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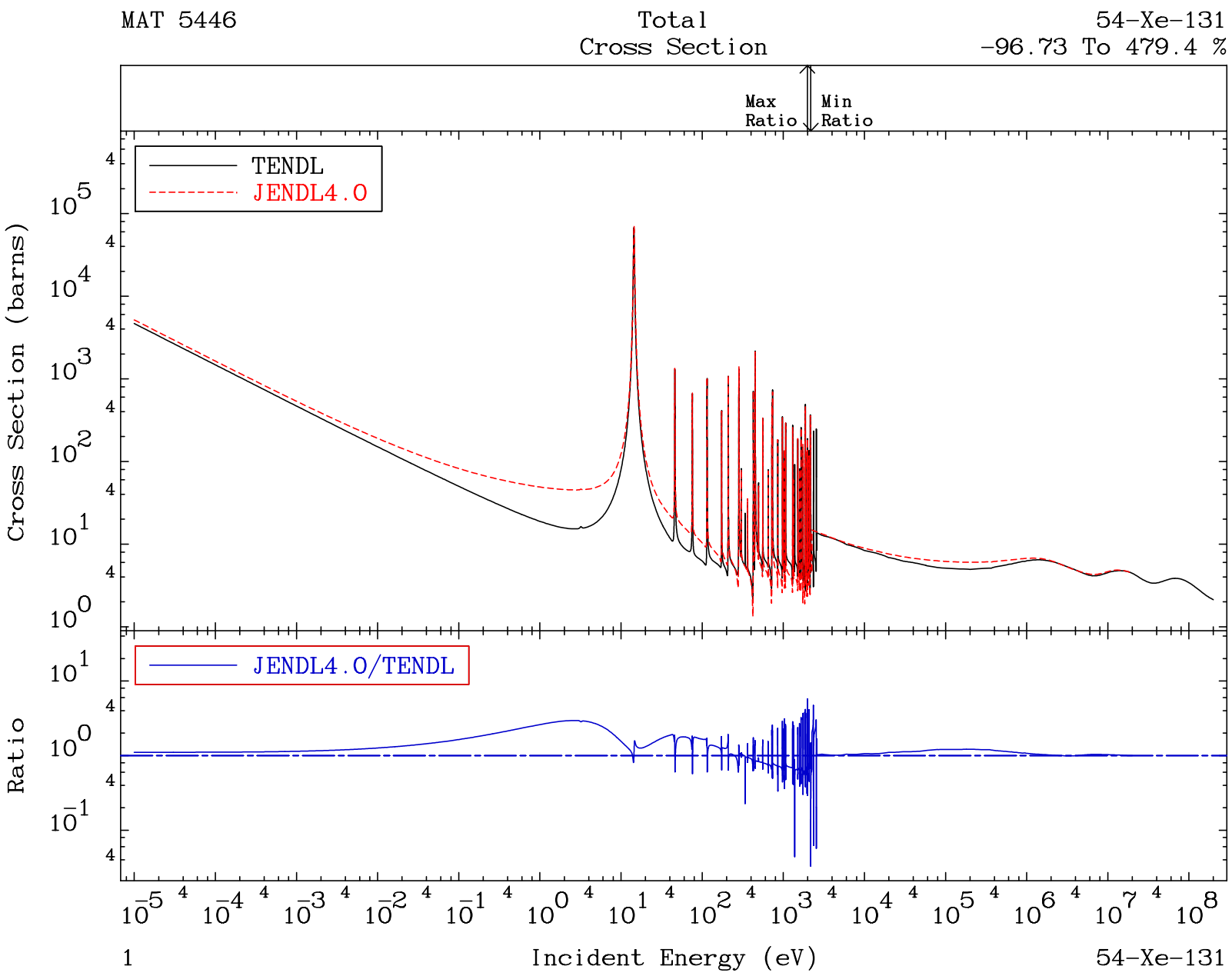
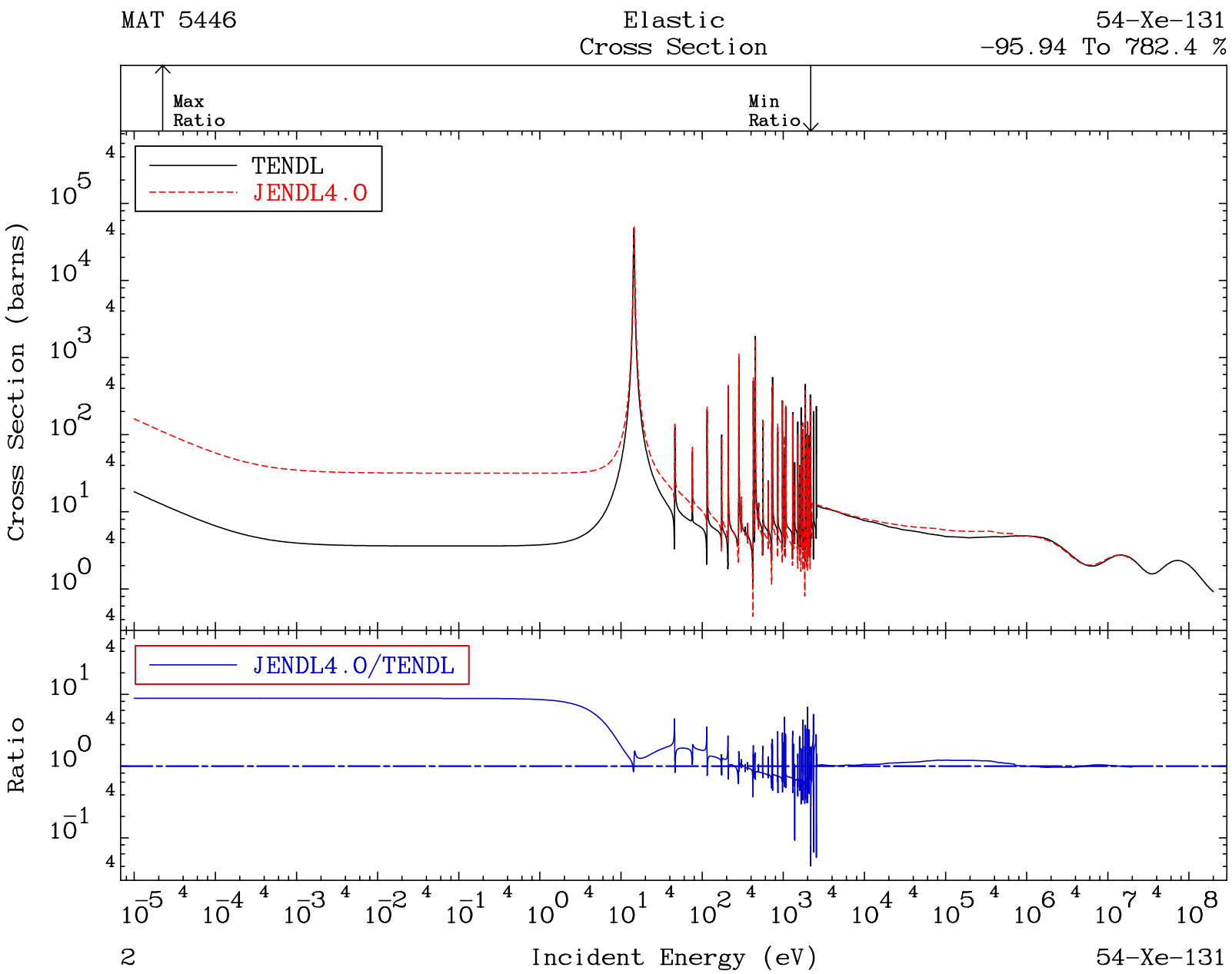
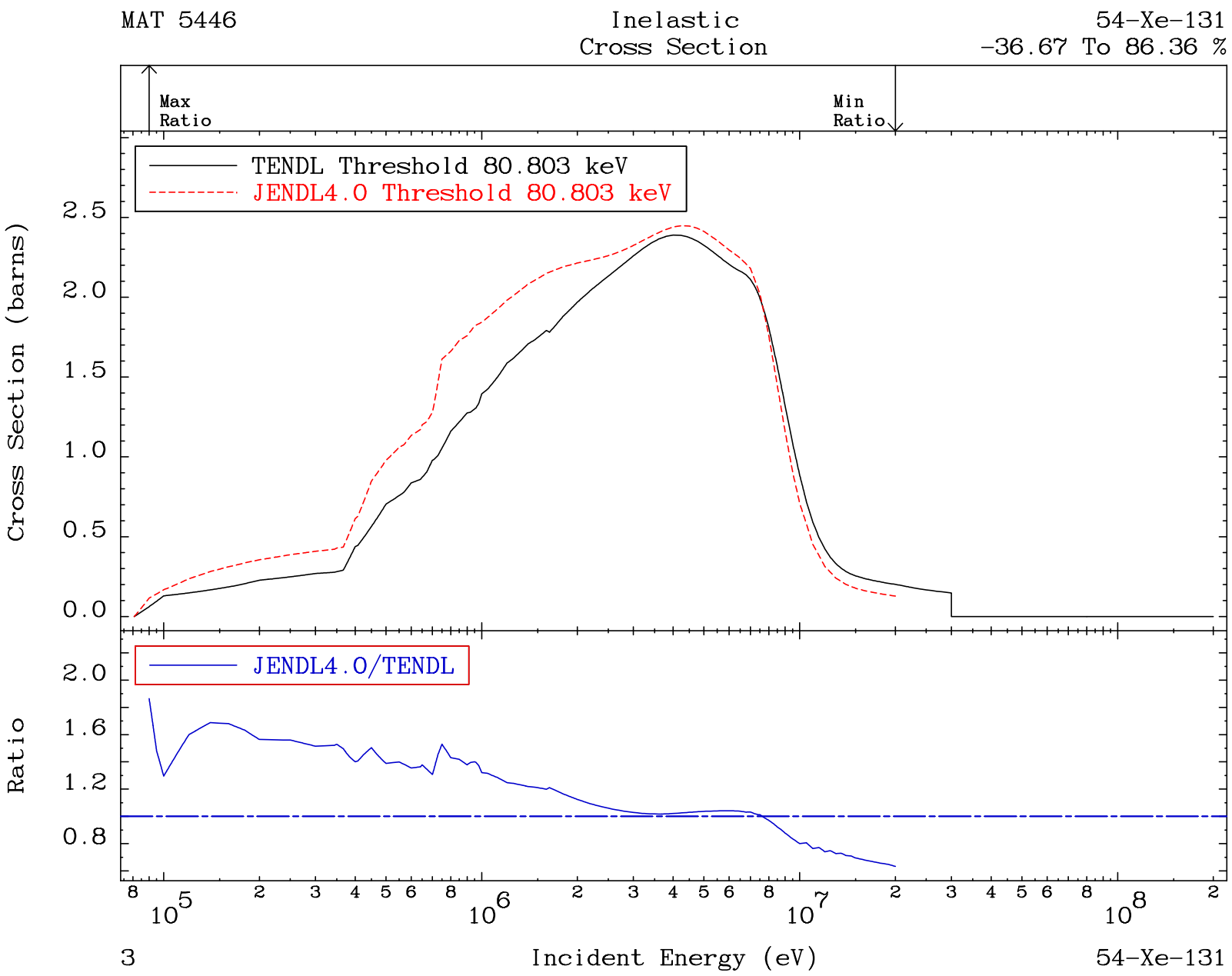
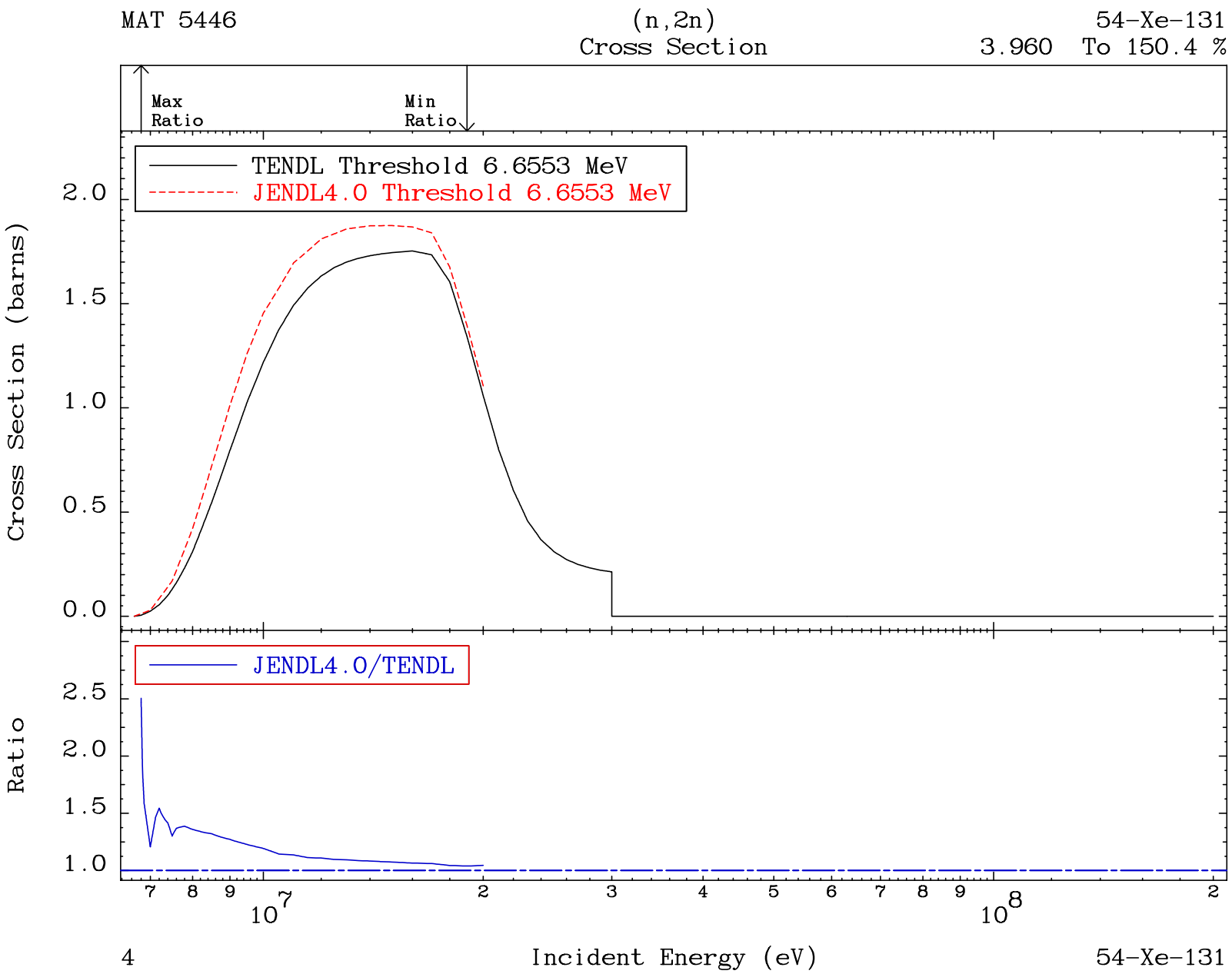
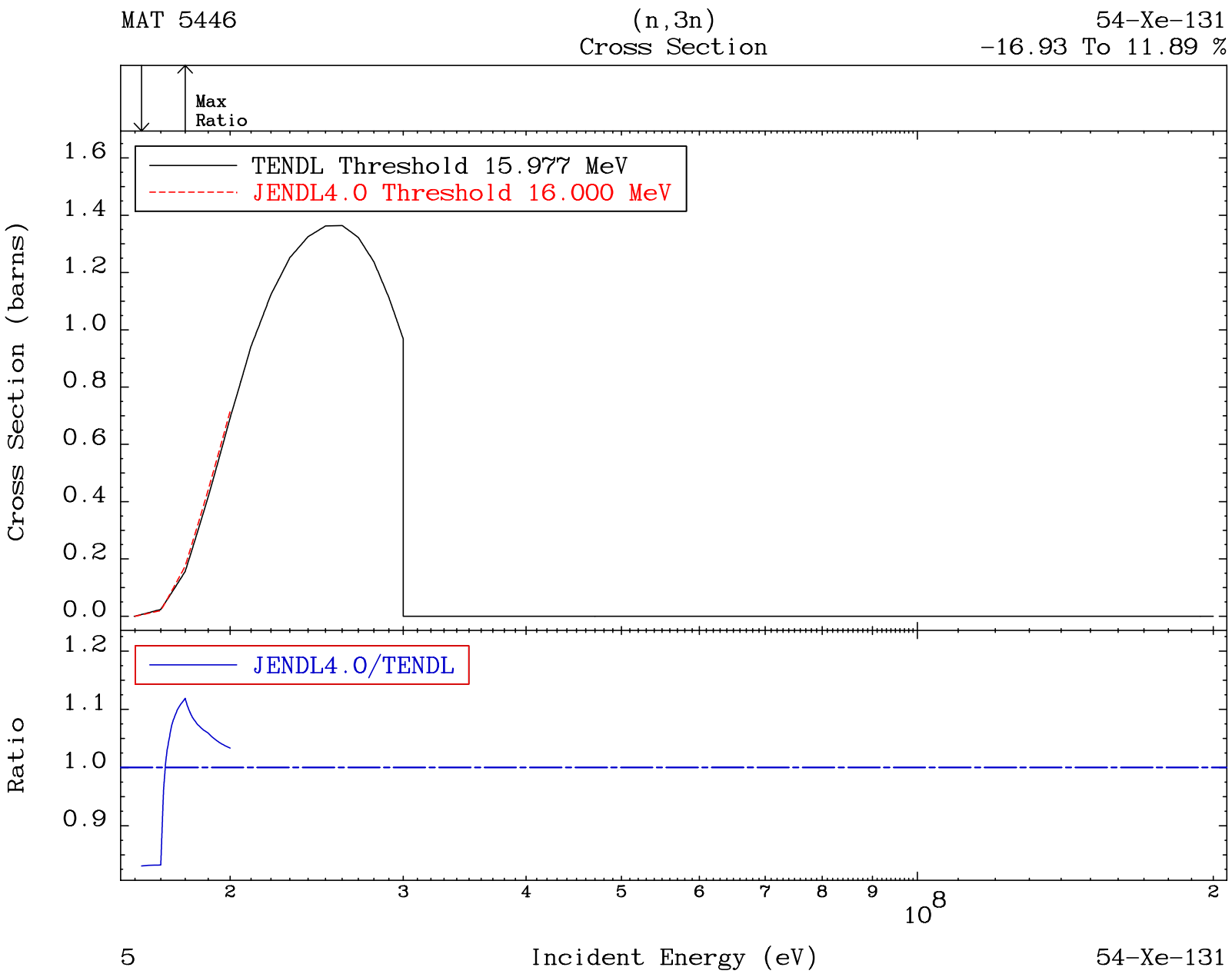
Press Mouse Button to Start

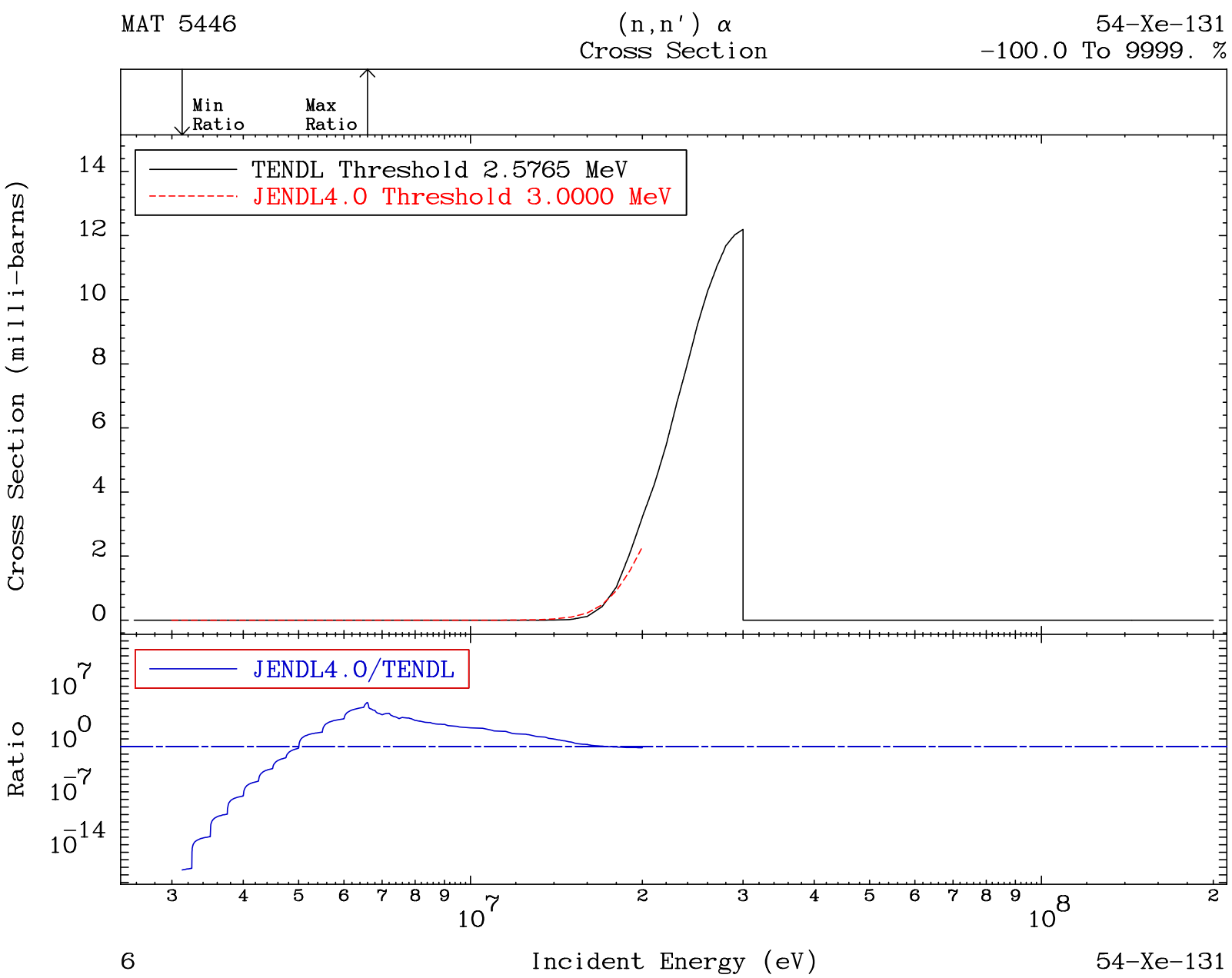

MAT 5446
Total
Cross Section
54-Xe-131
-96.73 To 479.4 %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
54-Xe-131

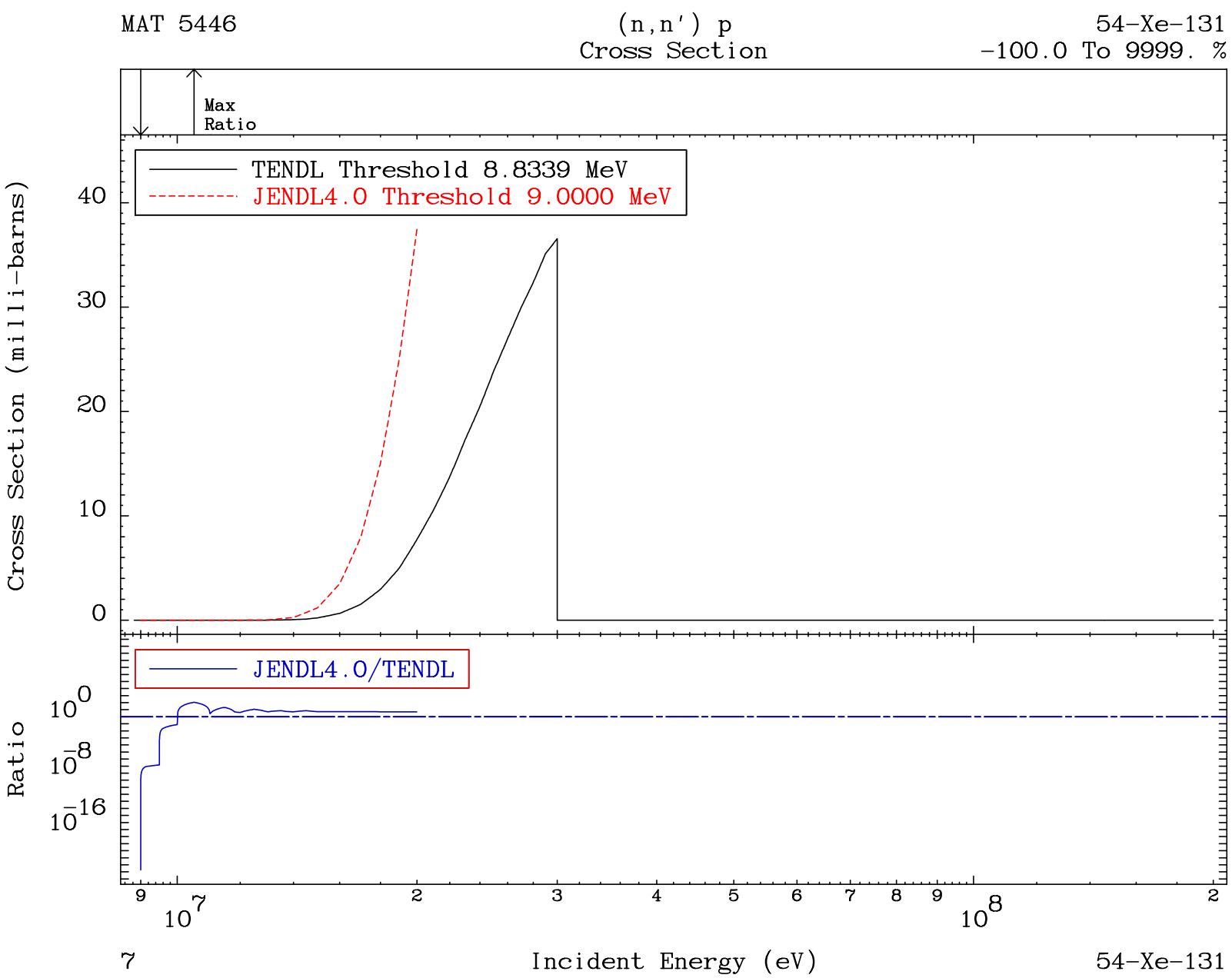

MAT 5446
Elastic
Cross Section
54-Xe-131
-95.94 To 782.4 %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
54-Xe-131

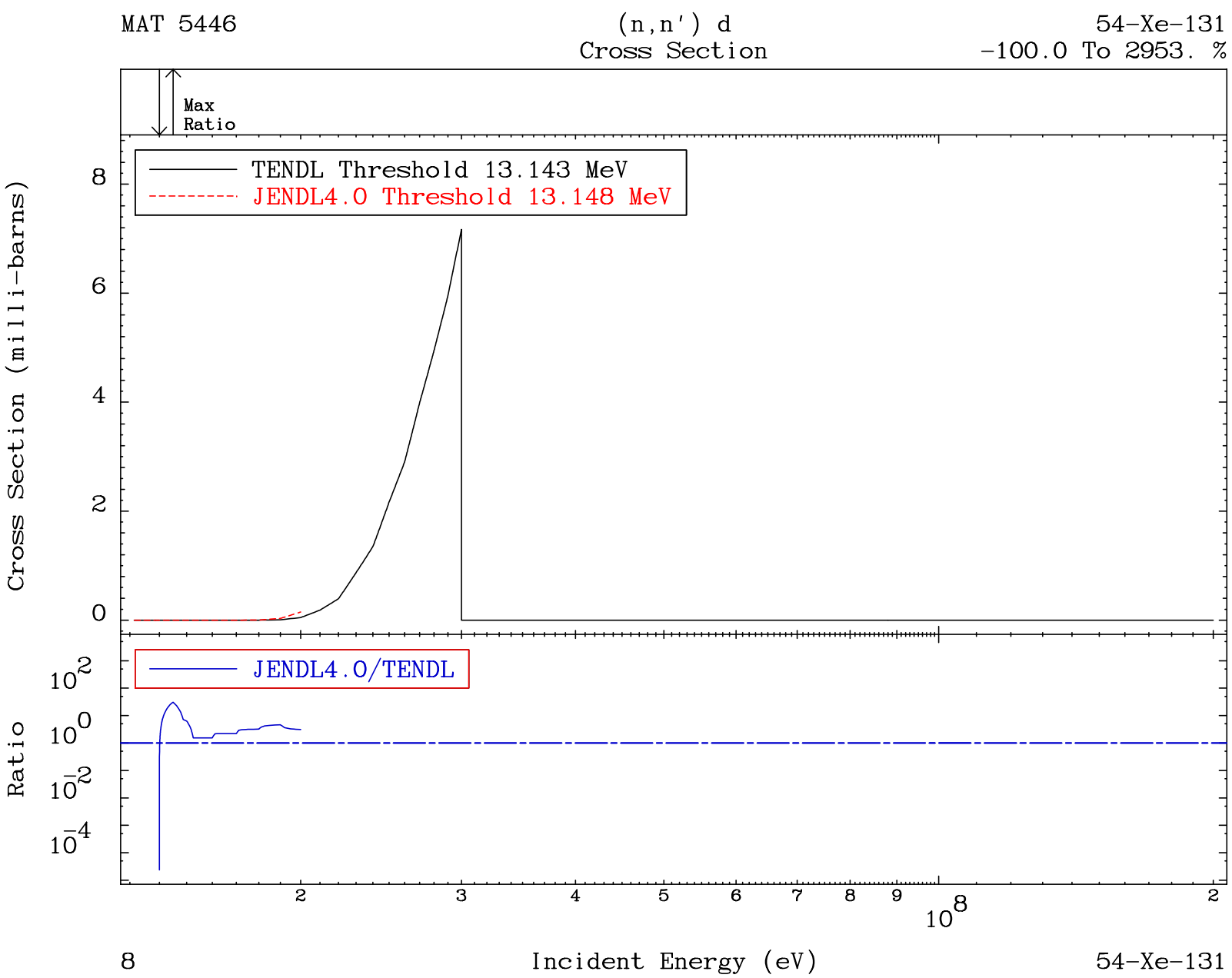

MAT 5446
Inelastic
Cross Section
54-Xe-131
-36.67 To 86.36 %
Max
Ratio
Min
Ratio
TENDL Threshold 80.803 keV
JENDL4.0 Threshold 80.803 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
2.0
1.6
1.2
0.8
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
54-Xe-131

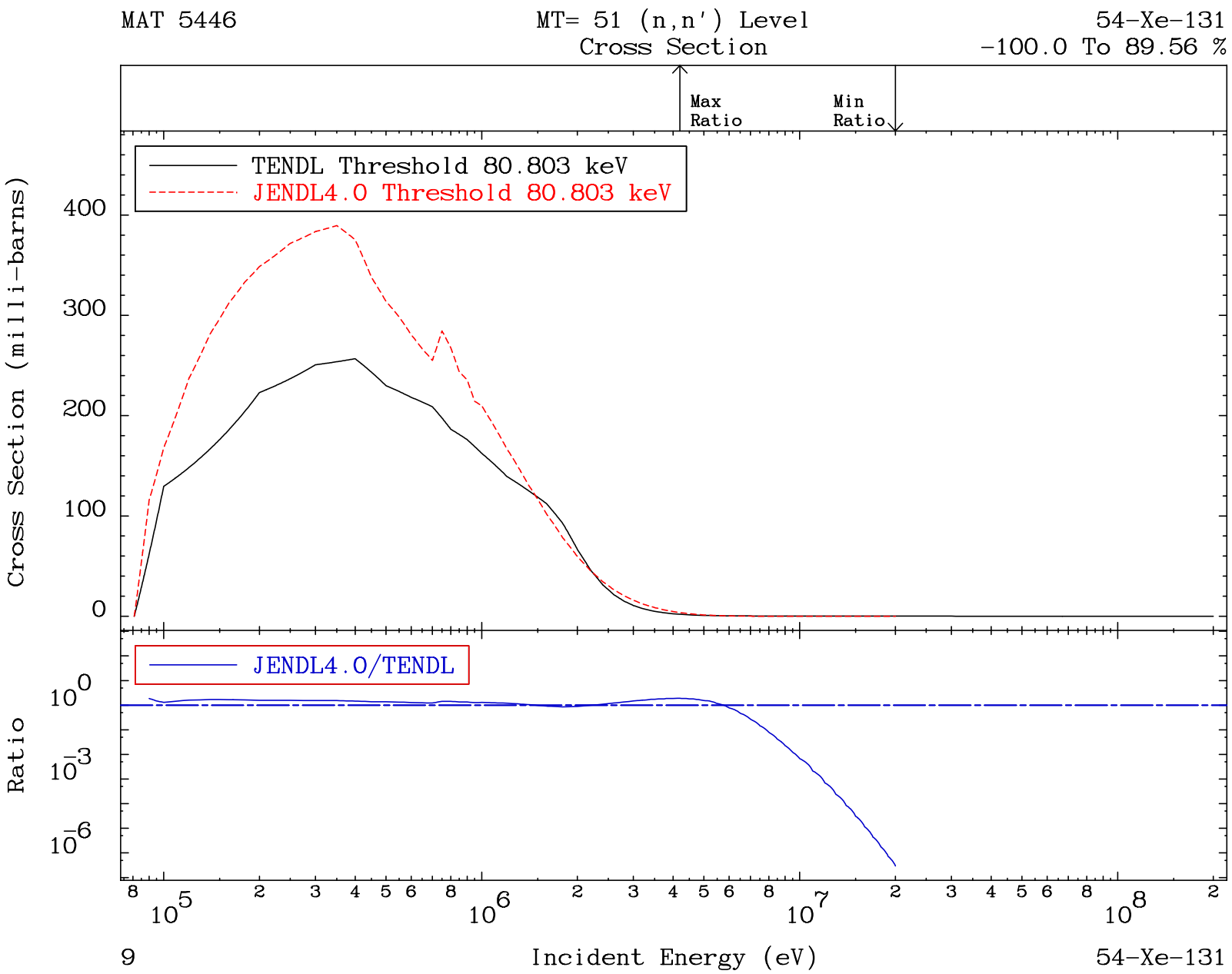

MAT 5446
(n,2n)
Cross Section
54-Xe-131
3.960 To 150.4 %
Max Ratio
Min Ratio
TENDL Threshold 6.6553 MeV
JENDL4.0 Threshold 6.6553 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
2.5
2.0
1.5
1.0
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
4
Incident Energy (eV)
54-Xe-131

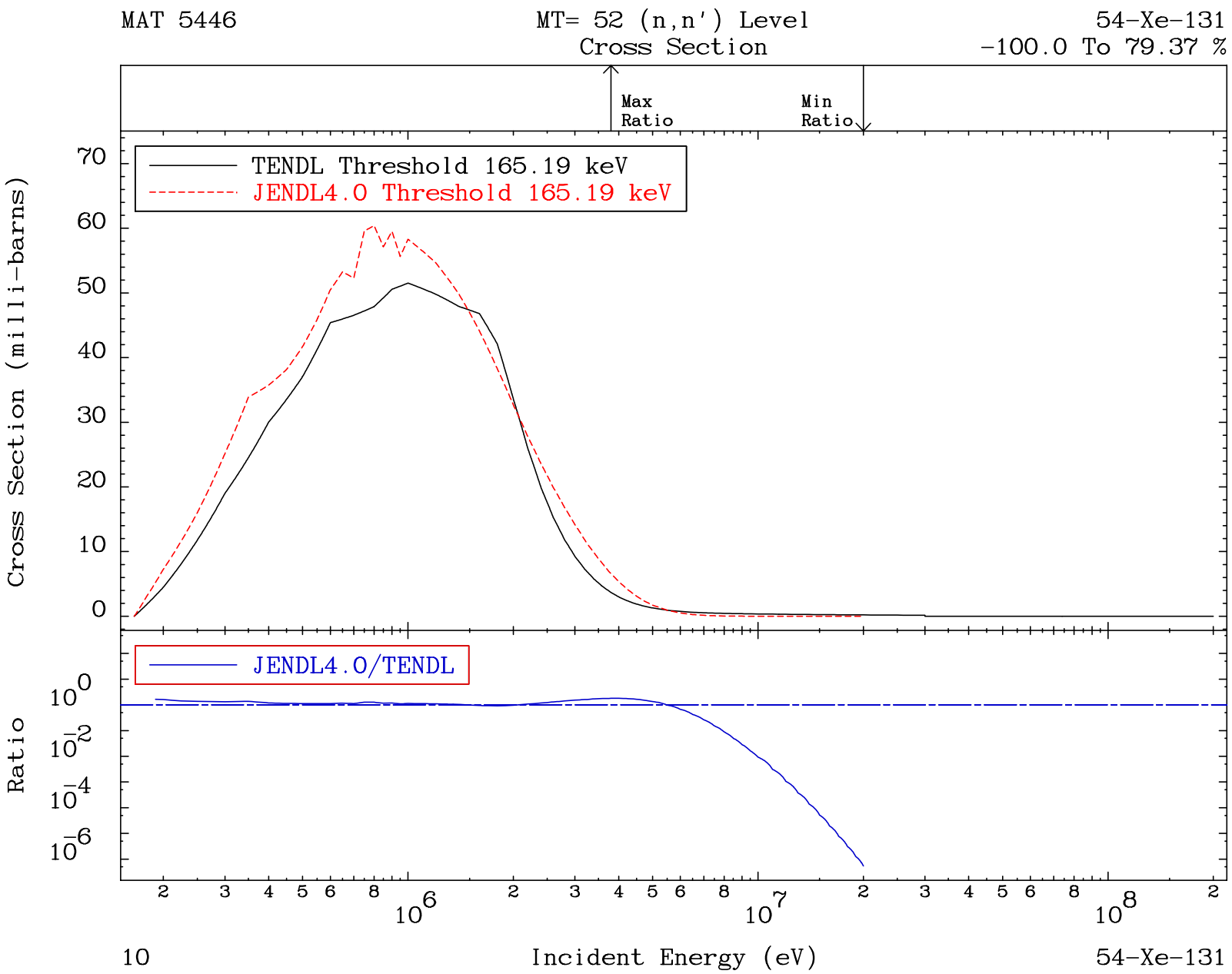

MAT 5446
(n,3n)
Cross Section
54-Xe-131
-16.93 To 11.89 %
Max
Ratio
TENDL Threshold 15.977 MeV
JENDL4.0 Threshold 16.000 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
1.2
1.1
1.0
0.9
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
54-Xe-131

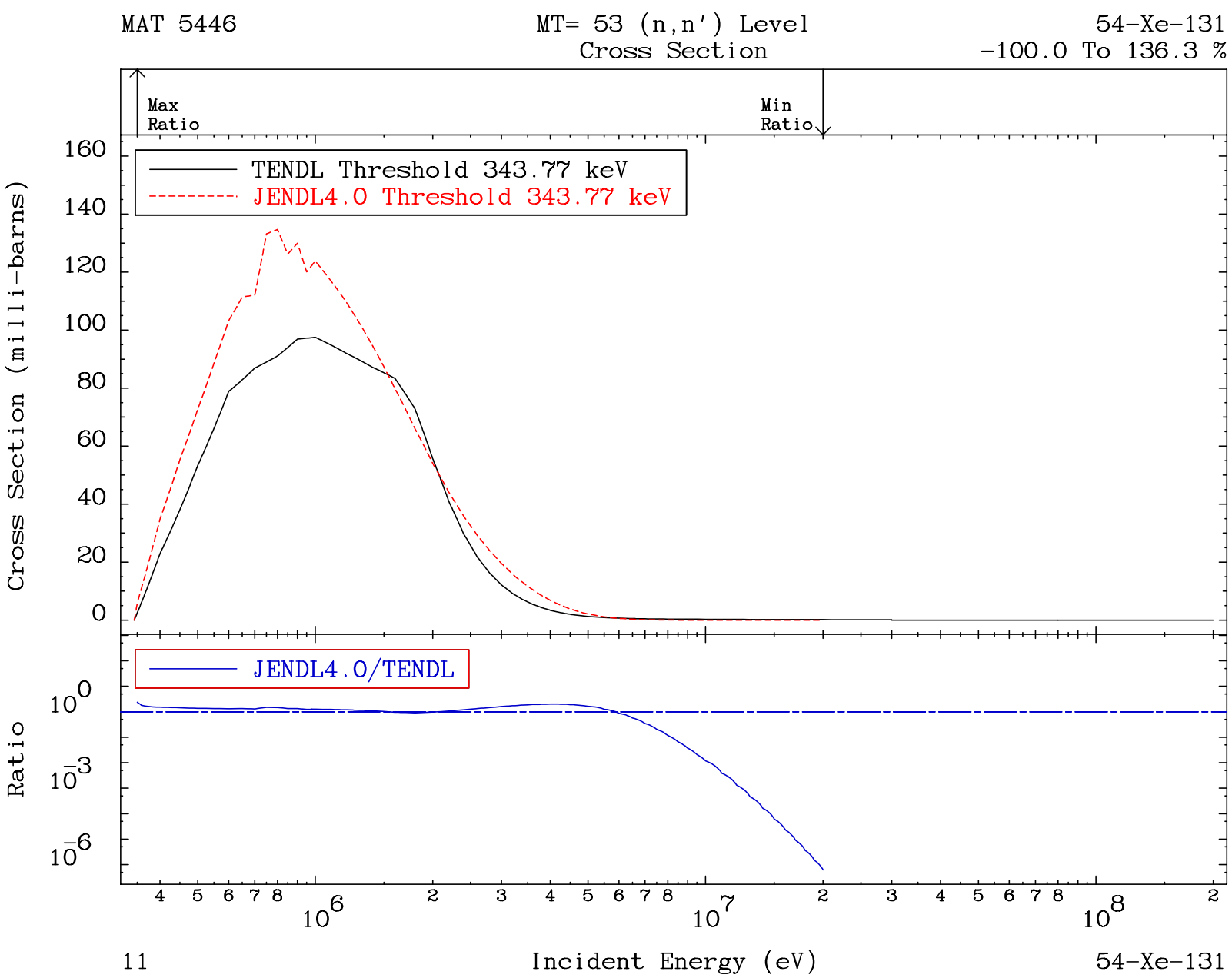

MAT 5446
(n,n') α
Cross Section
54-Xe-131
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5765 MeV
JENDL4.0 Threshold 3.0000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
6
54-Xe-131

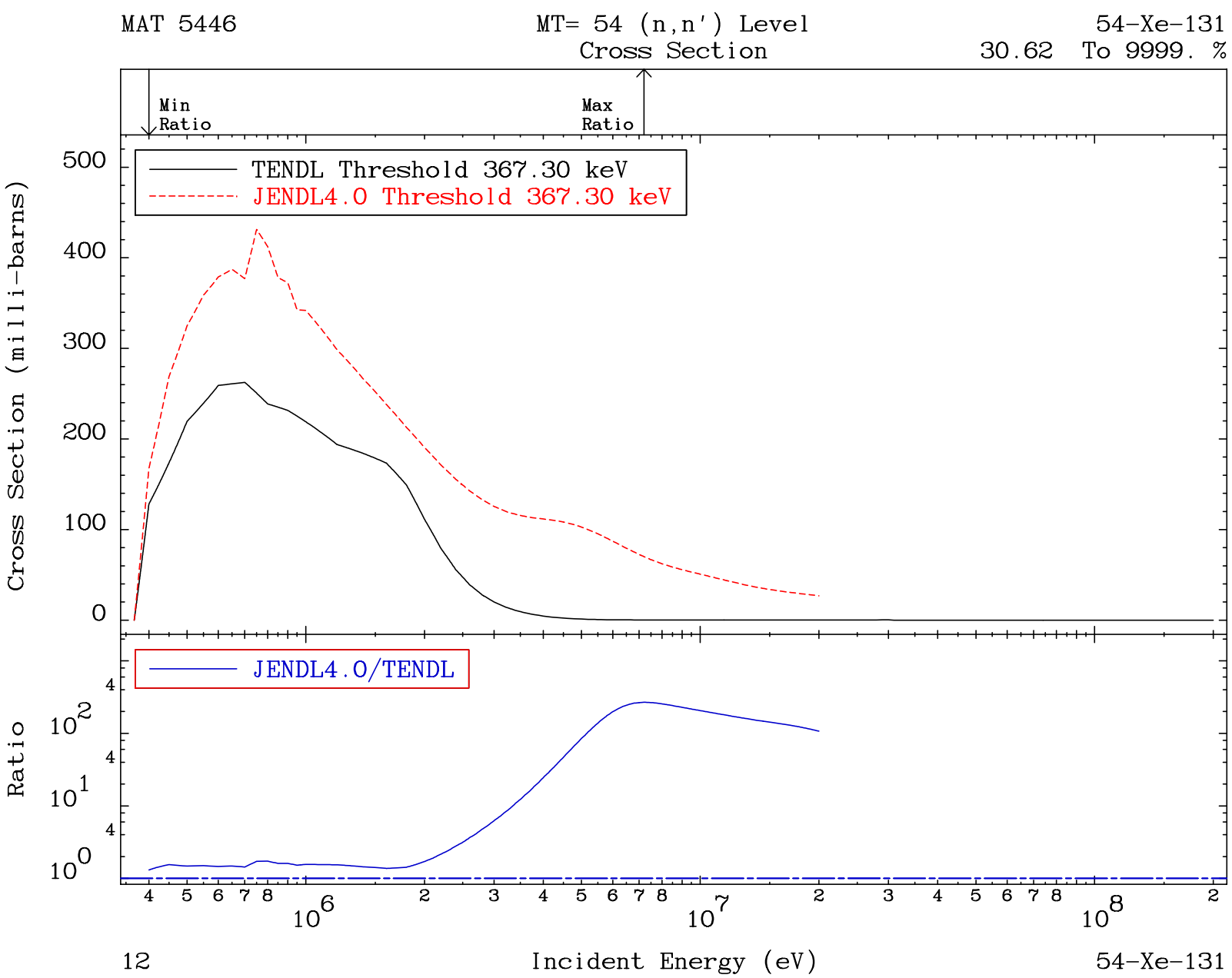

MAT 5446
(n,n') p
Cross Section
54-Xe-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.8339 MeV
JENDL4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-8
10^-16
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
54-Xe-131

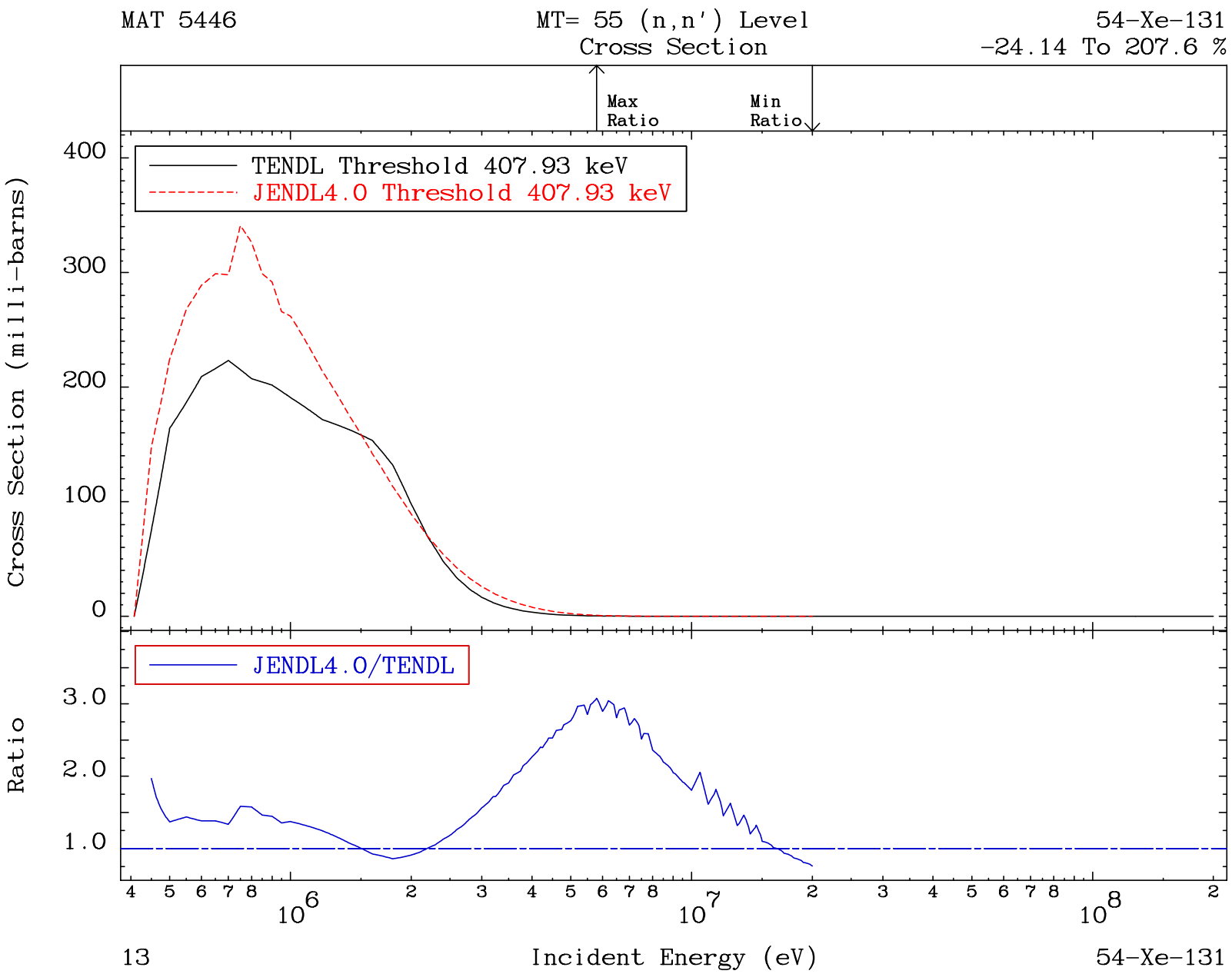

MAT 5446
(n,n') d
Cross Section
54-Xe-131
-100.0 To 2953. %
Max
Ratio
TENDL Threshold 13.143 MeV
JENDL4.0 Threshold 13.148 MeV
Cross Section (milli-barns)
0
2
4
6
8
JENDL4.0/TENDL
Ratio
10^2
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
54-Xe-131

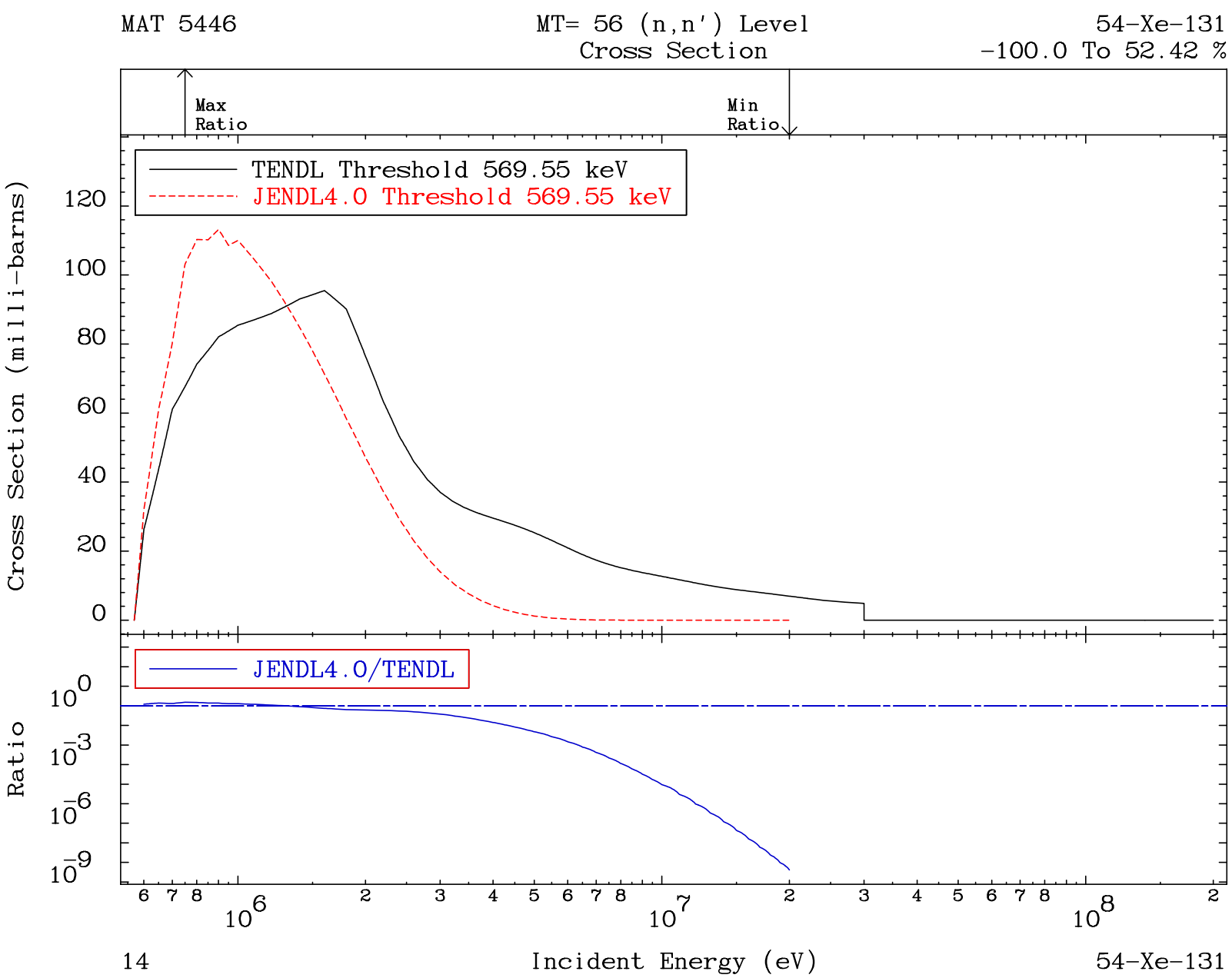

MAT 5446
MT= 51 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 89.56 %
Max Ratio
Min Ratio
TENDL Threshold 80.803 keV
JENDL4.0 Threshold 80.803 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^5
10^6
10^7
10^8
Incident Energy (eV)
9
54-Xe-131

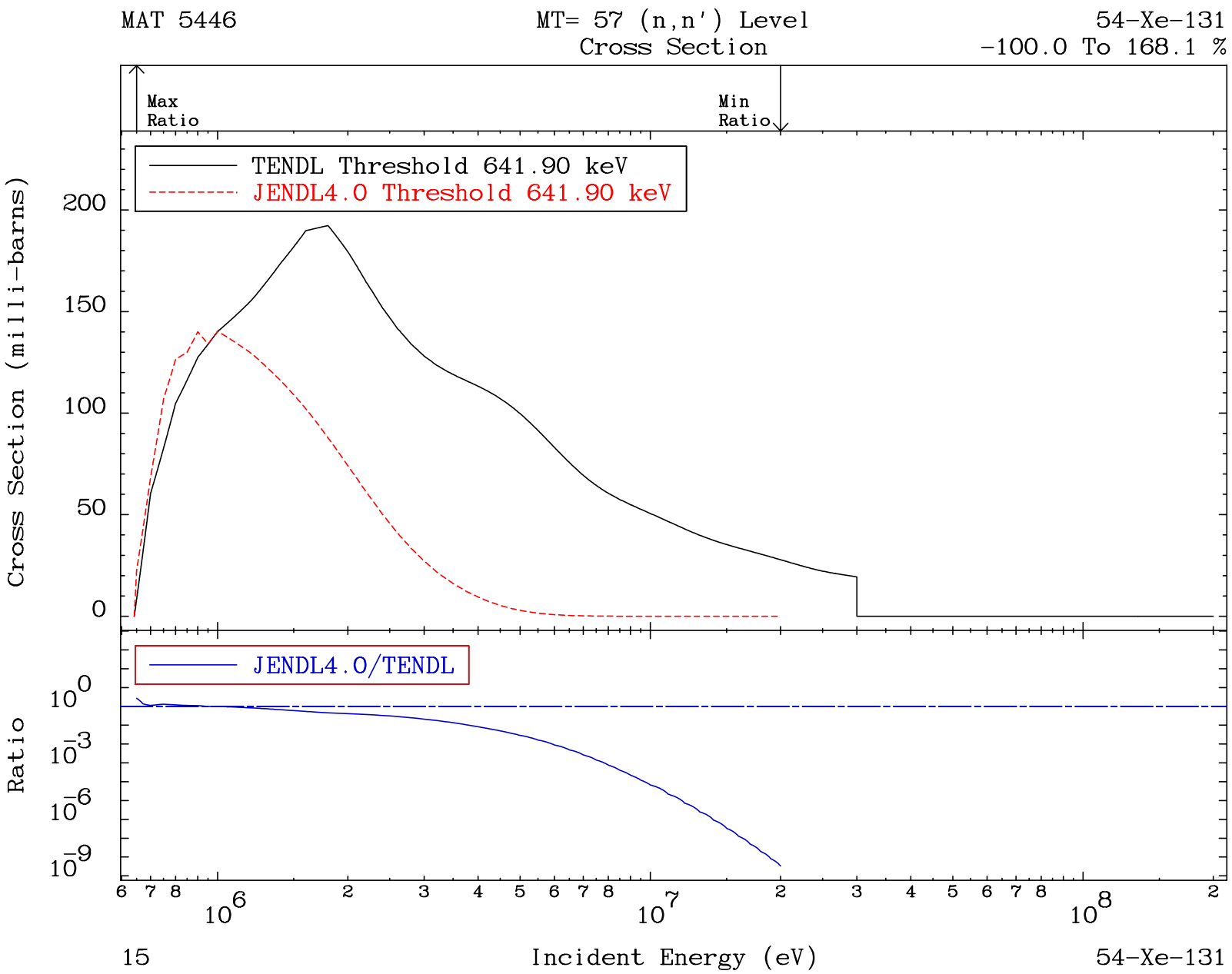

MAT 5446
MT= 52 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 79.37 %
Max
Ratio
Min
Ratio
TENDL Threshold 165.19 keV
JENDL4.0 Threshold 165.19 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
54-Xe-131

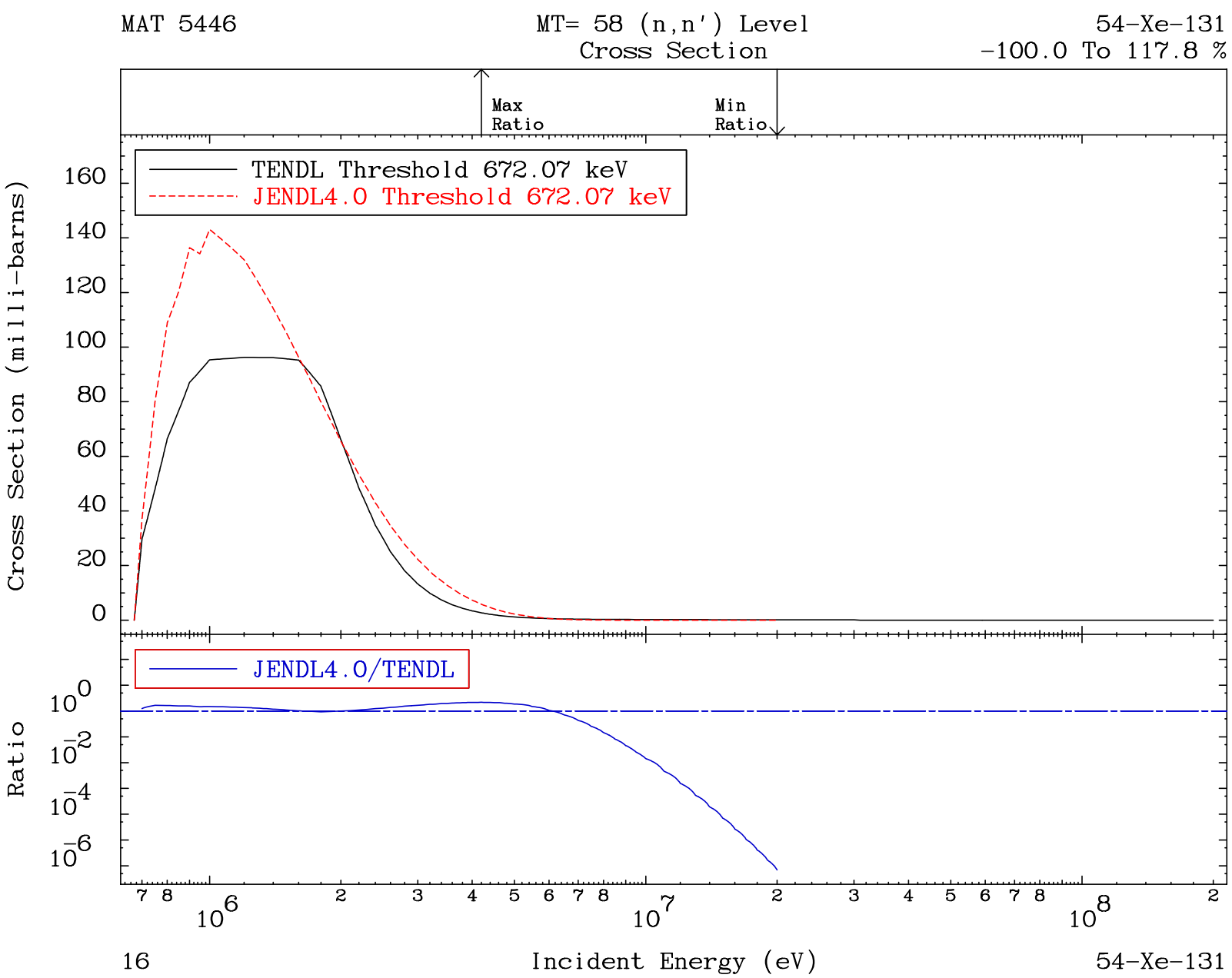

MAT 5446
MT= 53 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 136.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 343.77 keV
JENDL4.0 Threshold 343.77 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
54-Xe-131

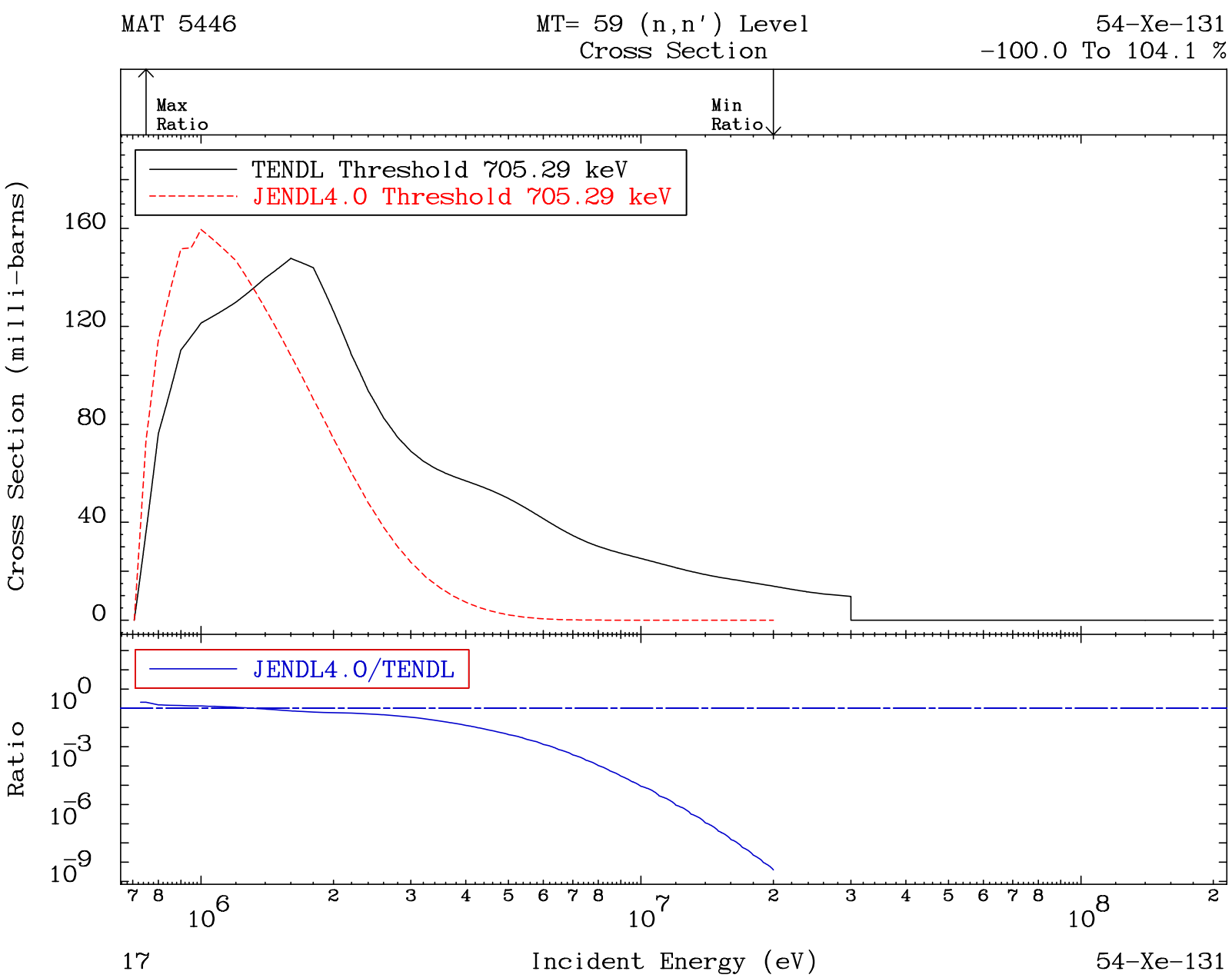

MAT 5446
MT= 54 (n,n') Level
Cross Section
54-Xe-131
30.62 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 367.30 keV
JENDL4.0 Threshold 367.30 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
54-Xe-131

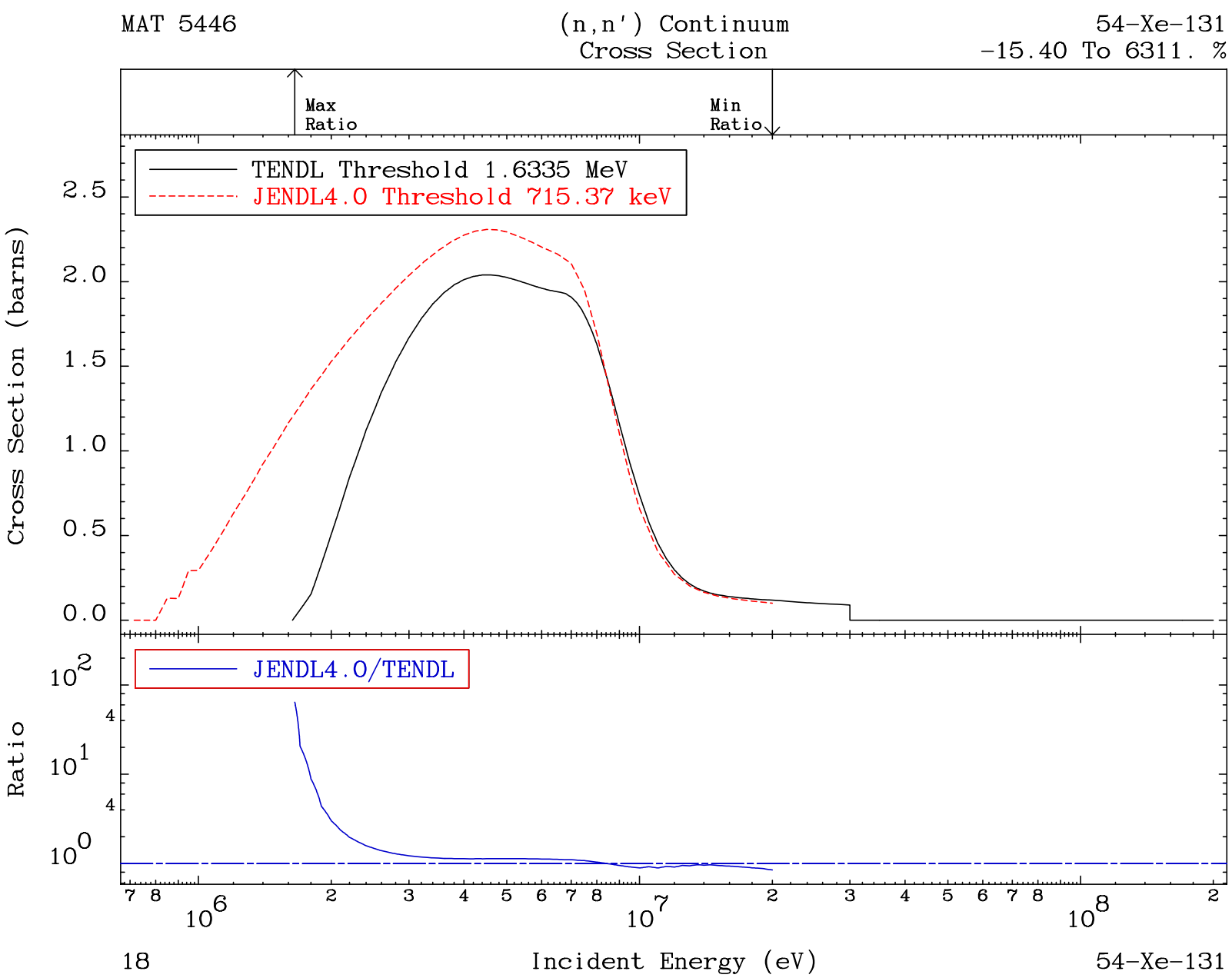

MAT 5446
MT= 55 (n,n') Level
Cross Section
54-Xe-131
-24.14 To 207.6 %
Max
Ratio
Min
Ratio
TENDL Threshold 407.93 keV
JENDL4.0 Threshold 407.93 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
3.0
2.0
1.0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
54-Xe-131

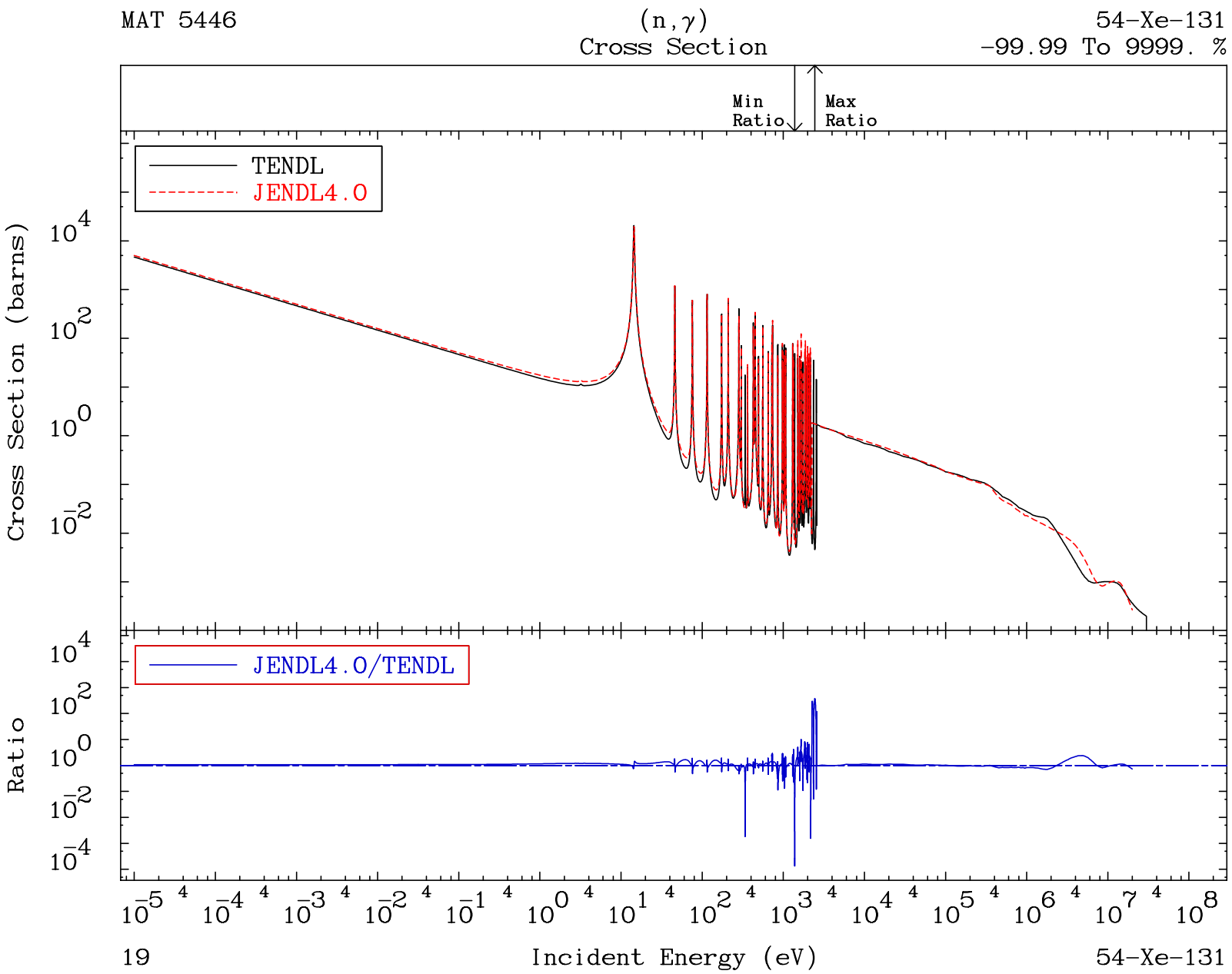

MAT 5446
MT= 56 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 52.42 %
Max
Ratio
Min
Ratio
TENDL Threshold 569.55 keV
JENDL4.0 Threshold 569.55 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
54-Xe-131

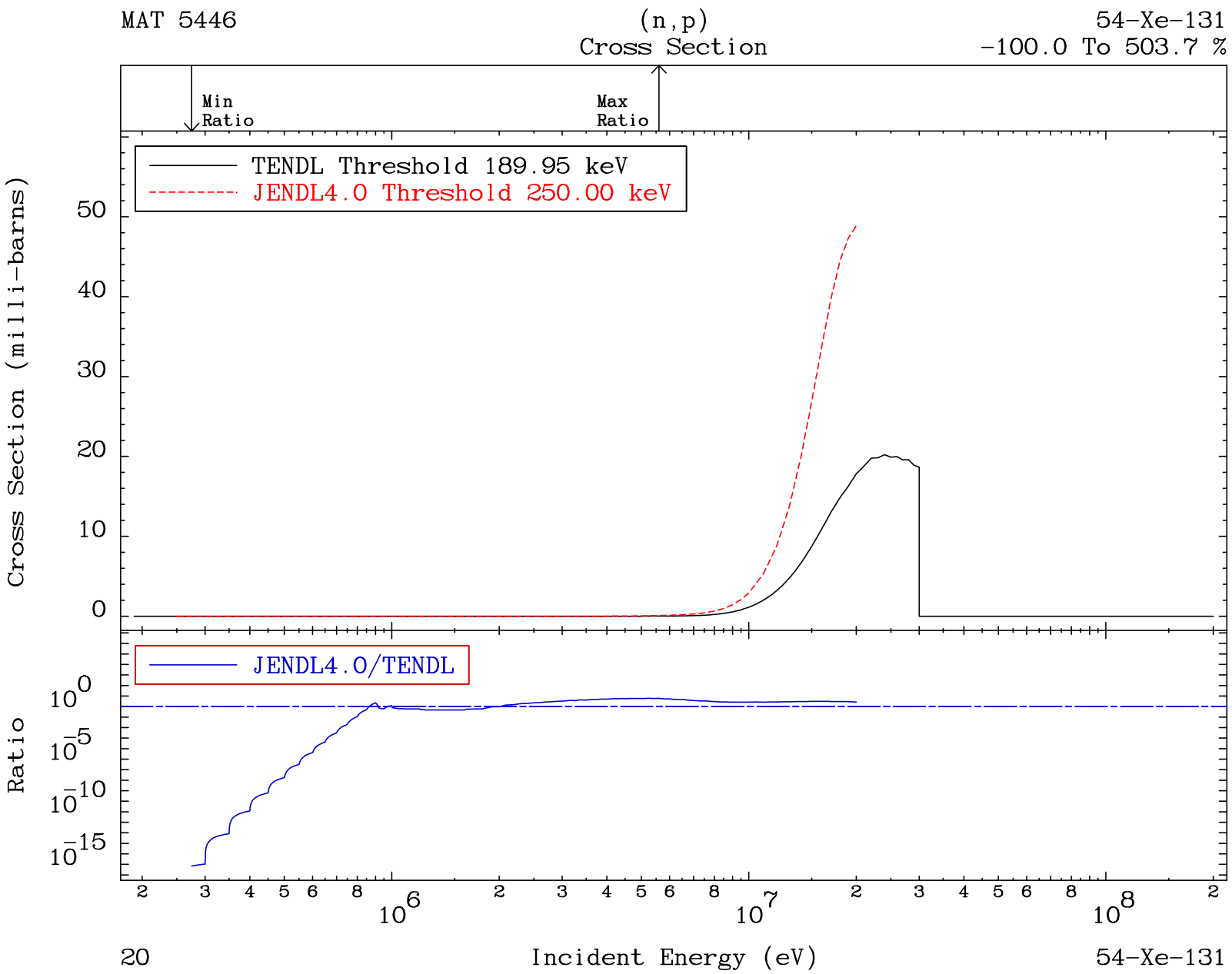

MAT 5446
MT= 57 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 168.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 641.90 keV
JENDL4.0 Threshold 641.90 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
54-Xe-131

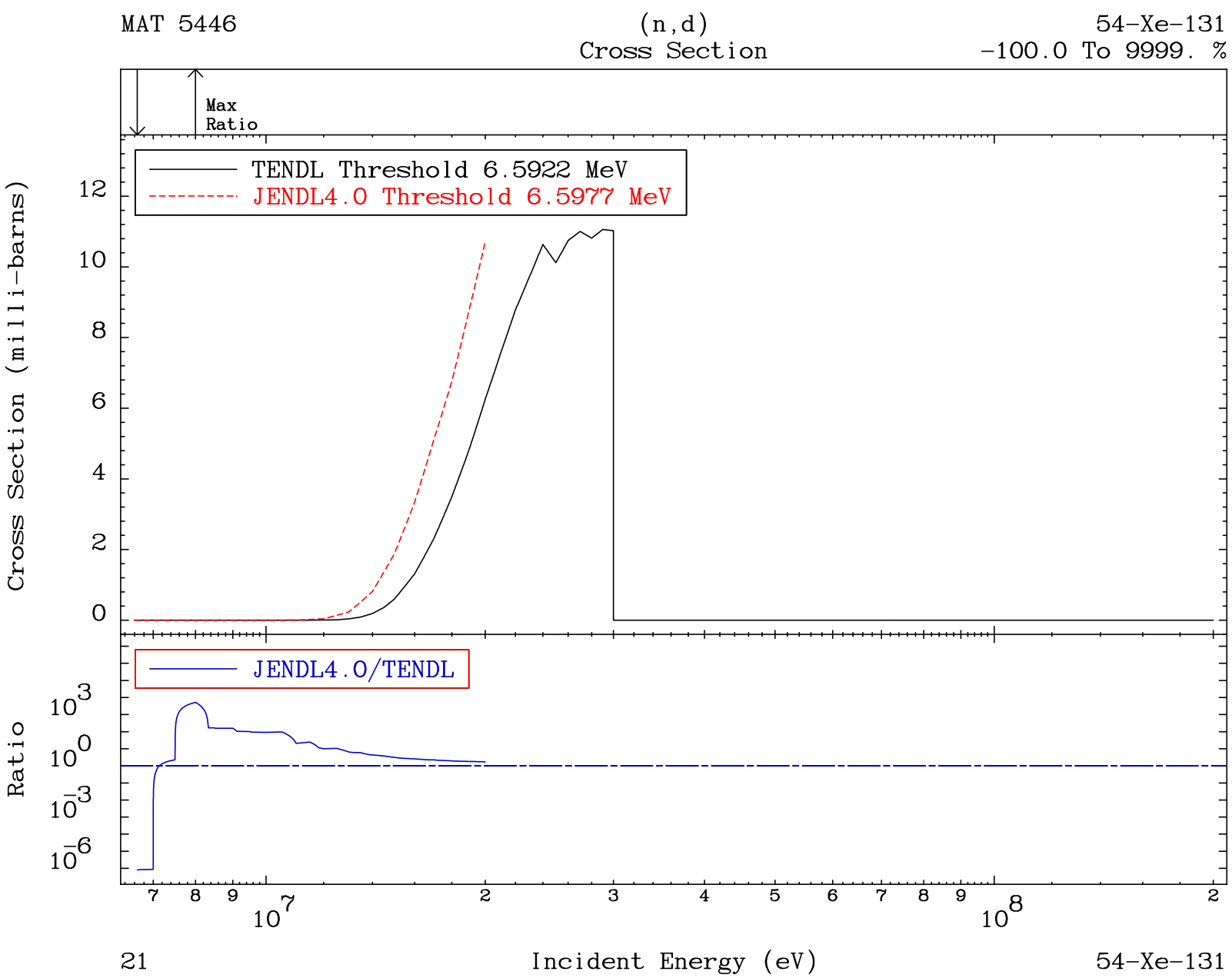

MAT 5446
MT= 58 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 117.8 %
Max
Ratio
Min
Ratio
TENDL Threshold 672.07 keV
JENDL4.0 Threshold 672.07 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
54-Xe-131

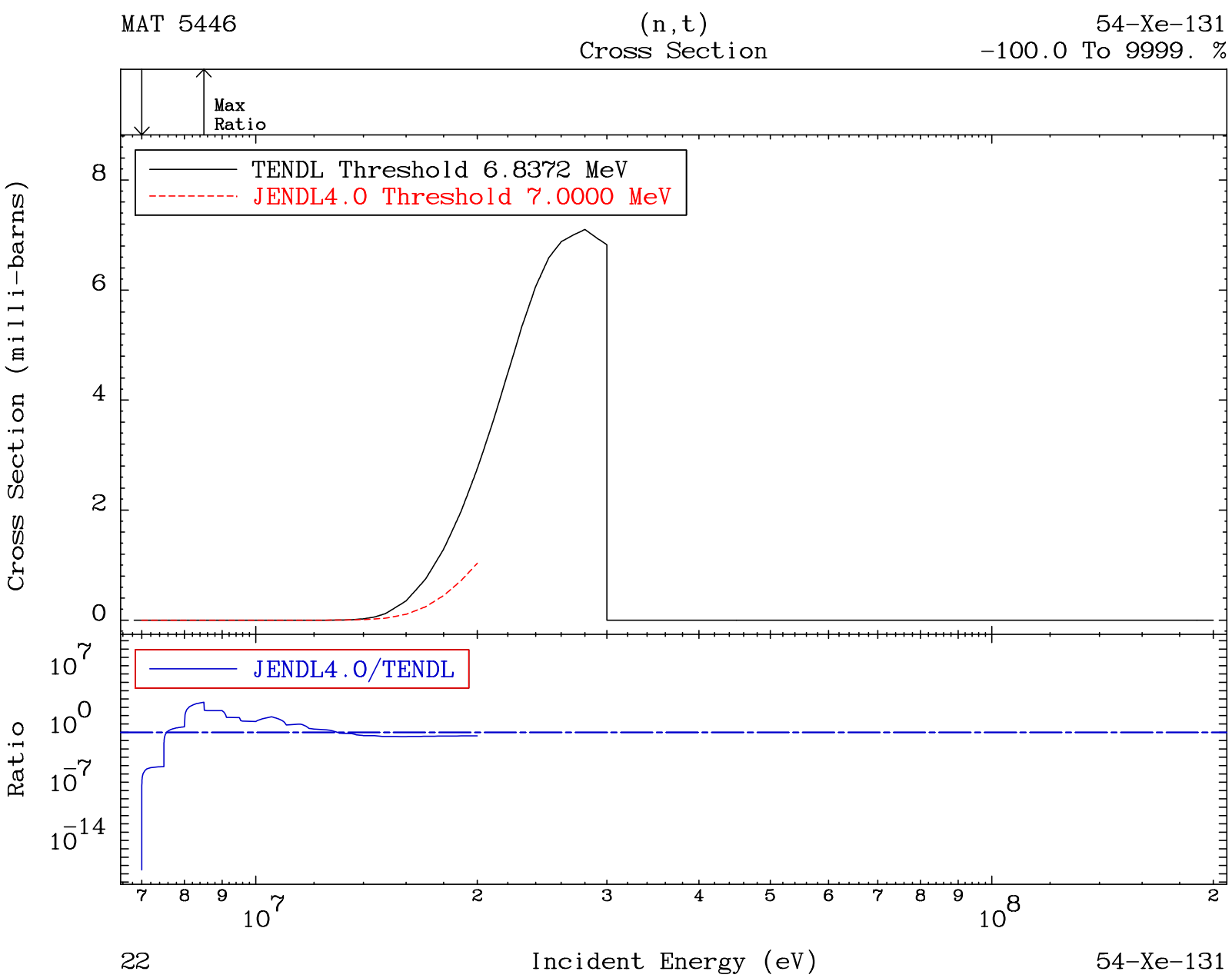

MAT 5446
MT= 59 (n,n') Level
Cross Section
54-Xe-131
-100.0 To 104.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 705.29 keV
JENDL4.0 Threshold 705.29 keV
Cross Section (milli-barns)
160
120
80
40
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
54-Xe-131

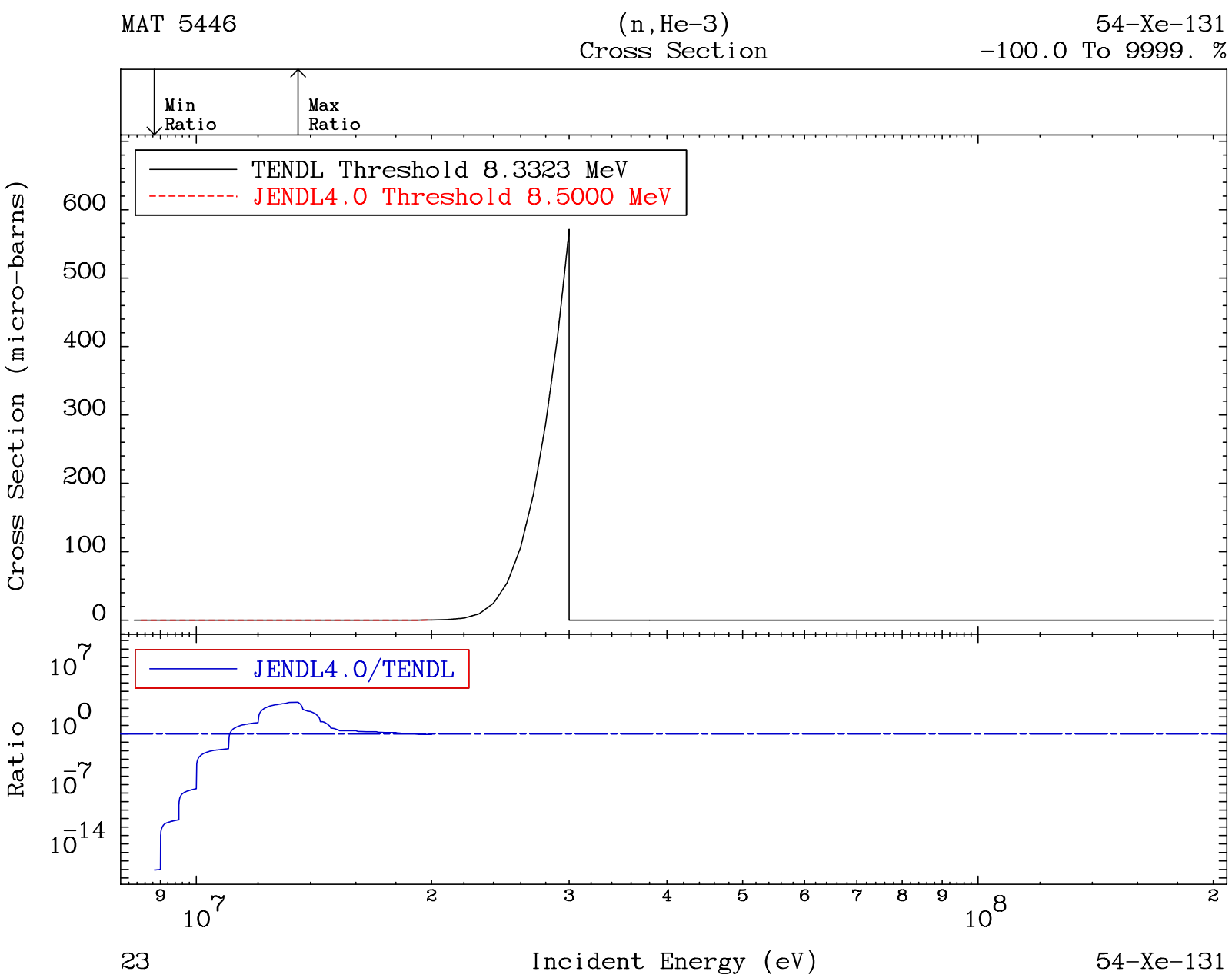

MAT 5446
(n,n') Continuum
Cross Section
54-Xe-131
-15.40 To 6311. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.6335 MeV
JENDL4.0 Threshold 715.37 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
54-Xe-131

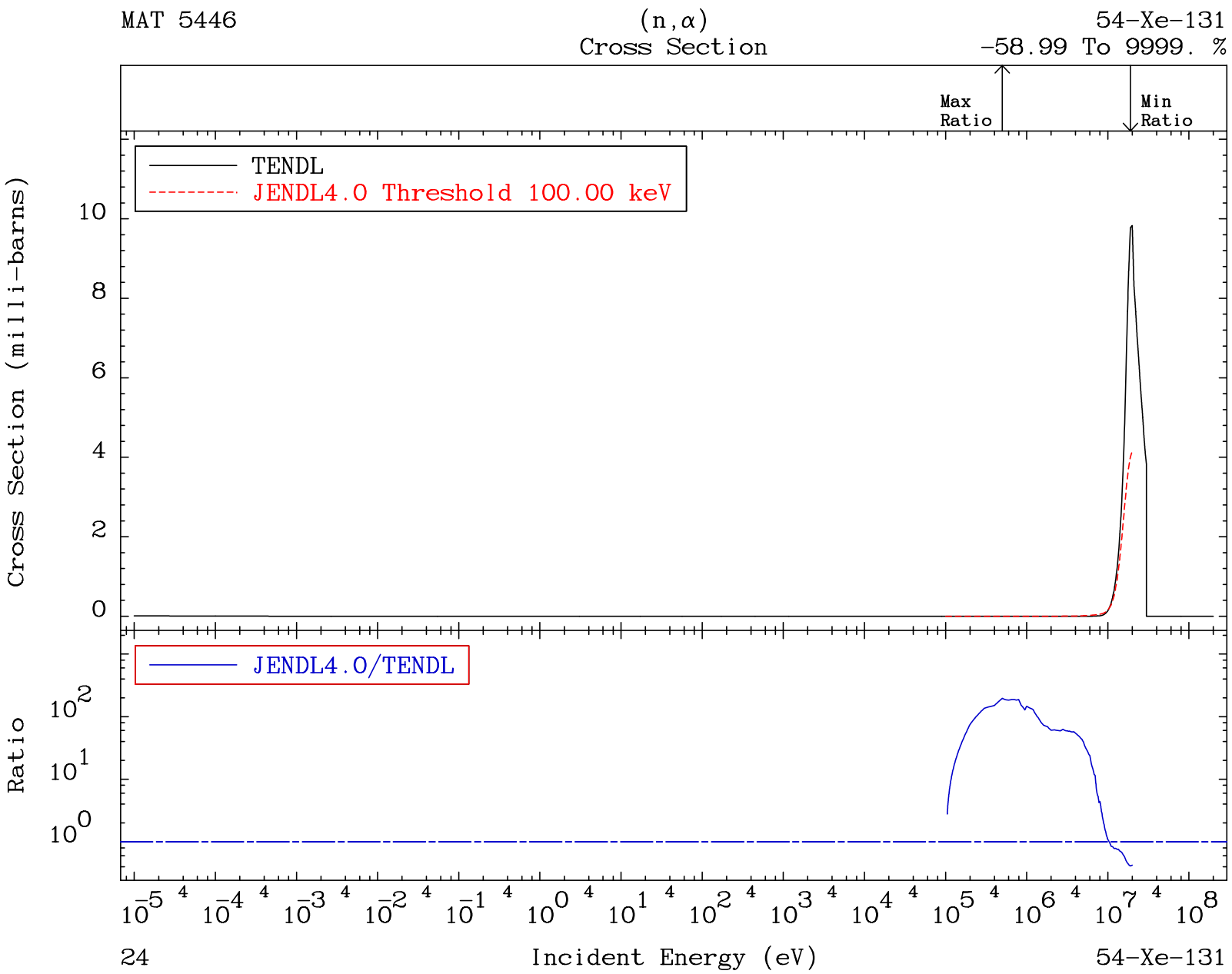

MAT 5446
(n,γ)
Cross Section
54-Xe-131
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
19
54-Xe-131

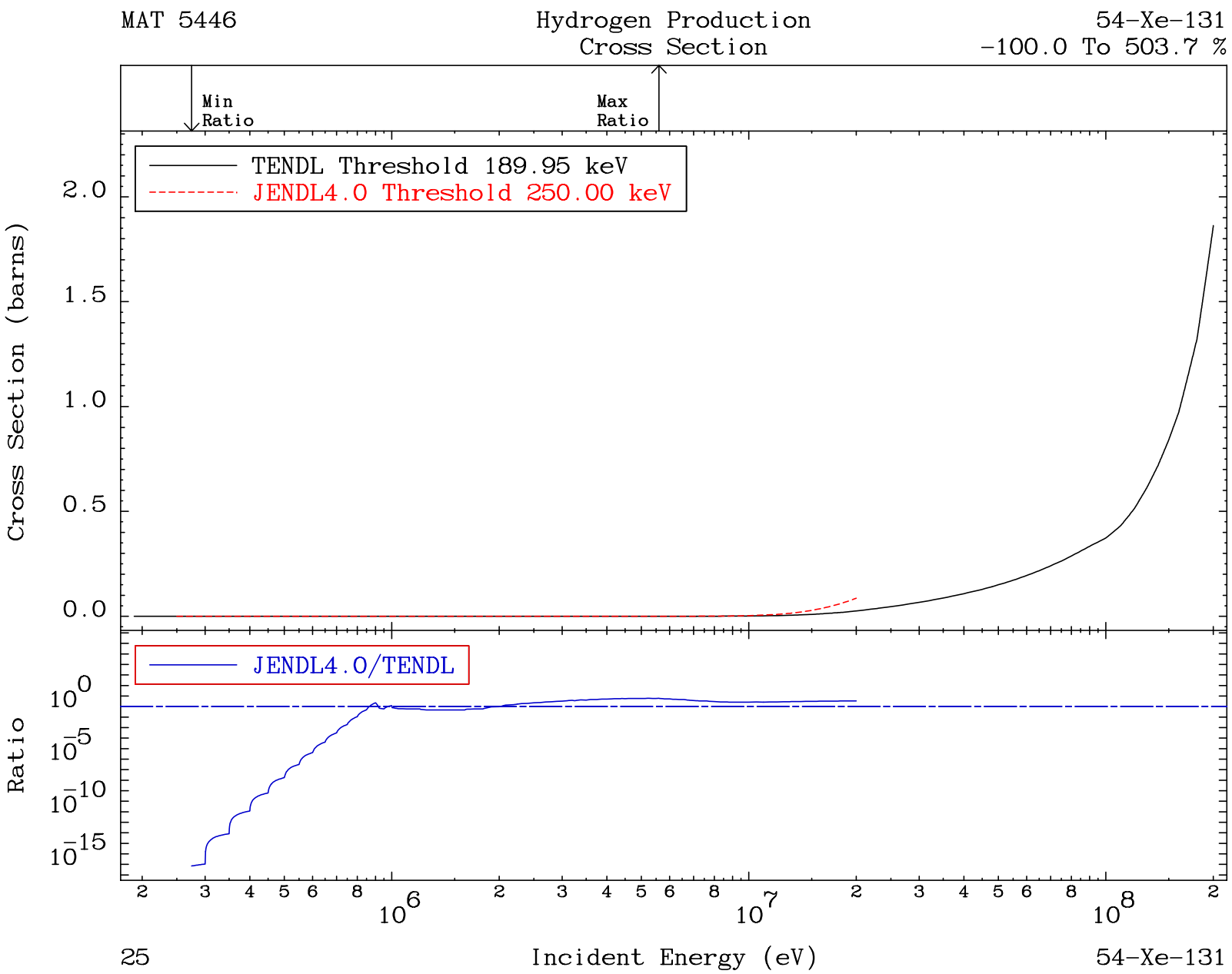

MAT 5446
(n,p)
Cross Section
54-Xe-131
-100.0 To 503.7 %
Min Ratio
Max Ratio
TENDL Threshold 189.95 keV
JENDL4.0 Threshold 250.00 keV
Cross Section (milli-barns)
0
10
20
30
40
50
JENDL4.0/TENDL
Ratio
10^0
10^-5
10^-10
10^-15
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
54-Xe-131

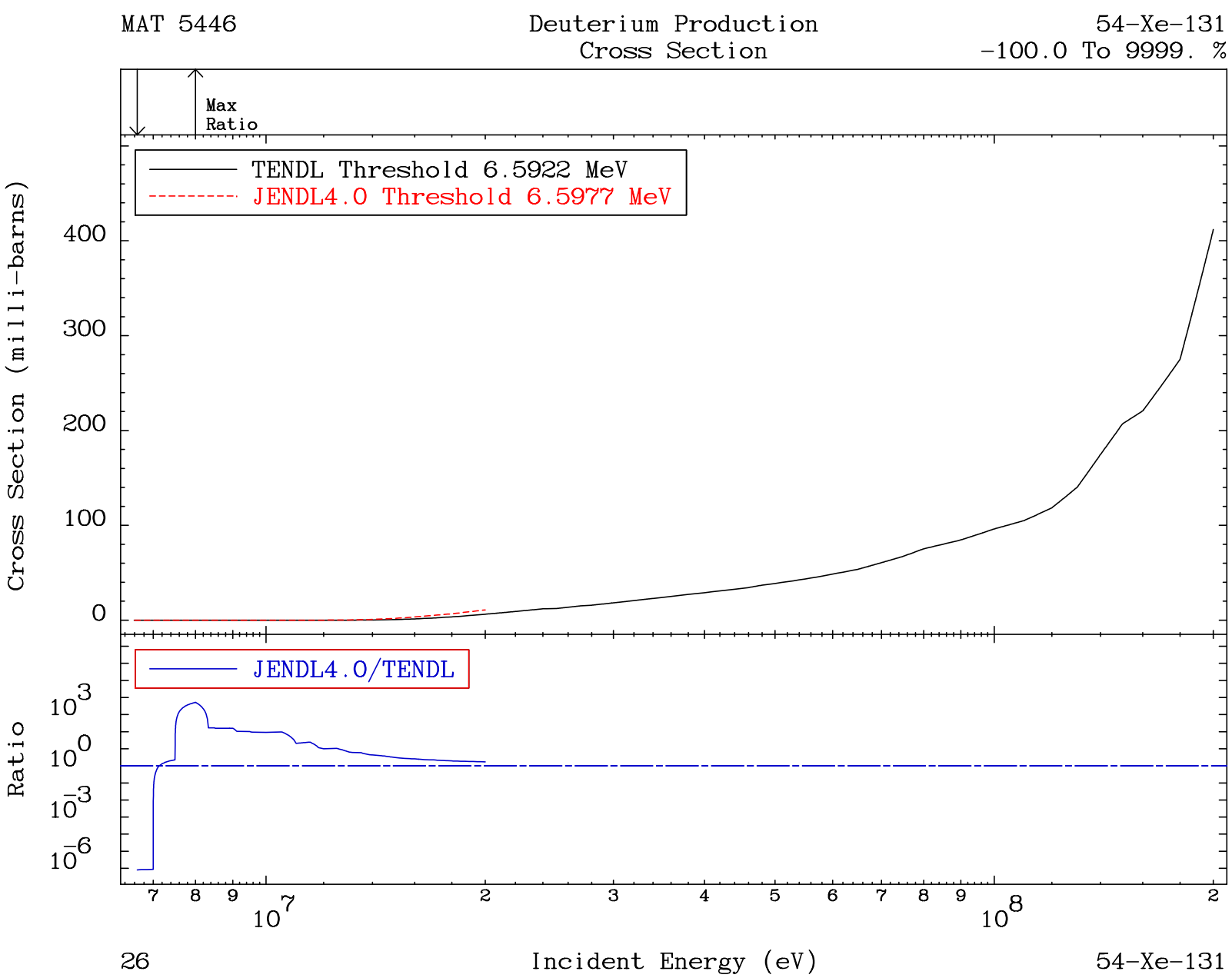

MAT 5446
(n,d)
Cross Section
54-Xe-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.5922 MeV
JENDL4.0 Threshold 6.5977 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
54-Xe-131

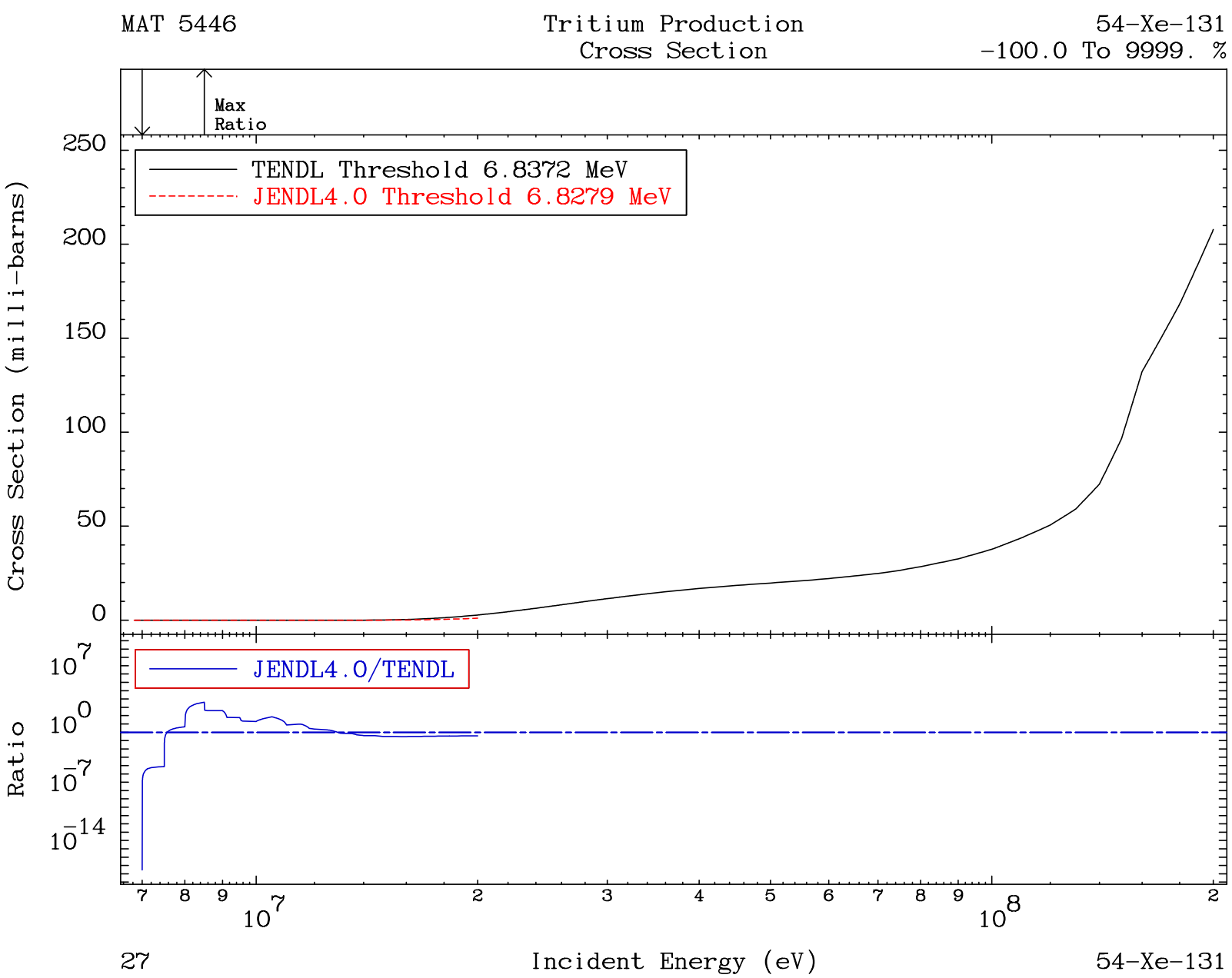

MAT 5446
(n,t)
Cross Section
54-Xe-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.8372 MeV
JENDL4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
22
54-Xe-131

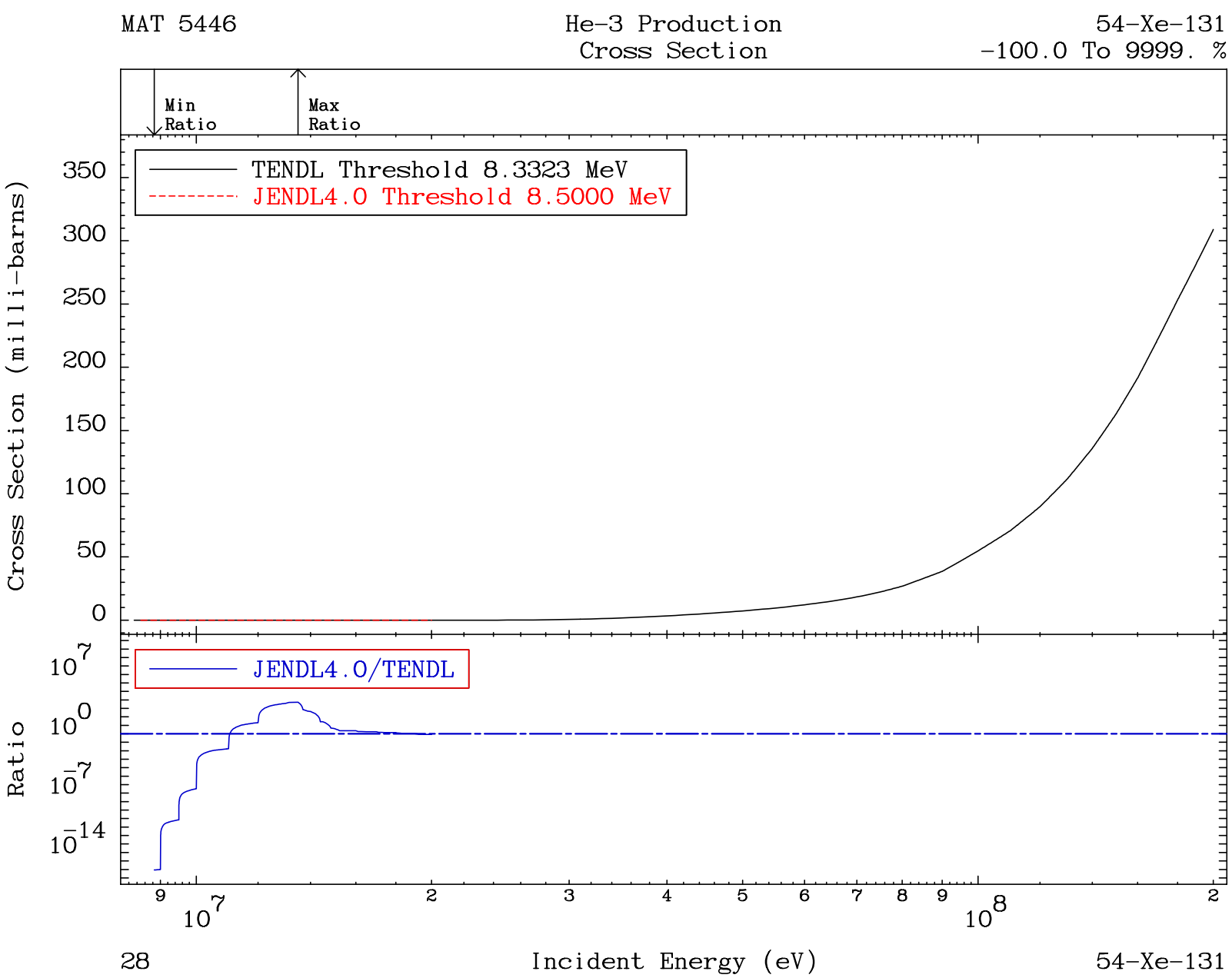

MAT 5446
(n,He-3)
Cross Section
54-Xe-131
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.3323 MeV
JENDL4.0 Threshold 8.5000 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^7
10^0
10^-7
10^-14
9
10^7
2
3
4
5
6
7
8
9
10^8
2
23
Incident Energy (eV)
54-Xe-131

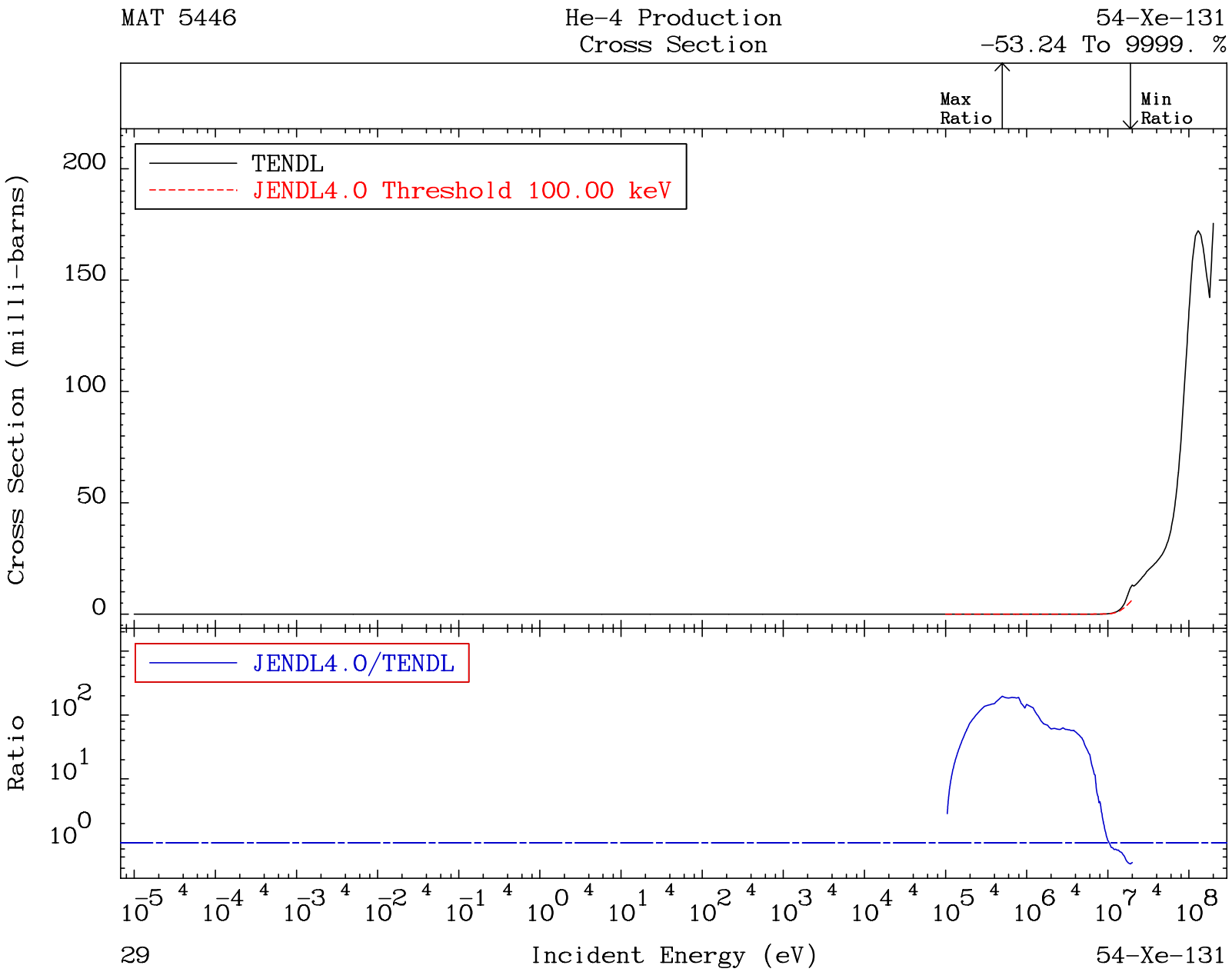

MAT 5446
(n,α)
Cross Section
54-Xe-131
-58.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
JENDL4.0/TENDL
Ratio
10^0
10^1
10^2
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
24
Incident Energy (eV)
54-Xe-131

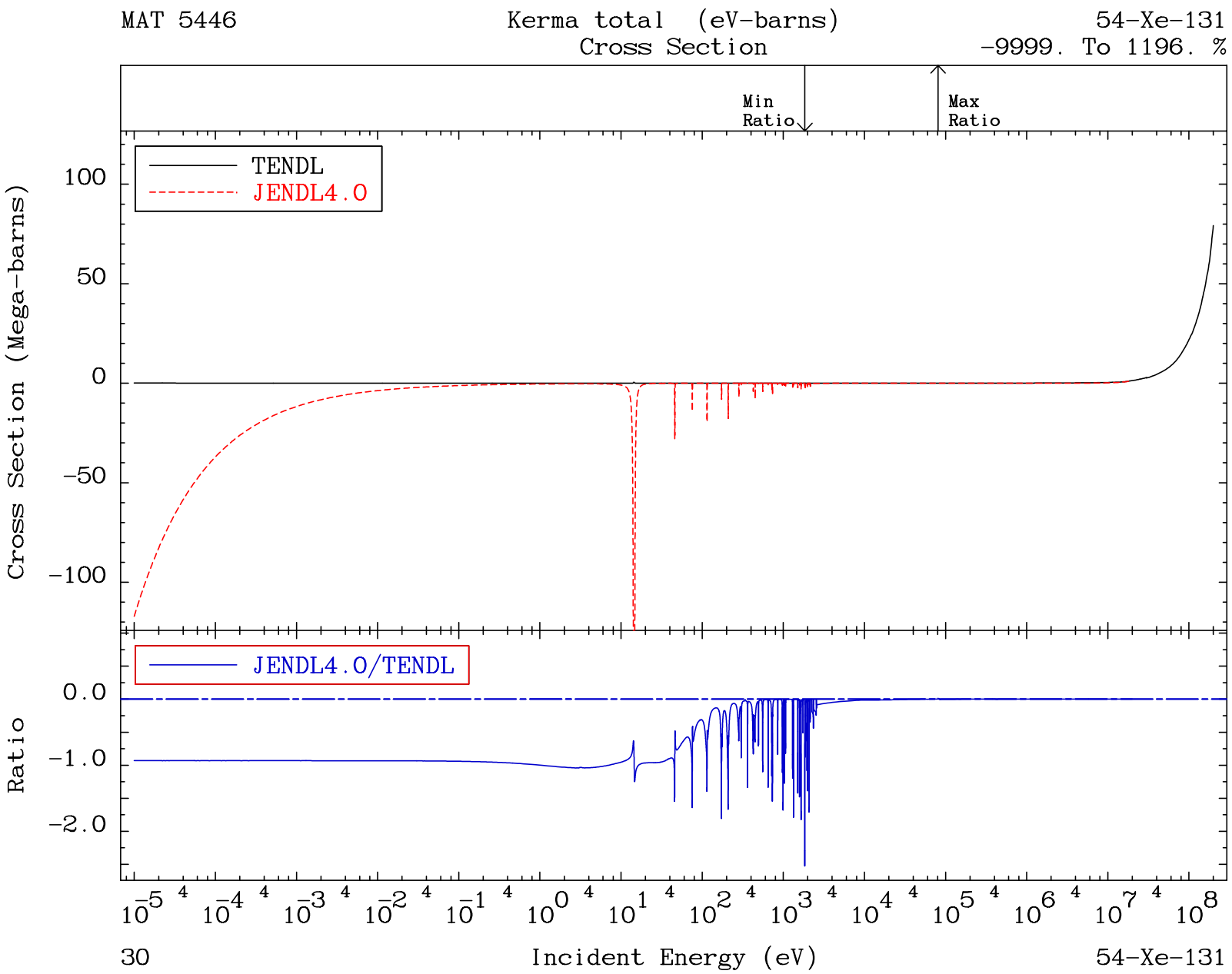

MAT 5446
Hydrogen Production
Cross Section
54-Xe-131
-100.0 To 503.7 %
Min Ratio
Max Ratio
TENDL Threshold 189.95 keV
JENDL4.0 Threshold 250.00 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-5
10^-10
10^-15
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
54-Xe-131

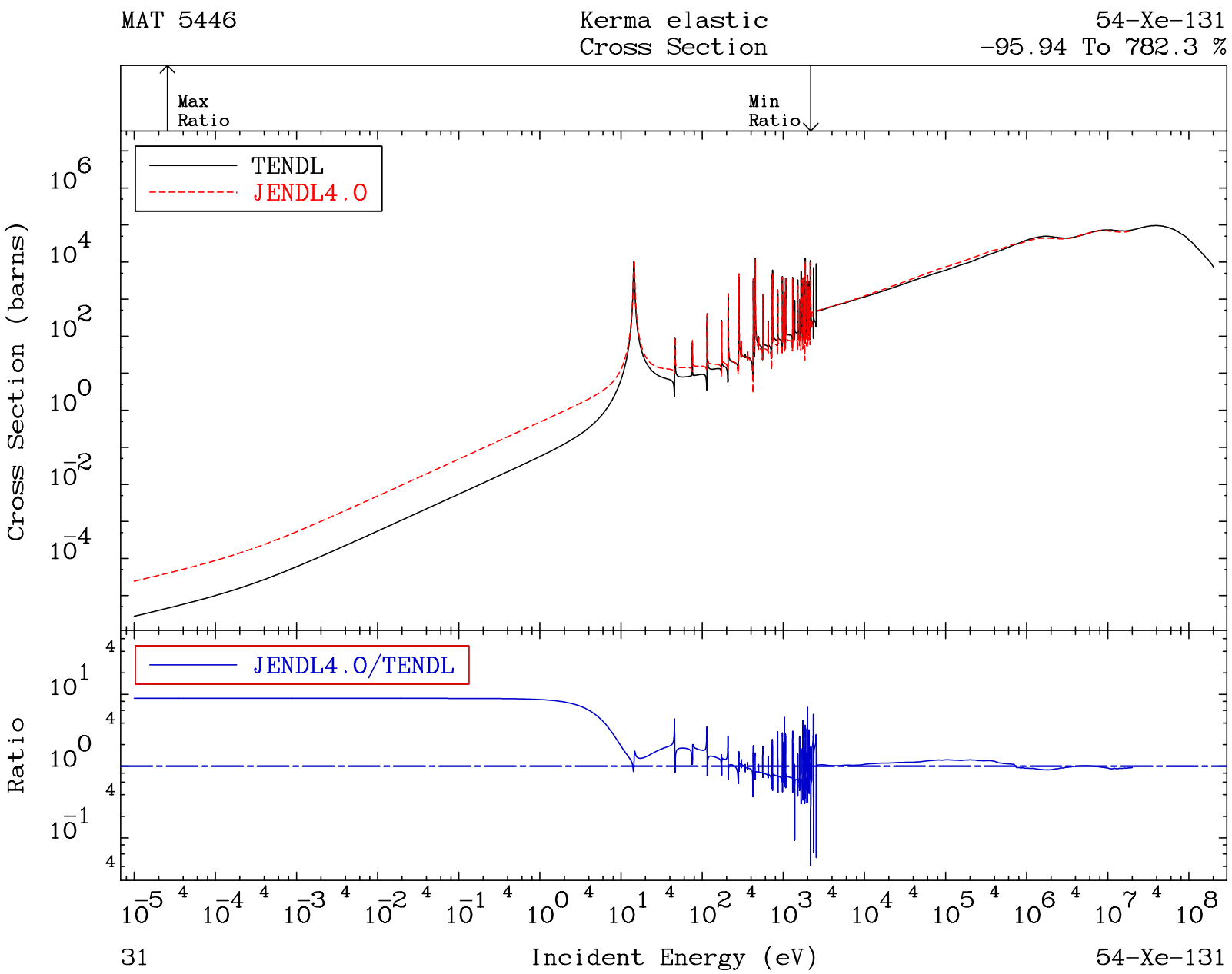

MAT 5446
Deuterium Production
Cross Section
54-Xe-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.5922 MeV
JENDL4.0 Threshold 6.5977 MeV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
54-Xe-131

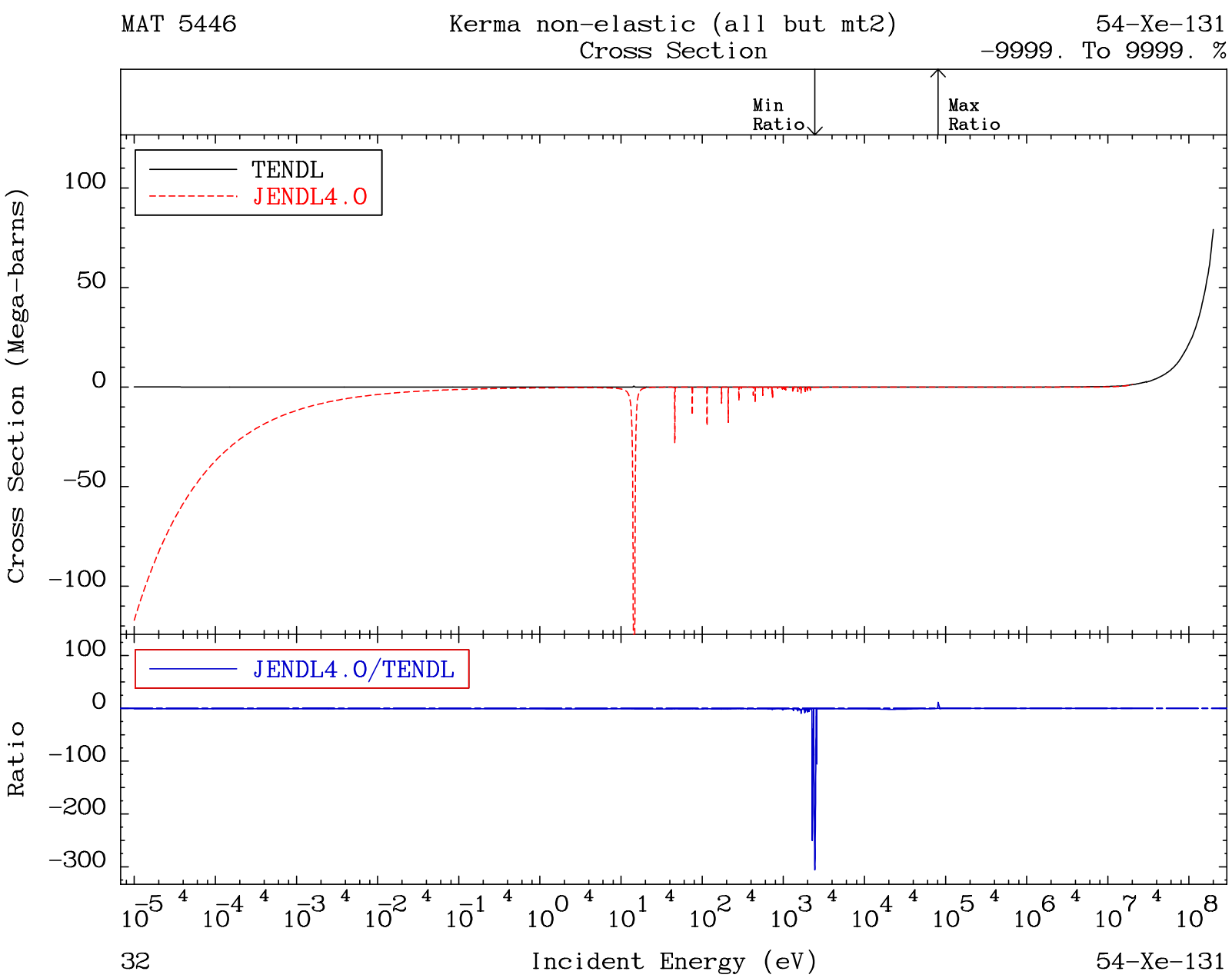

MAT 5446
Tritium Production
Cross Section
54-Xe-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.8372 MeV
JENDL4.0 Threshold 6.8279 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^7
10^0
10^-7
10^-14
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
54-Xe-131

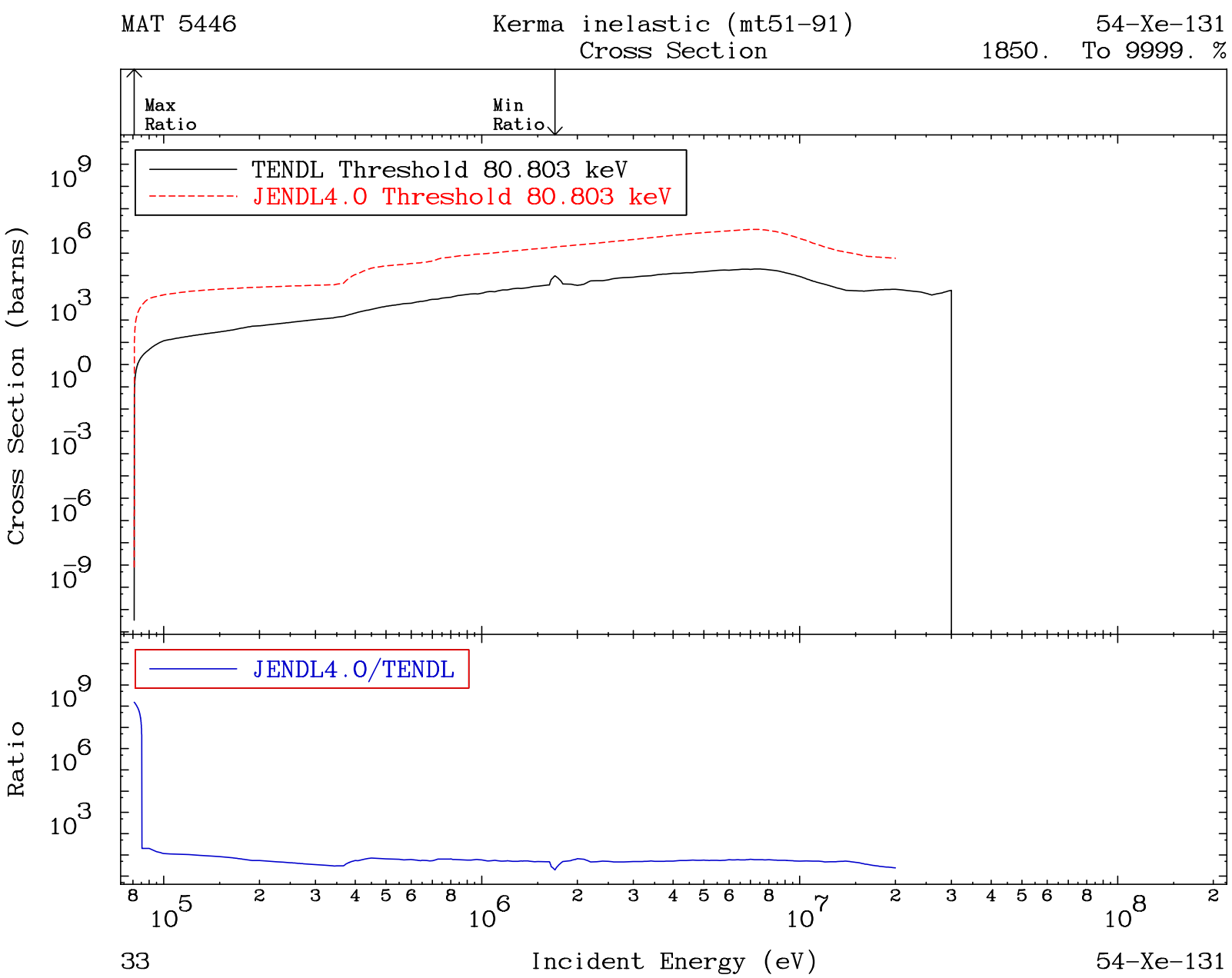

MAT 5446
He-3 Production
Cross Section
54-Xe-131
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.3323 MeV
JENDL4.0 Threshold 8.5000 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^7
10^0
10^-7
10^-14
9
10^7
2
3
4
5
6
7
8
9
10^8
2
28
Incident Energy (eV)
54-Xe-131

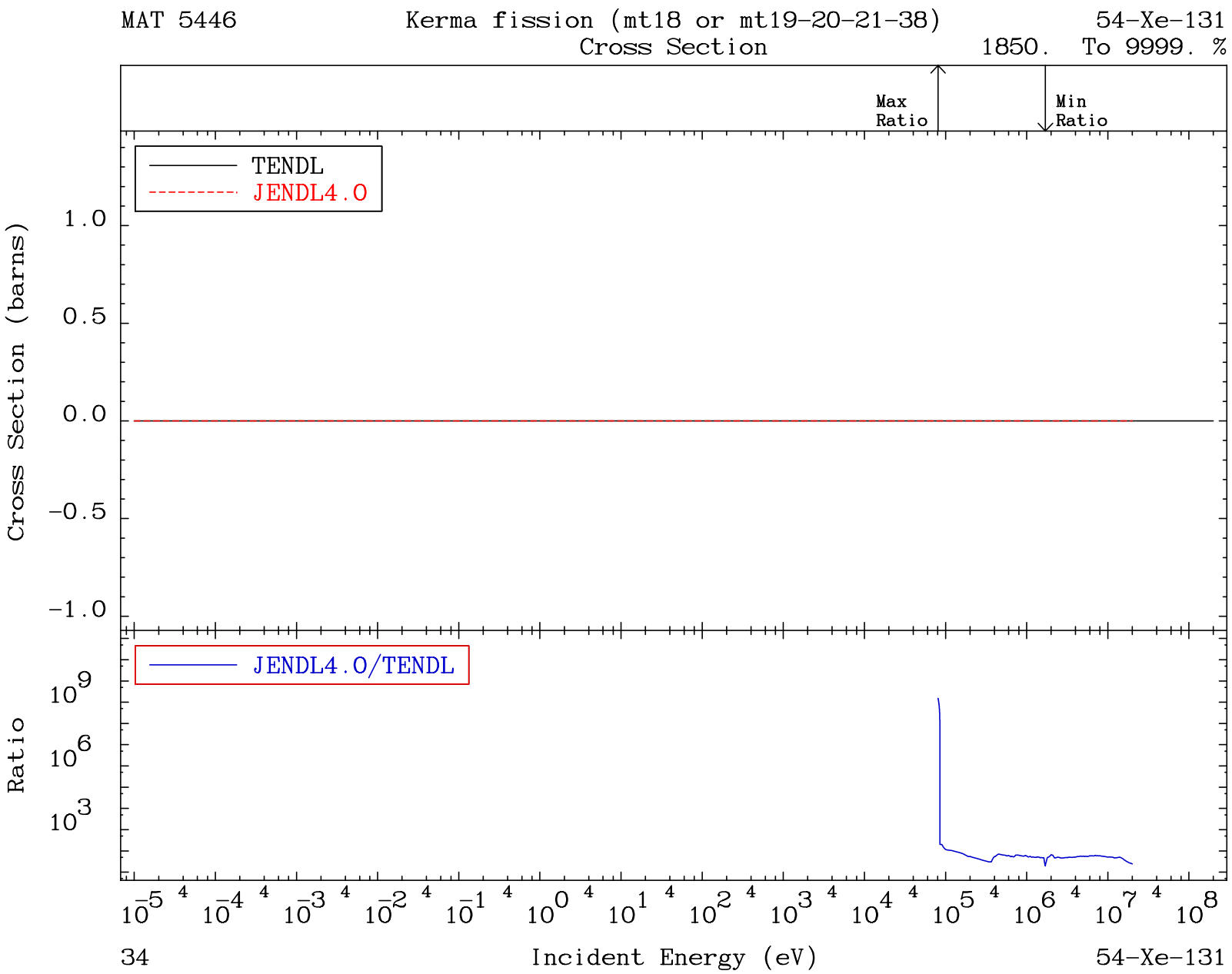

MAT 5446
He-4 Production
Cross Section
54-Xe-131
-53.24 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
54-Xe-131

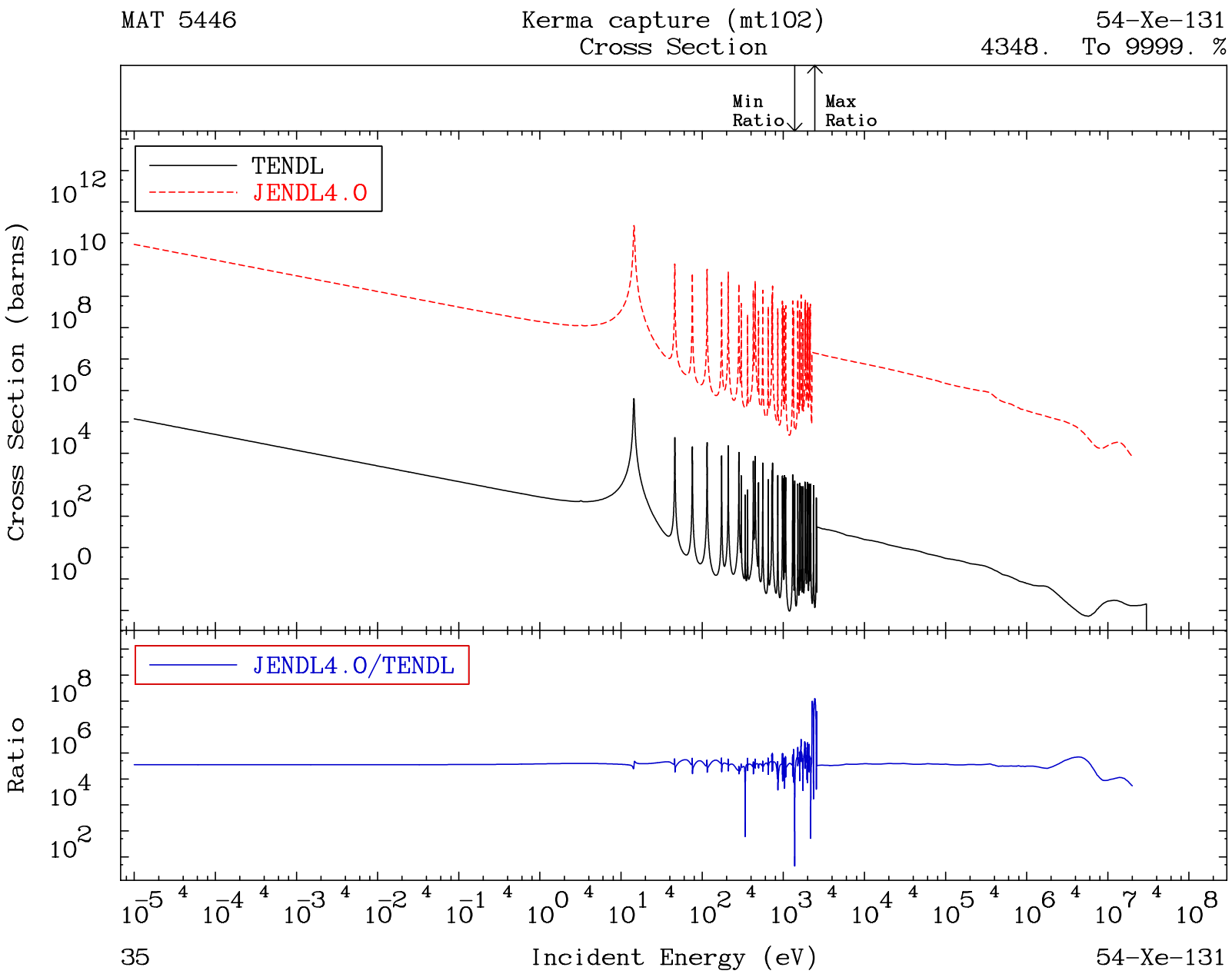

MAT 5446
Kerma total (eV-barns)
Cross Section
54-Xe-131
-9999. To 1196. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (Mega-barns)
100
50
0
-50
-100
JENDL4.0/TENDL
Ratio
0.0
-1.0
-2.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
54-Xe-131

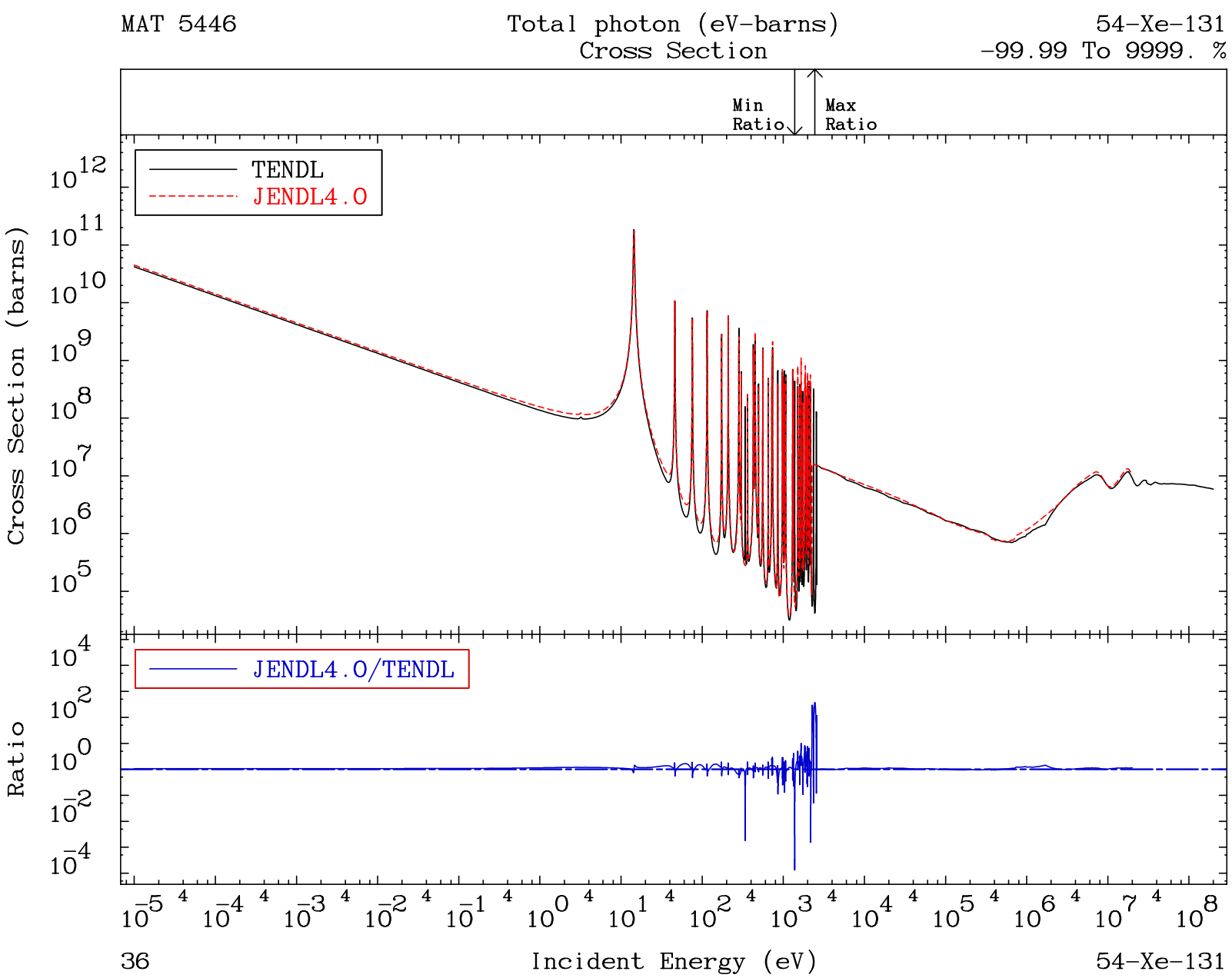

MAT 5446
Kerma elastic
Cross Section
54-Xe-131
-95.94 To 782.3 %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
31
54-Xe-131

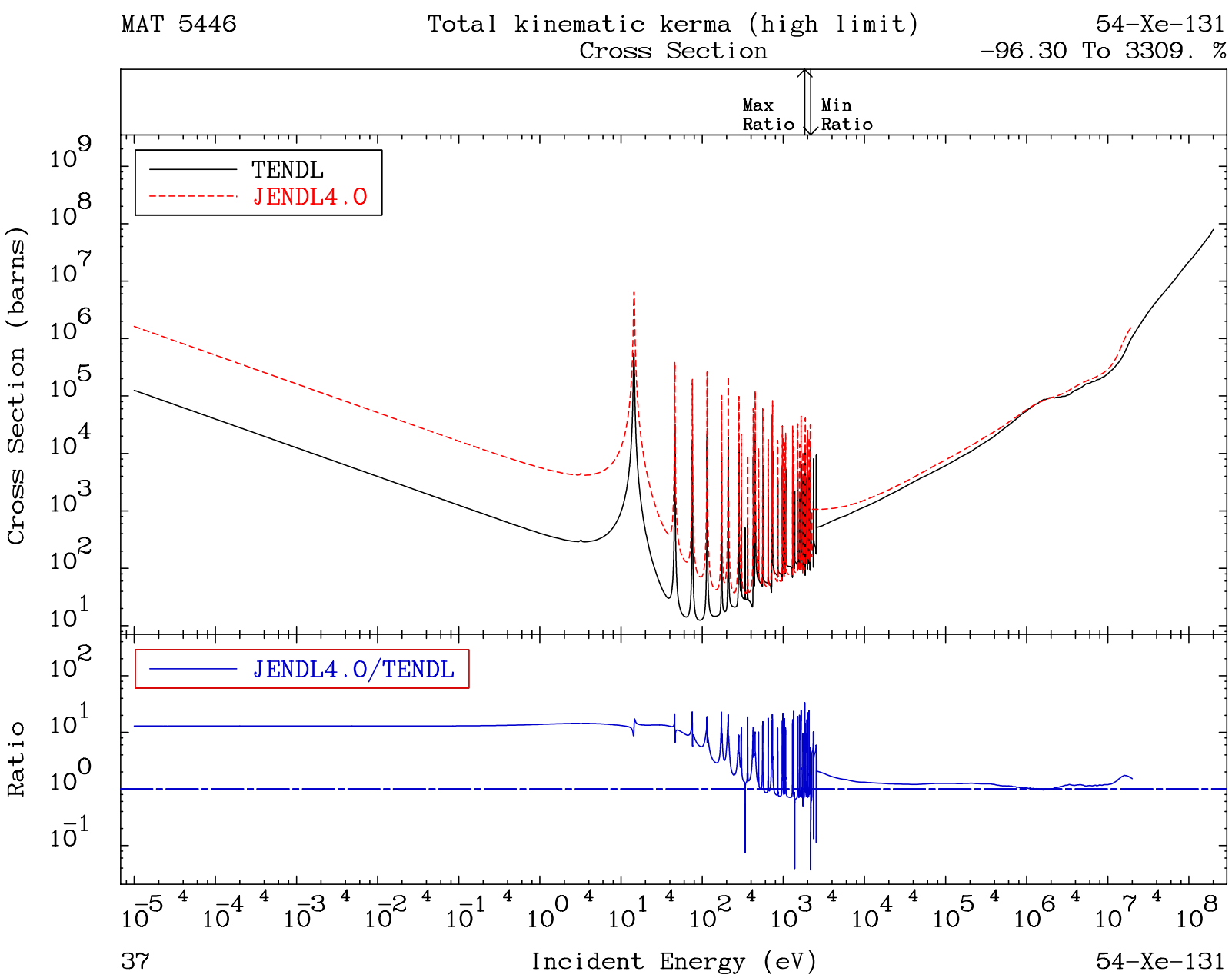

MAT 5446
Kerma non-elastic (all but mt2)
Cross Section
54-Xe-131
-9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (Mega-barns)
100
50
0
-50
-100
JENDL4.0/TENDL
Ratio
100
0
-100
-200
-300
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
32
Incident Energy (eV)
54-Xe-131

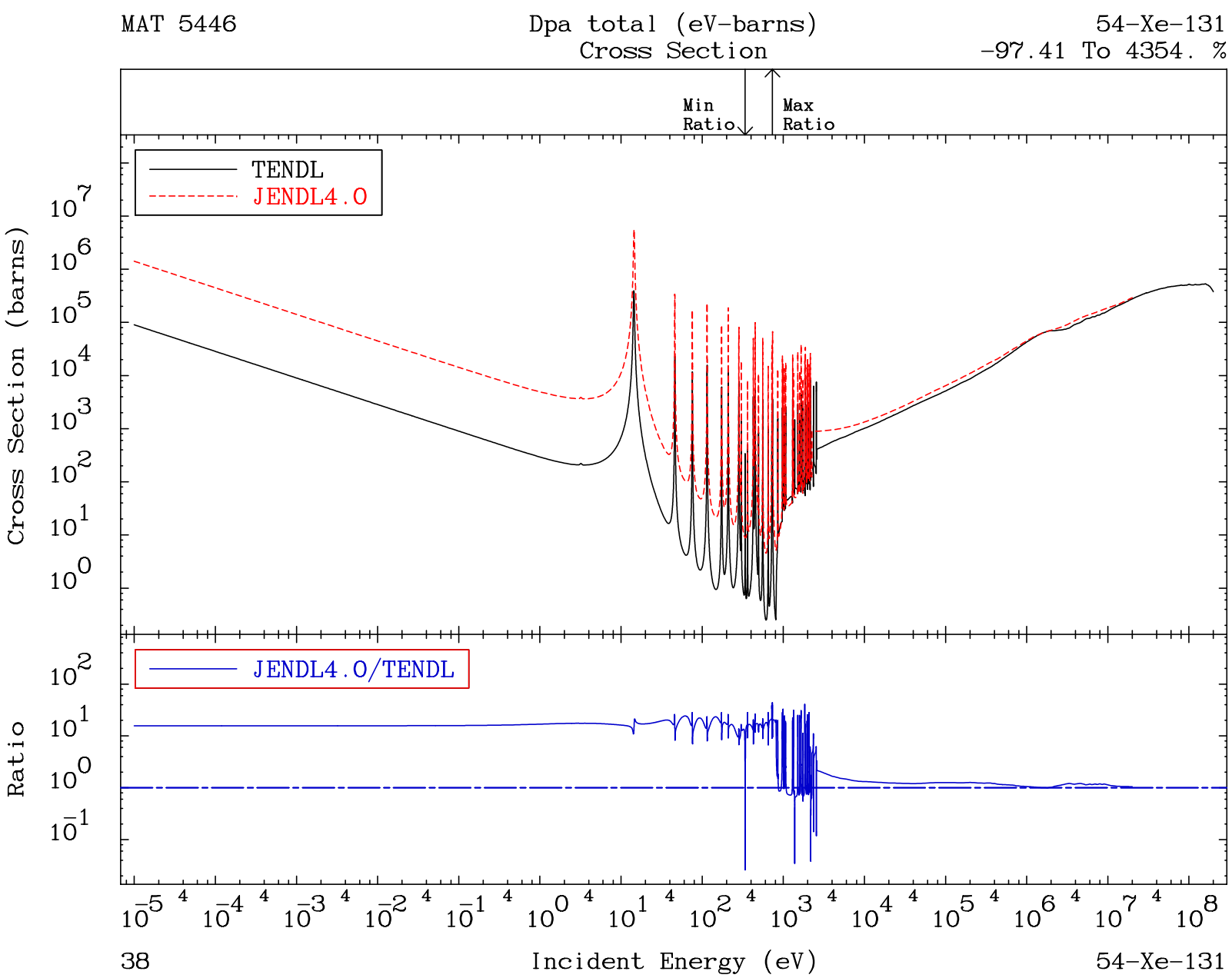

MAT 5446
Kerma inelastic (mt51-91)
Cross Section
54-Xe-131
1850. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 80.803 keV
JENDL4.0 Threshold 80.803 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
33
54-Xe-131

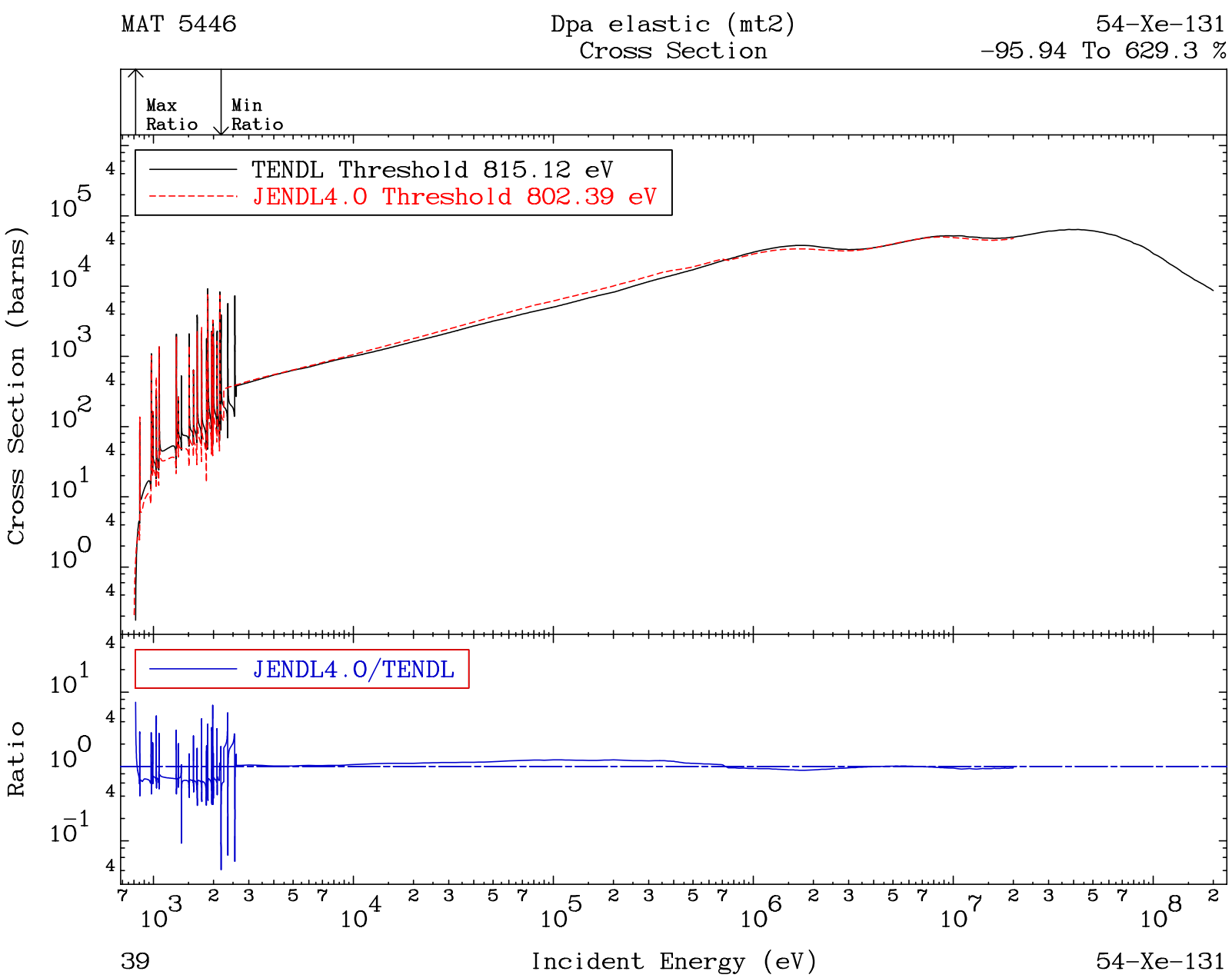

MAT 5446
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
54-Xe-131
1850. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
34
Incident Energy (eV)
54-Xe-131

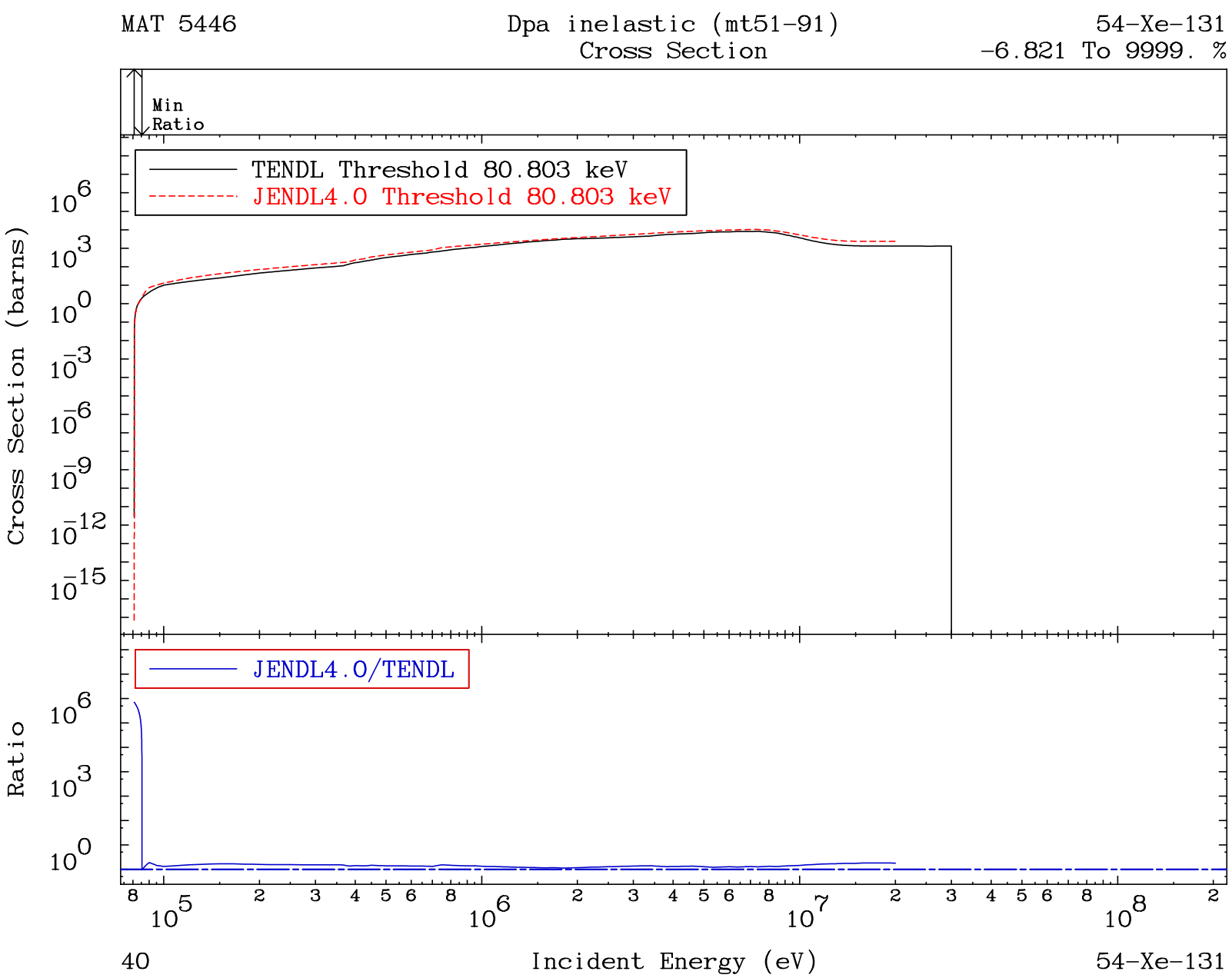

MAT 5446
Kerma capture (mt102)
Cross Section
54-Xe-131
4348. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
35
54-Xe-131

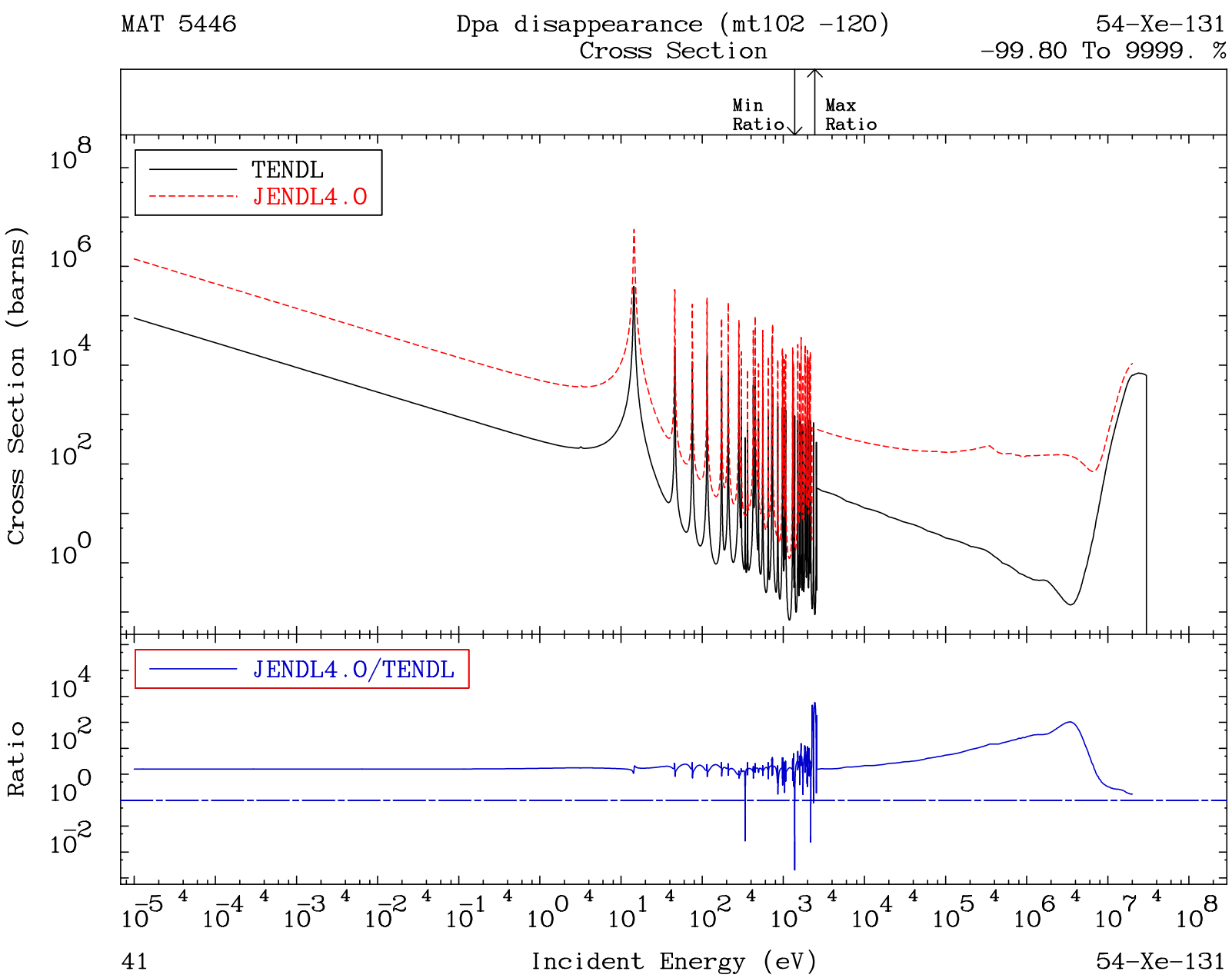

MAT 5446
Total photon (eV-barns)
Cross Section
54-Xe-131
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
36
54-Xe-131

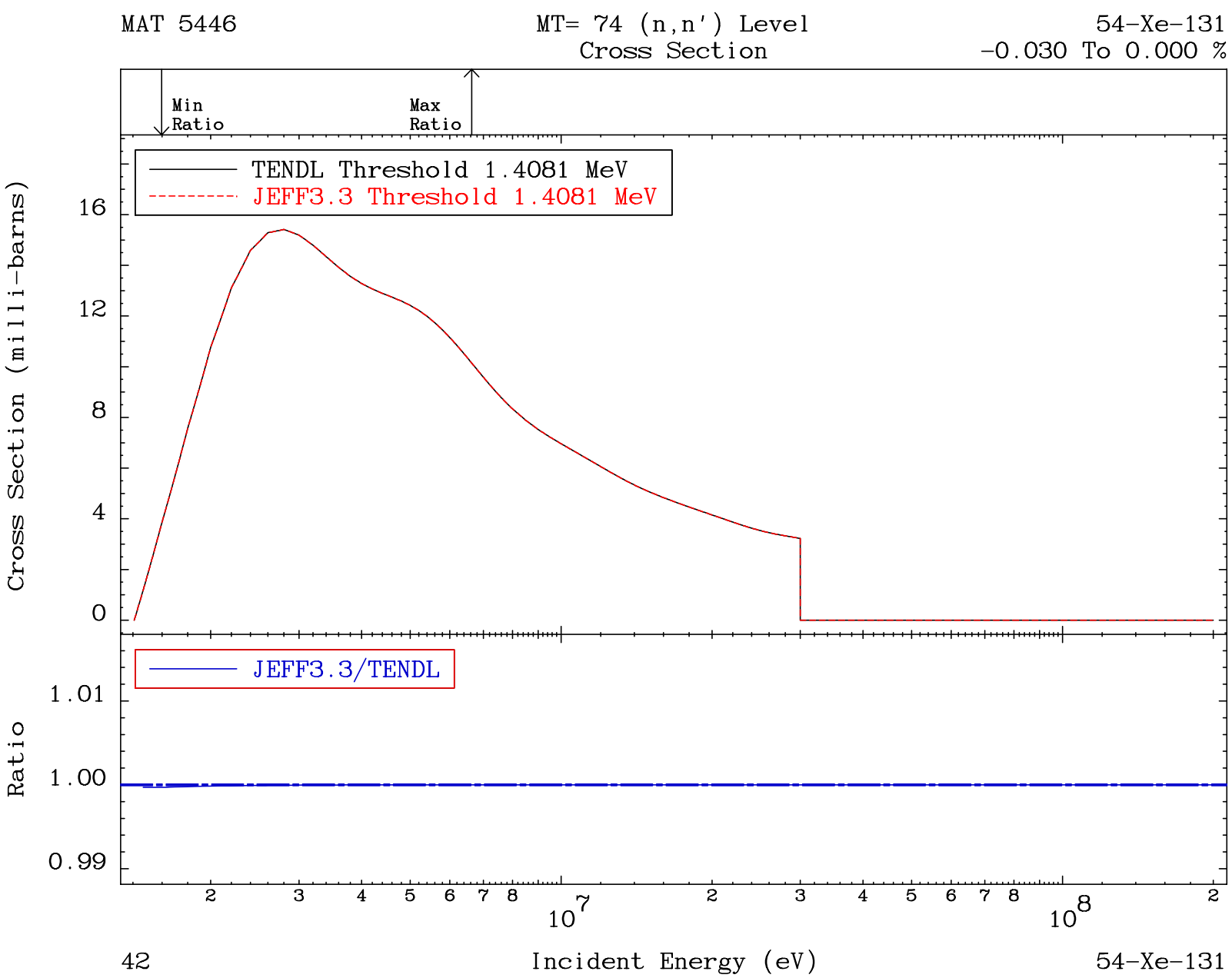

MAT 5446
Total kinematic kerma (high limit)
Cross Section
54-Xe-131
-96.30 To 3309. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
37
54-Xe-131

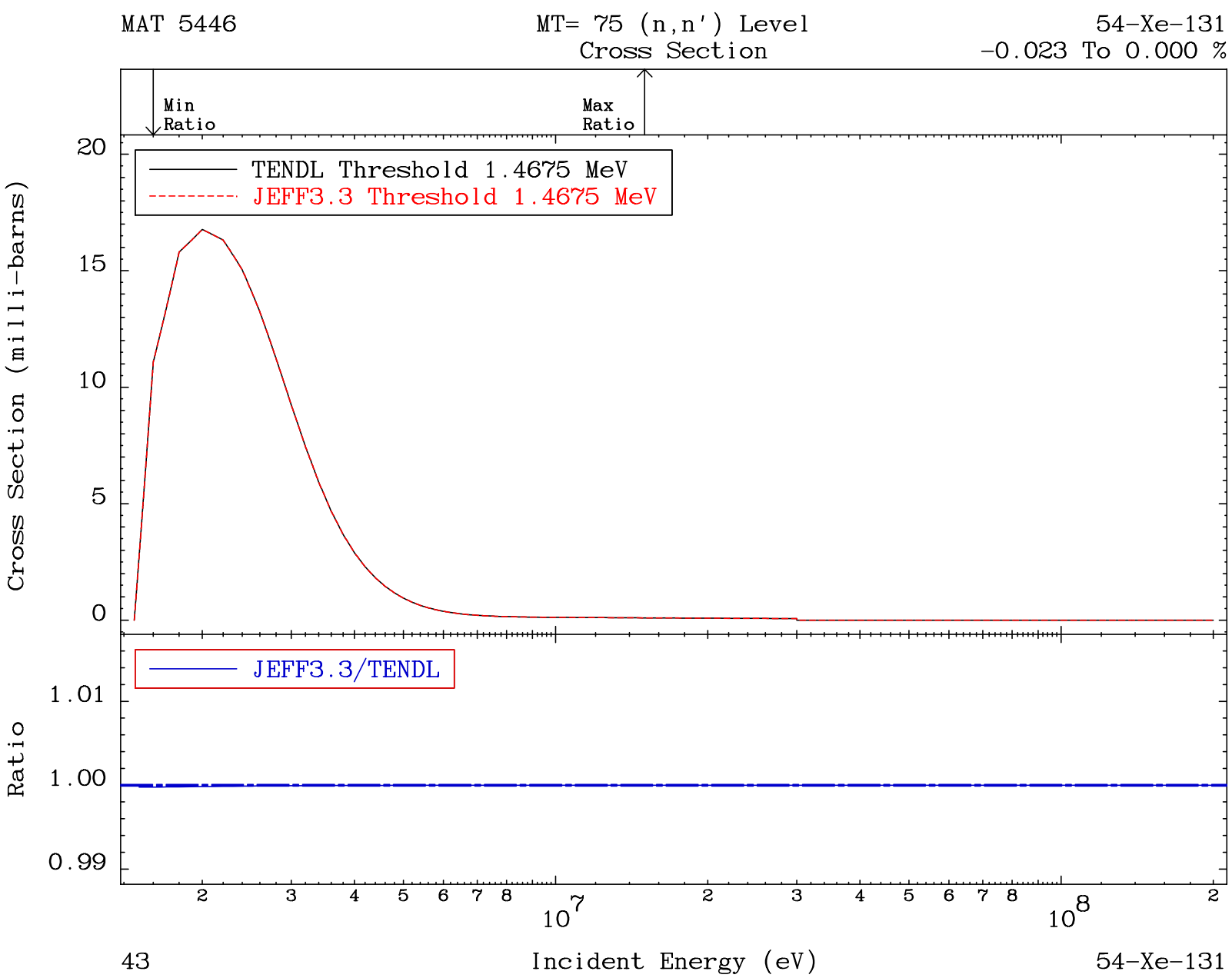

MAT 5446
Dpa total (eV-barns)
Cross Section
54-Xe-131
-97.41 To 4354. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
38
54-Xe-131

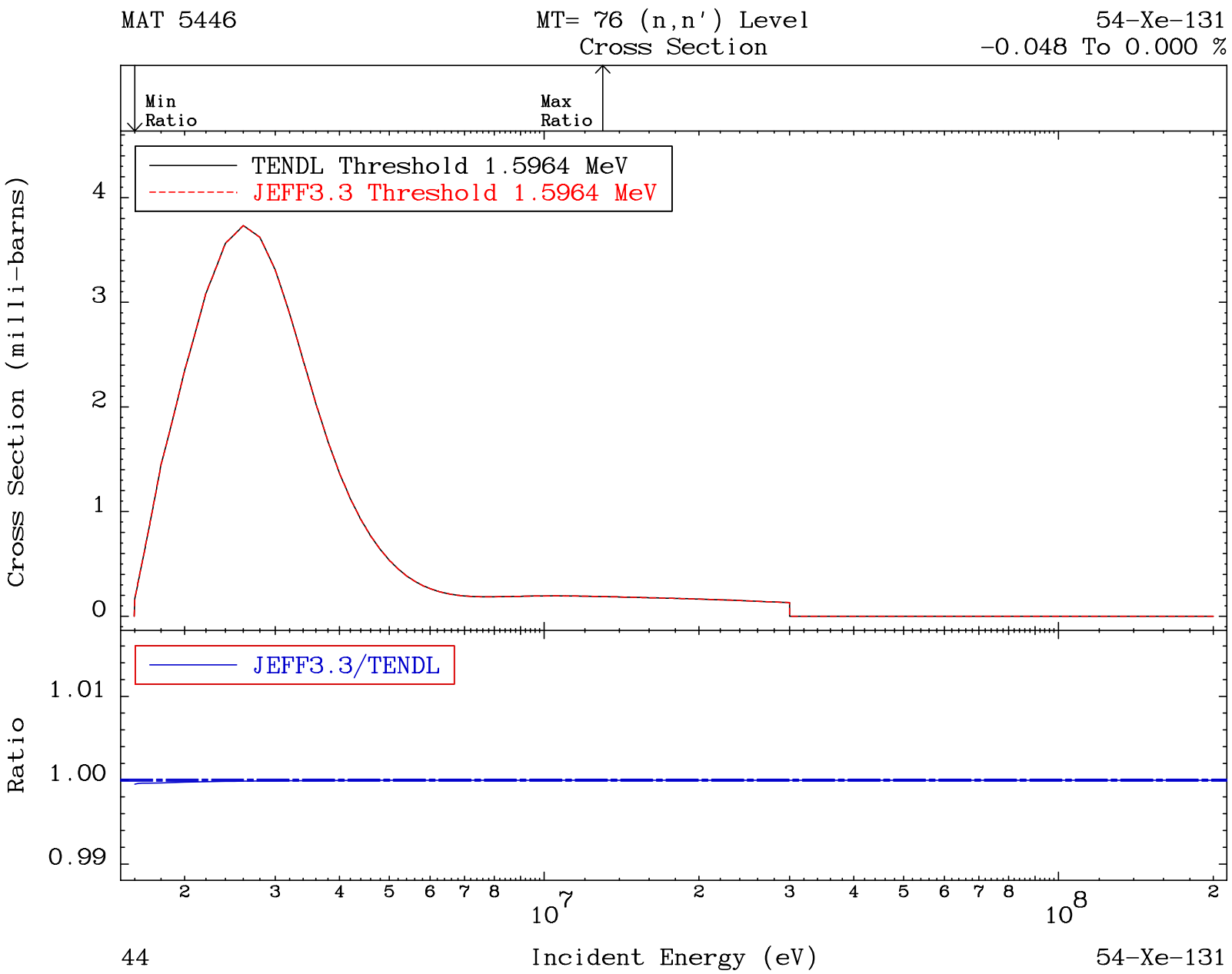

MAT 5446
Dpa elastic (mt2)
Cross Section
54-Xe-131
-95.94 To 629.3 %
Max Ratio
Min Ratio
TENDL Threshold 815.12 eV
JENDL4.0 Threshold 802.39 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
39
54-Xe-131

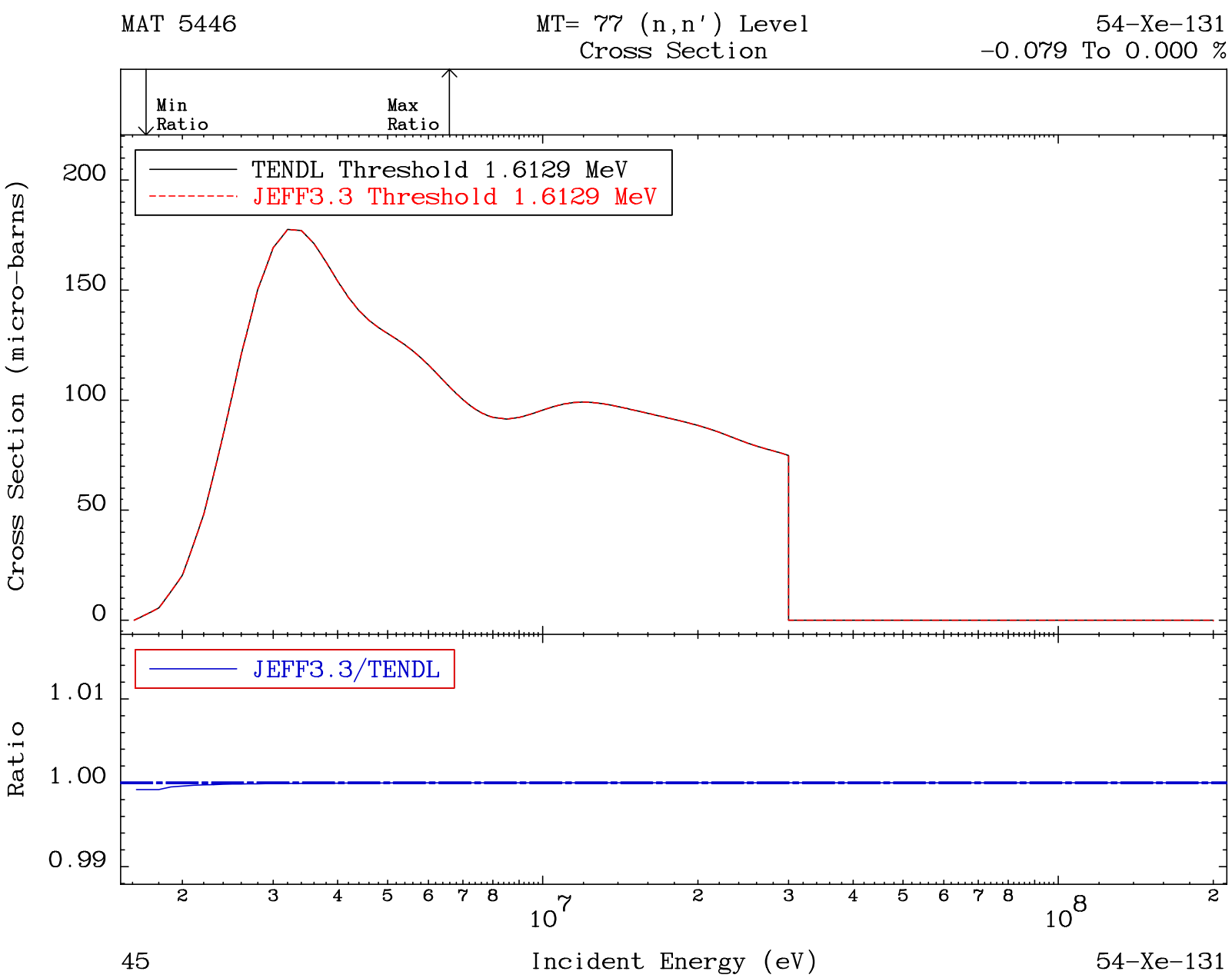

MAT 5446
Dpa inelastic (mt51-91)
Cross Section
54-Xe-131
-6.821 To 9999. %
Min
Ratio
TENDL Threshold 80.803 keV
JENDL4.0 Threshold 80.803 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
40
54-Xe-131

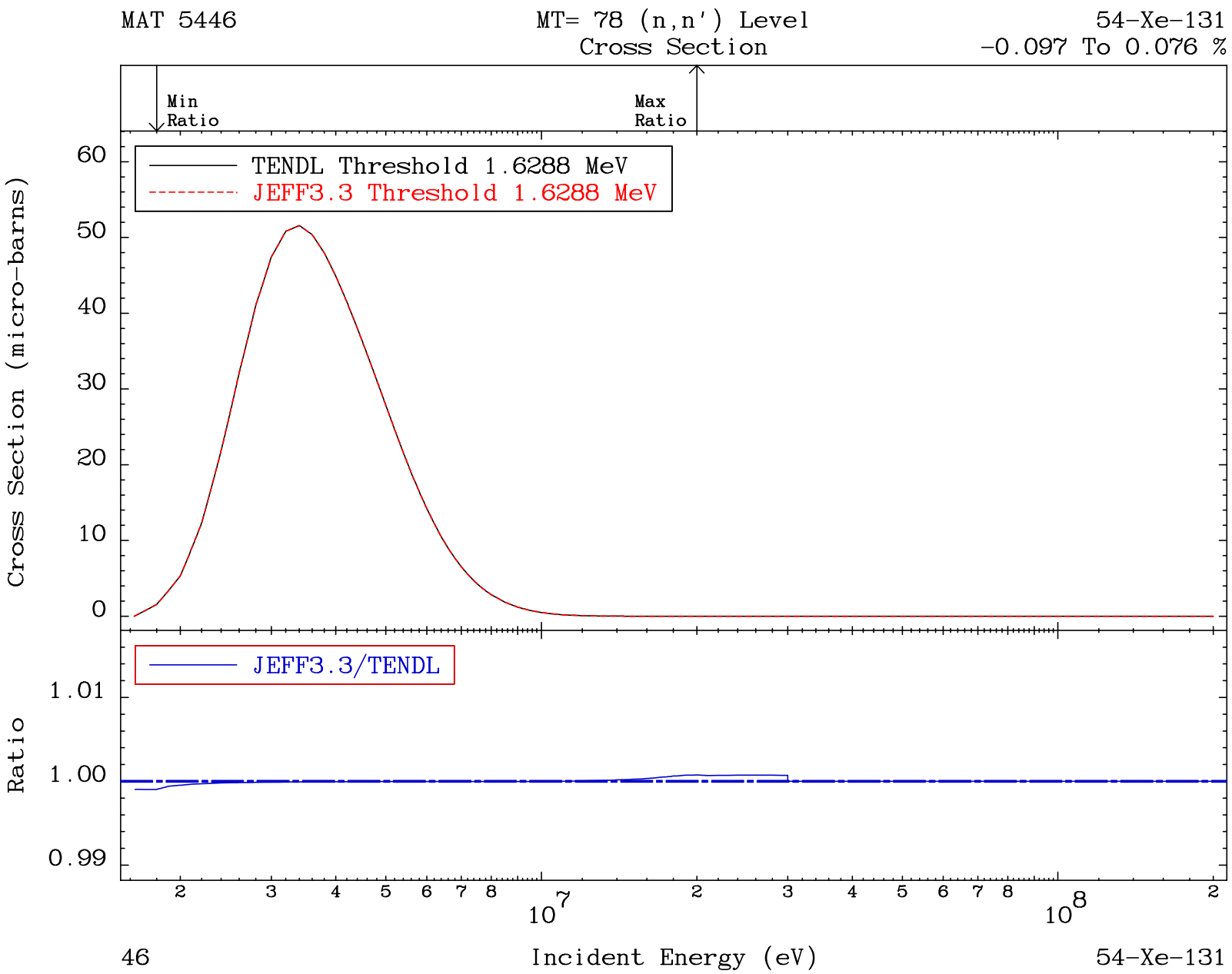

MAT 5446
Dpa disappearance (mt102 -120)
Cross Section
54-Xe-131
-99.80 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
41
54-Xe-131

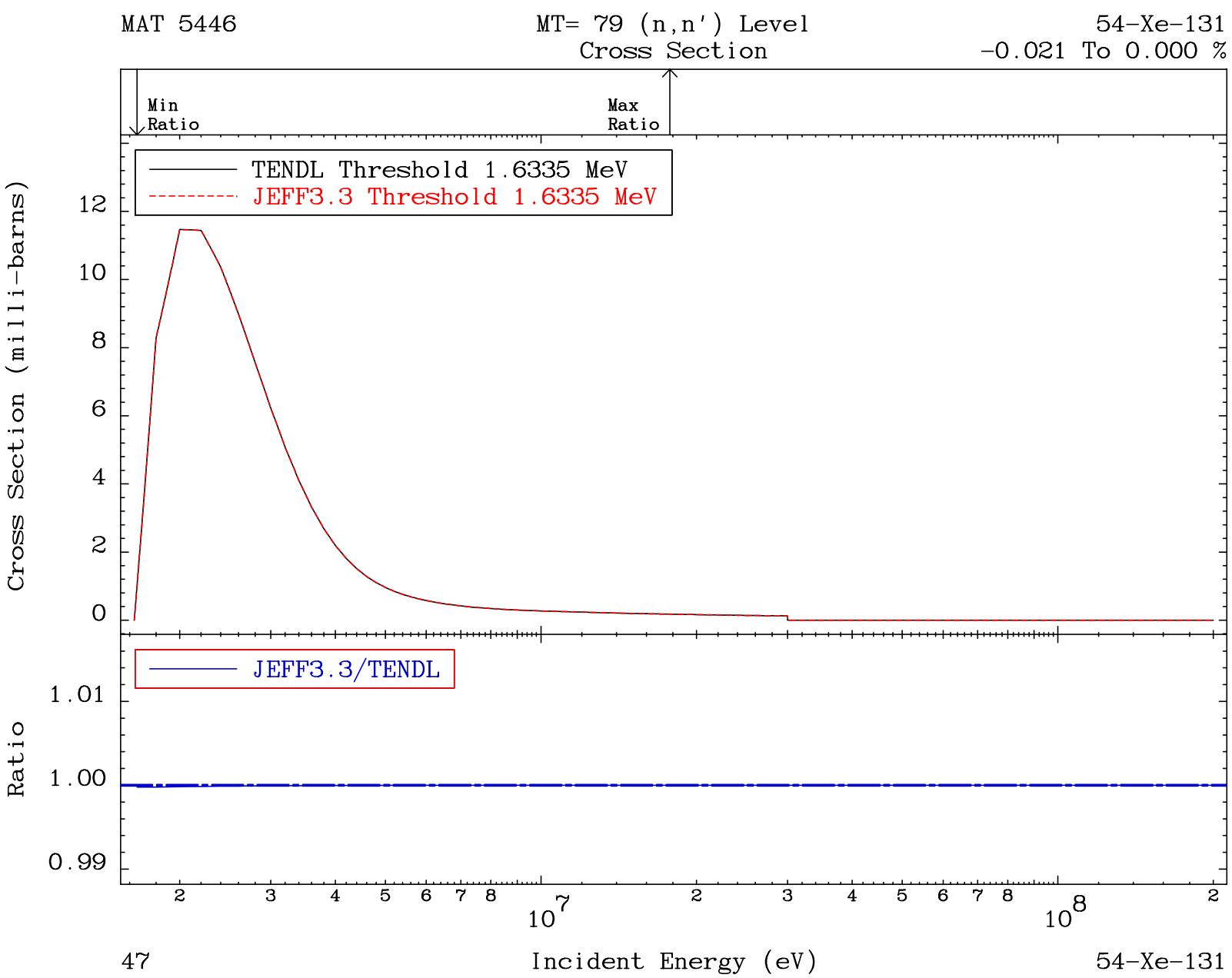

MAT 5446
MT= 74 (n,n') Level
Cross Section
54-Xe-131
-0.030 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.4081 MeV
JEFF3.3 Threshold 1.4081 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
54-Xe-131

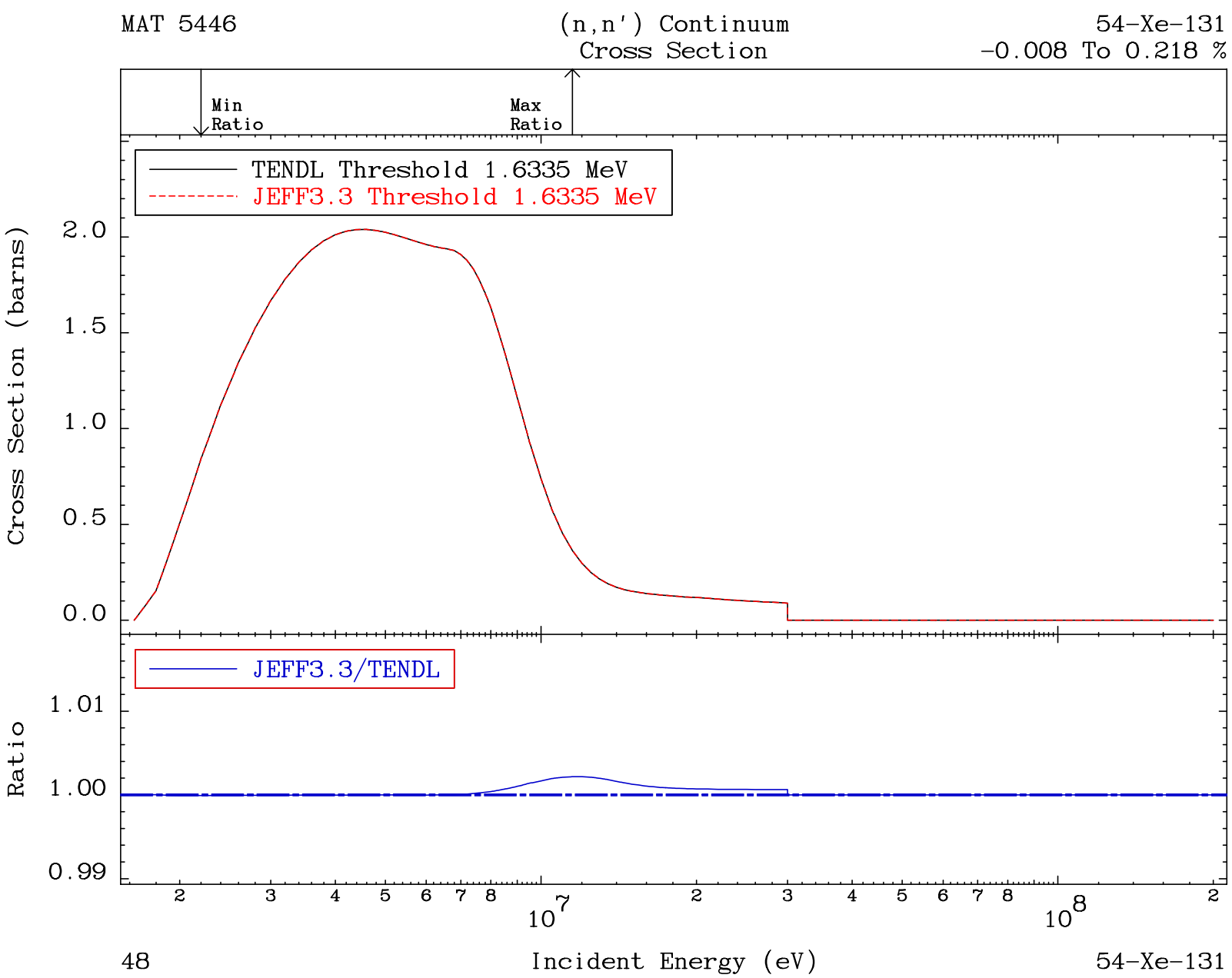

MAT 5446
MT= 75 (n,n') Level
Cross Section
54-Xe-131
-0.023 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.4675 MeV
JEFF3.3 Threshold 1.4675 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
54-Xe-131

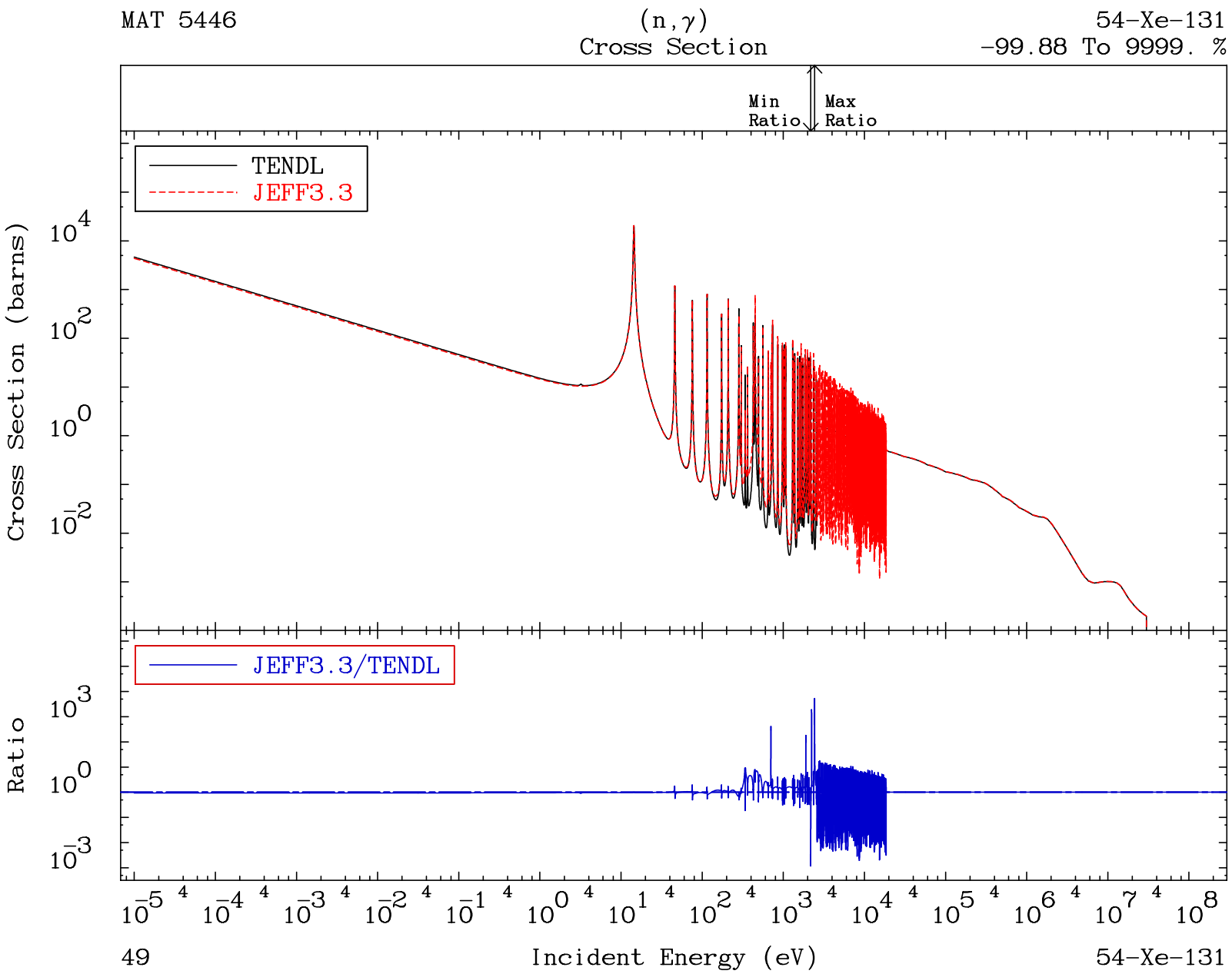

MAT 5446
MT= 76 (n,n') Level
Cross Section
54-Xe-131
-0.048 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.5964 MeV
JEFF3.3 Threshold 1.5964 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
44
54-Xe-131

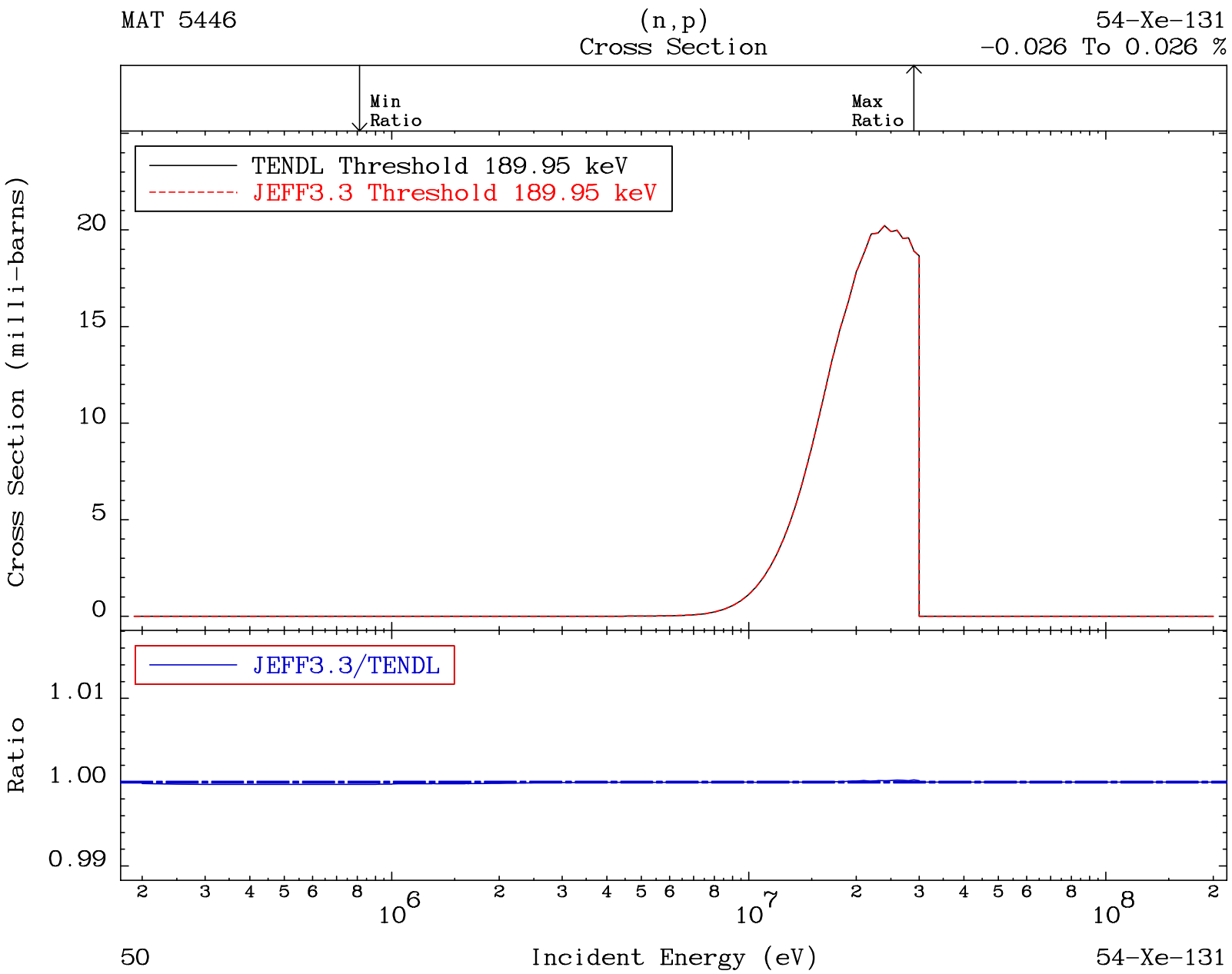

MAT 5446
MT= 77 (n,n') Level
Cross Section
54-Xe-131
-0.079 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.6129 MeV
JEFF3.3 Threshold 1.6129 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
54-Xe-131

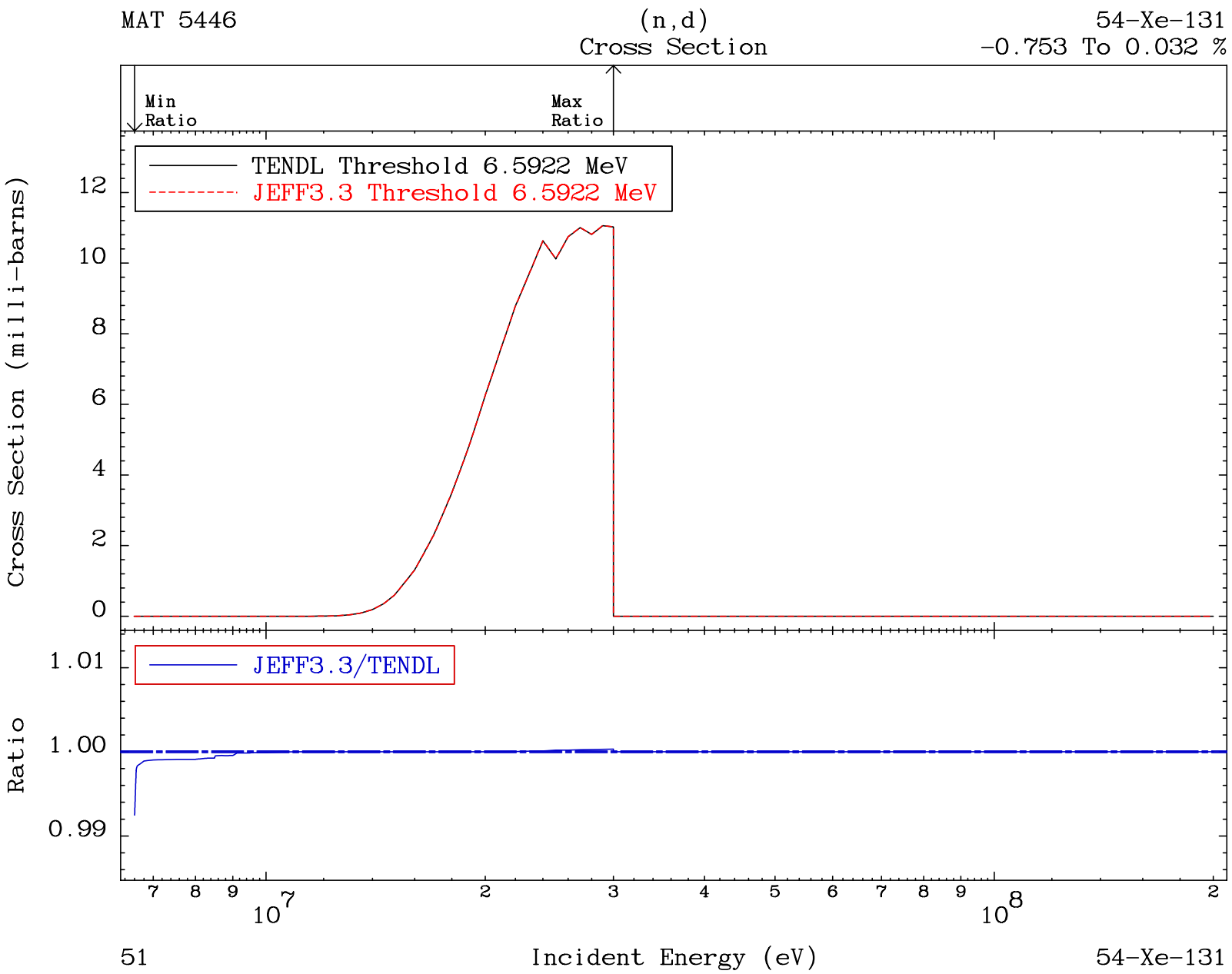

MAT 5446
MT= 78 (n,n') Level
Cross Section
54-Xe-131
-0.097 To 0.076 %
Min Ratio
Max Ratio
TENDL Threshold 1.6288 MeV
JEFF3.3 Threshold 1.6288 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
46
Incident Energy (eV)
54-Xe-131

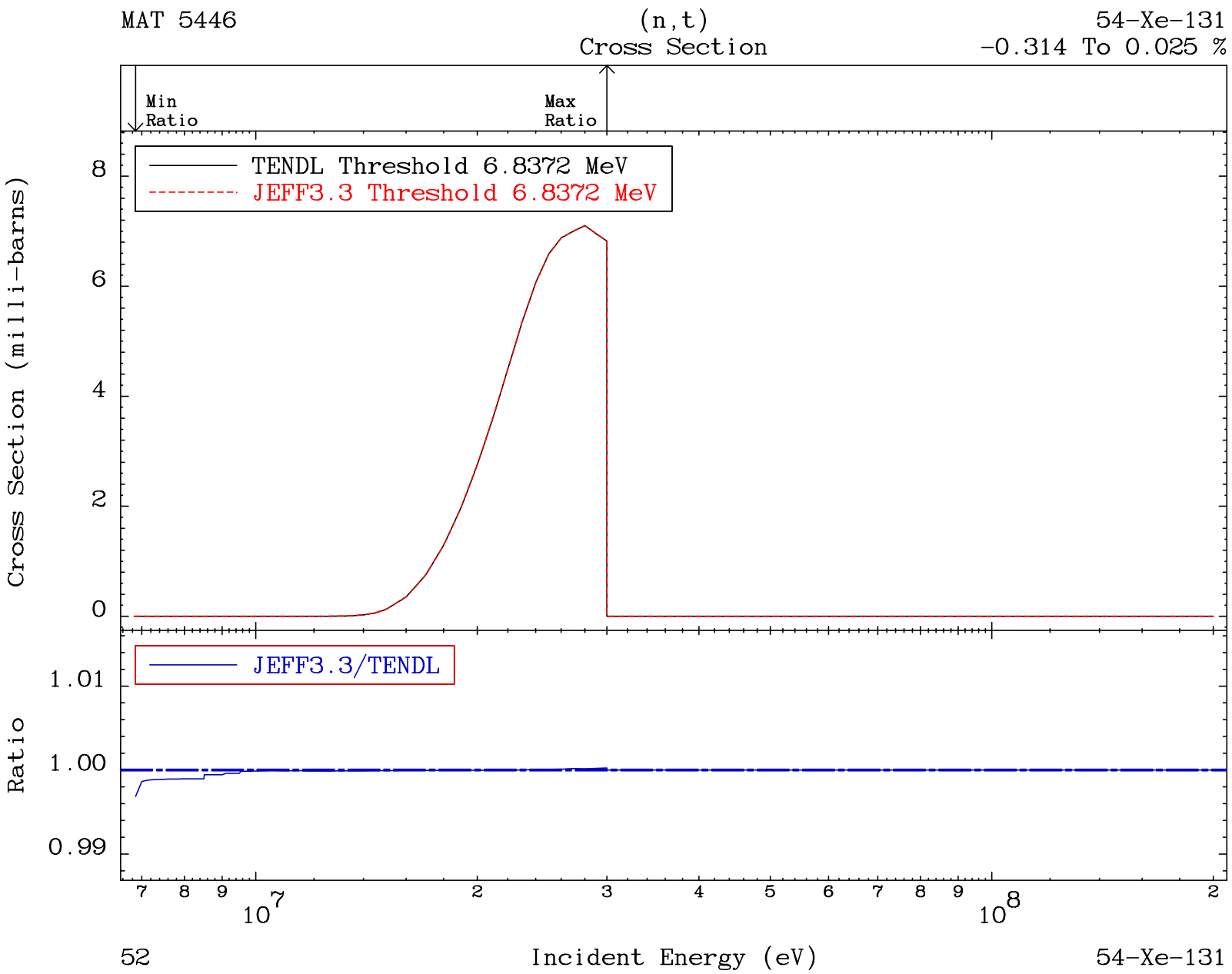

MAT 5446
MT= 79 (n,n') Level
Cross Section
54-Xe-131
-0.021 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.6335 MeV
JEFF3.3 Threshold 1.6335 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
47
Incident Energy (eV)
54-Xe-131

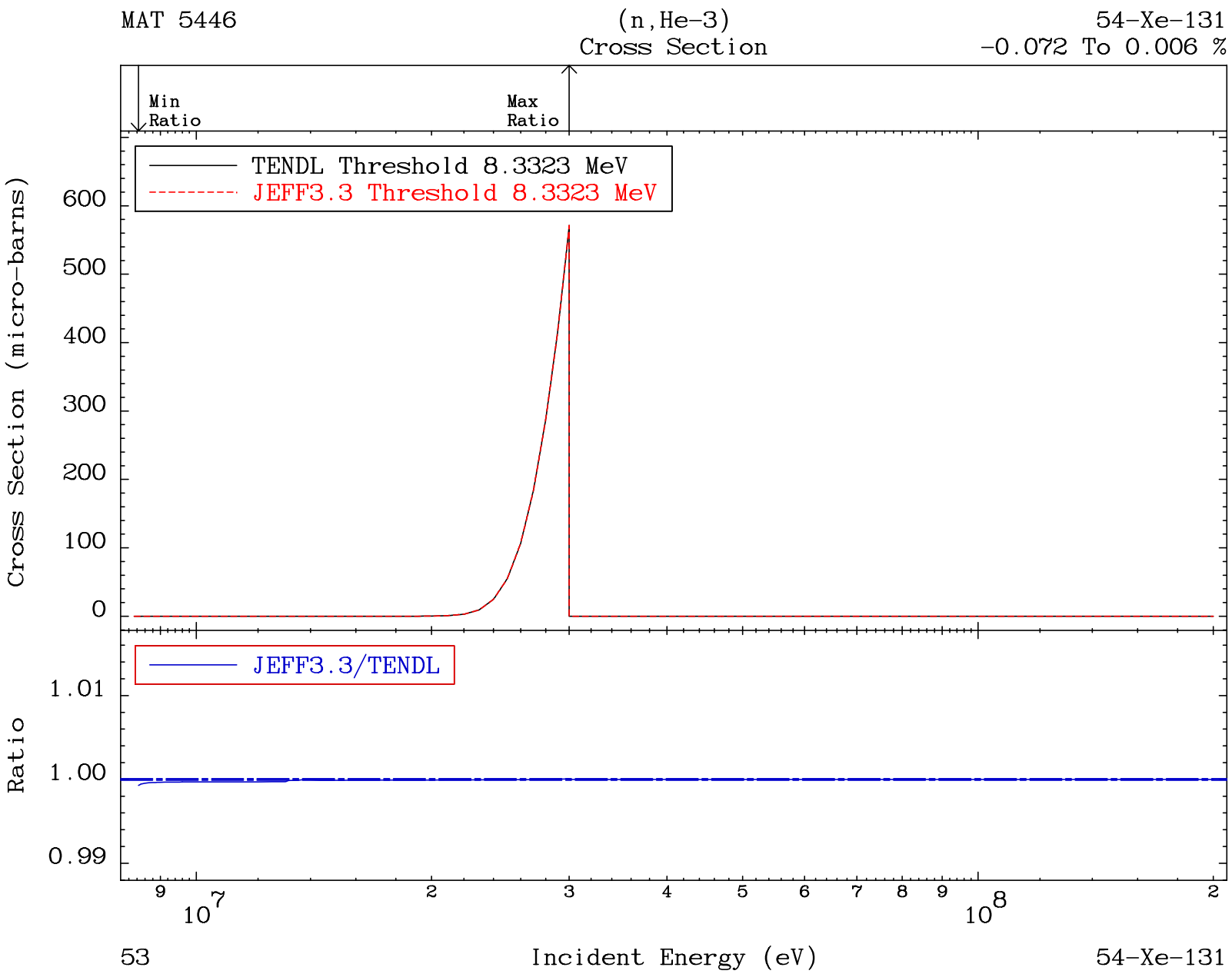

MAT 5446
(n,n') Continuum
Cross Section
54-Xe-131
-0.008 To 0.218 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6335 MeV
JEFF3.3 Threshold 1.6335 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
48
Incident Energy (eV)
54-Xe-131

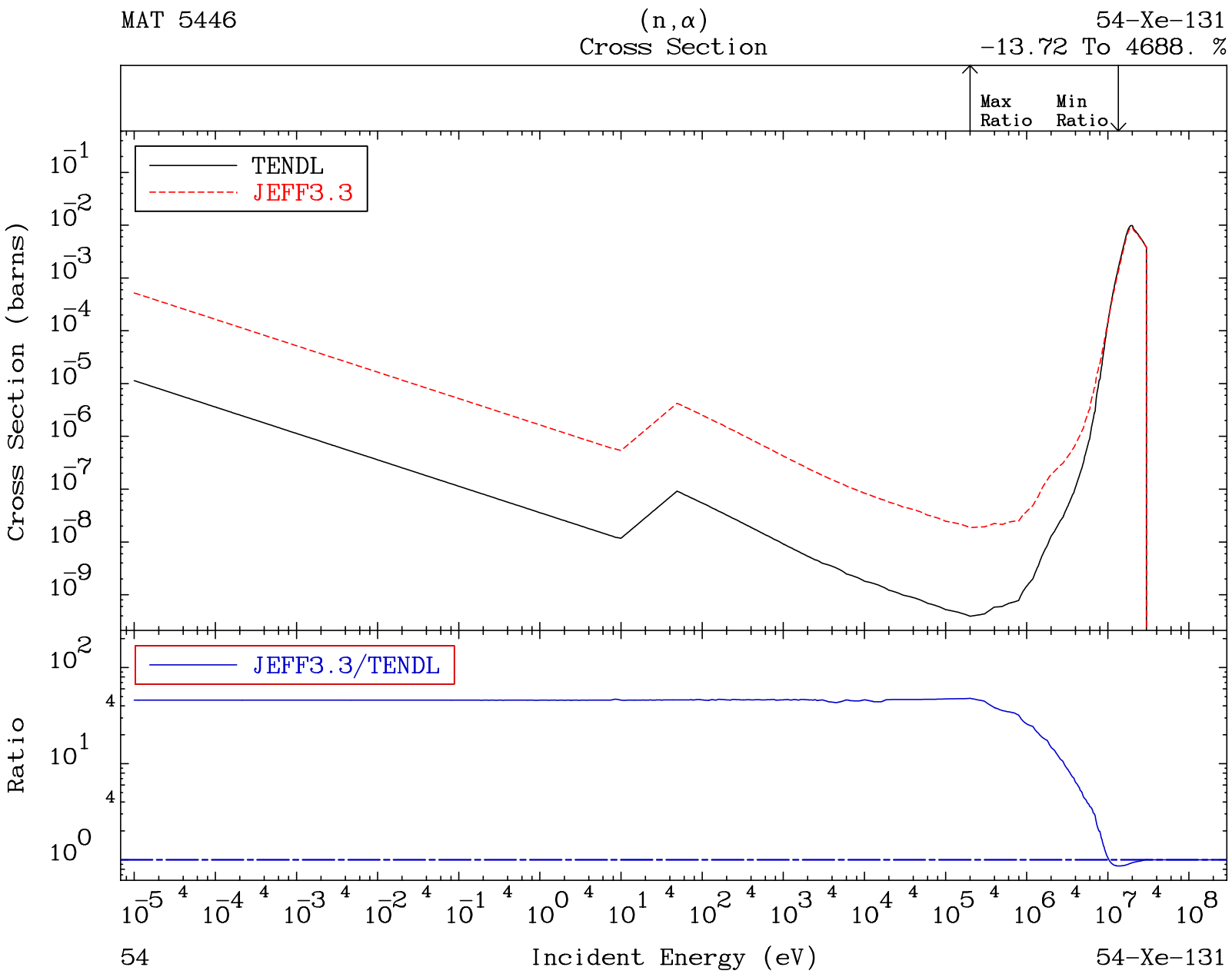

MAT 5446
(n,γ)
Cross Section
54-Xe-131
-99.88 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
54-Xe-131

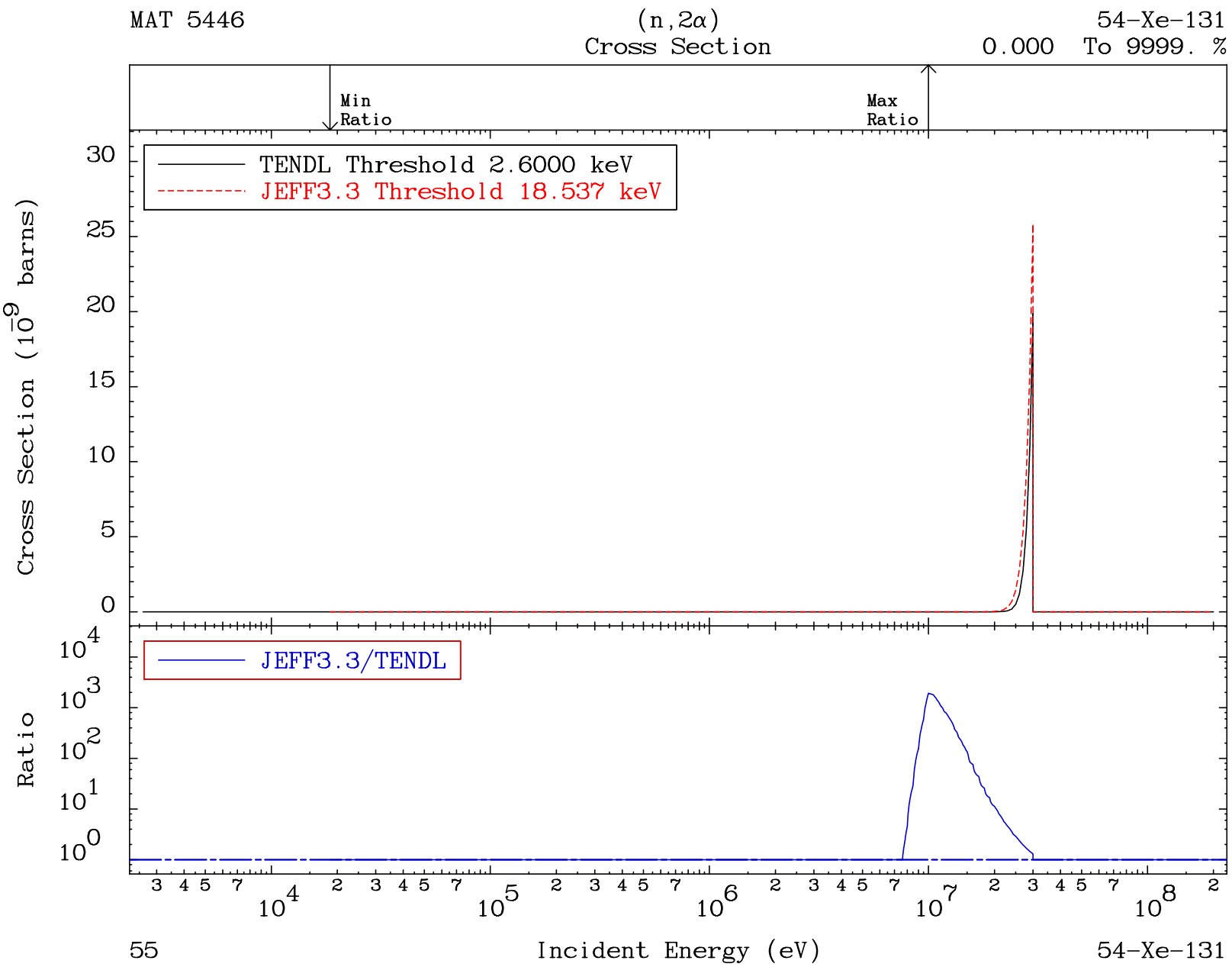

MAT 5446
(n,p)
Cross Section
54-Xe-131
-0.026 To 0.026 %
Min Ratio
Max Ratio
TENDL Threshold 189.95 keV
JEFF3.3 Threshold 189.95 keV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
50
Incident Energy (eV)
54-Xe-131

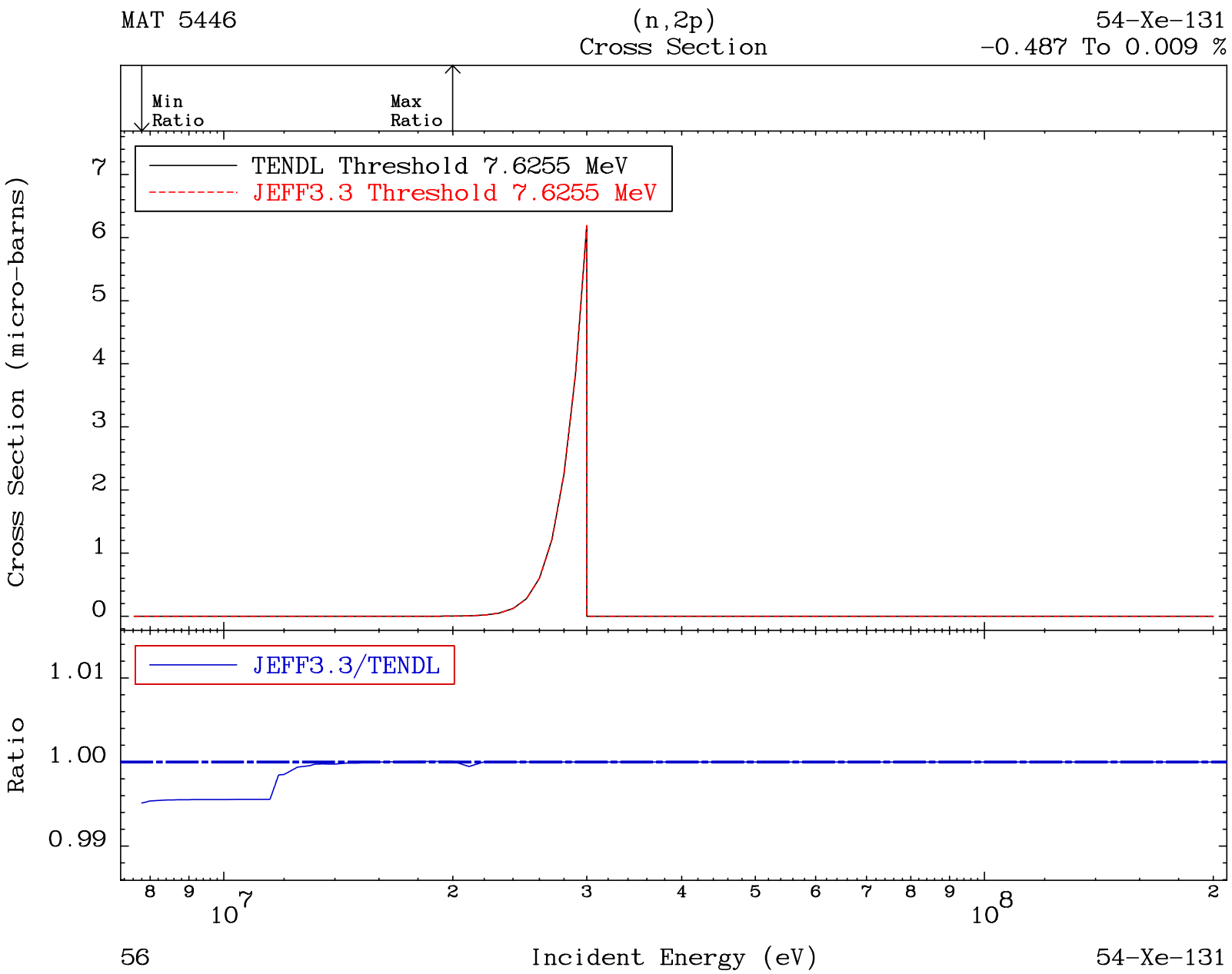

MAT 5446
(n,d)
Cross Section
54-Xe-131
-0.753 To 0.032 %
Min Ratio
Max Ratio
TENDL Threshold 6.5922 MeV
JEFF3.3 Threshold 6.5922 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
54-Xe-131

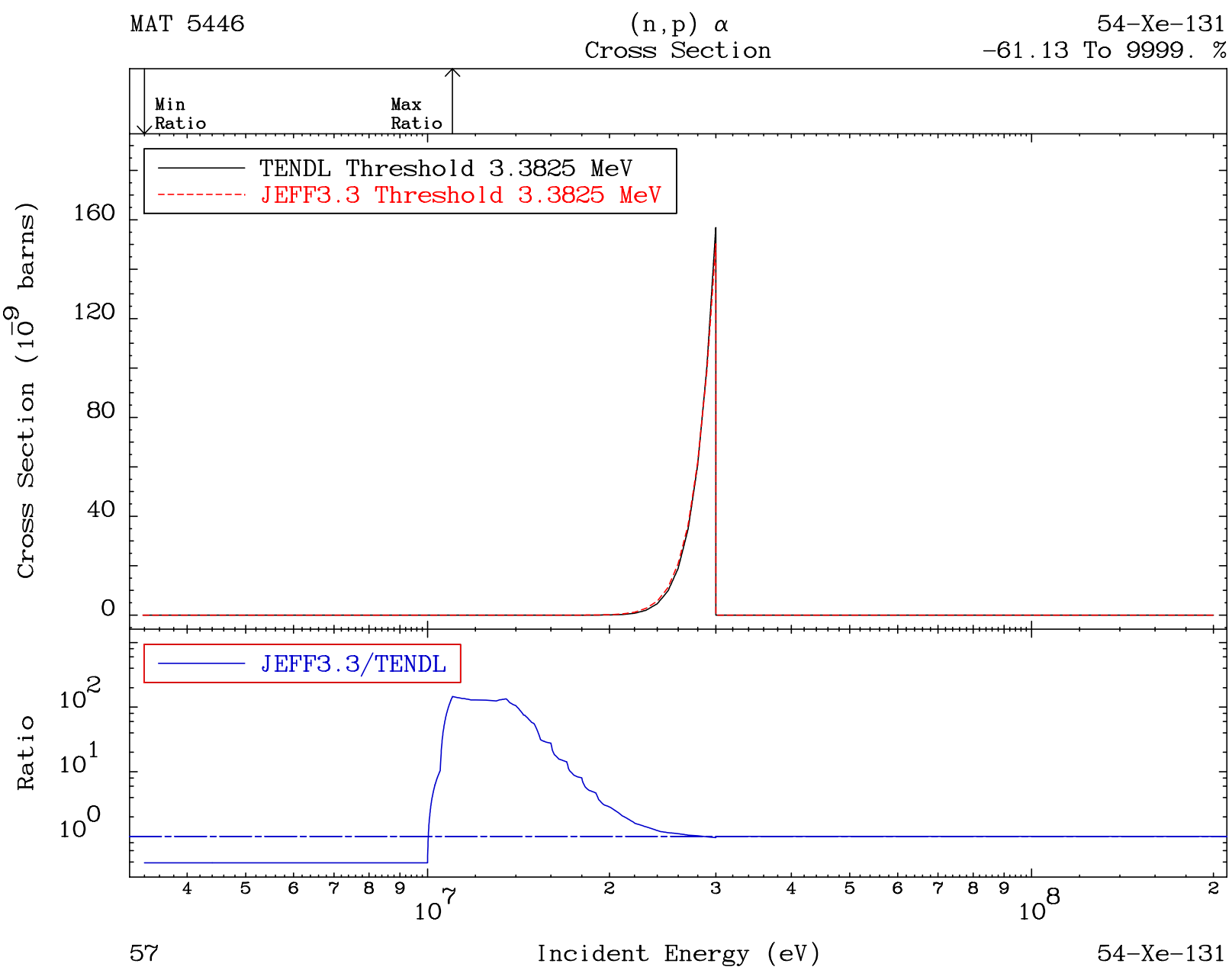

MAT 5446
(n,t)
Cross Section
54-Xe-131
-0.314 To 0.025 %
Min Ratio
Max Ratio
TENDL Threshold 6.8372 MeV
JEFF3.3 Threshold 6.8372 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
54-Xe-131

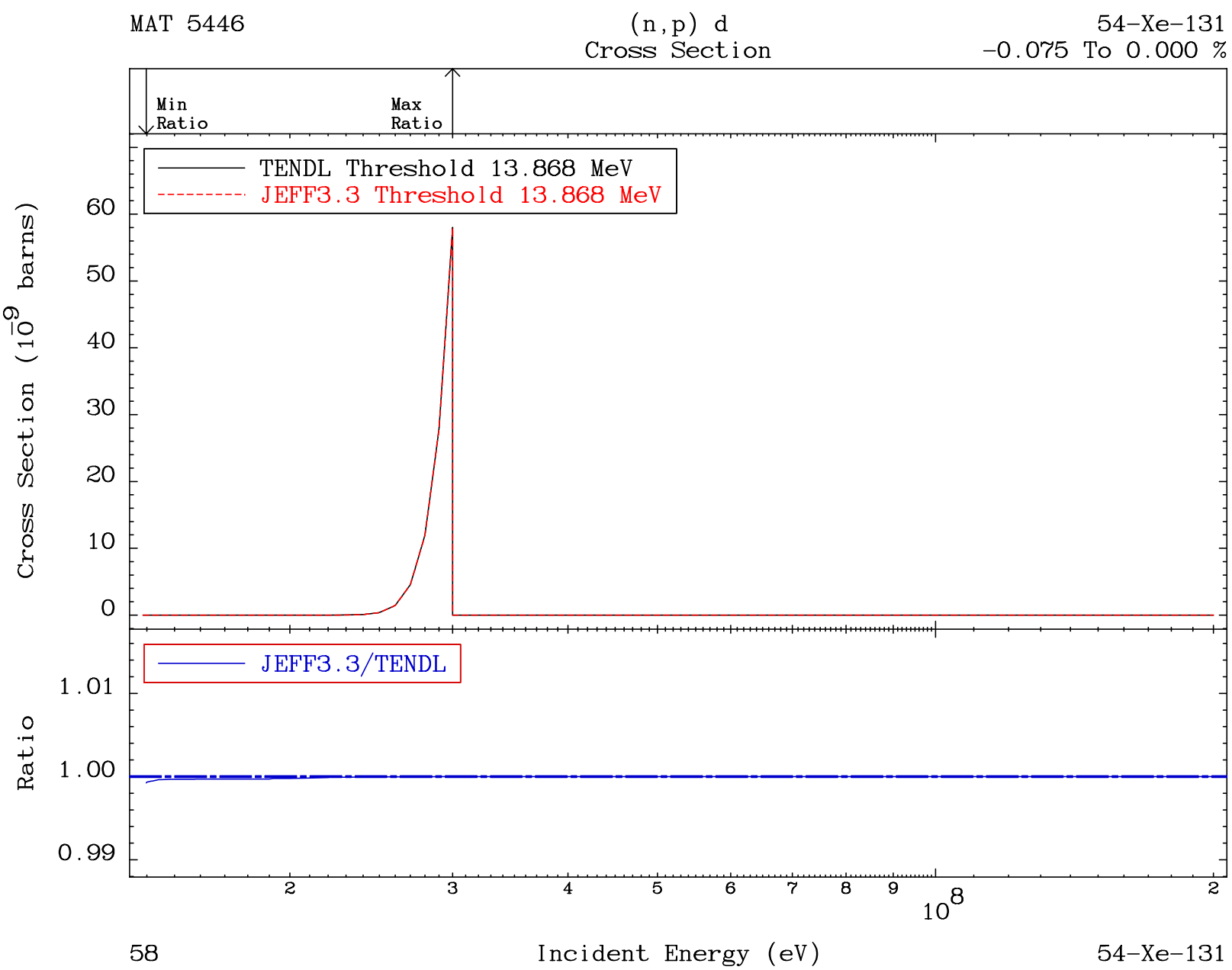

MAT 5446
(n,He-3)
Cross Section
54-Xe-131
-0.072 To 0.006 %
Min Ratio
Max Ratio
TENDL Threshold 8.3323 MeV
JEFF3.3 Threshold 8.3323 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
54-Xe-131

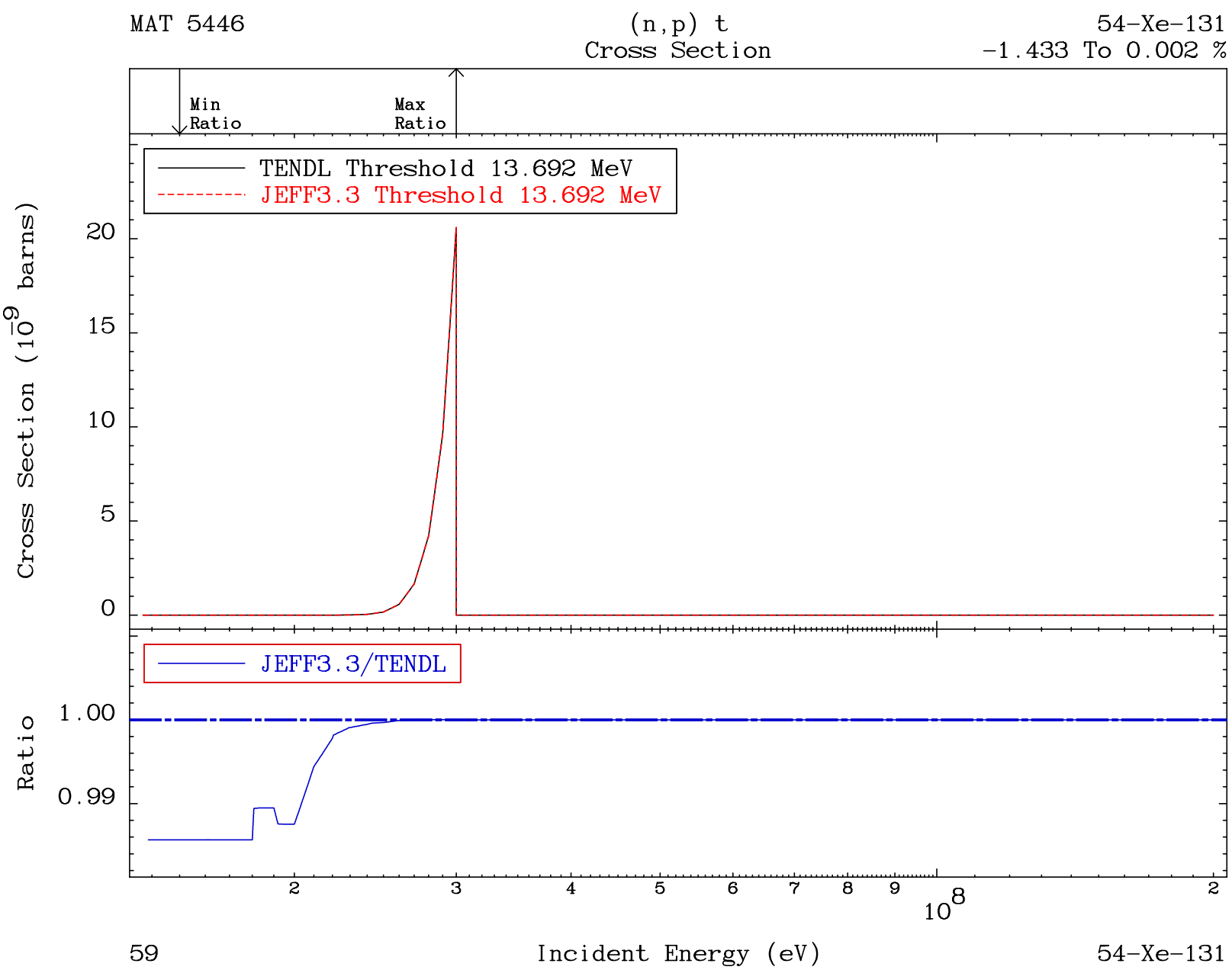

MAT 5446
(n,α)
Cross Section
54-Xe-131
-13.72 To 4688. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
54
54-Xe-131

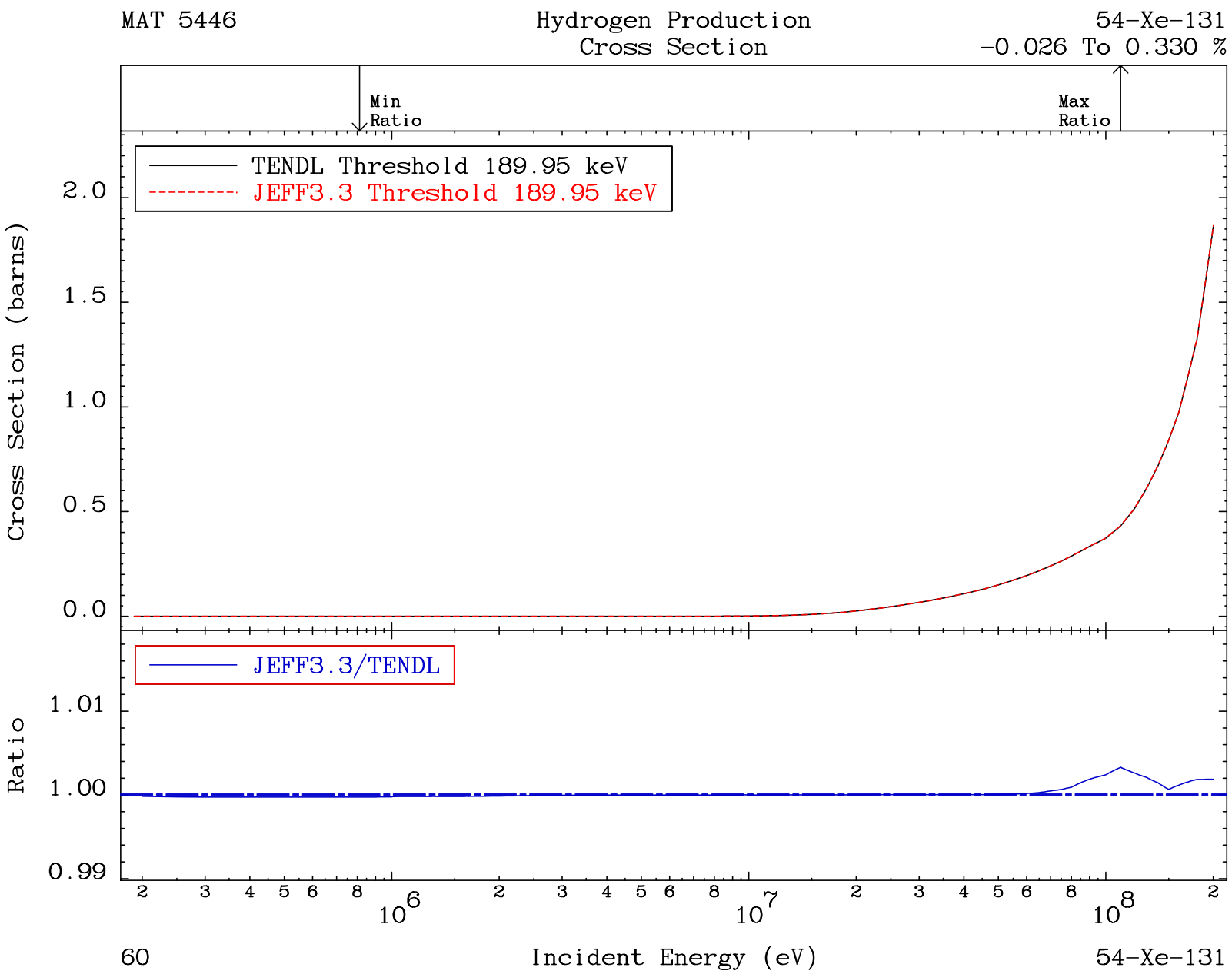

MAT 5446
(n,2α)
Cross Section
54-Xe-131
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.6000 keV
JEFF3.3 Threshold 18.537 keV
Cross Section (10^-9 barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
54-Xe-131

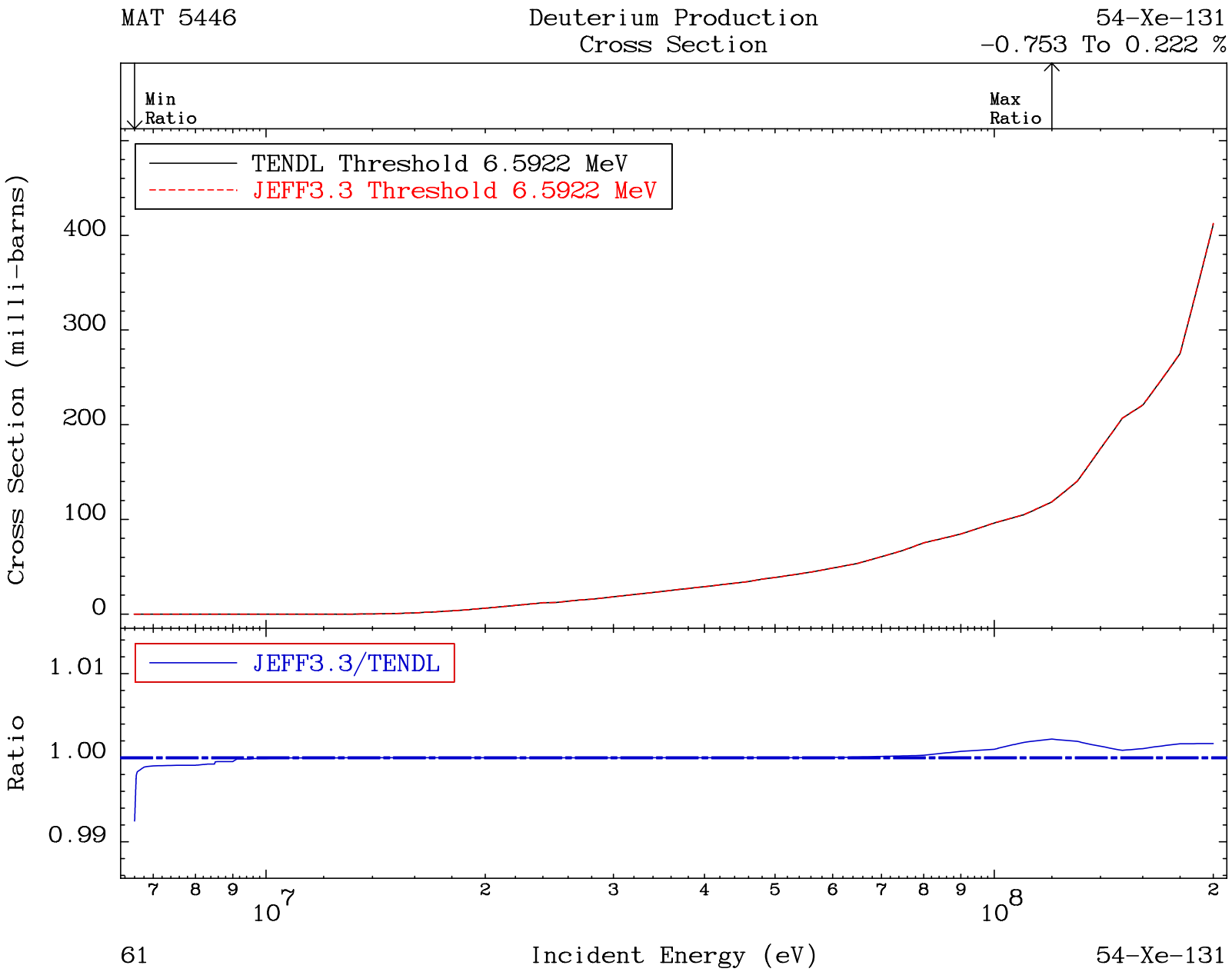

MAT 5446
(n,2p)
Cross Section
54-Xe-131
-0.487 To 0.009 %
Min Ratio
Max Ratio
TENDL Threshold 7.6255 MeV
JEFF3.3 Threshold 7.6255 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
54-Xe-131

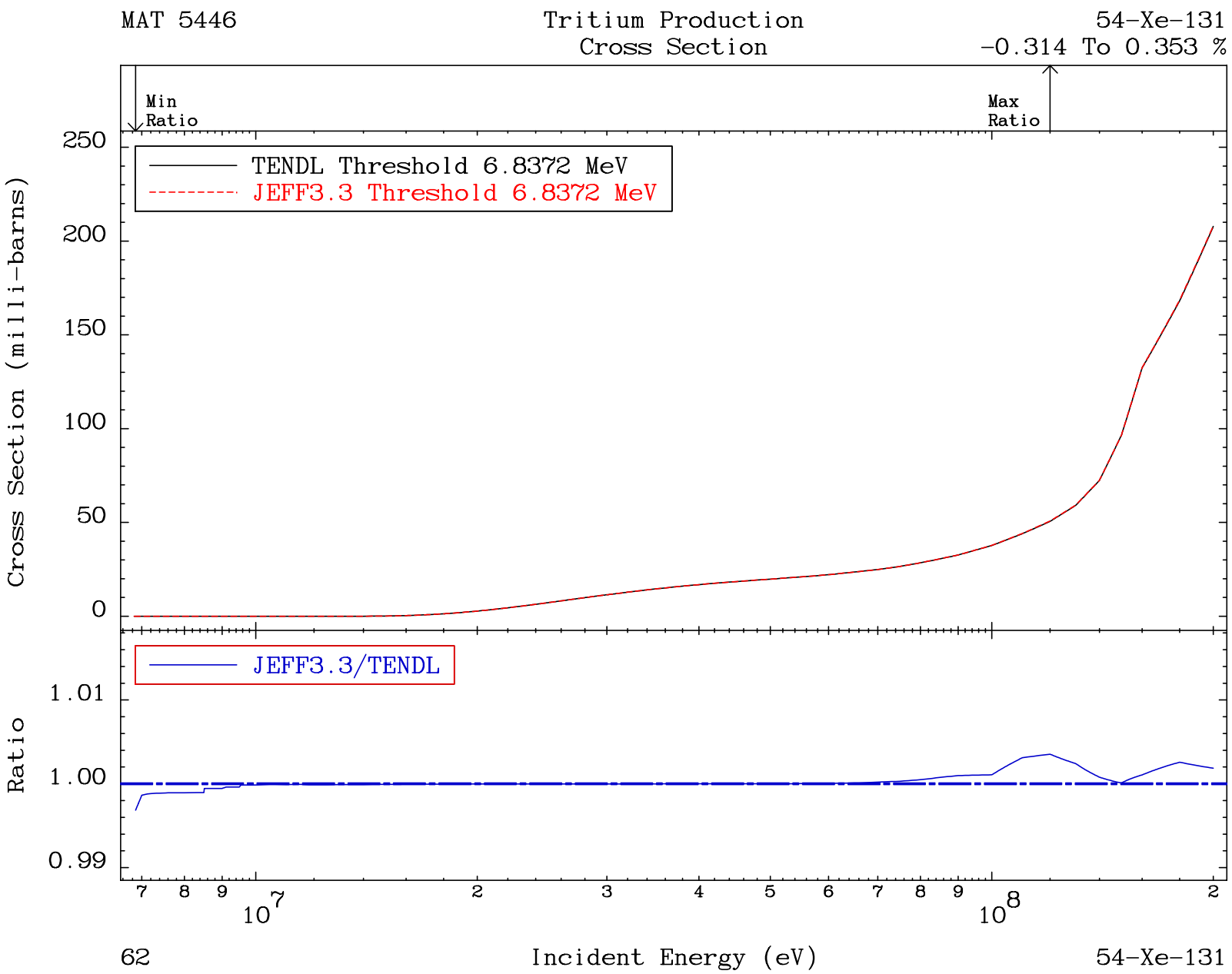

MAT 5446
(n,p) α
Cross Section
54-Xe-131
-61.13 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.3825 MeV
JEFF3.3 Threshold 3.3825 MeV
Cross Section (10^{-9} barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
57
Incident Energy (eV)
54-Xe-131

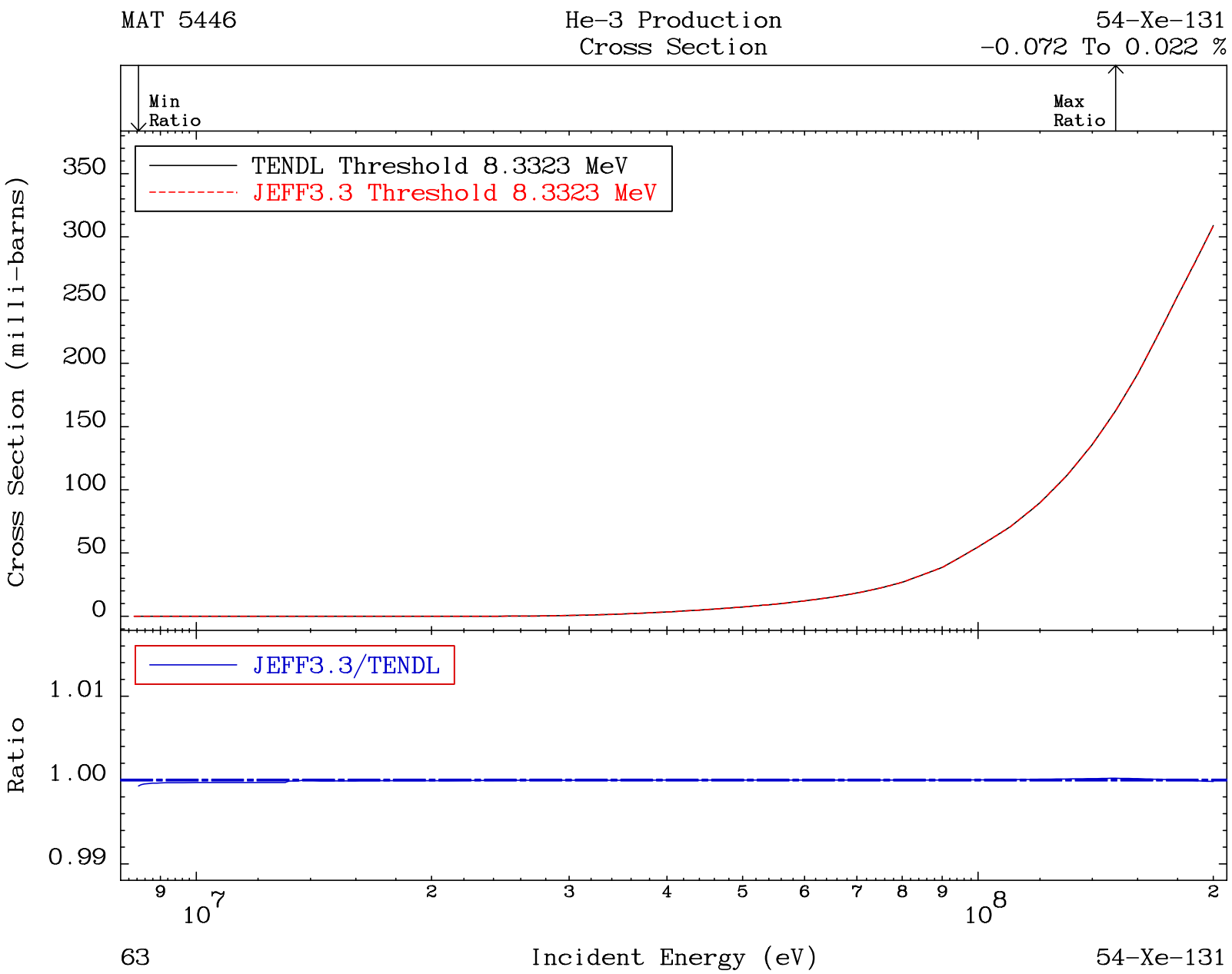

MAT 5446
(n,p) d
Cross Section
54-Xe-131
-0.075 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.868 MeV
JEFF3.3 Threshold 13.868 MeV
Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^{8}
2
58
Incident Energy (eV)
54-Xe-131

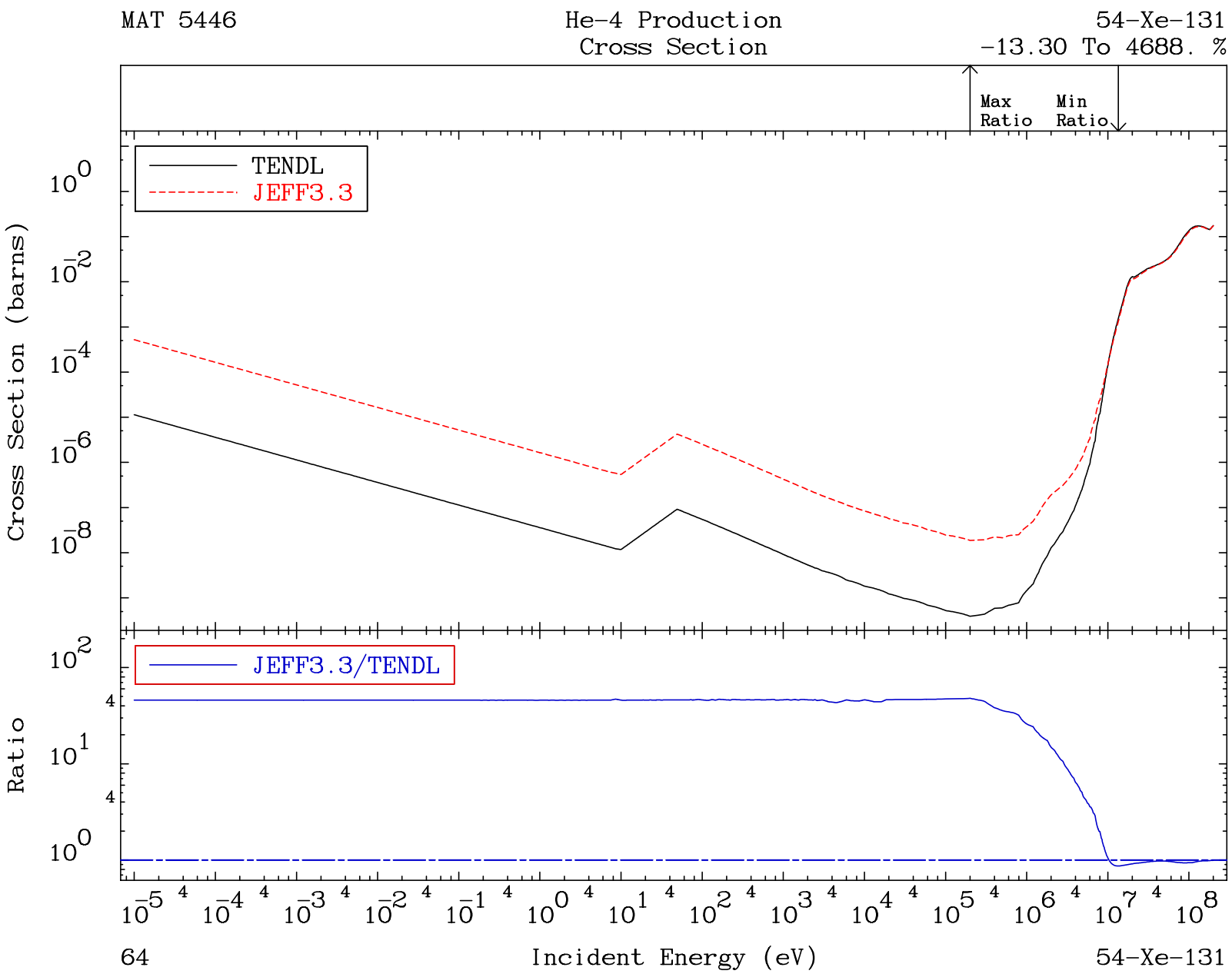

MAT 5446
(n,p) t
Cross Section
54-Xe-131
-1.433 To 0.002 %
Min Ratio
Max Ratio
TENDL Threshold 13.692 MeV
JEFF3.3 Threshold 13.692 MeV
Cross Section (10^{-9} barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
54-Xe-131

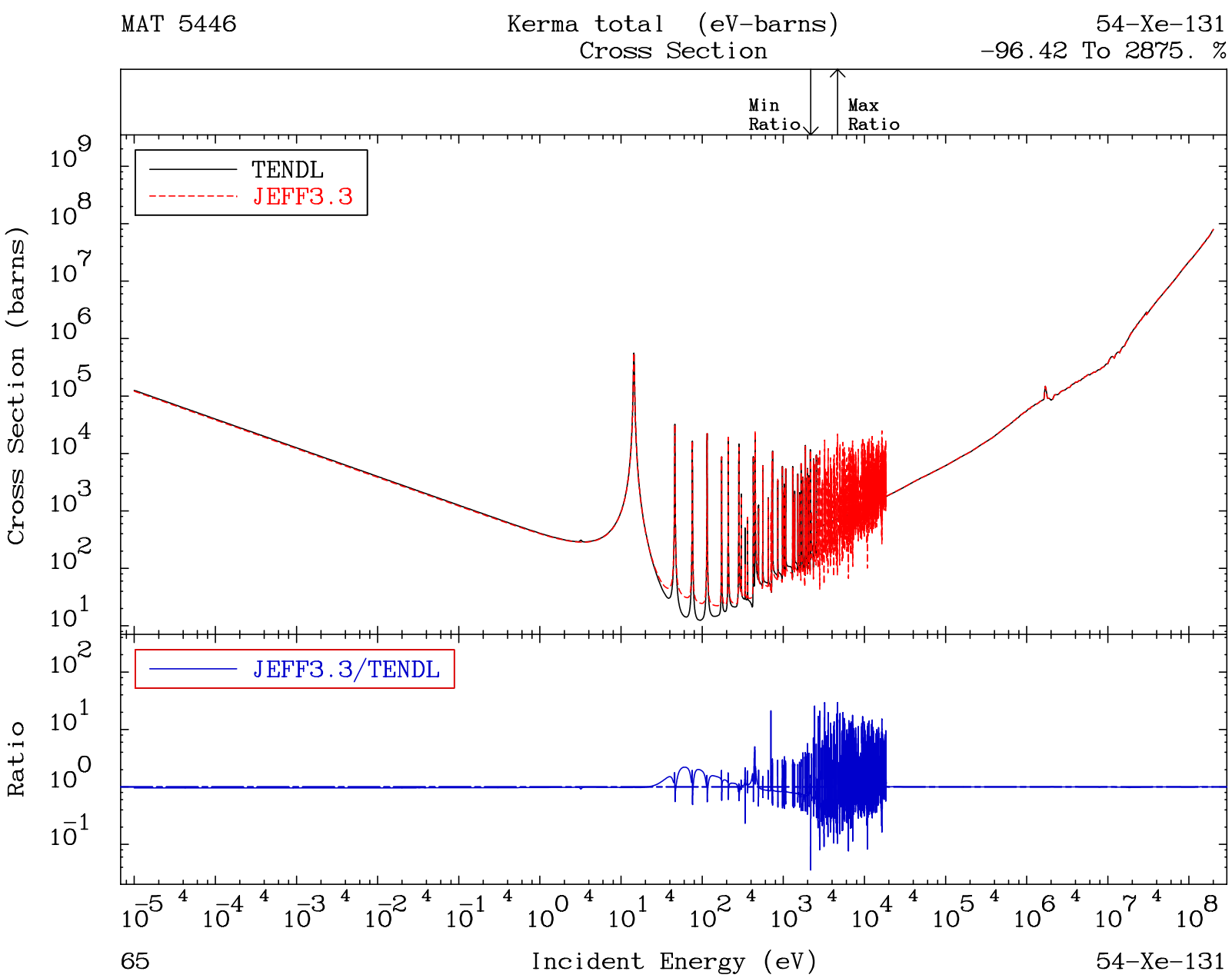

MAT 5446
Hydrogen Production
Cross Section
54-Xe-131
-0.026 To 0.330 %
Min Ratio
Max Ratio
TENDL Threshold 189.95 keV
JEFF3.3 Threshold 189.95 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
60
Incident Energy (eV)
54-Xe-131

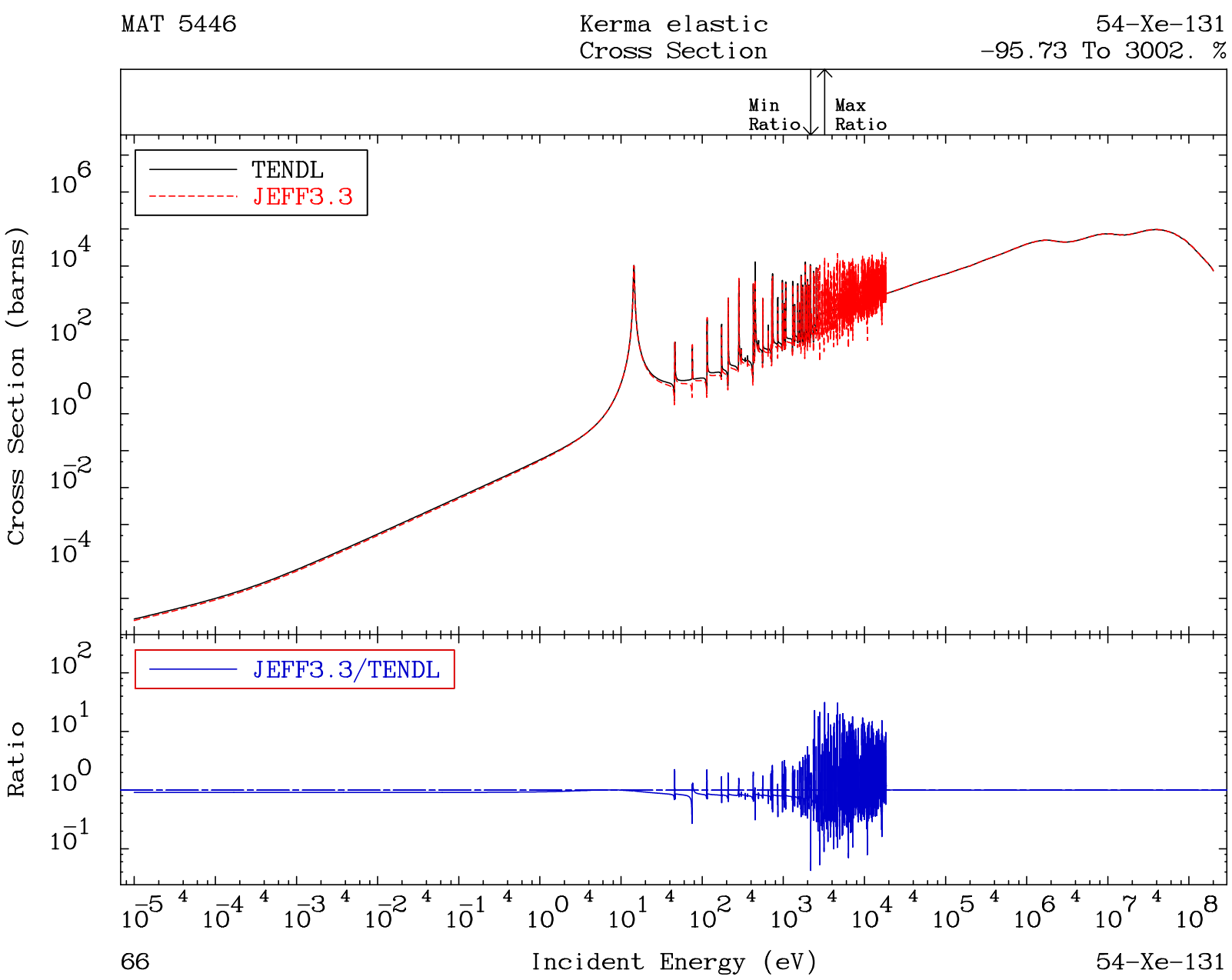

MAT 5446
Deuterium Production
Cross Section
54-Xe-131
-0.753 To 0.222 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.5922 MeV
JEFF3.3 Threshold 6.5922 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
61
Incident Energy (eV)
54-Xe-131

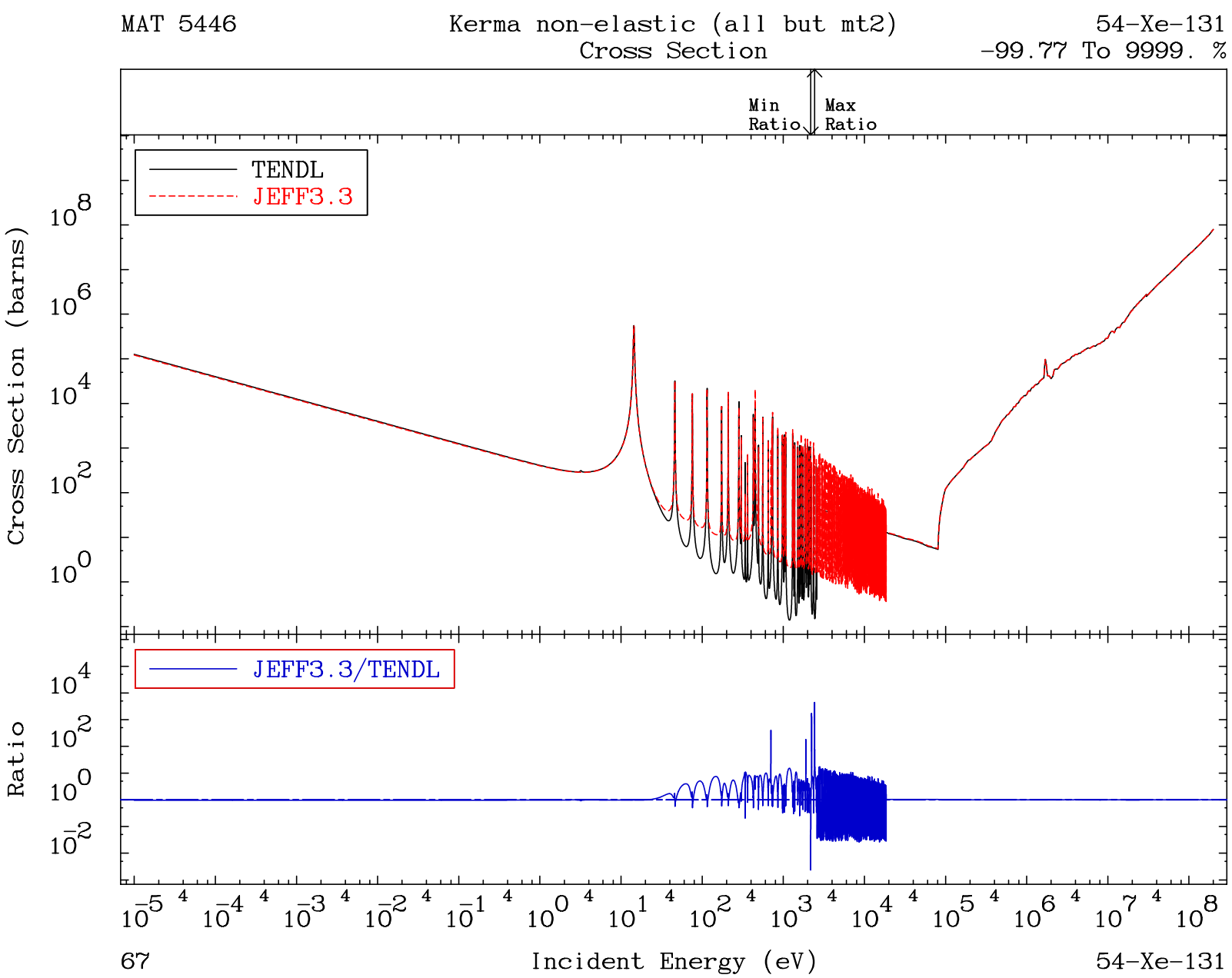

MAT 5446
Tritium Production
Cross Section
54-Xe-131
-0.314 To 0.353 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.8372 MeV
JEFF3.3 Threshold 6.8372 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
62
Incident Energy (eV)
54-Xe-131

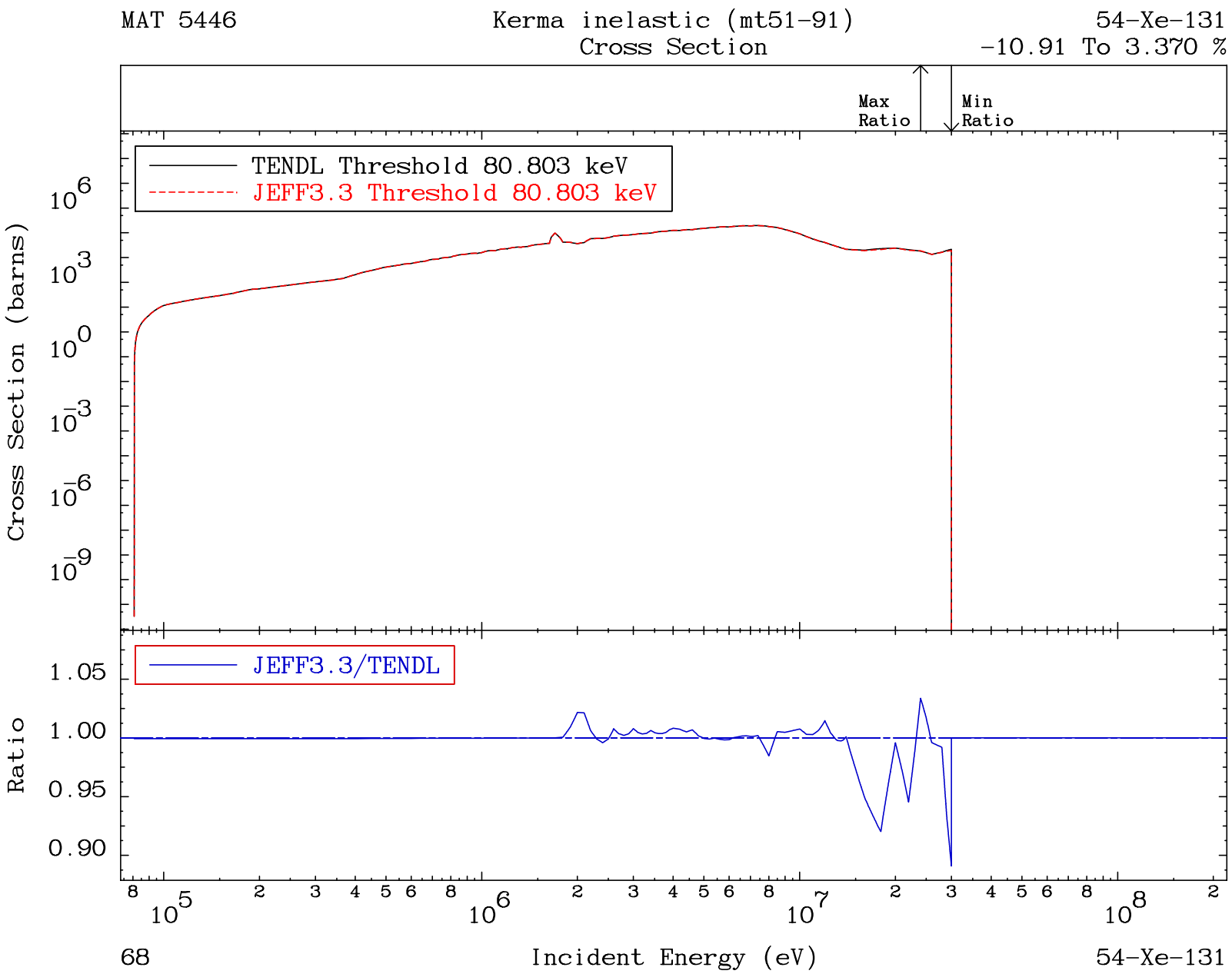

MAT 5446
He-3 Production
Cross Section
54-Xe-131
-0.072 To 0.022 %
Min Ratio
Max Ratio
TENDL Threshold 8.3323 MeV
JEFF3.3 Threshold 8.3323 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
54-Xe-131

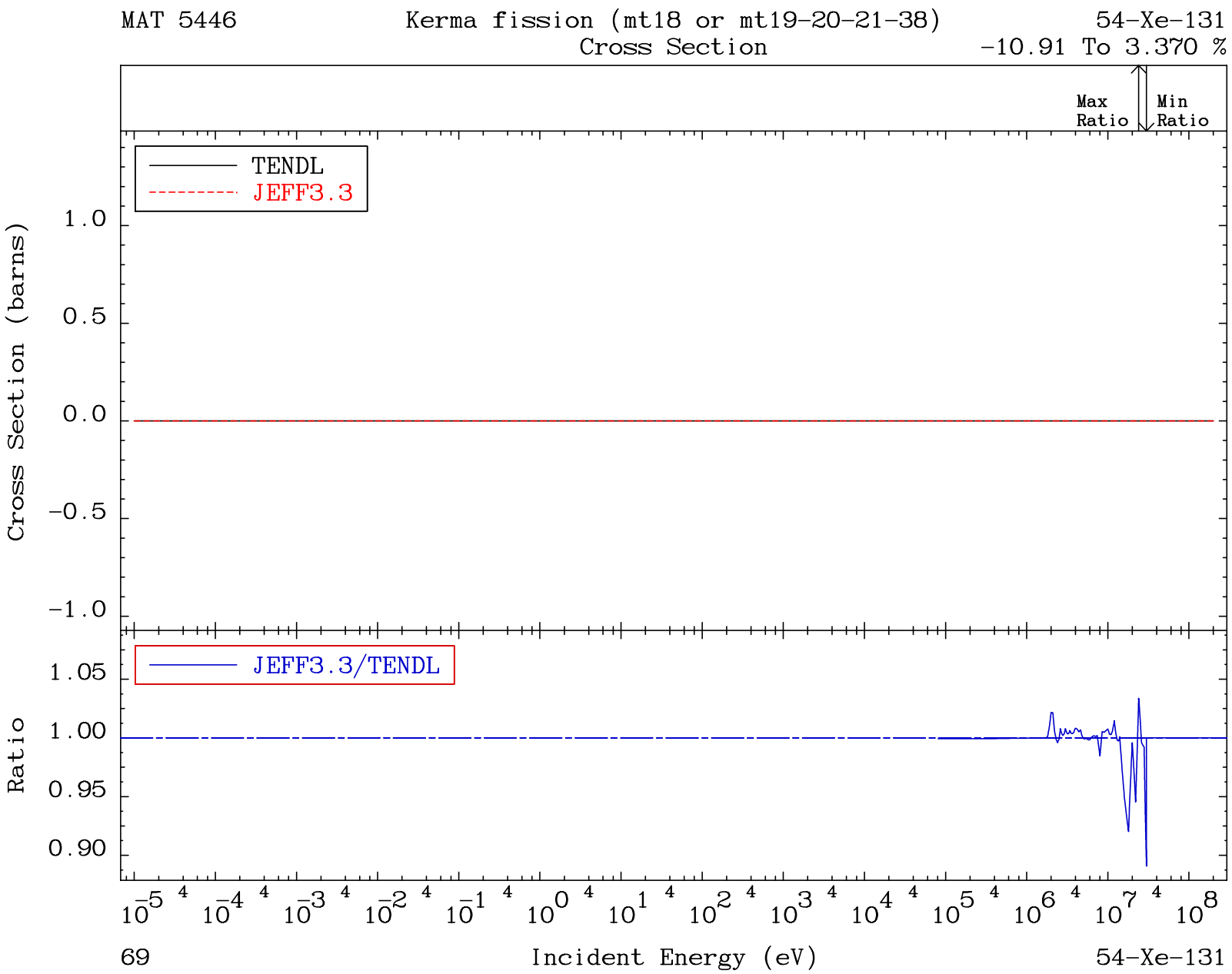

MAT 5446
He-4 Production
Cross Section
54-Xe-131
-13.30 To 4688. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
54-Xe-131

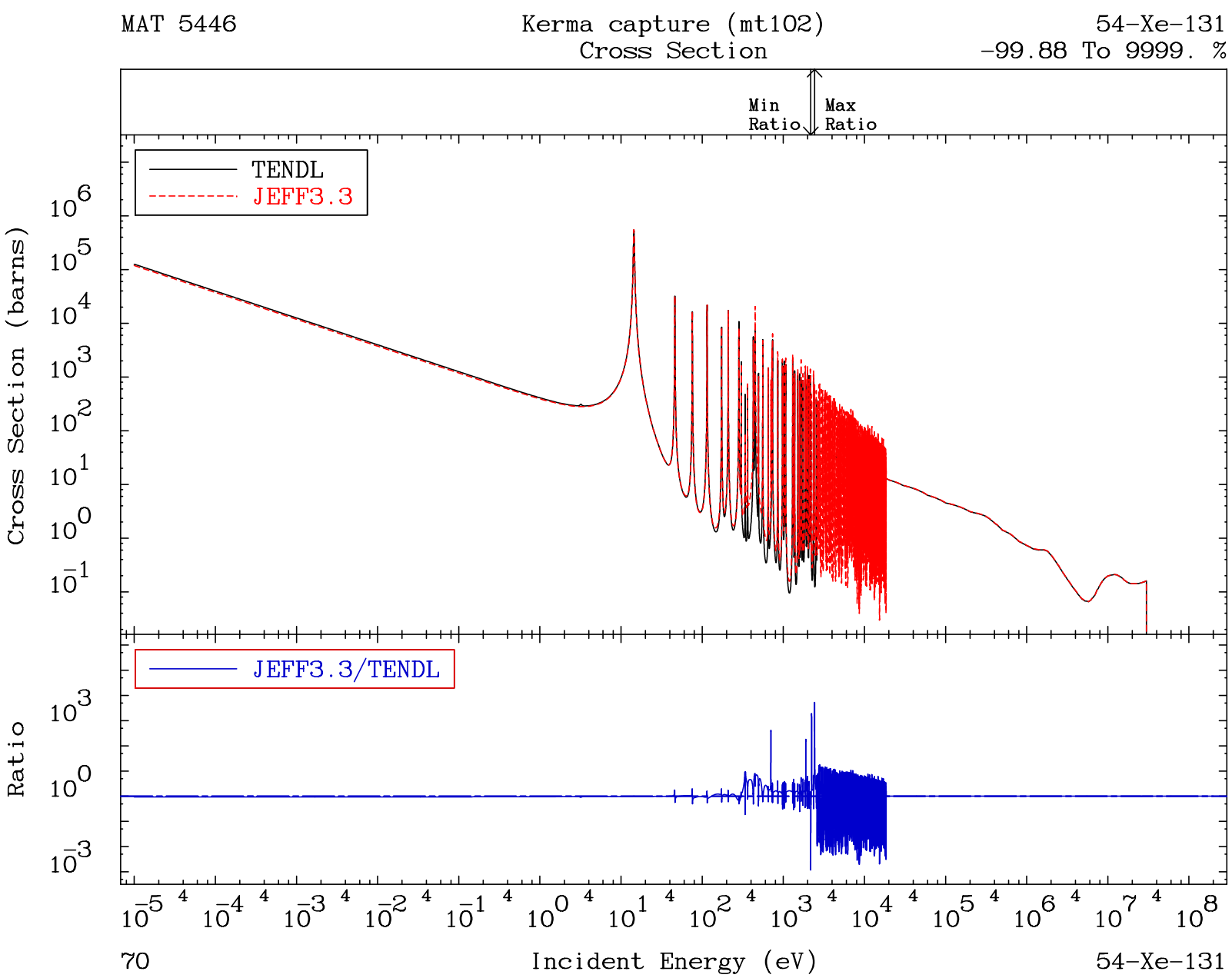

MAT 5446
Kerma total (eV-barns)
Cross Section
54-Xe-131
-96.42 To 2875. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
54-Xe-131

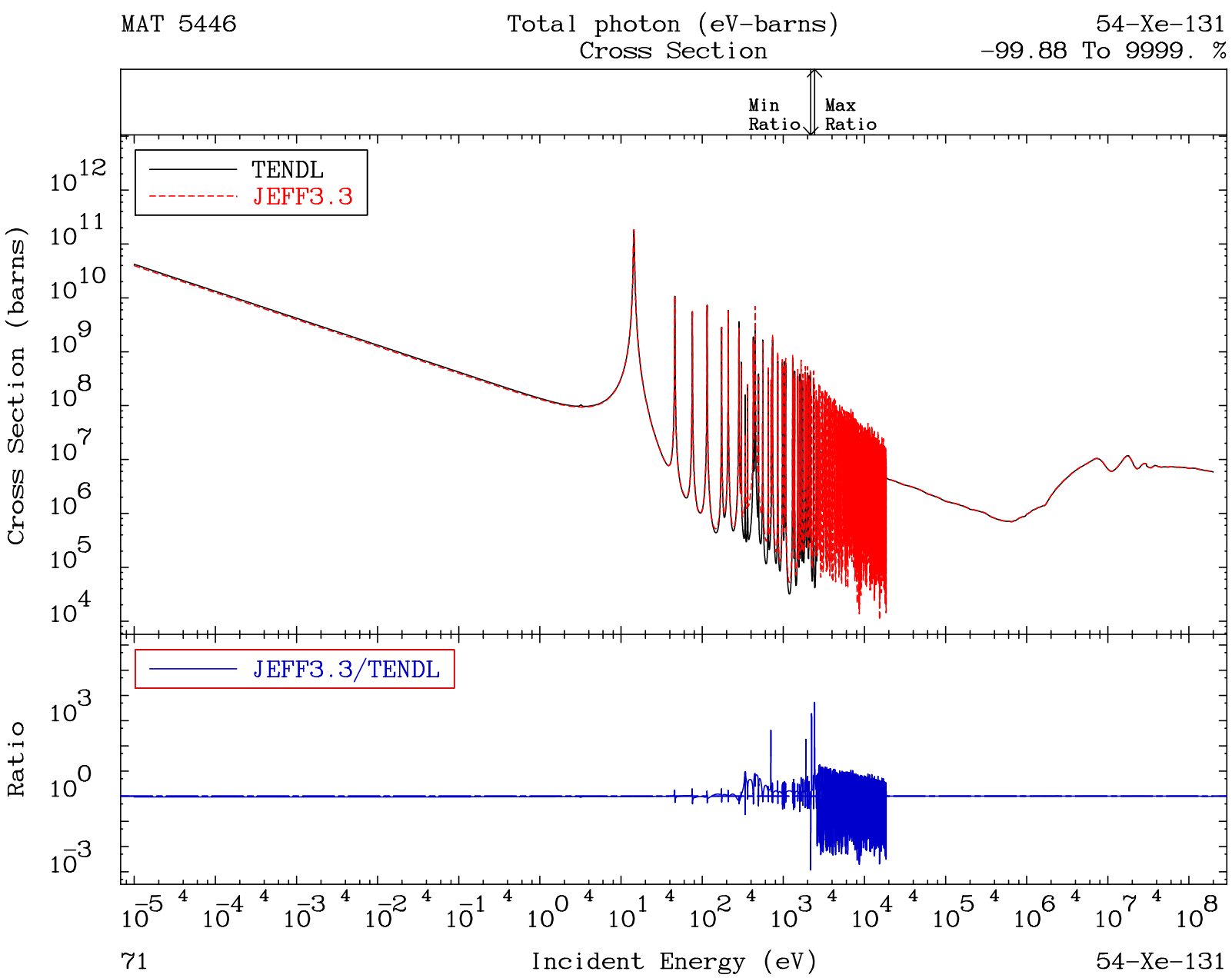

MAT 5446
Kerma elastic
Cross Section
54-Xe-131
-95.73 To 3002. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
54-Xe-131

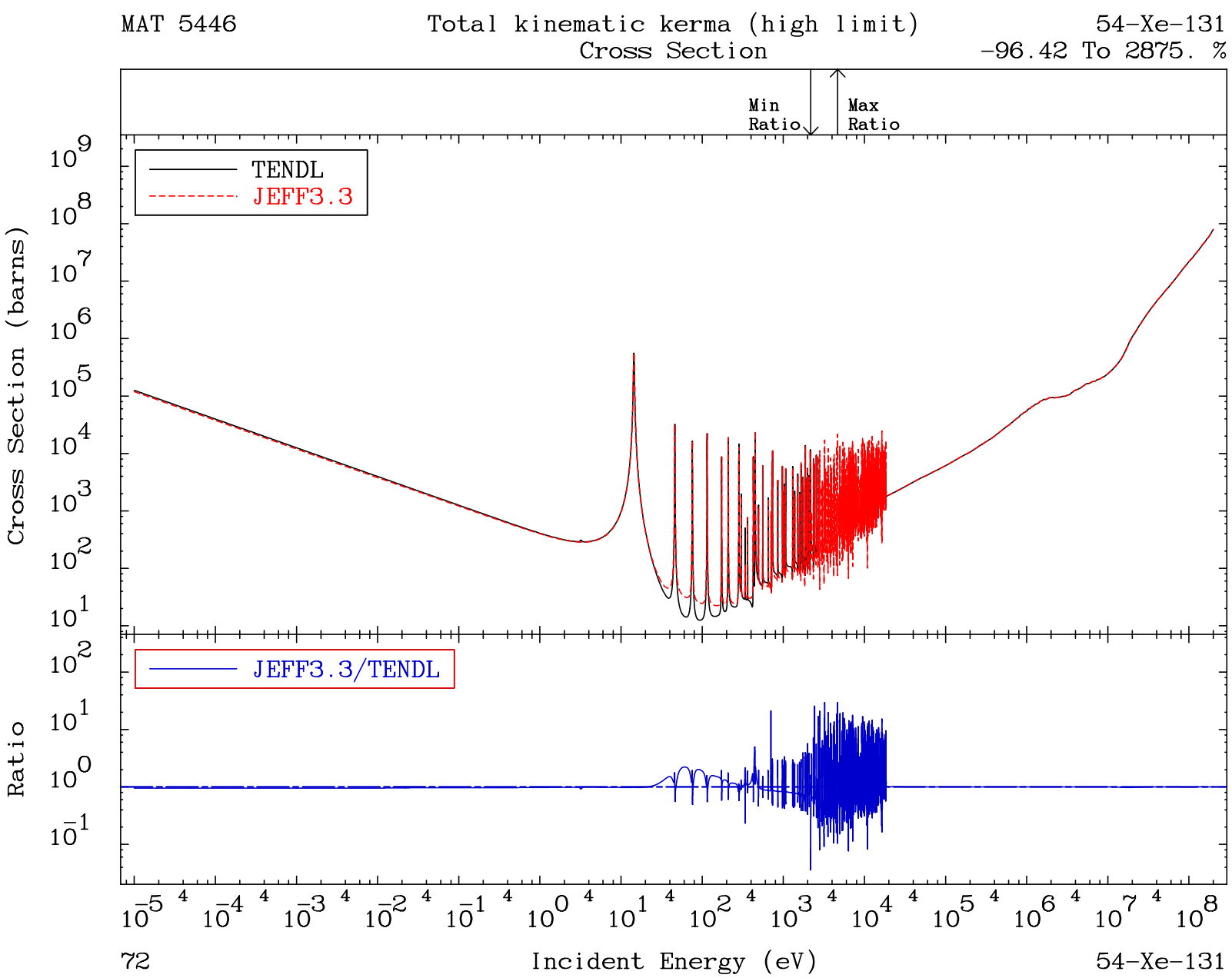

MAT 5446
Kerma non-elastic (all but mt2)
Cross Section
54-Xe-131
-99.77 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
54-Xe-131

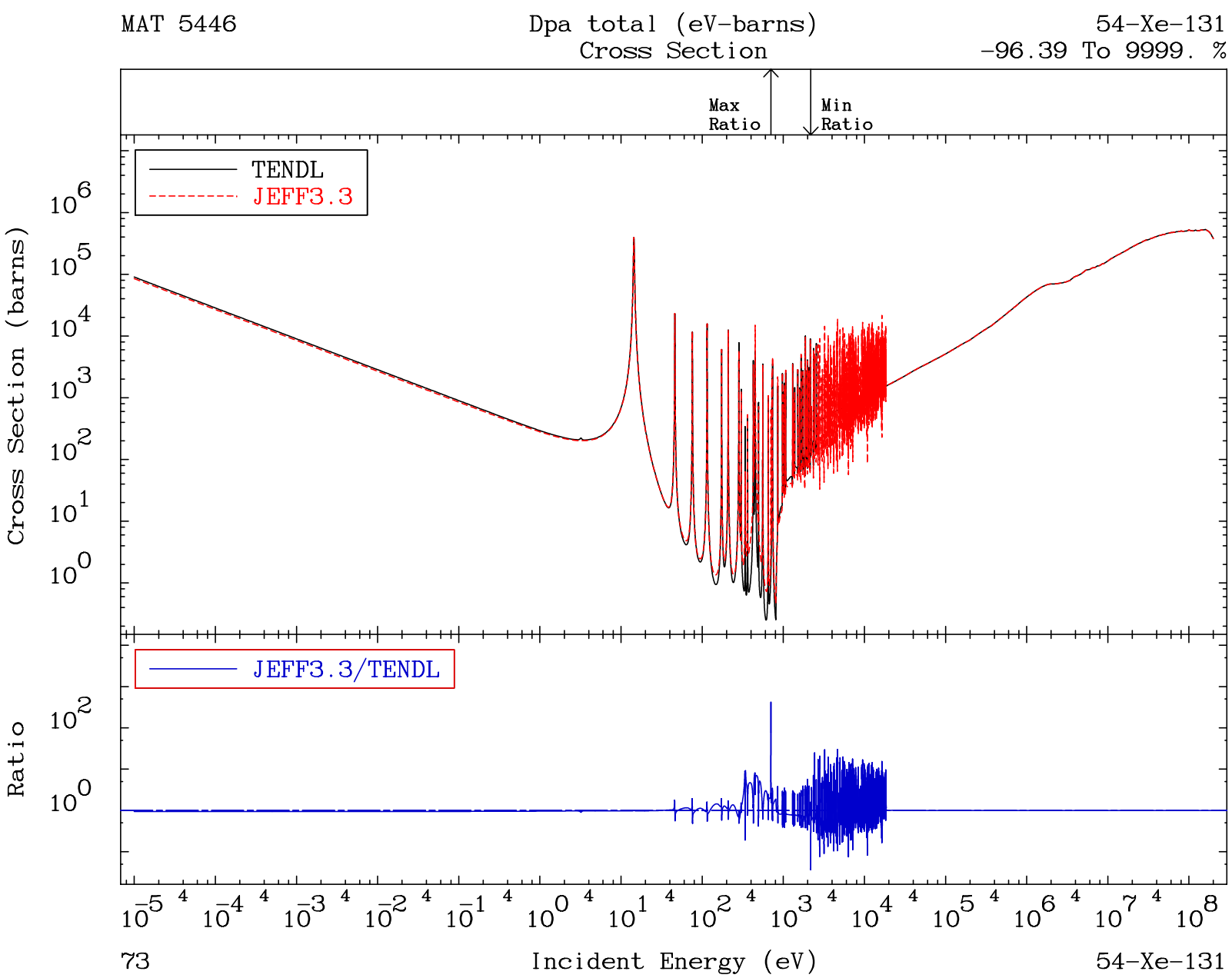

MAT 5446
Kerma inelastic (mt51-91)
Cross Section
54-Xe-131
-10.91 To 3.370 %
Max Ratio
Min Ratio
TENDL Threshold 80.803 keV
JEFF3.3 Threshold 80.803 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
54-Xe-131

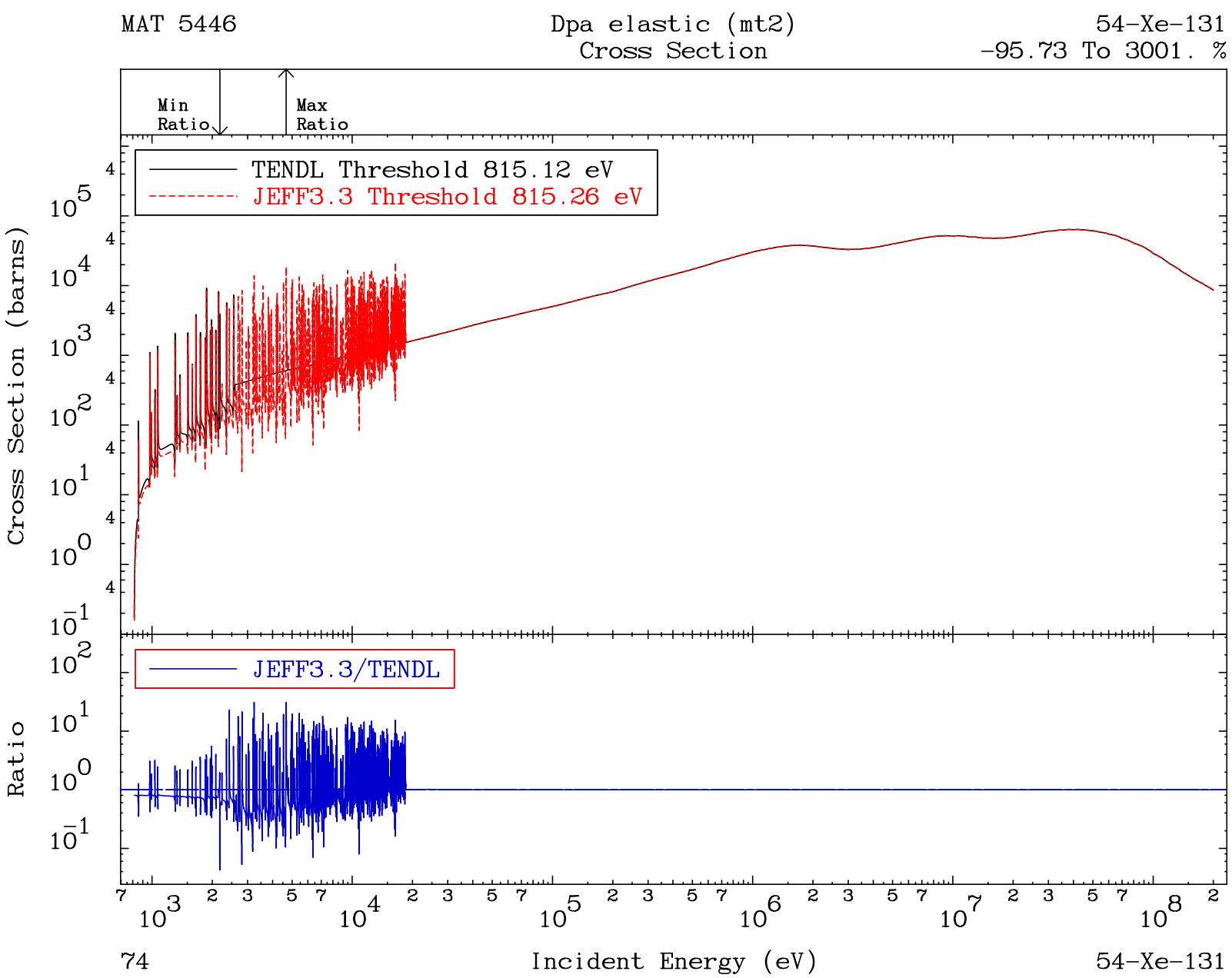

MAT 5446
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
54-Xe-131
-10.91 To 3.370 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
69
Incident Energy (eV)
54-Xe-131

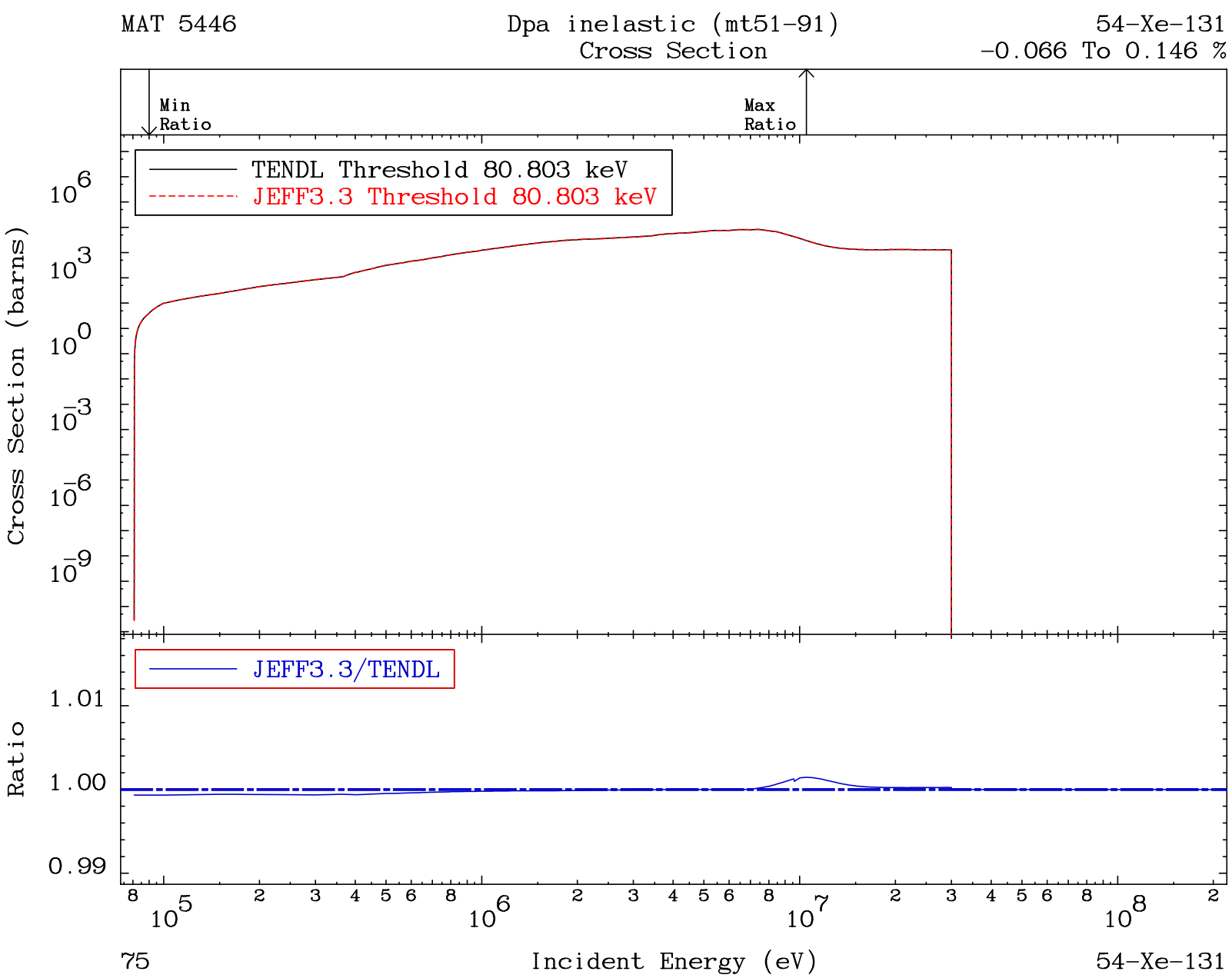

MAT 5446
Kerma capture (mt102)
Cross Section
54-Xe-131
-99.88 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
54-Xe-131

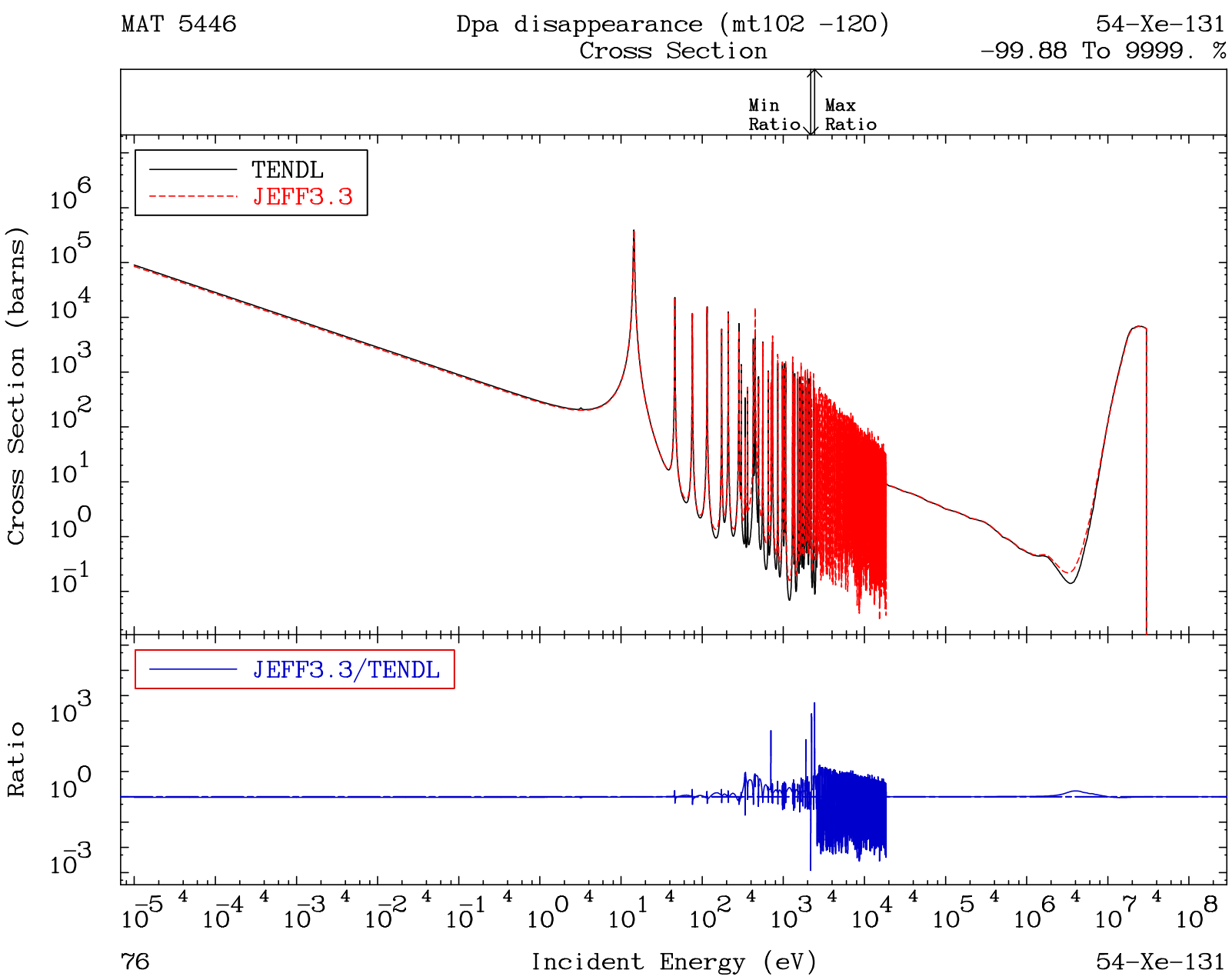

MAT 5446
Total photon (eV-barns)
Cross Section
54-Xe-131
-99.88 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
54-Xe-131

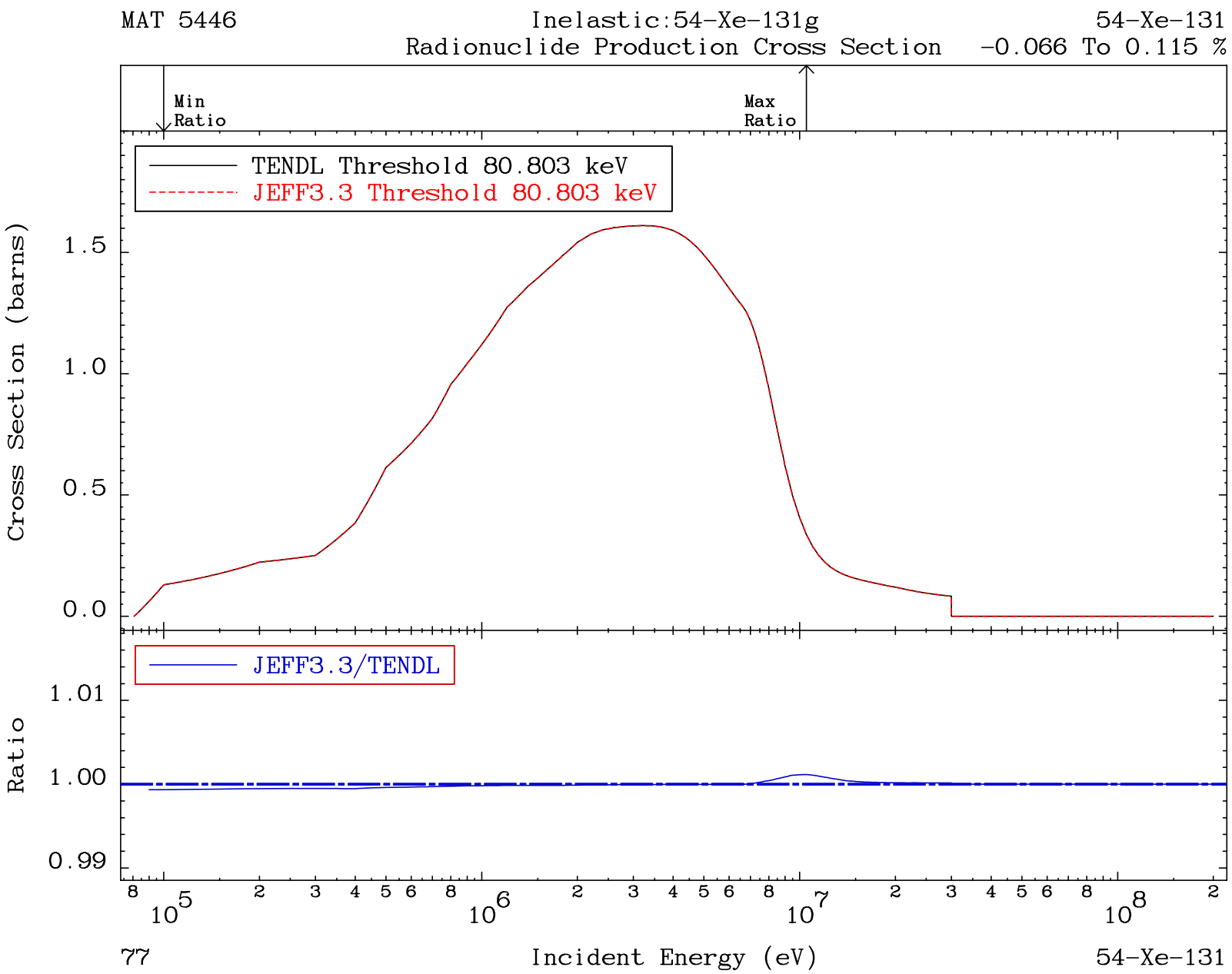

MAT 5446
Total kinematic kerma (high limit)
Cross Section
54-Xe-131
-96.42 To 2875. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
54-Xe-131

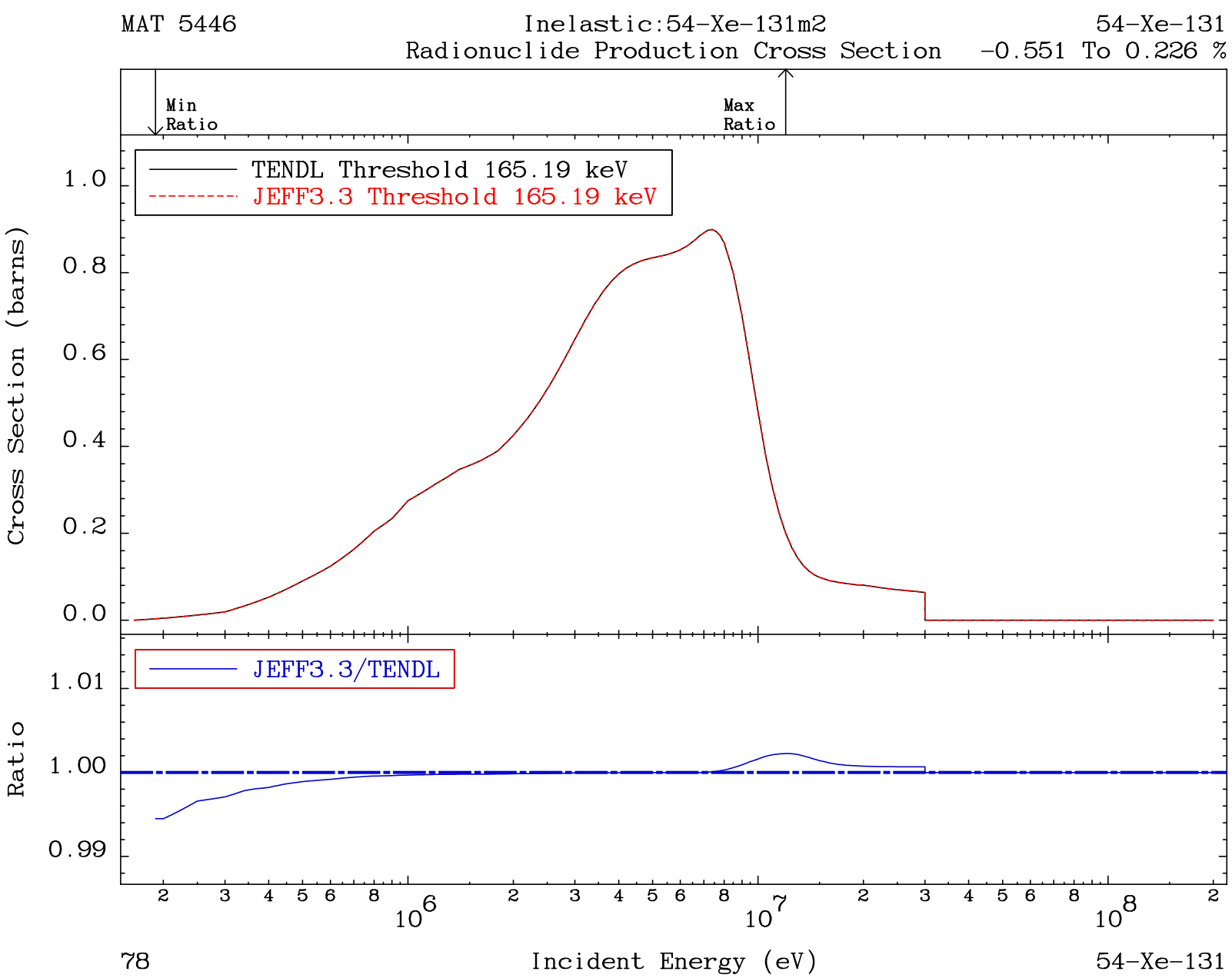

MAT 5446
Dpa total (eV-barns)
Cross Section
54-Xe-131
-96.39 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
54-Xe-131

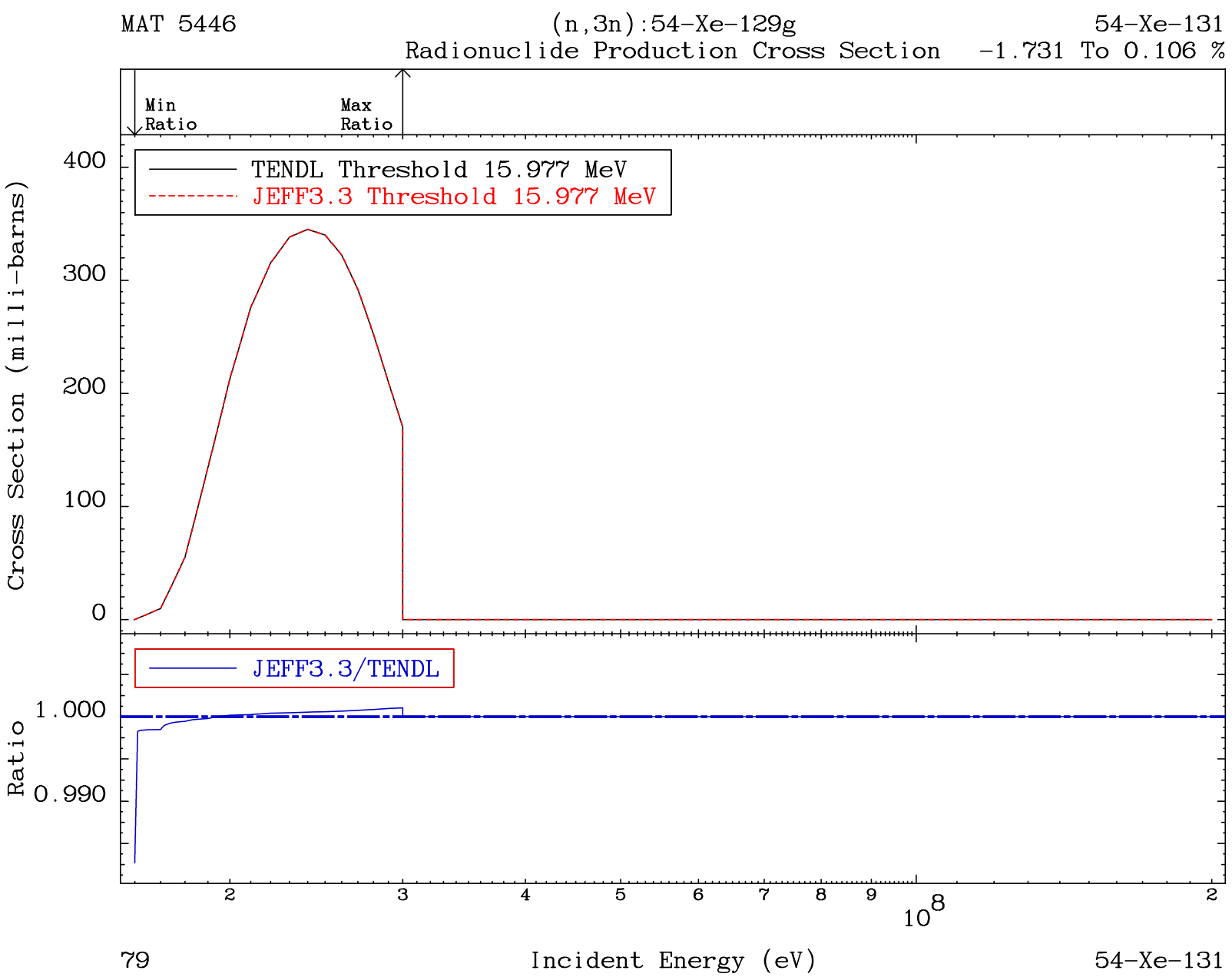

MAT 5446
Dpa elastic (mt2)
Cross Section
54-Xe-131
-95.73 To 3001. %
Min Ratio
Max Ratio
TENDL Threshold 815.12 eV
JEFF3.3 Threshold 815.26 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
54-Xe-131

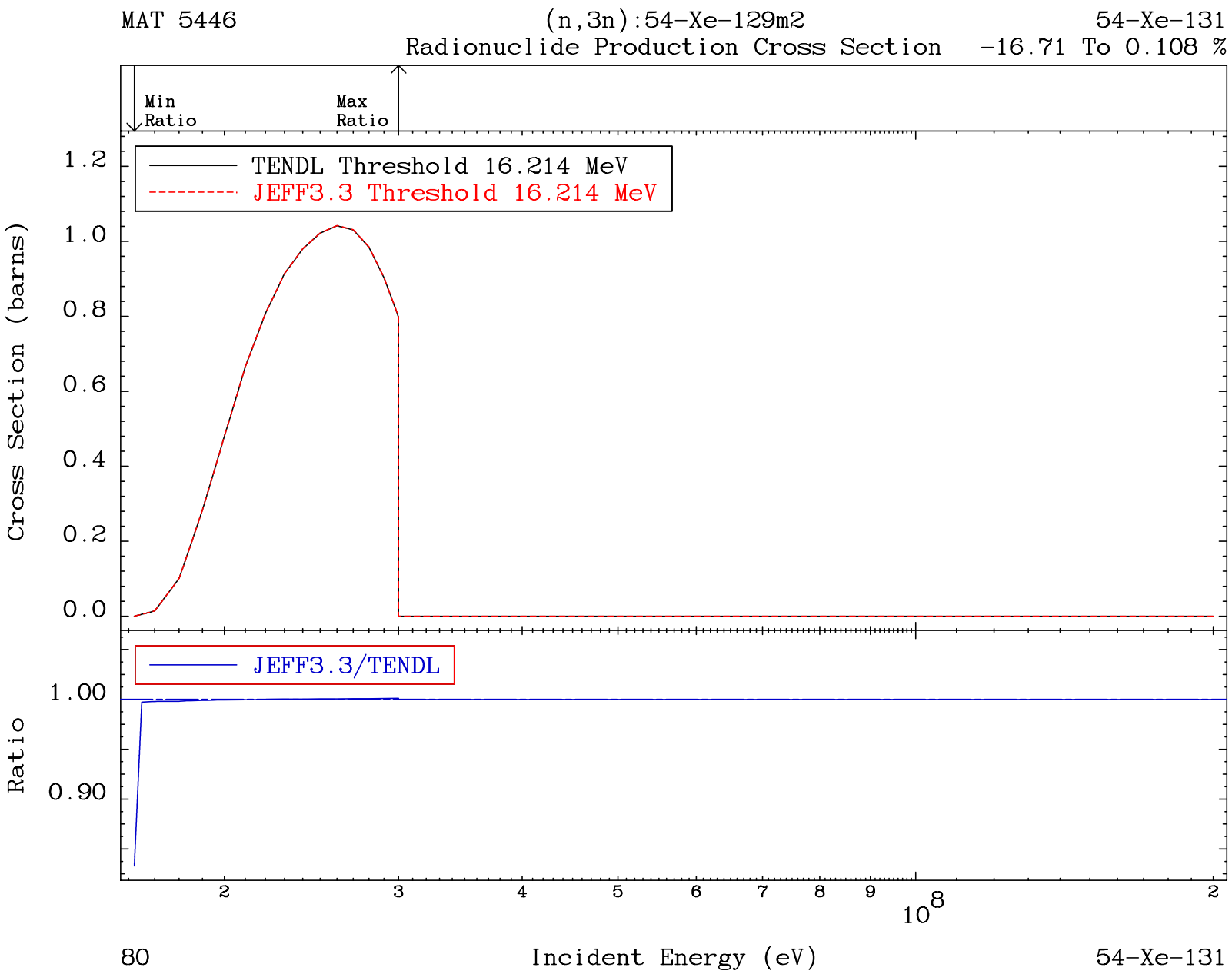

MAT 5446
Dpa inelastic (mt51-91)
Cross Section
54-Xe-131
-0.066 To 0.146 %
Min Ratio
Max Ratio
TENDL Threshold 80.803 keV
JEFF3.3 Threshold 80.803 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
54-Xe-131

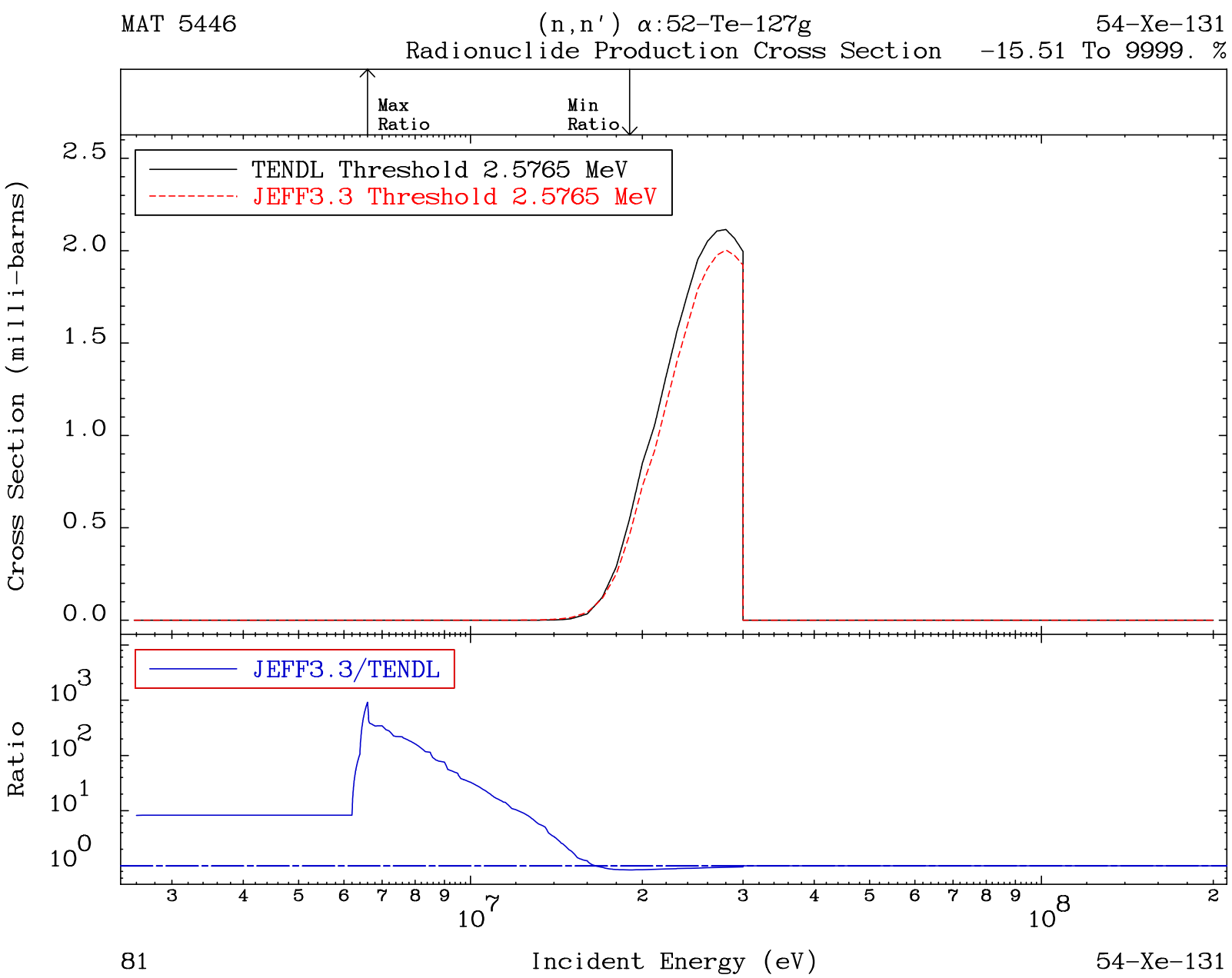

MAT 5446
Dpa disappearance (mt102 -120)
Cross Section
54-Xe-131
-99.88 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
54-Xe-131

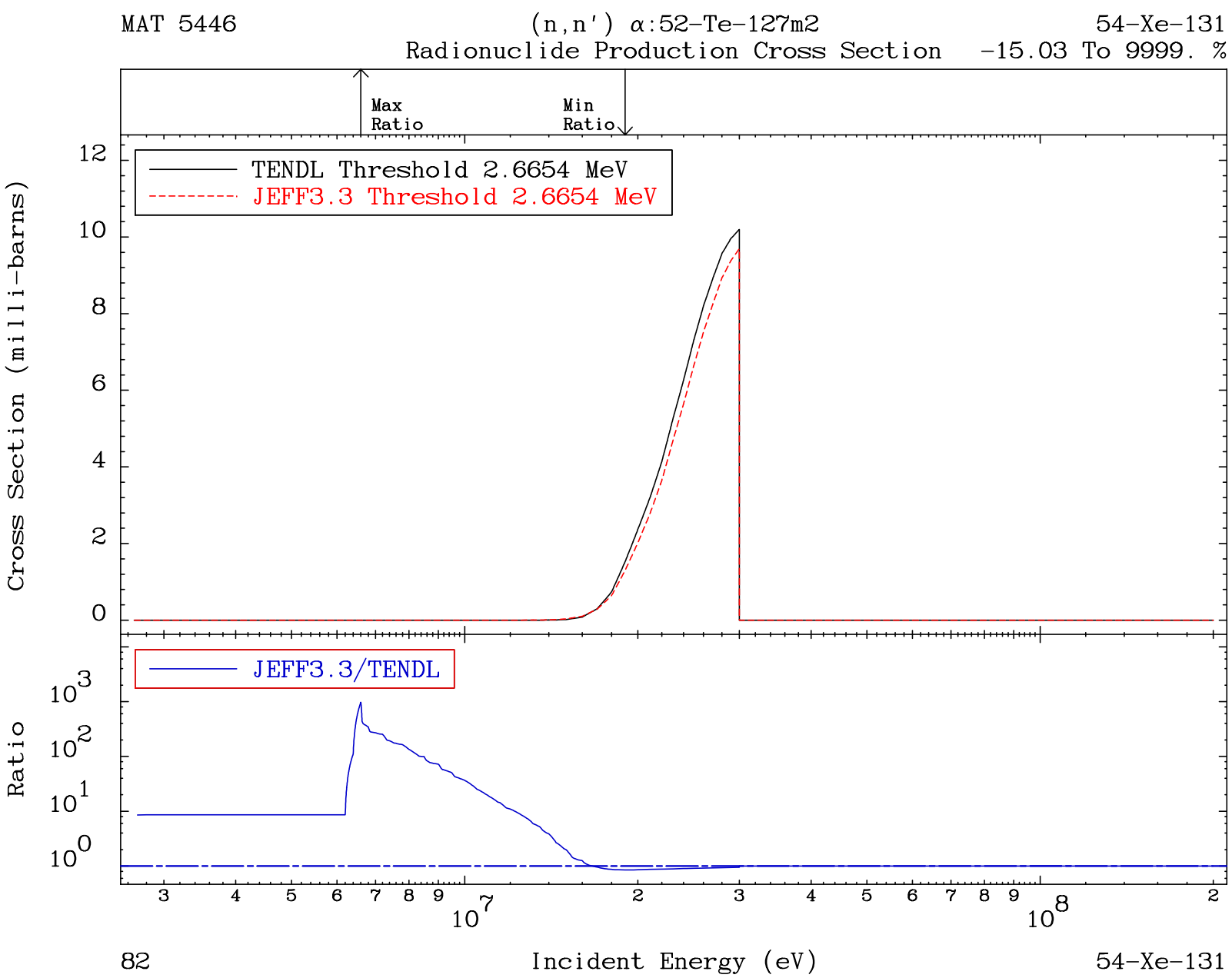

MAT 5446
Inelastic:54-Xe-131g
54-Xe-131
Radionuclide Production Cross Section
-0.066 To 0.115 %
Min Ratio
Max Ratio
TENDL Threshold 80.803 keV
JEFF3.3 Threshold 80.803 keV
Cross Section (barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
77
Incident Energy (eV)
54-Xe-131

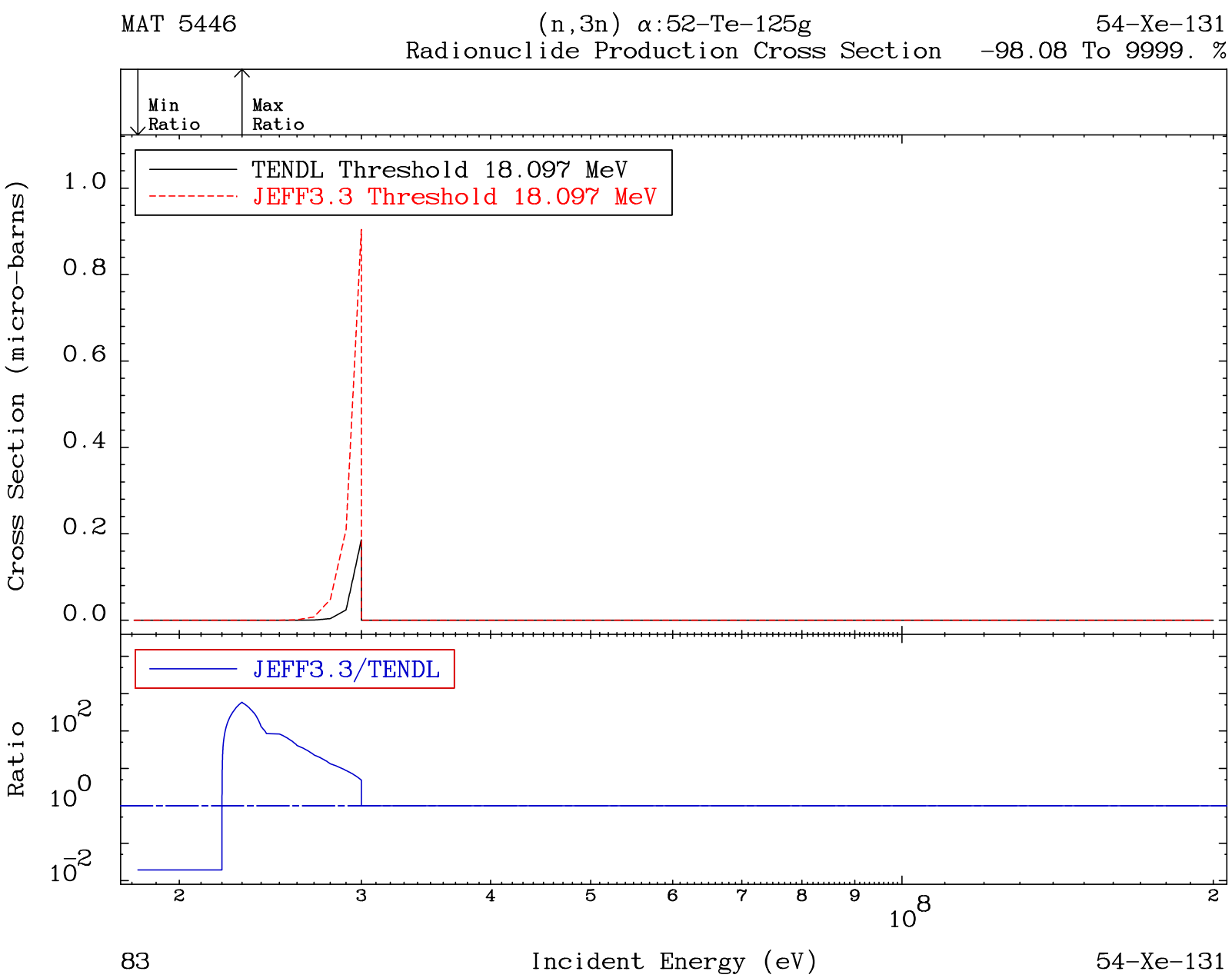

MAT 5446
Inelastic:54-Xe-131m2
54-Xe-131
Radionuclide Production Cross Section
-0.551 To 0.226 %
Min Ratio
Max Ratio
TENDL Threshold 165.19 keV
JEFF3.3 Threshold 165.19 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
78
Incident Energy (eV)
54-Xe-131

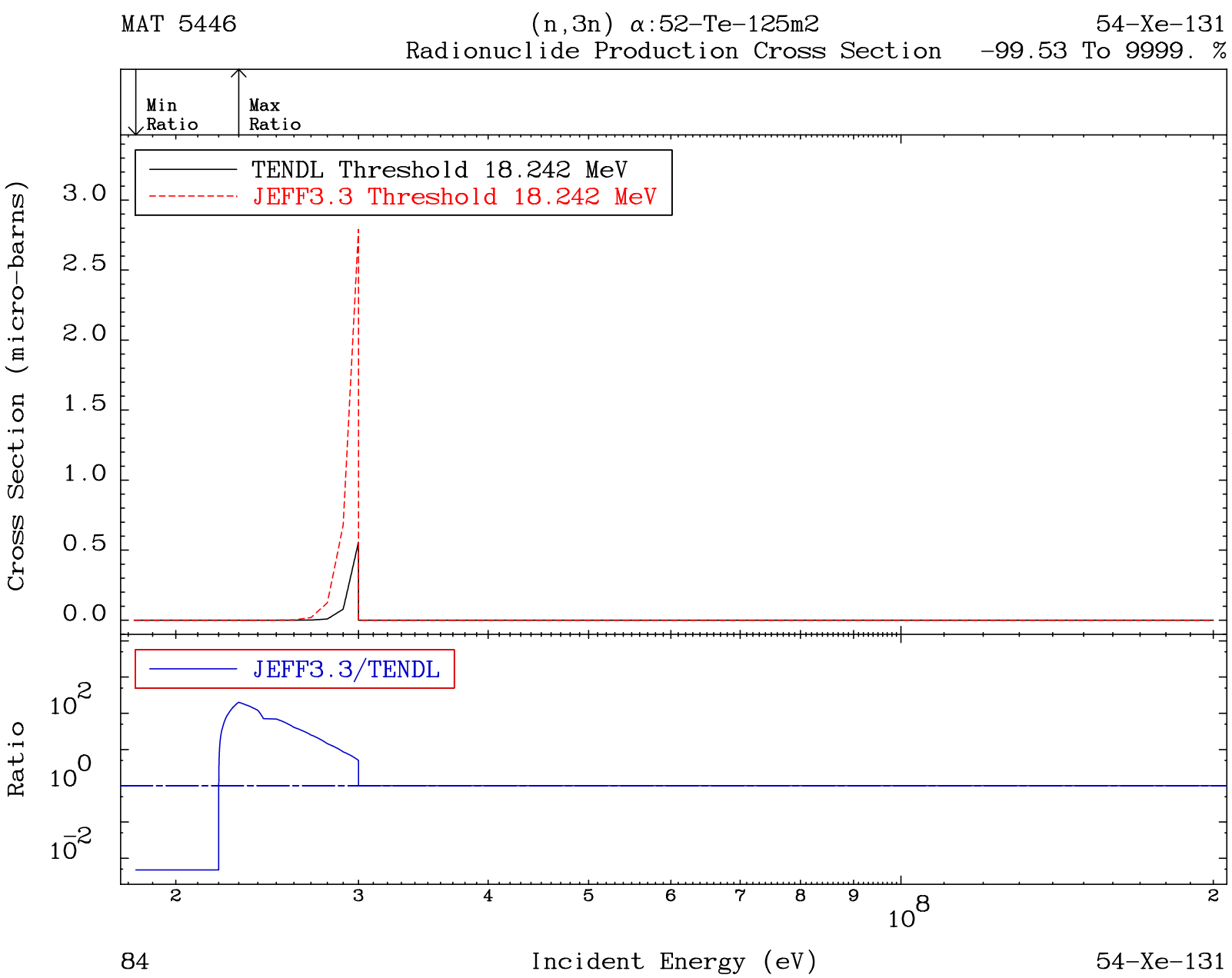

MAT 5446
(n,3n):54-Xe-129g
54-Xe-131
Radionuclide Production Cross Section
-1.731 To 0.106 %
Min Ratio
Max Ratio
TENDL Threshold 15.977 MeV
JEFF3.3 Threshold 15.977 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.000
0.990
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
54-Xe-131

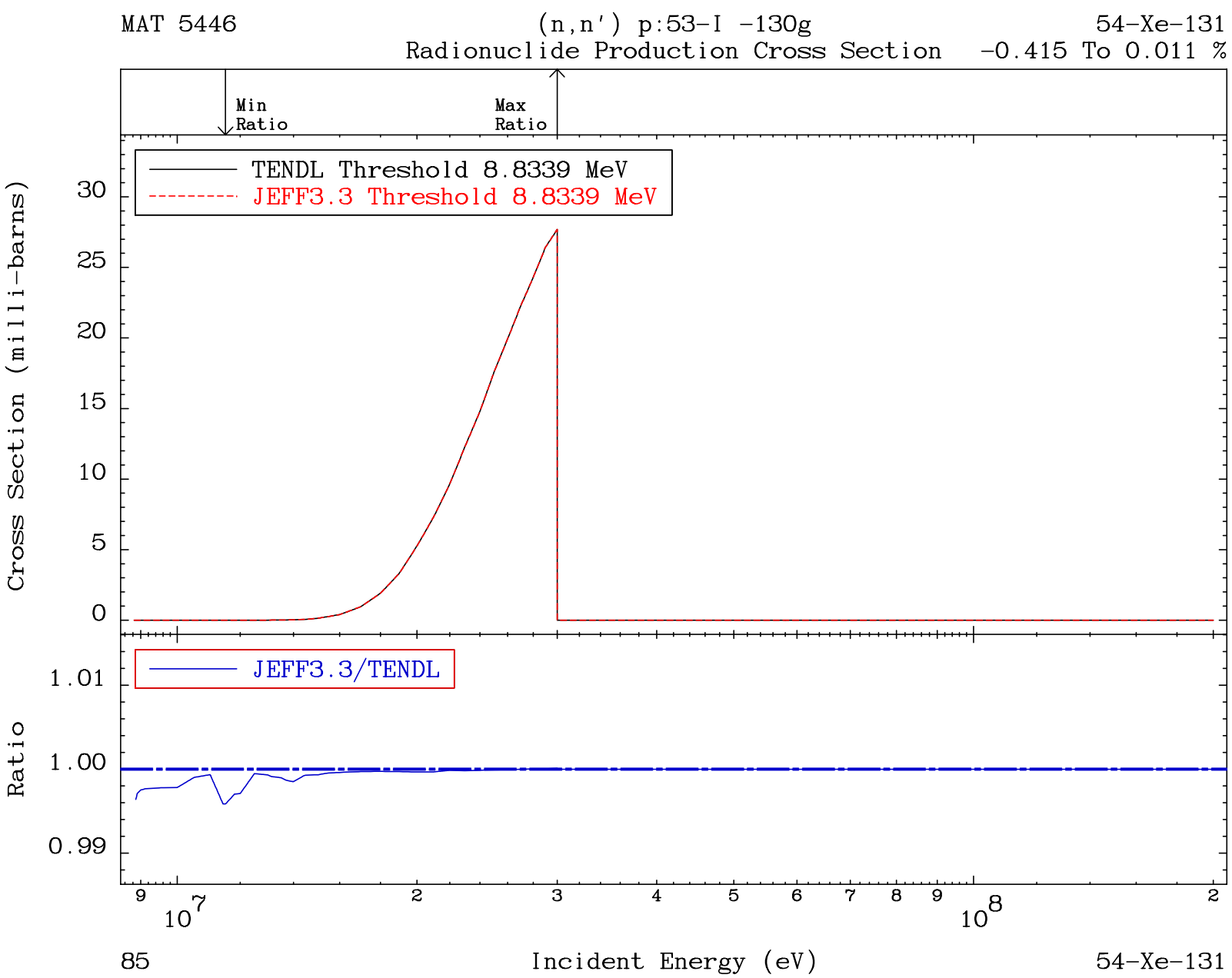

MAT 5446
(n,3n):54-Xe-129m2
54-Xe-131
Radionuclide Production Cross Section -16.71 To 0.108 %
Min Ratio
Max Ratio
TENDL Threshold 16.214 MeV
JEFF3.3 Threshold 16.214 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.90
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
54-Xe-131

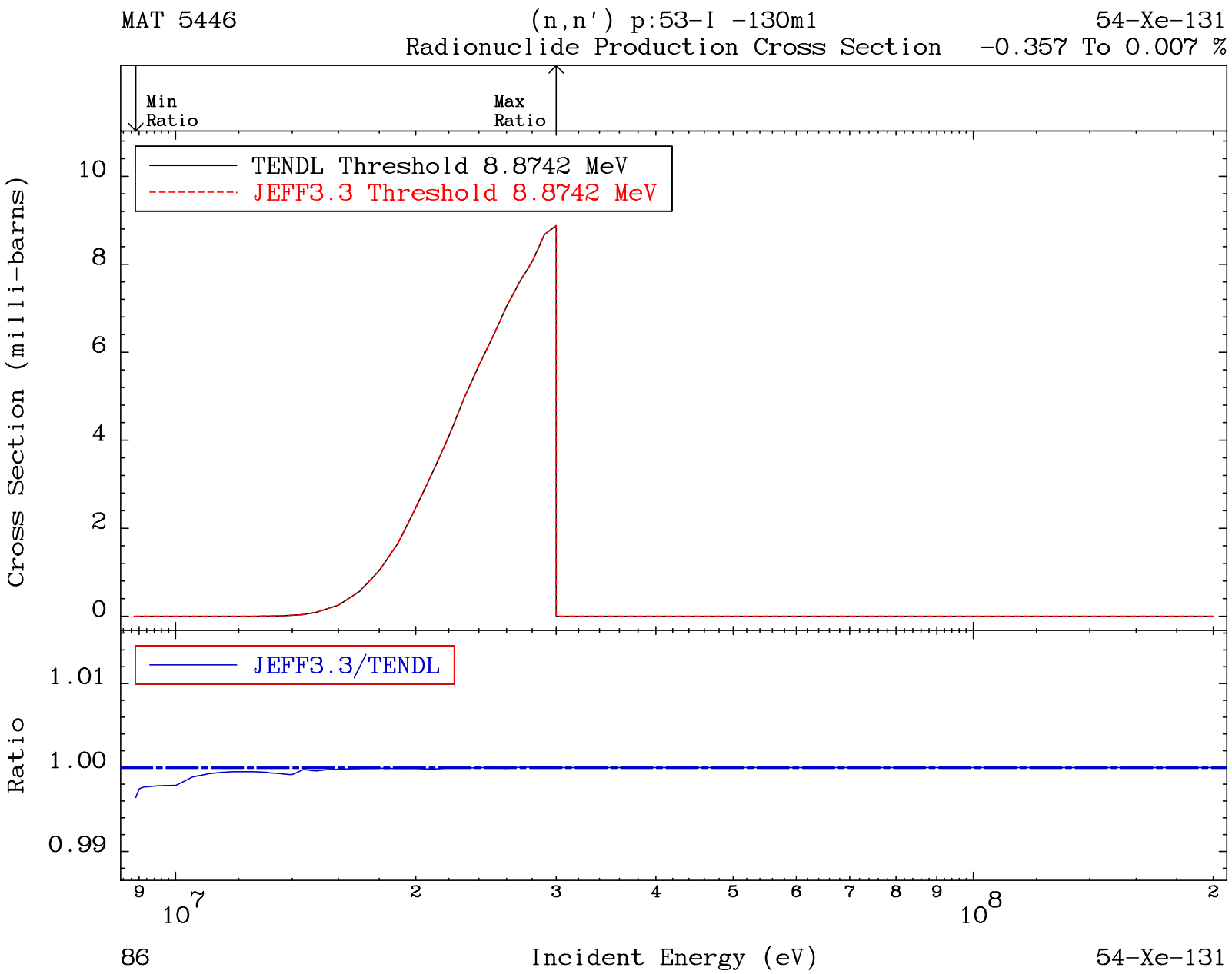

MAT 5446
(n,n') α:52-Te-127g
54-Xe-131
Radionuclide Production Cross Section -15.51 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5765 MeV
JEFF3.3 Threshold 2.5765 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
81
Incident Energy (eV)
54-Xe-131

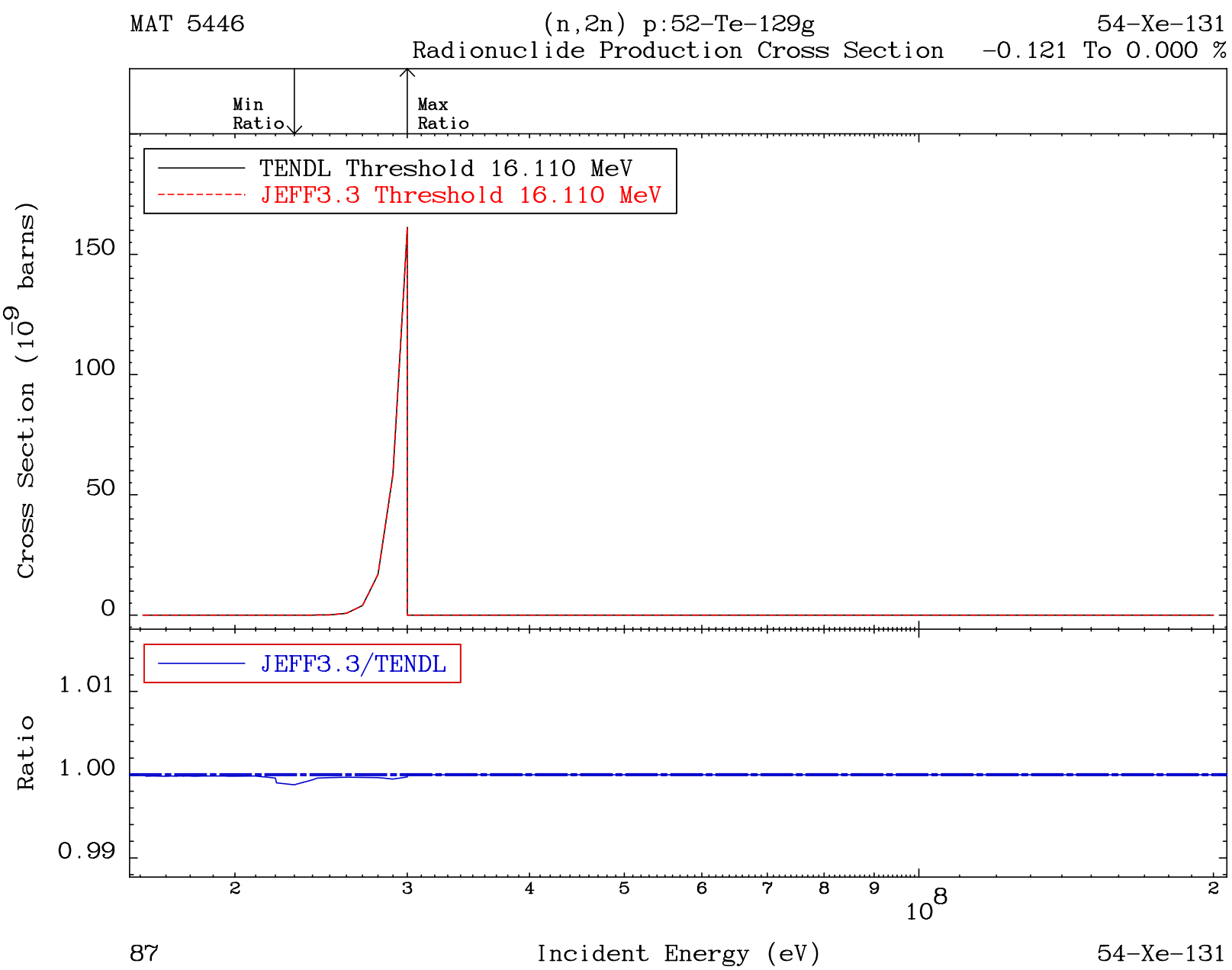

MAT 5446
(n,n') α:52-Te-127m2
54-Xe-131
Radionuclide Production Cross Section -15.03 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.6654 MeV
JEFF3.3 Threshold 2.6654 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
82
54-Xe-131

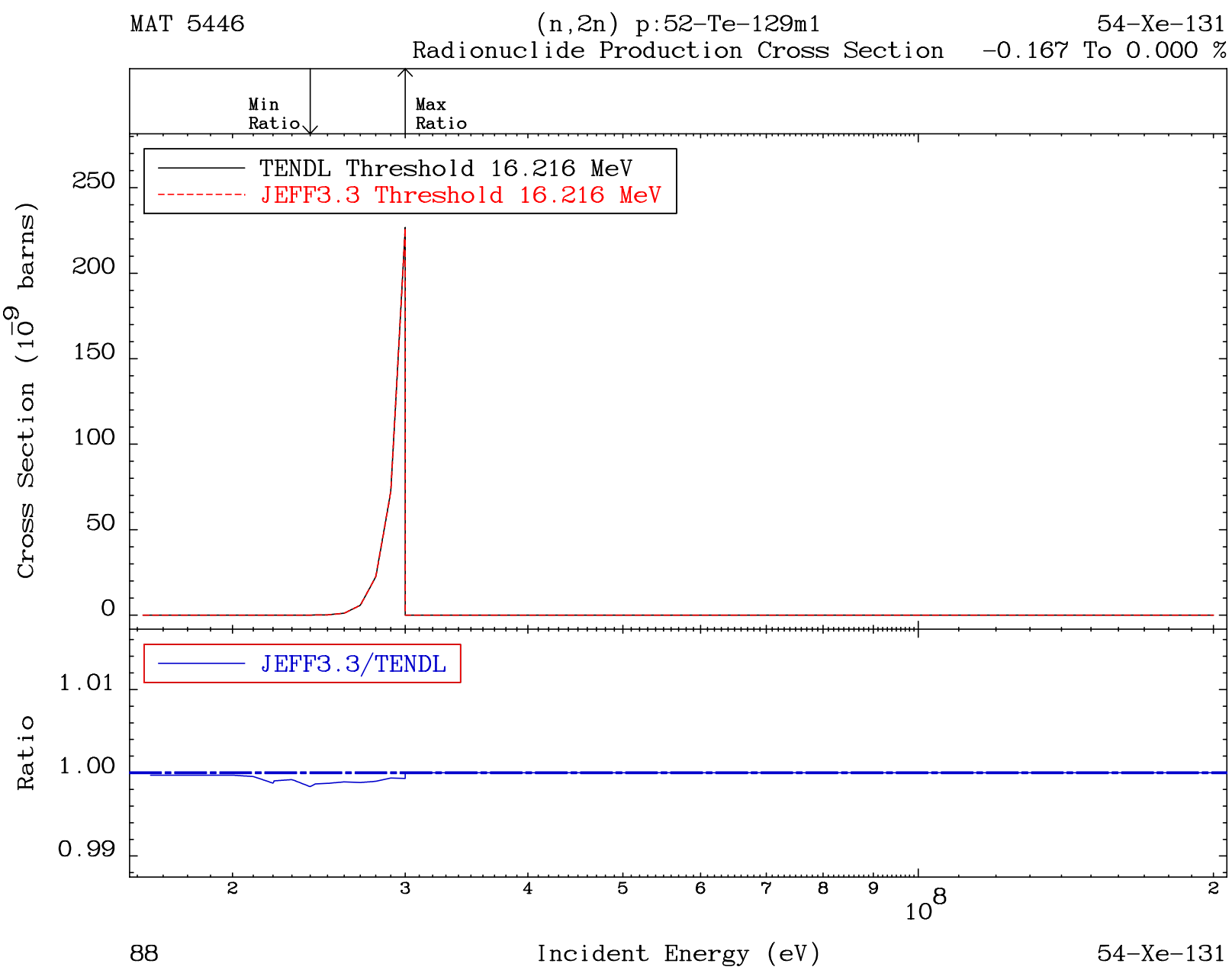

MAT 5446
(n,3n) α:52-Te-125g
54-Xe-131
Radionuclide Production Cross Section -98.08 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 18.097 MeV
JEFF3.3 Threshold 18.097 MeV
Cross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
54-Xe-131

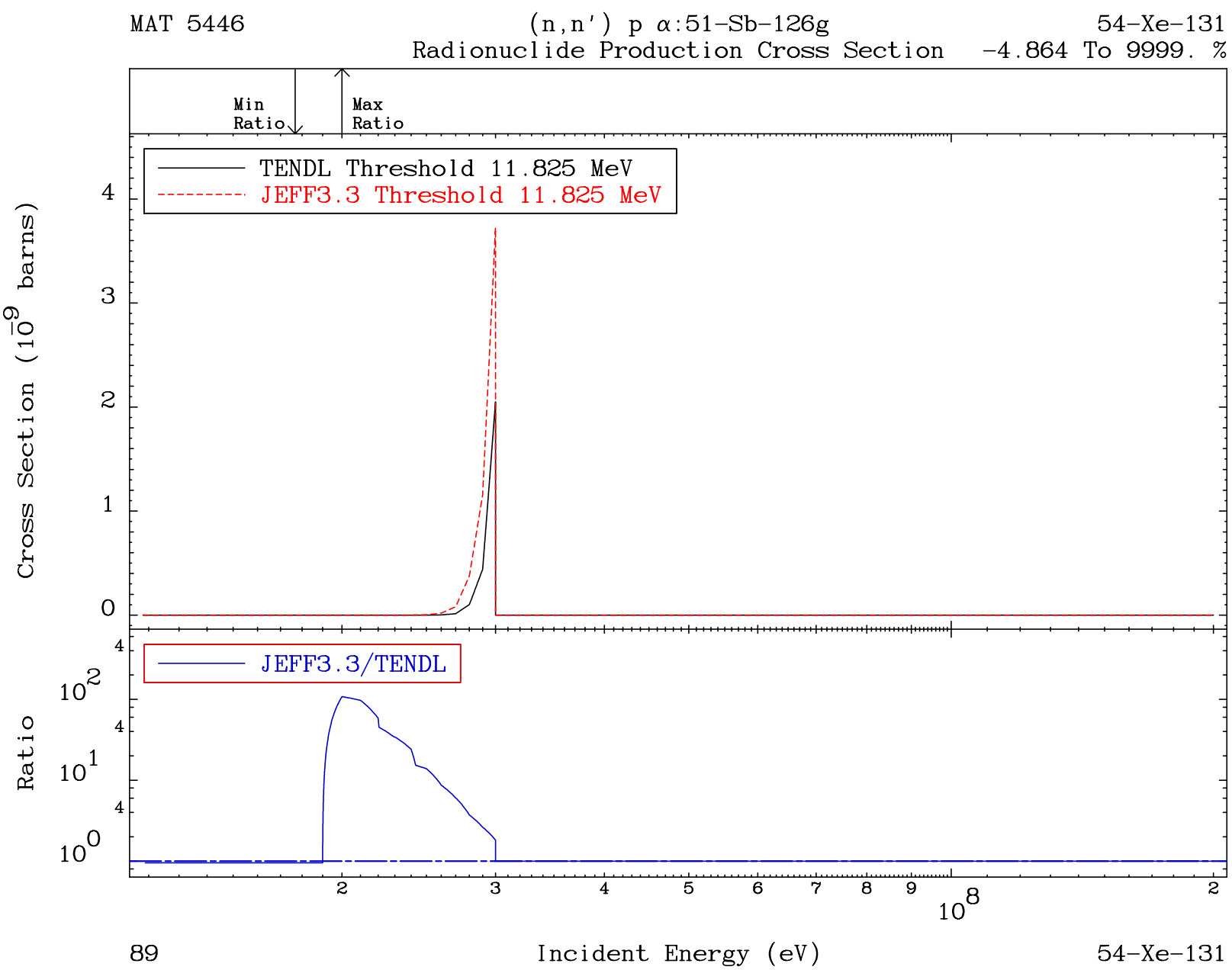

MAT 5446
(n,3n) α:52-Te-125m2
54-Xe-131
Radionuclide Production Cross Section -99.53 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 18.242 MeV
JEFF3.3 Threshold 18.242 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
54-Xe-131

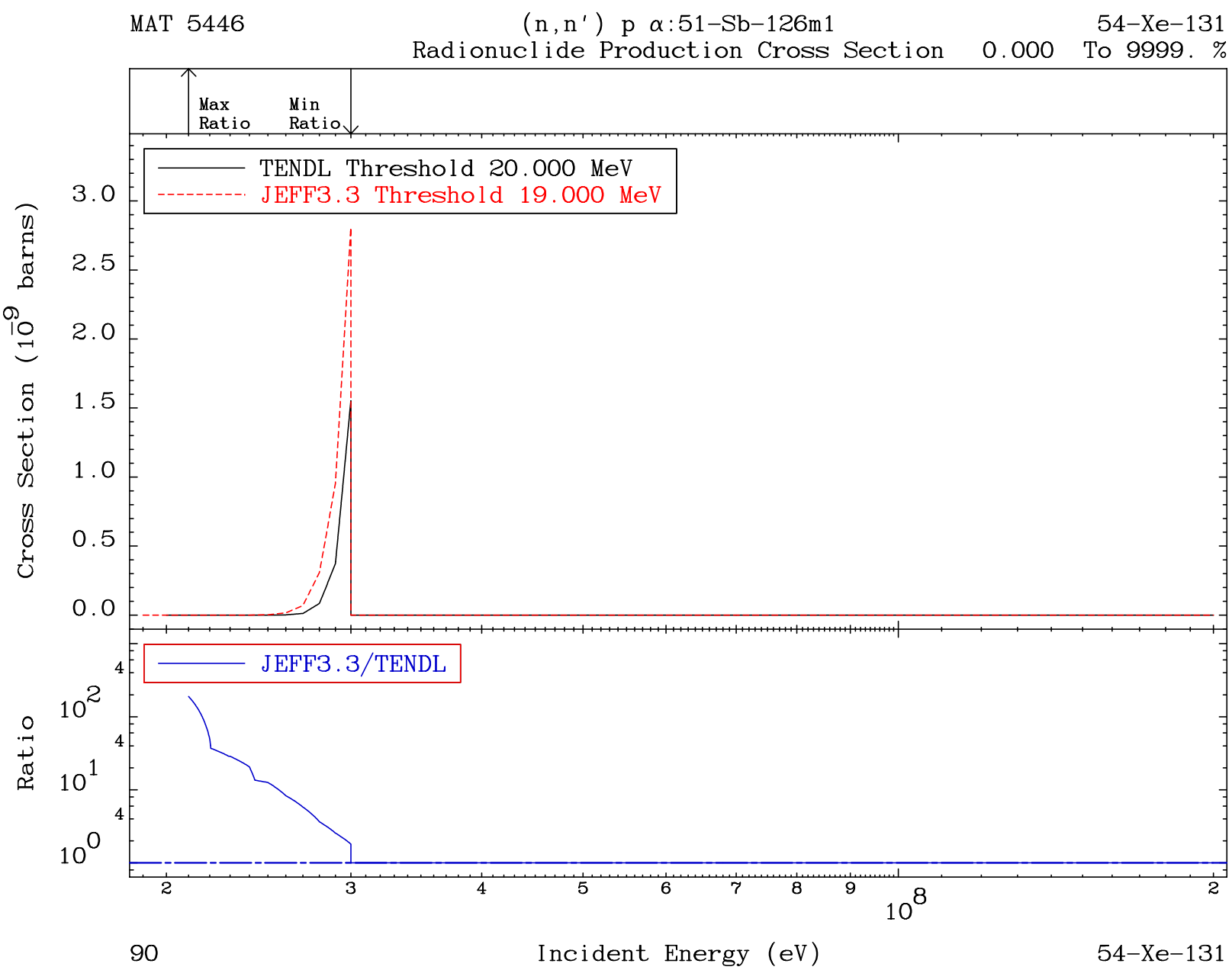

MAT 5446
(n,n') p:53-I -130g
54-Xe-131
Radionuclide Production Cross Section
-0.415 To 0.011 %
Min Ratio
Max Ratio
TENDL Threshold 8.8339 MeV
JEFF3.3 Threshold 8.8339 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
54-Xe-131

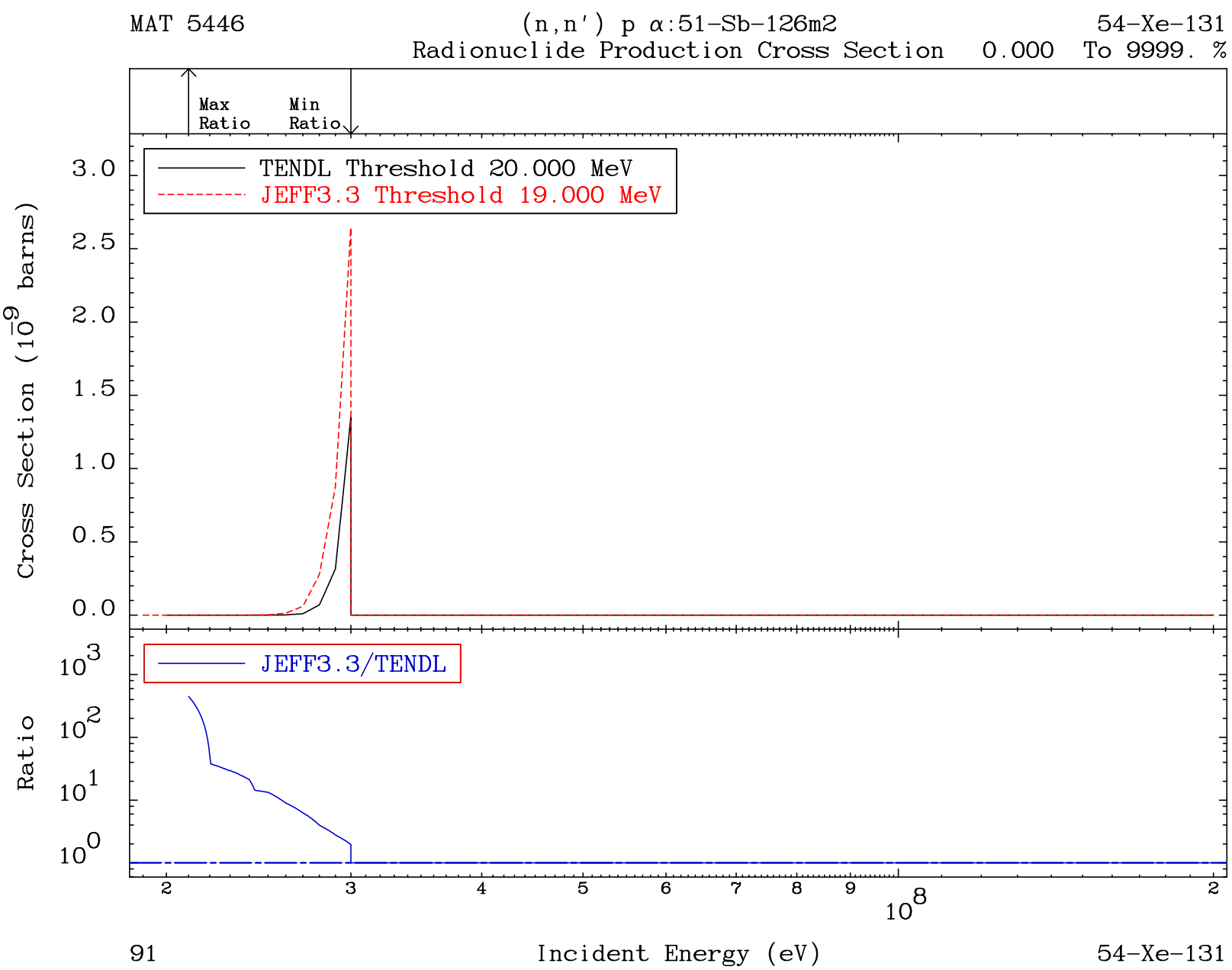

MAT 5446
(n,n') p:53-I -130m1
54-Xe-131
Radionuclide Production Cross Section
-0.357 To 0.007 %
Min Ratio
Max Ratio
TENDL Threshold 8.8742 MeV
JEFF3.3 Threshold 8.8742 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
54-Xe-131

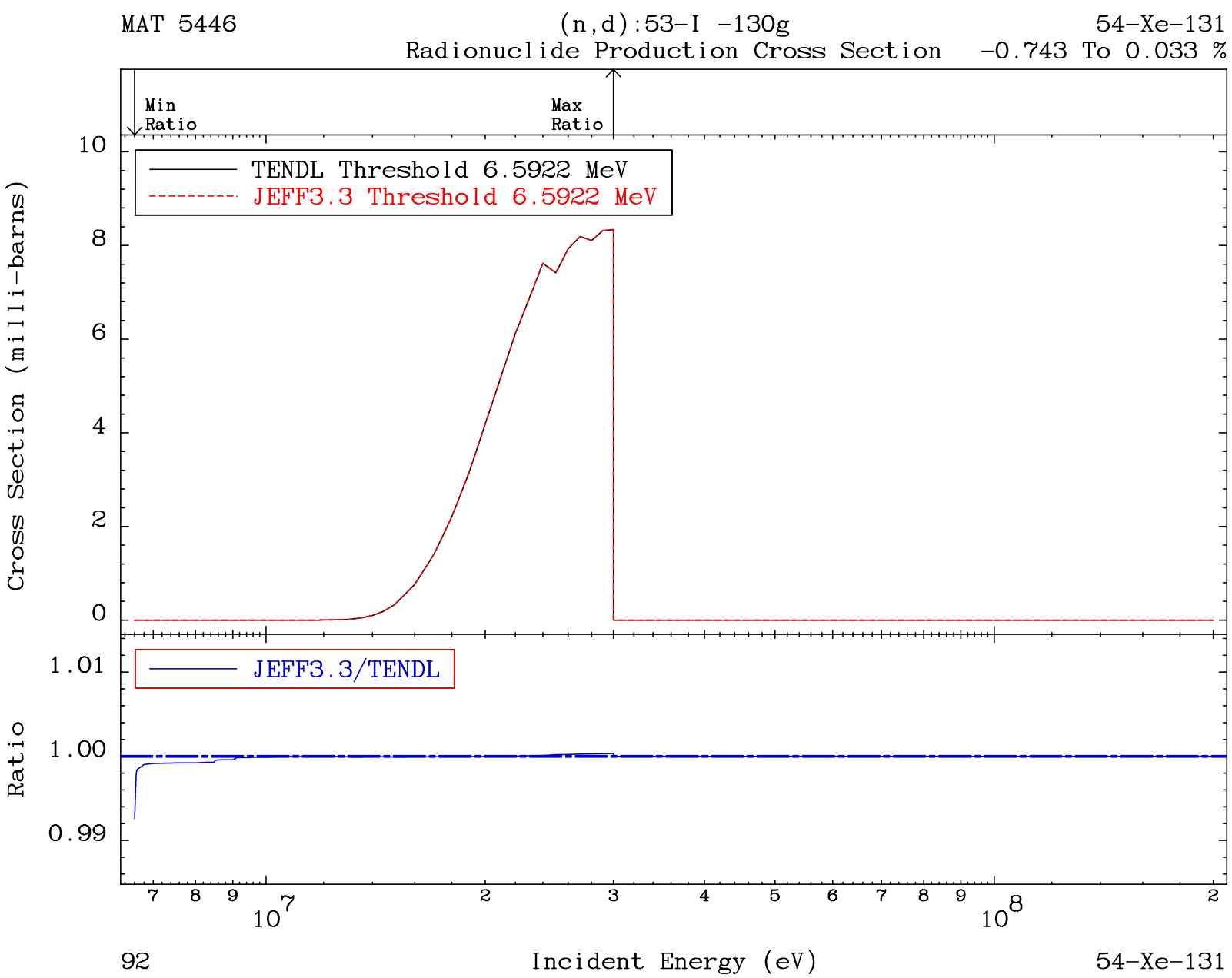

MAT 5446
(n,2n) p:52-Te-129g
54-Xe-131
Radionuclide Production Cross Section
-0.121 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.110 MeV
JEFF3.3 Threshold 16.110 MeV
Cross Section (10^{-9} barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
54-Xe-131

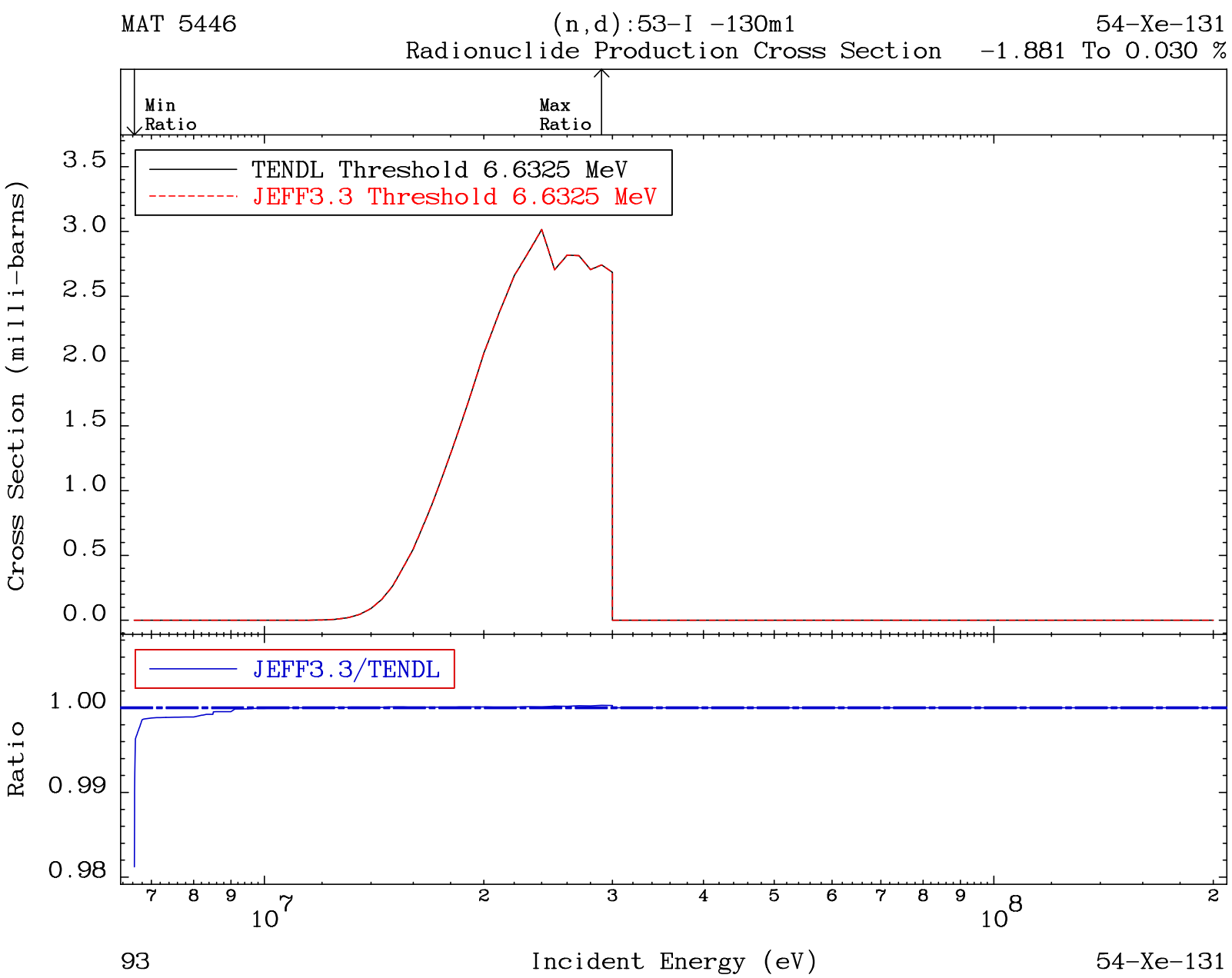

MAT 5446
(n,2n) p:52-Te-129m1
54-Xe-131
Radionuclide Production Cross Section
-0.167 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.216 MeV
JEFF3.3 Threshold 16.216 MeV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
54-Xe-131

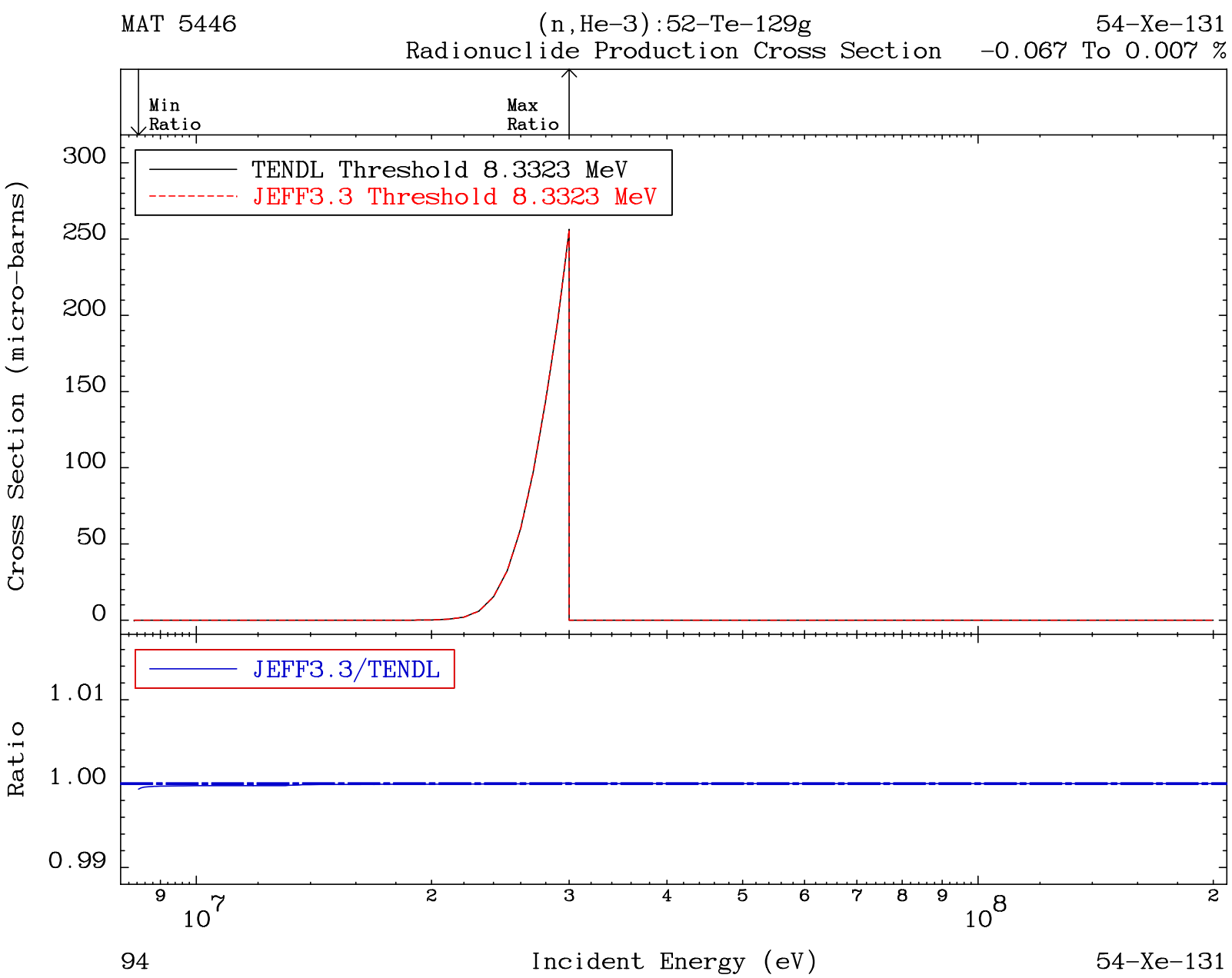

MAT 5446
(n,n') p α:51-Sb-126g
54-Xe-131
Radionuclide Production Cross Section -4.864 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.825 MeV
JEFF3.3 Threshold 11.825 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
89
54-Xe-131

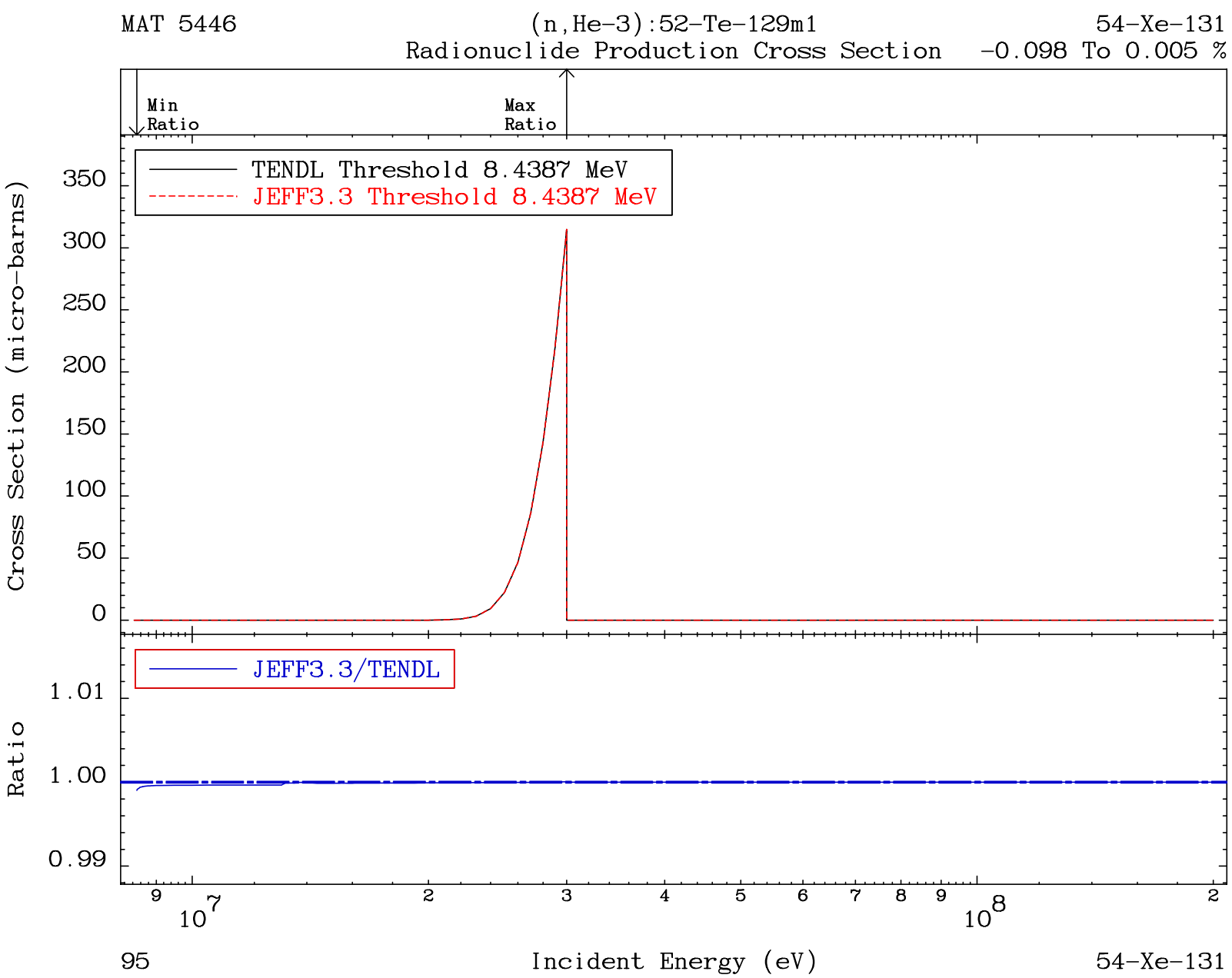

MAT 5446
(n,n') p α:51-Sb-126m1
54-Xe-131
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 19.000 MeV
Cross Section (10^{-9} barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
90
Incident Energy (eV)
54-Xe-131

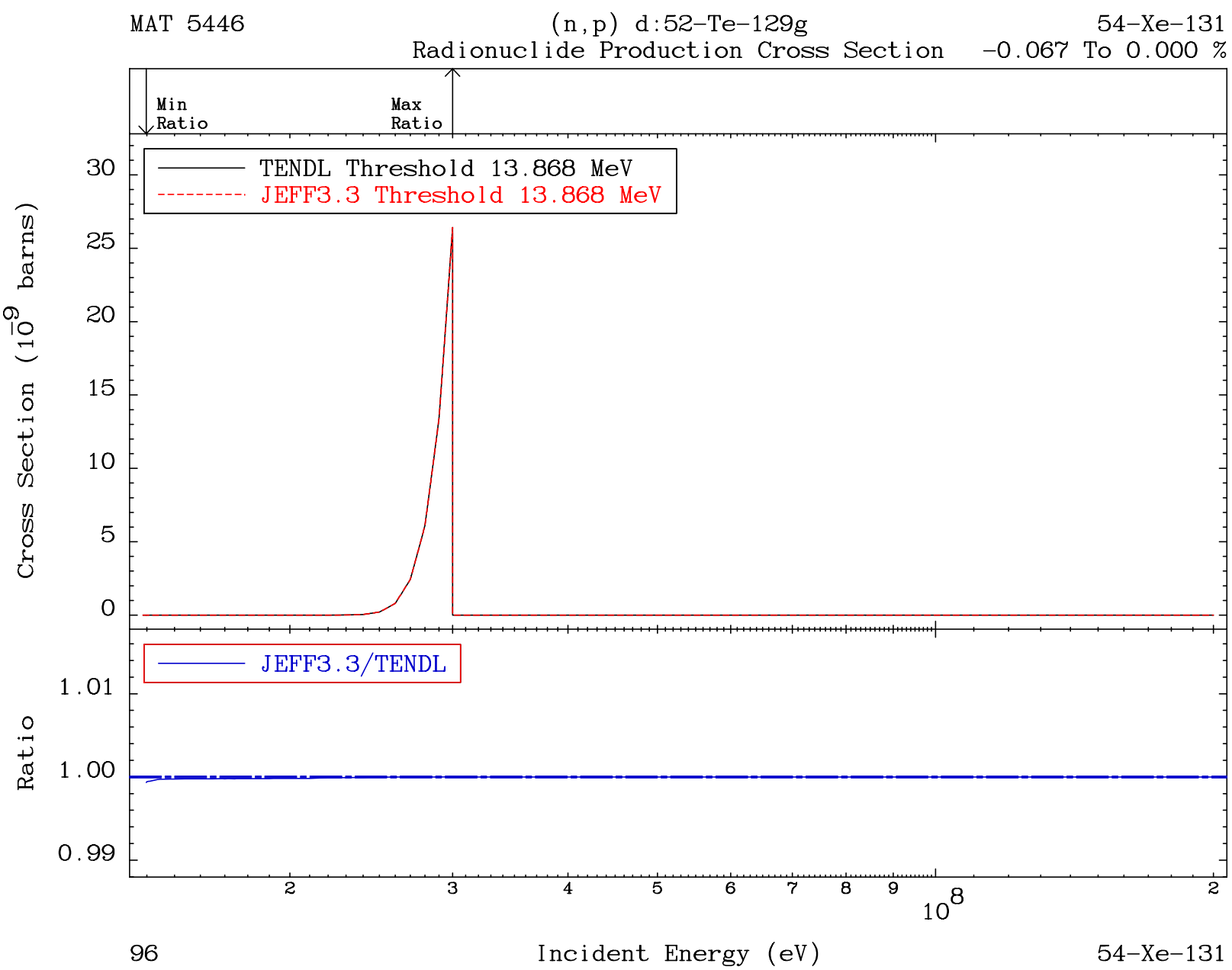

MAT 5446
(n,n') p α:51-Sb-126m2
54-Xe-131
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 19.000 MeV
Cross Section (10^{-9} barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
54-Xe-131

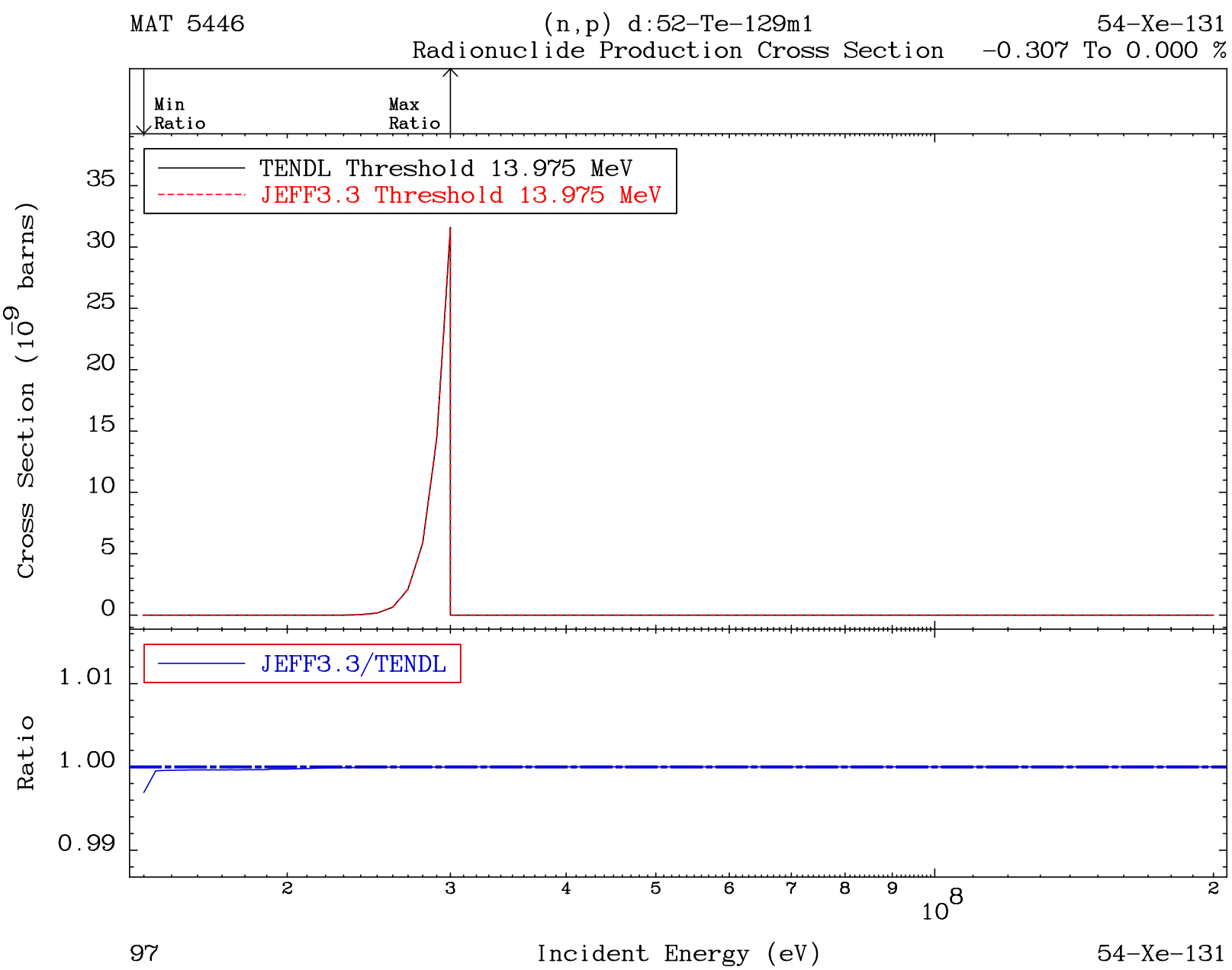

MAT 5446
(n,d):53-I -130g
54-Xe-131
Radionuclide Production Cross Section -0.743 To 0.033 %
Min Ratio
Max Ratio
TENDL Threshold 6.5922 MeV
JEFF3.3 Threshold 6.5922 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
92
54-Xe-131


MAT 5446
(n,d):53-I -130m1
54-Xe-131
Radionuclide Production Cross Section -1.881 To 0.030 %
Min Ratio
Max Ratio
TENDL Threshold 6.6325 MeV
JEFF3.3 Threshold 6.6325 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
1.00
0.99
0.98
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
93
Incident Energy (eV)
54-Xe-131


MAT 5446
(n,He-3):52-Te-129g
54-Xe-131
Radionuclide Production Cross Section
-0.067 To 0.007 %
Min Ratio
Max Ratio
TENDL Threshold 8.3323 MeV
JEFF3.3 Threshold 8.3323 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
54-Xe-131


MAT 5446
(n,He-3):52-Te-129m1
54-Xe-131
Radionuclide Production Cross Section
-0.098 To 0.005 %
Min Ratio
Max Ratio
TENDL Threshold 8.4387 MeV
JEFF3.3 Threshold 8.4387 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
54-Xe-131


MAT 5446
(n,p) d:52-Te-129g
54-Xe-131
Radionuclide Production Cross Section
-0.067 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.868 MeV
JEFF3.3 Threshold 13.868 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
54-Xe-131


MAT 5446
(n,p) d:52-Te-129m1
54-Xe-131
Radionuclide Production Cross Section
-0.307 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.975 MeV
JEFF3.3 Threshold 13.975 MeV
Cross Section (10^{-9} barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
97
Incident Energy (eV)
54-Xe-131