Program Complot
(Version 2018-1)
by
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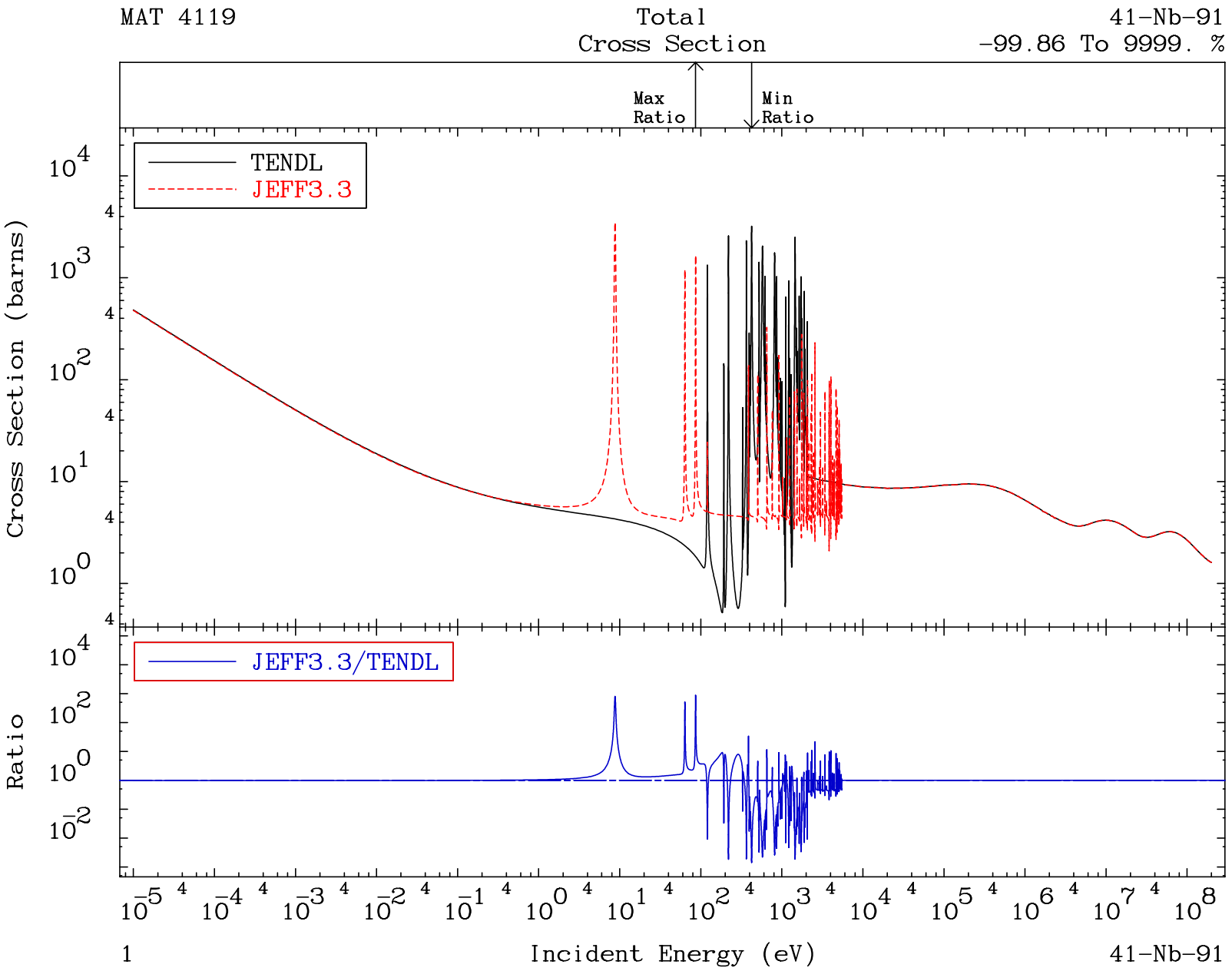
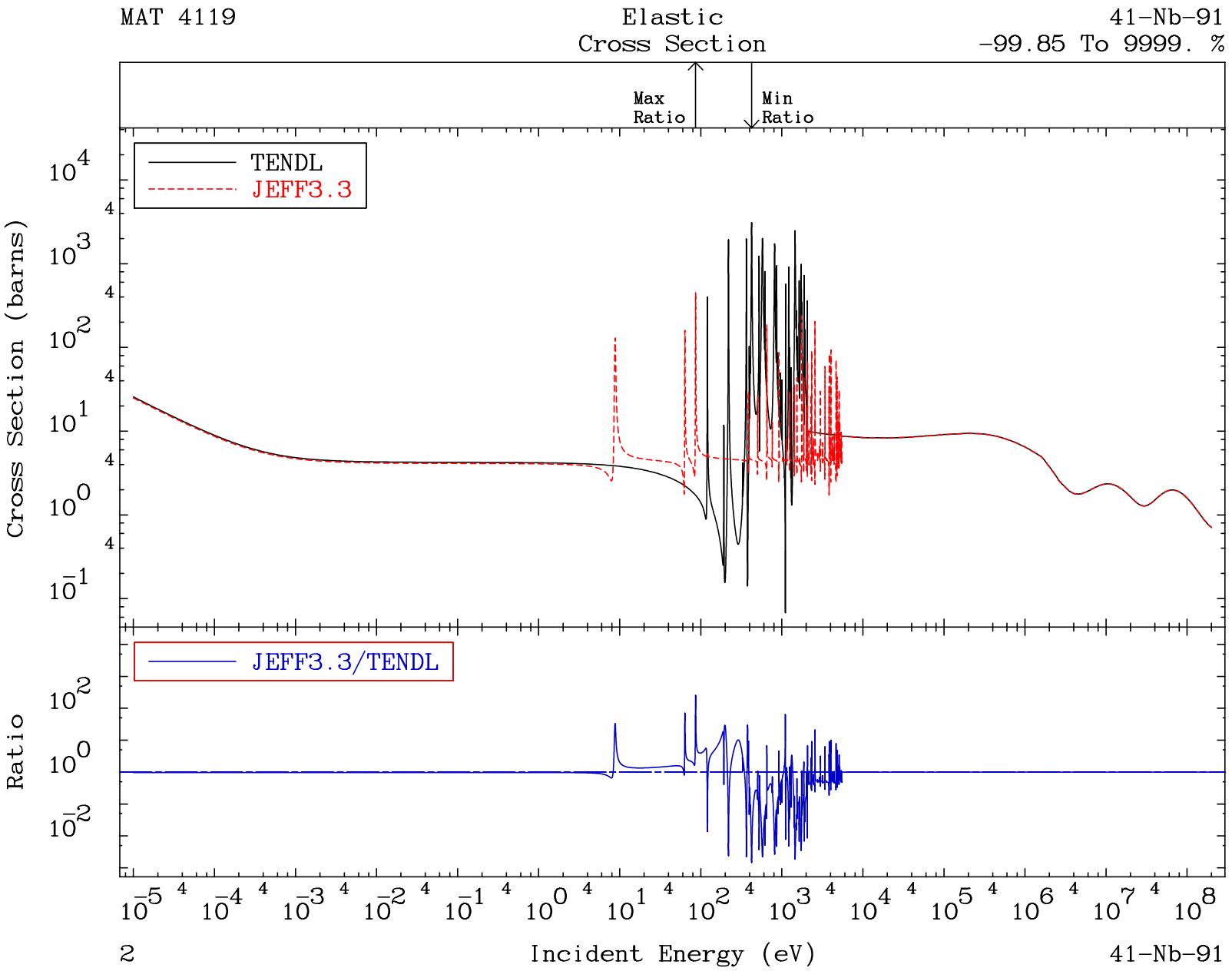
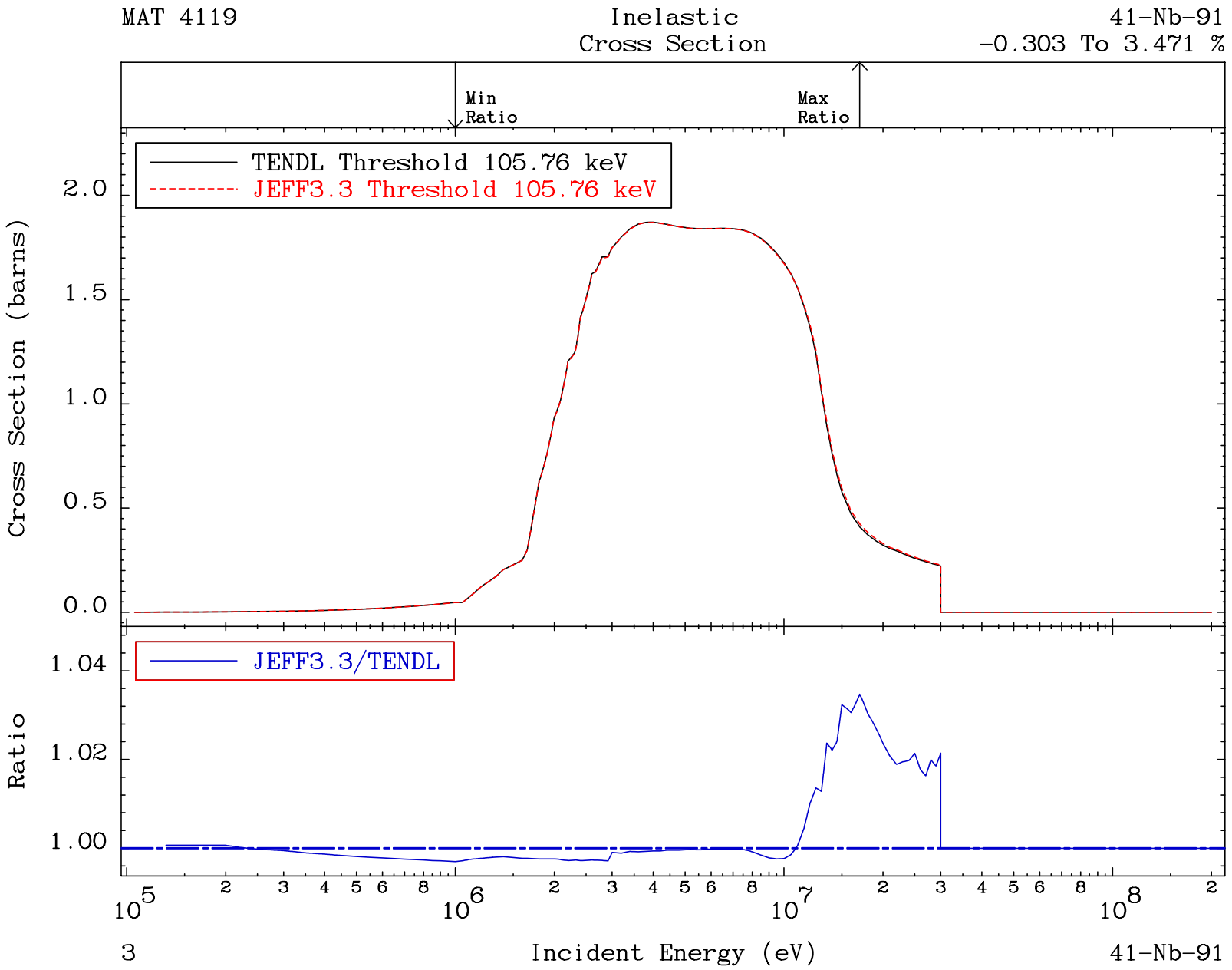
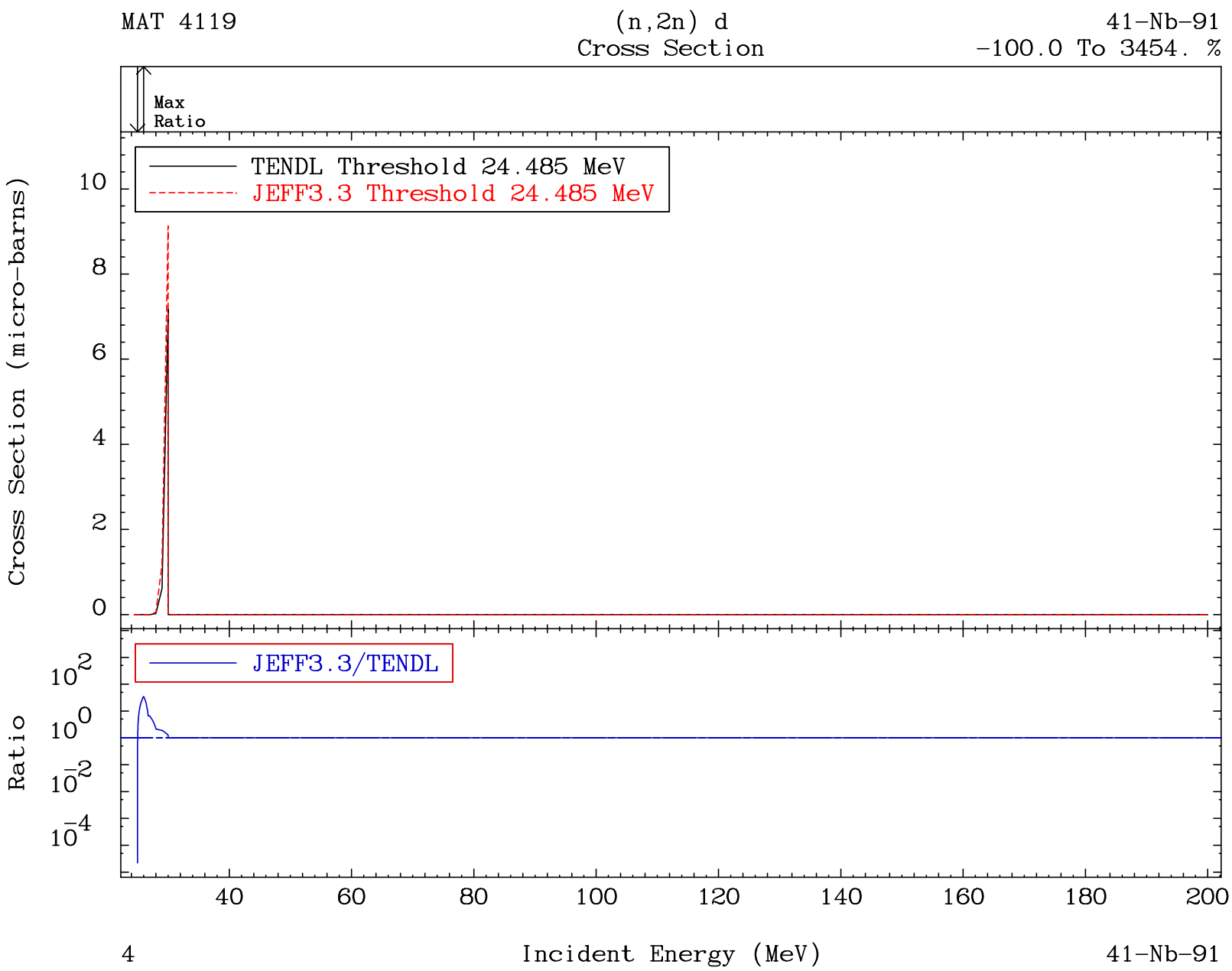
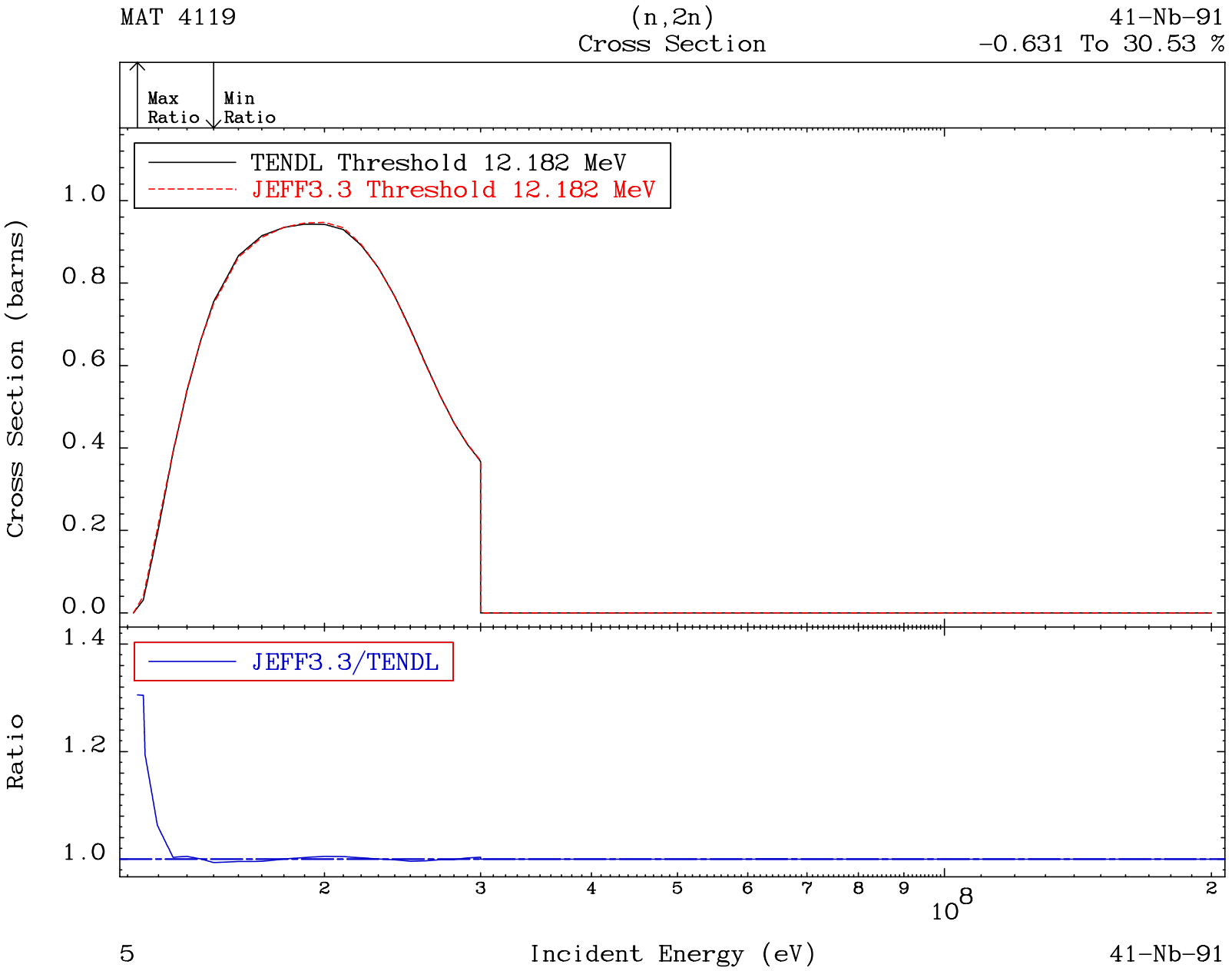
Press Mouse Button to Start

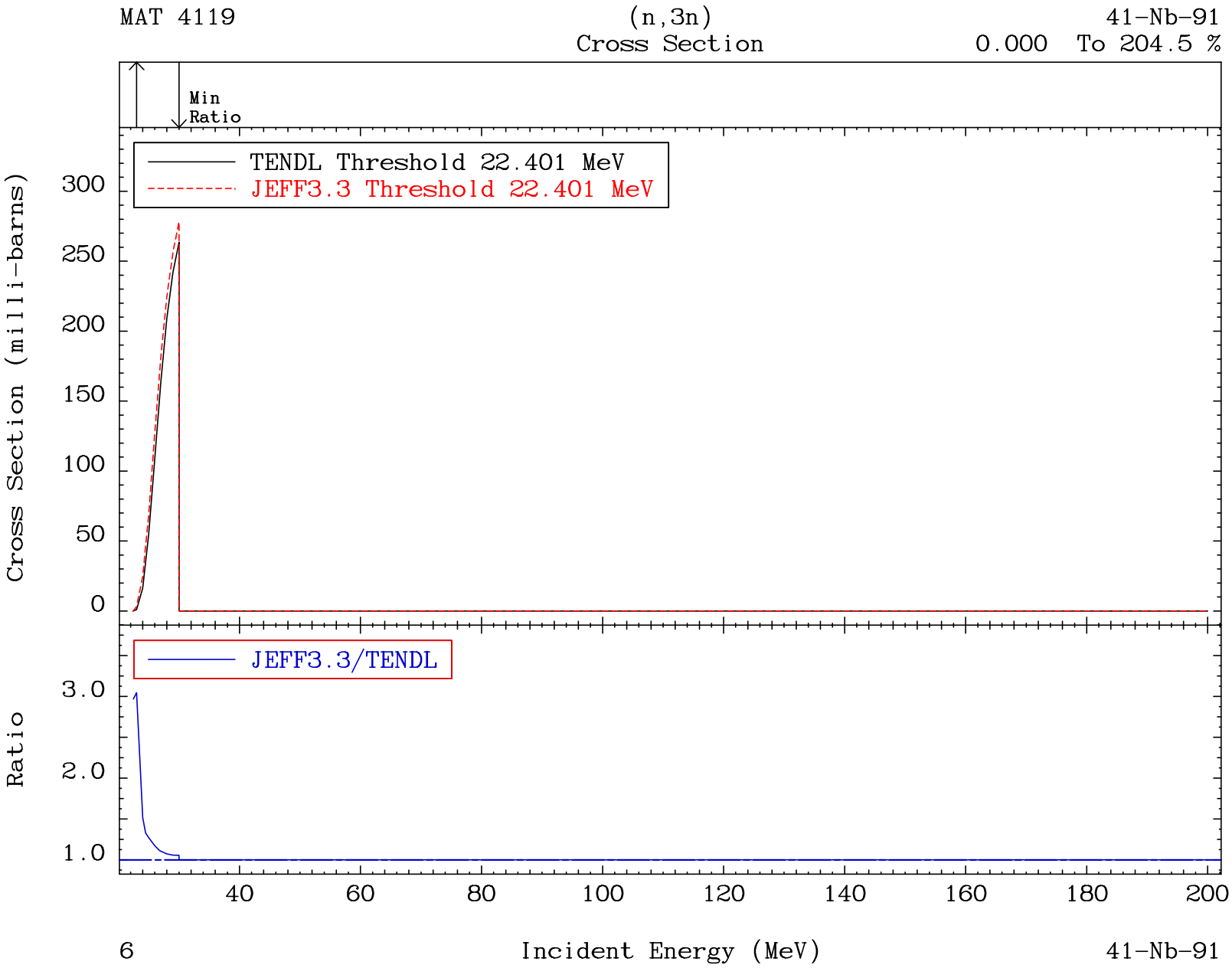

MAT 4119
Total
Cross Section
41-Nb-91
-99.86 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
41-Nb-91

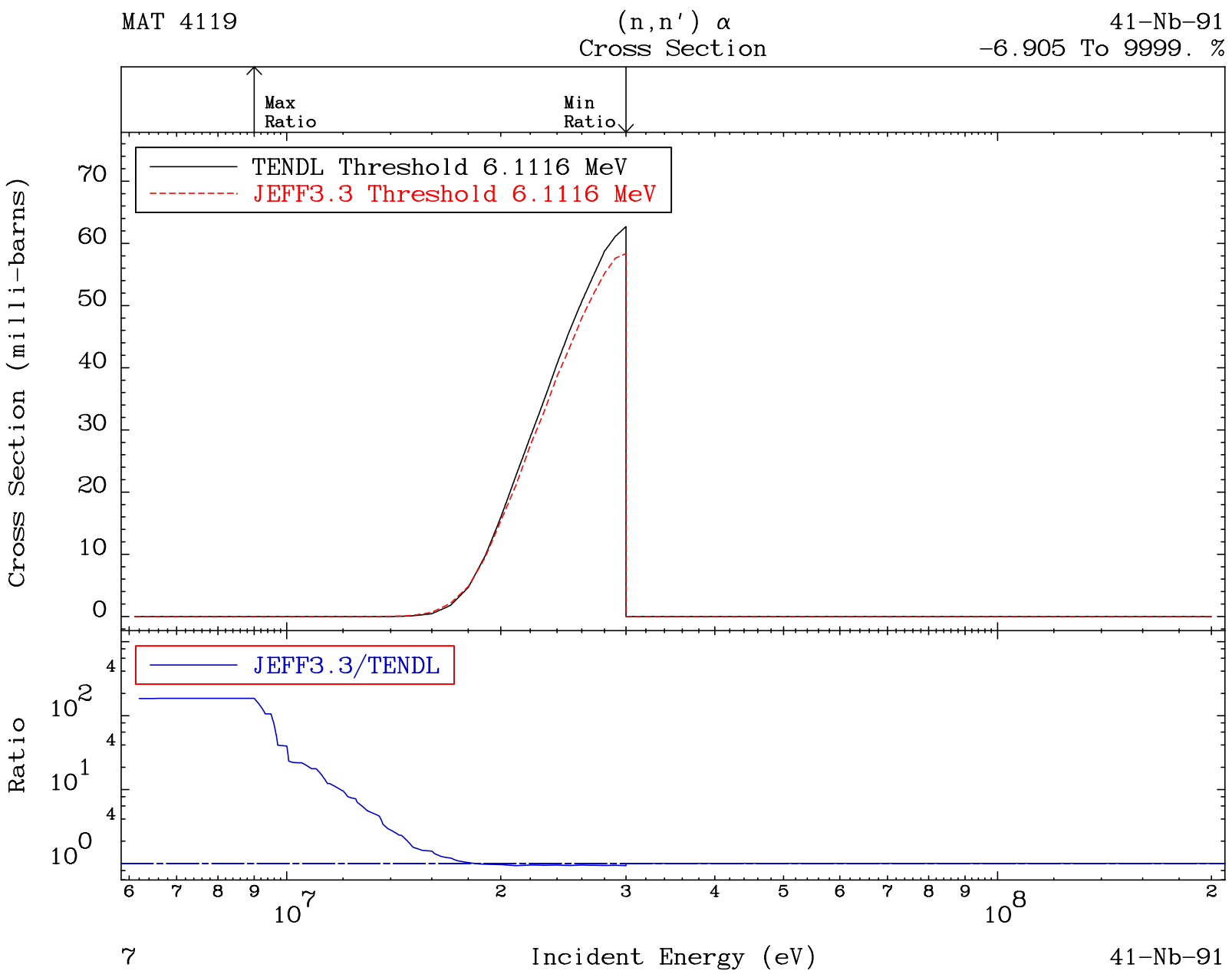

MAT 4119
Elastic
Cross Section
41-Nb-91
-99.85 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
41-Nb-91

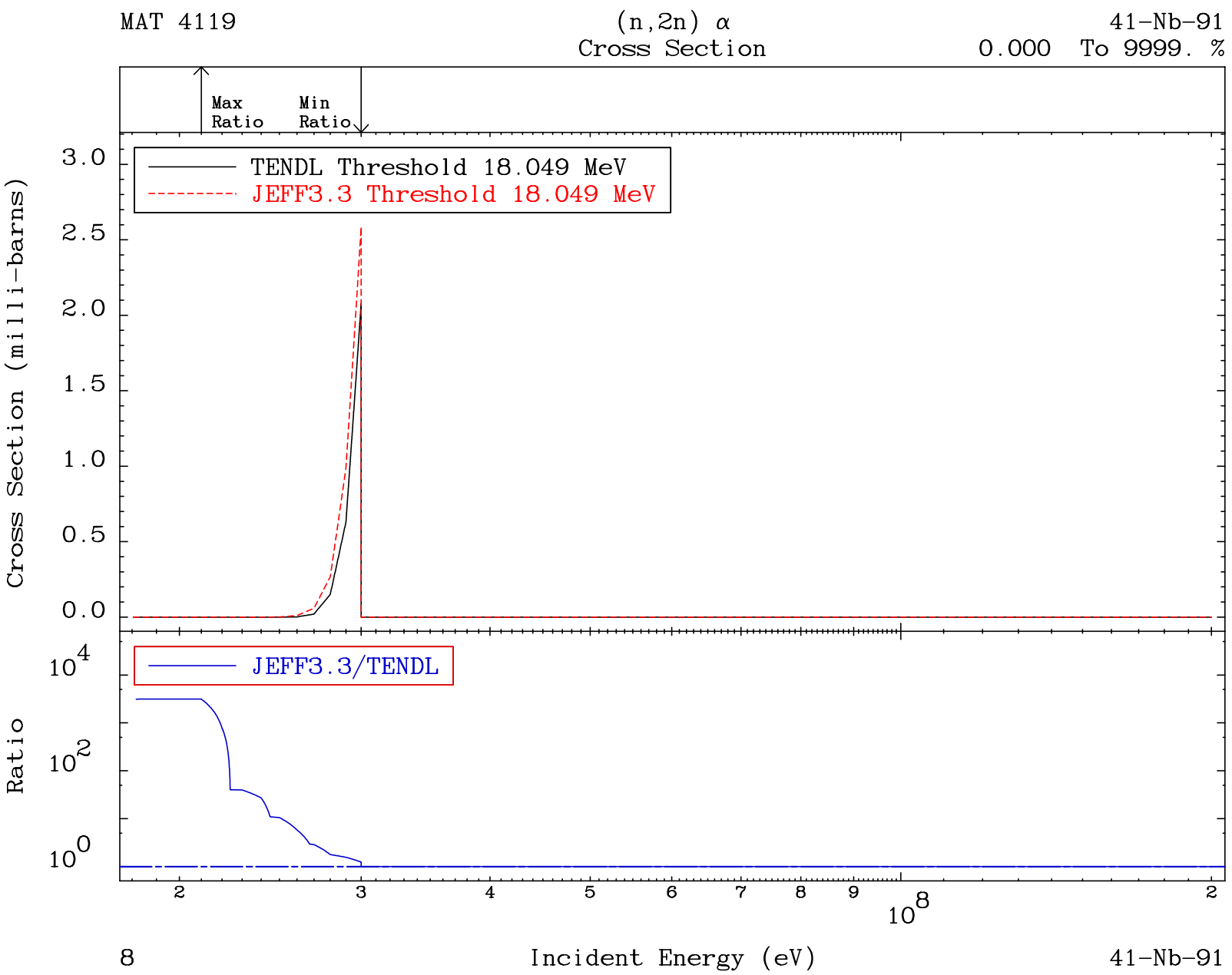

MAT 4119
Inelastic
Cross Section
41-Nb-91
-0.303 To 3.471 %
Min
Ratio
Max
Ratio
TENDL Threshold 105.76 keV
JEFF3.3 Threshold 105.76 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
41-Nb-91

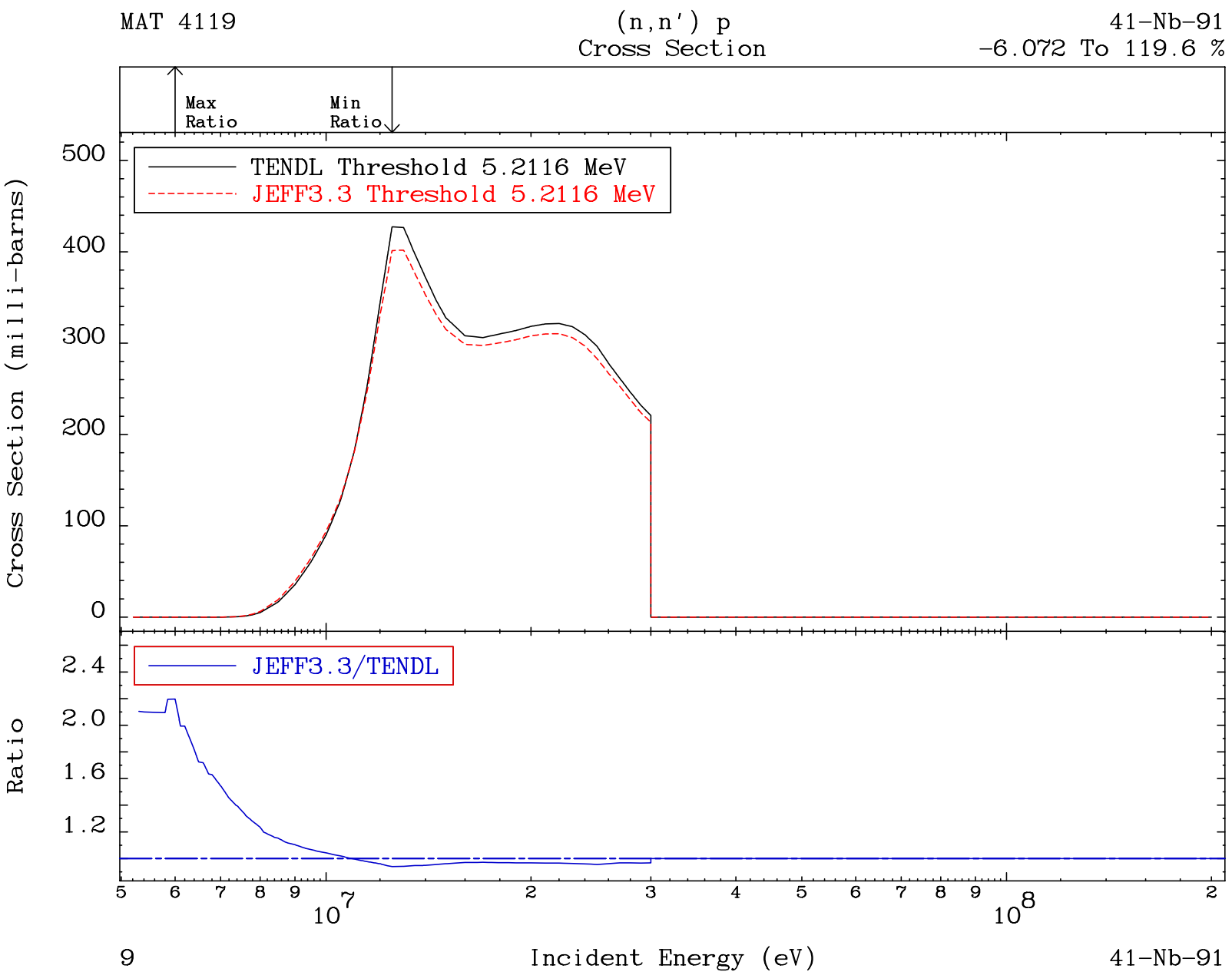

MAT 4119
(n,2n) d
Cross Section
41-Nb-91
-100.0 To 3454. %
Max
Ratio
TENDL Threshold 24.485 MeV
JEFF3.3 Threshold 24.485 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
JEFF3.3/TENDL
Ratio
10^{2}
10^{0}
10^{-2}
10^{-4}
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
41-Nb-91

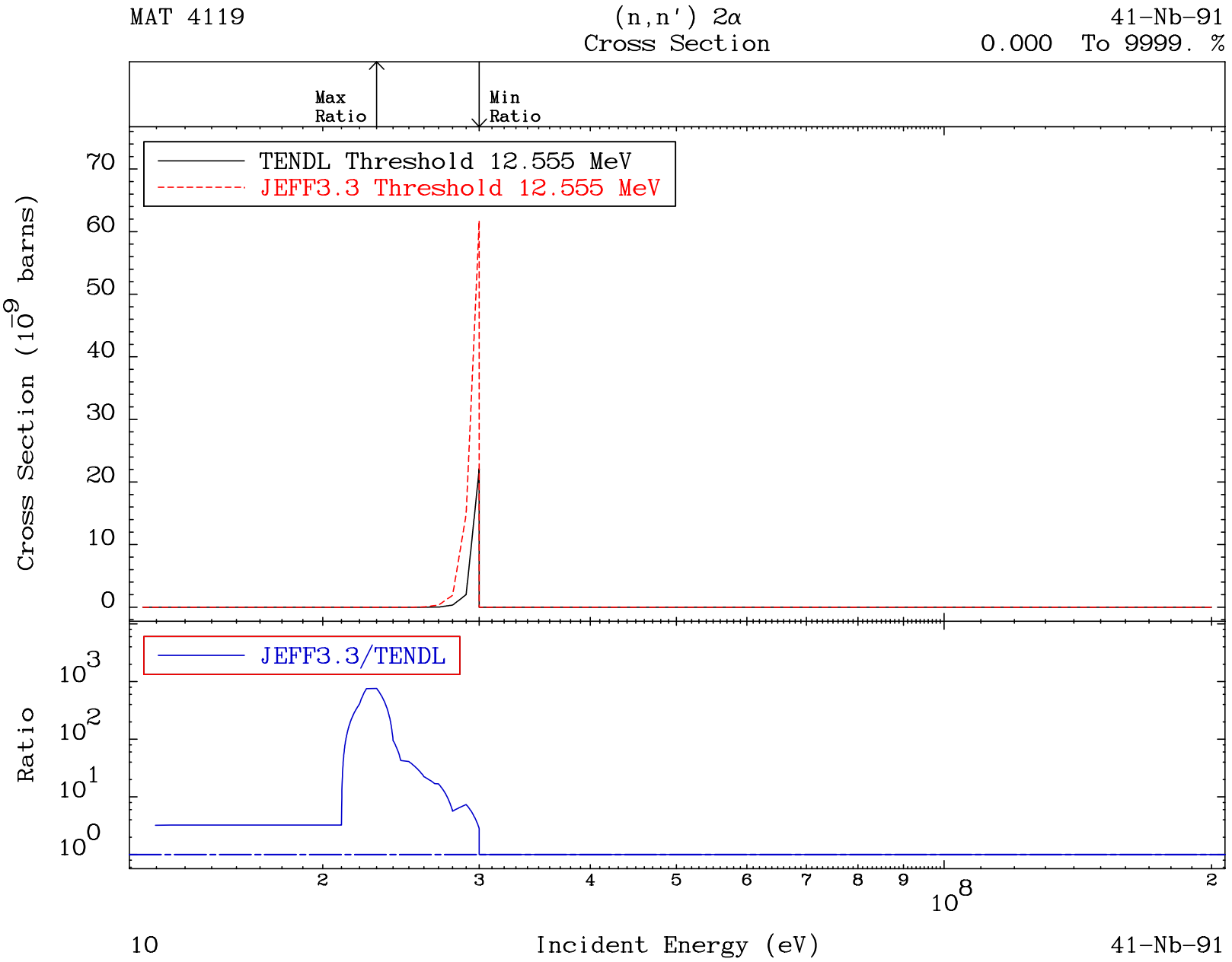

MAT 4119
(n,2n)
Cross Section
41-Nb-91
-0.631 To 30.53 %
Max Ratio
Min Ratio
TENDL Threshold 12.182 MeV
JEFF3.3 Threshold 12.182 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
41-Nb-91

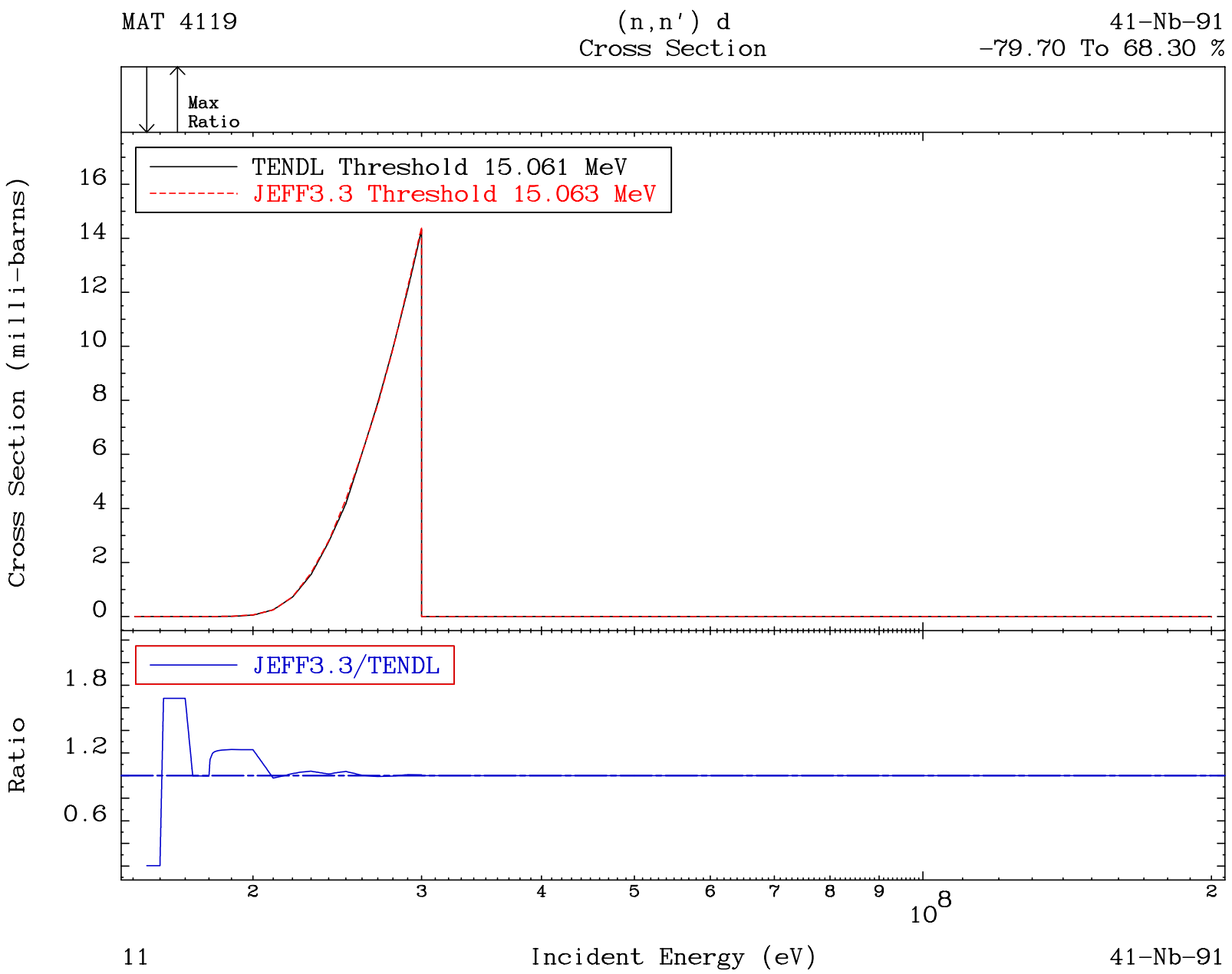

MAT 4119
(n,3n)
Cross Section
41-Nb-91
0.000 To 204.5 %
Min
Ratio
TENDL Threshold 22.401 MeV
JEFF3.3 Threshold 22.401 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
40
60
80
100
120
140
160
180
200
6
Incident Energy (MeV)
41-Nb-91

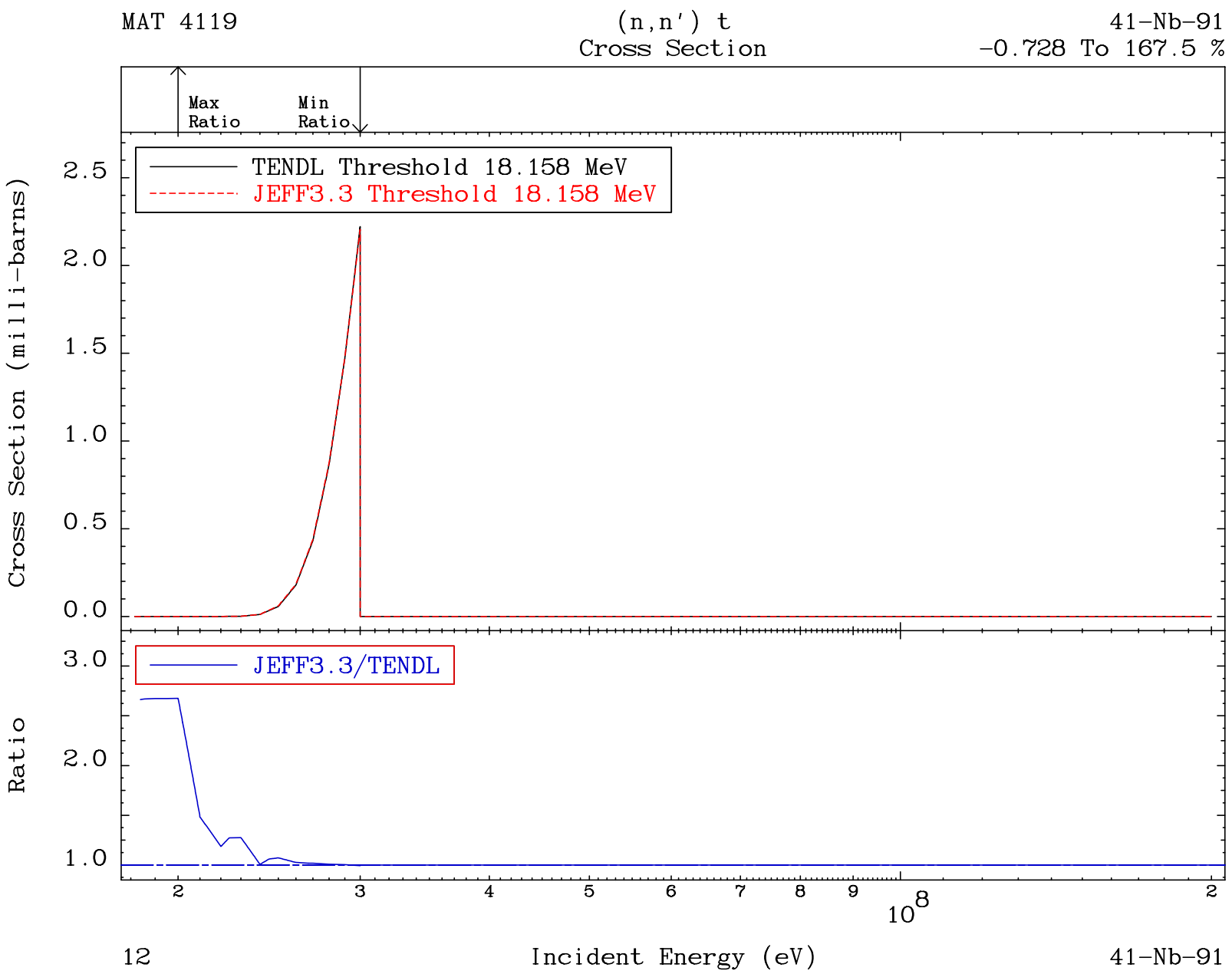

MAT 4119
(n,n') α
Cross Section
41-Nb-91
-6.905 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1116 MeV
JEFF3.3 Threshold 6.1116 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
7
41-Nb-91

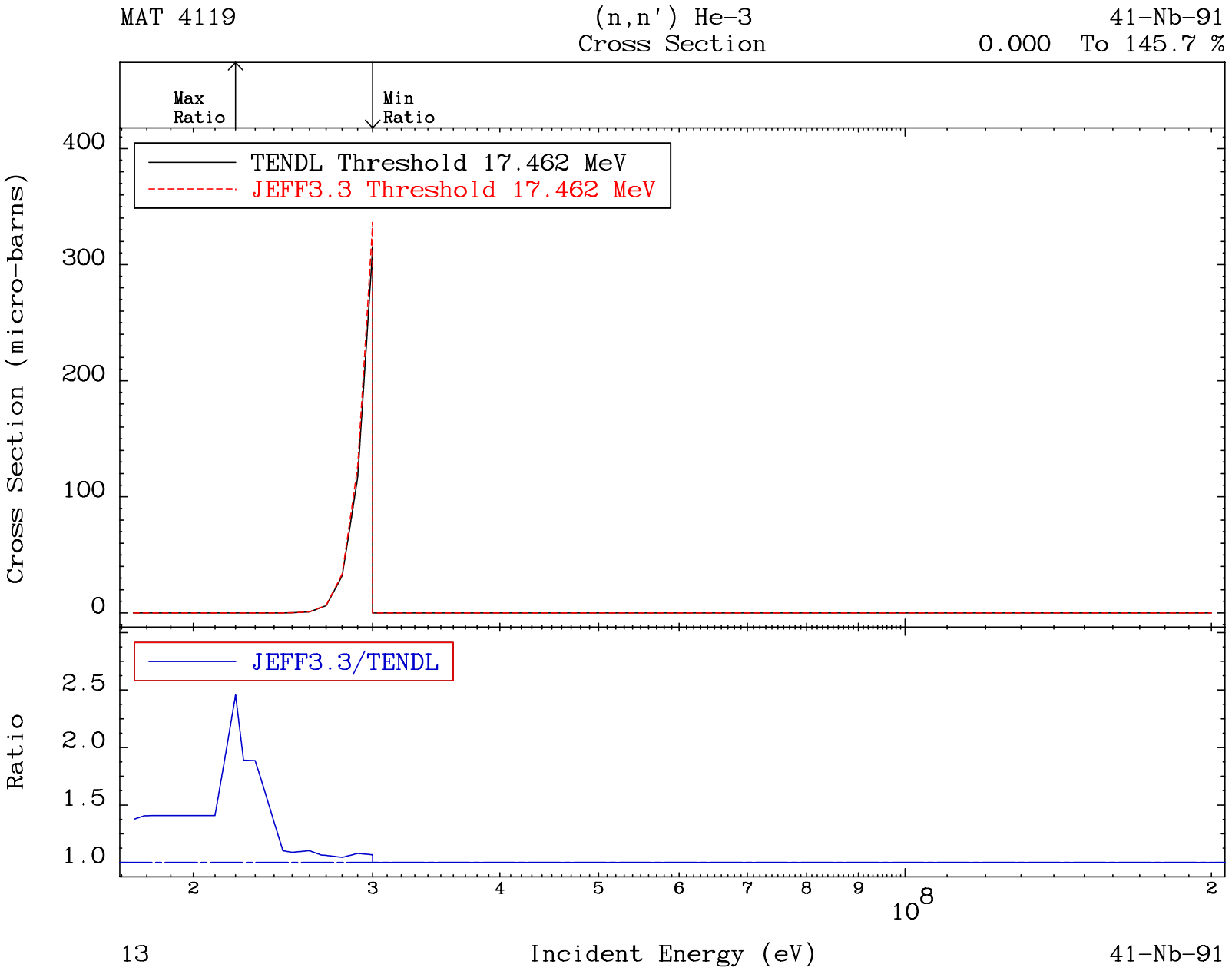

MAT 4119
(n,2n) α
Cross Section
41-Nb-91
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.049 MeV
JEFF3.3 Threshold 18.049 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
41-Nb-91

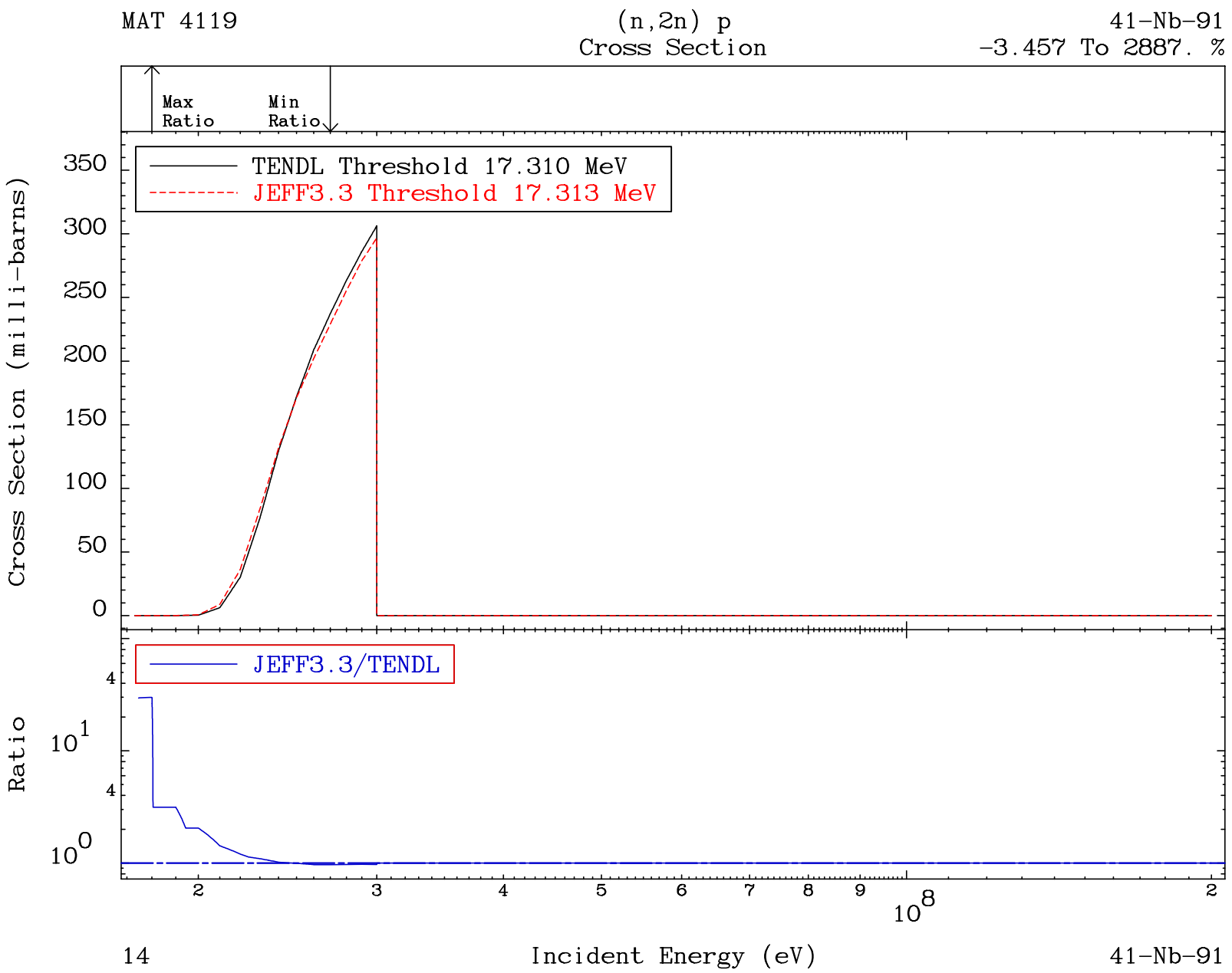

MAT 4119
(n,n') p
Cross Section
41-Nb-91
-6.072 To 119.6 %
Max Ratio
Min Ratio
TENDL Threshold 5.2116 MeV
JEFF3.3 Threshold 5.2116 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
41-Nb-91

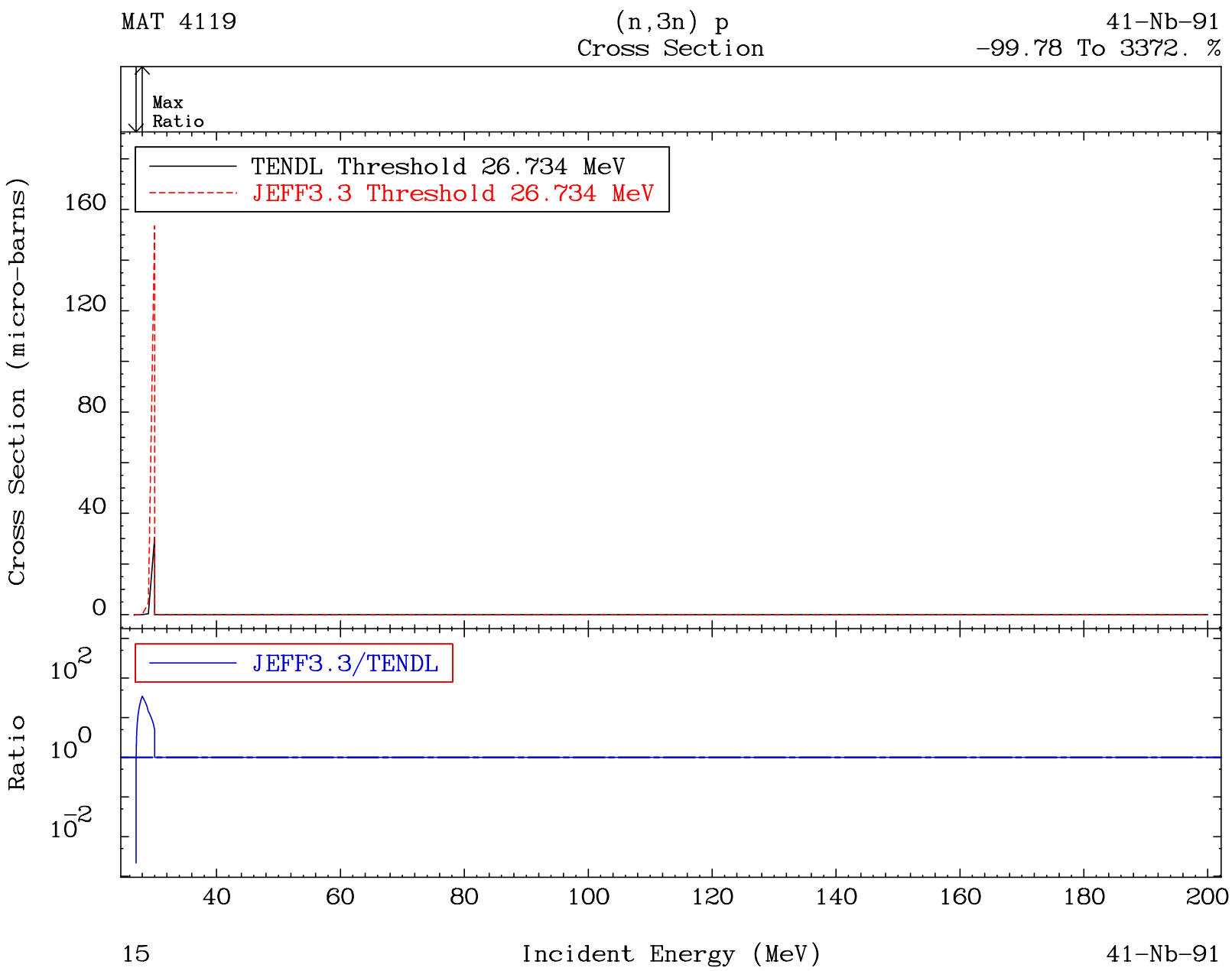

MAT 4119
(n,n') 2α
Cross Section
41-Nb-91
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.555 MeV
JEFF3.3 Threshold 12.555 MeV
Cross Section (10^-9 barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
41-Nb-91

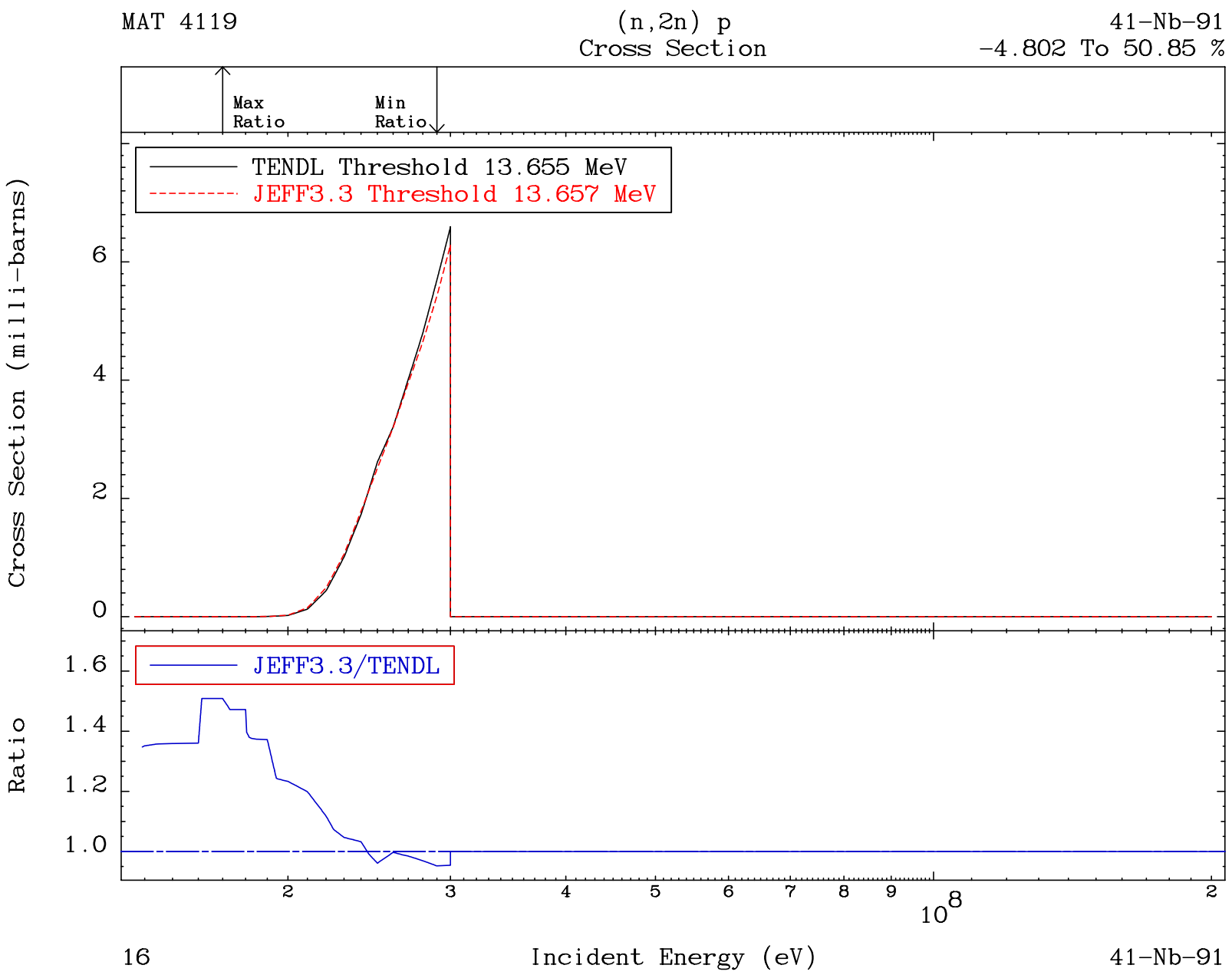

MAT 4119
(n,n') d
Cross Section
41-Nb-91
-79.70 To 68.30 %
Max
Ratio
TENDL Threshold 15.061 MeV
JEFF3.3 Threshold 15.063 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.8
1.2
0.6
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
41-Nb-91

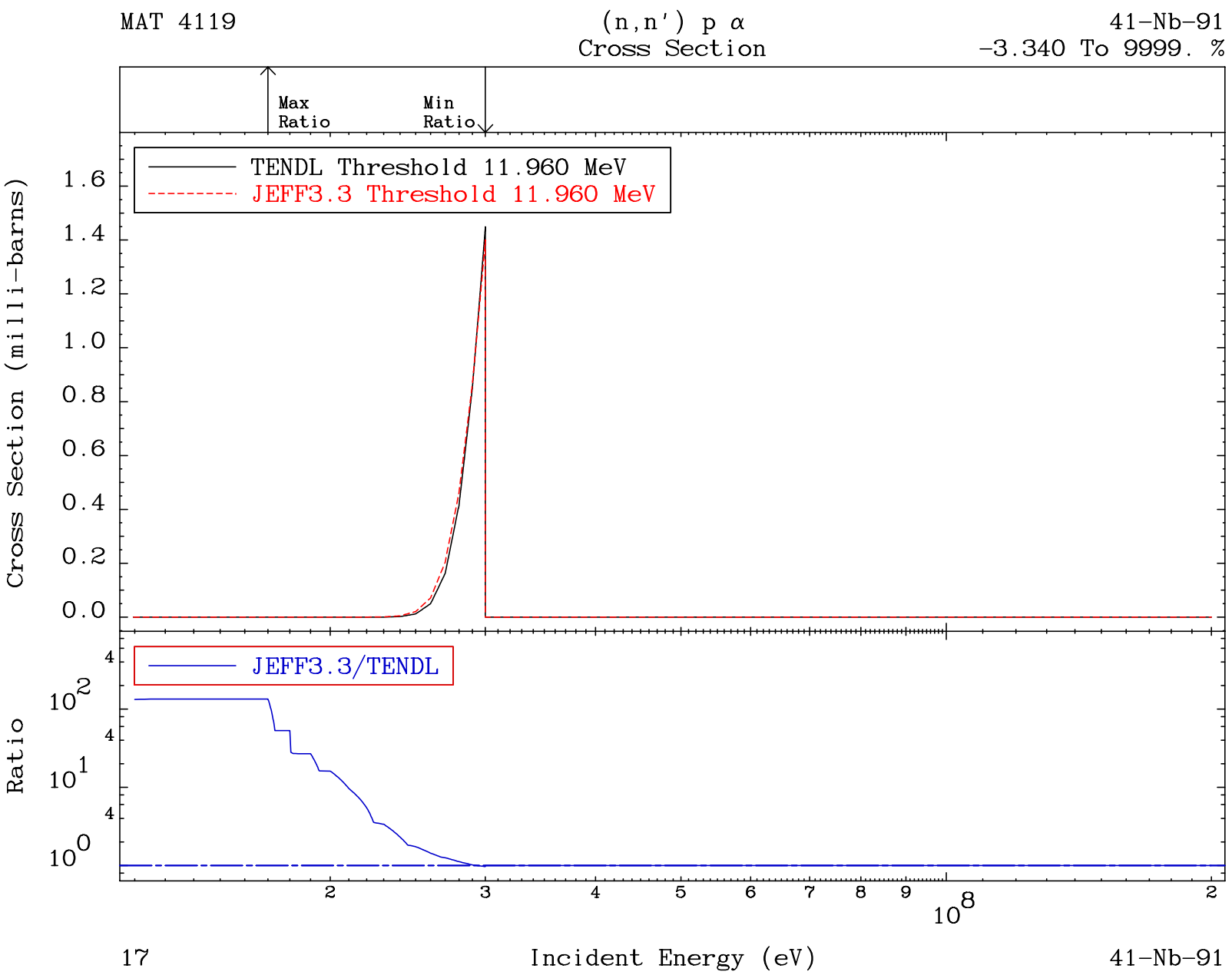

MAT 4119
(n,n') t
Cross Section
41-Nb-91
-0.728 To 167.5 %
Max Ratio
Min Ratio
TENDL Threshold 18.158 MeV
JEFF3.3 Threshold 18.158 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
41-Nb-91

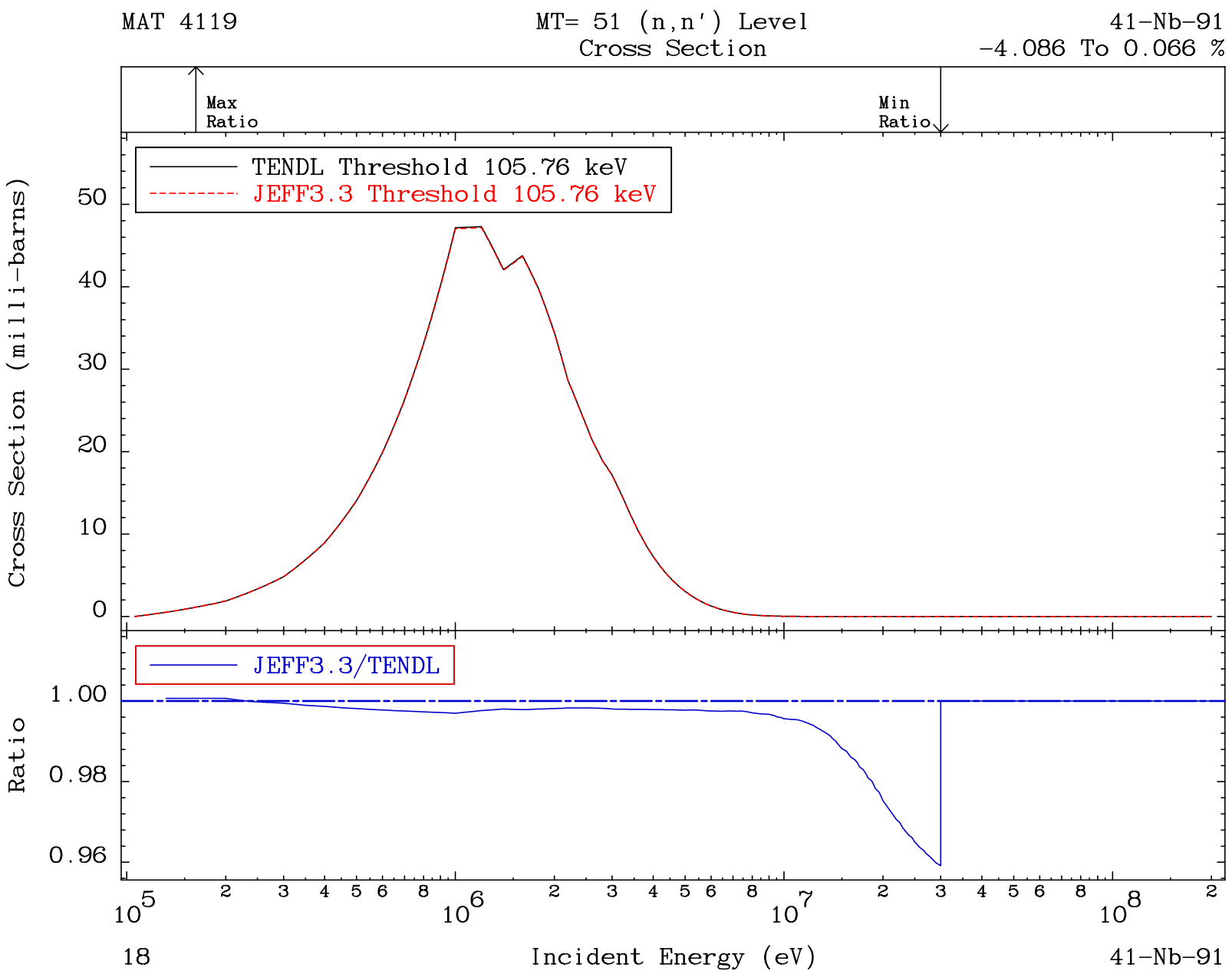

MAT 4119
(n,n') He-3
Cross Section
41-Nb-91
0.000 To 145.7 %
Max Ratio
Min Ratio
TENDL Threshold 17.462 MeV
JEFF3.3 Threshold 17.462 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.5
2.0
1.5
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
41-Nb-91

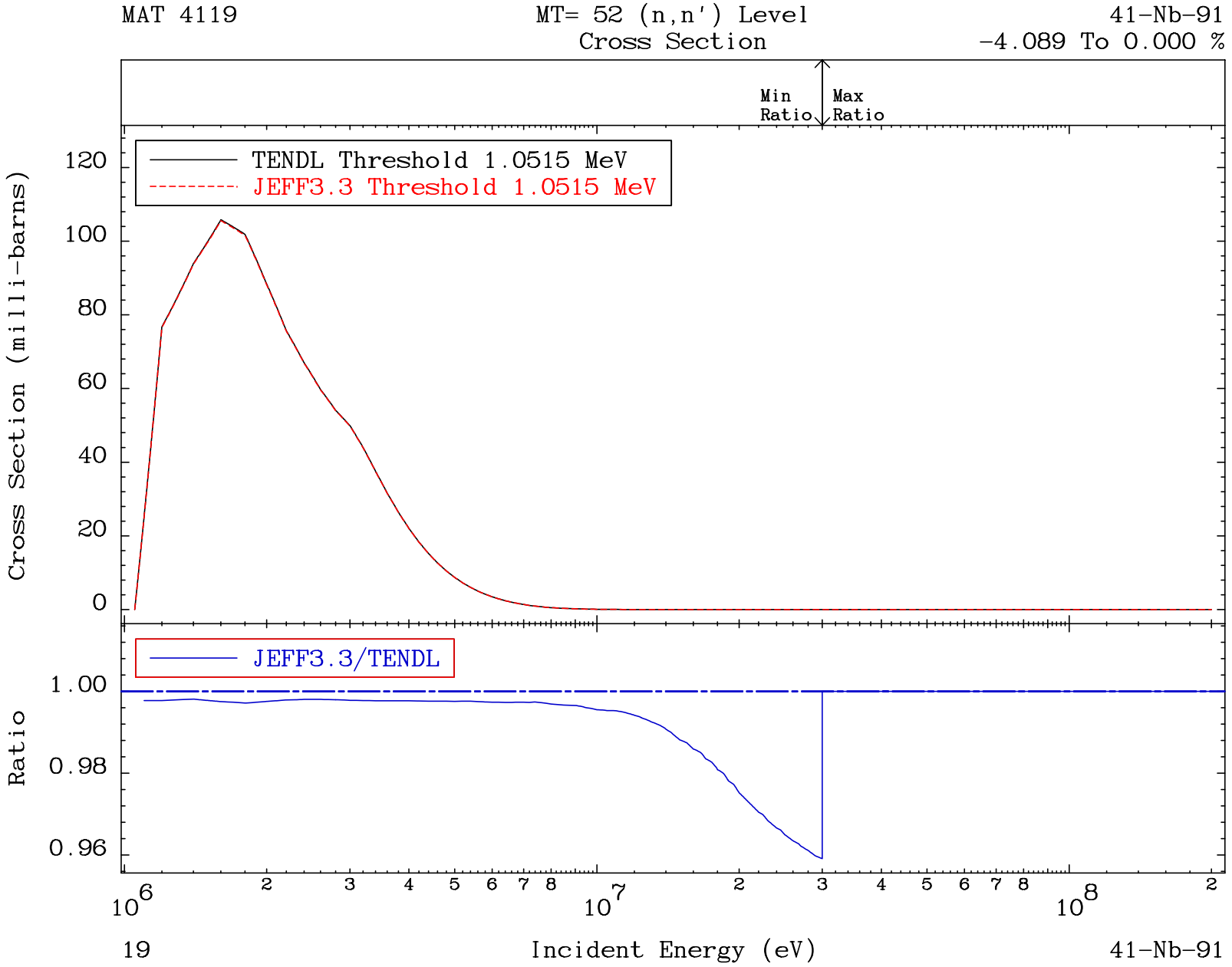

MAT 4119
(n,2n) p
Cross Section
41-Nb-91
-3.457 To 2887. %
Max Ratio
Min Ratio
TENDL Threshold 17.310 MeV
JEFF3.3 Threshold 17.313 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
41-Nb-91

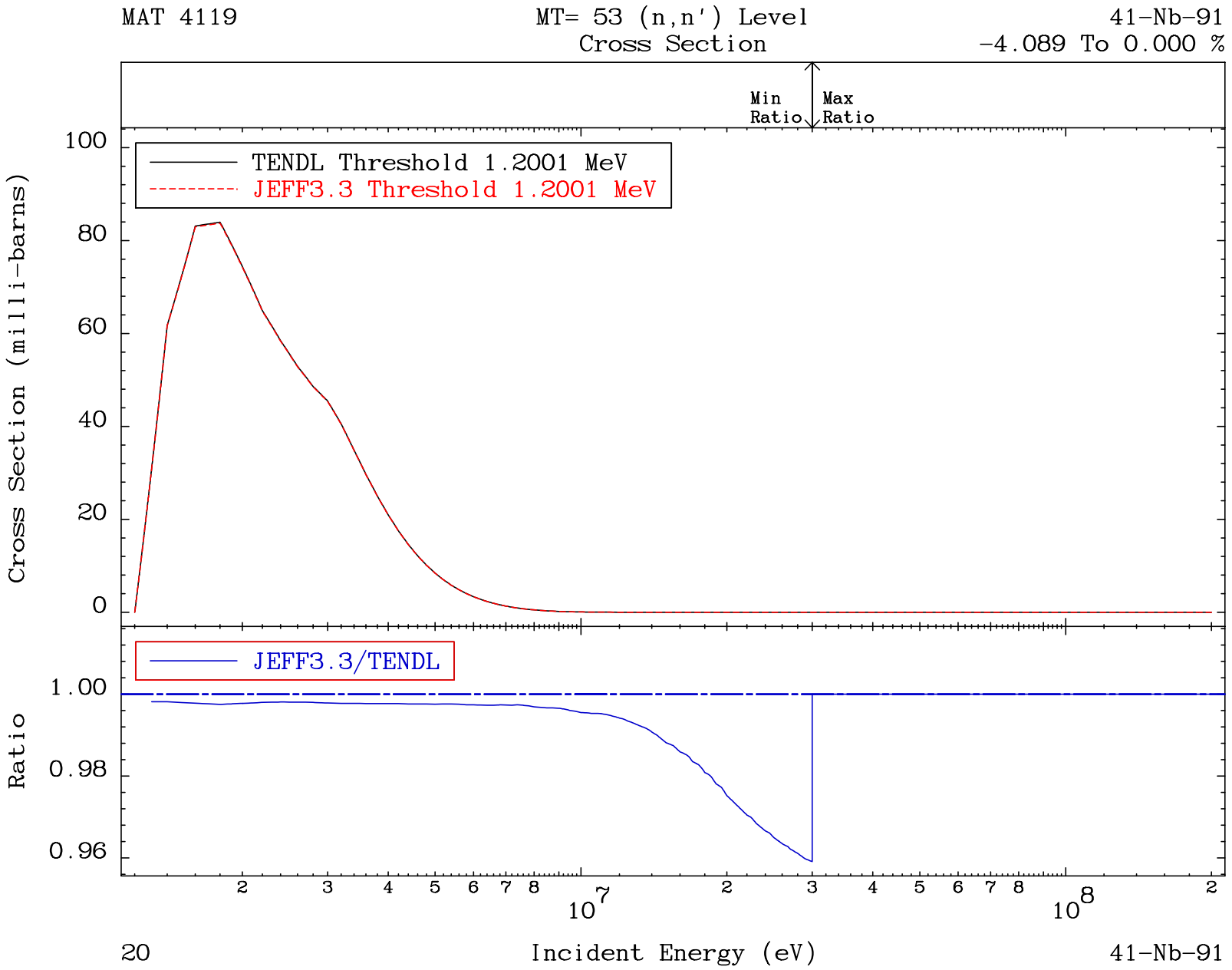

MAT 4119
(n,3n) p
Cross Section
41-Nb-91
-99.78 To 3372. %
Max
Ratio
TENDL Threshold 26.734 MeV
JEFF3.3 Threshold 26.734 MeV
Cross Section (micro-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
41-Nb-91

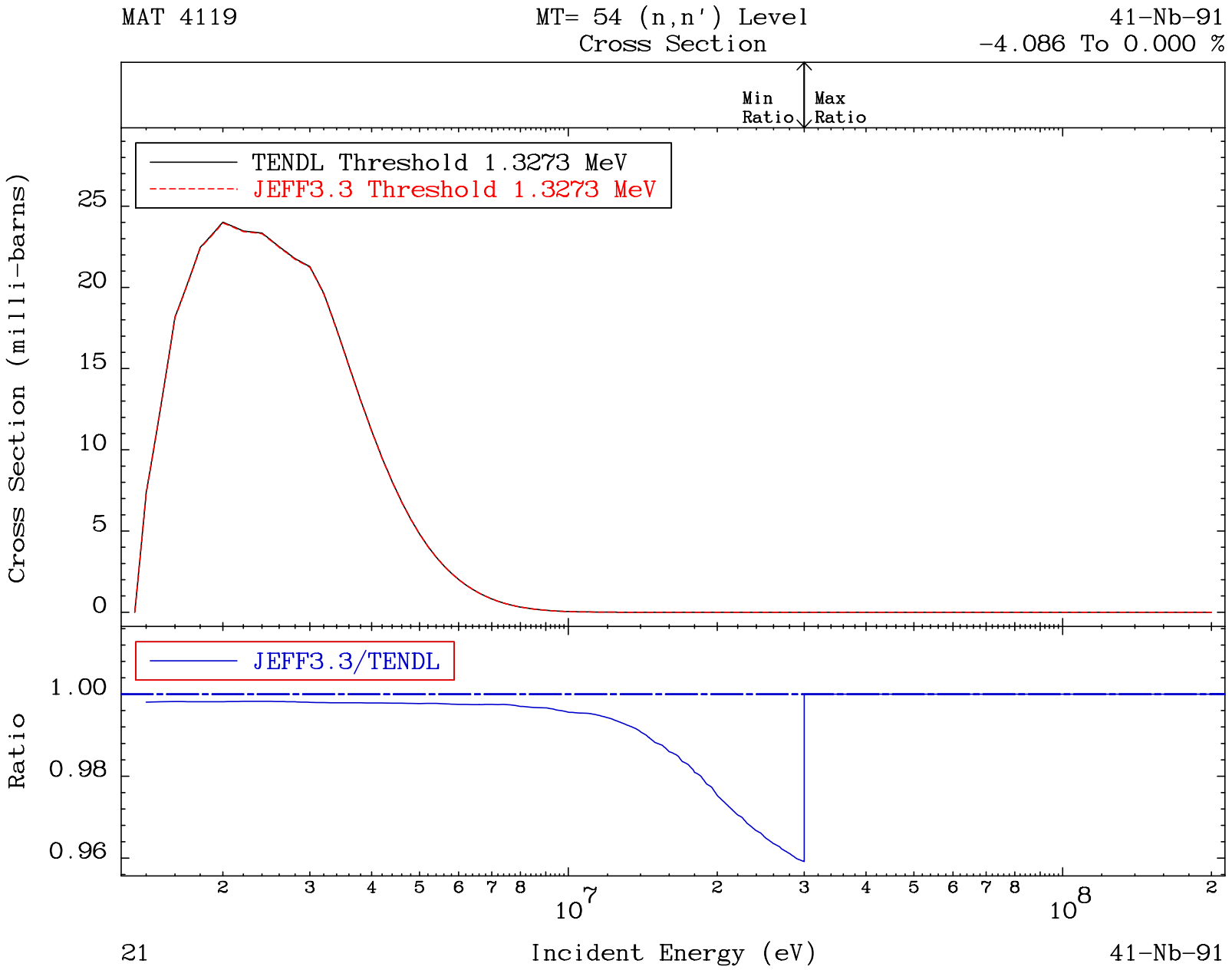

MAT 4119
(n,2n) p
Cross Section
41-Nb-91
-4.802 To 50.85 %
Max Ratio
Min Ratio
TENDL Threshold 13.655 MeV
JEFF3.3 Threshold 13.657 MeV
Cross Section (milli-barns)
0
2
4
6
JEFF3.3/TENDL
Ratio
1.0
1.2
1.4
1.6
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
41-Nb-91

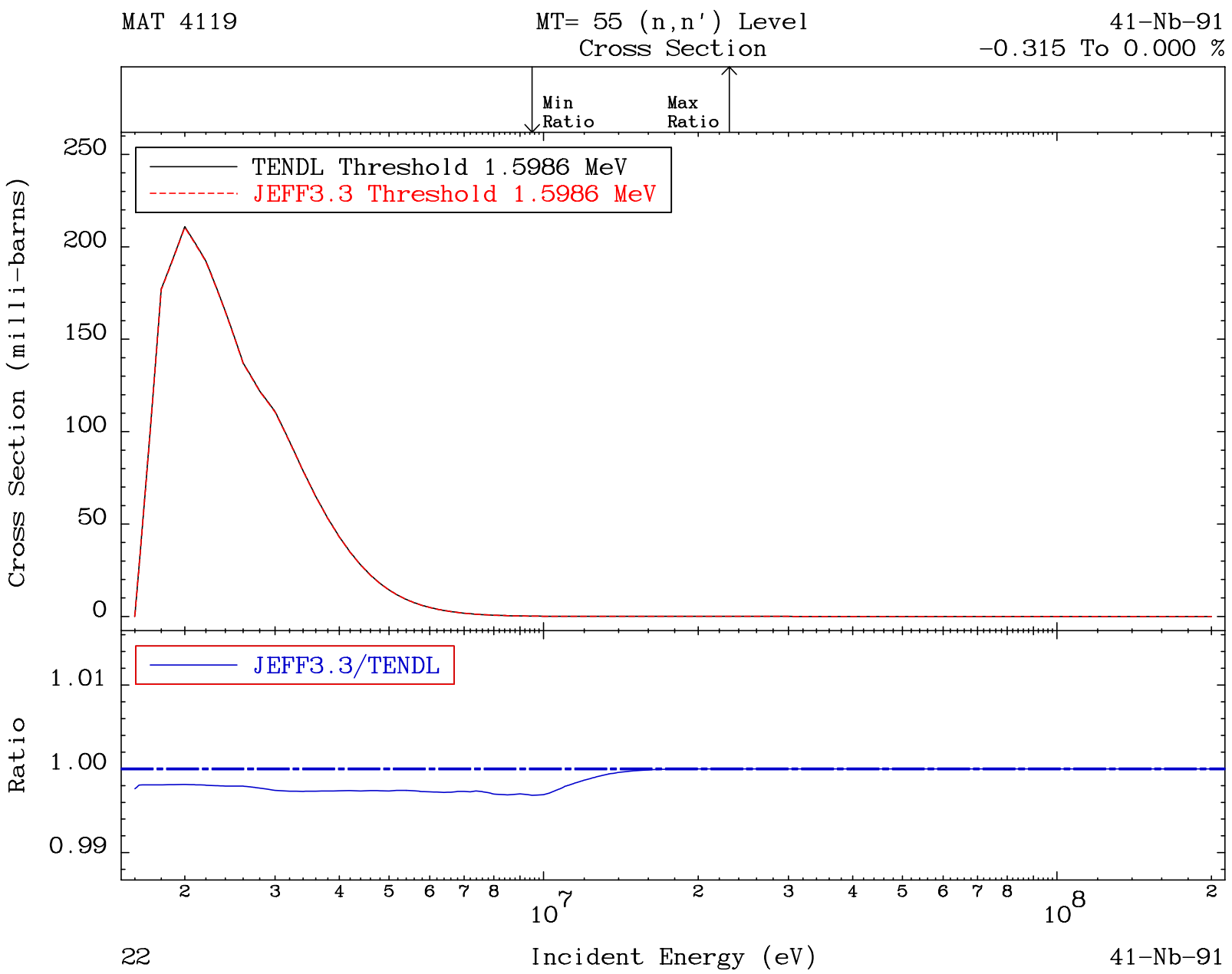

MAT 4119
(n,n') p α
Cross Section
41-Nb-91
-3.340 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.960 MeV
JEFF3.3 Threshold 11.960 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
41-Nb-91

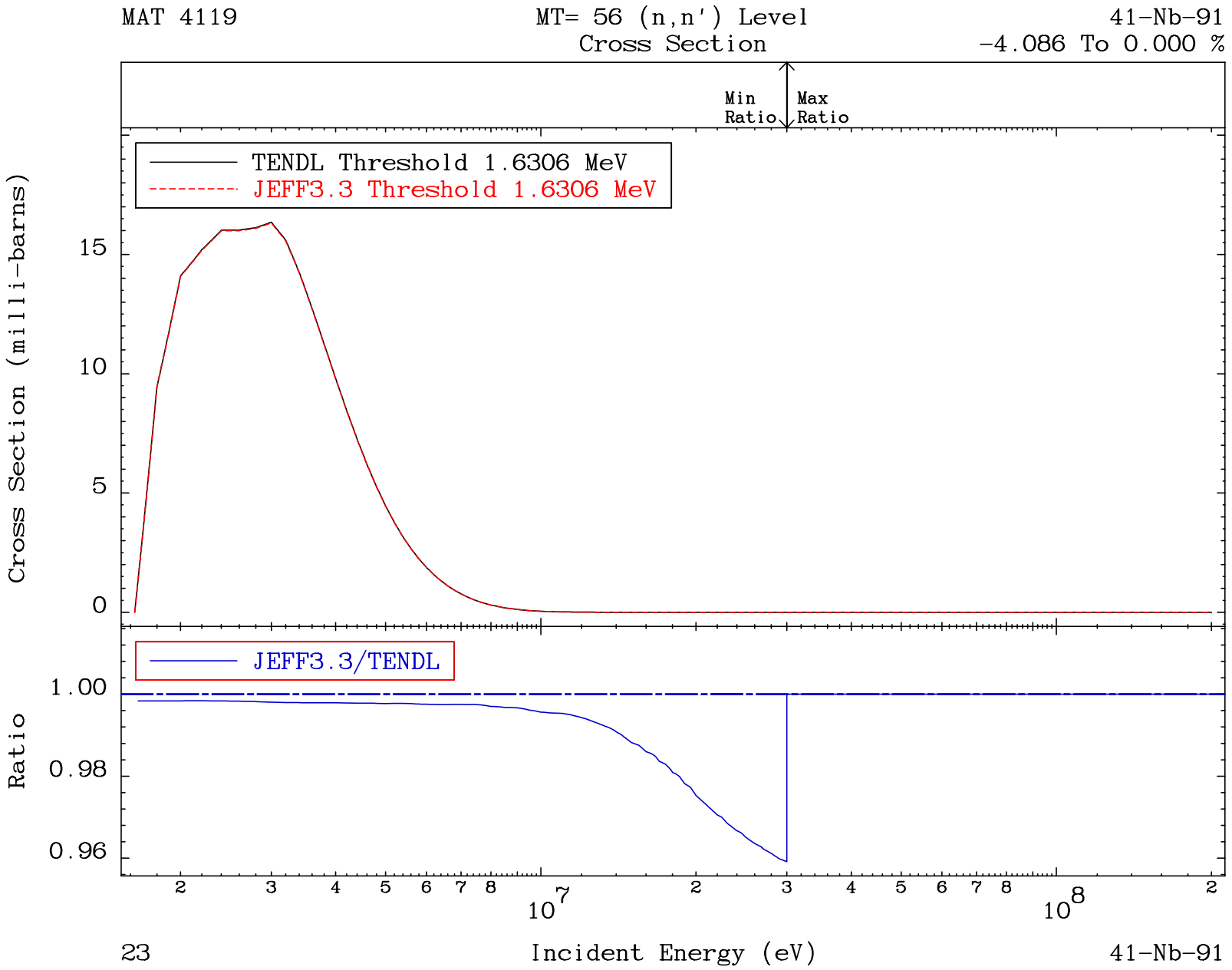

MAT 4119
MT= 51 (n,n') Level
Cross Section
41-Nb-91
-4.086 To 0.066 %
Max
Ratio
Min
Ratio
TENDL Threshold 105.76 keV
JEFF3.3 Threshold 105.76 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
10^5
10^6
10^7
10^8
Incident Energy (eV)
18
41-Nb-91

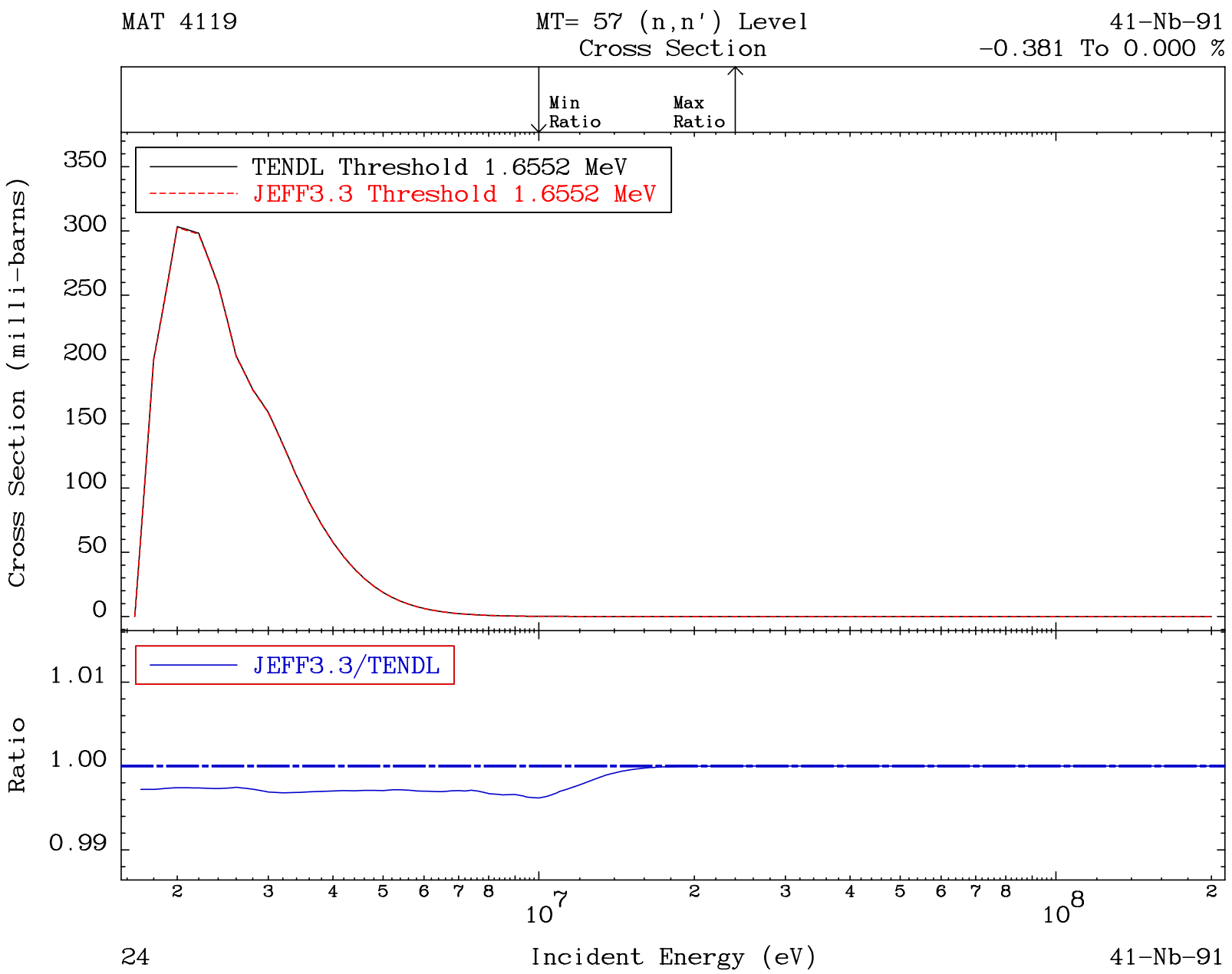

MAT 4119
MT= 52 (n,n') Level
Cross Section
41-Nb-91
-4.089 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.0515 MeV
JEFF3.3 Threshold 1.0515 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
10^6
10^7
10^8
Incident Energy (eV)
19
41-Nb-91

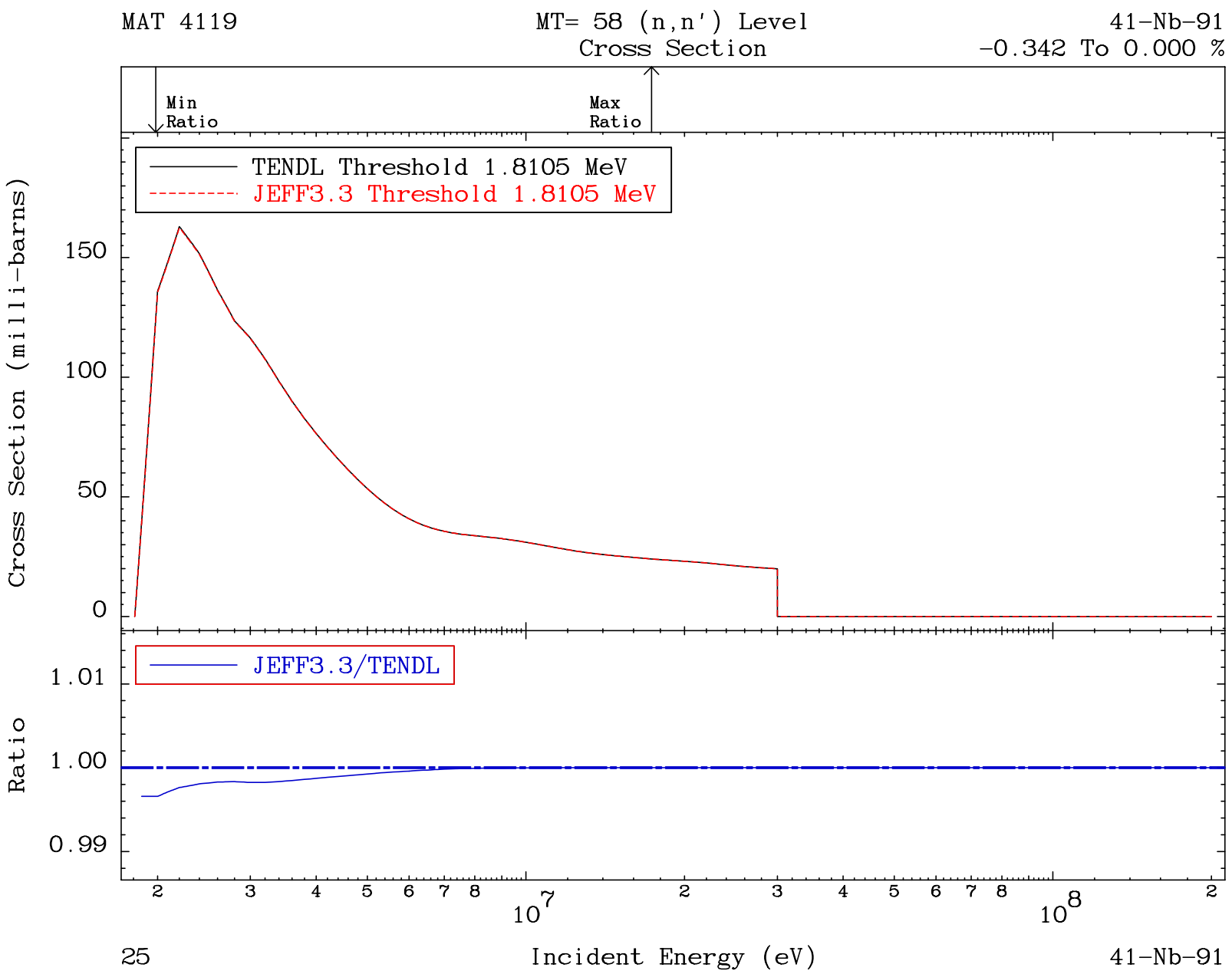

MAT 4119
MT= 53 (n,n') Level
Cross Section
41-Nb-91
-4.089 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.2001 MeV
JEFF3.3 Threshold 1.2001 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
41-Nb-91

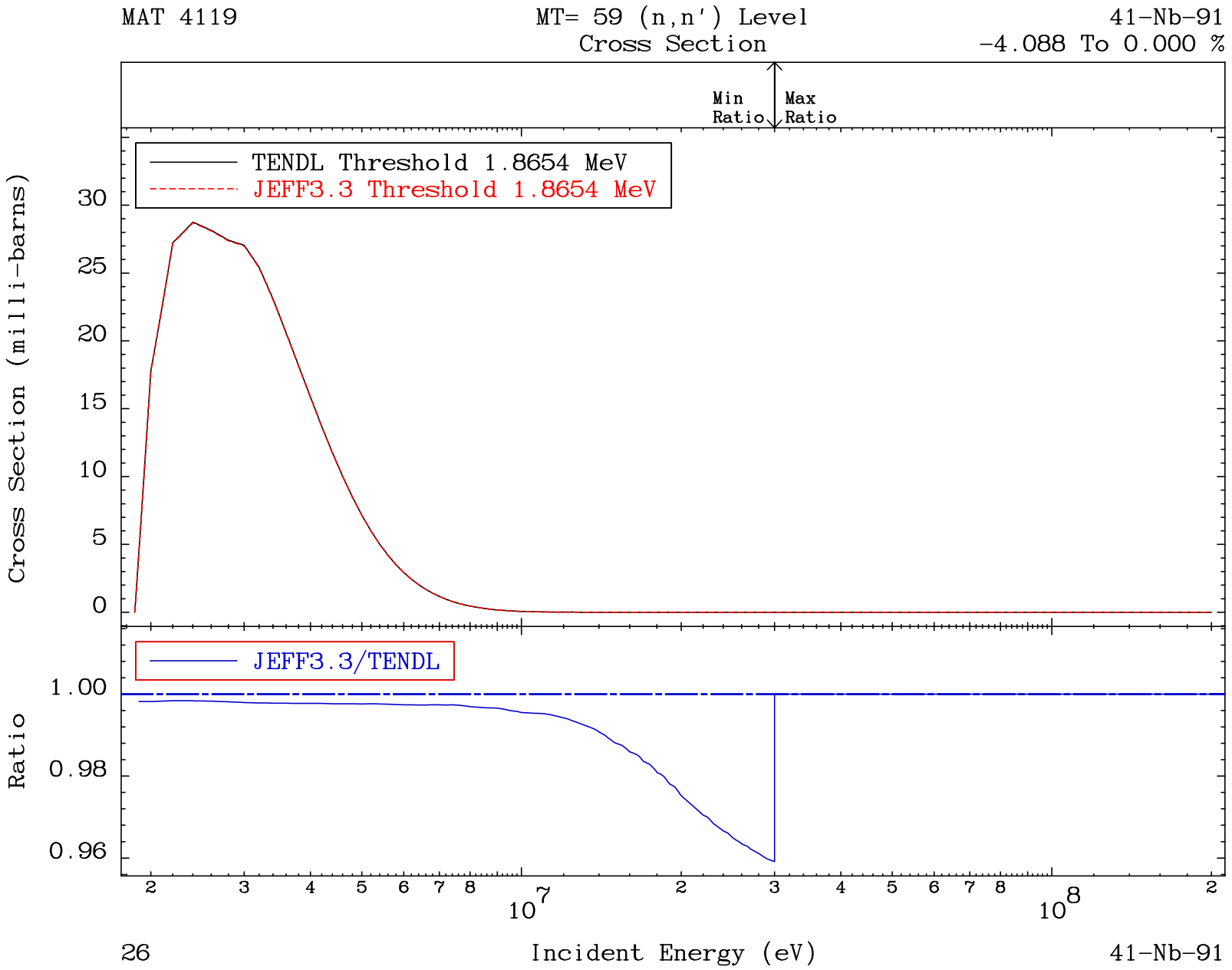

MAT 4119
MT= 54 (n,n') Level
Cross Section
41-Nb-91
-4.086 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.3273 MeV
JEFF3.3 Threshold 1.3273 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
41-Nb-91

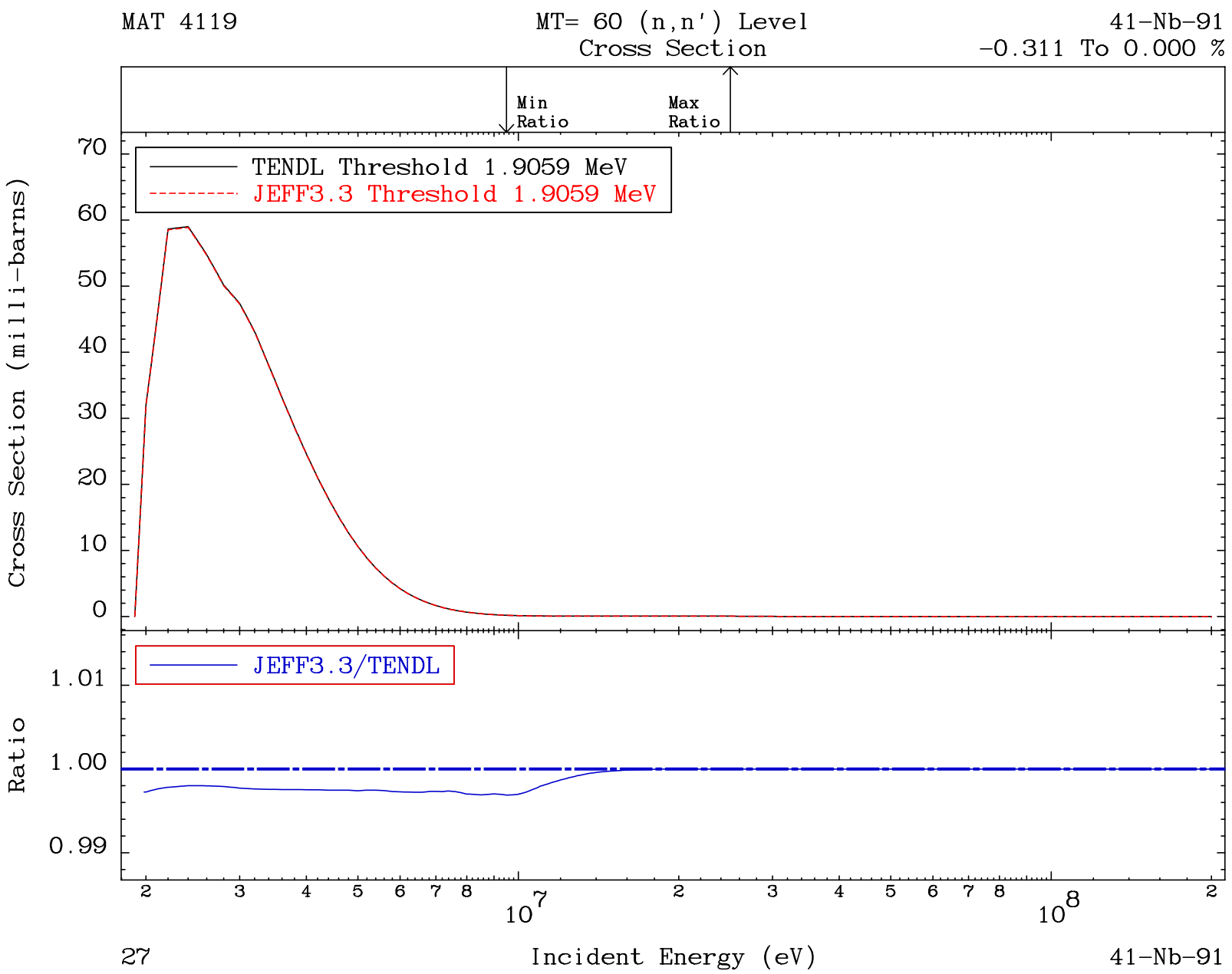

MAT 4119
MT= 55 (n,n') Level
Cross Section
41-Nb-91
-0.315 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.5986 MeV
JEFF3.3 Threshold 1.5986 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
41-Nb-91

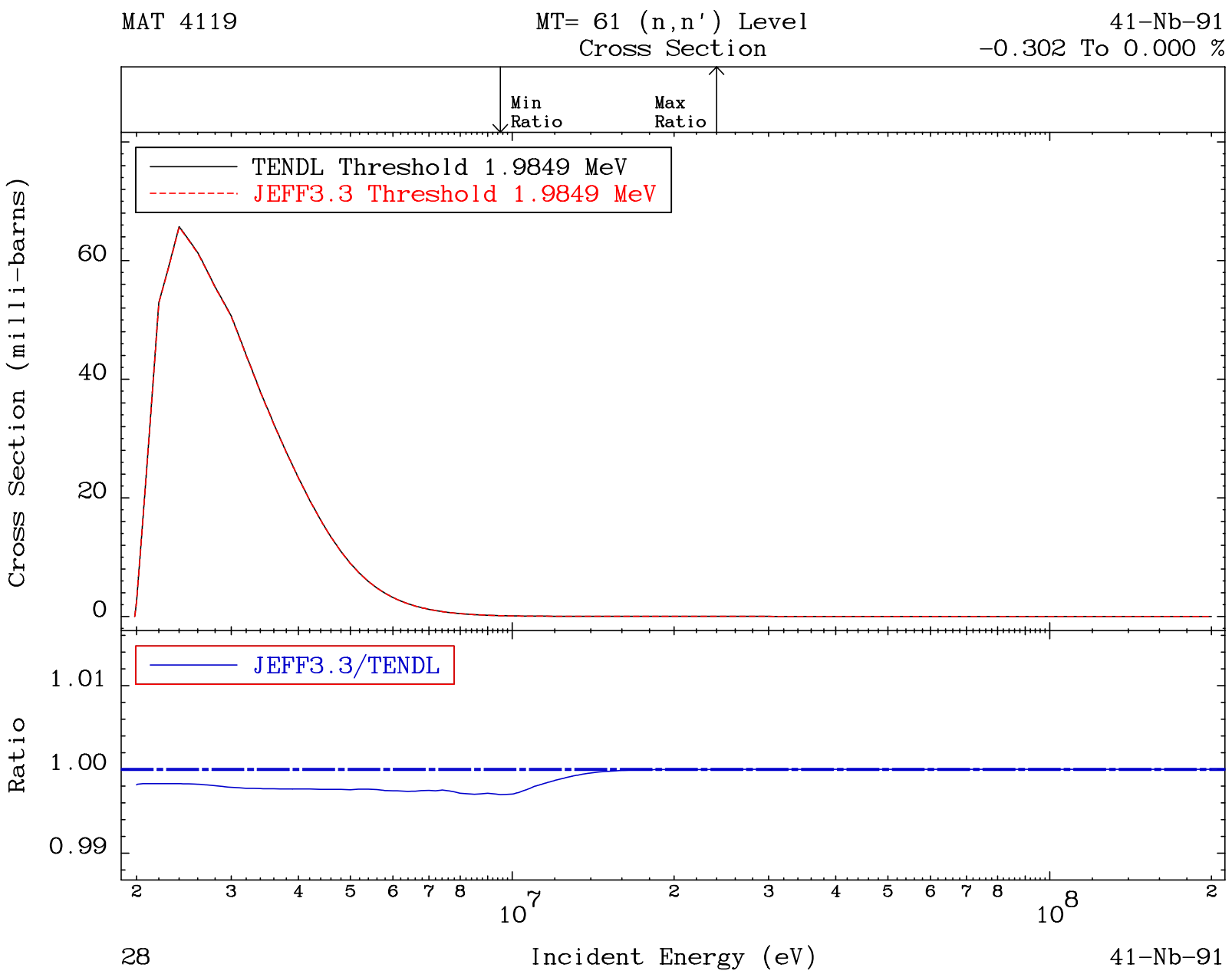

MAT 4119
MT= 56 (n,n') Level
Cross Section
41-Nb-91
-4.086 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.6306 MeV
JEFF3.3 Threshold 1.6306 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
41-Nb-91

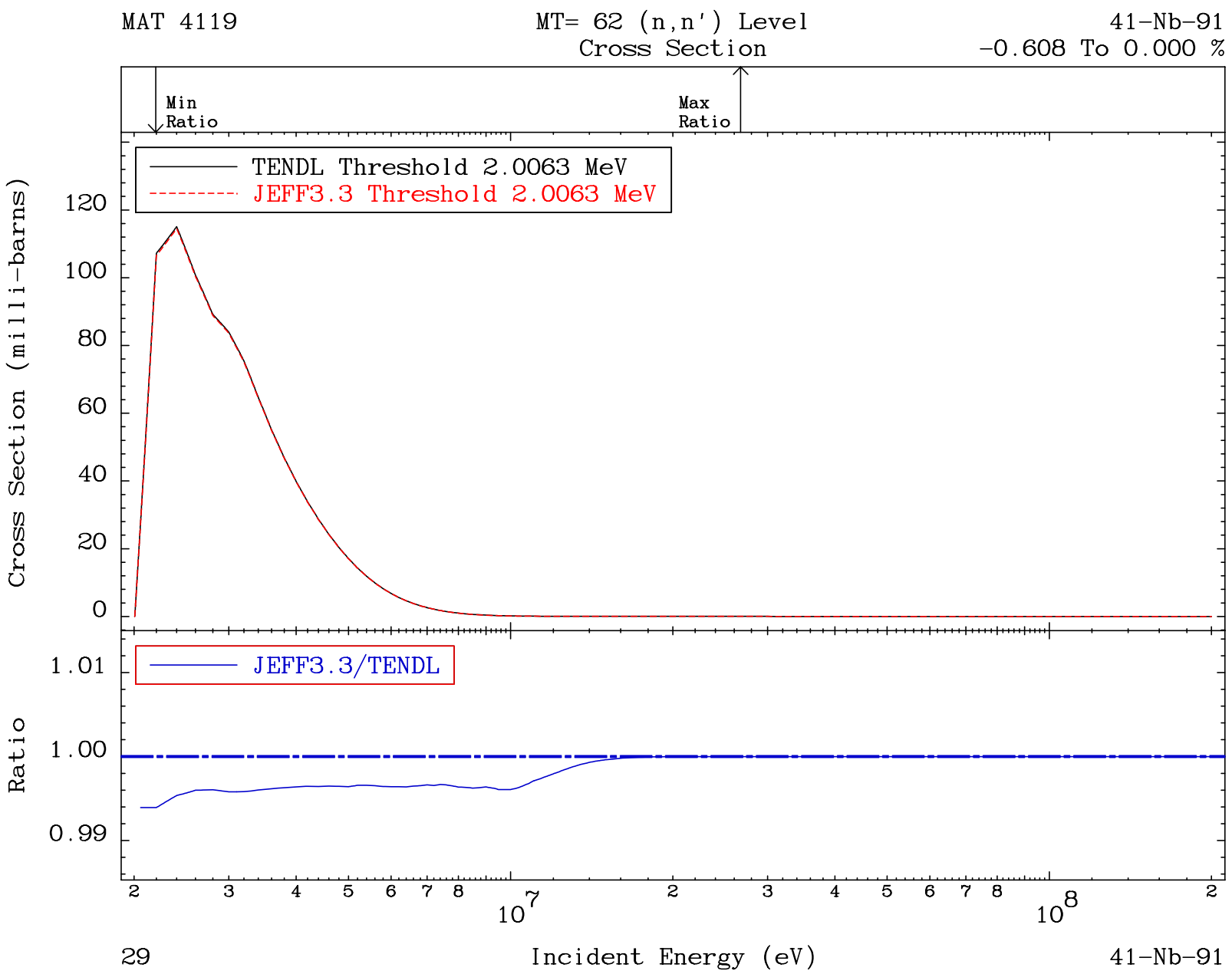

MAT 4119
MT= 57 (n,n') Level
Cross Section
41-Nb-91
-0.381 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.6552 MeV
JEFF3.3 Threshold 1.6552 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
41-Nb-91

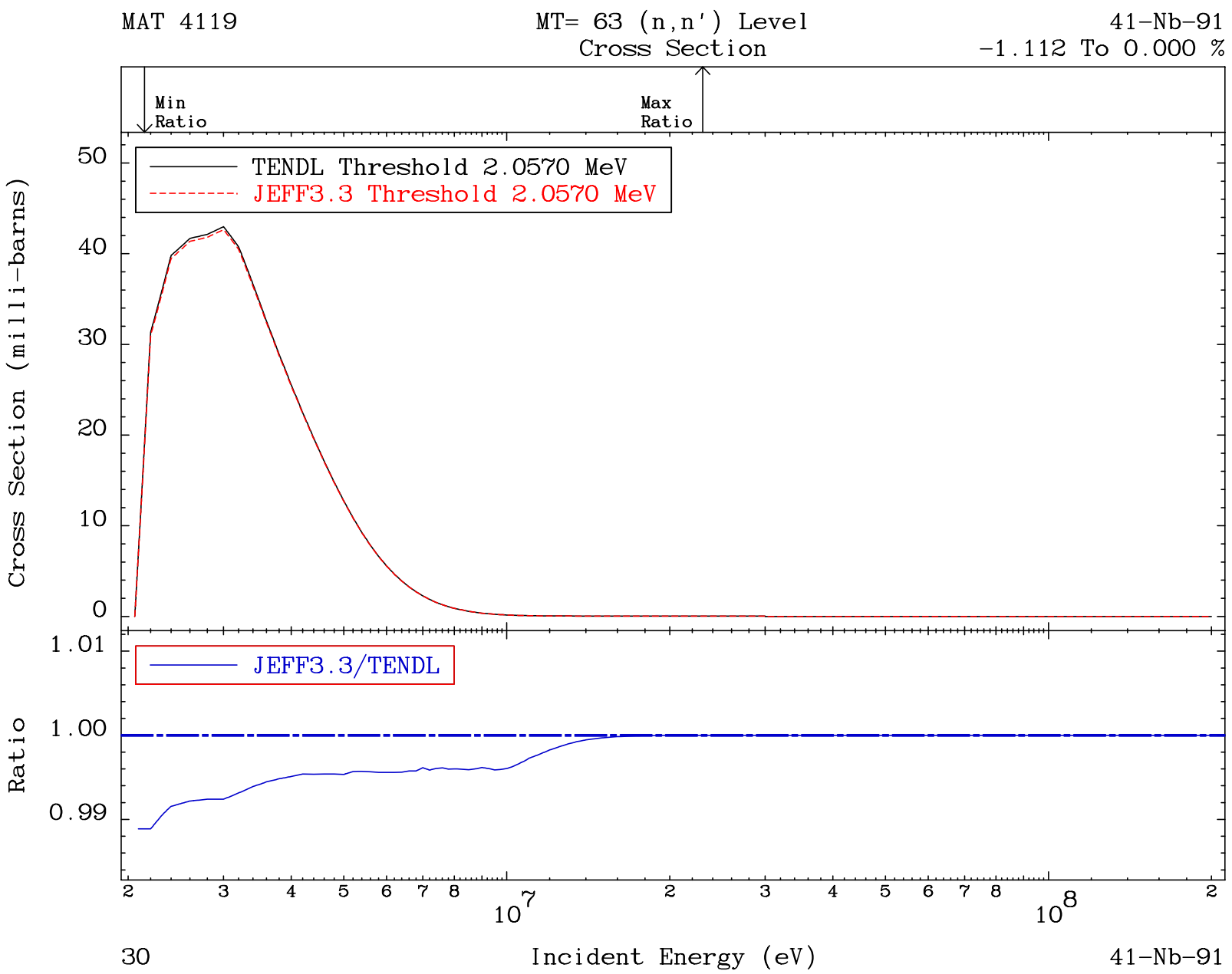

MAT 4119
MT= 58 (n,n') Level
Cross Section
41-Nb-91
-0.342 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.8105 MeV
JEFF3.3 Threshold 1.8105 MeV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
41-Nb-91

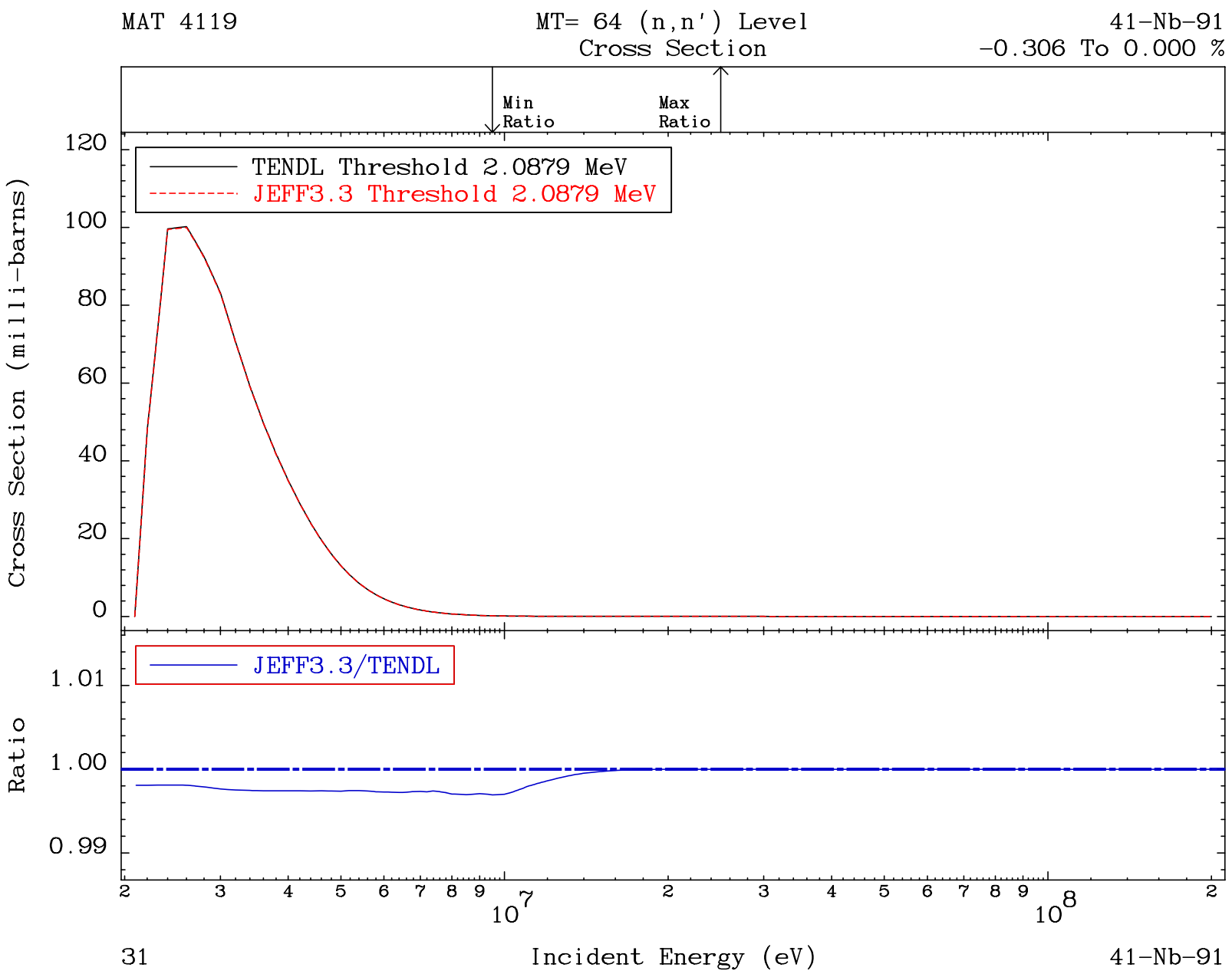

MAT 4119
MT= 59 (n,n') Level
Cross Section
41-Nb-91
-4.088 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.8654 MeV
JEFF3.3 Threshold 1.8654 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
41-Nb-91

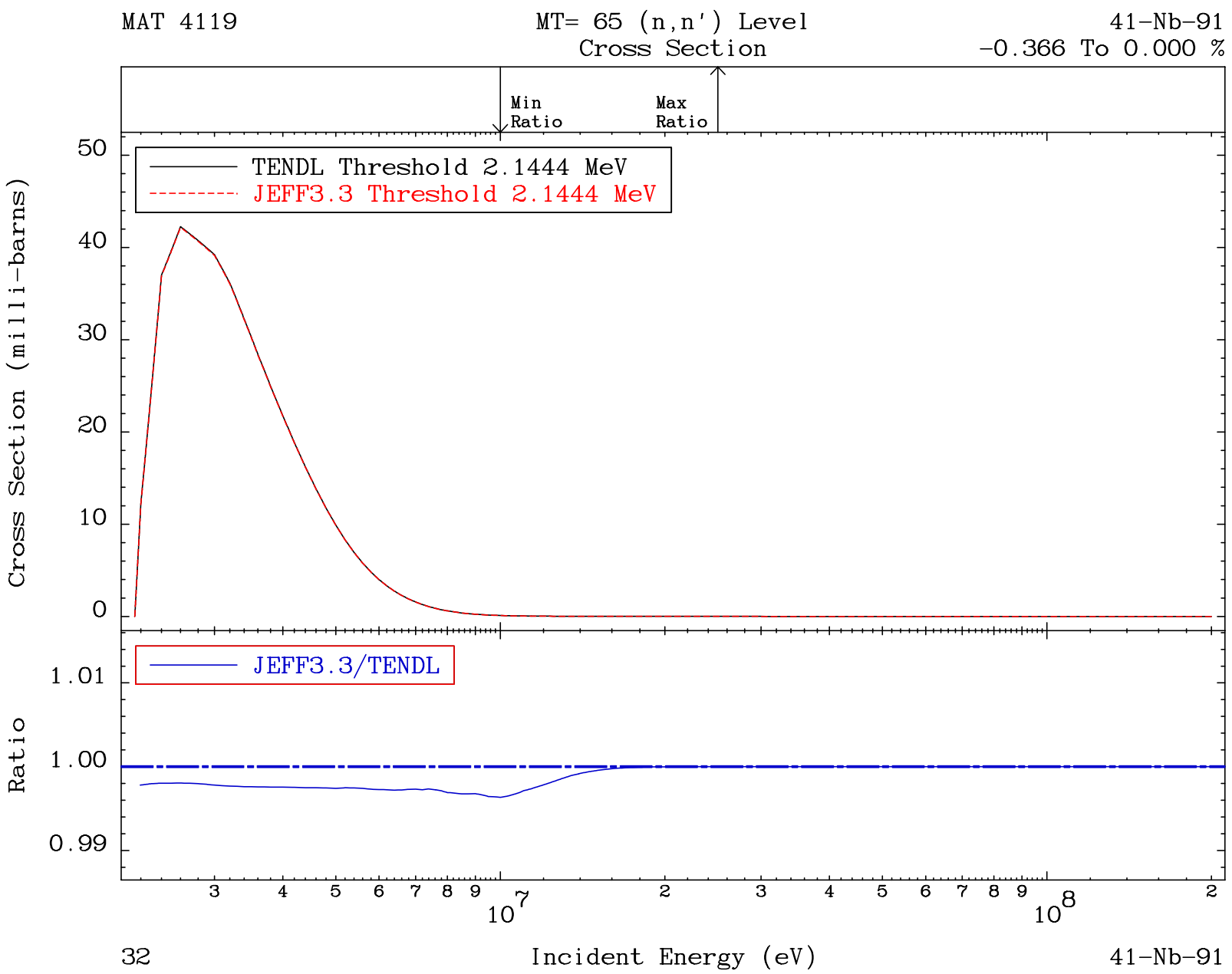

MAT 4119
MT= 60 (n,n') Level
Cross Section
41-Nb-91
-0.311 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.9059 MeV
JEFF3.3 Threshold 1.9059 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
41-Nb-91

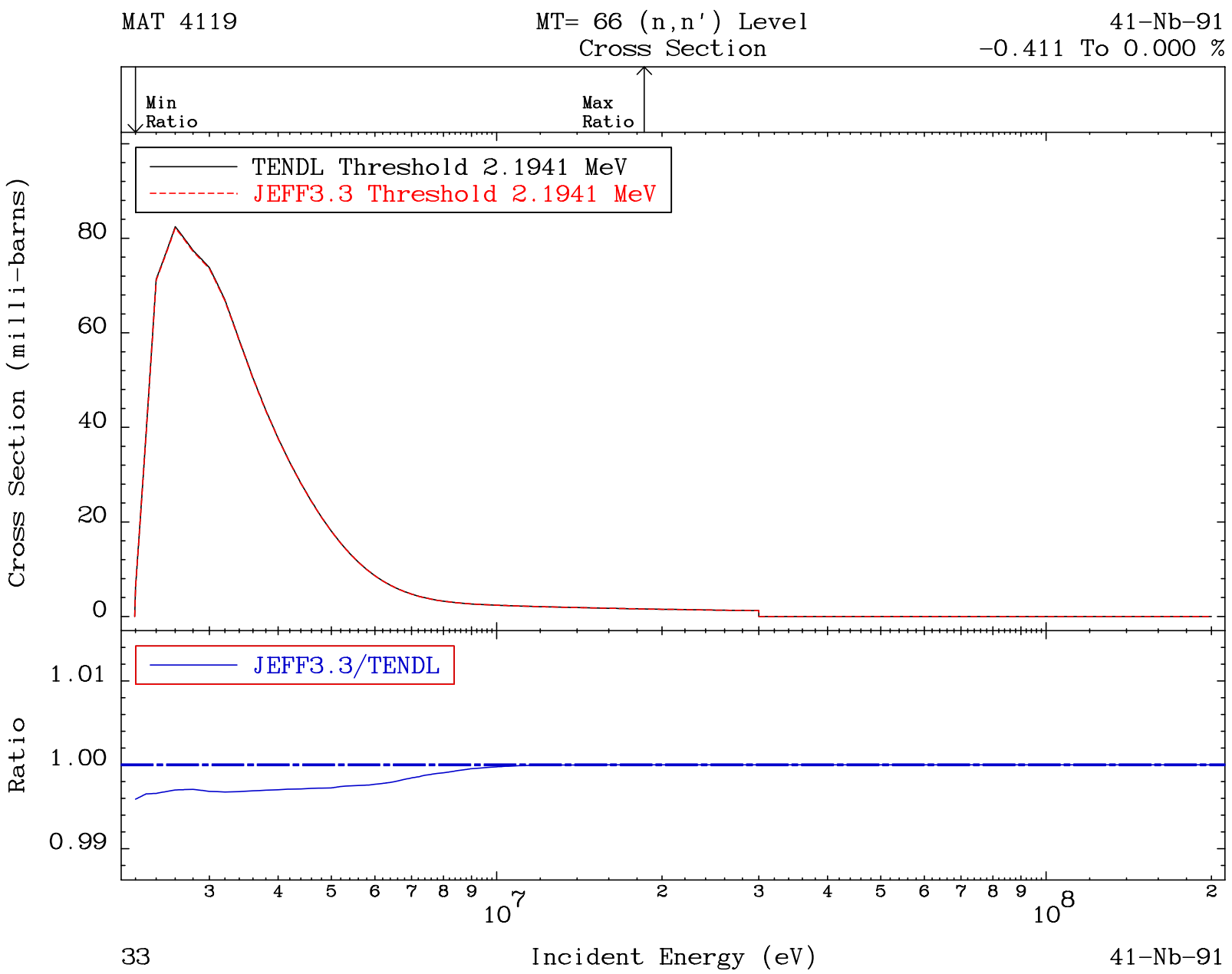

MAT 4119
MT= 61 (n,n') Level
Cross Section
41-Nb-91
-0.302 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.9849 MeV
JEFF3.3 Threshold 1.9849 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
41-Nb-91

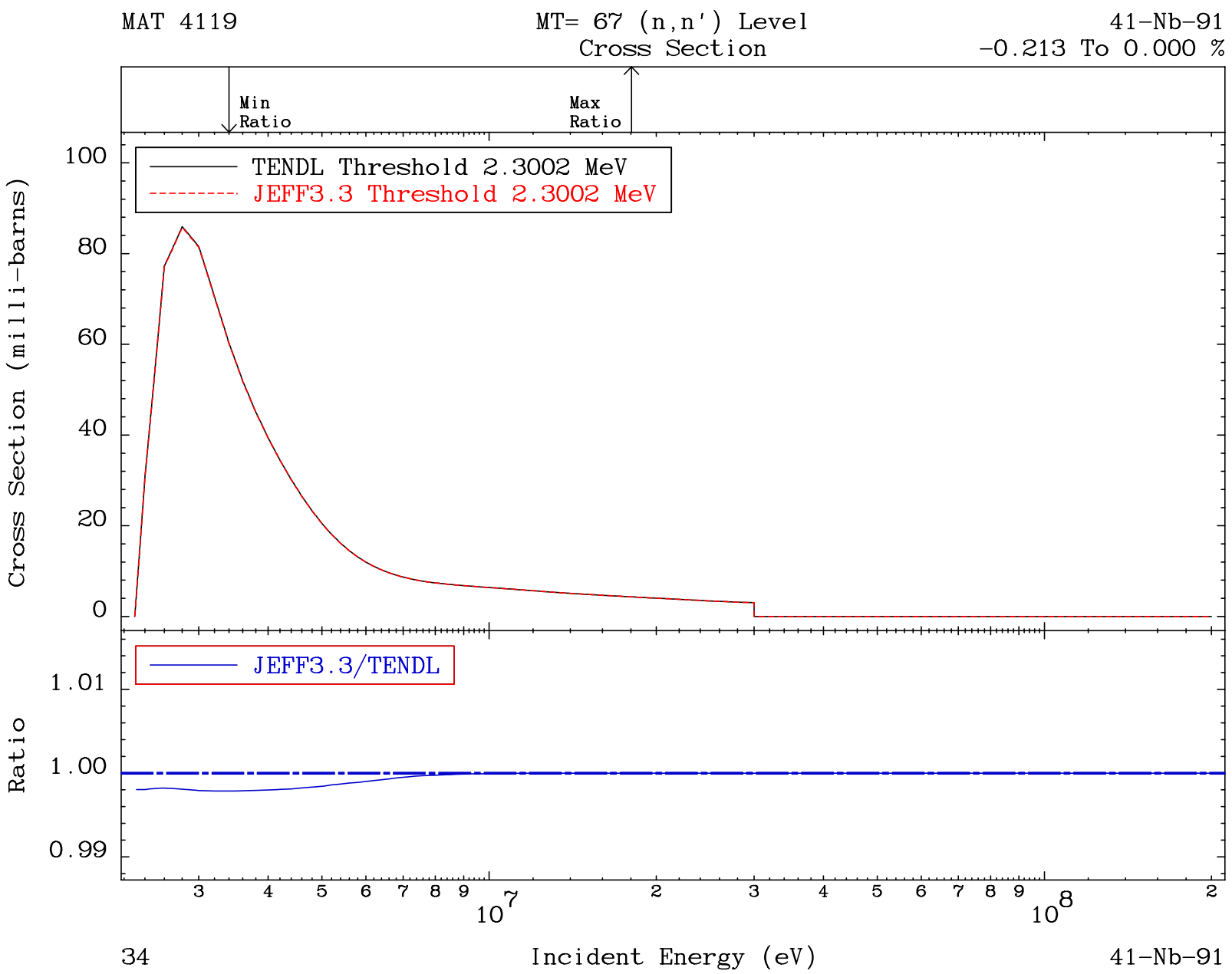

MAT 4119
MT= 62 (n,n') Level
Cross Section
41-Nb-91
-0.608 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.0063 MeV
JEFF3.3 Threshold 2.0063 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
41-Nb-91

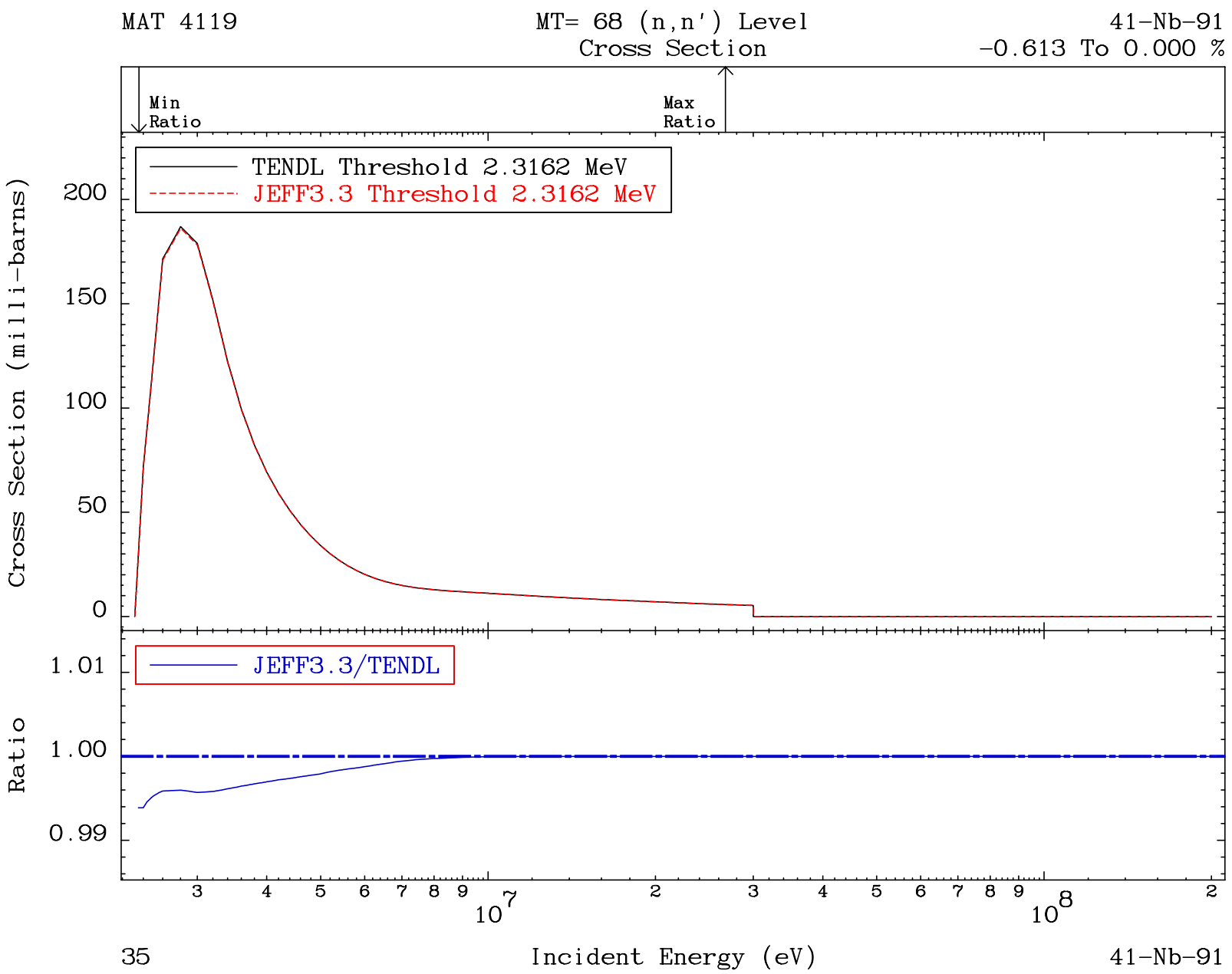

MAT 4119
MT= 63 (n,n') Level
Cross Section
41-Nb-91
-1.112 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.0570 MeV
JEFF3.3 Threshold 2.0570 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
41-Nb-91

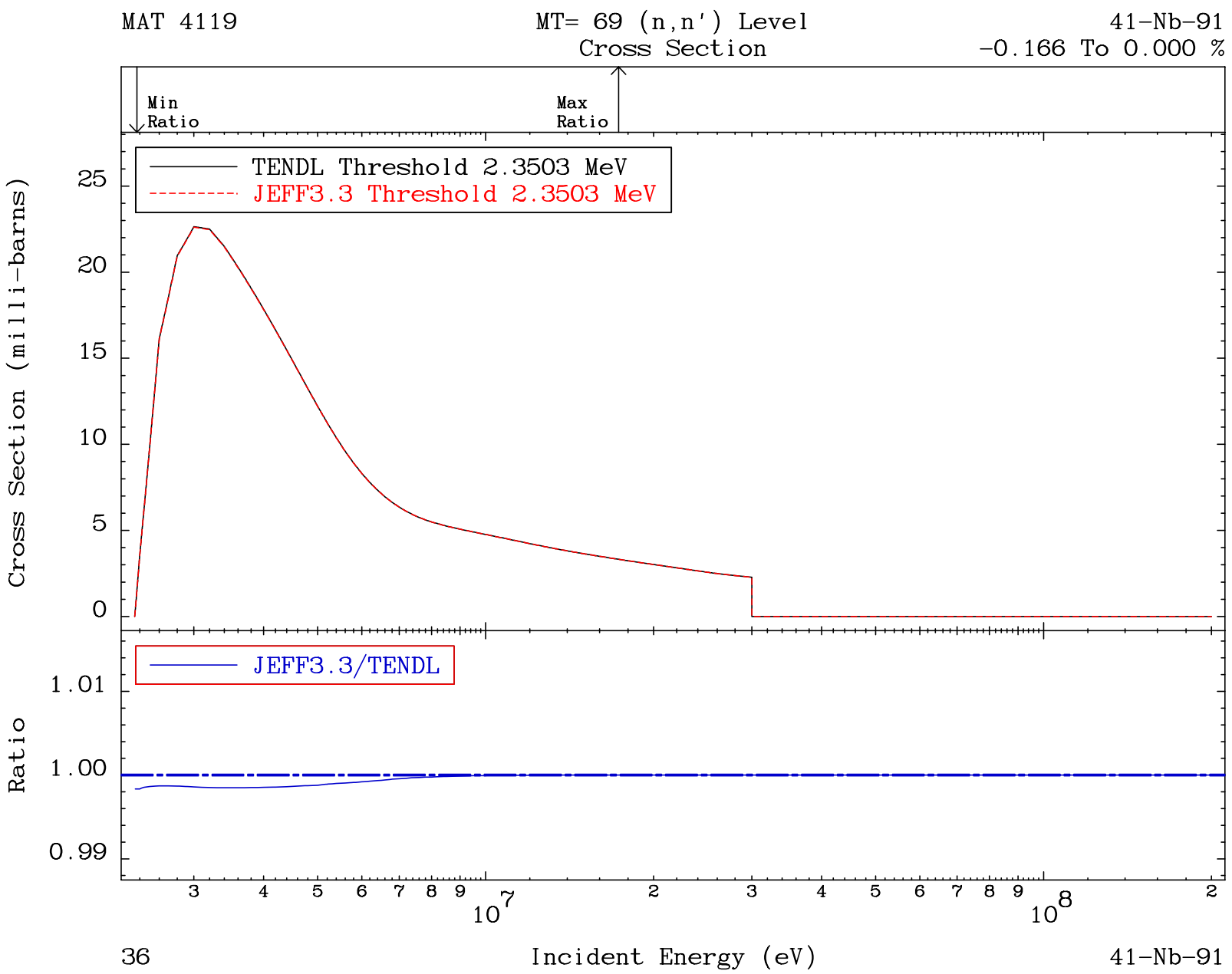

MAT 4119
MT= 64 (n,n') Level
Cross Section
41-Nb-91
-0.306 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.0879 MeV
JEFF3.3 Threshold 2.0879 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
41-Nb-91

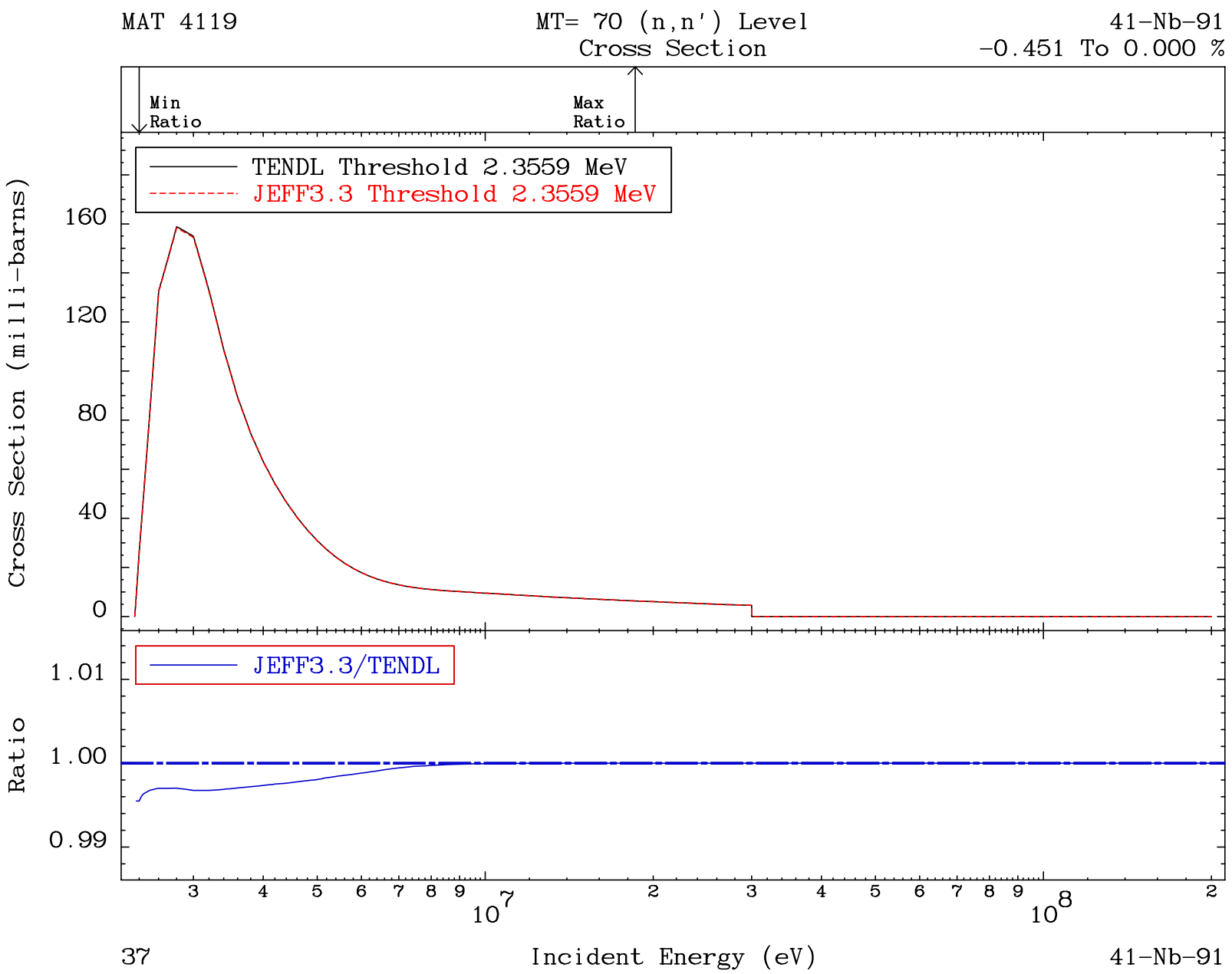

MAT 4119
MT= 65 (n,n') Level
Cross Section
41-Nb-91
-0.366 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.1444 MeV
JEFF3.3 Threshold 2.1444 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
41-Nb-91

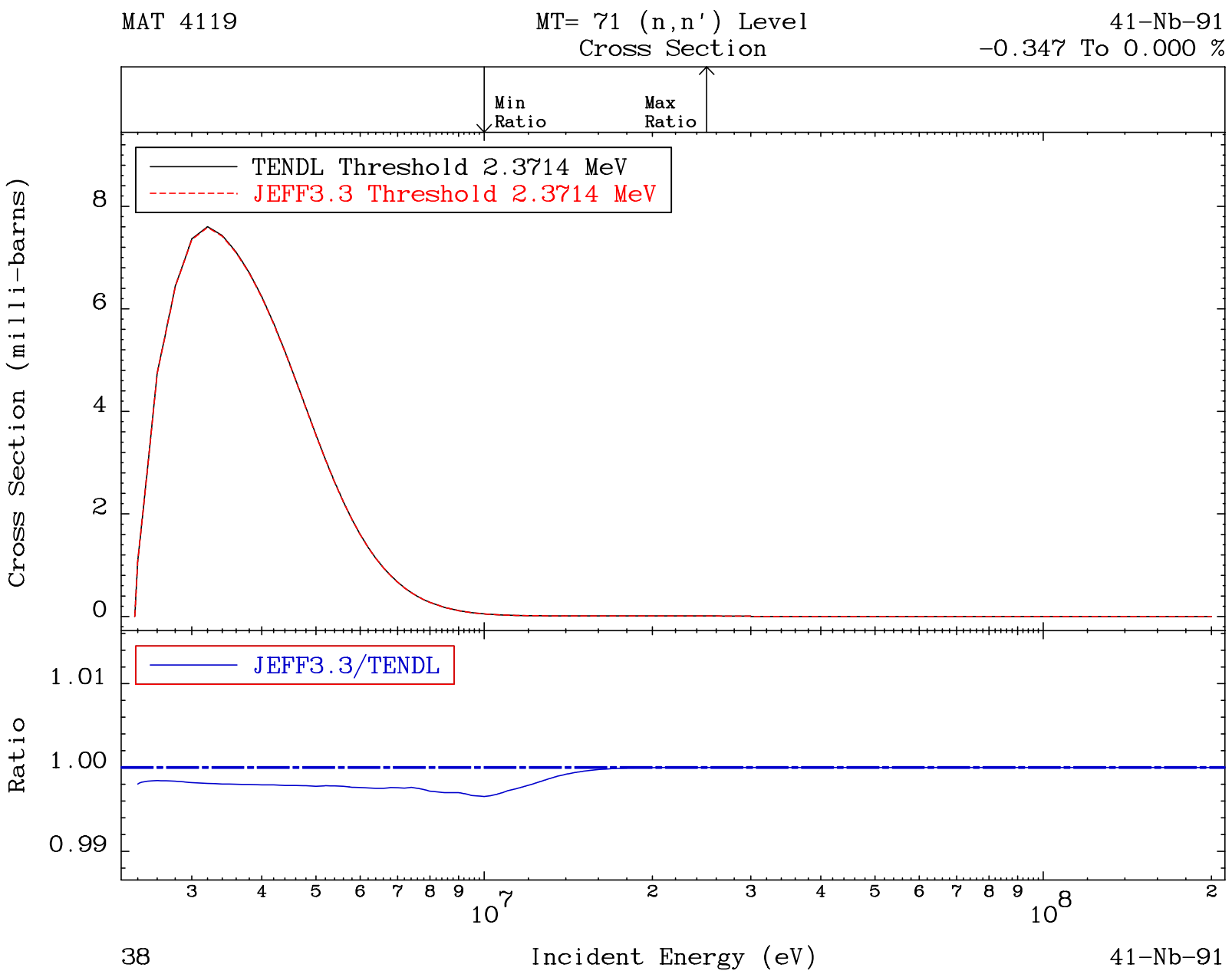

MAT 4119
MT= 66 (n,n') Level
Cross Section
41-Nb-91
-0.411 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.1941 MeV
JEFF3.3 Threshold 2.1941 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
41-Nb-91

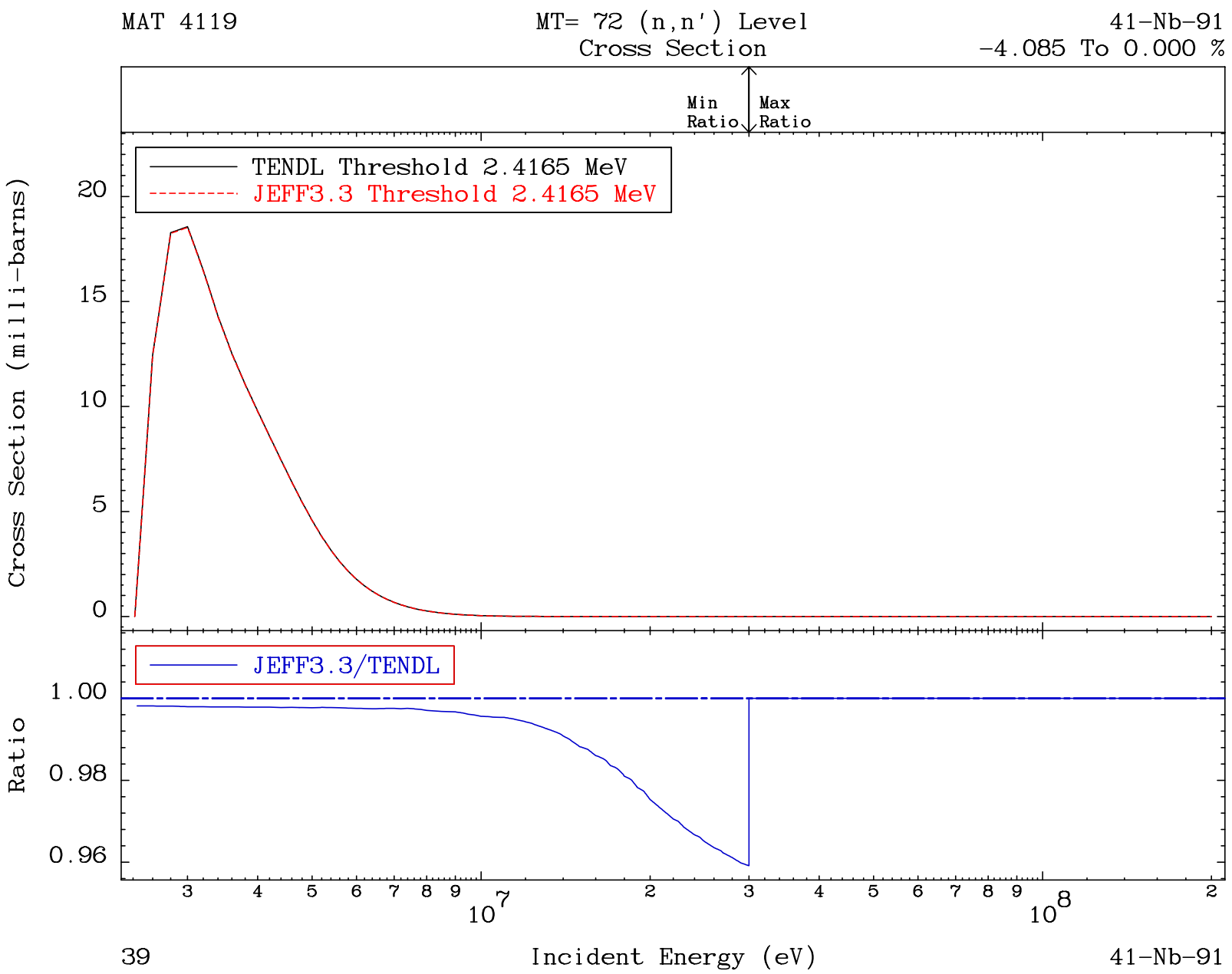

MAT 4119
MT= 67 (n,n') Level
Cross Section
41-Nb-91
-0.213 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3002 MeV
JEFF3.3 Threshold 2.3002 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
41-Nb-91

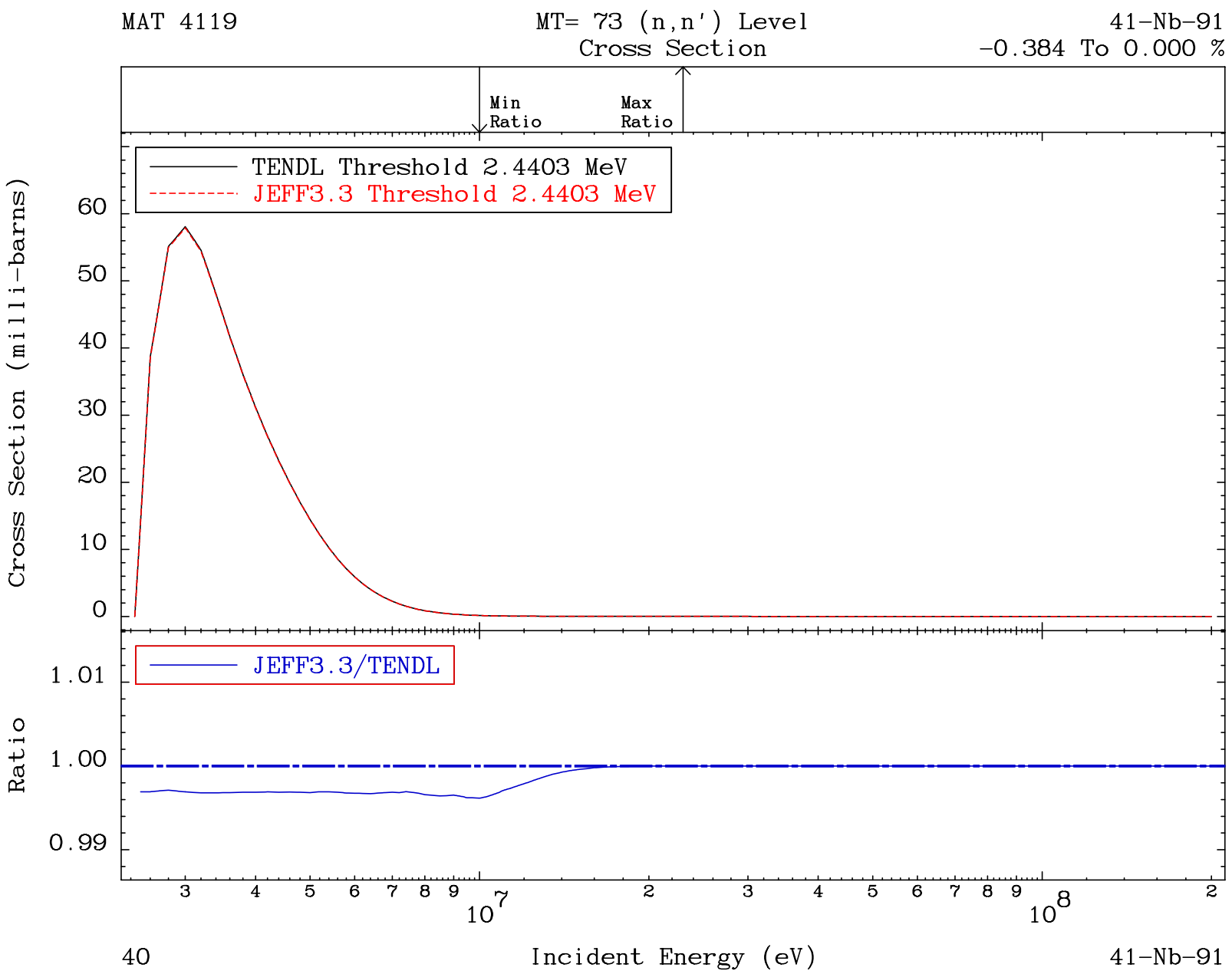

MAT 4119
MT= 68 (n,n') Level
Cross Section
41-Nb-91
-0.613 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3162 MeV
JEFF3.3 Threshold 2.3162 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
35
Incident Energy (eV)
41-Nb-91

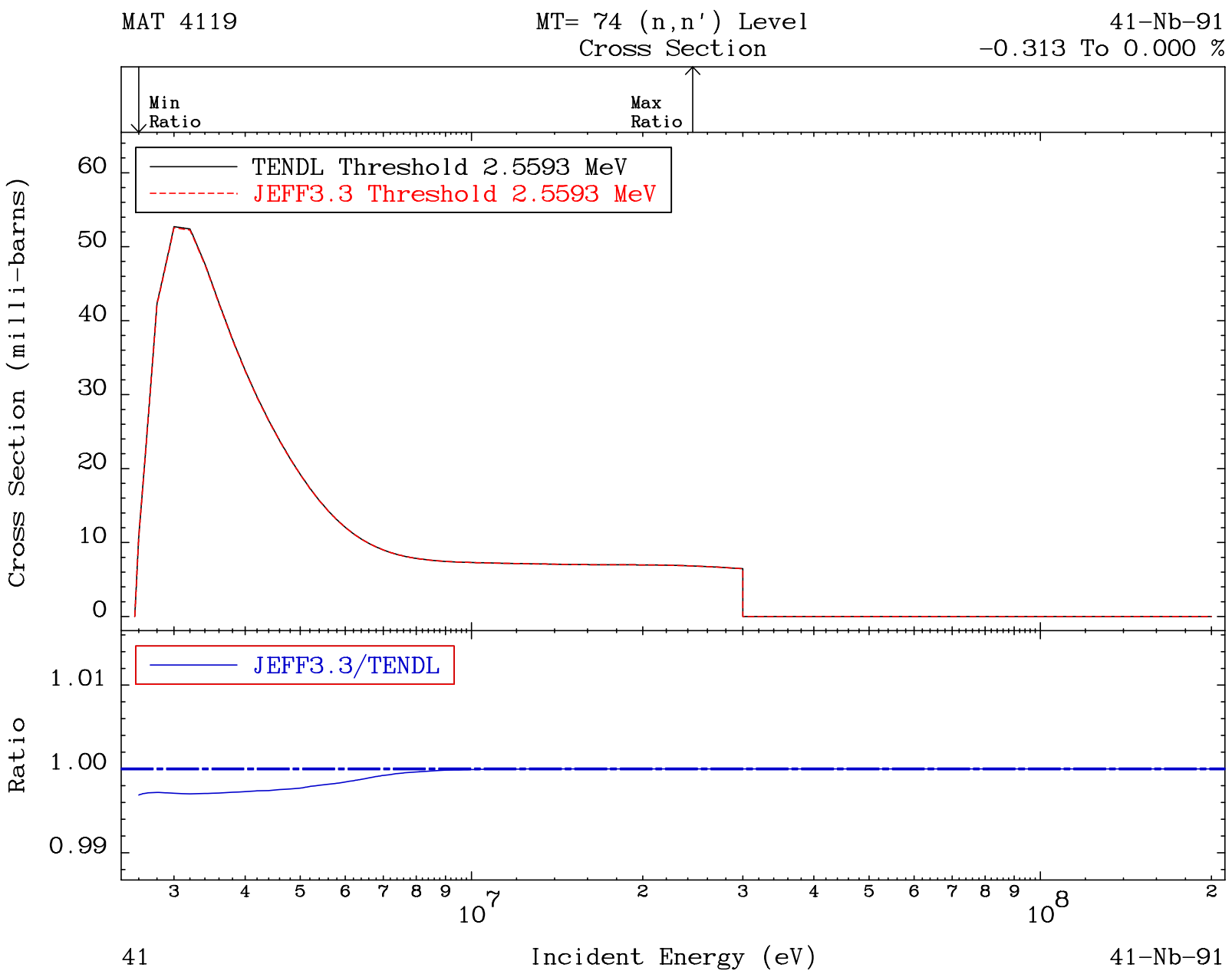

MAT 4119
MT= 69 (n,n') Level
Cross Section
41-Nb-91
-0.166 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.3503 MeV
JEFF3.3 Threshold 2.3503 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
41-Nb-91

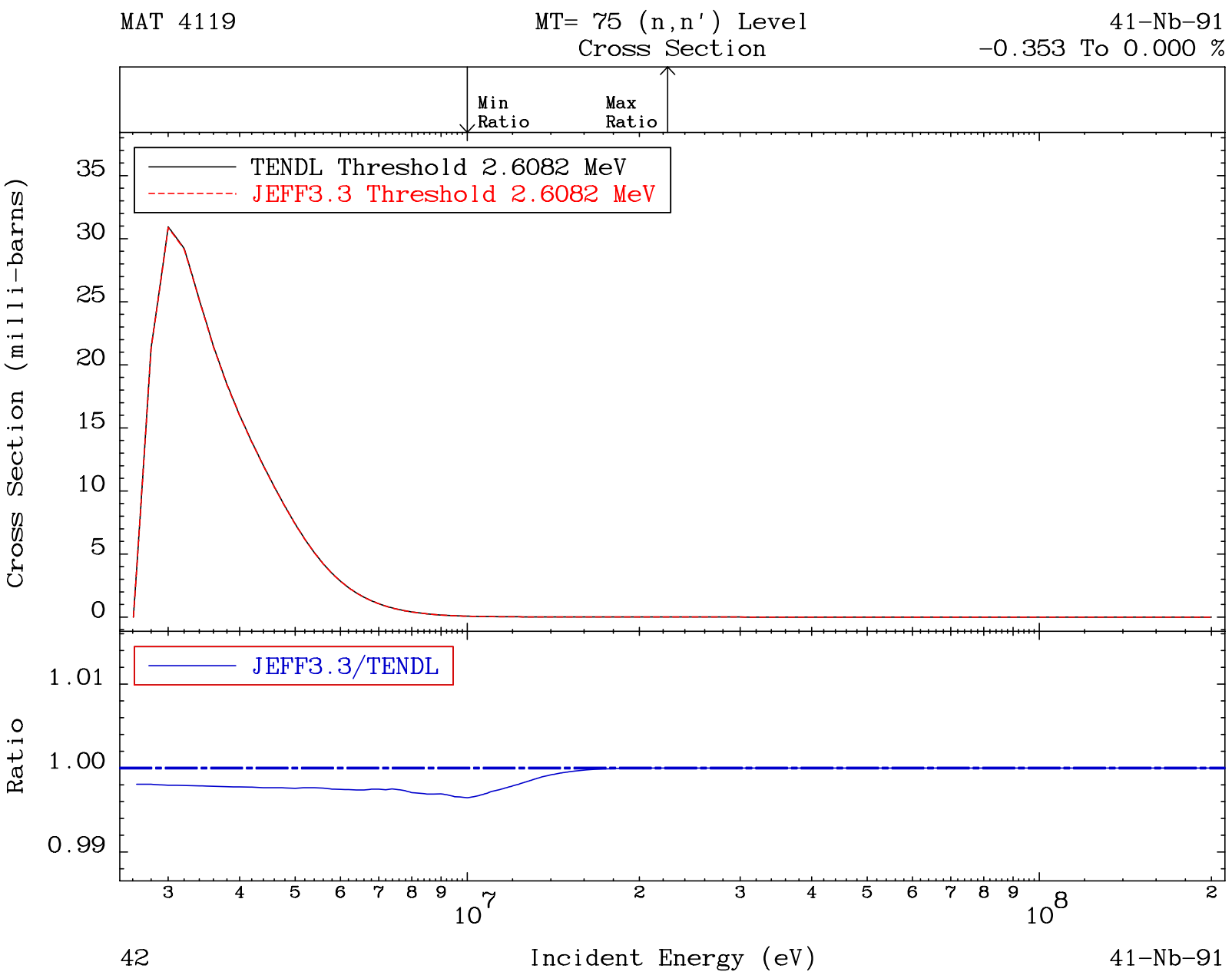

MAT 4119
MT= 70 (n,n') Level
Cross Section
41-Nb-91
-0.451 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.3559 MeV
JEFF3.3 Threshold 2.3559 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
41-Nb-91

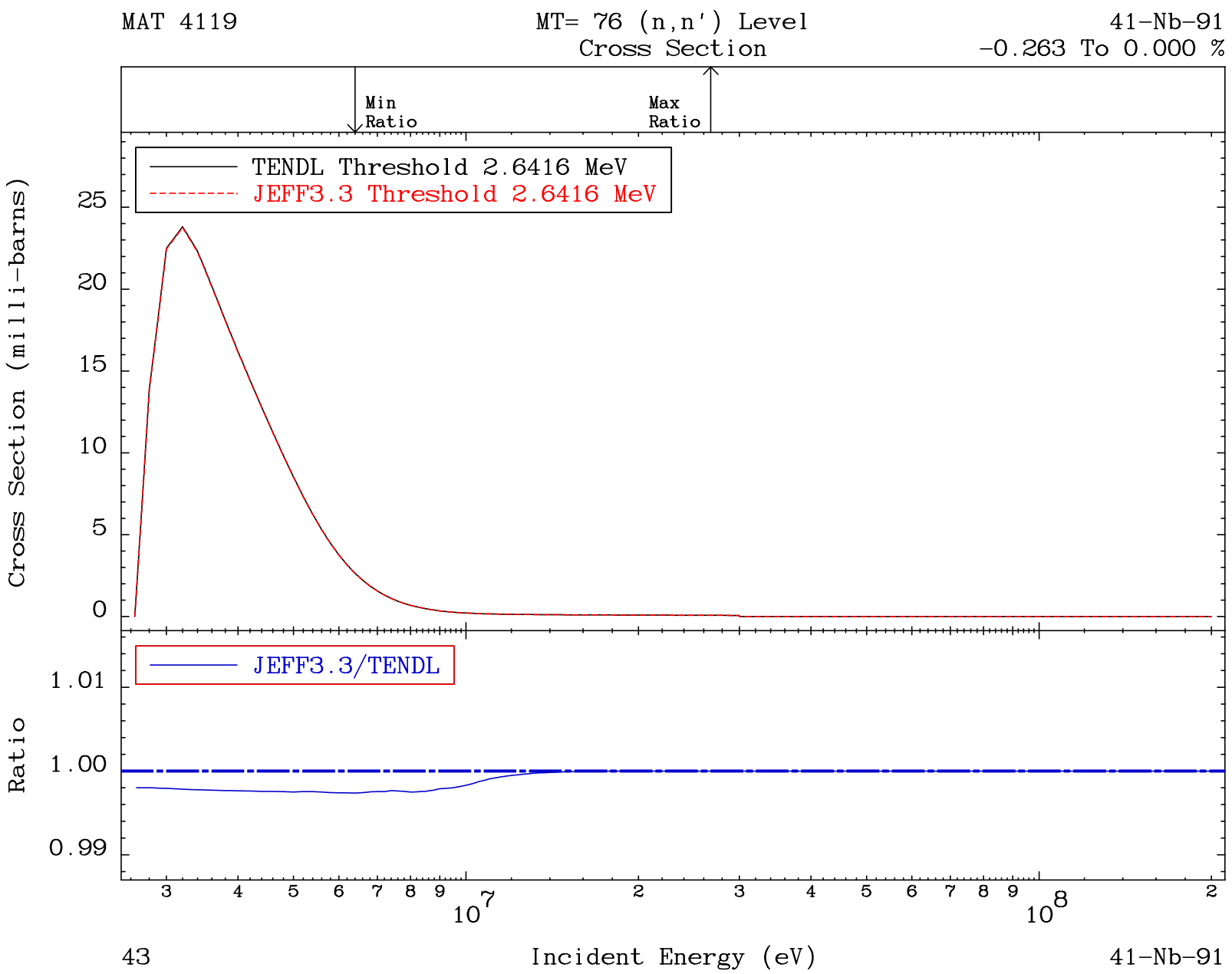

MAT 4119
MT= 71 (n,n') Level
Cross Section
41-Nb-91
-0.347 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.3714 MeV
JEFF3.3 Threshold 2.3714 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
41-Nb-91

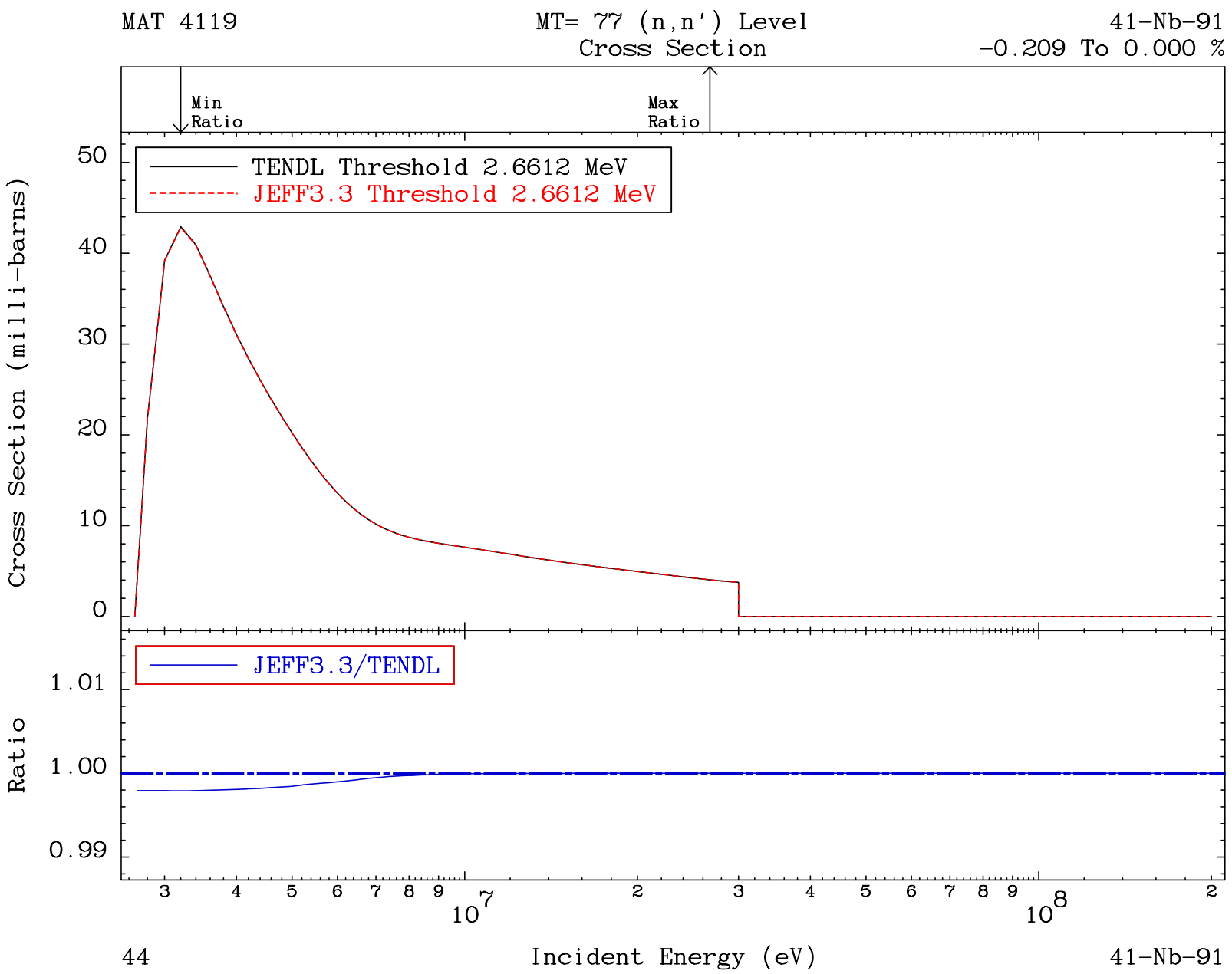

MAT 4119
MT= 72 (n,n') Level
Cross Section
41-Nb-91
-4.085 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.4165 MeV
JEFF3.3 Threshold 2.4165 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
39
Incident Energy (eV)
41-Nb-91

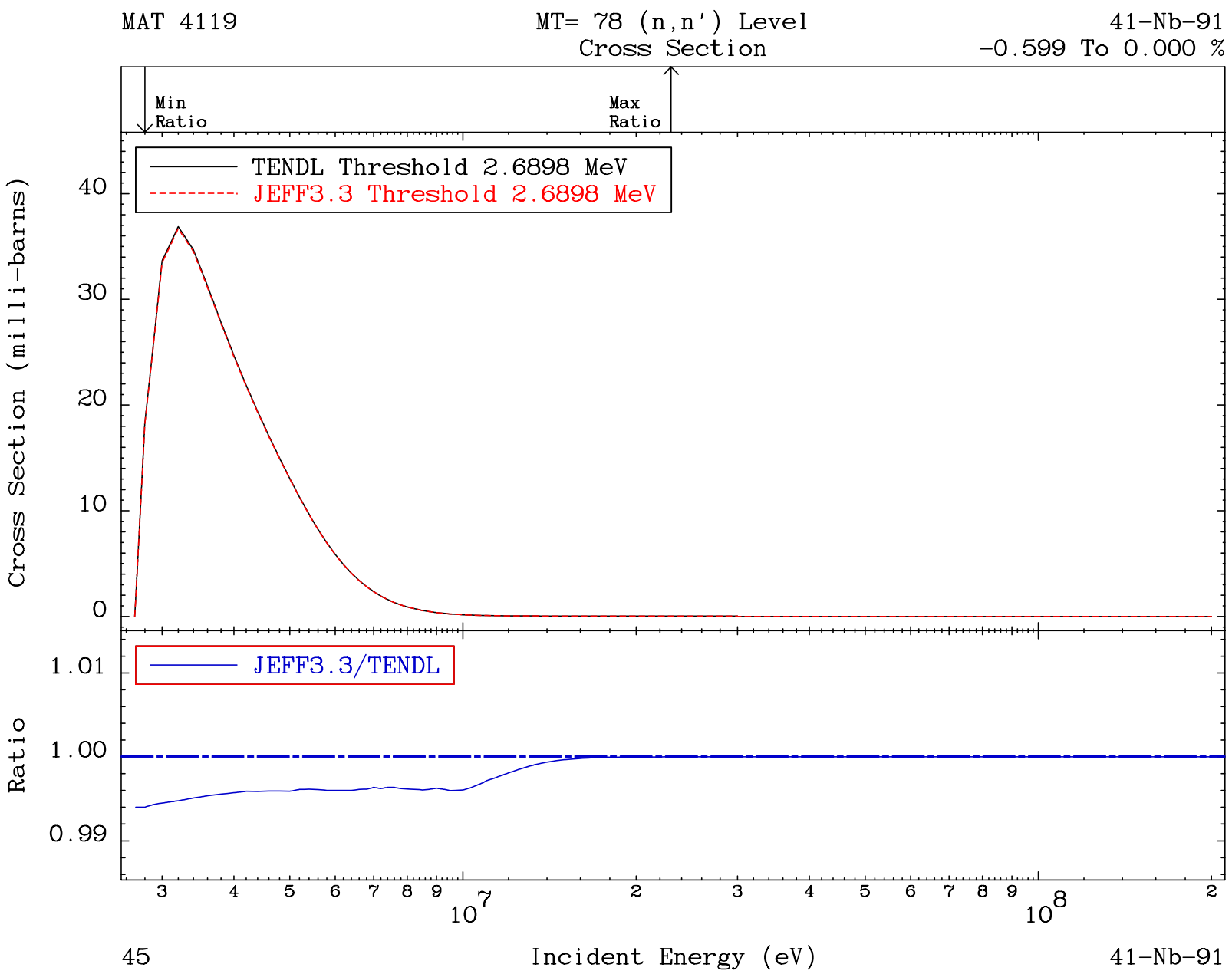

MAT 4119
MT= 73 (n,n') Level
Cross Section
41-Nb-91
-0.384 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.4403 MeV
JEFF3.3 Threshold 2.4403 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
41-Nb-91

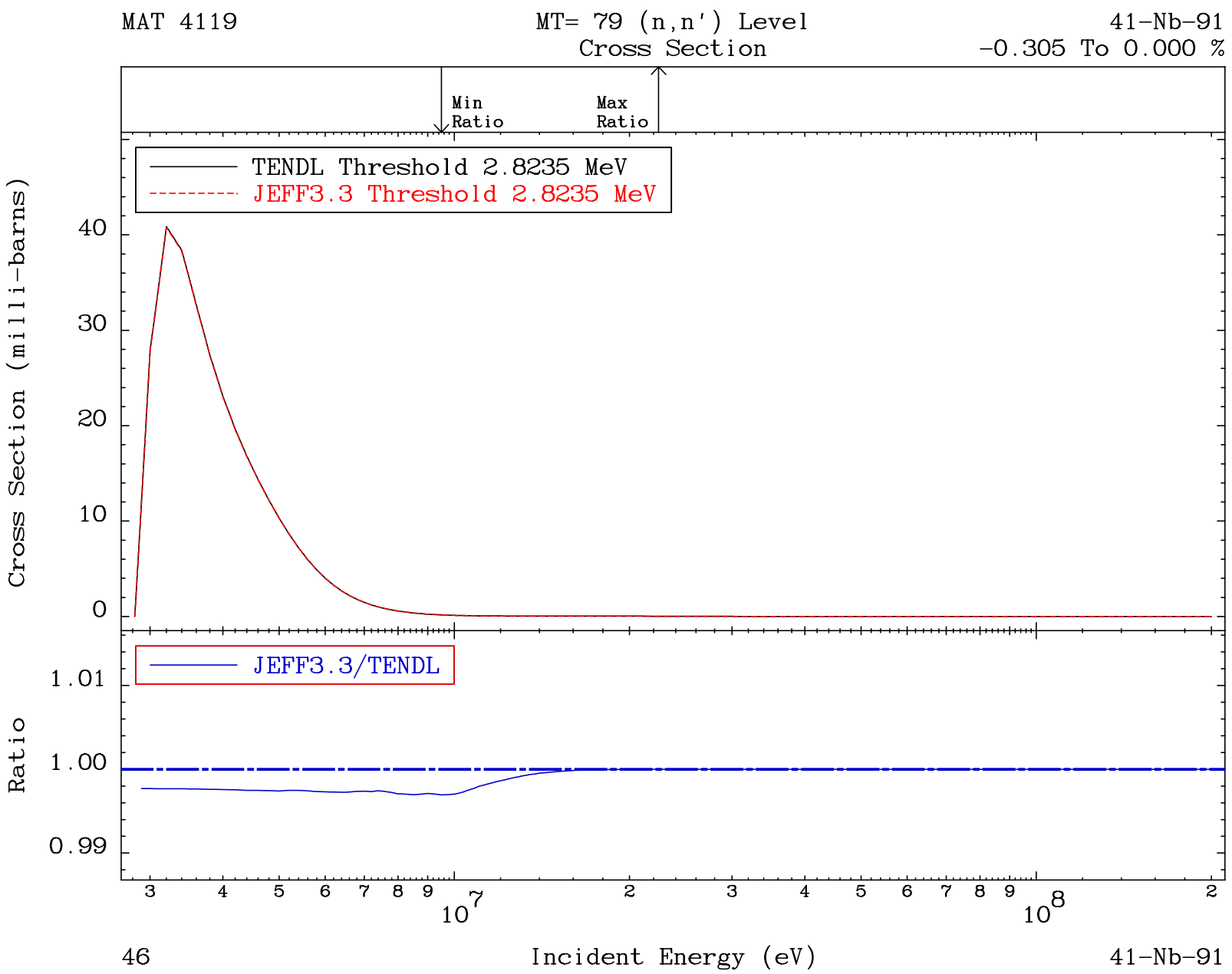

MAT 4119
MT= 74 (n,n') Level
Cross Section
41-Nb-91
-0.313 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5593 MeV
JEFF3.3 Threshold 2.5593 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
41-Nb-91

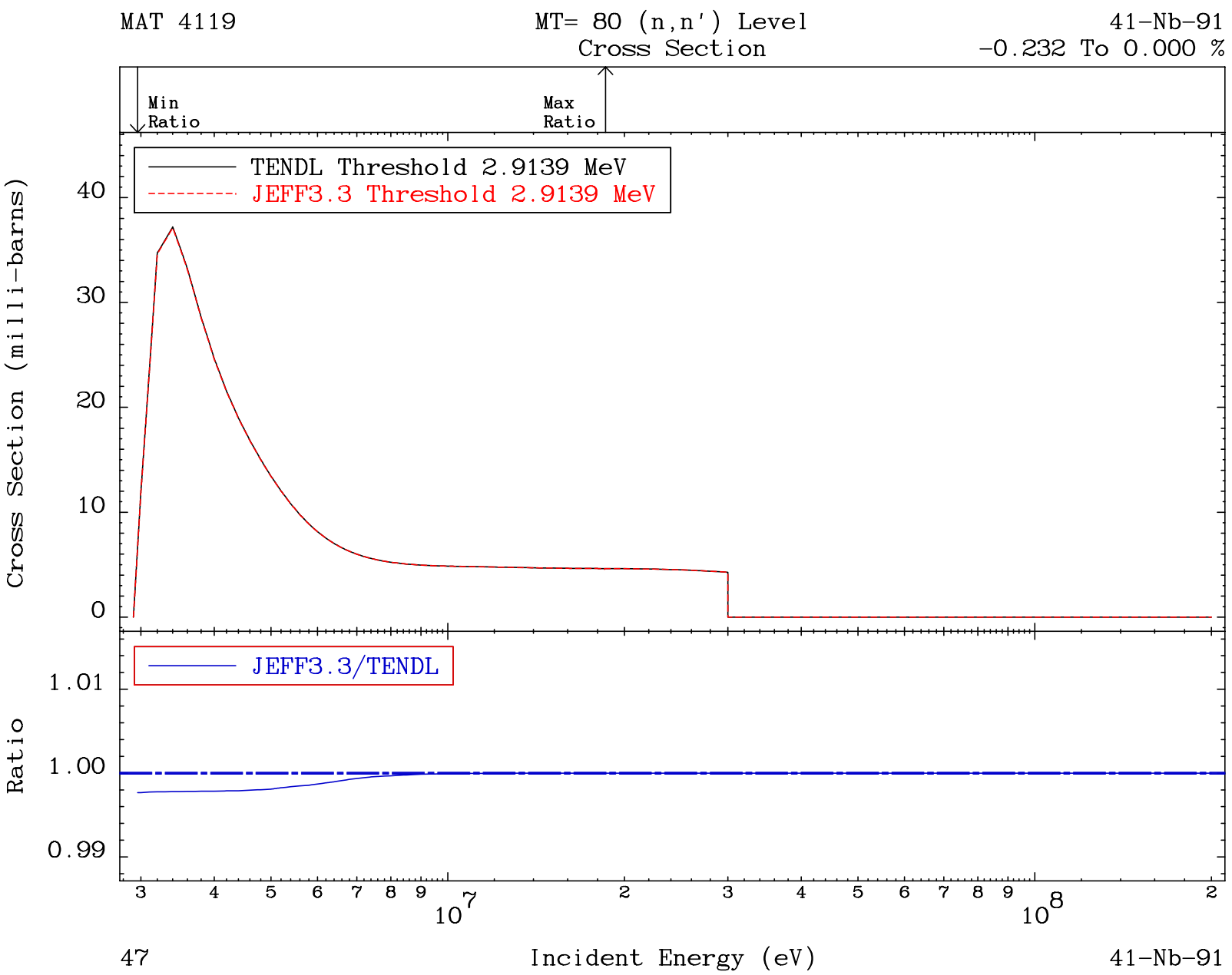

MAT 4119
MT= 75 (n,n') Level
Cross Section
41-Nb-91
-0.353 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.6082 MeV
JEFF3.3 Threshold 2.6082 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
41-Nb-91

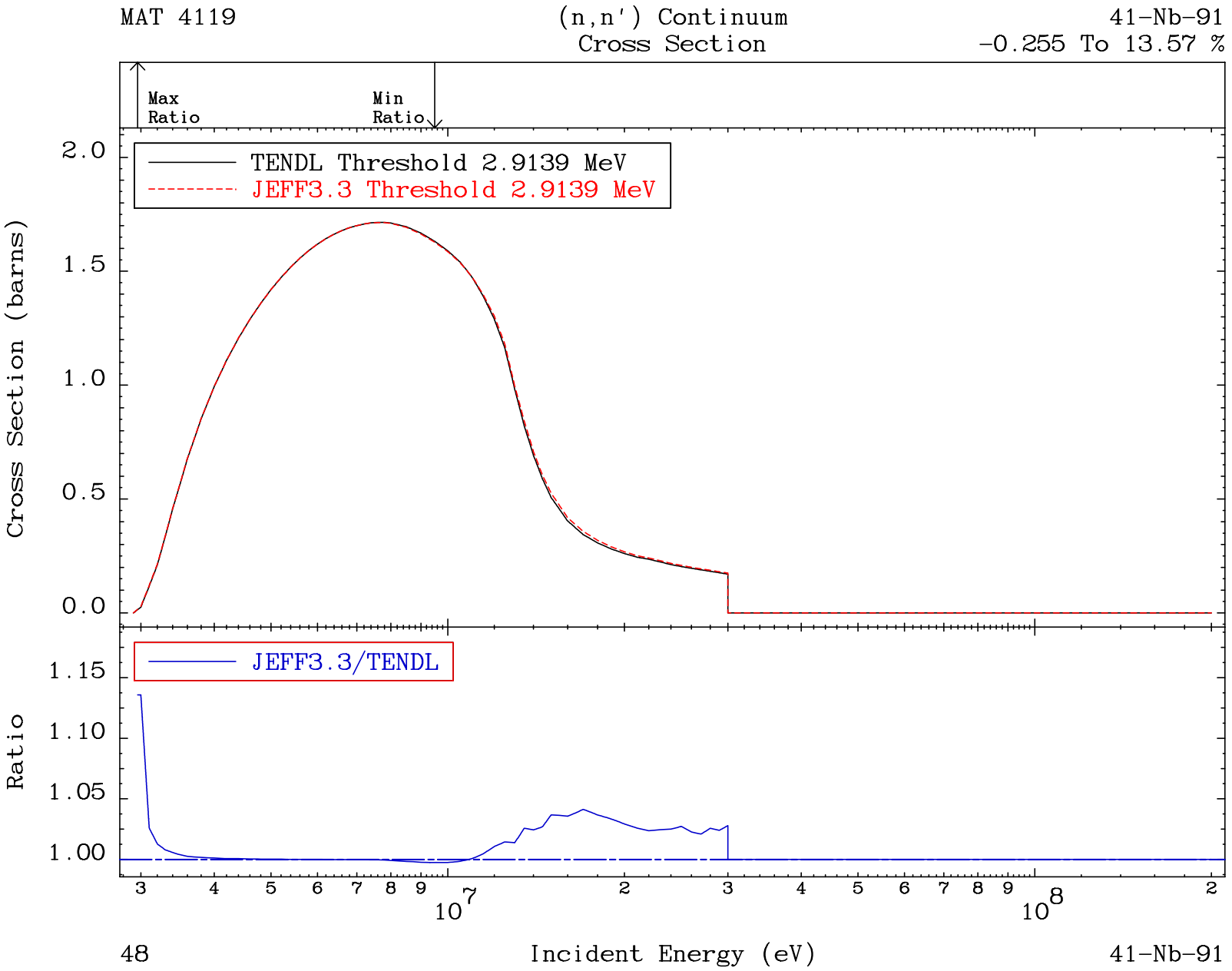

MAT 4119
MT= 76 (n,n') Level
Cross Section
41-Nb-91
-0.263 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6416 MeV
JEFF3.3 Threshold 2.6416 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
43
Incident Energy (eV)
41-Nb-91

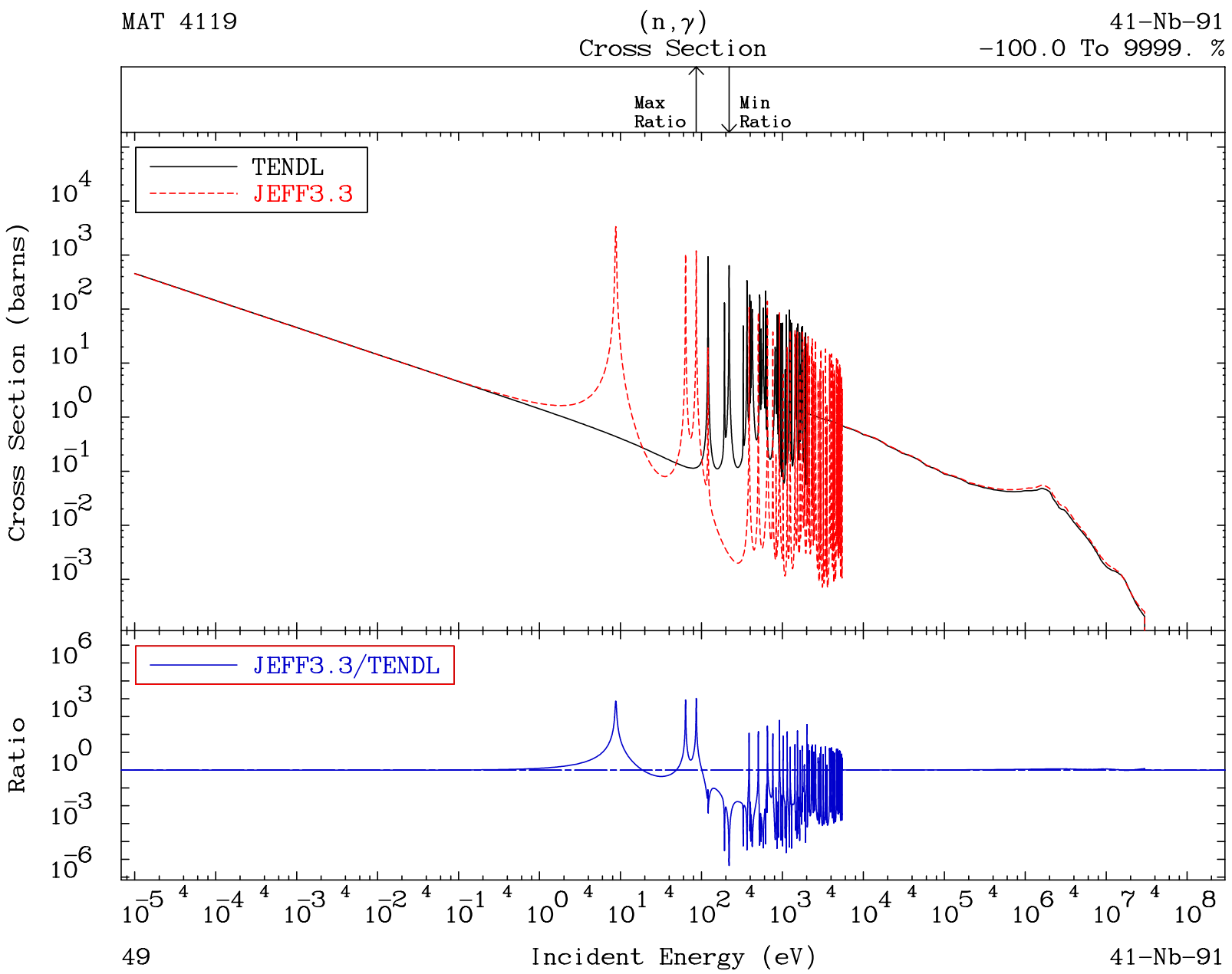

MAT 4119
MT= 77 (n,n') Level
Cross Section
41-Nb-91
-0.209 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.6612 MeV
JEFF3.3 Threshold 2.6612 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
41-Nb-91

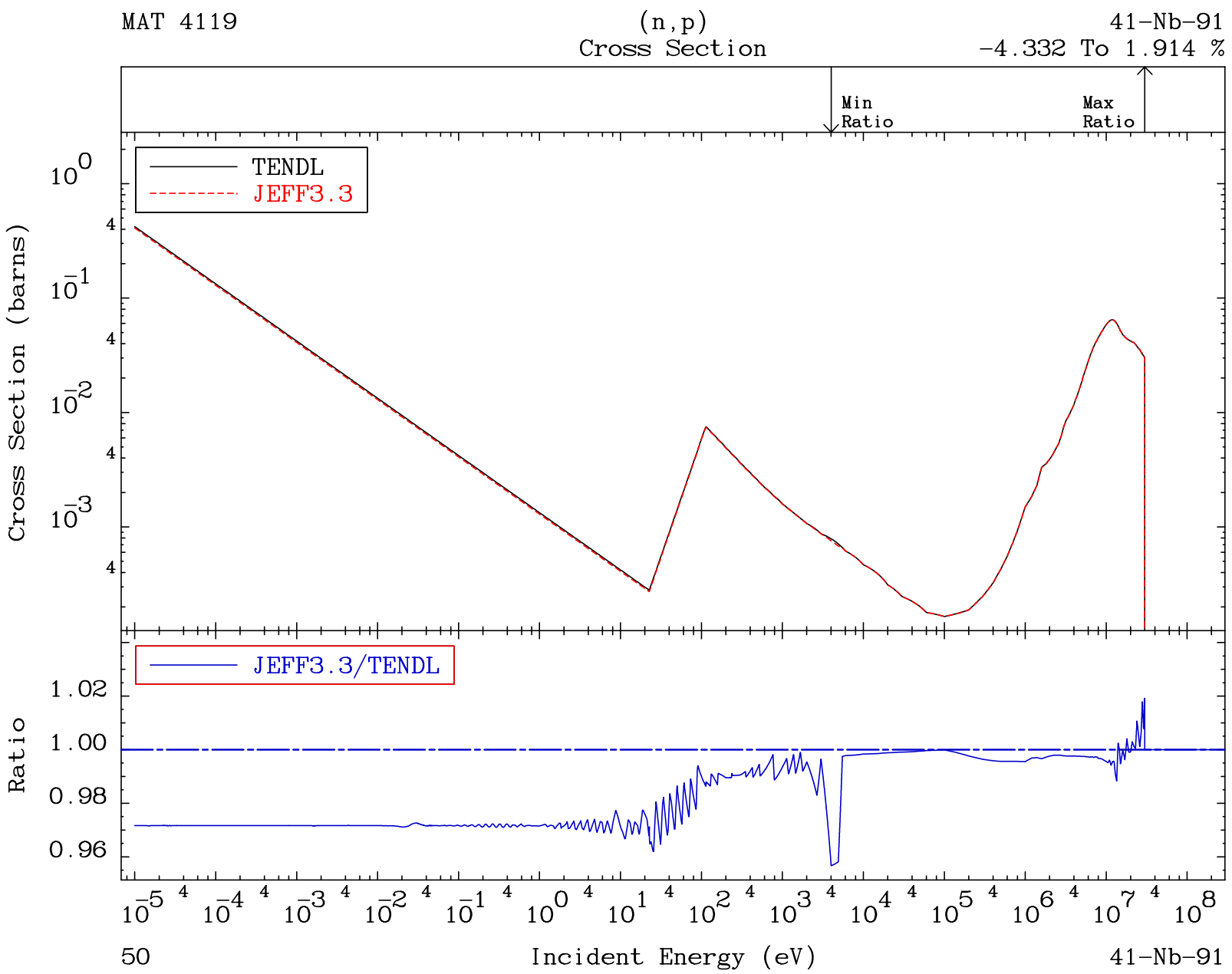

MAT 4119
MT= 78 (n,n') Level
Cross Section
41-Nb-91
-0.599 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6898 MeV
JEFF3.3 Threshold 2.6898 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
45
Incident Energy (eV)
41-Nb-91

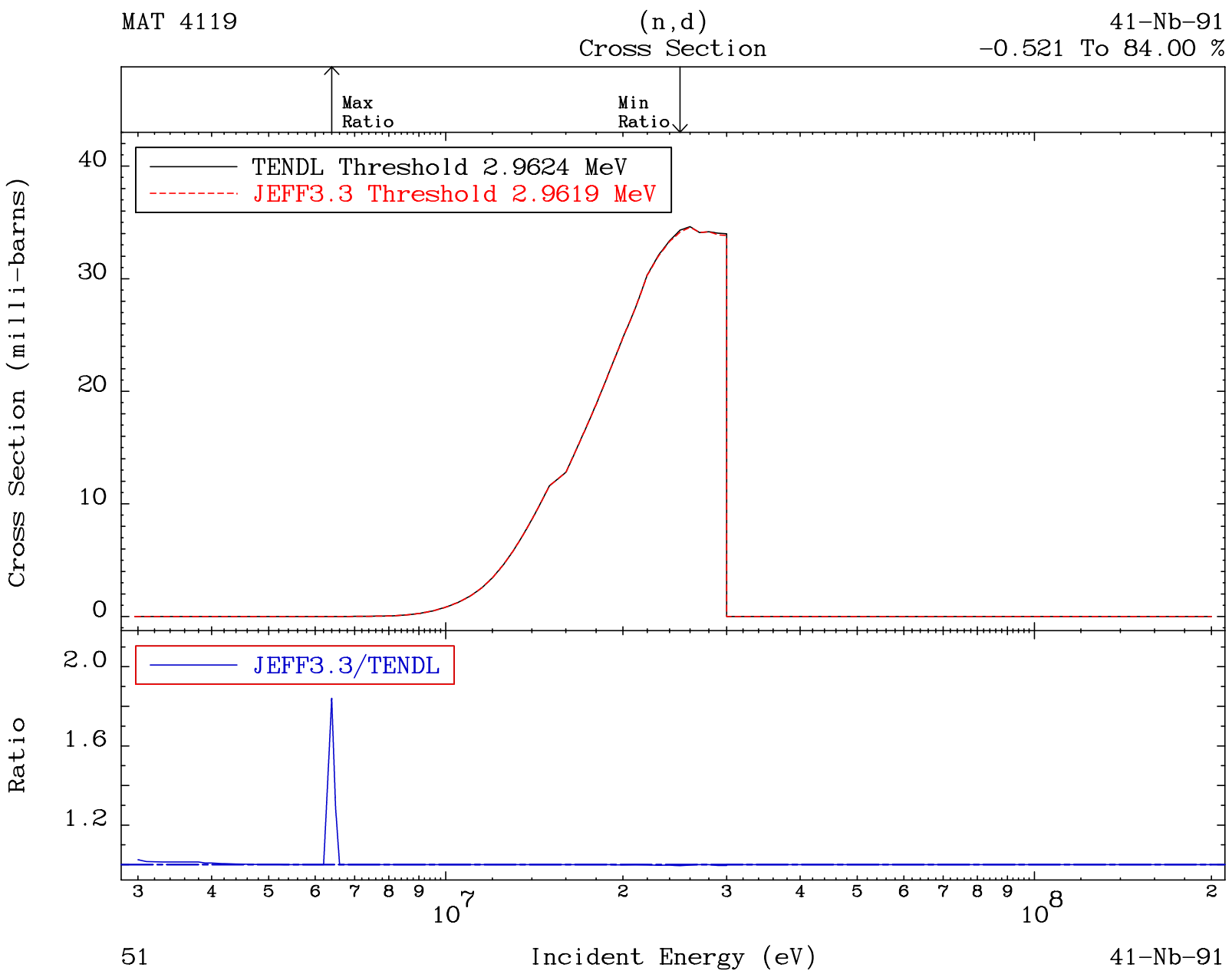

MAT 4119
MT= 79 (n,n') Level
Cross Section
41-Nb-91
-0.305 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.8235 MeV
JEFF3.3 Threshold 2.8235 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
41-Nb-91

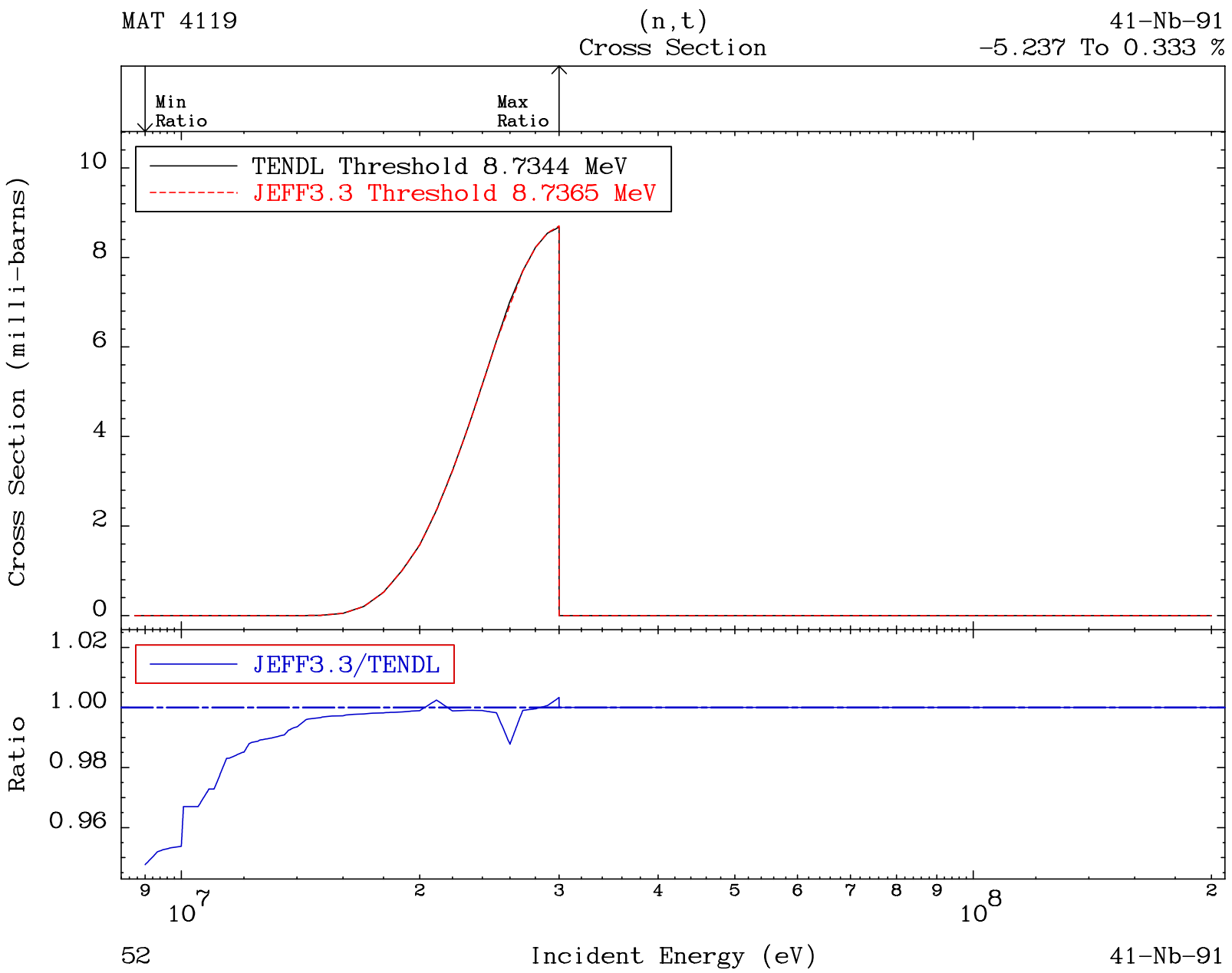

MAT 4119
MT= 80 (n,n') Level
Cross Section
41-Nb-91
-0.232 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.9139 MeV
JEFF3.3 Threshold 2.9139 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
41-Nb-91

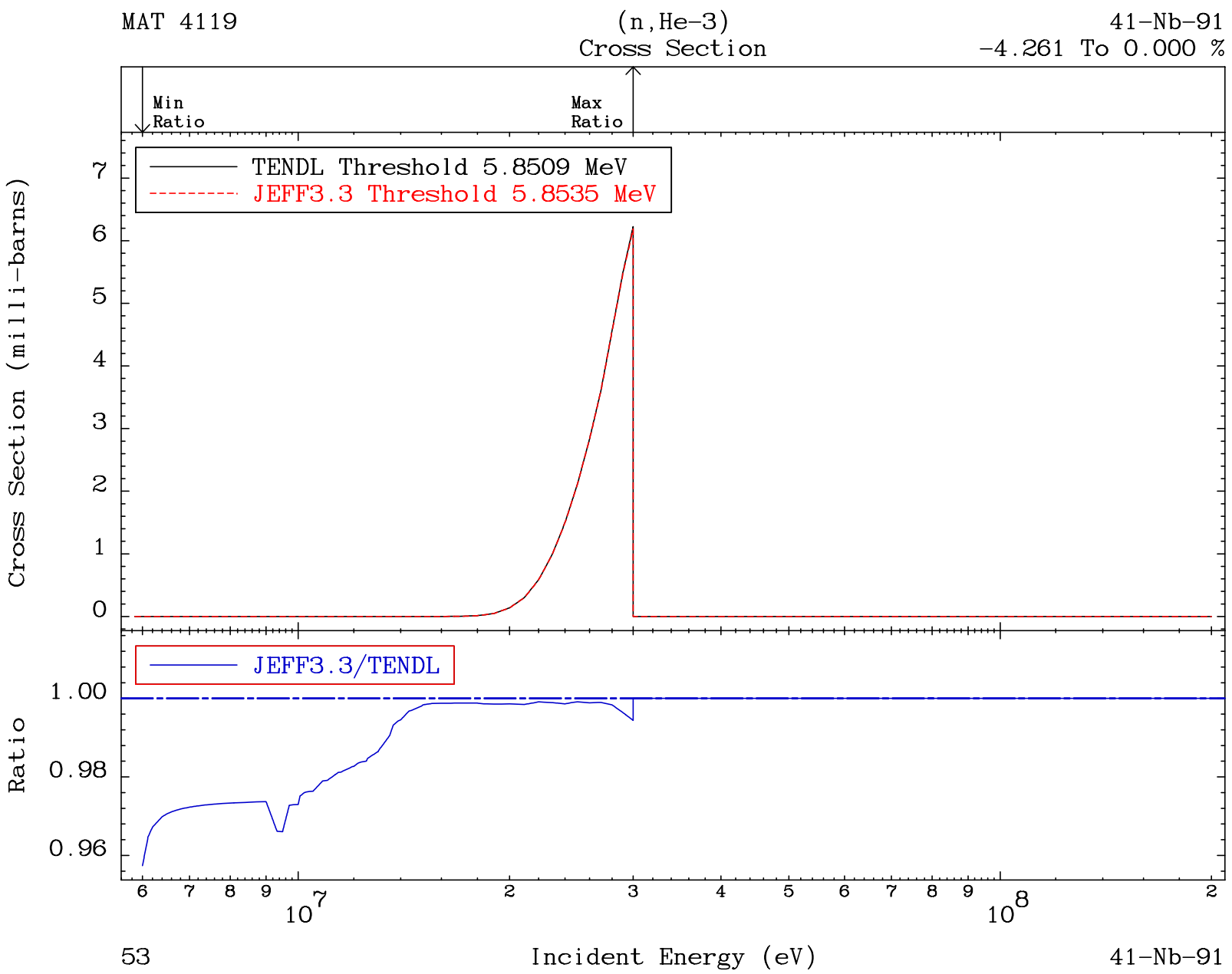

MAT 4119
(n,n') Continuum
Cross Section
41-Nb-91
-0.255 To 13.57 %
Max Ratio
Min Ratio
TENDL Threshold 2.9139 MeV
JEFF3.3 Threshold 2.9139 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
41-Nb-91

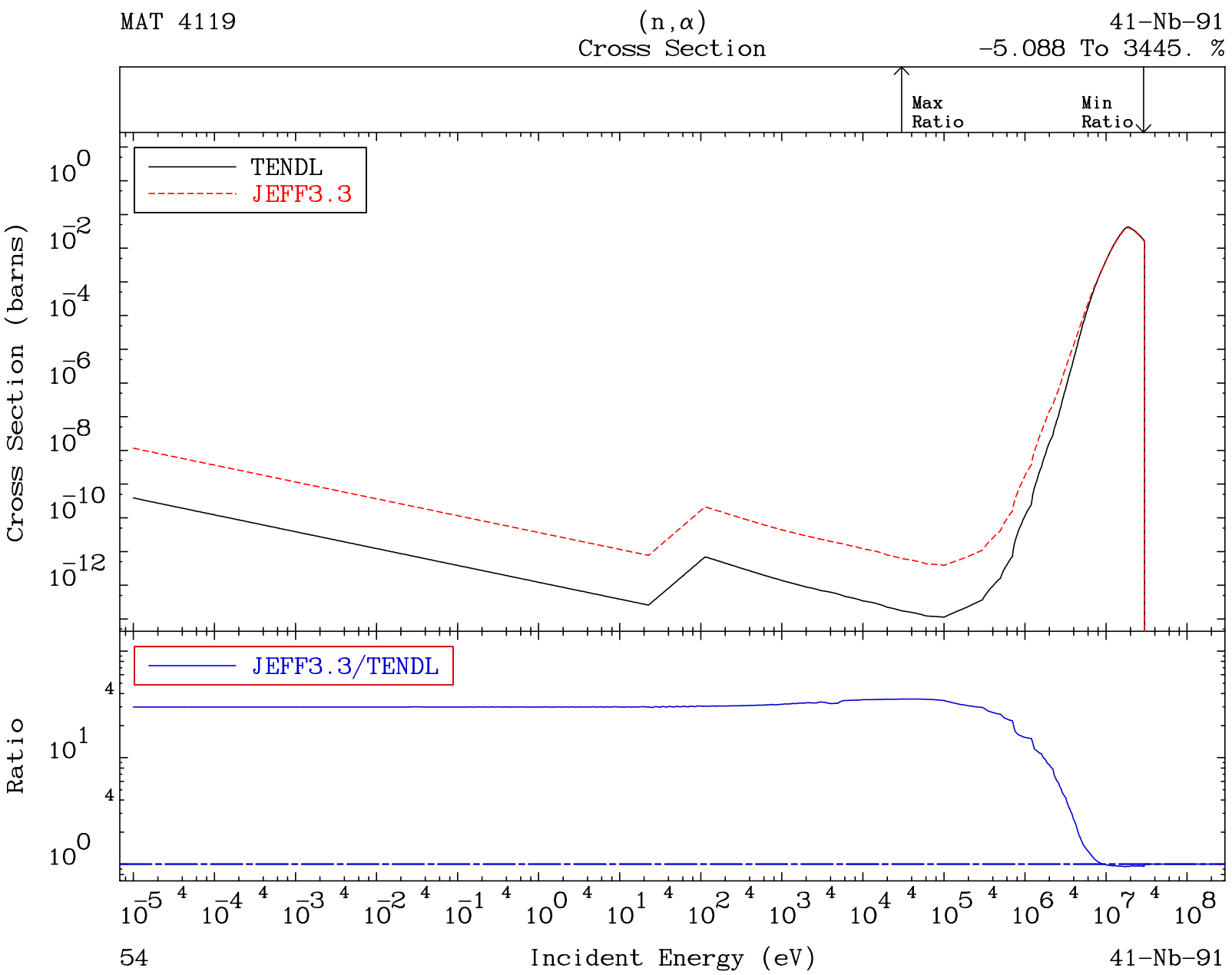

MAT 4119
(n,γ)
Cross Section
41-Nb-91
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
41-Nb-91

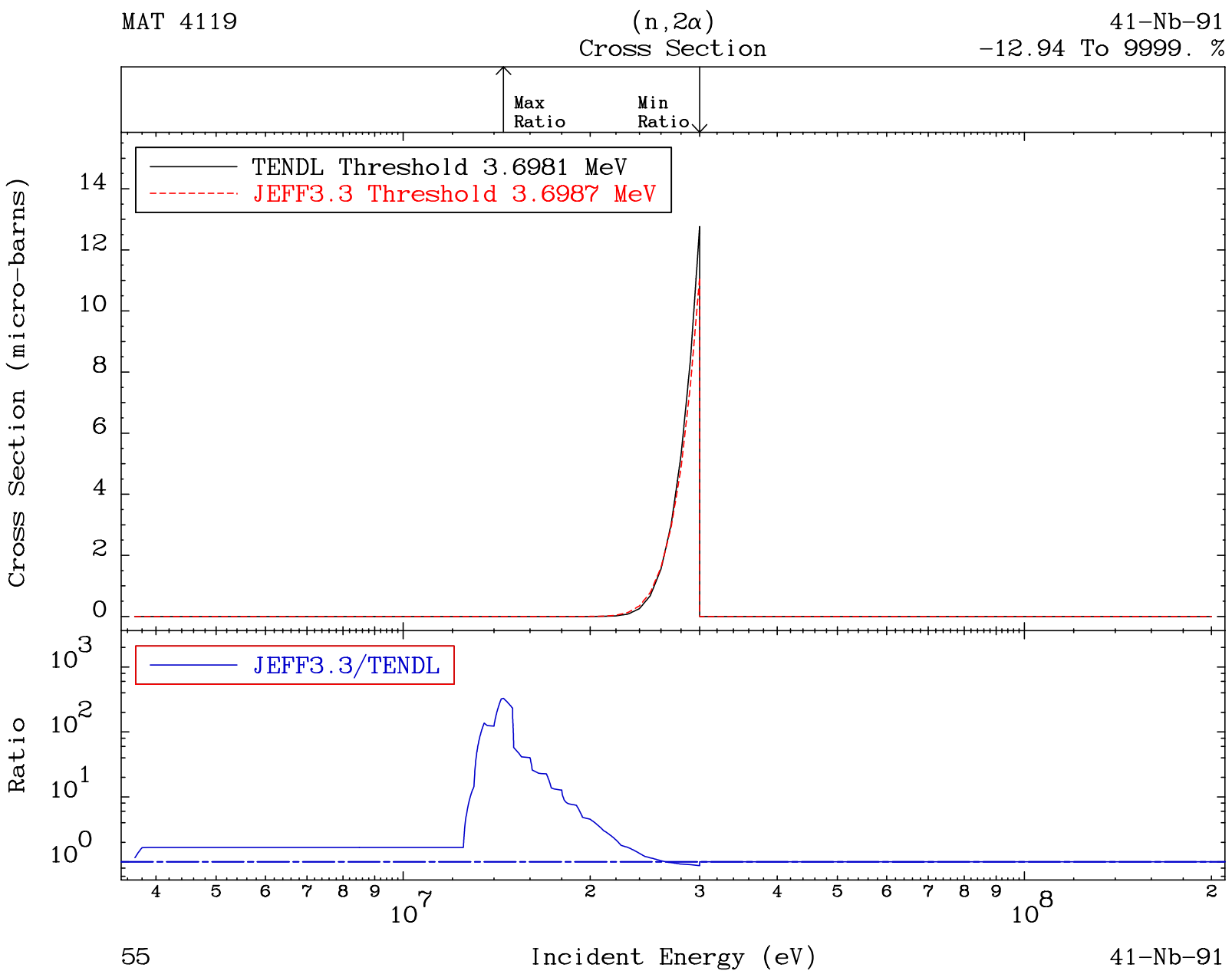

MAT 4119
(n,p)
Cross Section
41-Nb-91
-4.332 To 1.914 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
Incident Energy (eV)
50
41-Nb-91

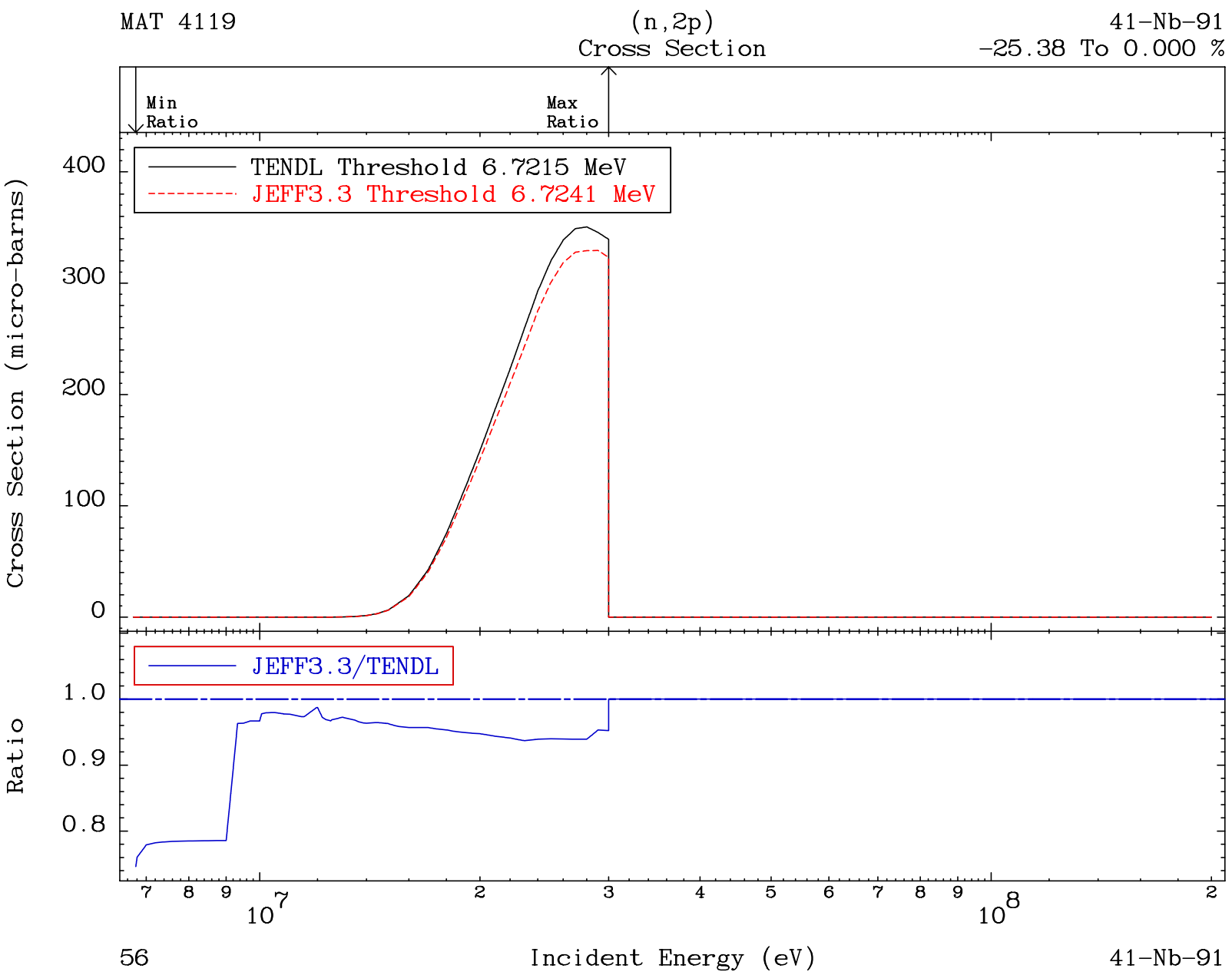

MAT 4119
(n,d)
Cross Section
41-Nb-91
-0.521 To 84.00 %
Max Ratio
Min Ratio
TENDL Threshold 2.9624 MeV
JEFF3.3 Threshold 2.9619 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
51
Incident Energy (eV)
41-Nb-91

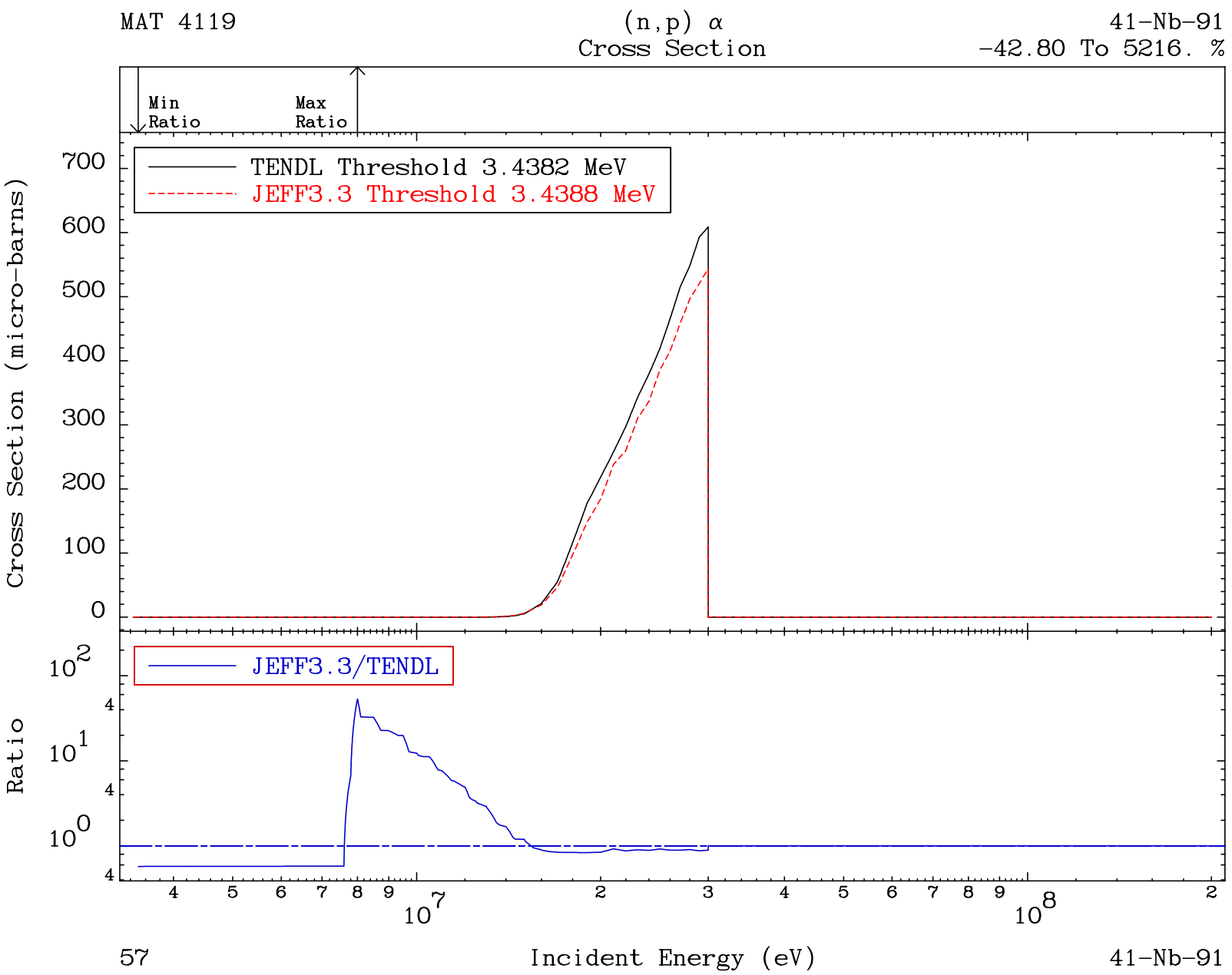

MAT 4119
(n,t)
Cross Section
41-Nb-91
-5.237 To 0.333 %
Min Ratio
Max Ratio
TENDL Threshold 8.7344 MeV
JEFF3.3 Threshold 8.7365 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
9
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
41-Nb-91

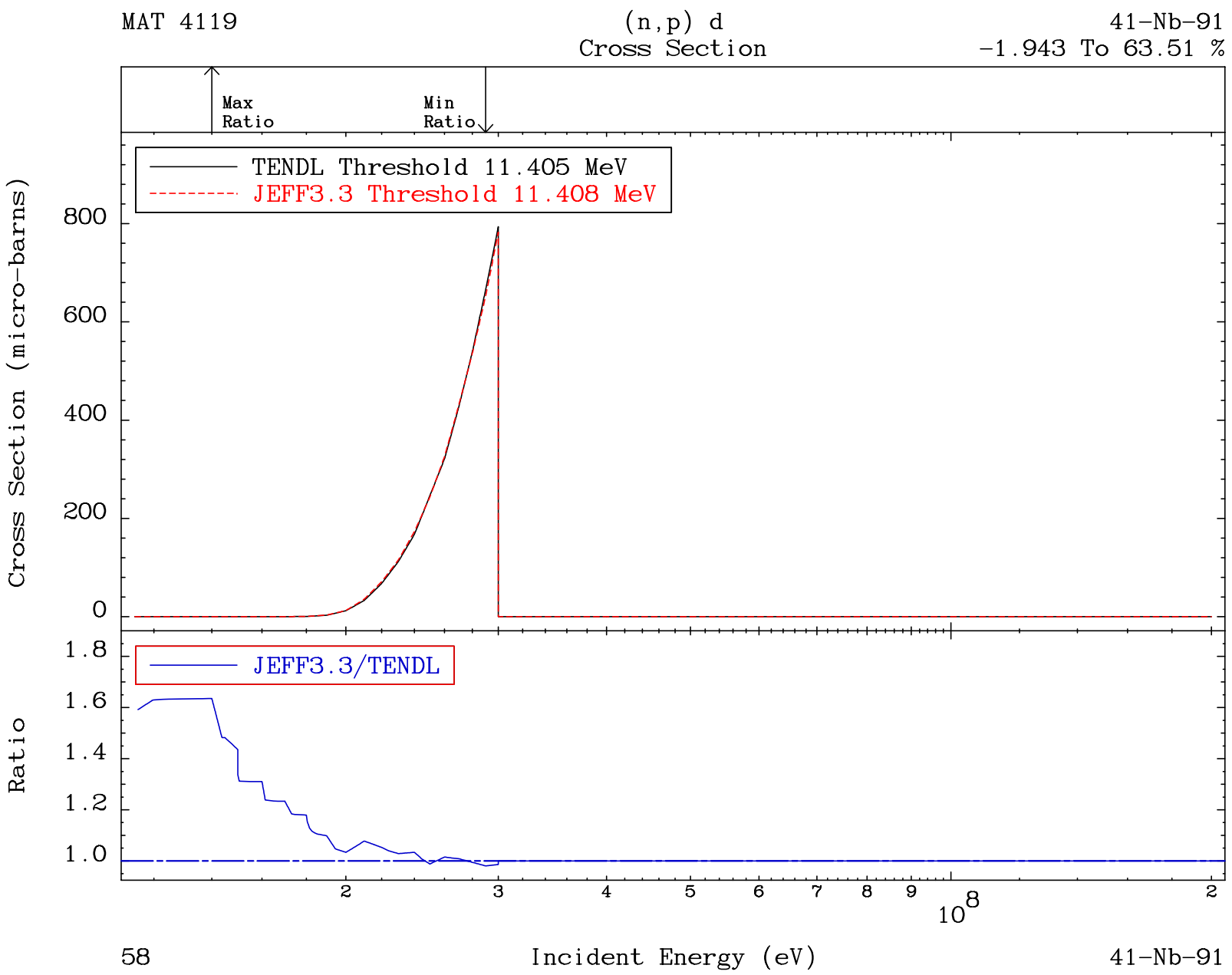

MAT 4119
(n,He-3)
Cross Section
41-Nb-91
-4.261 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.8509 MeV
JEFF3.3 Threshold 5.8535 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
41-Nb-91

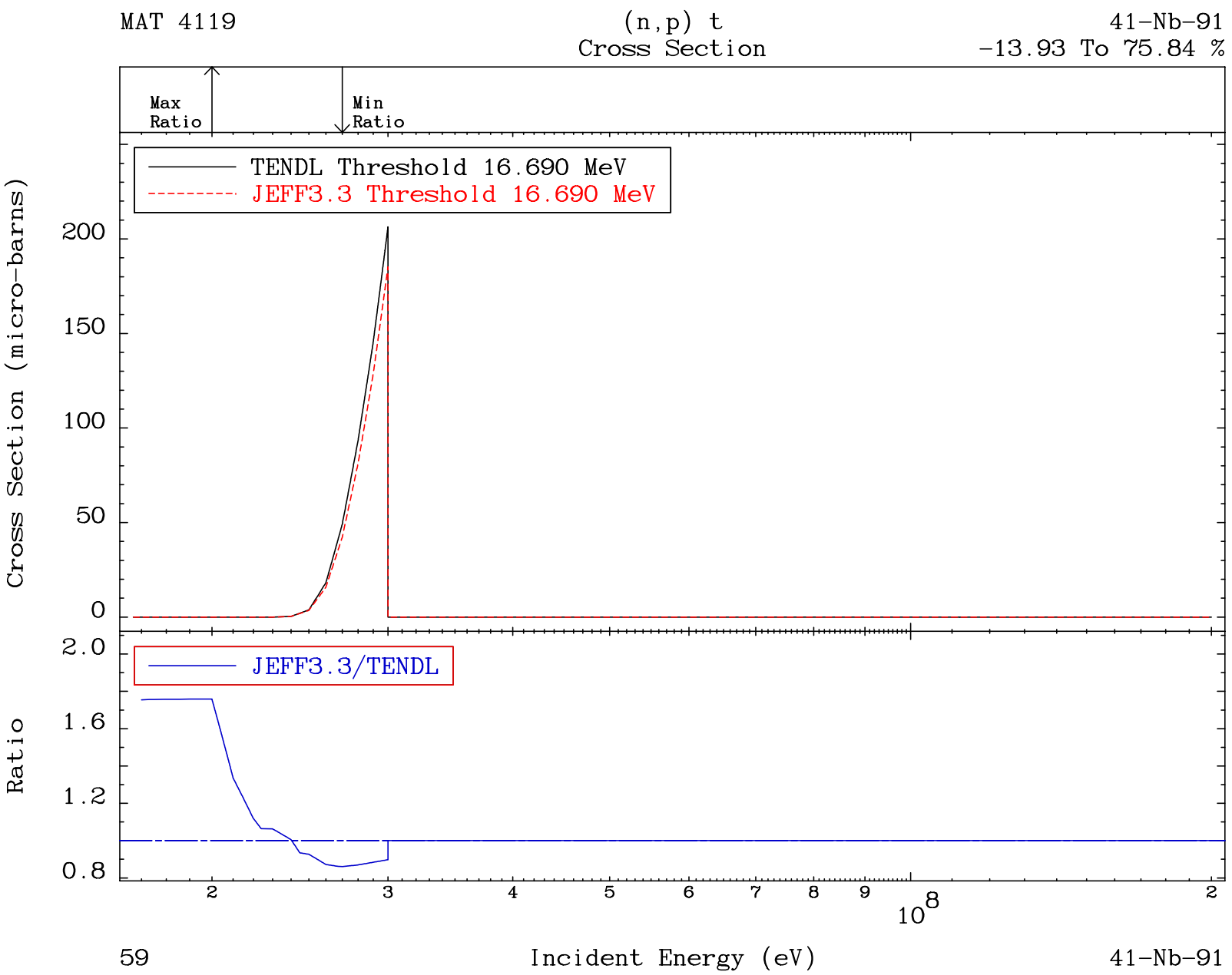

MAT 4119
(n,α)
Cross Section
41-Nb-91
-5.088 To 3445. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
54
41-Nb-91

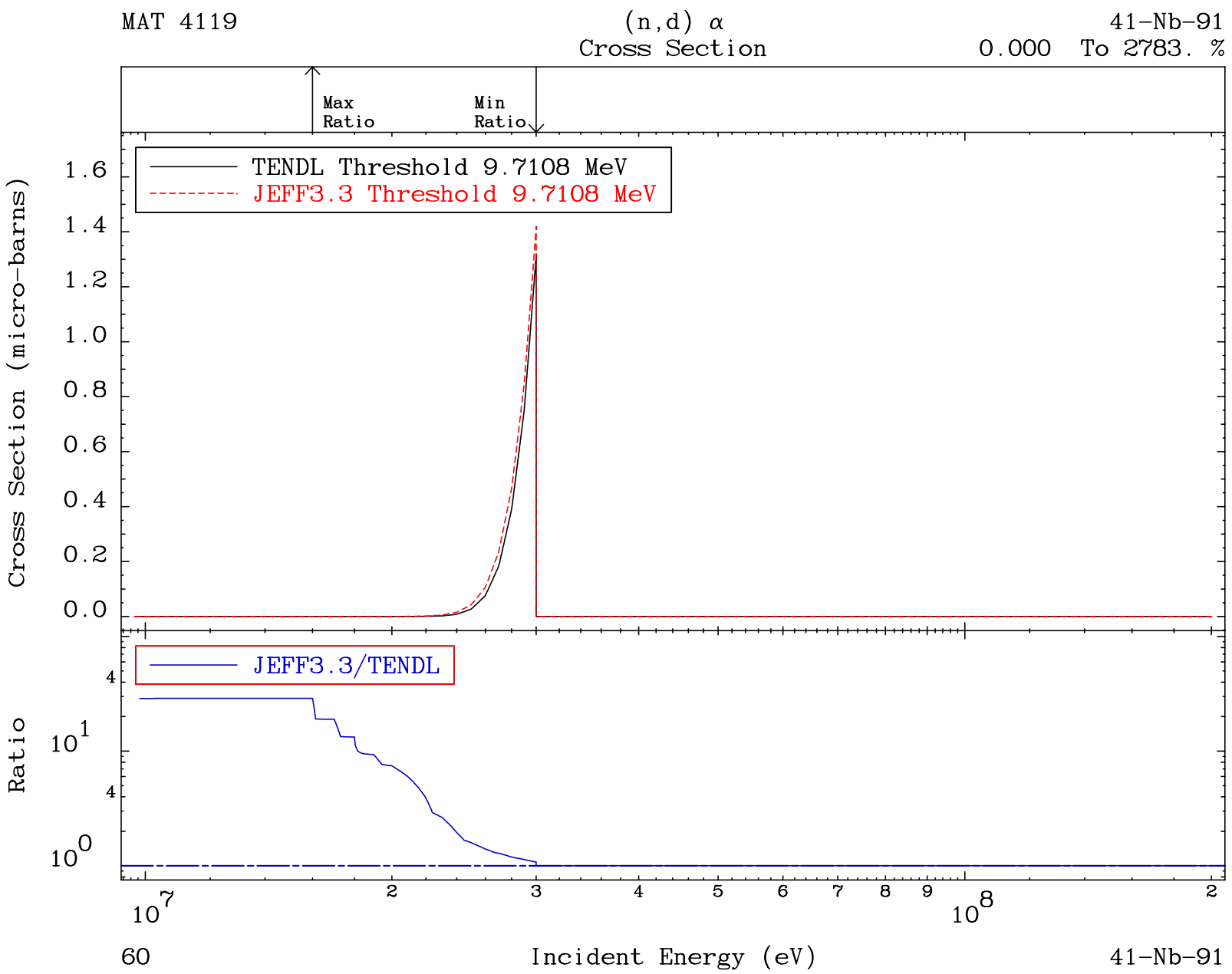

MAT 4119
(n,2α)
Cross Section
41-Nb-91
-12.94 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.6981 MeV
JEFF3.3 Threshold 3.6987 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
41-Nb-91

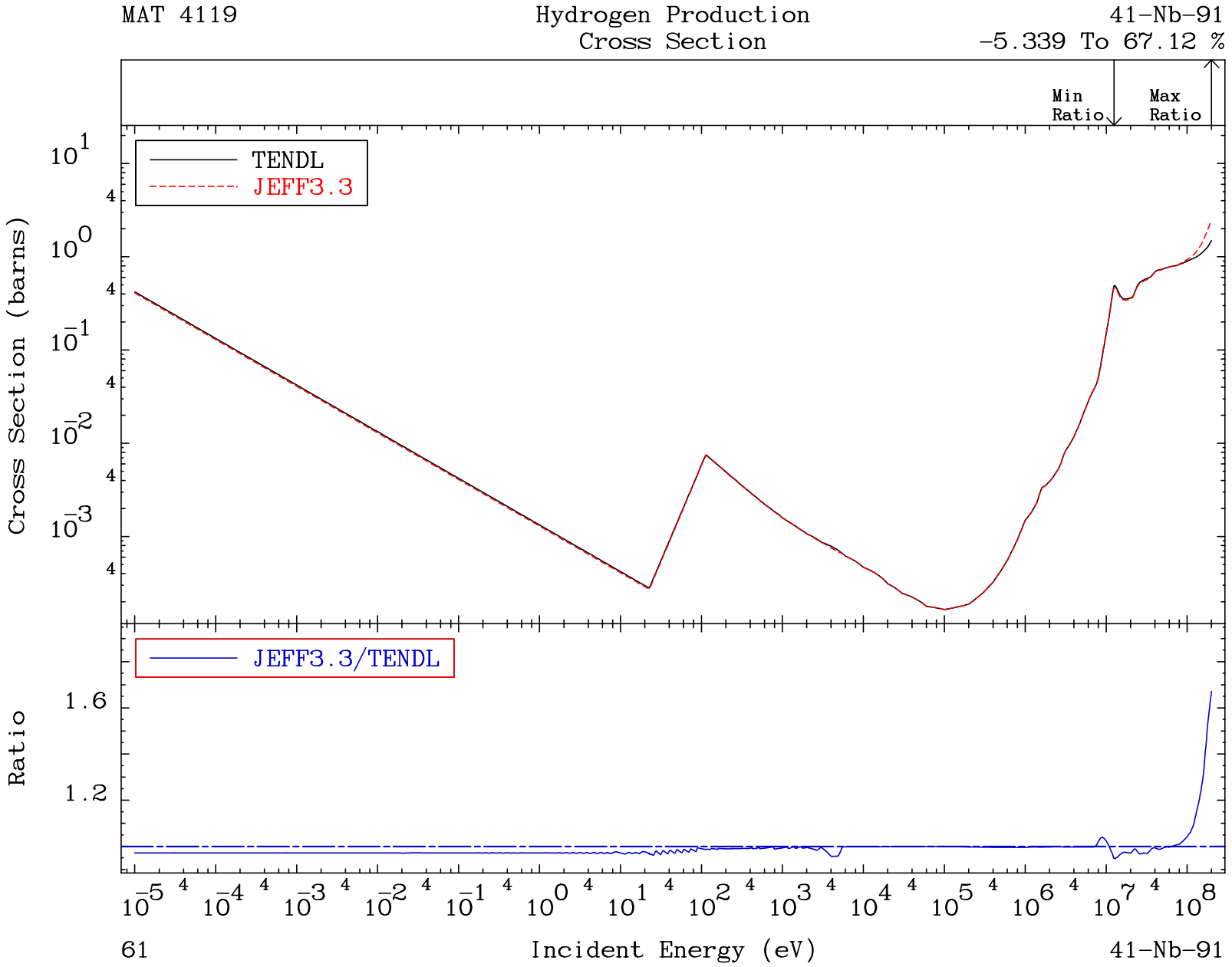

MAT 4119
(n,2p)
Cross Section
41-Nb-91
-25.38 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.7215 MeV
JEFF3.3 Threshold 6.7241 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
41-Nb-91

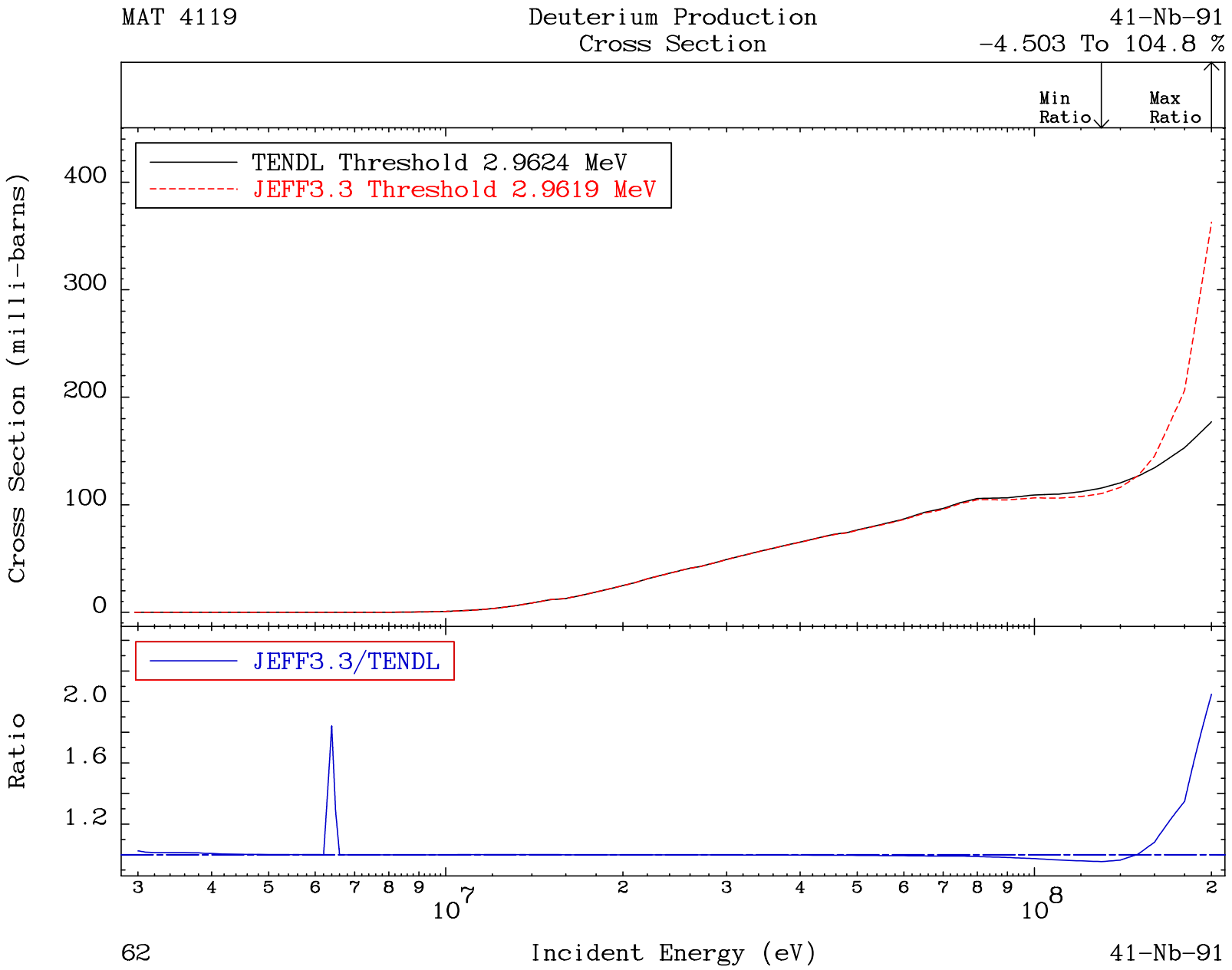

MAT 4119
(n,p) α
Cross Section
41-Nb-91
-42.80 To 5216. %
Min Ratio
Max Ratio
TENDL Threshold 3.4382 MeV
JEFF3.3 Threshold 3.4388 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
4
10^7
10^8
2
3
4
5
6
7
8
9
57
Incident Energy (eV)
41-Nb-91

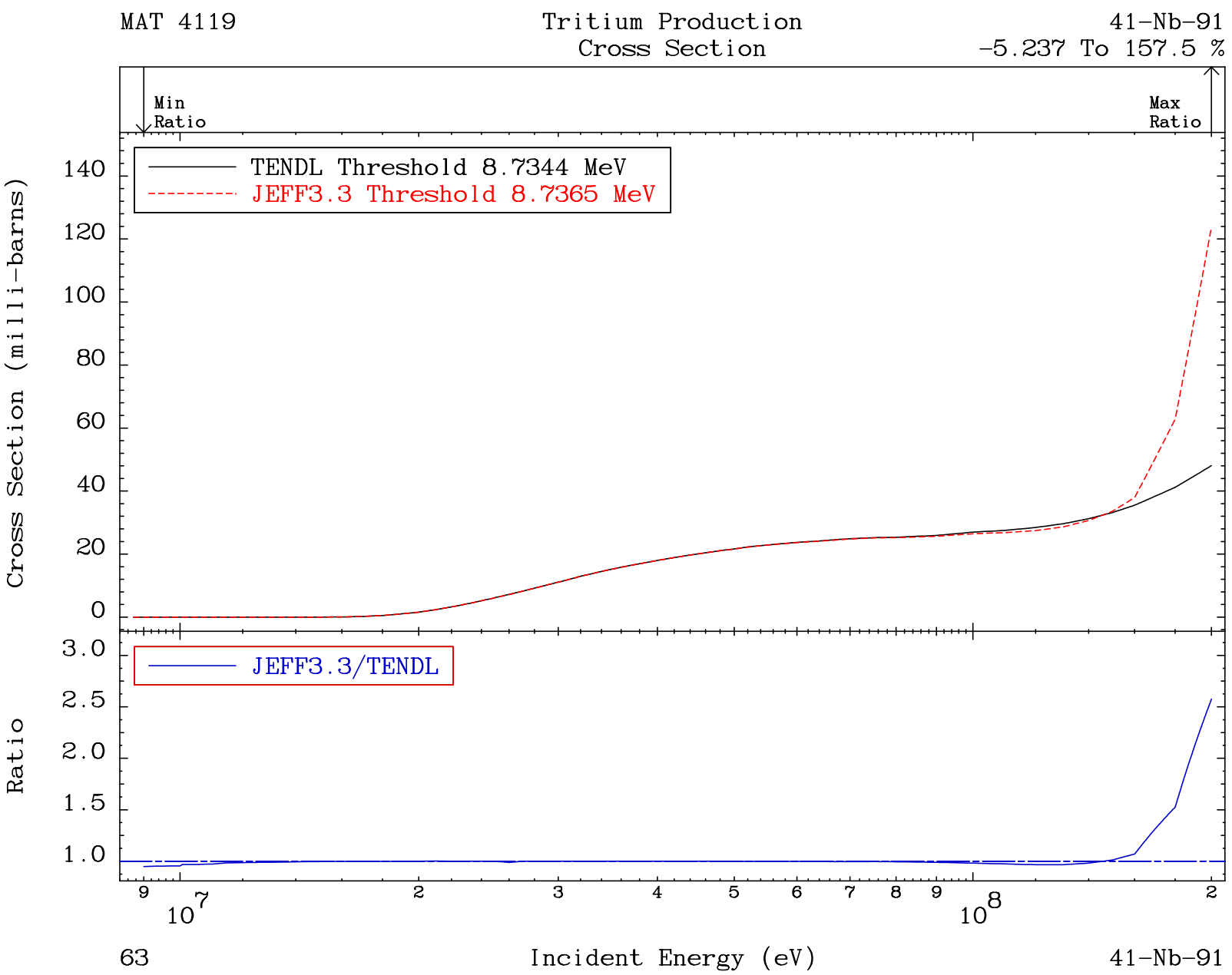

MAT 4119
(n,p) d
Cross Section
41-Nb-91
-1.943 To 63.51 %
Max Ratio
Min Ratio
TENDL Threshold 11.405 MeV
JEFF3.3 Threshold 11.408 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.8
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
41-Nb-91

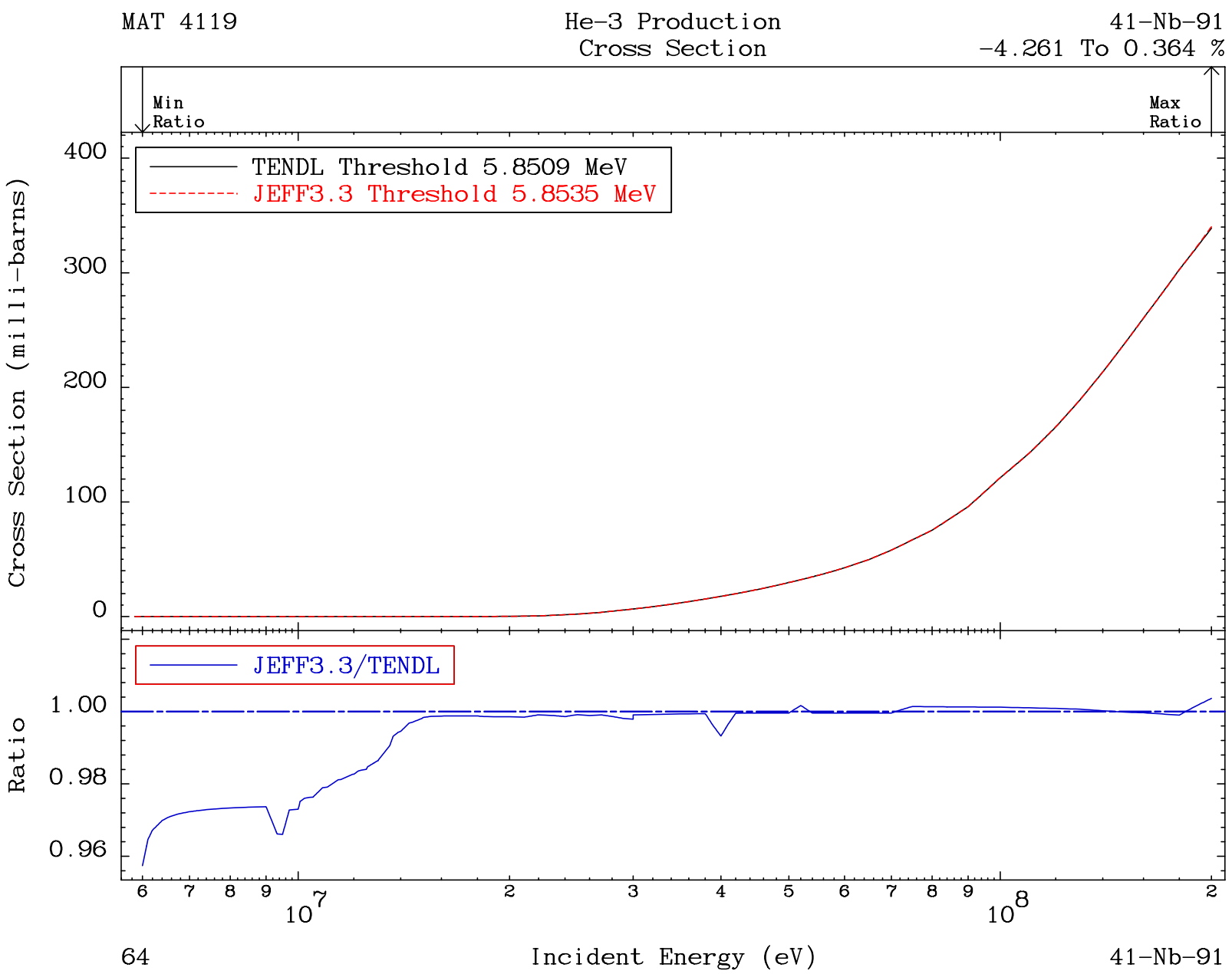

MAT 4119
(n,p) t
Cross Section
41-Nb-91
-13.93 To 75.84 %
Max Ratio
Min Ratio
TENDL Threshold 16.690 MeV
JEFF3.3 Threshold 16.690 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
41-Nb-91

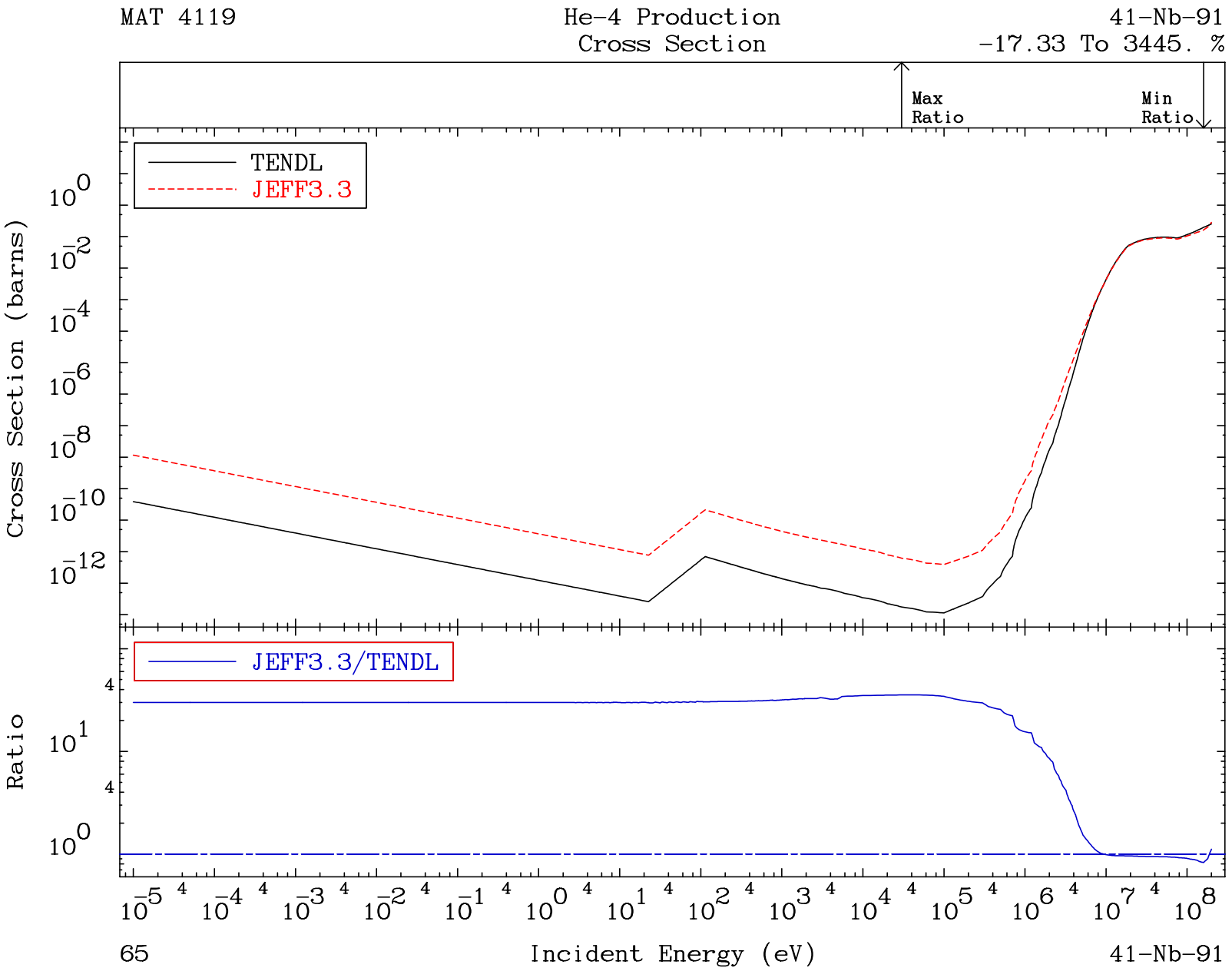

MAT 4119
(n,d) α
Cross Section
41-Nb-91
0.000 To 2783. %
Max Ratio
Min Ratio
TENDL Threshold 9.7108 MeV
JEFF3.3 Threshold 9.7108 MeV
Cross Section (micro-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
4
10^1
4
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
41-Nb-91

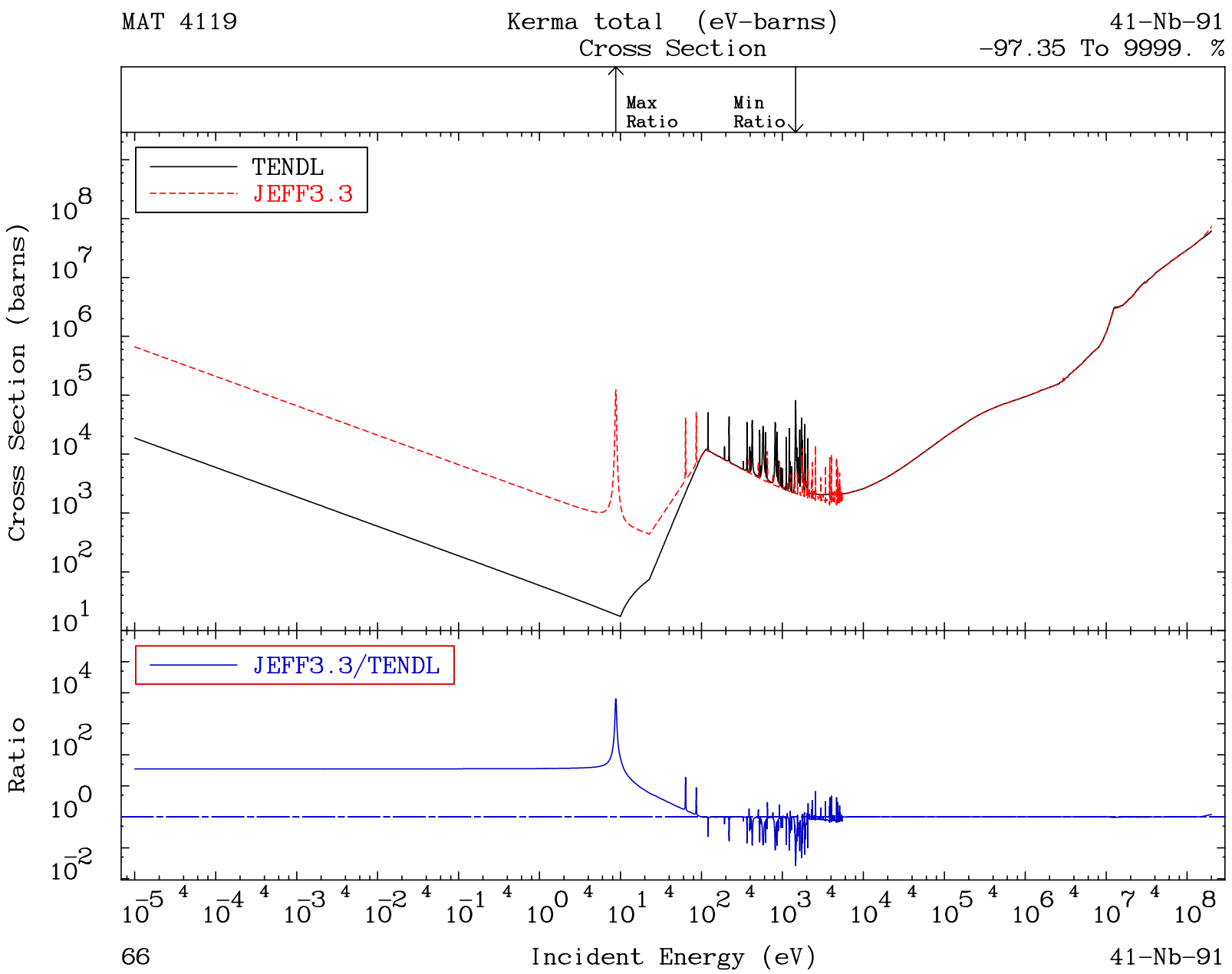

MAT 4119
Hydrogen Production
Cross Section
41-Nb-91
-5.339 To 67.12 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
1.6
1.2
Incident Energy (eV)
61
41-Nb-91

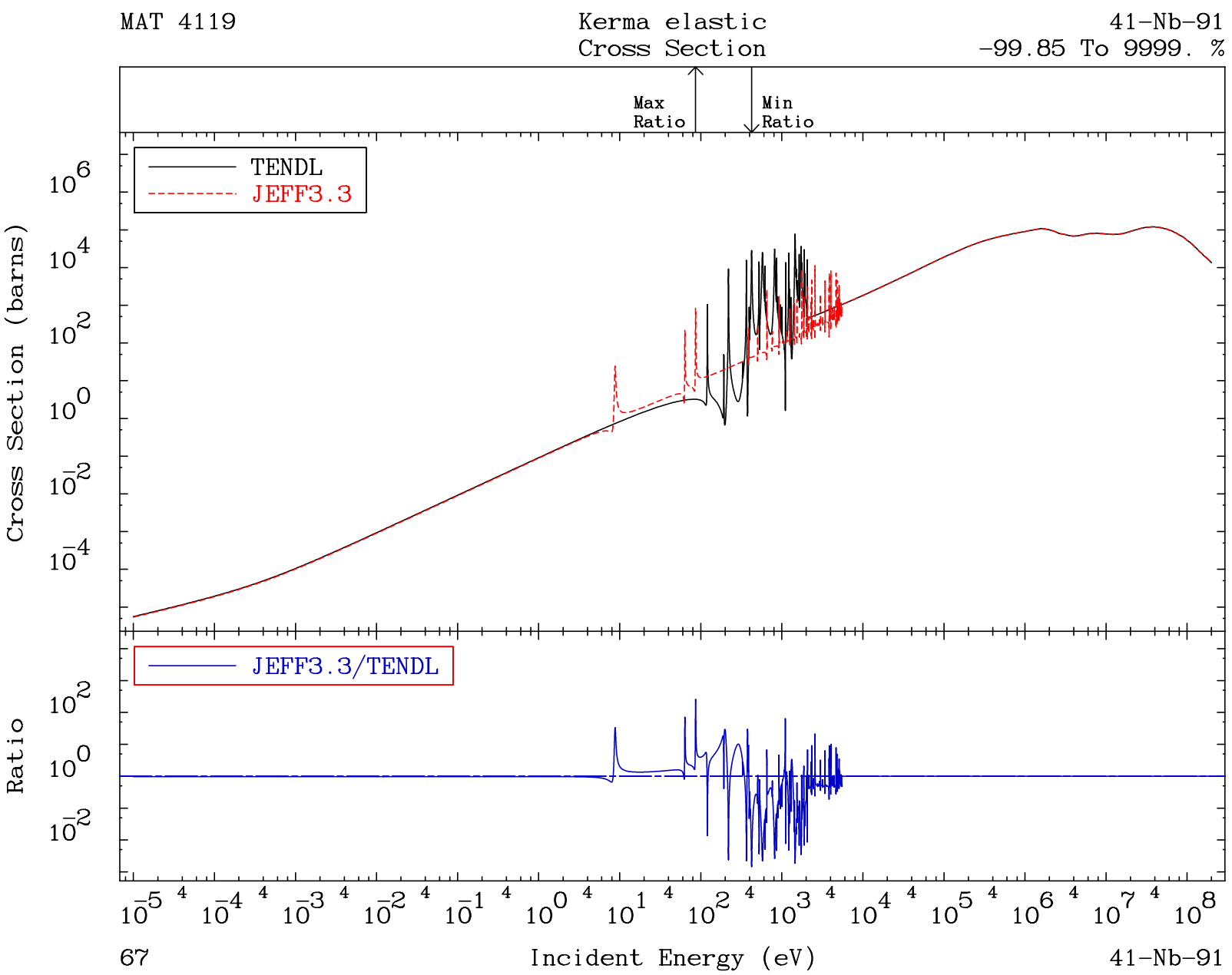

MAT 4119
Deuterium Production
Cross Section
41-Nb-91
-4.503 To 104.8 %
Min Ratio
Max Ratio
TENDL Threshold 2.9624 MeV
JEFF3.3 Threshold 2.9619 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
62
Incident Energy (eV)
41-Nb-91

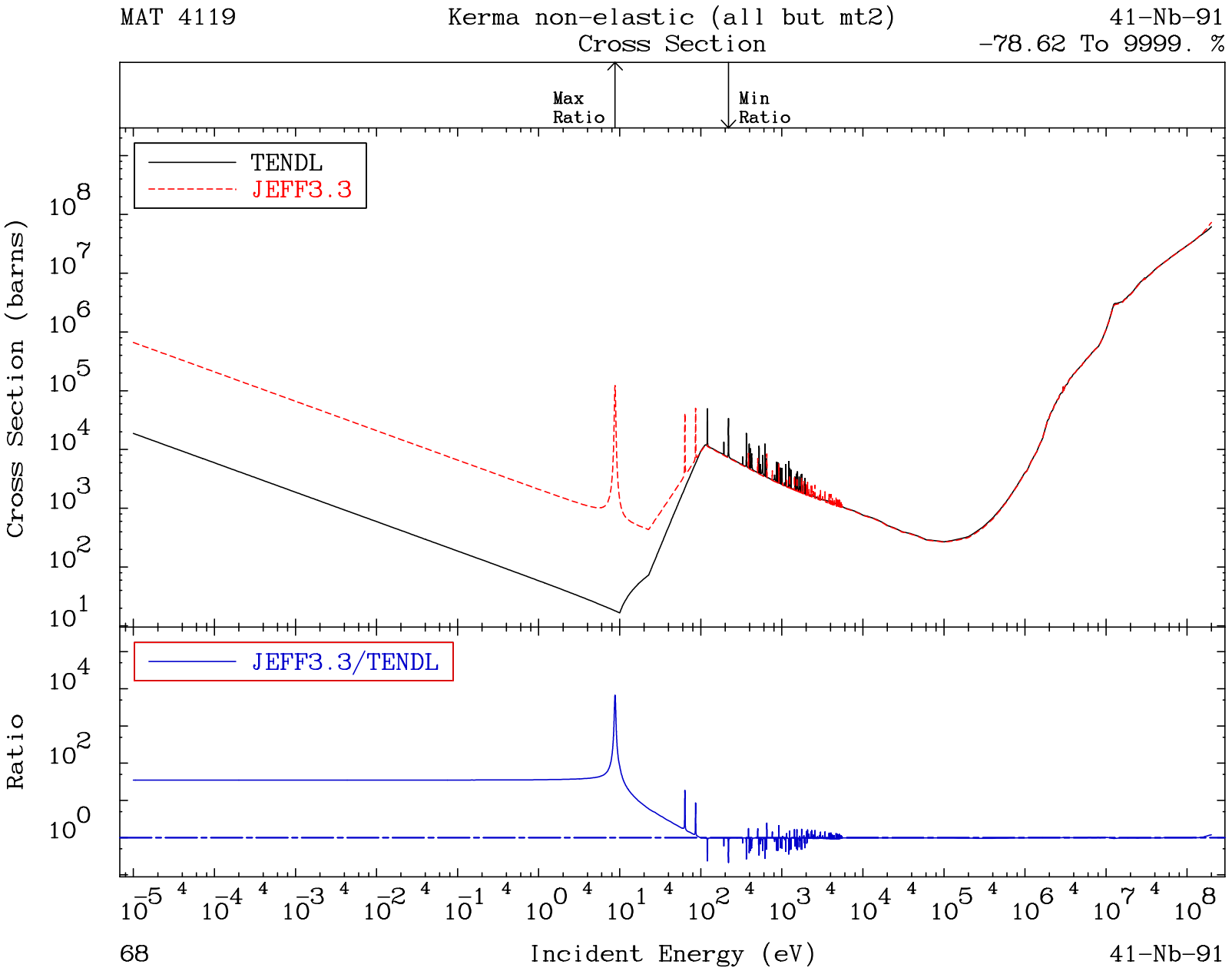

MAT 4119
Tritium Production
Cross Section
41-Nb-91
-5.237 To 157.5 %
Min Ratio
Max Ratio
TENDL Threshold 8.7344 MeV
JEFF3.3 Threshold 8.7365 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
3.0
2.5
2.0
1.5
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
41-Nb-91

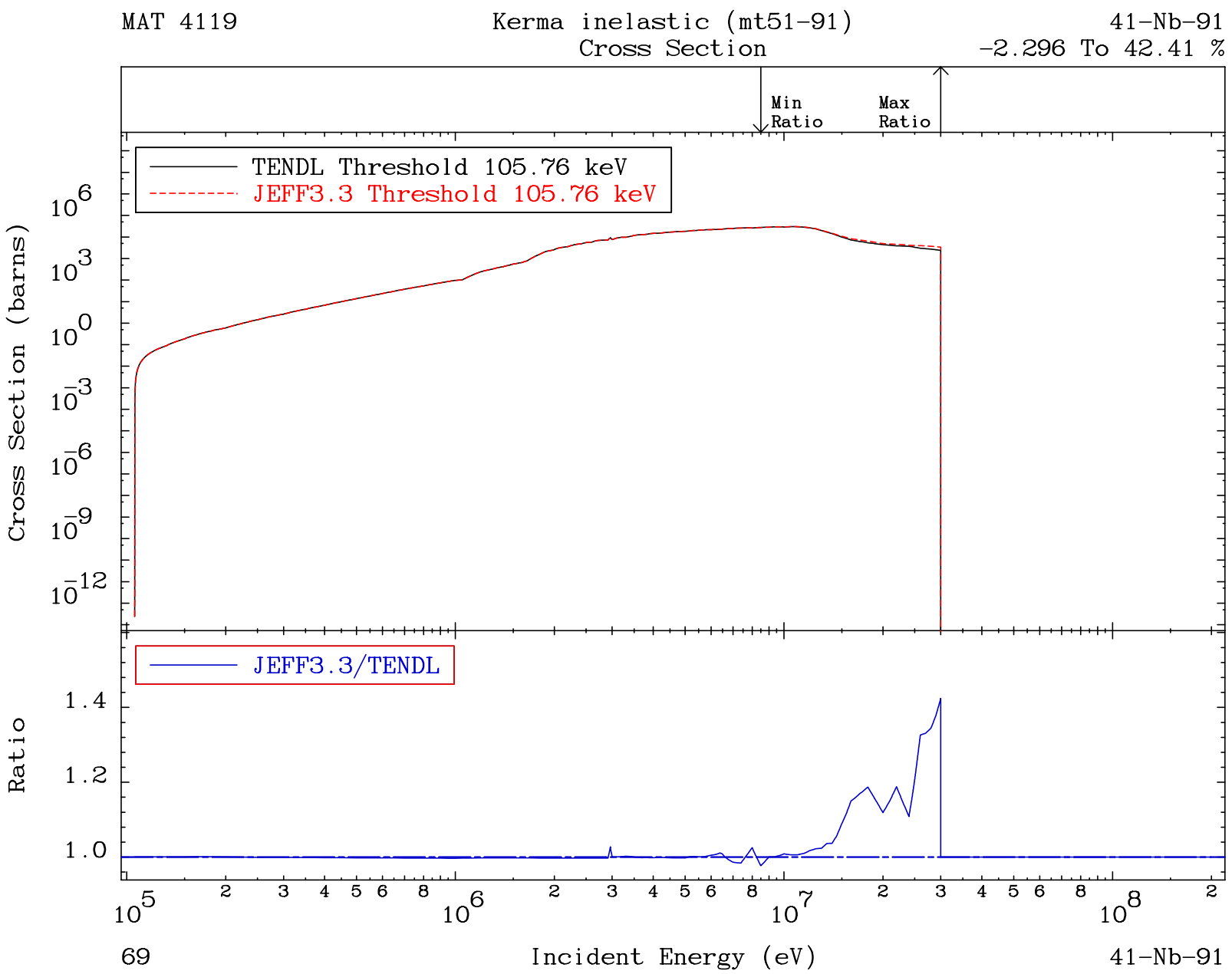

MAT 4119
He-3 Production
Cross Section
41-Nb-91
-4.261 To 0.364 %
Min Ratio
Max Ratio
TENDL Threshold 5.8509 MeV
JEFF3.3 Threshold 5.8535 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
41-Nb-91

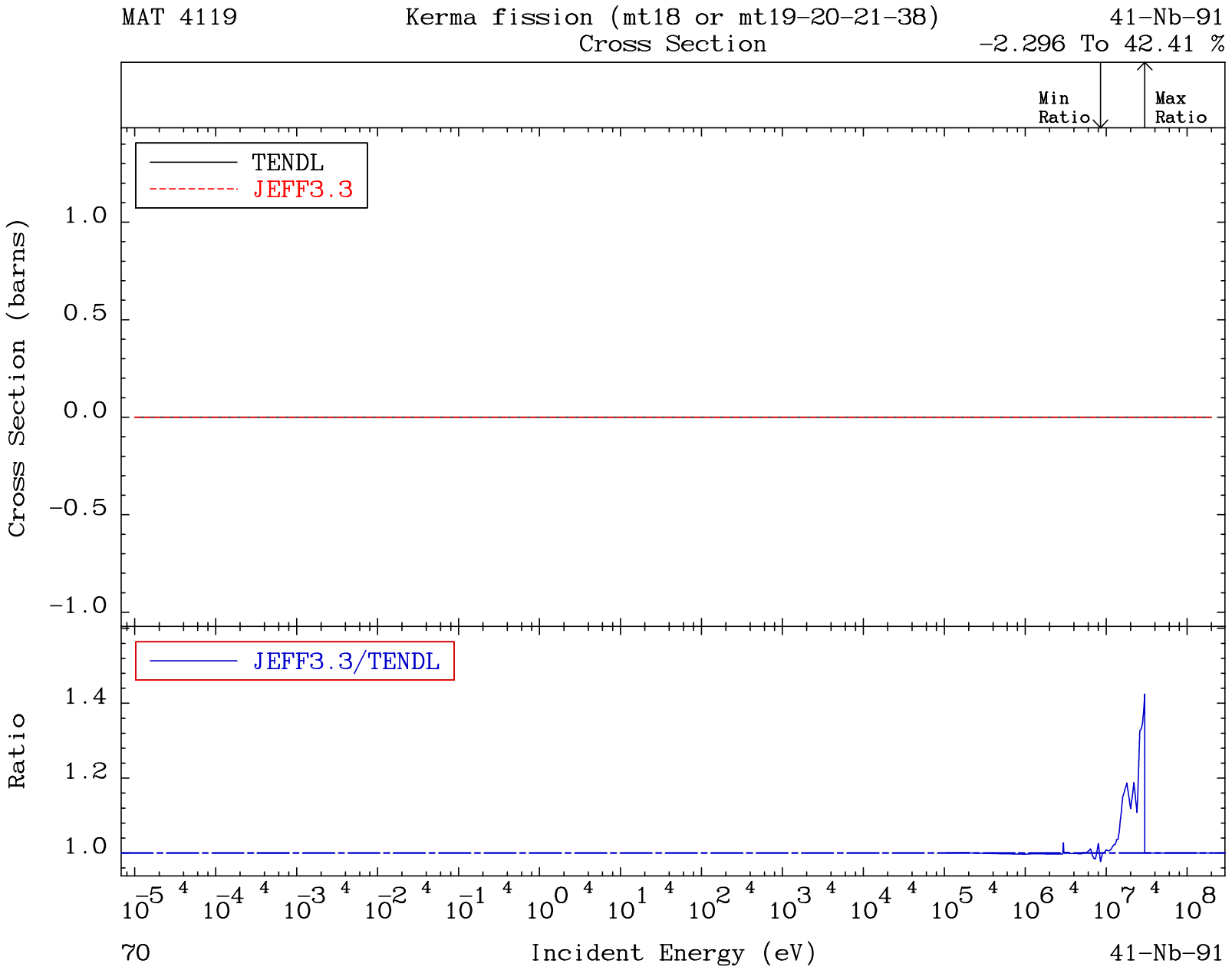

MAT 4119
He-4 Production
Cross Section
41-Nb-91
-17.33 To 3445. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
41-Nb-91

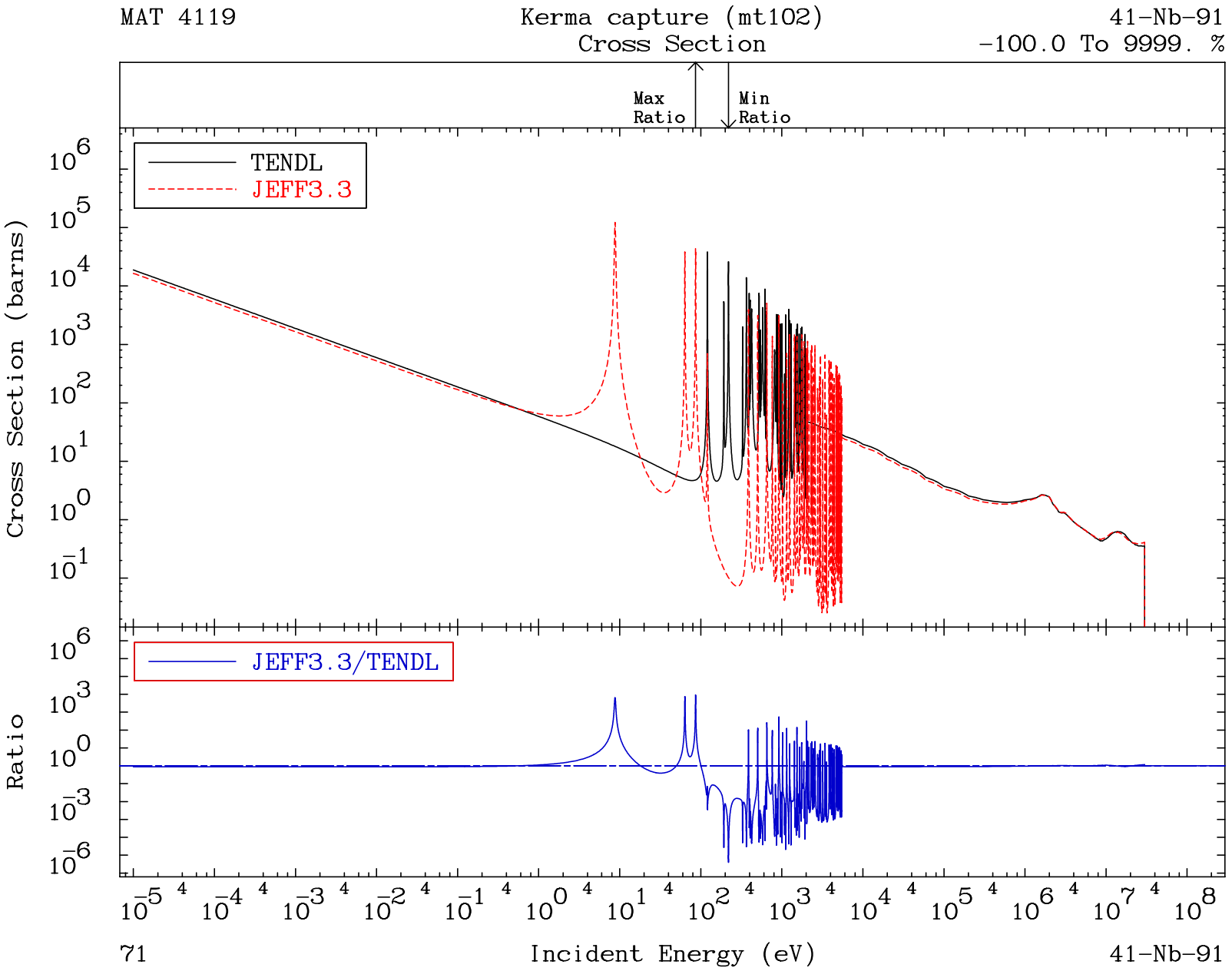

MAT 4119
Kerma total (eV-barns)
Cross Section
41-Nb-91
-97.35 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
41-Nb-91

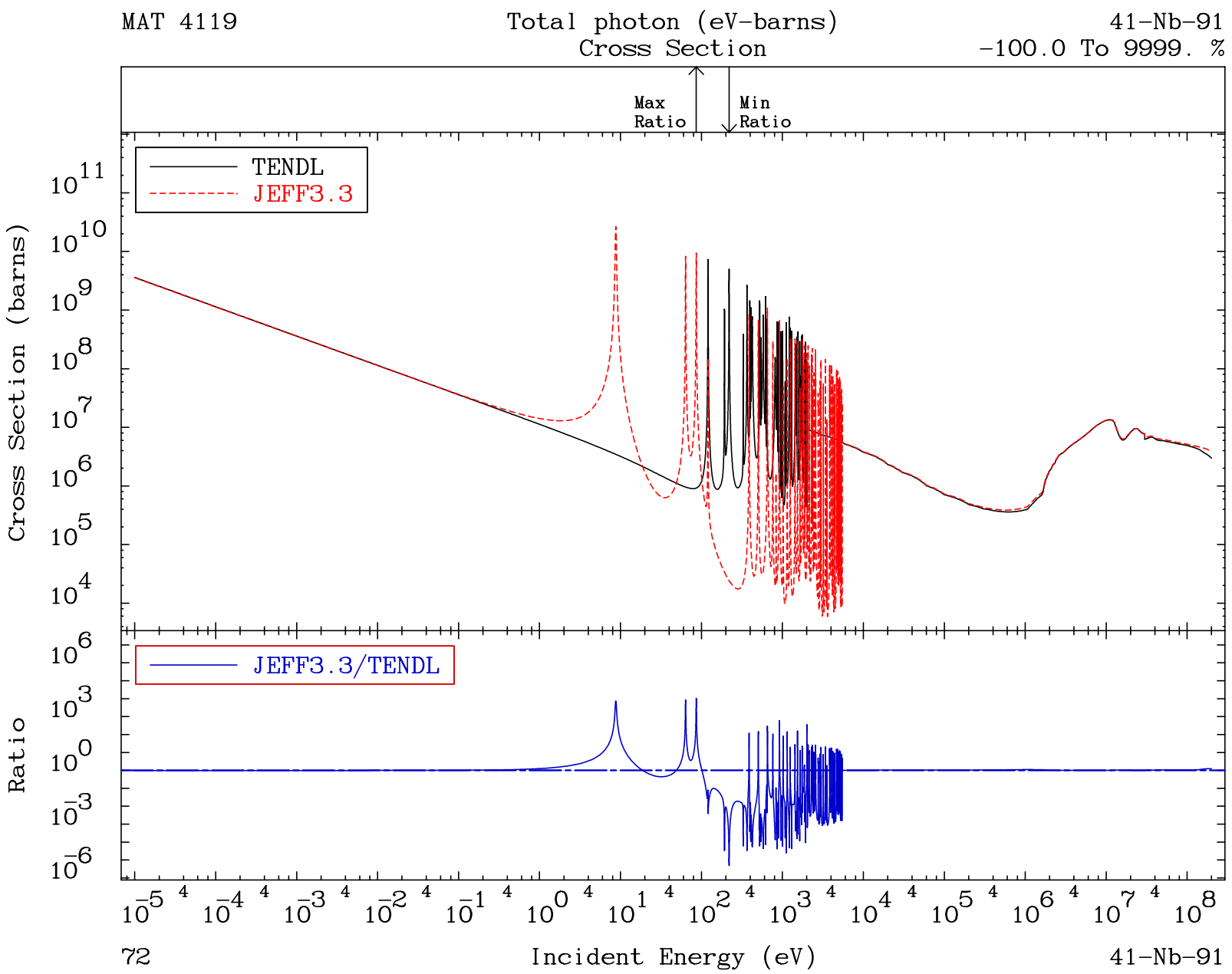

MAT 4119
Kerma elastic
Cross Section
41-Nb-91
-99.85 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
41-Nb-91

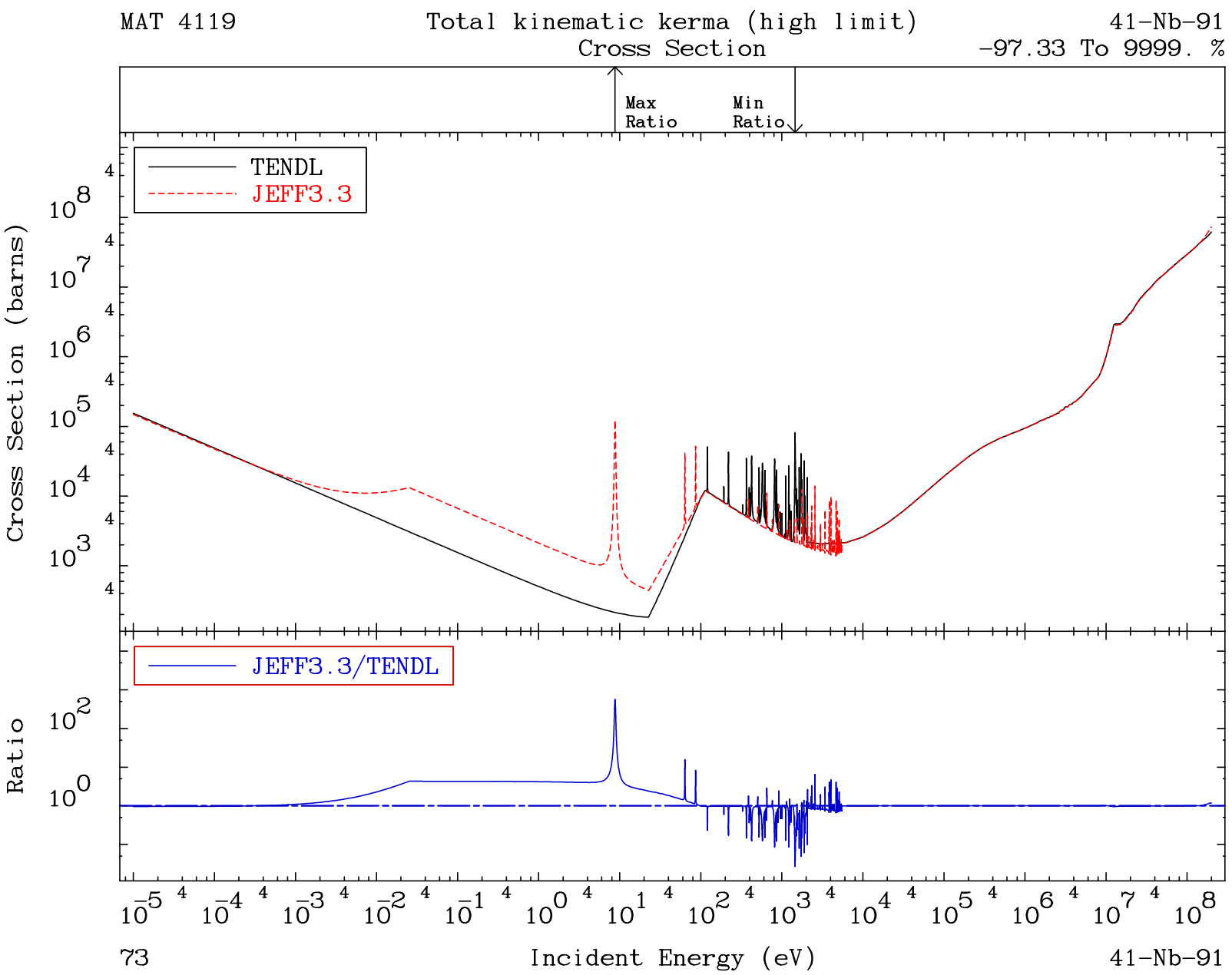

MAT 4119
Kerma non-elastic (all but mt2)
Cross Section
41-Nb-91
-78.62 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
41-Nb-91

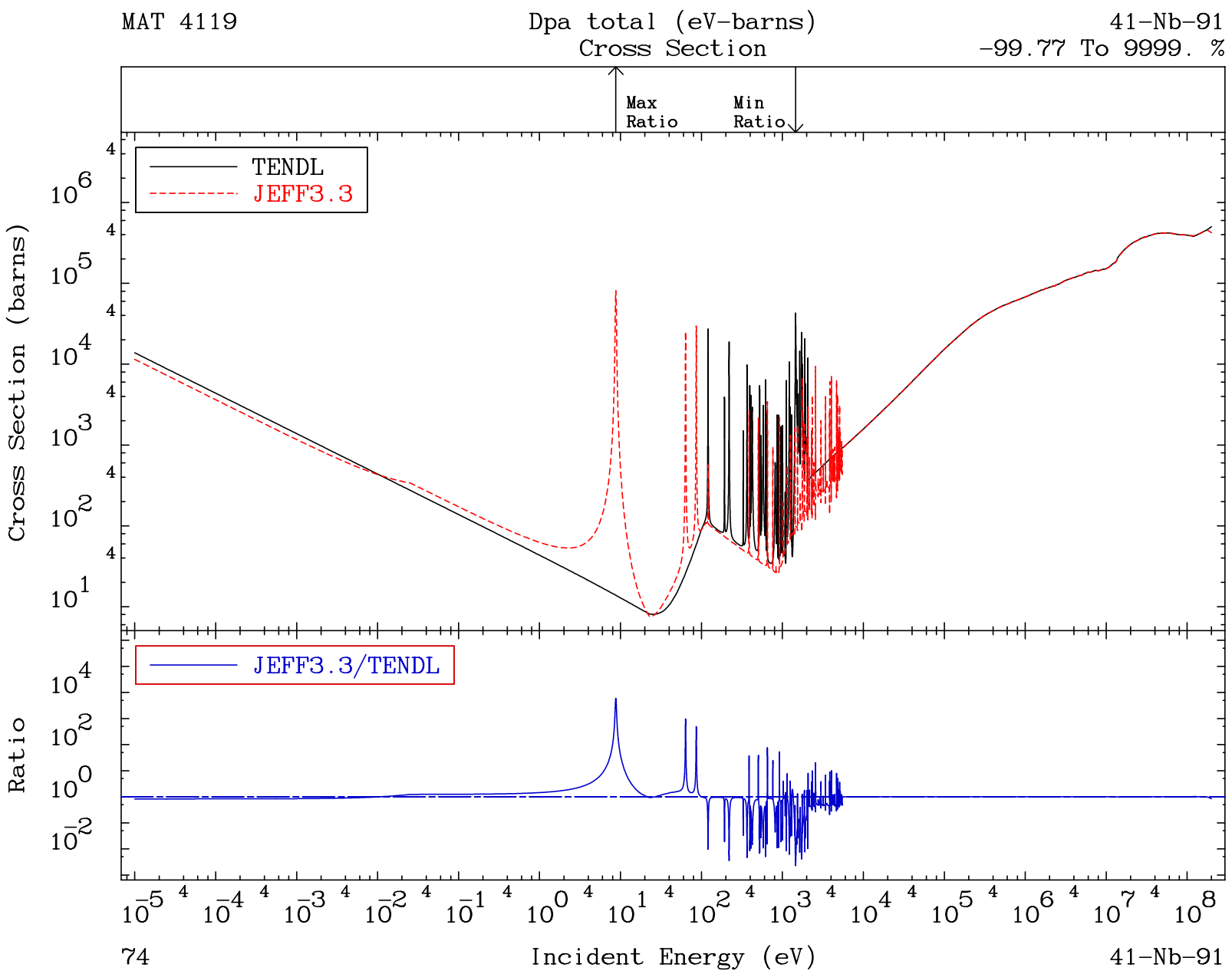

MAT 4119
Kerma inelastic (mt51-91)
Cross Section
41-Nb-91
-2.296 To 42.41 %
Min Ratio
Max Ratio
TENDL Threshold 105.76 keV
JEFF3.3 Threshold 105.76 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
41-Nb-91

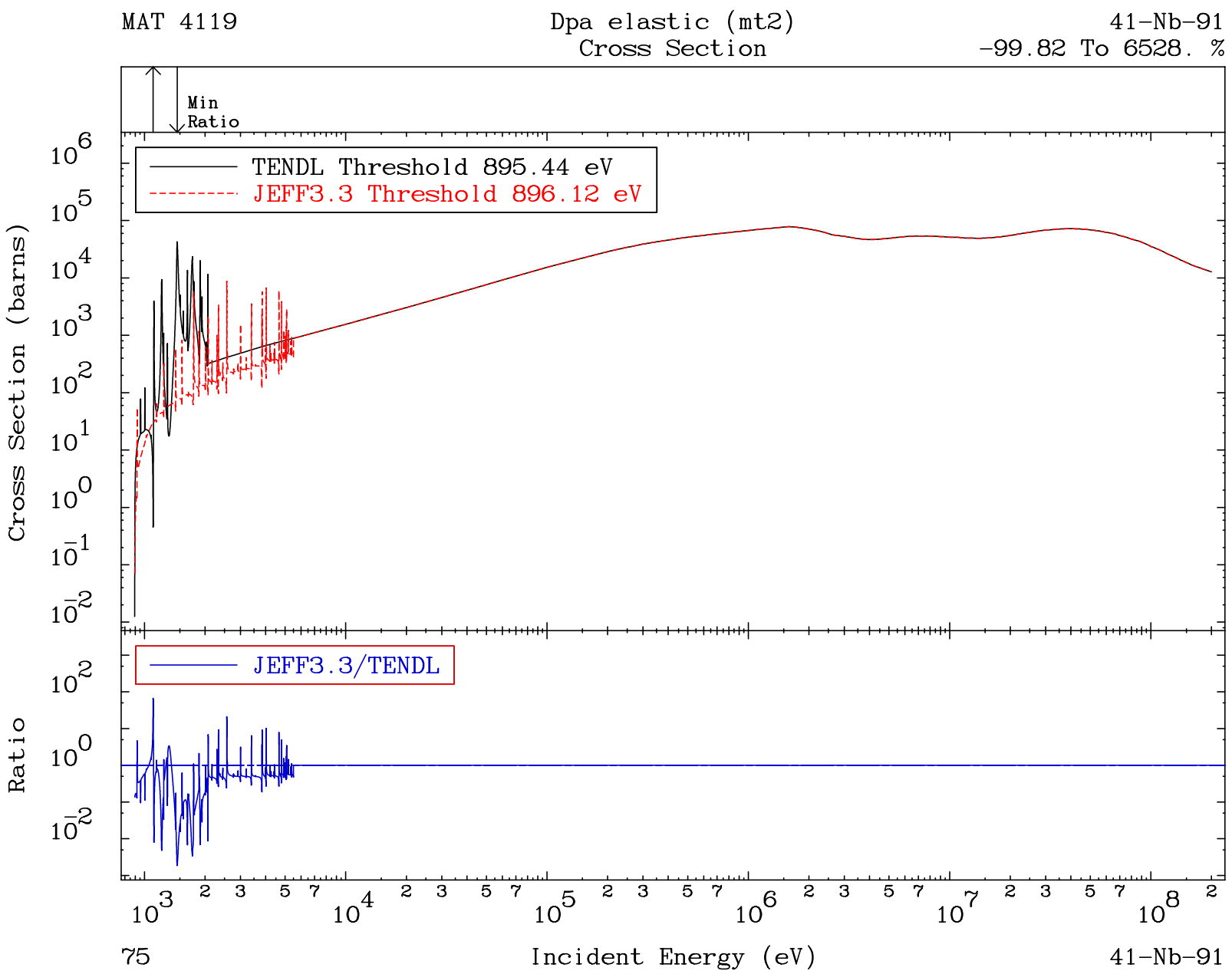

MAT 4119
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
41-Nb-91
-2.296 To 42.41 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
70
Incident Energy (eV)
41-Nb-91

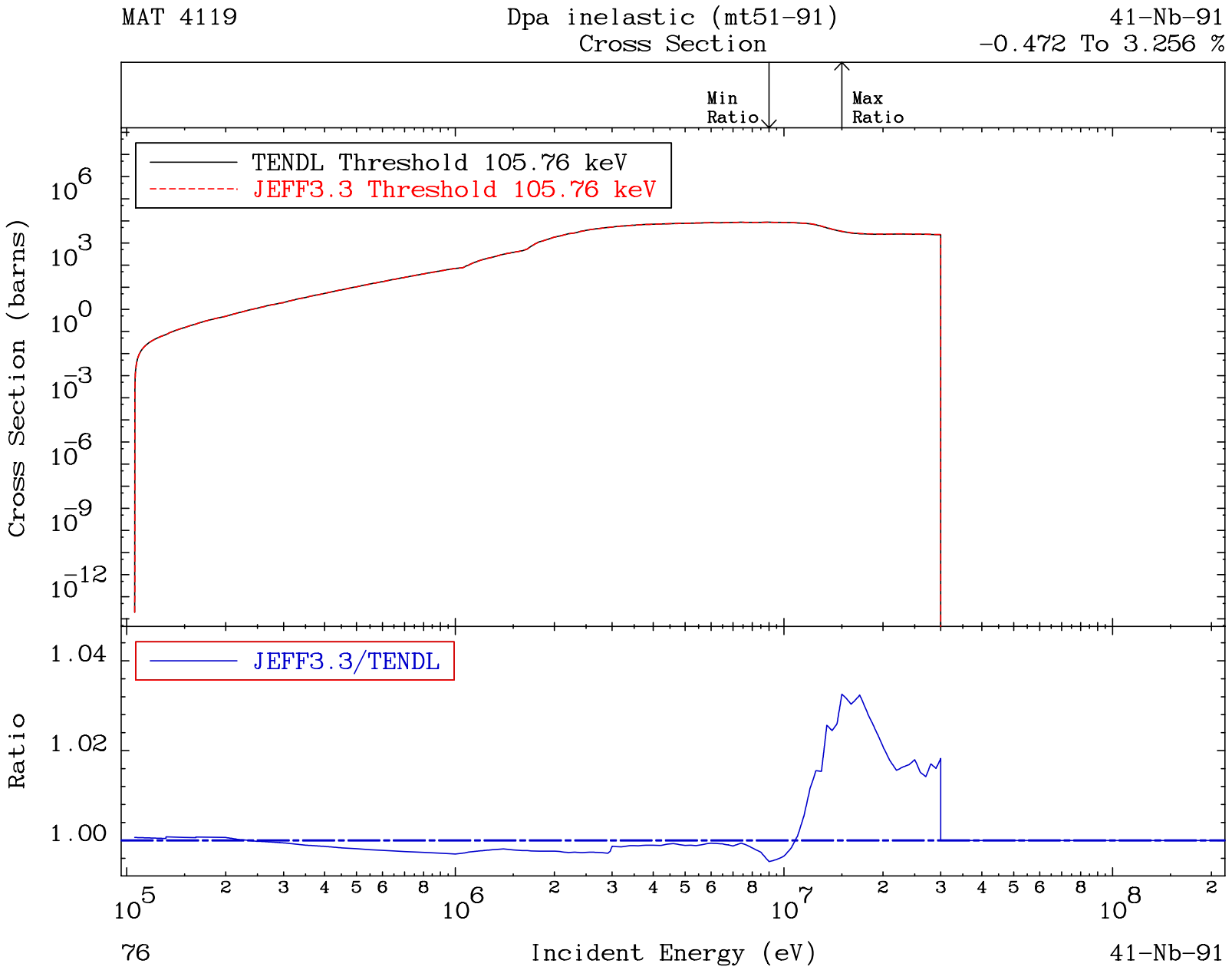

MAT 4119
Kerma capture (mt102)
Cross Section
41-Nb-91
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
41-Nb-91

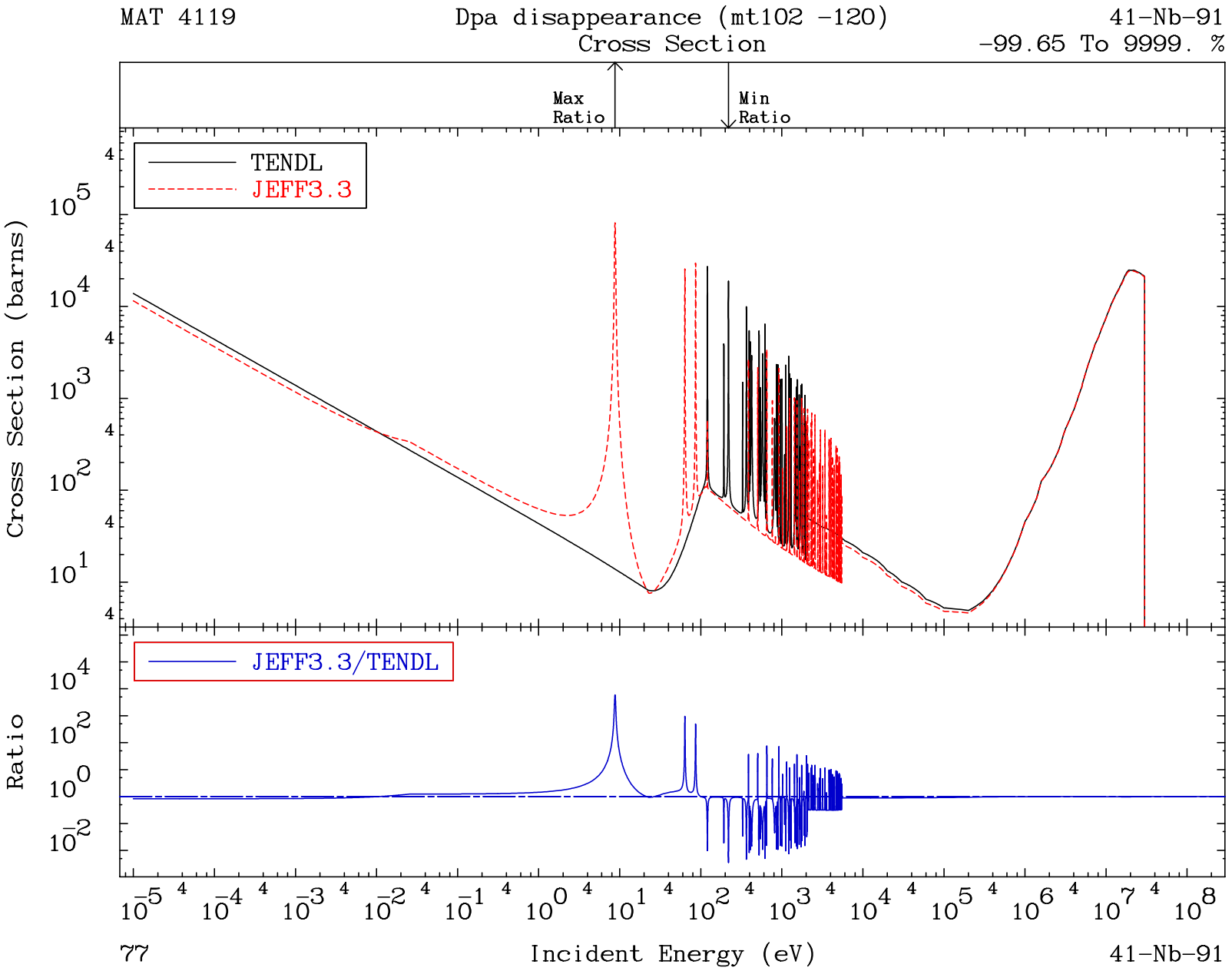

MAT 4119
Total photon (eV-barns)
Cross Section
41-Nb-91
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
41-Nb-91

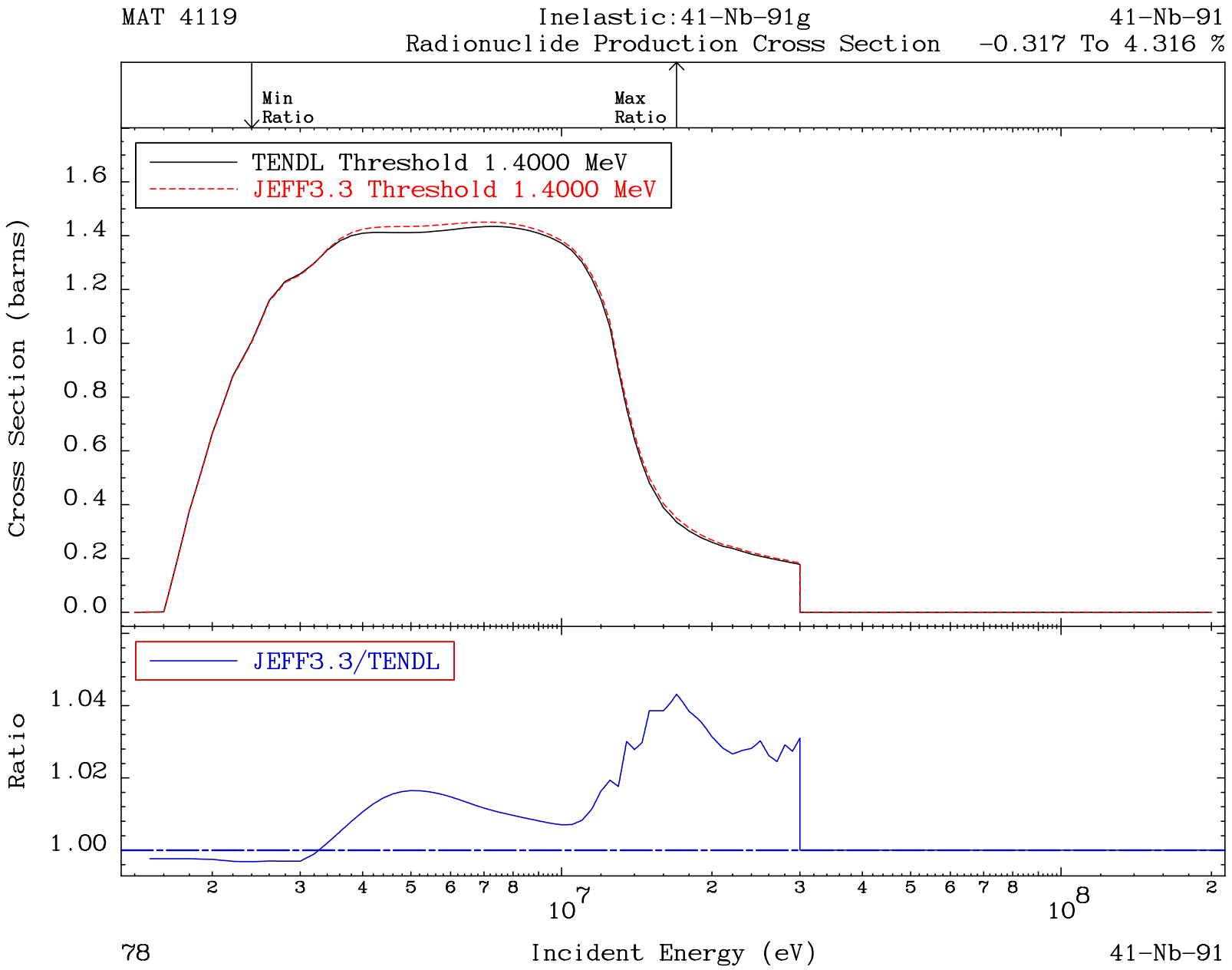

MAT 4119
Total kinematic kerma (high limit)
Cross Section
41-Nb-91
-97.33 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
41-Nb-91

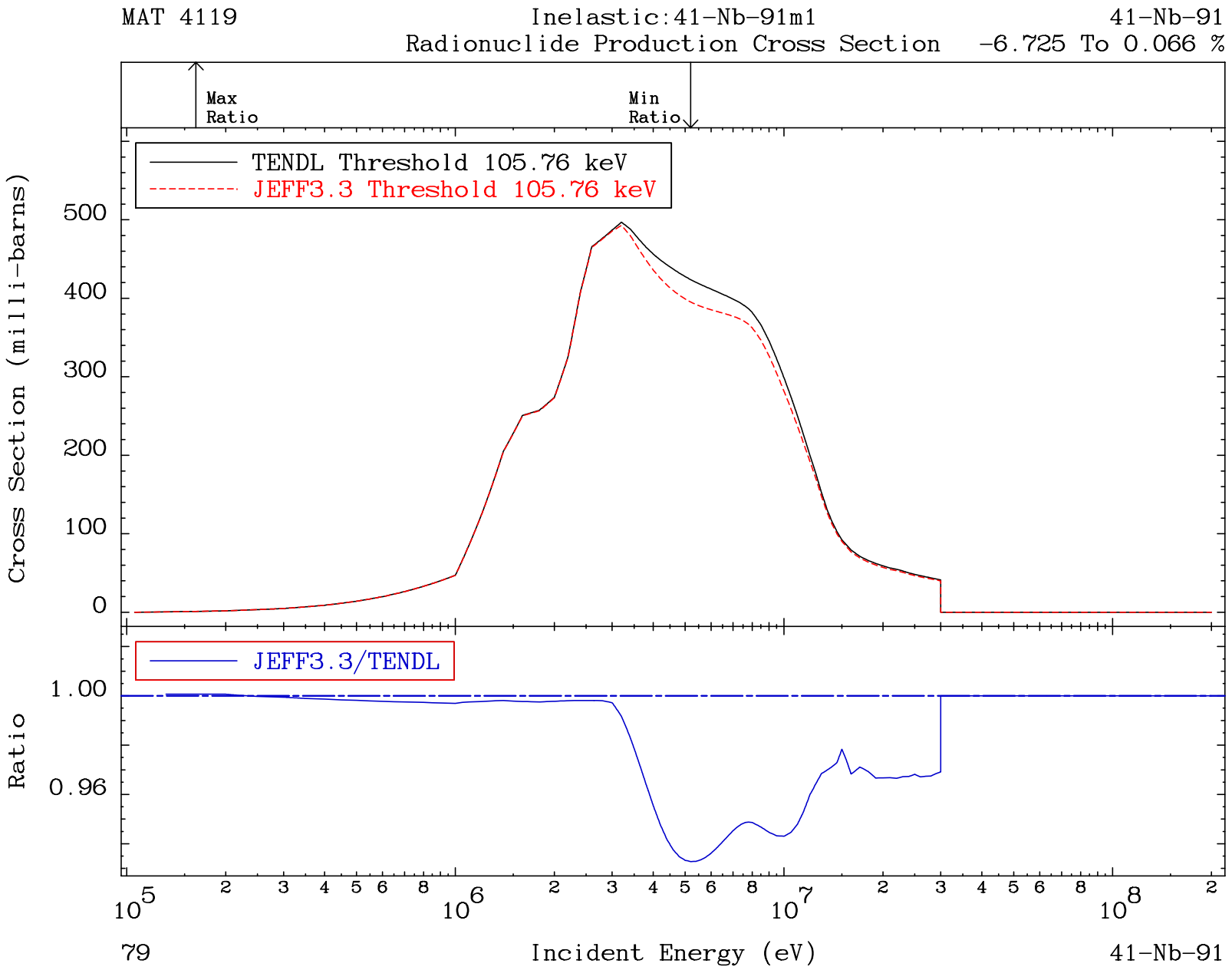

MAT 4119
Dpa total (eV-barns)
Cross Section
41-Nb-91
-99.77 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
74
Incident Energy (eV)
41-Nb-91

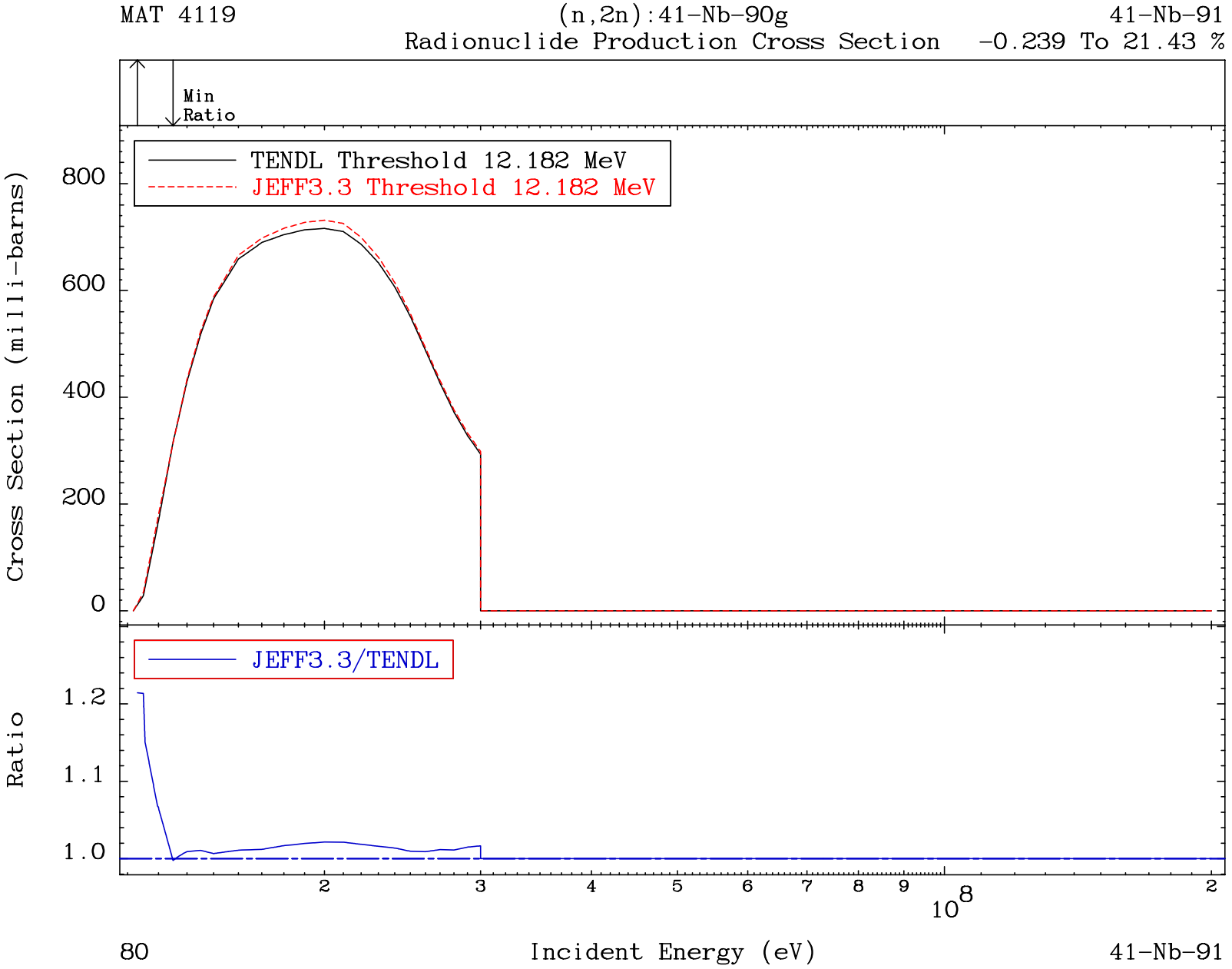

MAT 4119
Dpa elastic (mt2)
Cross Section
41-Nb-91
-99.82 To 6528. %
Min
Ratio
TENDL Threshold 895.44 eV
JEFF3.3 Threshold 896.12 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
41-Nb-91

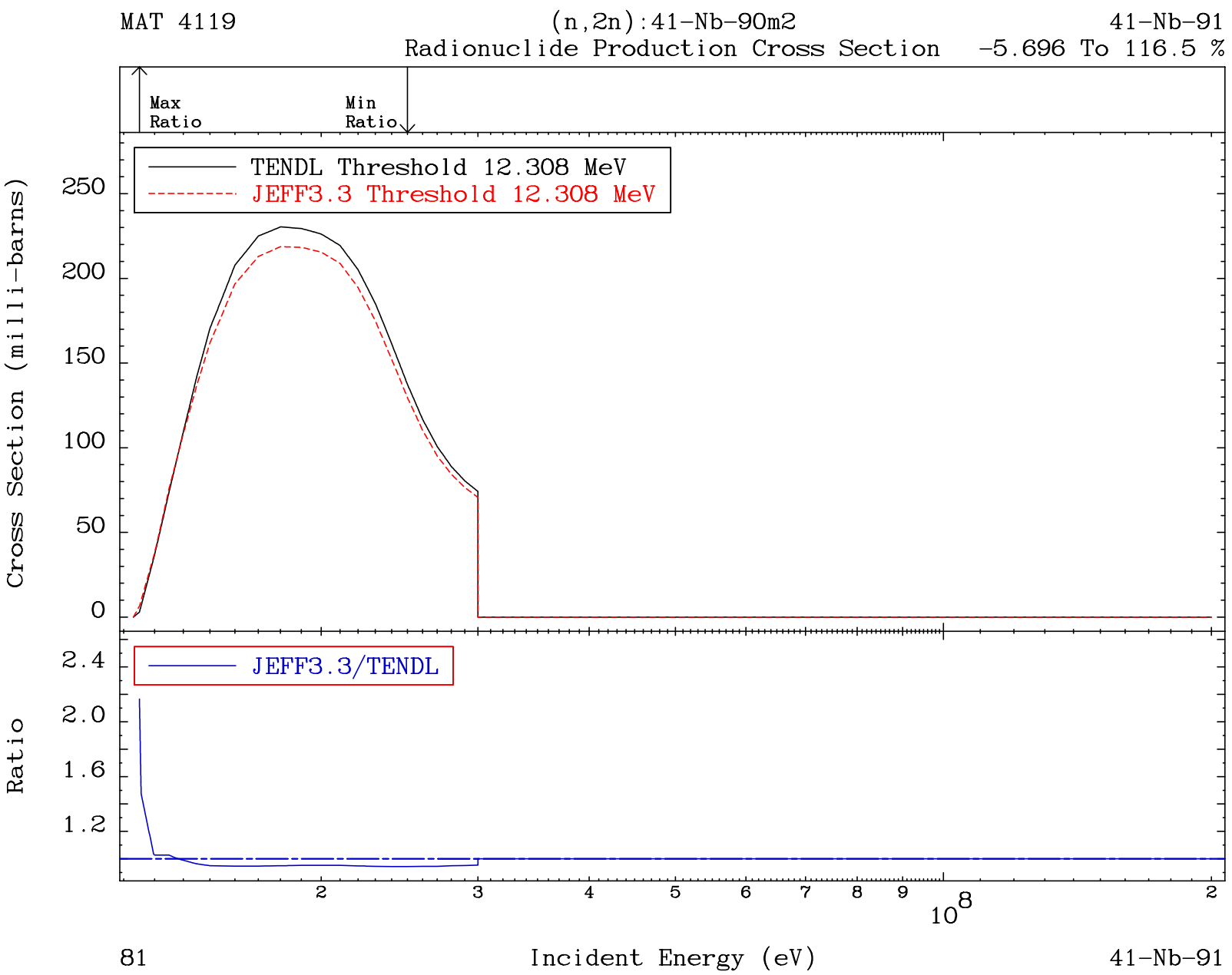

MAT 4119
Dpa inelastic (mt51-91)
Cross Section
41-Nb-91
-0.472 To 3.256 %
Min Ratio
Max Ratio
TENDL Threshold 105.76 keV
JEFF3.3 Threshold 105.76 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
41-Nb-91

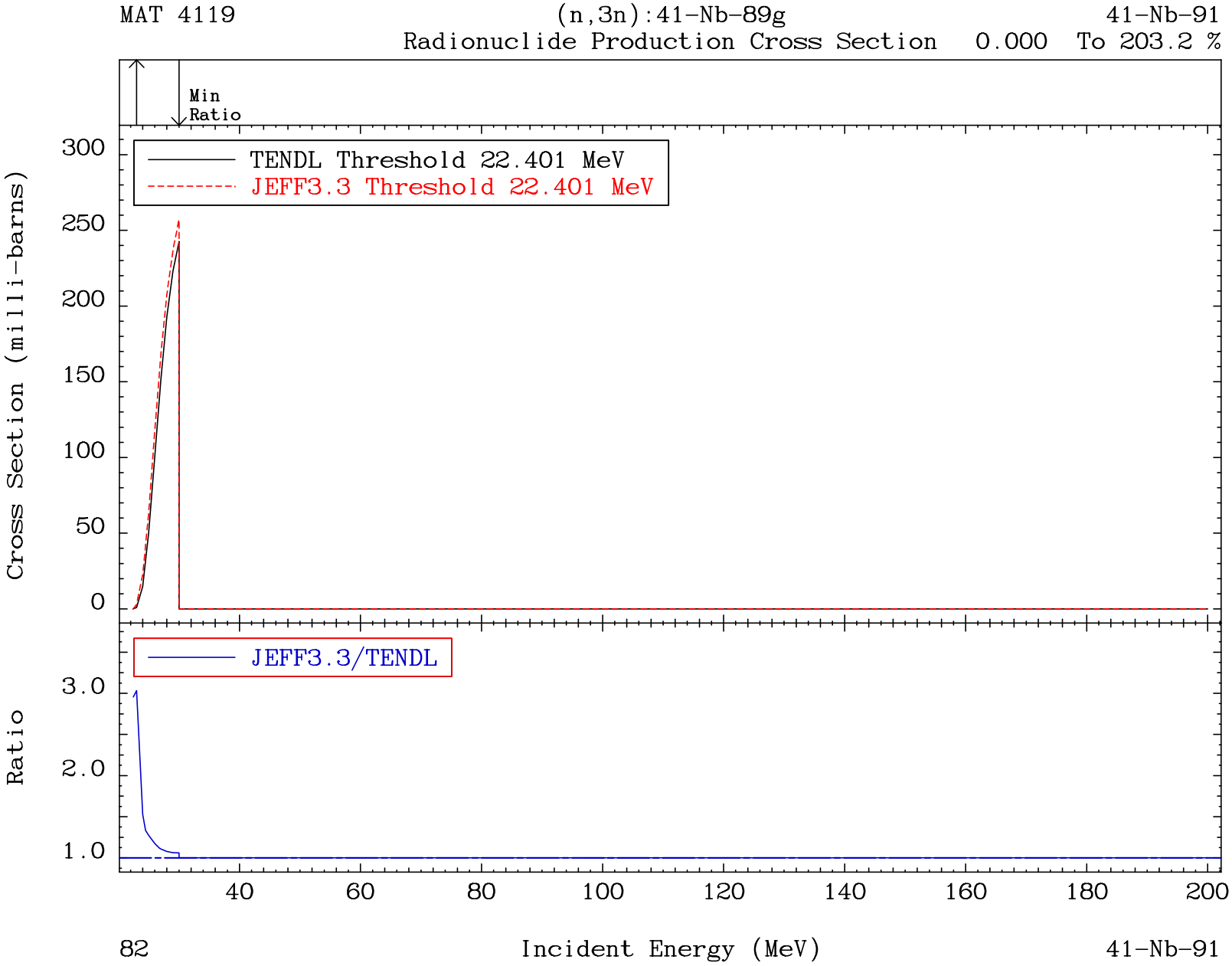

MAT 4119
Dpa disappearance (mt102 -120)
Cross Section
41-Nb-91
-99.65 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
41-Nb-91

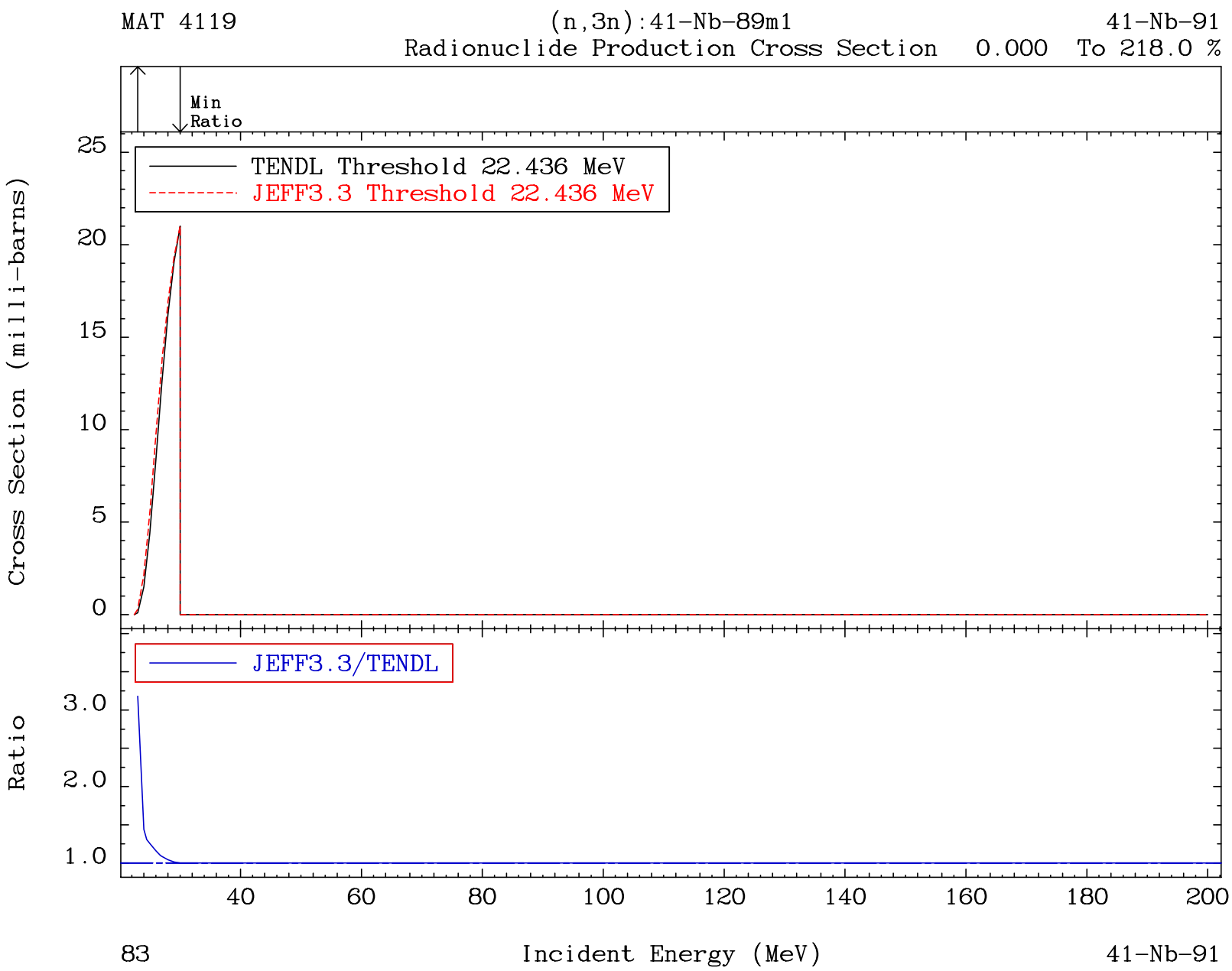

MAT 4119
Inelastic:41-Nb-91g
41-Nb-91
Radionuclide Production Cross Section
-0.317 To 4.316 %
Min Ratio
Max Ratio
TENDL Threshold 1.4000 MeV
JEFF3.3 Threshold 1.4000 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
78
Incident Energy (eV)
41-Nb-91

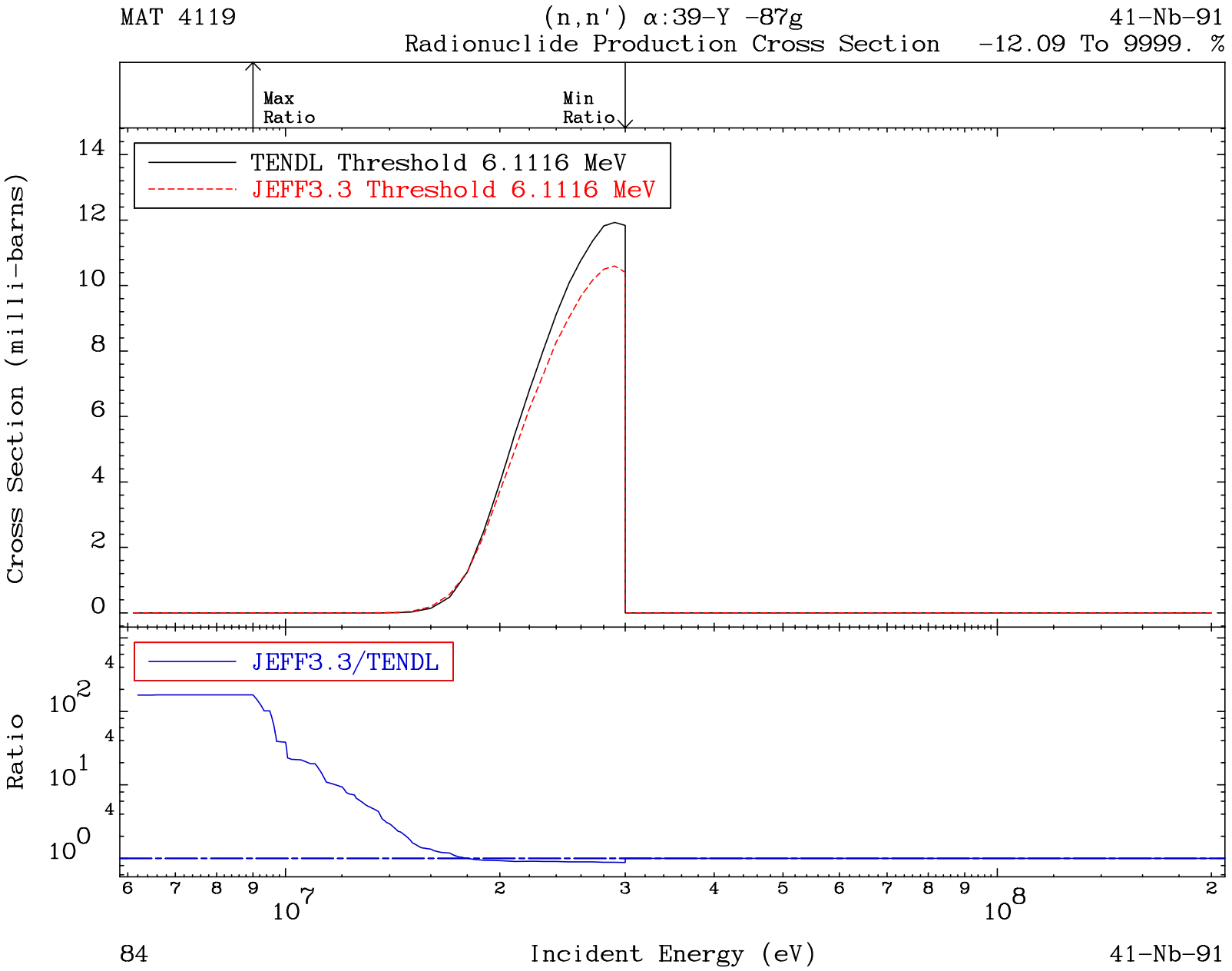

MAT 4119
Inelastic:41-Nb-91m1
41-Nb-91
Radionuclide Production Cross Section
-6.725 To 0.066 %
Max Ratio
Min Ratio
TENDL Threshold 105.76 keV
JEFF3.3 Threshold 105.76 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.96
10^5
10^6
10^7
10^8
79
Incident Energy (eV)
41-Nb-91

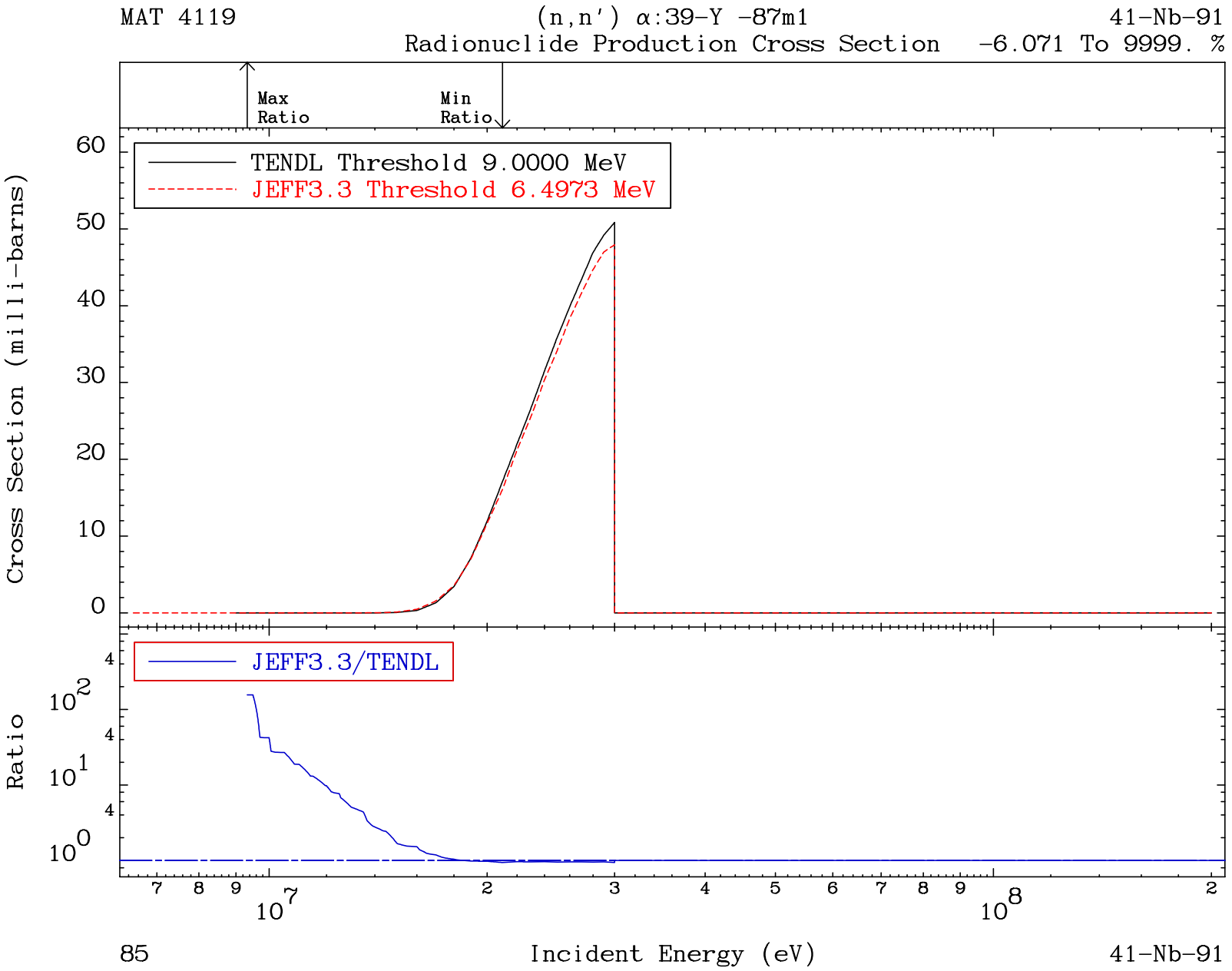

MAT 4119
(n,2n):41-Nb-90g
41-Nb-91
Radionuclide Production Cross Section
-0.239 To 21.43 %
Min
Ratio
TENDL Threshold 12.182 MeV
JEFF3.3 Threshold 12.182 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
41-Nb-91

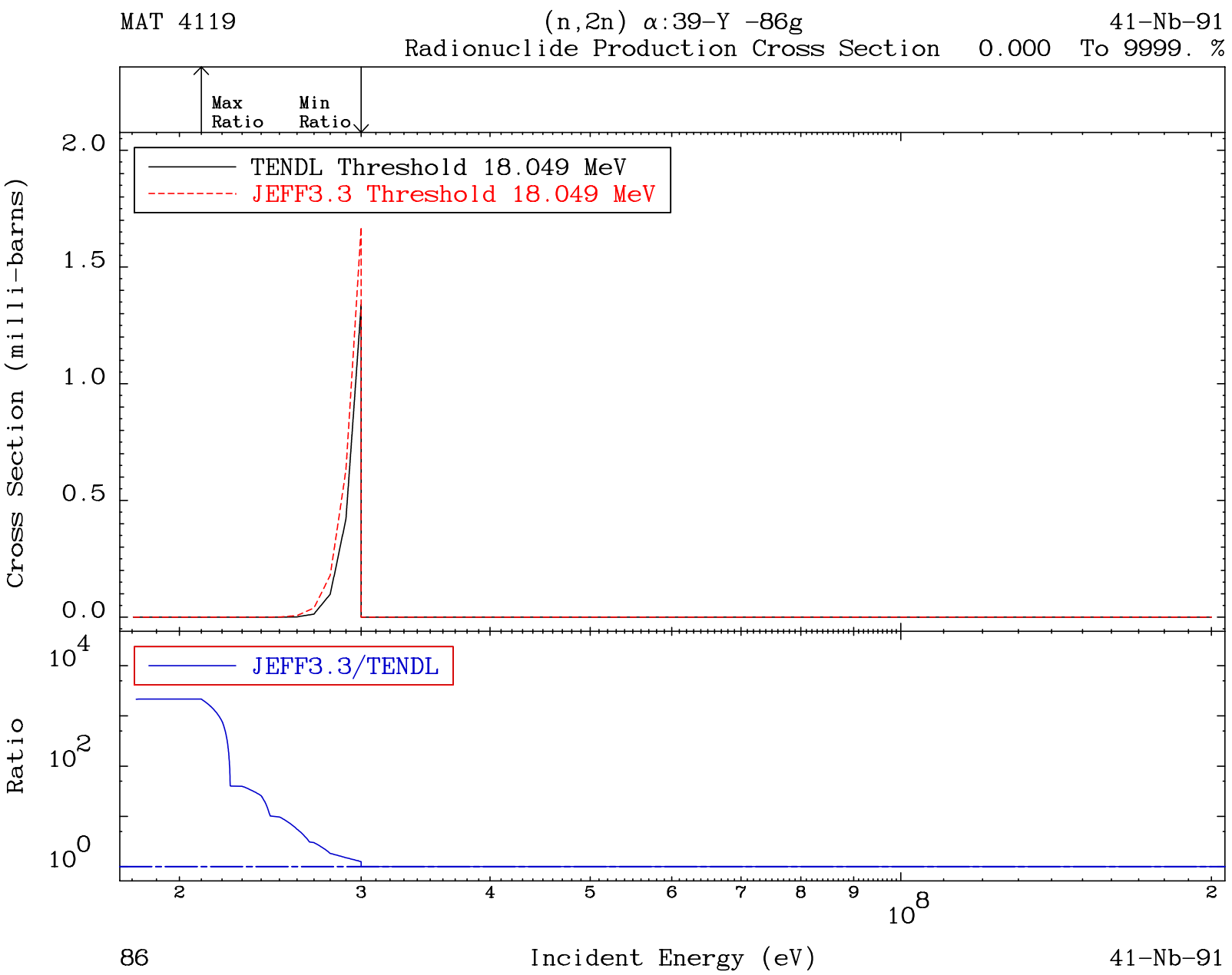

MAT 4119
(n,2n):41-Nb-90m2
41-Nb-91
Radionuclide Production Cross Section -5.696 To 116.5 %
Max Ratio
Min Ratio
TENDL Threshold 12.308 MeV
JEFF3.3 Threshold 12.308 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
41-Nb-91

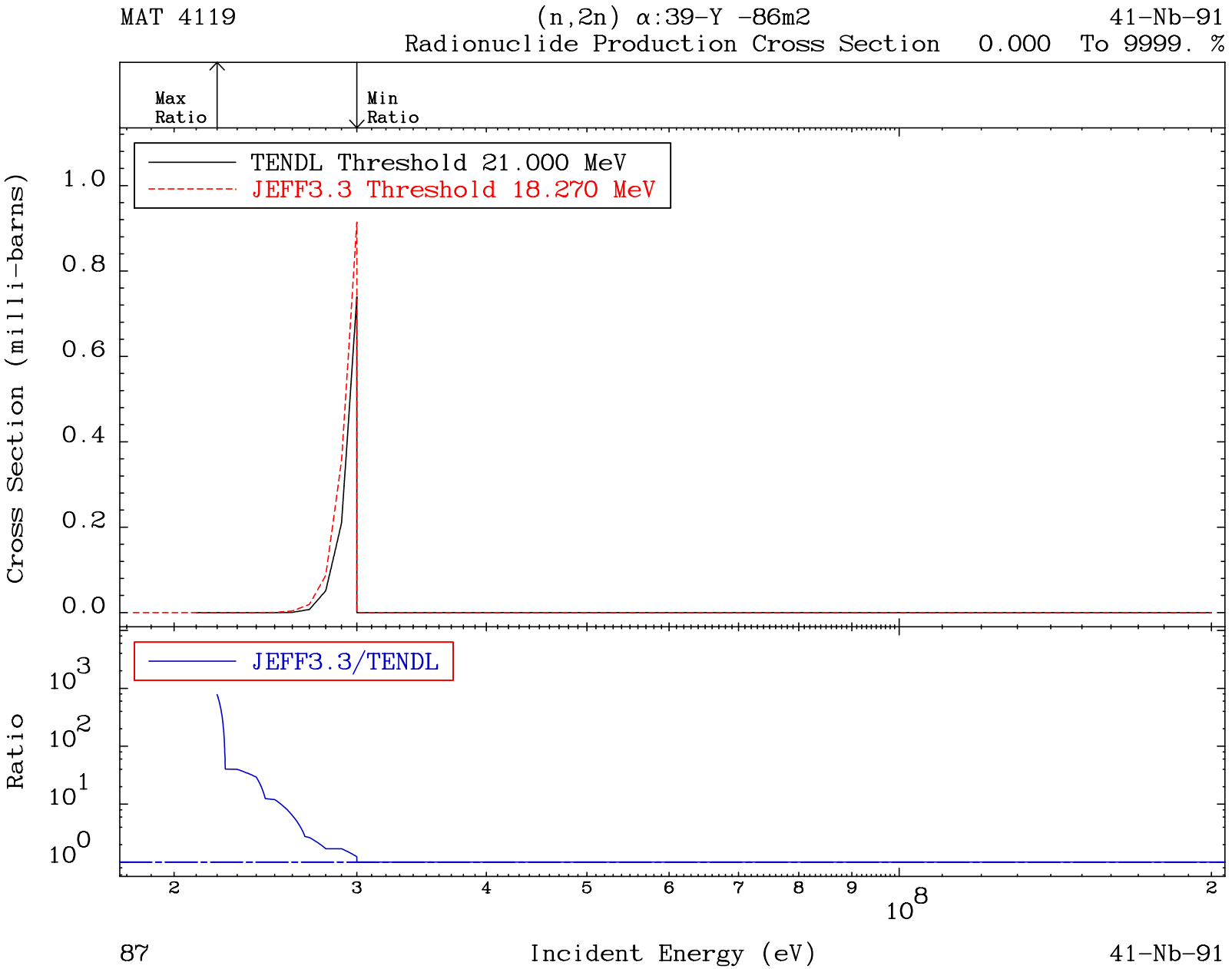

MAT 4119
(n,3n):41-Nb-89g
41-Nb-91
Radionuclide Production Cross Section 0.000 To 203.2 %
Min Ratio
TENDL Threshold 22.401 MeV
JEFF3.3 Threshold 22.401 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
40
60
80
100
120
140
160
180
200
82
Incident Energy (MeV)
41-Nb-91

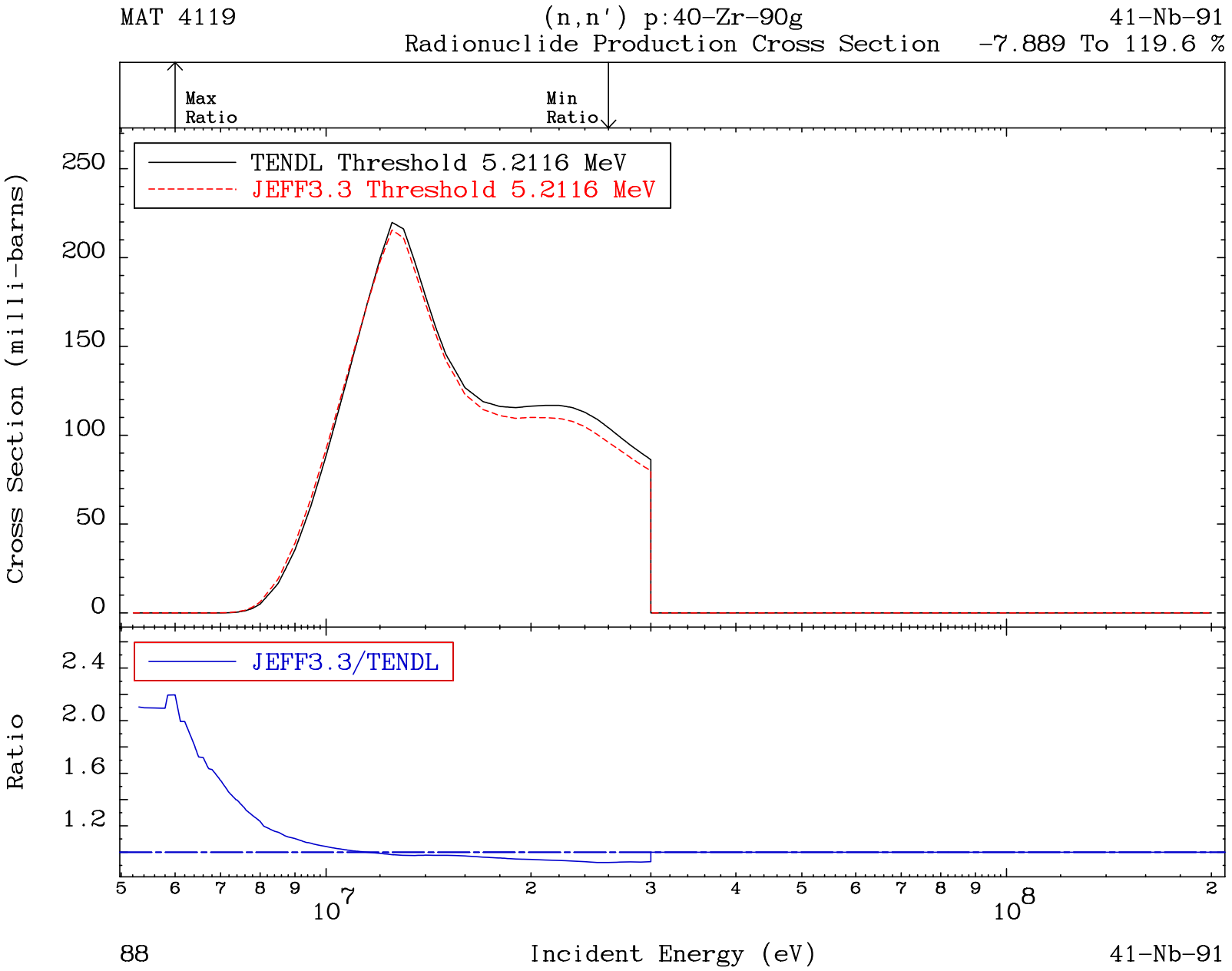

MAT 4119
(n,3n):41-Nb-89m1
41-Nb-91
Radionuclide Production Cross Section 0.000 To 218.0 %
Min Ratio
TENDL Threshold 22.436 MeV
JEFF3.3 Threshold 22.436 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
41-Nb-91

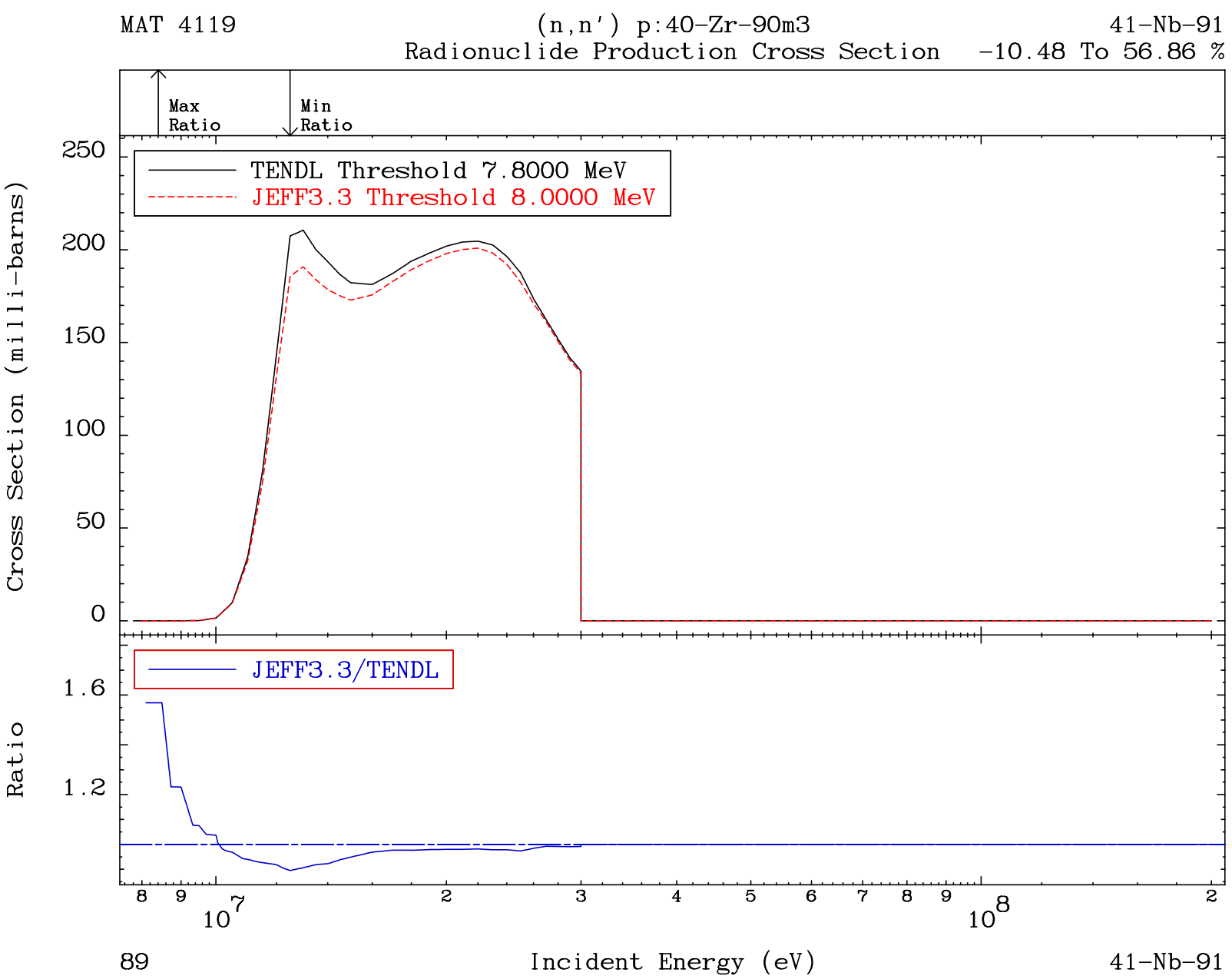

MAT 4119
(n,n') α:39-Y -87g
41-Nb-91
Radionuclide Production Cross Section -12.09 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1116 MeV
JEFF3.3 Threshold 6.1116 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
84
41-Nb-91

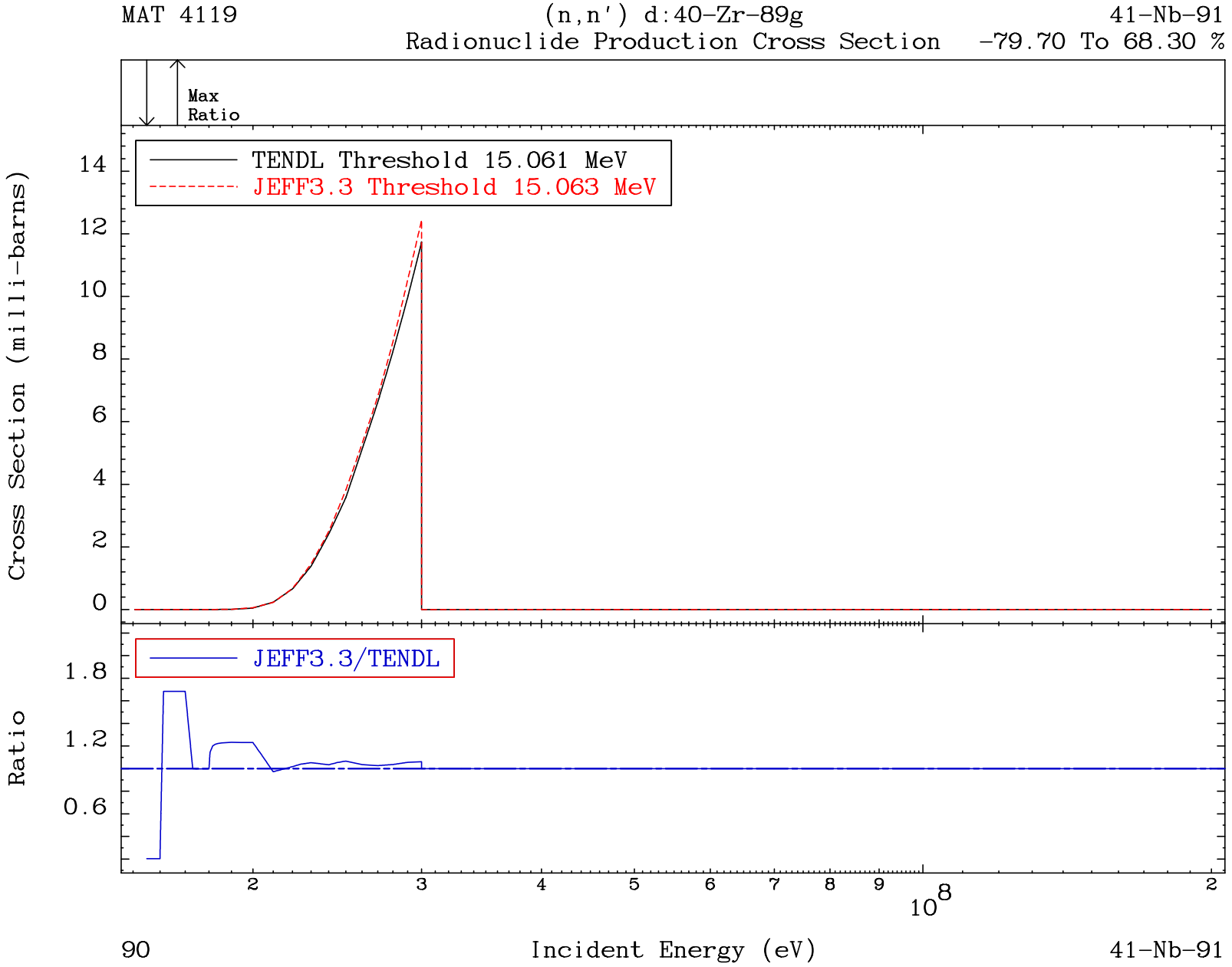

MAT 4119
(n,n') α:39-Y -87m1
41-Nb-91
Radionuclide Production Cross Section -6.071 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 6.4973 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
85
41-Nb-91

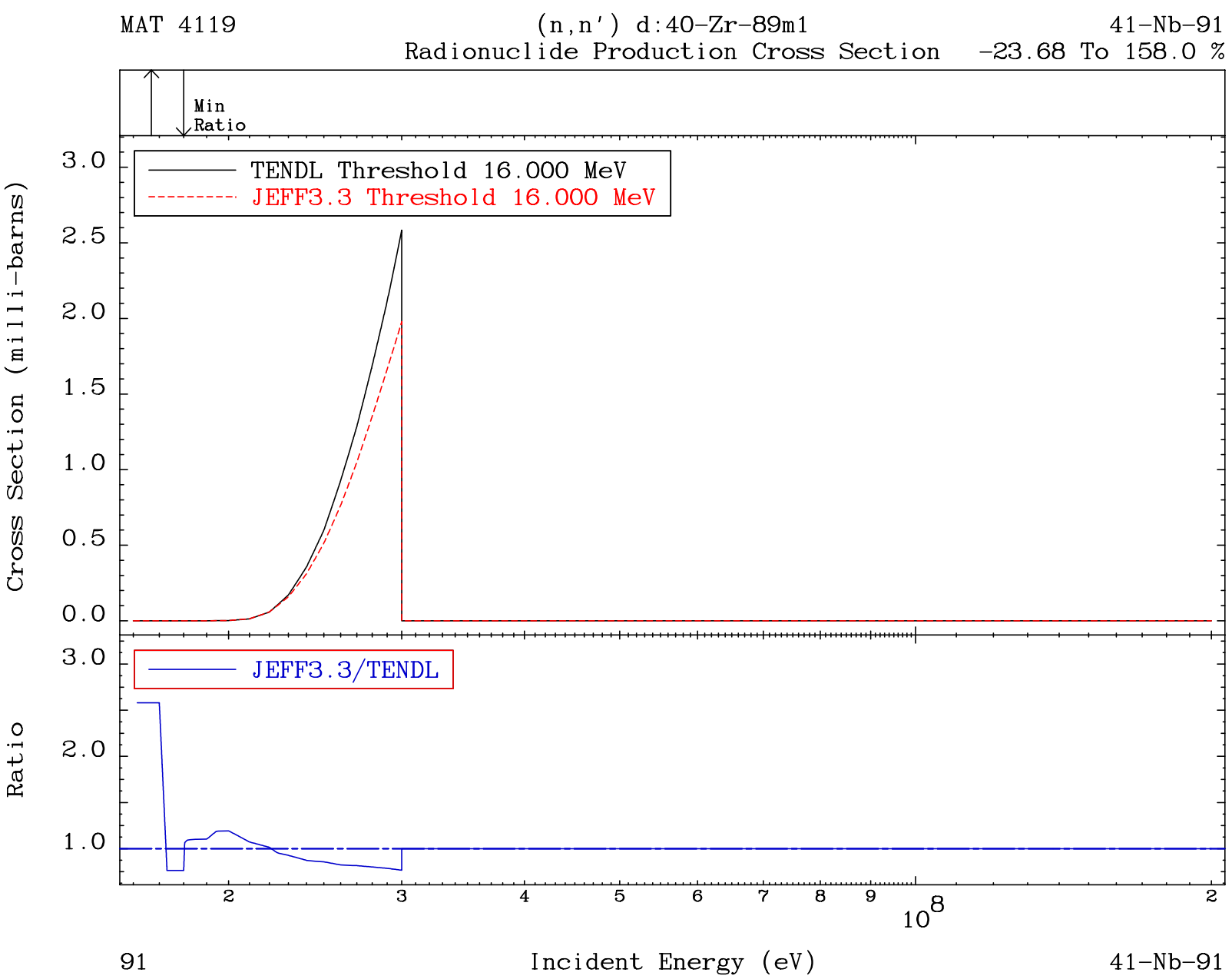

MAT 4119
(n,2n) α:39-Y -86g
41-Nb-91
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.049 MeV
JEFF3.3 Threshold 18.049 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
41-Nb-91

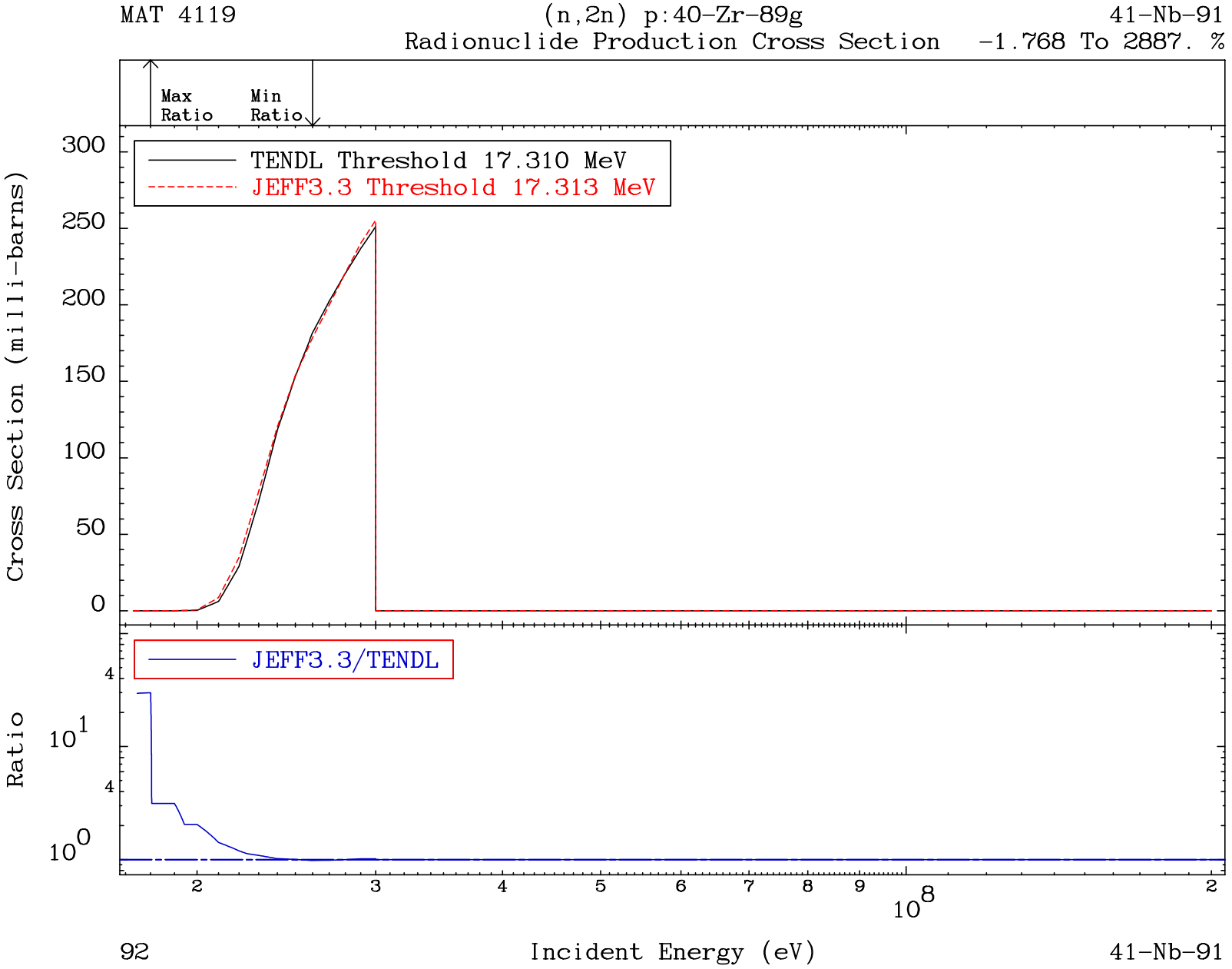

MAT 4119
(n,2n) α:39-Y -86m2
41-Nb-91
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 18.270 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
41-Nb-91

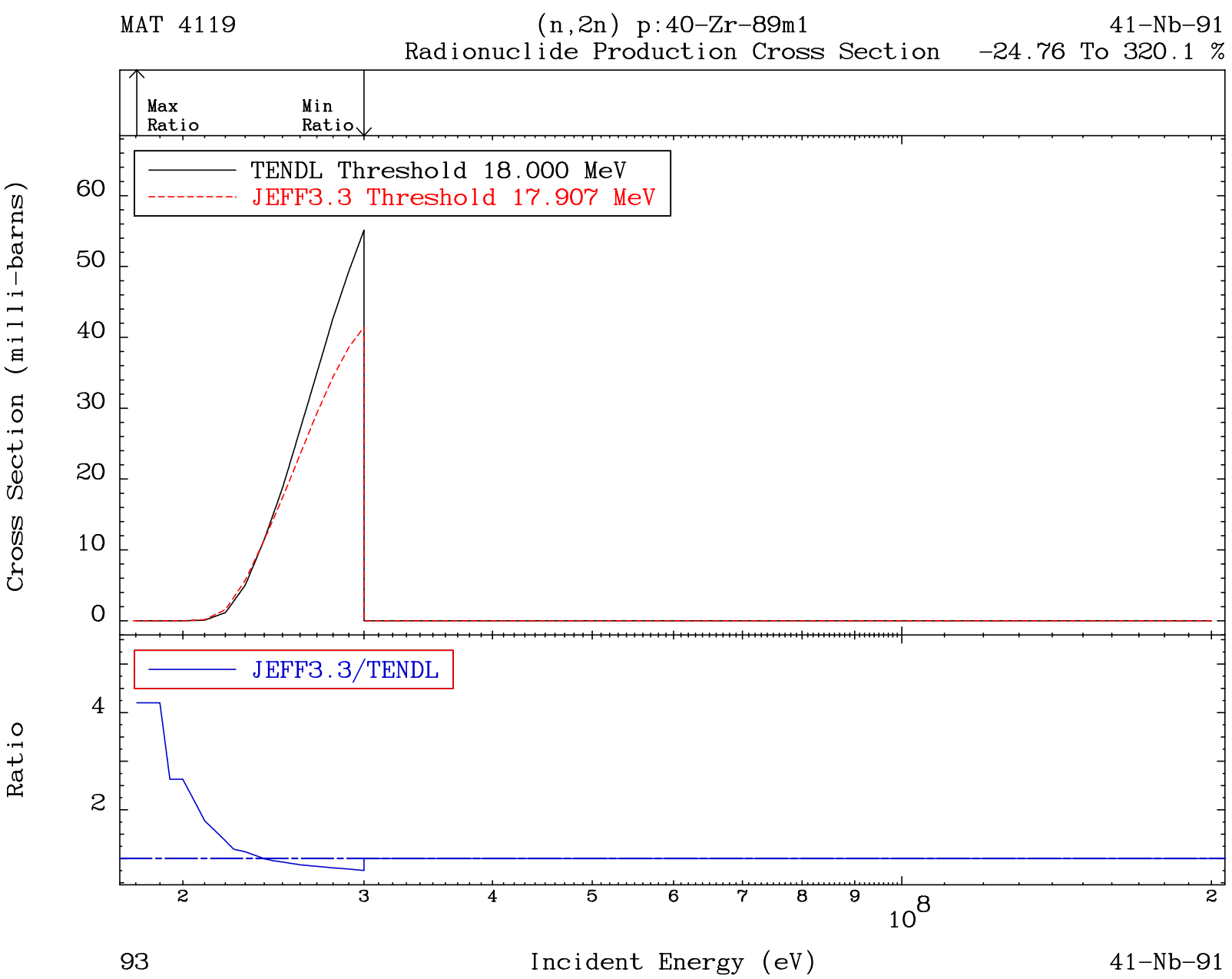

MAT 4119
(n,n') p:40-Zr-90g
41-Nb-91
Radionuclide Production Cross Section -7.889 To 119.6 %
Max Ratio
Min Ratio
TENDL Threshold 5.2116 MeV
JEFF3.3 Threshold 5.2116 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
88
Incident Energy (eV)
41-Nb-91

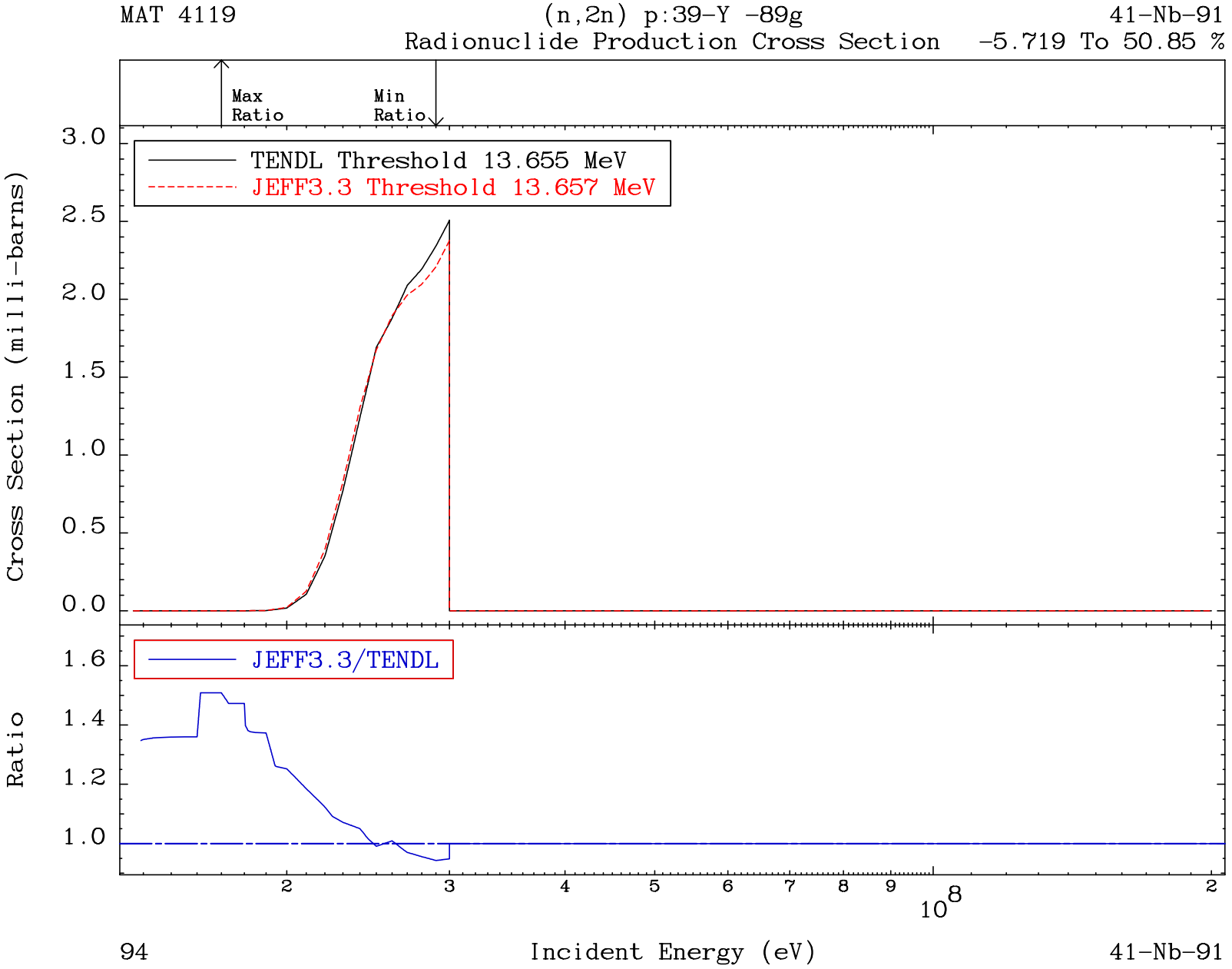

MAT 4119
(n,n') p:40-Zr-90m3
41-Nb-91
Radionuclide Production Cross Section -10.48 To 56.86 %
Max Ratio
Min Ratio
TENDL Threshold 7.8000 MeV
JEFF3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.6
1.2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
41-Nb-91

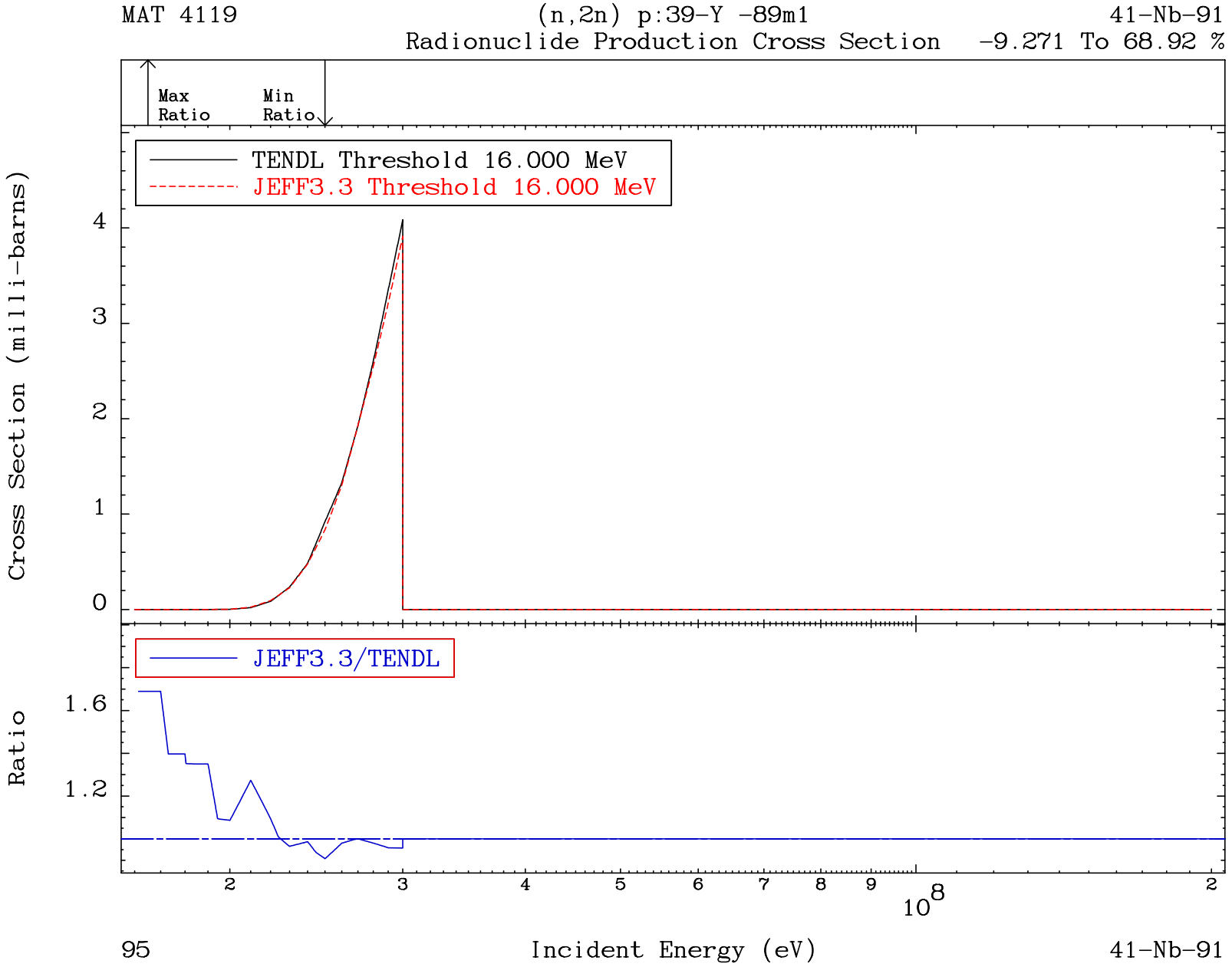

MAT 4119
(n,n') d:40-Zr-89g
41-Nb-91
Radionuclide Production Cross Section -79.70 To 68.30 %
Max
Ratio
TENDL Threshold 15.061 MeV
JEFF3.3 Threshold 15.063 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.8
1.2
0.6
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
41-Nb-91

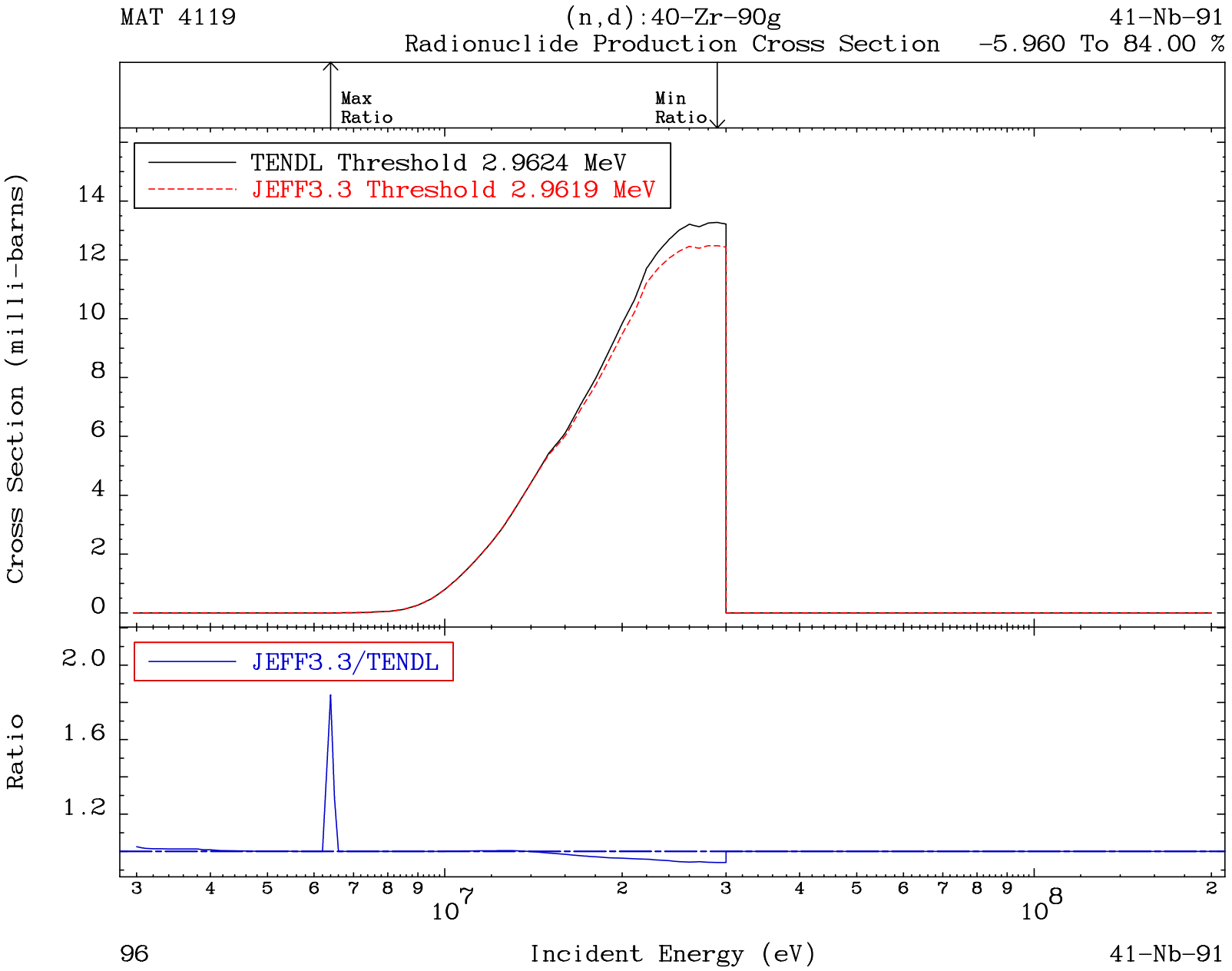

MAT 4119
(n,n') d:40-Zr-89m1
41-Nb-91
Radionuclide Production Cross Section -23.68 To 158.0 %
Min
Ratio
TENDL Threshold 16.000 MeV
JEFF3.3 Threshold 16.000 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
41-Nb-91

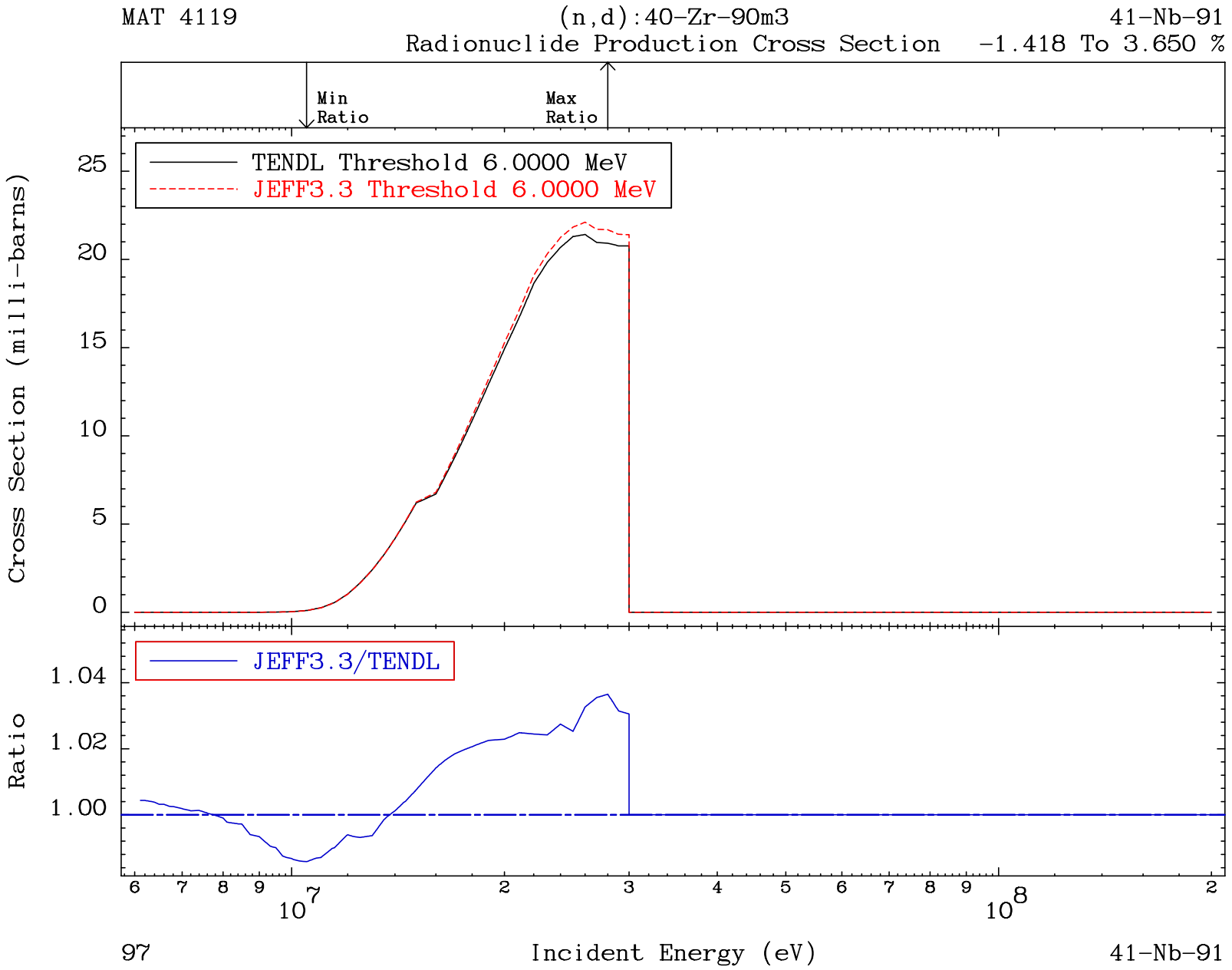

MAT 4119
(n,2n) p:40-Zr-89g
41-Nb-91
Radionuclide Production Cross Section -1.768 To 2887. %
Max Ratio
Min Ratio
TENDL Threshold 17.310 MeV
JEFF3.3 Threshold 17.313 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
41-Nb-91

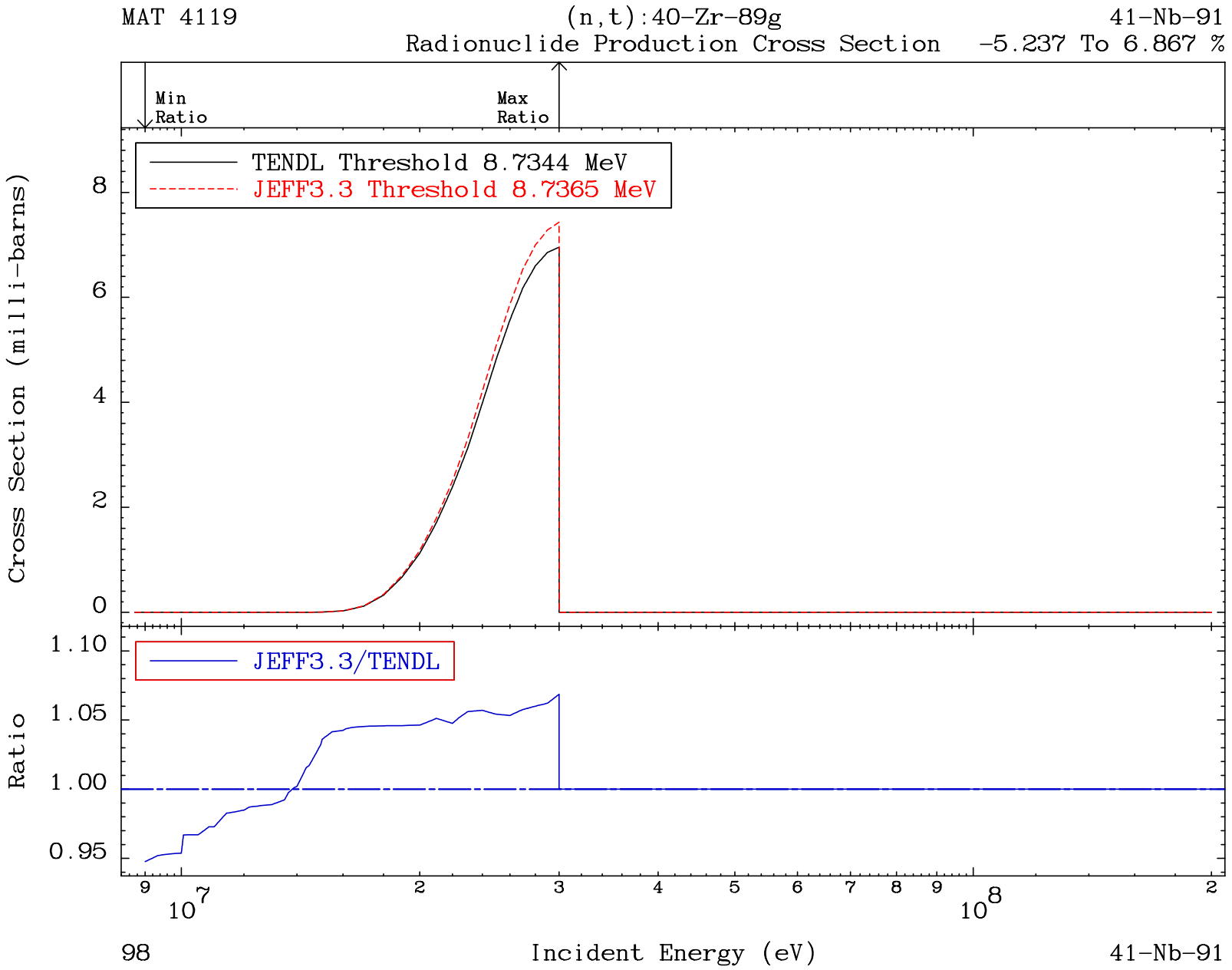

MAT 4119
(n,2n) p:40-Zr-89m1
41-Nb-91
Radionuclide Production Cross Section -24.76 To 320.1 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 17.907 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
4
2
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
41-Nb-91

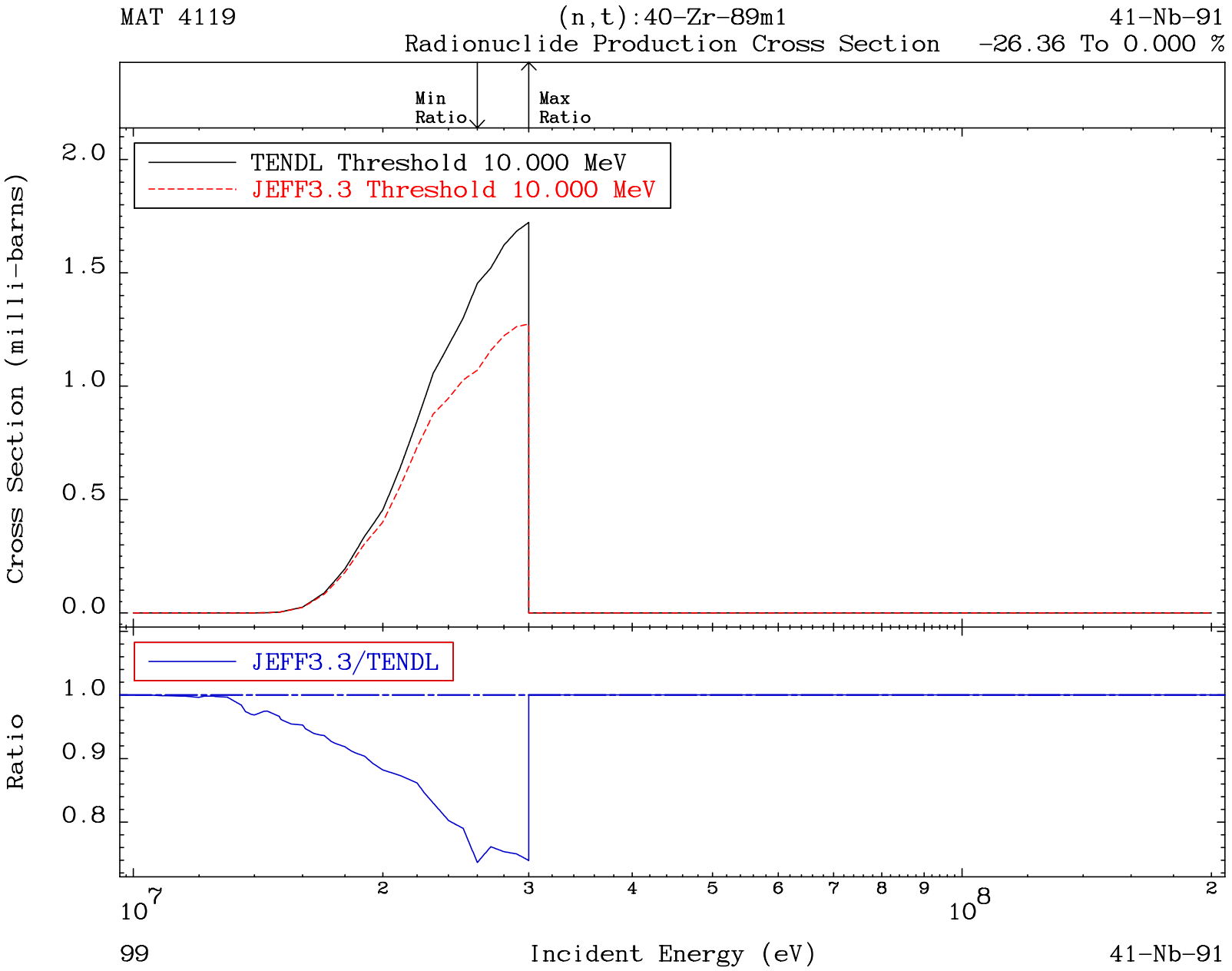

MAT 4119
(n,2n) p:39-Y -89g
41-Nb-91
Radionuclide Production Cross Section -5.719 To 50.85 %
Max Ratio
Min Ratio
TENDL Threshold 13.655 MeV
JEFF3.3 Threshold 13.657 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
41-Nb-91

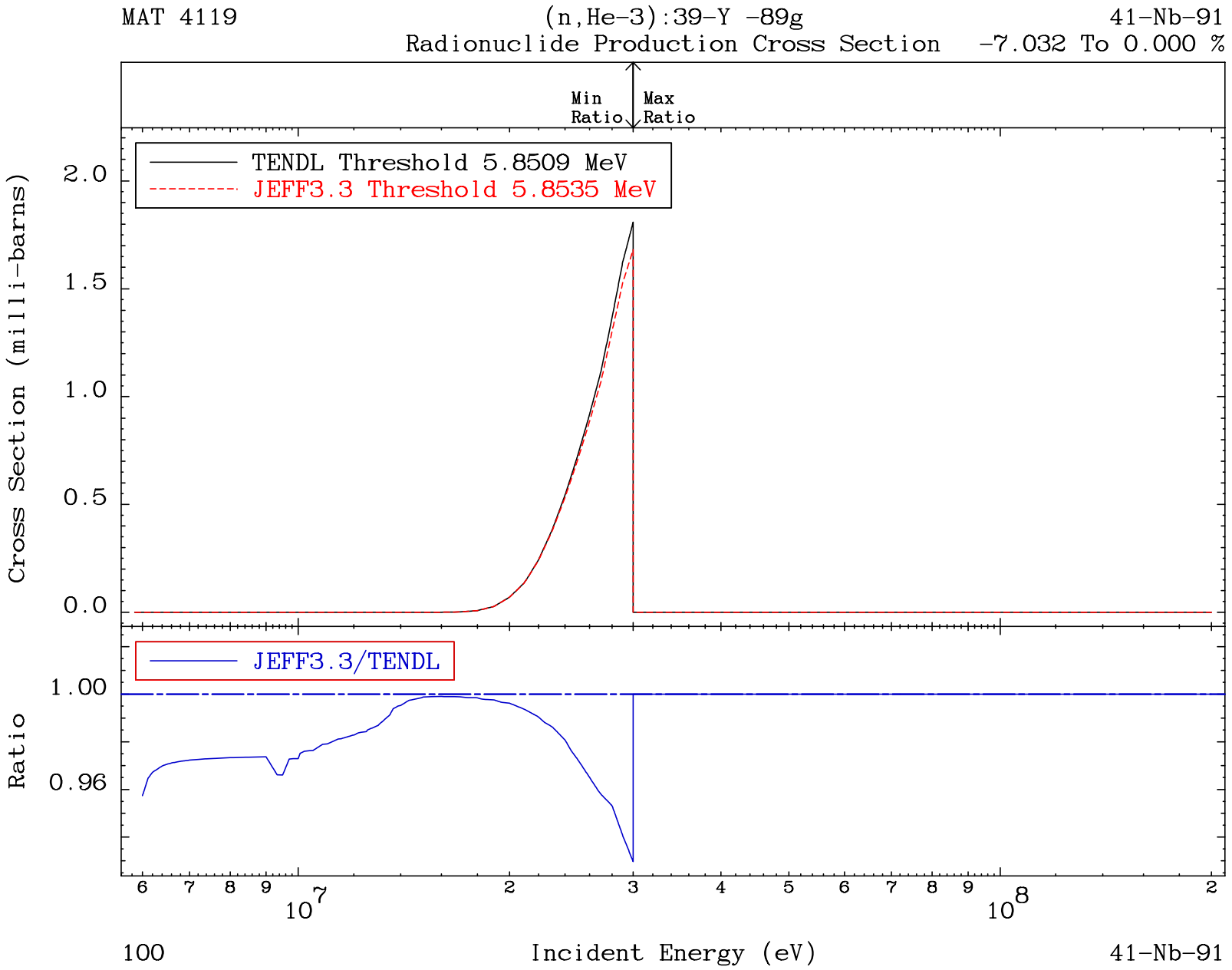

MAT 4119
(n,2n) p:39-Y -89m1
41-Nb-91
Radionuclide Production Cross Section -9.271 To 68.92 %
Max Ratio
Min Ratio
TENDL Threshold 16.000 MeV
JEFF3.3 Threshold 16.000 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.2
1.6
2
3
4
5
6
7
8
9
2
10^8
95
Incident Energy (eV)
41-Nb-91

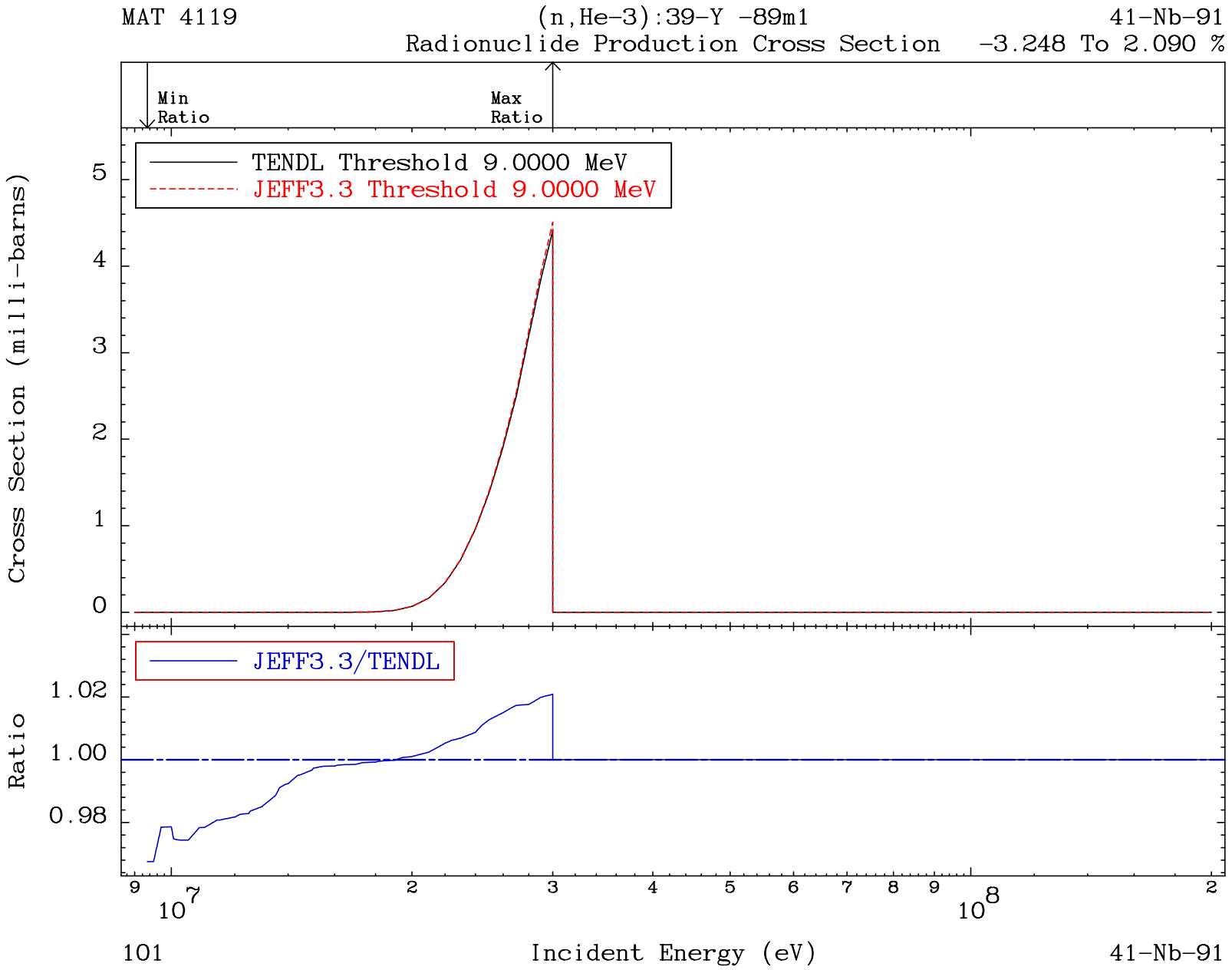

MAT 4119
(n,d):40-Zr-90g
41-Nb-91
Radionuclide Production Cross Section -5.960 To 84.00 %
Max Ratio
Min Ratio
TENDL Threshold 2.9624 MeV
JEFF3.3 Threshold 2.9619 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
96
41-Nb-91

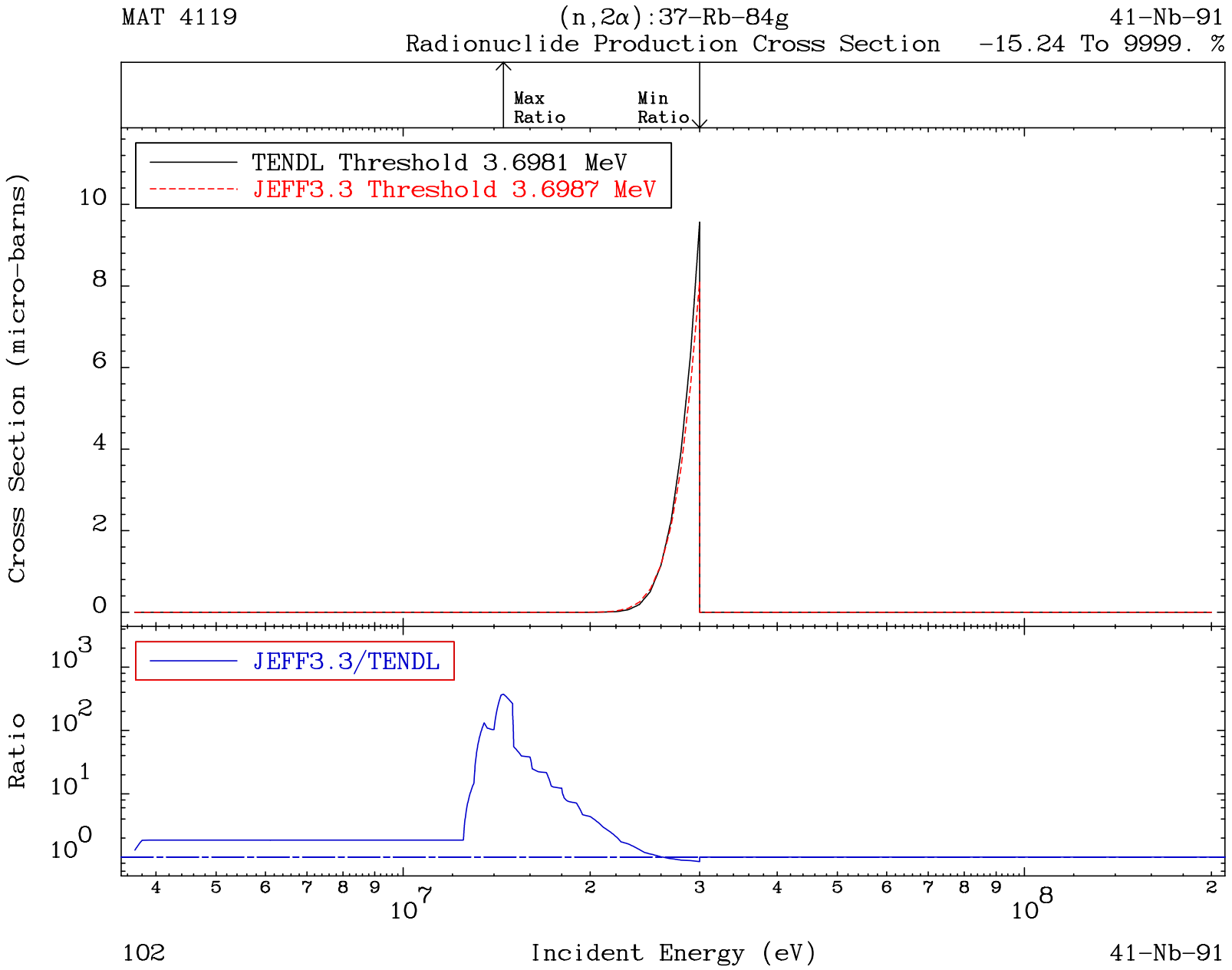

MAT 4119
(n,d):40-Zr-90m3
41-Nb-91
Radionuclide Production Cross Section -1.418 To 3.650 %
Min Ratio
Max Ratio
TENDL Threshold 6.0000 MeV
JEFF3.3 Threshold 6.0000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
97
Incident Energy (eV)
41-Nb-91

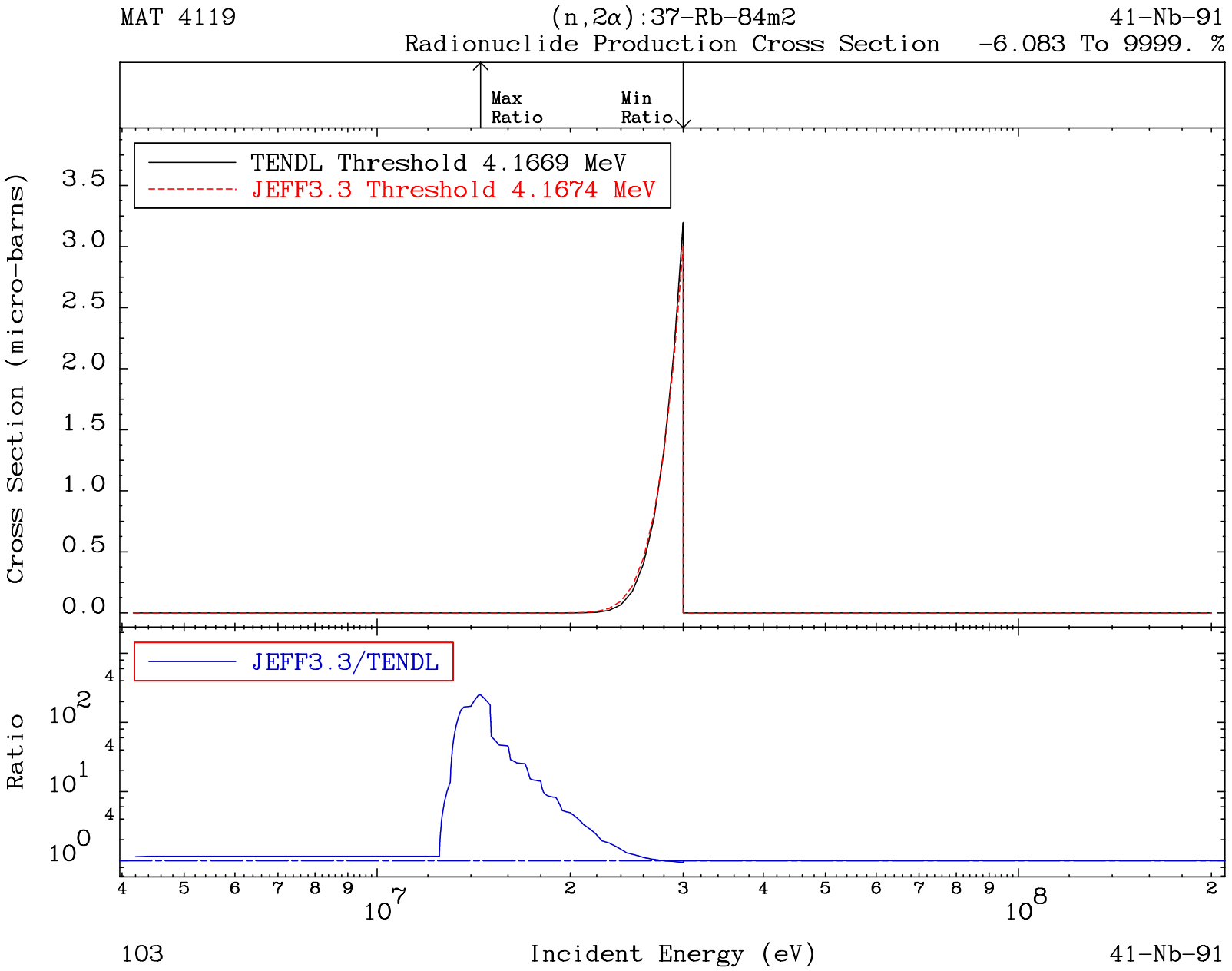

MAT 4119
(n,t):40-Zr-89g
41-Nb-91
Radionuclide Production Cross Section -5.237 To 6.867 %
Min Ratio
Max Ratio
TENDL Threshold 8.7344 MeV
JEFF3.3 Threshold 8.7365 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.95
1.00
1.05
1.10
9
10^7
2
3
4
5
6
7
8
9
10^8
2
98
Incident Energy (eV)
41-Nb-91

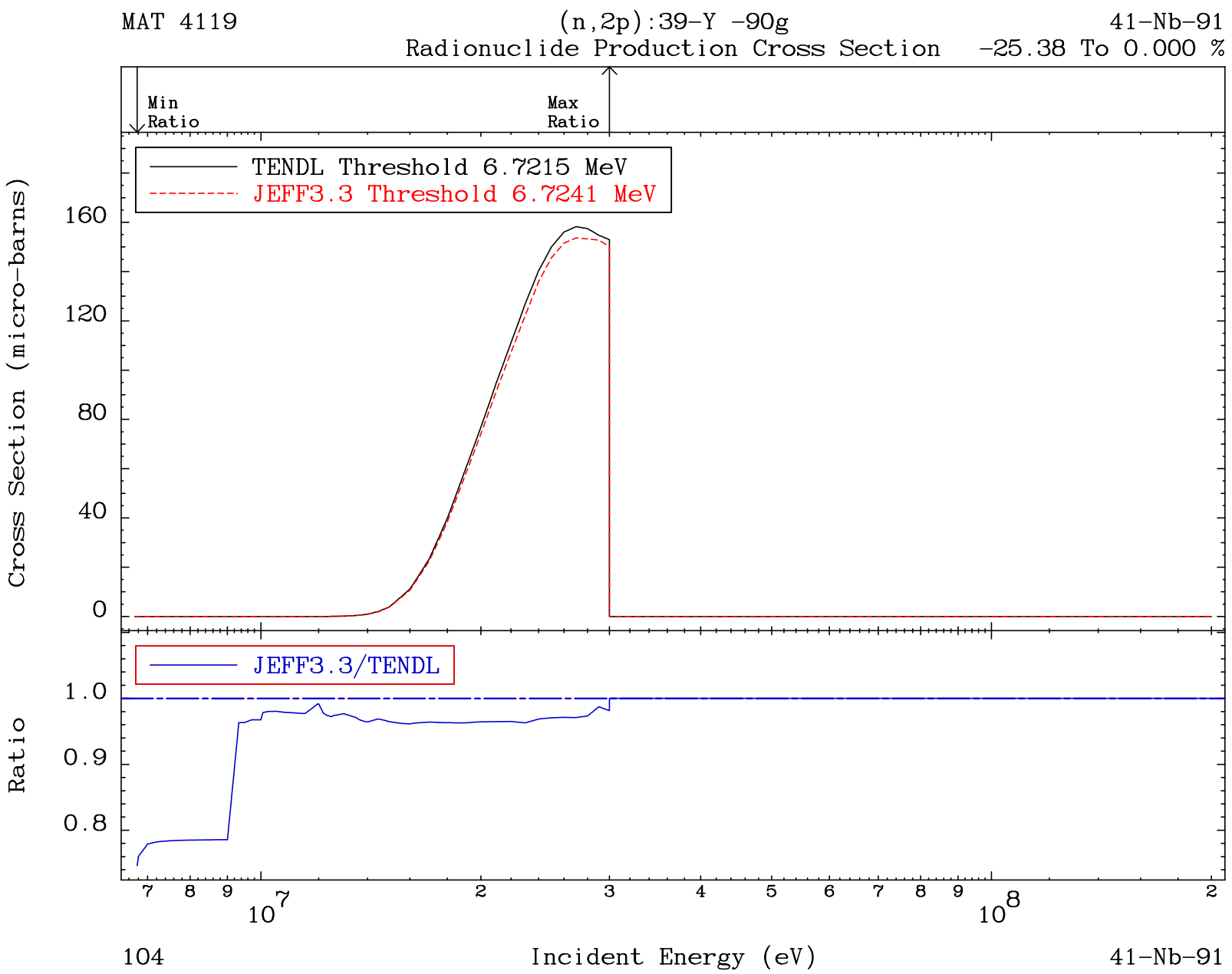

MAT 4119
(n,t):40-Zr-89m1
41-Nb-91
Radionuclide Production Cross Section
-26.36 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 10.000 MeV
JEFF3.3 Threshold 10.000 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
41-Nb-91

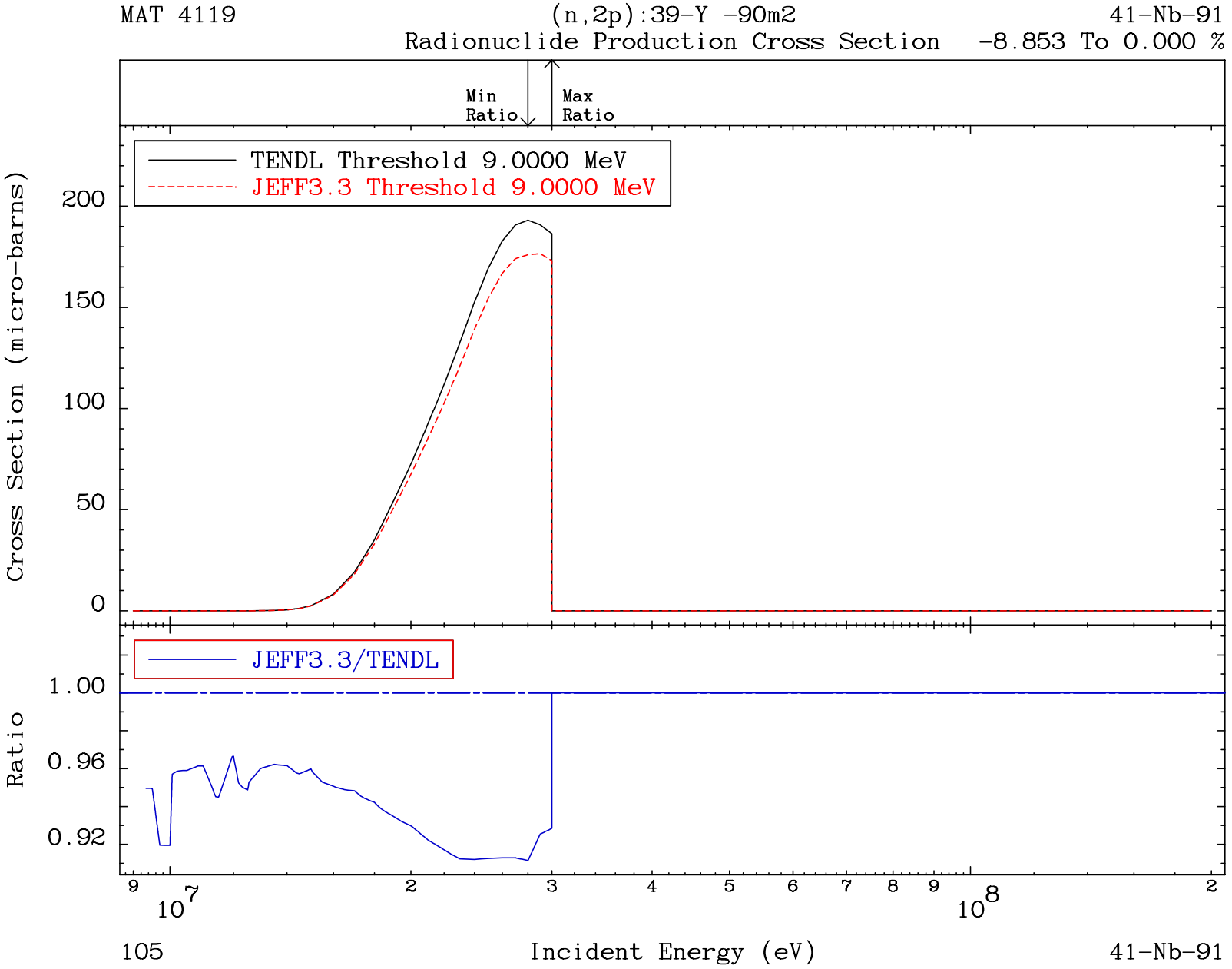

MAT 4119
(n,He-3):39-Y -89g
41-Nb-91
Radionuclide Production Cross Section -7.032 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.8509 MeV
JEFF3.3 Threshold 5.8535 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
100
Incident Energy (eV)
41-Nb-91

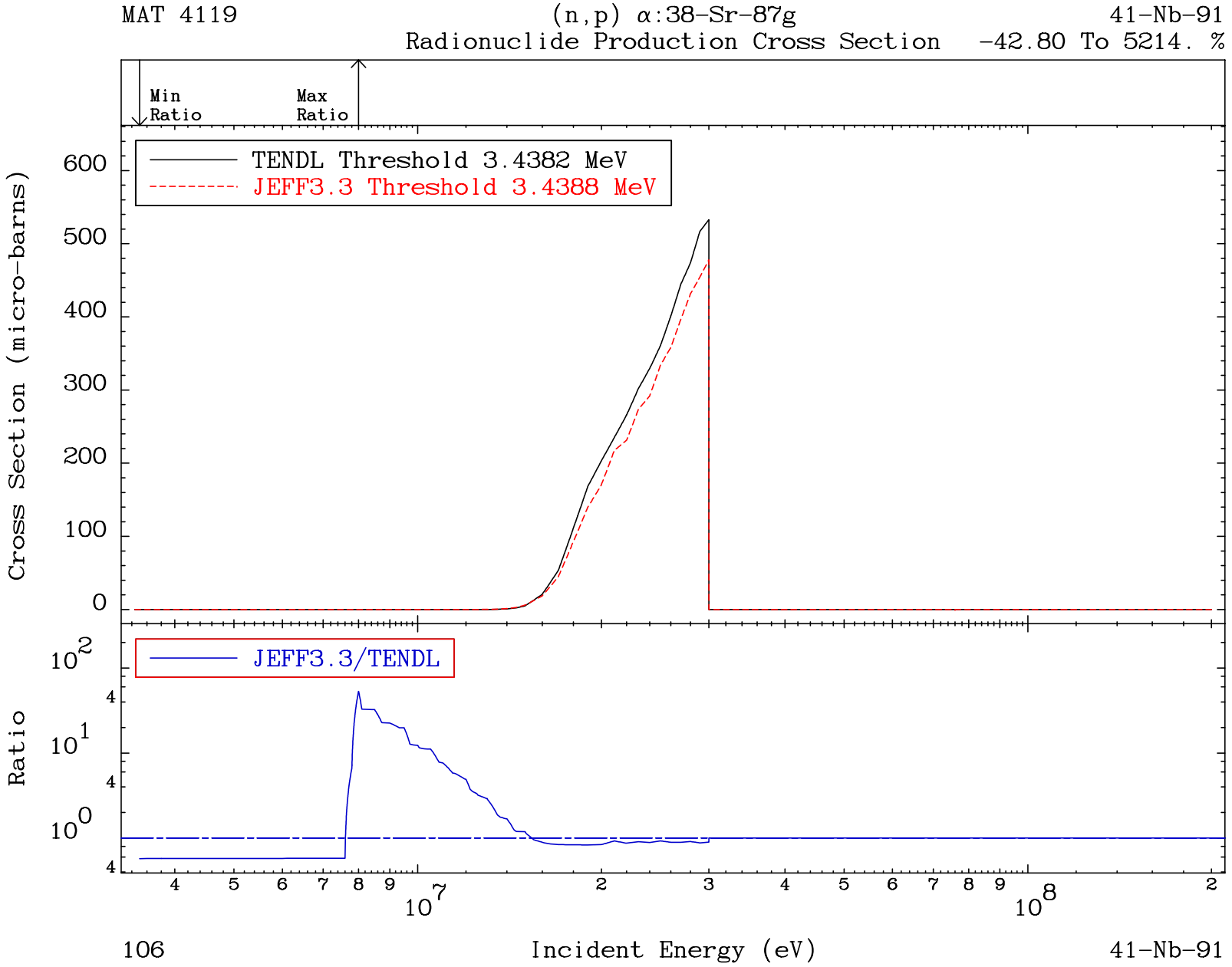

MAT 4119
(n,He-3):39-Y -89m1
41-Nb-91
Radionuclide Production Cross Section -3.248 To 2.090 %
Min Ratio
Max Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 9.0000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.98
1.00
1.02
9
10^7
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
41-Nb-91

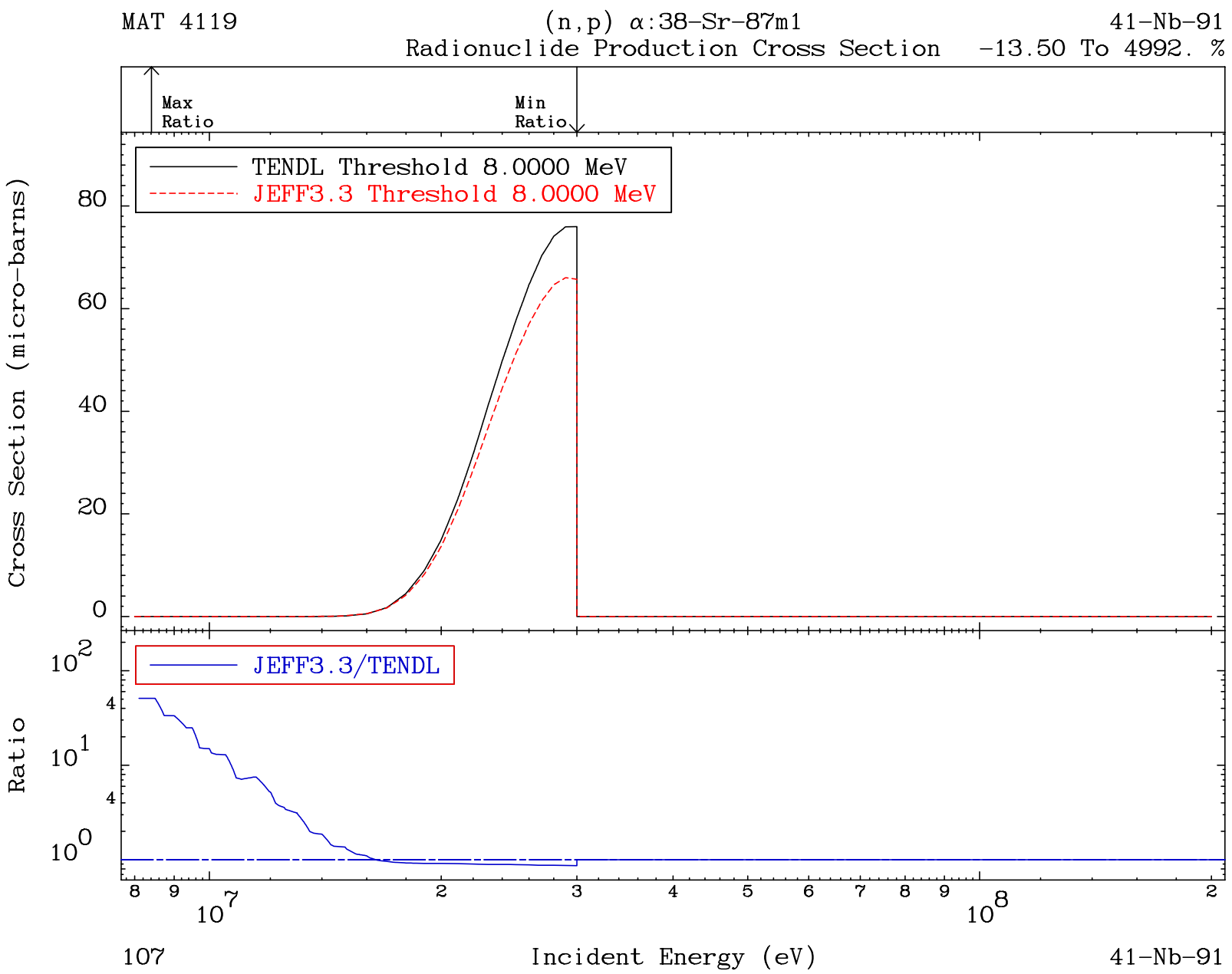

MAT 4119
(n,2α):37-Rb-84g
41-Nb-91
Radionuclide Production Cross Section -15.24 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.6981 MeV
JEFF3.3 Threshold 3.6987 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
10^3
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
102
Incident Energy (eV)
41-Nb-91

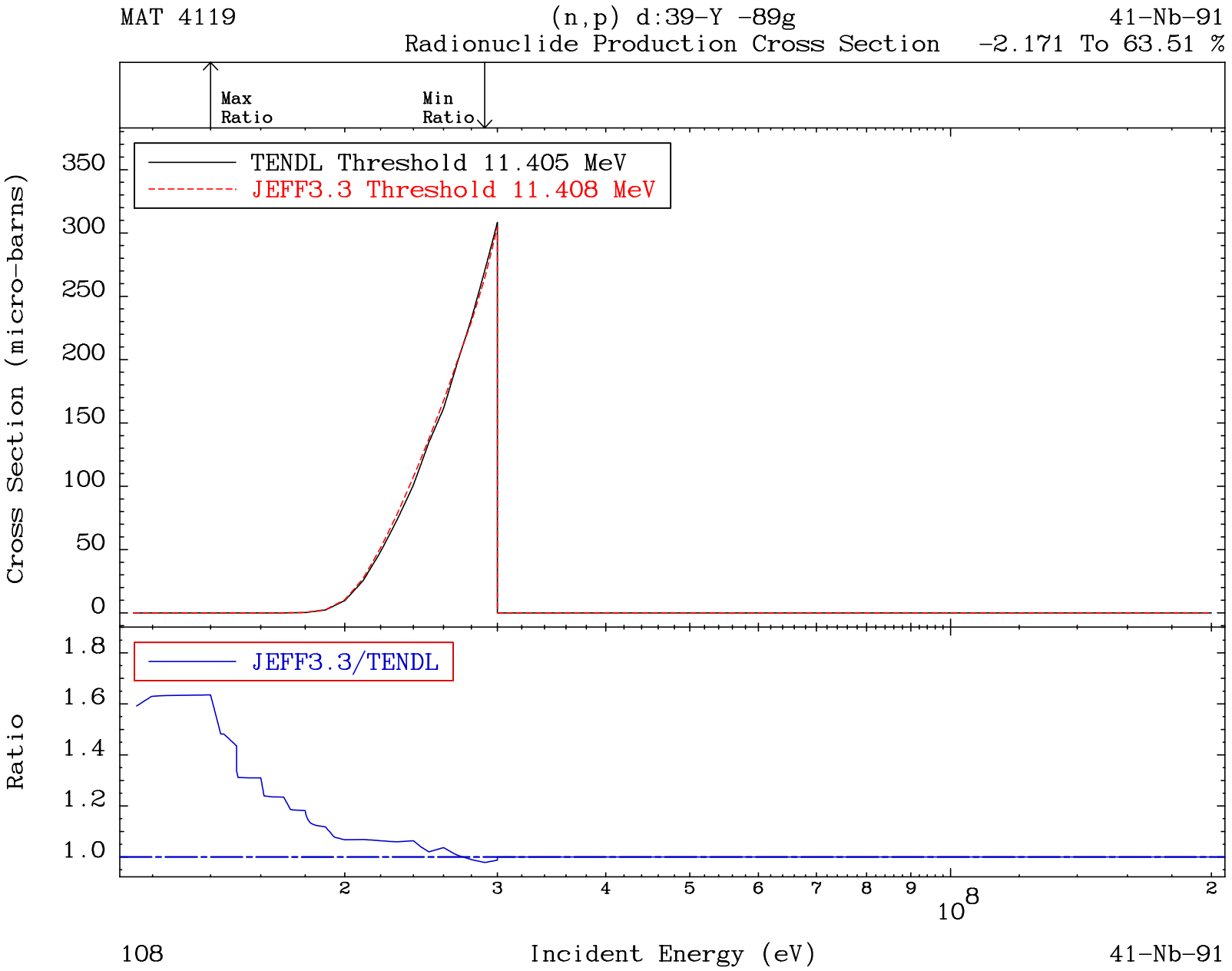

MAT 4119
(n,2α):37-Rb-84m2
41-Nb-91
Radionuclide Production Cross Section -6.083 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.1669 MeV
JEFF3.3 Threshold 4.1674 MeV
Cross Section (micro-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
103
Incident Energy (eV)
41-Nb-91

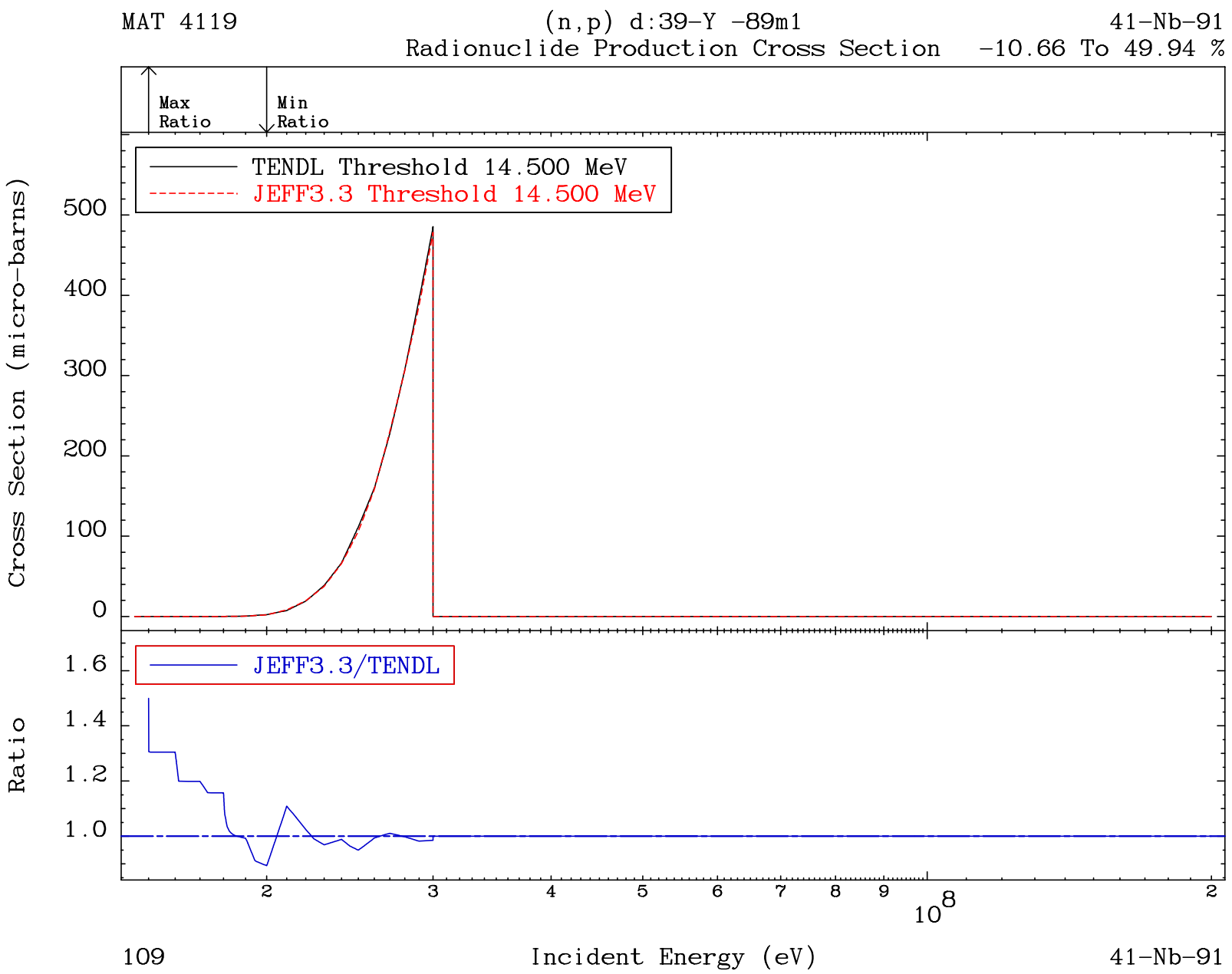

MAT 4119
(n,2p):39-Y -90g
41-Nb-91
Radionuclide Production Cross Section
-25.38 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.7215 MeV
JEFF3.3 Threshold 6.7241 MeV
Cross Section (micro-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
104
Incident Energy (eV)
41-Nb-91


MAT 4119
(n,2p):39-Y -90m2
41-Nb-91
Radionuclide Production Cross Section -8.853 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 9.0000 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.96
0.92
9
10^7
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
41-Nb-91


MAT 4119
(n,p) α:38-Sr-87g
41-Nb-91
Radionuclide Production Cross Section -42.80 To 5214. %
Min Ratio
Max Ratio
TENDL Threshold 3.4382 MeV
JEFF3.3 Threshold 3.4388 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
4
10^7
2
3
4
5
6
7
8
9
10^8
106
Incident Energy (eV)
41-Nb-91


MAT 4119
(n,p) α:38-Sr-87m1
41-Nb-91
Radionuclide Production Cross Section -13.50 To 4992. %
Max Ratio
Min Ratio
TENDL Threshold 8.0000 MeV
JEFF3.3 Threshold 8.0000 MeV
Cross Section (micro-barns)
0
20
40
60
80
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
107
Incident Energy (eV)
41-Nb-91


MAT 4119
(n,p) d:39-Y -89g
41-Nb-91
Radionuclide Production Cross Section -2.171 To 63.51 %
Max Ratio
Min Ratio
TENDL Threshold 11.405 MeV
JEFF3.3 Threshold 11.408 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.8
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
108
Incident Energy (eV)
41-Nb-91


MAT 4119
(n,p) d:39-Y -89m1
41-Nb-91
Radionuclide Production Cross Section -10.66 To 49.94 %
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
JEFF3.3 Threshold 14.500 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
109
Incident Energy (eV)
41-Nb-91