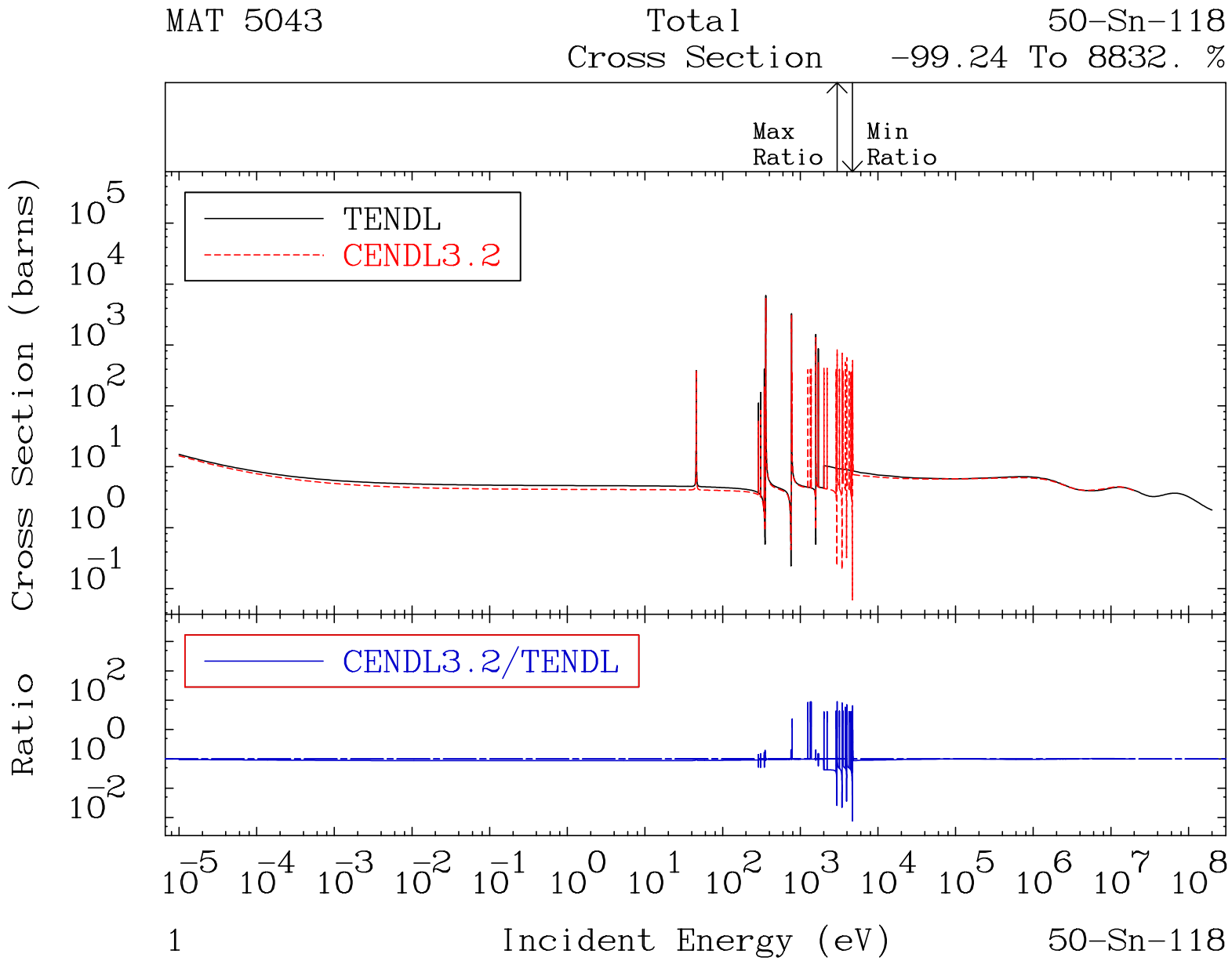
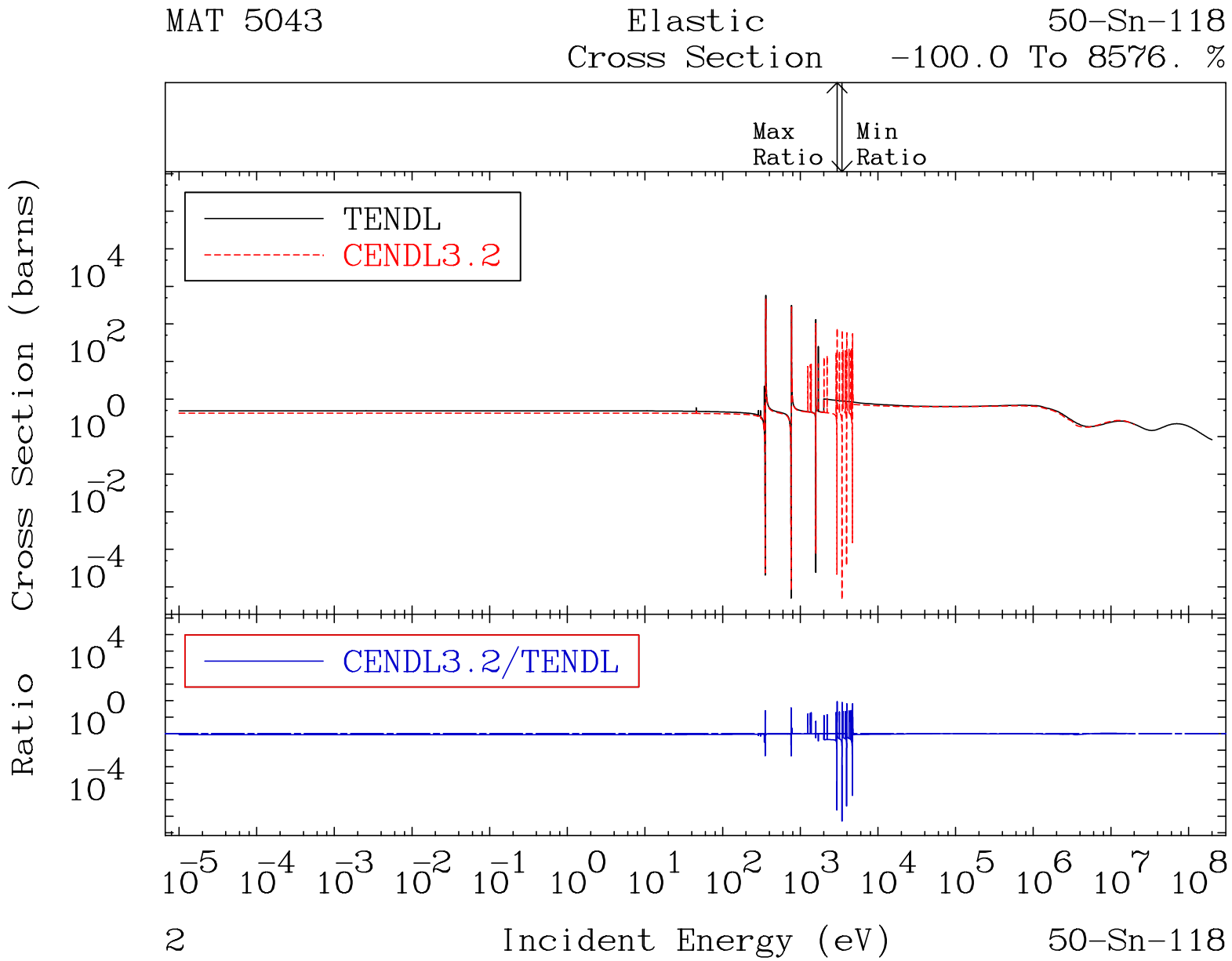
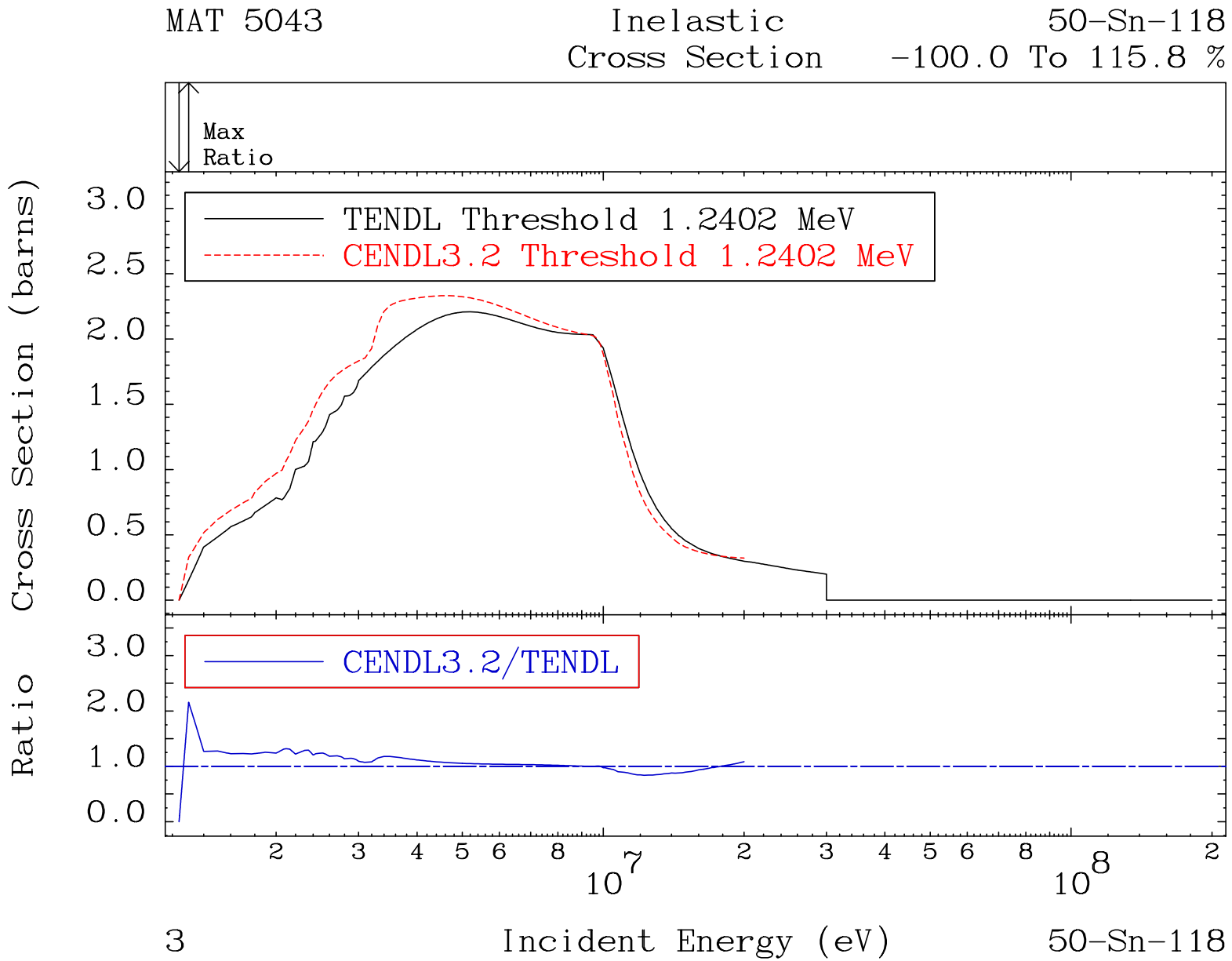
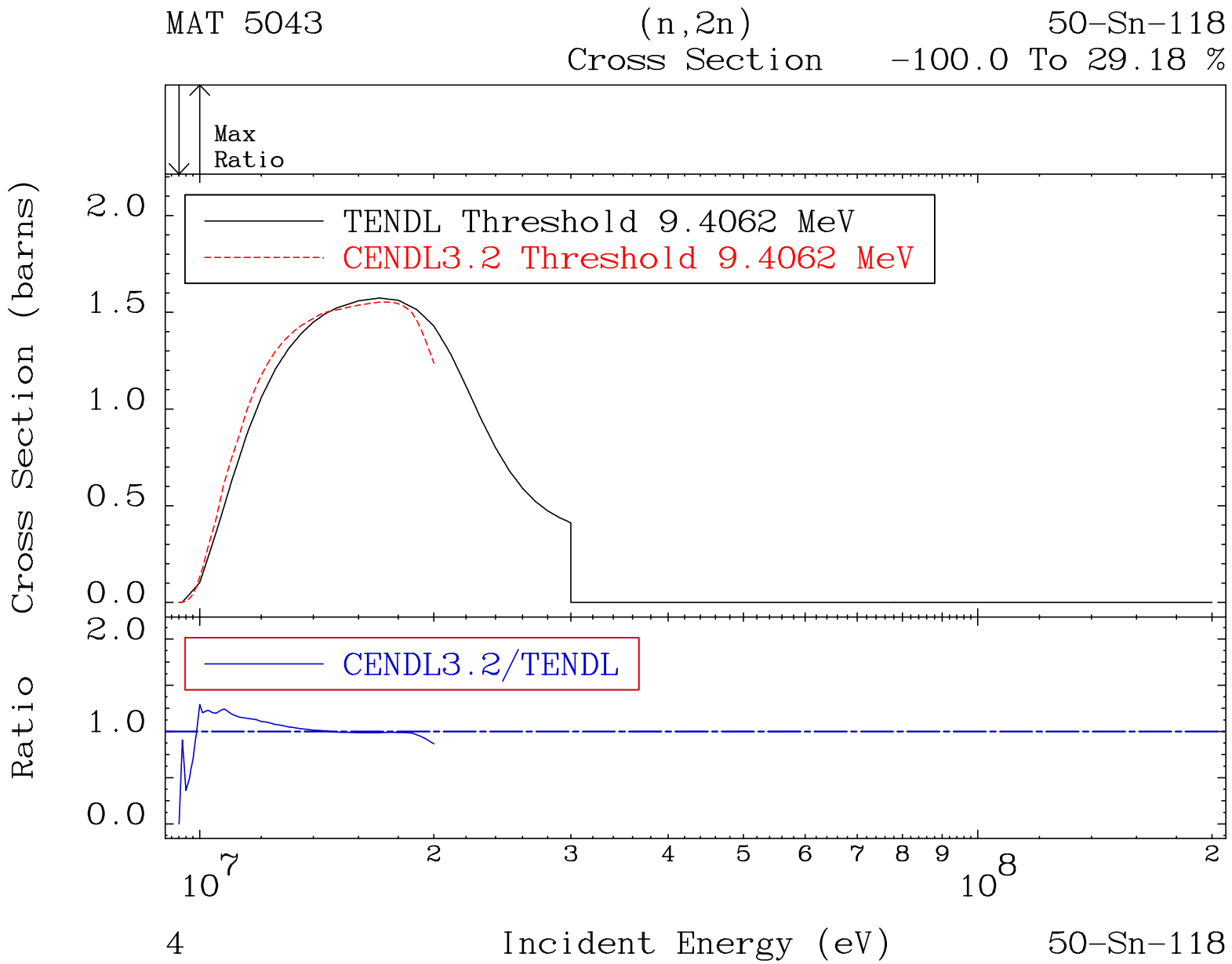
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

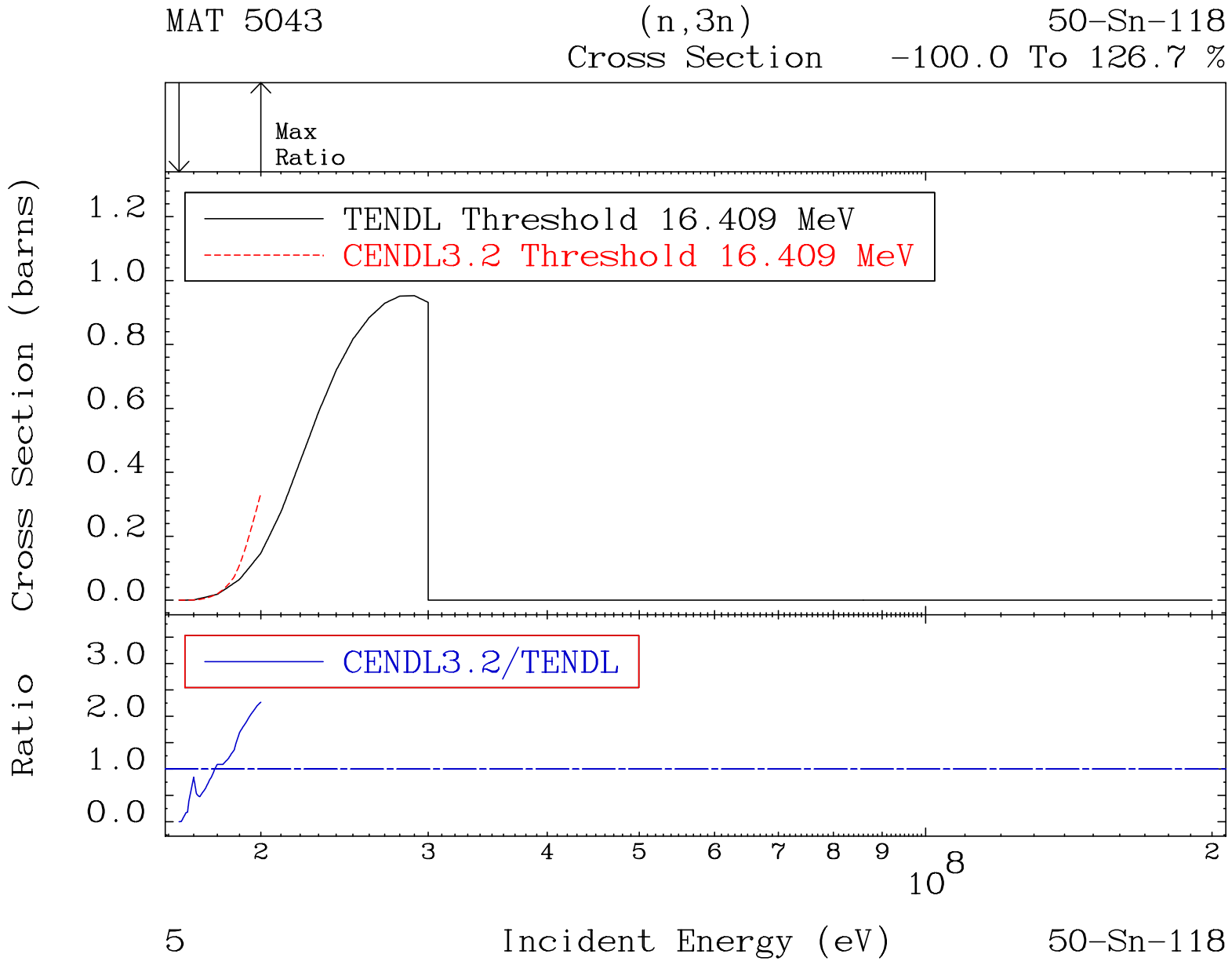
Press Mouse Button to Start

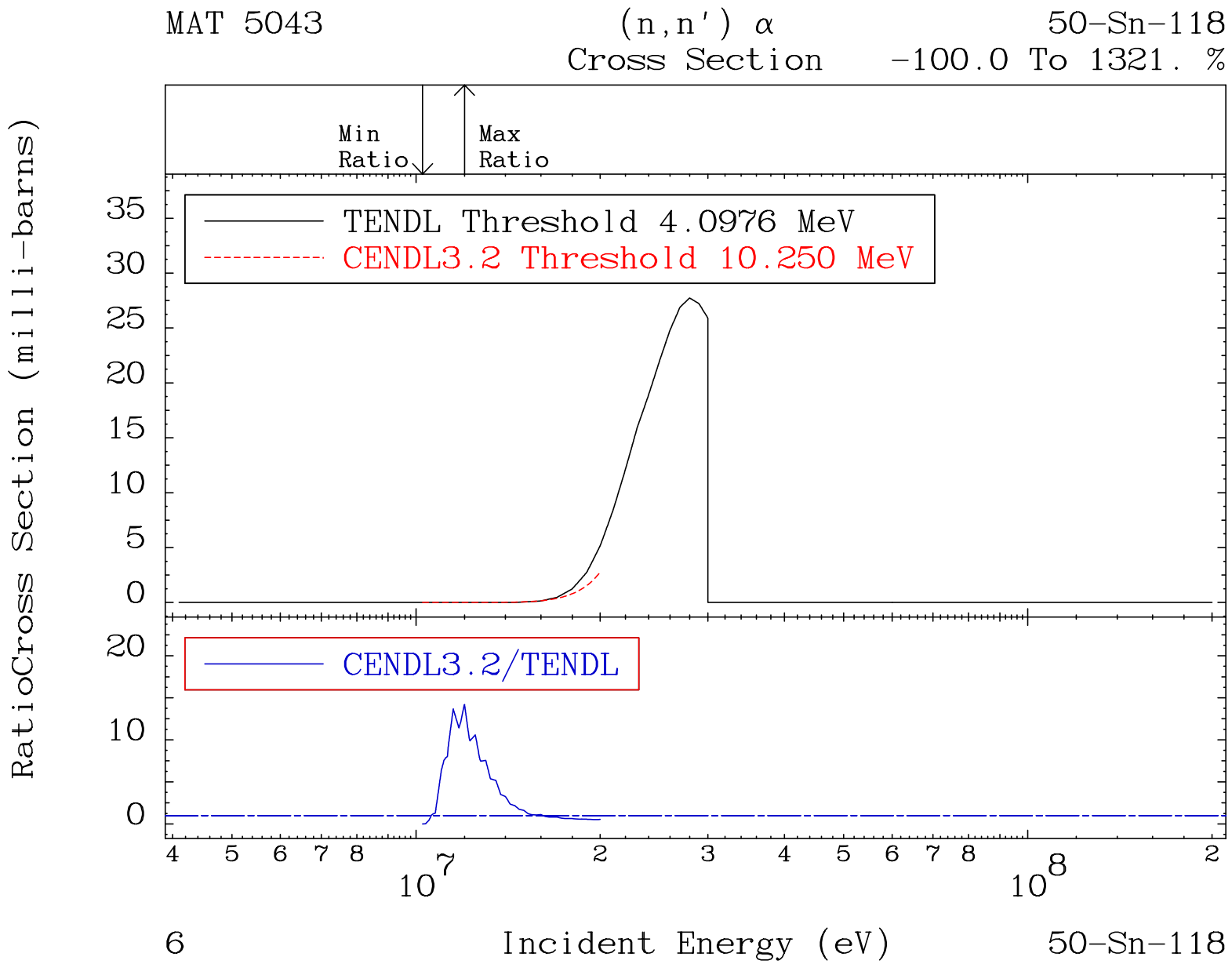

MAT 5043
Total
Cross Section
50-Sn-118
-99.24 To 8832. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
50-Sn-118

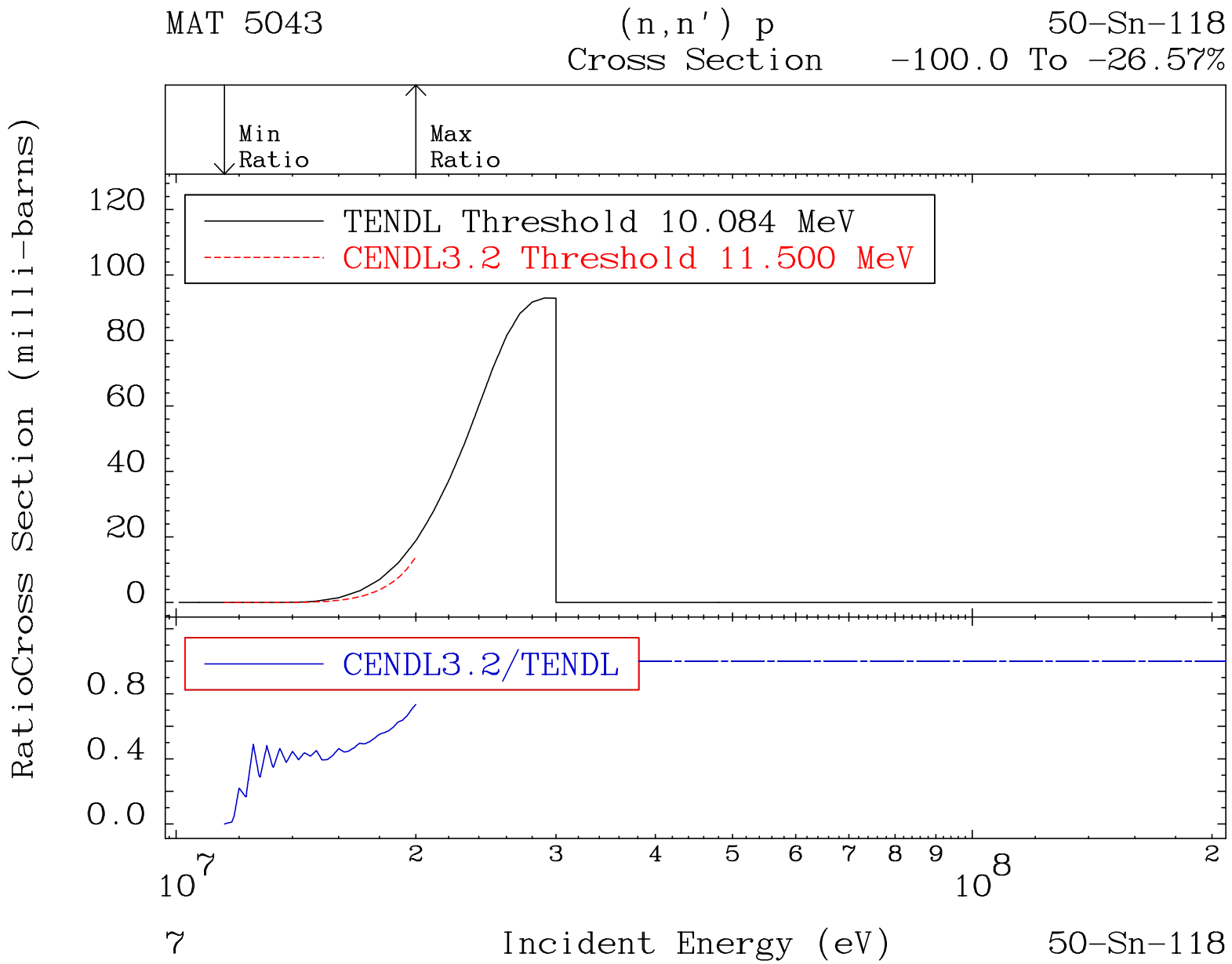

MAT 5043
Elastic
Cross Section
50-Sn-118
-100.0 To 8576. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
50-Sn-118

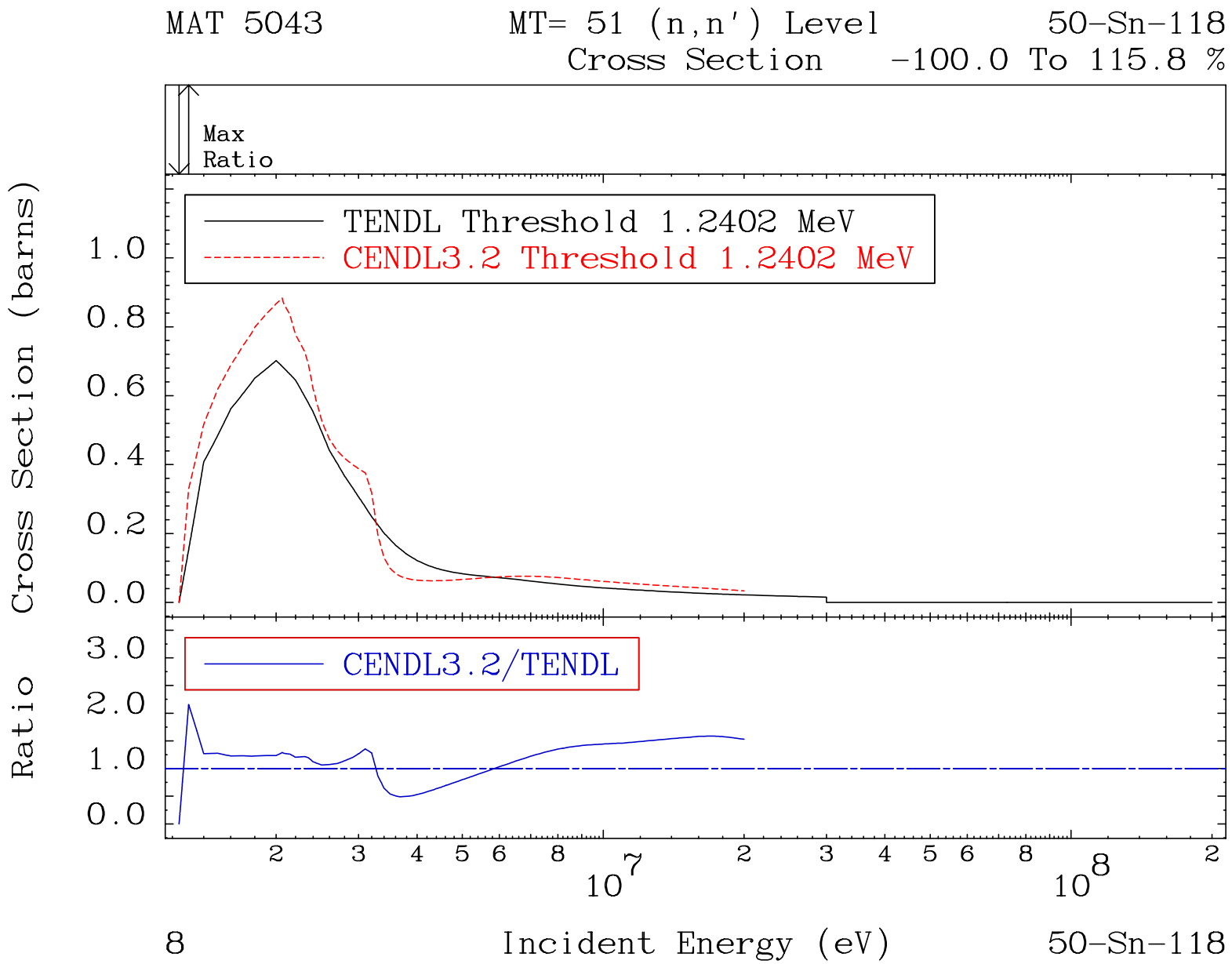

MAT 5043
Inelastic
Cross Section
50-Sn-118
-100.0 To 115.8 %
Max
Ratio
TENDL Threshold 1.2402 MeV
CENDL3.2 Threshold 1.2402 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
50-Sn-118

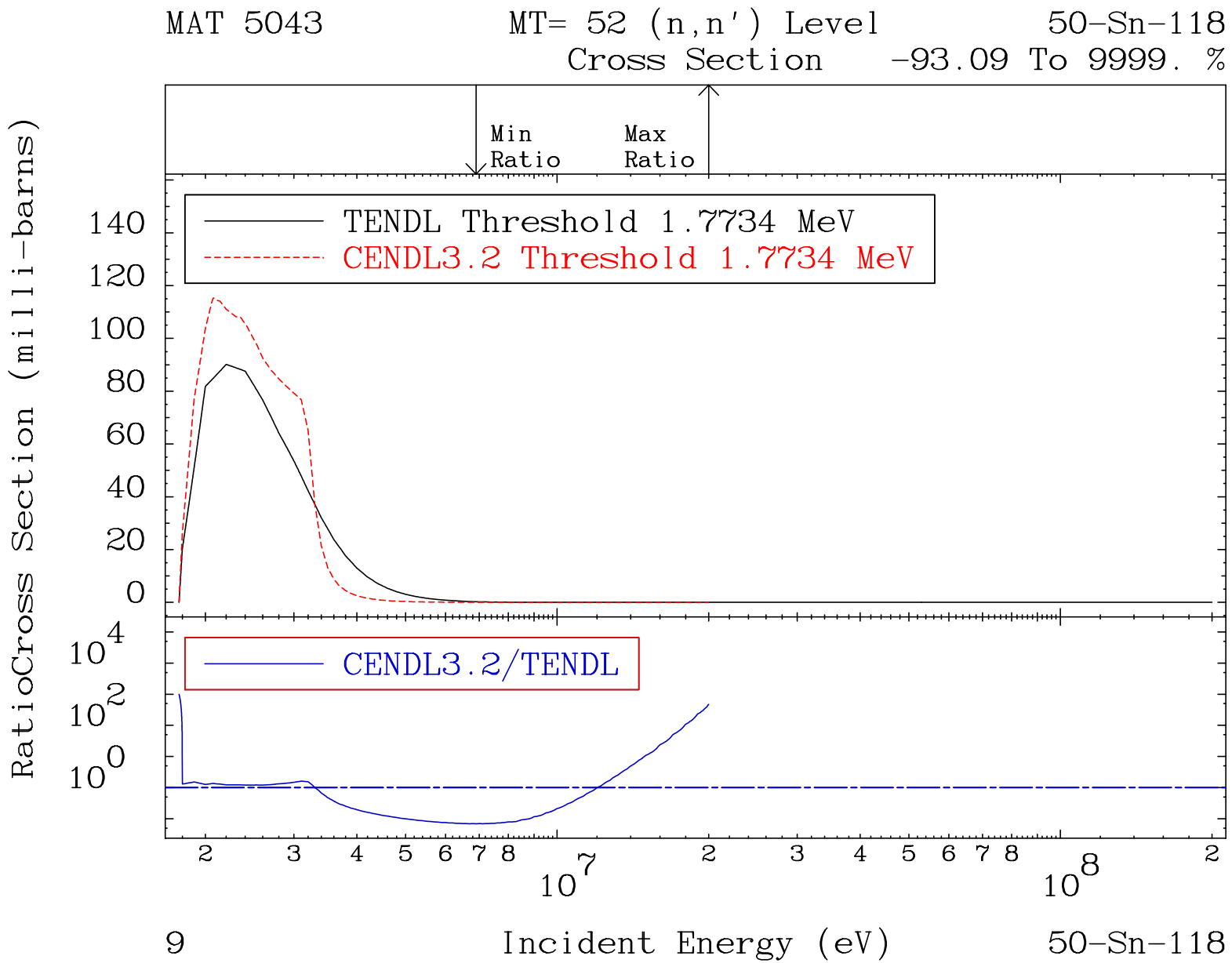

MAT 5043
(n,2n)
Cross Section
50-Sn-118
-100.0 To 29.18 %
Max
Ratio
TENDL Threshold 9.4062 MeV
CENDL3.2 Threshold 9.4062 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
4
50-Sn-118

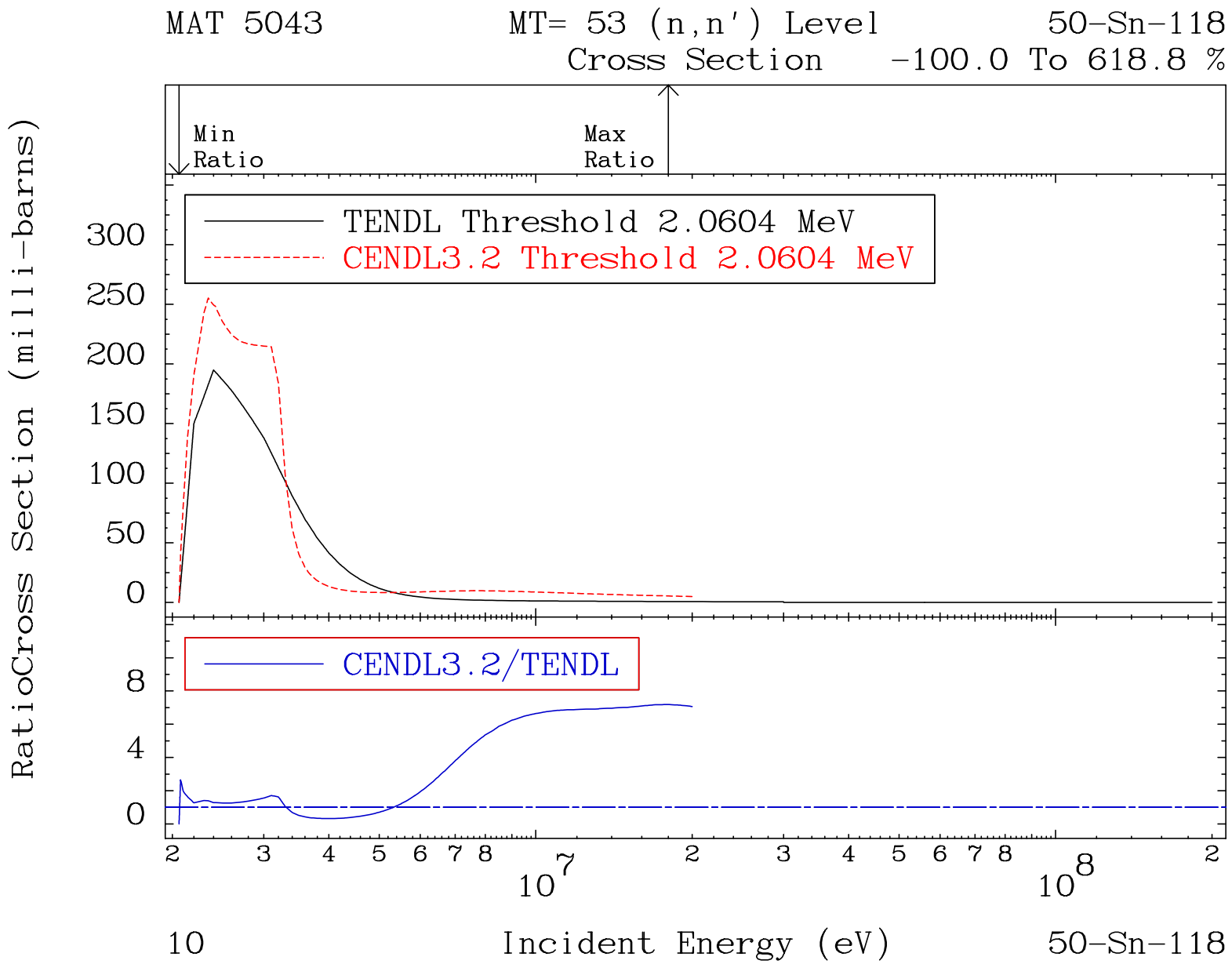

MAT 5043
(n,3n)
Cross Section
50-Sn-118
-100.0 To 126.7 %
Max
Ratio
TENDL Threshold 16.409 MeV
CENDL3.2 Threshold 16.409 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
50-Sn-118

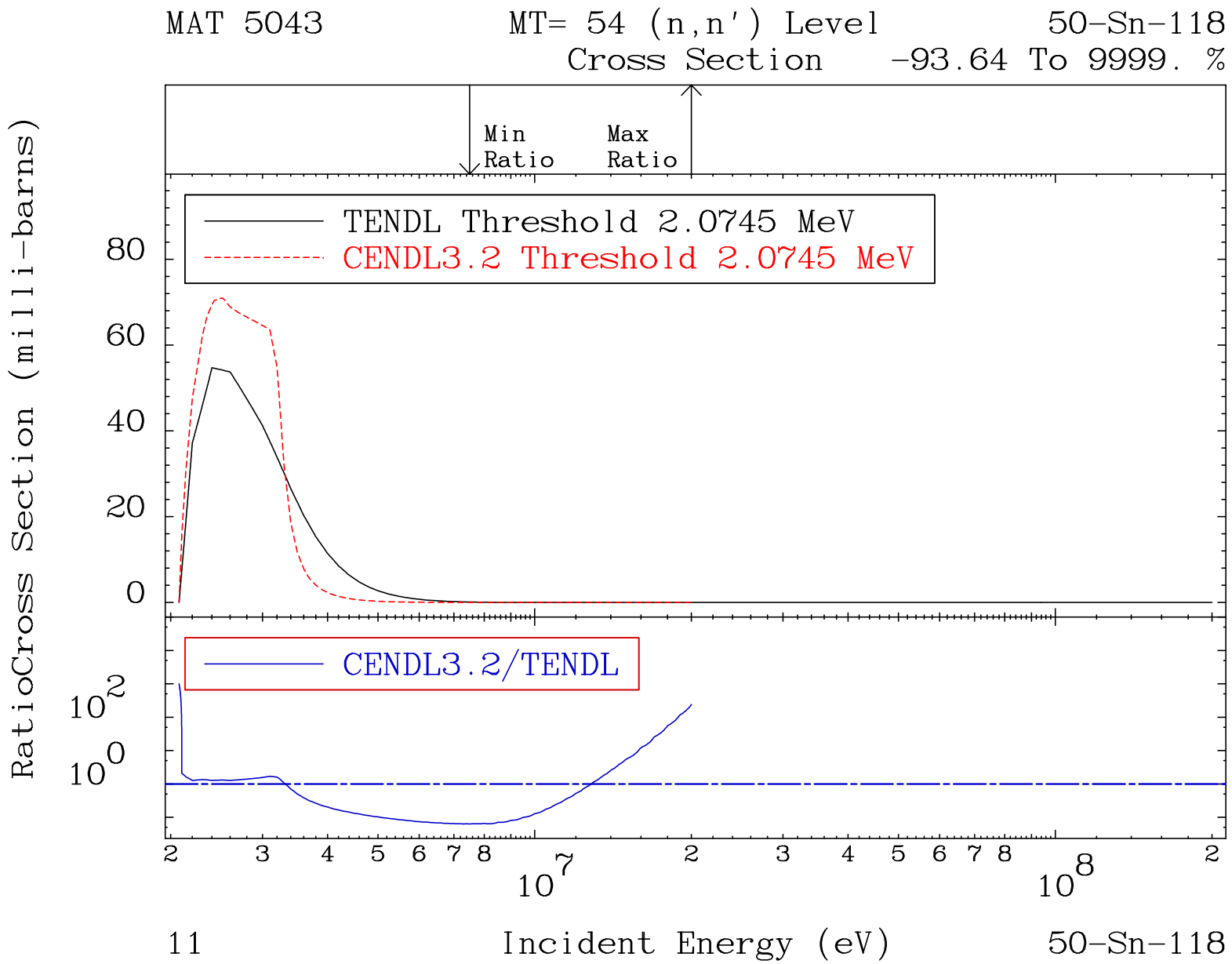

MAT 5043
(n,n') α
Cross Section
50-Sn-118
-100.0 To 1321. %
Min Ratio
Max Ratio
TENDL Threshold 4.0976 MeV
CENDL3.2 Threshold 10.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
20
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
6
50-Sn-118

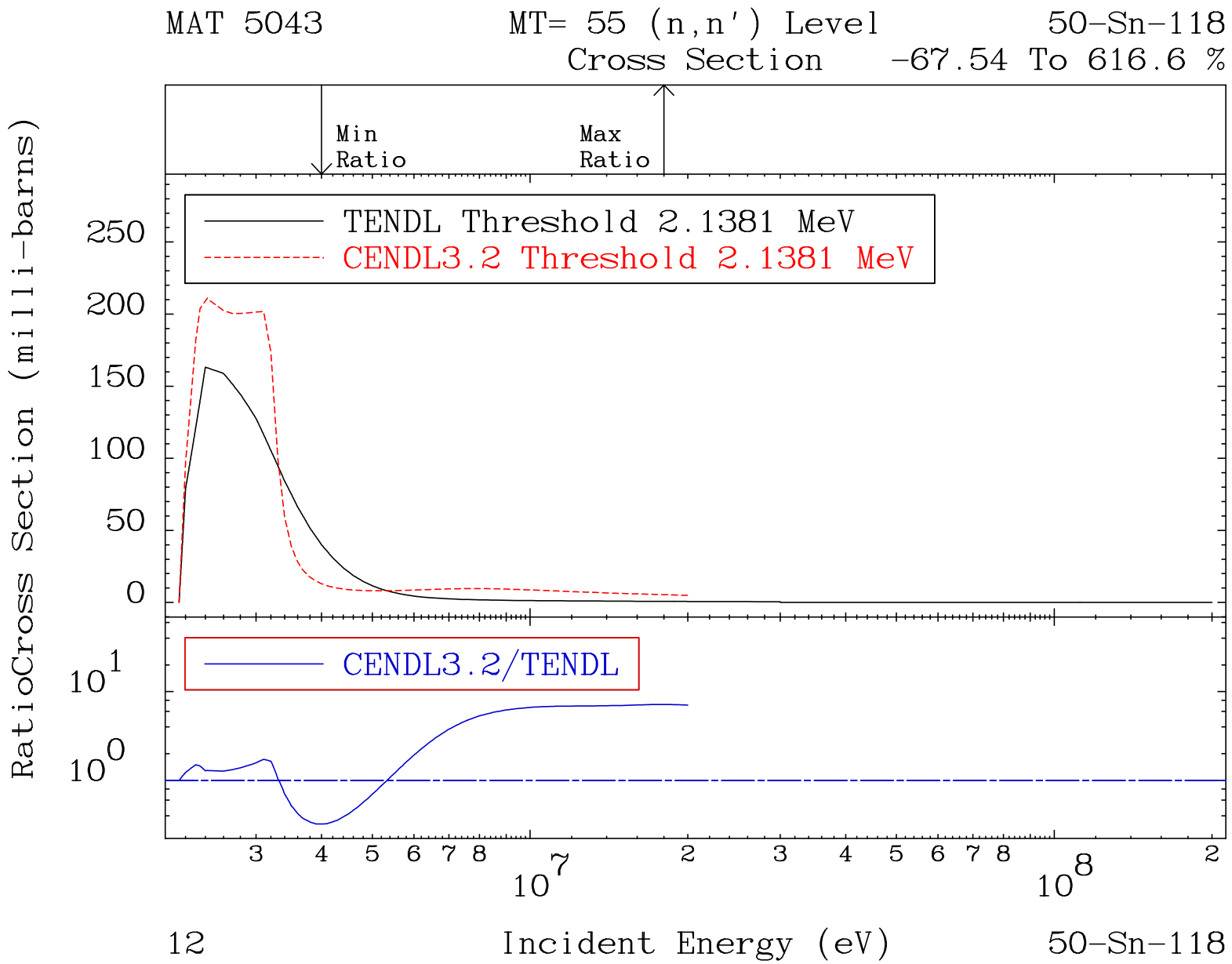

MAT 5043
(n,n') p
Cross Section
50-Sn-118
-100.0 To -26.57%
Min Ratio
Max Ratio
TENDL Threshold 10.084 MeV
CENDL3.2 Threshold 11.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
0.8
0.4
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
50-Sn-118

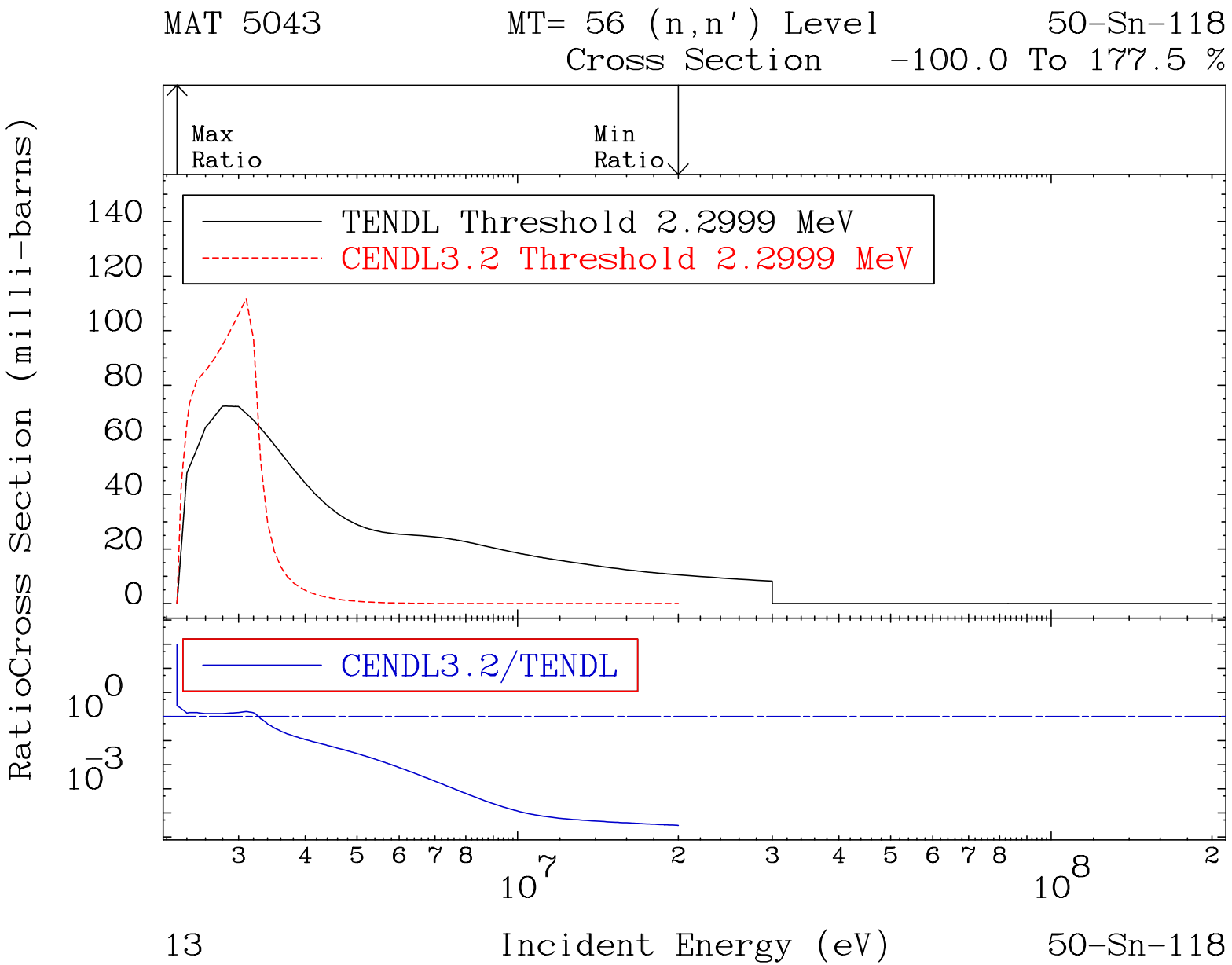

MAT 5043
MT= 51 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 115.8 %
Max
Ratio
TENDL Threshold 1.2402 MeV
CENDL3.2 Threshold 1.2402 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
8
Incident Energy (eV)
50-Sn-118

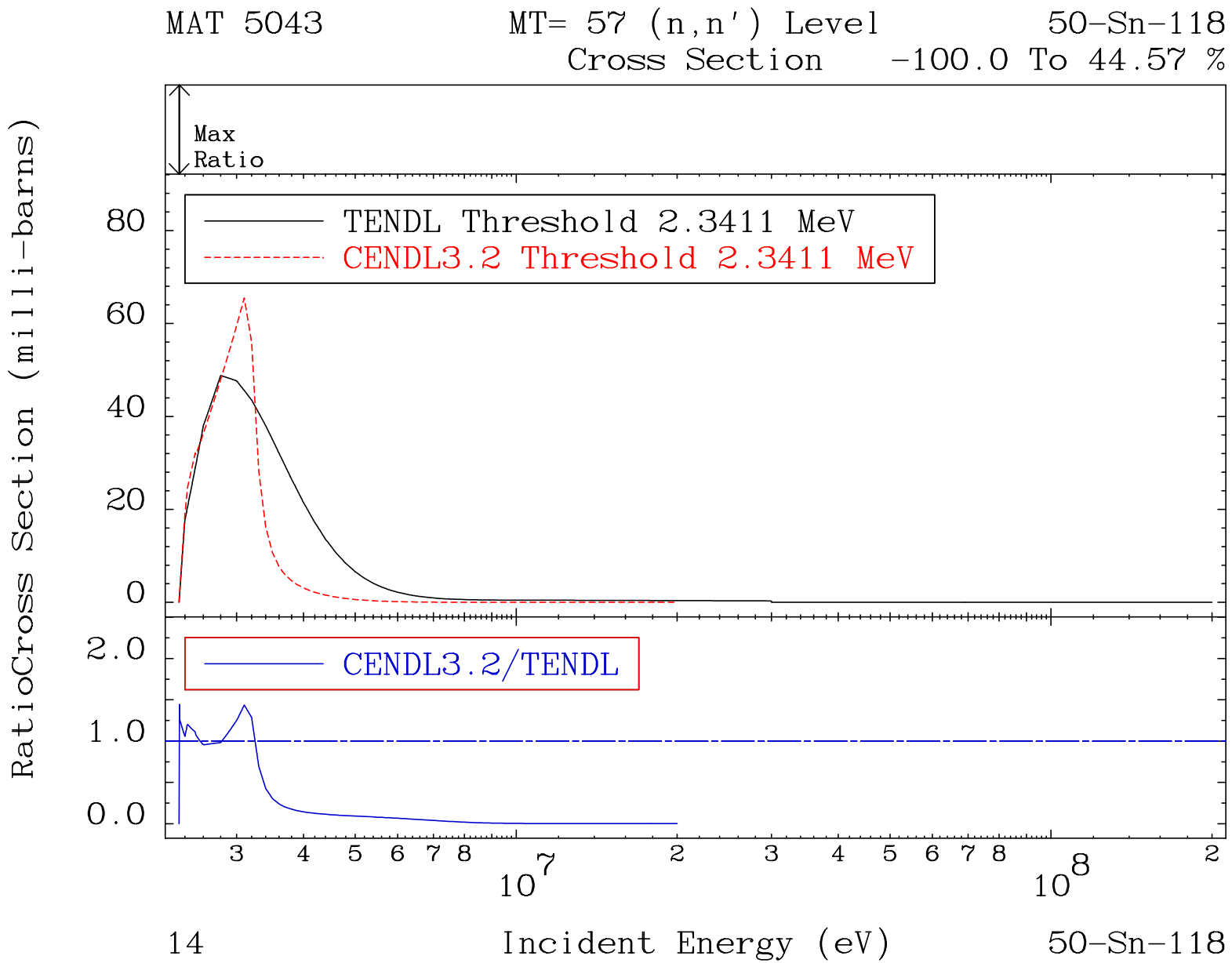

MAT 5043
MT= 52 (n,n') Level
50-Sn-118
Cross Section -93.09 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.7734 MeV
CENDL3.2 Threshold 1.7734 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
50-Sn-118

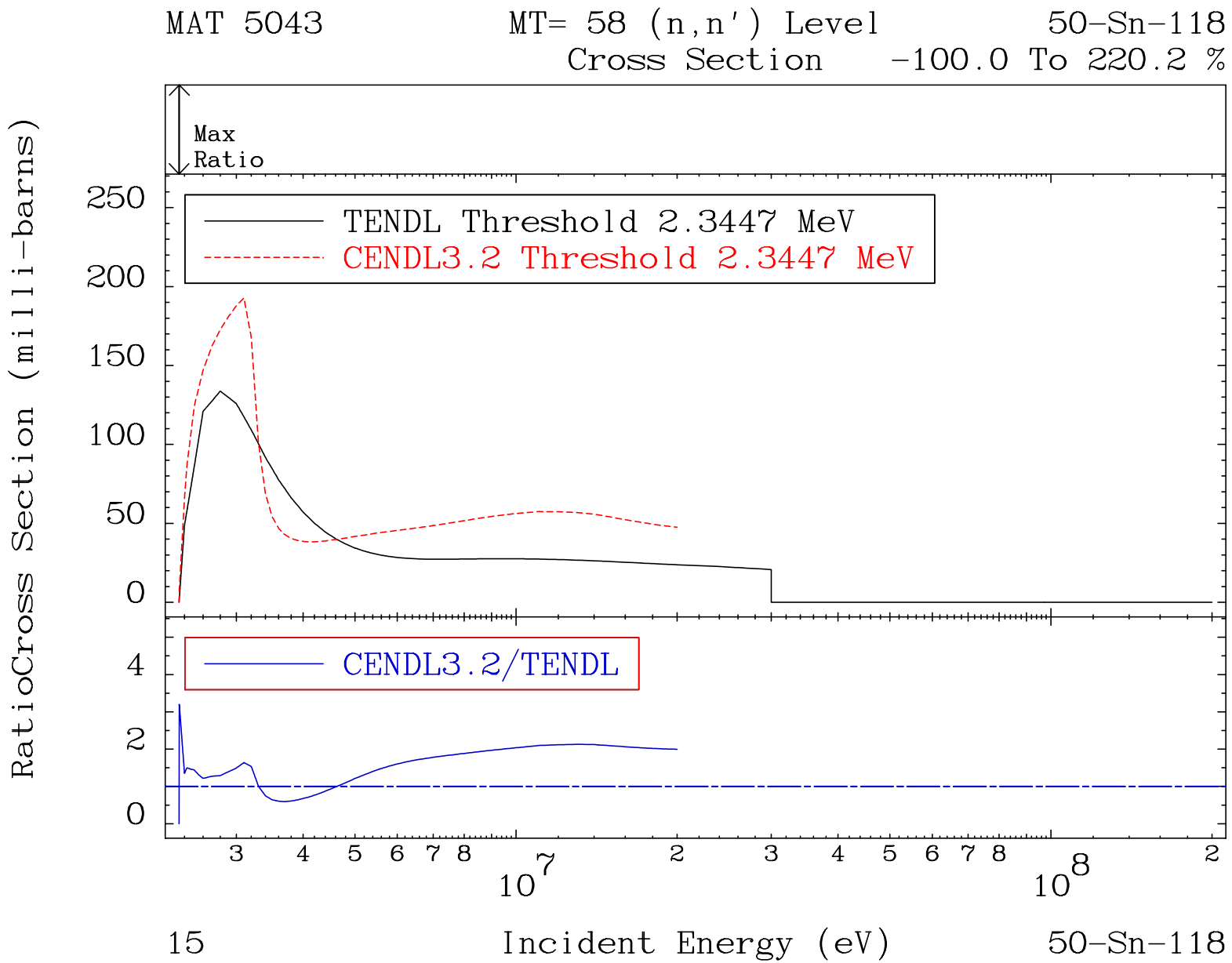

MAT 5043
MT= 53 (n,n') Level
50-Sn-118
Cross Section -100.0 To 618.8 %
Min Ratio
Max Ratio
TENDL Threshold 2.0604 MeV
CENDL3.2 Threshold 2.0604 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
50-Sn-118

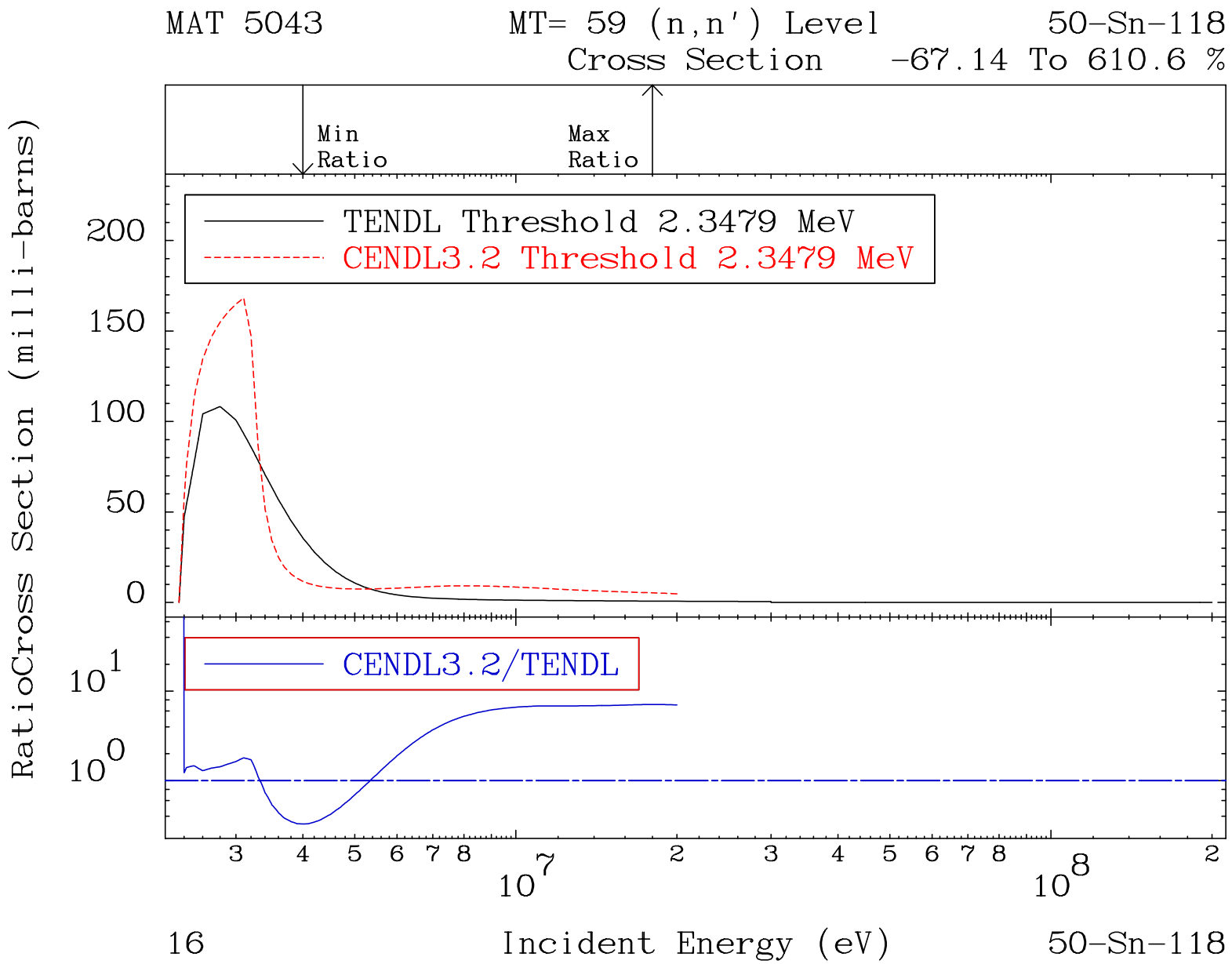

MAT 5043
MT= 54 (n,n') Level
50-Sn-118
Cross Section -93.64 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0745 MeV
CENDL3.2 Threshold 2.0745 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
11
50-Sn-118

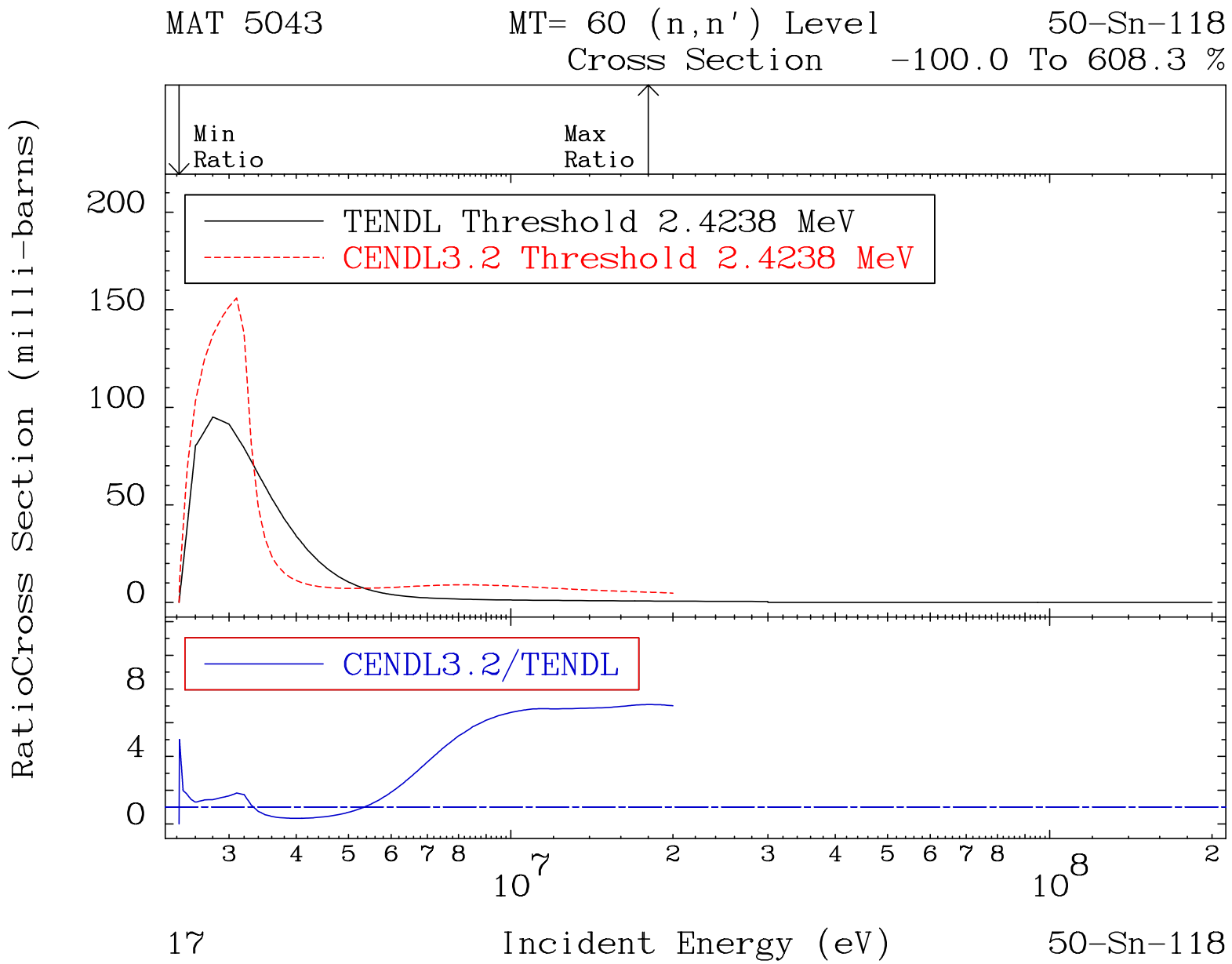

MAT 5043
MT= 55 (n,n') Level
50-Sn-118
Cross Section -67.54 To 616.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.1381 MeV
CENDL3.2 Threshold 2.1381 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
50-Sn-118

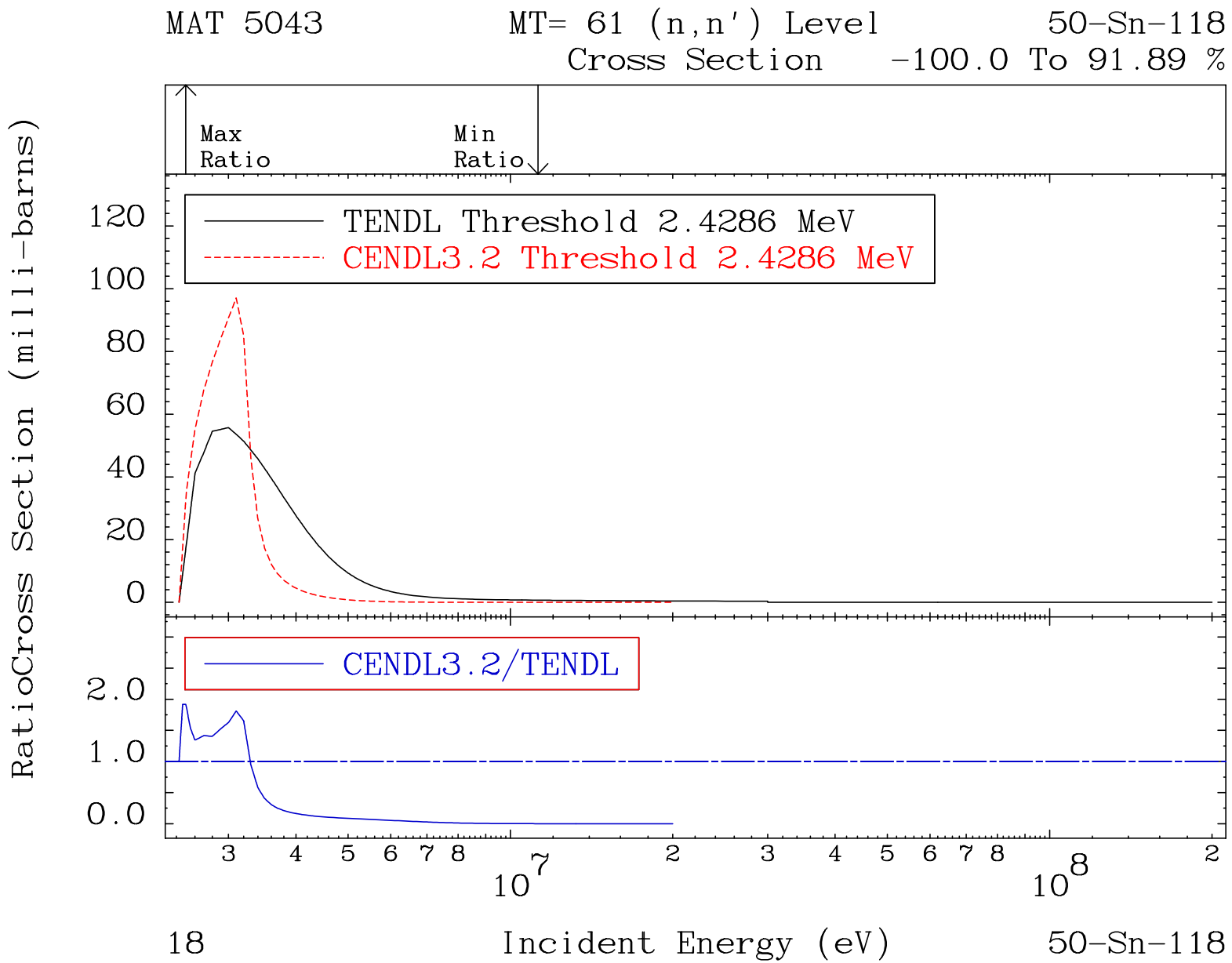

MAT 5043
MT= 56 (n,n') Level
50-Sn-118
Cross Section -100.0 To 177.5 %
Max Ratio
Min Ratio
TENDL Threshold 2.2999 MeV
CENDL3.2 Threshold 2.2999 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^0
10^-3
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
50-Sn-118

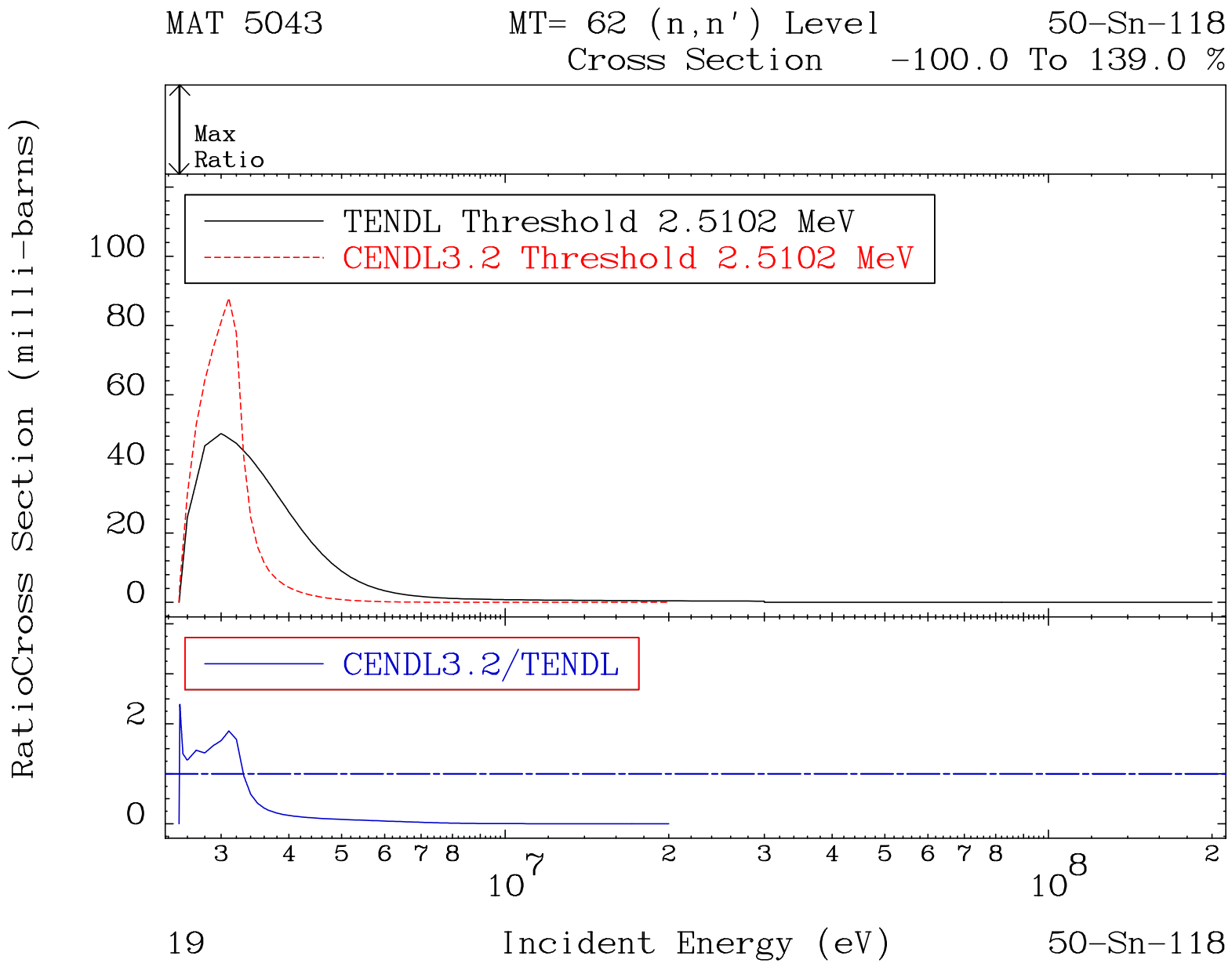

MAT 5043
MT= 57 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 44.57 %
Max
Ratio
TENDL Threshold 2.3411 MeV
CENDL3.2 Threshold 2.3411 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
50-Sn-118

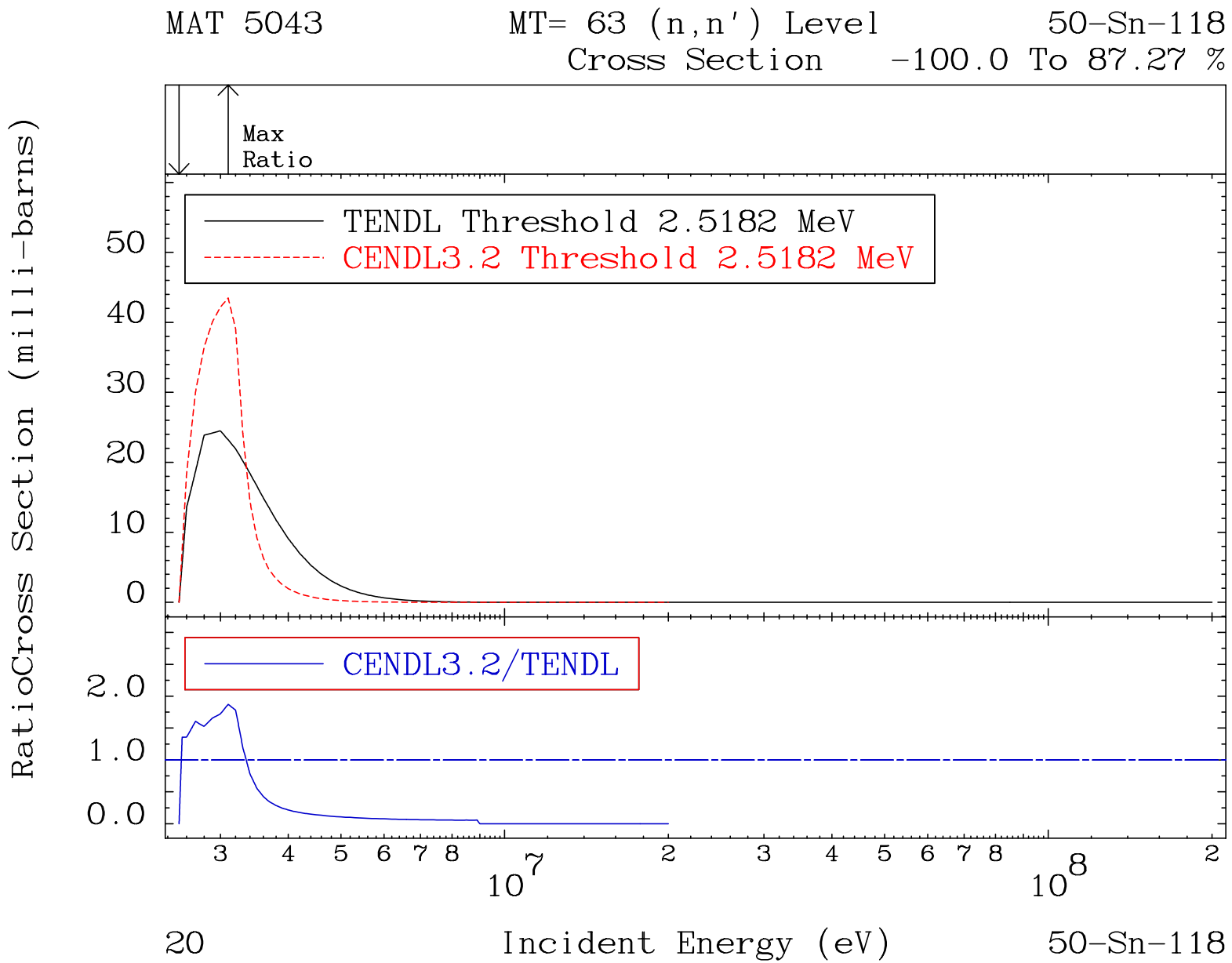

MAT 5043
MT= 58 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 220.2 %
Max
Ratio
TENDL Threshold 2.3447 MeV
CENDL3.2 Threshold 2.3447 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
50-Sn-118

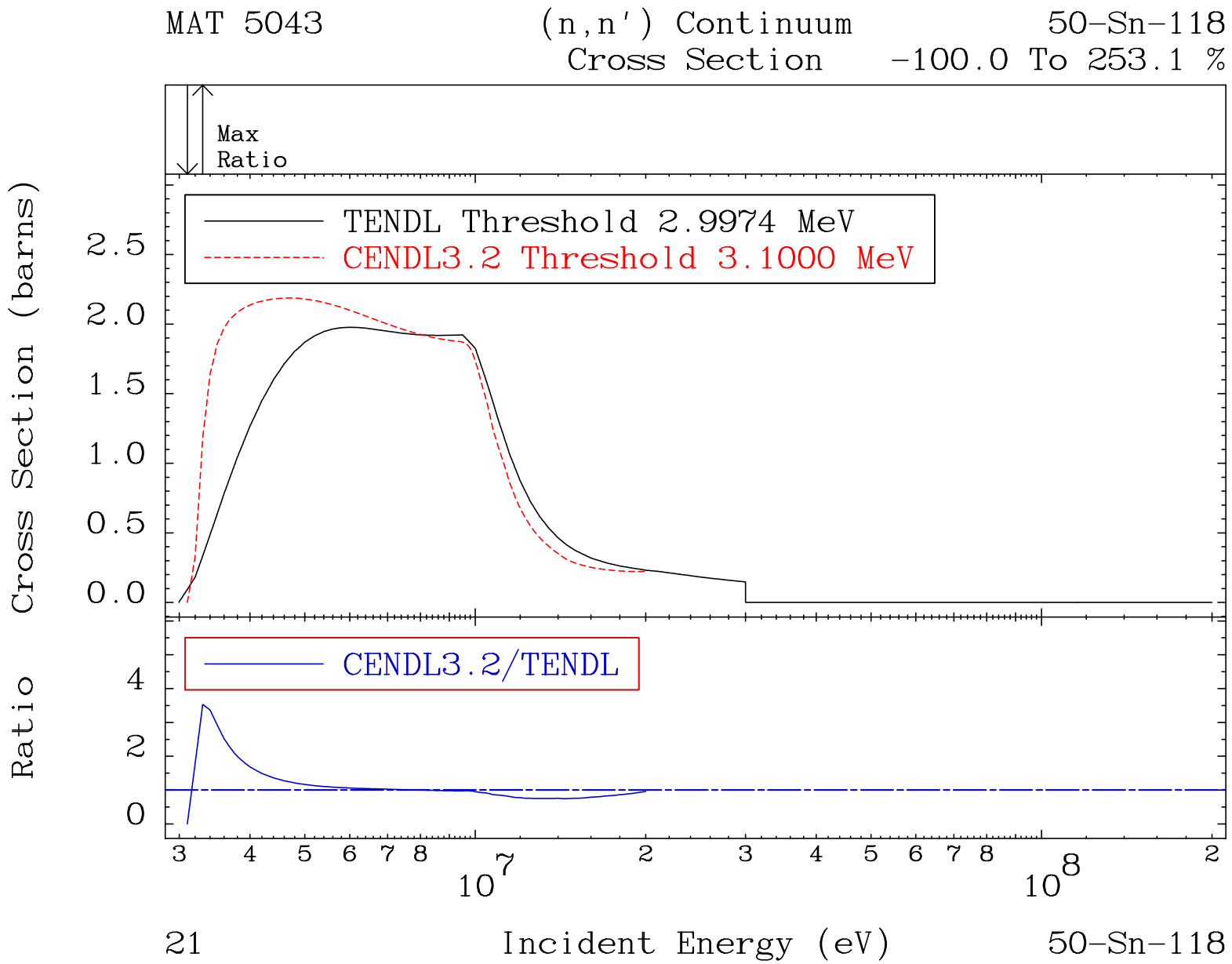

MAT 5043
MT= 59 (n,n') Level
50-Sn-118
Cross Section -67.14 To 610.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.3479 MeV
CENDL3.2 Threshold 2.3479 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
50-Sn-118

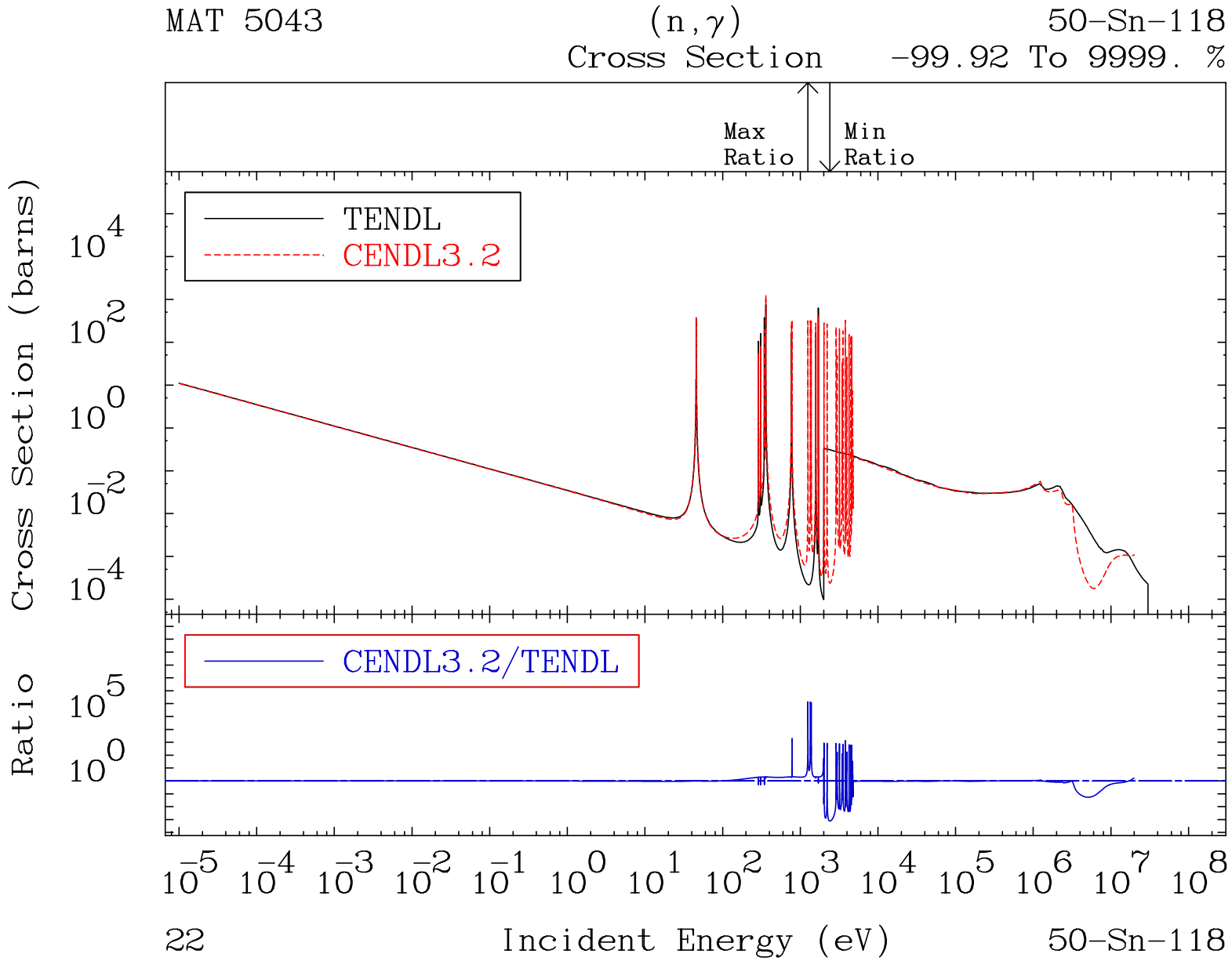

MAT 5043
MT= 60 (n,n') Level
50-Sn-118
Cross Section -100.0 To 608.3 %
Min Ratio
Max Ratio
TENDL Threshold 2.4238 MeV
CENDL3.2 Threshold 2.4238 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
50-Sn-118

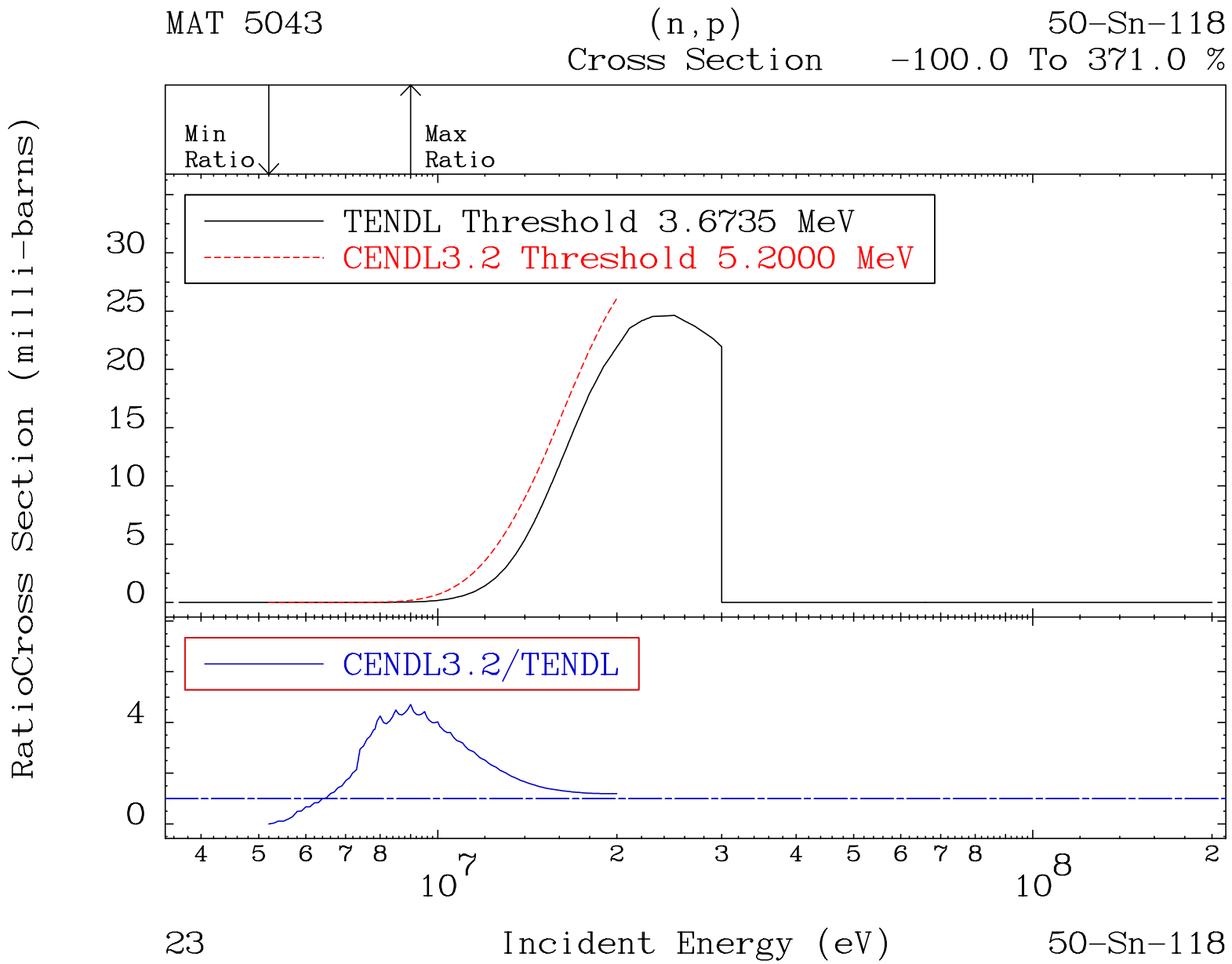

MAT 5043
MT= 61 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 91.89 %
Max Ratio
Min Ratio
TENDL Threshold 2.4286 MeV
CENDL3.2 Threshold 2.4286 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
50-Sn-118

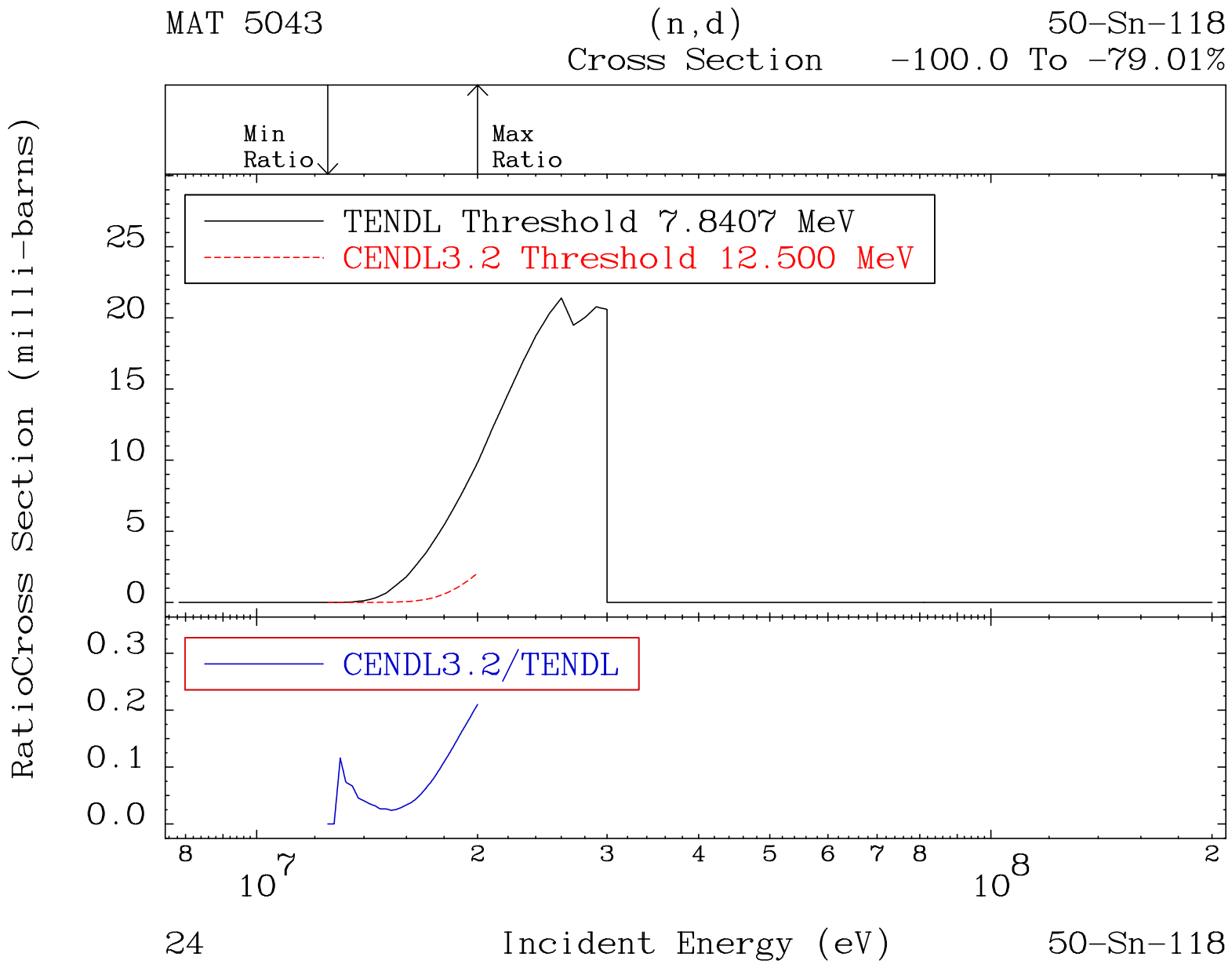

MAT 5043
MT= 62 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 139.0 %
Max
Ratio
TENDL Threshold 2.5102 MeV
CENDL3.2 Threshold 2.5102 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
50-Sn-118

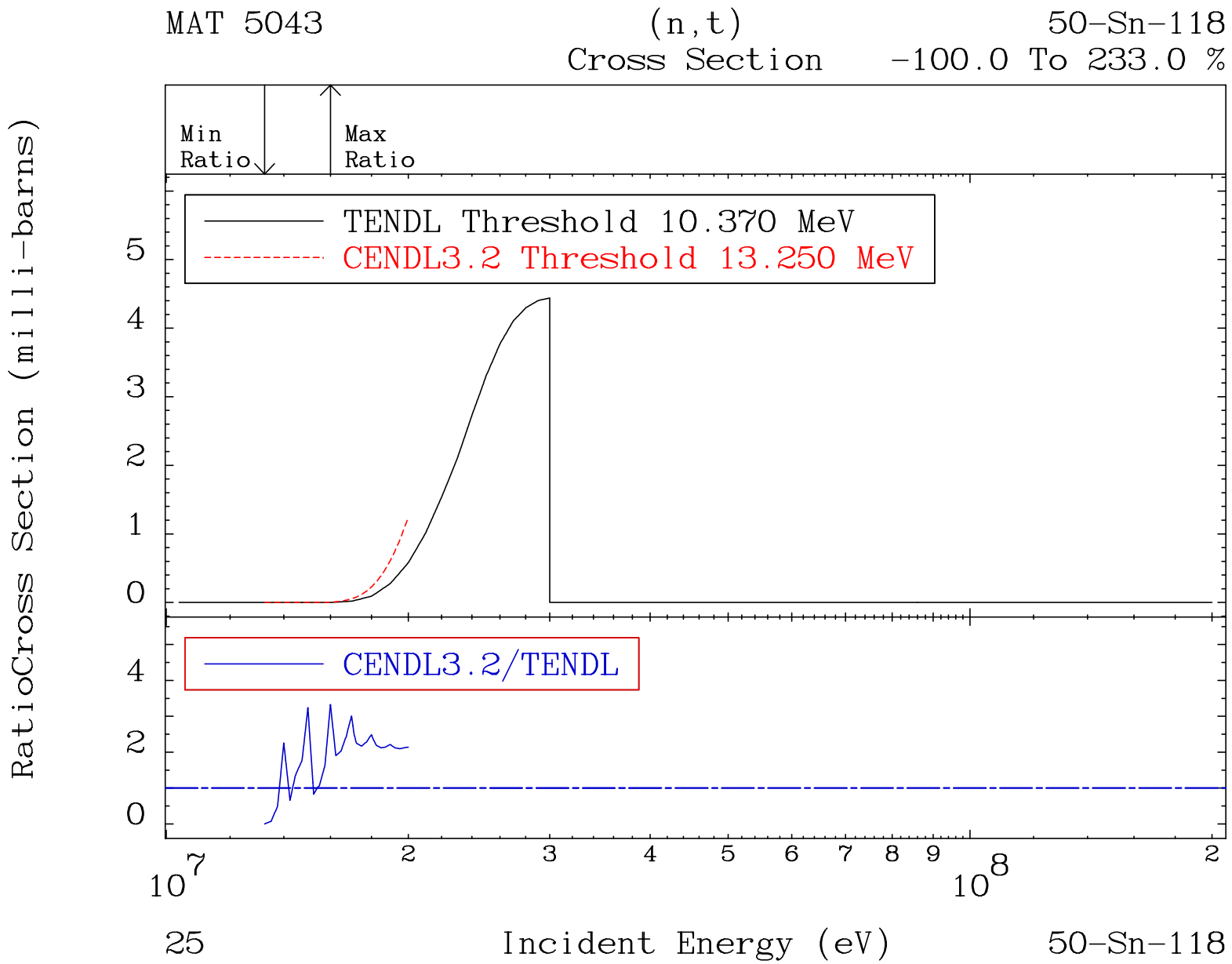

MAT 5043
MT= 63 (n,n') Level
50-Sn-118
Cross Section
-100.0 To 87.27 %
Max
Ratio
TENDL Threshold 2.5182 MeV
CENDL3.2 Threshold 2.5182 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
50-Sn-118

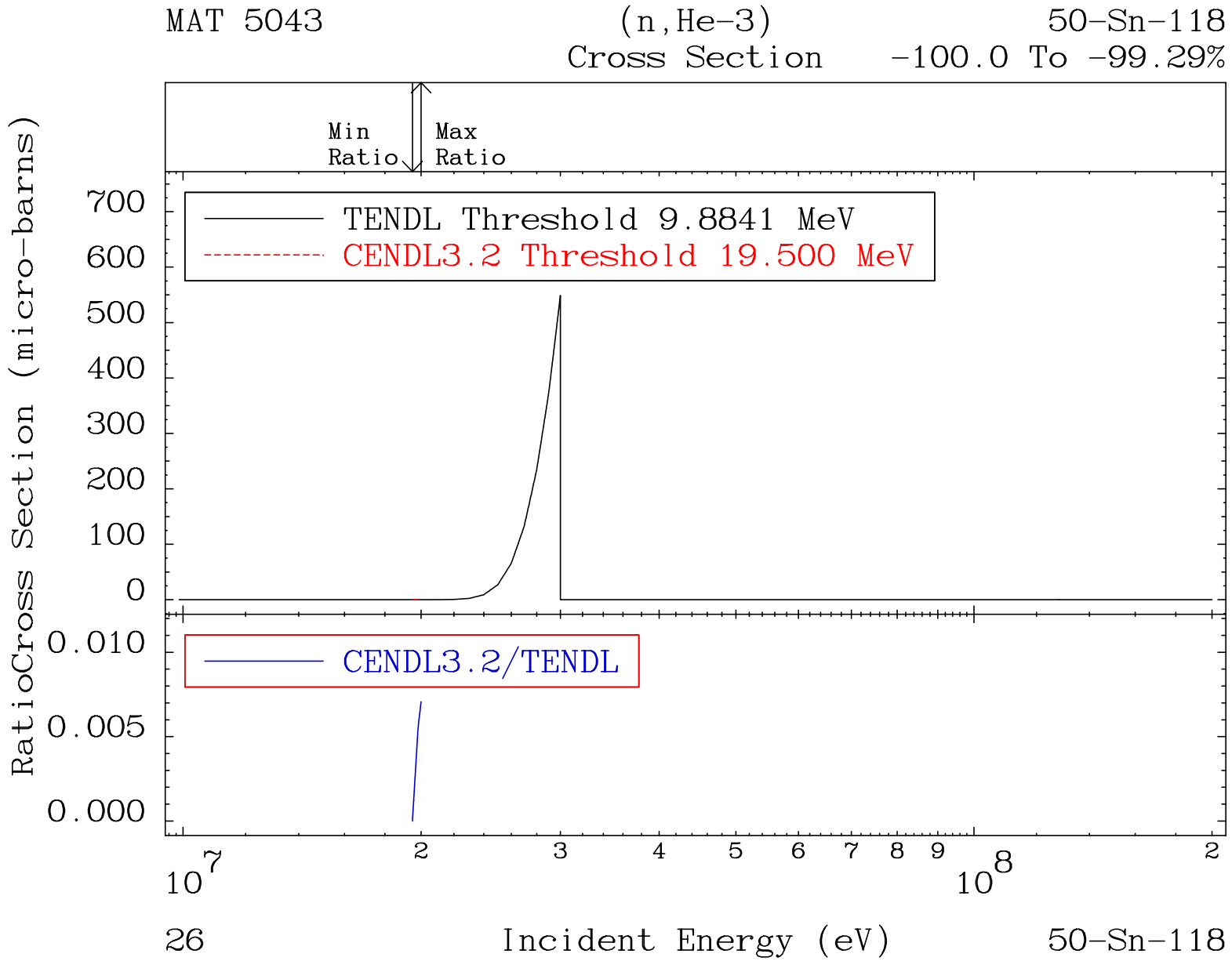

MAT 5043
(n,n') Continuum
Cross Section
50-Sn-118
-100.0 To 253.1 %
Max
Ratio
TENDL Threshold 2.9974 MeV
CENDL3.2 Threshold 3.1000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
50-Sn-118

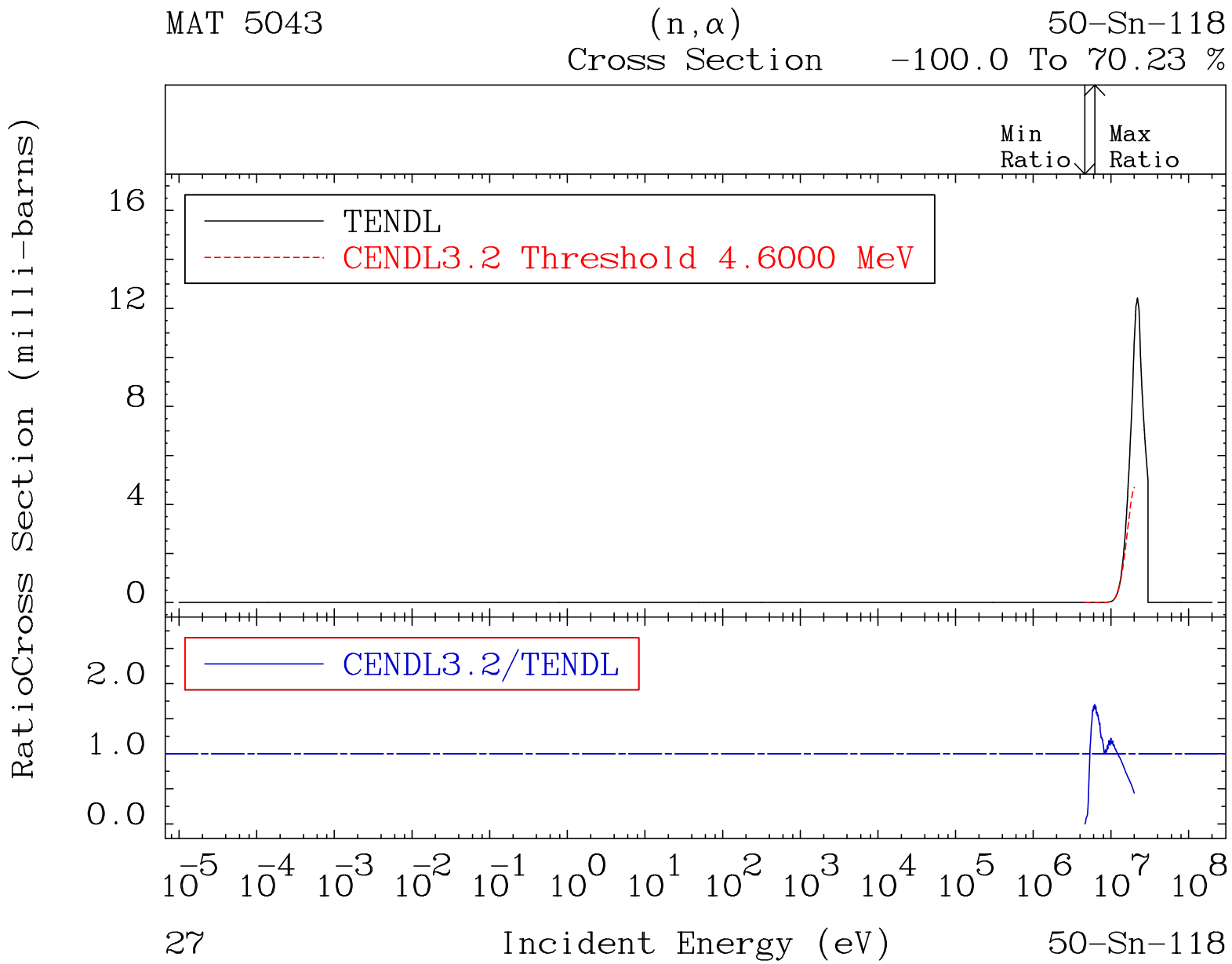

MAT 5043
(n,γ)
Cross Section
50-Sn-118
-99.92 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22
50-Sn-118

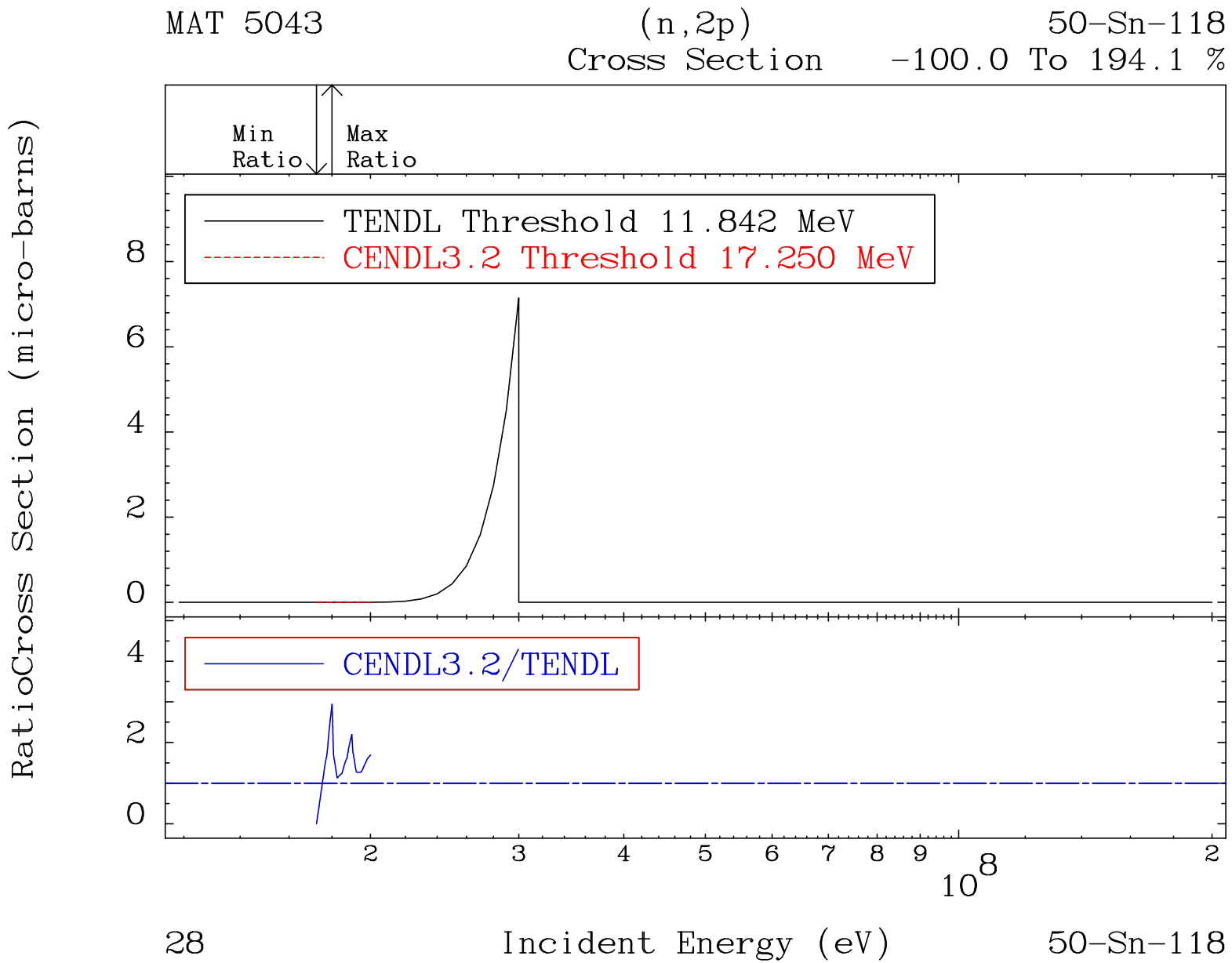

MAT 5043
(n,p)
50-Sn-118
Cross Section
-100.0 To 371.0 %
Min Ratio
Max Ratio
TENDL Threshold 3.6735 MeV
CENDL3.2 Threshold 5.2000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
50-Sn-118

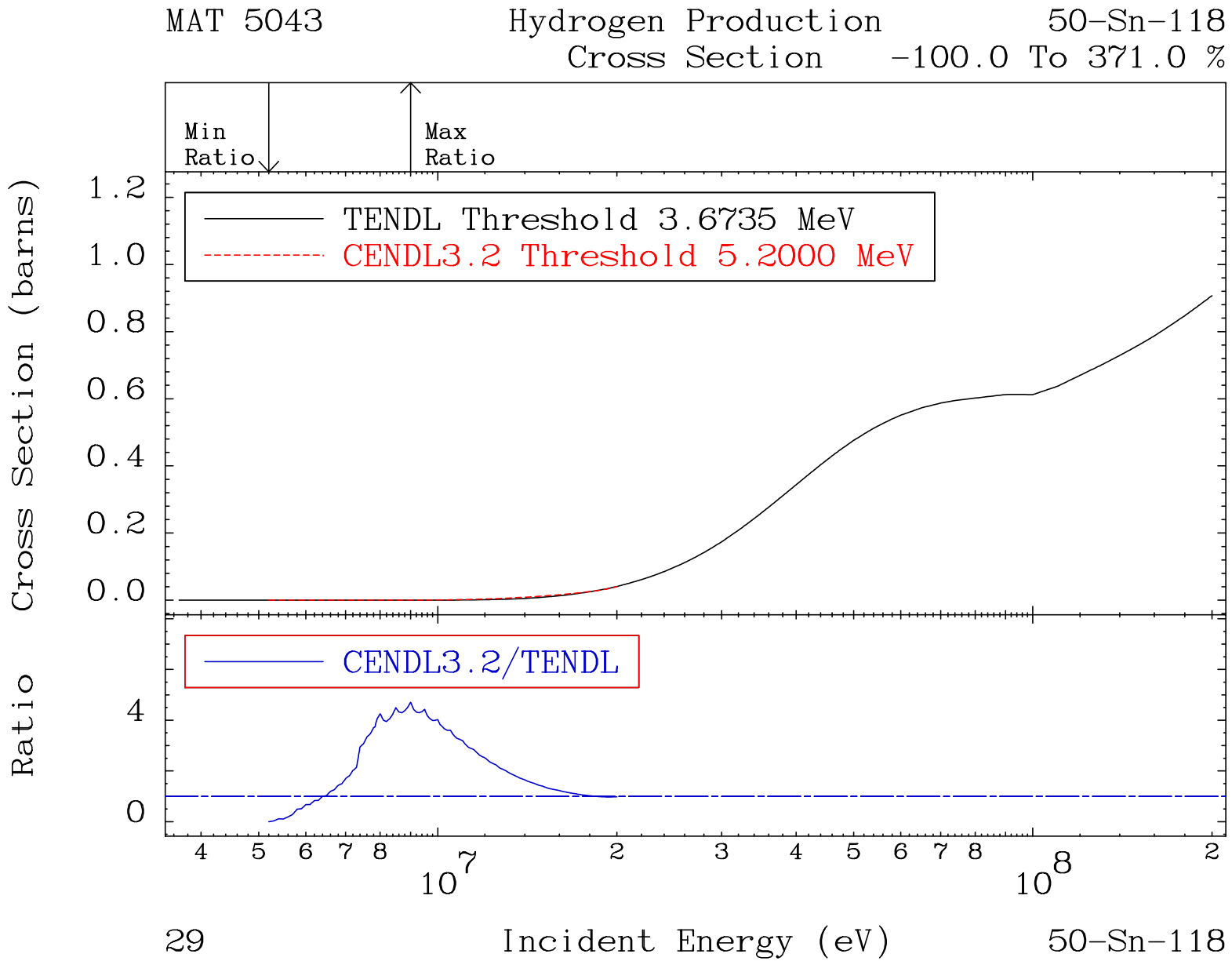

MAT 5043
(n,d)
50-Sn-118
Cross Section
-100.0 To -79.01%
Min Ratio
Max Ratio
TENDL Threshold 7.8407 MeV
CENDL3.2 Threshold 12.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
0.3
0.2
0.1
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
50-Sn-118

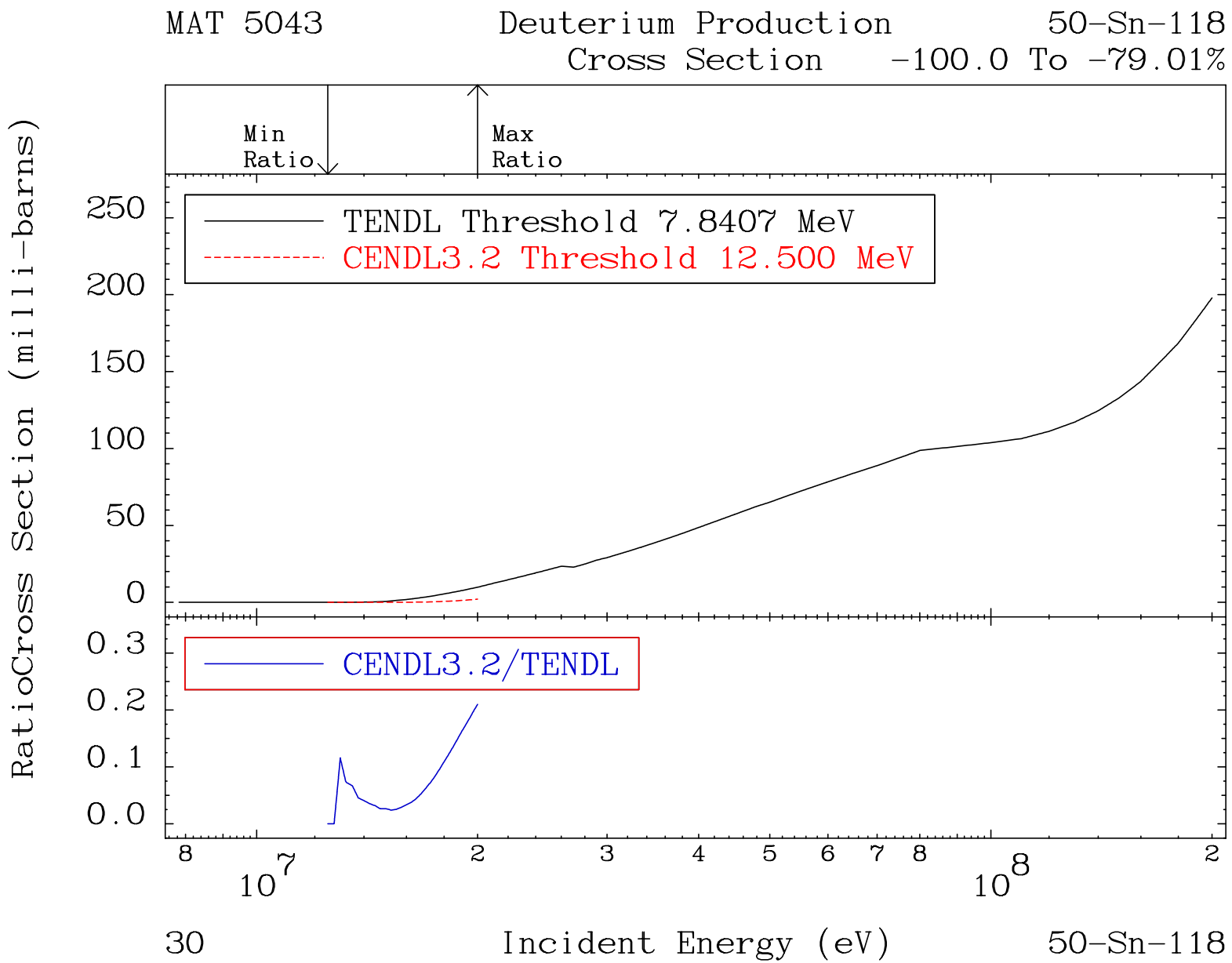

MAT 5043
(n,t)
Cross Section
50-Sn-118
-100.0 To 233.0 %
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
CENDL3.2 Threshold 13.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
50-Sn-118

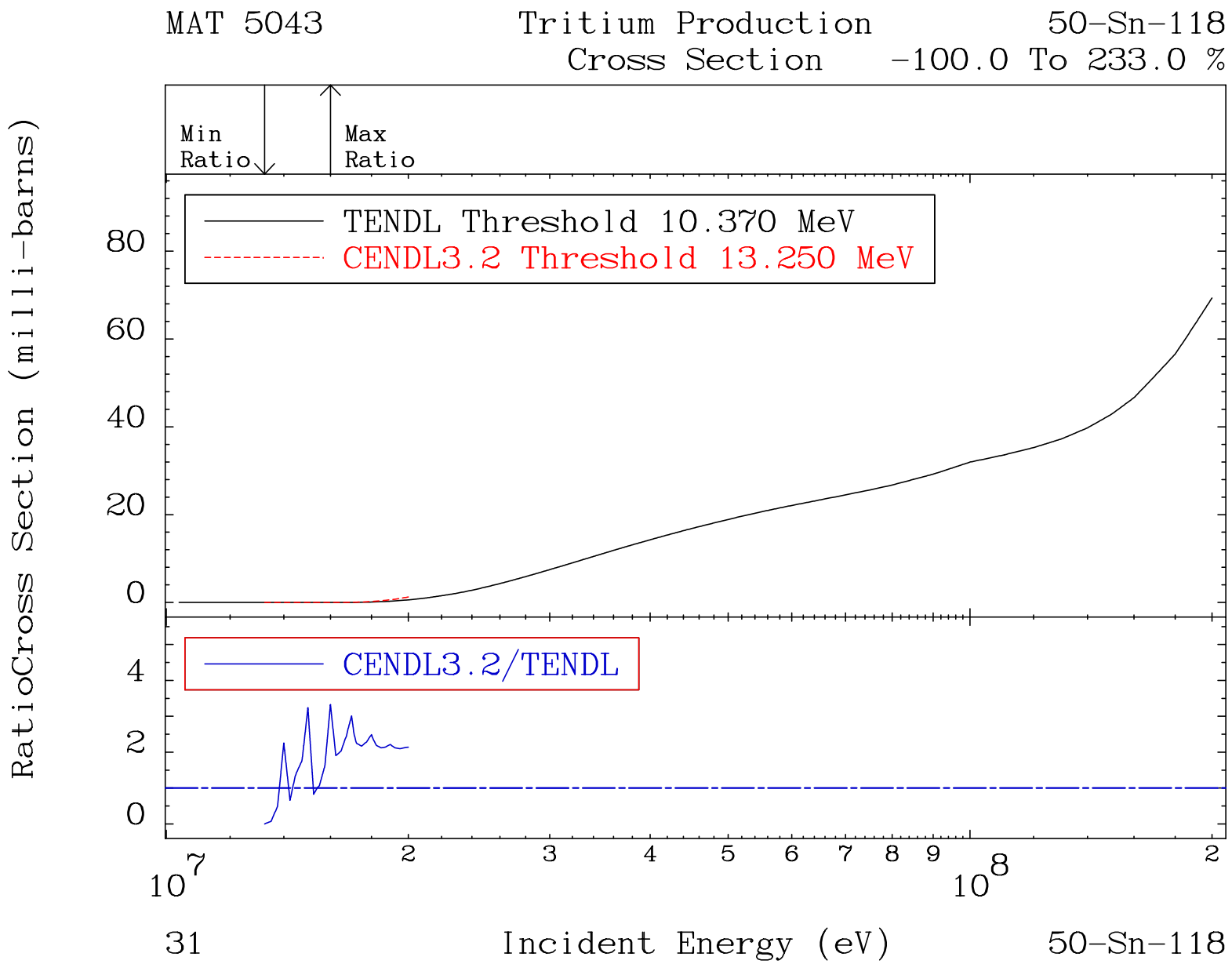

MAT 5043
(n,He-3)
50-Sn-118
Cross Section
-100.0 To -99.29%
Min Ratio
Max Ratio
TENDL Threshold 9.8841 MeV
CENDL3.2 Threshold 19.500 MeV
CENDL3.2/TENDL
RatioCross Section (micro-barns)
700
600
500
400
300
200
100
0
0.010
0.005
0.000
10^7
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
50-Sn-118

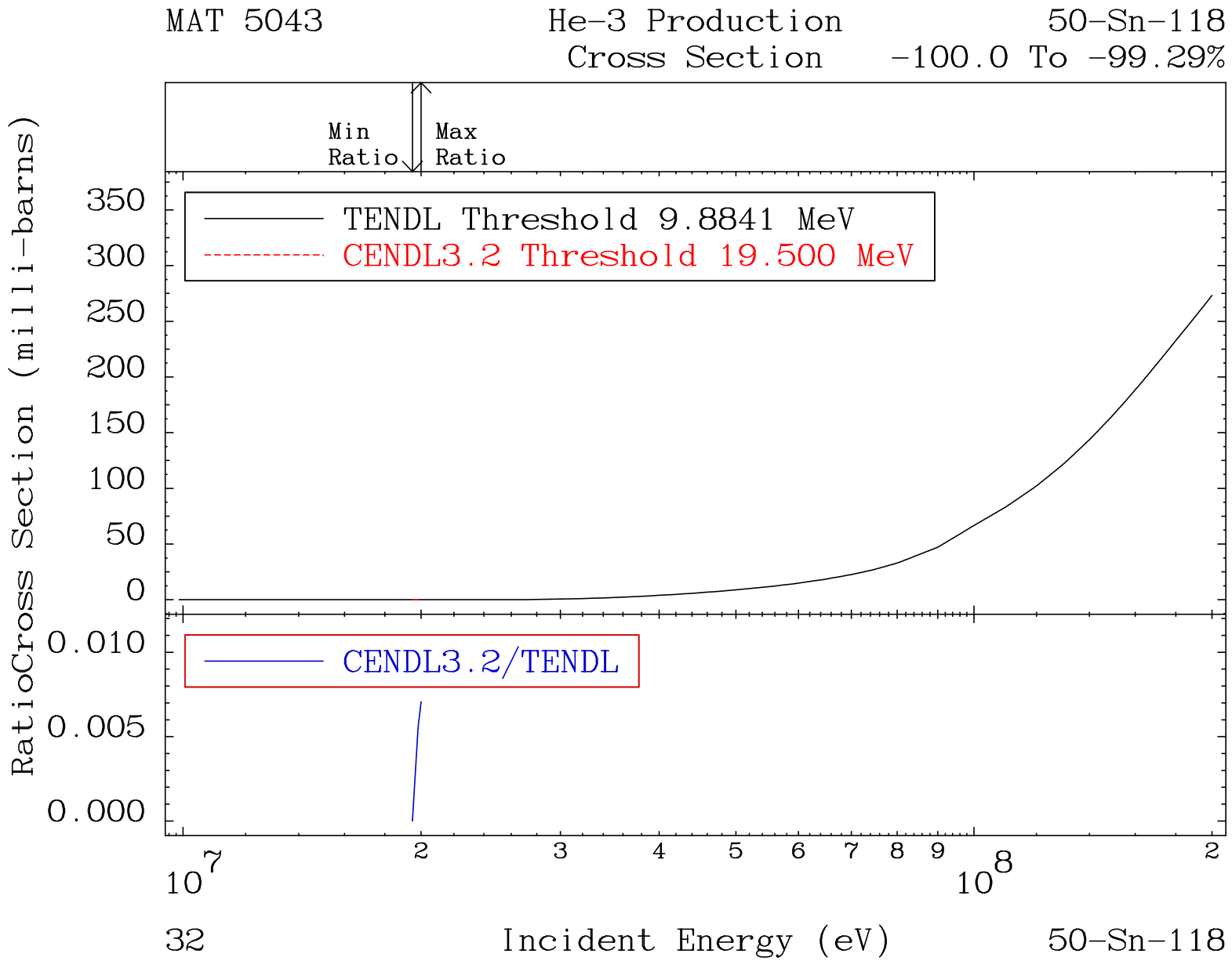

MAT 5043
(n,α)
Cross Section
50-Sn-118
-100.0 To 70.23 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 4.6000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
50-Sn-118

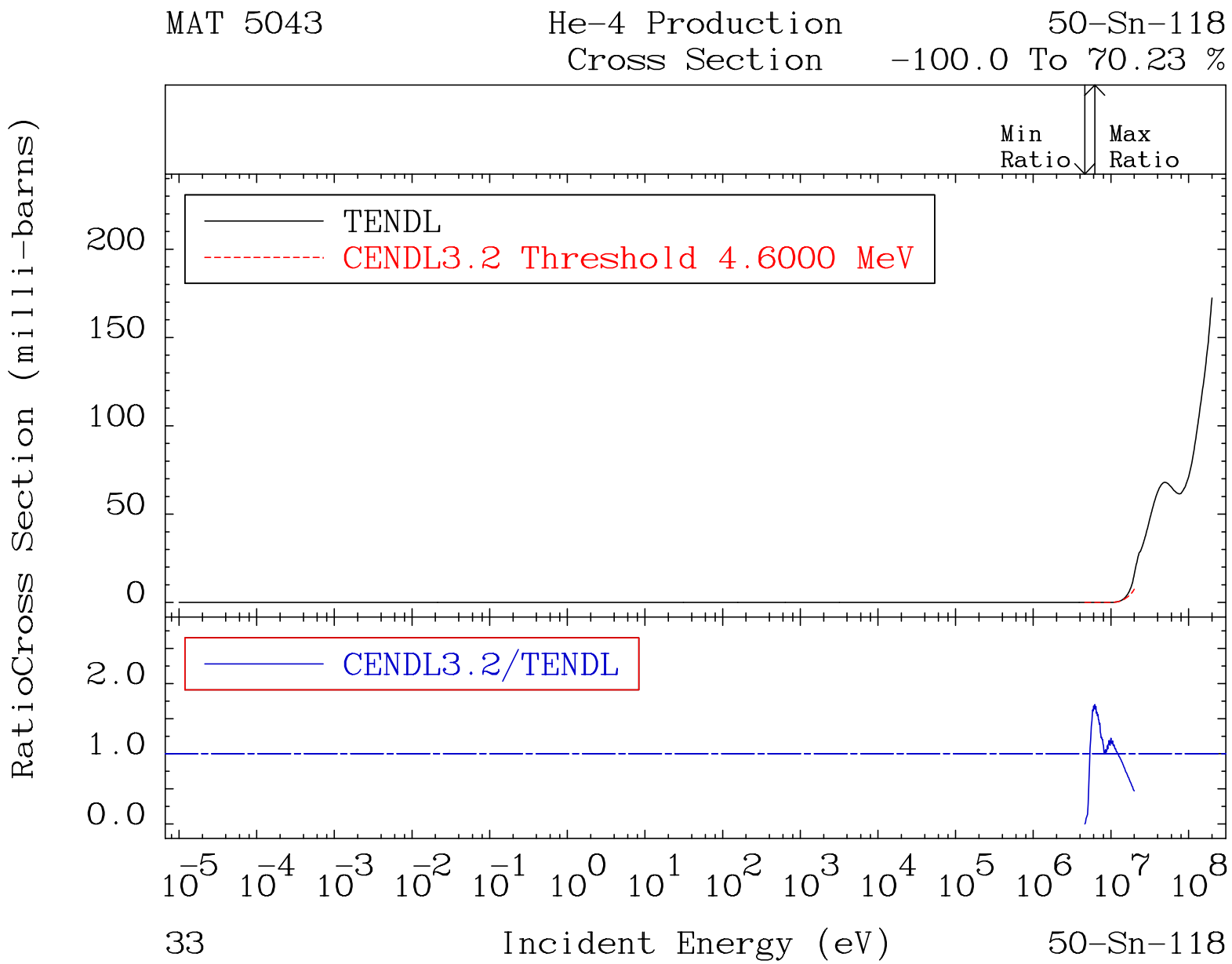

MAT 5043
(n,2p)
50-Sn-118
Cross Section
-100.0 To 194.1 %
Min Ratio
Max Ratio
TENDL Threshold 11.842 MeV
CENDL3.2 Threshold 17.250 MeV
CENDL3.2/TENDL
RatioCross Section (micro-barns)
0
2
4
6
8
0
2
4
2
3
4
5
6
7
8
9
10^8
2
28
Incident Energy (eV)
50-Sn-118

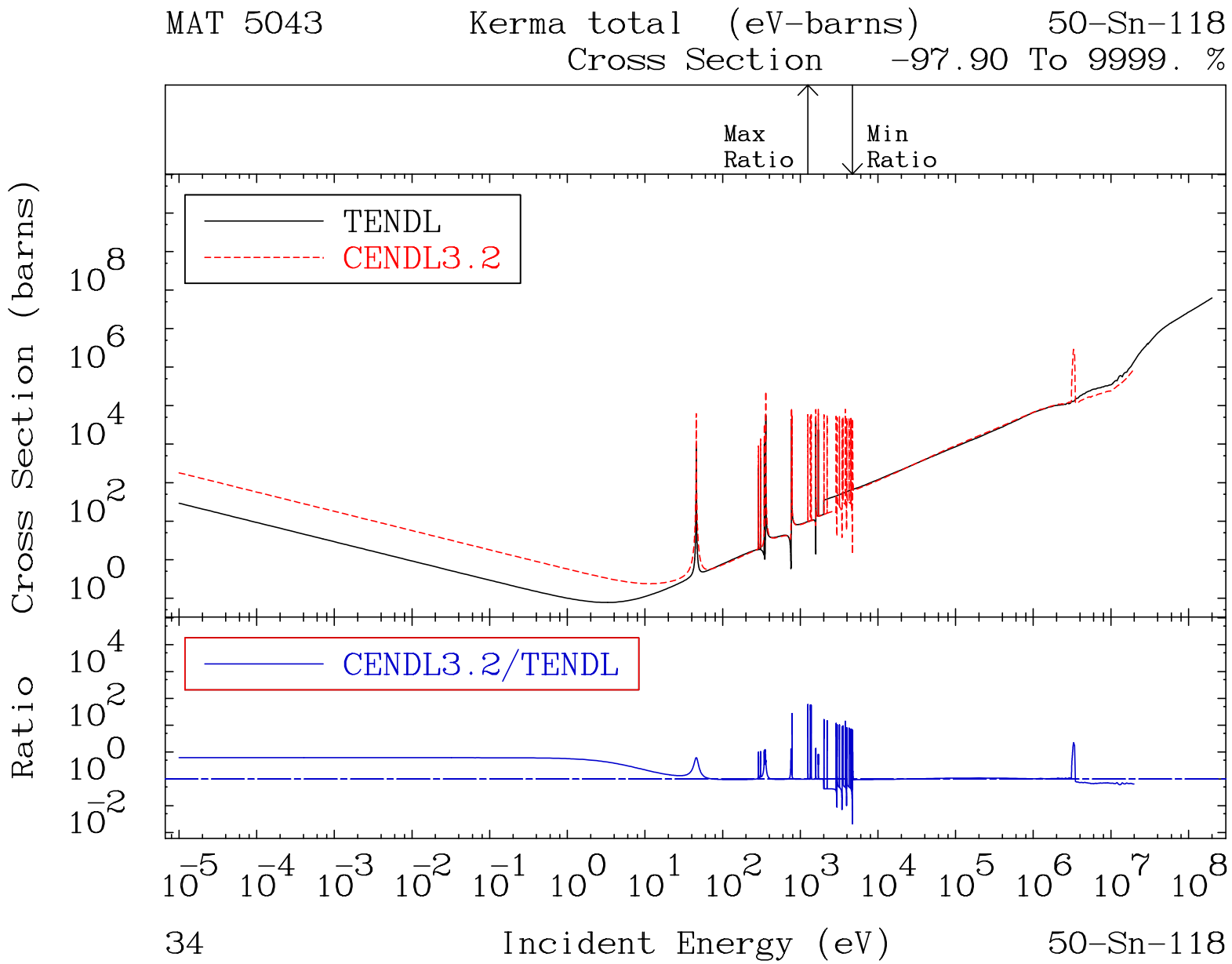

MAT 5043
Hydrogen Production
50-Sn-118
Cross Section
-100.0 To 371.0 %
Min Ratio
Max Ratio
TENDL Threshold 3.6735 MeV
CENDL3.2 Threshold 5.2000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
50-Sn-118

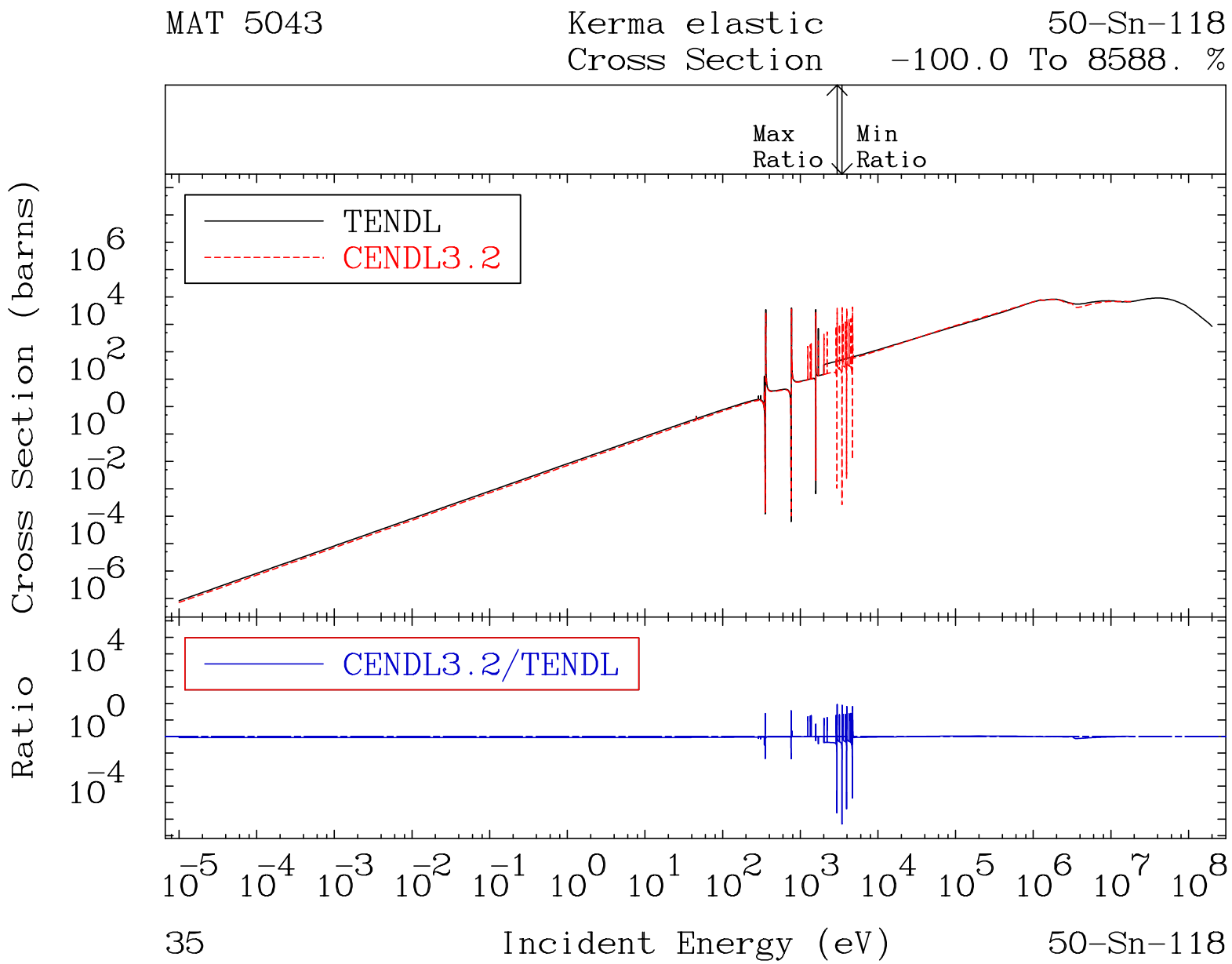

MAT 5043
Deuterium Production
50-Sn-118
Cross Section
-100.0 To -79.01%
Min Ratio
Max Ratio
TENDL Threshold 7.8407 MeV
CENDL3.2 Threshold 12.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
0.3
0.2
0.1
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
50-Sn-118

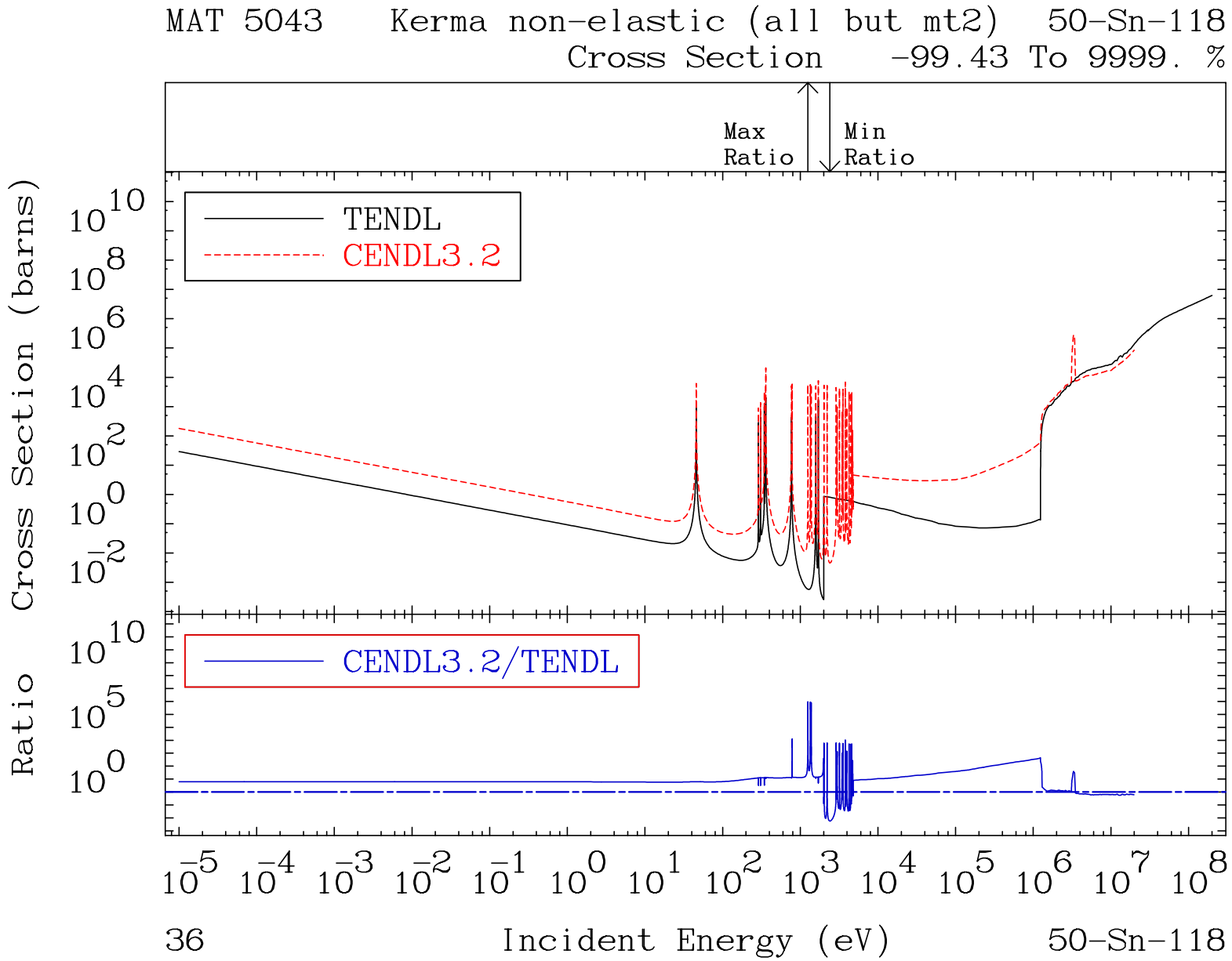

MAT 5043
Tritium Production
50-Sn-118
Cross Section
-100.0 To 233.0 %
Min Ratio
Max Ratio
TENDL Threshold 10.370 MeV
CENDL3.2 Threshold 13.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
50-Sn-118

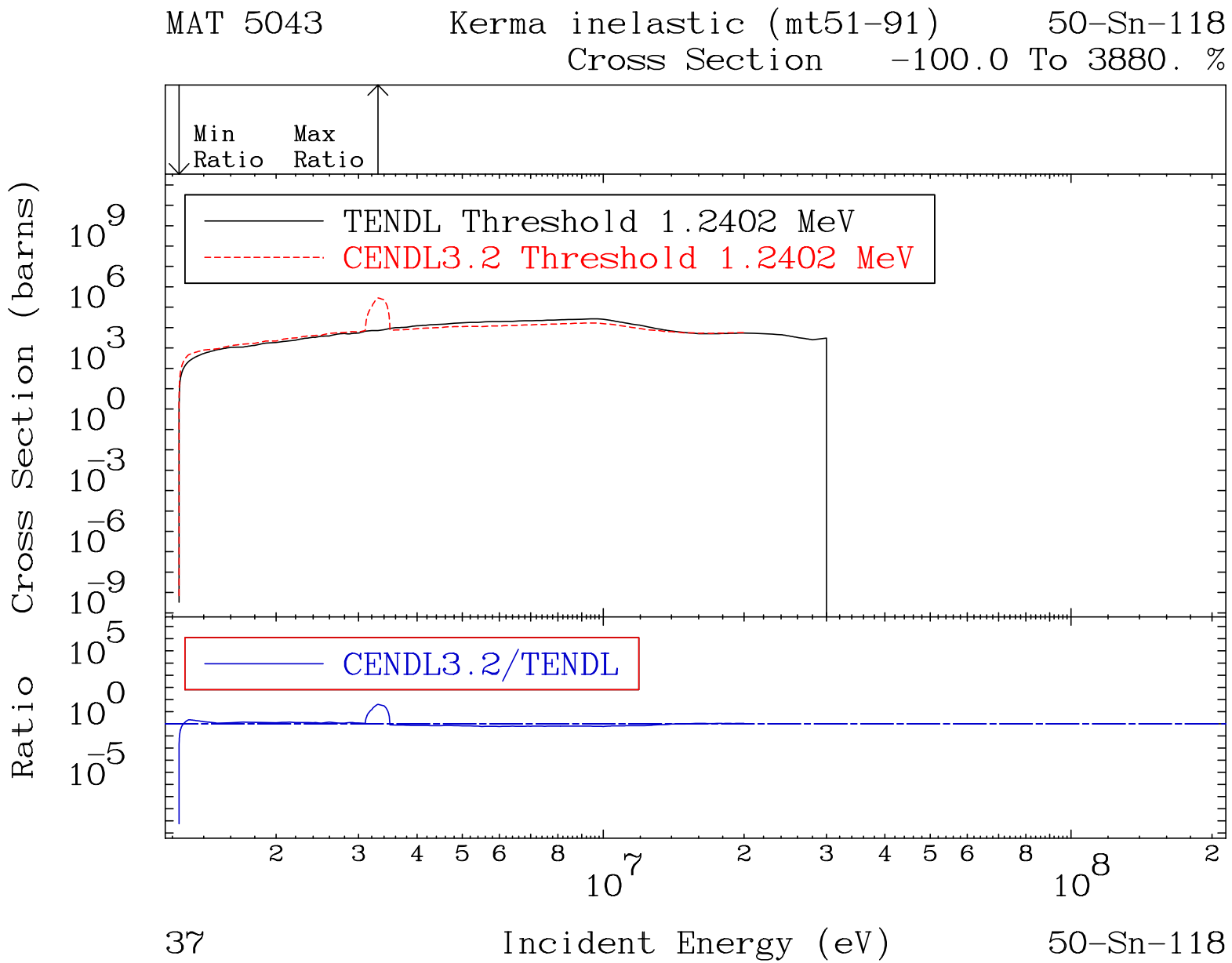

MAT 5043
He-3 Production
Cross Section
50-Sn-118
-100.0 To -99.29%
Min Ratio
Max Ratio
TENDL Threshold 9.8841 MeV
CENDL3.2 Threshold 19.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
0.010
0.005
0.000
10^7
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
50-Sn-118

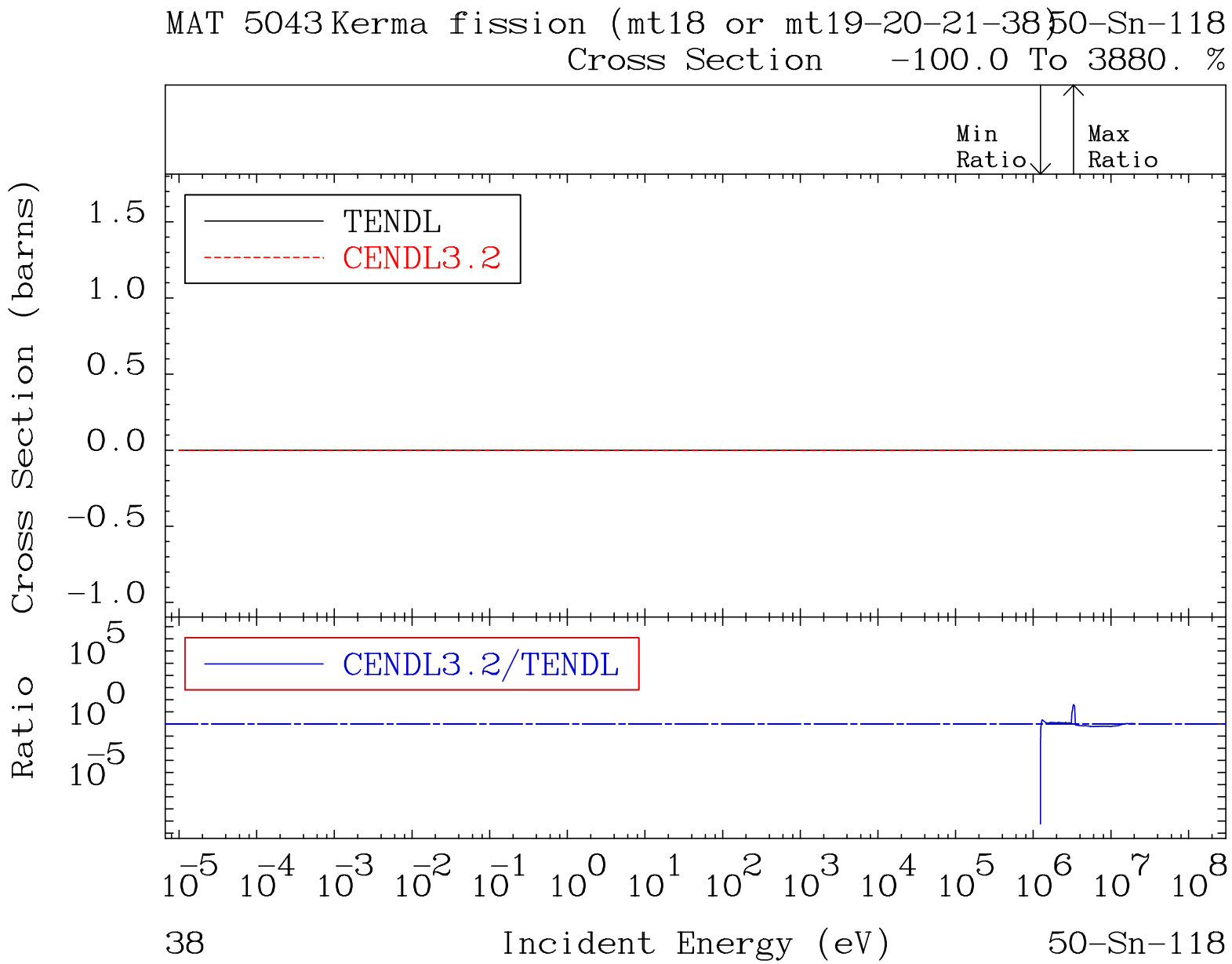

MAT 5043
He-4 Production
Cross Section
50-Sn-118
-100.0 To 70.23 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 4.6000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
50-Sn-118

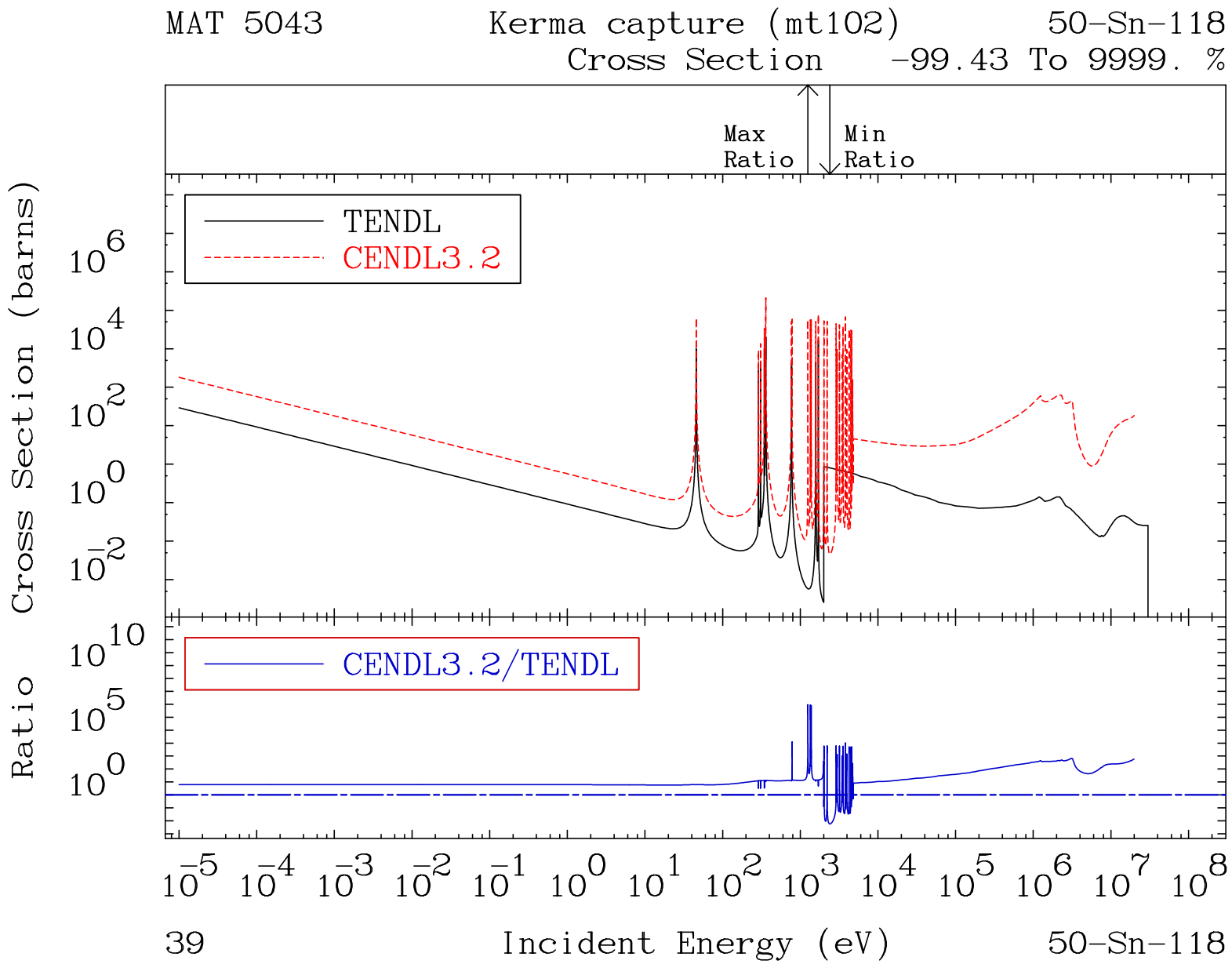

MAT 5043
Kerma total (eV-barns)
50-Sn-118
Cross Section -97.90 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
50-Sn-118

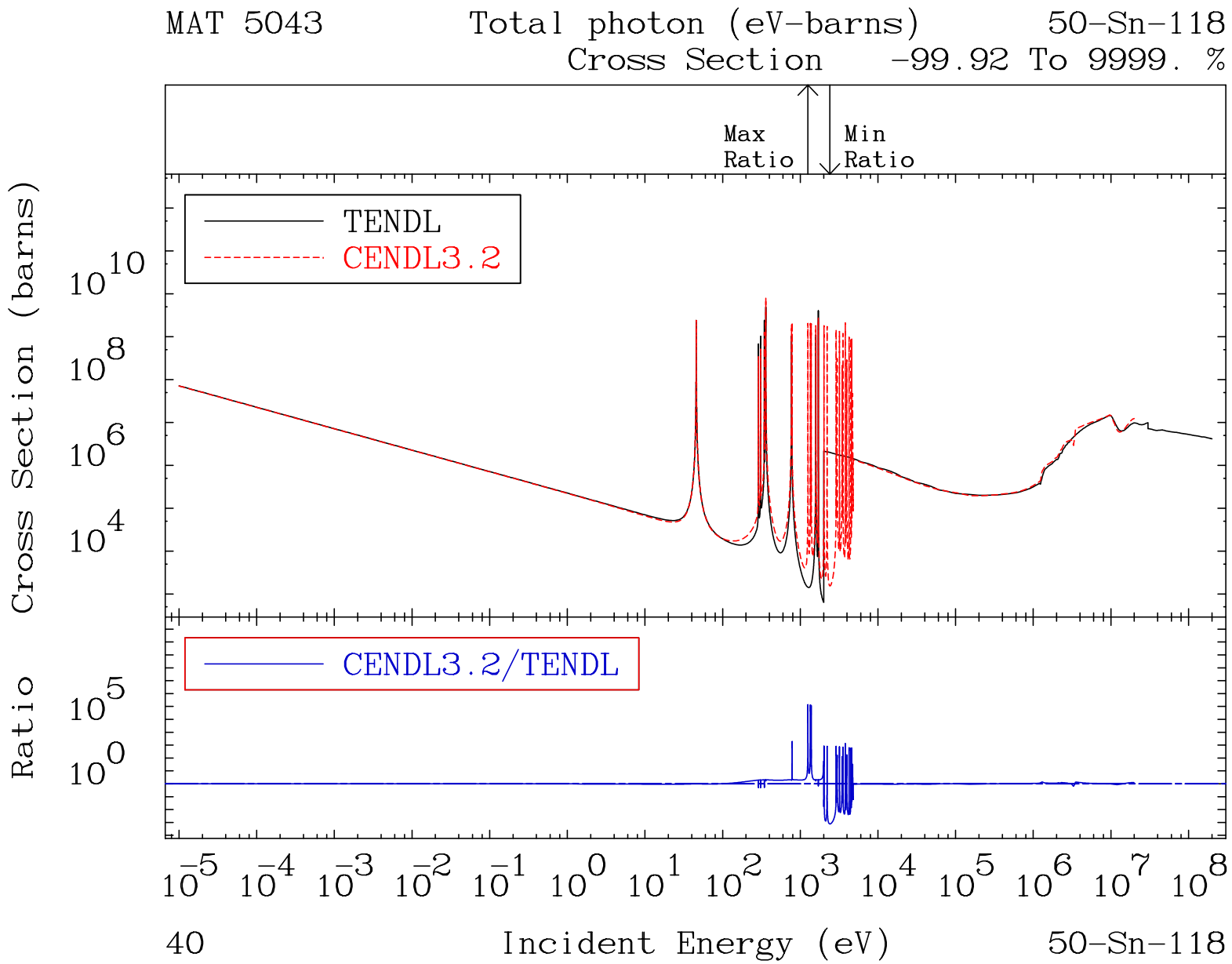

MAT 5043
Kerma elastic
Cross Section
50-Sn-118
-100.0 To 8588. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
50-Sn-118

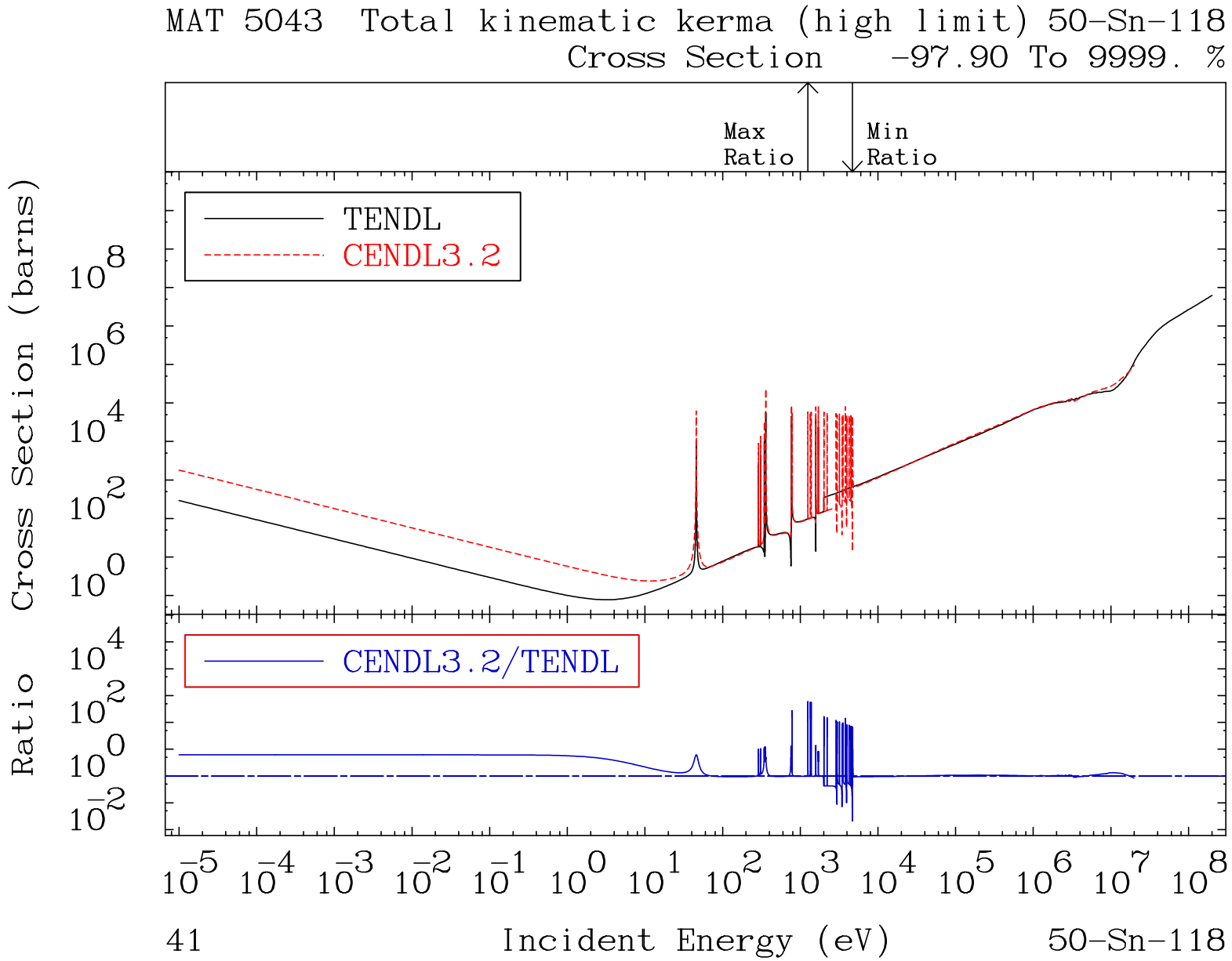

MAT 5043 Kerma non-elastic (all but mt2) 50-Sn-118
Cross Section -99.43 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
50-Sn-118

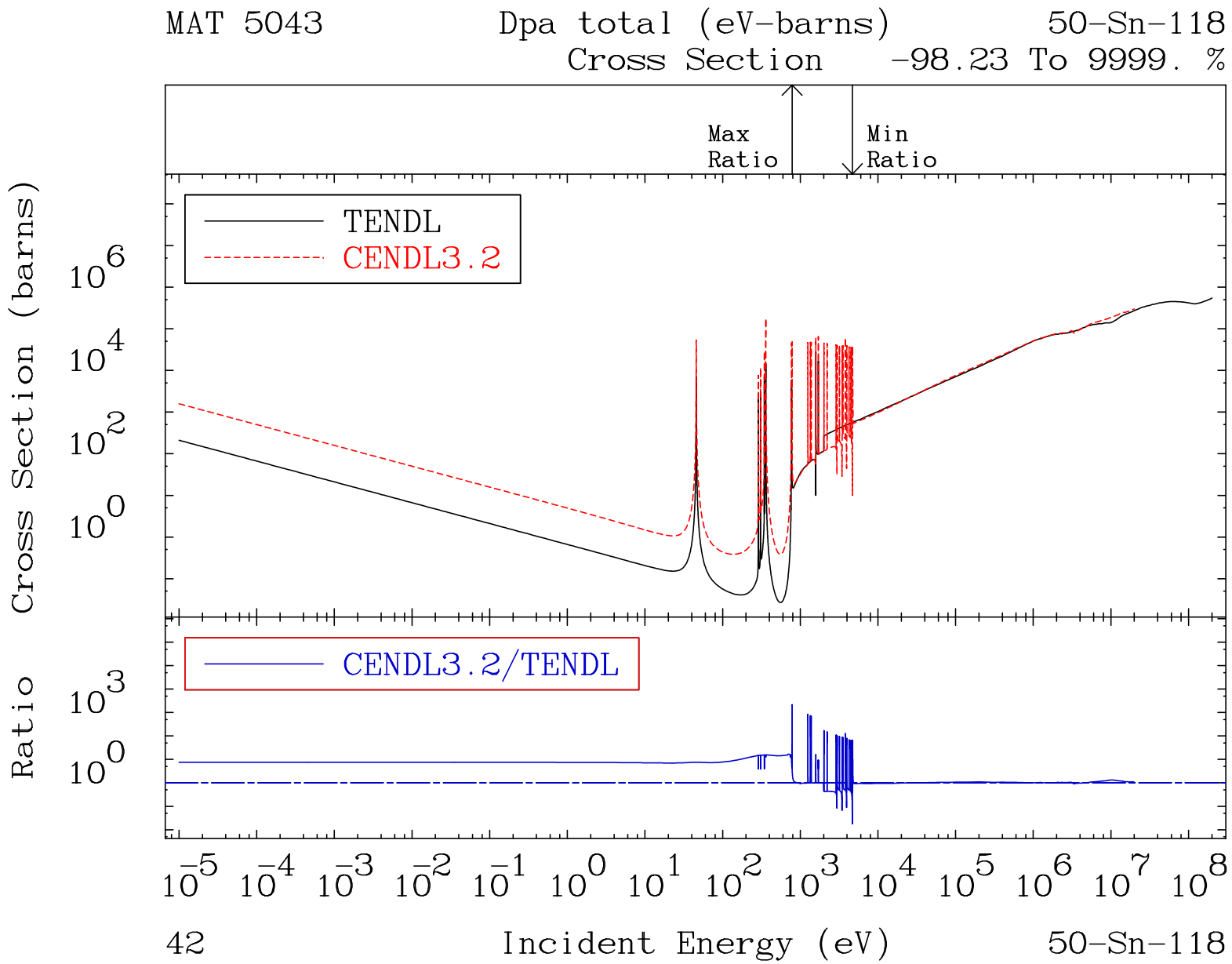

MAT 5043
Kerma inelastic (mt51-91)
50-Sn-118
Cross Section -100.0 To 3880. %
Min Ratio
Max Ratio
TENDL Threshold 1.2402 MeV
CENDL3.2 Threshold 1.2402 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
50-Sn-118

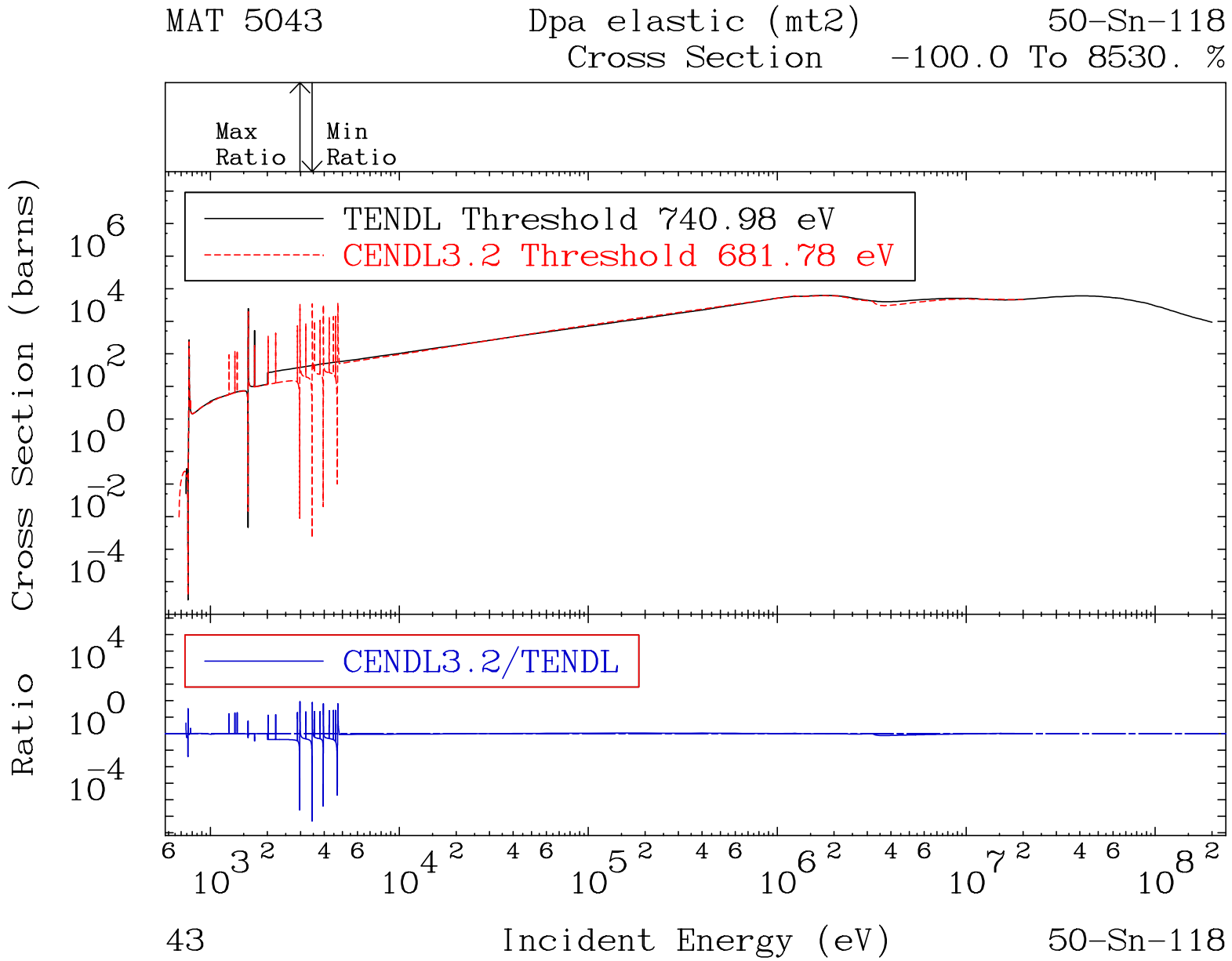

MAT 5043 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-118
Cross Section -100.0 To 3880. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
38
Incident Energy (eV)
50-Sn-118

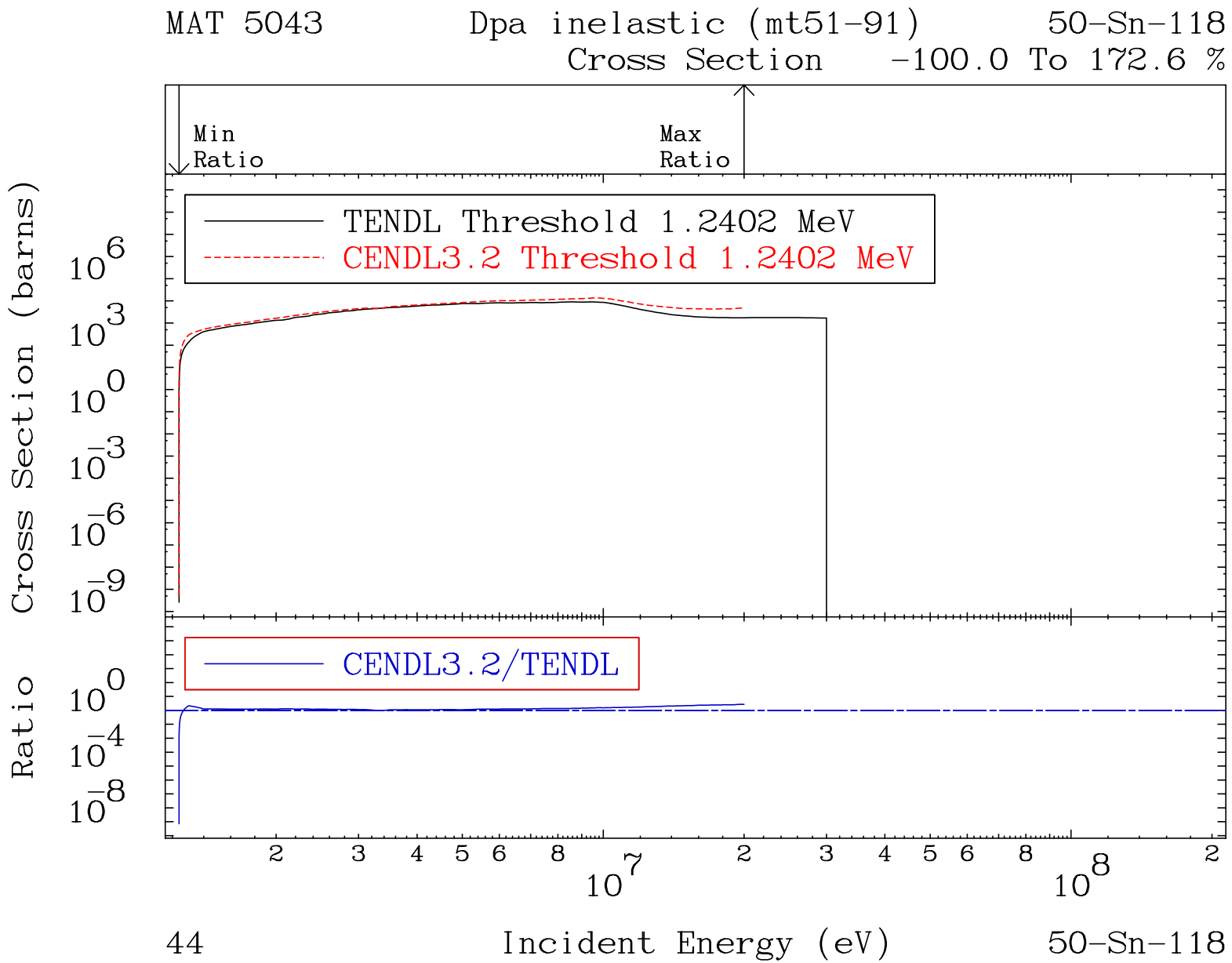

MAT 5043
Kerma capture (mt102)
50-Sn-118
Cross Section -99.43 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
50-Sn-118

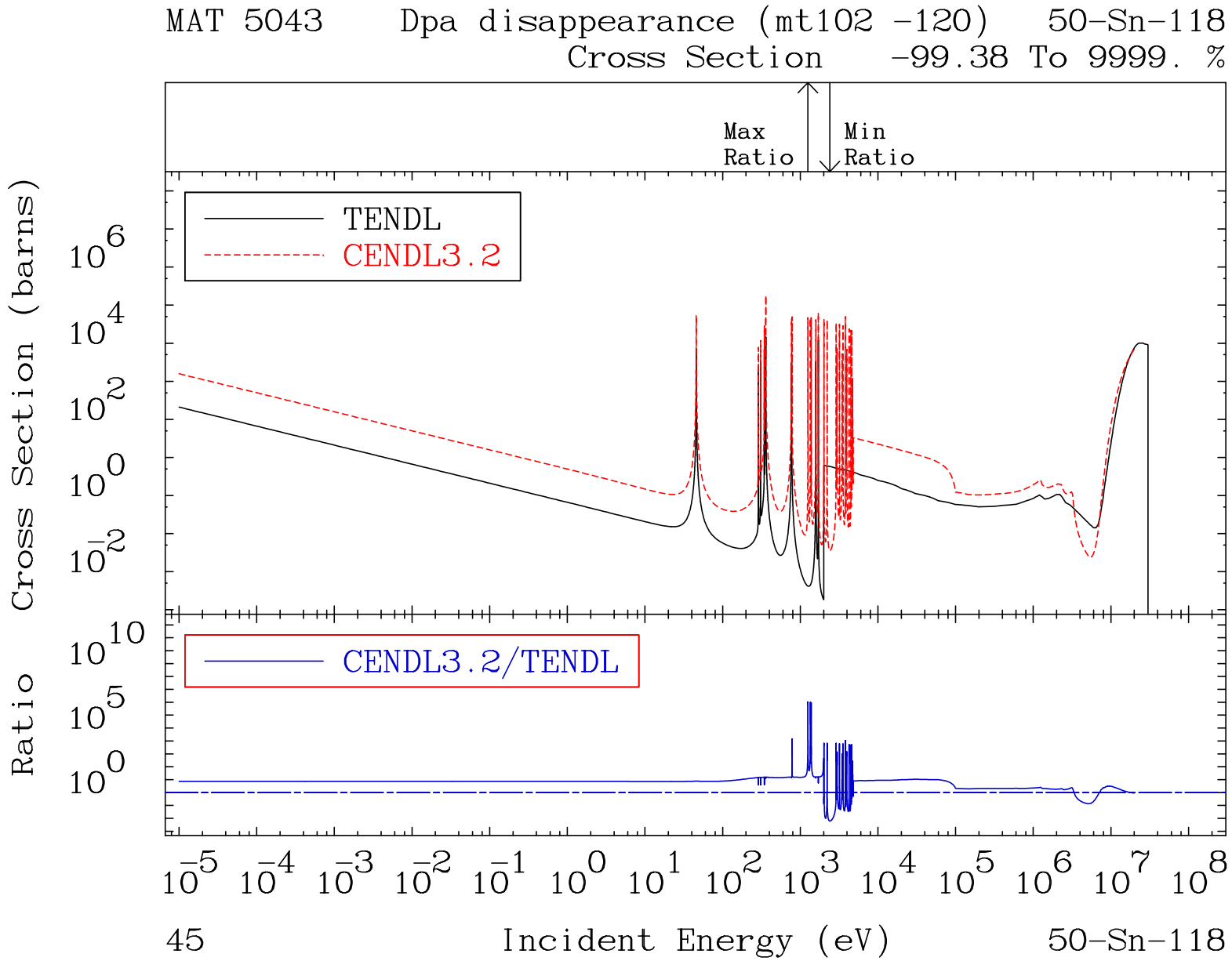

MAT 5043
Total photon (eV-barns)
50-Sn-118
Cross Section -99.92 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
50-Sn-118

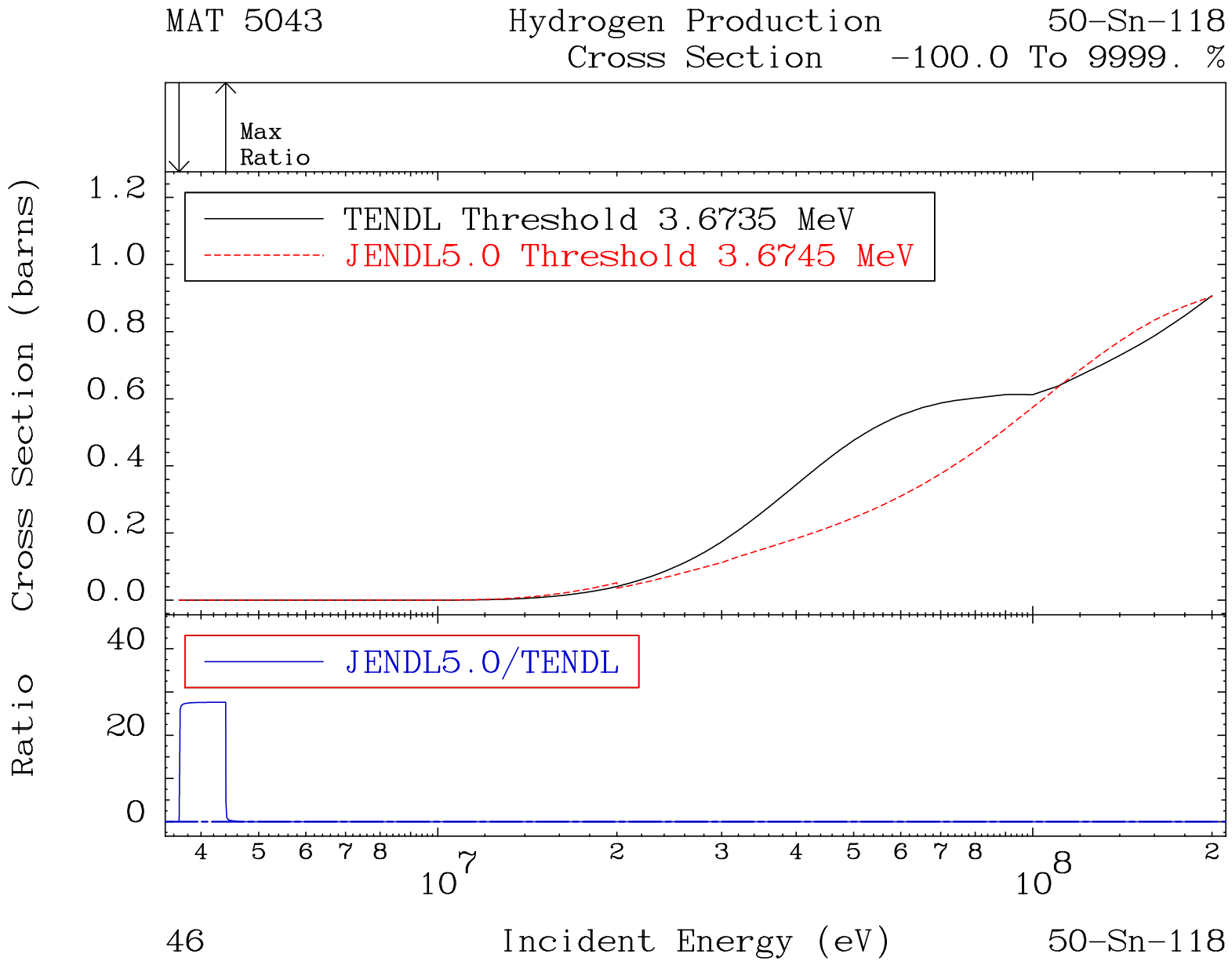

MAT 5043 Total kinematic kerma (high limit) 50-Sn-118
Cross Section -97.90 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
50-Sn-118

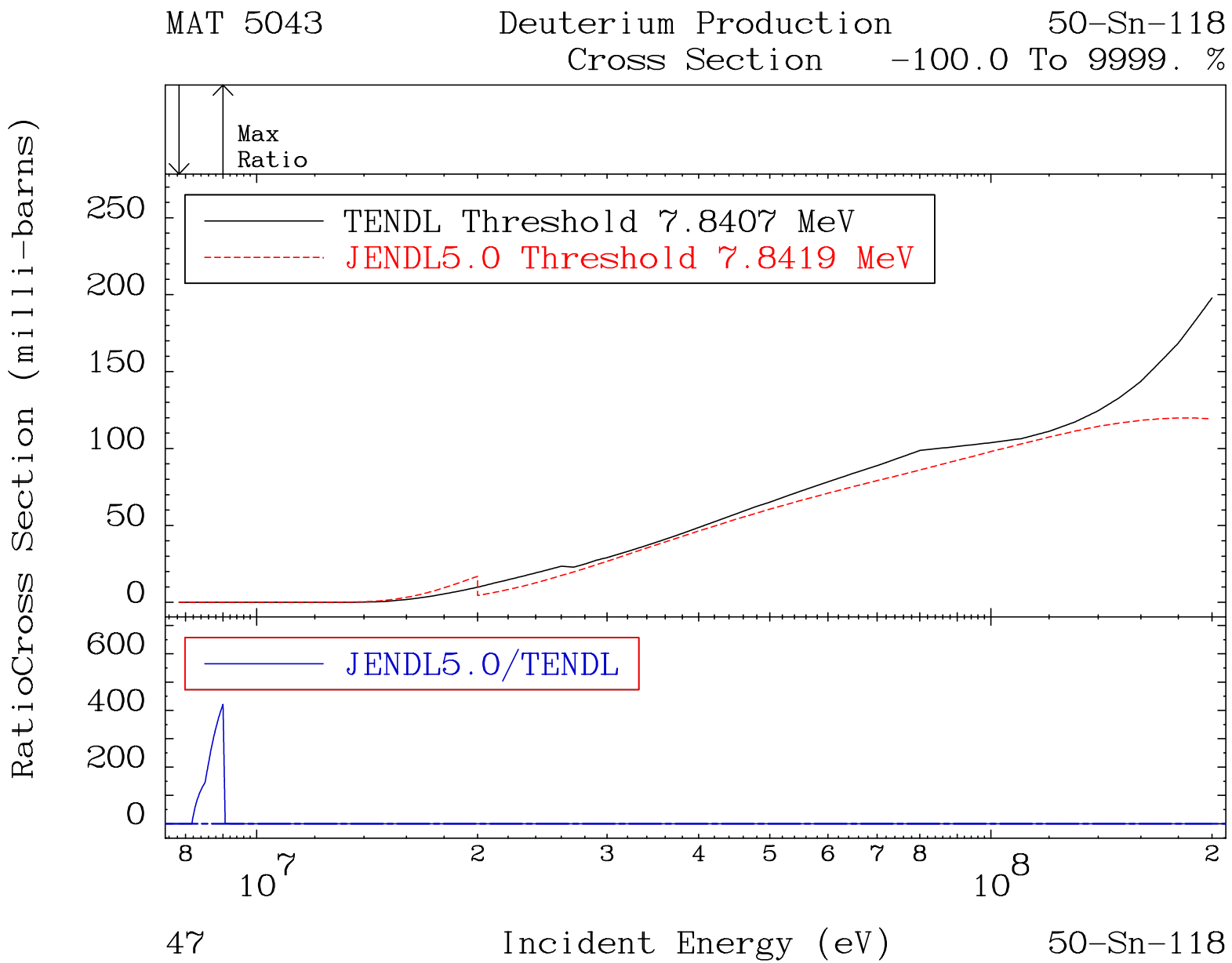

MAT 5043
Dpa total (eV-barns)
50-Sn-118
Cross Section -98.23 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
50-Sn-118

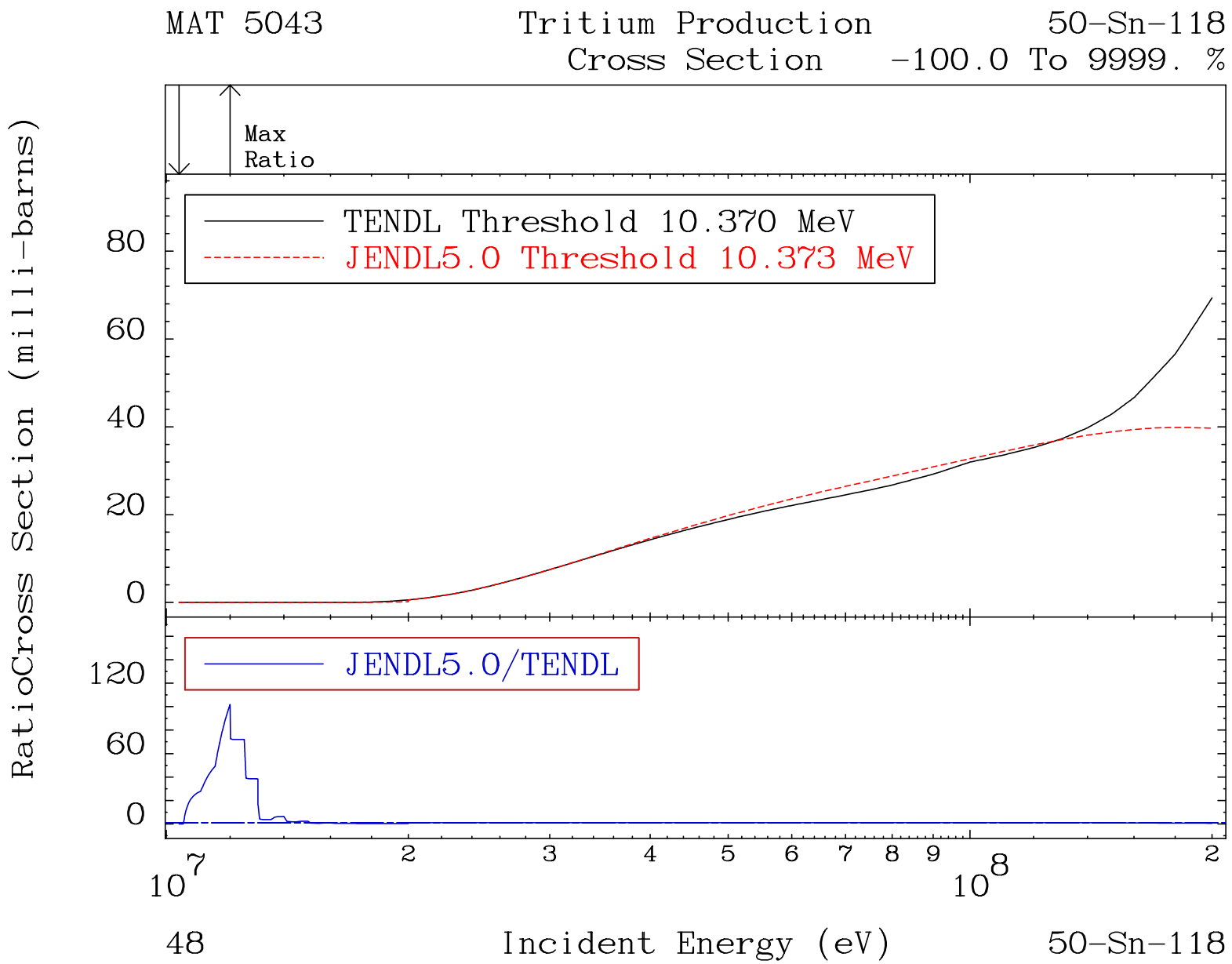

MAT 5043
Dpa elastic (mt2)
Cross Section
50-Sn-118
-100.0 To 8530. %
Max Ratio
Min Ratio
TENDL Threshold 740.98 eV
CENDL3.2 Threshold 681.78 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
50-Sn-118

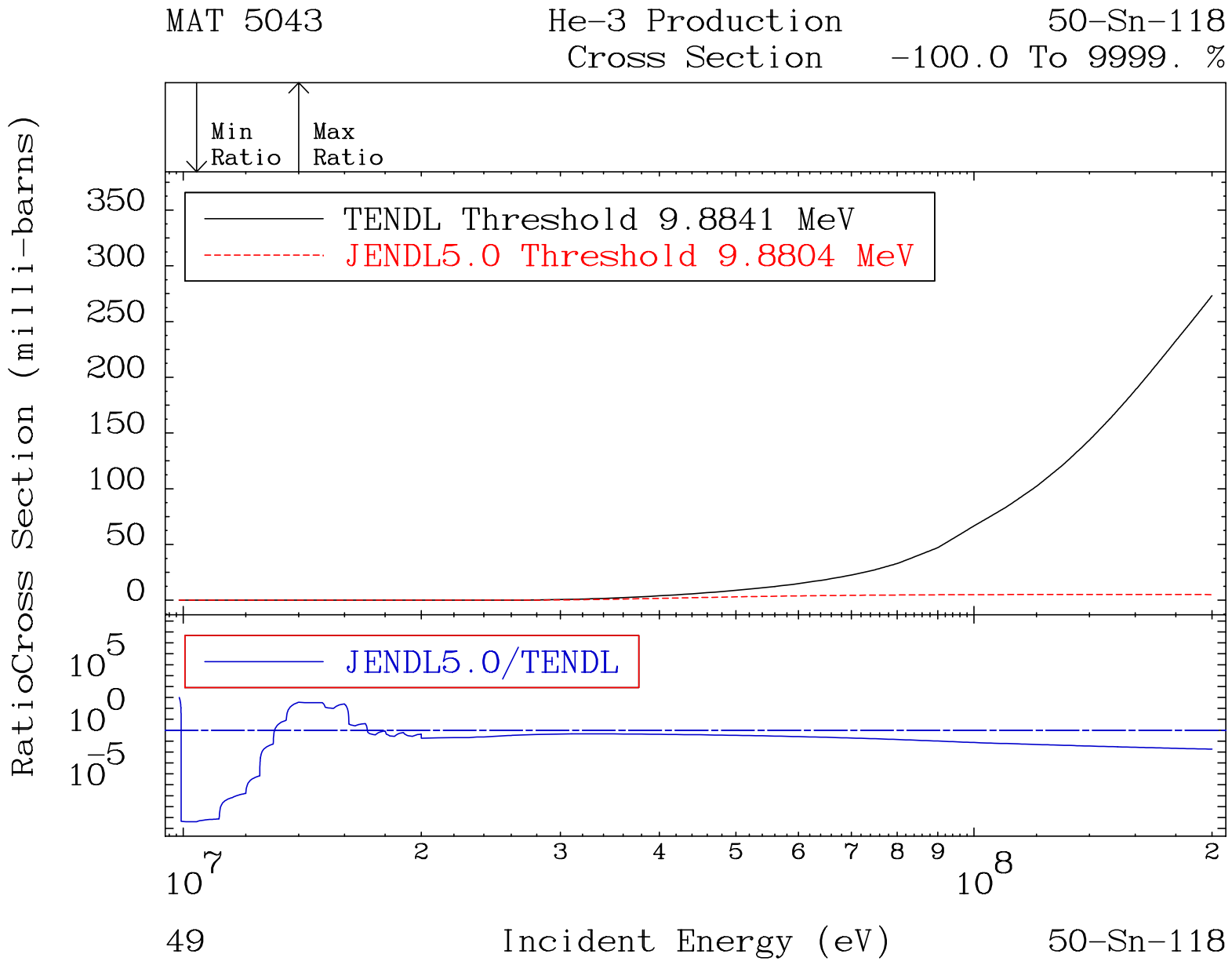

MAT 5043
Dpa inelastic (mt51-91)
50-Sn-118
Cross Section -100.0 To 172.6 %
Min Ratio
Max Ratio
TENDL Threshold 1.2402 MeV
CENDL3.2 Threshold 1.2402 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
50-Sn-118

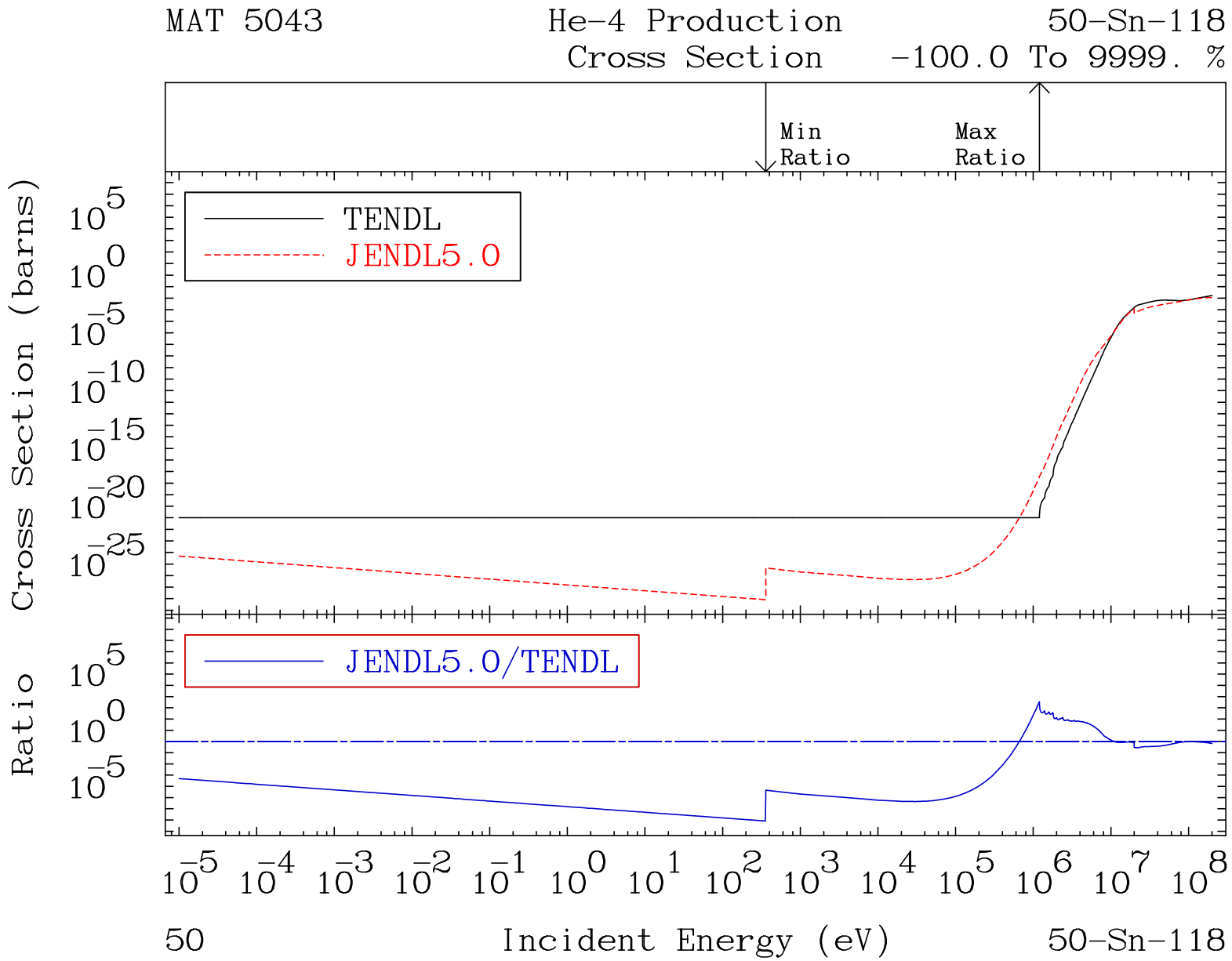

MAT 5043 Dpa disappearance (mt102 -120) 50-Sn-118
Cross Section -99.38 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
50-Sn-118

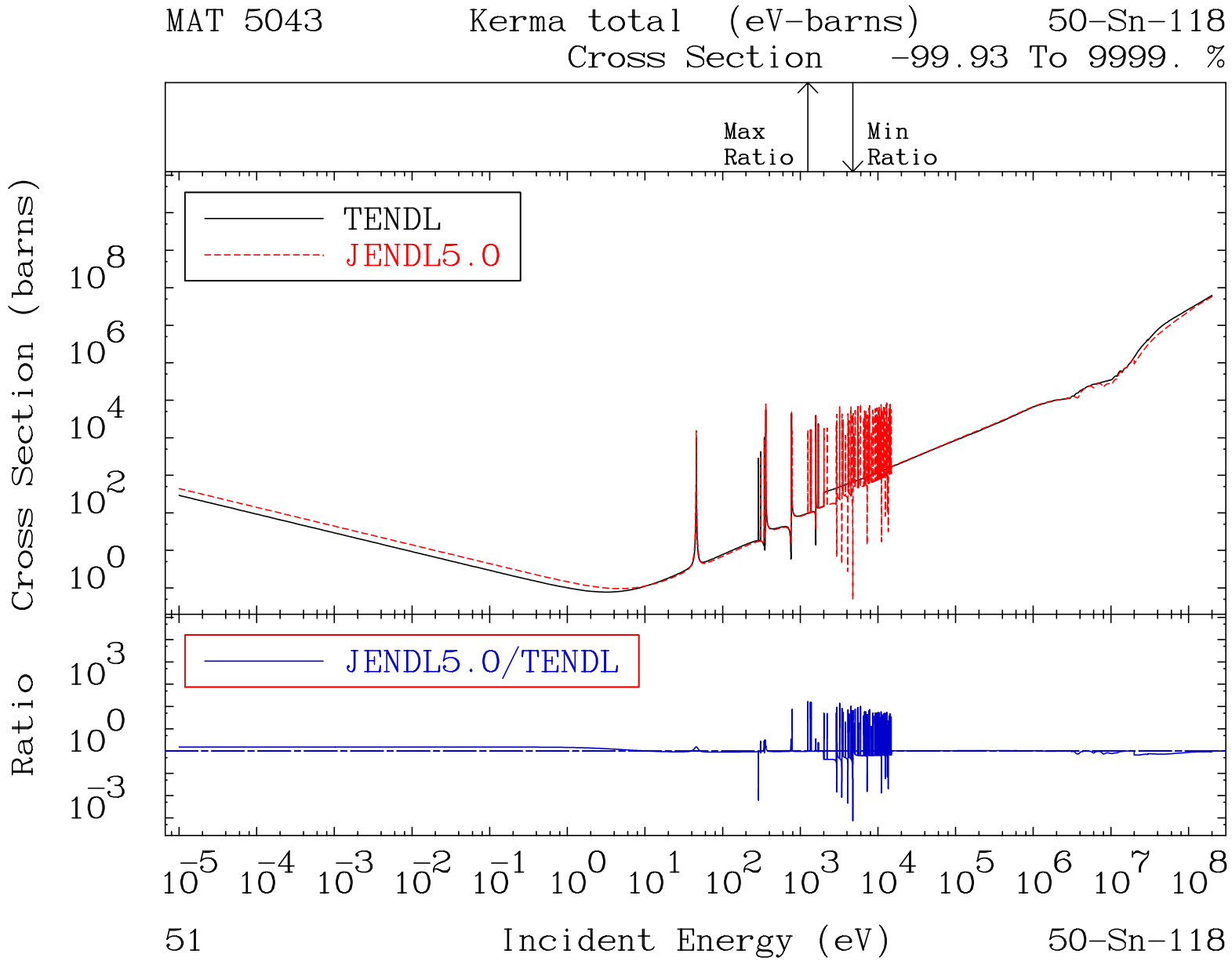

MAT 5043
Hydrogen Production
50-Sn-118
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 3.6735 MeV
JENDL5.0 Threshold 3.6745 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
40
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
50-Sn-118

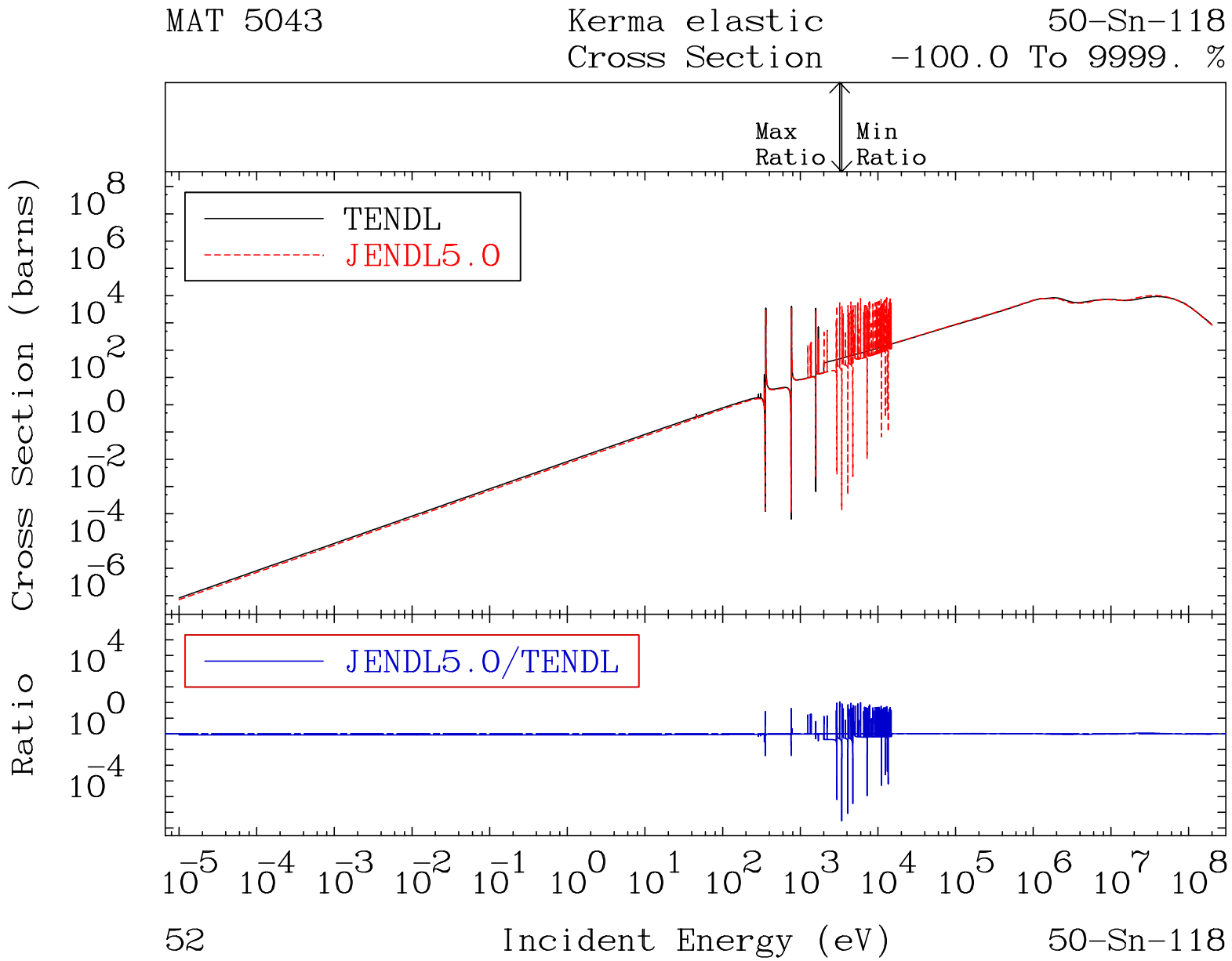

MAT 5043
Deuterium Production
50-Sn-118
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.8407 MeV
JENDL5.0 Threshold 7.8419 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
600
400
200
0
8
2
3
4
5
6
7
8
2
10^7
10^8
47
Incident Energy (eV)
50-Sn-118

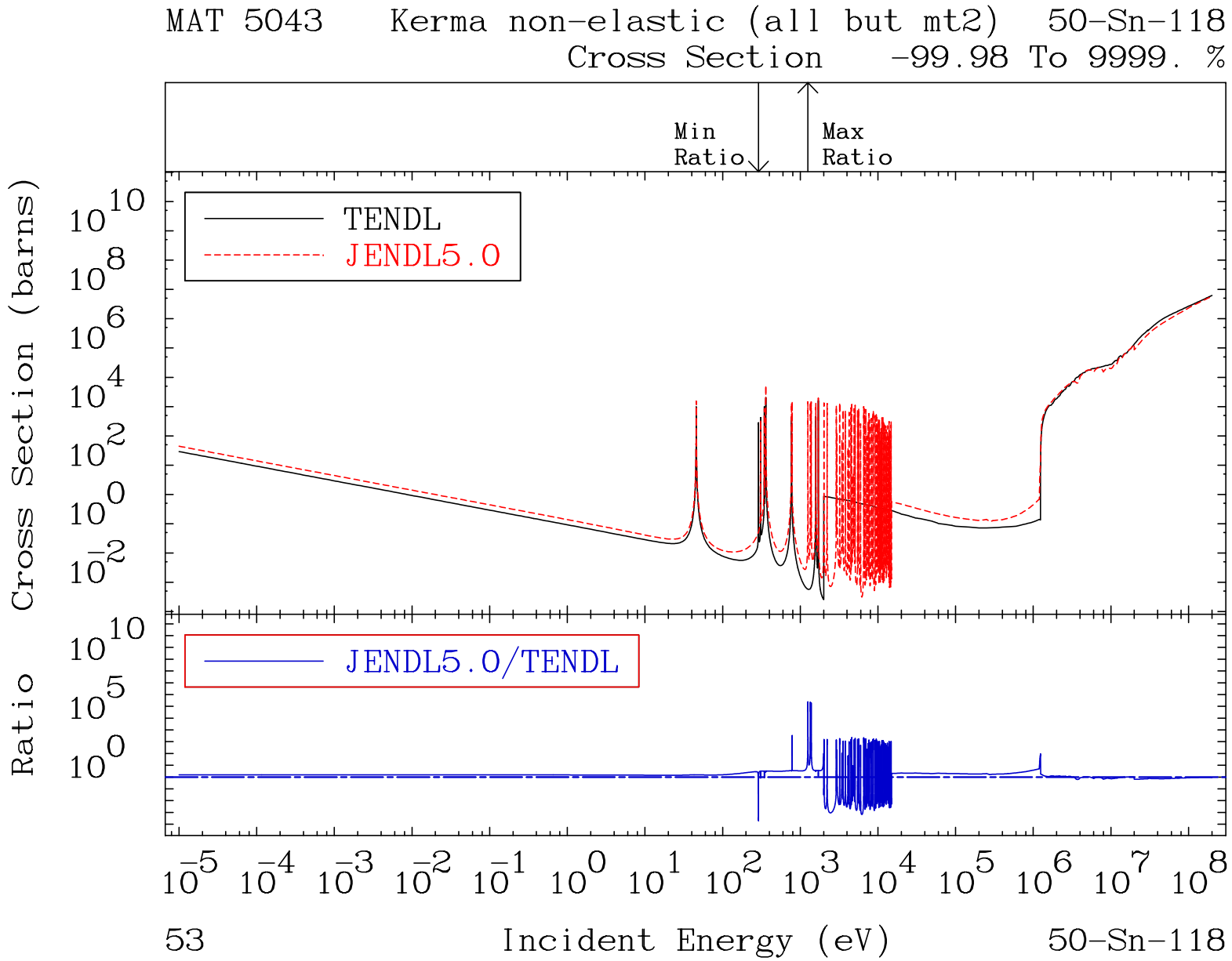

MAT 5043
Tritium Production
50-Sn-118
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.370 MeV
JENDL5.0 Threshold 10.373 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
120
60
0
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
50-Sn-118

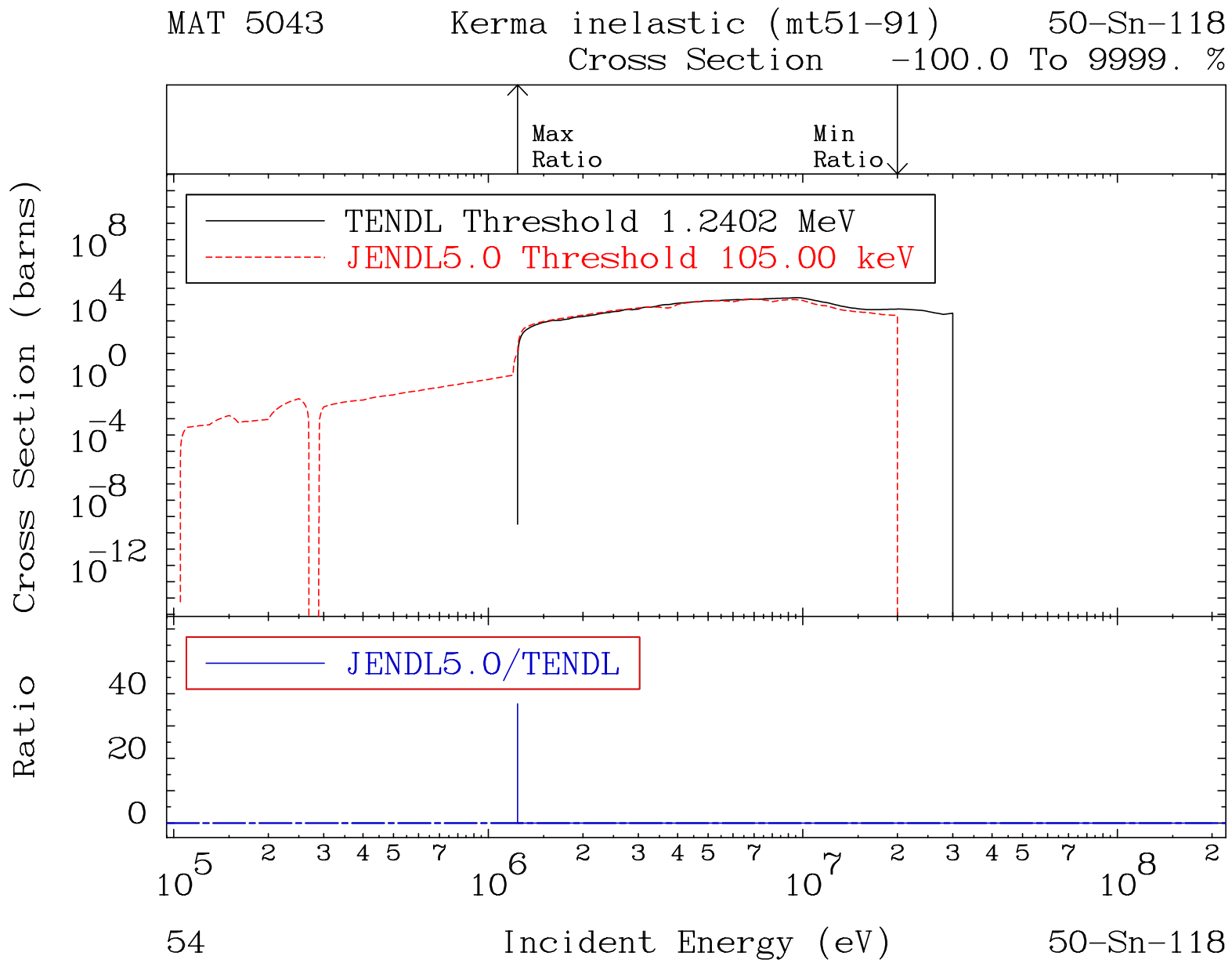

MAT 5043
He-3 Production
Cross Section
50-Sn-118
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.8841 MeV
JENDL5.0 Threshold 9.8804 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
10^5
10^0
10^-5
10^7
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
50-Sn-118

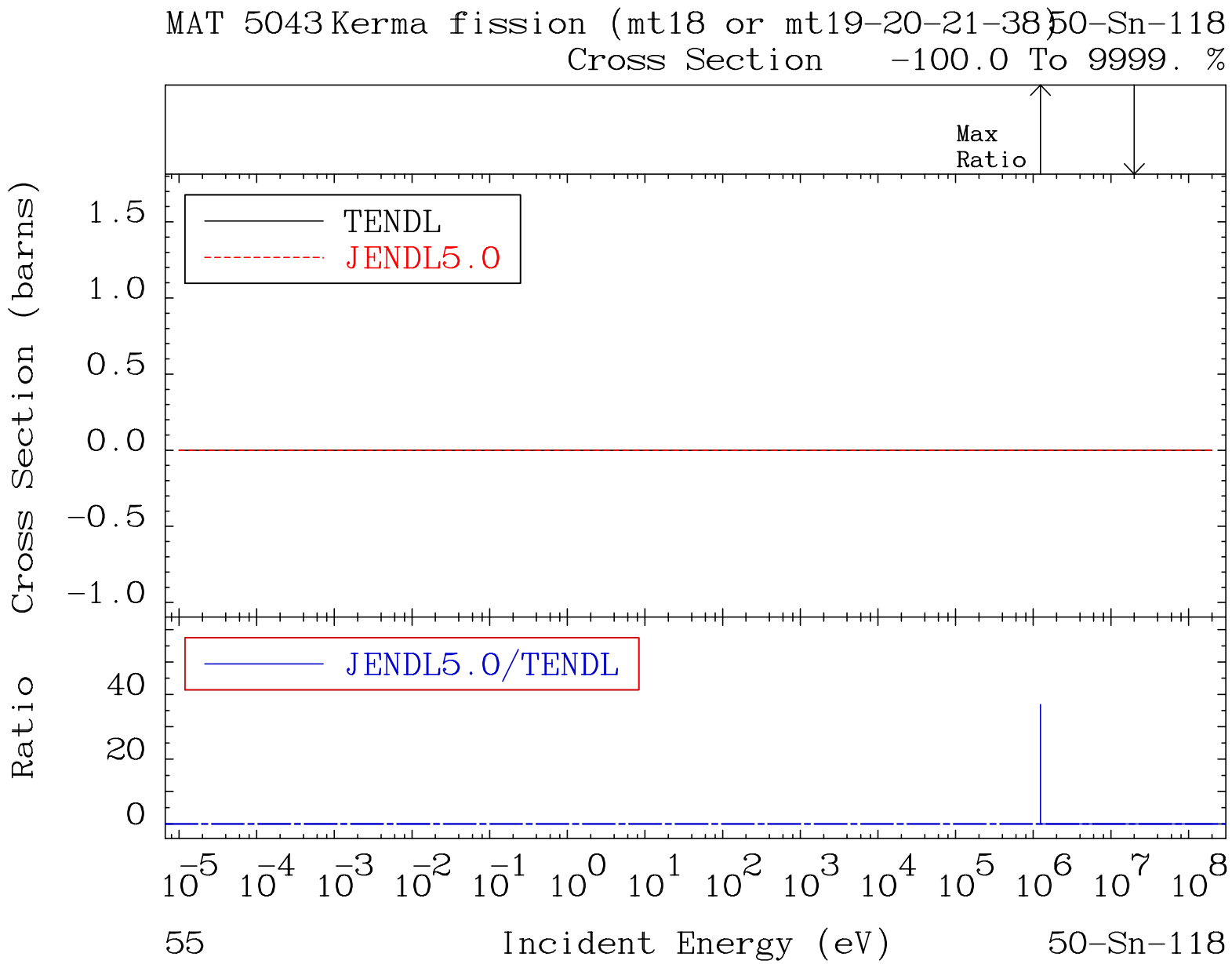

MAT 5043
He-4 Production
Cross Section
50-Sn-118
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
50
50-Sn-118

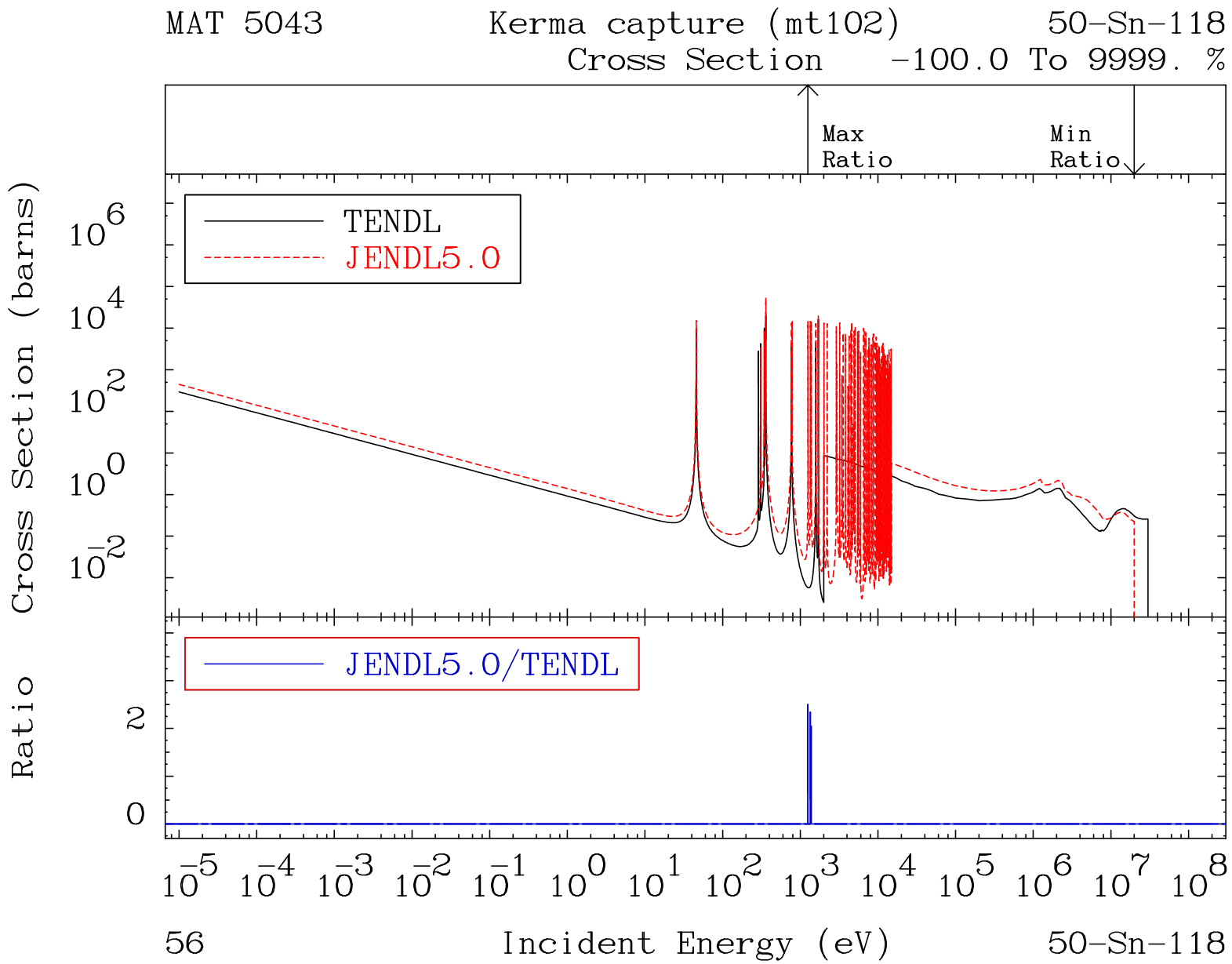

MAT 5043
Kerma total (eV-barns)
50-Sn-118
Cross Section -99.93 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
50-Sn-118

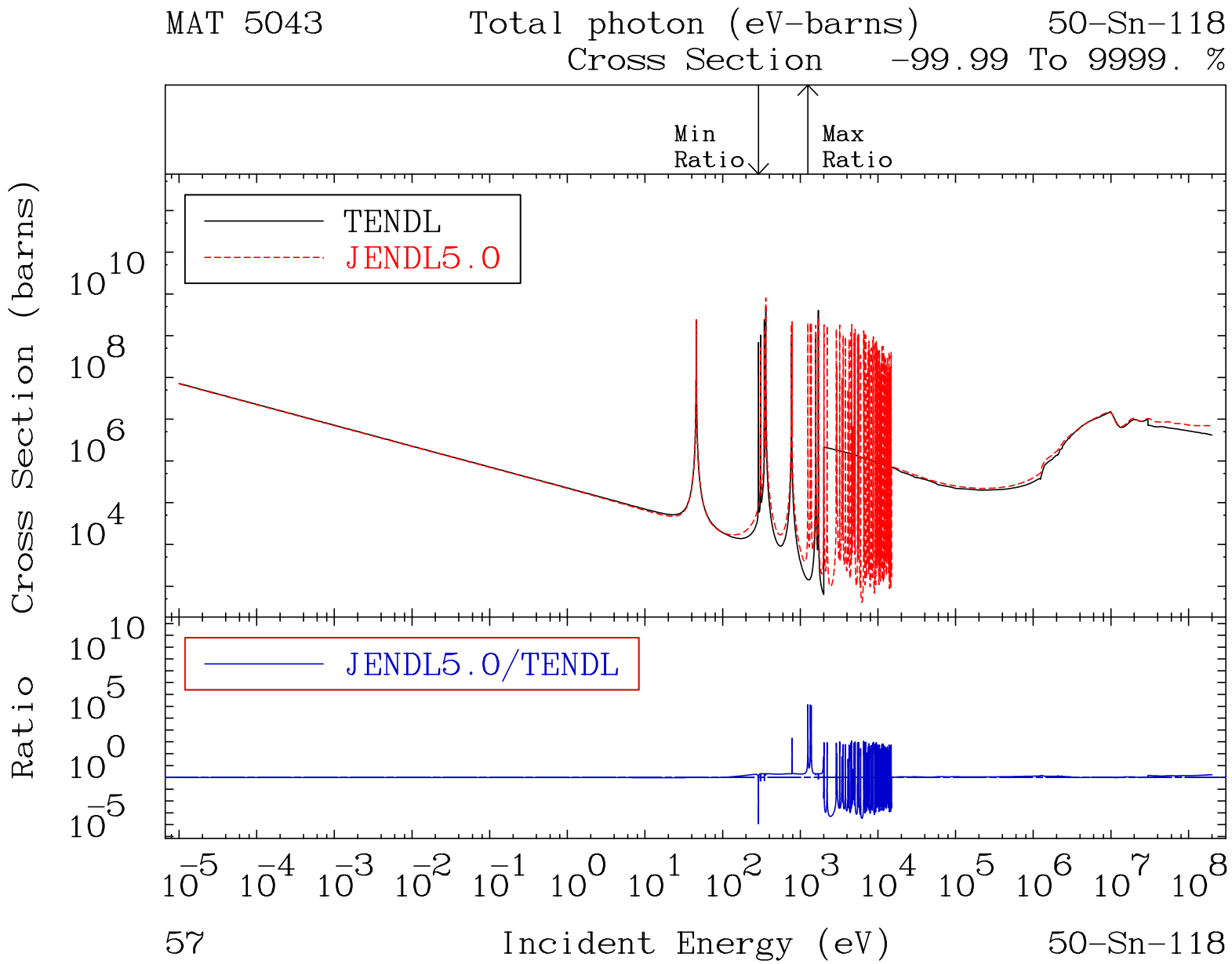

MAT 5043
Kerma elastic
Cross Section
50-Sn-118
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
50-Sn-118

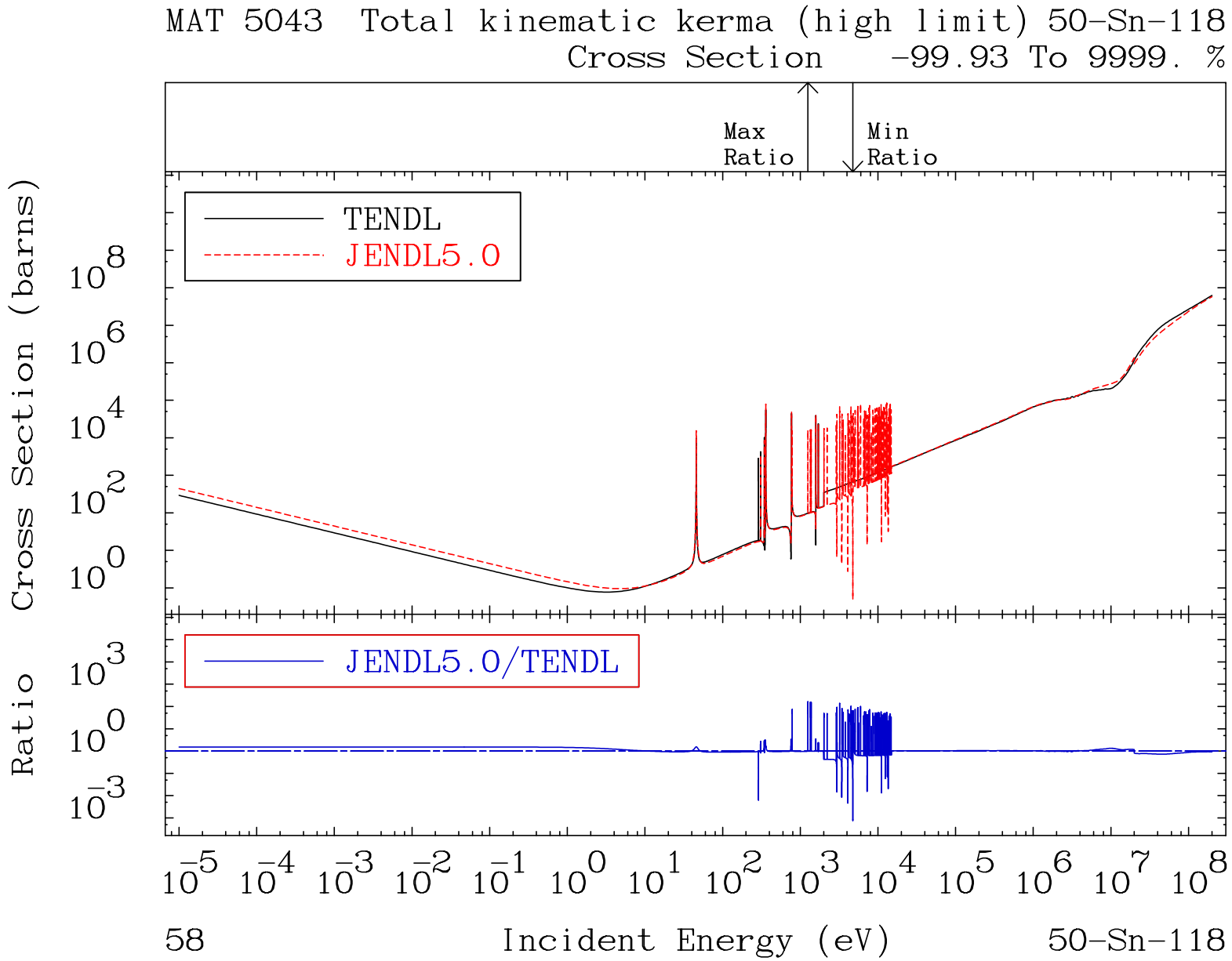

MAT 5043 Kerma non-elastic (all but mt2) 50-Sn-118
Cross Section -99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
50-Sn-118

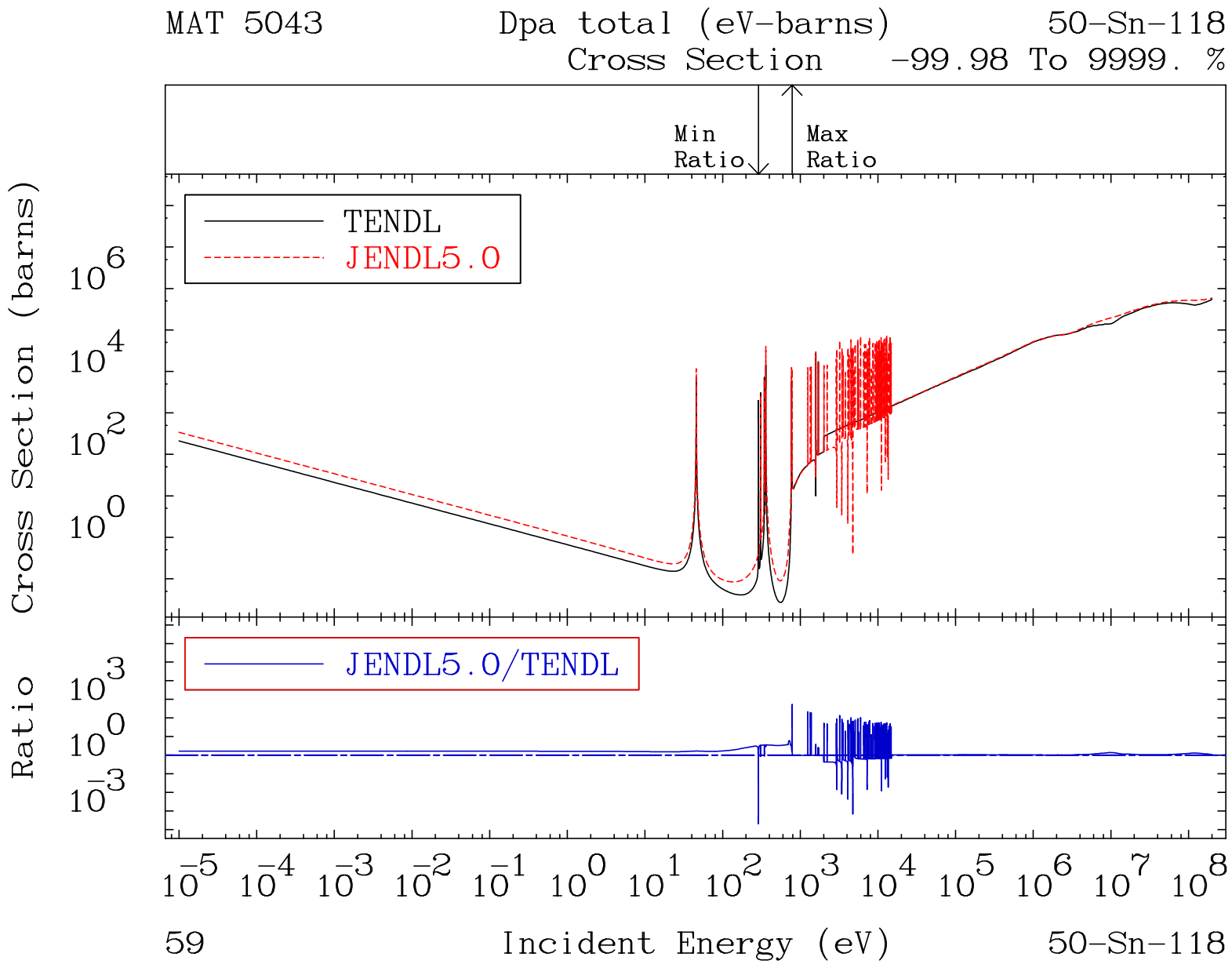

MAT 5043
Kerma inelastic (mt51-91)
50-Sn-118
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.2402 MeV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
50-Sn-118

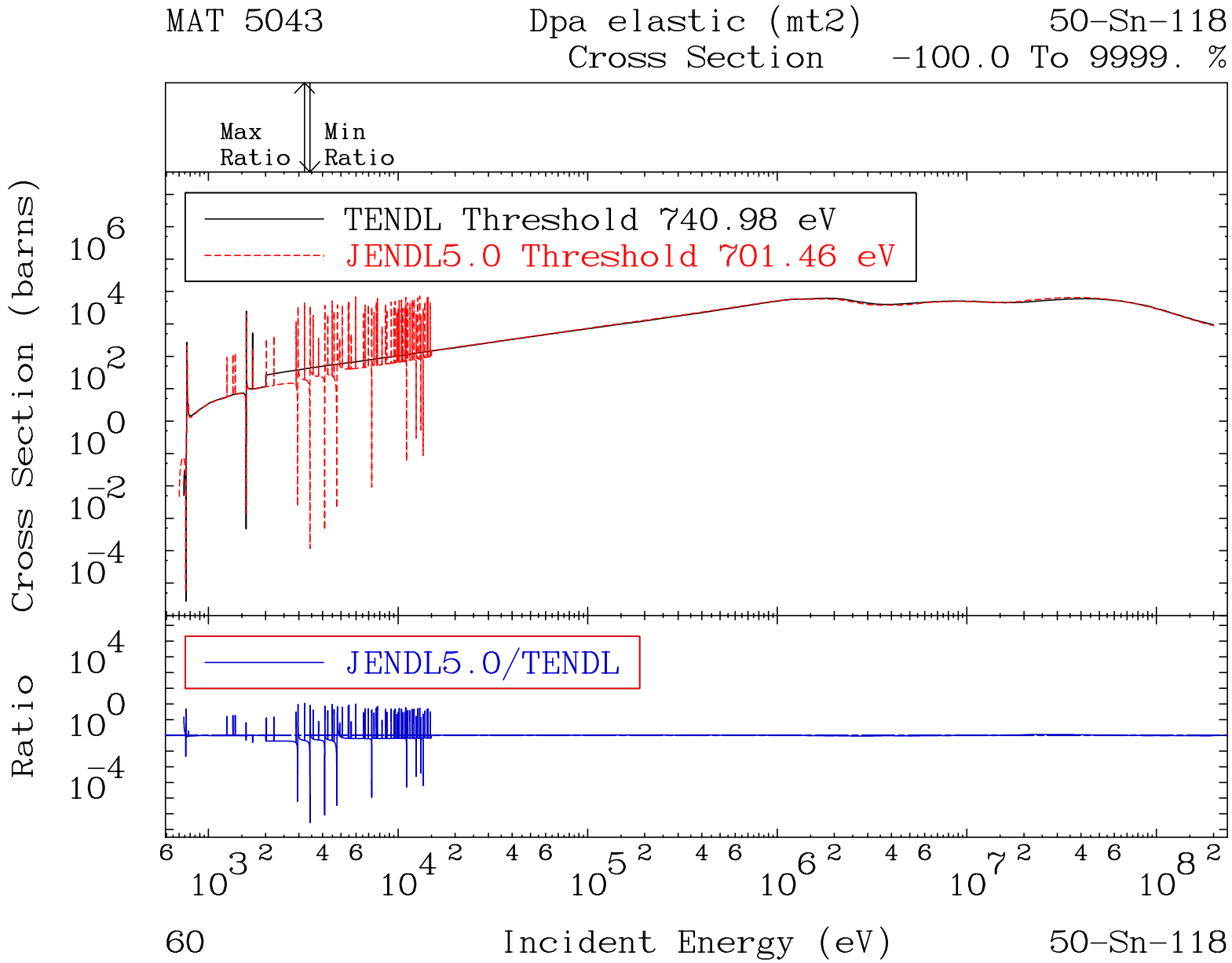

MAT 5043 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-118
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
40
20
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
55
Incident Energy (eV)
50-Sn-118

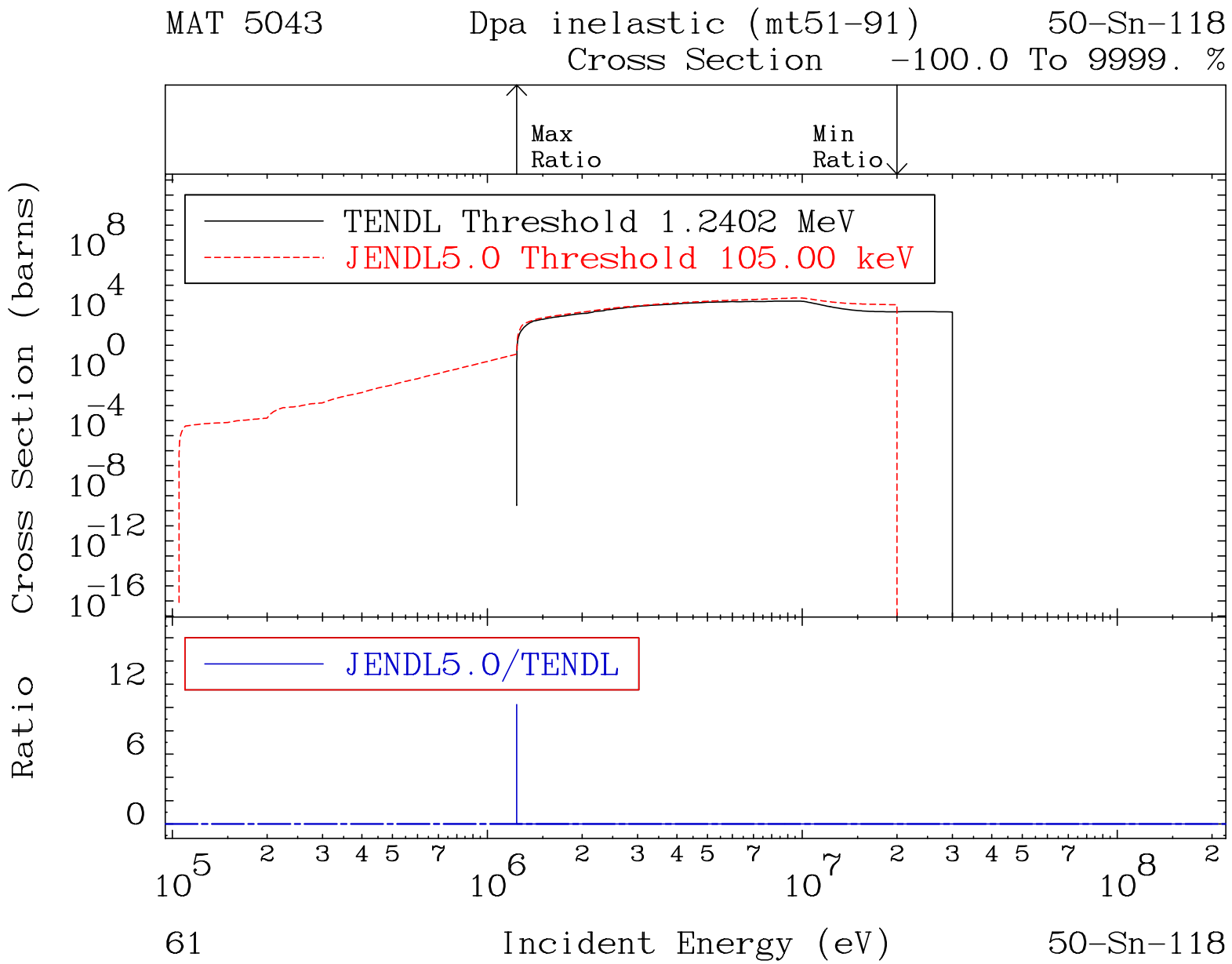

MAT 5043
Kerma capture (mt102)
50-Sn-118
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
56
50-Sn-118

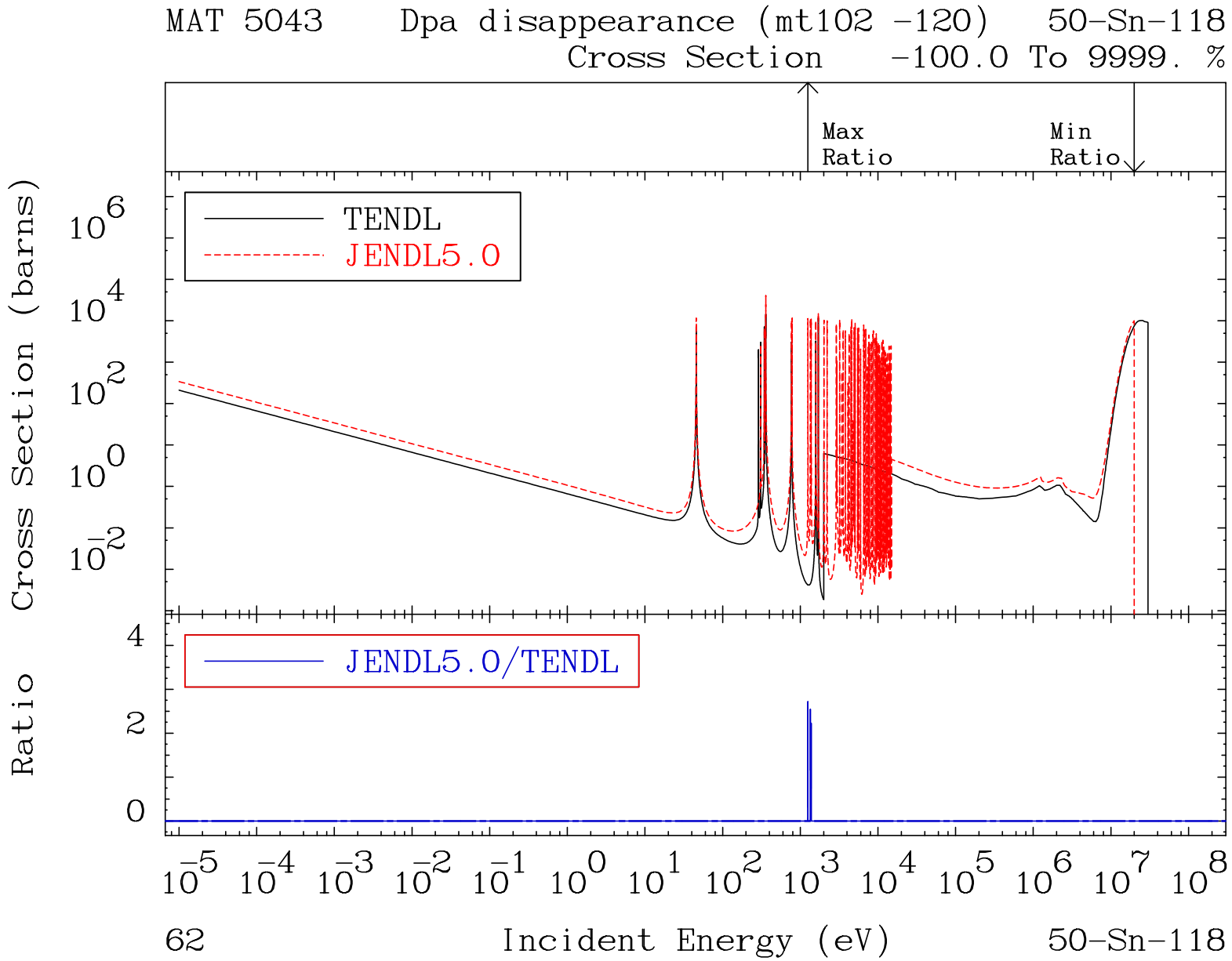

MAT 5043
Total photon (eV-barns)
50-Sn-118
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
50-Sn-118

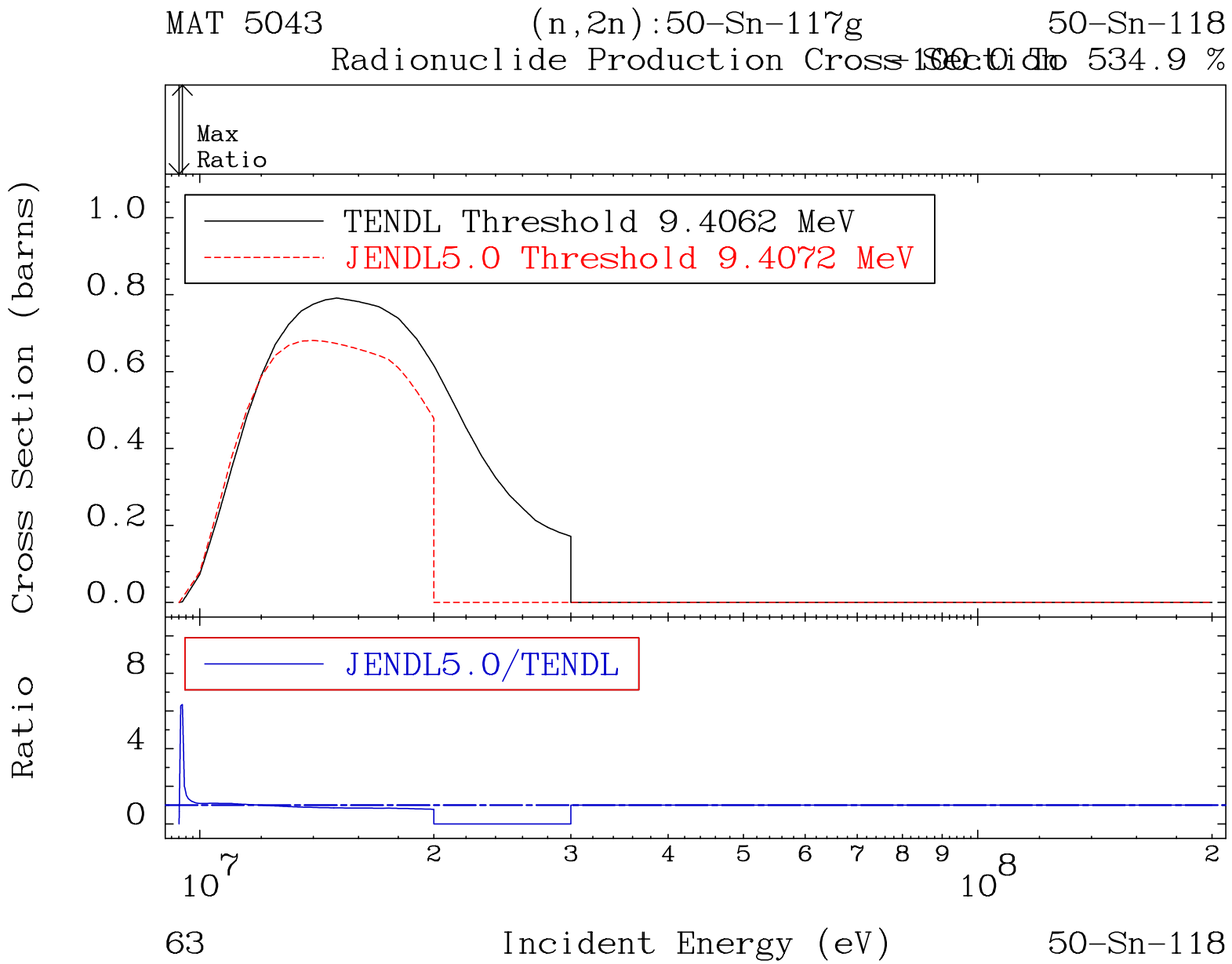

MAT 5043 Total kinematic kerma (high limit) 50-Sn-118
Cross Section -99.93 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
50-Sn-118

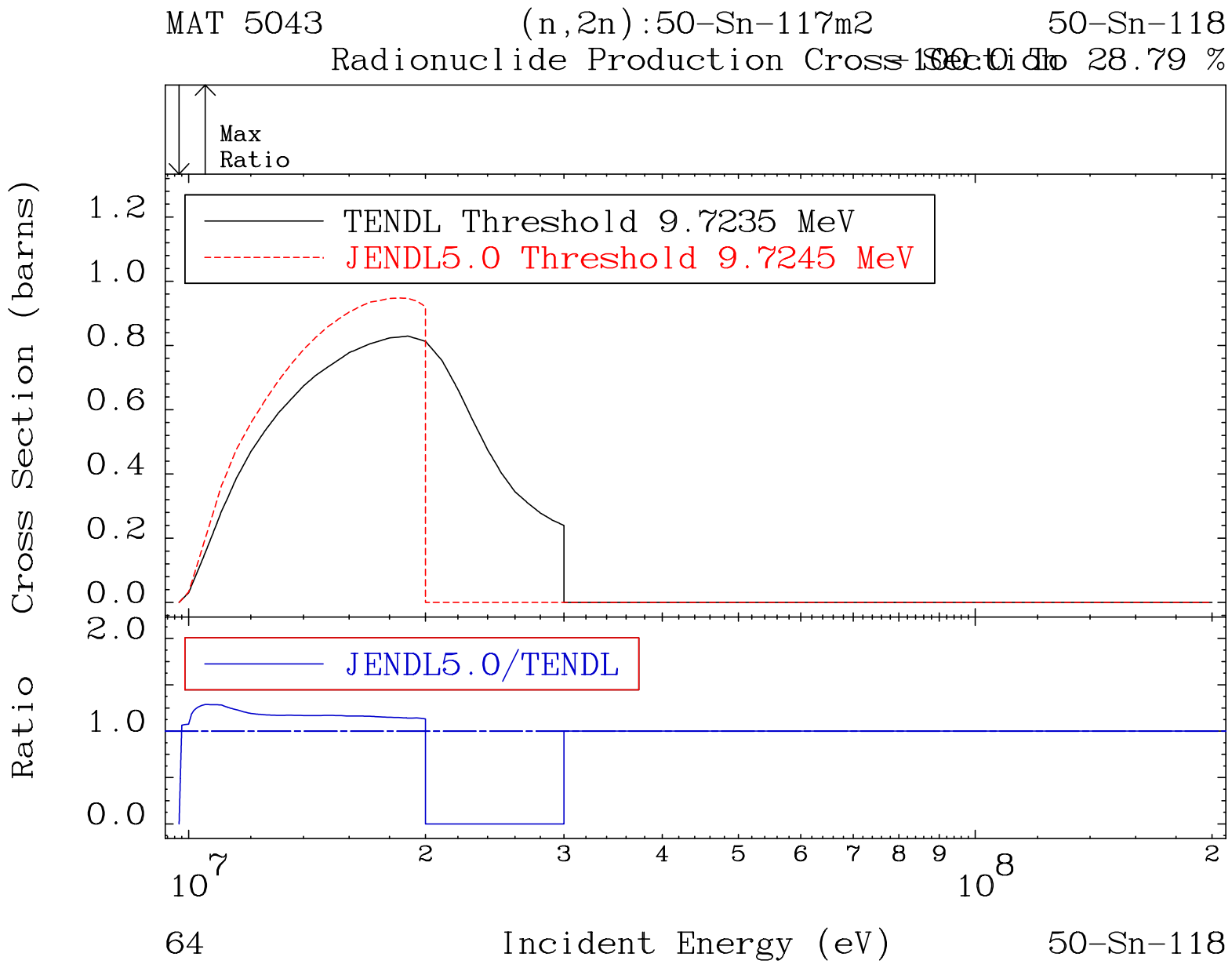

MAT 5043
Dpa total (eV-barns)
50-Sn-118
Cross Section
-99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
59
50-Sn-118

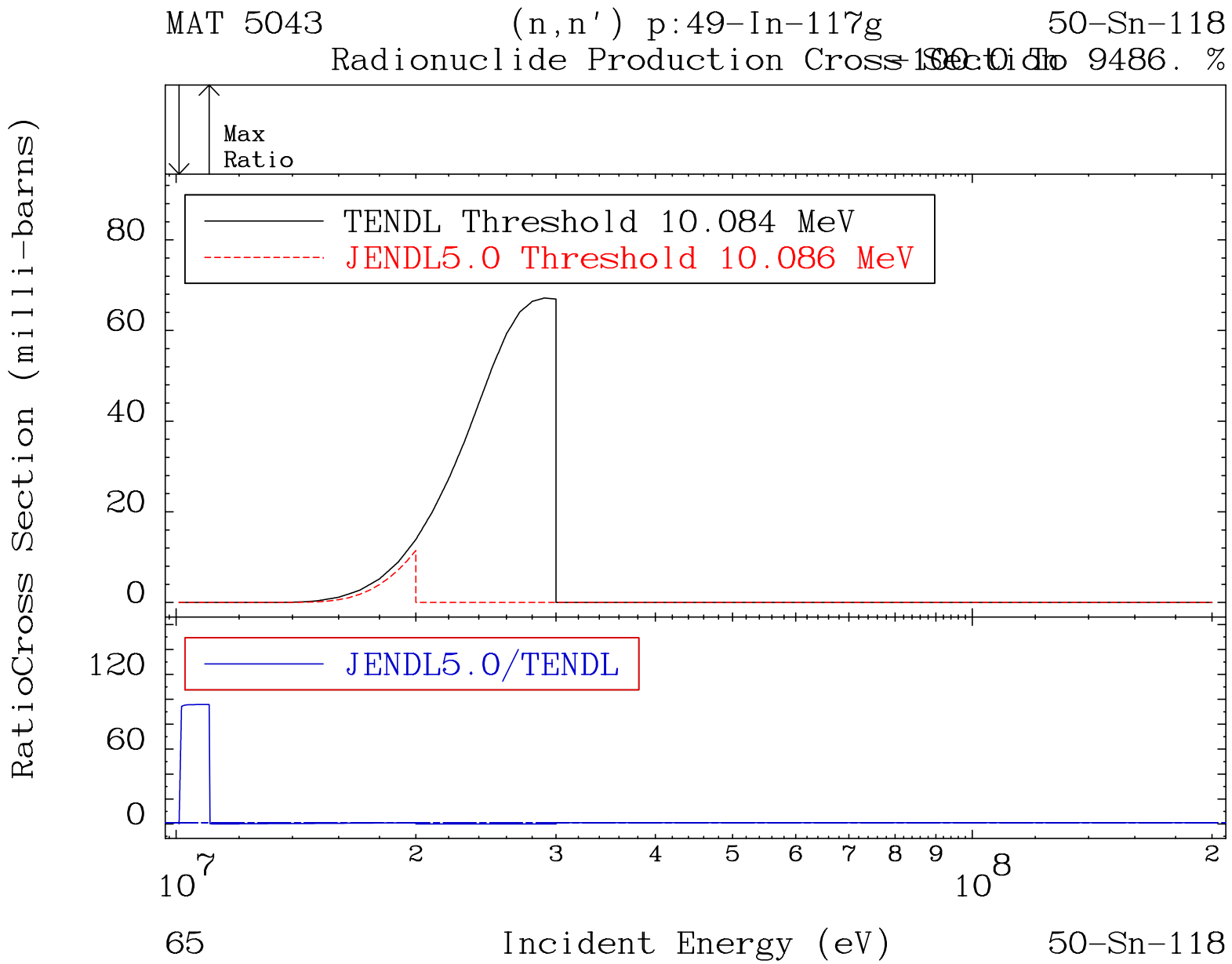

MAT 5043
Dpa elastic (mt2)
Cross Section
50-Sn-118
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 740.98 eV
JENDL5.0 Threshold 701.46 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
50-Sn-118

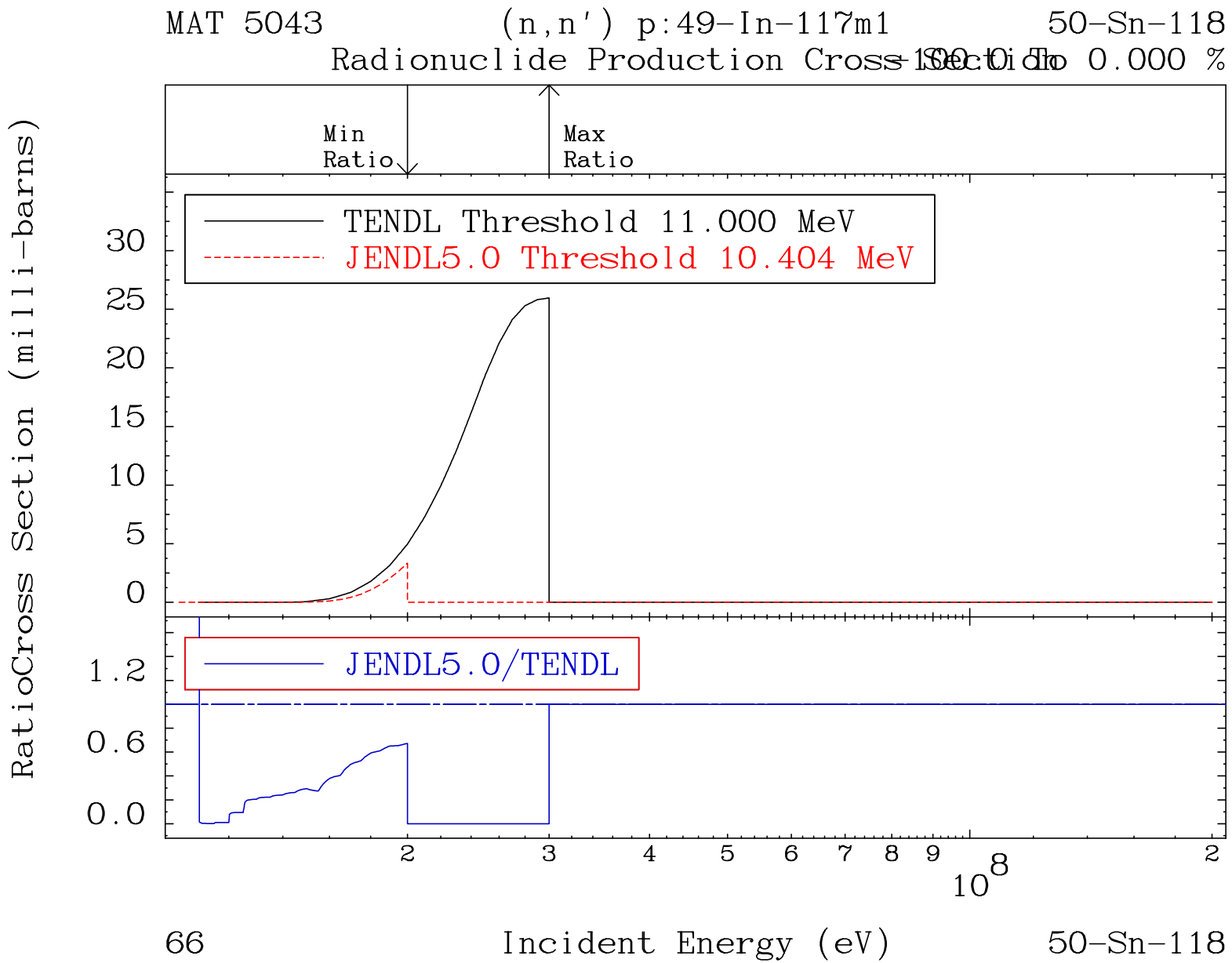

MAT 5043
Dpa inelastic (mt51-91)
50-Sn-118
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.2402 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
61
50-Sn-118

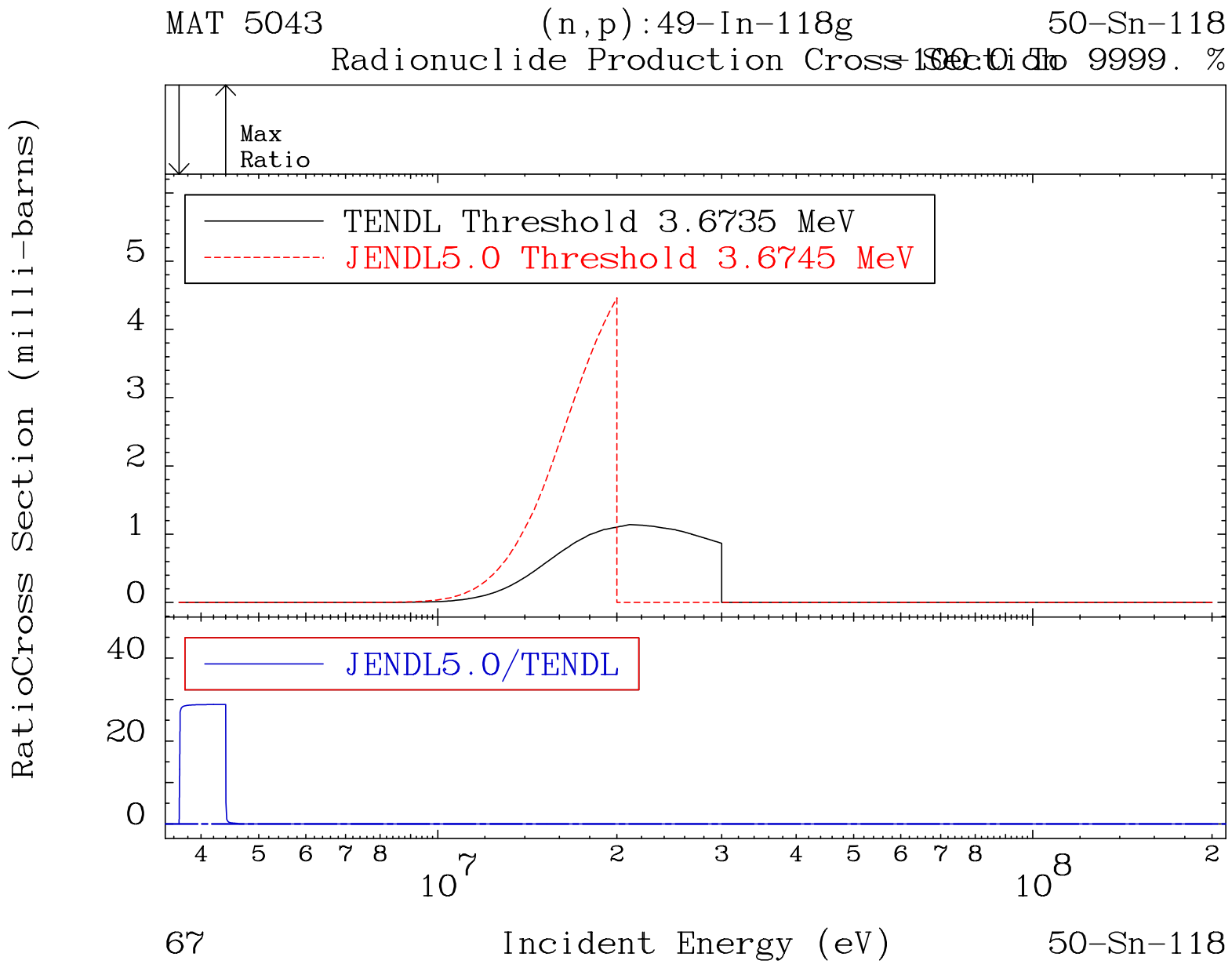

MAT 5043 Dpa disappearance (mt102 -120) 50-Sn-118
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
50-Sn-118

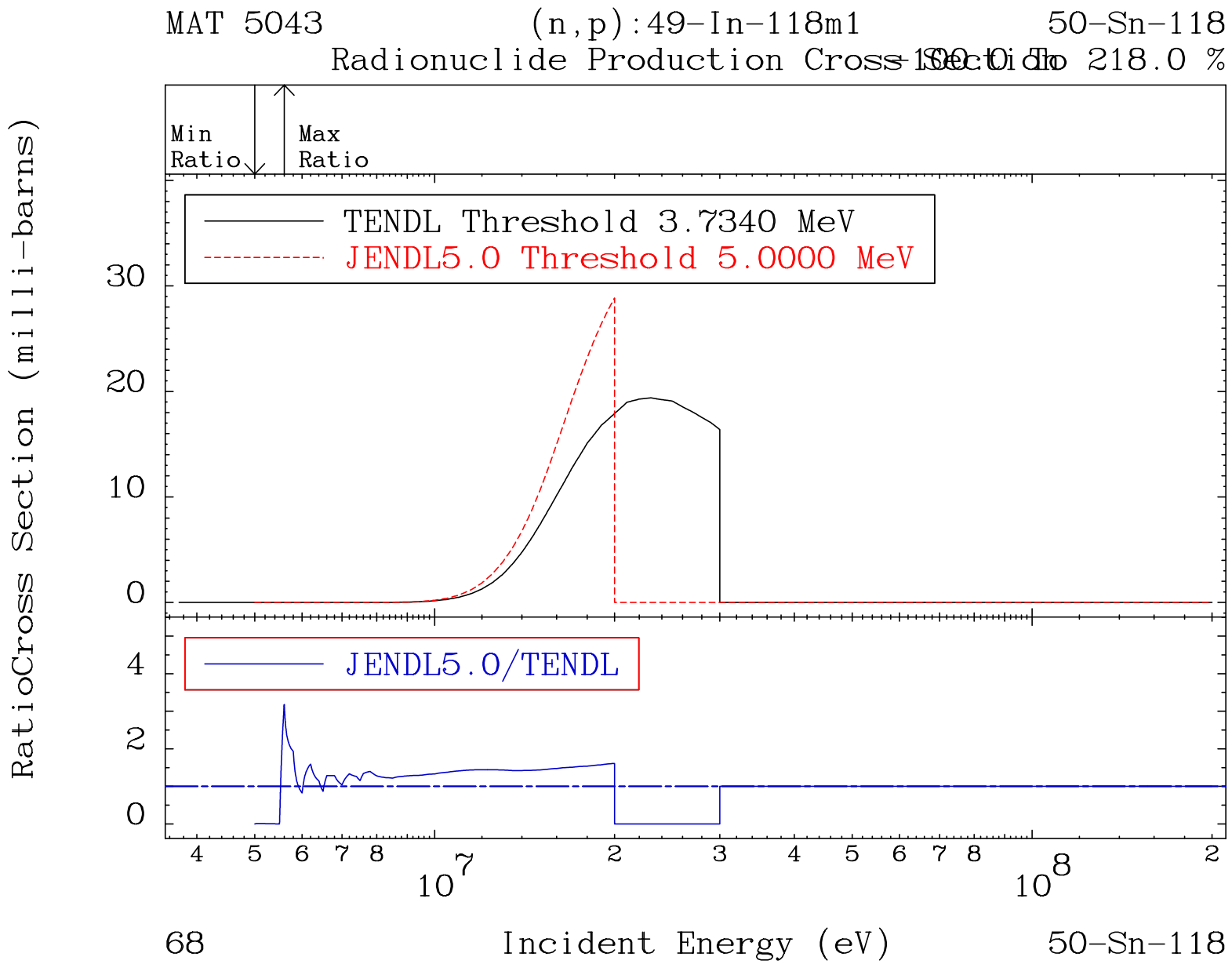

MAT 5043
(n,2n):50-Sn-117g
50-Sn-118
Radionuclide Production Cross Section To 534.9 %
Max
Ratio
TENDL Threshold 9.4062 MeV
JENDL5.0 Threshold 9.4072 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
2
3
4
5
6
7
8
9
2
10^7
10^8
63
Incident Energy (eV)
50-Sn-118

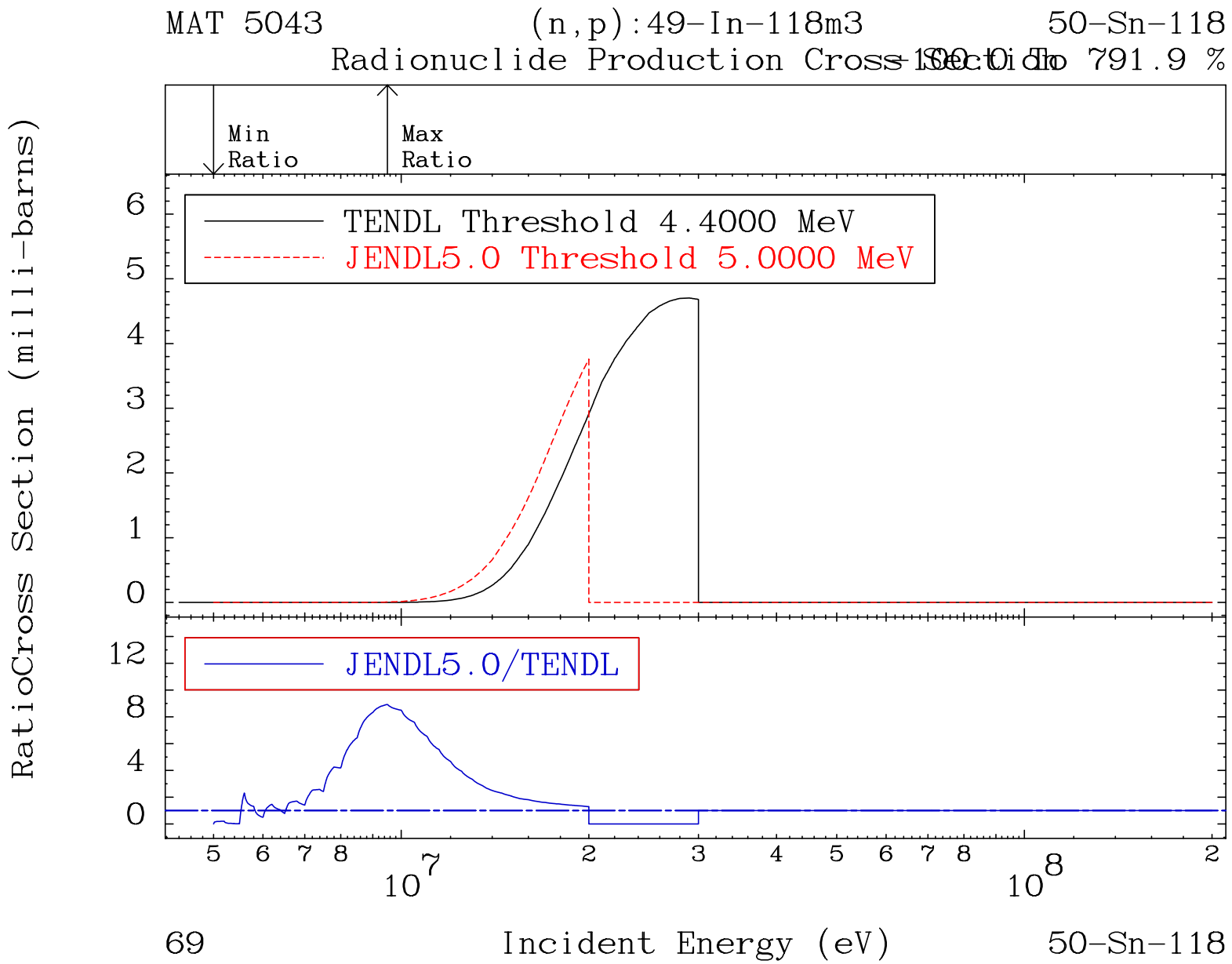

MAT 5043
(n,2n):50-Sn-117m2
50-Sn-118
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.7235 MeV
JENDL5.0 Threshold 9.7245 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
50-Sn-118

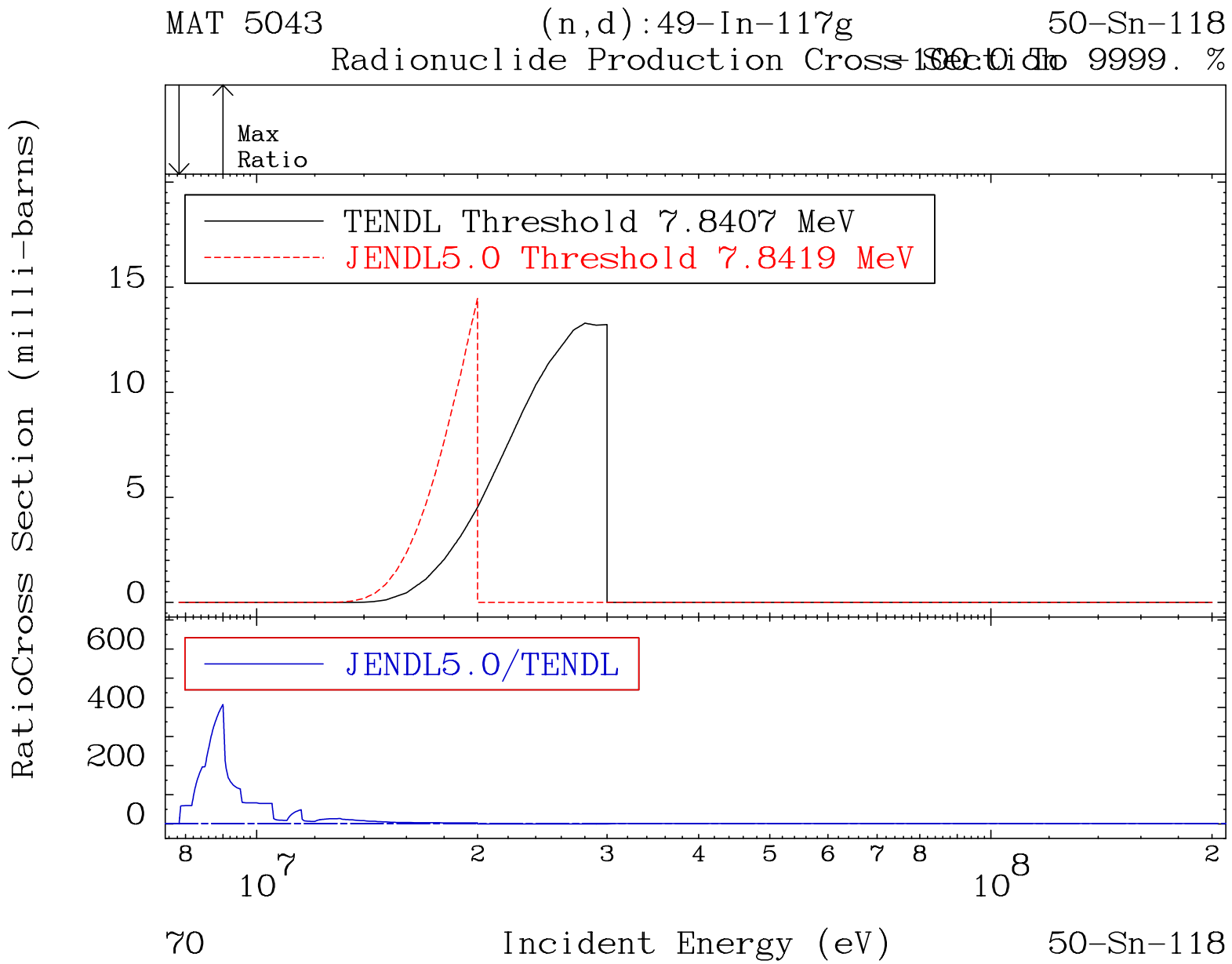

MAT 5043
(n,n') p:49-In-117g
50-Sn-118
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 10.084 MeV
JENDL5.0 Threshold 10.086 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
65
50-Sn-118

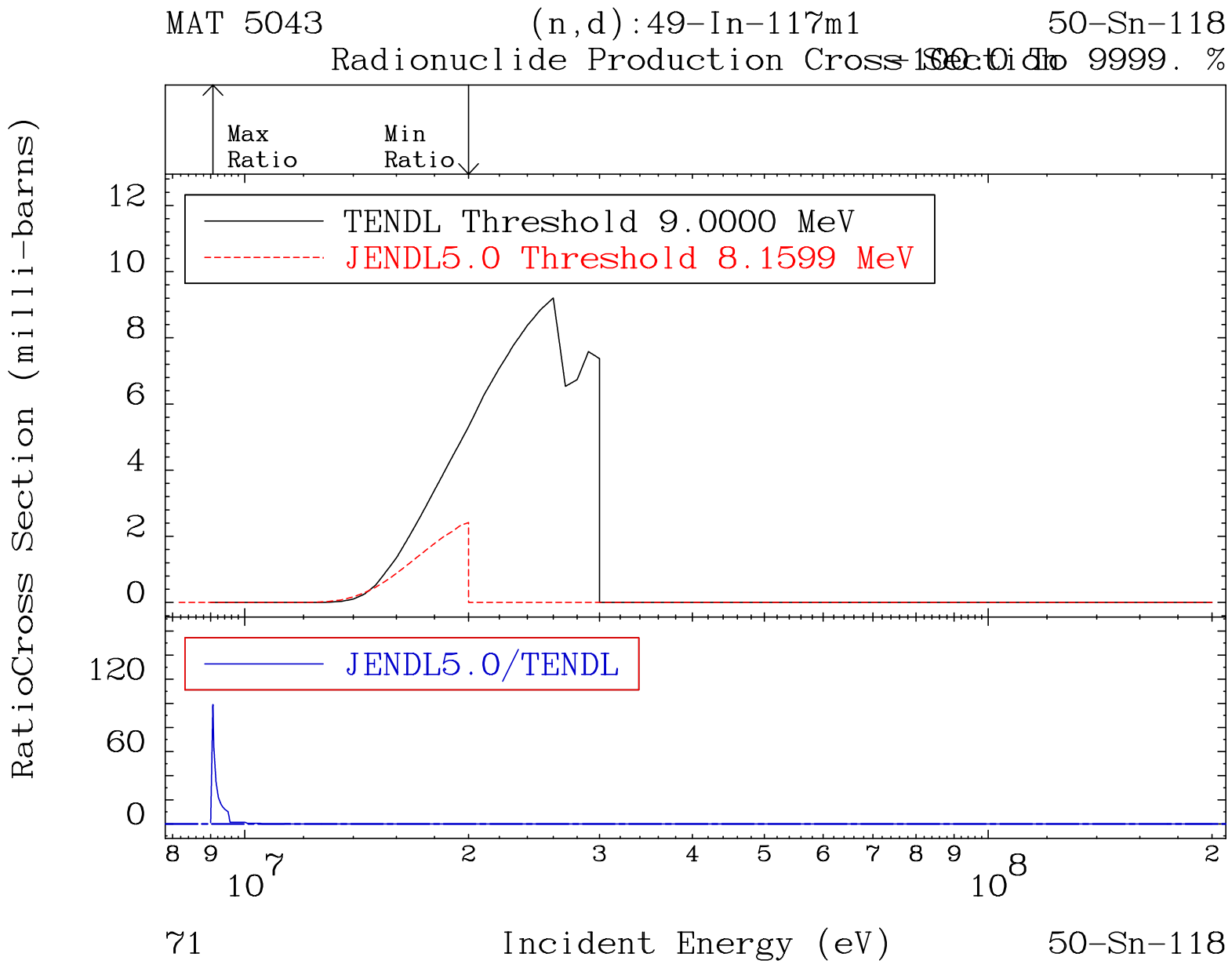

MAT 5043
(n,n') p:49-In-117m1
50-Sn-118
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.000 MeV
JENDL5.0 Threshold 10.404 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
50-Sn-118

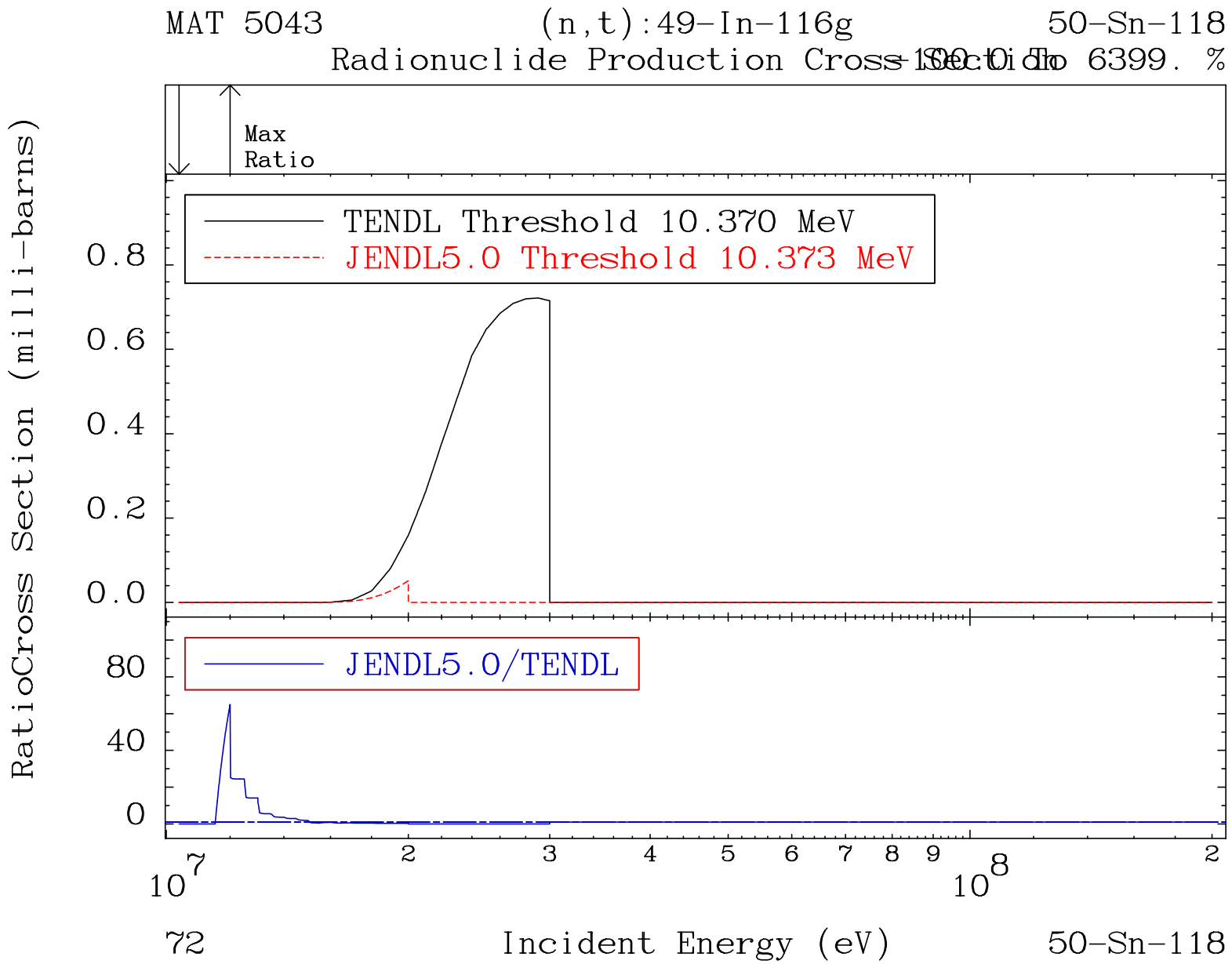

MAT 5043
(n,p):49-In-118g
50-Sn-118
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 3.6735 MeV
JENDL5.0 Threshold 3.6745 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
67
50-Sn-118

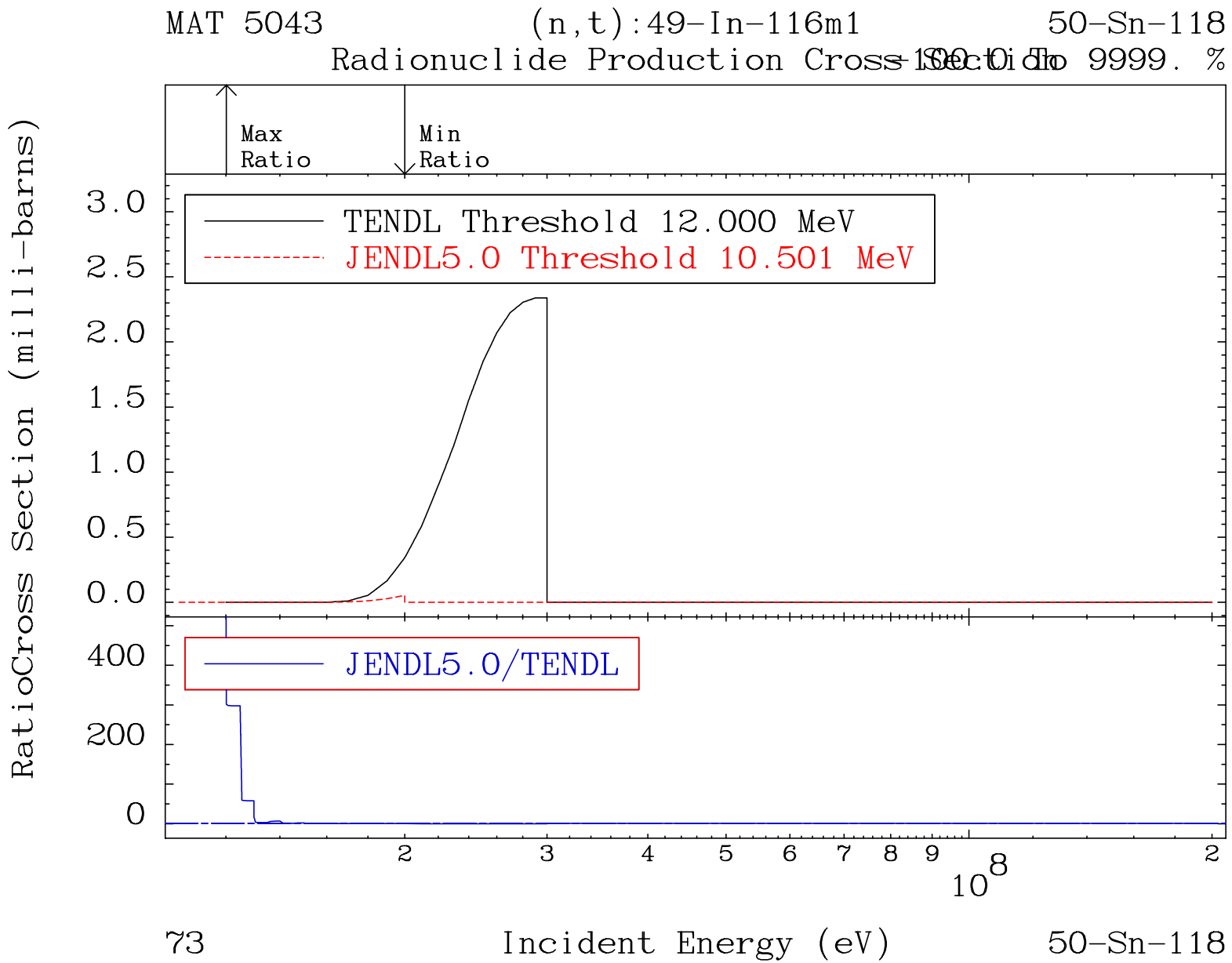

MAT 5043
(n,p):49-In-118m1
50-Sn-118
Radionuclide Production Cross Section To 218.0 %
Min Ratio
Max Ratio
TENDL Threshold 3.7340 MeV
JENDL5.0 Threshold 5.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
4
2
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
68
Incident Energy (eV)
50-Sn-118

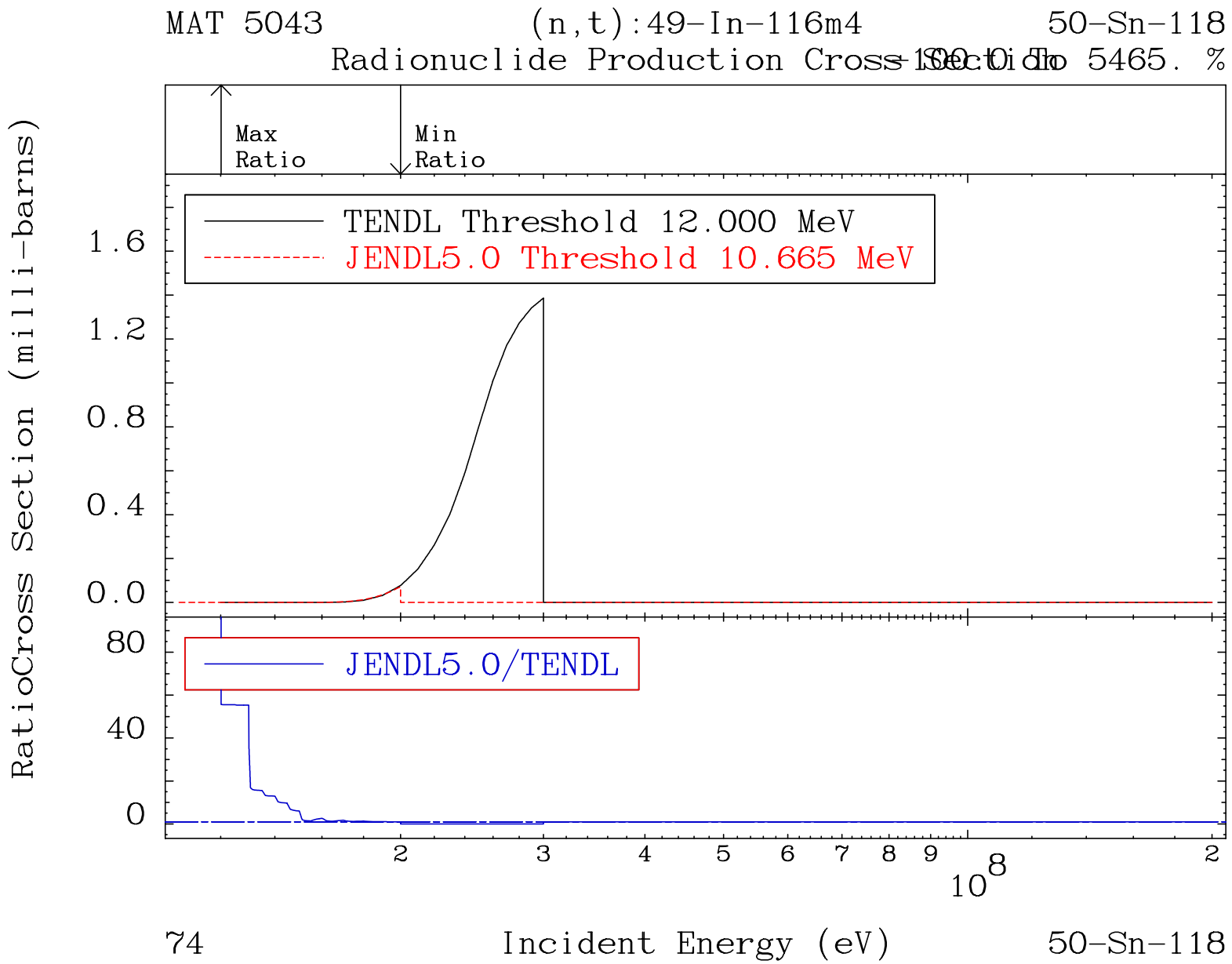

MAT 5043
(n,p):49-In-118m3
50-Sn-118
Radionuclide Production Cross Section To 791.9 %
Min Ratio
Max Ratio
TENDL Threshold 4.4000 MeV
JENDL5.0 Threshold 5.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
69
50-Sn-118


MAT 5043
(n,d):49-In-117g
50-Sn-118
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 7.8407 MeV
JENDL5.0 Threshold 7.8419 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
600
400
200
0
8
2
3
4
5
6
7
8
2
10^7
10^8
70
Incident Energy (eV)
50-Sn-118


MAT 5043
(n,d):49-In-117m1
50-Sn-118
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JENDL5.0 Threshold 8.1599 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
71
50-Sn-118


MAT 5043
(n,t):49-In-116g
50-Sn-118
Radionuclide Production Cross Section To 6399. %
Max
Ratio
TENDL Threshold 10.370 MeV
JENDL5.0 Threshold 10.373 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
0.8
0.6
0.4
0.2
0.0
80
40
0
10^7
2
3
4
5
6
7
8
9
10^8
2
72
Incident Energy (eV)
50-Sn-118


MAT 5043
(n,t):49-In-116m1
50-Sn-118
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.000 MeV
JENDL5.0 Threshold 10.501 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
400
200
0
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
50-Sn-118


MAT 5043
(n,t):49-In-116m4
50-Sn-118
Radionuclide Production Cross Section To 5465. %
Max Ratio
Min Ratio
TENDL Threshold 12.000 MeV
JENDL5.0 Threshold 10.665 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
74
Incident Energy (eV)
50-Sn-118