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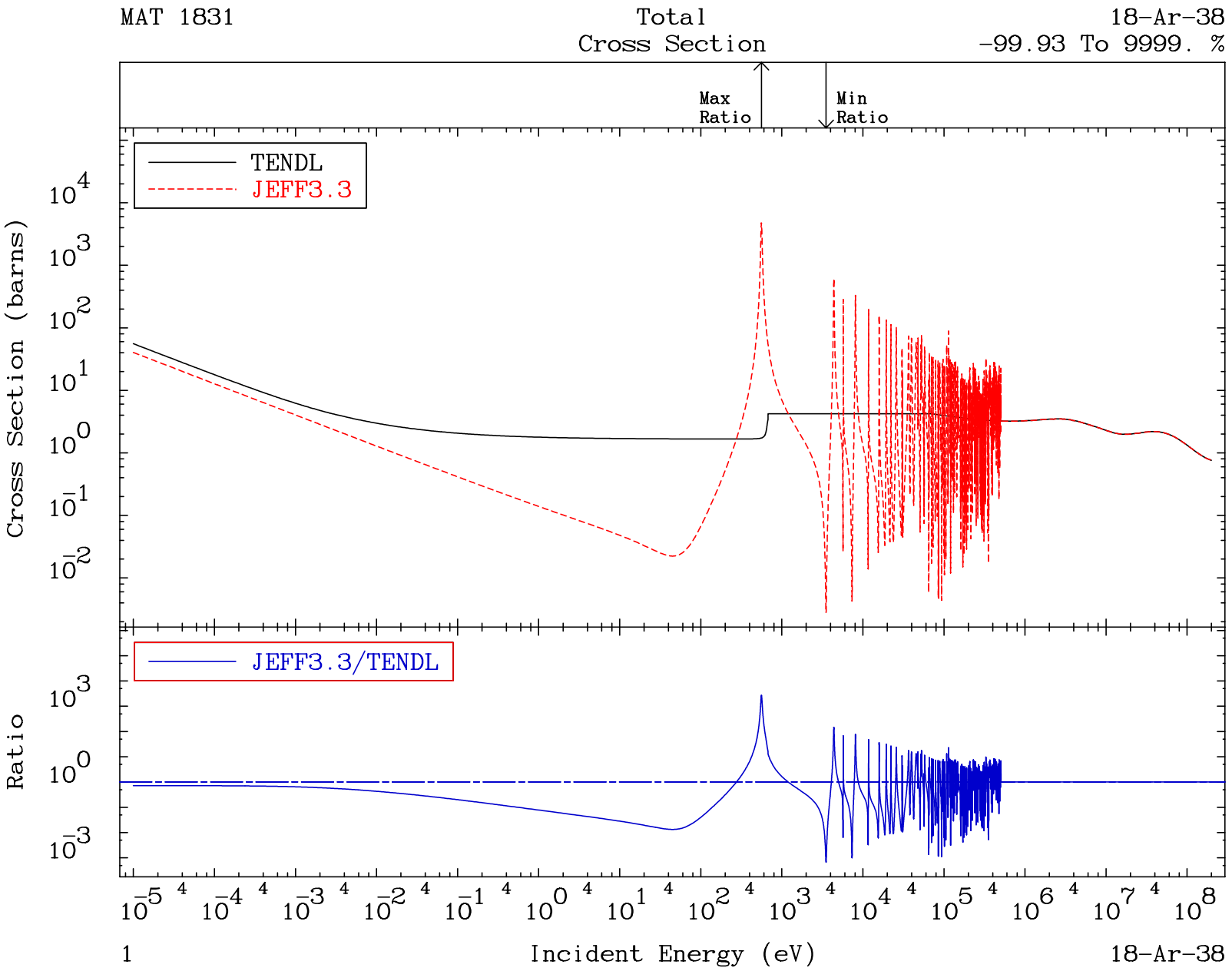
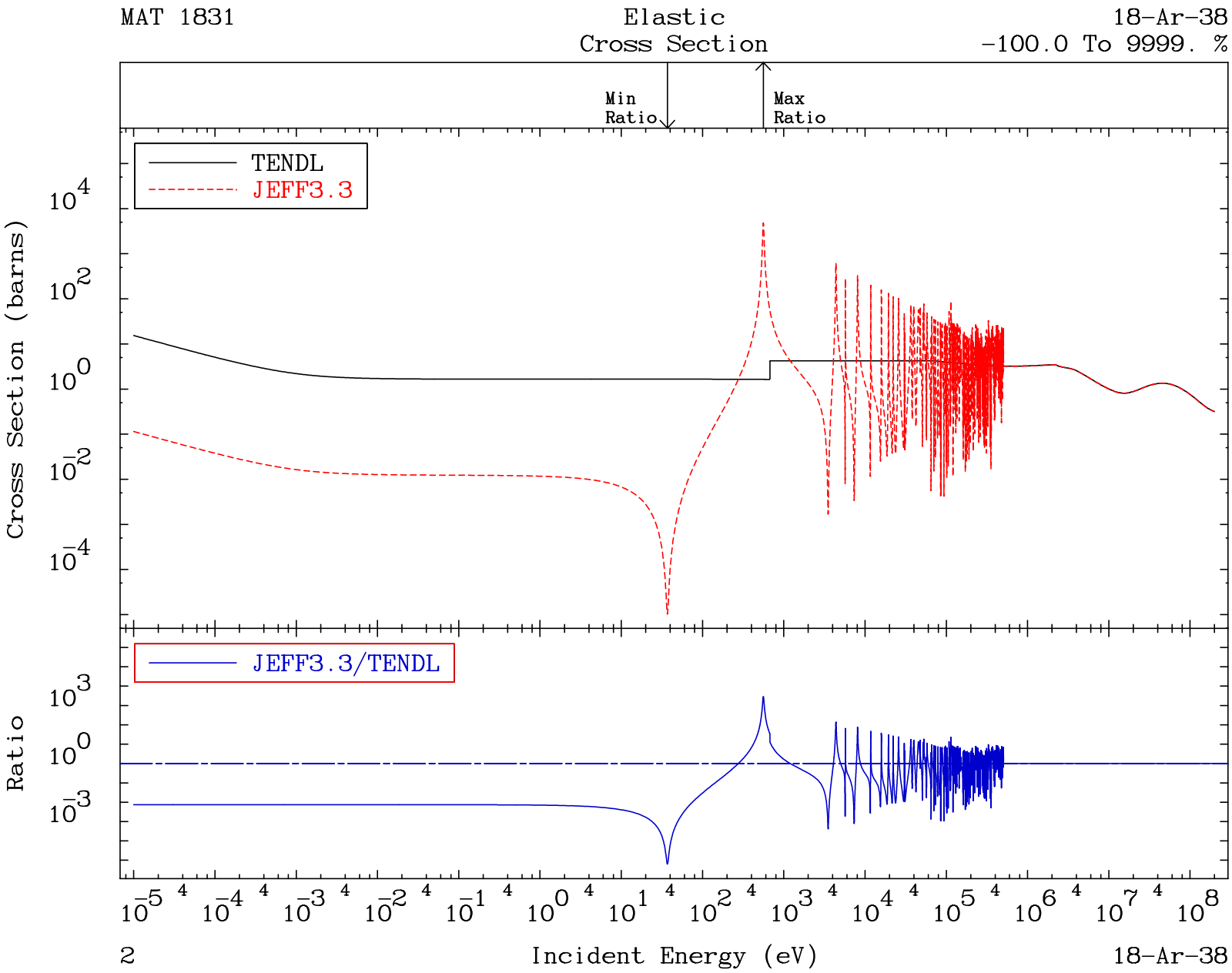
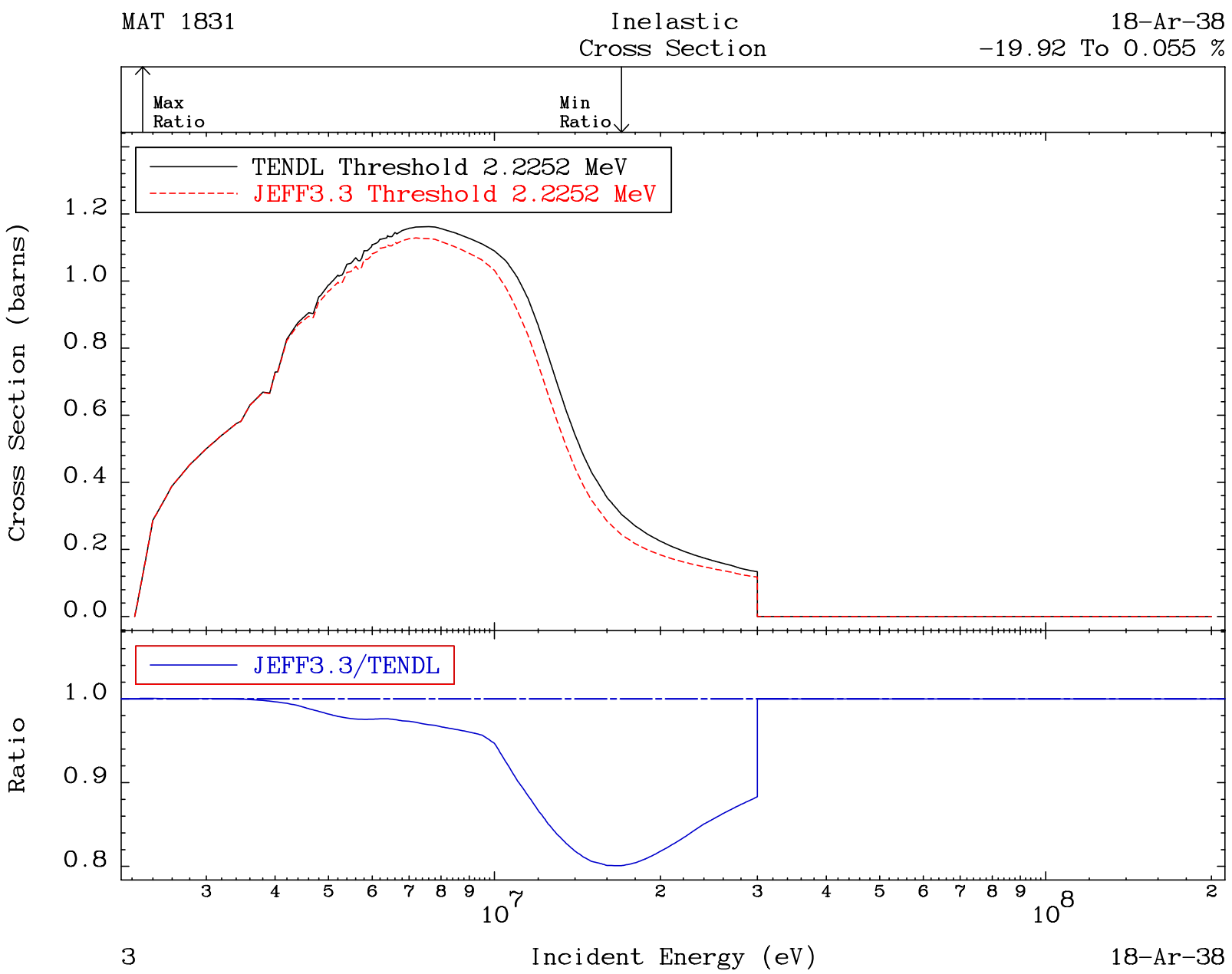
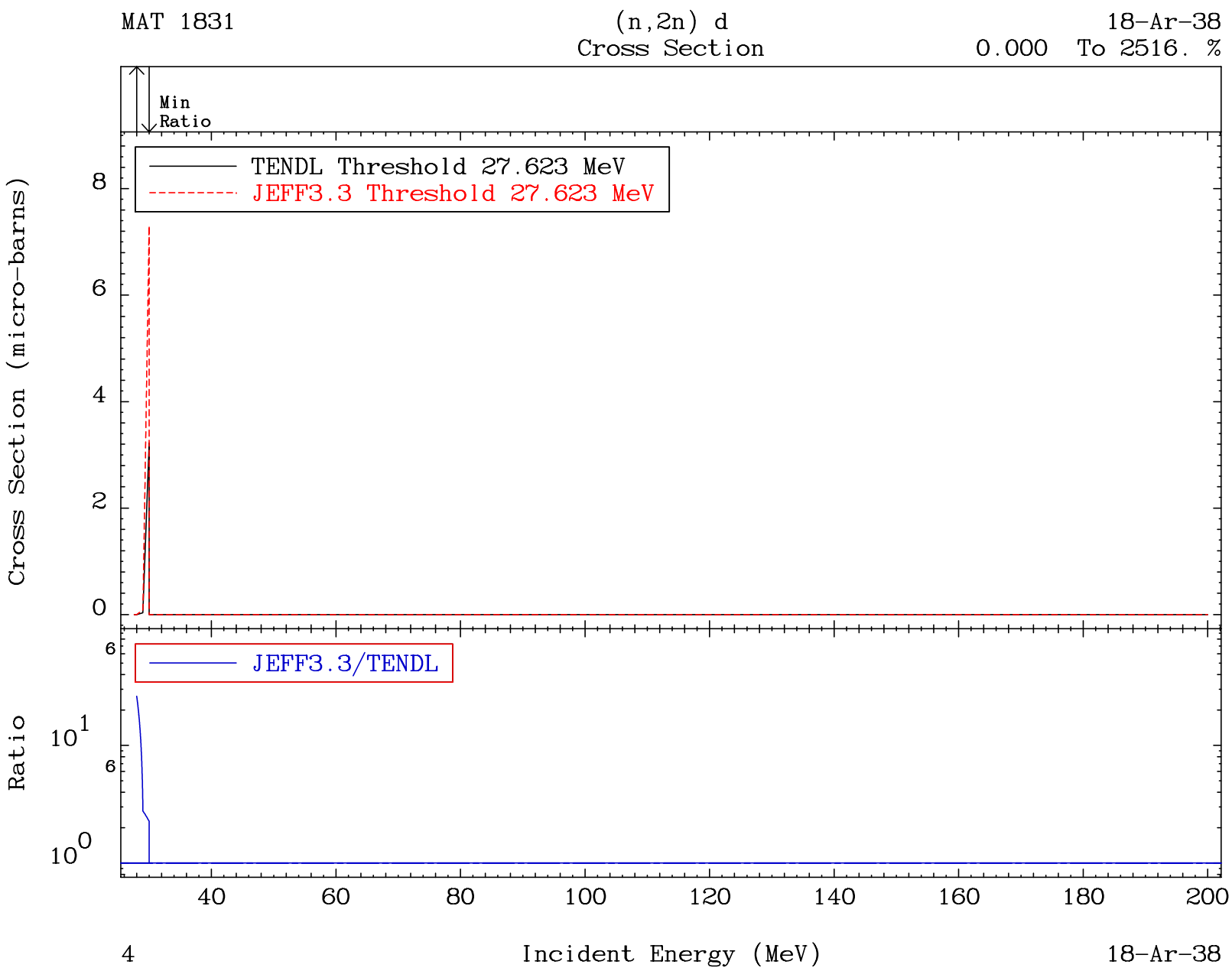
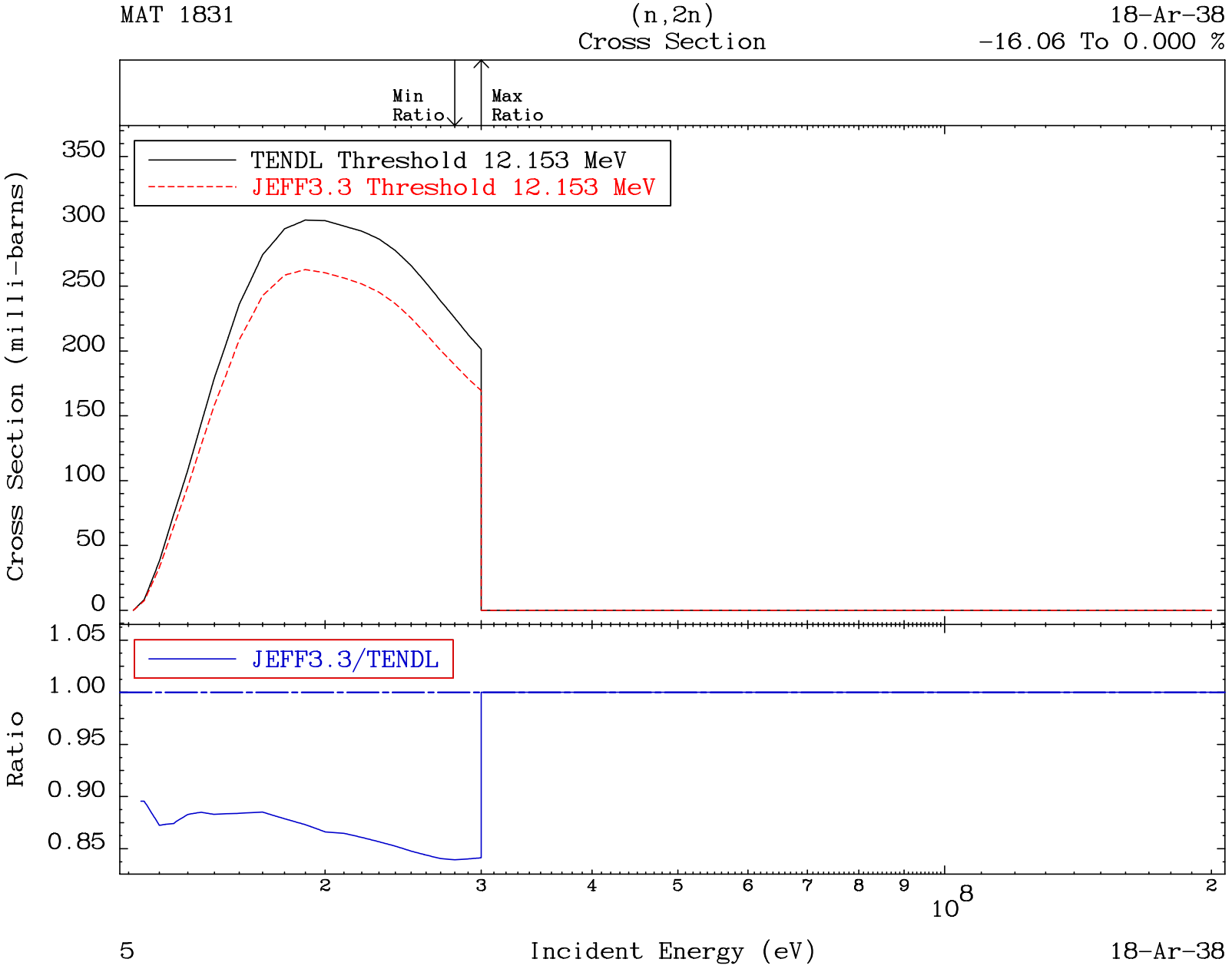
Press Mouse Button to Start

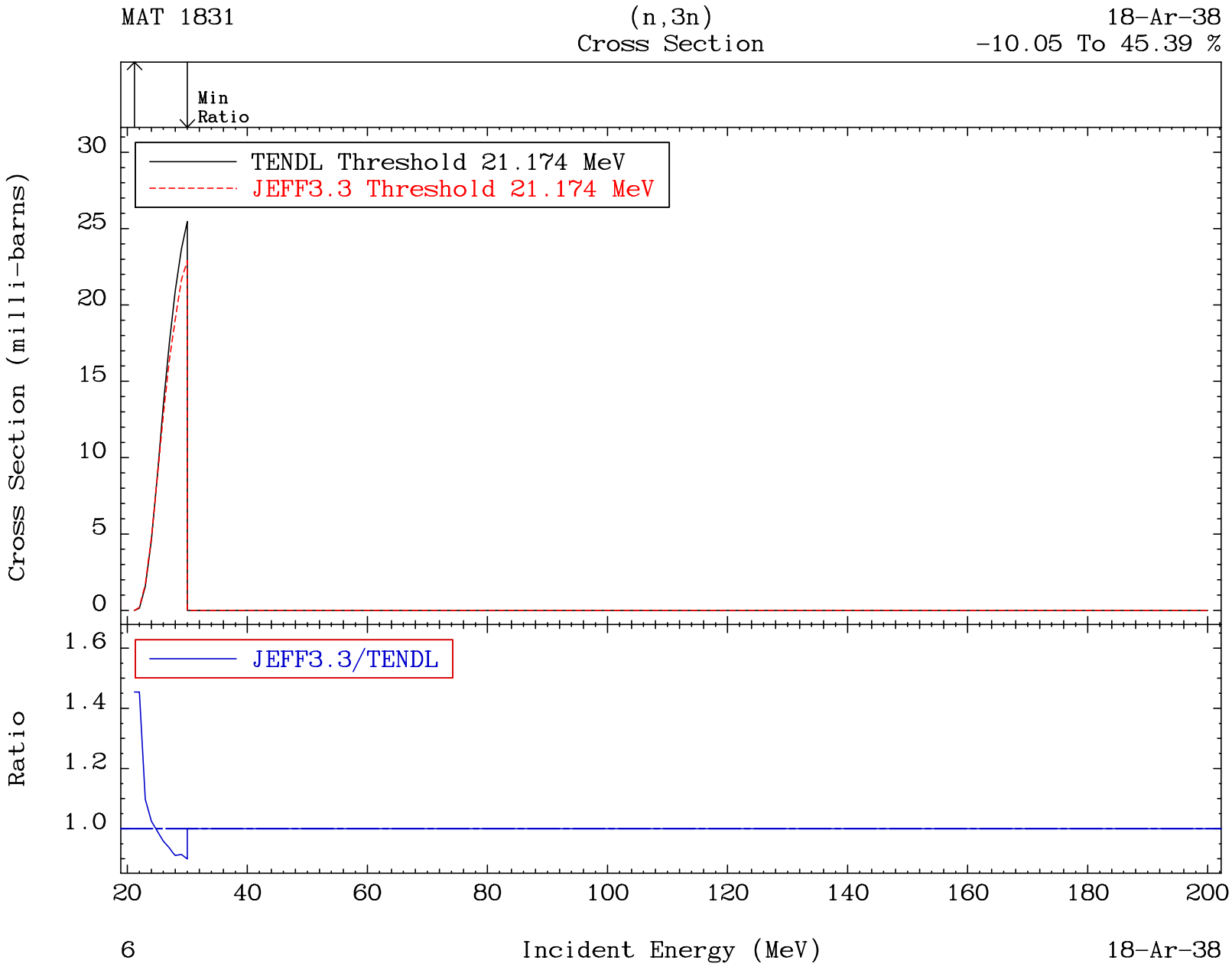

MAT 1831
Total
Cross Section
18-Ar-38
-99.93 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
18-Ar-38

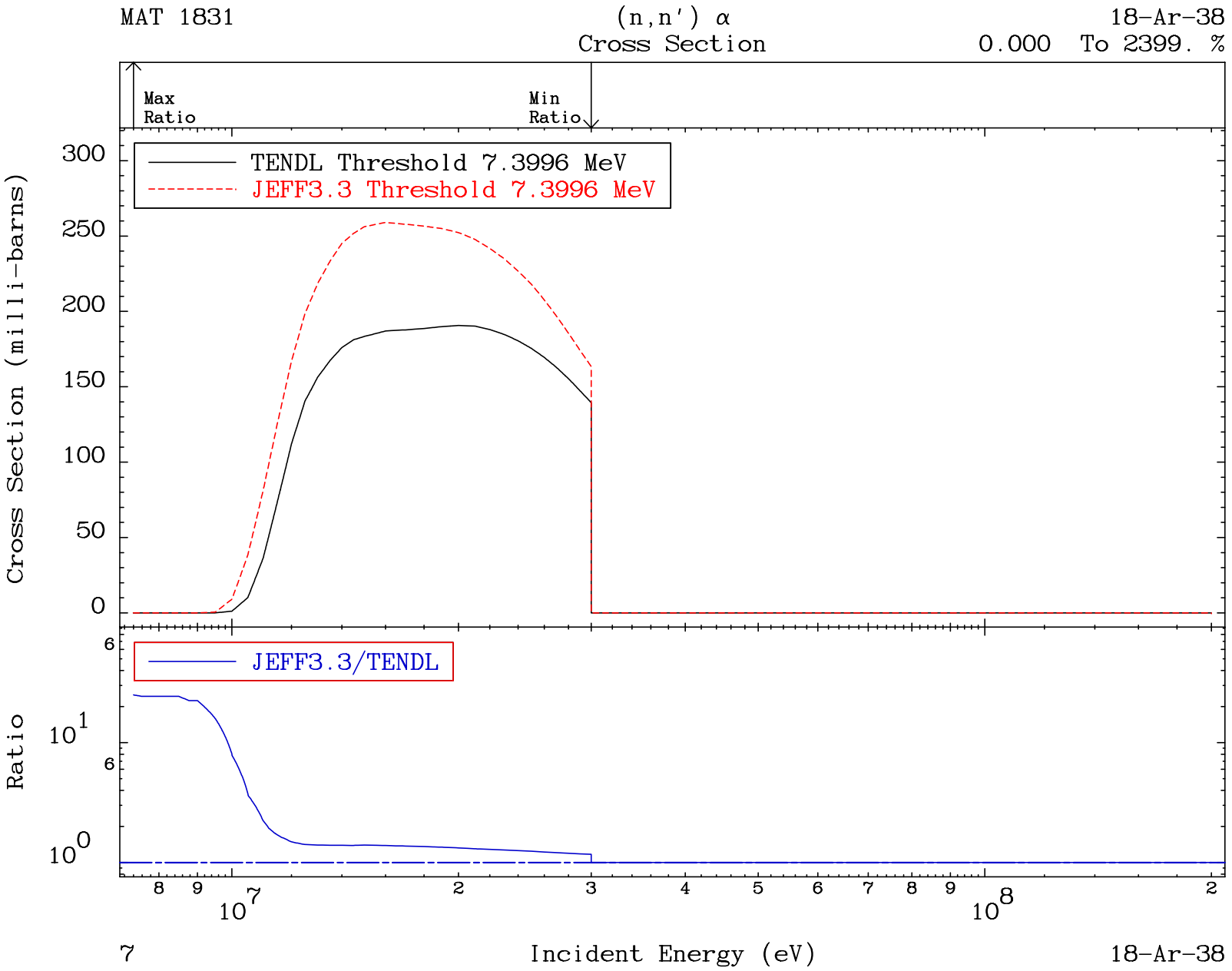

MAT 1831
Elastic
Cross Section
18-Ar-38
-100.0 To 9999. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
18-Ar-38

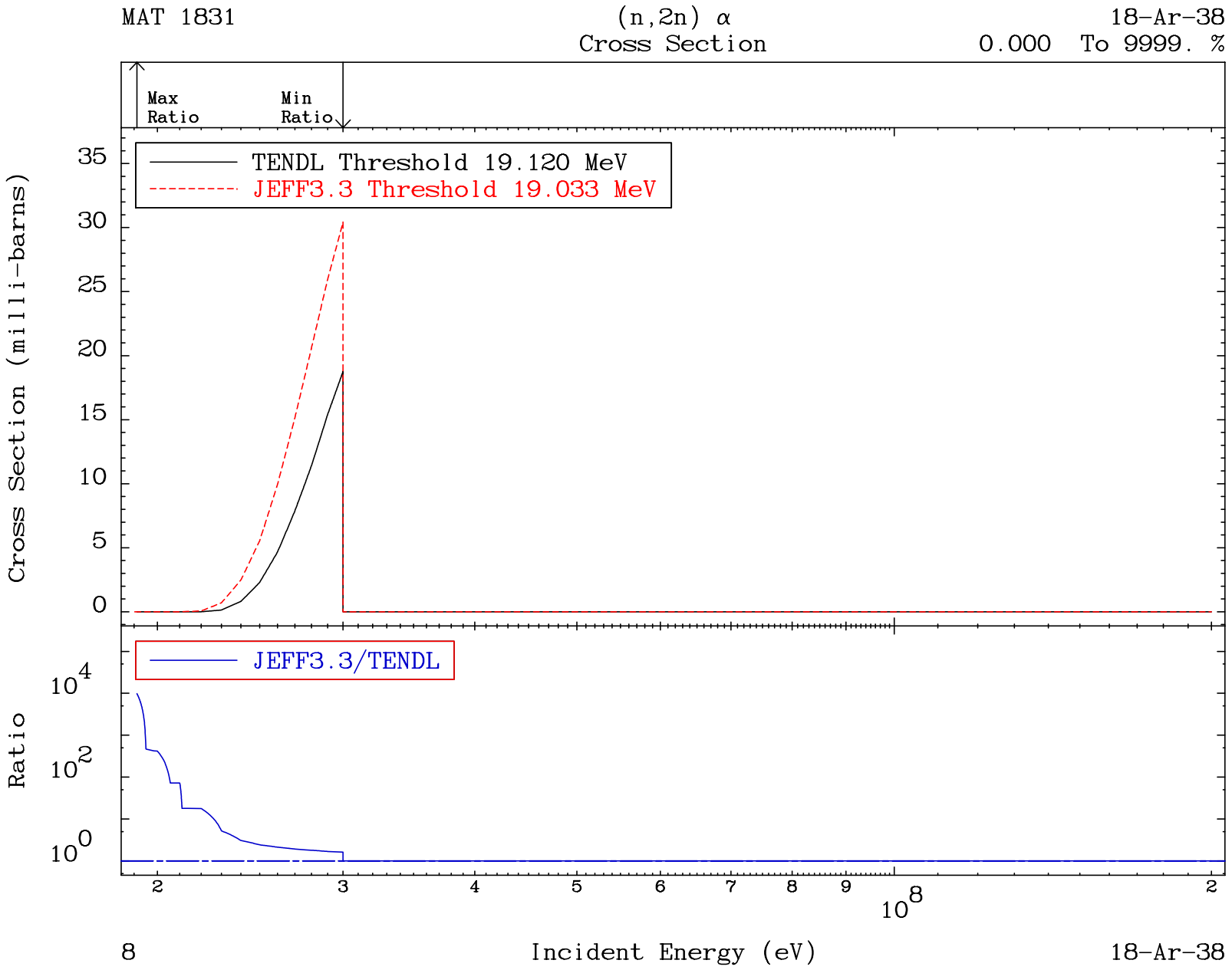

MAT 1831
Inelastic
Cross Section
18-Ar-38
-19.92 To 0.055 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.2252 MeV
JEFF3.3 Threshold 2.2252 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
3
Incident Energy (eV)
18-Ar-38

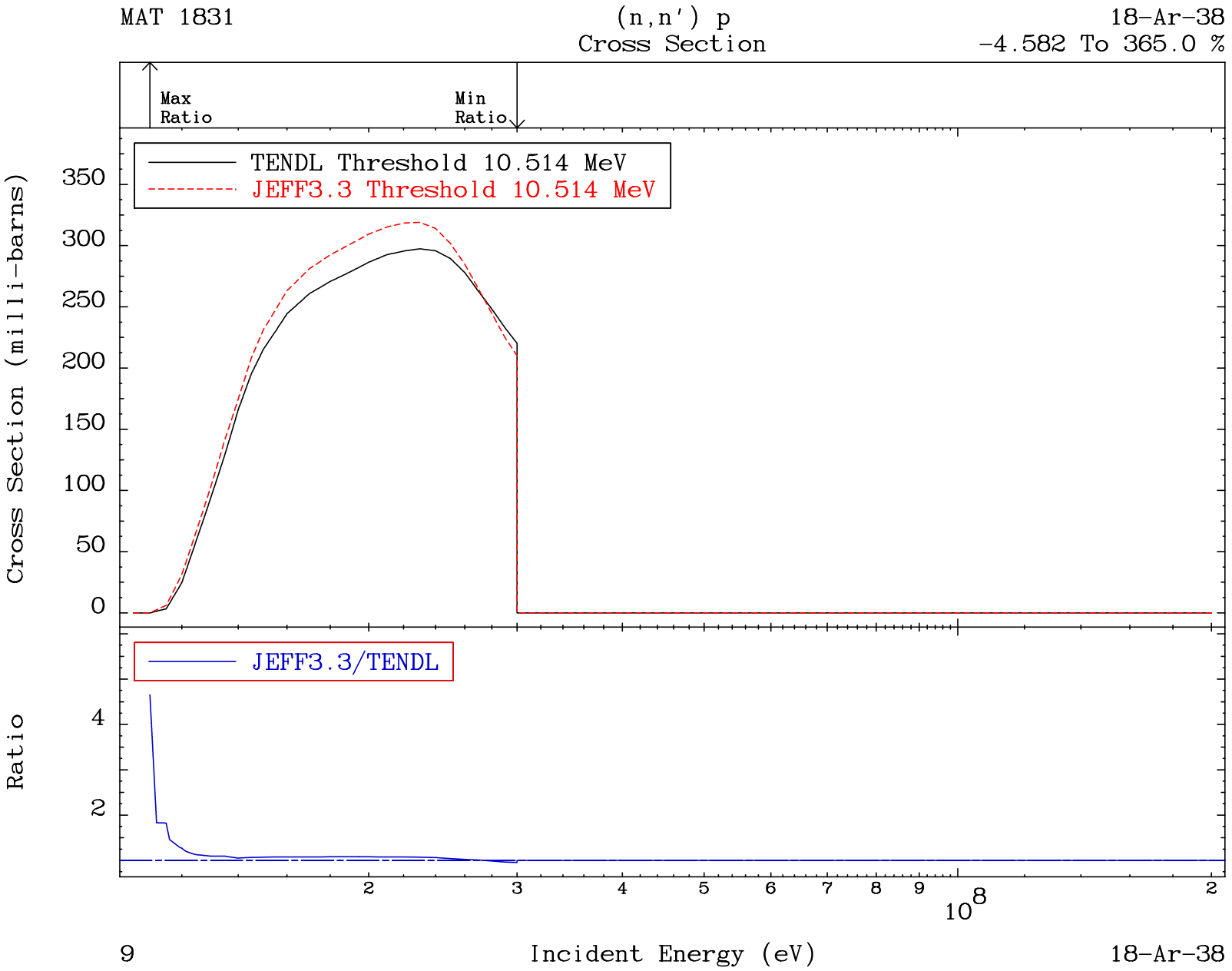

MAT 1831
(n,2n) d
Cross Section
18-Ar-38
0.000 To 2516. %
Min
Ratio
TENDL Threshold 27.623 MeV
JEFF3.3 Threshold 27.623 MeV
Cross Section (micro-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
10^0
6
10^1
6
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
4
18-Ar-38

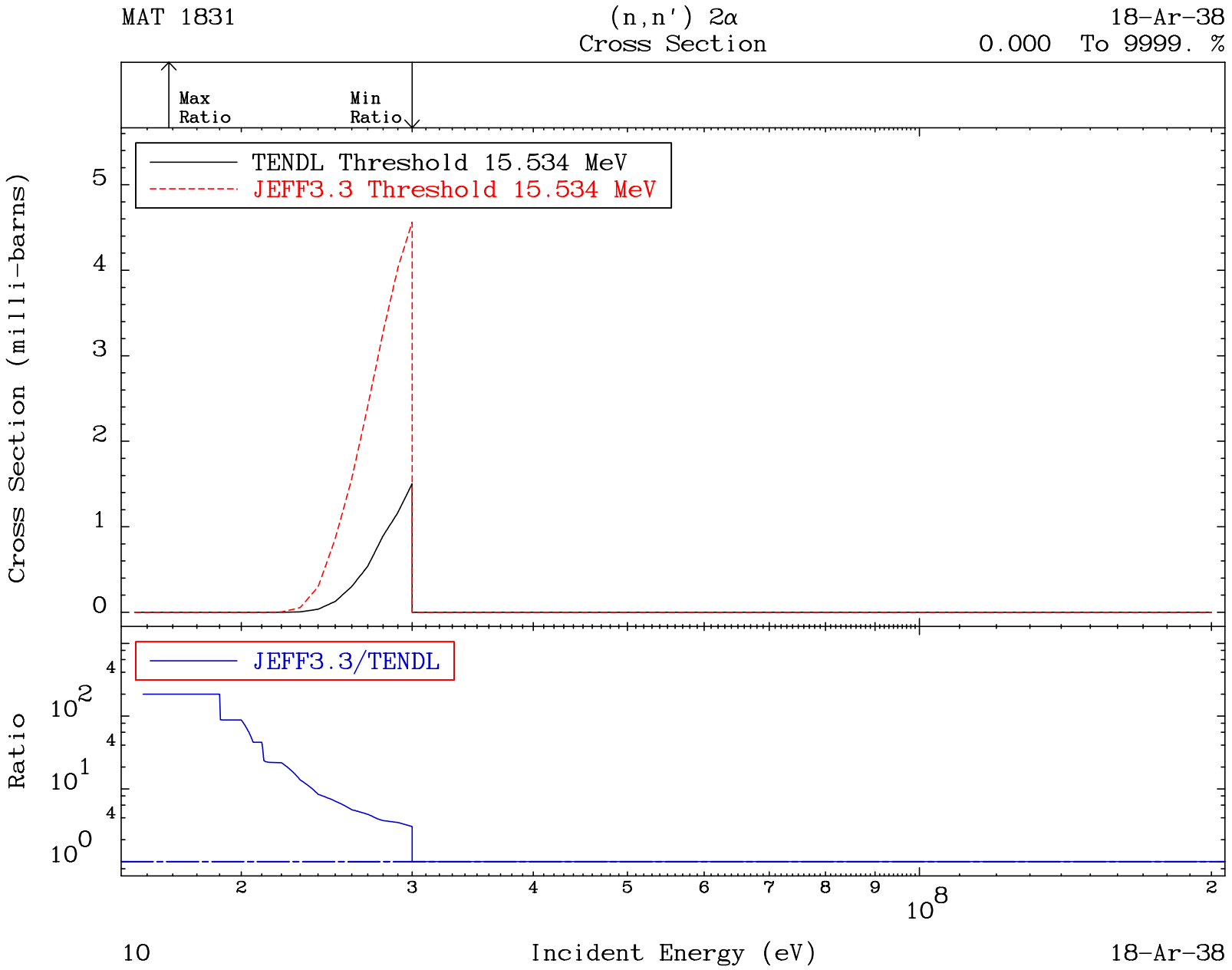

MAT 1831
(n,2n)
Cross Section
18-Ar-38
-16.06 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 12.153 MeV
JEFF3.3 Threshold 12.153 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
0.85
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
18-Ar-38

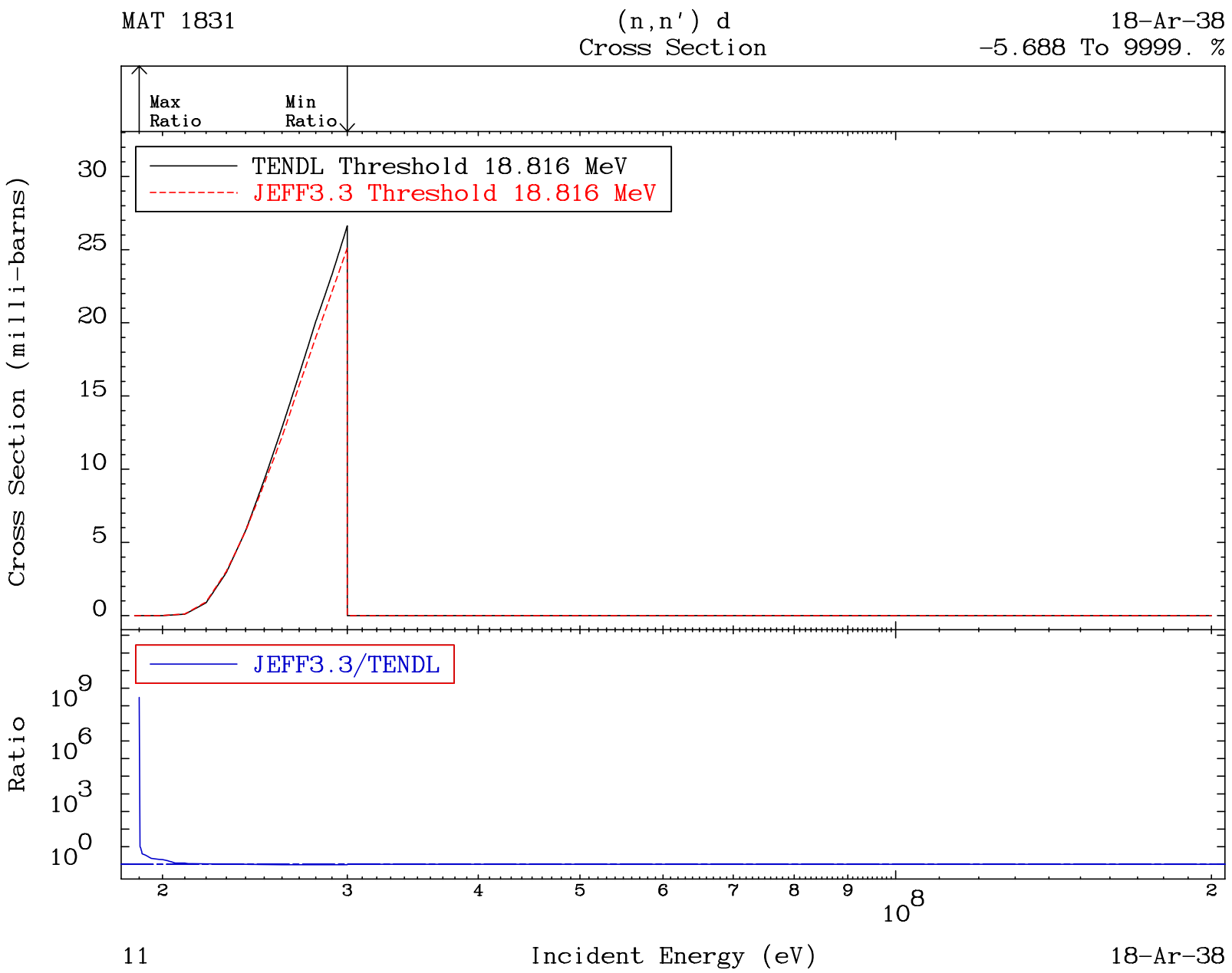

MAT 1831
(n,3n)
Cross Section
18-Ar-38
-10.05 To 45.39 %
Min
Ratio
TENDL Threshold 21.174 MeV
JEFF3.3 Threshold 21.174 MeV
JEFF3.3/TENDL
Cross Section (milli-barns)
Ratio
Incident Energy (MeV)
6
18-Ar-38
0
5
10
15
20
25
30
1.0
1.2
1.4
1.6
20
40
60
80
100
120
140
160
180
200

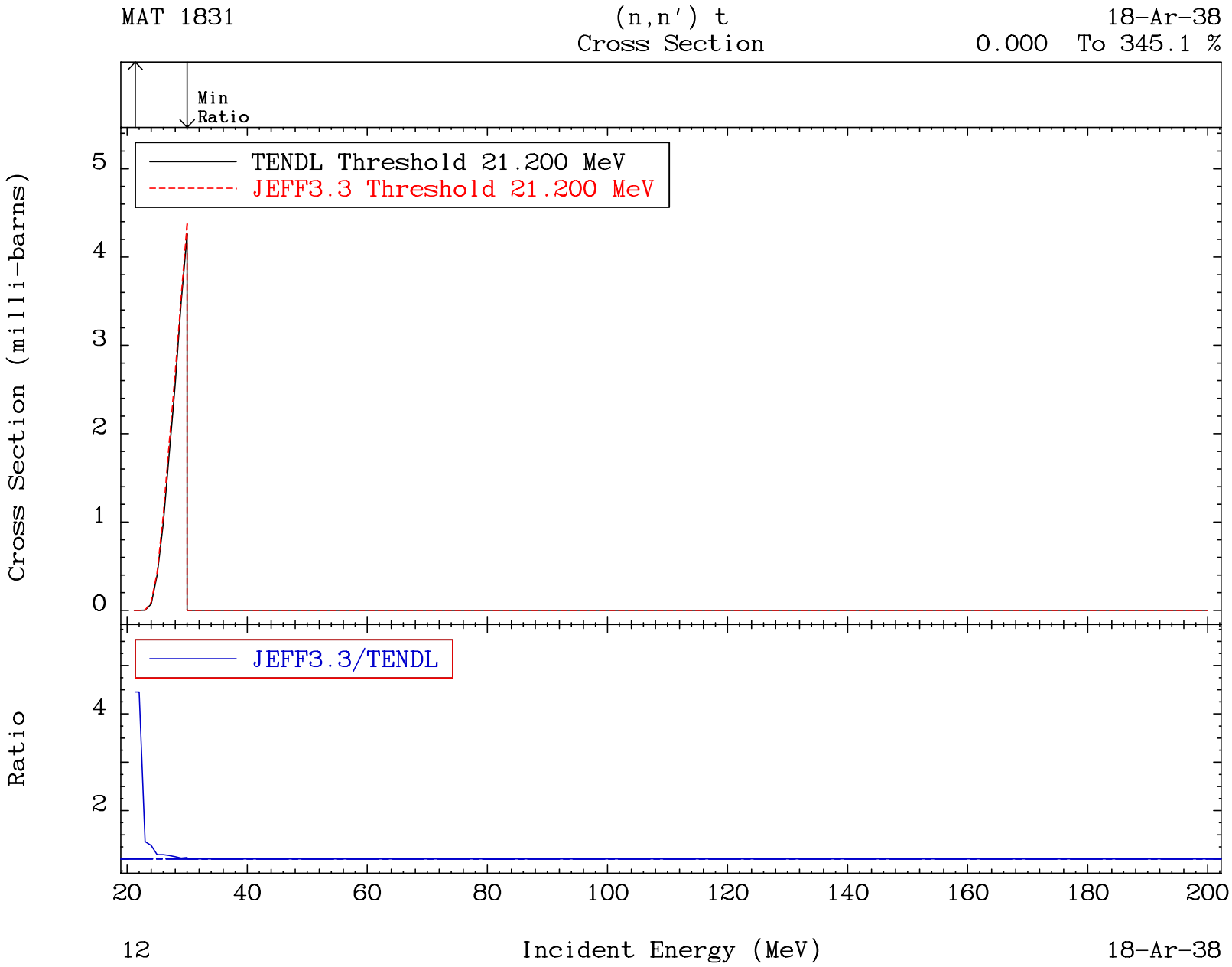

MAT 1831
(n,n') α
Cross Section
18-Ar-38
0.000 To 2399. %
Max Ratio
Min Ratio
TENDL Threshold 7.3996 MeV
JEFF3.3 Threshold 7.3996 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
6
10^1
6
10^0
8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
7
Incident Energy (eV)
18-Ar-38

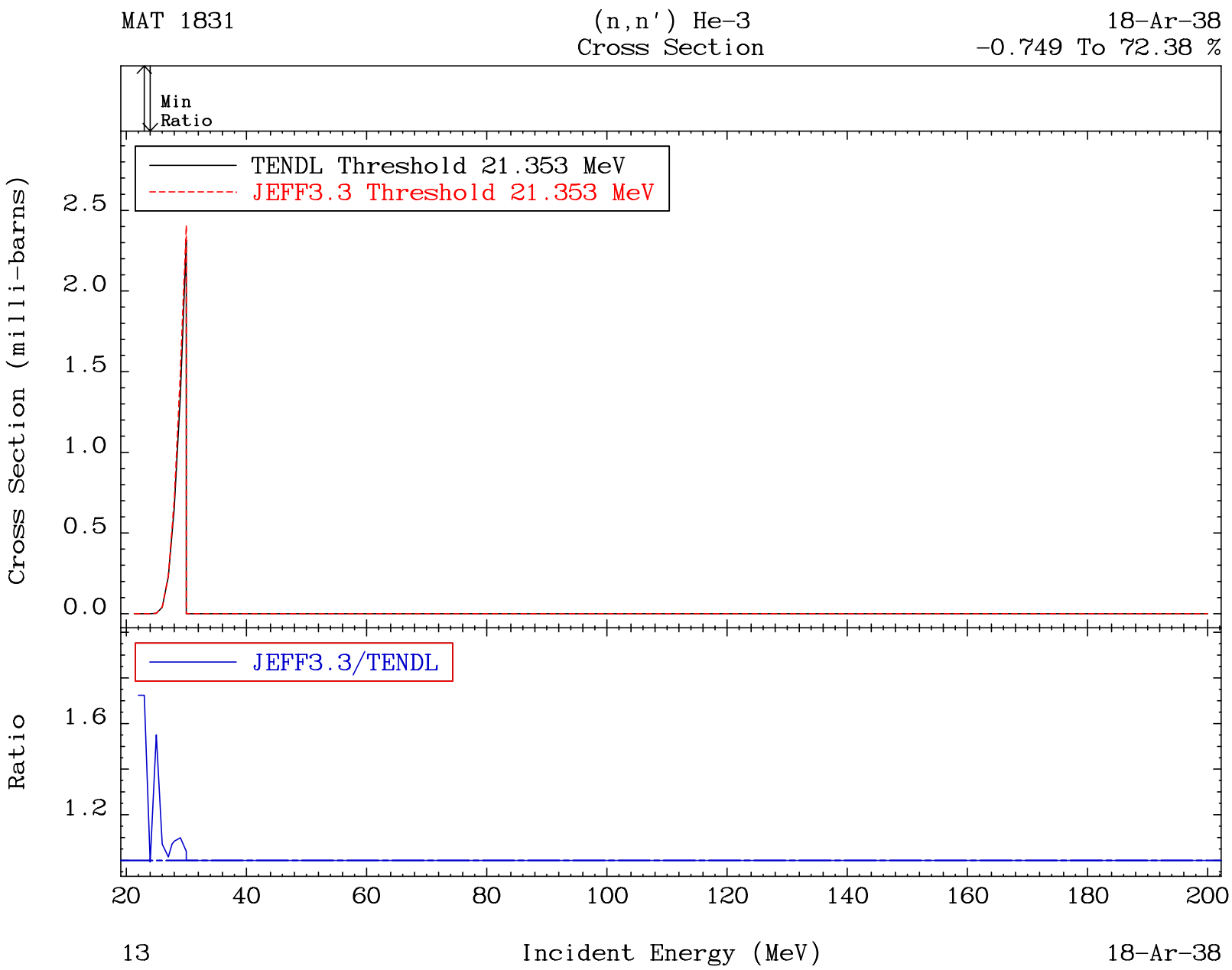

MAT 1831
(n,2n) α
Cross Section
18-Ar-38
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.120 MeV
JEFF3.3 Threshold 19.033 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
18-Ar-38

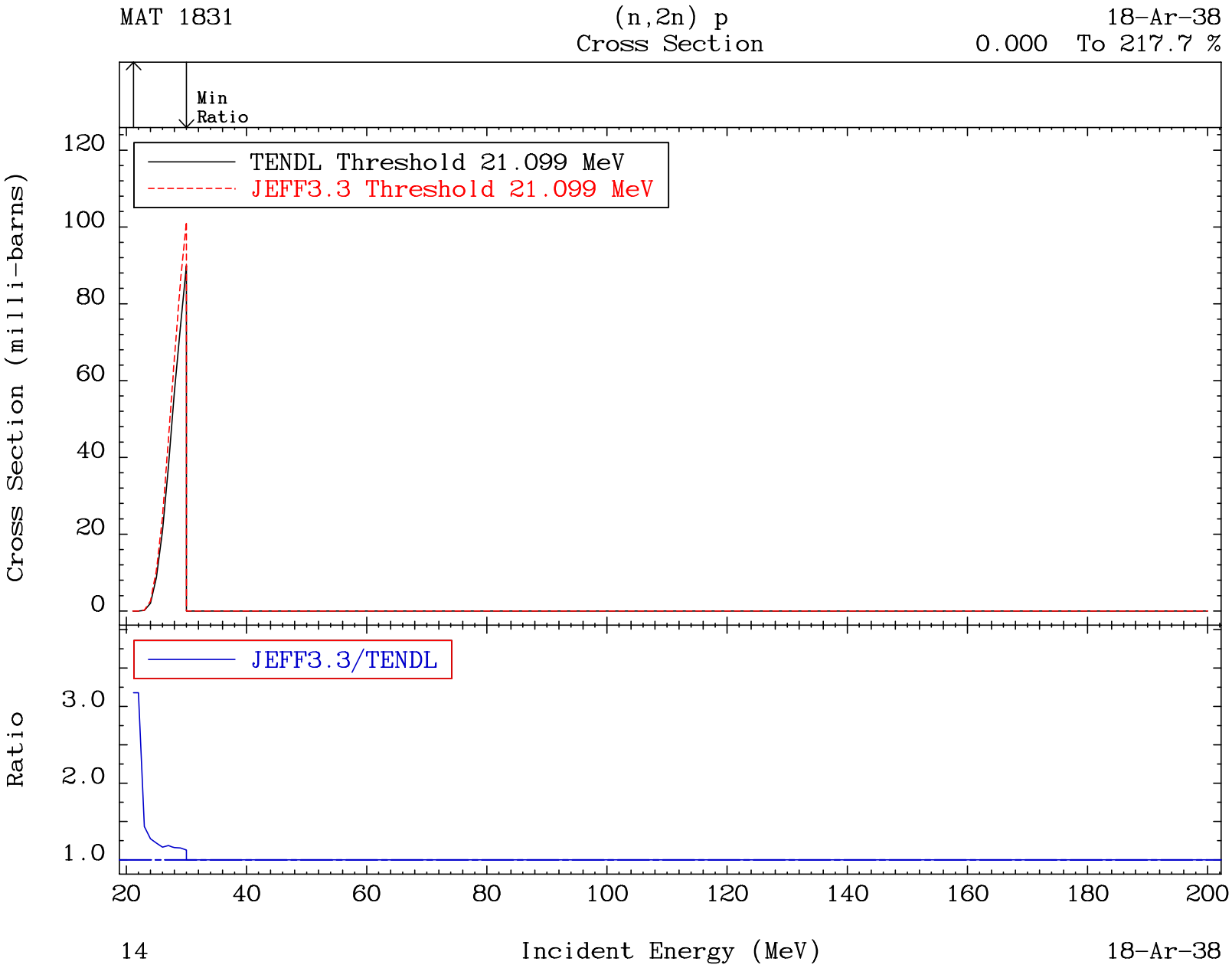

MAT 1831
(n,n') p
Cross Section
18-Ar-38
-4.582 To 365.0 %
Max Ratio
Min Ratio
TENDL Threshold 10.514 MeV
JEFF3.3 Threshold 10.514 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
4
2
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
18-Ar-38

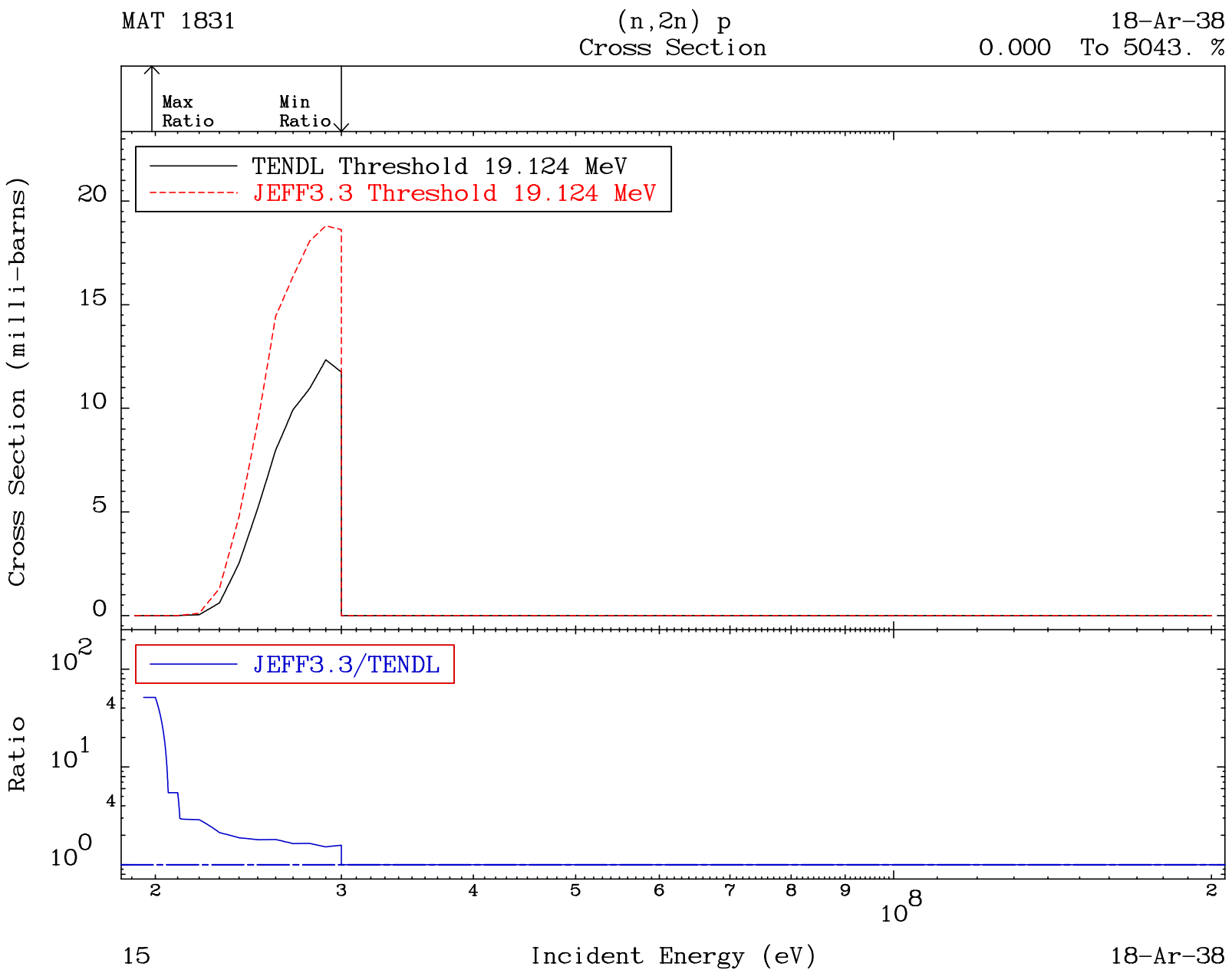

MAT 1831
(n,n') 2α
Cross Section
18-Ar-38
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 15.534 MeV
JEFF3.3 Threshold 15.534 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
10
18-Ar-38

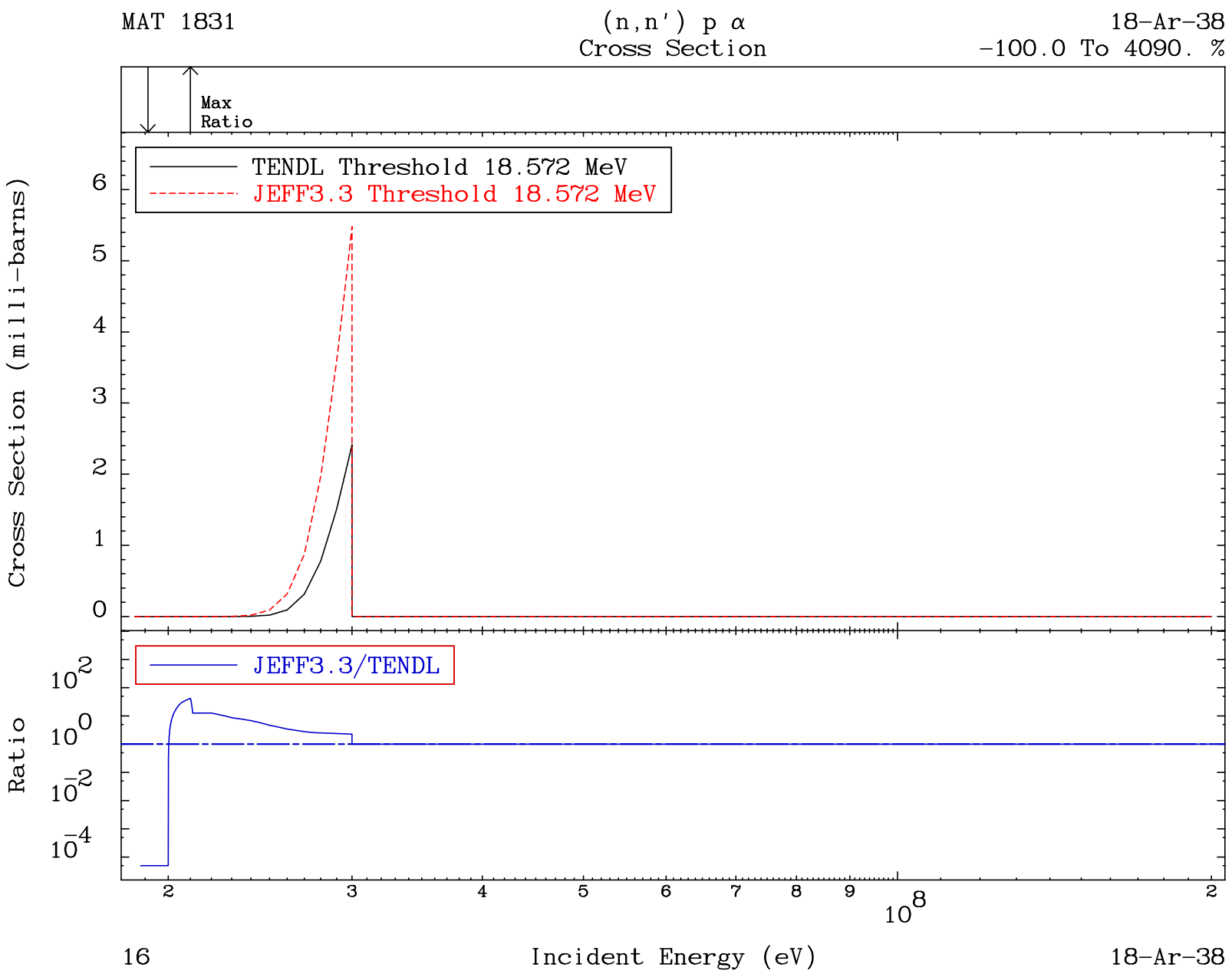

MAT 1831
(n,n') d
Cross Section
18-Ar-38
-5.688 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.816 MeV
JEFF3.3 Threshold 18.816 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
18-Ar-38

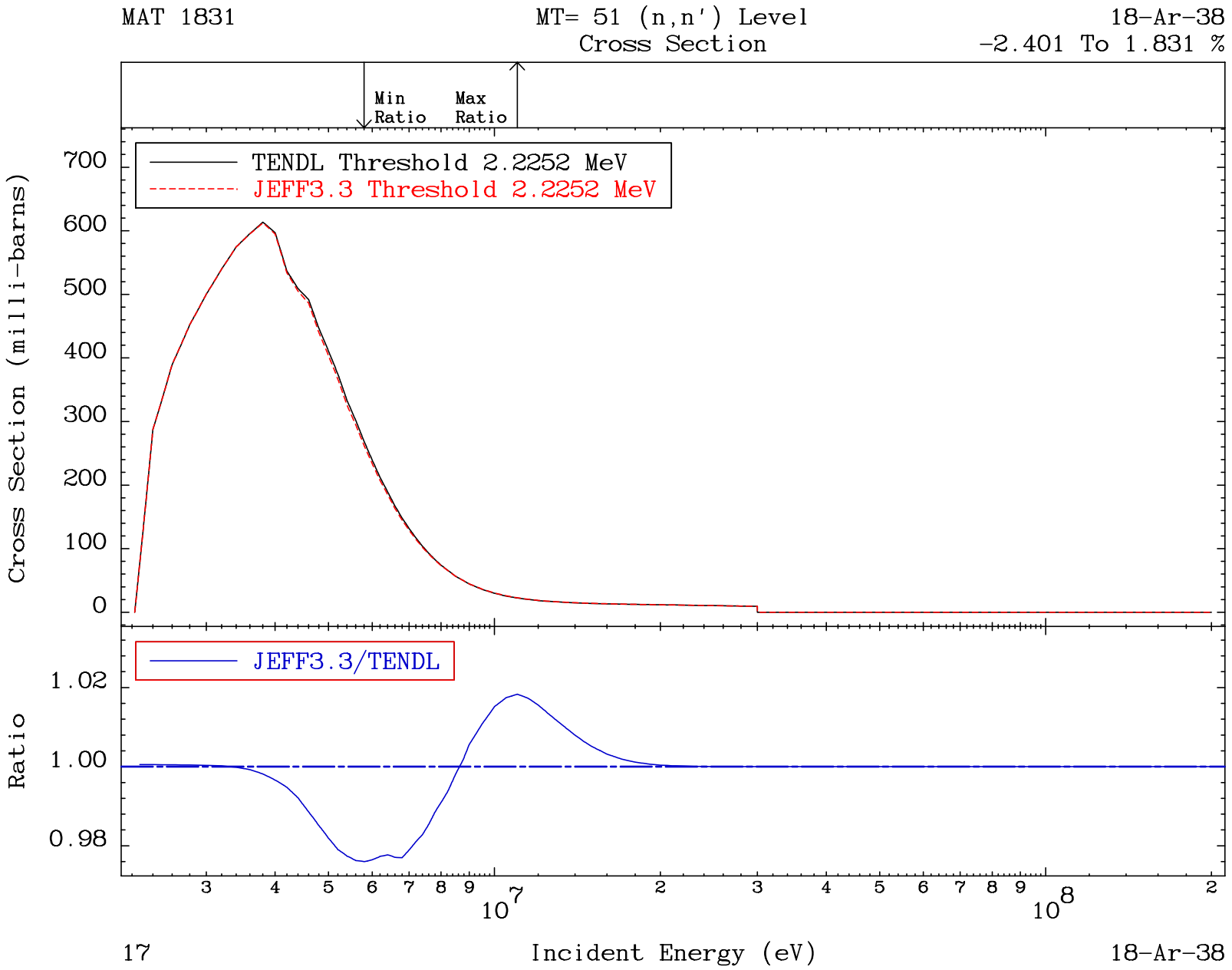

MAT 1831
(n,n') t
Cross Section
18-Ar-38
0.000 To 345.1 %
Min
Ratio
TENDL Threshold 21.200 MeV
JEFF3.3 Threshold 21.200 MeV
JEFF3.3/TENDL
Cross Section (milli-barns)
Ratio
Incident Energy (MeV)
12
18-Ar-38
0
1
2
3
4
5
20
40
60
80
100
120
140
160
180
200

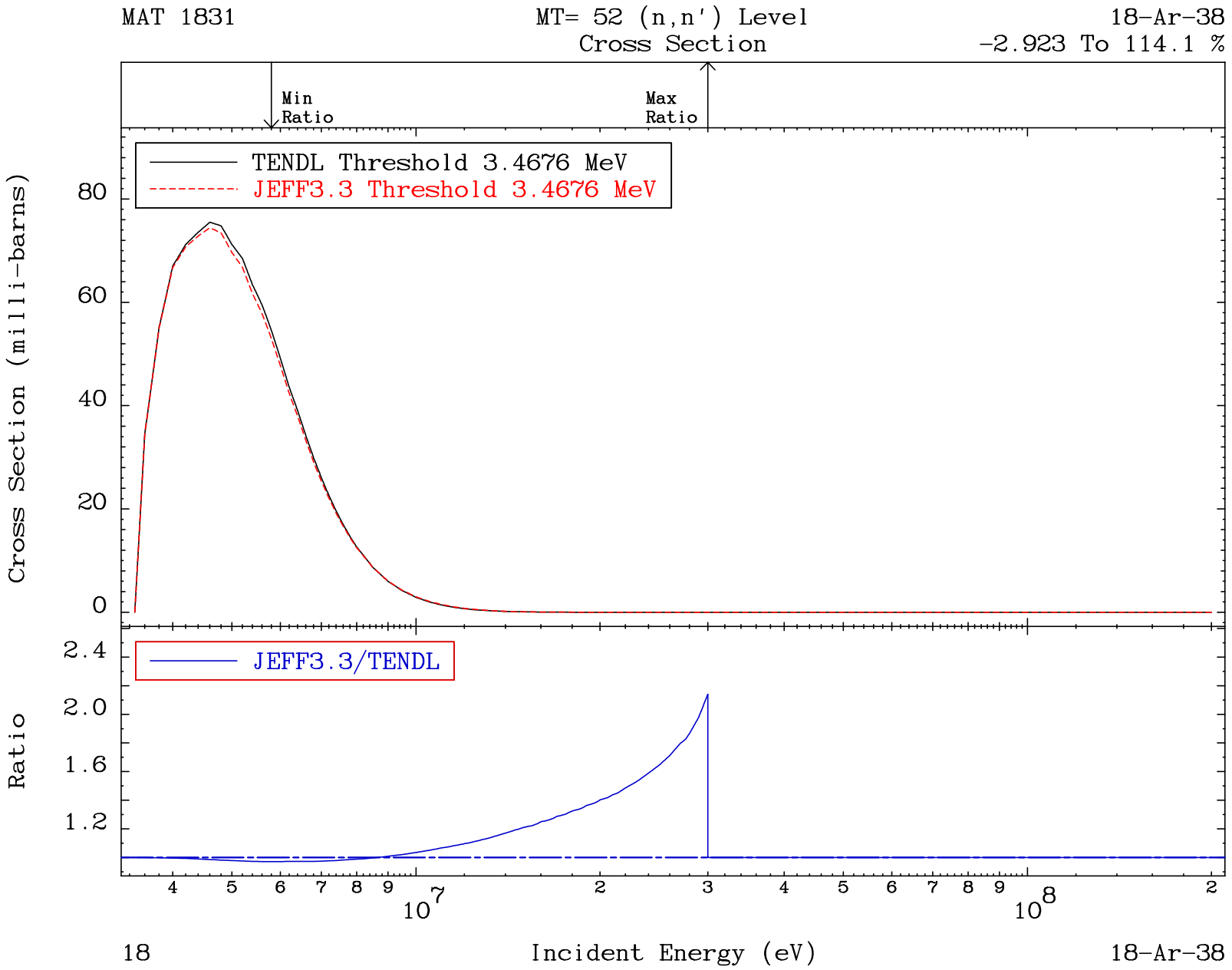

MAT 1831
(n,n') He-3
Cross Section
18-Ar-38
-0.749 To 72.38 %
Min
Ratio
TENDL Threshold 21.353 MeV
JEFF3.3 Threshold 21.353 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.6
1.2
20
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
18-Ar-38

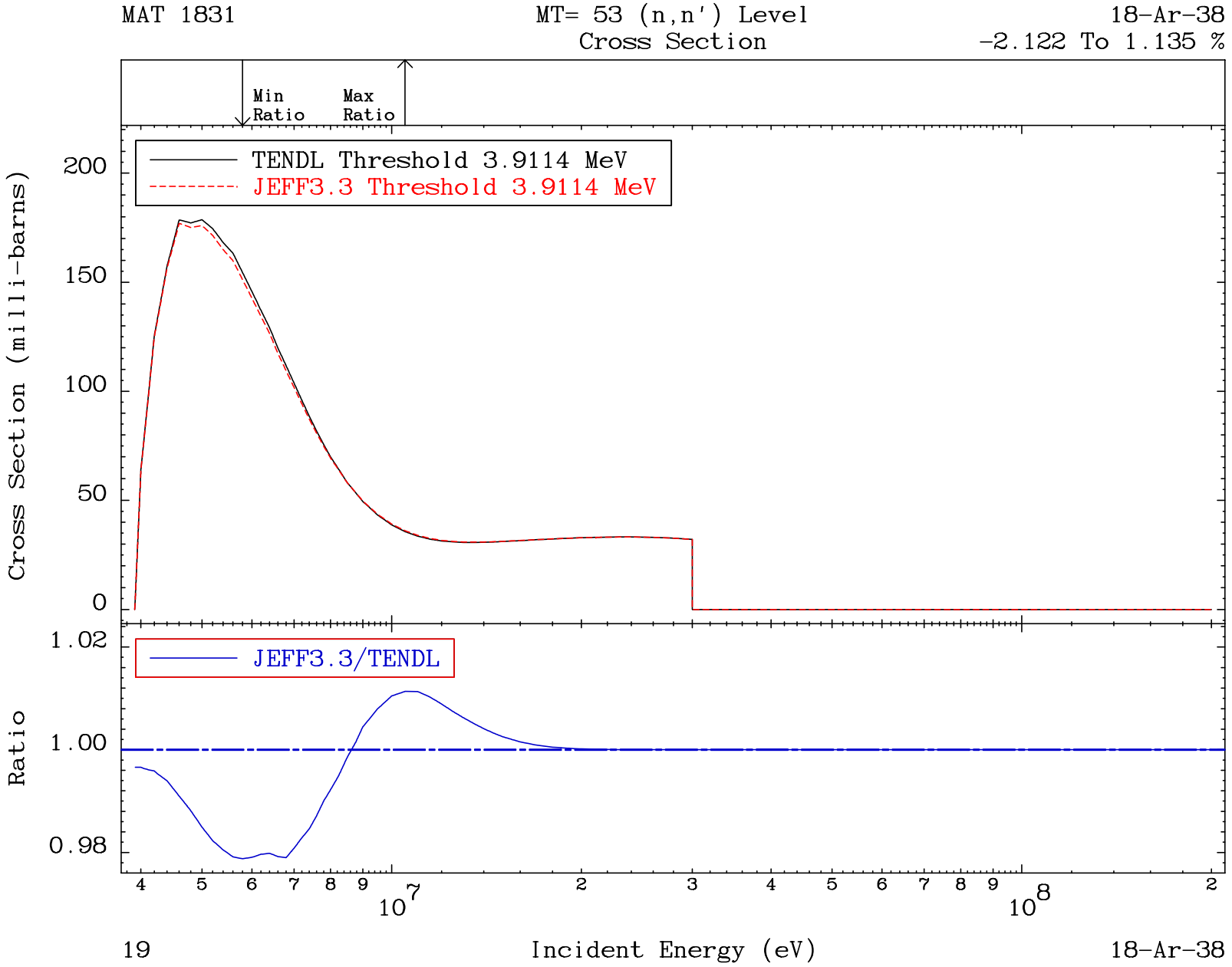

MAT 1831
(n,2n) p
Cross Section
18-Ar-38
0.000 To 217.7 %
Min
Ratio
TENDL Threshold 21.099 MeV
JEFF3.3 Threshold 21.099 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
20
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
18-Ar-38

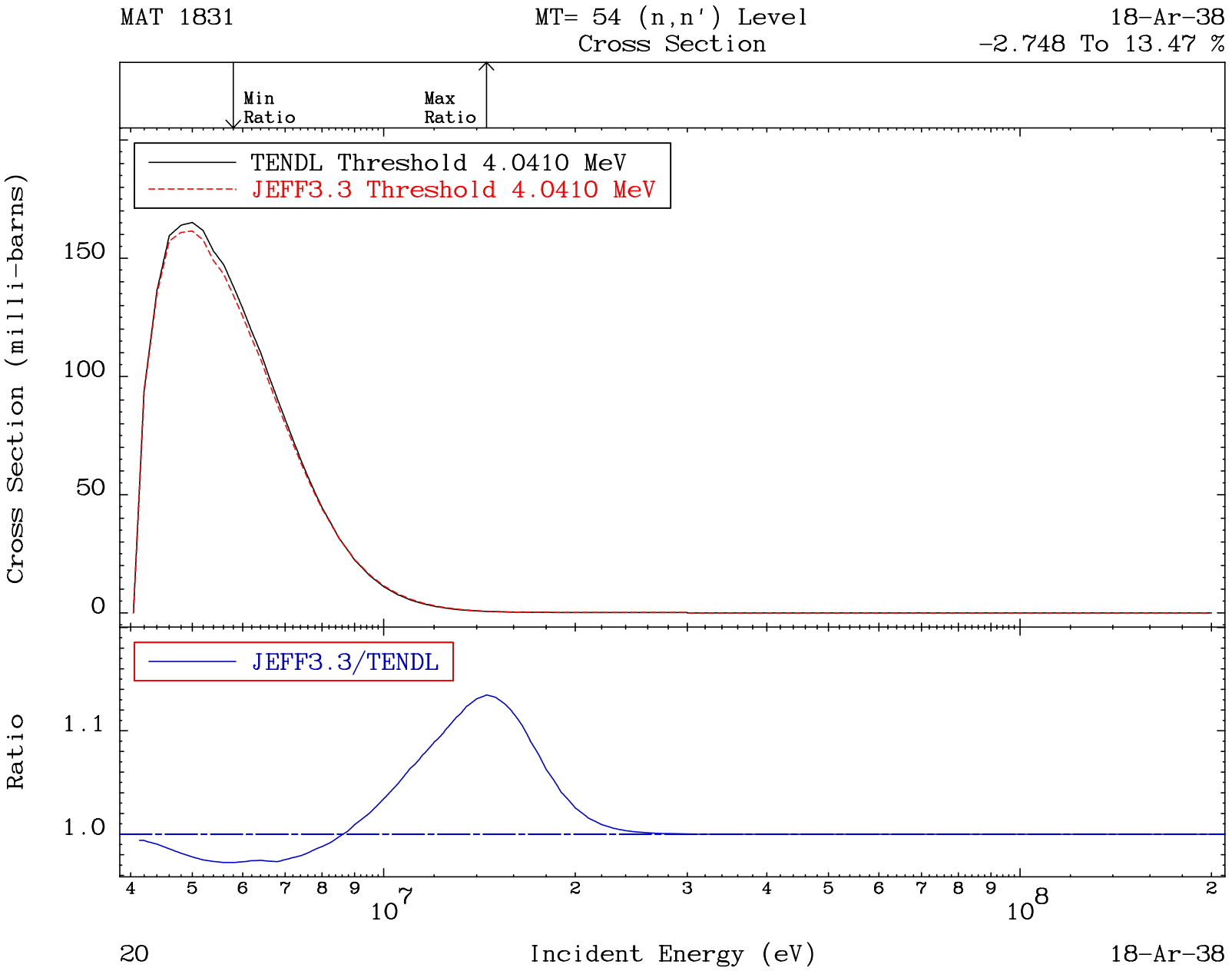

MAT 1831
(n,2n) p
Cross Section
18-Ar-38
0.000 To 5043. %
Max Ratio
Min Ratio
TENDL Threshold 19.124 MeV
JEFF3.3 Threshold 19.124 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
18-Ar-38

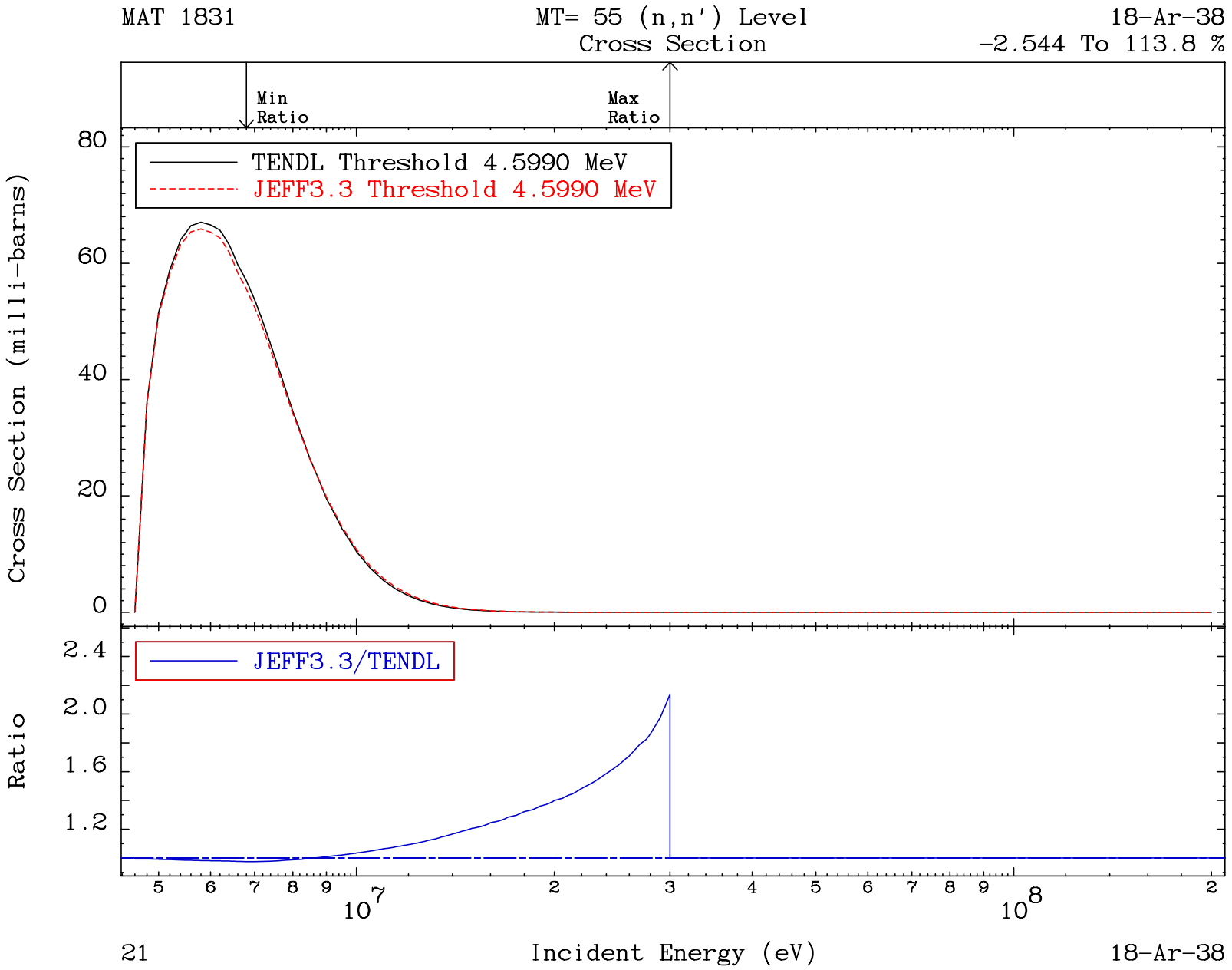

MAT 1831
(n,n') p α
Cross Section
18-Ar-38
-100.0 To 4090. %
Max
Ratio
TENDL Threshold 18.572 MeV
JEFF3.3 Threshold 18.572 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
16
18-Ar-38

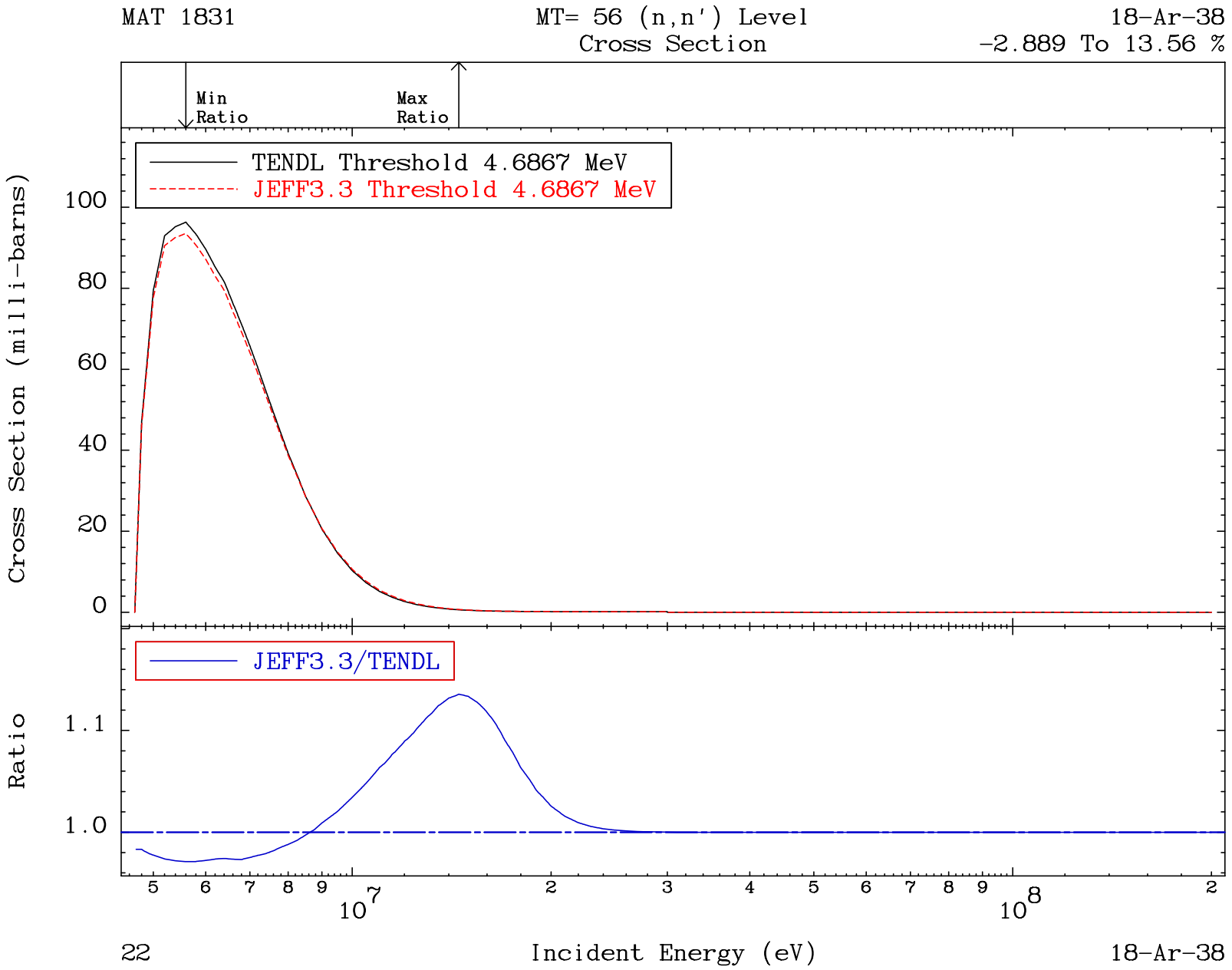

MAT 1831
MT= 51 (n,n') Level
Cross Section
18-Ar-38
-2.401 To 1.831 %
Min Ratio
Max Ratio
TENDL Threshold 2.2252 MeV
JEFF3.3 Threshold 2.2252 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
17
Incident Energy (eV)
18-Ar-38

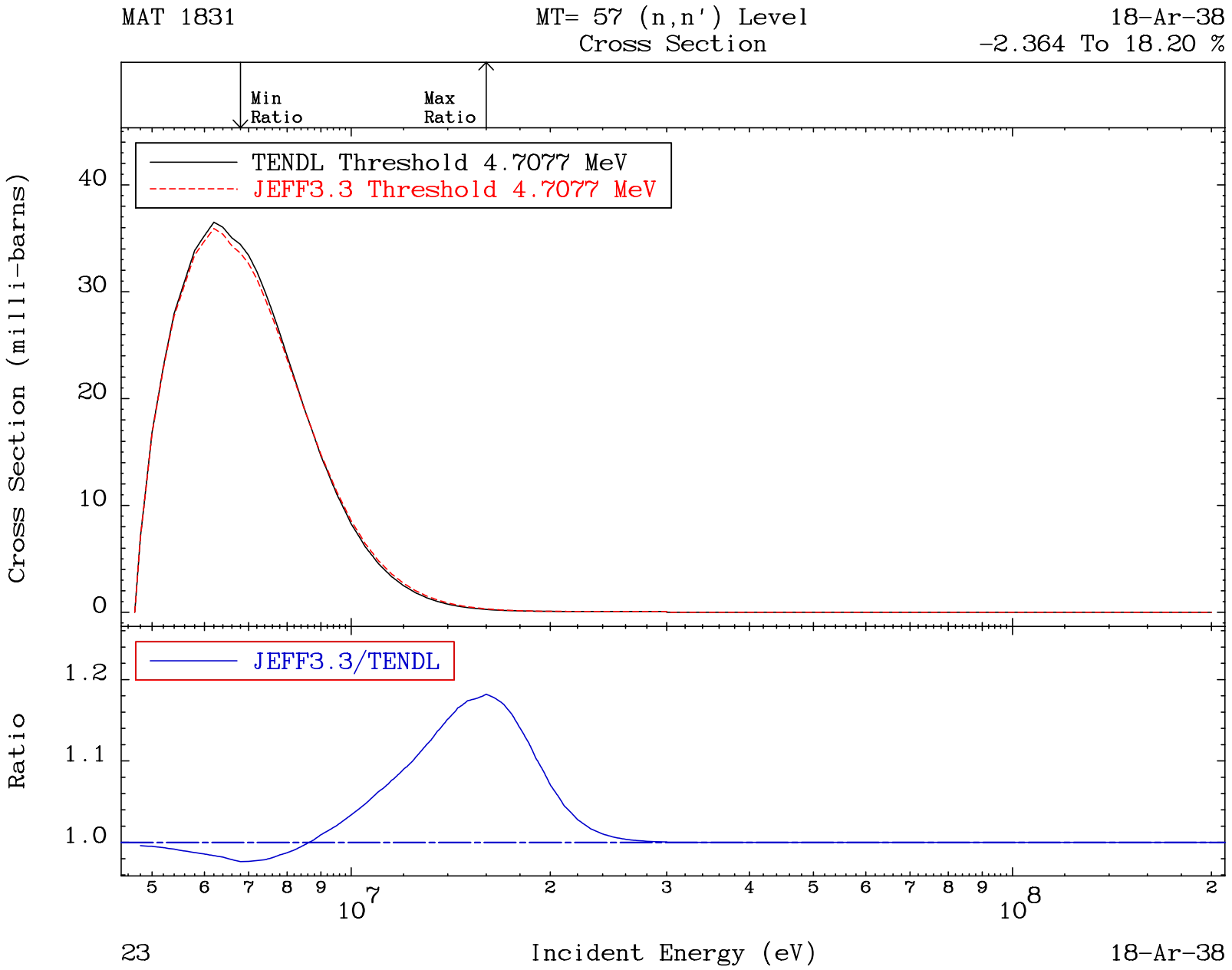

MAT 1831
MT= 52 (n,n') Level
Cross Section
18-Ar-38
-2.923 To 114.1 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.4676 MeV
JEFF3.3 Threshold 3.4676 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
18
Incident Energy (eV)
18-Ar-38

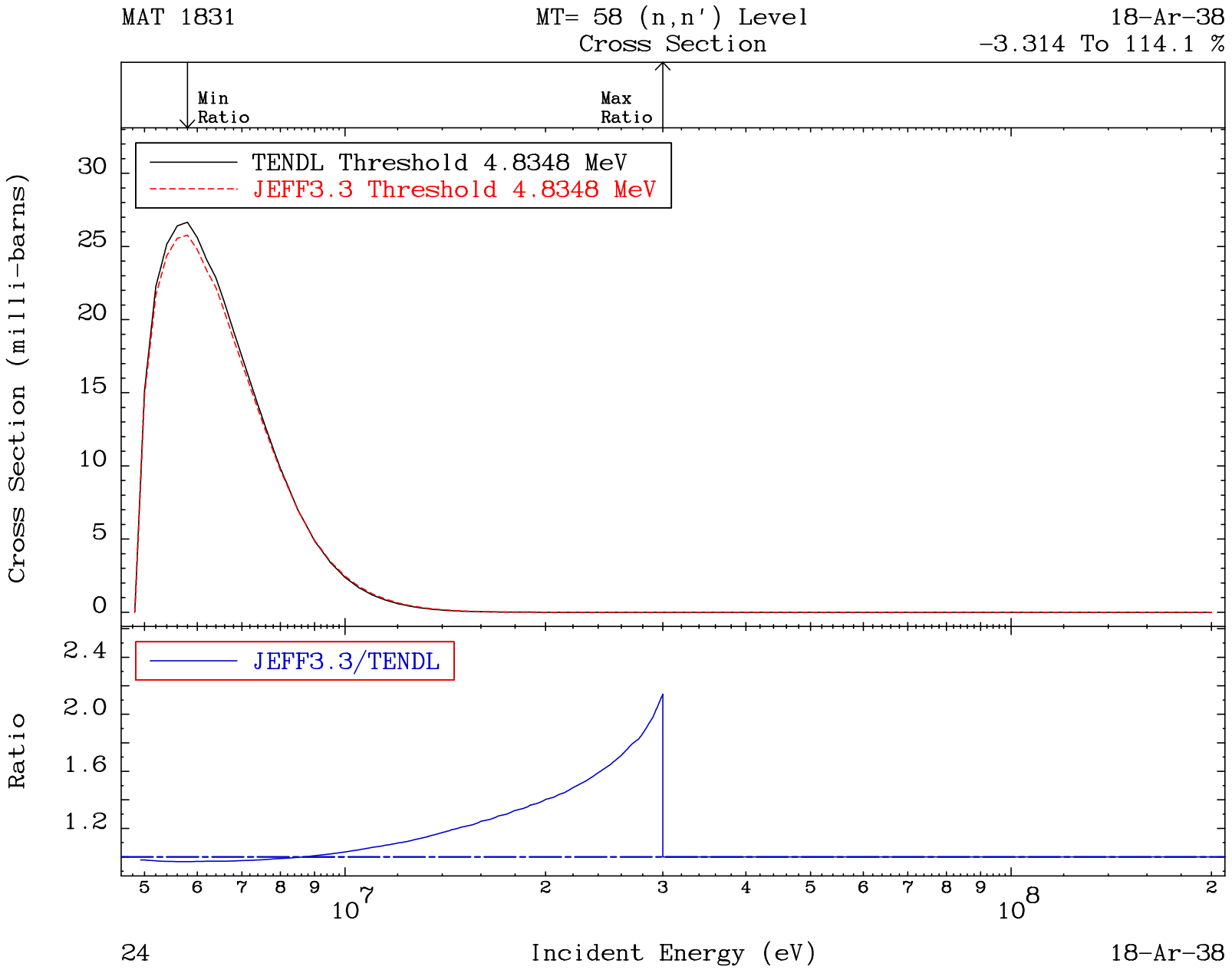

MAT 1831
MT= 53 (n,n') Level
Cross Section
18-Ar-38
-2.122 To 1.135 %
Min Ratio
Max Ratio
TENDL Threshold 3.9114 MeV
JEFF3.3 Threshold 3.9114 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
18-Ar-38

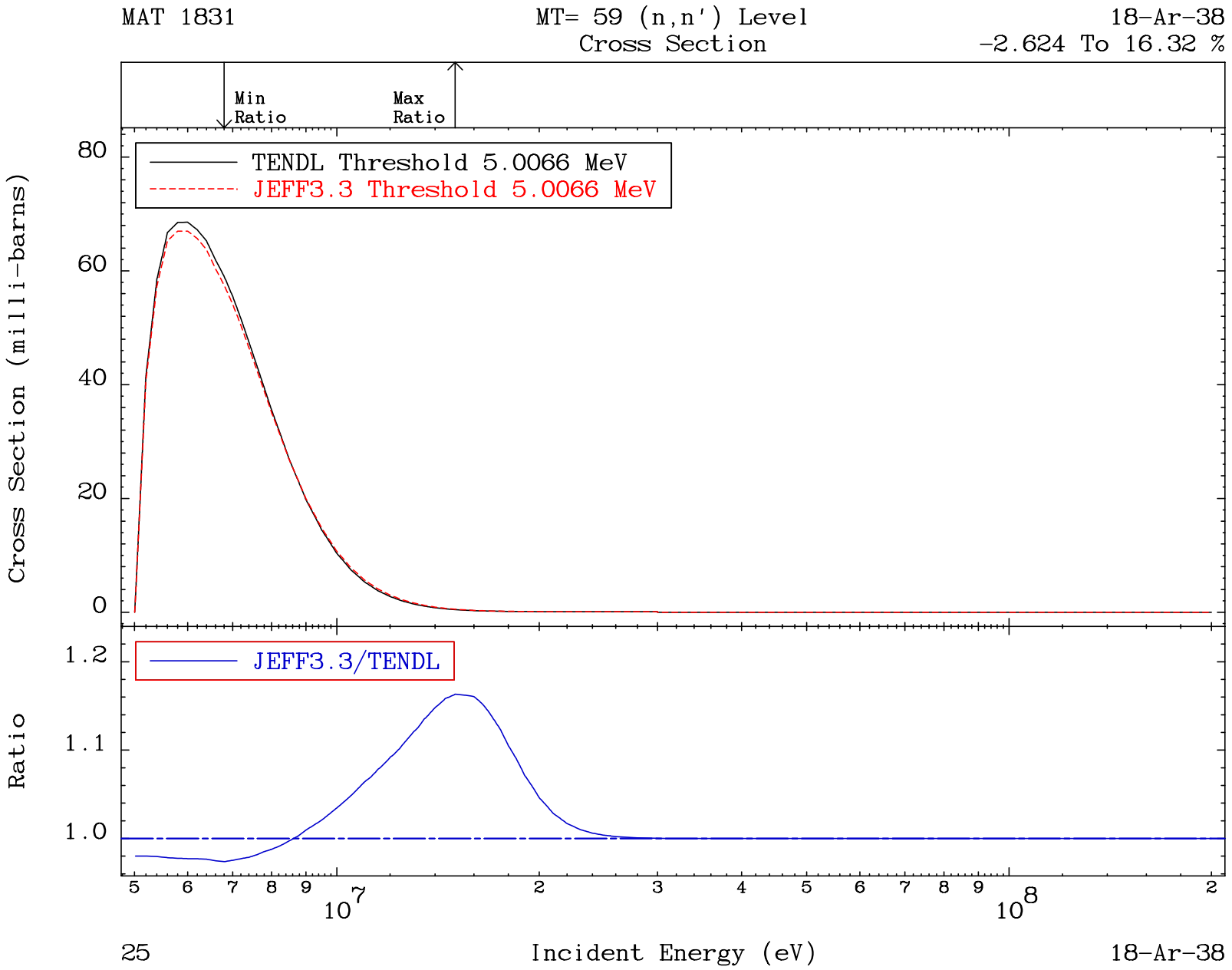

MAT 1831
MT= 54 (n,n') Level
Cross Section
18-Ar-38
-2.748 To 13.47 %
Min Ratio
Max Ratio
TENDL Threshold 4.0410 MeV
JEFF3.3 Threshold 4.0410 MeV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
1.1
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
18-Ar-38

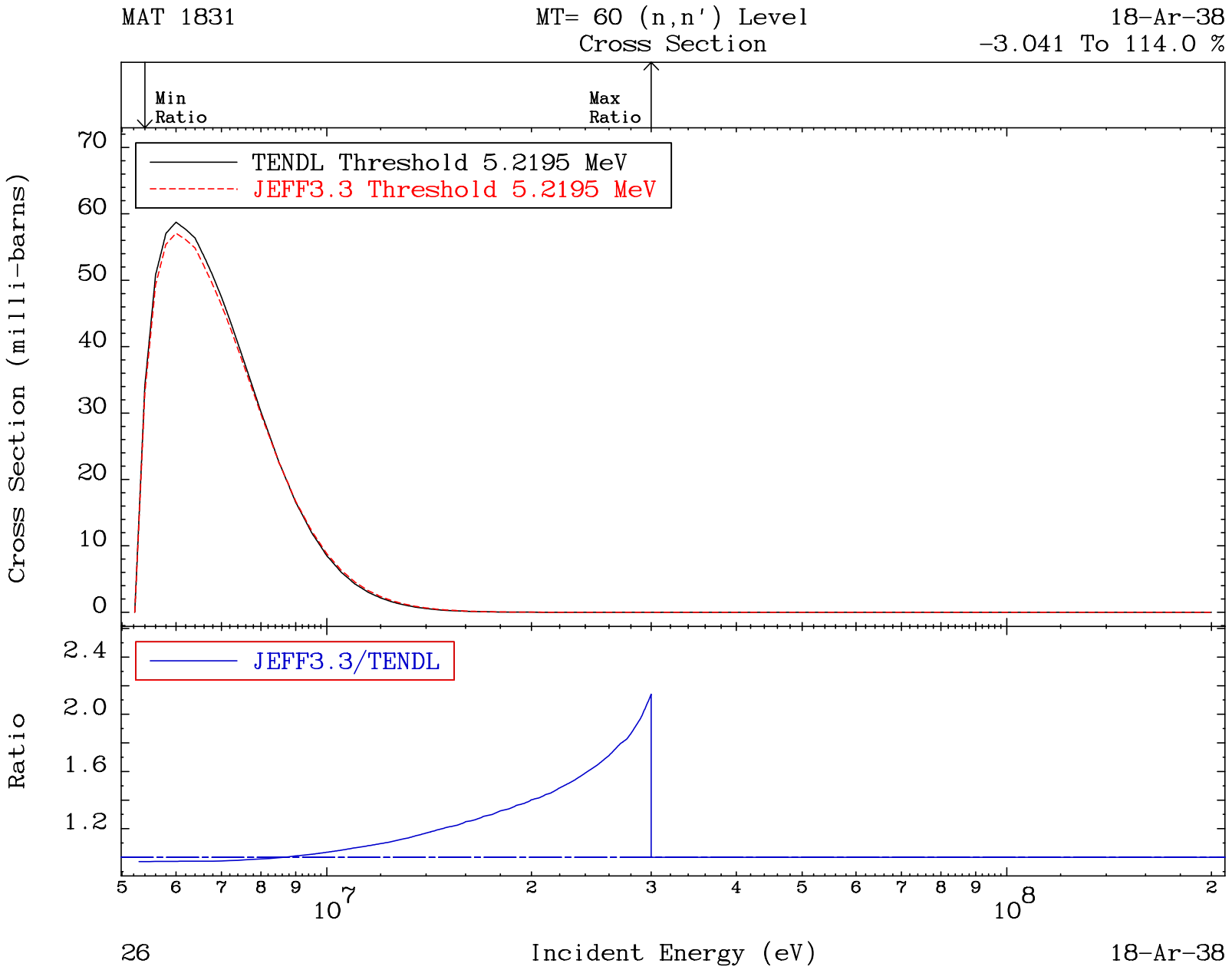

MAT 1831
MT= 55 (n,n') Level
Cross Section
18-Ar-38
-2.544 To 113.8 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.5990 MeV
JEFF3.3 Threshold 4.5990 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
21
Incident Energy (eV)
18-Ar-38

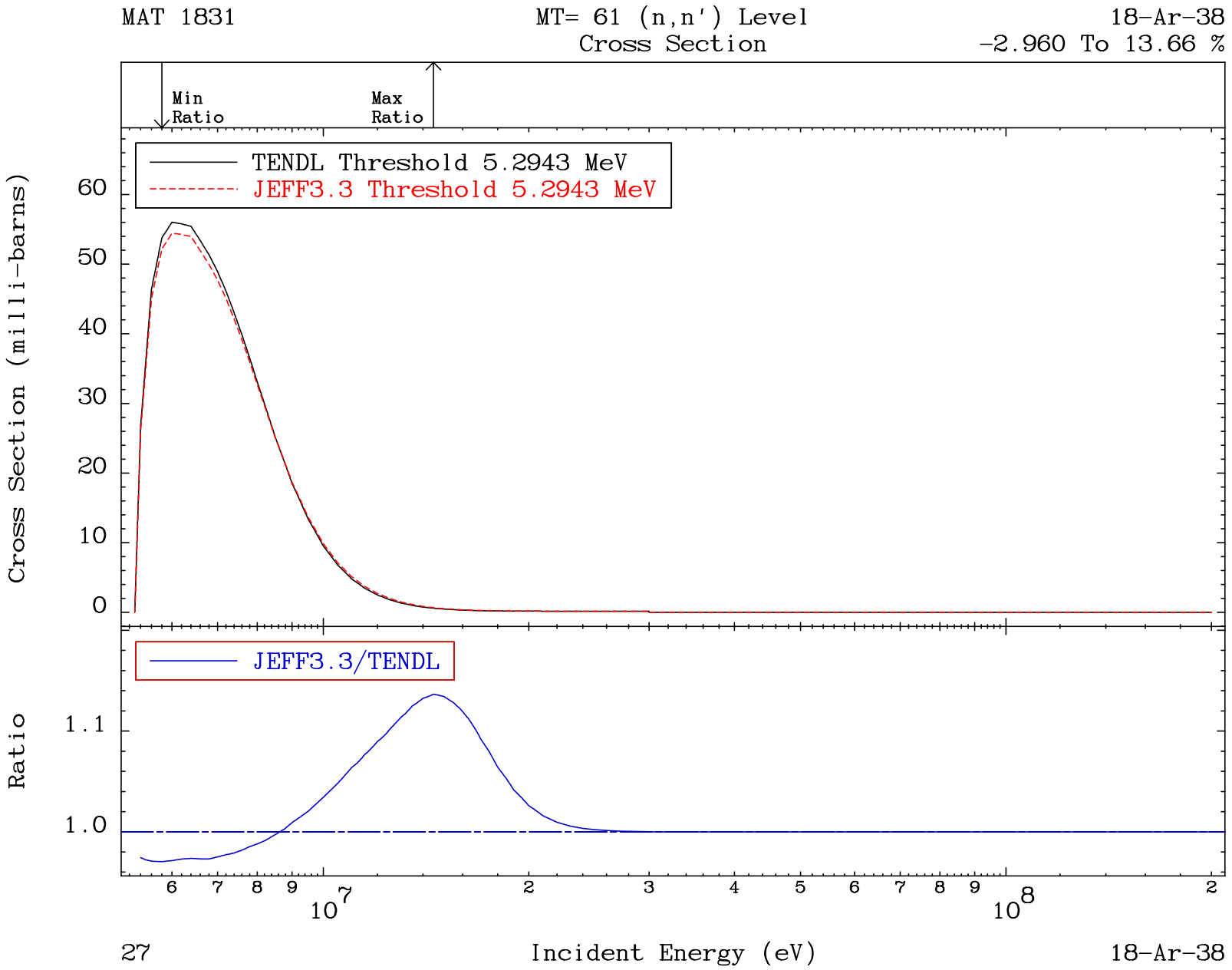

MAT 1831
MT= 56 (n,n') Level
Cross Section
18-Ar-38
-2.889 To 13.56 %
Min Ratio
Max Ratio
TENDL Threshold 4.6867 MeV
JEFF3.3 Threshold 4.6867 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.1
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
18-Ar-38

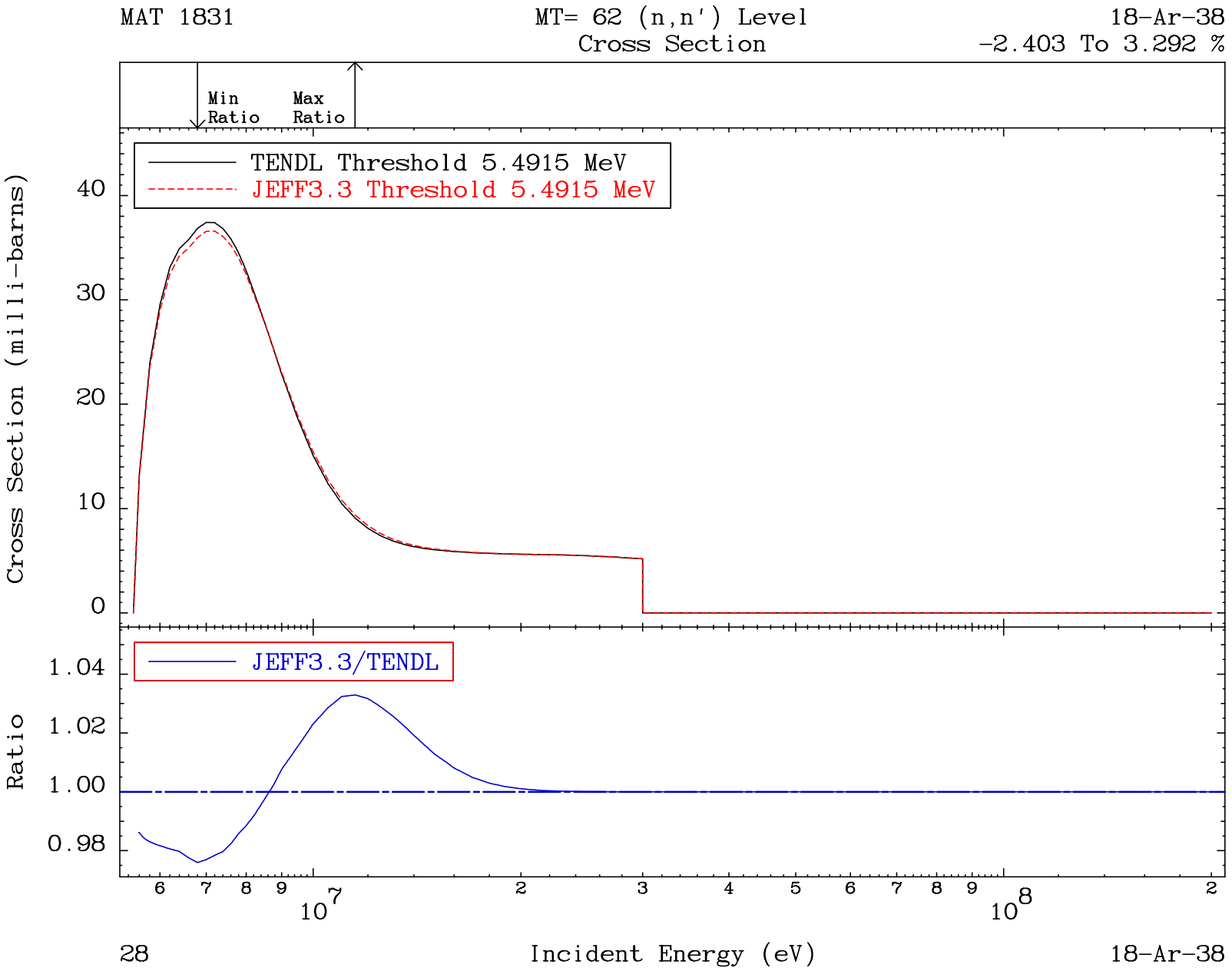

MAT 1831
MT= 57 (n,n') Level
Cross Section
18-Ar-38
-2.364 To 18.20 %
Min Ratio
Max Ratio
TENDL Threshold 4.7077 MeV
JEFF3.3 Threshold 4.7077 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
18-Ar-38

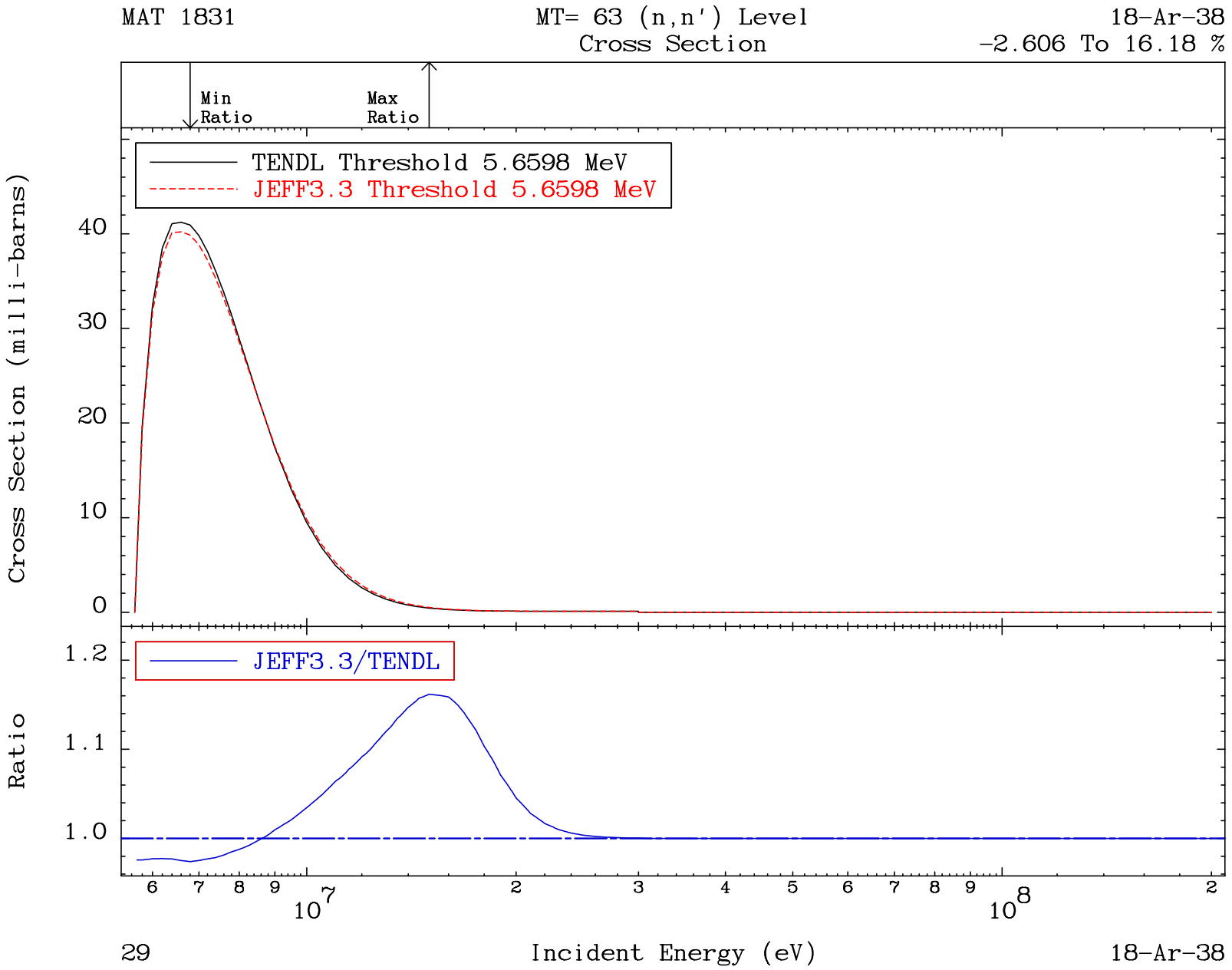

MAT 1831
MT= 58 (n,n') Level
Cross Section
18-Ar-38
-3.314 To 114.1 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.8348 MeV
JEFF3.3 Threshold 4.8348 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
18-Ar-38

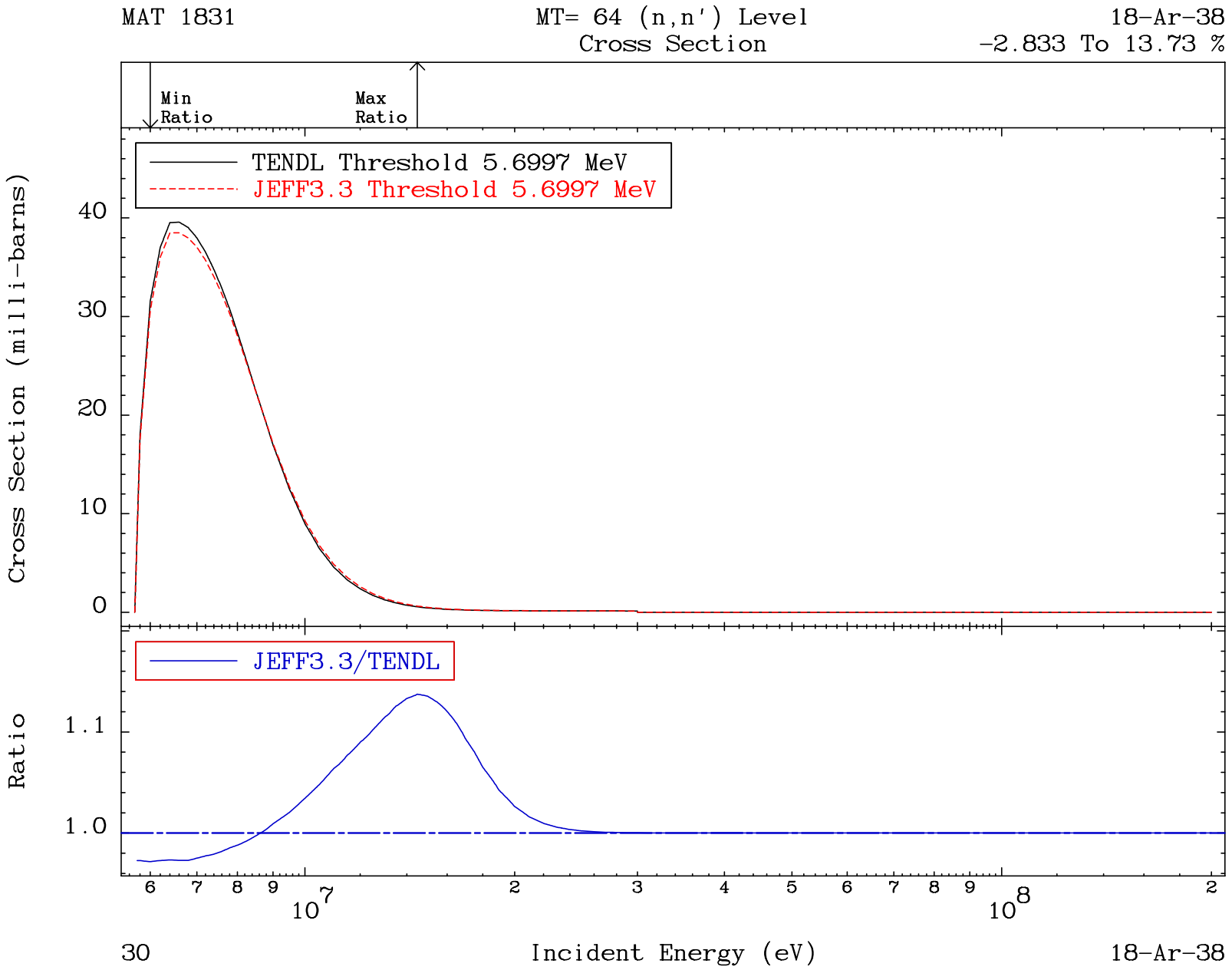

MAT 1831
MT= 59 (n,n') Level
Cross Section
18-Ar-38
-2.624 To 16.32 %
Min Ratio
Max Ratio
TENDL Threshold 5.0066 MeV
JEFF3.3 Threshold 5.0066 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
18-Ar-38

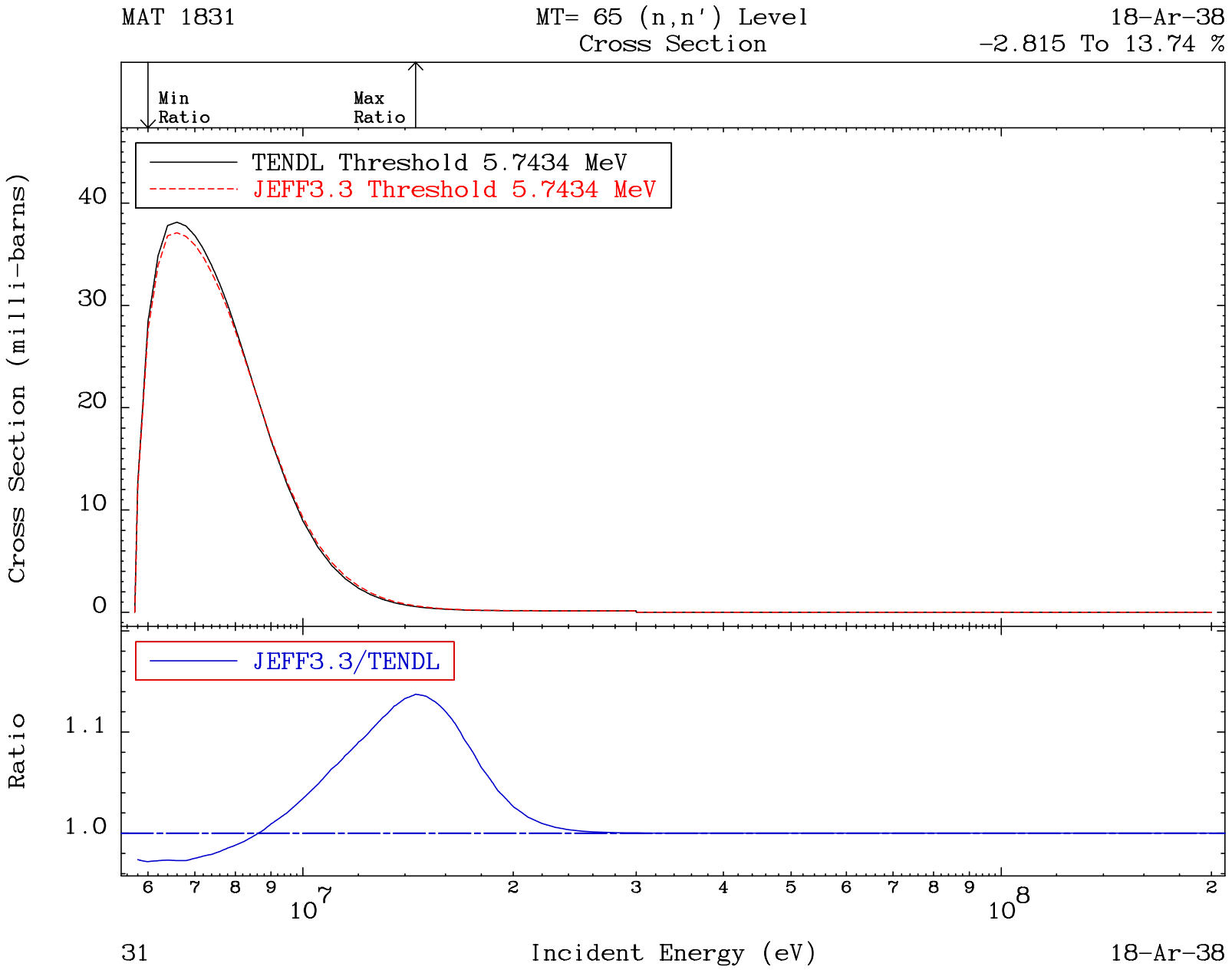

MAT 1831
MT= 60 (n,n') Level
Cross Section
18-Ar-38
-3.041 To 114.0 %
Min
Ratio
Max
Ratio
TENDL Threshold 5.2195 MeV
JEFF3.3 Threshold 5.2195 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
18-Ar-38

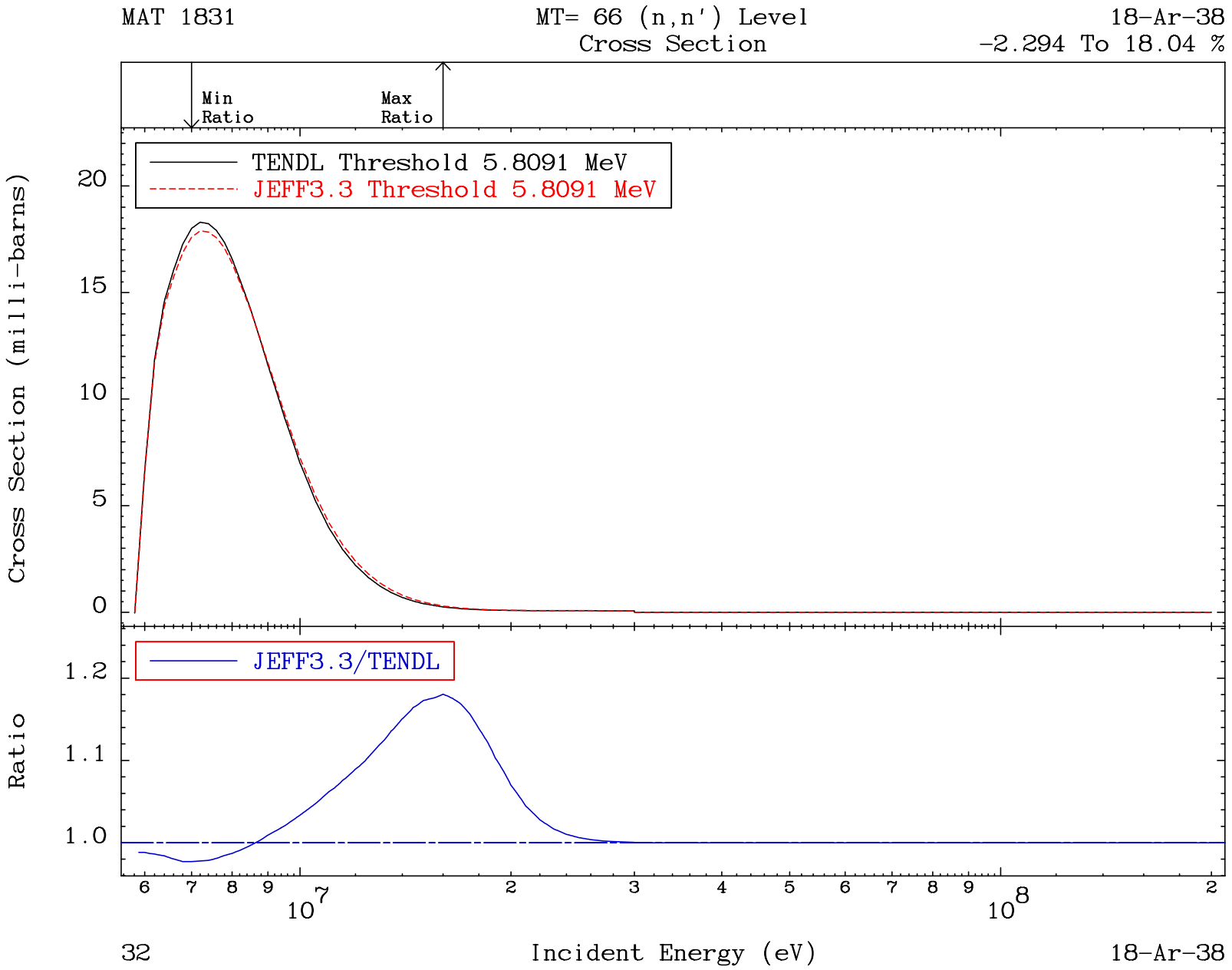

MAT 1831
MT= 61 (n,n') Level
Cross Section
18-Ar-38
-2.960 To 13.66 %
Min Ratio
Max Ratio
TENDL Threshold 5.2943 MeV
JEFF3.3 Threshold 5.2943 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
18-Ar-38

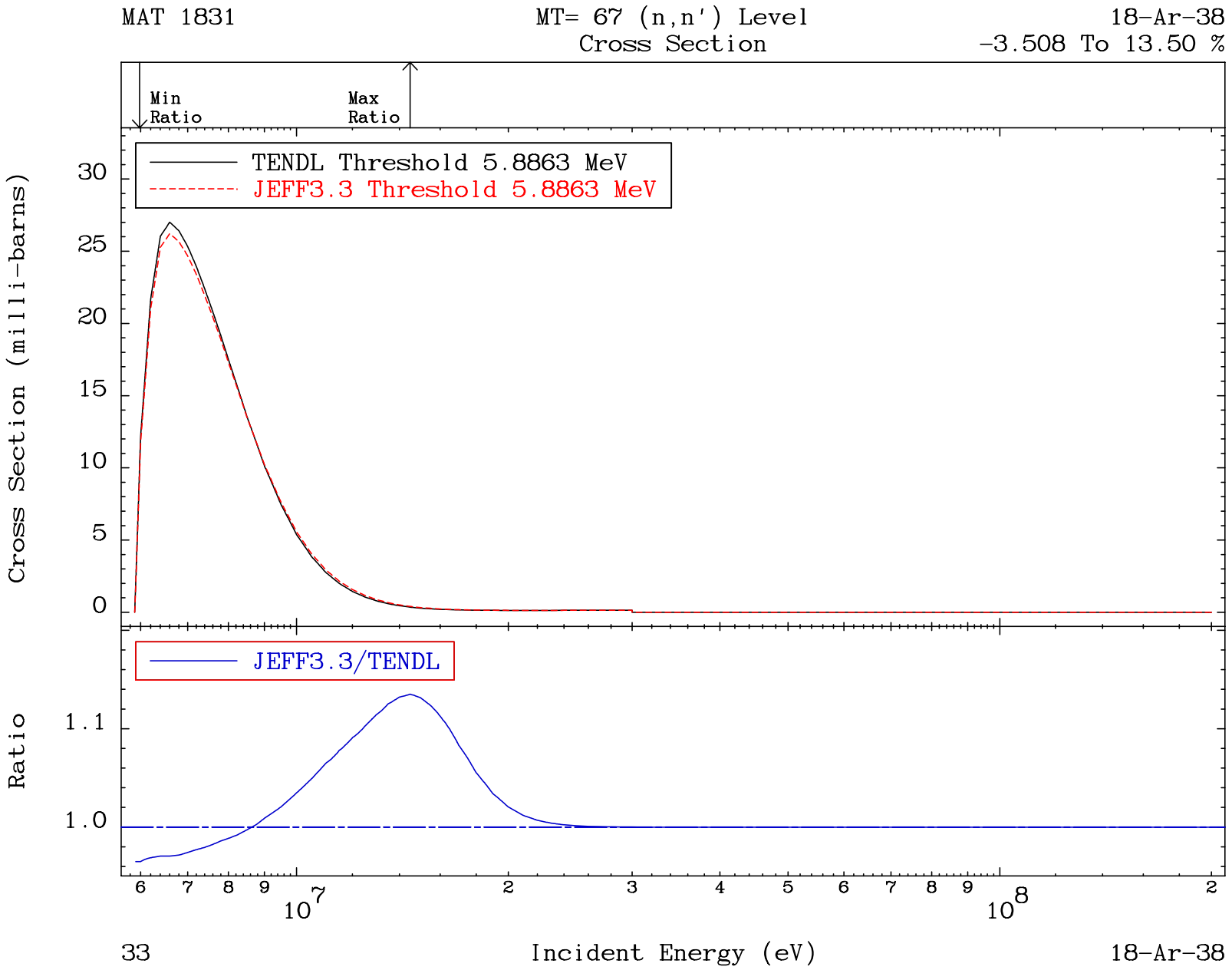

MAT 1831
MT= 62 (n,n') Level
Cross Section
18-Ar-38
-2.403 To 3.292 %
Min Ratio
Max Ratio
TENDL Threshold 5.4915 MeV
JEFF3.3 Threshold 5.4915 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
18-Ar-38

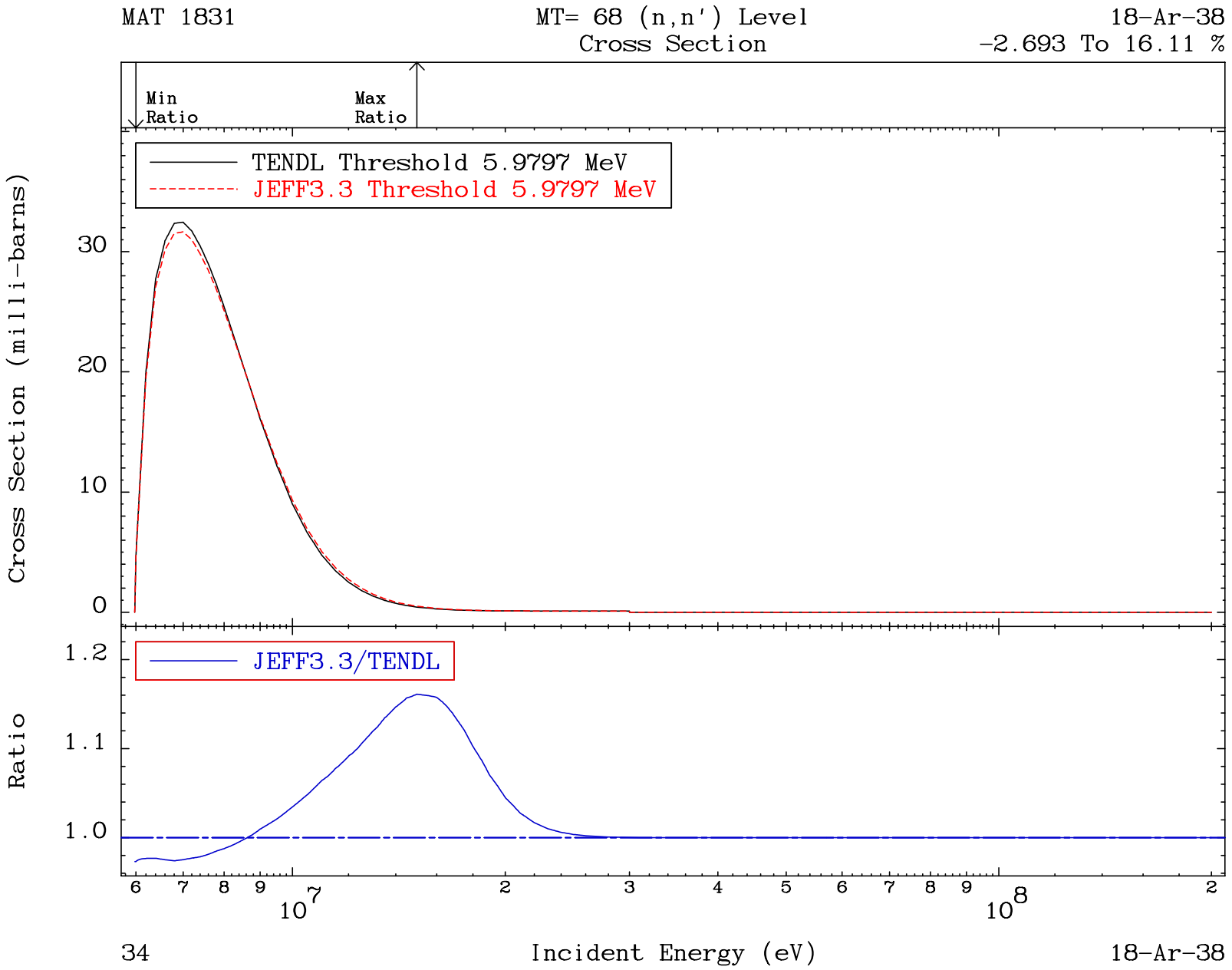

MAT 1831
MT= 63 (n,n') Level
Cross Section
18-Ar-38
-2.606 To 16.18 %
Min Ratio
Max Ratio
TENDL Threshold 5.6598 MeV
JEFF3.3 Threshold 5.6598 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
18-Ar-38

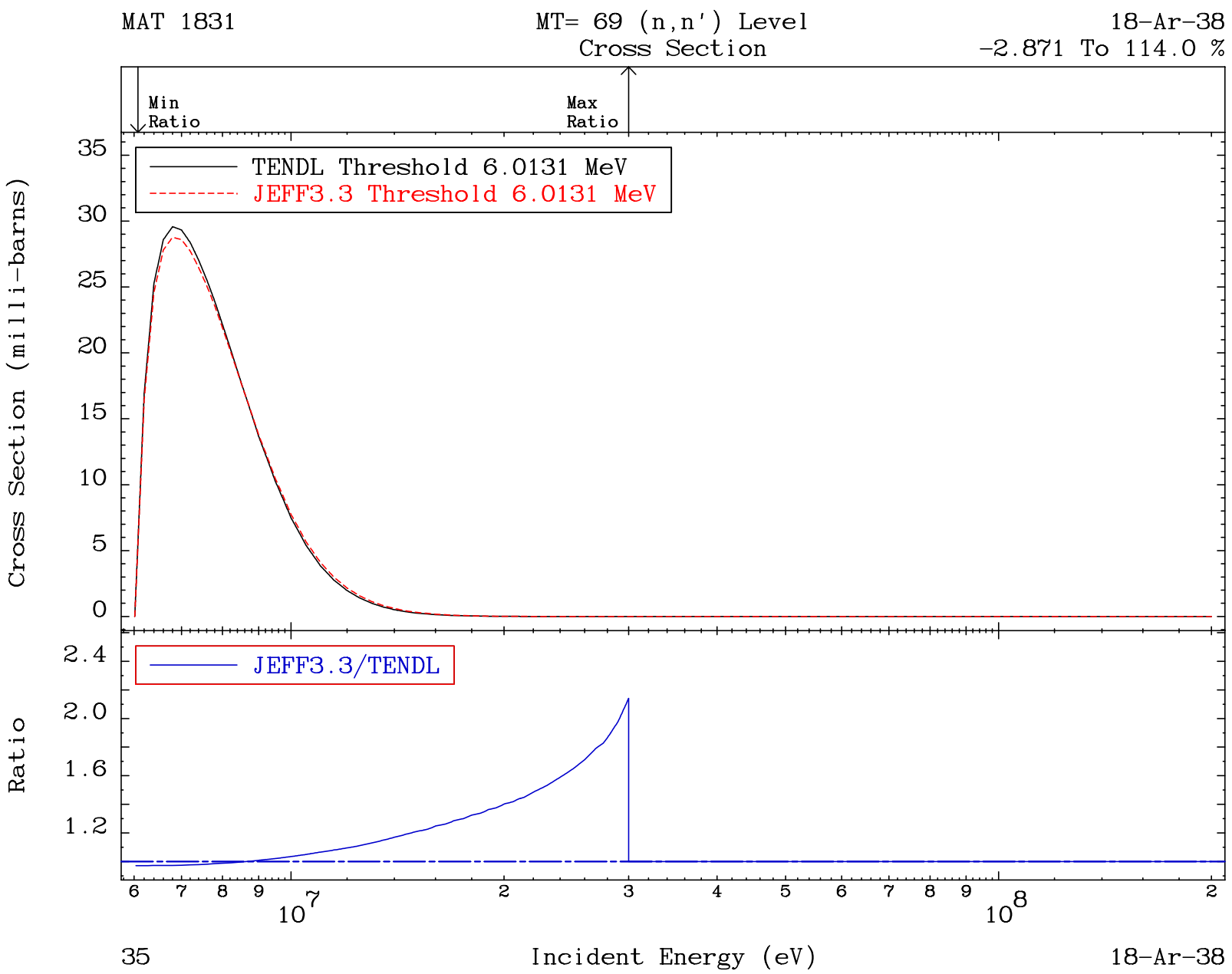

MAT 1831
MT= 64 (n,n') Level
Cross Section
18-Ar-38
-2.833 To 13.73 %
Min Ratio
Max Ratio
TENDL Threshold 5.6997 MeV
JEFF3.3 Threshold 5.6997 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
18-Ar-38

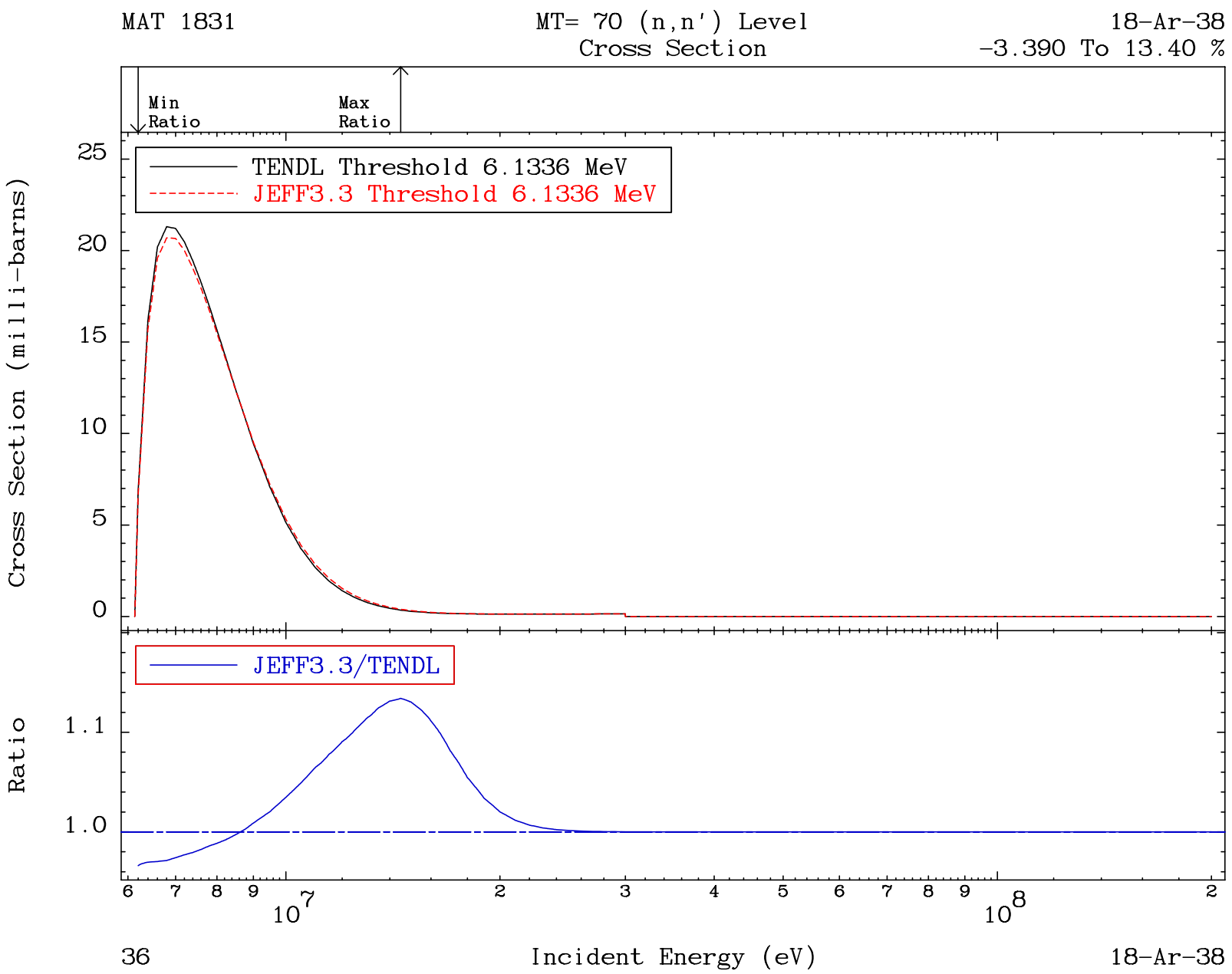

MAT 1831
MT= 65 (n,n') Level
Cross Section
18-Ar-38
-2.815 To 13.74 %
Min Ratio
Max Ratio
TENDL Threshold 5.7434 MeV
JEFF3.3 Threshold 5.7434 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
18-Ar-38

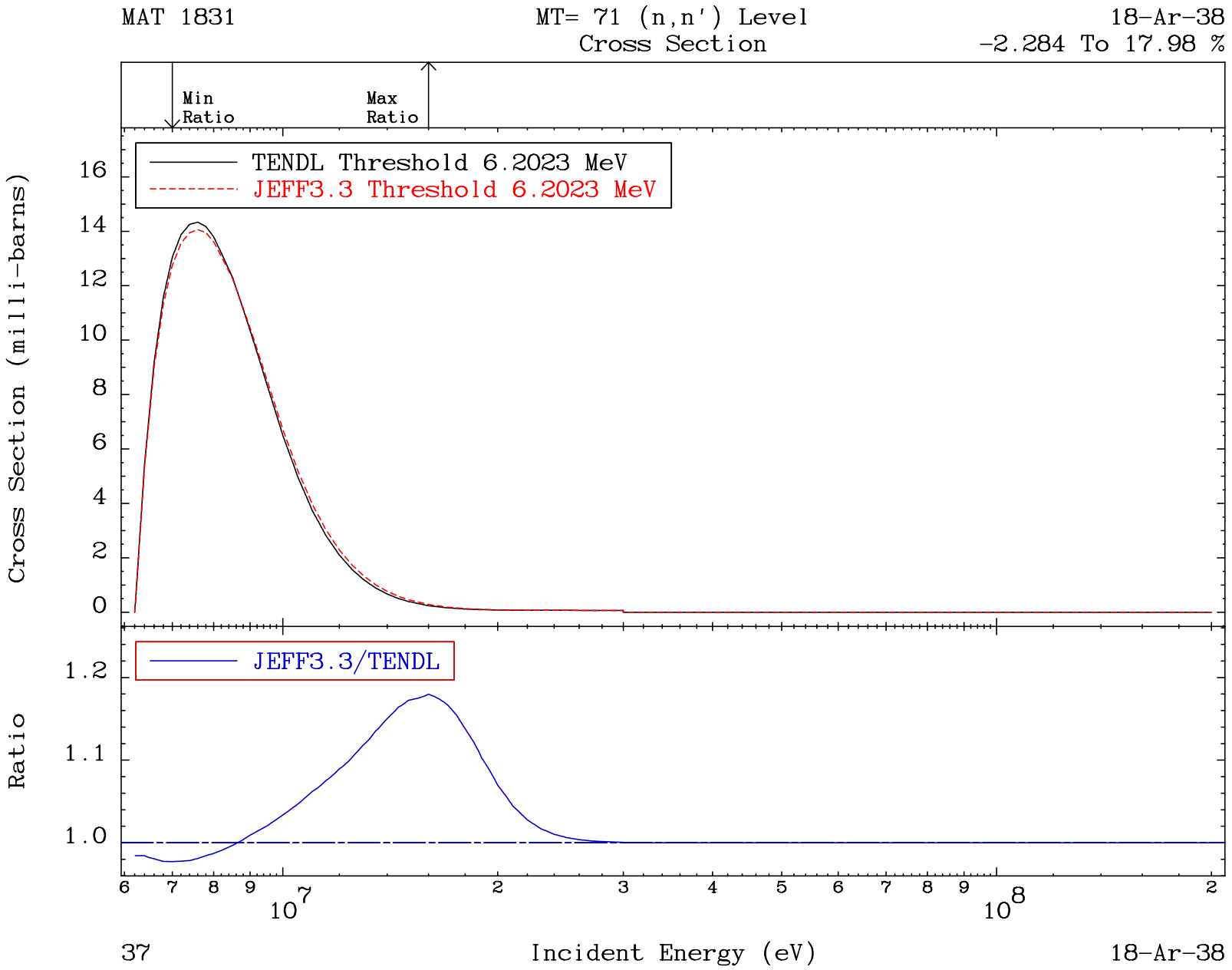

MAT 1831
MT= 66 (n,n') Level
Cross Section
18-Ar-38
-2.294 To 18.04 %
Min Ratio
Max Ratio
TENDL Threshold 5.8091 MeV
JEFF3.3 Threshold 5.8091 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
18-Ar-38

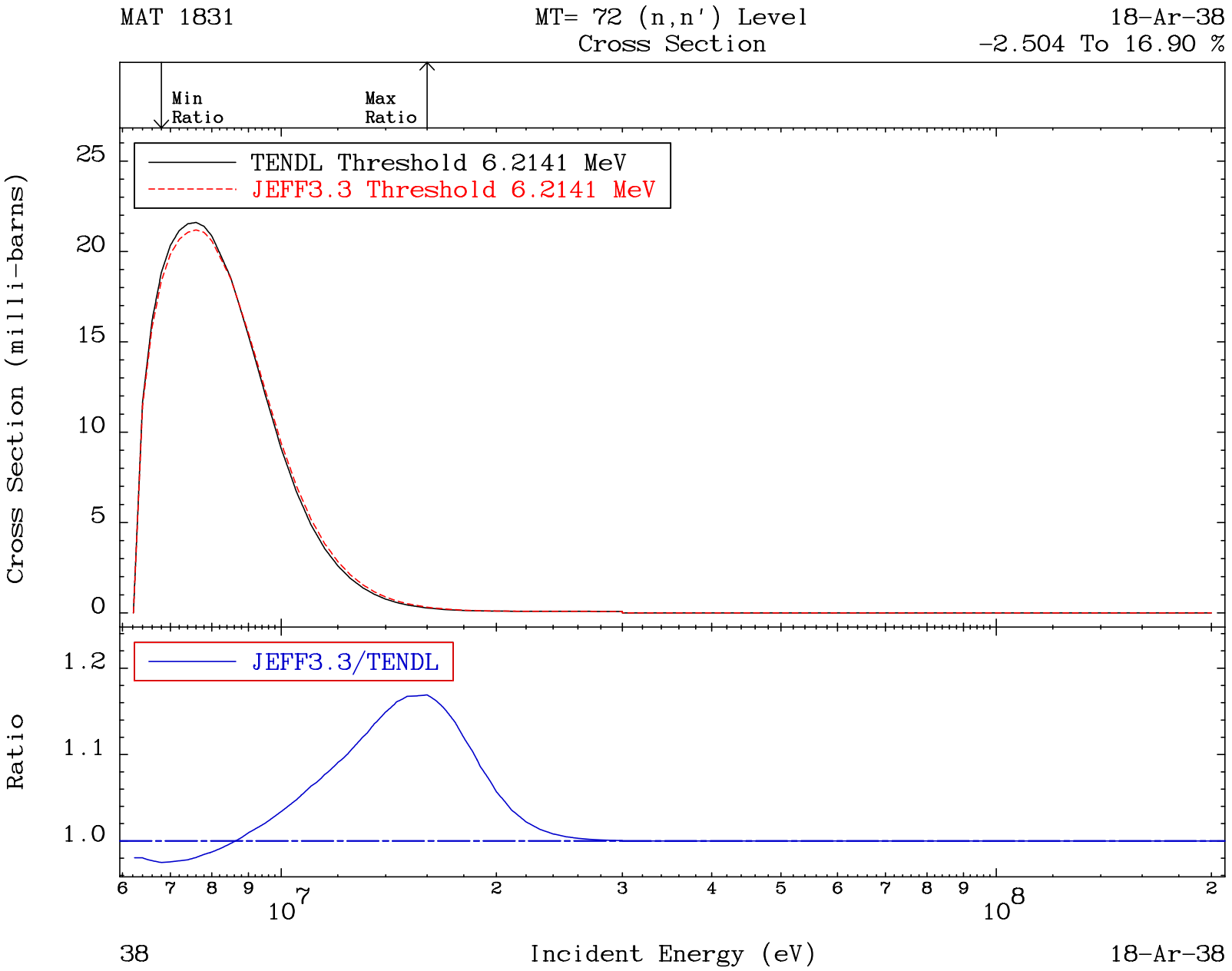

MAT 1831
MT= 67 (n,n') Level
Cross Section
18-Ar-38
-3.508 To 13.50 %
Min Ratio
Max Ratio
TENDL Threshold 5.8863 MeV
JEFF3.3 Threshold 5.8863 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
18-Ar-38

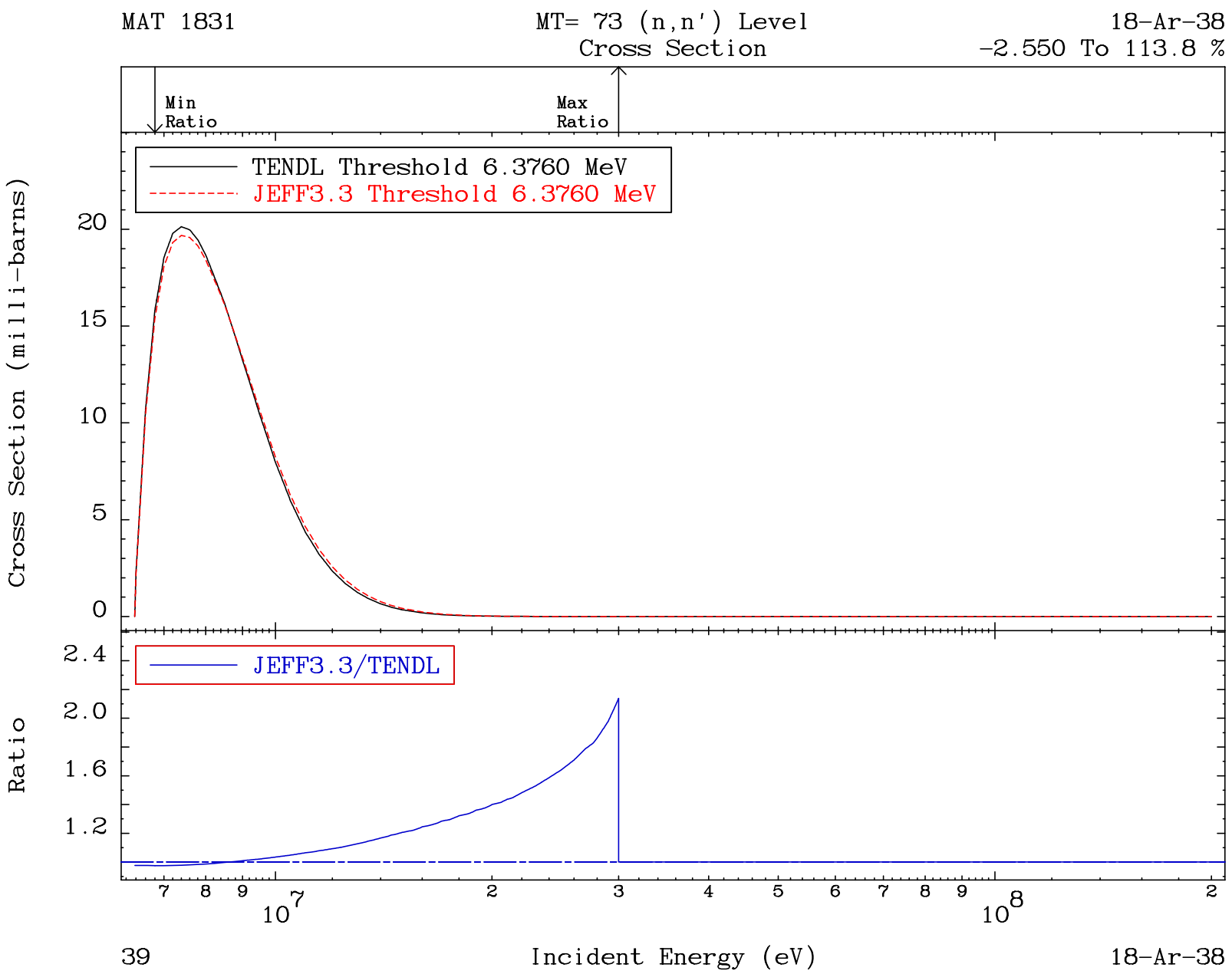

MAT 1831
MT= 68 (n,n') Level
Cross Section
18-Ar-38
-2.693 To 16.11 %
Min Ratio
Max Ratio
TENDL Threshold 5.9797 MeV
JEFF3.3 Threshold 5.9797 MeV
Cross Section (milli-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
18-Ar-38

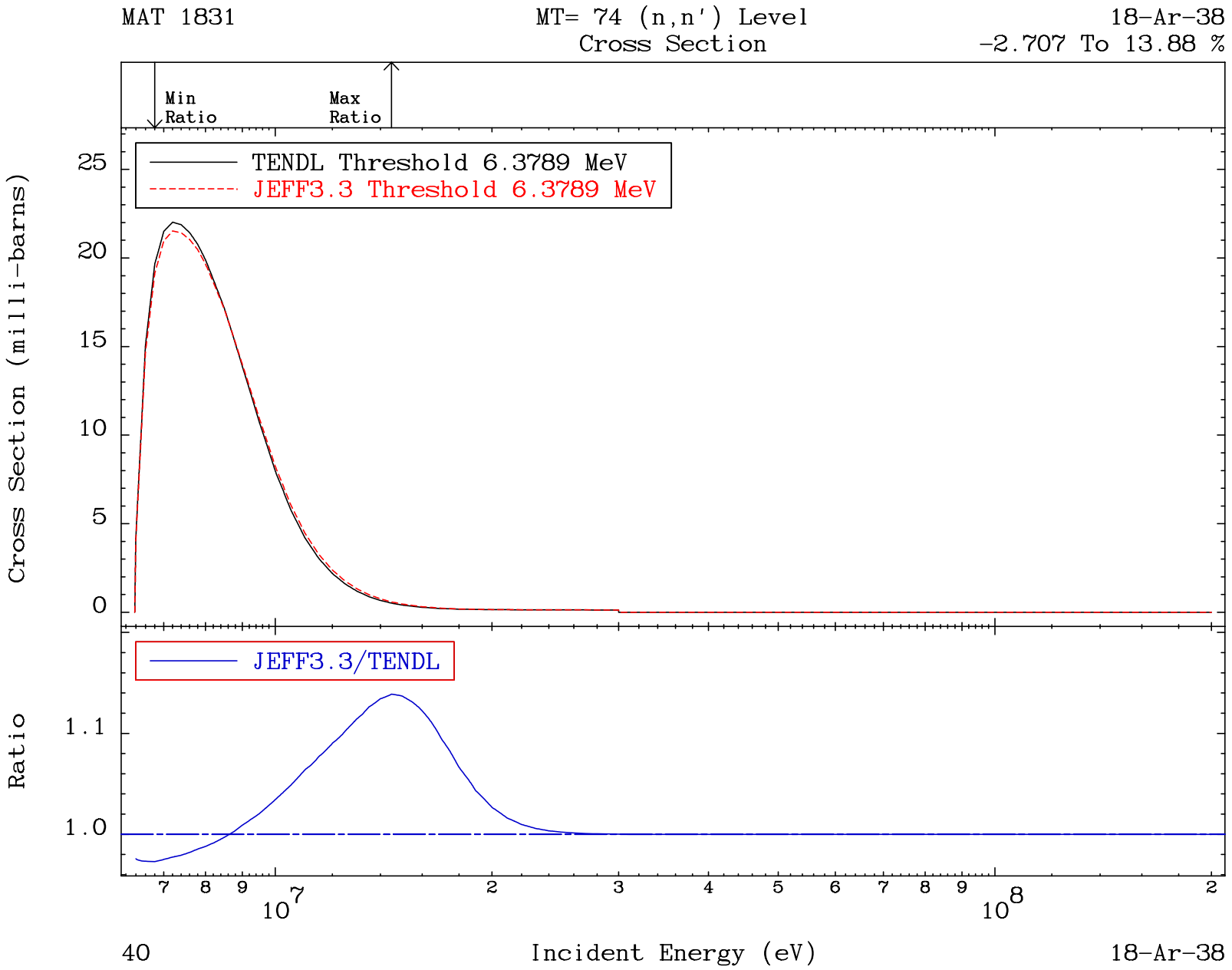

MAT 1831
MT= 69 (n,n') Level
Cross Section
18-Ar-38
-2.871 To 114.0 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.0131 MeV
JEFF3.3 Threshold 6.0131 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
35
18-Ar-38

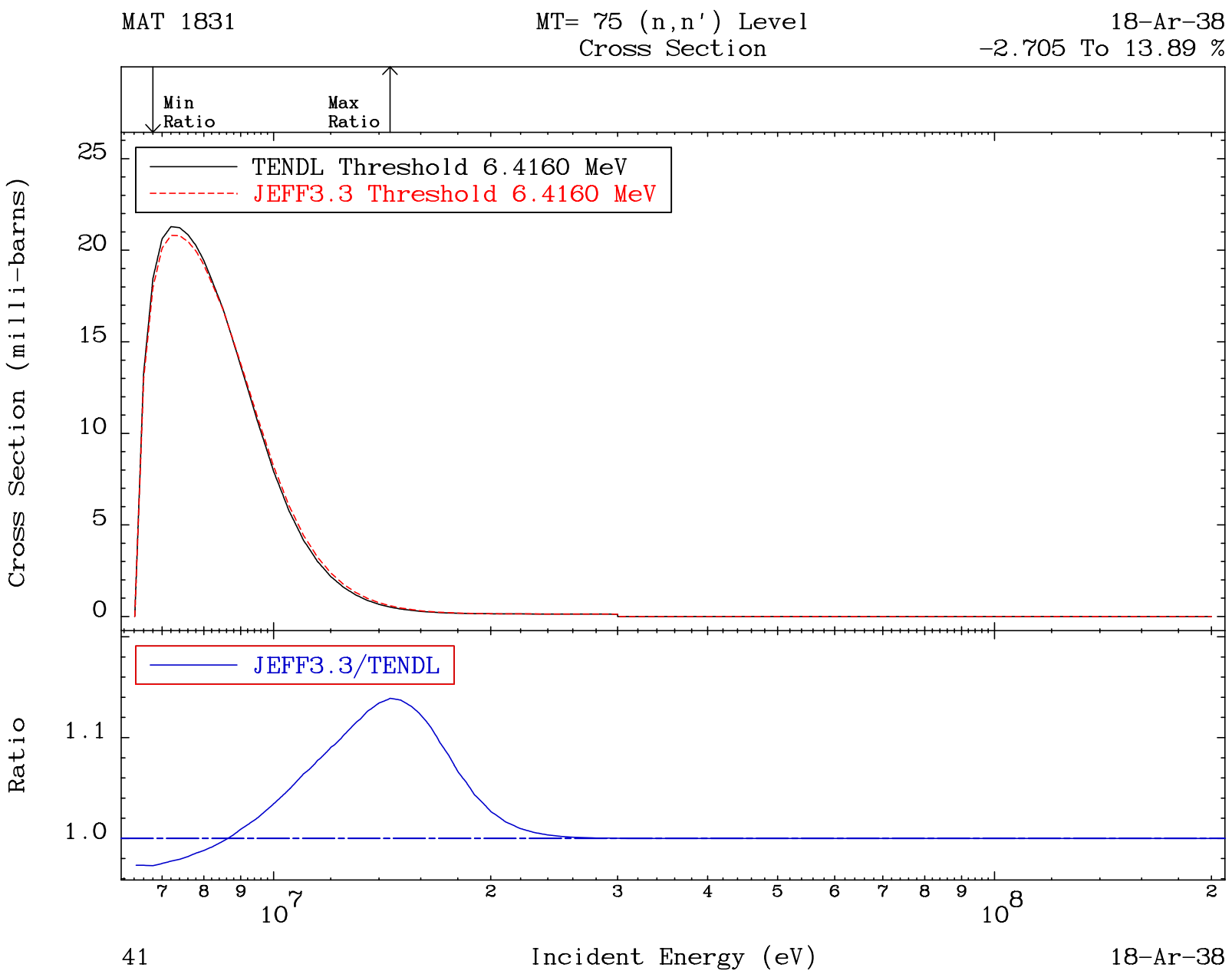

MAT 1831
MT= 70 (n,n') Level
Cross Section
18-Ar-38
-3.390 To 13.40 %
Min Ratio
Max Ratio
TENDL Threshold 6.1336 MeV
JEFF3.3 Threshold 6.1336 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
18-Ar-38

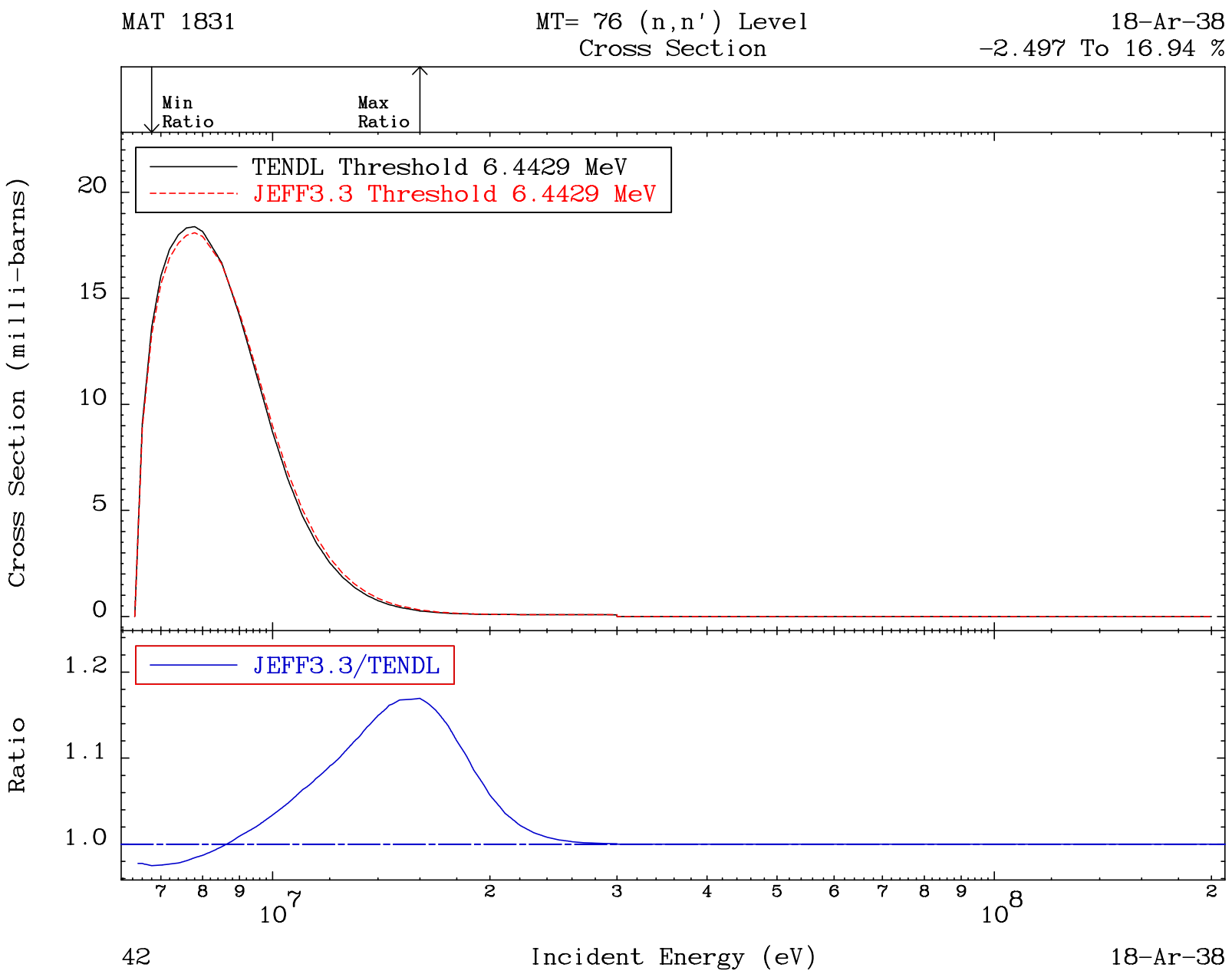

MAT 1831
MT= 71 (n,n') Level
Cross Section
18-Ar-38
-2.284 To 17.98 %
Min Ratio
Max Ratio
TENDL Threshold 6.2023 MeV
JEFF3.3 Threshold 6.2023 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
37
18-Ar-38

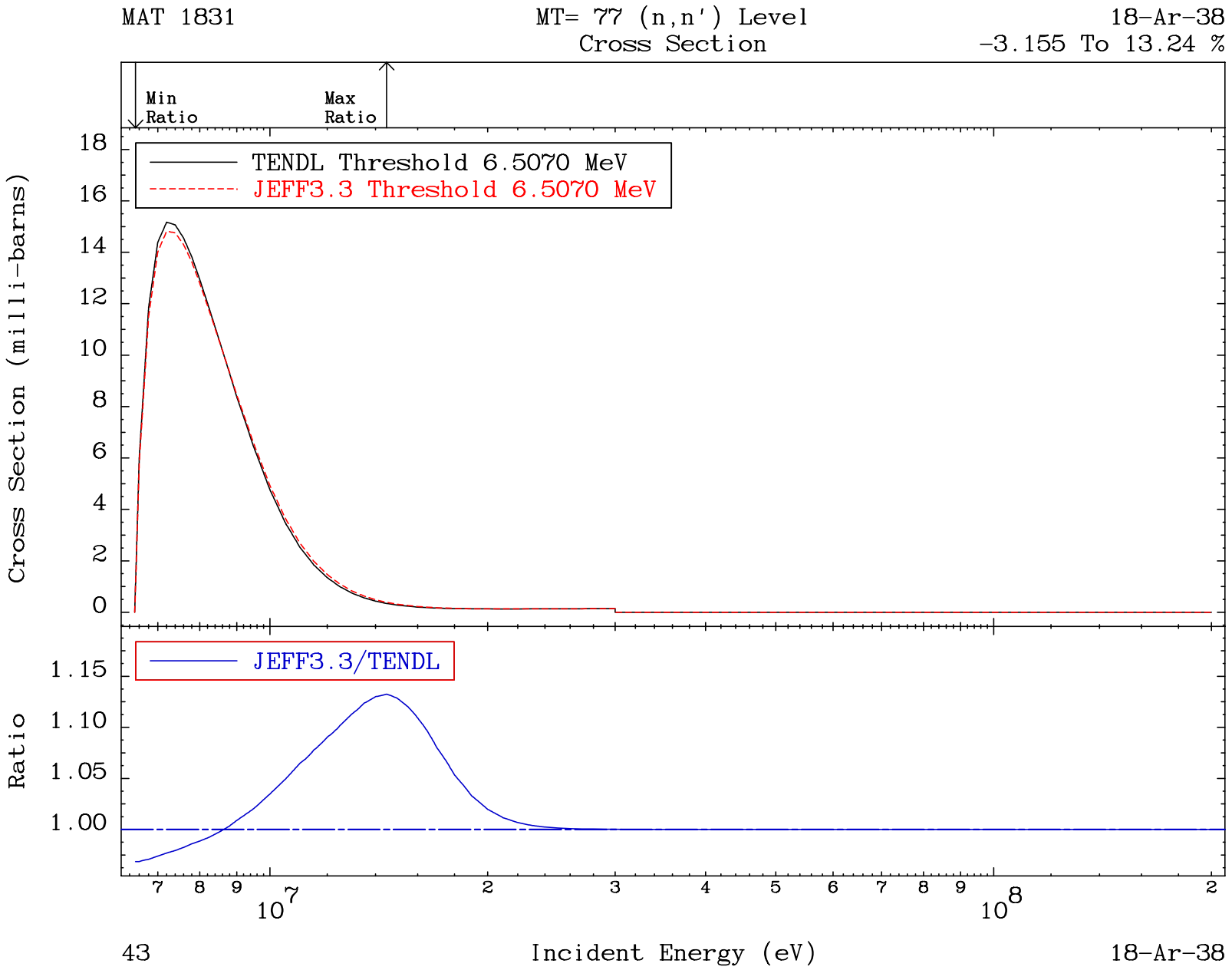

MAT 1831
MT= 72 (n,n') Level
Cross Section
18-Ar-38
-2.504 To 16.90 %
Min Ratio
Max Ratio
TENDL Threshold 6.2141 MeV
JEFF3.3 Threshold 6.2141 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
18-Ar-38

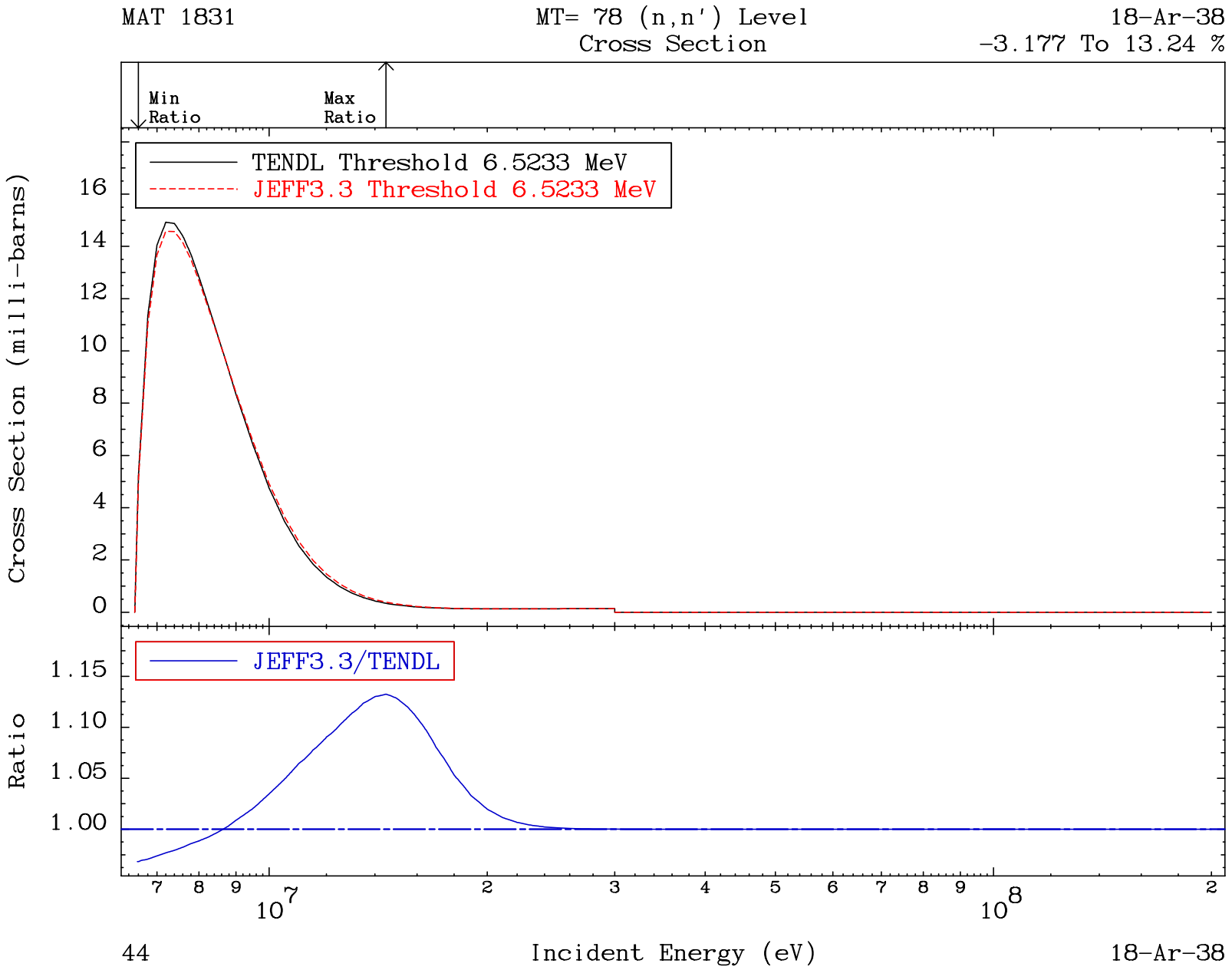

MAT 1831
MT= 73 (n,n') Level
Cross Section
18-Ar-38
-2.550 To 113.8 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.3760 MeV
JEFF3.3 Threshold 6.3760 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
39
Incident Energy (eV)
18-Ar-38

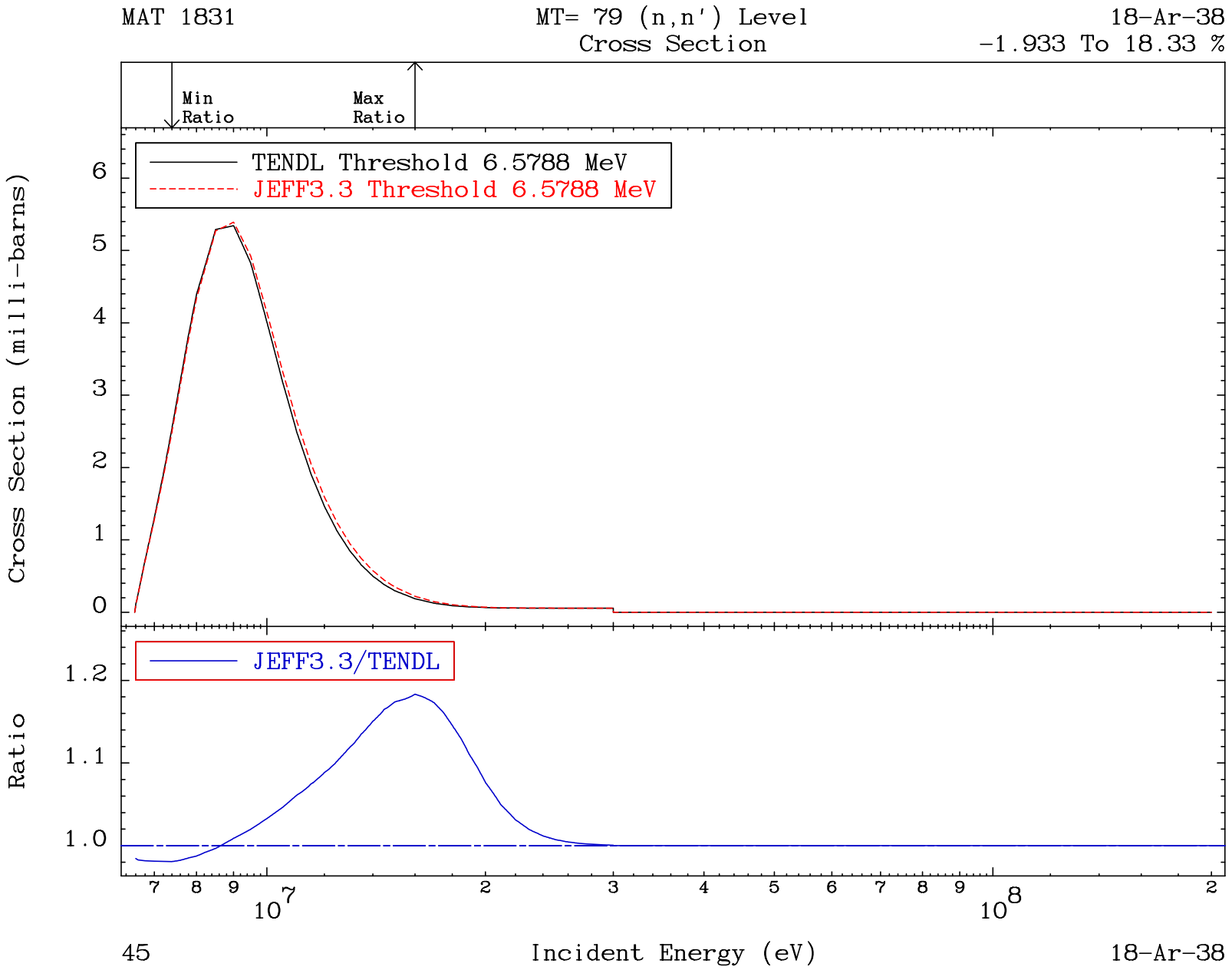

MAT 1831
MT= 74 (n,n') Level
Cross Section
18-Ar-38
-2.707 To 13.88 %
Min Ratio
Max Ratio
TENDL Threshold 6.3789 MeV
JEFF3.3 Threshold 6.3789 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
18-Ar-38

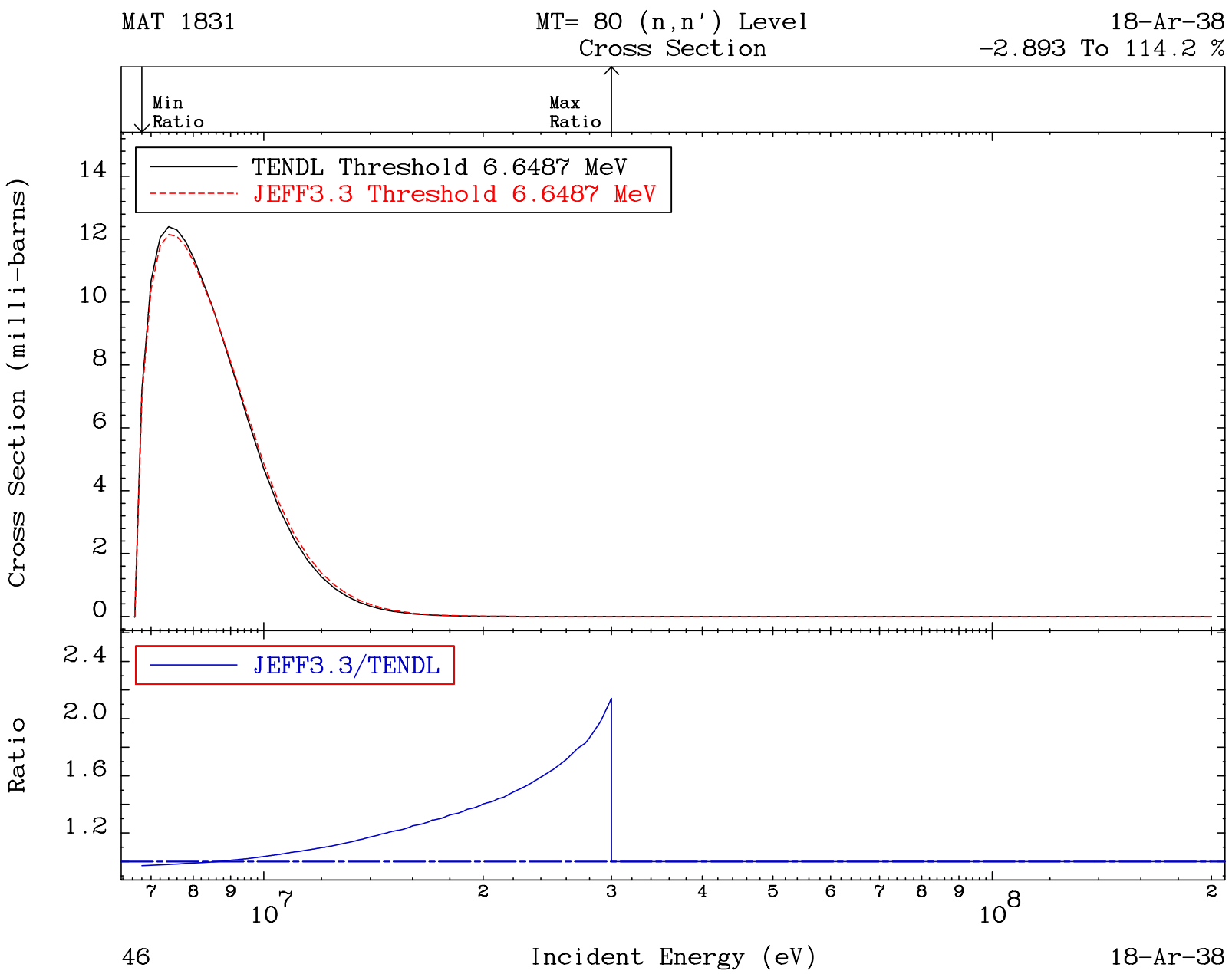

MAT 1831
MT= 75 (n,n') Level
Cross Section
18-Ar-38
-2.705 To 13.89 %
Min Ratio
Max Ratio
TENDL Threshold 6.4160 MeV
JEFF3.3 Threshold 6.4160 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
18-Ar-38

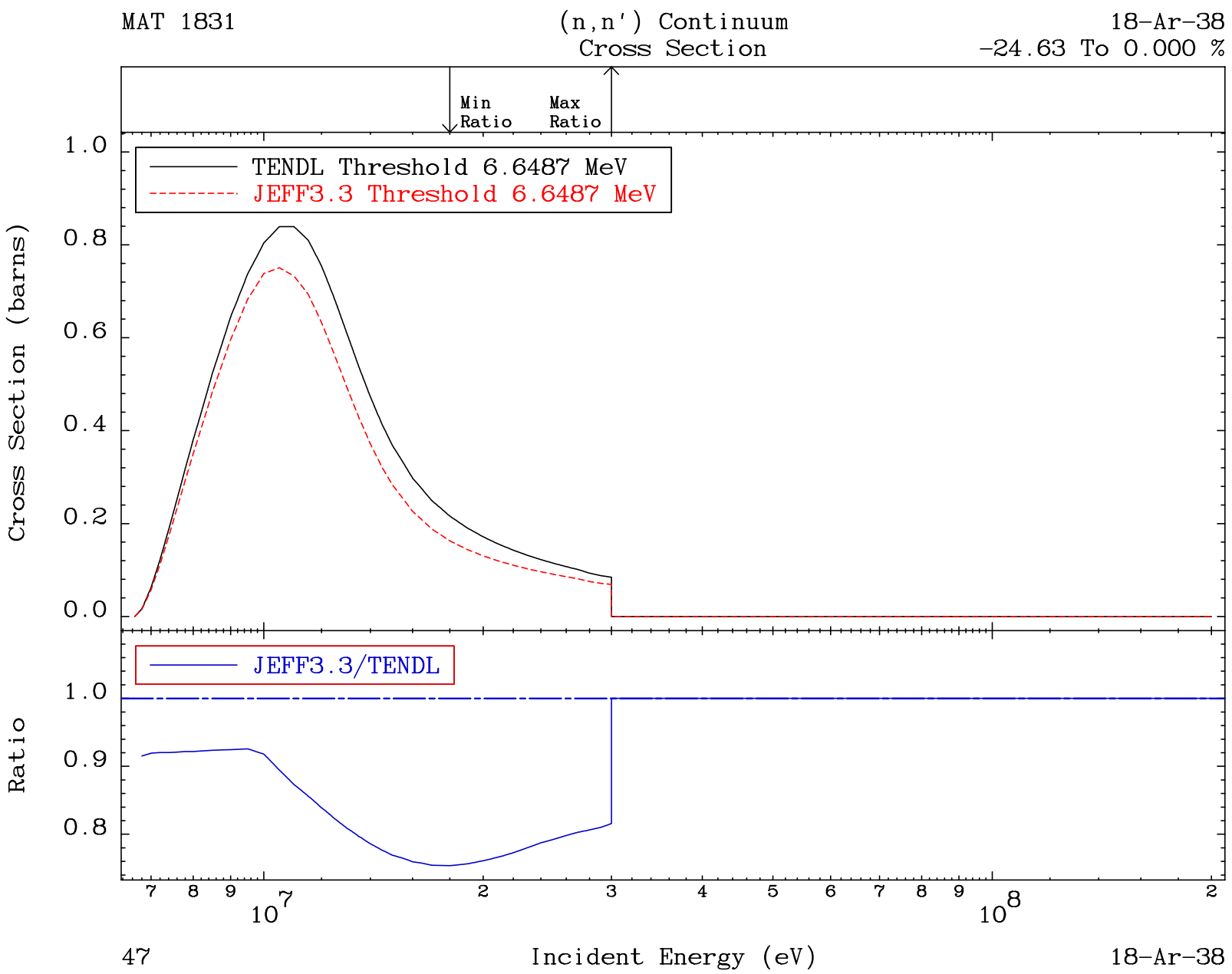

MAT 1831
MT= 76 (n,n') Level
Cross Section
18-Ar-38
-2.497 To 16.94 %
Min Ratio
Max Ratio
TENDL Threshold 6.4429 MeV
JEFF3.3 Threshold 6.4429 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
18-Ar-38

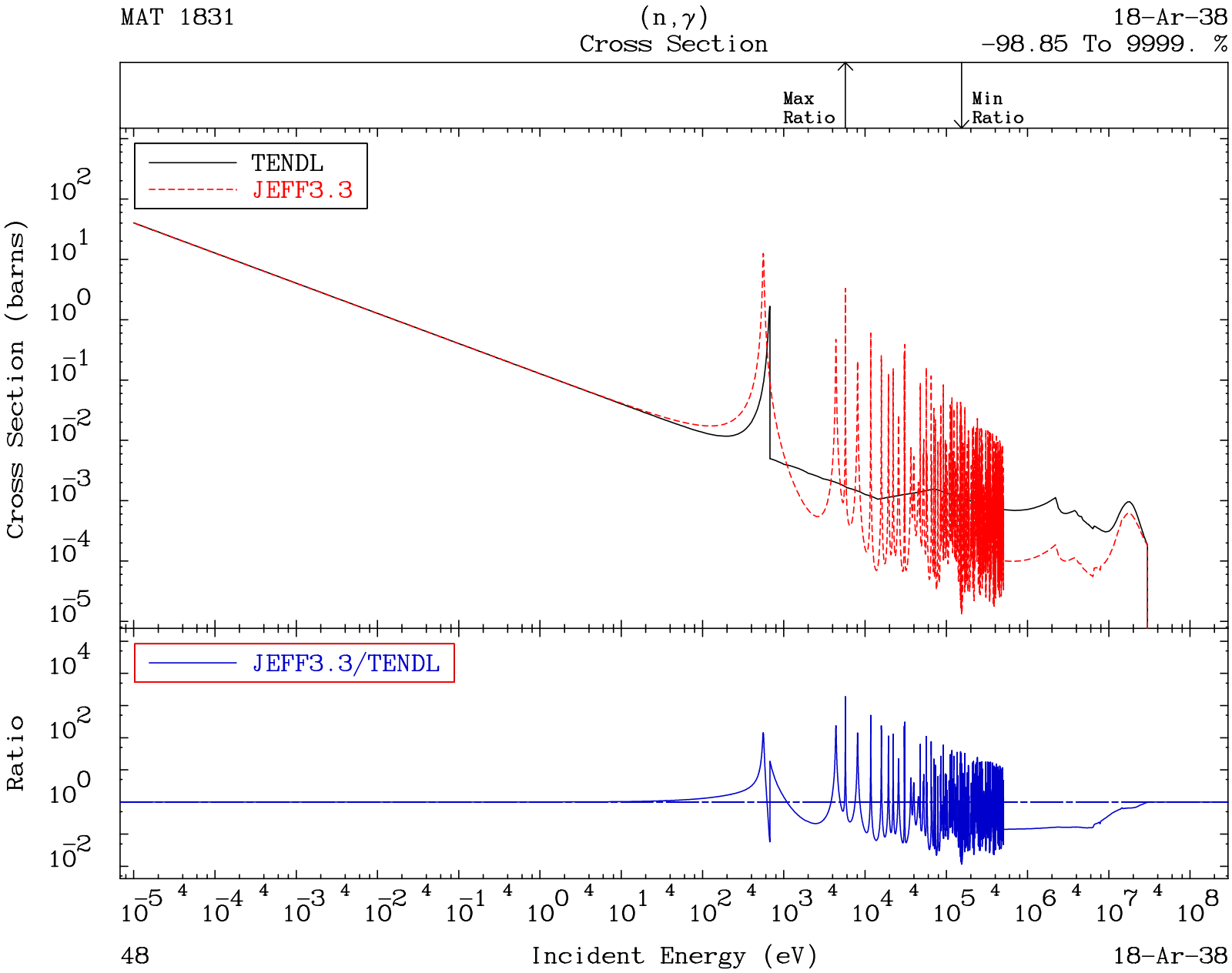

MAT 1831
MT= 77 (n,n') Level
Cross Section
18-Ar-38
-3.155 To 13.24 %
Min Ratio
Max Ratio
TENDL Threshold 6.5070 MeV
JEFF3.3 Threshold 6.5070 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
43
18-Ar-38

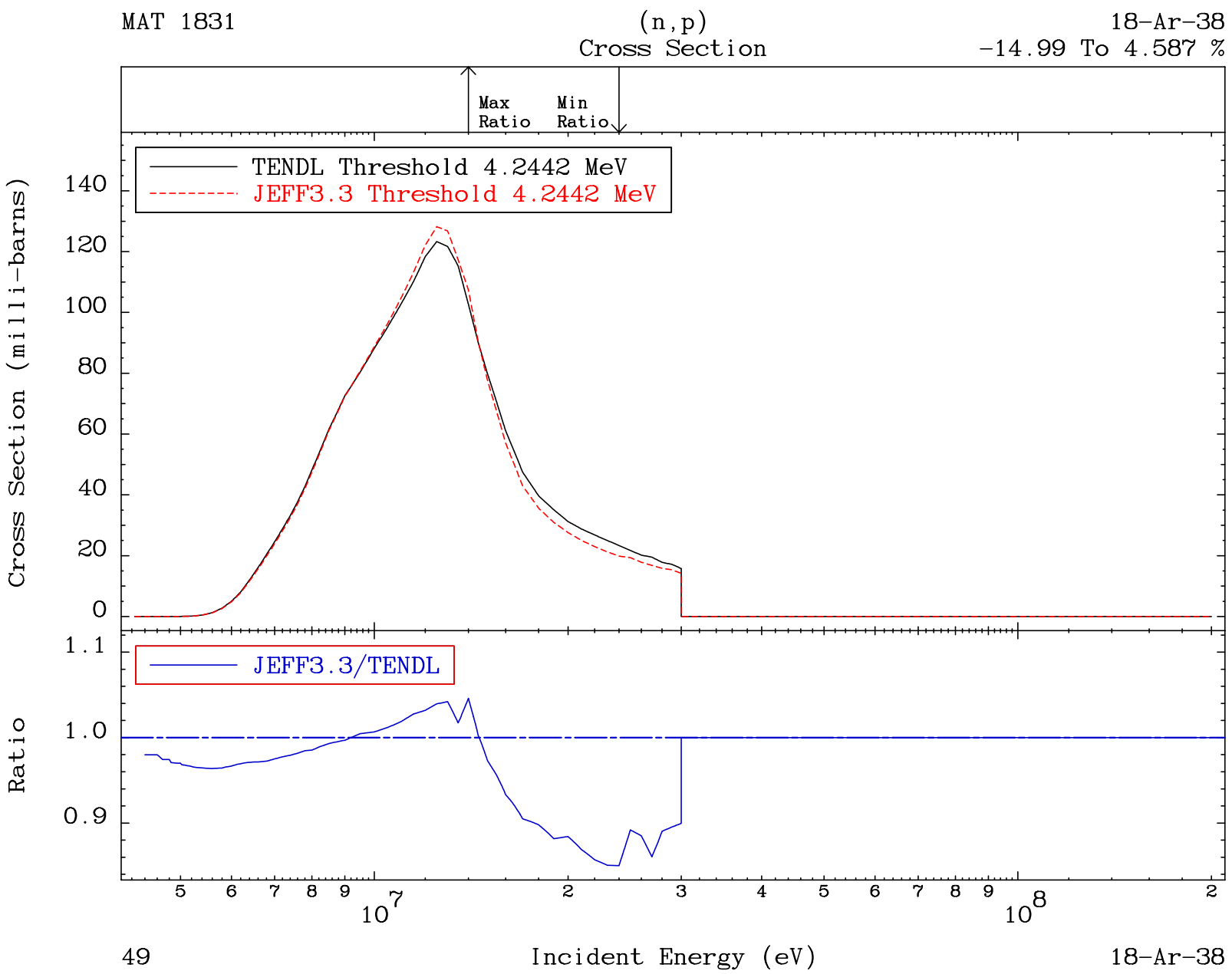

MAT 1831
MT= 78 (n,n') Level
Cross Section
18-Ar-38
-3.177 To 13.24 %
Min Ratio
Max Ratio
TENDL Threshold 6.5233 MeV
JEFF3.3 Threshold 6.5233 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
18-Ar-38

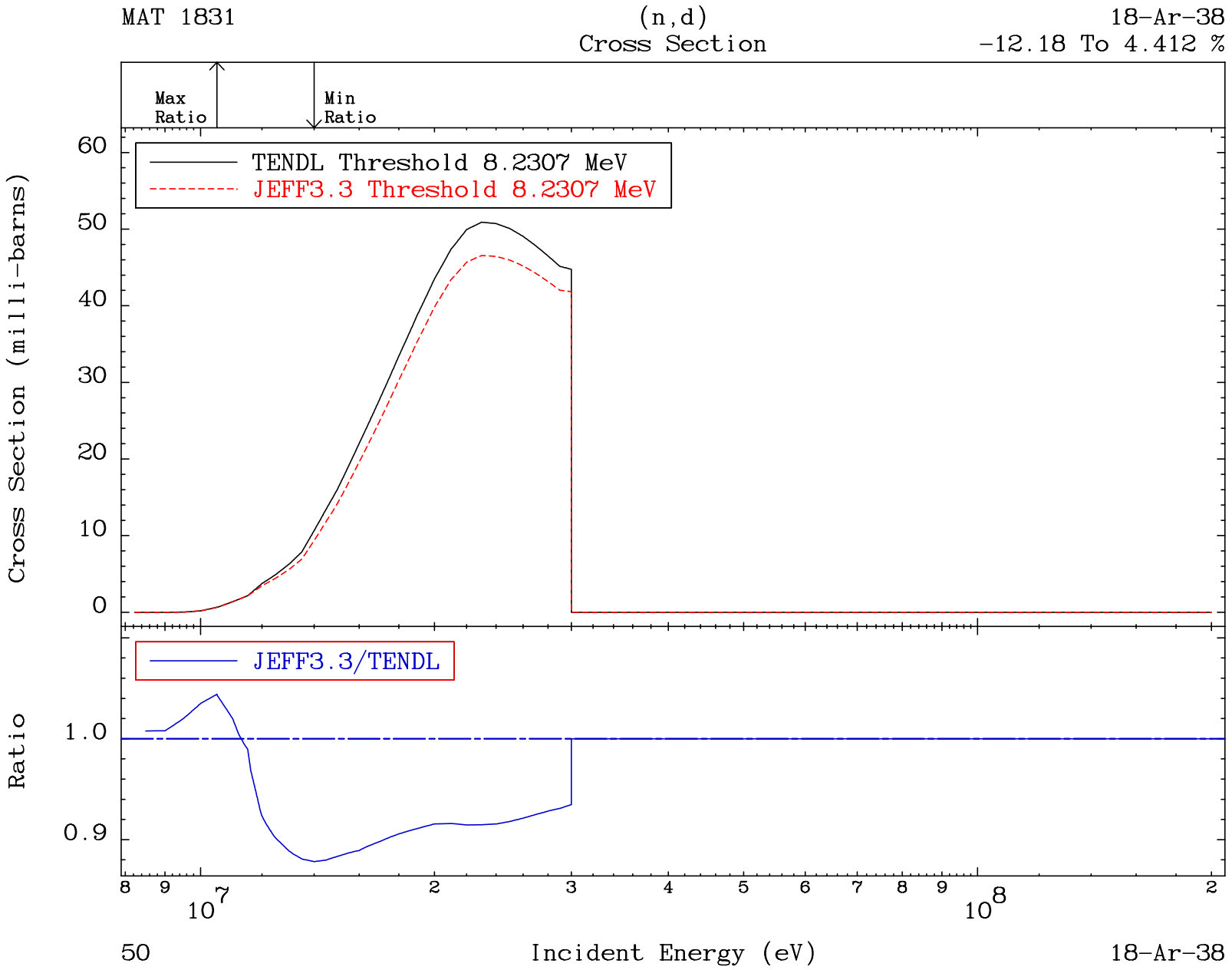

MAT 1831
MT= 79 (n,n') Level
Cross Section
18-Ar-38
-1.933 To 18.33 %
Min Ratio
Max Ratio
TENDL Threshold 6.5788 MeV
JEFF3.3 Threshold 6.5788 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
18-Ar-38

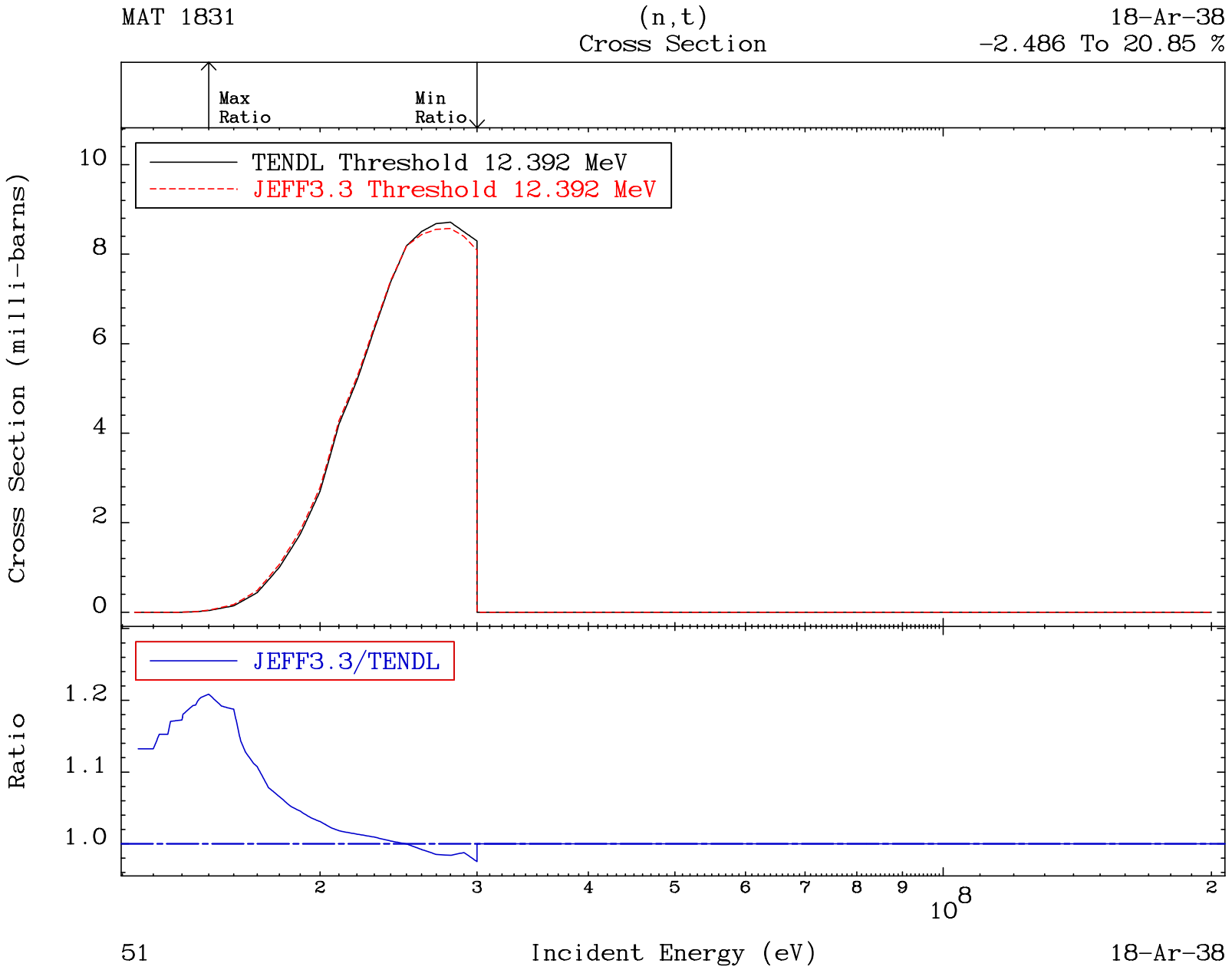

MAT 1831
MT= 80 (n,n') Level
Cross Section
18-Ar-38
-2.893 To 114.2 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.6487 MeV
JEFF3.3 Threshold 6.6487 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
18-Ar-38

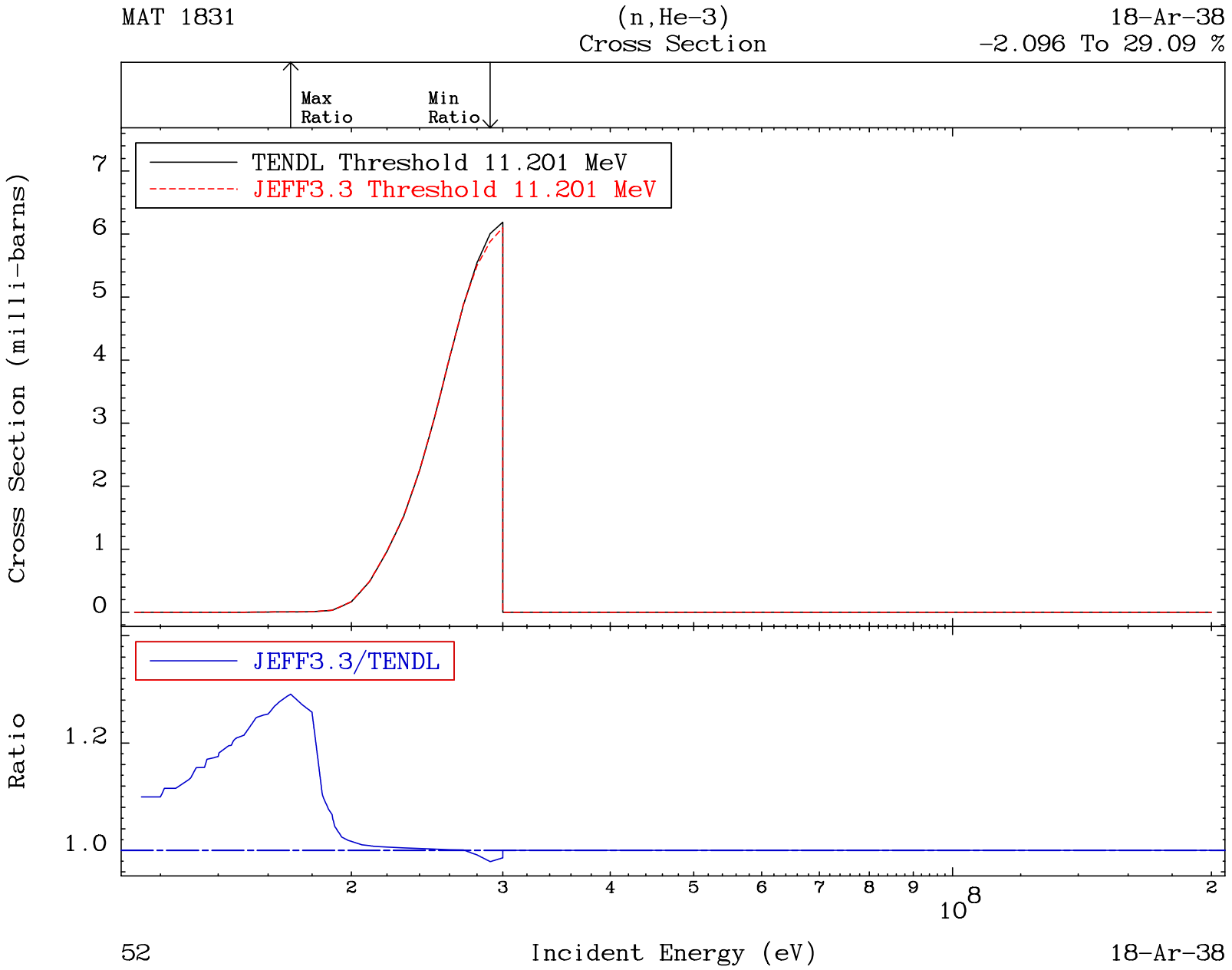

MAT 1831
(n,n') Continuum
Cross Section
18-Ar-38
-24.63 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.6487 MeV
JEFF3.3 Threshold 6.6487 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
18-Ar-38

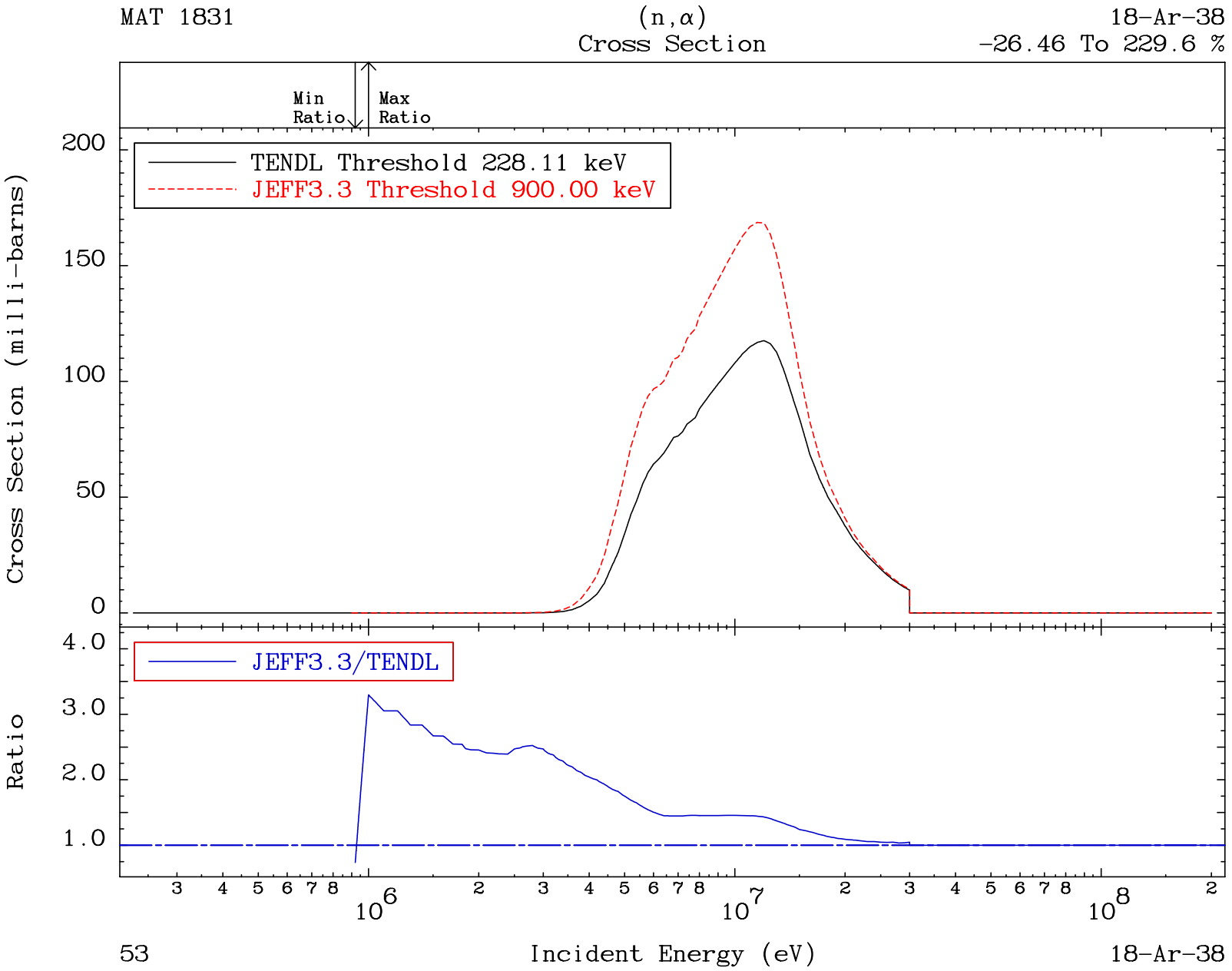

MAT 1831
(n,γ)
Cross Section
18-Ar-38
-98.85 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
48
18-Ar-38

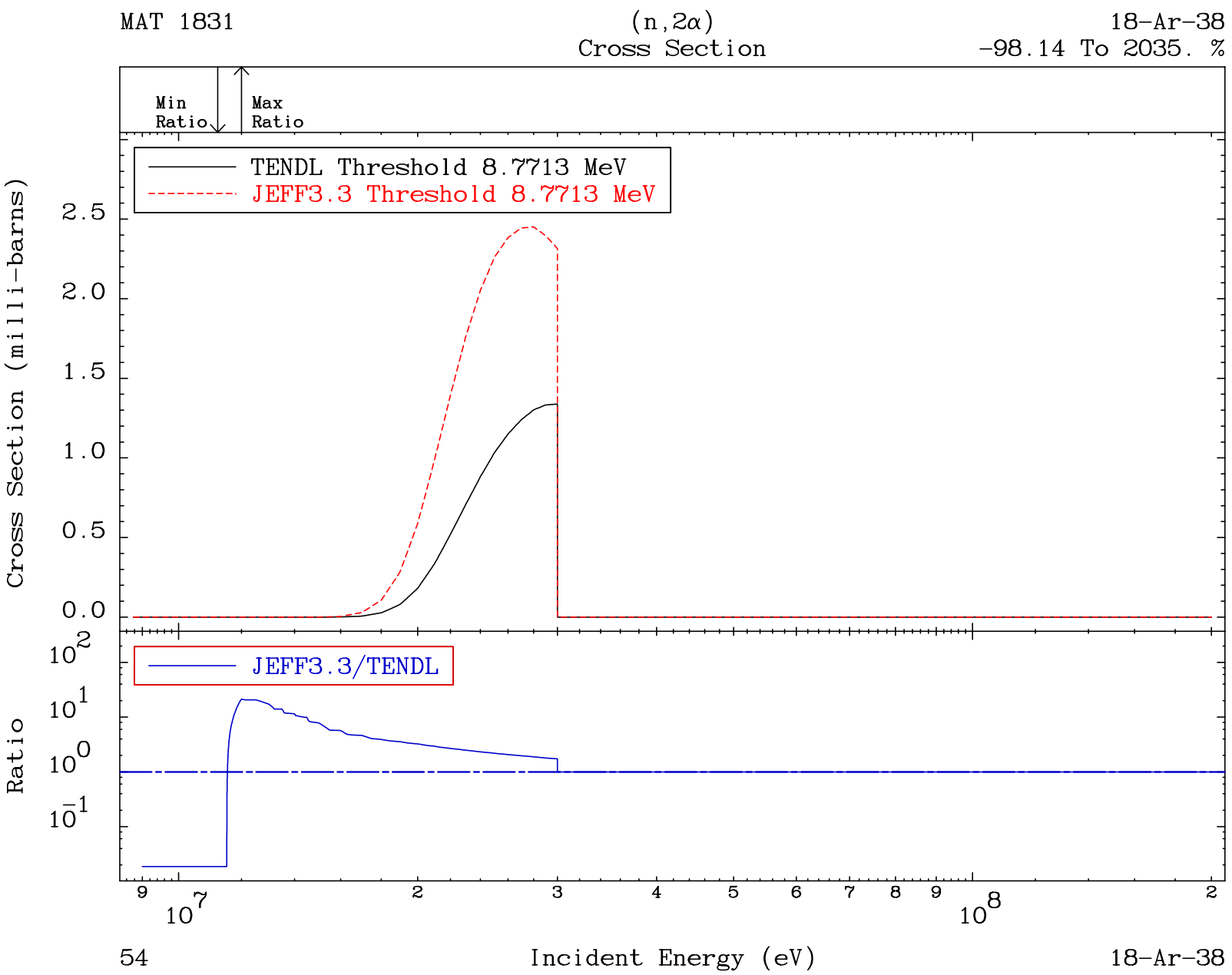

MAT 1831
(n,p)
Cross Section
18-Ar-38
-14.99 To 4.587 %
Max Ratio
Min Ratio
TENDL Threshold 4.2442 MeV
JEFF3.3 Threshold 4.2442 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
18-Ar-38

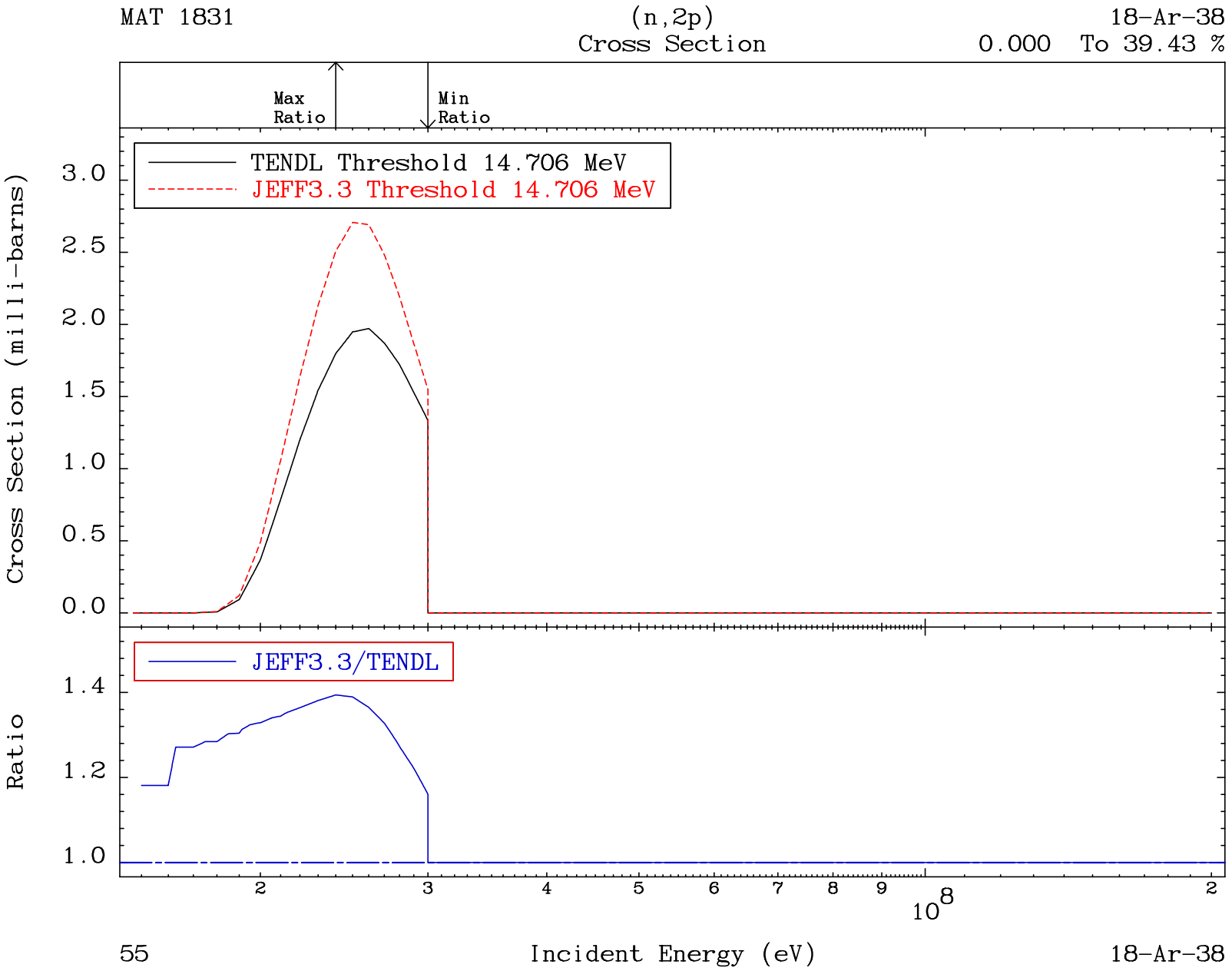

MAT 1831
(n,d)
Cross Section
18-Ar-38
-12.18 To 4.412 %
Max Ratio
Min Ratio
TENDL Threshold 8.2307 MeV
JEFF3.3 Threshold 8.2307 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.9
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
18-Ar-38

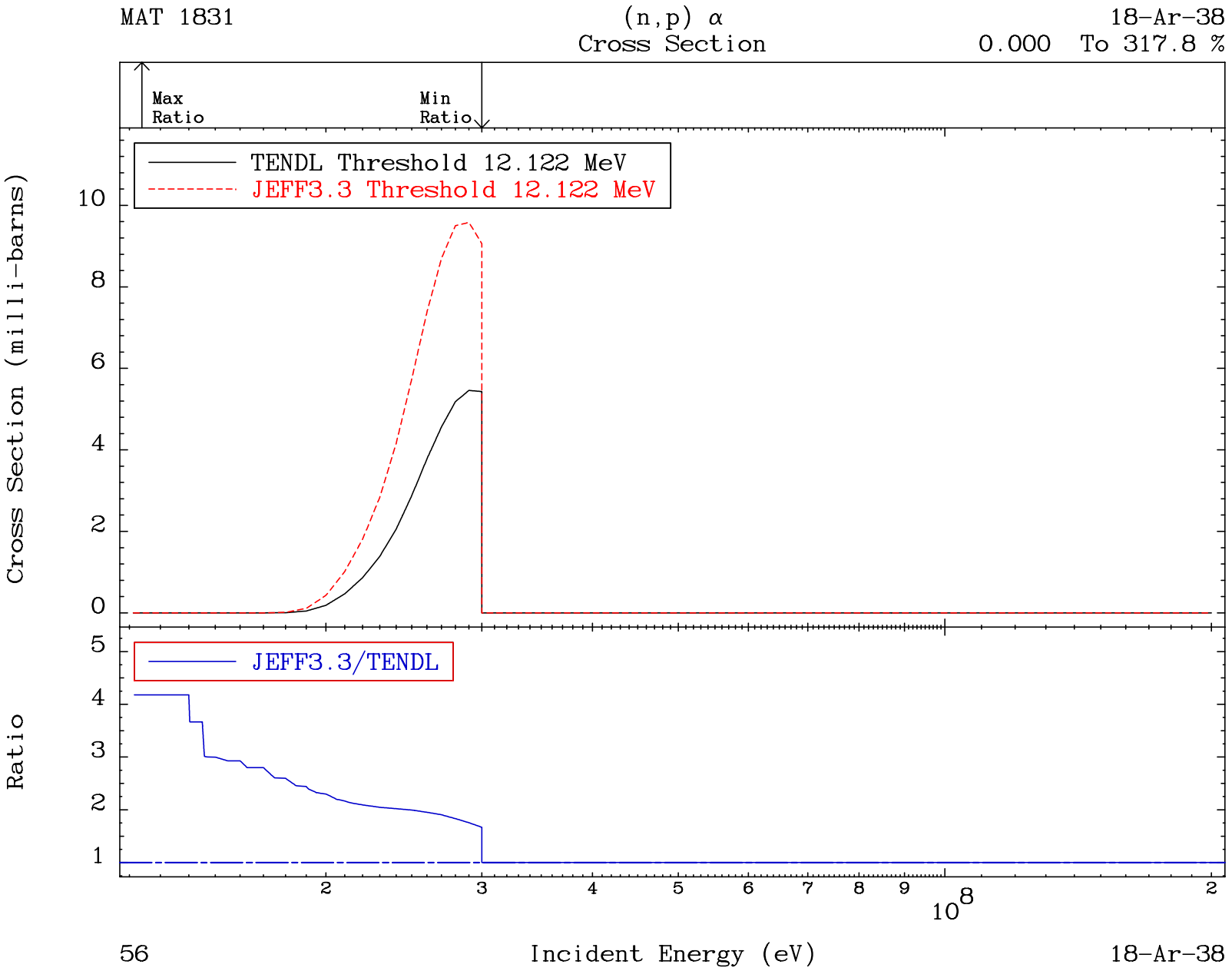

MAT 1831
(n,t)
Cross Section
18-Ar-38
-2.486 To 20.85 %
Max Ratio
Min Ratio
TENDL Threshold 12.392 MeV
JEFF3.3 Threshold 12.392 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
51
18-Ar-38

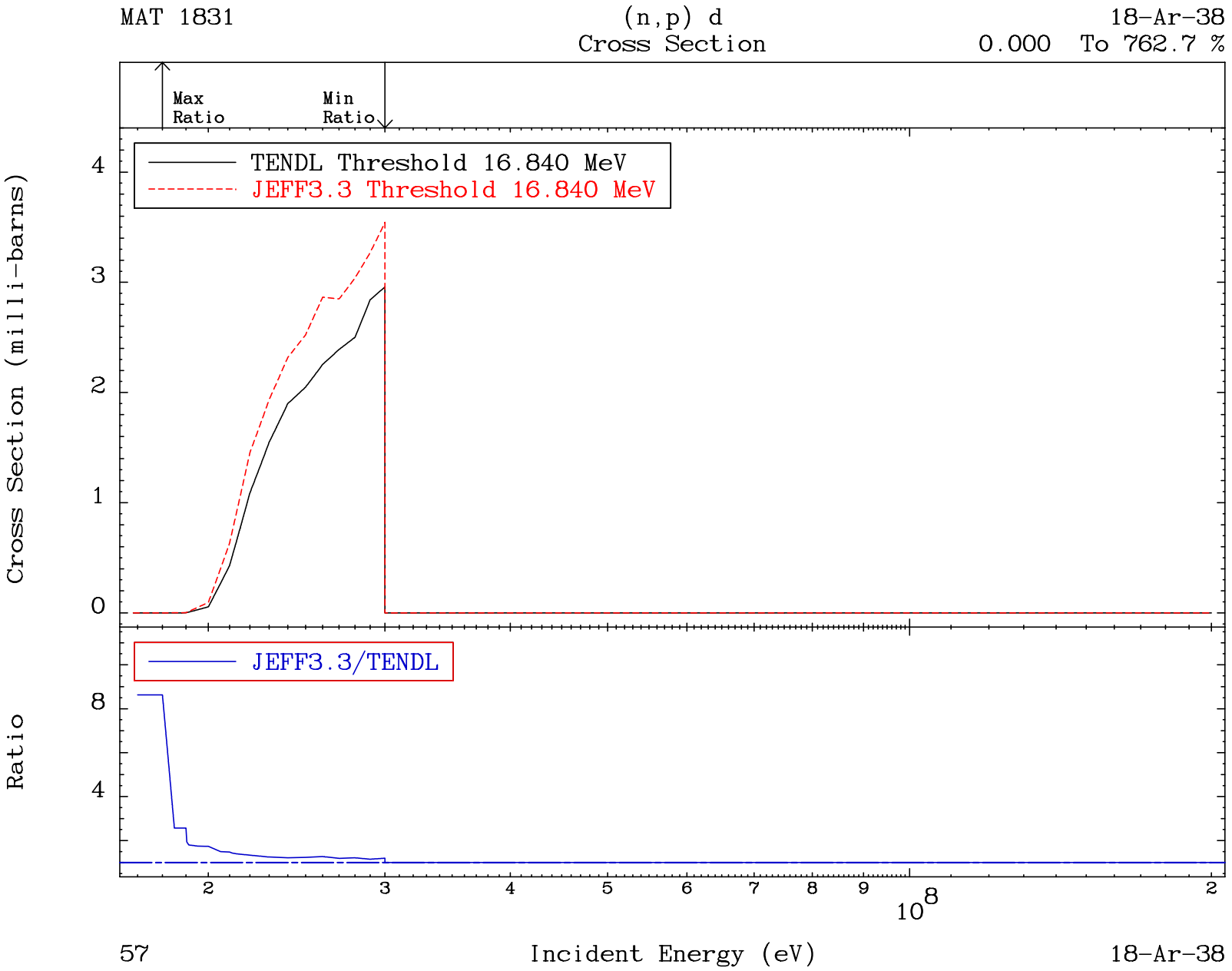

MAT 1831
(n,He-3)
Cross Section
18-Ar-38
-2.096 To 29.09 %
Max Ratio
Min Ratio
TENDL Threshold 11.201 MeV
JEFF3.3 Threshold 11.201 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.0
1.2
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
18-Ar-38

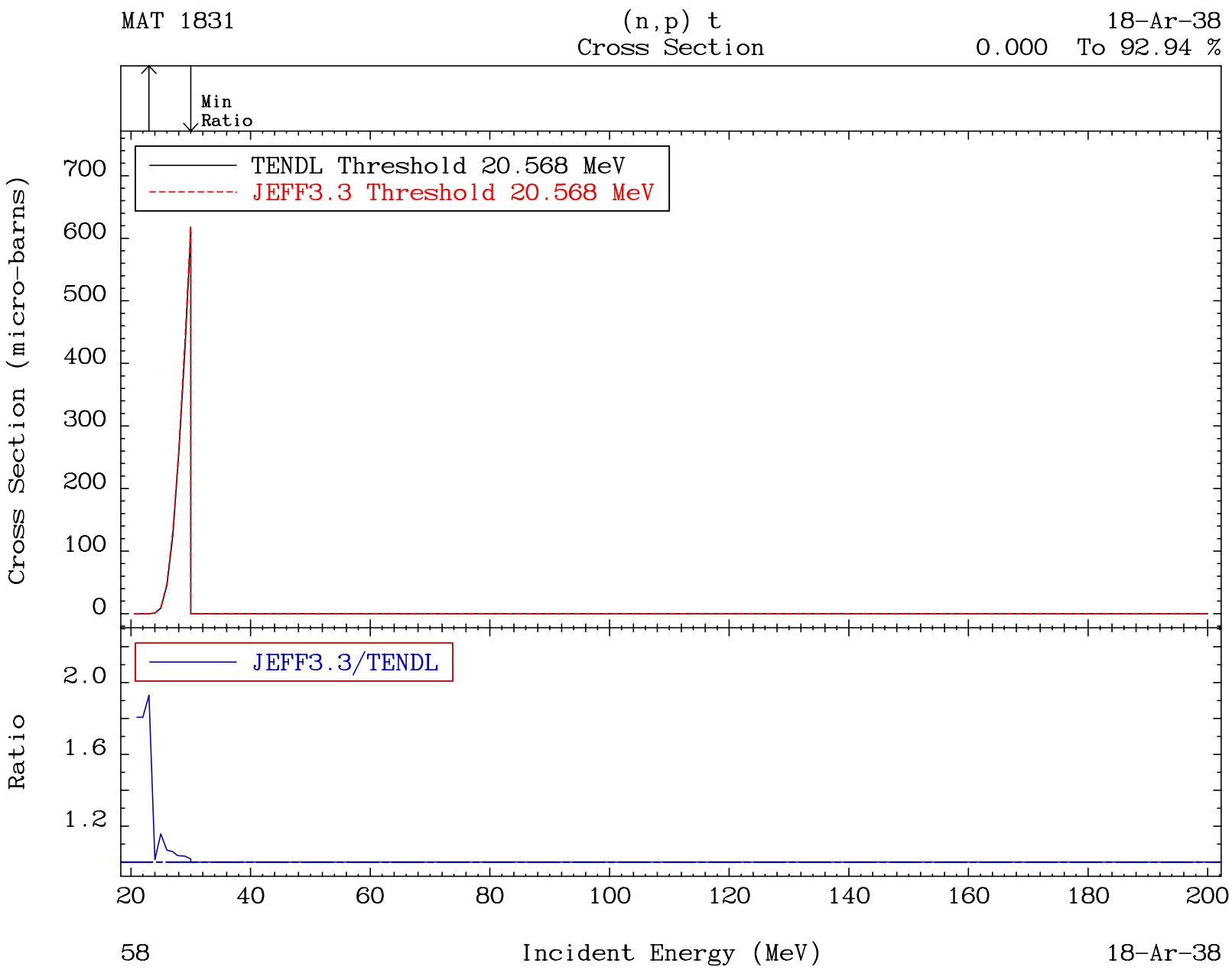

MAT 1831
(n,α)
Cross Section
18-Ar-38
-26.46 To 229.6 %
Min Ratio
Max Ratio
TENDL Threshold 228.11 keV
JEFF3.3 Threshold 900.00 keV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
18-Ar-38

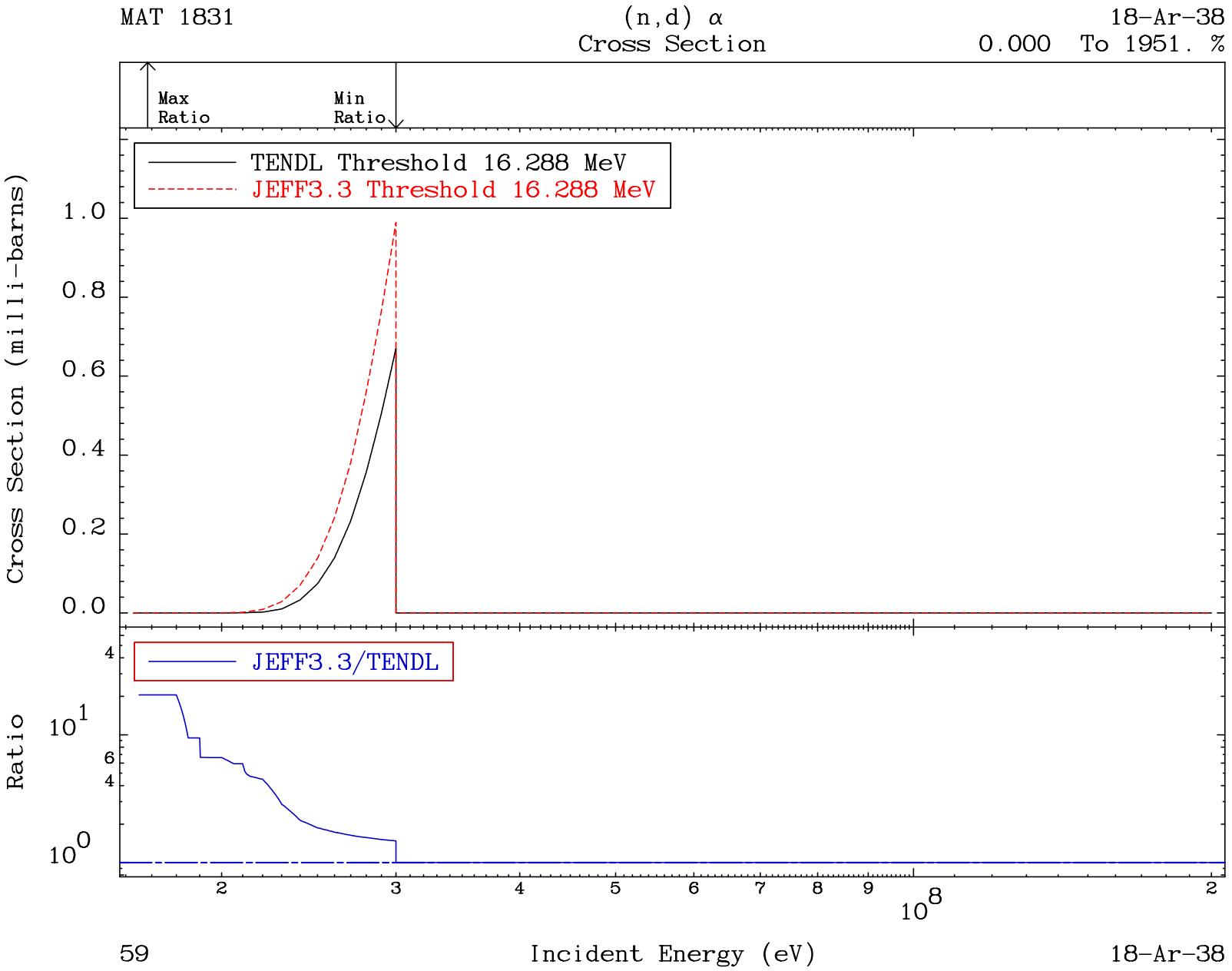

MAT 1831
(n,2α)
Cross Section
18-Ar-38
-98.14 To 2035. %
Min Ratio
Max Ratio
TENDL Threshold 8.7713 MeV
JEFF3.3 Threshold 8.7713 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^-1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
18-Ar-38

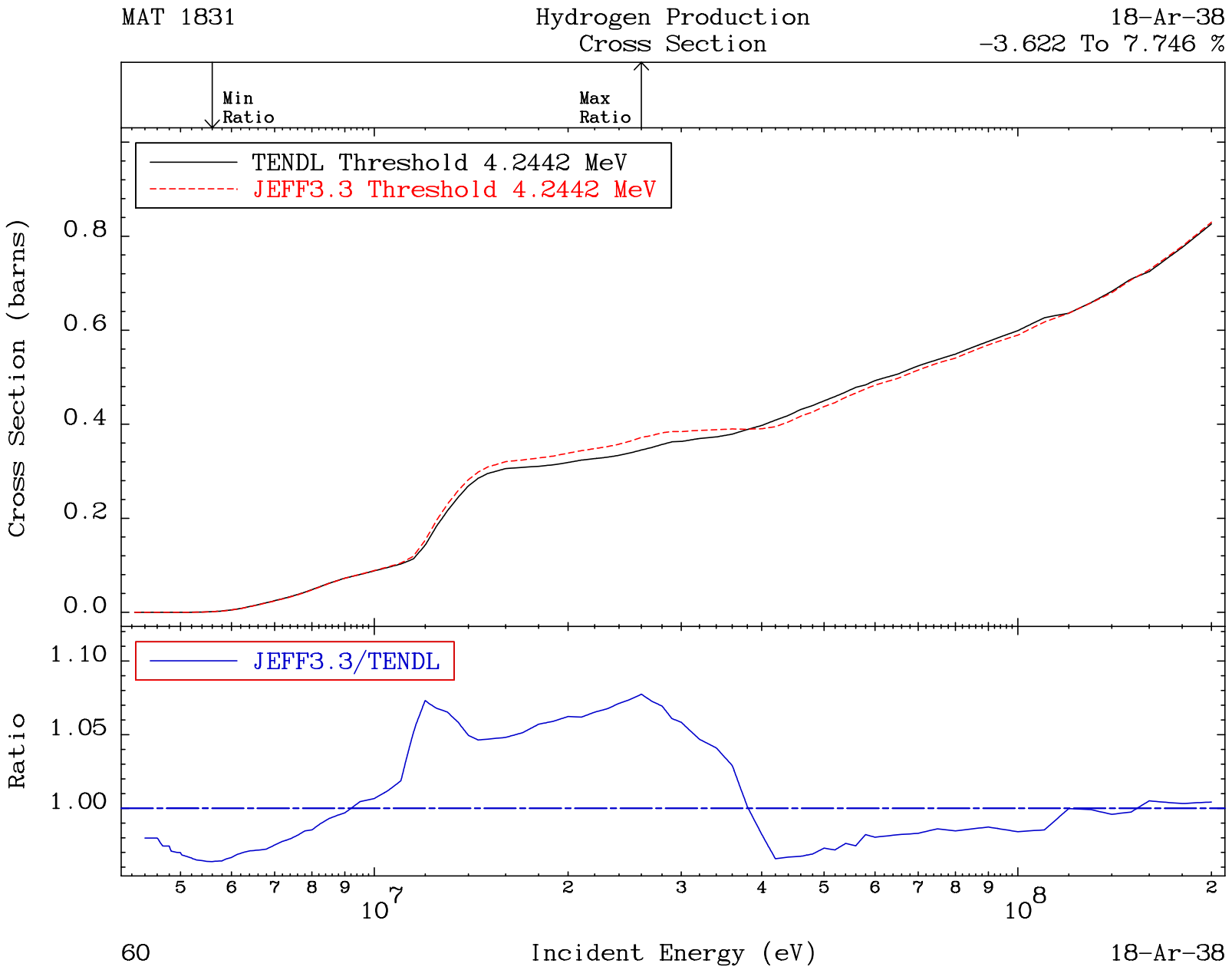

MAT 1831
(n,2p)
Cross Section
18-Ar-38
0.000 To 39.43 %
Max Ratio
Min Ratio
TENDL Threshold 14.706 MeV
JEFF3.3 Threshold 14.706 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
18-Ar-38

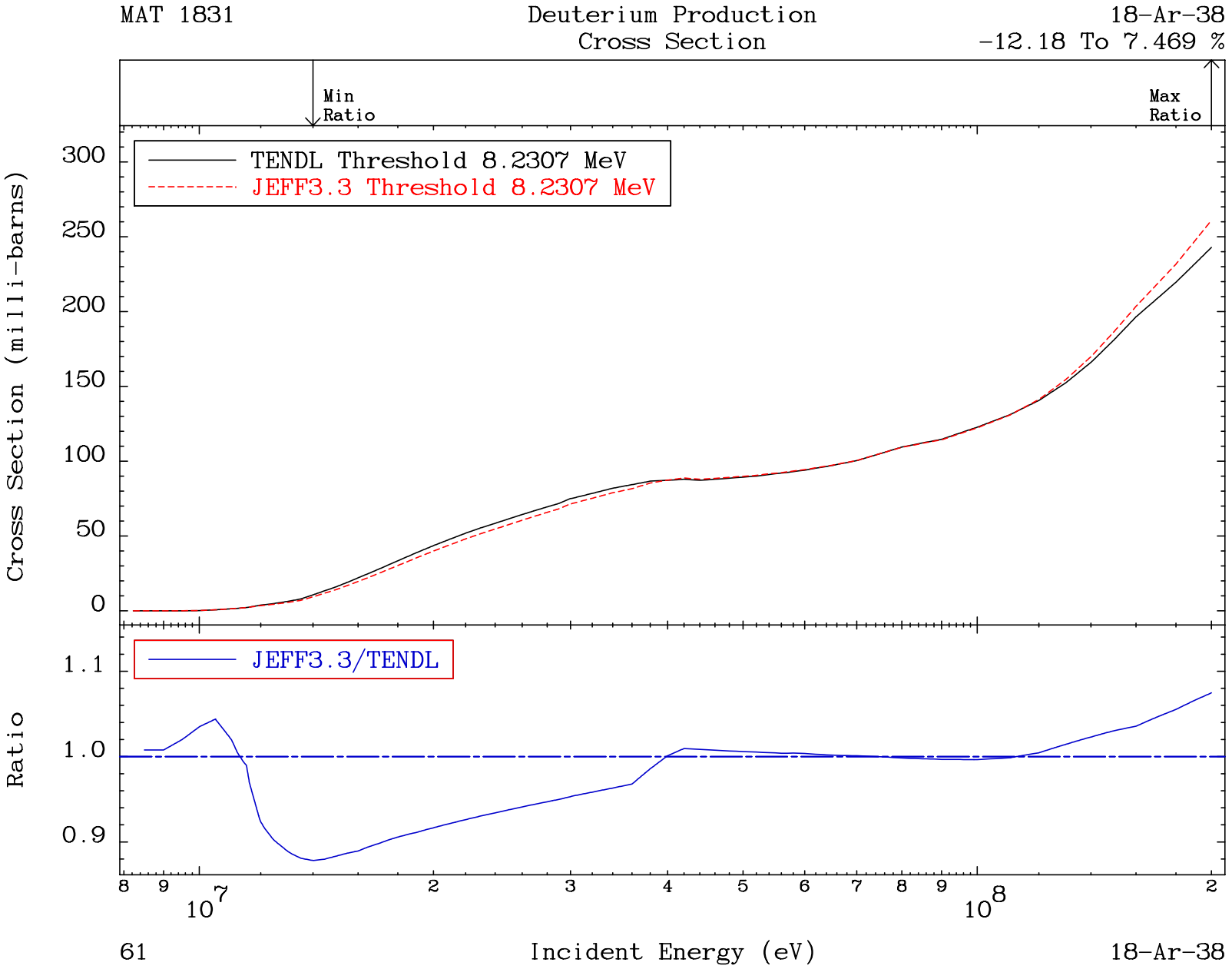

MAT 1831
(n,p) α
Cross Section
18-Ar-38
0.000 To 317.8 %
Max Ratio
Min Ratio
TENDL Threshold 12.122 MeV
JEFF3.3 Threshold 12.122 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
56
18-Ar-38

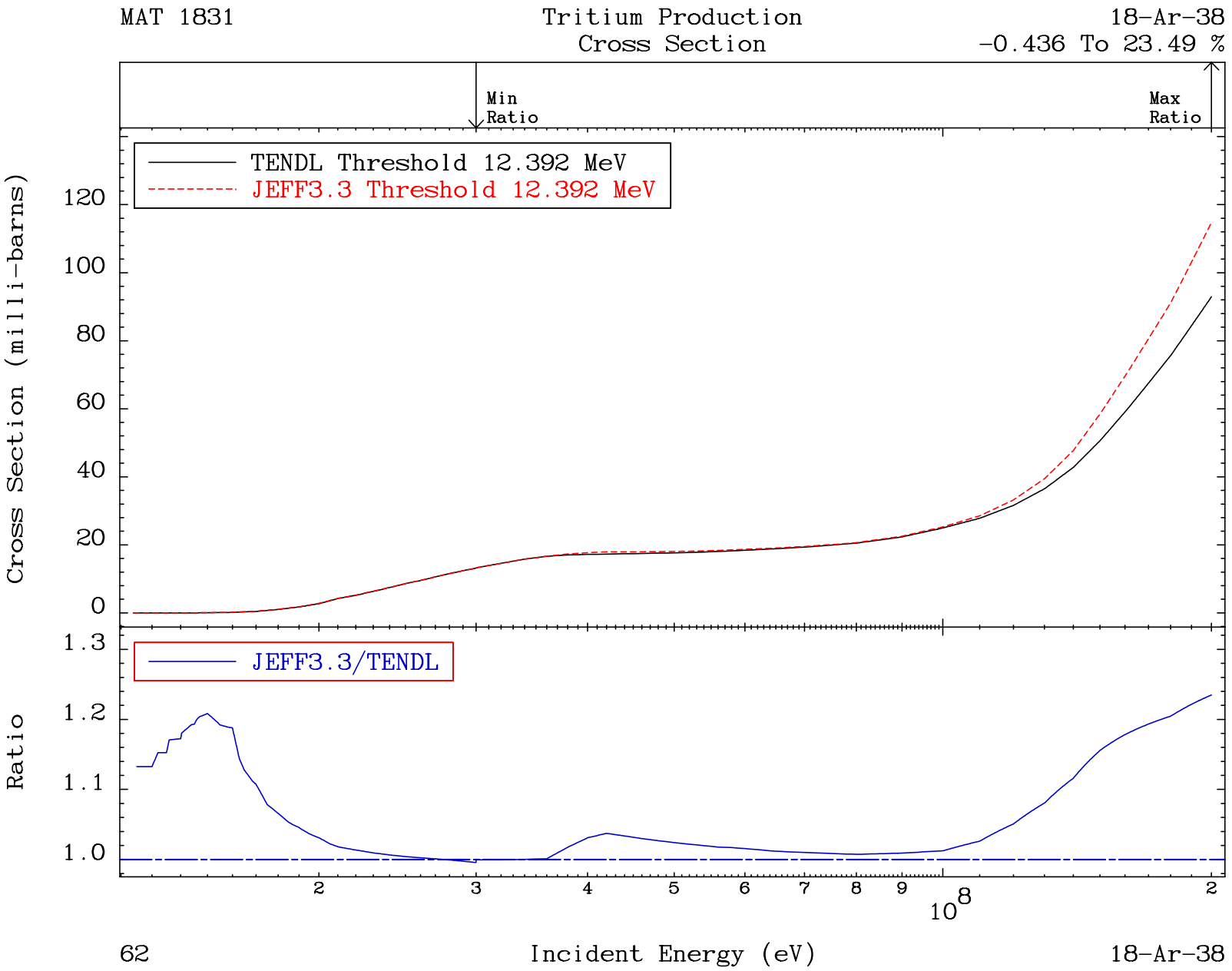

MAT 1831
(n,p) d
Cross Section
18-Ar-38
0.000 To 762.7 %
Max Ratio
Min Ratio
TENDL Threshold 16.840 MeV
JEFF3.3 Threshold 16.840 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
18-Ar-38

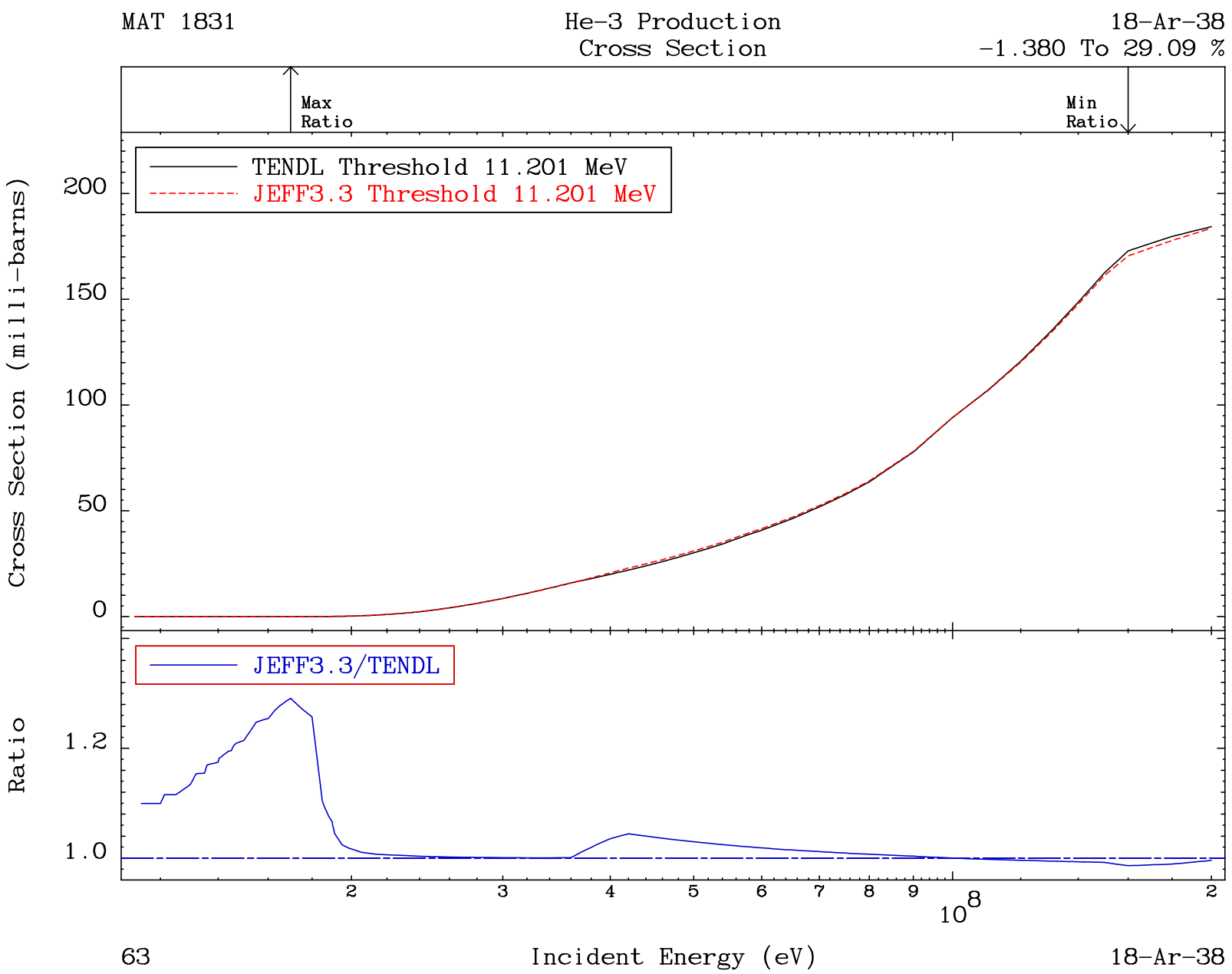

MAT 1831
(n,p) t
Cross Section
18-Ar-38
0.000 To 92.94 %
Min
Ratio
TENDL Threshold 20.568 MeV
JEFF3.3 Threshold 20.568 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
20
40
60
80
100
120
140
160
180
200
58
Incident Energy (MeV)
18-Ar-38

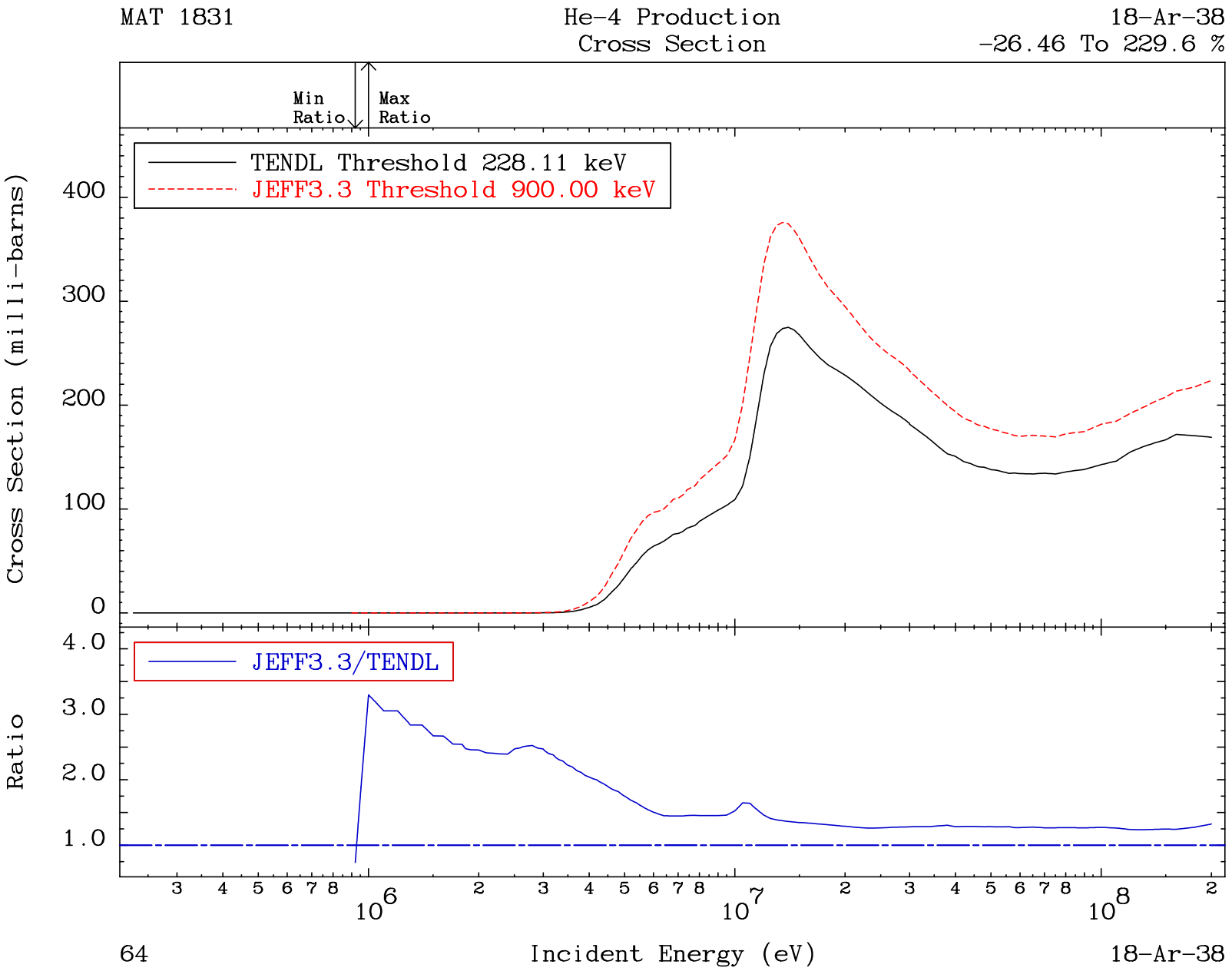

MAT 1831
(n,d) α
Cross Section
18-Ar-38
0.000 To 1951. %
Max Ratio
Min Ratio
TENDL Threshold 16.288 MeV
JEFF3.3 Threshold 16.288 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
4
10^1
6
4
10^0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
18-Ar-38

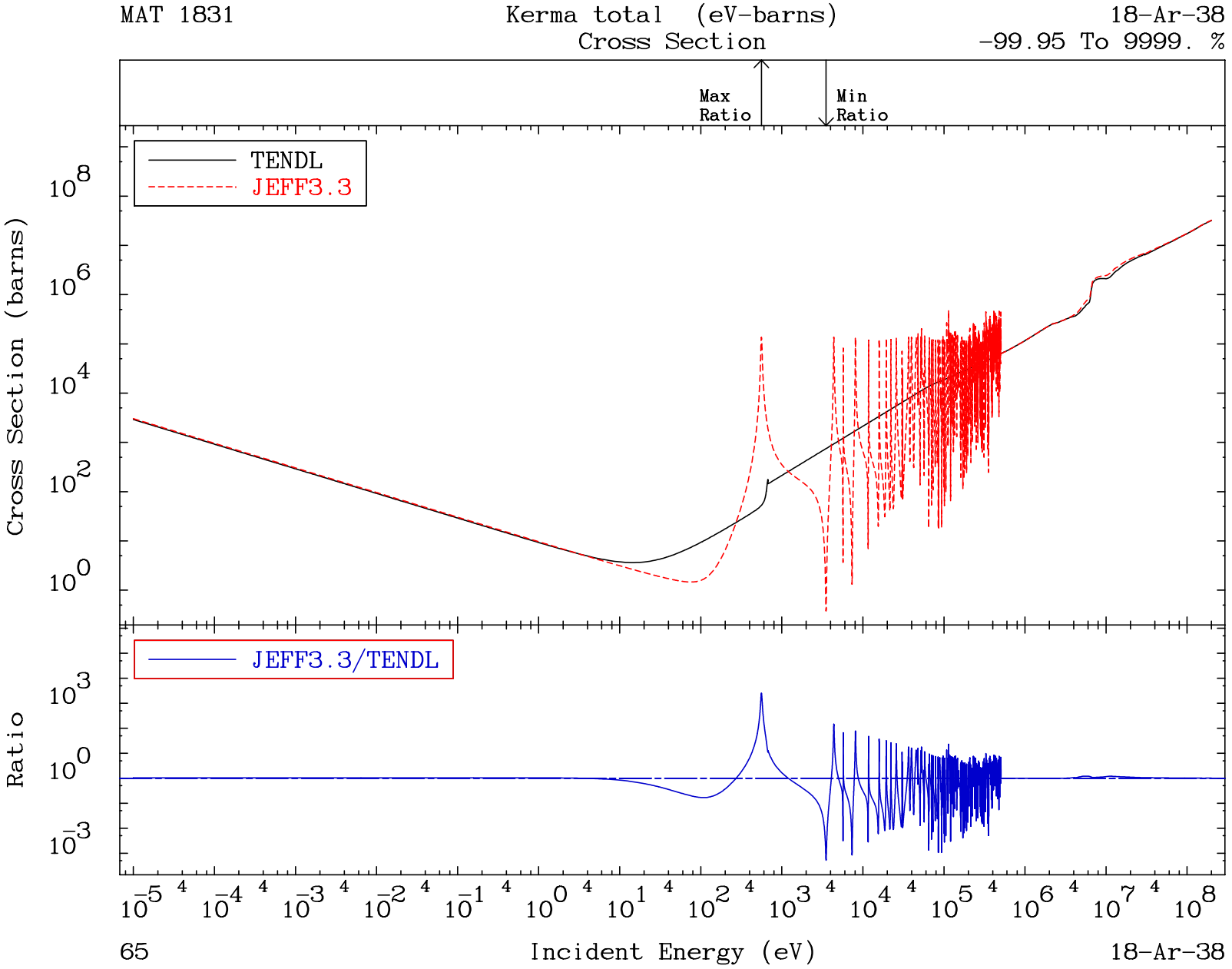

MAT 1831
Hydrogen Production
Cross Section
18-Ar-38
-3.622 To 7.746 %
Min Ratio
Max Ratio
TENDL Threshold 4.2442 MeV
JEFF3.3 Threshold 4.2442 MeV
Cross Section (barns)
0.0
0.2
0.4
0.6
0.8
JEFF3.3/TENDL
Ratio
1.00
1.05
1.10
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
60
Incident Energy (eV)
18-Ar-38

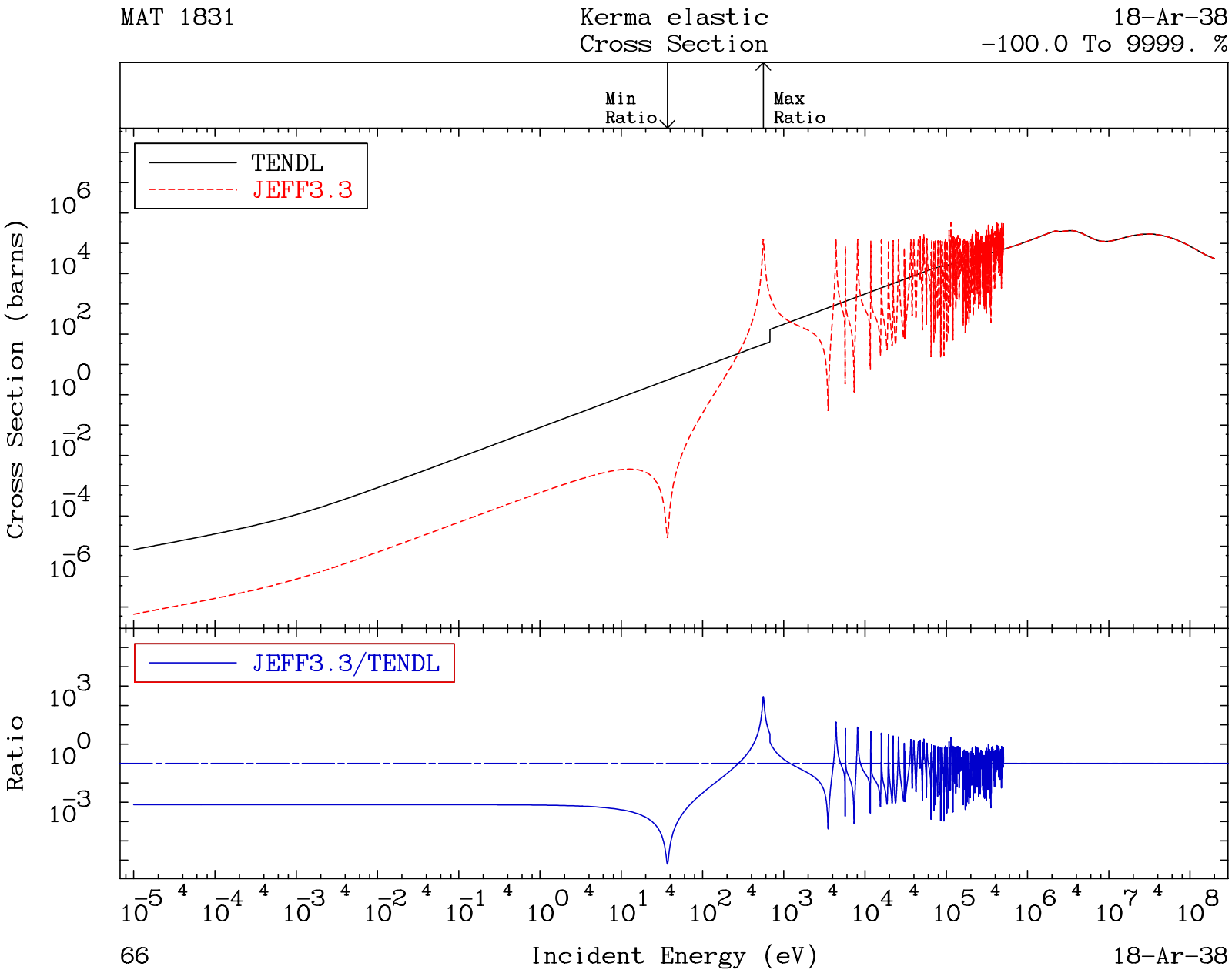

MAT 1831
Deuterium Production
Cross Section
18-Ar-38
-12.18 To 7.469 %
Min Ratio
Max Ratio
TENDL Threshold 8.2307 MeV
JEFF3.3 Threshold 8.2307 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
61
Incident Energy (eV)
18-Ar-38

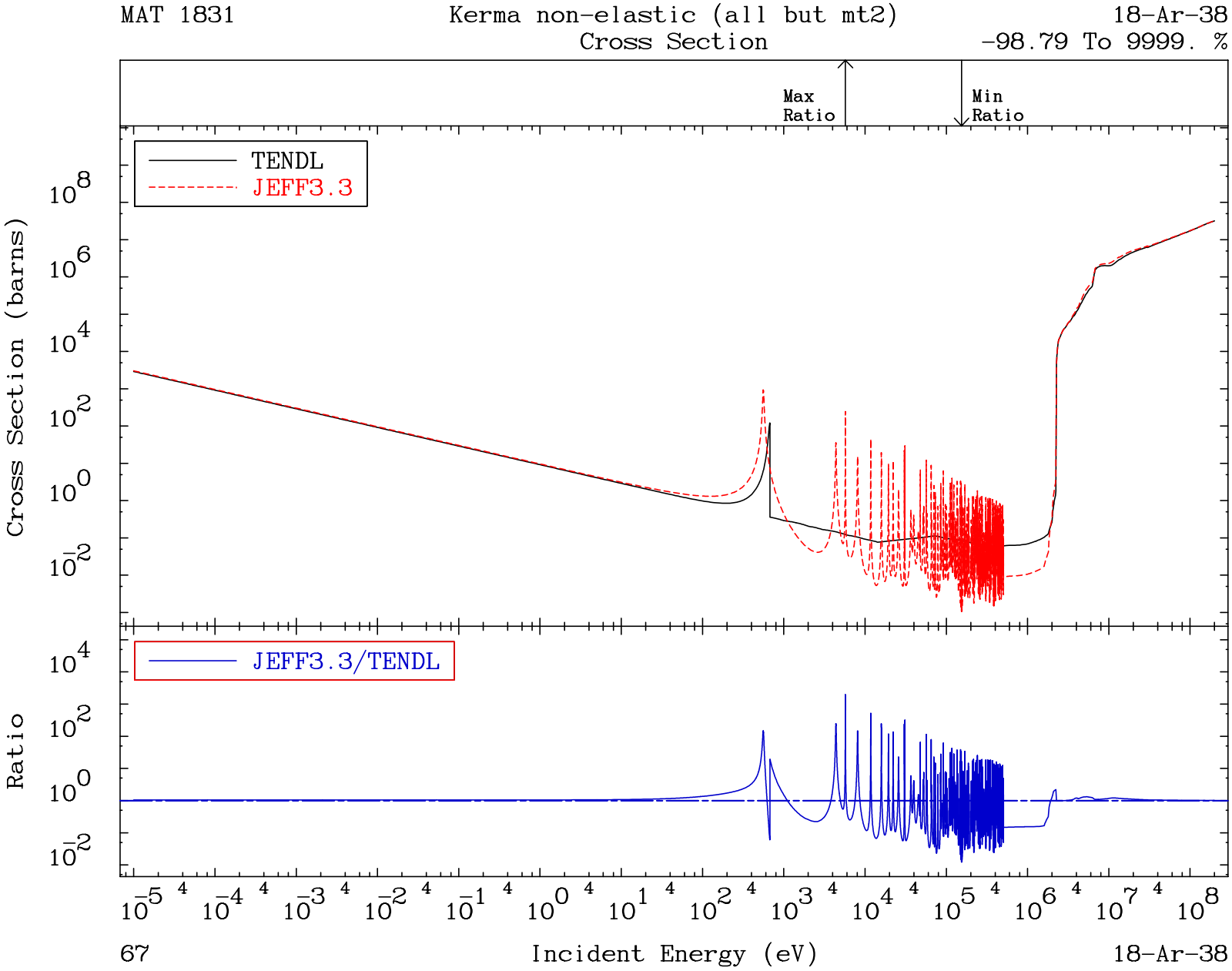

MAT 1831
Tritium Production
Cross Section
18-Ar-38
-0.436 To 23.49 %
Min Ratio
Max Ratio
TENDL Threshold 12.392 MeV
JEFF3.3 Threshold 12.392 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
18-Ar-38

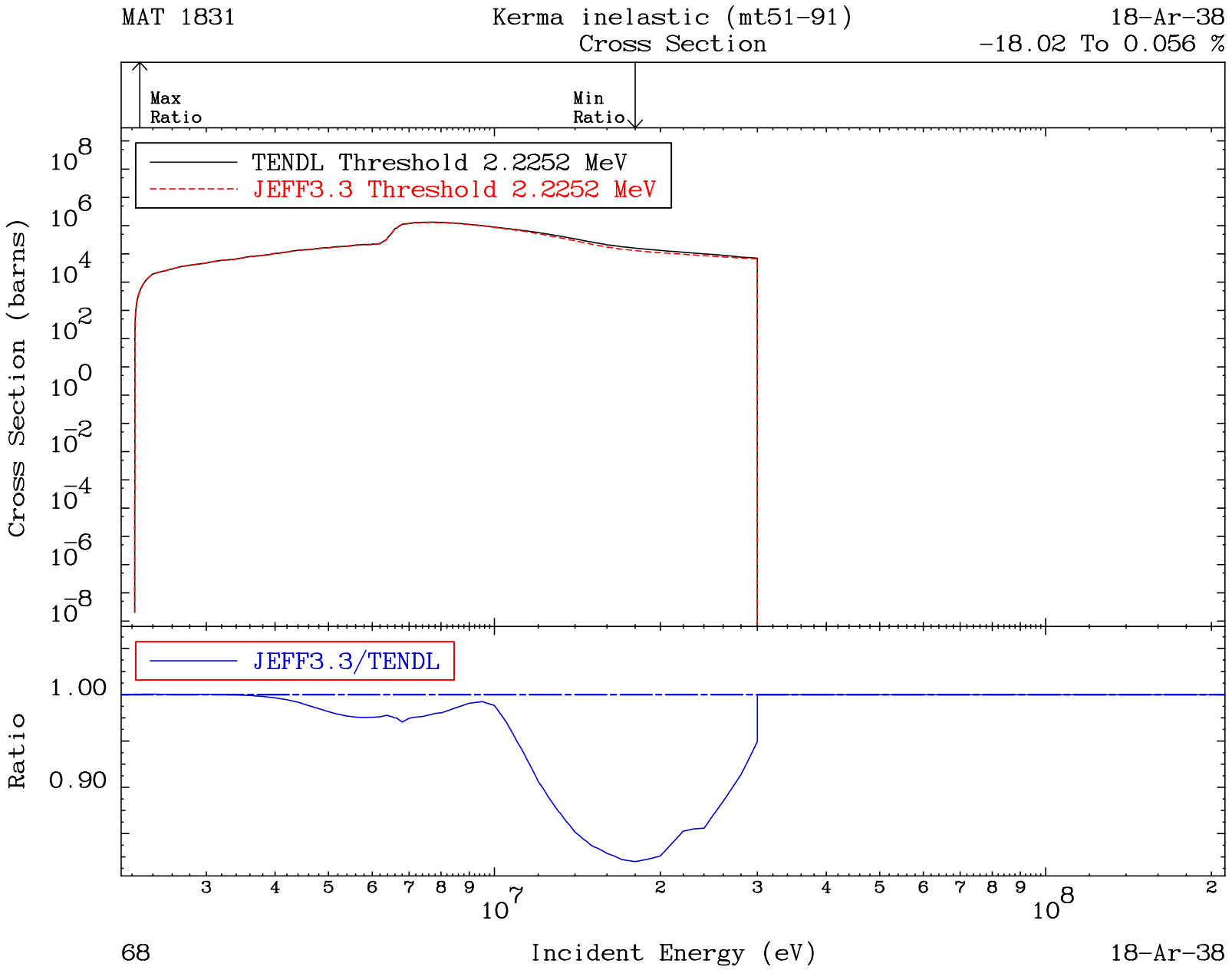

MAT 1831
He-3 Production
Cross Section
18-Ar-38
-1.380 To 29.09 %
Max Ratio
Min Ratio
TENDL Threshold 11.201 MeV
JEFF3.3 Threshold 11.201 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
18-Ar-38

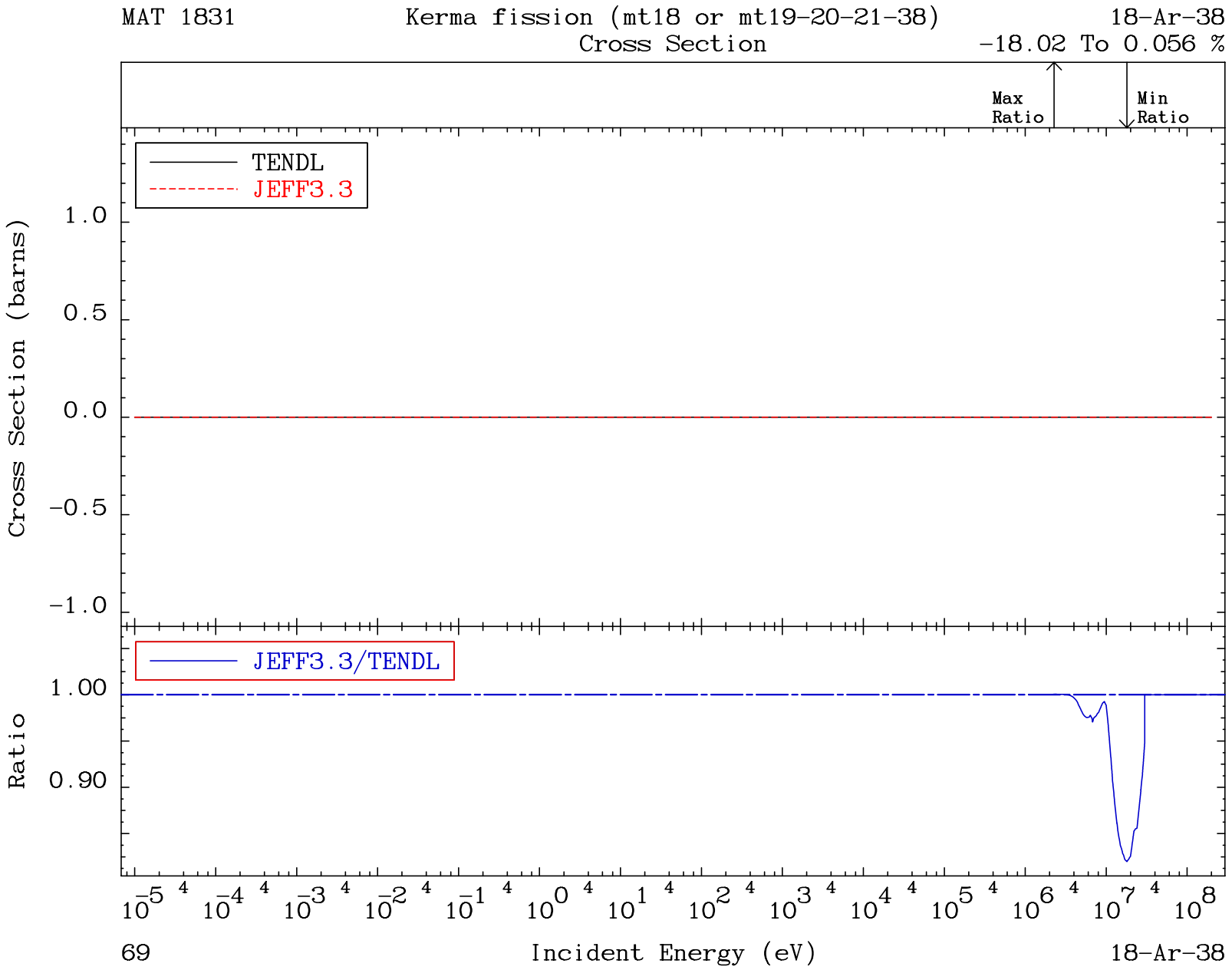

MAT 1831
He-4 Production
Cross Section
18-Ar-38
-26.46 To 229.6 %
Min Ratio
Max Ratio
TENDL Threshold 228.11 keV
JEFF3.3 Threshold 900.00 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
64
Incident Energy (eV)
18-Ar-38

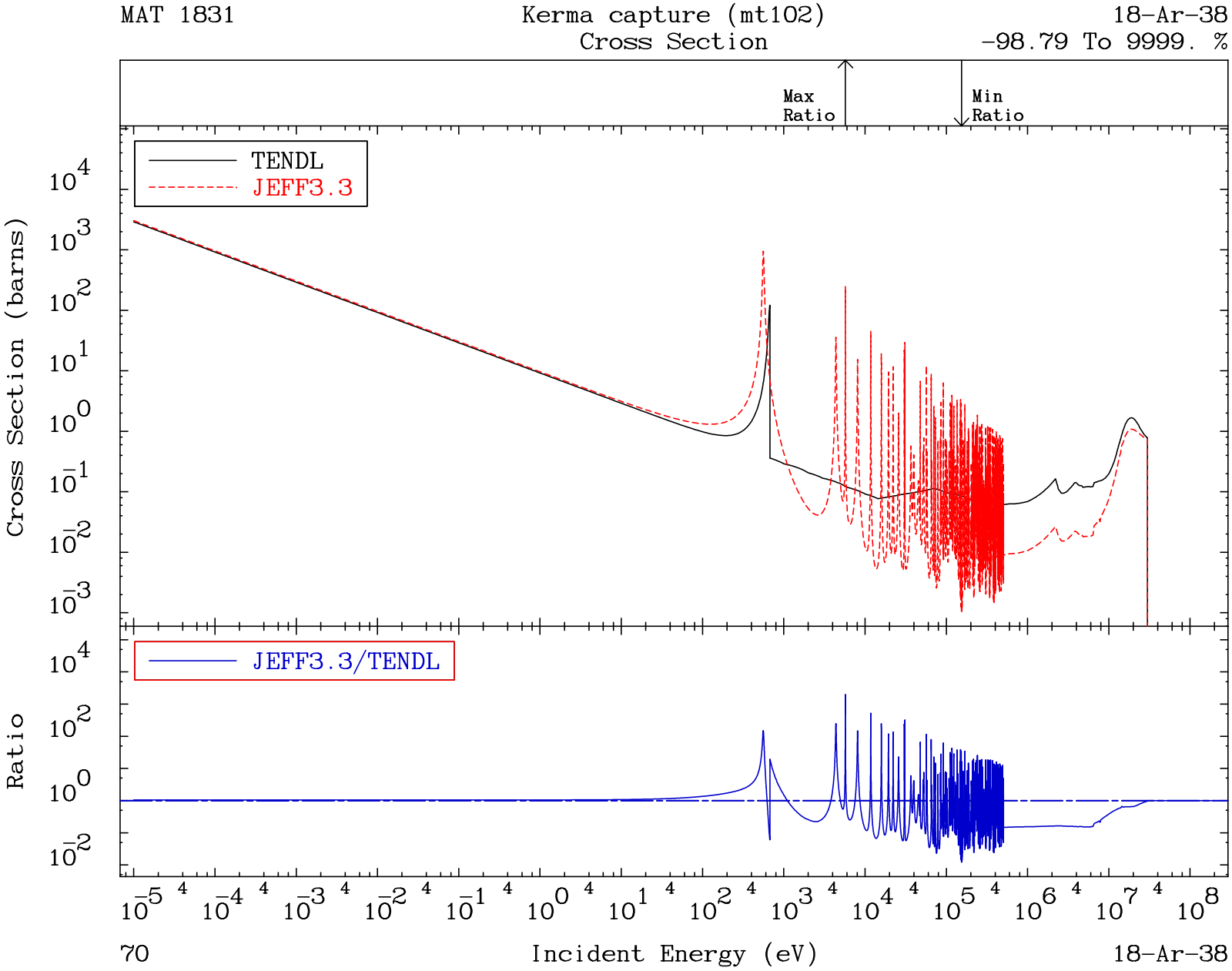

MAT 1831
Kerma total (eV-barns)
Cross Section
18-Ar-38
-99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
18-Ar-38

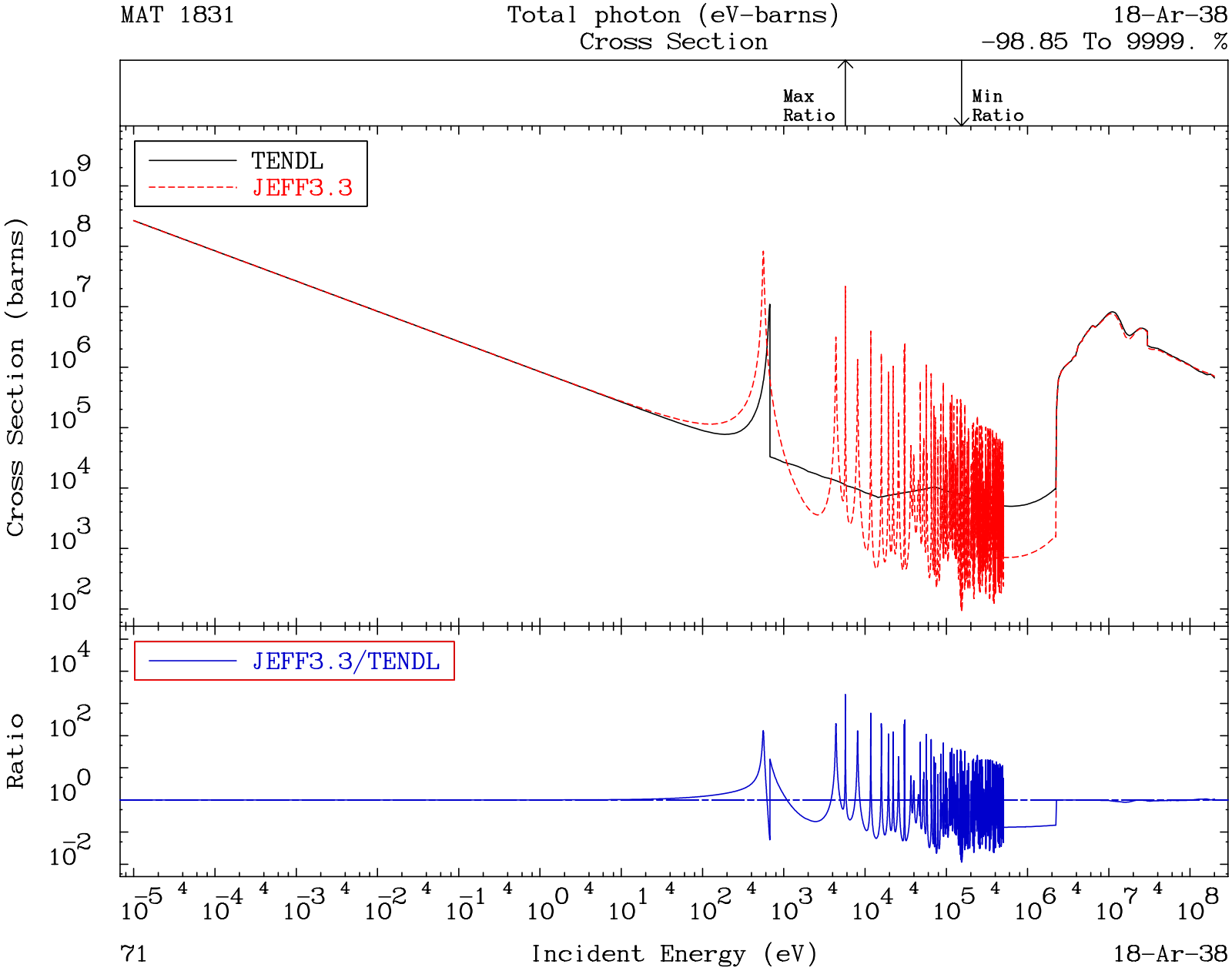

MAT 1831
Kerma elastic
Cross Section
18-Ar-38
-100.0 To 9999. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
18-Ar-38

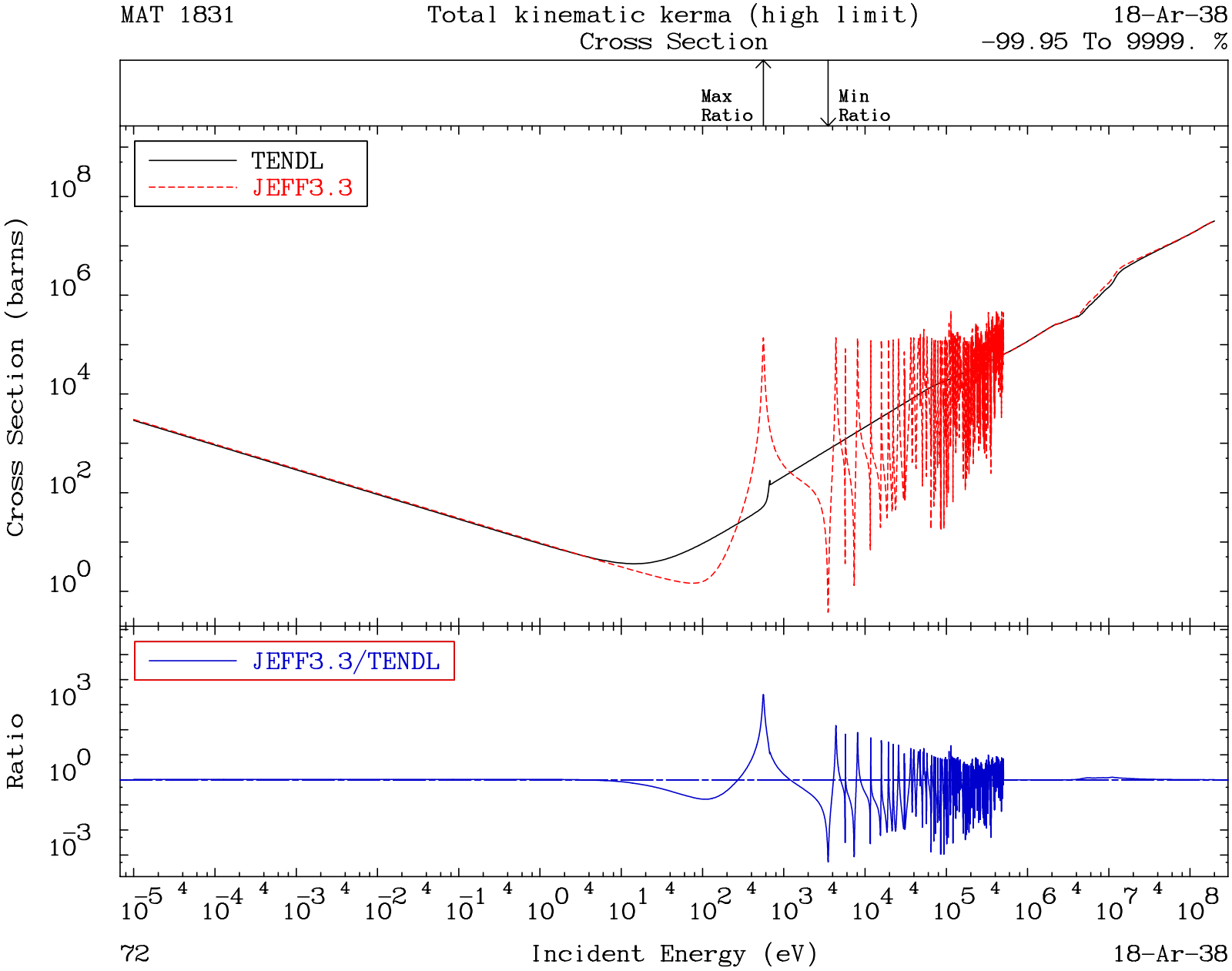

MAT 1831
Kerma non-elastic (all but mt2)
Cross Section
18-Ar-38
-98.79 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
18-Ar-38

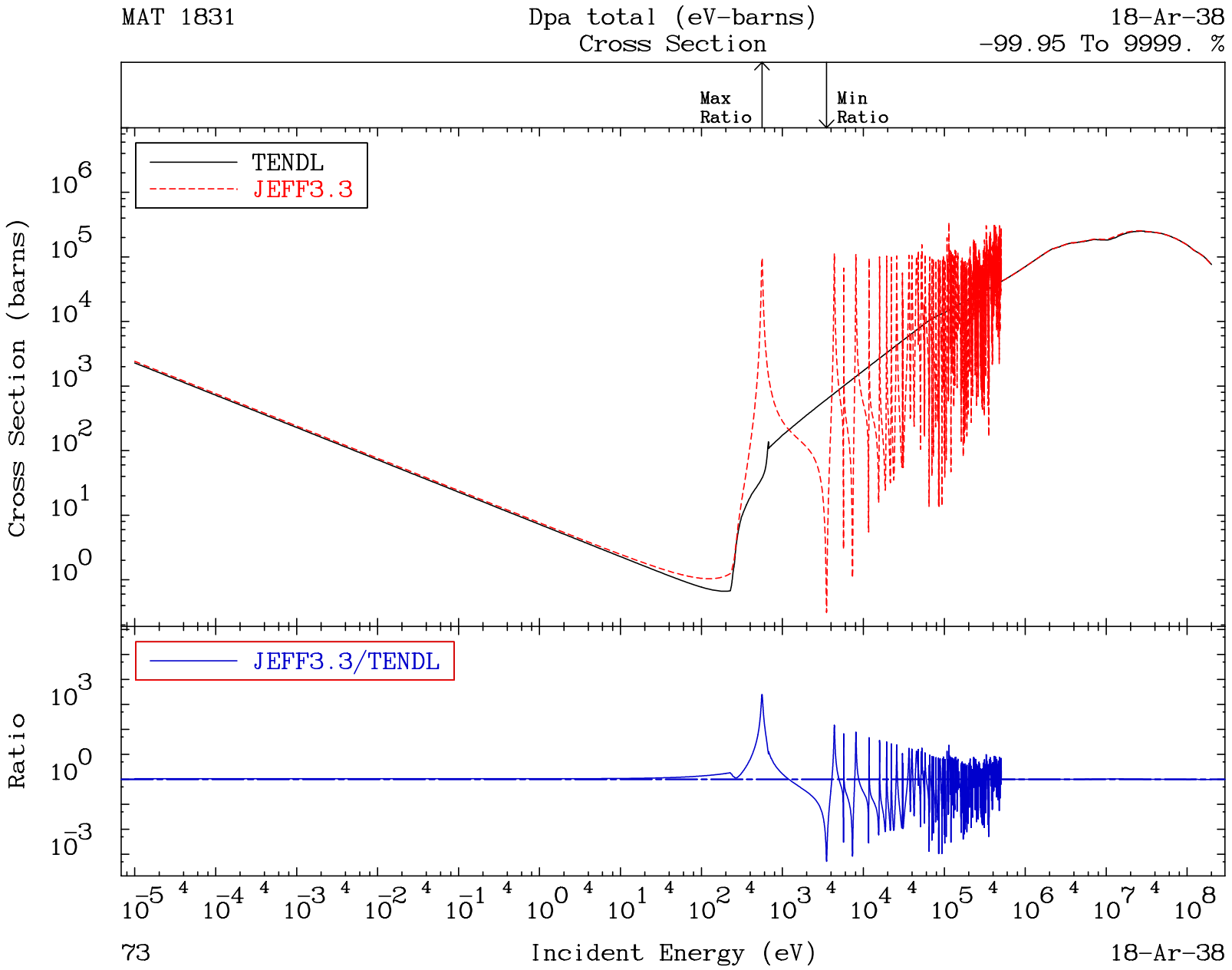

MAT 1831
Kerma inelastic (mt51-91)
Cross Section
18-Ar-38
-18.02 To 0.056 %
Max Ratio
Min Ratio
TENDL Threshold 2.2252 MeV
JEFF3.3 Threshold 2.2252 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
1.00
0.90
Incident Energy (eV)
68
18-Ar-38

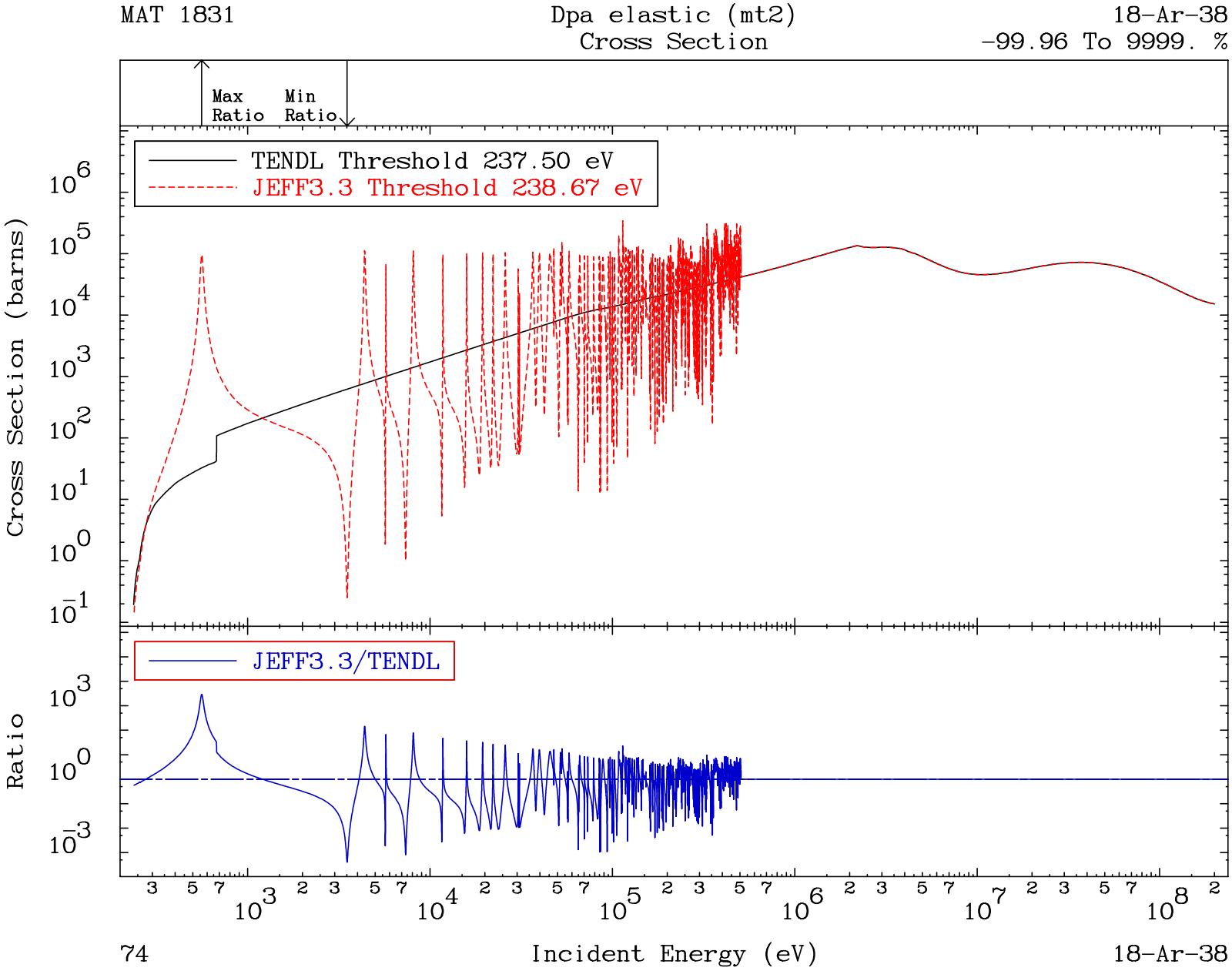

MAT 1831
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
18-Ar-38
-18.02 To 0.056 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.00
0.90
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
69
Incident Energy (eV)
18-Ar-38

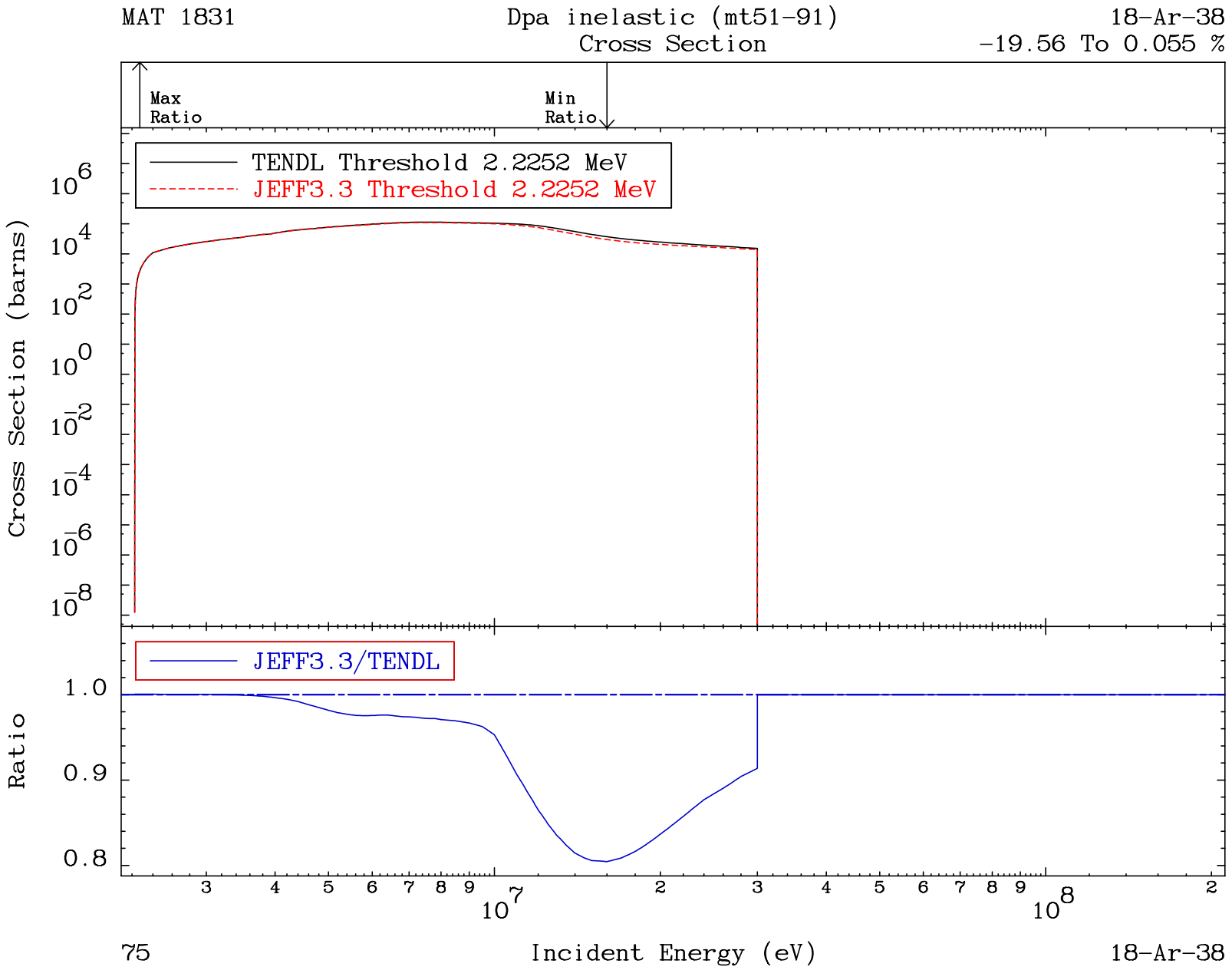

MAT 1831
Kerma capture (mt102)
Cross Section
18-Ar-38
-98.79 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
18-Ar-38

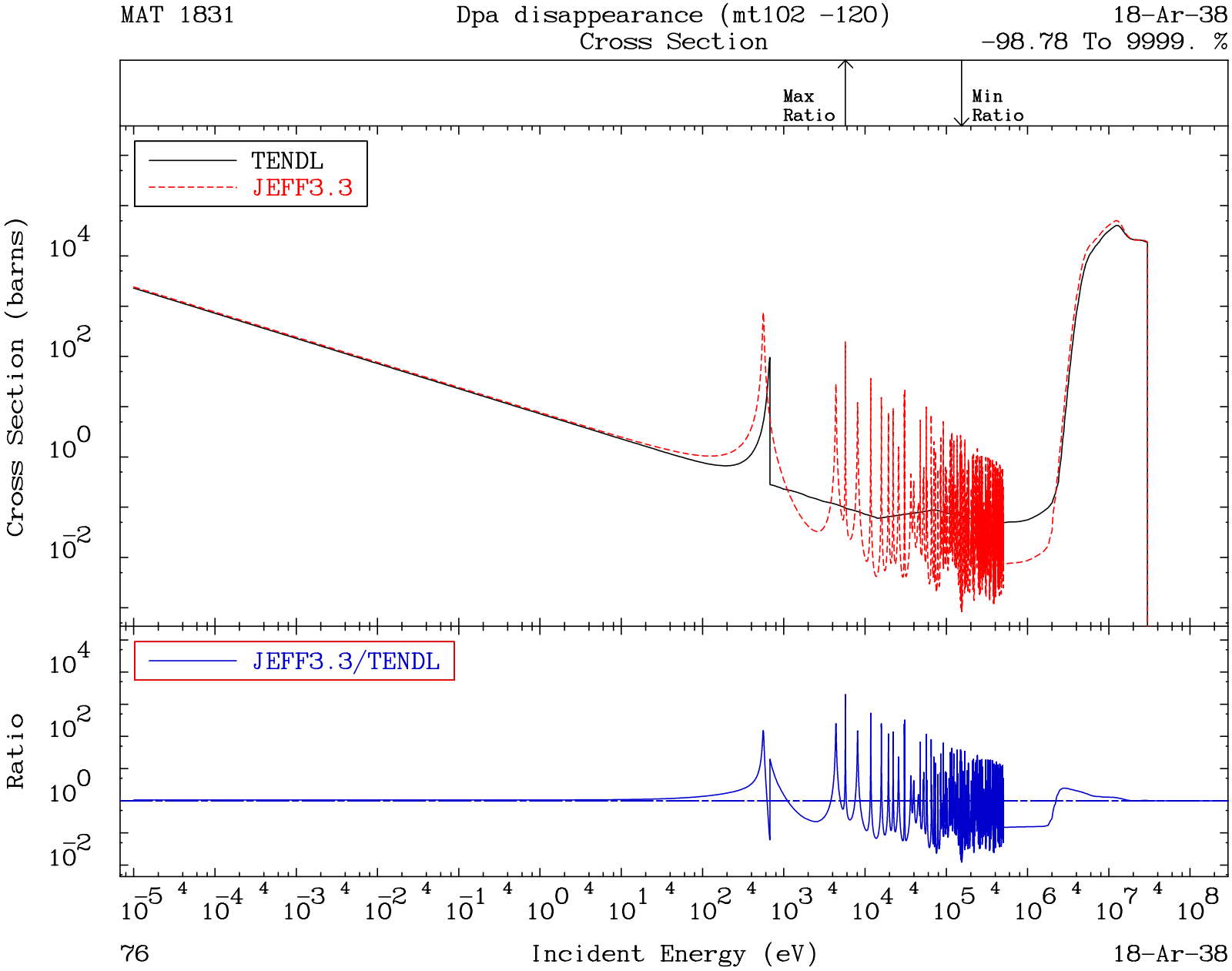

MAT 1831
Total photon (eV-barns)
Cross Section
18-Ar-38
-98.85 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
18-Ar-38

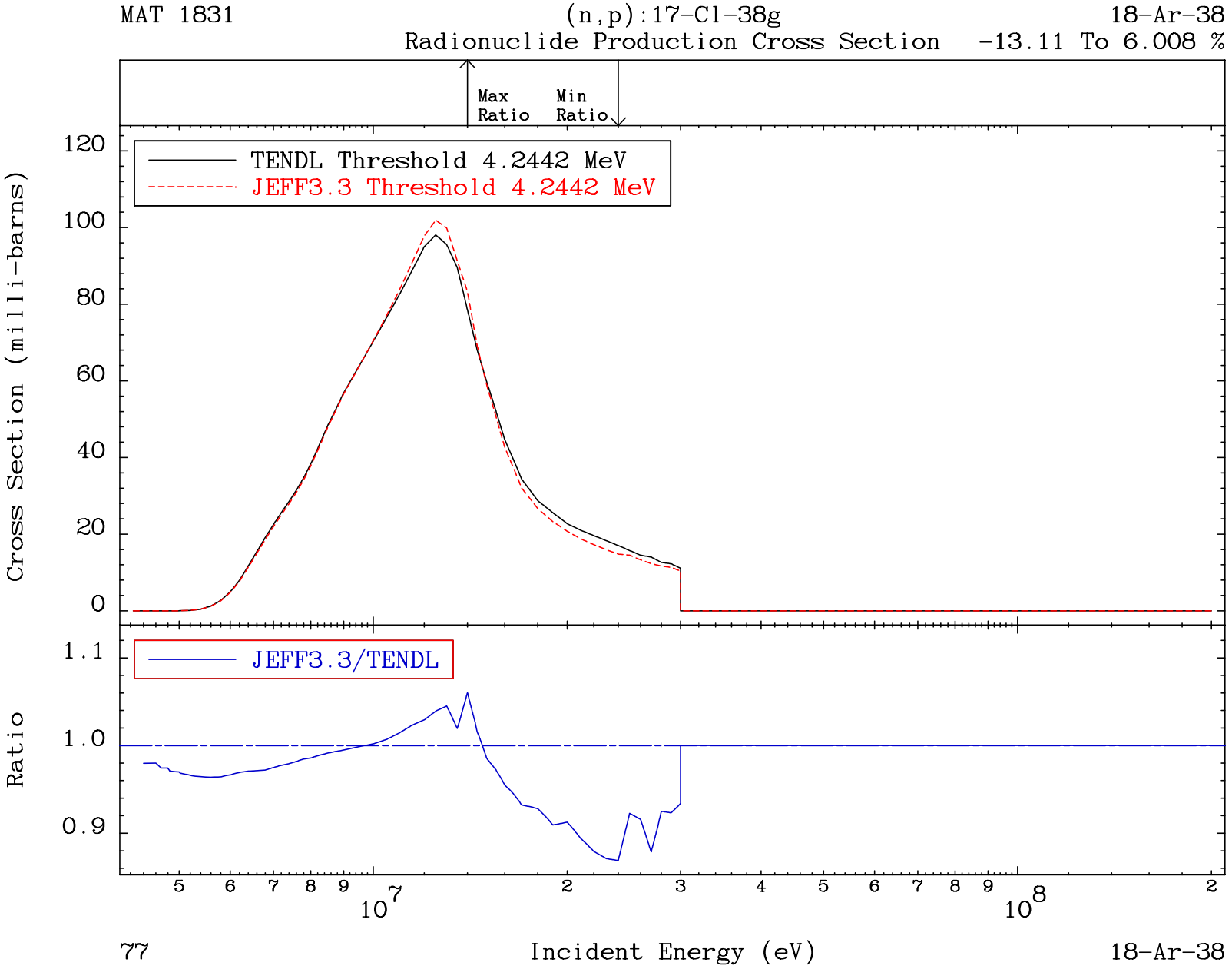

MAT 1831
Total kinematic kerma (high limit)
Cross Section
18-Ar-38
-99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
18-Ar-38

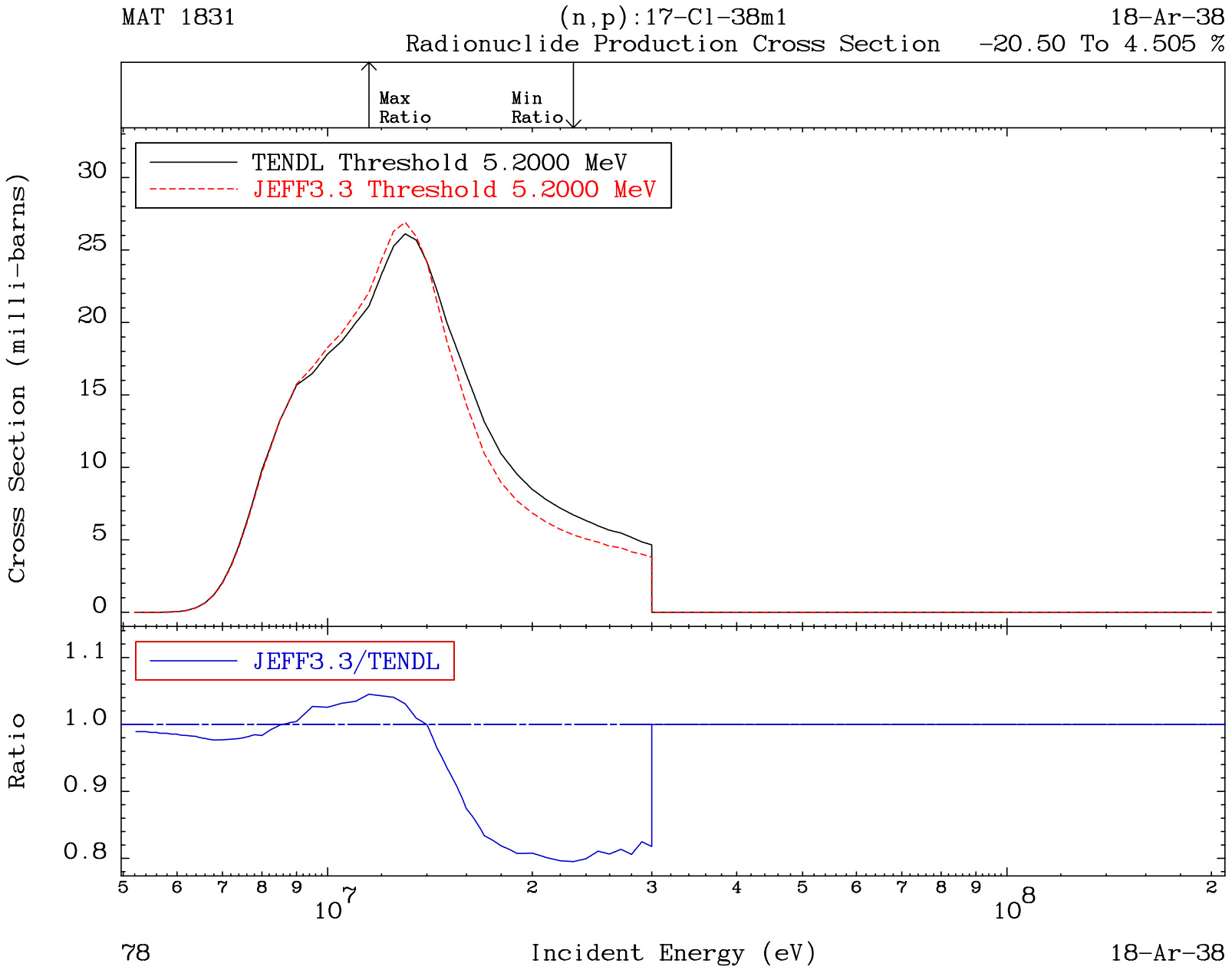

MAT 1831
Dpa total (eV-barns)
Cross Section
18-Ar-38
-99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
18-Ar-38


MAT 1831
Dpa elastic (mt2)
Cross Section
18-Ar-38
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 237.50 eV
JEFF3.3 Threshold 238.67 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
18-Ar-38


MAT 1831
Dpa inelastic (mt51-91)
Cross Section
18-Ar-38
-19.56 To 0.055 %
Max Ratio
Min Ratio
TENDL Threshold 2.2252 MeV
JEFF3.3 Threshold 2.2252 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
18-Ar-38


MAT 1831
Dpa disappearance (mt102 -120)
Cross Section
18-Ar-38
-98.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
18-Ar-38


MAT 1831
(n,p):17-Cl-38g
18-Ar-38
Radionuclide Production Cross Section
-13.11 To 6.008 %
Max Ratio
Min Ratio
TENDL Threshold 4.2442 MeV
JEFF3.3 Threshold 4.2442 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
77
Incident Energy (eV)
18-Ar-38


MAT 1831
(n,p):17-Cl-38m1
18-Ar-38
Radionuclide Production Cross Section
-20.50 To 4.505 %
Max Ratio
Min Ratio
TENDL Threshold 5.2000 MeV
JEFF3.3 Threshold 5.2000 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
78
Incident Energy (eV)
18-Ar-38