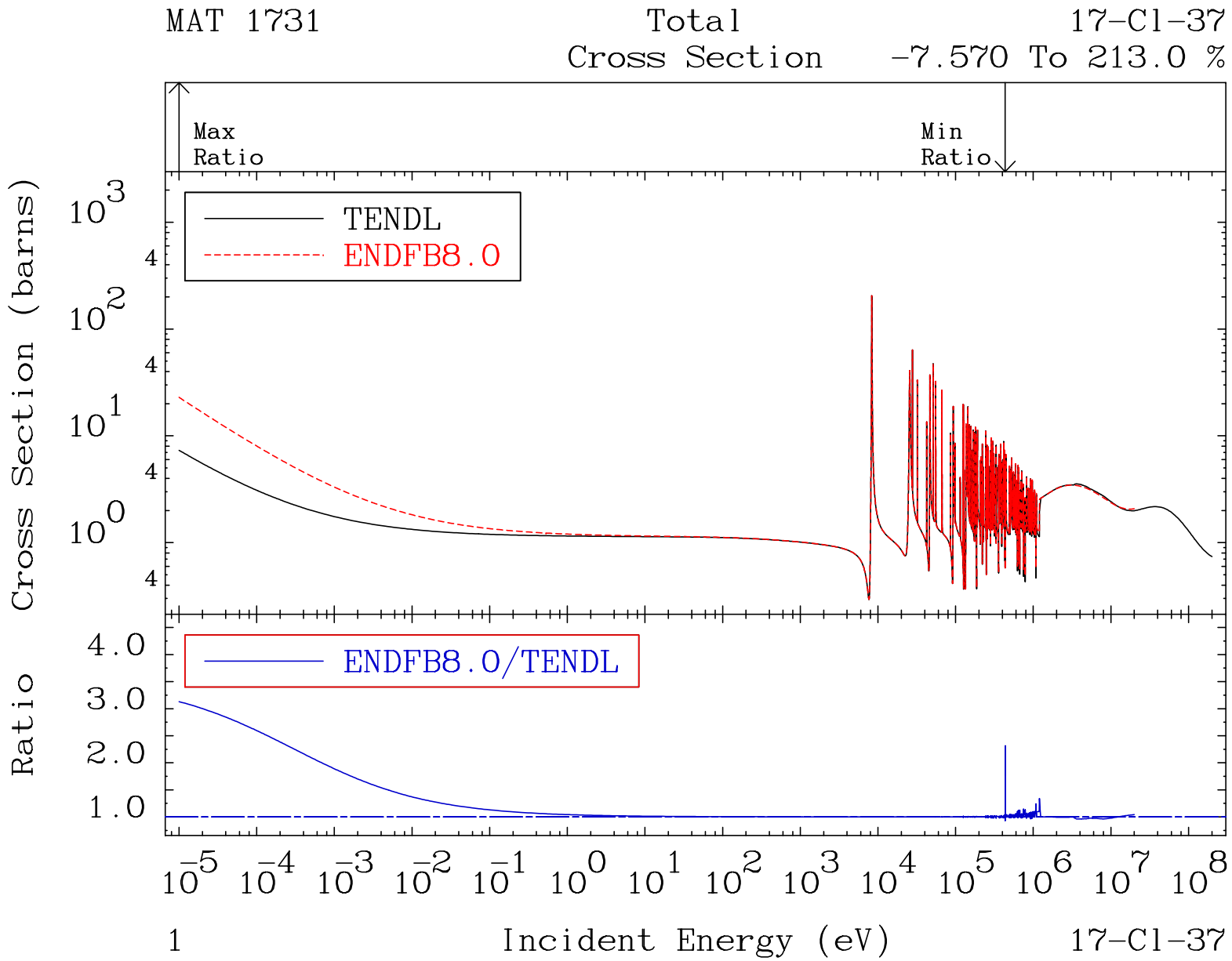
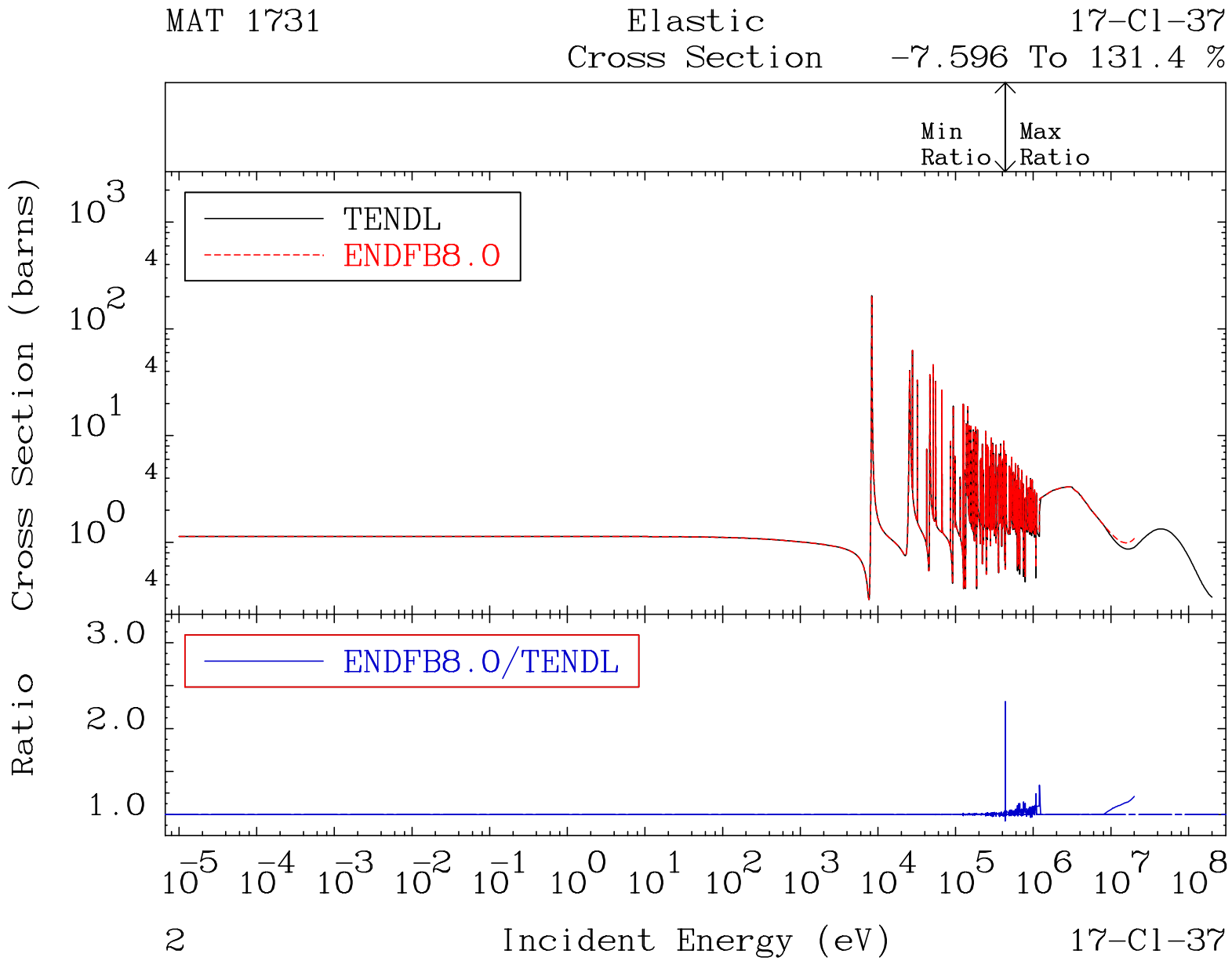
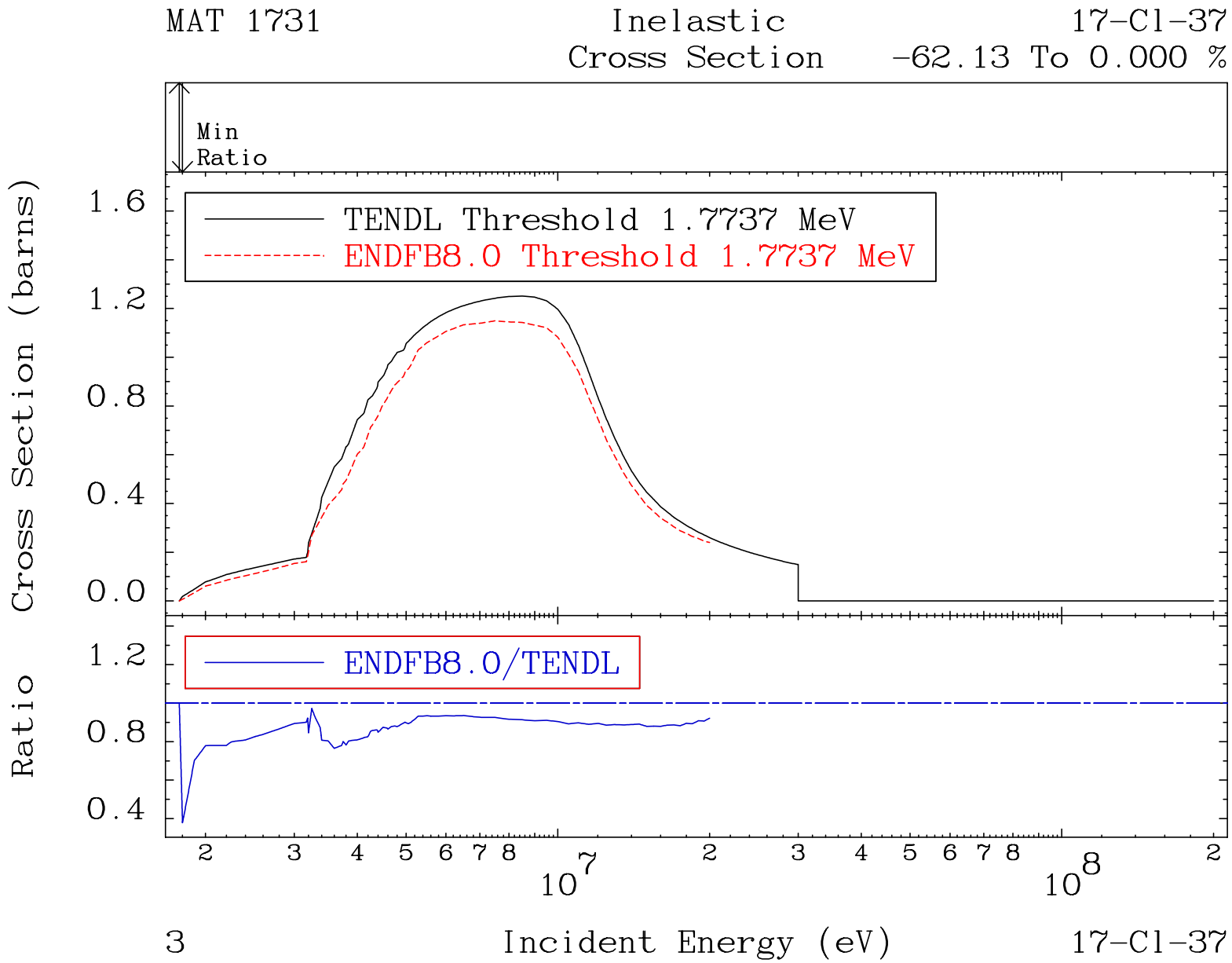
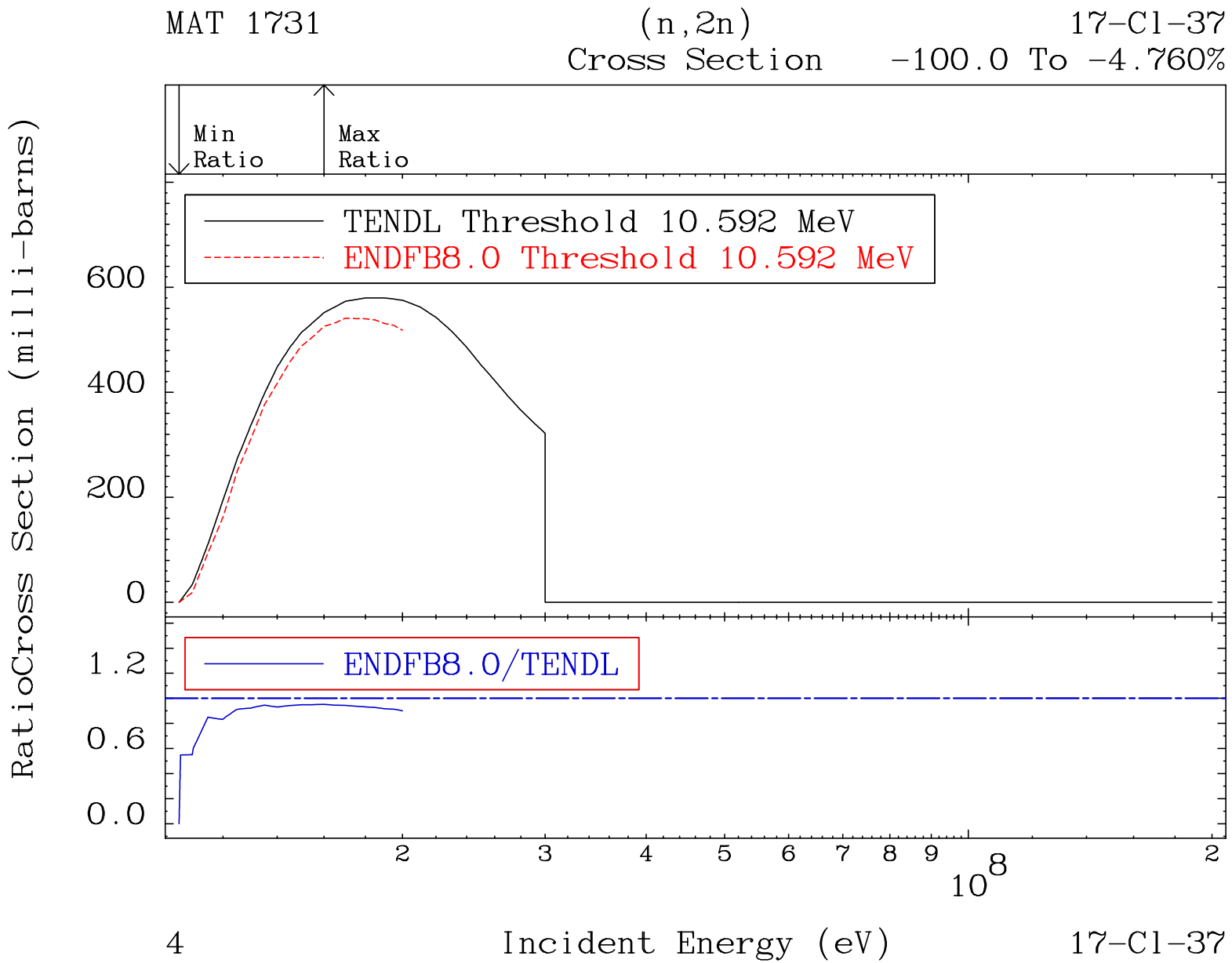
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

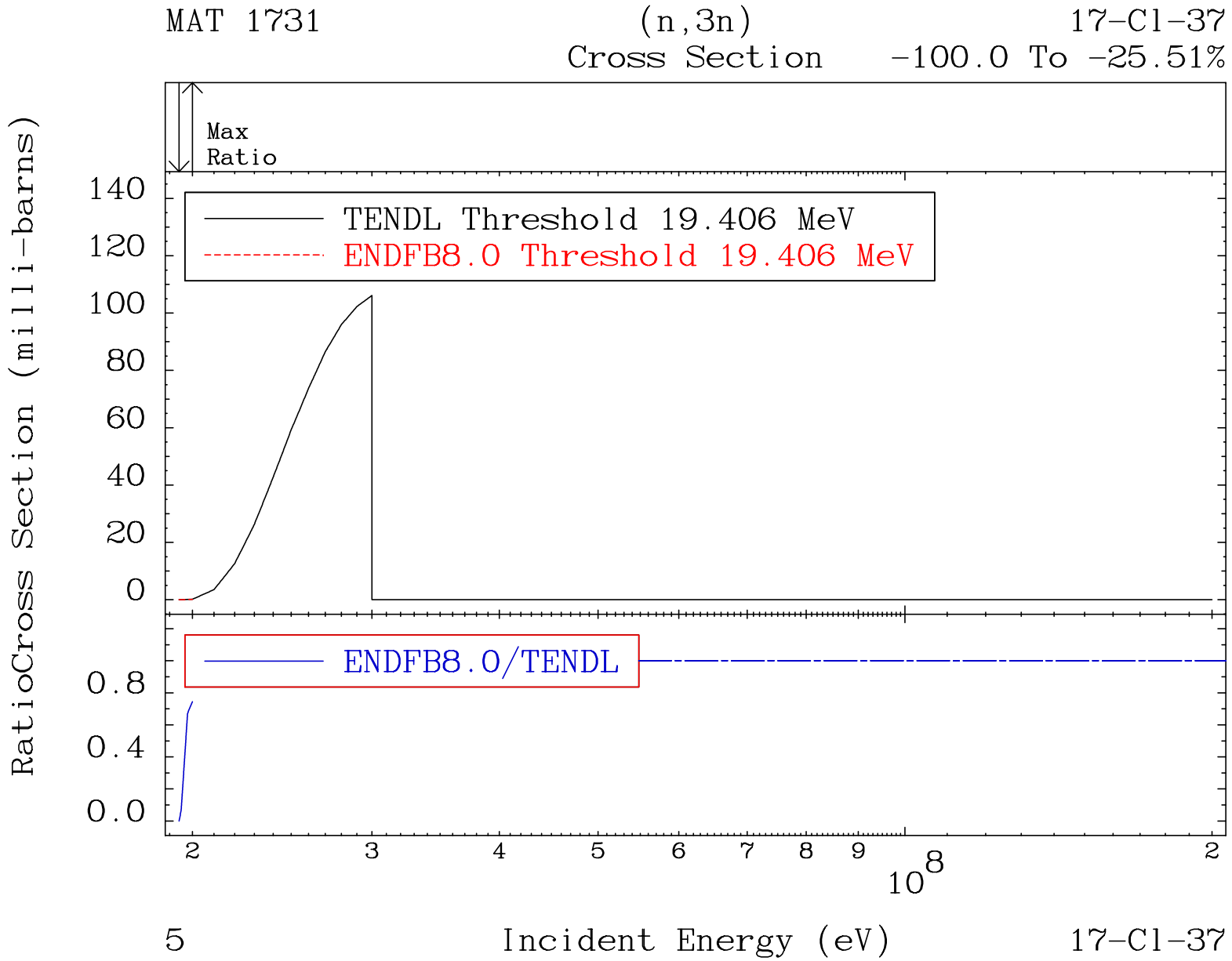
Press Mouse Button to Start

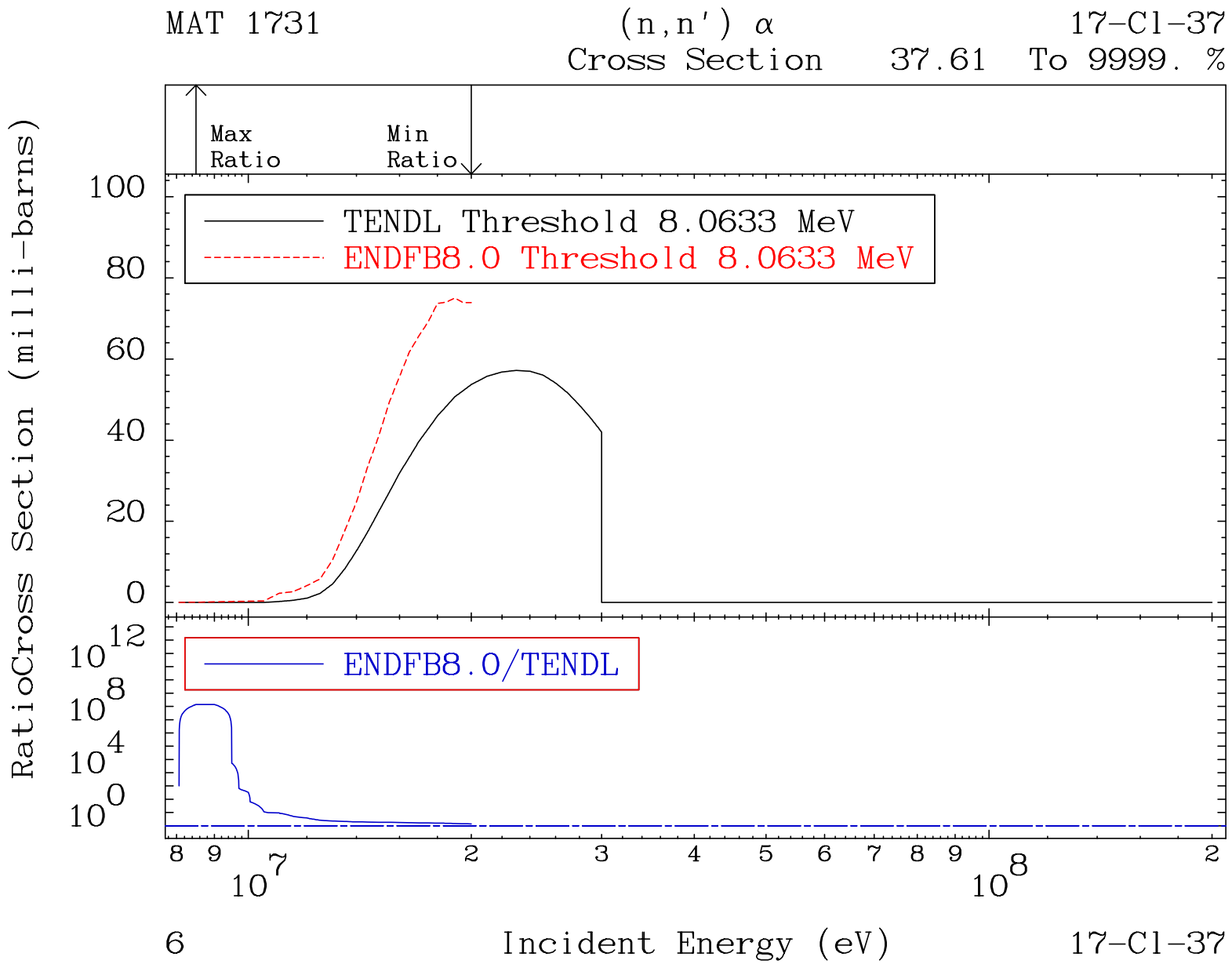

MAT 1731
Total
Cross Section
17-Cl-37
-7.570 To 213.0 %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
17-Cl-37
1

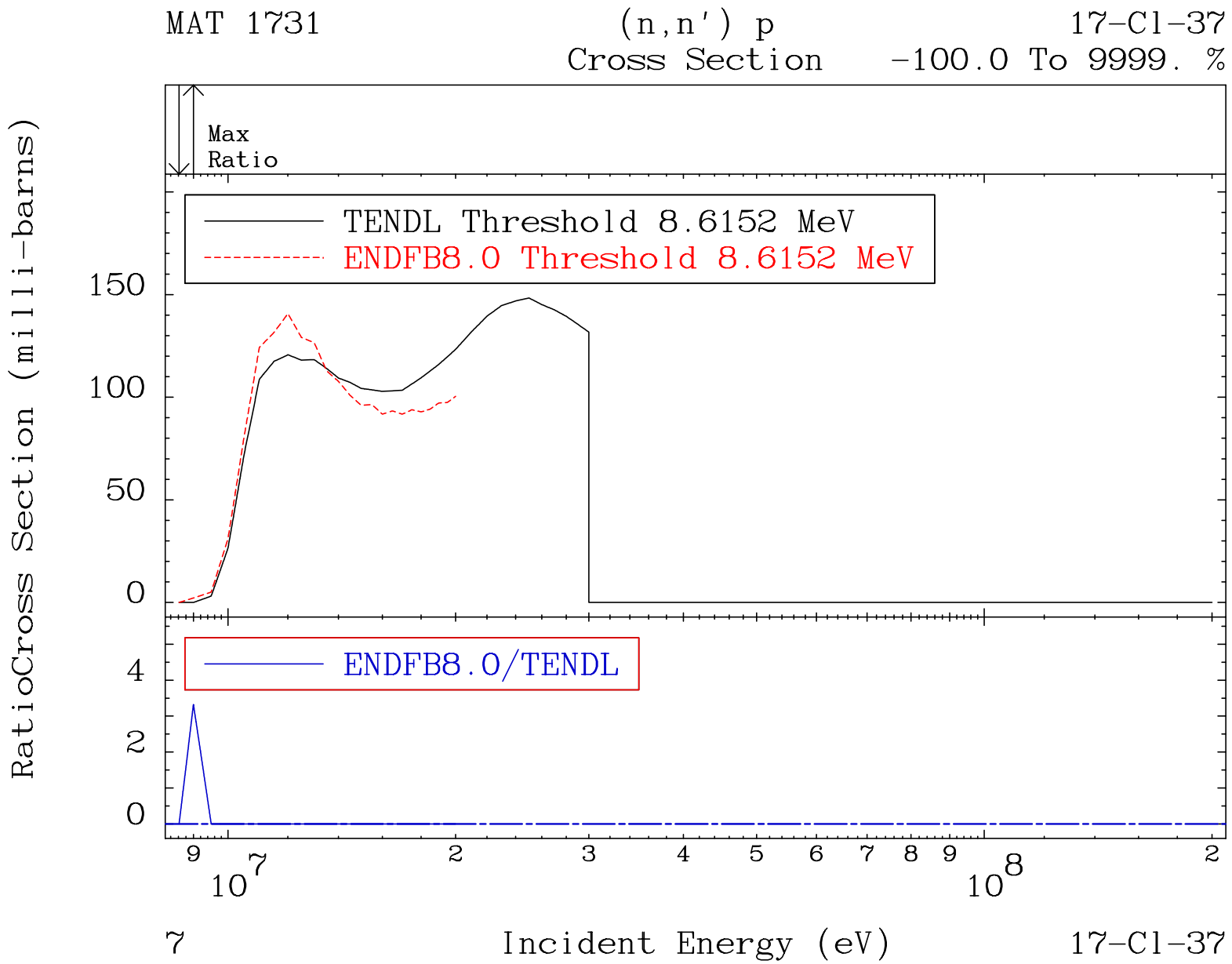

MAT 1731
Elastic
Cross Section
17-Cl-37
-7.596 To 131.4 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
17-Cl-37
2

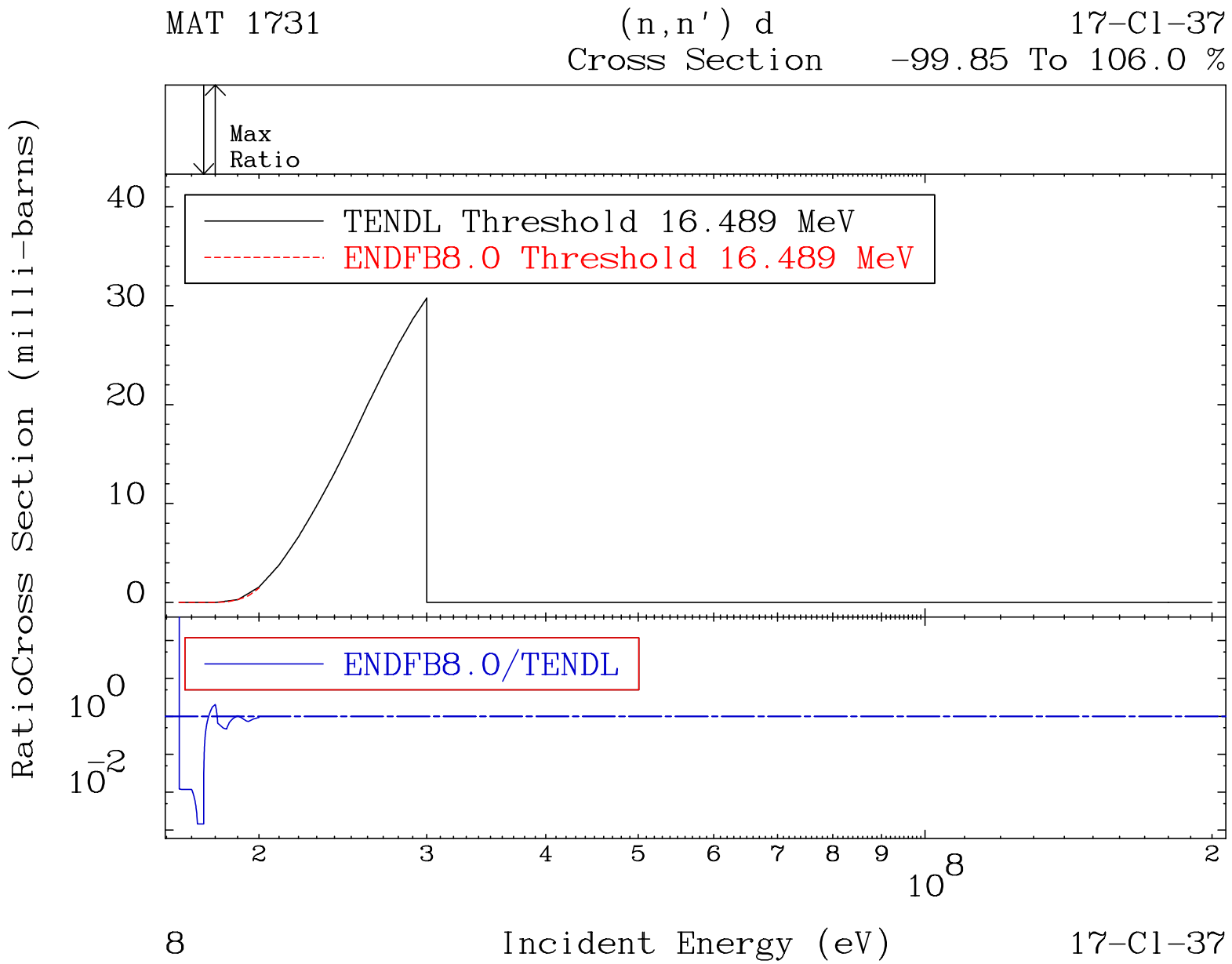

MAT 1731
Inelastic
Cross Section
17-Cl-37
-62.13 To 0.000 %
Min
Ratio
TENDL Threshold 1.7737 MeV
ENDFB8.0 Threshold 1.7737 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
Incident Energy (eV)
3
17-Cl-37

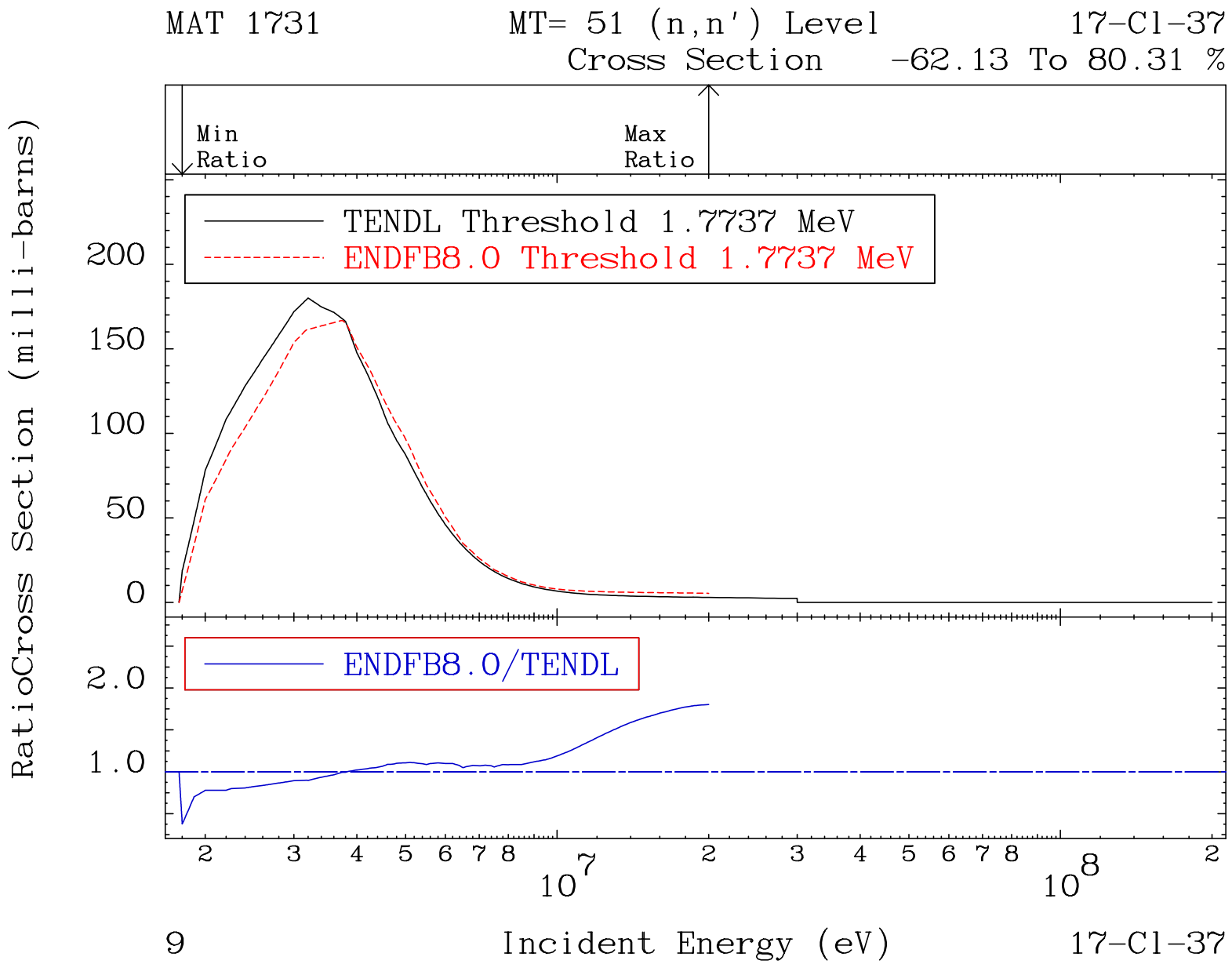

MAT 1731
(n,2n)
Cross Section
17-Cl-37
-100.0 To -4.760%
Min Ratio
Max Ratio
TENDL Threshold 10.592 MeV
ENDFB8.0 Threshold 10.592 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
17-Cl-37

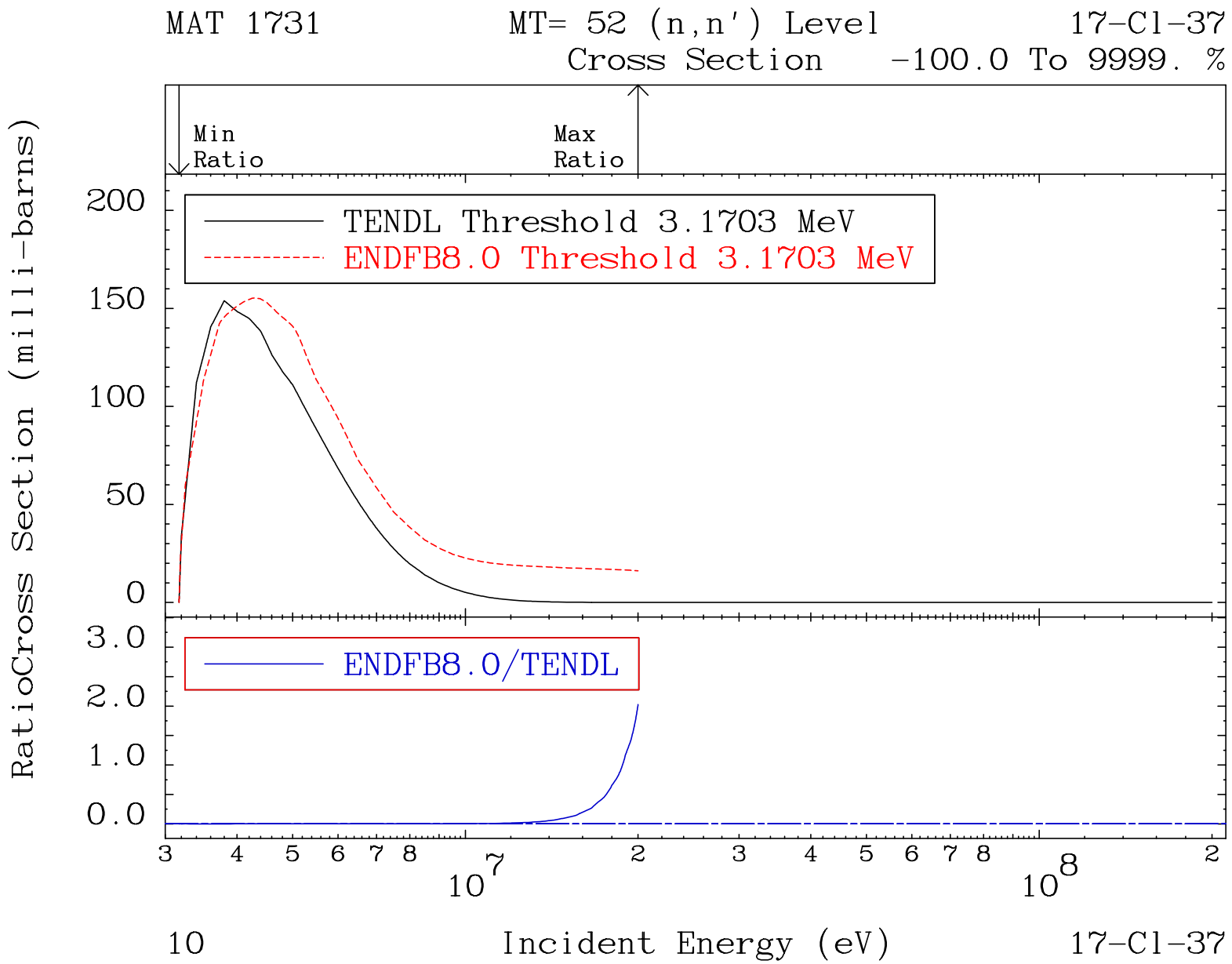

MAT 1731
(n,3n)
17-Cl-37
Cross Section
-100.0 To -25.51%
Max
Ratio
TENDL Threshold 19.406 MeV
ENDFB8.0 Threshold 19.406 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
17-Cl-37

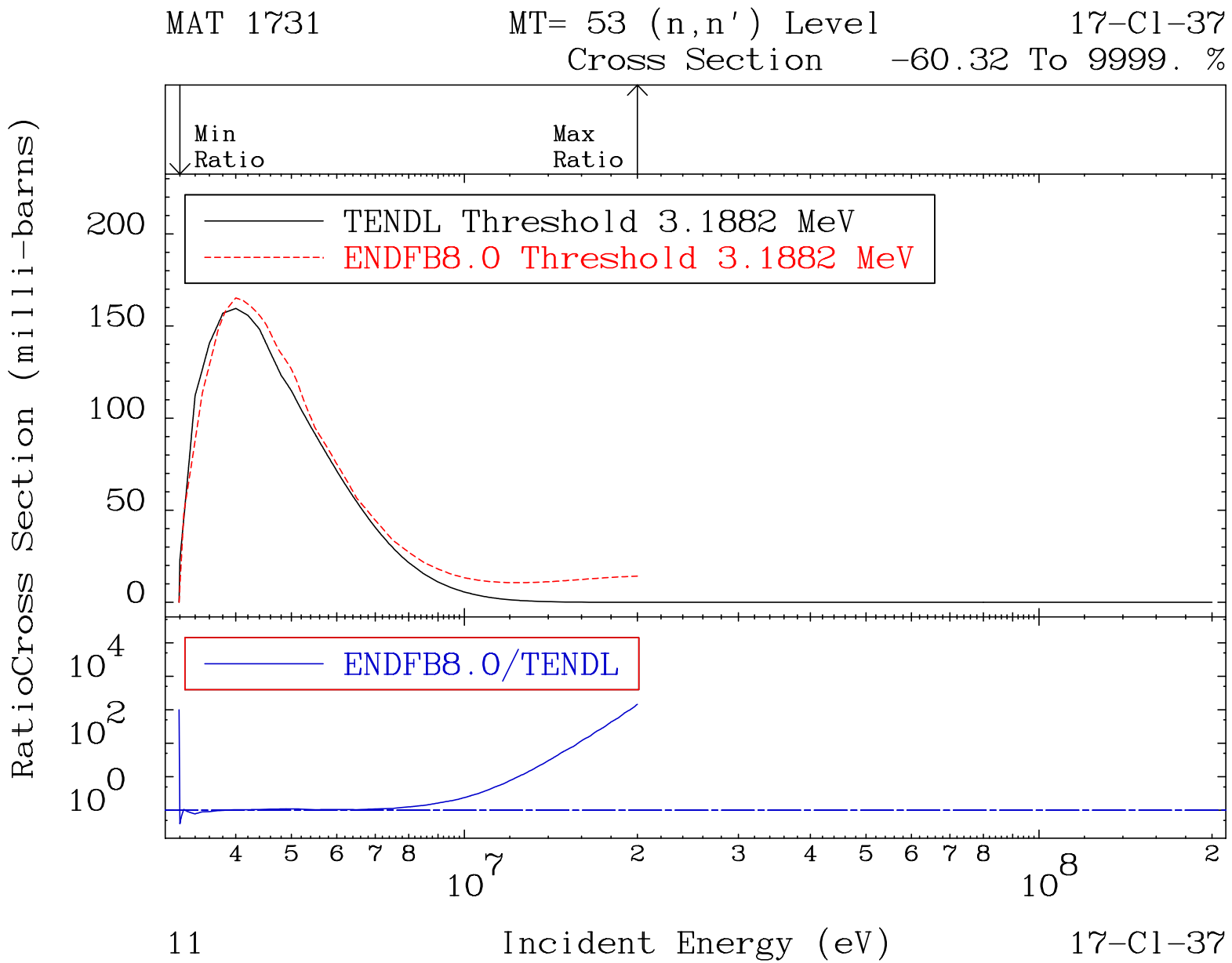

MAT 1731
(n,n') α
17-Cl-37
Cross Section 37.61 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.0633 MeV
ENDFB8.0 Threshold 8.0633 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
17-Cl-37

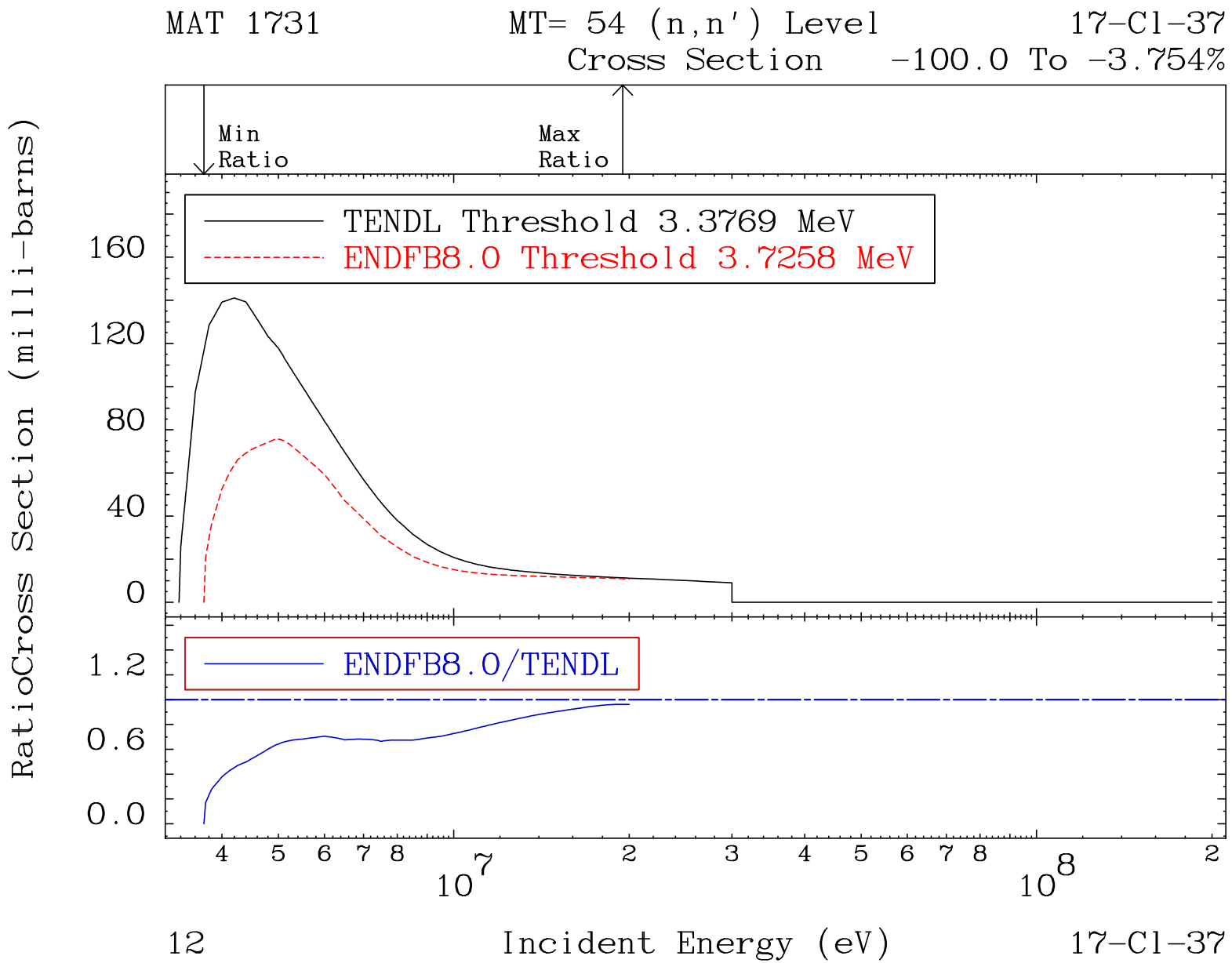

MAT 1731
(n,n') p
Cross Section
17-Cl-37
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.6152 MeV
ENDFB8.0 Threshold 8.6152 MeV
150
100
50
0
ENDFB8.0/TENDL
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
17-Cl-37
RatioCross Section (milli-barns)

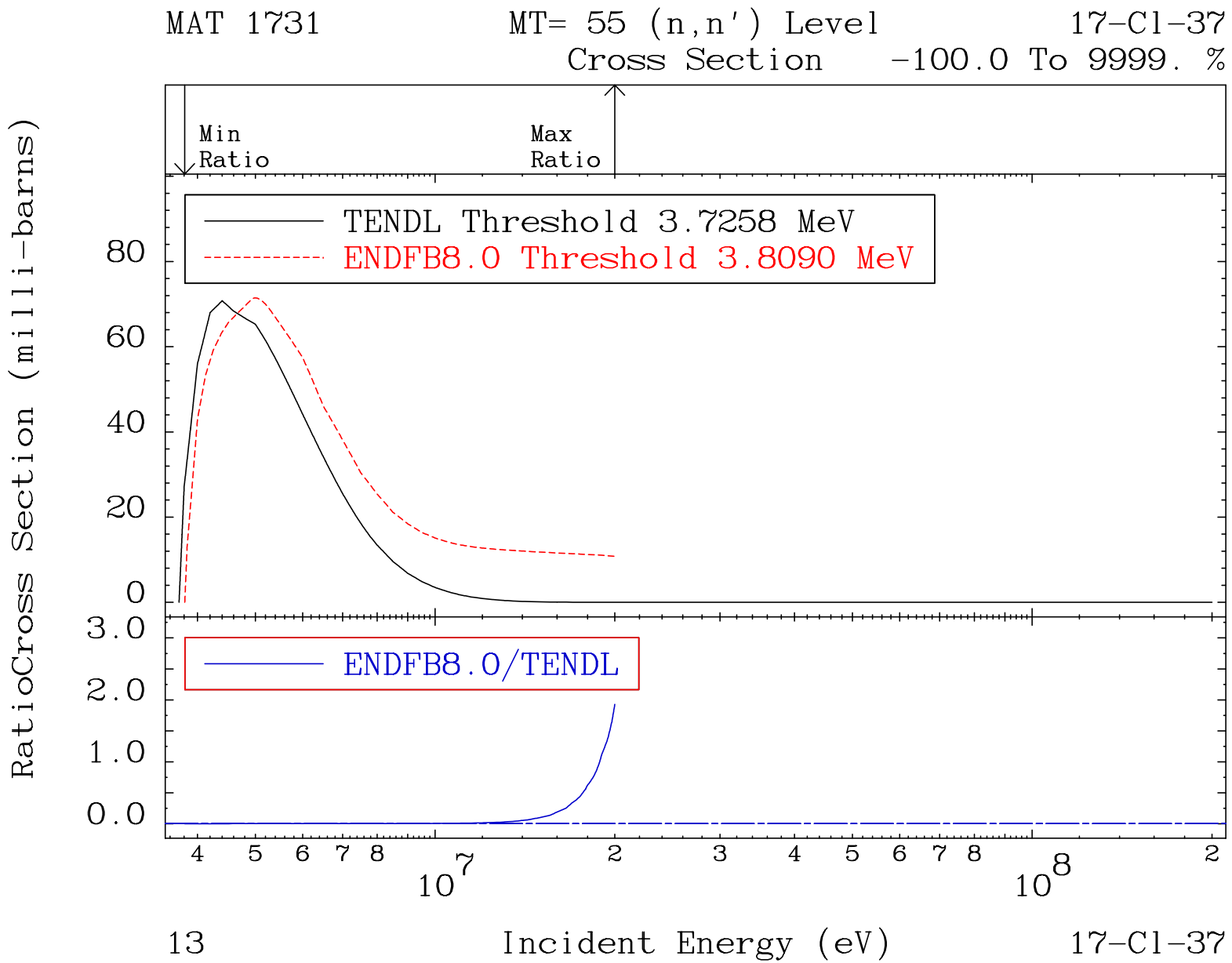

MAT 1731
(n,n') d
Cross Section
17-Cl-37
-99.85 To 106.0 %
Max
Ratio
TENDL Threshold 16.489 MeV
ENDFB8.0 Threshold 16.489 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^{0}
10^{-2}
2
3
4
5
6
7
8
9
10^{8}
2
8
Incident Energy (eV)
17-Cl-37

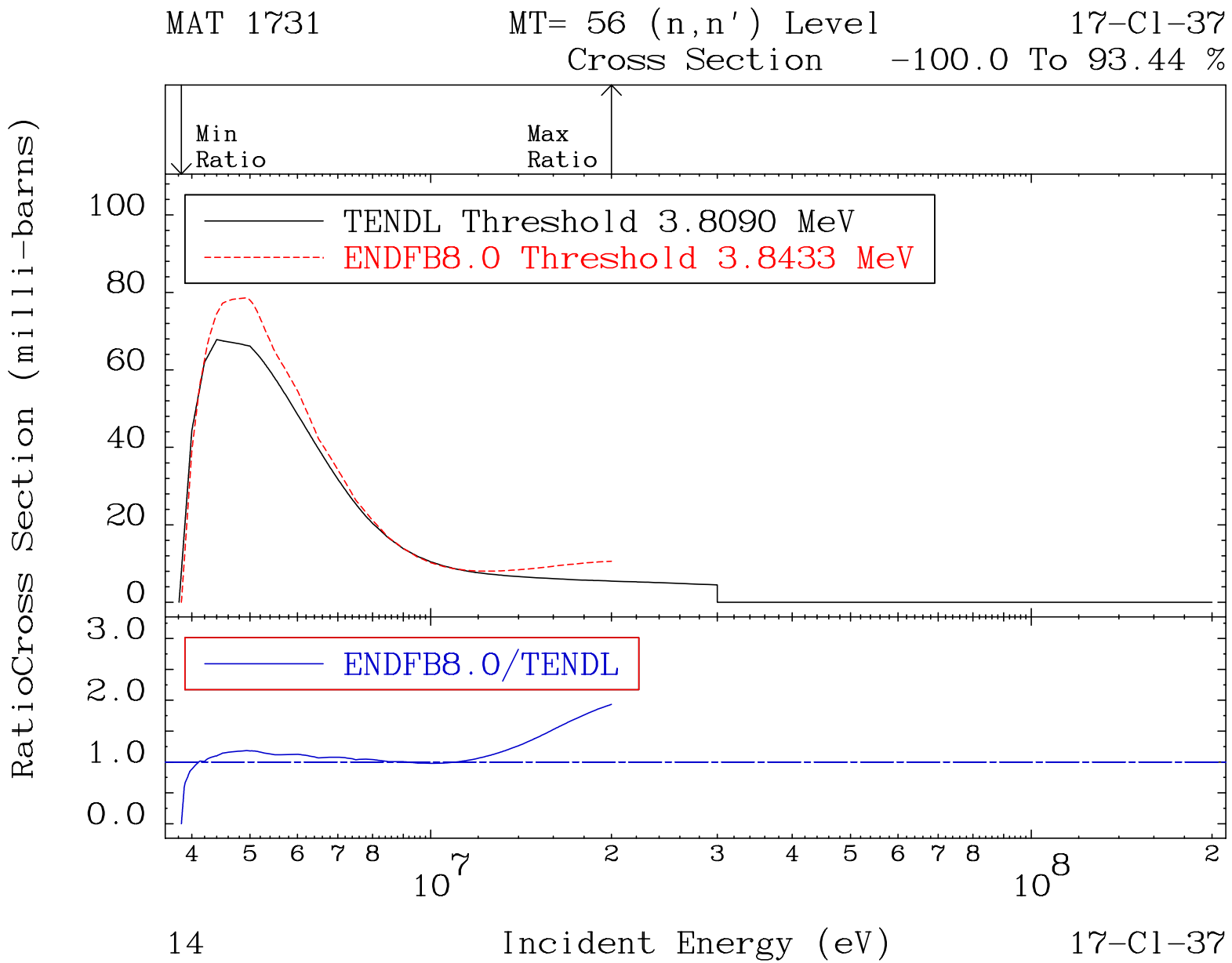

MAT 1731
MT= 51 (n,n') Level
17-Cl-37
Cross Section -62.13 To 80.31 %
Min Ratio
Max Ratio
TENDL Threshold 1.7737 MeV
ENDFB8.0 Threshold 1.7737 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
17-Cl-37

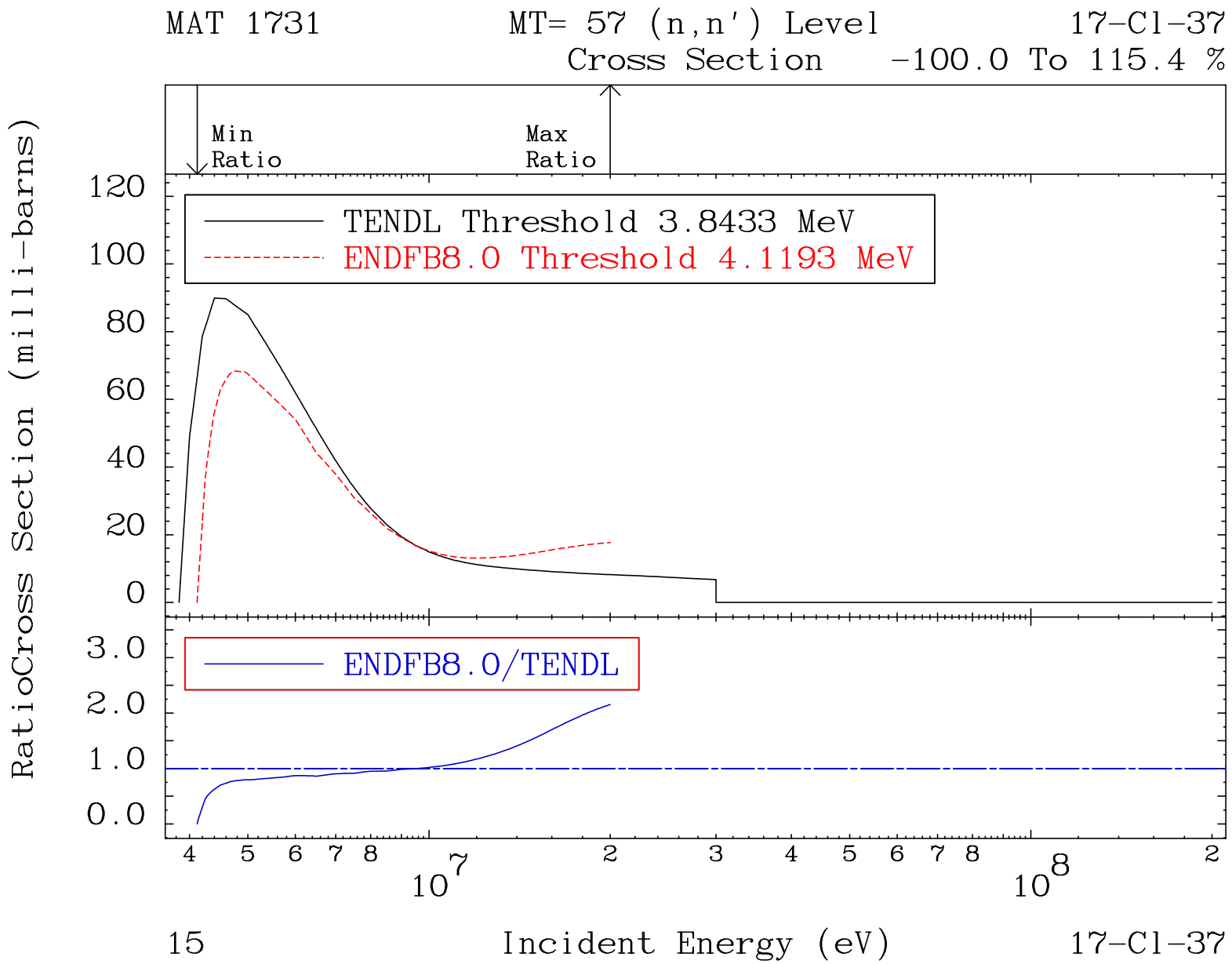

MAT 1731
MT= 52 (n,n') Level
17-Cl-37
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1703 MeV
ENDFB8.0 Threshold 3.1703 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
17-Cl-37

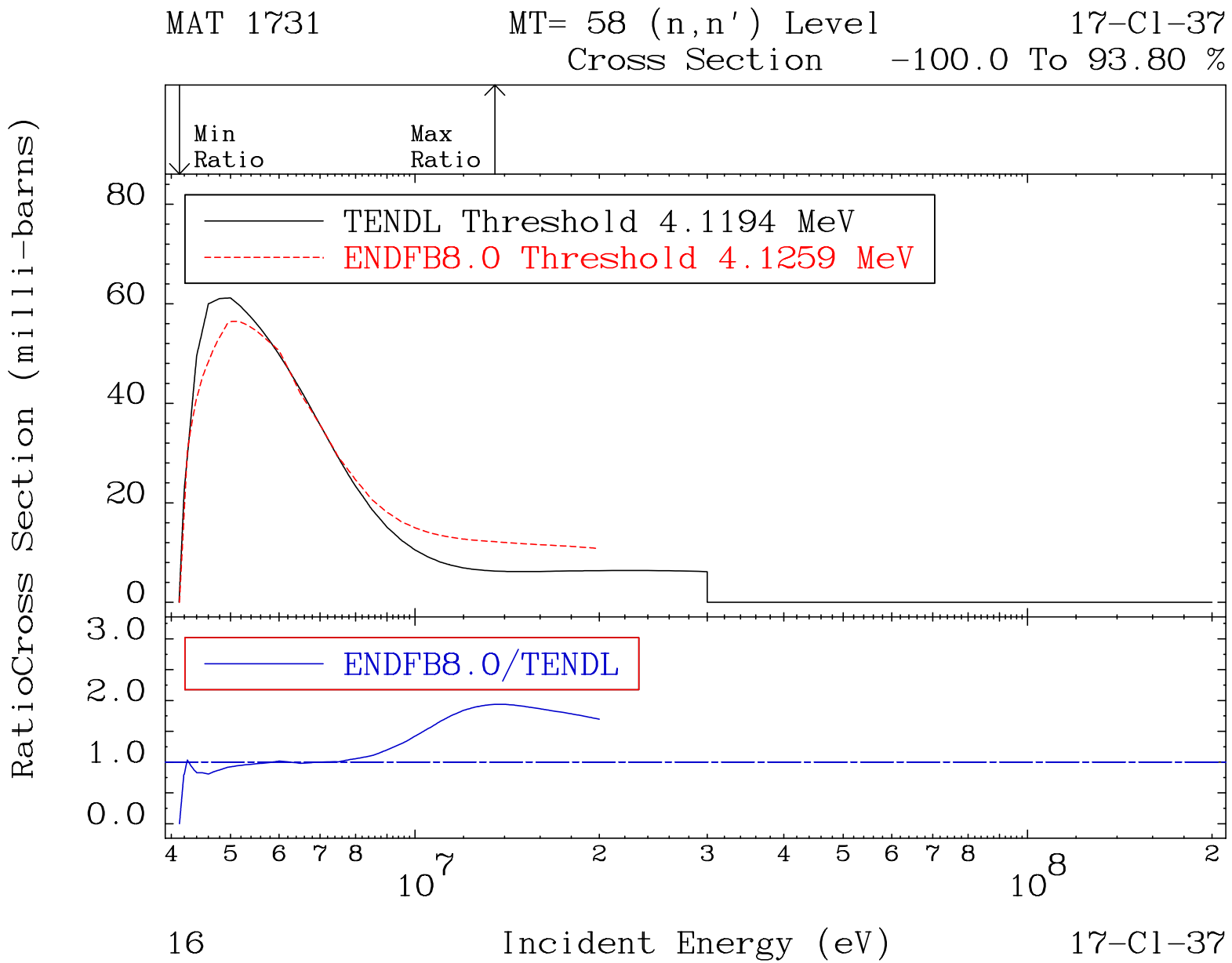

MAT 1731
MT= 53 (n,n') Level
17-Cl-37
Cross Section -60.32 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1882 MeV
ENDFB8.0 Threshold 3.1882 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^4
10^2
10^0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
17-Cl-37

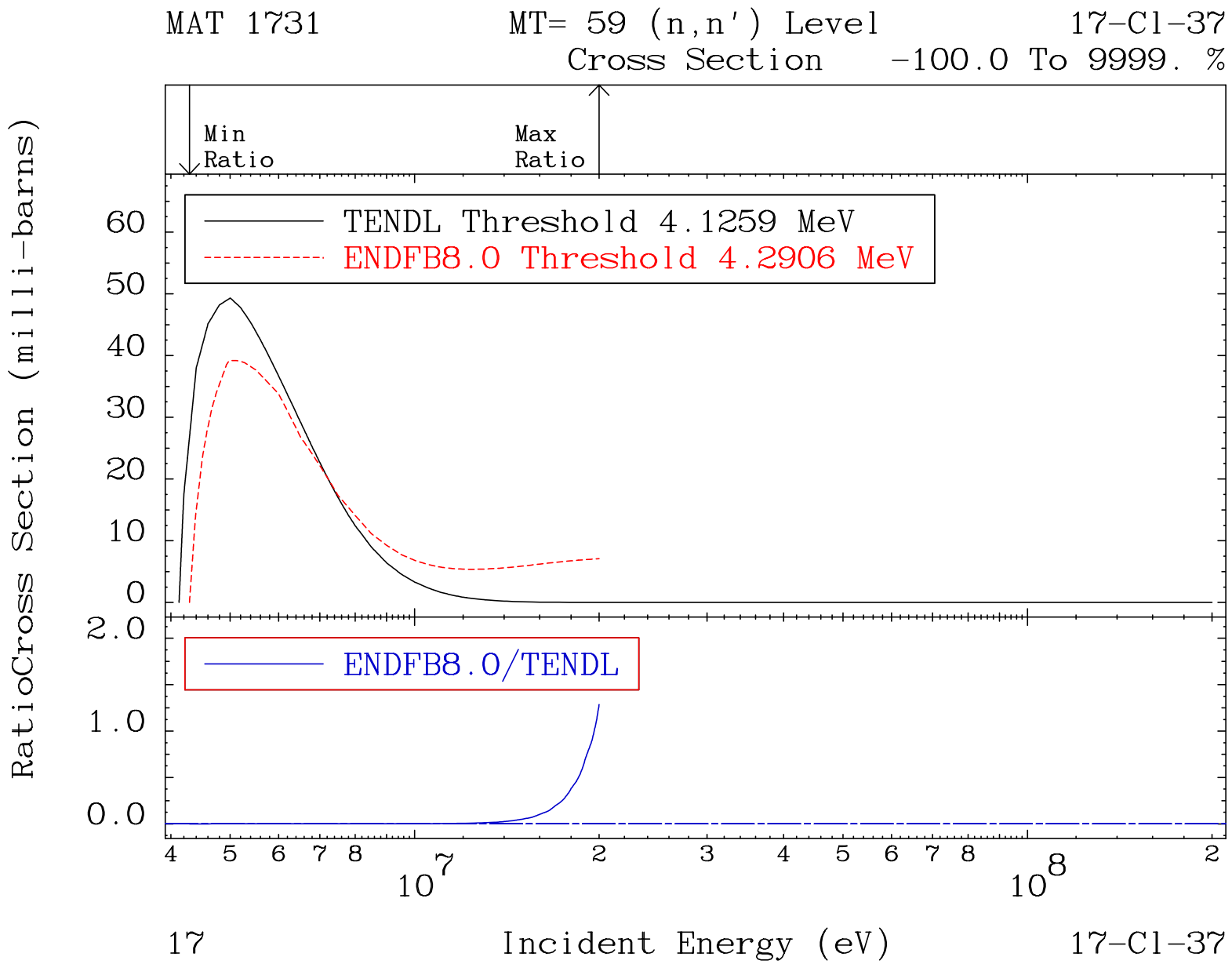

MAT 1731
MT= 54 (n,n') Level
17-Cl-37
Cross Section -100.0 To -3.754%
Min Ratio
Max Ratio
TENDL Threshold 3.3769 MeV
ENDFB8.0 Threshold 3.7258 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.6
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
17-Cl-37

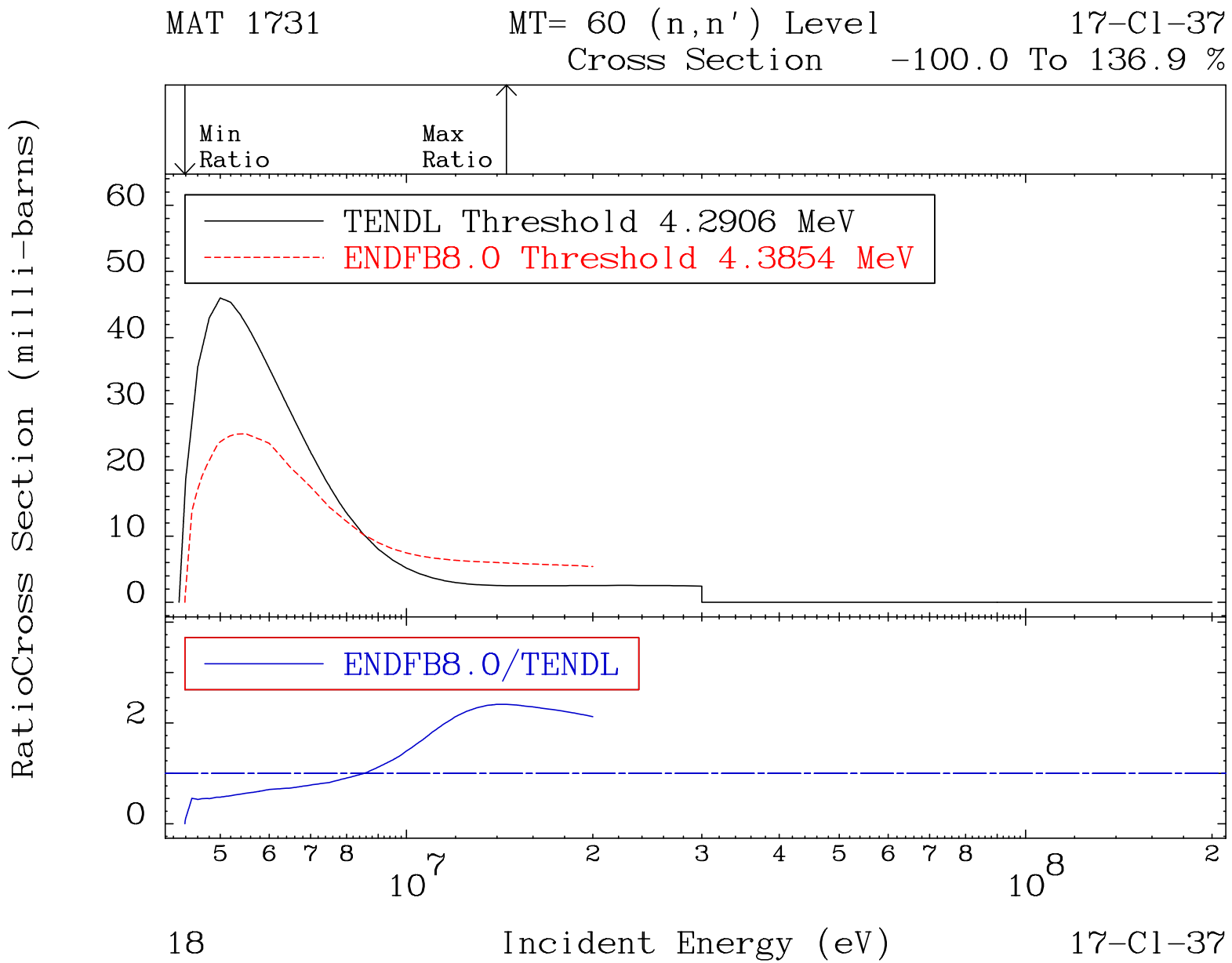

MAT 1731
MT= 55 (n,n') Level
17-Cl-37
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.7258 MeV
ENDFB8.0 Threshold 3.8090 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
17-Cl-37

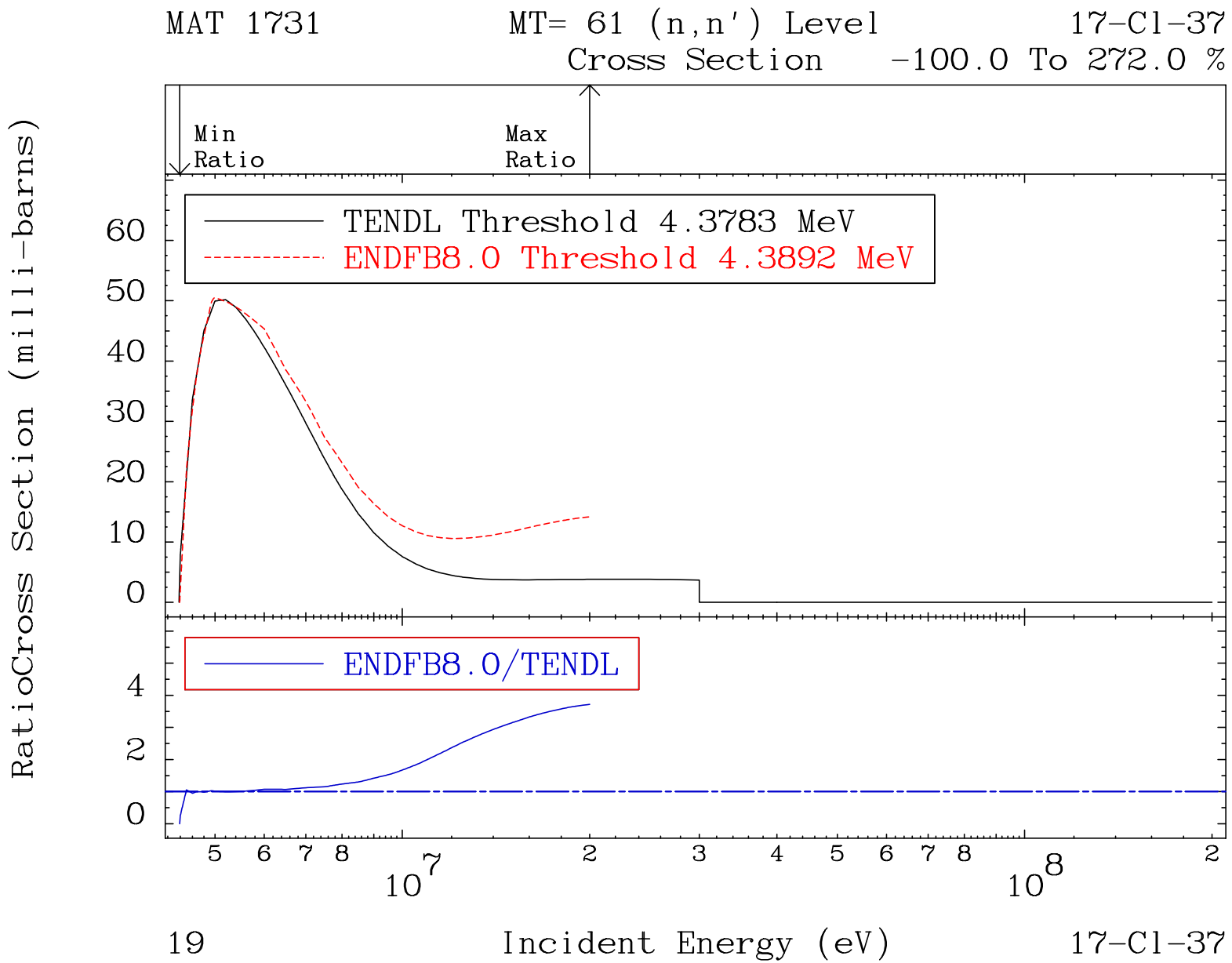

MAT 1731
MT= 56 (n,n') Level
17-Cl-37
Cross Section -100.0 To 93.44 %
Min Ratio
Max Ratio
TENDL Threshold 3.8090 MeV
ENDFB8.0 Threshold 3.8433 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
3.0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
17-Cl-37

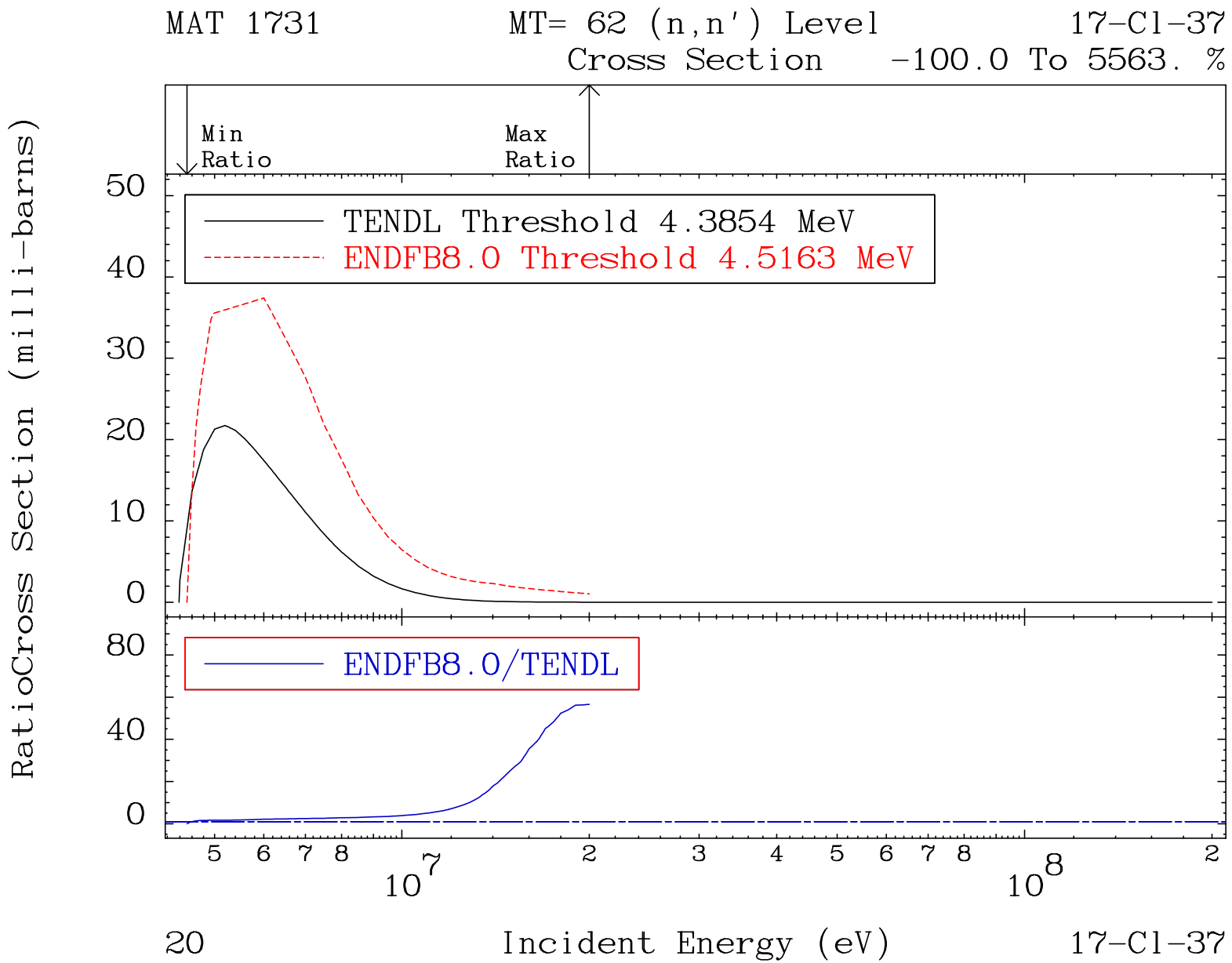

MAT 1731
MT= 57 (n,n') Level
17-Cl-37
Cross Section -100.0 To 115.4 %
Min Ratio
Max Ratio
TENDL Threshold 3.8433 MeV
ENDFB8.0 Threshold 4.1193 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
3.0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
15
17-Cl-37

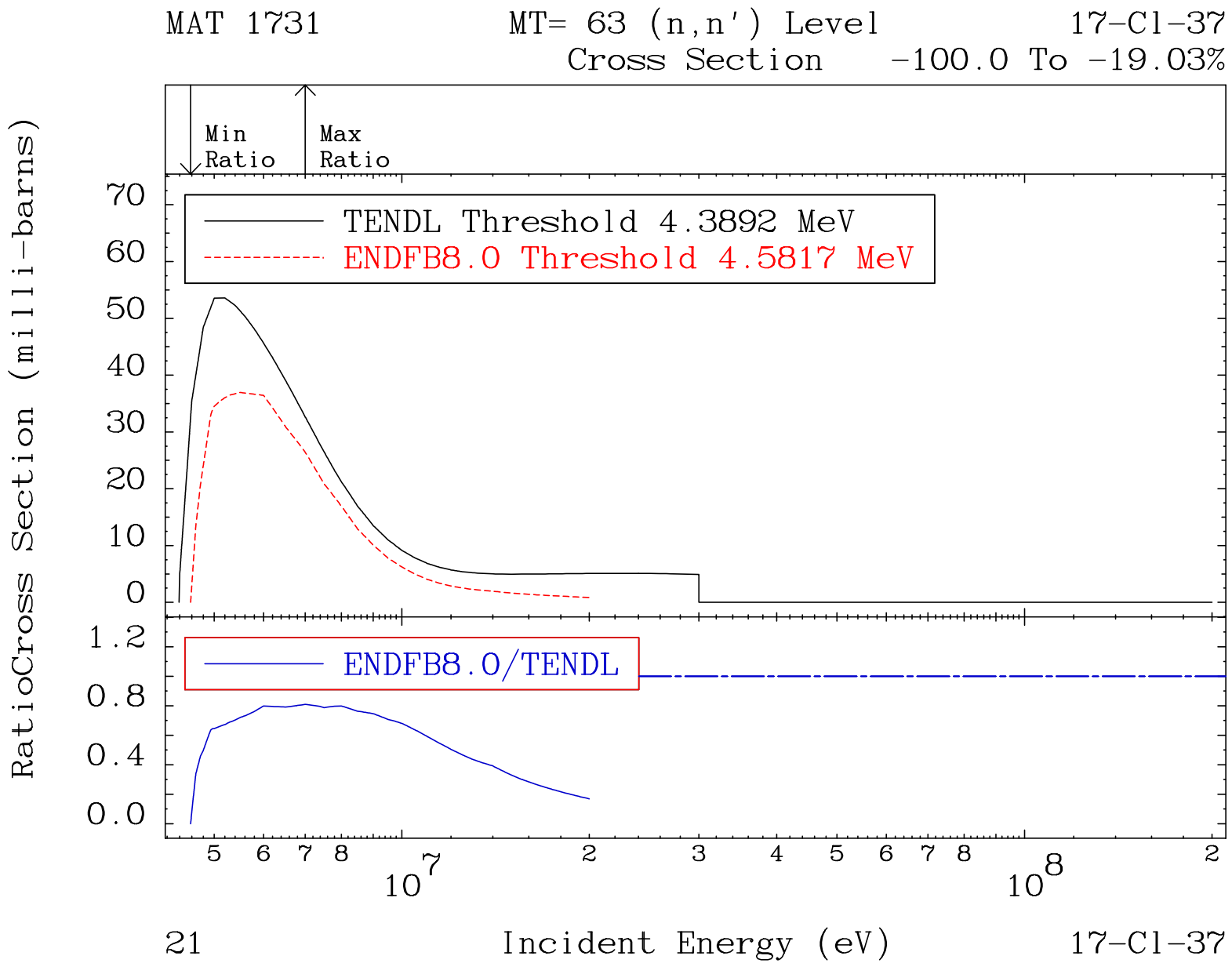

MAT 1731
MT= 58 (n,n') Level
17-Cl-37
Cross Section -100.0 To 93.80 %
Min Ratio
Max Ratio
TENDL Threshold 4.1194 MeV
ENDFB8.0 Threshold 4.1259 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
17-Cl-37

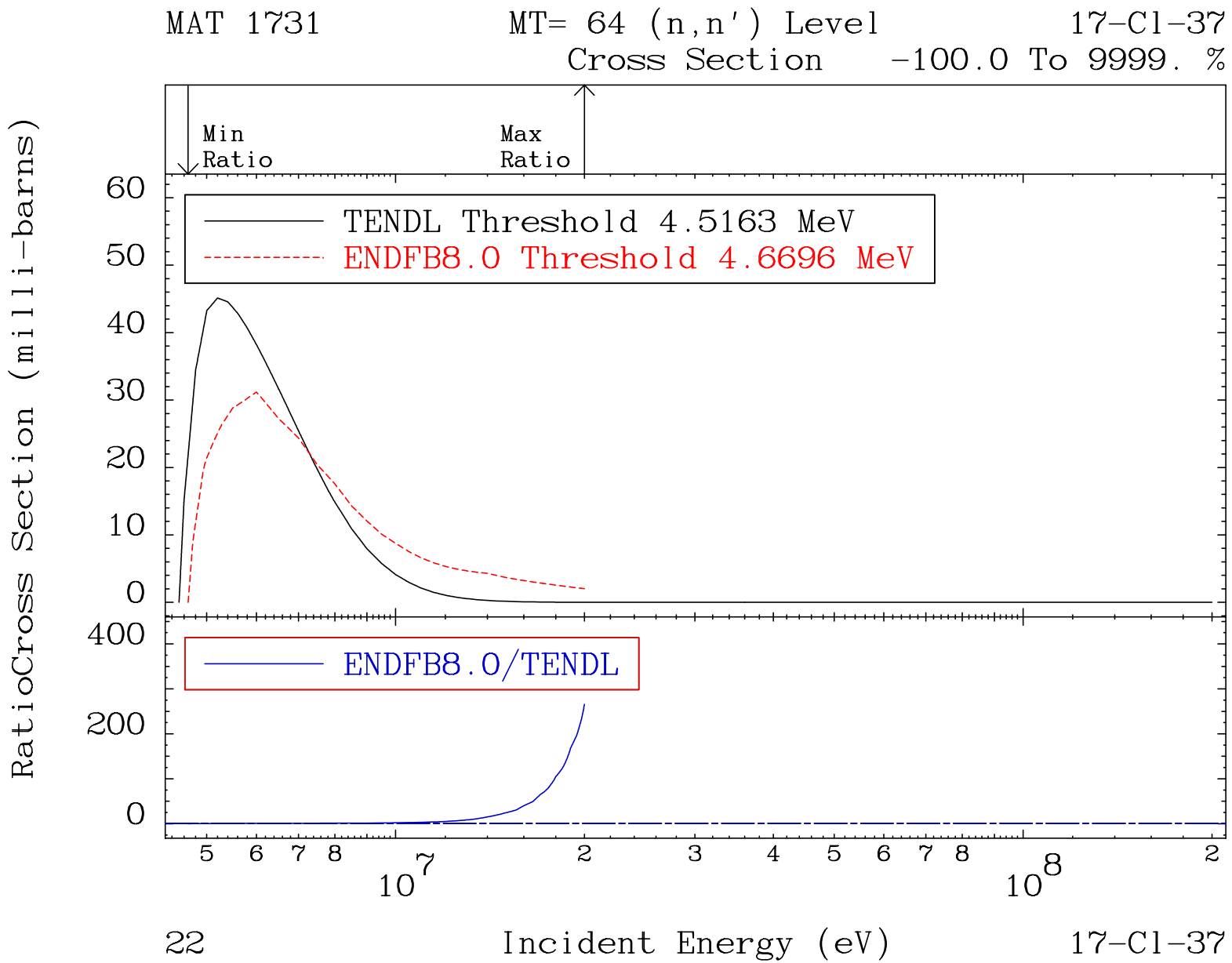

MAT 1731
MT= 59 (n,n') Level
17-Cl-37
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.1259 MeV
ENDFB8.0 Threshold 4.2906 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
17-Cl-37

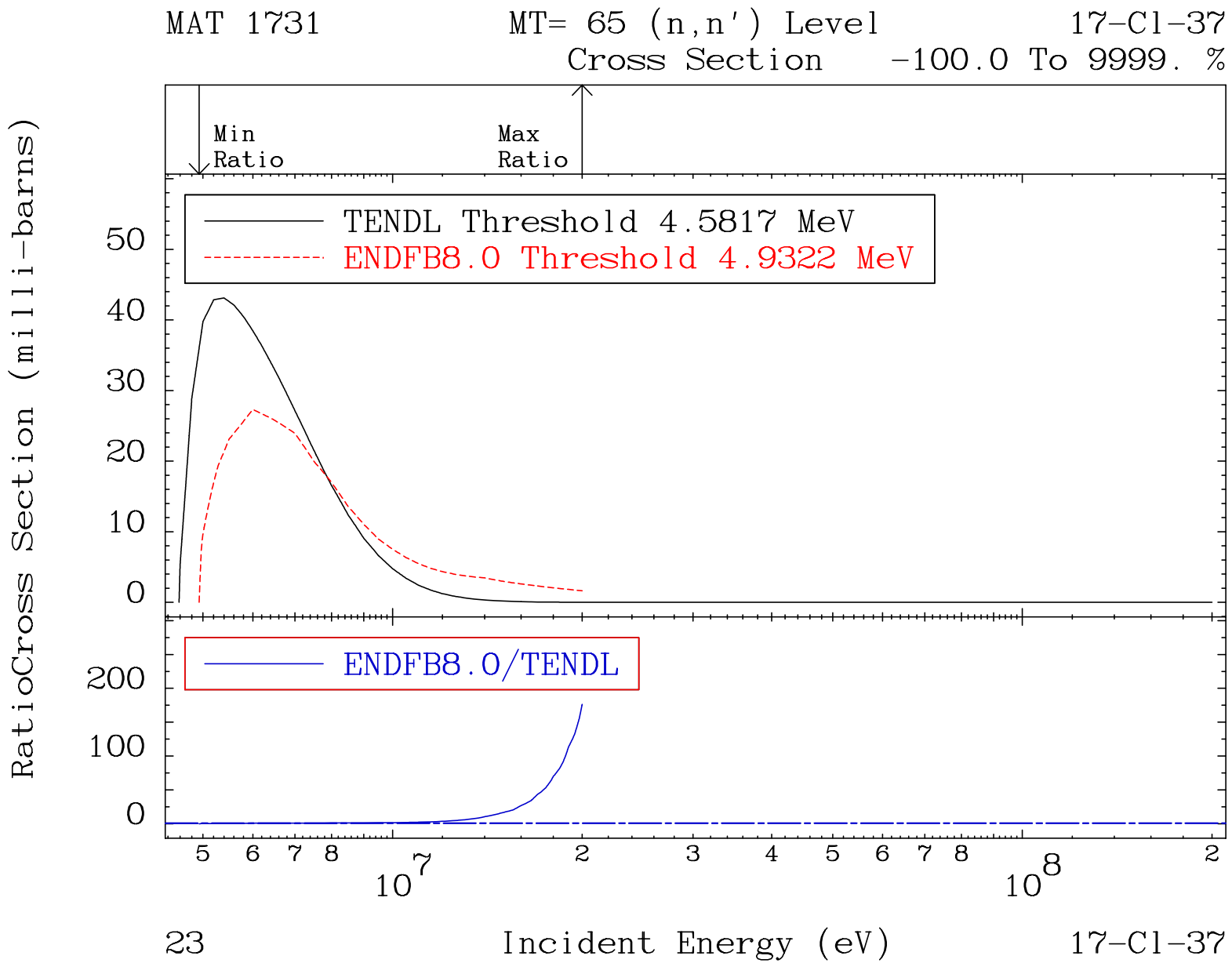

MAT 1731
MT= 60 (n,n') Level
17-Cl-37
Cross Section -100.0 To 136.9 %
Min Ratio
Max Ratio
TENDL Threshold 4.2906 MeV
ENDFB8.0 Threshold 4.3854 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
17-Cl-37

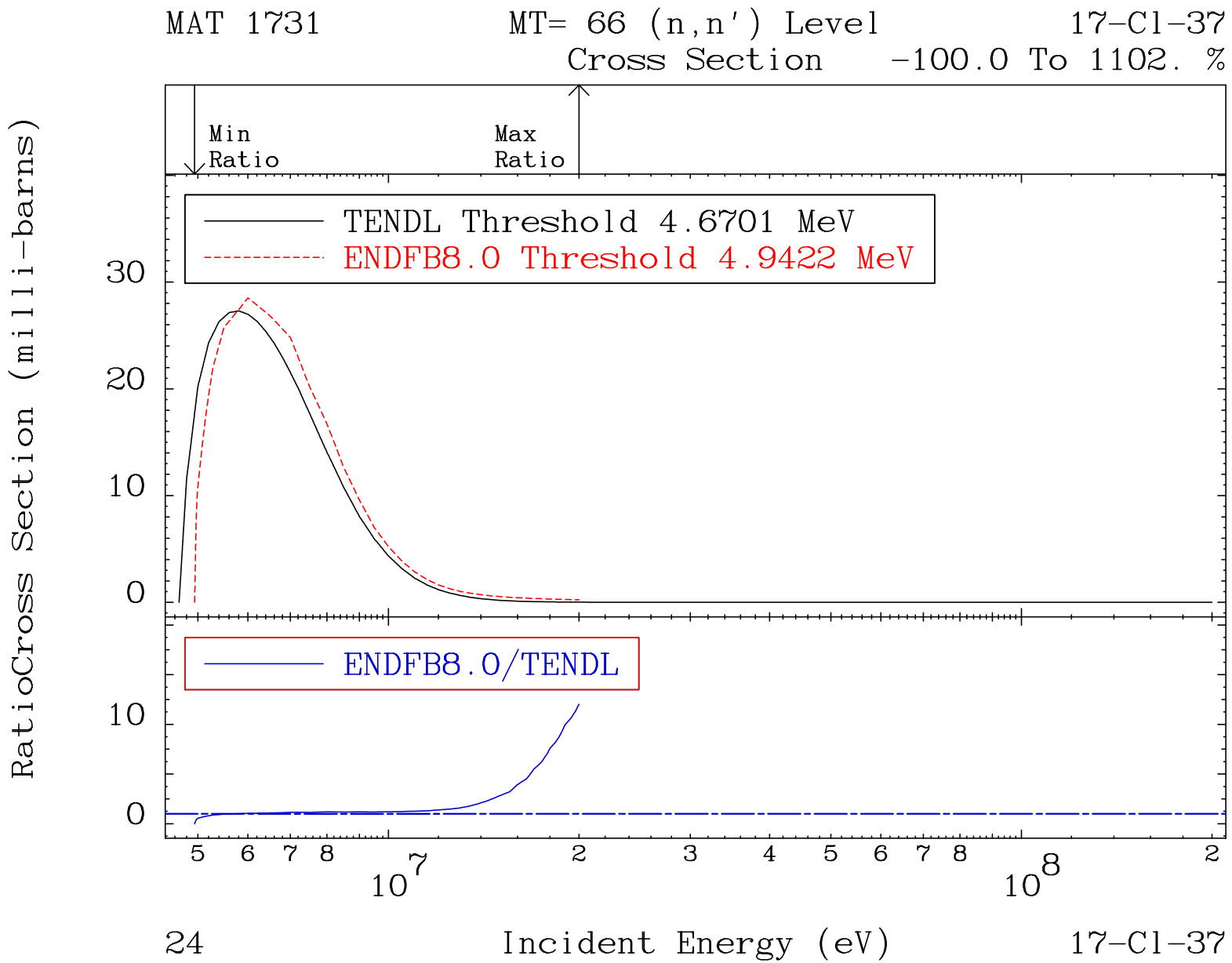

MAT 1731
MT= 61 (n,n') Level
17-Cl-37
Cross Section -100.0 To 272.0 %
Min Ratio
Max Ratio
TENDL Threshold 4.3783 MeV
ENDFB8.0 Threshold 4.3892 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
2
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
17-Cl-37

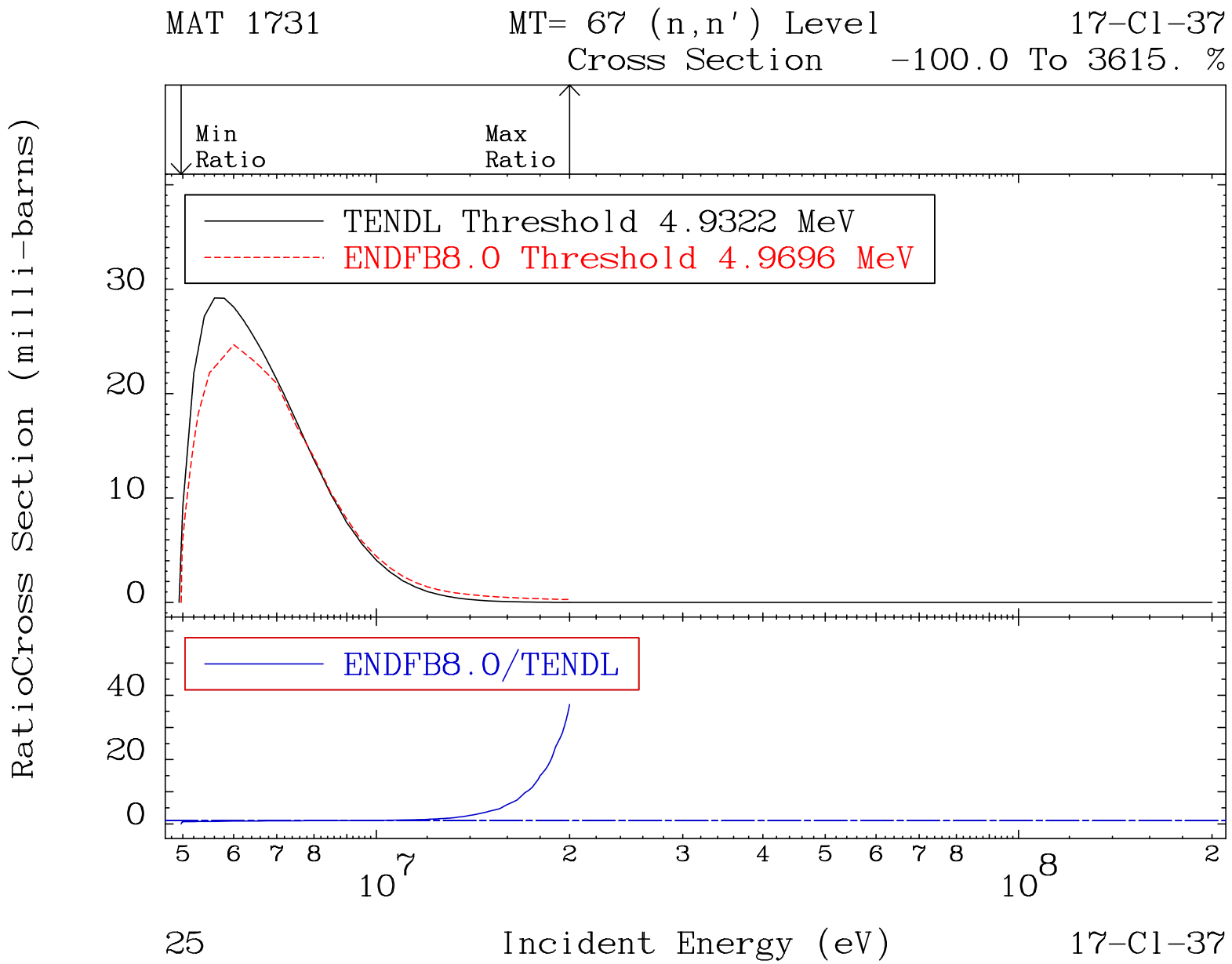

MAT 1731
MT= 62 (n,n') Level
17-Cl-37
Cross Section -100.0 To 5563. %
Min Ratio
Max Ratio
TENDL Threshold 4.3854 MeV
ENDFB8.0 Threshold 4.5163 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
20
17-Cl-37

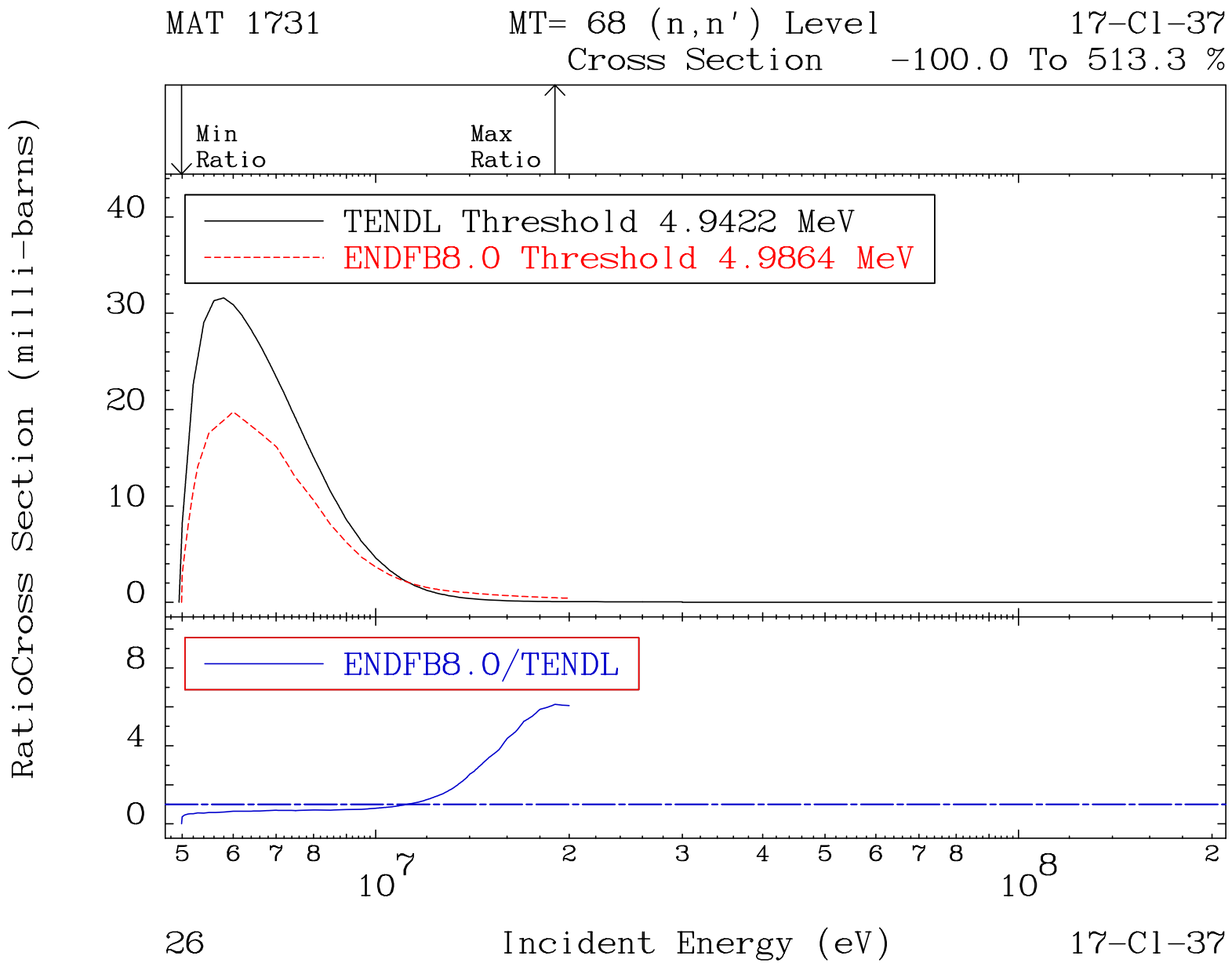

MAT 1731
MT= 63 (n,n') Level
17-Cl-37
Cross Section -100.0 To -19.03%
Min Ratio
Max Ratio
TENDL Threshold 4.3892 MeV
ENDFB8.0 Threshold 4.5817 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.8
0.4
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
17-Cl-37

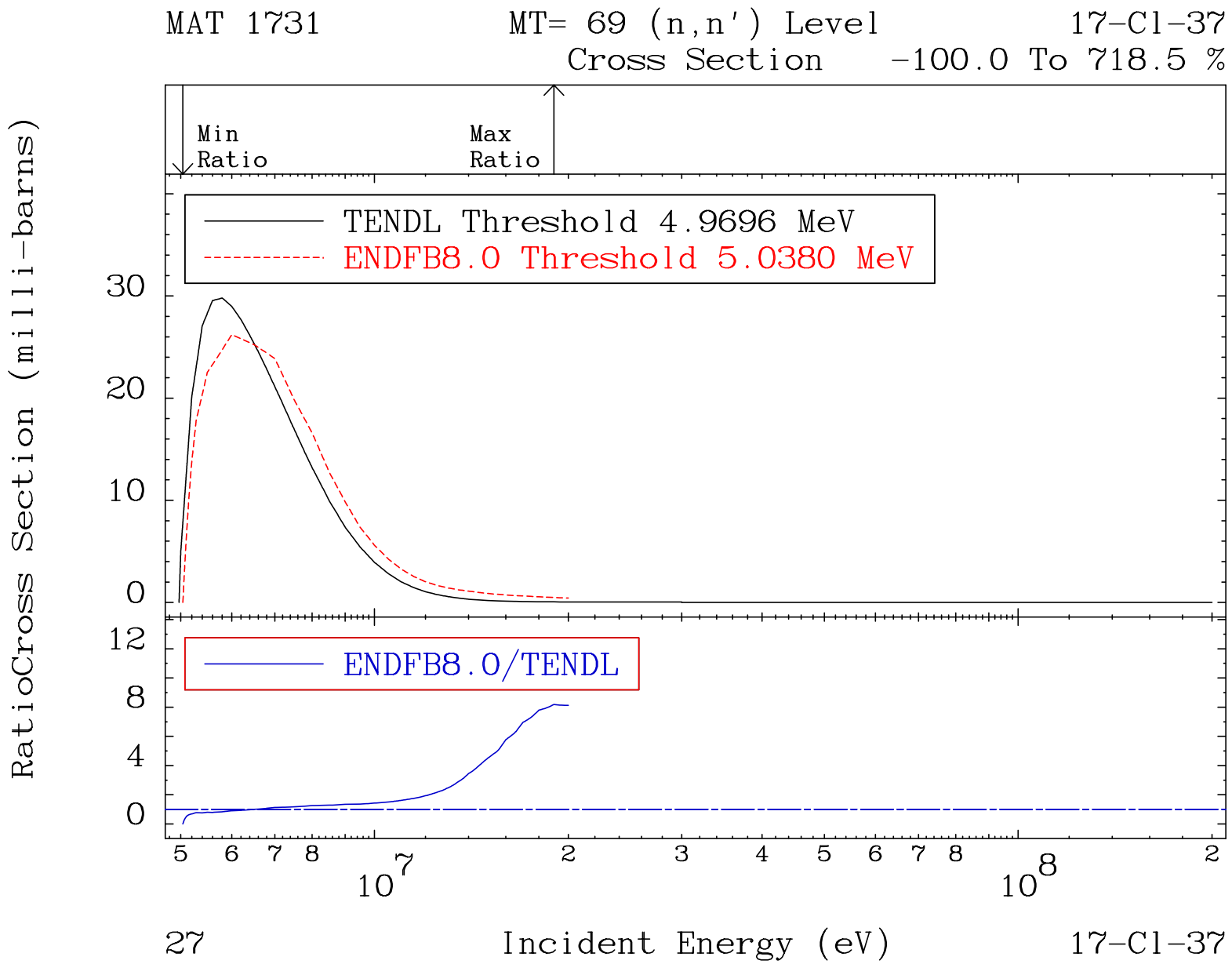

MAT 1731
MT= 64 (n,n') Level
17-Cl-37
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.5163 MeV
ENDFB8.0 Threshold 4.6696 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
400
200
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
17-Cl-37

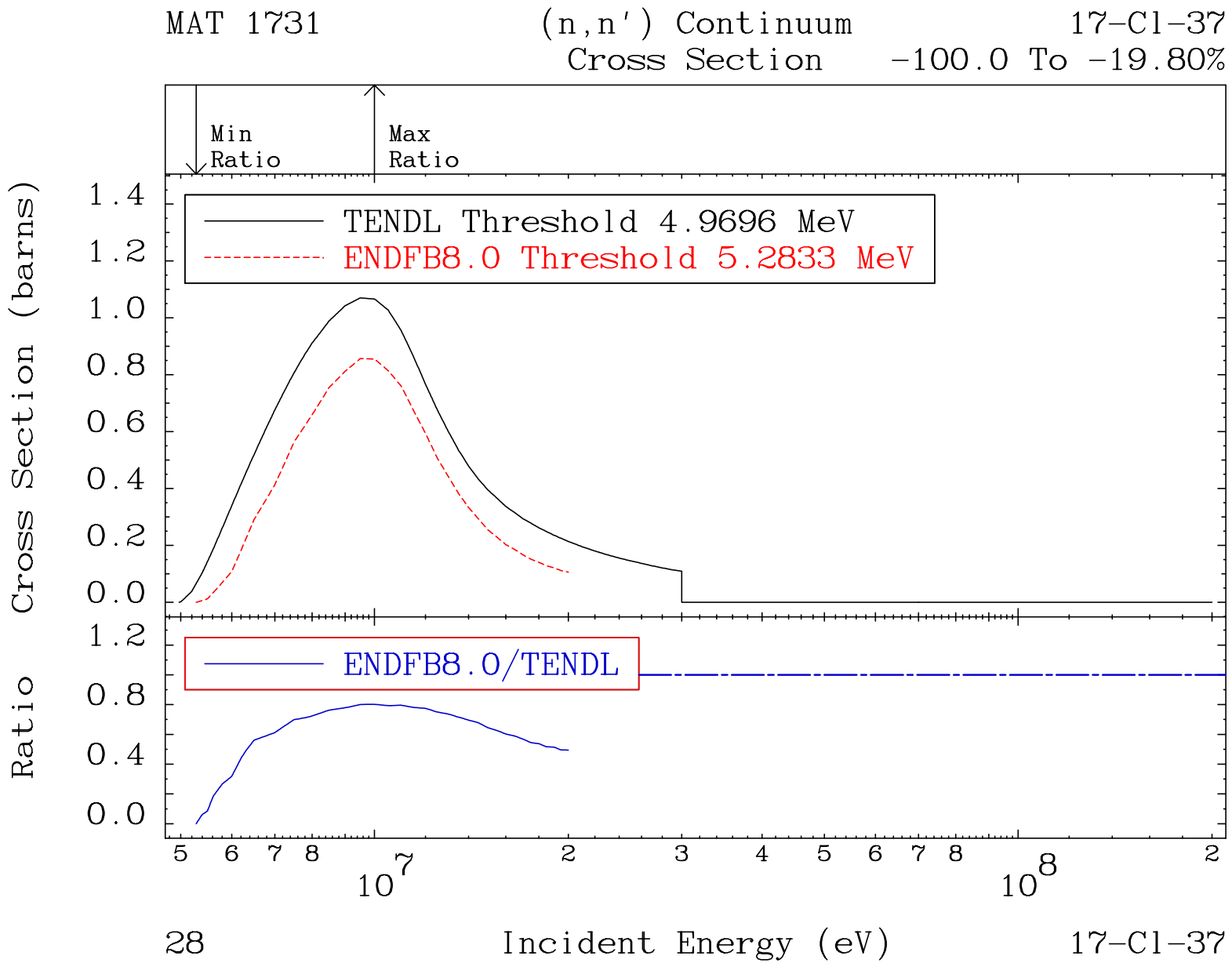

MAT 1731
MT= 65 (n,n') Level
17-Cl-37
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.5817 MeV
ENDFB8.0 Threshold 4.9322 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
200
100
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
17-Cl-37

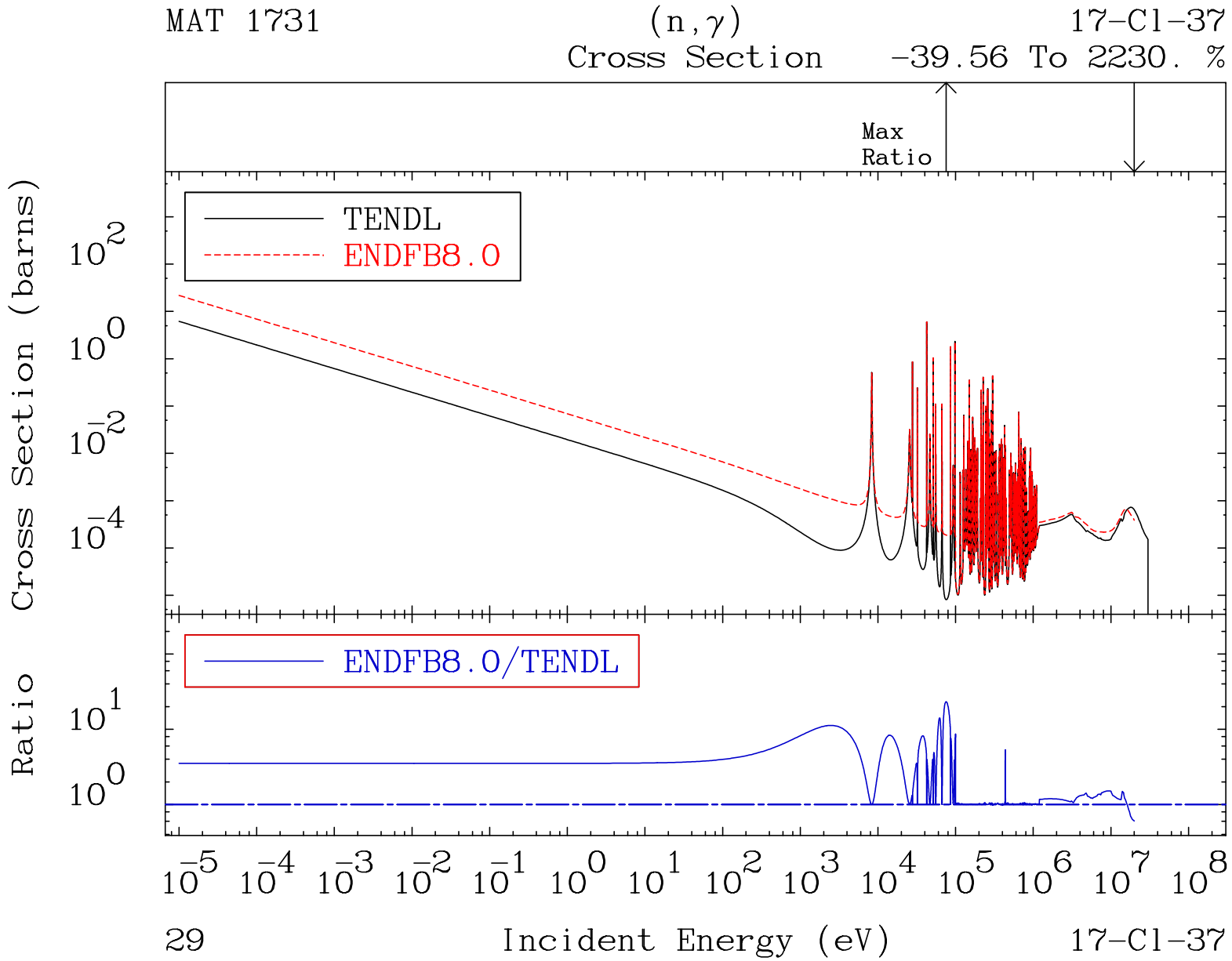

MAT 1731
MT= 66 (n,n') Level
17-Cl-37
Cross Section -100.0 To 1102. %
Min Ratio
Max Ratio
TENDL Threshold 4.6701 MeV
ENDFB8.0 Threshold 4.9422 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
10
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
17-Cl-37

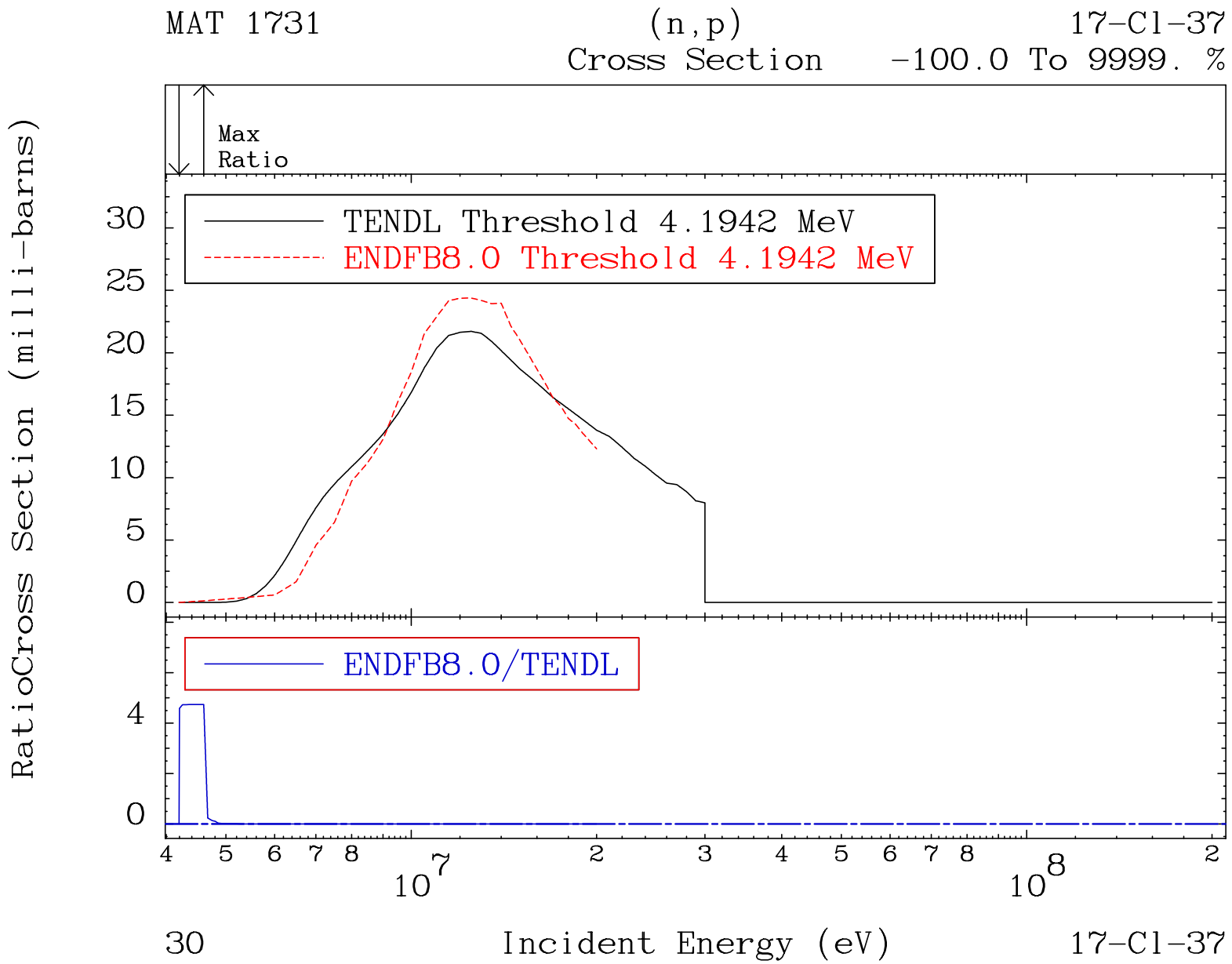

MAT 1731
MT= 67 (n,n') Level
17-Cl-37
Cross Section -100.0 To 3615. %
Min Ratio
Max Ratio
TENDL Threshold 4.9322 MeV
ENDFB8.0 Threshold 4.9696 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
40
20
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
17-Cl-37

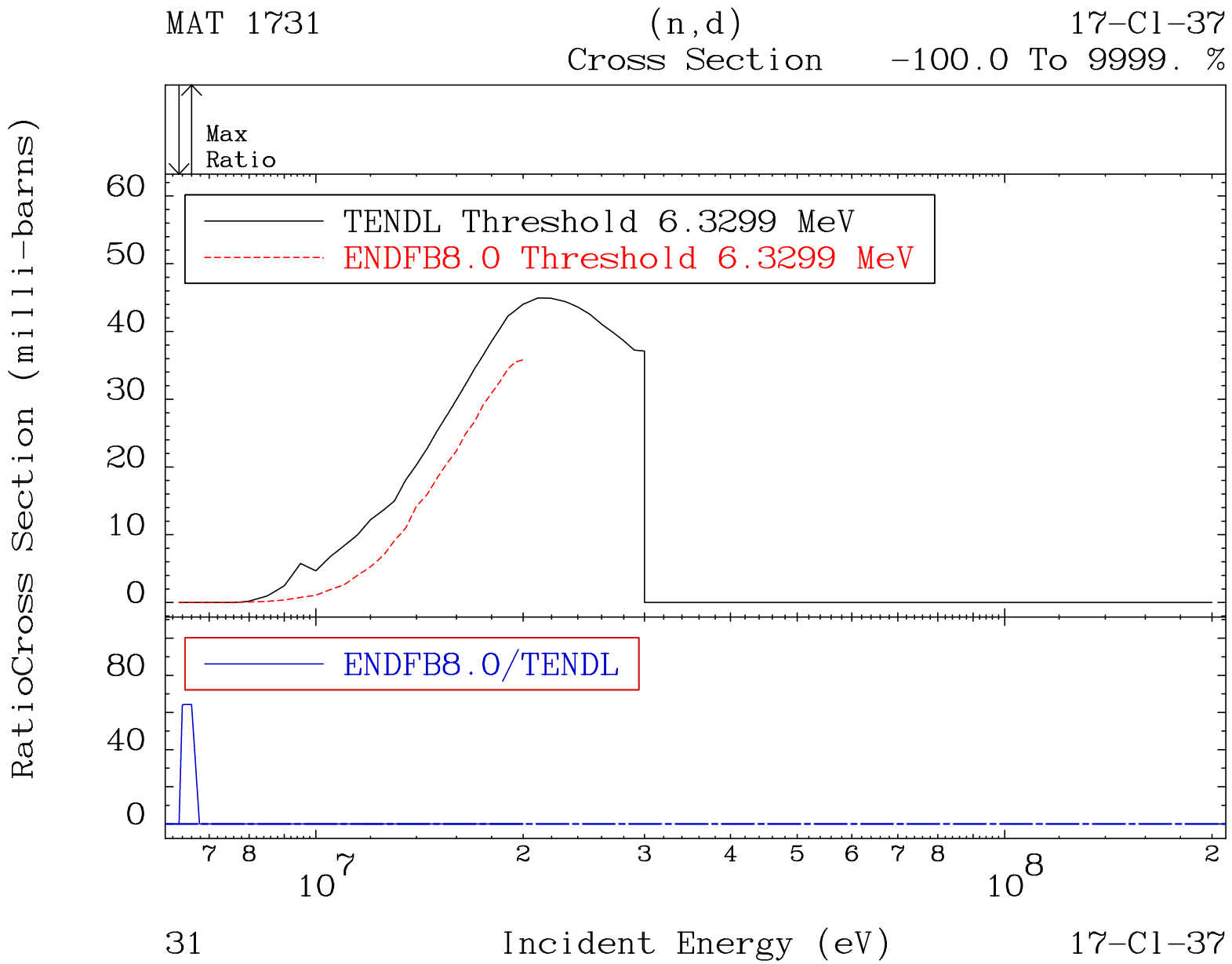

MAT 1731
MT= 68 (n,n') Level
17-Cl-37
Cross Section -100.0 To 513.3 %
Min Ratio
Max Ratio
TENDL Threshold 4.9422 MeV
ENDFB8.0 Threshold 4.9864 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
8
4
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
17-Cl-37

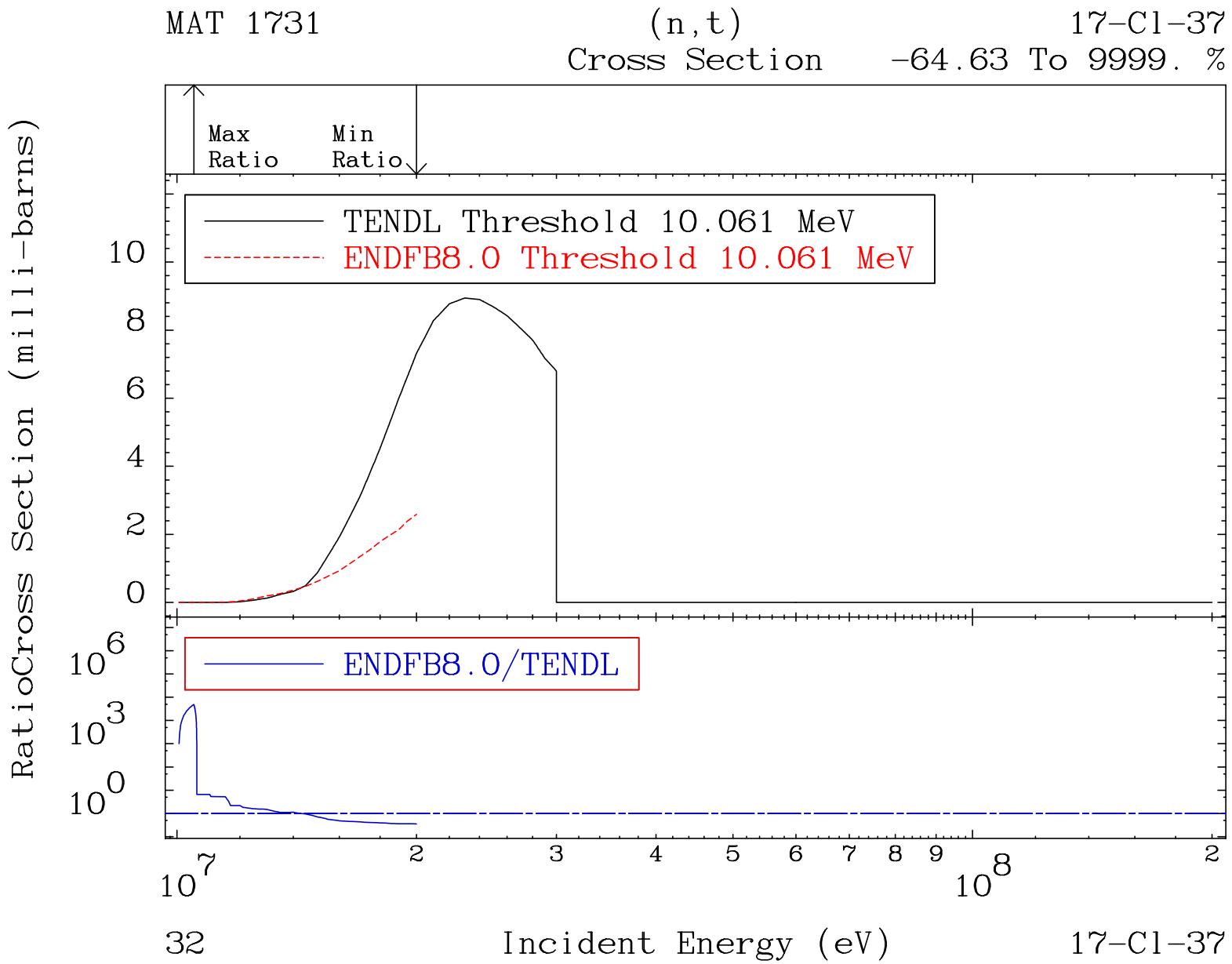

MAT 1731
MT= 69 (n,n') Level
17-Cl-37
Cross Section -100.0 To 718.5 %
Min Ratio
Max Ratio
TENDL Threshold 4.9696 MeV
ENDFB8.0 Threshold 5.0380 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
12
8
4
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
17-Cl-37

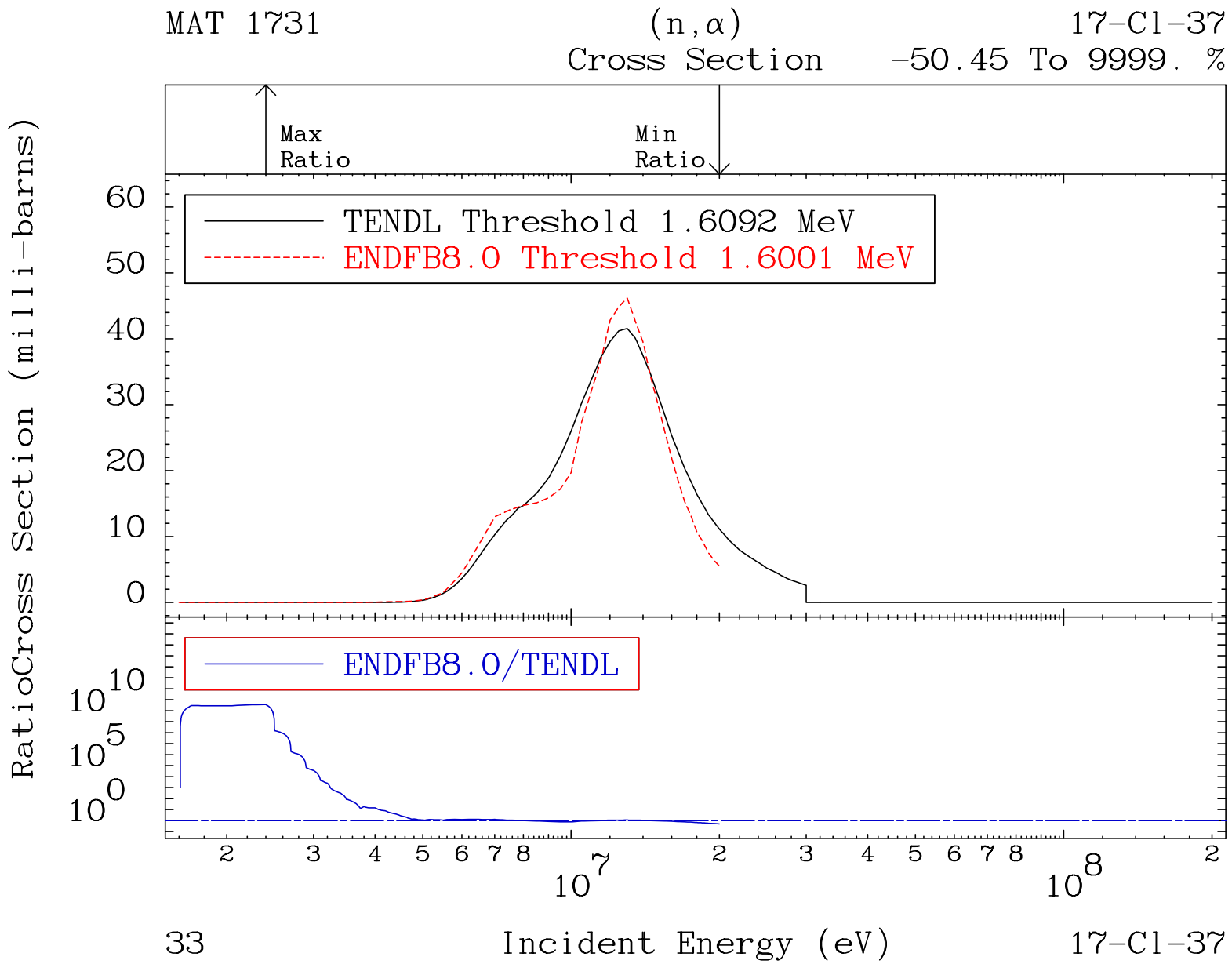

MAT 1731
(n,n') Continuum
Cross Section
17-Cl-37
-100.0 To -19.80%
Min Ratio
Max Ratio
TENDL Threshold 4.9696 MeV
ENDFB8.0 Threshold 5.2833 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
28
17-Cl-37

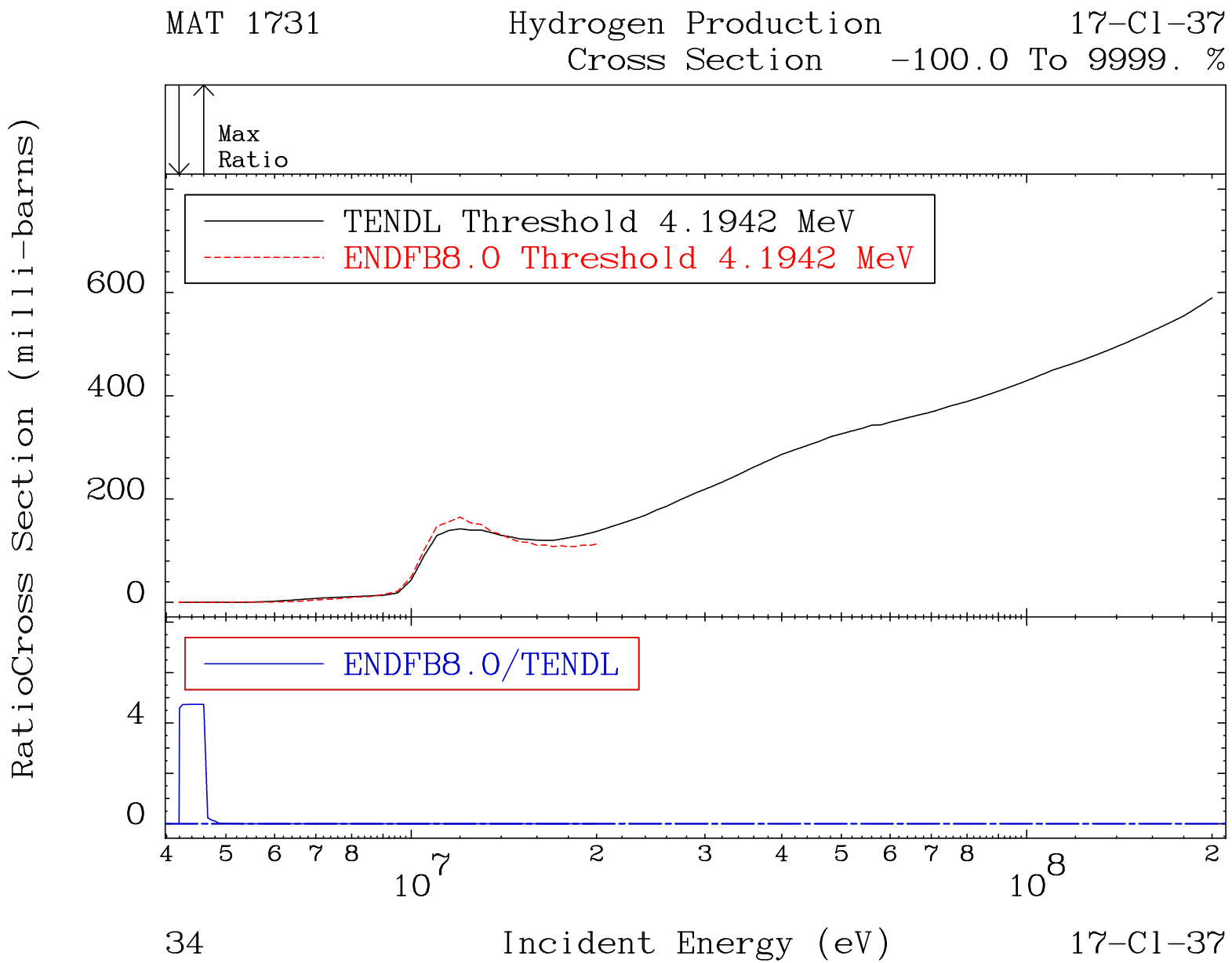

MAT 1731
(n,γ)
Cross Section
17-Cl-37
-39.56 To 2230. %
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
17-Cl-37

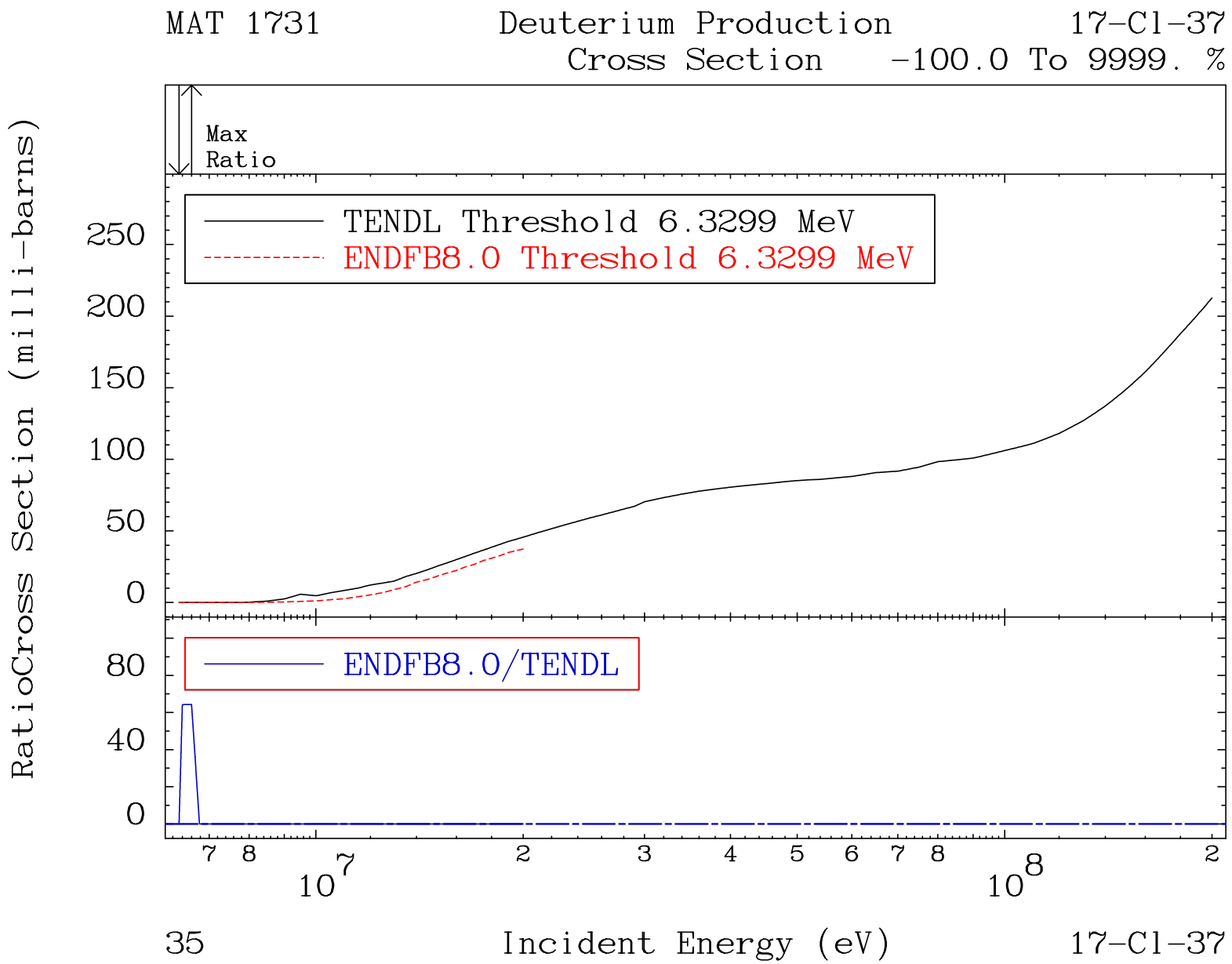

MAT 1731
(n,p)
17-Cl-37
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.1942 MeV
ENDFB8.0 Threshold 4.1942 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
17-Cl-37

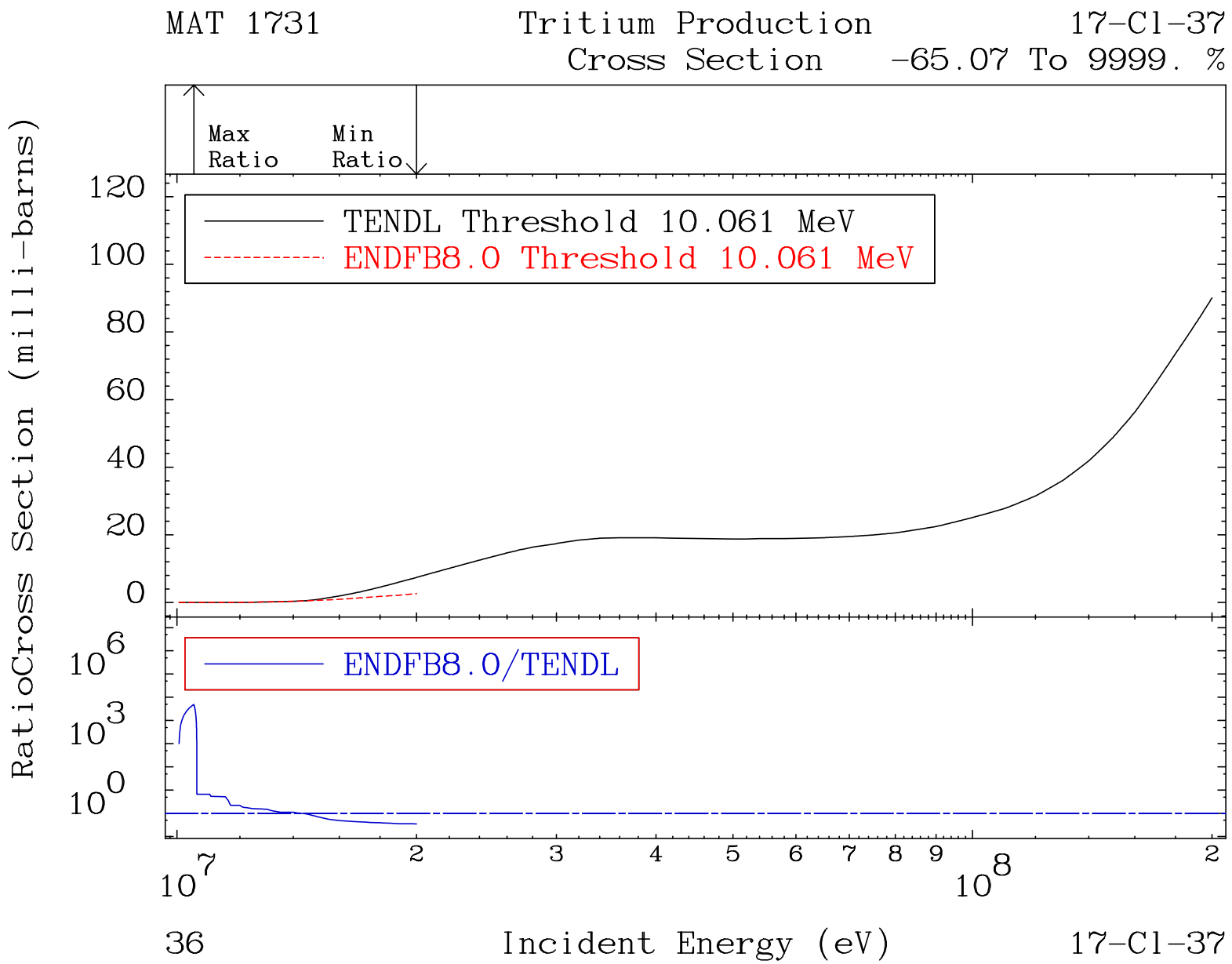

MAT 1731
(n,d)
17-Cl-37
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.3299 MeV
ENDFB8.0 Threshold 6.3299 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
80
40
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
17-Cl-37

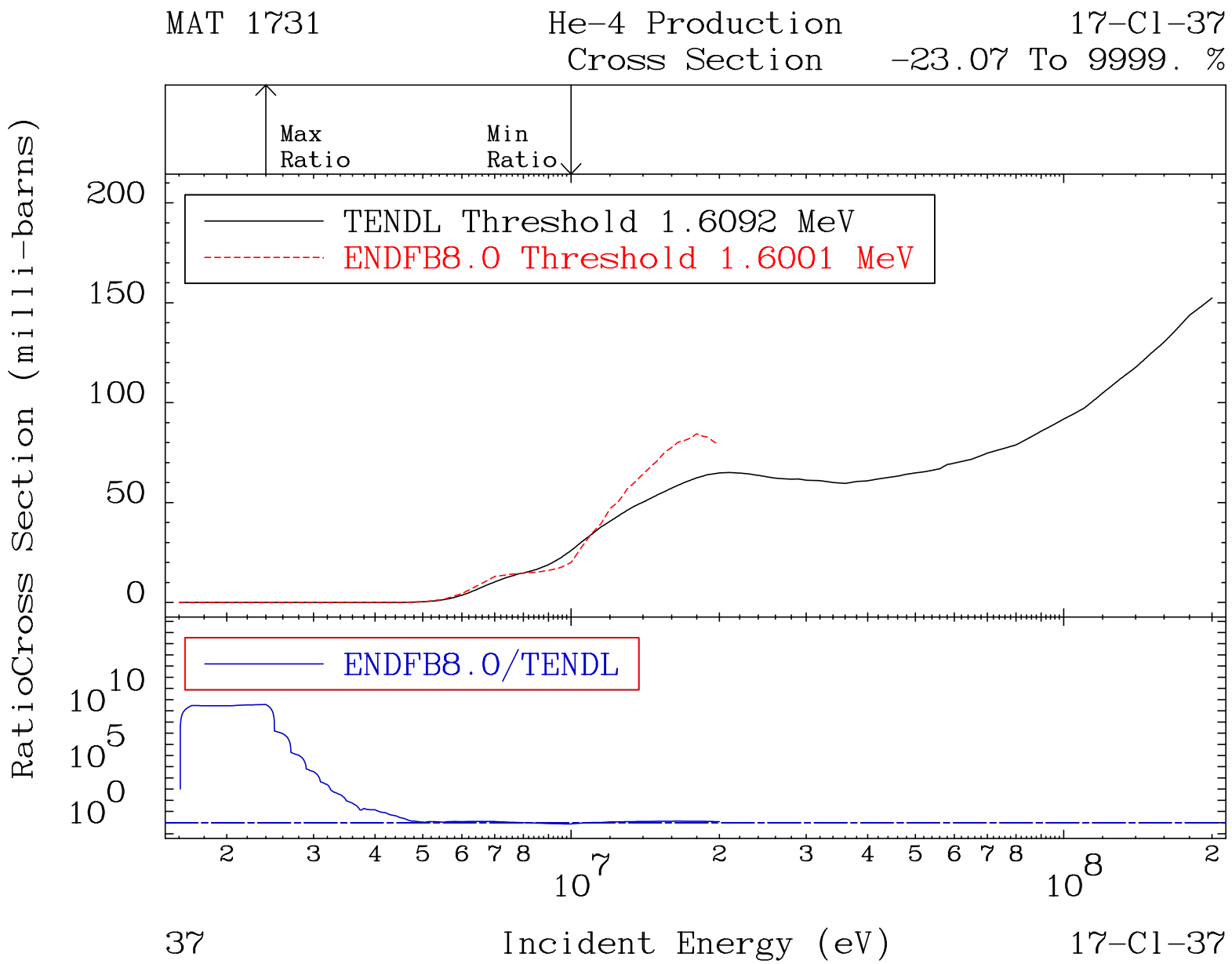

MAT 1731
(n,t)
17-Cl-37
Cross Section
-64.63 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.061 MeV
ENDFB8.0 Threshold 10.061 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
32
17-Cl-37

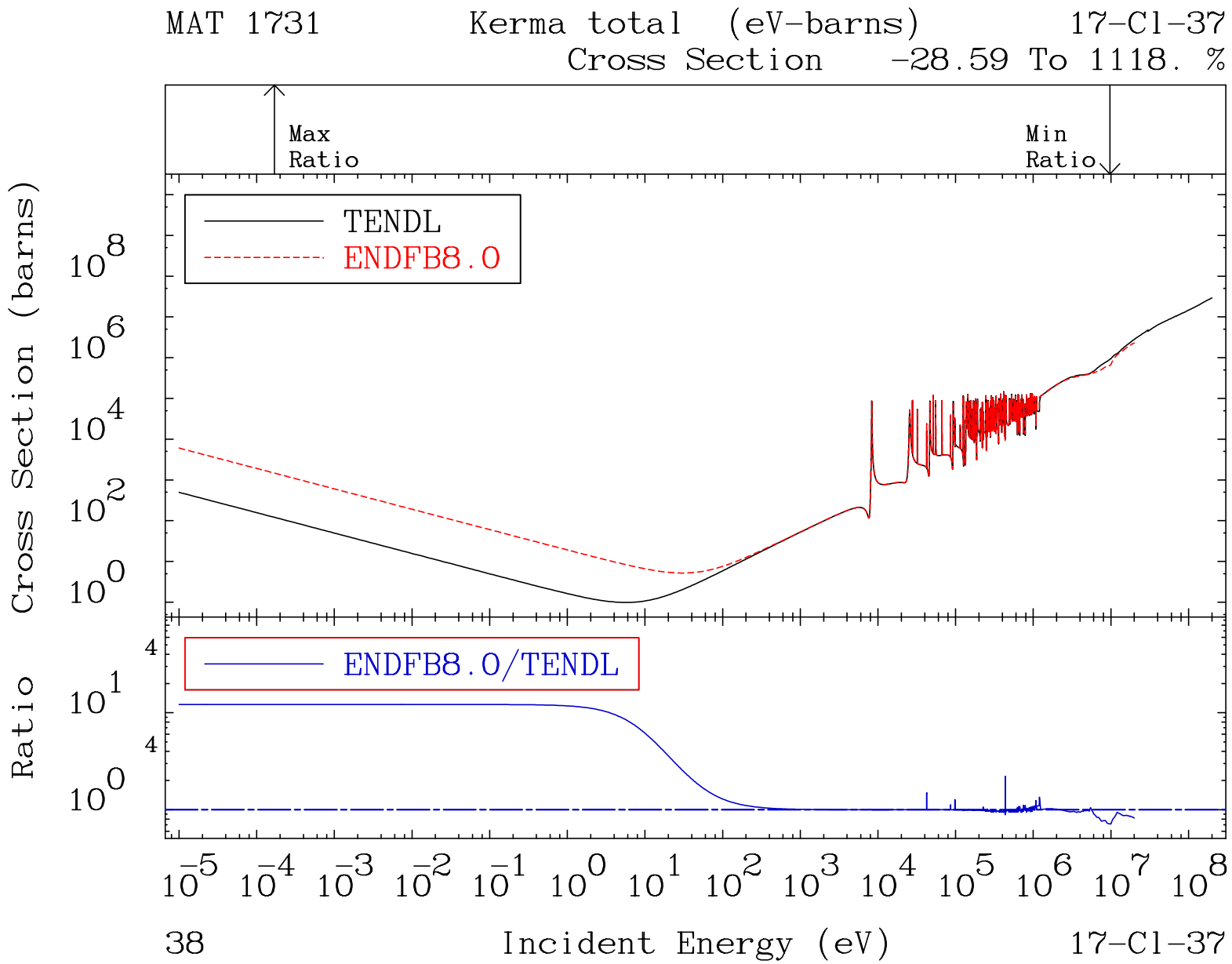

MAT 1731
(n,α)
17-Cl-37
Cross Section
-50.45 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.6092 MeV
ENDFB8.0 Threshold 1.6001 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
10^10
10^5
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
17-Cl-37

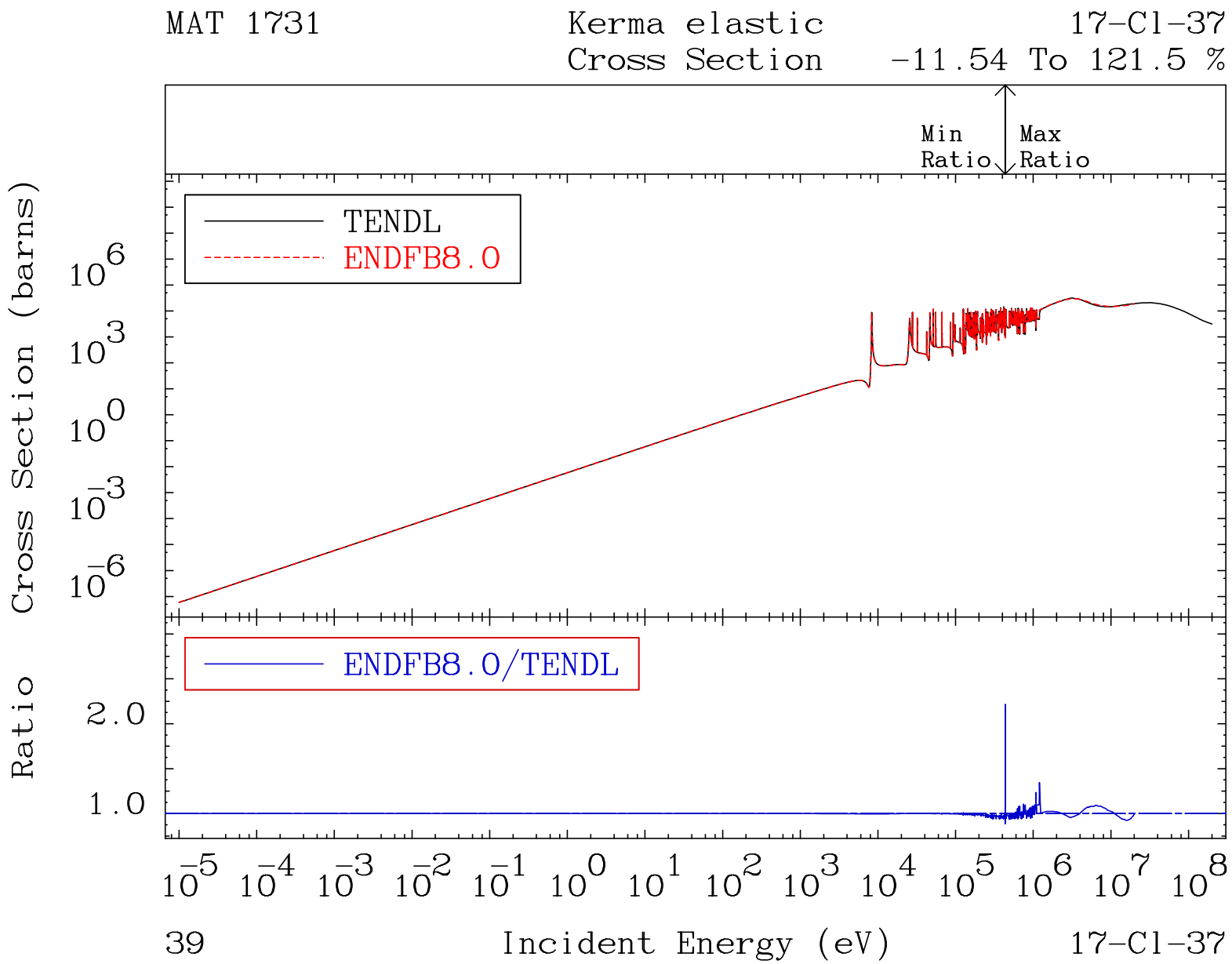

MAT 1731
Hydrogen Production
17-Cl-37
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.1942 MeV
ENDFB8.0 Threshold 4.1942 MeV
600
400
200
0
ENDFB8.0/TENDL
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
RatioCross Section (milli-barns)
34
Incident Energy (eV)
17-Cl-37

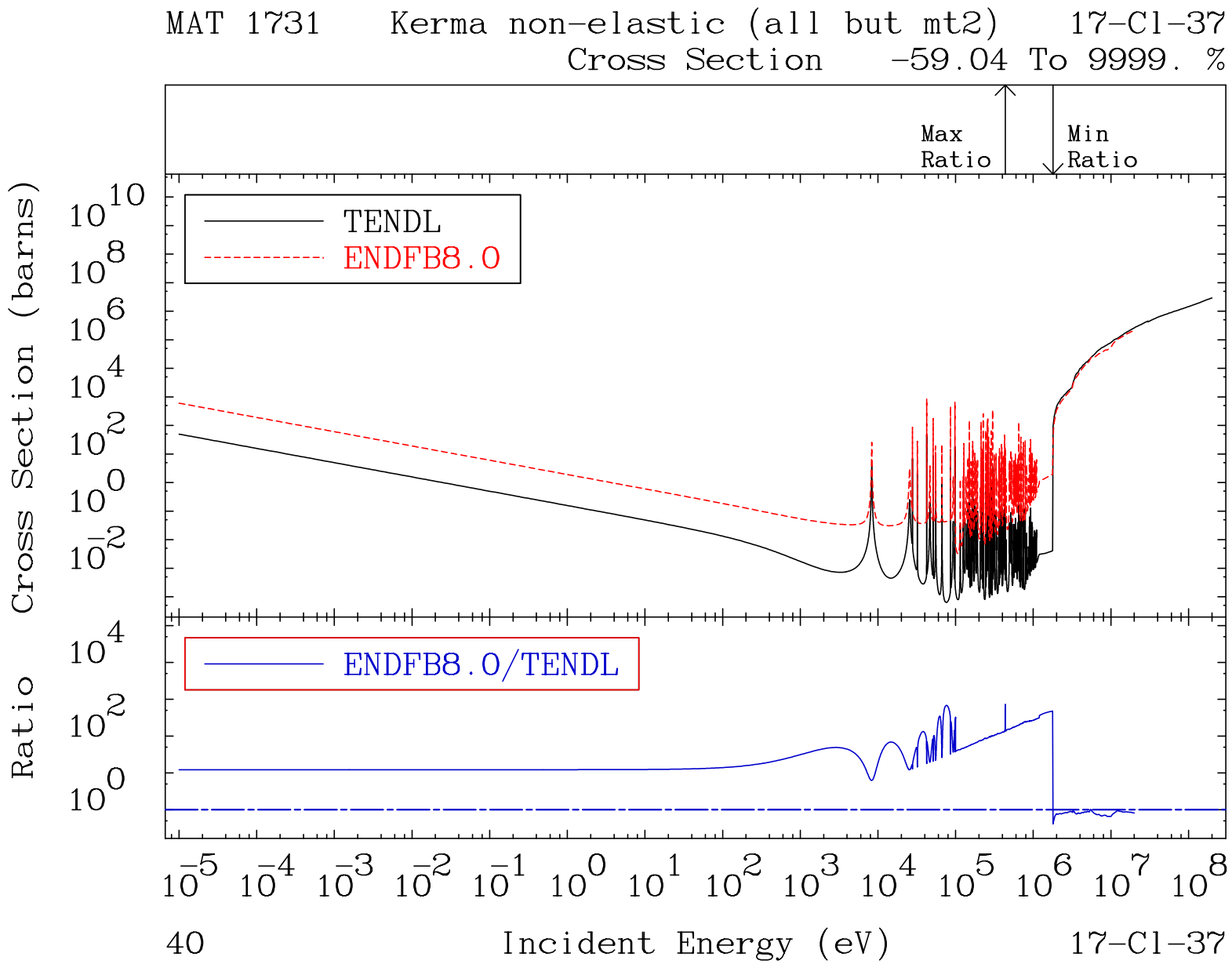

MAT 1731
Deuterium Production
17-Cl-37
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.3299 MeV
ENDFB8.0 Threshold 6.3299 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
80
40
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
17-Cl-37

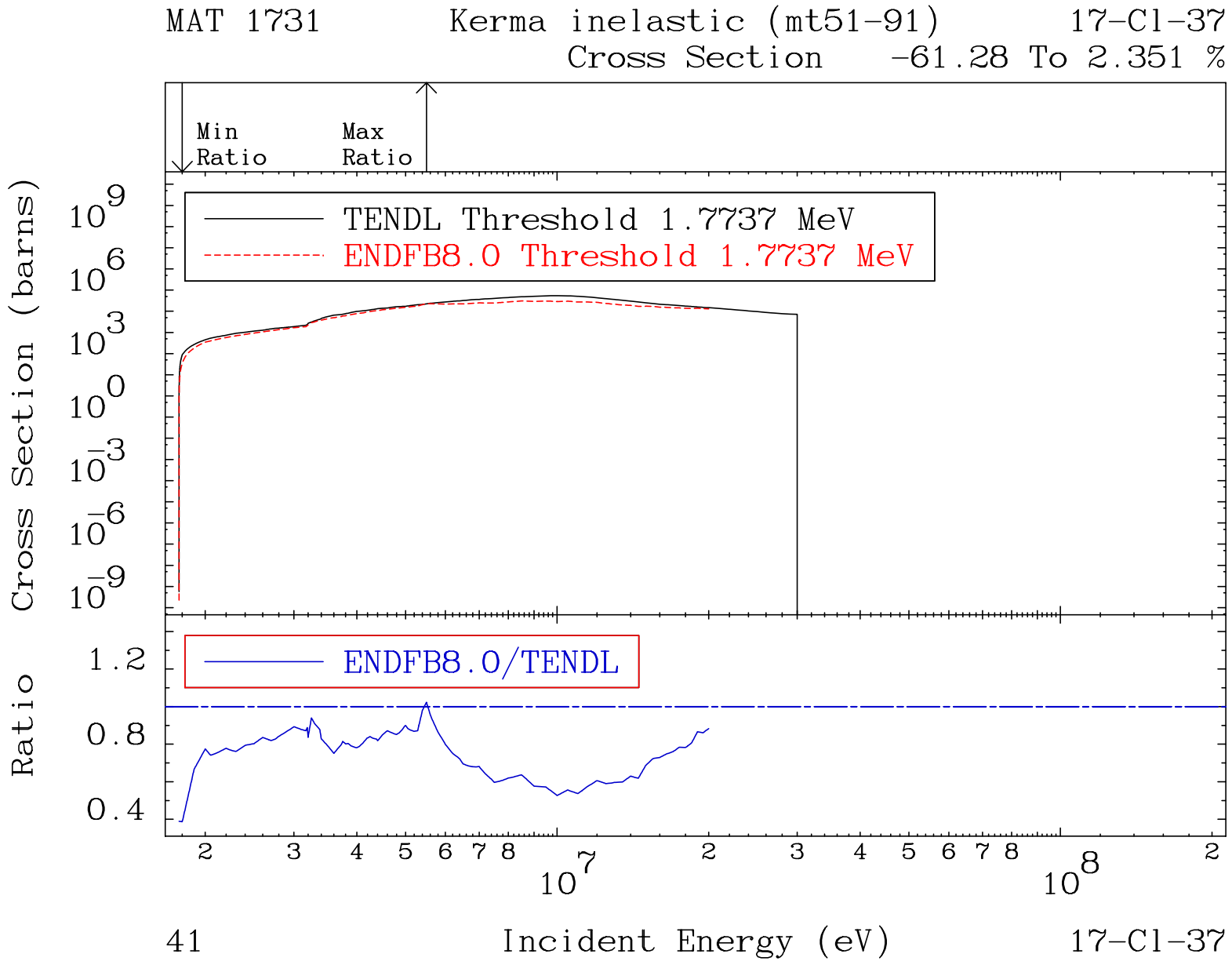

MAT 1731
Tritium Production
17-Cl-37
Cross Section -65.07 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.061 MeV
ENDFB8.0 Threshold 10.061 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^6
10^3
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
36
Incident Energy (eV)
17-Cl-37

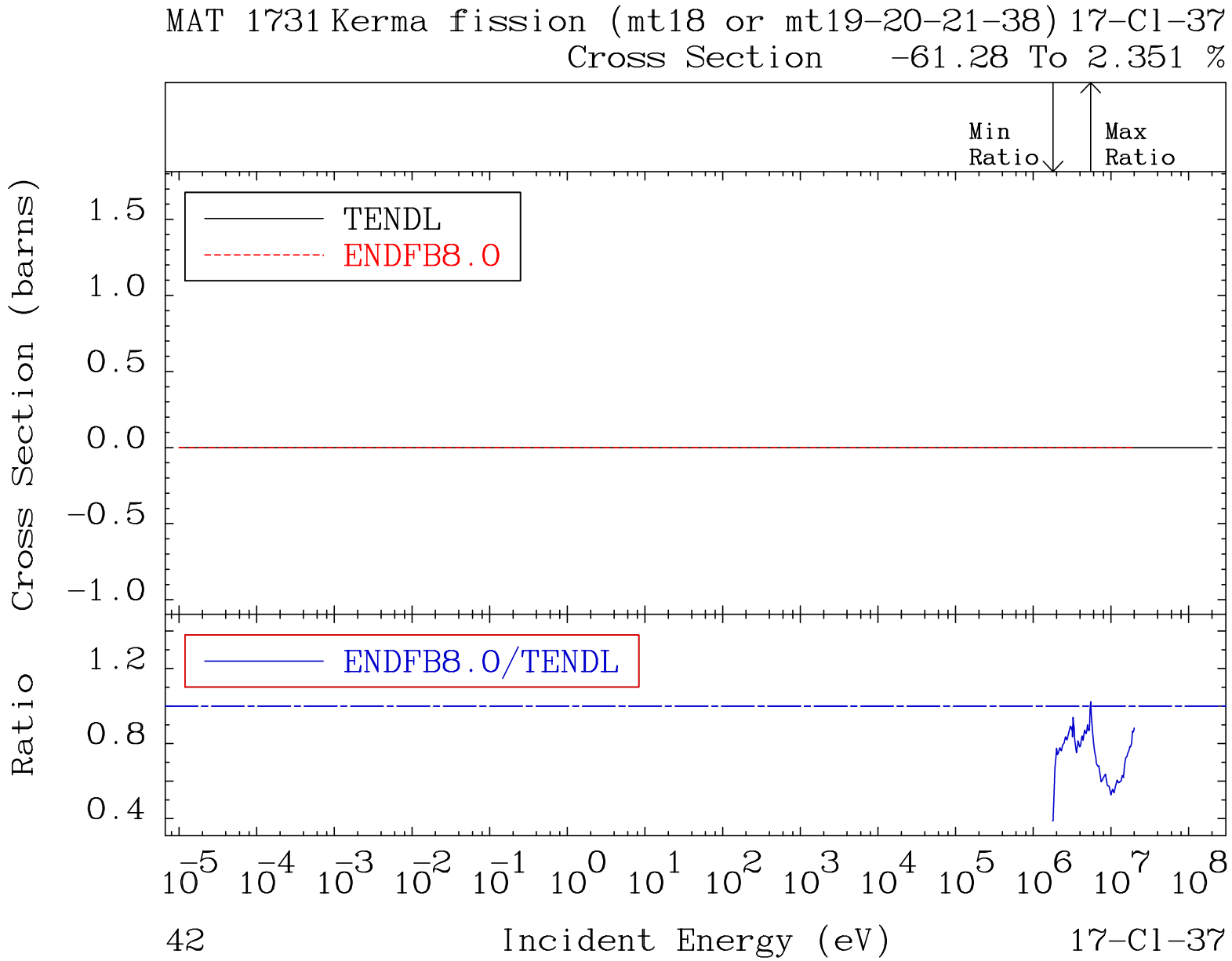

MAT 1731
He-4 Production
Cross Section
17-Cl-37
-23.07 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.6092 MeV
ENDFB8.0 Threshold 1.6001 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^10
10^5
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
17-Cl-37

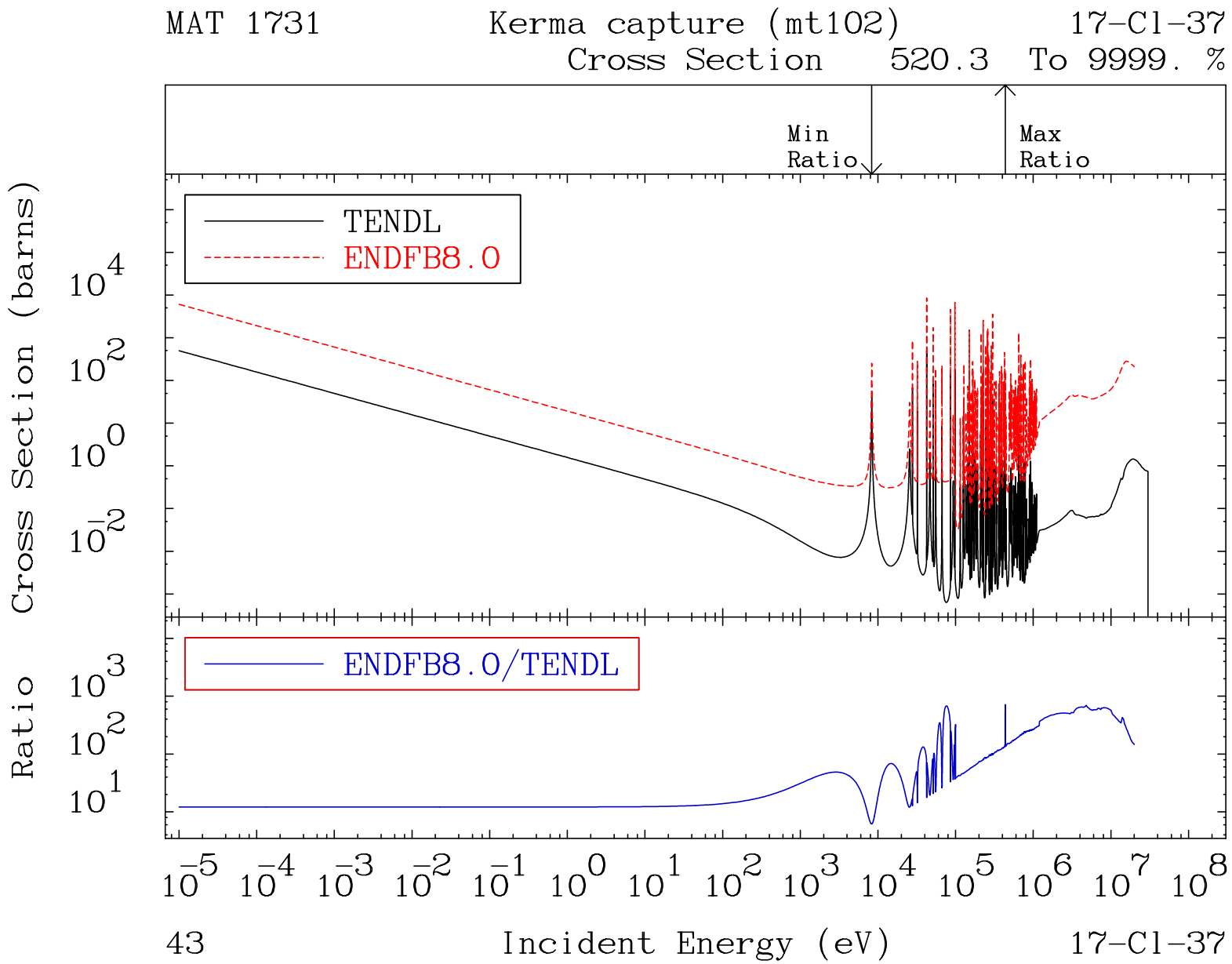

MAT 1731
Kerma total (eV-barns)
17-Cl-37
Cross Section -28.59 To 1118. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
38
17-Cl-37

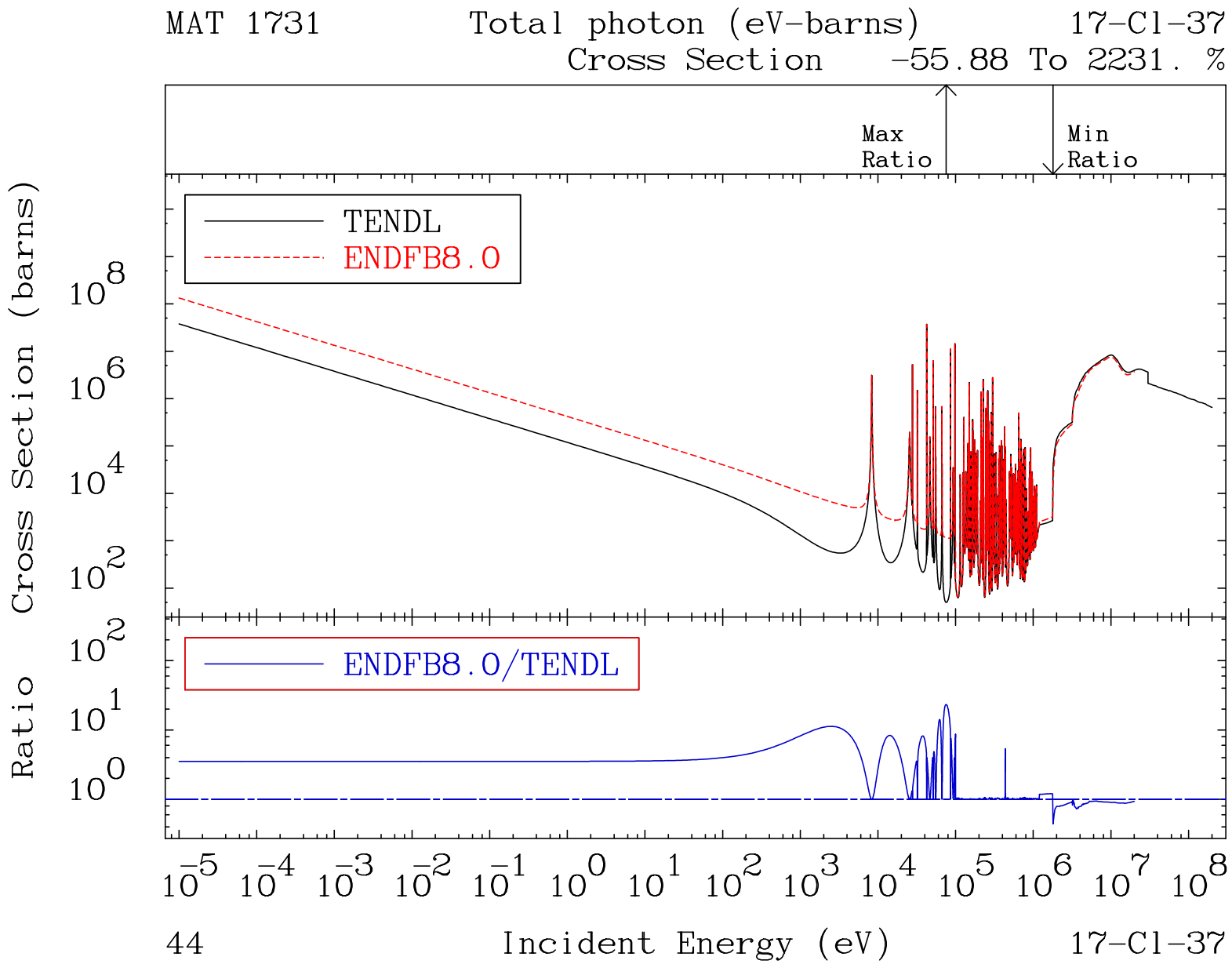

MAT 1731
Kerma elastic
Cross Section
17-Cl-37
-11.54 To 121.5 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
ENDFB8.0/TENDL
Ratio
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
17-Cl-37

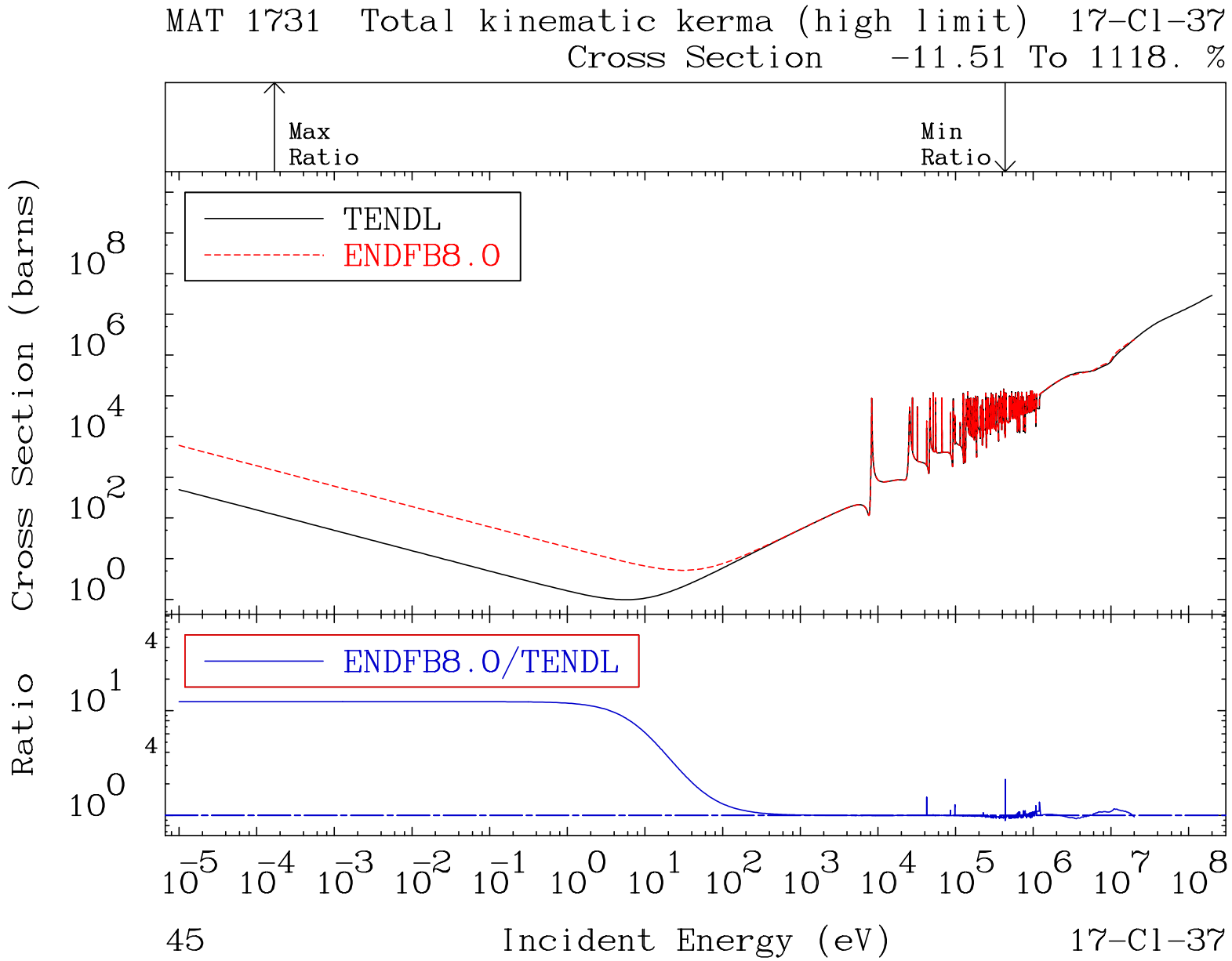

MAT 1731 Kerma non-elastic (all but mt2) 17-Cl-37
Cross Section -59.04 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
17-Cl-37

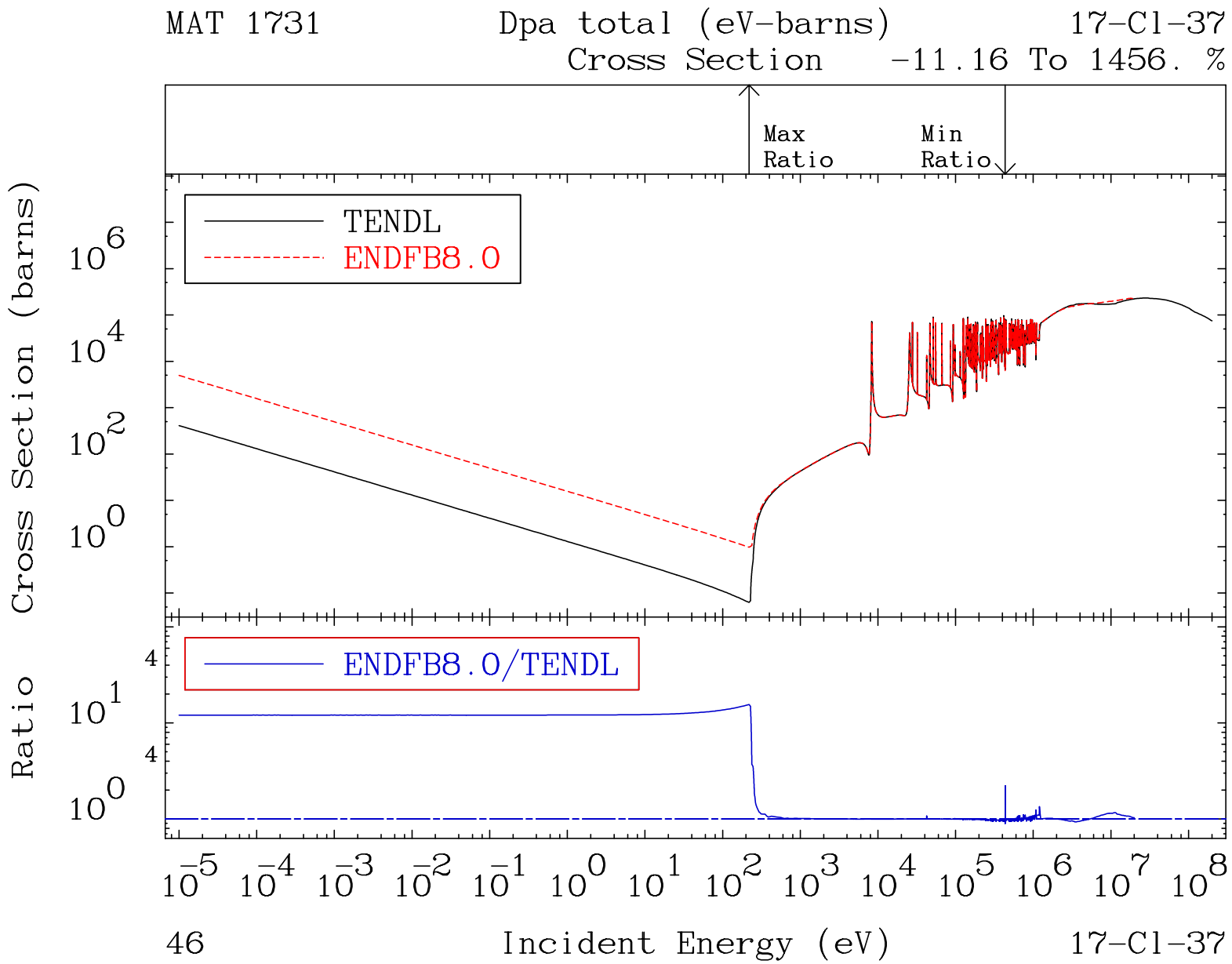

MAT 1731
Kerma inelastic (mt51-91)
17-Cl-37
Cross Section -61.28 To 2.351 %
Min Ratio
Max Ratio
TENDL Threshold 1.7737 MeV
ENDFB8.0 Threshold 1.7737 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
17-Cl-37

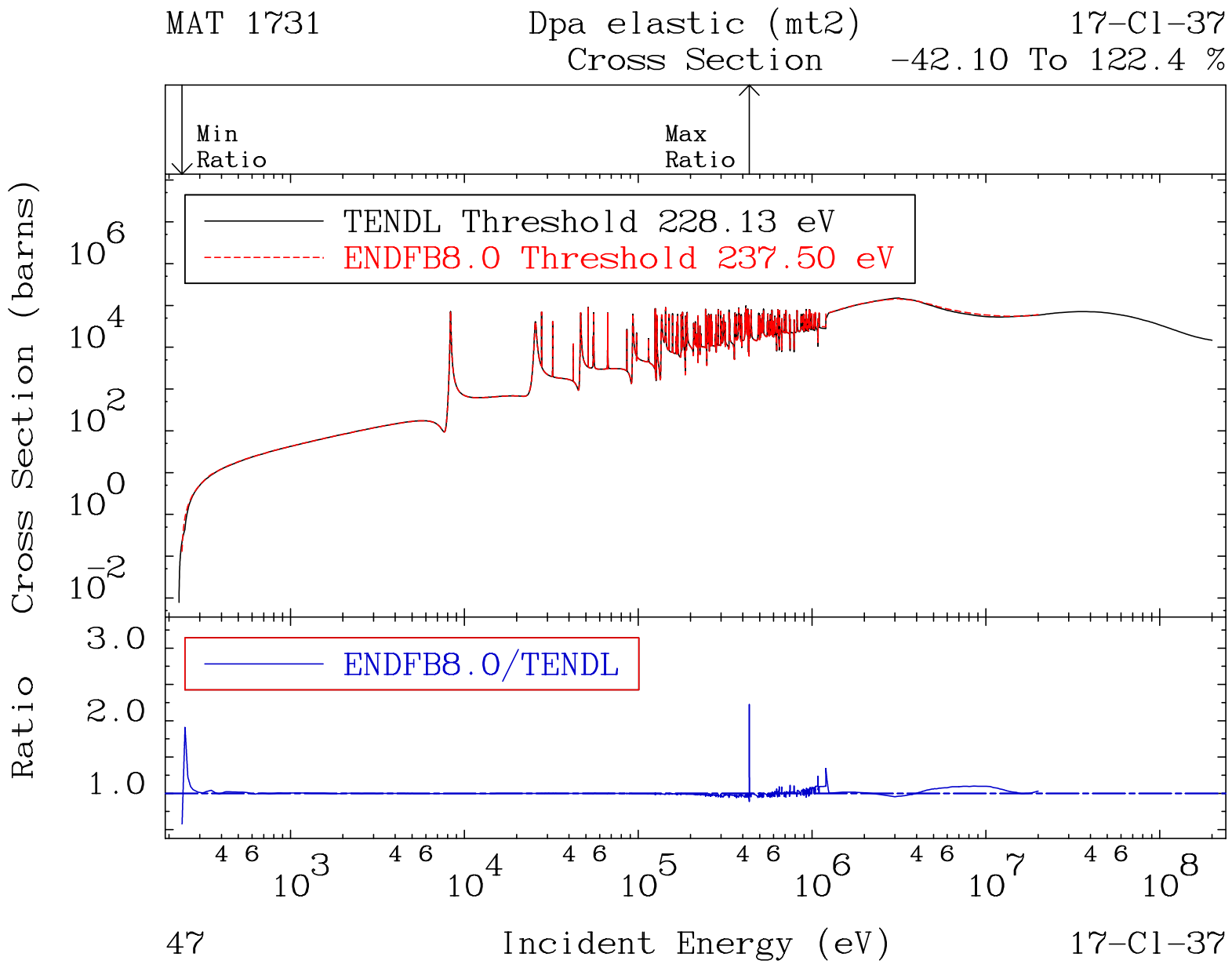

MAT 1731 Kerma fission (mt18 or mt19-20-21-38) 17-Cl-37
Cross Section -61.28 To 2.351 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.2
0.8
0.4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
42
Incident Energy (eV)
17-Cl-37

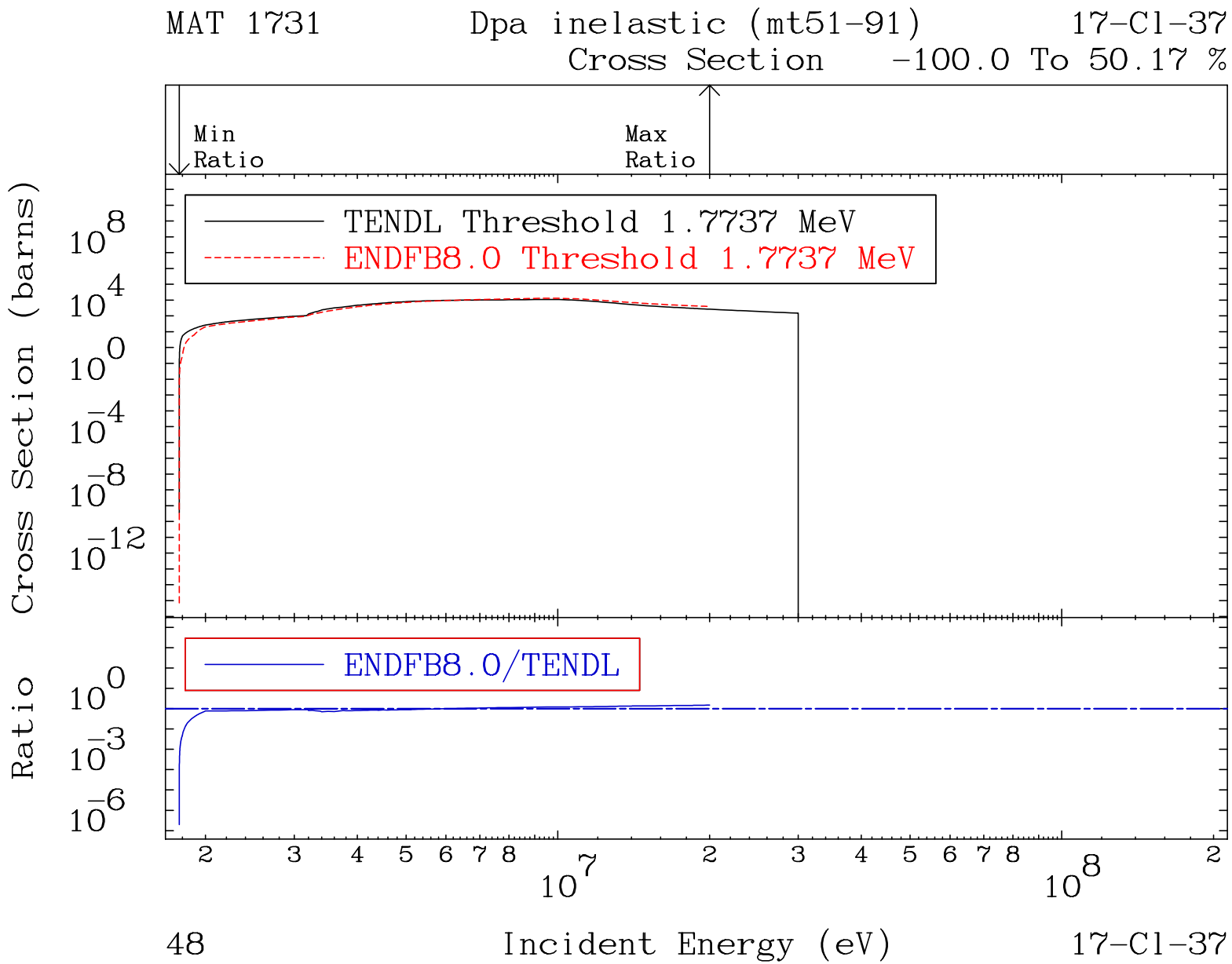

MAT 1731
Kerma capture (mt102)
17-Cl-37
Cross Section 520.3 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
17-Cl-37

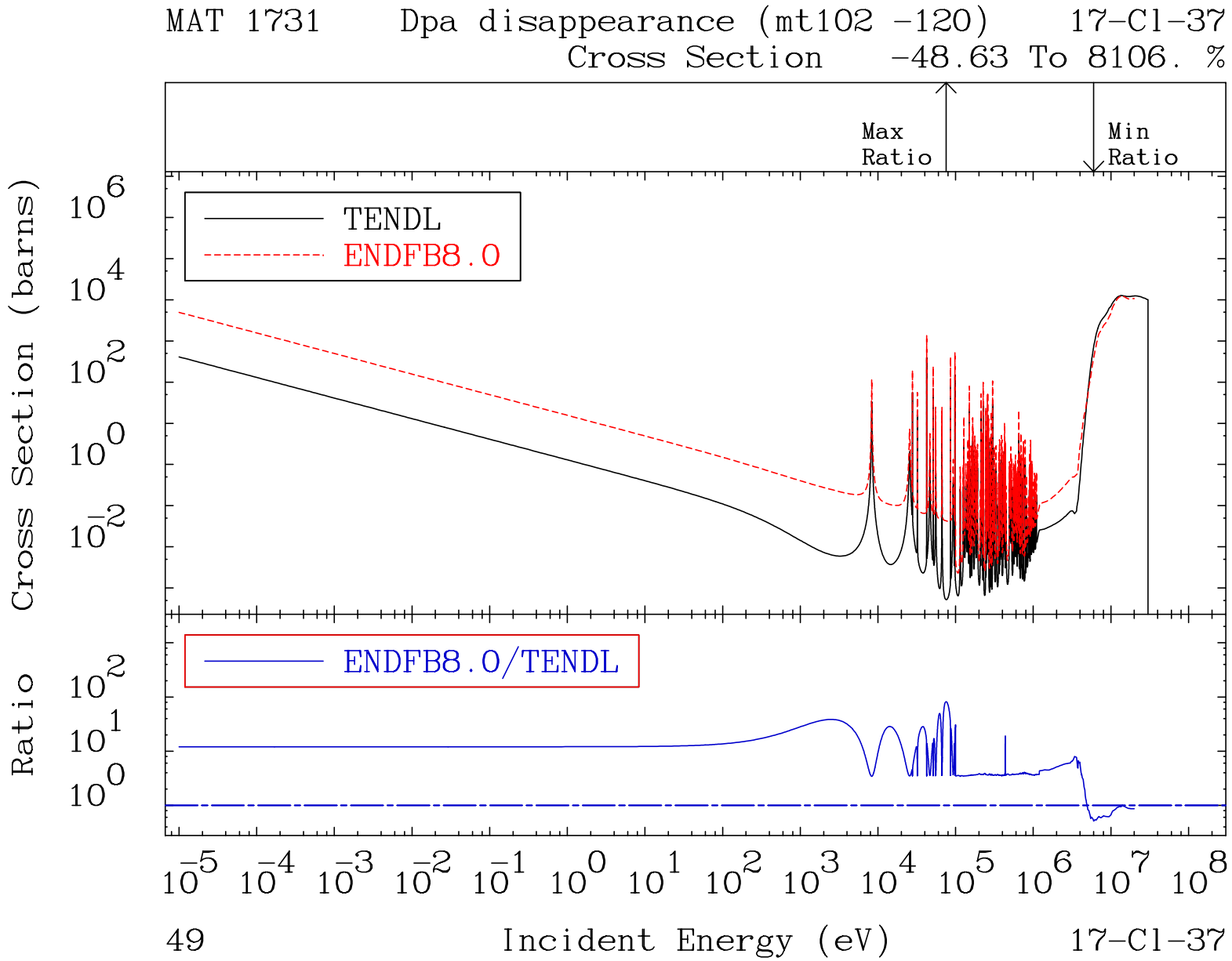

MAT 1731
Total photon (eV-barns)
17-Cl-37
Cross Section -55.88 To 2231. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
17-Cl-37


MAT 1731 Total kinematic kerma (high limit) 17-Cl-37
Cross Section -11.51 To 1118. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
45
17-Cl-37


MAT 1731
Dpa total (eV-barns)
17-Cl-37
Cross Section -11.16 To 1456. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
46
17-Cl-37


MAT 1731
Dpa elastic (mt2)
Cross Section
17-Cl-37
-42.10 To 122.4 %
Min Ratio
Max Ratio
TENDL Threshold 228.13 eV
ENDFB8.0 Threshold 237.50 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
17-Cl-37


MAT 1731
Dpa inelastic (mt51-91)
17-Cl-37
Cross Section -100.0 To 50.17 %
Min Ratio
Max Ratio
TENDL Threshold 1.7737 MeV
ENDFB8.0 Threshold 1.7737 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
17-Cl-37


MAT 1731 Dpa disappearance (mt102 -120) 17-Cl-37
Cross Section -48.63 To 8106. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
17-Cl-37