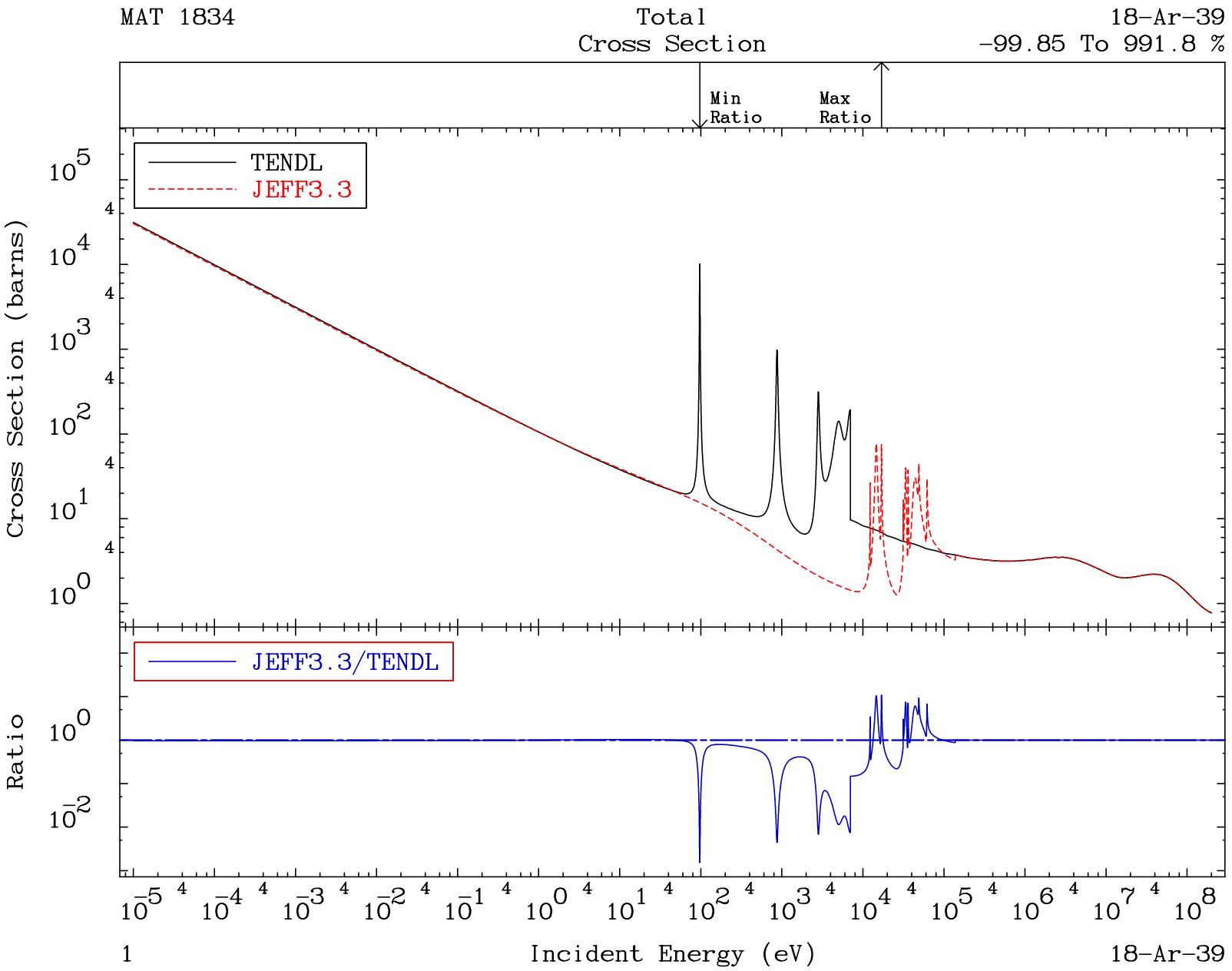
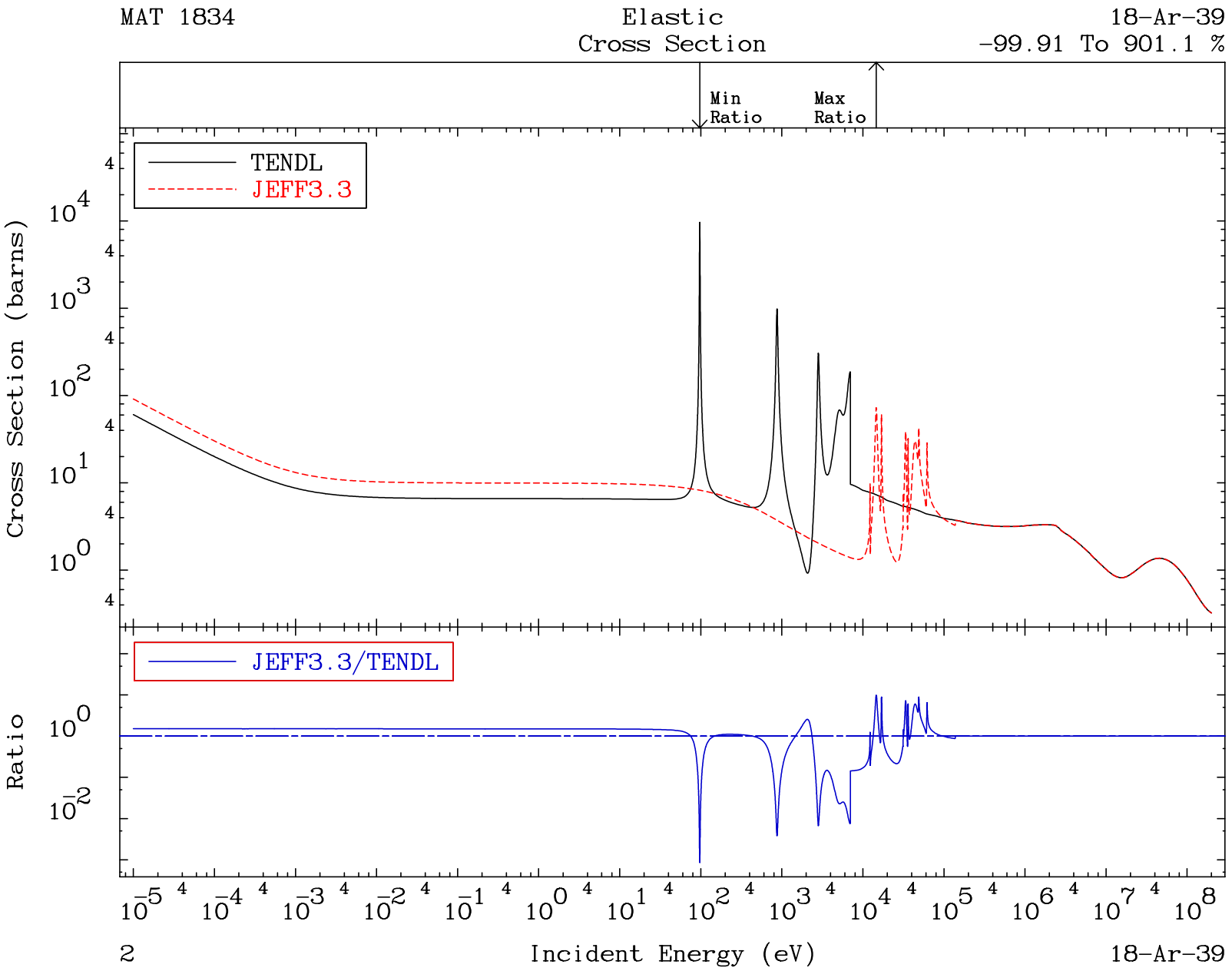
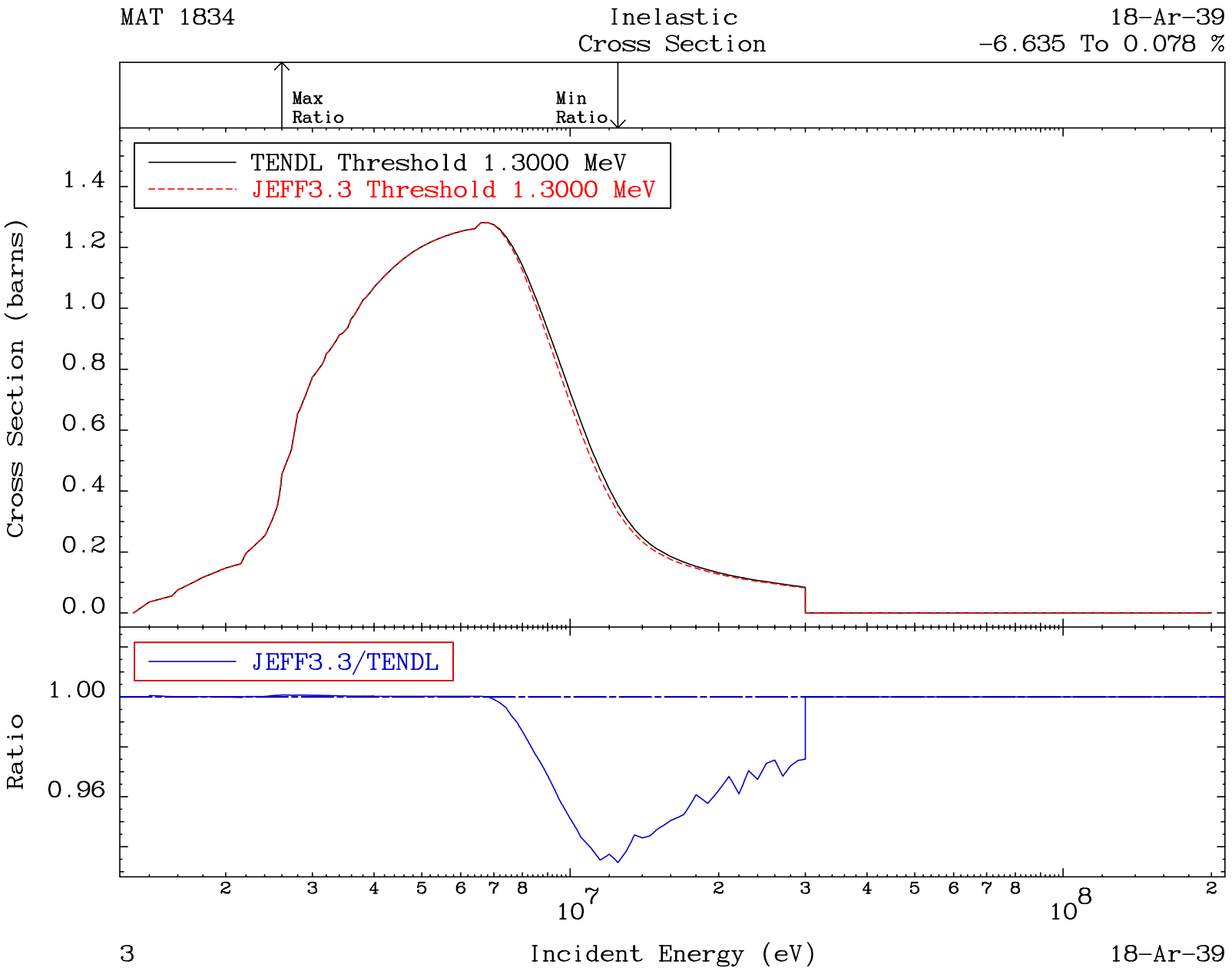
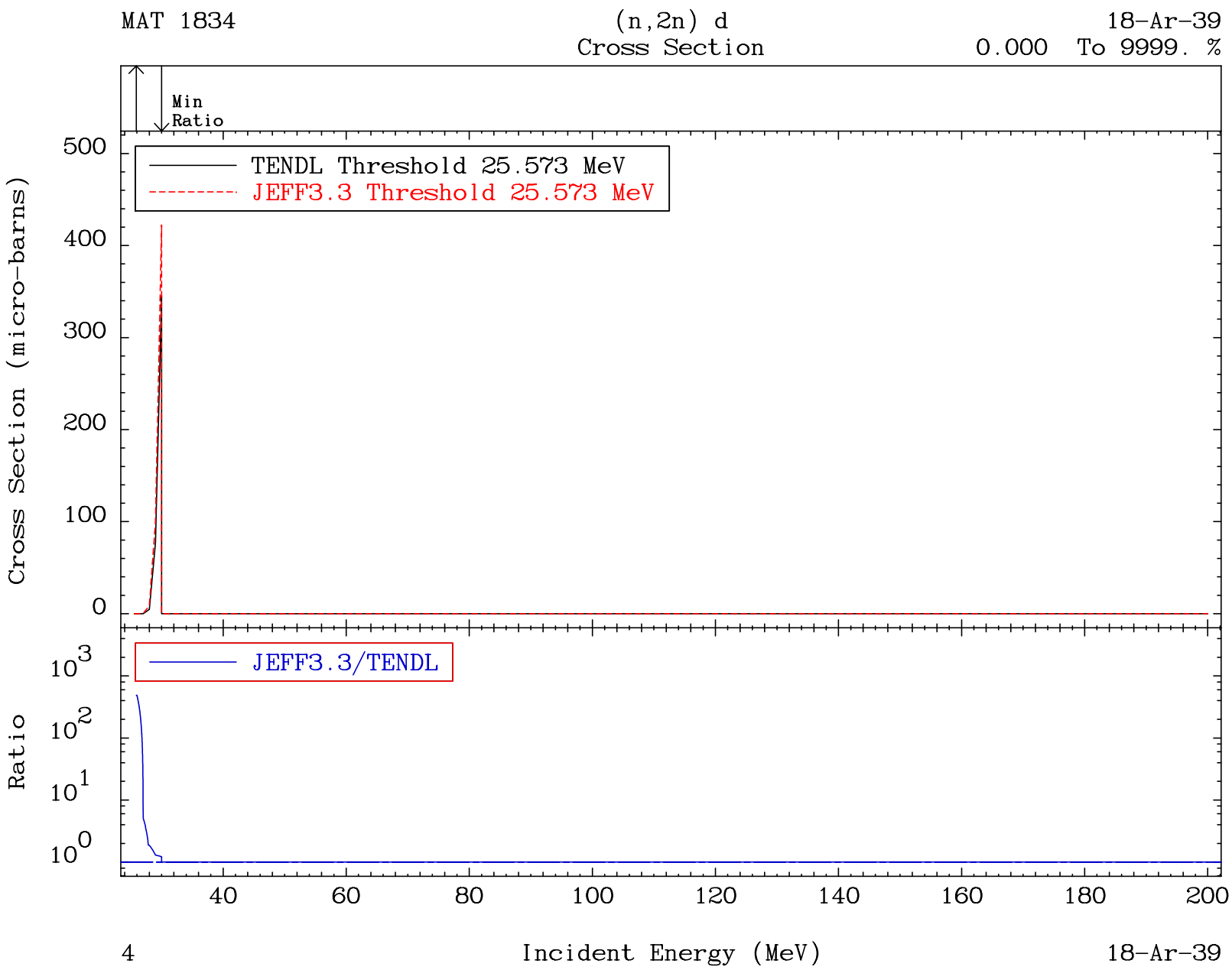
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

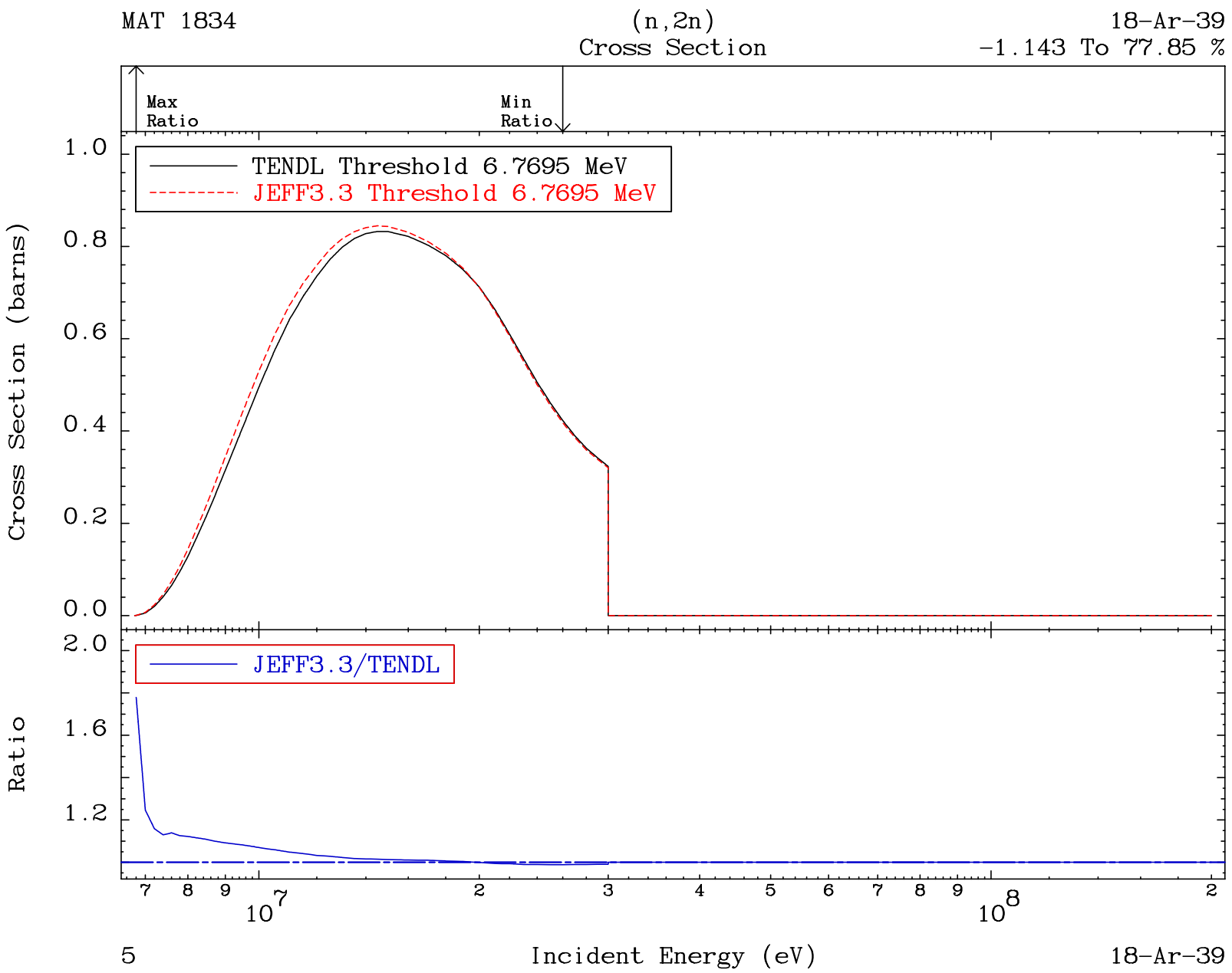
Press Mouse Button to Start

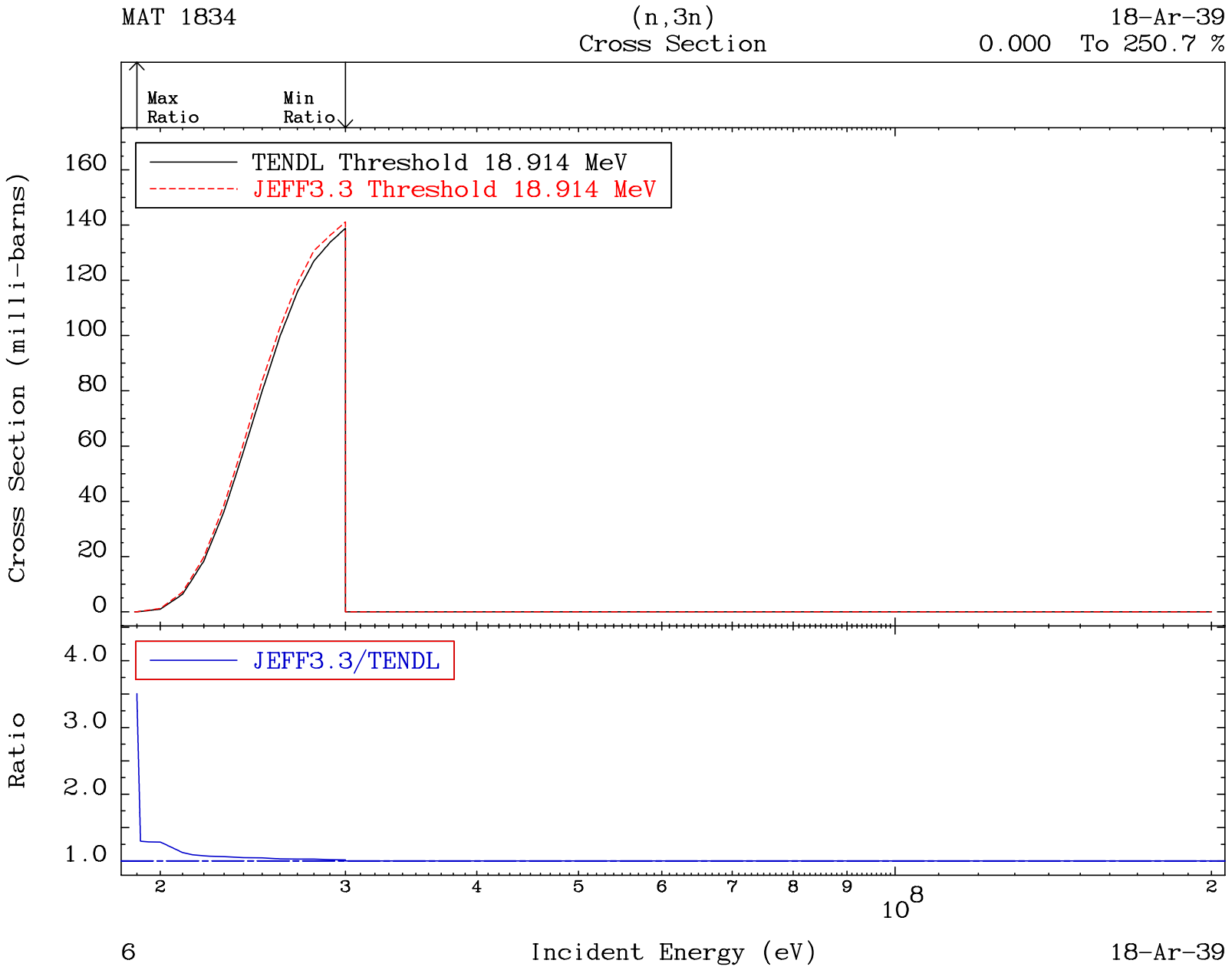

MAT 1834
Total
Cross Section
18-Ar-39
-99.85 To 991.8 %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
18-Ar-39

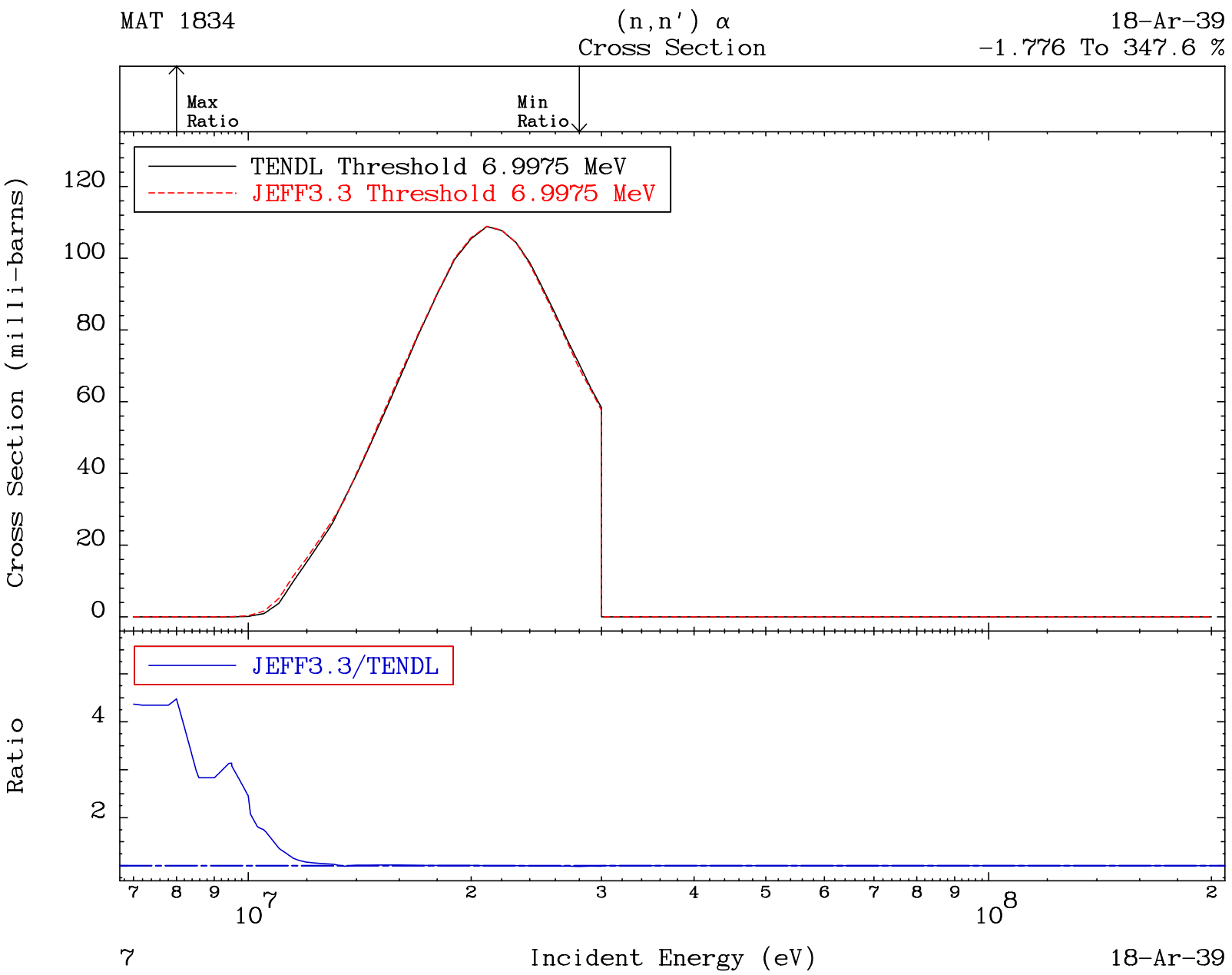

MAT 1834
Elastic
Cross Section
18-Ar-39
-99.91 To 901.1 %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
18-Ar-39

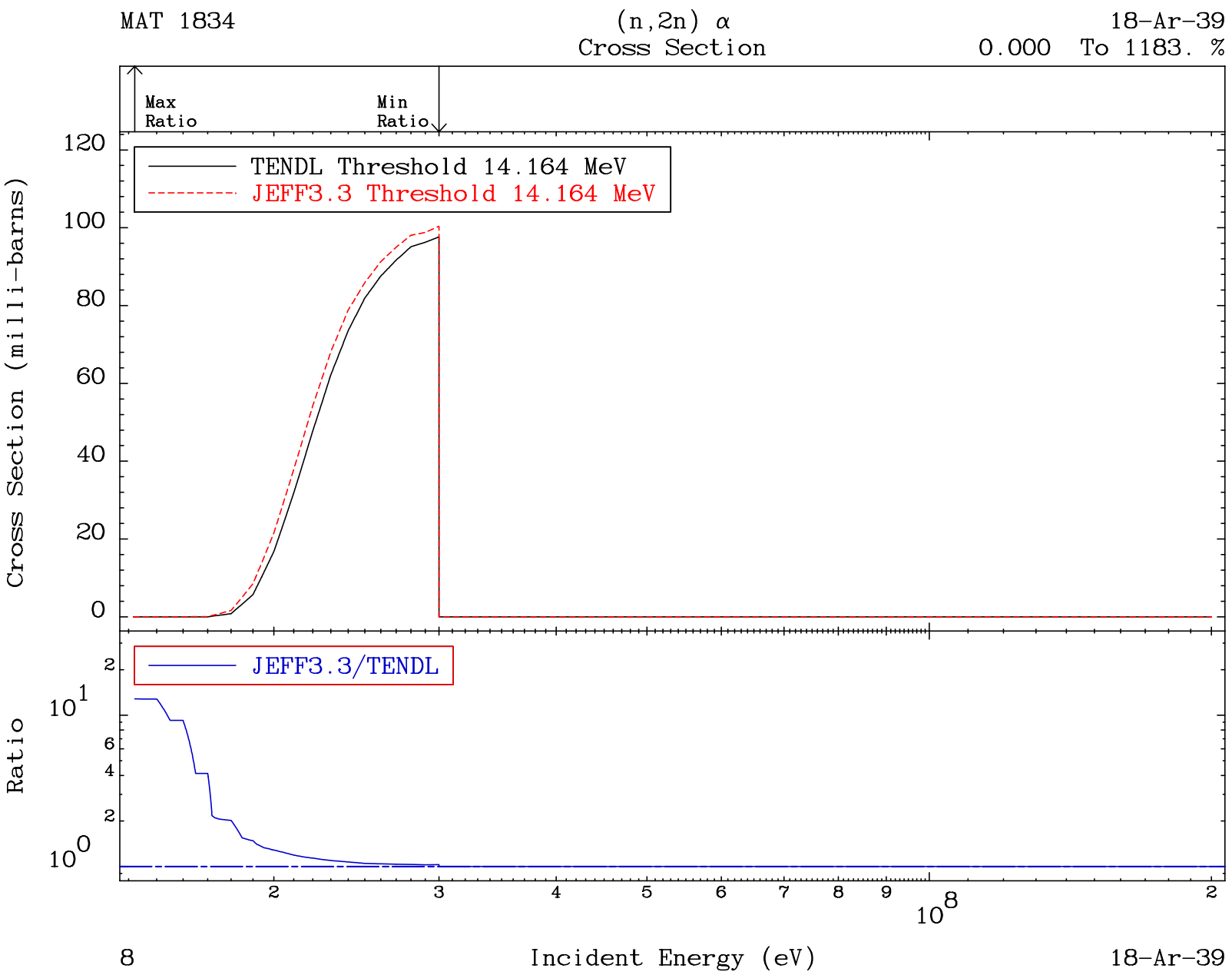

MAT 1834
Inelastic
Cross Section
18-Ar-39
-6.635 To 0.078 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3000 MeV
JEFF3.3 Threshold 1.3000 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
18-Ar-39

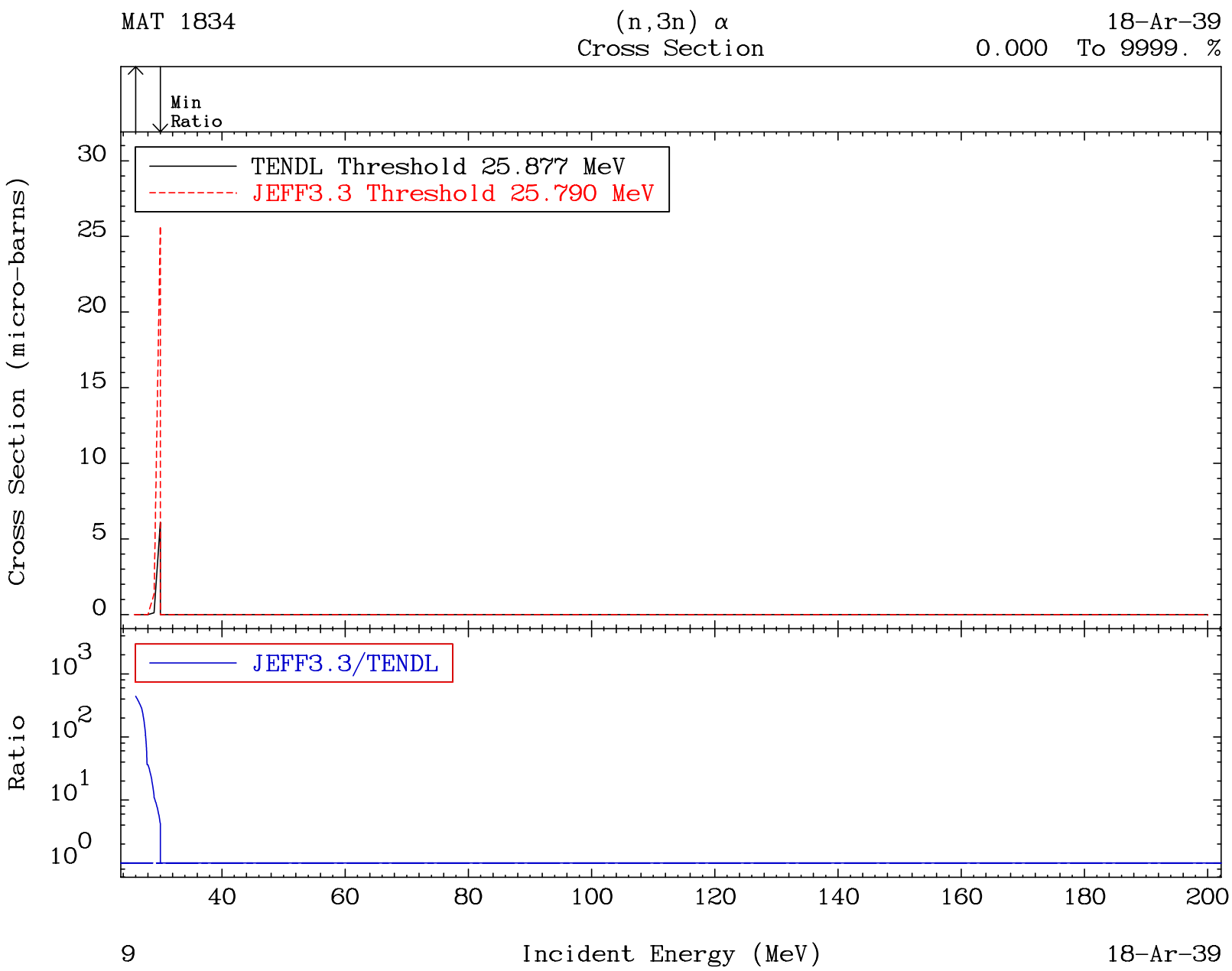

MAT 1834
(n,2n) d
Cross Section
18-Ar-39
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.573 MeV
JEFF3.3 Threshold 25.573 MeV
JEFF3.3/TENDL
Cross Section (micro-barns)
Ratio
Incident Energy (MeV)
4
18-Ar-39

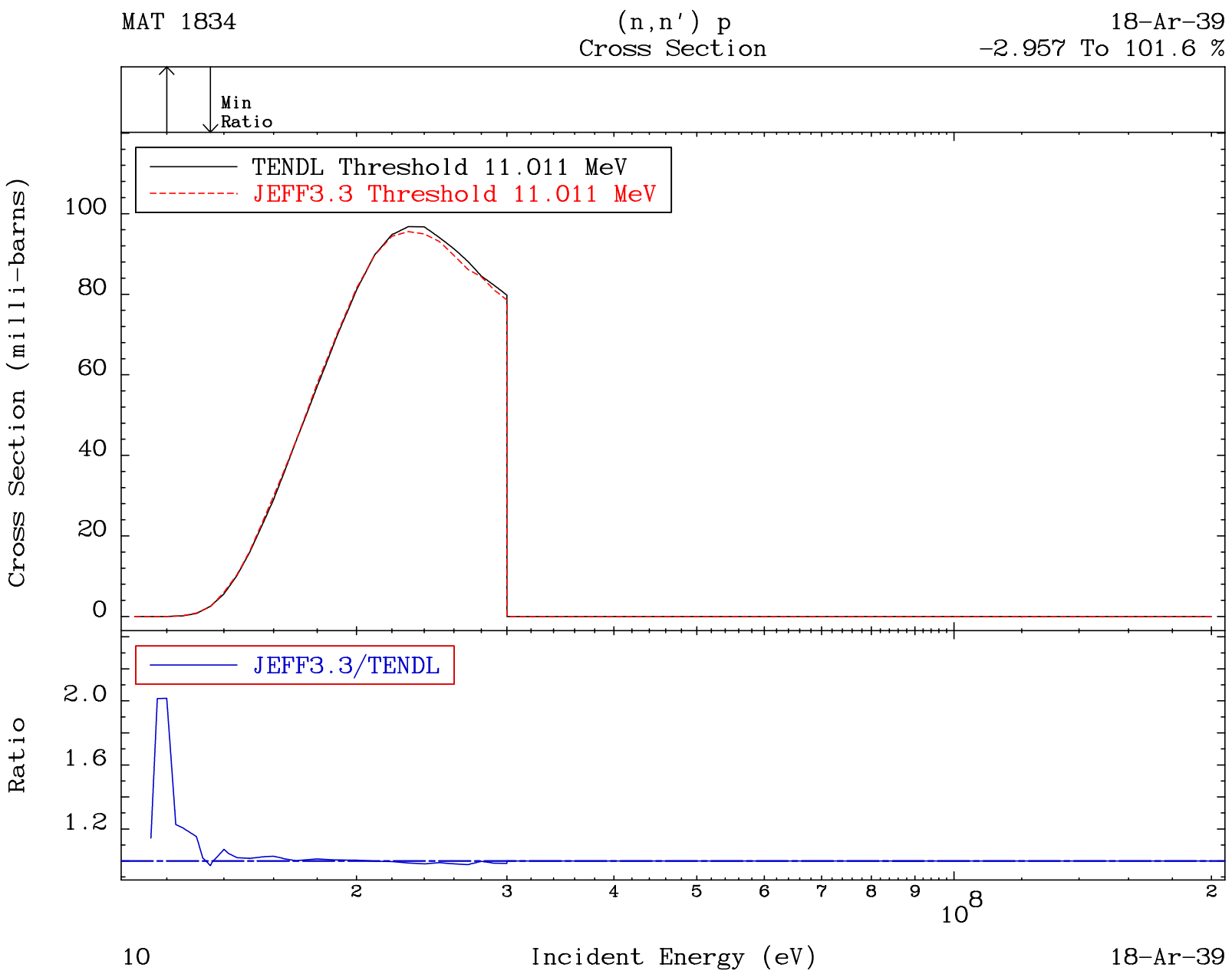

MAT 1834
(n,2n)
Cross Section
18-Ar-39
-1.143 To 77.85 %
Max Ratio
Min Ratio
TENDL Threshold 6.7695 MeV
JEFF3.3 Threshold 6.7695 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
18-Ar-39

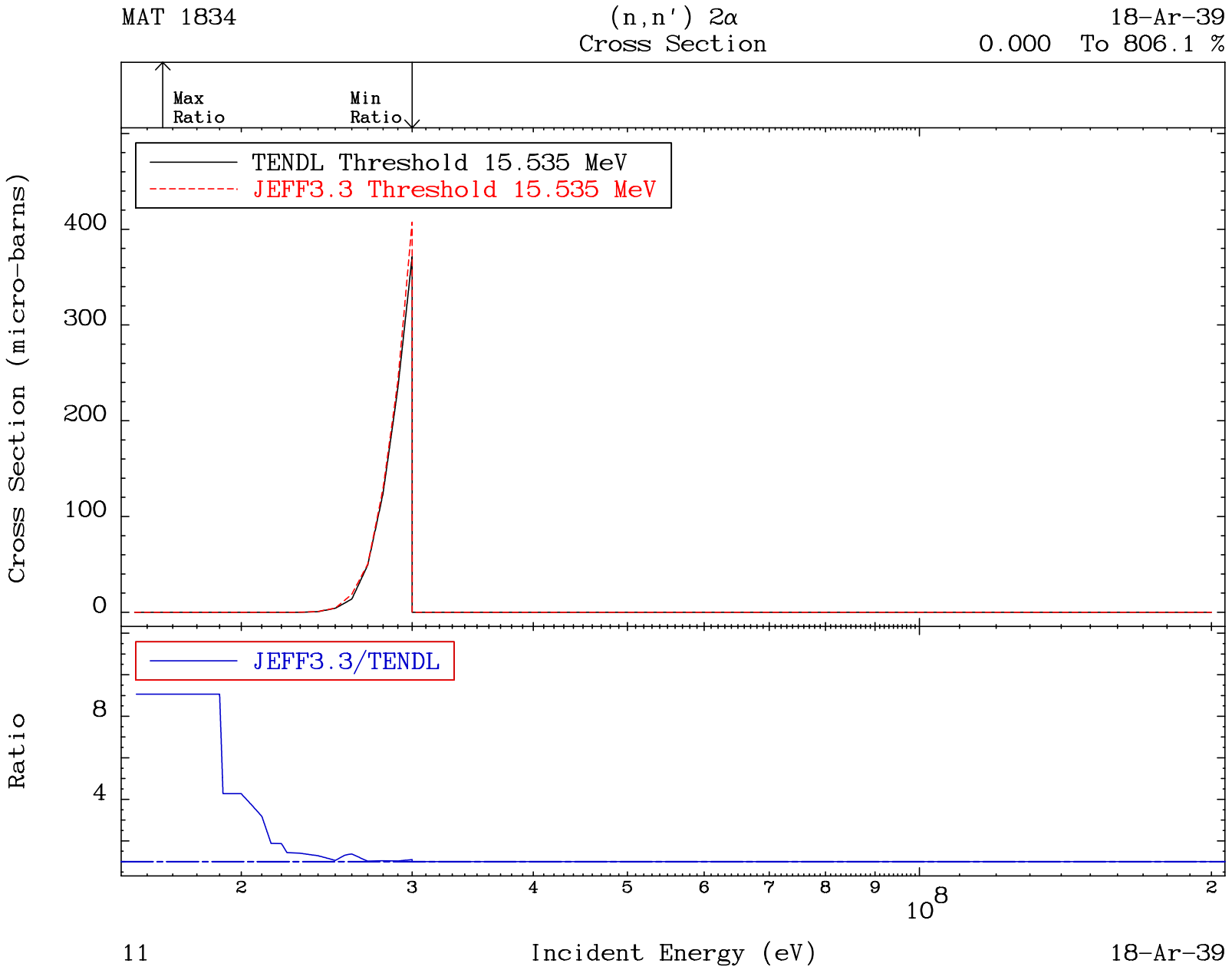

MAT 1834
(n,3n)
Cross Section
18-Ar-39
0.000 To 250.7 %
Max Ratio
Min Ratio
TENDL Threshold 18.914 MeV
JEFF3.3 Threshold 18.914 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
18-Ar-39

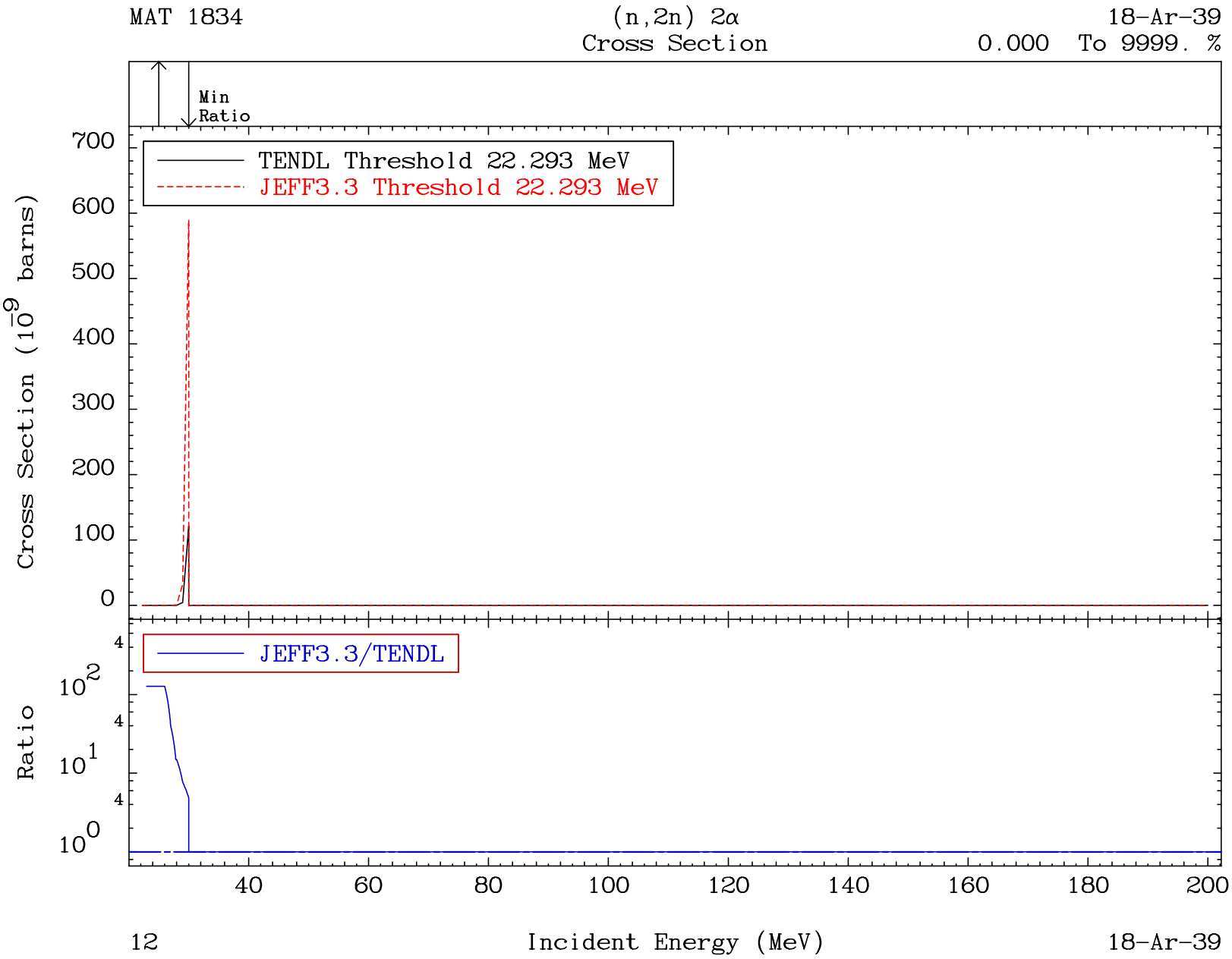

MAT 1834
(n,n') α
Cross Section
18-Ar-39
-1.776 To 347.6 %
Max Ratio
Min Ratio
TENDL Threshold 6.9975 MeV
JEFF3.3 Threshold 6.9975 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
4
2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
18-Ar-39

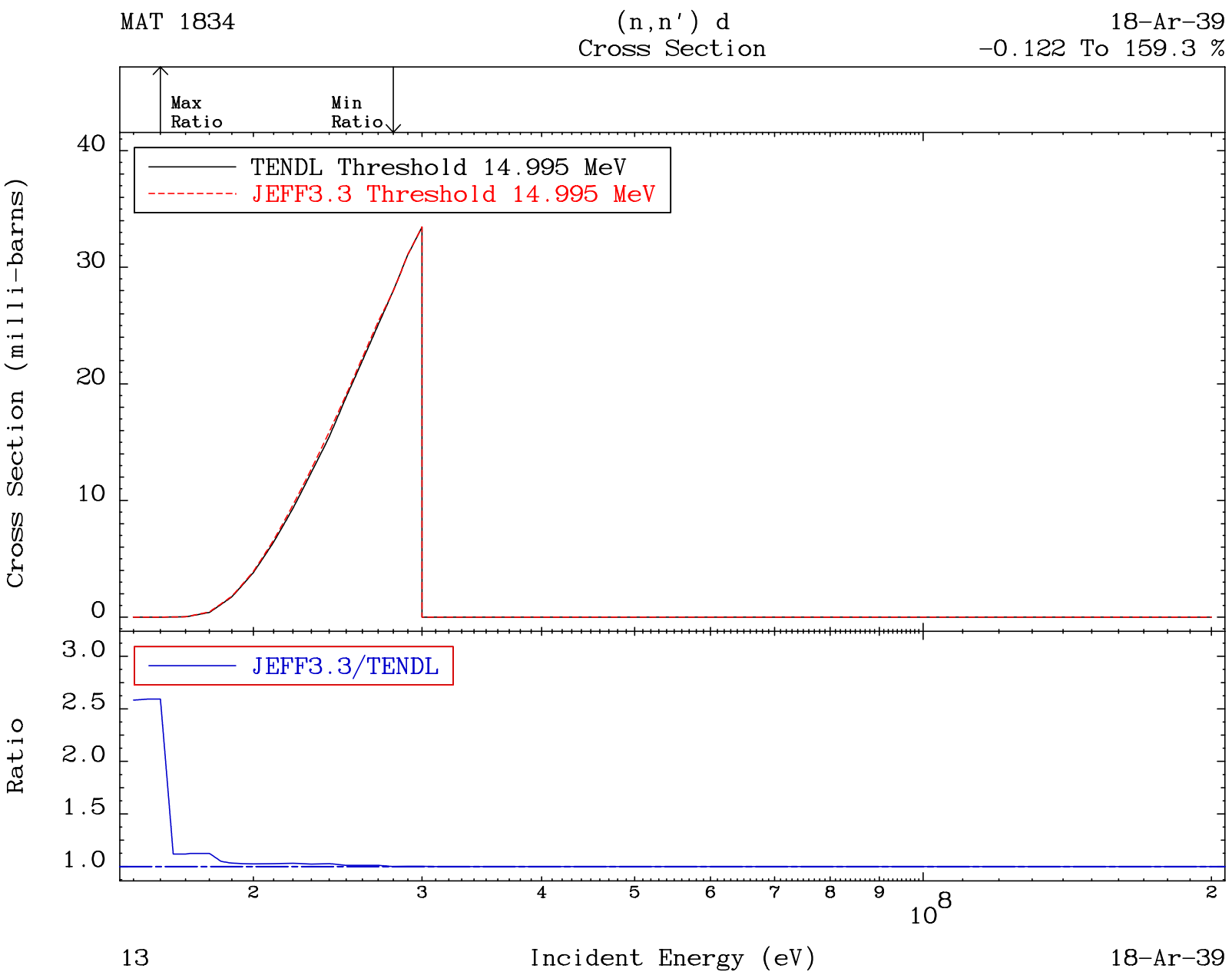

MAT 1834
(n,2n) α
Cross Section
18-Ar-39
0.000 To 1183. %
Max Ratio
Min Ratio
TENDL Threshold 14.164 MeV
JEFF3.3 Threshold 14.164 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
18-Ar-39

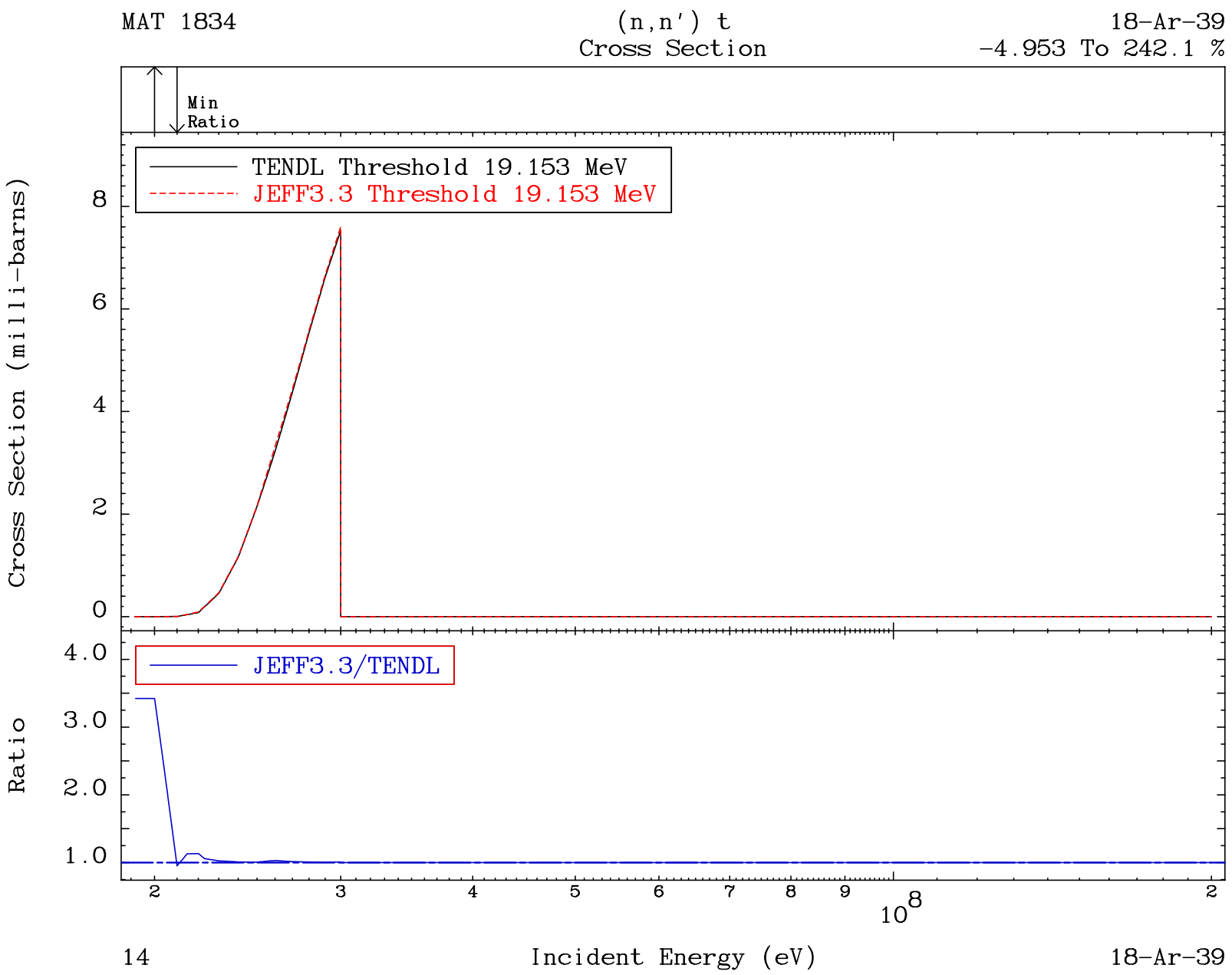

MAT 1834
(n,3n) α
Cross Section
18-Ar-39
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.877 MeV
JEFF3.3 Threshold 25.790 MeV
JEFF3.3/TENDL
Cross Section (micro-barns)
Ratio
Incident Energy (MeV)
9
18-Ar-39

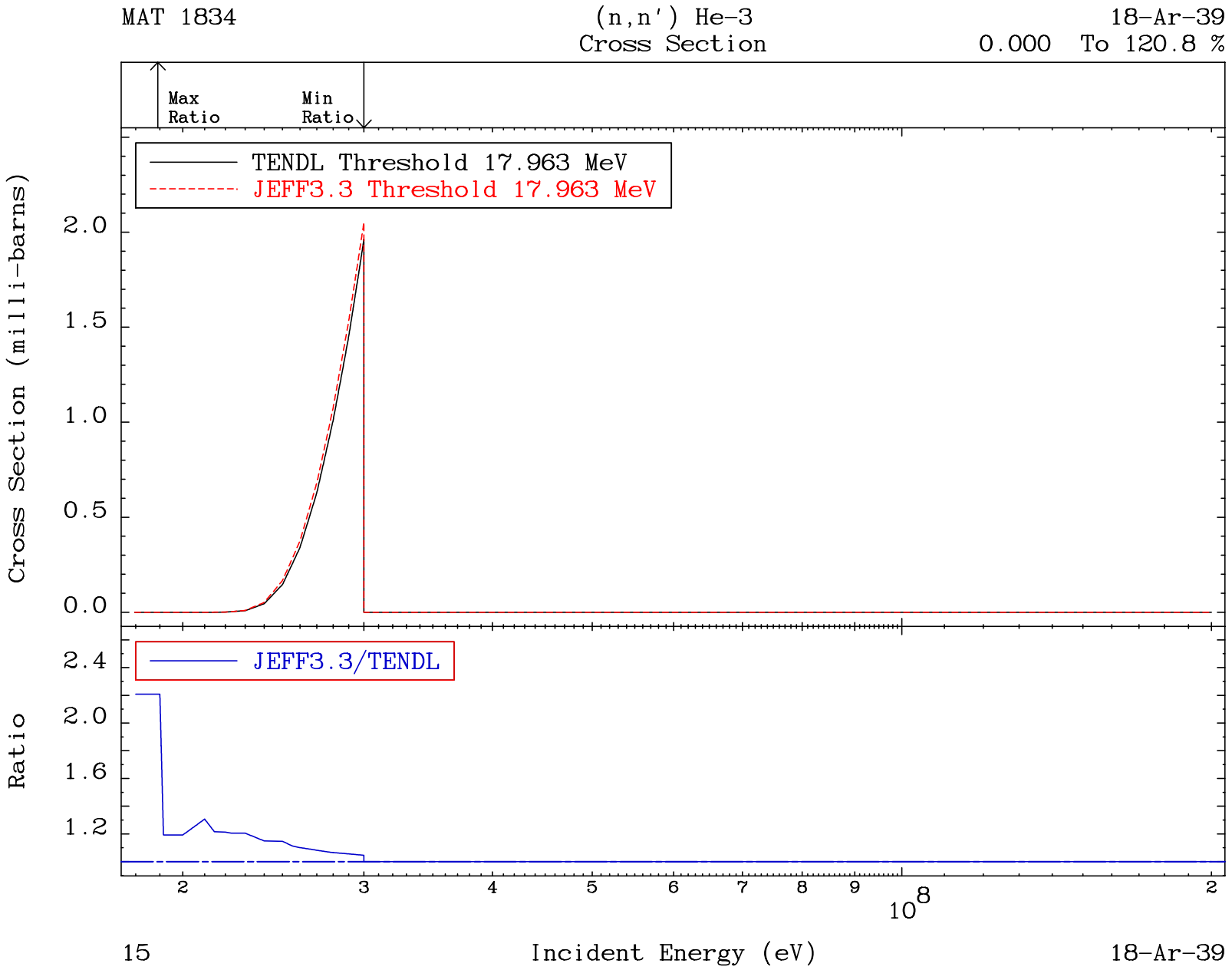

MAT 1834
(n,n') p
Cross Section
18-Ar-39
-2.957 To 101.6 %
Min
Ratio
TENDL Threshold 11.011 MeV
JEFF3.3 Threshold 11.011 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
18-Ar-39

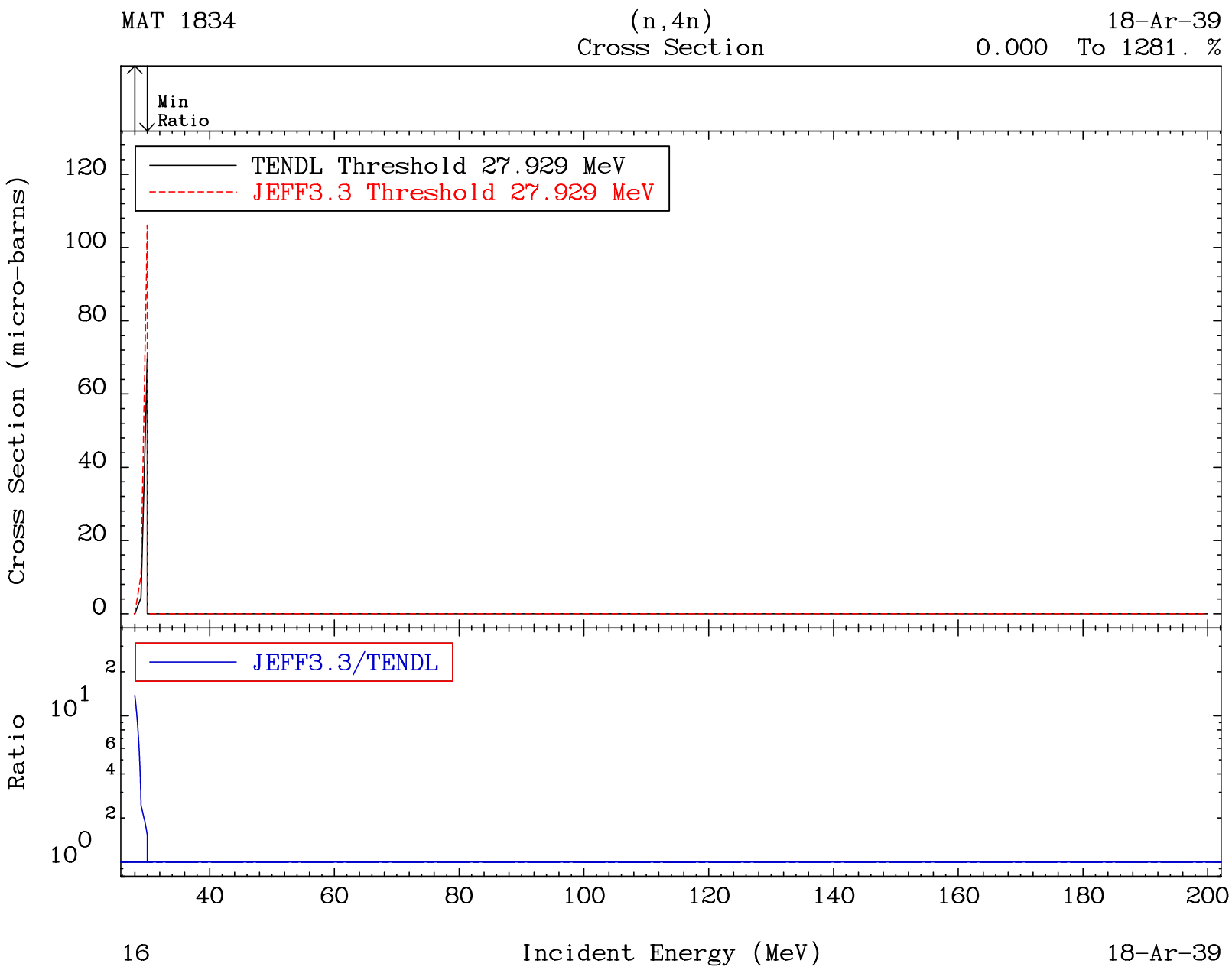

MAT 1834
(n,n') 2α
Cross Section
18-Ar-39
0.000 To 806.1 %
Max Ratio
Min Ratio
TENDL Threshold 15.535 MeV
JEFF3.3 Threshold 15.535 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
18-Ar-39

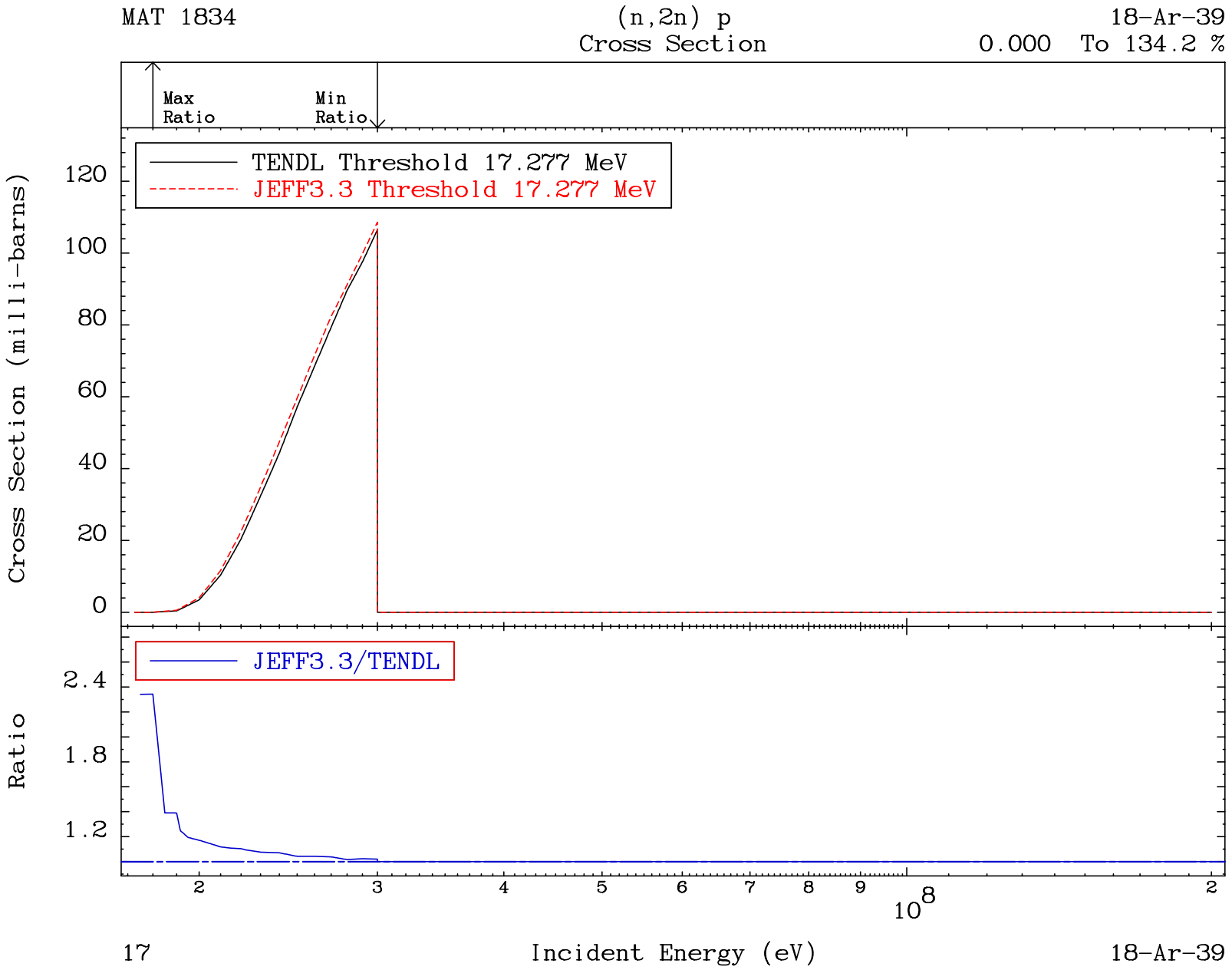

MAT 1834
(n,2n) 2α
Cross Section
18-Ar-39
0.000 To 9999. %
Min
Ratio
TENDL Threshold 22.293 MeV
JEFF3.3 Threshold 22.293 MeV
Cross Section (10^-9 barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
18-Ar-39

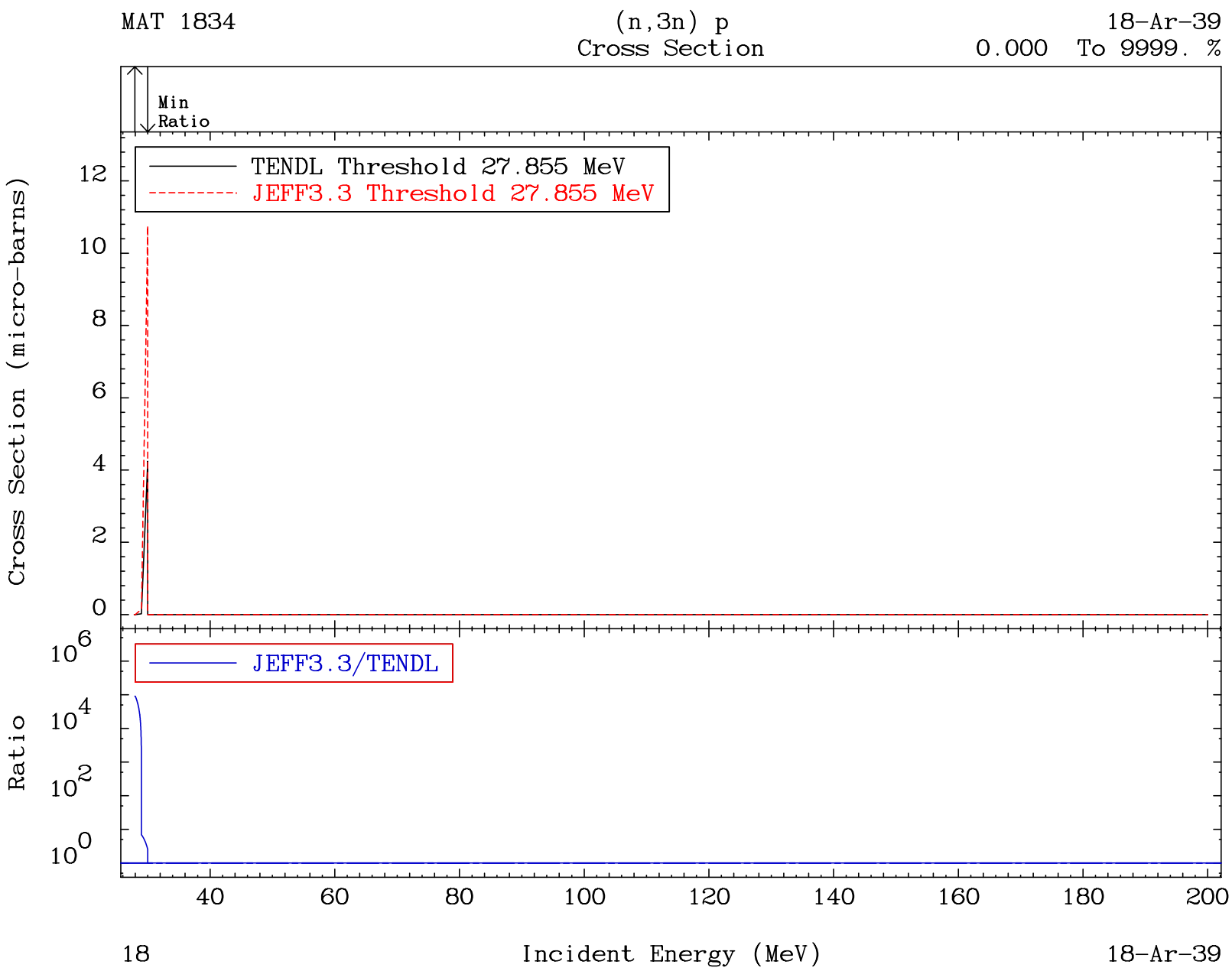

MAT 1834
(n,n') d
Cross Section
18-Ar-39
-0.122 To 159.3 %
Max Ratio
Min Ratio
TENDL Threshold 14.995 MeV
JEFF3.3 Threshold 14.995 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
3.0
2.5
2.0
1.5
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
18-Ar-39

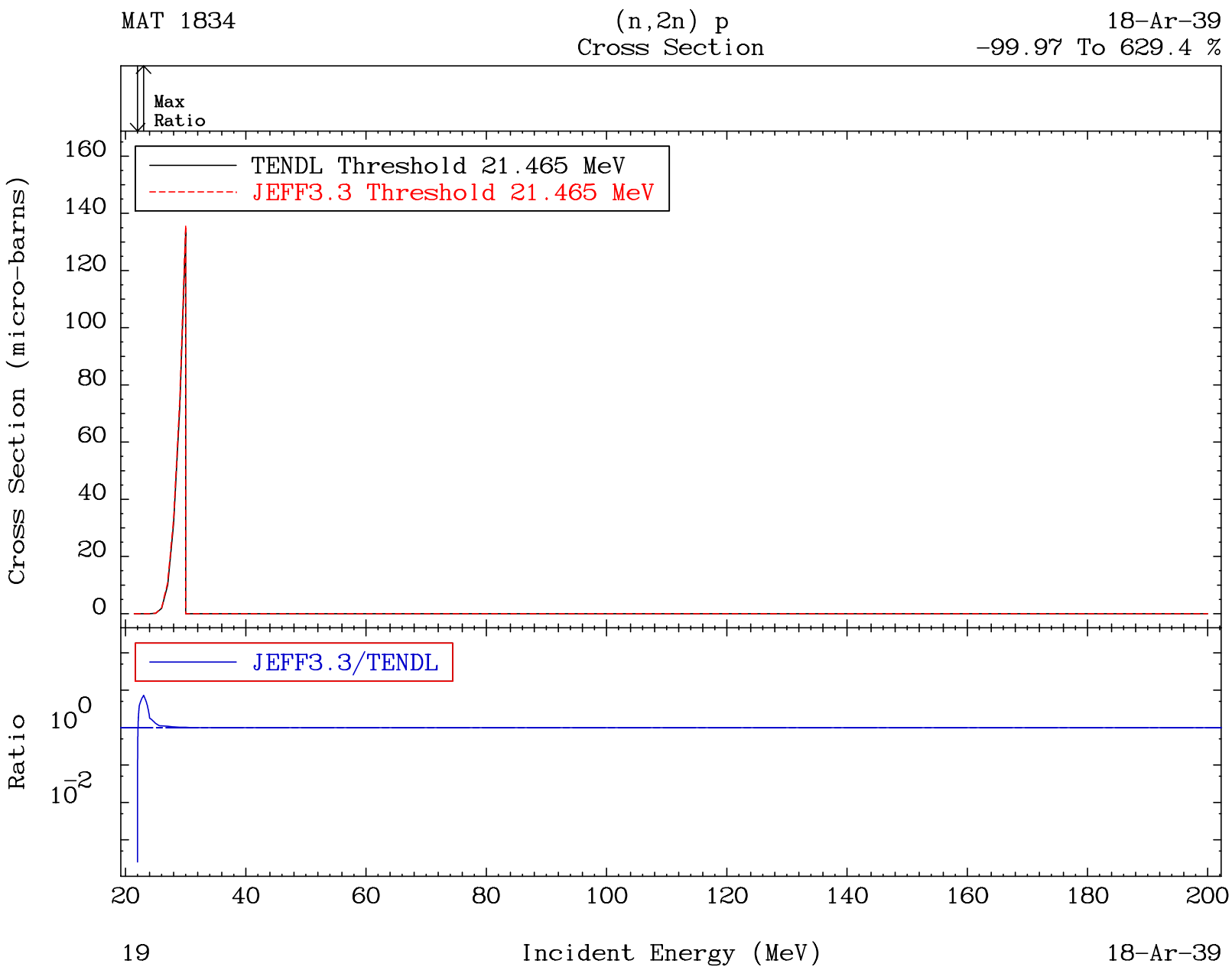

MAT 1834
(n,n') t
Cross Section
18-Ar-39
-4.953 To 242.1 %
Min
Ratio
TENDL Threshold 19.153 MeV
JEFF3.3 Threshold 19.153 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
1.0
2.0
3.0
4.0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
18-Ar-39

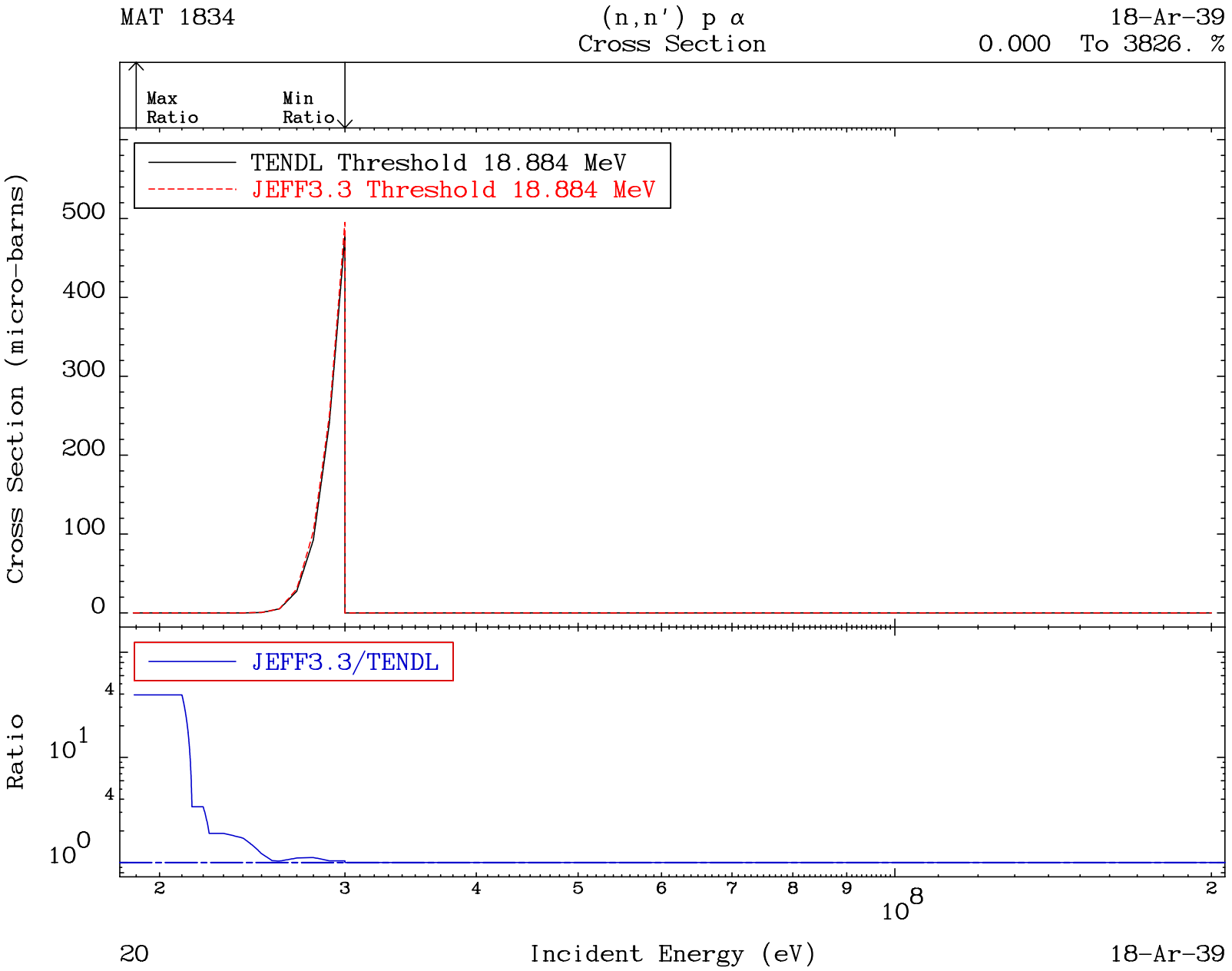

MAT 1834
(n,n') He-3
Cross Section
18-Ar-39
0.000 To 120.8 %
Max Ratio
Min Ratio
TENDL Threshold 17.963 MeV
JEFF3.3 Threshold 17.963 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
18-Ar-39

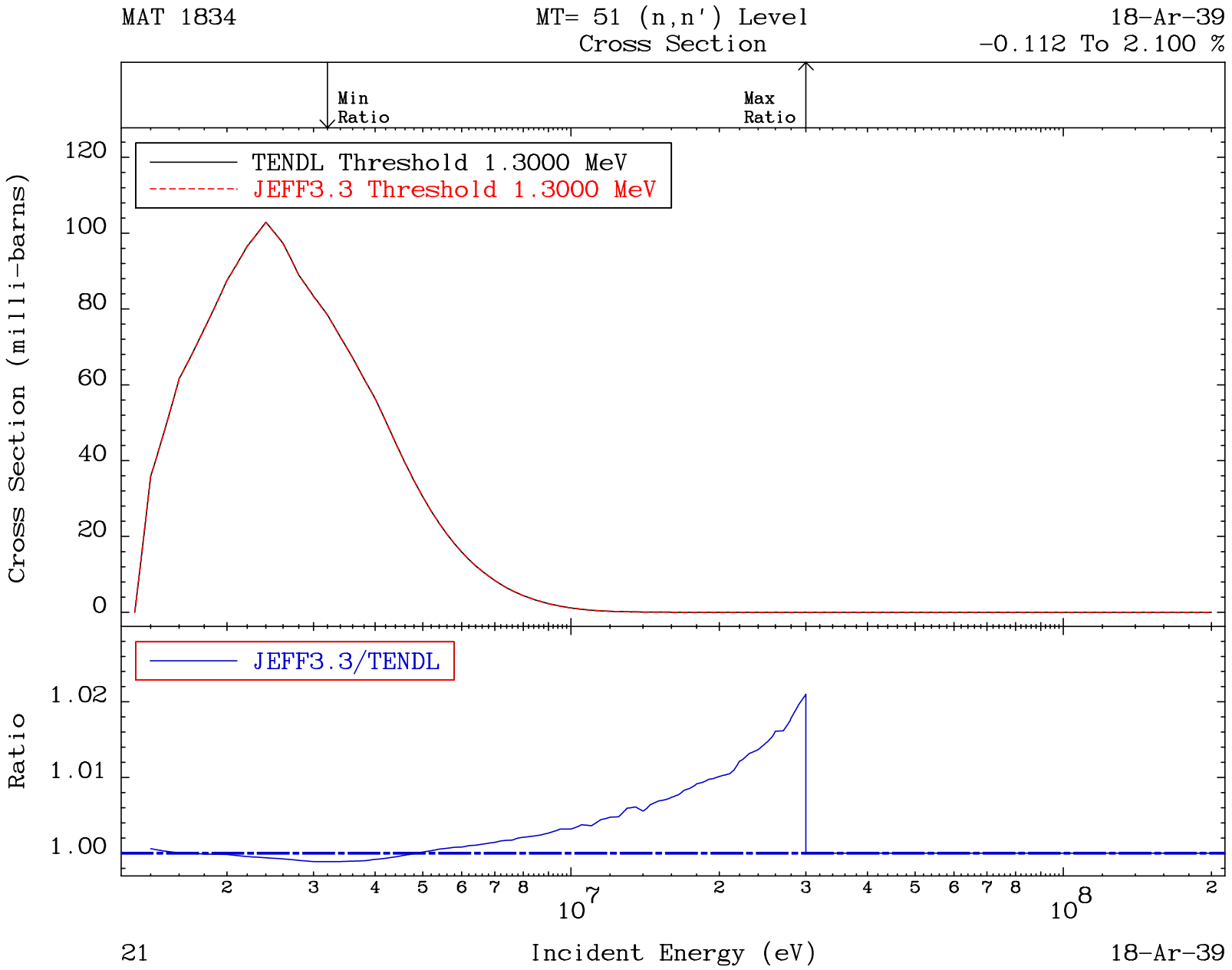

MAT 1834
(n,4n)
Cross Section
18-Ar-39
0.000 To 1281. %
Min
Ratio
TENDL Threshold 27.929 MeV
JEFF3.3 Threshold 27.929 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
18-Ar-39

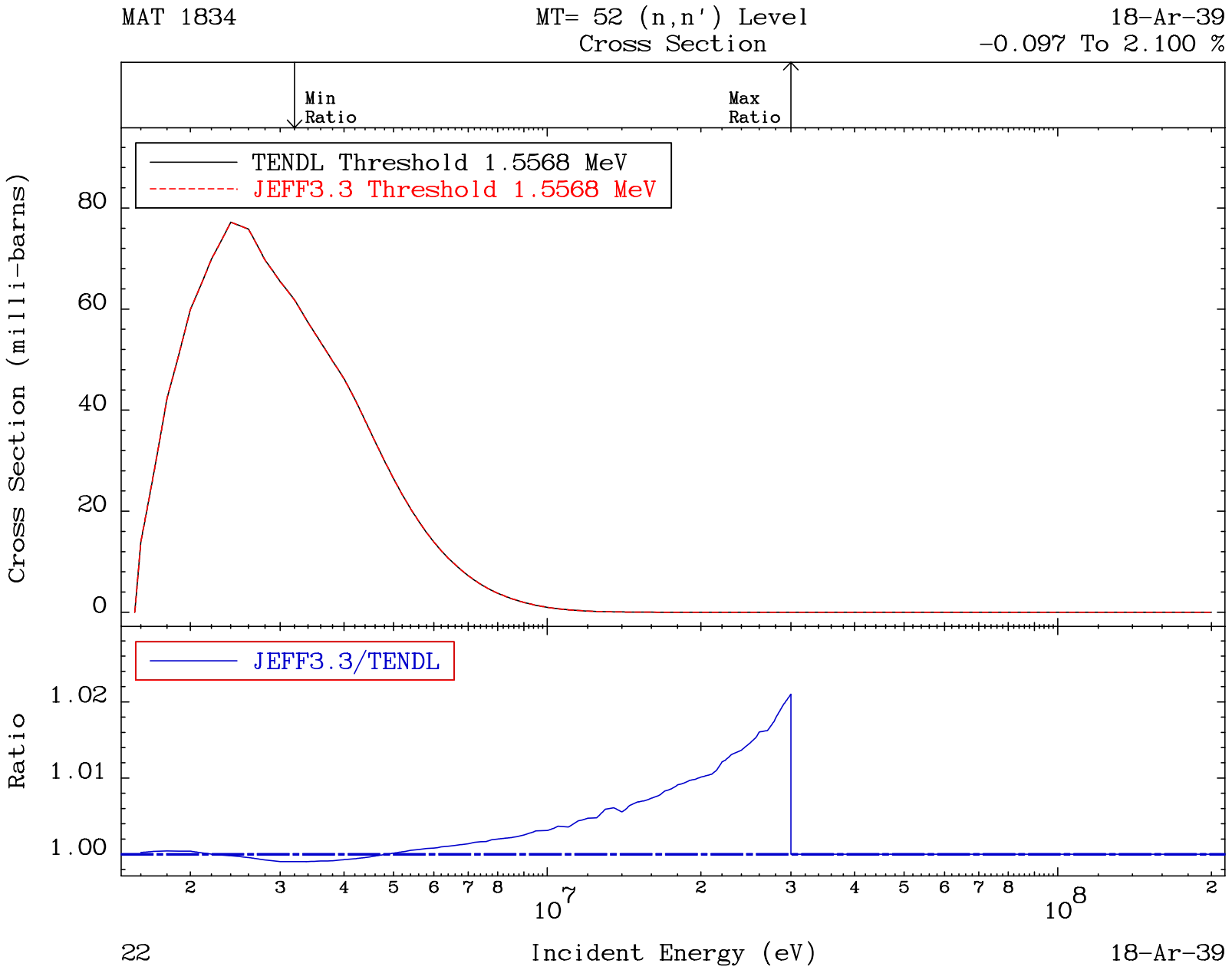

MAT 1834
(n,2n) p
Cross Section
18-Ar-39
0.000 To 134.2 %
Max Ratio
Min Ratio
TENDL Threshold 17.277 MeV
JEFF3.3 Threshold 17.277 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
18-Ar-39

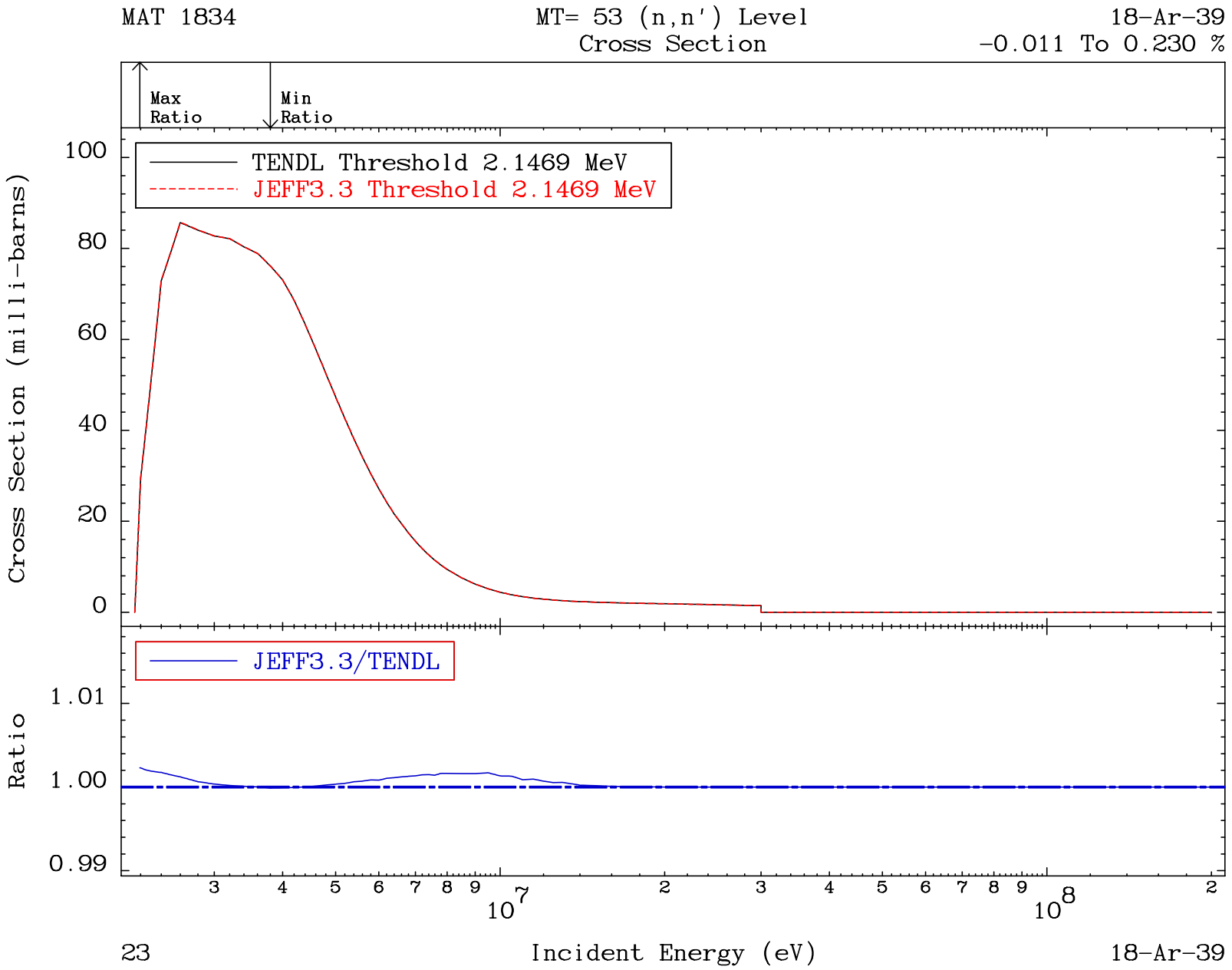

MAT 1834
(n,3n) p
Cross Section
18-Ar-39
0.000 To 9999. %
Min
Ratio
TENDL Threshold 27.855 MeV
JEFF3.3 Threshold 27.855 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
10^0
10^2
10^4
10^6
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
18-Ar-39

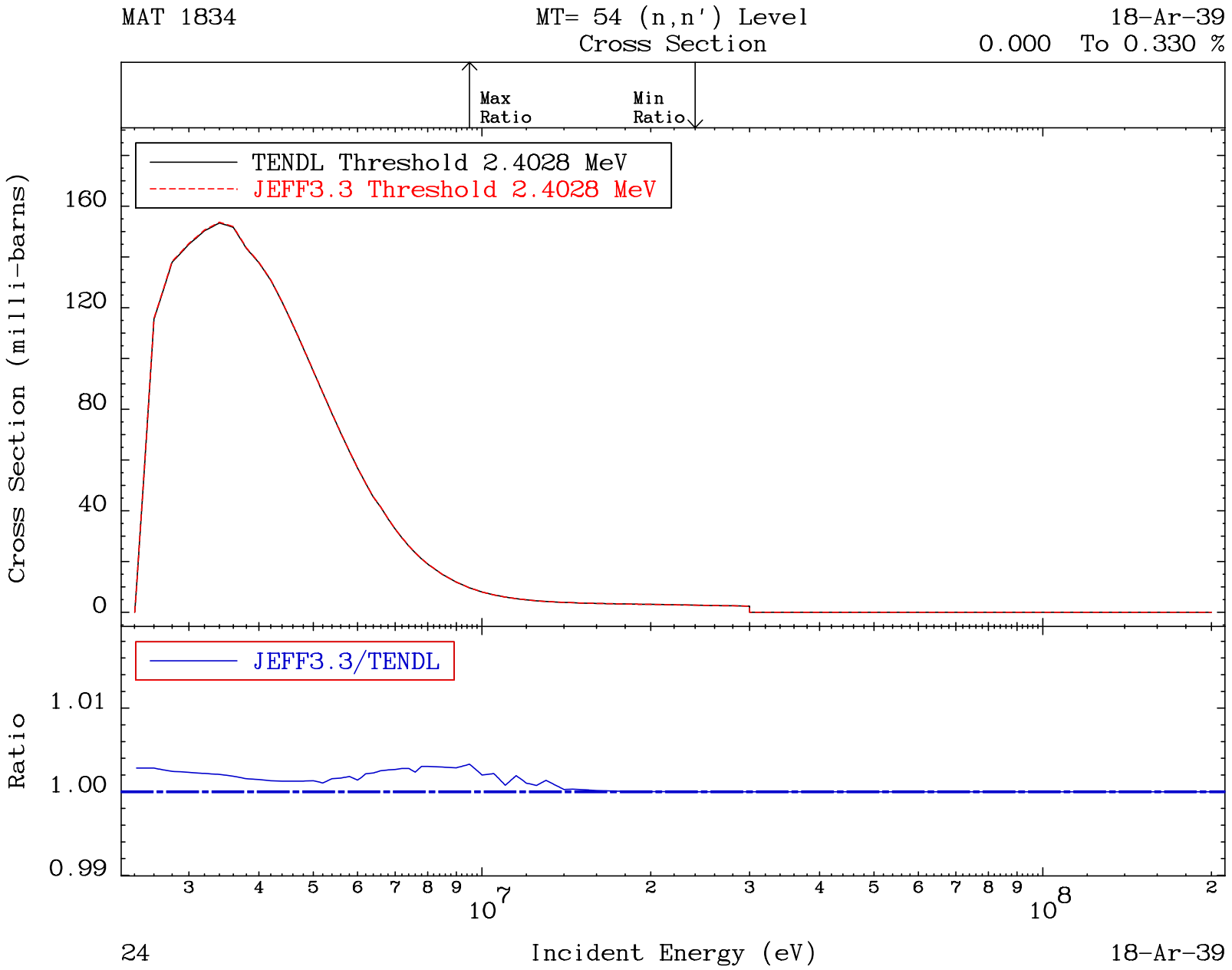

MAT 1834
(n,2n) p
Cross Section
18-Ar-39
-99.97 To 629.4 %
Max
Ratio
TENDL Threshold 21.465 MeV
JEFF3.3 Threshold 21.465 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
10^-2
20
40
60
80
100
120
140
160
180
200
19
Incident Energy (MeV)
18-Ar-39

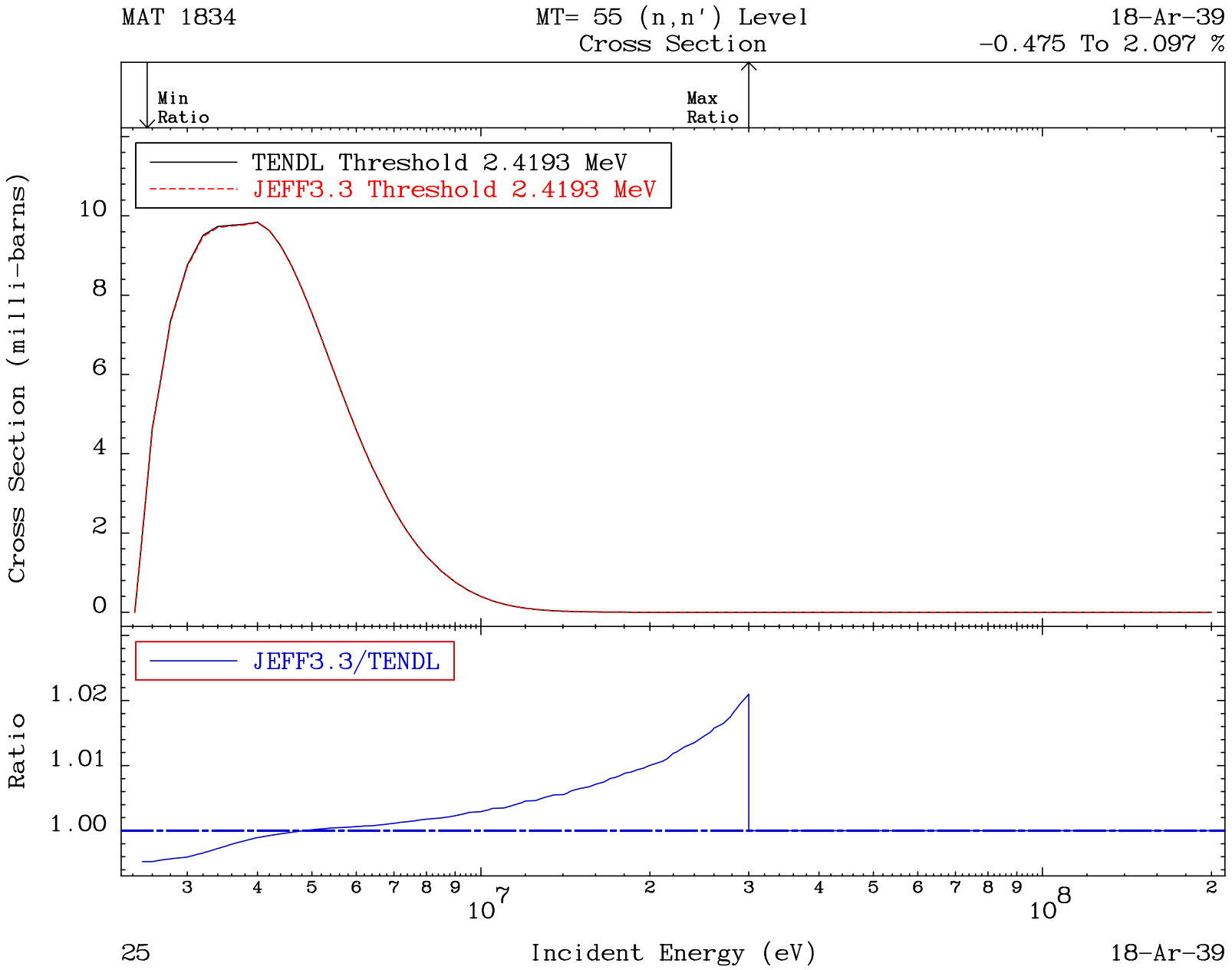

MAT 1834
(n,n') p α
Cross Section
18-Ar-39
0.000 To 3826. %
Max Ratio
Min Ratio
TENDL Threshold 18.884 MeV
JEFF3.3 Threshold 18.884 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
18-Ar-39

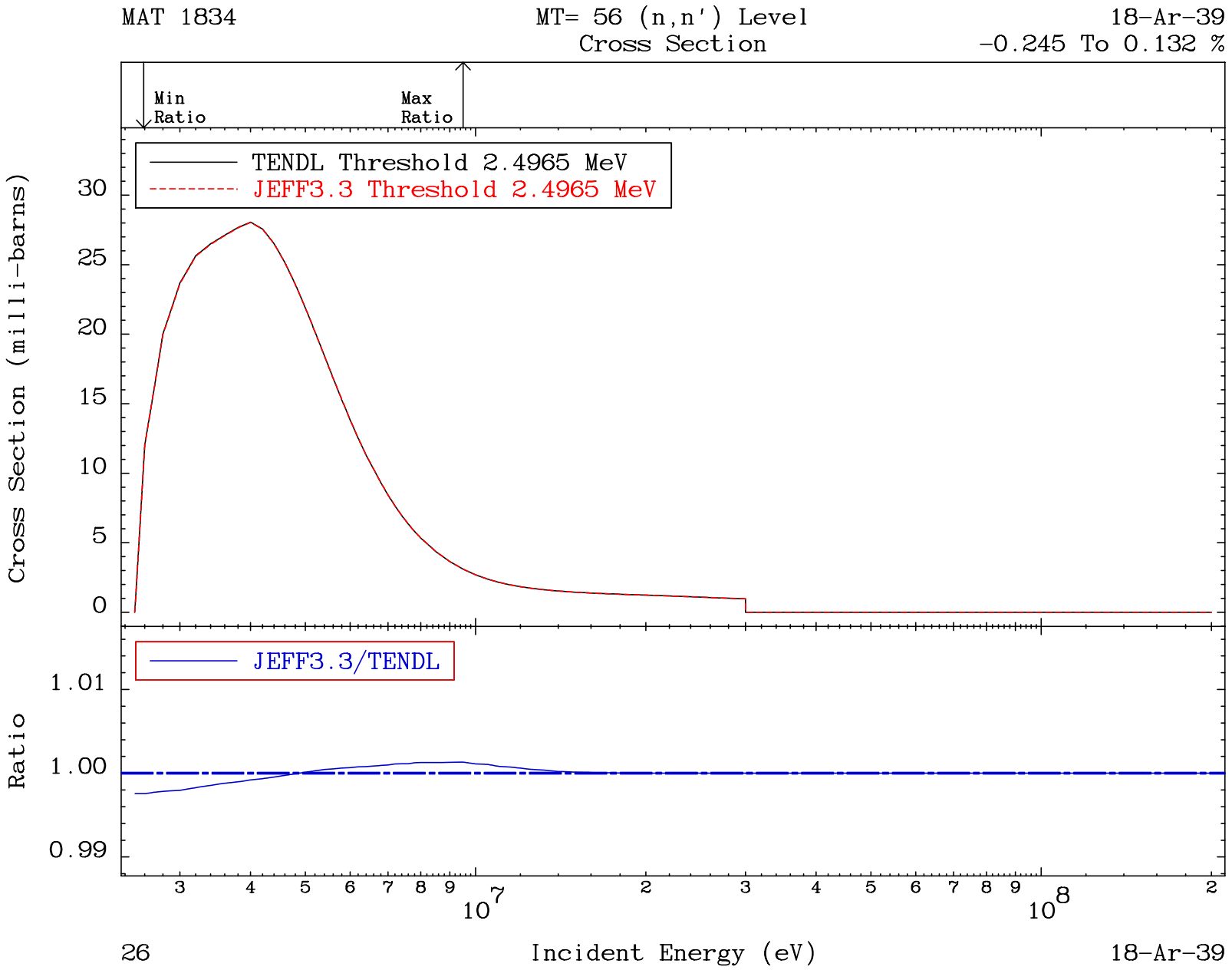

MAT 1834
MT= 51 (n,n') Level
Cross Section
18-Ar-39
-0.112 To 2.100 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3000 MeV
JEFF3.3 Threshold 1.3000 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
21
Incident Energy (eV)
18-Ar-39

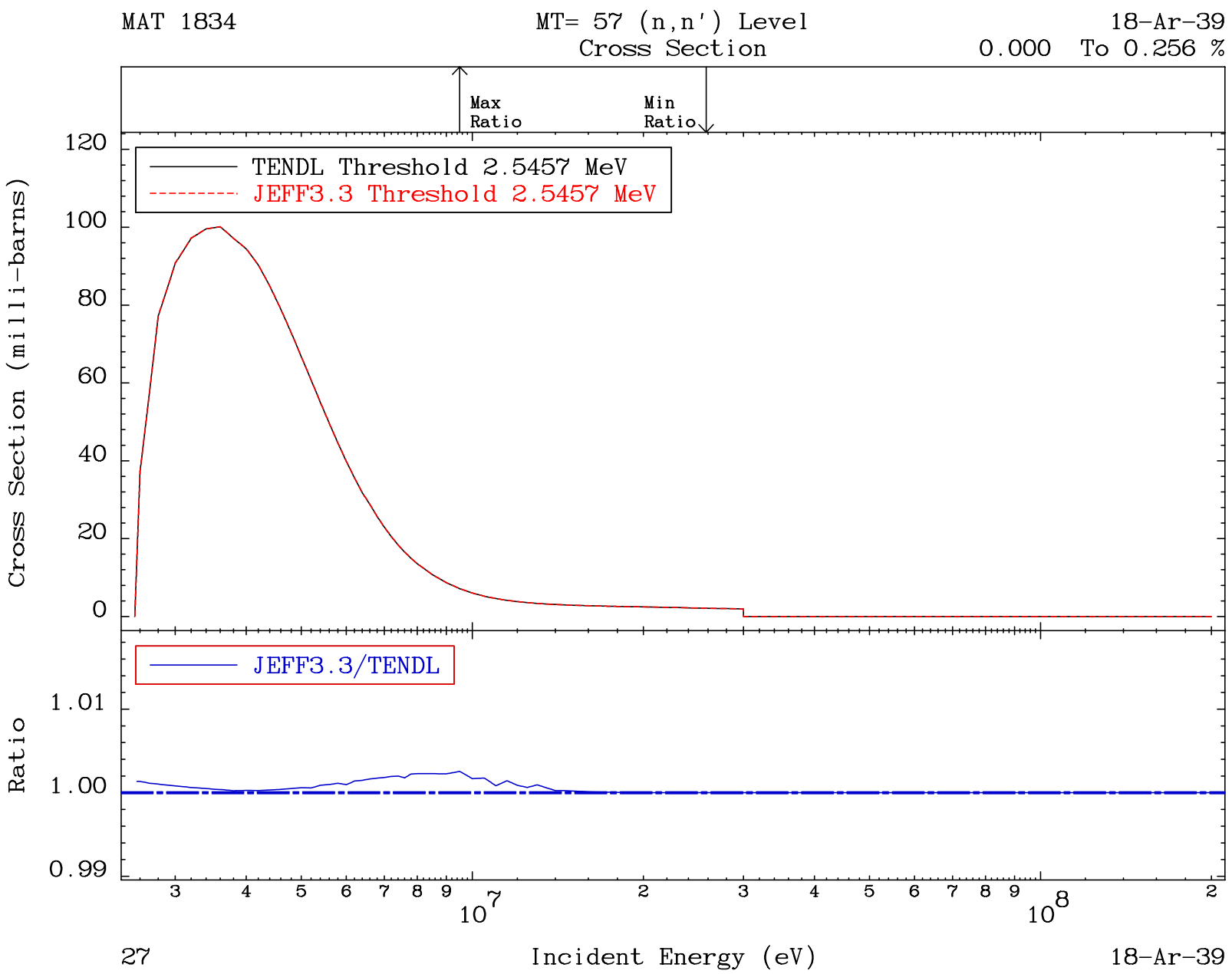

MAT 1834
MT= 52 (n,n') Level
Cross Section
18-Ar-39
-0.097 To 2.100 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5568 MeV
JEFF3.3 Threshold 1.5568 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
18-Ar-39

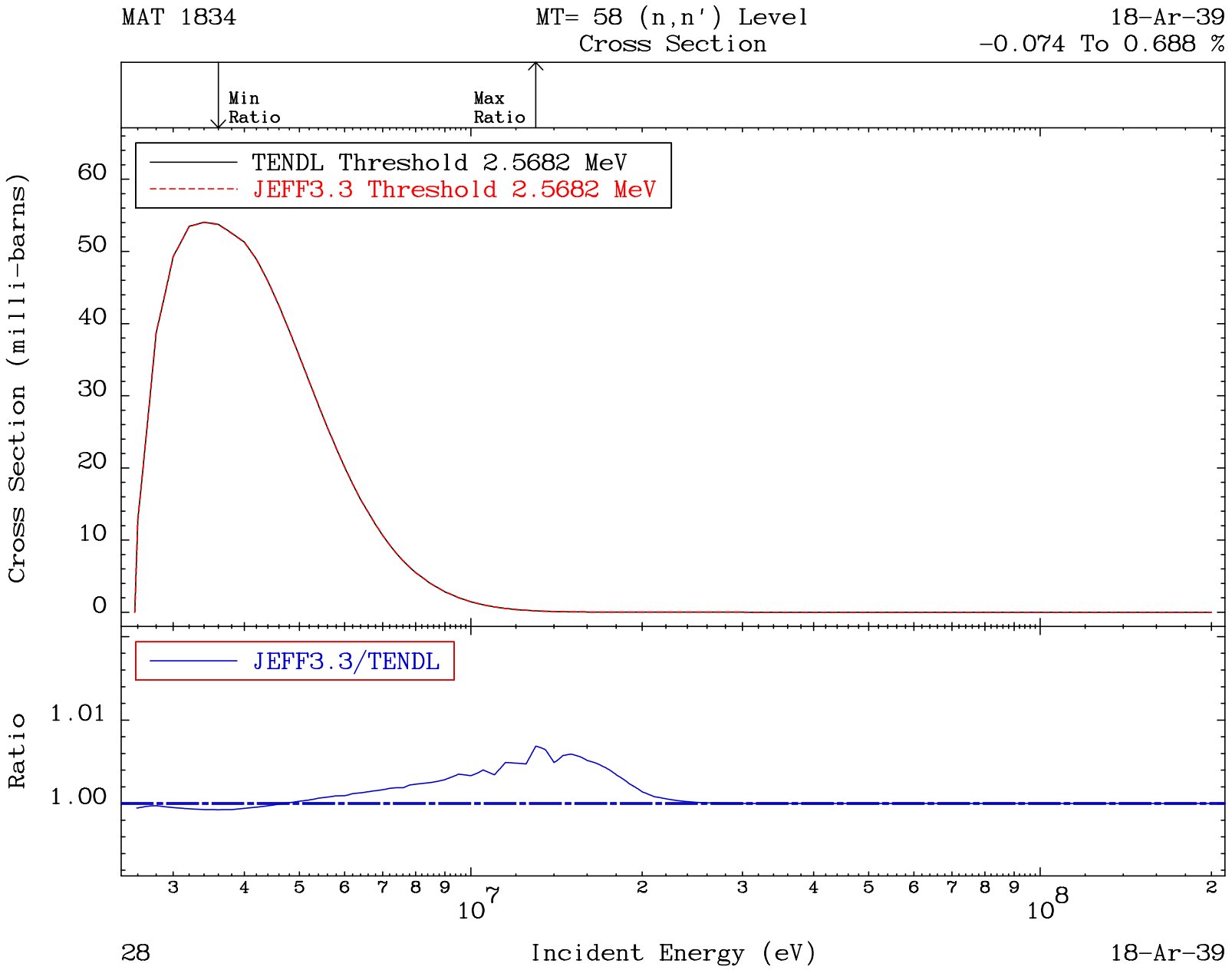

MAT 1834
MT= 53 (n,n') Level
Cross Section
18-Ar-39
-0.011 To 0.230 %
Max Ratio
Min Ratio
TENDL Threshold 2.1469 MeV
JEFF3.3 Threshold 2.1469 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
18-Ar-39

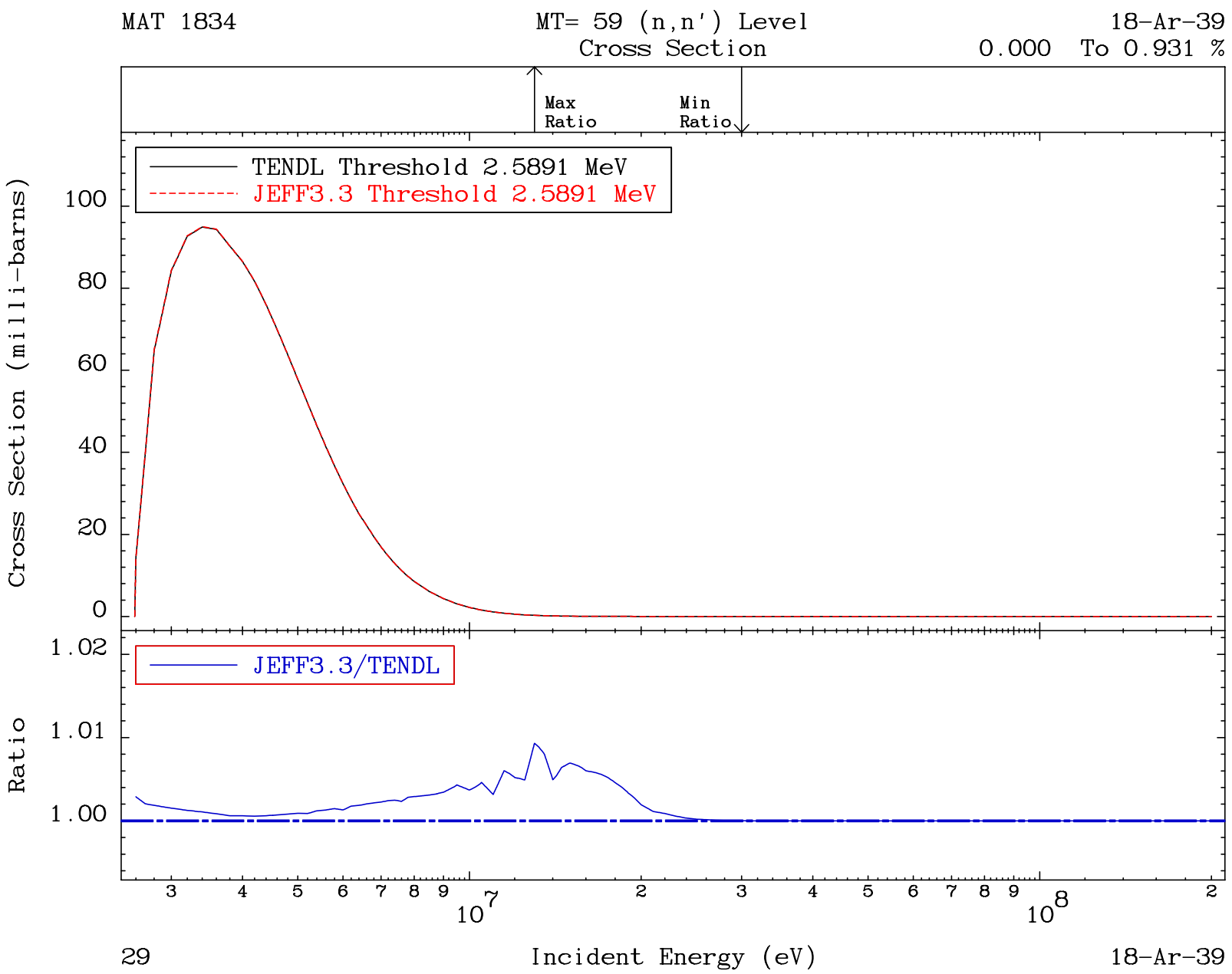

MAT 1834
MT= 54 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.330 %
Max Ratio
Min Ratio
TENDL Threshold 2.4028 MeV
JEFF3.3 Threshold 2.4028 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
24
Incident Energy (eV)
18-Ar-39

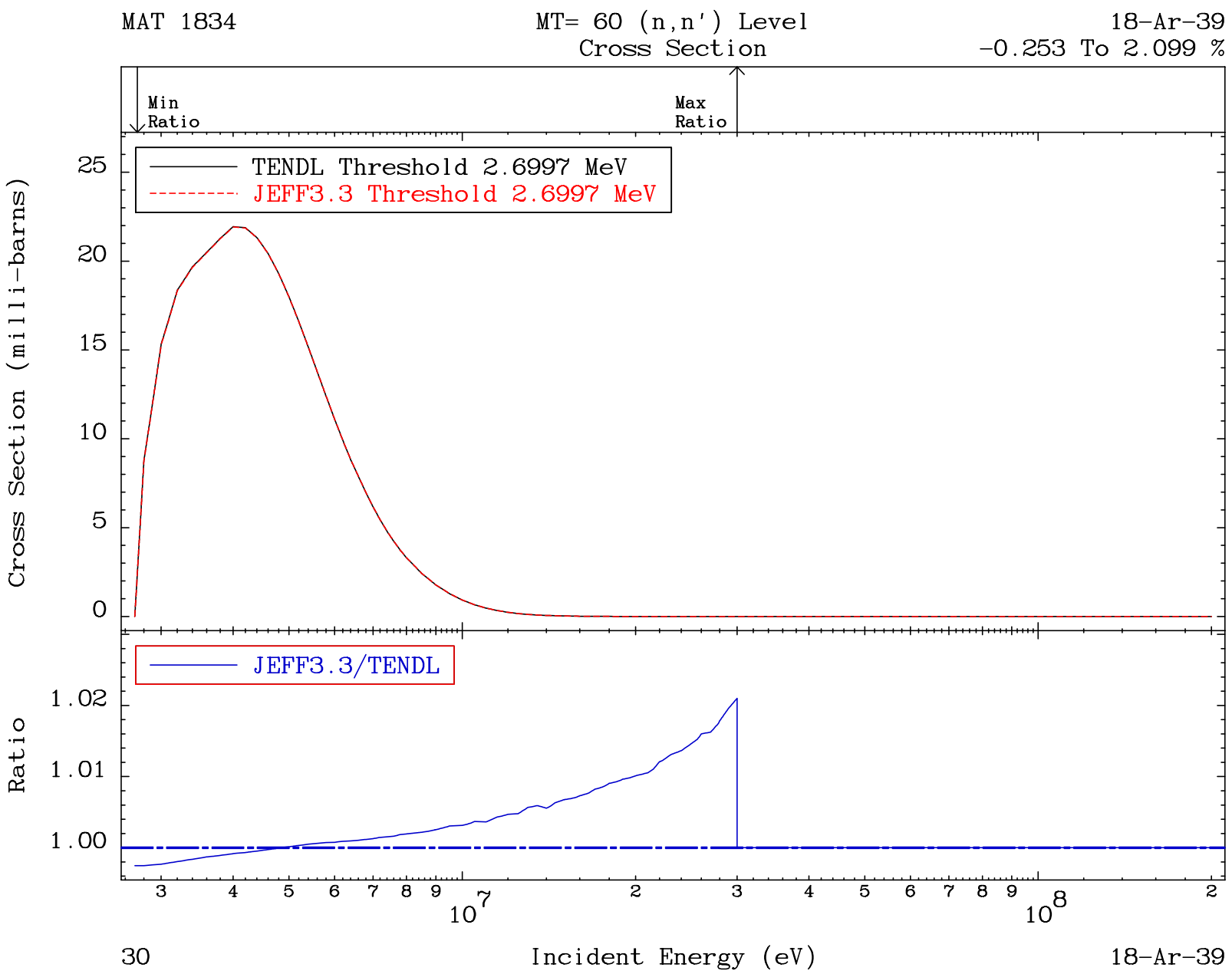

MAT 1834
MT= 55 (n,n') Level
Cross Section
18-Ar-39
-0.475 To 2.097 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.4193 MeV
JEFF3.3 Threshold 2.4193 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
JEFF3.3/TENDL
Ratio
1.00
1.01
1.02
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
25
Incident Energy (eV)
18-Ar-39

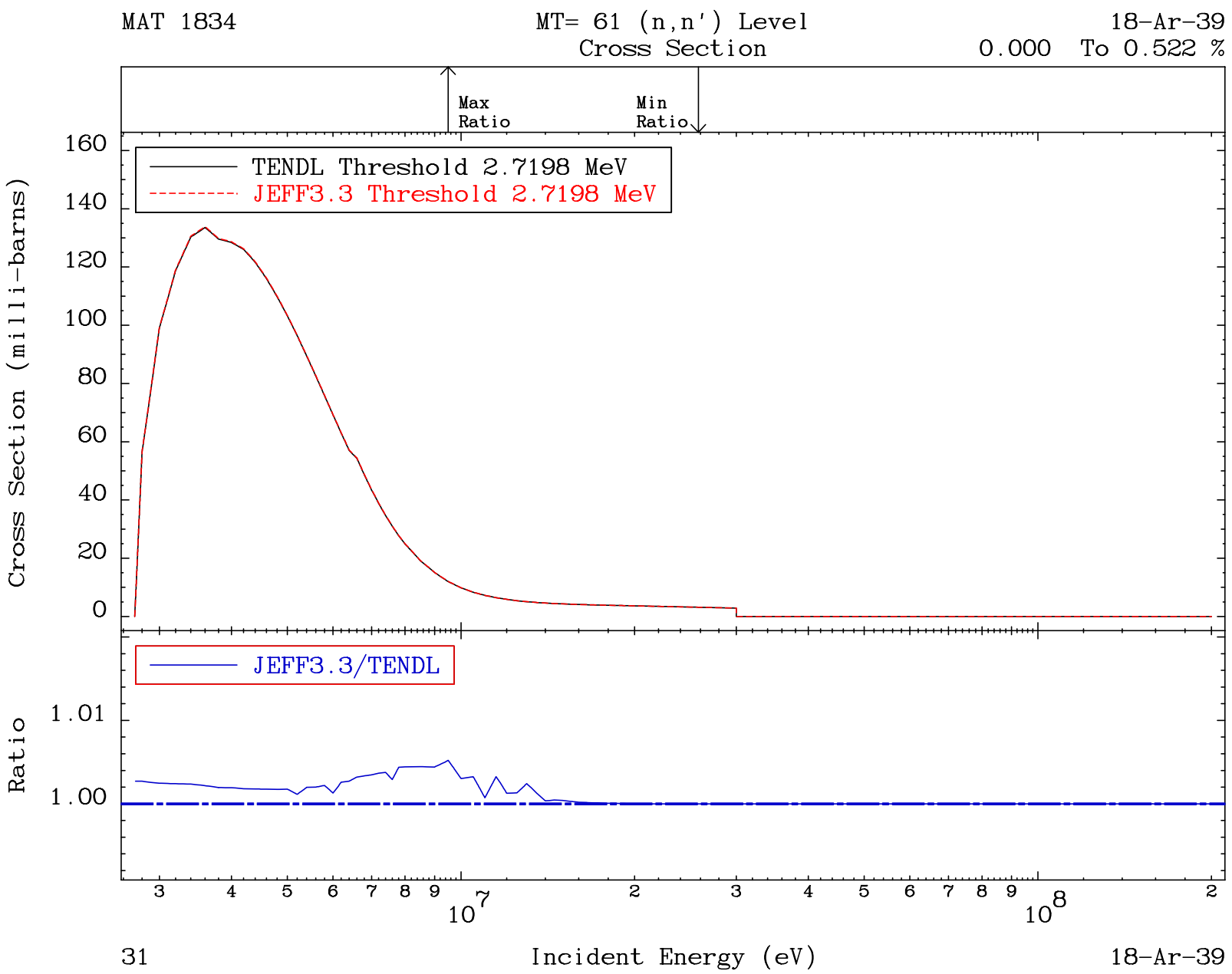

MAT 1834
MT= 56 (n,n') Level
Cross Section
18-Ar-39
-0.245 To 0.132 %
Min Ratio
Max Ratio
TENDL Threshold 2.4965 MeV
JEFF3.3 Threshold 2.4965 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
18-Ar-39

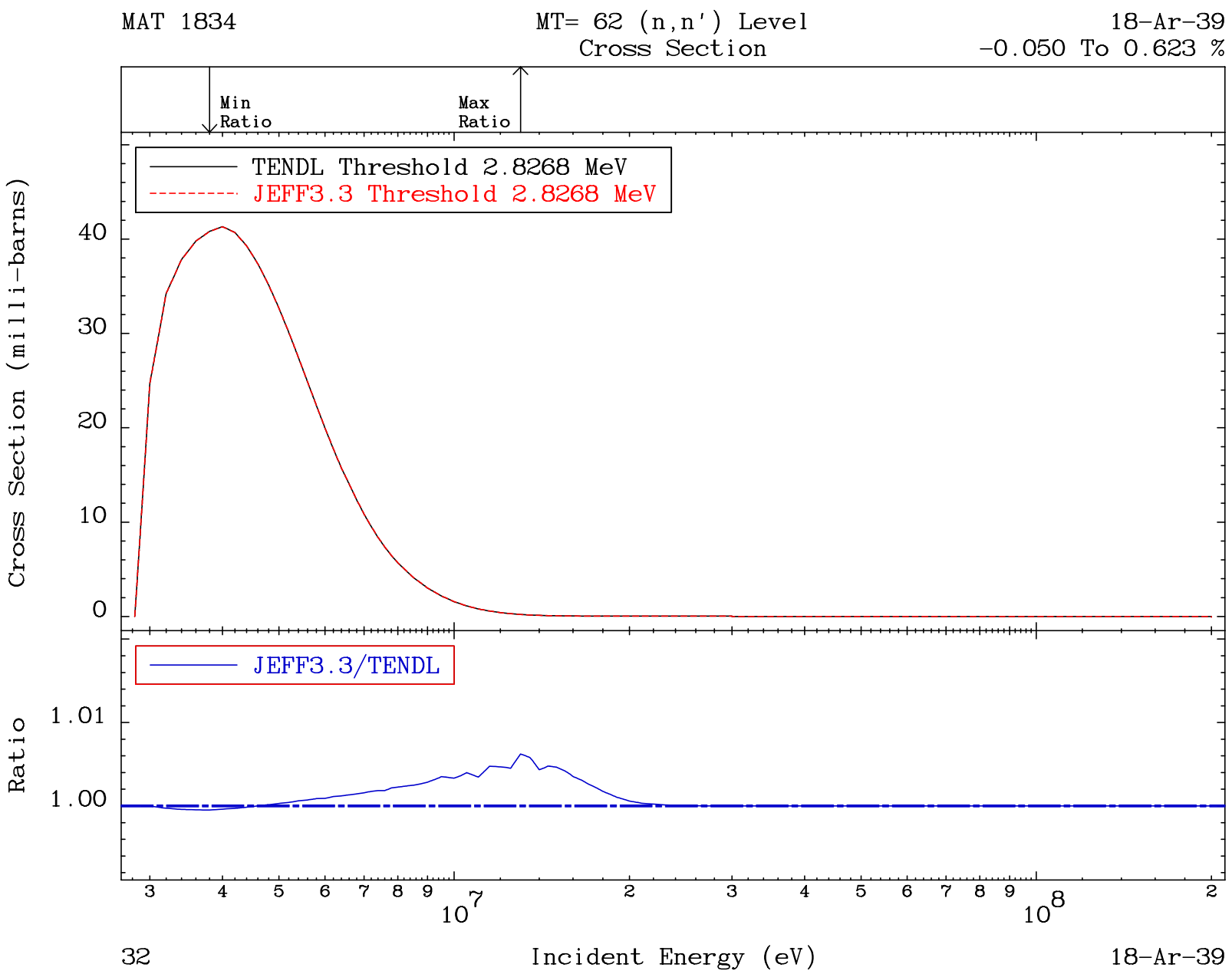

MAT 1834
MT= 57 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.256 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.5457 MeV
JEFF3.3 Threshold 2.5457 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
27
Incident Energy (eV)
18-Ar-39

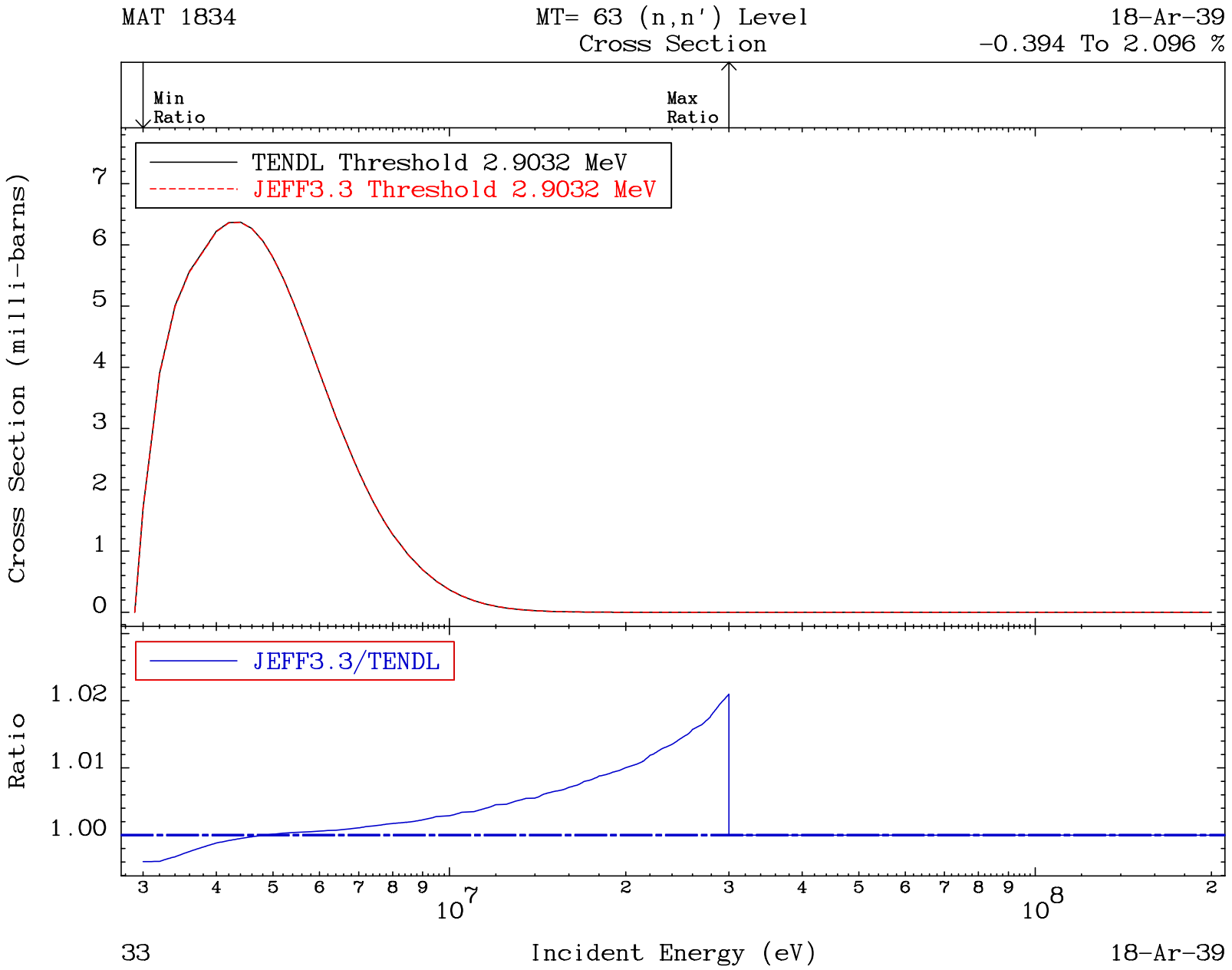

MAT 1834
MT= 58 (n,n') Level
Cross Section
18-Ar-39
-0.074 To 0.688 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5682 MeV
JEFF3.3 Threshold 2.5682 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
28
Incident Energy (eV)
18-Ar-39

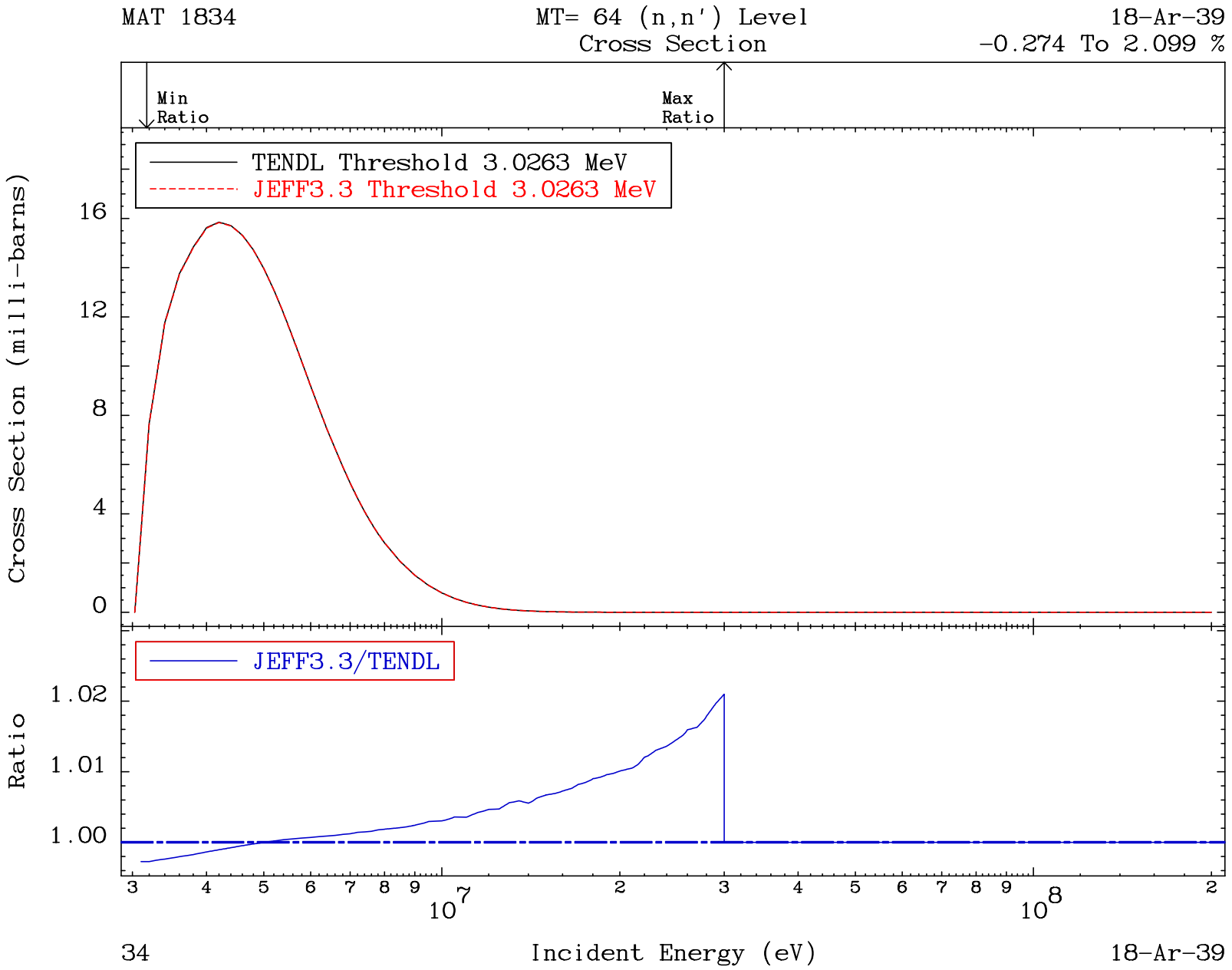

MAT 1834
MT= 59 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.931 %
Max Ratio
Min Ratio
TENDL Threshold 2.5891 MeV
JEFF3.3 Threshold 2.5891 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
18-Ar-39

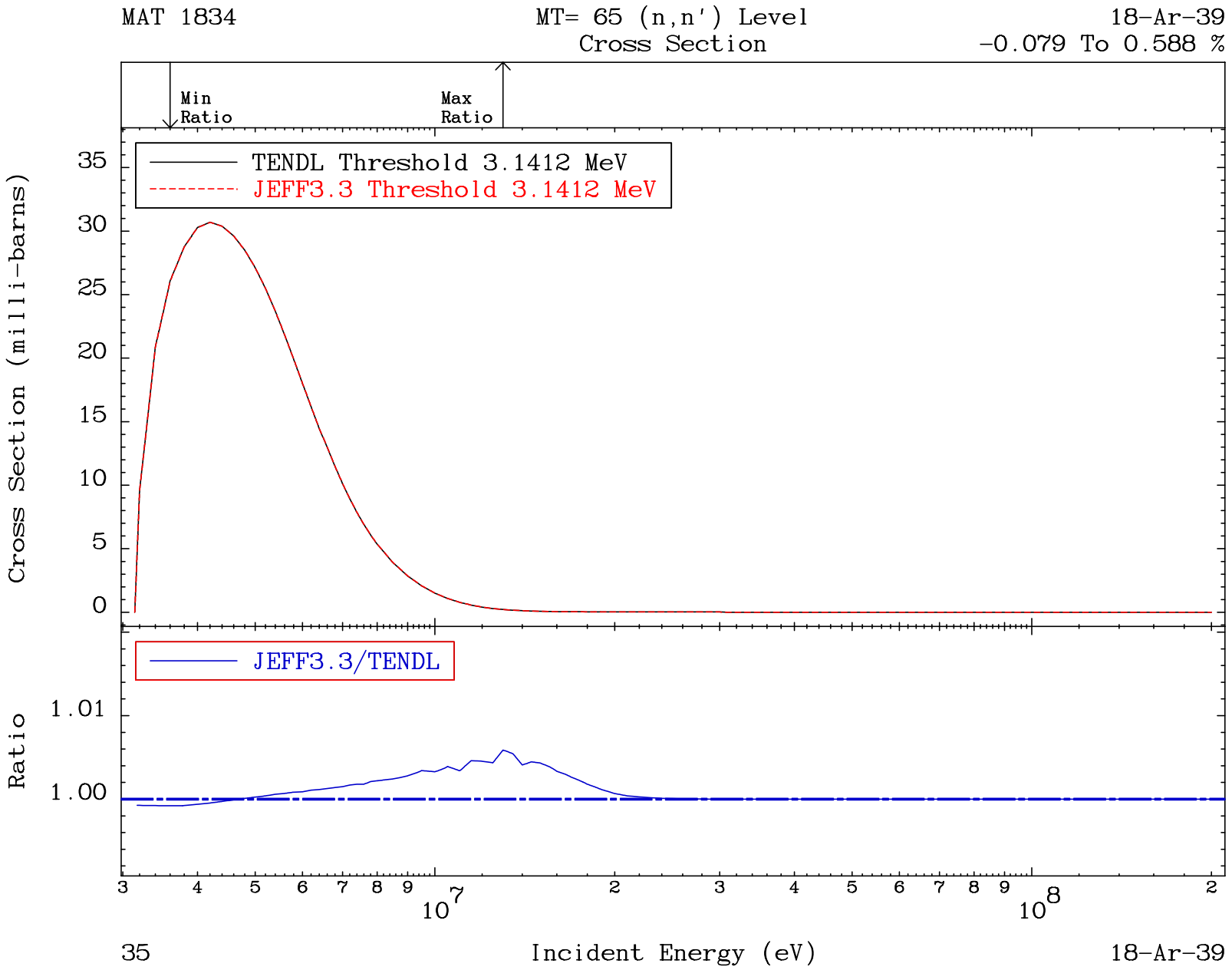

MAT 1834
MT= 60 (n,n') Level
Cross Section
18-Ar-39
-0.253 To 2.099 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6997 MeV
JEFF3.3 Threshold 2.6997 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
30
Incident Energy (eV)
18-Ar-39

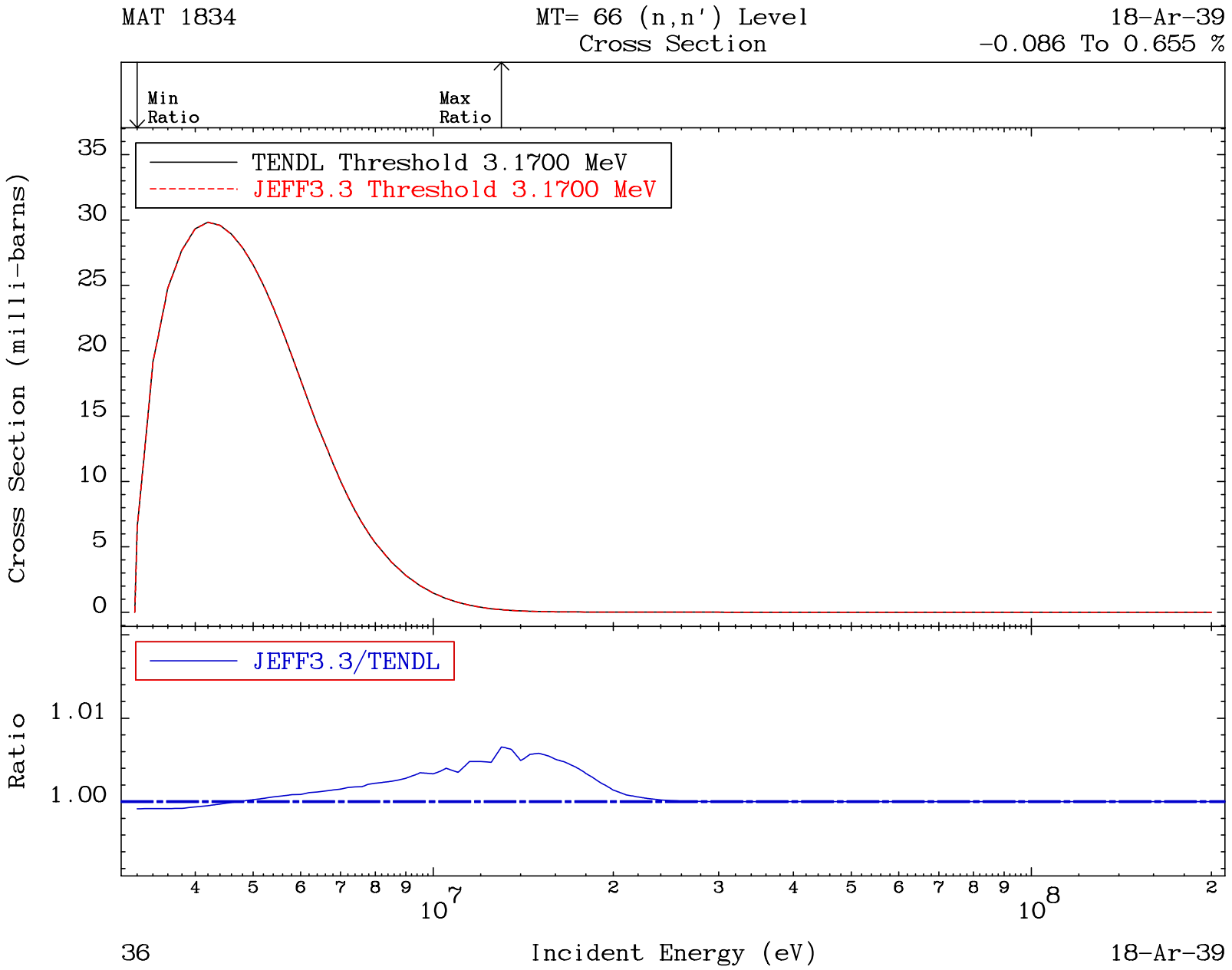

MAT 1834
MT= 61 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.522 %
Max Ratio
Min Ratio
TENDL Threshold 2.7198 MeV
JEFF3.3 Threshold 2.7198 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
18-Ar-39

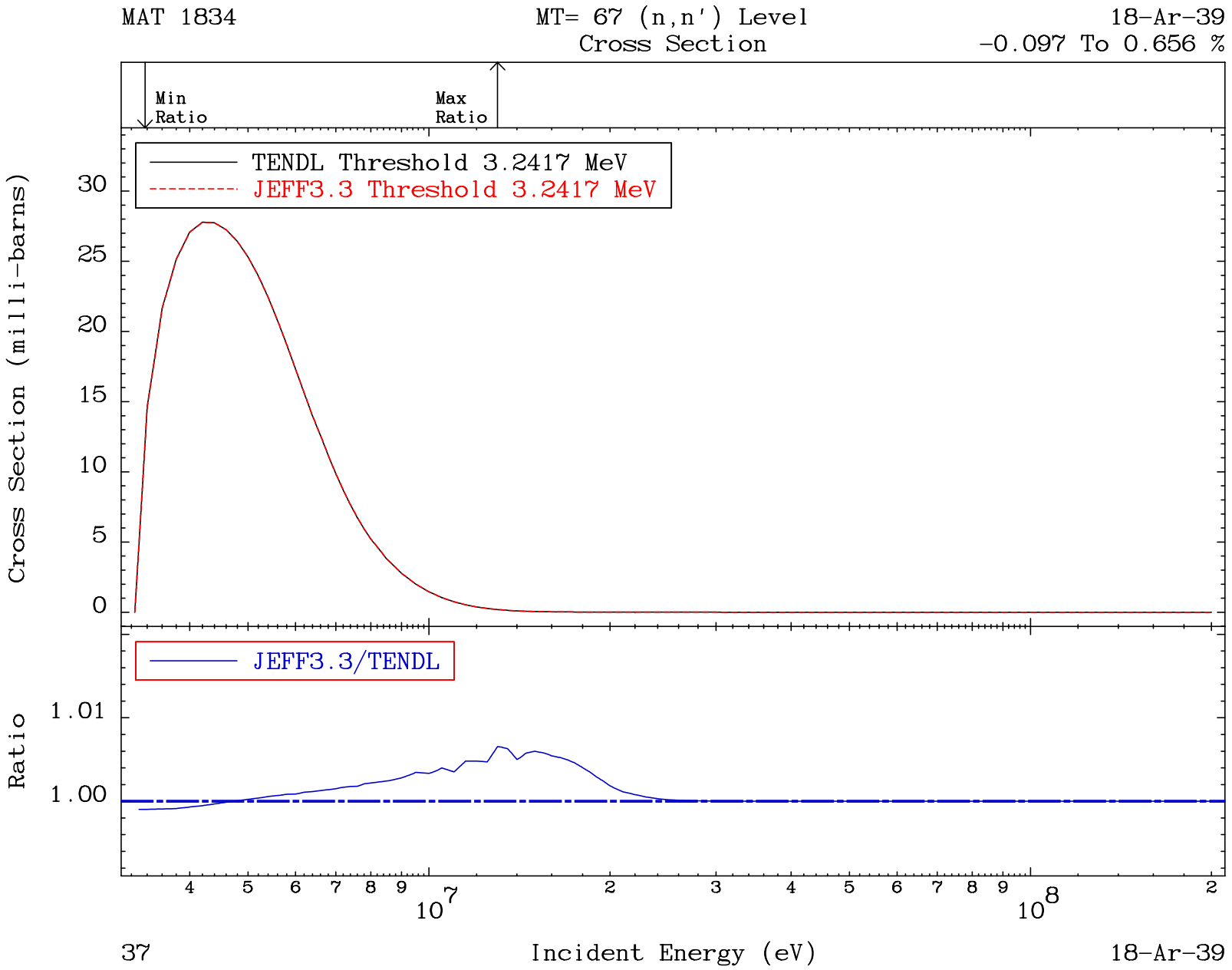

MAT 1834
MT= 62 (n,n') Level
Cross Section
18-Ar-39
-0.050 To 0.623 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8268 MeV
JEFF3.3 Threshold 2.8268 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
18-Ar-39

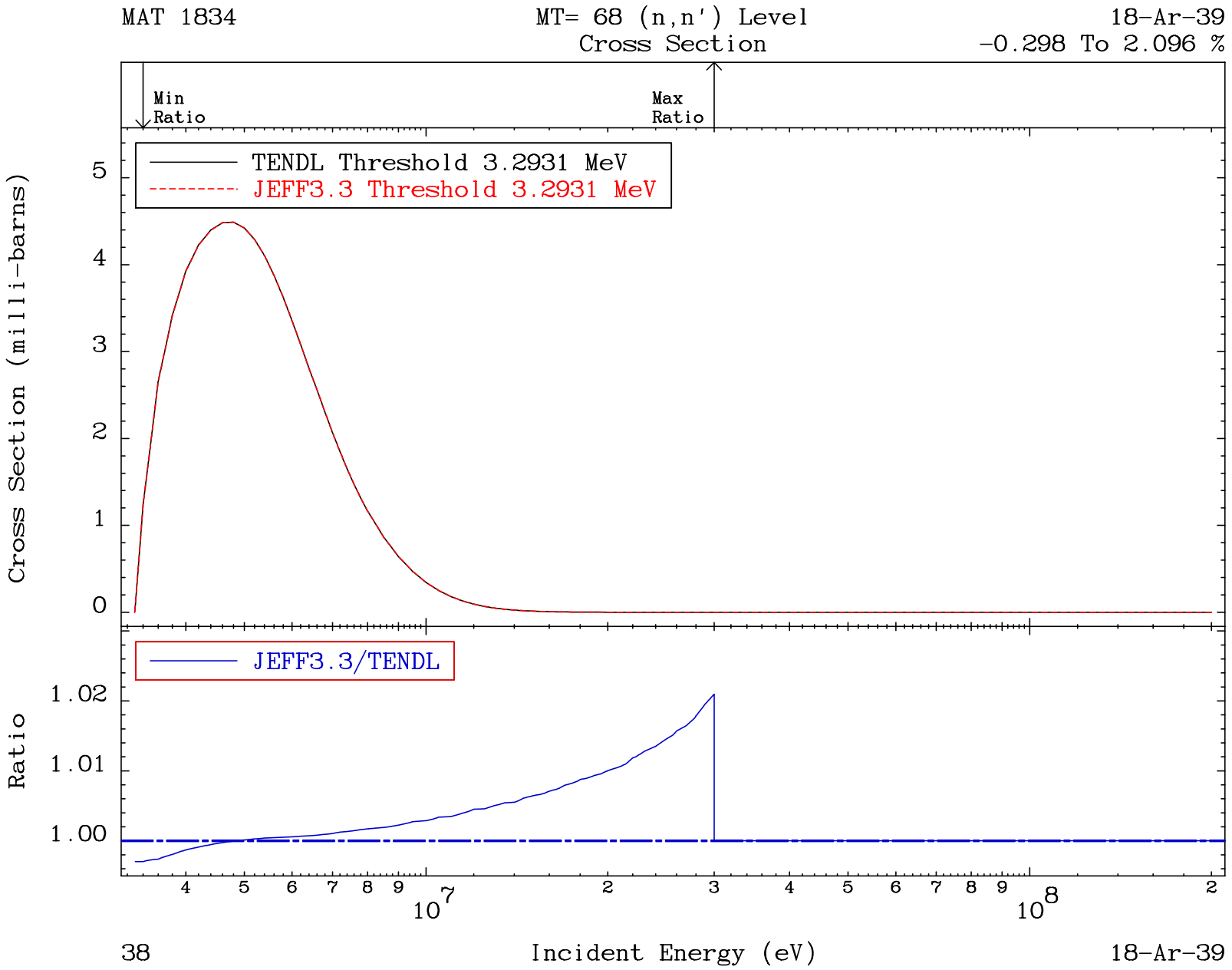

MAT 1834
MT= 63 (n,n') Level
Cross Section
18-Ar-39
-0.394 To 2.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.9032 MeV
JEFF3.3 Threshold 2.9032 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.00
1.01
1.02
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
18-Ar-39

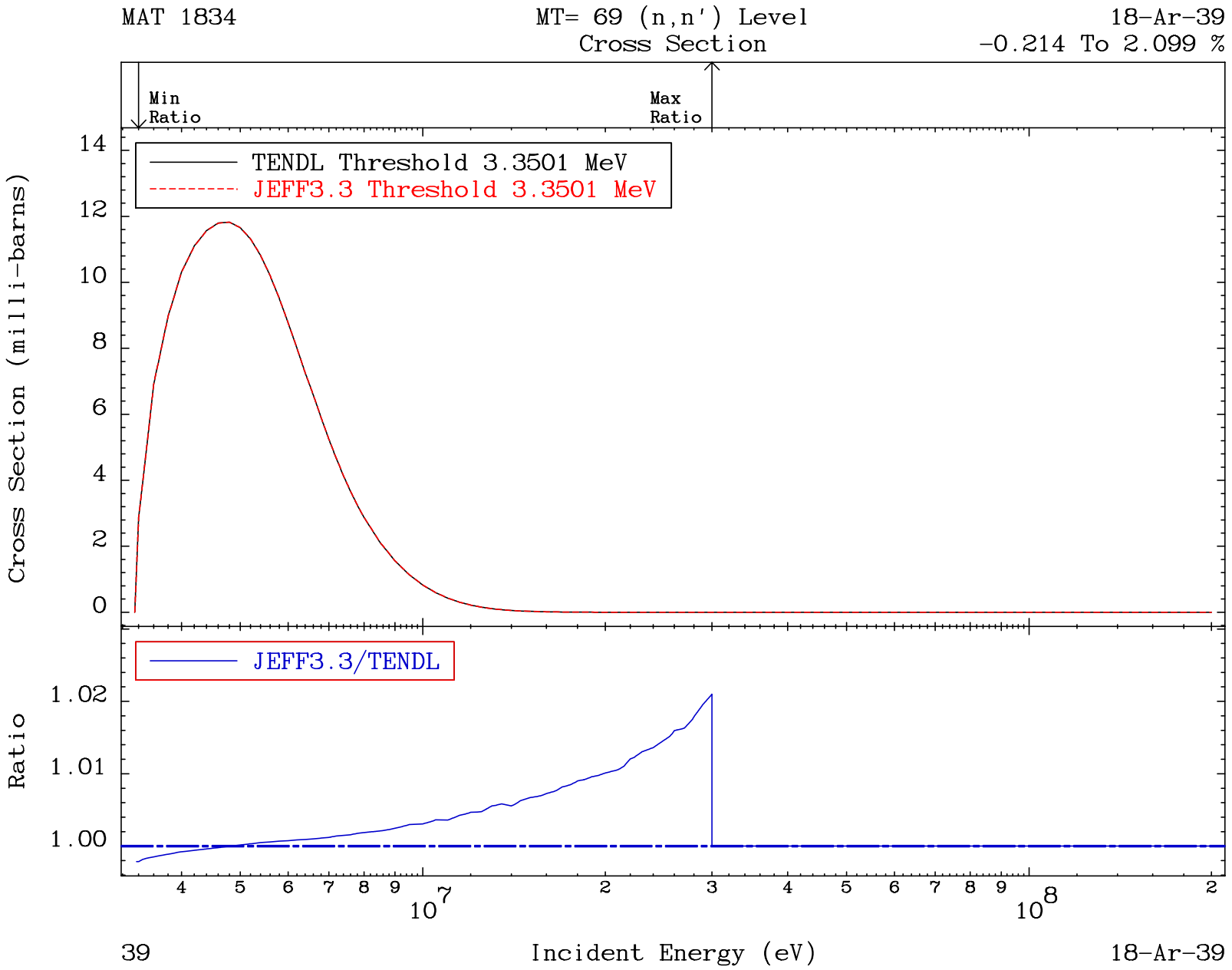

MAT 1834
MT= 64 (n,n') Level
Cross Section
18-Ar-39
-0.274 To 2.099 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.0263 MeV
JEFF3.3 Threshold 3.0263 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
34
Incident Energy (eV)
18-Ar-39

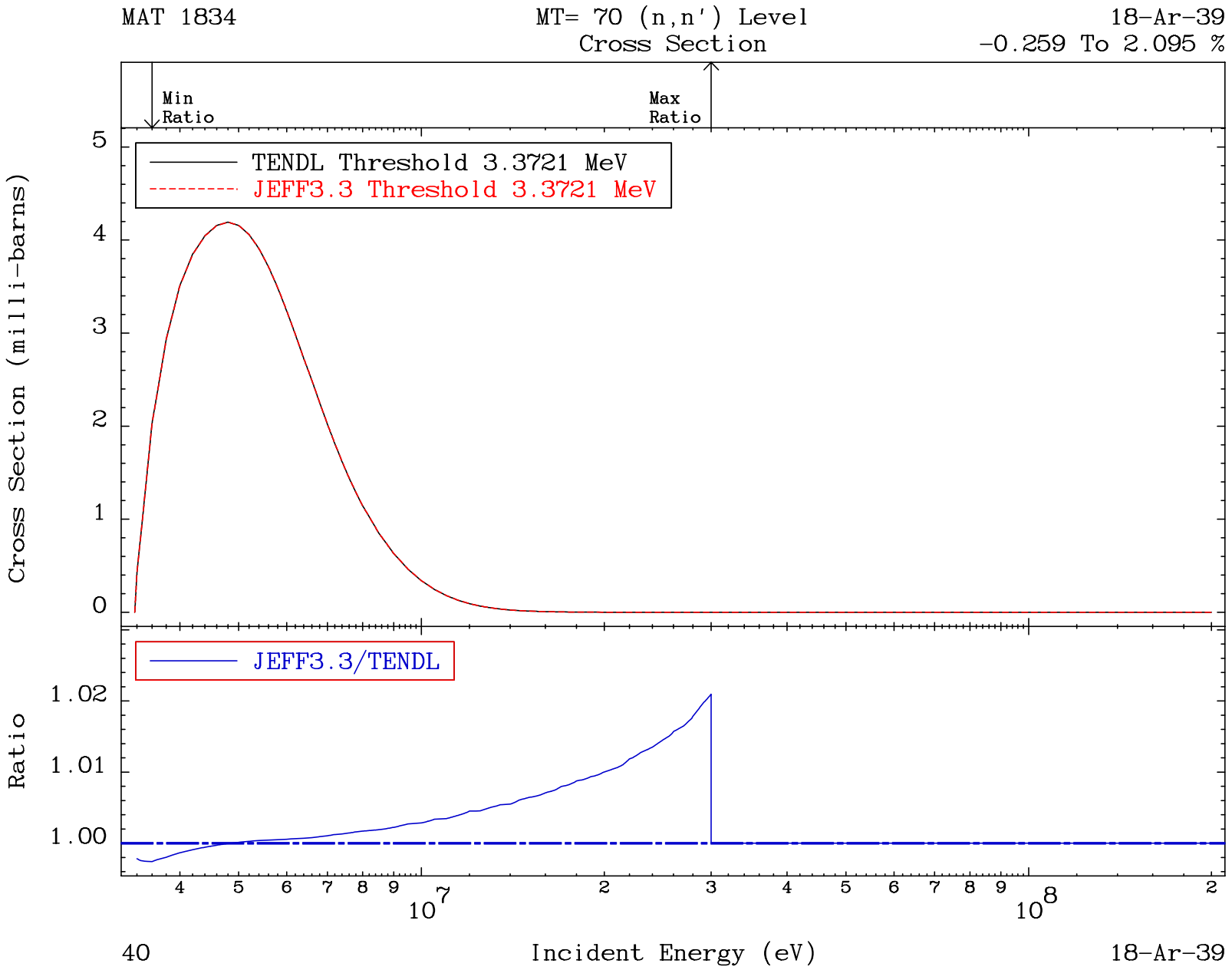

MAT 1834
MT= 65 (n,n') Level
Cross Section
18-Ar-39
-0.079 To 0.588 %
Min Ratio
Max Ratio
TENDL Threshold 3.1412 MeV
JEFF3.3 Threshold 3.1412 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
18-Ar-39

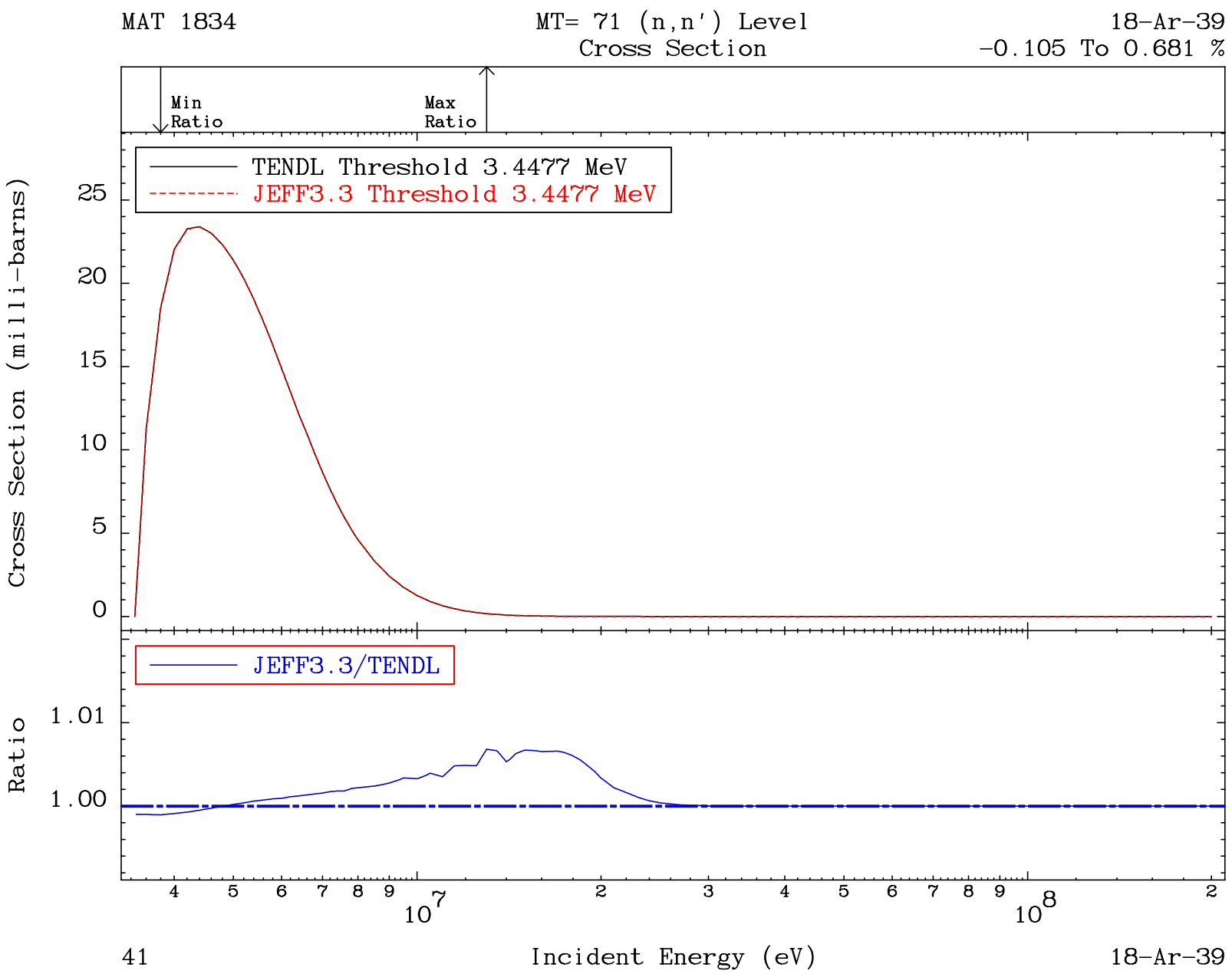

MAT 1834
MT= 66 (n,n') Level
Cross Section
18-Ar-39
-0.086 To 0.655 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.1700 MeV
JEFF3.3 Threshold 3.1700 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
36
Incident Energy (eV)
18-Ar-39

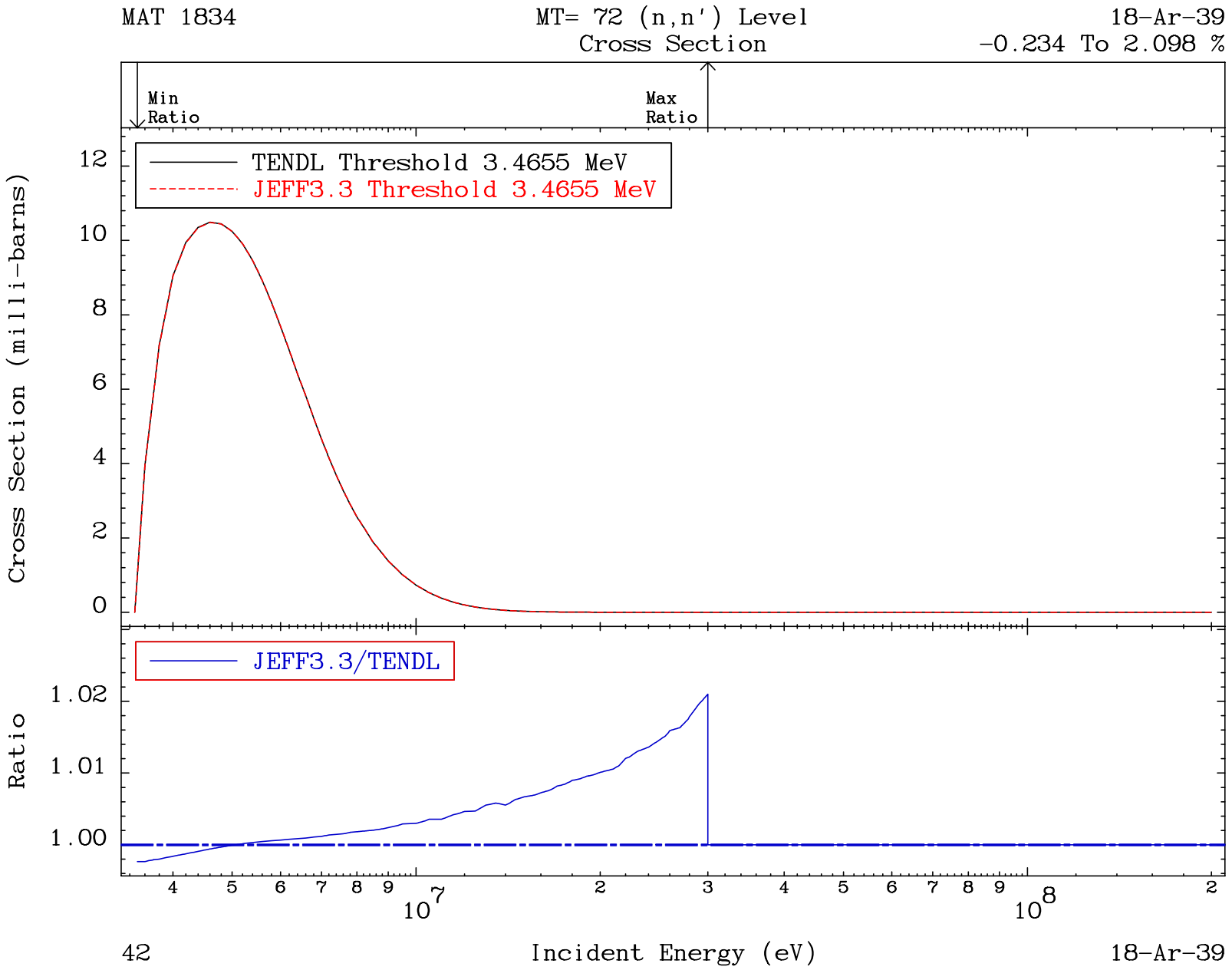

MAT 1834
MT= 67 (n,n') Level
Cross Section
18-Ar-39
-0.097 To 0.656 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.2417 MeV
JEFF3.3 Threshold 3.2417 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
18-Ar-39

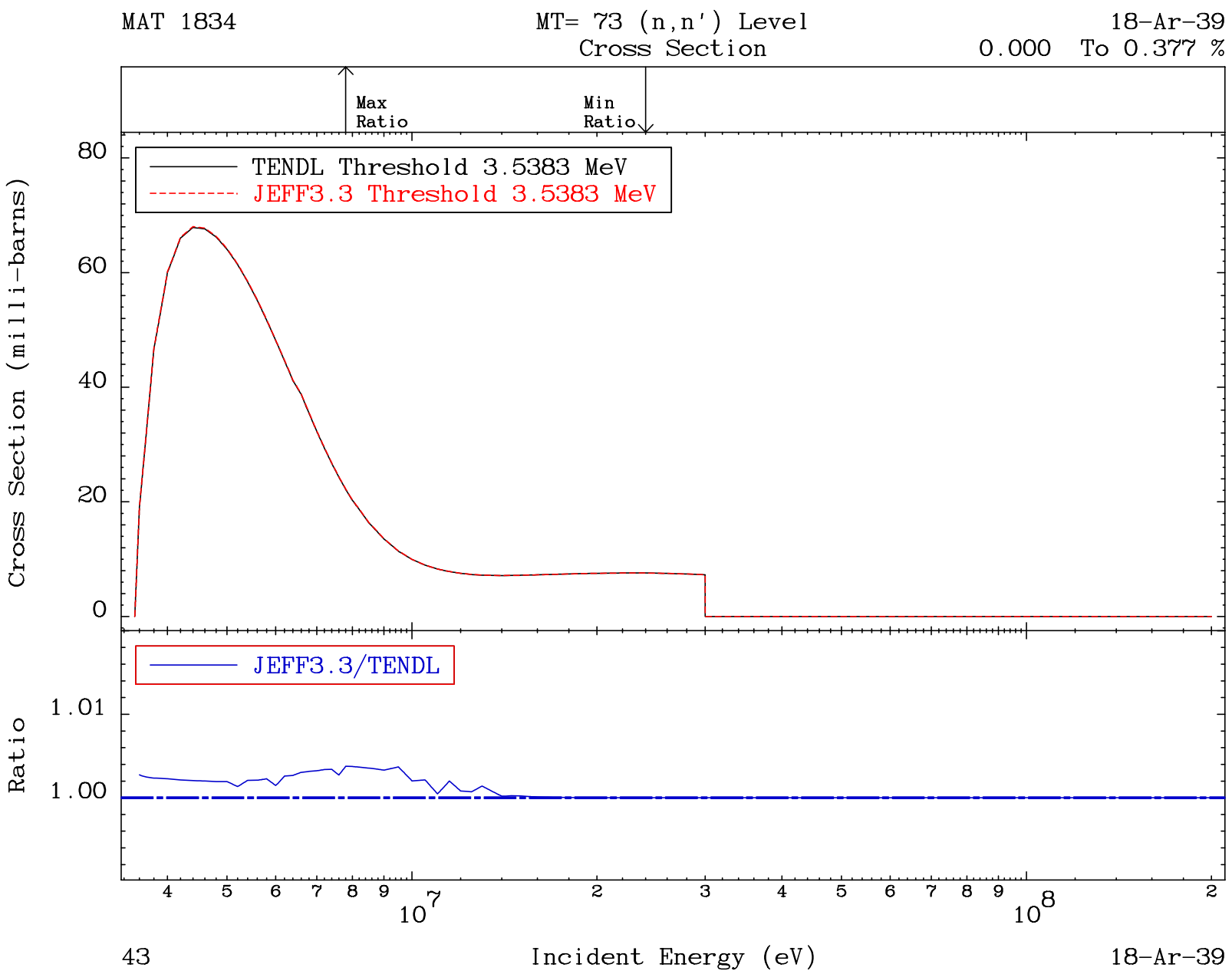

MAT 1834
MT= 68 (n,n') Level
Cross Section
18-Ar-39
-0.298 To 2.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.2931 MeV
JEFF3.3 Threshold 3.2931 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.00
1.01
1.02
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
18-Ar-39

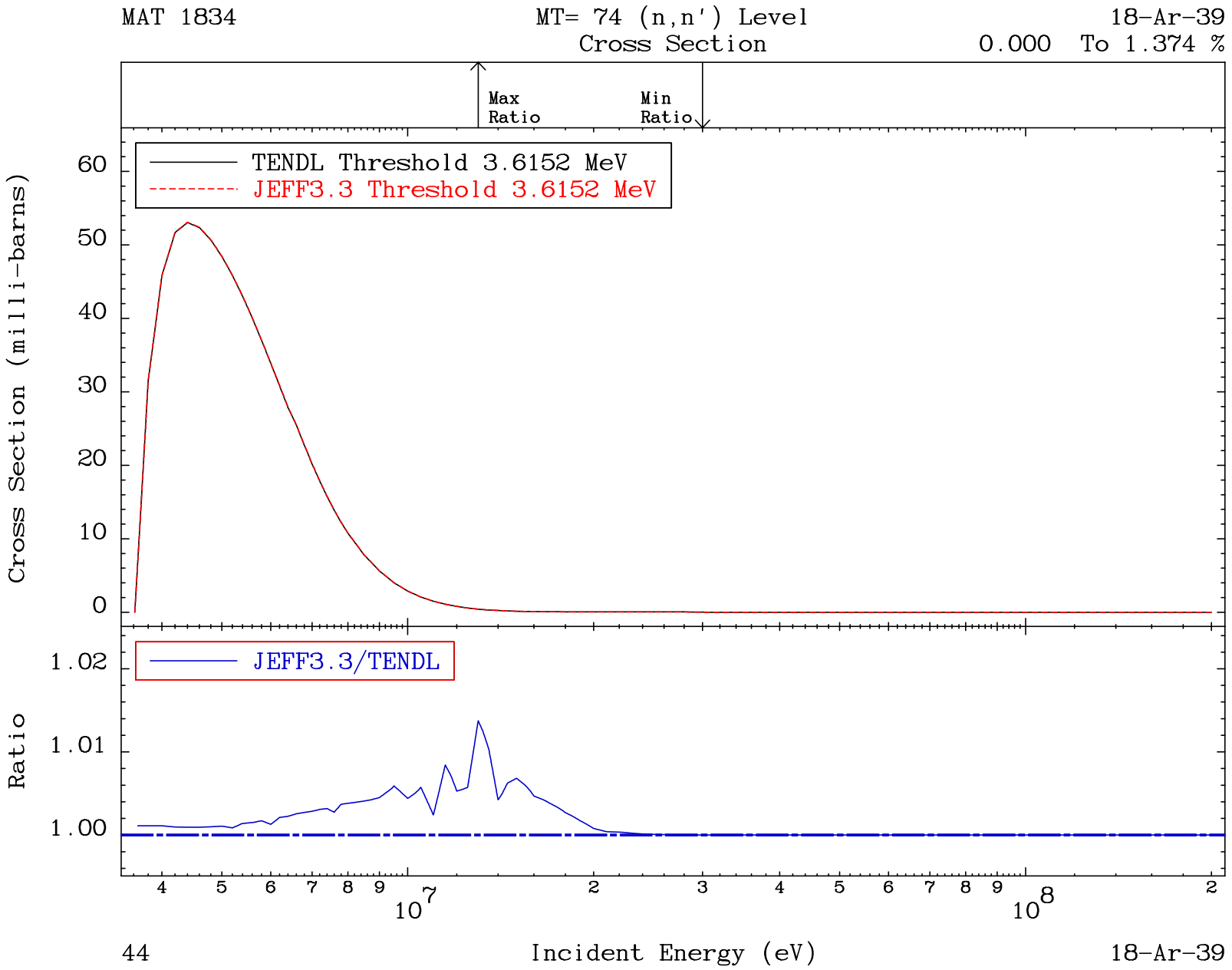

MAT 1834
MT= 69 (n,n') Level
Cross Section
18-Ar-39
-0.214 To 2.099 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.3501 MeV
JEFF3.3 Threshold 3.3501 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
39
Incident Energy (eV)
18-Ar-39

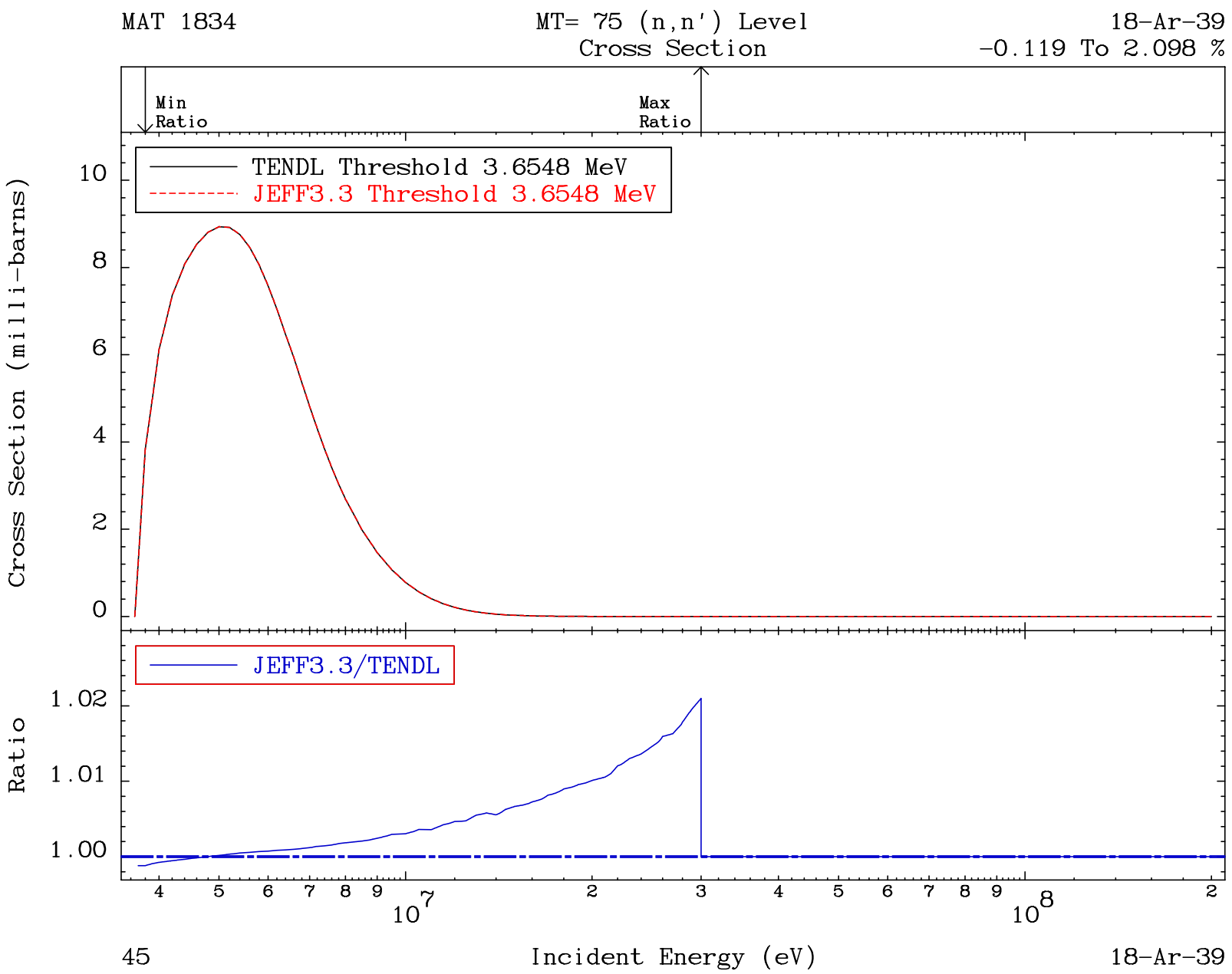

MAT 1834
MT= 70 (n,n') Level
Cross Section
18-Ar-39
-0.259 To 2.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.3721 MeV
JEFF3.3 Threshold 3.3721 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.00
1.01
1.02
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
18-Ar-39

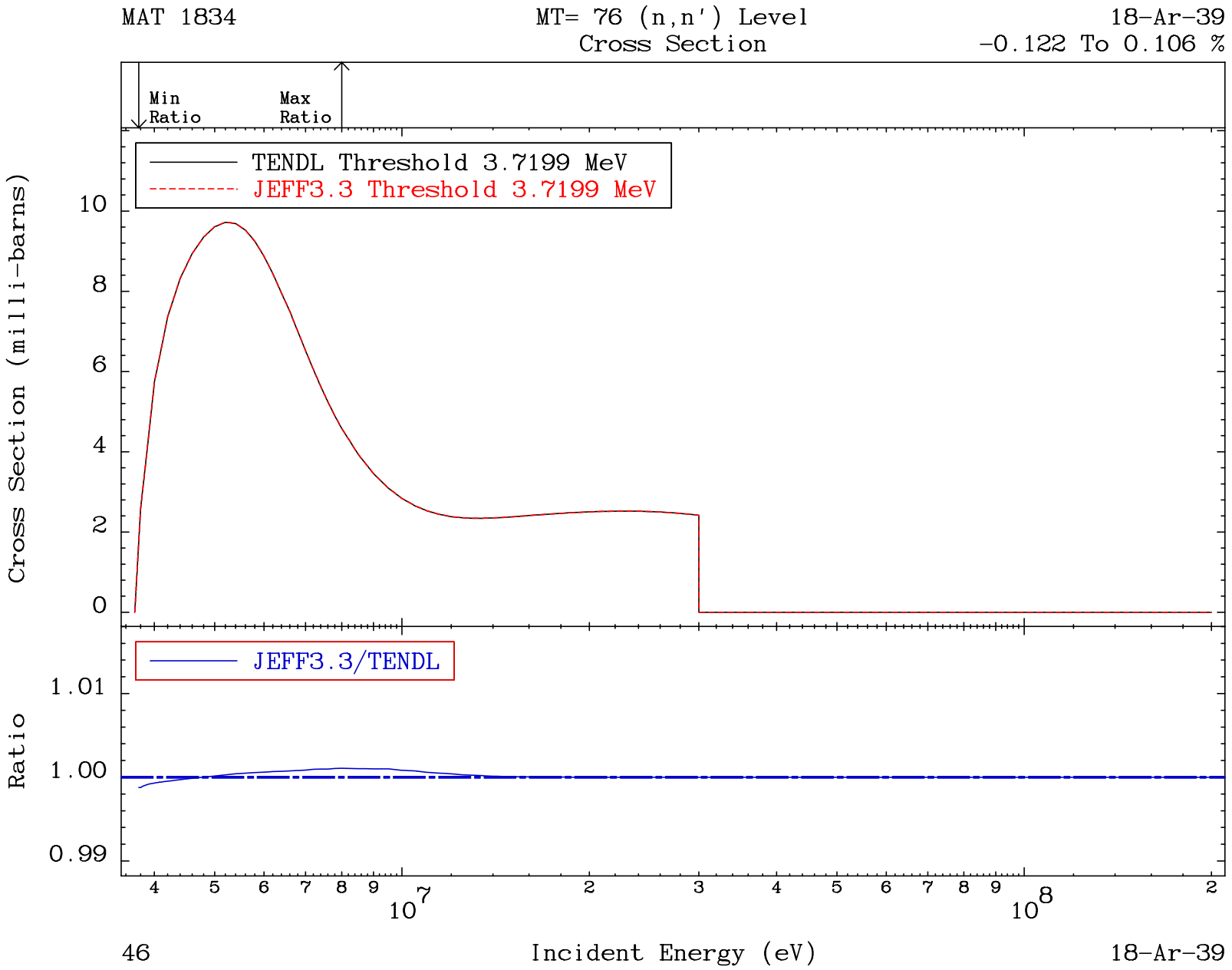

MAT 1834
MT= 71 (n,n') Level
Cross Section
18-Ar-39
-0.105 To 0.681 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.4477 MeV
JEFF3.3 Threshold 3.4477 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
18-Ar-39

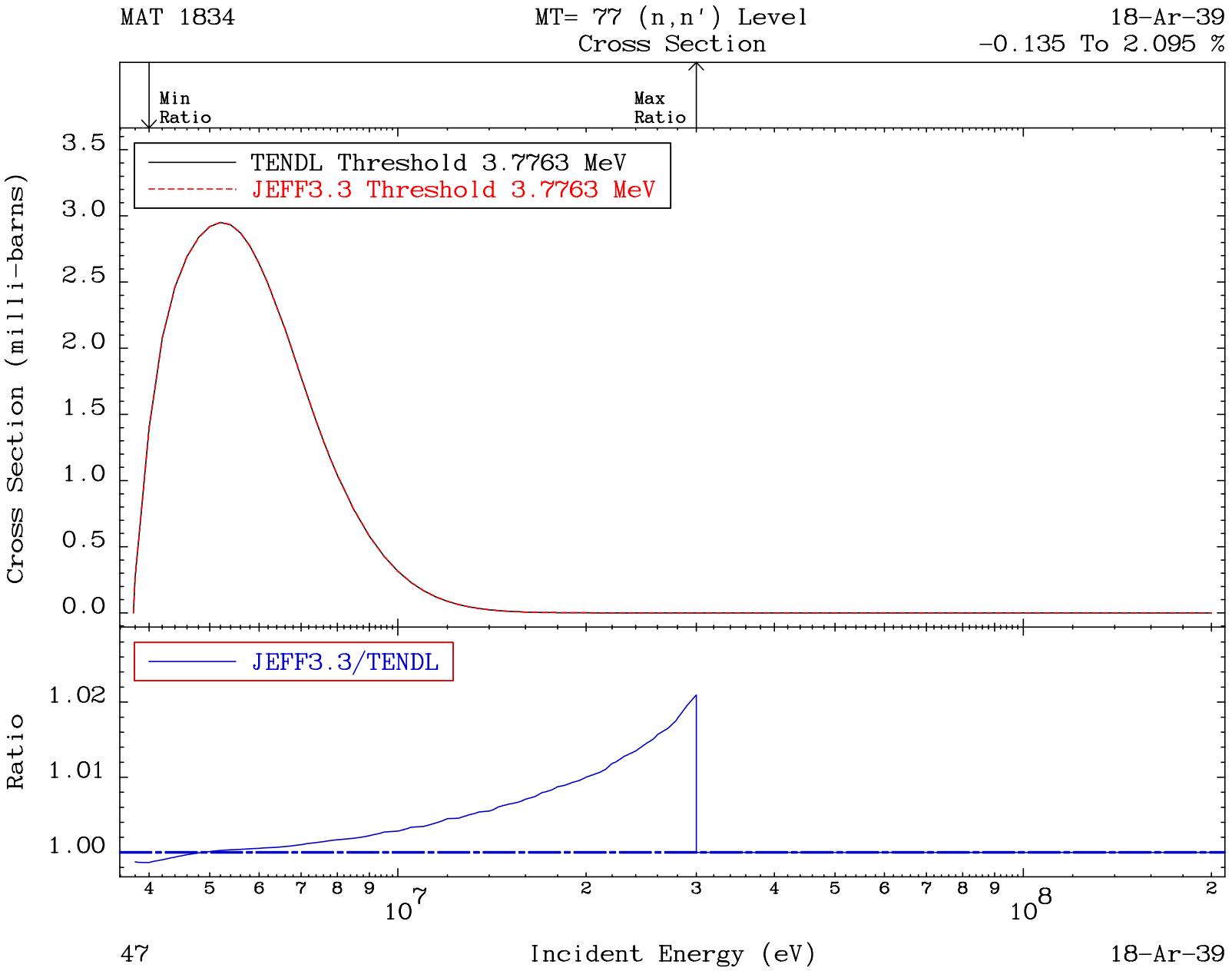

MAT 1834
MT= 72 (n,n') Level
Cross Section
18-Ar-39
-0.234 To 2.098 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.4655 MeV
JEFF3.3 Threshold 3.4655 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
42
Incident Energy (eV)
18-Ar-39

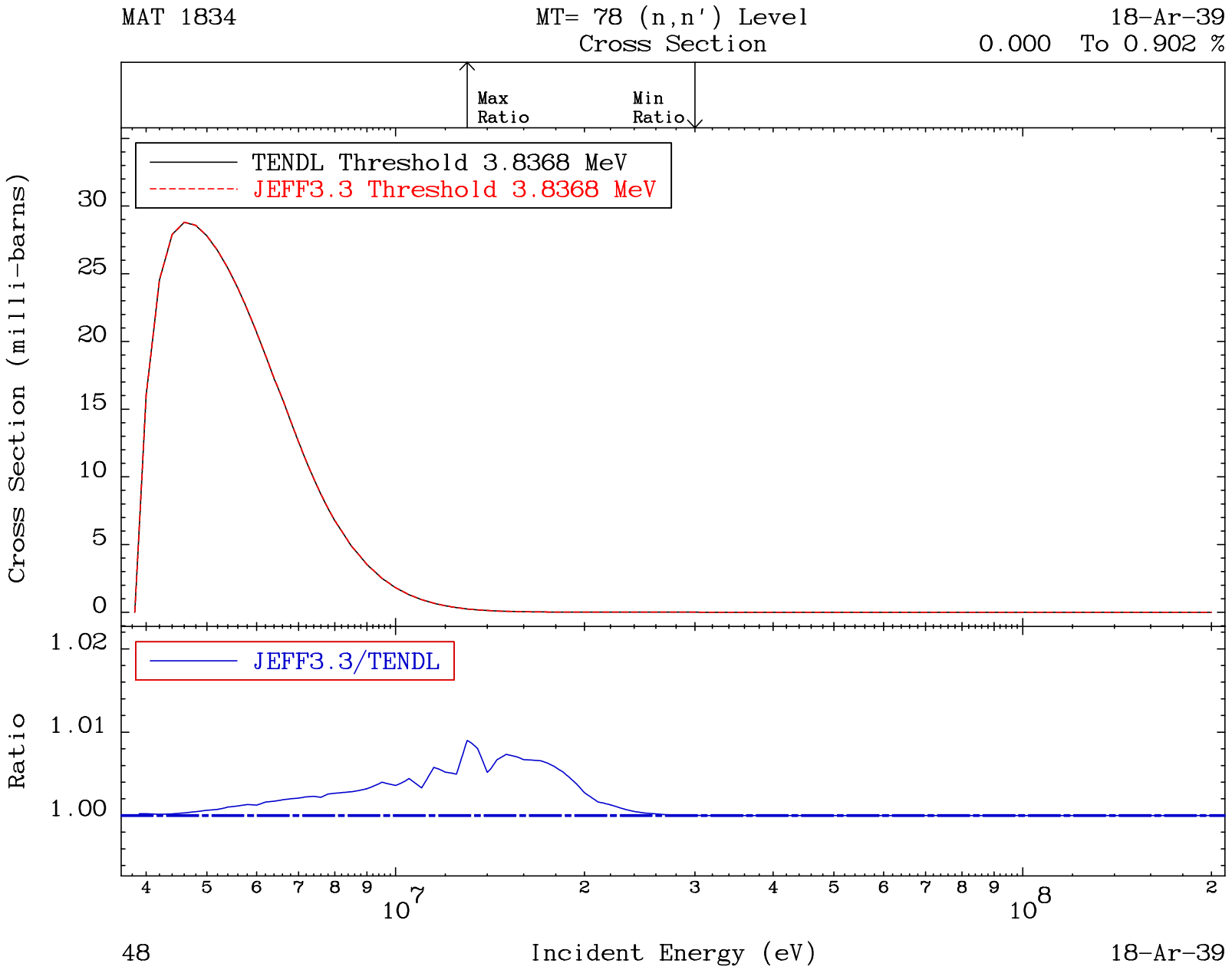

MAT 1834
MT= 73 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.377 %
Max Ratio
Min Ratio
TENDL Threshold 3.5383 MeV
JEFF3.3 Threshold 3.5383 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
18-Ar-39

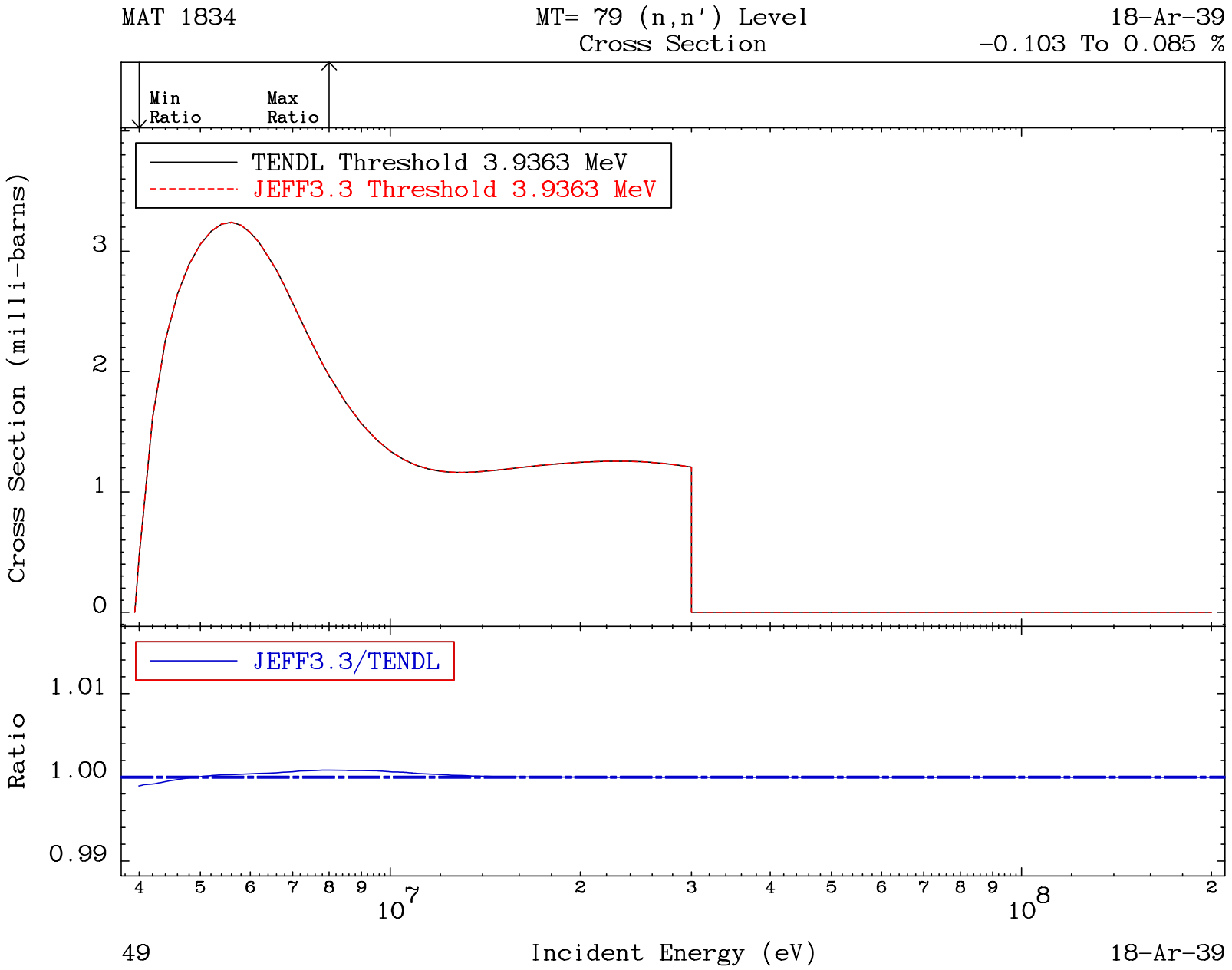

MAT 1834
MT= 74 (n,n') Level
Cross Section
18-Ar-39
0.000 To 1.374 %
Max Ratio
Min Ratio
TENDL Threshold 3.6152 MeV
JEFF3.3 Threshold 3.6152 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
18-Ar-39

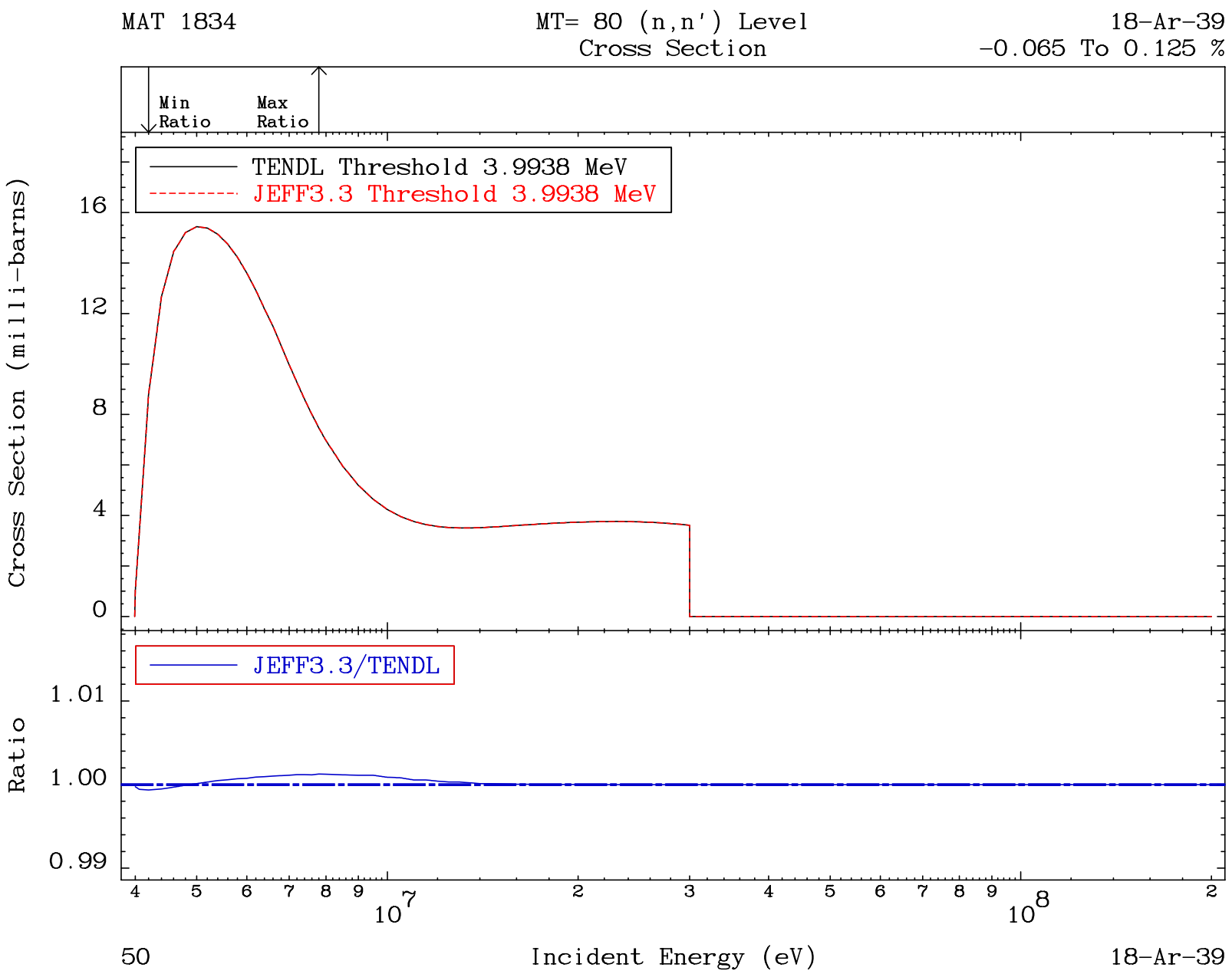

MAT 1834
MT= 75 (n,n') Level
Cross Section
18-Ar-39
-0.119 To 2.098 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.6548 MeV
JEFF3.3 Threshold 3.6548 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
18-Ar-39

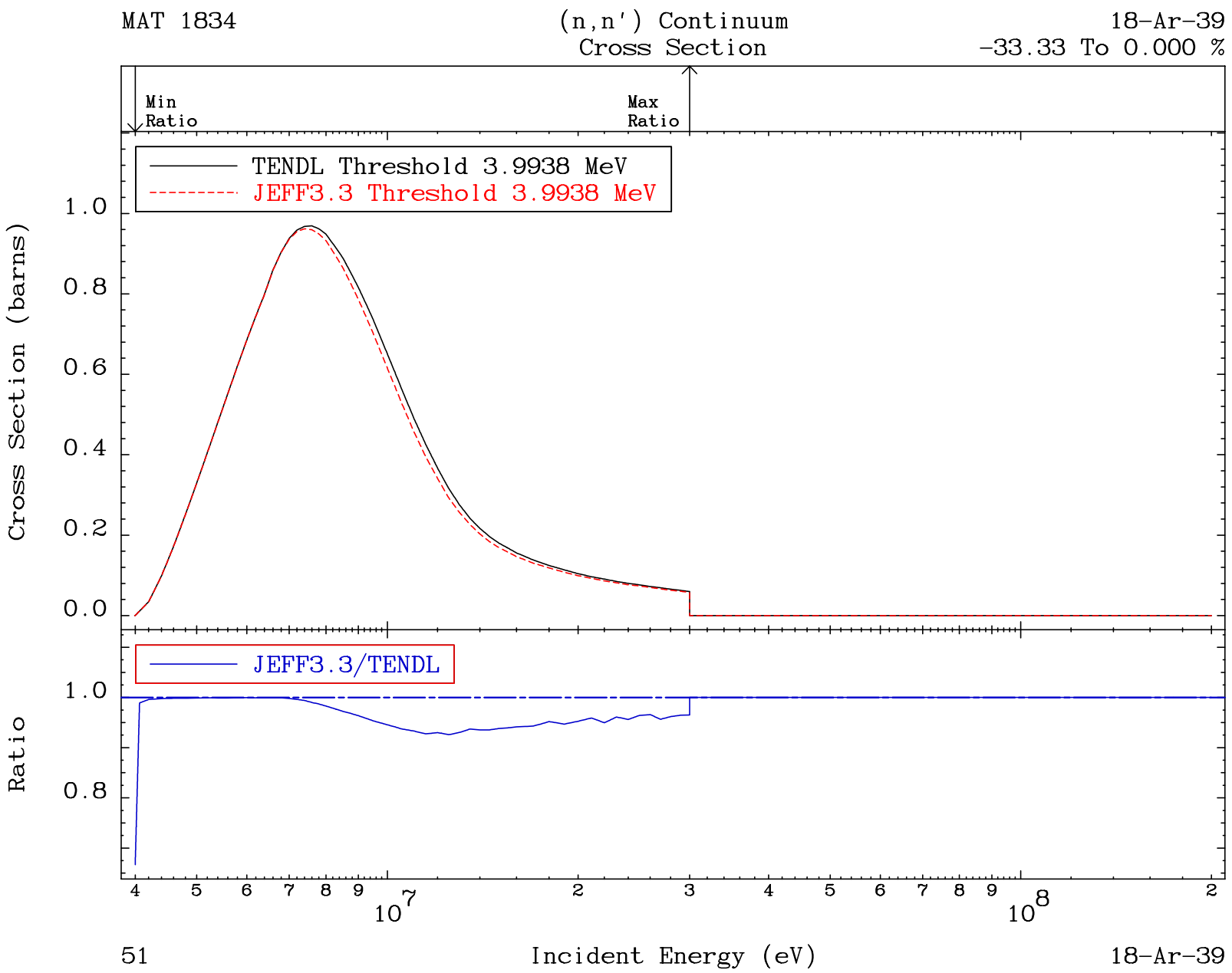

MAT 1834
MT= 76 (n,n') Level
Cross Section
18-Ar-39
-0.122 To 0.106 %
Min Ratio
Max Ratio
TENDL Threshold 3.7199 MeV
JEFF3.3 Threshold 3.7199 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
18-Ar-39

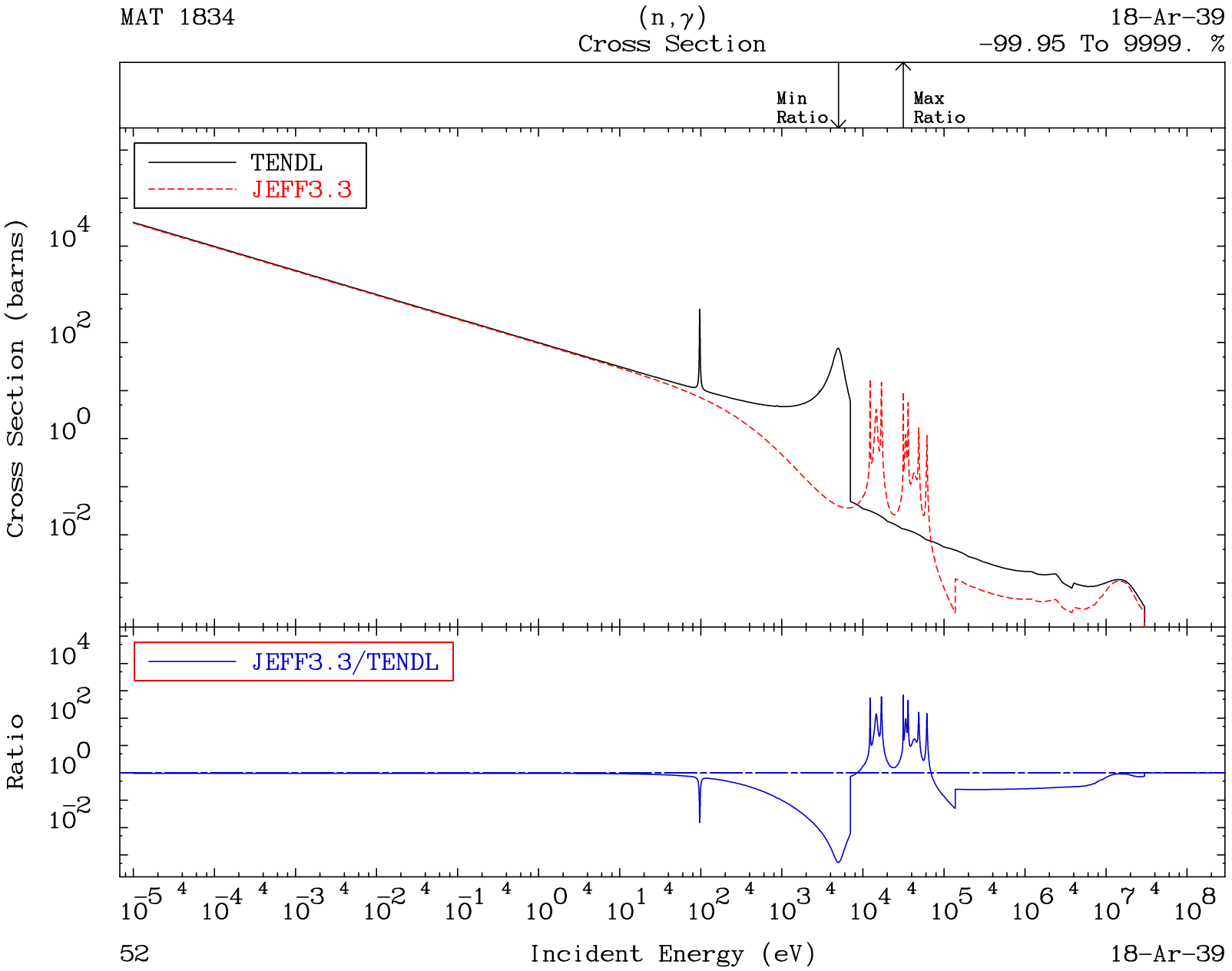

MAT 1834
MT= 77 (n,n') Level
Cross Section
18-Ar-39
-0.135 To 2.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.7763 MeV
JEFF3.3 Threshold 3.7763 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
18-Ar-39

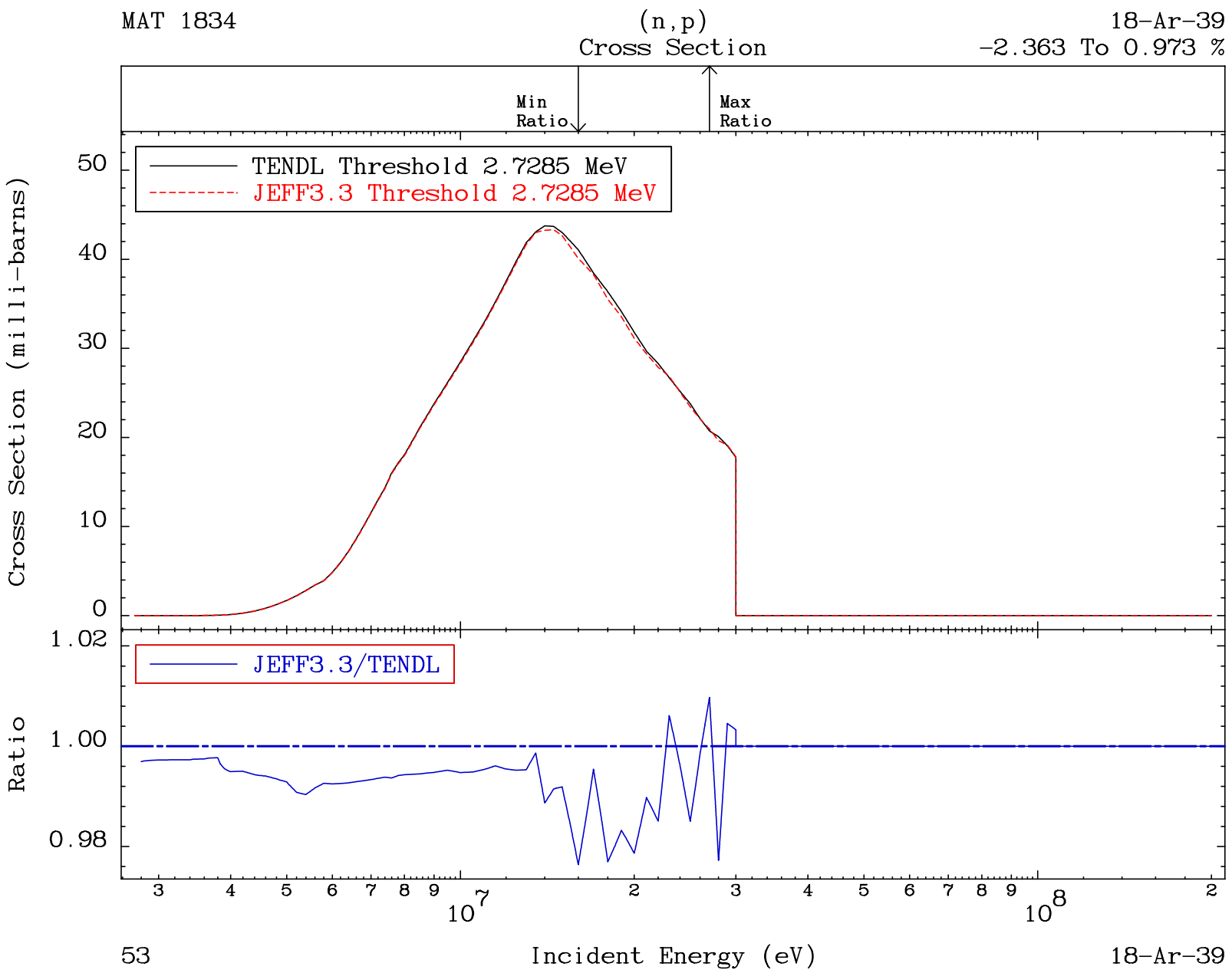

MAT 1834
MT= 78 (n,n') Level
Cross Section
18-Ar-39
0.000 To 0.902 %
Max Ratio
Min Ratio
TENDL Threshold 3.8368 MeV
JEFF3.3 Threshold 3.8368 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
18-Ar-39

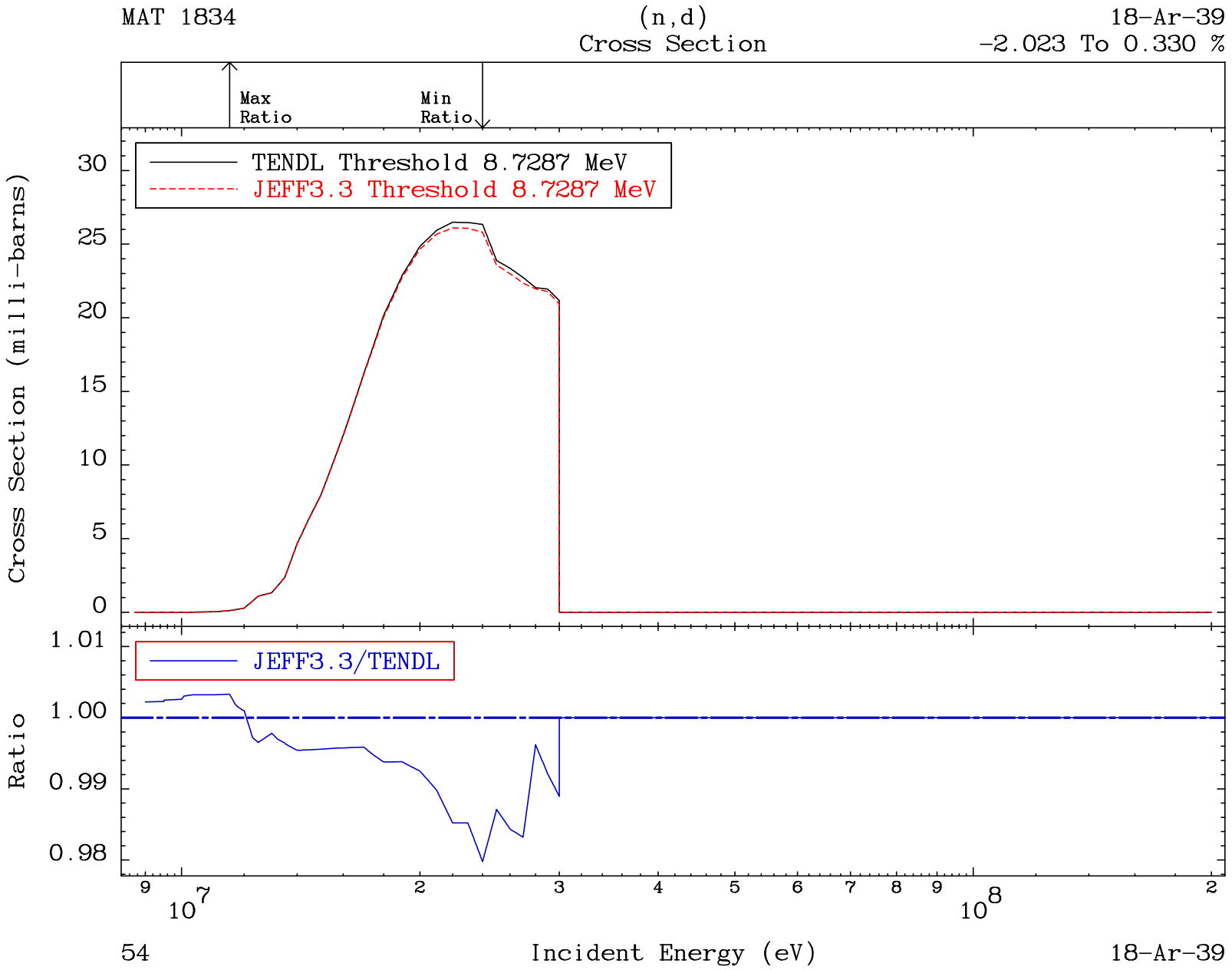

MAT 1834
MT= 79 (n,n') Level
Cross Section
18-Ar-39
-0.103 To 0.085 %
Min Ratio
Max Ratio
TENDL Threshold 3.9363 MeV
JEFF3.3 Threshold 3.9363 MeV
Cross Section (milli-barns)
0
1
2
3
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
49
18-Ar-39

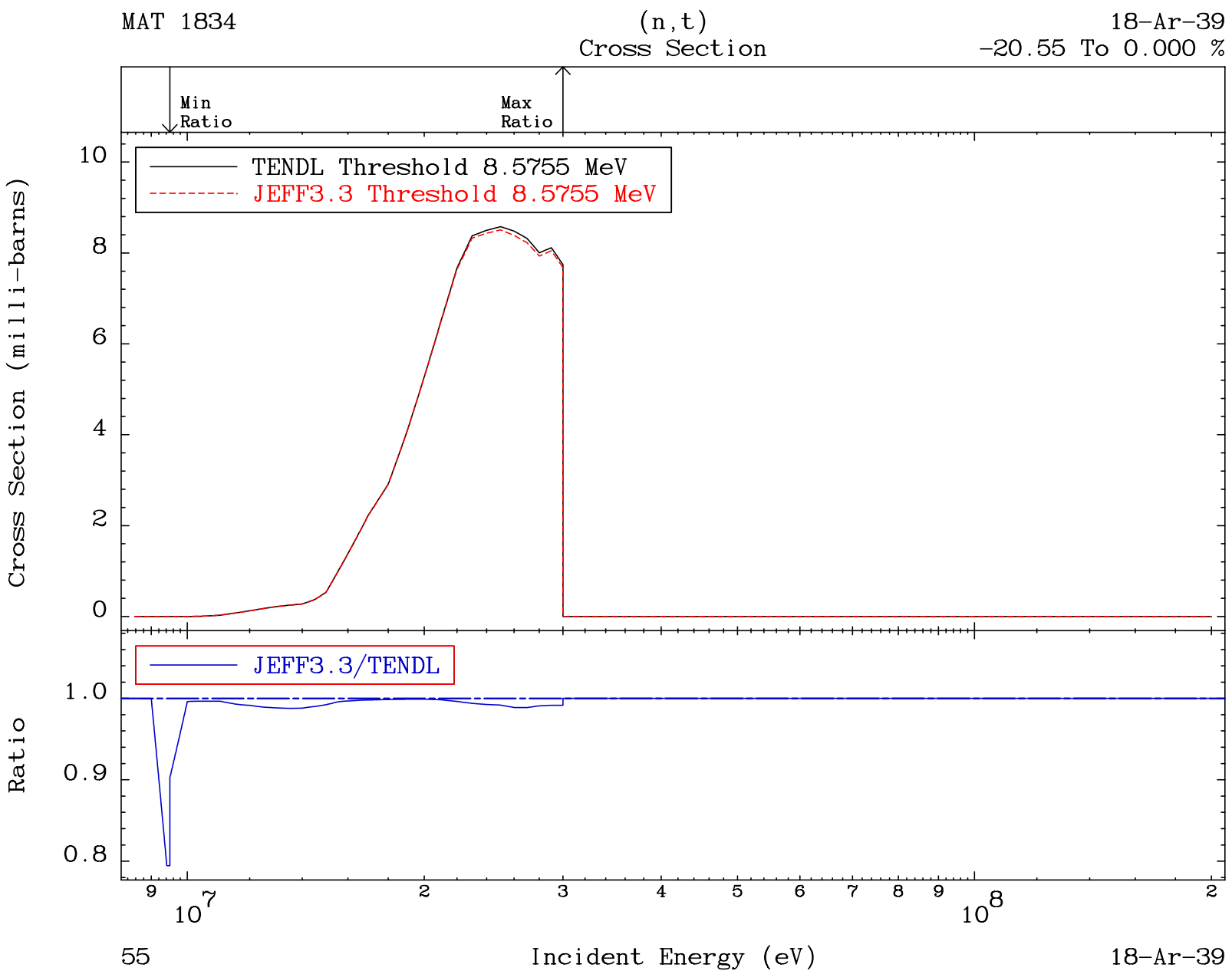

MAT 1834
MT= 80 (n,n') Level
Cross Section
18-Ar-39
-0.065 To 0.125 %
Min Ratio
Max Ratio
TENDL Threshold 3.9938 MeV
JEFF3.3 Threshold 3.9938 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
18-Ar-39

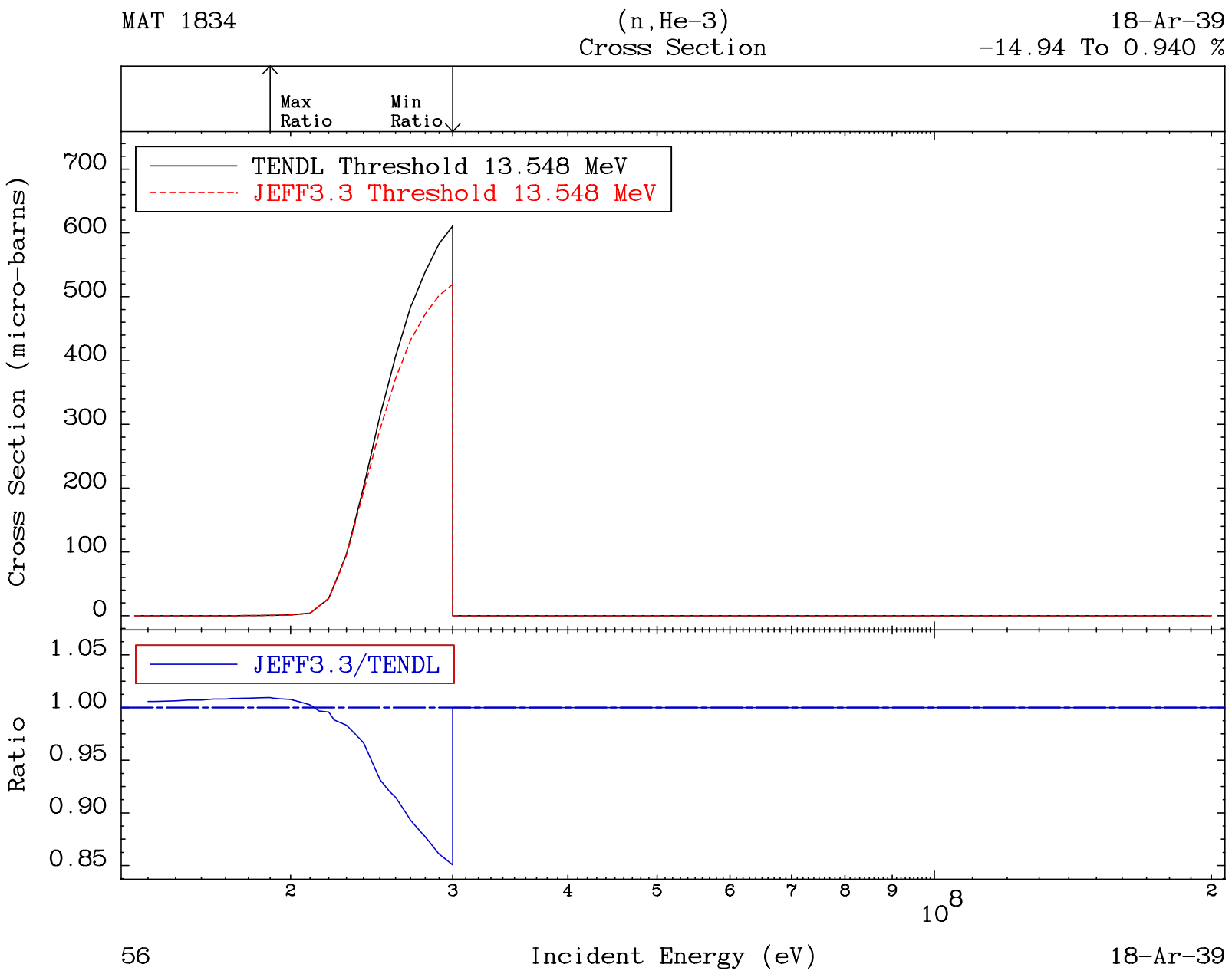

MAT 1834
(n,n') Continuum
Cross Section
18-Ar-39
-33.33 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.9938 MeV
JEFF3.3 Threshold 3.9938 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.0
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
18-Ar-39

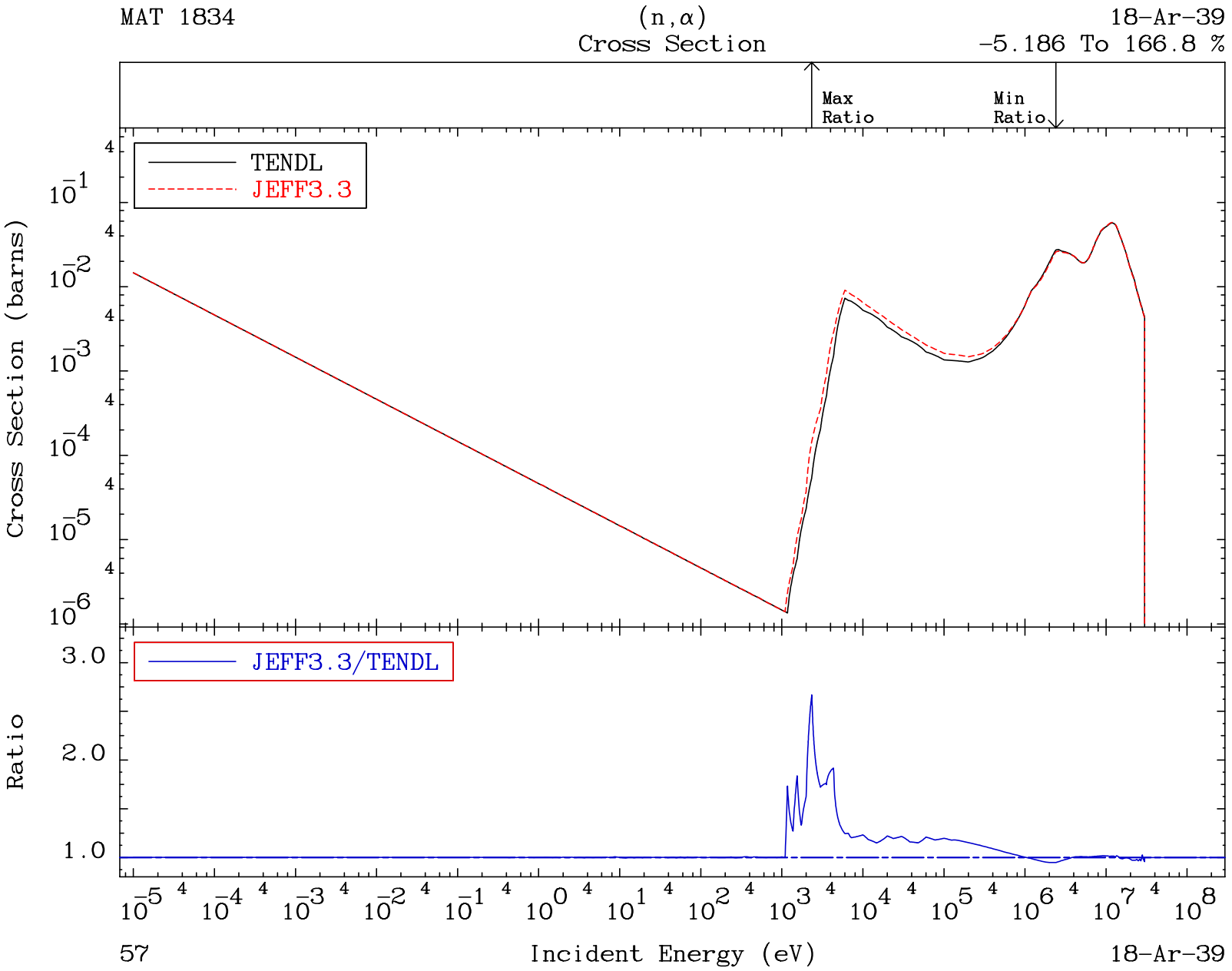

MAT 1834
(n,γ)
Cross Section
18-Ar-39
-99.95 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
18-Ar-39

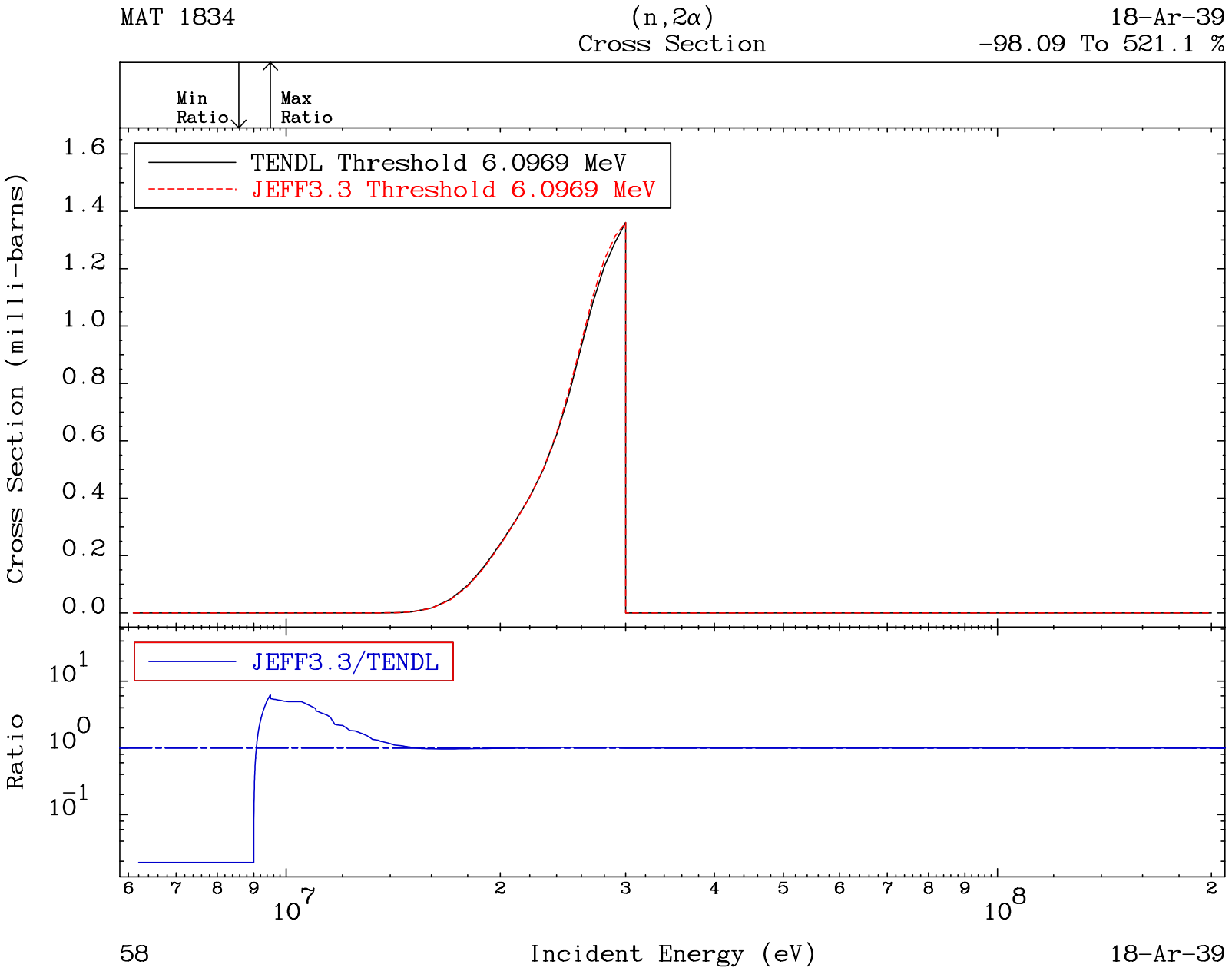

MAT 1834
(n,p)
Cross Section
18-Ar-39
-2.363 To 0.973 %
Min Ratio
Max Ratio
TENDL Threshold 2.7285 MeV
JEFF3.3 Threshold 2.7285 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
53
Incident Energy (eV)
18-Ar-39

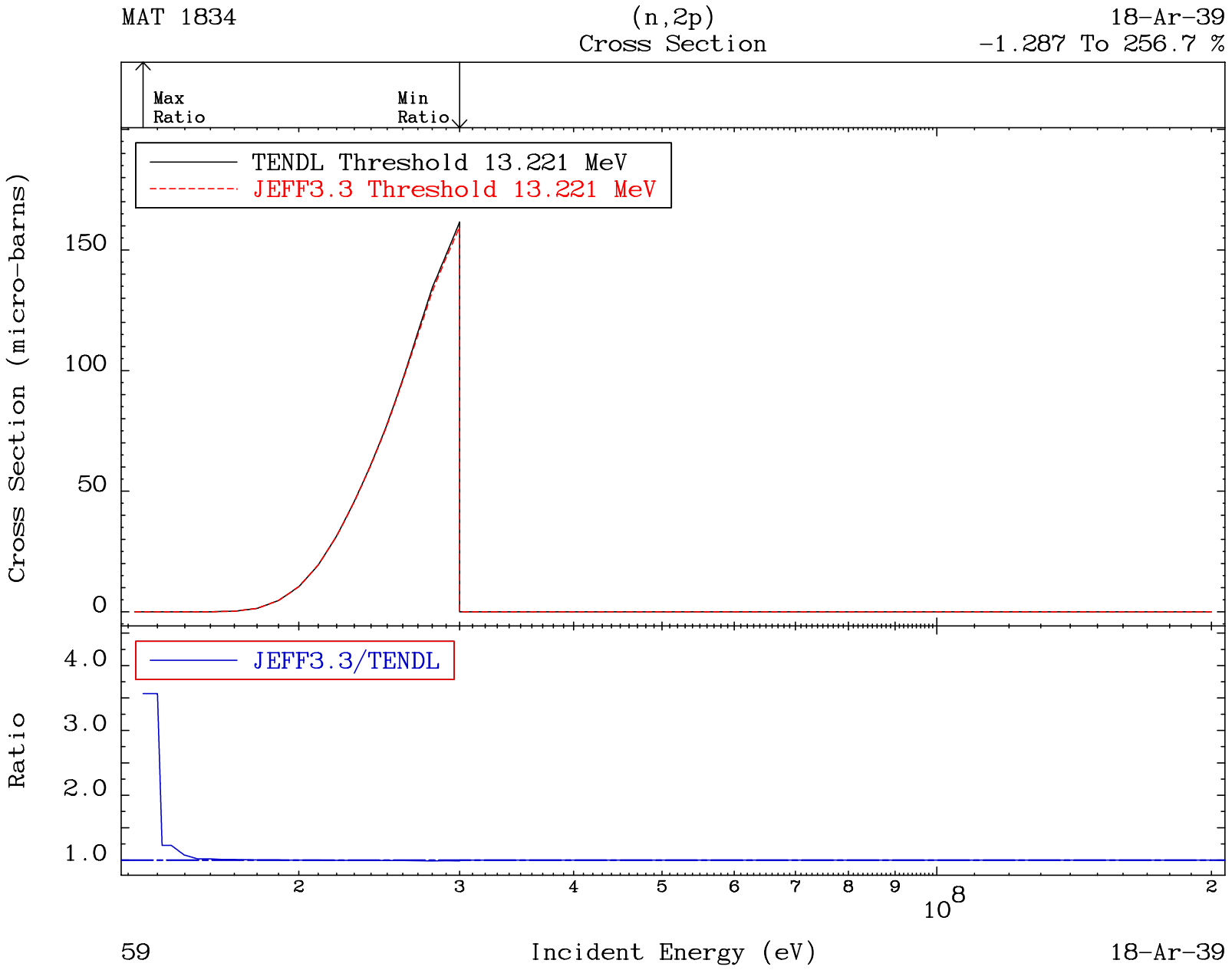

MAT 1834
(n,d)
Cross Section
18-Ar-39
-2.023 To 0.330 %
Max Ratio
Min Ratio
TENDL Threshold 8.7287 MeV
JEFF3.3 Threshold 8.7287 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
0.98
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
18-Ar-39

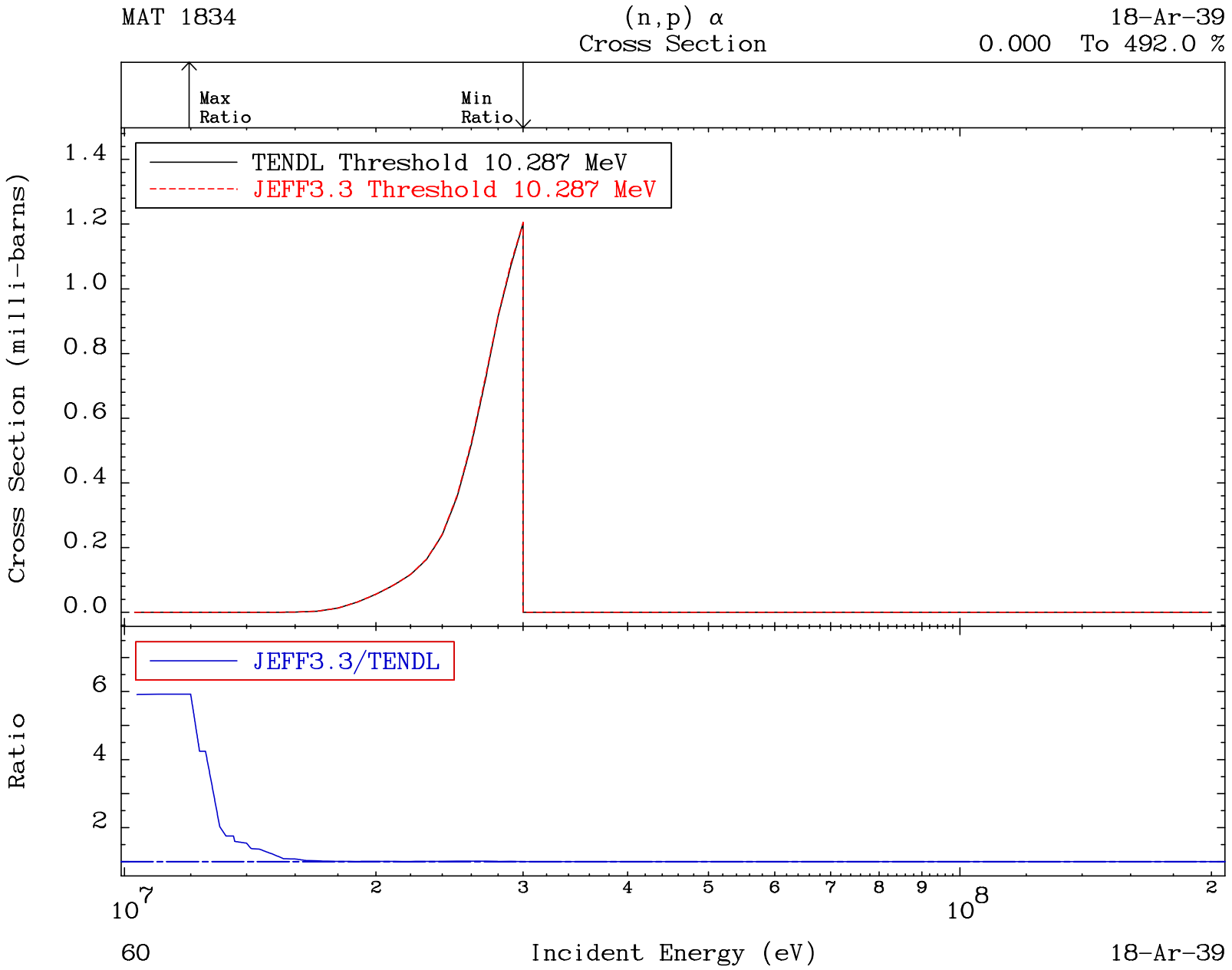

MAT 1834
(n,t)
Cross Section
18-Ar-39
-20.55 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 8.5755 MeV
JEFF3.3 Threshold 8.5755 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
18-Ar-39

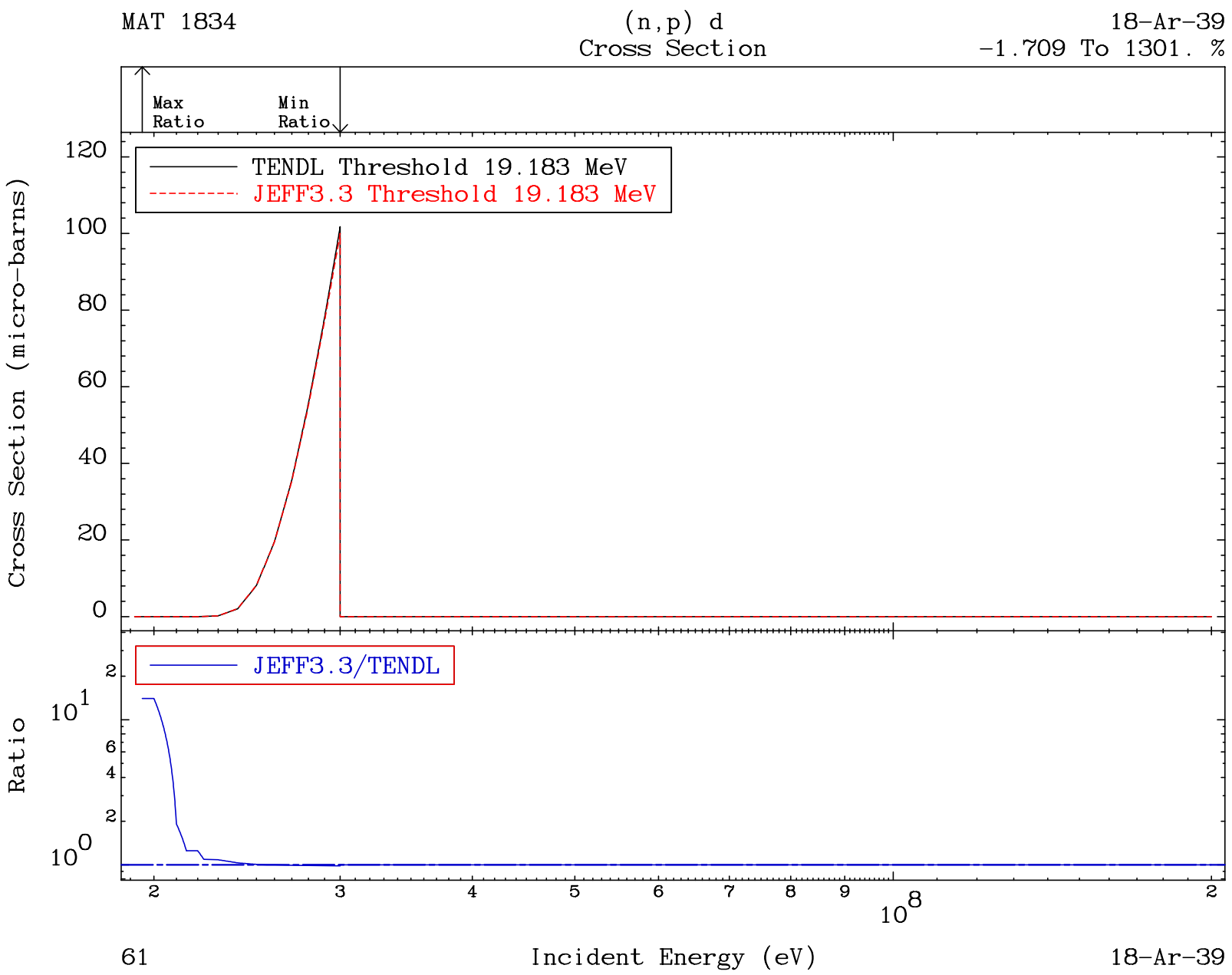

MAT 1834
(n,He-3)
Cross Section
18-Ar-39
-14.94 To 0.940 %
Max Ratio
Min Ratio
TENDL Threshold 13.548 MeV
JEFF3.3 Threshold 13.548 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
0.85
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
18-Ar-39

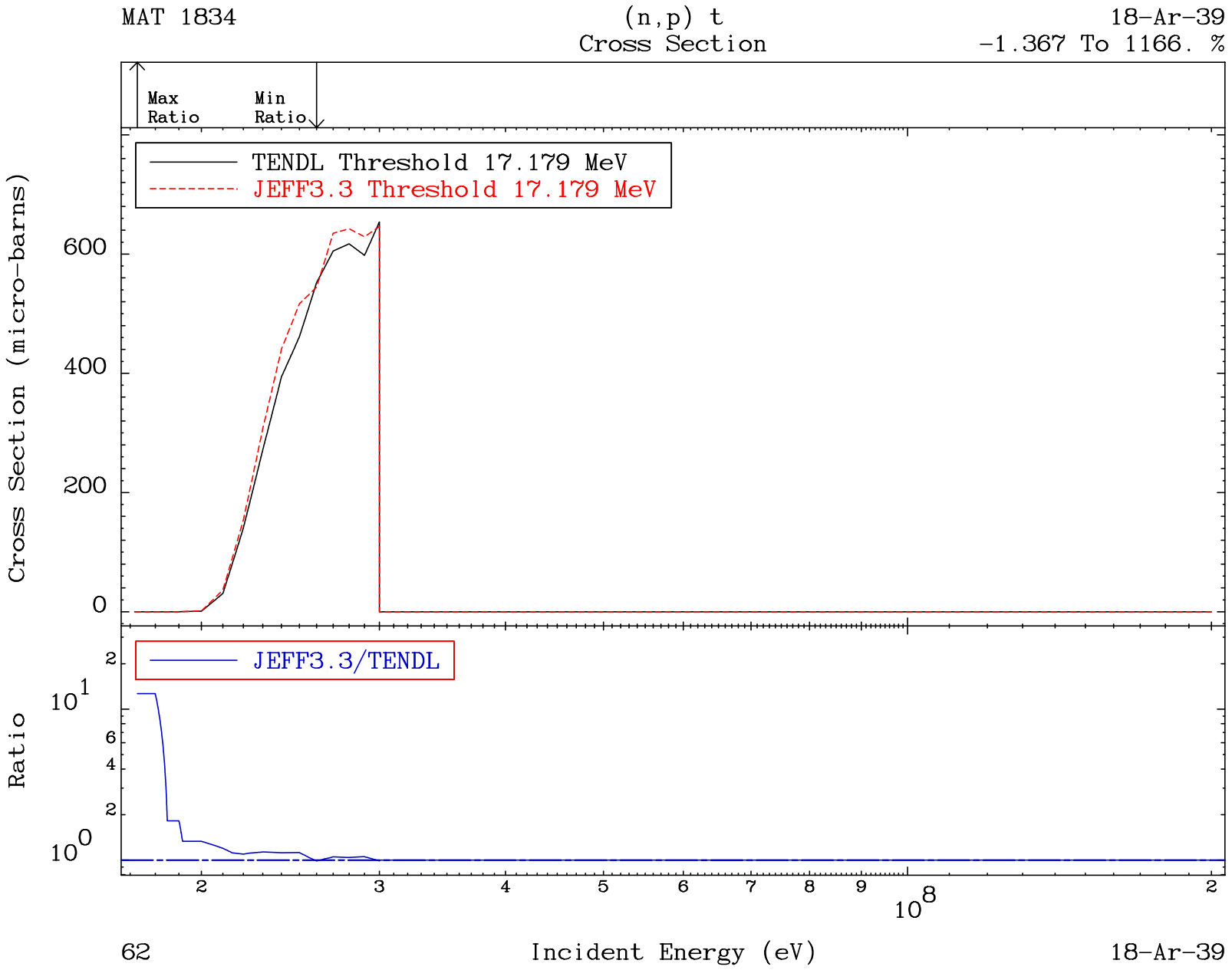

MAT 1834
(n,α)
Cross Section
18-Ar-39
-5.186 To 166.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
18-Ar-39

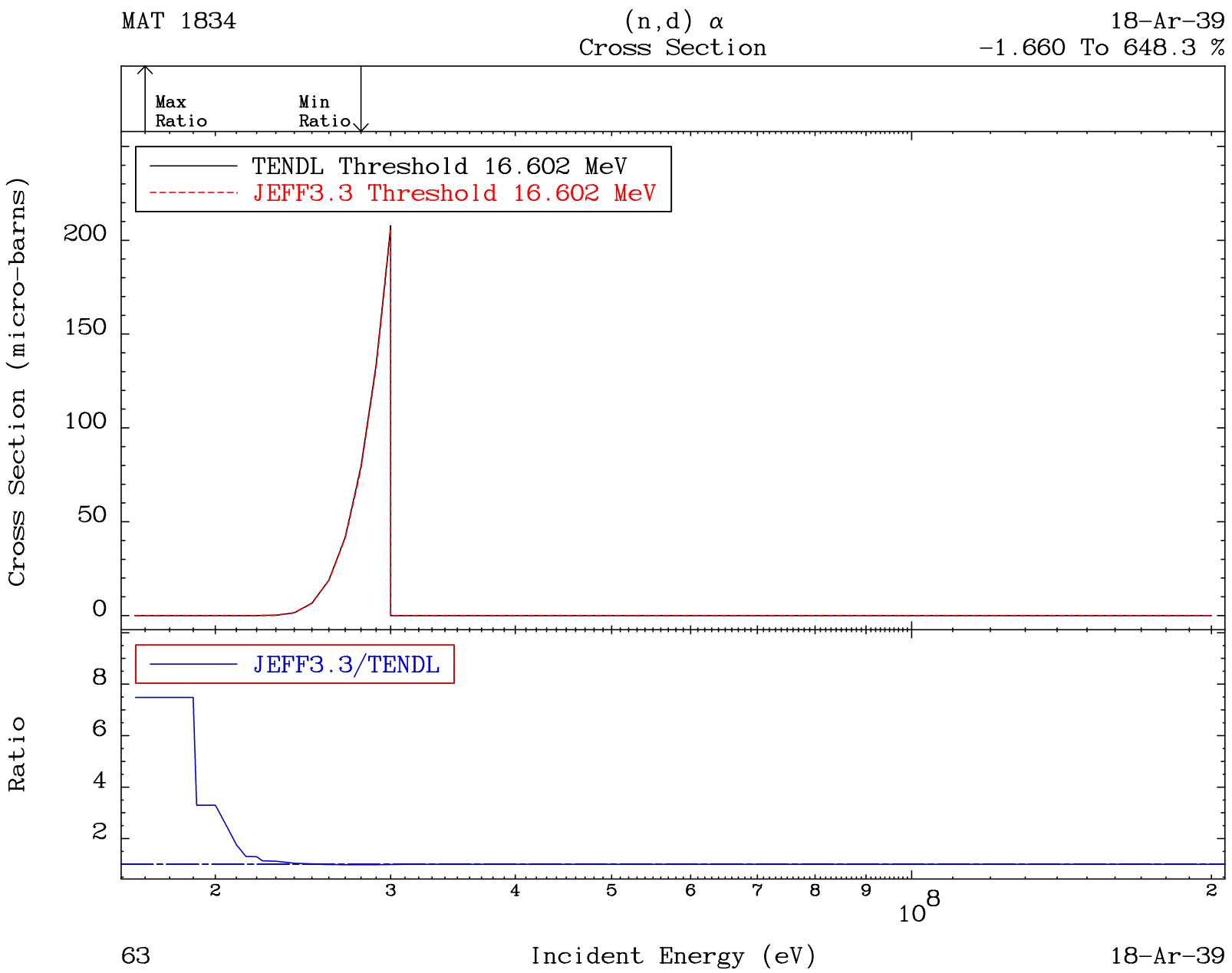

MAT 1834
(n,2α)
Cross Section
18-Ar-39
-98.09 To 521.1 %
Min Ratio
Max Ratio
TENDL Threshold 6.0969 MeV
JEFF3.3 Threshold 6.0969 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
18-Ar-39

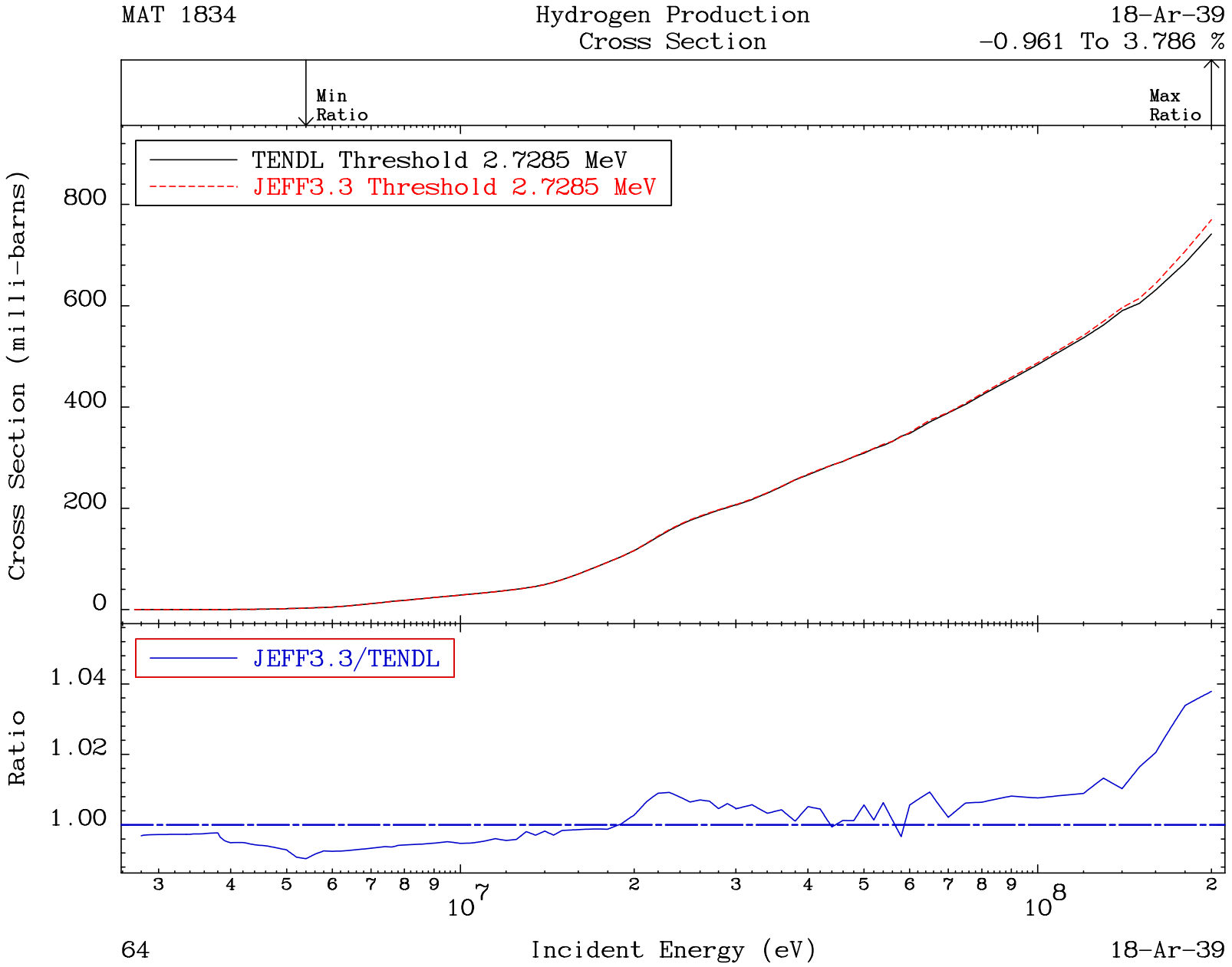

MAT 1834
(n,2p)
Cross Section
18-Ar-39
-1.287 To 256.7 %
Max Ratio
Min Ratio
TENDL Threshold 13.221 MeV
JEFF3.3 Threshold 13.221 MeV
Cross Section (micro-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
18-Ar-39

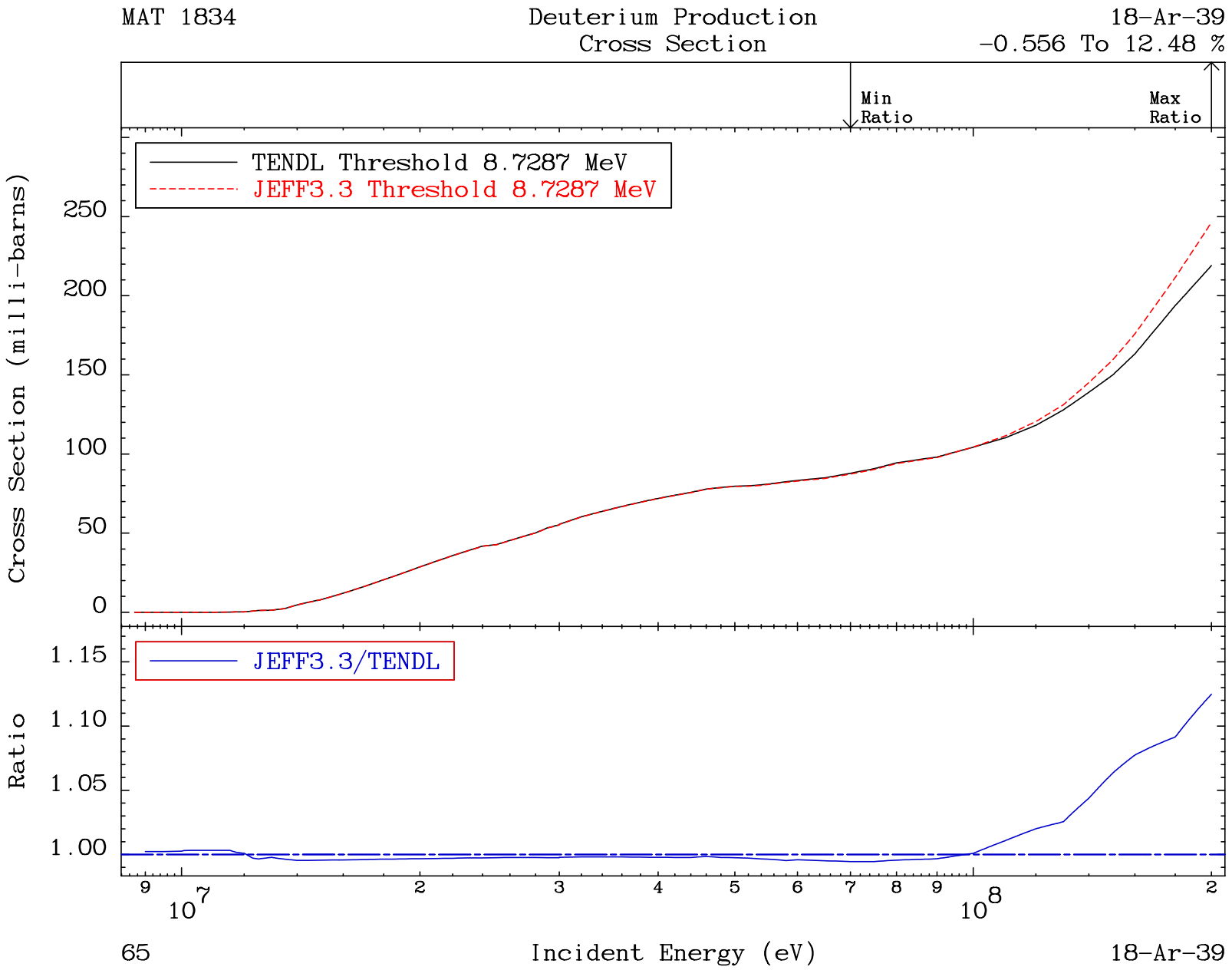

MAT 1834
(n,p) α
Cross Section
18-Ar-39
0.000 To 492.0 %
Max Ratio
Min Ratio
TENDL Threshold 10.287 MeV
JEFF3.3 Threshold 10.287 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
6
4
2
10^7
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
18-Ar-39

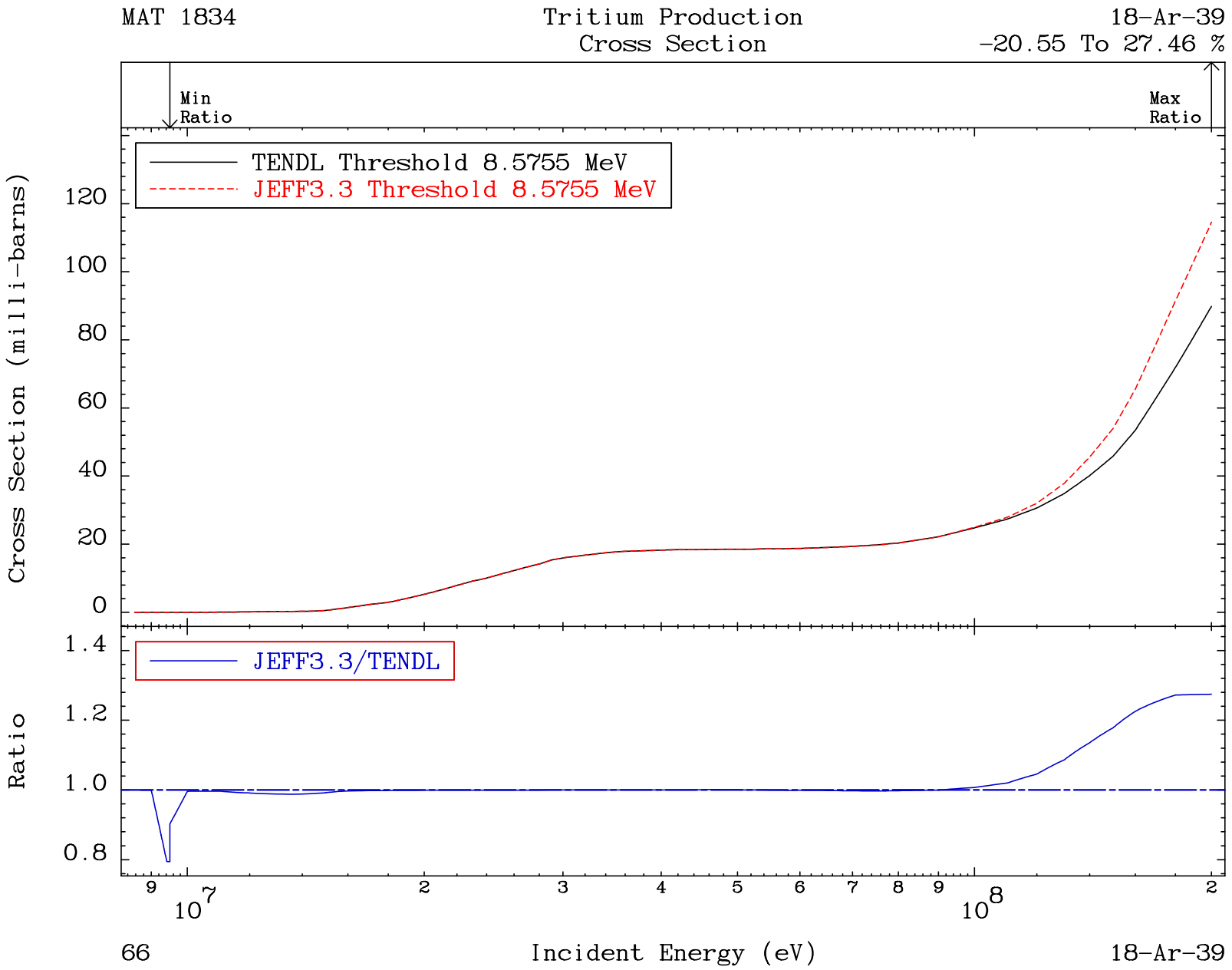

MAT 1834
(n,p) d
Cross Section
18-Ar-39
-1.709 To 1301. %
Max Ratio
Min Ratio
TENDL Threshold 19.183 MeV
JEFF3.3 Threshold 19.183 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
18-Ar-39

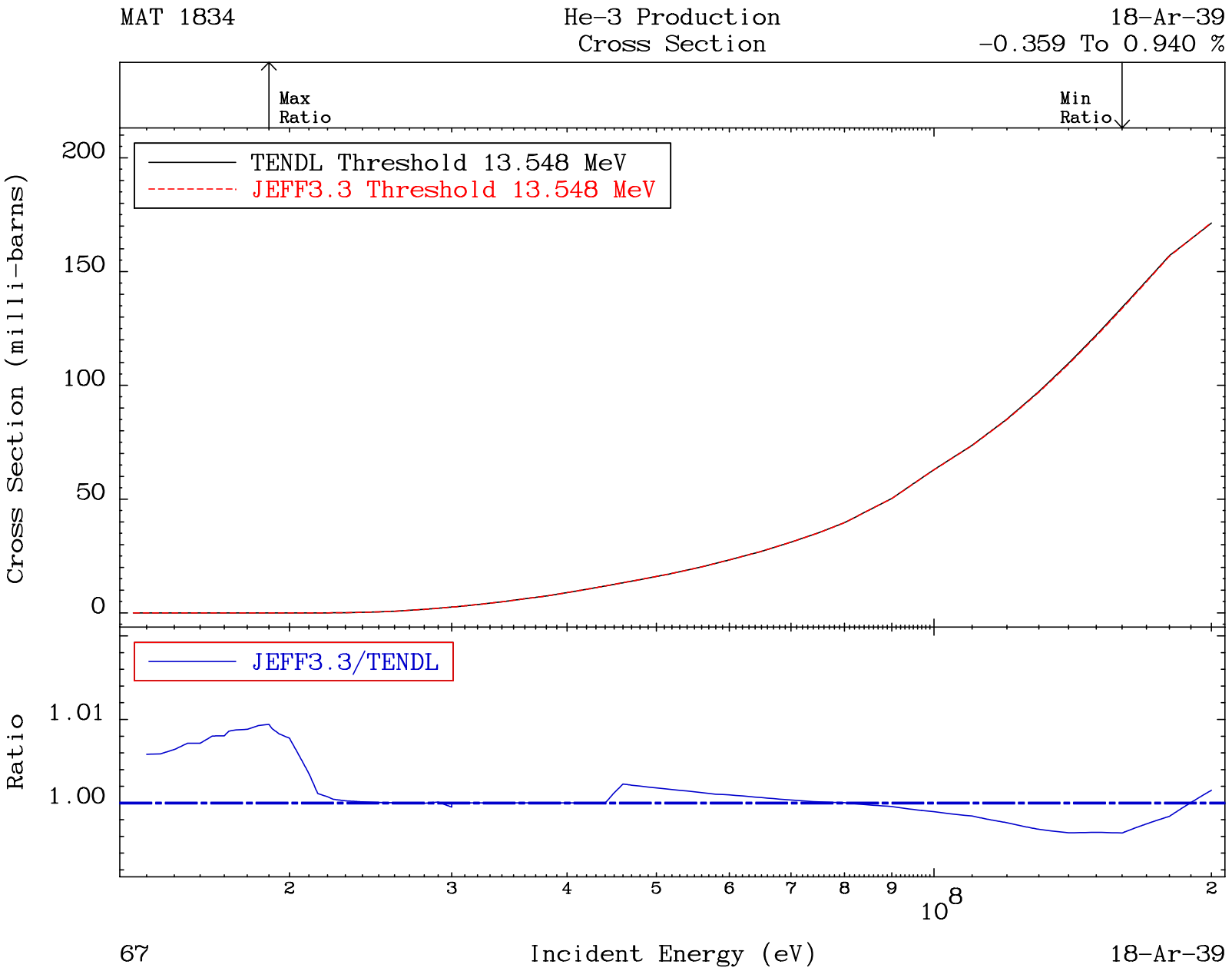

MAT 1834
(n,p) t
Cross Section
18-Ar-39
-1.367 To 1166. %
Max Ratio
Min Ratio
TENDL Threshold 17.179 MeV
JEFF3.3 Threshold 17.179 MeV
Cross Section (micro-barns)
600
400
200
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
18-Ar-39

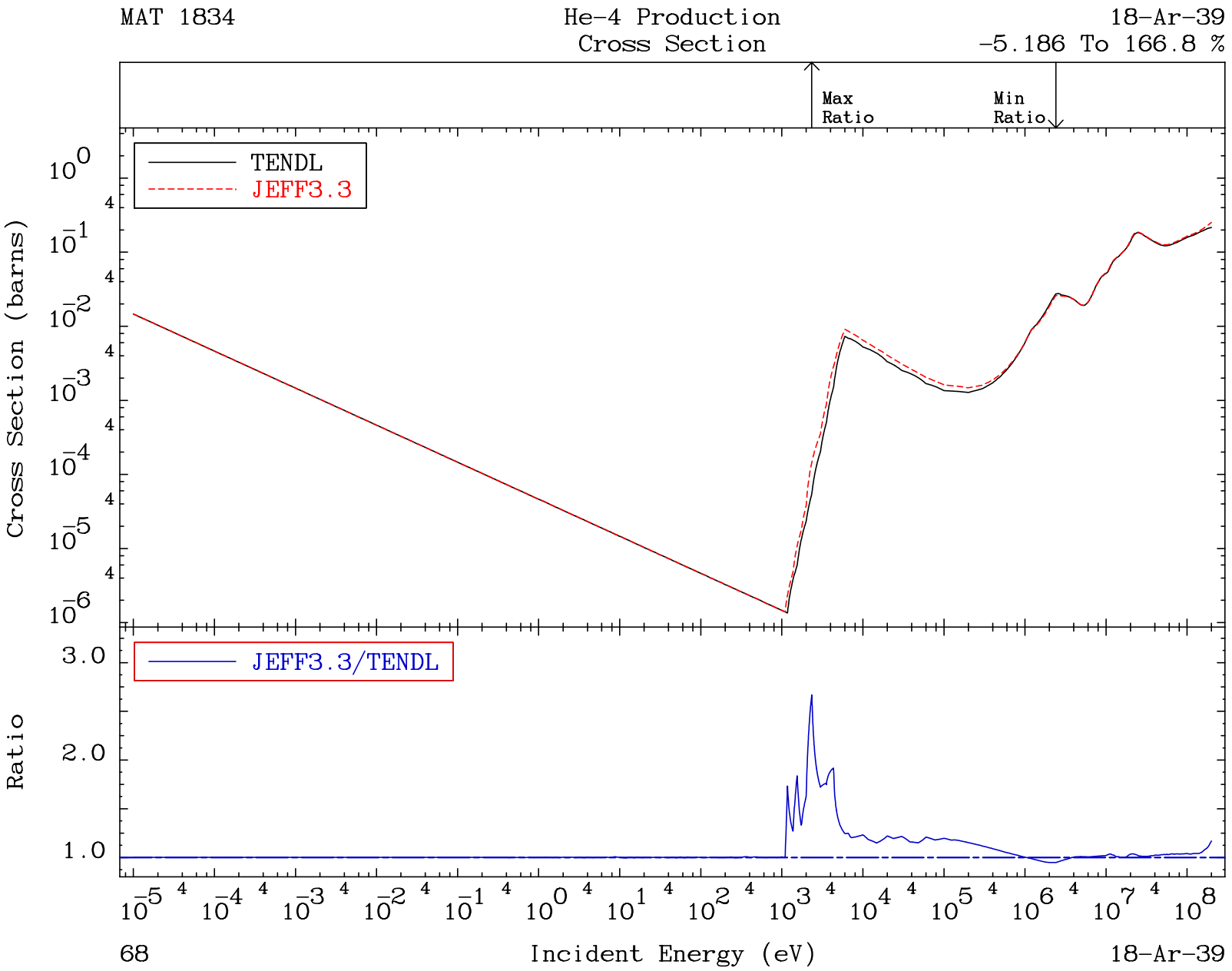

MAT 1834
(n,d) α
Cross Section
18-Ar-39
-1.660 To 648.3 %
Max Ratio
Min Ratio
TENDL Threshold 16.602 MeV
JEFF3.3 Threshold 16.602 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
18-Ar-39

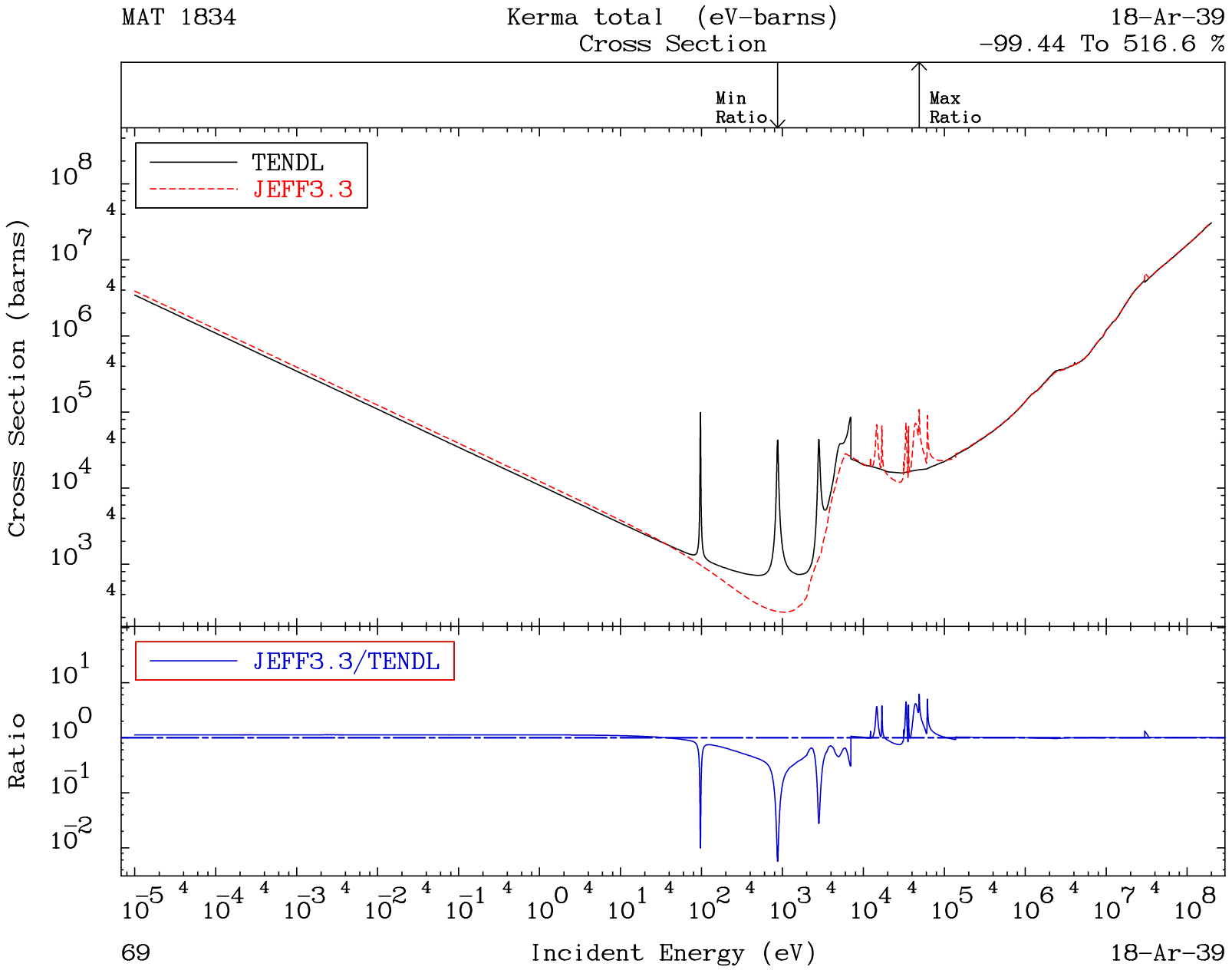

MAT 1834
Hydrogen Production
Cross Section
18-Ar-39
-0.961 To 3.786 %
Min Ratio
Max Ratio
TENDL Threshold 2.7285 MeV
JEFF3.3 Threshold 2.7285 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
64
Incident Energy (eV)
18-Ar-39

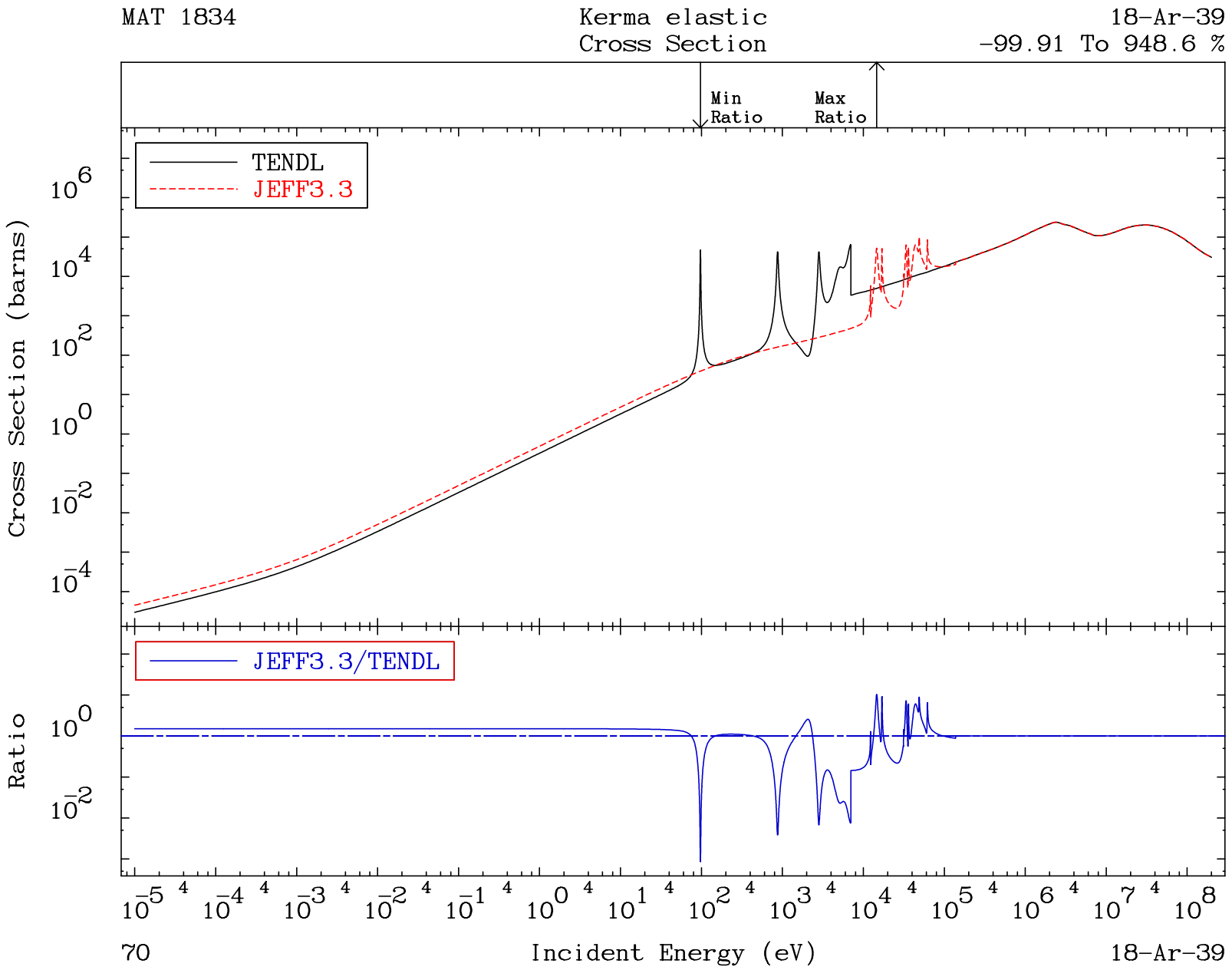

MAT 1834
Deuterium Production
Cross Section
18-Ar-39
-0.556 To 12.48 %
Min Ratio
Max Ratio
TENDL Threshold 8.7287 MeV
JEFF3.3 Threshold 8.7287 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
9
10^7
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
18-Ar-39

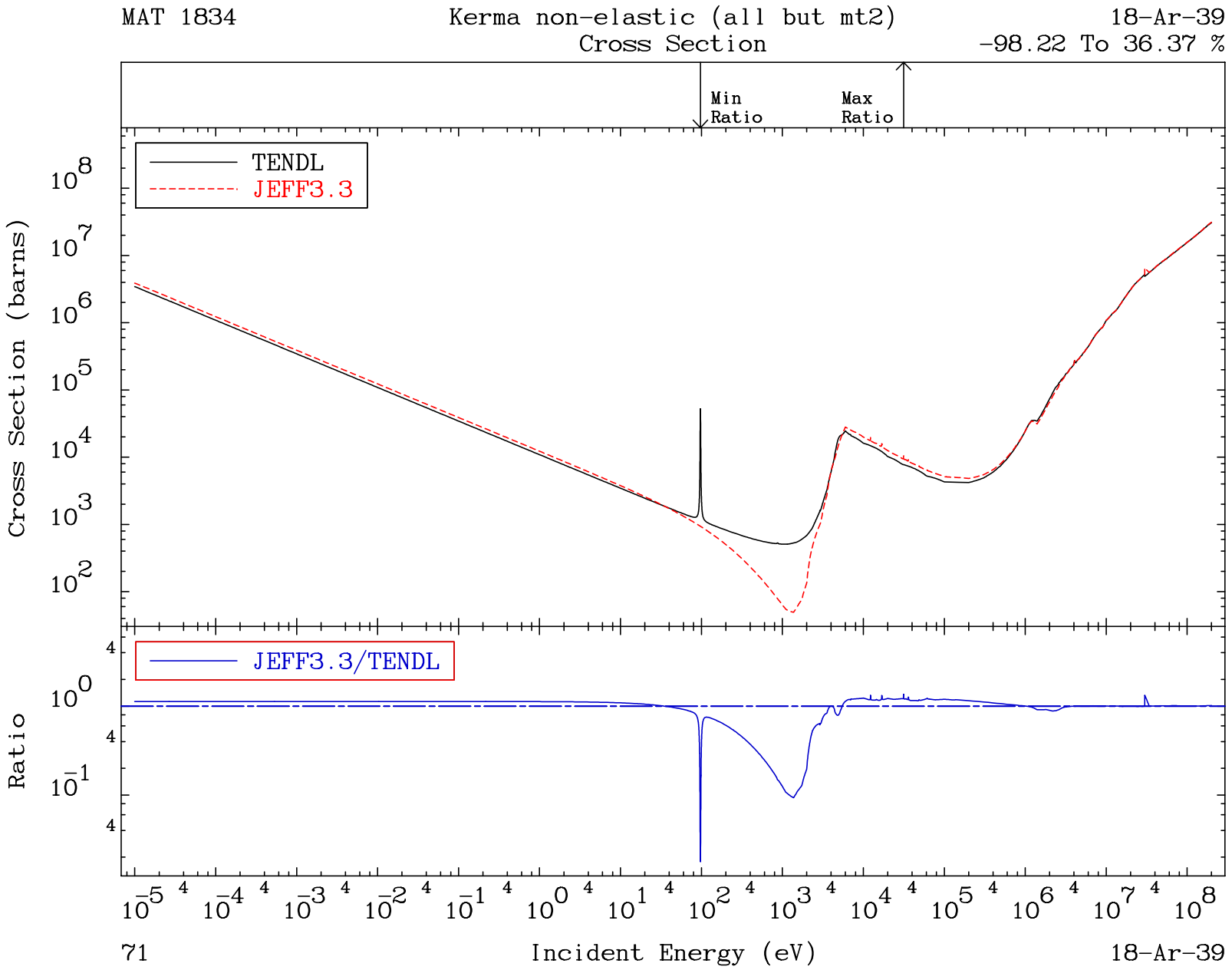

MAT 1834
Tritium Production
Cross Section
18-Ar-39
-20.55 To 27.46 %
Min Ratio
Max Ratio
TENDL Threshold 8.5755 MeV
JEFF3.3 Threshold 8.5755 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
18-Ar-39

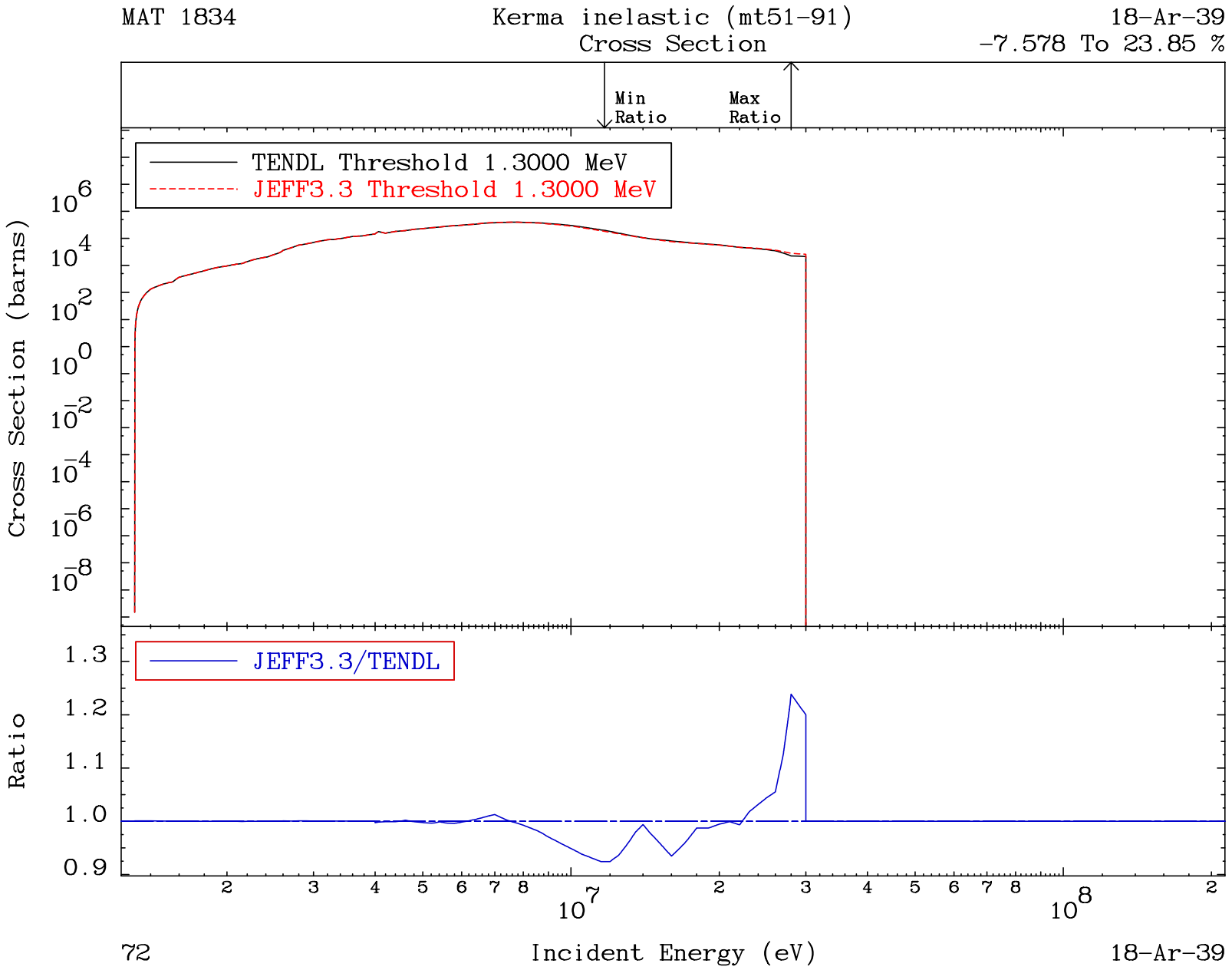

MAT 1834
He-3 Production
Cross Section
18-Ar-39
-0.359 To 0.940 %
Max
Ratio
Min
Ratio
TENDL Threshold 13.548 MeV
JEFF3.3 Threshold 13.548 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
18-Ar-39

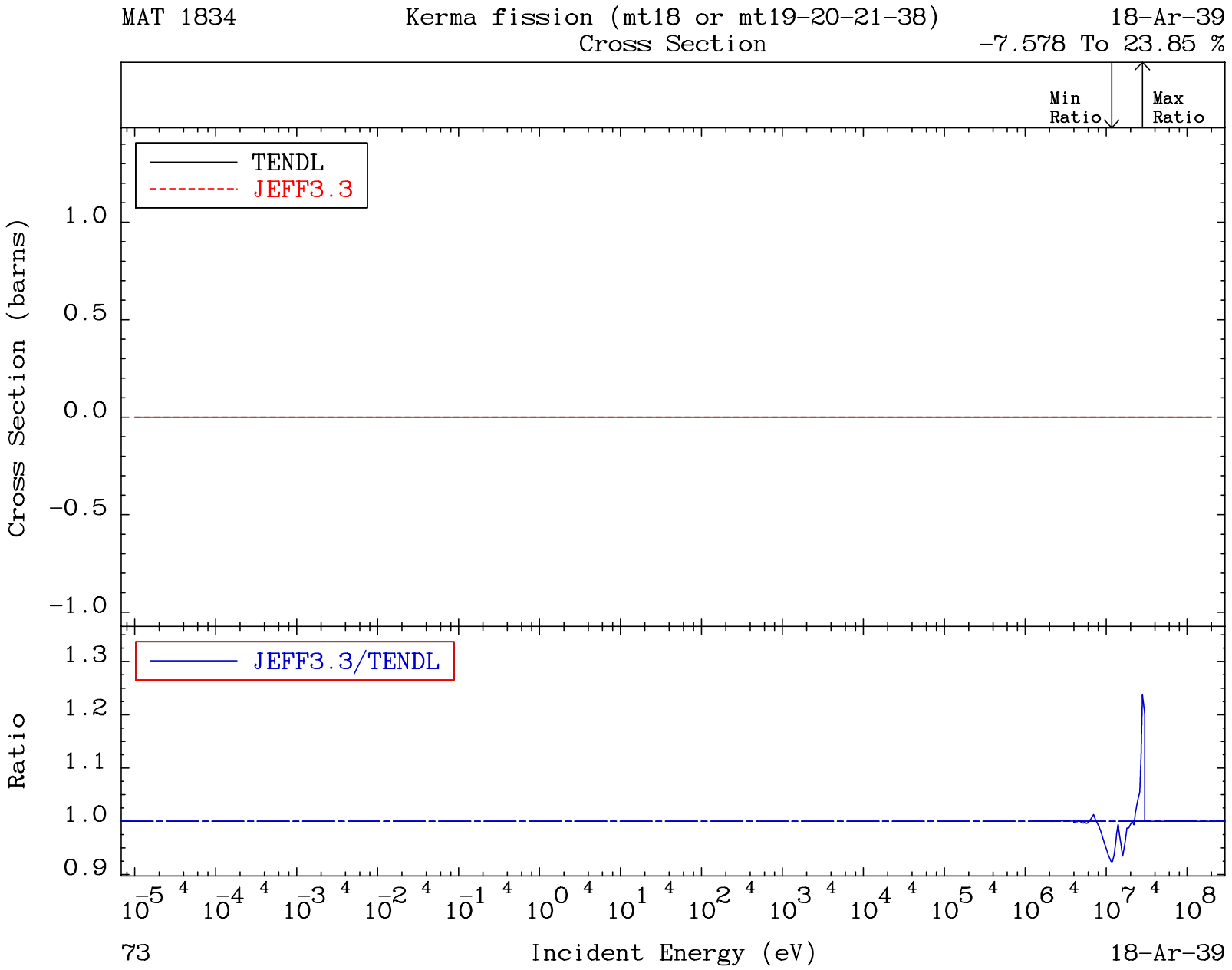

MAT 1834
He-4 Production
Cross Section
18-Ar-39
-5.186 To 166.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
18-Ar-39

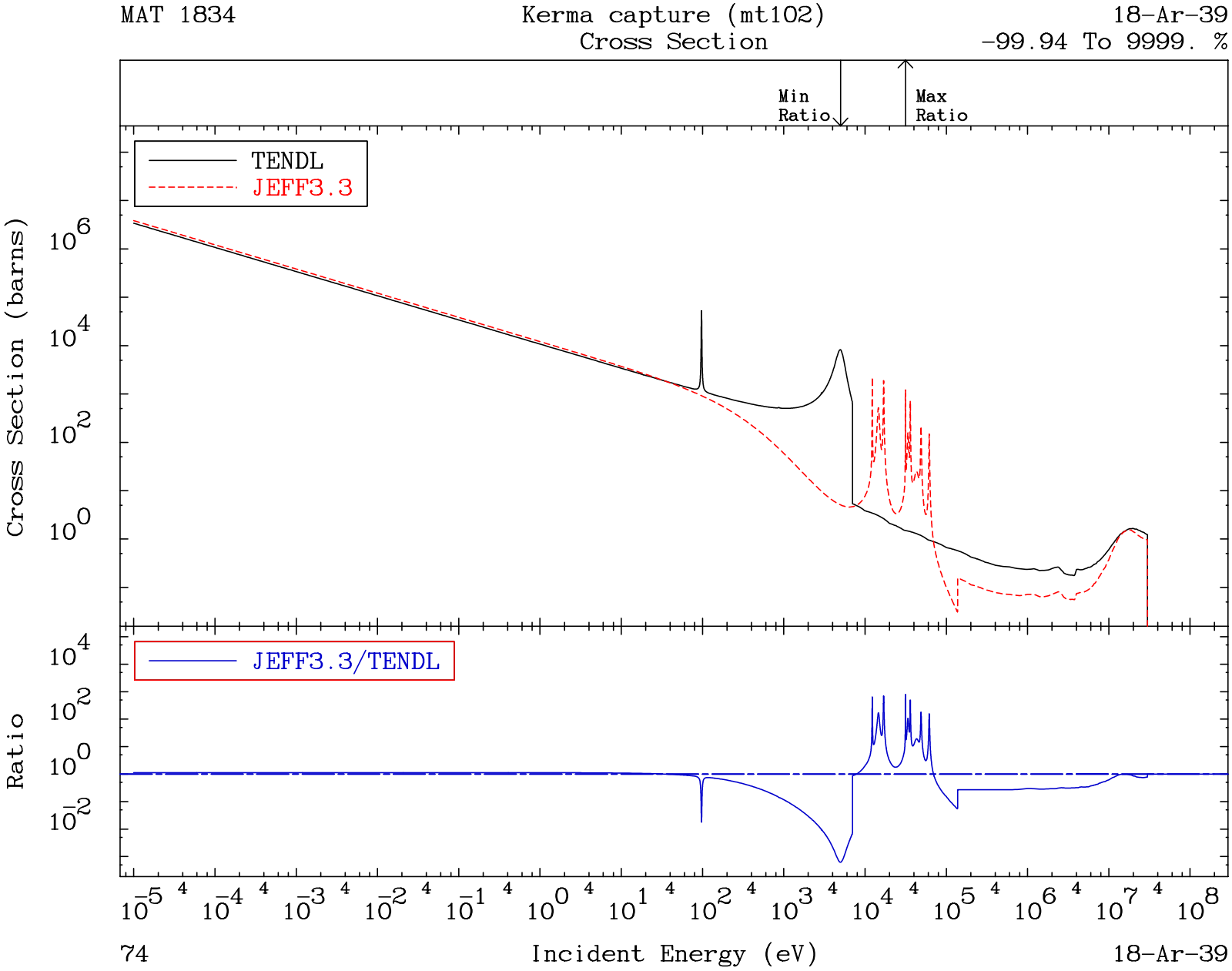

MAT 1834
Kerma total (eV-barns)
Cross Section
18-Ar-39
-99.44 To 516.6 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
18-Ar-39

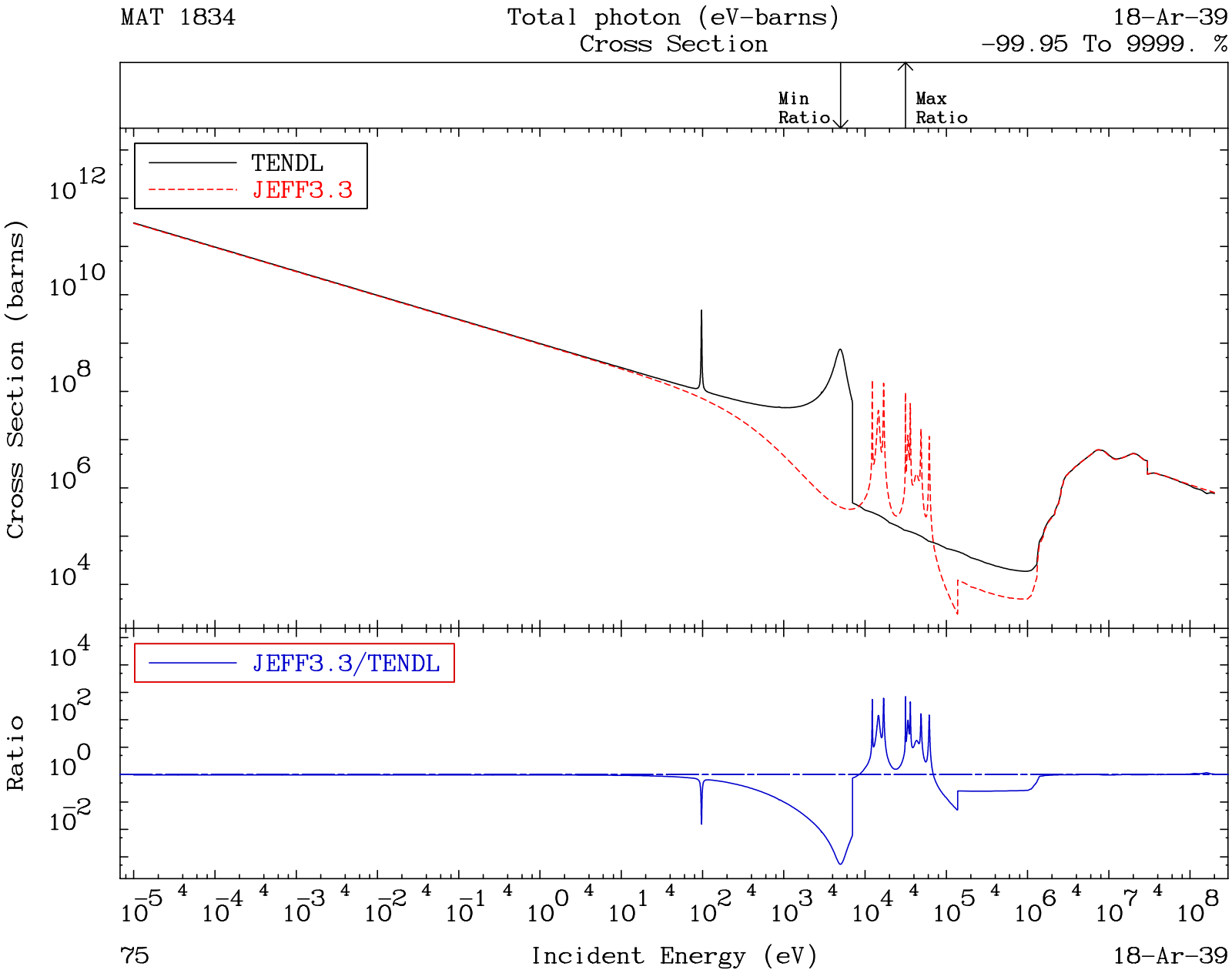

MAT 1834
Kerma elastic
Cross Section
18-Ar-39
-99.91 To 948.6 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
18-Ar-39

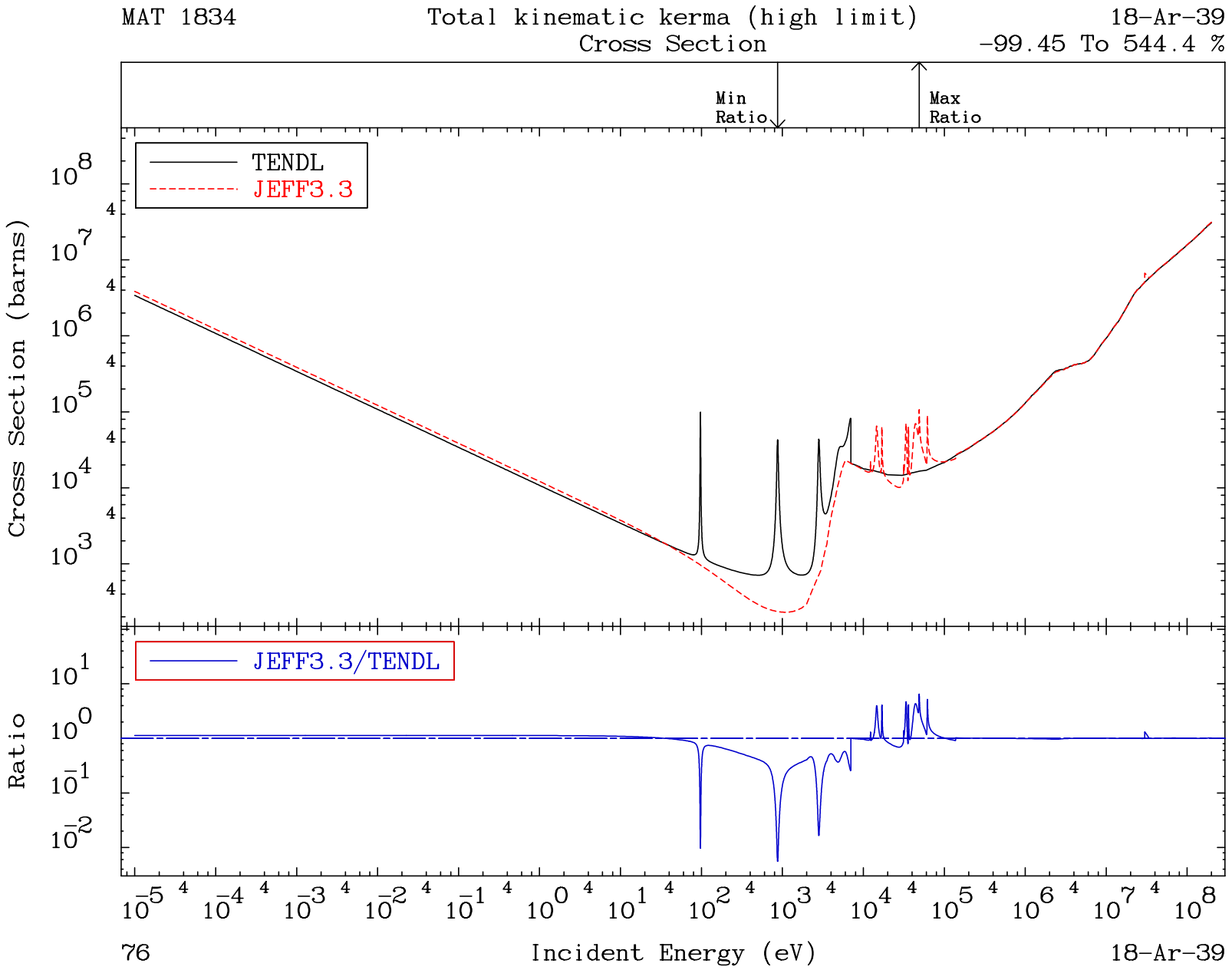

MAT 1834
Kerma non-elastic (all but mt2)
Cross Section
18-Ar-39
-98.22 To 36.37 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
18-Ar-39

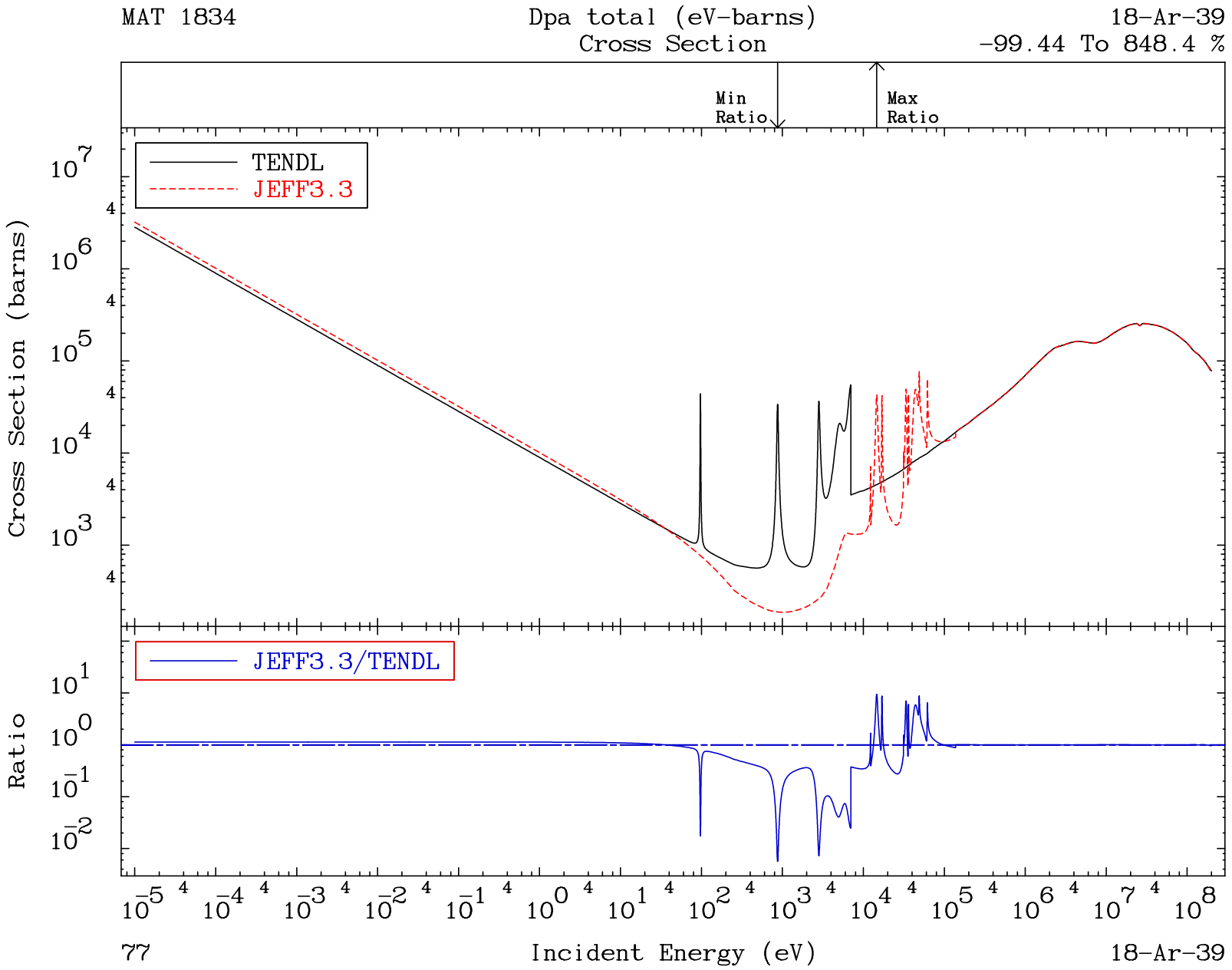

MAT 1834
Kerma inelastic (mt51-91)
Cross Section
18-Ar-39
-7.578 To 23.85 %
Min Ratio
Max Ratio
TENDL Threshold 1.3000 MeV
JEFF3.3 Threshold 1.3000 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
18-Ar-39

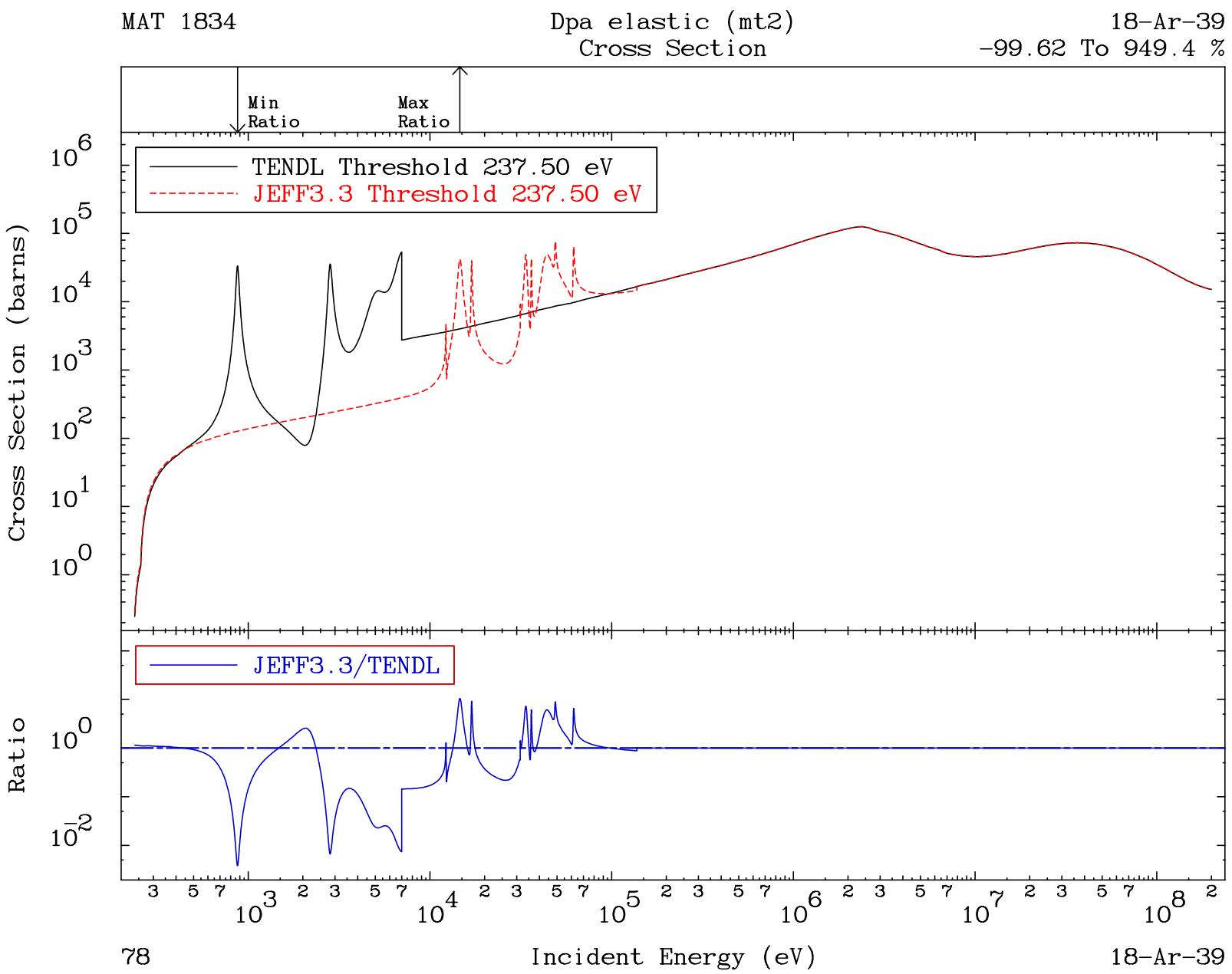

MAT 1834
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
18-Ar-39
-7.578 To 23.85 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
0.9
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
73
Incident Energy (eV)
18-Ar-39

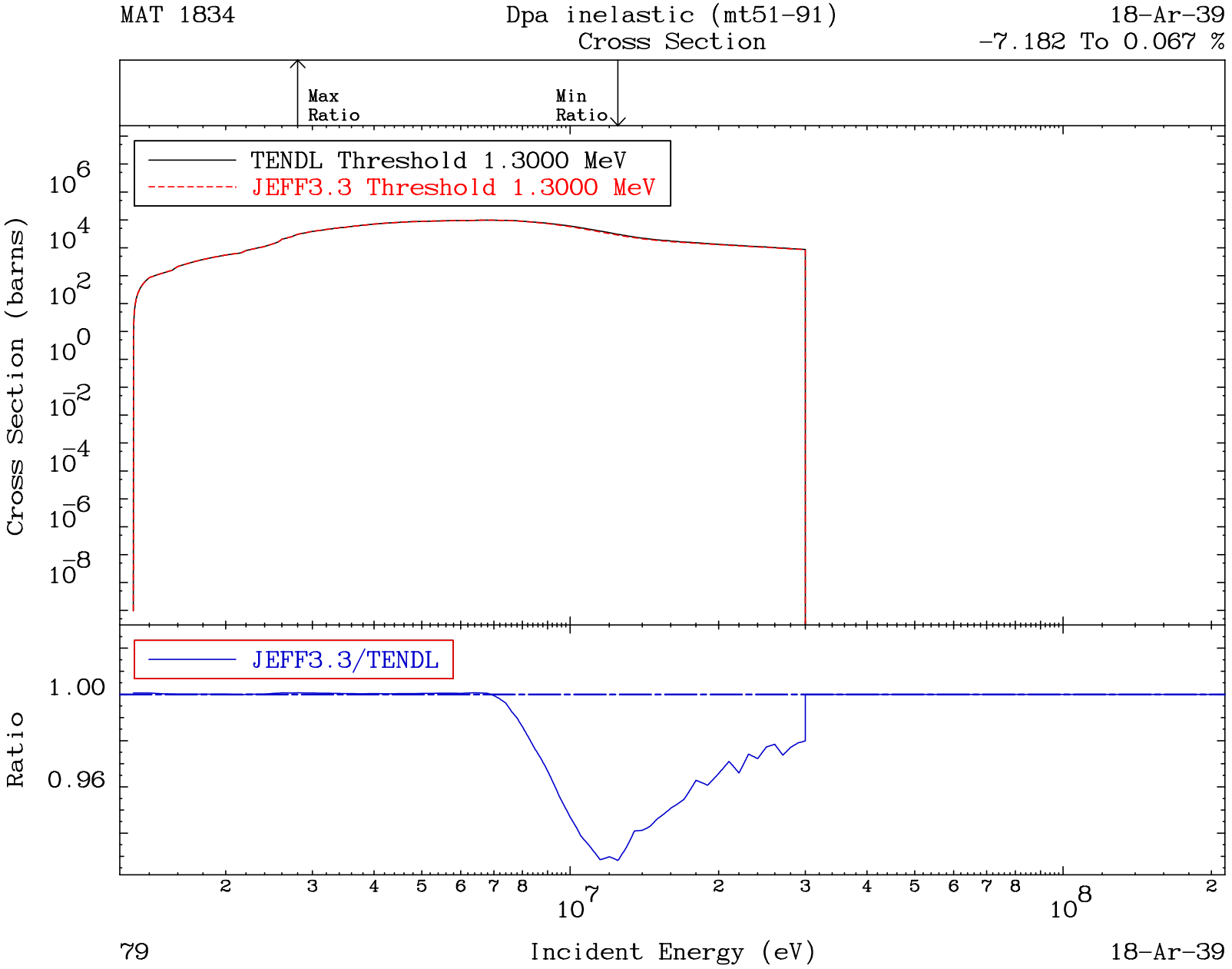

MAT 1834
Kerma capture (mt102)
Cross Section
18-Ar-39
-99.94 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
18-Ar-39

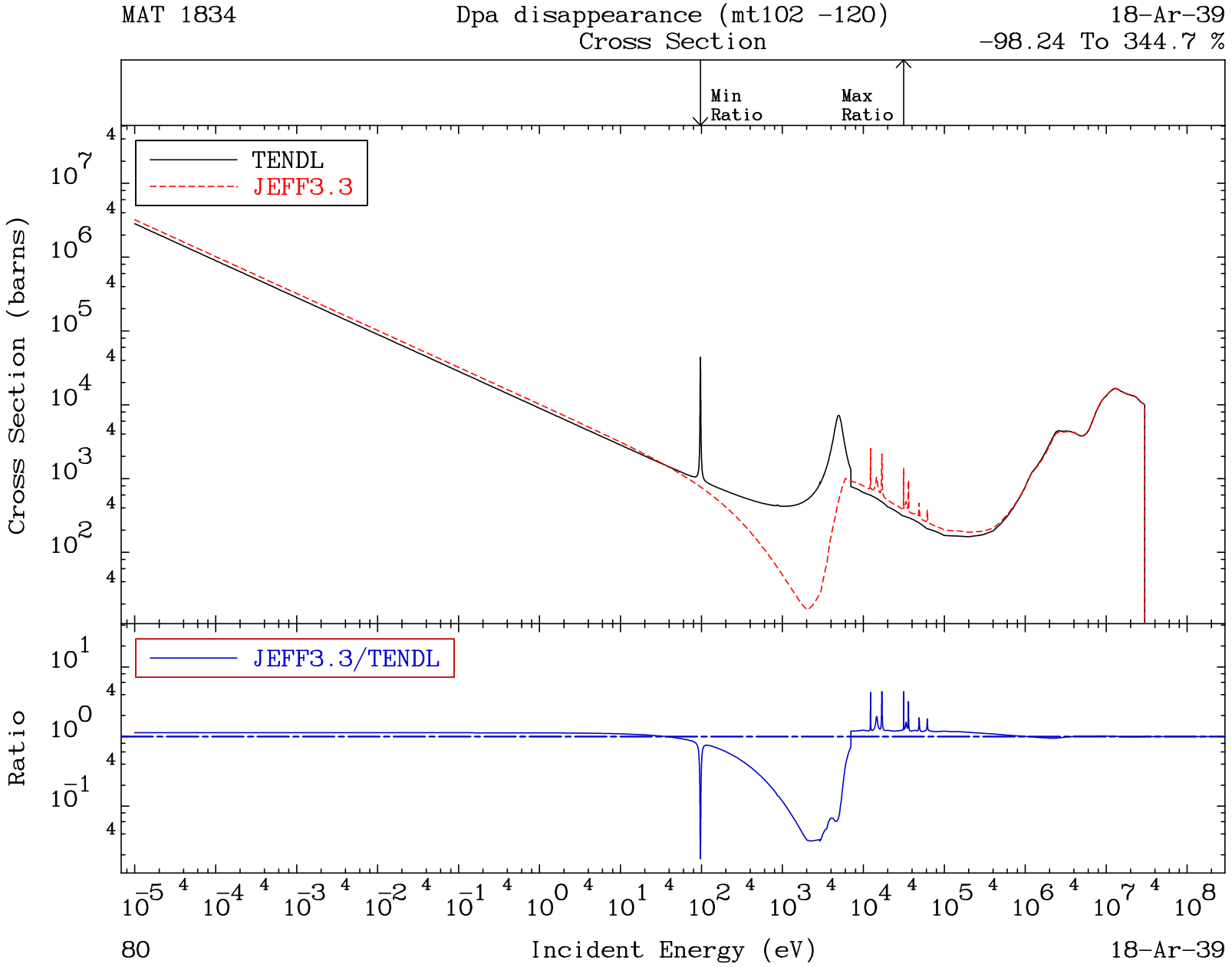

MAT 1834
Total photon (eV-barns)
Cross Section
18-Ar-39
-99.95 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
18-Ar-39

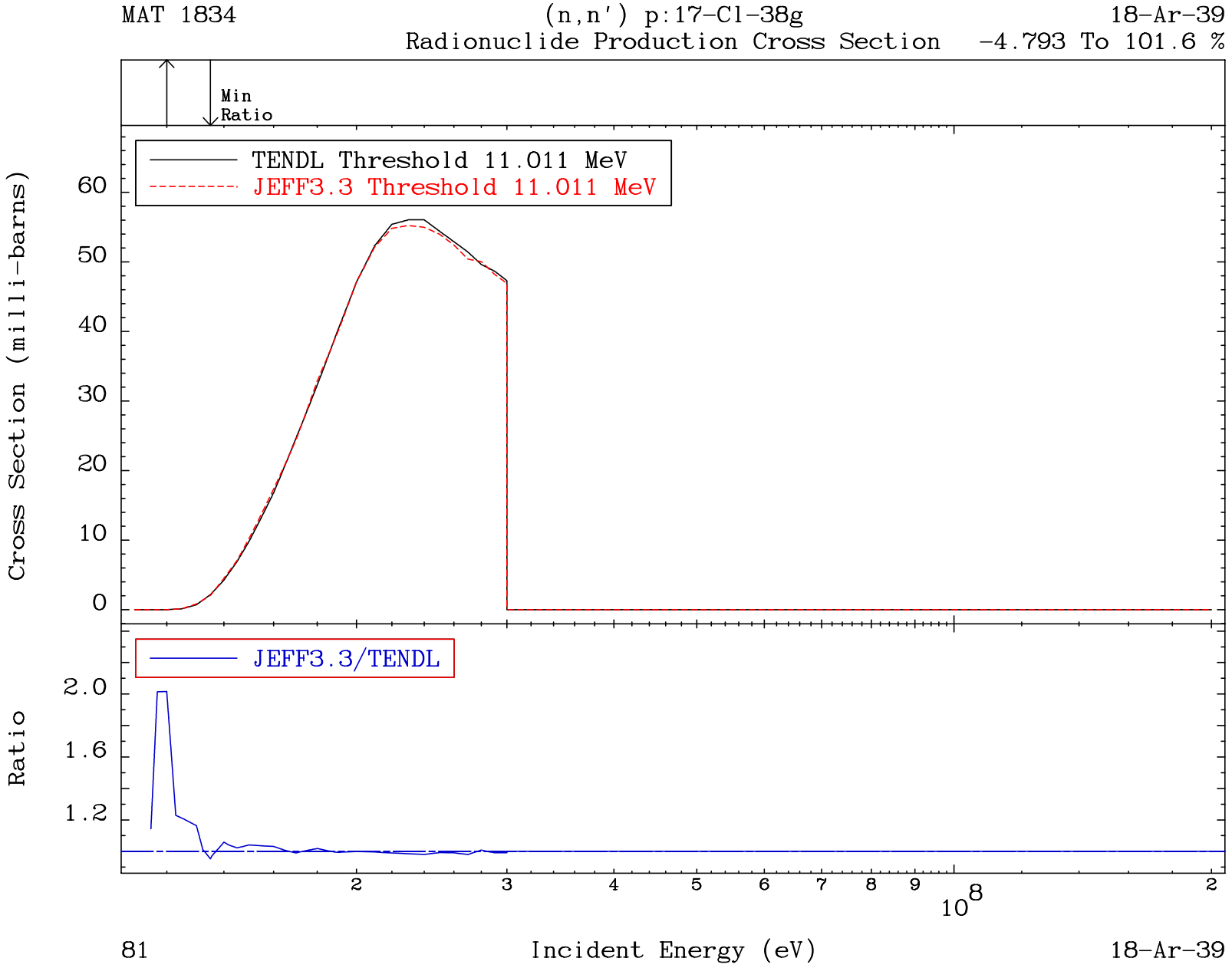

MAT 1834
Total kinematic kerma (high limit)
Cross Section
18-Ar-39
-99.45 To 544.4 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
18-Ar-39

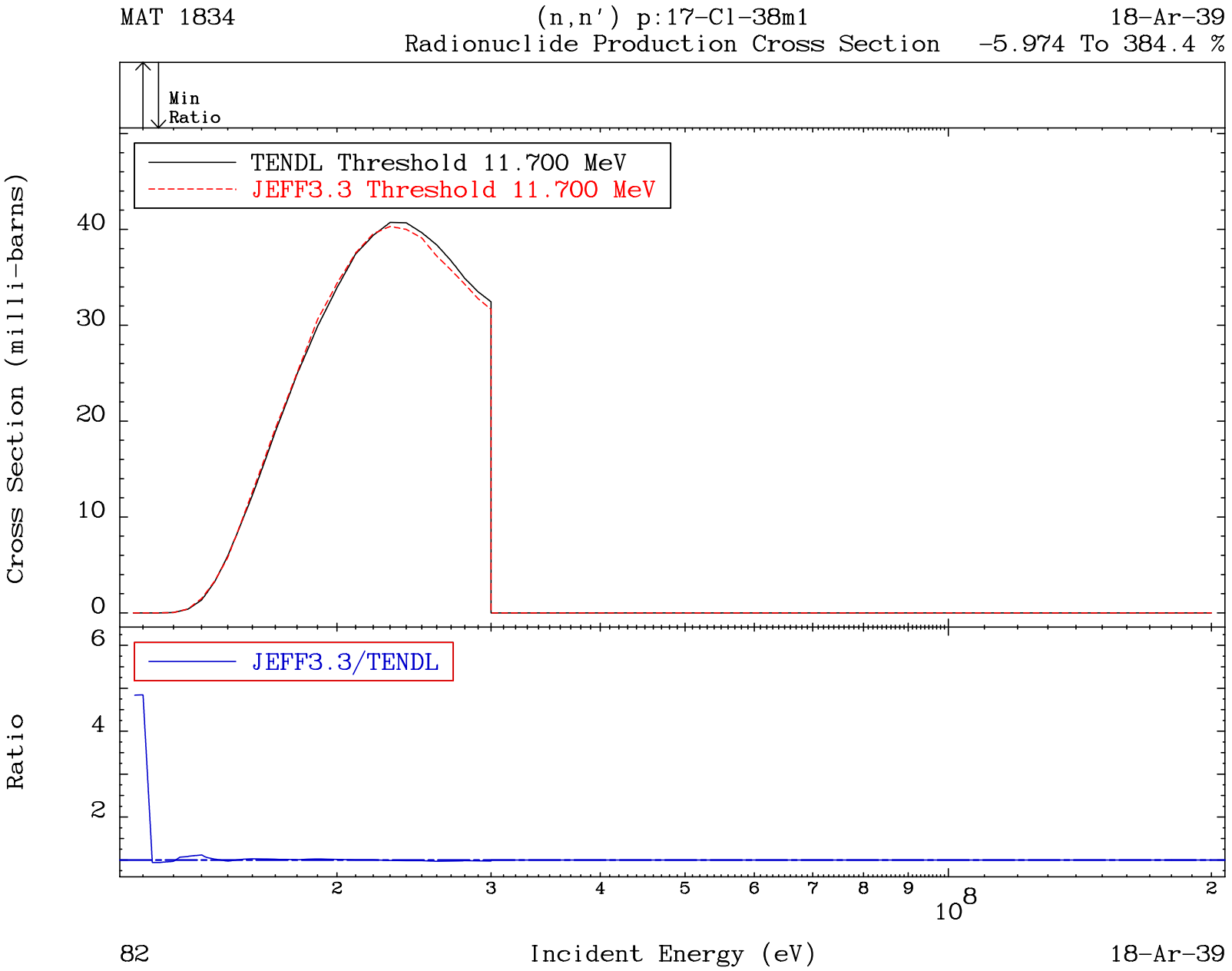

MAT 1834
Dpa total (eV-barns)
Cross Section
18-Ar-39
-99.44 To 848.4 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
18-Ar-39

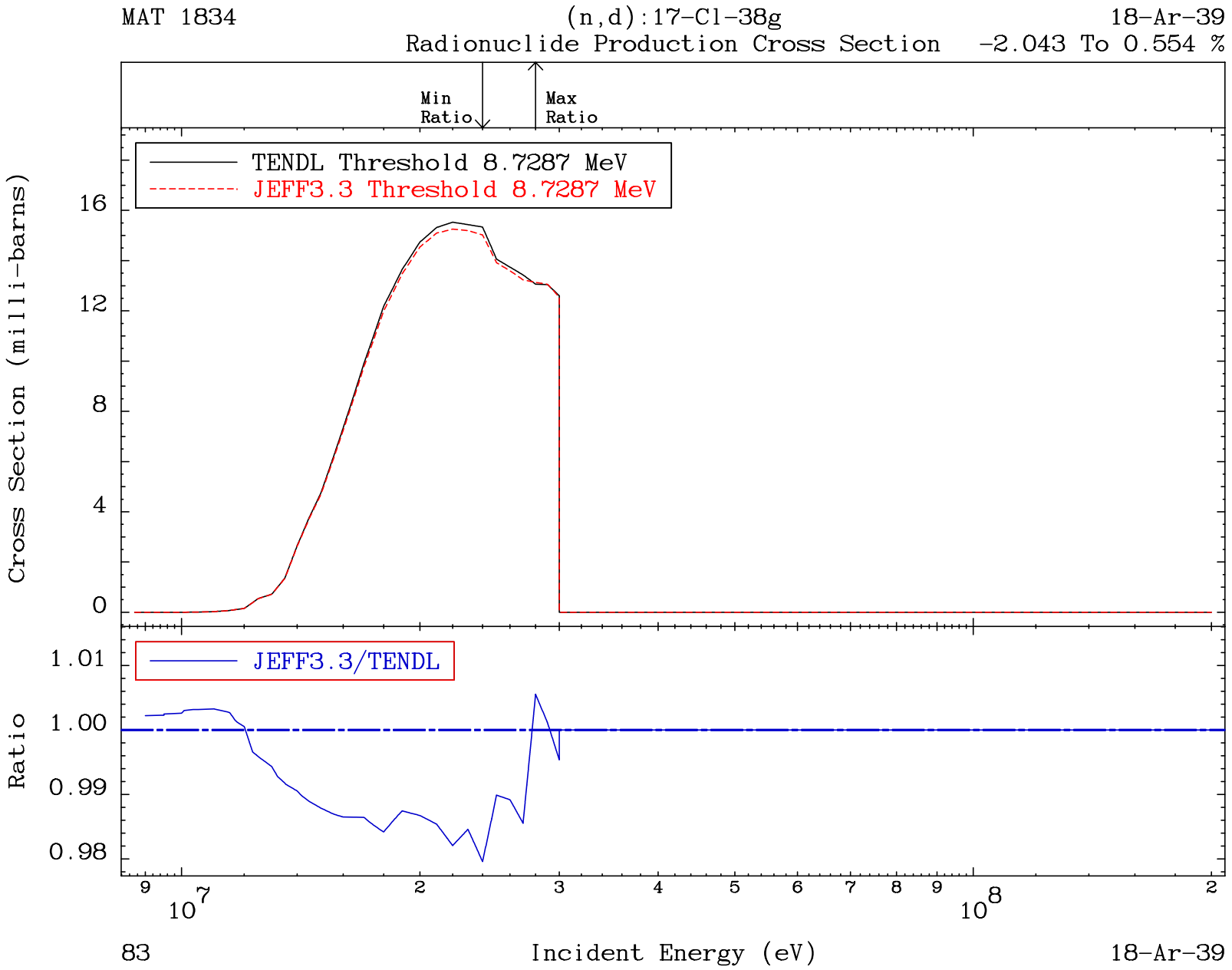

MAT 1834
Dpa elastic (mt2)
Cross Section
18-Ar-39
-99.62 To 949.4 %
Min Ratio
Max Ratio
TENDL Threshold 237.50 eV
JEFF3.3 Threshold 237.50 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
18-Ar-39

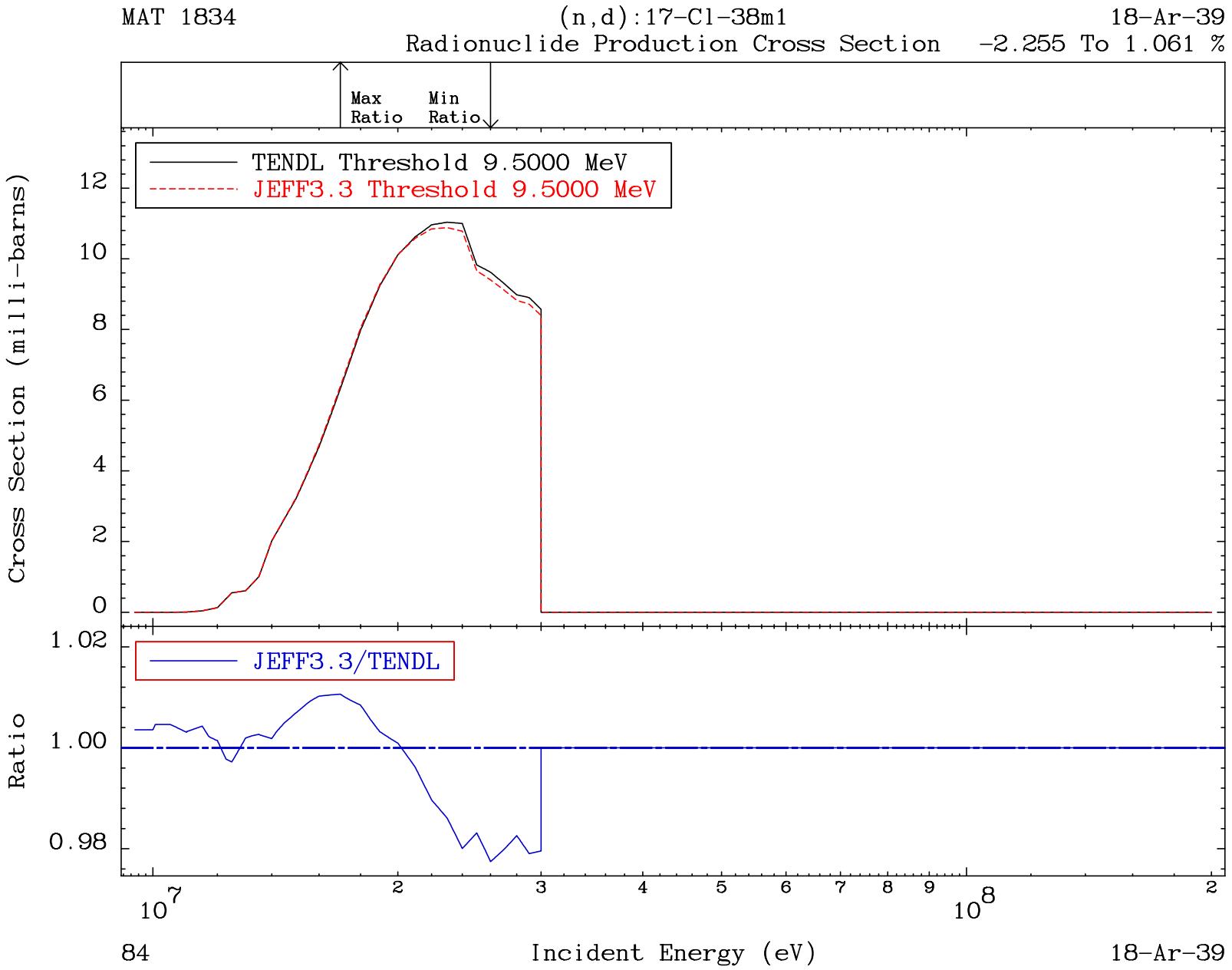

MAT 1834
Dpa inelastic (mt51-91)
Cross Section
18-Ar-39
-7.182 To 0.067 %
Max Ratio
Min Ratio
TENDL Threshold 1.3000 MeV
JEFF3.3 Threshold 1.3000 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
1.00
0.96
Incident Energy (eV)
79
18-Ar-39


MAT 1834
Dpa disappearance (mt102 -120)
Cross Section
18-Ar-39
-98.24 To 344.7 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
80
18-Ar-39


MAT 1834
(n,n') p:17-Cl-38g
18-Ar-39
Radionuclide Production Cross Section
-4.793 To 101.6 %
Min
Ratio
TENDL Threshold 11.011 MeV
JEFF3.3 Threshold 11.011 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
18-Ar-39


MAT 1834
(n,n') p:17-Cl-38m1
18-Ar-39
Radionuclide Production Cross Section
-5.974 To 384.4 %
Min Ratio
TENDL Threshold 11.700 MeV
JEFF3.3 Threshold 11.700 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
18-Ar-39


MAT 1834
(n,d):17-Cl-38g
18-Ar-39
Radionuclide Production Cross Section
-2.043 To 0.554 %
Min Ratio
Max Ratio
TENDL Threshold 8.7287 MeV
JEFF3.3 Threshold 8.7287 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
0.98
9
10^7
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
18-Ar-39


MAT 1834
(n,d):17-Cl-38m1
18-Ar-39
Radionuclide Production Cross Section
-2.255 To 1.061 %
Max Ratio
Min Ratio
TENDL Threshold 9.5000 MeV
JEFF3.3 Threshold 9.5000 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
10^7
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
18-Ar-39