Program Complot
(Version 2021-1)
by
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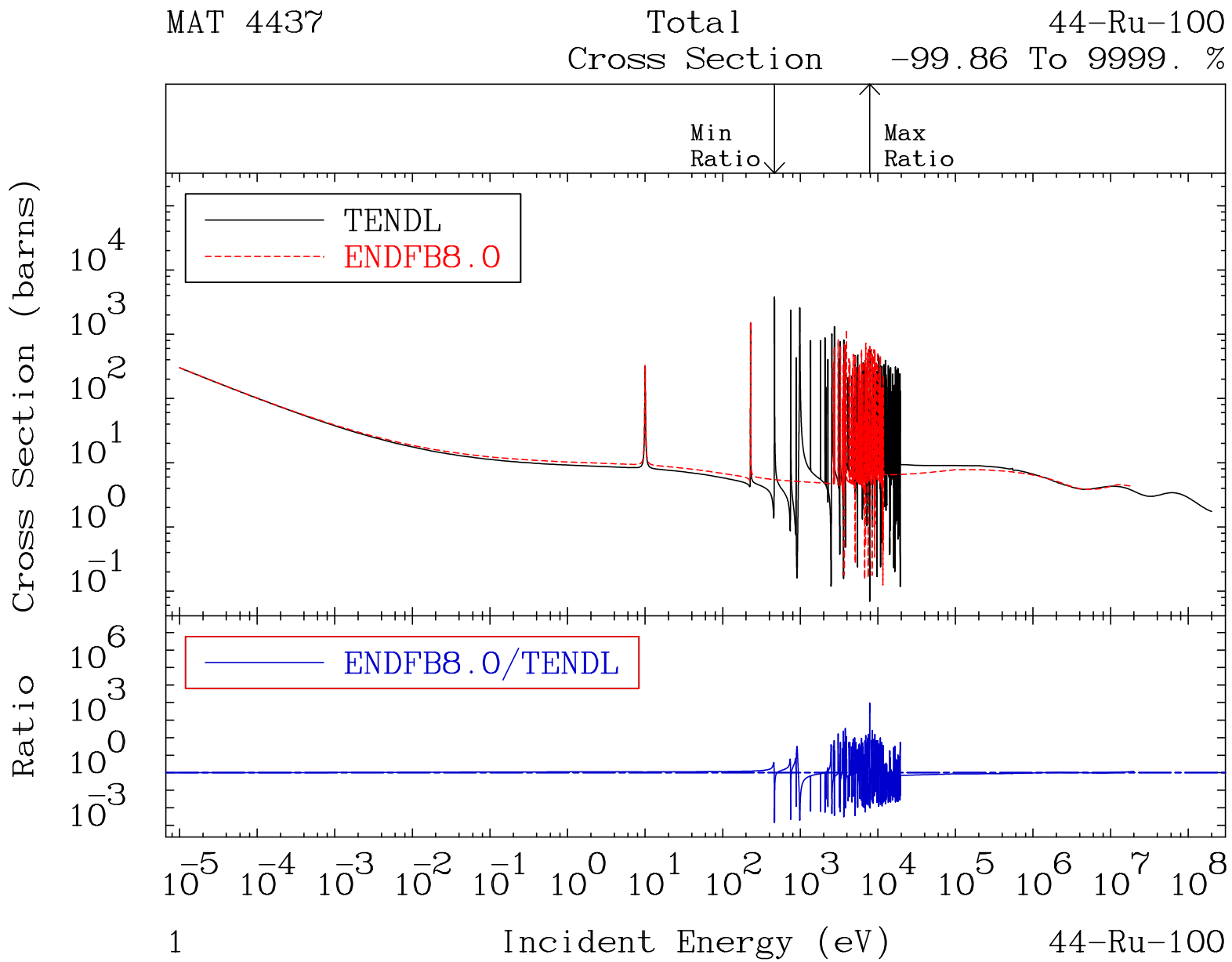
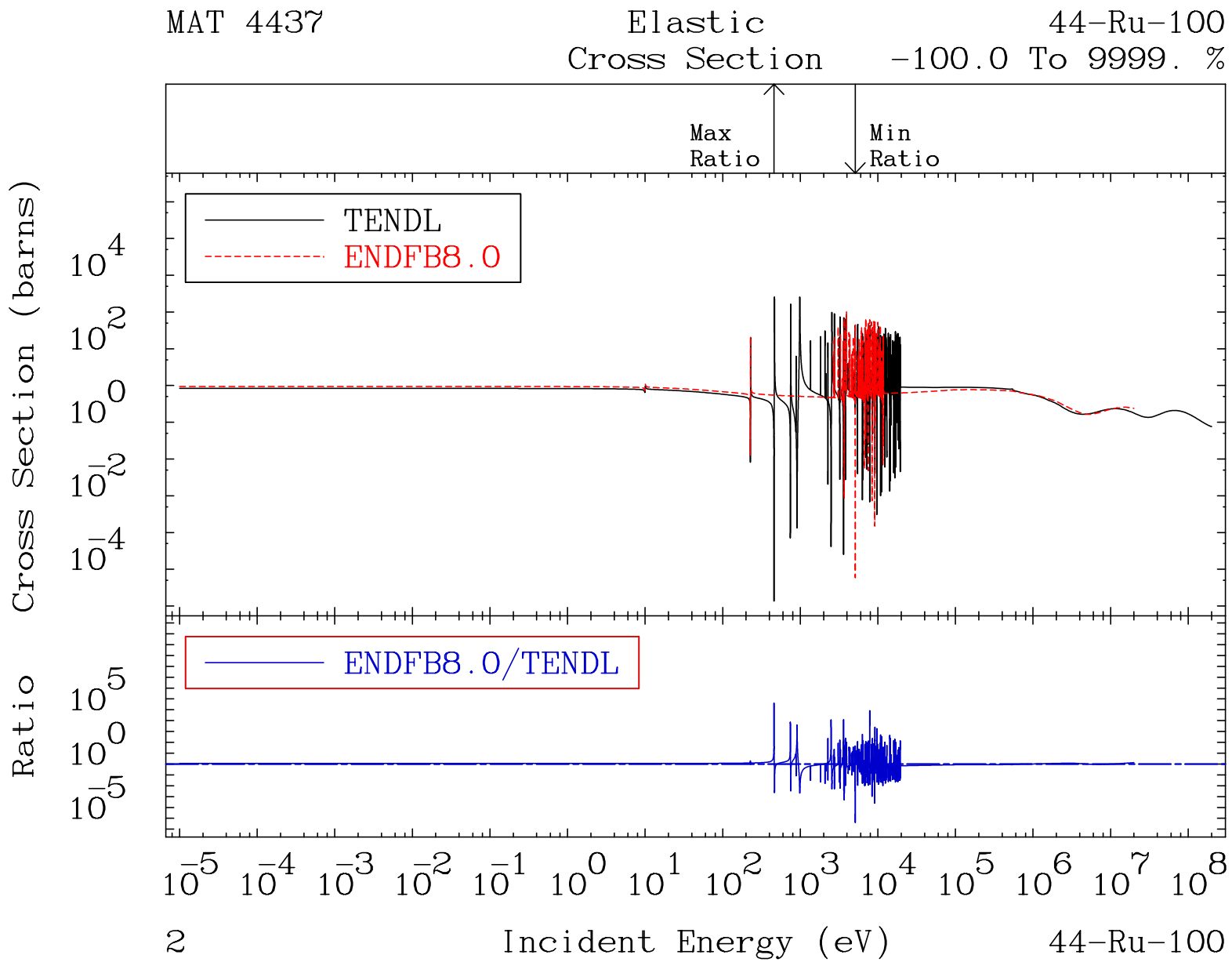
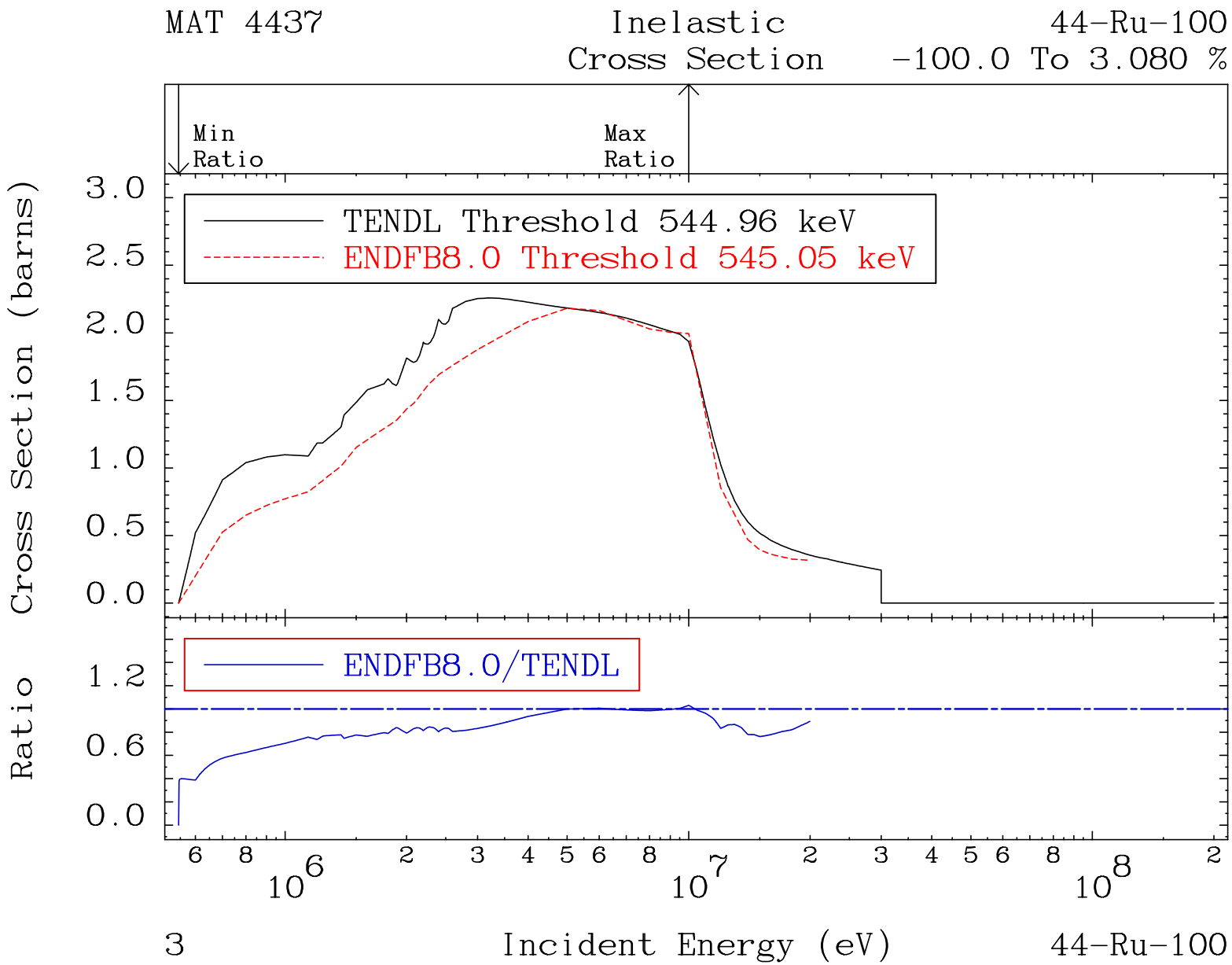
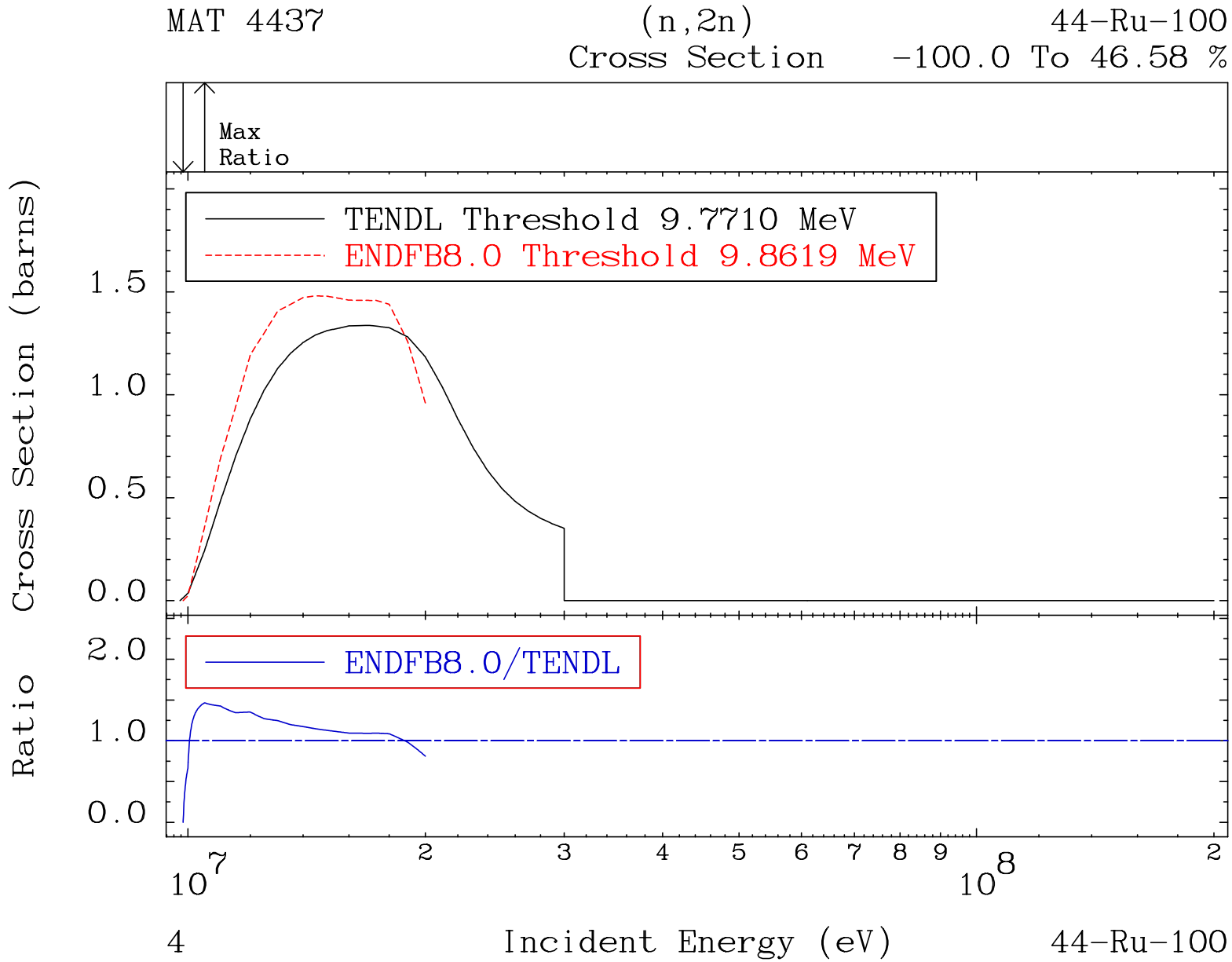
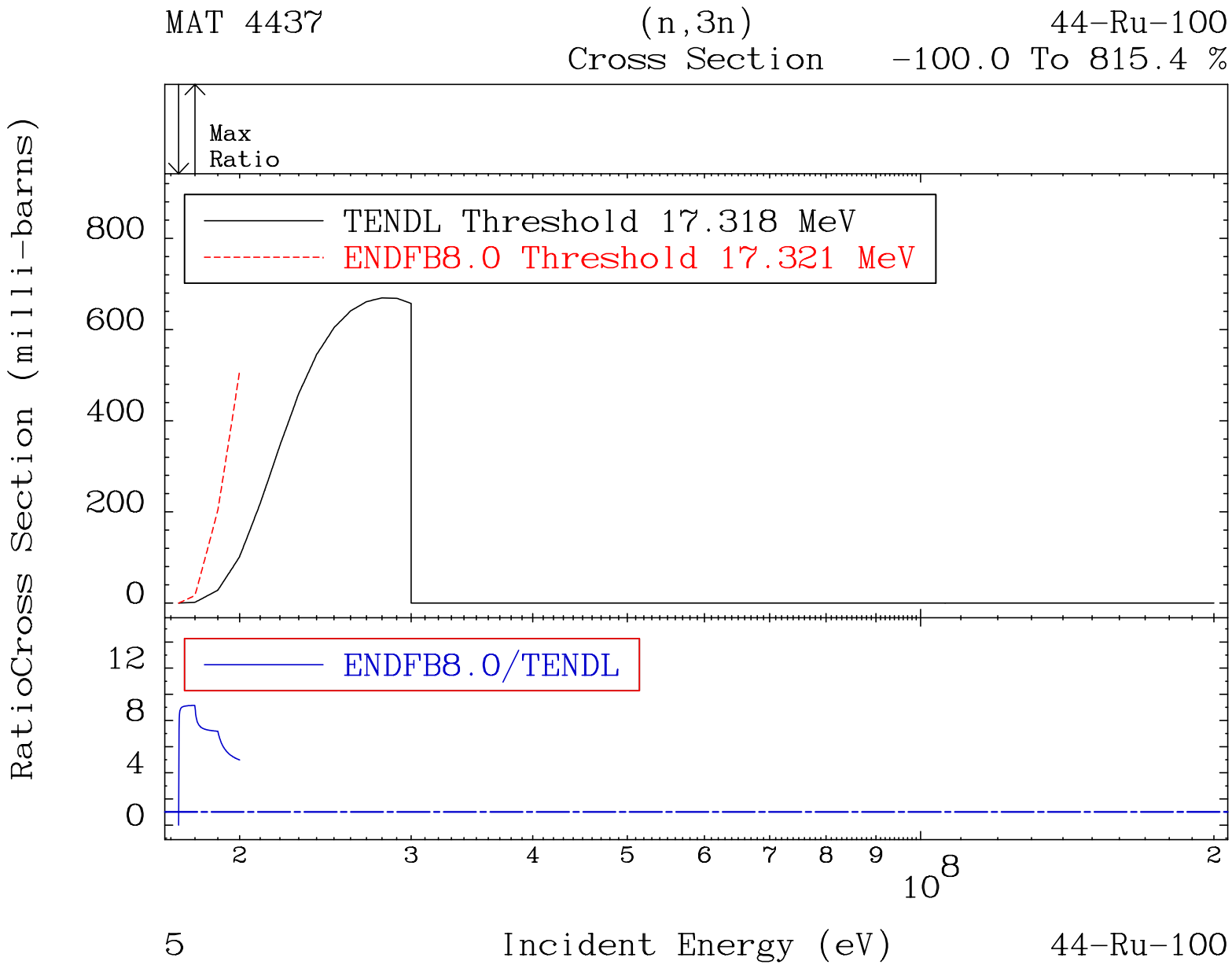
Press Mouse Button to Start

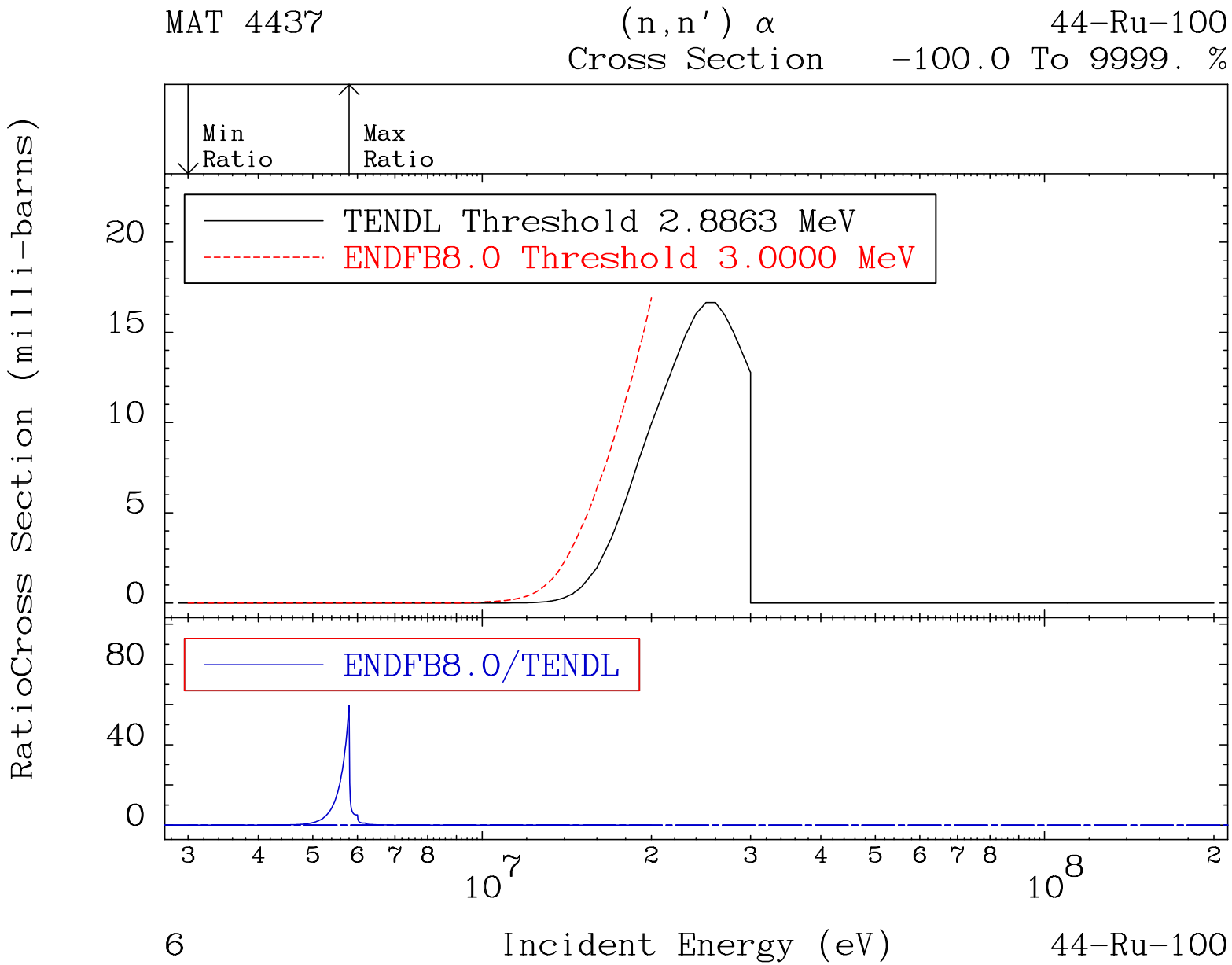

MAT 4437
Total
Cross Section
44-Ru-100
-99.86 To 9999. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
44-Ru-100

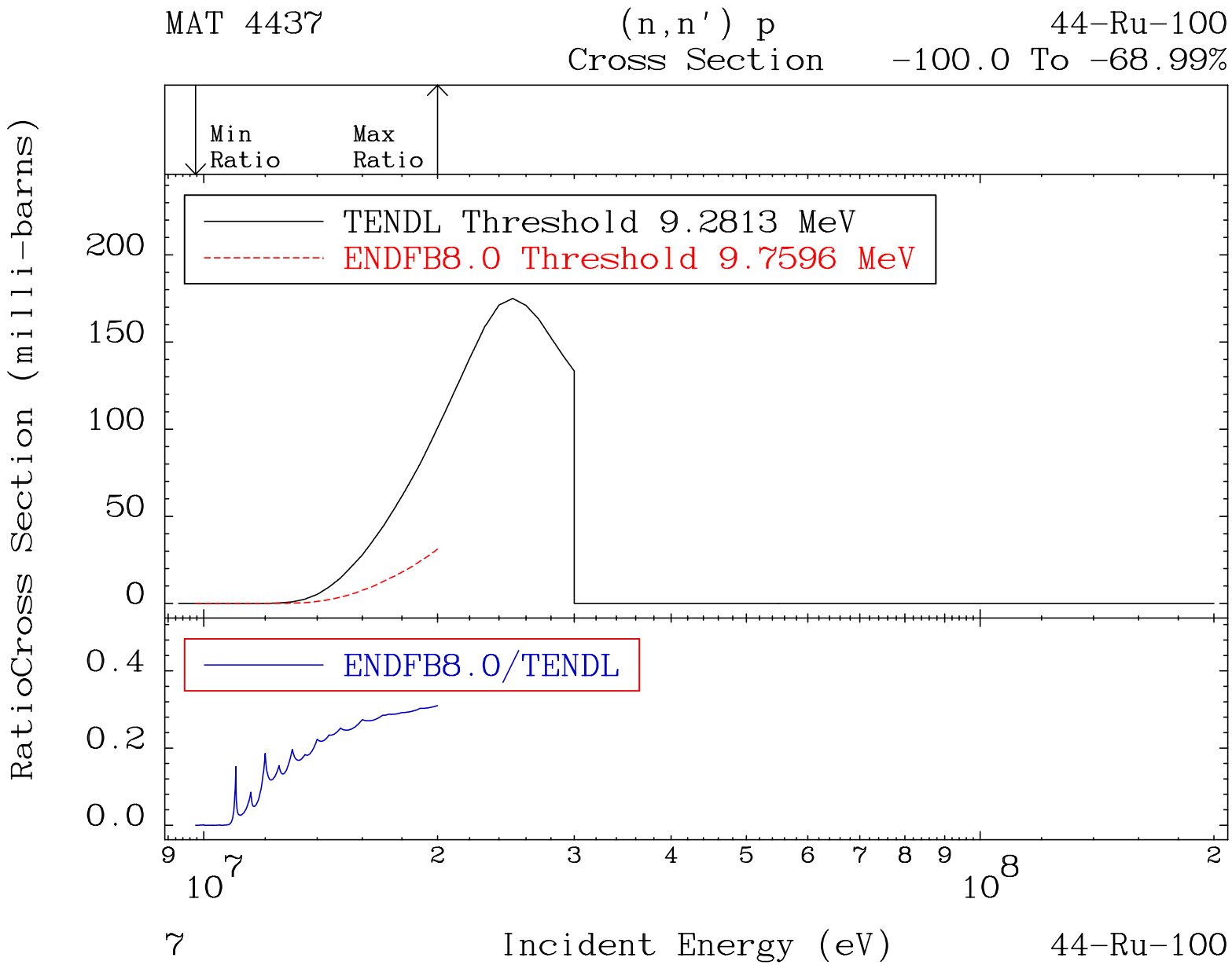

MAT 4437
Elastic
Cross Section
44-Ru-100
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
44-Ru-100

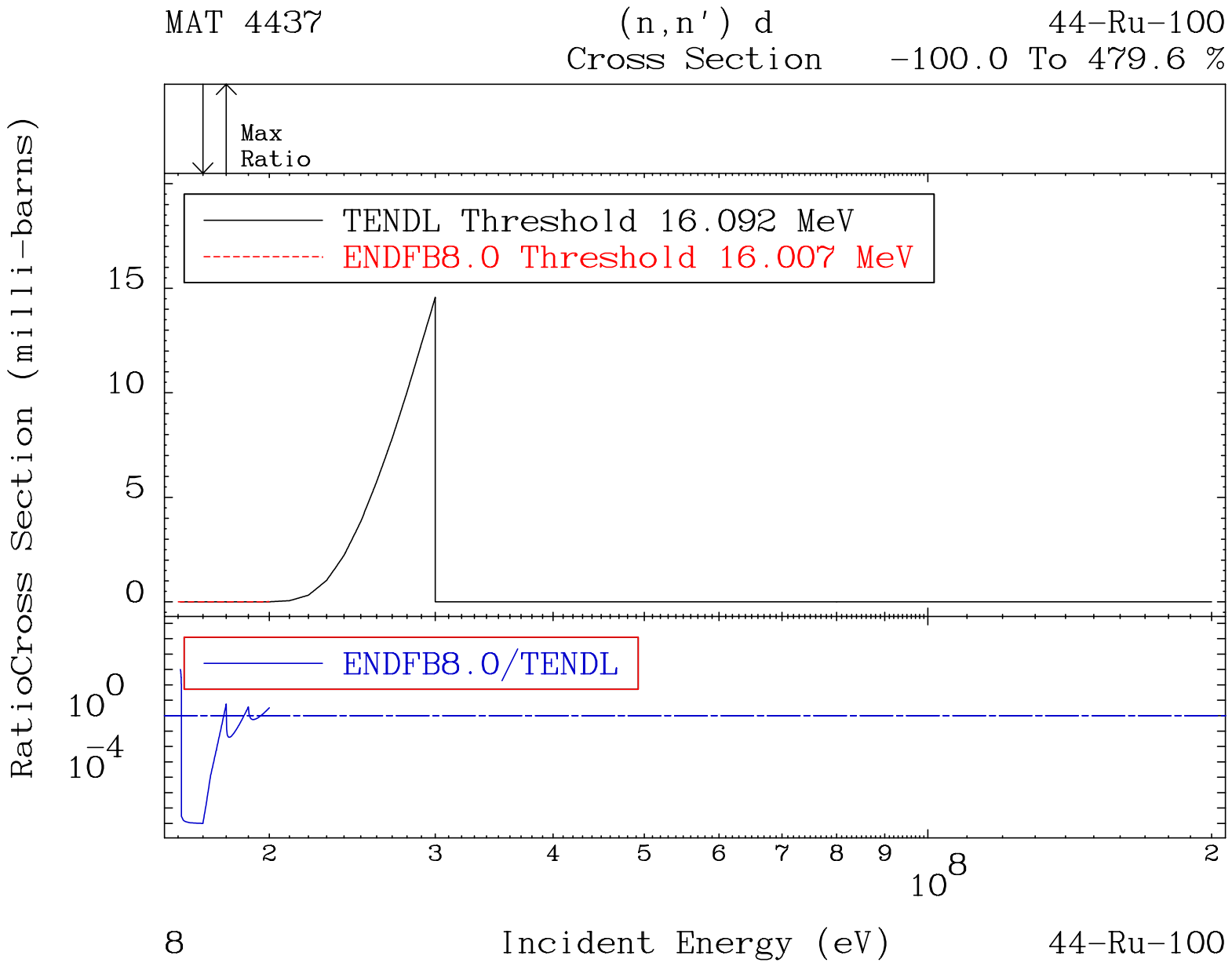

MAT 4437
Inelastic
Cross Section
44-Ru-100
-100.0 To 3.080 %
Min
Ratio
Max
Ratio
TENDL Threshold 544.96 keV
ENDFB8.0 Threshold 545.05 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
44-Ru-100

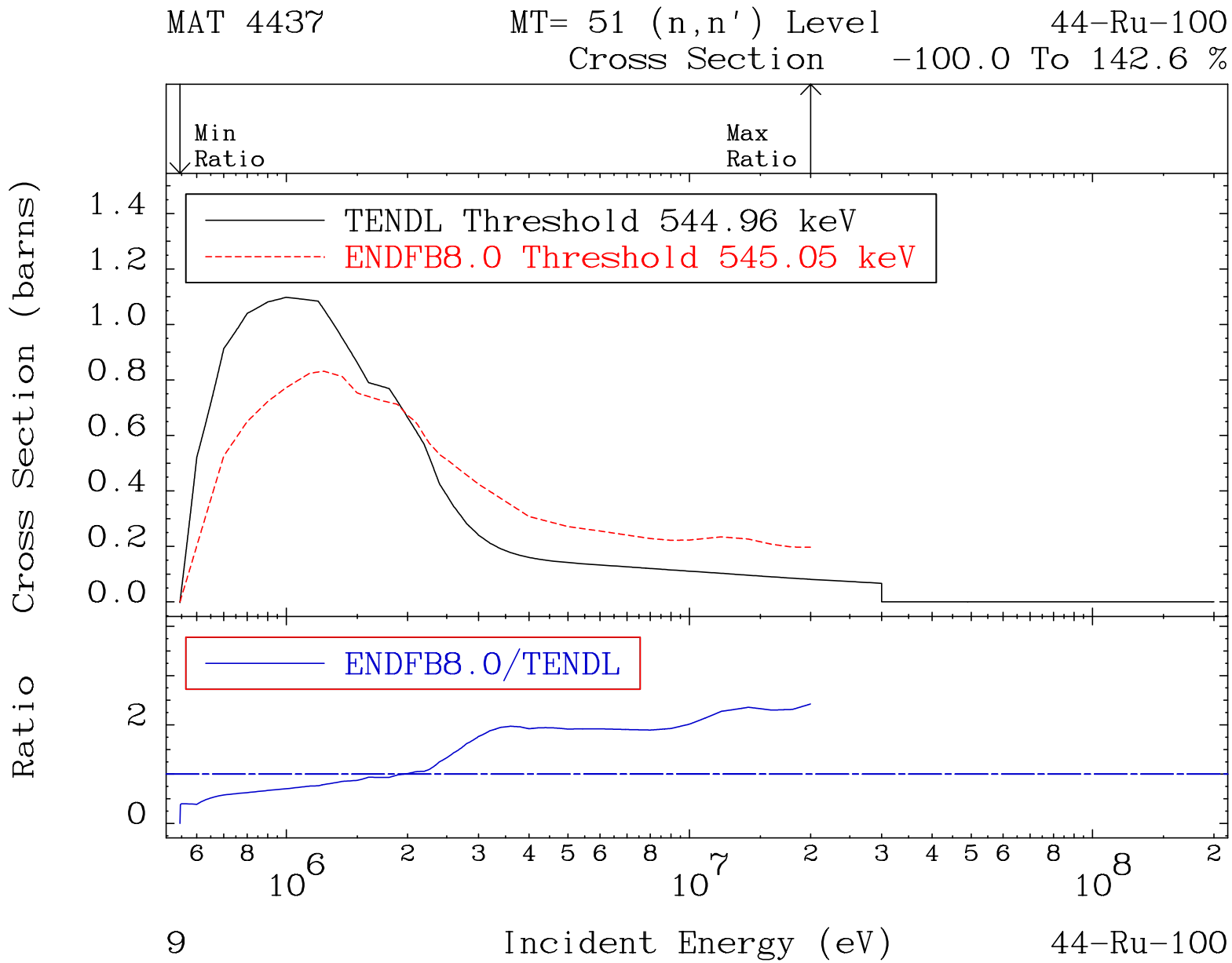

MAT 4437
(n,2n)
Cross Section
44-Ru-100
-100.0 To 46.58 %
Max
Ratio
TENDL Threshold 9.7710 MeV
ENDFB8.0 Threshold 9.8619 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
2.0
1.0
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
44-Ru-100

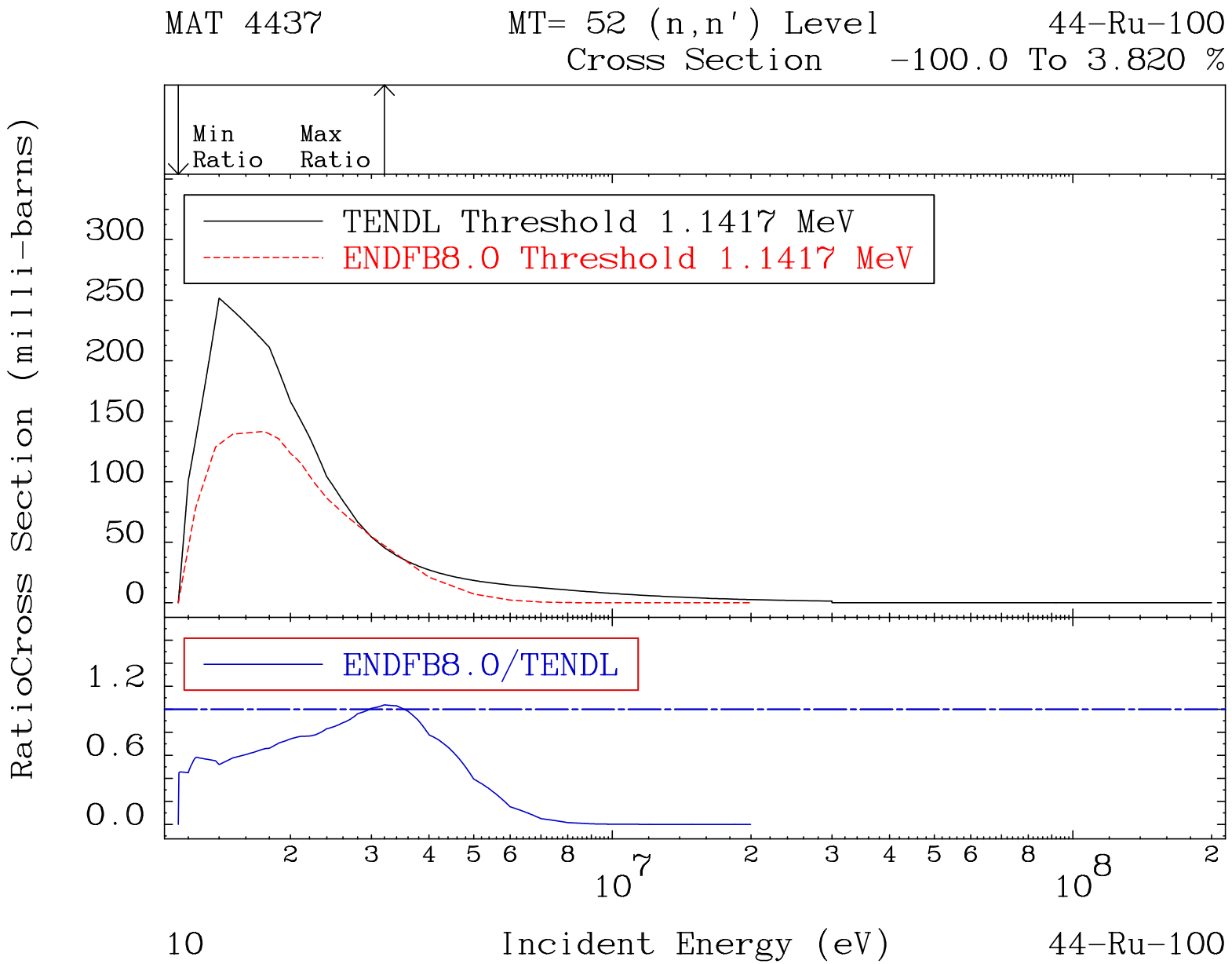

MAT 4437
(n,3n)
Cross Section
44-Ru-100
-100.0 To 815.4 %
Max
Ratio
TENDL Threshold 17.318 MeV
ENDFB8.0 Threshold 17.321 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
12
8
4
0
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
44-Ru-100

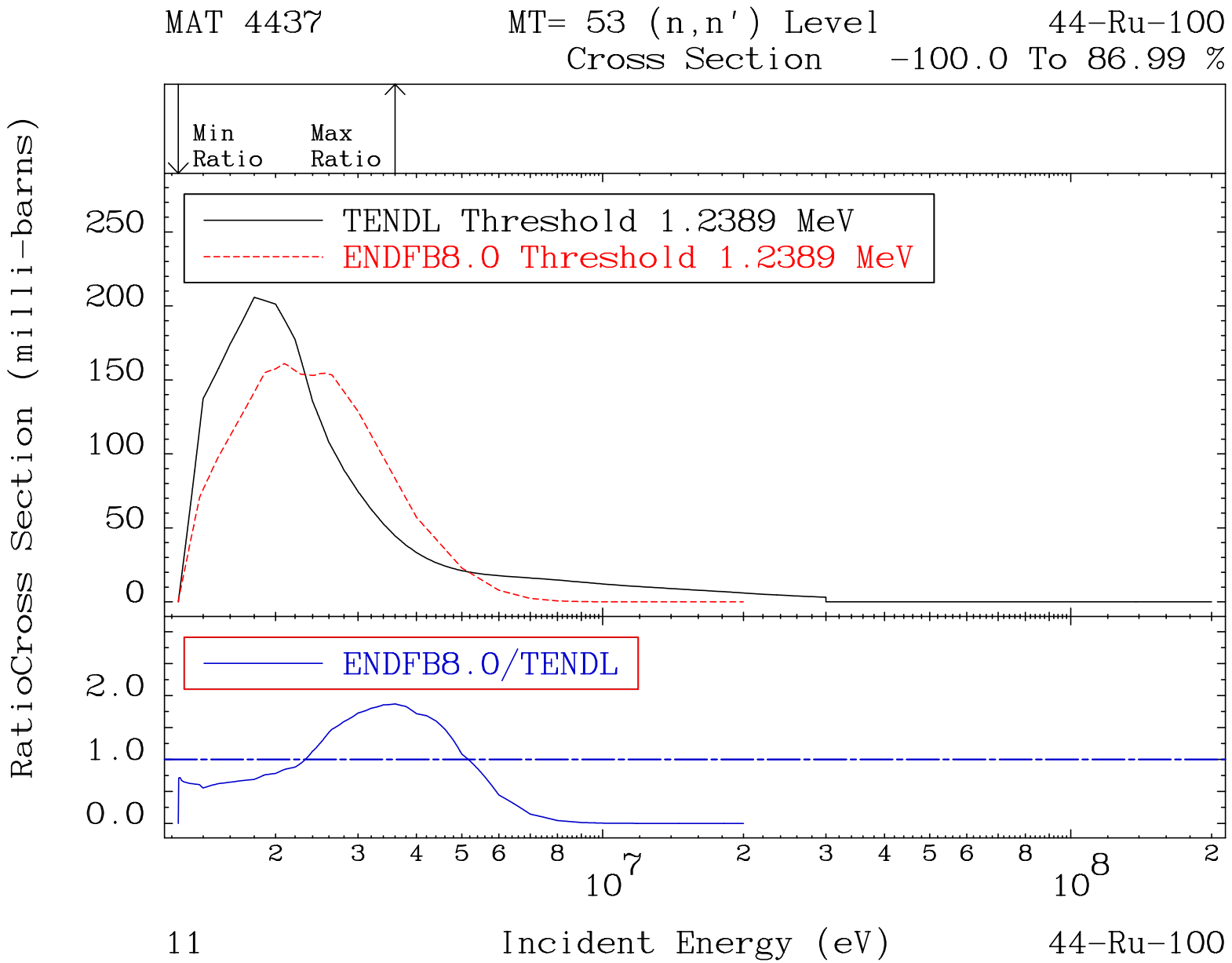

MAT 4437
(n,n') α
Cross Section
44-Ru-100
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8863 MeV
ENDFB8.0 Threshold 3.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
44-Ru-100

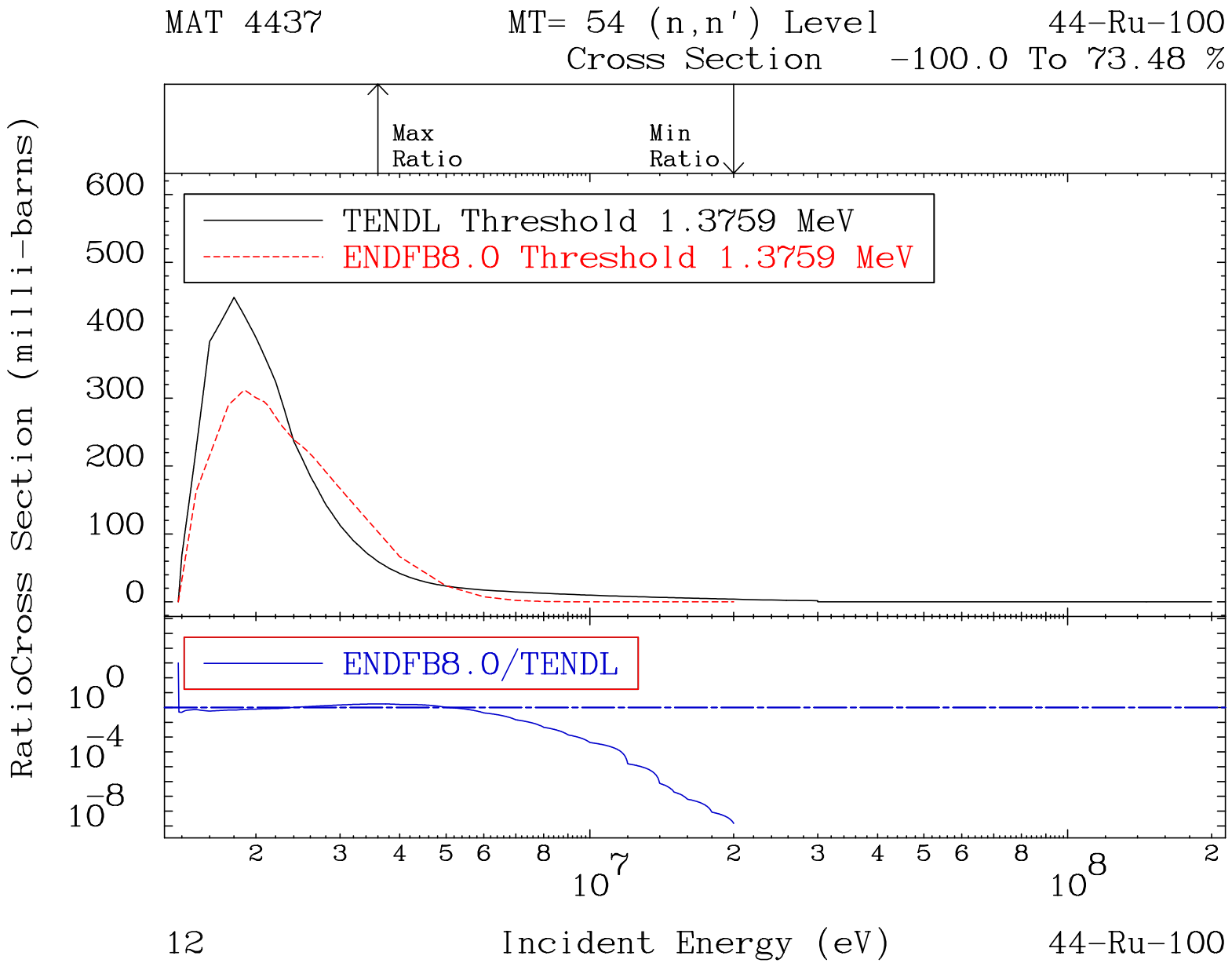

MAT 4437
(n,n') p
Cross Section
44-Ru-100
-100.0 To -68.99%
Min Ratio
Max Ratio
TENDL Threshold 9.2813 MeV
ENDFB8.0 Threshold 9.7596 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
0.4
0.2
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
44-Ru-100

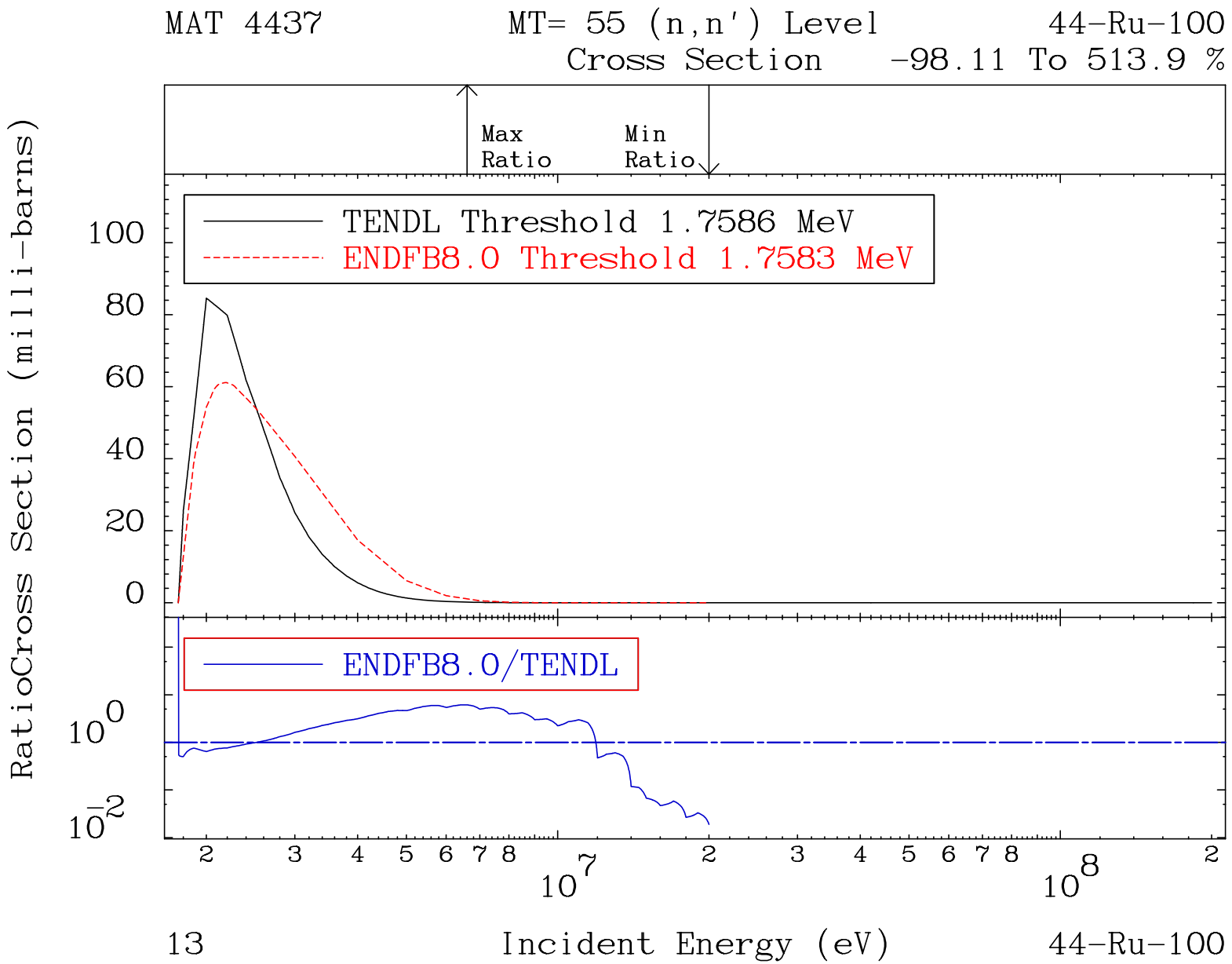

MAT 4437
(n,n') d
Cross Section
44-Ru-100
-100.0 To 479.6 %
Max
Ratio
TENDL Threshold 16.092 MeV
ENDFB8.0 Threshold 16.007 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
10^{0}
10^{-4}
2
3
4
5
6
7
8
9
10^{8}
2
8
Incident Energy (eV)
44-Ru-100

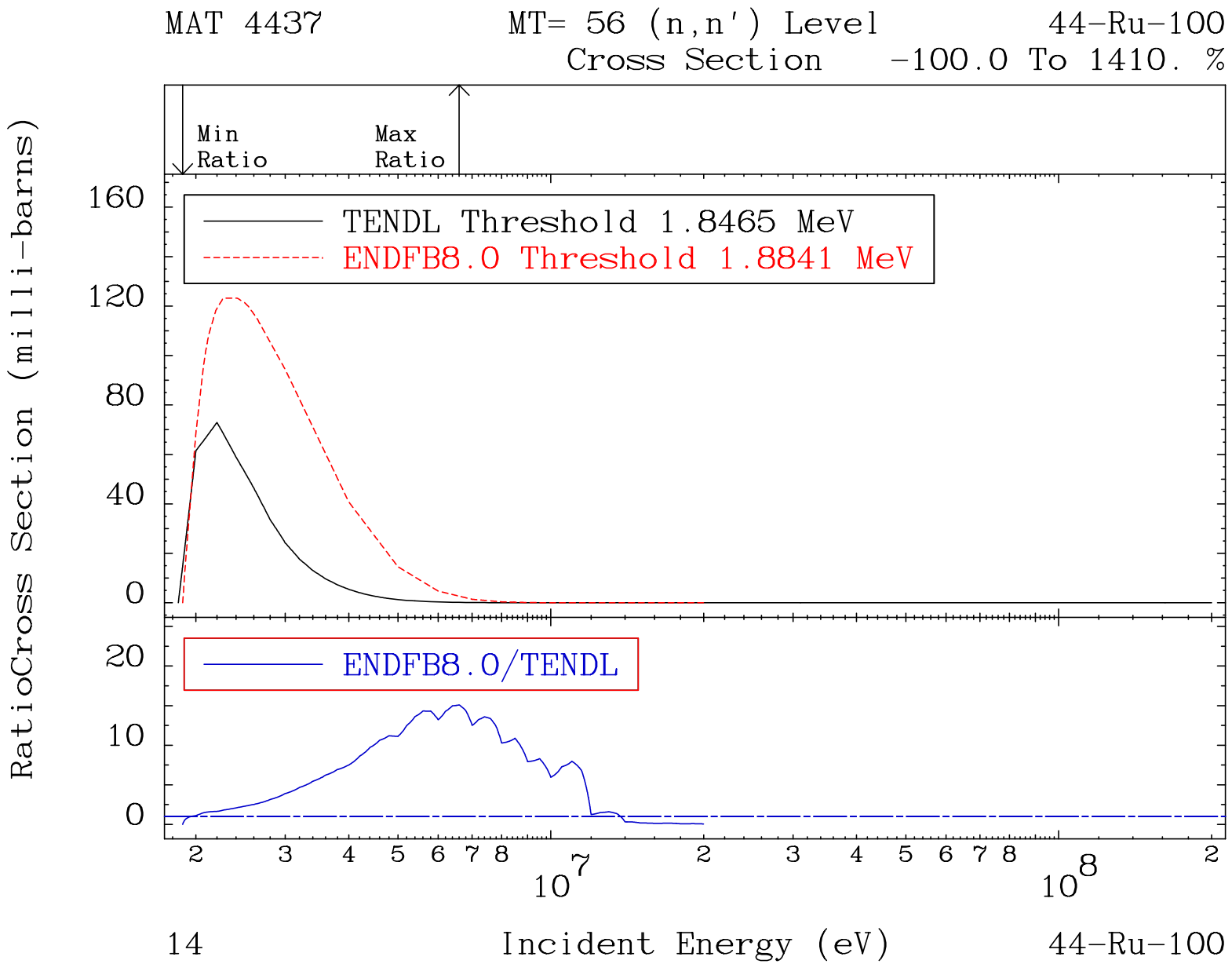

MAT 4437
MT= 51 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 142.6 %
Min Ratio
Max Ratio
TENDL Threshold 544.96 keV
ENDFB8.0 Threshold 545.05 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
9
44-Ru-100

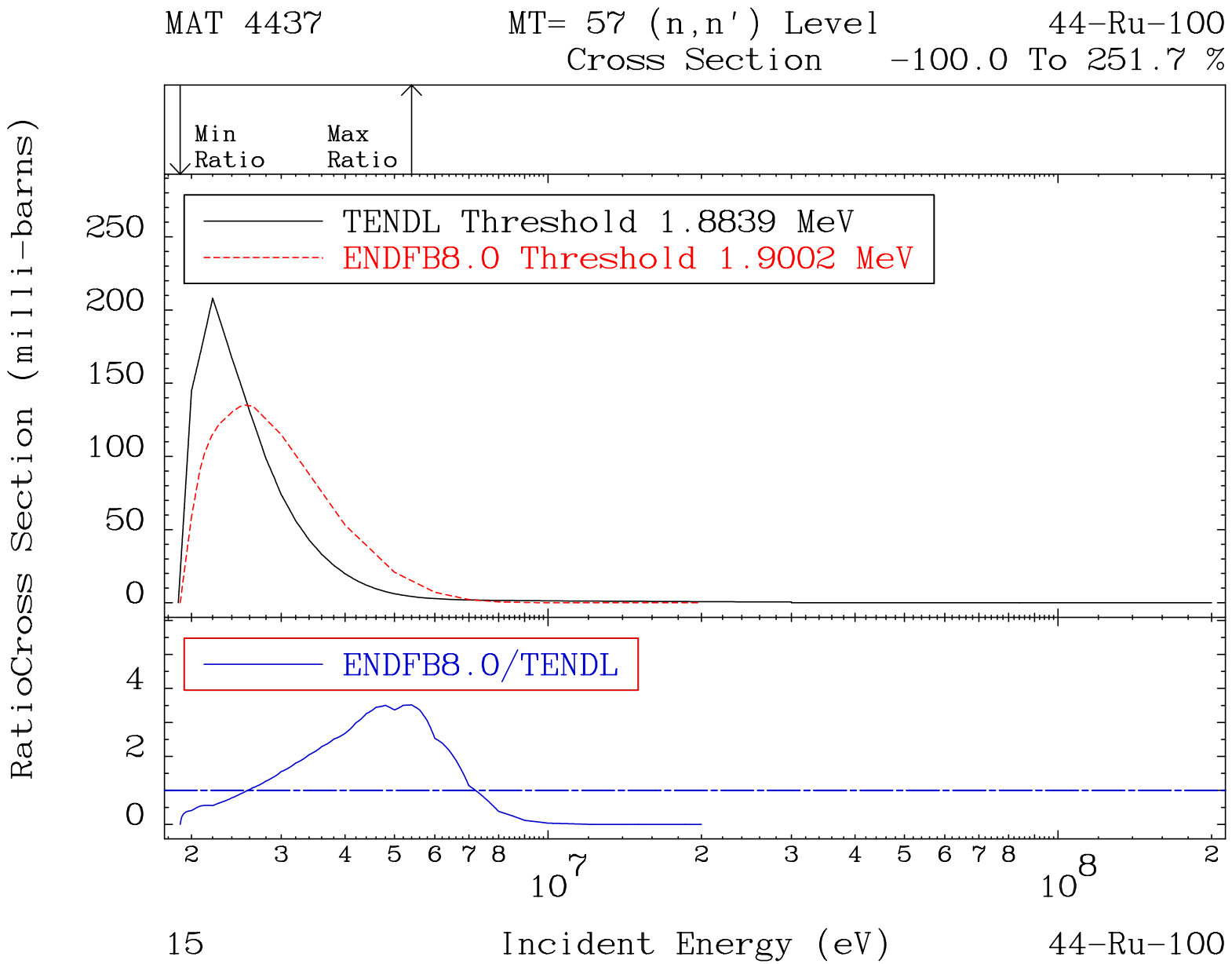

MAT 4437
MT= 52 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 3.820 %
Min Ratio
Max Ratio
TENDL Threshold 1.1417 MeV
ENDFB8.0 Threshold 1.1417 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
10
Incident Energy (eV)
44-Ru-100

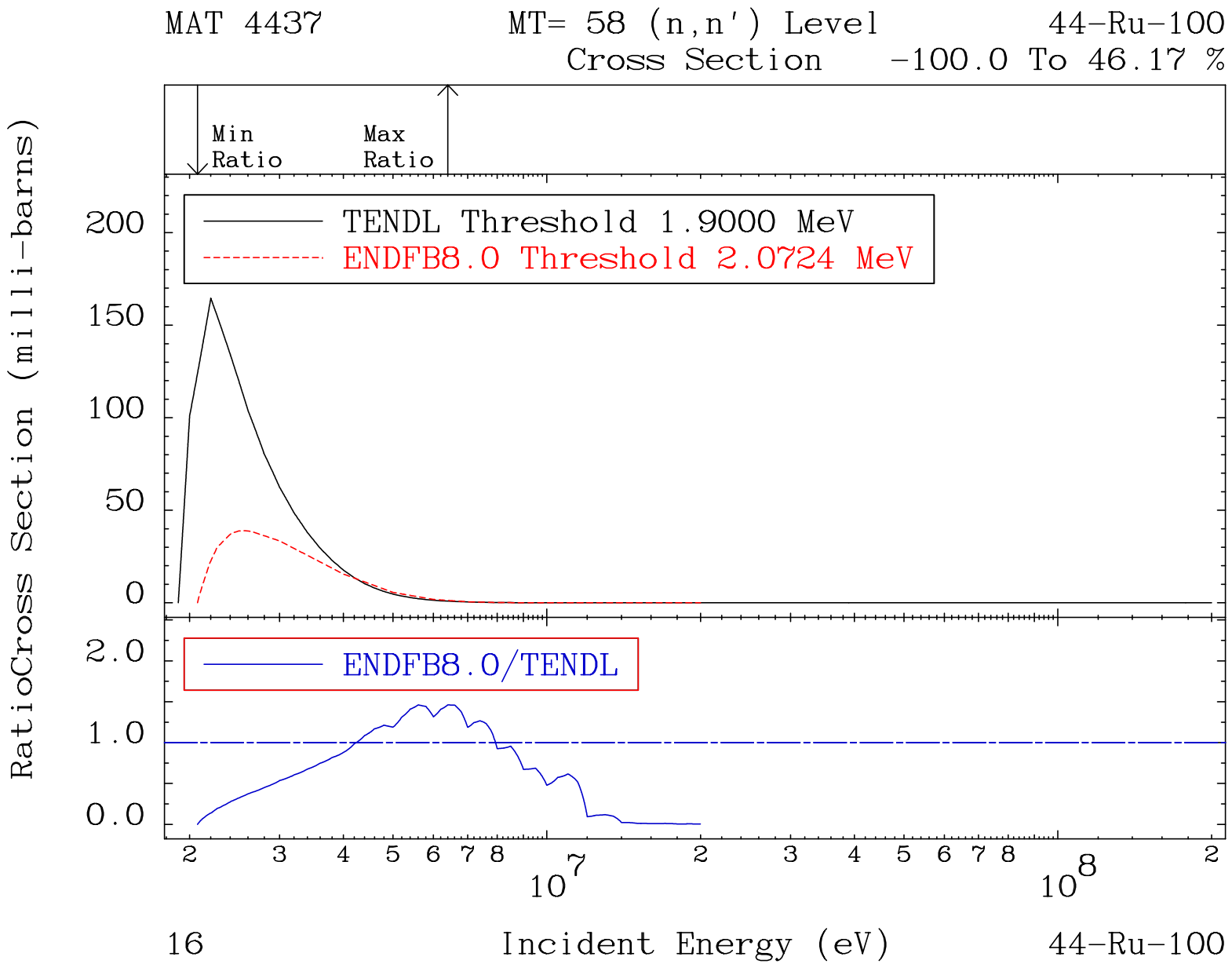

MAT 4437
MT= 53 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 86.99 %
Min Ratio
Max Ratio
TENDL Threshold 1.2389 MeV
ENDFB8.0 Threshold 1.2389 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
44-Ru-100

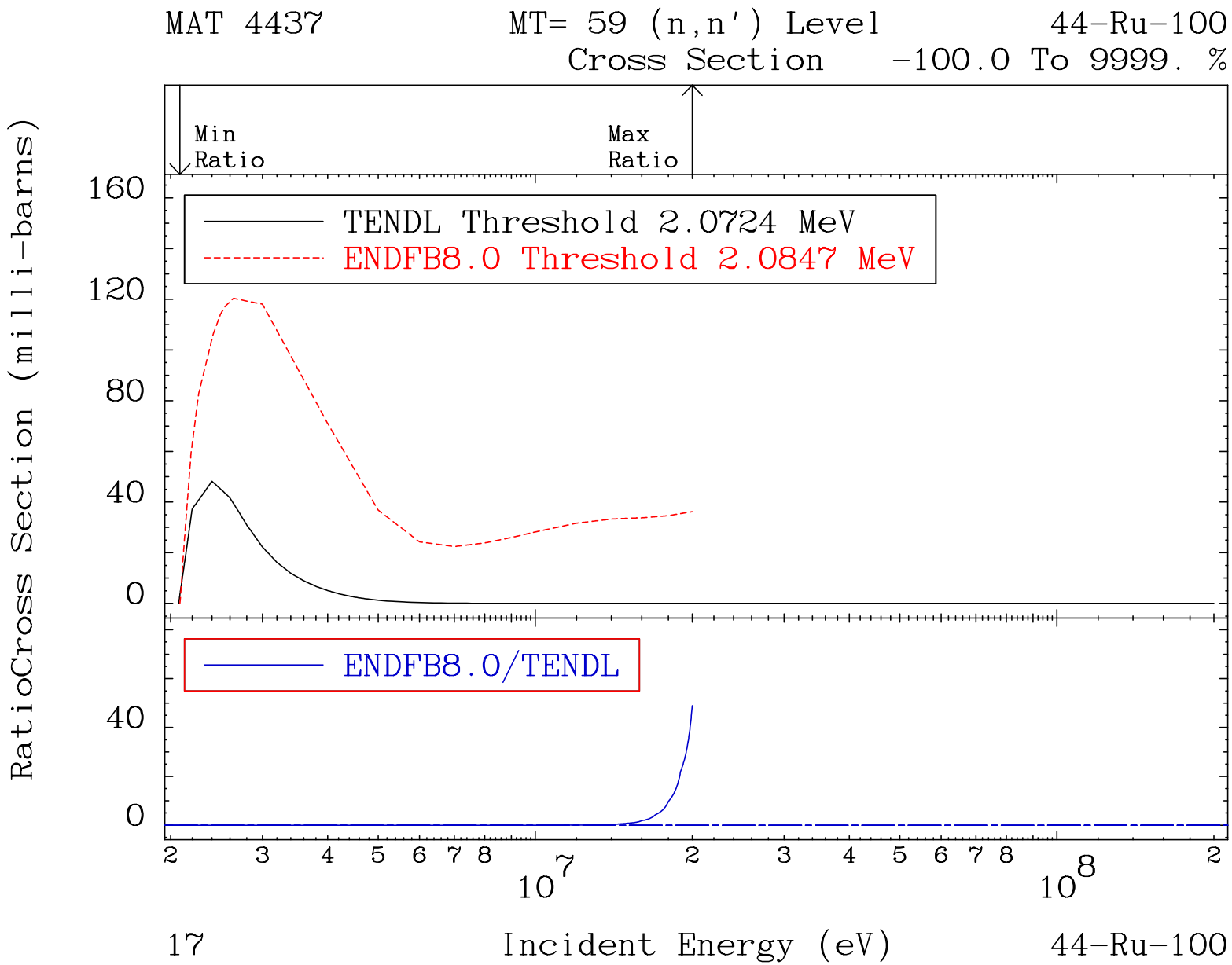

MAT 4437
MT= 54 (n,n') Level
44-Ru-100
Cross Section -100.0 To 73.48 %
Max Ratio
Min Ratio
TENDL Threshold 1.3759 MeV
ENDFB8.0 Threshold 1.3759 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
10^{0}
10^{-4}
10^{-8}
2 3 4 5 6 8 10^{7} 2 3 4 5 6 8 10^{8} 2
12
Incident Energy (eV)
44-Ru-100

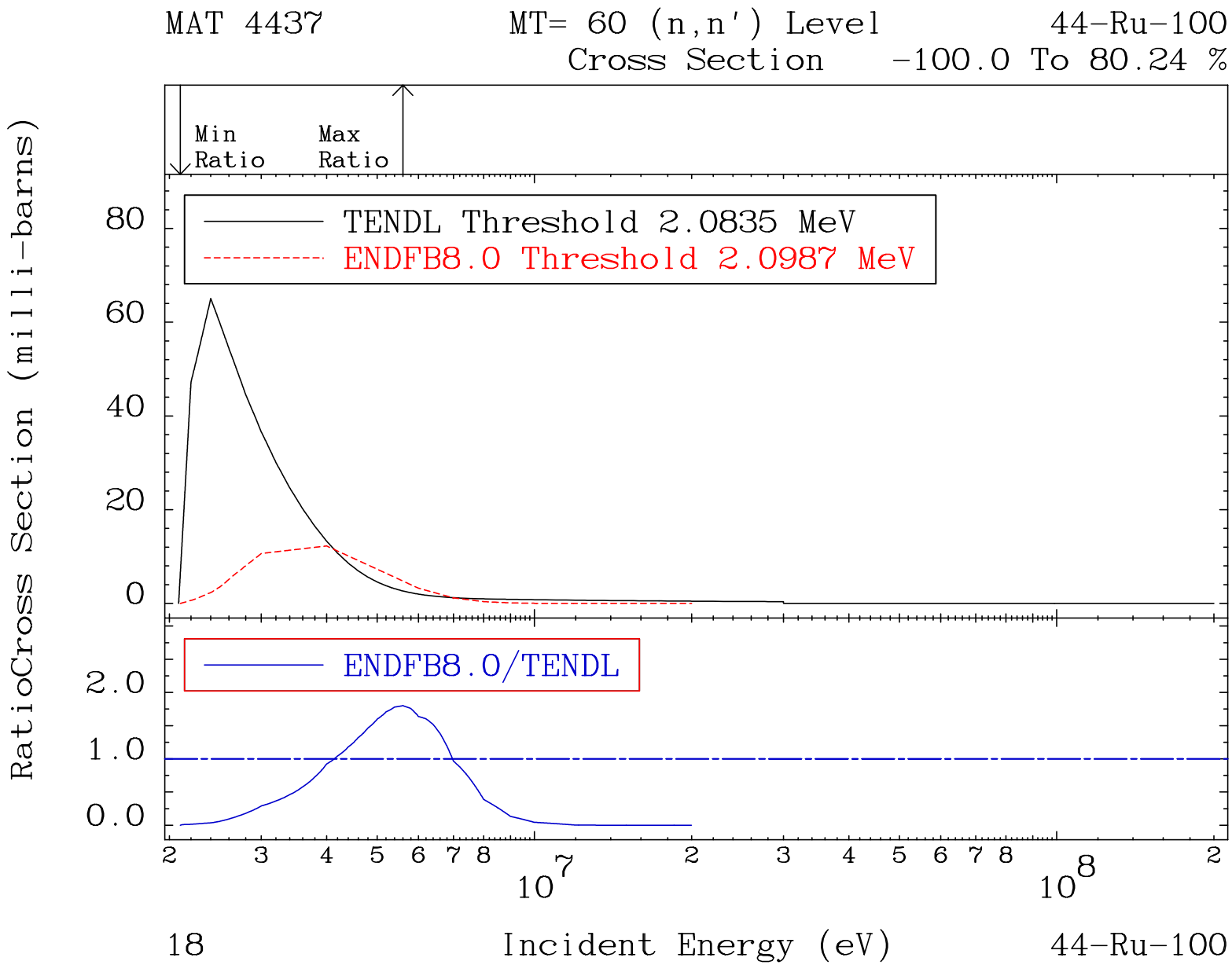

MAT 4437
MT= 55 (n,n') Level
Cross Section
44-Ru-100
-98.11 To 513.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.7586 MeV
ENDFB8.0 Threshold 1.7583 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^0
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
44-Ru-100

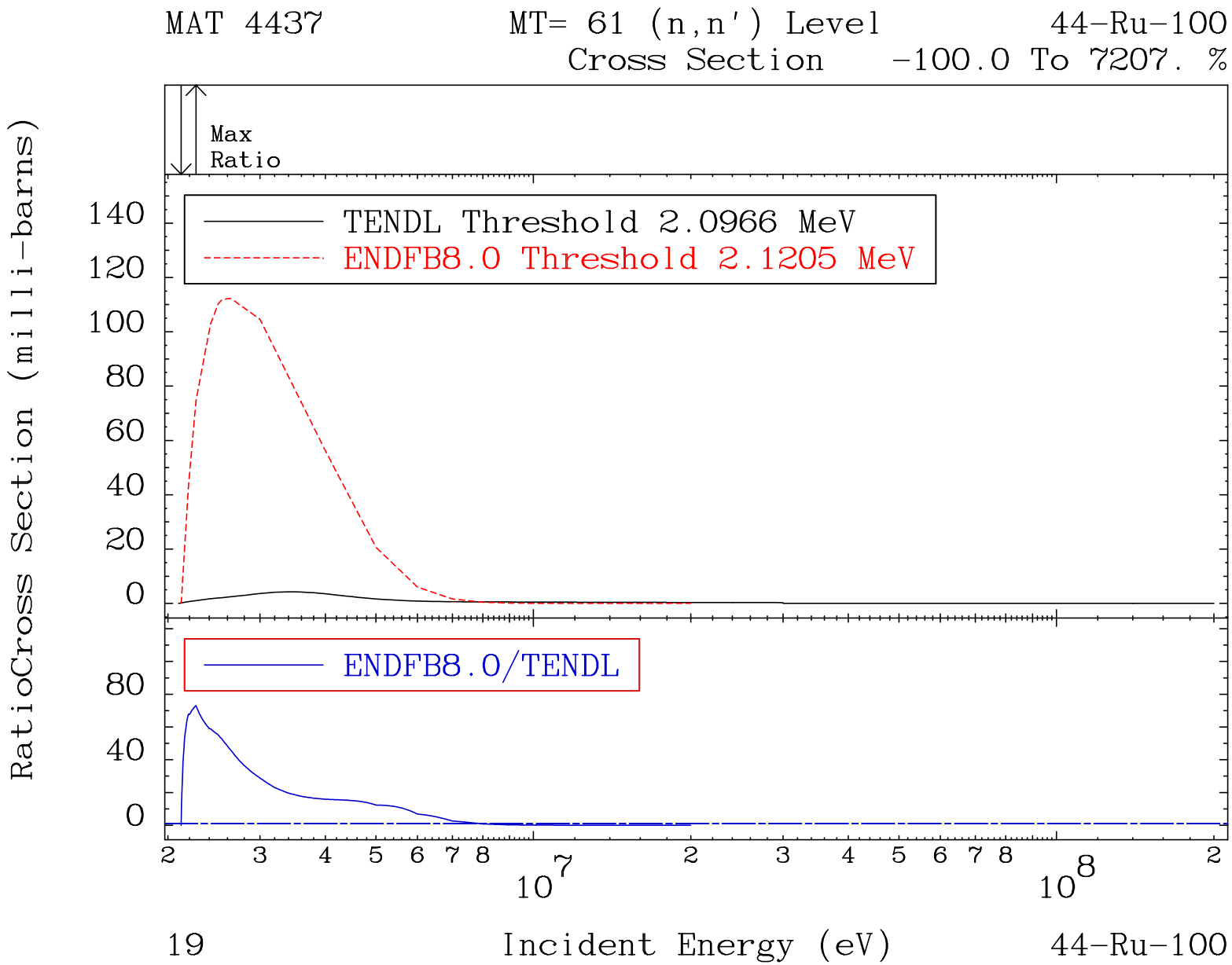

MAT 4437
MT= 56 (n,n') Level
44-Ru-100
Cross Section -100.0 To 1410. %
Min Ratio
Max Ratio
TENDL Threshold 1.8465 MeV
ENDFB8.0 Threshold 1.8841 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
20
10
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
44-Ru-100

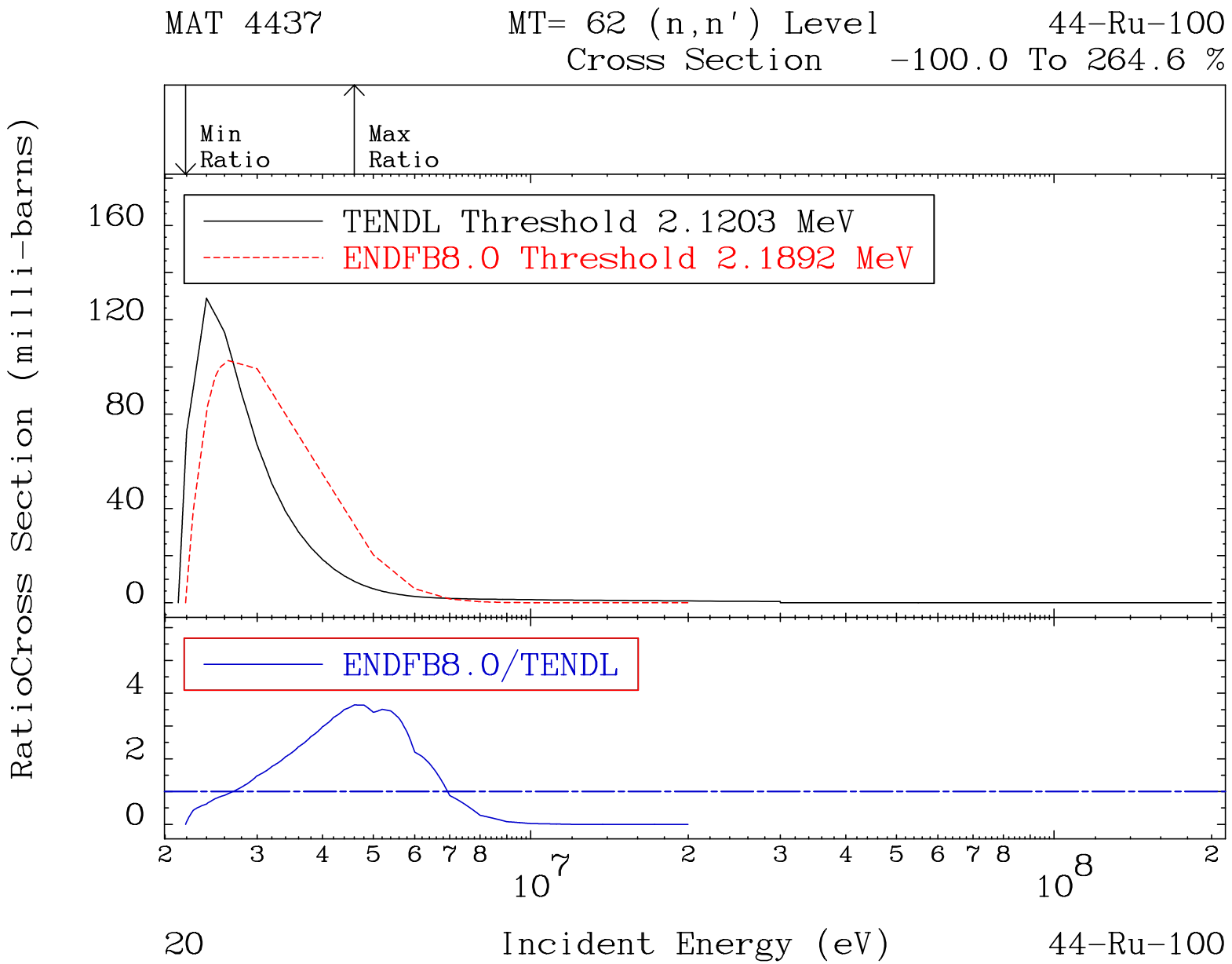

MAT 4437
MT= 57 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 251.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.8839 MeV
ENDFB8.0 Threshold 1.9002 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
44-Ru-100

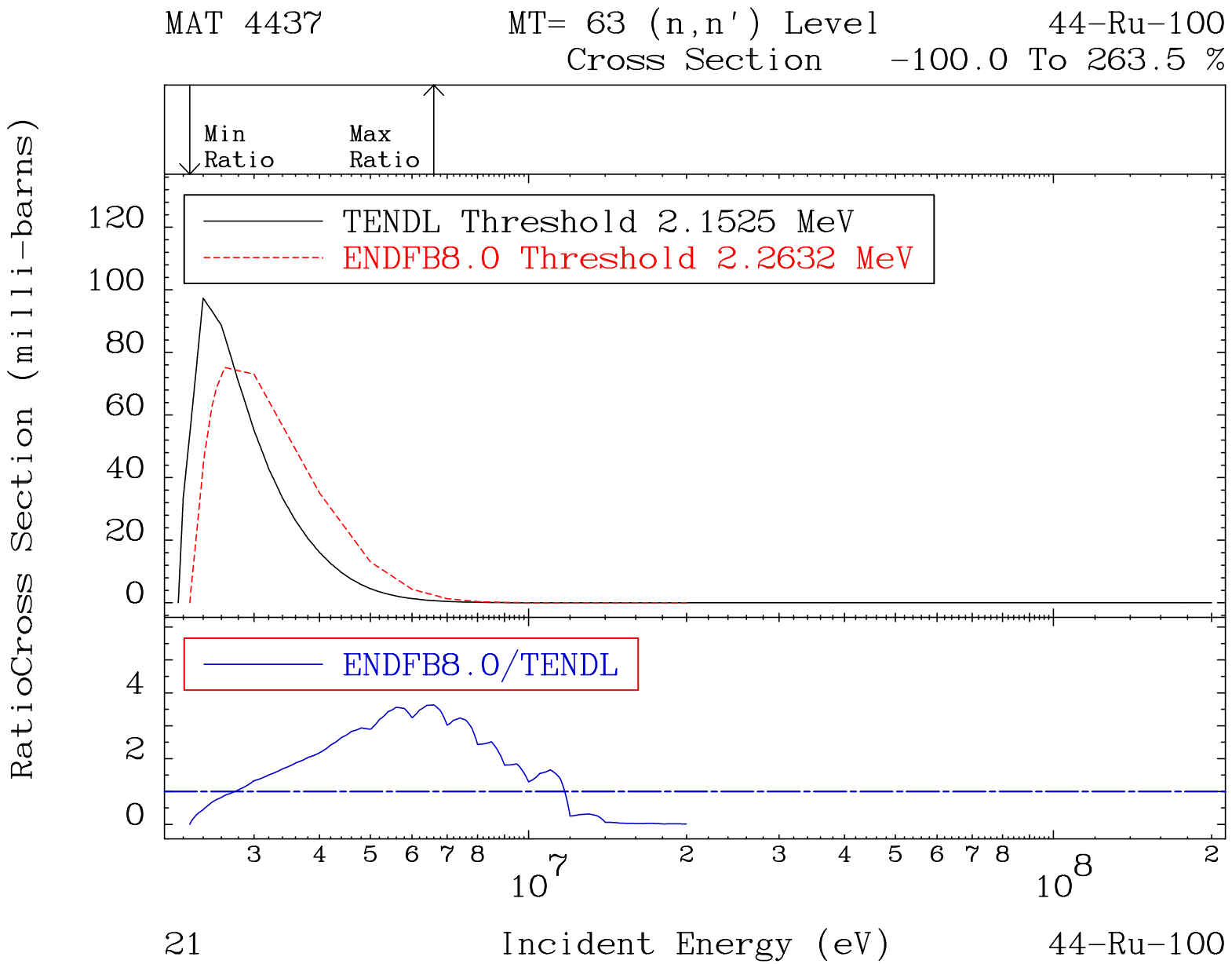

MAT 4437
MT= 58 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 46.17 %
Min Ratio
Max Ratio
TENDL Threshold 1.9000 MeV
ENDFB8.0 Threshold 2.0724 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
44-Ru-100

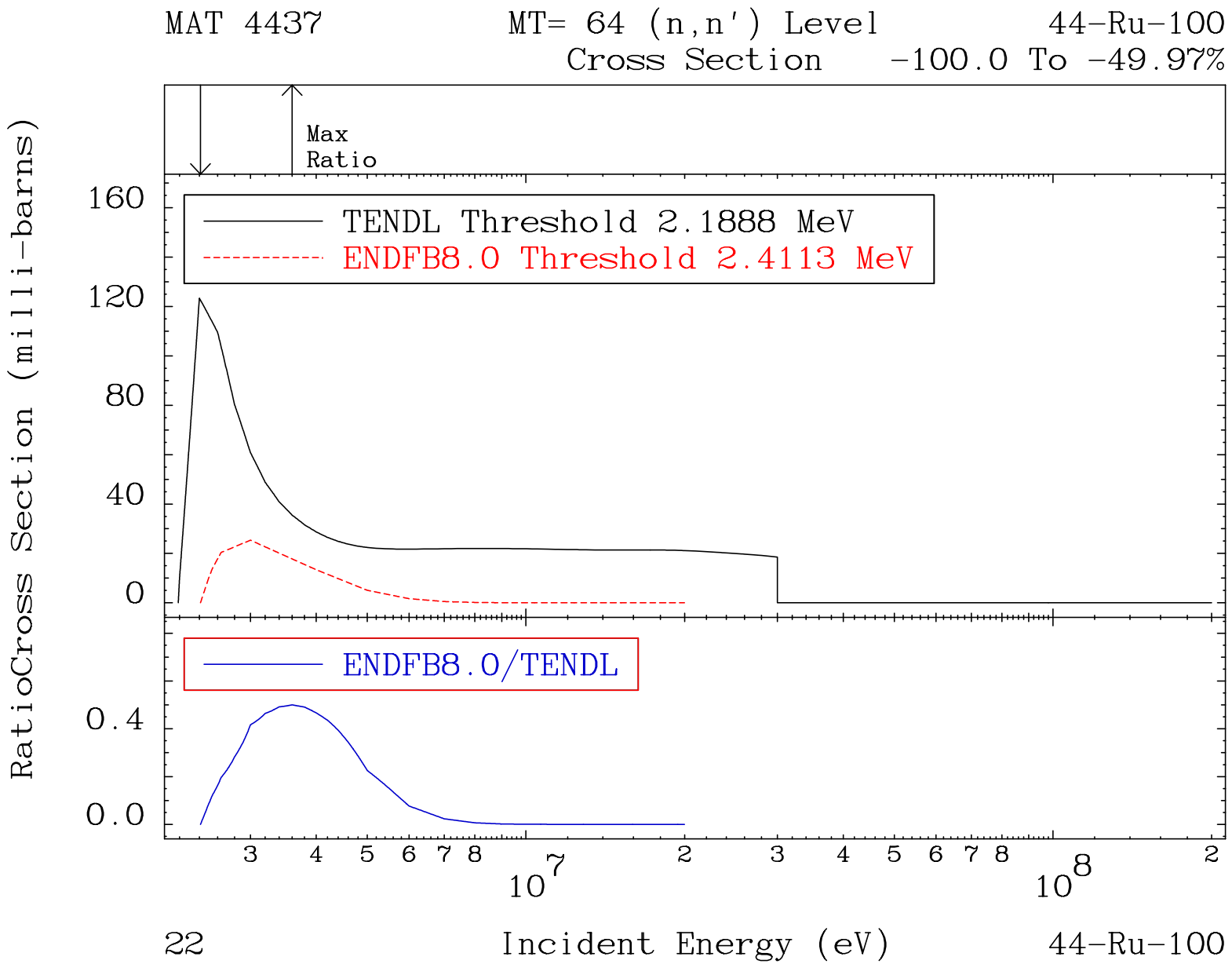

MAT 4437
MT= 59 (n,n') Level
44-Ru-100
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0724 MeV
ENDFB8.0 Threshold 2.0847 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
40
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
44-Ru-100

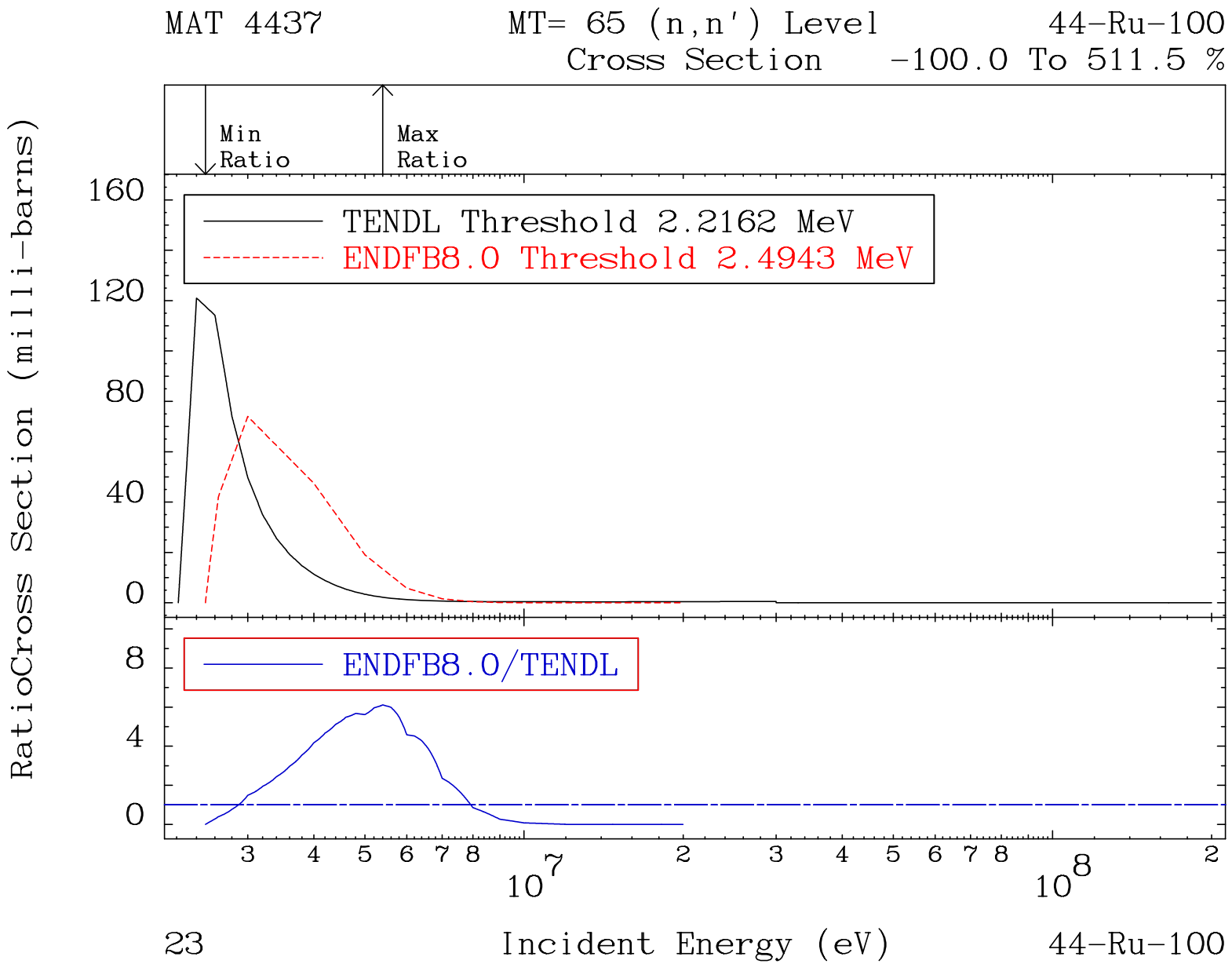

MAT 4437
MT= 60 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 80.24 %
Min Ratio
Max Ratio
TENDL Threshold 2.0835 MeV
ENDFB8.0 Threshold 2.0987 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
44-Ru-100

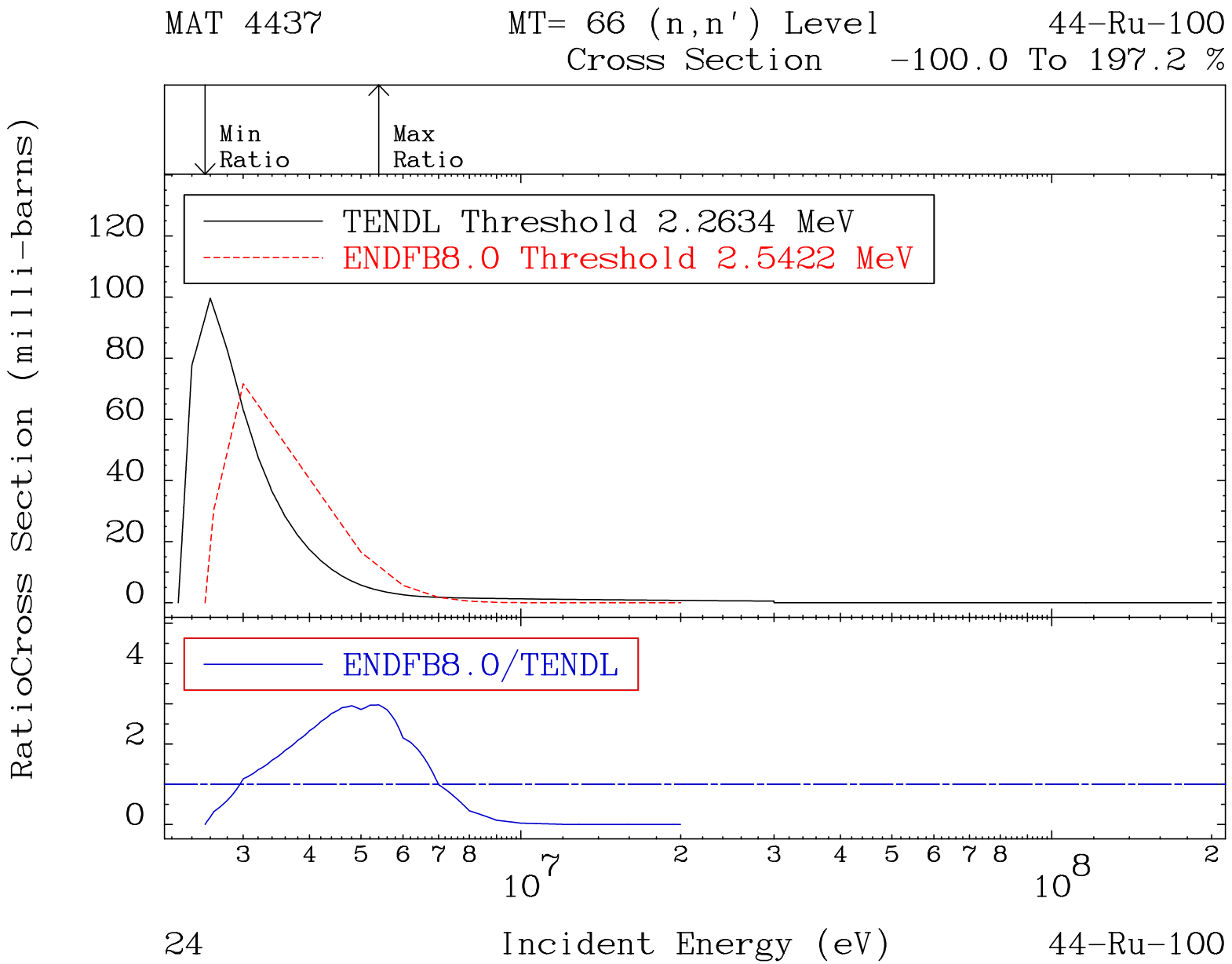

MAT 4437
MT= 61 (n,n') Level
44-Ru-100
Cross Section -100.0 To 7207. %
Max
Ratio
TENDL Threshold 2.0966 MeV
ENDFB8.0 Threshold 2.1205 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
80
40
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
44-Ru-100

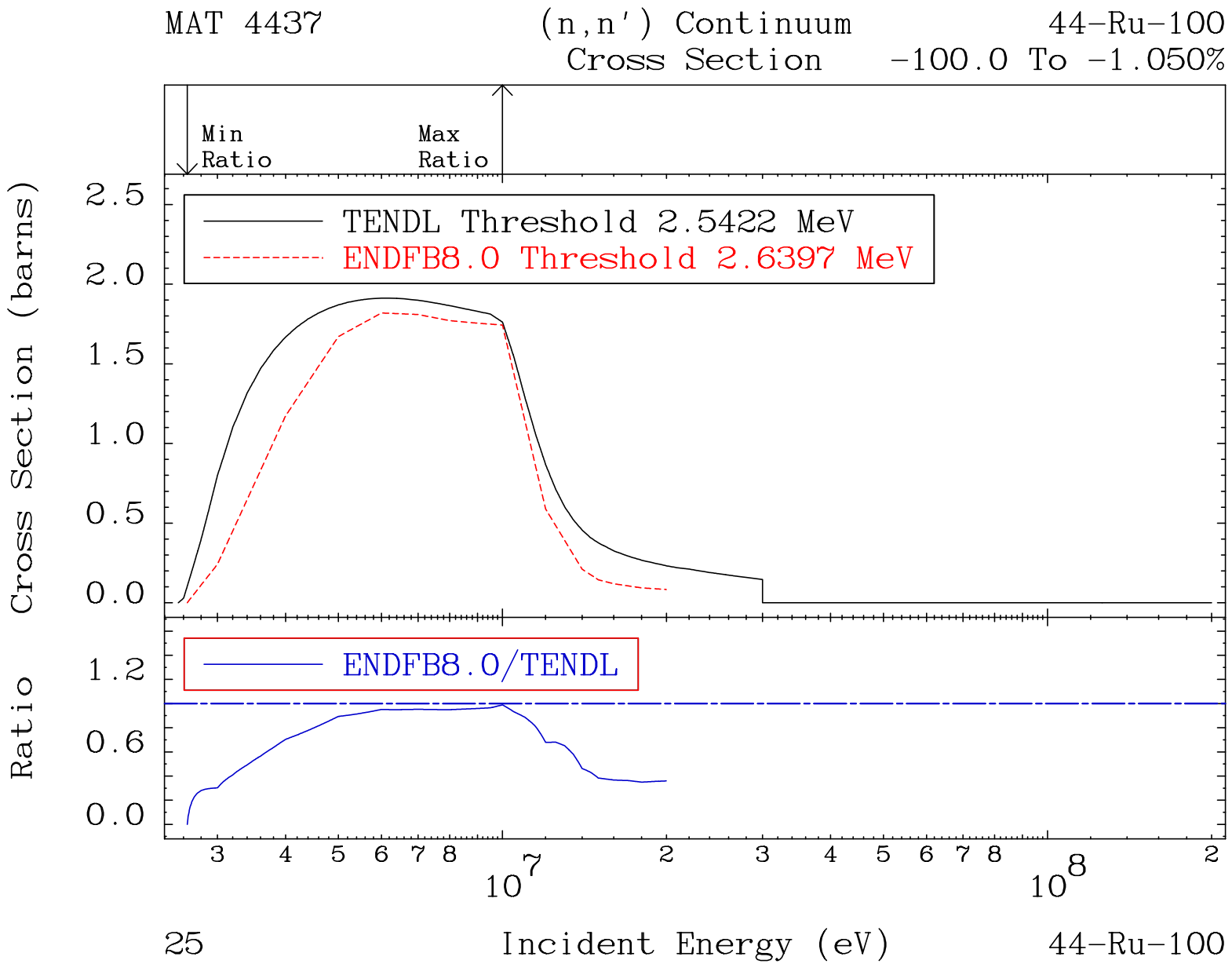

MAT 4437
MT= 62 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 264.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.1203 MeV
ENDFB8.0 Threshold 2.1892 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
44-Ru-100

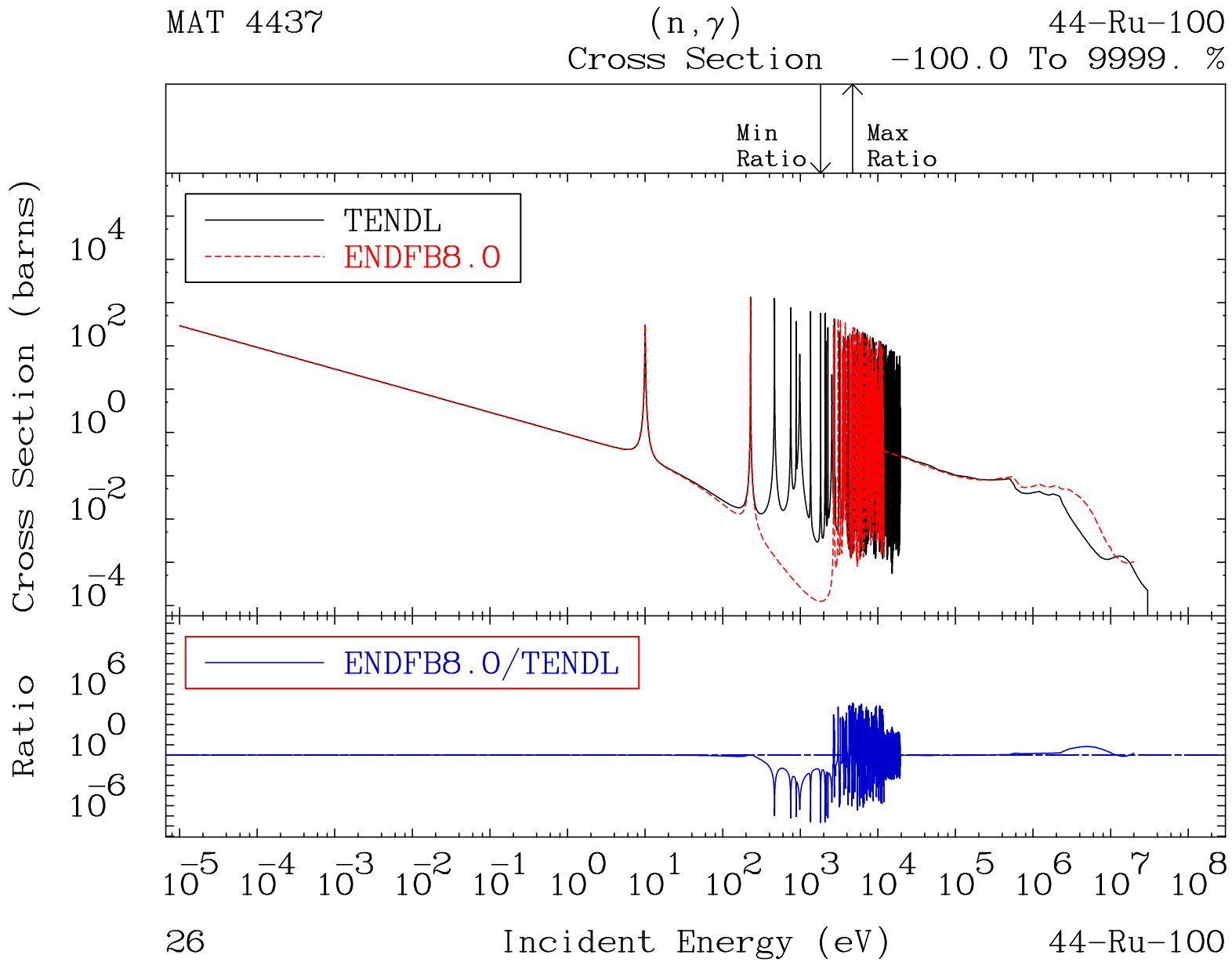

MAT 4437
MT= 63 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 263.5 %
Min Ratio
Max Ratio
TENDL Threshold 2.1525 MeV
ENDFB8.0 Threshold 2.2632 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
44-Ru-100

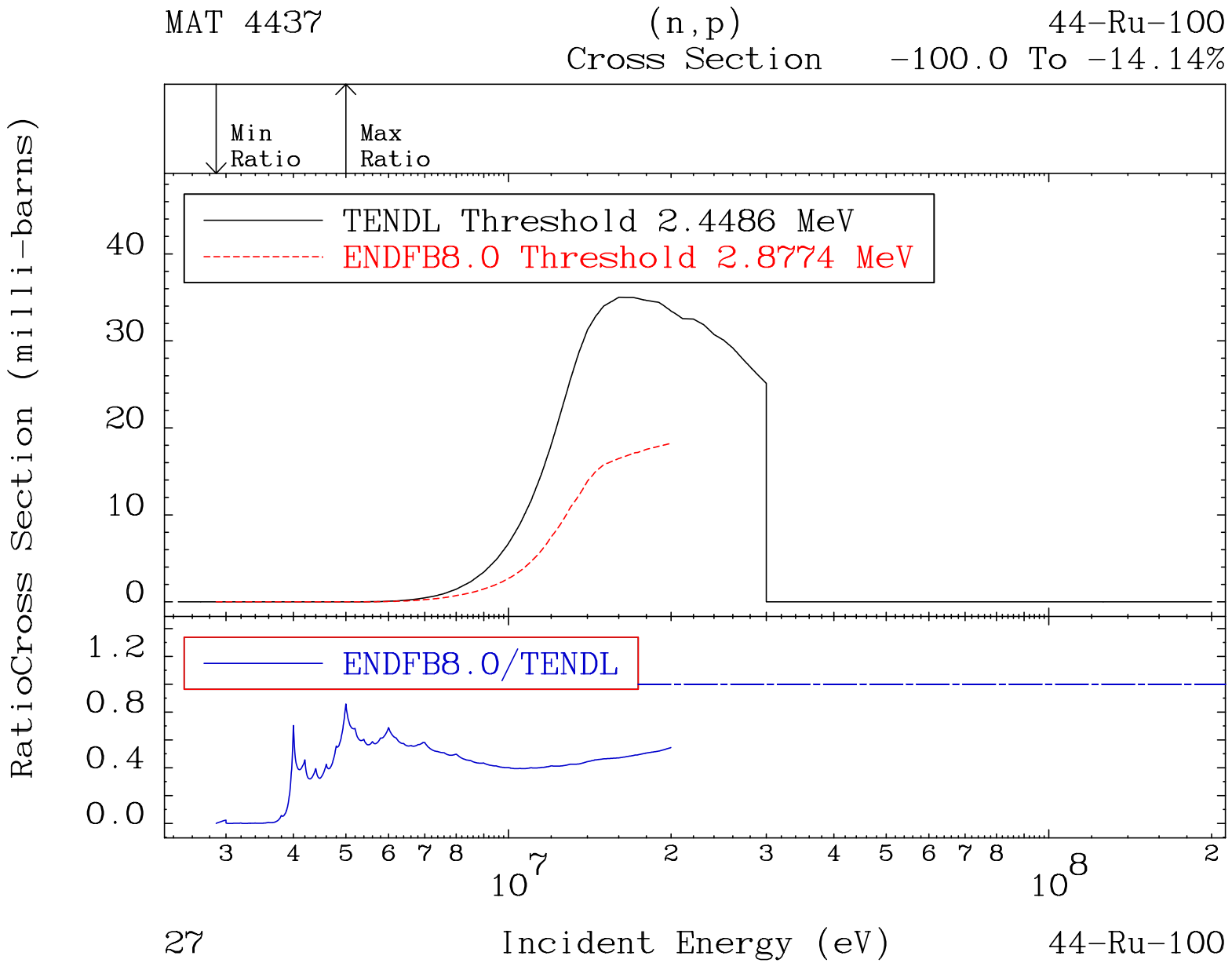

MAT 4437
MT= 64 (n,n') Level
44-Ru-100
Cross Section
-100.0 To -49.97%
Max
Ratio
TENDL Threshold 2.1888 MeV
ENDFB8.0 Threshold 2.4113 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
0.4
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
44-Ru-100

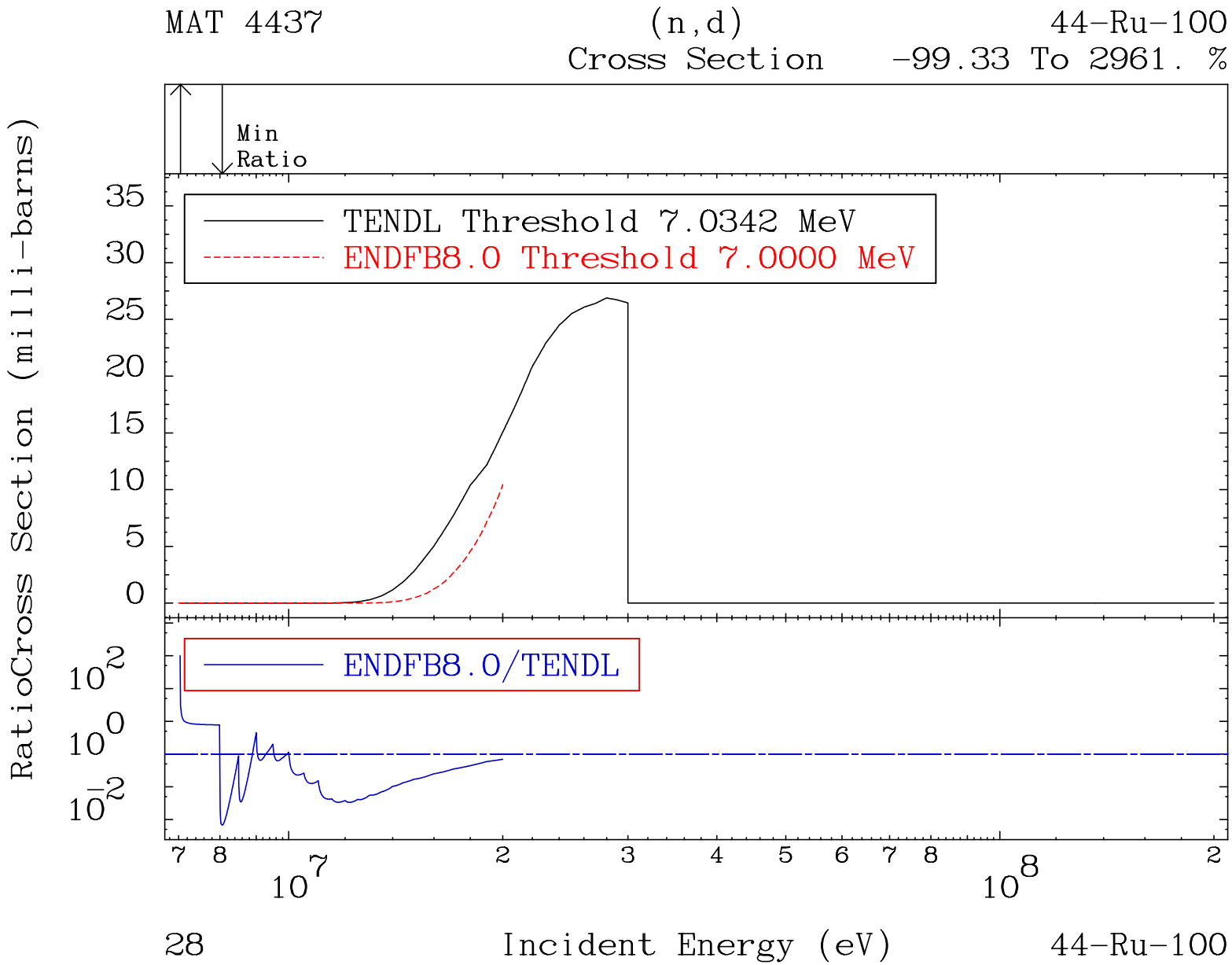

MAT 4437
MT= 65 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 511.5 %
Min Ratio
Max Ratio
TENDL Threshold 2.2162 MeV
ENDFB8.0 Threshold 2.4943 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
44-Ru-100

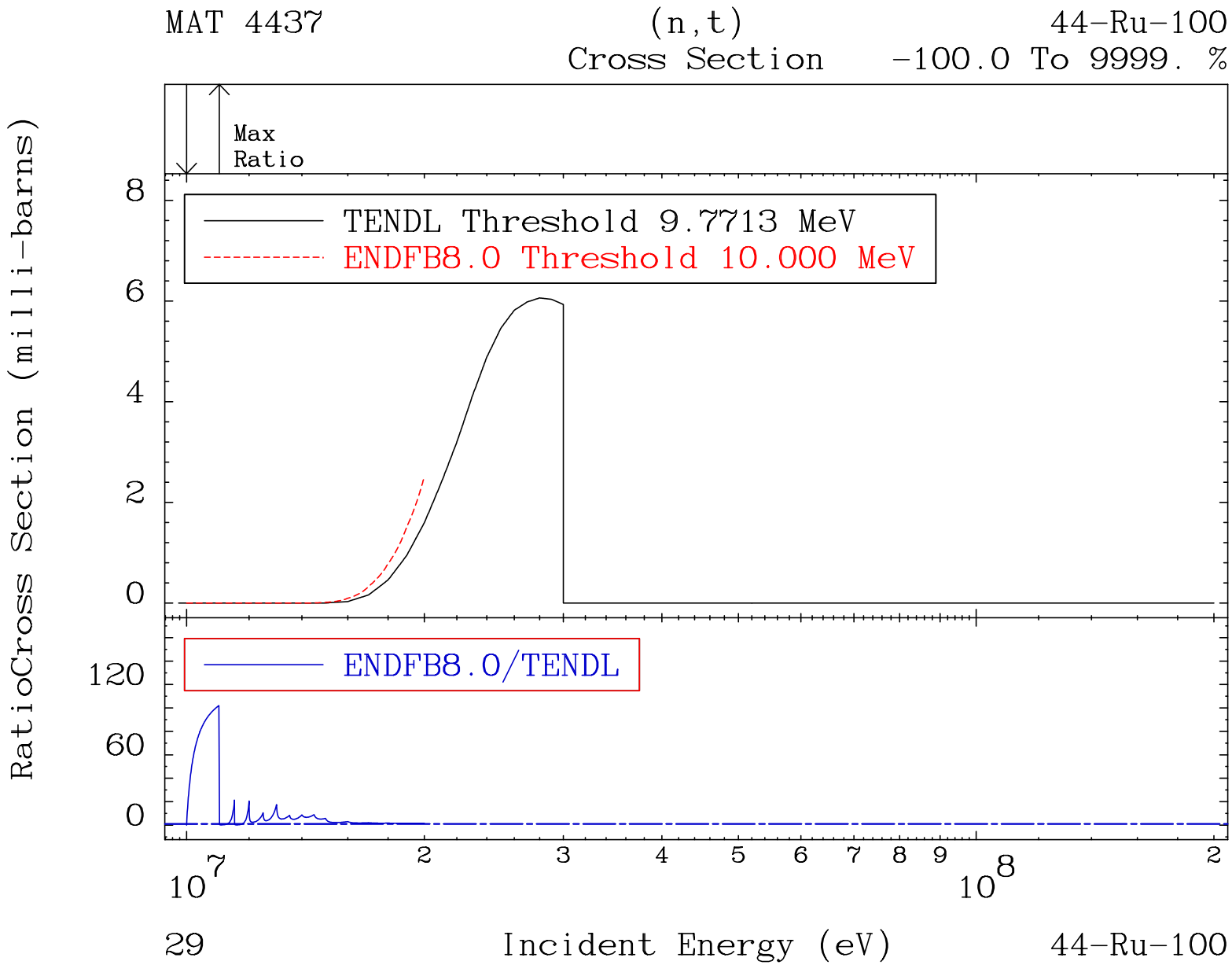

MAT 4437
MT= 66 (n,n') Level
44-Ru-100
Cross Section
-100.0 To 197.2 %
Min Ratio
Max Ratio
TENDL Threshold 2.2634 MeV
ENDFB8.0 Threshold 2.5422 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
44-Ru-100

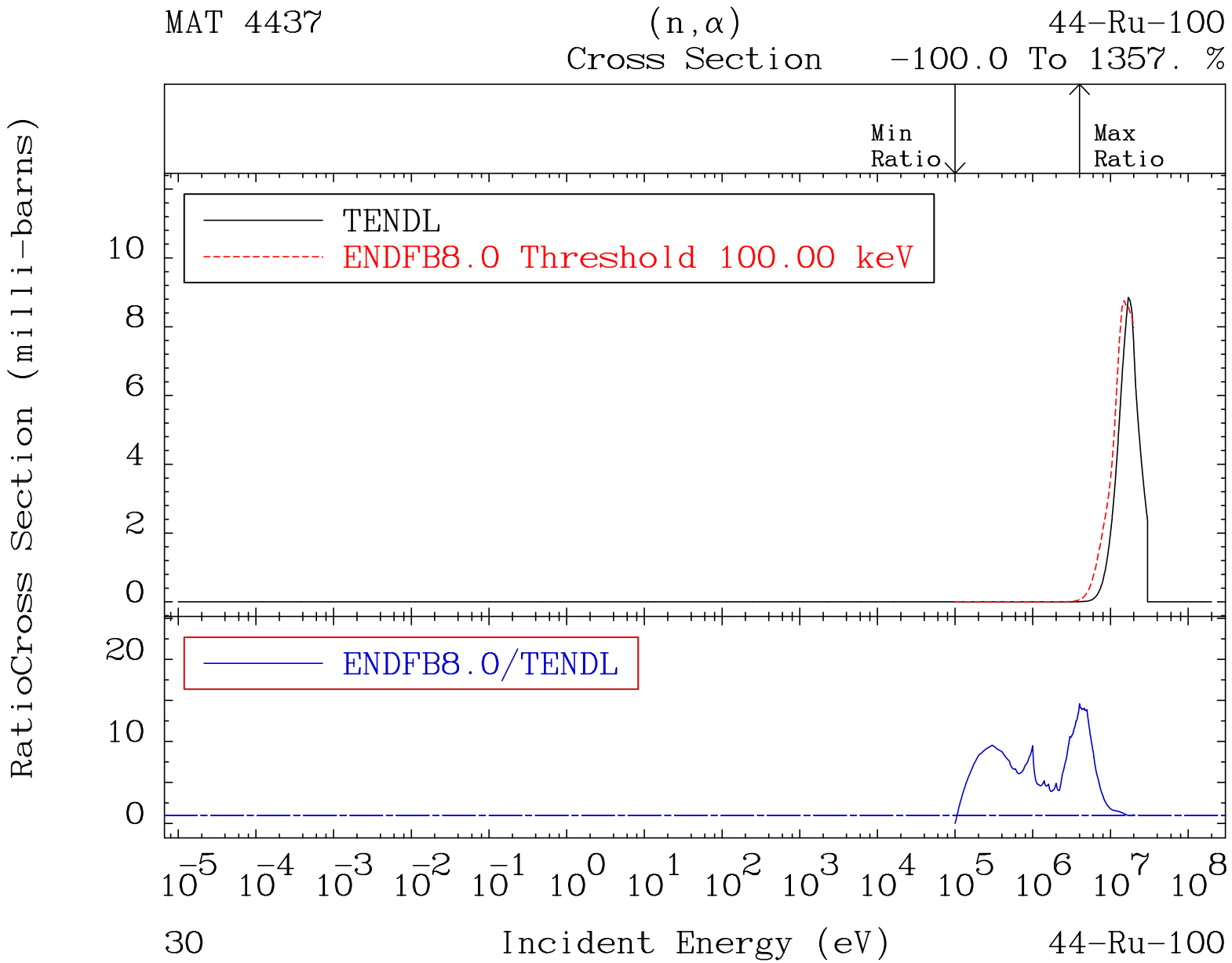

MAT 4437
(n,n') Continuum
Cross Section
44-Ru-100
-100.0 To -1.050%
Min Ratio
Max Ratio
TENDL Threshold 2.5422 MeV
ENDFB8.0 Threshold 2.6397 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
25
44-Ru-100

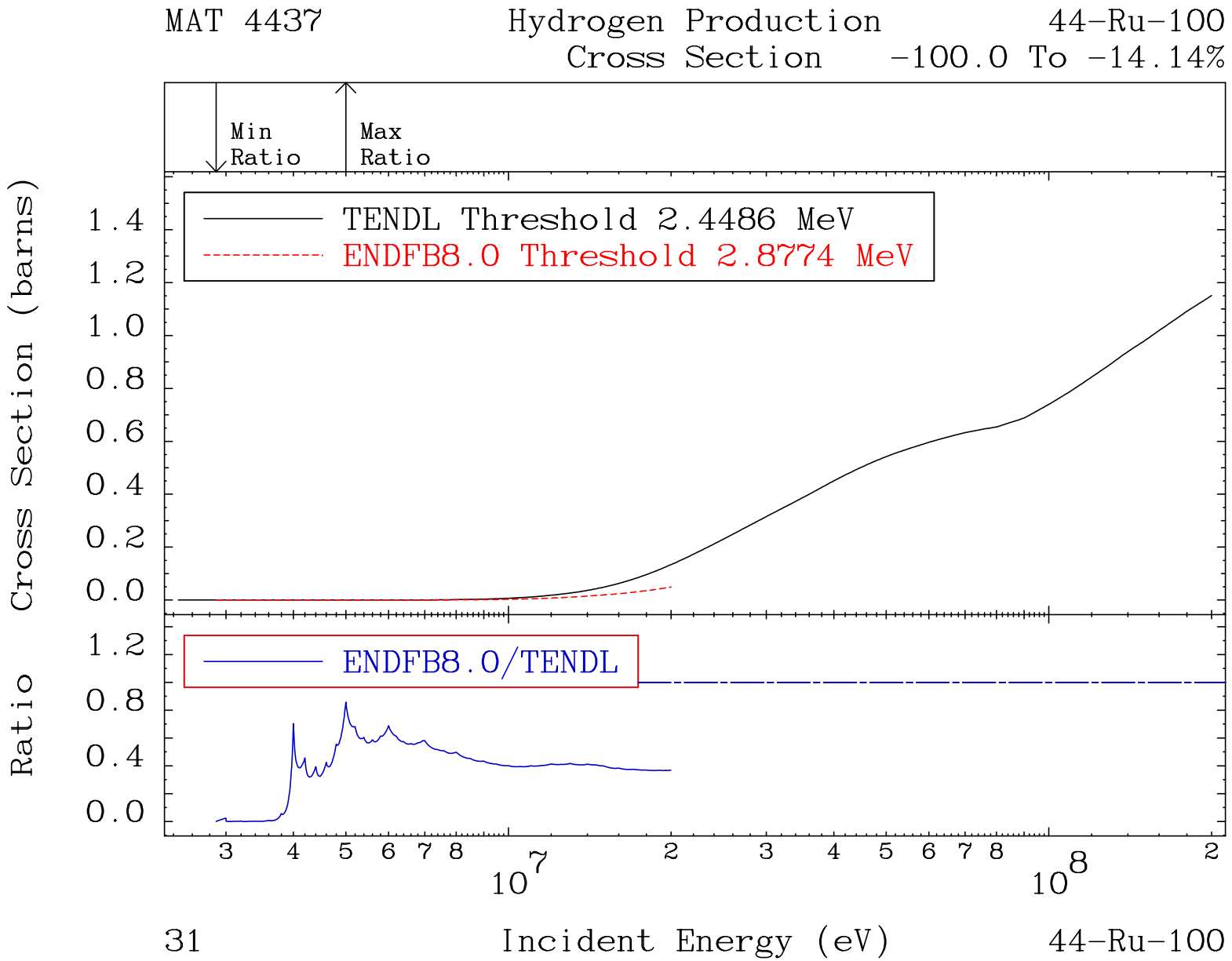

MAT 4437
(n,γ)
Cross Section
44-Ru-100
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
26
44-Ru-100

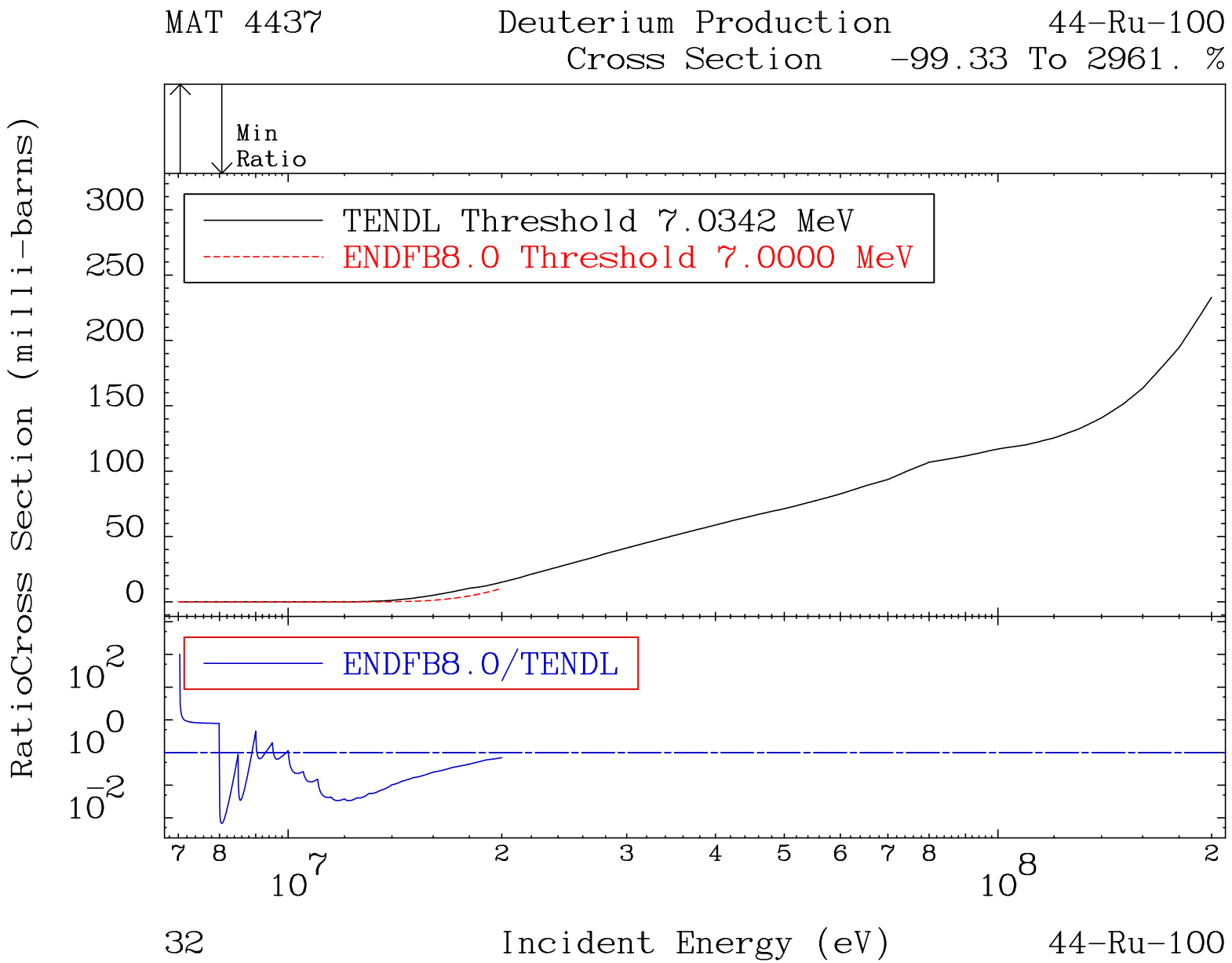

MAT 4437
(n,p)
Cross Section
44-Ru-100
-100.0 To -14.14%
Min Ratio
Max Ratio
TENDL Threshold 2.4486 MeV
ENDFB8.0 Threshold 2.8774 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
44-Ru-100

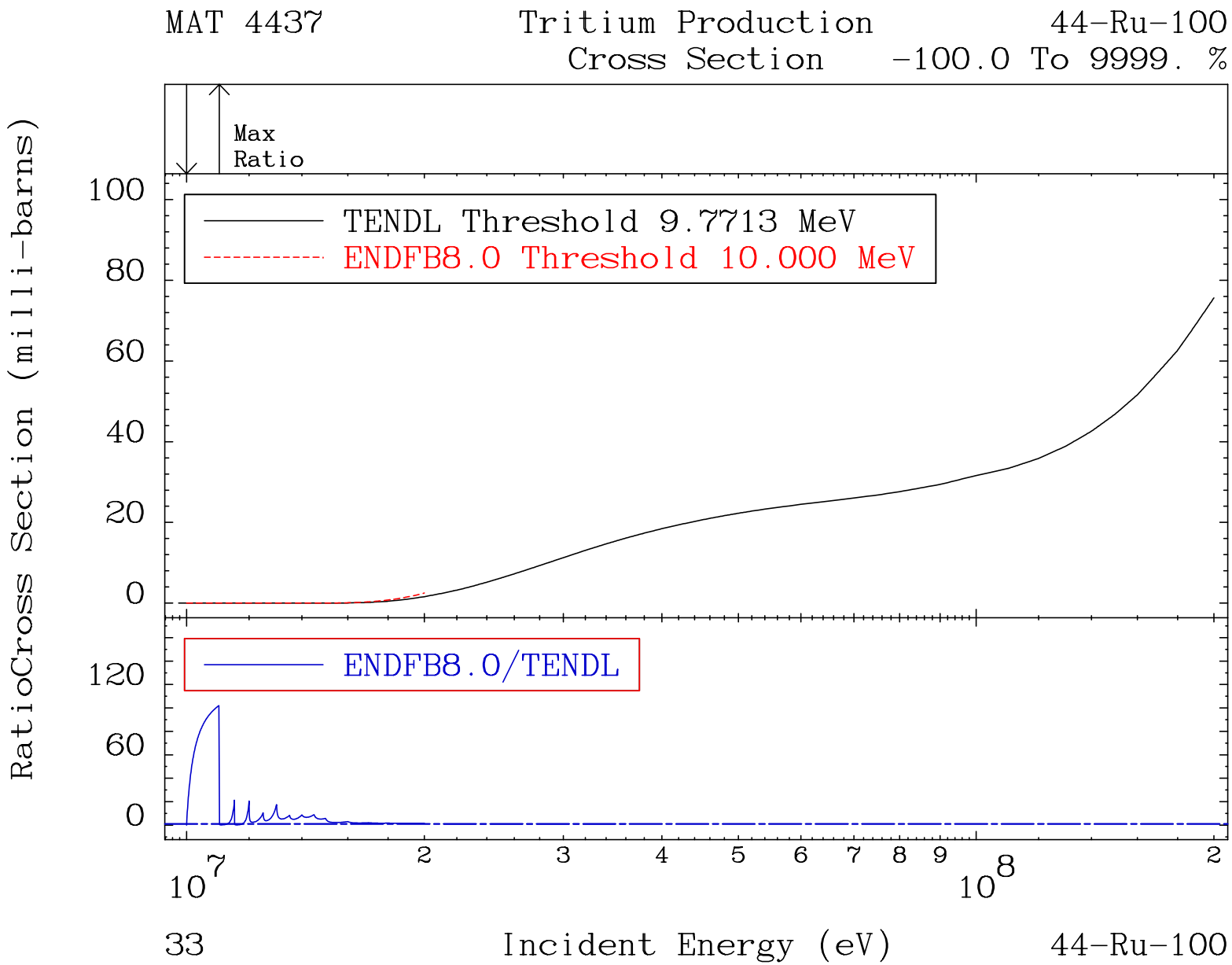

MAT 4437
(n,d)
Cross Section
44-Ru-100
-99.33 To 2961. %
Min
Ratio
TENDL Threshold 7.0342 MeV
ENDFB8.0 Threshold 7.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
10^{2}
10^{0}
10^{-2}
7 8
10^{7}
2 3 4 5 6 7 8
10^{8}
2
28
Incident Energy (eV)
44-Ru-100

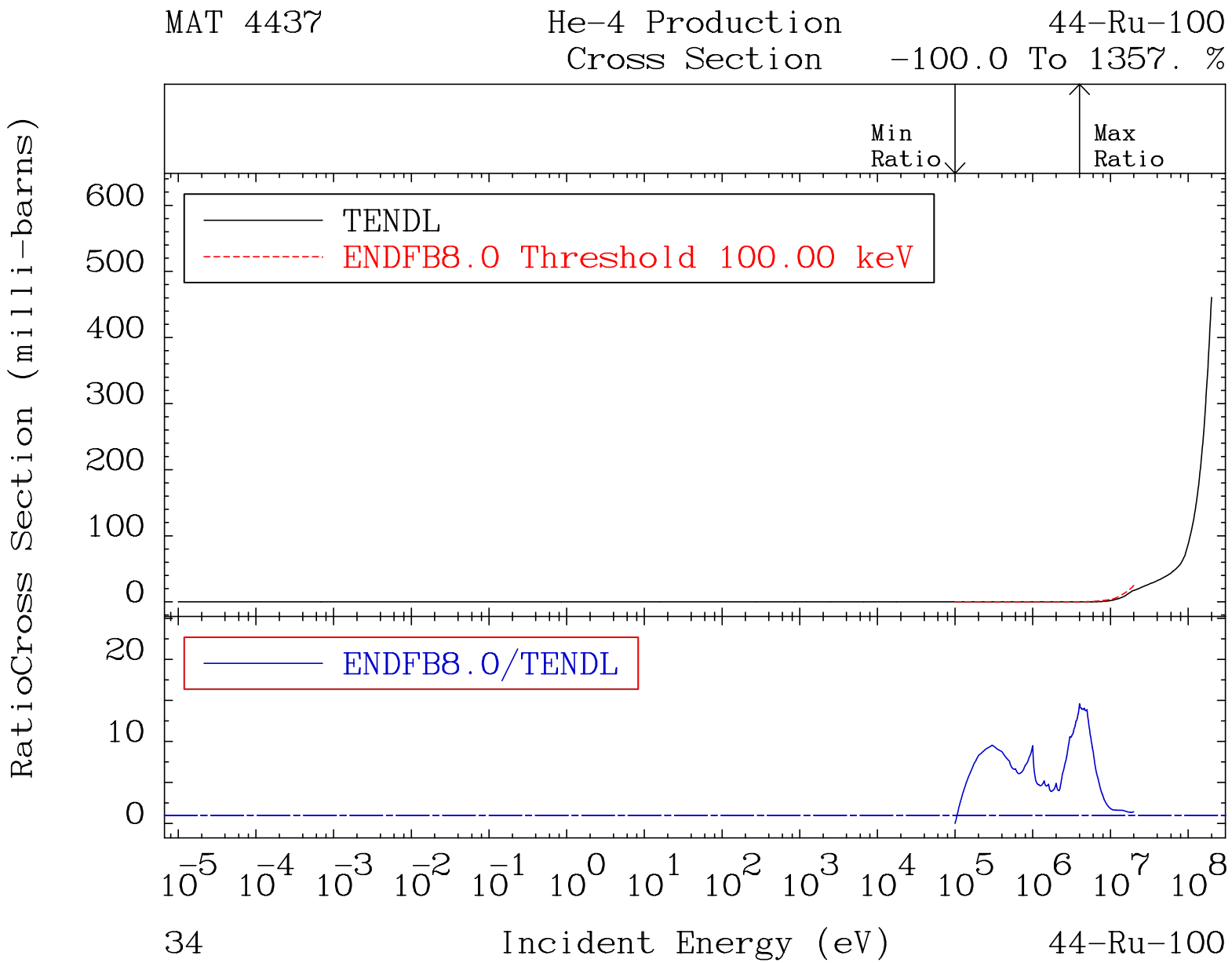

MAT 4437
(n,t)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.7713 MeV
ENDFB8.0 Threshold 10.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
120
60
0
10^7
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
44-Ru-100

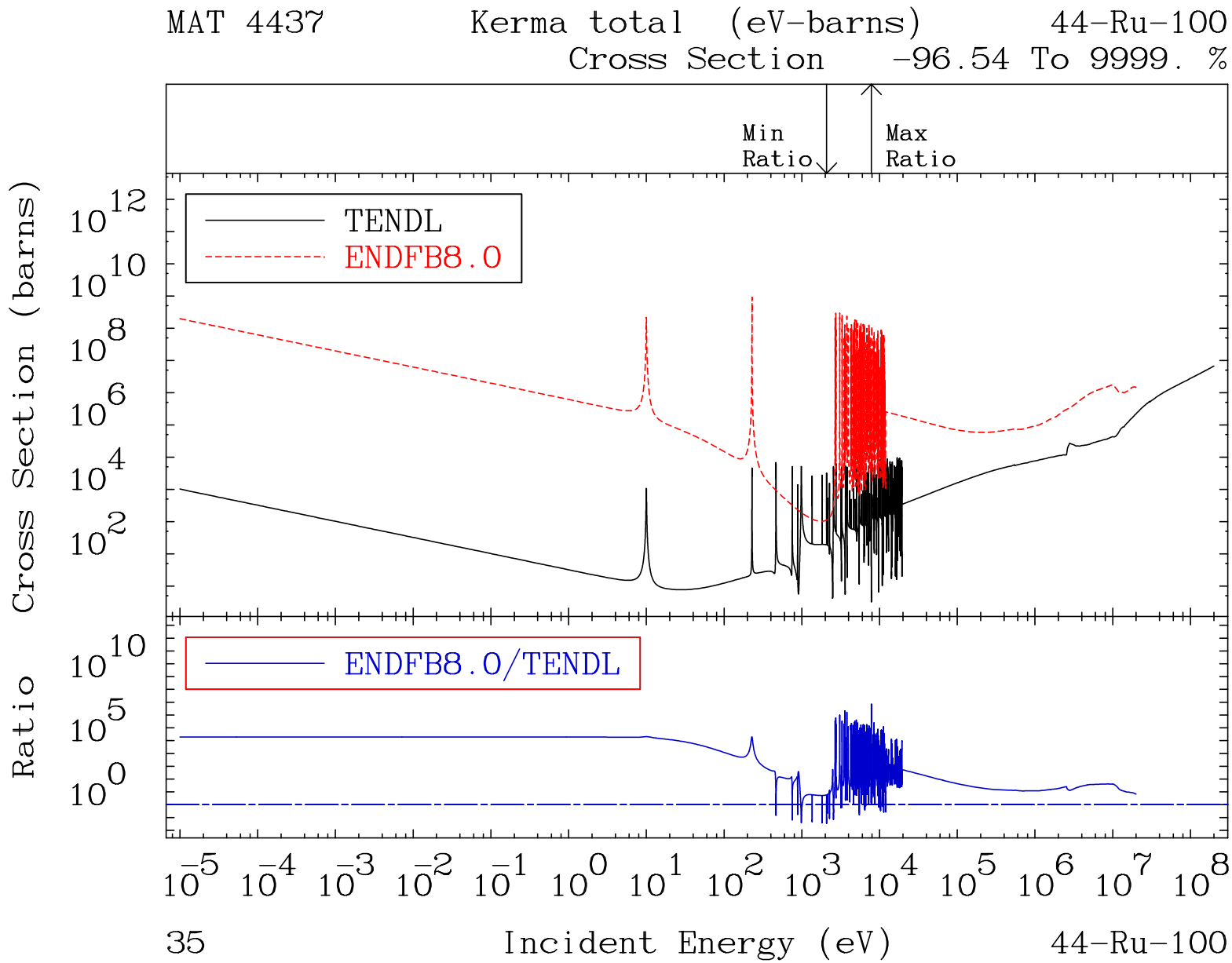

MAT 4437
(n,α)
Cross Section
44-Ru-100
-100.0 To 1357. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 100.00 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
30
44-Ru-100

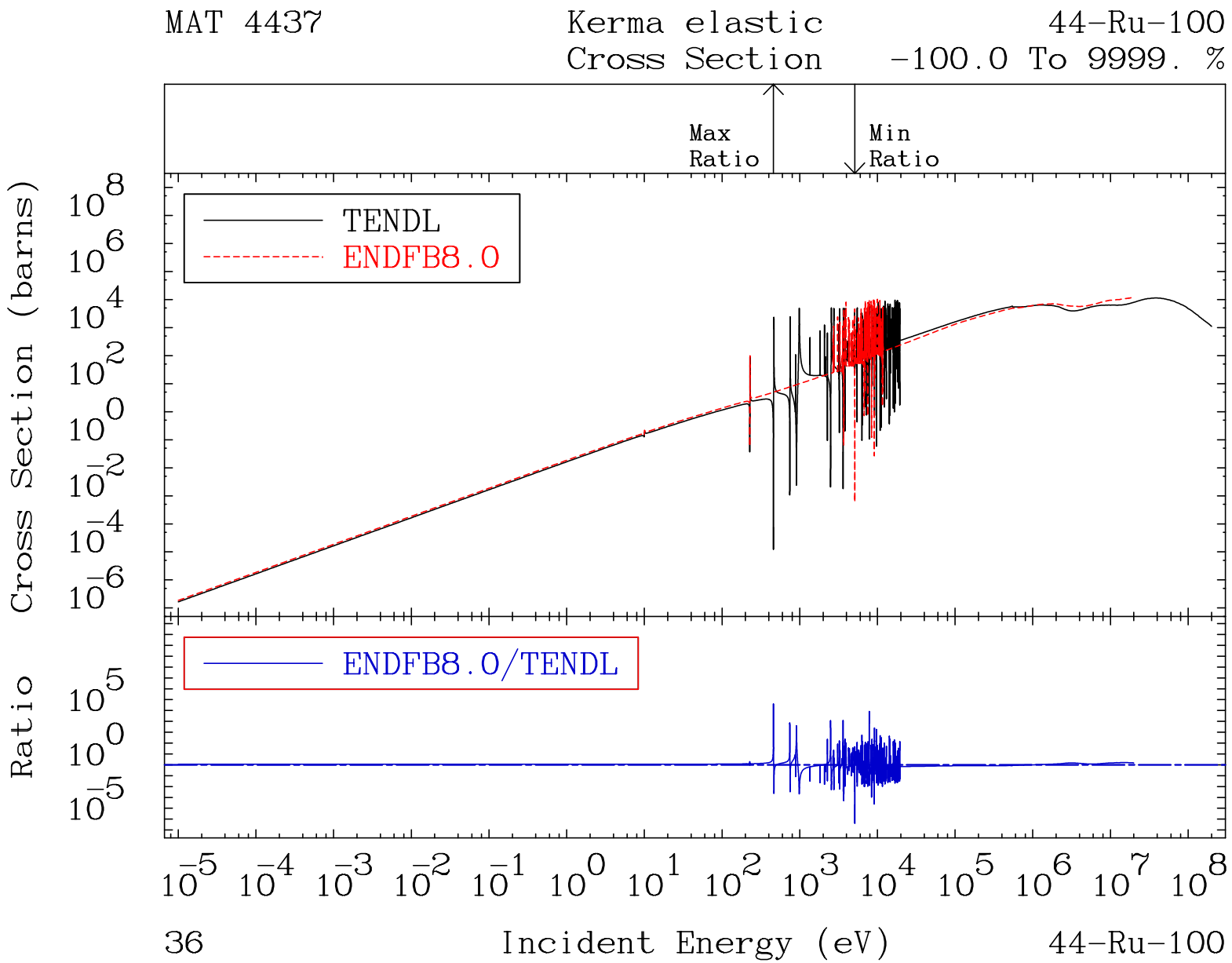

MAT 4437
Hydrogen Production
44-Ru-100
Cross Section
-100.0 To -14.14%
Min Ratio
Max Ratio
TENDL Threshold 2.4486 MeV
ENDFB8.0 Threshold 2.8774 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
31
44-Ru-100

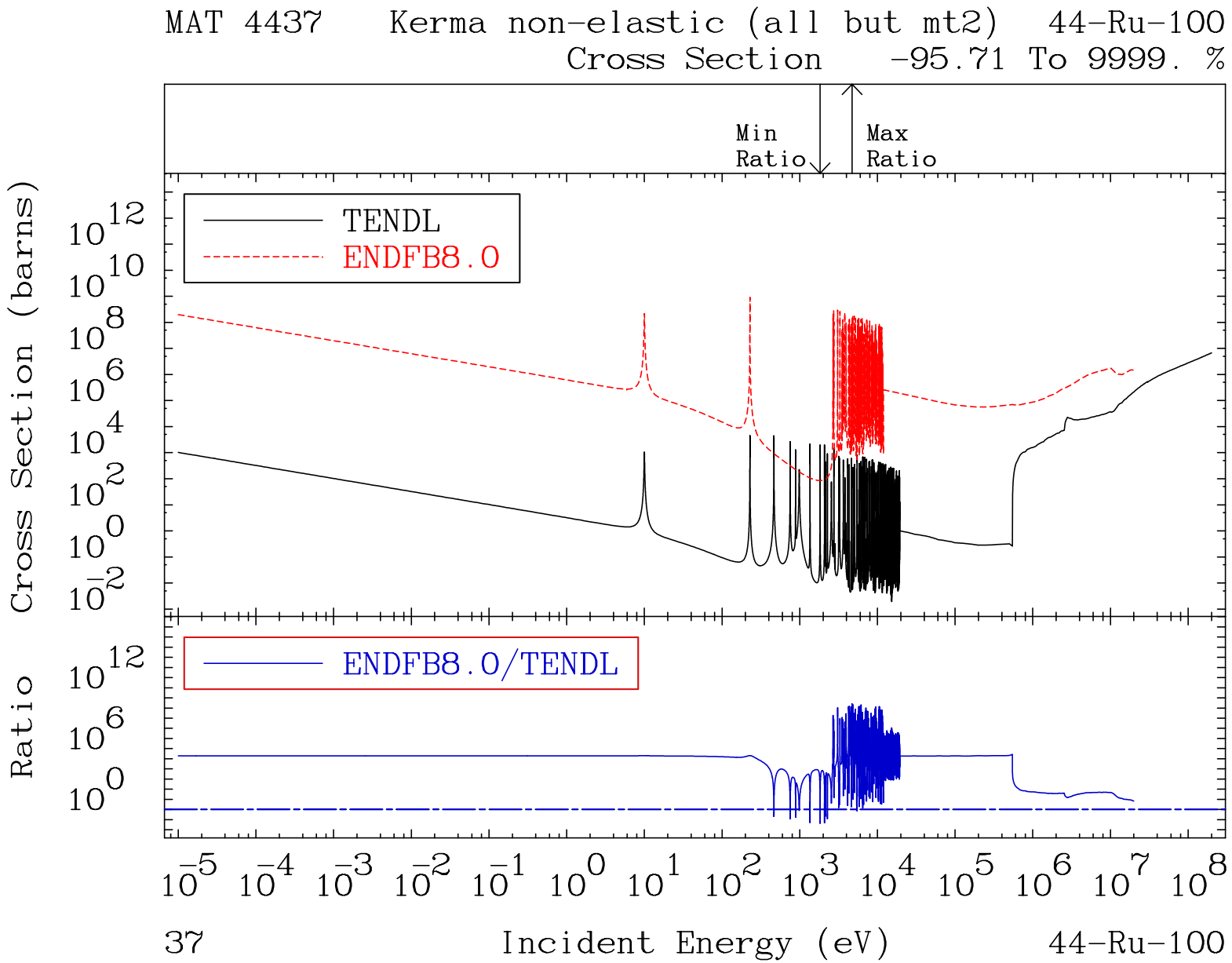

MAT 4437
Deuterium Production
44-Ru-100
Cross Section -99.33 To 2961. %
Min
Ratio
TENDL Threshold 7.0342 MeV
ENDFB8.0 Threshold 7.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^{2}
10^{0}
10^{-2}
7 8
10^{7}
2 3 4 5 6 7 8
10^{8}
2
32
Incident Energy (eV)
44-Ru-100

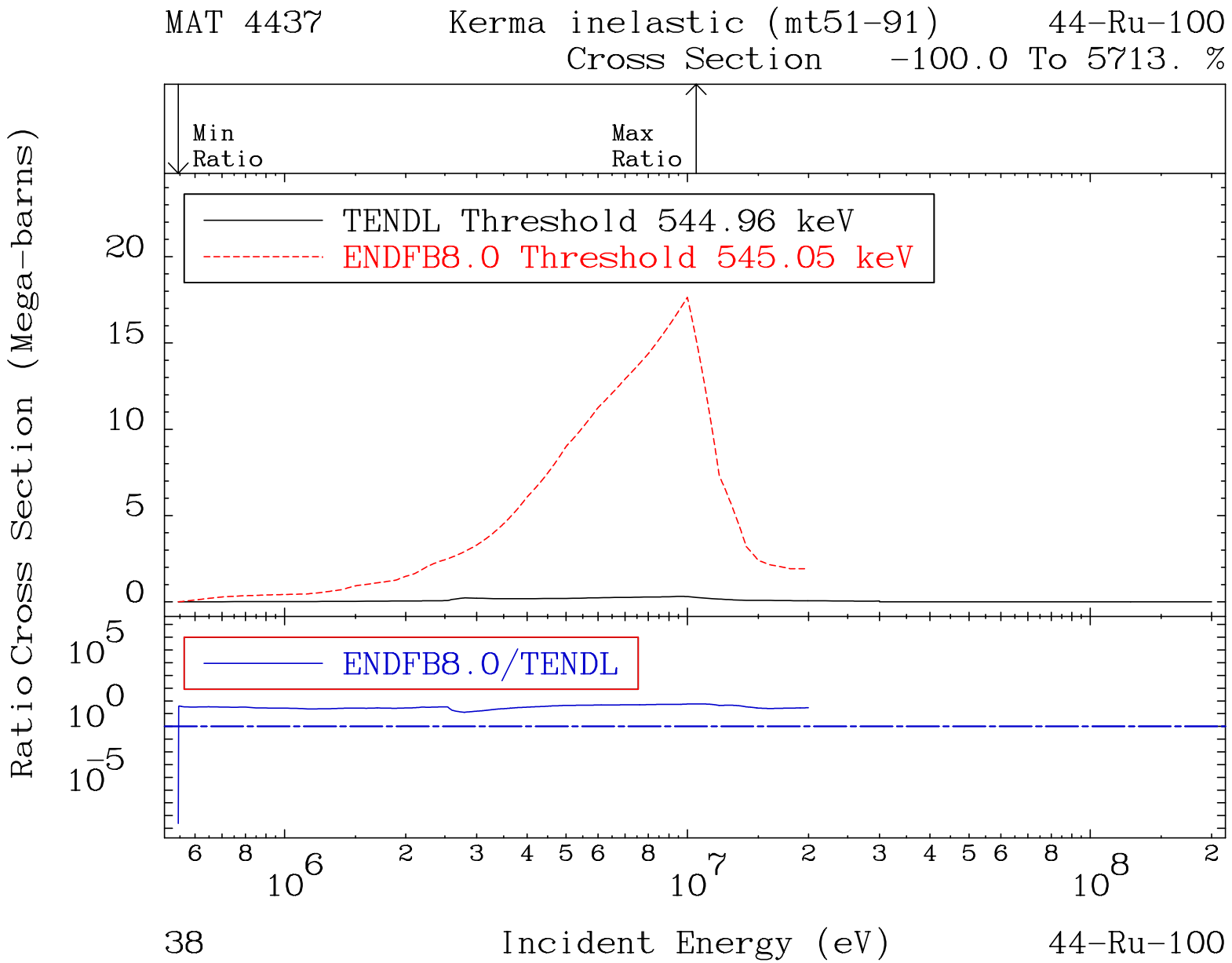

MAT 4437
Tritium Production
Cross Section
44-Ru-100
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.7713 MeV
ENDFB8.0 Threshold 10.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
120
60
0
10^7
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
44-Ru-100

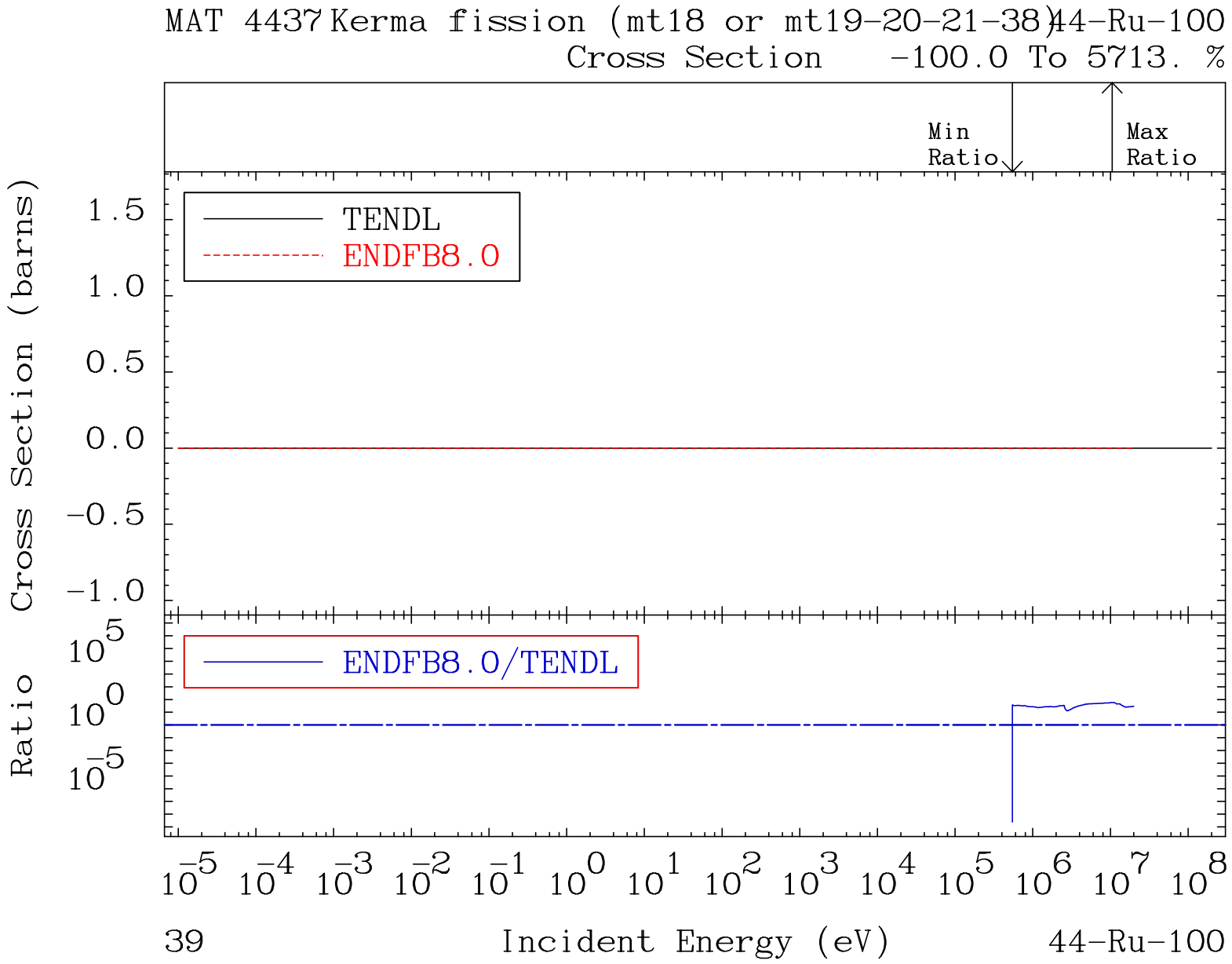

MAT 4437
He-4 Production
Cross Section
44-Ru-100
-100.0 To 1357. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 100.00 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
20
10
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
34
Incident Energy (eV)
44-Ru-100

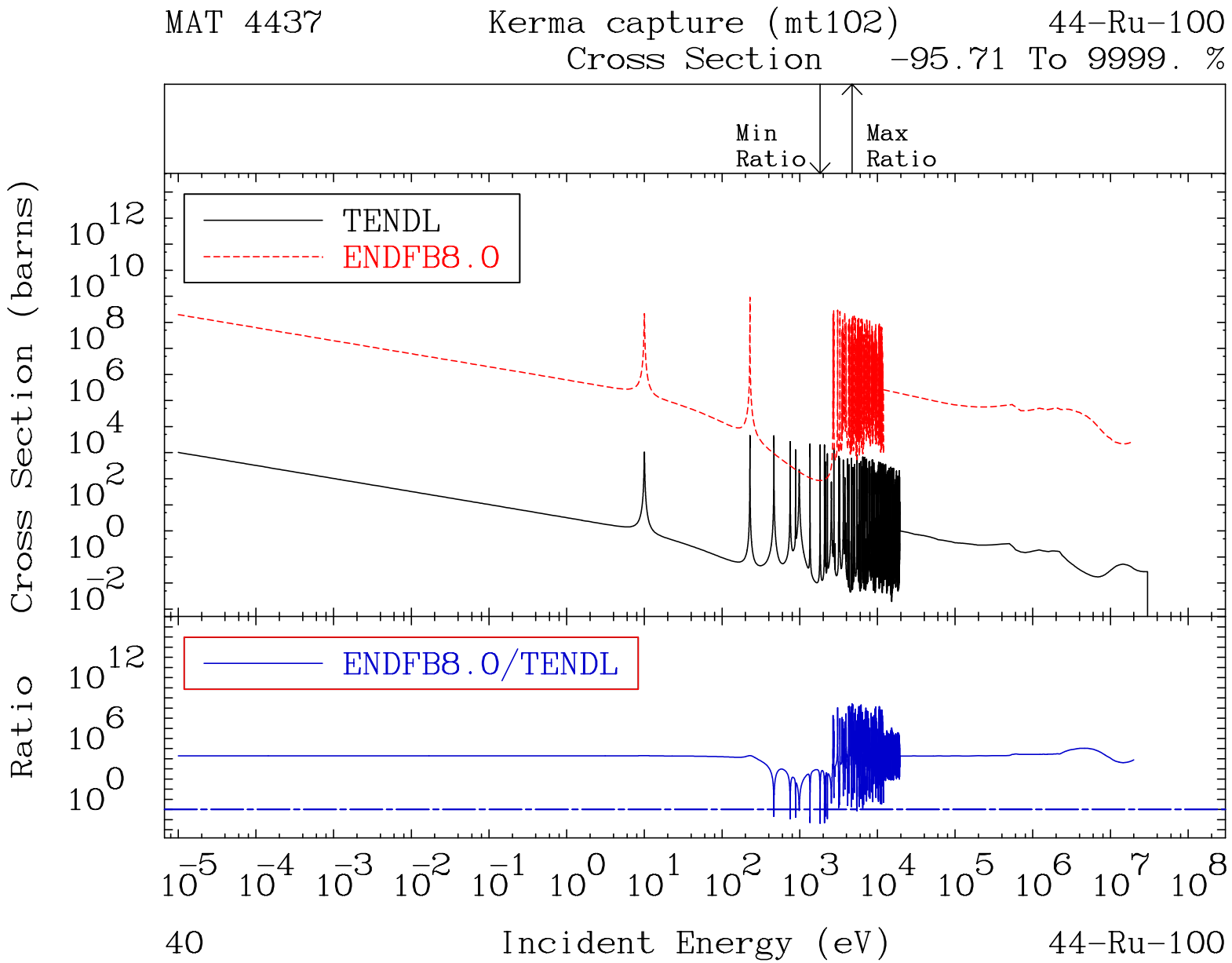

MAT 4437
Kerma total (eV-barns)
44-Ru-100
Cross Section -96.54 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
35
44-Ru-100

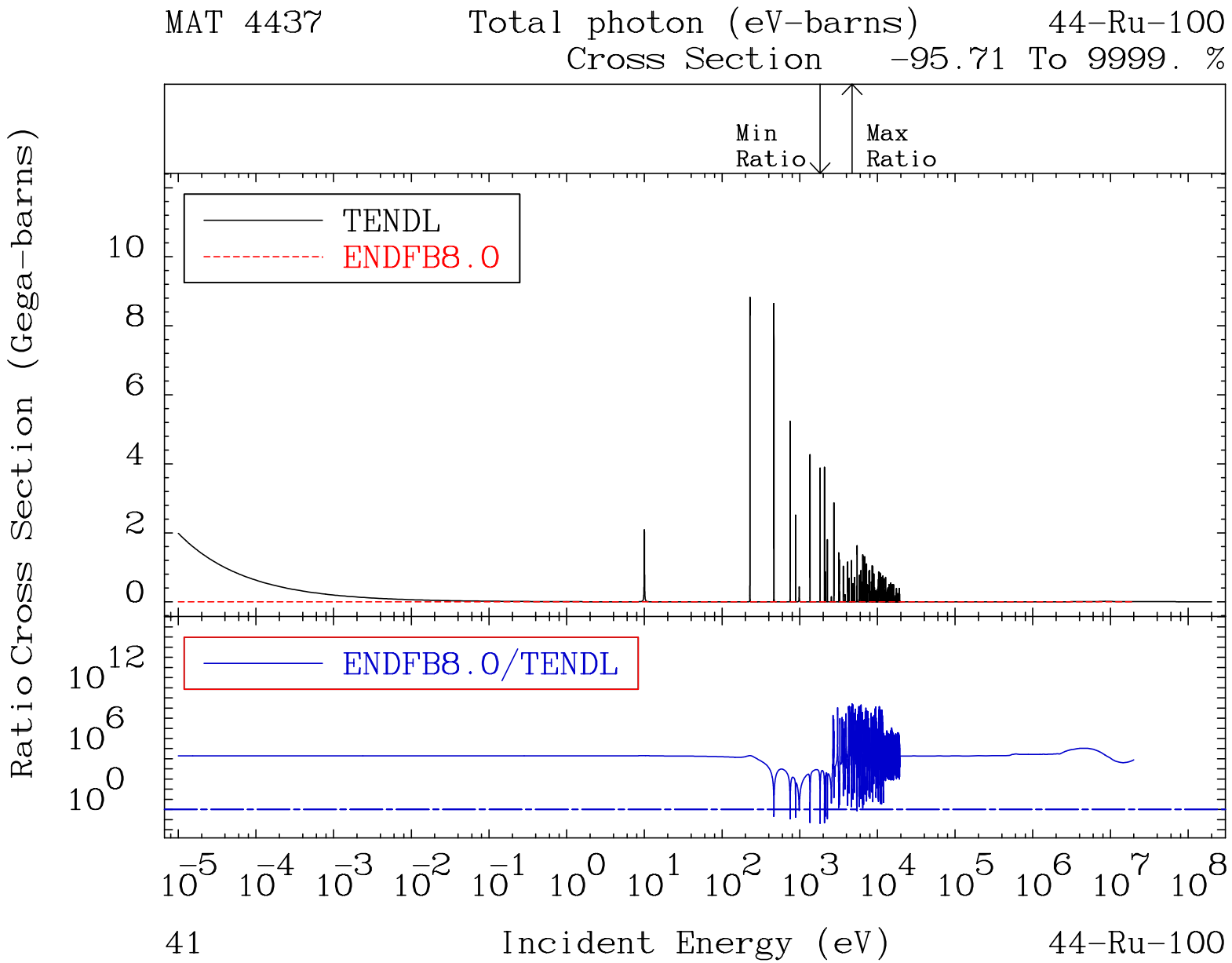

MAT 4437
Kerma elastic
Cross Section
44-Ru-100
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
44-Ru-100

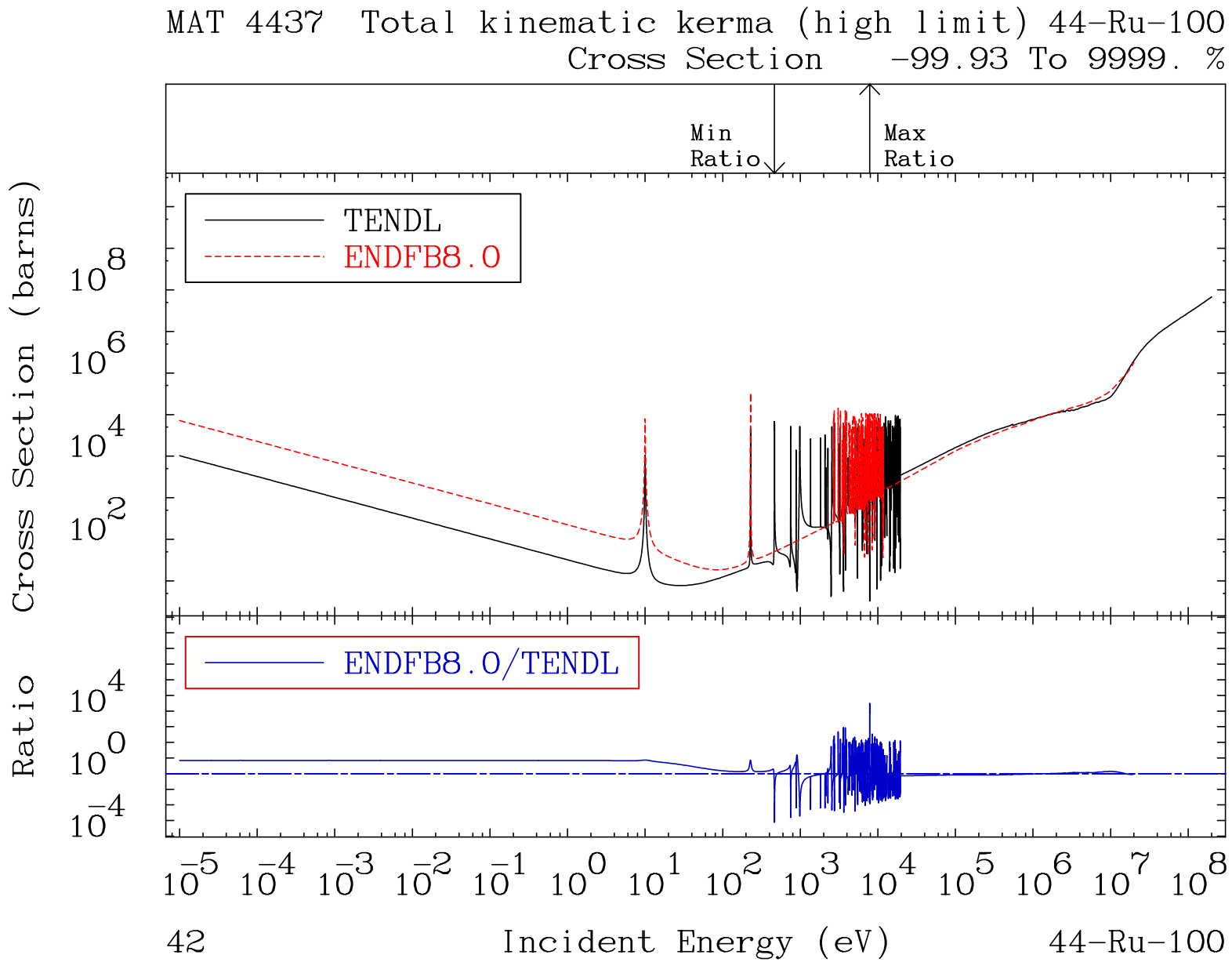

MAT 4437 Kerma non-elastic (all but mt2) 44-Ru-100
Cross Section -95.71 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
44-Ru-100

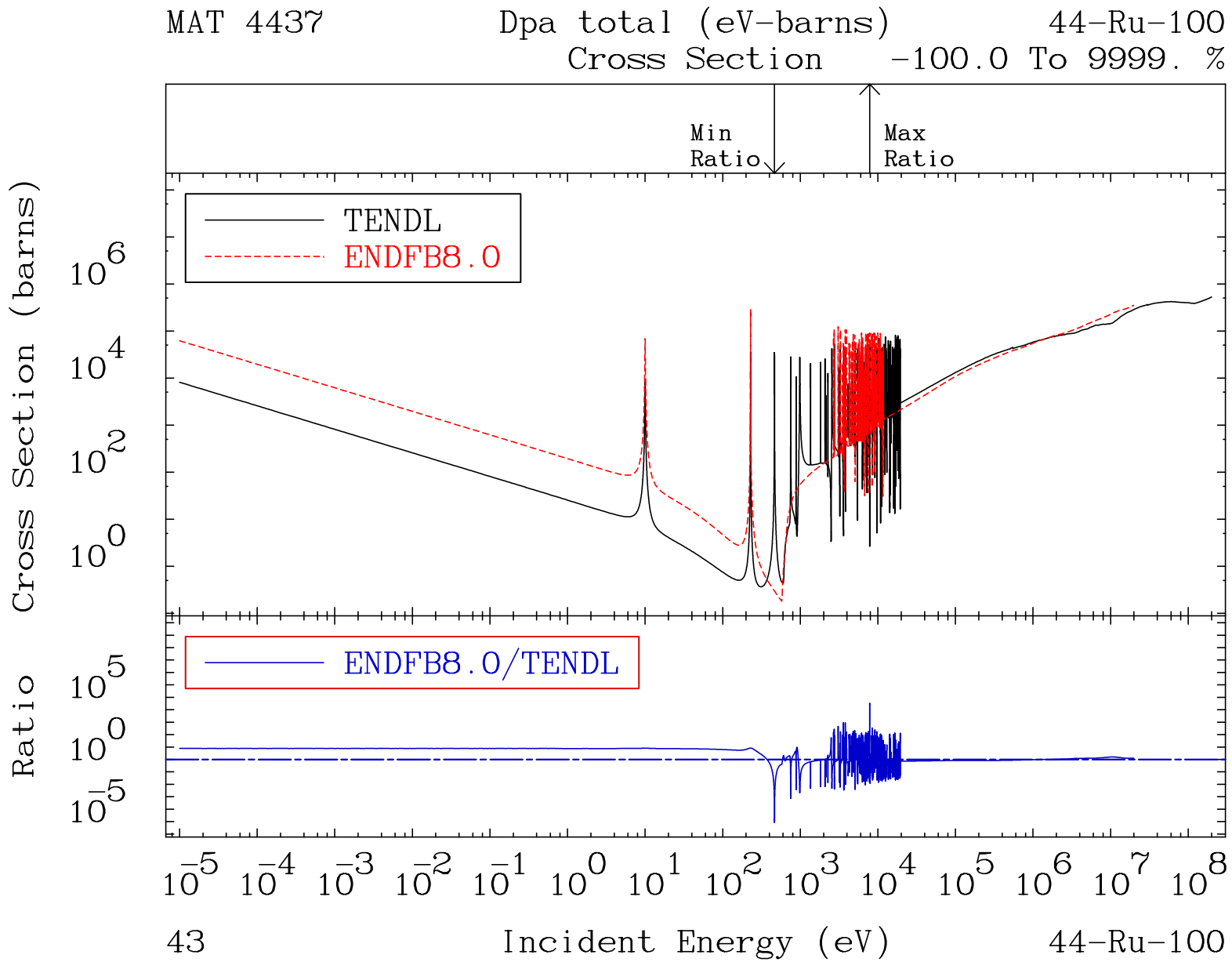

MAT 4437
Kerma inelastic (mt51-91)
44-Ru-100
Cross Section
-100.0 To 5713. %
Min Ratio
Max Ratio
TENDL Threshold 544.96 keV
ENDFB8.0 Threshold 545.05 keV
ENDFB8.0/TENDL
Ratio Cross Section (Mega-barns)
Incident Energy (eV)
38
44-Ru-100

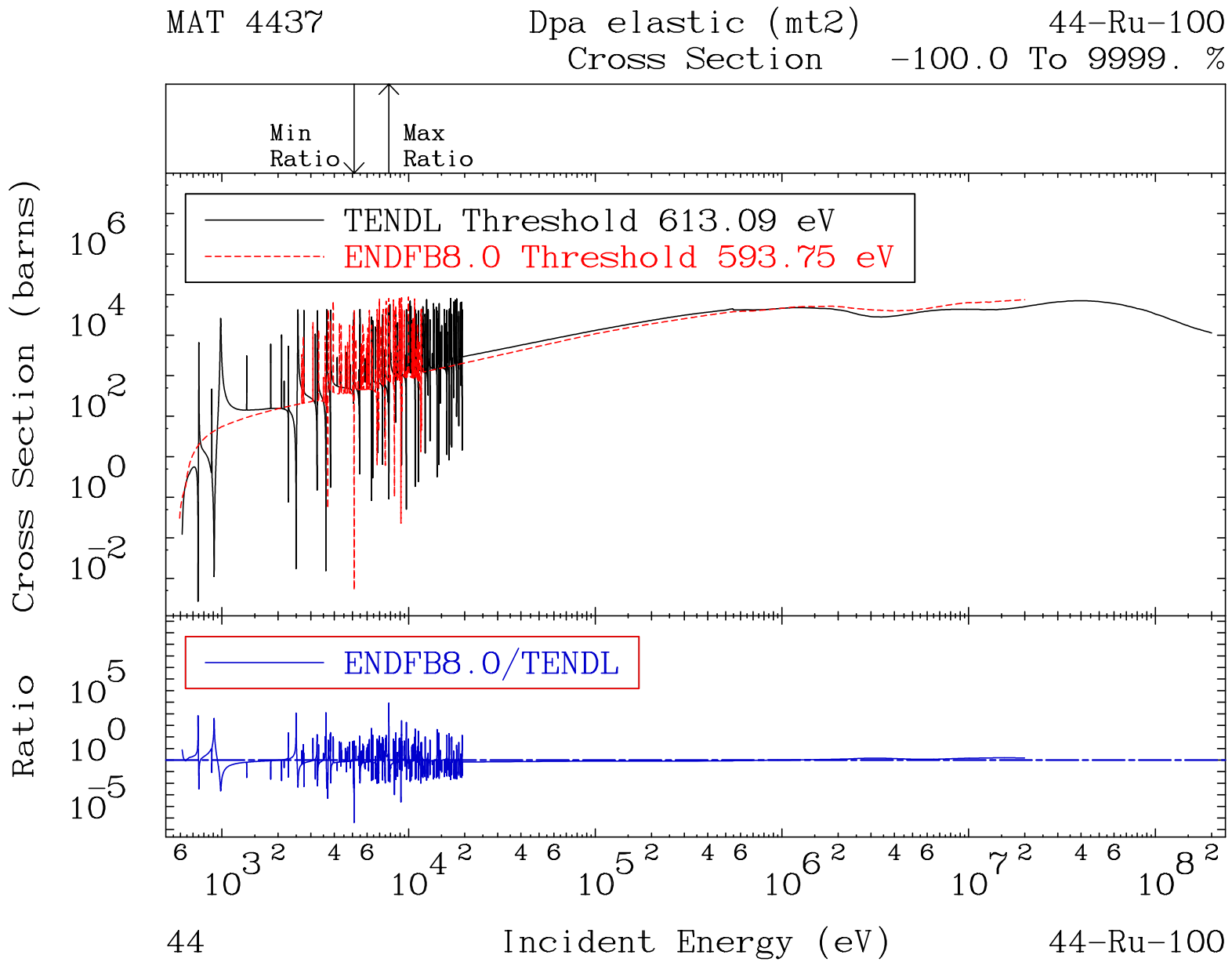

MAT 4437 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-100
Cross Section -100.0 To 5713. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
39
Incident Energy (eV)
44-Ru-100

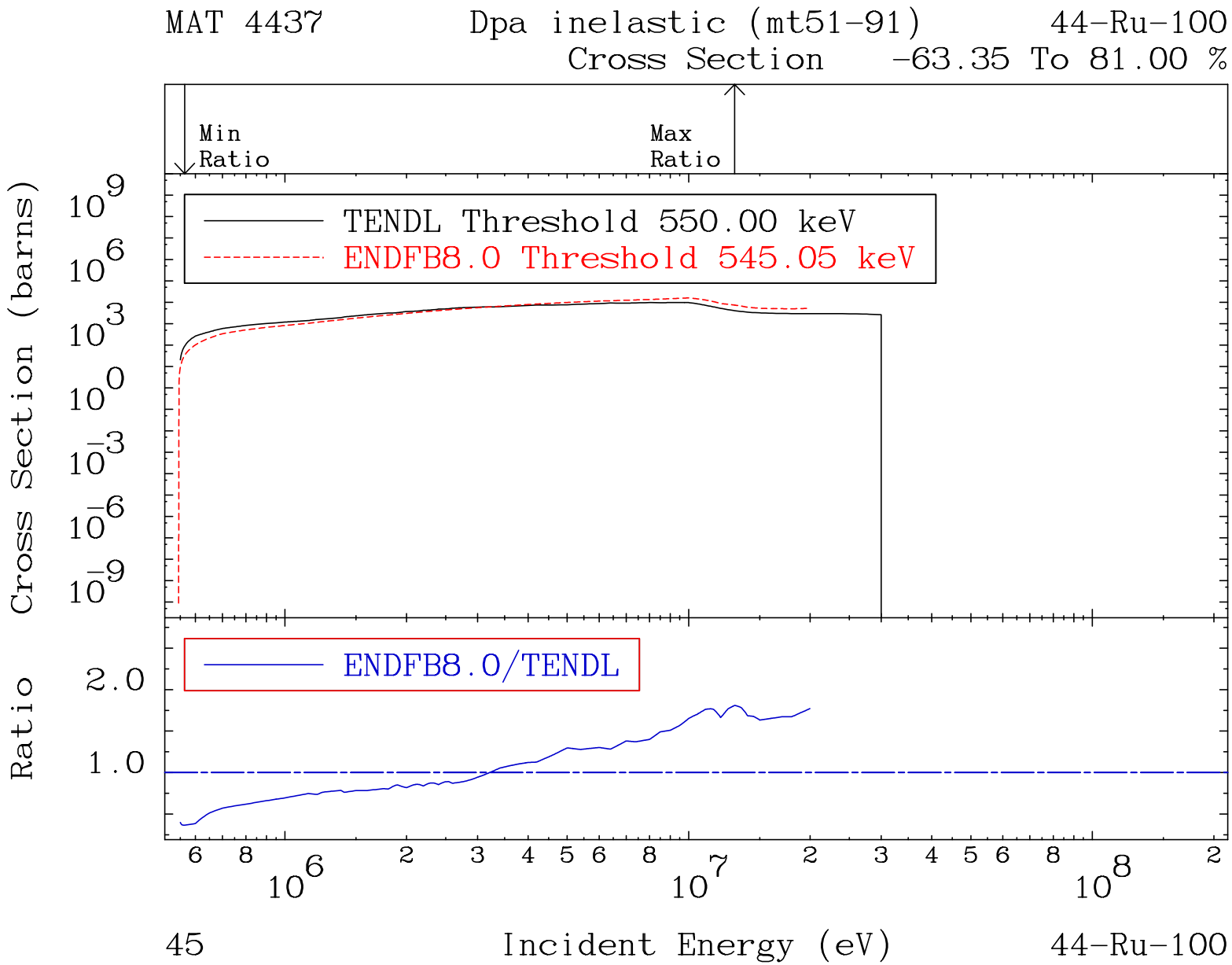

MAT 4437
Kerma capture (mt102)
44-Ru-100
Cross Section -95.71 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
40
44-Ru-100

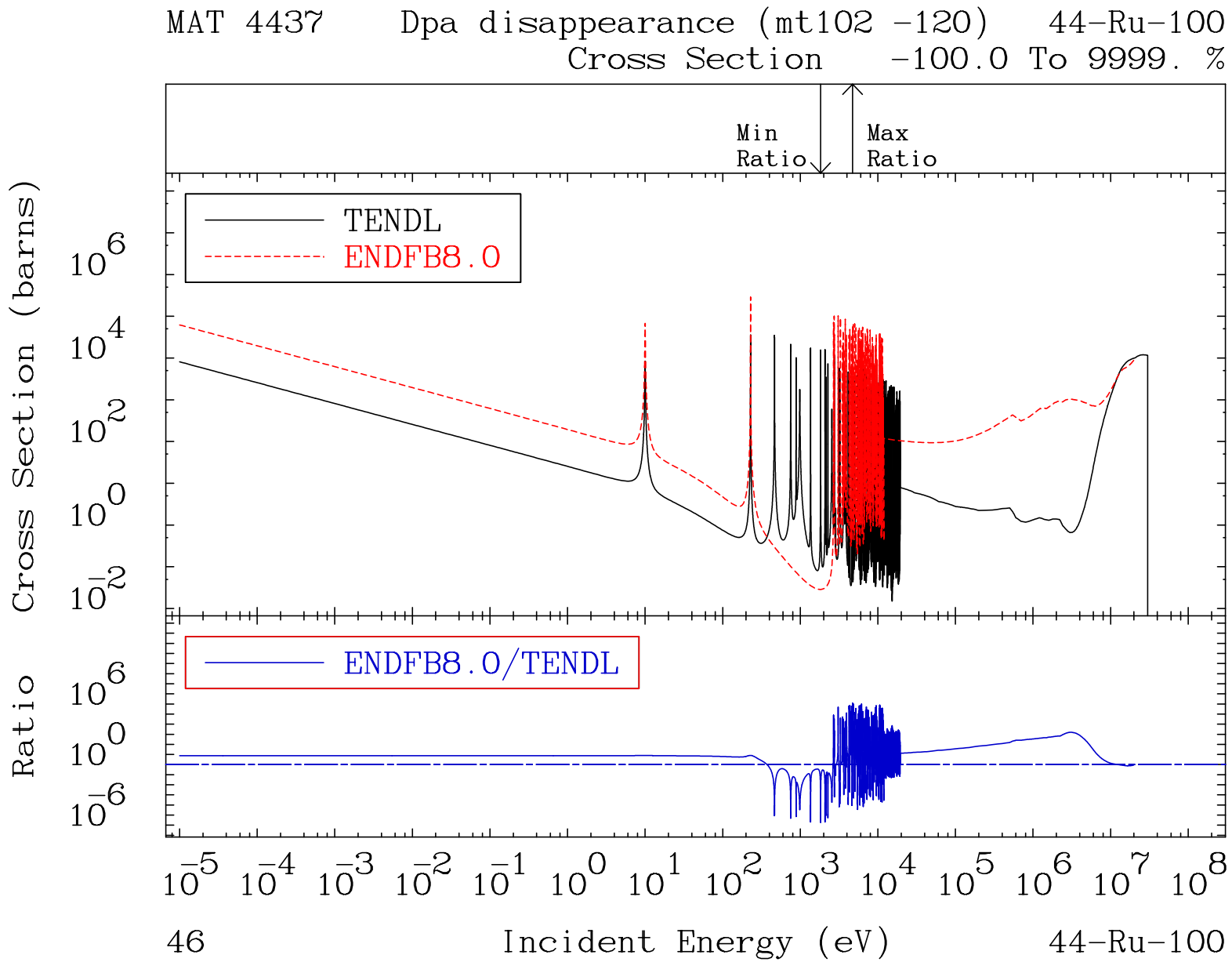

MAT 4437
Total photon (eV-barns)
44-Ru-100
Cross Section -95.71 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (Giga-barns)
Incident Energy (eV)
41
44-Ru-100


MAT 4437 Total kinematic kerma (high limit) 44-Ru-100
Cross Section -99.93 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
42
44-Ru-100


MAT 4437
Dpa total (eV-barns)
44-Ru-100
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
44-Ru-100


MAT 4437
Dpa elastic (mt2)
Cross Section
44-Ru-100
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 613.09 eV
ENDFB8.0 Threshold 593.75 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
44-Ru-100


MAT 4437
Dpa inelastic (mt51-91)
44-Ru-100
Cross Section
-63.35 To 81.00 %
Min Ratio
Max Ratio
TENDL Threshold 550.00 keV
ENDFB8.0 Threshold 545.05 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
45
44-Ru-100


MAT 4437 Dpa disappearance (mt102 -120) 44-Ru-100
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
46
44-Ru-100