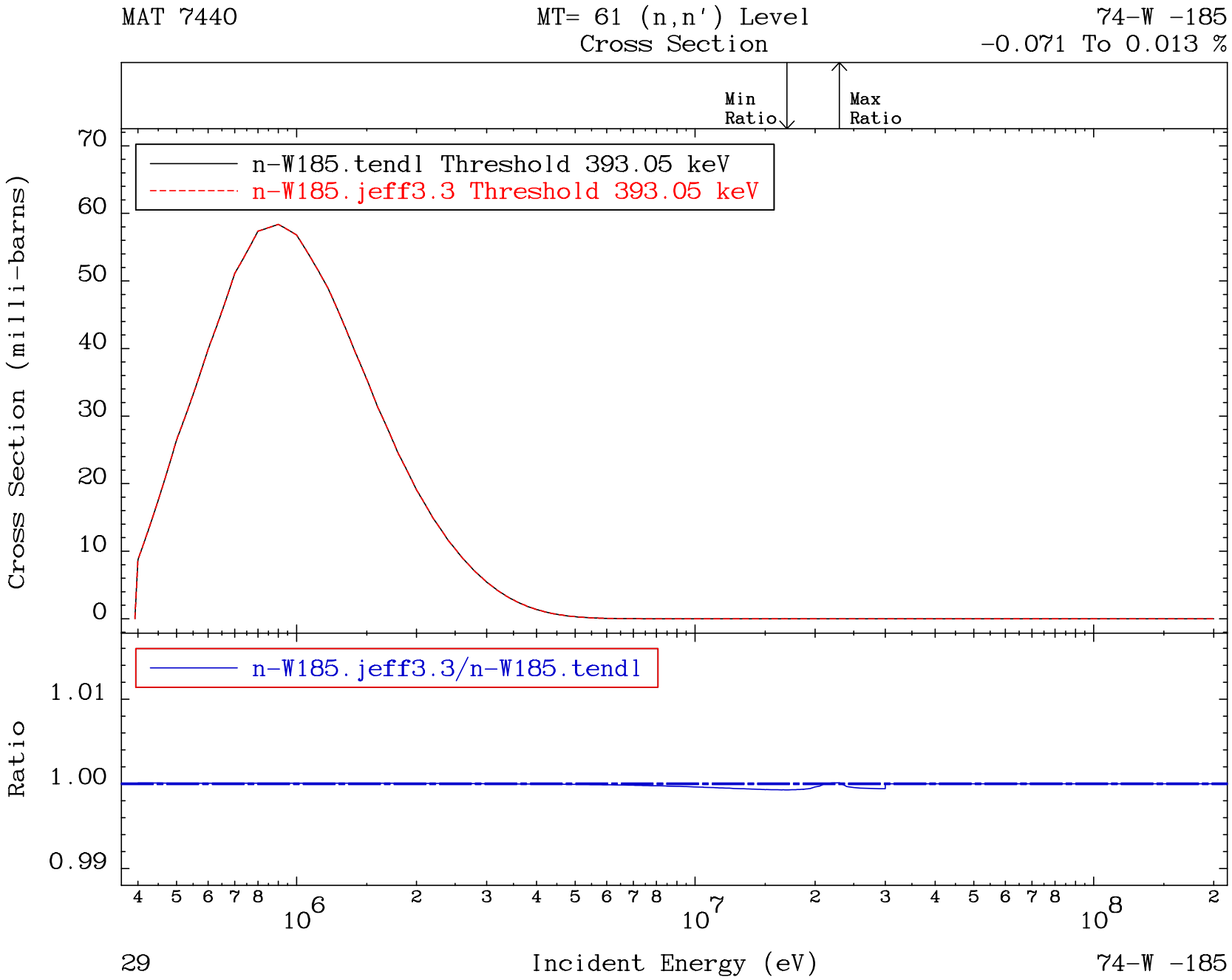

MAT 7440
MT= 56 (n,n') Level
Cross Section
74-W -185
-0.070 To 0.082 %
Max
Ratio
Min
Ratio
n-W185.tendl Threshold 198.46 keV
n-W185.jeff3.3 Threshold 198.46 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
74-W -185

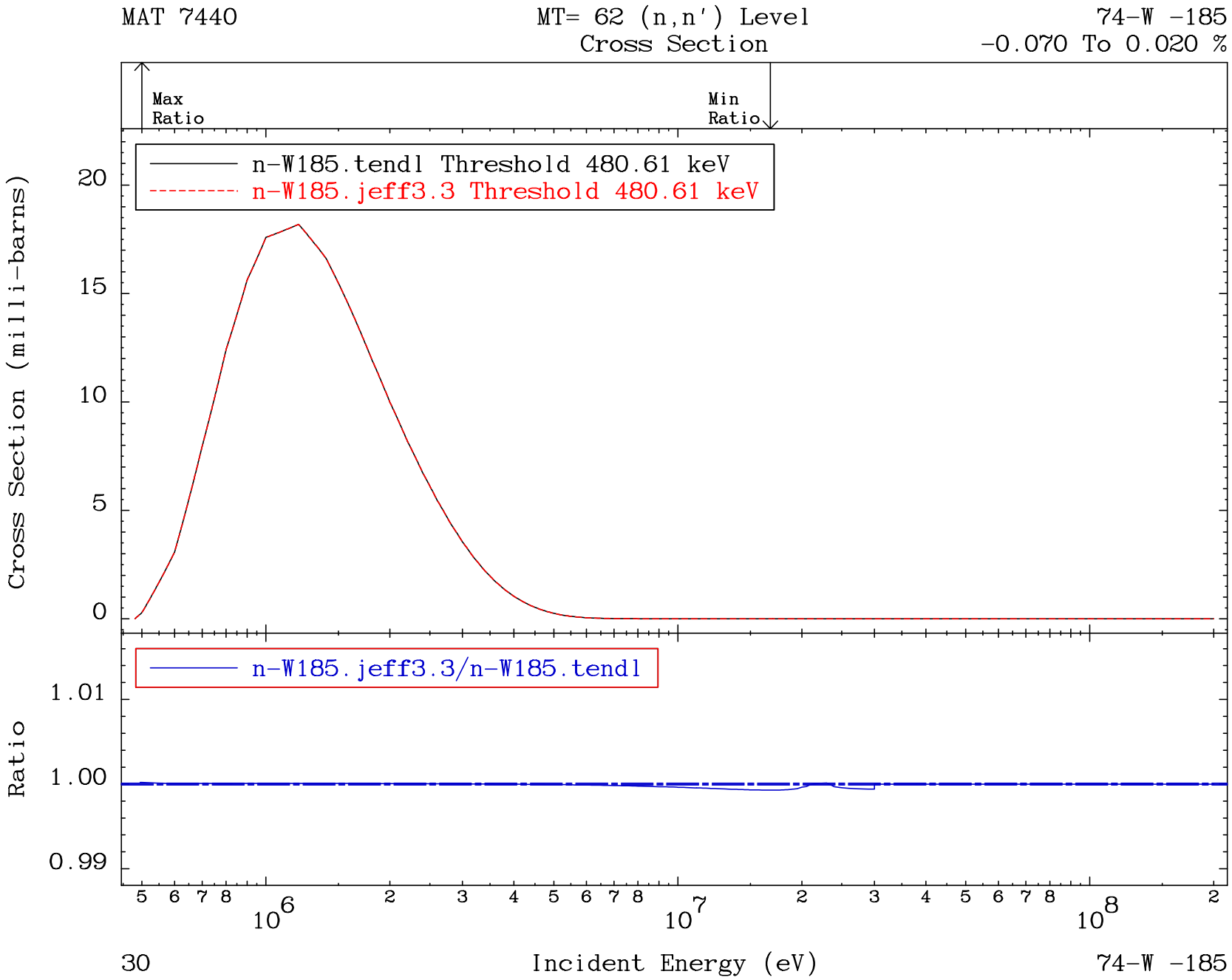

MAT 7440
MT= 57 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 244.95 keV
n-W185.jeff3.3 Threshold 244.95 keV
Cross Section (milli-barns)
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
74-W -185

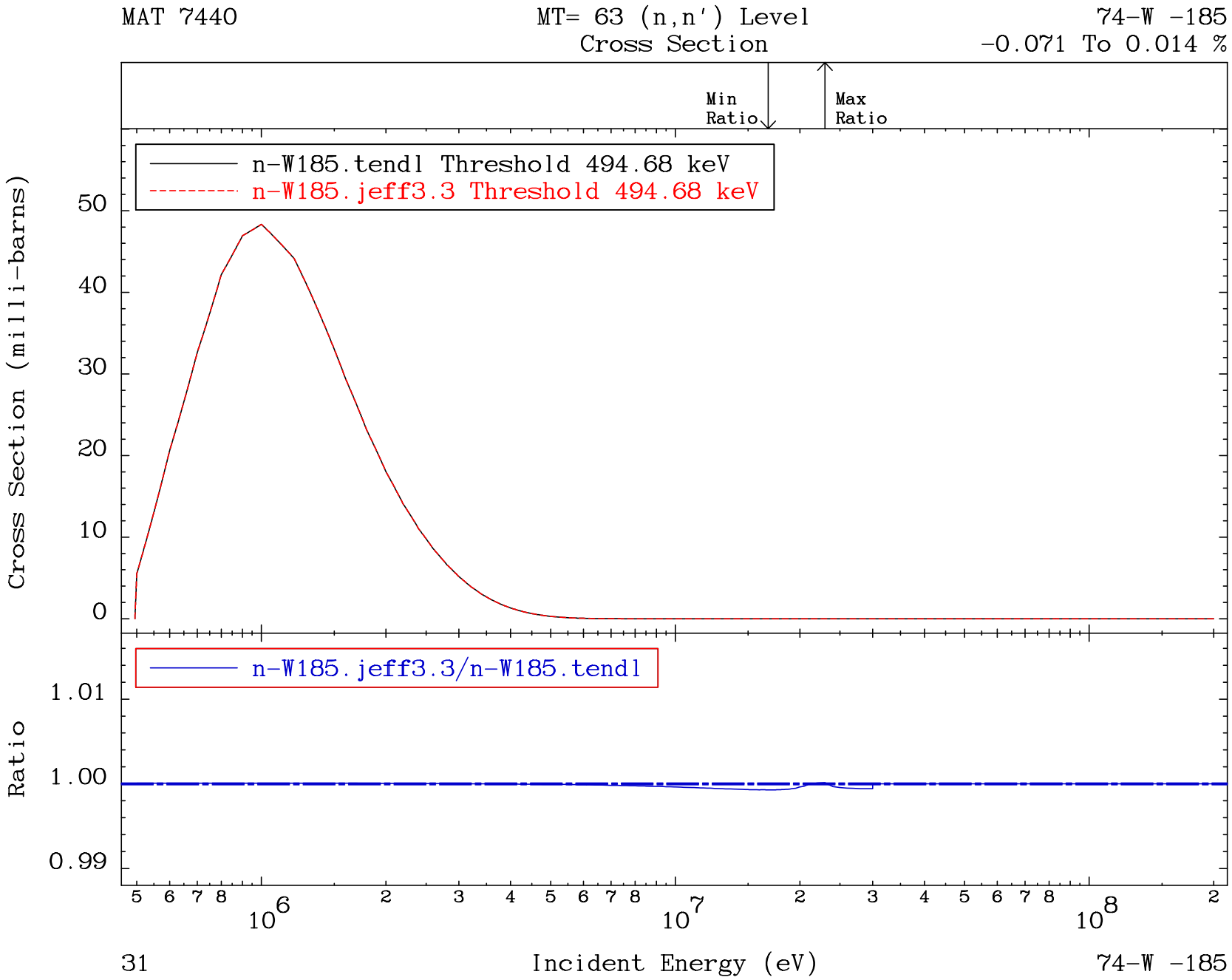

MAT 7440
MT= 58 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 303.65 keV
n-W185.jeff3.3 Threshold 303.65 keV
Cross Section (milli-barns)
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
74-W -185

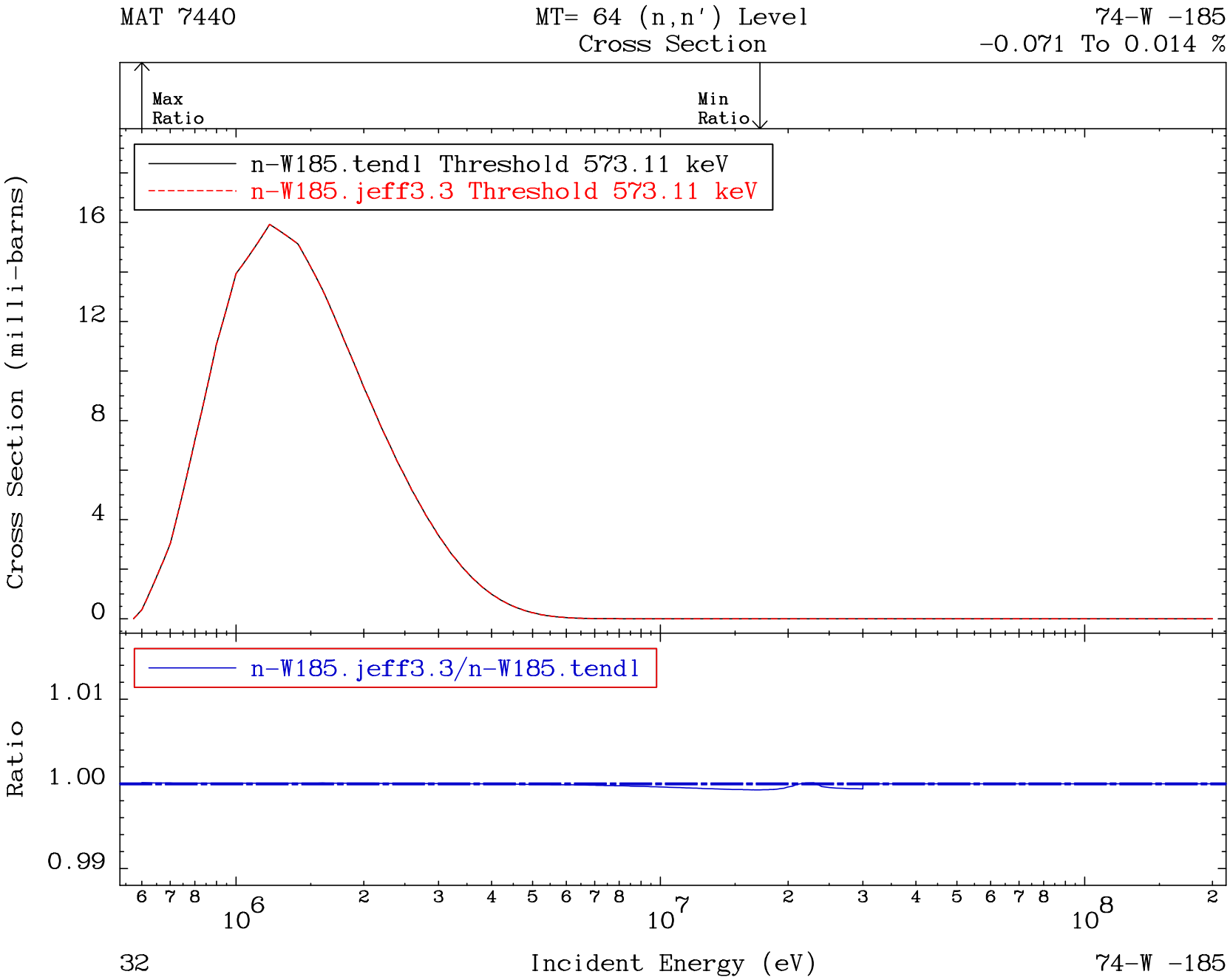

MAT 7440
MT= 59 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 335.82 keV
n-W185.jeff3.3 Threshold 335.82 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
74-W -185

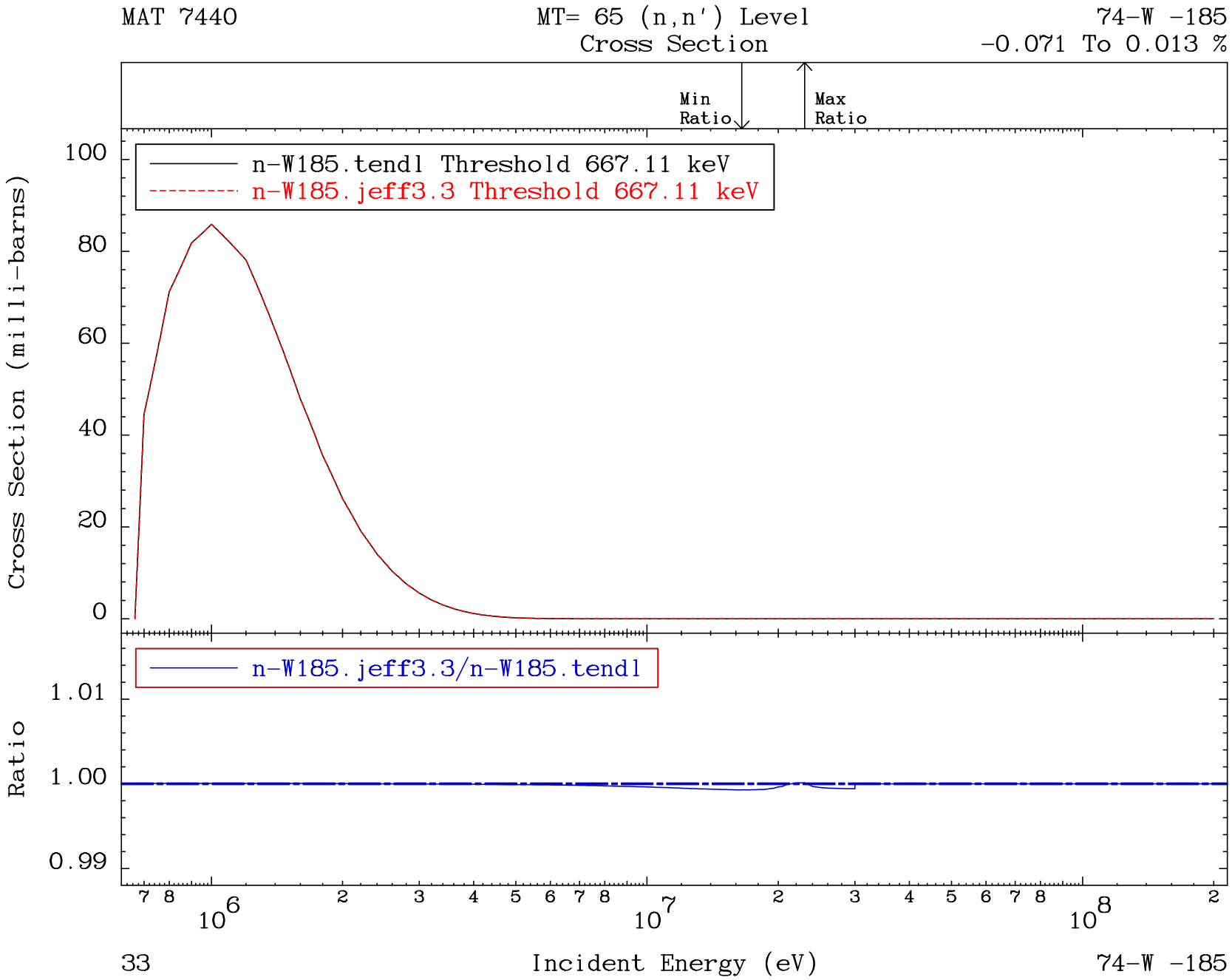

MAT 7440
MT= 60 (n,n') Level
Cross Section
74-W -185
-0.002 To 0.055 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 386.09 keV
n-W185.jeff3.3 Threshold 386.09 keV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-W185.jeff3.3/n-W185.tendl
Ratio
0.99
1.00
1.01
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
74-W -185

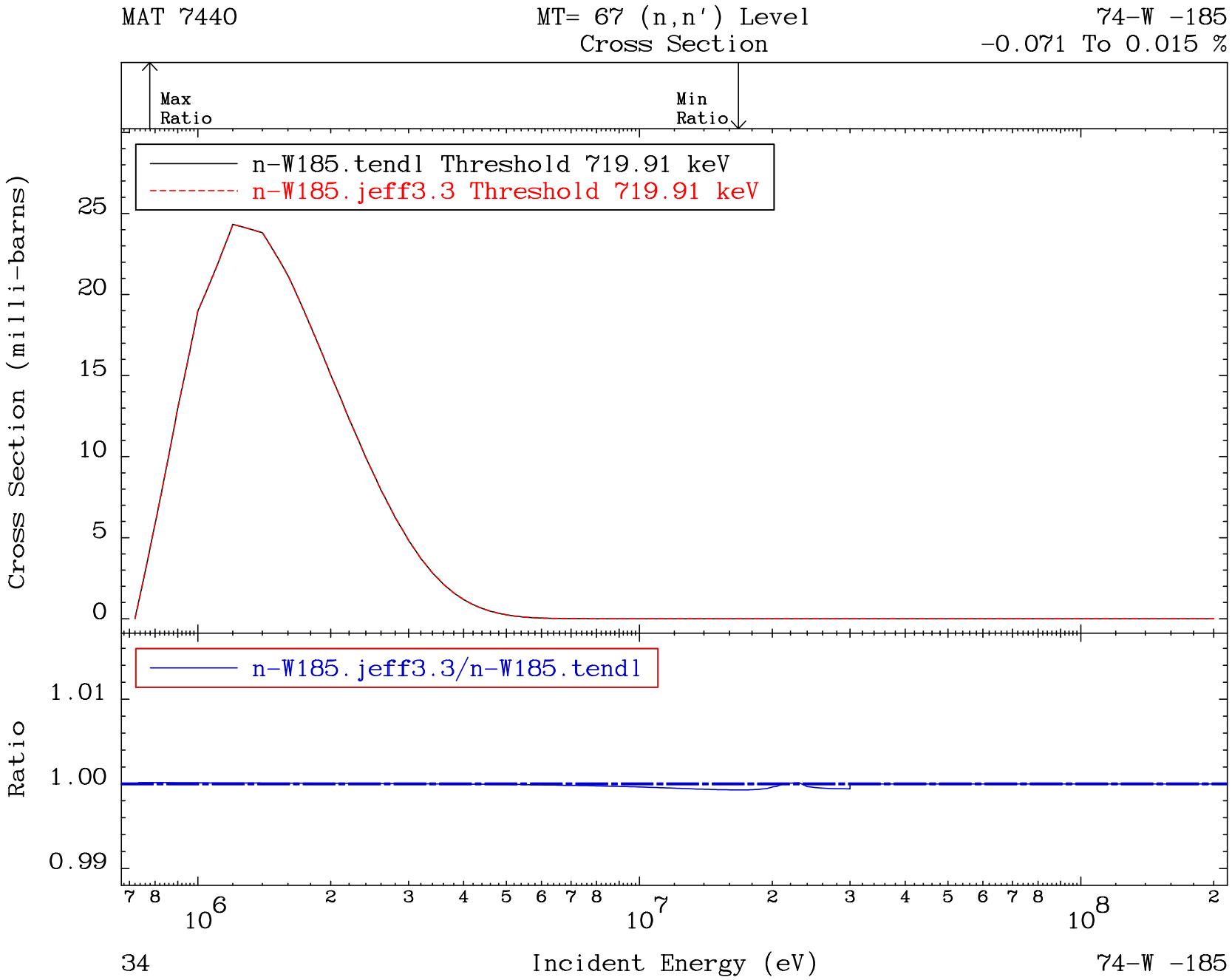

MAT 7440
MT= 61 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 393.05 keV
n-W185.jeff3.3 Threshold 393.05 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
74-W -185

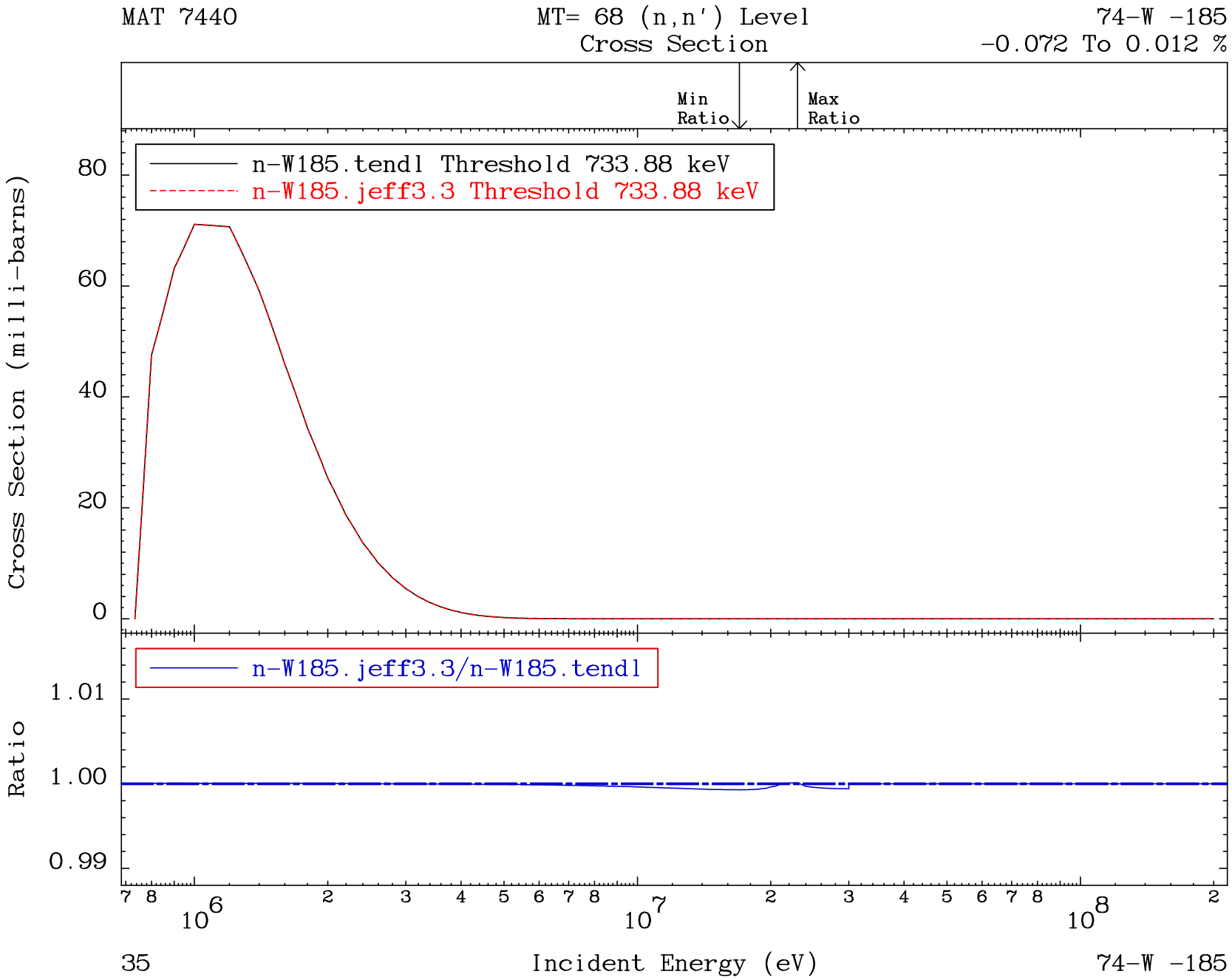

MAT 7440
MT= 62 (n,n') Level
Cross Section
74-W -185
-0.070 To 0.020 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 480.61 keV
n-W185.jeff3.3 Threshold 480.61 keV
Cross Section (milli-barns)
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
74-W -185

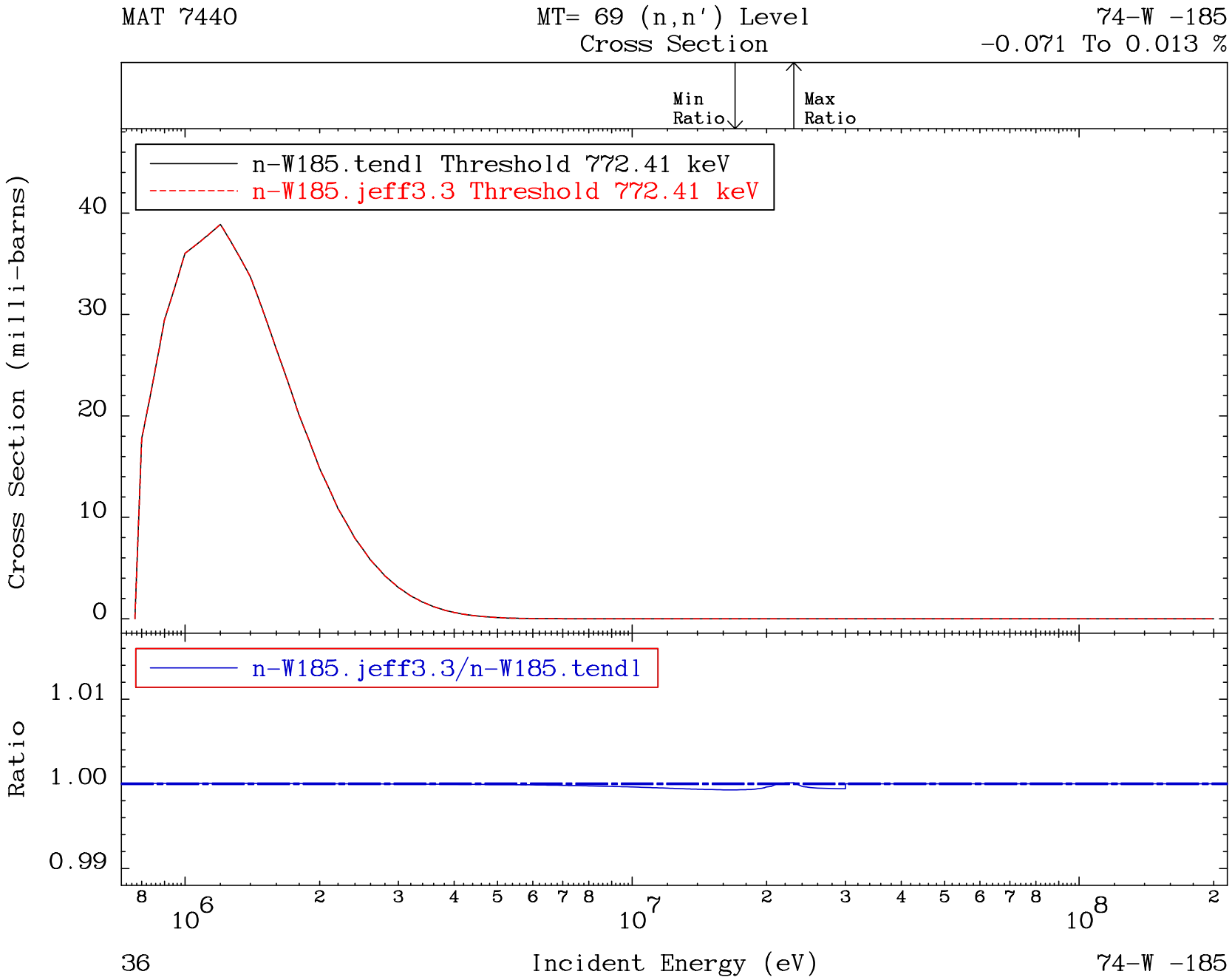

MAT 7440
MT= 63 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.014 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 494.68 keV
n-W185.jeff3.3 Threshold 494.68 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
74-W -185

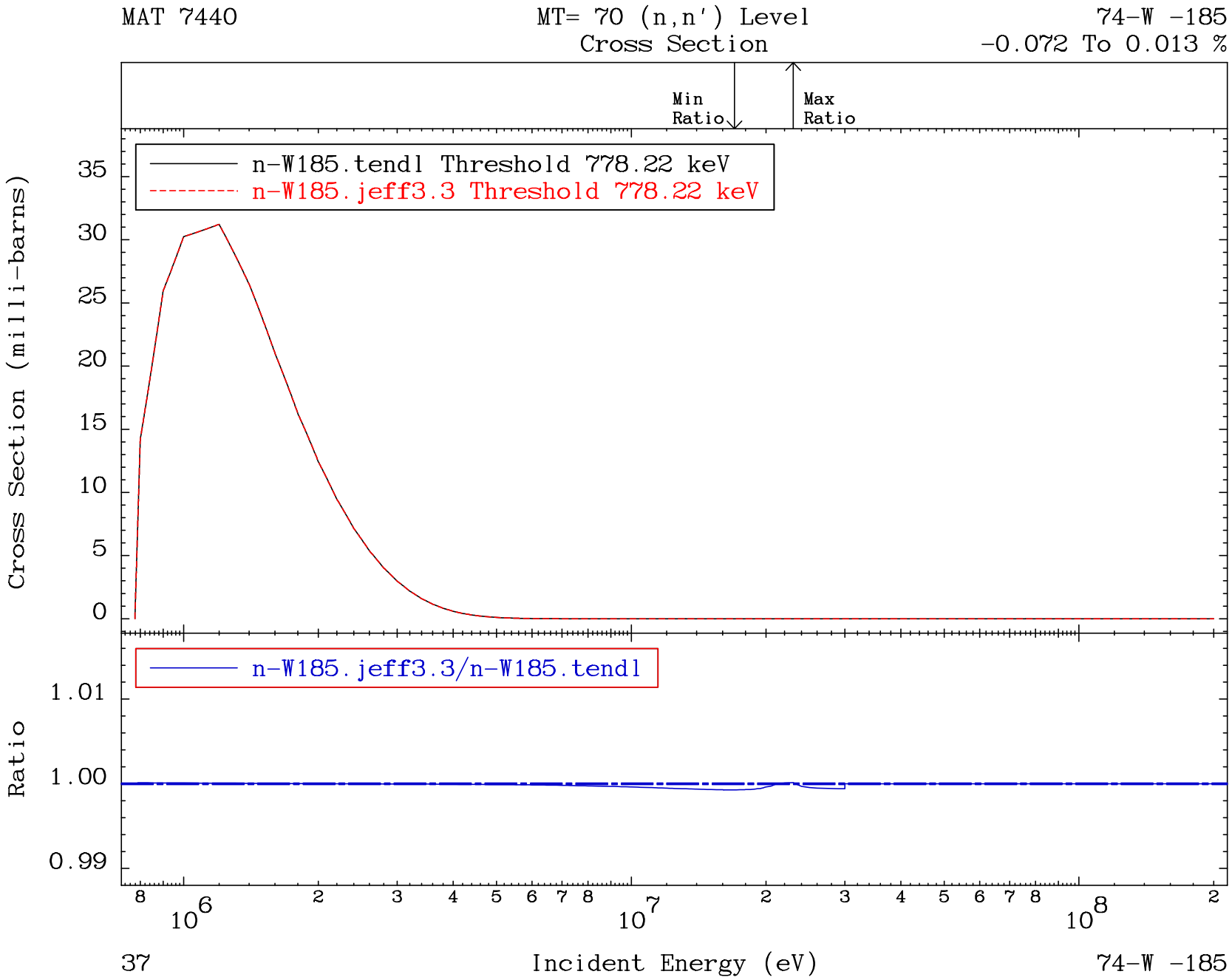

MAT 7440
MT= 64 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.014 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 573.11 keV
n-W185.jeff3.3 Threshold 573.11 keV
Cross Section (milli-barns)
16
12
8
4
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
74-W -185

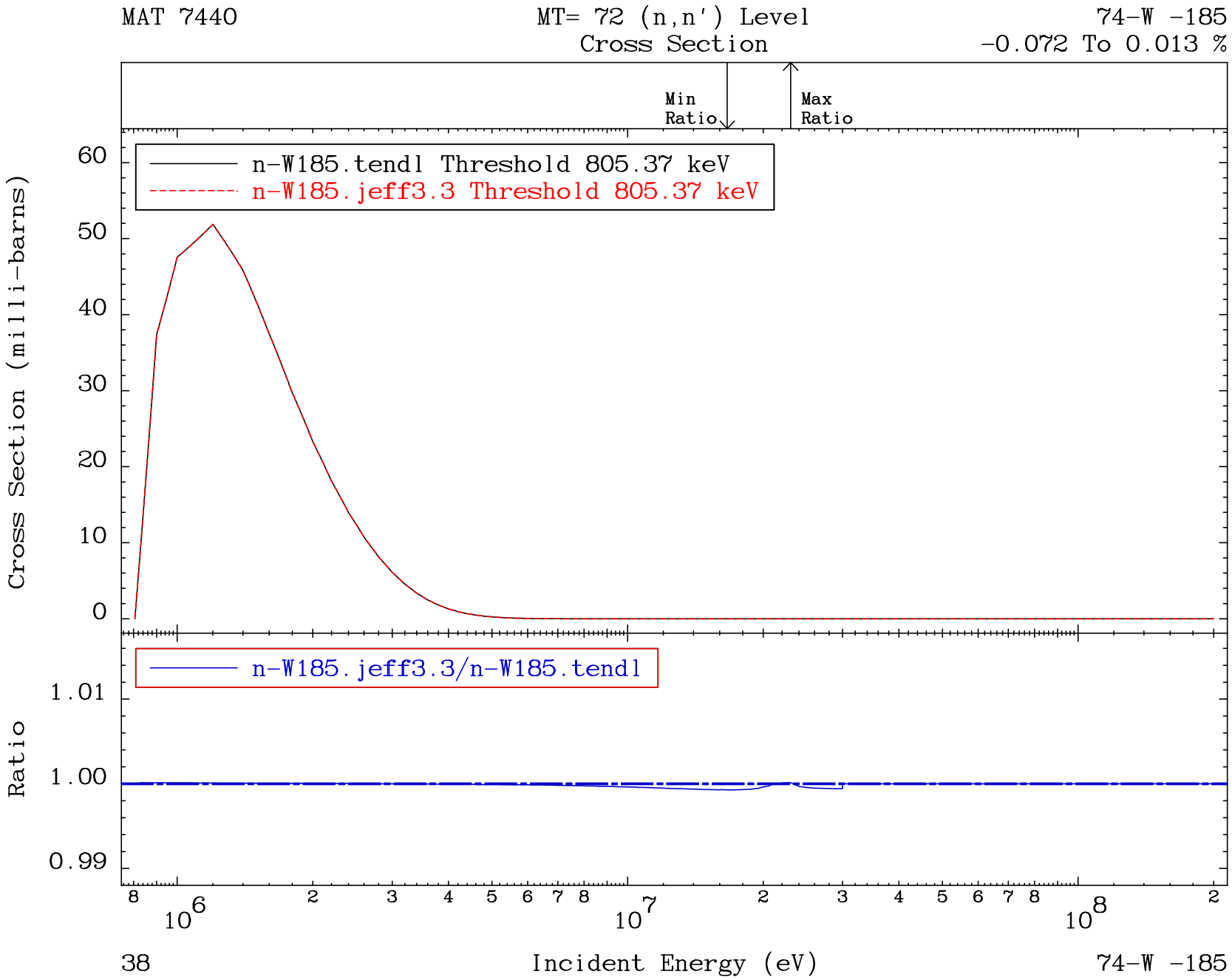

MAT 7440
MT= 65 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 667.11 keV
n-W185.jeff3.3 Threshold 667.11 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
74-W -185

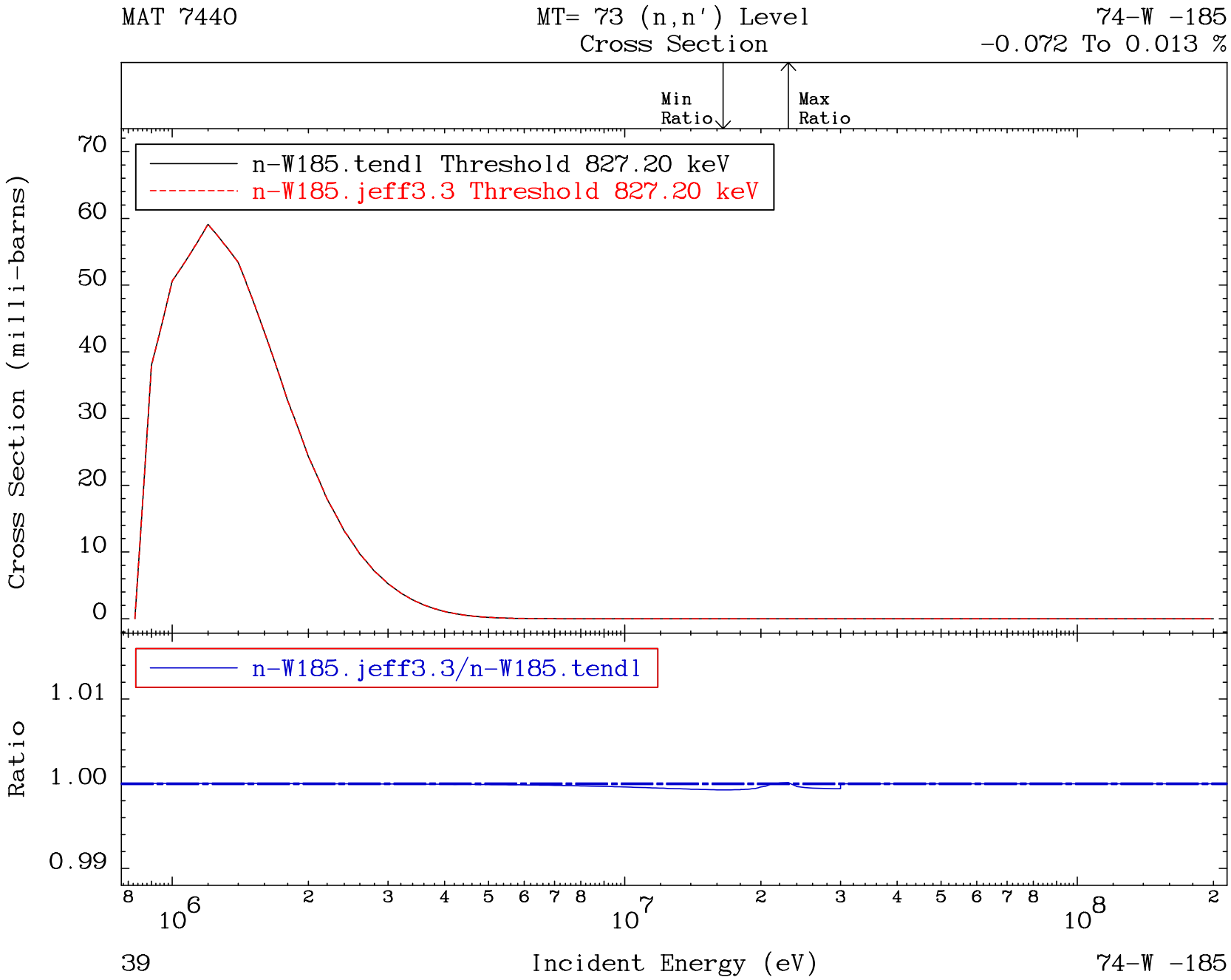

MAT 7440
MT= 67 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.015 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 719.91 keV
n-W185.jeff3.3 Threshold 719.91 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
74-W -185

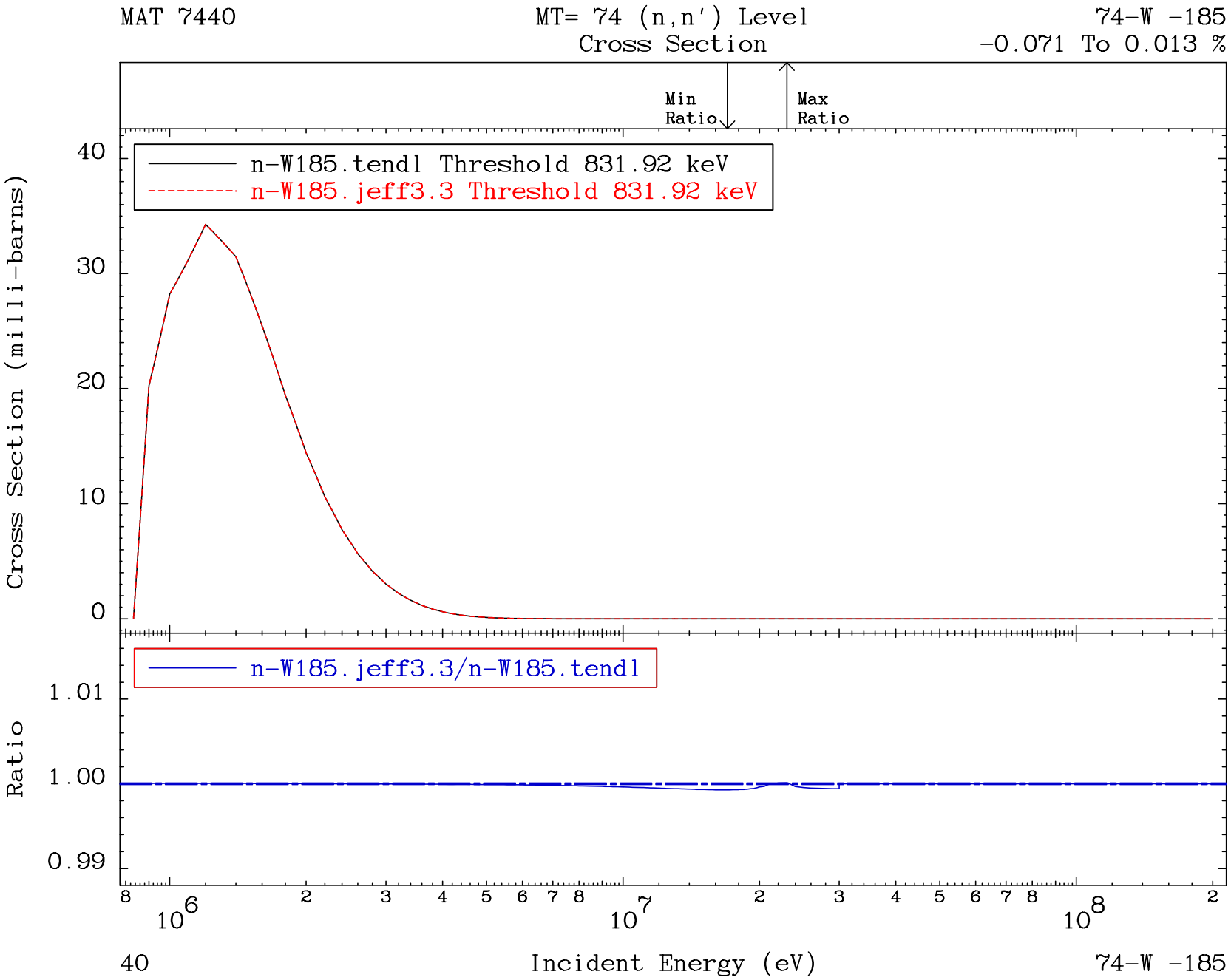

MAT 7440
MT= 68 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.012 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 733.88 keV
n-W185.jeff3.3 Threshold 733.88 keV
Cross Section (milli-barns)
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
74-W -185

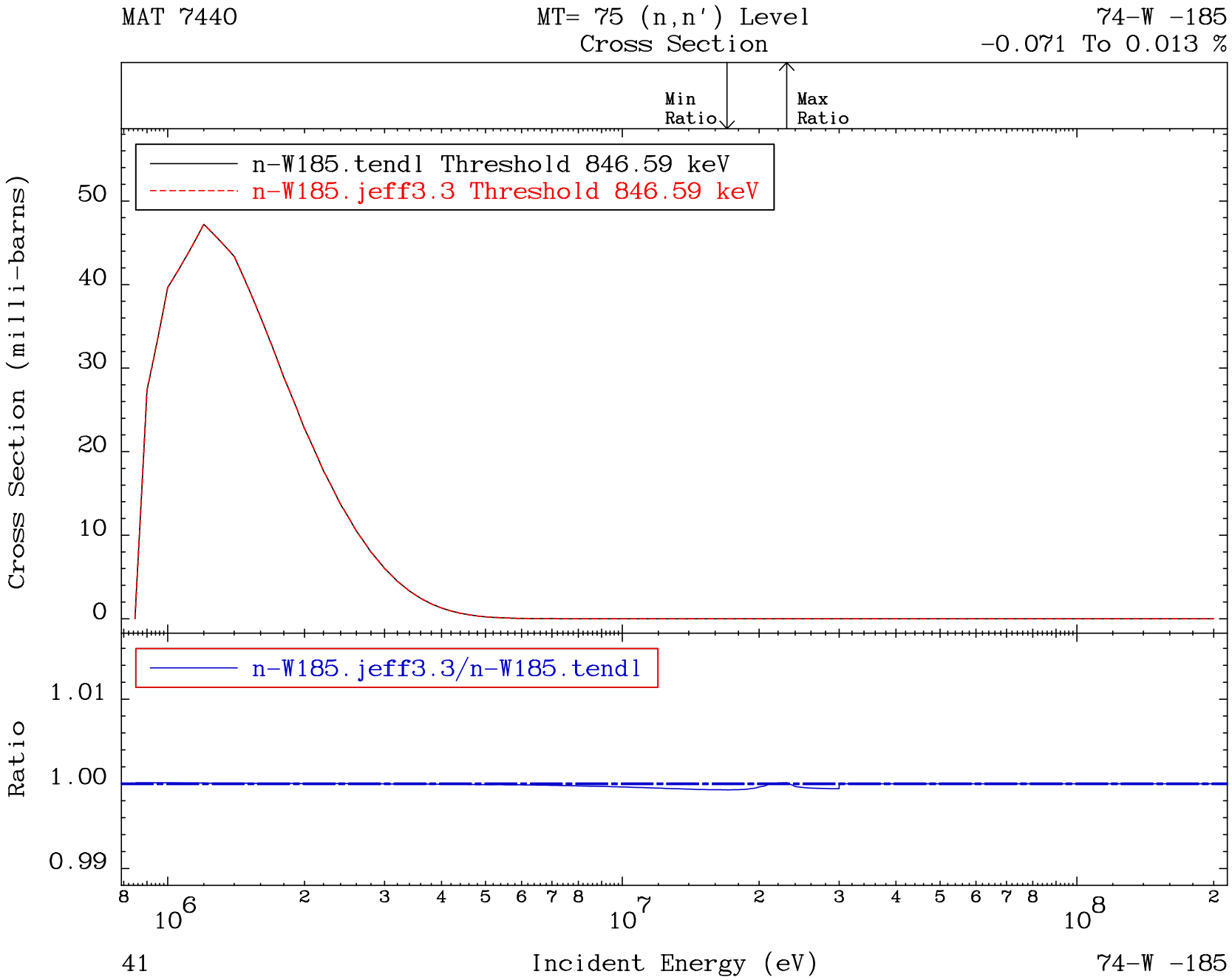

MAT 7440
MT= 69 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 772.41 keV
n-W185.jeff3.3 Threshold 772.41 keV
Cross Section (milli-barns)
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
36
Incident Energy (eV)
74-W -185

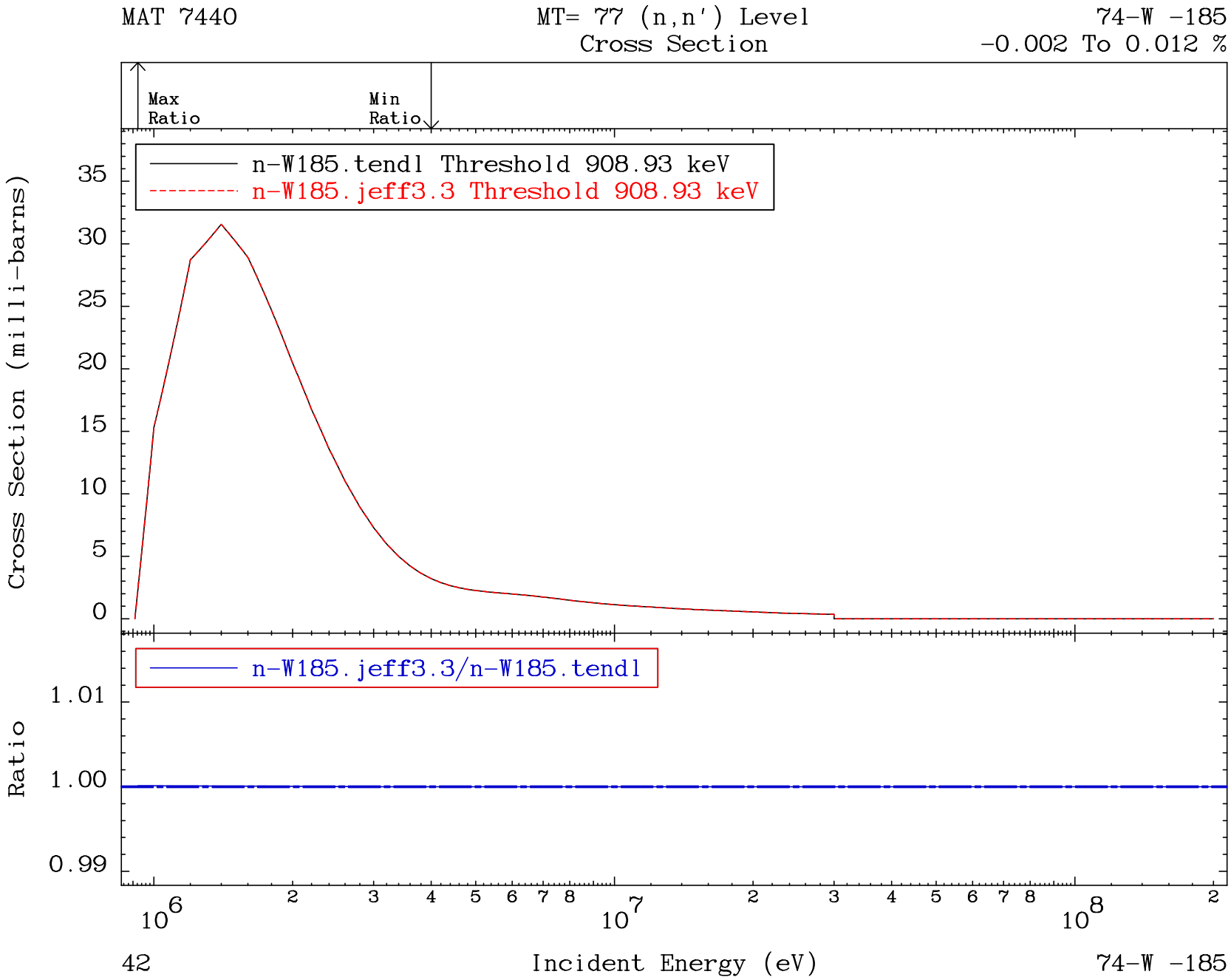

MAT 7440
MT= 70 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 778.22 keV
n-W185.jeff3.3 Threshold 778.22 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
74-W -185

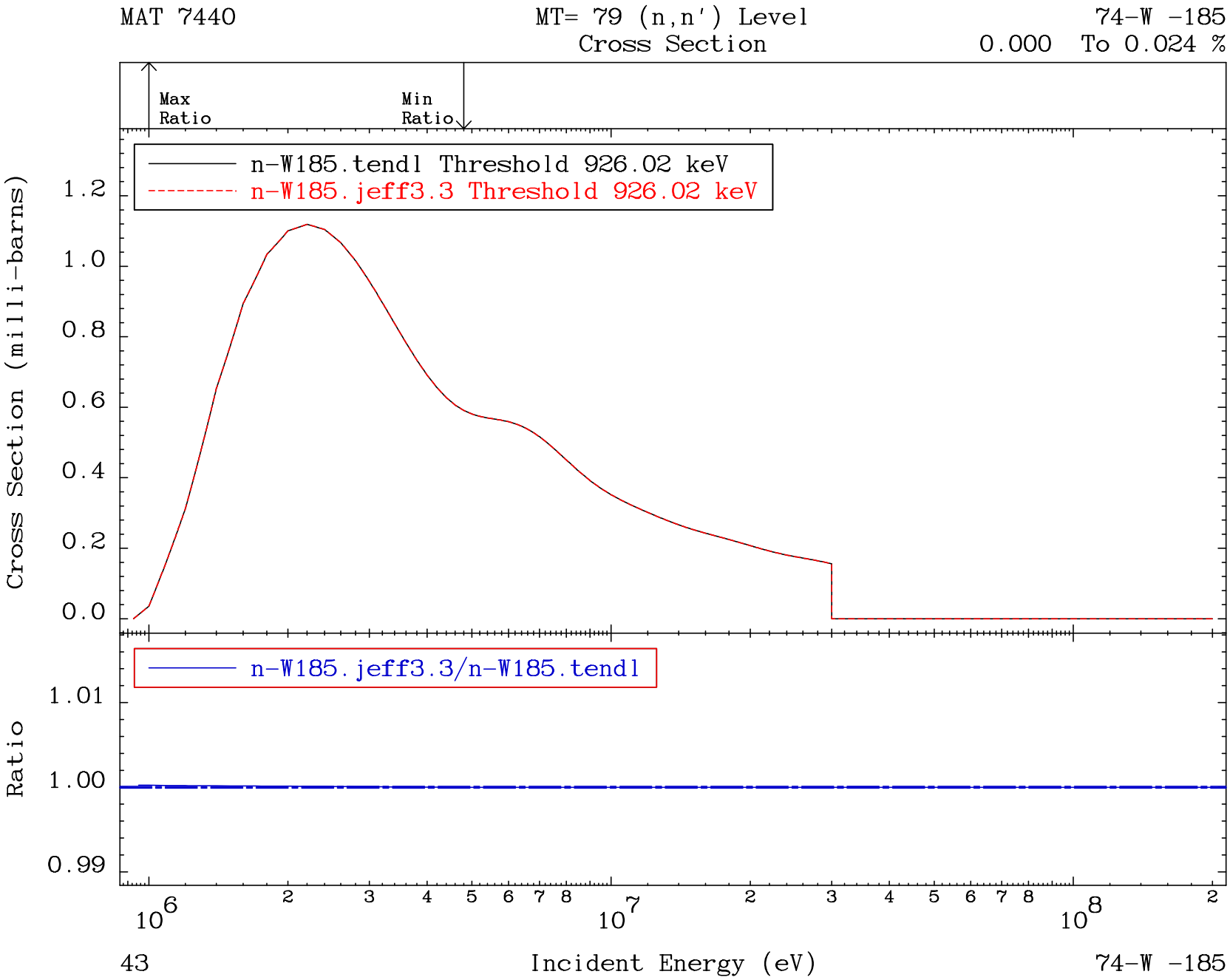

MAT 7440
MT= 72 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 805.37 keV
n-W185.jeff3.3 Threshold 805.37 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
38
Incident Energy (eV)
74-W -185

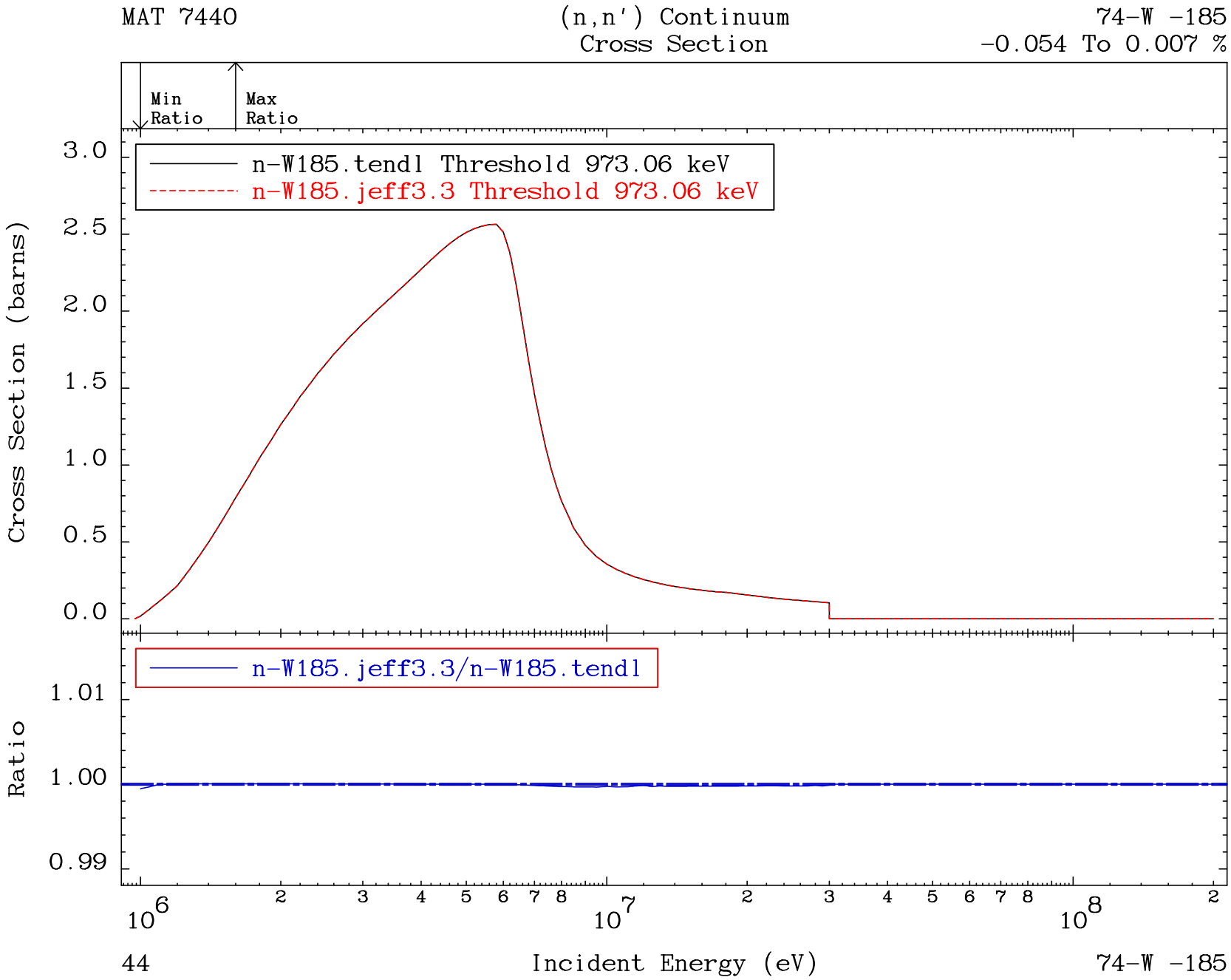

MAT 7440
MT= 73 (n,n') Level
Cross Section
74-W -185
-0.072 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 827.20 keV
n-W185.jeff3.3 Threshold 827.20 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
74-W -185

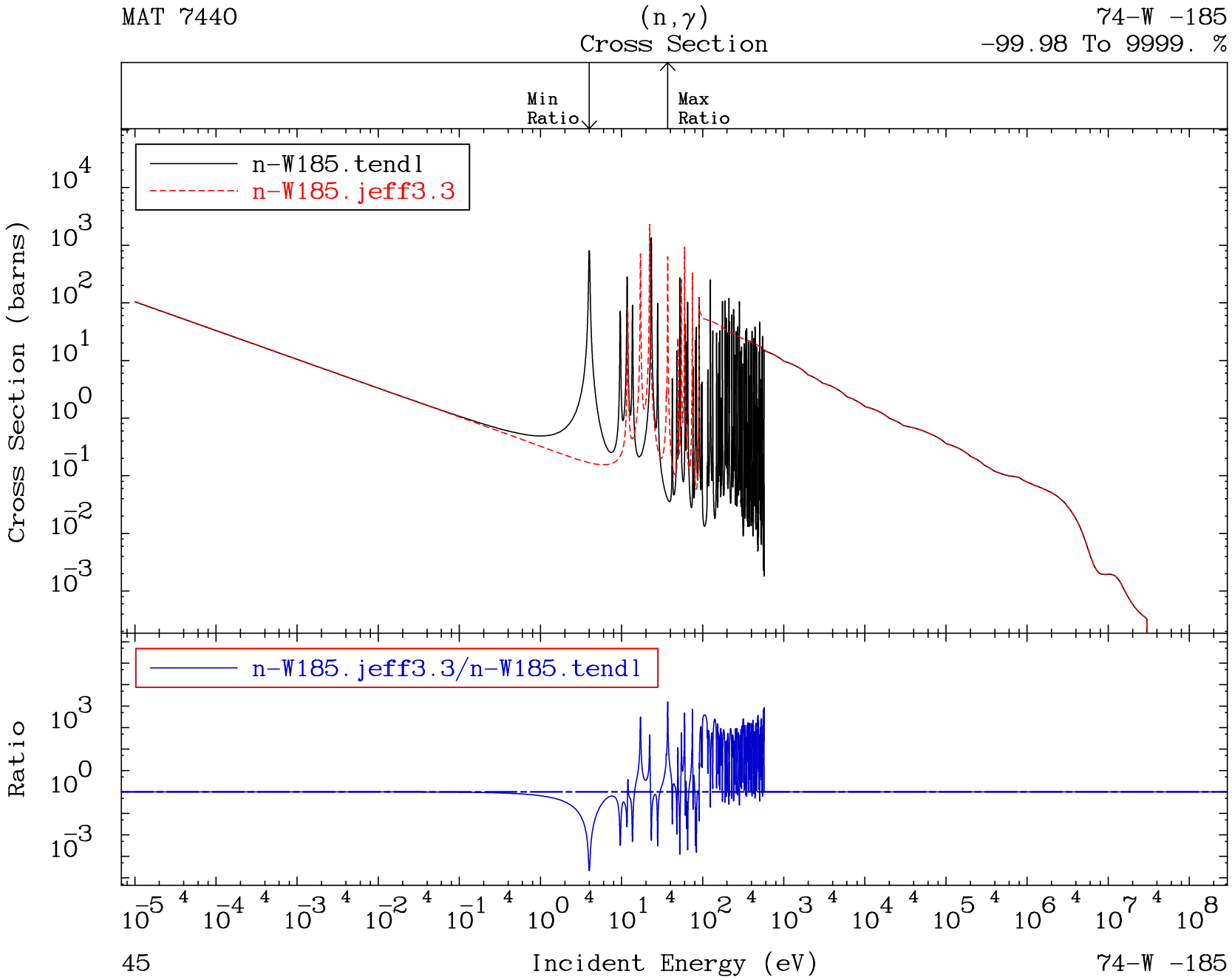

MAT 7440
MT= 74 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 831.92 keV
n-W185.jeff3.3 Threshold 831.92 keV
Cross Section (milli-barns)
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8 2 3 4 5 6 7 8 2 3 4 5 6 7 8 2
10^6
10^7
10^8
40
Incident Energy (eV)
74-W -185

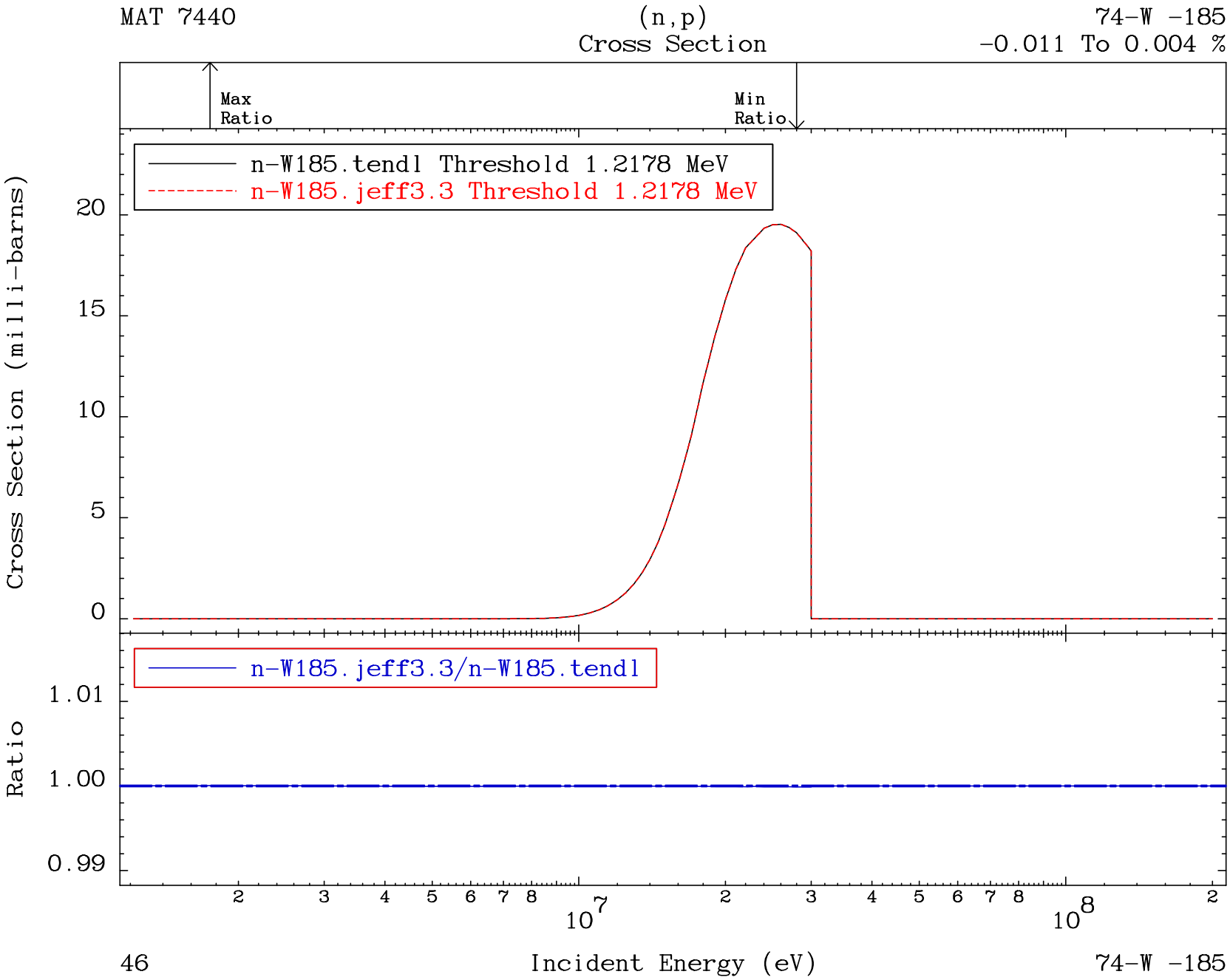

MAT 7440
MT= 75 (n,n') Level
Cross Section
74-W -185
-0.071 To 0.013 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 846.59 keV
n-W185.jeff3.3 Threshold 846.59 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
41
Incident Energy (eV)
74-W -185

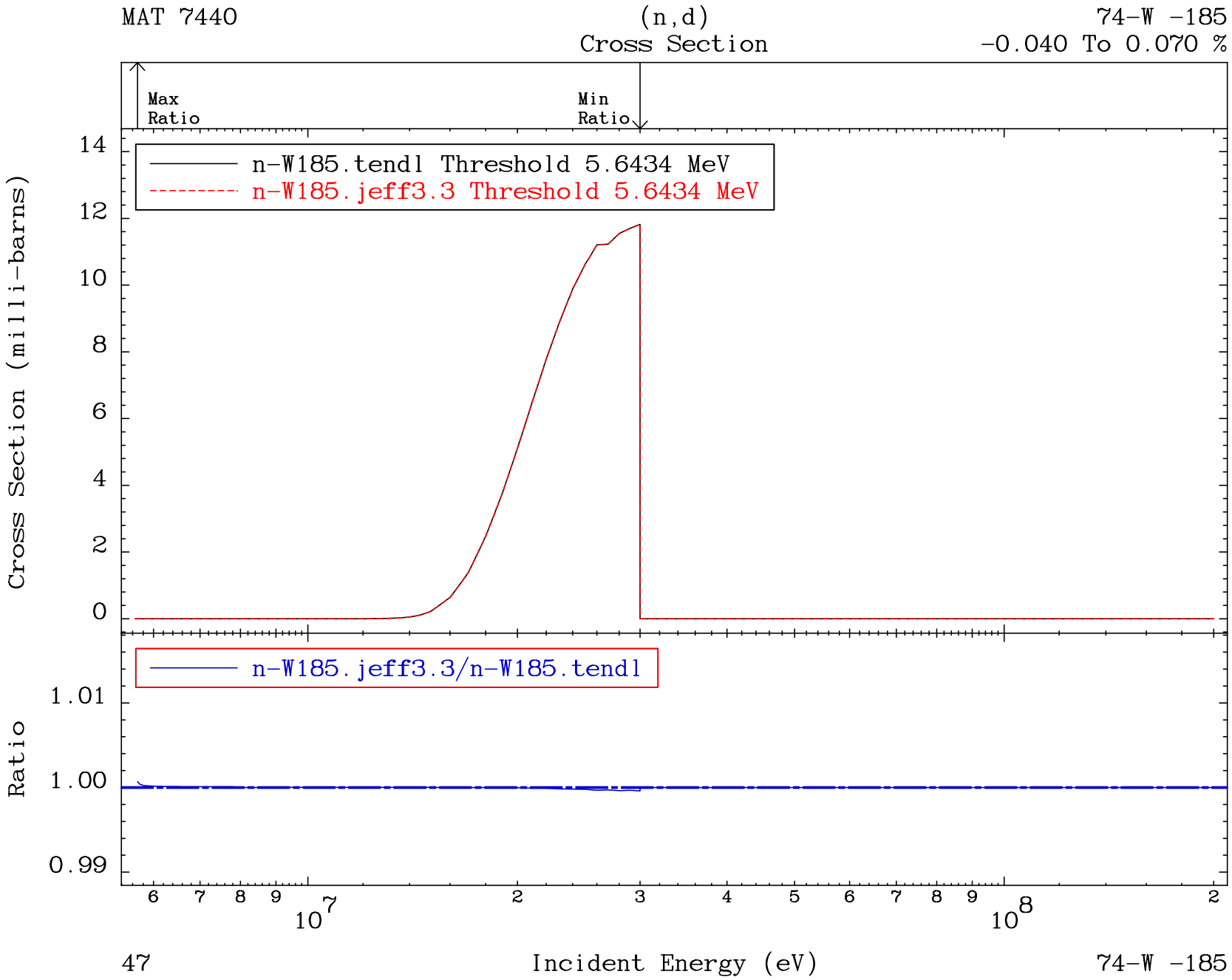

MAT 7440
MT= 77 (n,n') Level
Cross Section
74-W -185
-0.002 To 0.012 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 908.93 keV
n-W185.jeff3.3 Threshold 908.93 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
42
Incident Energy (eV)
74-W -185

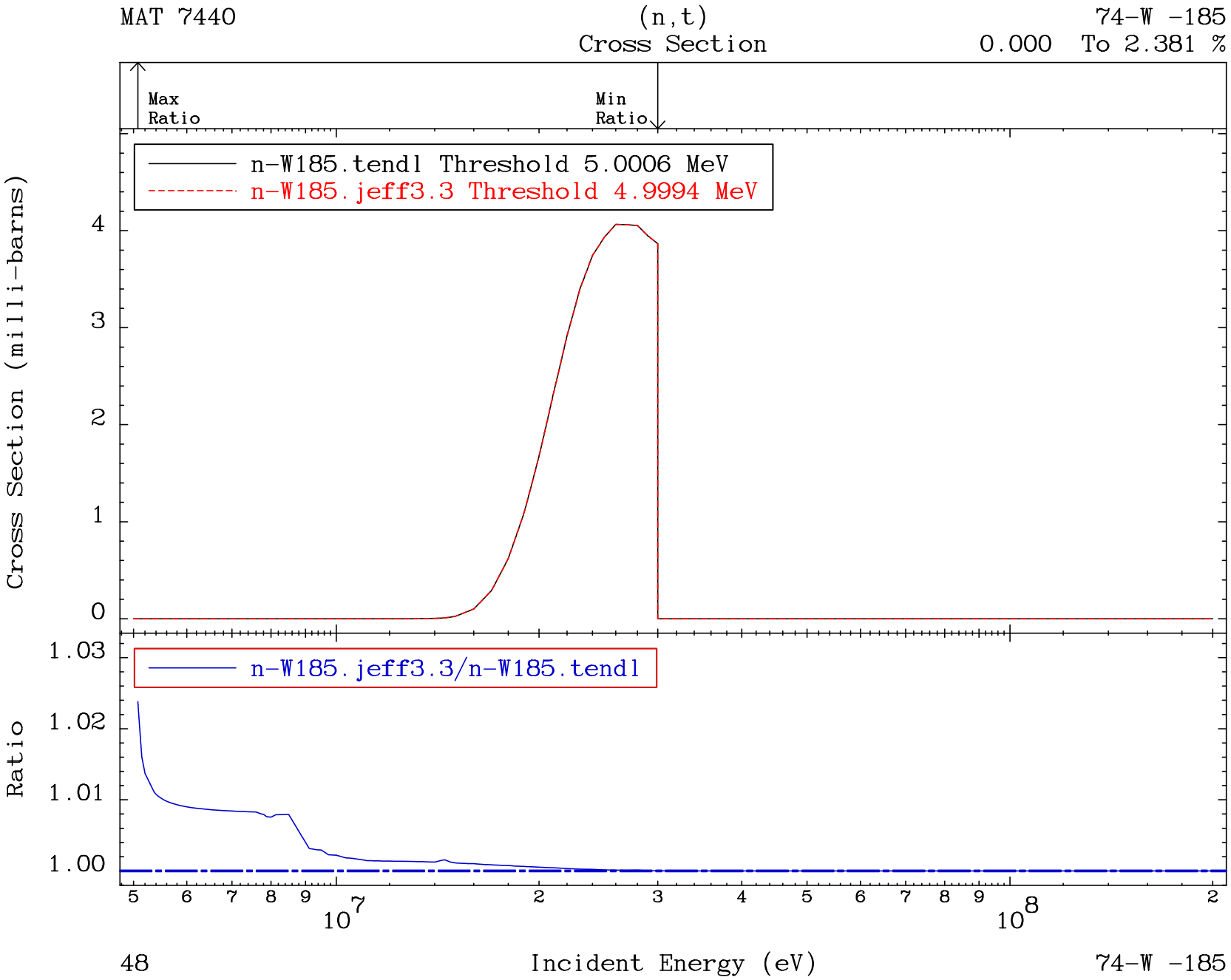

MAT 7440
MT= 79 (n,n') Level
Cross Section
74-W -185
0.000 To 0.024 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 926.02 keV
n-W185.jeff3.3 Threshold 926.02 keV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
43
Incident Energy (eV)
74-W -185

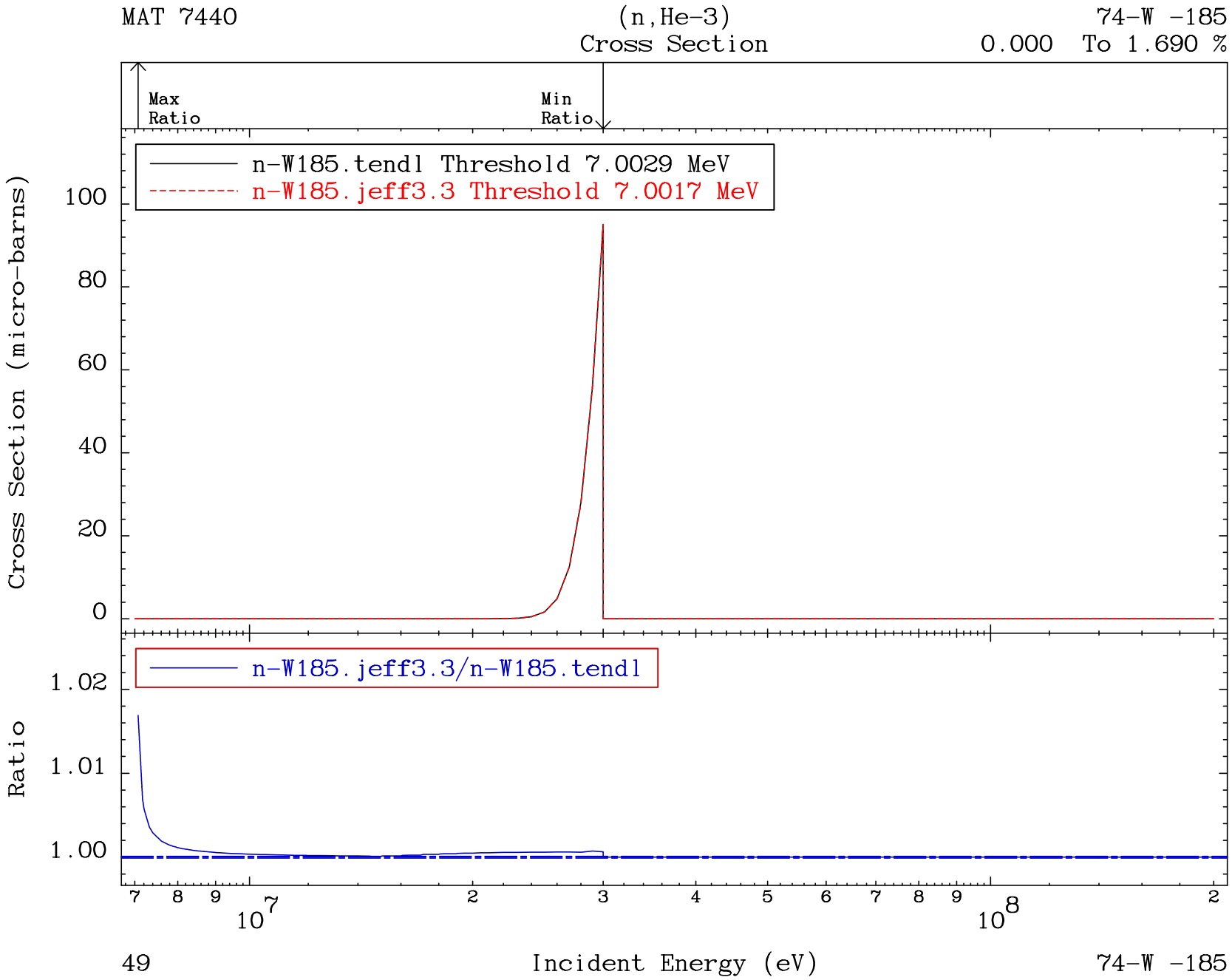

MAT 7440
(n,n') Continuum
Cross Section
74-W -185
-0.054 To 0.007 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 973.06 keV
n-W185.jeff3.3 Threshold 973.06 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
Incident Energy (eV)
44
74-W -185

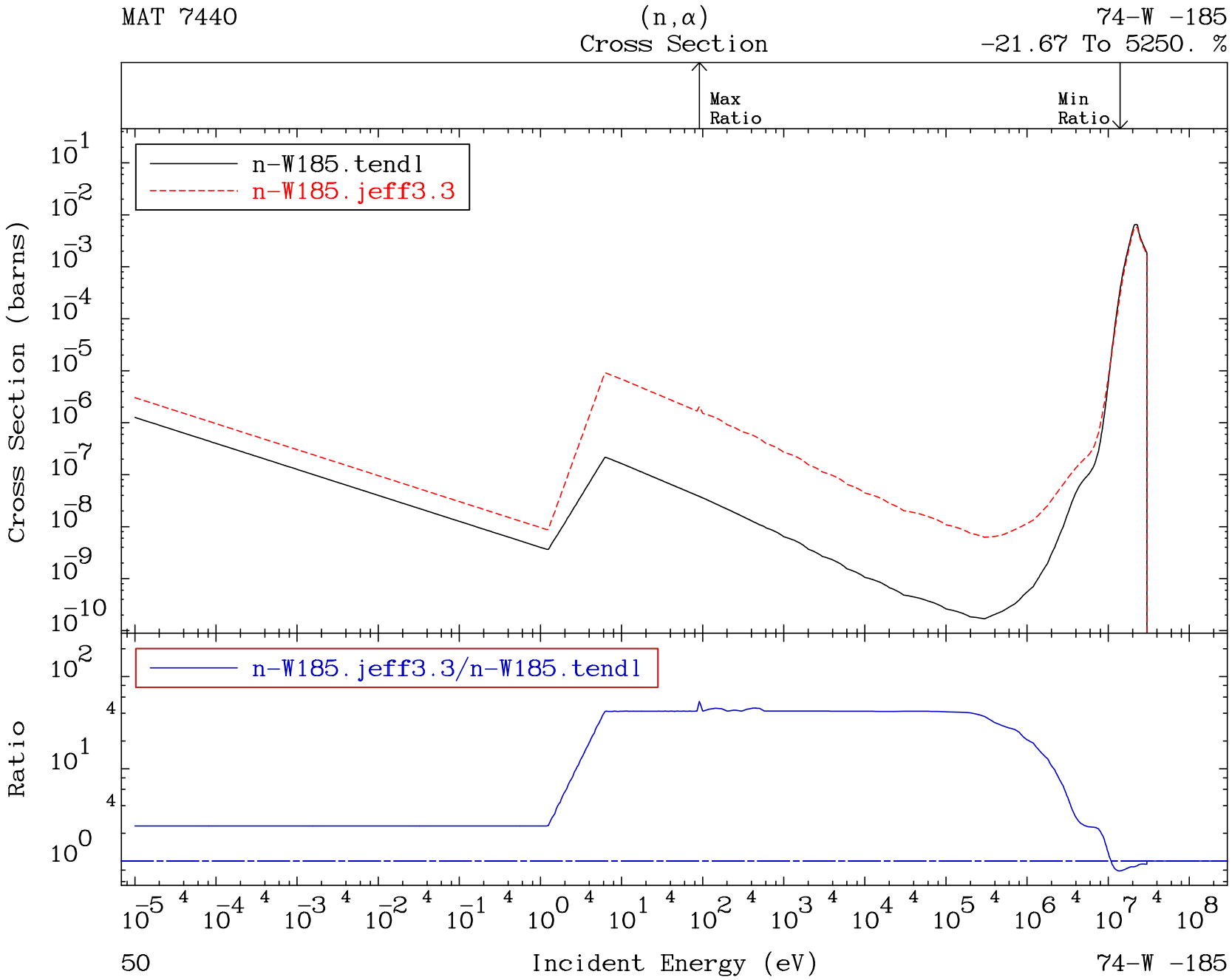

MAT 7440
(n,γ)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
45
74-W -185

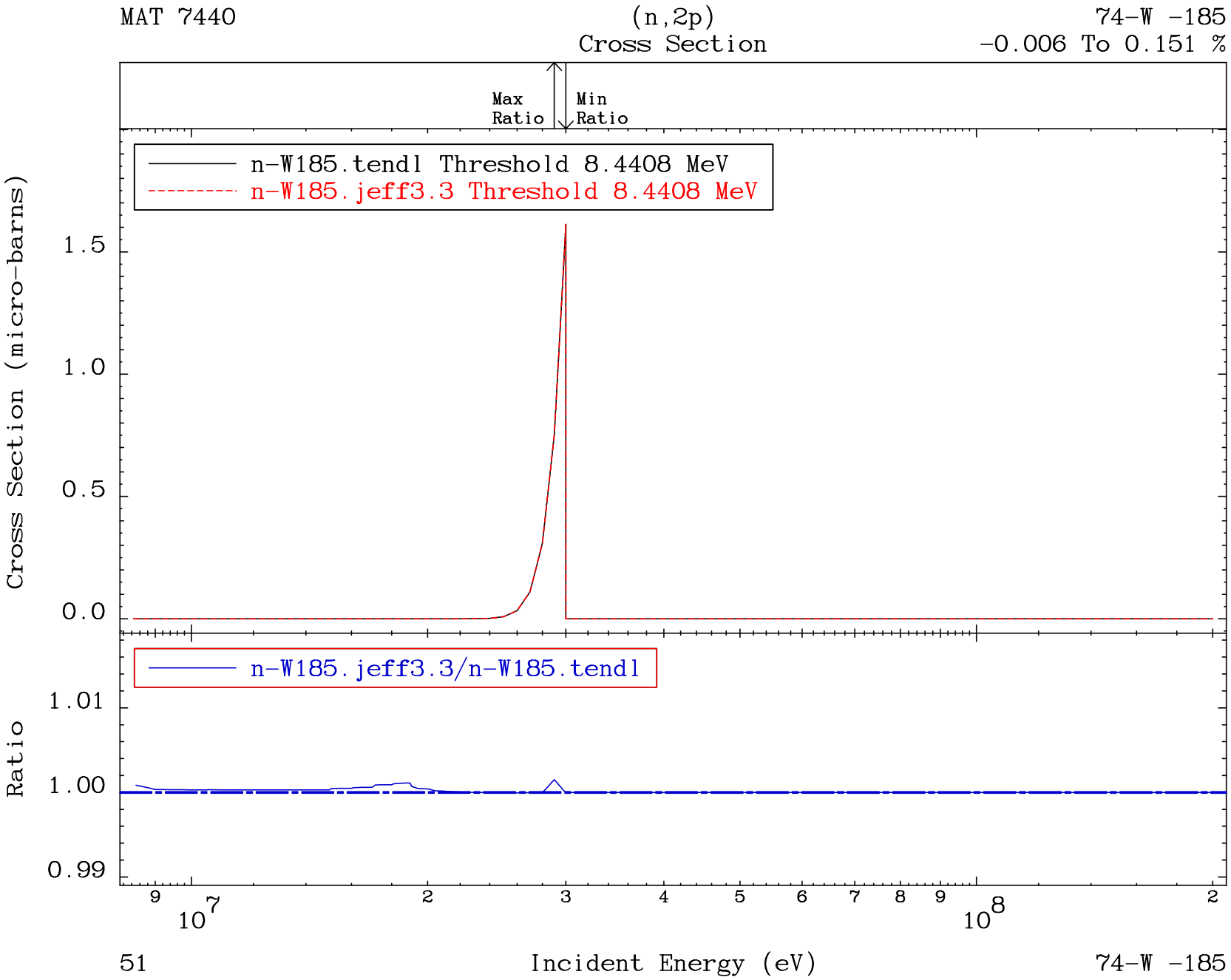

MAT 7440
(n,p)
Cross Section
74-W -185
-0.011 To 0.004 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 1.2178 MeV
n-W185.jeff3.3 Threshold 1.2178 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
74-W -185

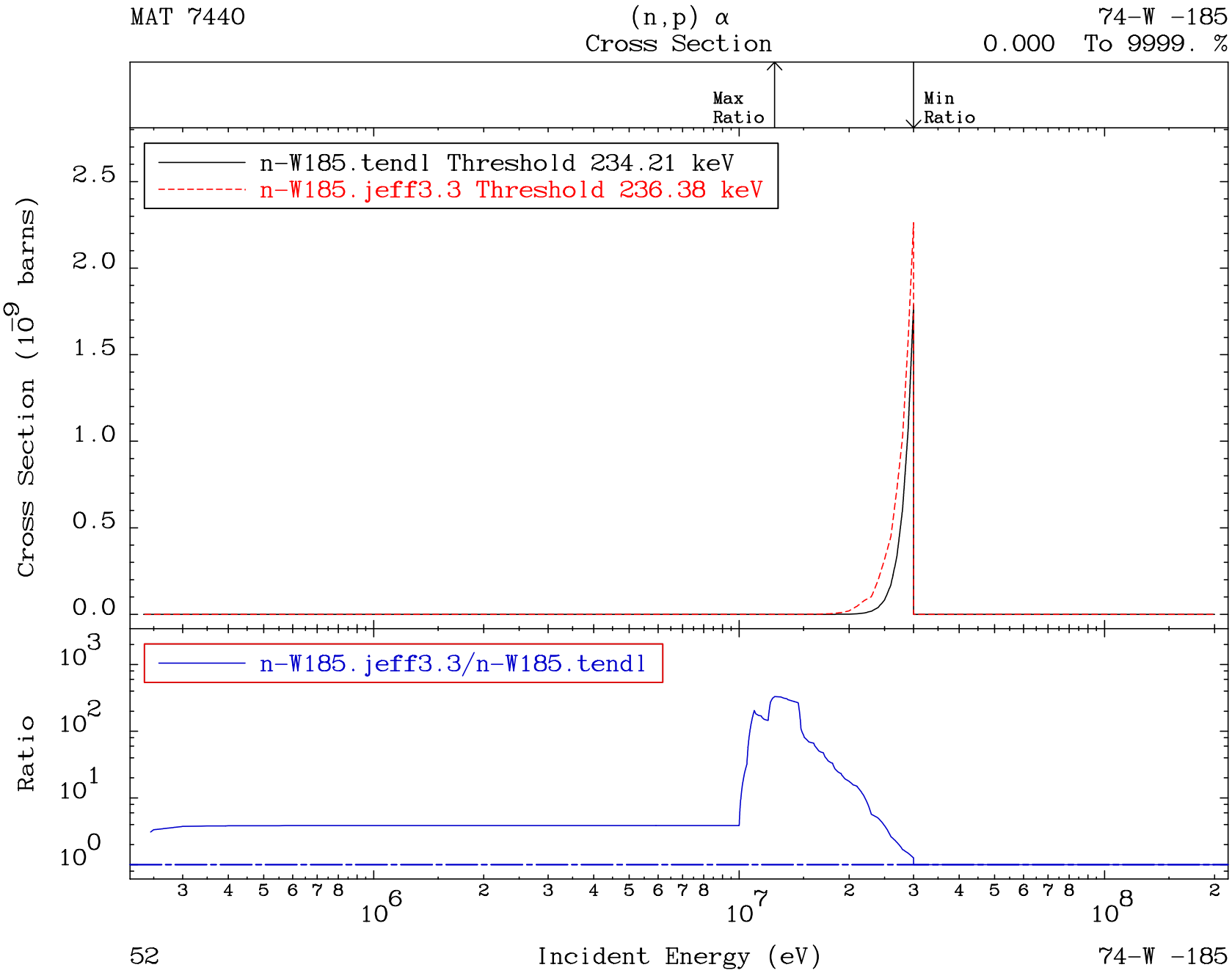

MAT 7440
(n,d)
Cross Section
74-W -185
-0.040 To 0.070 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 5.6434 MeV
n-W185.jeff3.3 Threshold 5.6434 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
74-W -185

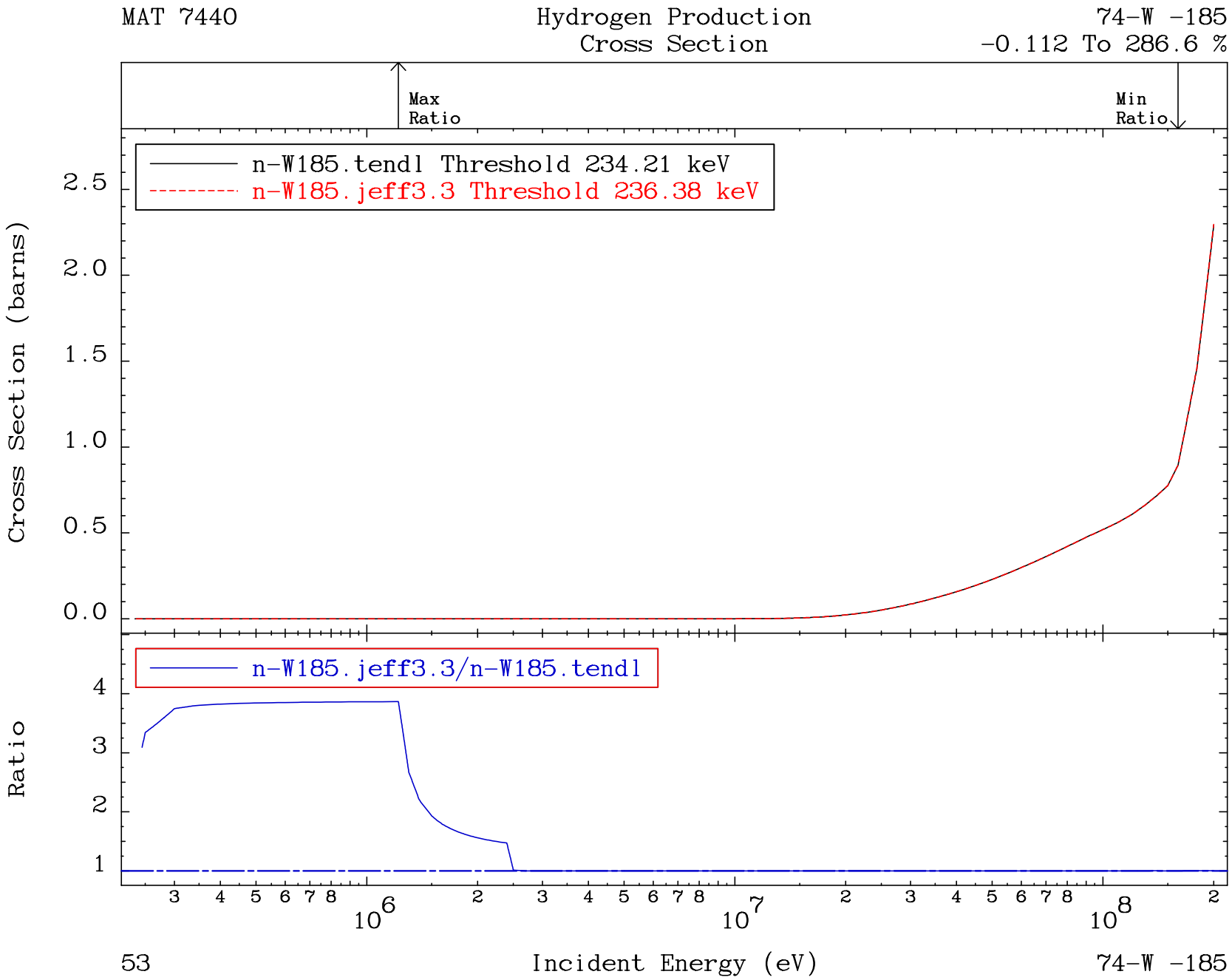

MAT 7440
(n,t)
Cross Section
74-W -185
0.000 To 2.381 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 5.0006 MeV
n-W185.jeff3.3 Threshold 4.9994 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-W185.jeff3.3/n-W185.tendl
Ratio
1.00
1.01
1.02
1.03
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
74-W -185

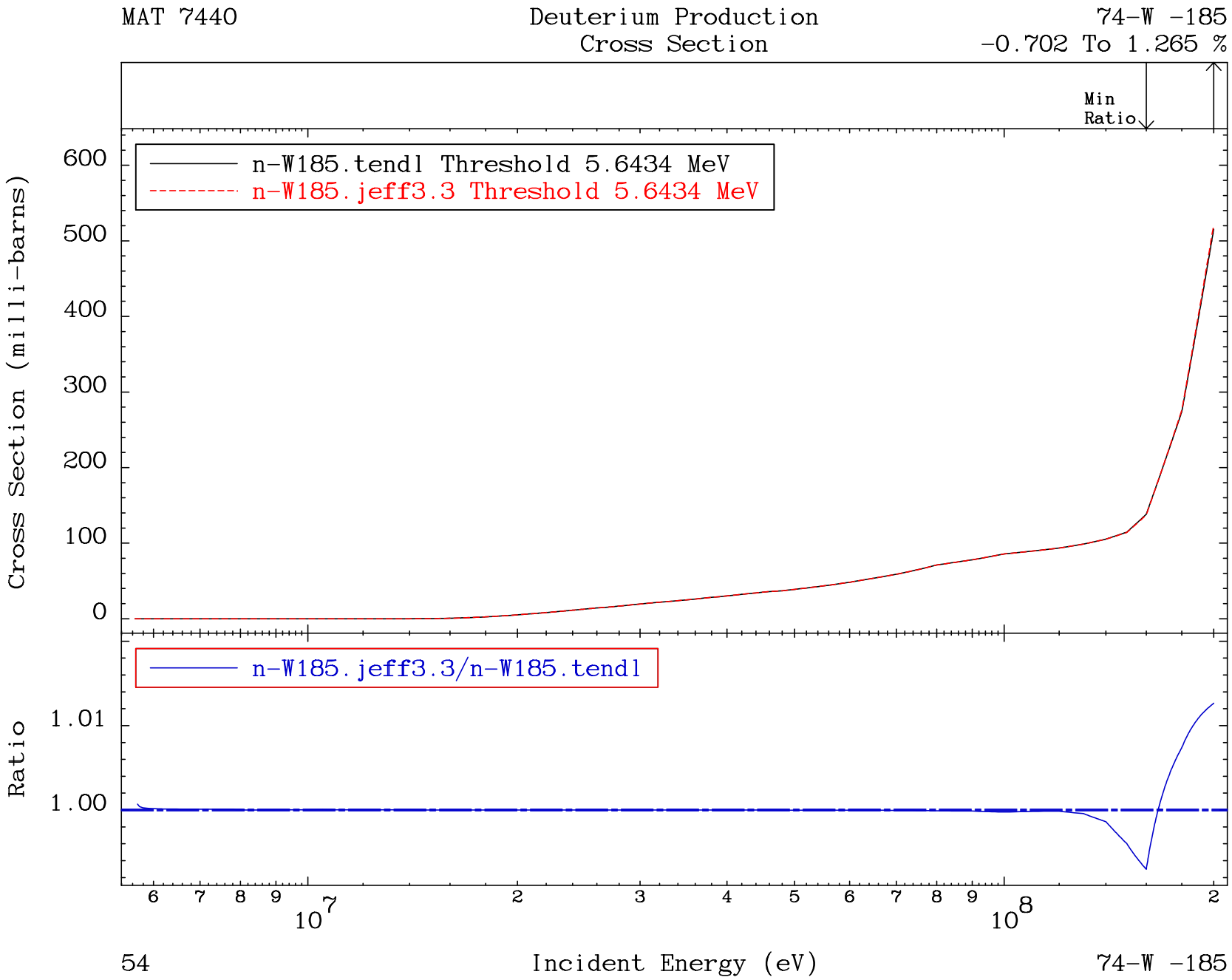

MAT 7440
(n,He-3)
Cross Section
74-W -185
0.000 To 1.690 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 7.0029 MeV
n-W185.jeff3.3 Threshold 7.0017 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
74-W -185

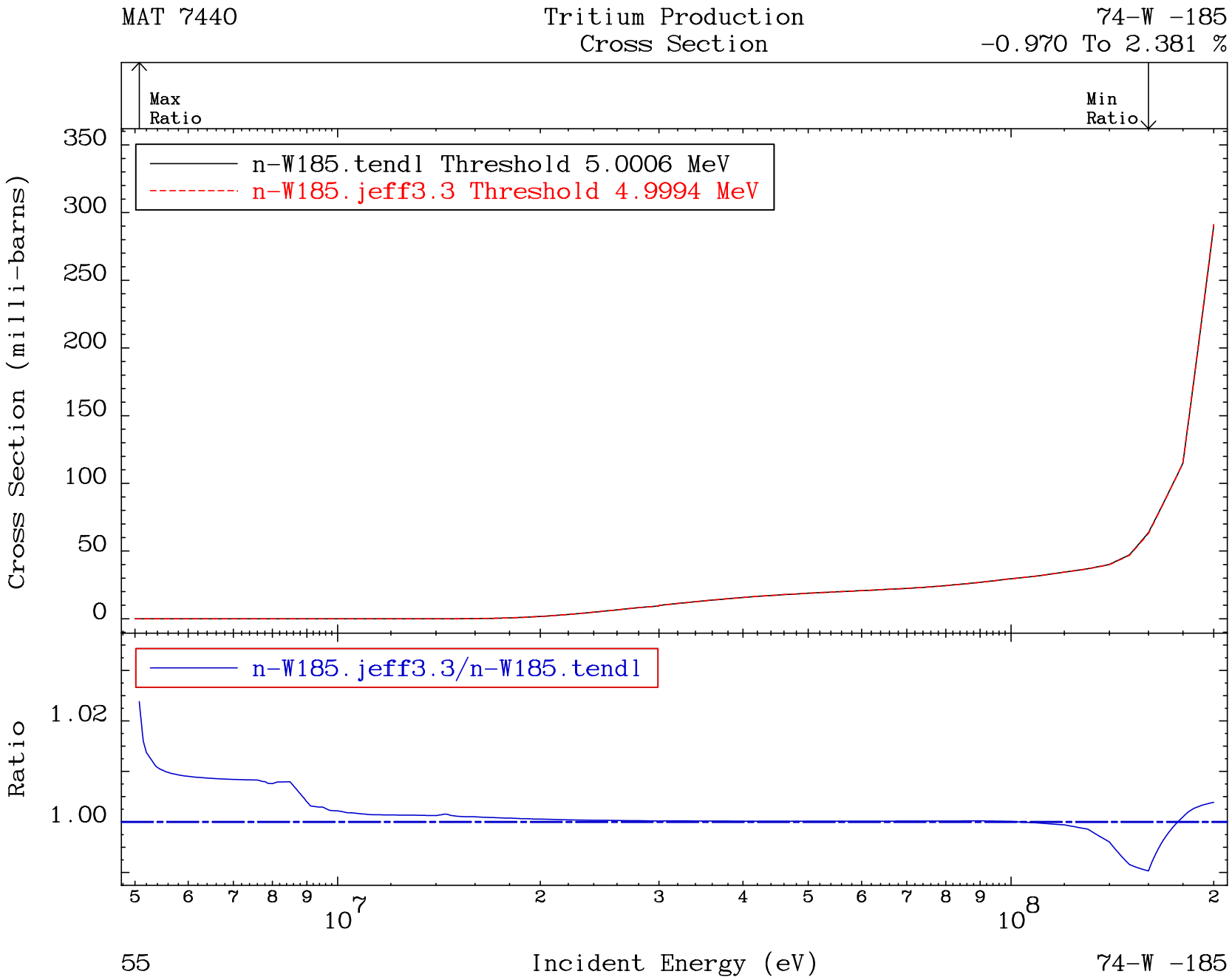

MAT 7440
(n,α)
Cross Section
74-W -185
-21.67 To 5250. %
Max Ratio
Min Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
50
74-W -185

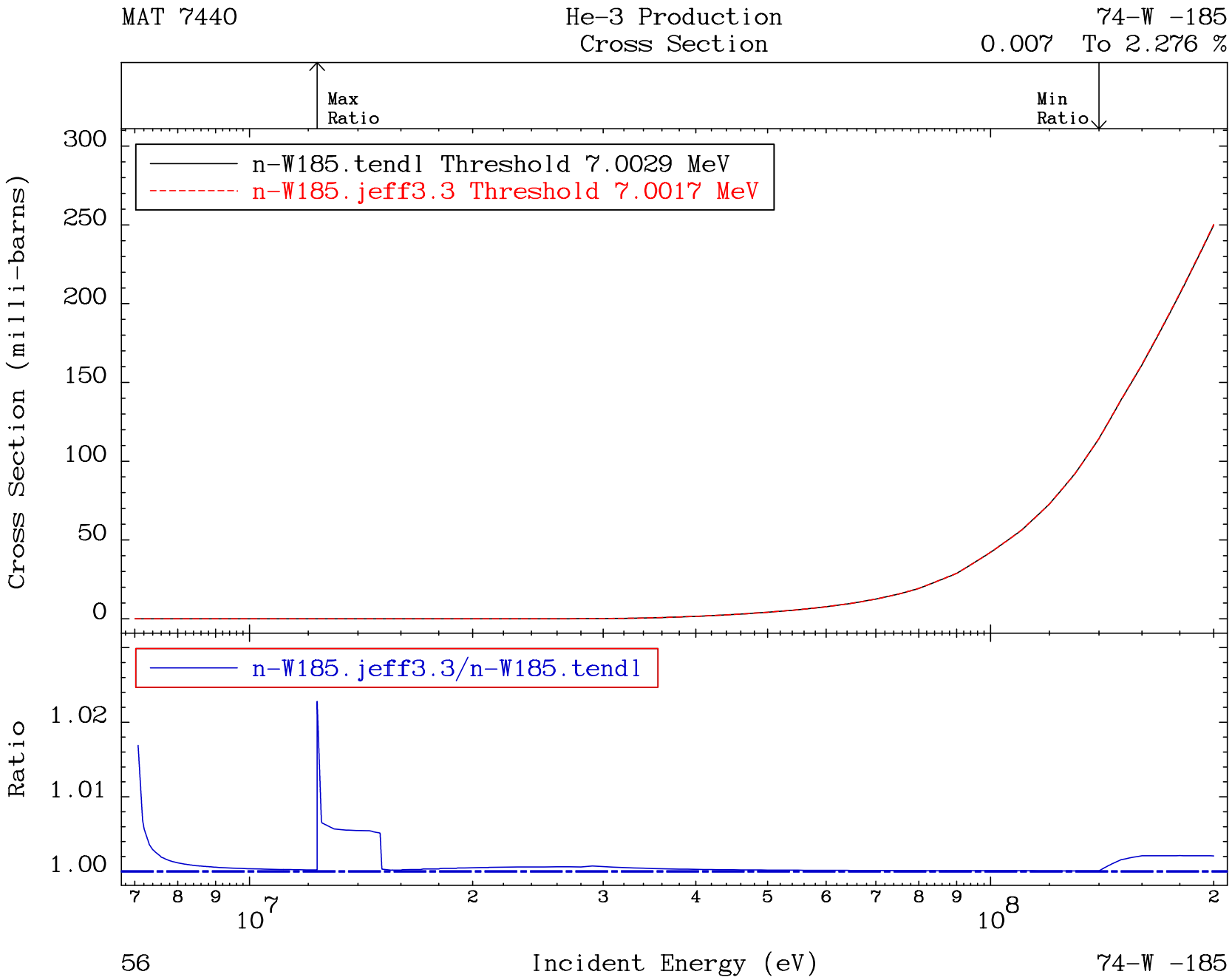

MAT 7440
(n,2p)
Cross Section
74-W -185
-0.006 To 0.151 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 8.4408 MeV
n-W185.jeff3.3 Threshold 8.4408 MeV
Cross Section (micro-barns)
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
74-W -185

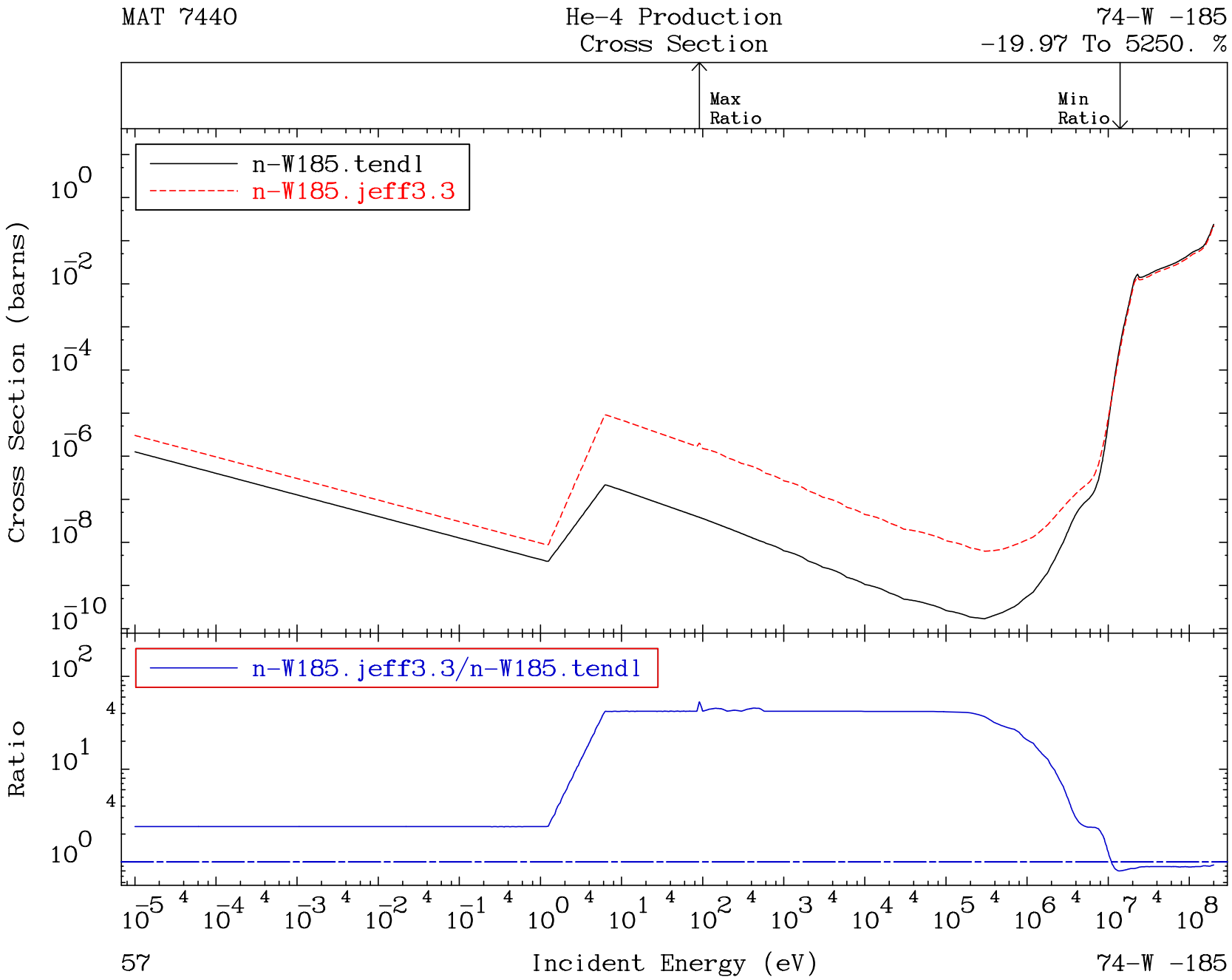

MAT 7440
(n,p) α
Cross Section
74-W -185
0.000 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 234.21 keV
n-W185.jeff3.3 Threshold 236.38 keV
Cross Section (10^{-9} barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
52
Incident Energy (eV)
74-W -185

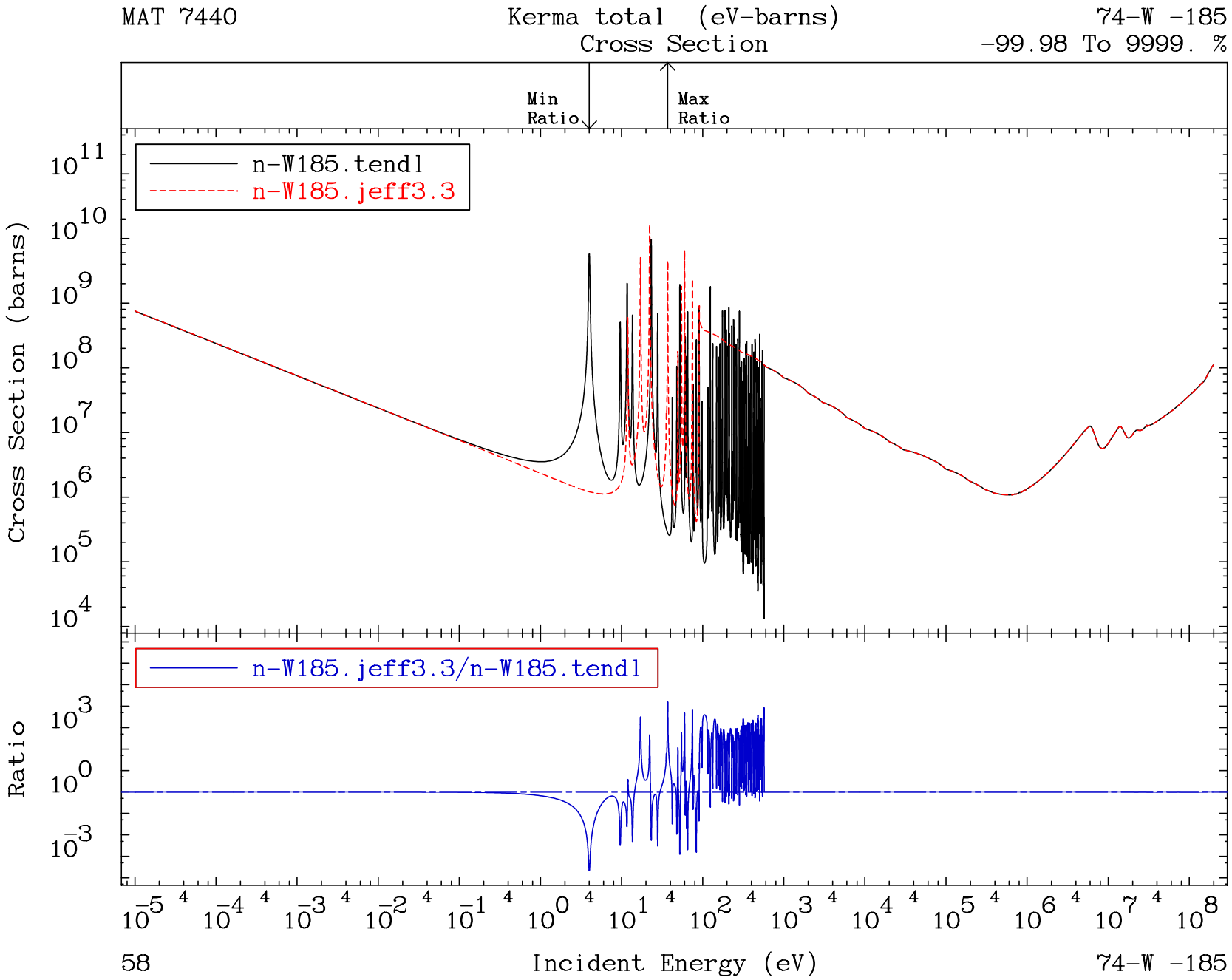

MAT 7440
Hydrogen Production
Cross Section
74-W -185
-0.112 To 286.6 %
Max
Ratio
Min
Ratio
n-W185.tendl Threshold 234.21 keV
n-W185.jeff3.3 Threshold 236.38 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
4
3
2
1
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
74-W -185

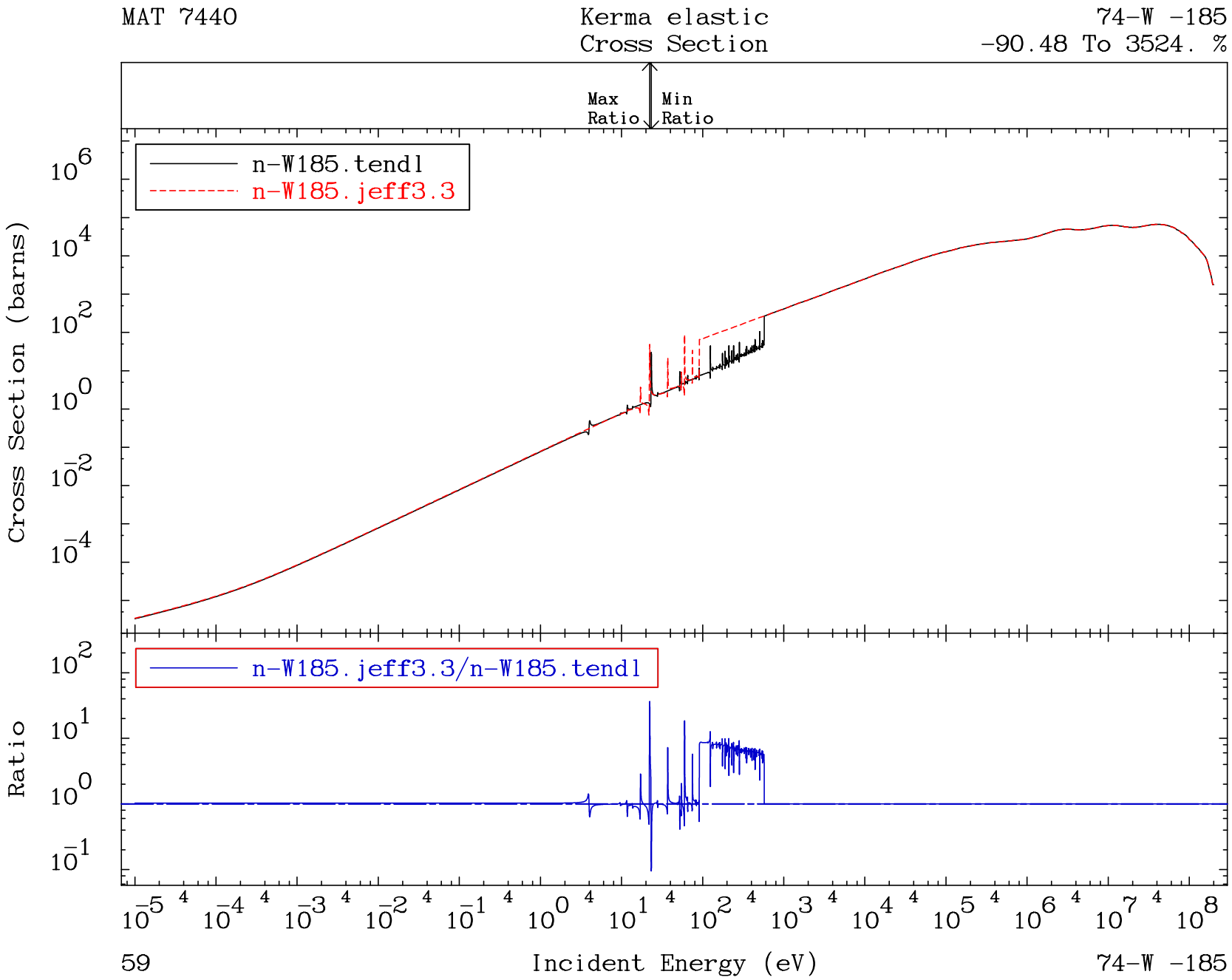

MAT 7440
Deuterium Production
Cross Section
74-W -185
-0.702 To 1.265 %
Min
Ratio
n-W185.tendl Threshold 5.6434 MeV
n-W185.jeff3.3 Threshold 5.6434 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
74-W -185

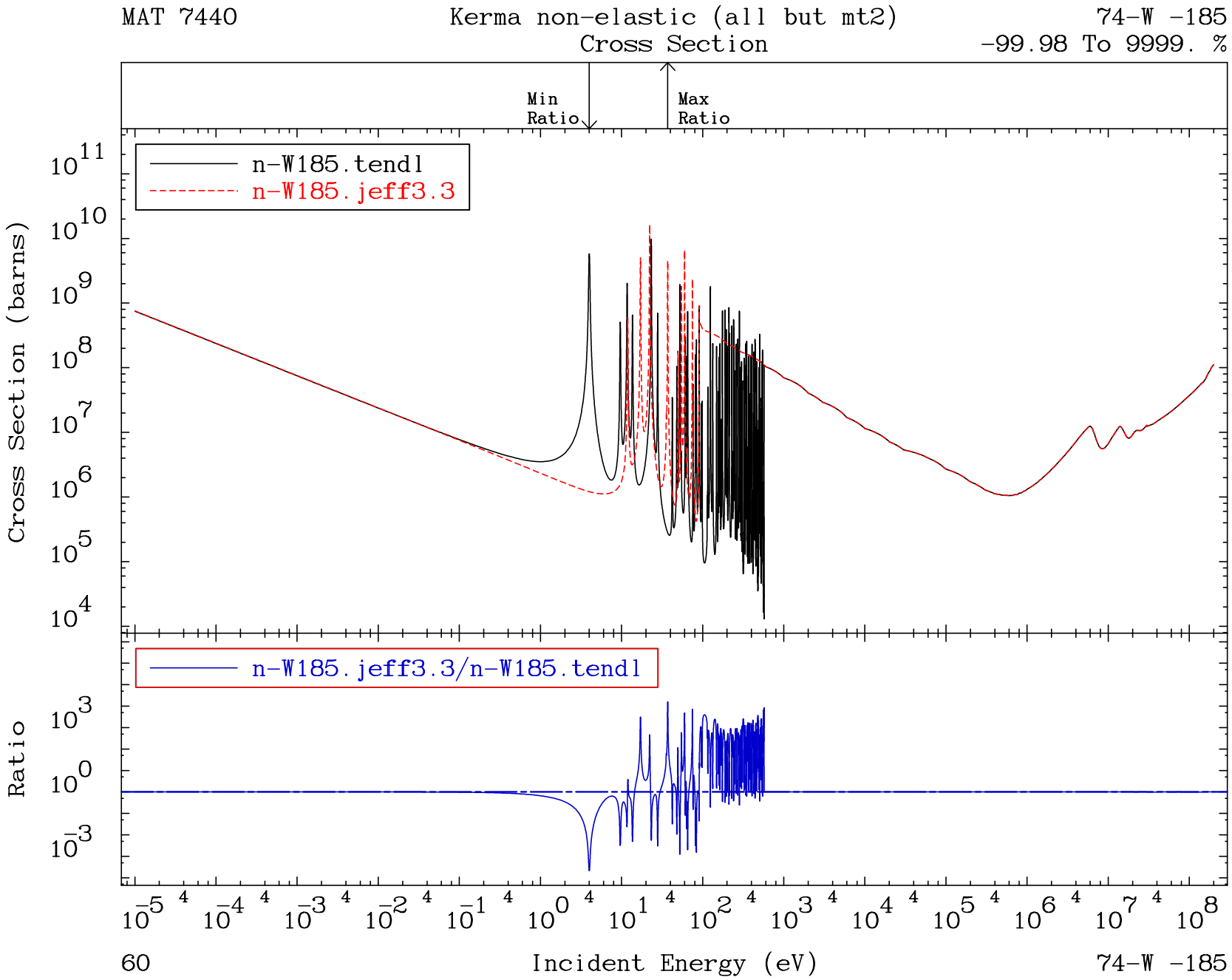

MAT 7440
Tritium Production
Cross Section
74-W -185
-0.970 To 2.381 %
Max
Ratio
Min
Ratio
n-W185.tendl Threshold 5.0006 MeV
n-W185.jeff3.3 Threshold 4.9994 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.00
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
74-W -185

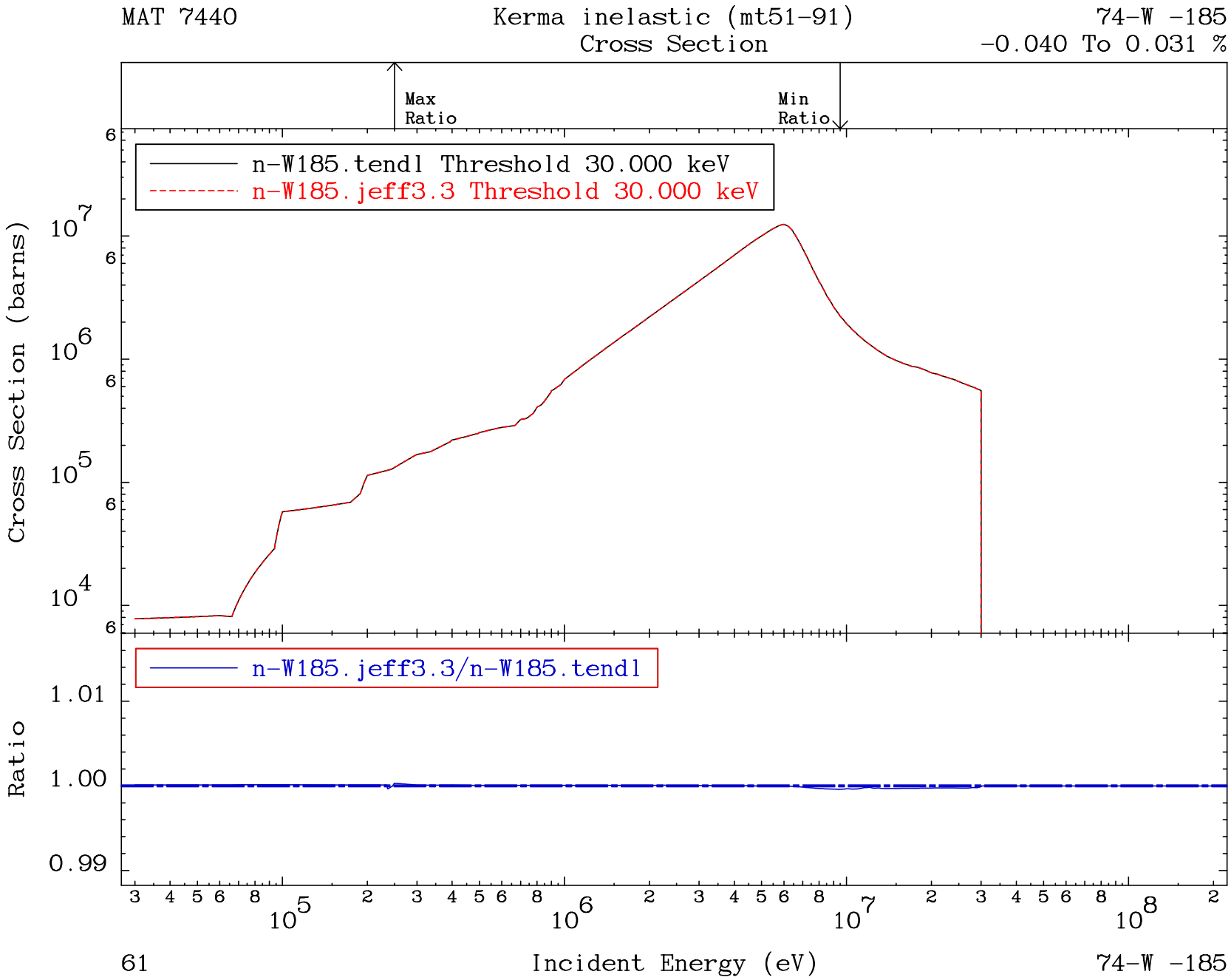

MAT 7440
He-3 Production
Cross Section
74-W -185
0.007 To 2.276 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 7.0029 MeV
n-W185.jeff3.3 Threshold 7.0017 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
74-W -185

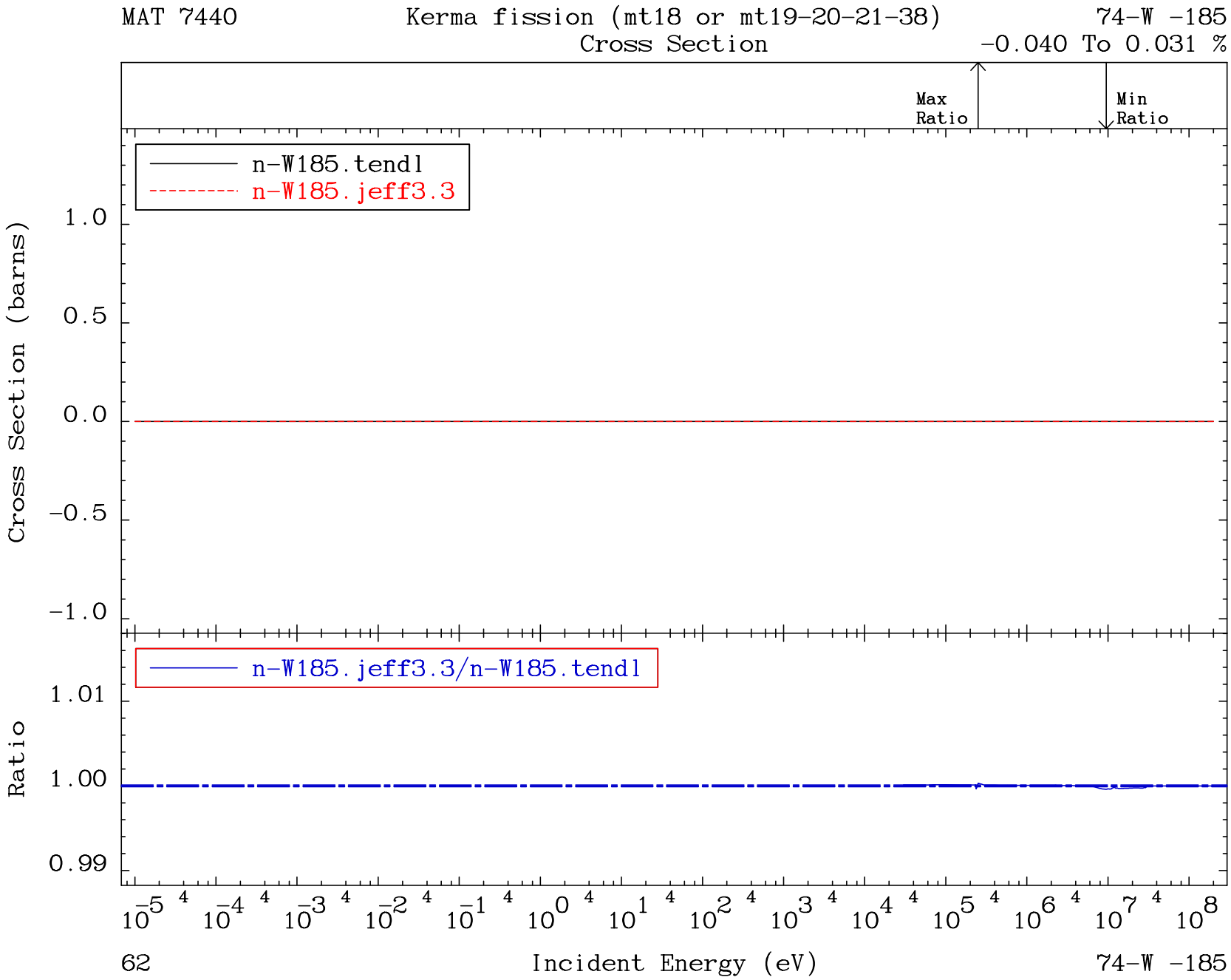

MAT 7440
He-4 Production
Cross Section
74-W -185
-19.97 To 5250. %
Max
Ratio
Min
Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
57
74-W -185

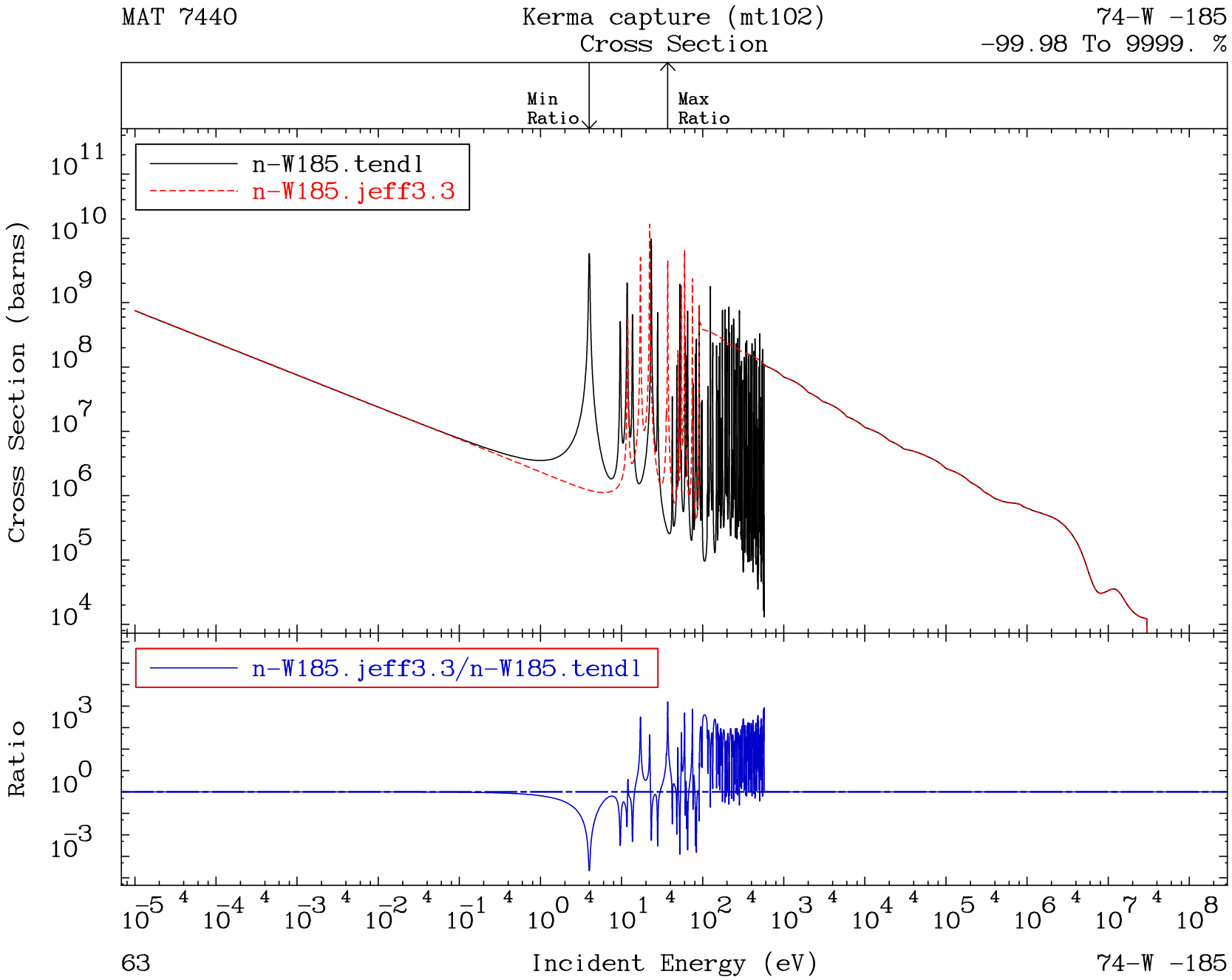

MAT 7440
Kerma total (eV-barns)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
58
74-W -185

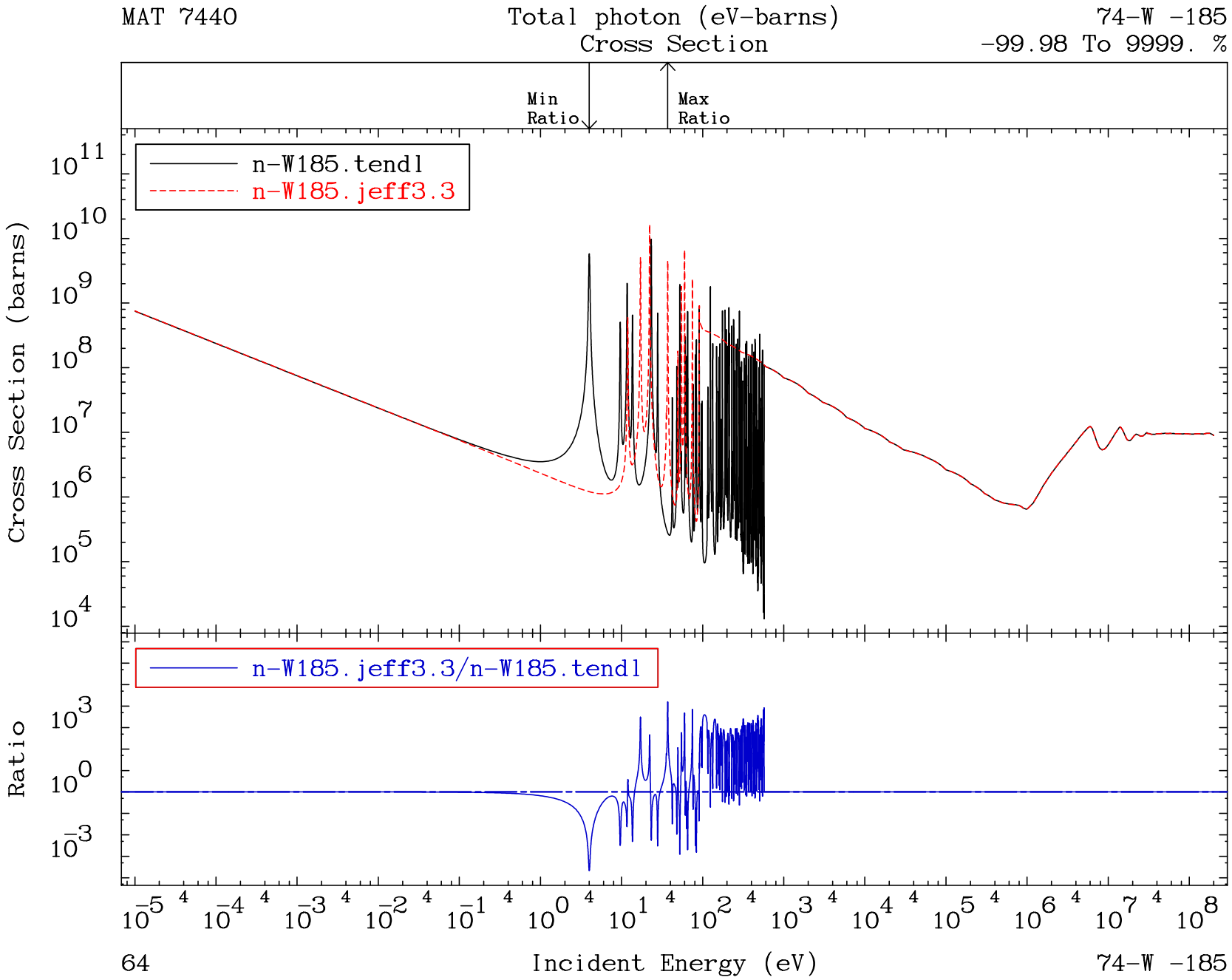

MAT 7440
Kerma elastic
Cross Section
74-W -185
-90.48 To 3524. %
Max Ratio
Min Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
59
74-W -185

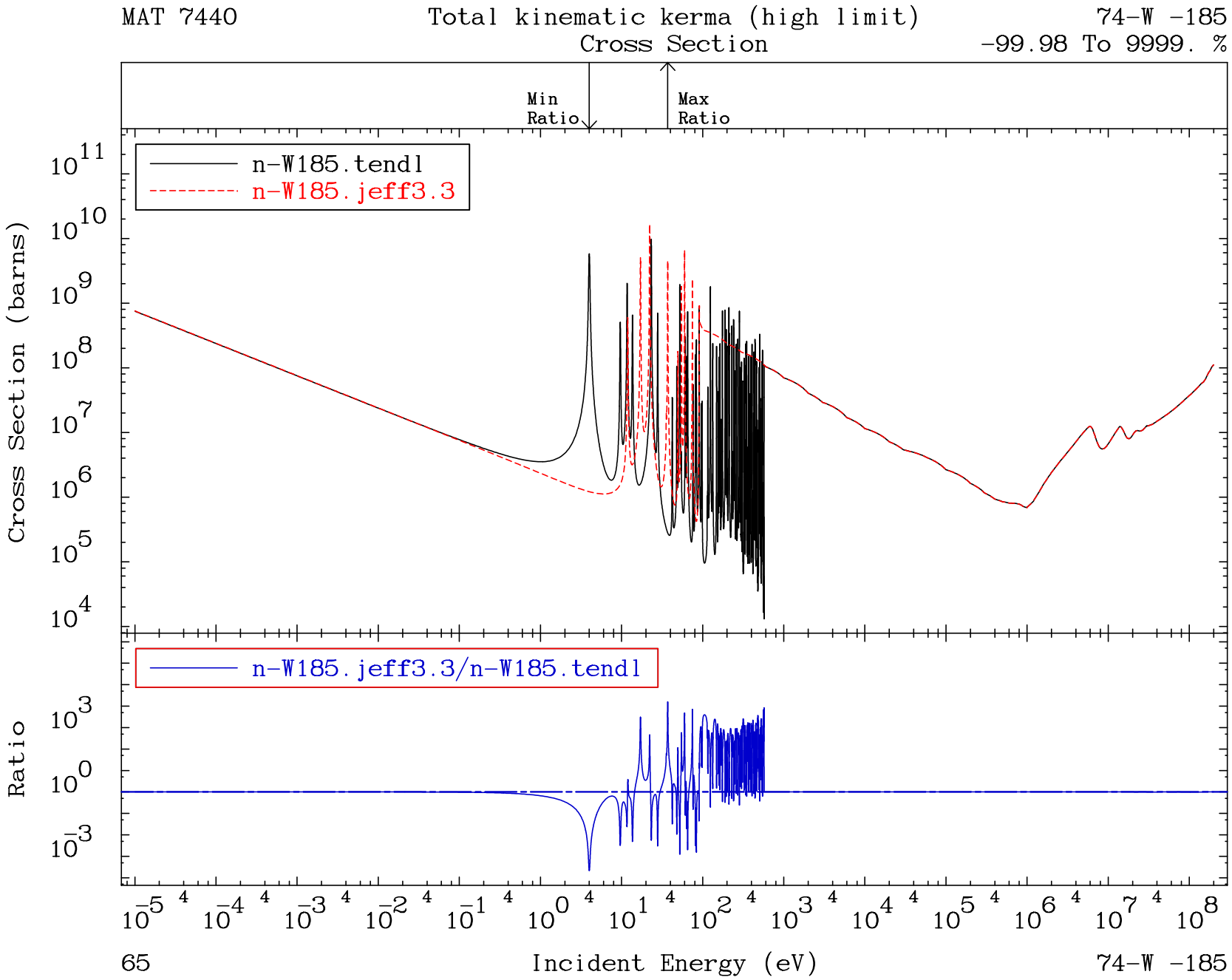

MAT 7440
Kerma non-elastic (all but mt2)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
60
74-W -185

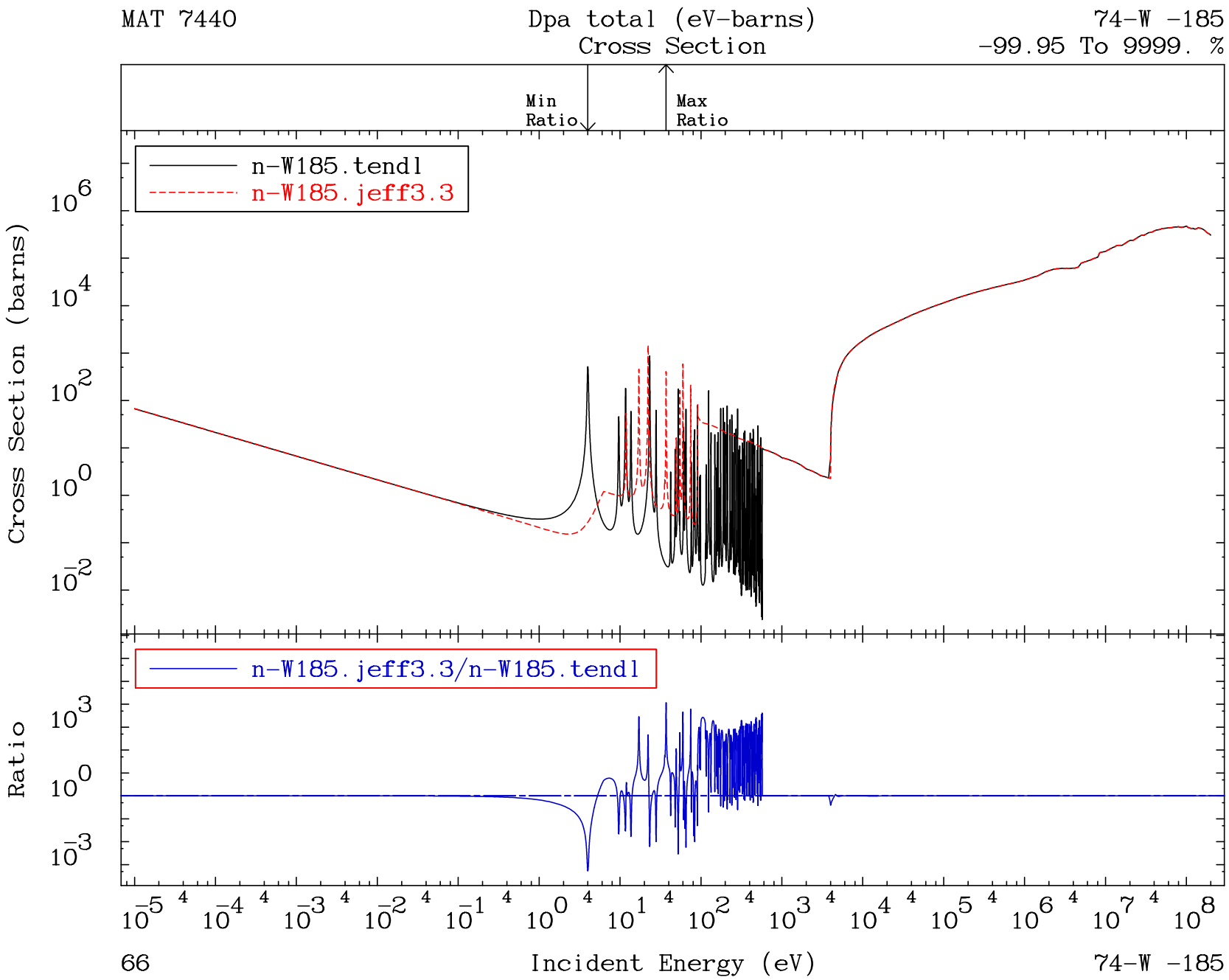

MAT 7440
Kerma inelastic (mt51-91)
Cross Section
74-W -185
-0.040 To 0.031 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 30.000 keV
n-W185.jeff3.3 Threshold 30.000 keV
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
61
74-W -185

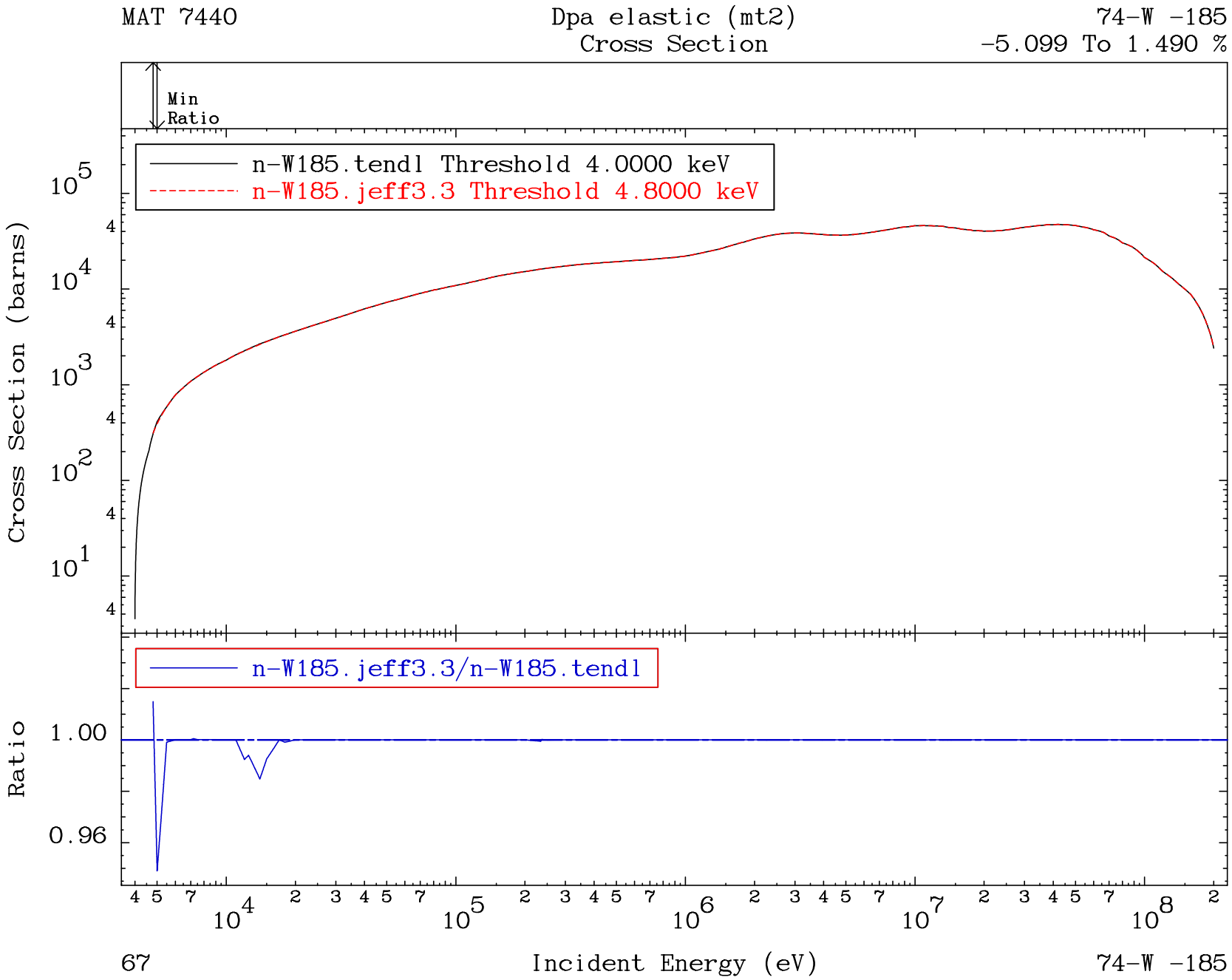

MAT 7440
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
74-W -185
-0.040 To 0.031 %
Max Ratio
Min Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
62
Incident Energy (eV)
74-W -185

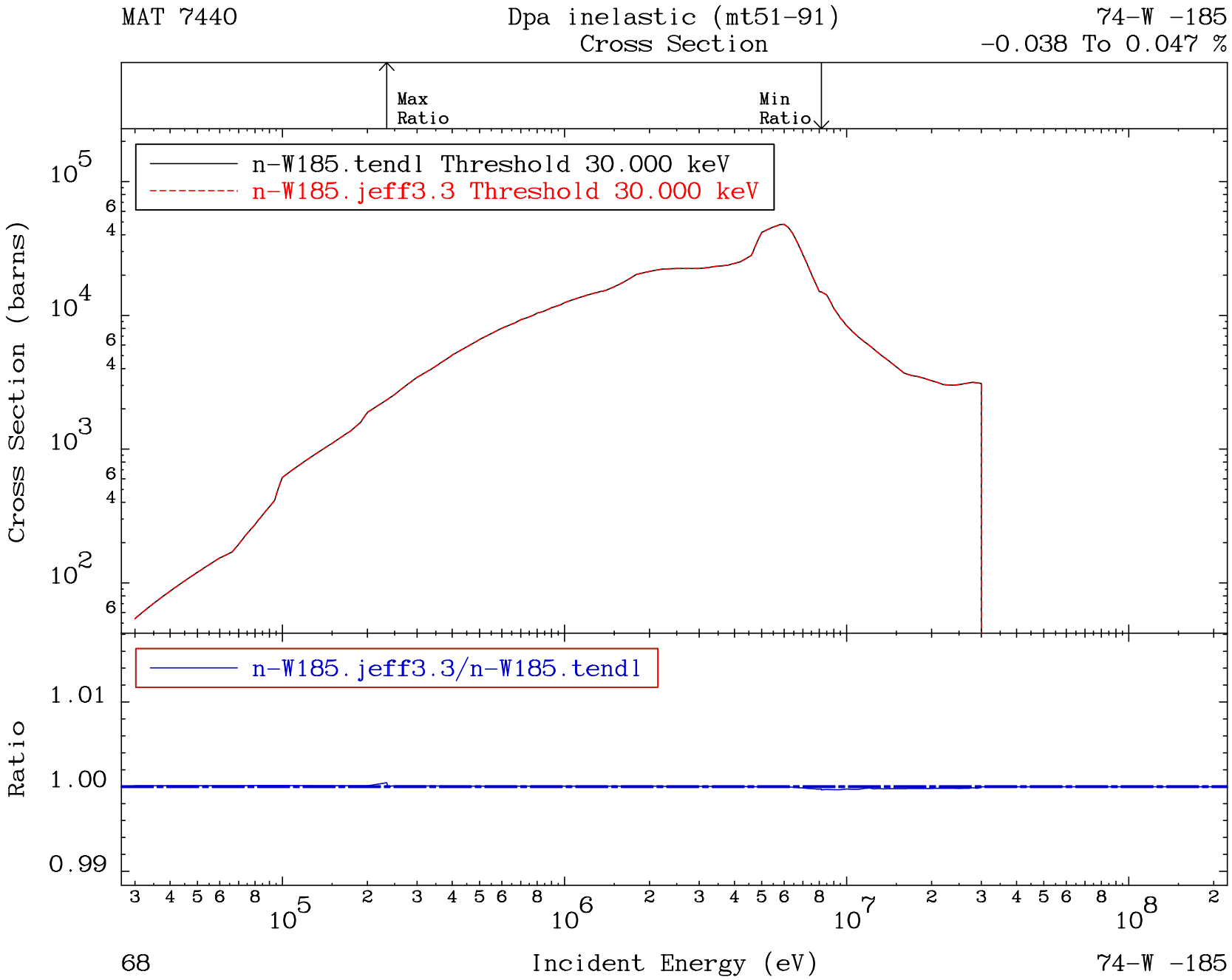

MAT 7440
Kerma capture (mt102)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
63
74-W -185

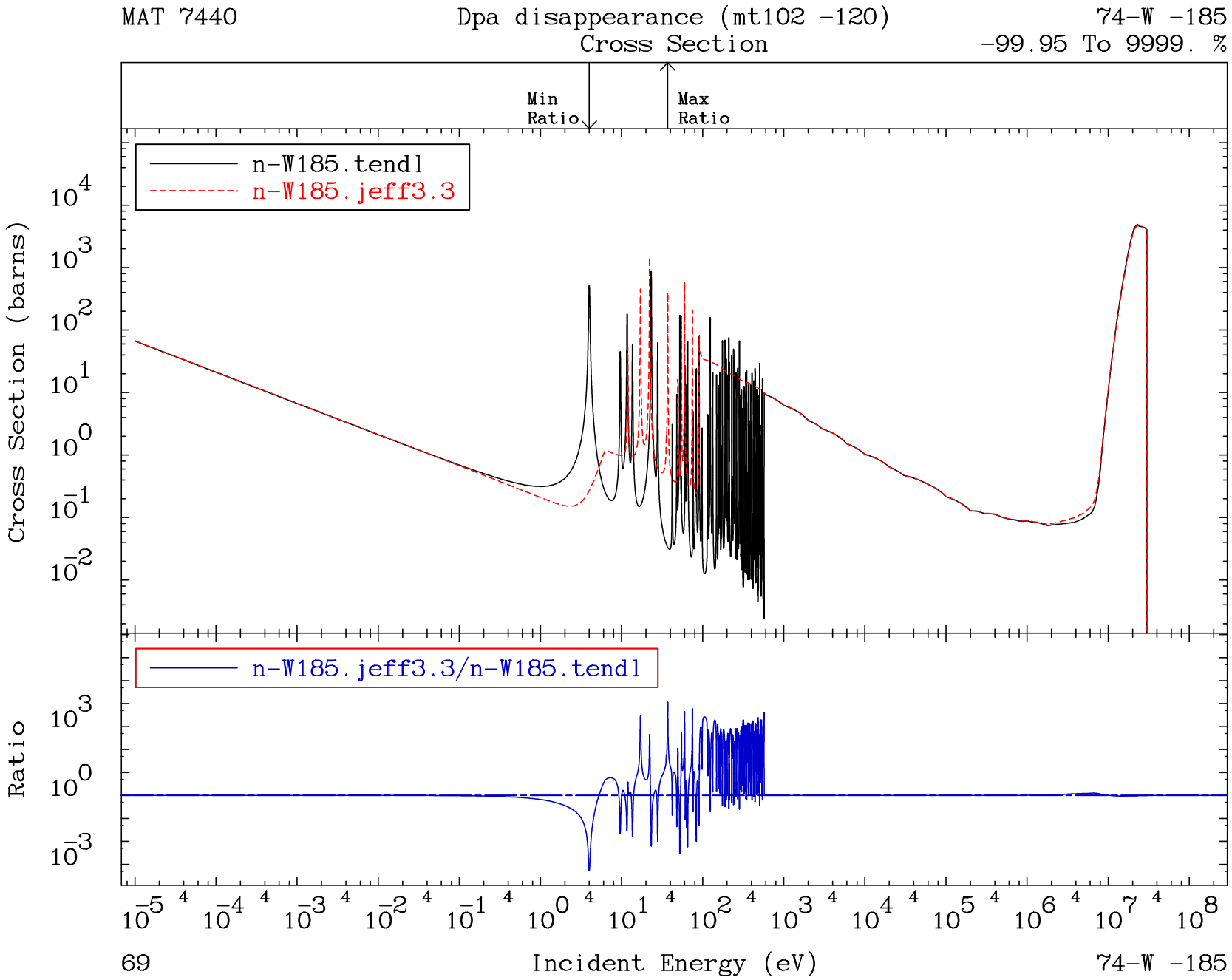

MAT 7440
Total photon (eV-barns)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
64
74-W -185

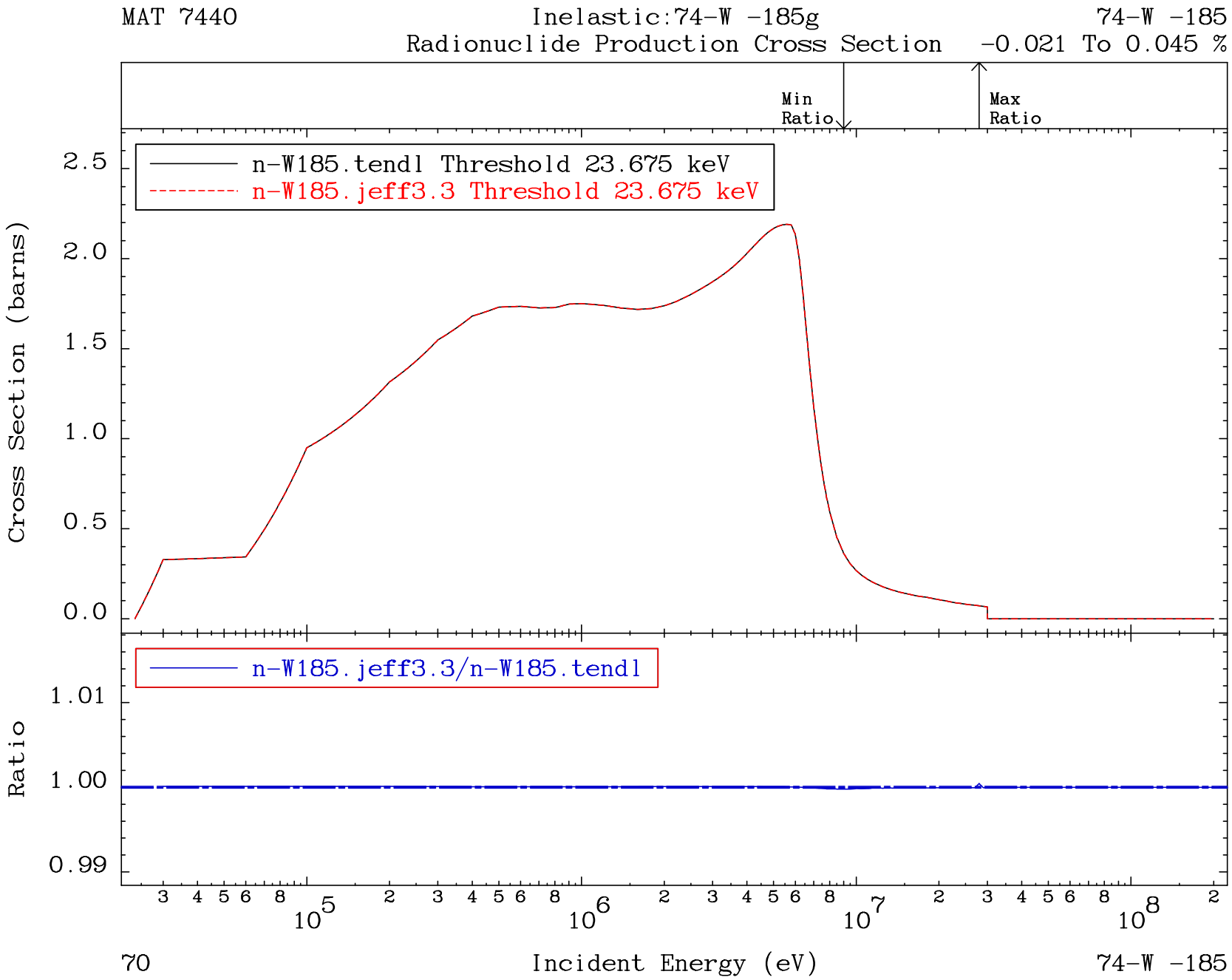

MAT 7440
Total kinematic kerma (high limit)
Cross Section
74-W -185
-99.98 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
65
74-W -185

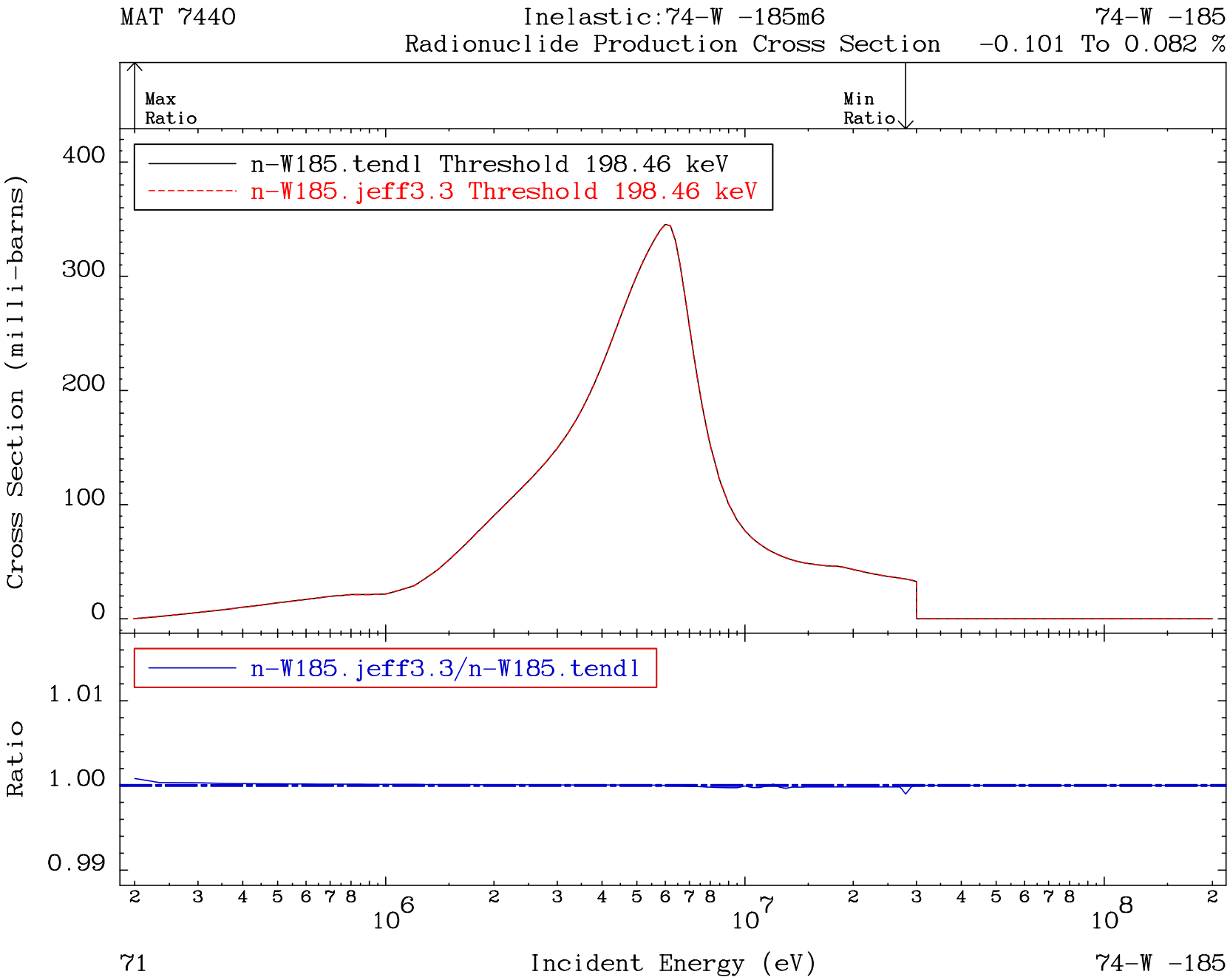

MAT 7440
Dpa total (eV-barns)
Cross Section
74-W -185
-99.95 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
66
74-W -185

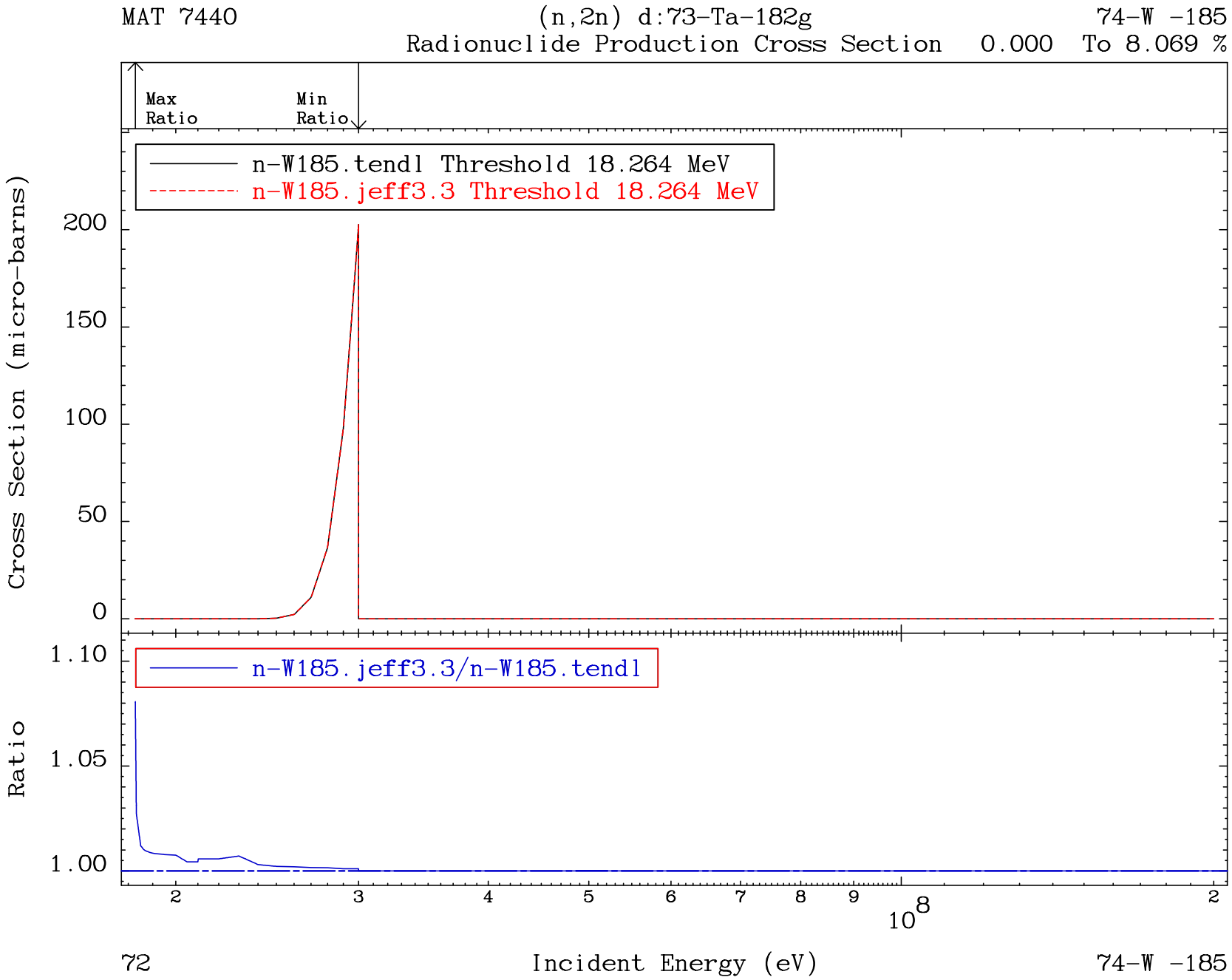

MAT 7440
Dpa elastic (mt2)
Cross Section
74-W -185
-5.099 To 1.490 %
Min
Ratio
n-W185.tendl Threshold 4.0000 keV
n-W185.jeff3.3 Threshold 4.8000 keV
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
1.00
0.96
Incident Energy (eV)
67
74-W -185

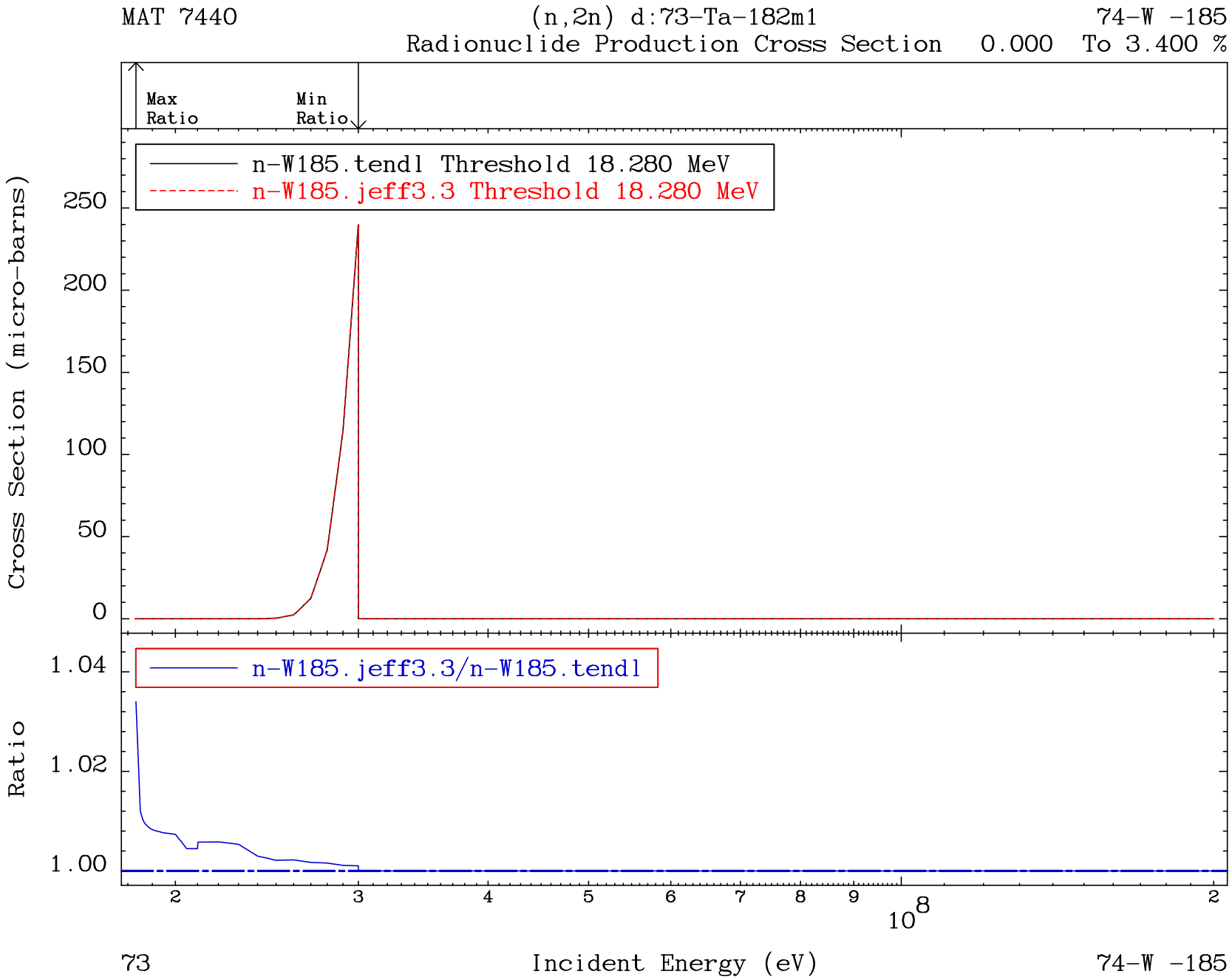

MAT 7440
Dpa inelastic (mt51-91)
Cross Section
74-W -185
-0.038 To 0.047 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 30.000 keV
n-W185.jeff3.3 Threshold 30.000 keV
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
68
74-W -185

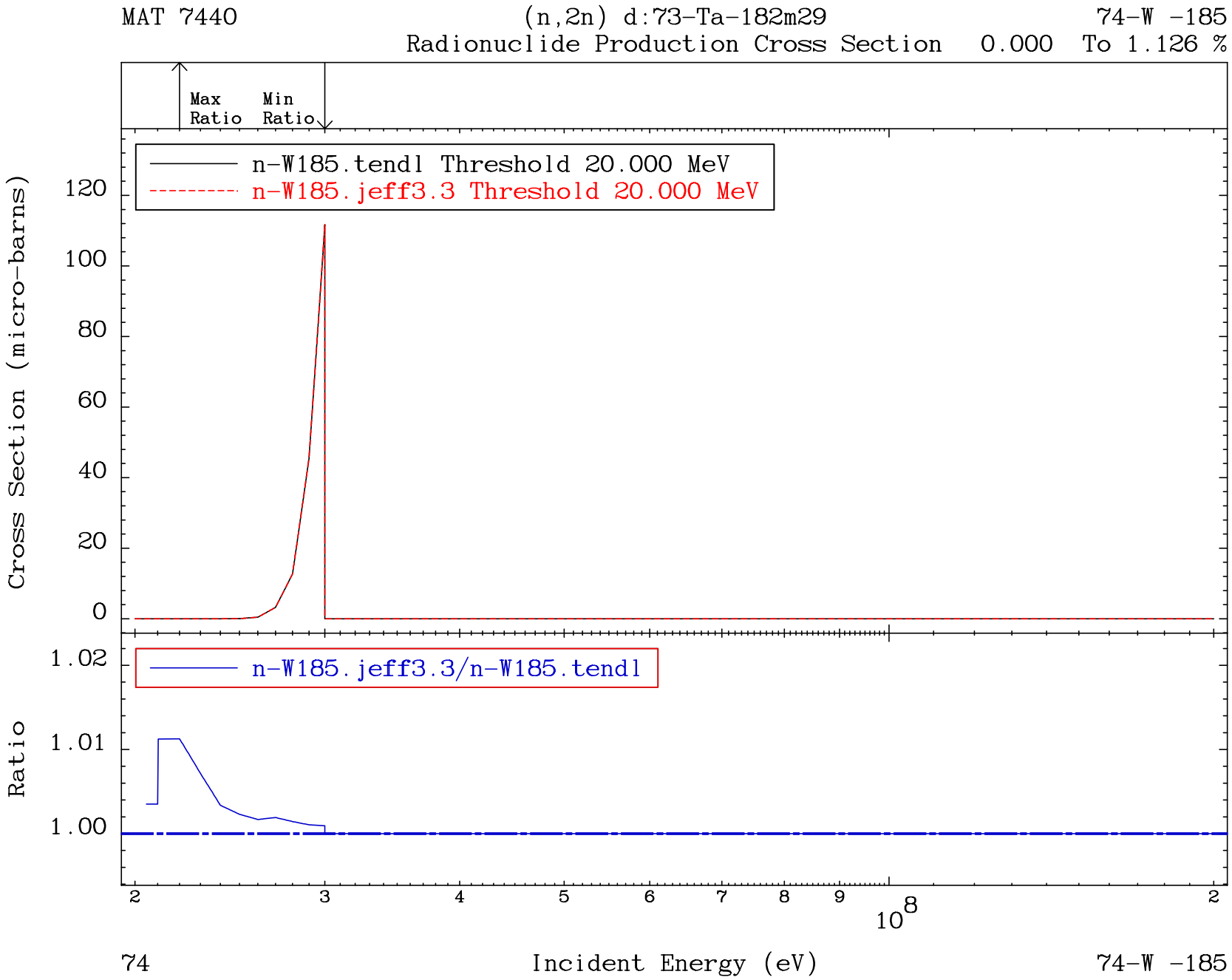

MAT 7440
Dpa disappearance (mt102 -120)
Cross Section
74-W -185
-99.95 To 9999. %
Min Ratio
Max Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
n-W185.jeff3.3/n-W185.tendl
Ratio
Incident Energy (eV)
69
74-W -185

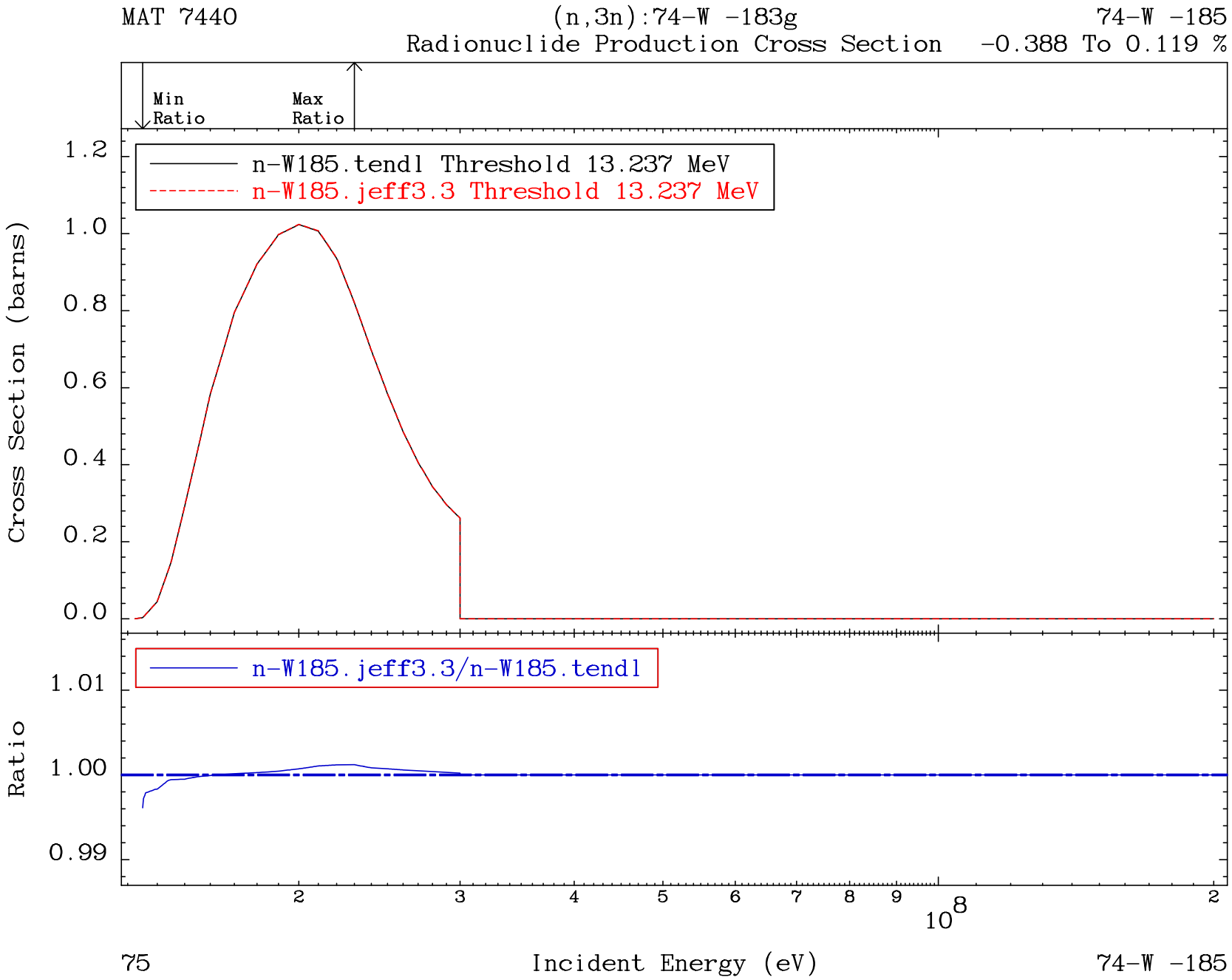

MAT 7440
Inelastic:74-W -185g
74-W -185
Radionuclide Production Cross Section
-0.021 To 0.045 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 23.675 keV
n-W185.jeff3.3 Threshold 23.675 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
70
Incident Energy (eV)
74-W -185

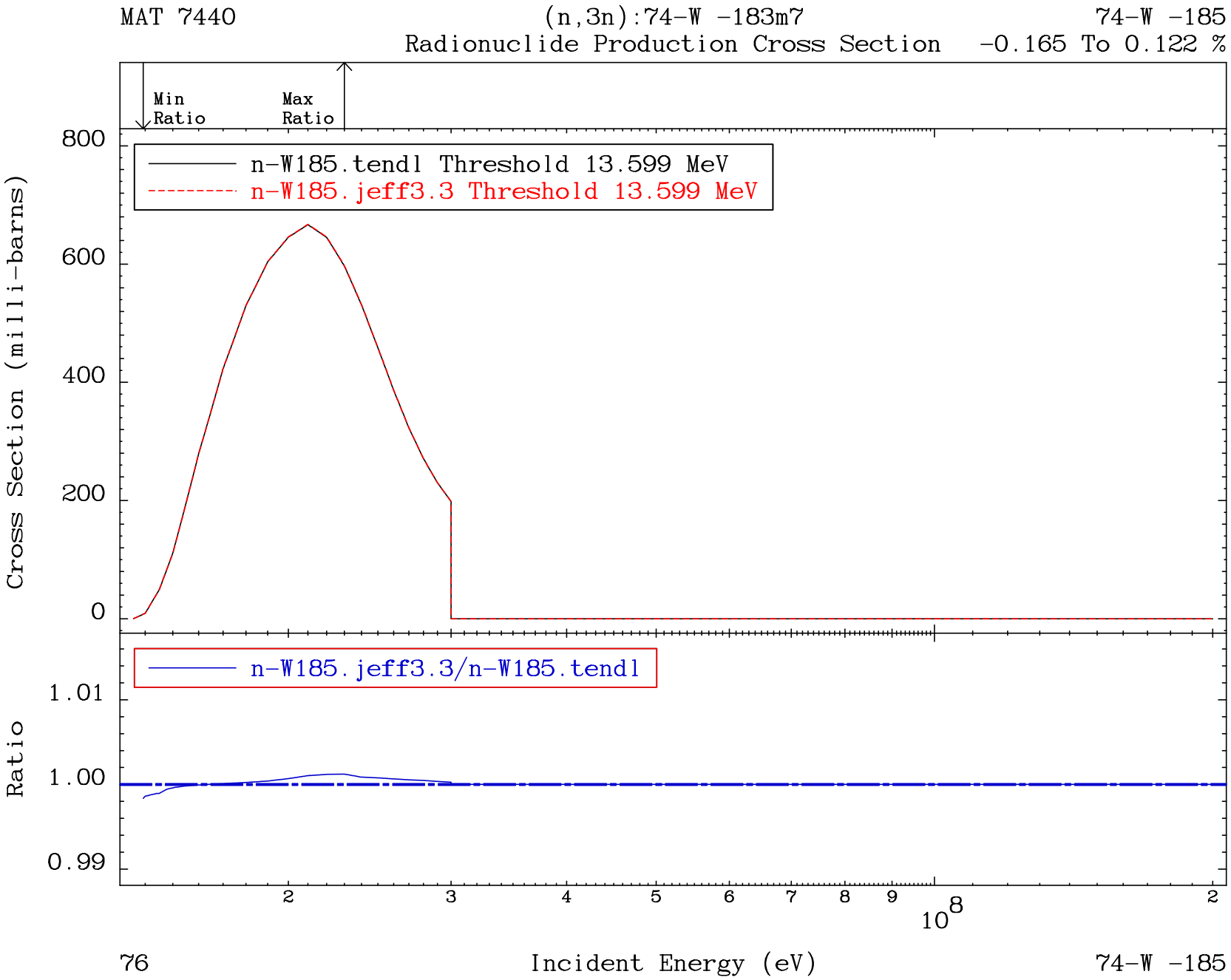

MAT 7440
Inelastic:74-W -185m6
74-W -185
Radionuclide Production Cross Section
-0.101 To 0.082 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 198.46 keV
n-W185.jeff3.3 Threshold 198.46 keV
Cross Section (milli-barns)
400
300
200
100
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
71
Incident Energy (eV)
74-W -185

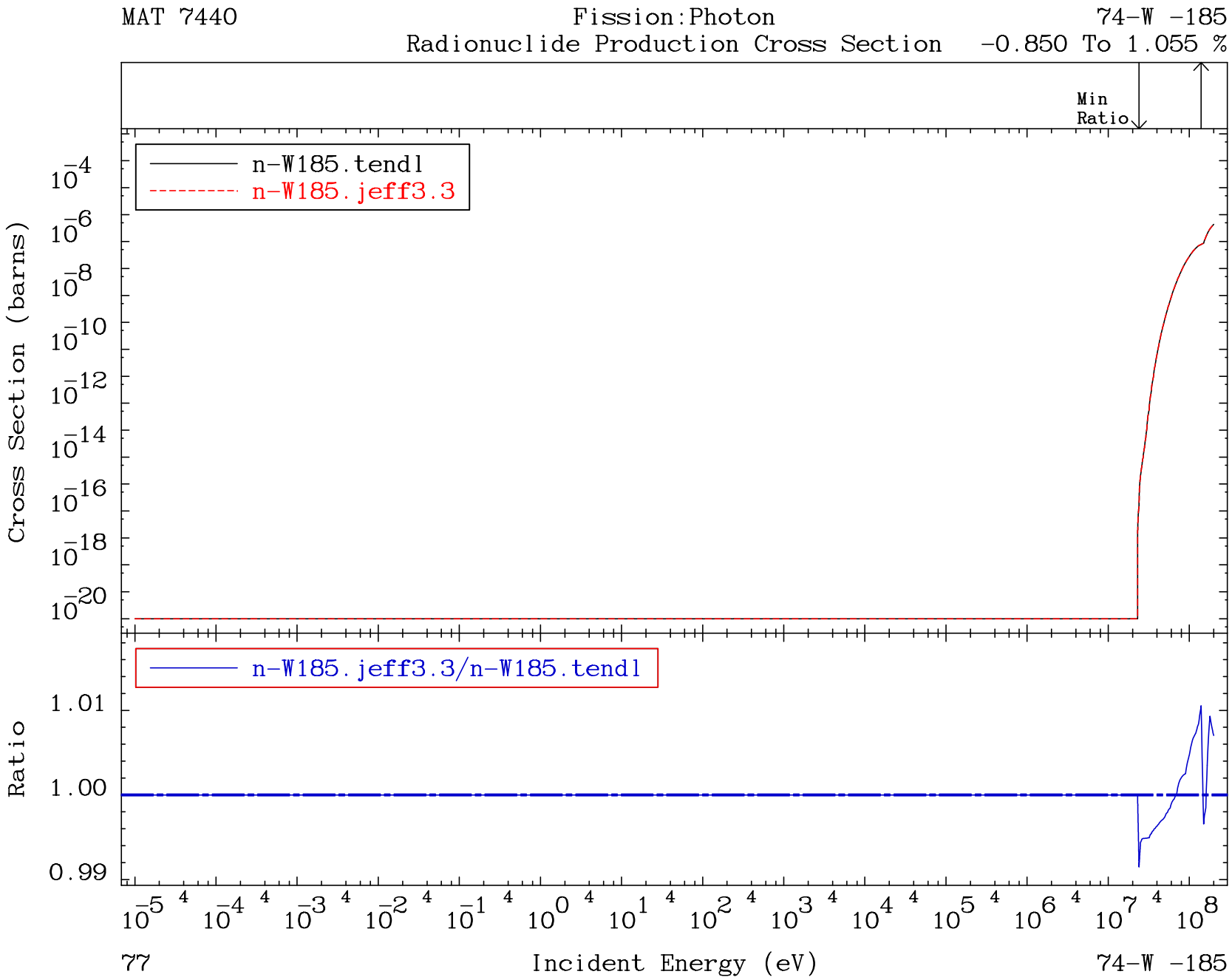

MAT 7440
(n,2n) d:73-Ta-182g
74-W -185
Radionuclide Production Cross Section 0.000 To 8.069 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 18.264 MeV
n-W185.jeff3.3 Threshold 18.264 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
72
Incident Energy (eV)
74-W -185

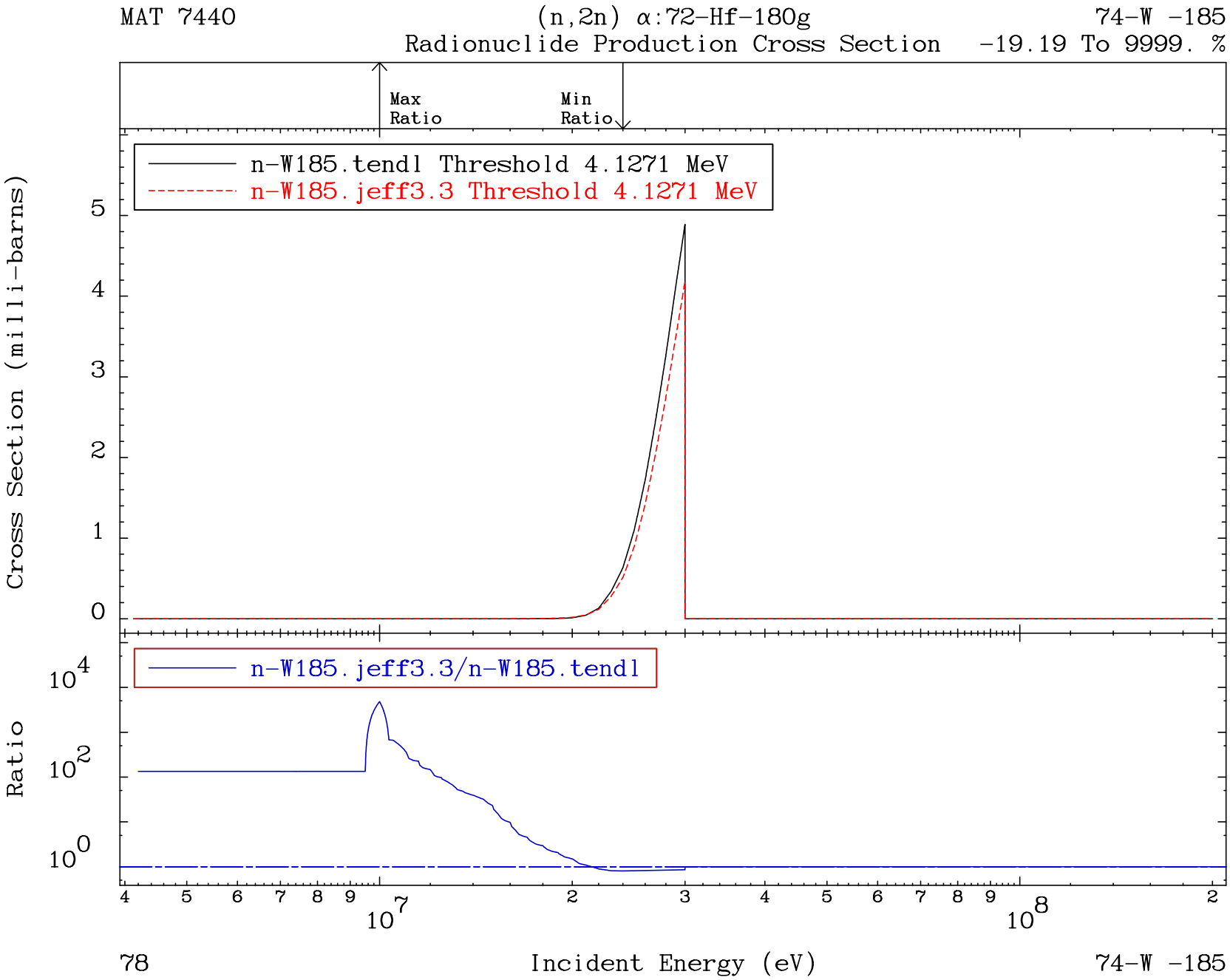

MAT 7440
(n,2n) d:73-Ta-182m1
74-W -185
Radionuclide Production Cross Section 0.000 To 3.400 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 18.280 MeV
n-W185.jeff3.3 Threshold 18.280 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
74-W -185

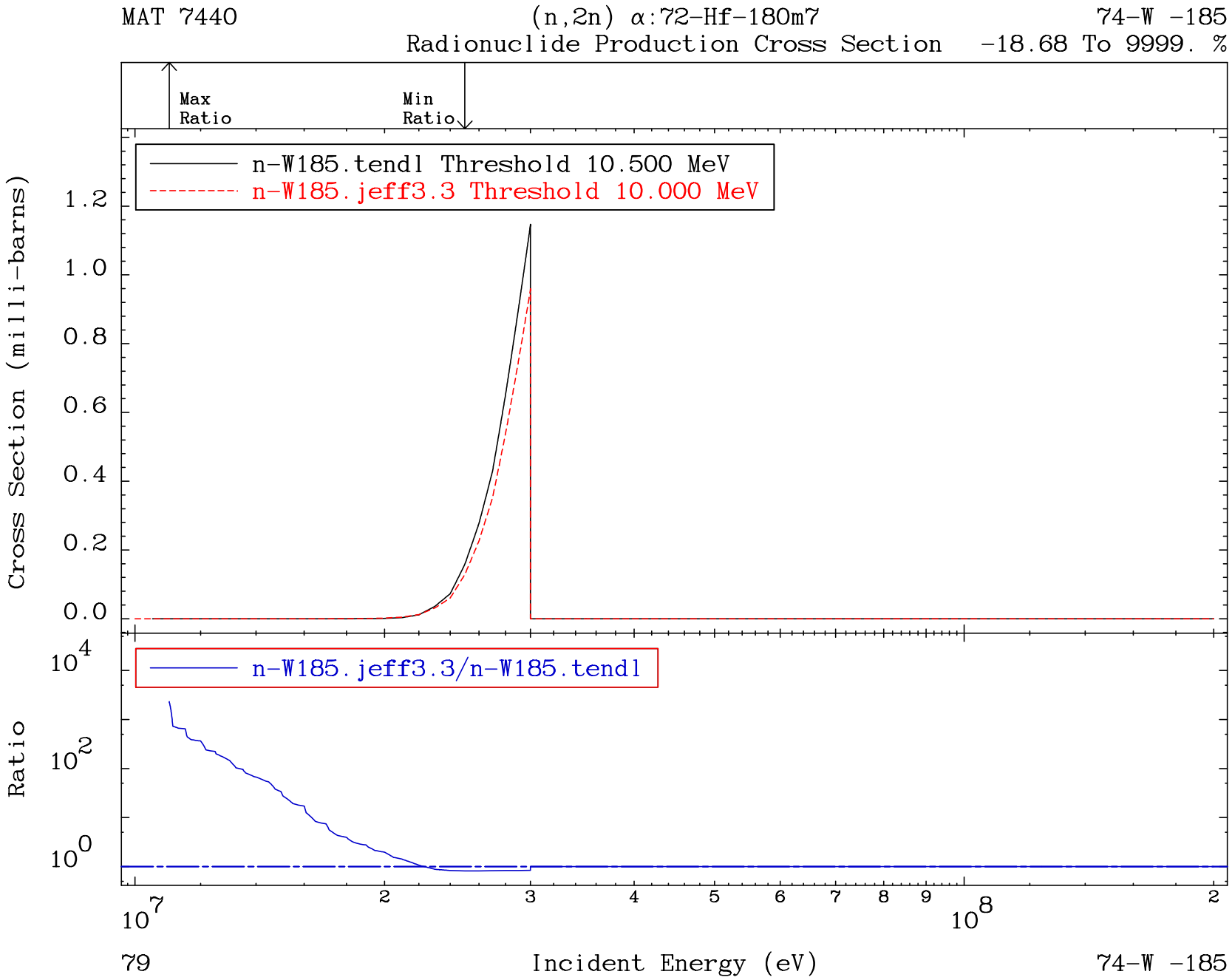

MAT 7440
(n,2n) d:73-Ta-182m29
74-W -185
Radionuclide Production Cross Section 0.000 To 1.126 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 20.000 MeV
n-W185.jeff3.3 Threshold 20.000 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
74-W -185

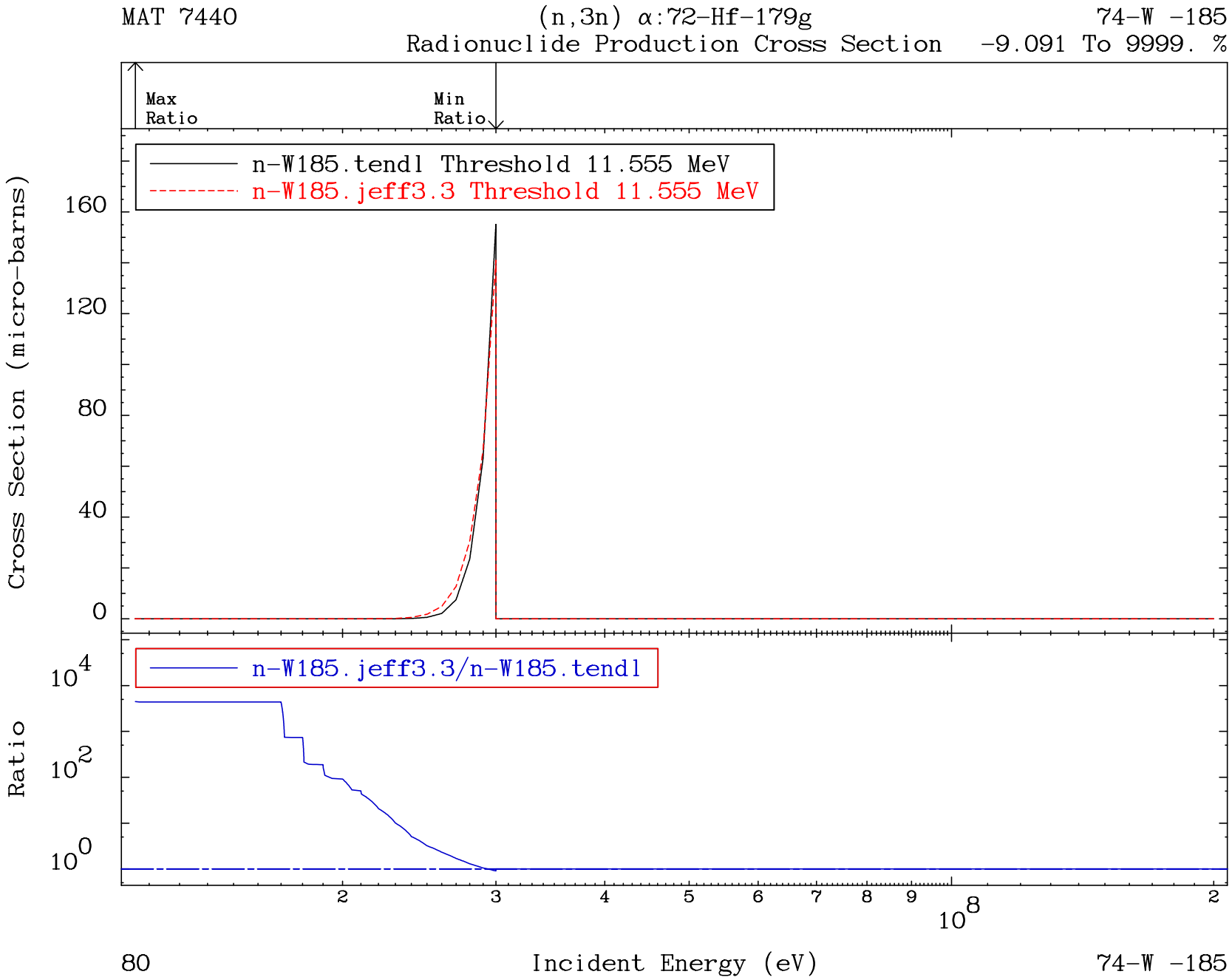

MAT 7440
(n,3n):74-W -183g
74-W -185
Radionuclide Production Cross Section
-0.388 To 0.119 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 13.237 MeV
n-W185.jeff3.3 Threshold 13.237 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
74-W -185

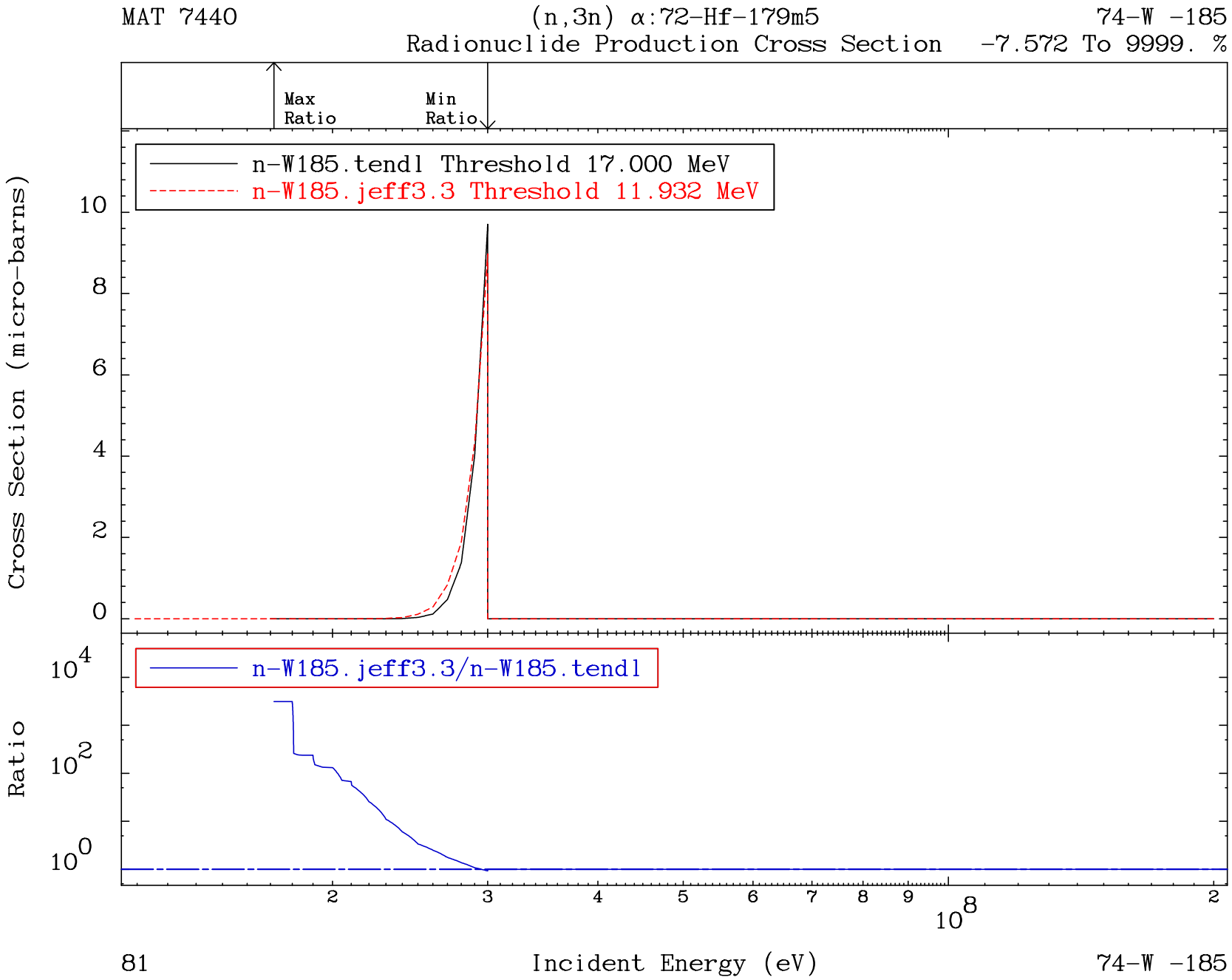

MAT 7440
(n,3n):74-W -183m7
74-W -185
Radionuclide Production Cross Section -0.165 To 0.122 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 13.599 MeV
n-W185.jeff3.3 Threshold 13.599 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
74-W -185

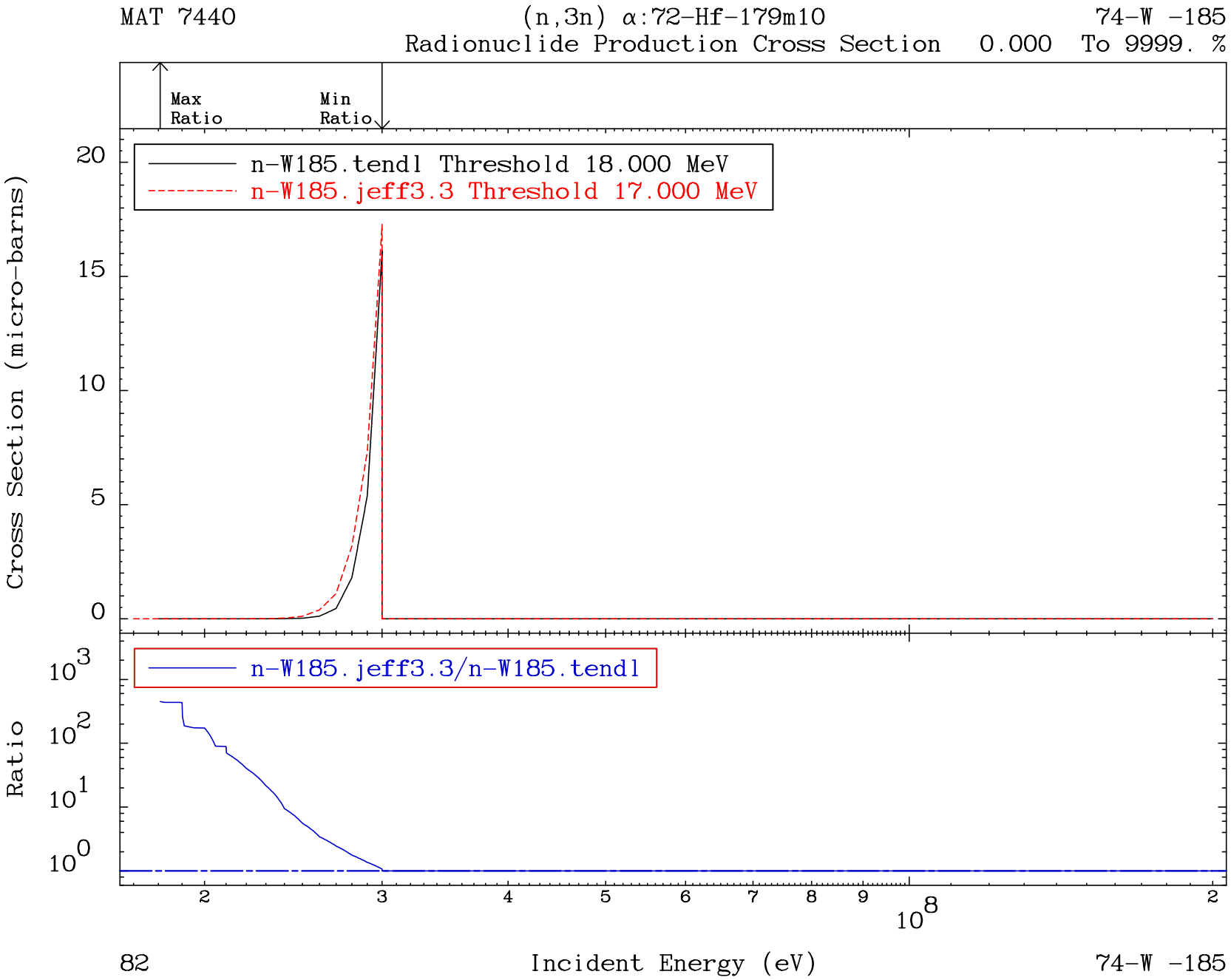

MAT 7440
Fission:Photon
74-W -185
Radionuclide Production Cross Section
-0.850 To 1.055 %
Min
Ratio
n-W185.tendl
n-W185.jeff3.3
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-12
10^-14
10^-16
10^-18
10^-20
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
77
Incident Energy (eV)
74-W -185

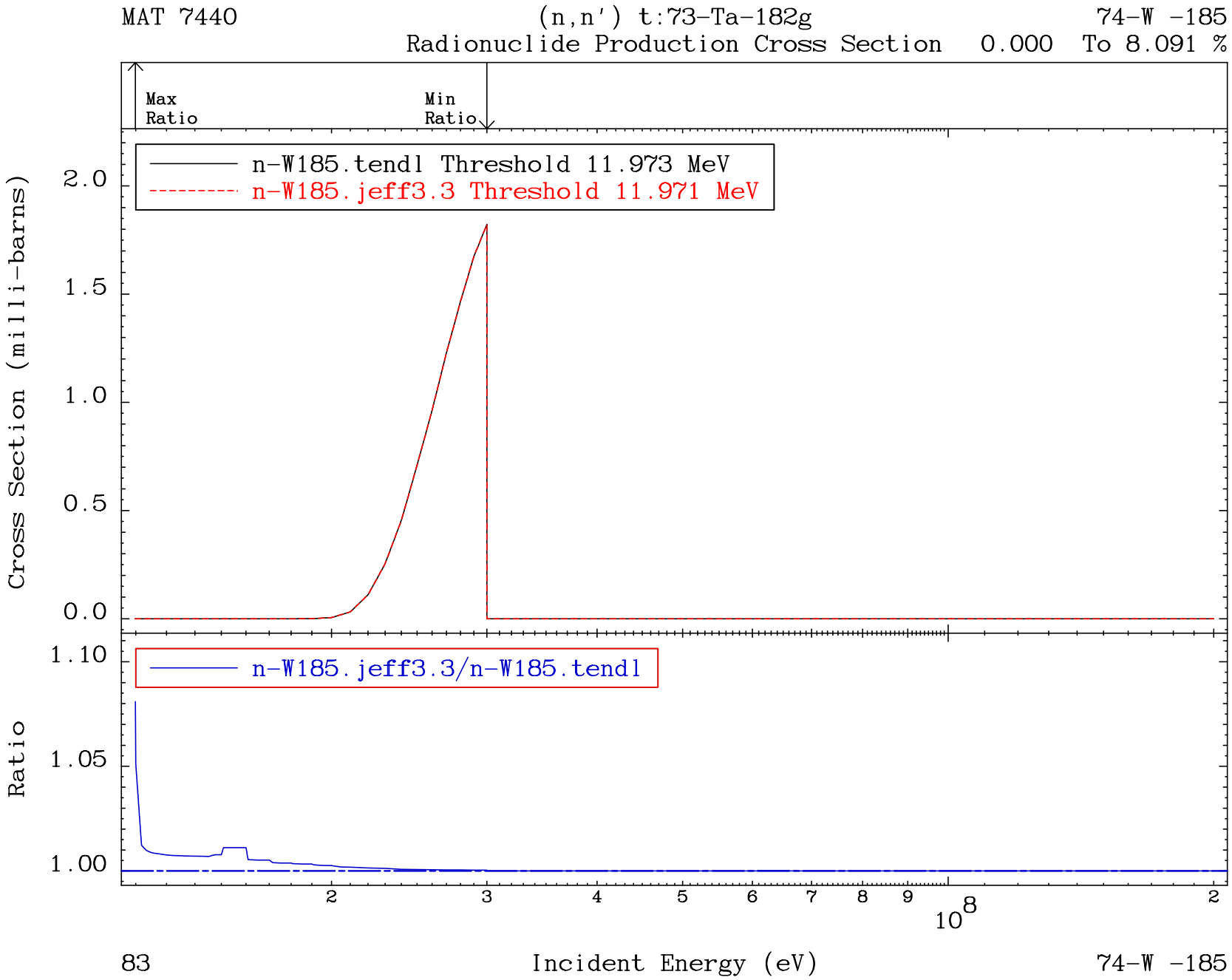

MAT 7440
(n,2n) α:72-Hf-180g
74-W -185
Radionuclide Production Cross Section -19.19 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 4.1271 MeV
n-W185.jeff3.3 Threshold 4.1271 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-W185.jeff3.3/n-W185.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
78
Incident Energy (eV)
74-W -185

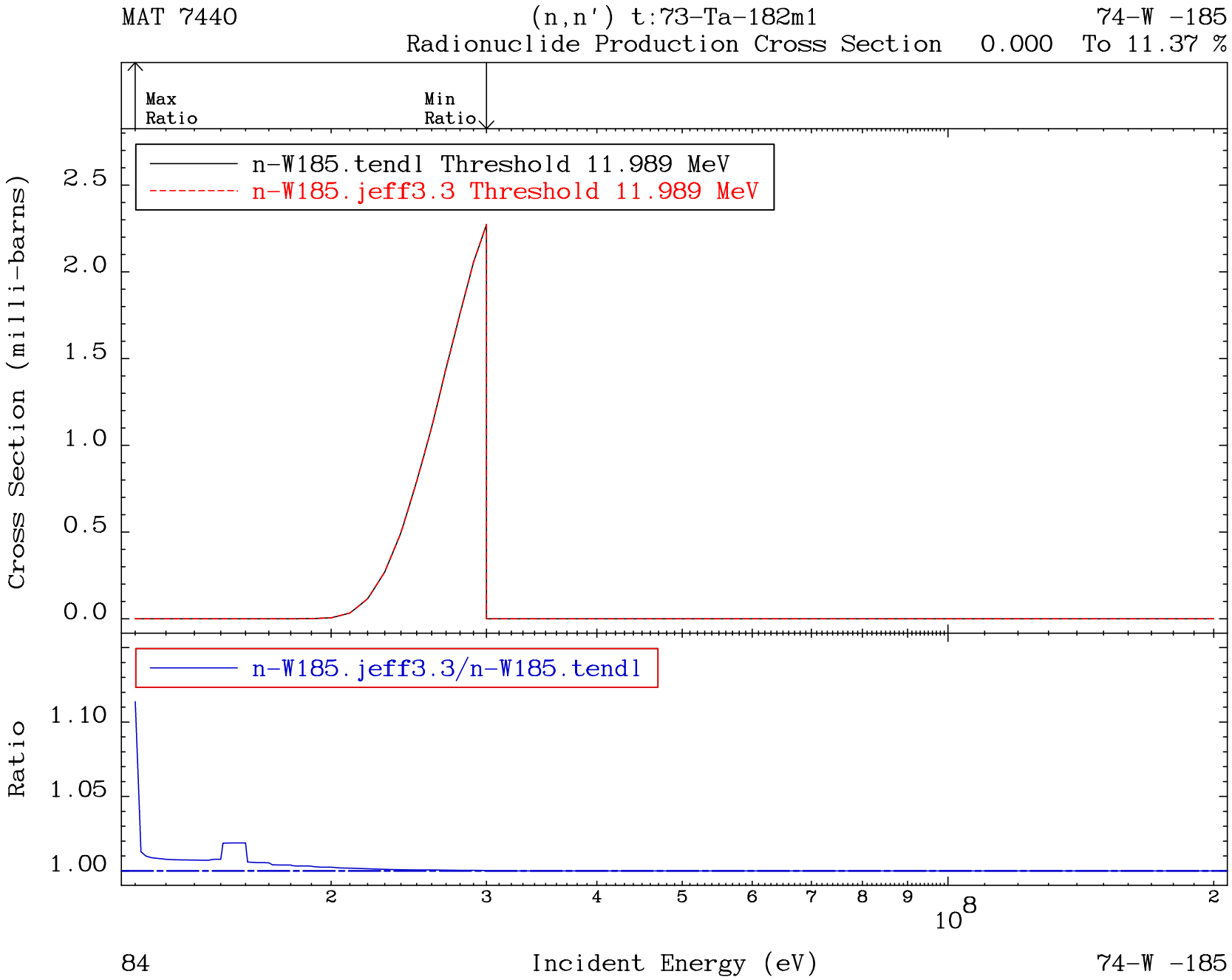

MAT 7440
(n,2n) α:72-Hf-180m7
74-W -185
Radionuclide Production Cross Section -18.68 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 10.500 MeV
n-W185.jeff3.3 Threshold 10.000 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^4
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
74-W -185

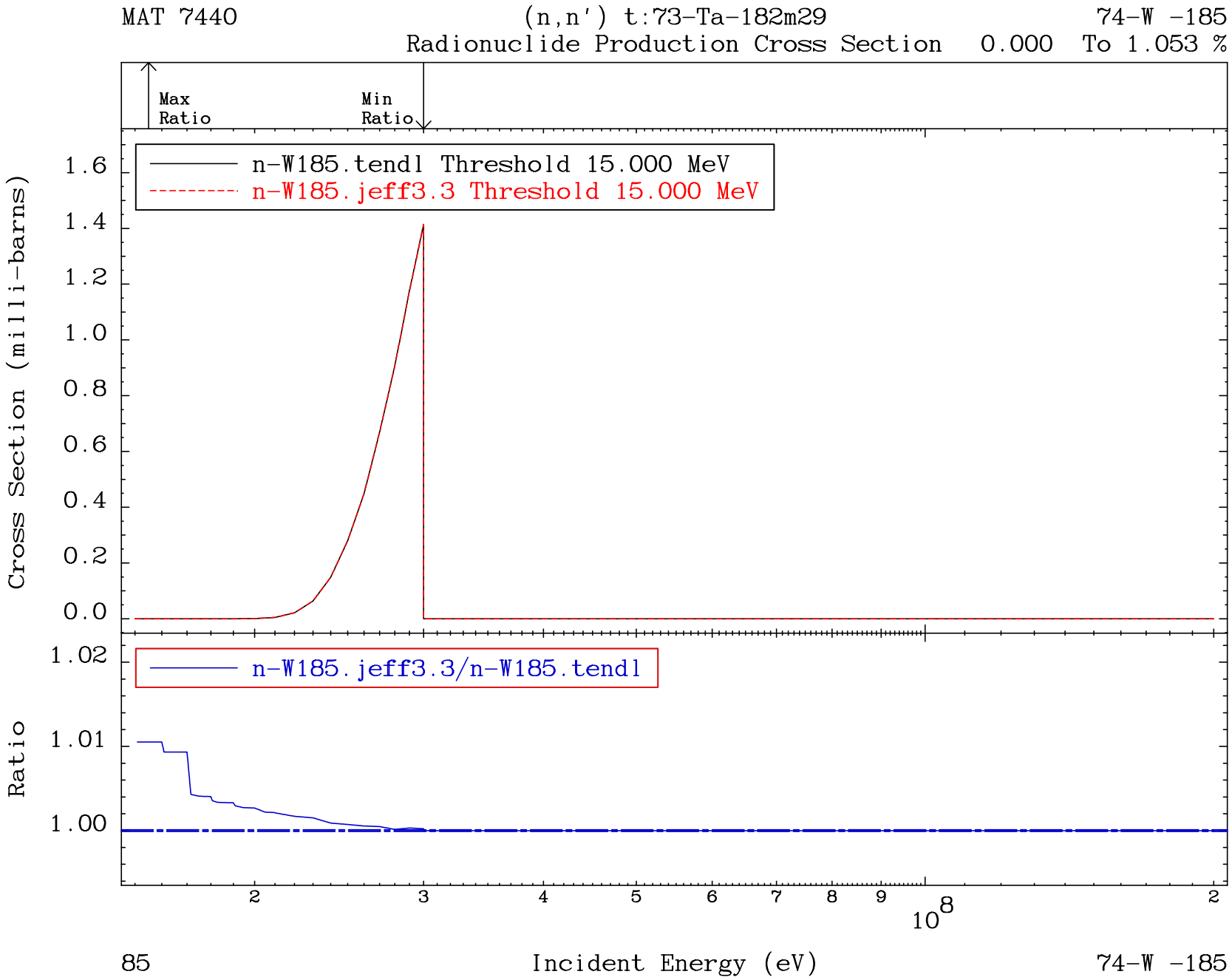

MAT 7440
(n,3n) α:72-Hf-179g
74-W -185
Radionuclide Production Cross Section -9.091 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.555 MeV
n-W185.jeff3.3 Threshold 11.555 MeV
Cross Section (micro-barns)
160
120
80
40
0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
74-W -185

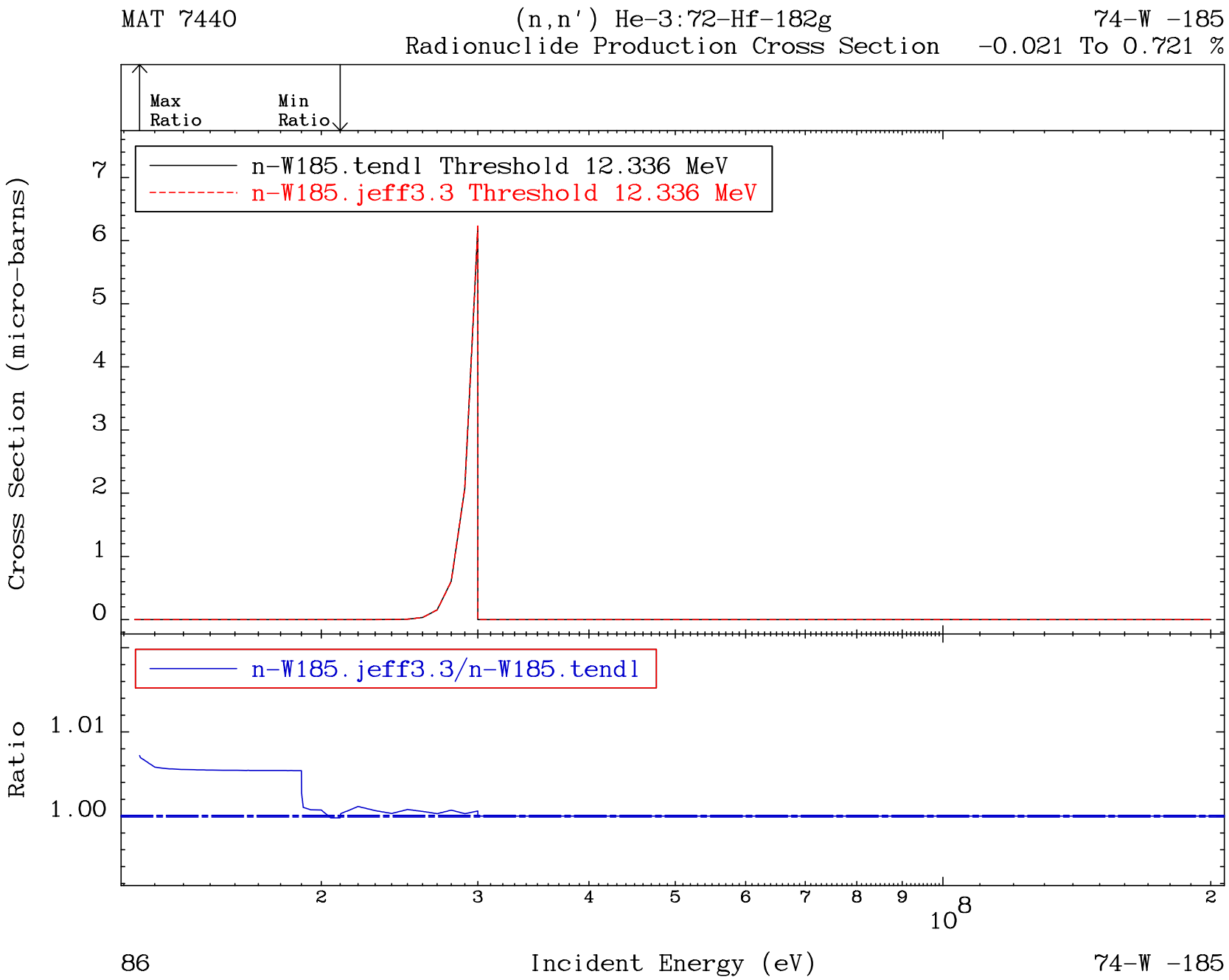

MAT 7440
(n,3n) α:72-Hf-179m5
74-W -185
Radionuclide Production Cross Section -7.572 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 17.000 MeV
n-W185.jeff3.3 Threshold 11.932 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
74-W -185

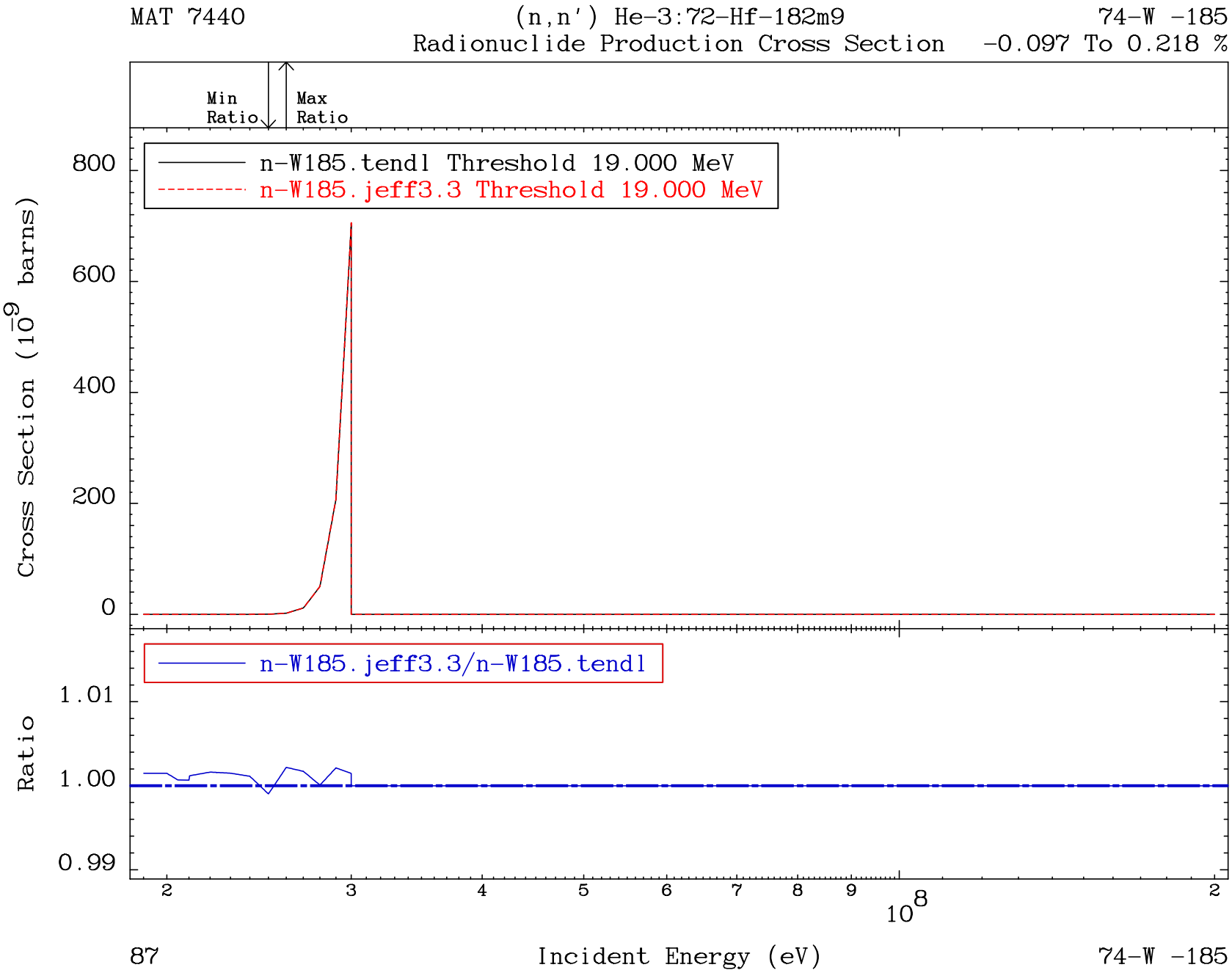

MAT 7440
(n,3n) α:72-Hf-179m10
74-W -185
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-W185.tendl Threshold 18.000 MeV
n-W185.jeff3.3 Threshold 17.000 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-W185.jeff3.3/n-W185.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
74-W -185

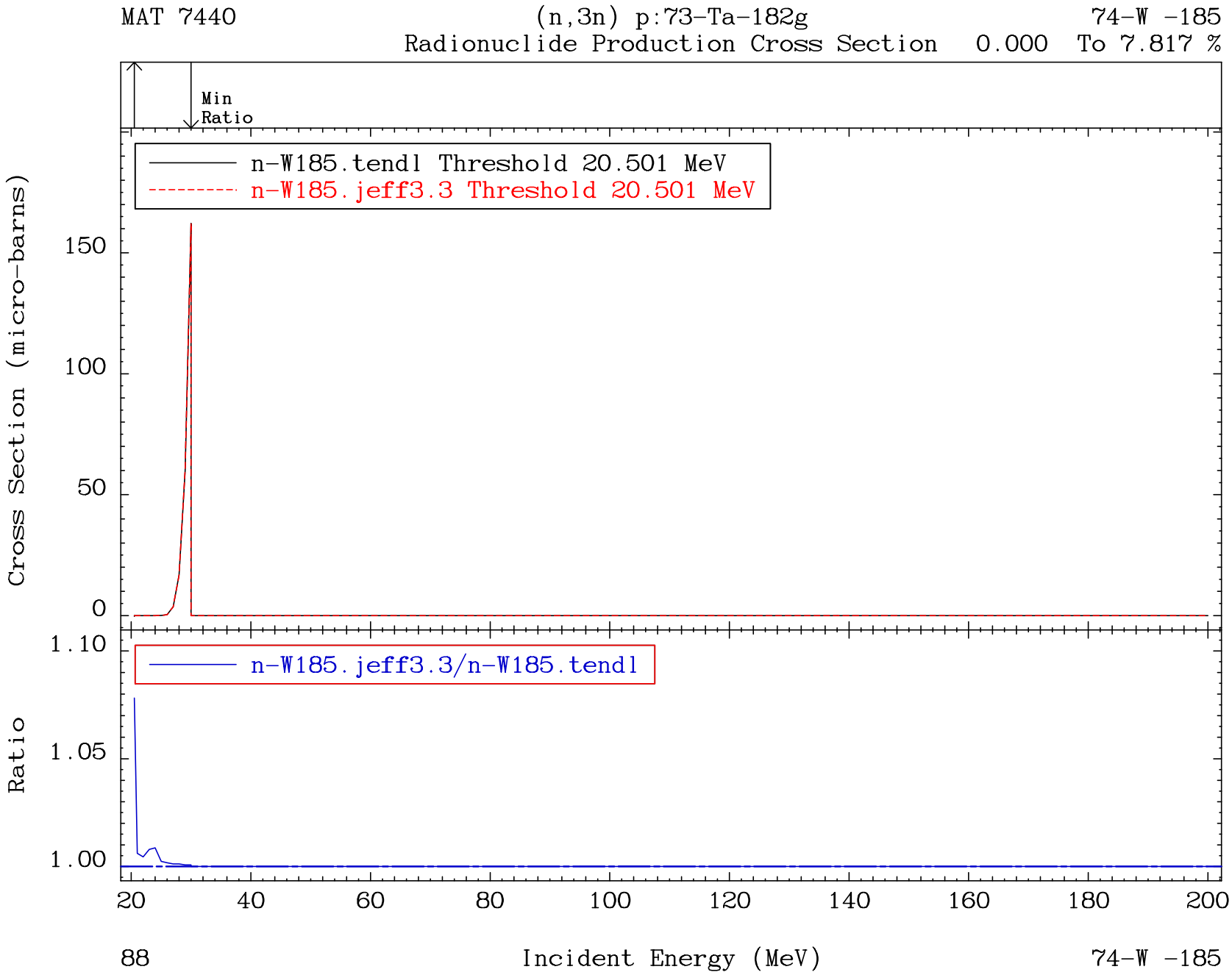

MAT 7440
(n,n') t:73-Ta-182g
74-W -185
Radionuclide Production Cross Section 0.000 To 8.091 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.973 MeV
n-W185.jeff3.3 Threshold 11.971 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
74-W -185

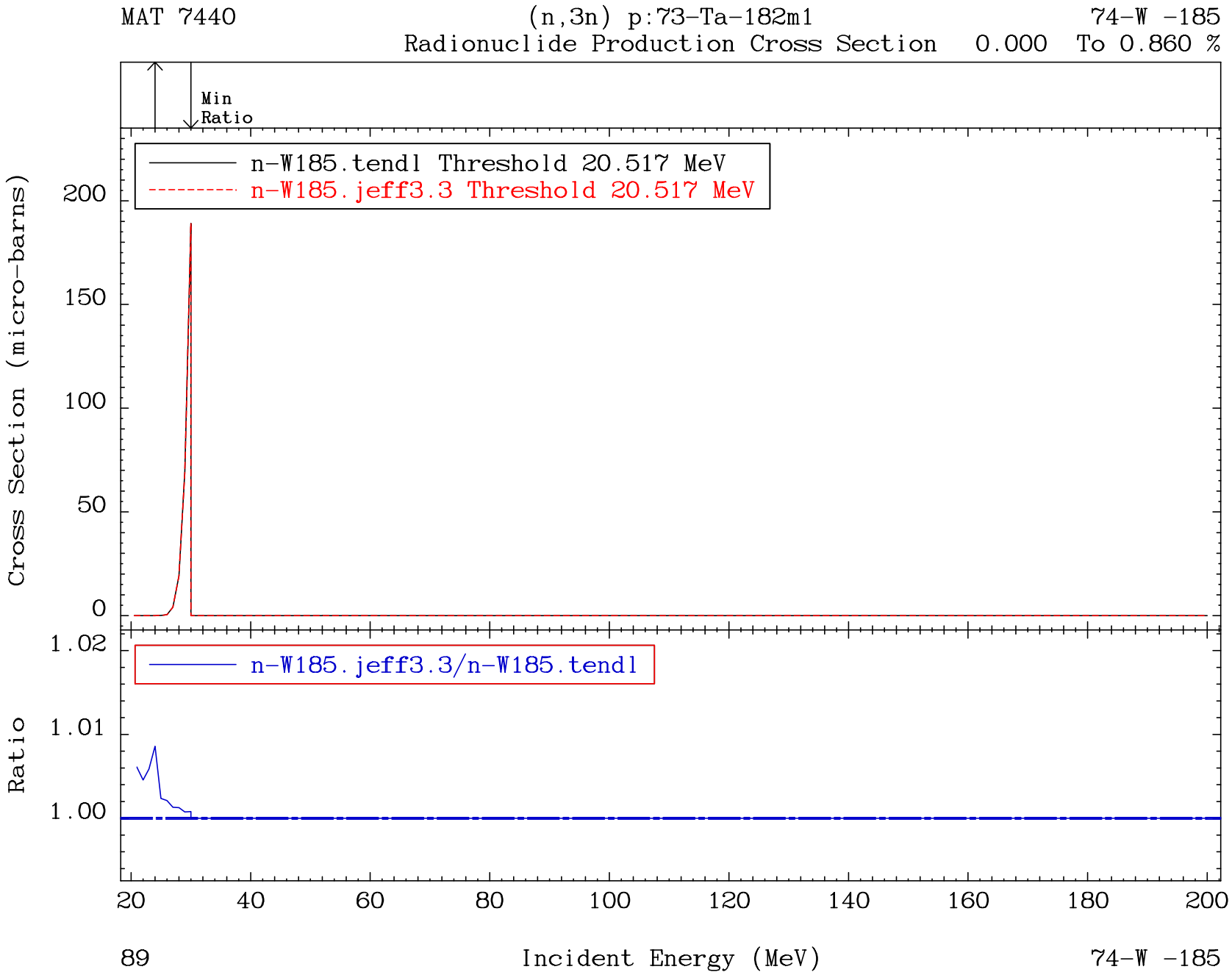

MAT 7440
(n,n') t:73-Ta-182m1
74-W -185
Radionuclide Production Cross Section 0.000 To 11.37 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 11.989 MeV
n-W185.jeff3.3 Threshold 11.989 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
74-W -185

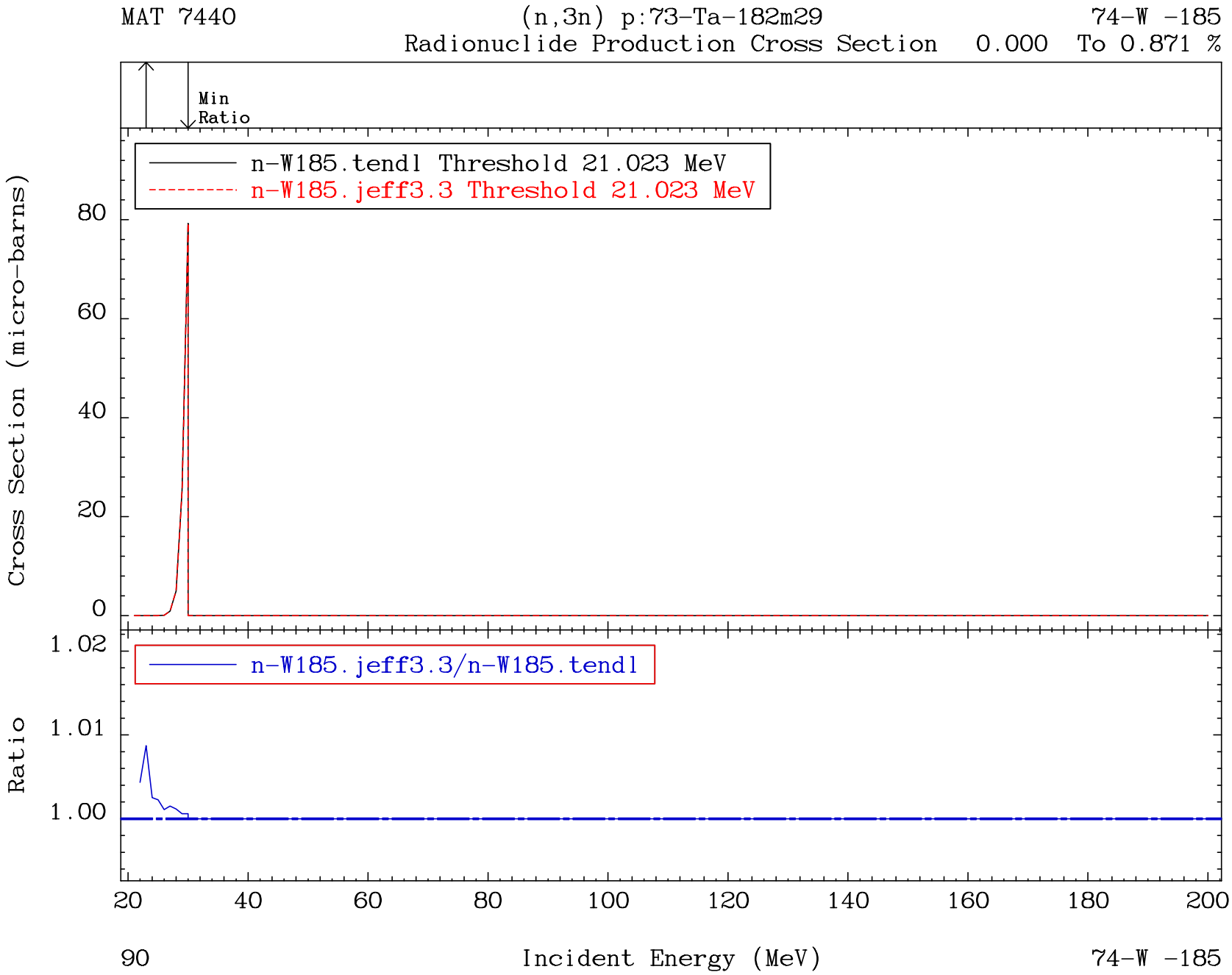

MAT 7440
(n,n') t:73-Ta-182m29
74-W -185
Radionuclide Production Cross Section 0.000 To 1.053 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 15.000 MeV
n-W185.jeff3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
74-W -185

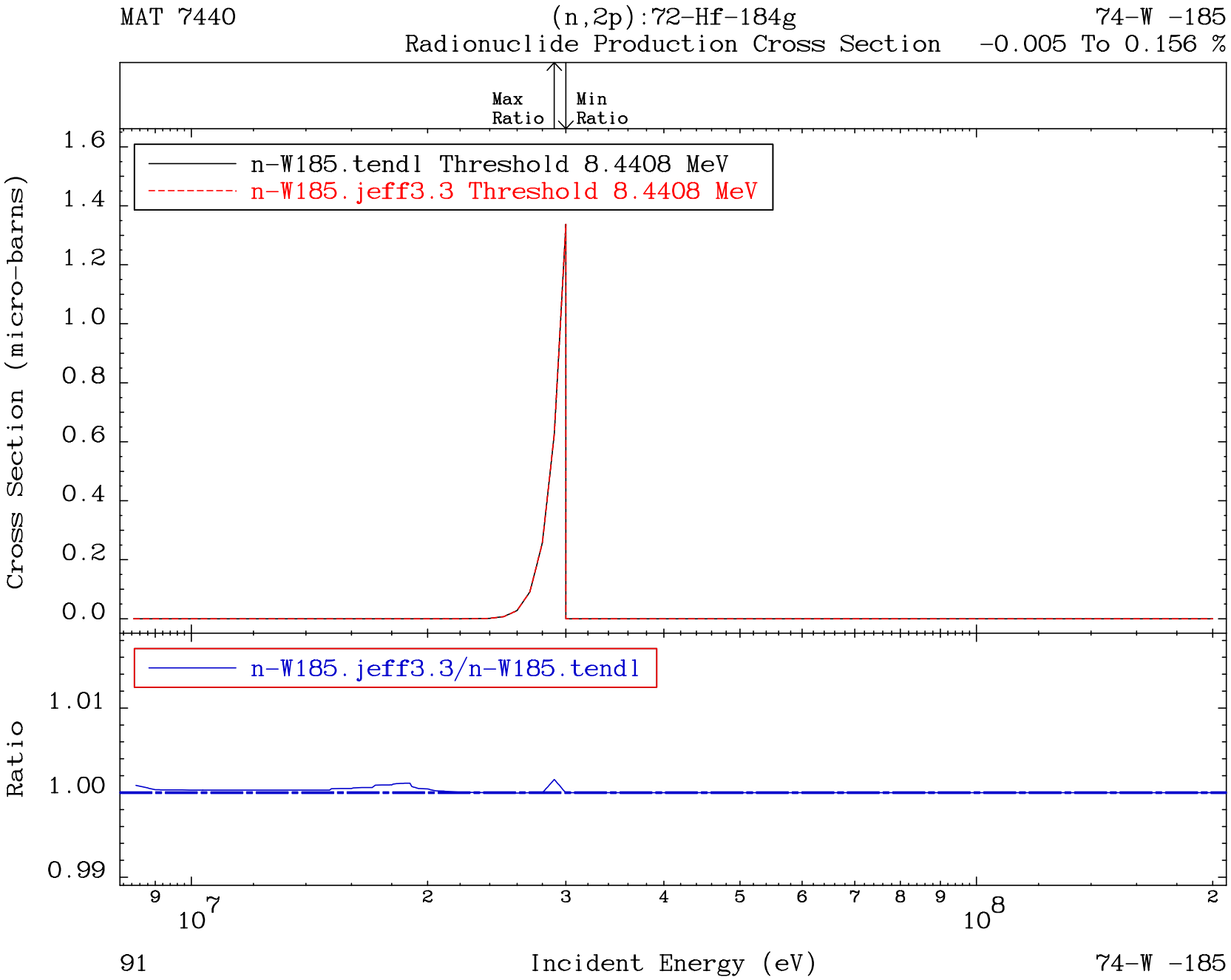

MAT 7440
(n,n') He-3:72-Hf-182g
74-W -185
Radionuclide Production Cross Section
-0.021 To 0.721 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 12.336 MeV
n-W185.jeff3.3 Threshold 12.336 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
7
n-W185.jeff3.3/n-W185.tendl
Ratio
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
74-W -185

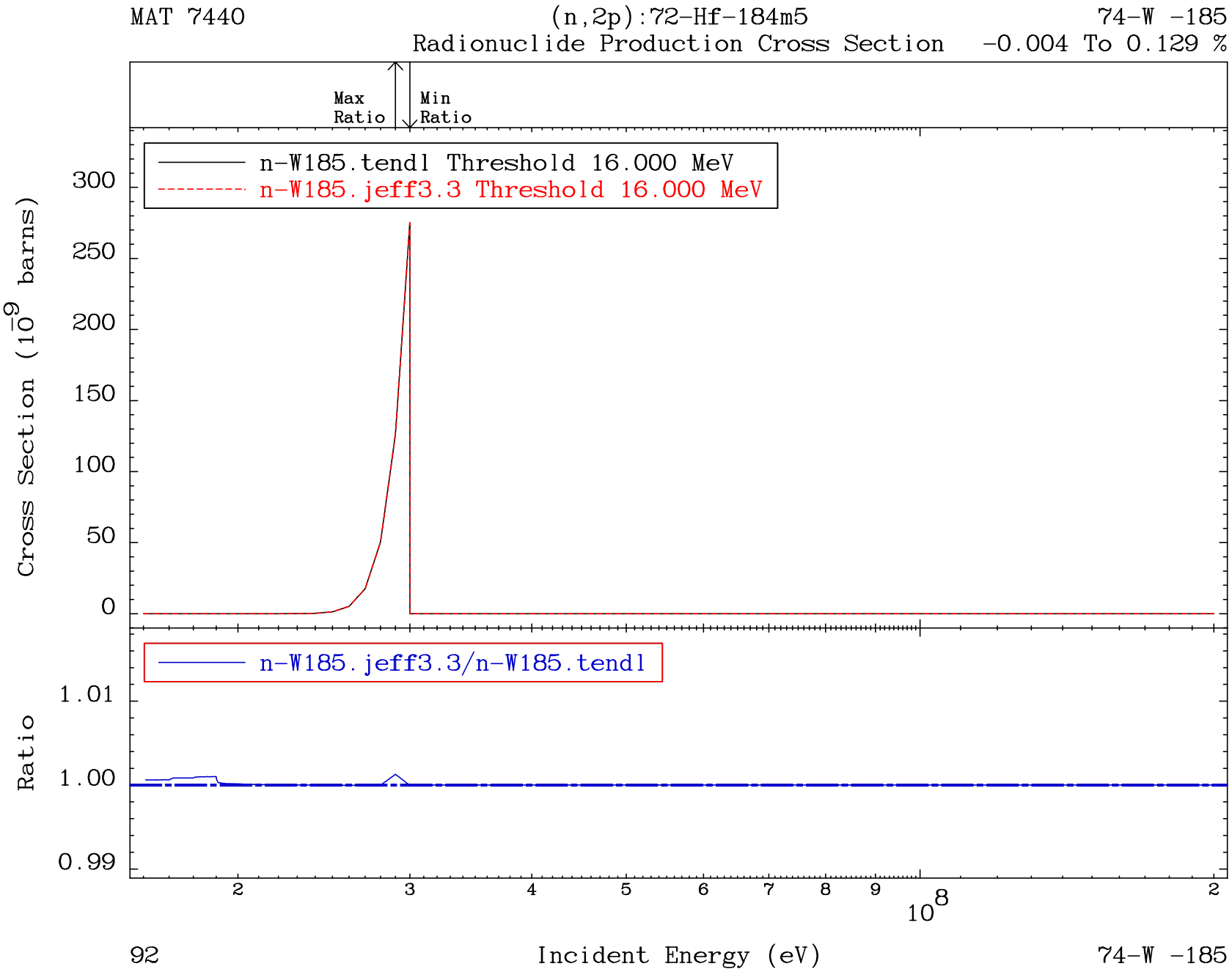

MAT 7440
(n,n') He-3:72-Hf-182m9
74-W -185
Radionuclide Production Cross Section
-0.097 To 0.218 %
Min Ratio
Max Ratio
n-W185.tendl Threshold 19.000 MeV
n-W185.jeff3.3 Threshold 19.000 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
74-W -185


MAT 7440
(n,3n) p:73-Ta-182g
74-W -185
Radionuclide Production Cross Section 0.000 To 7.817 %
Min Ratio
n-W185.tendl Threshold 20.501 MeV
n-W185.jeff3.3 Threshold 20.501 MeV
Cross Section (micro-barns)
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.10
1.05
1.00
20
40
60
80
100
120
140
160
180
200
88
Incident Energy (MeV)
74-W -185


MAT 7440
(n,3n) p:73-Ta-182m1
74-W -185
Radionuclide Production Cross Section 0.000 To 0.860 %
Min Ratio
n-W185.tendl Threshold 20.517 MeV
n-W185.jeff3.3 Threshold 20.517 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.02
1.01
1.00
20
40
60
80
100
120
140
160
180
200
89
Incident Energy (MeV)
74-W -185


MAT 7440
(n,3n) p:73-Ta-182m29
74-W -185
Radionuclide Production Cross Section 0.000 To 0.871 %
Min
Ratio
n-W185.tendl Threshold 21.023 MeV
n-W185.jeff3.3 Threshold 21.023 MeV
Cross Section (micro-barns)
80
60
40
20
0
1.02
1.01
1.00
Ratio
n-W185.jeff3.3/n-W185.tendl
20
40
60
80
100
120
140
160
180
200
90
Incident Energy (MeV)
74-W -185


MAT 7440
(n,2p):72-Hf-184g
74-W -185
Radionuclide Production Cross Section -0.005 To 0.156 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 8.4408 MeV
n-W185.jeff3.3 Threshold 8.4408 MeV
Cross Section (micro-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
74-W -185


MAT 7440
(n,2p):72-Hf-184m5
74-W -185
Radionuclide Production Cross Section
-0.004 To 0.129 %
Max Ratio
Min Ratio
n-W185.tendl Threshold 16.000 MeV
n-W185.jeff3.3 Threshold 16.000 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
n-W185.jeff3.3/n-W185.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
74-W -185