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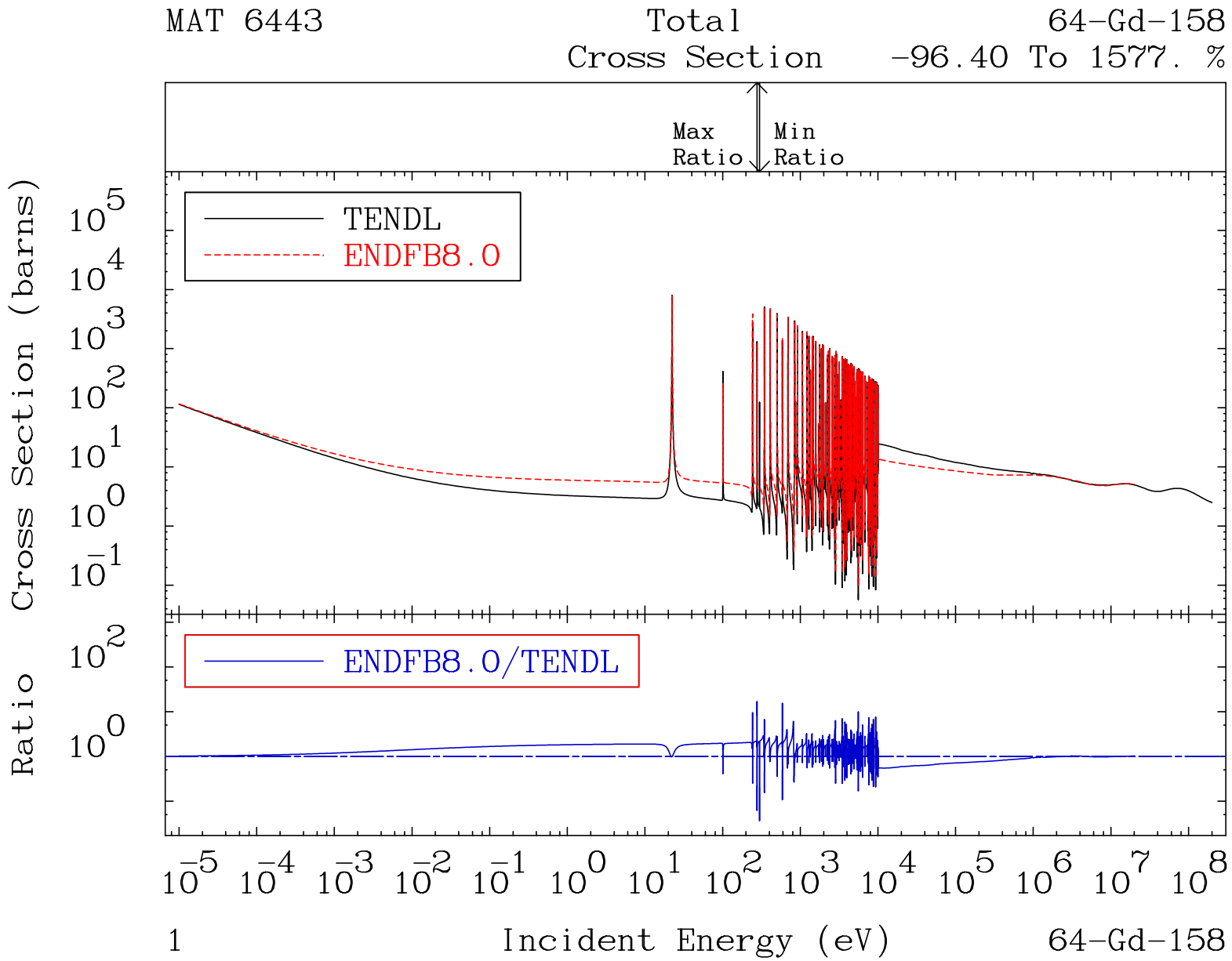
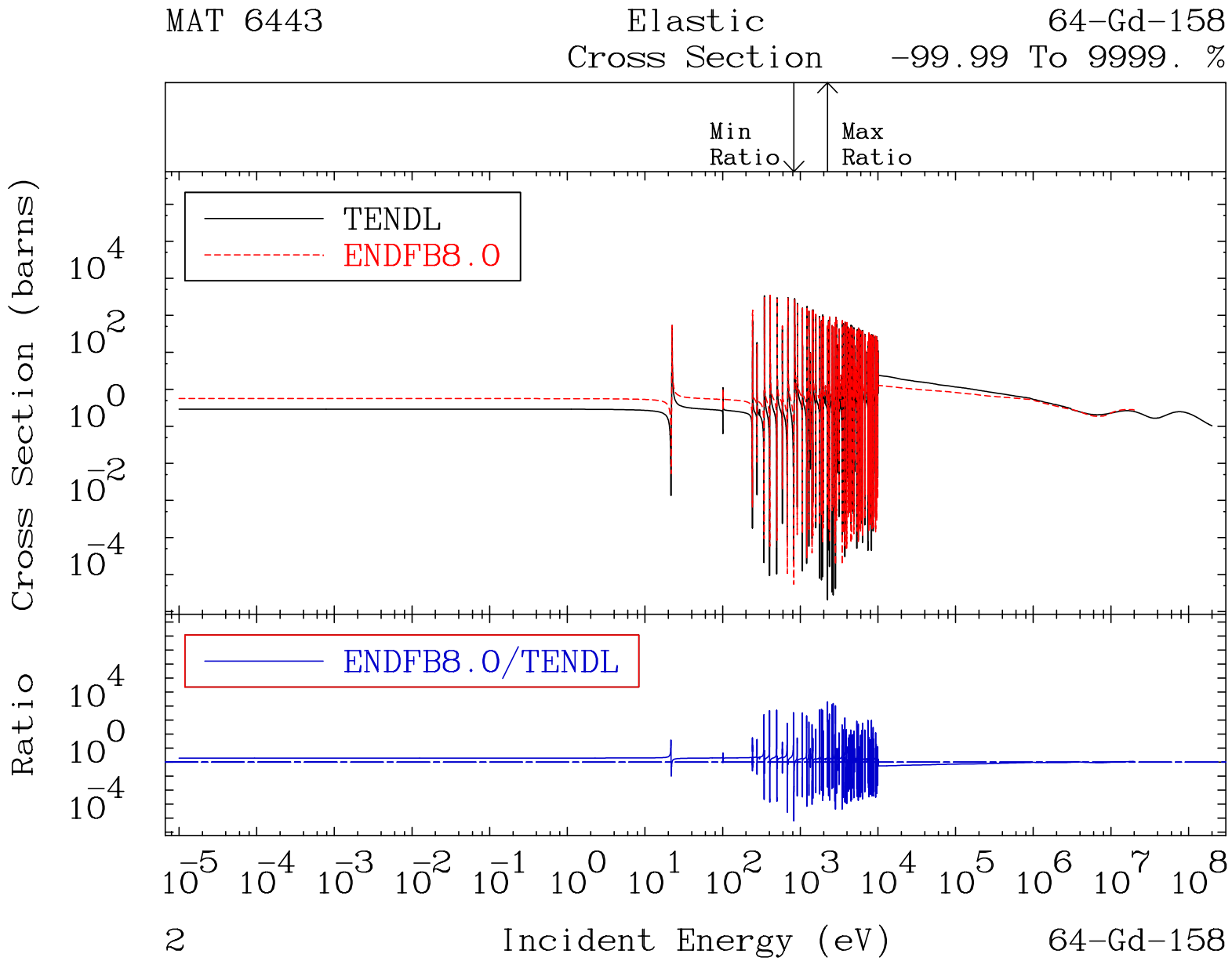
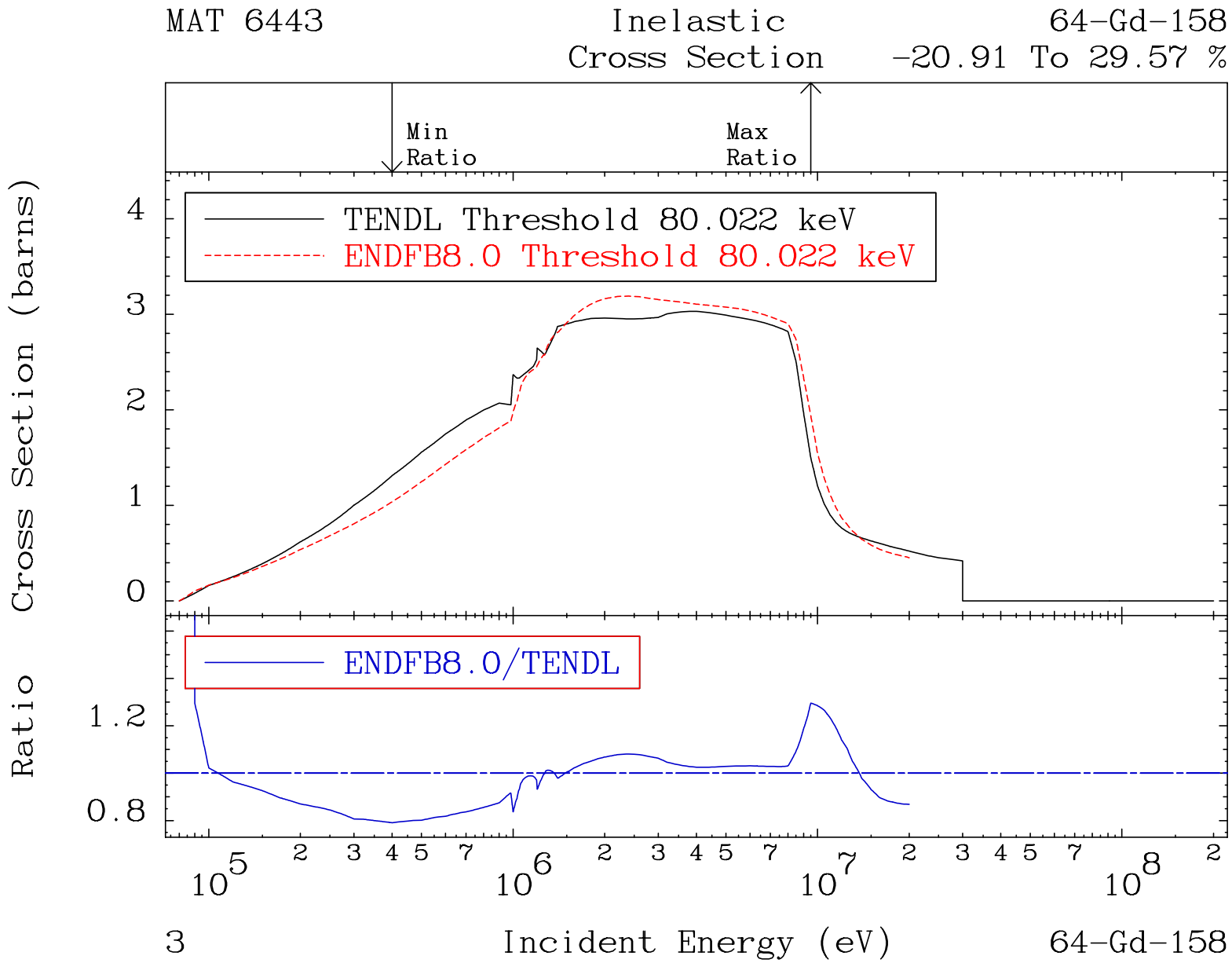
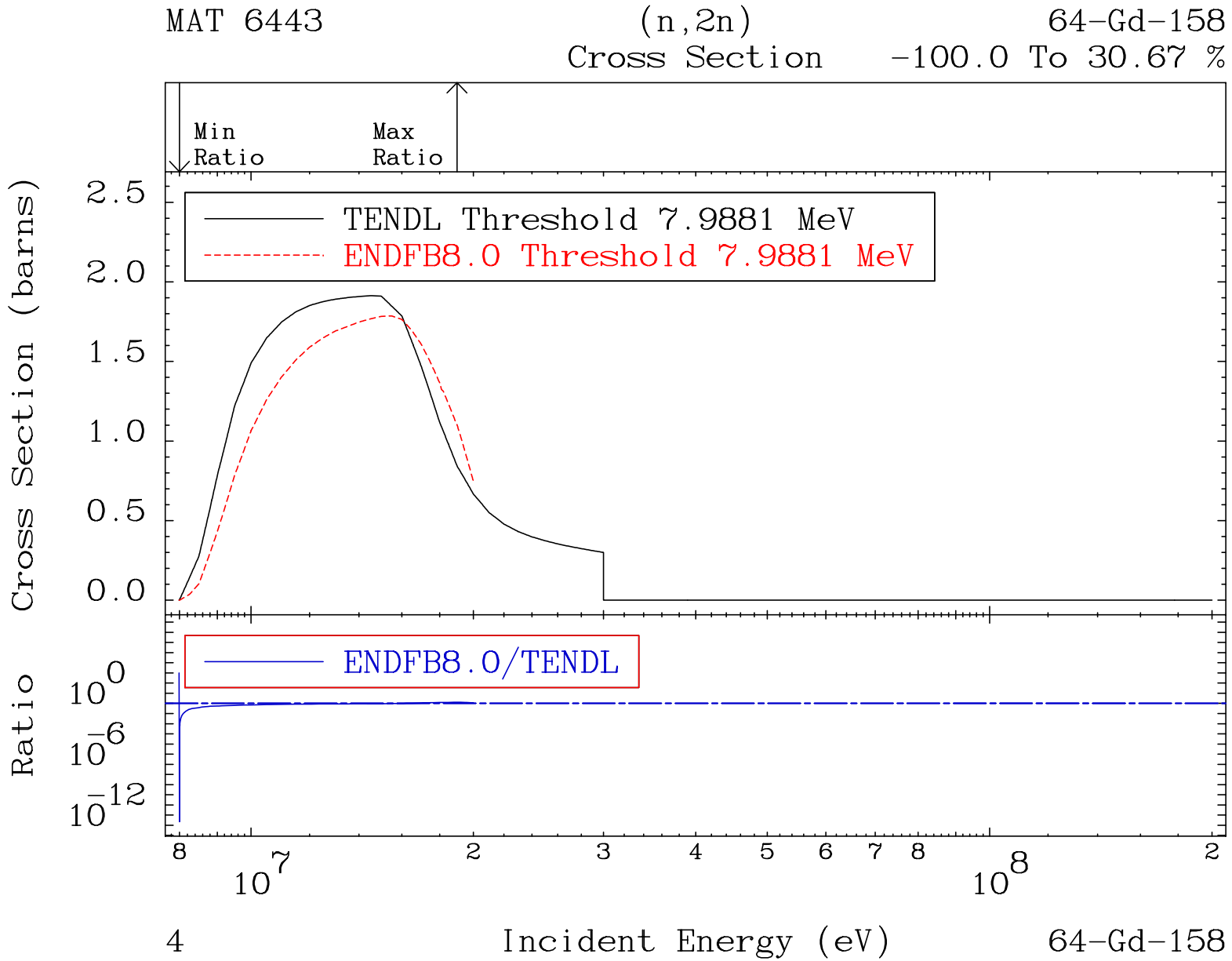
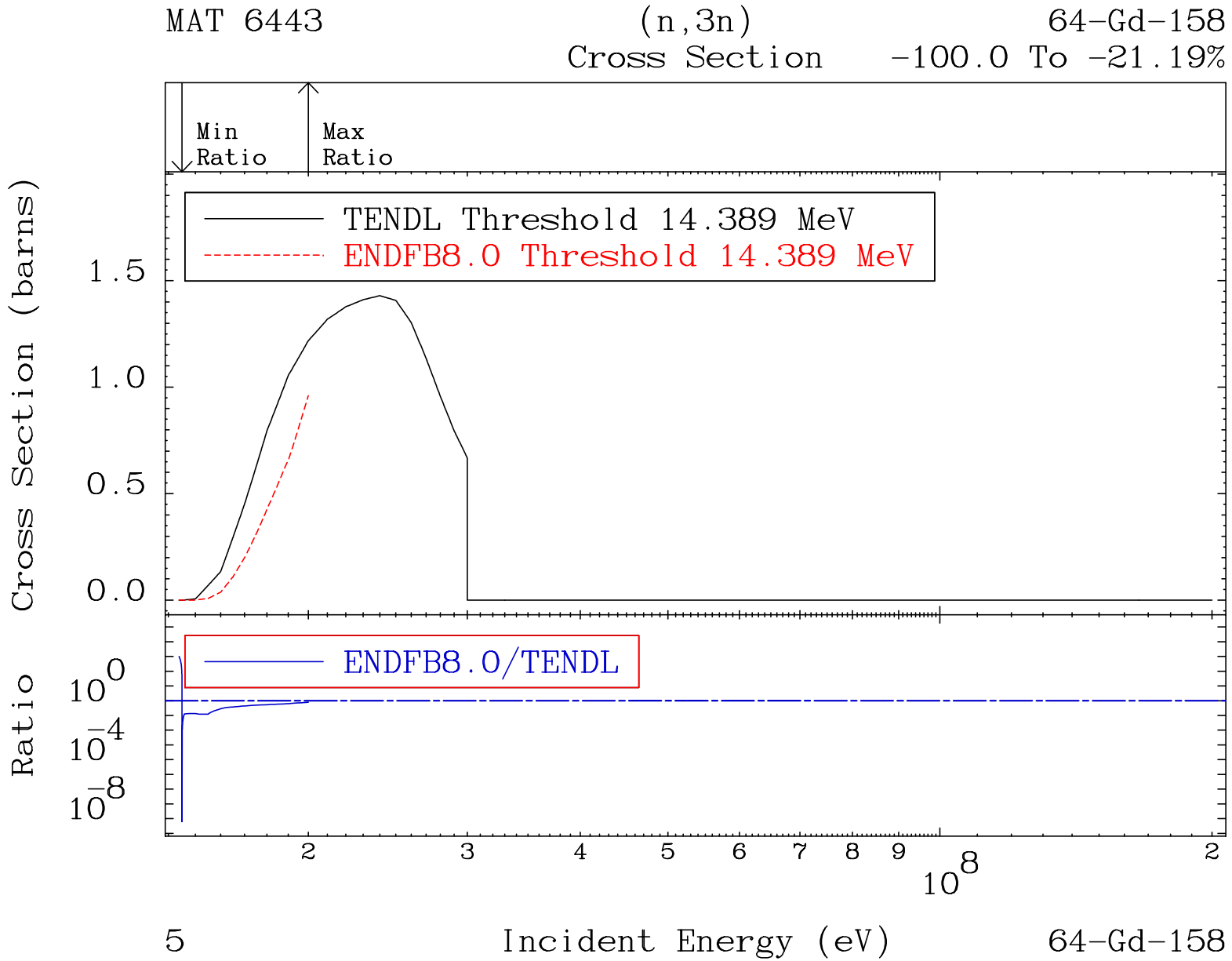
Press Mouse Button to Start

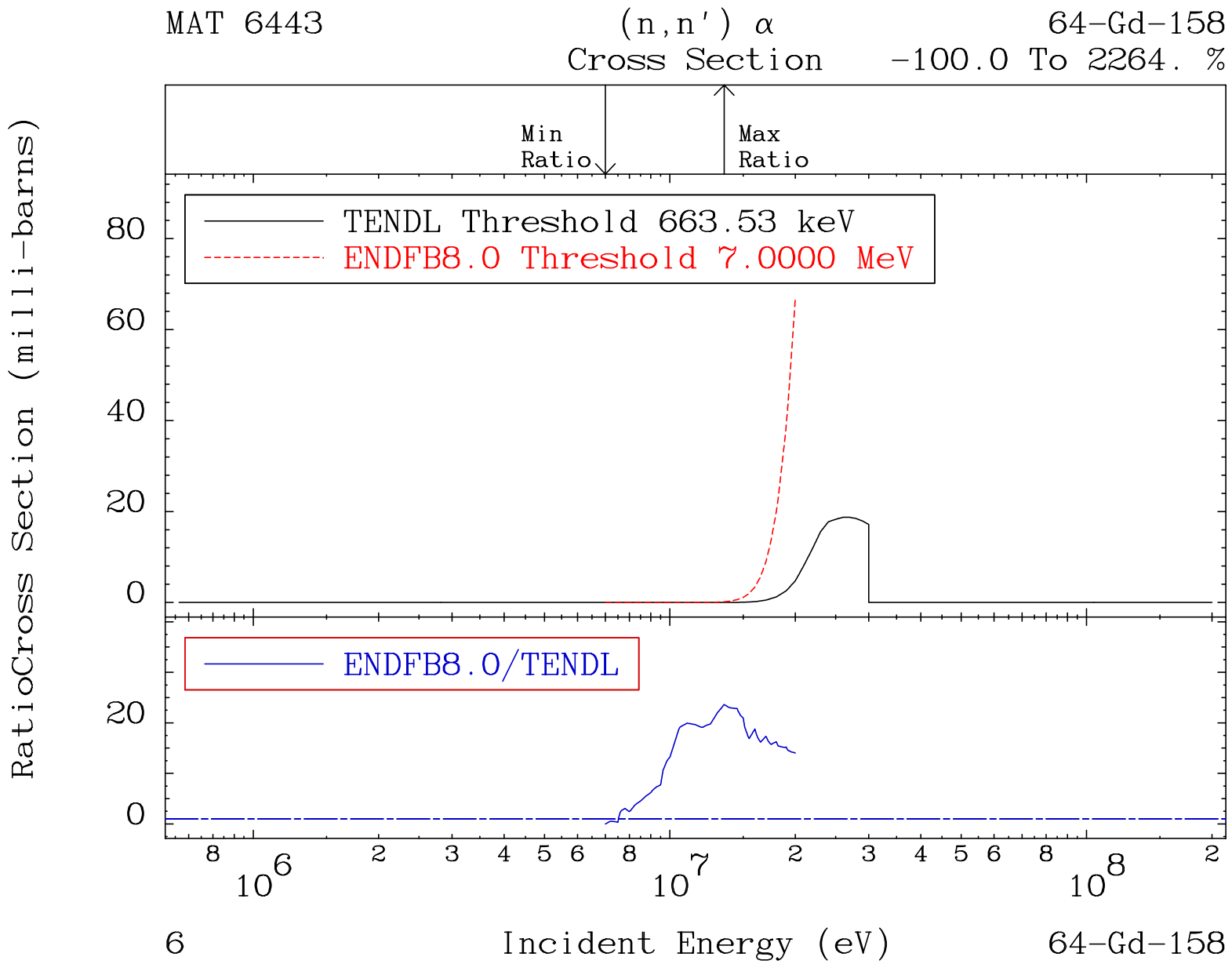

MAT 6443
Total
Cross Section
64-Gd-158
-96.40 To 1577. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
64-Gd-158

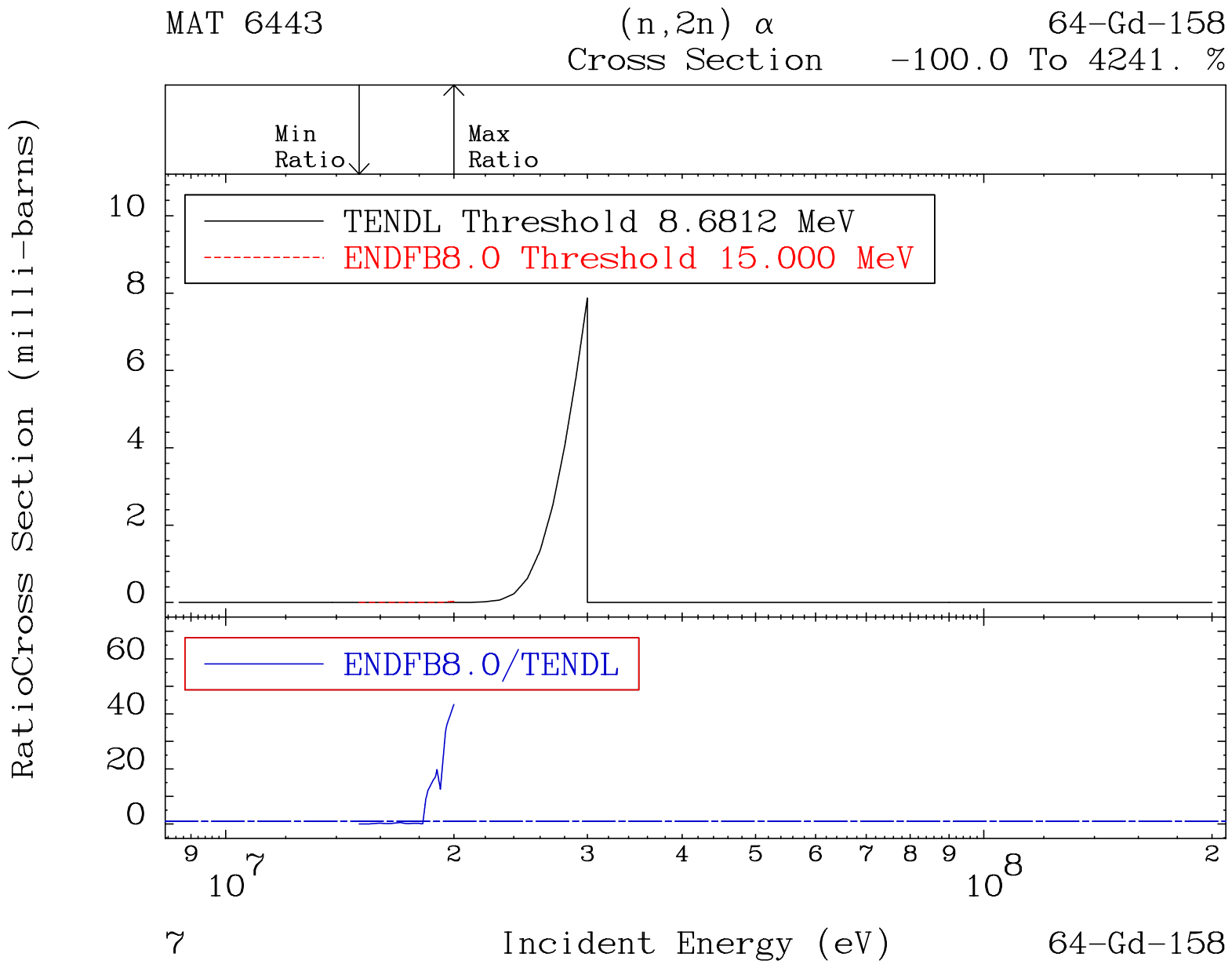

MAT 6443
Elastic
Cross Section
64-Gd-158
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
64-Gd-158

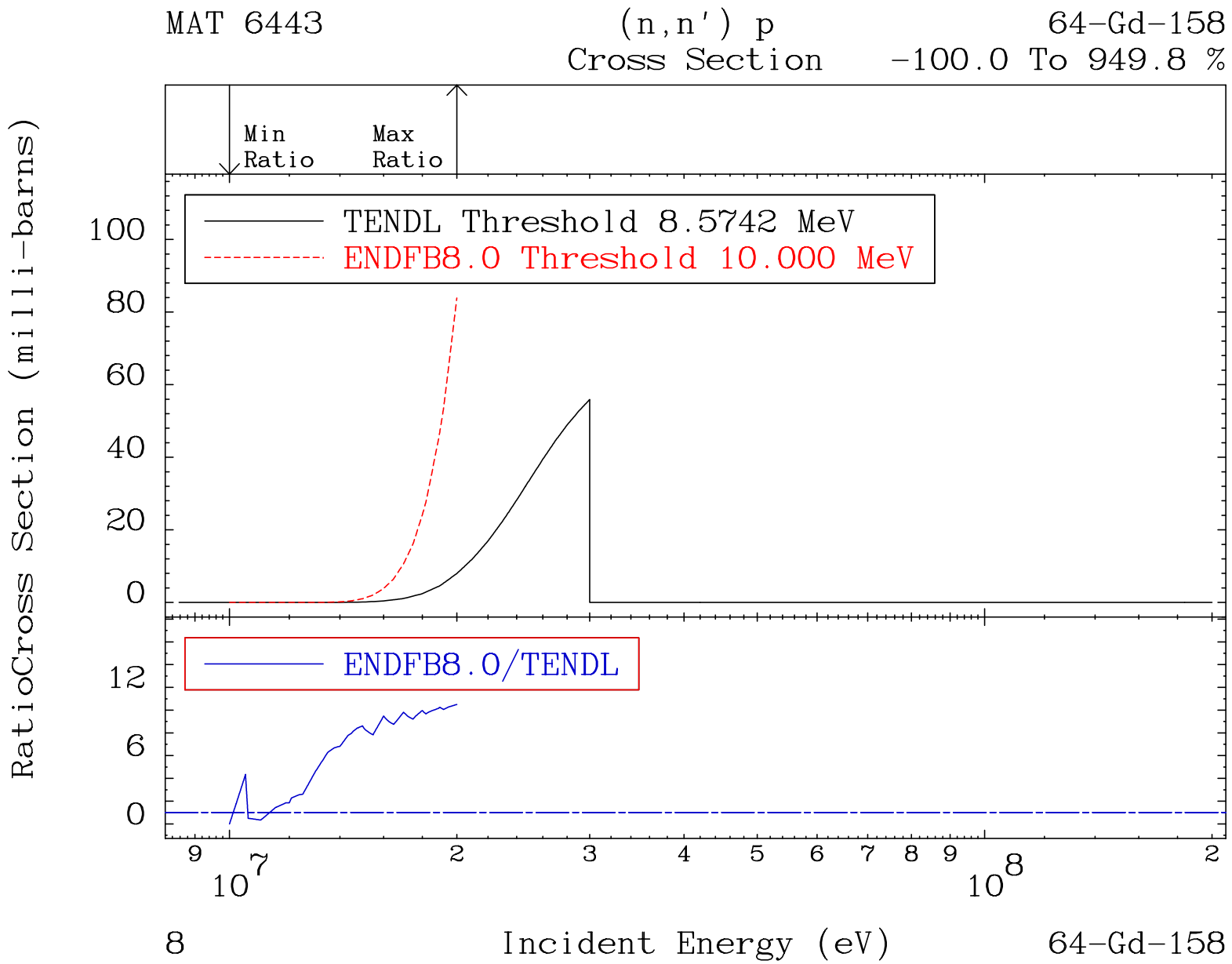

MAT 6443
Inelastic
Cross Section
64-Gd-158
-20.91 To 29.57 %
Min
Ratio
Max
Ratio
TENDL Threshold 80.022 keV
ENDFB8.0 Threshold 80.022 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
64-Gd-158

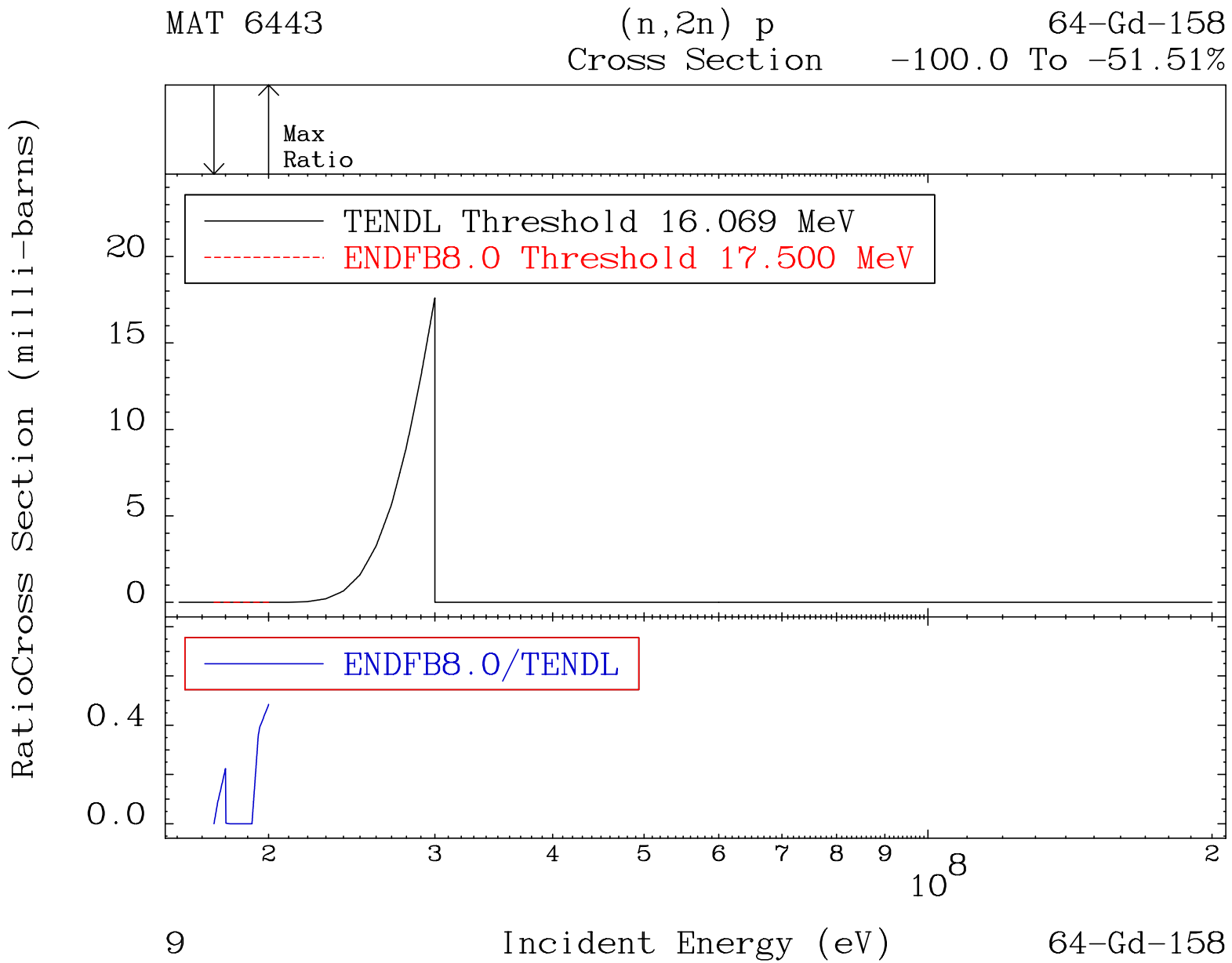

MAT 6443
(n,2n)
Cross Section
64-Gd-158
-100.0 To 30.67 %
Min Ratio
Max Ratio
TENDL Threshold 7.9881 MeV
ENDFB8.0 Threshold 7.9881 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^0
10^-6
10^-12
8
10^7
2
3
4
5
6
7
8
10^8
2
4
Incident Energy (eV)
64-Gd-158

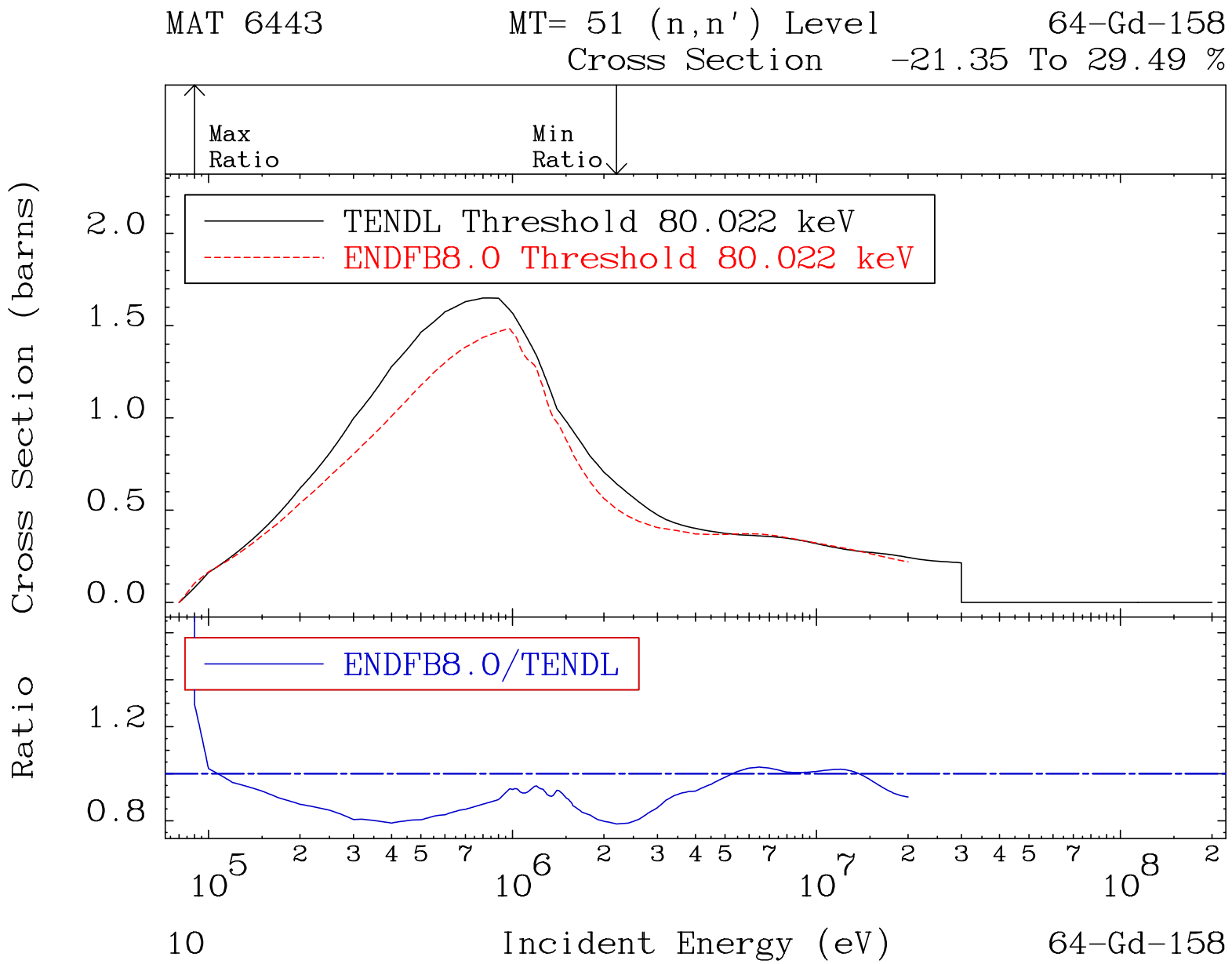

MAT 6443
(n,3n)
64-Gd-158
Cross Section
-100.0 To -21.19%
Min Ratio
Max Ratio
TENDL Threshold 14.389 MeV
ENDFB8.0 Threshold 14.389 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^0
10^-4
10^-8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
64-Gd-158

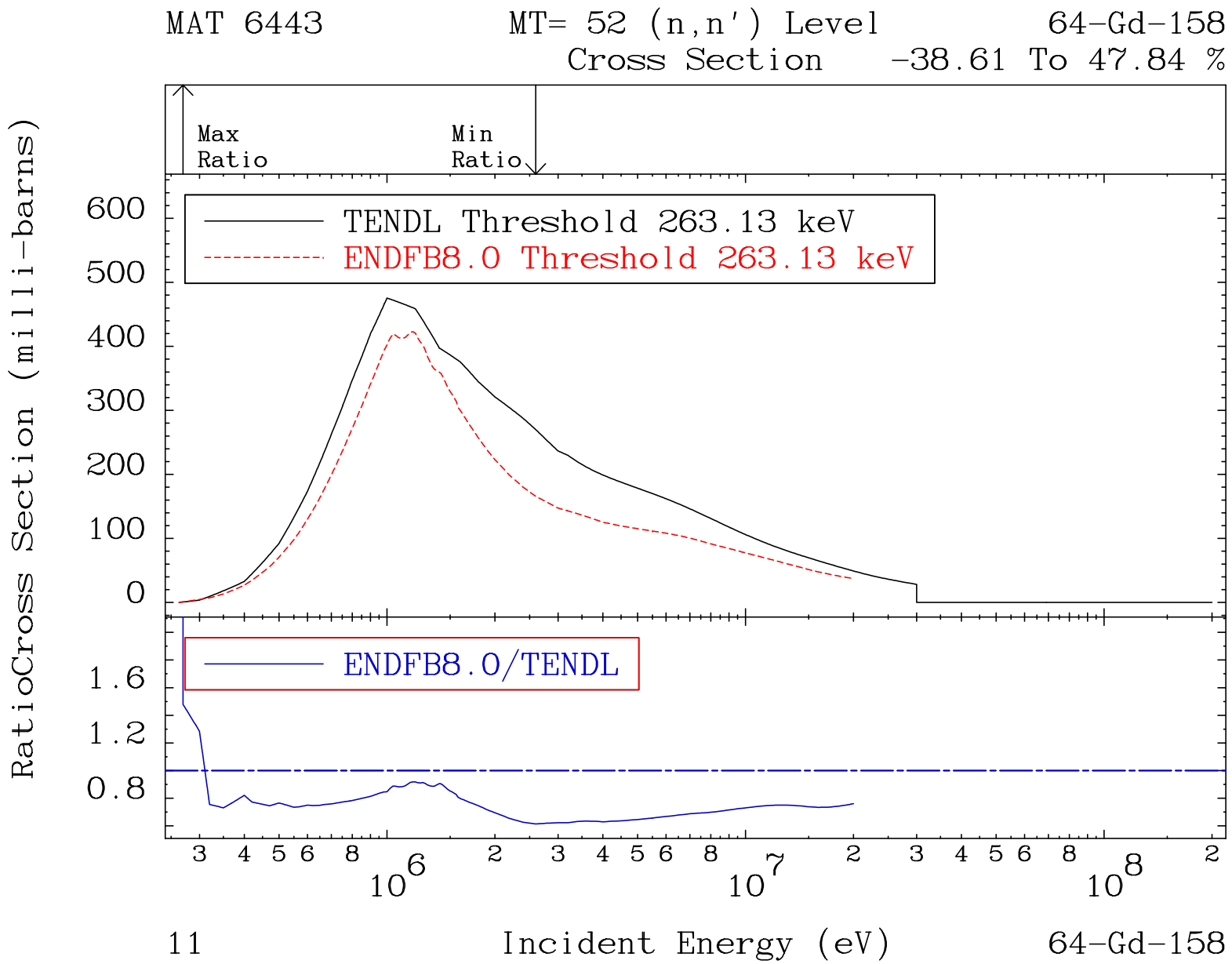

MAT 6443
(n,n') α
64-Gd-158
Cross Section
-100.0 To 2264. %
Min Ratio
Max Ratio
TENDL Threshold 663.53 keV
ENDFB8.0 Threshold 7.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
20
0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
6
Incident Energy (eV)
64-Gd-158

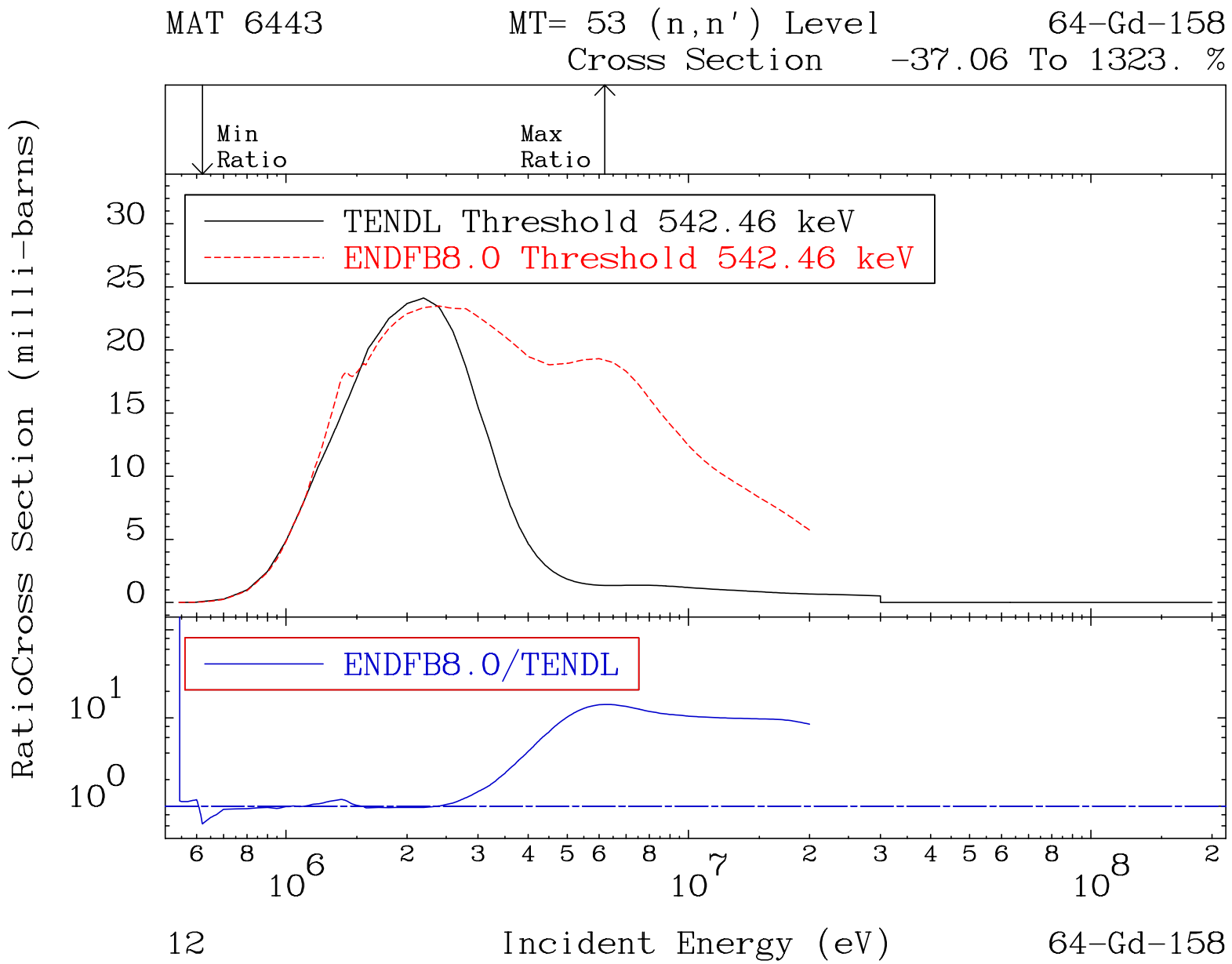

MAT 6443
(n,2n) α
64-Gd-158
Cross Section
-100.0 To 4241. %
Min Ratio
Max Ratio
TENDL Threshold 8.6812 MeV
ENDFB8.0 Threshold 15.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
64-Gd-158

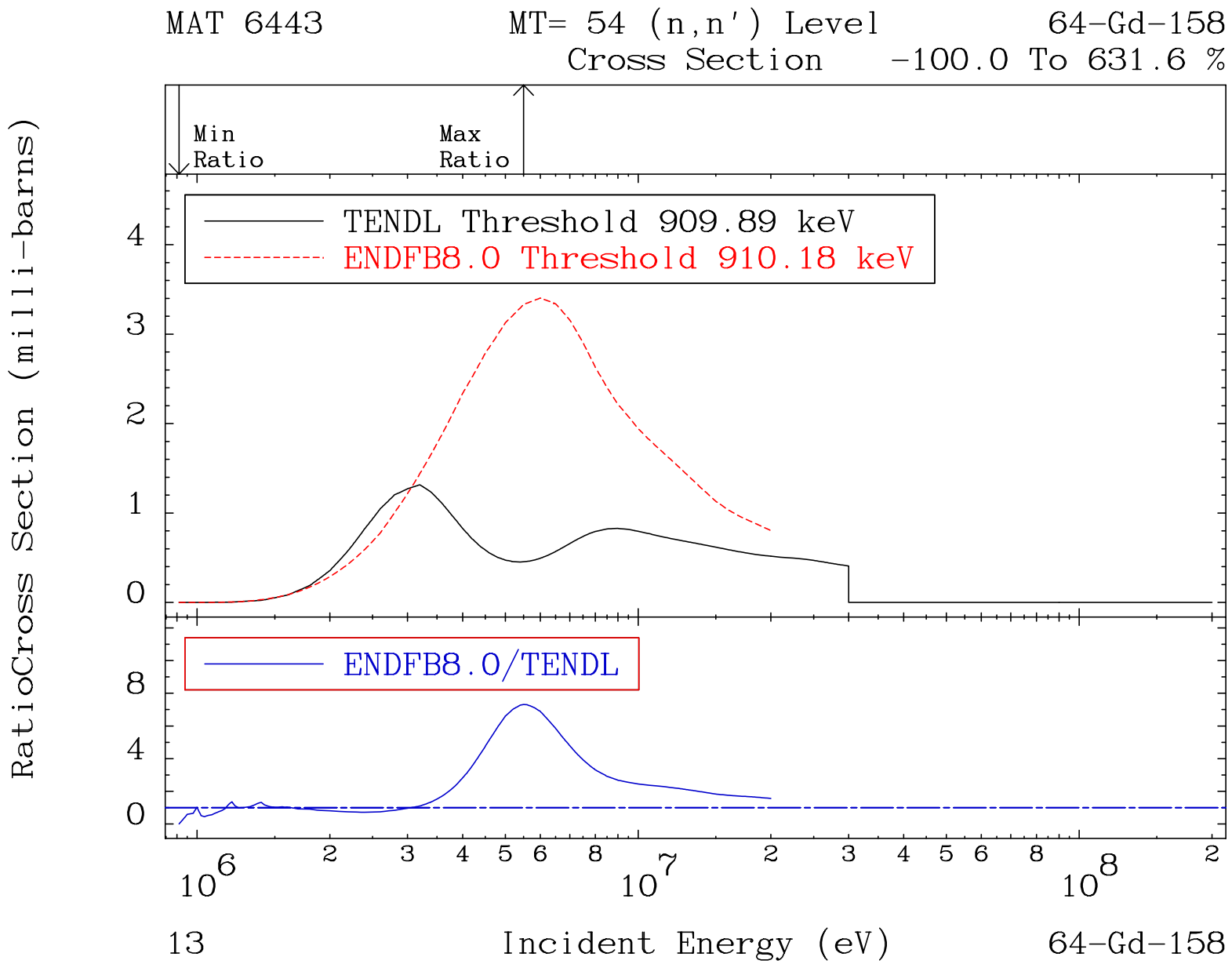

MAT 6443
(n,n') p
Cross Section
64-Gd-158
-100.0 To 949.8 %
Min Ratio
Max Ratio
TENDL Threshold 8.5742 MeV
ENDFB8.0 Threshold 10.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
12
6
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
64-Gd-158

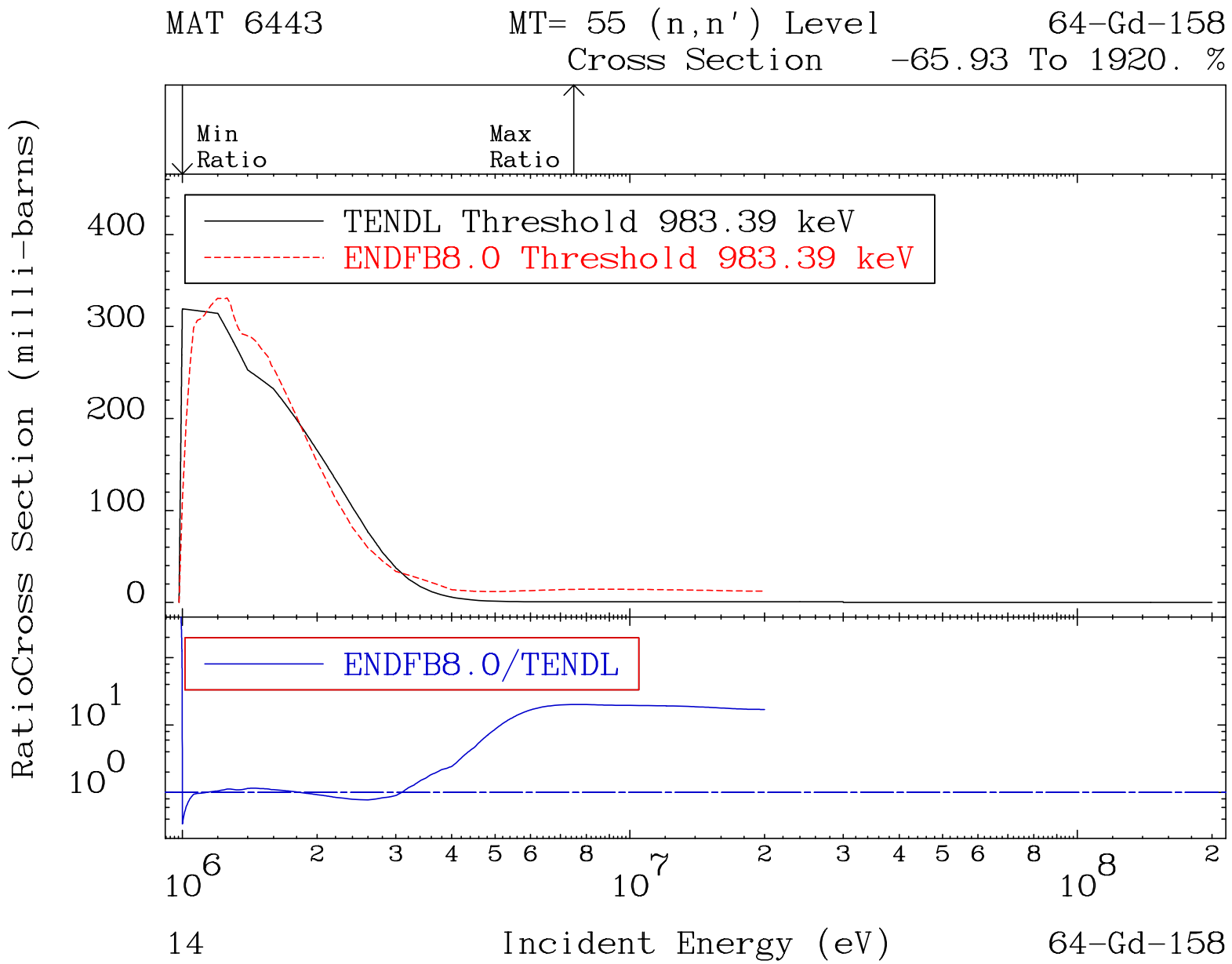

MAT 6443
(n,2n) p
64-Gd-158
Cross Section
-100.0 To -51.51%
Max
Ratio
TENDL Threshold 16.069 MeV
ENDFB8.0 Threshold 17.500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
64-Gd-158

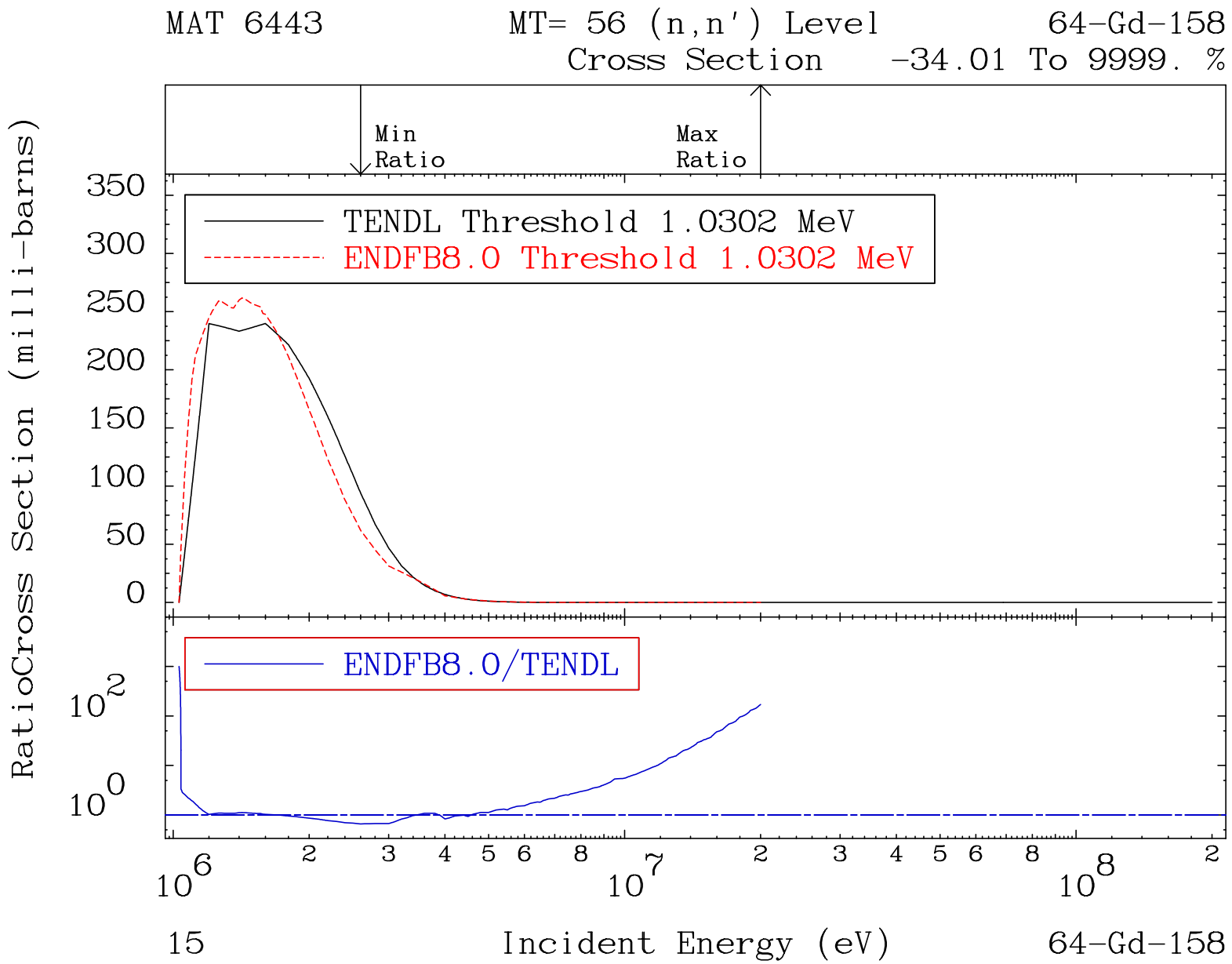

MAT 6443
MT= 51 (n,n') Level
64-Gd-158
Cross Section
-21.35 To 29.49 %
Max Ratio
Min Ratio
TENDL Threshold 80.022 keV
ENDFB8.0 Threshold 80.022 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
1.2
0.8
10^5
2 3 4 5 7
10^6
2 3 4 5 7
10^7
2 3 4 5 7
10^8
2
10
Incident Energy (eV)
64-Gd-158

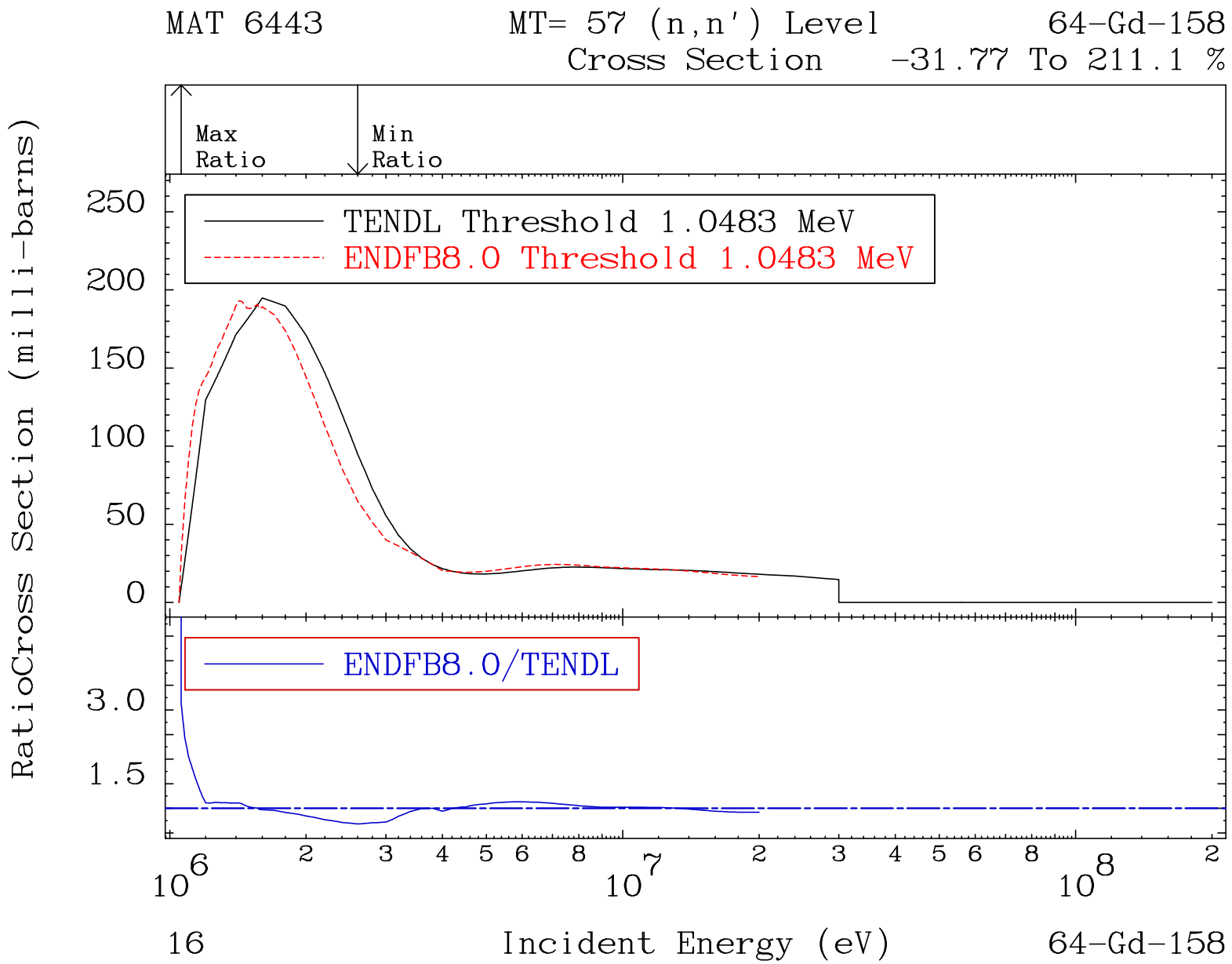

MAT 6443
MT= 52 (n,n') Level
64-Gd-158
Cross Section -38.61 To 47.84 %
Max Ratio
Min Ratio
TENDL Threshold 263.13 keV
ENDFB8.0 Threshold 263.13 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
1.6
1.2
0.8
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
64-Gd-158

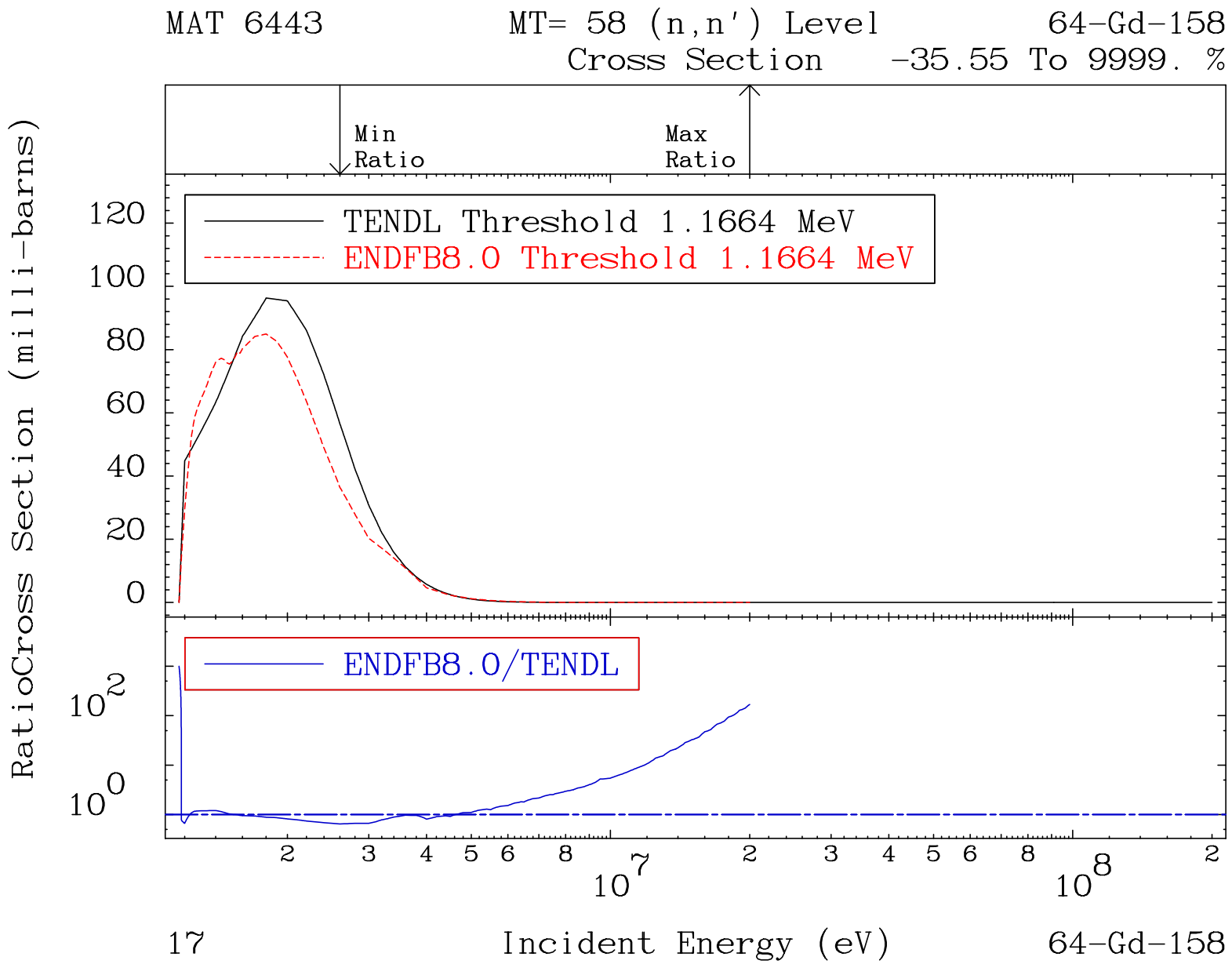

MAT 6443
MT= 53 (n,n') Level
64-Gd-158
Cross Section -37.06 To 1323. %
Min Ratio
Max Ratio
TENDL Threshold 542.46 keV
ENDFB8.0 Threshold 542.46 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
12
64-Gd-158

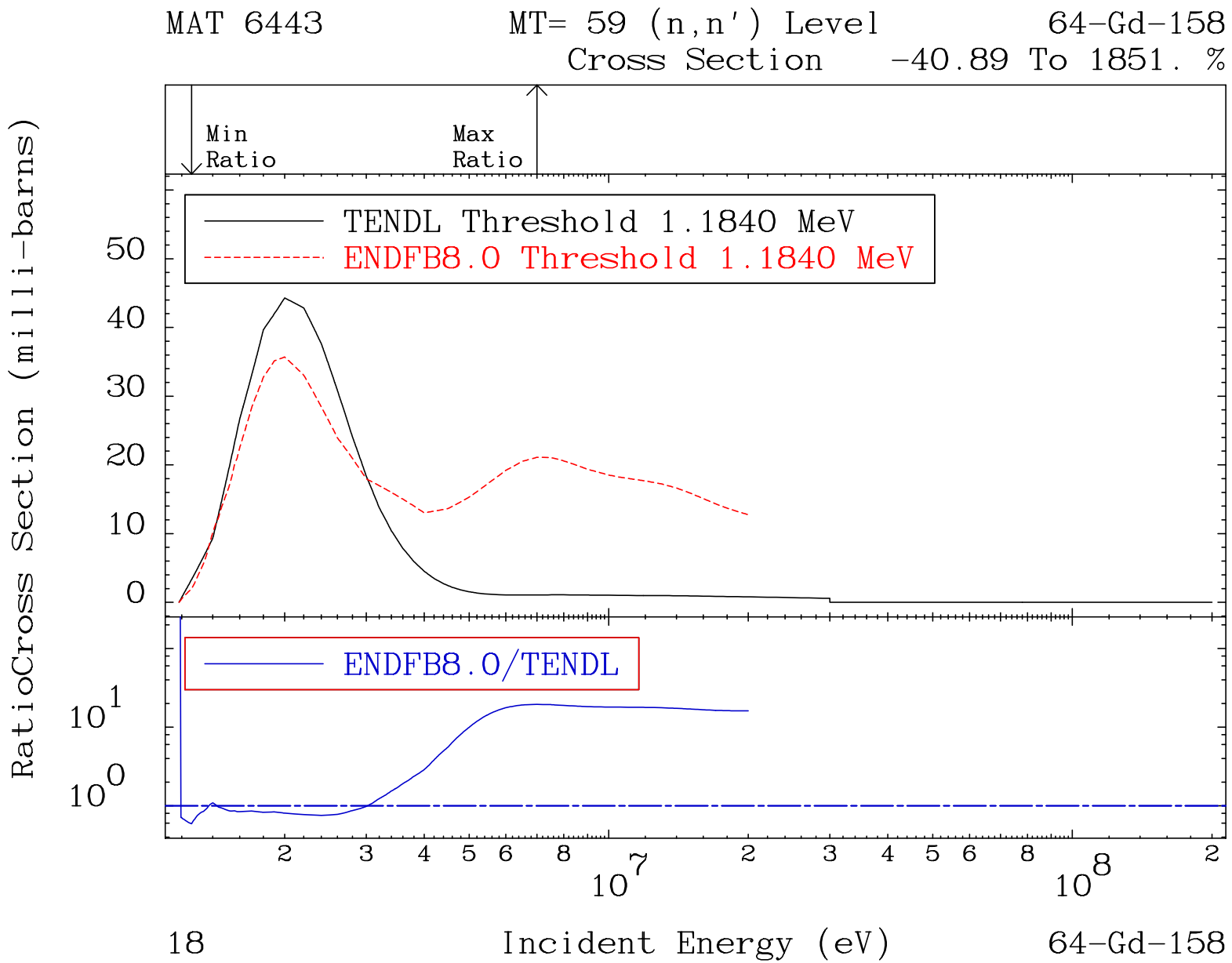

MAT 6443
MT= 54 (n,n') Level
64-Gd-158
Cross Section
-100.0 To 631.6 %
Min Ratio
Max Ratio
TENDL Threshold 909.89 keV
ENDFB8.0 Threshold 910.18 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
13
64-Gd-158

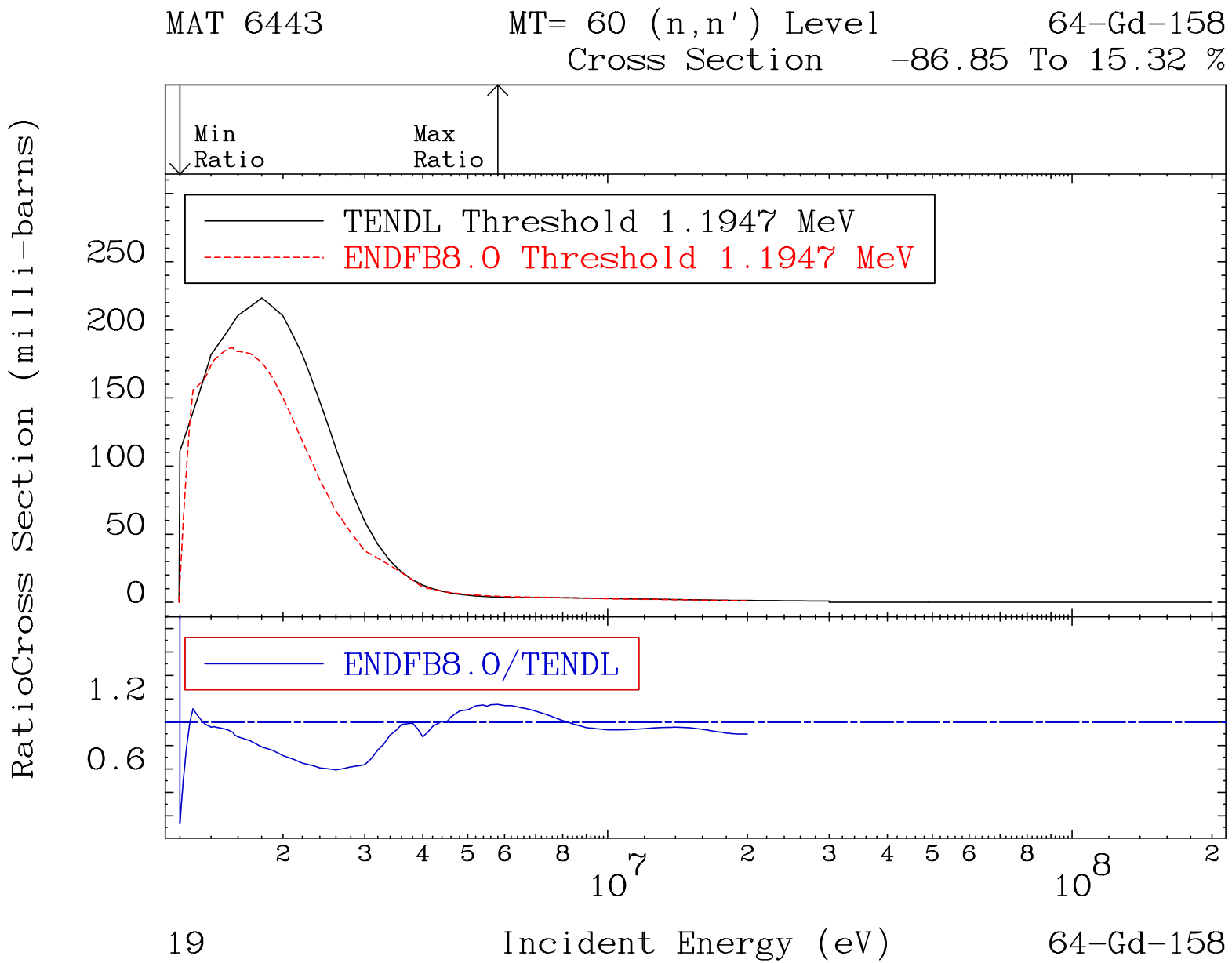

MAT 6443
MT= 55 (n,n') Level
64-Gd-158
Cross Section -65.93 To 1920. %
Min Ratio
Max Ratio
TENDL Threshold 983.39 keV
ENDFB8.0 Threshold 983.39 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^1
10^0
10^6
10^7
10^8
2 3 4 5 6 8
14
Incident Energy (eV)
64-Gd-158

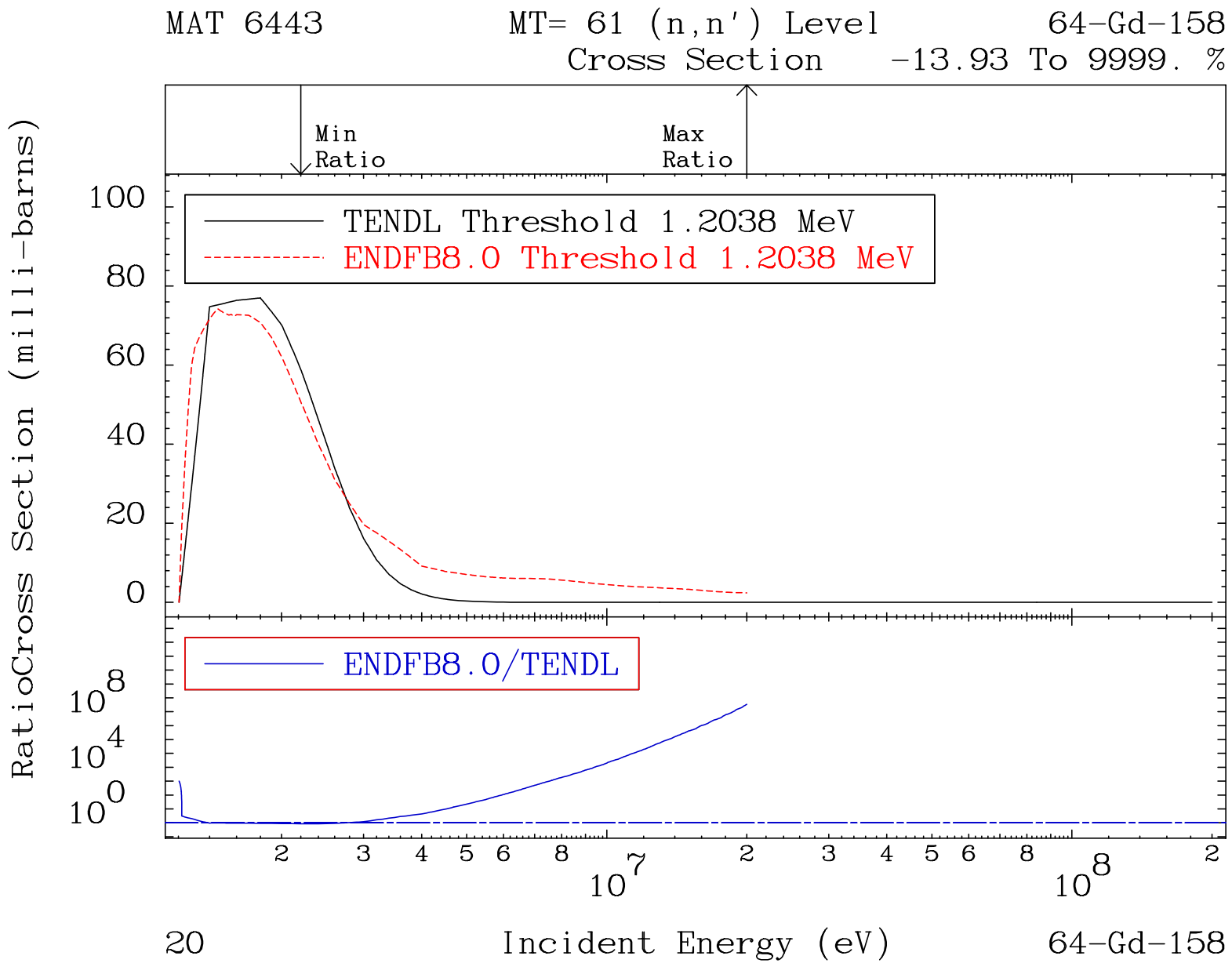

MAT 6443
MT= 56 (n,n') Level
64-Gd-158
Cross Section -34.01 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0302 MeV
ENDFB8.0 Threshold 1.0302 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
10^2
10^0
10^6
10^7
10^8
Incident Energy (eV)
15
64-Gd-158

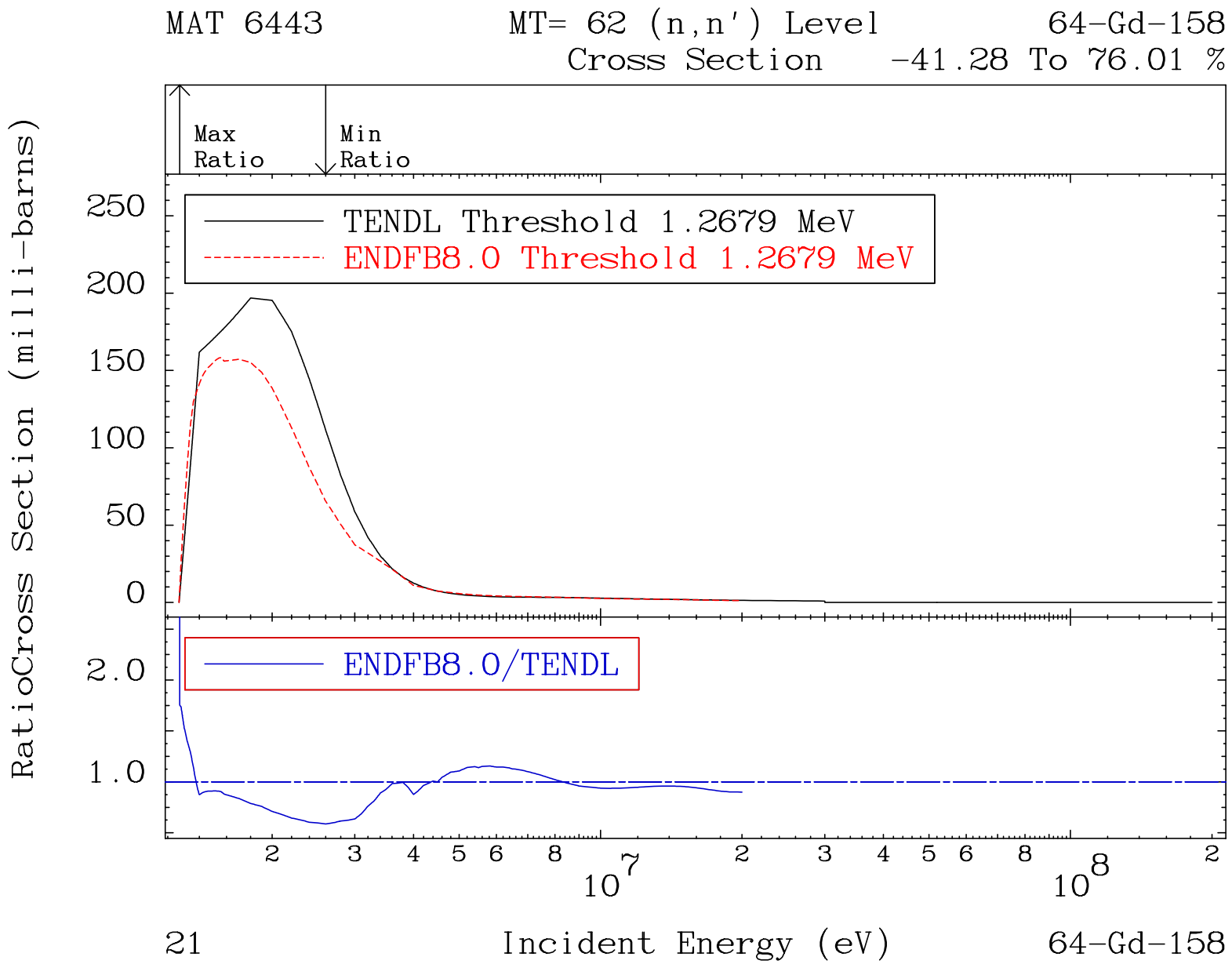

MAT 6443
MT= 57 (n,n') Level
64-Gd-158
Cross Section
-31.77 To 211.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.0483 MeV
ENDFB8.0 Threshold 1.0483 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
3.0
1.5
10^6
10^7
10^8
Incident Energy (eV)
16
64-Gd-158

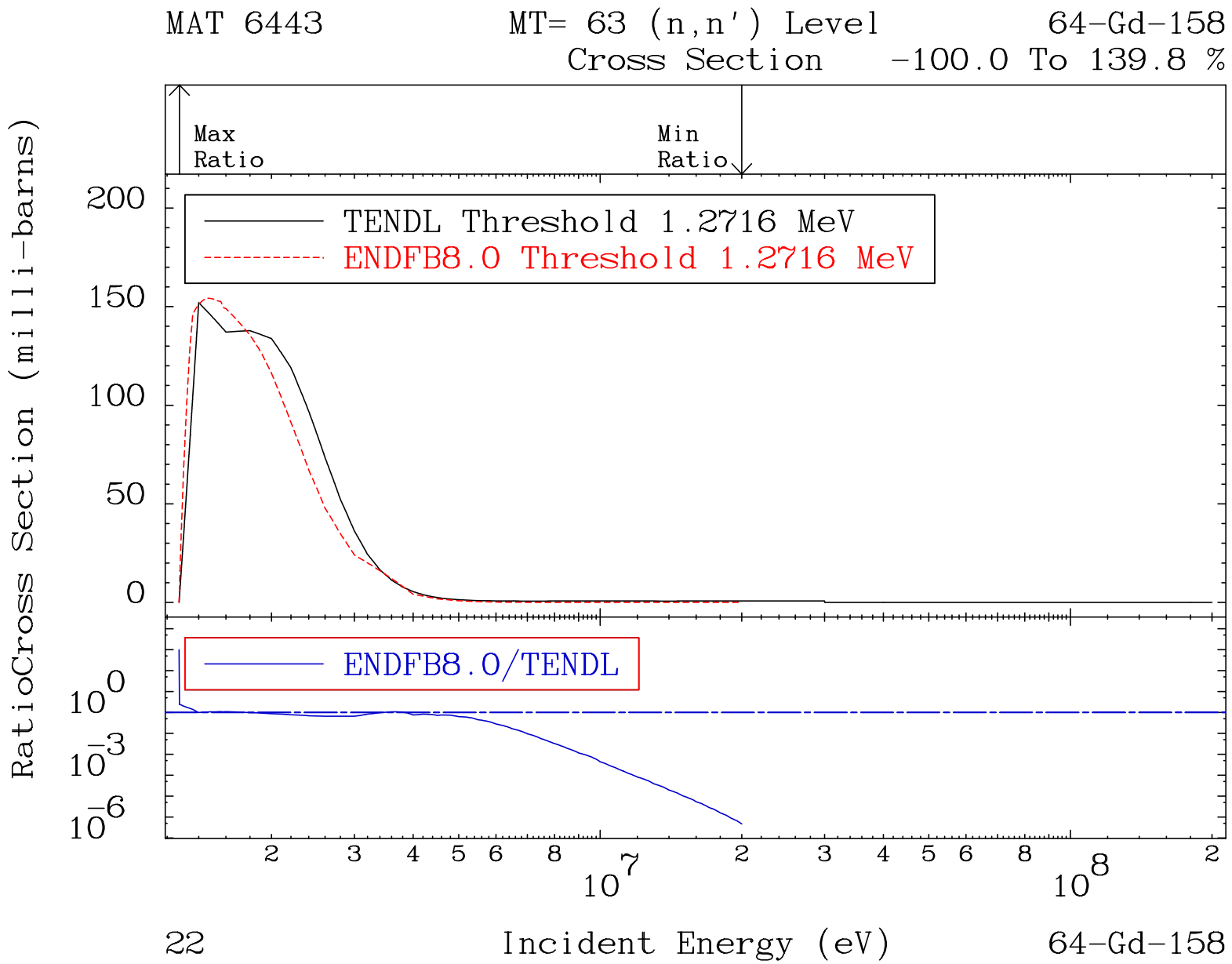

MAT 6443
MT= 58 (n,n') Level
64-Gd-158
Cross Section -35.55 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1664 MeV
ENDFB8.0 Threshold 1.1664 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^2
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
64-Gd-158

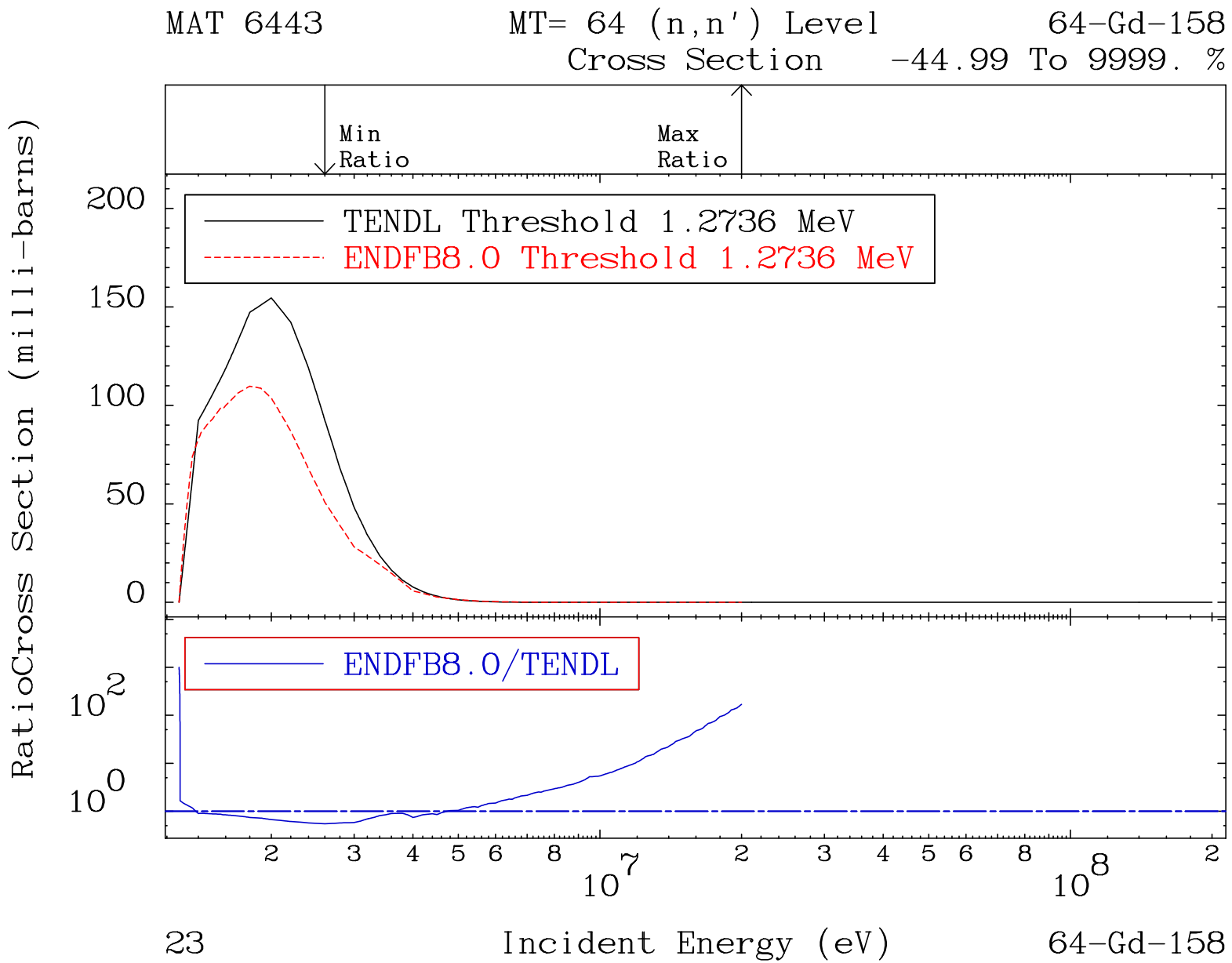

MAT 6443
MT= 59 (n,n') Level
64-Gd-158
Cross Section -40.89 To 1851. %
Min Ratio
Max Ratio
TENDL Threshold 1.1840 MeV
ENDFB8.0 Threshold 1.1840 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
10^1
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
64-Gd-158

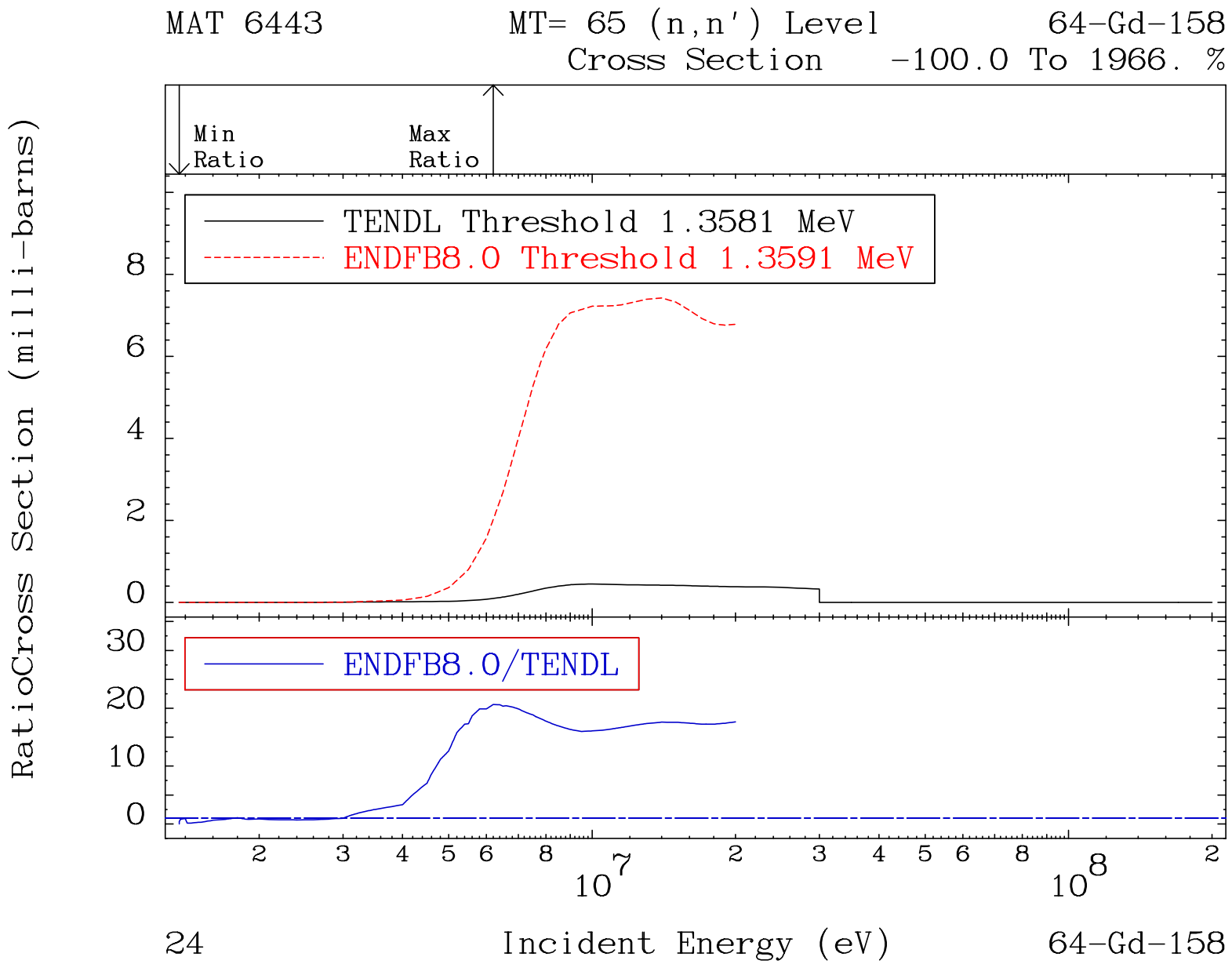

MAT 6443
MT= 60 (n,n') Level
64-Gd-158
Cross Section
-86.85 To 15.32 %
Min Ratio
Max Ratio
TENDL Threshold 1.1947 MeV
ENDFB8.0 Threshold 1.1947 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
19
Incident Energy (eV)
64-Gd-158

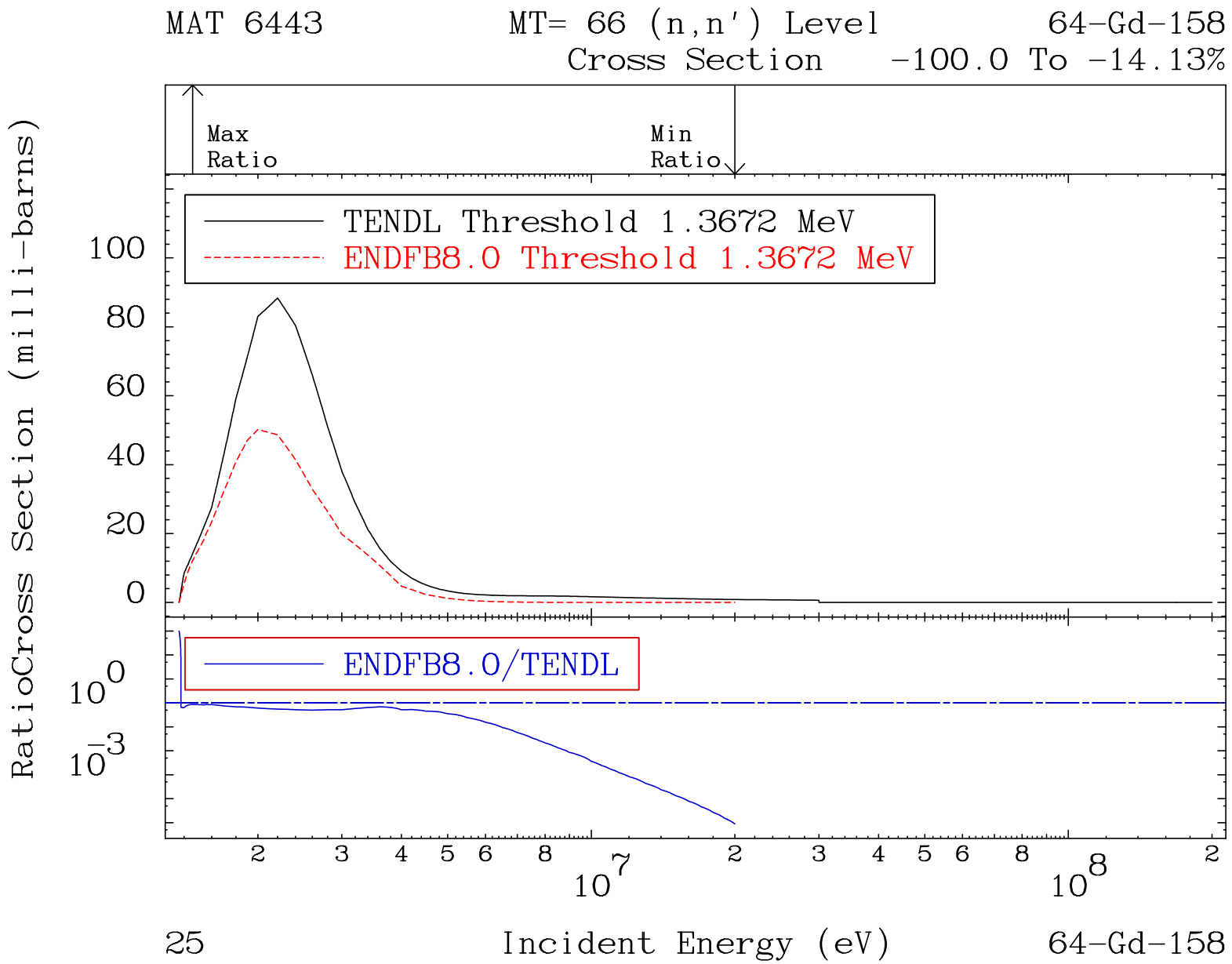

MAT 6443
MT= 61 (n,n') Level
64-Gd-158
Cross Section -13.93 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2038 MeV
ENDFB8.0 Threshold 1.2038 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^8
10^4
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
64-Gd-158

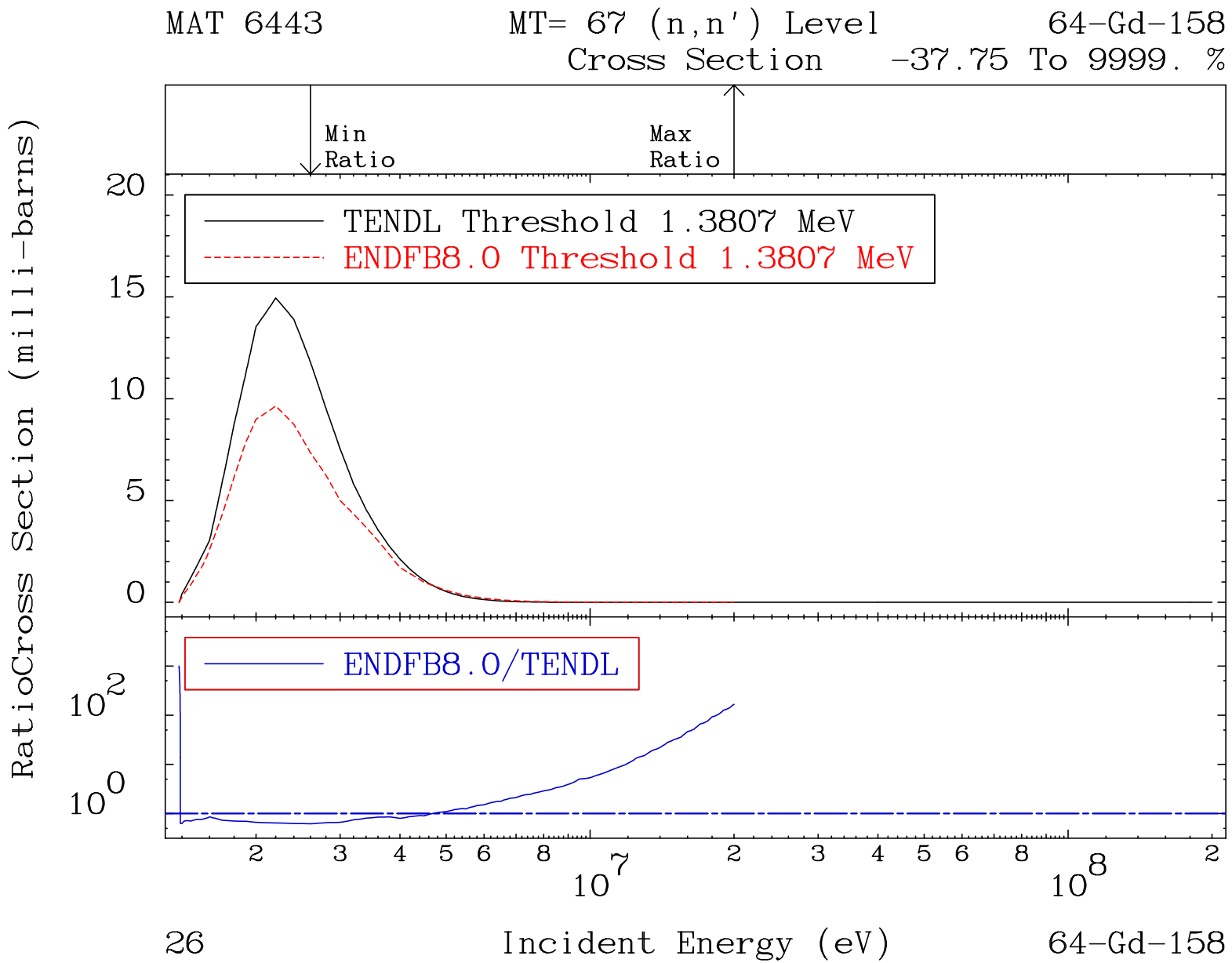

MAT 6443
MT= 62 (n,n') Level
64-Gd-158
Cross Section
-41.28 To 76.01 %
Max Ratio
Min Ratio
TENDL Threshold 1.2679 MeV
ENDFB8.0 Threshold 1.2679 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
21
Incident Energy (eV)
64-Gd-158

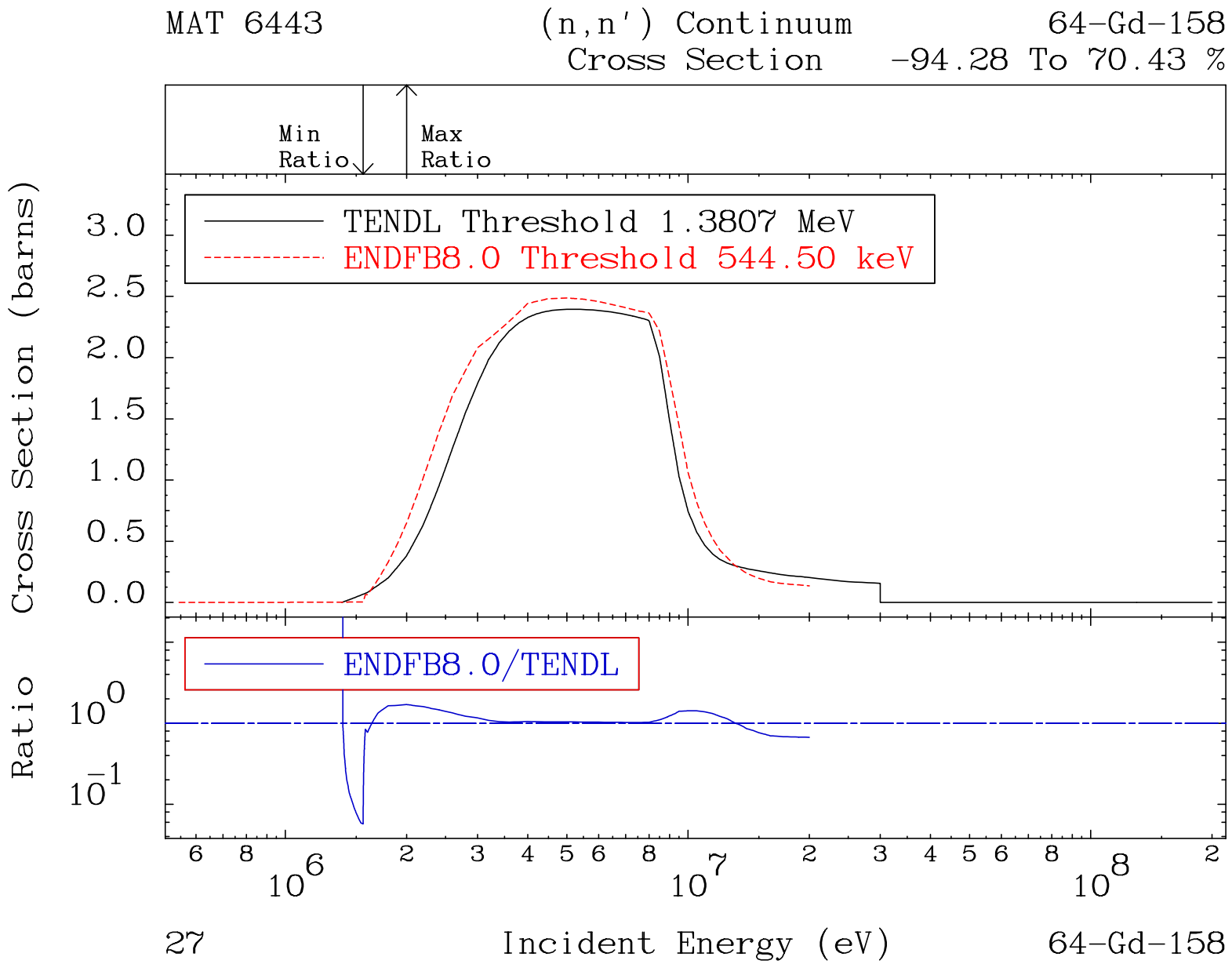

MAT 6443
MT= 63 (n,n') Level
64-Gd-158
Cross Section
-100.0 To 139.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.2716 MeV
ENDFB8.0 Threshold 1.2716 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^0
10^-3
10^-6
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
64-Gd-158

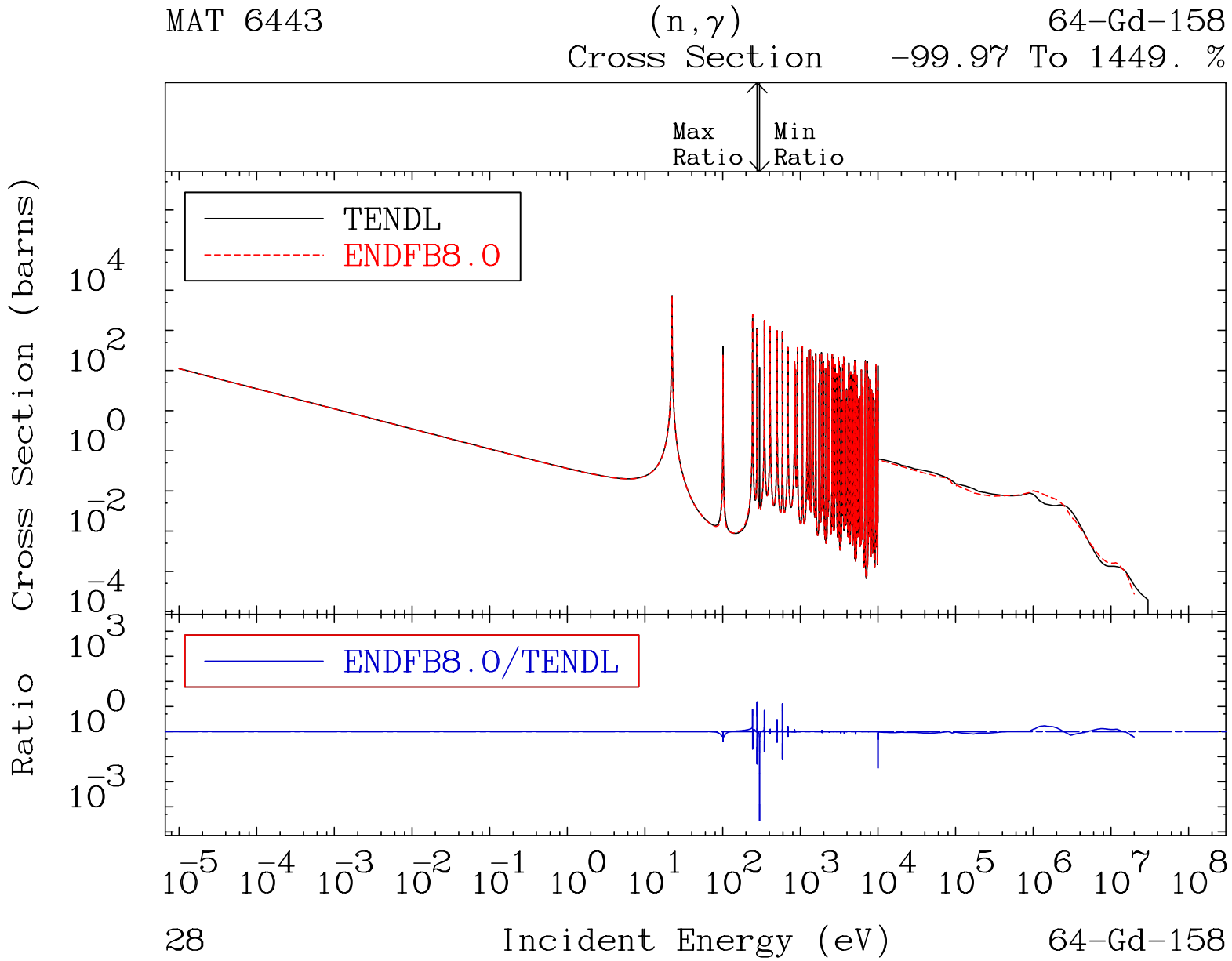

MAT 6443
MT= 64 (n,n') Level
64-Gd-158
Cross Section -44.99 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2736 MeV
ENDFB8.0 Threshold 1.2736 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^2
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
64-Gd-158

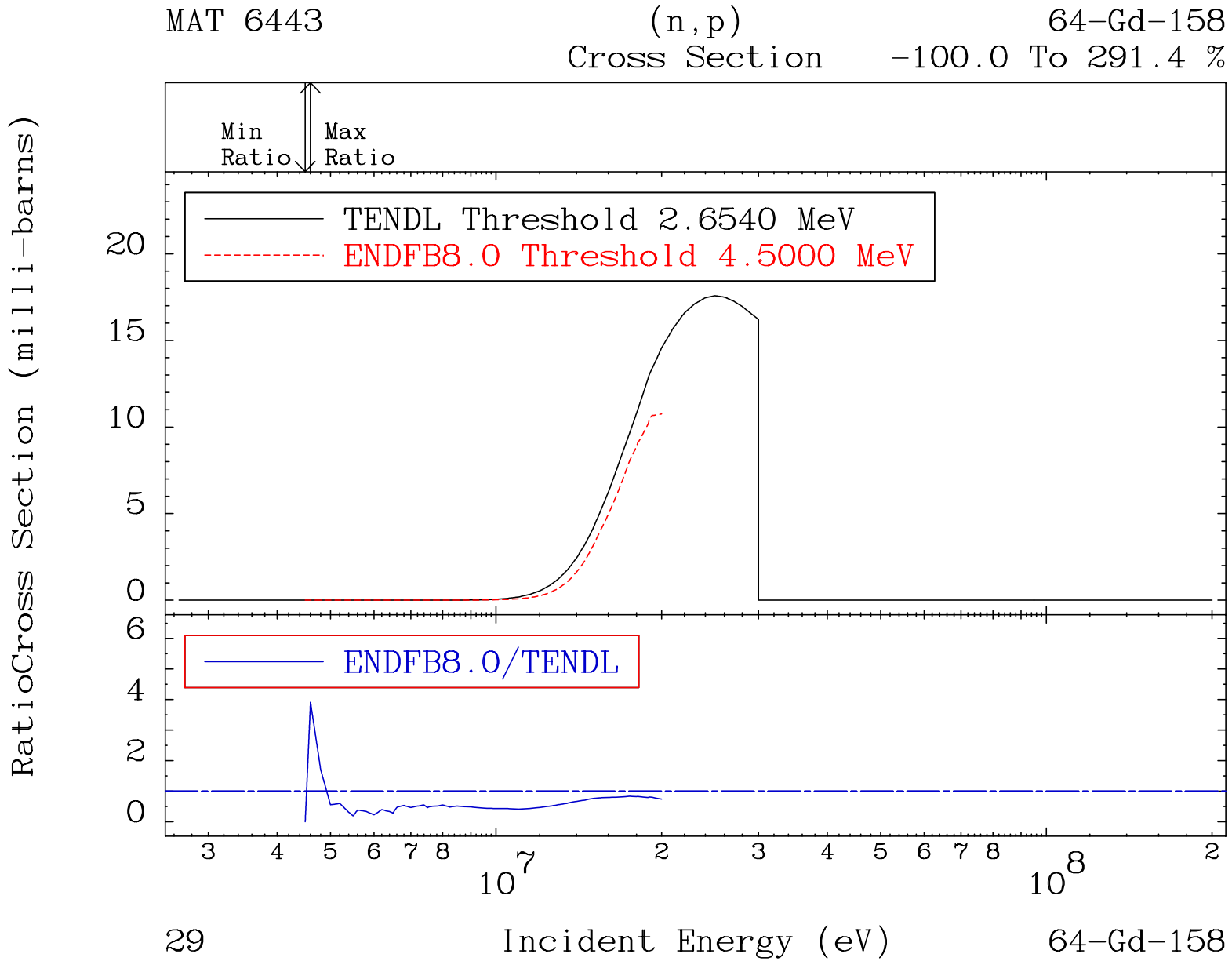

MAT 6443
MT= 65 (n,n') Level
64-Gd-158
Cross Section -100.0 To 1966. %
Min Ratio
Max Ratio
TENDL Threshold 1.3581 MeV
ENDFB8.0 Threshold 1.3591 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
64-Gd-158

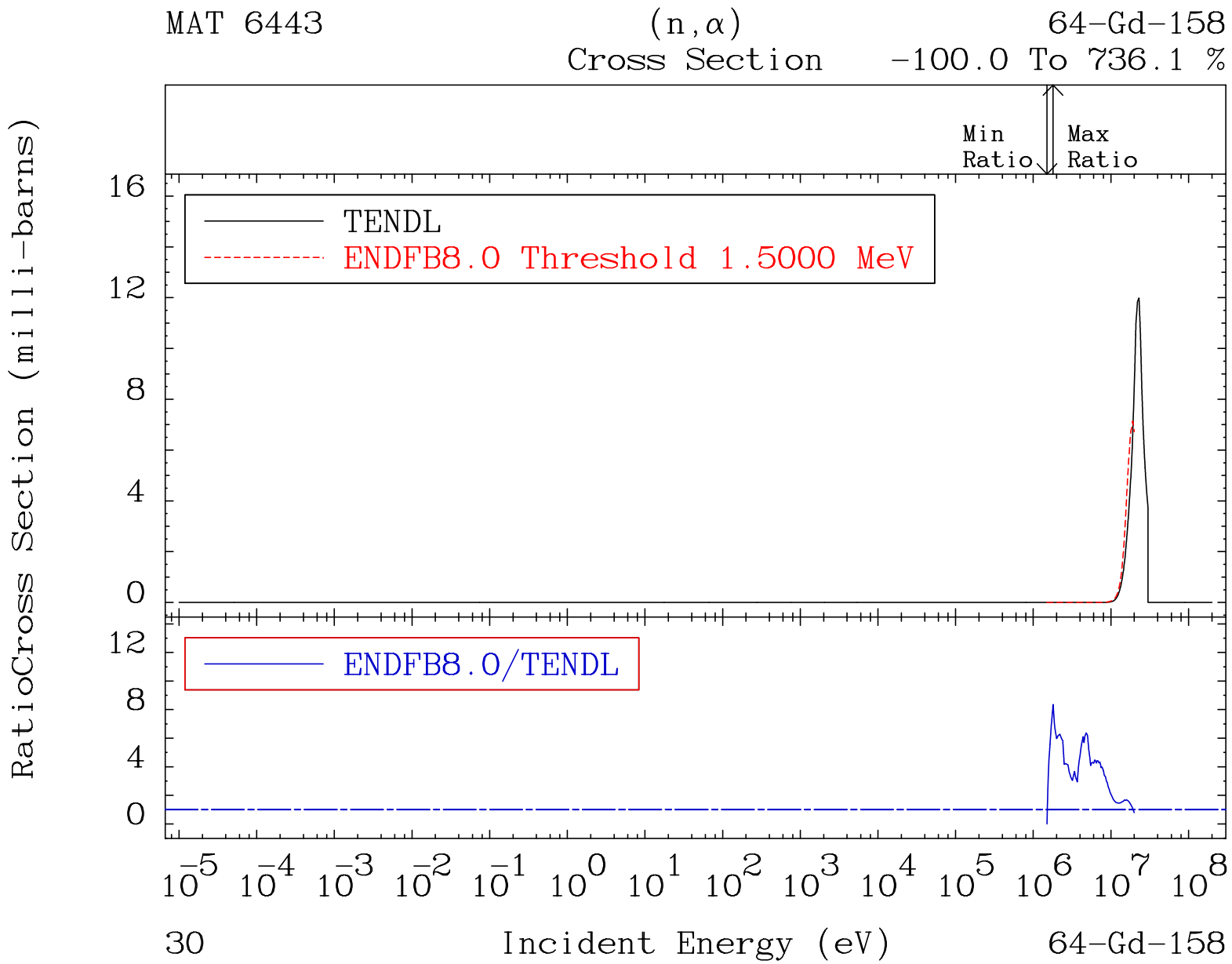

MAT 6443
MT= 66 (n,n') Level
64-Gd-158
Cross Section -100.0 To -14.13%
Max Ratio
Min Ratio
TENDL Threshold 1.3672 MeV
ENDFB8.0 Threshold 1.3672 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^0
10^-3
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
64-Gd-158

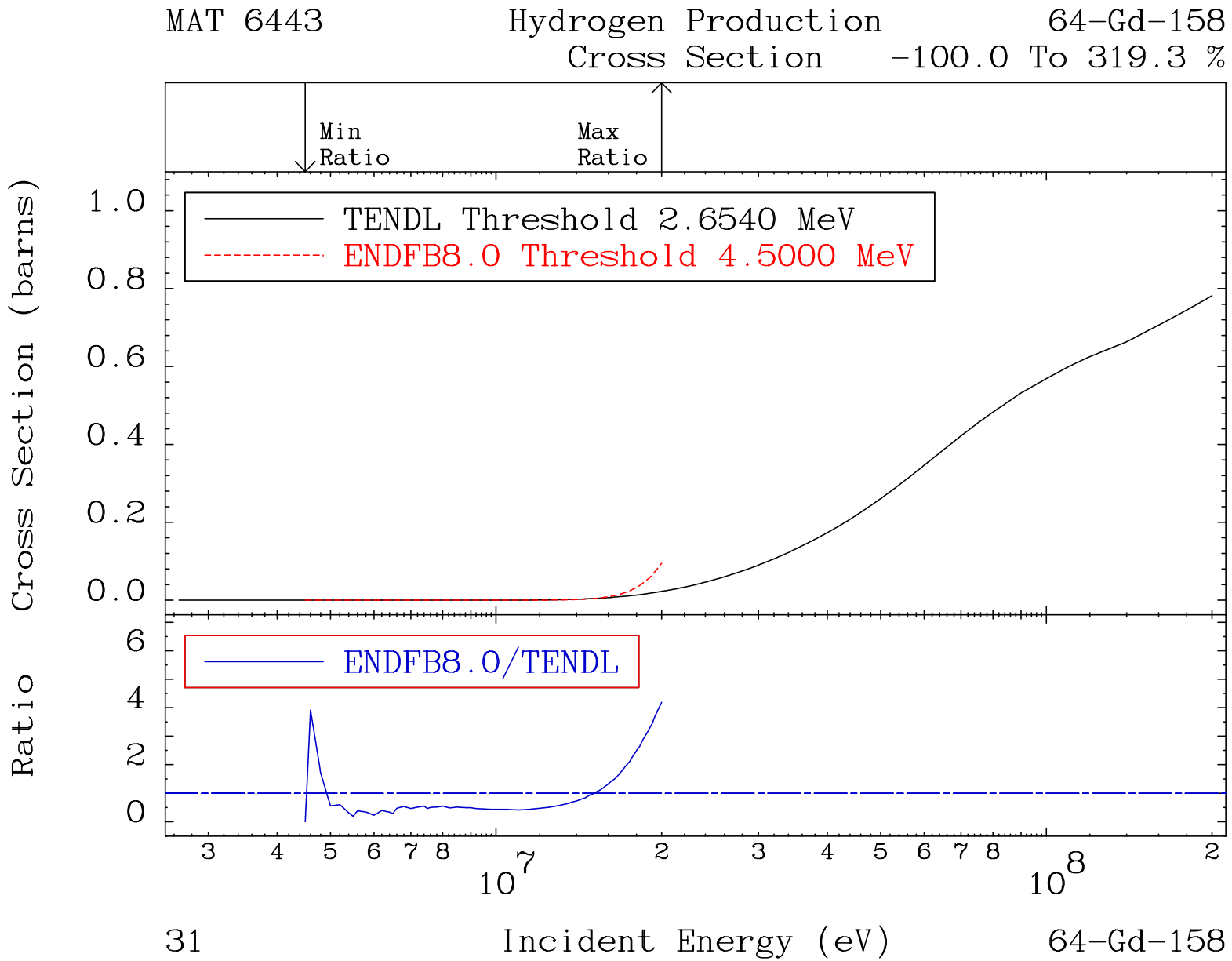

MAT 6443
MT= 67 (n,n') Level
64-Gd-158
Cross Section -37.75 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.3807 MeV
ENDFB8.0 Threshold 1.3807 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
26
64-Gd-158

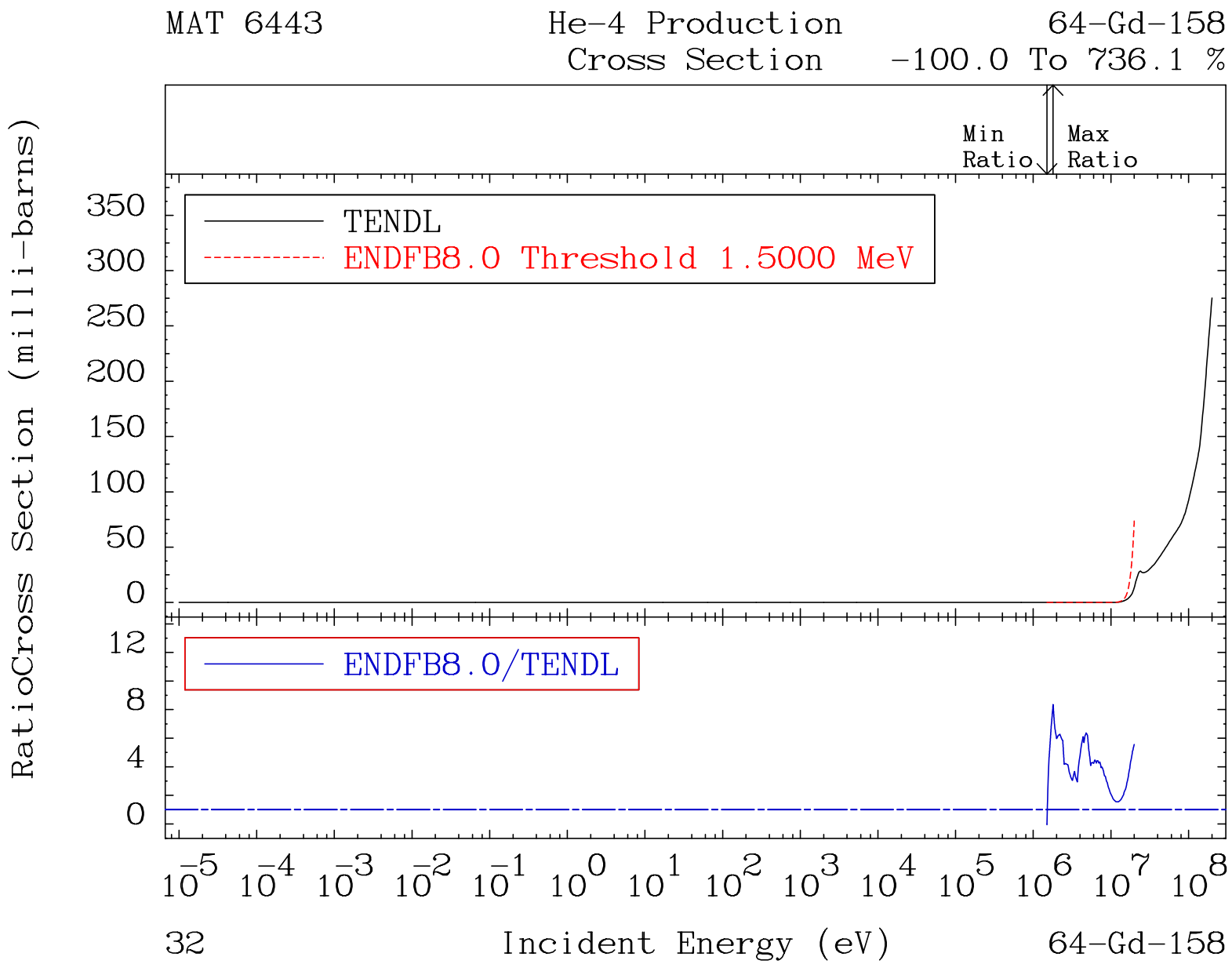

MAT 6443
(n,n') Continuum
Cross Section
64-Gd-158
-94.28 To 70.43 %
Min Ratio
Max Ratio
TENDL Threshold 1.3807 MeV
ENDFB8.0 Threshold 544.50 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^0
10^-1
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
64-Gd-158

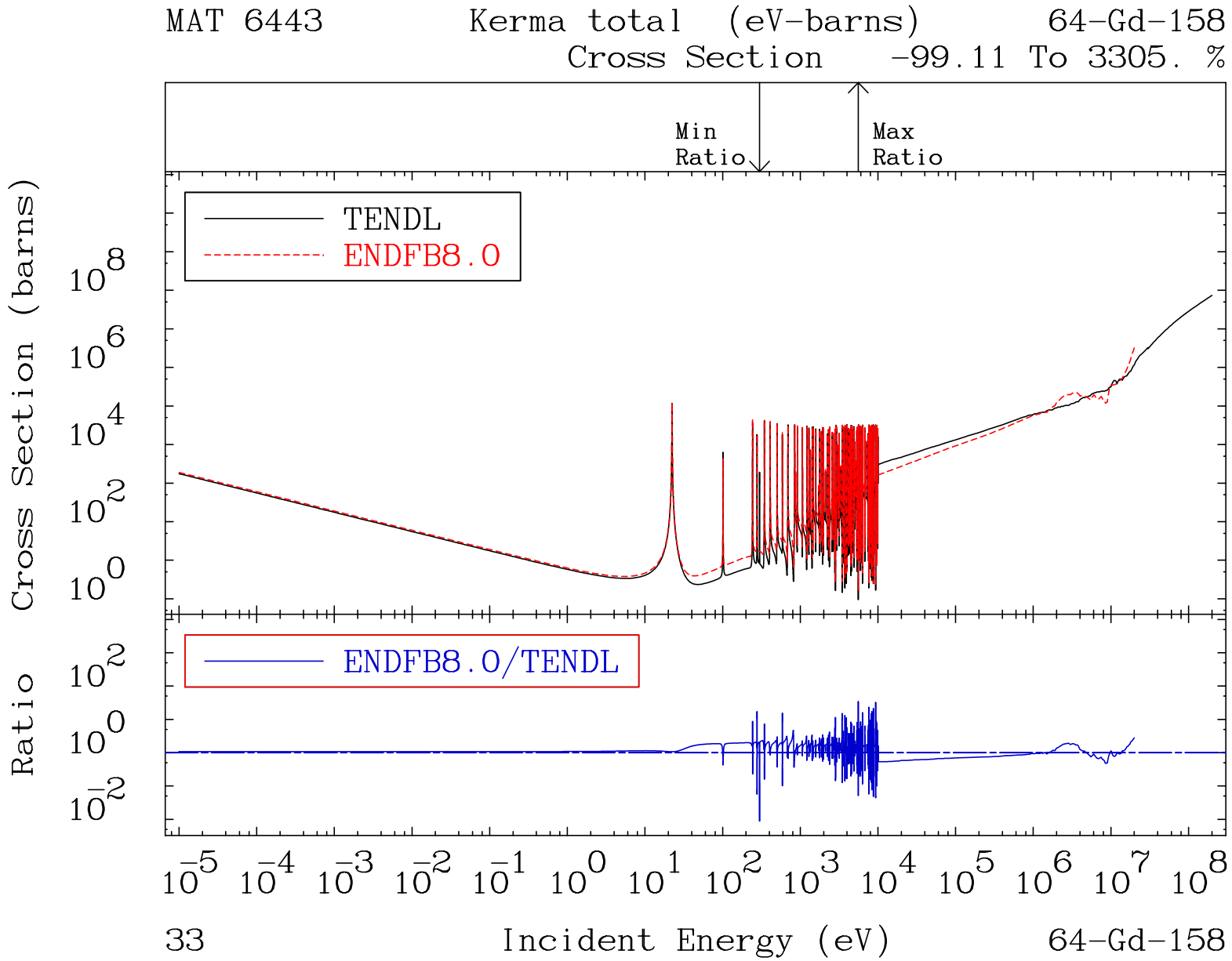

MAT 6443
(n,γ)
Cross Section
64-Gd-158
-99.97 To 1449. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
28
64-Gd-158

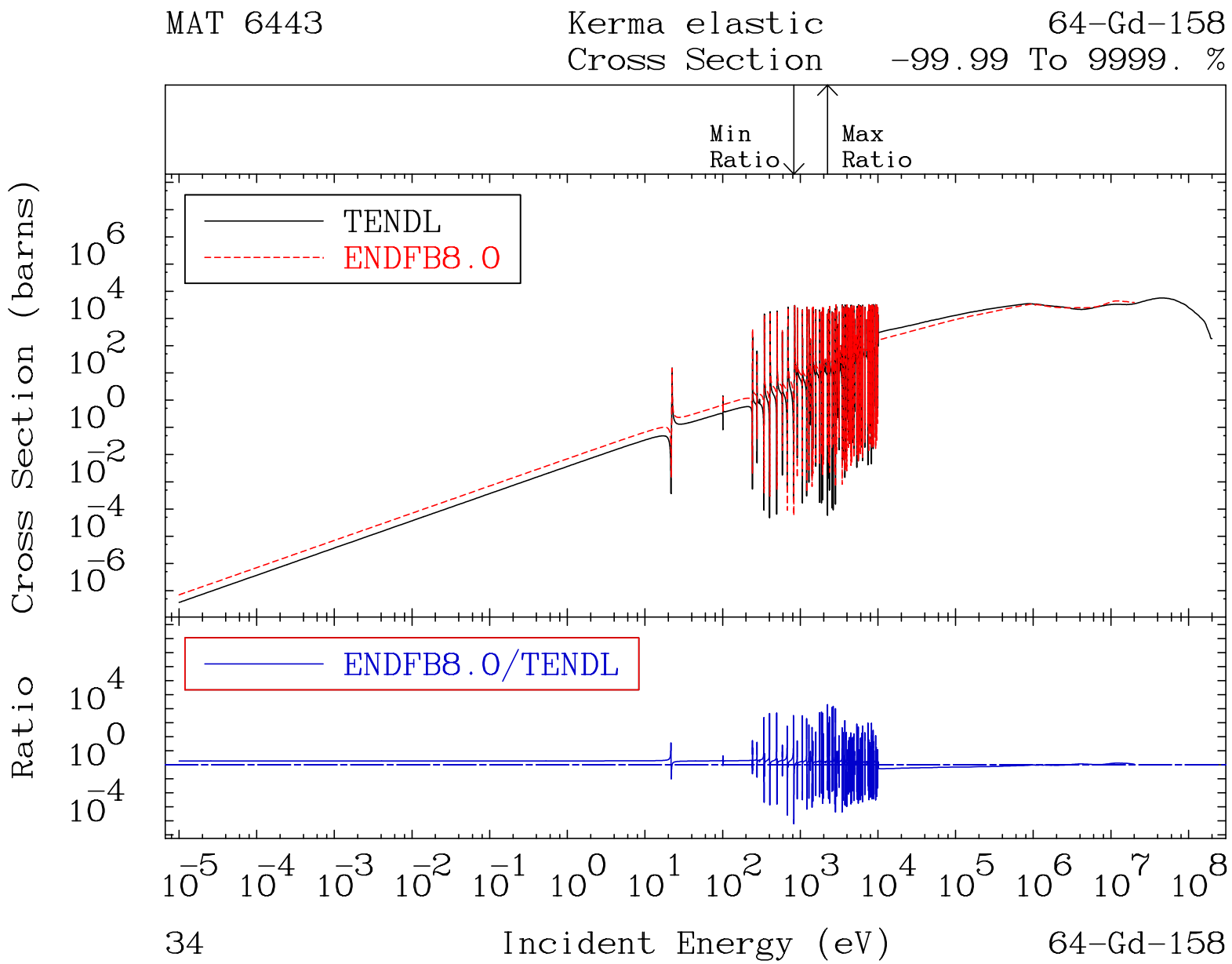

MAT 6443
(n,p)
64-Gd-158
Cross Section
-100.0 To 291.4 %
Min Ratio
Max Ratio
TENDL Threshold 2.6540 MeV
ENDFB8.0 Threshold 4.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
29
64-Gd-158

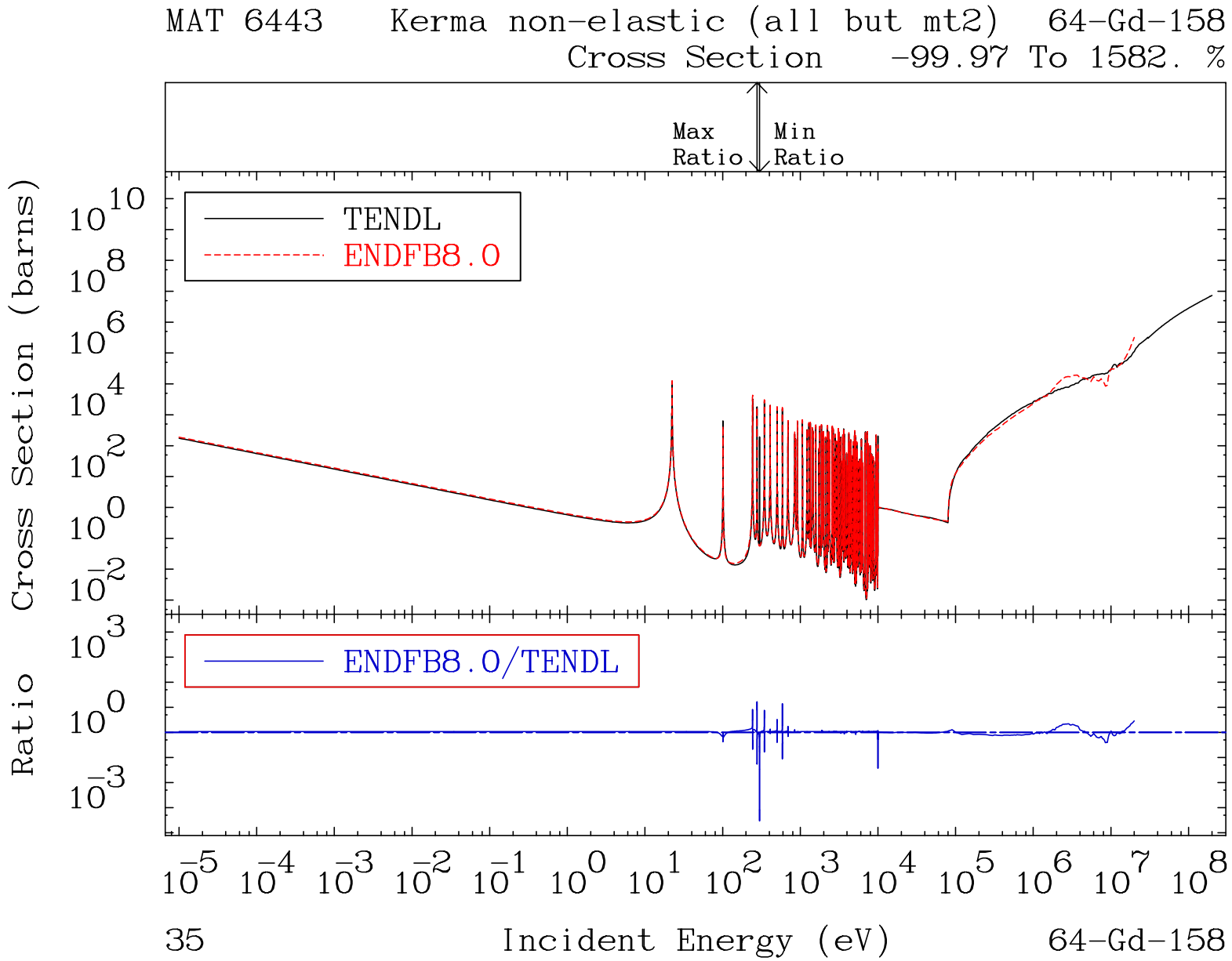

MAT 6443
(n,α)
64-Gd-158
Cross Section
-100.0 To 736.1 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 1.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
12
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
64-Gd-158

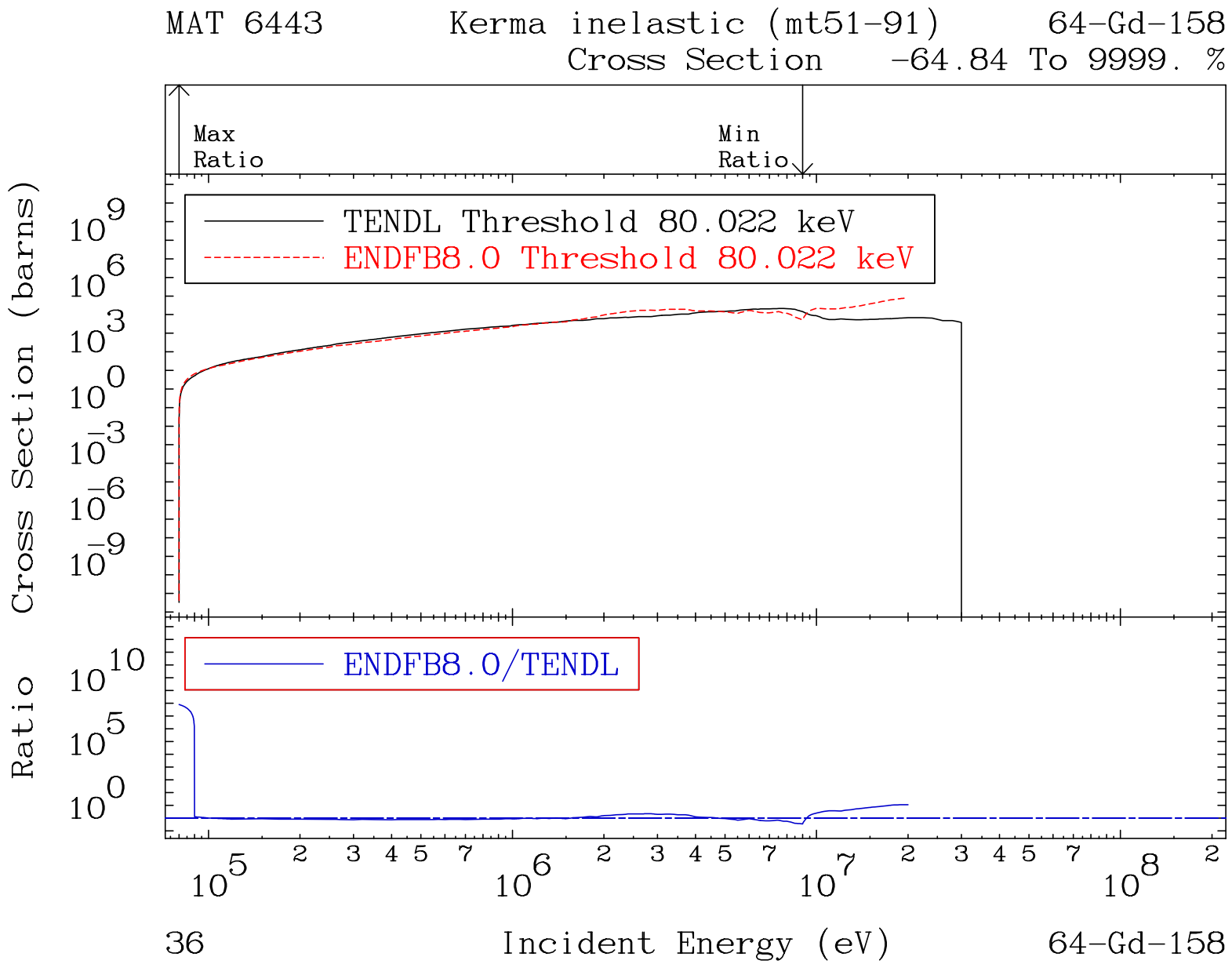

MAT 6443
Hydrogen Production
64-Gd-158
Cross Section
-100.0 To 319.3 %
Min Ratio
Max Ratio
TENDL Threshold 2.6540 MeV
ENDFB8.0 Threshold 4.5000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
6
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
64-Gd-158

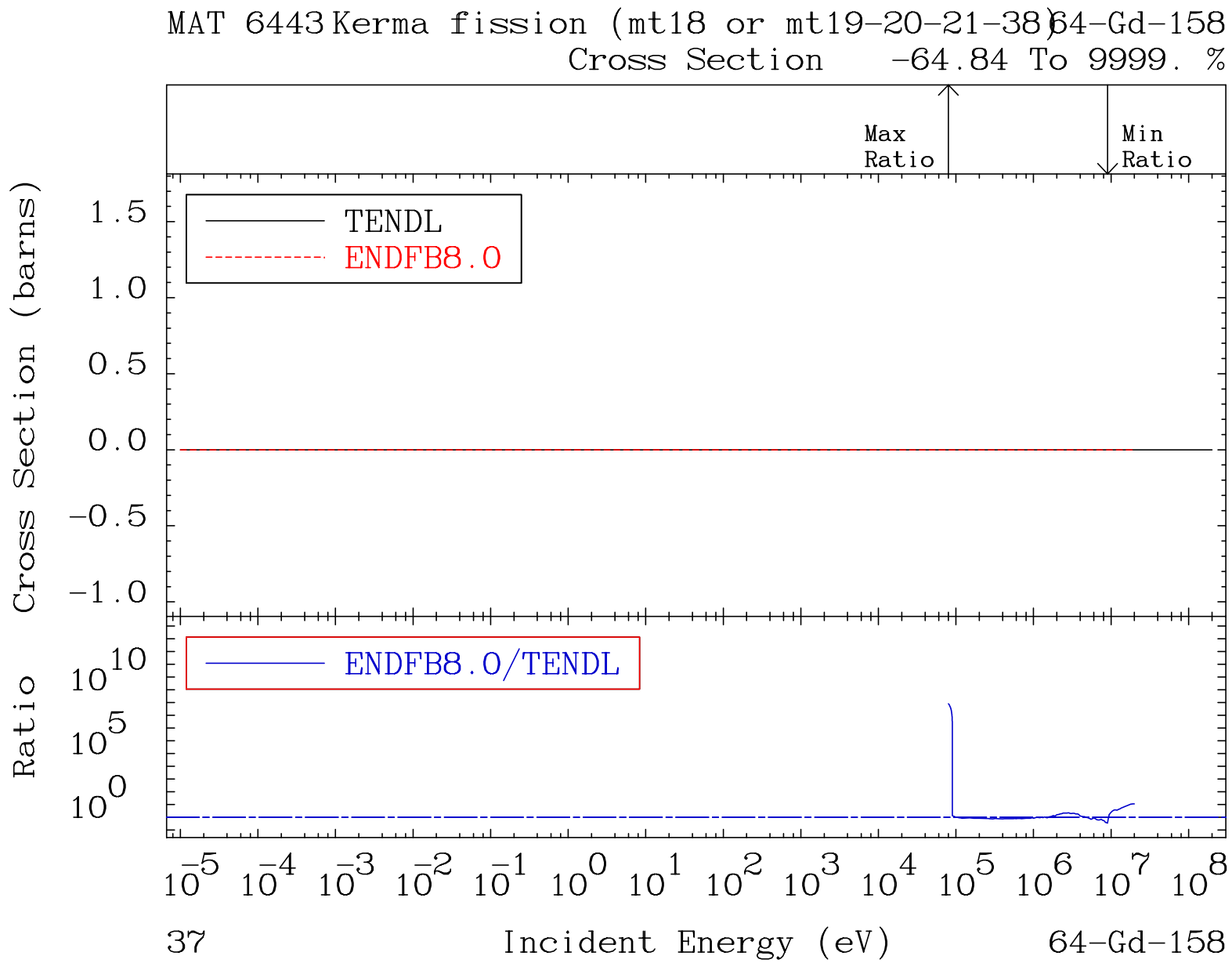

MAT 6443
He-4 Production
Cross Section
64-Gd-158
-100.0 To 736.1 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0 Threshold 1.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
12
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
64-Gd-158

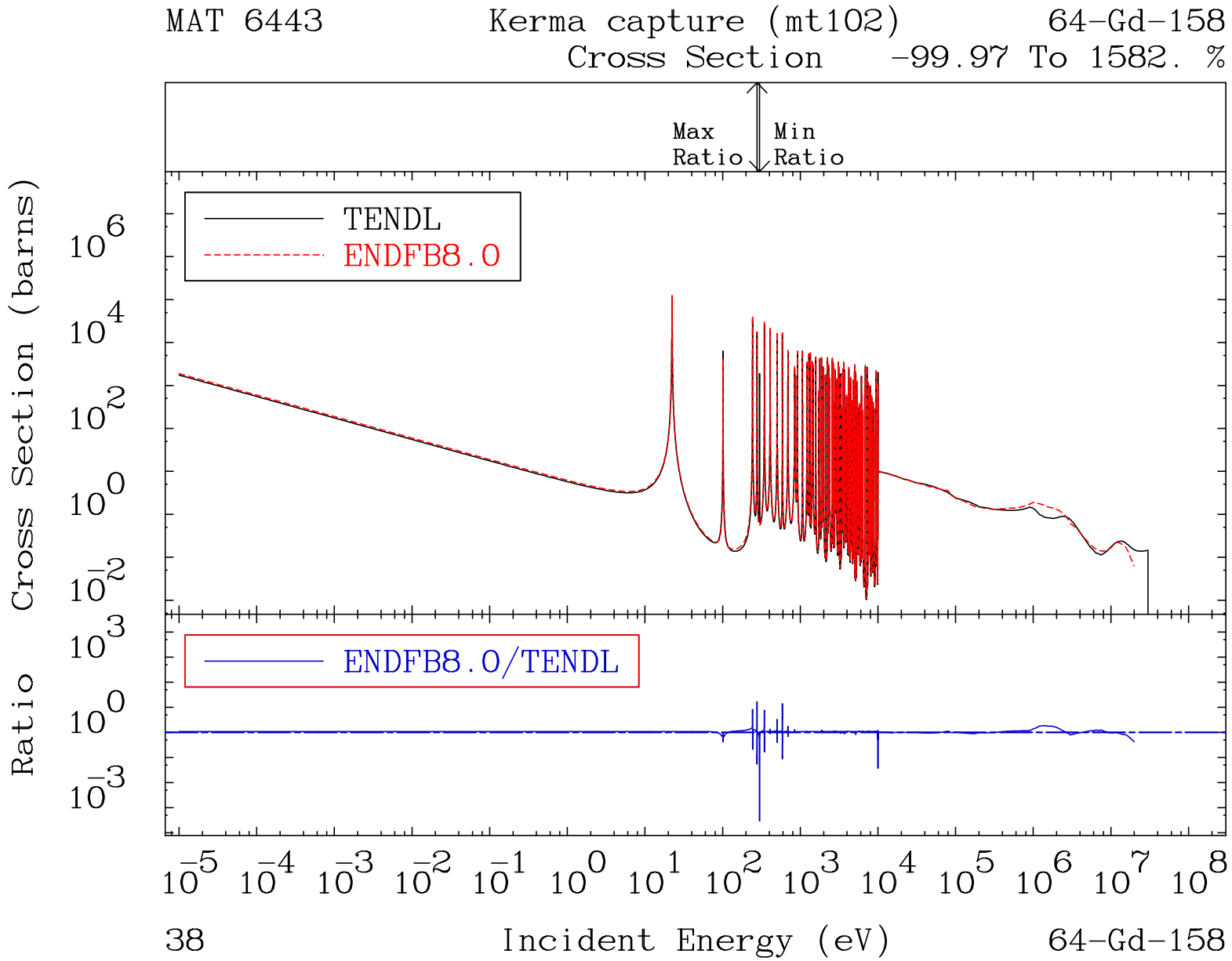

MAT 6443
Kerma total (eV-barns)
64-Gd-158
Cross Section -99.11 To 3305. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
64-Gd-158

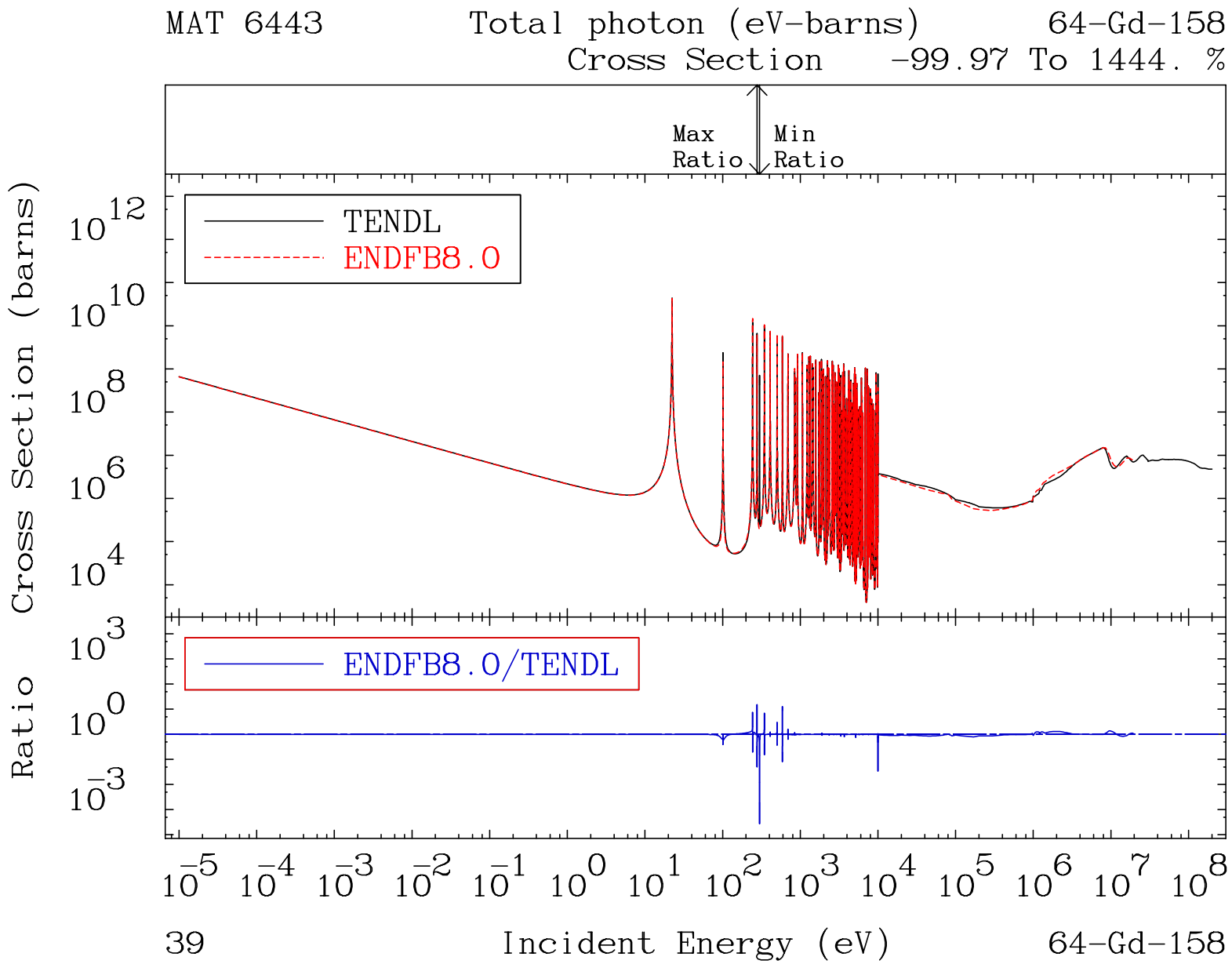

MAT 6443
Kerma elastic
Cross Section
64-Gd-158
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
64-Gd-158

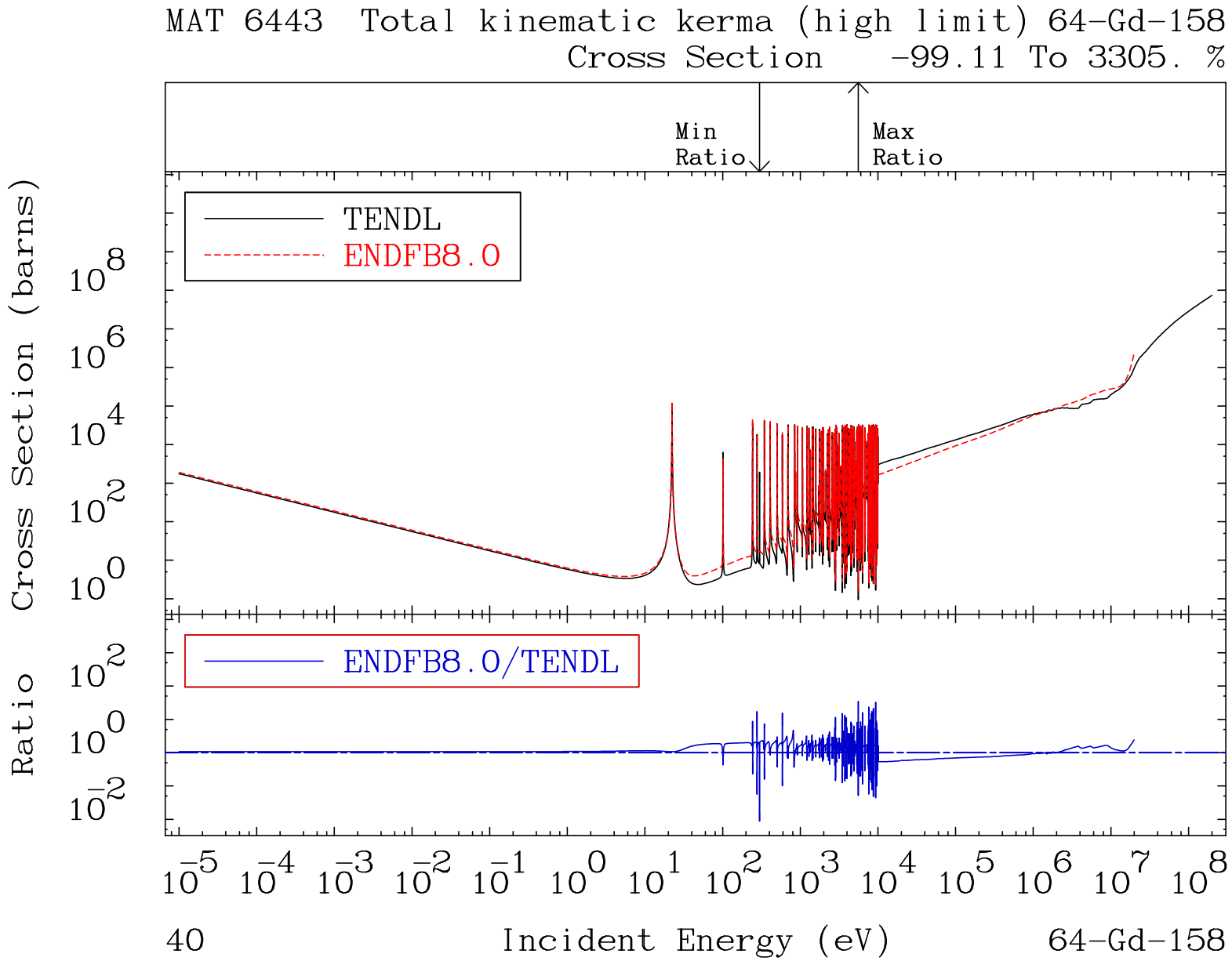

MAT 6443 Kerma non-elastic (all but mt2) 64-Gd-158
Cross Section -99.97 To 1582. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
64-Gd-158

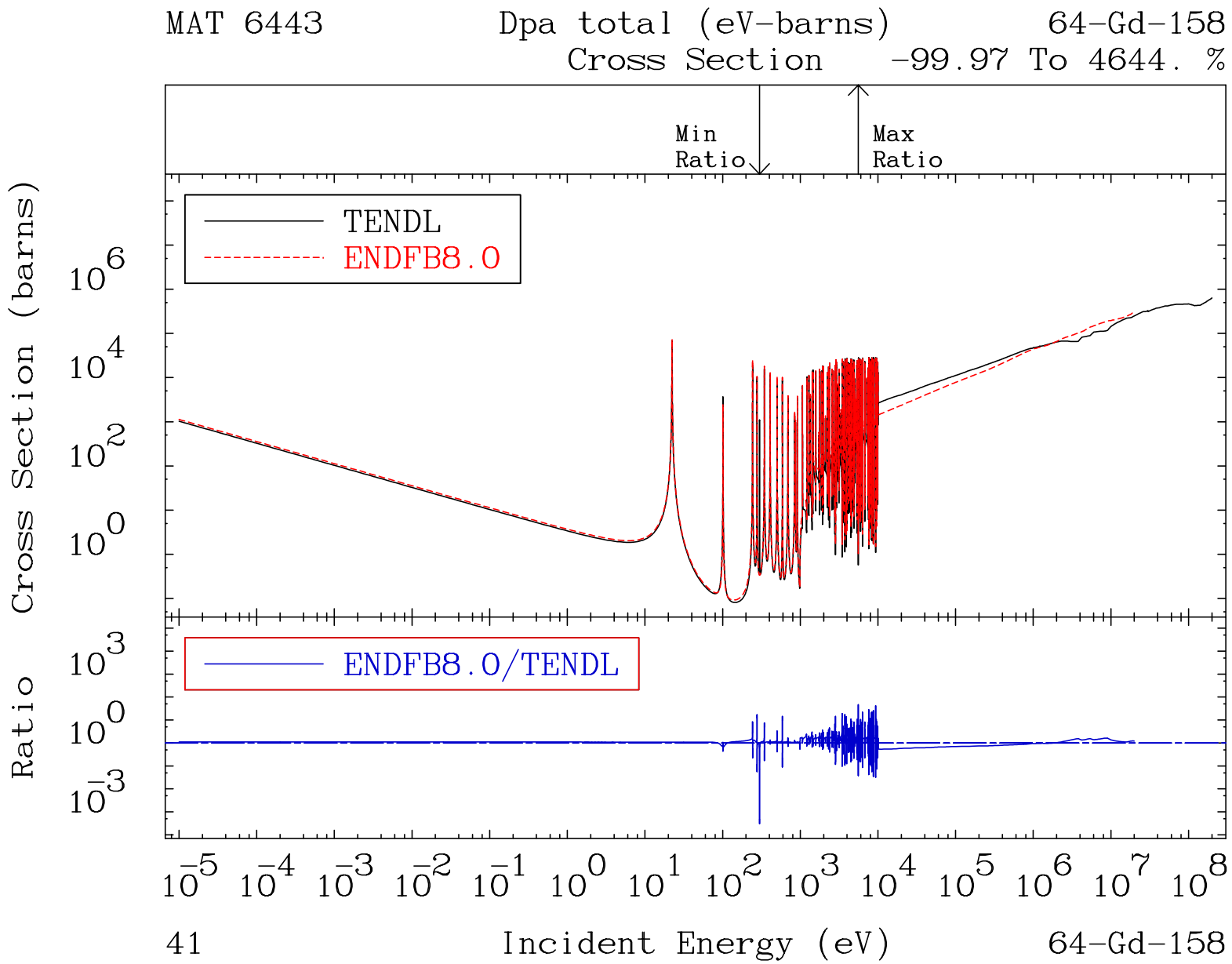

MAT 6443
Kerma inelastic (mt51-91)
64-Gd-158
Cross Section -64.84 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 80.022 keV
ENDFB8.0 Threshold 80.022 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
36
64-Gd-158

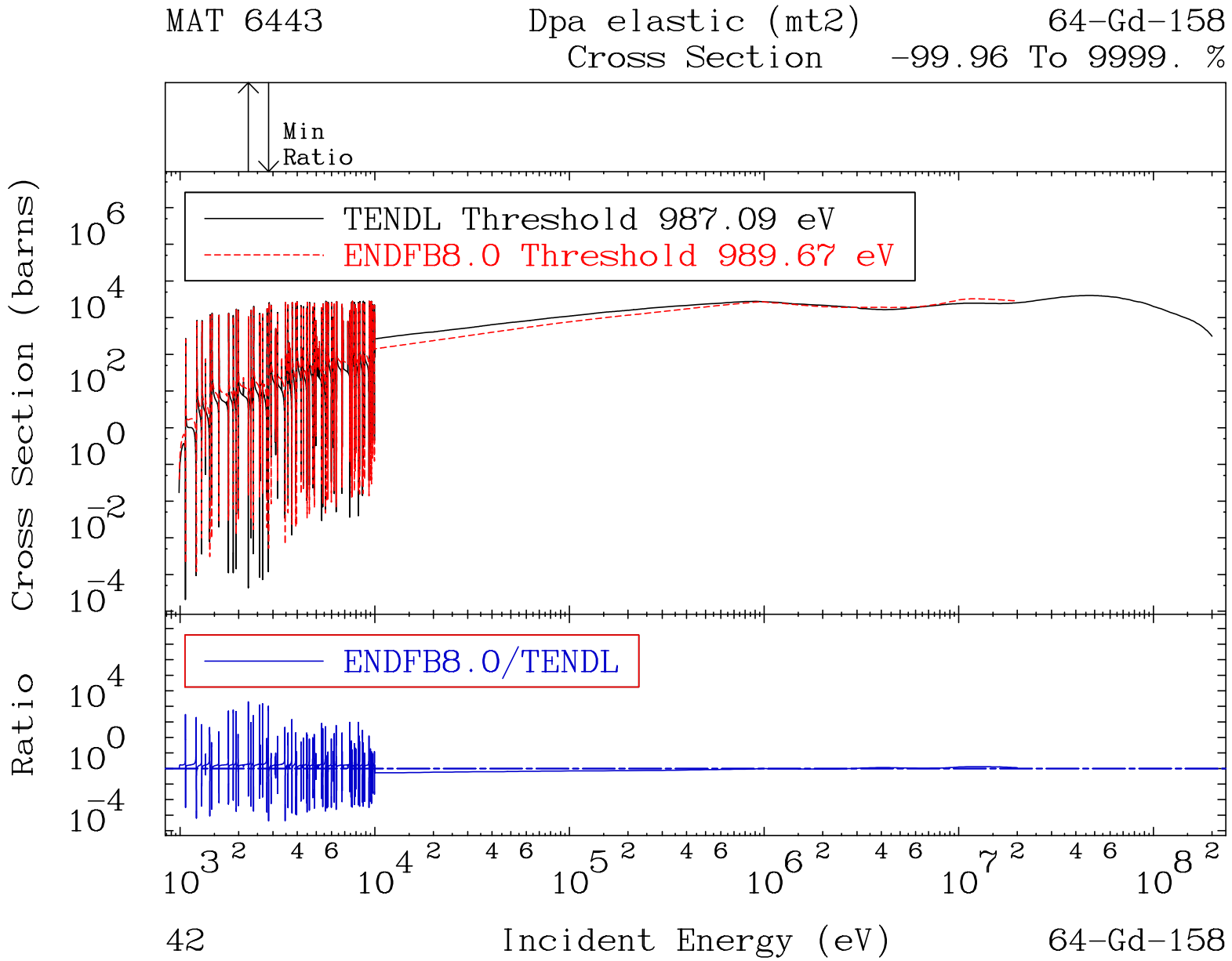

MAT 6443 Kerma fission (mt18 or mt19-20-21-38) 64-Gd-158
Cross Section -64.84 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{10}
10^{5}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
37
Incident Energy (eV)
64-Gd-158

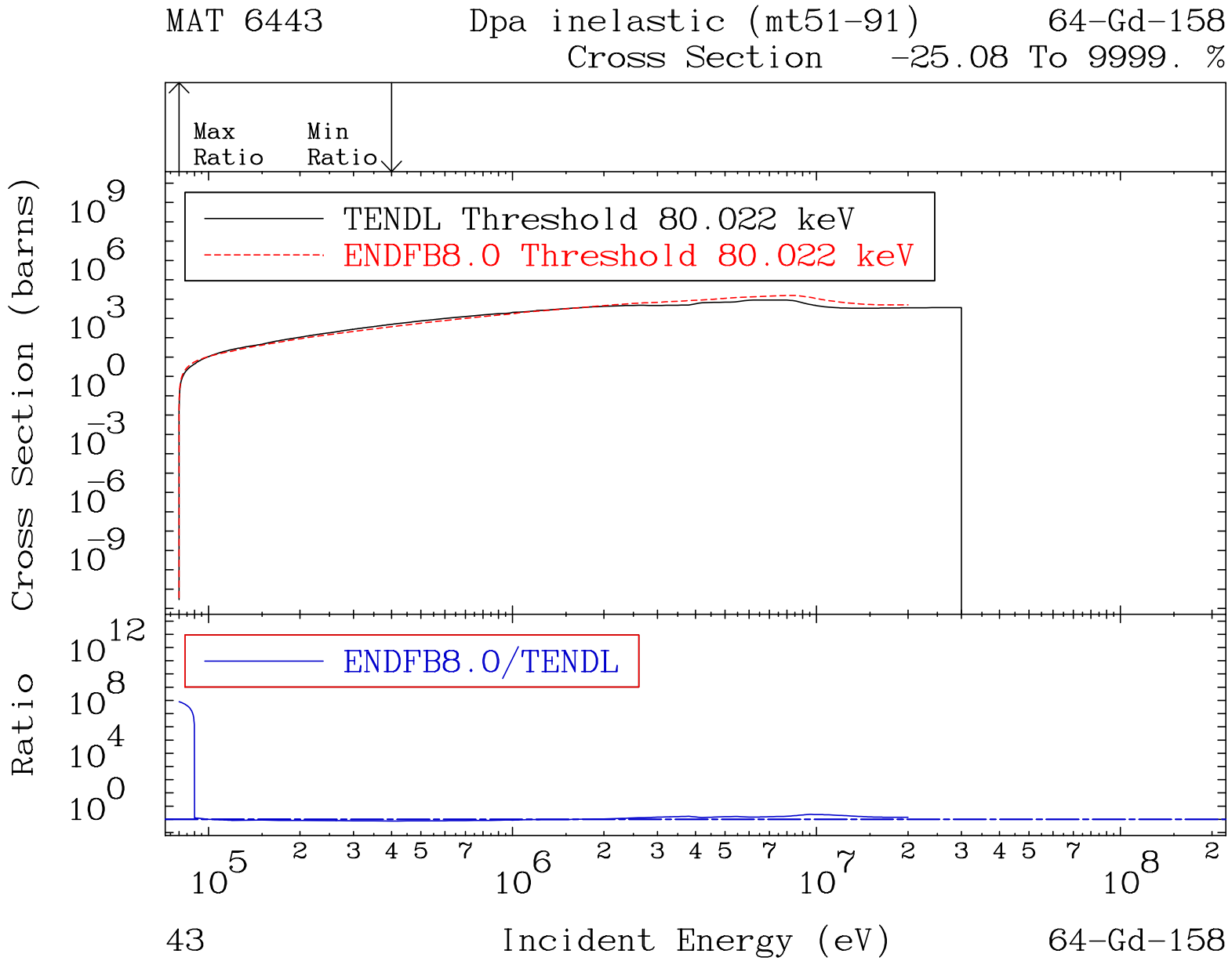

MAT 6443
Kerma capture (mt102)
64-Gd-158
Cross Section -99.97 To 1582. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
64-Gd-158

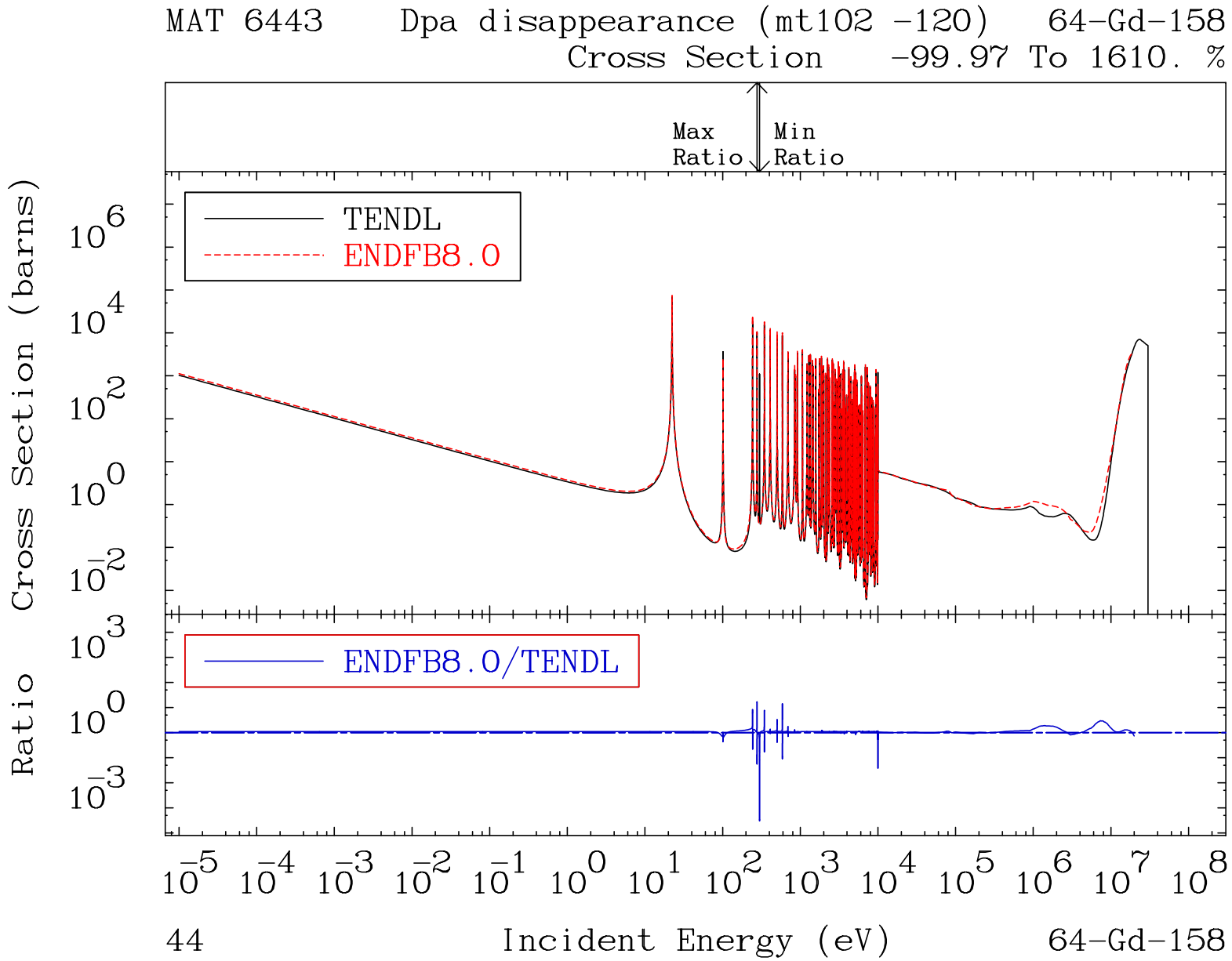

MAT 6443
Total photon (eV-barns)
64-Gd-158
Cross Section -99.97 To 1444. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
64-Gd-158


MAT 6443 Total kinematic kerma (high limit) 64-Gd-158
Cross Section -99.11 To 3305. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
64-Gd-158


MAT 6443
Dpa total (eV-barns)
64-Gd-158
Cross Section -99.97 To 4644. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
64-Gd-158


MAT 6443
Dpa elastic (mt2)
Cross Section
64-Gd-158
-99.96 To 9999. %
Min
Ratio
TENDL Threshold 987.09 eV
ENDFB8.0 Threshold 989.67 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
64-Gd-158


MAT 6443
Dpa inelastic (mt51-91)
64-Gd-158
Cross Section
-25.08 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 80.022 keV
ENDFB8.0 Threshold 80.022 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
64-Gd-158


MAT 6443 Dpa disappearance (mt102 -120) 64-Gd-158
Cross Section -99.97 To 1610. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
44
64-Gd-158