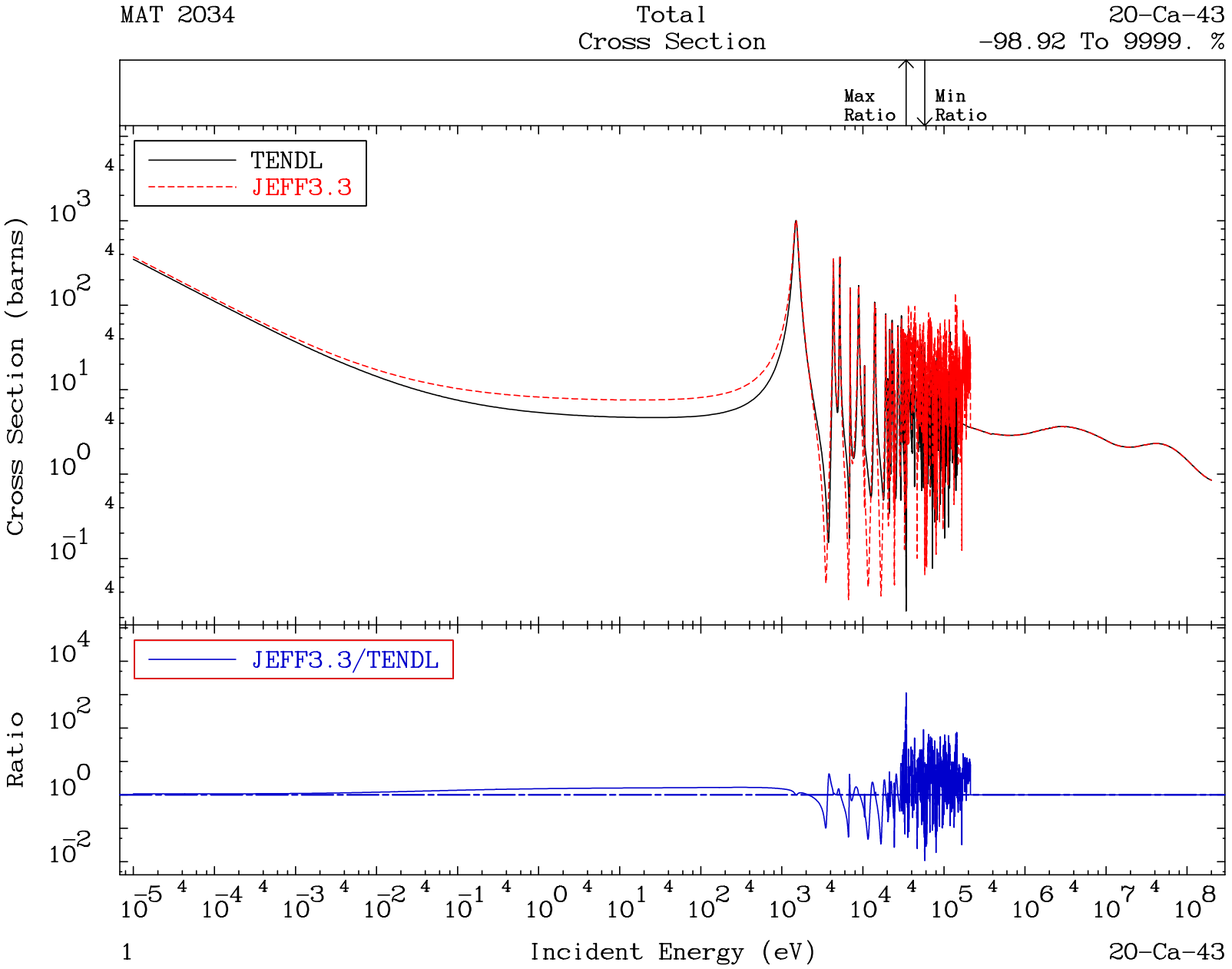
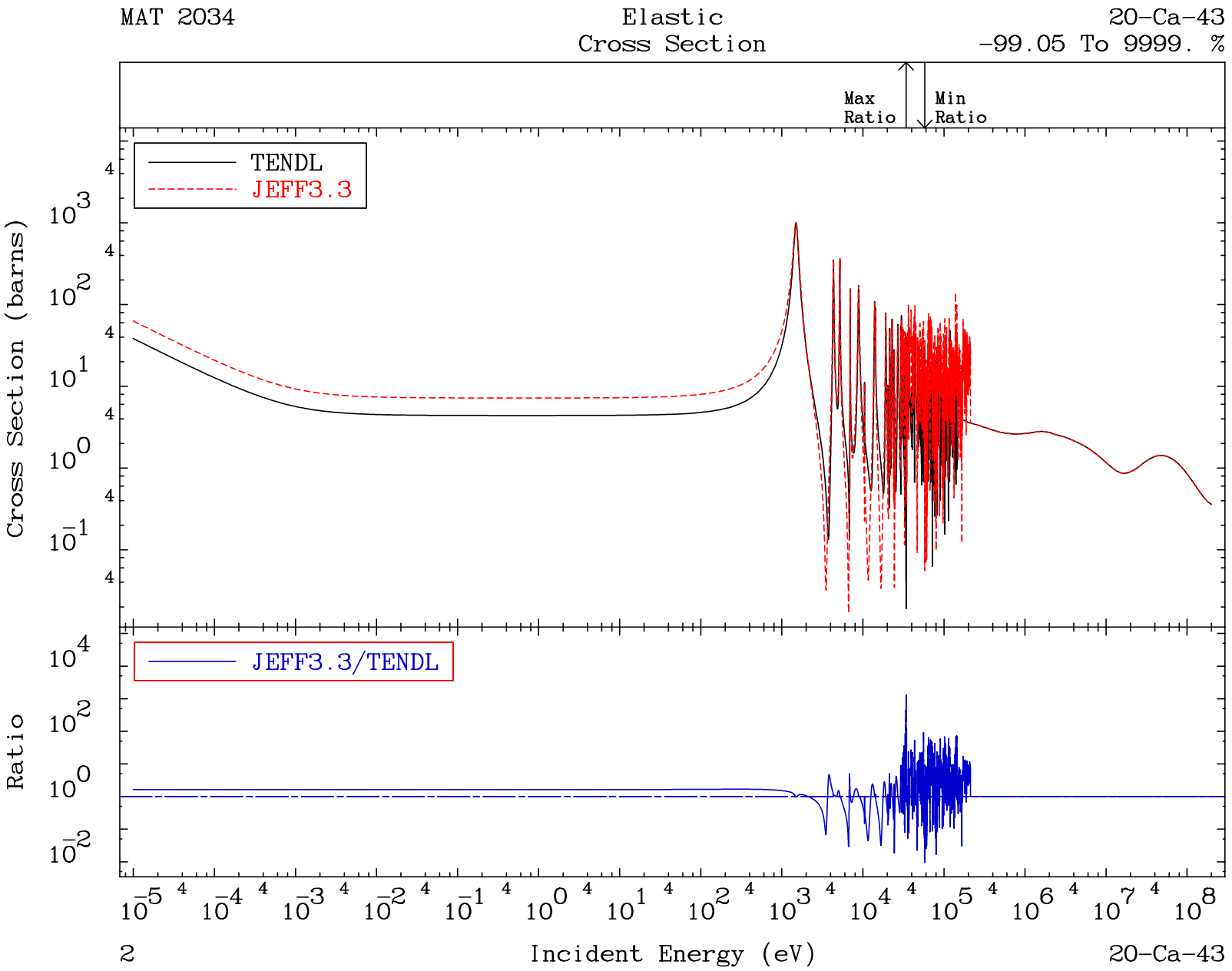
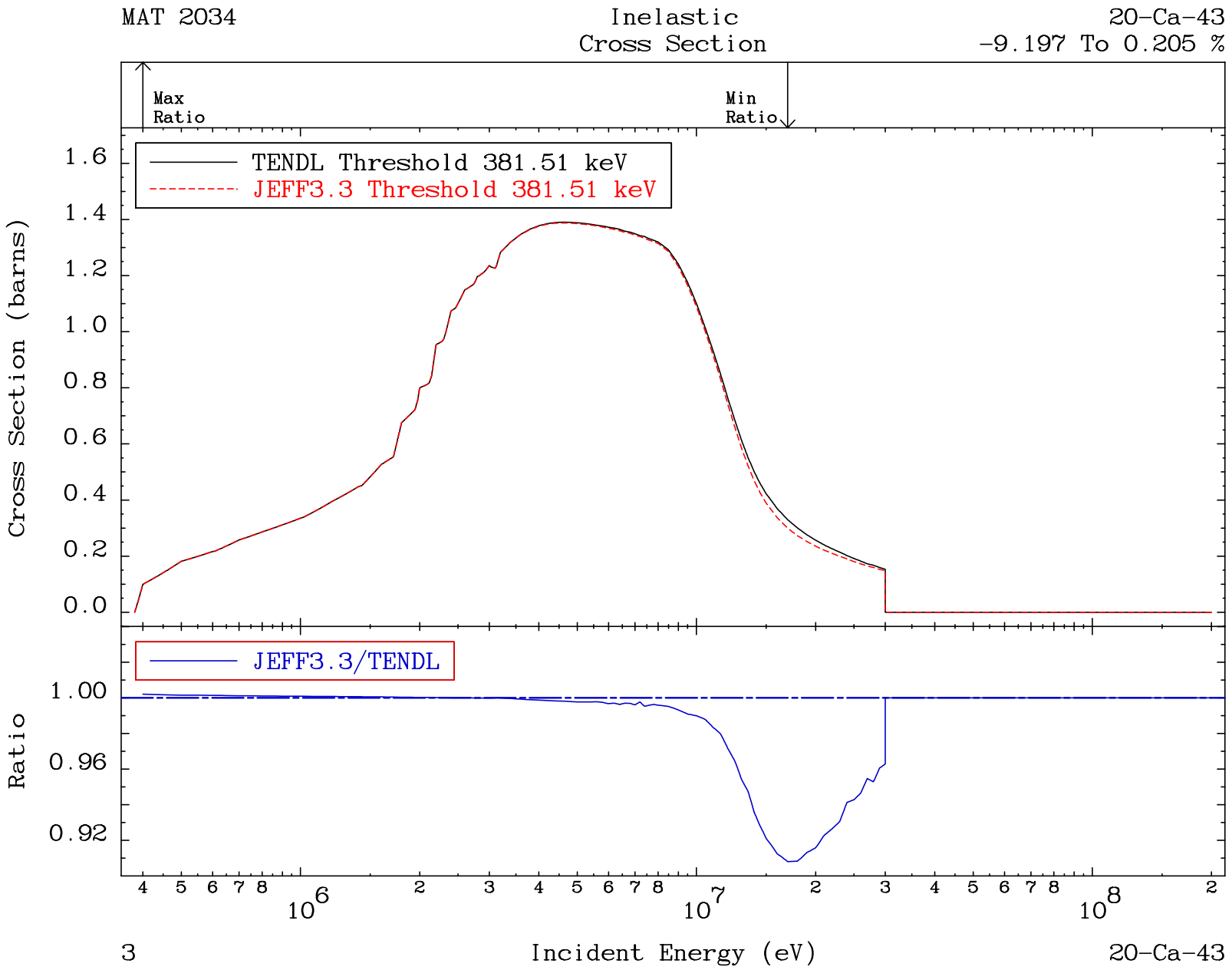
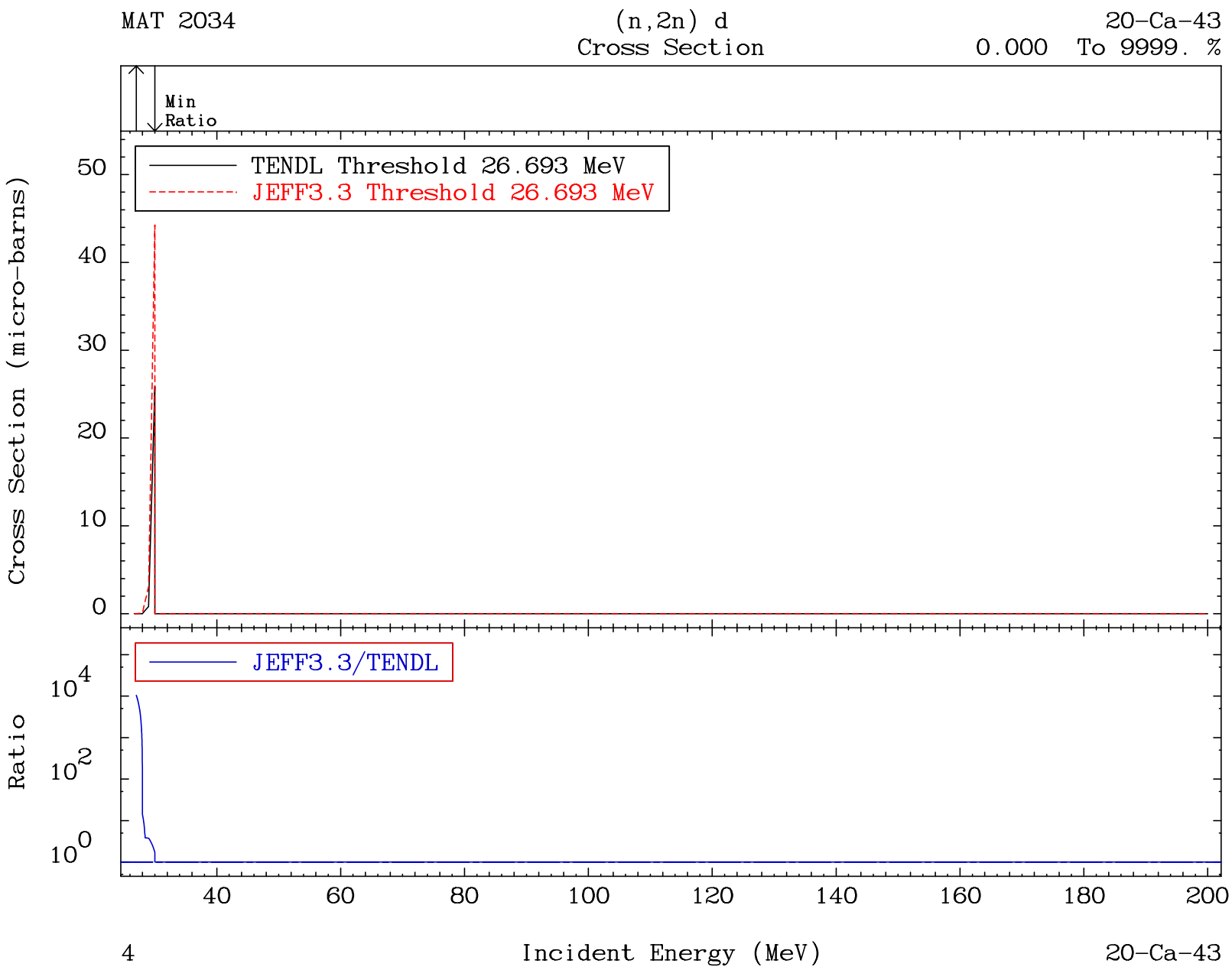
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

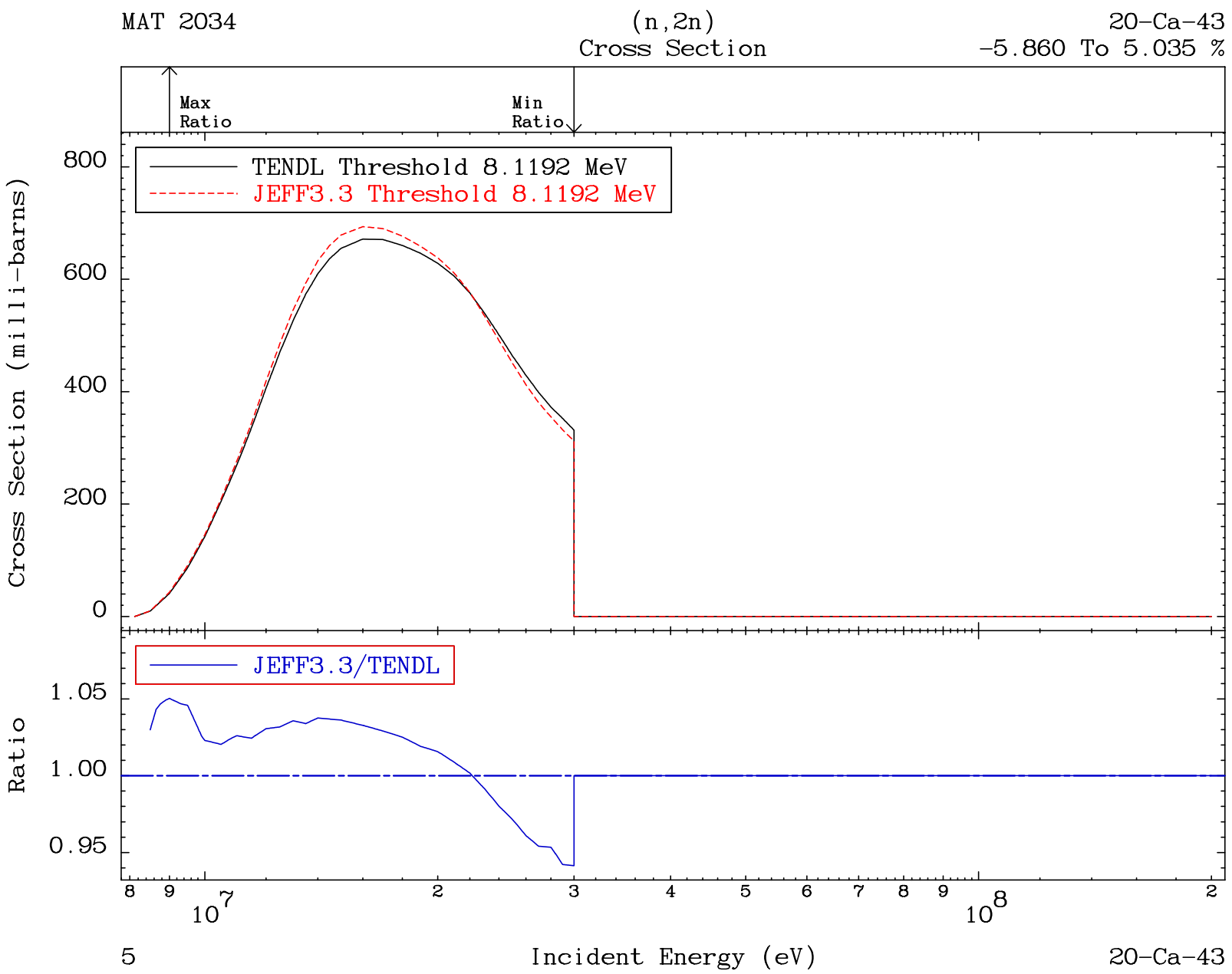
Press Mouse Button to Start

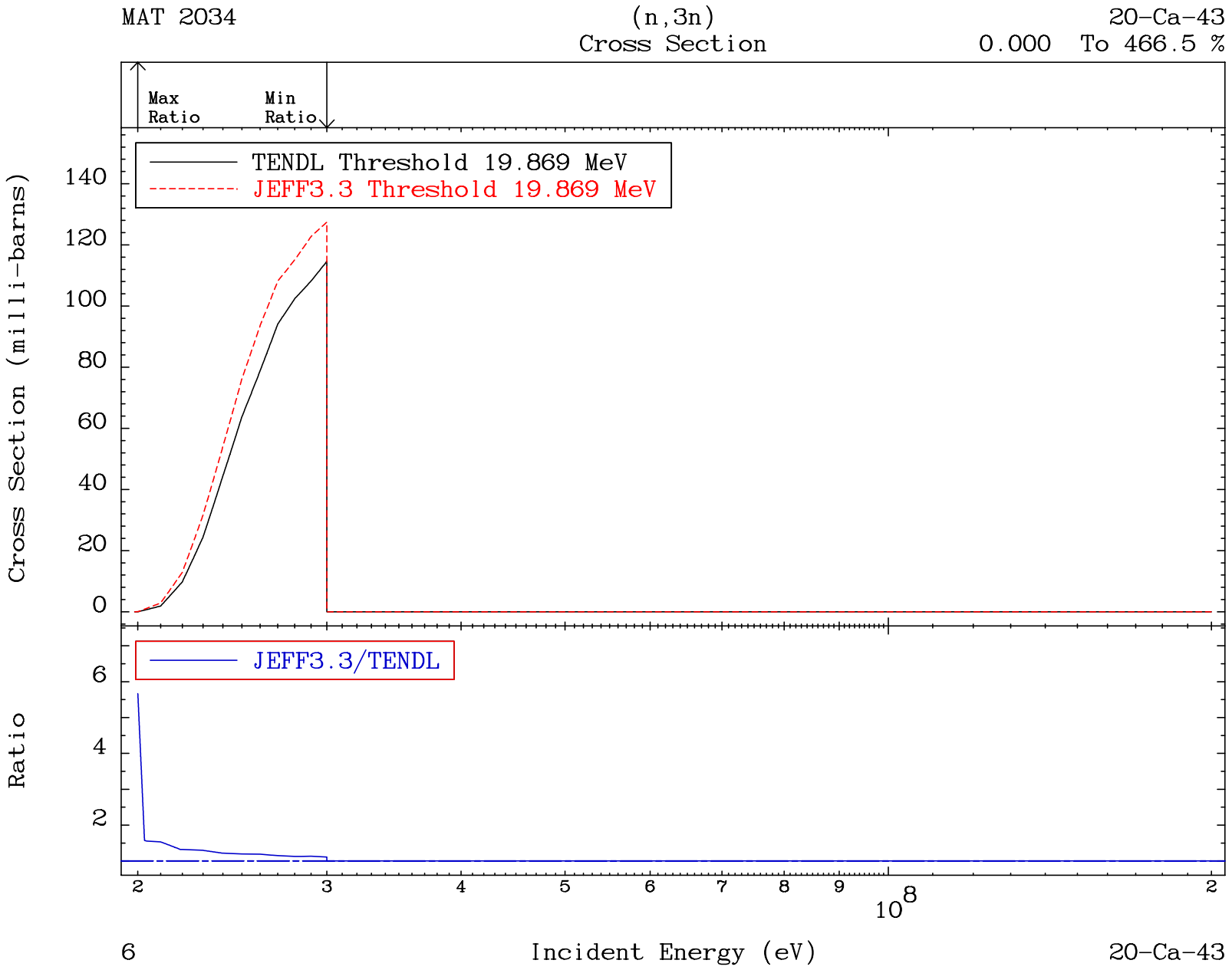

MAT 2034
Total
Cross Section
20-Ca-43
-98.92 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
20-Ca-43

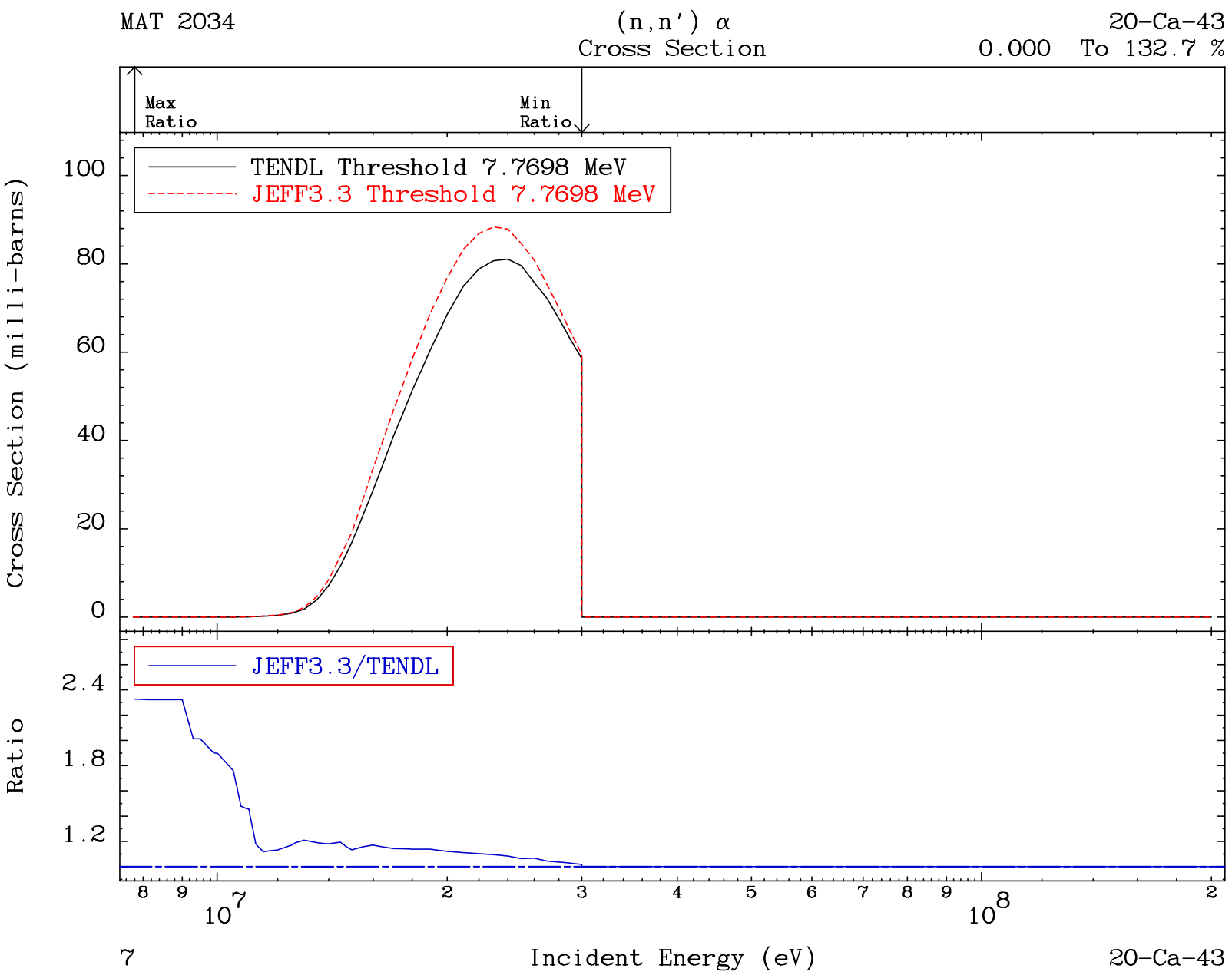

MAT 2034
Elastic
Cross Section
20-Ca-43
-99.05 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
20-Ca-43

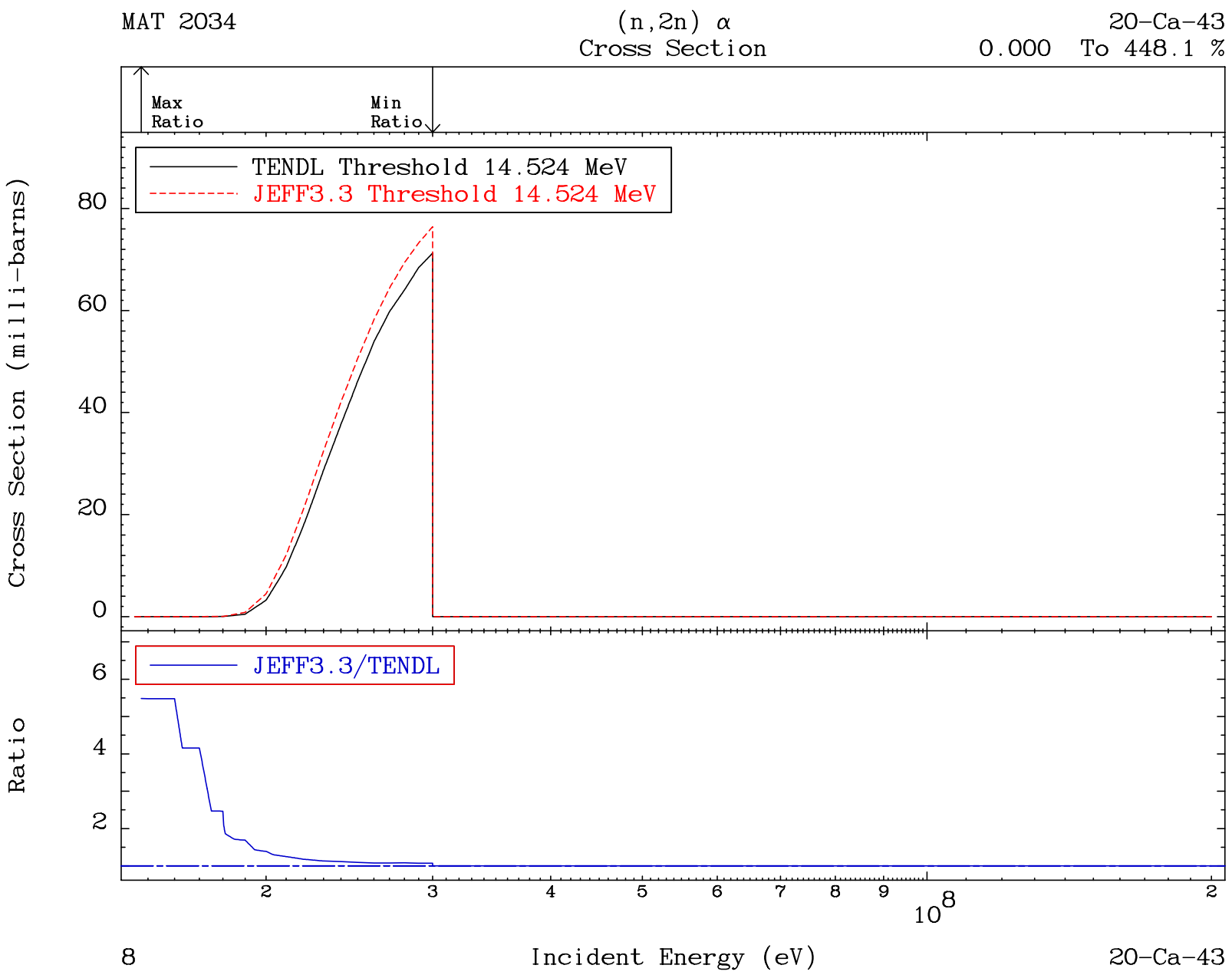

MAT 2034
Inelastic
Cross Section
20-Ca-43
-9.197 To 0.205 %
Max
Ratio
Min
Ratio
TENDL Threshold 381.51 keV
JEFF3.3 Threshold 381.51 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.96
0.92
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
3
Incident Energy (eV)
20-Ca-43

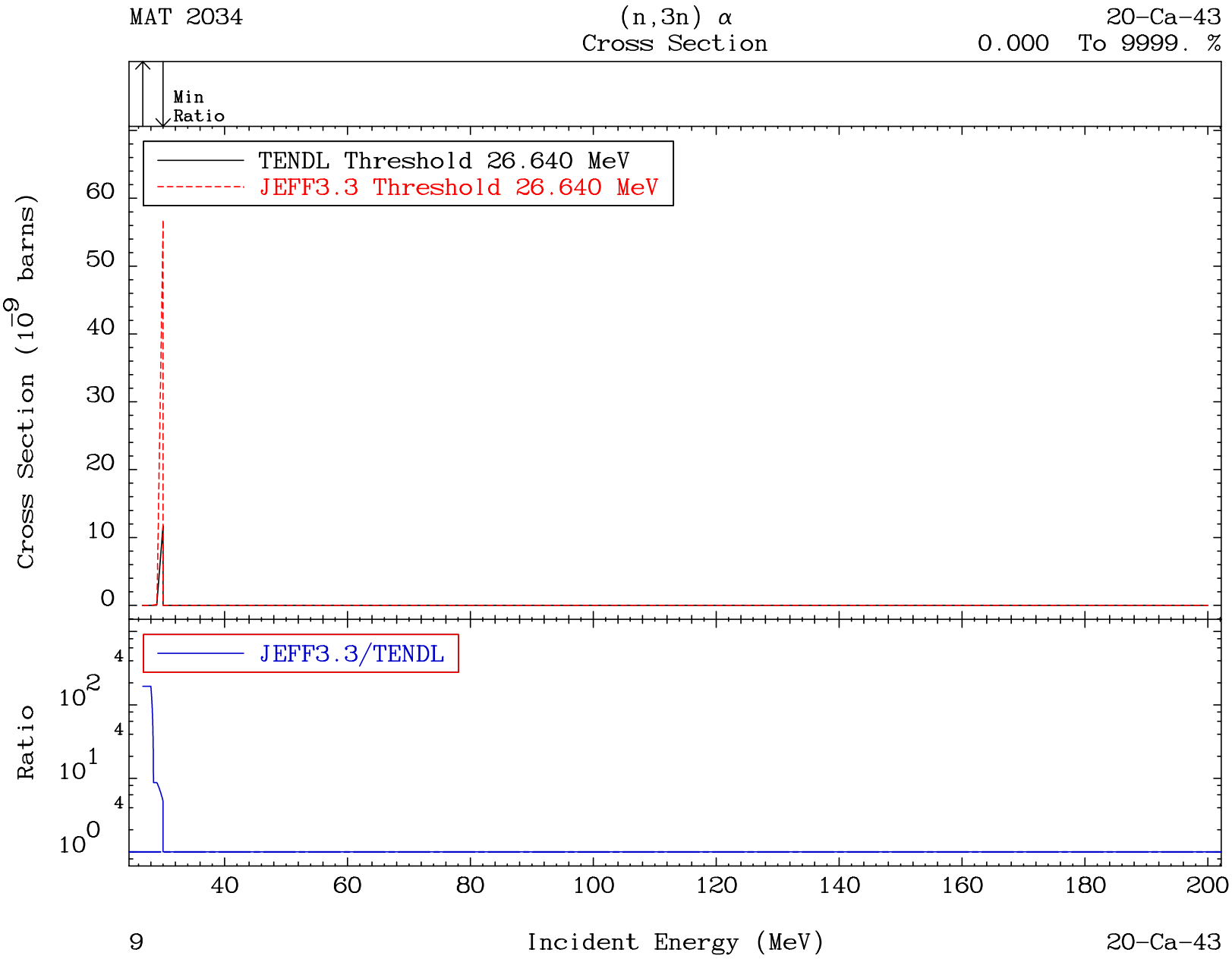

MAT 2034
(n,2n) d
Cross Section
20-Ca-43
0.000 To 9999. %
Min
Ratio
TENDL Threshold 26.693 MeV
JEFF3.3 Threshold 26.693 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
20-Ca-43

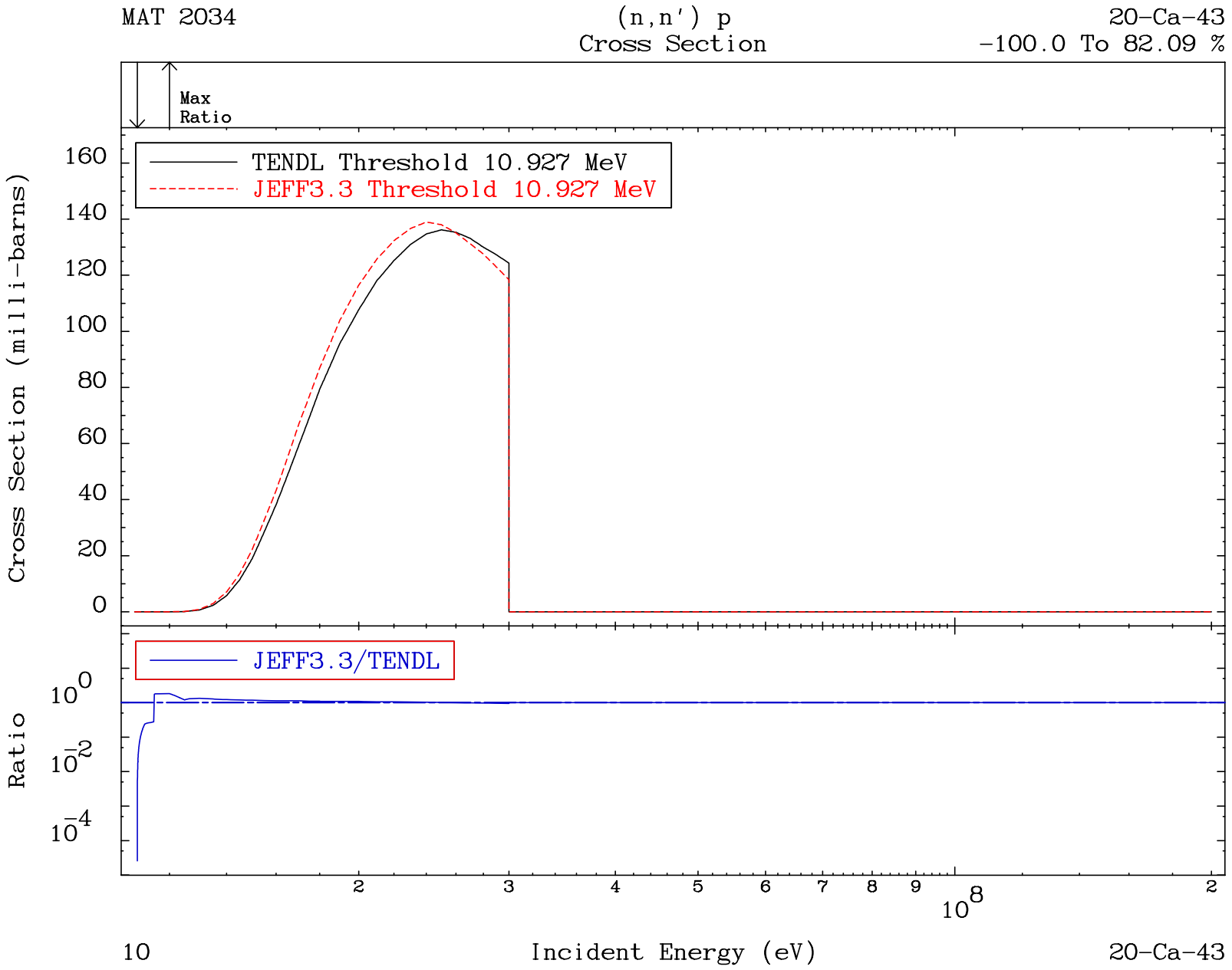

MAT 2034
(n,2n)
Cross Section
20-Ca-43
-5.860 To 5.035 %
Max Ratio
Min Ratio
TENDL Threshold 8.1192 MeV
JEFF3.3 Threshold 8.1192 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
20-Ca-43

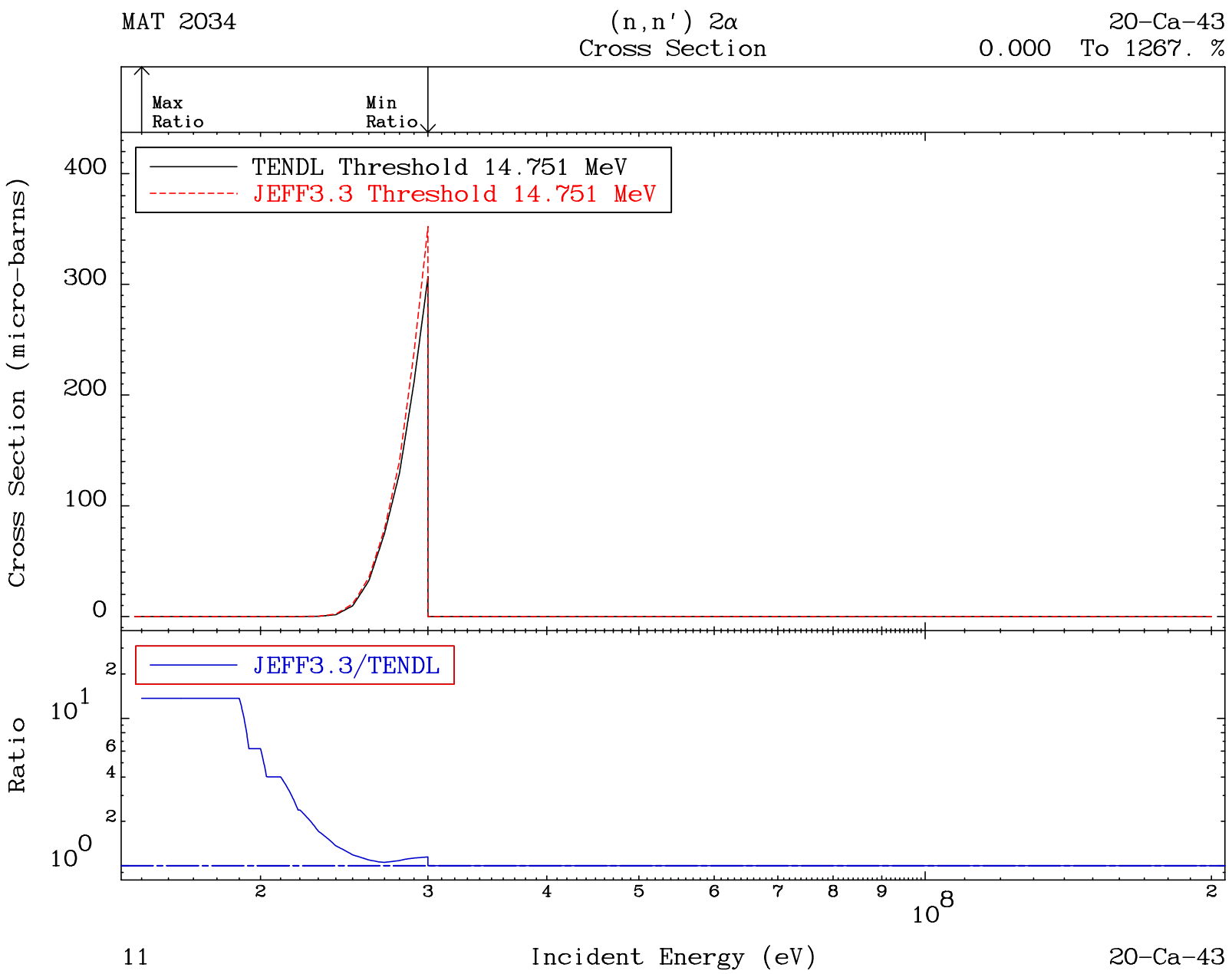

MAT 2034
(n,3n)
Cross Section
20-Ca-43
0.000 To 466.5 %
Max Ratio
Min Ratio
TENDL Threshold 19.869 MeV
JEFF3.3 Threshold 19.869 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
20-Ca-43

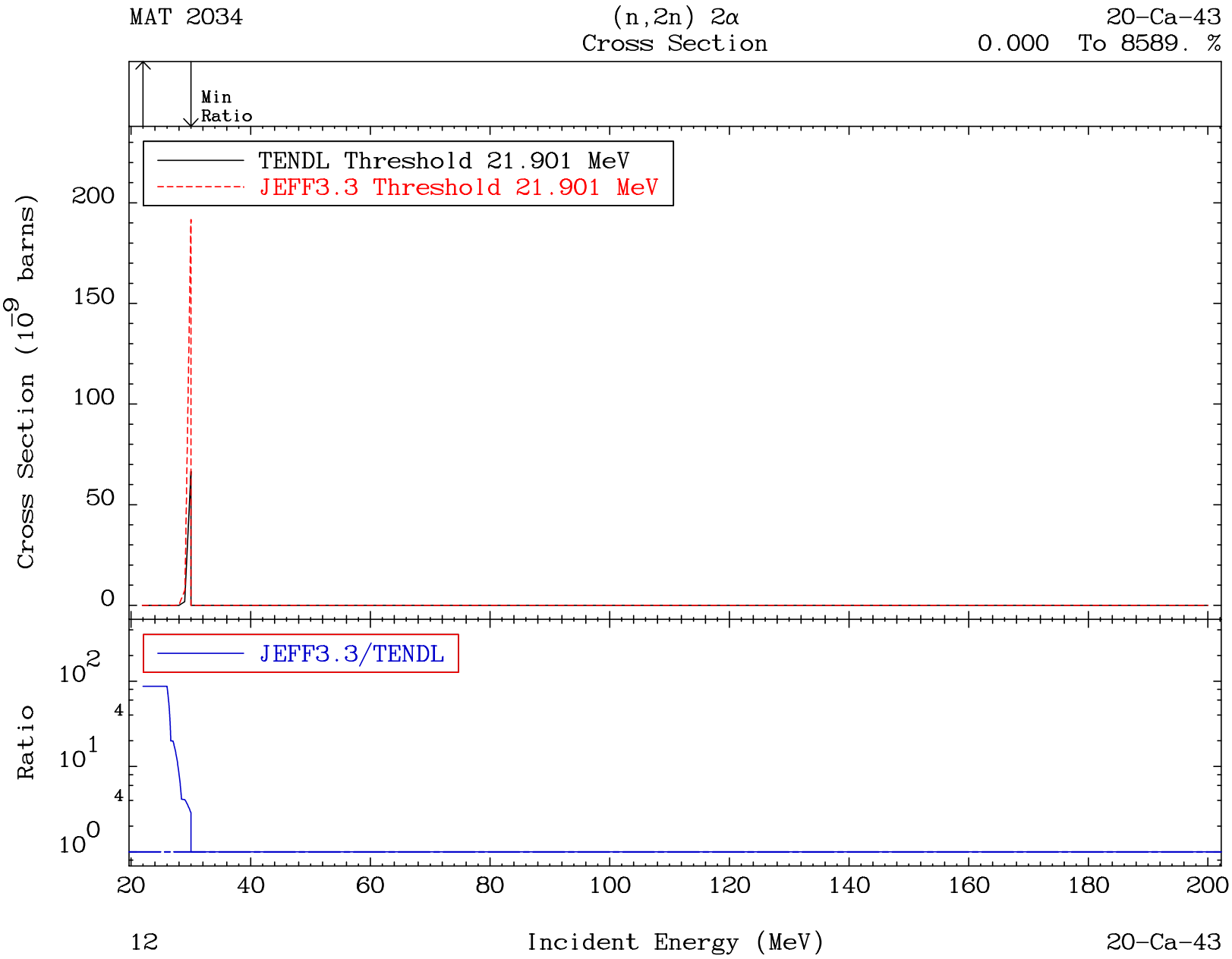

MAT 2034
(n,n') α
Cross Section
20-Ca-43
0.000 To 132.7 %
Max Ratio
Min Ratio
TENDL Threshold 7.7698 MeV
JEFF3.3 Threshold 7.7698 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.4
1.8
1.2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
20-Ca-43

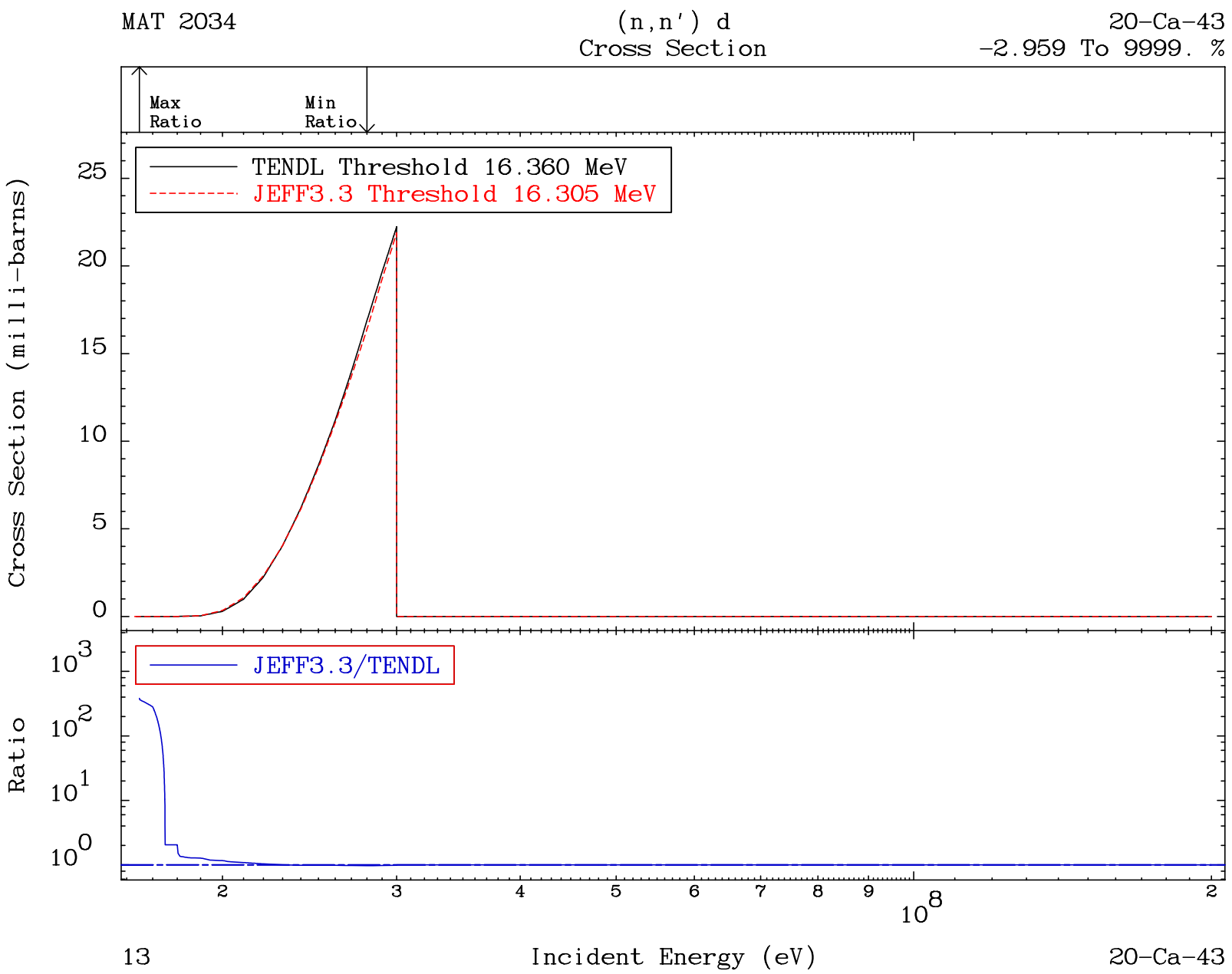

MAT 2034
(n,2n) α
Cross Section
20-Ca-43
0.000 To 448.1 %
Max Ratio
Min Ratio
TENDL Threshold 14.524 MeV
JEFF3.3 Threshold 14.524 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
20-Ca-43

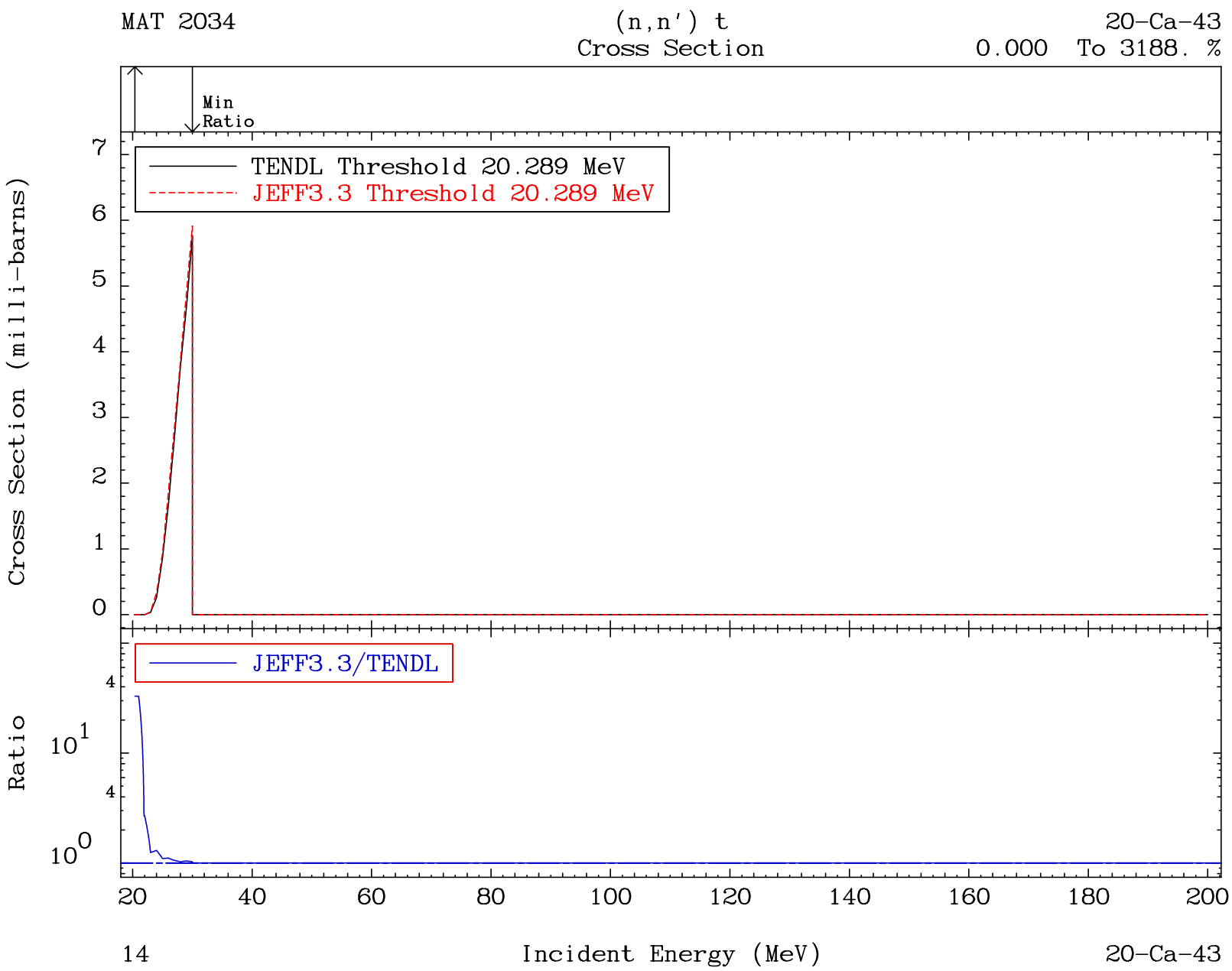

MAT 2034
(n,3n) α
Cross Section
20-Ca-43
0.000 To 9999. %
Min
Ratio
TENDL Threshold 26.640 MeV
JEFF3.3 Threshold 26.640 MeV
Cross Section (10^-9 barns)
0
10
20
30
40
50
60
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
4
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
20-Ca-43

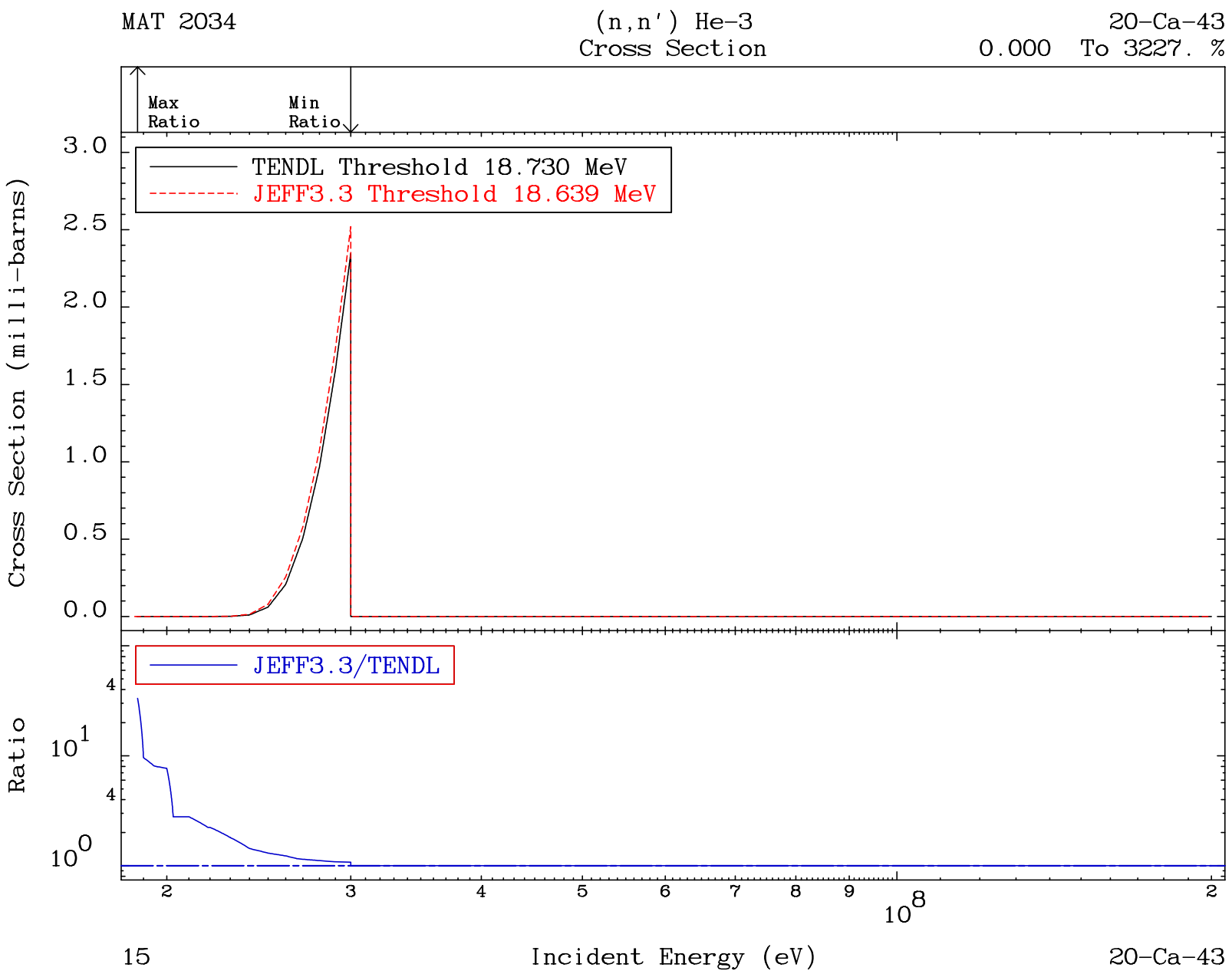

MAT 2034
(n,n') p
Cross Section
20-Ca-43
-100.0 To 82.09 %
Max
Ratio
TENDL Threshold 10.927 MeV
JEFF3.3 Threshold 10.927 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
20-Ca-43

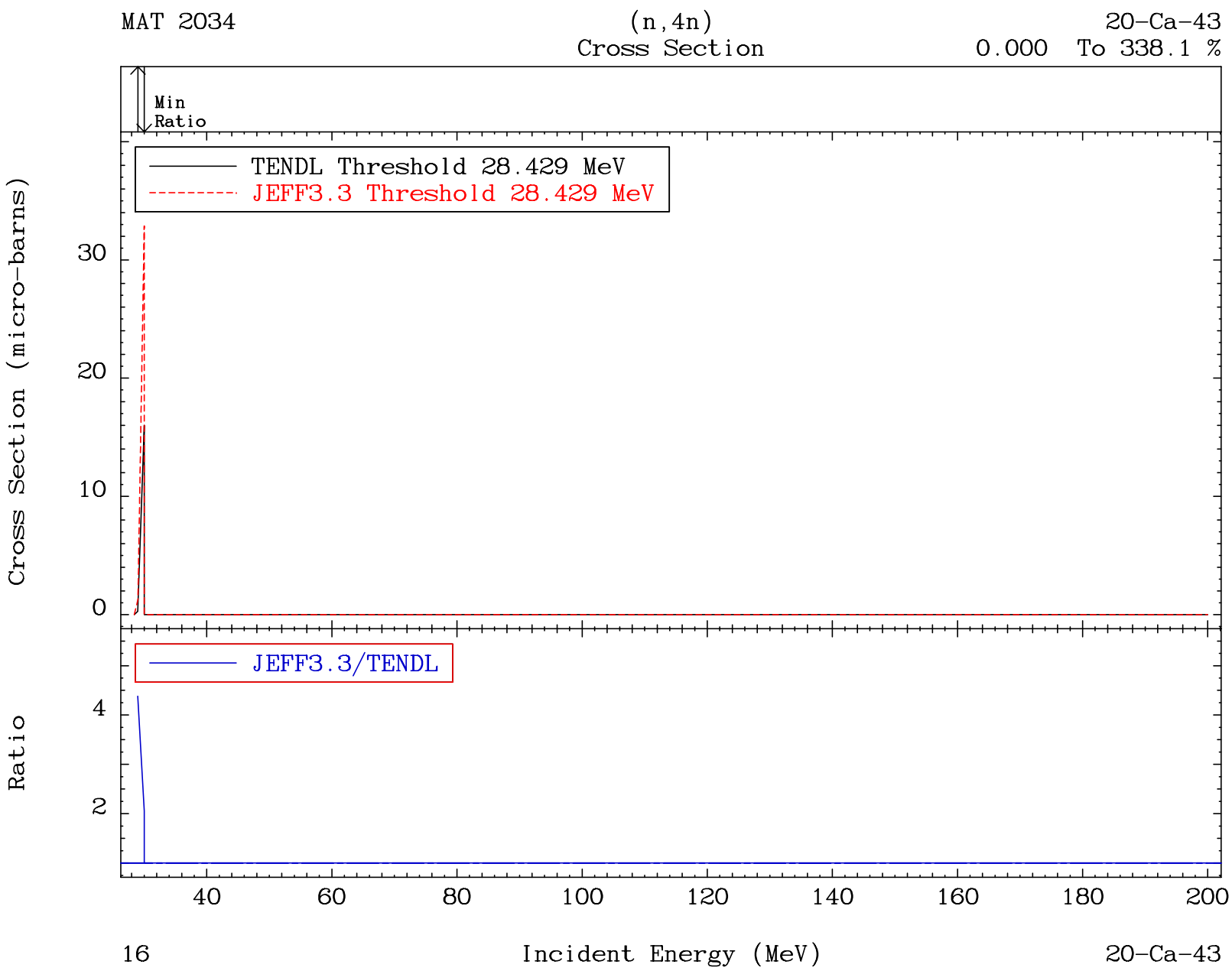

MAT 2034
(n,n') 2α
Cross Section
20-Ca-43
0.000 To 1267. %
Max Ratio
Min Ratio
TENDL Threshold 14.751 MeV
JEFF3.3 Threshold 14.751 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
20-Ca-43

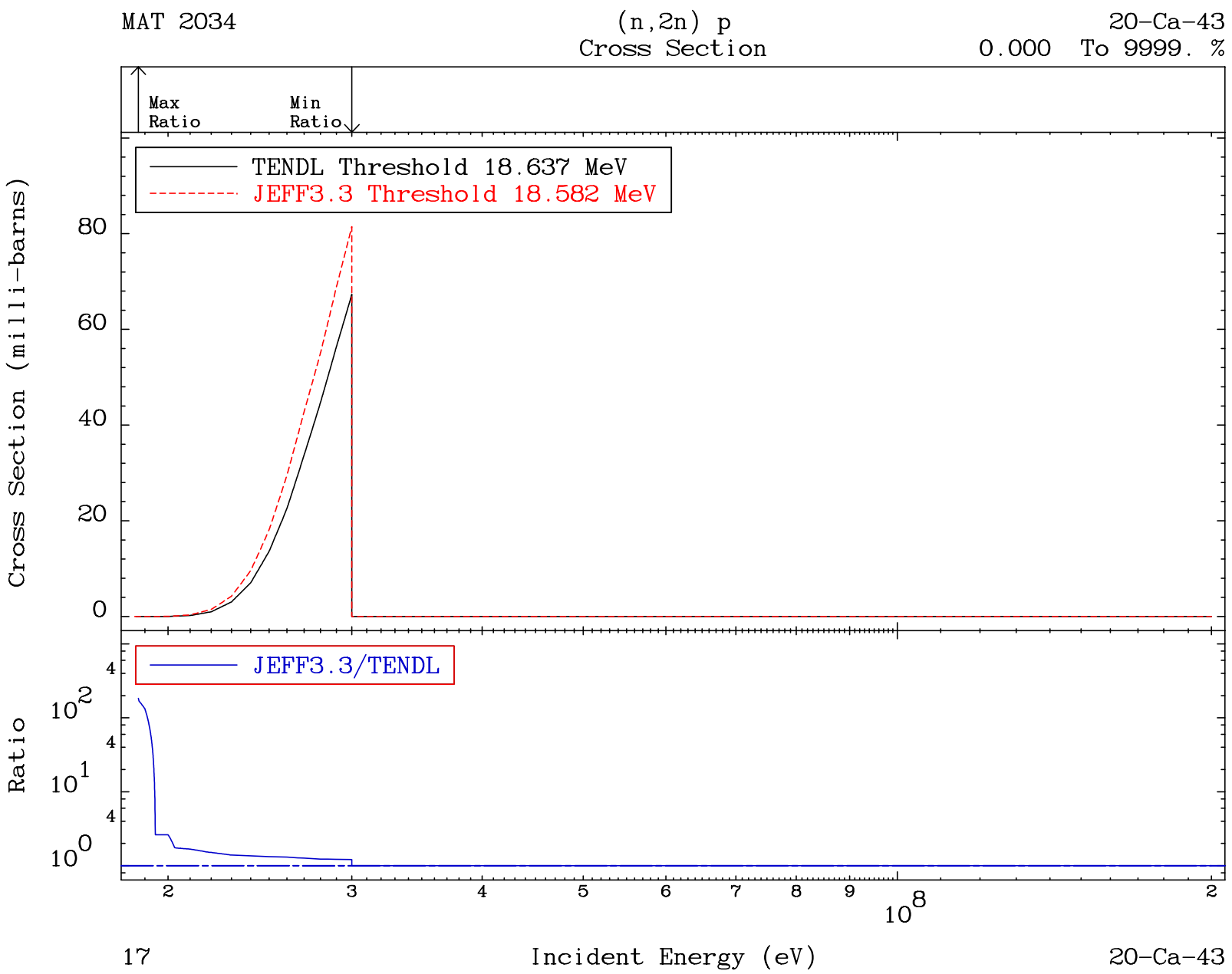

MAT 2034
(n,2n) 2α
Cross Section
20-Ca-43
0.000 To 8589. %
Min
Ratio
TENDL Threshold 21.901 MeV
JEFF3.3 Threshold 21.901 MeV
Cross Section (10^-9 barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
20
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
20-Ca-43

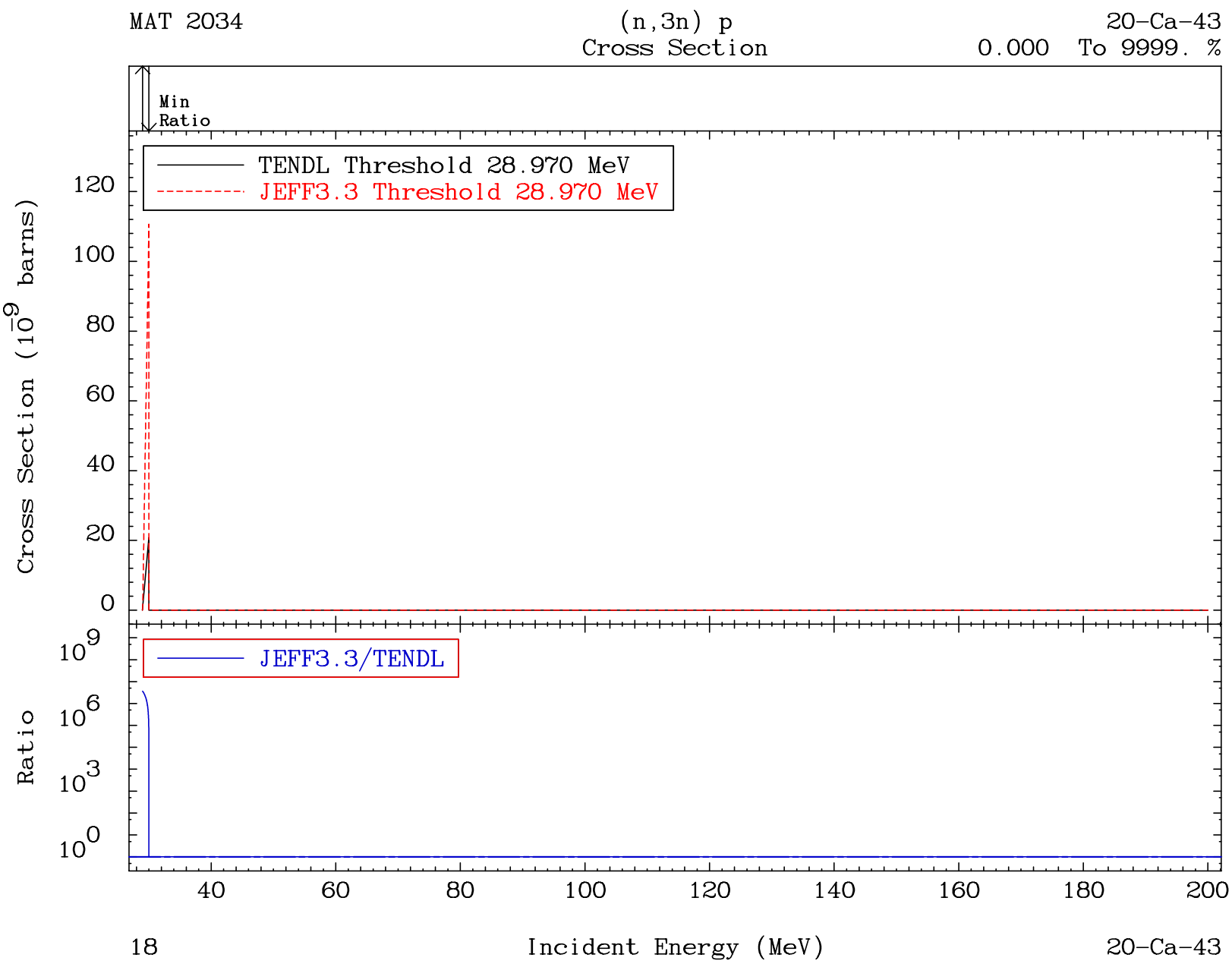

MAT 2034
(n,n') d
Cross Section
20-Ca-43
-2.959 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.360 MeV
JEFF3.3 Threshold 16.305 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
20-Ca-43

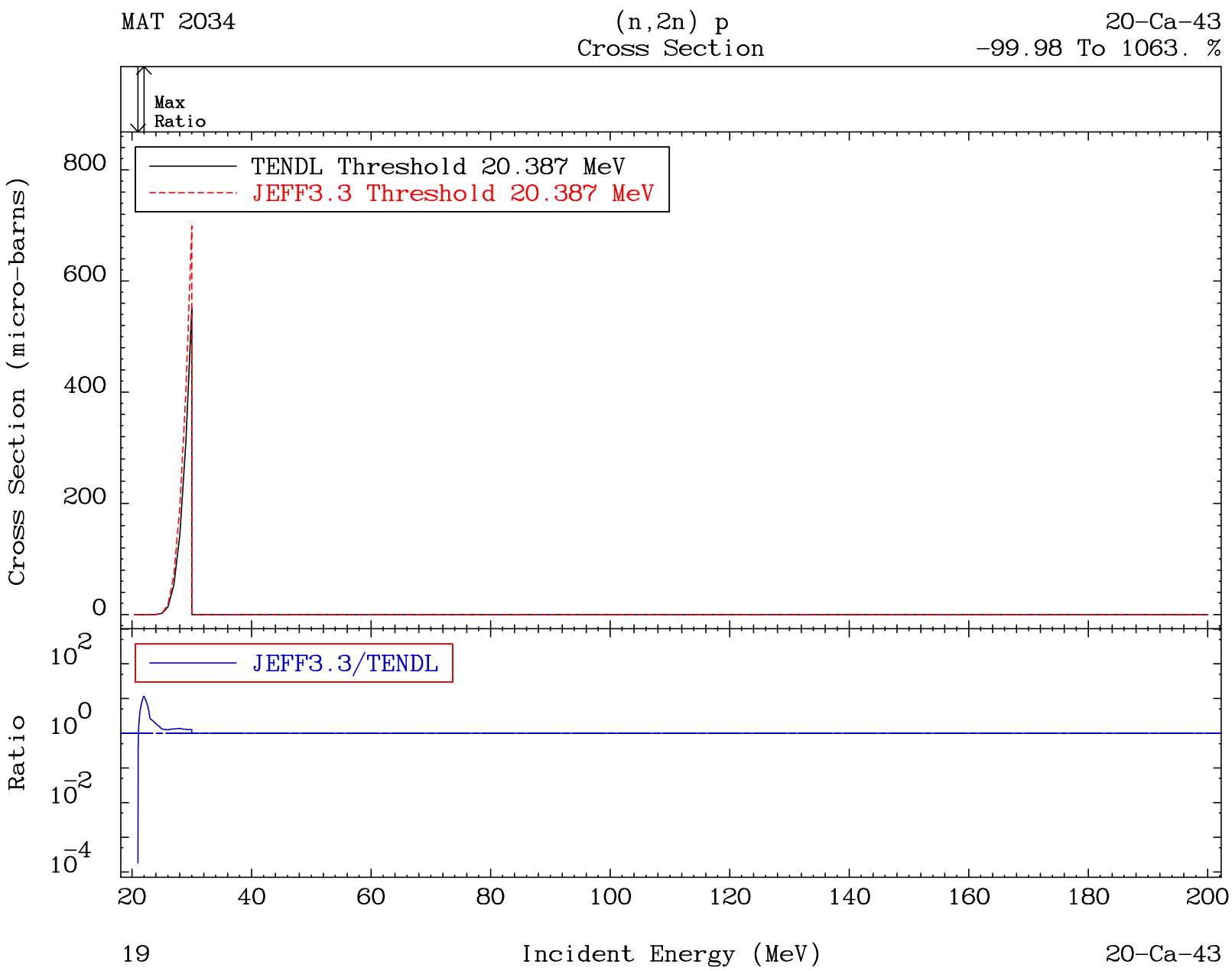

MAT 2034
(n,n') t
Cross Section
20-Ca-43
0.000 To 3188. %
Min
Ratio
TENDL Threshold 20.289 MeV
JEFF3.3 Threshold 20.289 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (MeV)
14
20-Ca-43

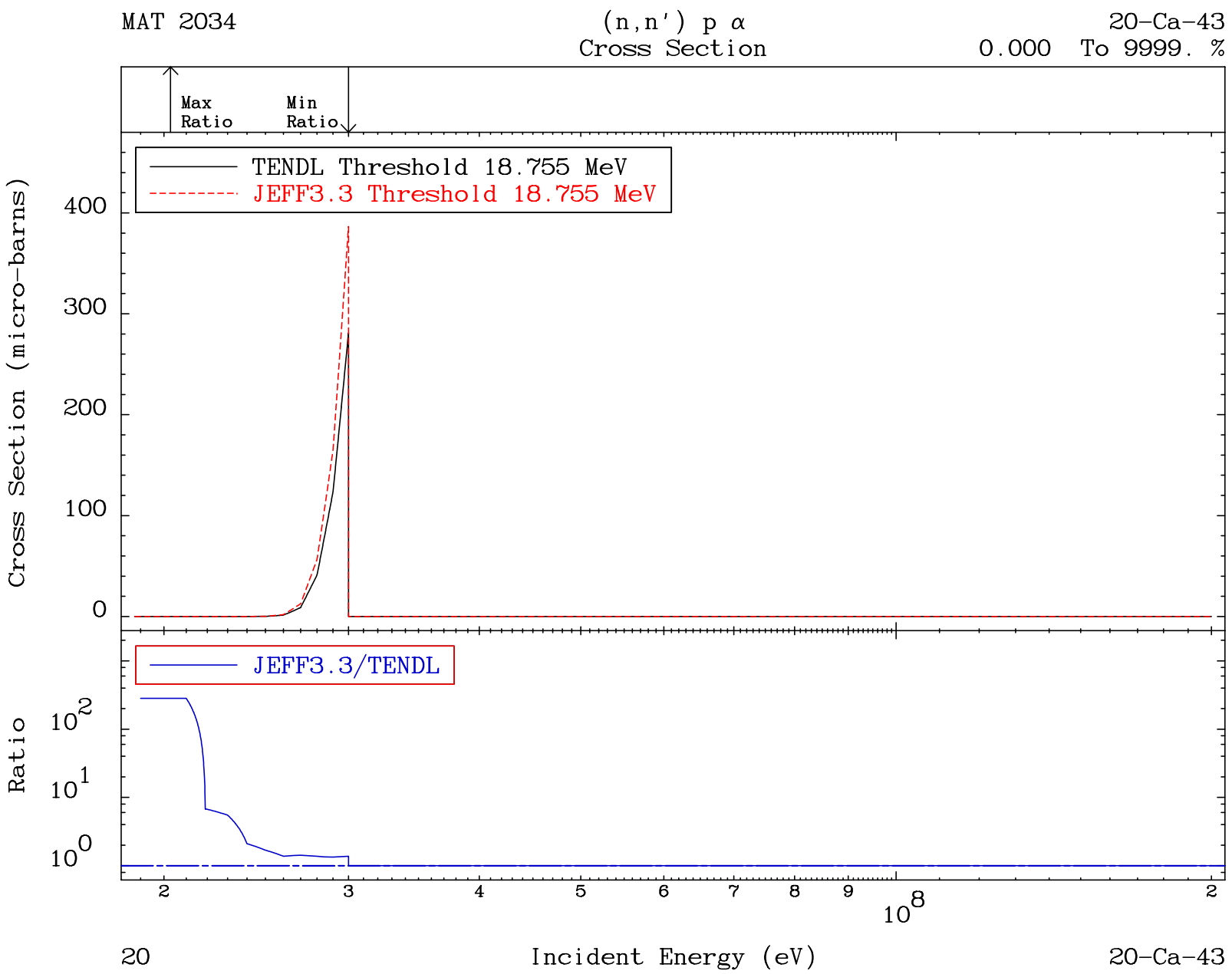

MAT 2034
(n,n') He-3
Cross Section
20-Ca-43
0.000 To 3227. %
Max Ratio
Min Ratio
TENDL Threshold 18.730 MeV
JEFF3.3 Threshold 18.639 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
20-Ca-43

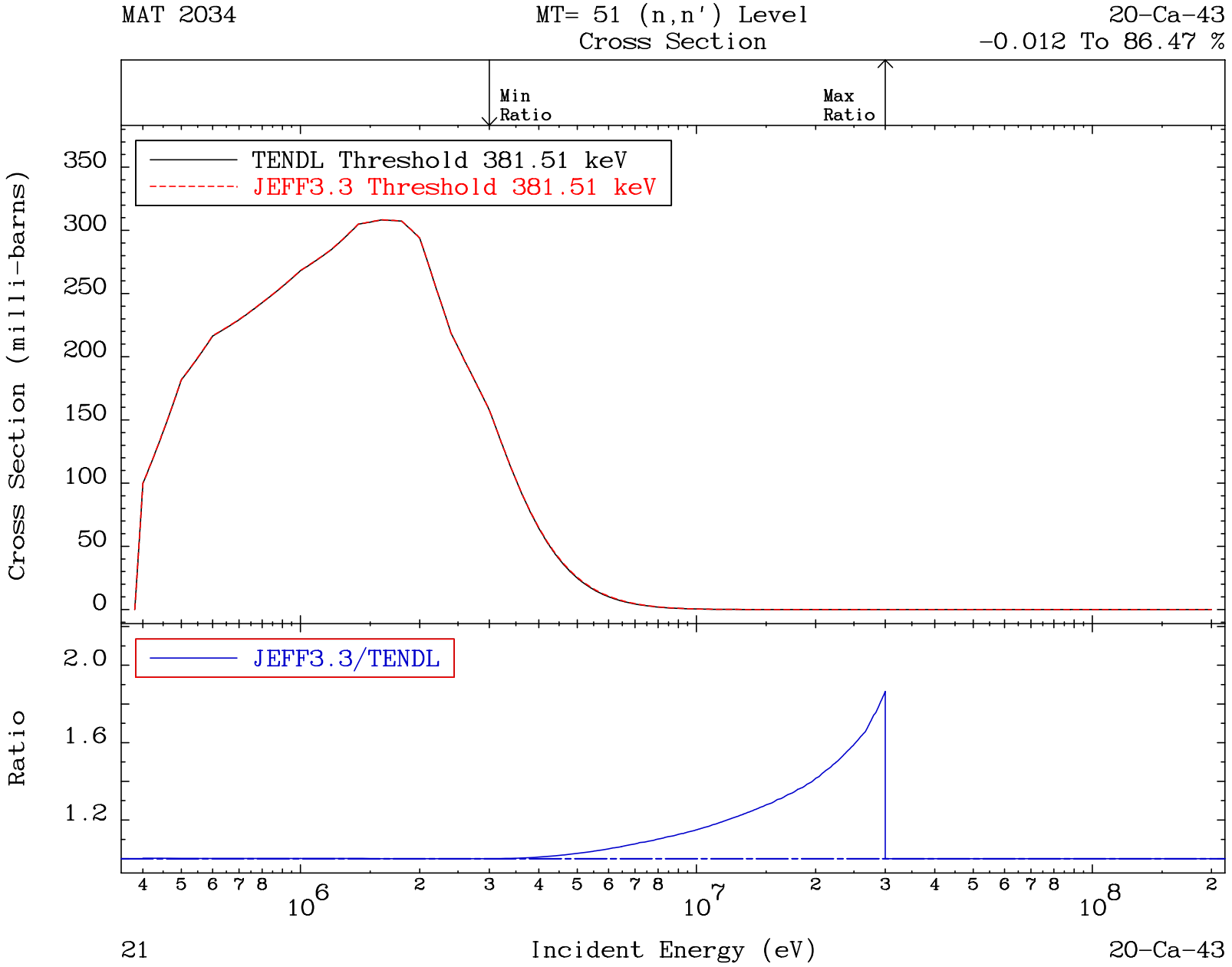

MAT 2034
(n,4n)
Cross Section
20-Ca-43
0.000 To 338.1 %
Min
Ratio
TENDL Threshold 28.429 MeV
JEFF3.3 Threshold 28.429 MeV
Cross Section (micro-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
4
2
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
20-Ca-43

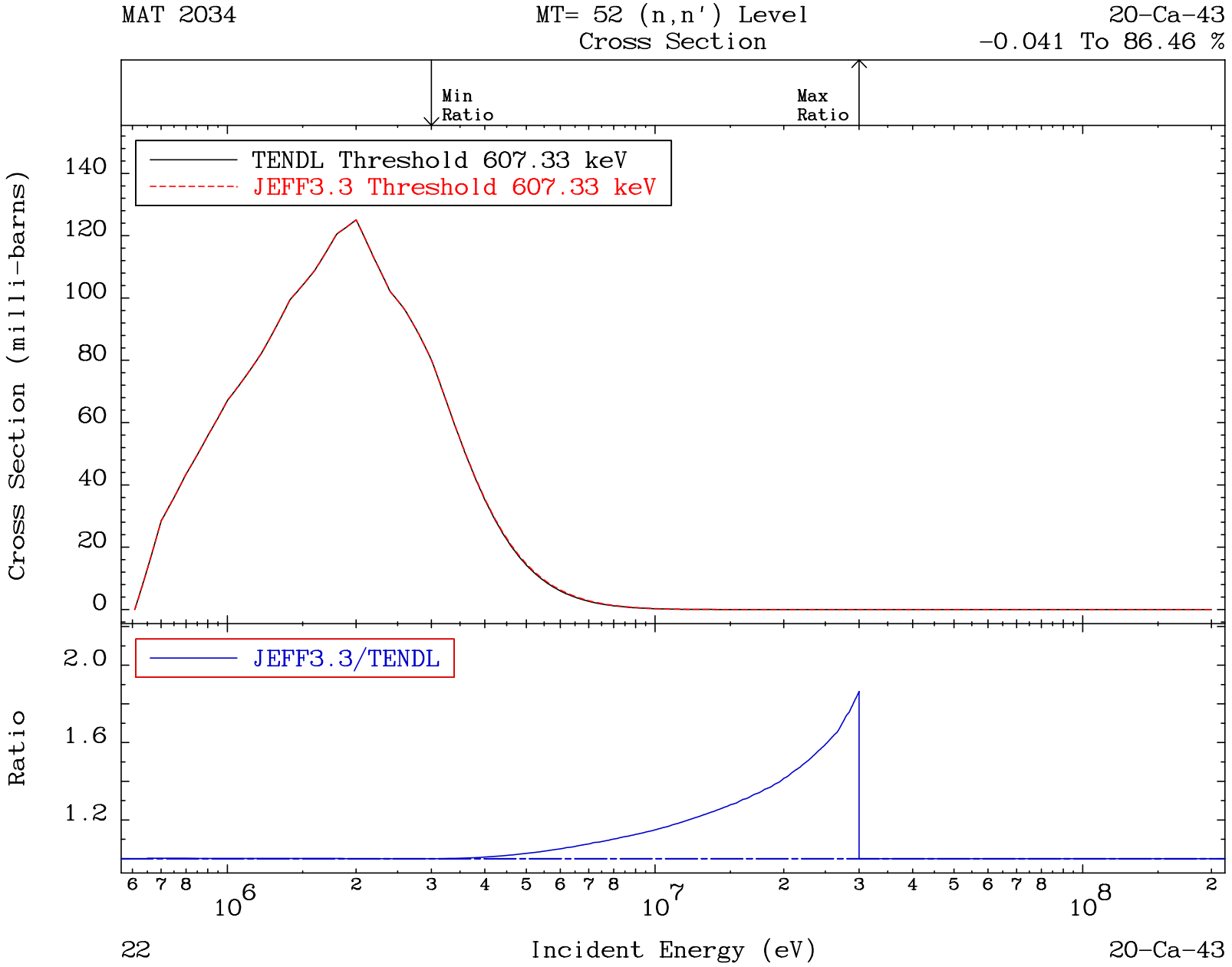

MAT 2034
(n,2n) p
Cross Section
20-Ca-43
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.637 MeV
JEFF3.3 Threshold 18.582 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
4
10^2
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
20-Ca-43

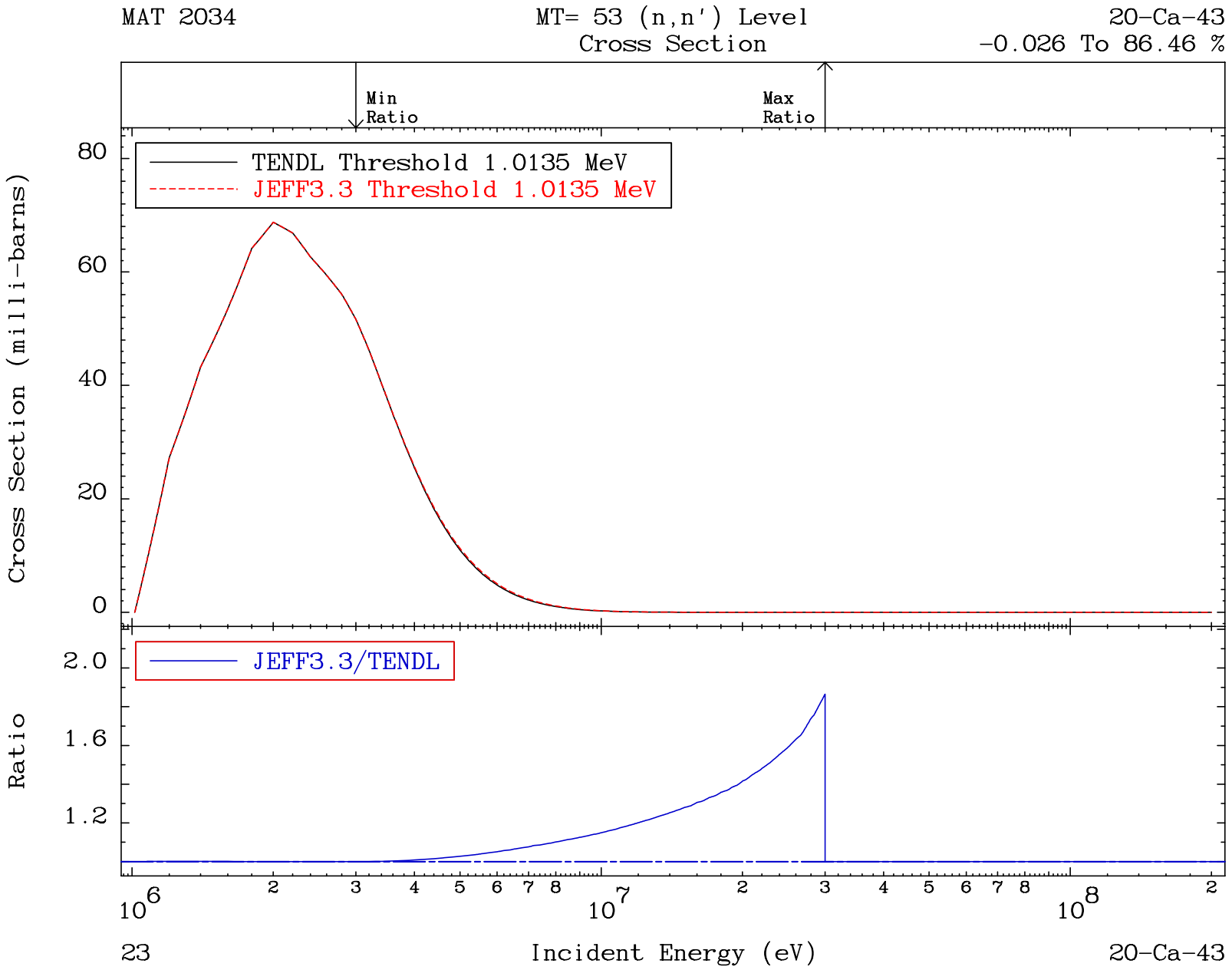

MAT 2034
(n,3n) p
Cross Section
20-Ca-43
0.000 To 9999. %
Min
Ratio
TENDL Threshold 28.970 MeV
JEFF3.3 Threshold 28.970 MeV
Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^{9}
10^{6}
10^{3}
10^{0}
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
20-Ca-43

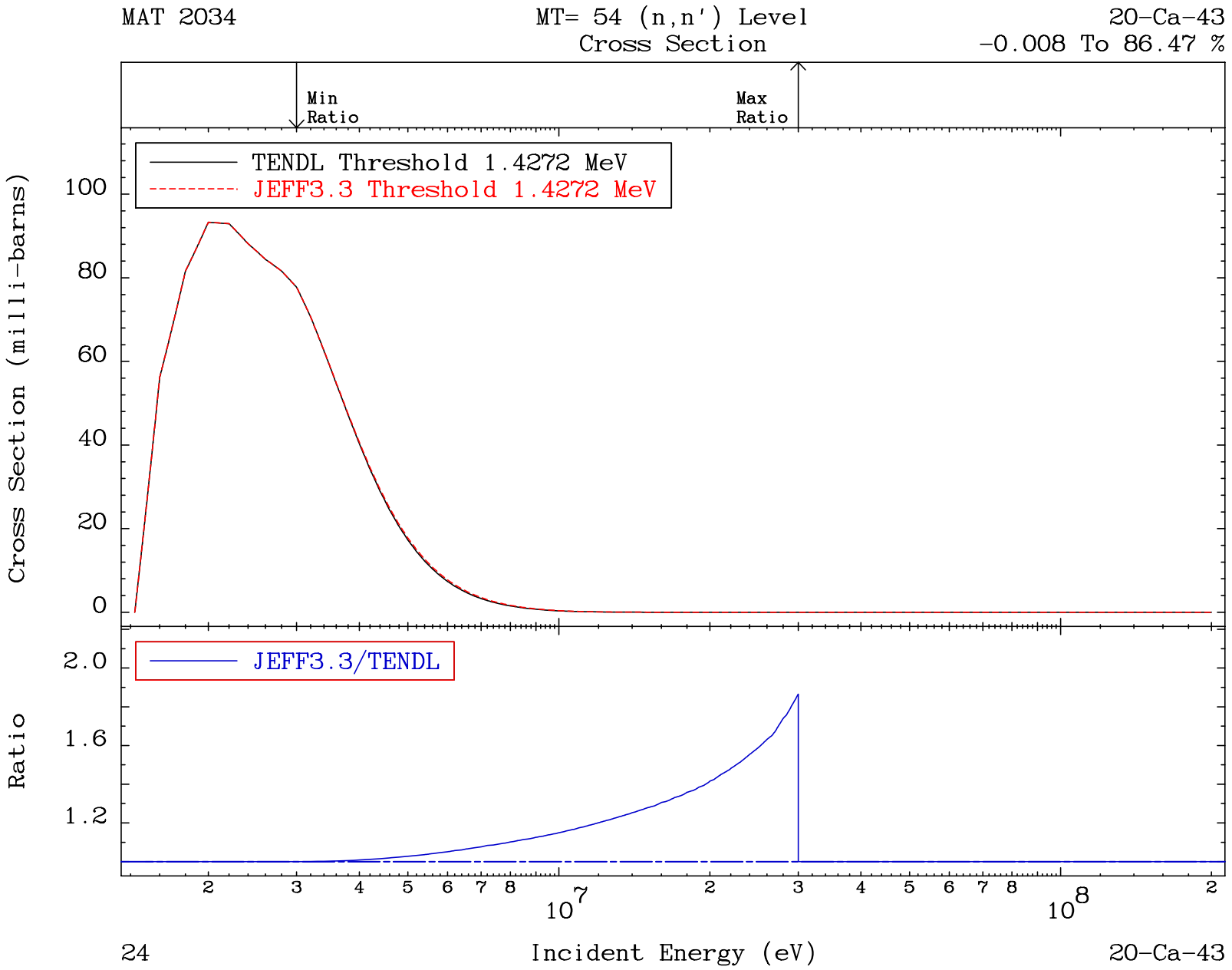

MAT 2034
(n,2n) p
Cross Section
20-Ca-43
-99.98 To 1063. %
Max
Ratio
TENDL Threshold 20.387 MeV
JEFF3.3 Threshold 20.387 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
10^-4
20
40
60
80
100
120
140
160
180
200
19
Incident Energy (MeV)
20-Ca-43

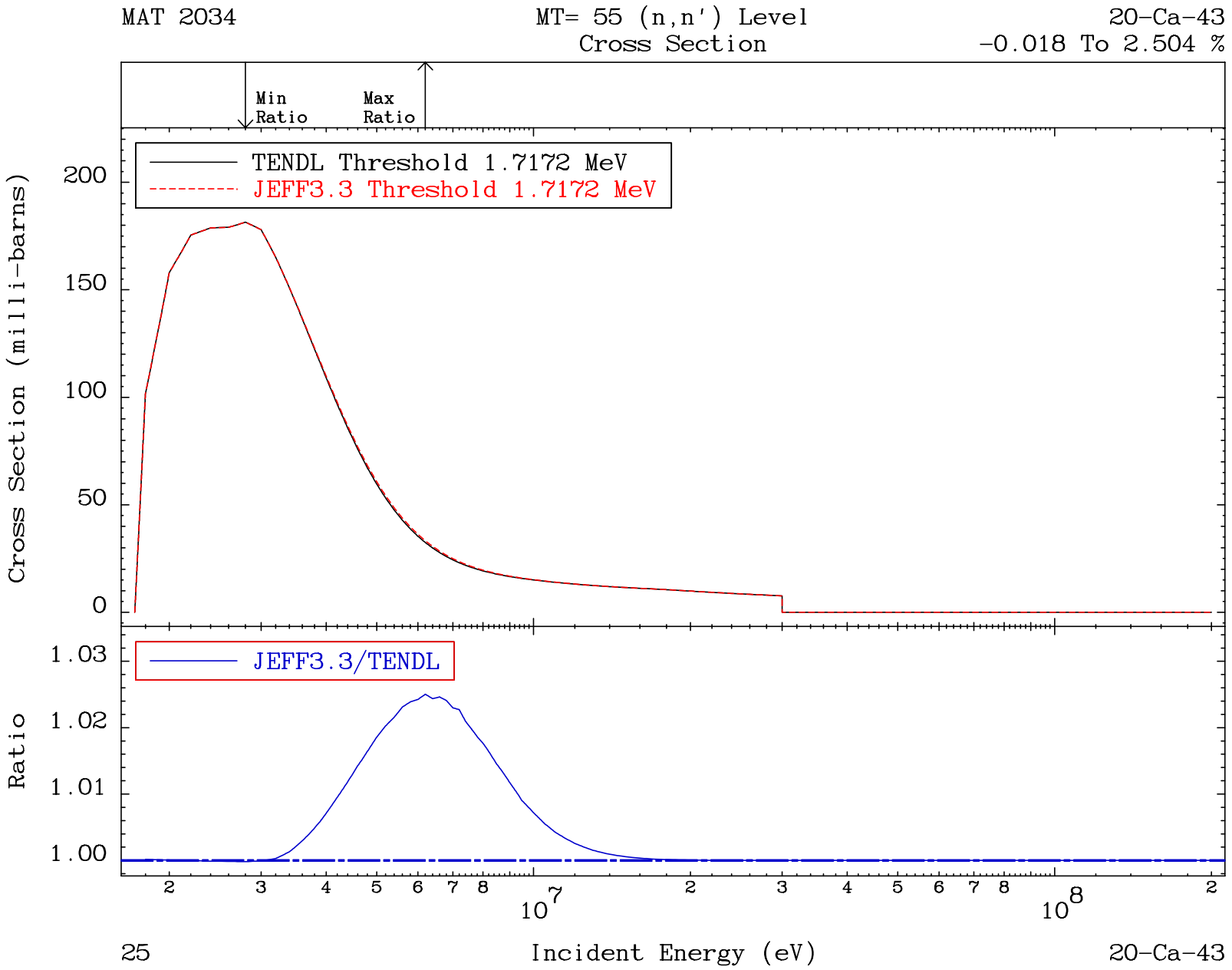

MAT 2034
(n,n') p α
Cross Section
20-Ca-43
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.755 MeV
JEFF3.3 Threshold 18.755 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
20-Ca-43

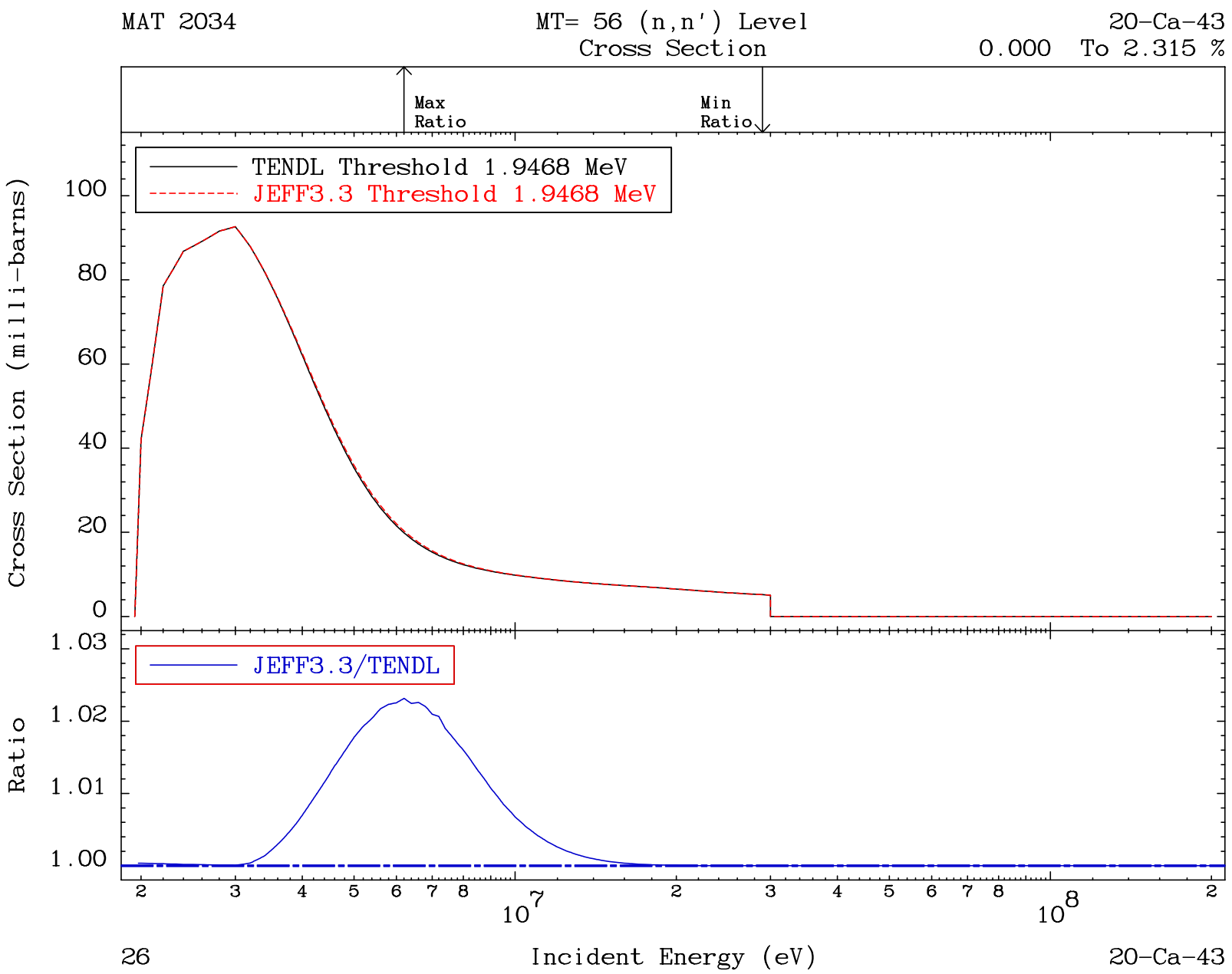

MAT 2034
MT= 51 (n,n') Level
Cross Section
20-Ca-43
-0.012 To 86.47 %
Min
Ratio
Max
Ratio
TENDL Threshold 381.51 keV
JEFF3.3 Threshold 381.51 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
20-Ca-43

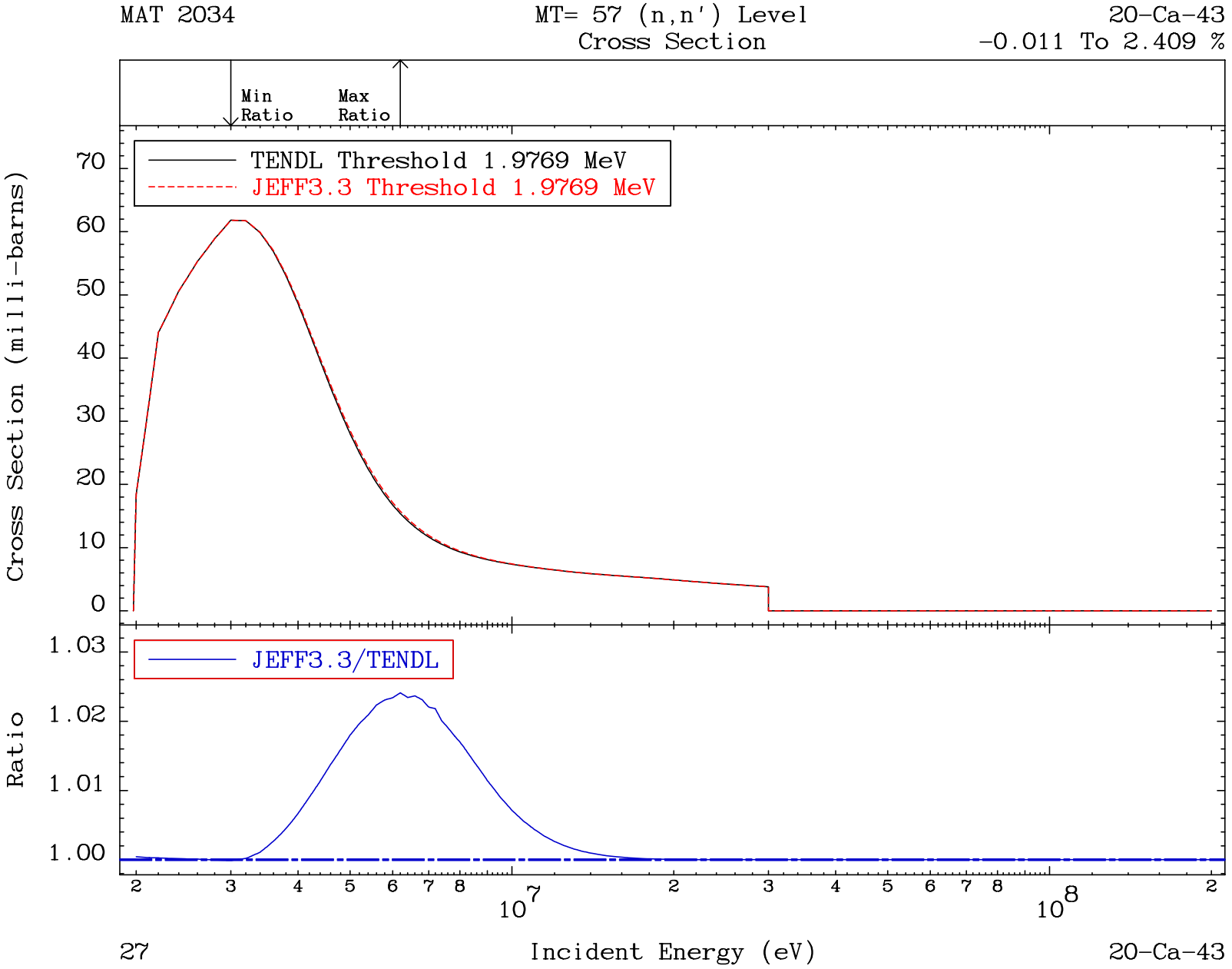

MAT 2034
MT= 52 (n,n') Level
Cross Section
20-Ca-43
-0.041 To 86.46 %
Min
Ratio
Max
Ratio
TENDL Threshold 607.33 keV
JEFF3.3 Threshold 607.33 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
20-Ca-43

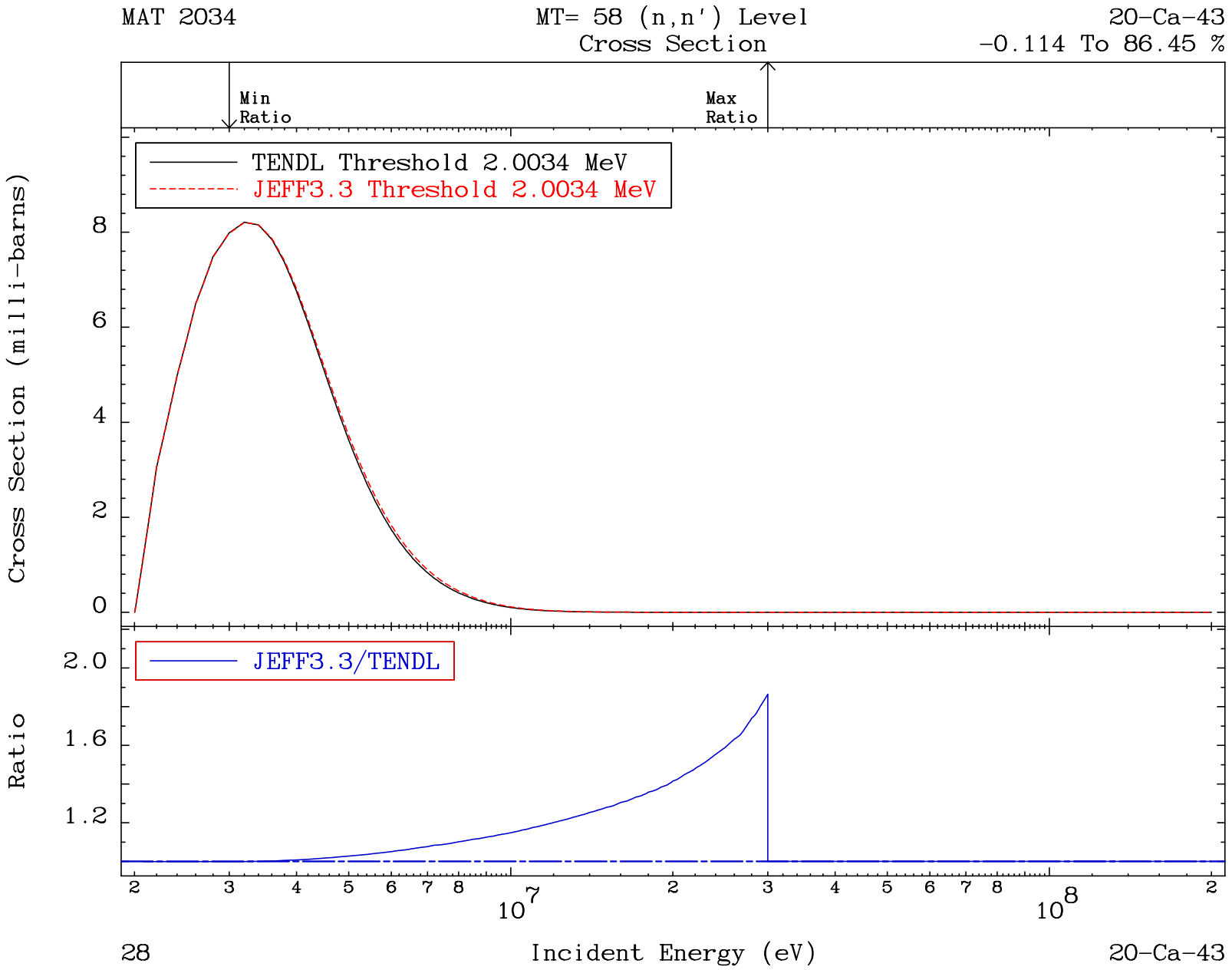

MAT 2034
MT= 53 (n,n') Level
Cross Section
20-Ca-43
-0.026 To 86.46 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0135 MeV
JEFF3.3 Threshold 1.0135 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
10^6
10^7
10^8
Incident Energy (eV)
23
20-Ca-43

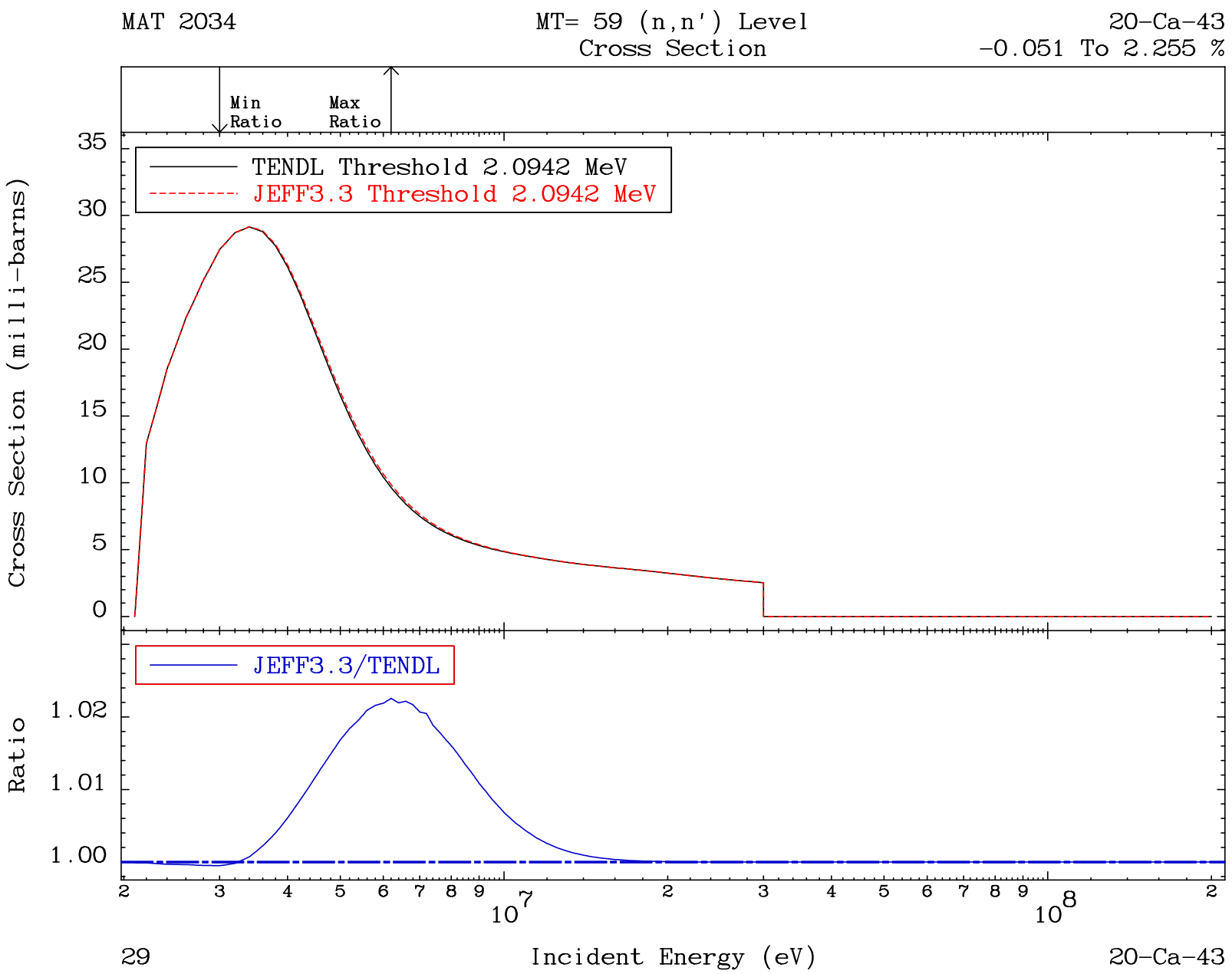

MAT 2034
MT= 54 (n,n') Level
Cross Section
20-Ca-43
-0.008 To 86.47 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.4272 MeV
JEFF3.3 Threshold 1.4272 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
20-Ca-43

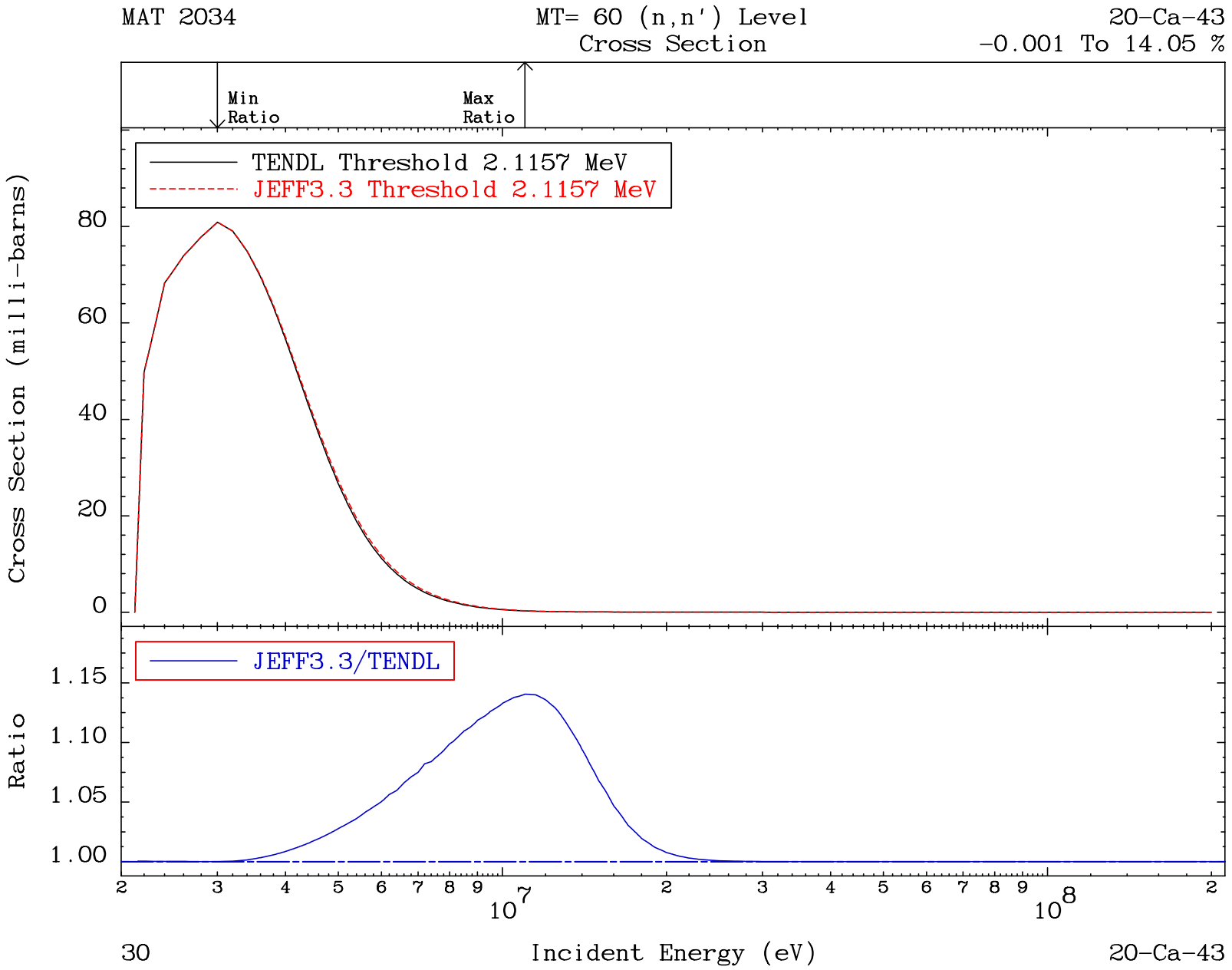

MAT 2034
MT= 55 (n,n') Level
Cross Section
20-Ca-43
-0.018 To 2.504 %
Min Ratio
Max Ratio
TENDL Threshold 1.7172 MeV
JEFF3.3 Threshold 1.7172 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
20-Ca-43

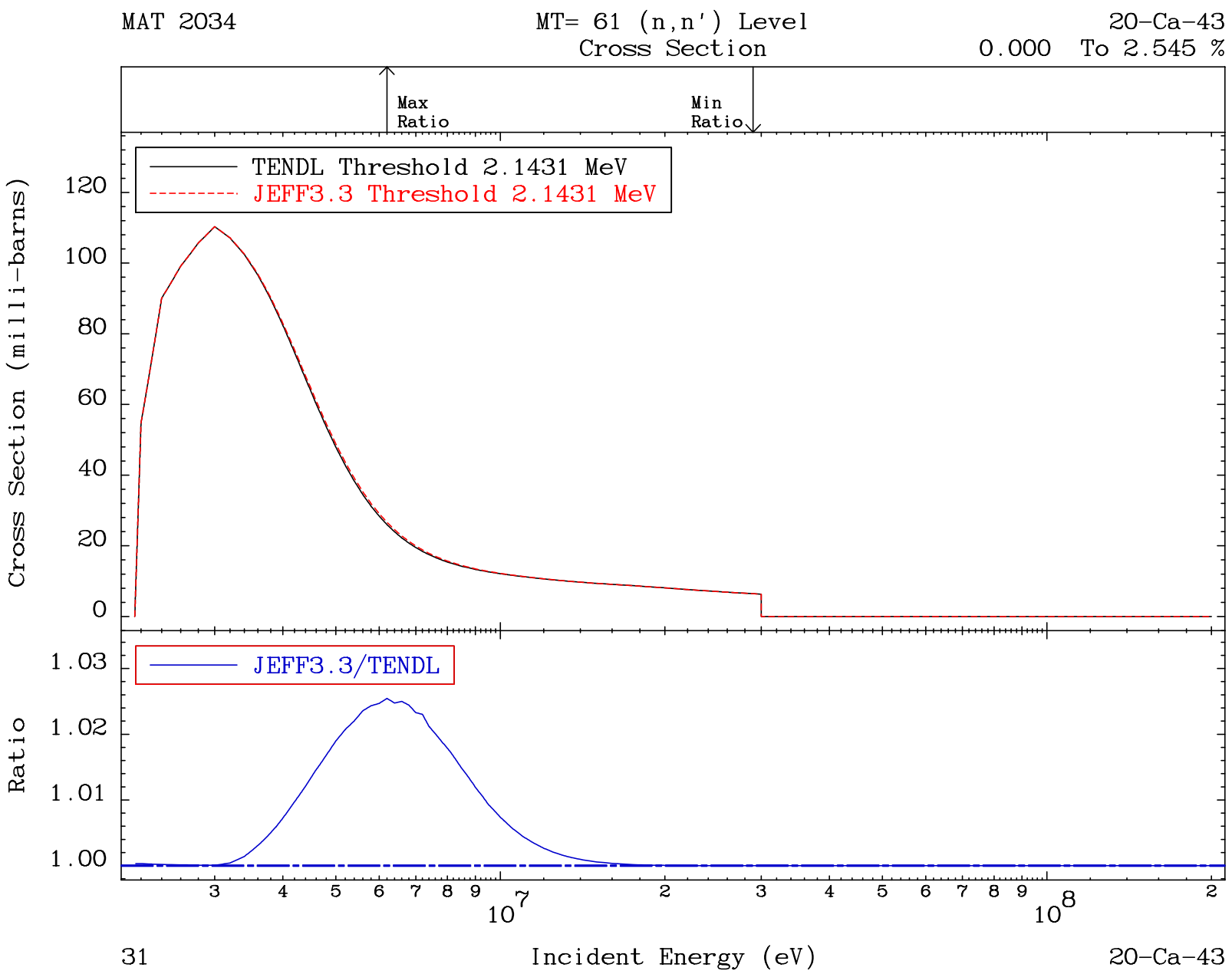

MAT 2034
MT= 56 (n,n') Level
Cross Section
20-Ca-43
0.000 To 2.315 %
Max Ratio
Min Ratio
TENDL Threshold 1.9468 MeV
JEFF3.3 Threshold 1.9468 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
20-Ca-43

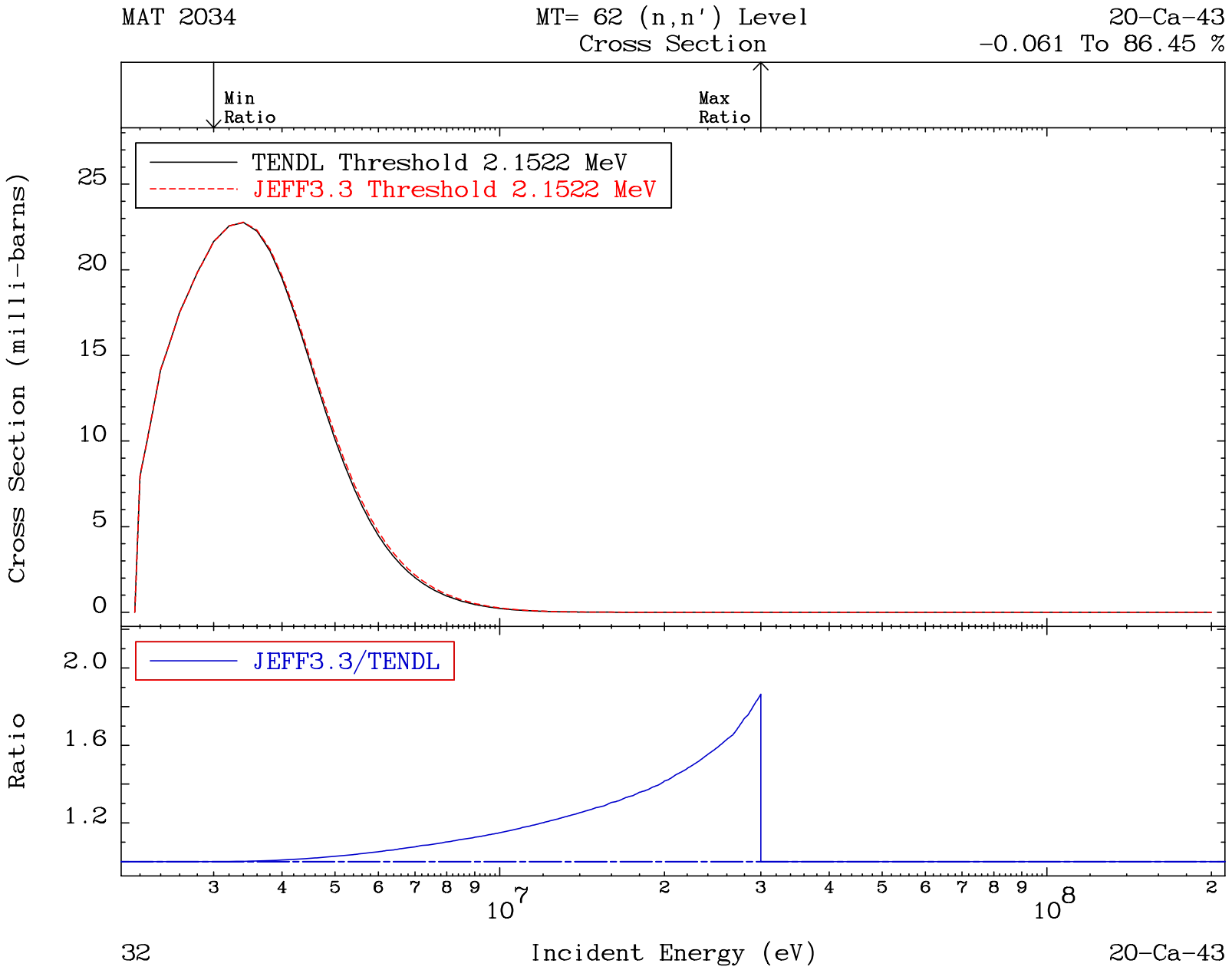

MAT 2034
MT= 57 (n,n') Level
Cross Section
20-Ca-43
-0.011 To 2.409 %
Min Ratio
Max Ratio
TENDL Threshold 1.9769 MeV
JEFF3.3 Threshold 1.9769 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
20-Ca-43

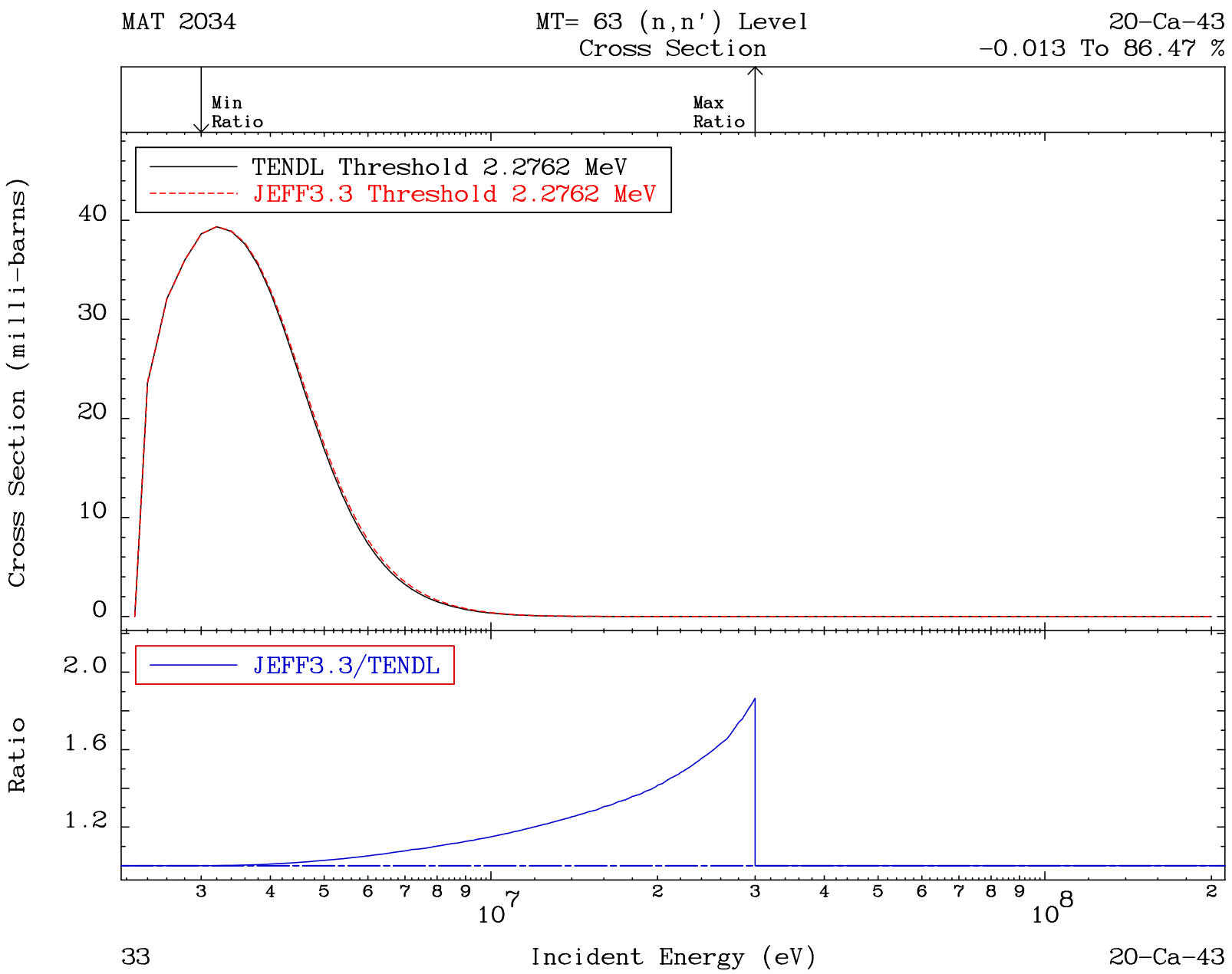

MAT 2034
MT= 58 (n,n') Level
Cross Section
20-Ca-43
-0.114 To 86.45 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.0034 MeV
JEFF3.3 Threshold 2.0034 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
1.2
1.6
2.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
20-Ca-43

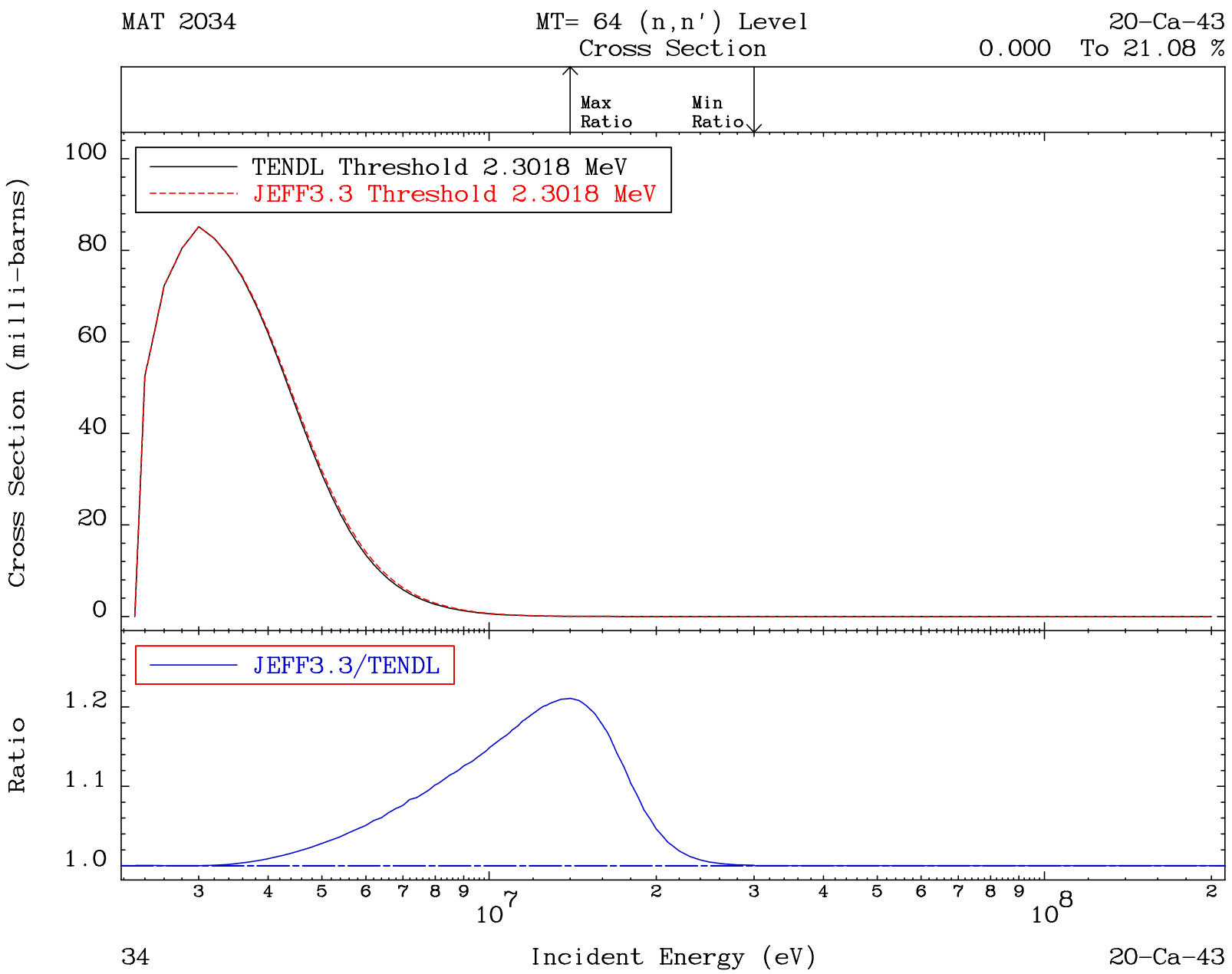

MAT 2034
MT= 59 (n,n') Level
Cross Section
20-Ca-43
-0.051 To 2.255 %
Min Ratio
Max Ratio
TENDL Threshold 2.0942 MeV
JEFF3.3 Threshold 2.0942 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
20-Ca-43

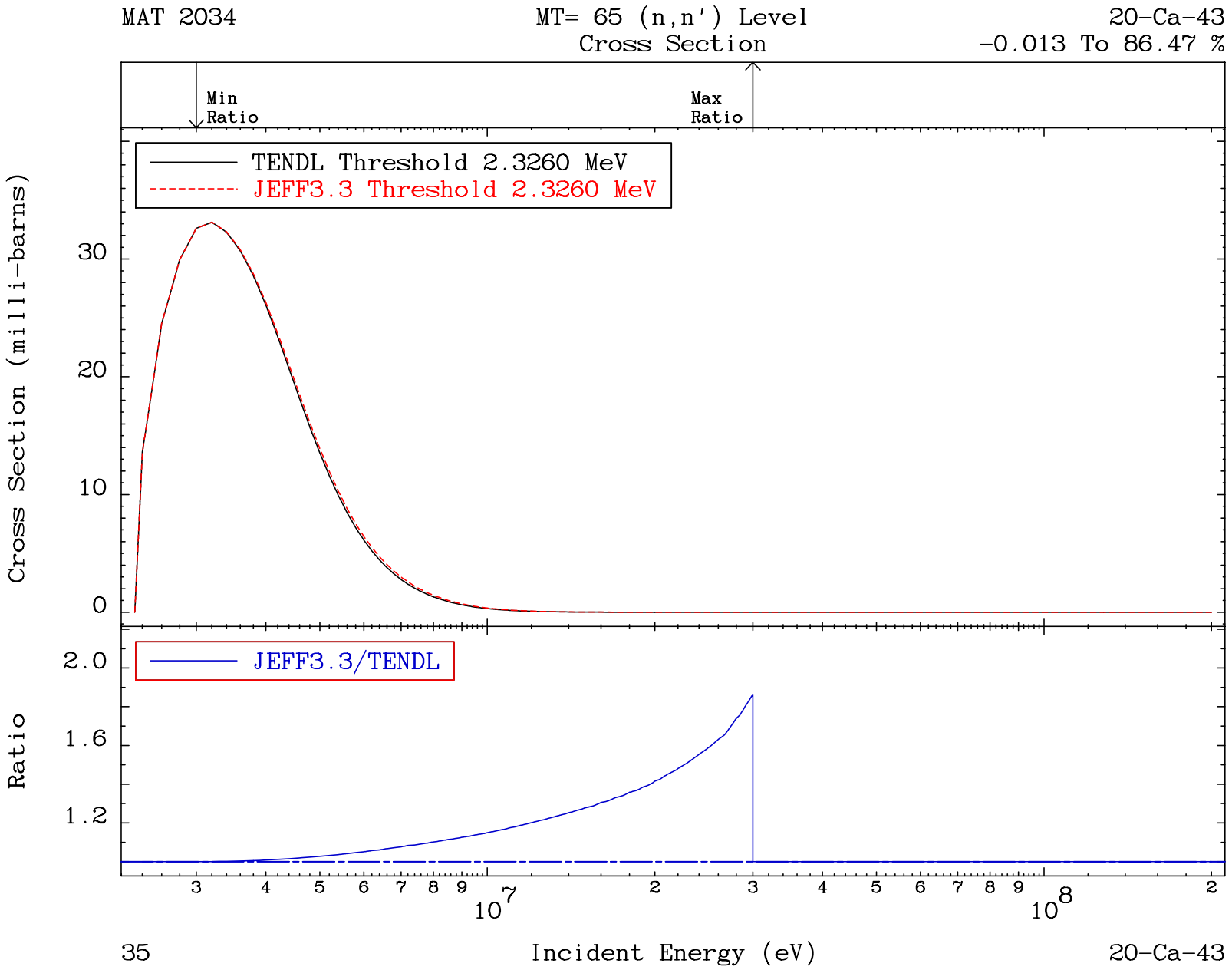

MAT 2034
MT= 60 (n,n') Level
Cross Section
20-Ca-43
-0.001 To 14.05 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.1157 MeV
JEFF3.3 Threshold 2.1157 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
20-Ca-43

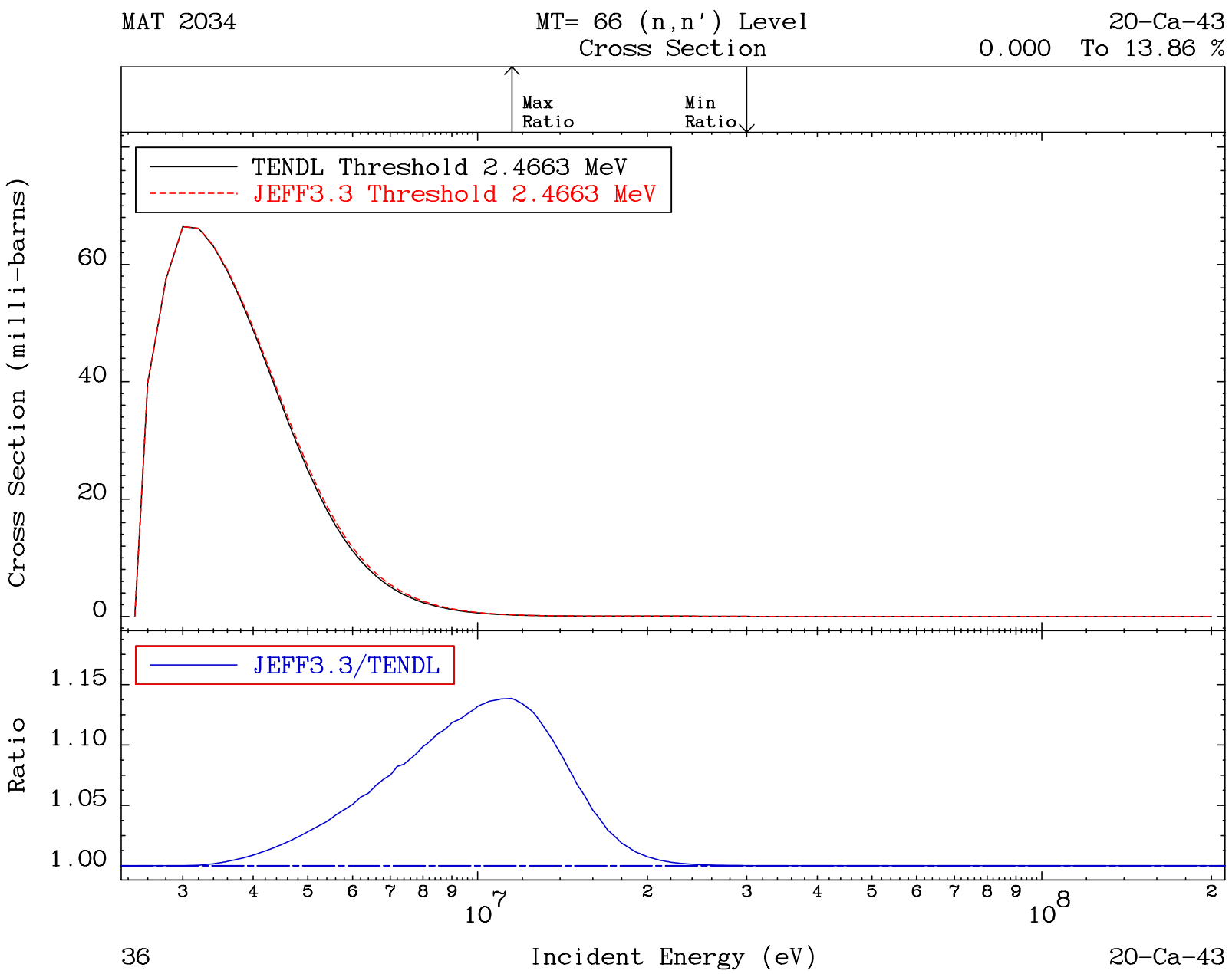

MAT 2034
MT= 61 (n,n') Level
Cross Section
20-Ca-43
0.000 To 2.545 %
Max Ratio
Min Ratio
TENDL Threshold 2.1431 MeV
JEFF3.3 Threshold 2.1431 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
20-Ca-43

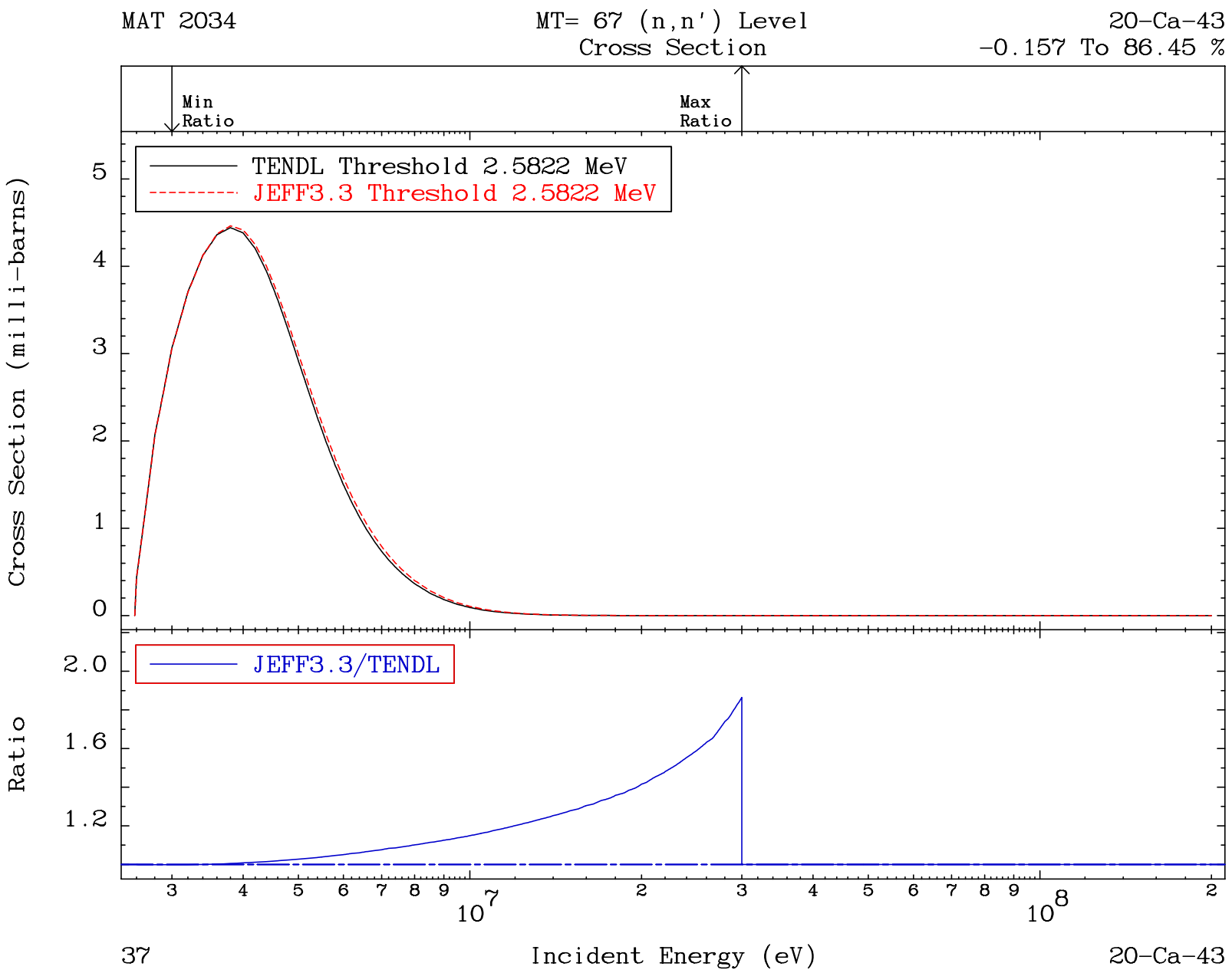

MAT 2034
MT= 62 (n,n') Level
Cross Section
20-Ca-43
-0.061 To 86.45 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.1522 MeV
JEFF3.3 Threshold 2.1522 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
32
Incident Energy (eV)
20-Ca-43

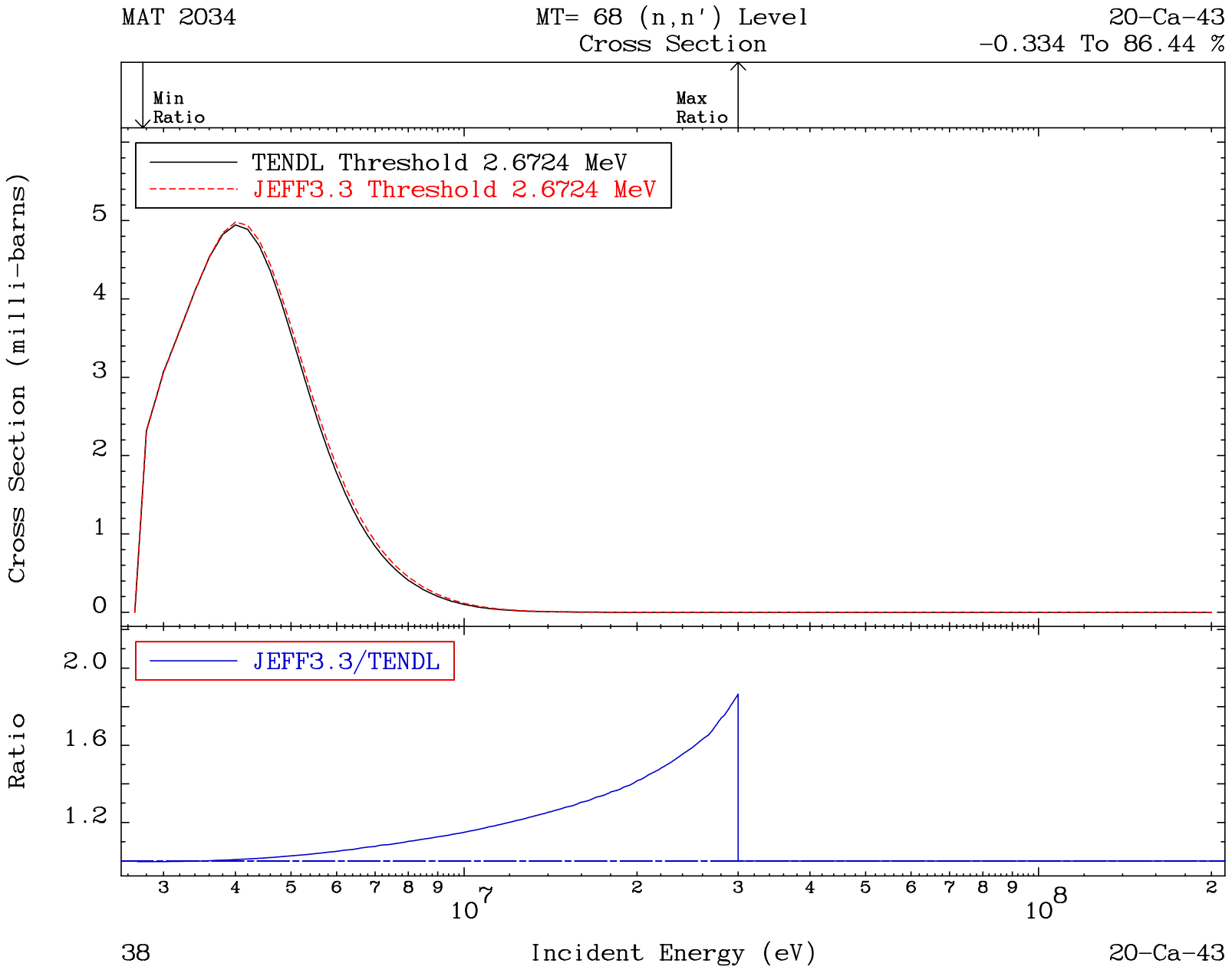

MAT 2034
MT= 63 (n,n') Level
Cross Section
20-Ca-43
-0.013 To 86.47 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.2762 MeV
JEFF3.3 Threshold 2.2762 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
33
Incident Energy (eV)
20-Ca-43

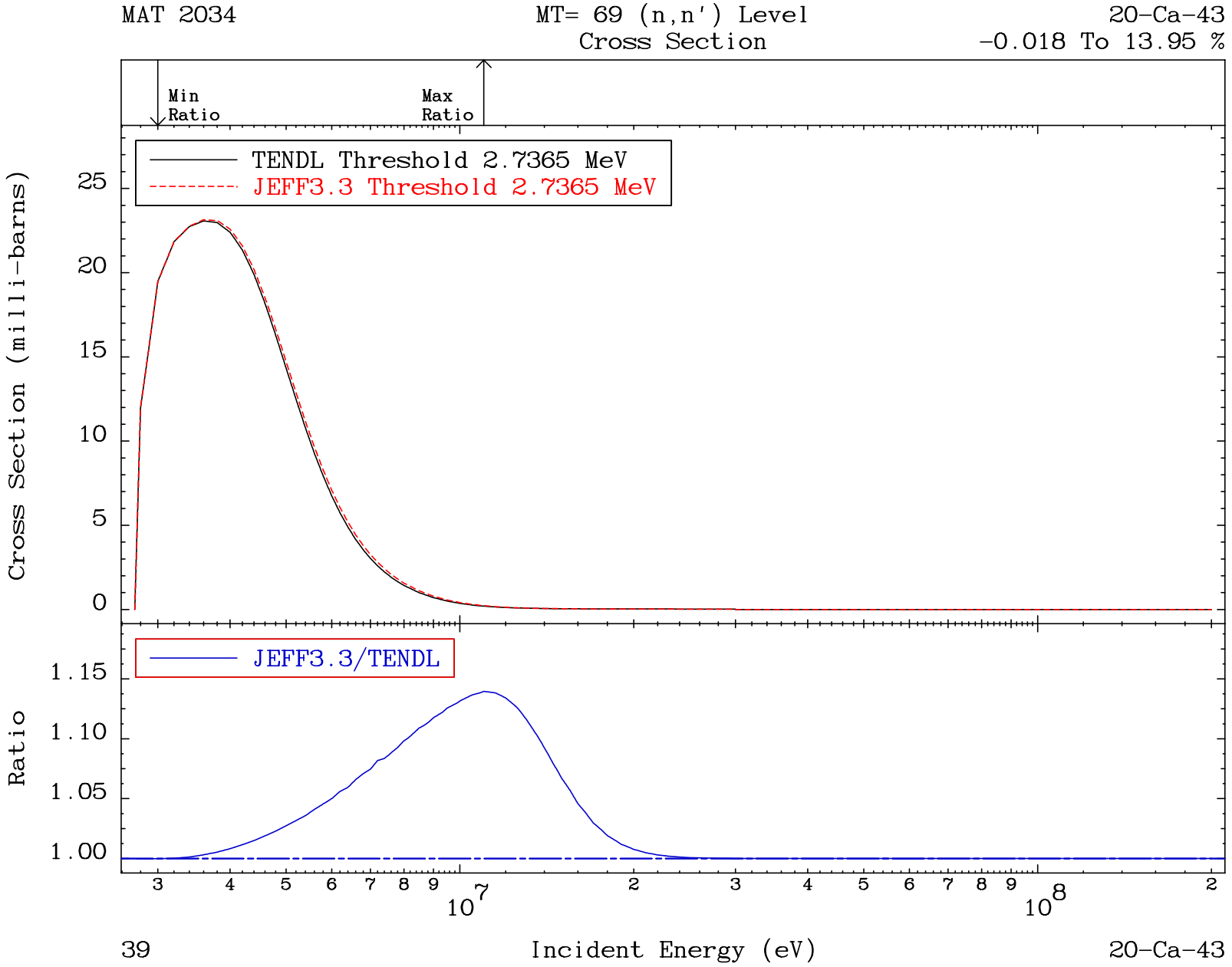

MAT 2034
MT= 64 (n,n') Level
Cross Section
20-Ca-43
0.000 To 21.08 %
Max Ratio
Min Ratio
TENDL Threshold 2.3018 MeV
JEFF3.3 Threshold 2.3018 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
20-Ca-43

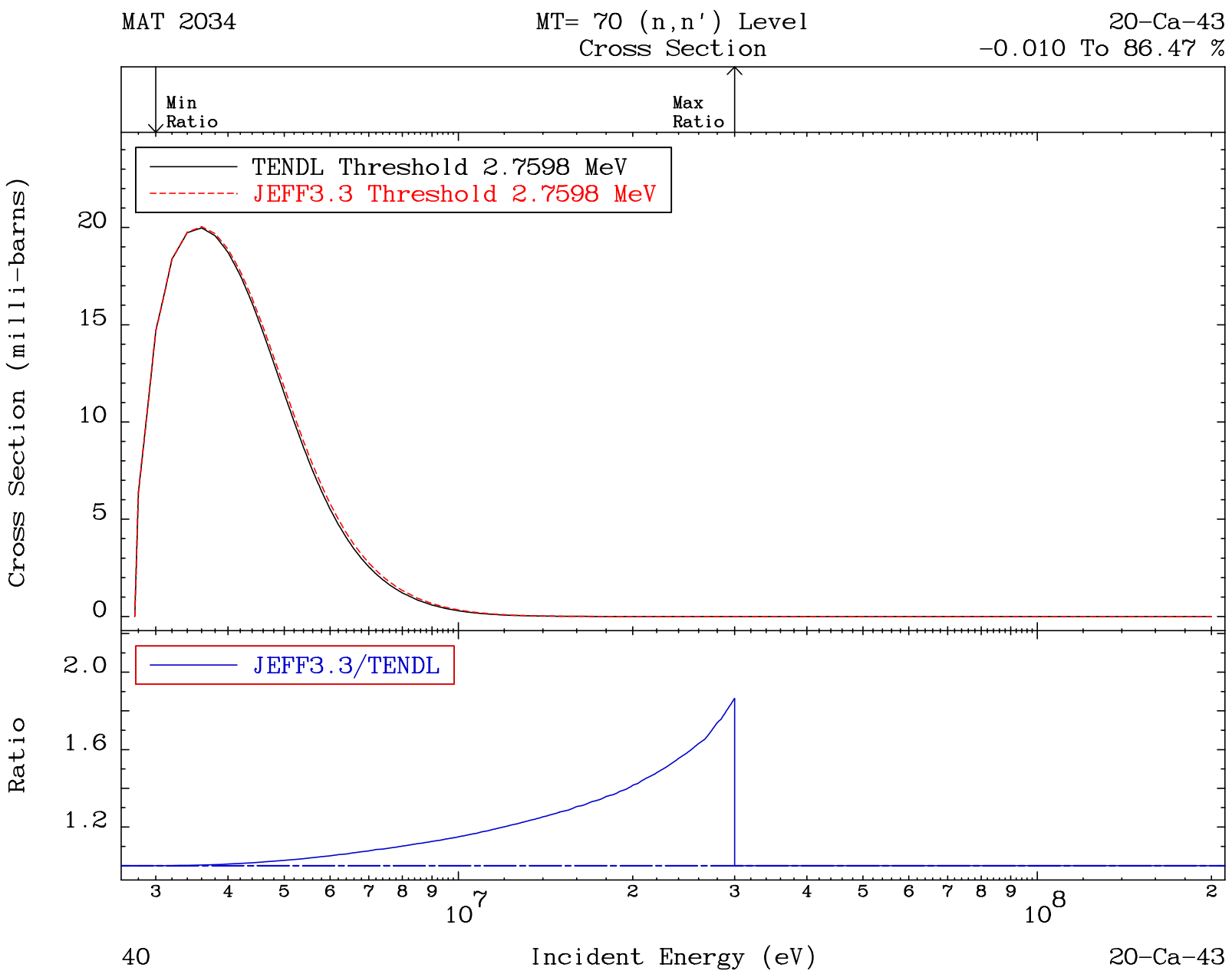

MAT 2034
MT= 65 (n,n') Level
Cross Section
20-Ca-43
-0.013 To 86.47 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3260 MeV
JEFF3.3 Threshold 2.3260 MeV
Cross Section (milli-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
35
Incident Energy (eV)
20-Ca-43

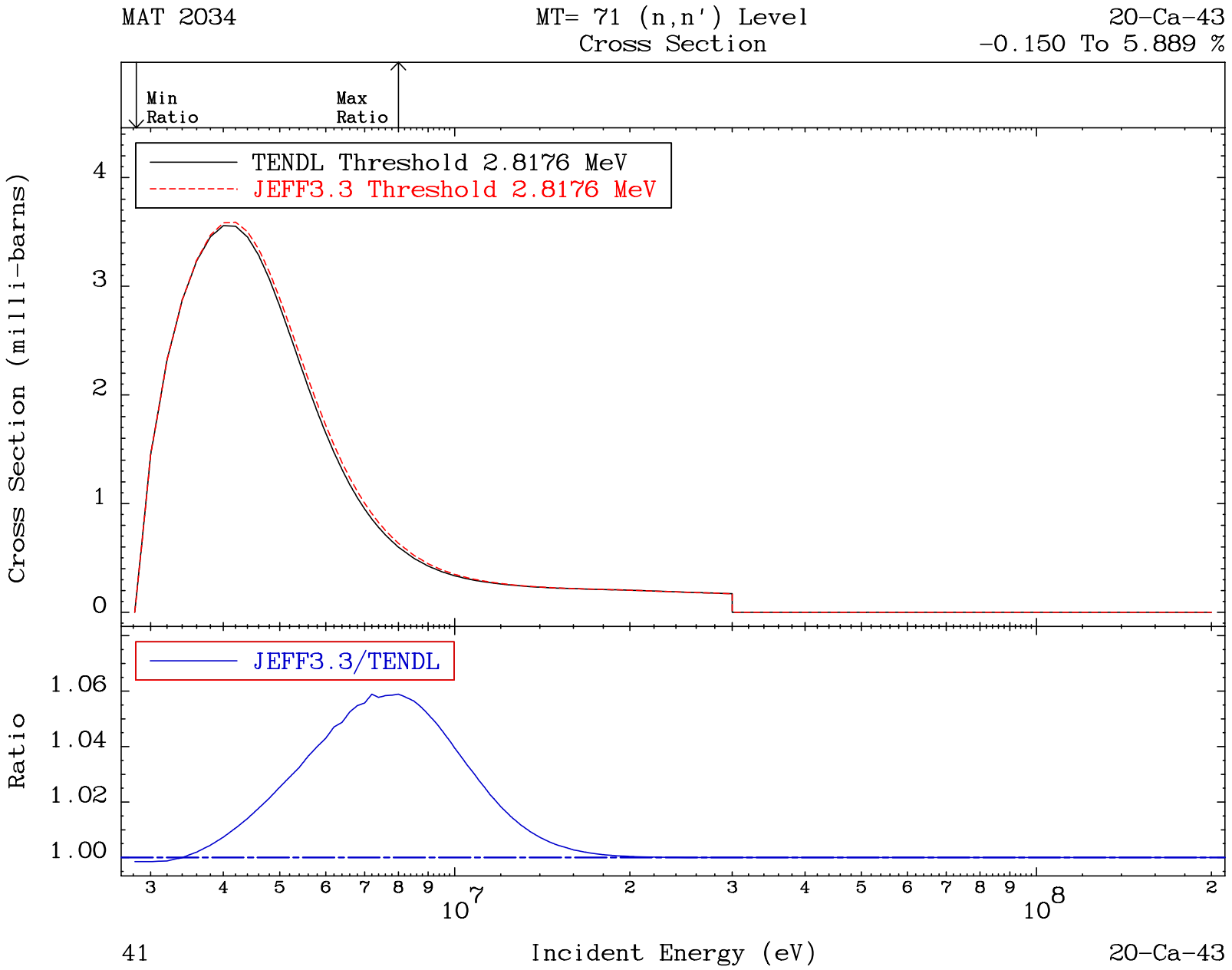

MAT 2034
MT= 66 (n,n') Level
Cross Section
20-Ca-43
0.000 To 13.86 %
Max Ratio
Min Ratio
TENDL Threshold 2.4663 MeV
JEFF3.3 Threshold 2.4663 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
20-Ca-43

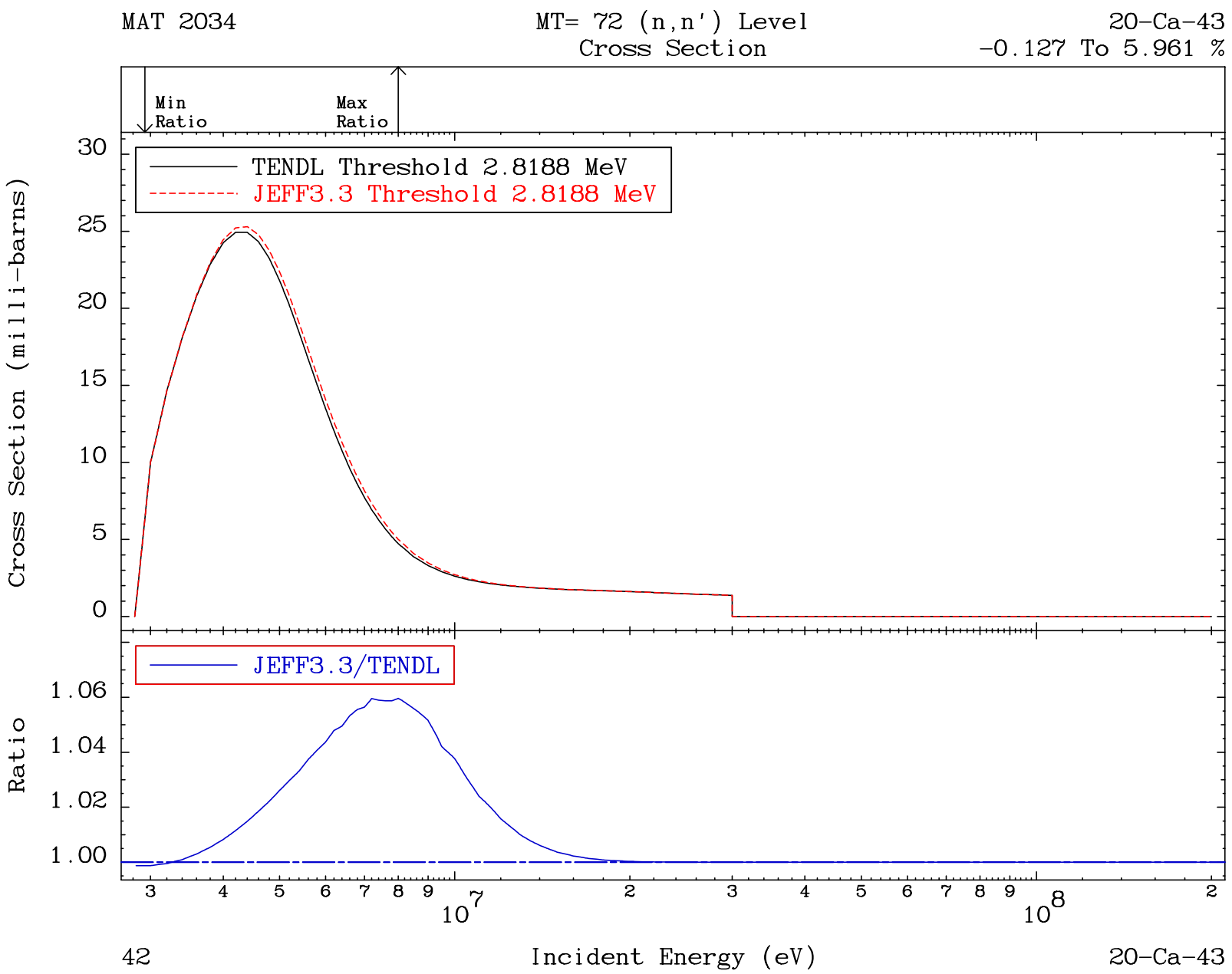

MAT 2034
MT= 67 (n,n') Level
Cross Section
20-Ca-43
-0.157 To 86.45 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5822 MeV
JEFF3.3 Threshold 2.5822 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.2
1.6
2.0
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
20-Ca-43

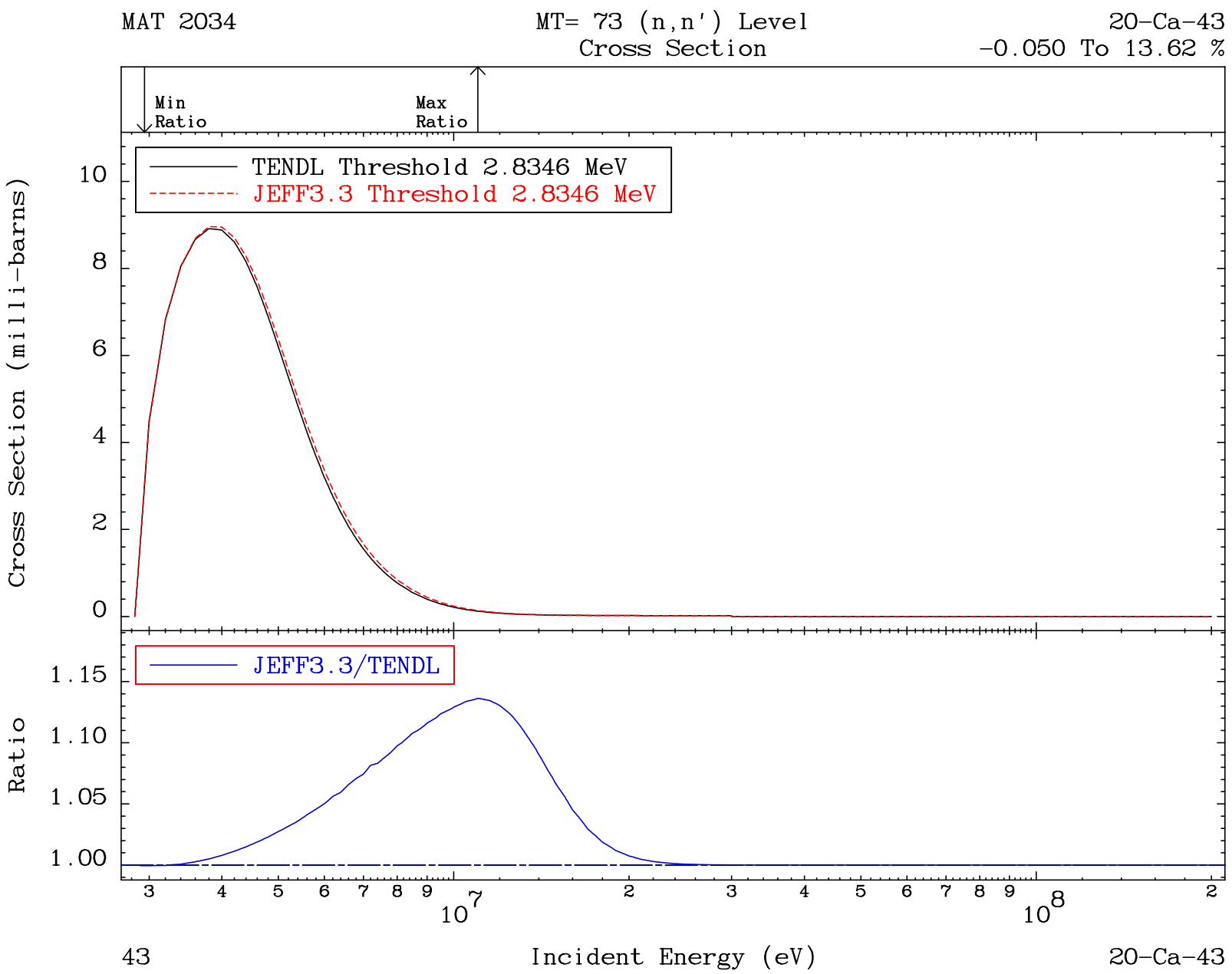

MAT 2034
MT= 68 (n,n') Level
Cross Section
20-Ca-43
-0.334 To 86.44 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6724 MeV
JEFF3.3 Threshold 2.6724 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.2
1.6
2.0
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
38
Incident Energy (eV)
20-Ca-43

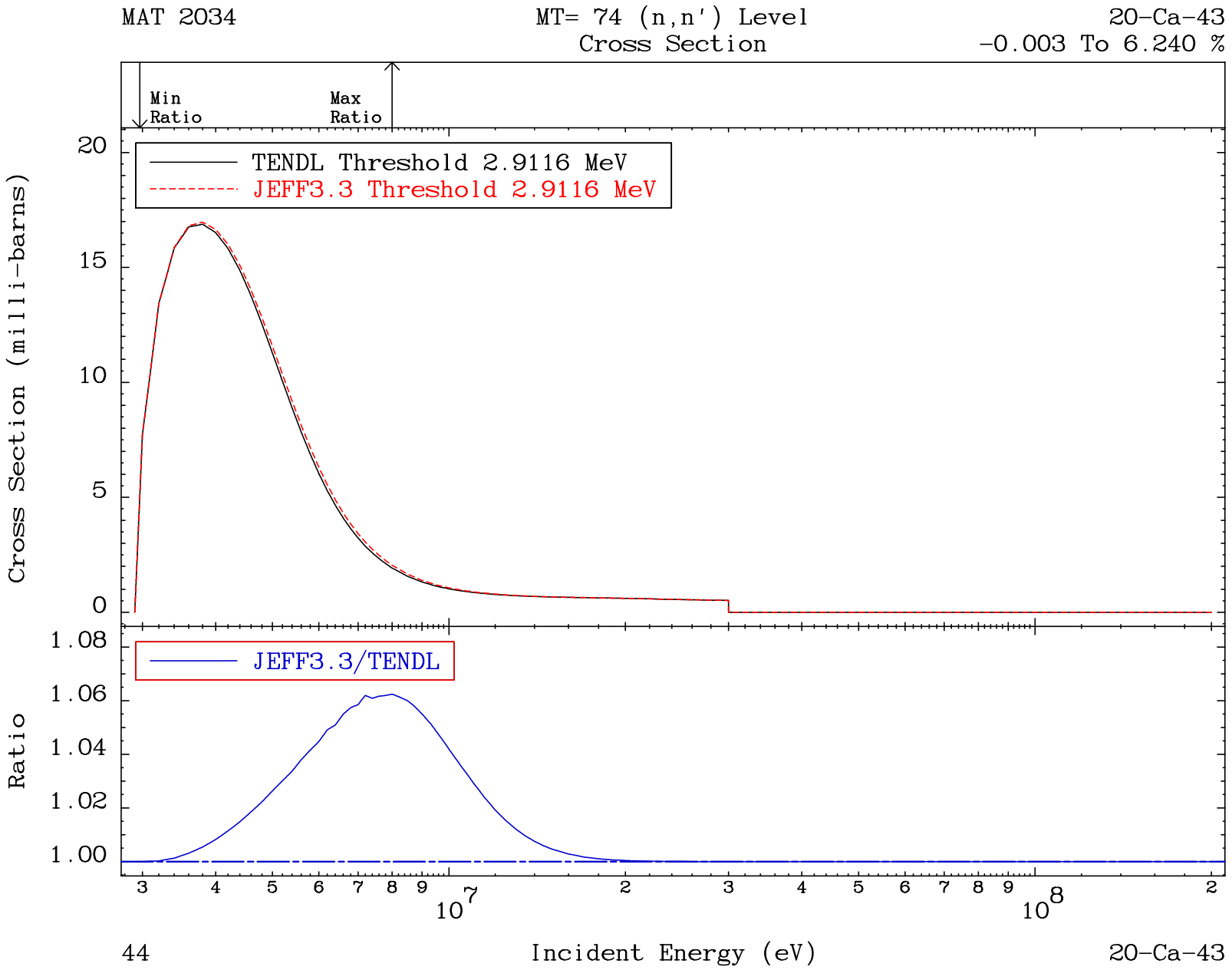

MAT 2034
MT= 69 (n,n') Level
Cross Section
20-Ca-43
-0.018 To 13.95 %
Min Ratio
Max Ratio
TENDL Threshold 2.7365 MeV
JEFF3.3 Threshold 2.7365 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
20-Ca-43

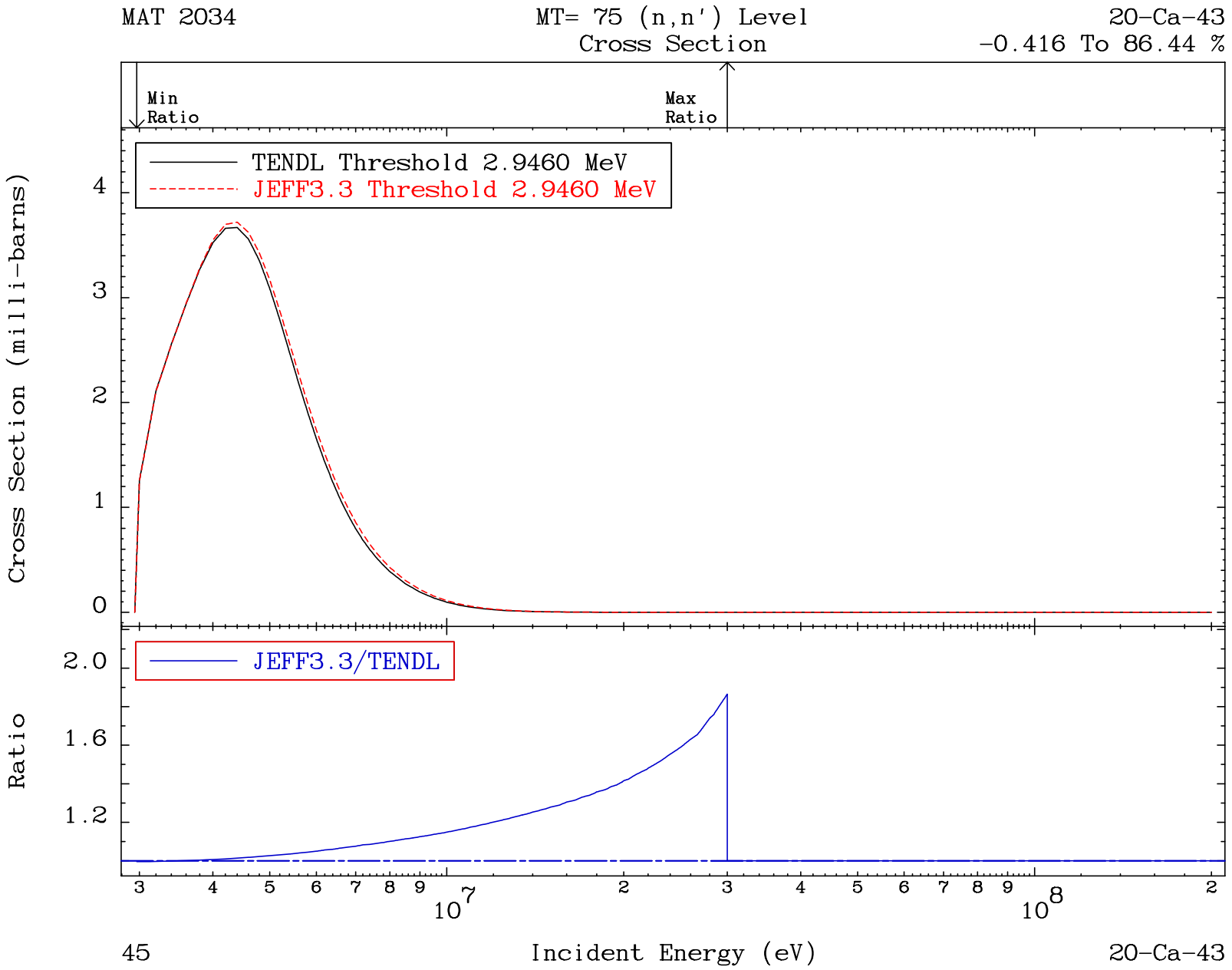

MAT 2034
MT= 70 (n,n') Level
Cross Section
20-Ca-43
-0.010 To 86.47 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.7598 MeV
JEFF3.3 Threshold 2.7598 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
40
Incident Energy (eV)
20-Ca-43

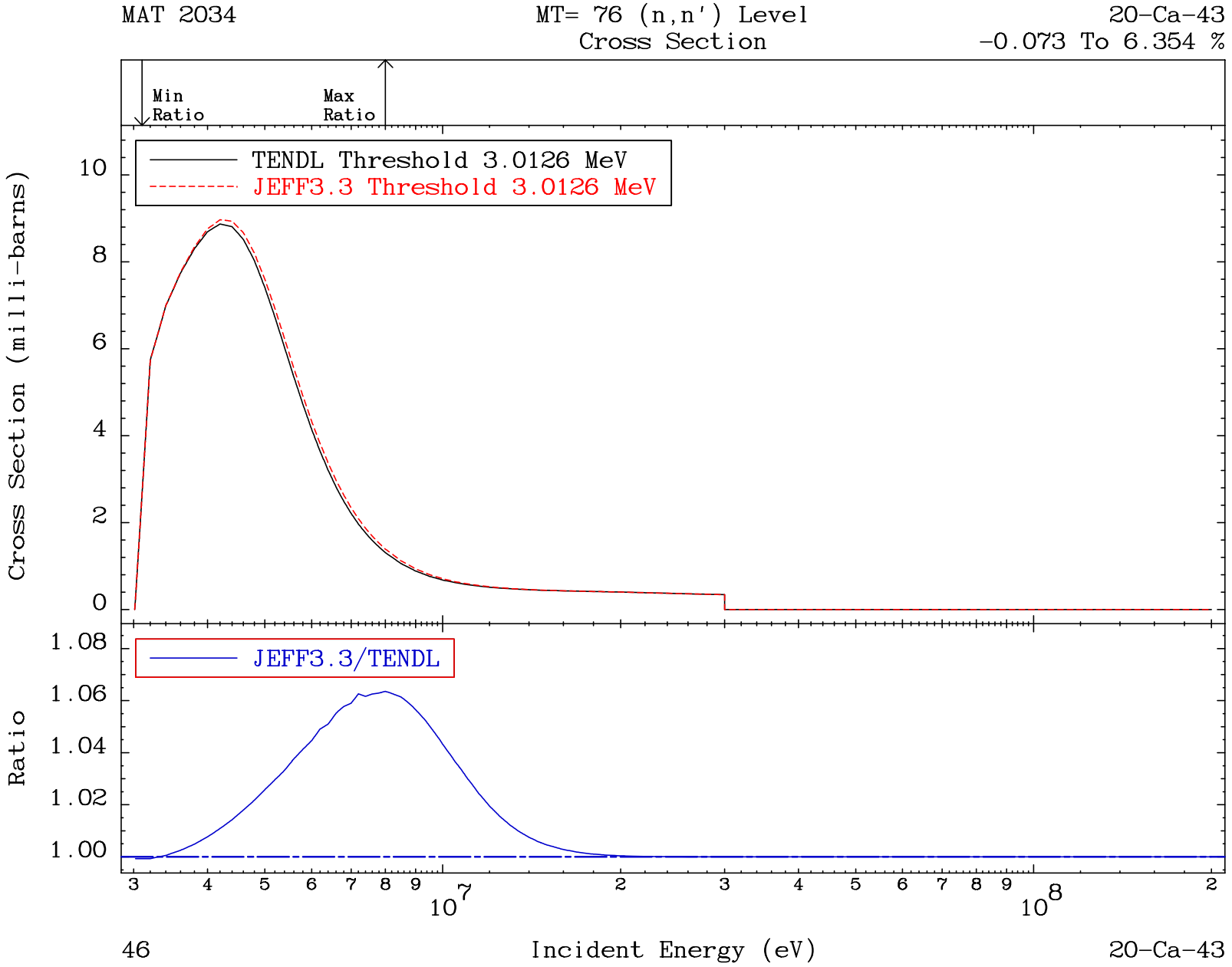

MAT 2034
MT= 71 (n,n') Level
Cross Section
20-Ca-43
-0.150 To 5.889 %
Min Ratio
Max Ratio
TENDL Threshold 2.8176 MeV
JEFF3.3 Threshold 2.8176 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
1.06
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
41
20-Ca-43

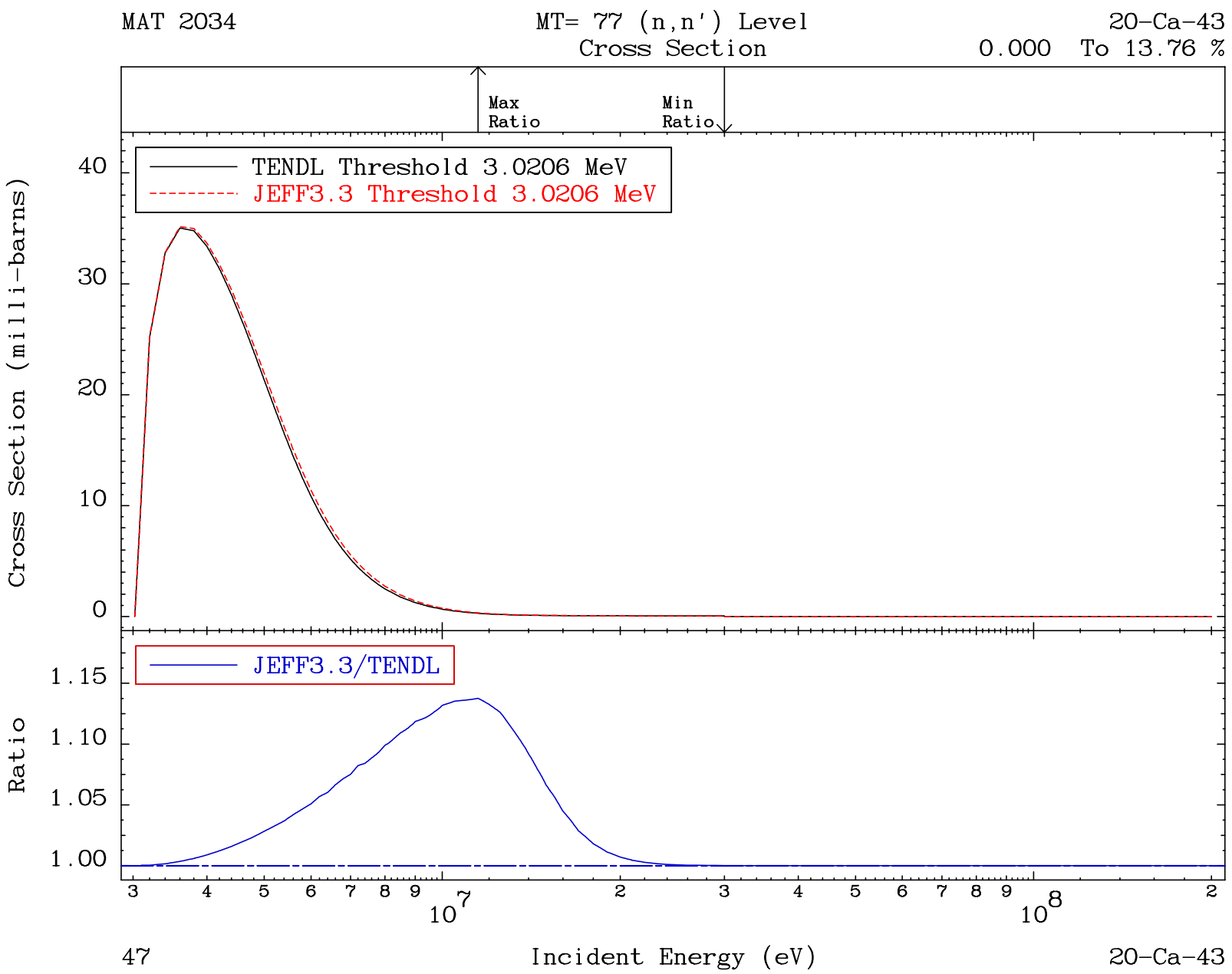

MAT 2034
MT= 72 (n,n') Level
Cross Section
20-Ca-43
-0.127 To 5.961 %
Min Ratio
Max Ratio
TENDL Threshold 2.8188 MeV
JEFF3.3 Threshold 2.8188 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
20-Ca-43

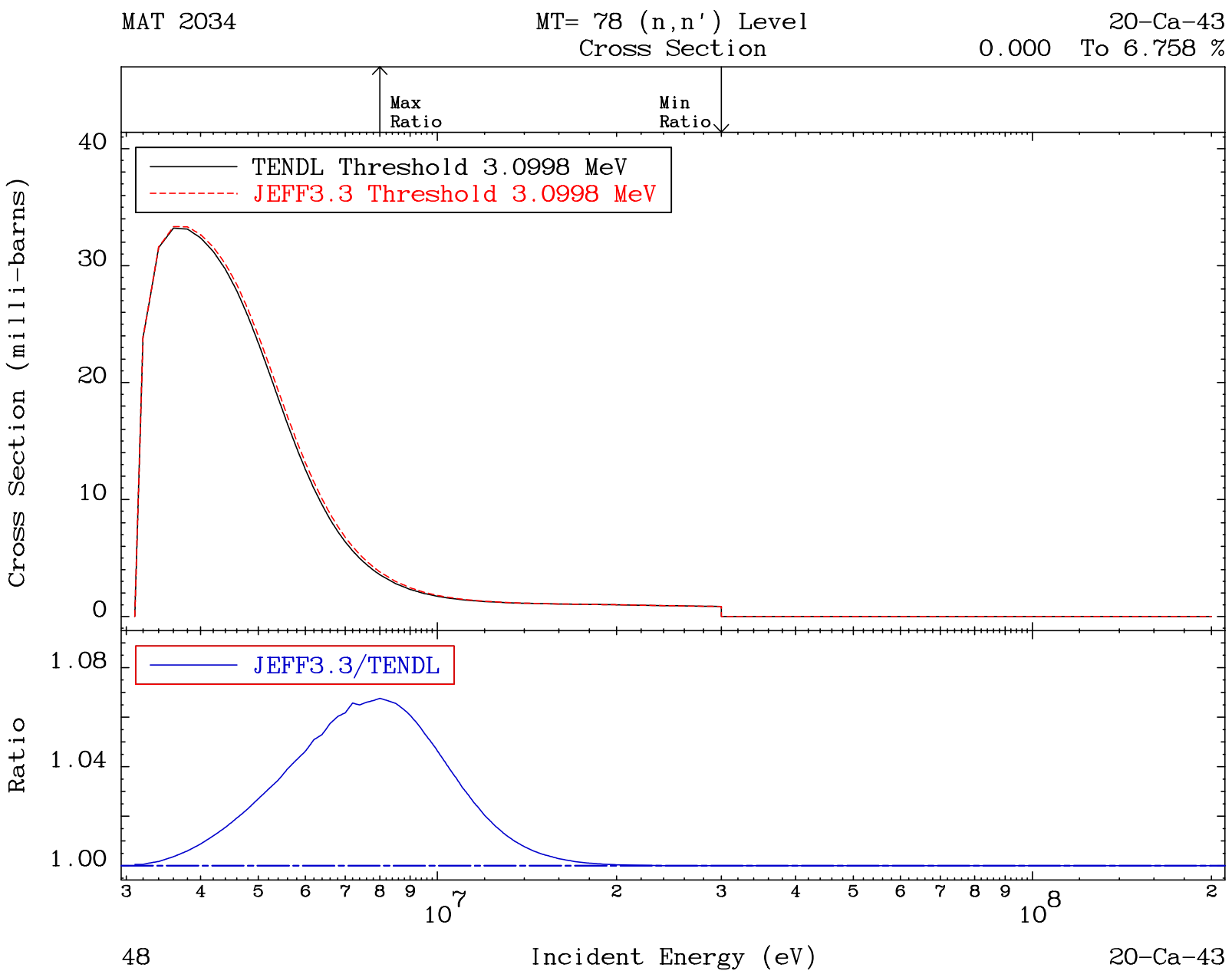

MAT 2034
MT= 73 (n,n') Level
Cross Section
20-Ca-43
-0.050 To 13.62 %
Min Ratio
Max Ratio
TENDL Threshold 2.8346 MeV
JEFF3.3 Threshold 2.8346 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
43
20-Ca-43

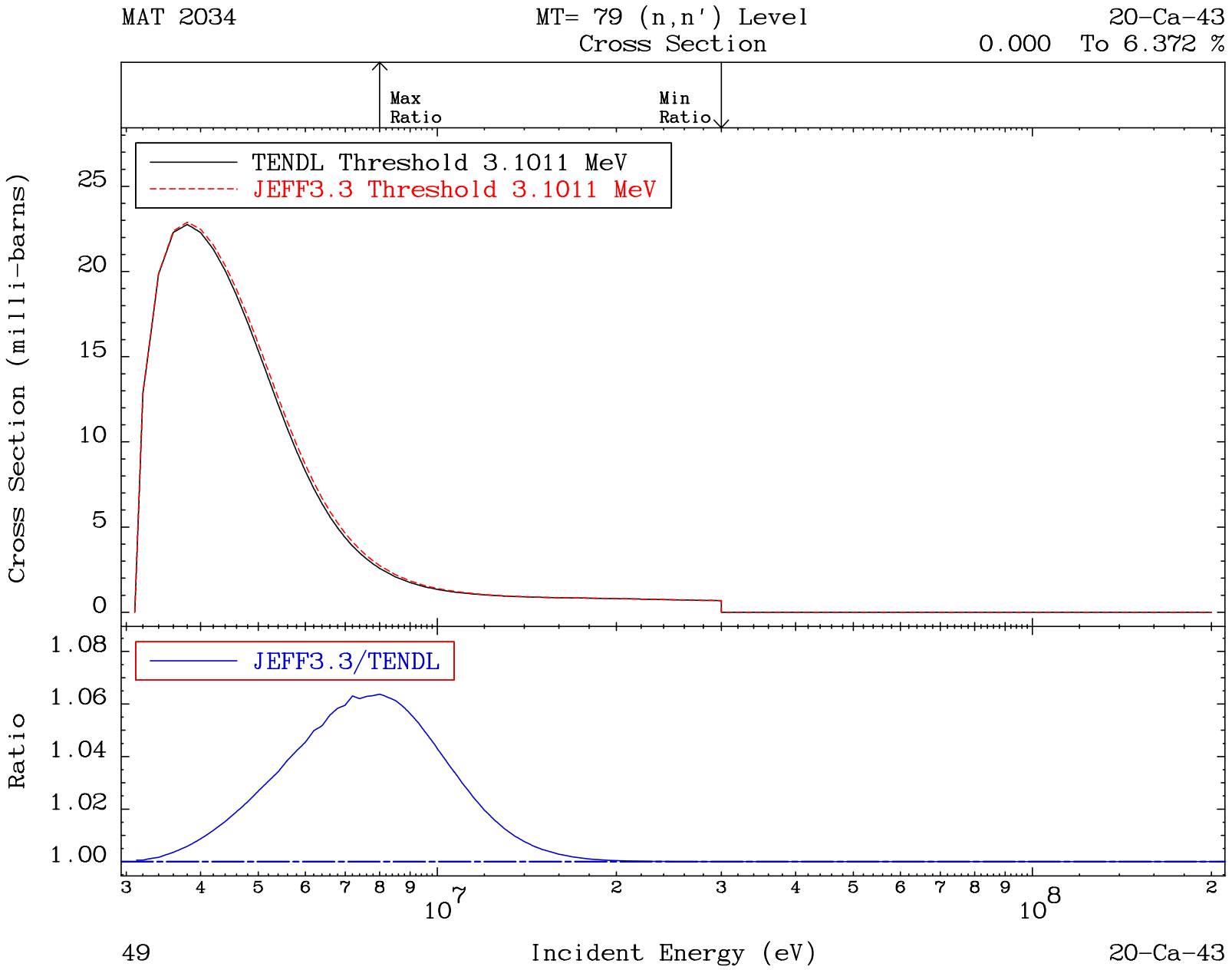

MAT 2034
MT= 74 (n,n') Level
Cross Section
20-Ca-43
-0.003 To 6.240 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.9116 MeV
JEFF3.3 Threshold 2.9116 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.08
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
44
Incident Energy (eV)
20-Ca-43

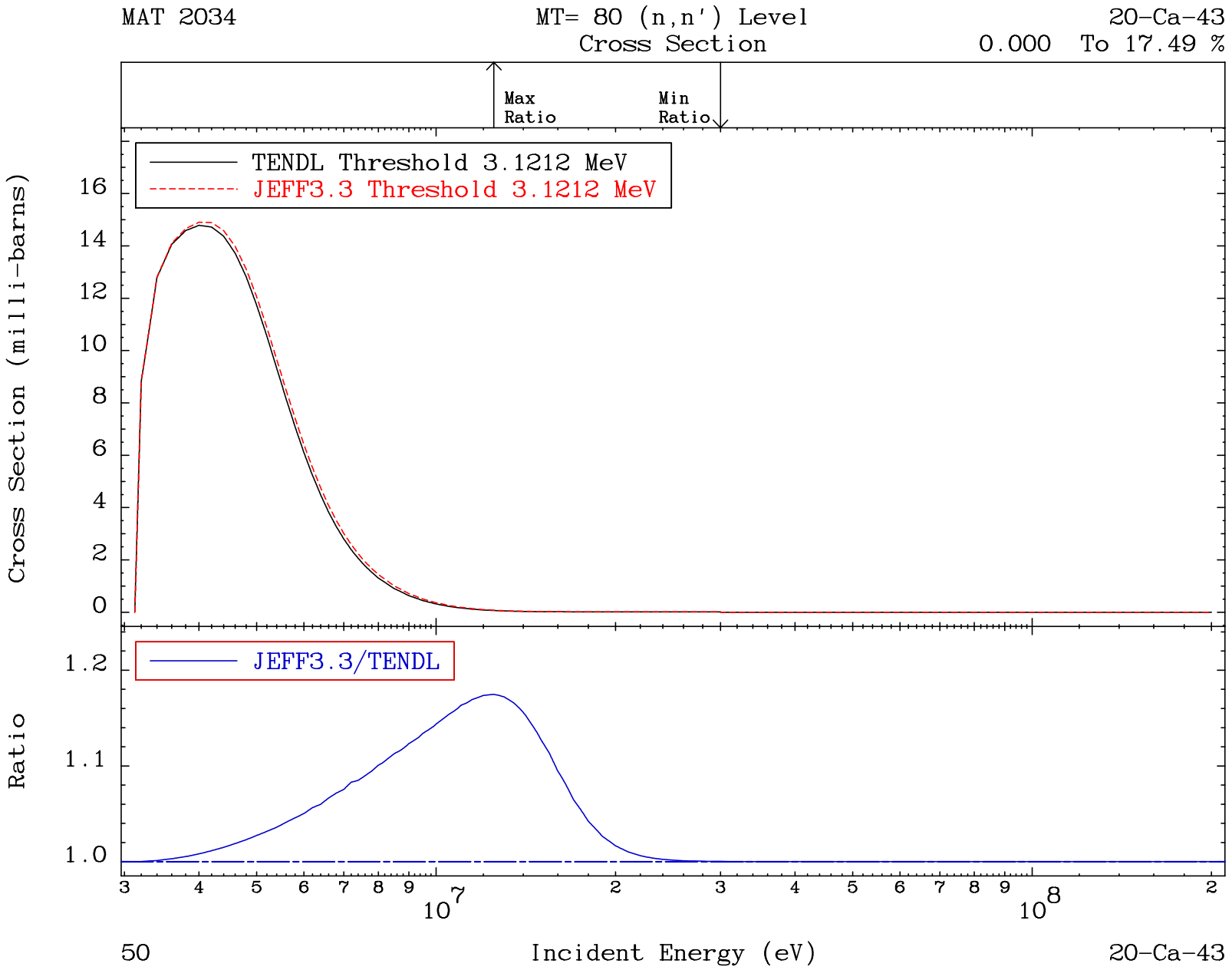

MAT 2034
MT= 75 (n,n') Level
Cross Section
20-Ca-43
-0.416 To 86.44 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.9460 MeV
JEFF3.3 Threshold 2.9460 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
20-Ca-43

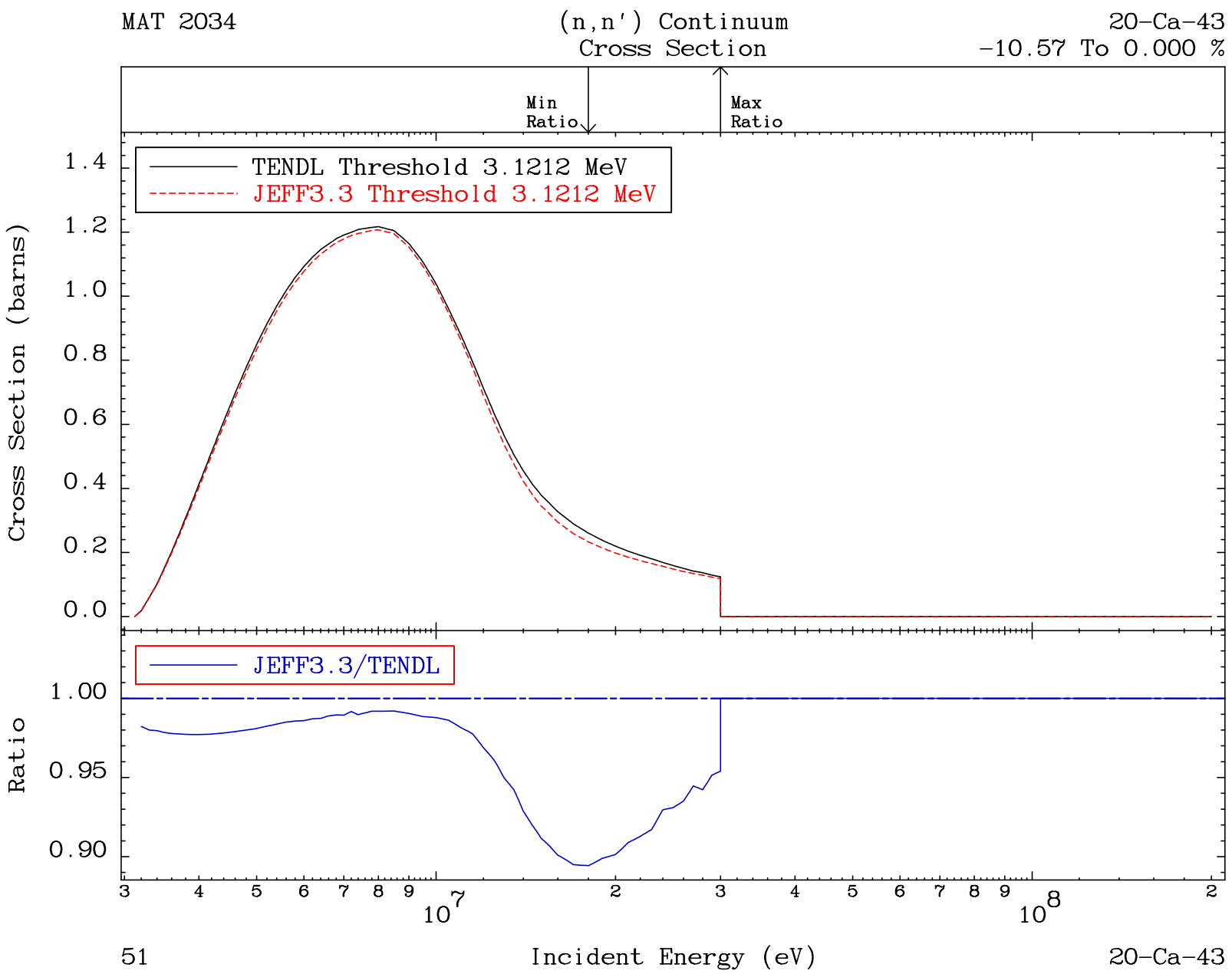

MAT 2034
MT= 76 (n,n') Level
Cross Section
20-Ca-43
-0.073 To 6.354 %
Min Ratio
Max Ratio
TENDL Threshold 3.0126 MeV
JEFF3.3 Threshold 3.0126 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
20-Ca-43

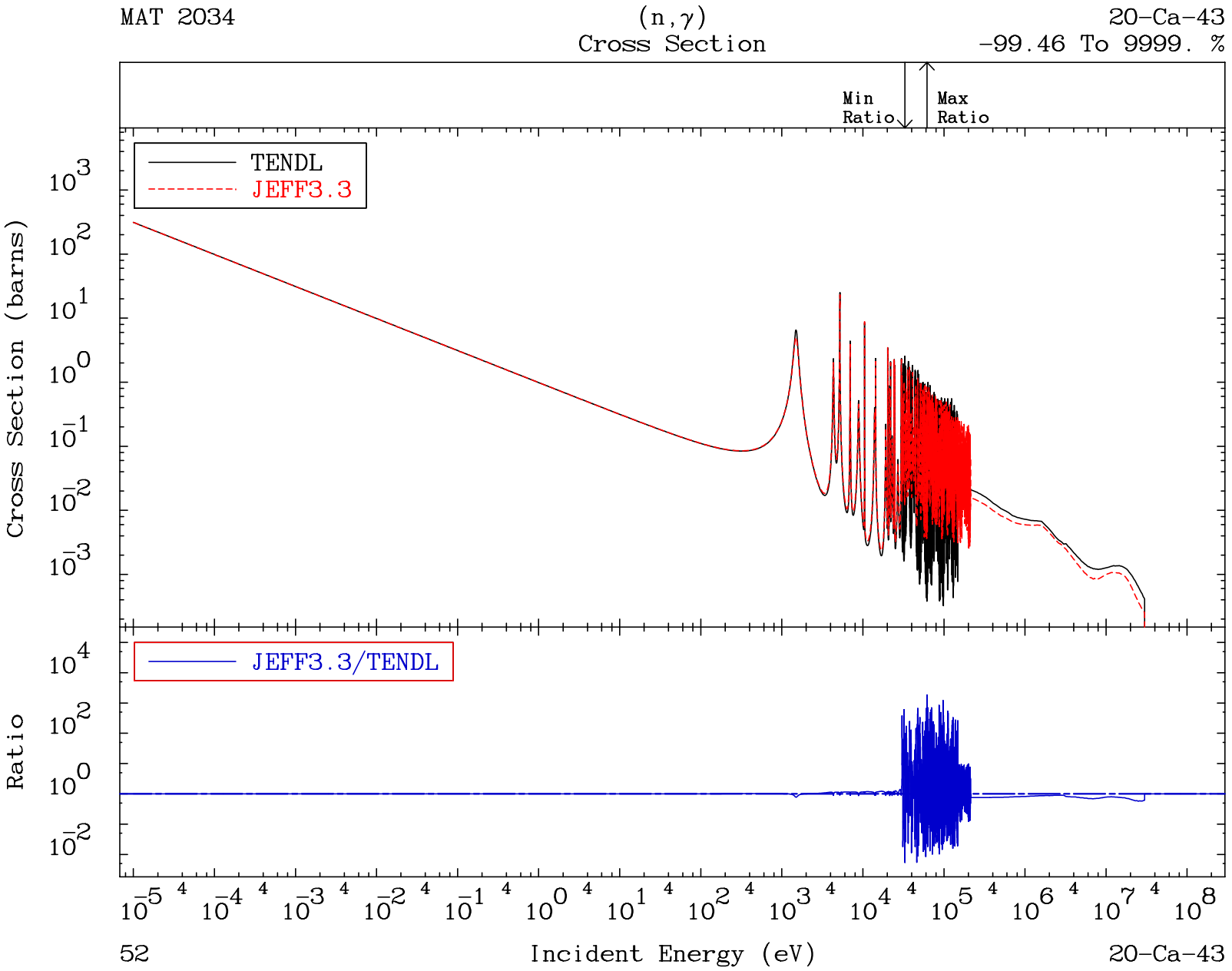

MAT 2034
MT= 77 (n,n') Level
Cross Section
20-Ca-43
0.000 To 13.76 %
Max Ratio
Min Ratio
TENDL Threshold 3.0206 MeV
JEFF3.3 Threshold 3.0206 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
20-Ca-43

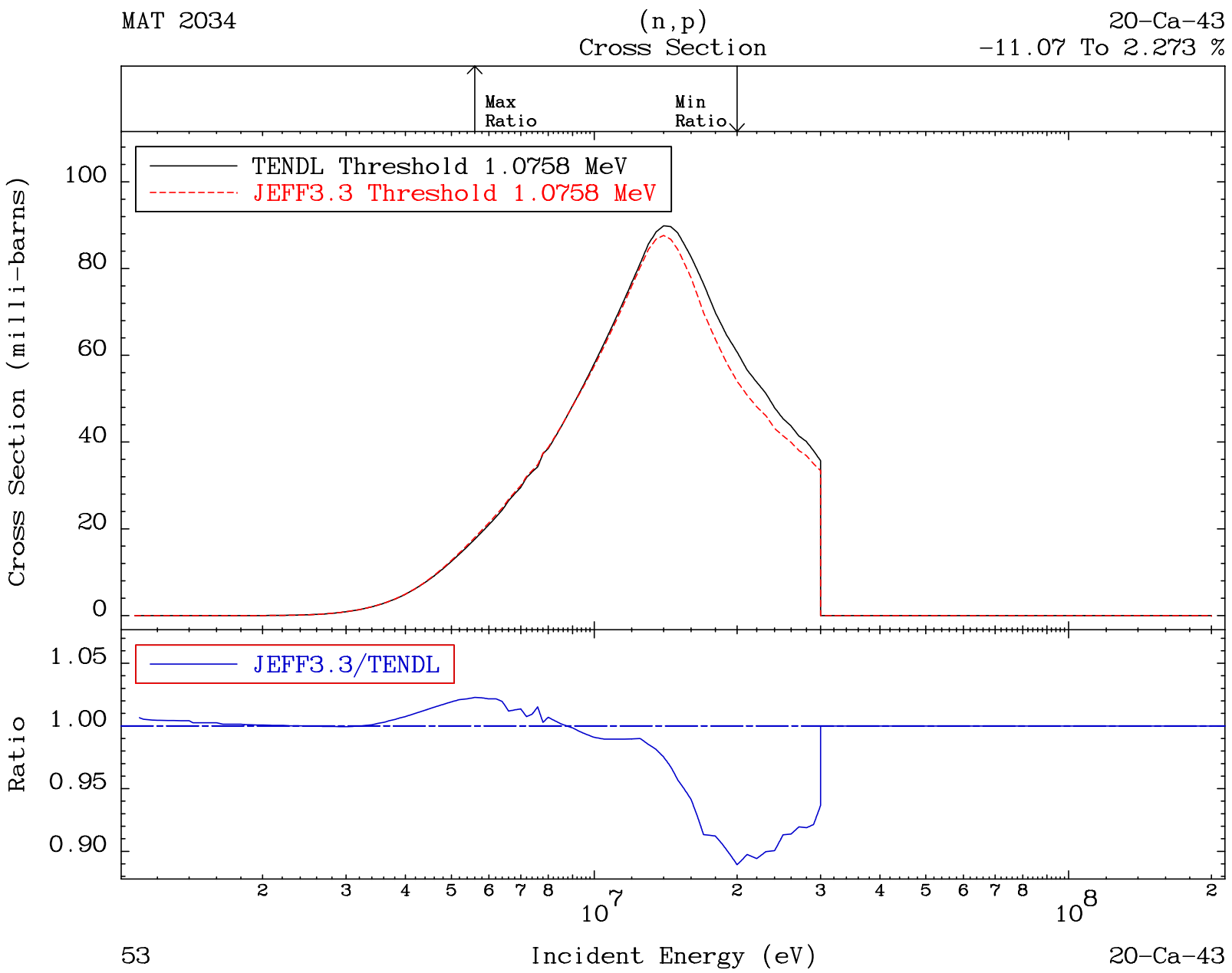

MAT 2034
MT= 78 (n,n') Level
Cross Section
20-Ca-43
0.000 To 6.758 %
Max Ratio
Min Ratio
TENDL Threshold 3.0998 MeV
JEFF3.3 Threshold 3.0998 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.08
1.04
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
20-Ca-43

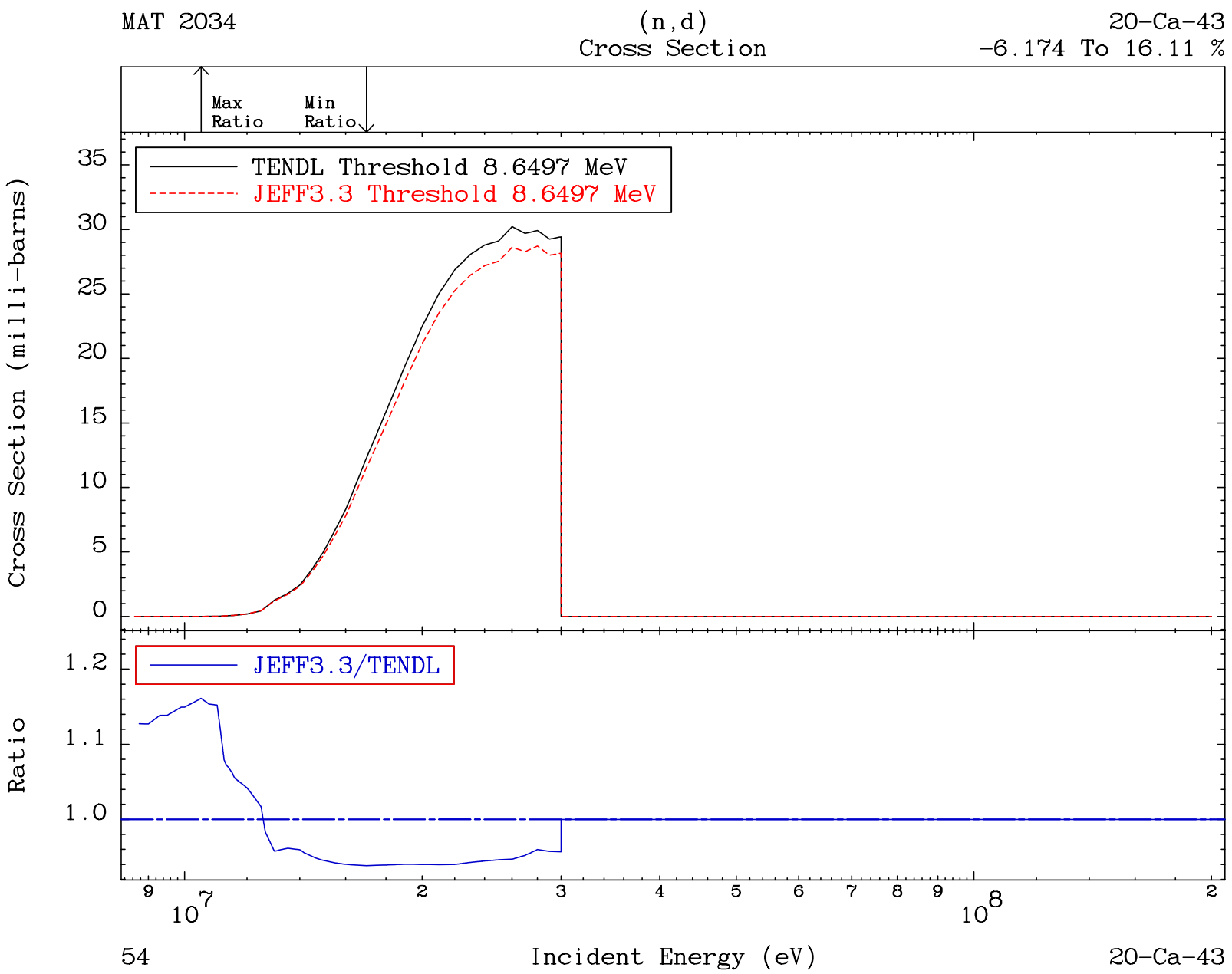

MAT 2034
MT= 79 (n,n') Level
Cross Section
20-Ca-43
0.000 To 6.372 %
Max Ratio
Min Ratio
TENDL Threshold 3.1011 MeV
JEFF3.3 Threshold 3.1011 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.08
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
49
20-Ca-43

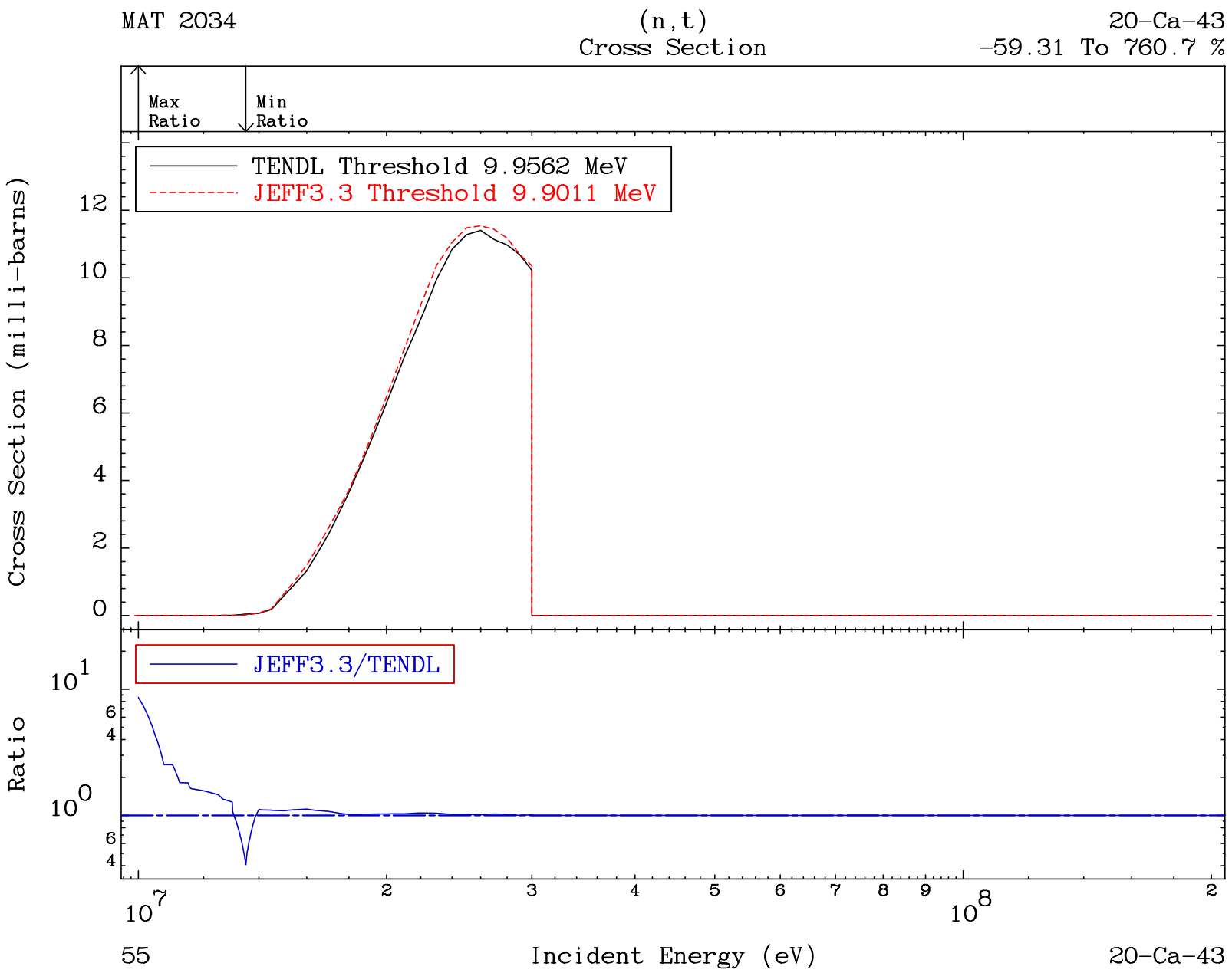

MAT 2034
MT= 80 (n,n') Level
Cross Section
20-Ca-43
0.000 To 17.49 %
Max Ratio
Min Ratio
TENDL Threshold 3.1212 MeV
JEFF3.3 Threshold 3.1212 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
50
Incident Energy (eV)
20-Ca-43

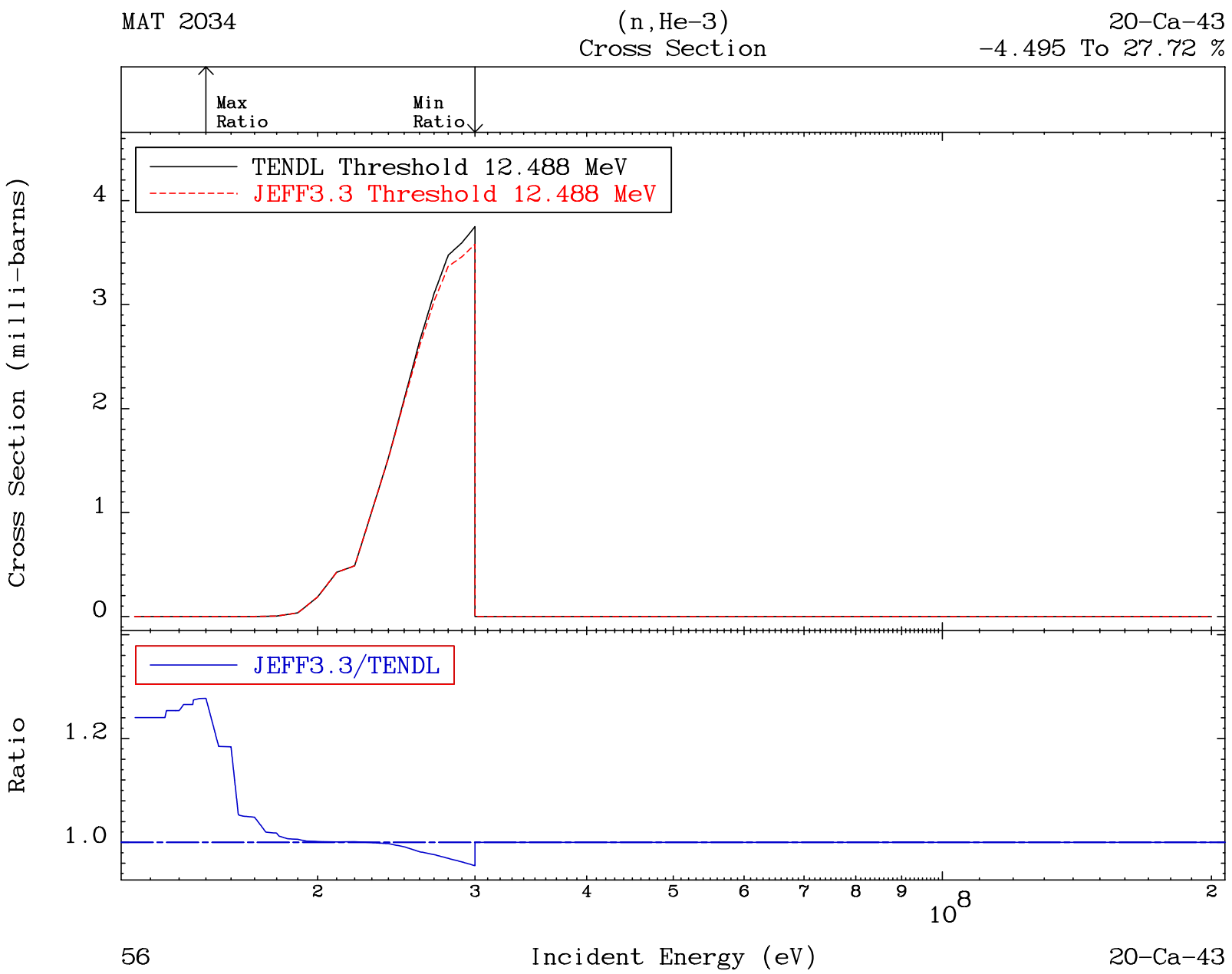

MAT 2034
(n,n') Continuum
Cross Section
20-Ca-43
-10.57 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.1212 MeV
JEFF3.3 Threshold 3.1212 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
51
Incident Energy (eV)
20-Ca-43

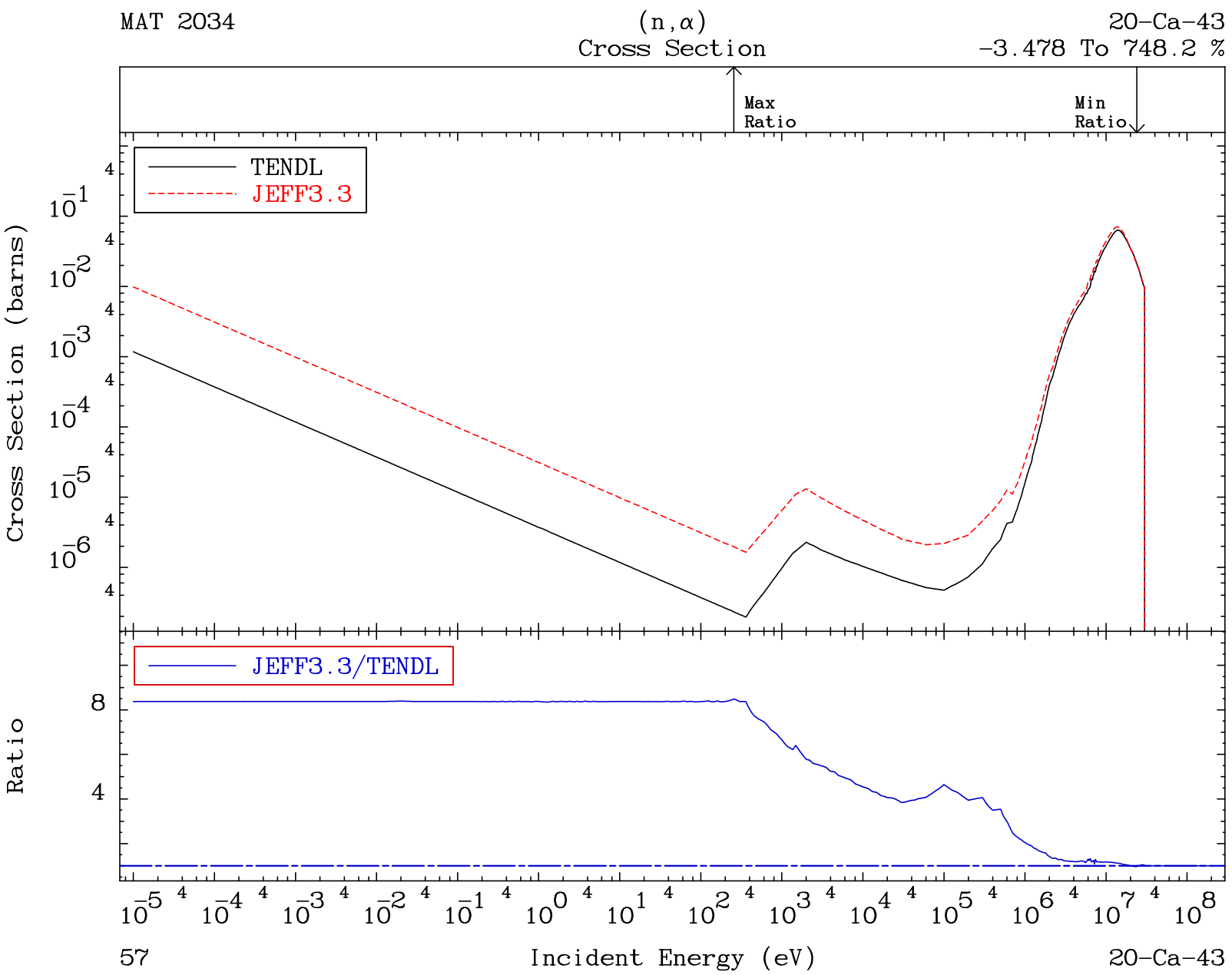

MAT 2034
(n,γ)
Cross Section
20-Ca-43
-99.46 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
20-Ca-43

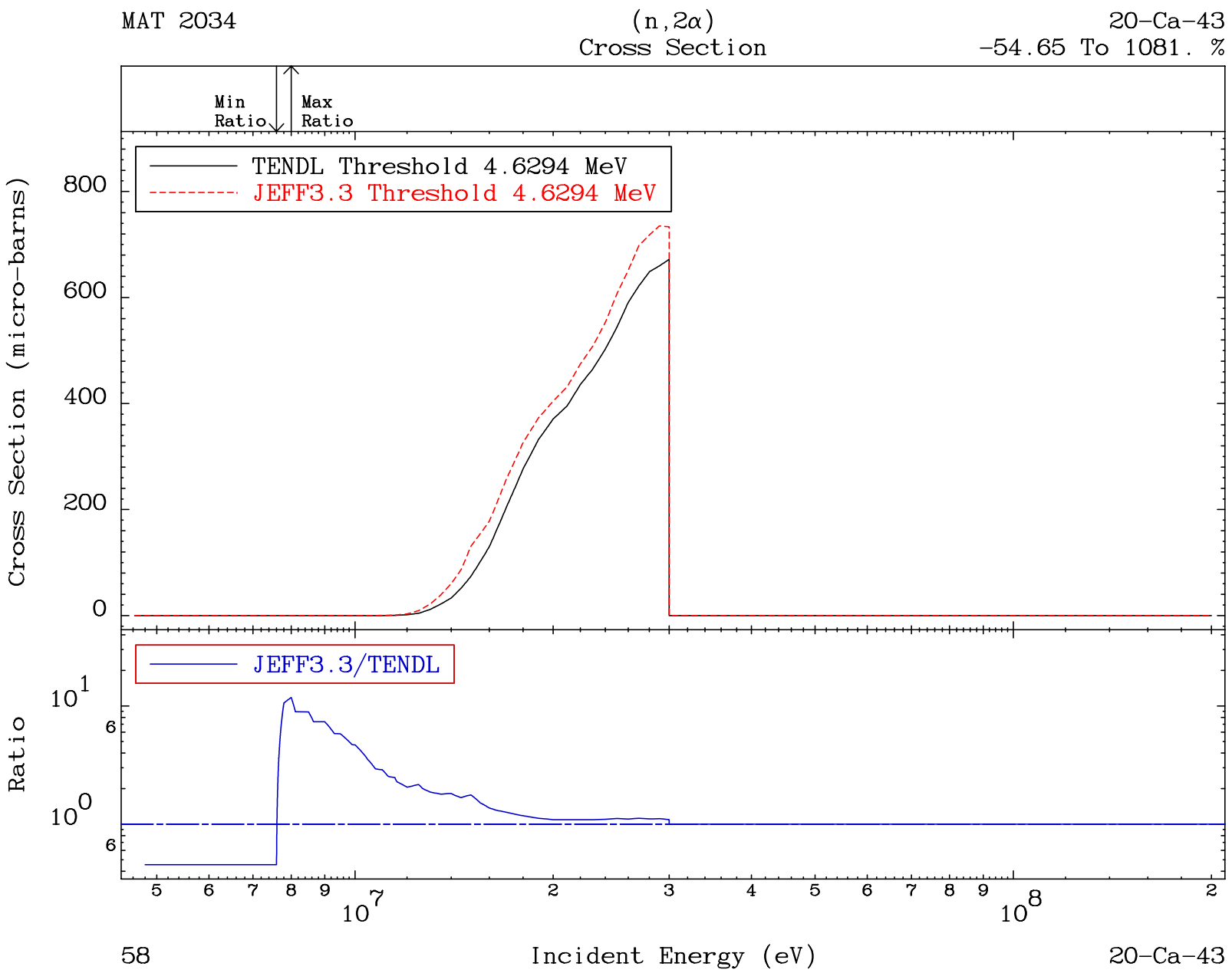

MAT 2034
(n,p)
Cross Section
20-Ca-43
-11.07 To 2.273 %
Max Ratio
Min Ratio
TENDL Threshold 1.0758 MeV
JEFF3.3 Threshold 1.0758 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
20-Ca-43

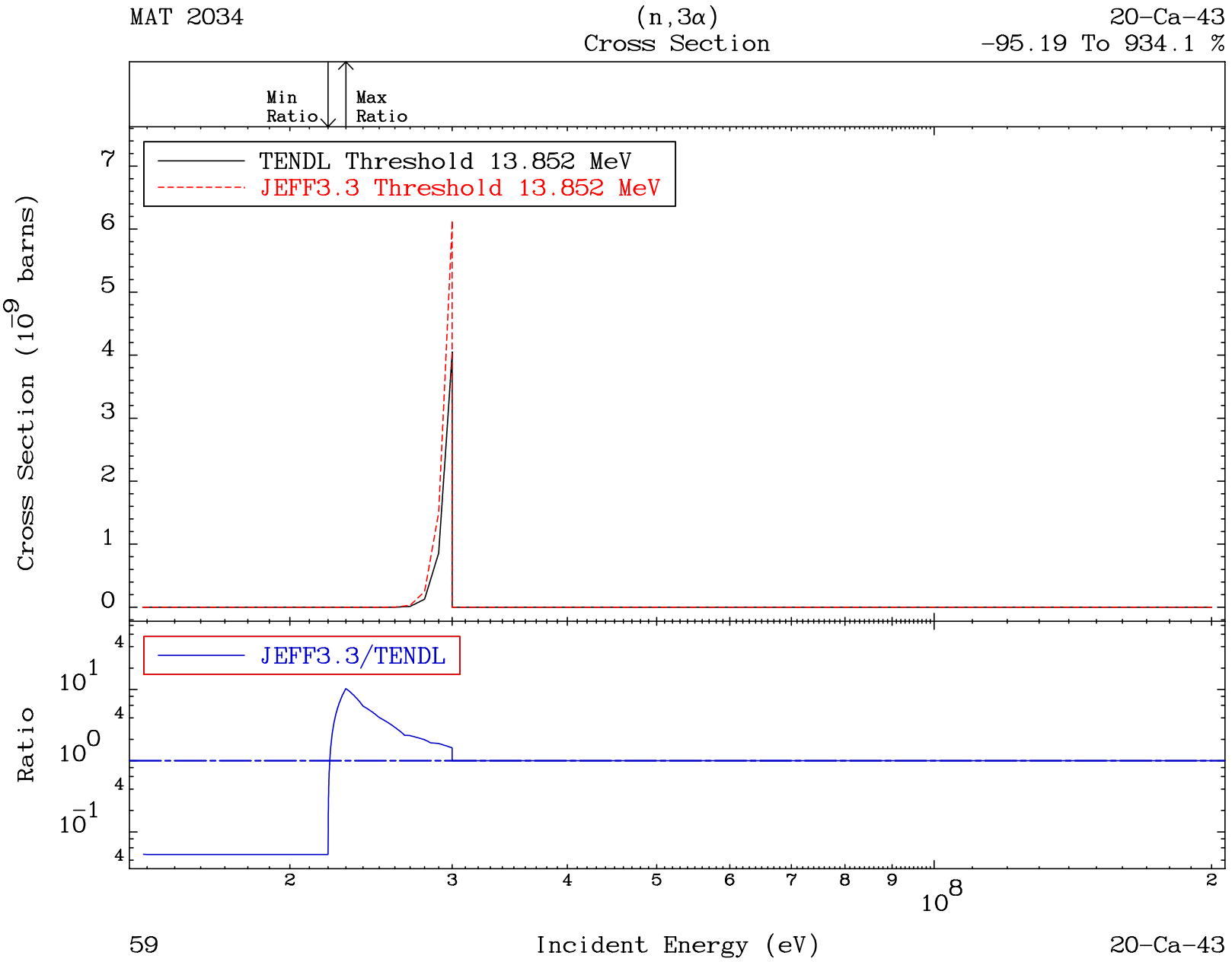

MAT 2034
(n,d)
Cross Section
20-Ca-43
-6.174 To 16.11 %
Max Ratio
Min Ratio
TENDL Threshold 8.6497 MeV
JEFF3.3 Threshold 8.6497 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
20-Ca-43

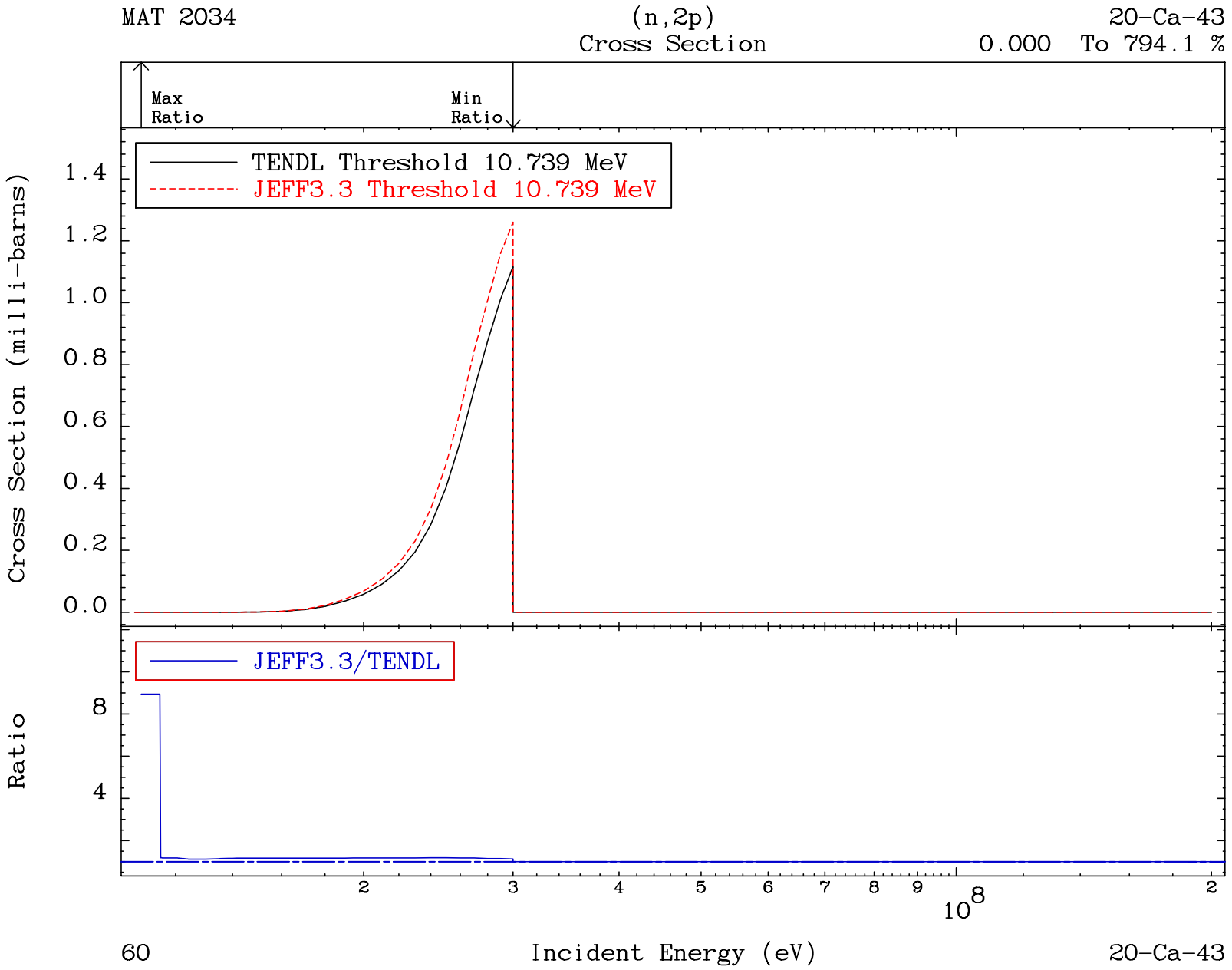

MAT 2034
(n,t)
Cross Section
20-Ca-43
-59.31 To 760.7 %
Max Ratio
Min Ratio
TENDL Threshold 9.9562 MeV
JEFF3.3 Threshold 9.9011 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
20-Ca-43

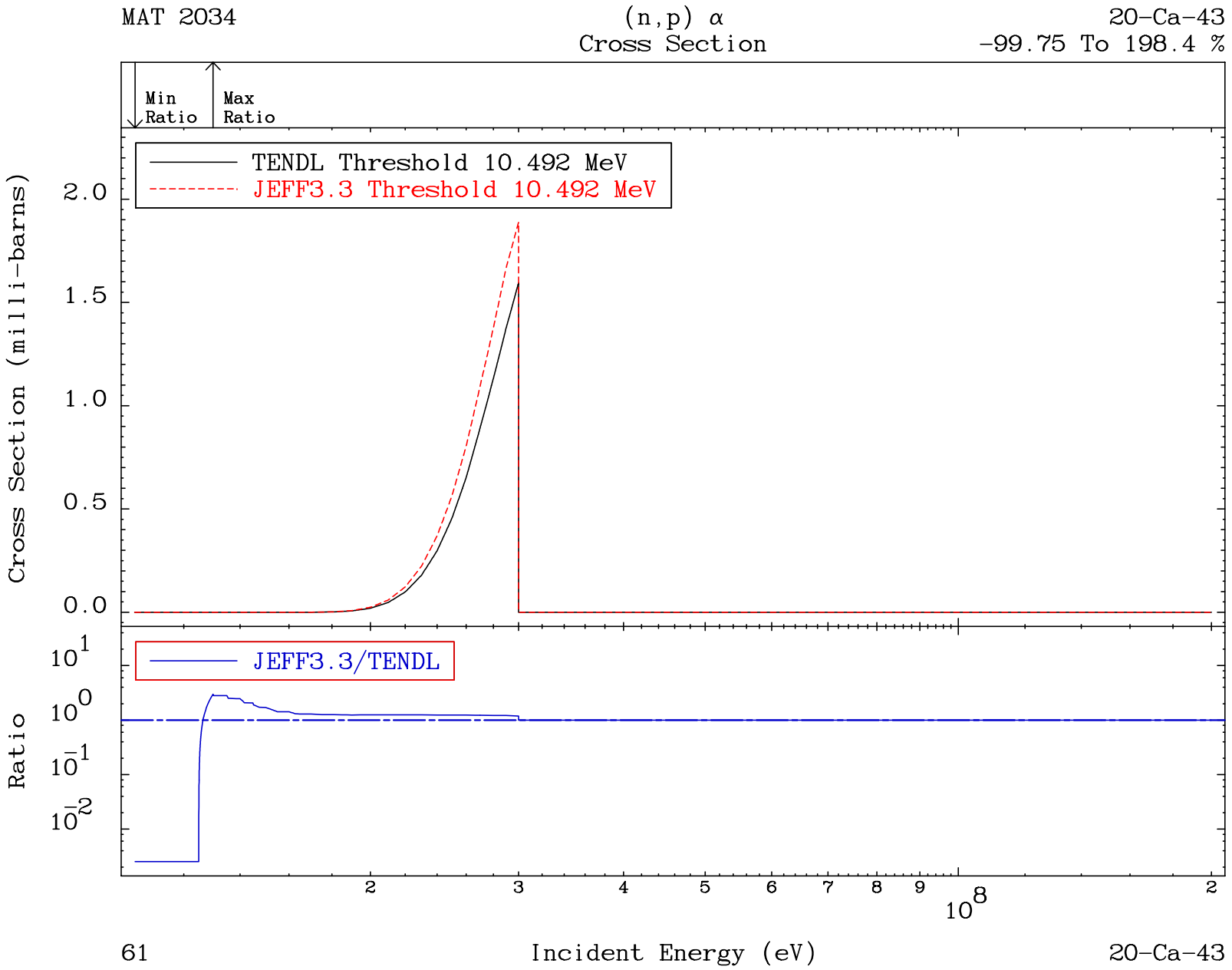

MAT 2034
(n,He-3)
Cross Section
20-Ca-43
-4.495 To 27.72 %
Max Ratio
Min Ratio
TENDL Threshold 12.488 MeV
JEFF3.3 Threshold 12.488 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.0
1.2
2
3
4
5
6
7
8
9
2
10^8
56
Incident Energy (eV)
20-Ca-43

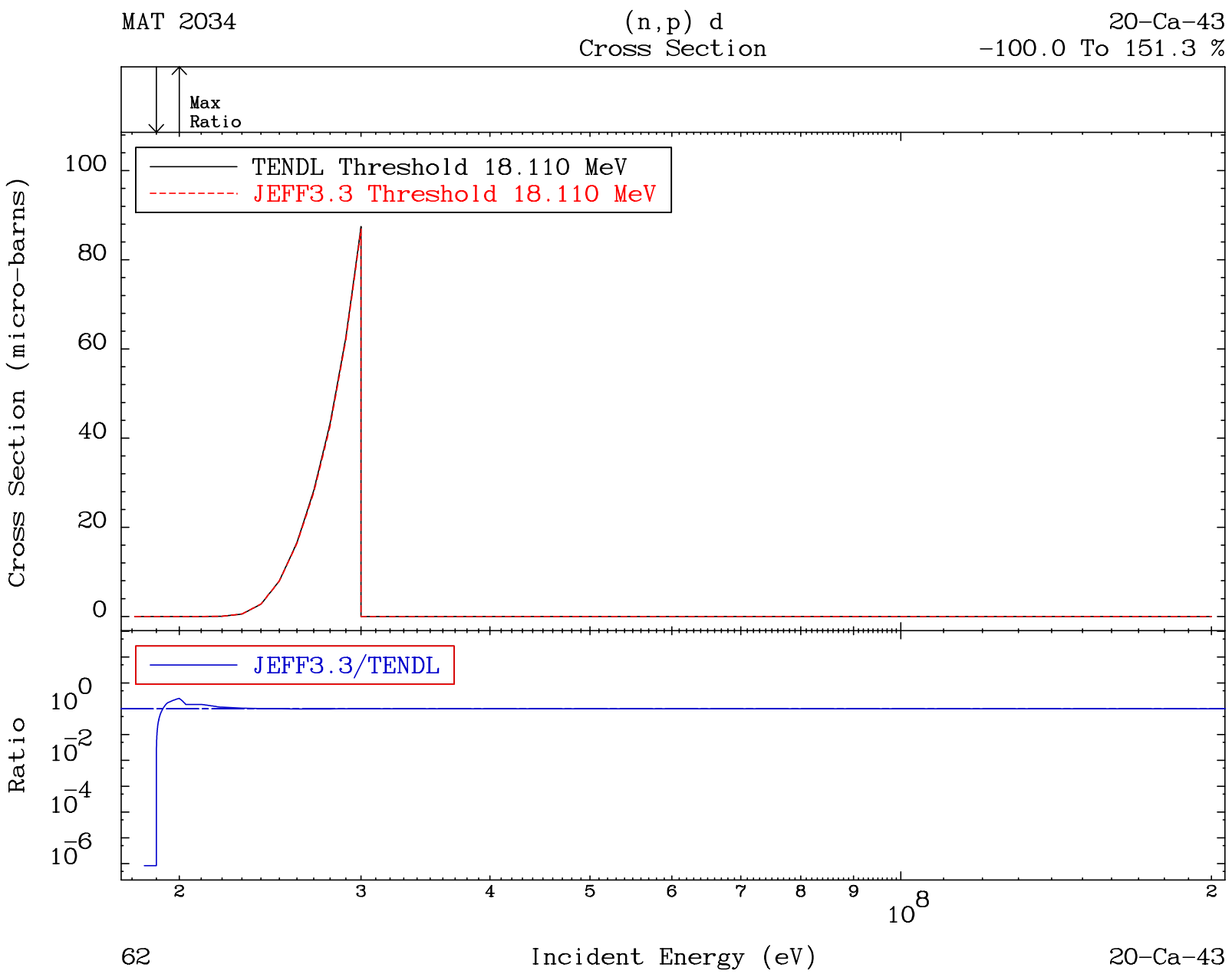

MAT 2034
(n,α)
Cross Section
20-Ca-43
-3.478 To 748.2 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
20-Ca-43

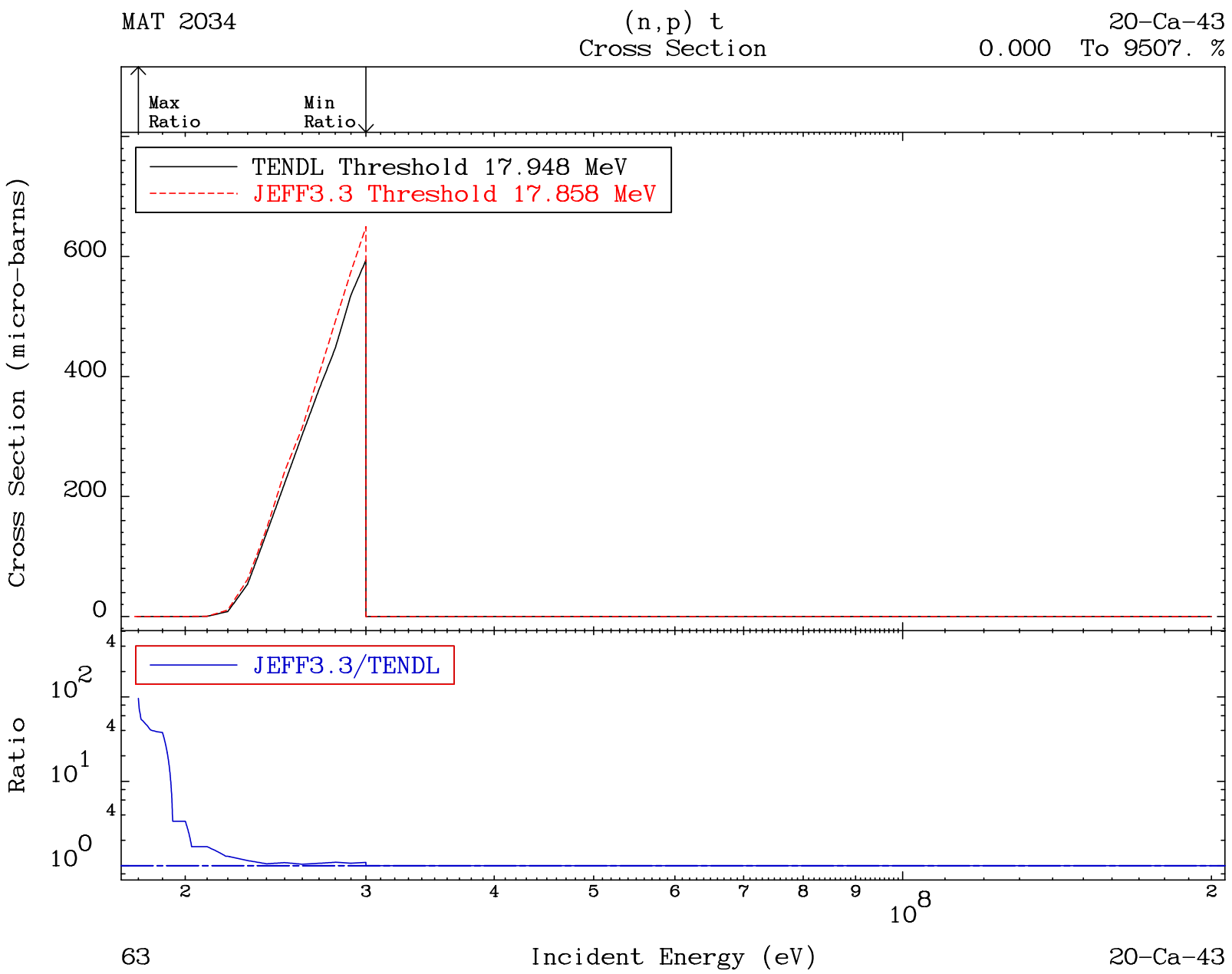

MAT 2034
(n,2α)
Cross Section
20-Ca-43
-54.65 To 1081. %
Min Ratio
Max Ratio
TENDL Threshold 4.6294 MeV
JEFF3.3 Threshold 4.6294 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
10^1
6
10^0
6
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
20-Ca-43

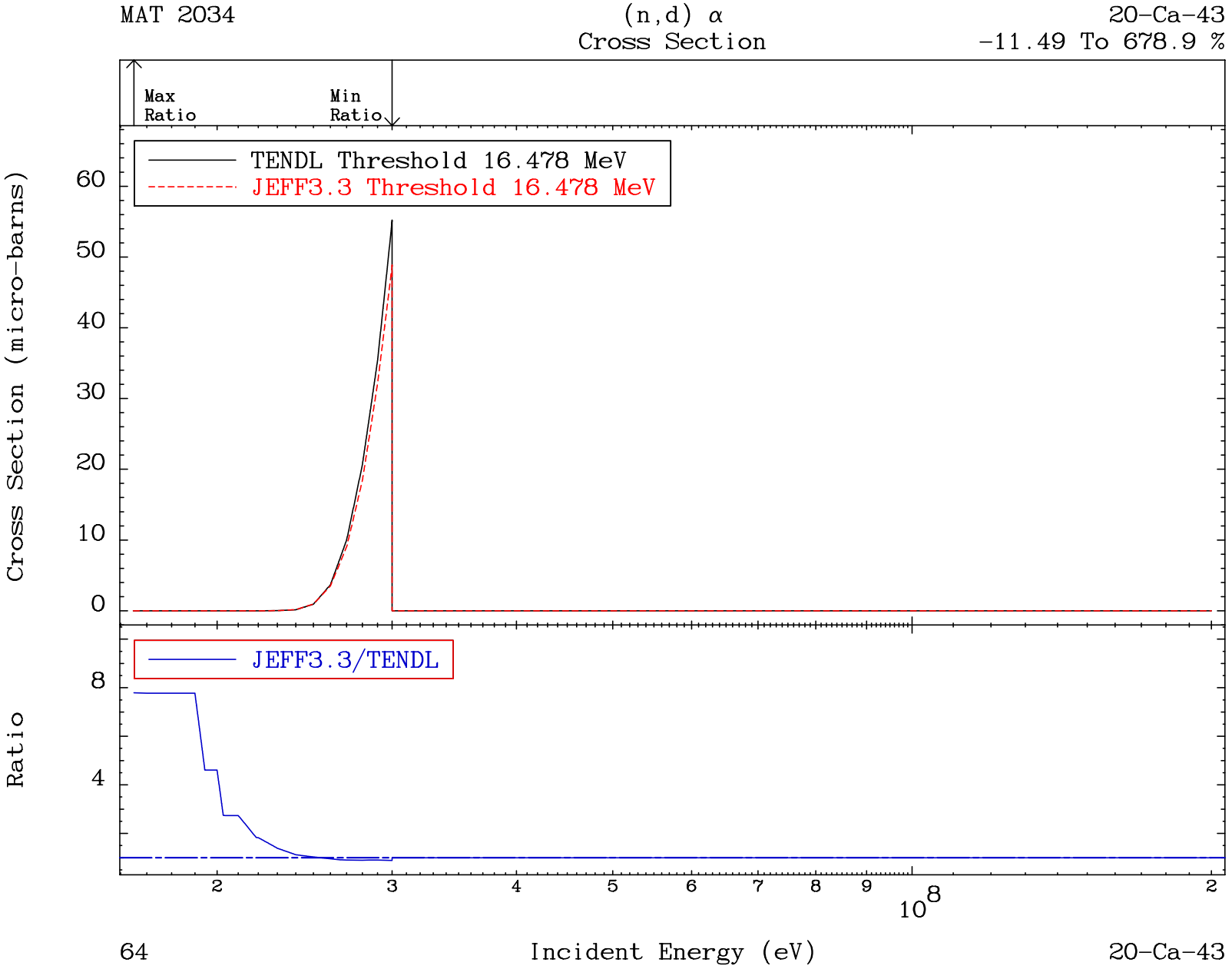

MAT 2034
(n,3α)
Cross Section
20-Ca-43
-95.19 To 934.1 %
Min Ratio
Max Ratio
TENDL Threshold 13.852 MeV
JEFF3.3 Threshold 13.852 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
59
20-Ca-43

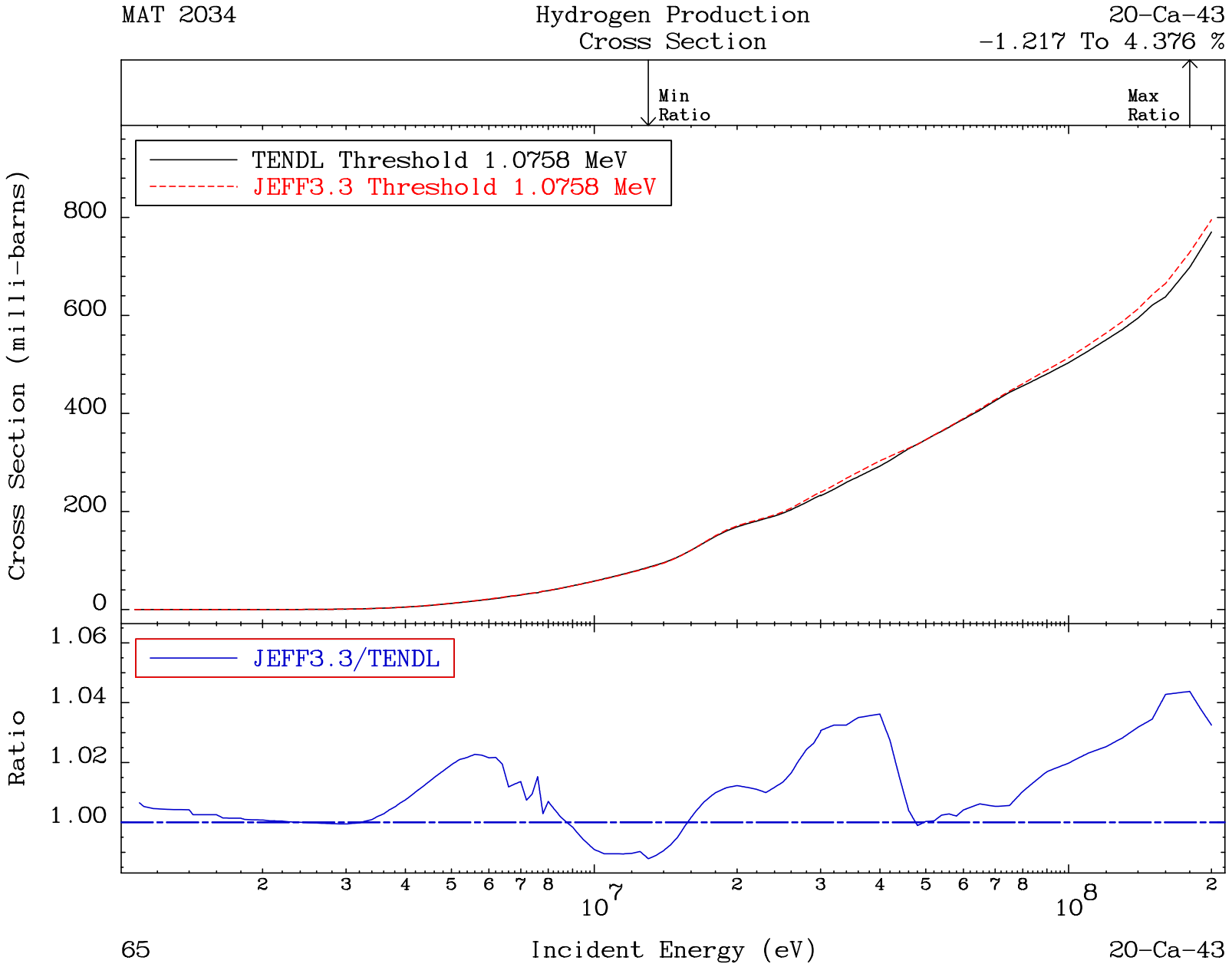

MAT 2034
(n,2p)
Cross Section
20-Ca-43
0.000 To 794.1 %
Max Ratio
Min Ratio
TENDL Threshold 10.739 MeV
JEFF3.3 Threshold 10.739 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
20-Ca-43

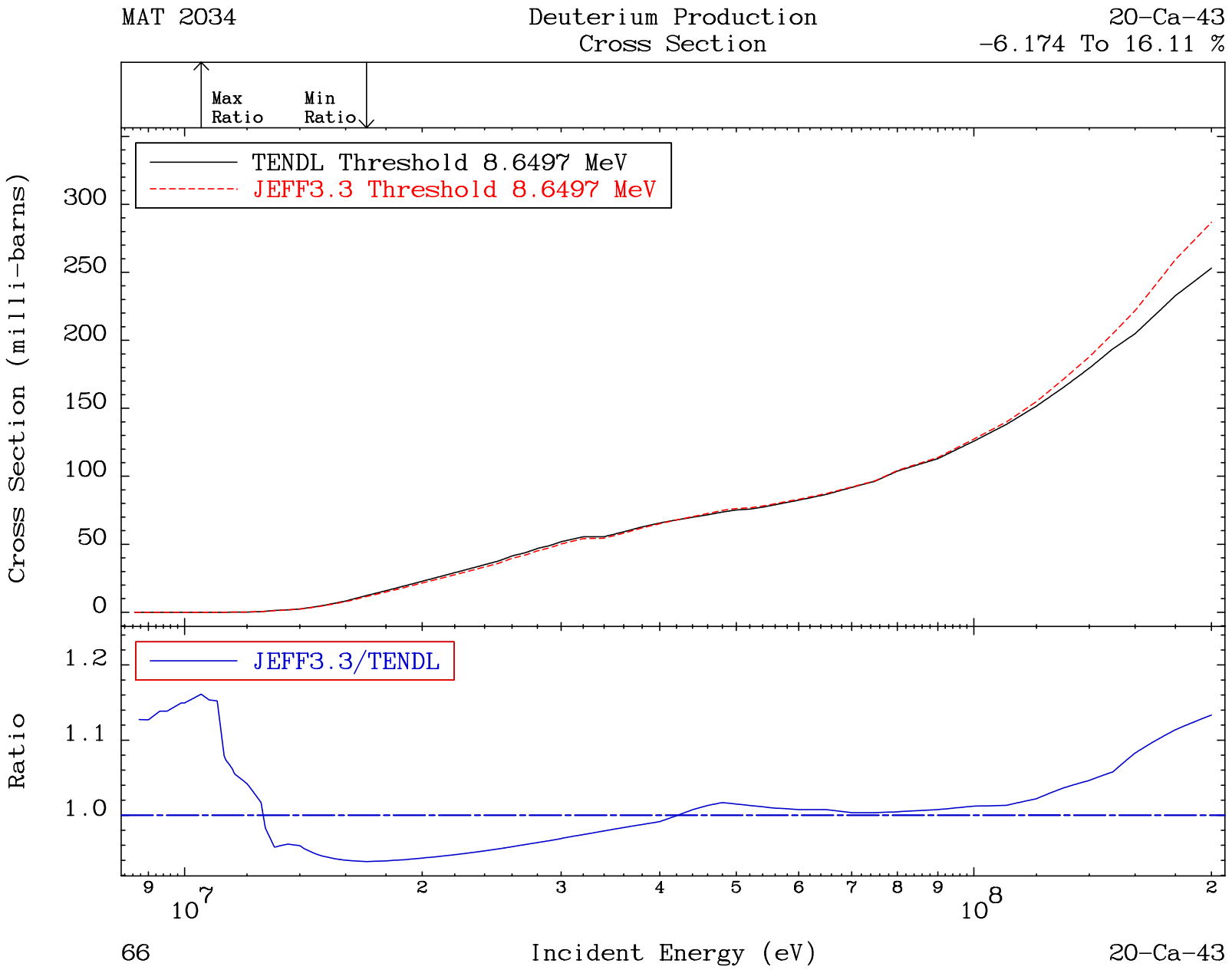

MAT 2034
(n,p) α
Cross Section
20-Ca-43
-99.75 To 198.4 %
Min Ratio
Max Ratio
TENDL Threshold 10.492 MeV
JEFF3.3 Threshold 10.492 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
20-Ca-43

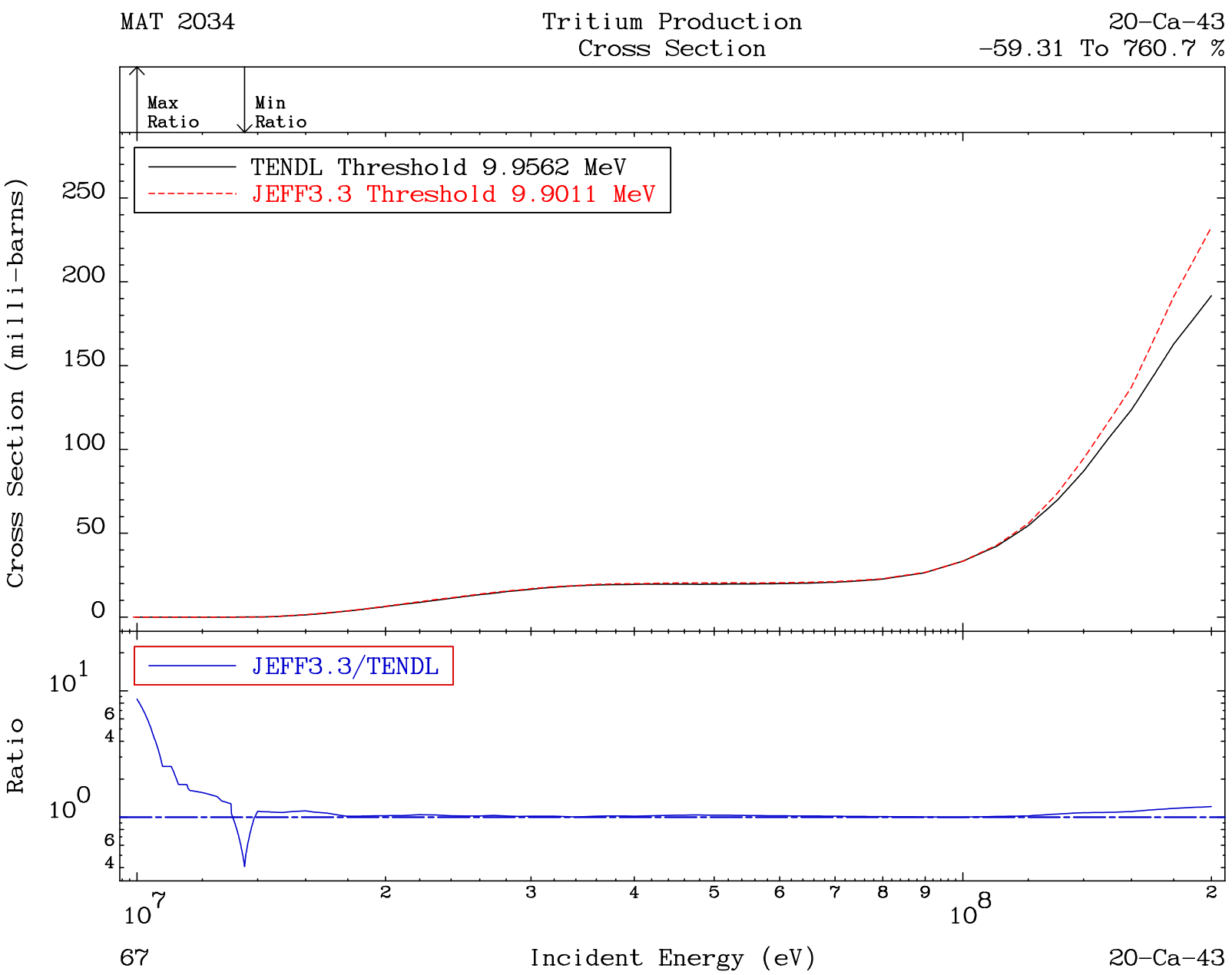

MAT 2034
(n,p) d
Cross Section
20-Ca-43
-100.0 To 151.3 %
Max
Ratio
TENDL Threshold 18.110 MeV
JEFF3.3 Threshold 18.110 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
20-Ca-43

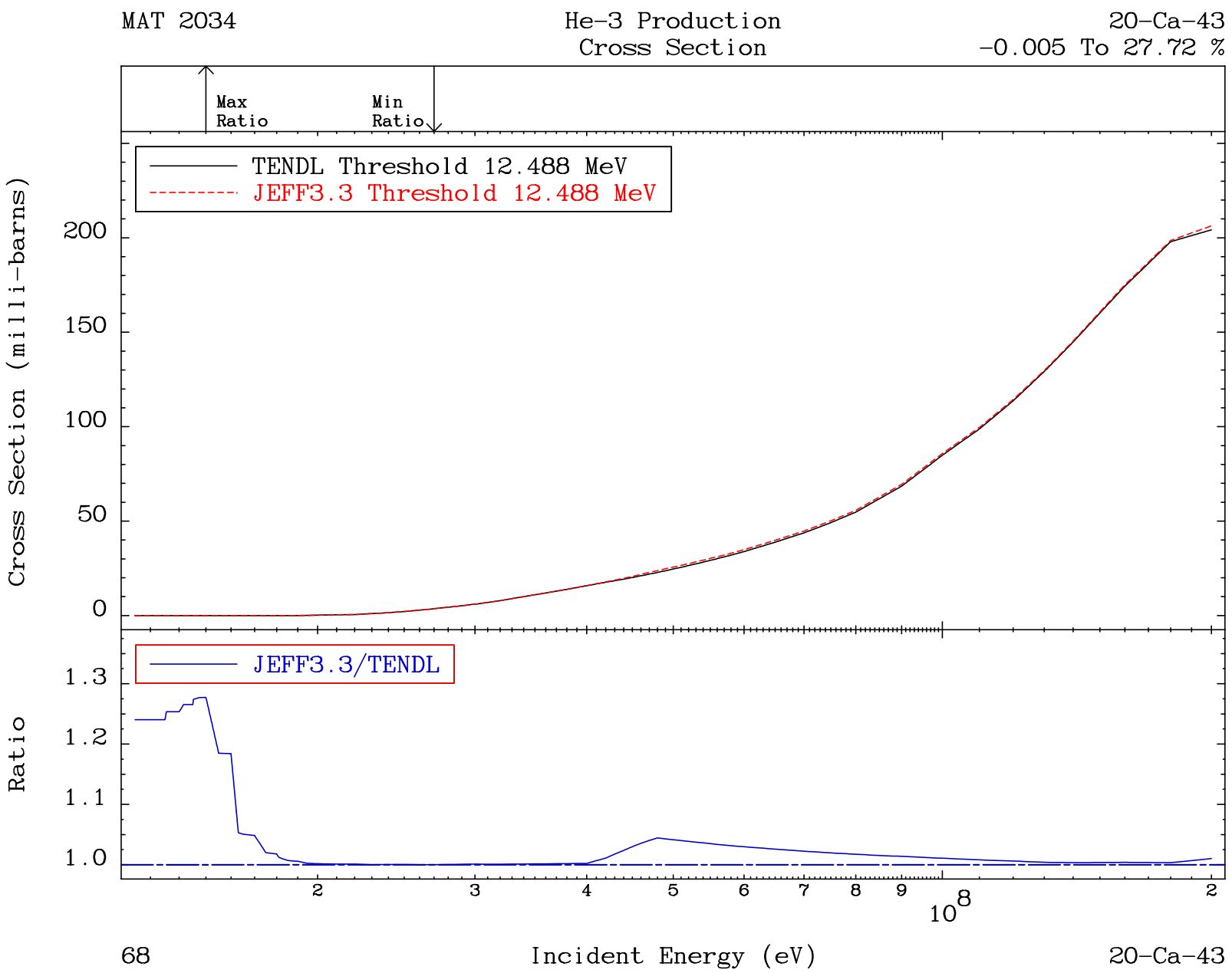

MAT 2034
(n,p) t
Cross Section
20-Ca-43
0.000 To 9507. %
Max Ratio
Min Ratio
TENDL Threshold 17.948 MeV
JEFF3.3 Threshold 17.858 MeV
Cross Section (micro-barns)
600
400
200
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
20-Ca-43

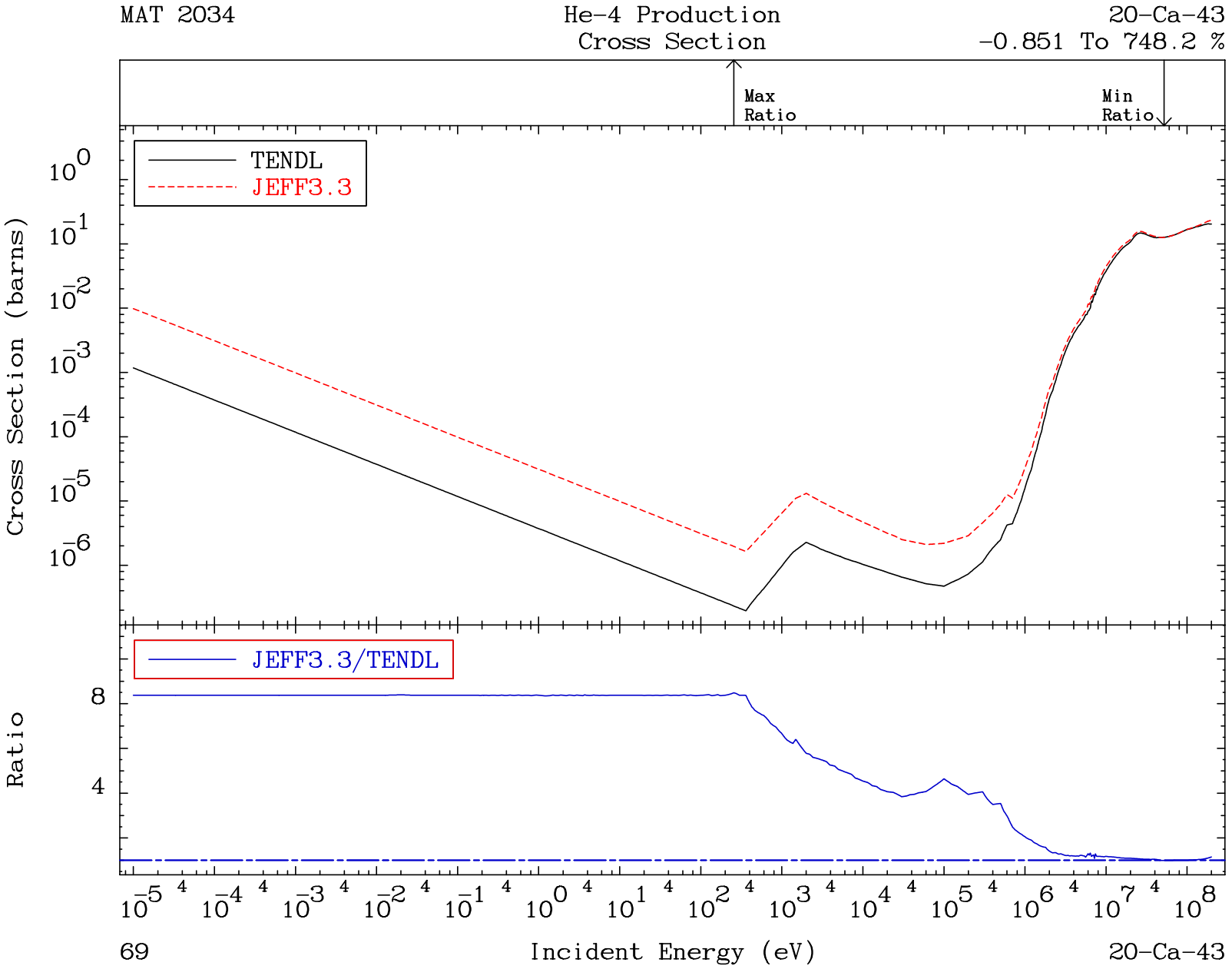

MAT 2034
(n,d) α
Cross Section
20-Ca-43
-11.49 To 678.9 %
Max Ratio
Min Ratio
TENDL Threshold 16.478 MeV
JEFF3.3 Threshold 16.478 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
20-Ca-43

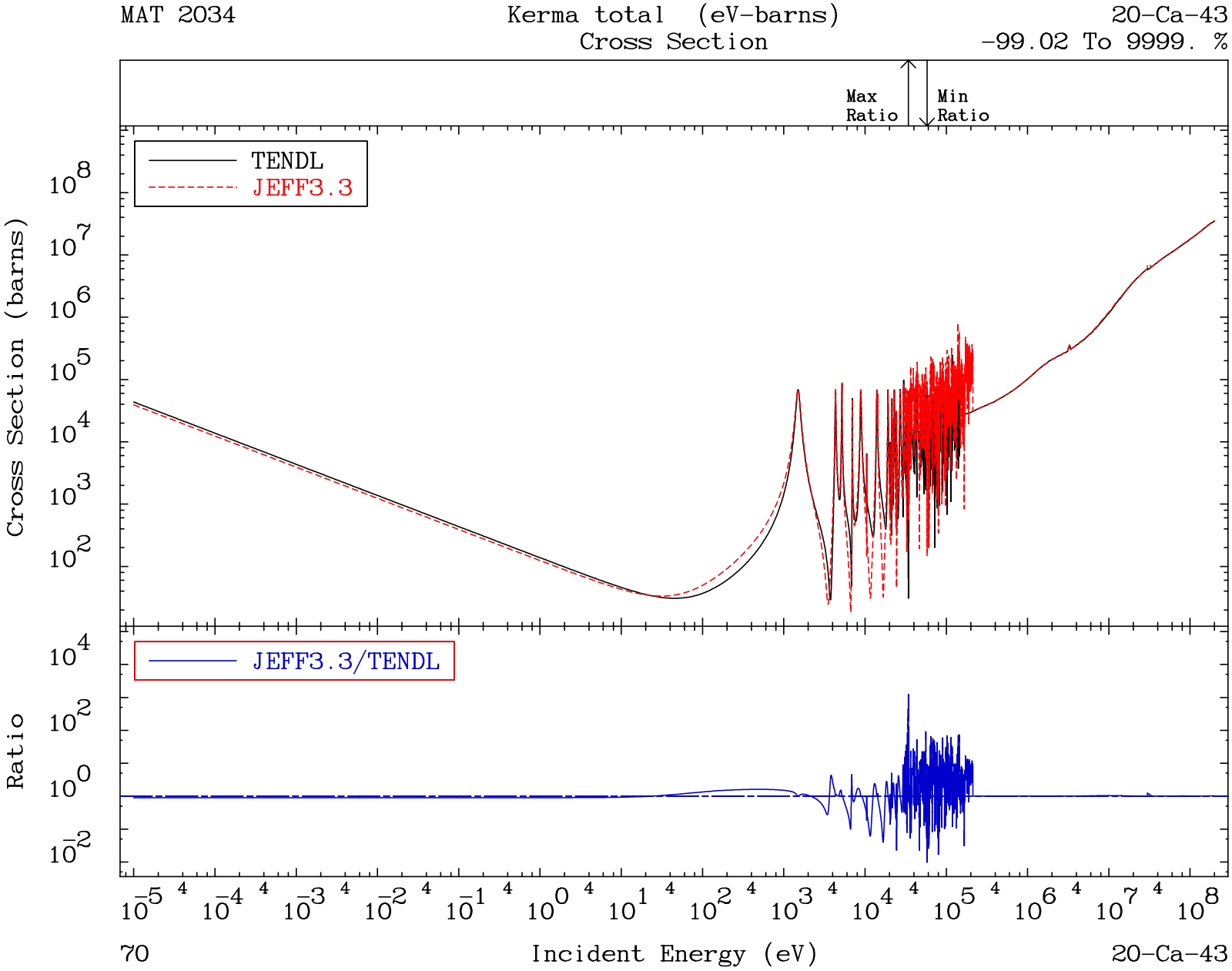

MAT 2034
Hydrogen Production
Cross Section
20-Ca-43
-1.217 To 4.376 %
Min Ratio
Max Ratio
TENDL Threshold 1.0758 MeV
JEFF3.3 Threshold 1.0758 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
20-Ca-43

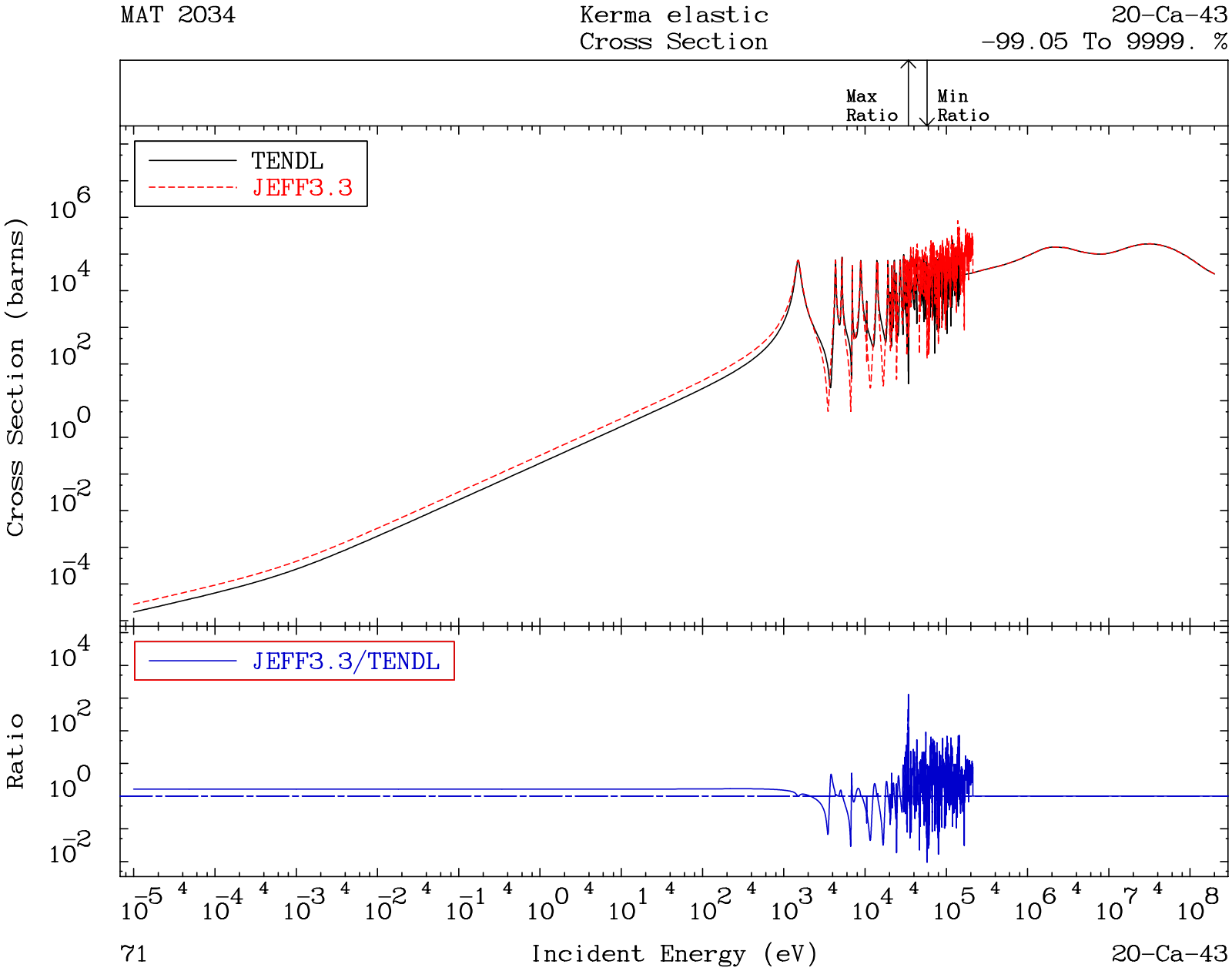

MAT 2034
Deuterium Production
Cross Section
20-Ca-43
-6.174 To 16.11 %
Max Ratio
Min Ratio
TENDL Threshold 8.6497 MeV
JEFF3.3 Threshold 8.6497 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
20-Ca-43

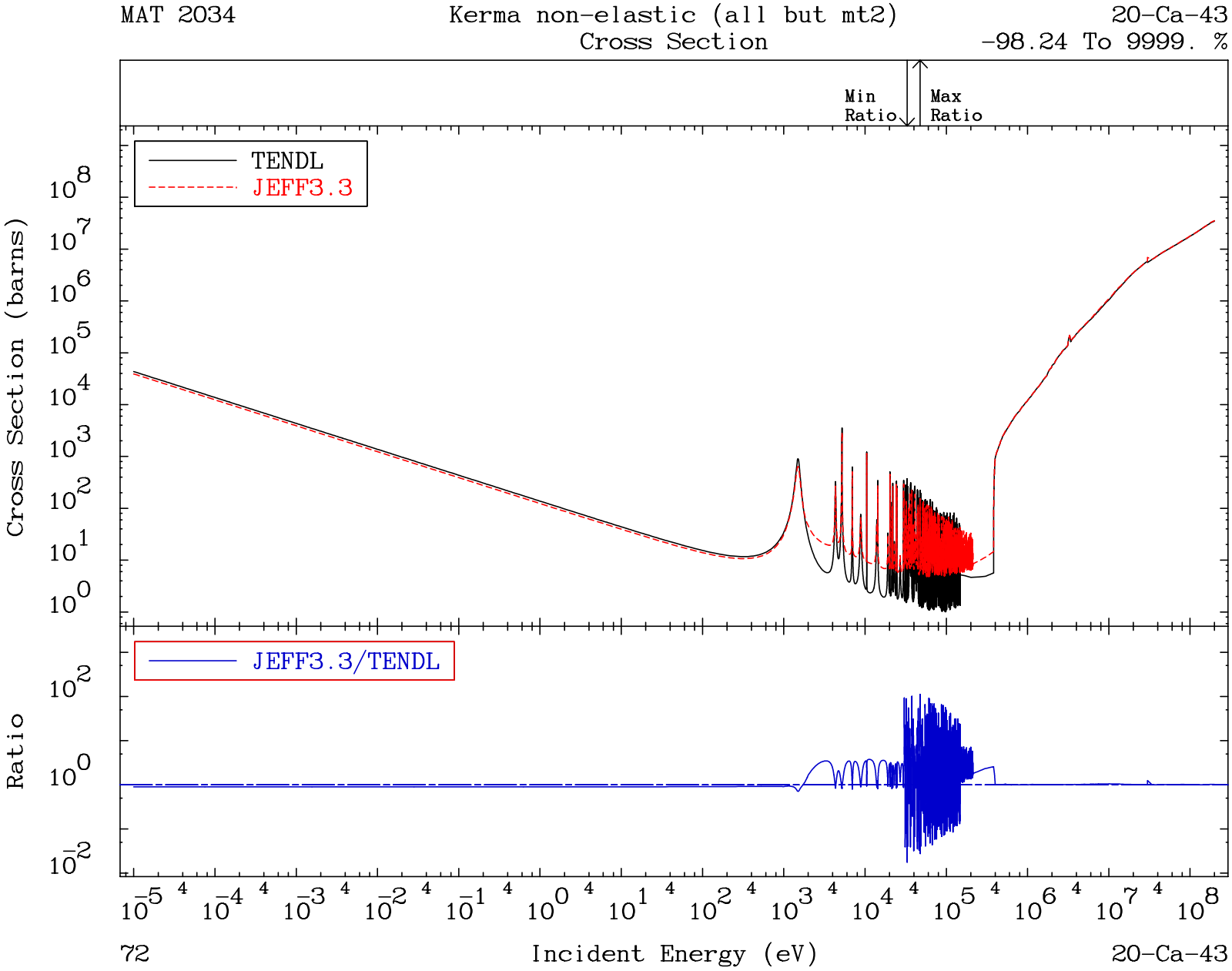

MAT 2034
Tritium Production
Cross Section
20-Ca-43
-59.31 To 760.7 %
Max Ratio
Min Ratio
TENDL Threshold 9.9562 MeV
JEFF3.3 Threshold 9.9011 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^1
6
4
10^0
6
4
10^7
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
20-Ca-43

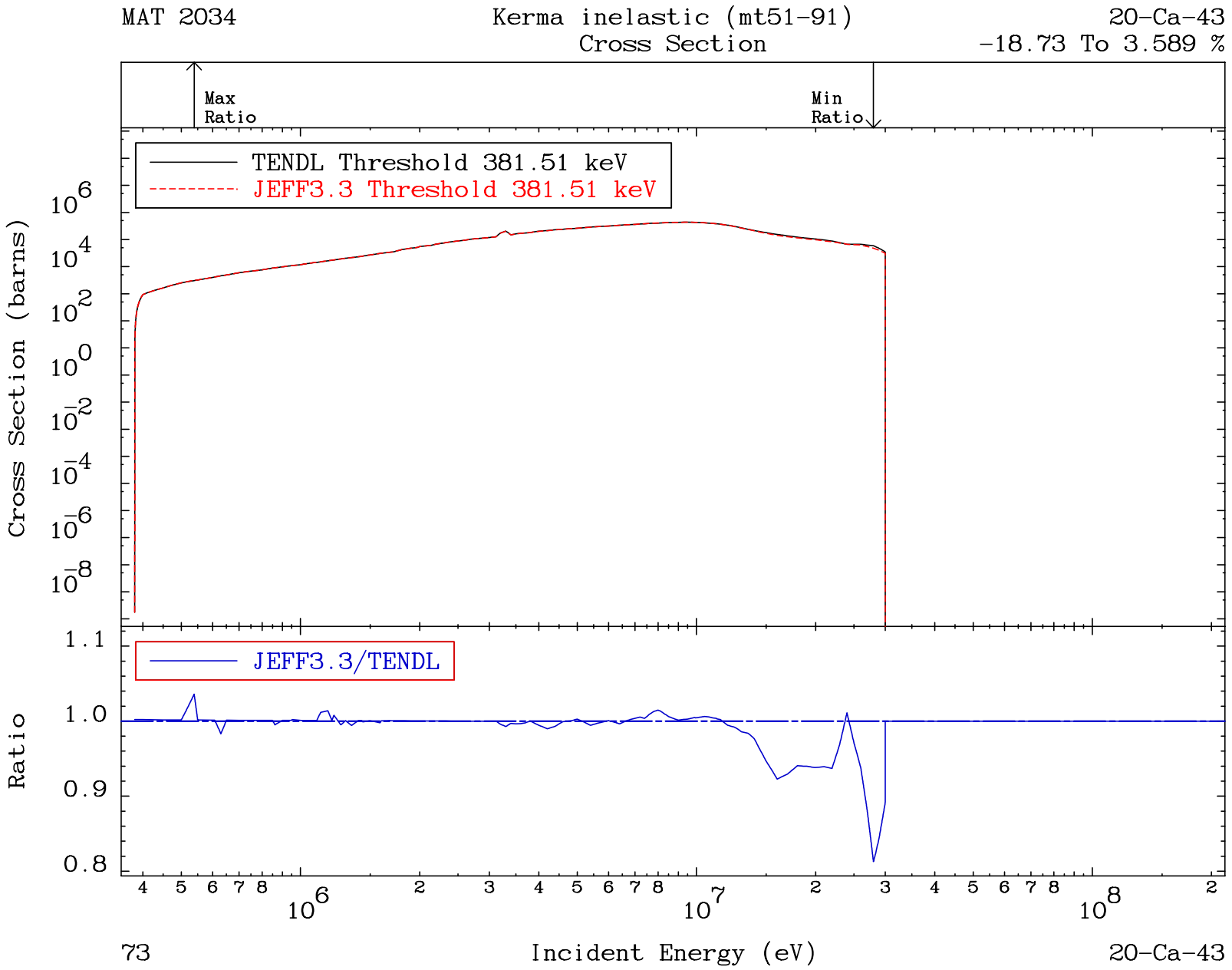

MAT 2034
He-3 Production
Cross Section
20-Ca-43
-0.005 To 27.72 %
Max Ratio
Min Ratio
TENDL Threshold 12.488 MeV
JEFF3.3 Threshold 12.488 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
20-Ca-43

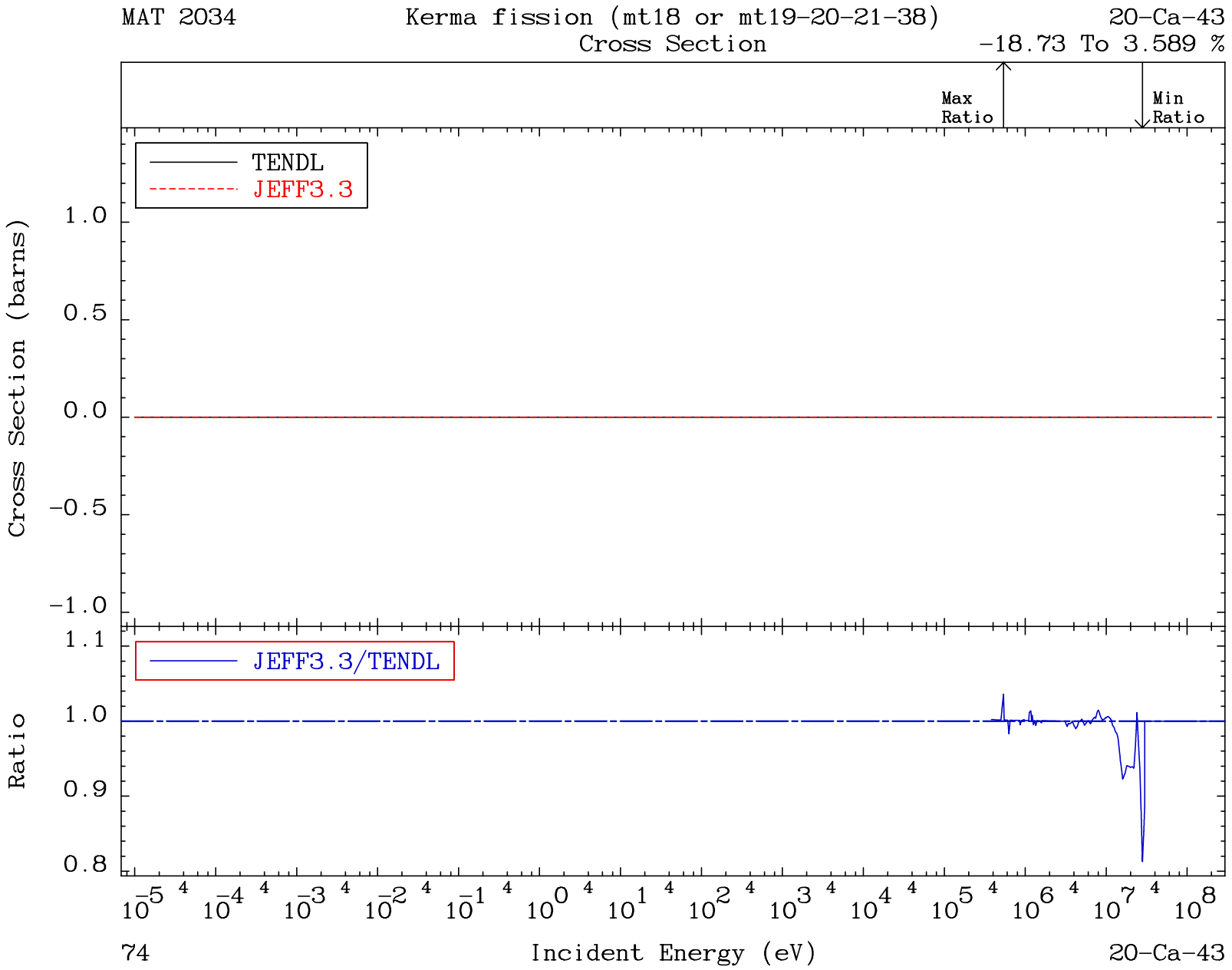

MAT 2034
He-4 Production
Cross Section
20-Ca-43
-0.851 To 748.2 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
20-Ca-43

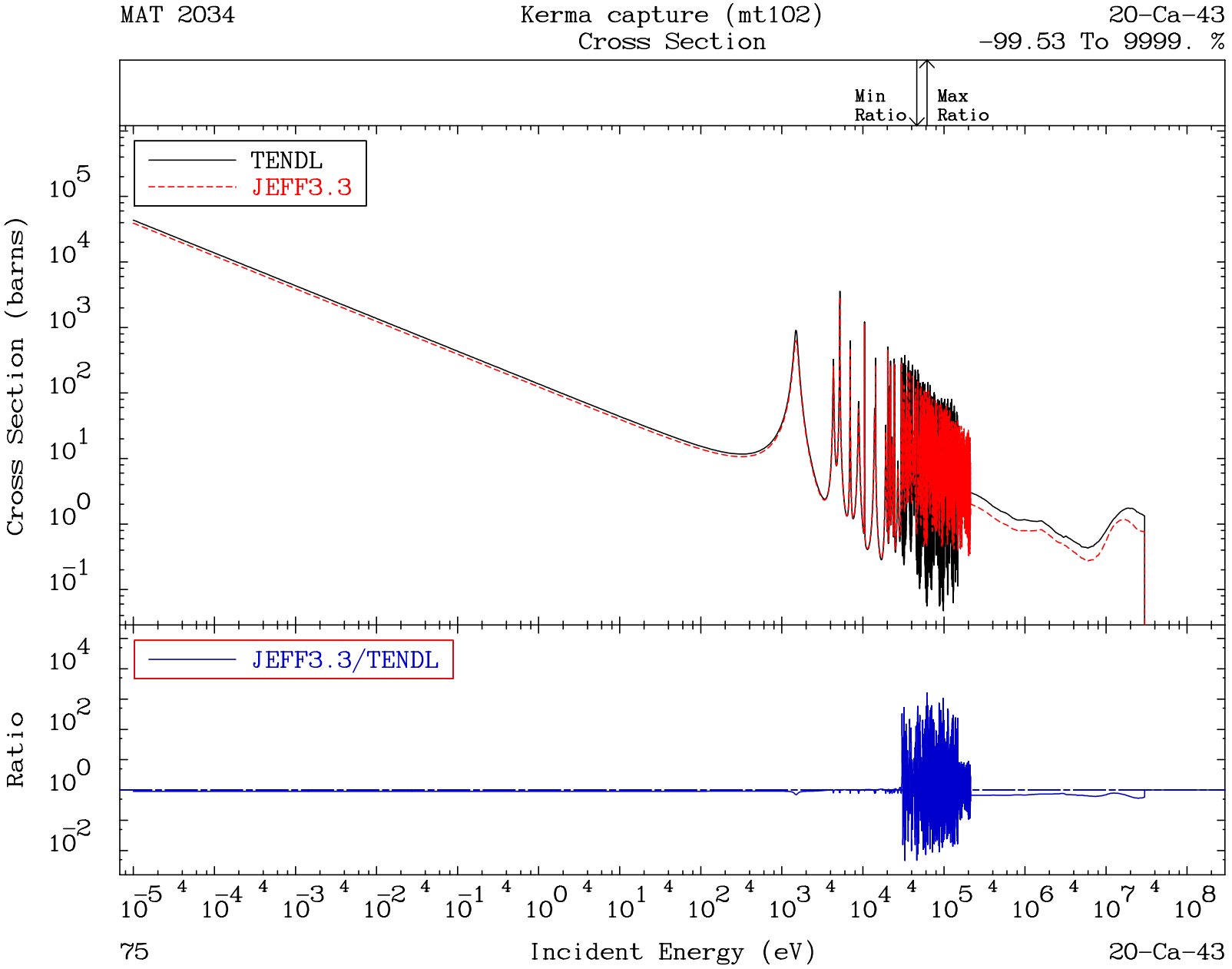

MAT 2034
Kerma total (eV-barns)
Cross Section
20-Ca-43
-99.02 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
20-Ca-43

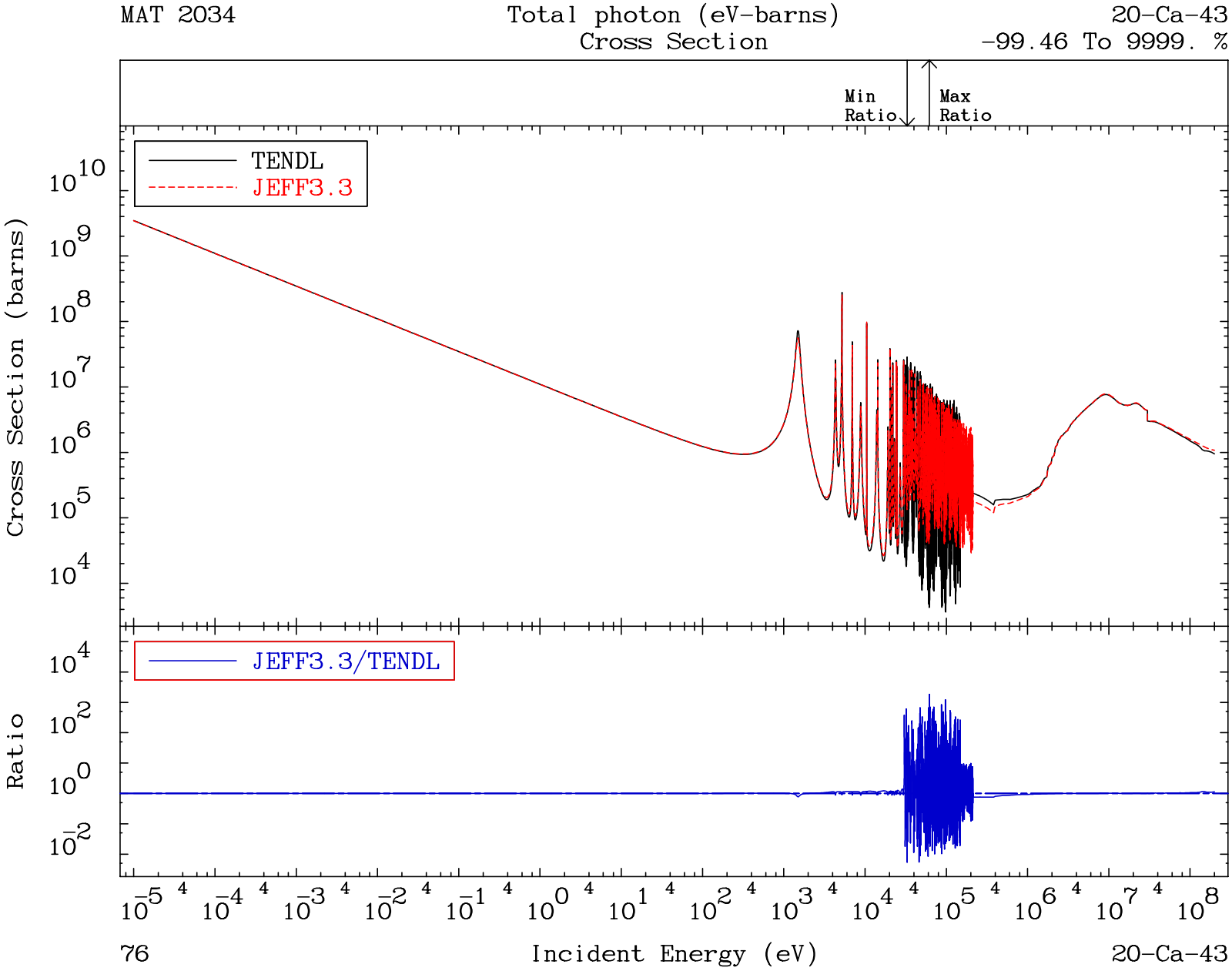

MAT 2034
Kerma elastic
Cross Section
20-Ca-43
-99.05 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
20-Ca-43

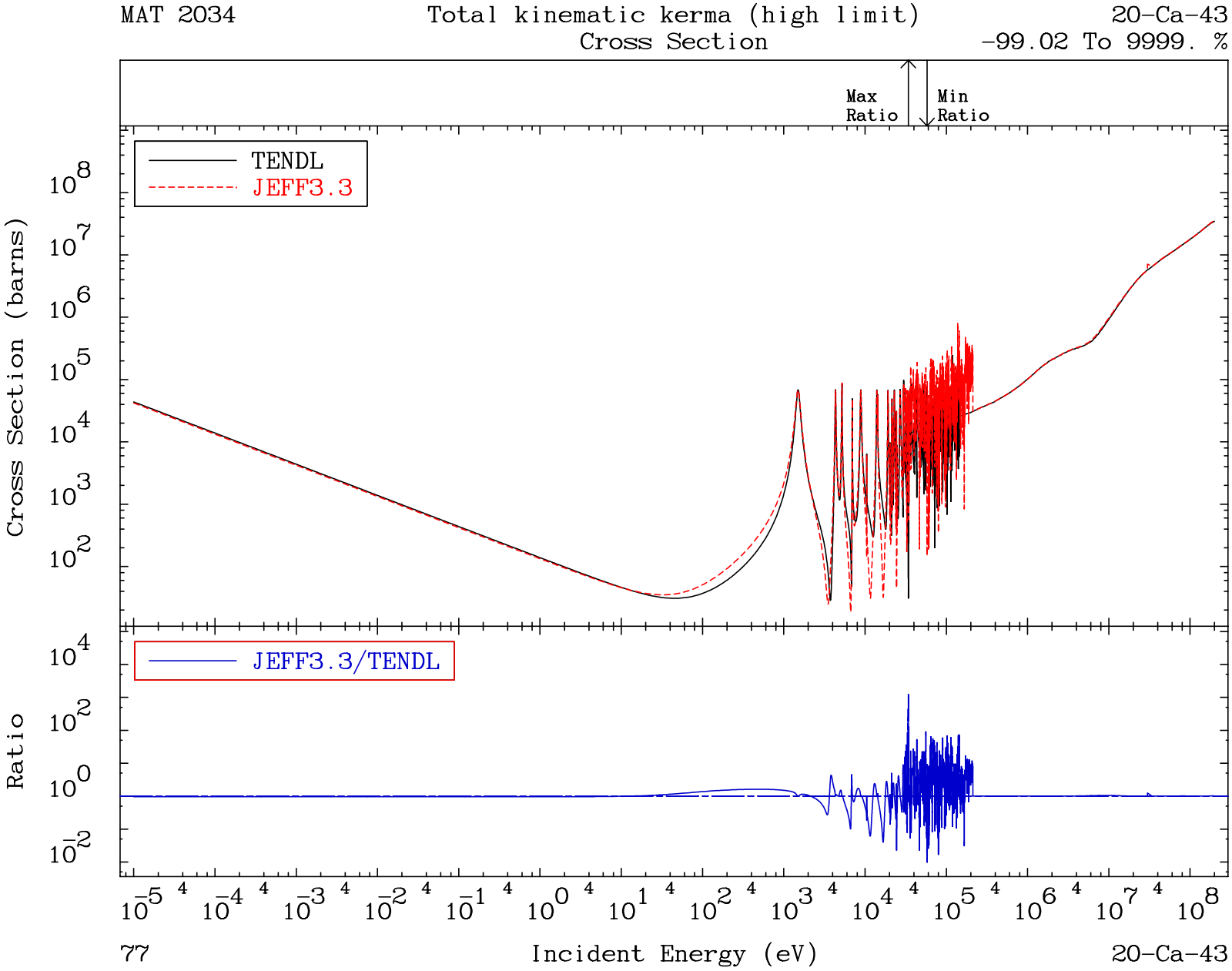

MAT 2034
Kerma non-elastic (all but mt2)
Cross Section
20-Ca-43
-98.24 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
20-Ca-43

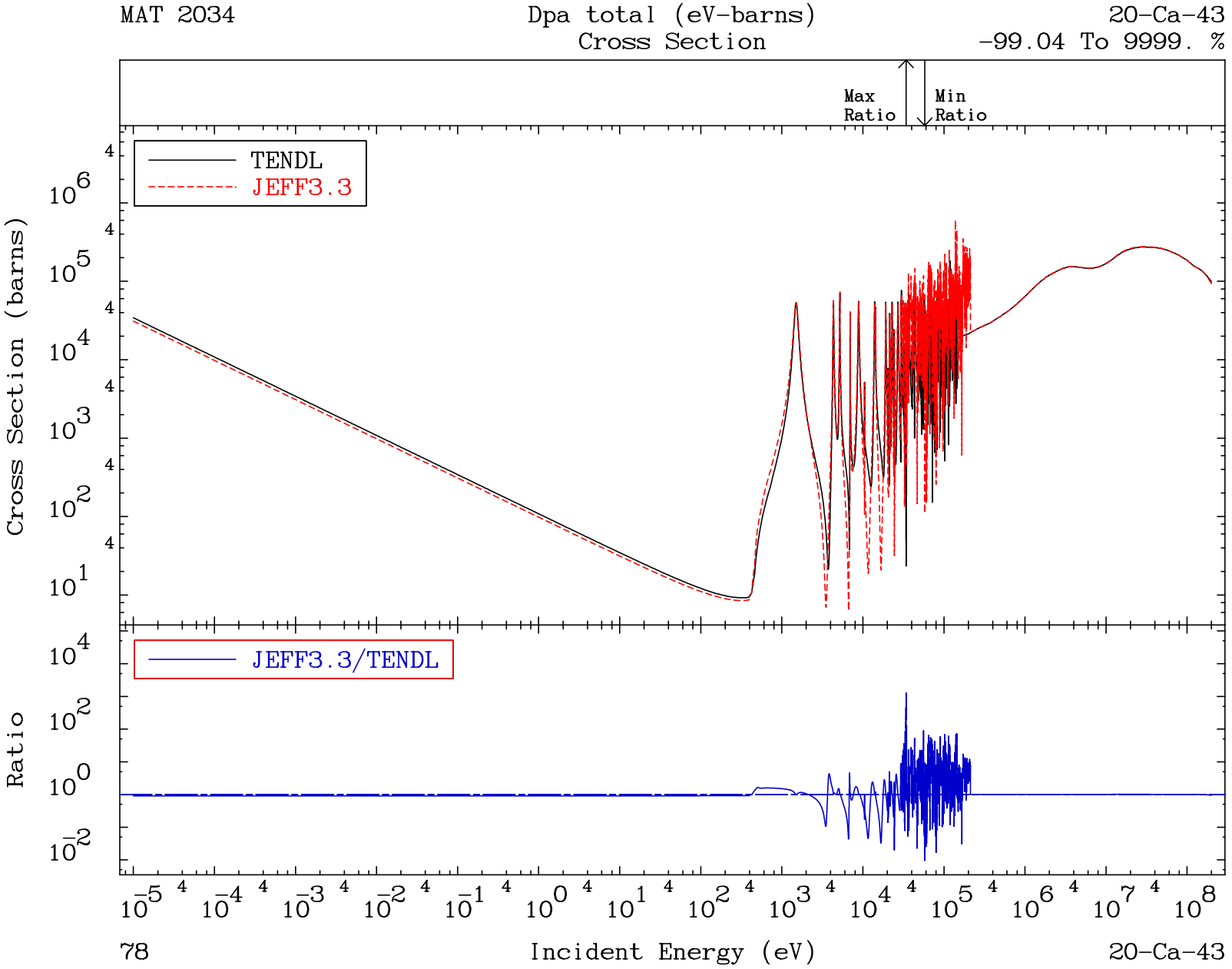

MAT 2034
Kerma inelastic (mt51-91)
Cross Section
20-Ca-43
-18.73 To 3.589 %
Max Ratio
Min Ratio
TENDL Threshold 381.51 keV
JEFF3.3 Threshold 381.51 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
20-Ca-43

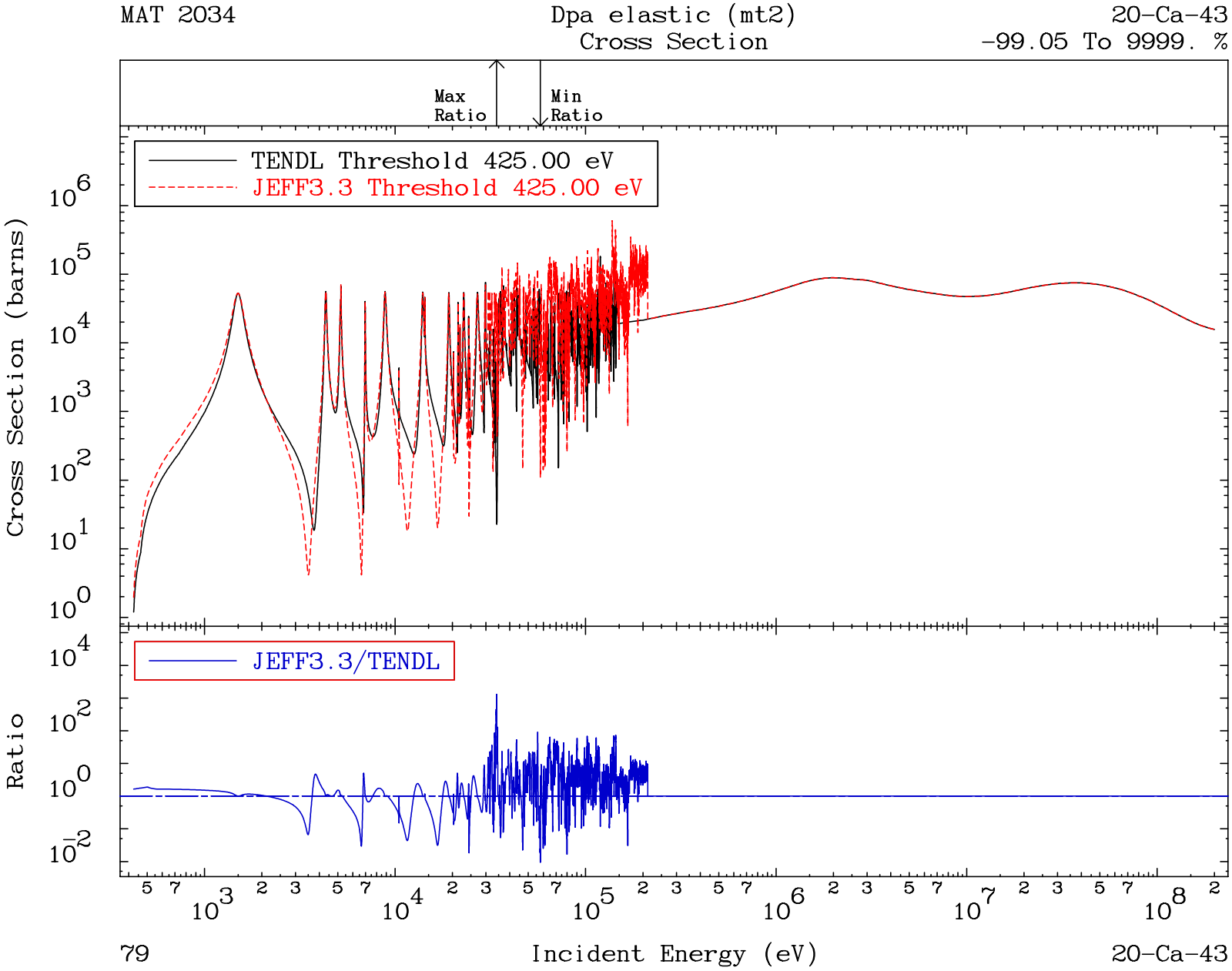

MAT 2034
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
20-Ca-43
-18.73 To 3.589 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
74
Incident Energy (eV)
20-Ca-43

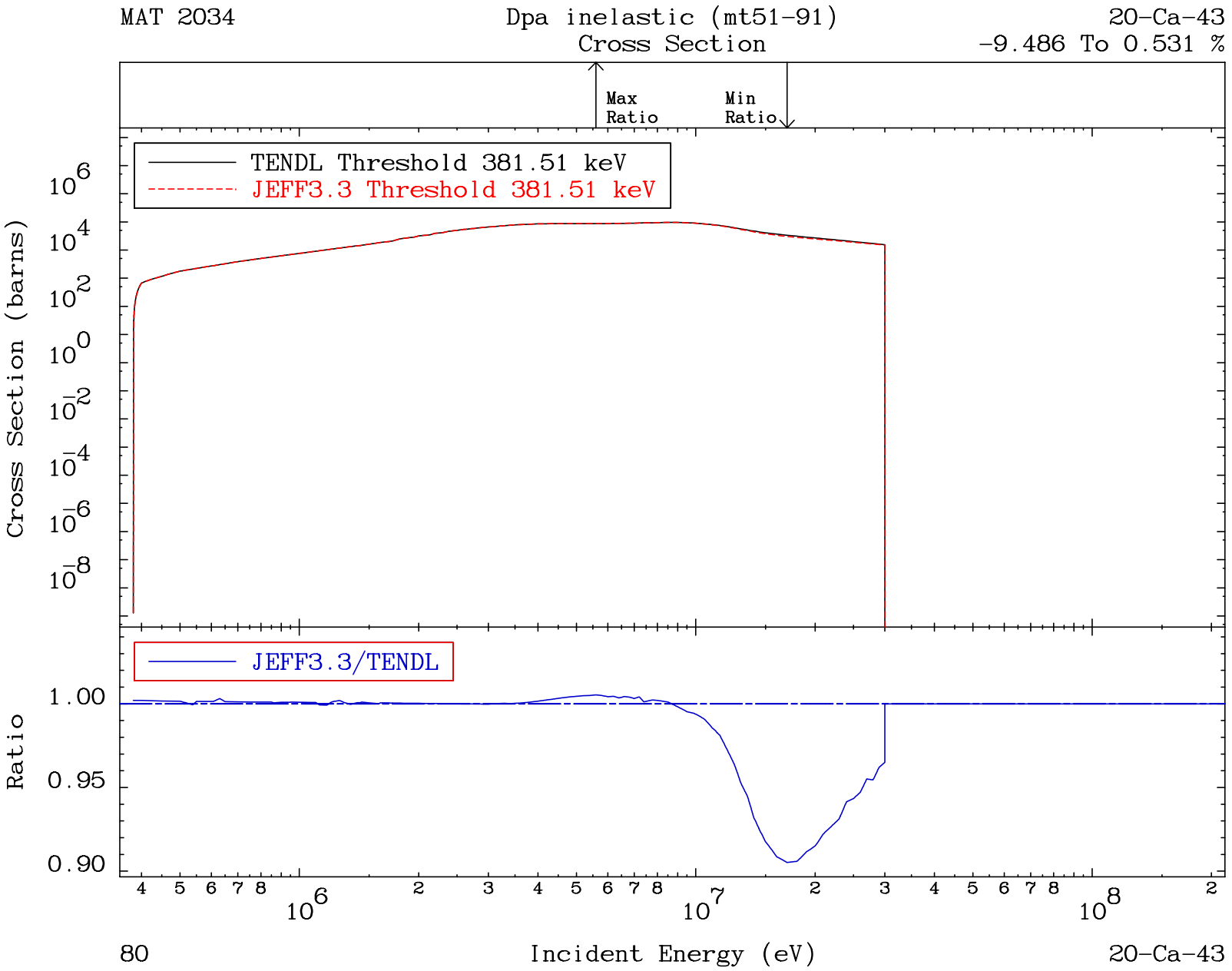

MAT 2034
Kerma capture (mt102)
Cross Section
20-Ca-43
-99.53 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
20-Ca-43

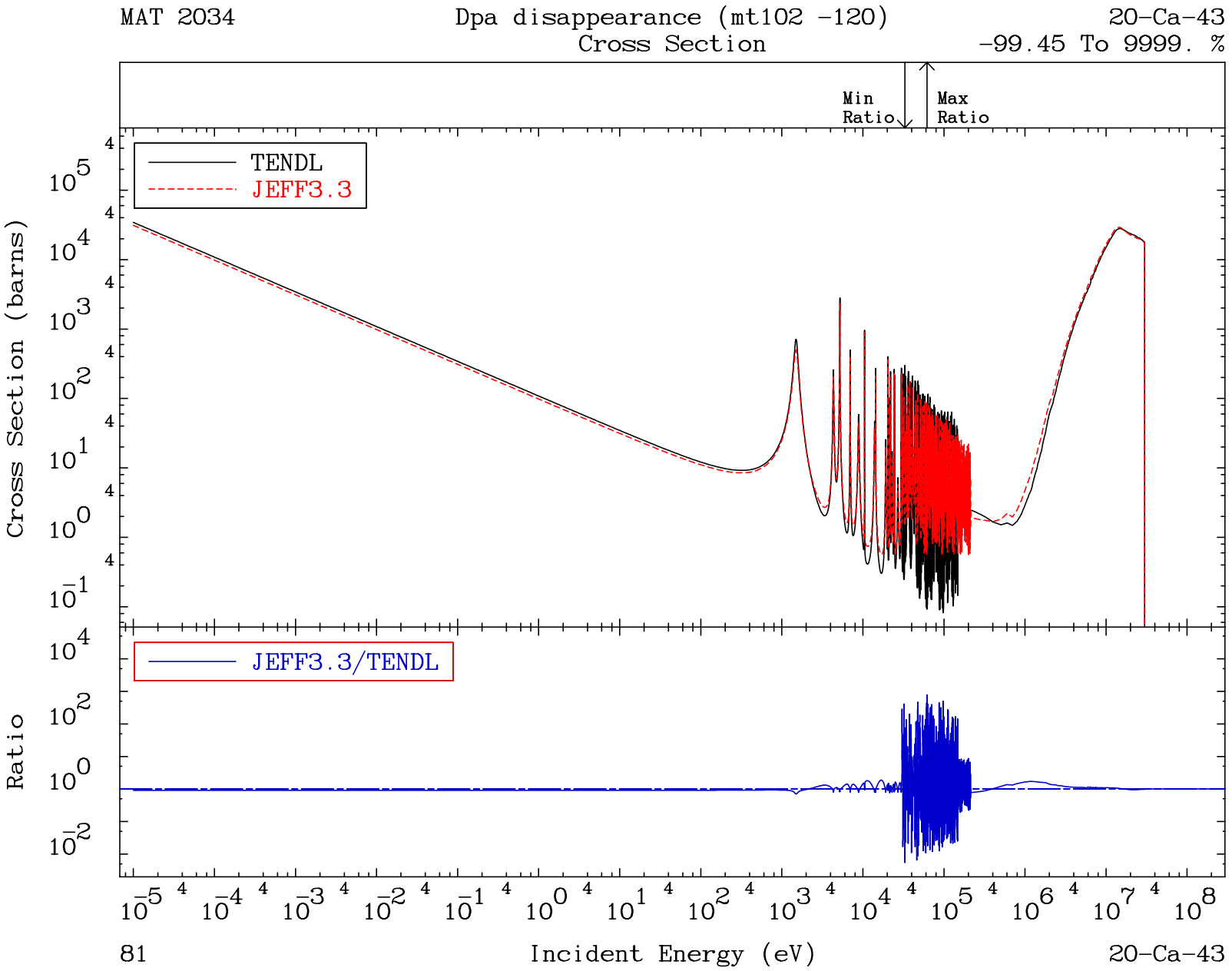

MAT 2034
Total photon (eV-barns)
Cross Section
20-Ca-43
-99.46 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
20-Ca-43

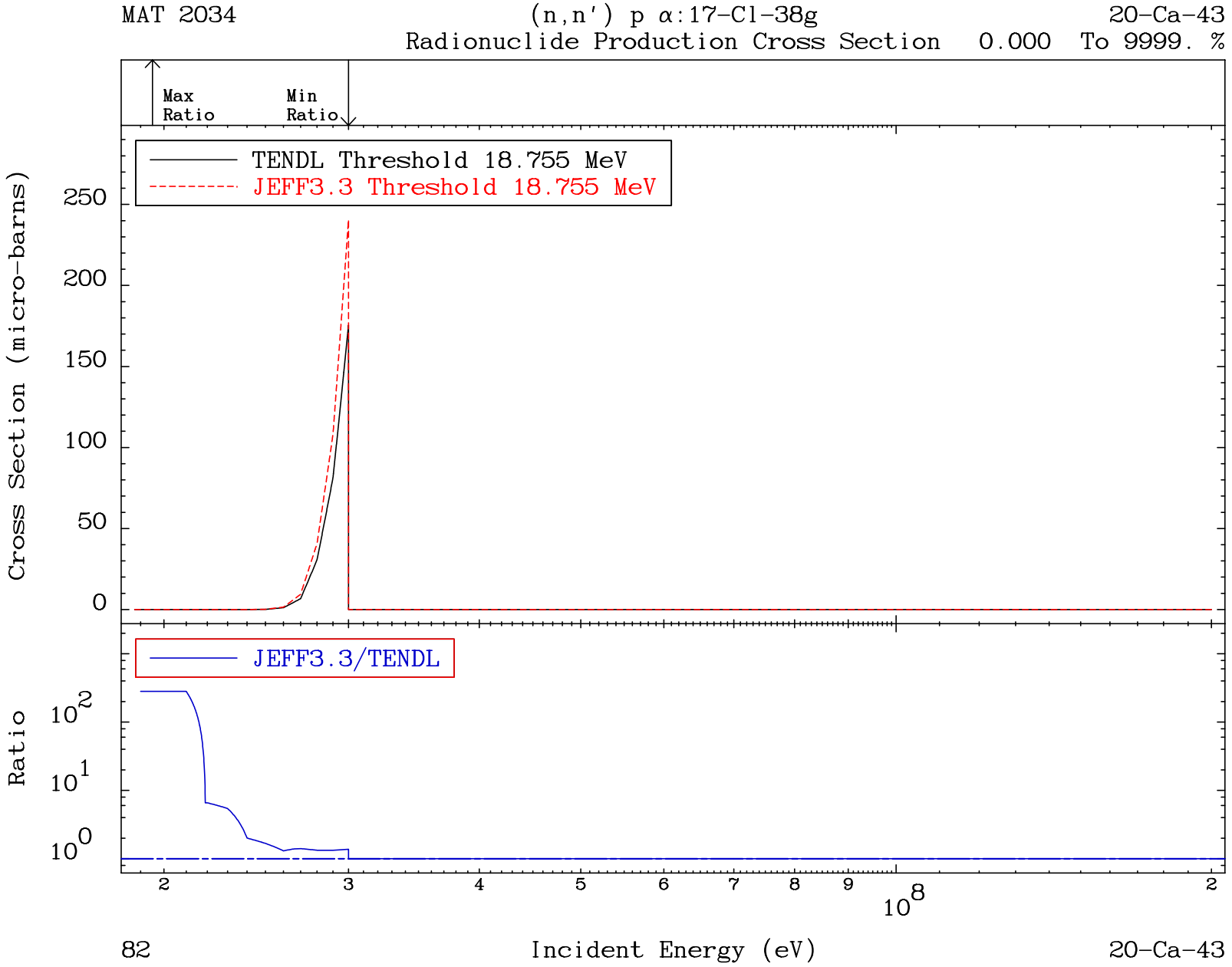

MAT 2034
Total kinematic kerma (high limit)
Cross Section
20-Ca-43
-99.02 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
20-Ca-43

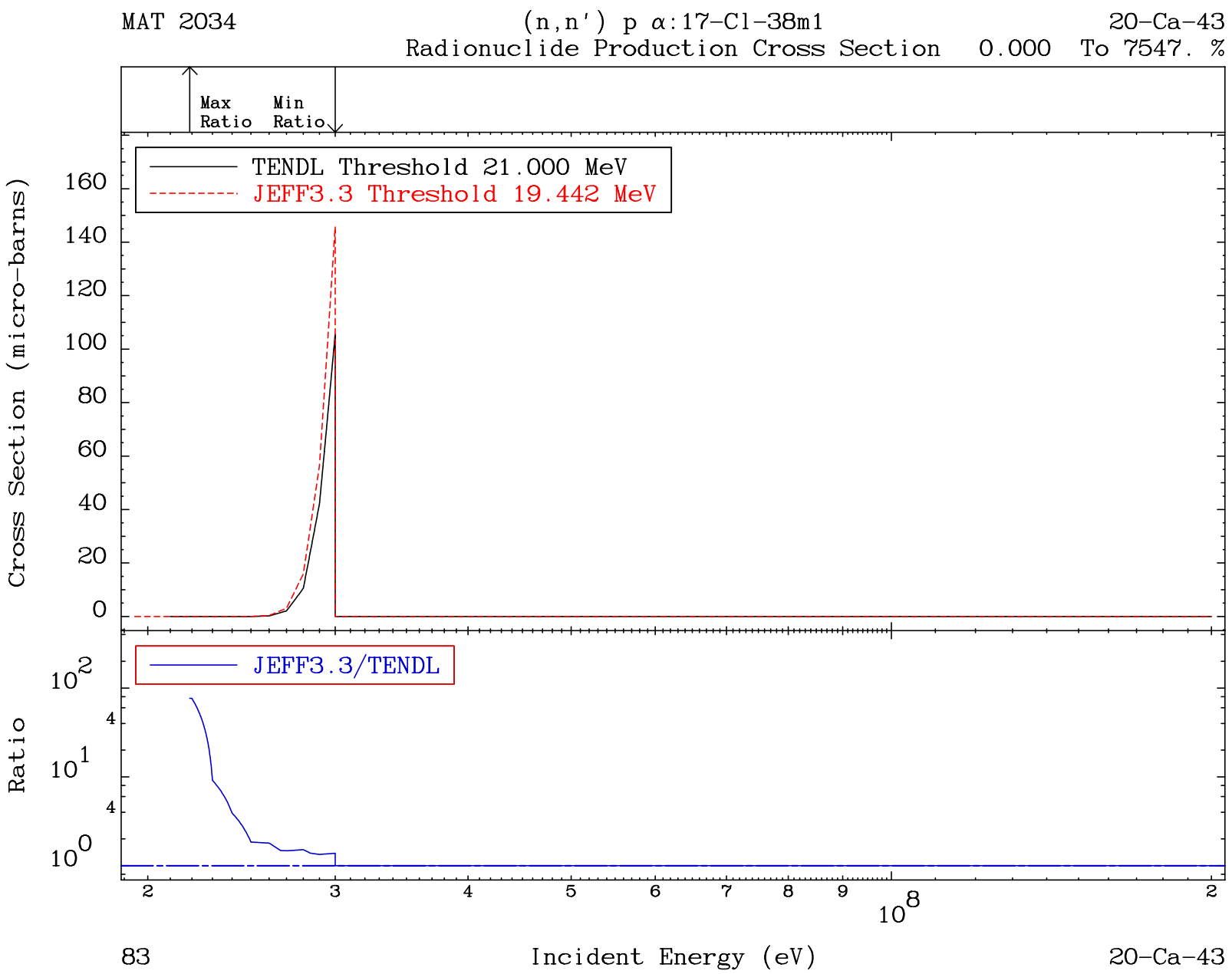

MAT 2034
Dpa total (eV-barns)
Cross Section
20-Ca-43
-99.04 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
20-Ca-43

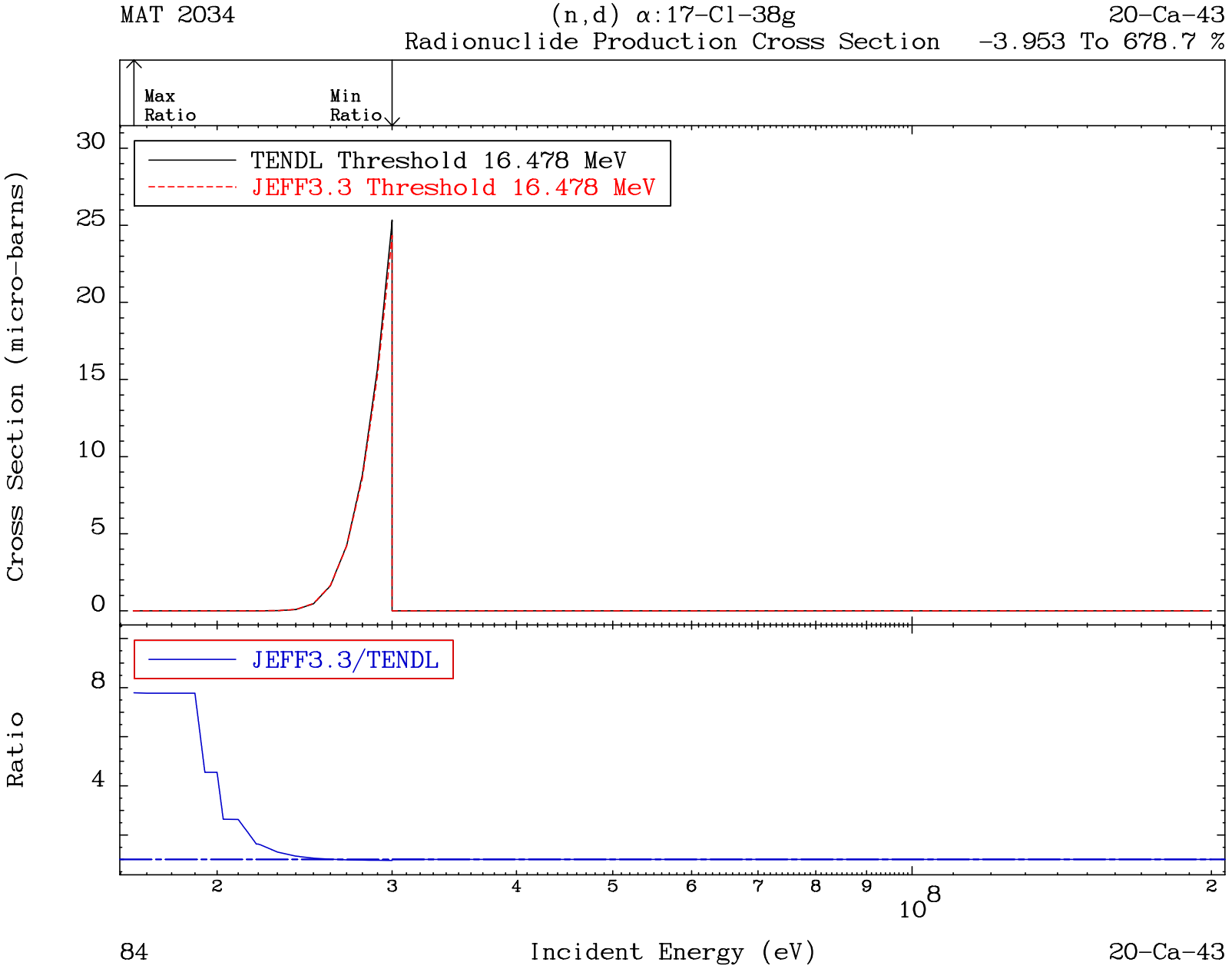

MAT 2034
Dpa elastic (mt2)
Cross Section
20-Ca-43
-99.05 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 425.00 eV
JEFF3.3 Threshold 425.00 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
79
20-Ca-43

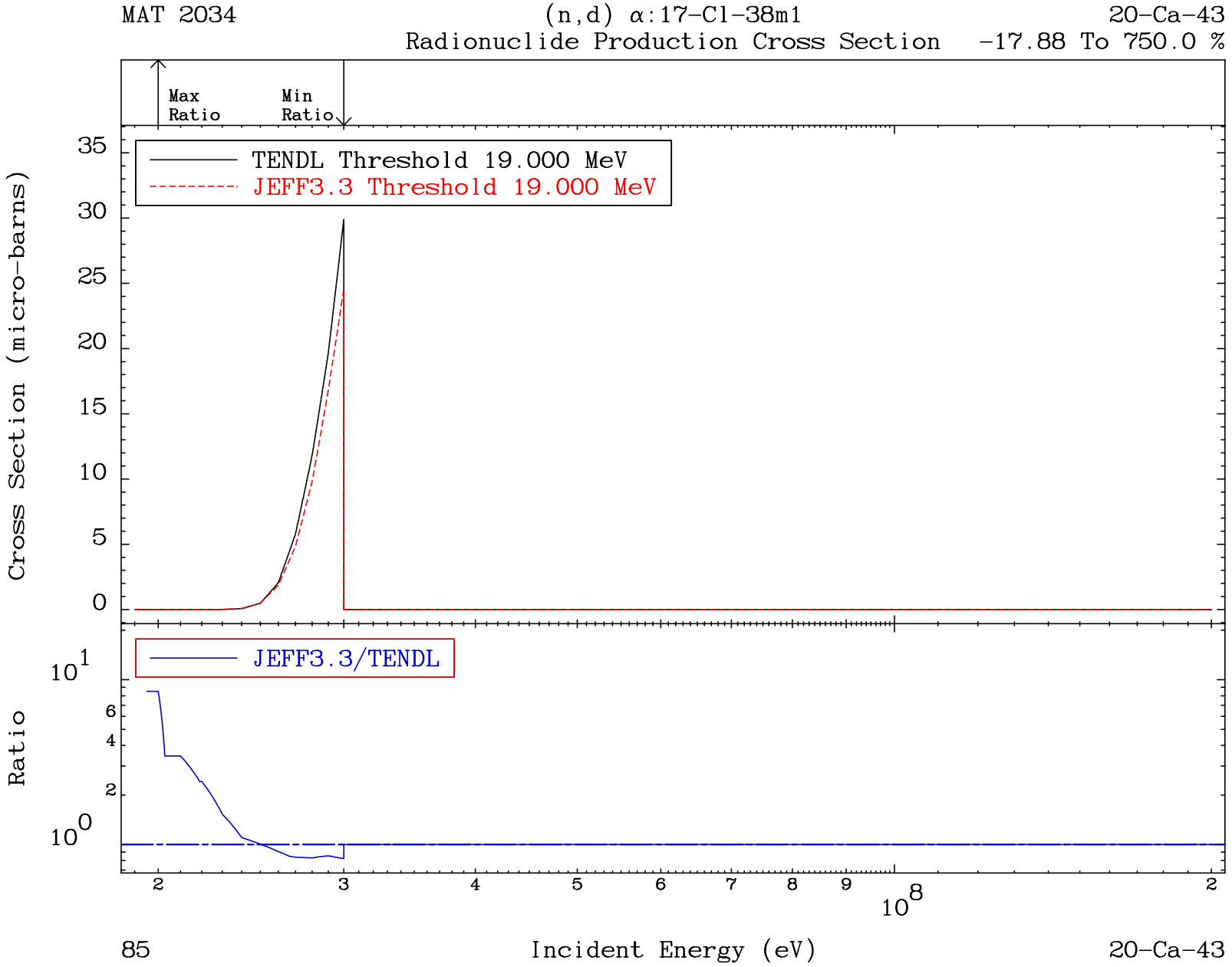

MAT 2034
Dpa inelastic (mt51-91)
Cross Section
20-Ca-43
-9.486 To 0.531 %
Max Ratio
Min Ratio
TENDL Threshold 381.51 keV
JEFF3.3 Threshold 381.51 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
80
20-Ca-43


MAT 2034
Dpa disappearance (mt102 -120)
Cross Section
20-Ca-43
-99.45 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
81
20-Ca-43


MAT 2034
(n,n') p α:17-Cl-38g
20-Ca-43
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.755 MeV
JEFF3.3 Threshold 18.755 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
20-Ca-43


MAT 2034
(n,n') p α:17-Cl-38m1
20-Ca-43
Radionuclide Production Cross Section 0.000 To 7547. %
Max Ratio
Min Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 19.442 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
20-Ca-43


MAT 2034
(n,d) α:17-Cl-38g
20-Ca-43
Radionuclide Production Cross Section
-3.953 To 678.7 %
Max Ratio
Min Ratio
TENDL Threshold 16.478 MeV
JEFF3.3 Threshold 16.478 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
20-Ca-43


MAT 2034
(n,d) α:17-Cl-38m1
20-Ca-43
Radionuclide Production Cross Section -17.88 To 750.0 %
Max Ratio
Min Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 19.000 MeV
Cross Section (micro-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
20-Ca-43