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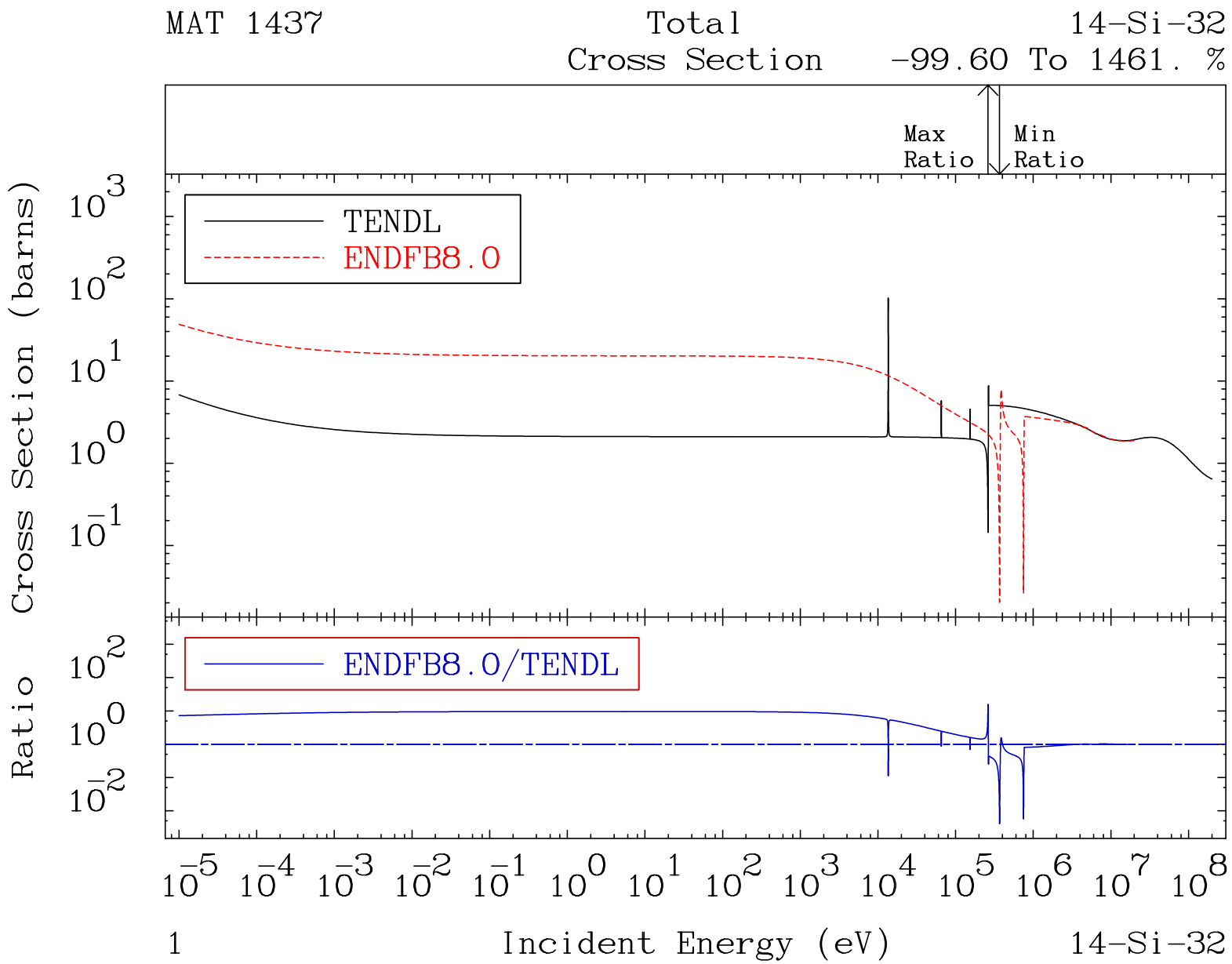
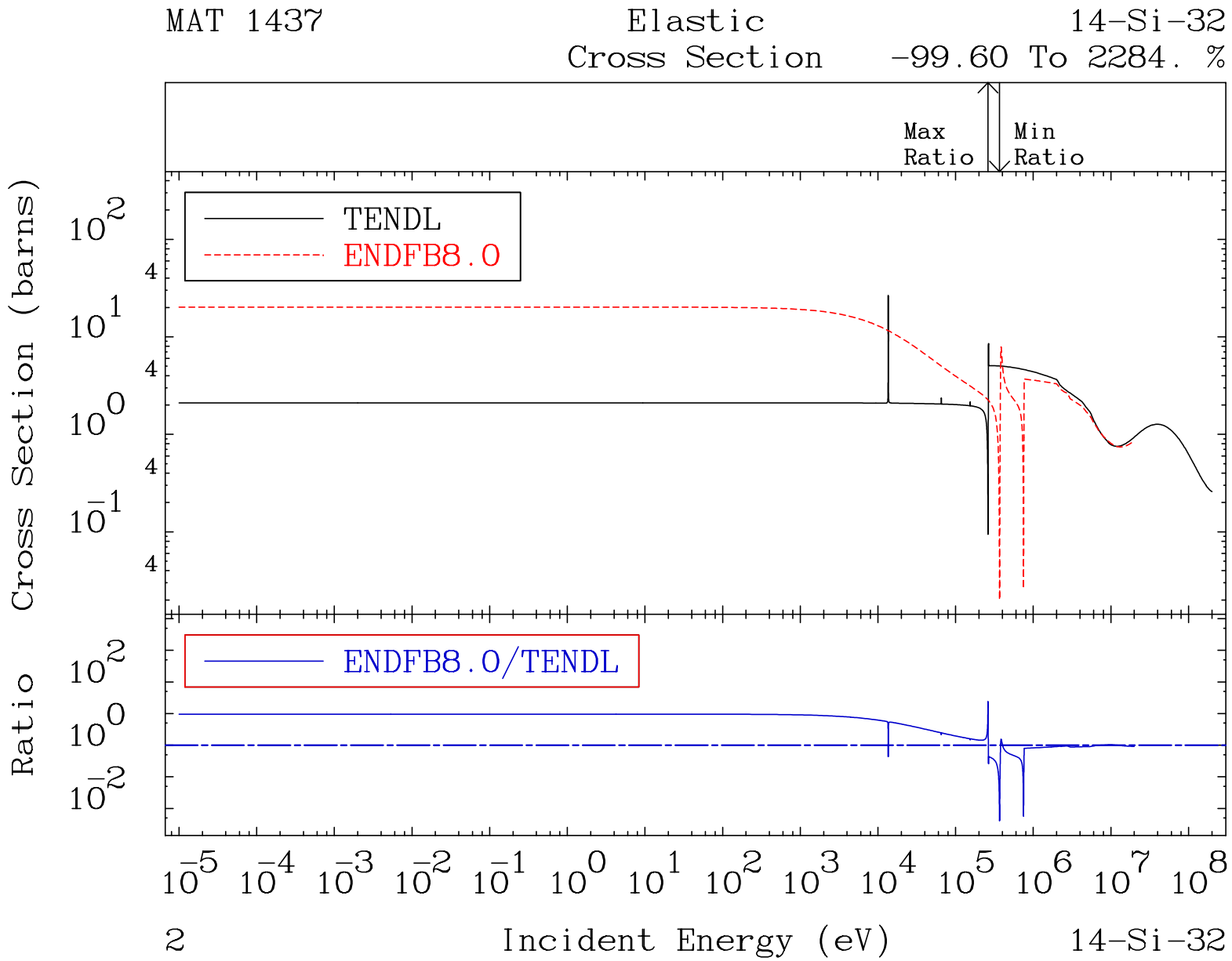
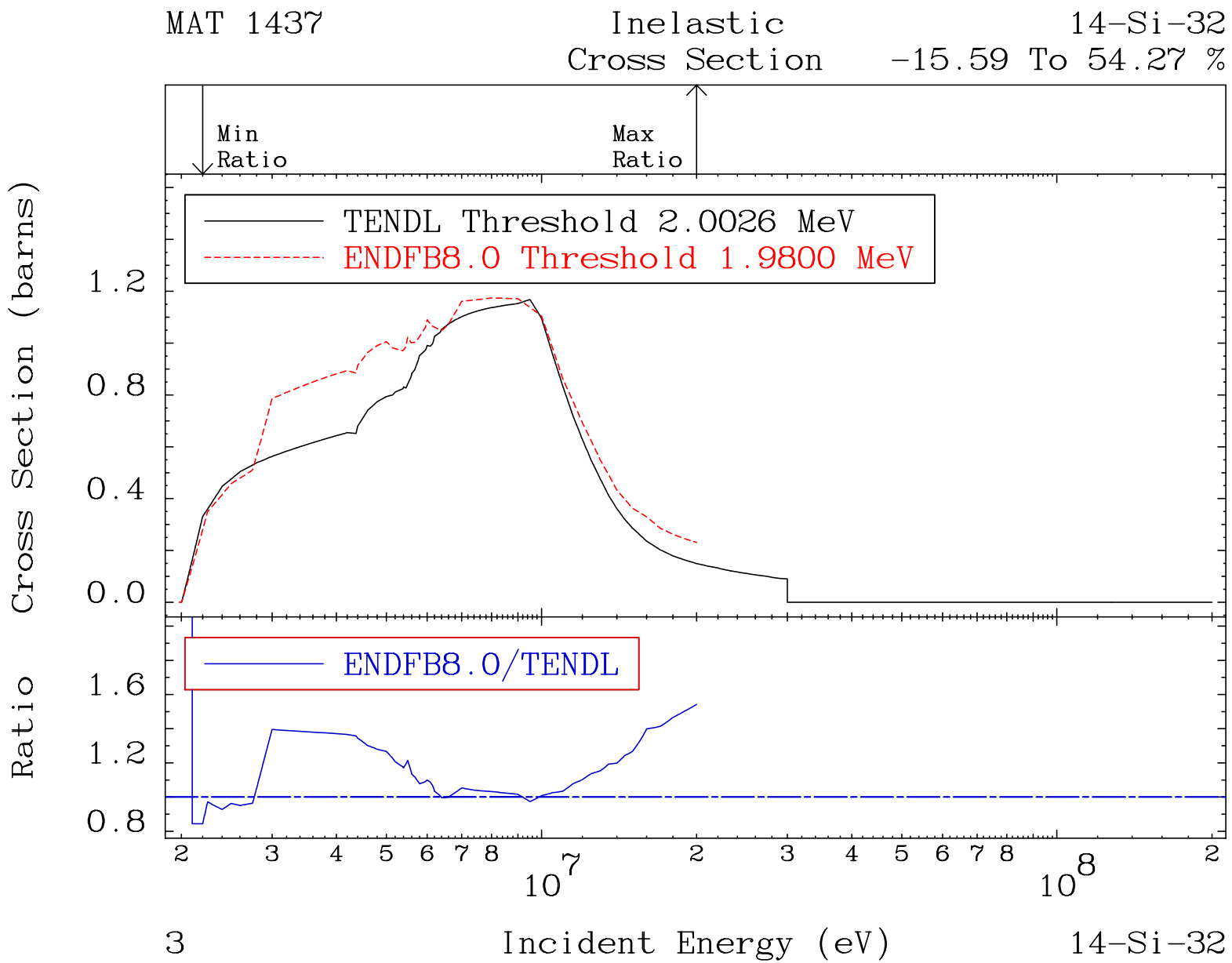
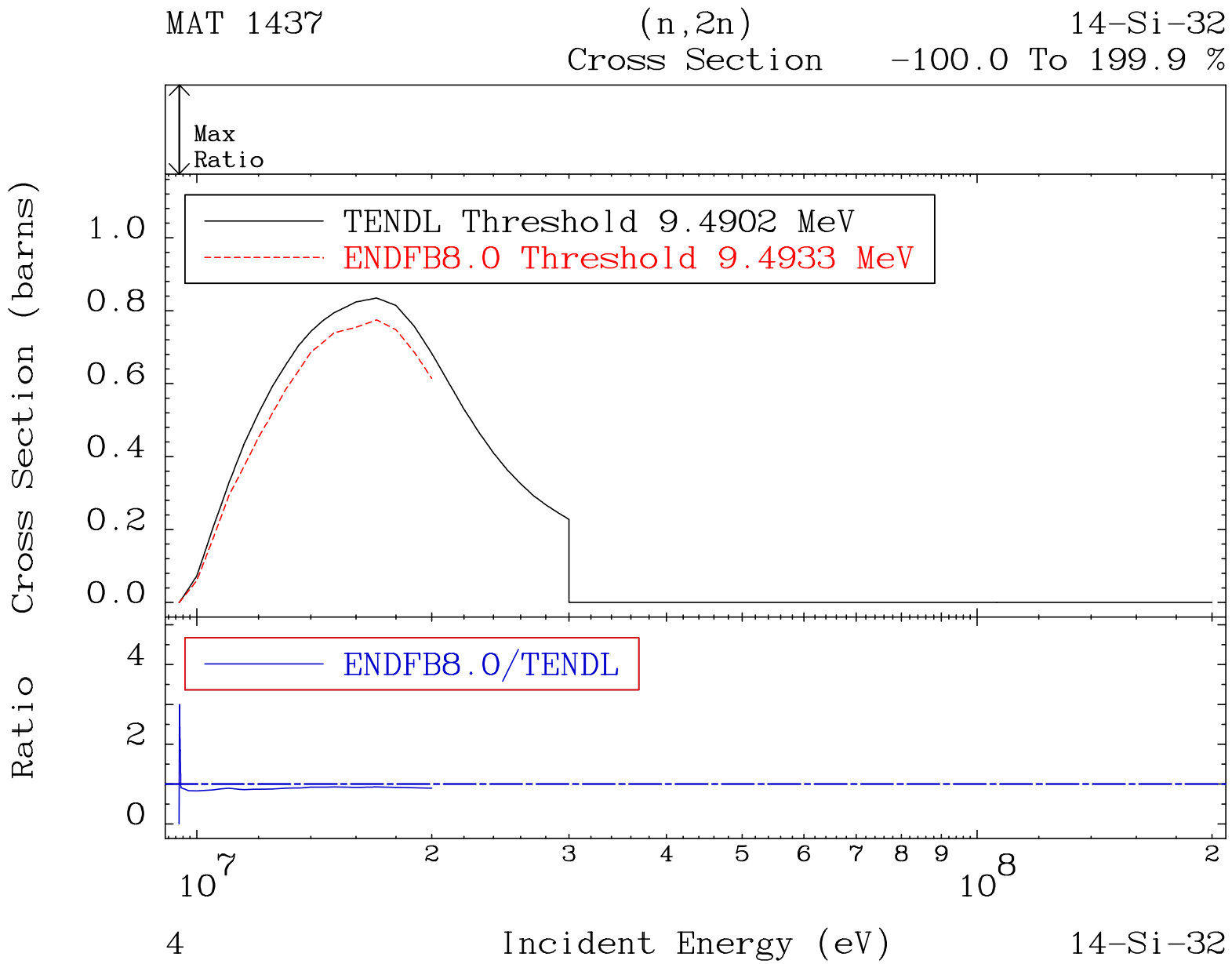
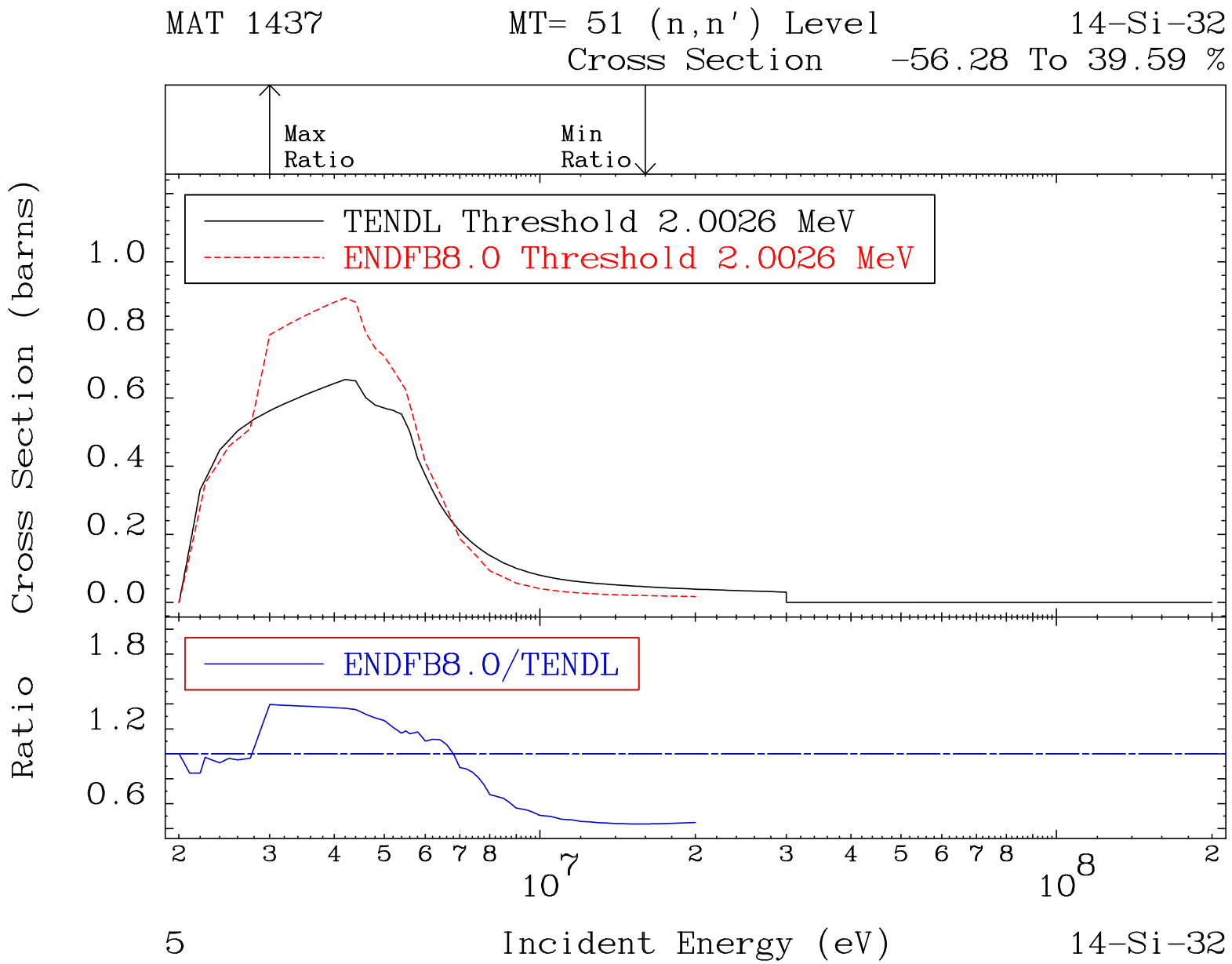
Press Mouse Button to Start

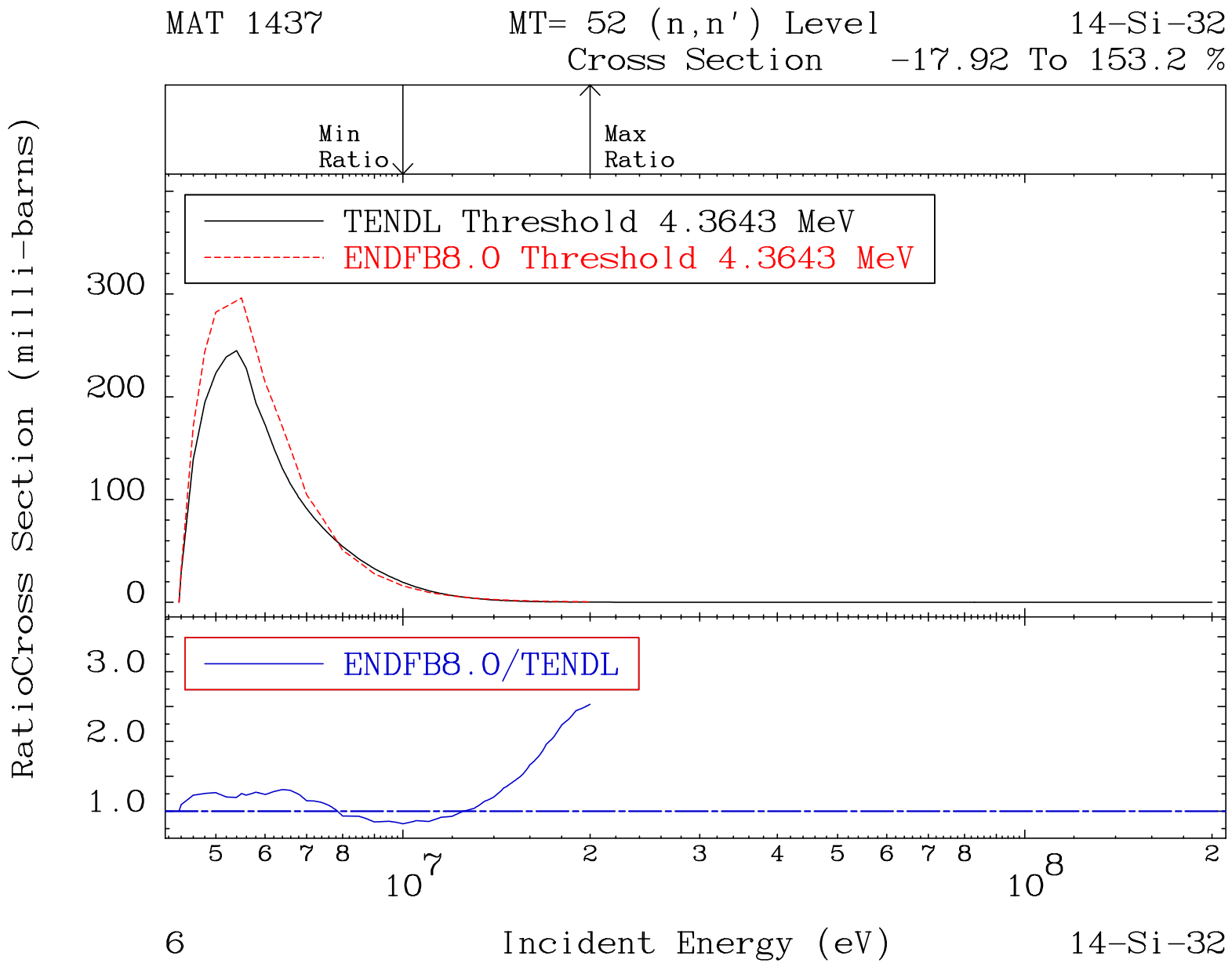

MAT 1437
Total
Cross Section
14-Si-32
-99.60 To 1461. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
14-Si-32

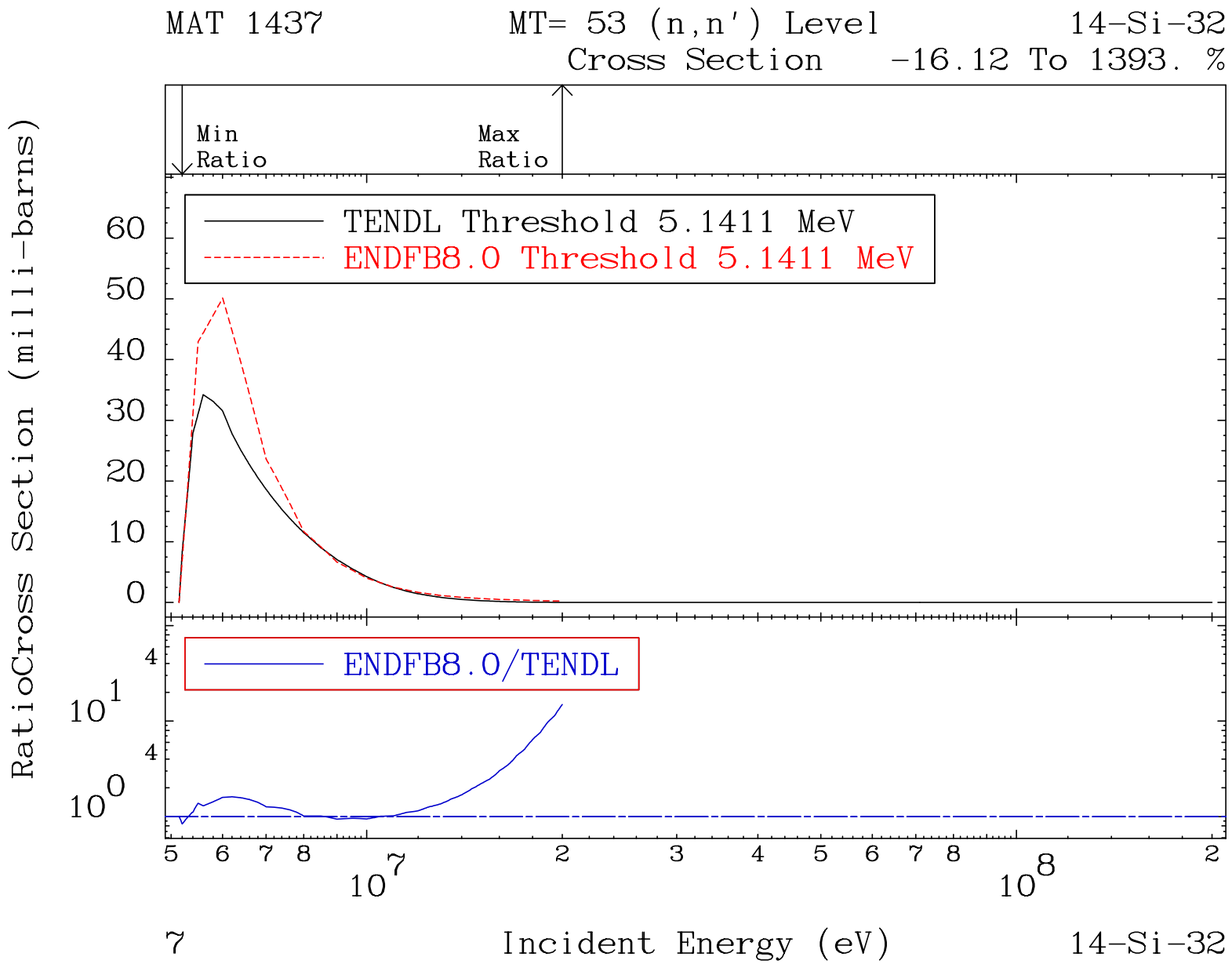

MAT 1437
Elastic
Cross Section
14-Si-32
-99.60 To 2284. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
14-Si-32

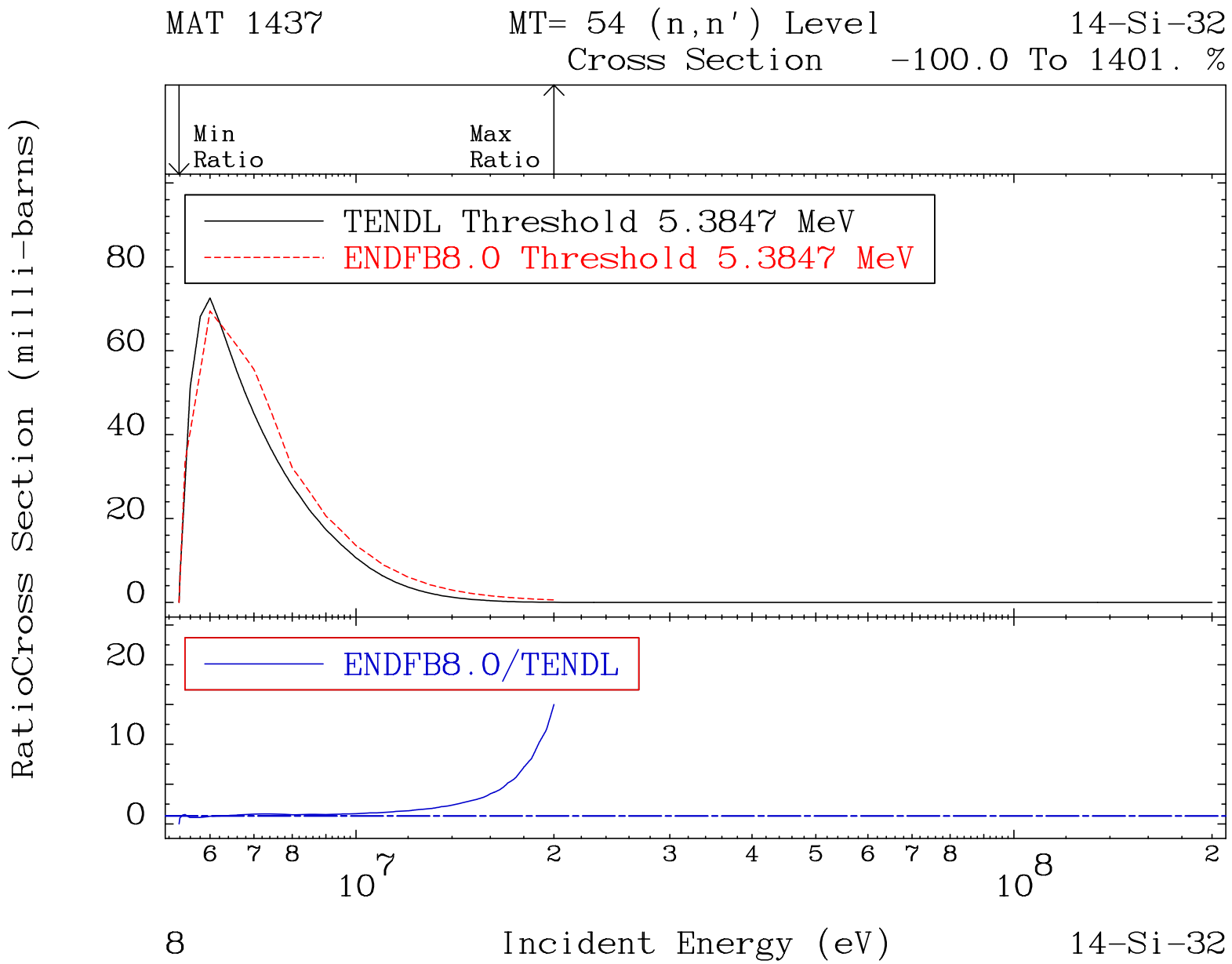

MAT 1437
Inelastic
Cross Section
14-Si-32
-15.59 To 54.27 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.0026 MeV
ENDFB8.0 Threshold 1.9800 MeV
Cross Section (barns)
1.2
0.8
0.4
0.0
ENDFB8.0/TENDL
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
10^8
3
Incident Energy (eV)
14-Si-32

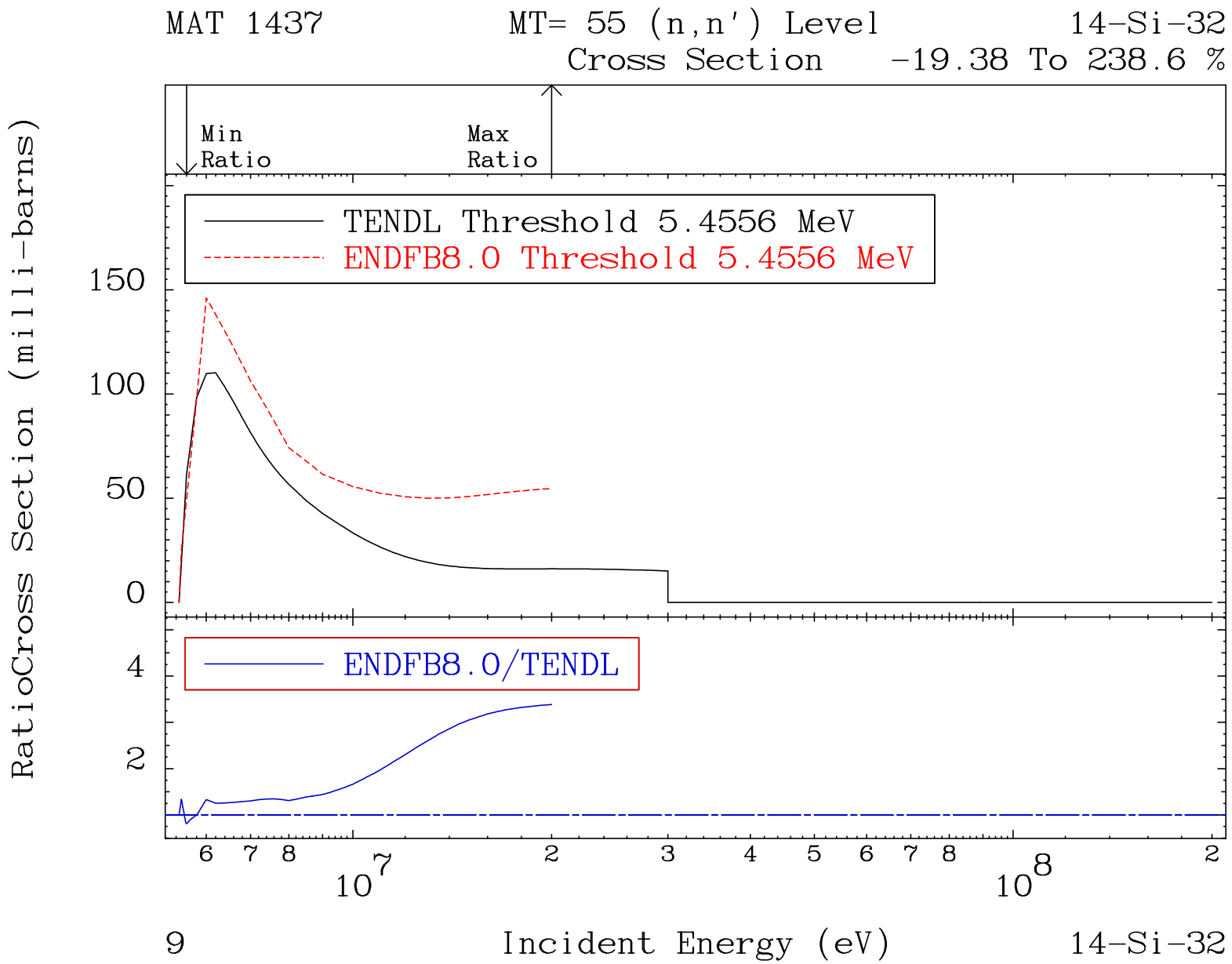

MAT 1437
(n,2n)
Cross Section
14-Si-32
-100.0 To 199.9 %
Max
Ratio
TENDL Threshold 9.4902 MeV
ENDFB8.0 Threshold 9.4933 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
14-Si-32

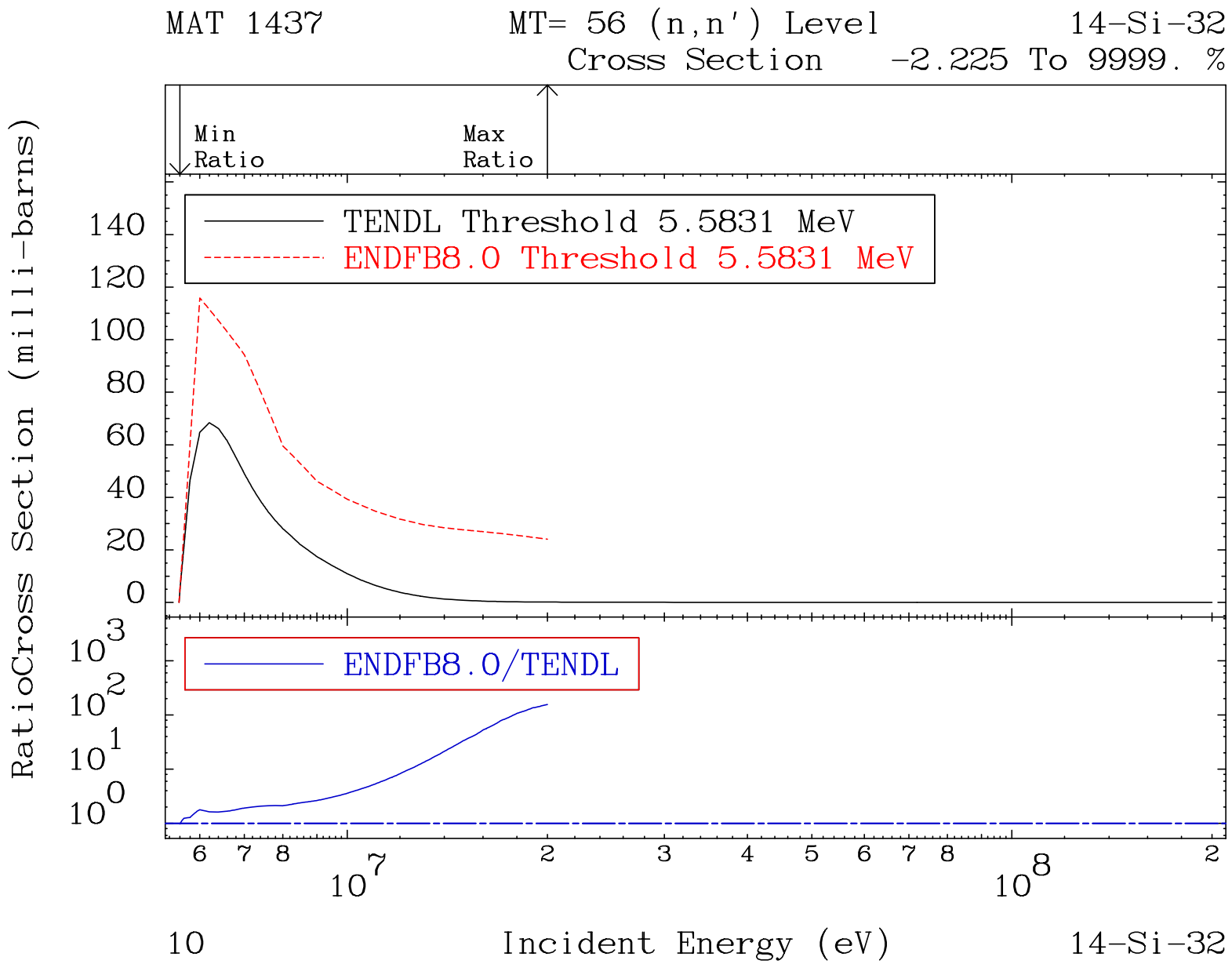

MAT 1437
MT= 51 (n,n') Level
14-Si-32
Cross Section -56.28 To 39.59 %
Max Ratio
Min Ratio
TENDL Threshold 2.0026 MeV
ENDFB8.0 Threshold 2.0026 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.8
1.2
0.6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
5
14-Si-32

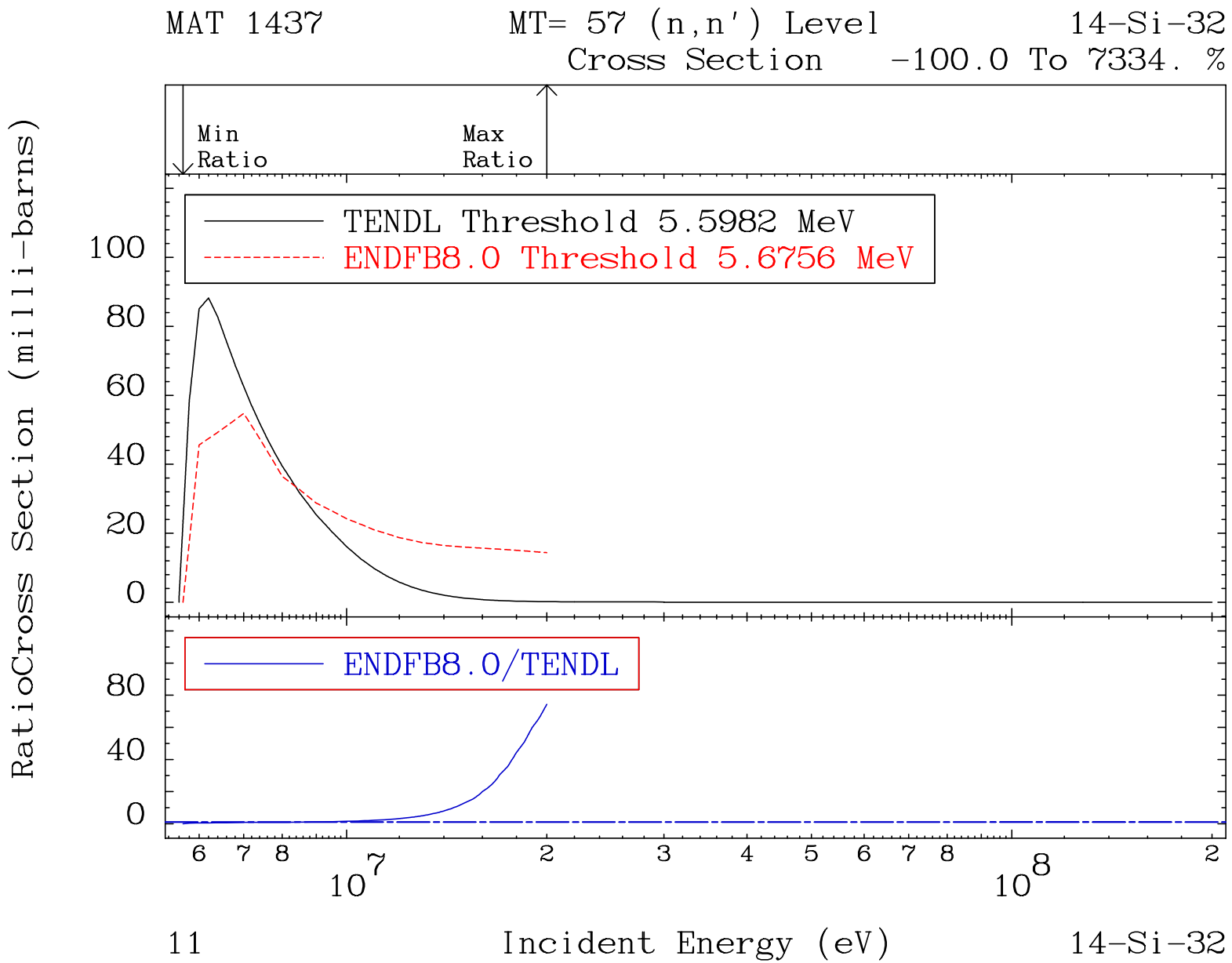

MAT 1437
MT= 52 (n,n') Level
14-Si-32
Cross Section -17.92 To 153.2 %
Min Ratio
Max Ratio
TENDL Threshold 4.3643 MeV
ENDFB8.0 Threshold 4.3643 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
200
100
0
3.0
2.0
1.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
14-Si-32

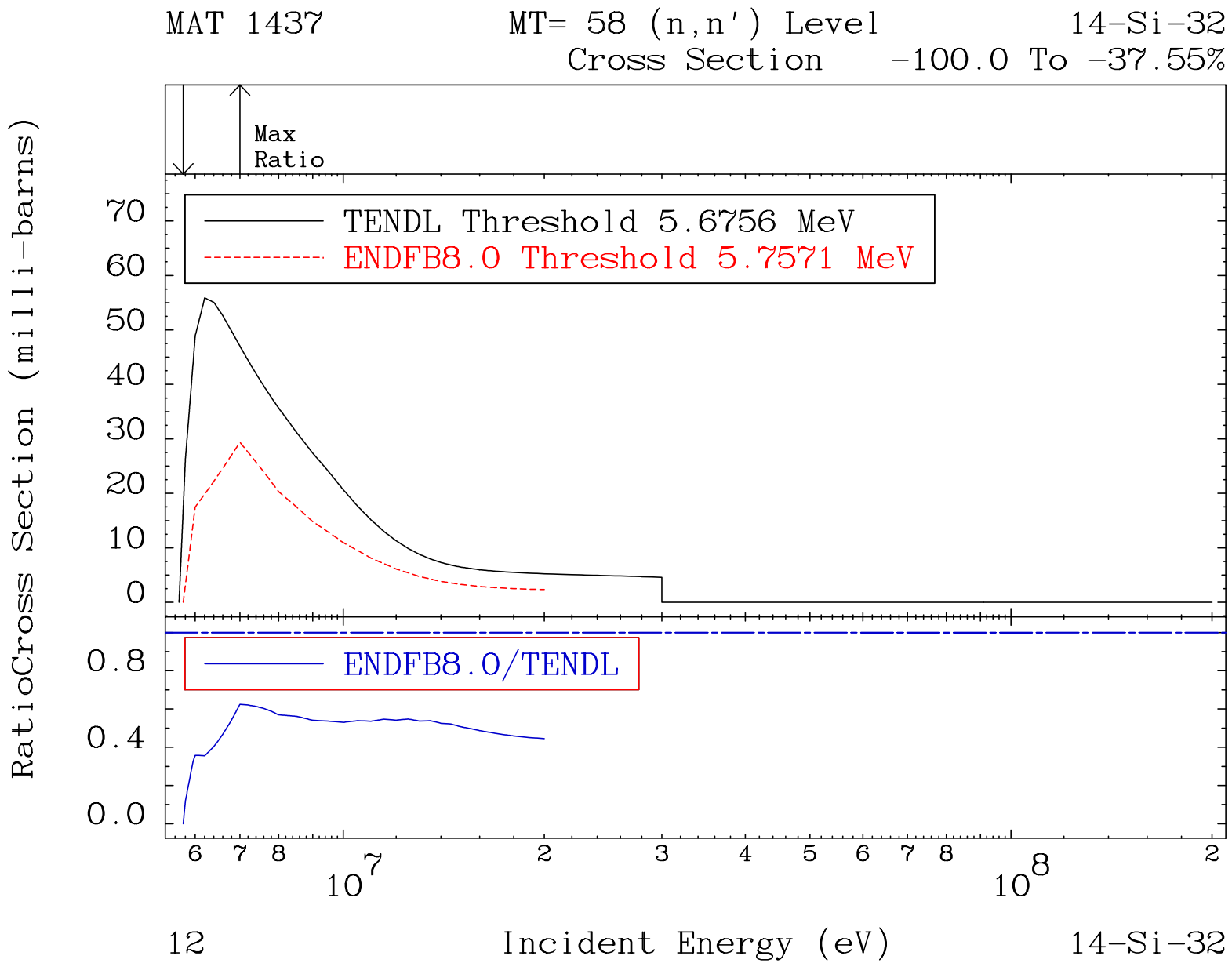

MAT 1437
MT= 53 (n,n') Level
14-Si-32
Cross Section -16.12 To 1393. %
Min Ratio
Max Ratio
TENDL Threshold 5.1411 MeV
ENDFB8.0 Threshold 5.1411 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14-Si-32

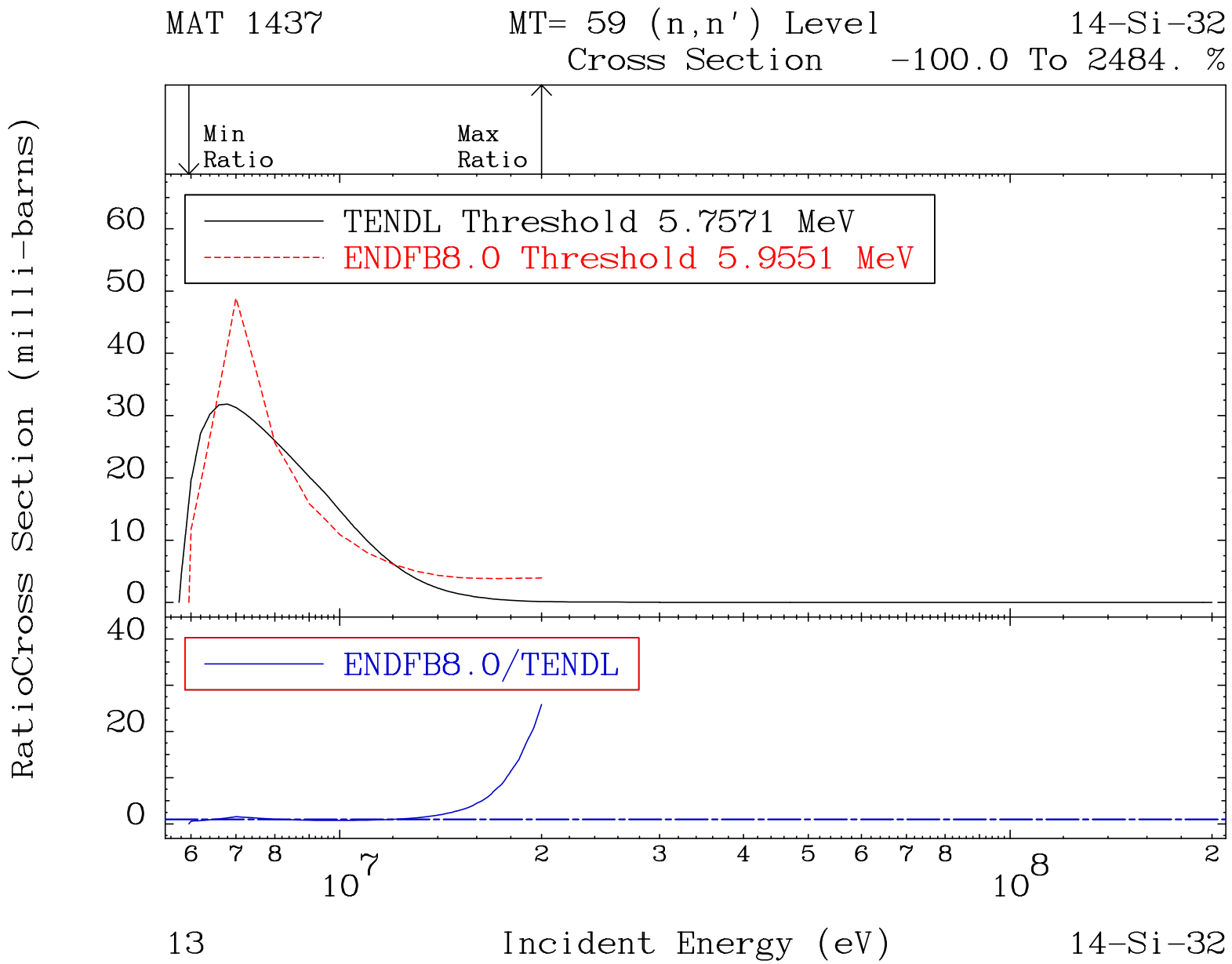

MAT 1437
MT= 54 (n,n') Level
14-Si-32
Cross Section -100.0 To 1401. %
Min Ratio
Max Ratio
TENDL Threshold 5.3847 MeV
ENDFB8.0 Threshold 5.3847 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
20
10
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
14-Si-32

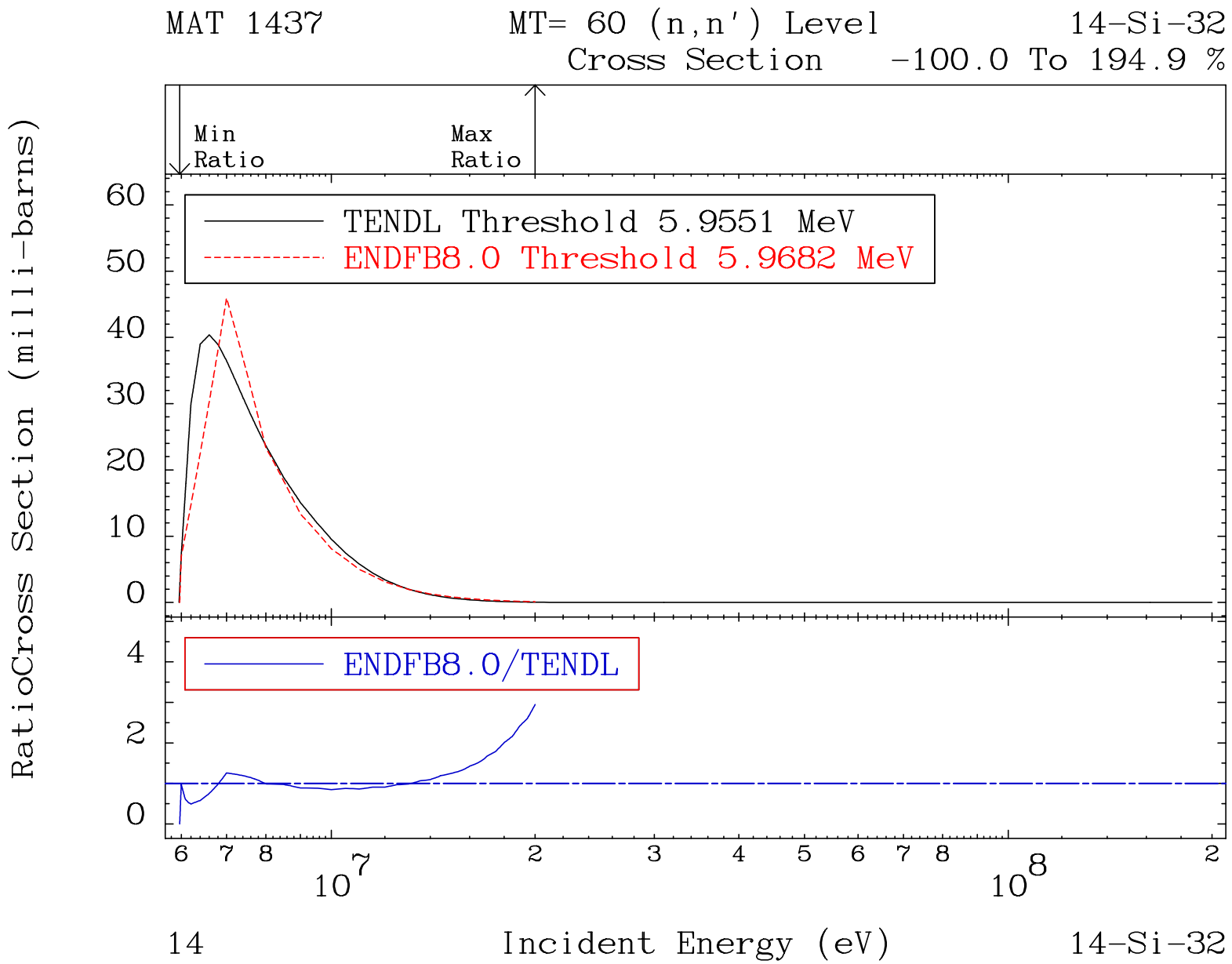

MAT 1437
MT= 55 (n,n') Level
14-Si-32
Cross Section -19.38 To 238.6 %
Min Ratio
Max Ratio
TENDL Threshold 5.4556 MeV
ENDFB8.0 Threshold 5.4556 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
4
2
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
14-Si-32

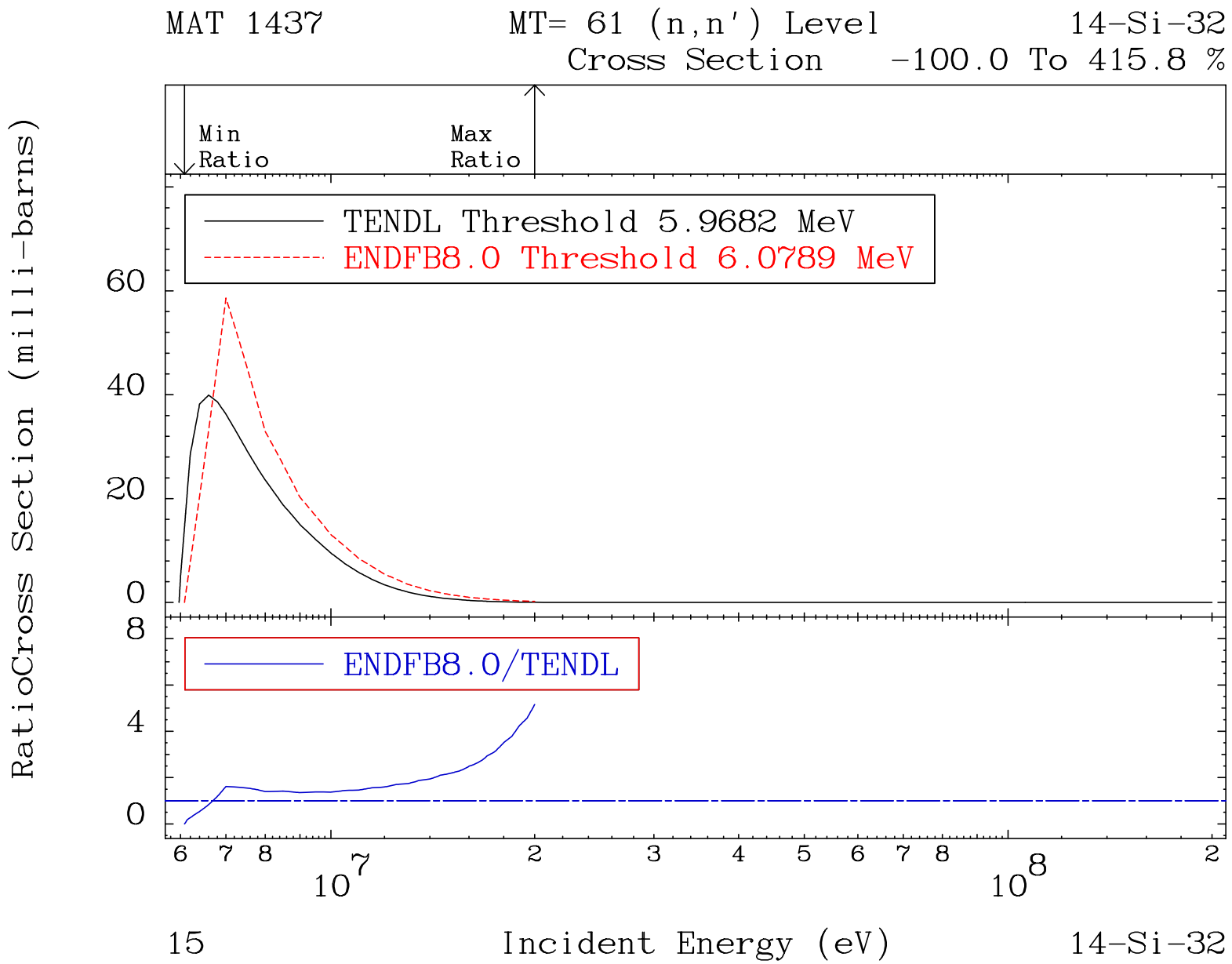

MAT 1437
MT= 56 (n,n') Level
14-Si-32
Cross Section -2.225 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.5831 MeV
ENDFB8.0 Threshold 5.5831 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^3
10^2
10^1
10^0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
14-Si-32

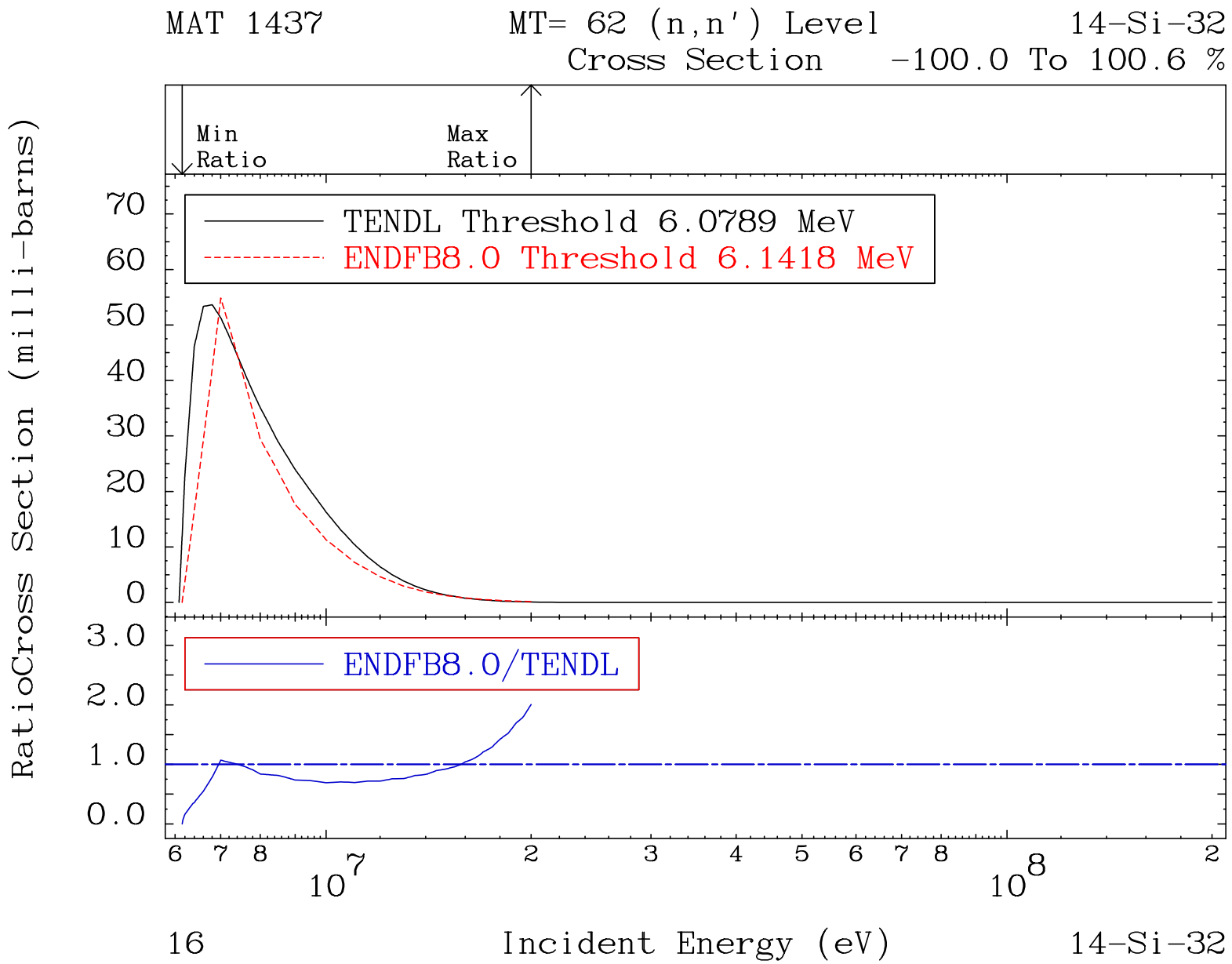

MAT 1437
MT= 57 (n,n') Level
14-Si-32
Cross Section -100.0 To 7334. %
Min Ratio
Max Ratio
TENDL Threshold 5.5982 MeV
ENDFB8.0 Threshold 5.6756 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
80
40
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
14-Si-32

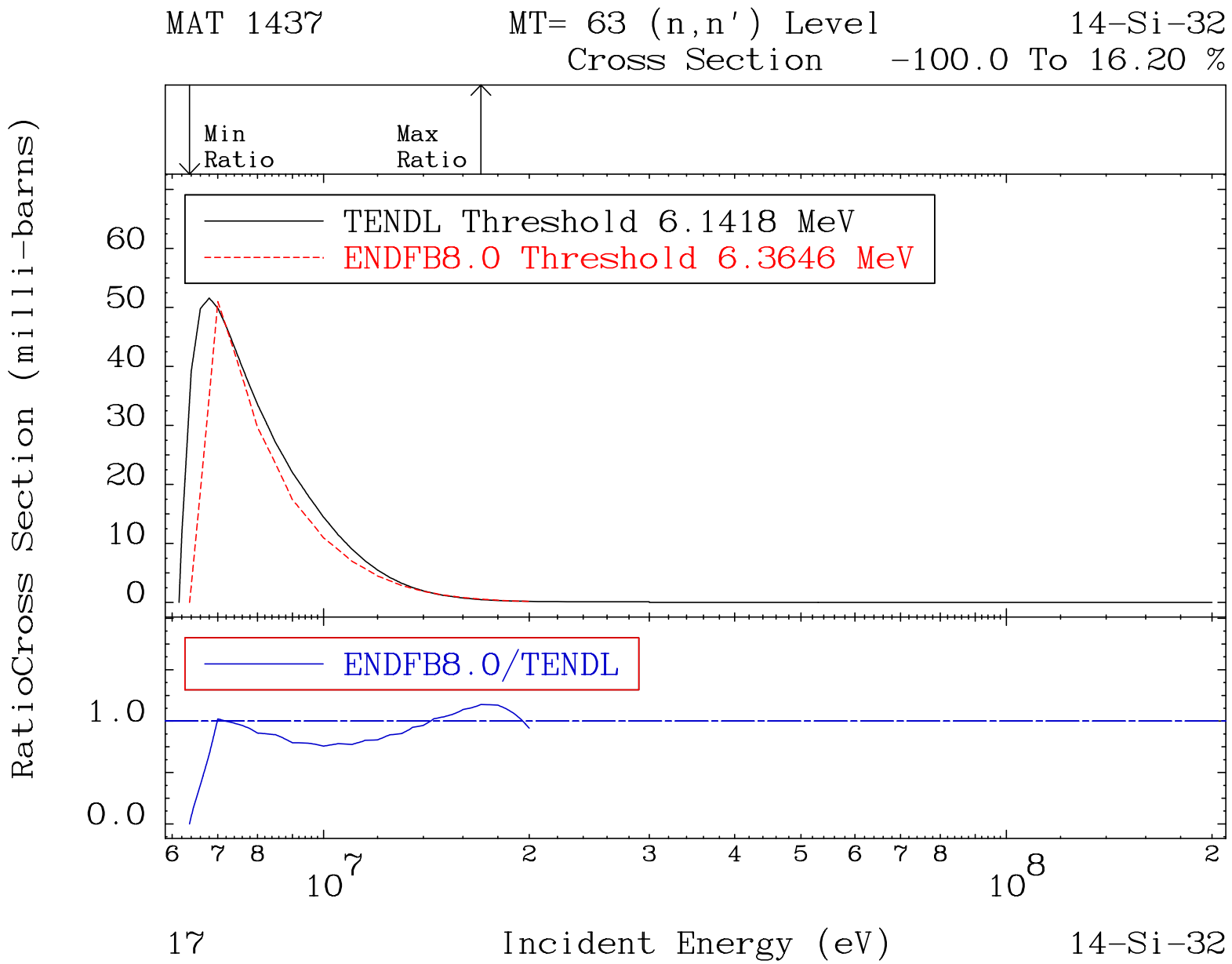

MAT 1437
MT= 58 (n,n') Level
14-Si-32
Cross Section -100.0 To -37.55%
Max
Ratio
TENDL Threshold 5.6756 MeV
ENDFB8.0 Threshold 5.7571 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.8
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
14-Si-32

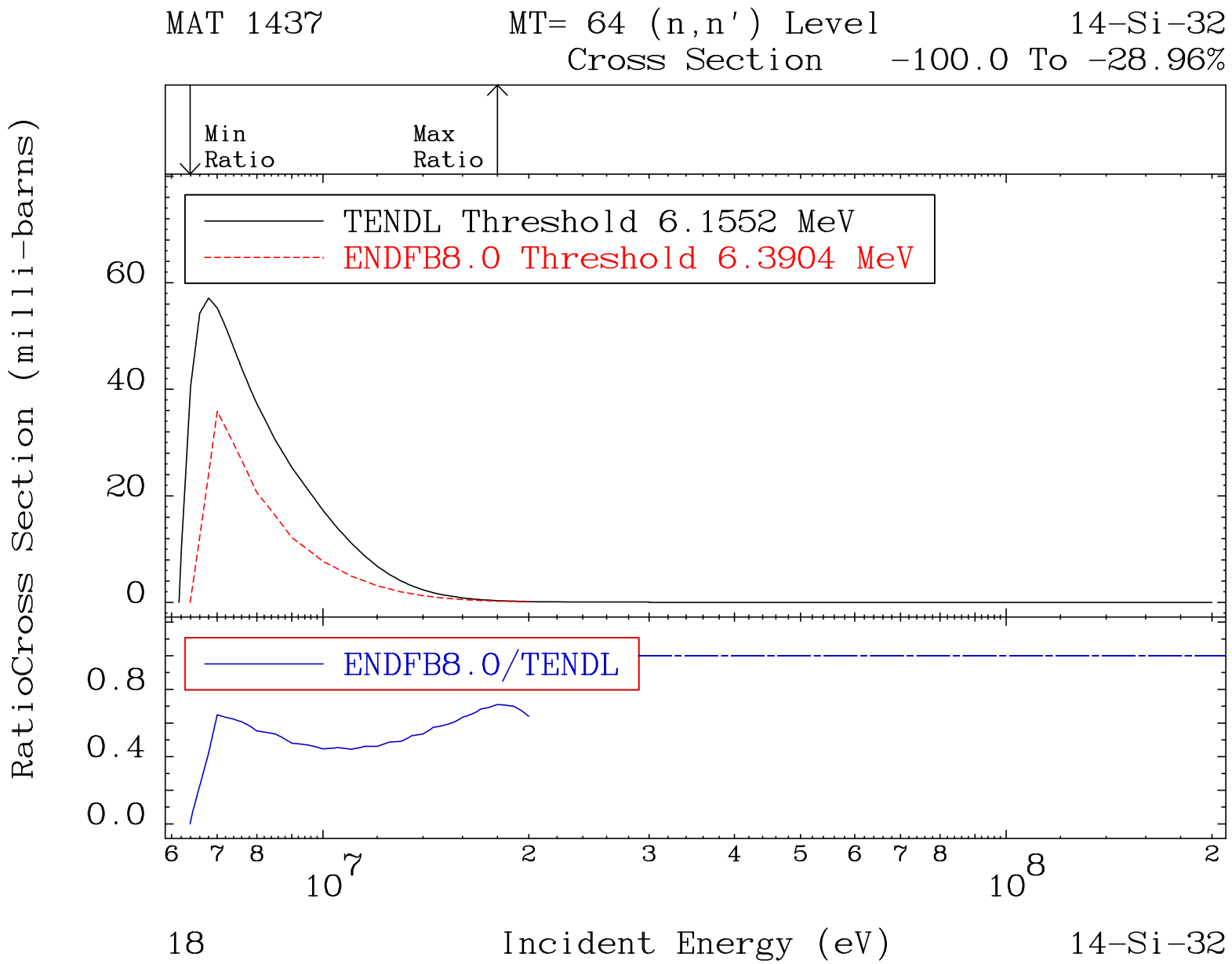

MAT 1437
MT= 59 (n,n') Level
14-Si-32
Cross Section -100.0 To 2484. %
Min Ratio
Max Ratio
TENDL Threshold 5.7571 MeV
ENDFB8.0 Threshold 5.9551 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
40
20
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
14-Si-32

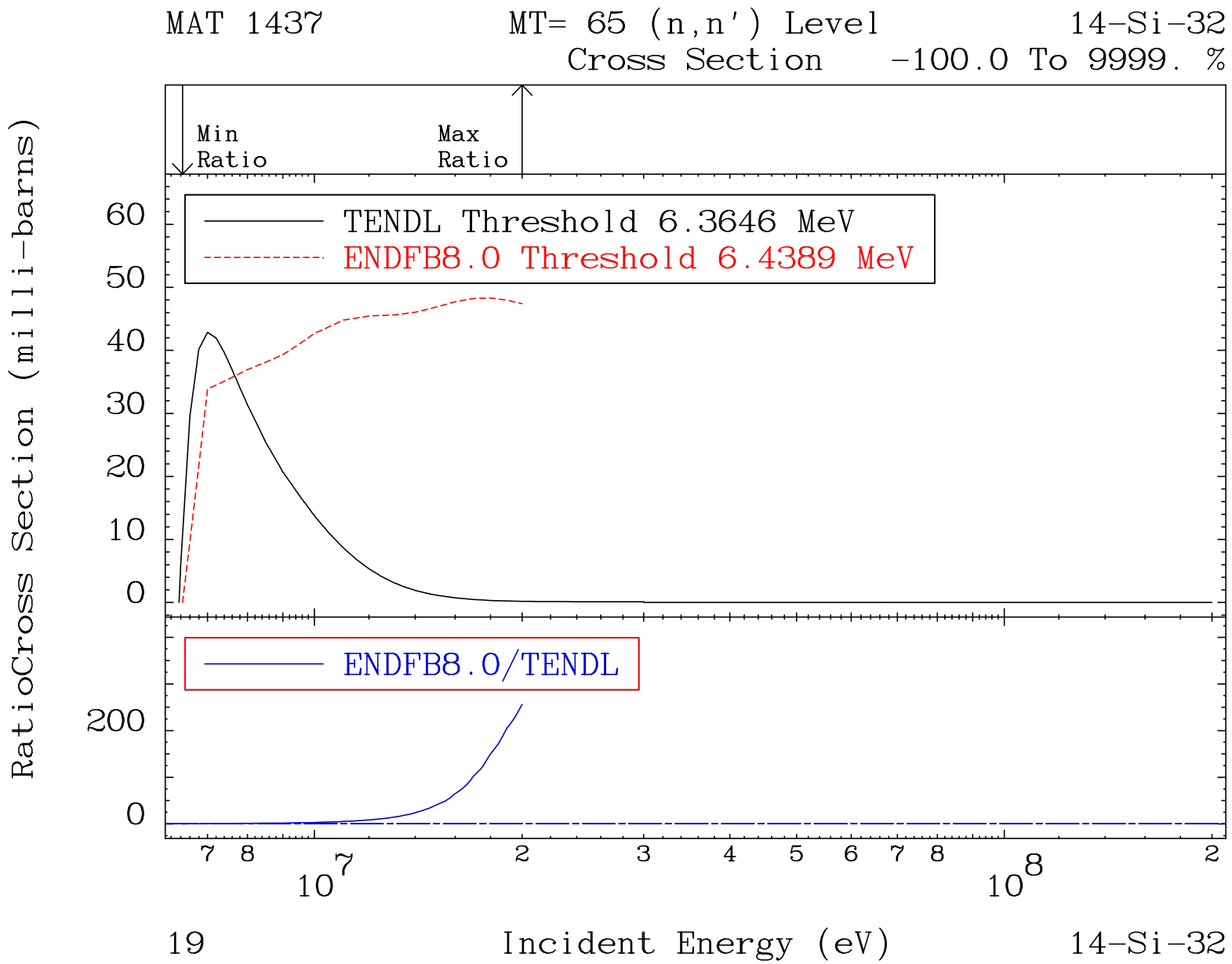

MAT 1437
MT= 60 (n,n') Level
14-Si-32
Cross Section -100.0 To 194.9 %
Min Ratio
Max Ratio
TENDL Threshold 5.9551 MeV
ENDFB8.0 Threshold 5.9682 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
14-Si-32

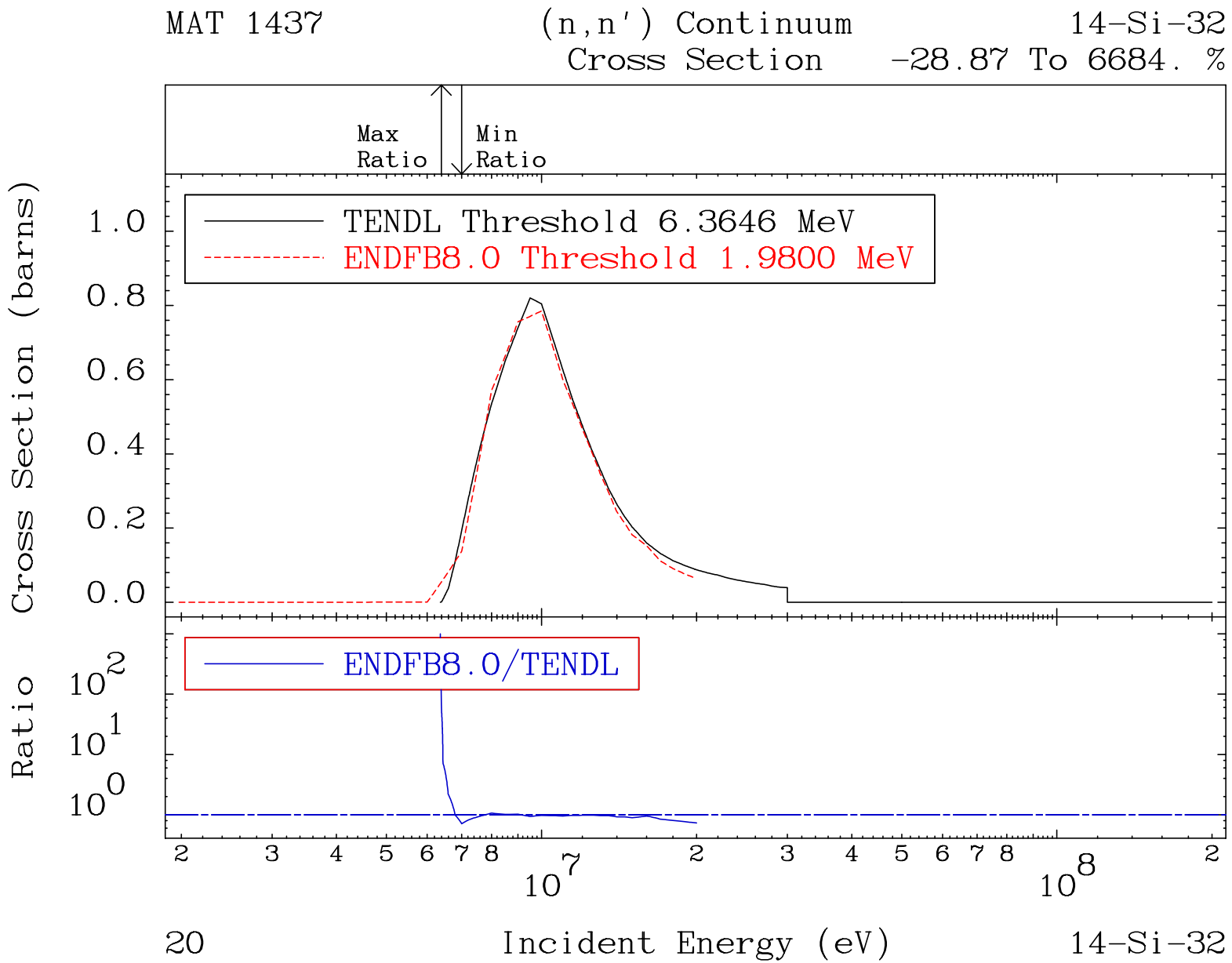

MAT 1437
MT= 61 (n,n') Level
14-Si-32
Cross Section -100.0 To 415.8 %
Min Ratio
Max Ratio
TENDL Threshold 5.9682 MeV
ENDFB8.0 Threshold 6.0789 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
8
4
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
14-Si-32

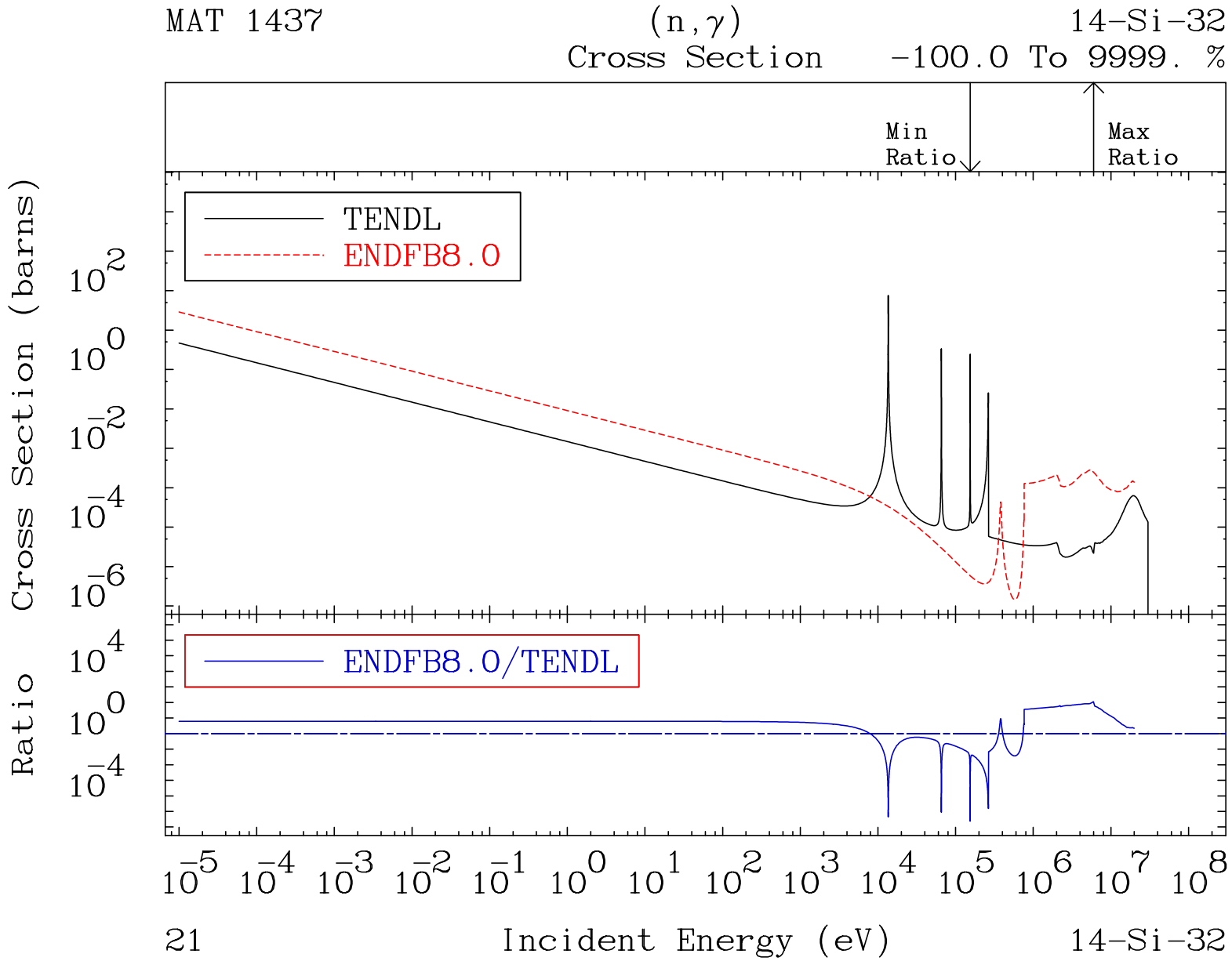

MAT 1437
MT= 62 (n,n') Level
14-Si-32
Cross Section -100.0 To 100.6 %
Min Ratio
Max Ratio
TENDL Threshold 6.0789 MeV
ENDFB8.0 Threshold 6.1418 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
14-Si-32

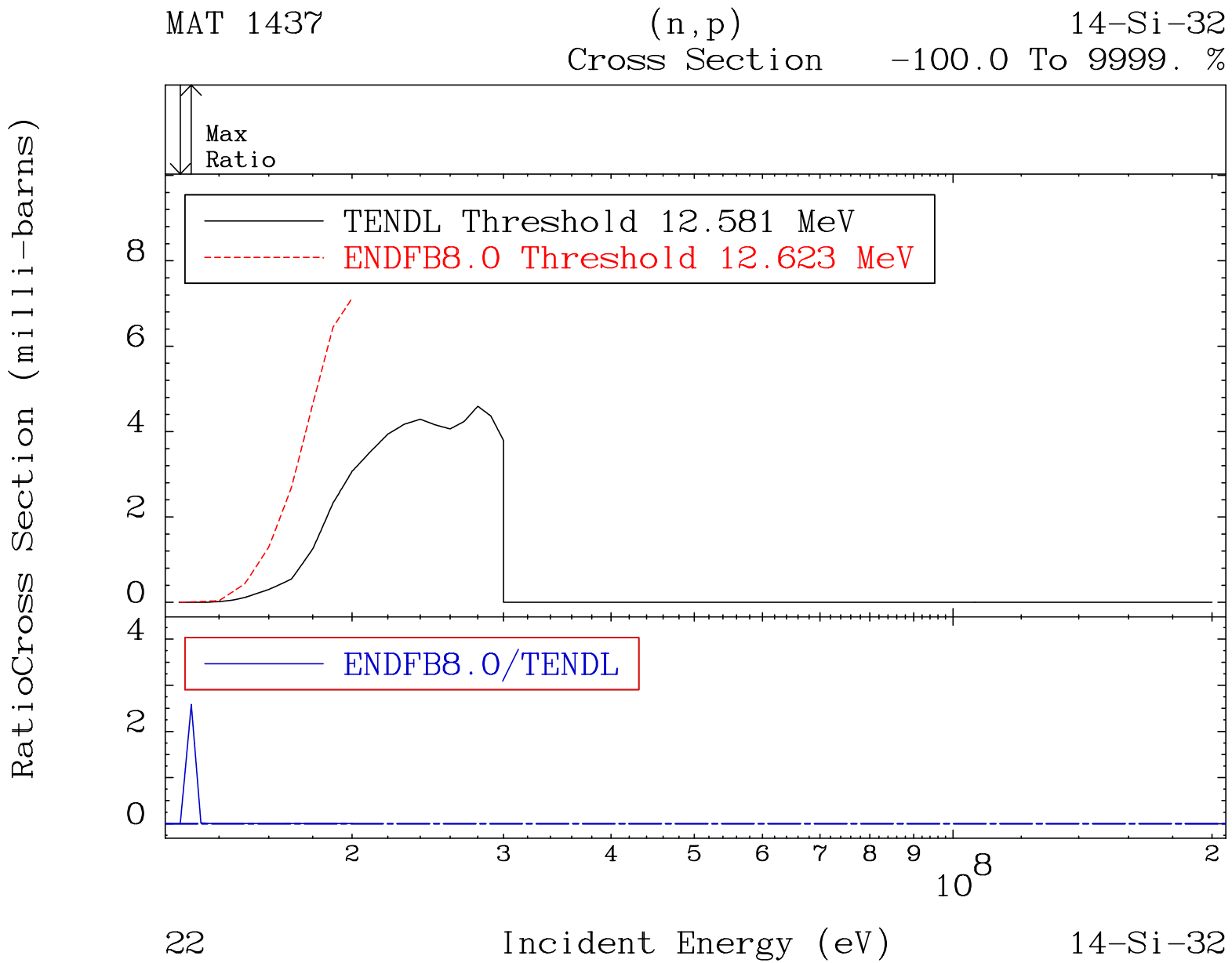

MAT 1437
MT= 63 (n,n') Level
14-Si-32
Cross Section -100.0 To 16.20 %
Min Ratio
Max Ratio
TENDL Threshold 6.1418 MeV
ENDFB8.0 Threshold 6.3646 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.0
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
14-Si-32

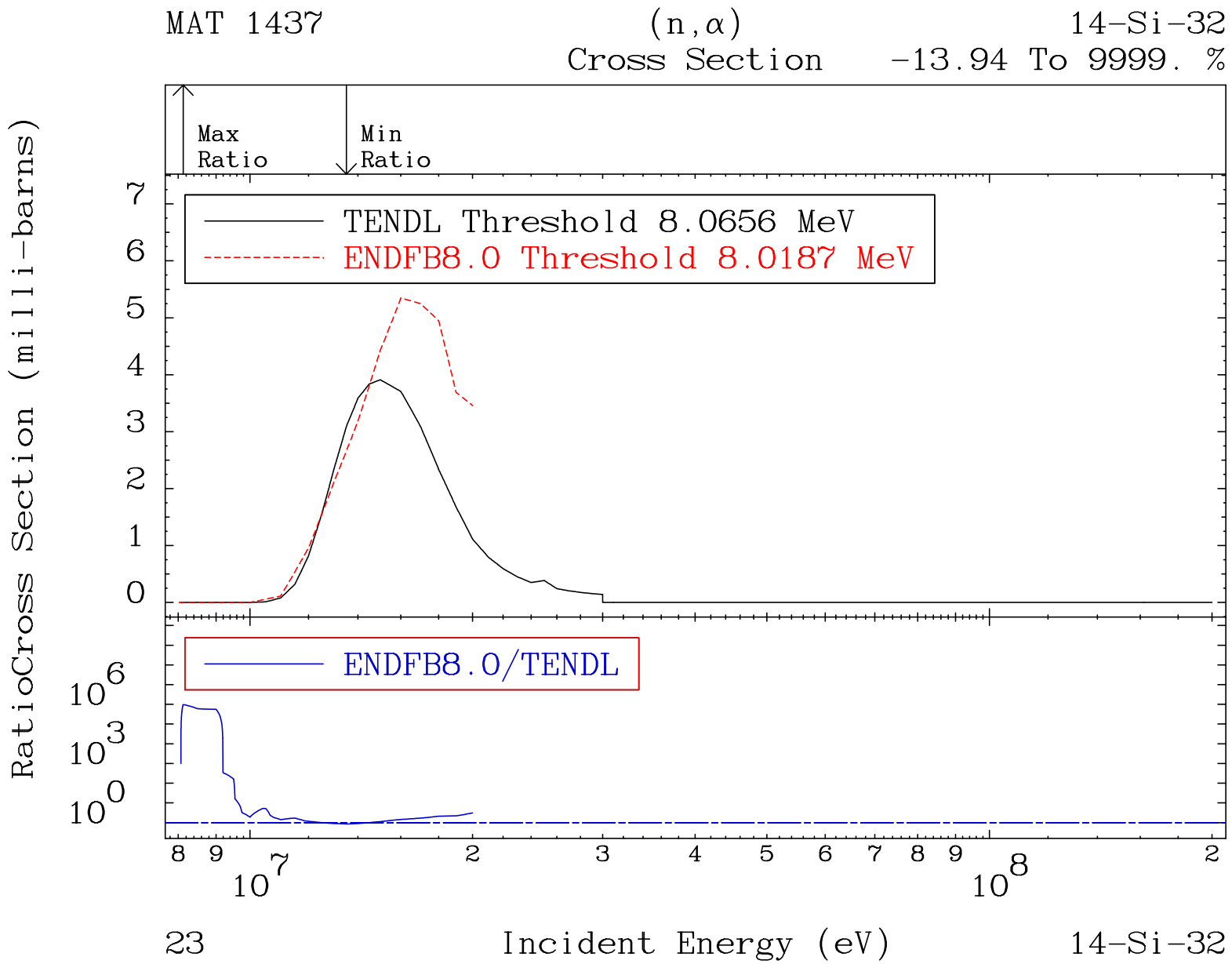

MAT 1437
MT= 64 (n,n') Level
14-Si-32
Cross Section -100.0 To -28.96%
Min Ratio
Max Ratio
TENDL Threshold 6.1552 MeV
ENDFB8.0 Threshold 6.3904 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
0.8
0.4
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
14-Si-32

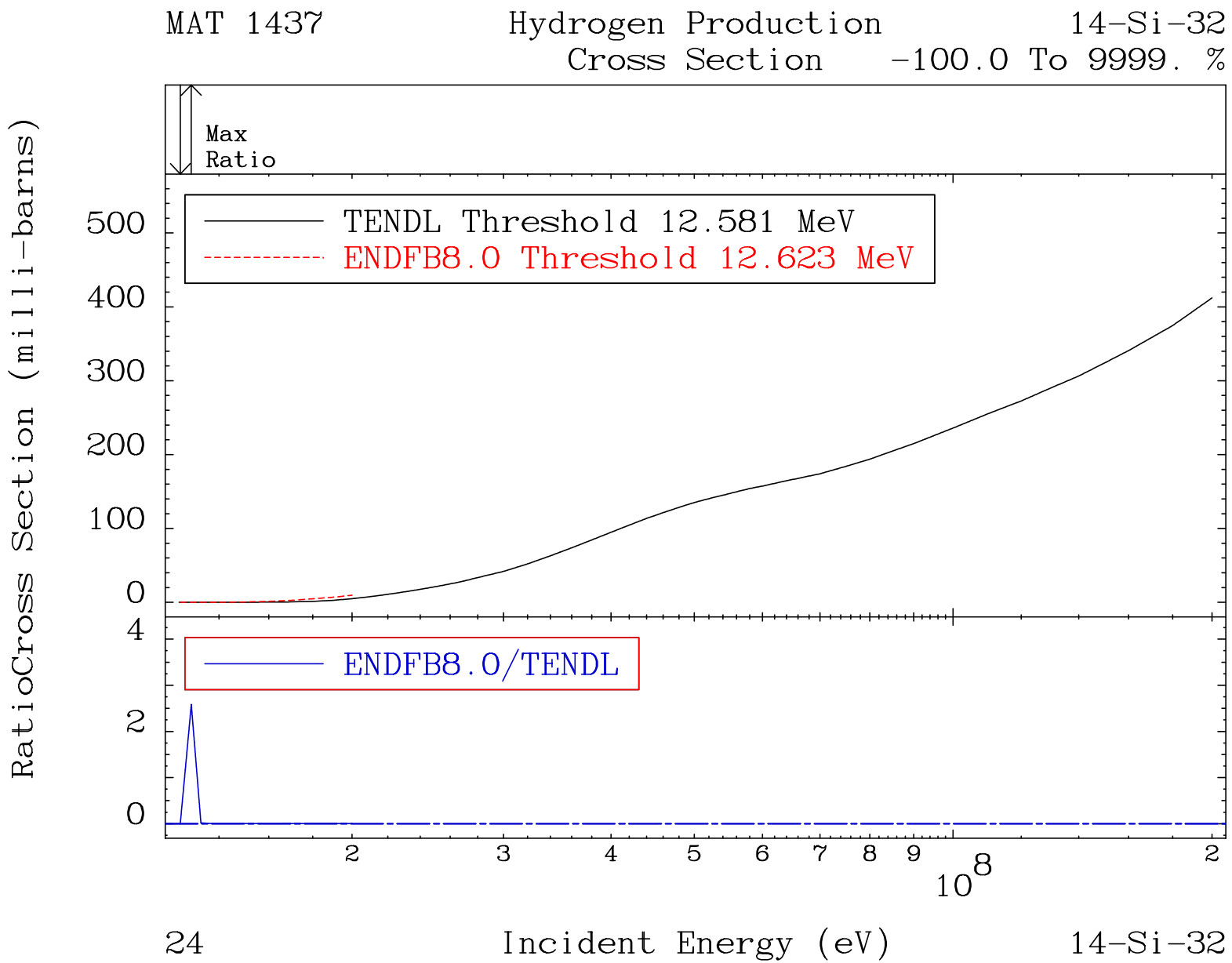

MAT 1437
MT= 65 (n,n') Level
14-Si-32
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3646 MeV
ENDFB8.0 Threshold 6.4389 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
14-Si-32

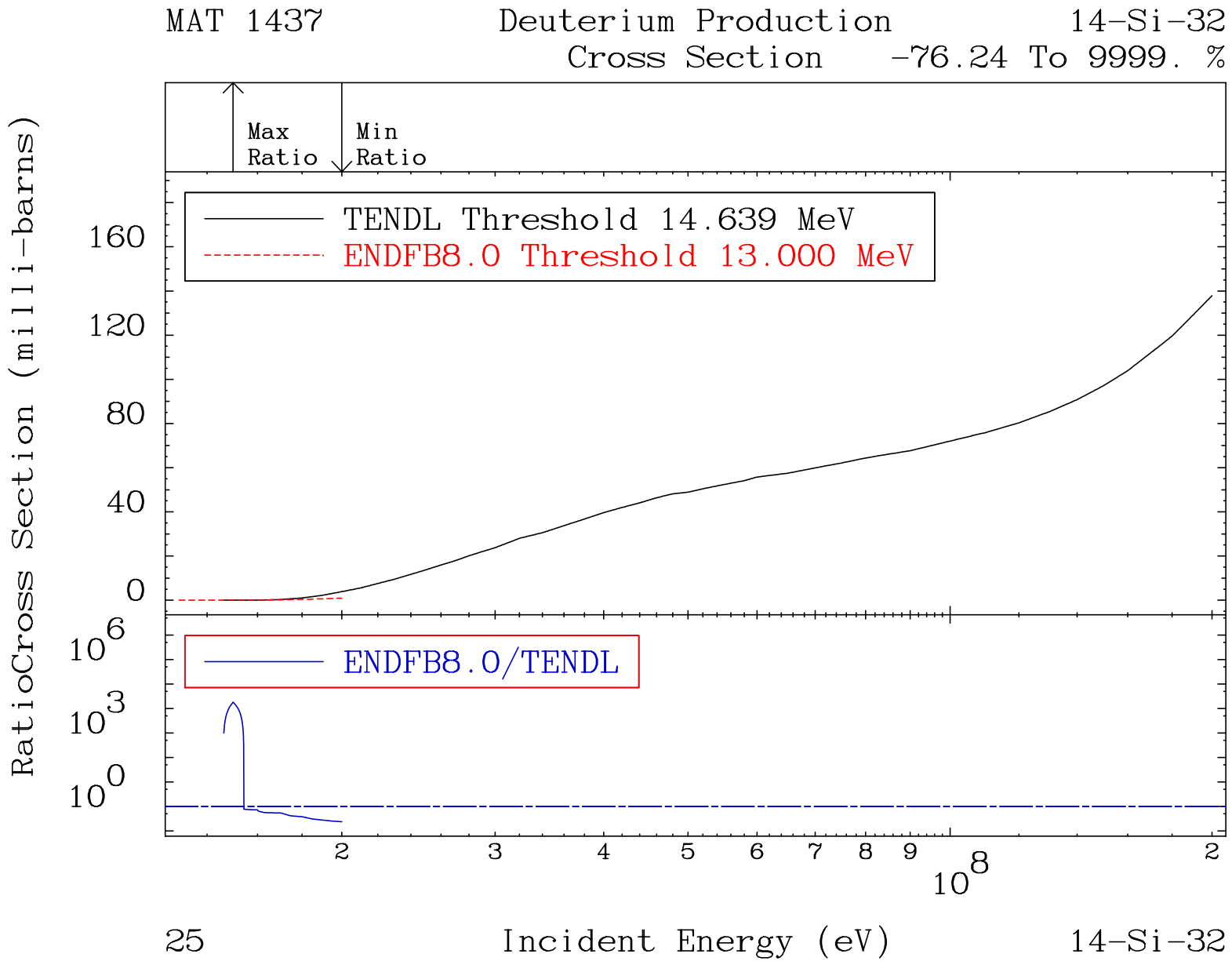

MAT 1437
(n,n') Continuum
Cross Section
14-Si-32
-28.87 To 6684. %
Max Ratio
Min Ratio
TENDL Threshold 6.3646 MeV
ENDFB8.0 Threshold 1.9800 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
14-Si-32

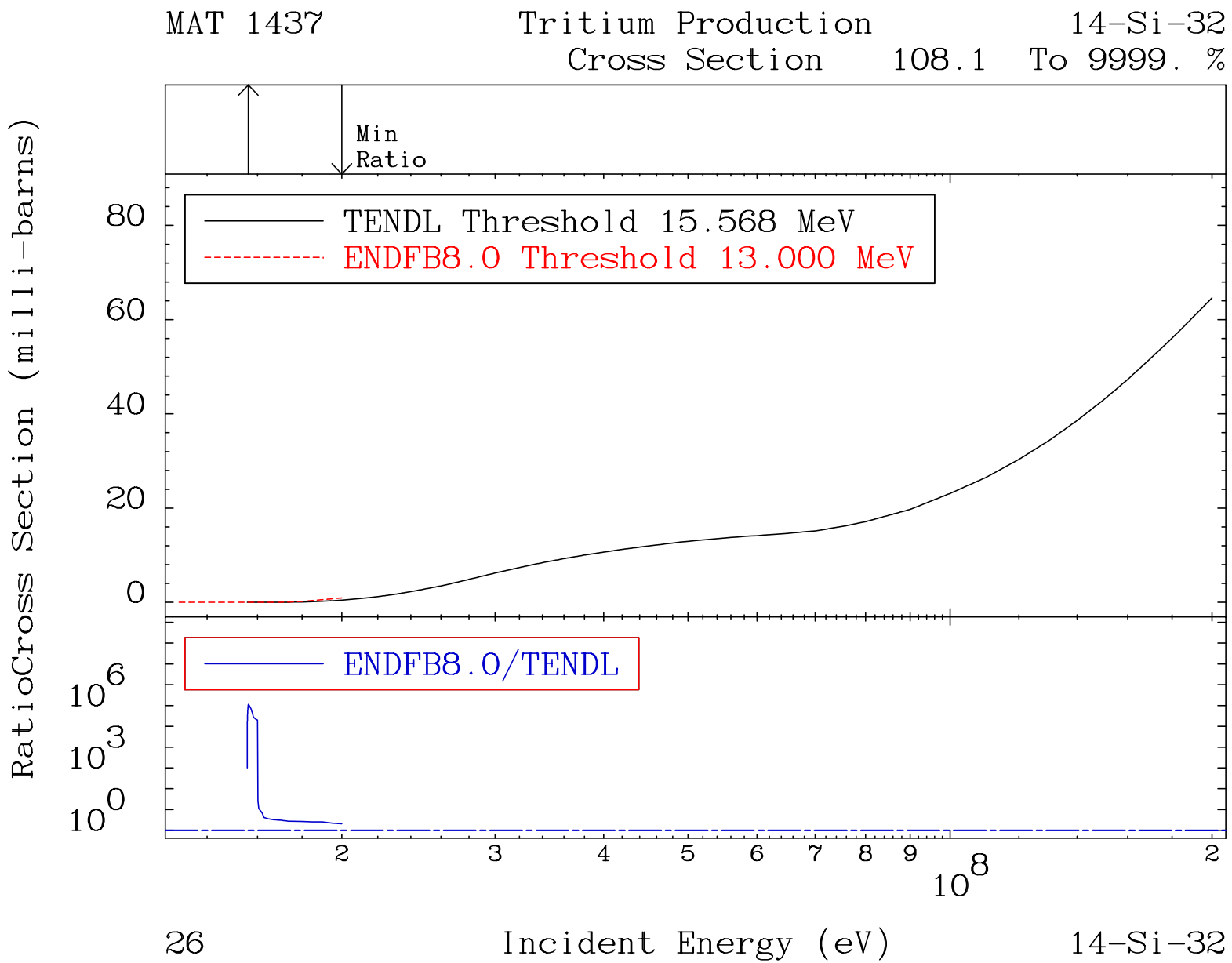

MAT 1437
(n,γ)
Cross Section
14-Si-32
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
21
14-Si-32

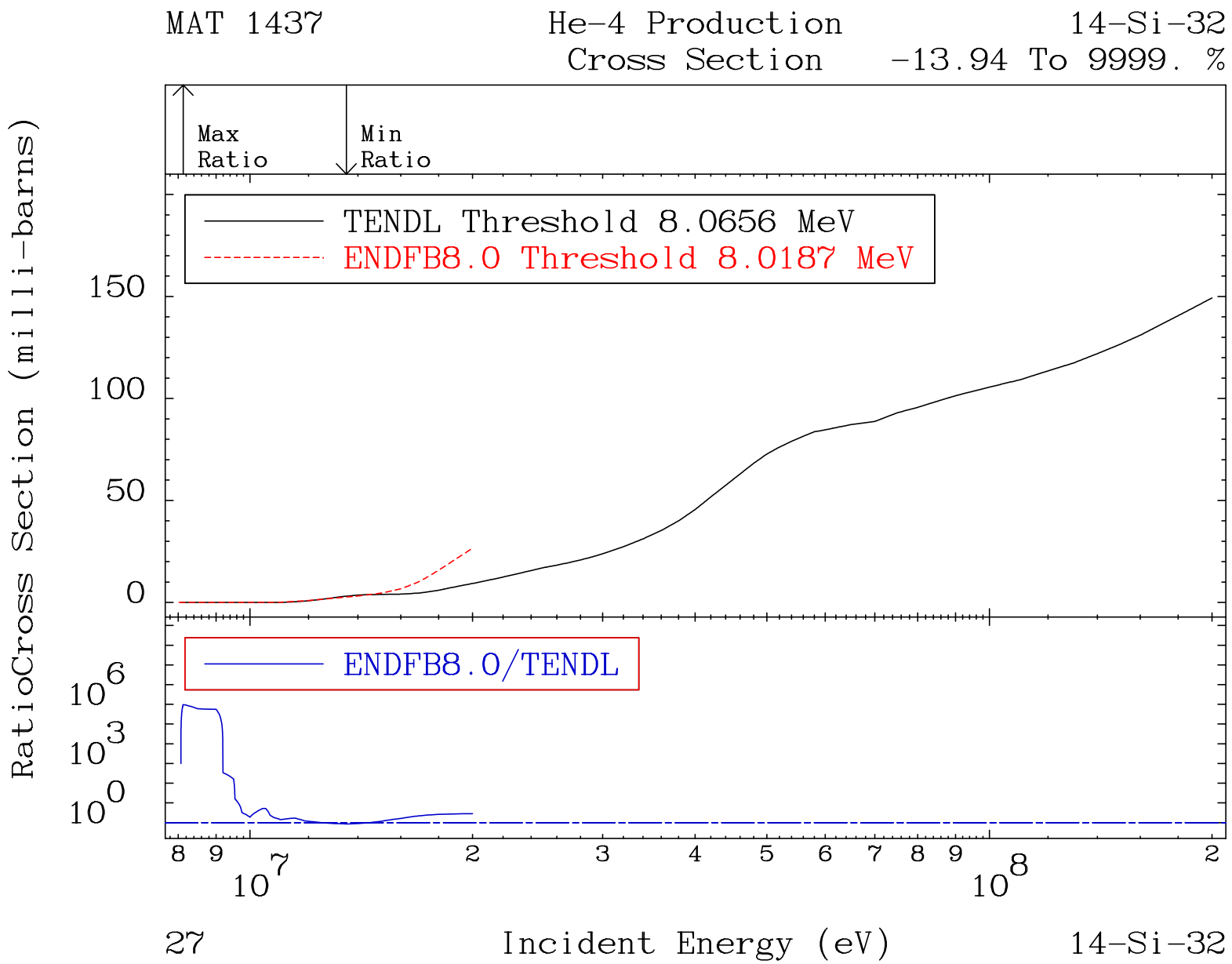

MAT 1437
(n,p)
14-Si-32
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.581 MeV
ENDFB8.0 Threshold 12.623 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22
14-Si-32

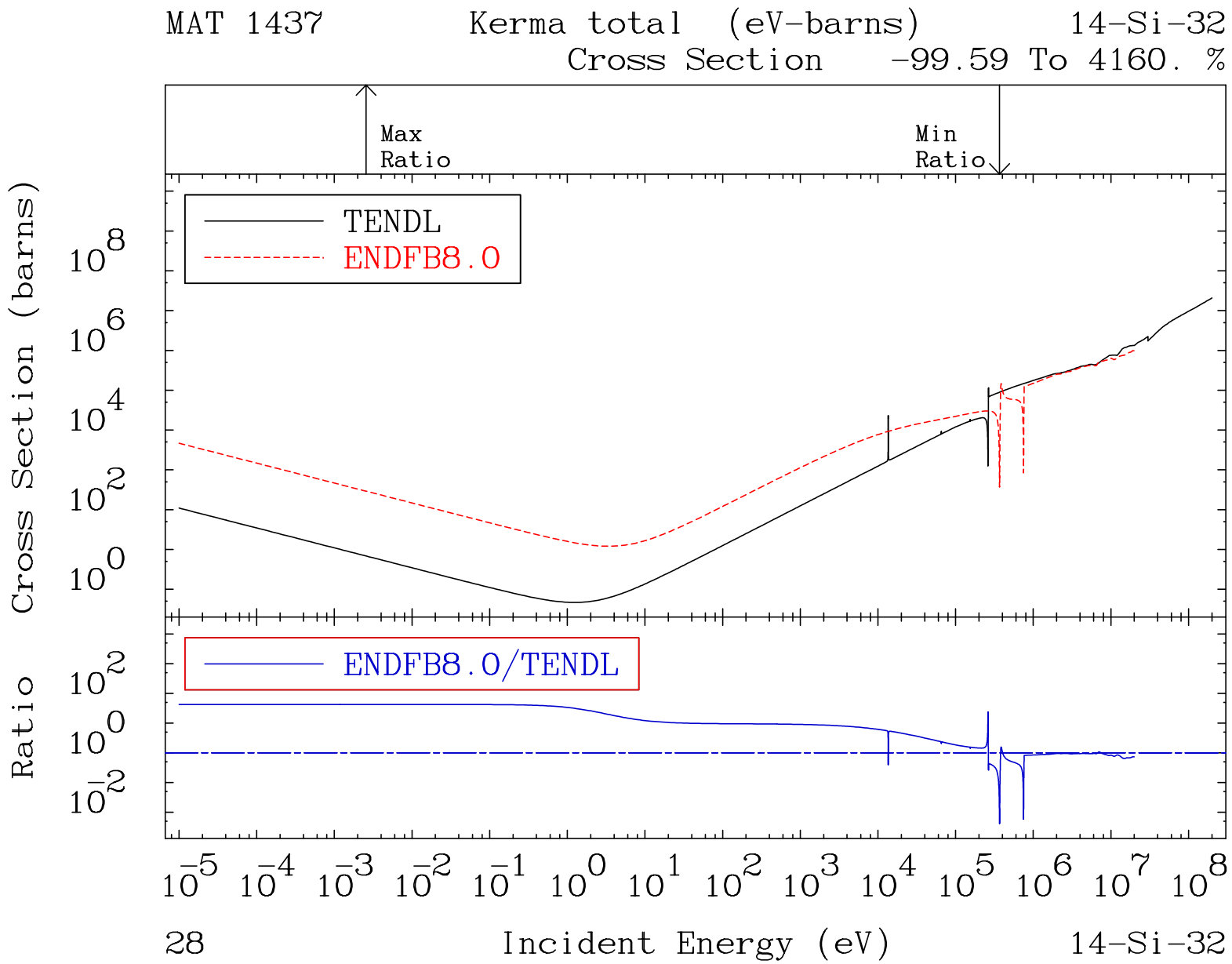

MAT 1437
(n,α)
14-Si-32
Cross Section
-13.94 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.0656 MeV
ENDFB8.0 Threshold 8.0187 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
14-Si-32

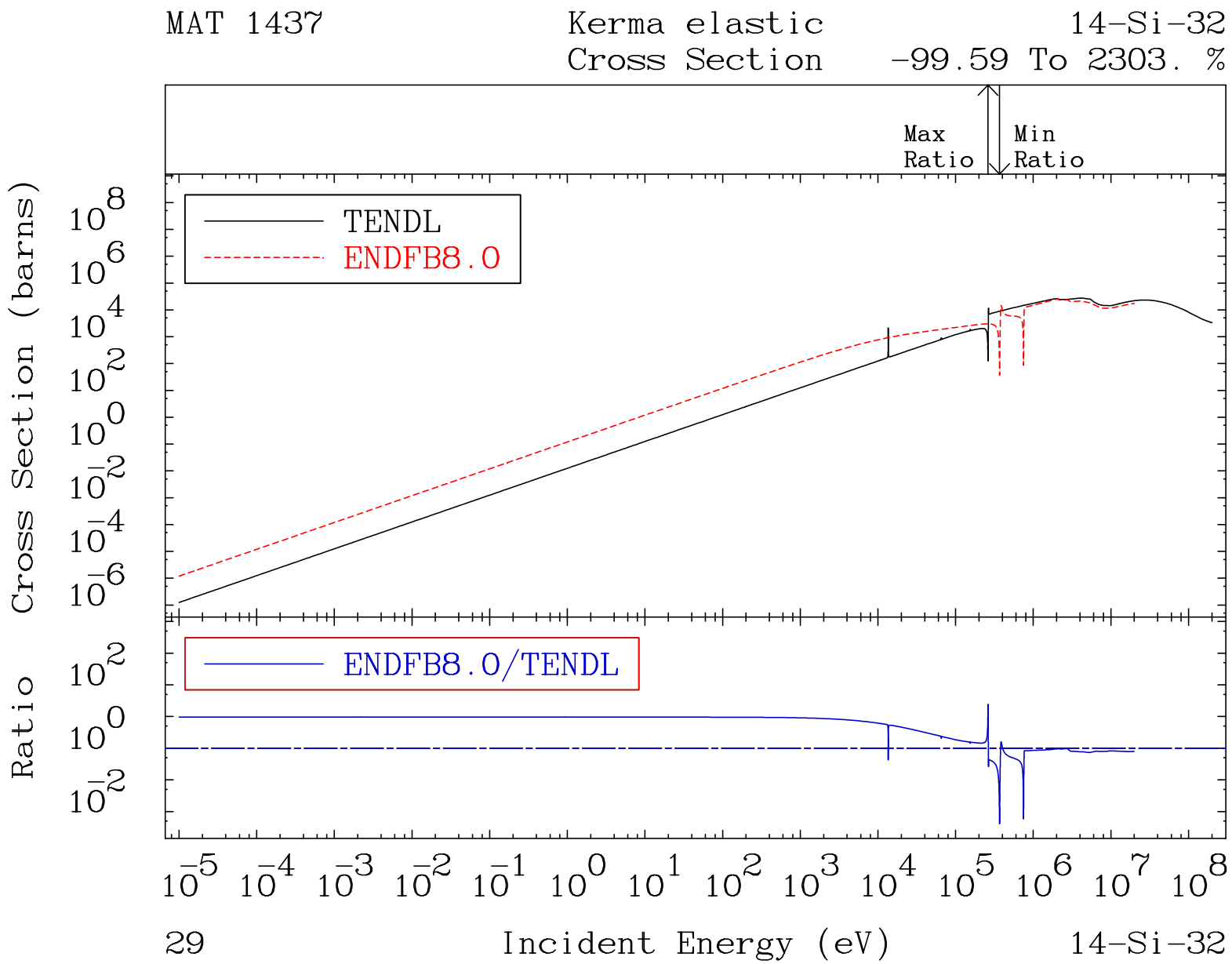

MAT 1437
Hydrogen Production
14-Si-32
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.581 MeV
ENDFB8.0 Threshold 12.623 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
14-Si-32

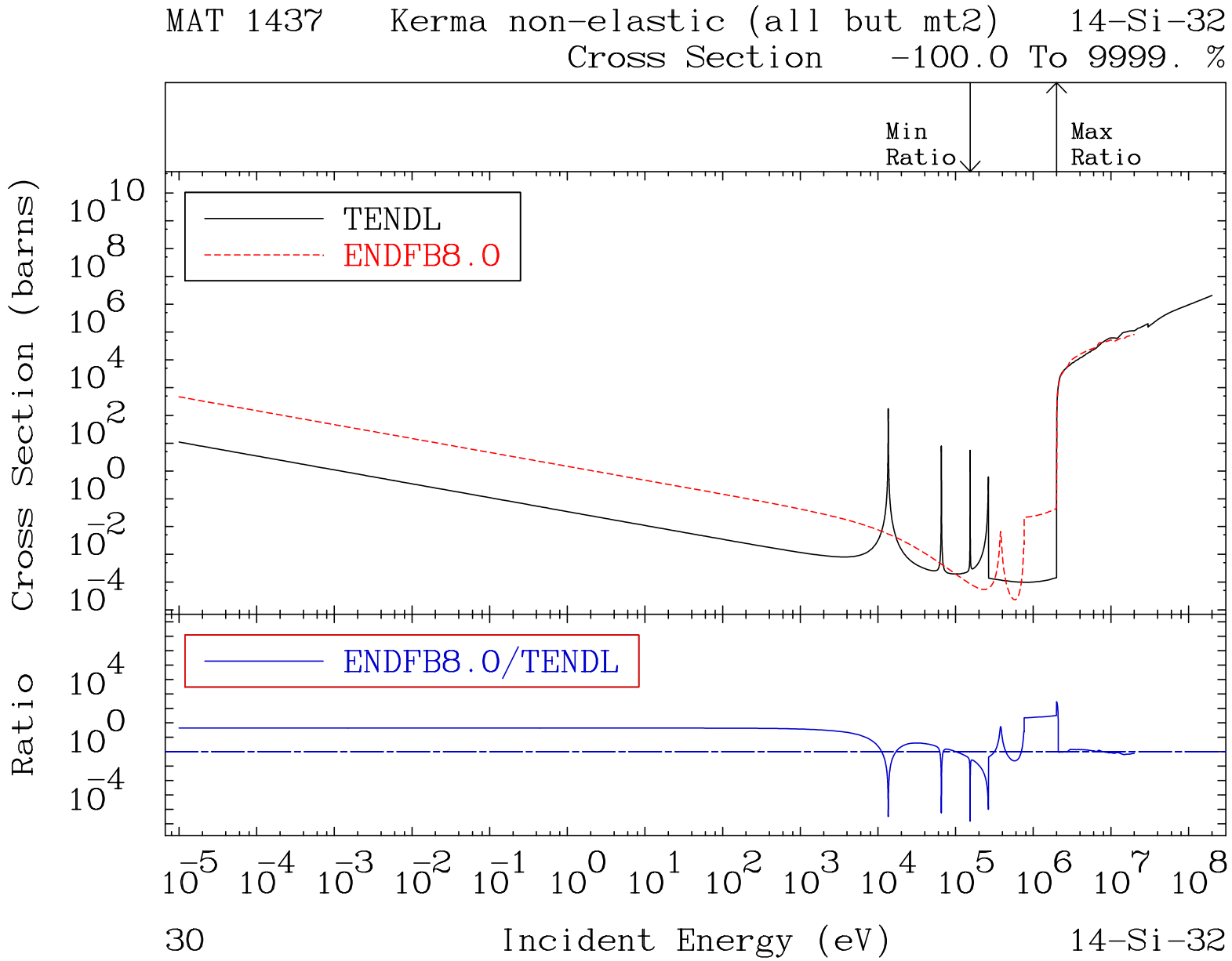

MAT 1437
Deuterium Production
14-Si-32
Cross Section -76.24 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.639 MeV
ENDFB8.0 Threshold 13.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
14-Si-32

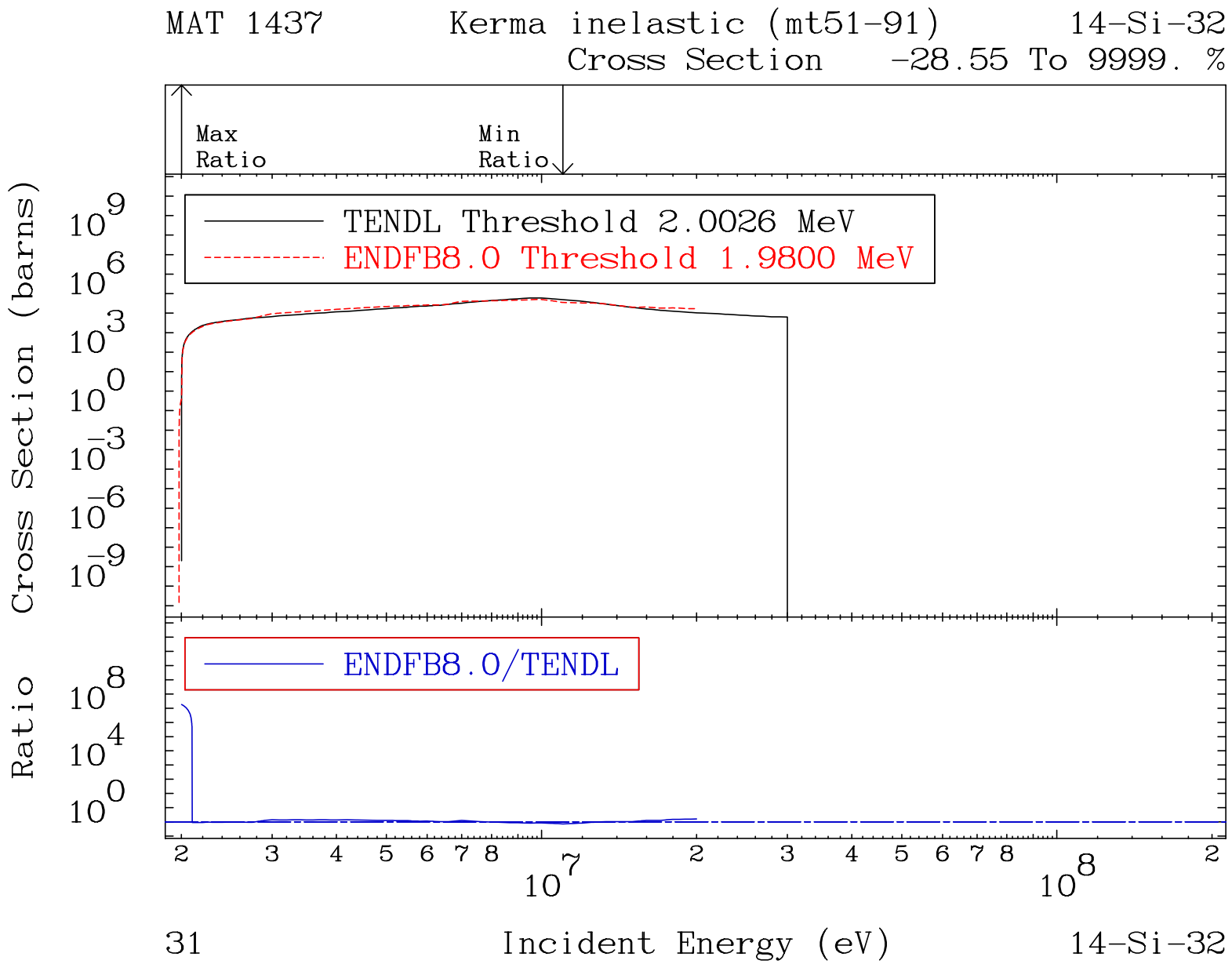

MAT 1437
Tritium Production
14-Si-32
Cross Section 108.1 To 9999. %
Min
Ratio
TENDL Threshold 15.568 MeV
ENDFB8.0 Threshold 13.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
14-Si-32

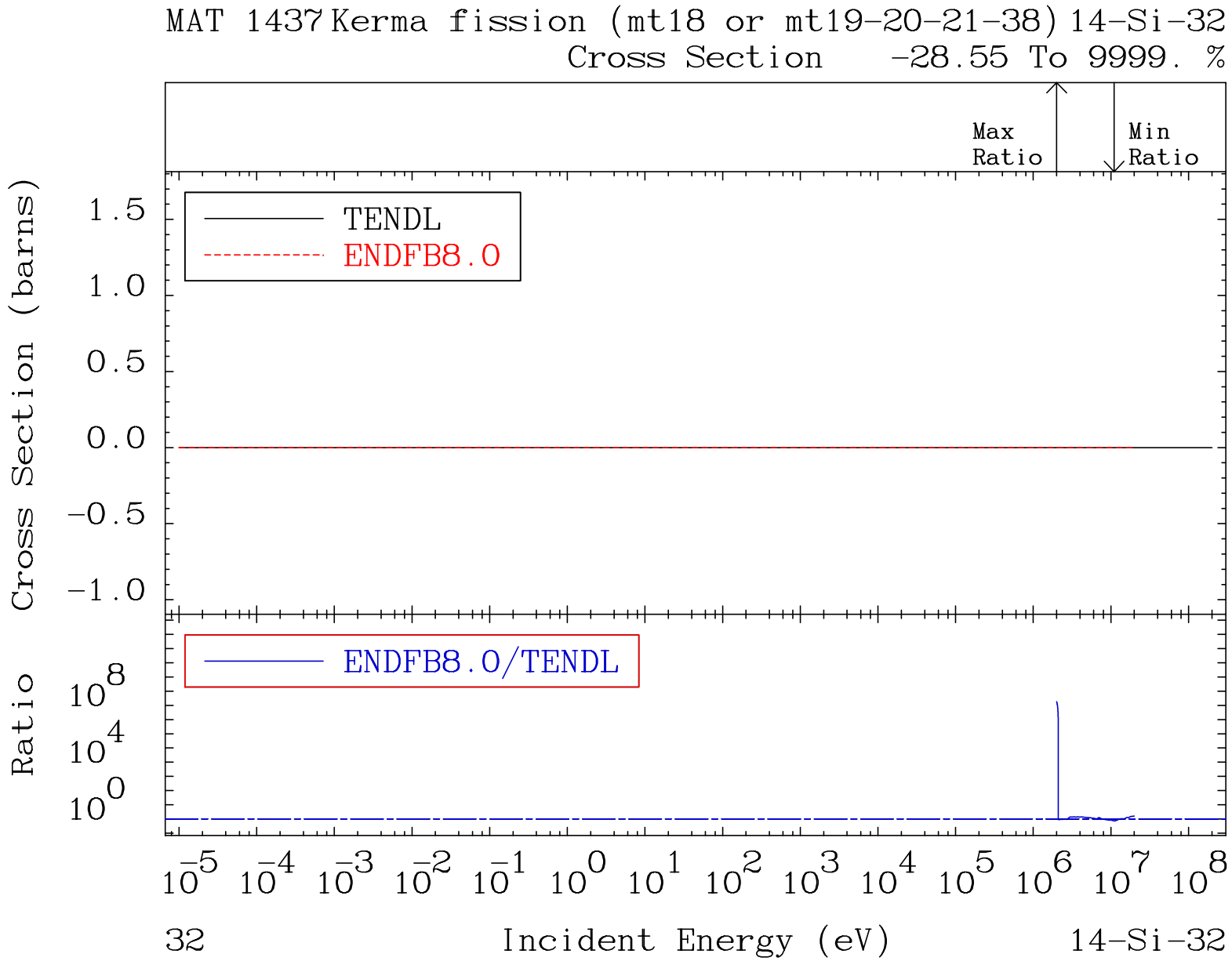

MAT 1437
He-4 Production
Cross Section
14-Si-32
-13.94 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.0656 MeV
ENDFB8.0 Threshold 8.0187 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
10^6
10^3
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
14-Si-32

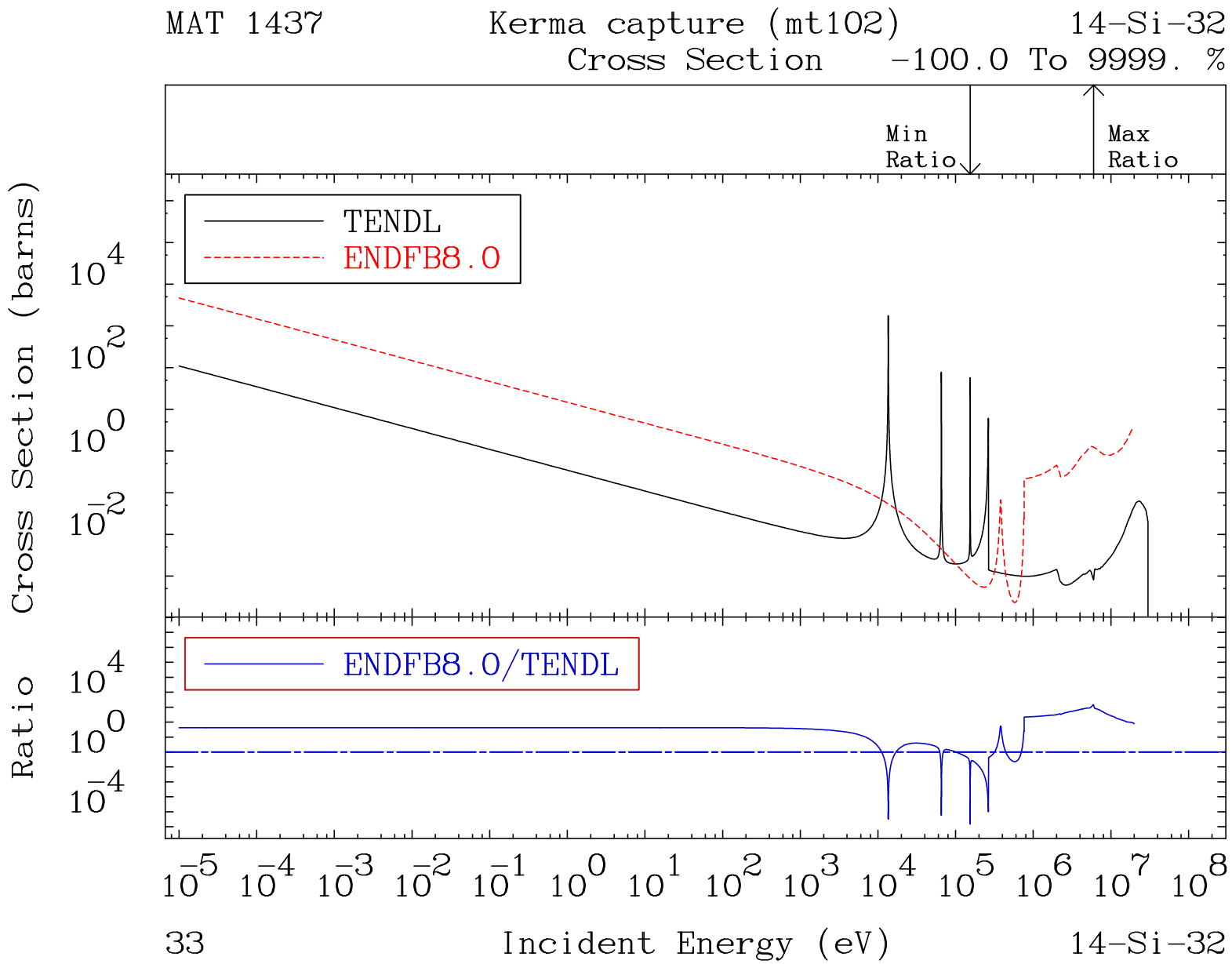

MAT 1437
Kerma total (eV-barns)
14-Si-32
Cross Section -99.59 To 4160. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
28
14-Si-32

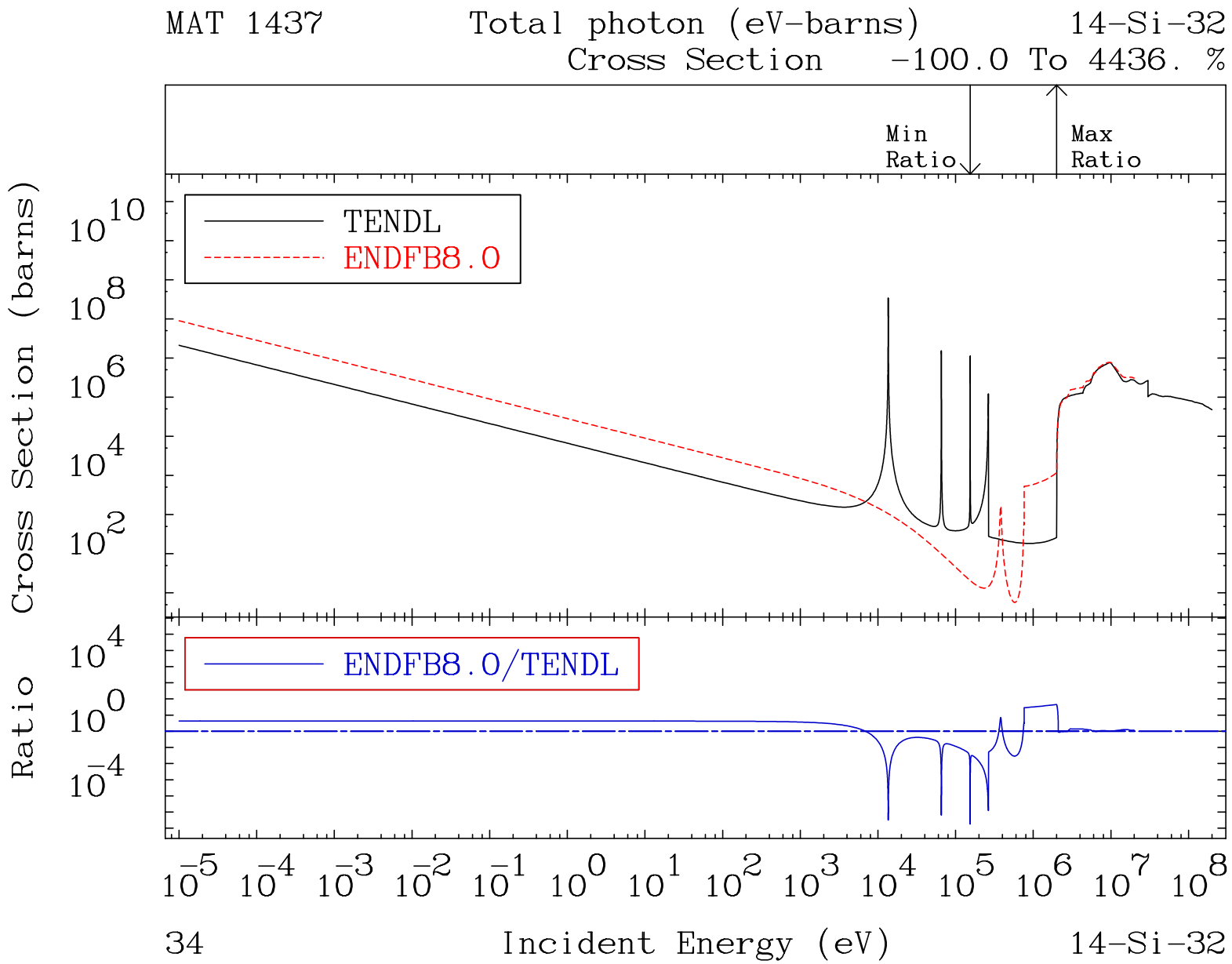

MAT 1437
Kerma elastic
Cross Section
14-Si-32
-99.59 To 2303. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
14-Si-32

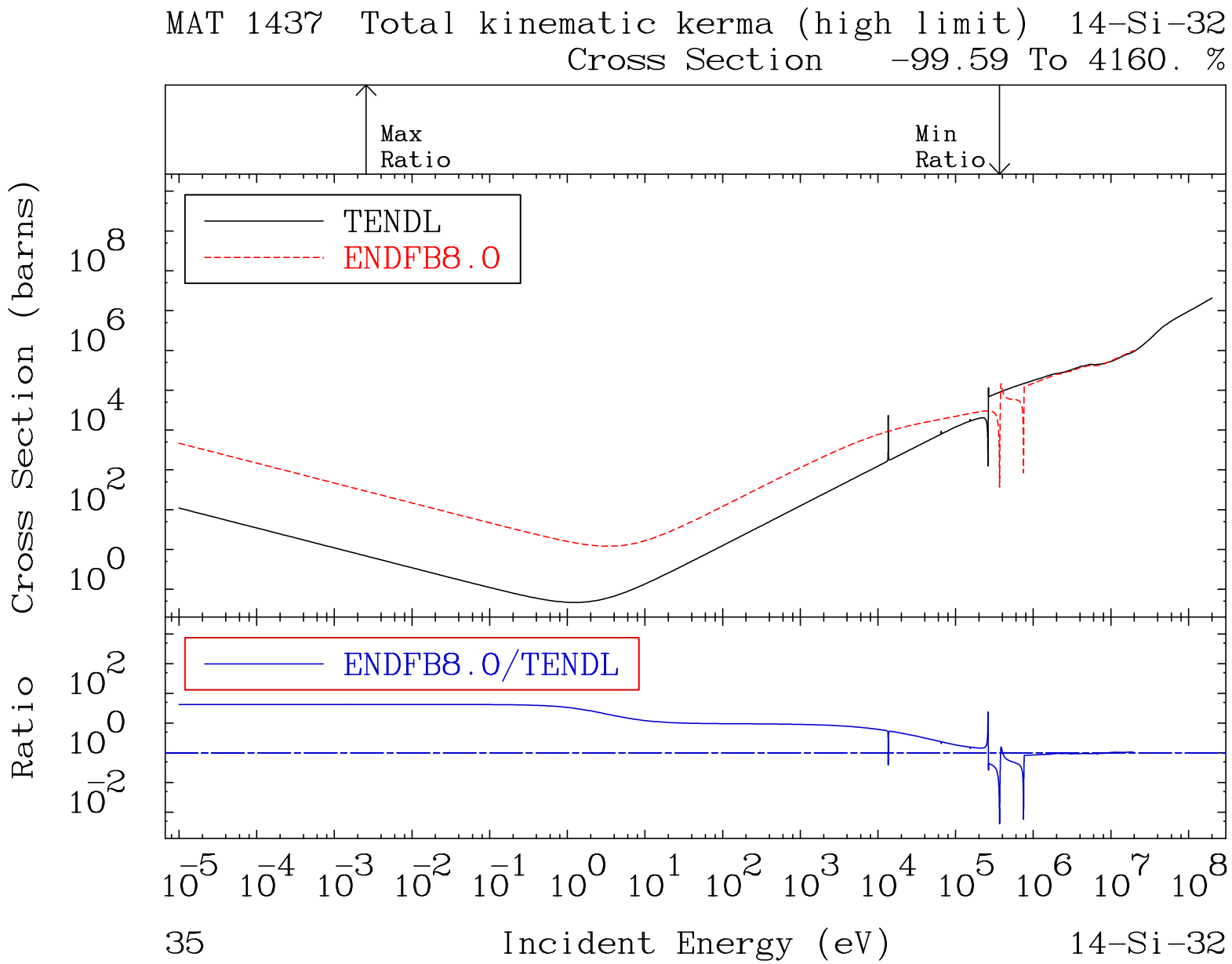

MAT 1437 Kerma non-elastic (all but mt2) 14-Si-32
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
14-Si-32

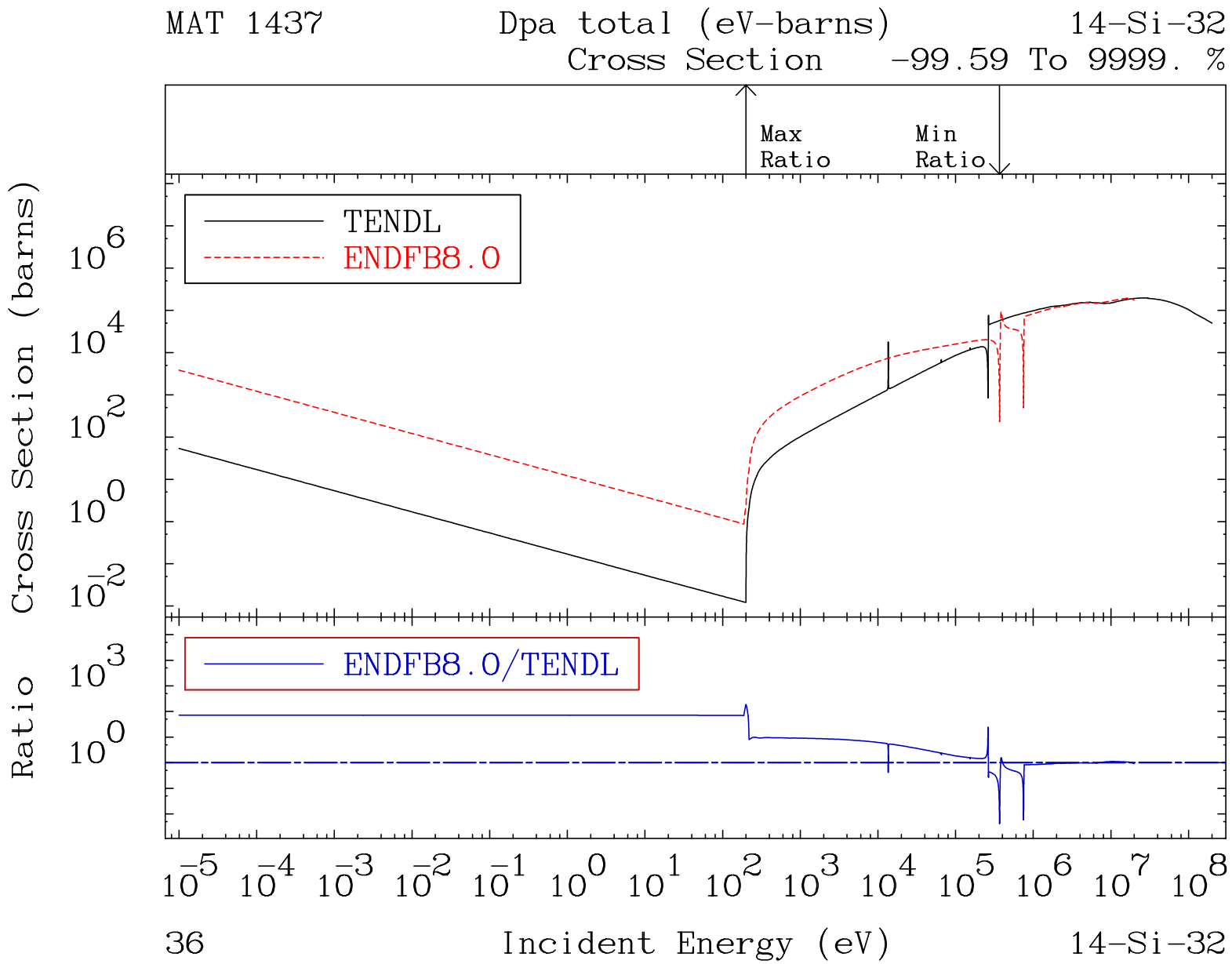

MAT 1437
Kerma inelastic (mt51-91)
14-Si-32
Cross Section -28.55 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0026 MeV
ENDFB8.0 Threshold 1.9800 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
14-Si-32

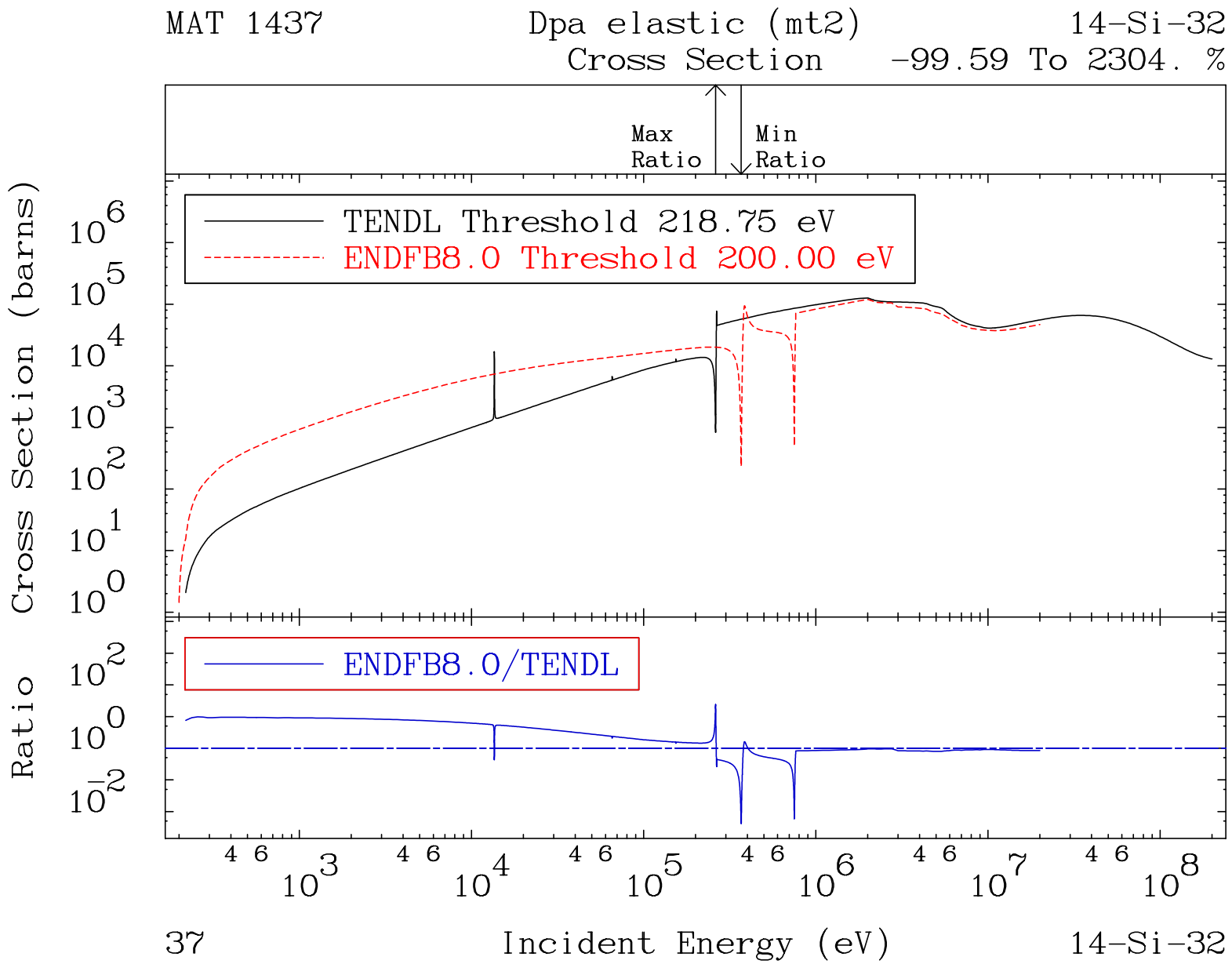

MAT 1437 Kerma fission (mt18 or mt19-20-21-38) 14-Si-32
Cross Section -28.55 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{8}
10^{4}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
32
Incident Energy (eV)
14-Si-32

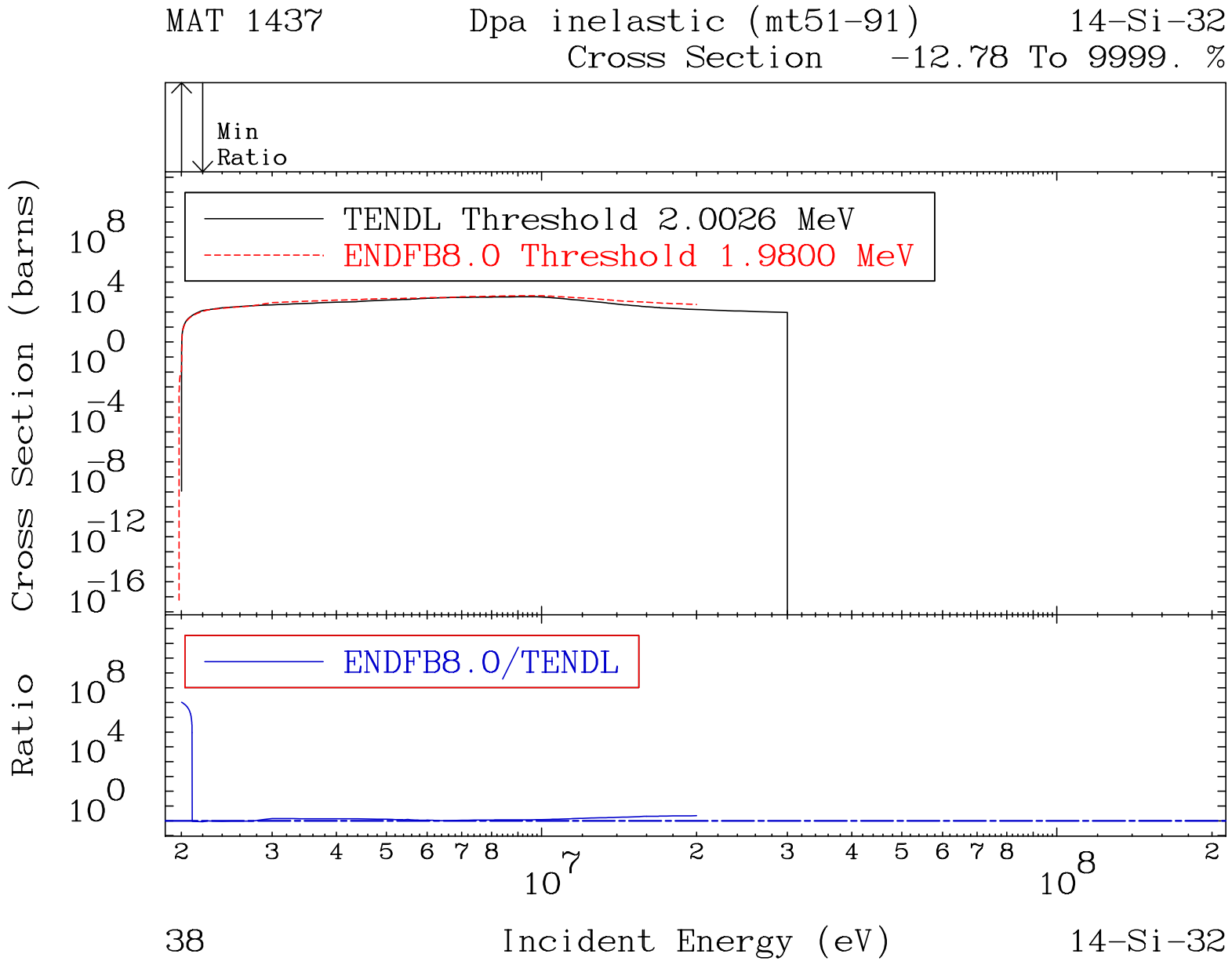

MAT 1437
Kerma capture (mt102)
14-Si-32
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
14-Si-32

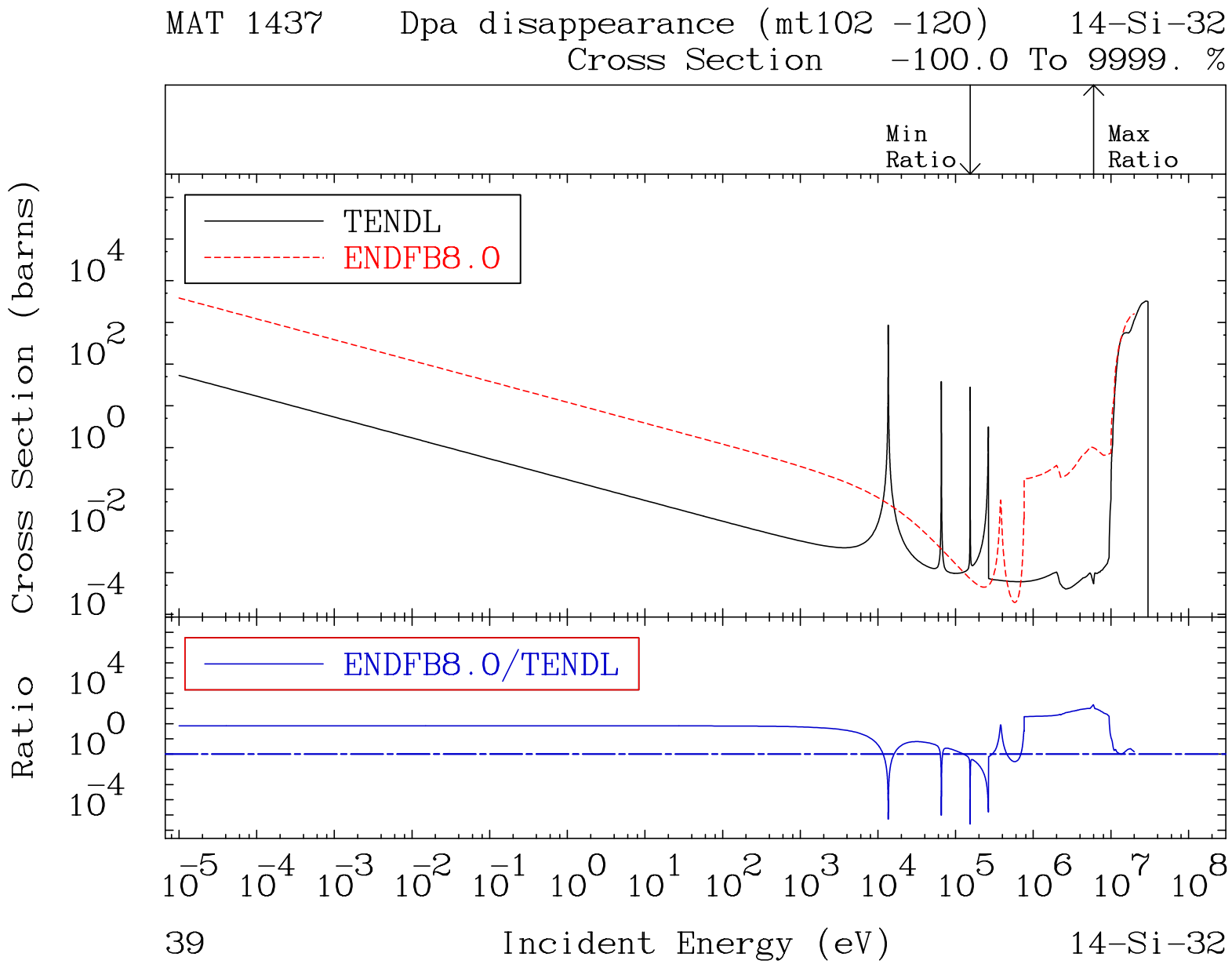

MAT 1437
Total photon (eV-barns)
14-Si-32
Cross Section -100.0 To 4436. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
34
14-Si-32


MAT 1437 Total kinematic kerma (high limit) 14-Si-32
Cross Section -99.59 To 4160. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
14-Si-32


MAT 1437
Dpa total (eV-barns)
14-Si-32
Cross Section -99.59 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
36
14-Si-32


MAT 1437
Dpa elastic (mt2)
Cross Section
14-Si-32
-99.59 To 2304. %
Max Ratio
Min Ratio
TENDL Threshold 218.75 eV
ENDFB8.0 Threshold 200.00 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
14-Si-32


MAT 1437
Dpa inelastic (mt51-91)
14-Si-32
Cross Section -12.78 To 9999. %
Min
Ratio
TENDL Threshold 2.0026 MeV
ENDFB8.0 Threshold 1.9800 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
14-Si-32


MAT 1437 Dpa disappearance (mt102 -120) 14-Si-32
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
39
14-Si-32