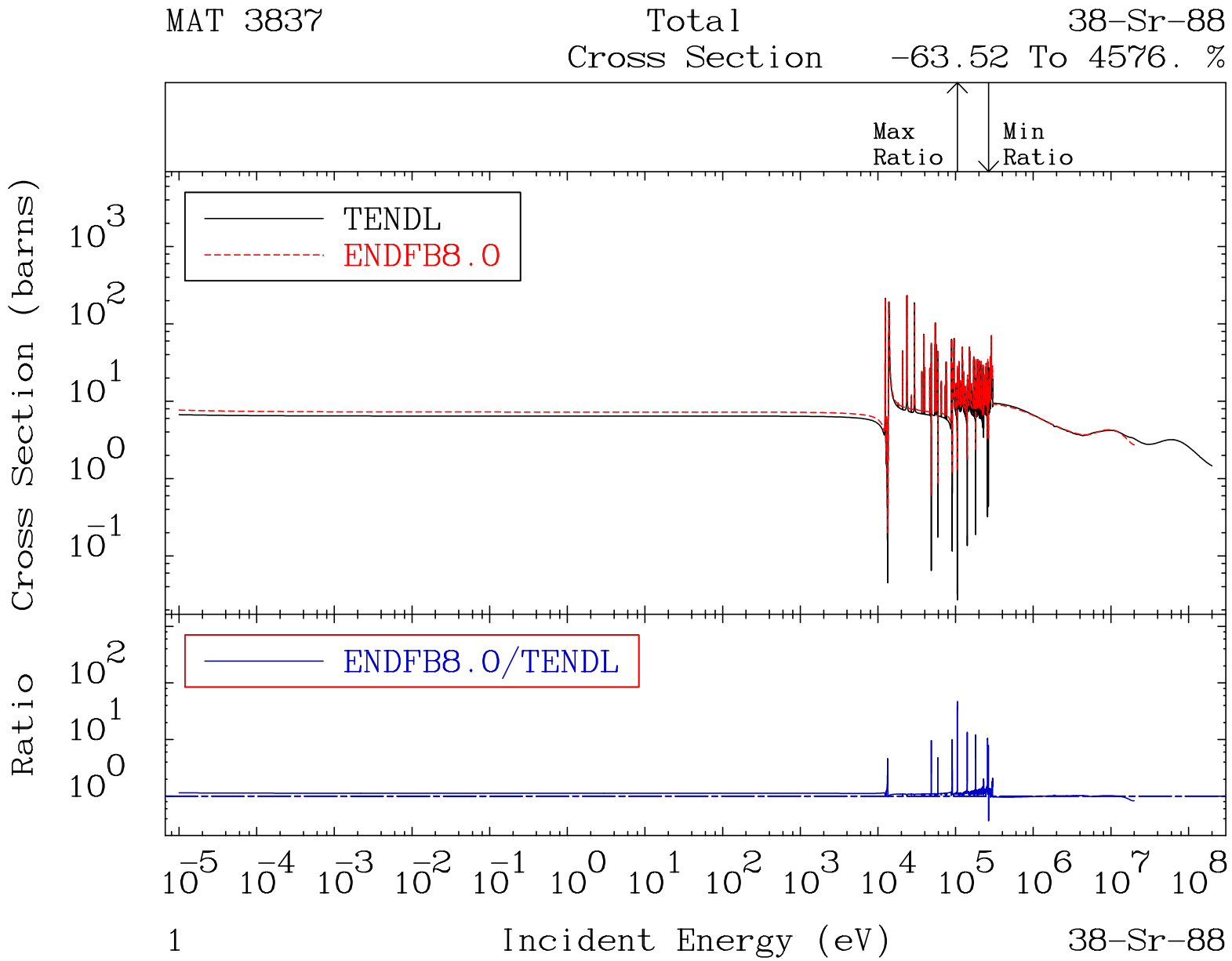
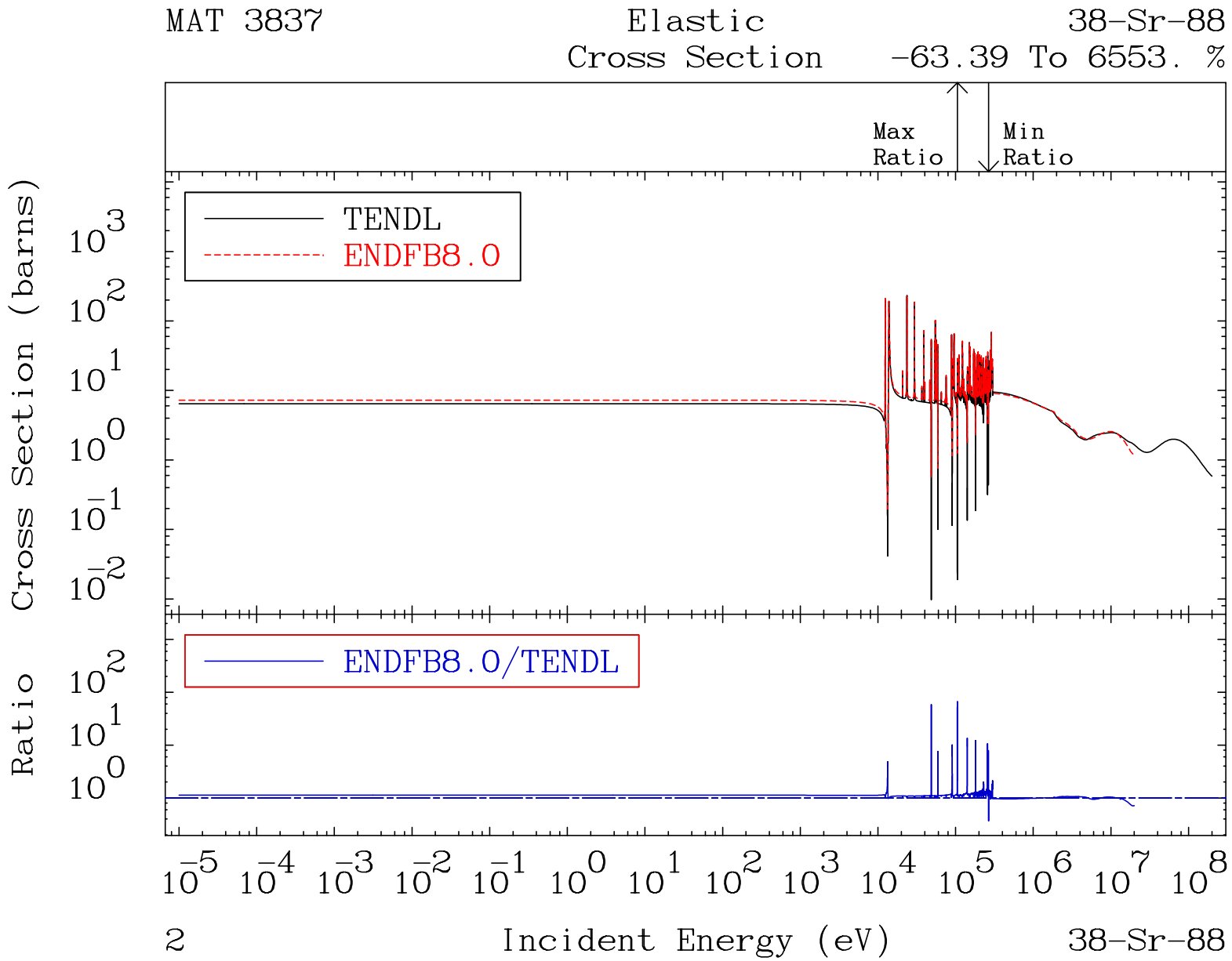
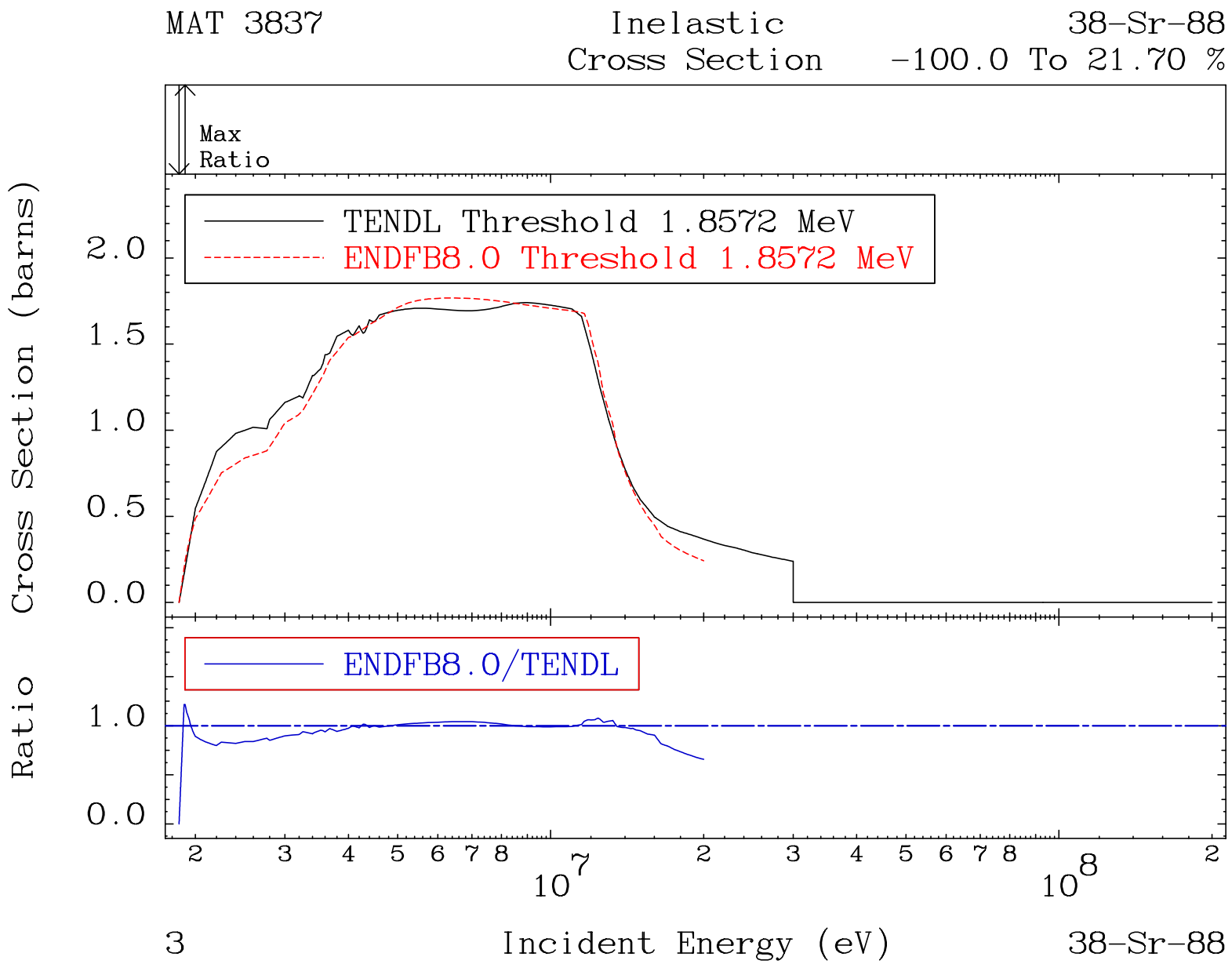
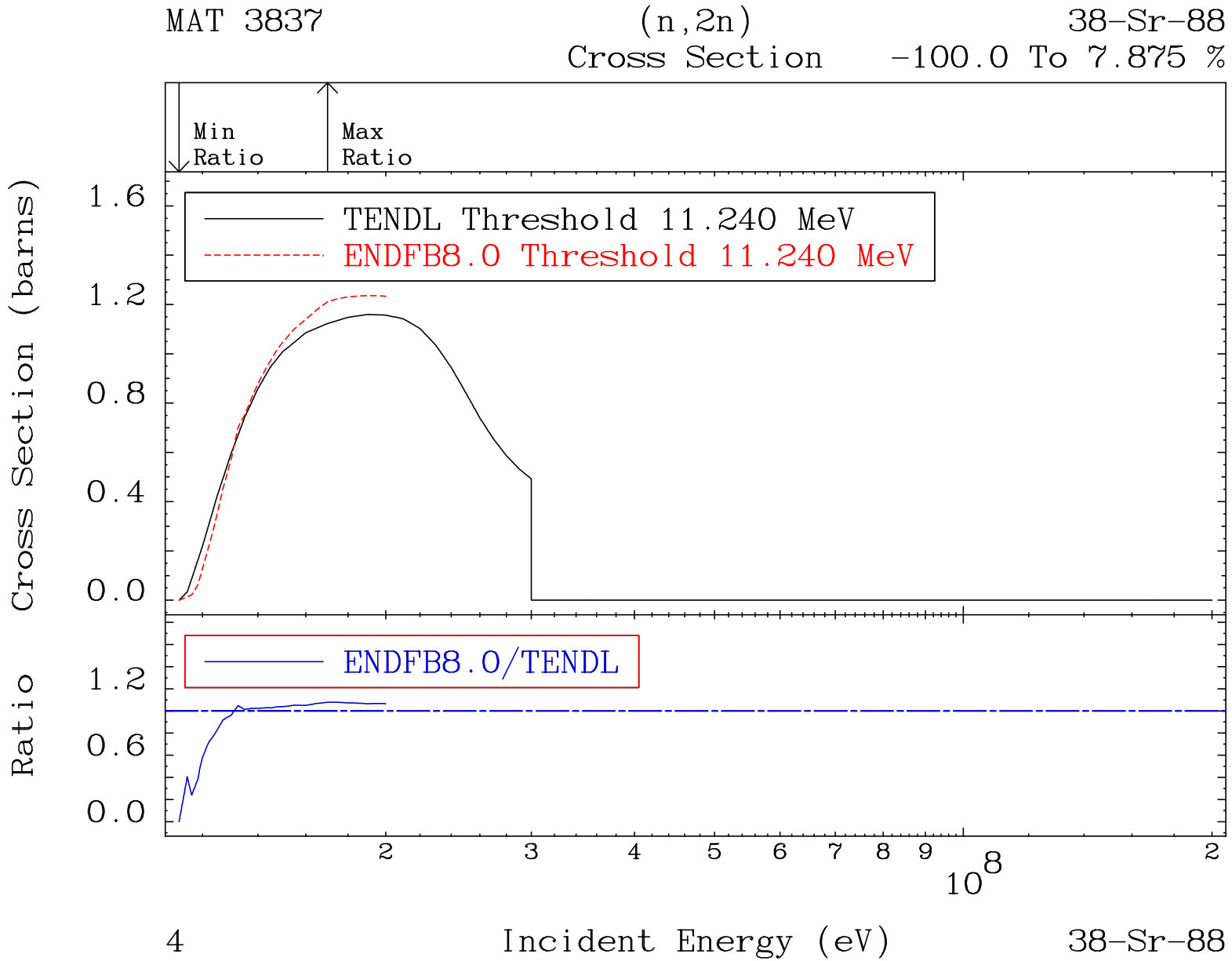
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

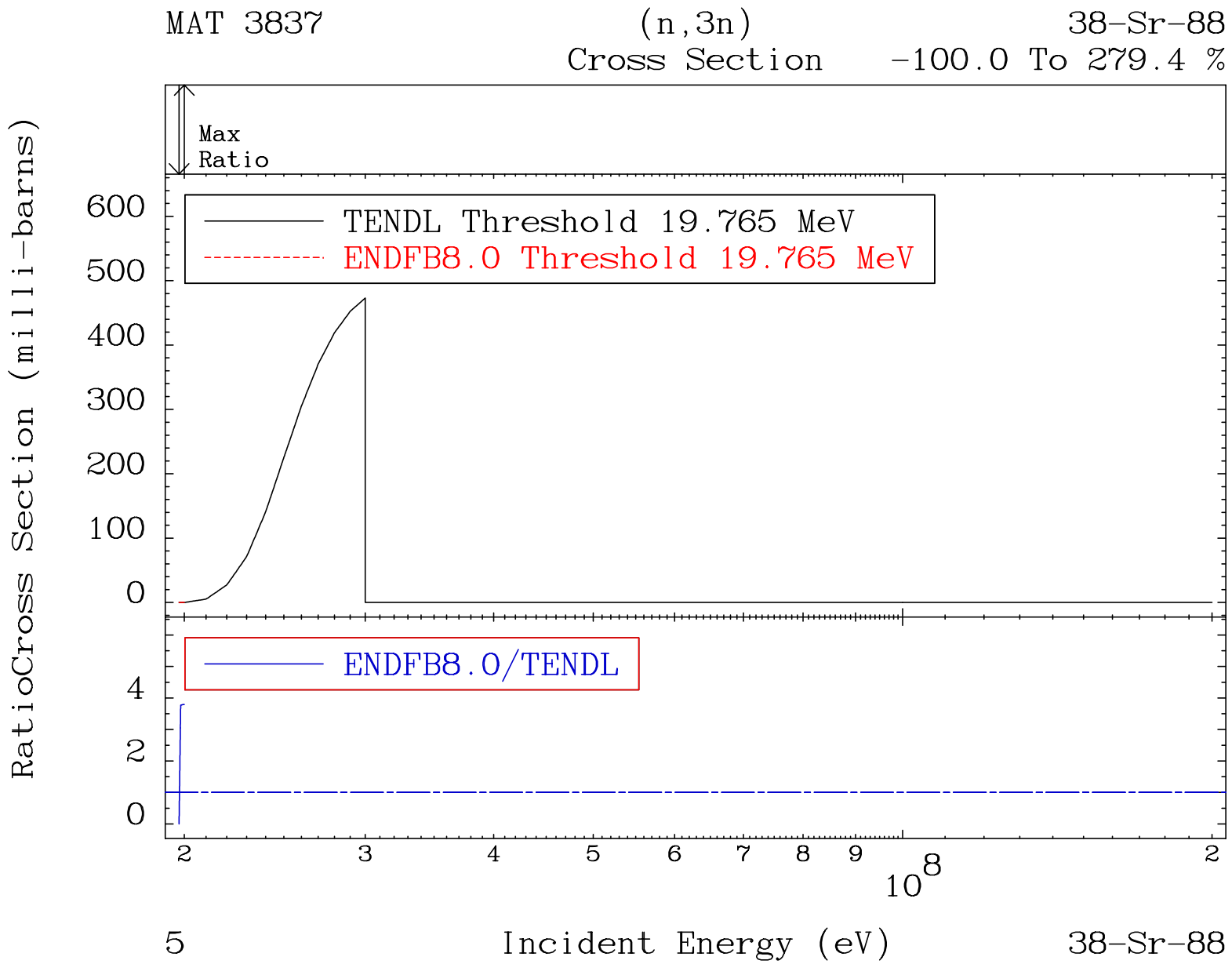
Press Mouse Button to Start

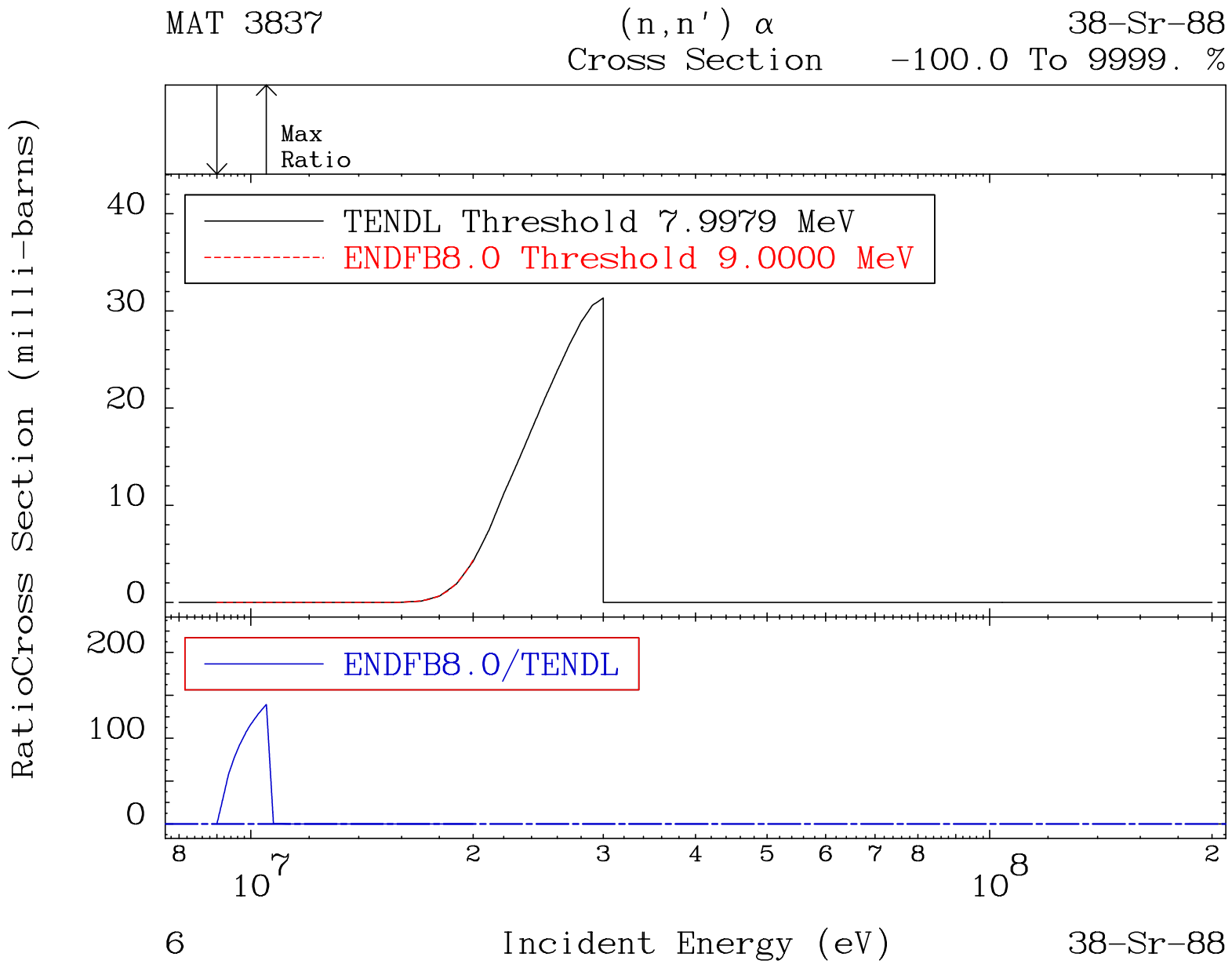

MAT 3837
Total
Cross Section
38-Sr-88
-63.52 To 4576. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
38-Sr-88

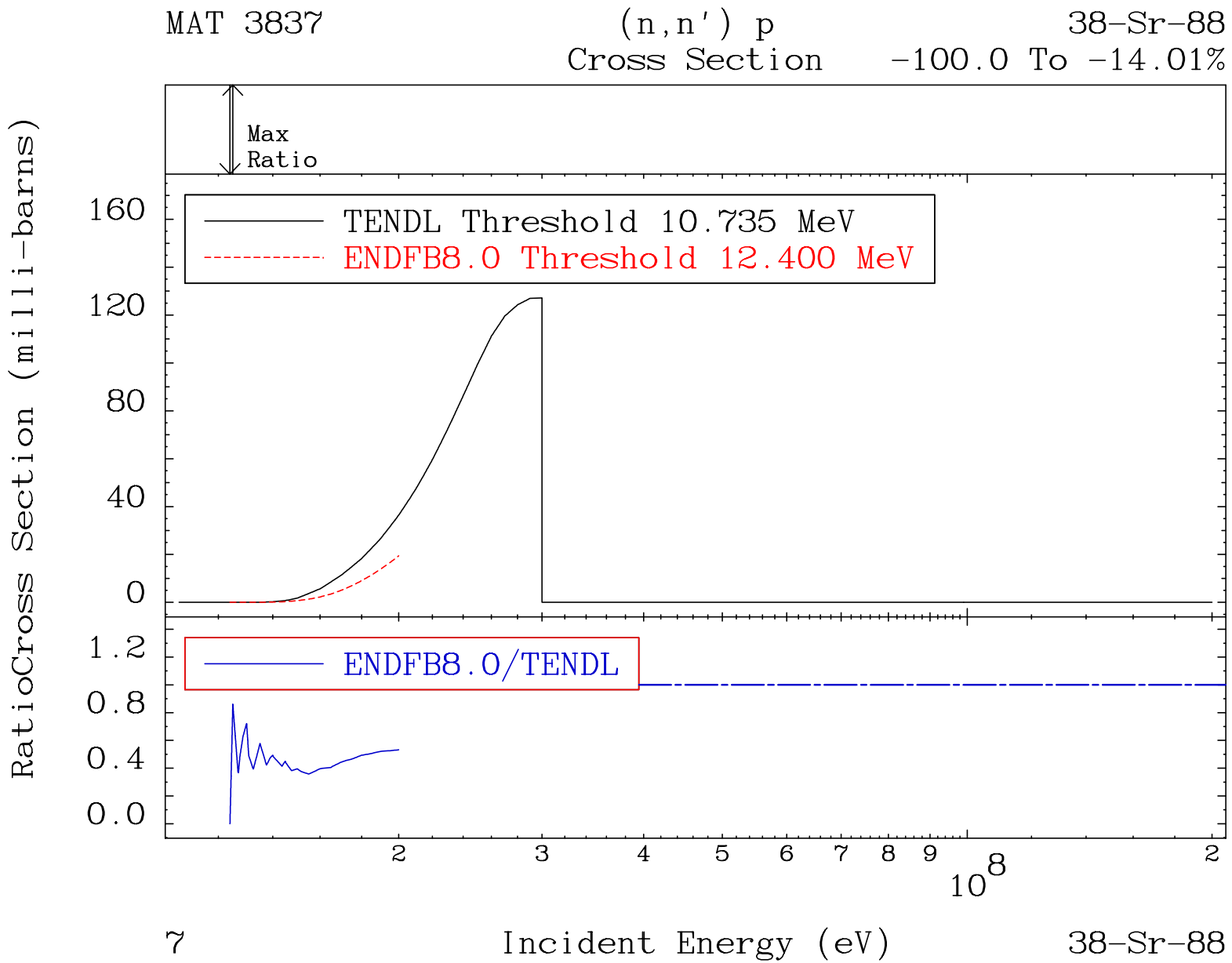

MAT 3837
Elastic
Cross Section
38-Sr-88
-63.39 To 6553. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
38-Sr-88

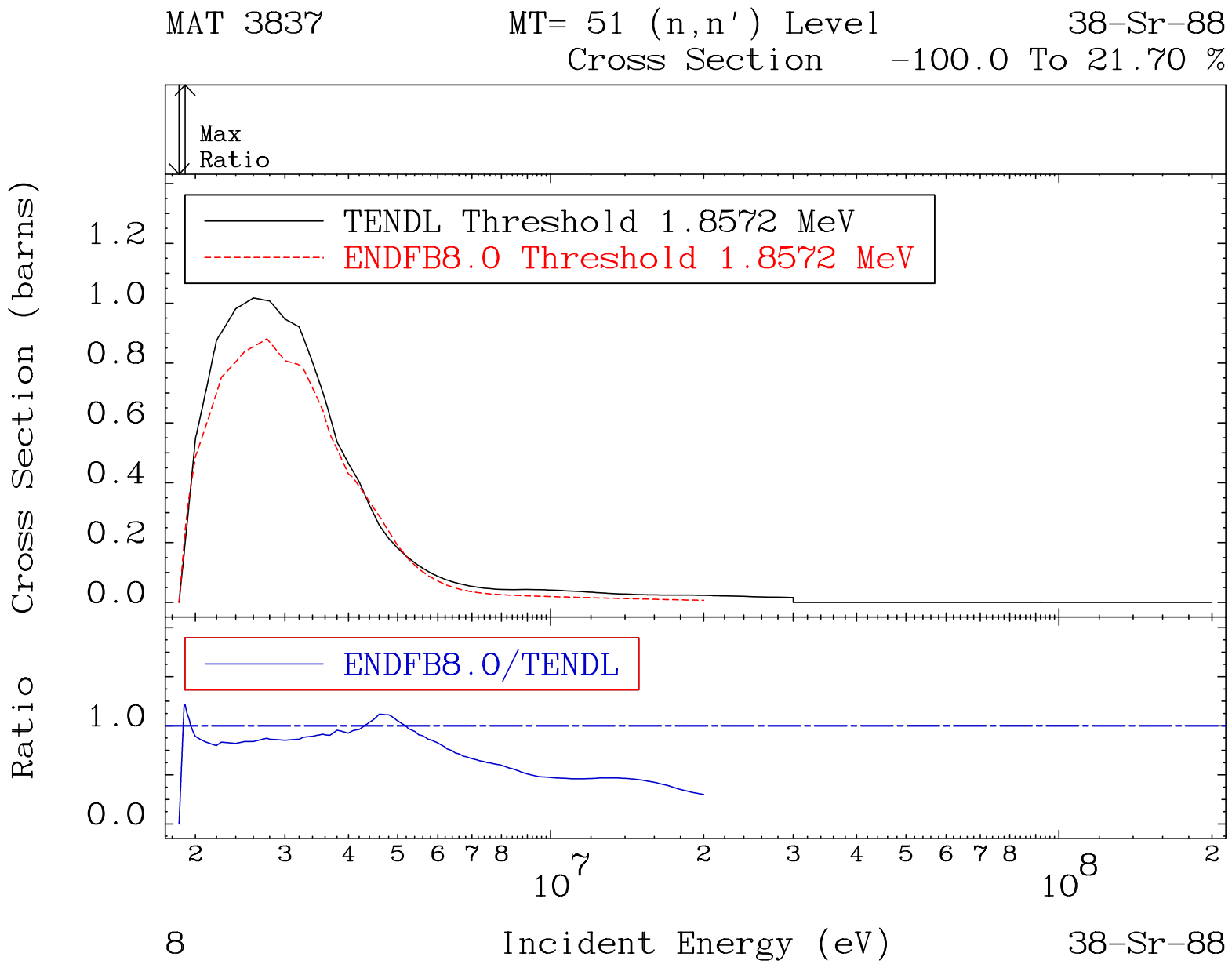

MAT 3837
Inelastic
Cross Section
38-Sr-88
-100.0 To 21.70 %
Max
Ratio
TENDL Threshold 1.8572 MeV
ENDFB8.0 Threshold 1.8572 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
38-Sr-88

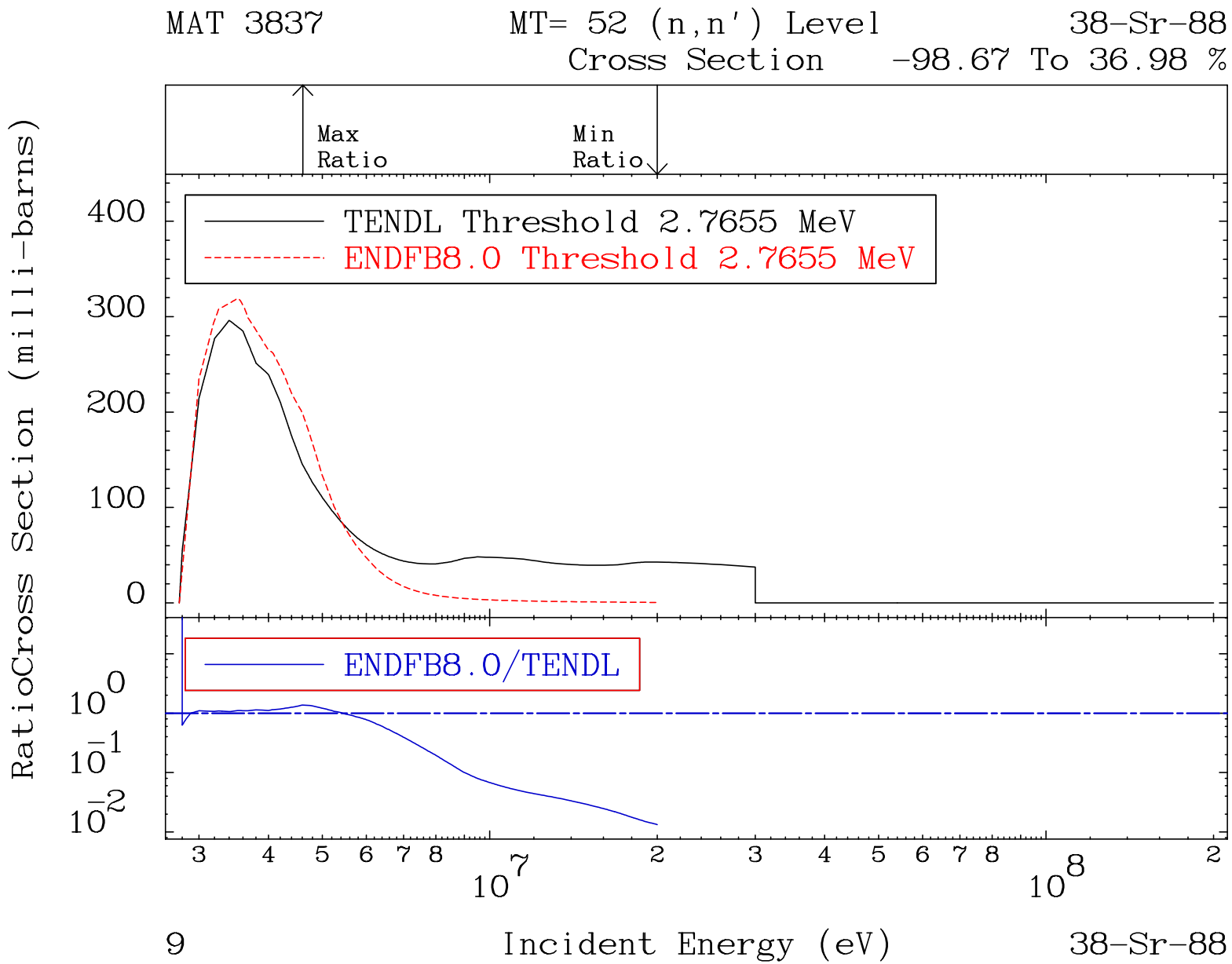

MAT 3837
(n,2n)
Cross Section
38-Sr-88
-100.0 To 7.875 %
Min Ratio
Max Ratio
TENDL Threshold 11.240 MeV
ENDFB8.0 Threshold 11.240 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
38-Sr-88

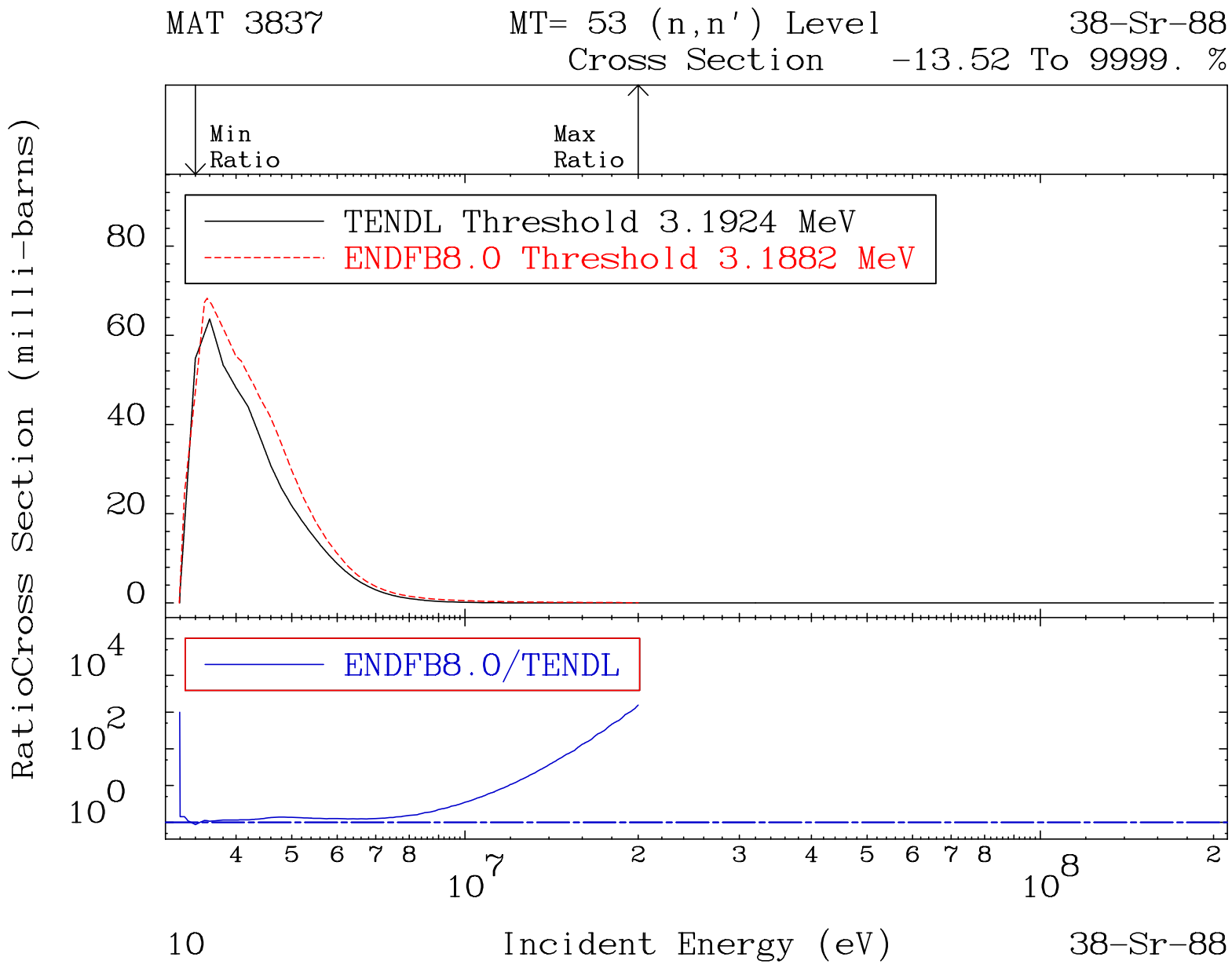

MAT 3837
(n,3n)
38-Sr-88
Cross Section
-100.0 To 279.4 %
Max
Ratio
TENDL Threshold 19.765 MeV
ENDFB8.0 Threshold 19.765 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
38-Sr-88

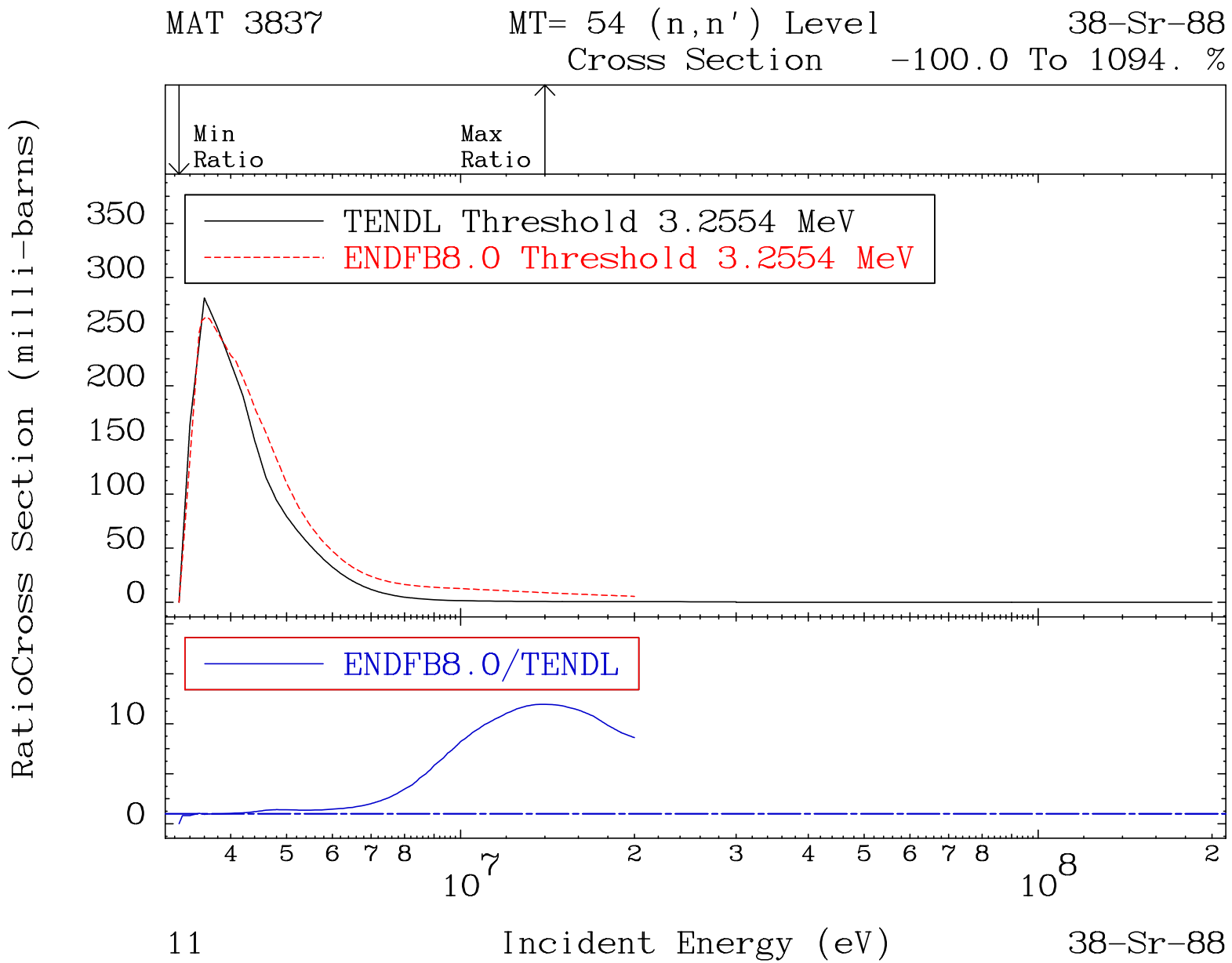

MAT 3837
(n,n') α
38-Sr-88
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.9979 MeV
ENDFB8.0 Threshold 9.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
200
100
0
8
2
3
4
5
6
7
8
2
10^7
10^8
6
Incident Energy (eV)
38-Sr-88

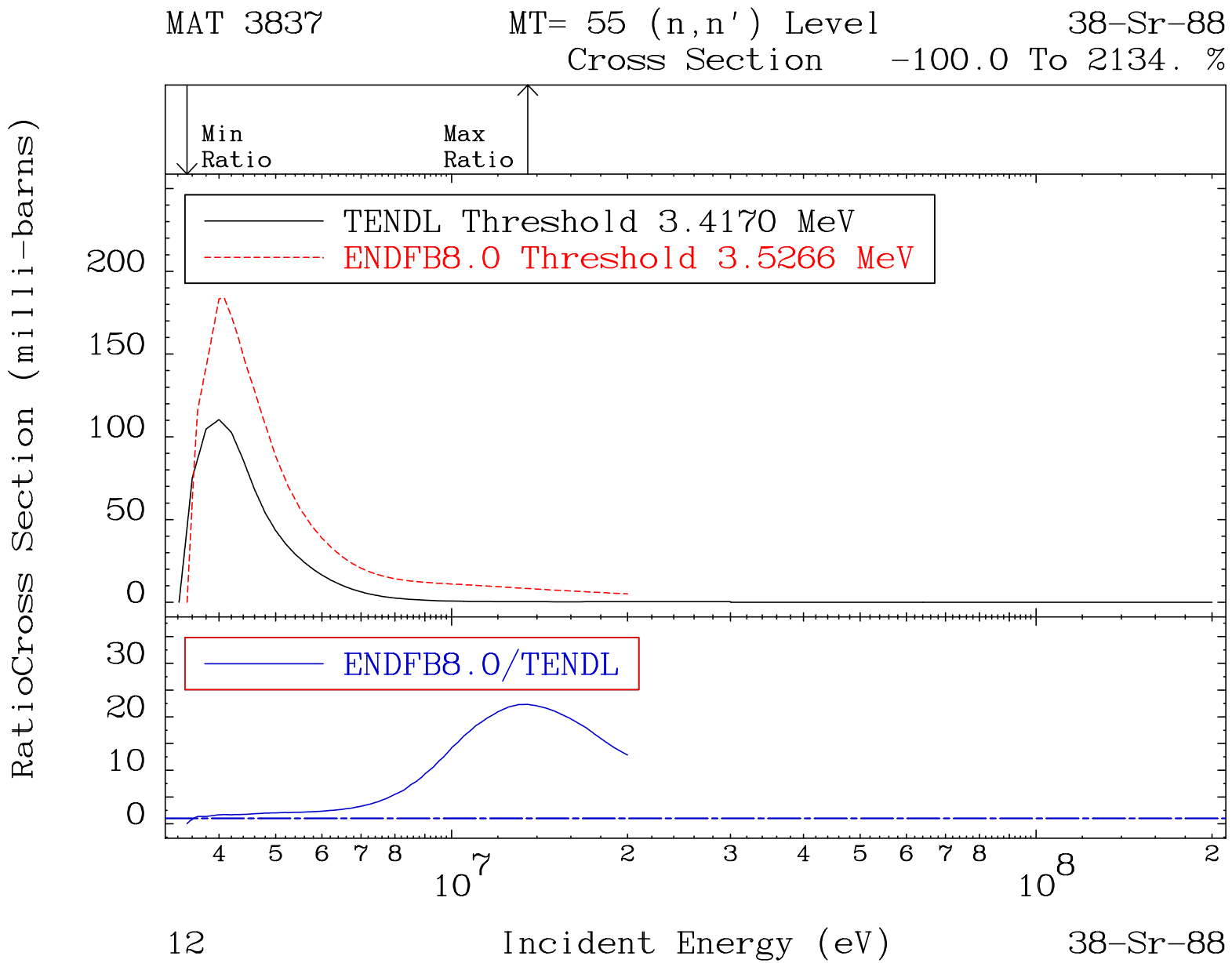

MAT 3837
(n,n') p
Cross Section
38-Sr-88
-100.0 To -14.01%
Max
Ratio
TENDL Threshold 10.735 MeV
ENDFB8.0 Threshold 12.400 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
2
10^8
7
Incident Energy (eV)
38-Sr-88

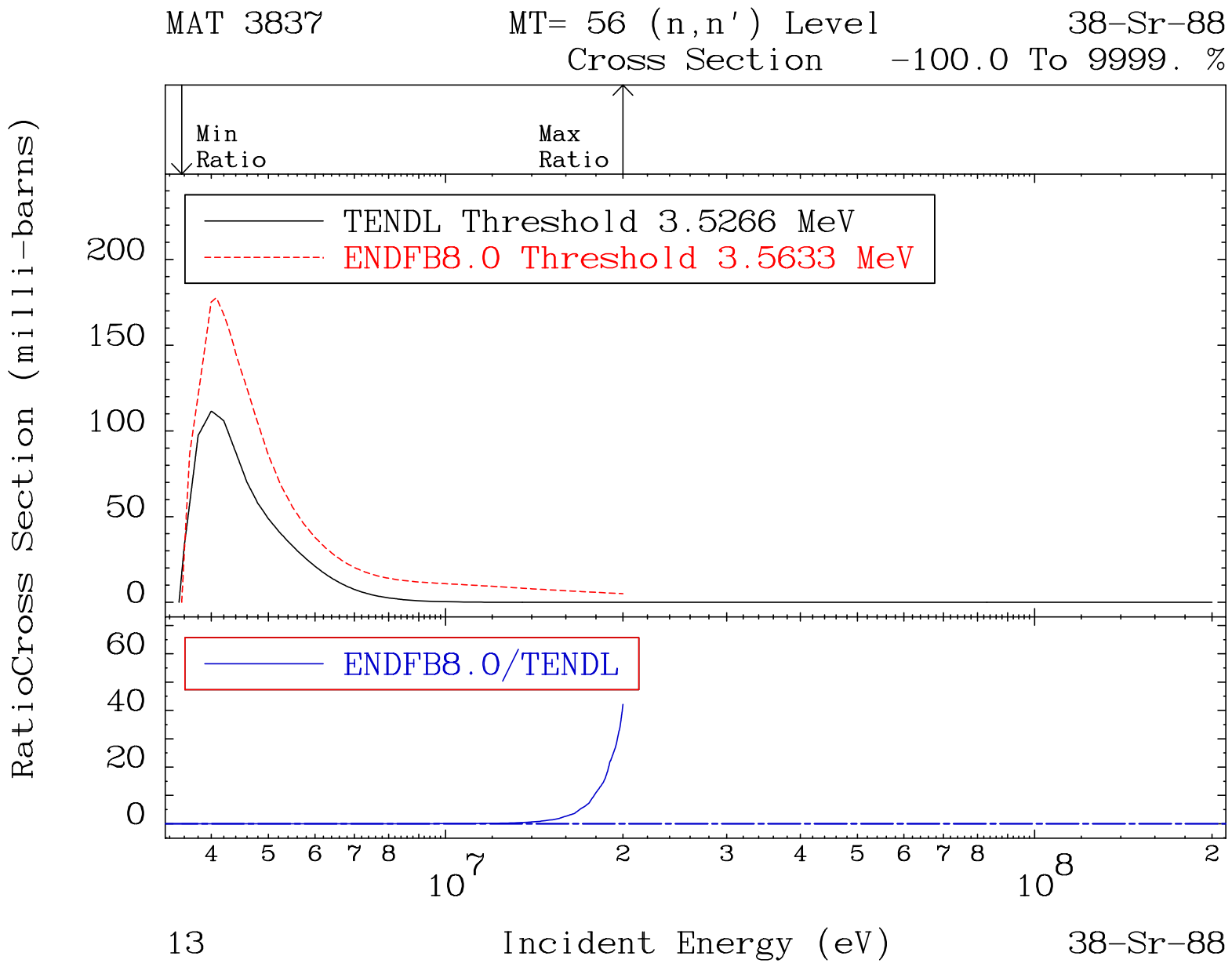

MAT 3837
MT= 51 (n,n') Level
38-Sr-88
Cross Section -100.0 To 21.70 %
Max
Ratio
TENDL Threshold 1.8572 MeV
ENDFB8.0 Threshold 1.8572 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
38-Sr-88

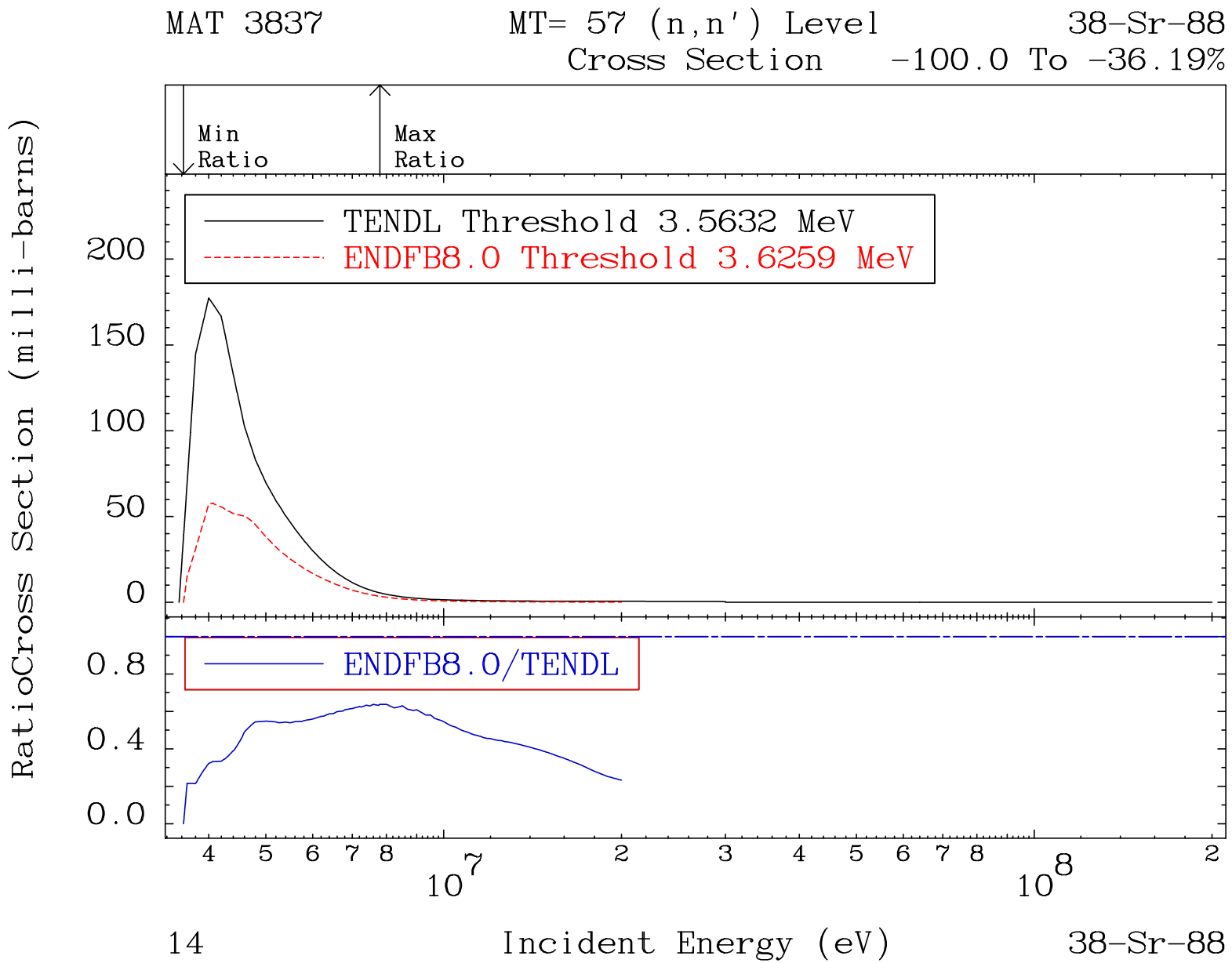

MAT 3837
MT= 52 (n,n') Level
38-Sr-88
Cross Section -98.67 To 36.98 %
Max Ratio
Min Ratio
TENDL Threshold 2.7655 MeV
ENDFB8.0 Threshold 2.7655 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^0
10^-1
10^-2
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
38-Sr-88

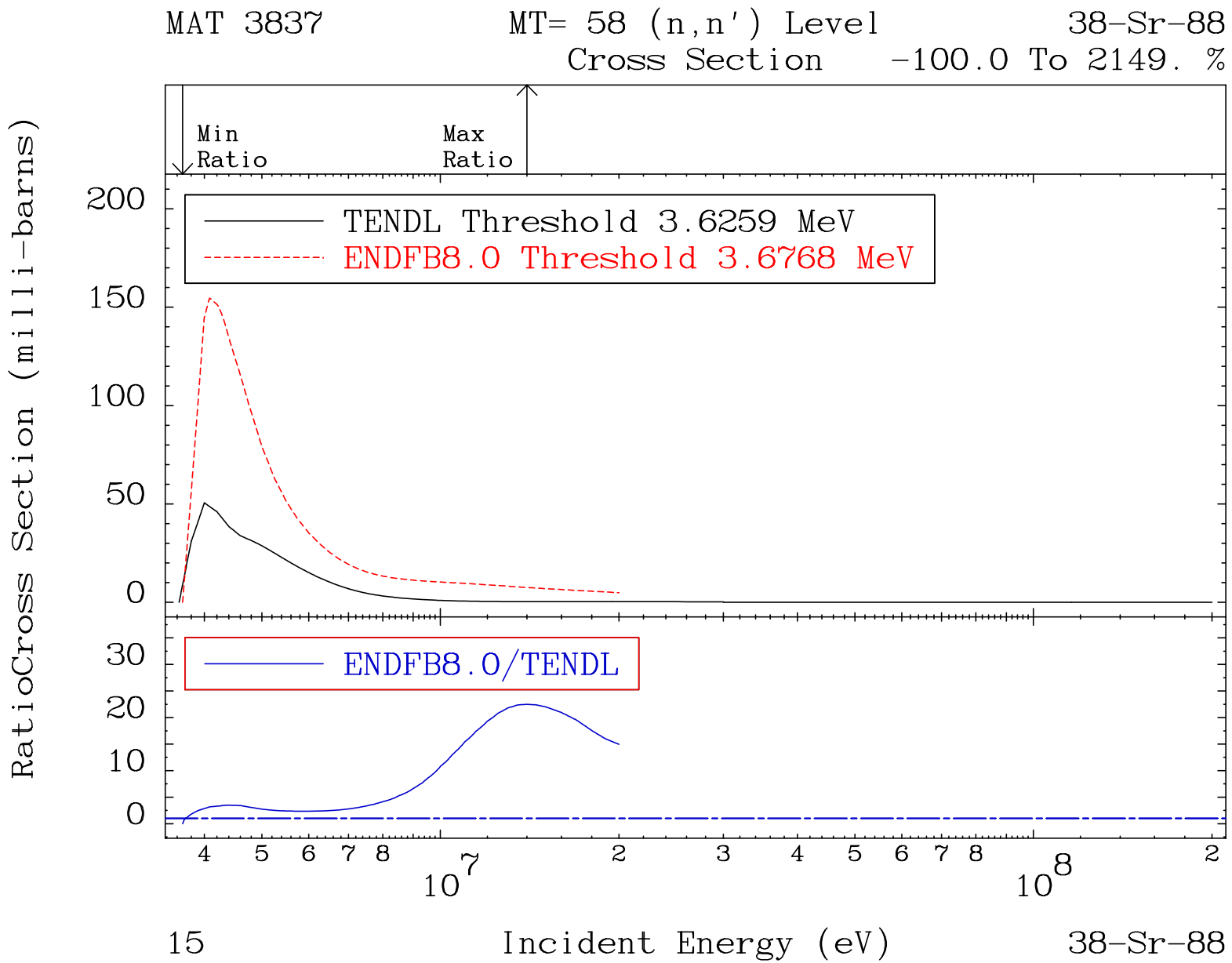

MAT 3837
MT= 53 (n,n') Level
38-Sr-88
Cross Section -13.52 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1924 MeV
ENDFB8.0 Threshold 3.1882 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
38-Sr-88

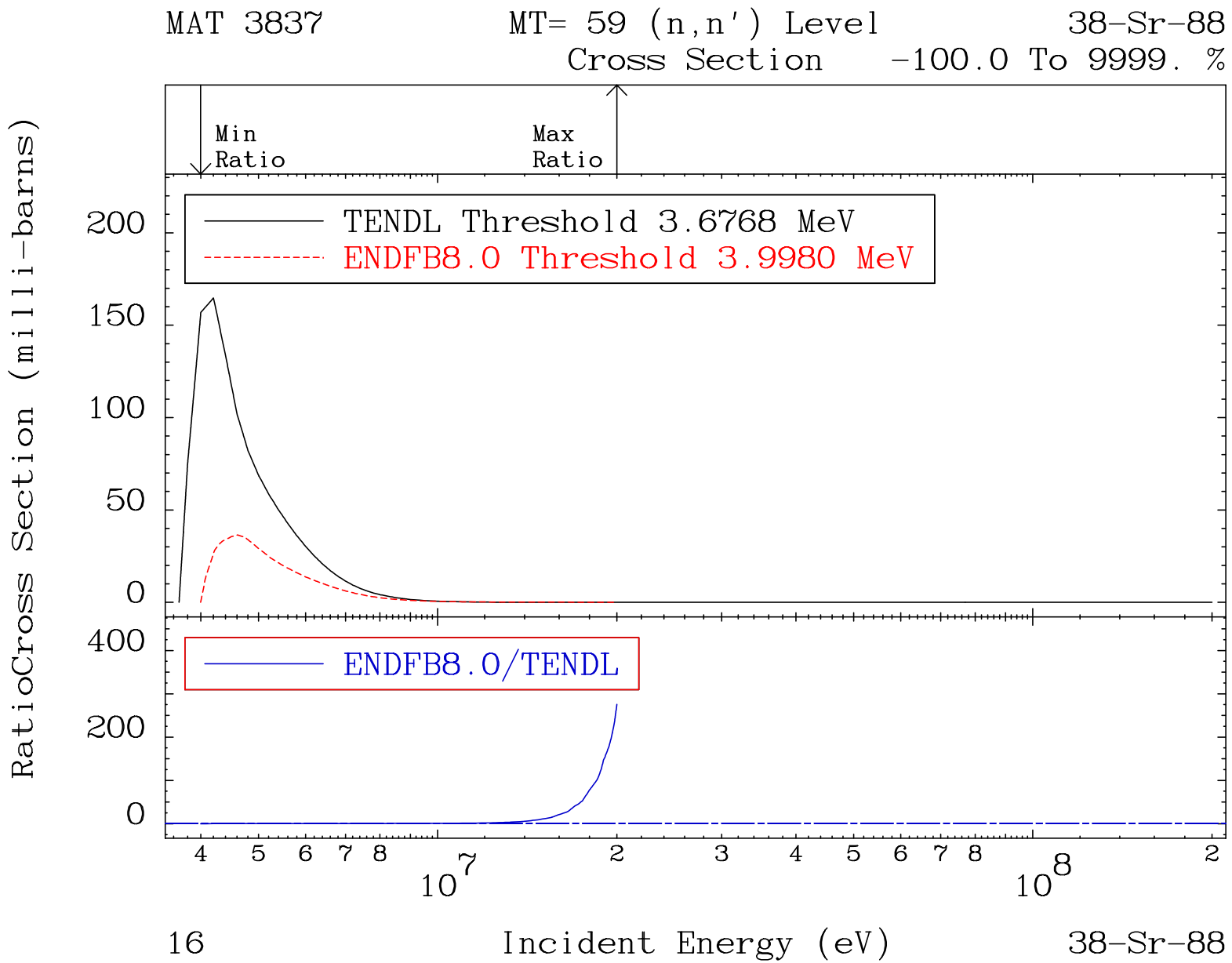

MAT 3837
MT= 54 (n,n') Level
38-Sr-88
Cross Section -100.0 To 1094. %
Min Ratio
Max Ratio
TENDL Threshold 3.2554 MeV
ENDFB8.0 Threshold 3.2554 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
38-Sr-88

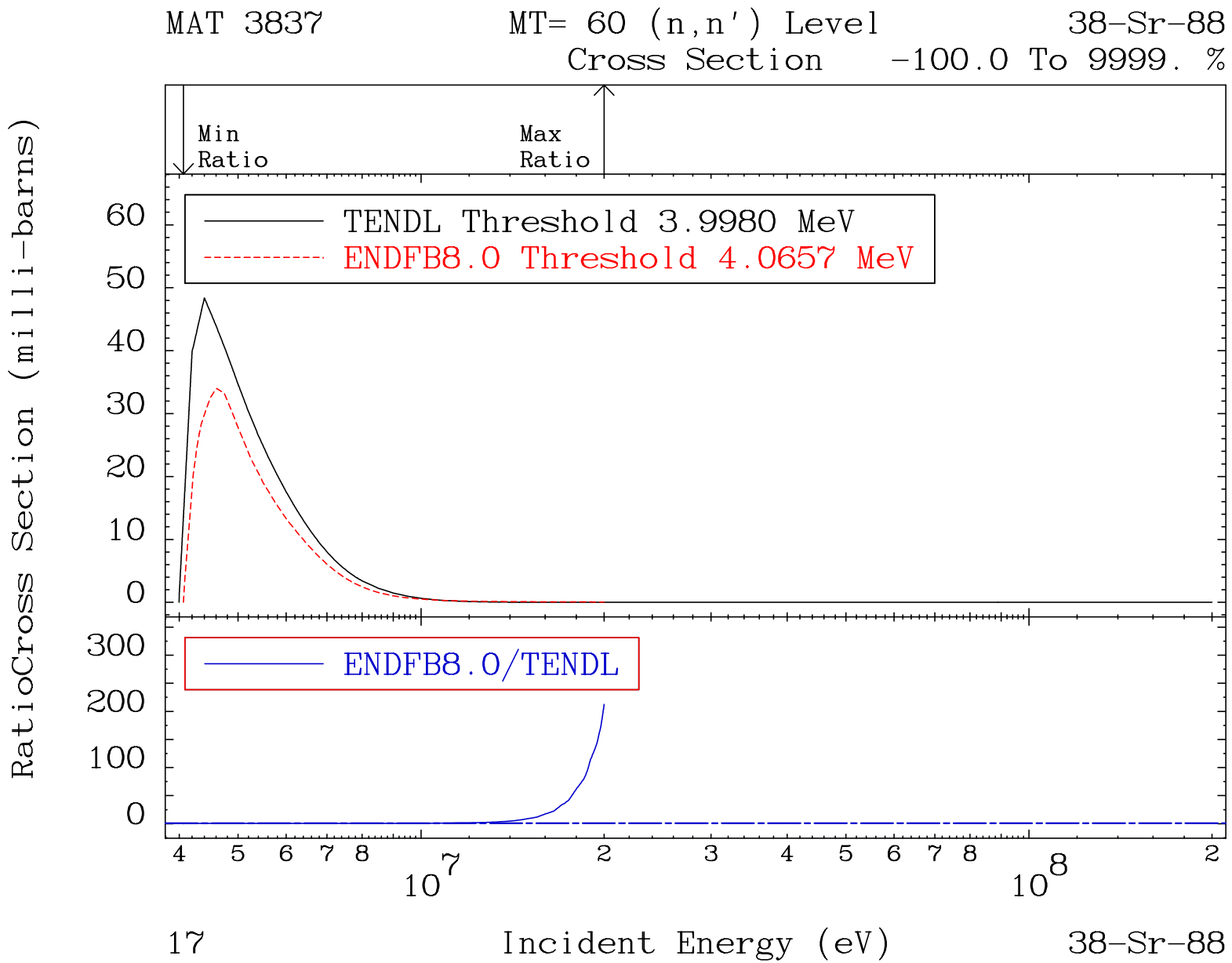

MAT 3837
MT= 55 (n,n') Level
38-Sr-88
Cross Section -100.0 To 2134. %
Min Ratio
Max Ratio
TENDL Threshold 3.4170 MeV
ENDFB8.0 Threshold 3.5266 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
30
20
10
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
38-Sr-88

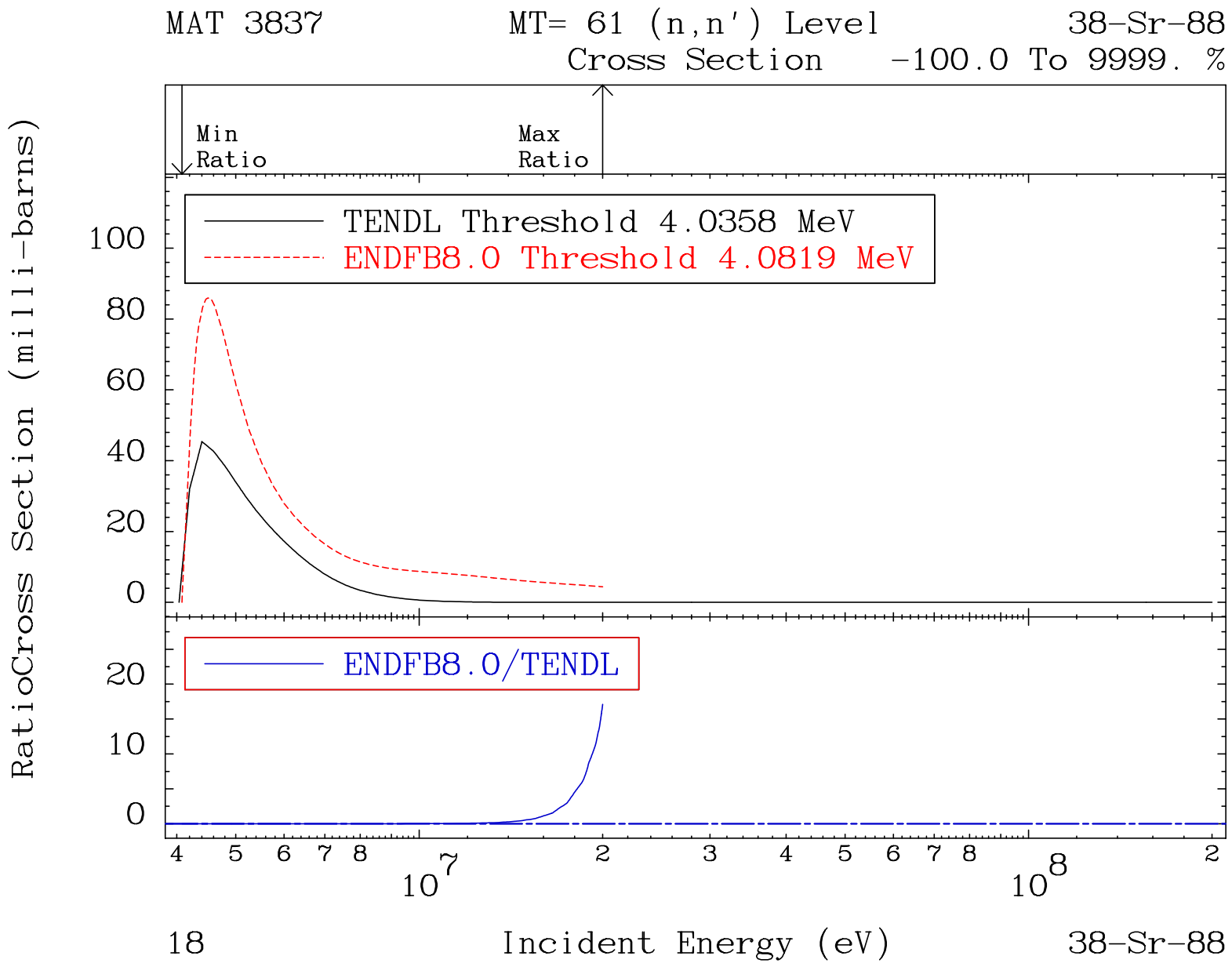

MAT 3837
MT= 56 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.5266 MeV
ENDFB8.0 Threshold 3.5633 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
60
40
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
38-Sr-88

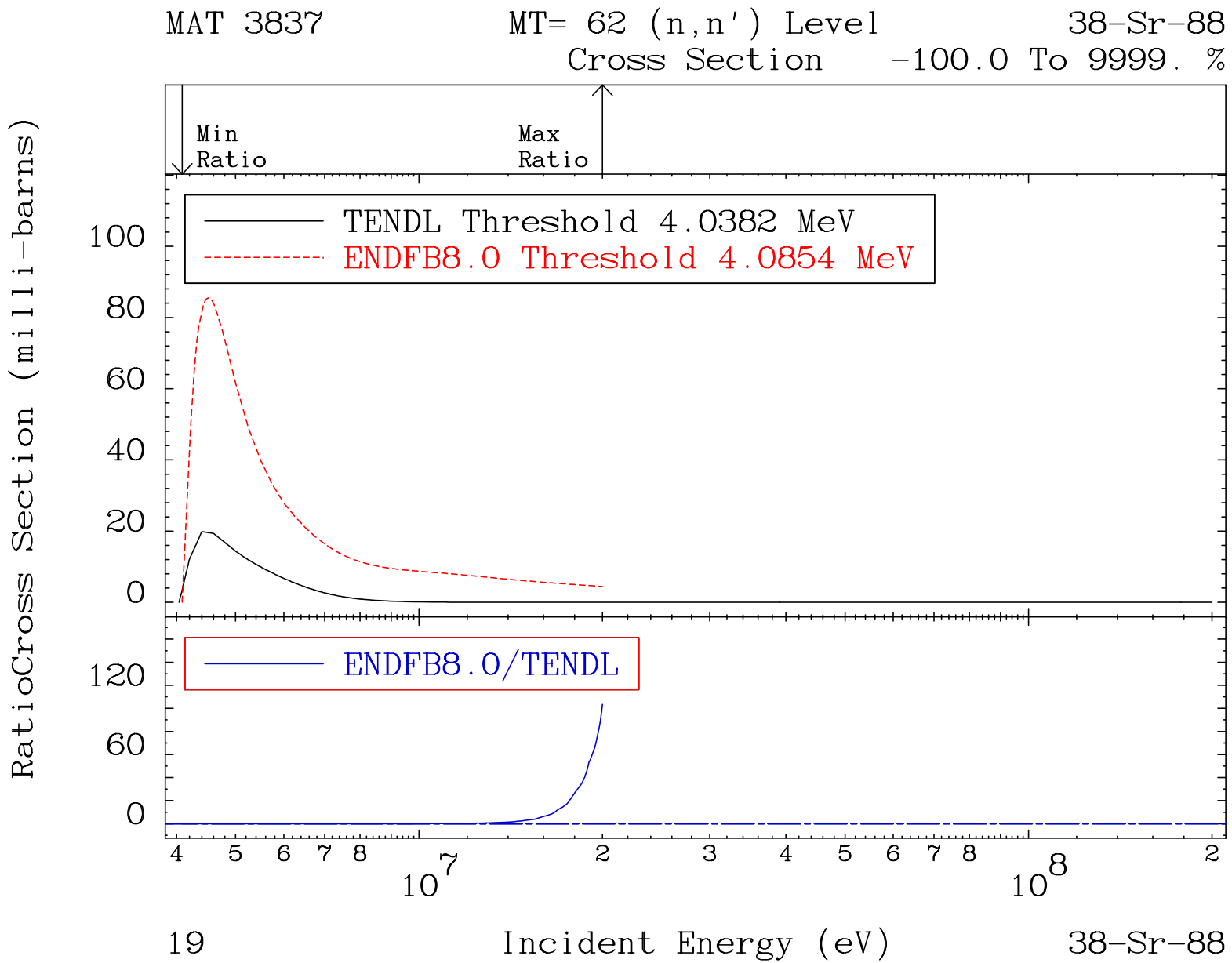

MAT 3837
MT= 57 (n,n') Level
38-Sr-88
Cross Section -100.0 To -36.19%
Min Ratio
Max Ratio
TENDL Threshold 3.5632 MeV
ENDFB8.0 Threshold 3.6259 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
0.8
0.4
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
38-Sr-88

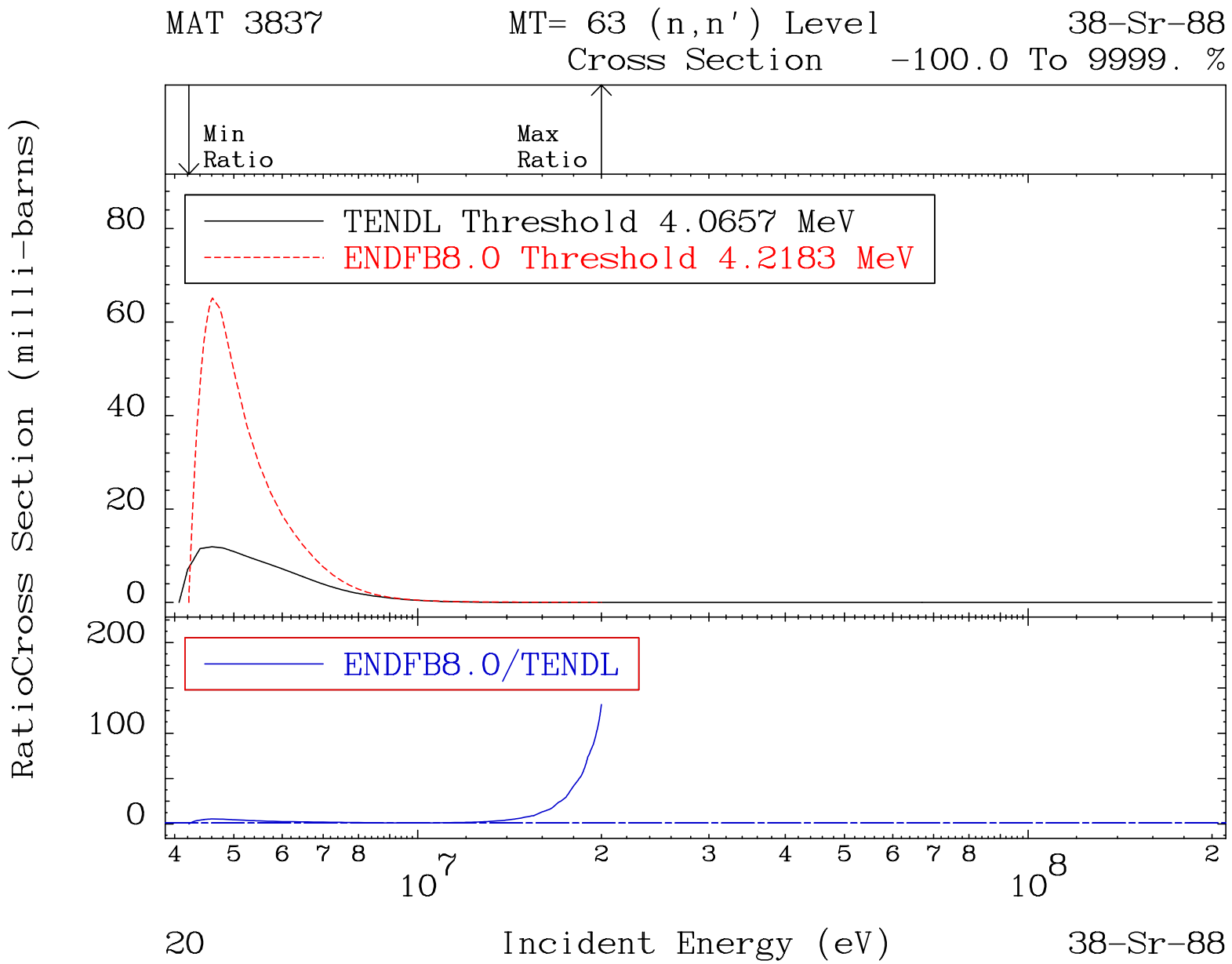

MAT 3837
MT= 58 (n,n') Level
38-Sr-88
Cross Section -100.0 To 2149. %
Min Ratio
Max Ratio
TENDL Threshold 3.6259 MeV
ENDFB8.0 Threshold 3.6768 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
30
20
10
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
38-Sr-88

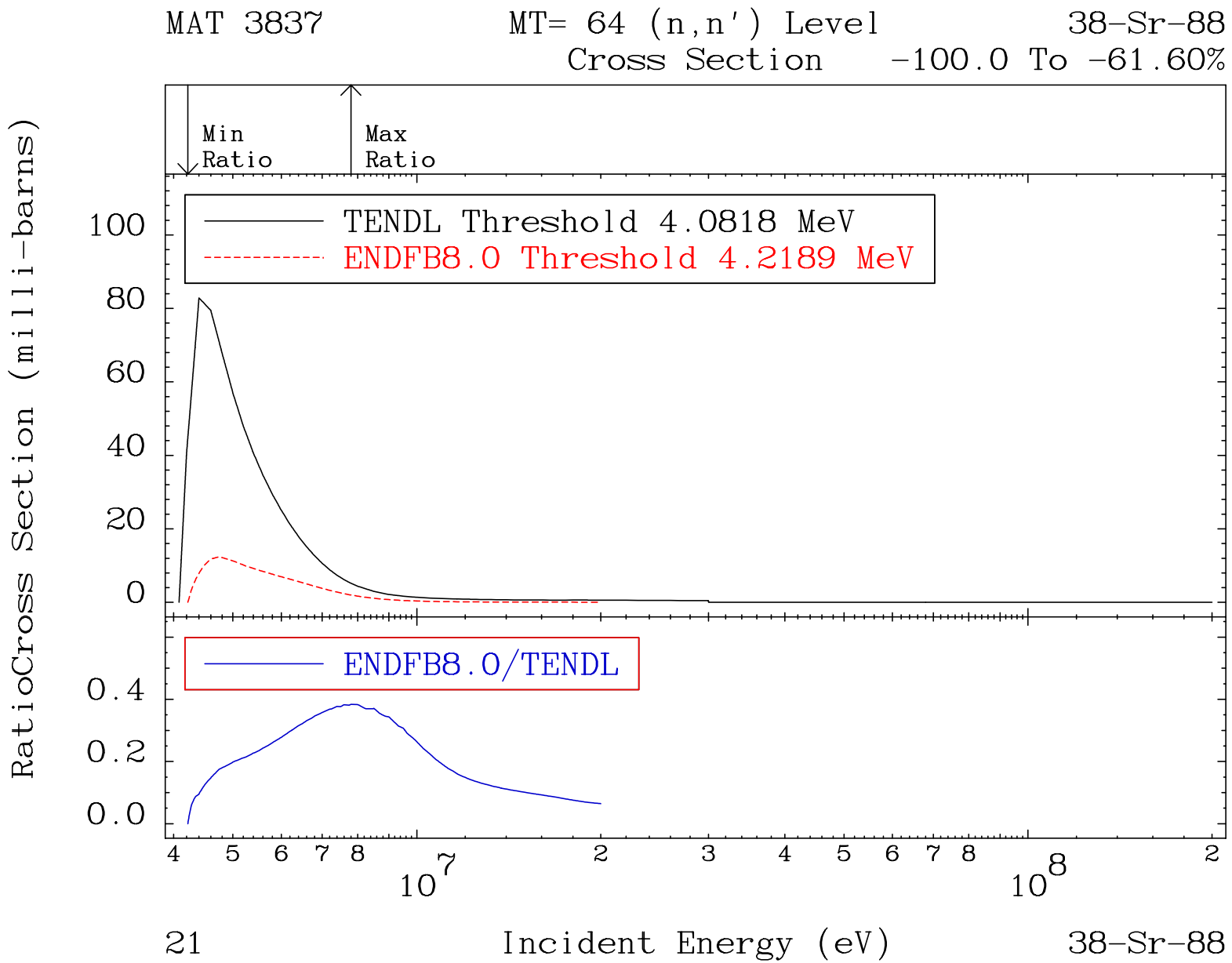

MAT 3837
MT= 59 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.6768 MeV
ENDFB8.0 Threshold 3.9980 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
400
200
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
38-Sr-88

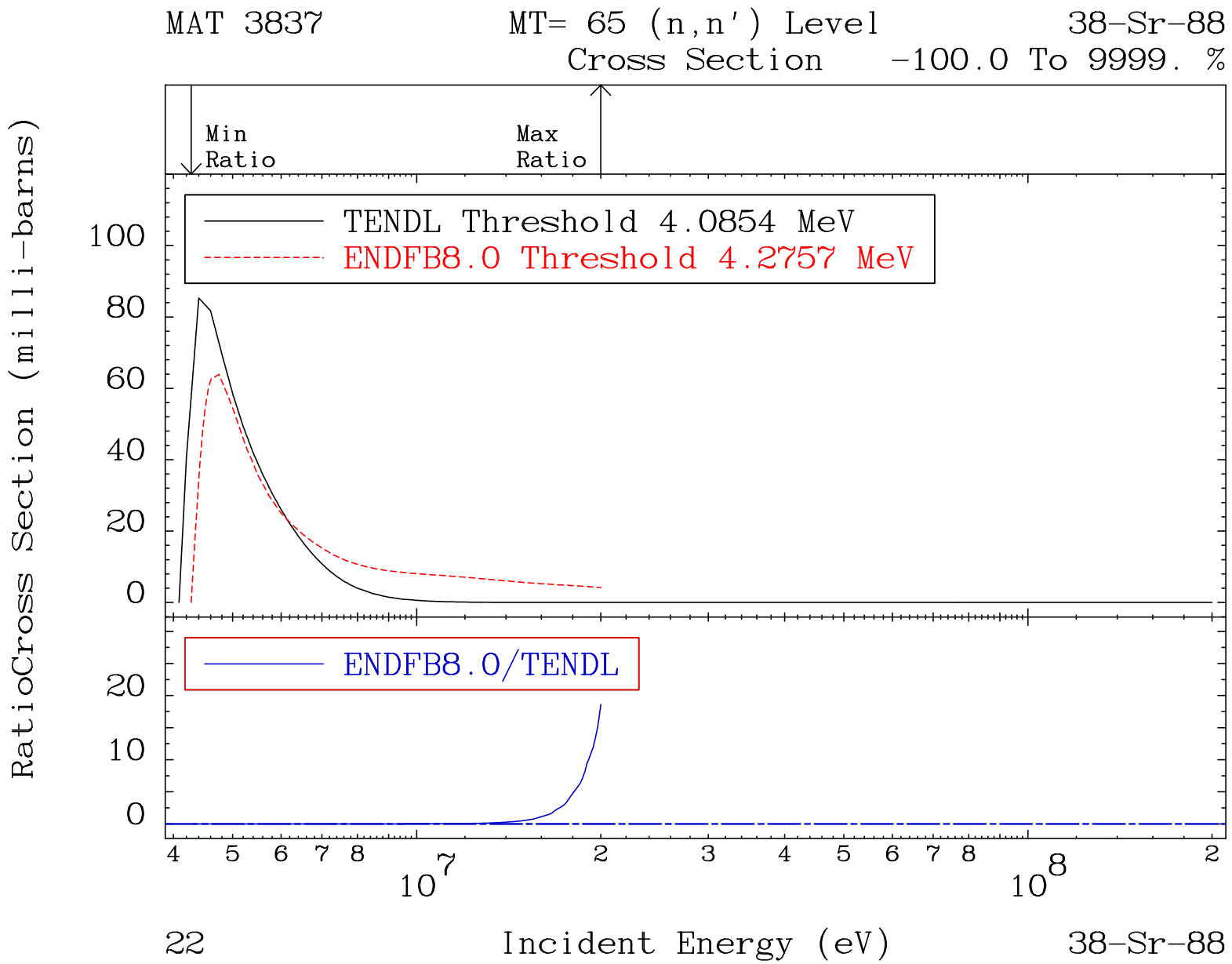

MAT 3837
MT= 60 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.9980 MeV
ENDFB8.0 Threshold 4.0657 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
300
200
100
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
38-Sr-88

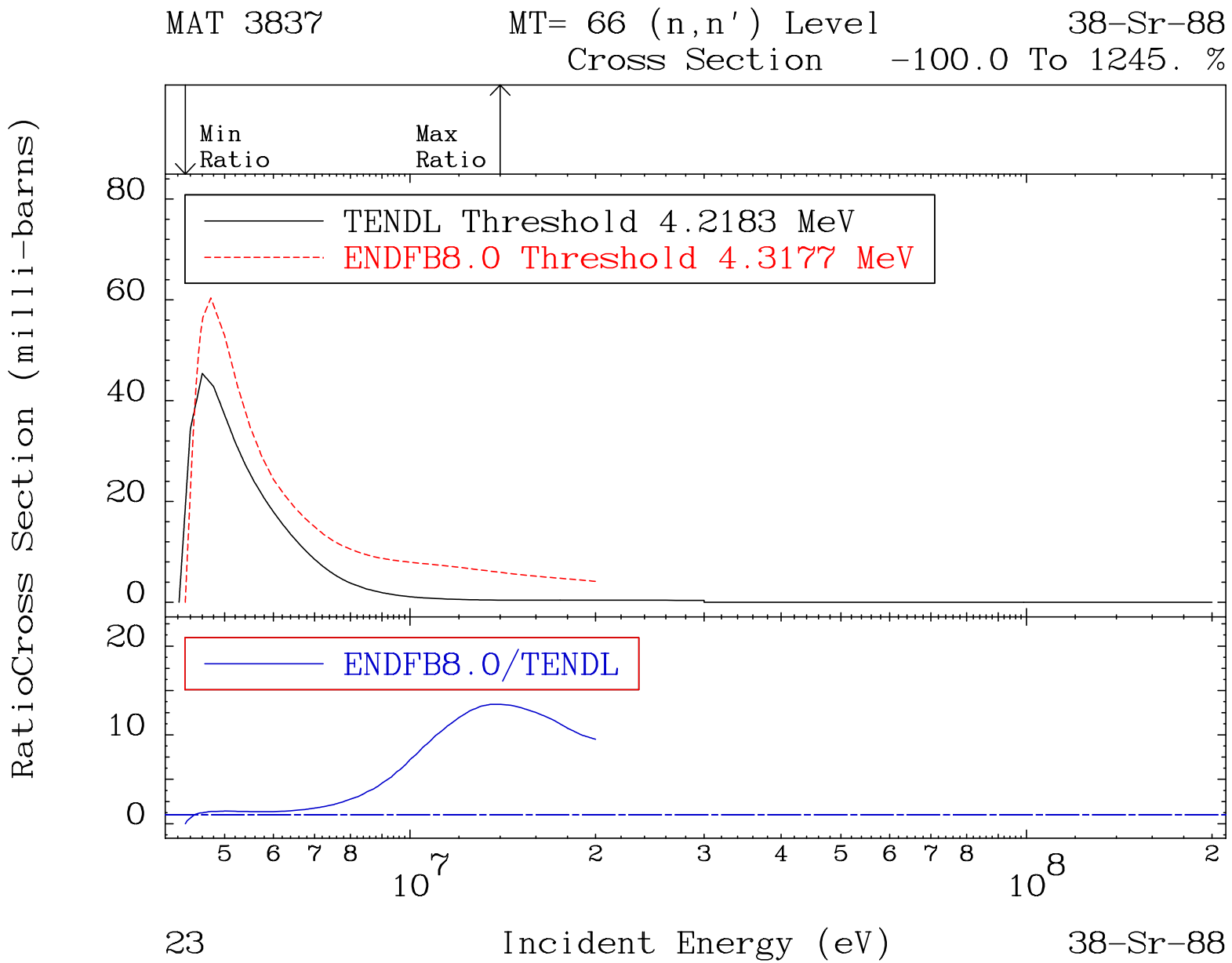

MAT 3837
MT= 61 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0358 MeV
ENDFB8.0 Threshold 4.0819 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
20
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
38-Sr-88

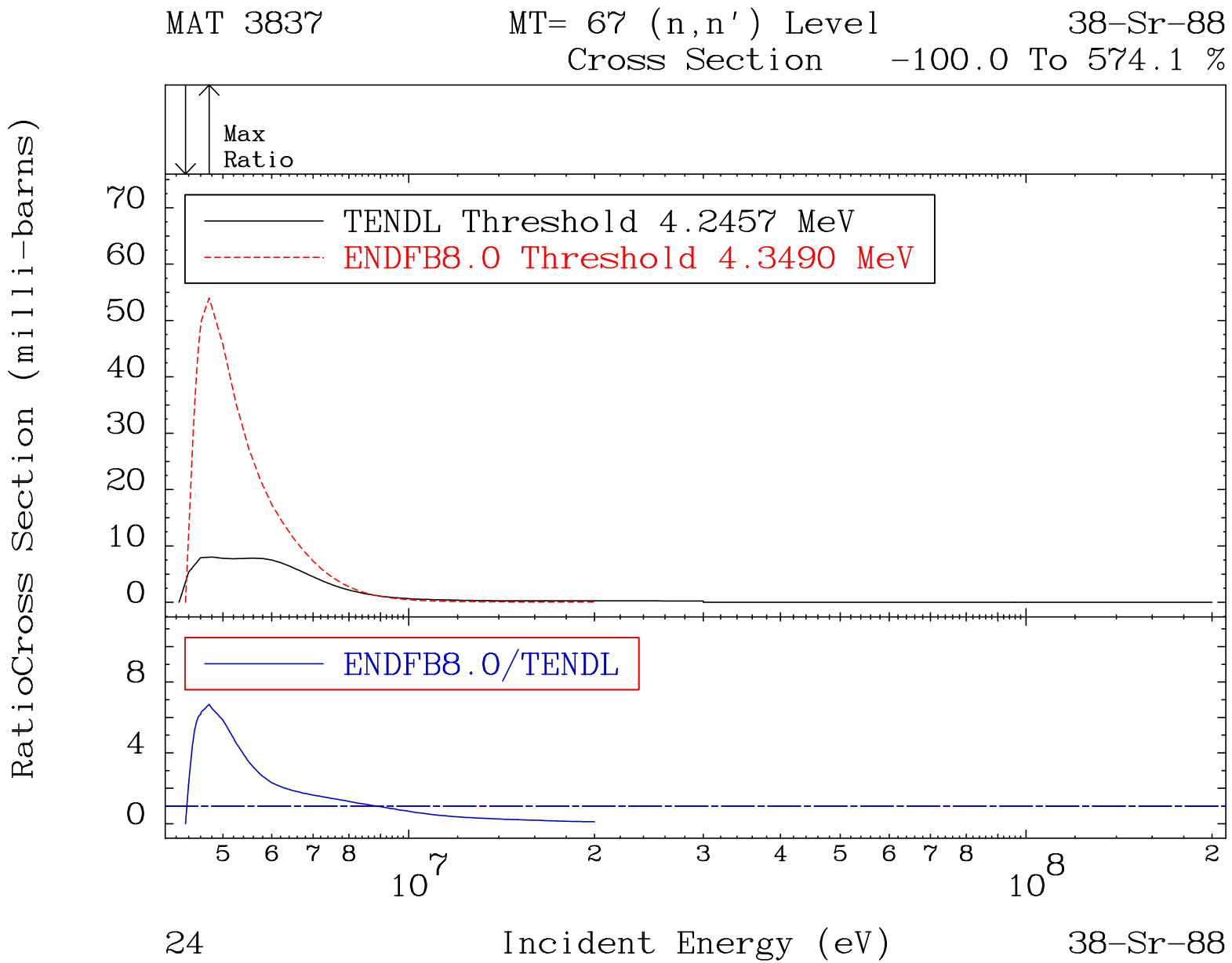

MAT 3837
MT= 62 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0382 MeV
ENDFB8.0 Threshold 4.0854 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
120
60
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
38-Sr-88

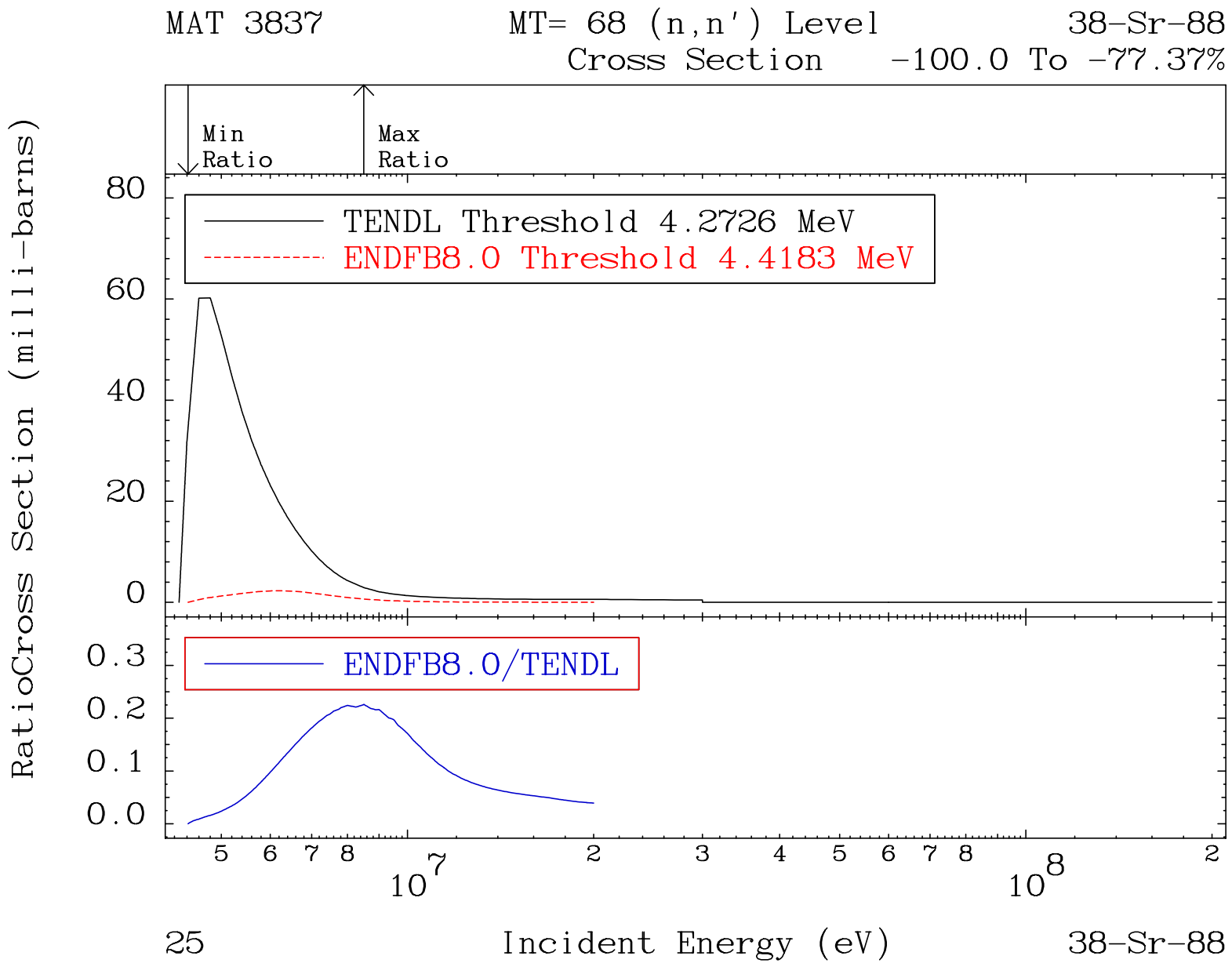

MAT 3837
MT= 63 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0657 MeV
ENDFB8.0 Threshold 4.2183 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
200
100
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
38-Sr-88

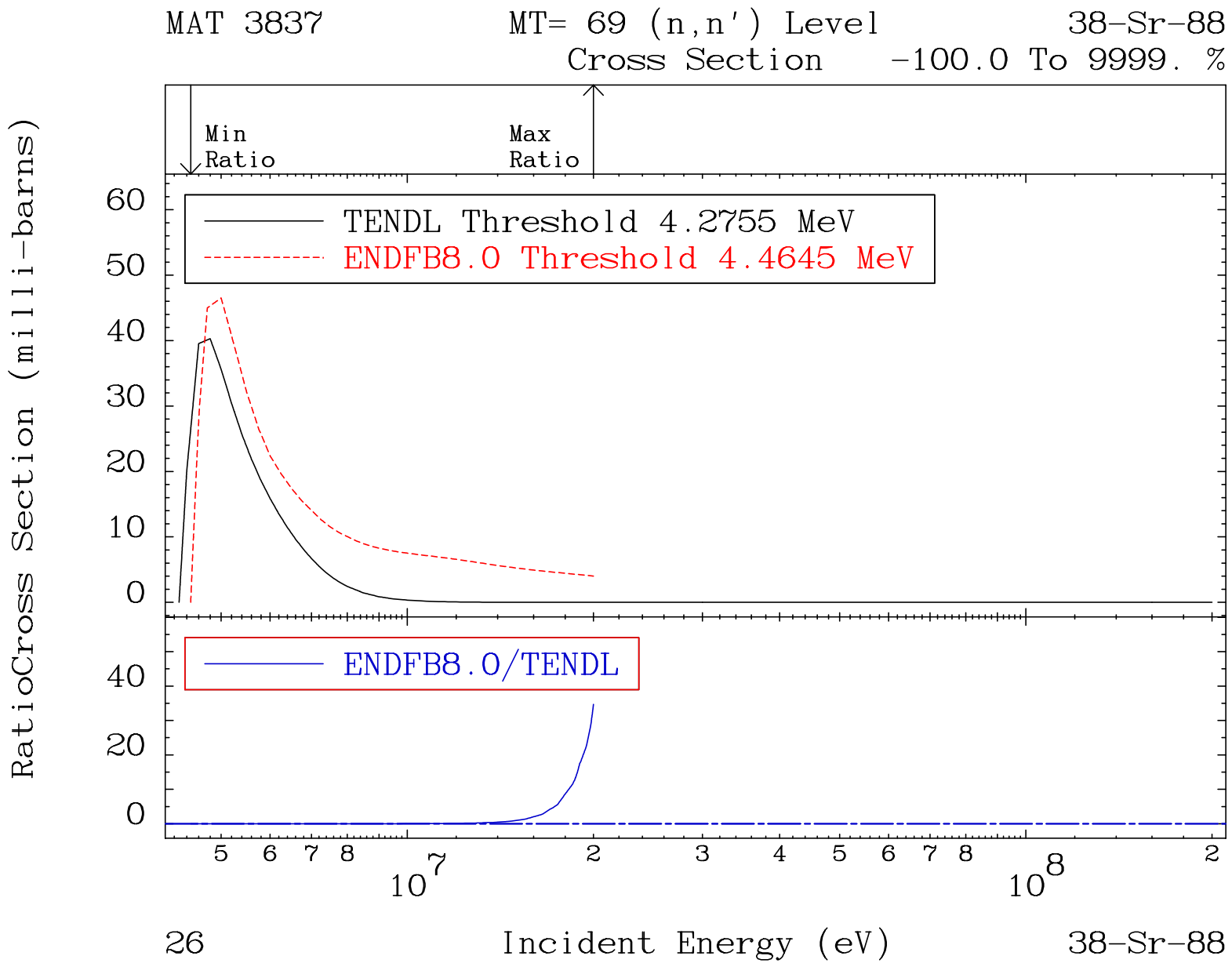

MAT 3837
MT= 64 (n,n') Level
38-Sr-88
Cross Section -100.0 To -61.60%
Min Ratio
Max Ratio
TENDL Threshold 4.0818 MeV
ENDFB8.0 Threshold 4.2189 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
0.4
0.2
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
38-Sr-88

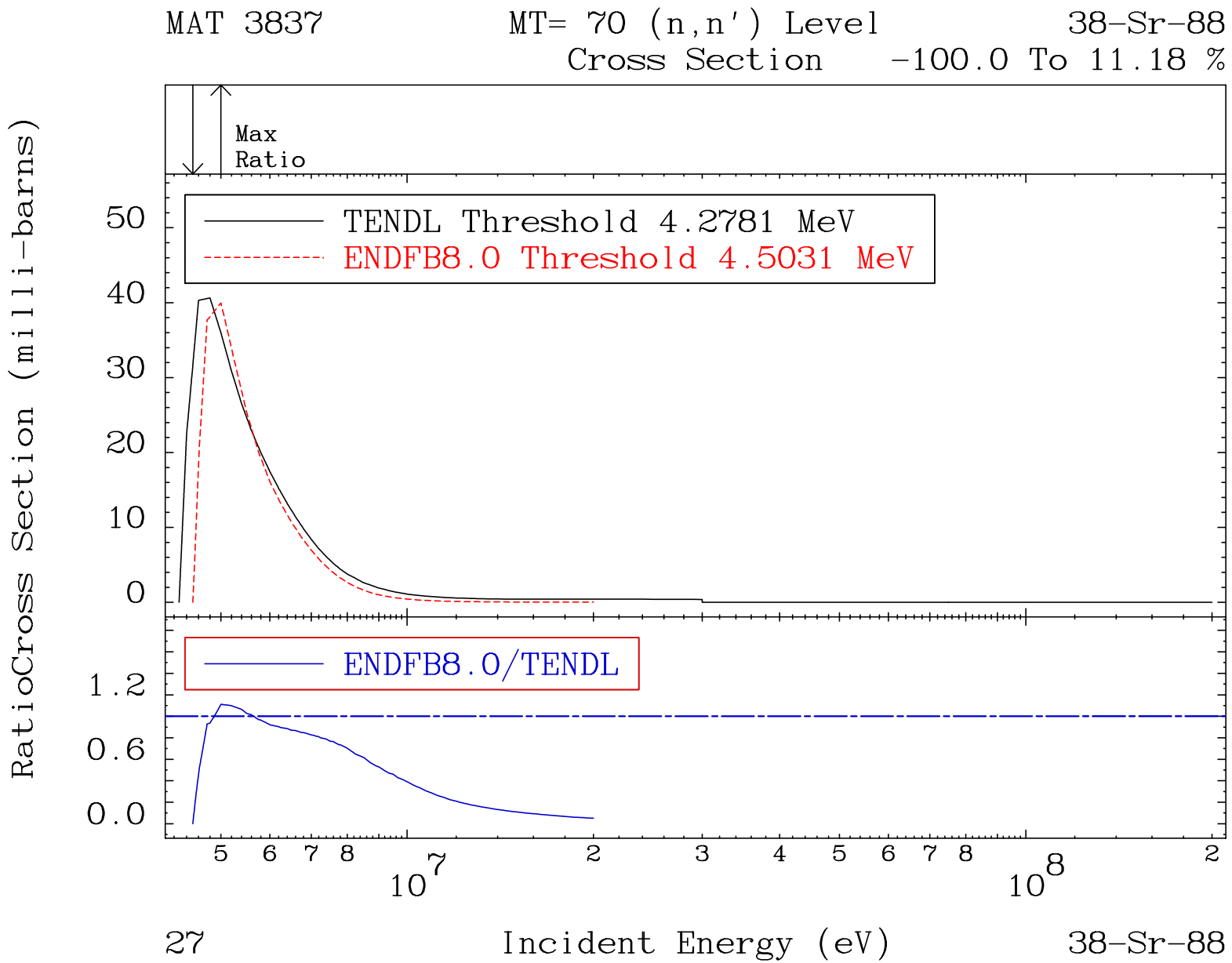

MAT 3837
MT= 65 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0854 MeV
ENDFB8.0 Threshold 4.2757 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
20
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
38-Sr-88

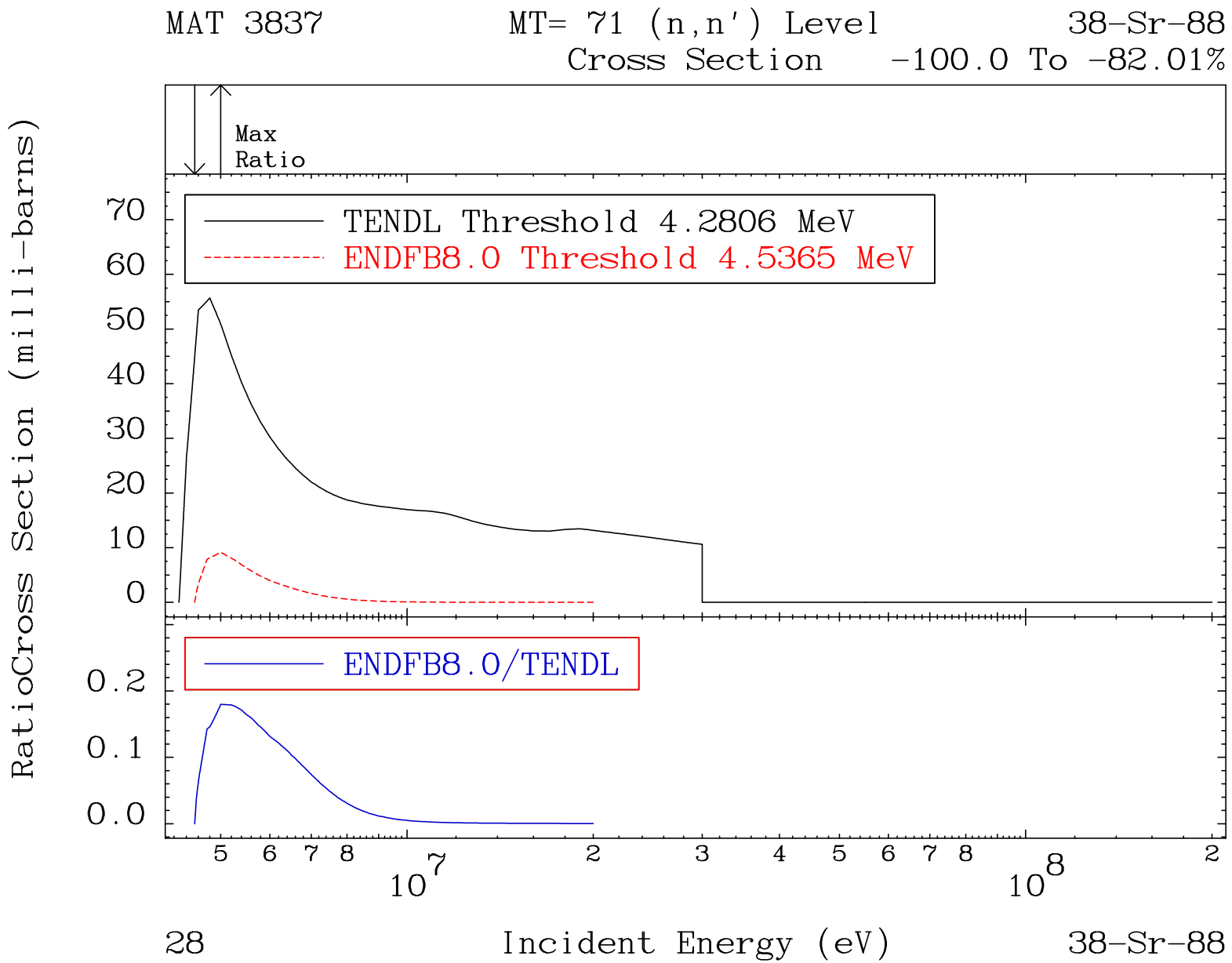

MAT 3837
MT= 66 (n,n') Level
38-Sr-88
Cross Section -100.0 To 1245. %
Min Ratio
Max Ratio
TENDL Threshold 4.2183 MeV
ENDFB8.0 Threshold 4.3177 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
38-Sr-88

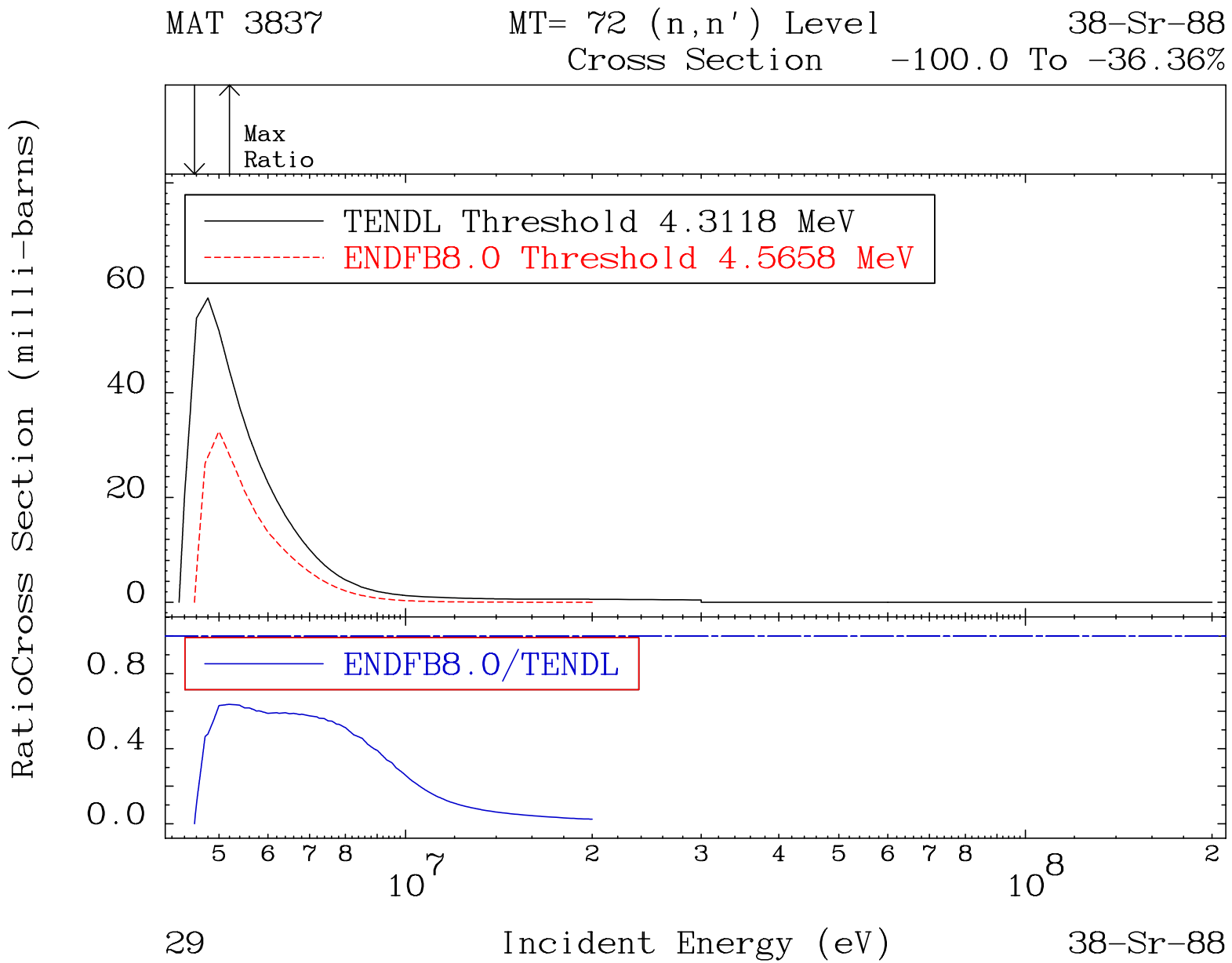

MAT 3837
MT= 67 (n,n') Level
38-Sr-88
Cross Section -100.0 To 574.1 %
Max
Ratio
TENDL Threshold 4.2457 MeV
ENDFB8.0 Threshold 4.3490 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
38-Sr-88

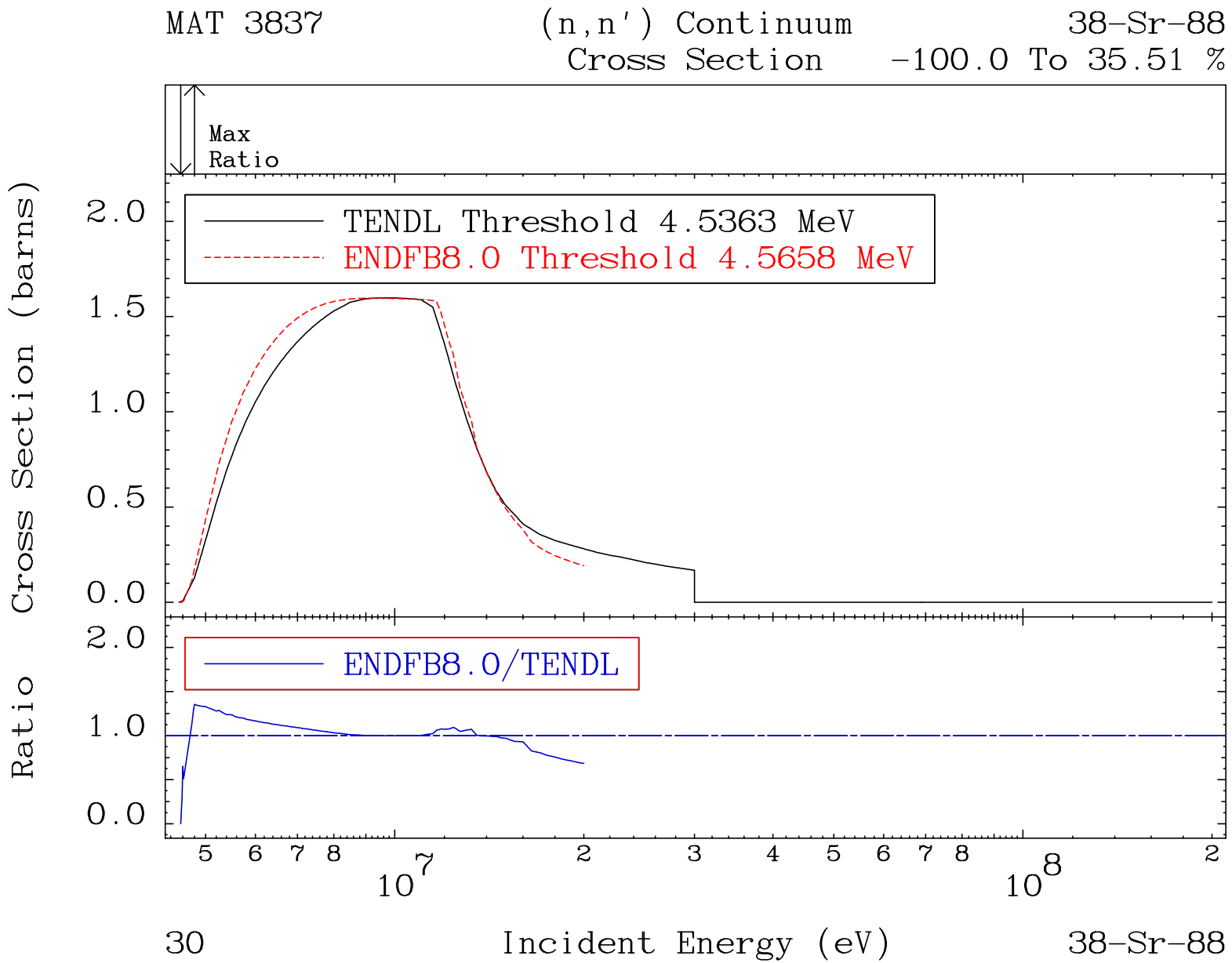

MAT 3837
MT= 68 (n,n') Level
38-Sr-88
Cross Section -100.0 To -77.37%
Min Ratio
Max Ratio
TENDL Threshold 4.2726 MeV
ENDFB8.0 Threshold 4.4183 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
0.3
0.2
0.1
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
25
38-Sr-88

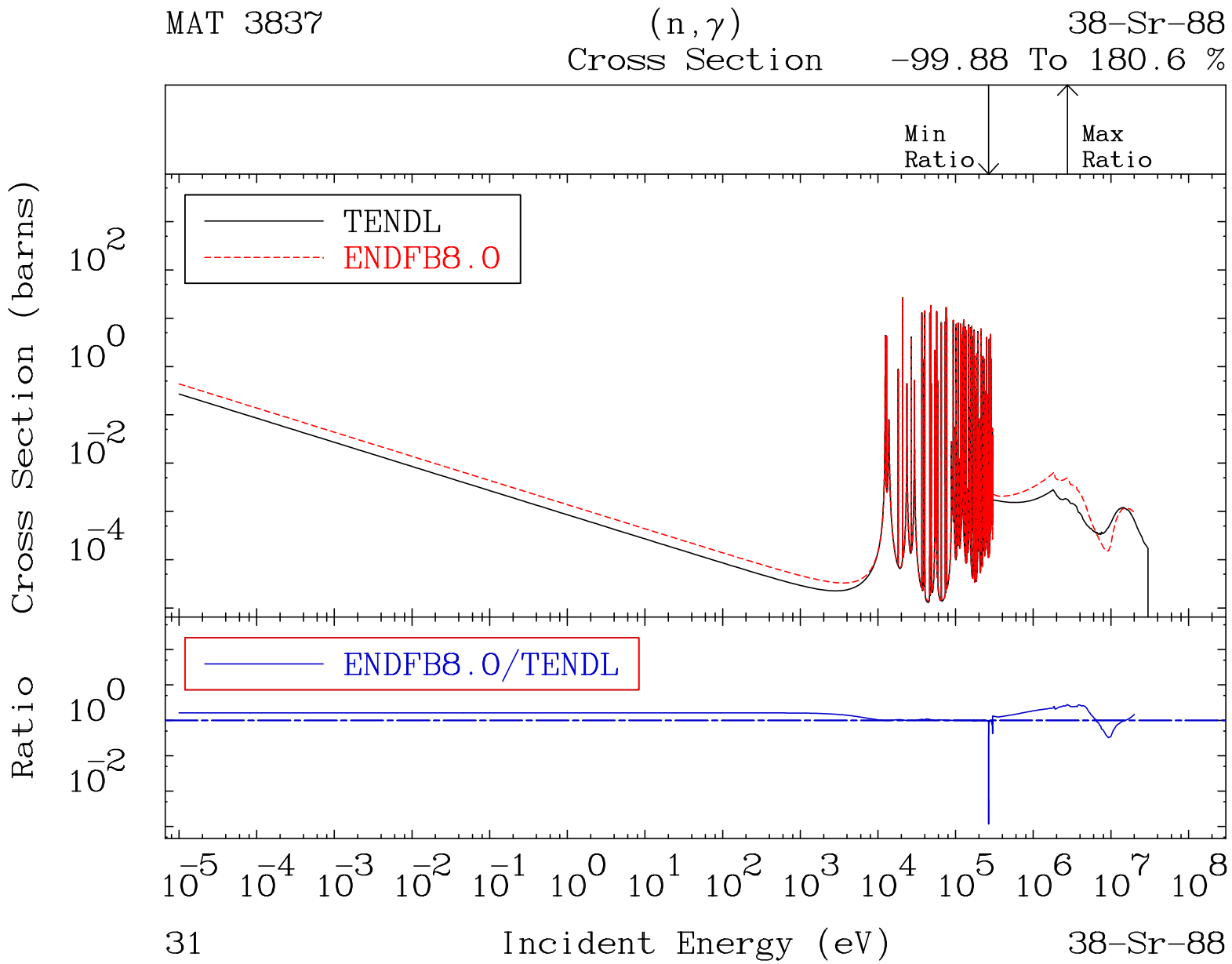

MAT 3837
MT= 69 (n,n') Level
38-Sr-88
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.2755 MeV
ENDFB8.0 Threshold 4.4645 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
26
38-Sr-88

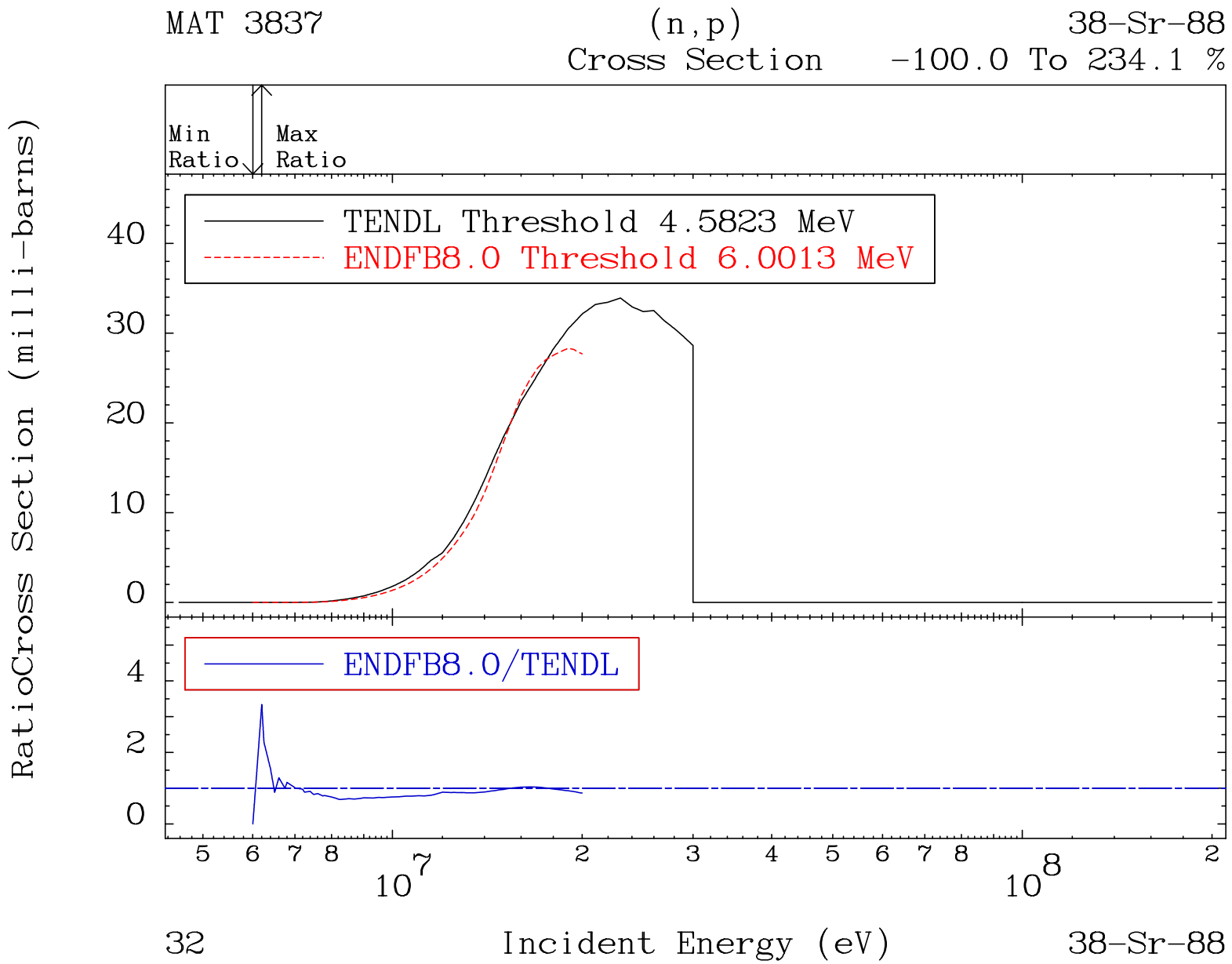

MAT 3837
MT= 70 (n,n') Level
38-Sr-88
Cross Section -100.0 To 11.18 %
Max
Ratio
TENDL Threshold 4.2781 MeV
ENDFB8.0 Threshold 4.5031 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
38-Sr-88

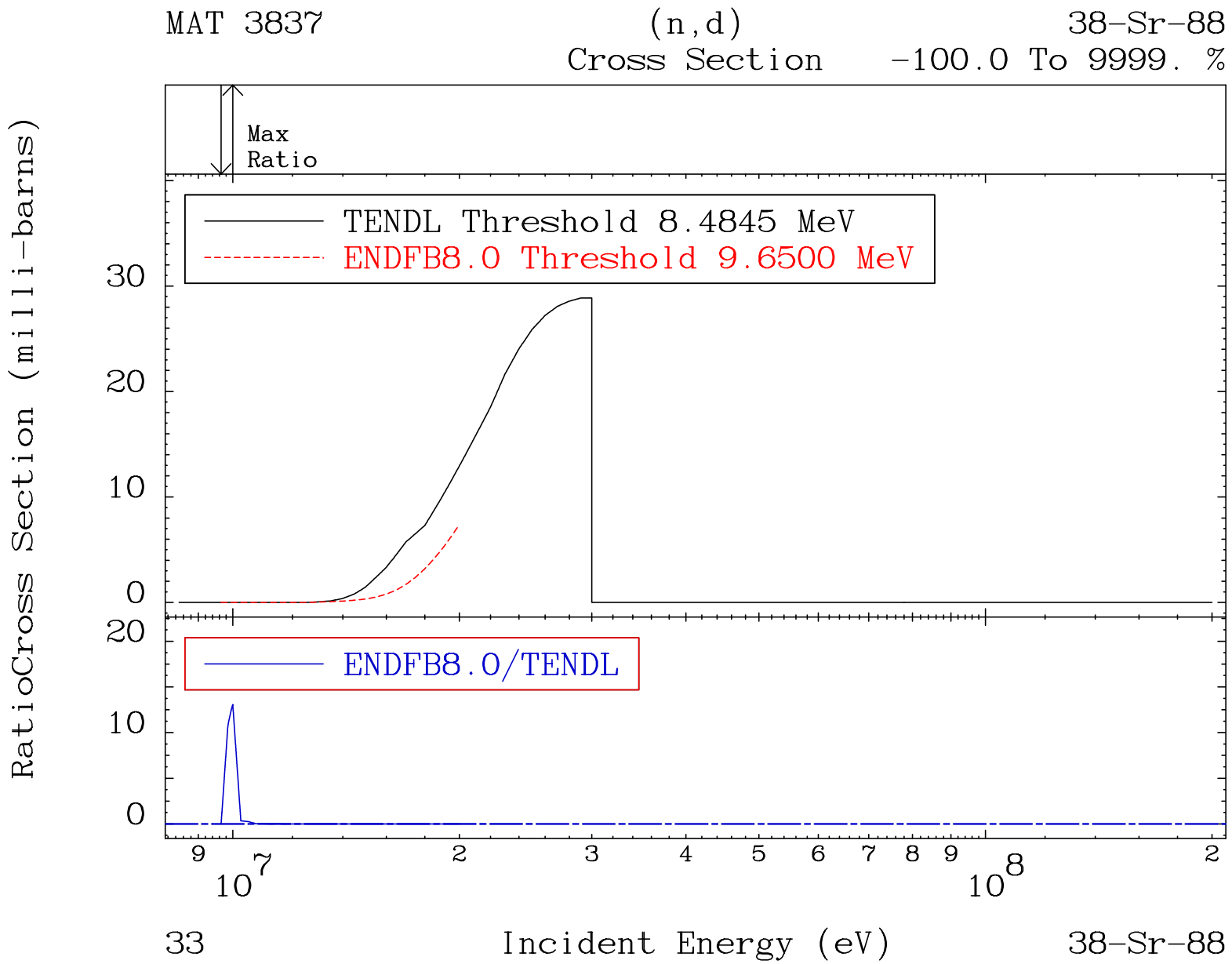

MAT 3837
MT= 71 (n,n') Level
38-Sr-88
Cross Section -100.0 To -82.01%
Max
Ratio
TENDL Threshold 4.2806 MeV
ENDFB8.0 Threshold 4.5365 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.2
0.1
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
38-Sr-88

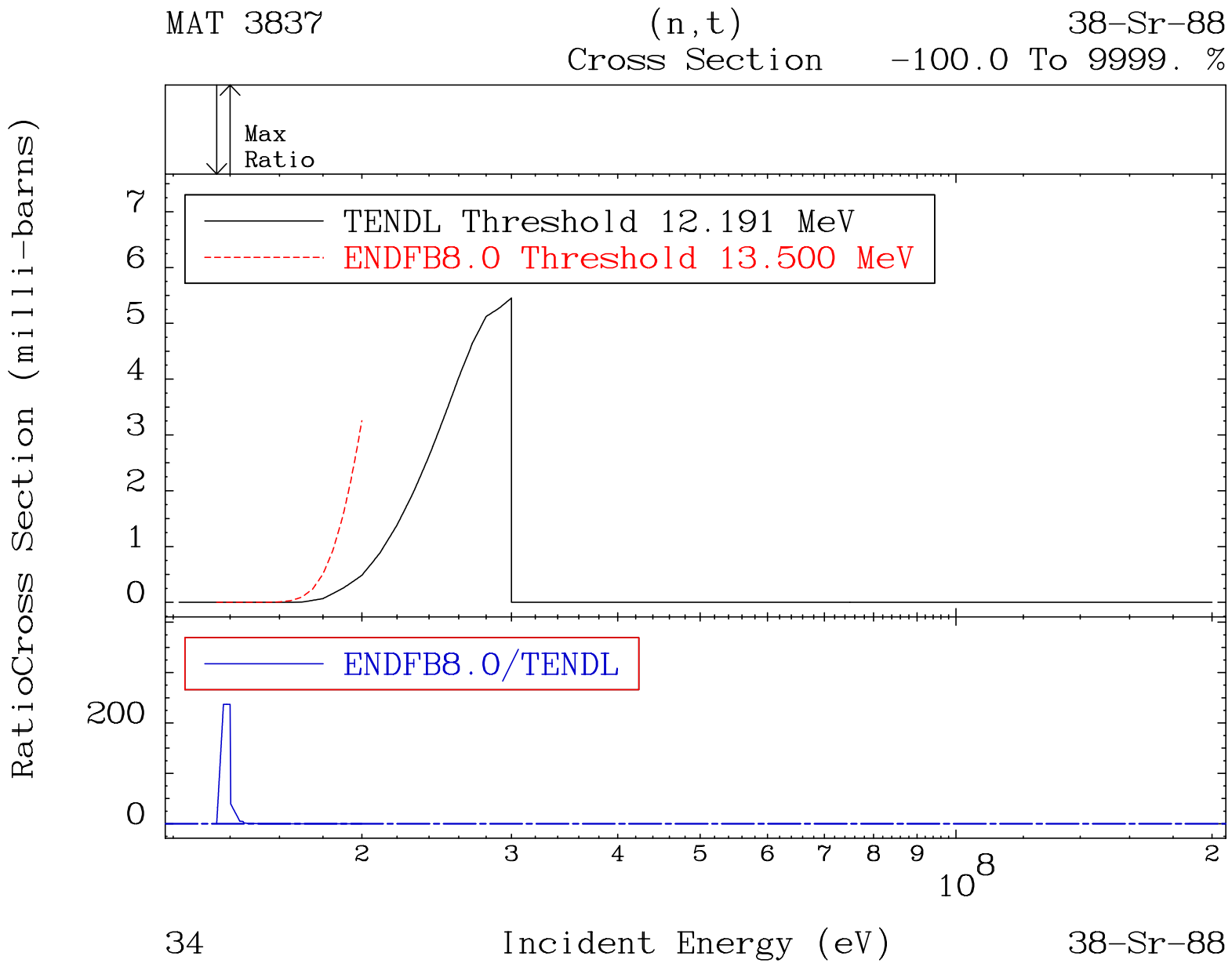

MAT 3837
MT= 72 (n,n') Level
38-Sr-88
Cross Section -100.0 To -36.36%
Max
Ratio
TENDL Threshold 4.3118 MeV
ENDFB8.0 Threshold 4.5658 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
0.8
0.4
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
38-Sr-88

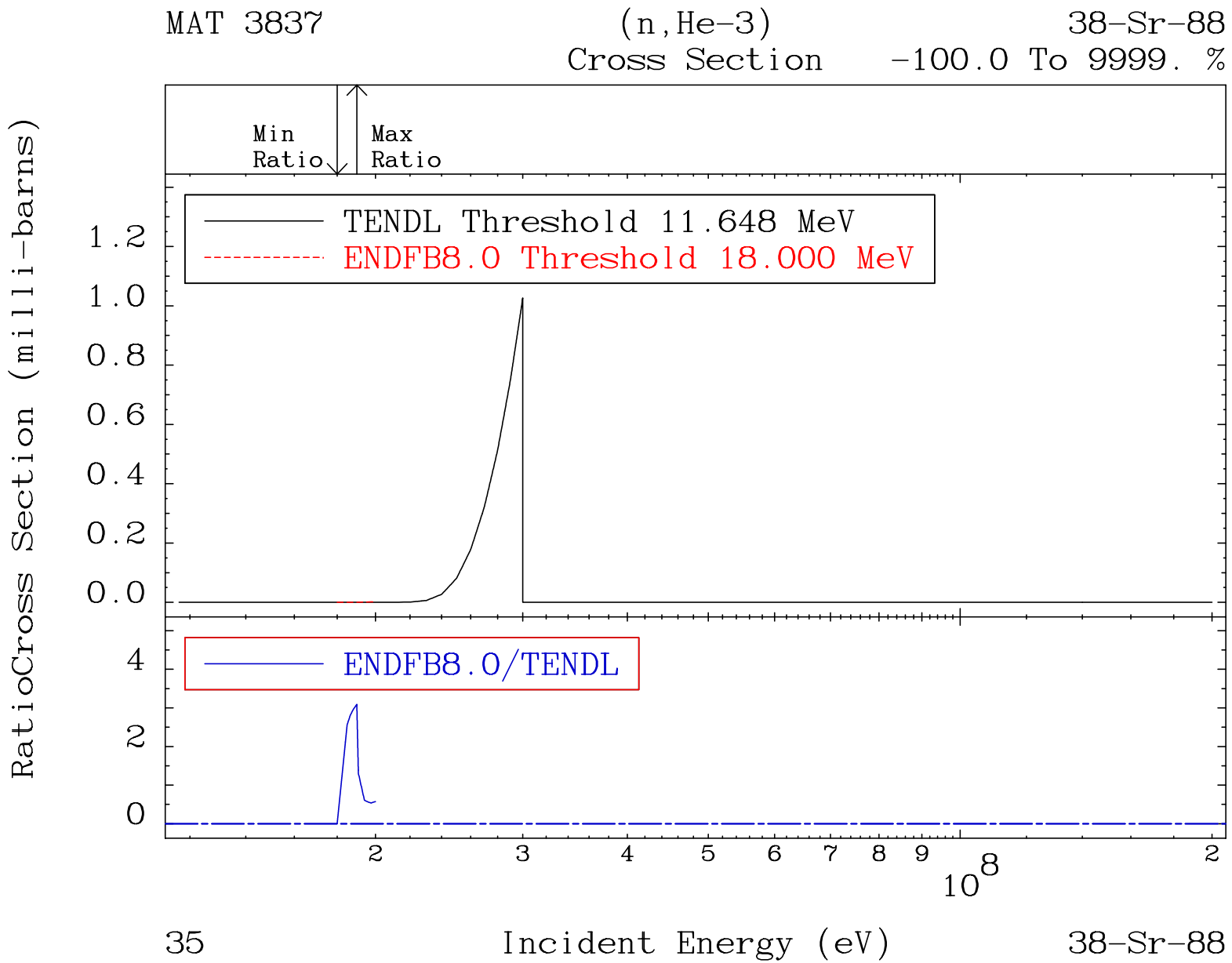

MAT 3837
(n,n') Continuum
Cross Section
38-Sr-88
-100.0 To 35.51 %
Max
Ratio
TENDL Threshold 4.5363 MeV
ENDFB8.0 Threshold 4.5658 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
38-Sr-88

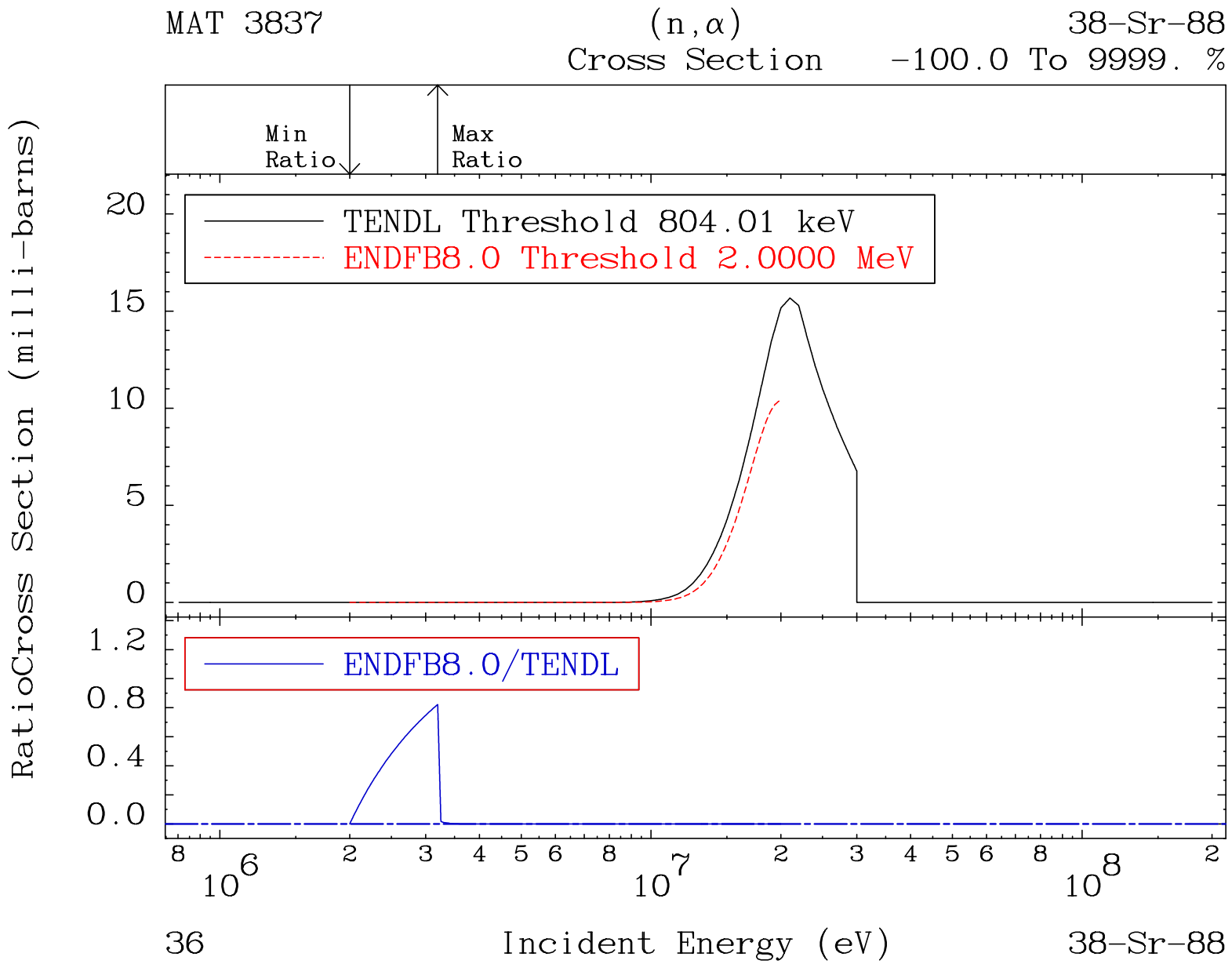

MAT 3837
(n,γ)
Cross Section
38-Sr-88
-99.88 To 180.6 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
38-Sr-88

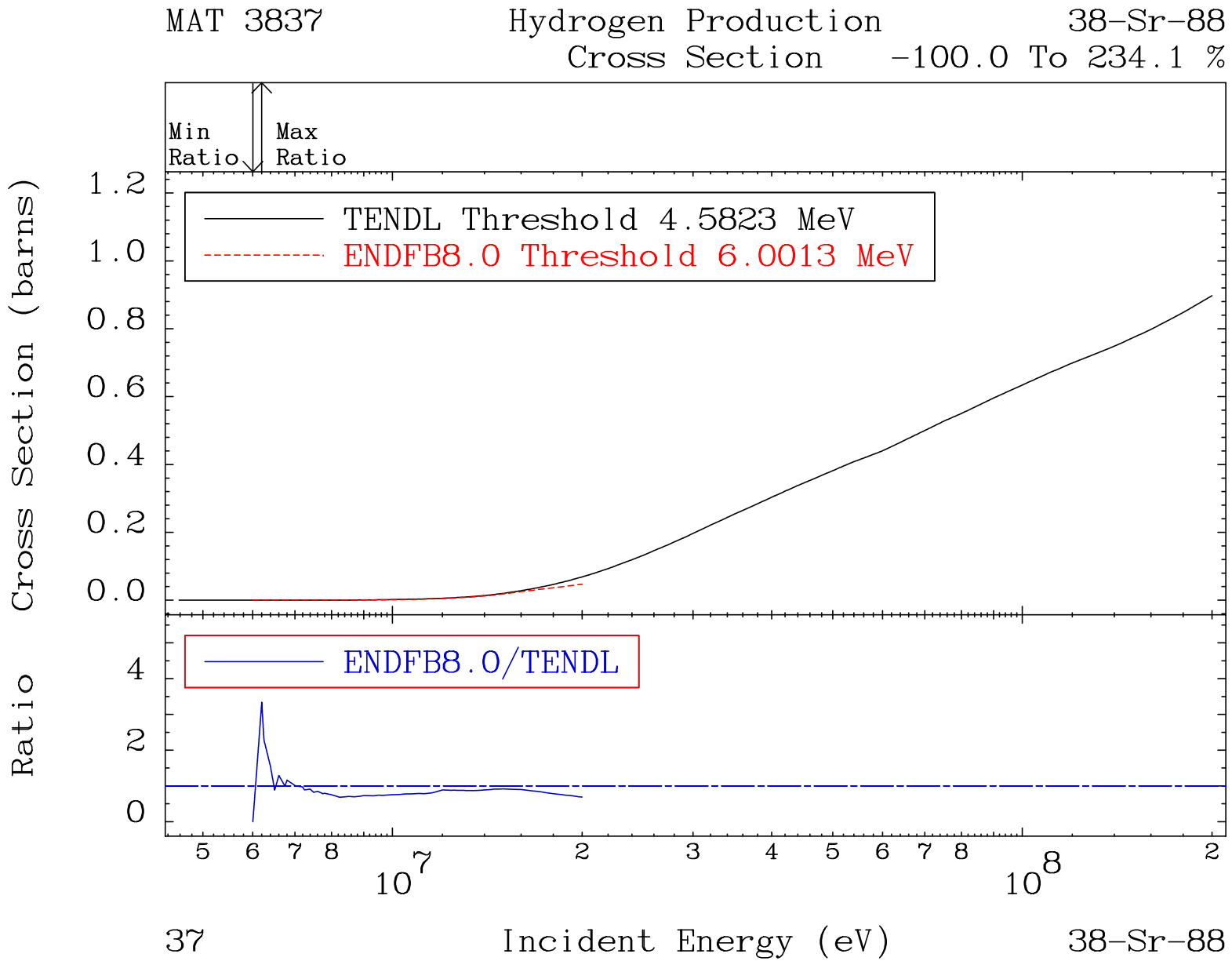

MAT 3837
(n,p)
38-Sr-88
Cross Section
-100.0 To 234.1 %
Min Ratio
Max Ratio
TENDL Threshold 4.5823 MeV
ENDFB8.0 Threshold 6.0013 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
38-Sr-88

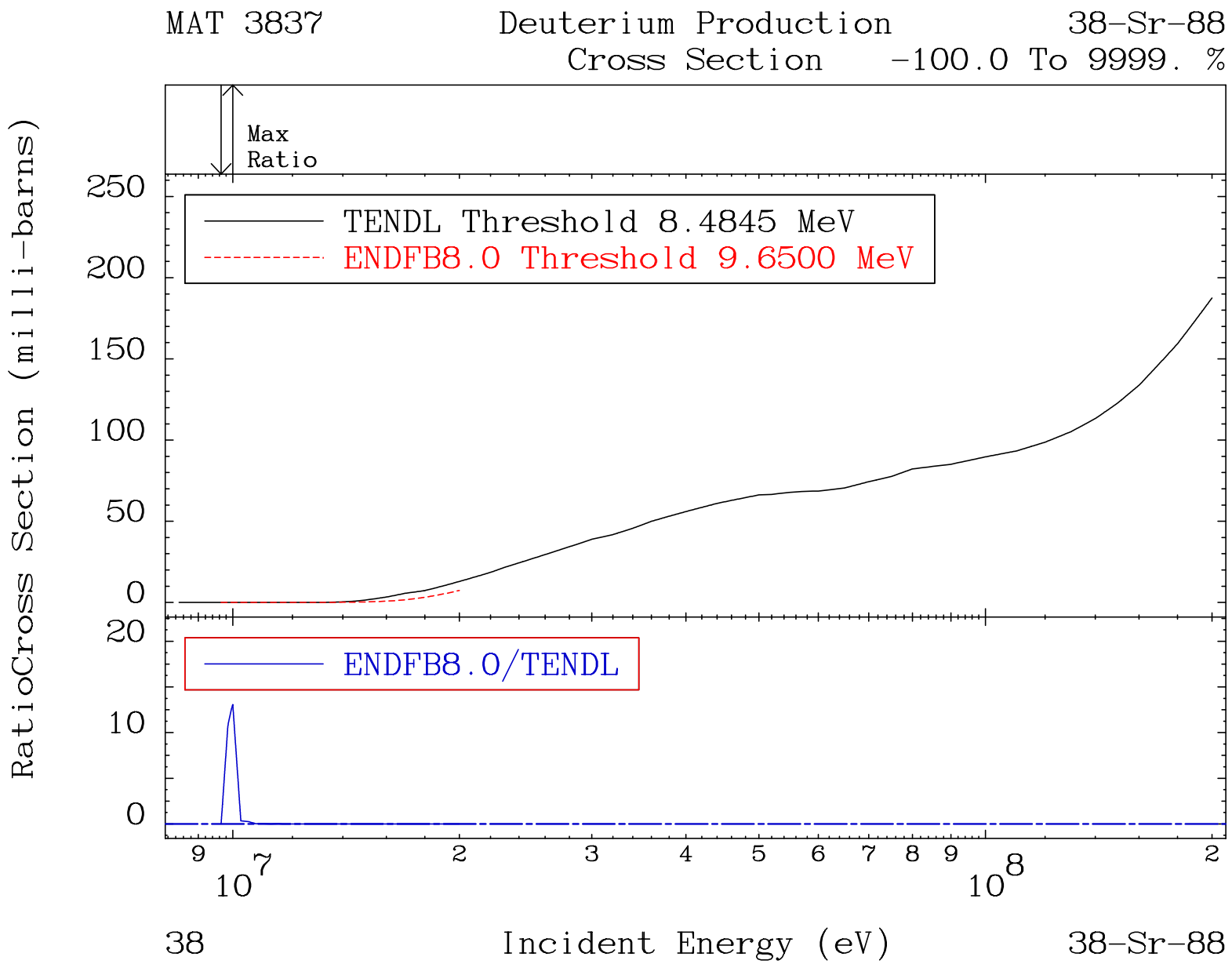

MAT 3837
(n,d)
38-Sr-88
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.4845 MeV
ENDFB8.0 Threshold 9.6500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
20
10
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
33
Incident Energy (eV)
38-Sr-88

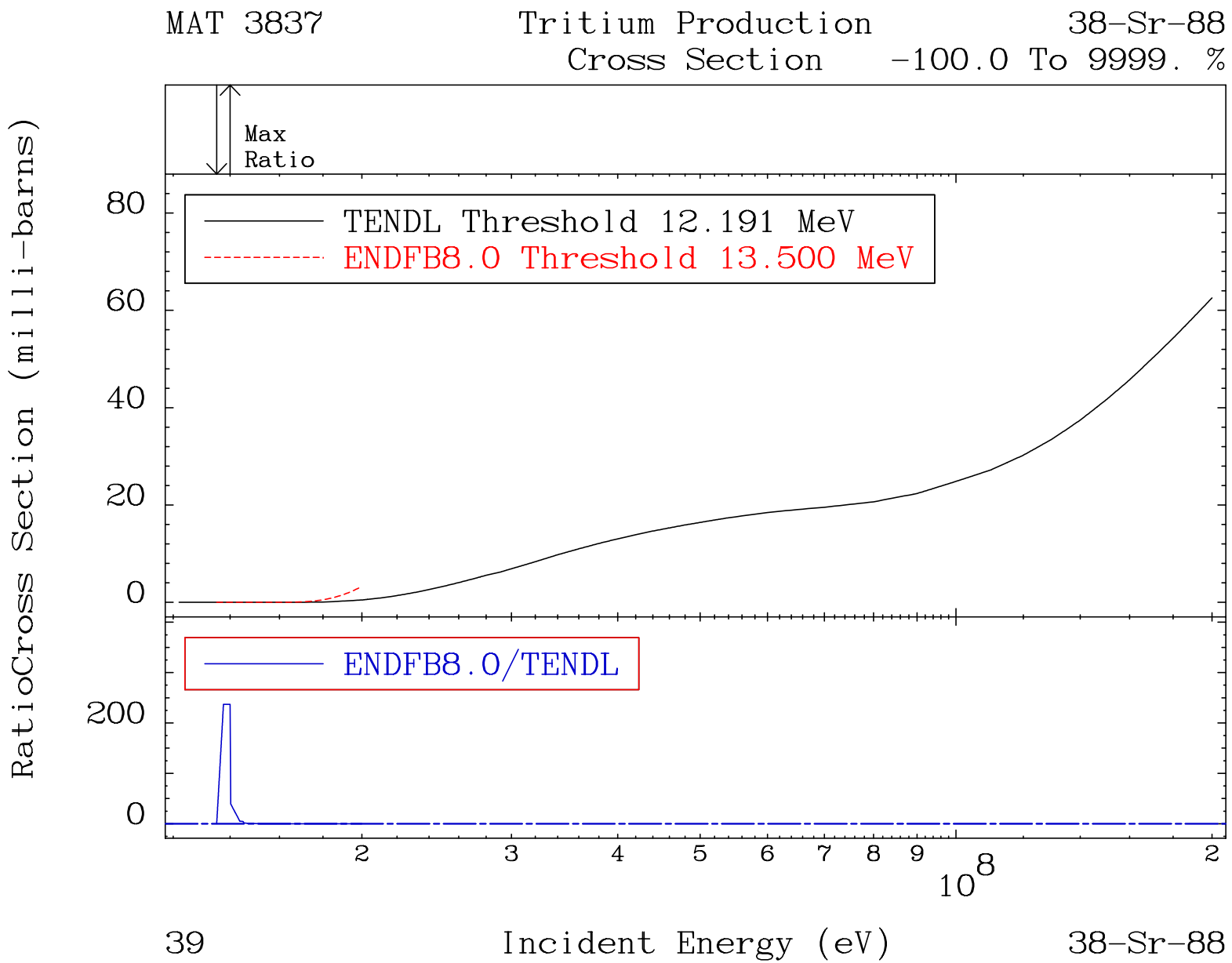

MAT 3837
(n,t)
38-Sr-88
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.191 MeV
ENDFB8.0 Threshold 13.500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
5
6
7
200
0
2
3
4
5
6
7
8
9
10^8
2
34
Incident Energy (eV)
38-Sr-88

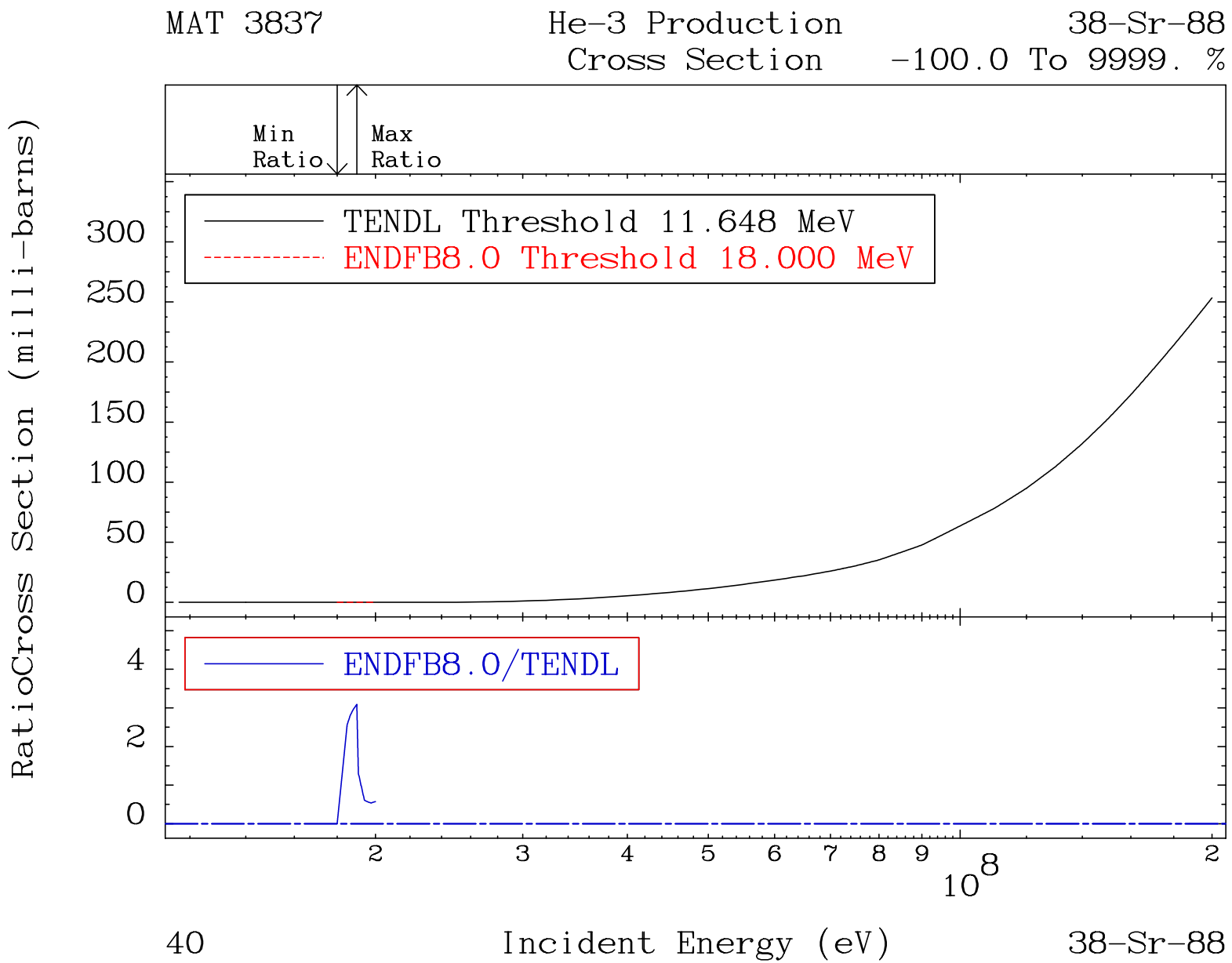

MAT 3837
(n,He-3)
Cross Section
38-Sr-88
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.648 MeV
ENDFB8.0 Threshold 18.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
35
Incident Energy (eV)
38-Sr-88

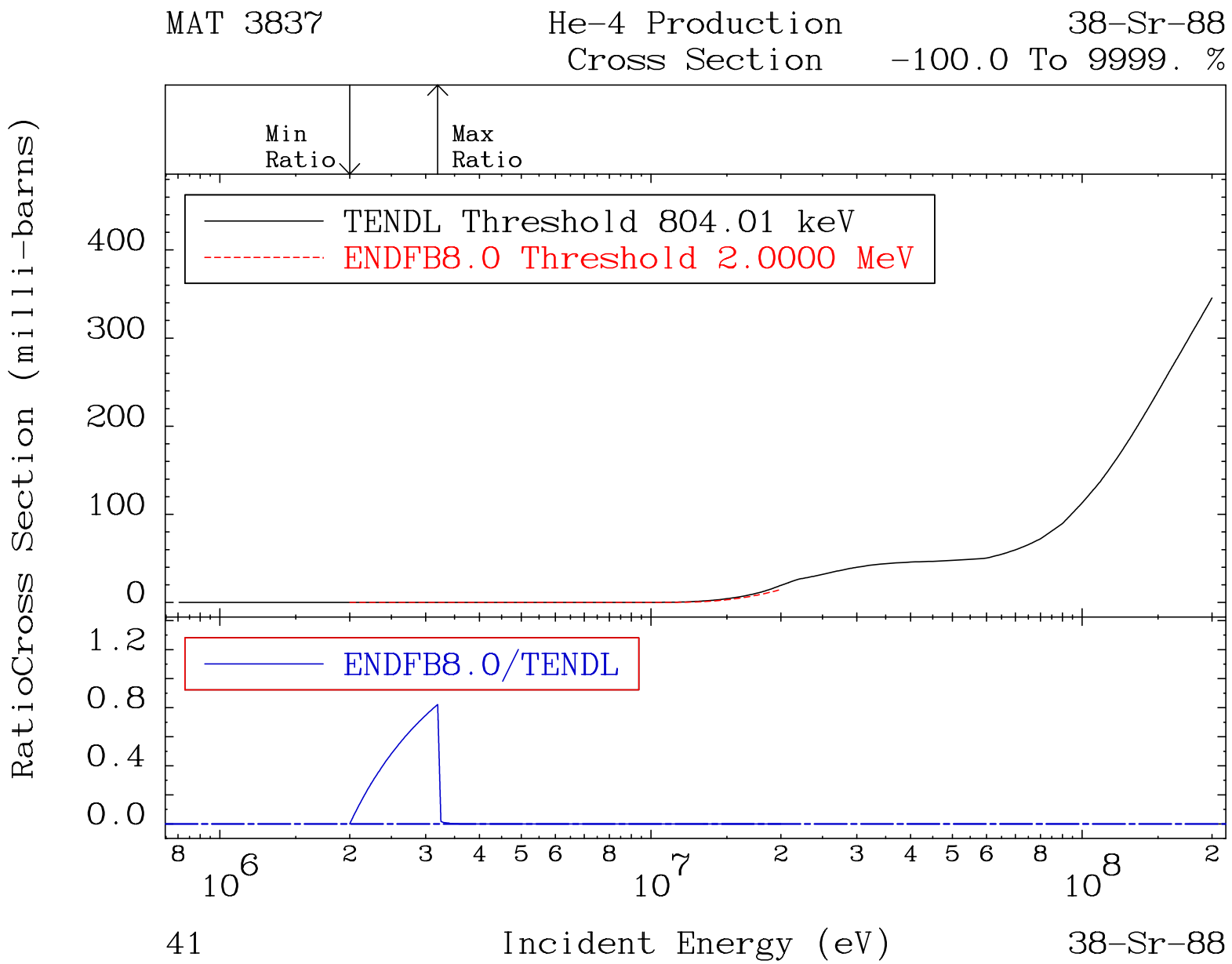

MAT 3837
(n,α)
38-Sr-88
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 804.01 keV
ENDFB8.0 Threshold 2.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.8
0.4
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
36
Incident Energy (eV)
38-Sr-88

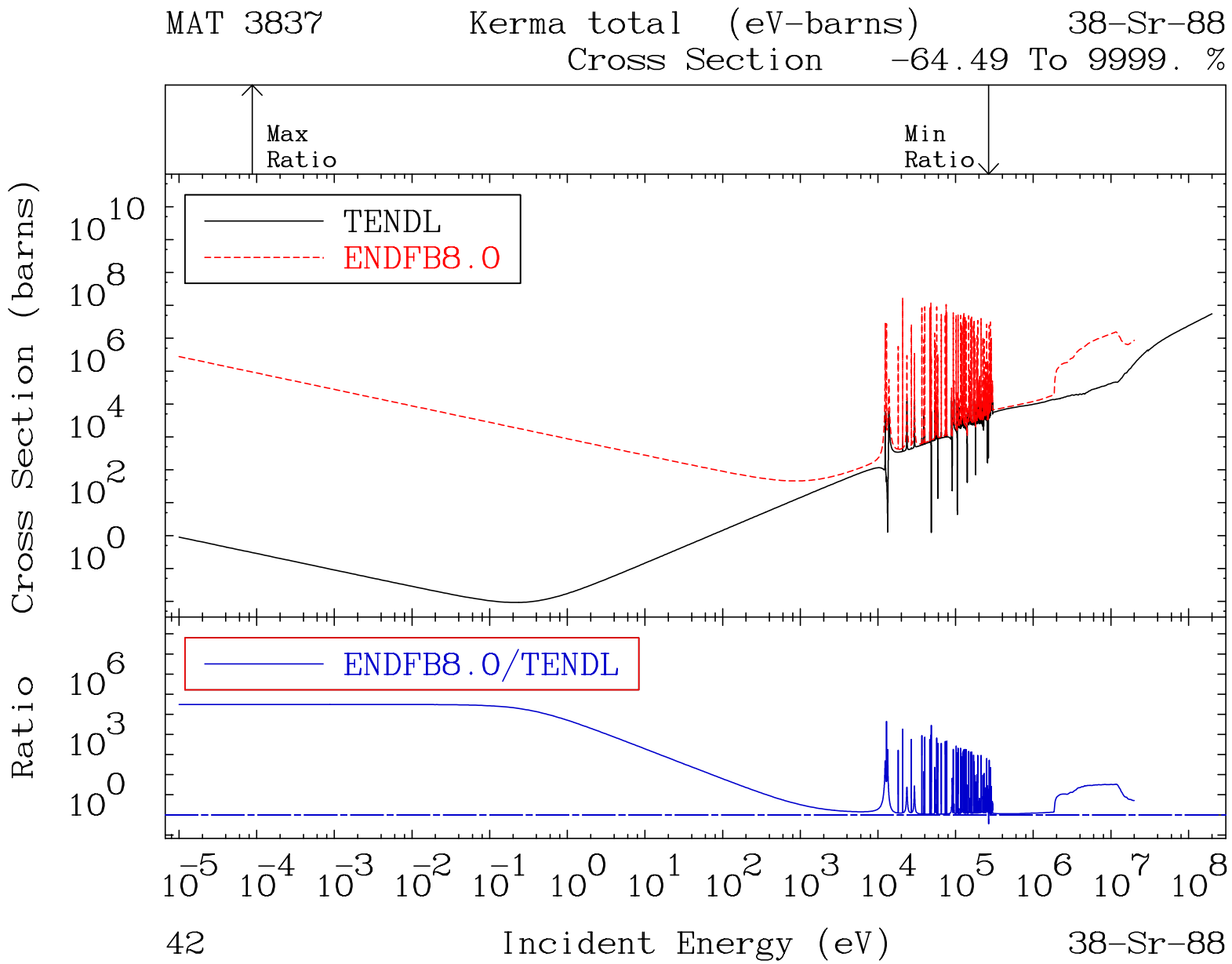

MAT 3837
Hydrogen Production
38-Sr-88
Cross Section -100.0 To 234.1 %
Min Ratio
Max Ratio
TENDL Threshold 4.5823 MeV
ENDFB8.0 Threshold 6.0013 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
38-Sr-88

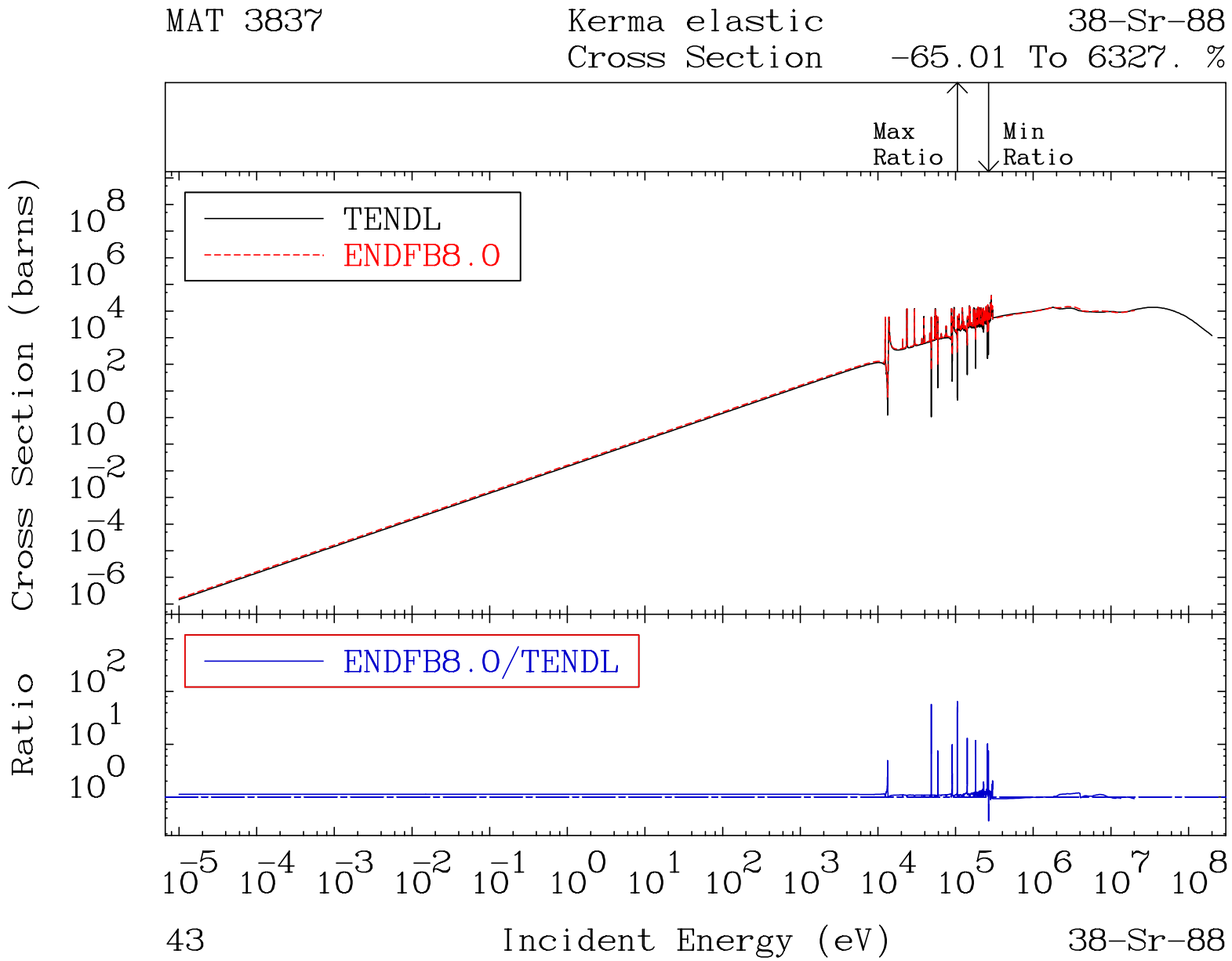

MAT 3837
Deuterium Production
38-Sr-88
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.4845 MeV
ENDFB8.0 Threshold 9.6500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
20
10
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
38
Incident Energy (eV)
38-Sr-88

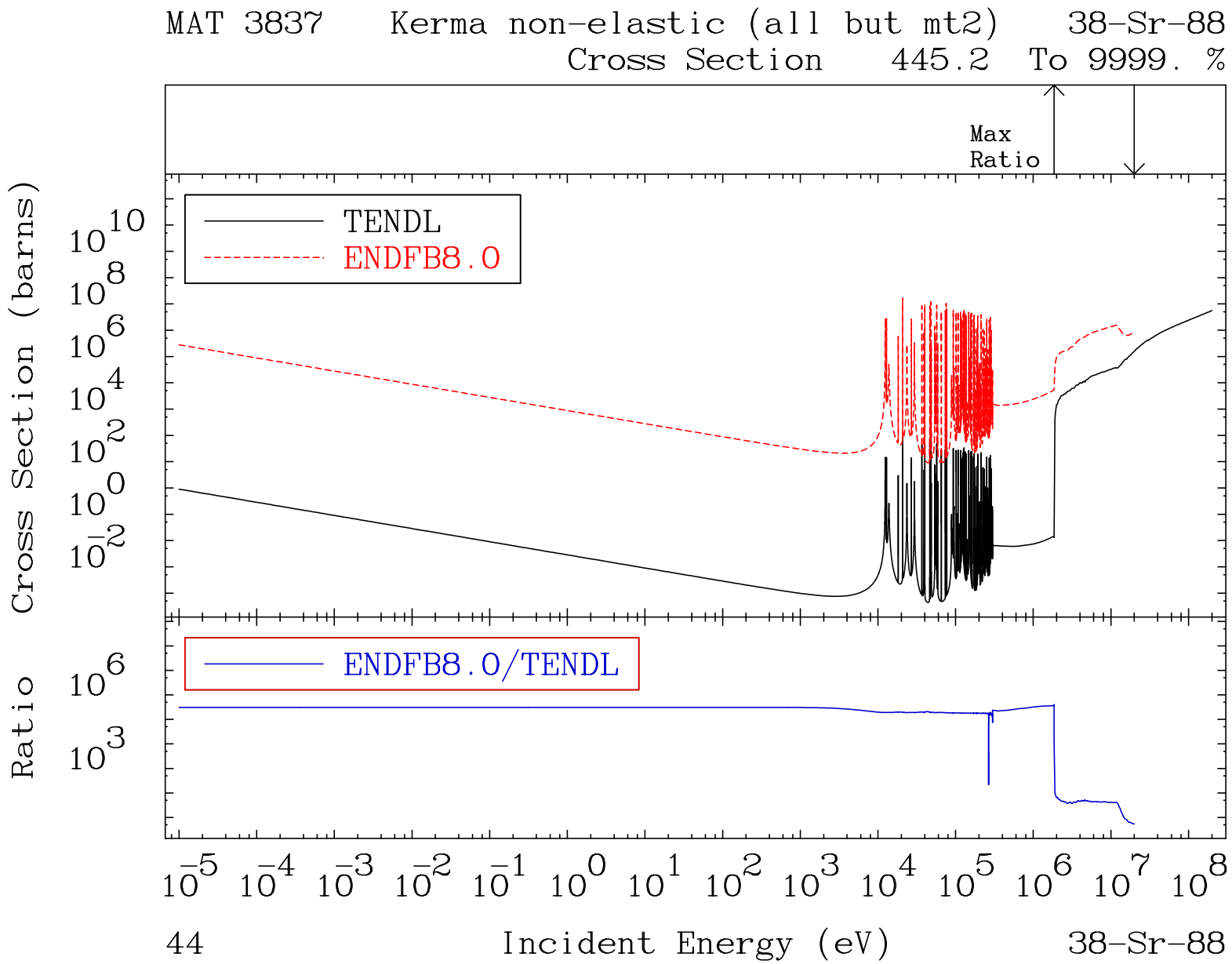

MAT 3837
Tritium Production
38-Sr-88
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.191 MeV
ENDFB8.0 Threshold 13.500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
200
0
2
3
4
5
6
7
8
9
10^8
2
39
Incident Energy (eV)
38-Sr-88

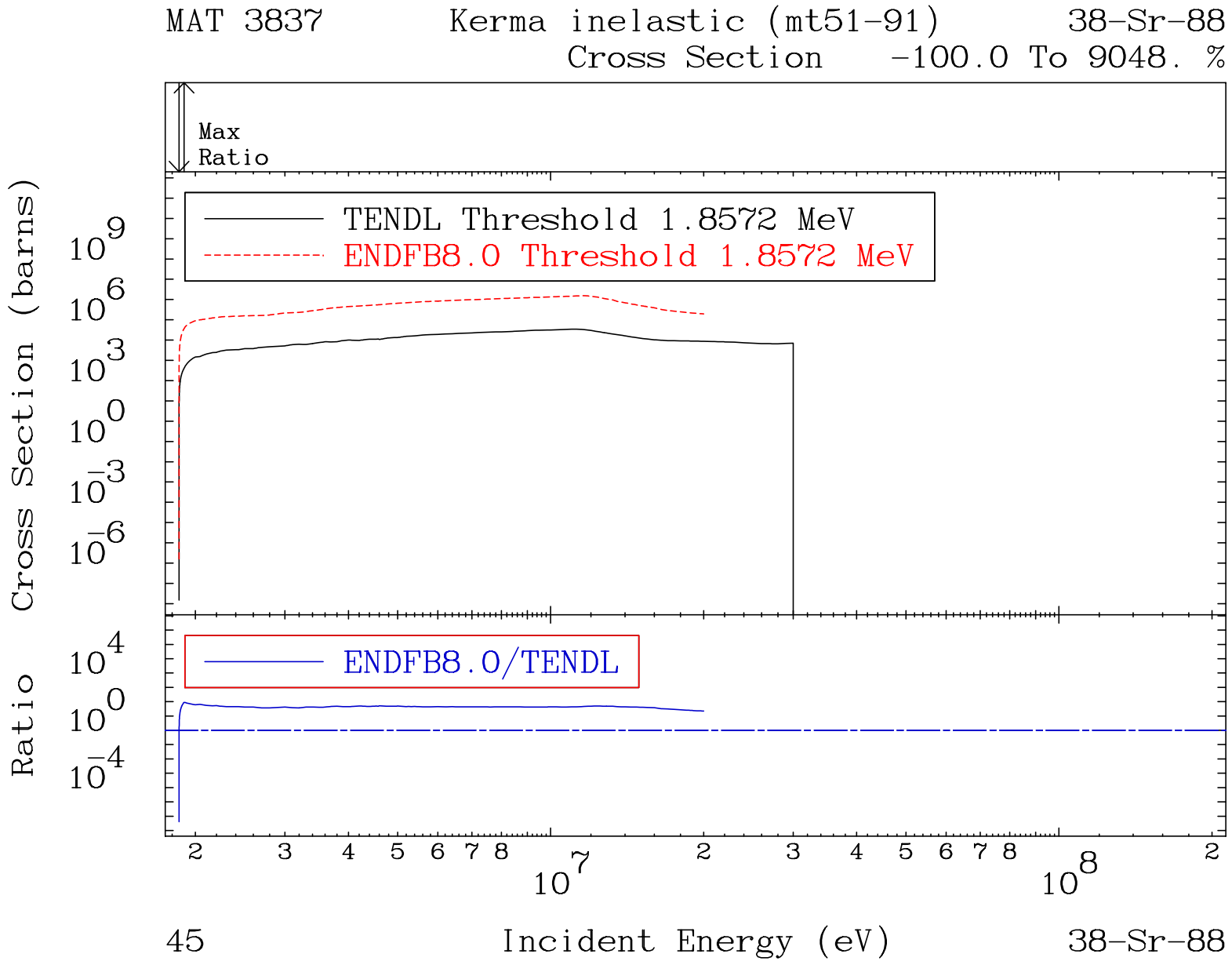

MAT 3837
He-3 Production
Cross Section
38-Sr-88
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.648 MeV
ENDFB8.0 Threshold 18.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
38-Sr-88

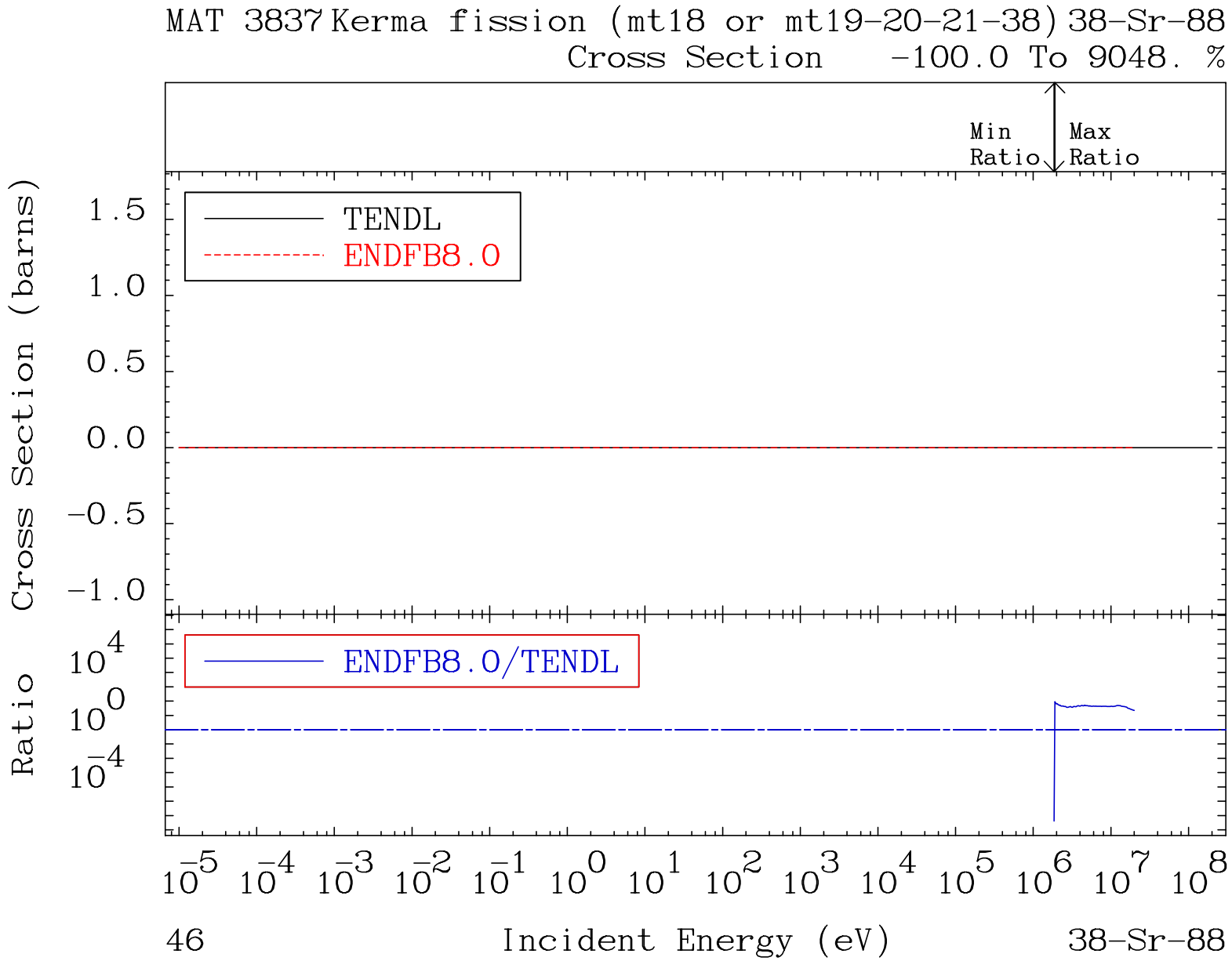

MAT 3837
He-4 Production
Cross Section
38-Sr-88
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 804.01 keV
ENDFB8.0 Threshold 2.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.8
0.4
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
41
Incident Energy (eV)
38-Sr-88

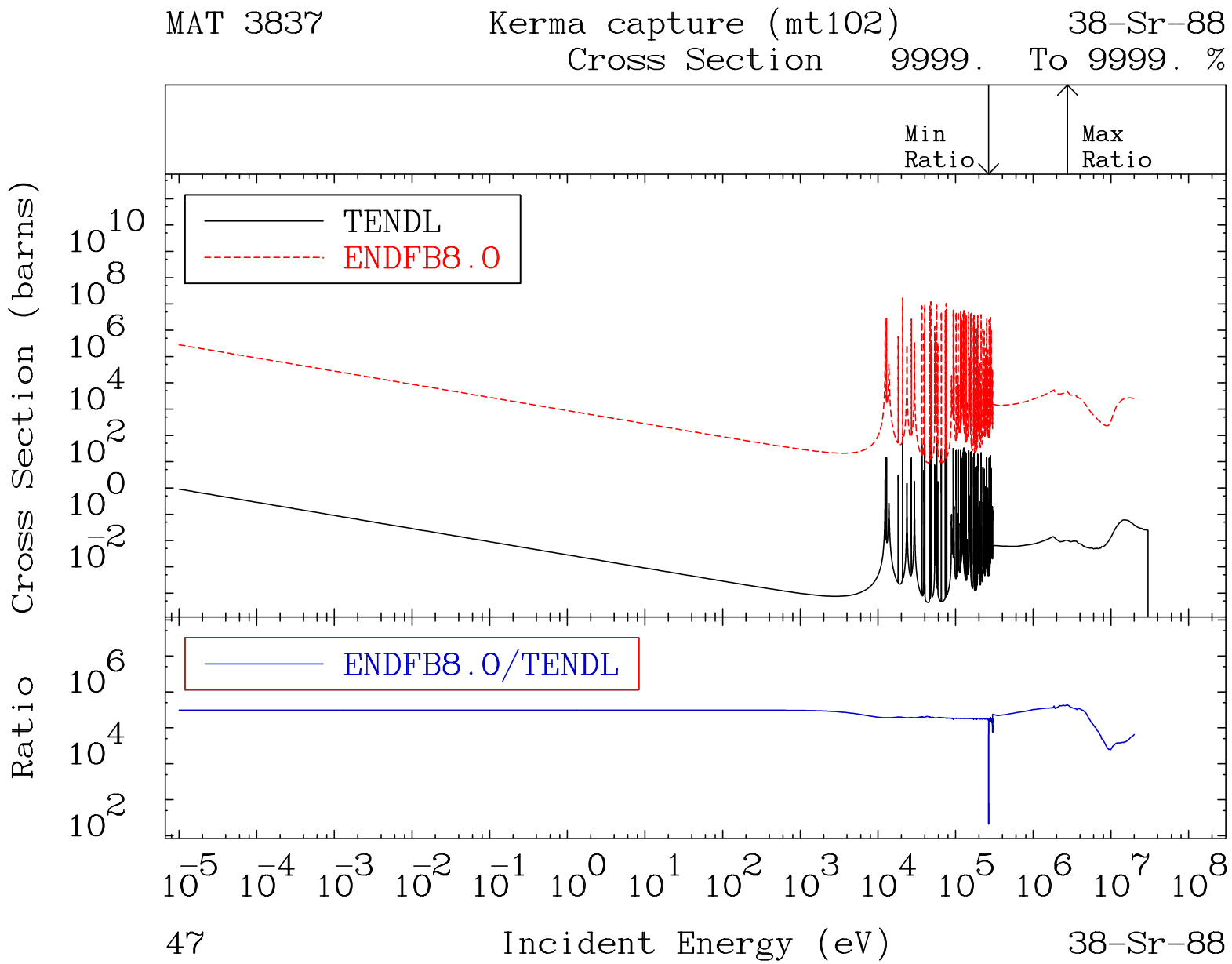

MAT 3837
Kerma total (eV-barns)
38-Sr-88
Cross Section -64.49 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
42
38-Sr-88

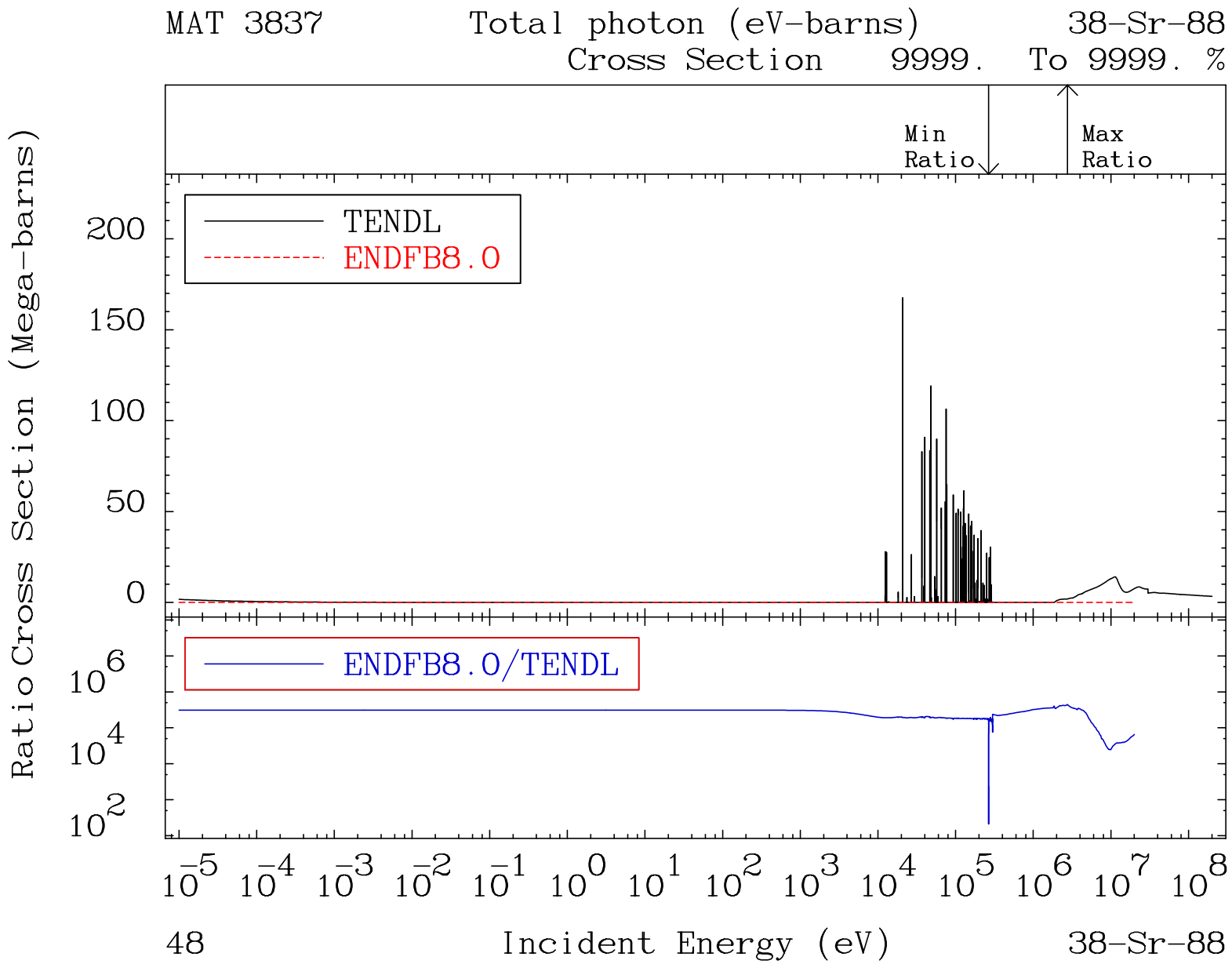

MAT 3837
Kerma elastic
Cross Section
38-Sr-88
-65.01 To 6327. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
38-Sr-88

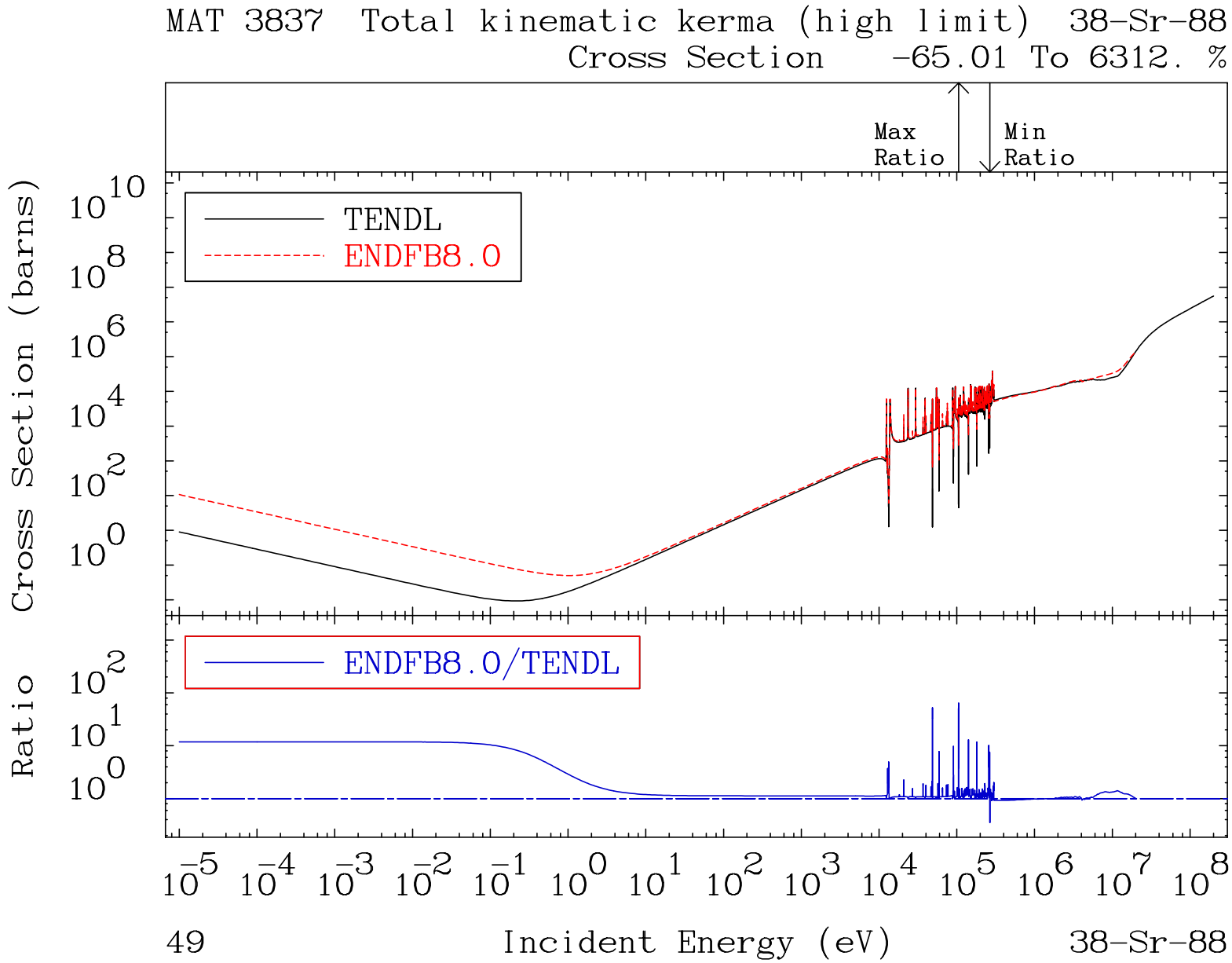

MAT 3837 Kerma non-elastic (all but mt2) 38-Sr-88
Cross Section 445.2 To 9999. %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
Ratio
ENDFB8.0/TENDL
Incident Energy (eV)
44
38-Sr-88

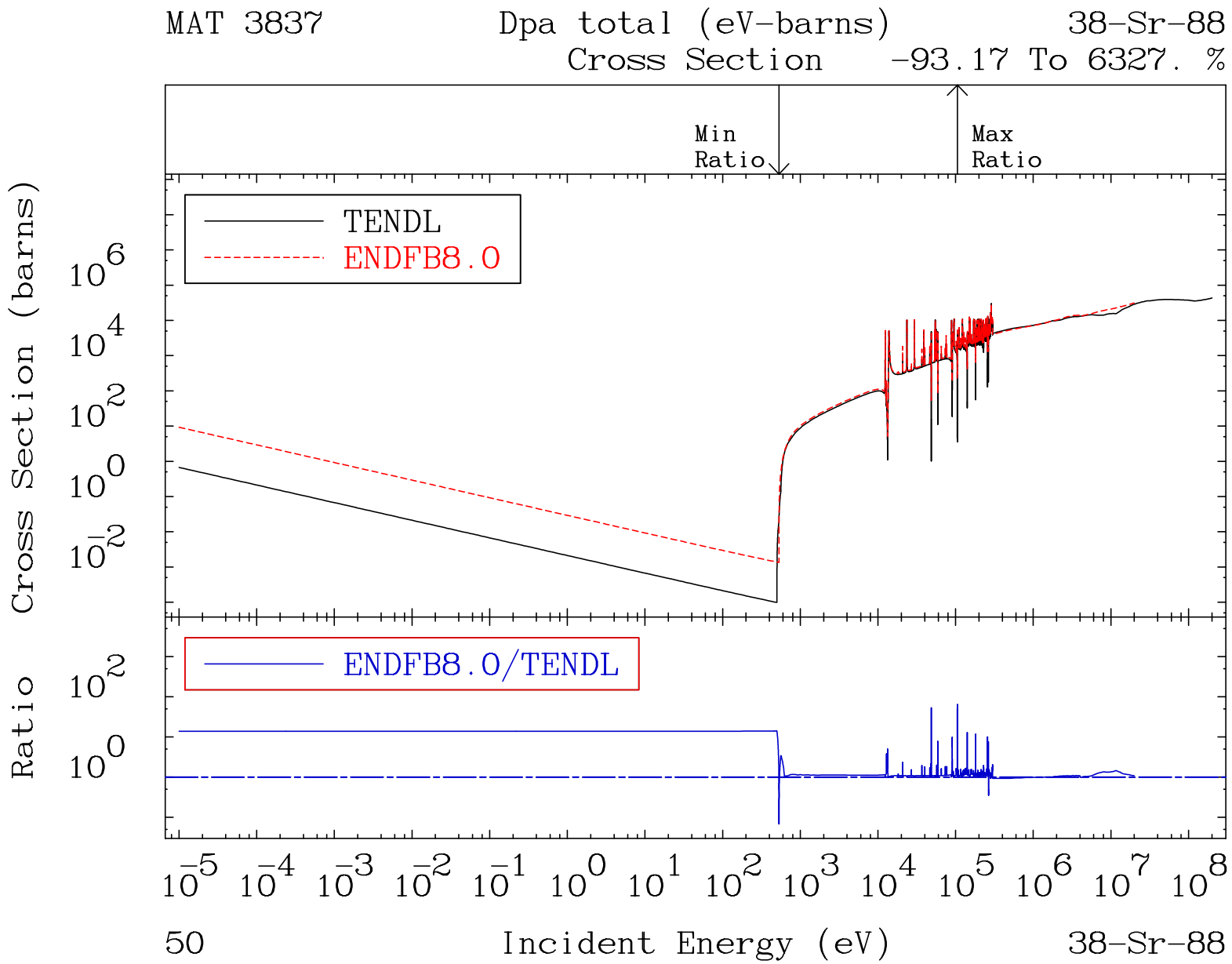

MAT 3837
Kerma inelastic (mt51-91)
38-Sr-88
Cross Section -100.0 To 9048. %
Max
Ratio
TENDL Threshold 1.8572 MeV
ENDFB8.0 Threshold 1.8572 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
38-Sr-88

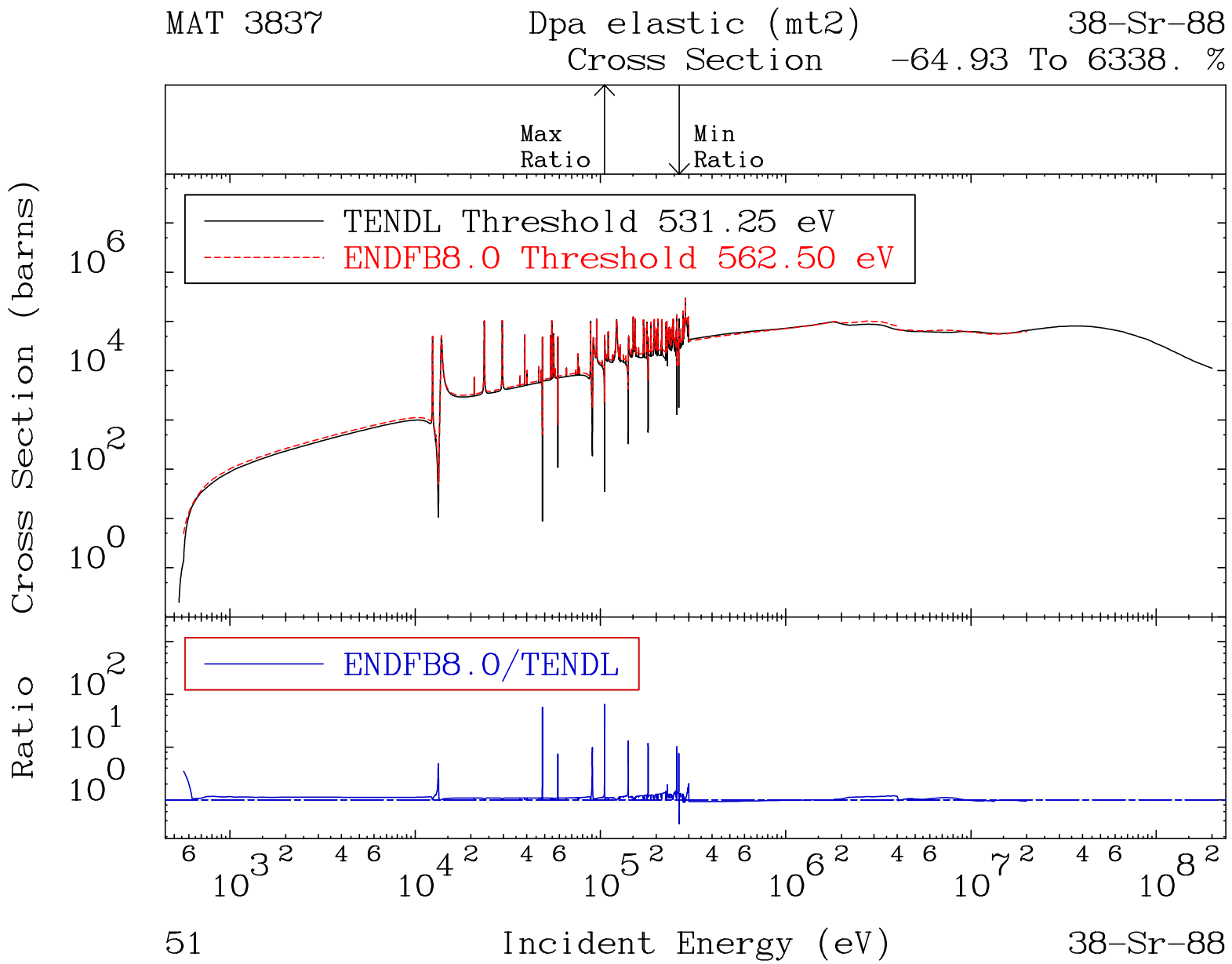

MAT 3837 Kerma fission (mt18 or mt19-20-21-38) 38-Sr-88
Cross Section -100.0 To 9048. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{4}
10^{0}
10^{-4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
46
Incident Energy (eV)
38-Sr-88

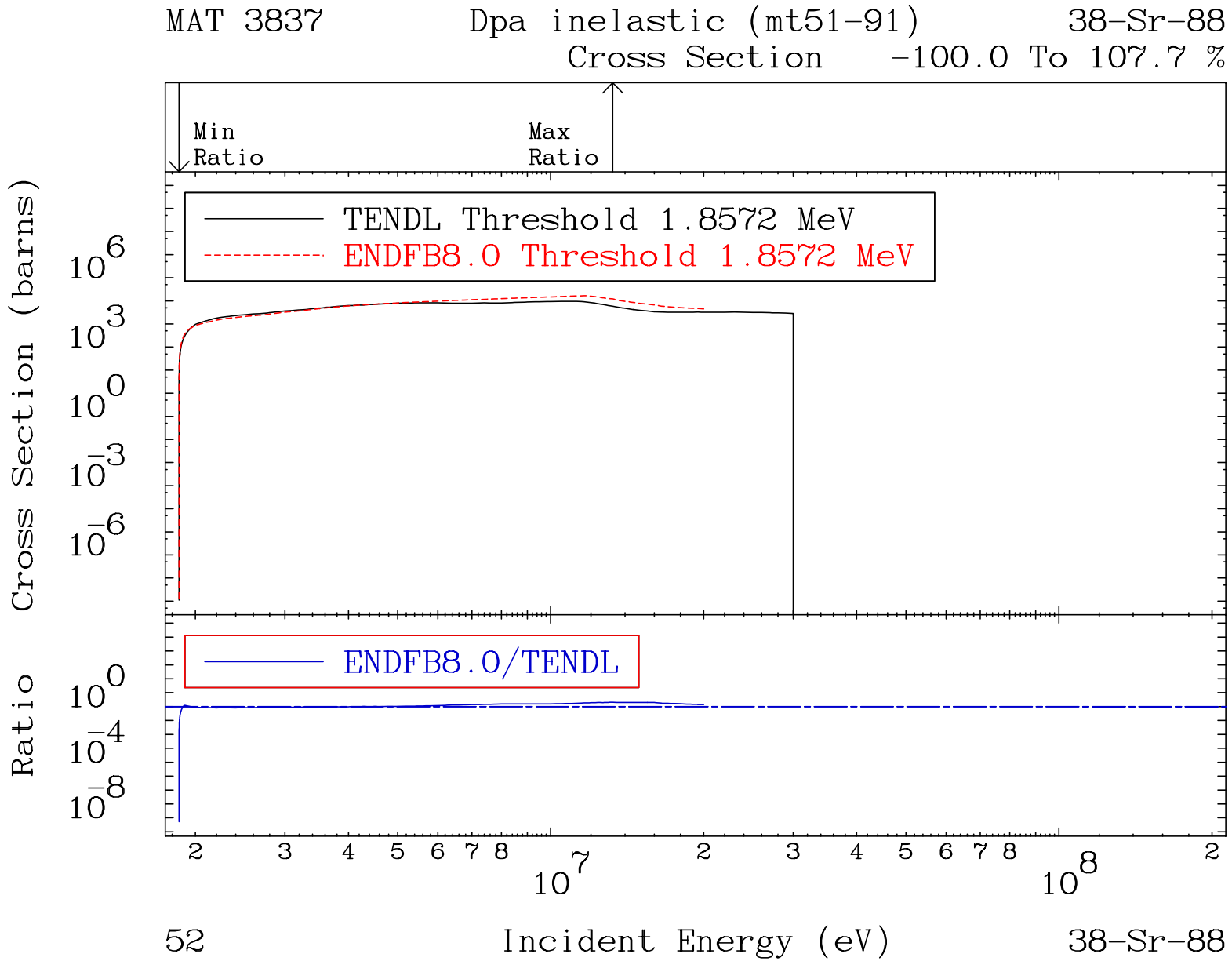

MAT 3837
Kerma capture (mt102)
38-Sr-88
Cross Section 9999. To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
47
38-Sr-88

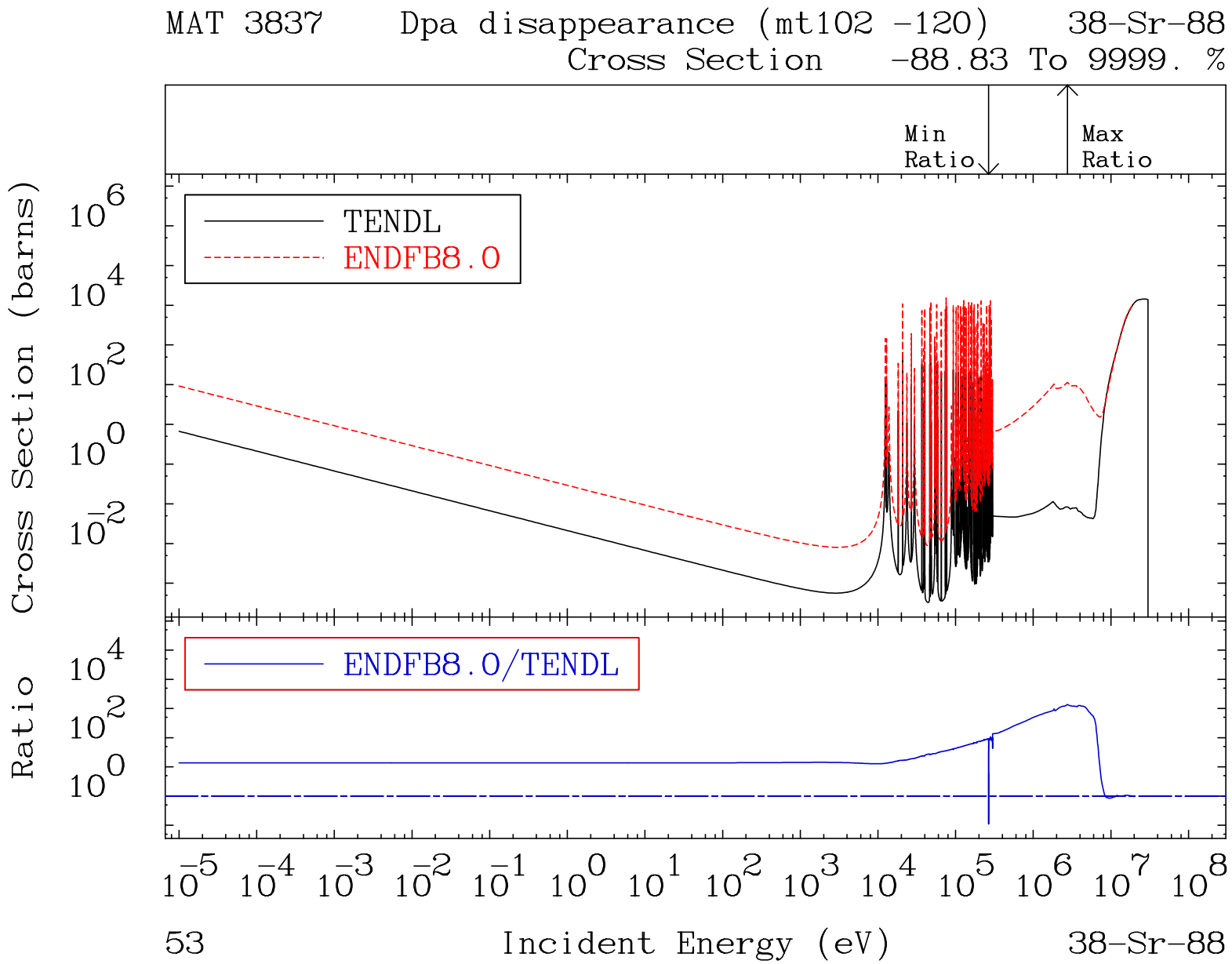

MAT 3837
Total photon (eV-barns)
38-Sr-88
Cross Section 9999. To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (Mega-barns)
200
150
100
50
0
10^6
10^4
10^2
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
48
Incident Energy (eV)
38-Sr-88


MAT 3837 Total kinematic kerma (high limit) 38-Sr-88
Cross Section -65.01 To 6312. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
49
38-Sr-88


MAT 3837
Dpa total (eV-barns)
38-Sr-88
Cross Section -93.17 To 6327. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
50
38-Sr-88


MAT 3837
Dpa elastic (mt2)
Cross Section
38-Sr-88
-64.93 To 6338. %
Max Ratio
Min Ratio
TENDL Threshold 531.25 eV
ENDFB8.0 Threshold 562.50 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
38-Sr-88


MAT 3837
Dpa inelastic (mt51-91)
38-Sr-88
Cross Section -100.0 To 107.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.8572 MeV
ENDFB8.0 Threshold 1.8572 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
38-Sr-88


MAT 3837 Dpa disappearance (mt102 -120) 38-Sr-88
Cross Section -88.83 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
53
38-Sr-88