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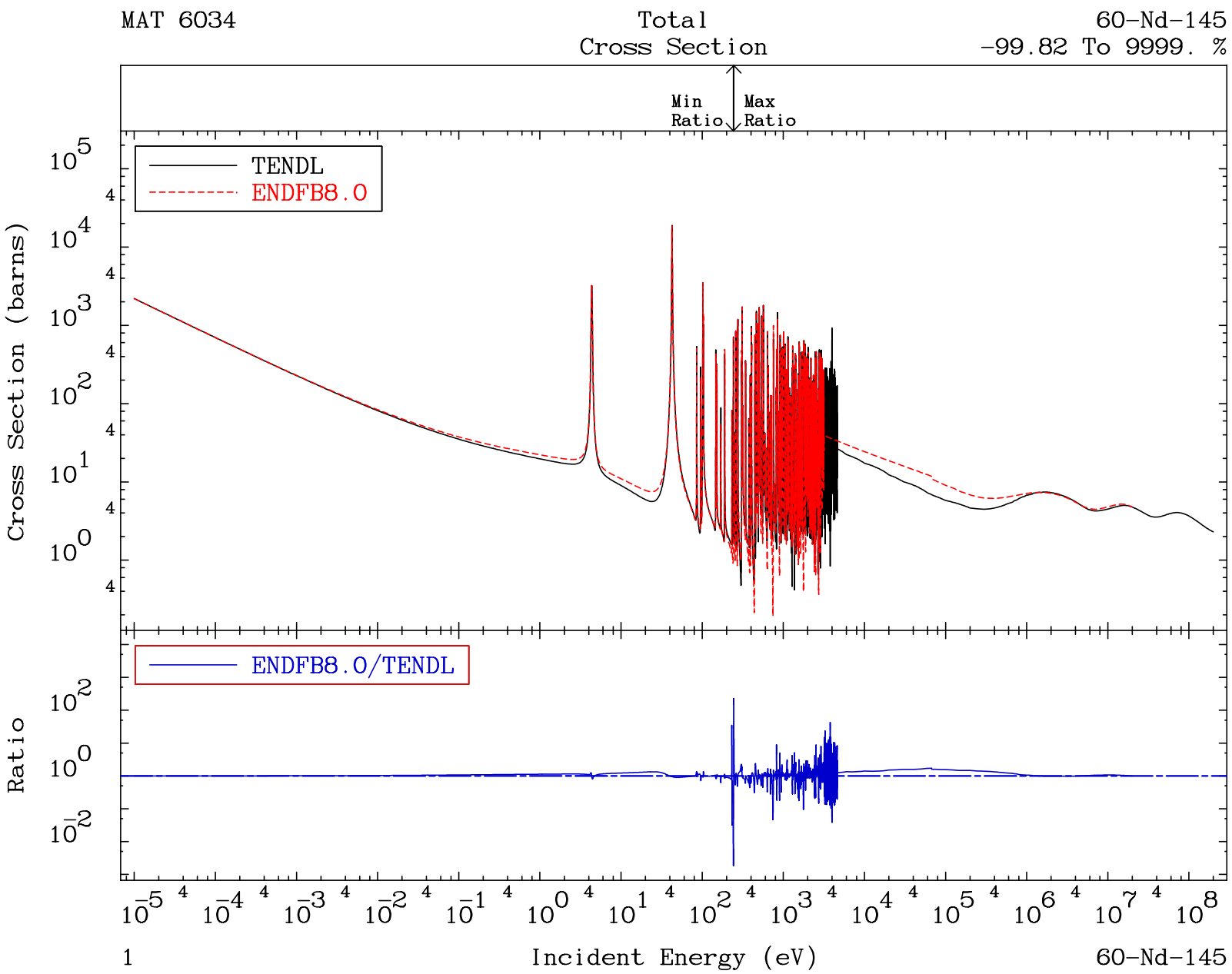
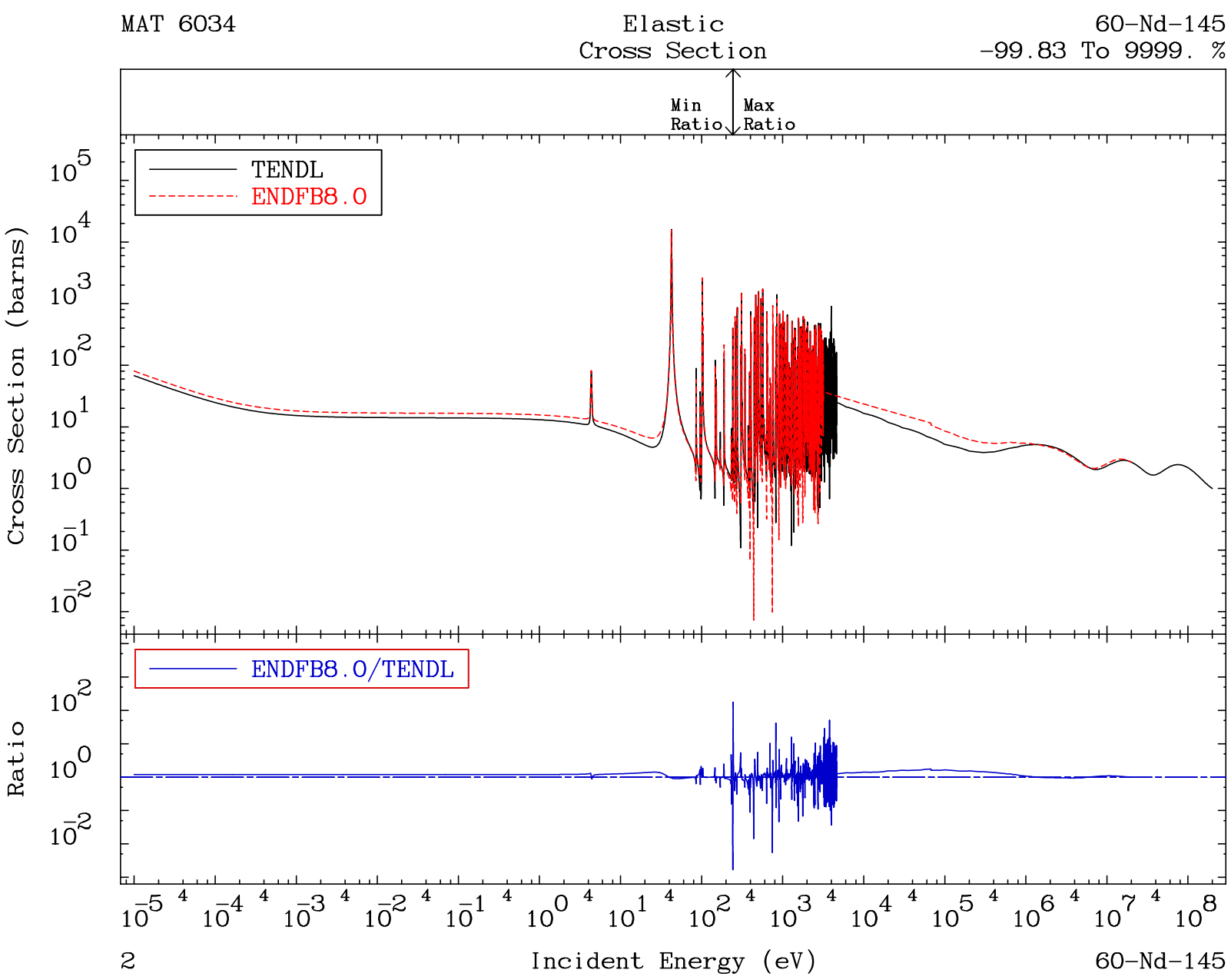
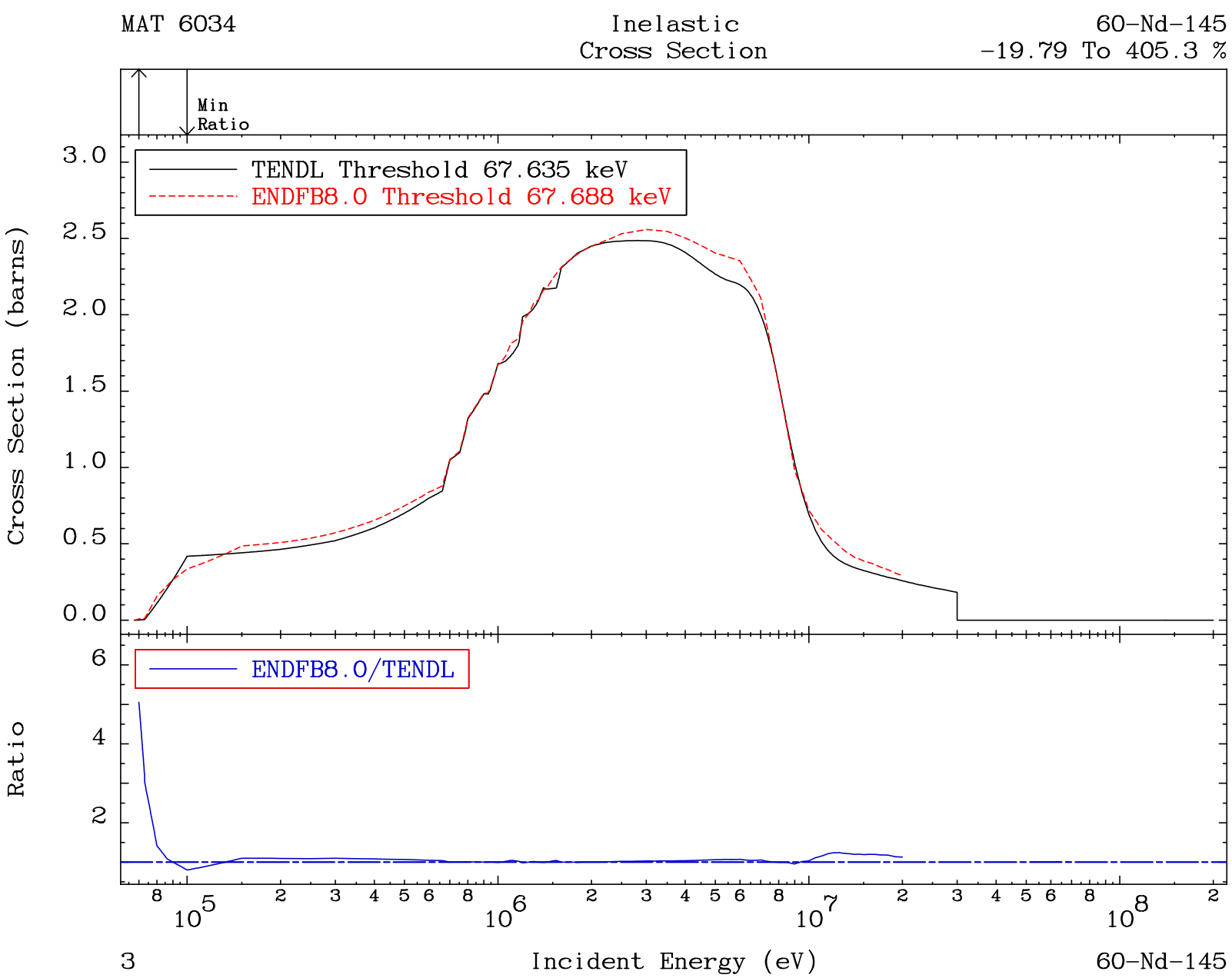
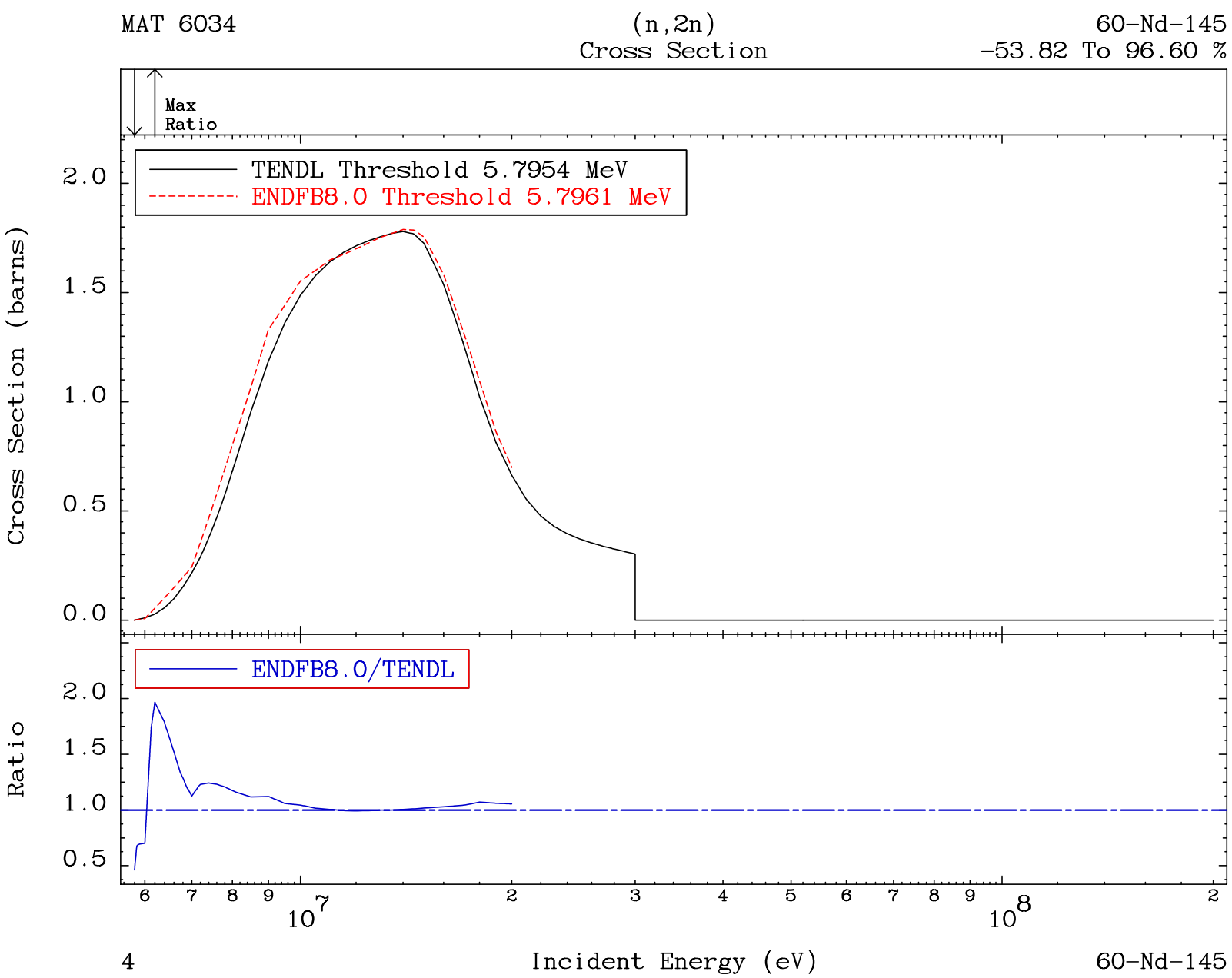
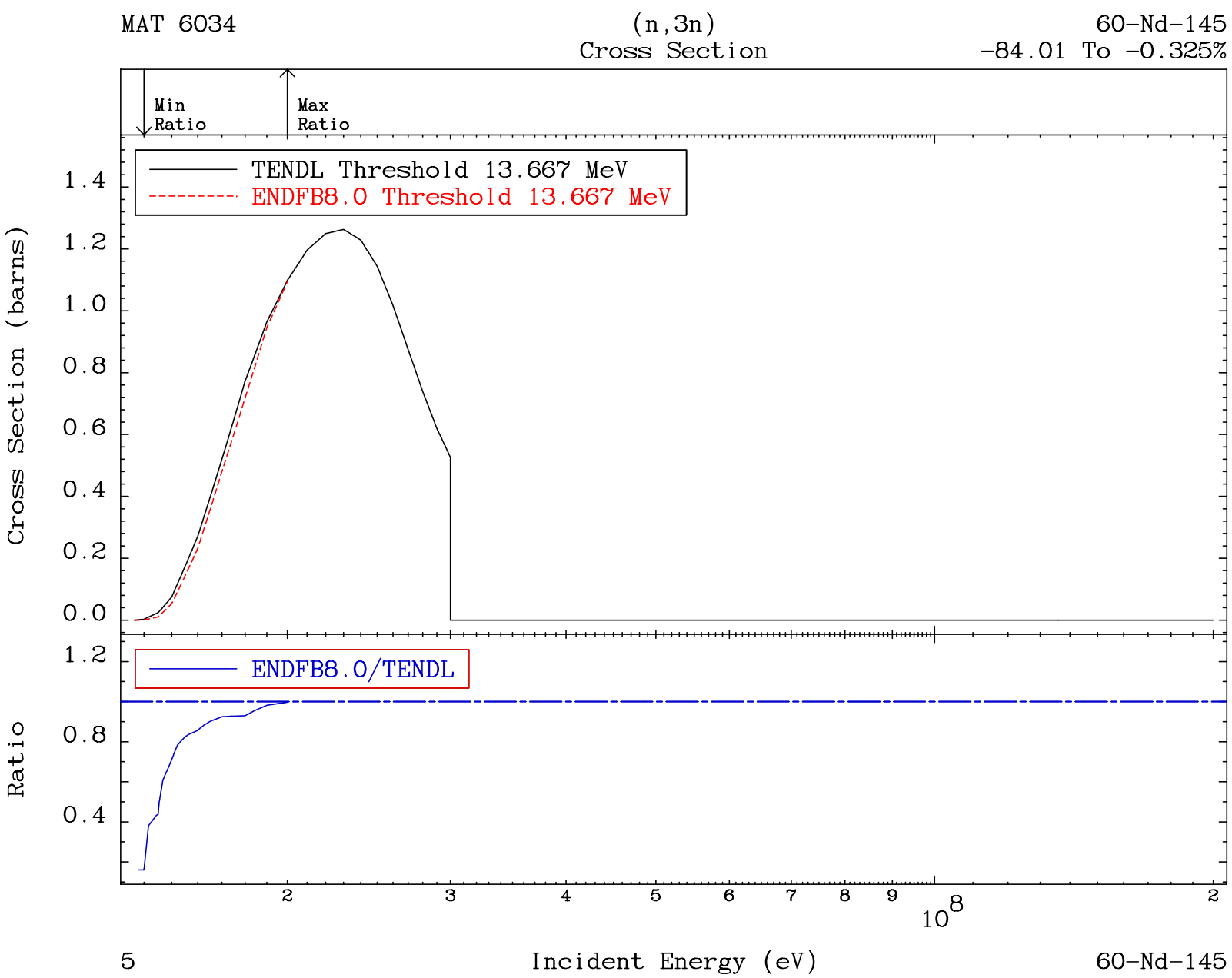
Press Mouse Button to Start

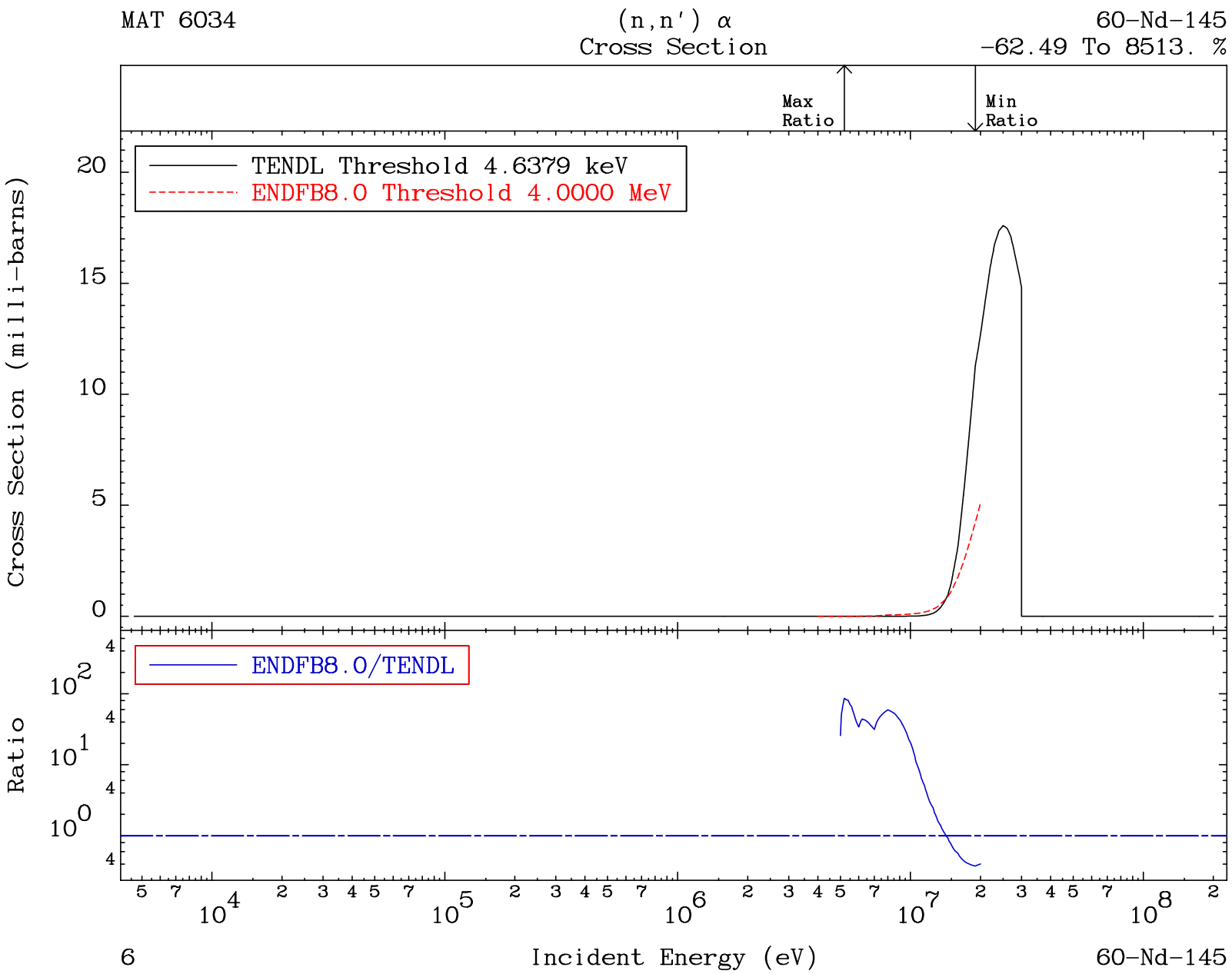

MAT 6034
Total
Cross Section
60-Nd-145
-99.82 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
60-Nd-145
1

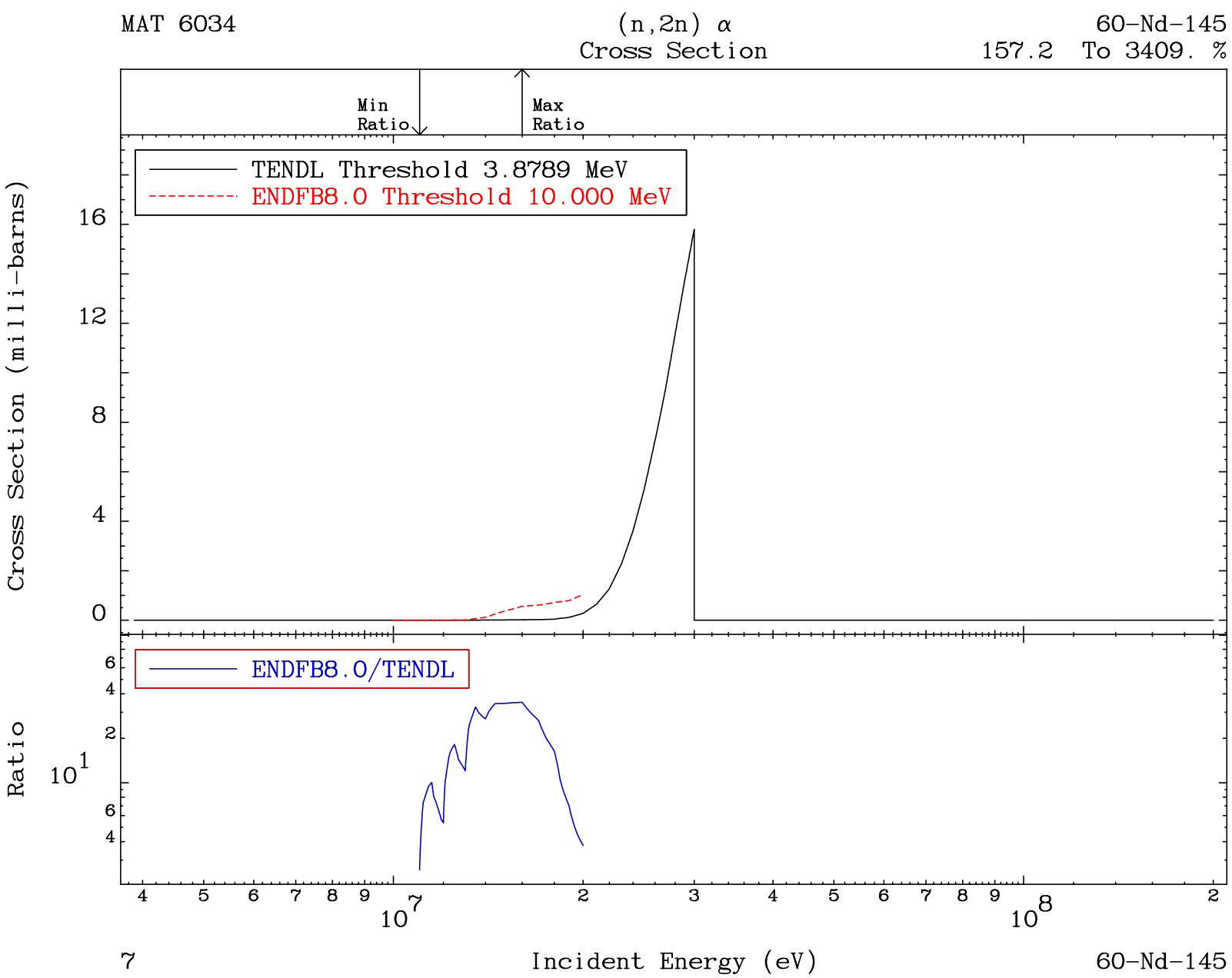

MAT 6034
Elastic
Cross Section
60-Nd-145
-99.83 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
2
60-Nd-145

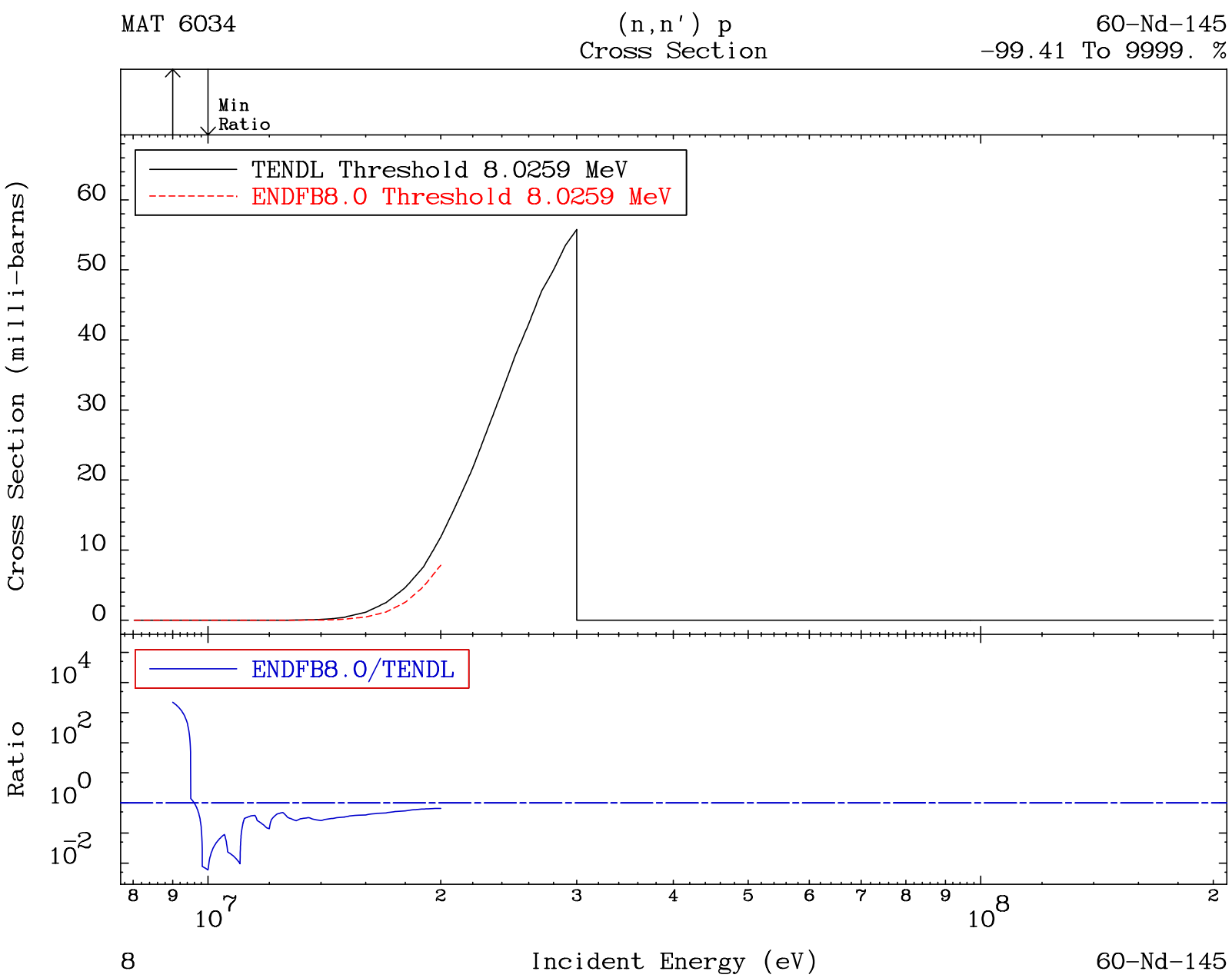

MAT 6034
Inelastic
Cross Section
60-Nd-145
-19.79 To 405.3 %
Min
Ratio
TENDL Threshold 67.635 keV
ENDFB8.0 Threshold 67.688 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
6
4
2
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
60-Nd-145

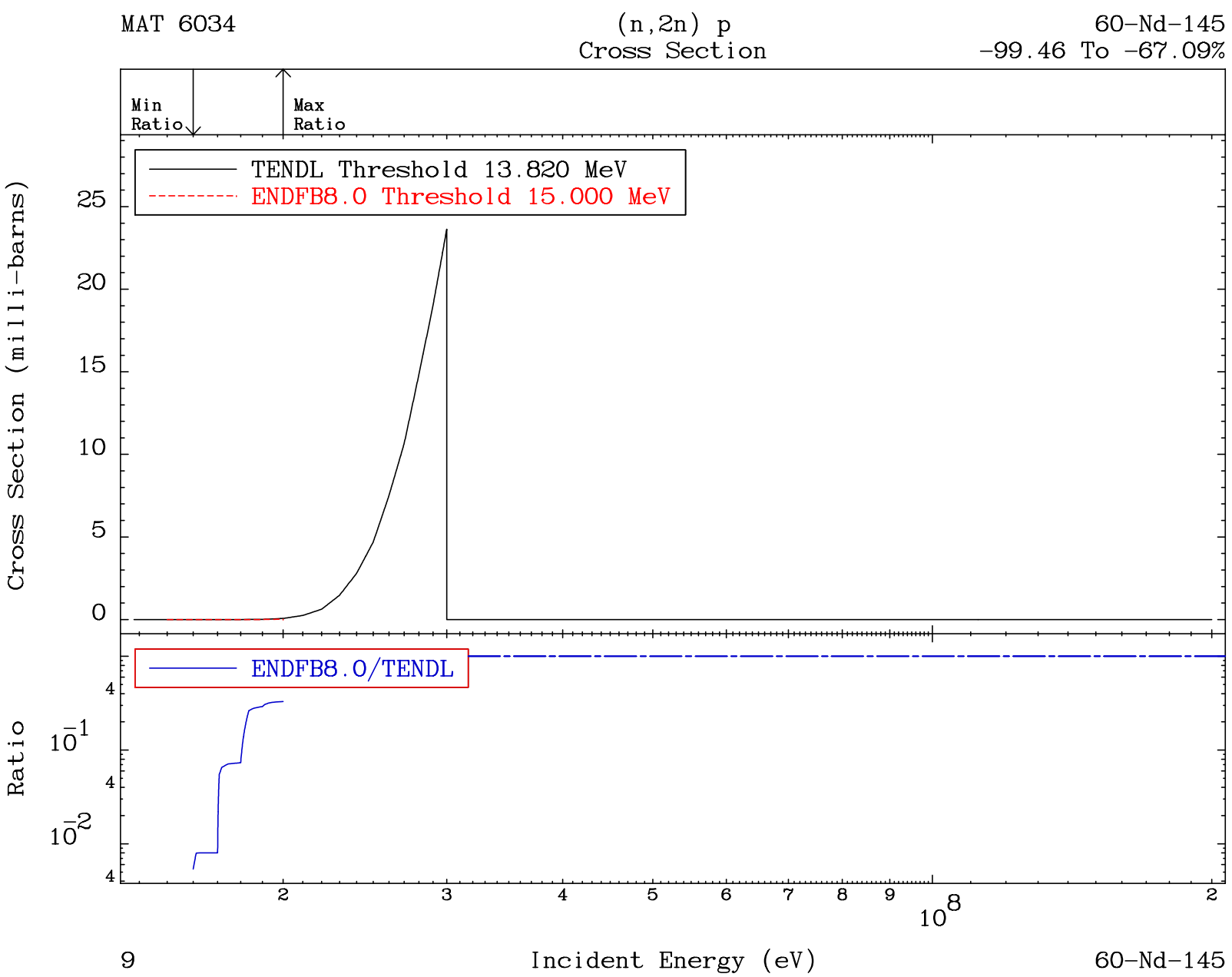

MAT 6034
(n,2n)
Cross Section
60-Nd-145
-53.82 To 96.60 %
Max
Ratio
TENDL Threshold 5.7954 MeV
ENDFB8.0 Threshold 5.7961 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
2.0
1.5
1.0
0.5
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
60-Nd-145

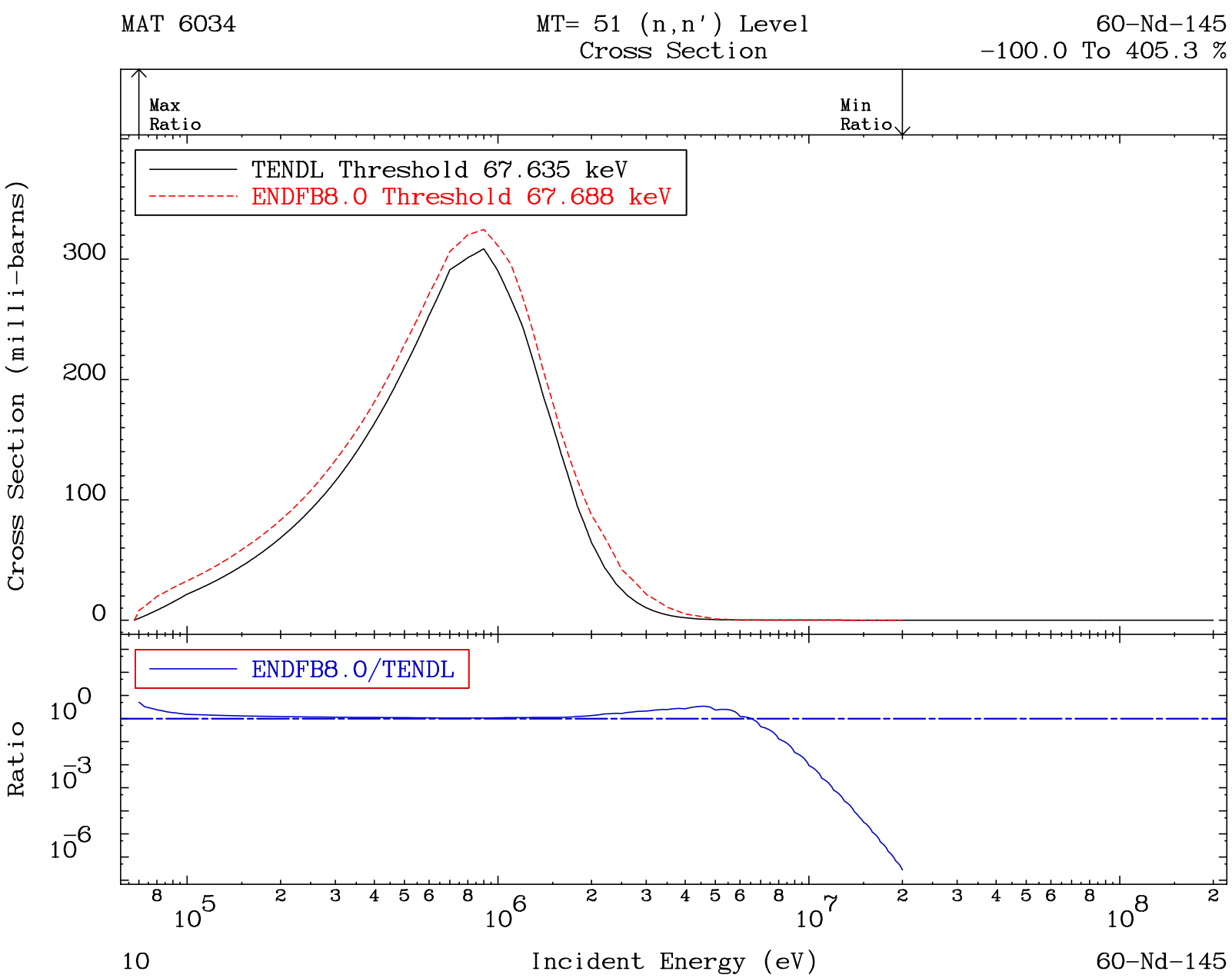

MAT 6034
(n,3n)
Cross Section
60-Nd-145
-84.01 To -0.325%
Min Ratio
Max Ratio
TENDL Threshold 13.667 MeV
ENDFB8.0 Threshold 13.667 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
60-Nd-145

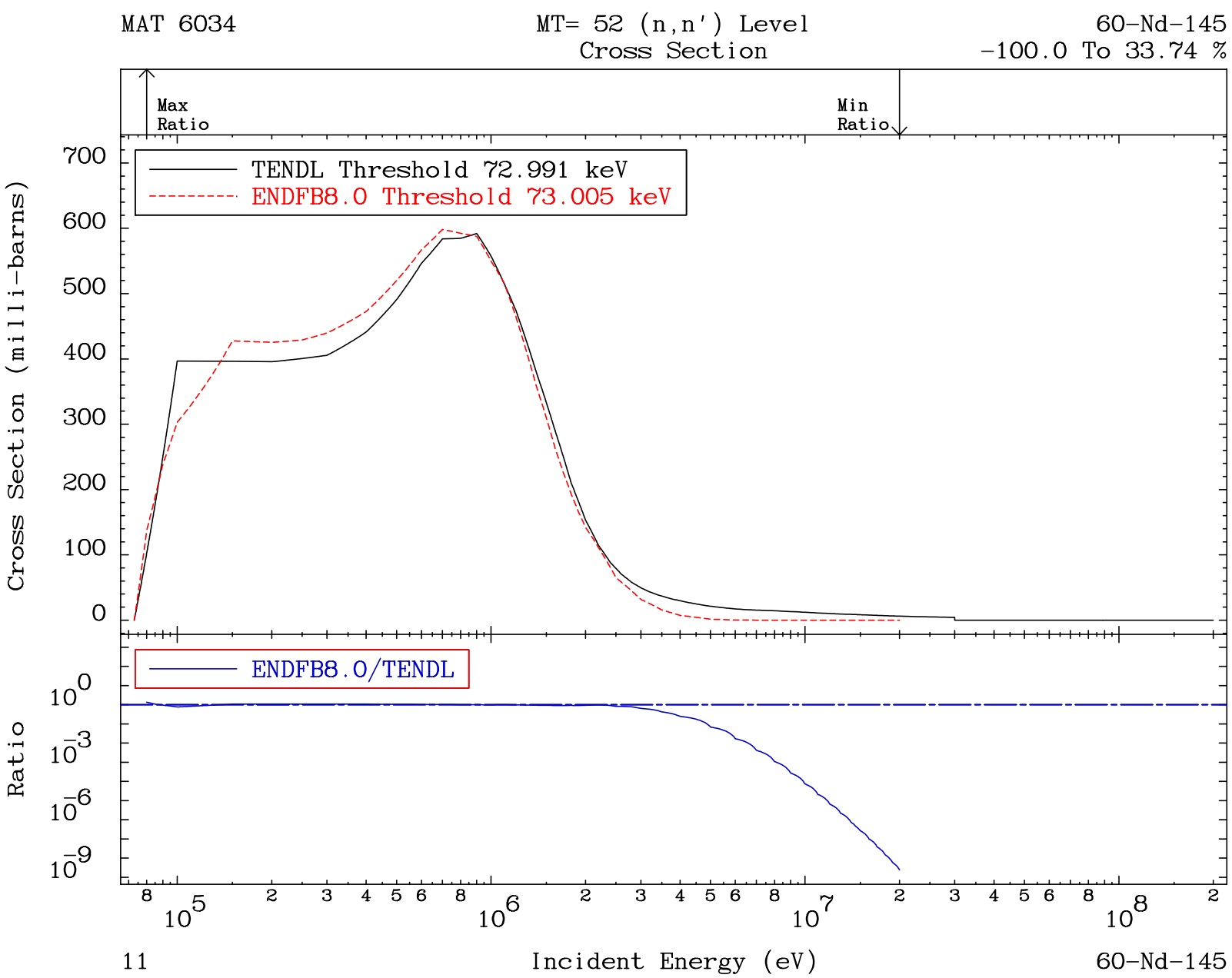

MAT 6034
(n,n') α
Cross Section
60-Nd-145
-62.49 To 8513. %
Max Ratio
Min Ratio
TENDL Threshold 4.6379 keV
ENDFB8.0 Threshold 4.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
10^4
10^5
10^6
10^7
10^8
Incident Energy (eV)
6
60-Nd-145

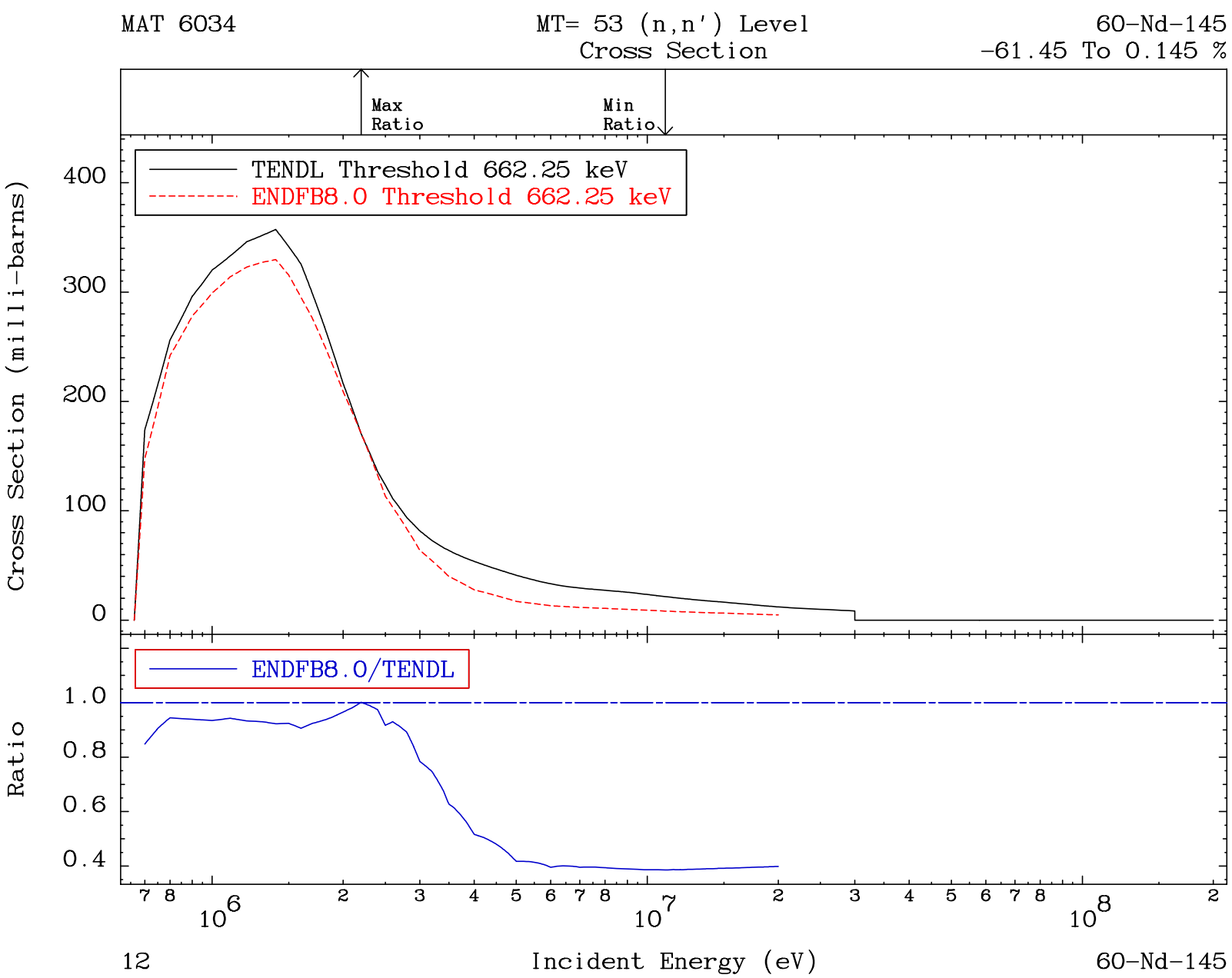

MAT 6034
(n,2n) α
Cross Section
60-Nd-145
157.2 To 3409. %
Min Ratio
Max Ratio
TENDL Threshold 3.8789 MeV
ENDFB8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
16
12
8
4
0
ENDFB8.0/TENDL
Ratio
10^1
6
4
2
6
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
60-Nd-145

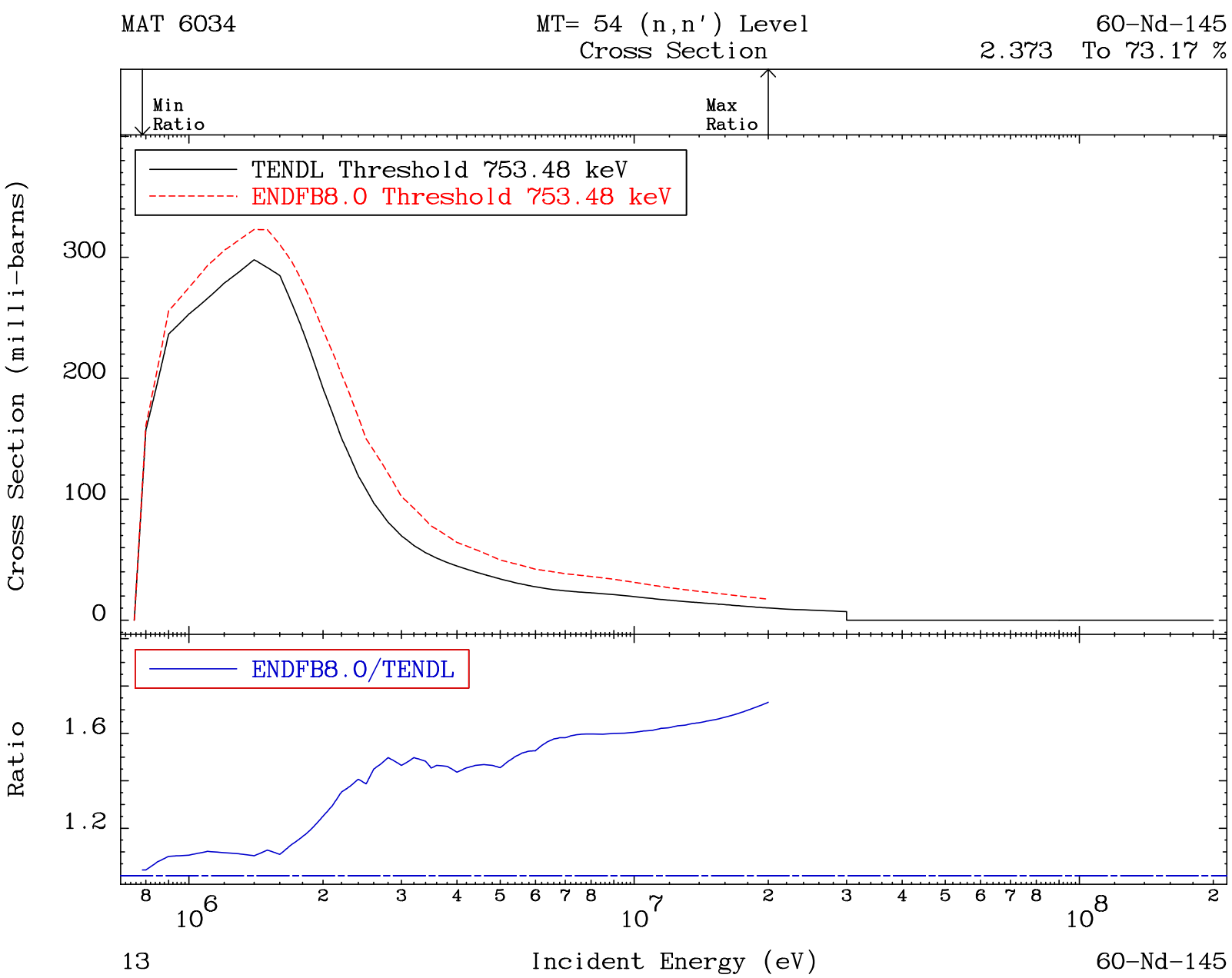

MAT 6034
(n,n') p
Cross Section
60-Nd-145
-99.41 To 9999. %
Min
Ratio
TENDL Threshold 8.0259 MeV
ENDFB8.0 Threshold 8.0259 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
10^-2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
60-Nd-145

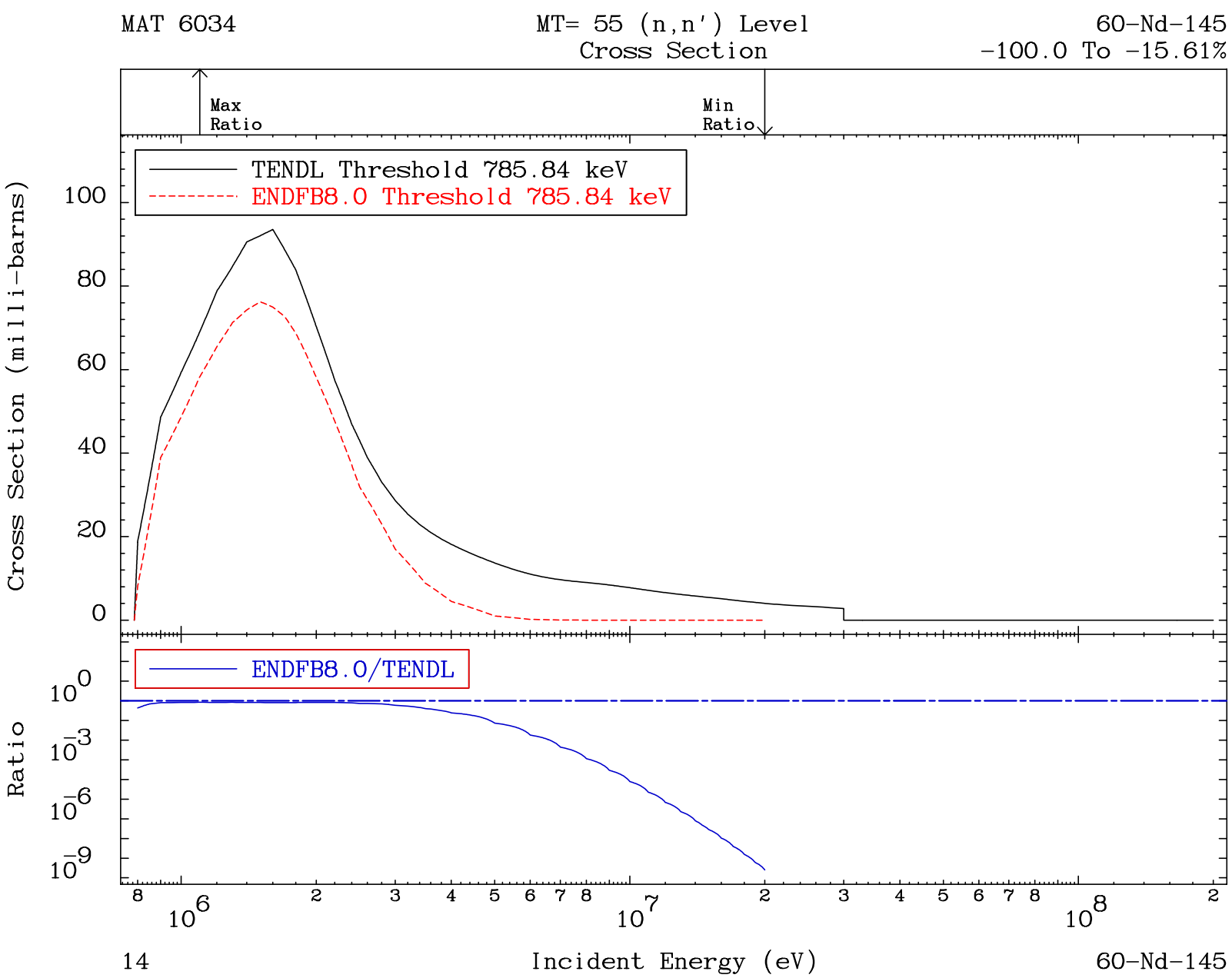

MAT 6034
(n,2n) p
Cross Section
60-Nd-145
-99.46 To -67.09%
Min Ratio
Max Ratio
TENDL Threshold 13.820 MeV
ENDFB8.0 Threshold 15.000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
10-1
10-2
2
3
4
5
6
7
8
9
10 8
2
9
Incident Energy (eV)
60-Nd-145

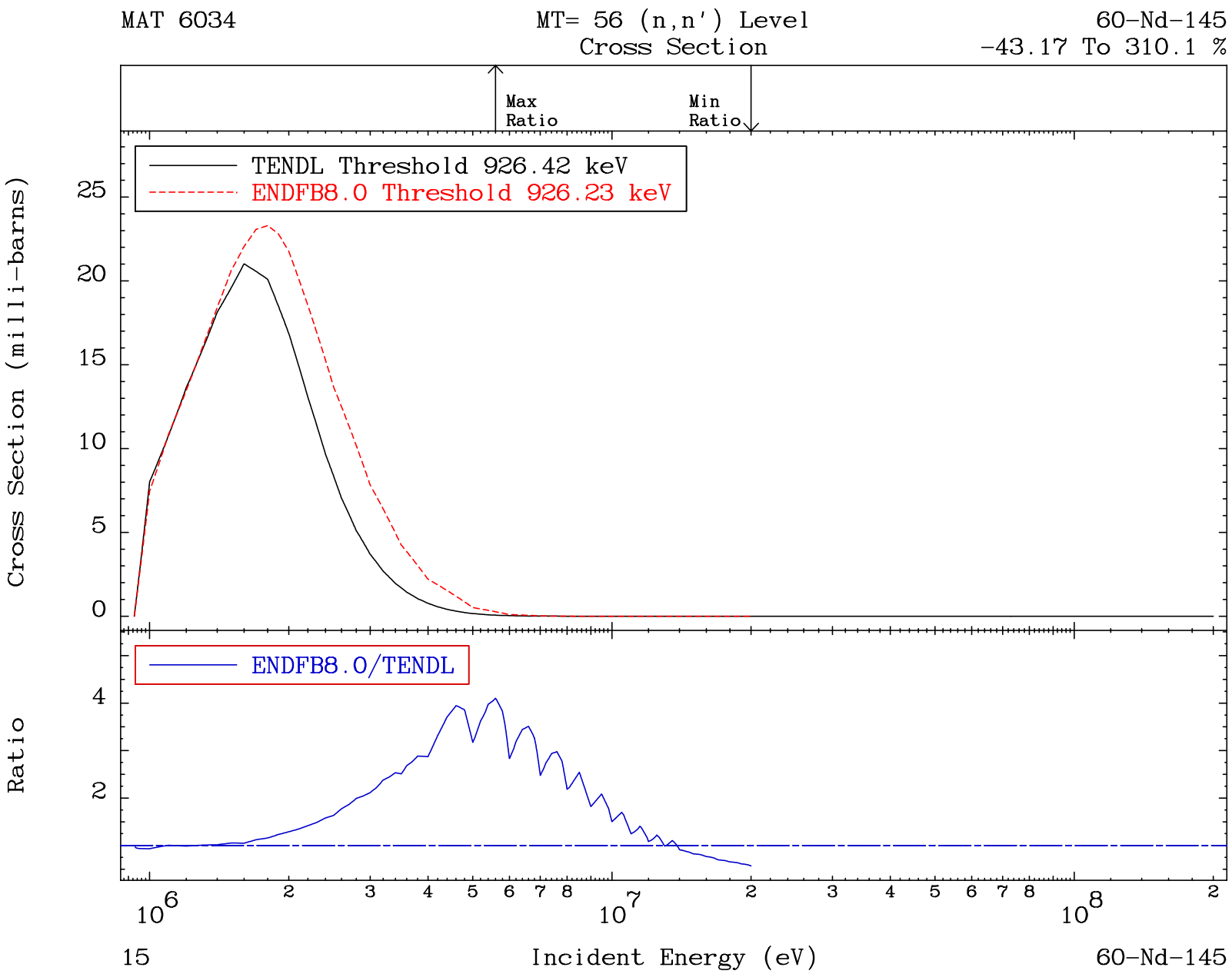

MAT 6034
MT= 51 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 405.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 67.635 keV
ENDFB8.0 Threshold 67.688 keV
Cross Section (milli-barns)
300
200
100
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
10
Incident Energy (eV)
60-Nd-145

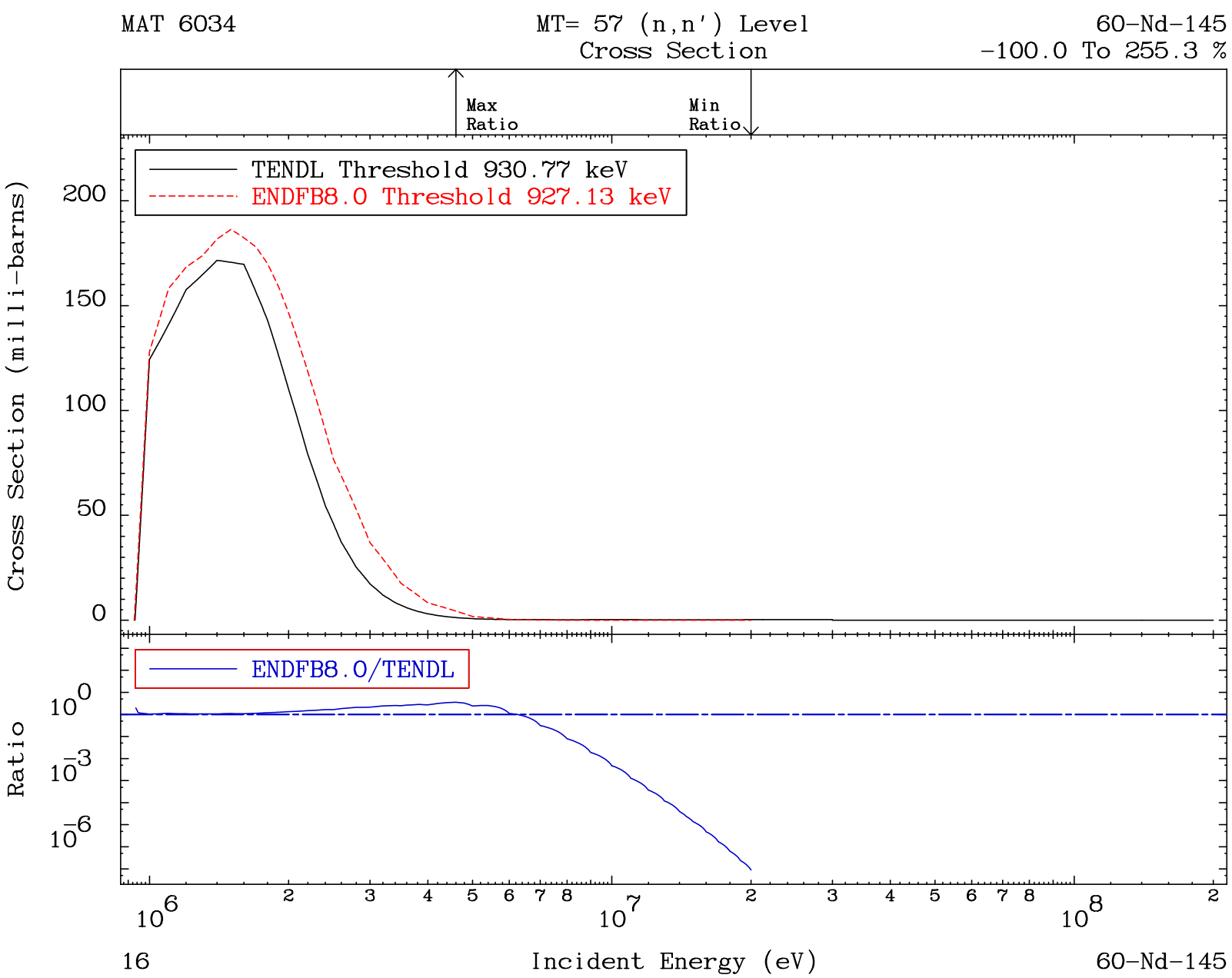

MAT 6034
MT= 52 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 33.74 %
Max
Ratio
Min
Ratio
TENDL Threshold 72.991 keV
ENDFB8.0 Threshold 73.005 keV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
10^5
10^6
10^7
10^8
11
Incident Energy (eV)
60-Nd-145

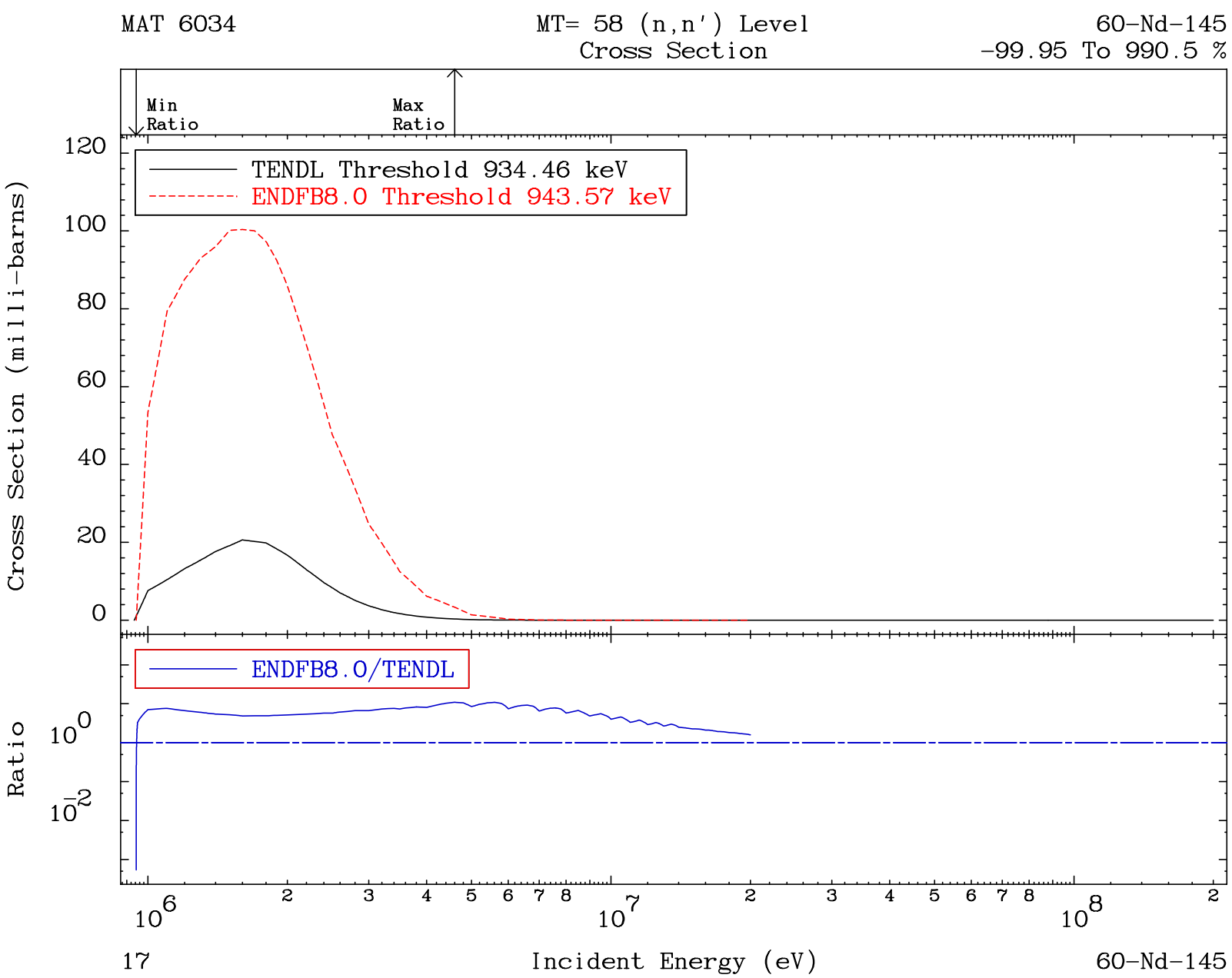

MAT 6034
MT= 53 (n,n') Level
Cross Section
60-Nd-145
-61.45 To 0.145 %
Max
Ratio
Min
Ratio
TENDL Threshold 662.25 keV
ENDFB8.0 Threshold 662.25 keV
Cross Section (milli-barns)
400
300
200
100
0
ENDFB8.0/TENDL
Ratio
1.0
0.8
0.6
0.4
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
60-Nd-145

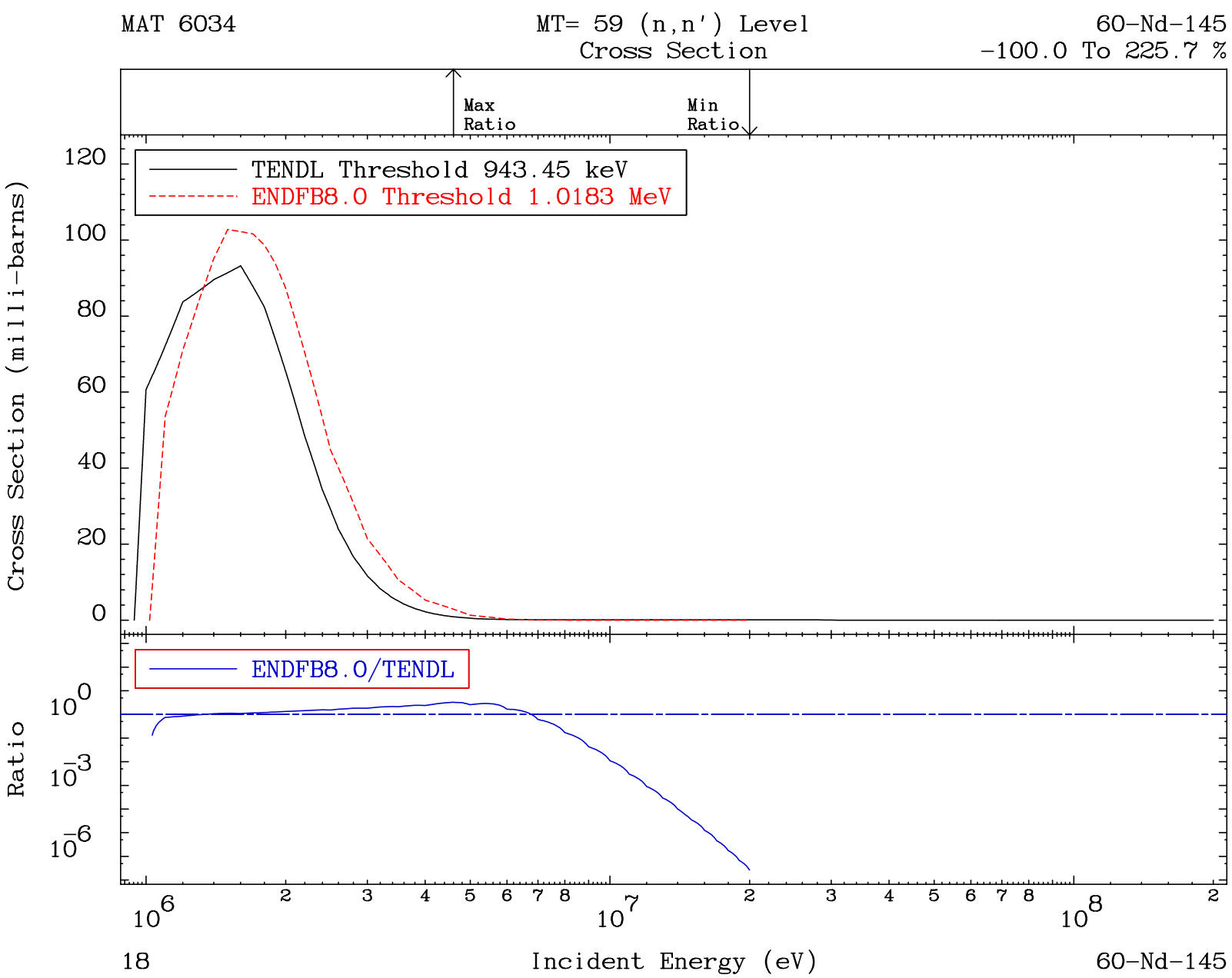

MAT 6034
MT= 54 (n,n') Level
Cross Section
60-Nd-145
2.373 To 73.17 %
Min
Ratio
Max
Ratio
TENDL Threshold 753.48 keV
ENDFB8.0 Threshold 753.48 keV
Cross Section (milli-barns)
300
200
100
0
ENDFB8.0/TENDL
Ratio
1.6
1.2
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
60-Nd-145

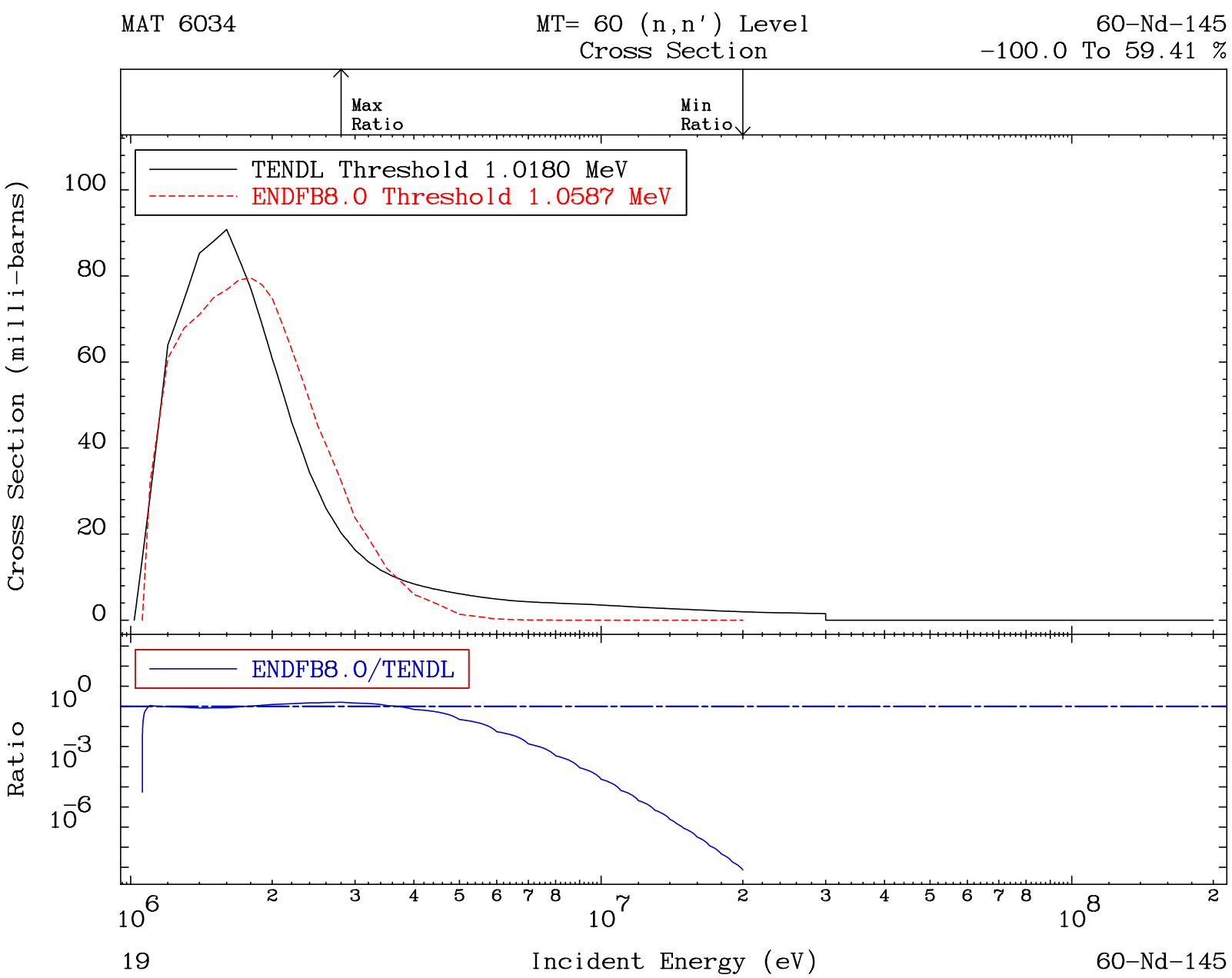

MAT 6034
MT= 55 (n,n') Level
Cross Section
60-Nd-145
-100.0 To -15.61%
Max
Ratio
Min
Ratio
TENDL Threshold 785.84 keV
ENDFB8.0 Threshold 785.84 keV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
60-Nd-145

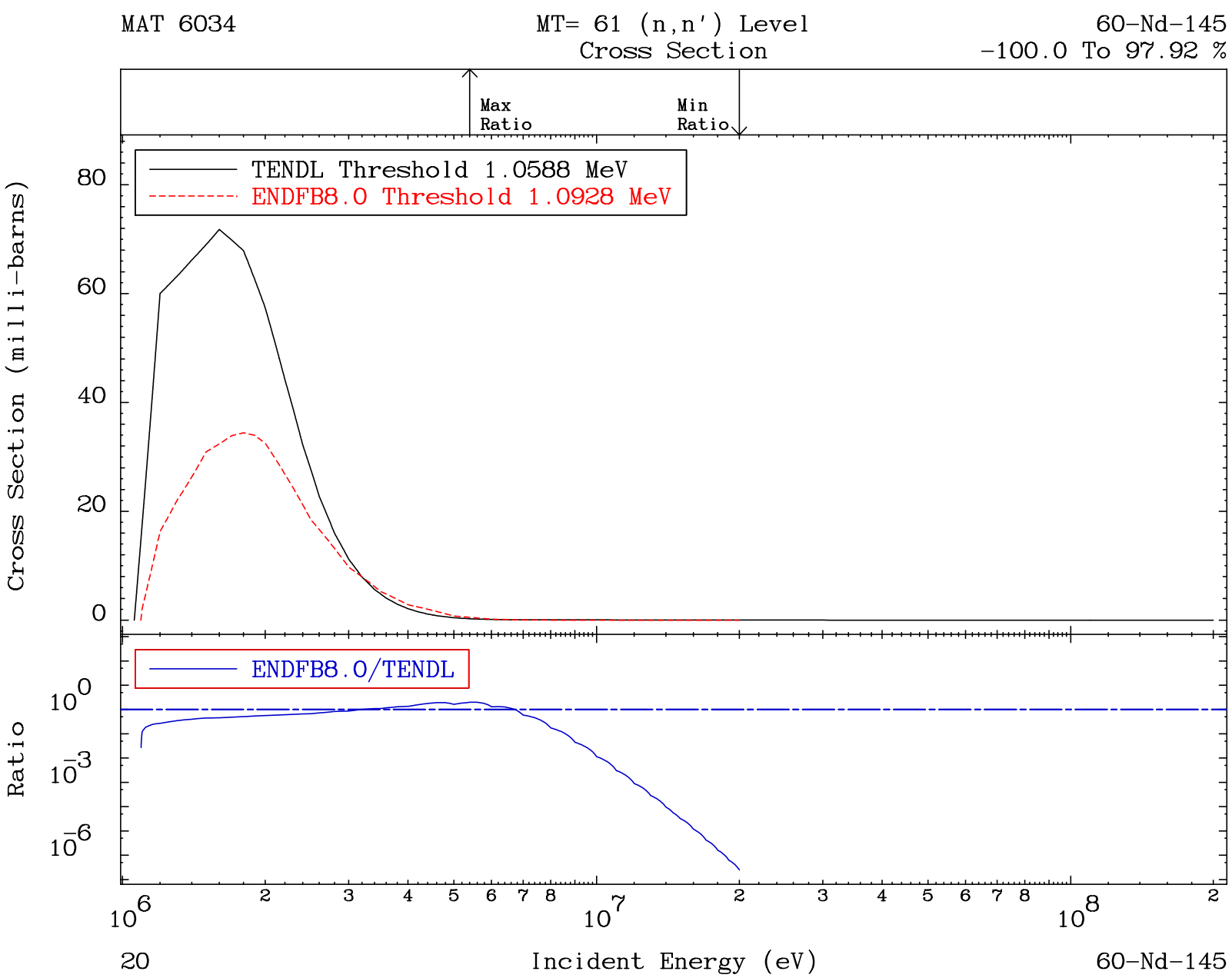

MAT 6034
MT= 56 (n,n') Level
Cross Section
60-Nd-145
-43.17 To 310.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 926.42 keV
ENDFB8.0 Threshold 926.23 keV
Cross Section (milli-barns)
25
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
4
2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
60-Nd-145

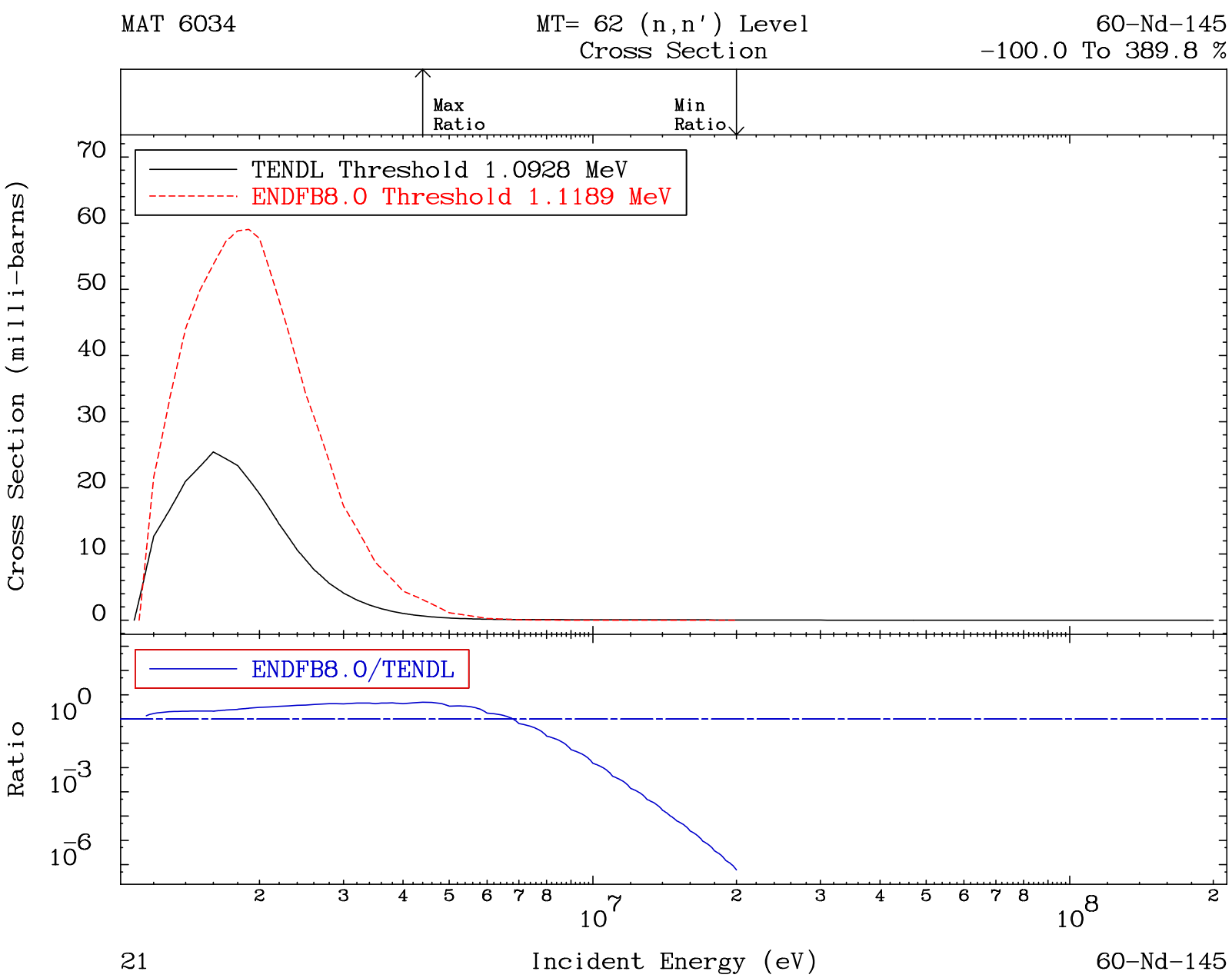

MAT 6034
MT= 57 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 255.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 930.77 keV
ENDFB8.0 Threshold 927.13 keV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
60-Nd-145

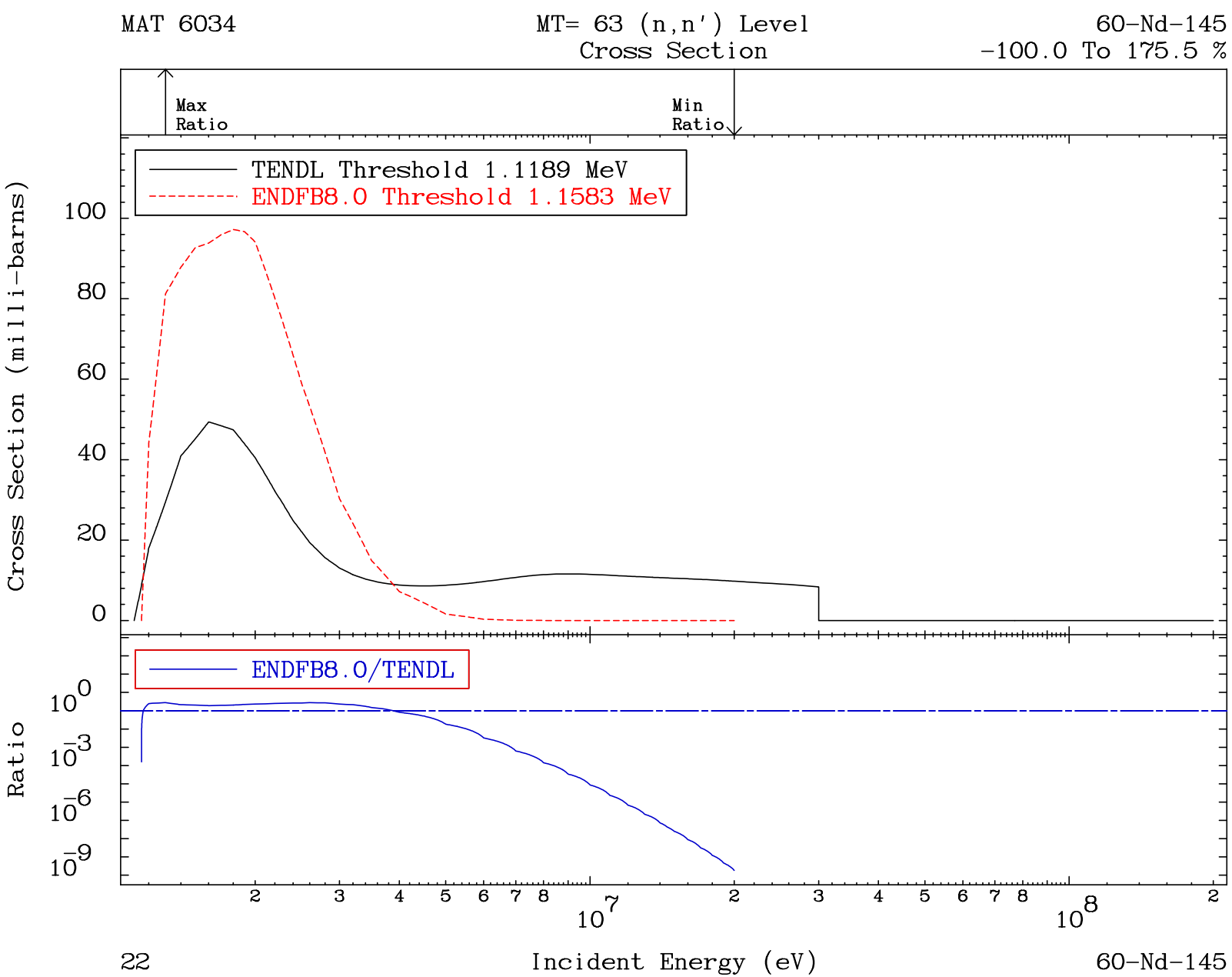

MAT 6034
MT= 58 (n,n') Level
Cross Section
60-Nd-145
-99.95 To 990.5 %
Min
Ratio
Max
Ratio
TENDL Threshold 934.46 keV
ENDFB8.0 Threshold 943.57 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
60-Nd-145

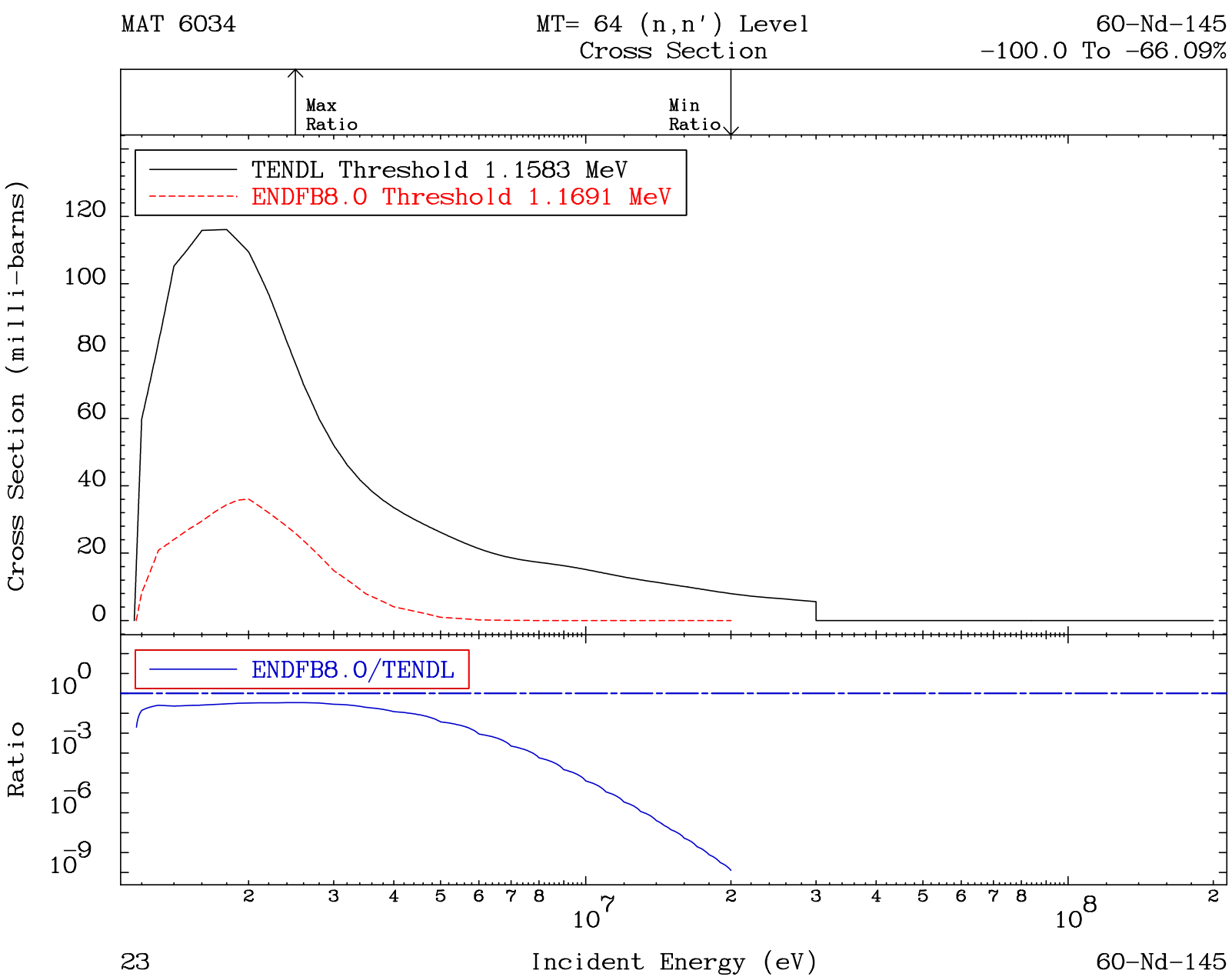

MAT 6034
MT= 59 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 225.7 %
Max
Ratio
Min
Ratio
TENDL Threshold 943.45 keV
ENDFB8.0 Threshold 1.0183 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
60-Nd-145

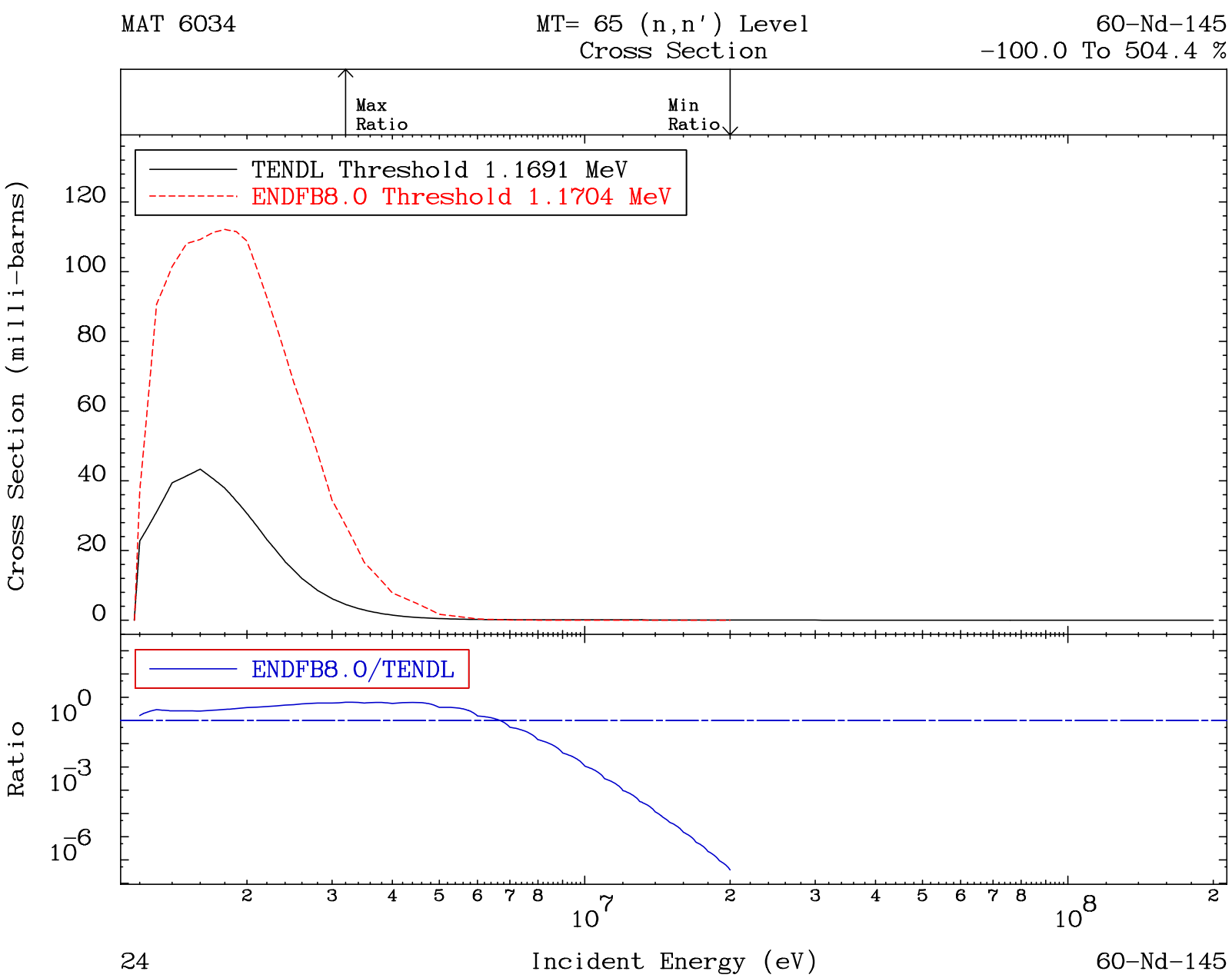

MAT 6034
MT= 60 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 59.41 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0180 MeV
ENDFB8.0 Threshold 1.0587 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
60-Nd-145

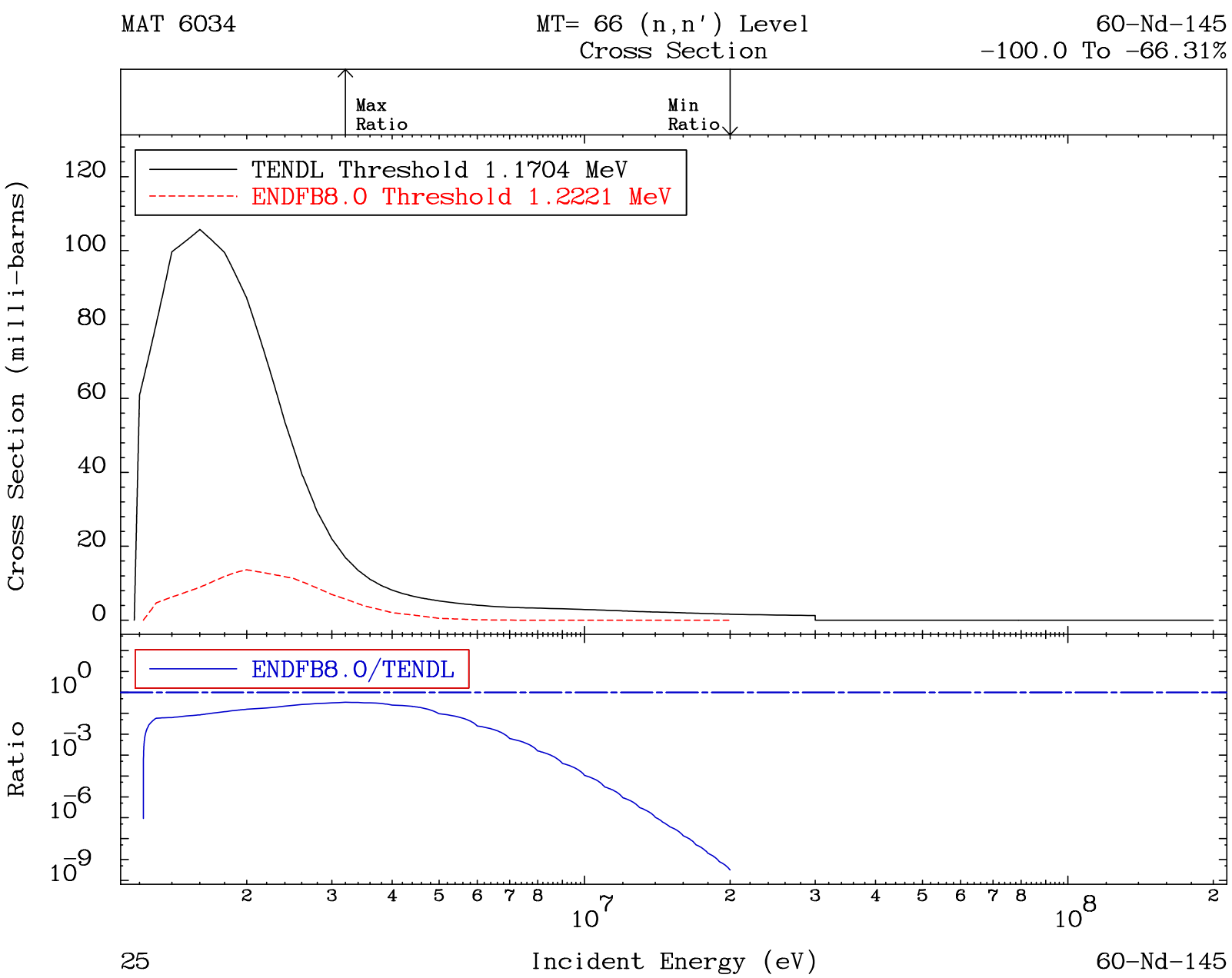

MAT 6034
MT= 61 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 97.92 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0588 MeV
ENDFB8.0 Threshold 1.0928 MeV
Cross Section (milli-barns)
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
60-Nd-145

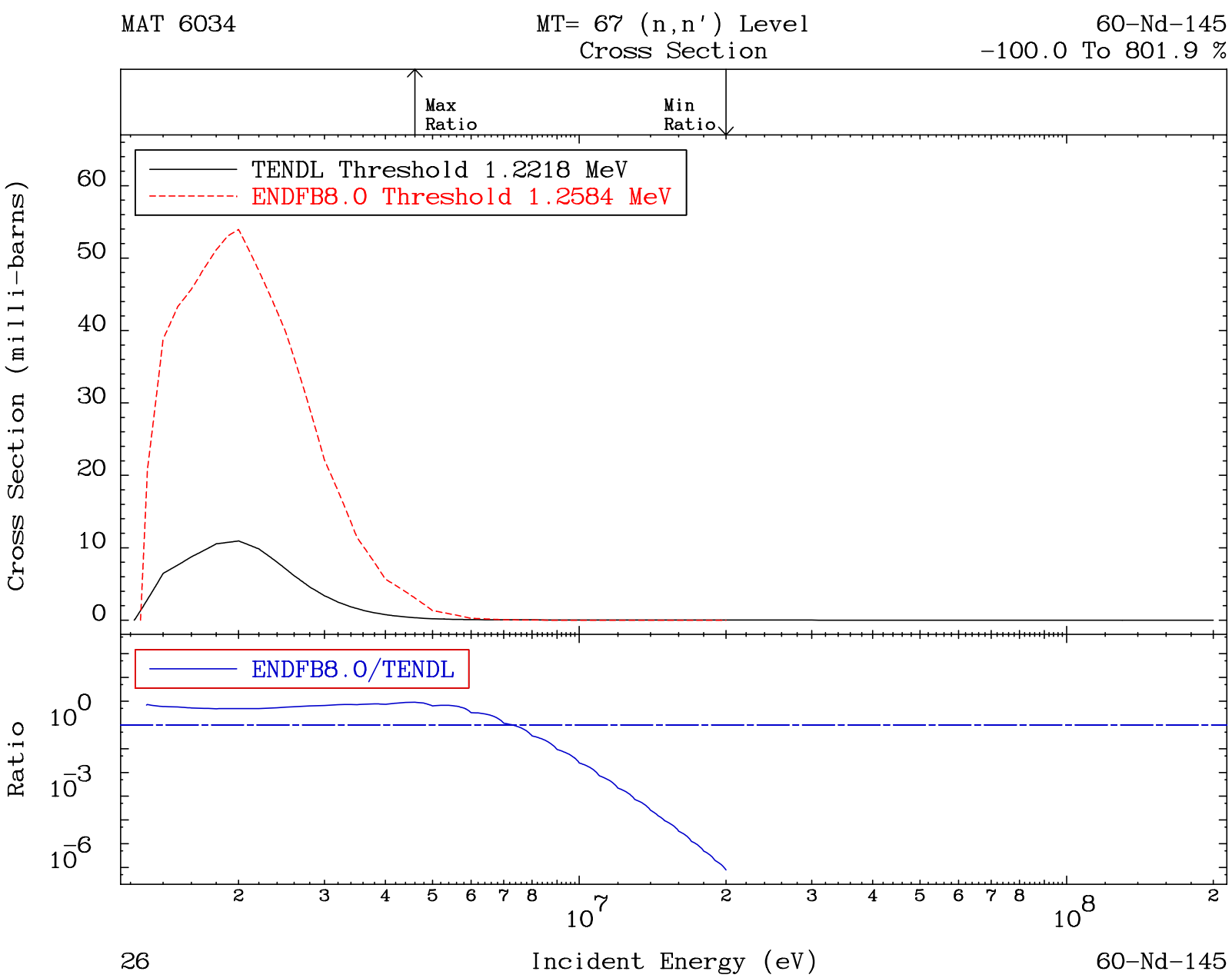

MAT 6034
MT= 62 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 389.8 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0928 MeV
ENDFB8.0 Threshold 1.1189 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
21
Incident Energy (eV)
60-Nd-145

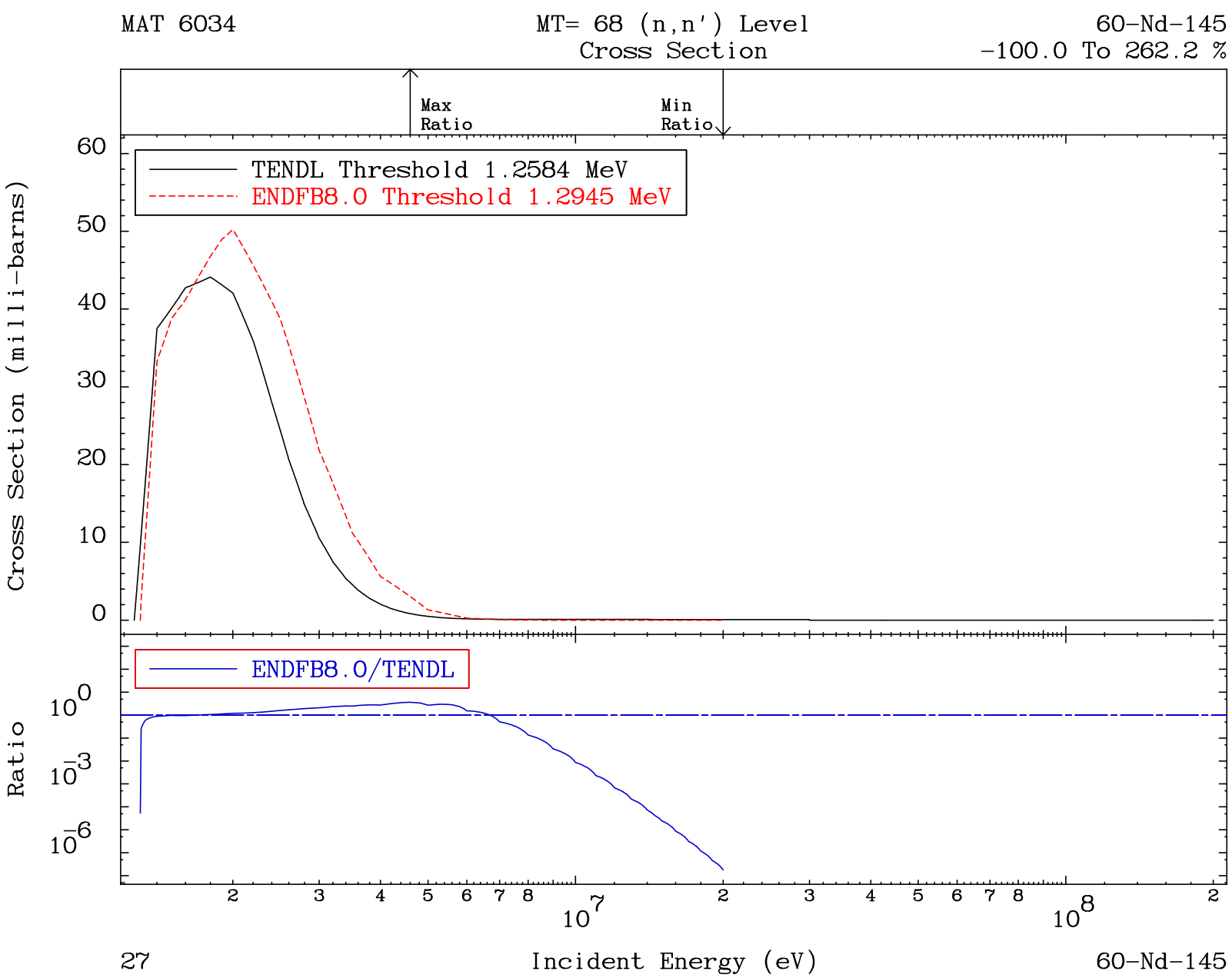

MAT 6034
MT= 63 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 175.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1189 MeV
ENDFB8.0 Threshold 1.1583 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
60-Nd-145

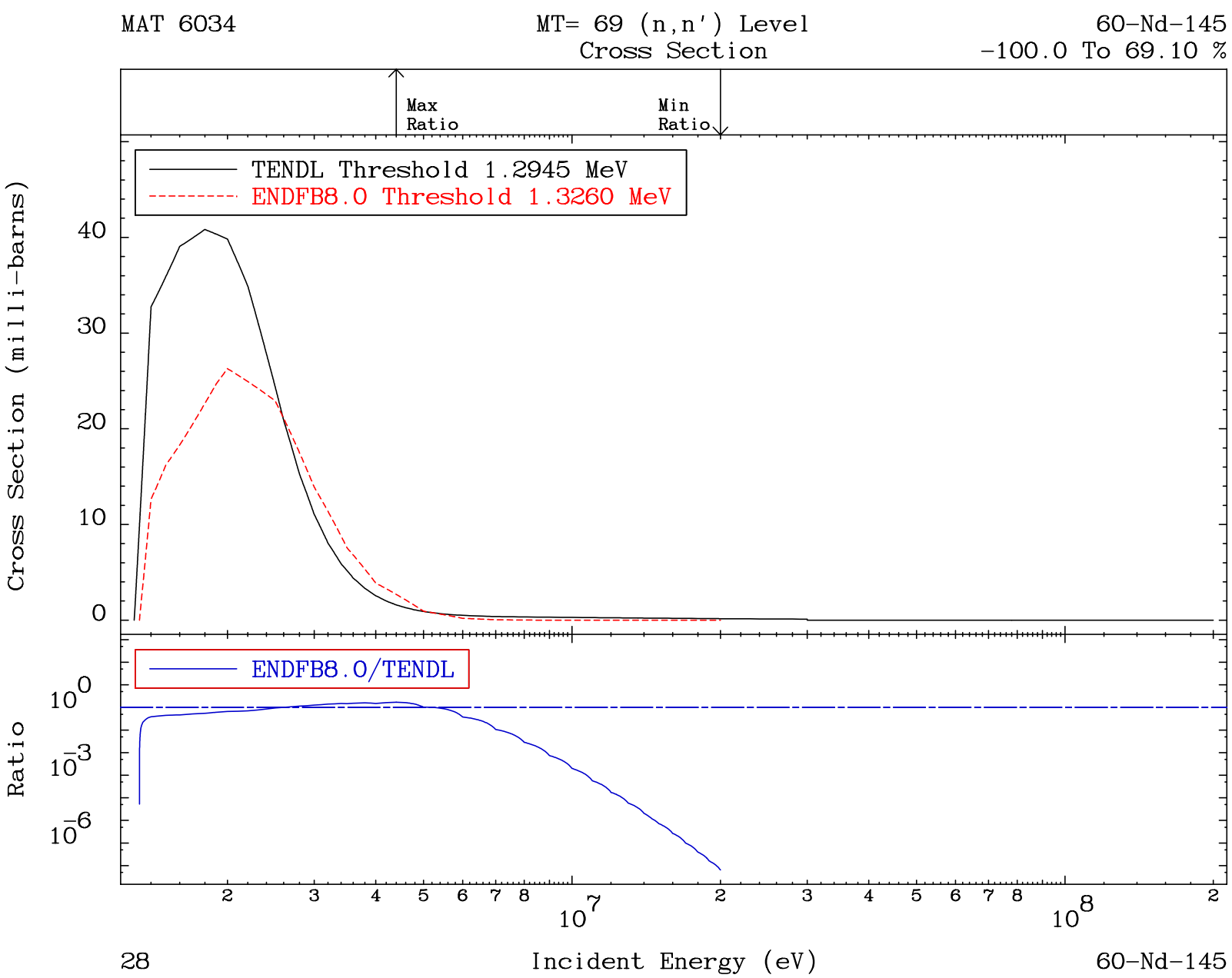

MAT 6034
MT= 64 (n,n') Level
Cross Section
60-Nd-145
-100.0 To -66.09%
Max
Ratio
Min
Ratio
TENDL Threshold 1.1583 MeV
ENDFB8.0 Threshold 1.1691 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
60-Nd-145

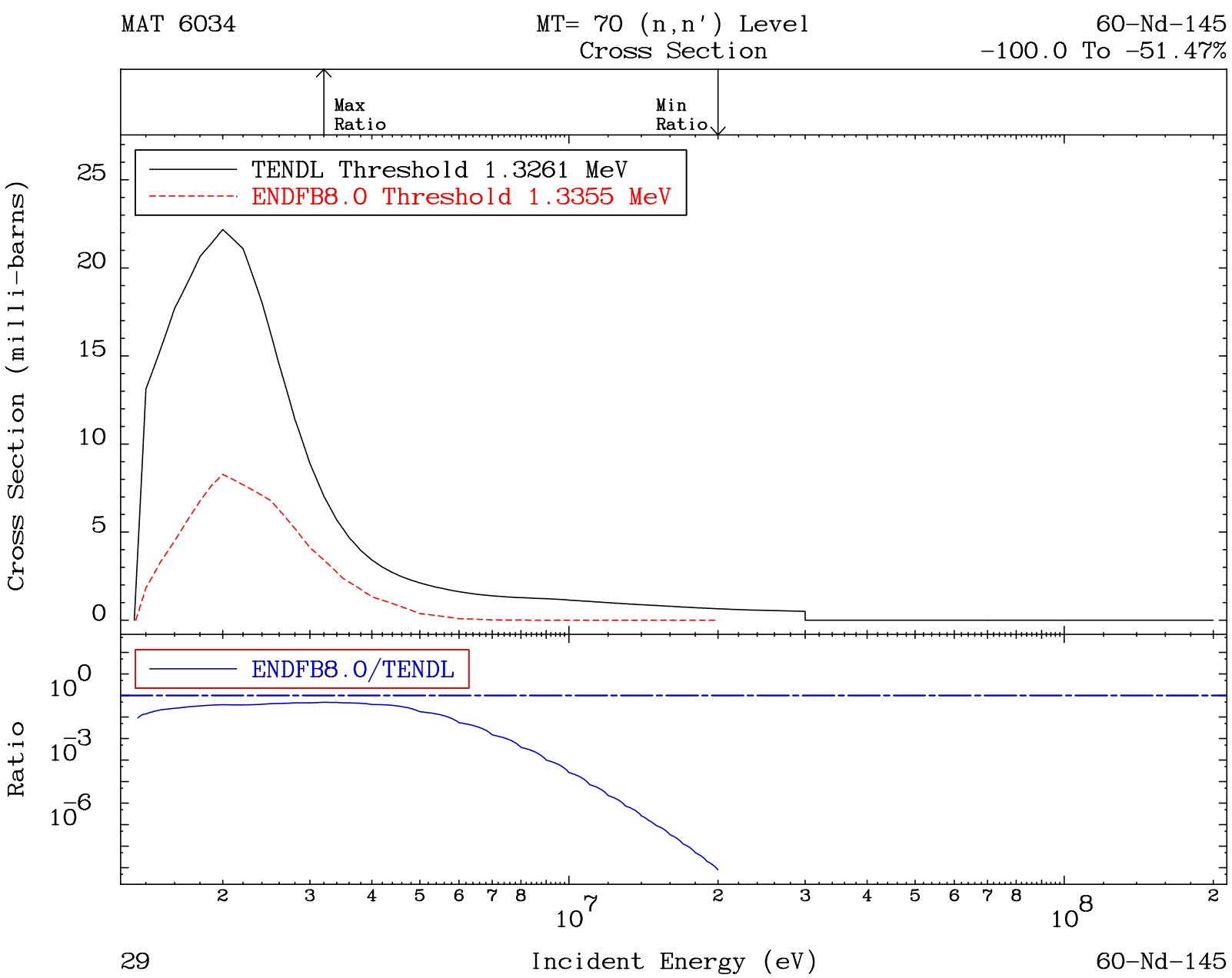

MAT 6034
MT= 65 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 504.4 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1691 MeV
ENDFB8.0 Threshold 1.1704 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
60-Nd-145

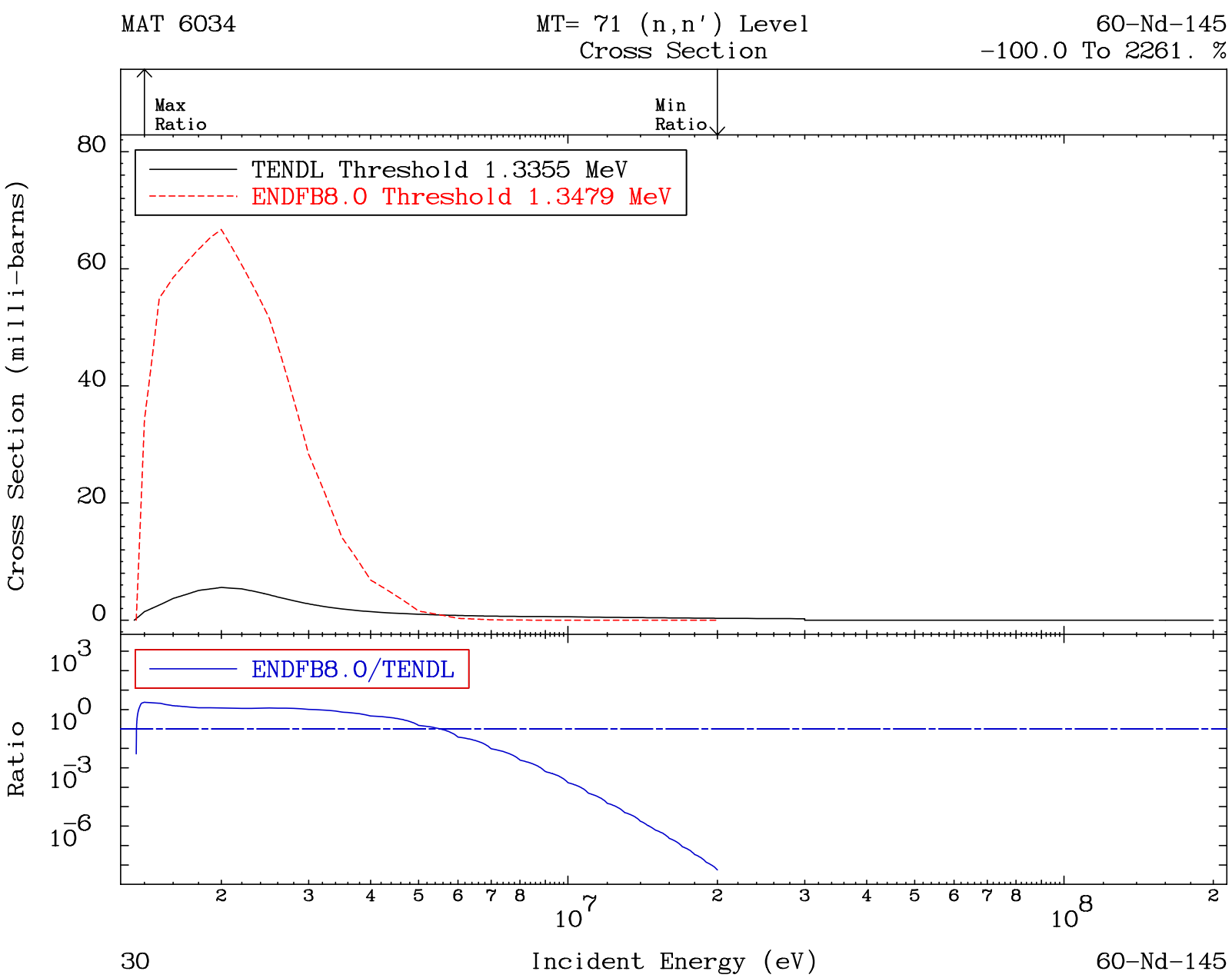

MAT 6034
MT= 66 (n,n') Level
Cross Section
60-Nd-145
-100.0 To -66.31%
Max
Ratio
Min
Ratio
TENDL Threshold 1.1704 MeV
ENDFB8.0 Threshold 1.2221 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
60-Nd-145

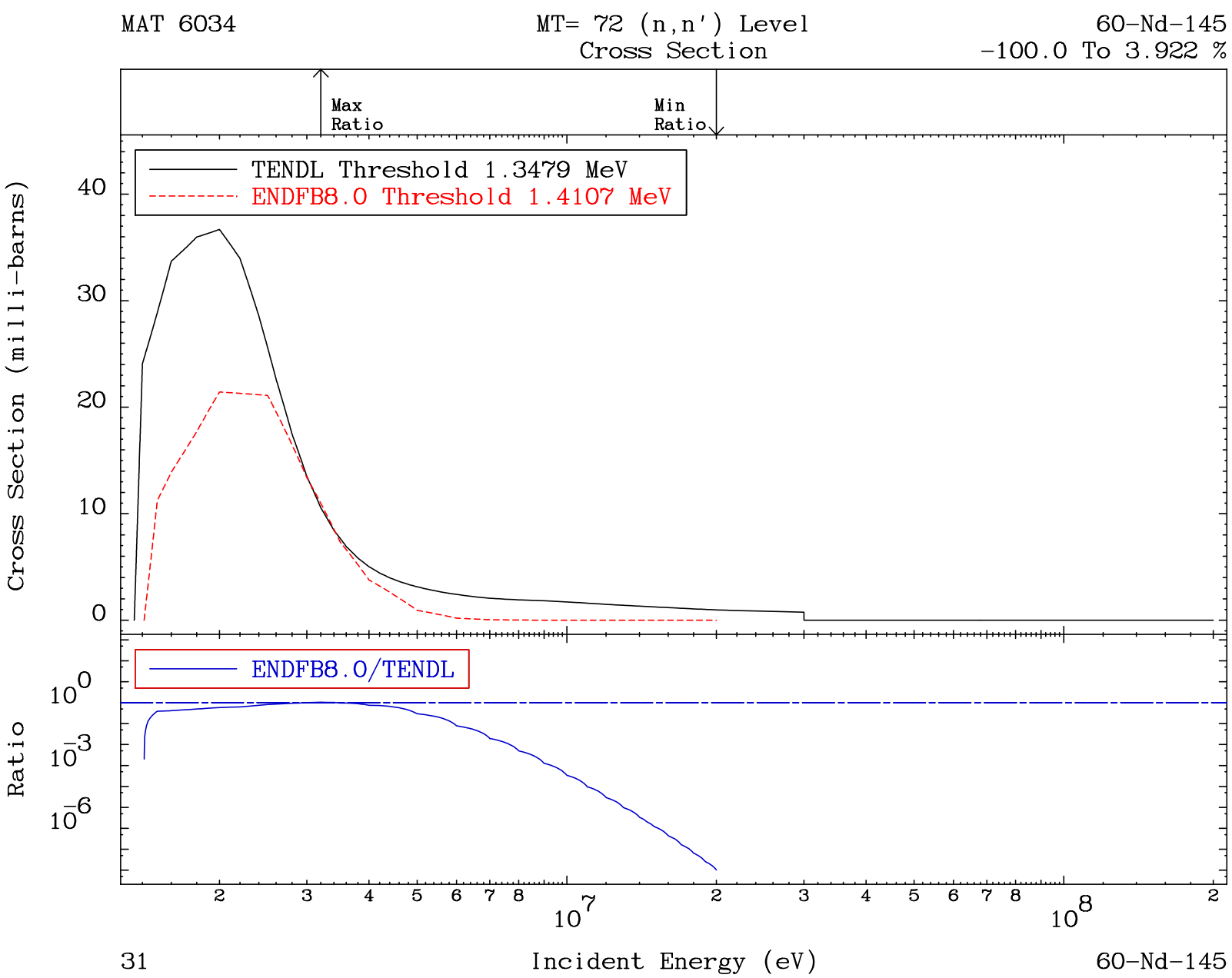

MAT 6034
MT= 67 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 801.9 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2218 MeV
ENDFB8.0 Threshold 1.2584 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
60-Nd-145

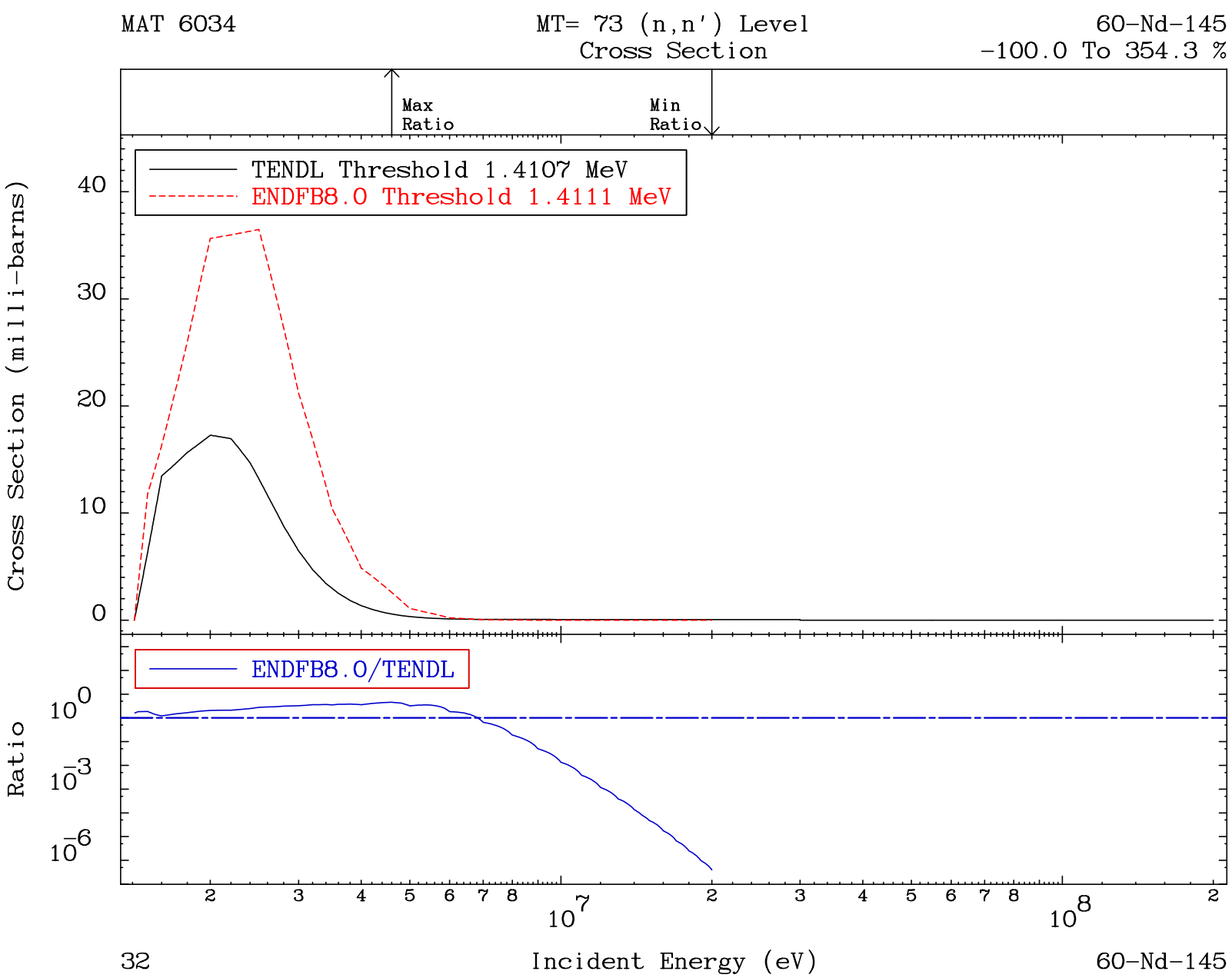

MAT 6034
MT= 68 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 262.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2584 MeV
ENDFB8.0 Threshold 1.2945 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
60-Nd-145

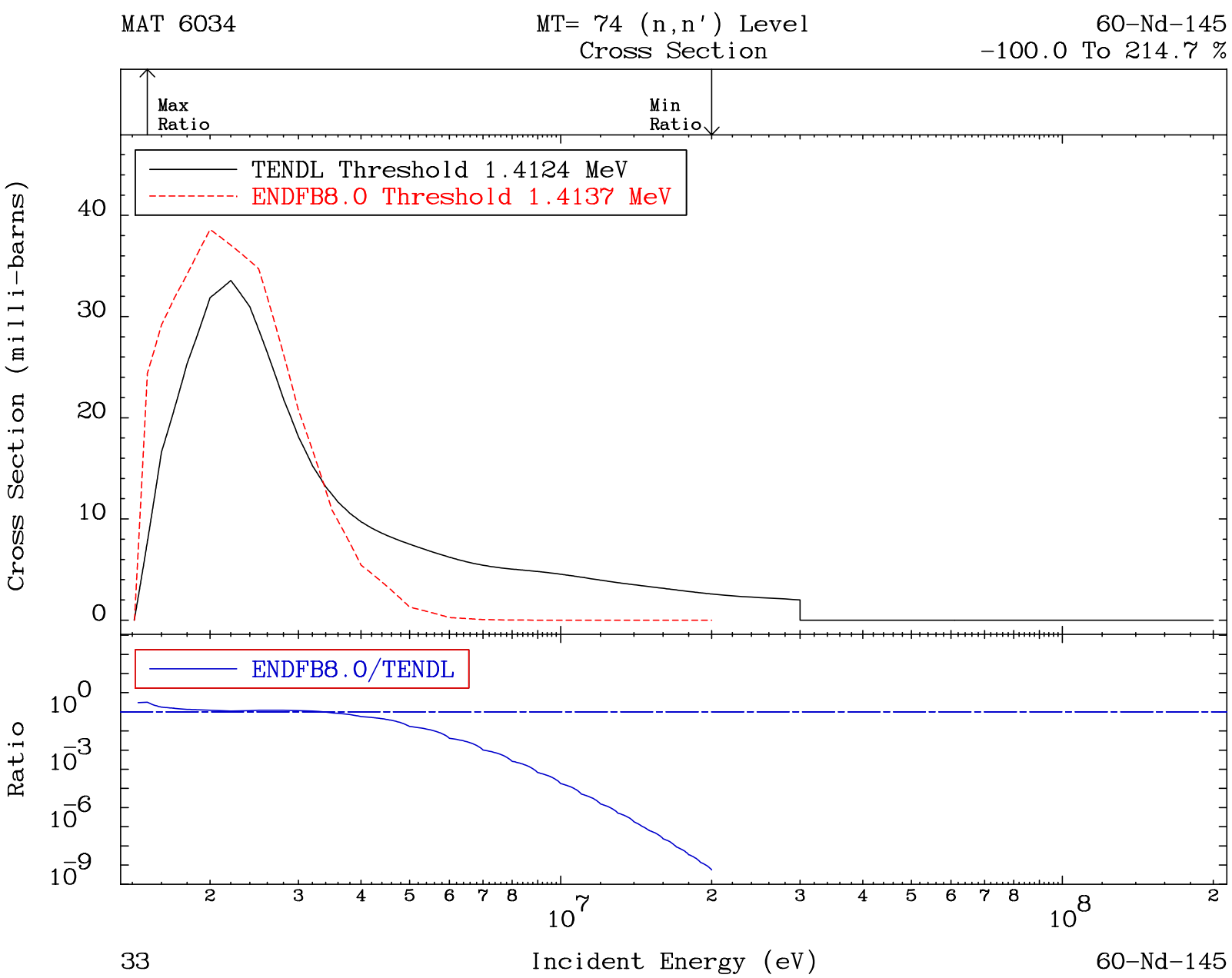

MAT 6034
MT= 69 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 69.10 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2945 MeV
ENDFB8.0 Threshold 1.3260 MeV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
60-Nd-145

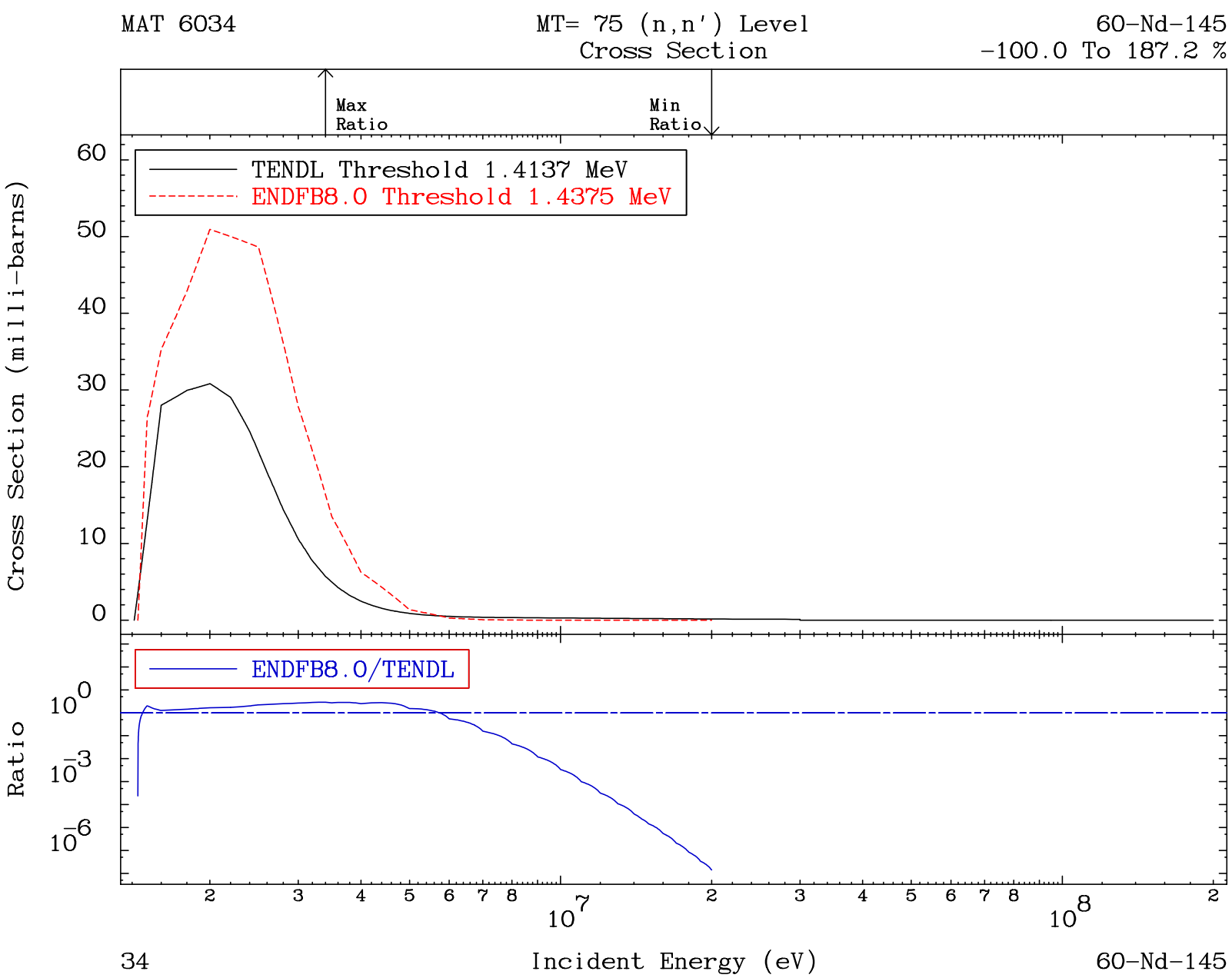

MAT 6034
MT= 70 (n,n') Level
Cross Section
60-Nd-145
-100.0 To -51.47%
Max
Ratio
Min
Ratio
TENDL Threshold 1.3261 MeV
ENDFB8.0 Threshold 1.3355 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
60-Nd-145

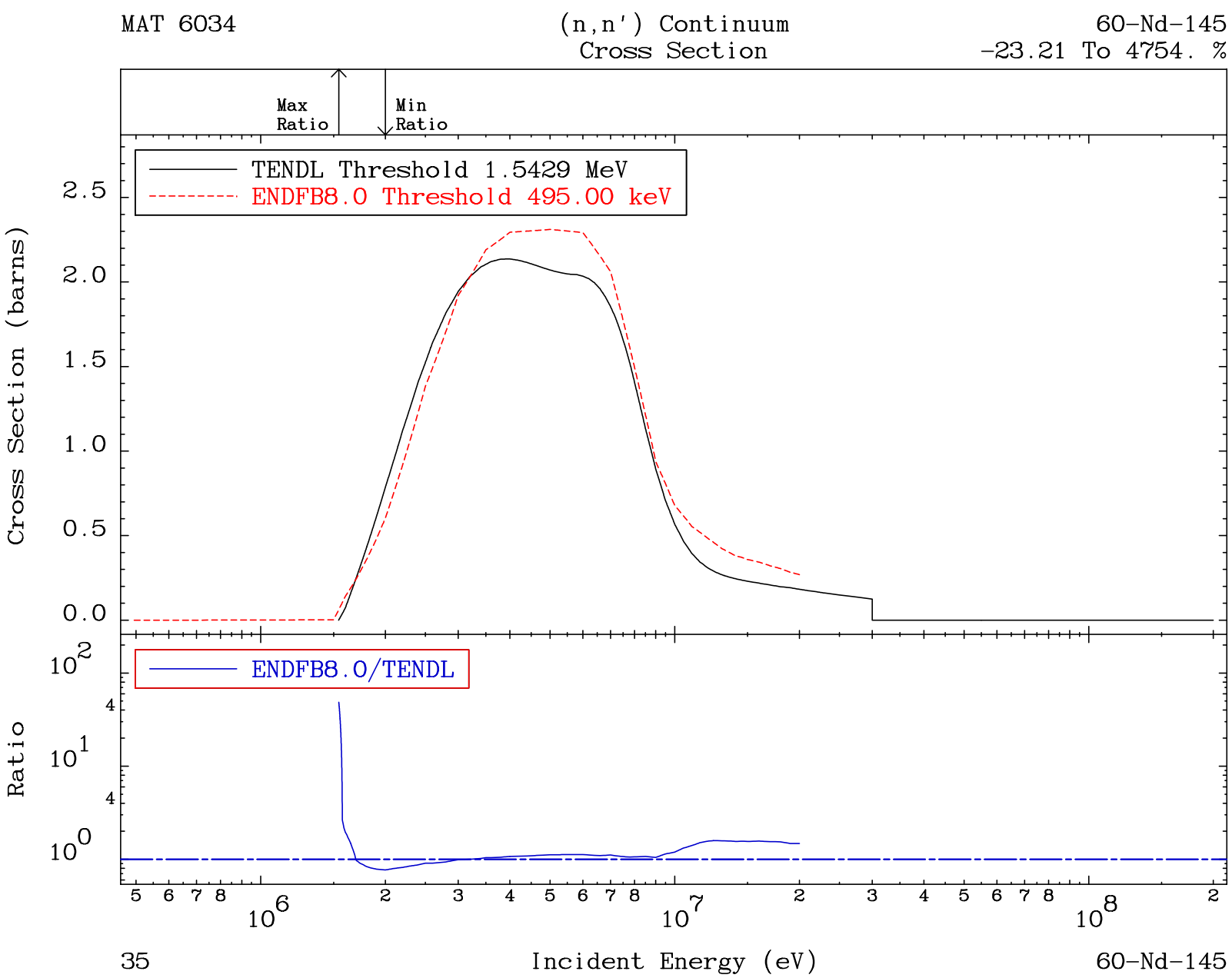

MAT 6034
MT= 71 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 2261. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3355 MeV
ENDFB8.0 Threshold 1.3479 MeV
Cross Section (milli-barns)
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
60-Nd-145

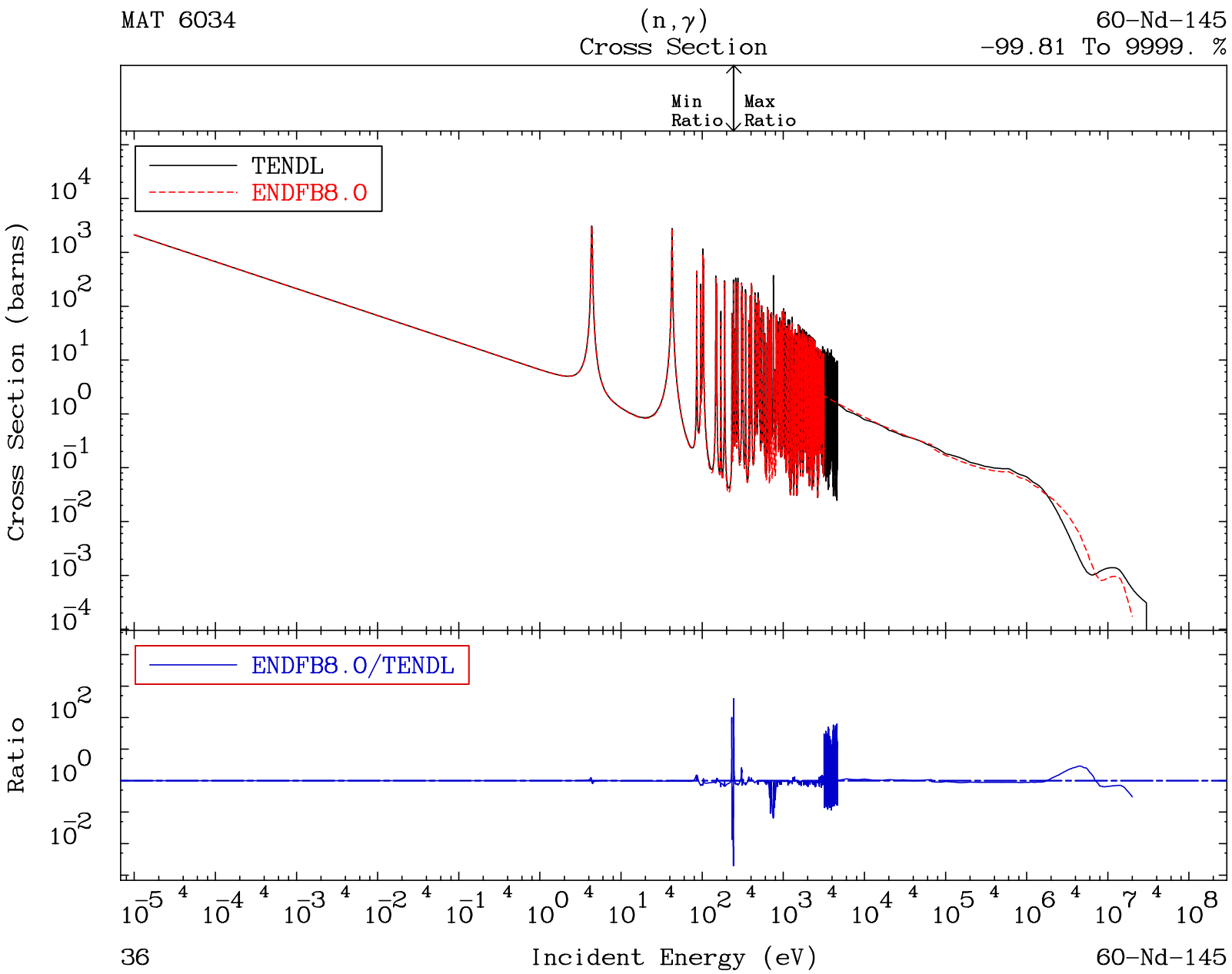

MAT 6034
MT= 72 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 3.922 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3479 MeV
ENDFB8.0 Threshold 1.4107 MeV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
31
Incident Energy (eV)
60-Nd-145

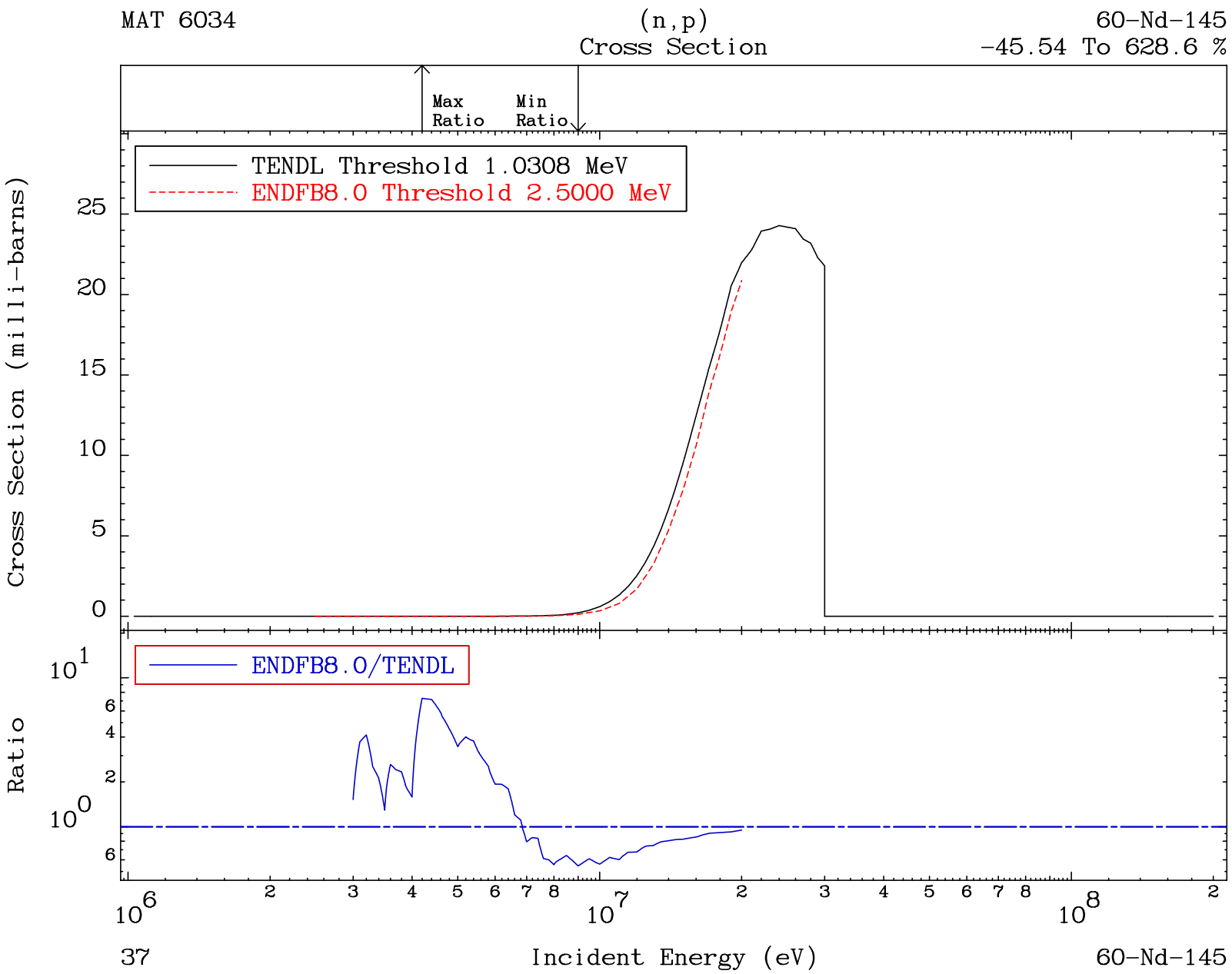

MAT 6034
MT= 73 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 354.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4107 MeV
ENDFB8.0 Threshold 1.4111 MeV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
60-Nd-145

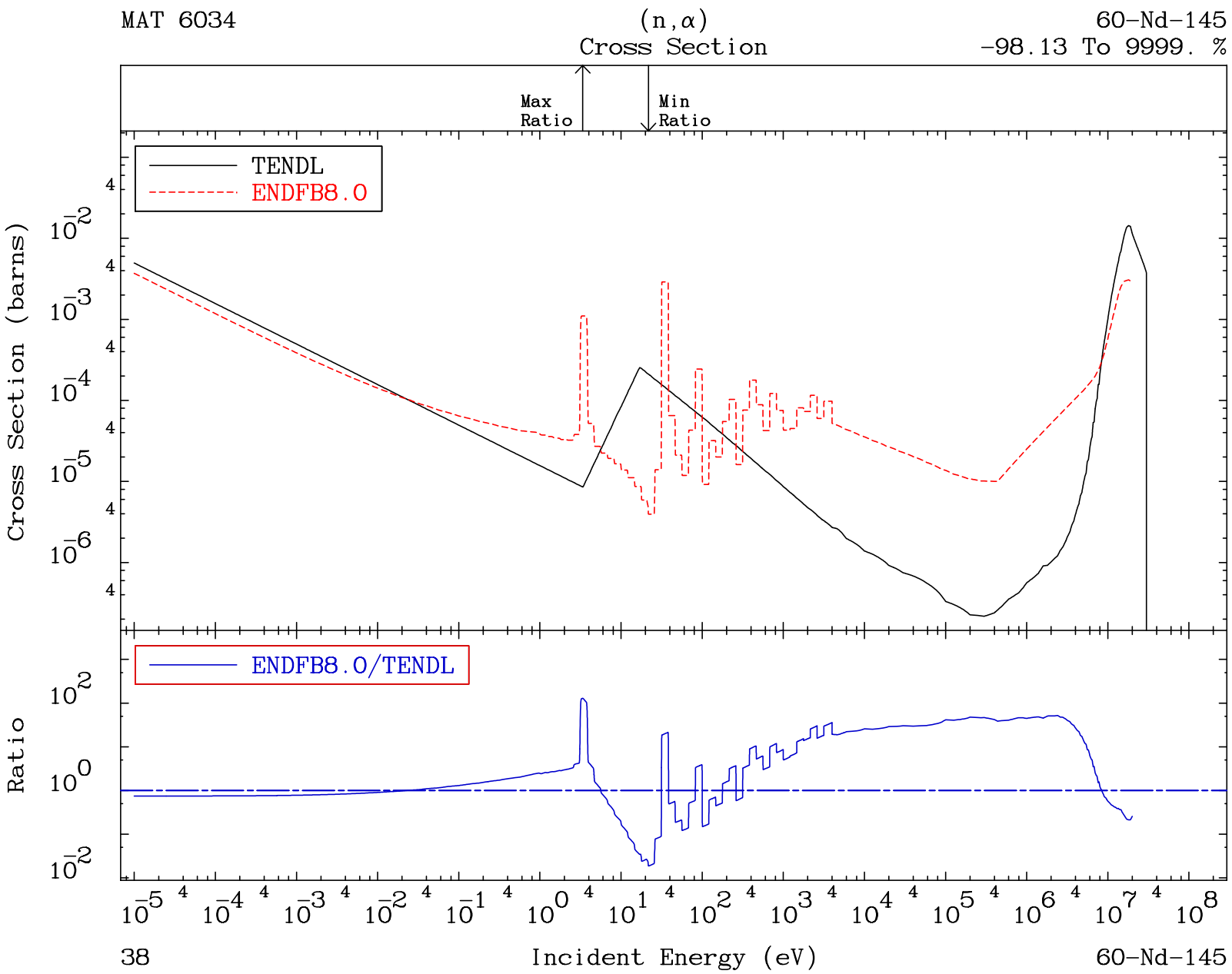

MAT 6034
MT= 74 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 214.7 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4124 MeV
ENDFB8.0 Threshold 1.4137 MeV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
60-Nd-145

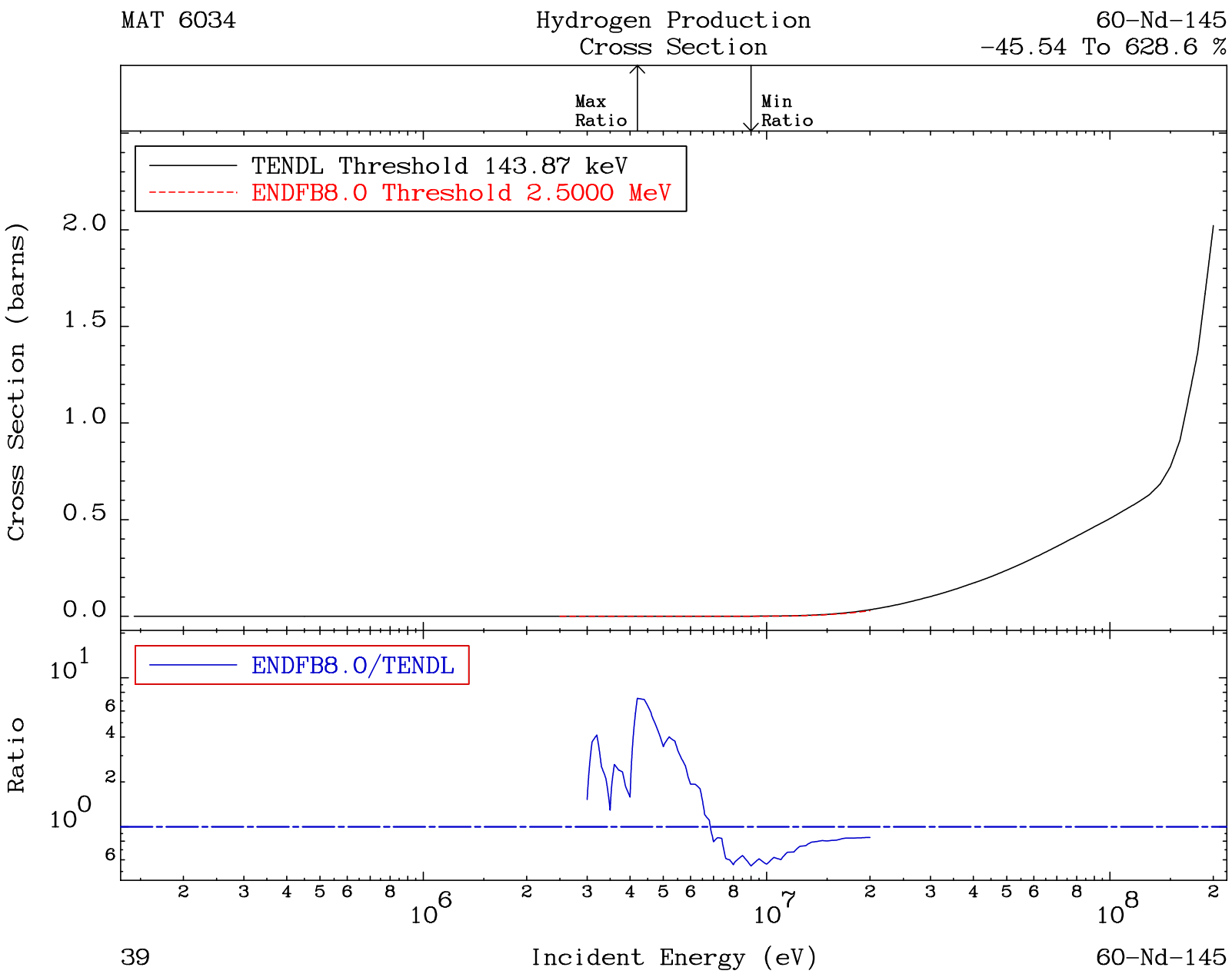

MAT 6034
MT= 75 (n,n') Level
Cross Section
60-Nd-145
-100.0 To 187.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4137 MeV
ENDFB8.0 Threshold 1.4375 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
34
Incident Energy (eV)
60-Nd-145

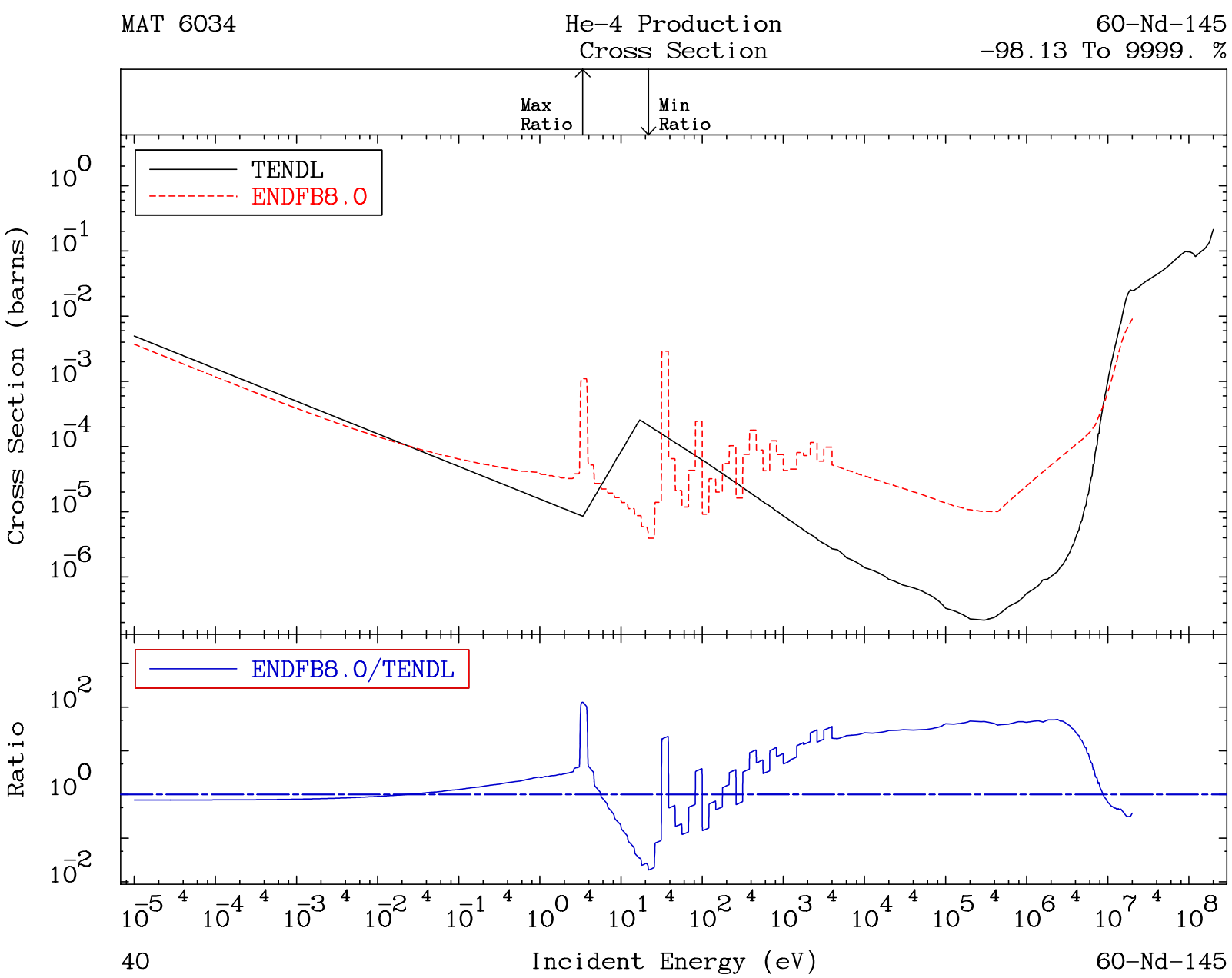

MAT 6034
(n,n') Continuum
Cross Section
60-Nd-145
-23.21 To 4754. %
Max Ratio
Min Ratio
TENDL Threshold 1.5429 MeV
ENDFB8.0 Threshold 495.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
60-Nd-145

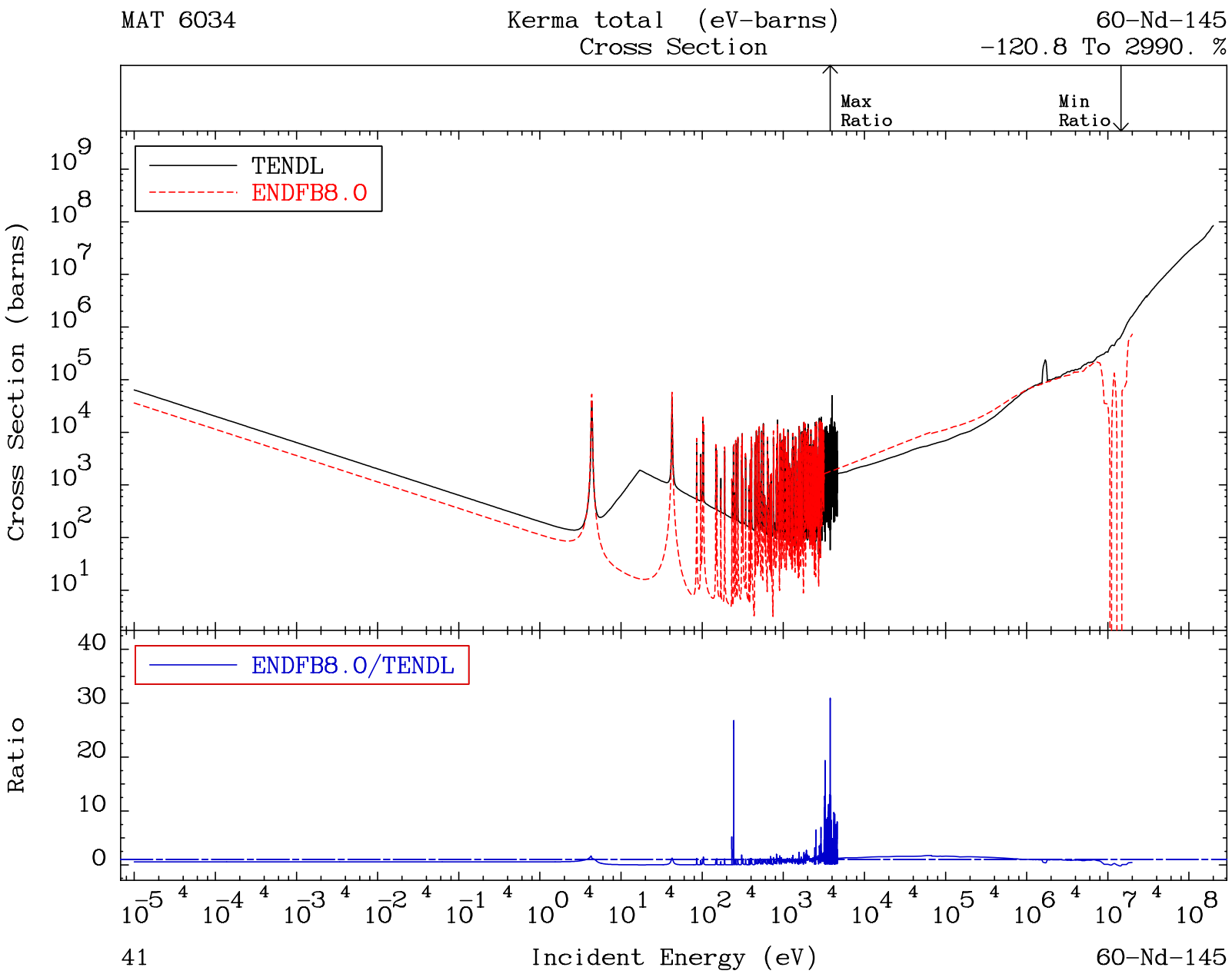

MAT 6034
(n,γ)
Cross Section
60-Nd-145
-99.81 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
36
60-Nd-145

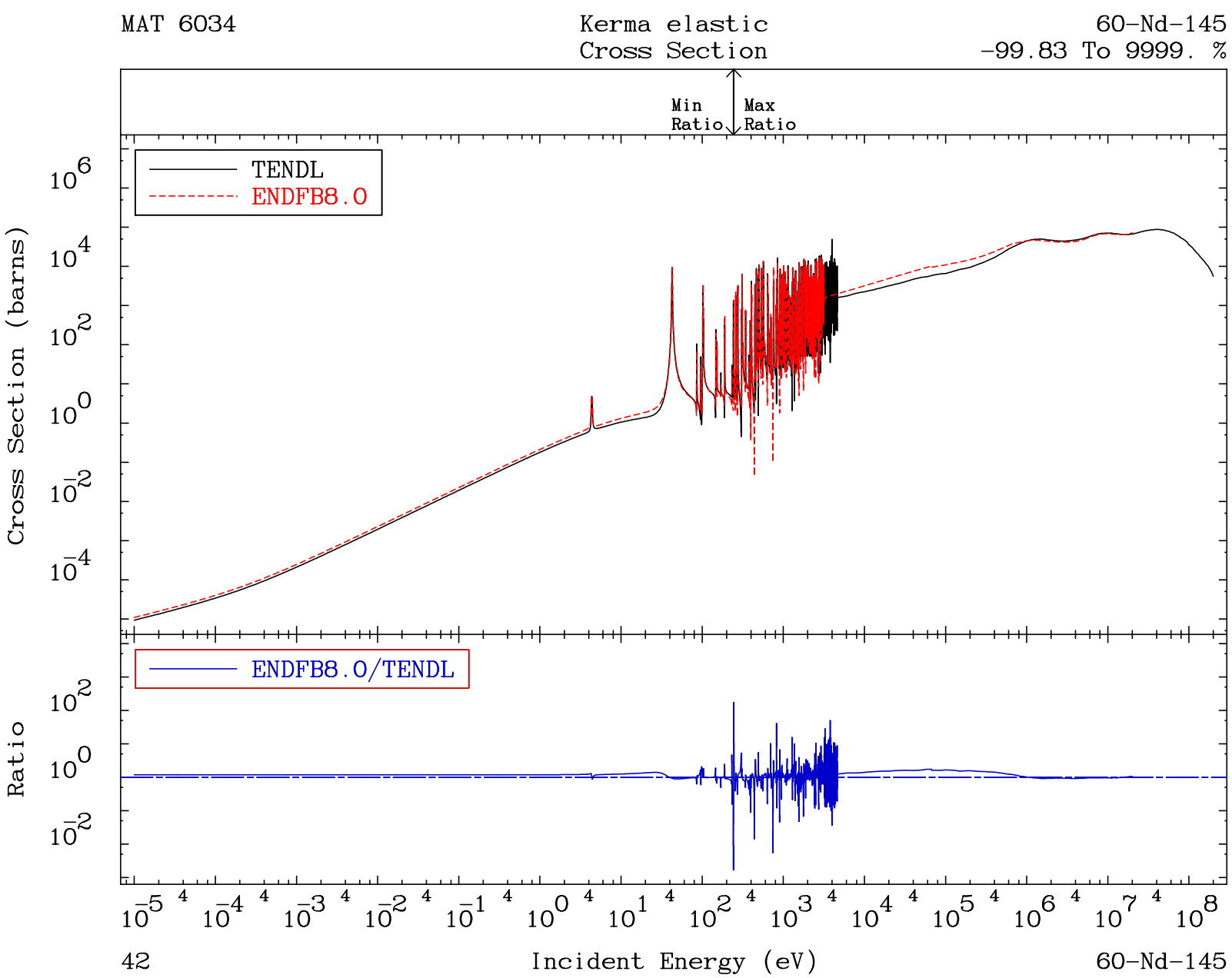

MAT 6034
(n,p)
Cross Section
60-Nd-145
-45.54 To 628.6 %
Max Ratio
Min Ratio
TENDL Threshold 1.0308 MeV
ENDFB8.0 Threshold 2.5000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
10^1
10^0
6
4
2
6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
60-Nd-145

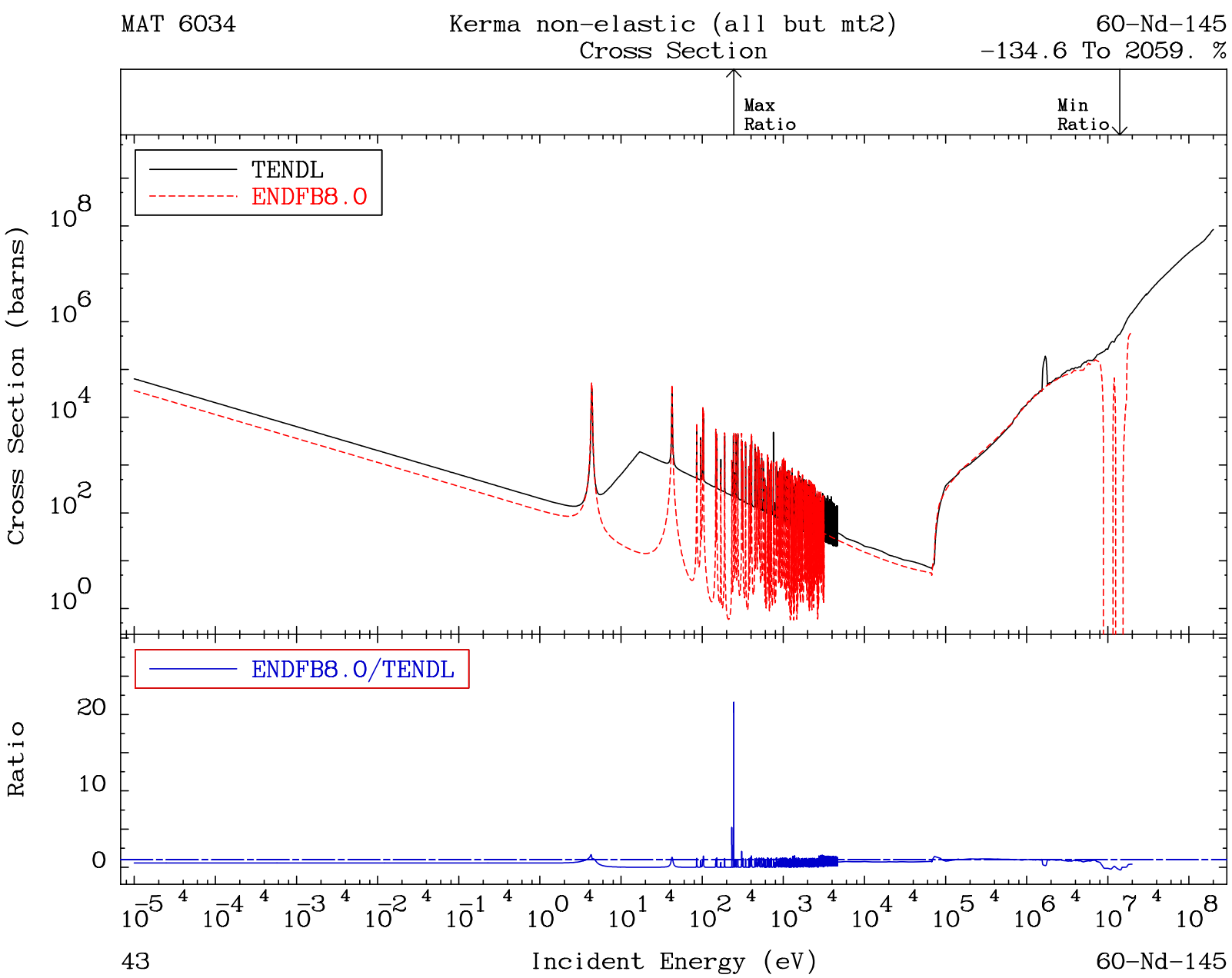

MAT 6034
(n,α)
Cross Section
60-Nd-145
-98.13 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
38
60-Nd-145

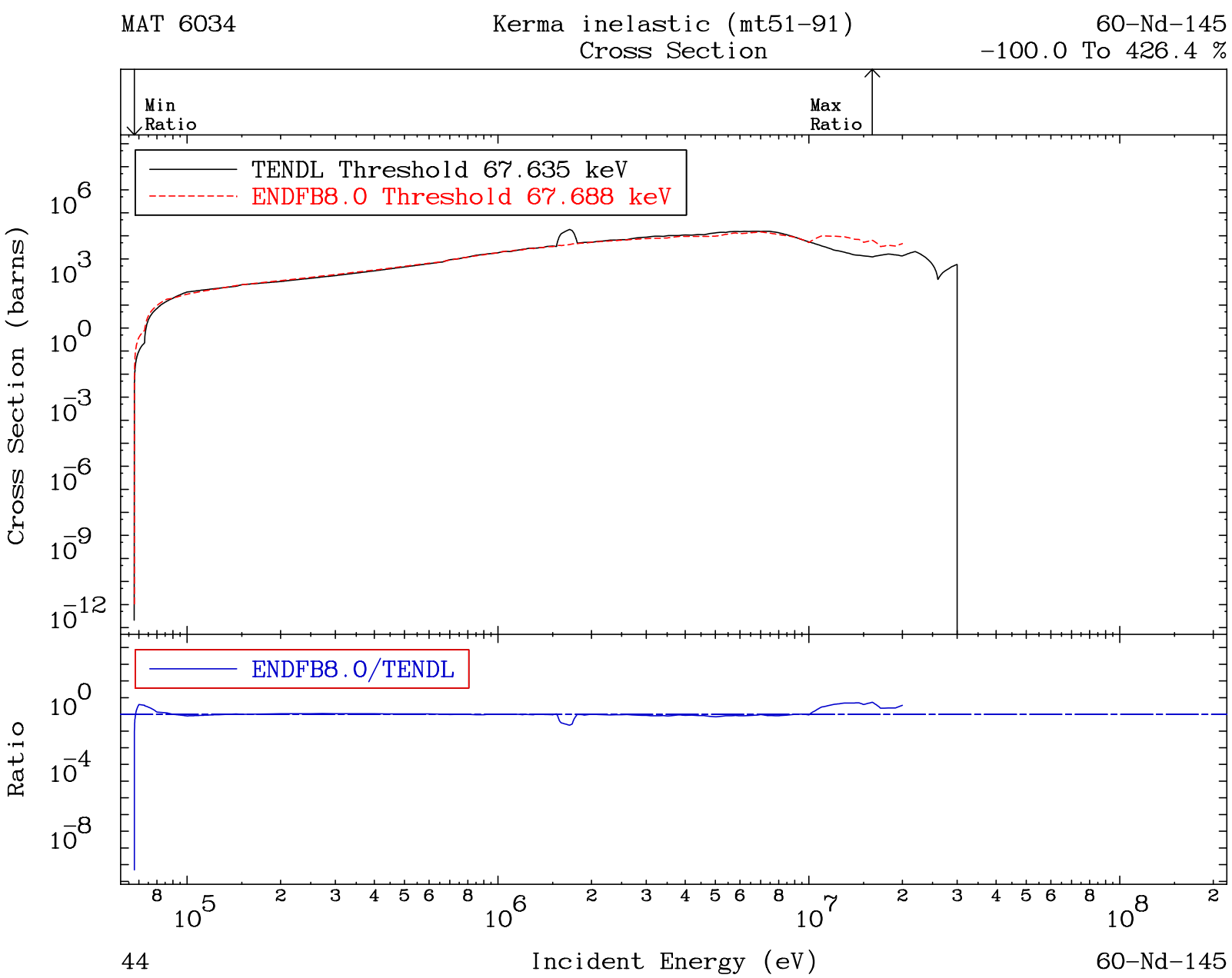

MAT 6034
Hydrogen Production
Cross Section
60-Nd-145
-45.54 To 628.6 %
Max
Ratio
Min
Ratio
TENDL Threshold 143.87 keV
ENDFB8.0 Threshold 2.5000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
10^1
10^0
6
4
2
6
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
39
Incident Energy (eV)
60-Nd-145

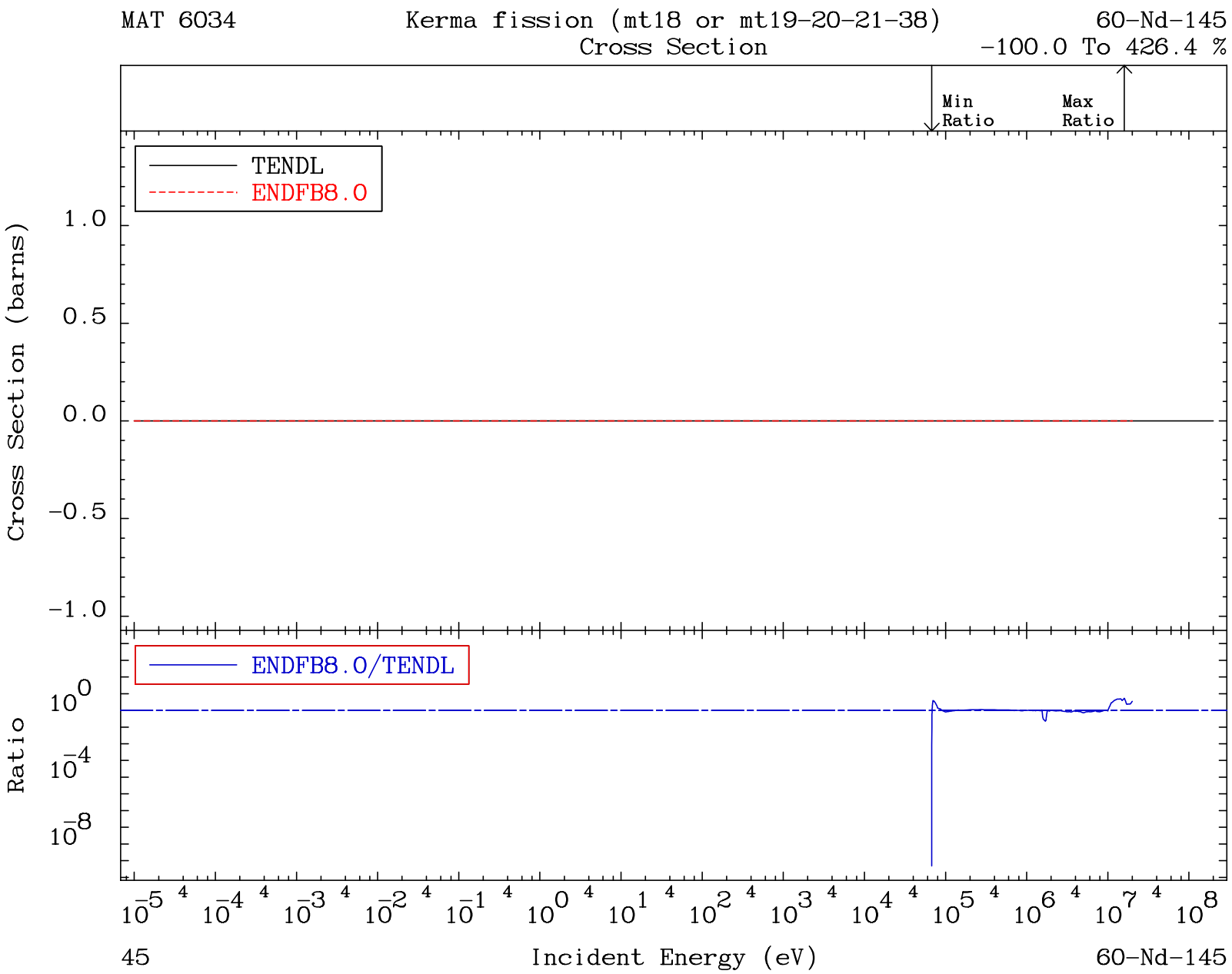

MAT 6034
He-4 Production
Cross Section
60-Nd-145
-98.13 To 9999. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
40
60-Nd-145

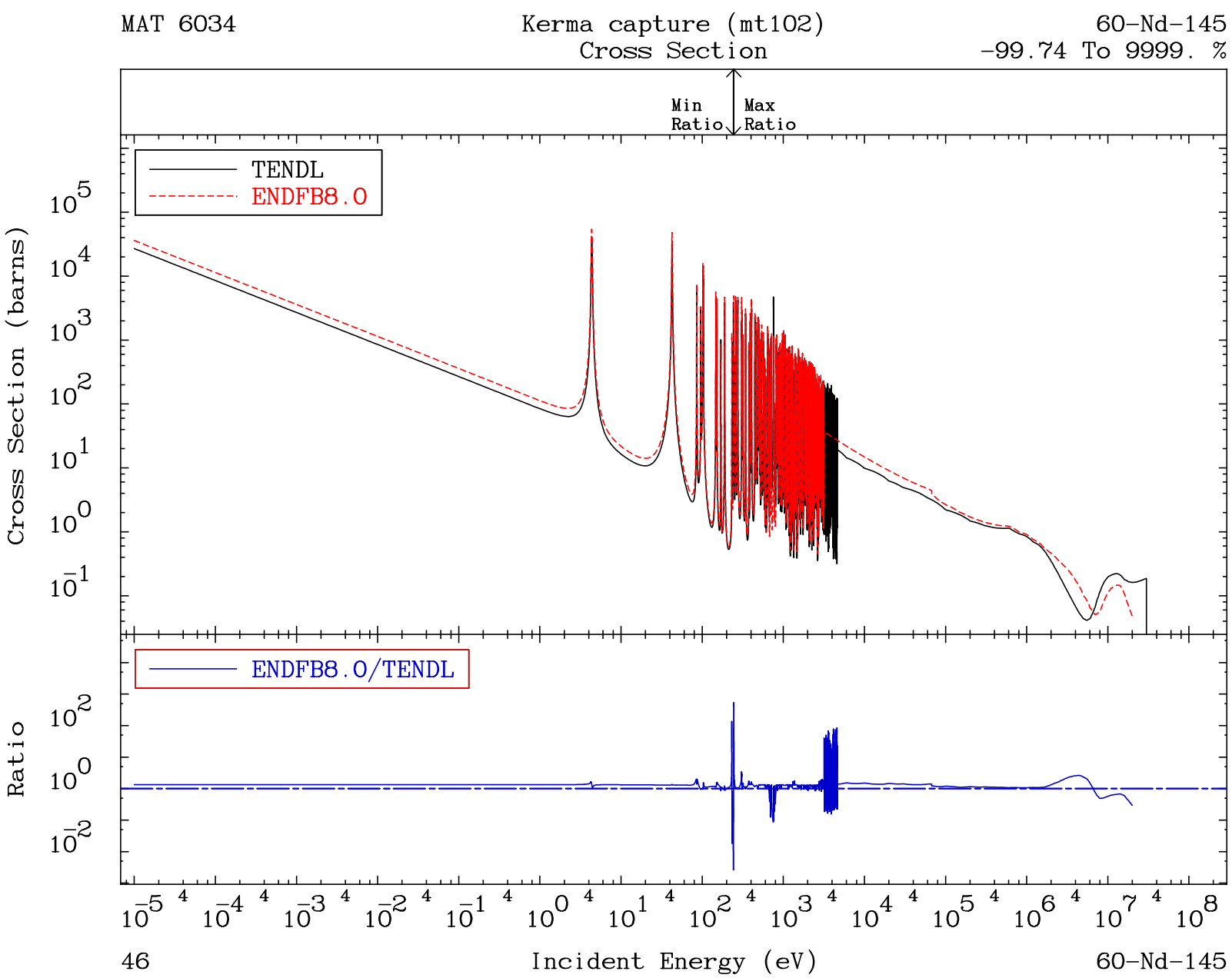

MAT 6034
Kerma total (eV-barns)
Cross Section
60-Nd-145
-120.8 To 2990. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
41
60-Nd-145

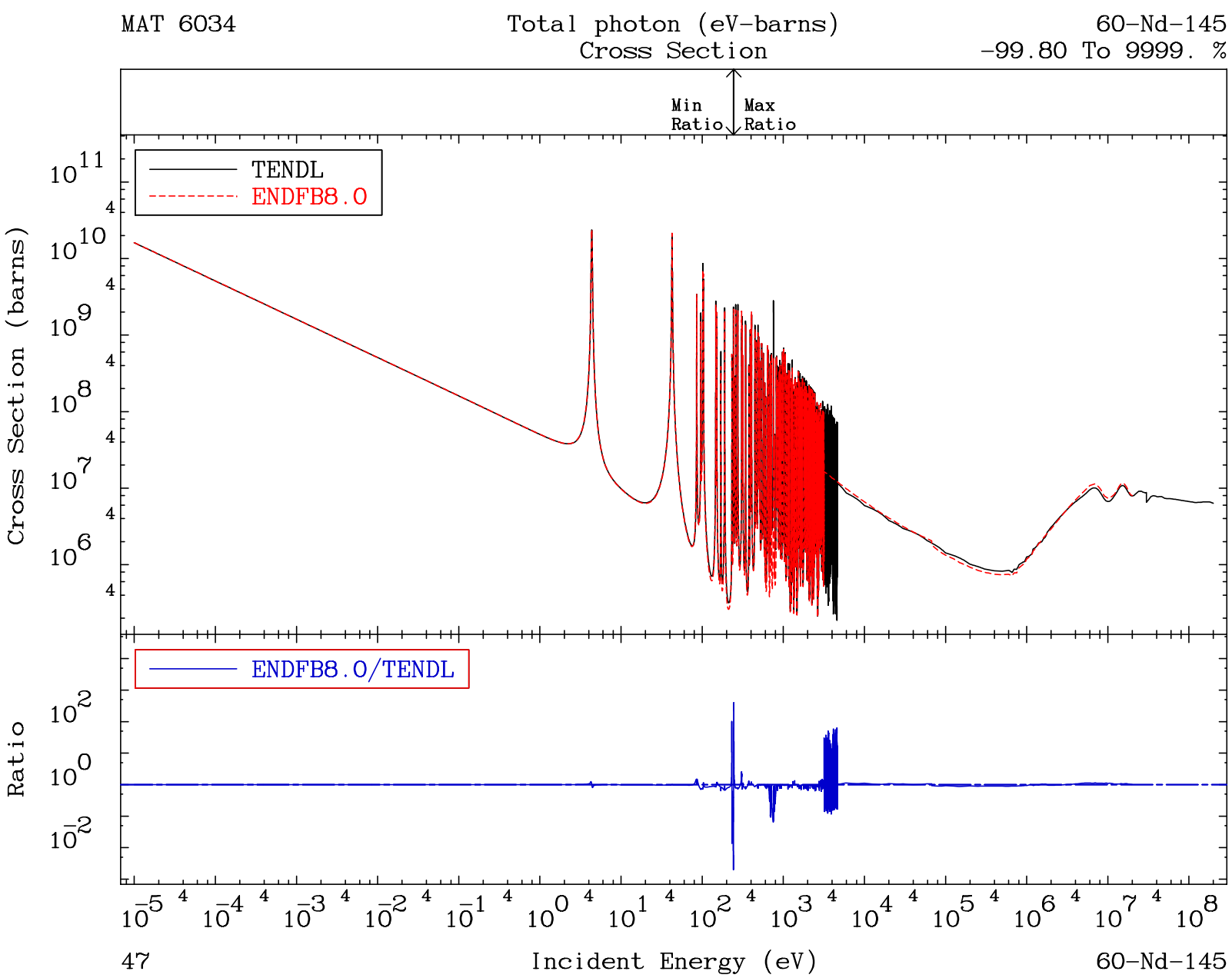

MAT 6034
Kerma elastic
Cross Section
60-Nd-145
-99.83 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
42
60-Nd-145

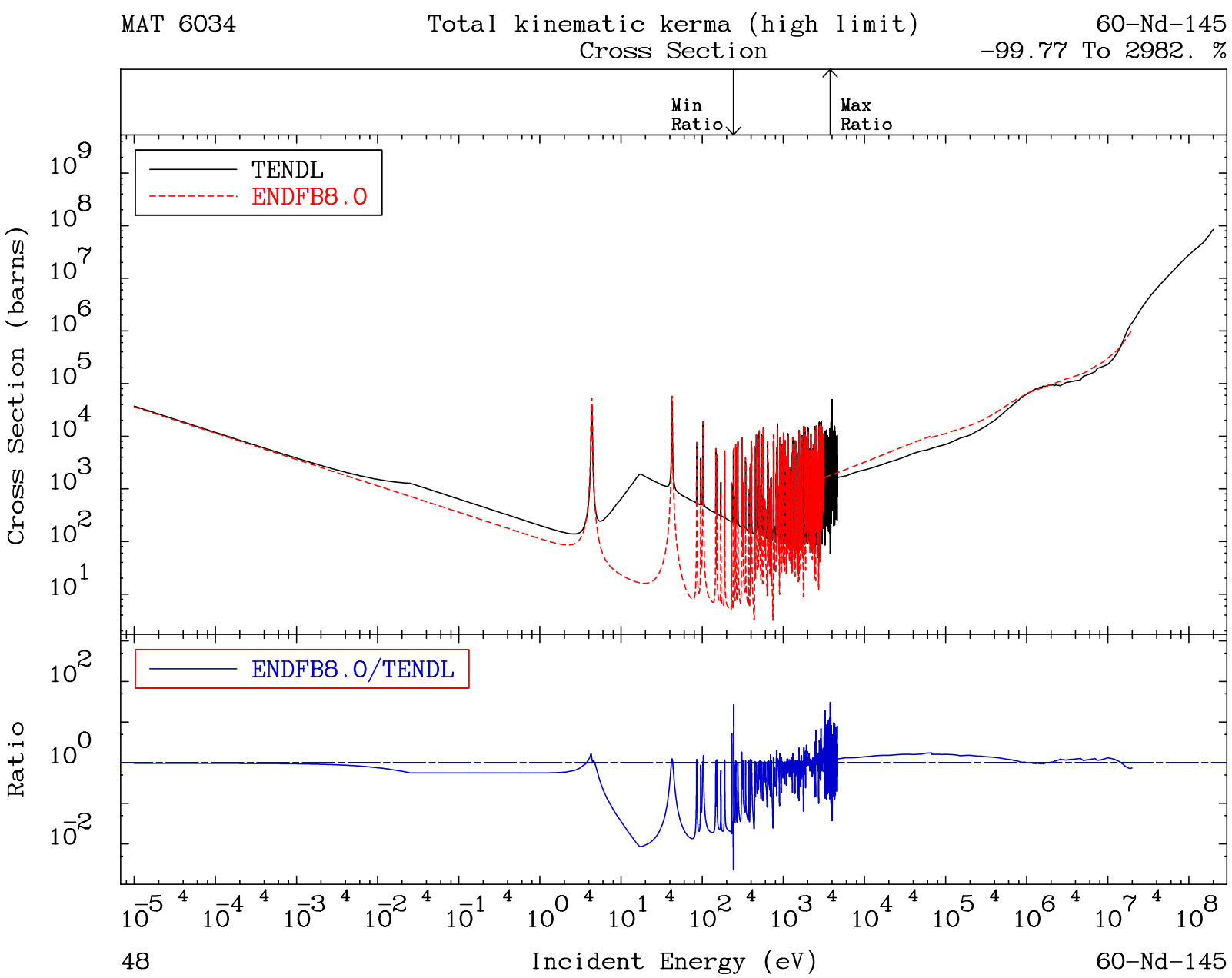

MAT 6034
Kerma non-elastic (all but mt2)
Cross Section
60-Nd-145
-134.6 To 2059. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
60-Nd-145

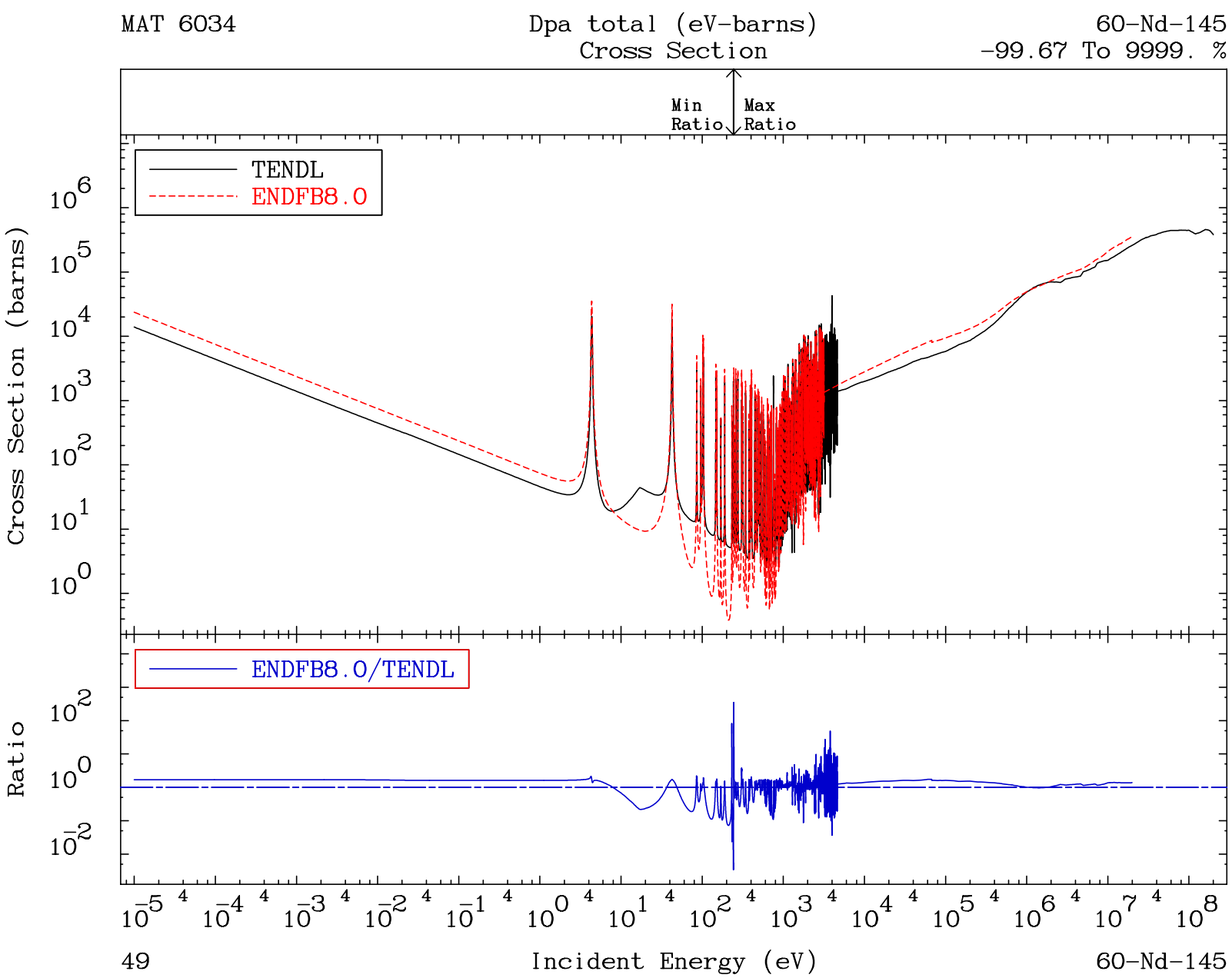

MAT 6034
Kerma inelastic (mt51-91)
Cross Section
60-Nd-145
-100.0 To 426.4 %
Min Ratio
Max Ratio
TENDL Threshold 67.635 keV
ENDFB8.0 Threshold 67.688 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
44
60-Nd-145

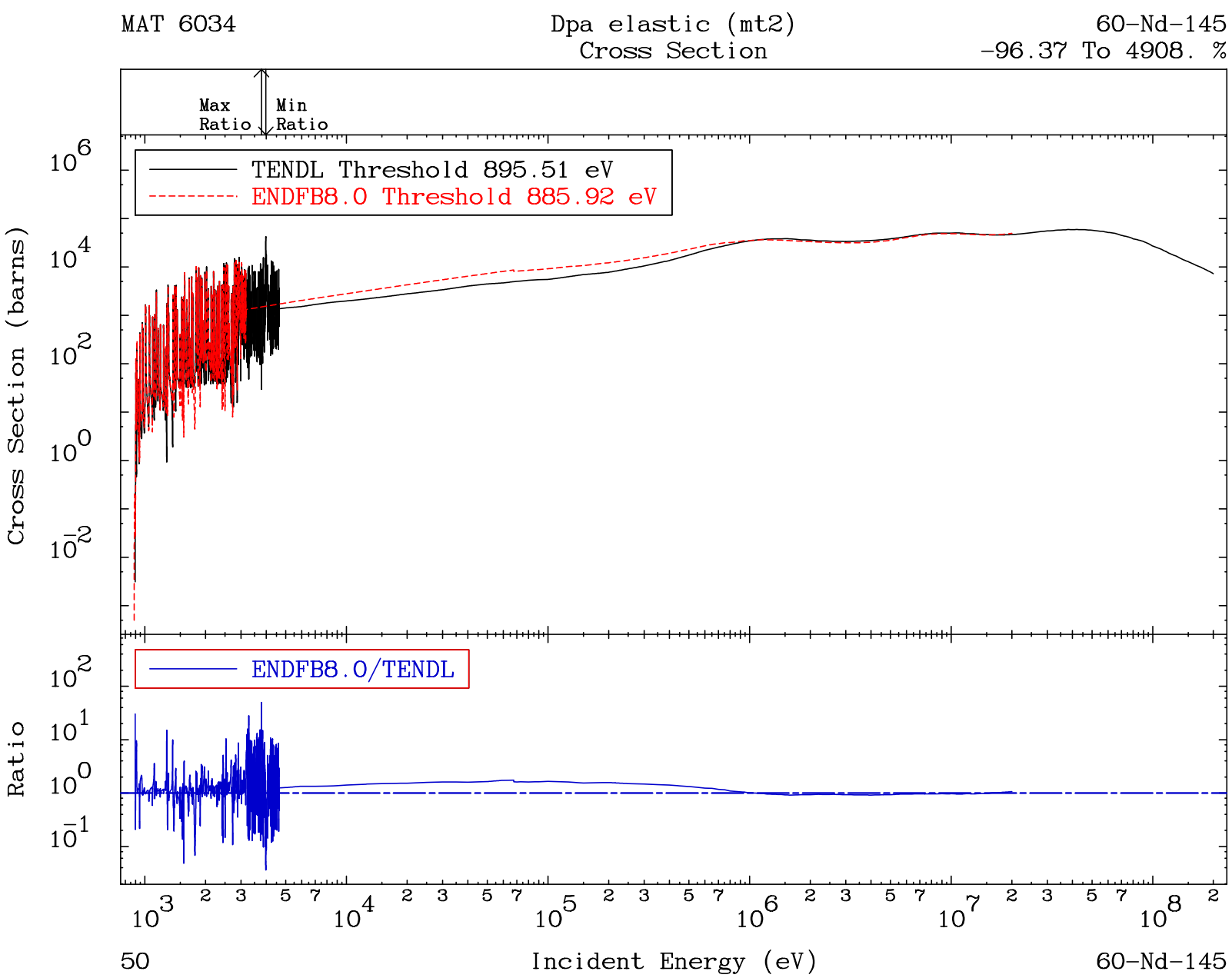

MAT 6034
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
60-Nd-145
-100.0 To 426.4 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
ENDFB8.0/TENDL
Ratio
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
60-Nd-145

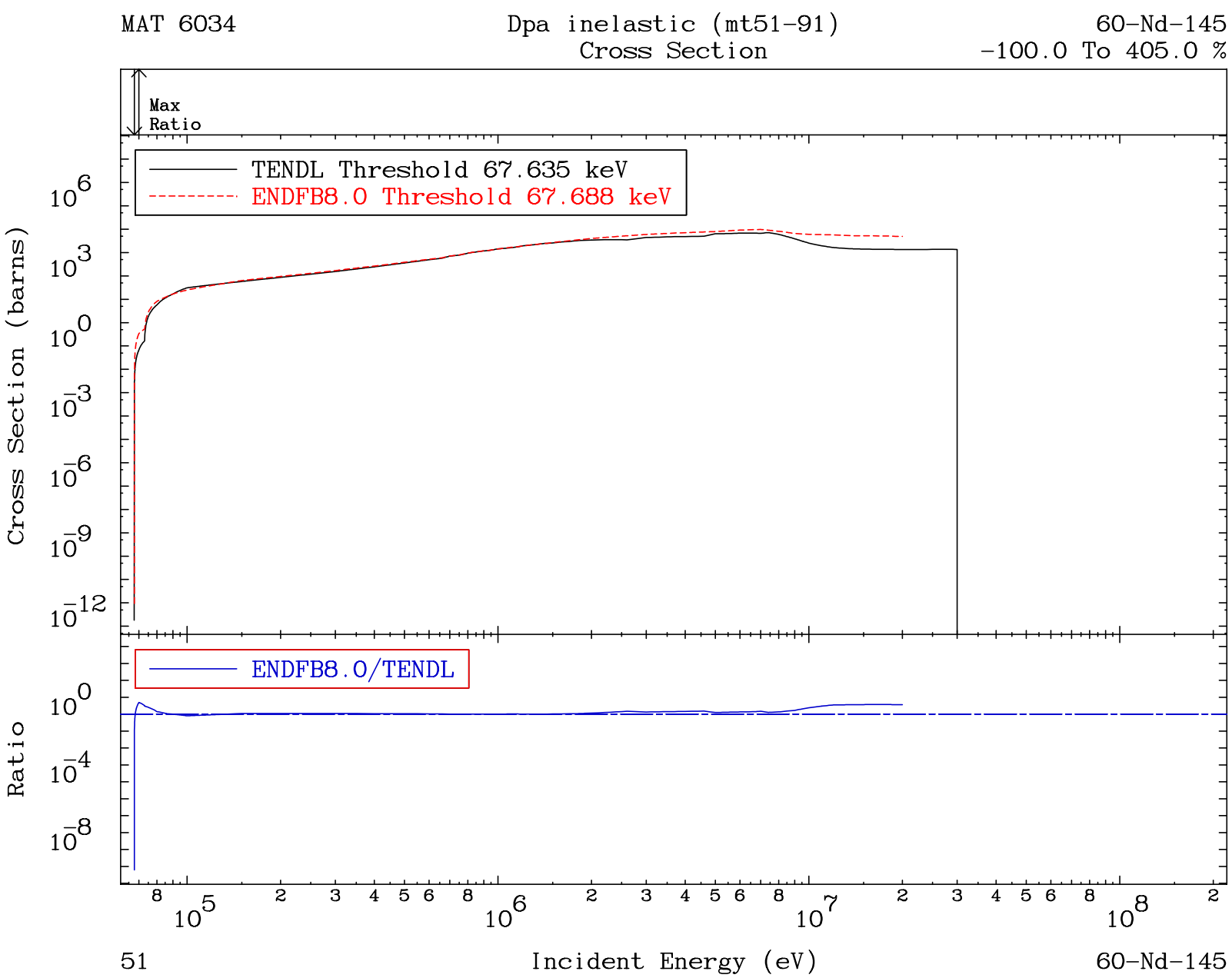

MAT 6034
Kerma capture (mt102)
Cross Section
60-Nd-145
-99.74 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
46
60-Nd-145

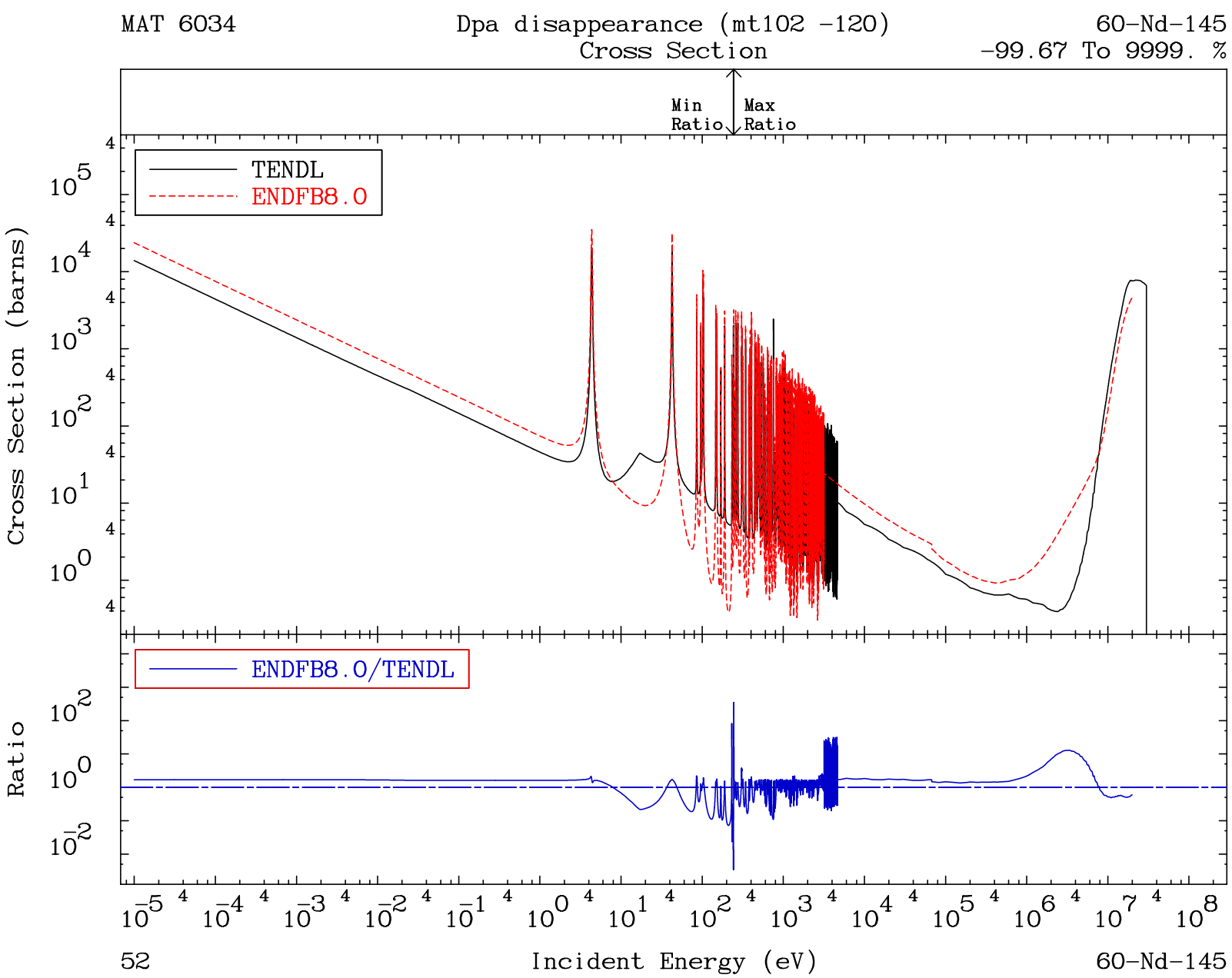

MAT 6034
Total photon (eV-barns)
Cross Section
60-Nd-145
-99.80 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
47
60-Nd-145


MAT 6034
Total kinematic kerma (high limit)
Cross Section
60-Nd-145
-99.77 To 2982. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
48
60-Nd-145


MAT 6034
Dpa total (eV-barns)
Cross Section
60-Nd-145
-99.67 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
49
60-Nd-145


MAT 6034
Dpa elastic (mt2)
Cross Section
60-Nd-145
-96.37 To 4908. %
Max Ratio
Min Ratio
TENDL Threshold 895.51 eV
ENDFB8.0 Threshold 885.92 eV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
50
60-Nd-145


MAT 6034
Dpa inelastic (mt51-91)
Cross Section
60-Nd-145
-100.0 To 405.0 %
Max
Ratio
TENDL Threshold 67.635 keV
ENDFB8.0 Threshold 67.688 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
51
60-Nd-145


MAT 6034
Dpa disappearance (mt102 -120)
Cross Section
60-Nd-145
-99.67 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
52
60-Nd-145