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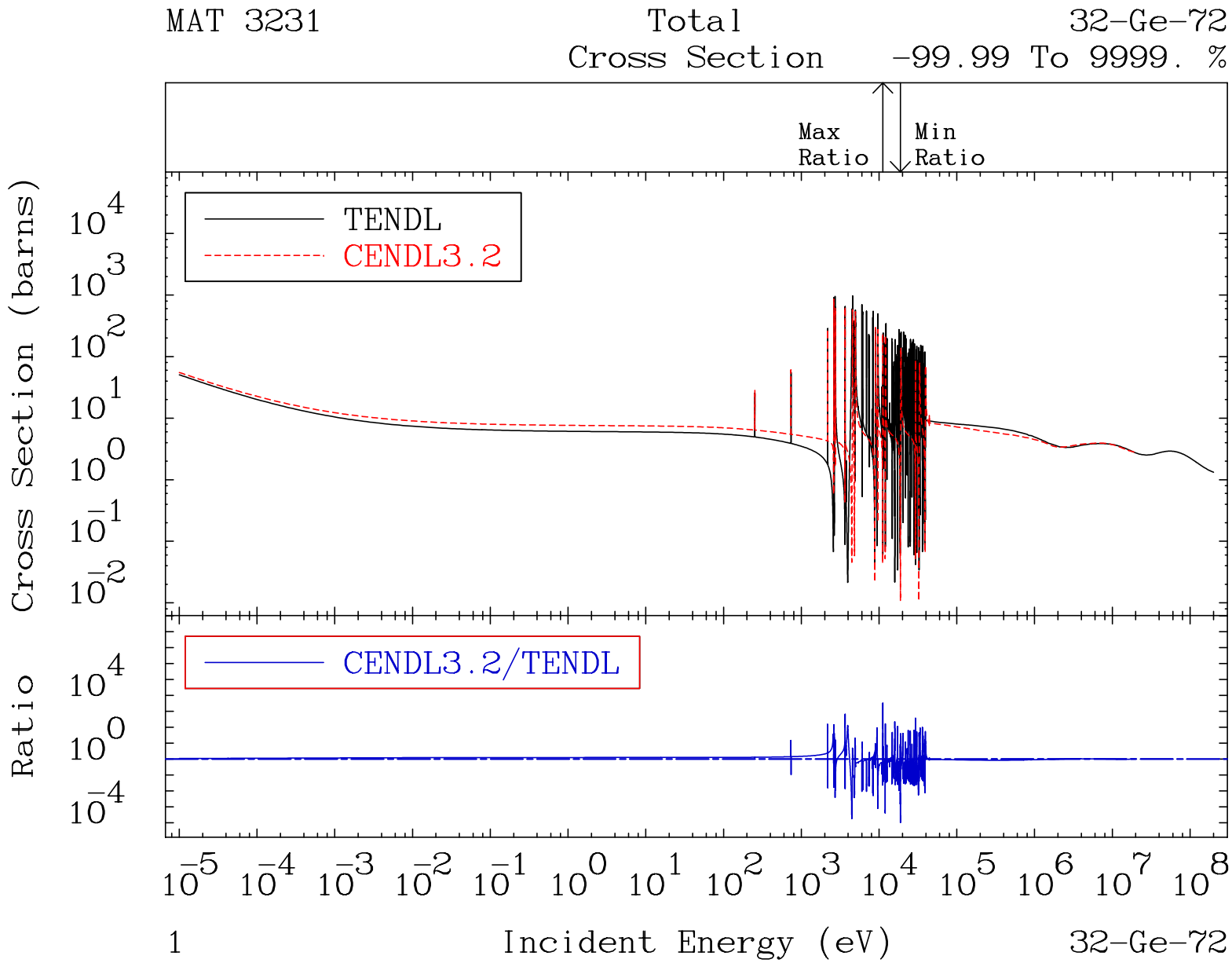
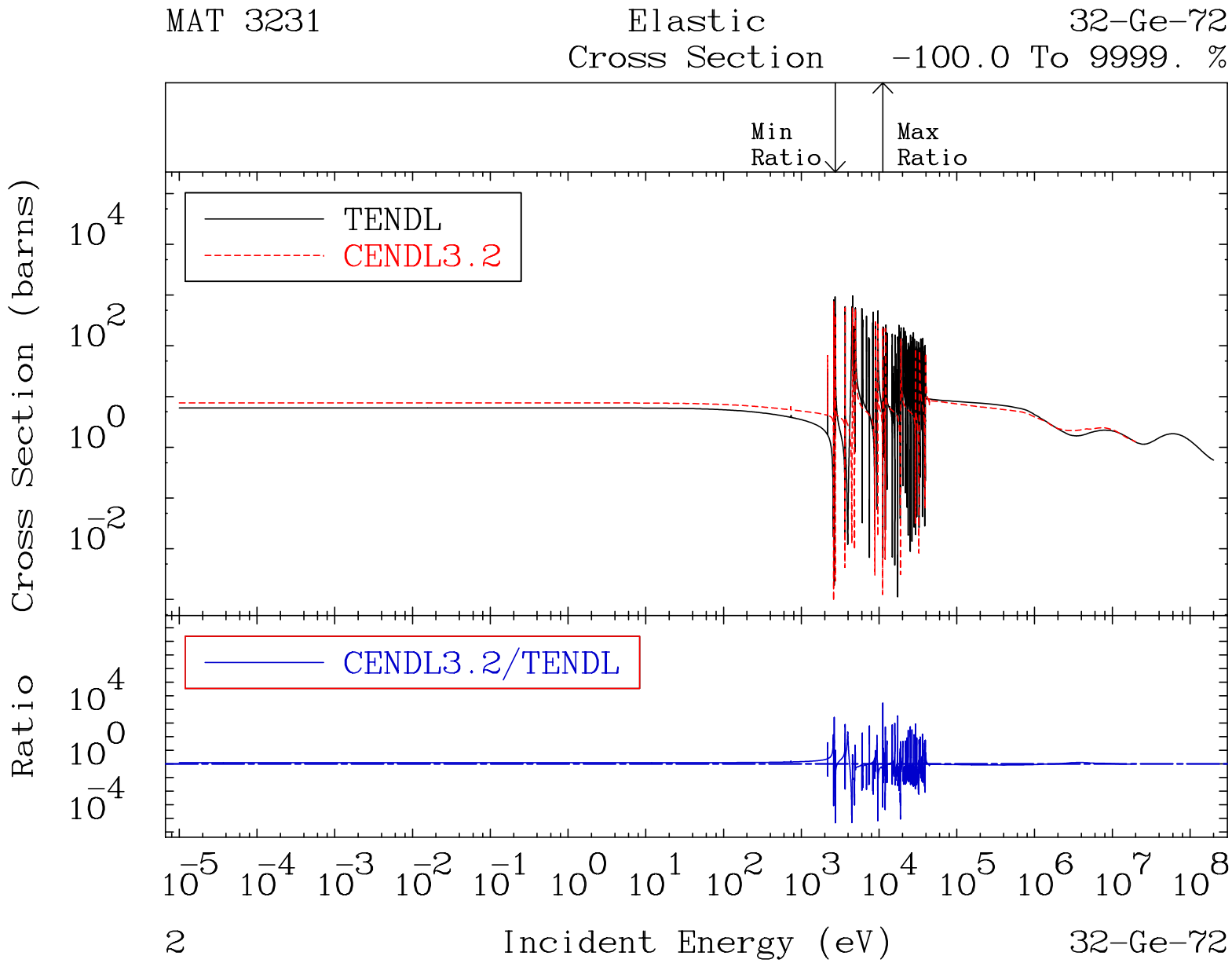
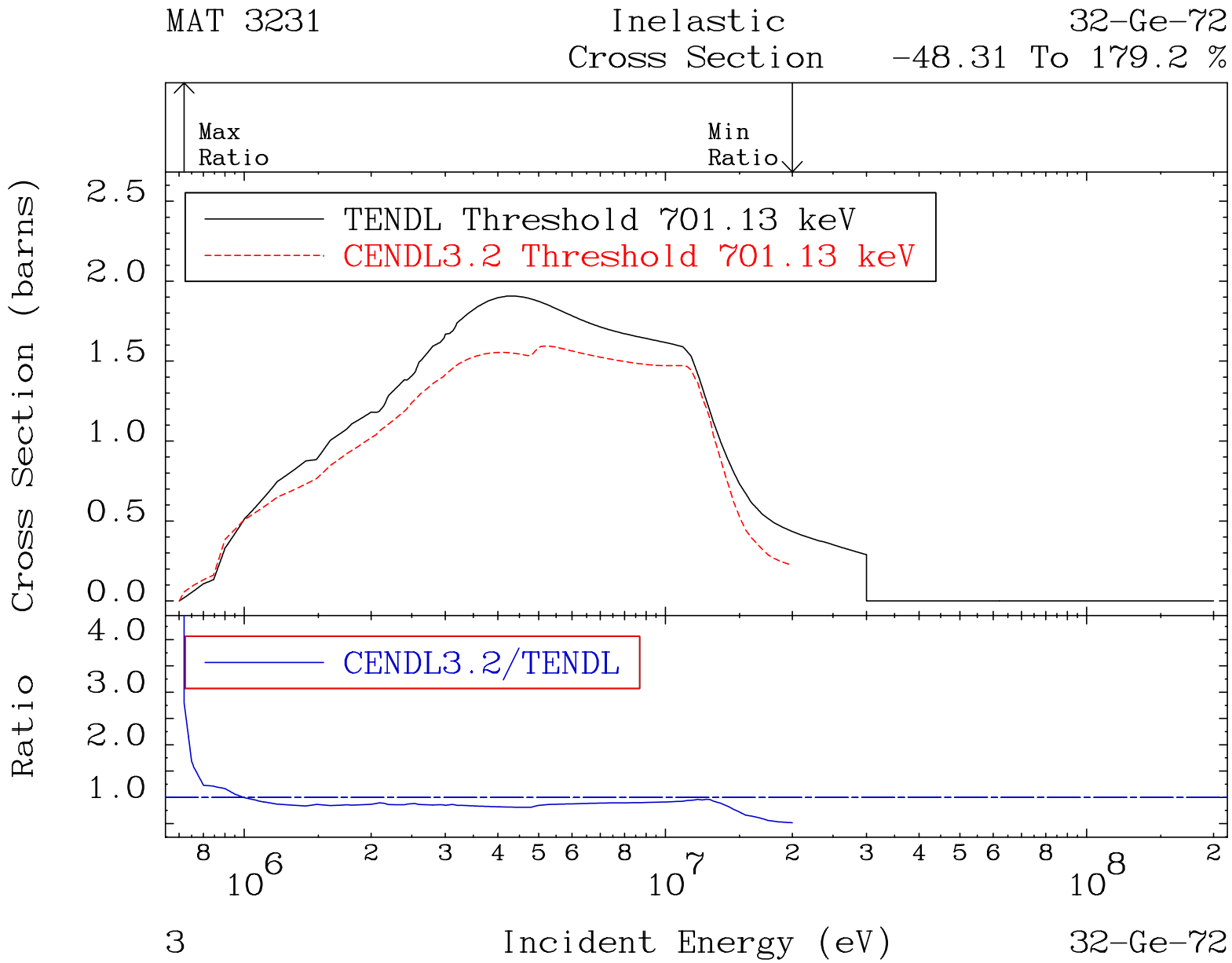
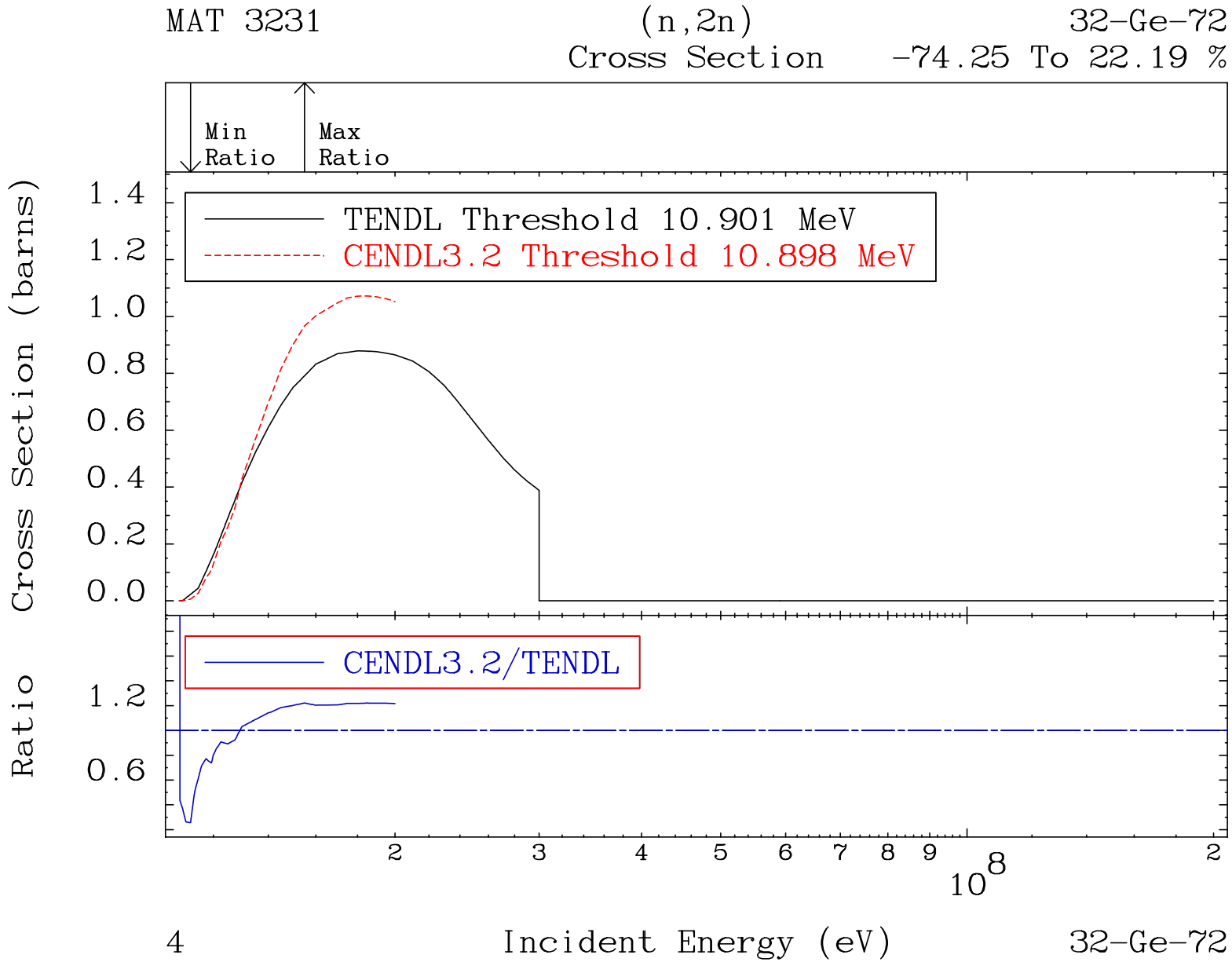
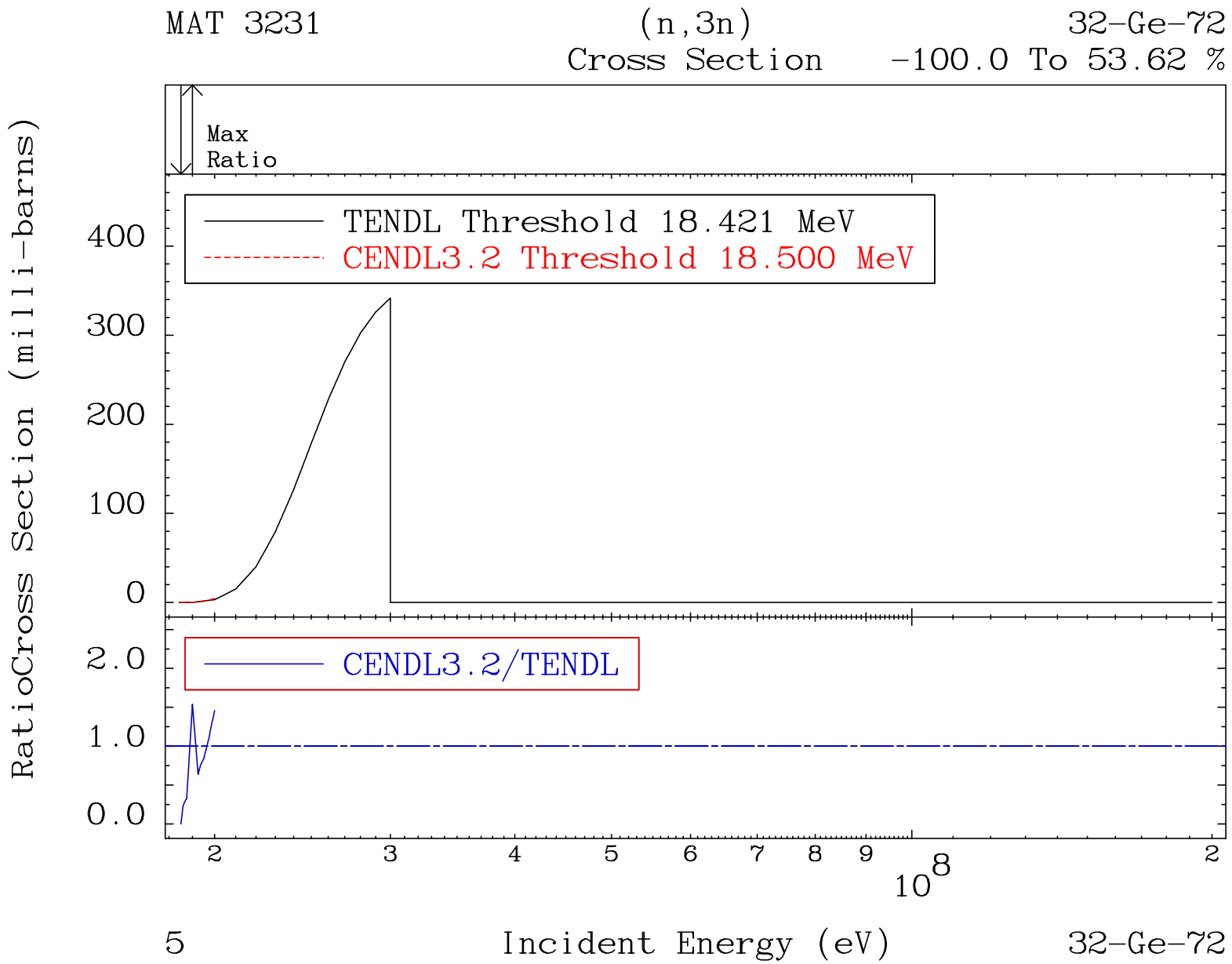
Press Mouse Button to Start

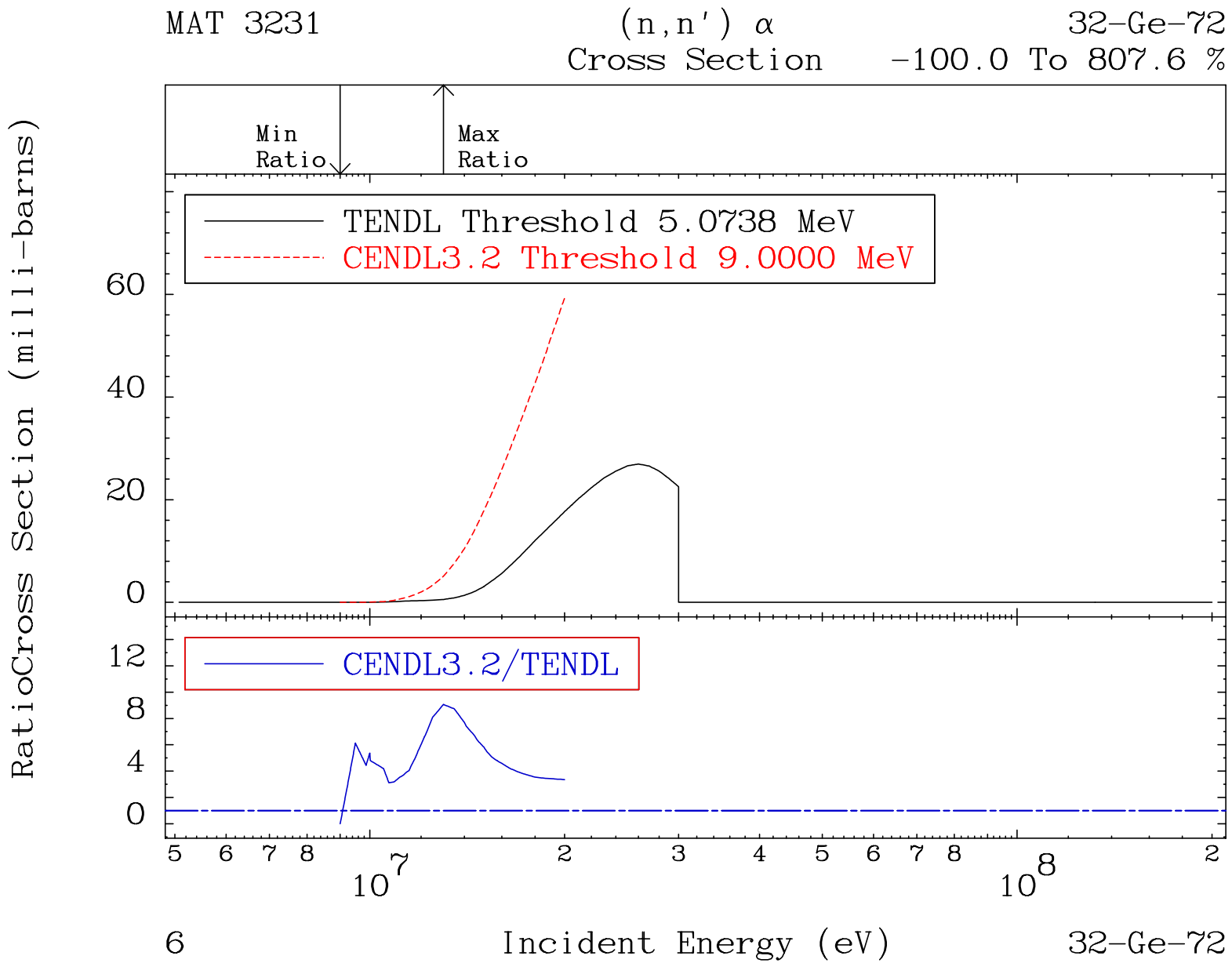

MAT 3231
Total
Cross Section
32-Ge-72
-99.99 To 9999. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
1
32-Ge-72

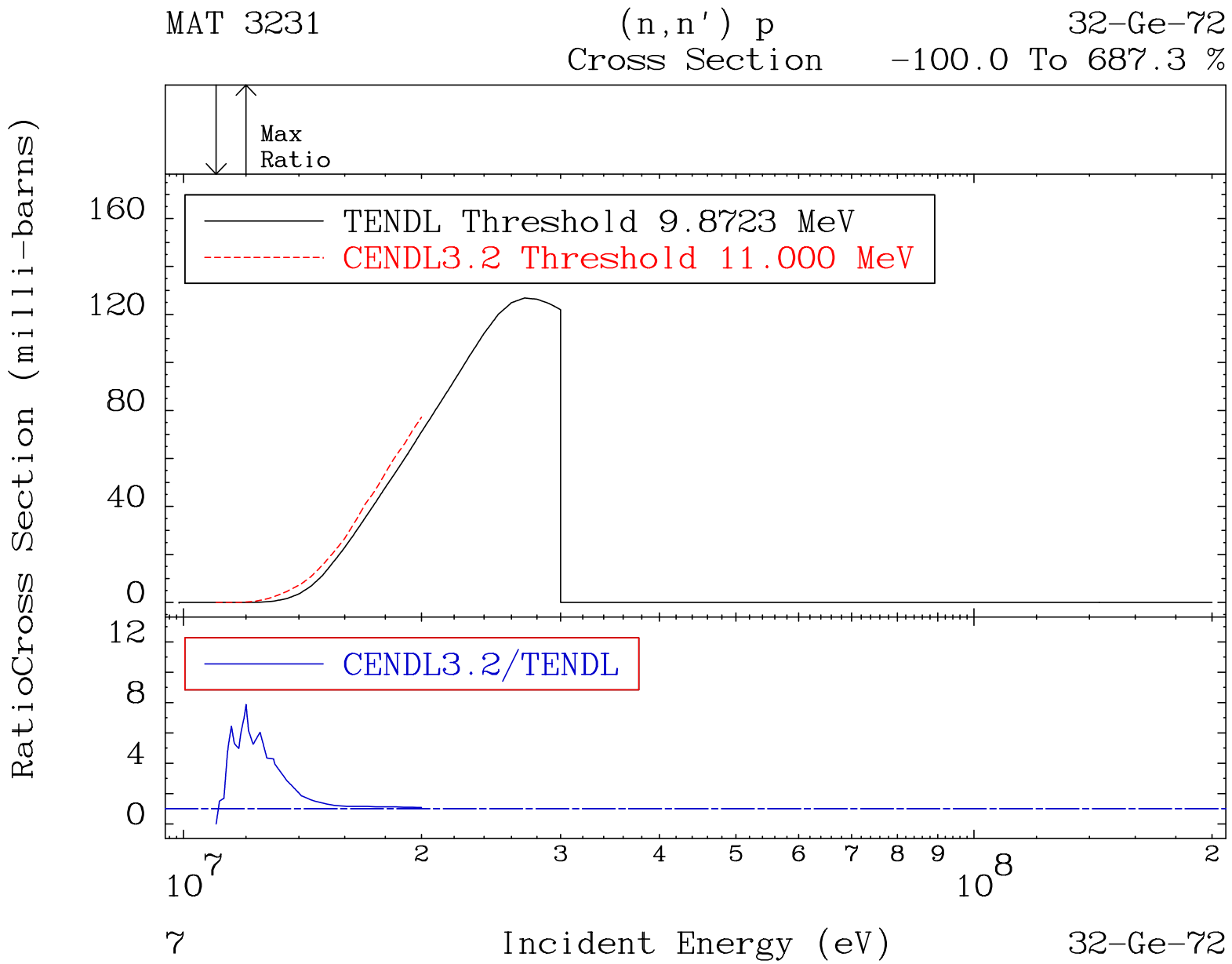

MAT 3231
Elastic
Cross Section
32-Ge-72
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
32-Ge-72

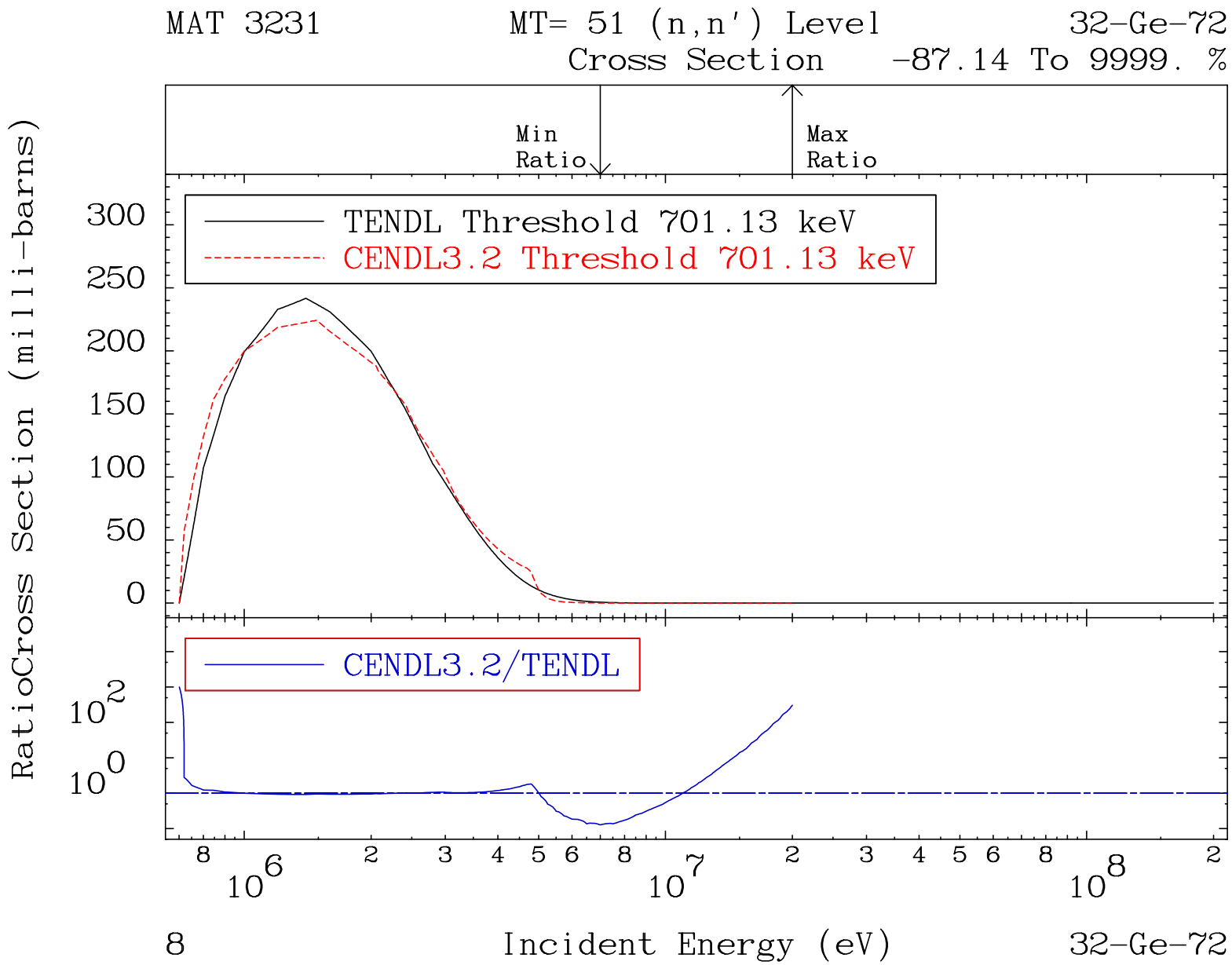

MAT 3231
Inelastic
Cross Section
32-Ge-72
-48.31 To 179.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 701.13 keV
CENDL3.2 Threshold 701.13 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
4.0
3.0
2.0
1.0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
Incident Energy (eV)
3
32-Ge-72

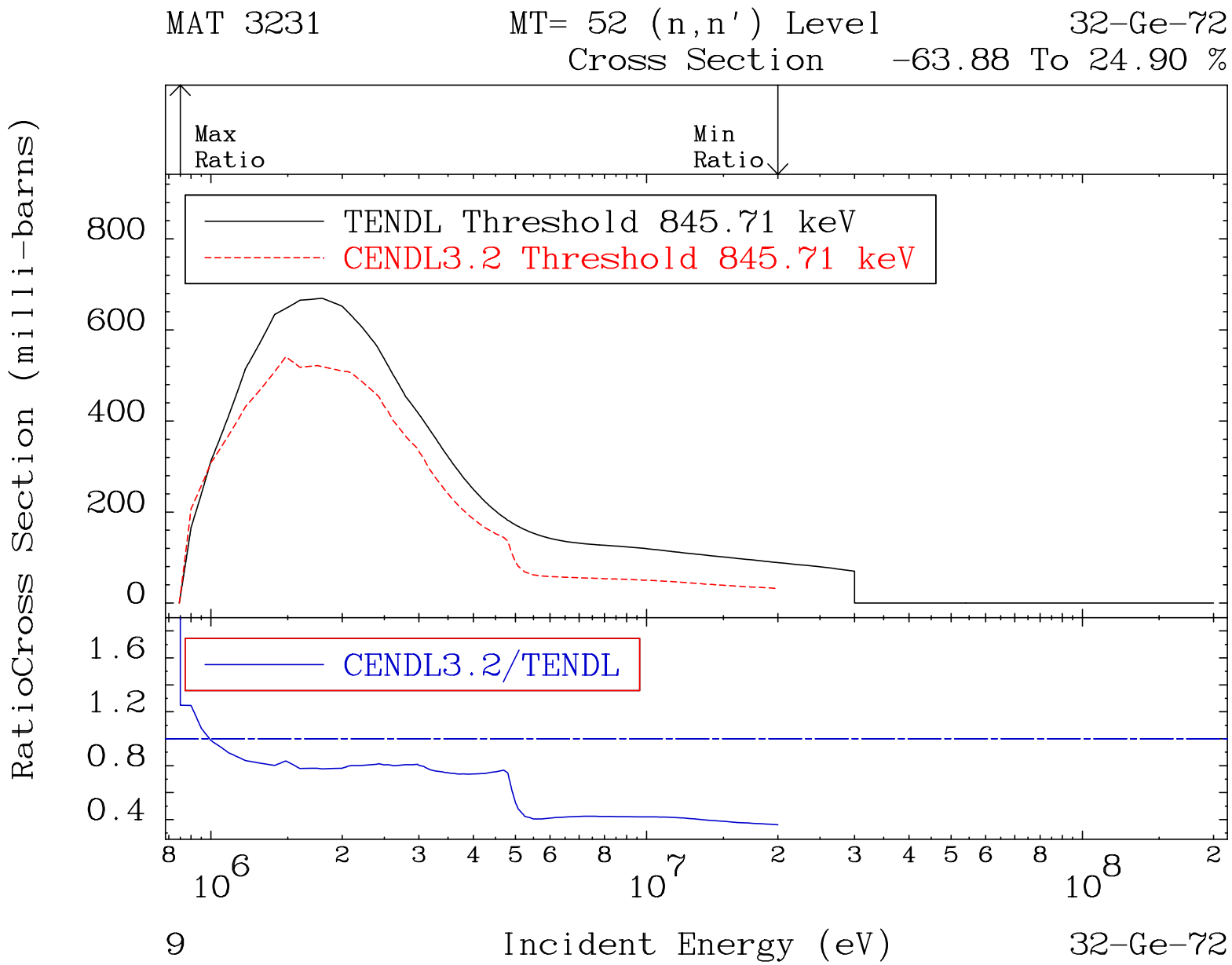

MAT 3231
(n,2n)
Cross Section
32-Ge-72
-74.25 To 22.19 %
Min Ratio
Max Ratio
TENDL Threshold 10.901 MeV
CENDL3.2 Threshold 10.898 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
1.2
0.6
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
32-Ge-72

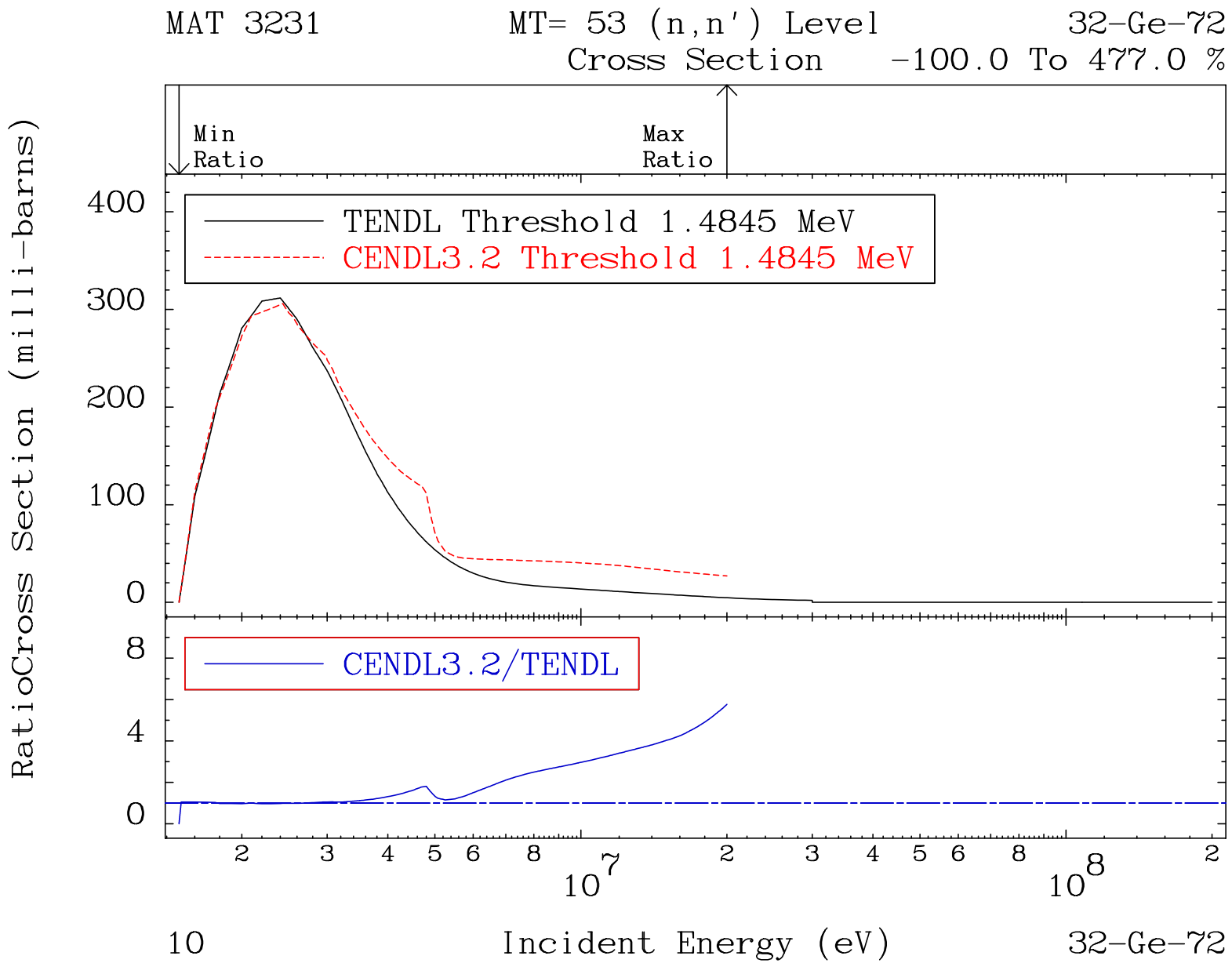

MAT 3231
(n,3n)
Cross Section
32-Ge-72
-100.0 To 53.62 %
Max
Ratio
TENDL Threshold 18.421 MeV
CENDL3.2 Threshold 18.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
32-Ge-72

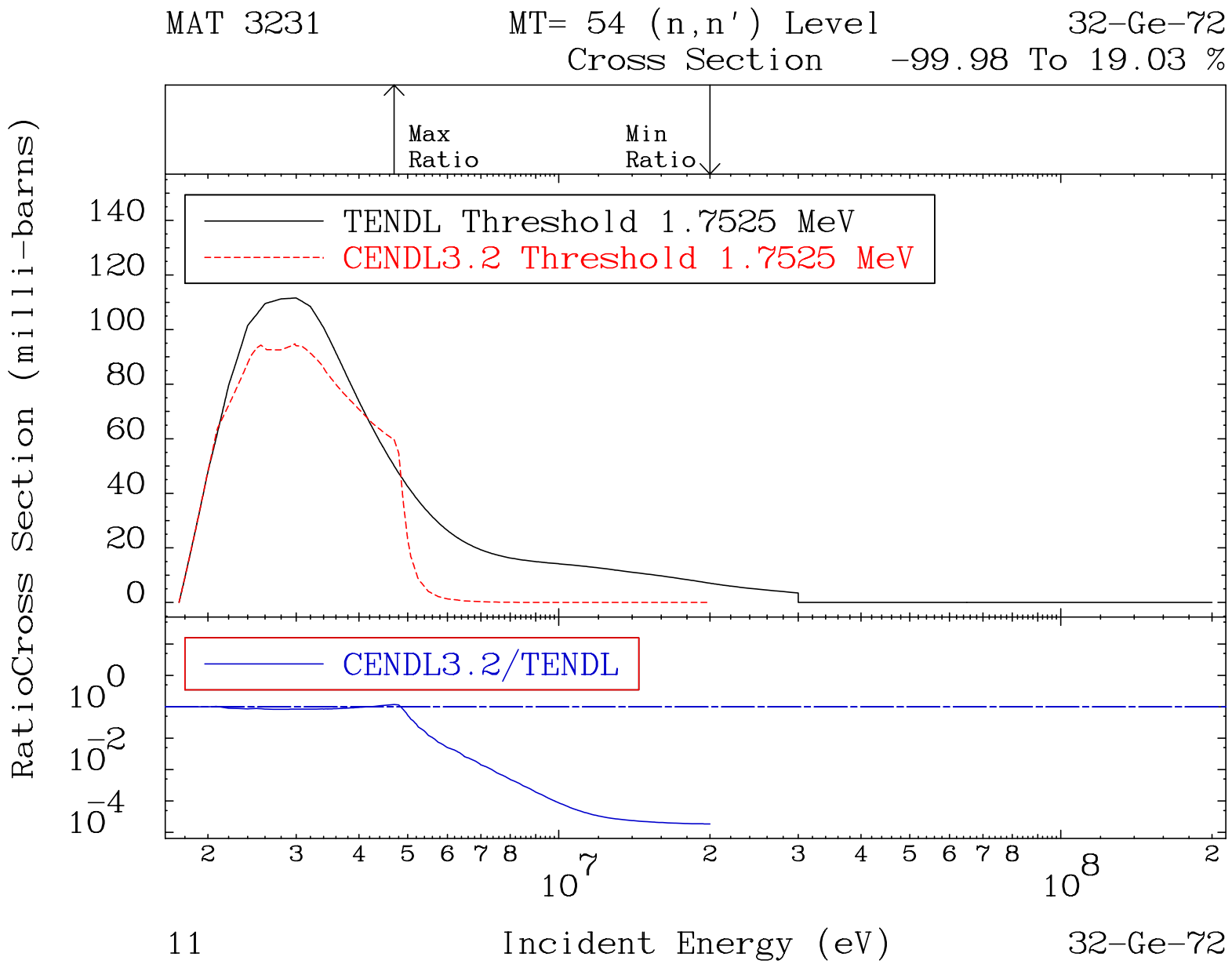

MAT 3231
(n,n') α
Cross Section
32-Ge-72
-100.0 To 807.6 %
Min Ratio
Max Ratio
TENDL Threshold 5.0738 MeV
CENDL3.2 Threshold 9.0000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
40
20
0
12
8
4
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
6
32-Ge-72

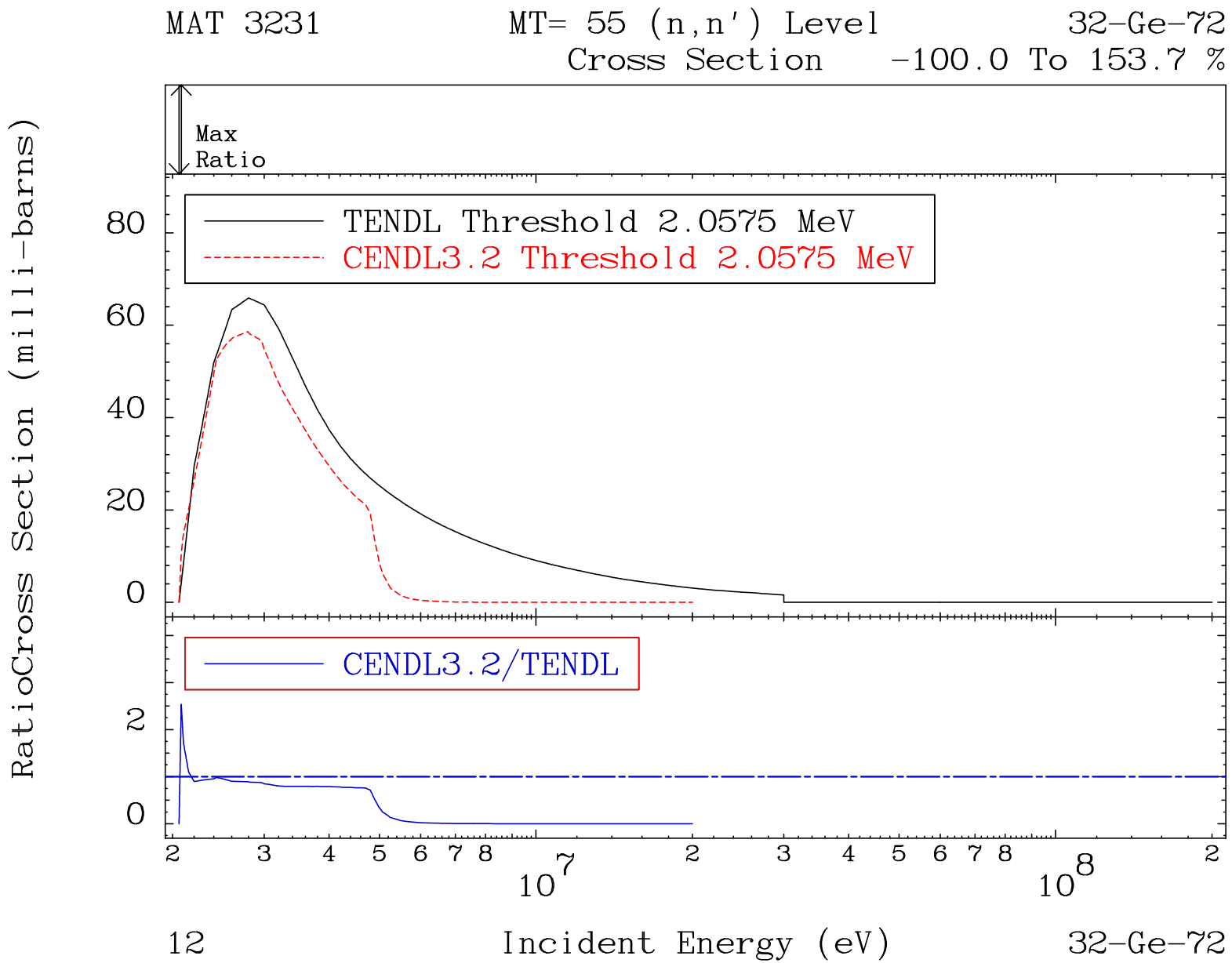

MAT 3231
(n,n') p
Cross Section
32-Ge-72
-100.0 To 687.3 %
Max
Ratio
TENDL Threshold 9.8723 MeV
CENDL3.2 Threshold 11.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
12
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
32-Ge-72

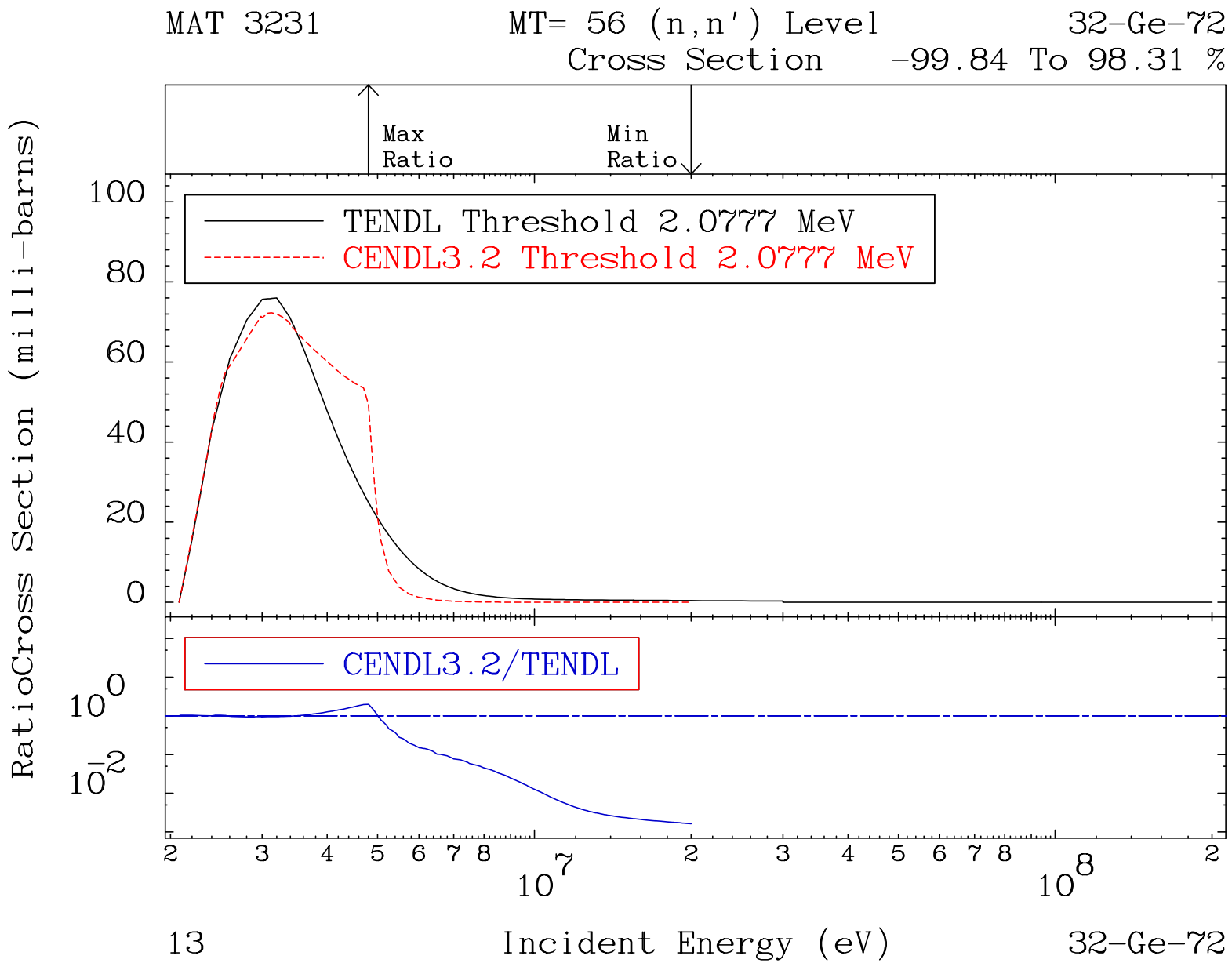

MAT 3231
MT= 51 (n,n') Level
32-Ge-72
Cross Section -87.14 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 701.13 keV
CENDL3.2 Threshold 701.13 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^2
10^0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
8
Incident Energy (eV)
32-Ge-72

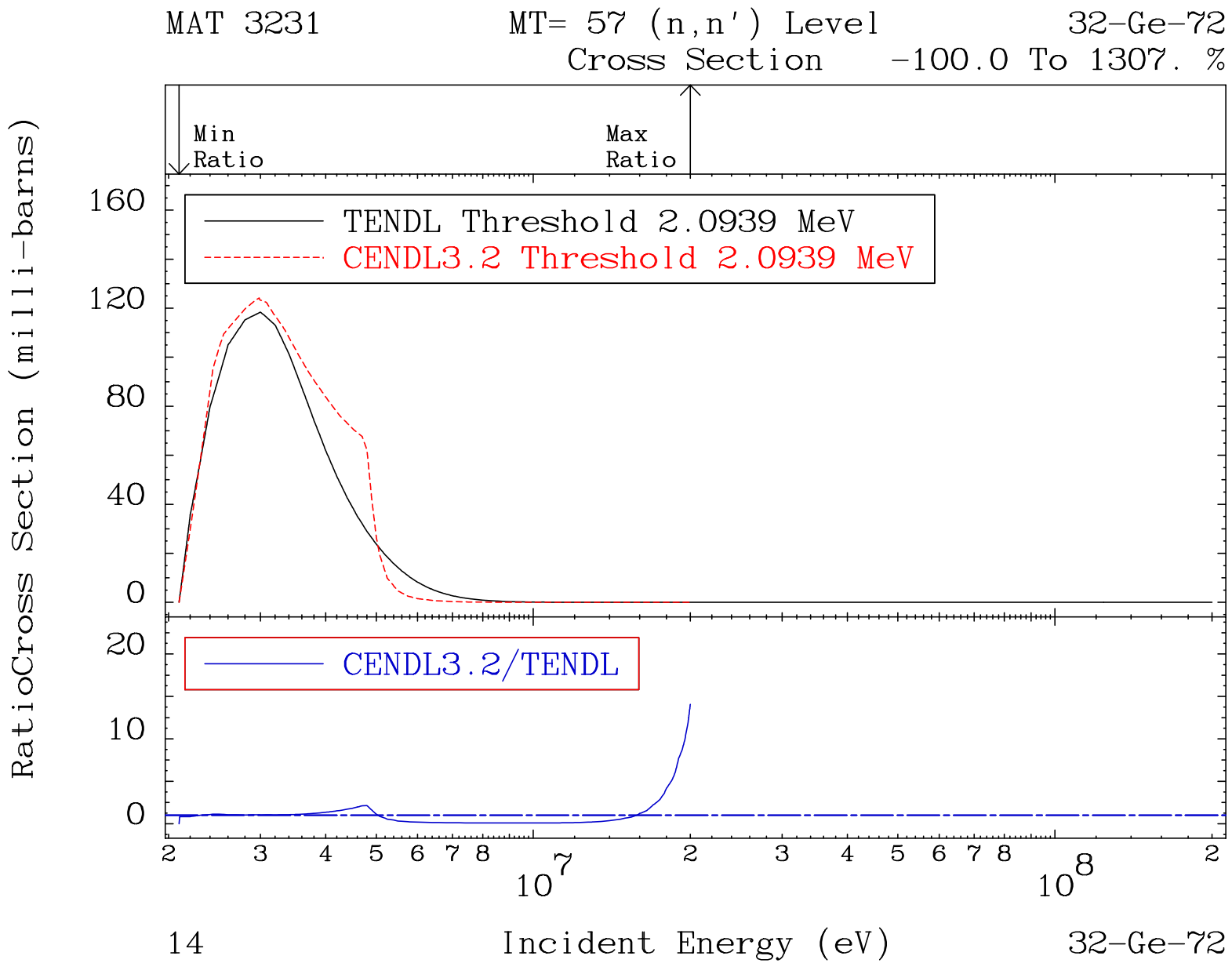

MAT 3231
MT= 52 (n,n') Level
32-Ge-72
Cross Section
-63.88 To 24.90 %
Max Ratio
Min Ratio
TENDL Threshold 845.71 keV
CENDL3.2 Threshold 845.71 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.6
1.2
0.8
0.4
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
9
Incident Energy (eV)
32-Ge-72

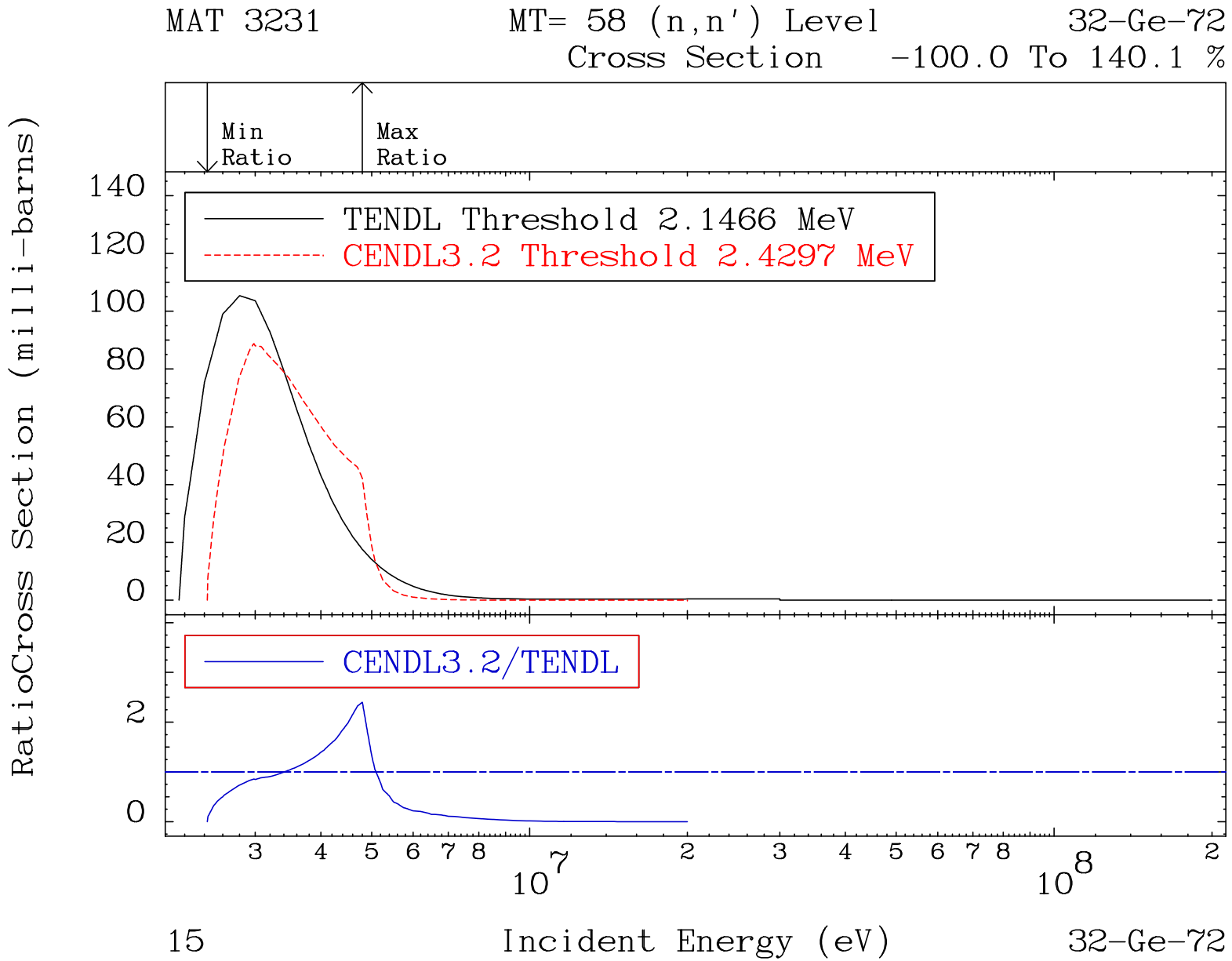

MAT 3231
MT= 53 (n,n') Level
32-Ge-72
Cross Section -100.0 To 477.0 %
Min Ratio
Max Ratio
TENDL Threshold 1.4845 MeV
CENDL3.2 Threshold 1.4845 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
32-Ge-72

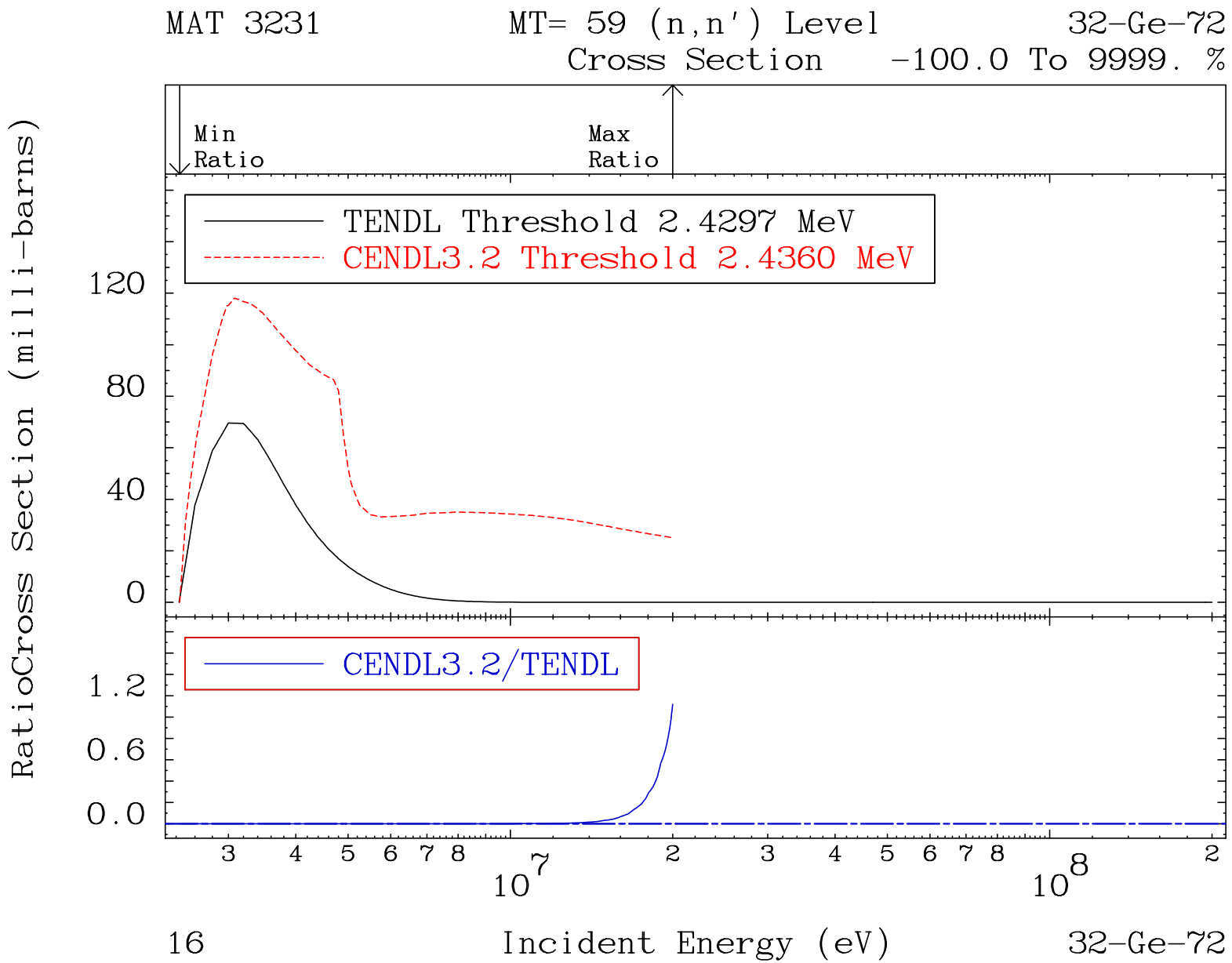

MAT 3231
MT= 54 (n,n') Level
32-Ge-72
Cross Section
-99.98 To 19.03 %
Max Ratio
Min Ratio
TENDL Threshold 1.7525 MeV
CENDL3.2 Threshold 1.7525 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^{0}
10^{-2}
10^{-4}
2 3 4 5 6 7 8
10^{7}
2 3 4 5 6 7 8
10^{8}
2
11
Incident Energy (eV)
32-Ge-72

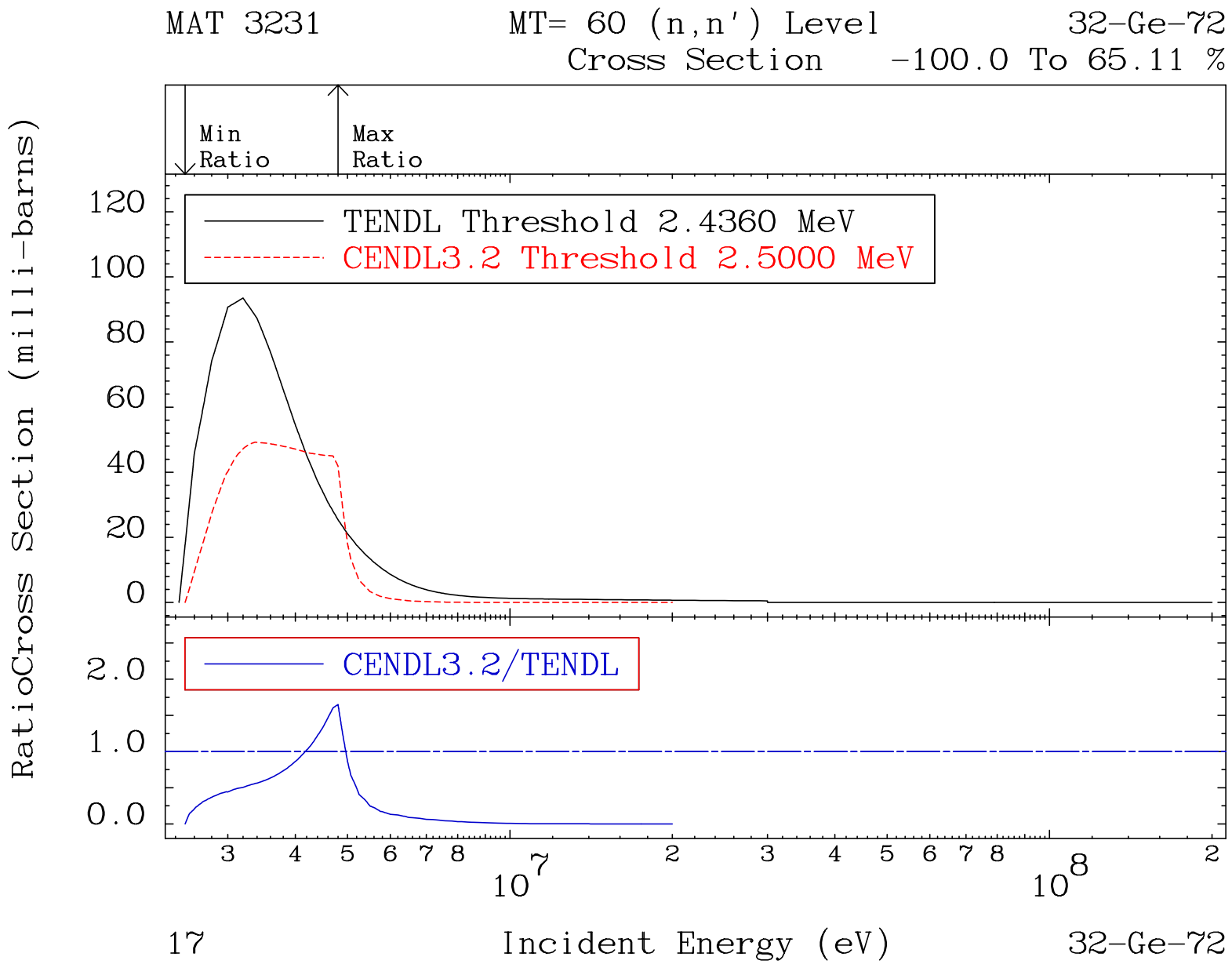

MAT 3231
MT= 55 (n,n') Level
32-Ge-72
Cross Section -100.0 To 153.7 %
Max
Ratio
TENDL Threshold 2.0575 MeV
CENDL3.2 Threshold 2.0575 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
32-Ge-72

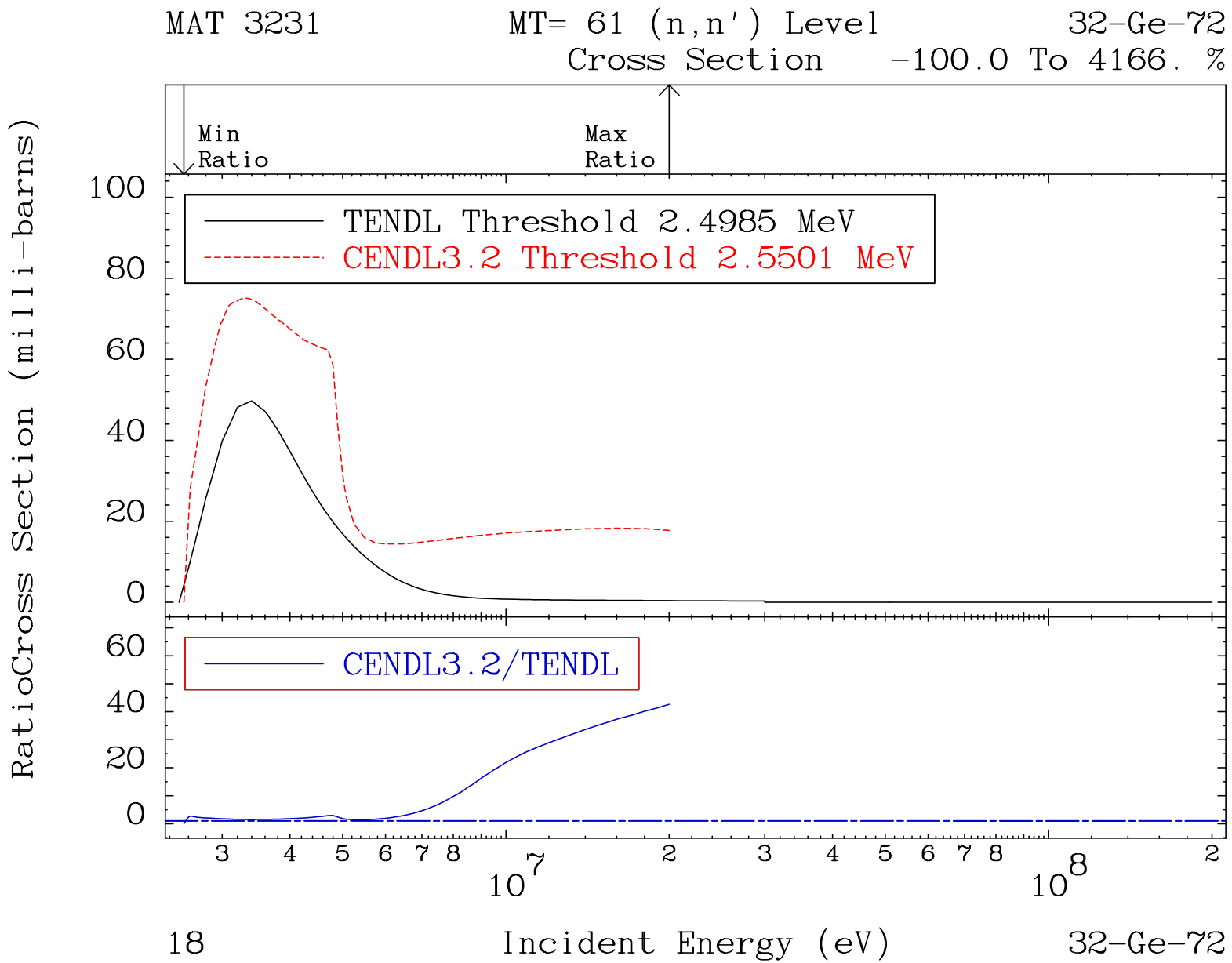

MAT 3231
MT= 56 (n,n') Level
32-Ge-72
Cross Section -99.84 To 98.31 %
Max Ratio
Min Ratio
TENDL Threshold 2.0777 MeV
CENDL3.2 Threshold 2.0777 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^{0}
10^{-2}
2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
13
Incident Energy (eV)
32-Ge-72

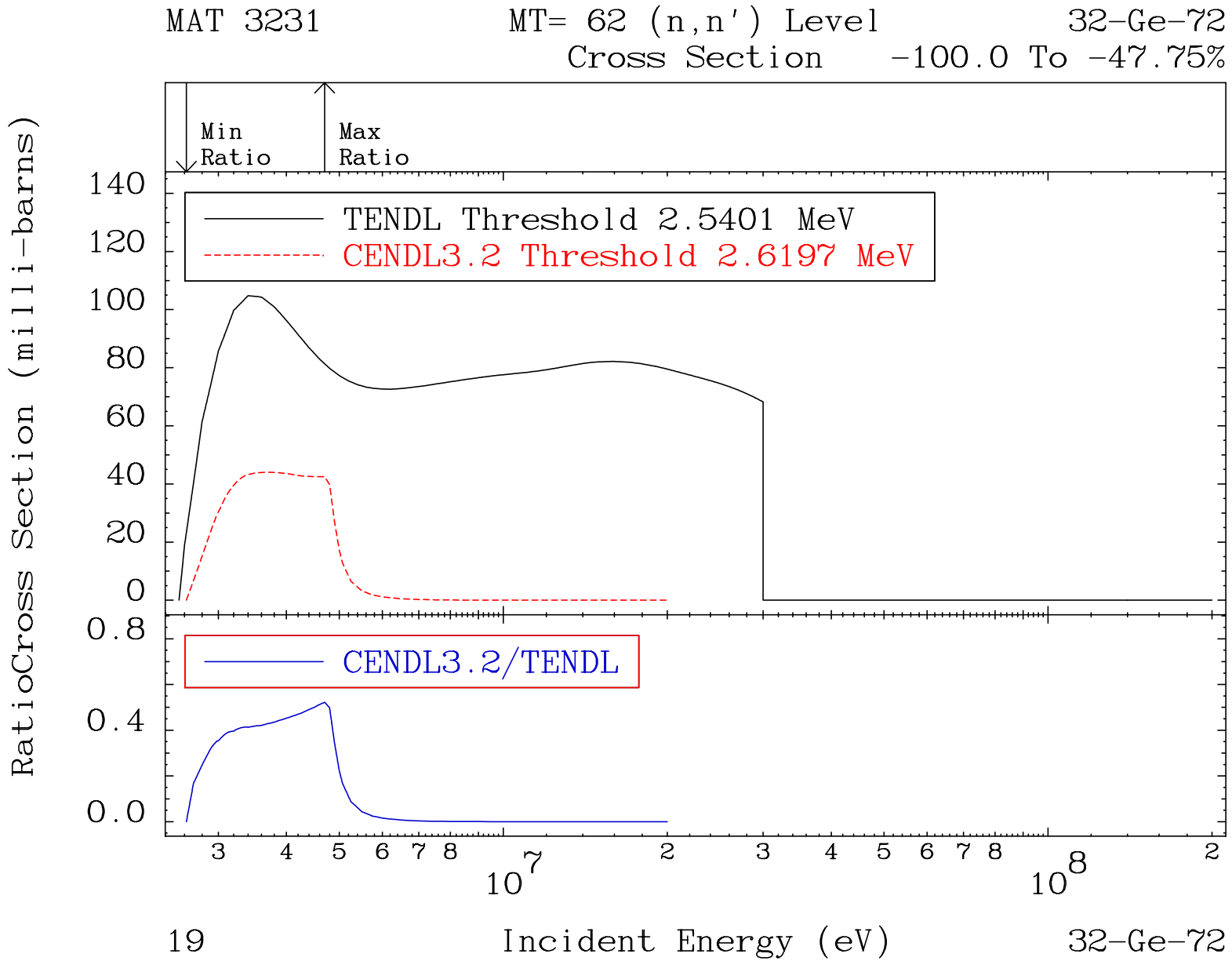

MAT 3231
MT= 57 (n,n') Level
32-Ge-72
Cross Section -100.0 To 1307. %
Min Ratio
Max Ratio
TENDL Threshold 2.0939 MeV
CENDL3.2 Threshold 2.0939 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
20
10
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
32-Ge-72

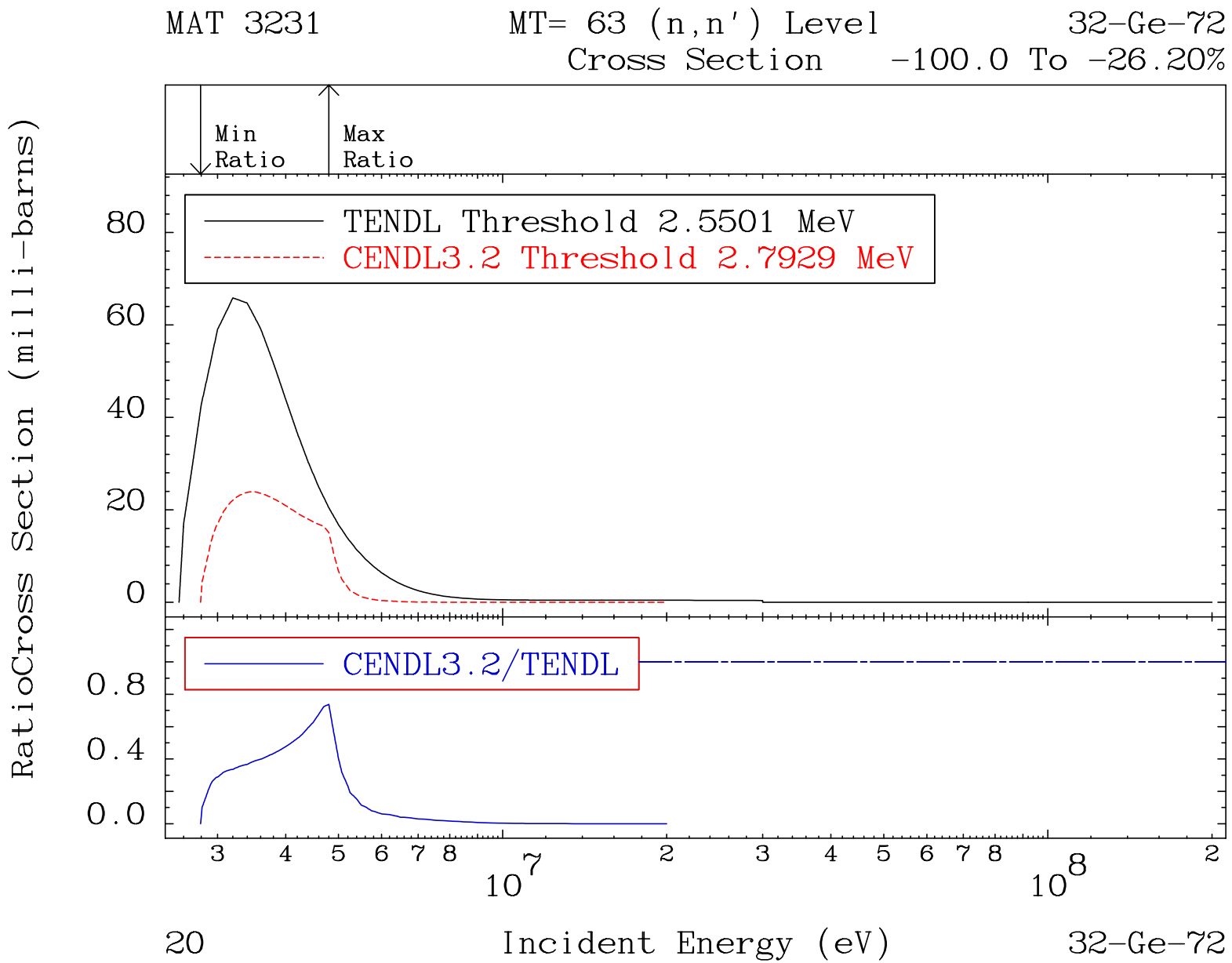

MAT 3231
MT= 58 (n,n') Level
32-Ge-72
Cross Section -100.0 To 140.1 %
Min Ratio
Max Ratio
TENDL Threshold 2.1466 MeV
CENDL3.2 Threshold 2.4297 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
32-Ge-72

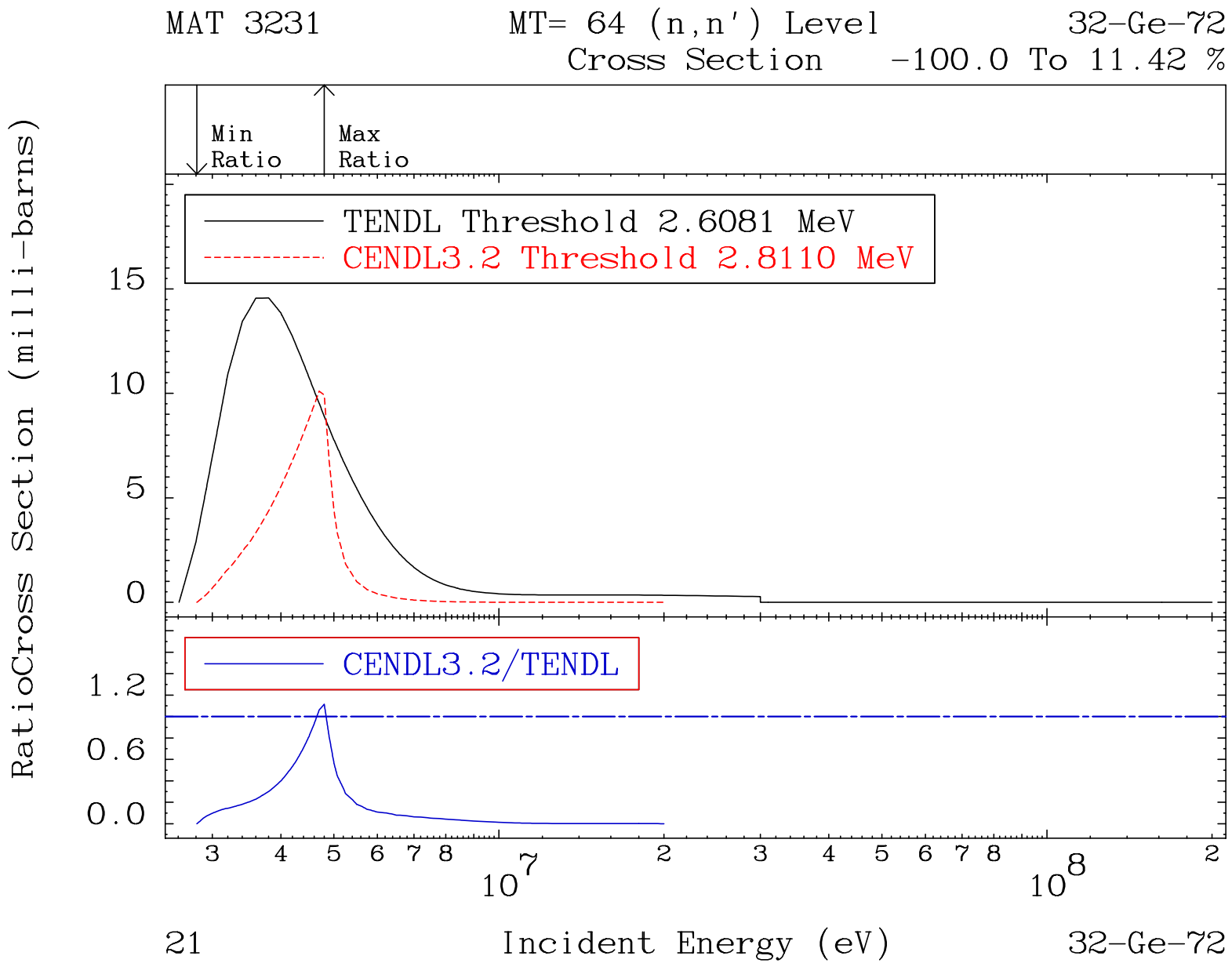

MAT 3231
MT= 59 (n,n') Level
32-Ge-72
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4297 MeV
CENDL3.2 Threshold 2.4360 MeV
120
80
40
0
CENDL3.2/TENDL
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
RatioCross Section (milli-barns)
16
Incident Energy (eV)
32-Ge-72

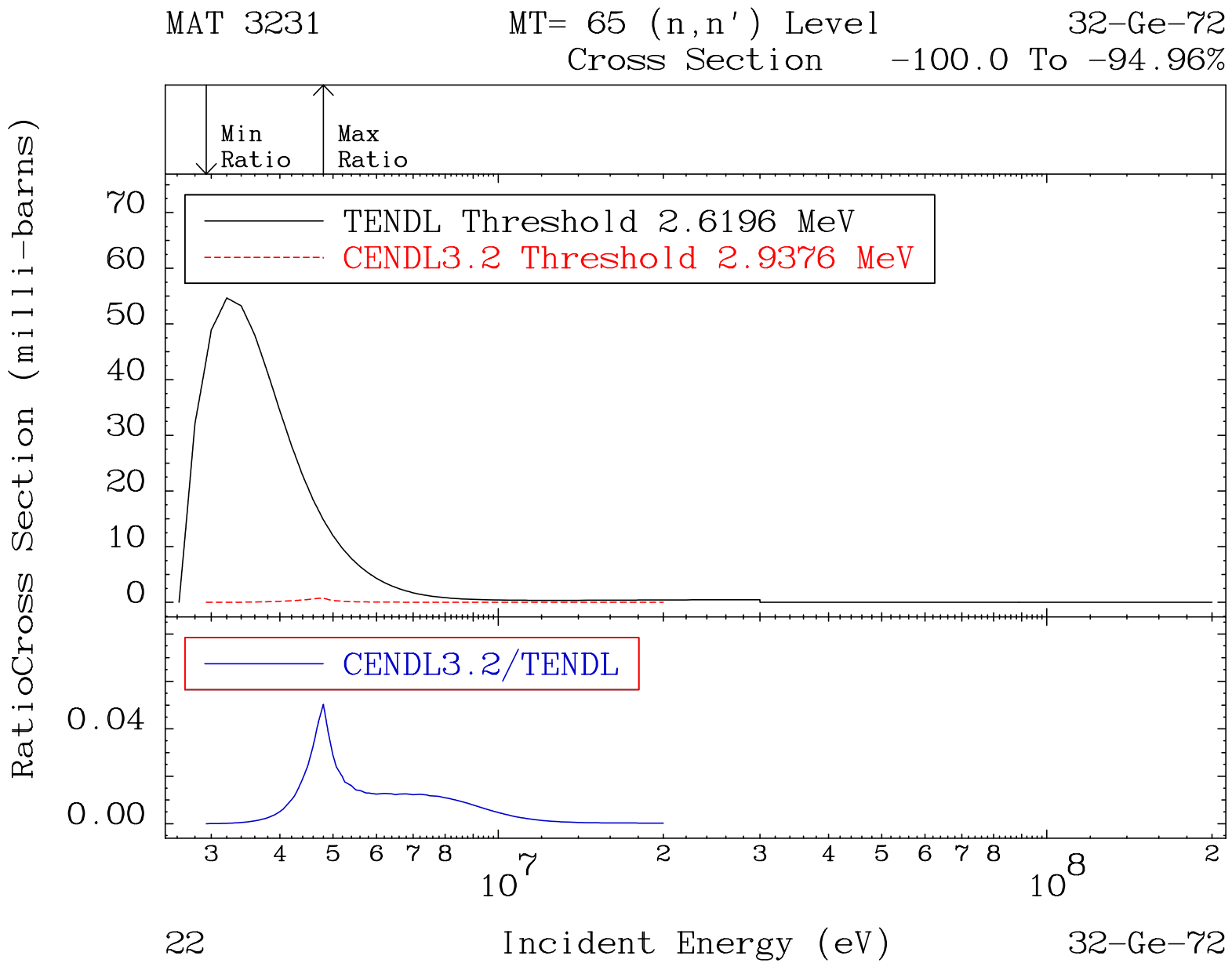

MAT 3231
MT= 60 (n,n') Level
32-Ge-72
Cross Section -100.0 To 65.11 %
Min Ratio
Max Ratio
TENDL Threshold 2.4360 MeV
CENDL3.2 Threshold 2.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
32-Ge-72

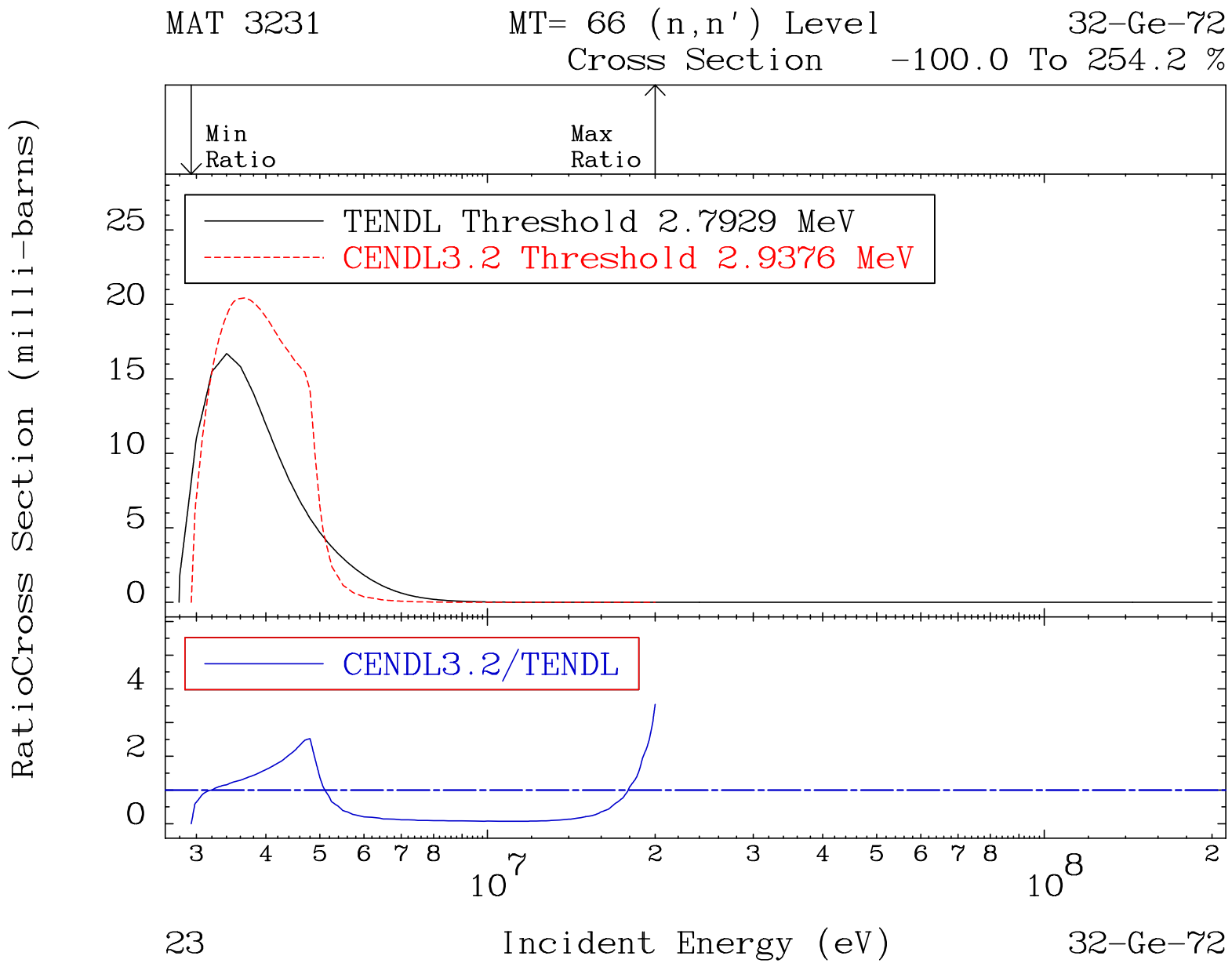

MAT 3231
MT= 61 (n,n') Level
32-Ge-72
Cross Section -100.0 To 4166. %
Min Ratio
Max Ratio
TENDL Threshold 2.4985 MeV
CENDL3.2 Threshold 2.5501 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
32-Ge-72

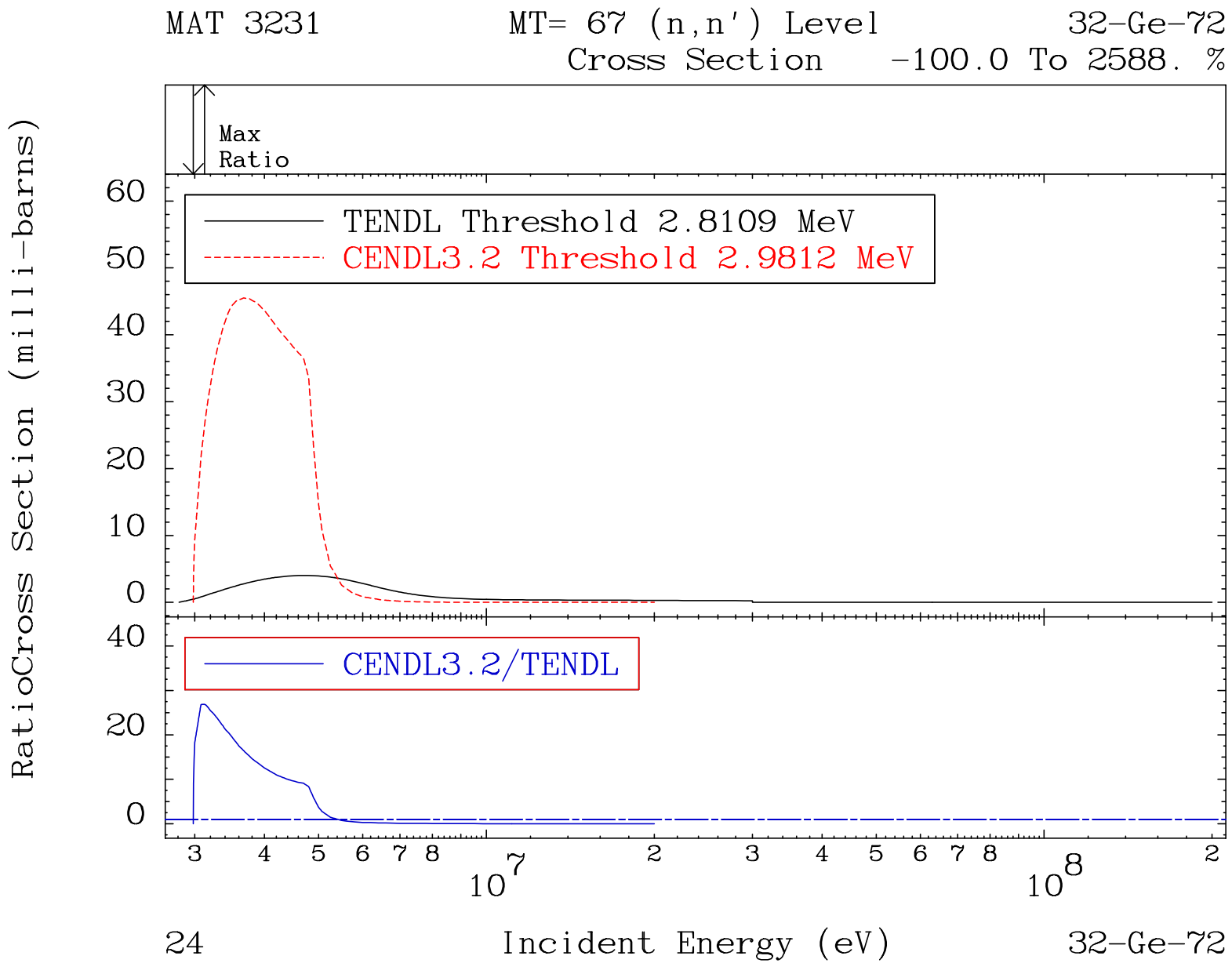

MAT 3231
MT= 62 (n,n') Level
32-Ge-72
Cross Section -100.0 To -47.75%
Min Ratio
Max Ratio
TENDL Threshold 2.5401 MeV
CENDL3.2 Threshold 2.6197 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
32-Ge-72

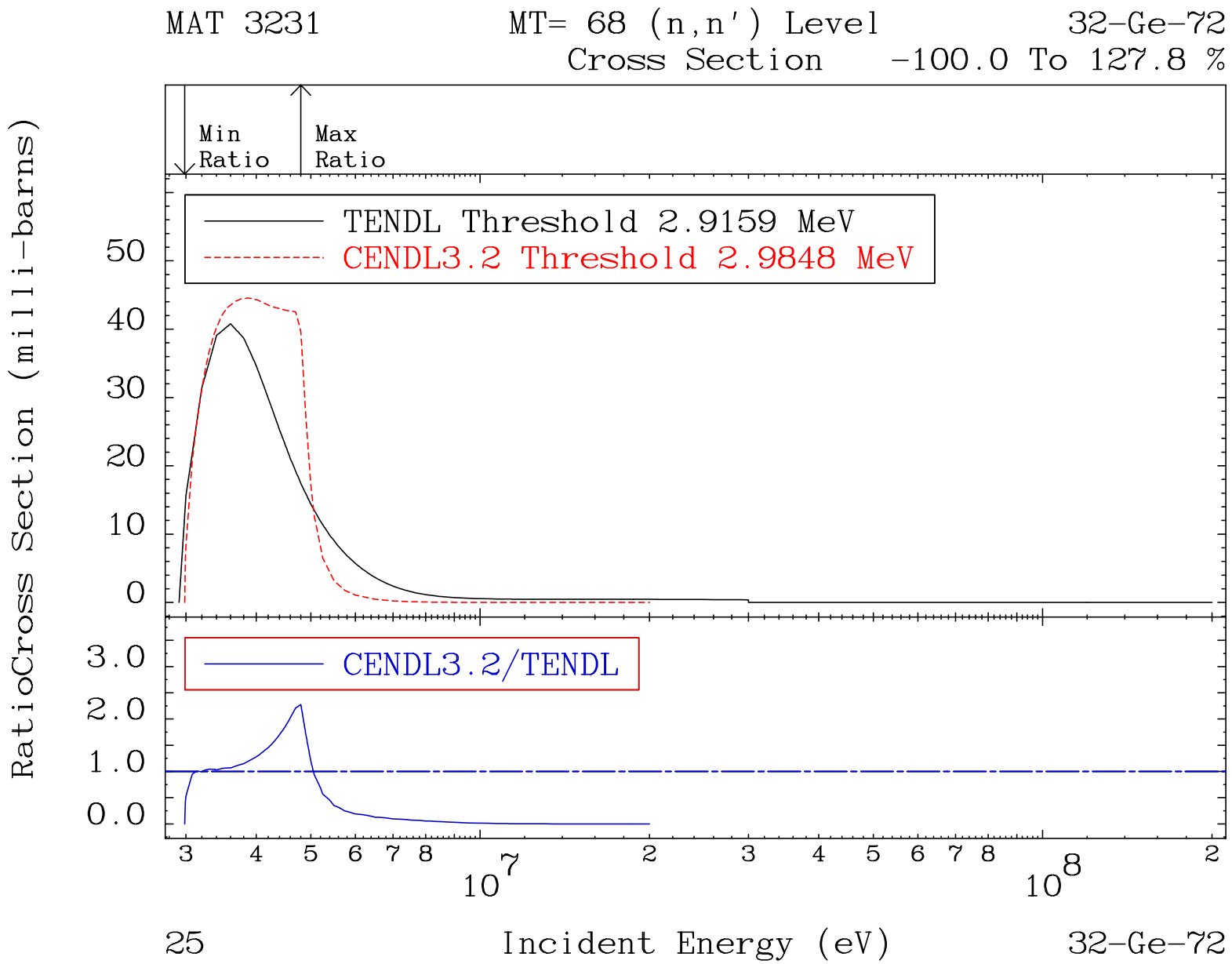

MAT 3231
MT= 63 (n,n') Level
32-Ge-72
Cross Section -100.0 To -26.20%
Min Ratio
Max Ratio
TENDL Threshold 2.5501 MeV
CENDL3.2 Threshold 2.7929 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
20
32-Ge-72

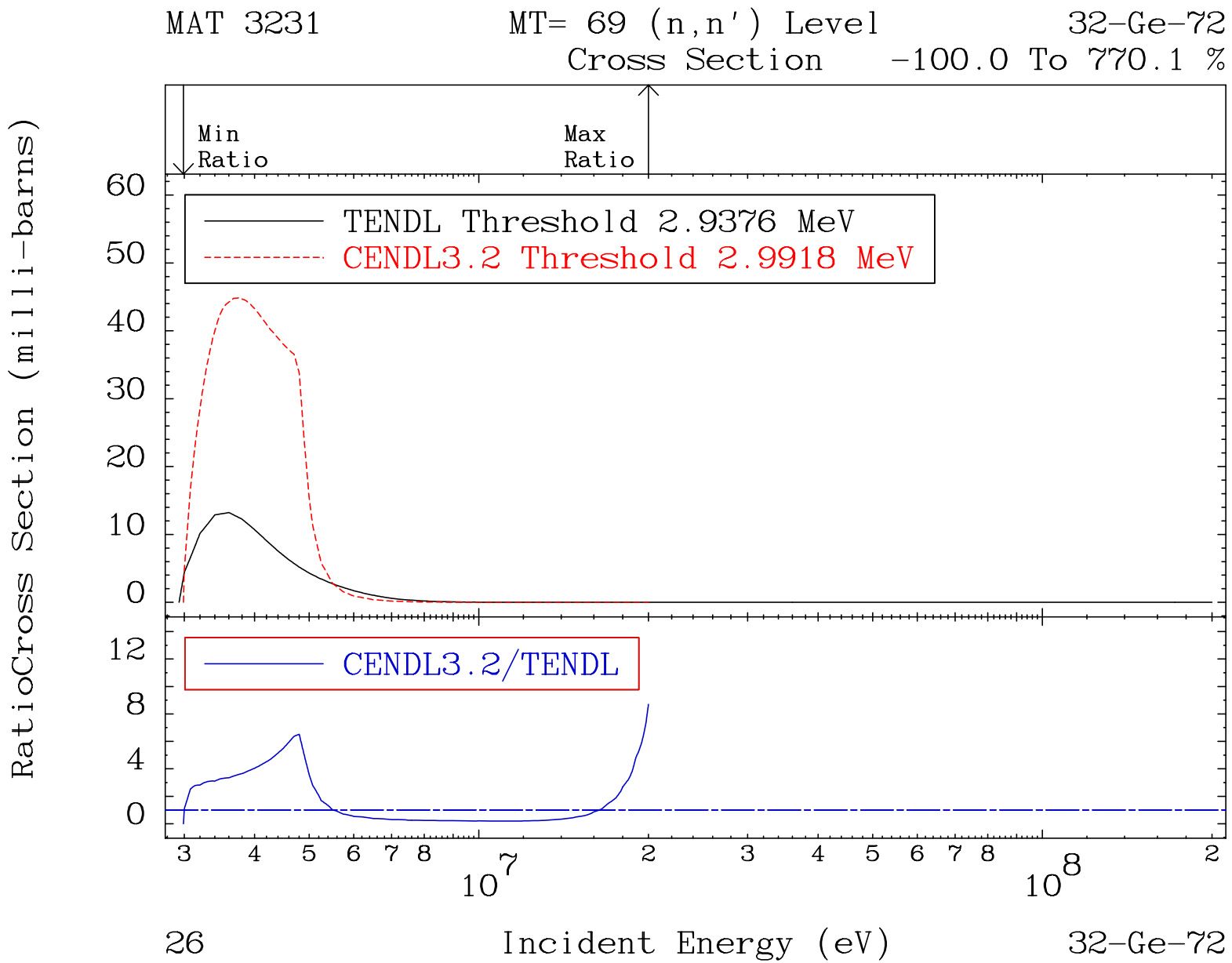

MAT 3231
MT= 64 (n,n') Level
32-Ge-72
Cross Section -100.0 To 11.42 %
Min Ratio
Max Ratio
TENDL Threshold 2.6081 MeV
CENDL3.2 Threshold 2.8110 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
32-Ge-72

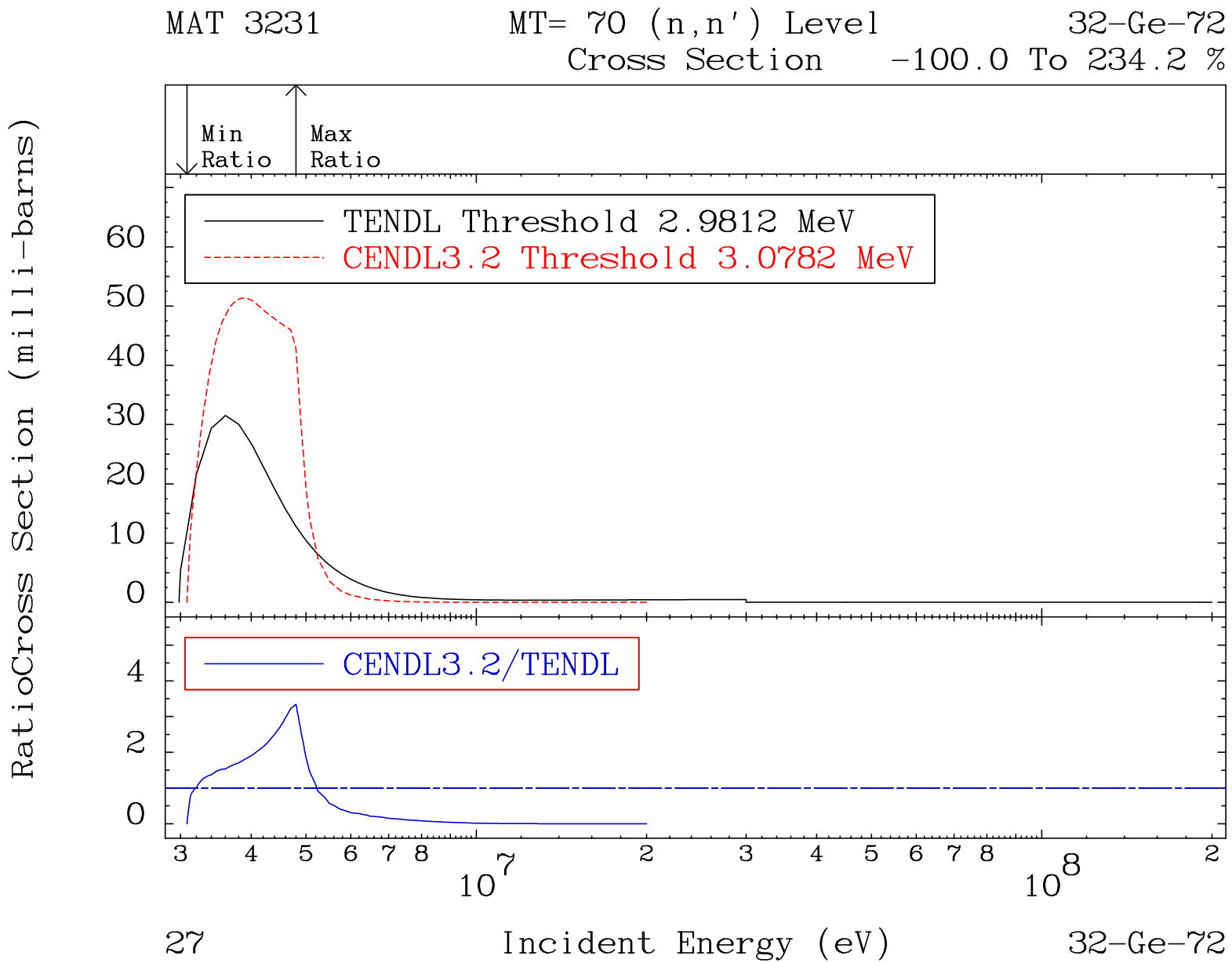

MAT 3231
MT= 65 (n,n') Level
32-Ge-72
Cross Section -100.0 To -94.96%
Min Ratio
Max Ratio
TENDL Threshold 2.6196 MeV
CENDL3.2 Threshold 2.9376 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.04
0.00
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
32-Ge-72

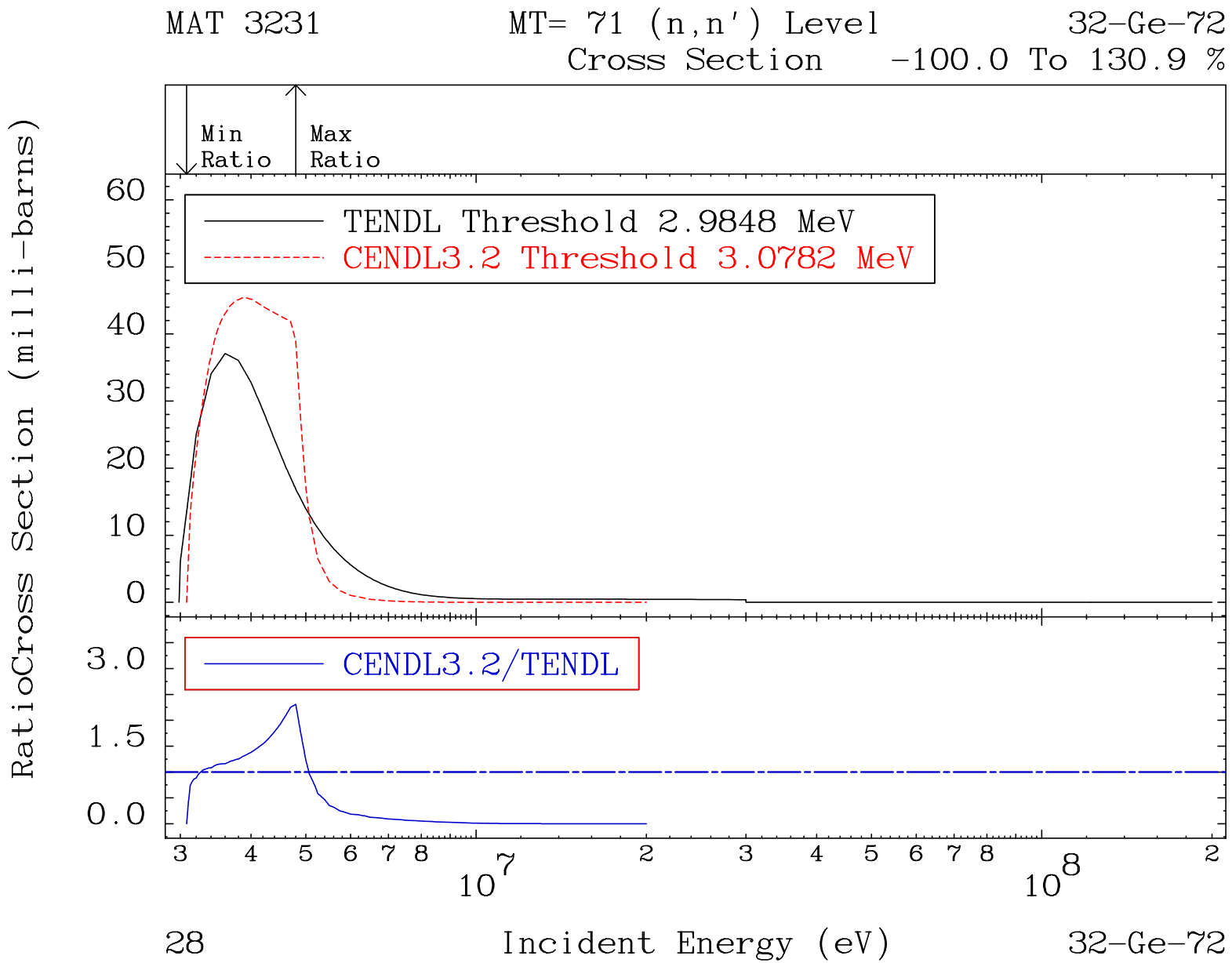

MAT 3231
MT= 66 (n,n') Level
32-Ge-72
Cross Section -100.0 To 254.2 %
Min Ratio
Max Ratio
TENDL Threshold 2.7929 MeV
CENDL3.2 Threshold 2.9376 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
32-Ge-72

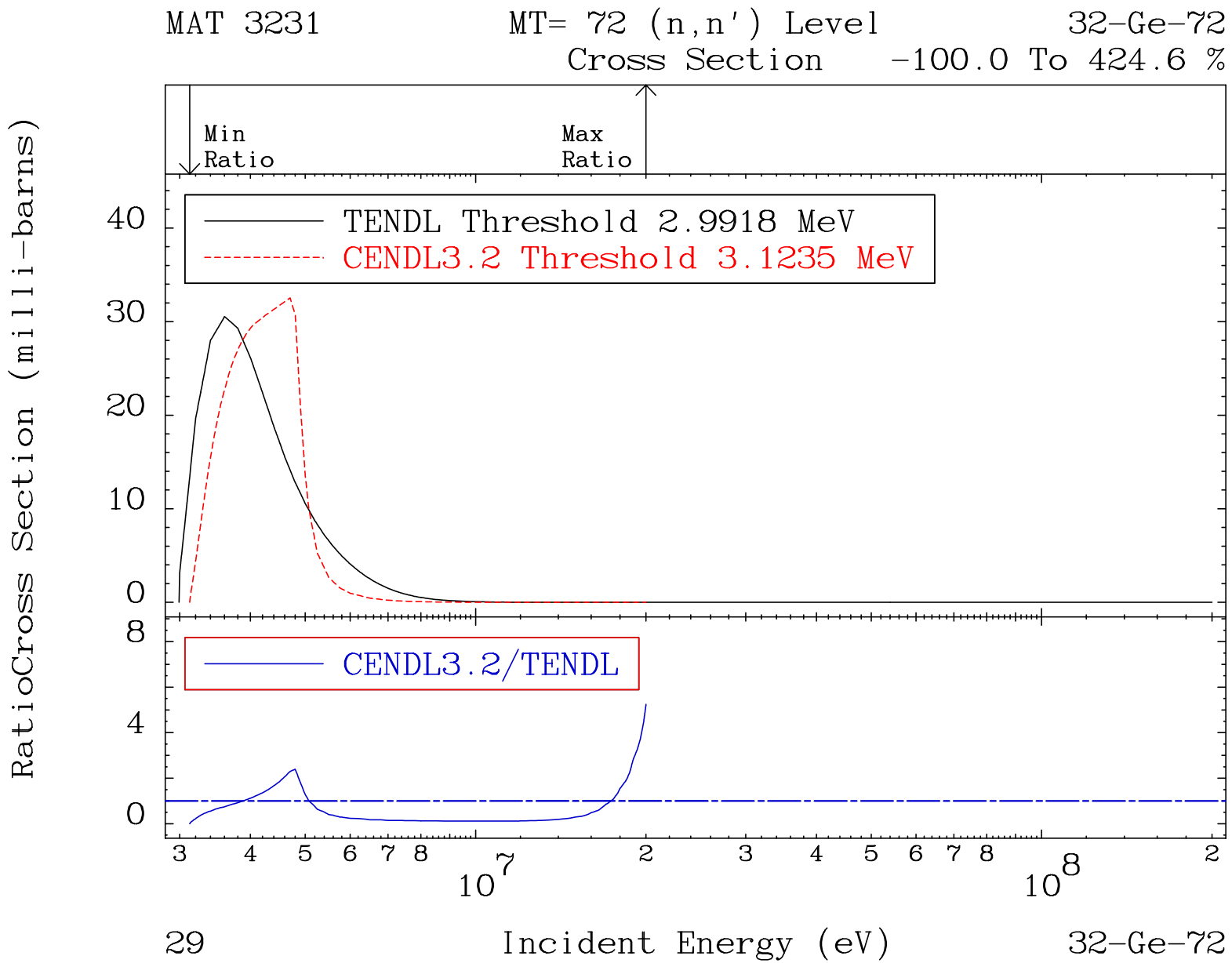

MAT 3231
MT= 67 (n,n') Level
32-Ge-72
Cross Section -100.0 To 2588. %
Max
Ratio
TENDL Threshold 2.8109 MeV
CENDL3.2 Threshold 2.9812 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
40
20
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
32-Ge-72

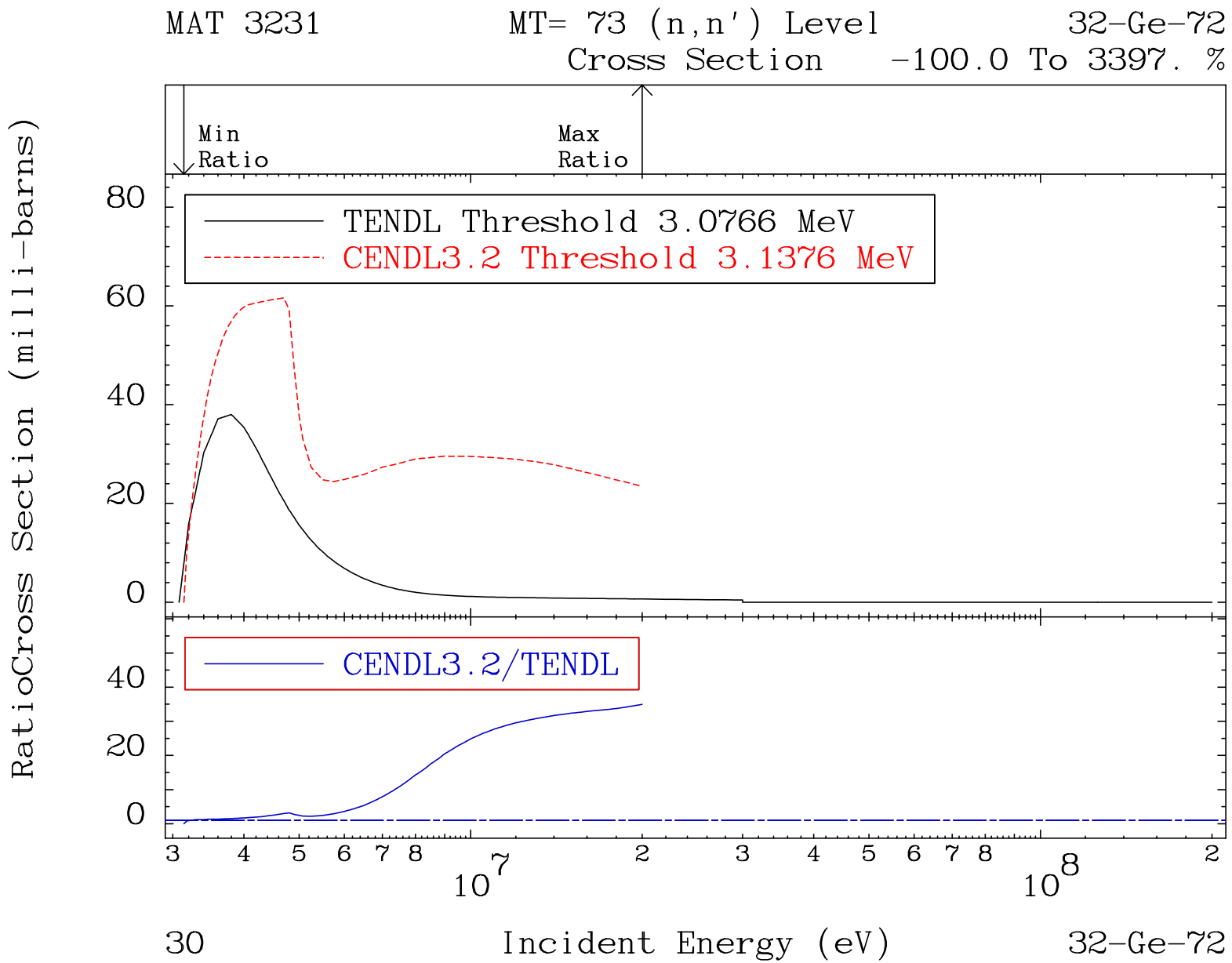

MAT 3231
MT= 68 (n,n') Level
32-Ge-72
Cross Section
-100.0 To 127.8 %
Min Ratio
Max Ratio
TENDL Threshold 2.9159 MeV
CENDL3.2 Threshold 2.9848 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
32-Ge-72

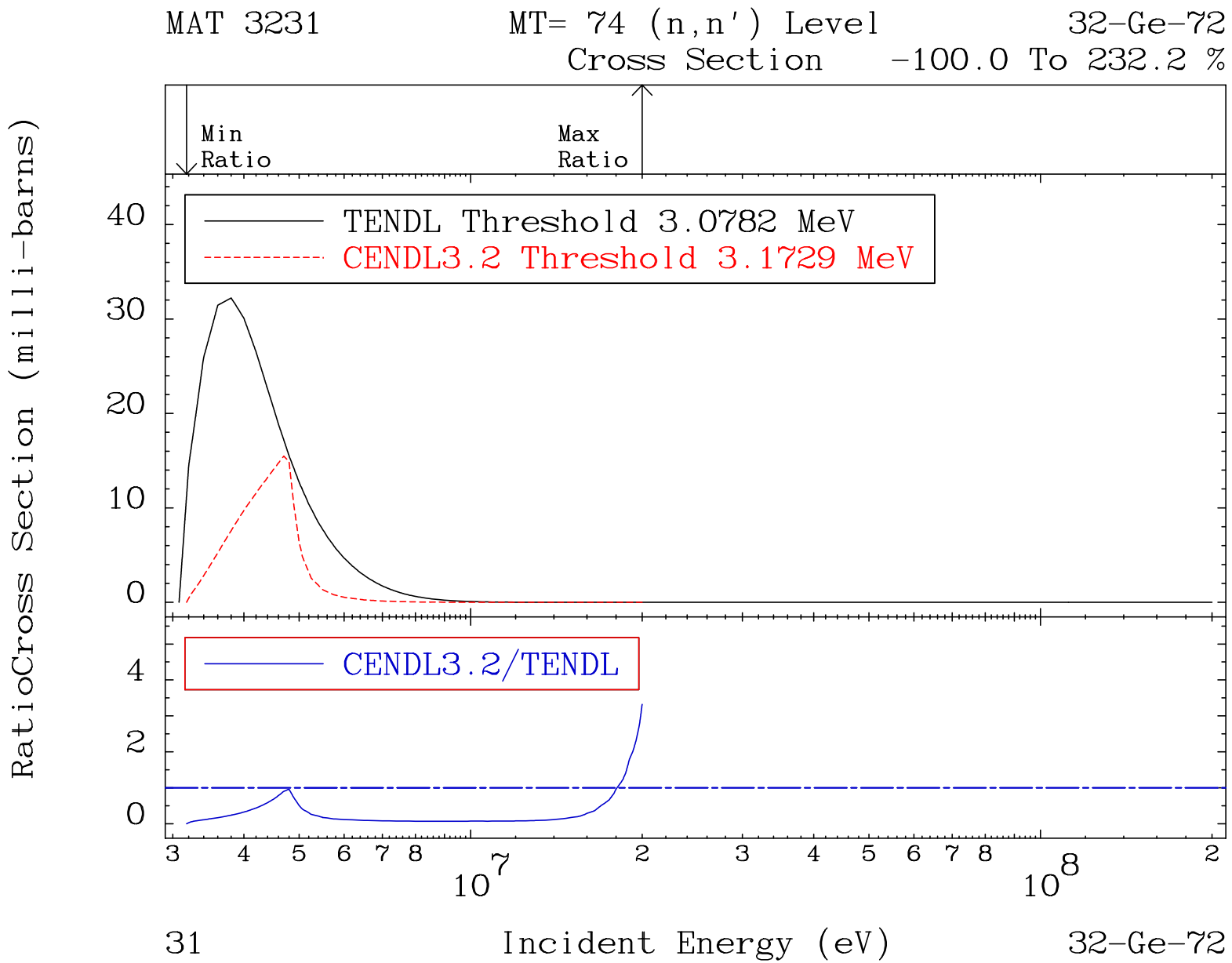

MAT 3231
MT= 69 (n,n') Level
32-Ge-72
Cross Section -100.0 To 770.1 %
Min Ratio
Max Ratio
TENDL Threshold 2.9376 MeV
CENDL3.2 Threshold 2.9918 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
12
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
26
32-Ge-72

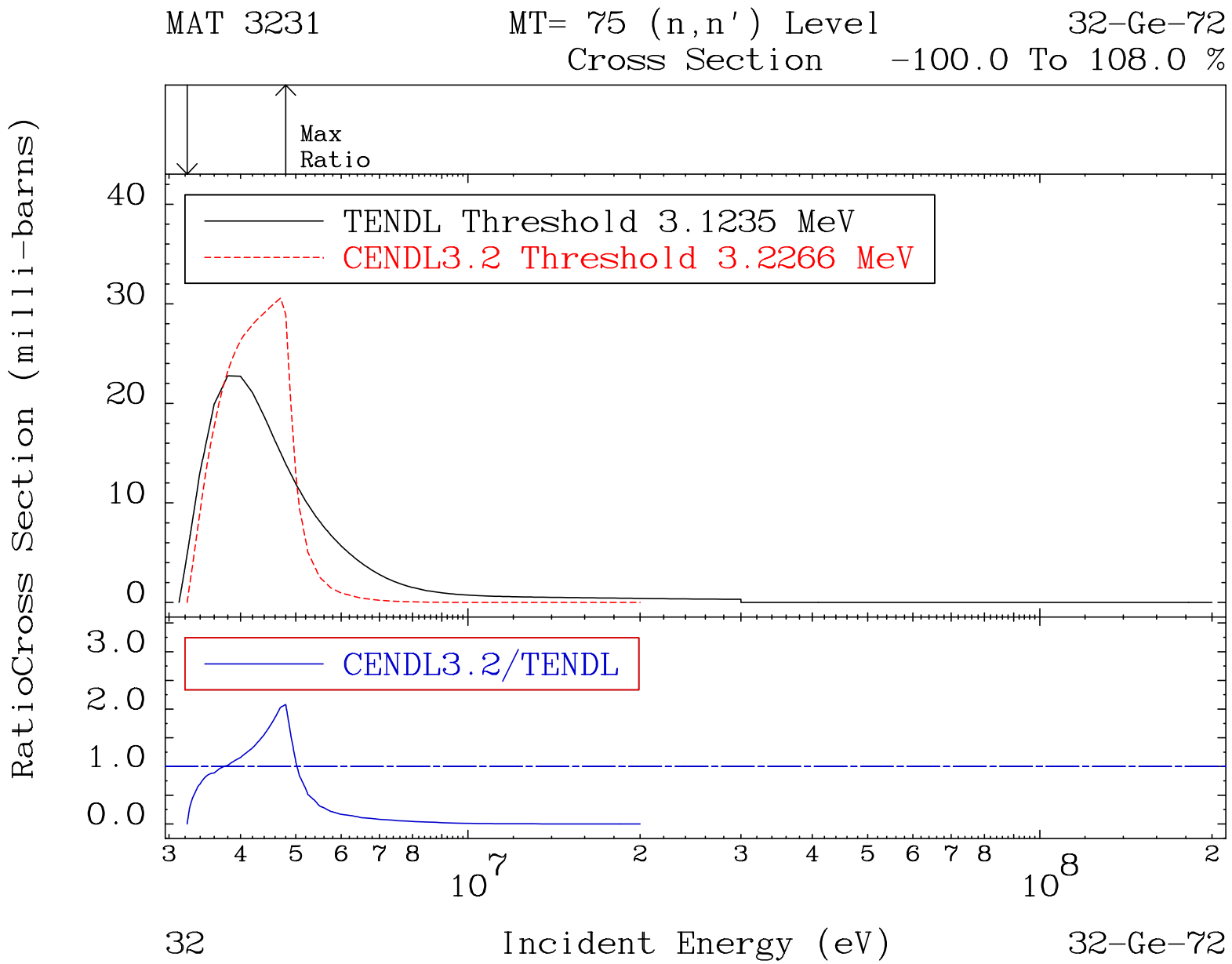

MAT 3231
MT= 70 (n,n') Level
32-Ge-72
Cross Section -100.0 To 234.2 %
Min Ratio
Max Ratio
TENDL Threshold 2.9812 MeV
CENDL3.2 Threshold 3.0782 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
32-Ge-72

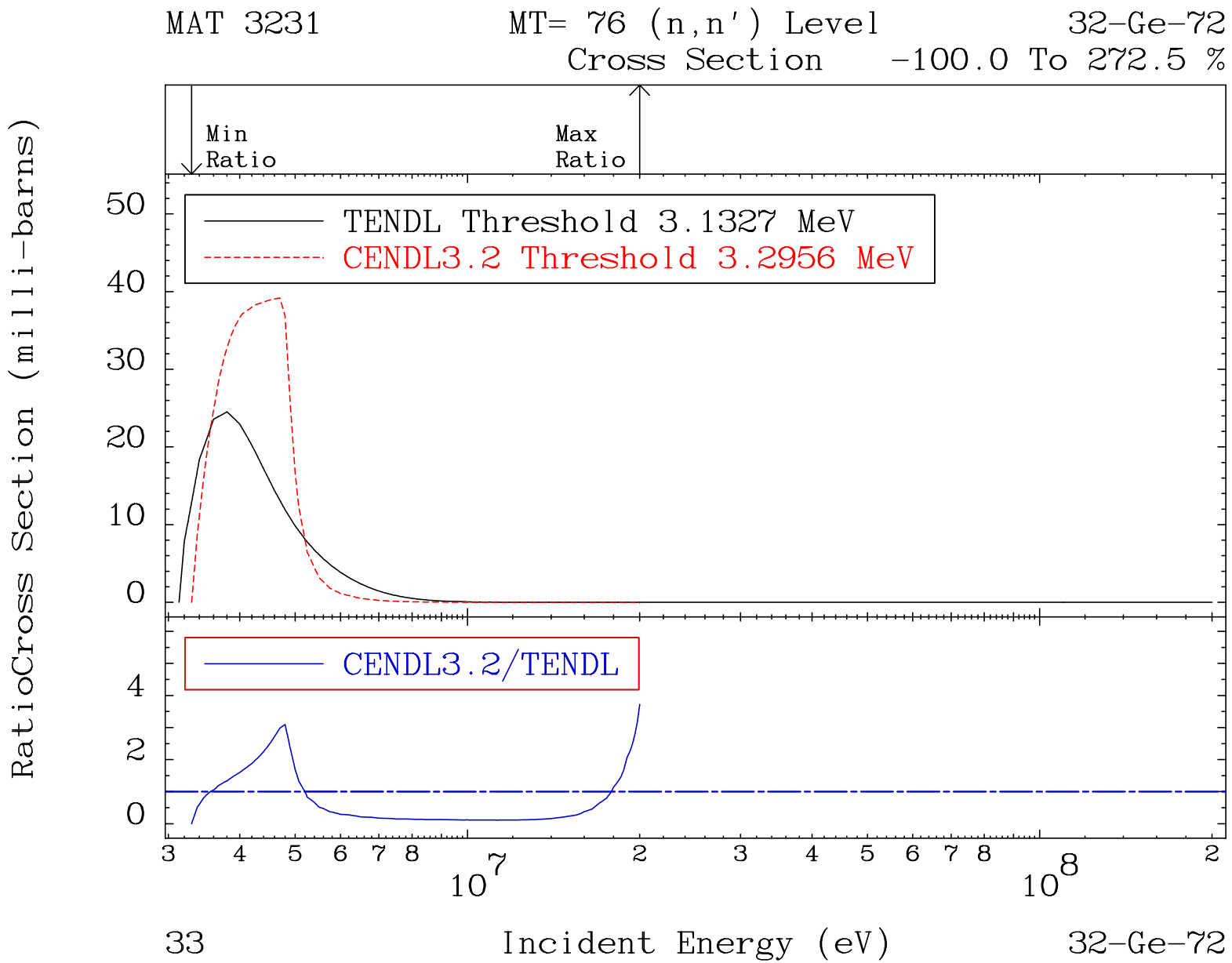

MAT 3231
MT= 71 (n,n') Level
32-Ge-72
Cross Section -100.0 To 130.9 %
Min Ratio
Max Ratio
TENDL Threshold 2.9848 MeV
CENDL3.2 Threshold 3.0782 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
1.5
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
32-Ge-72

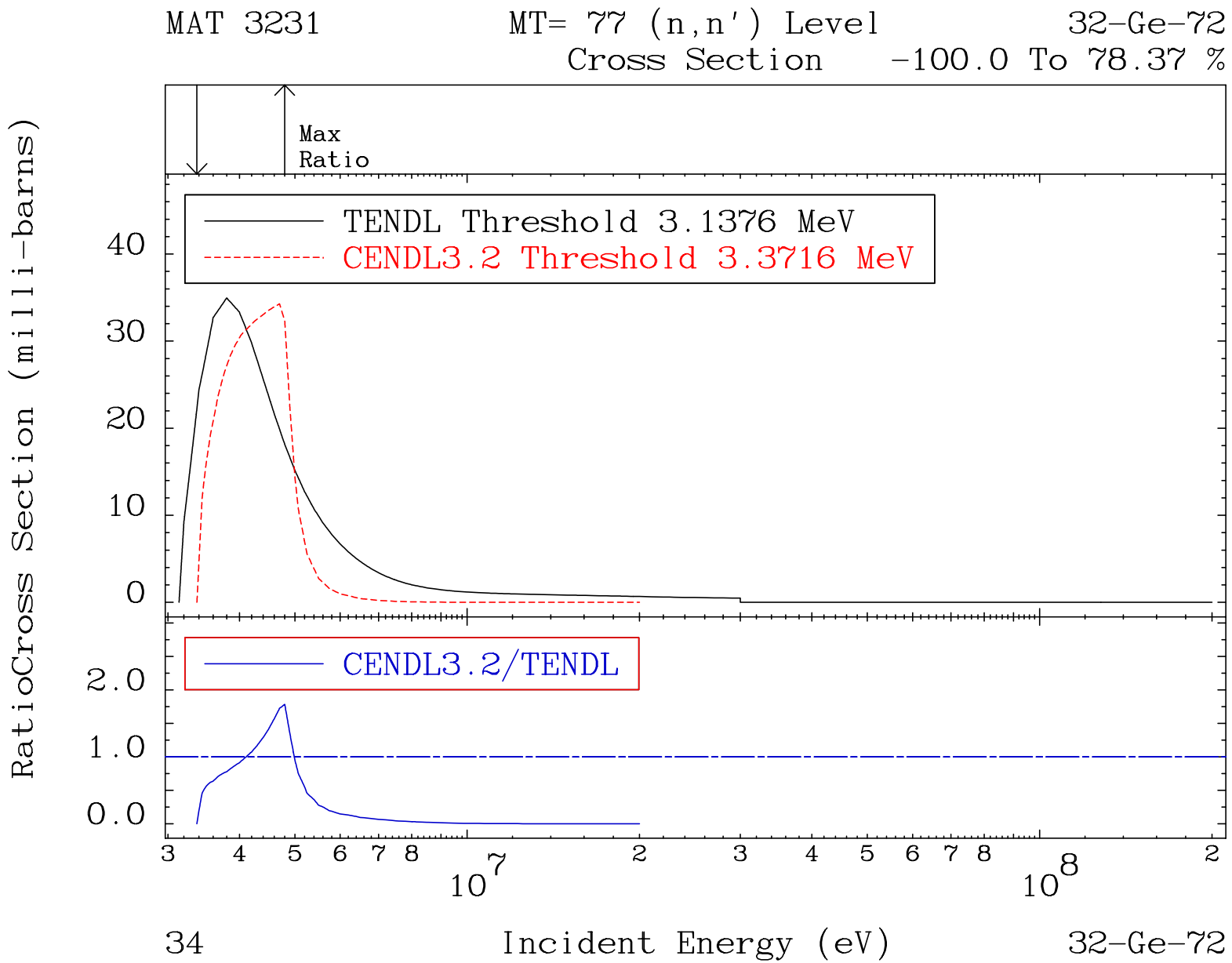

MAT 3231
MT= 72 (n,n') Level
32-Ge-72
Cross Section -100.0 To 424.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.9918 MeV
CENDL3.2 Threshold 3.1235 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
32-Ge-72

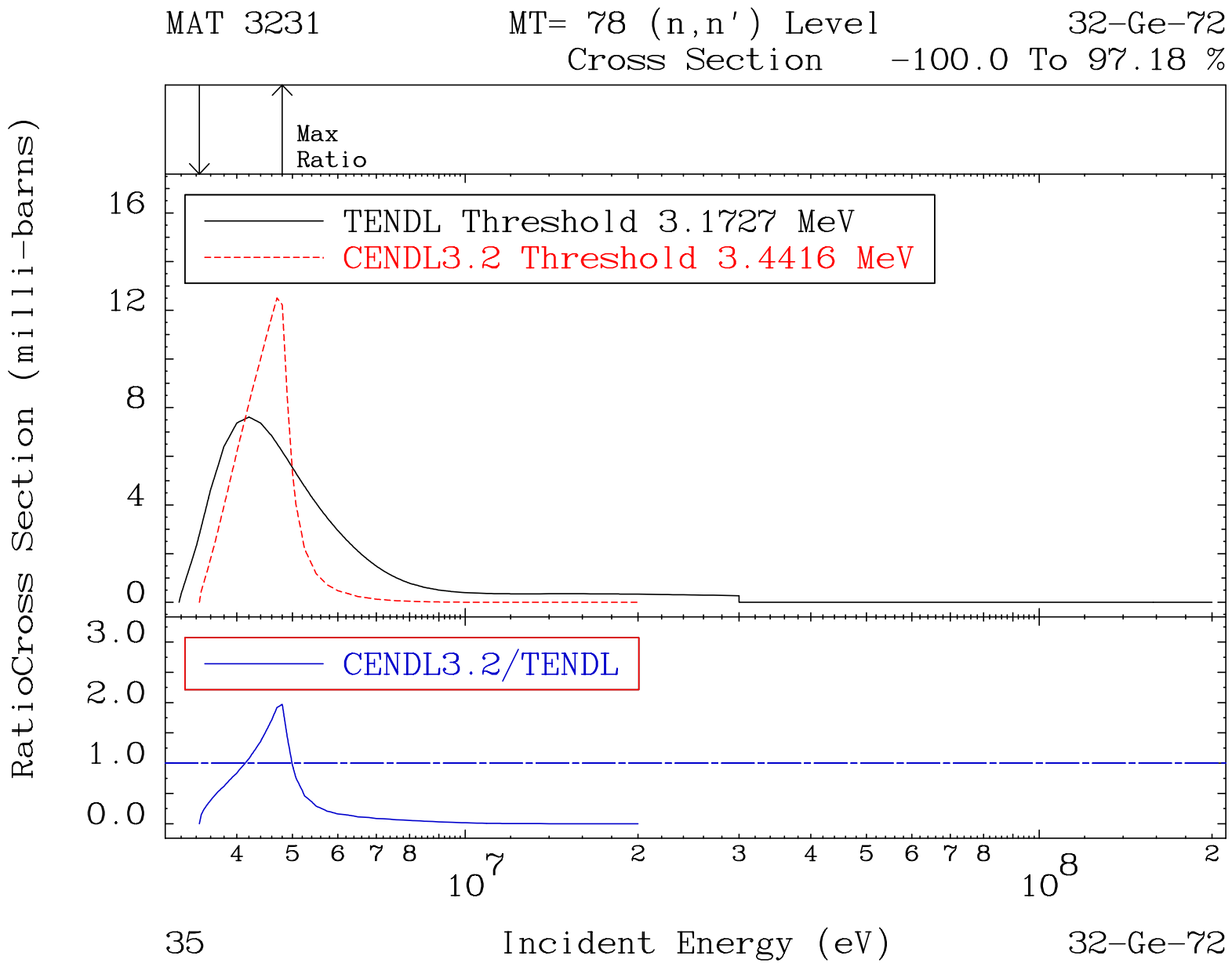

MAT 3231
MT= 73 (n,n') Level
32-Ge-72
Cross Section -100.0 To 3397. %
Min Ratio
Max Ratio
TENDL Threshold 3.0766 MeV
CENDL3.2 Threshold 3.1376 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
40
20
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
32-Ge-72

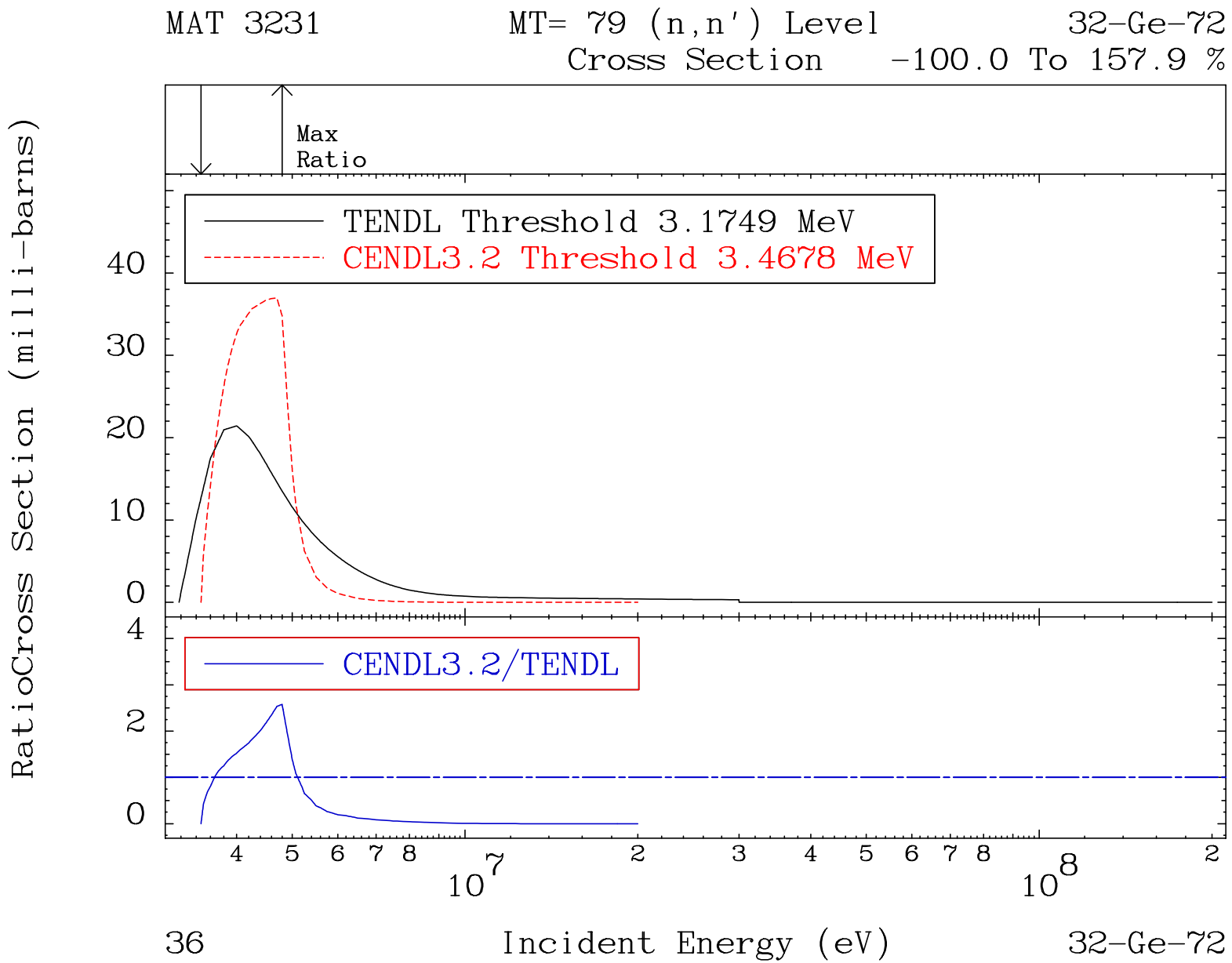

MAT 3231
MT= 74 (n,n') Level
32-Ge-72
Cross Section -100.0 To 232.2 %
Min Ratio
Max Ratio
TENDL Threshold 3.0782 MeV
CENDL3.2 Threshold 3.1729 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
32-Ge-72

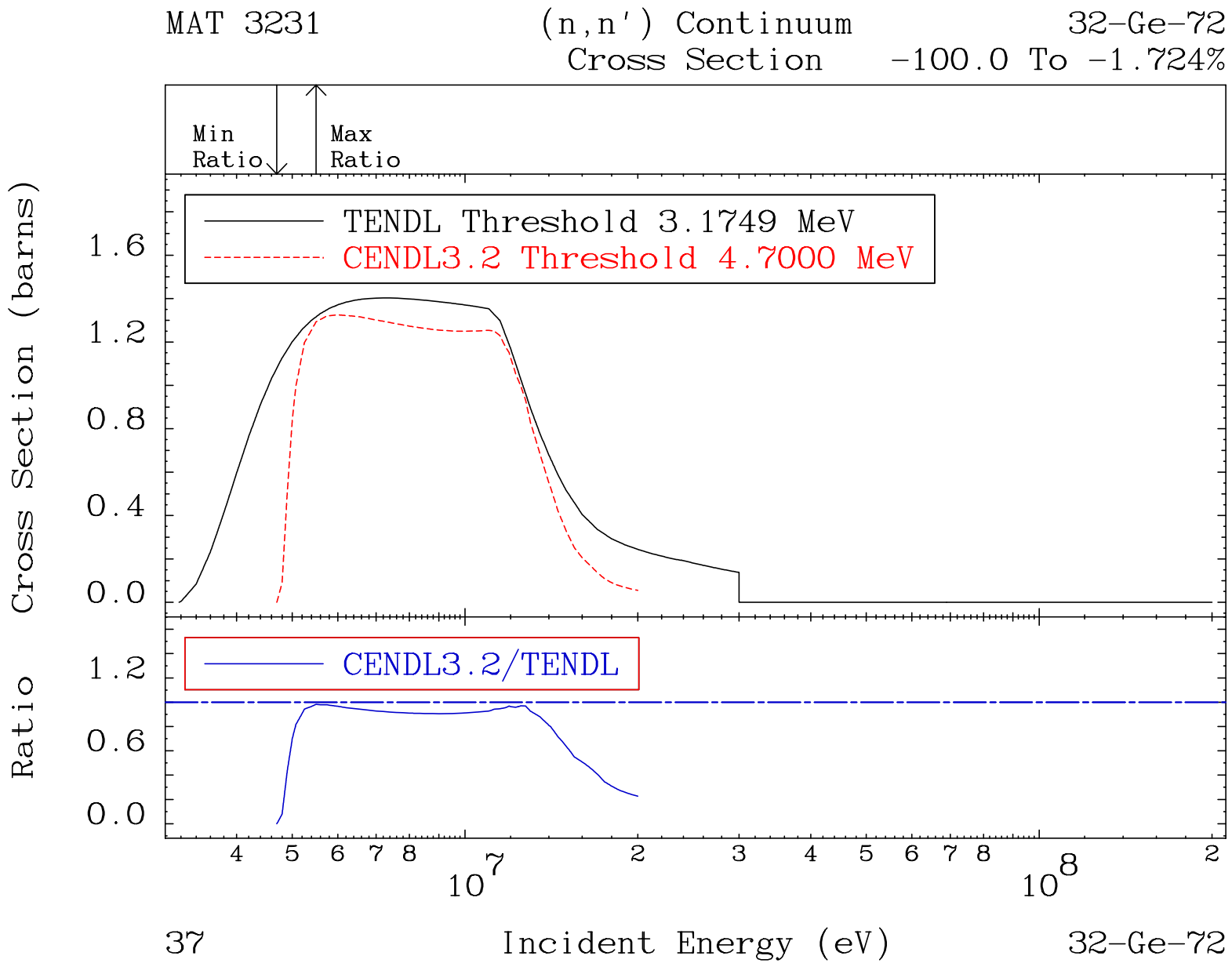

MAT 3231
MT= 75 (n,n') Level
32-Ge-72
Cross Section -100.0 To 108.0 %
Max
Ratio
TENDL Threshold 3.1235 MeV
CENDL3.2 Threshold 3.2266 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
32-Ge-72

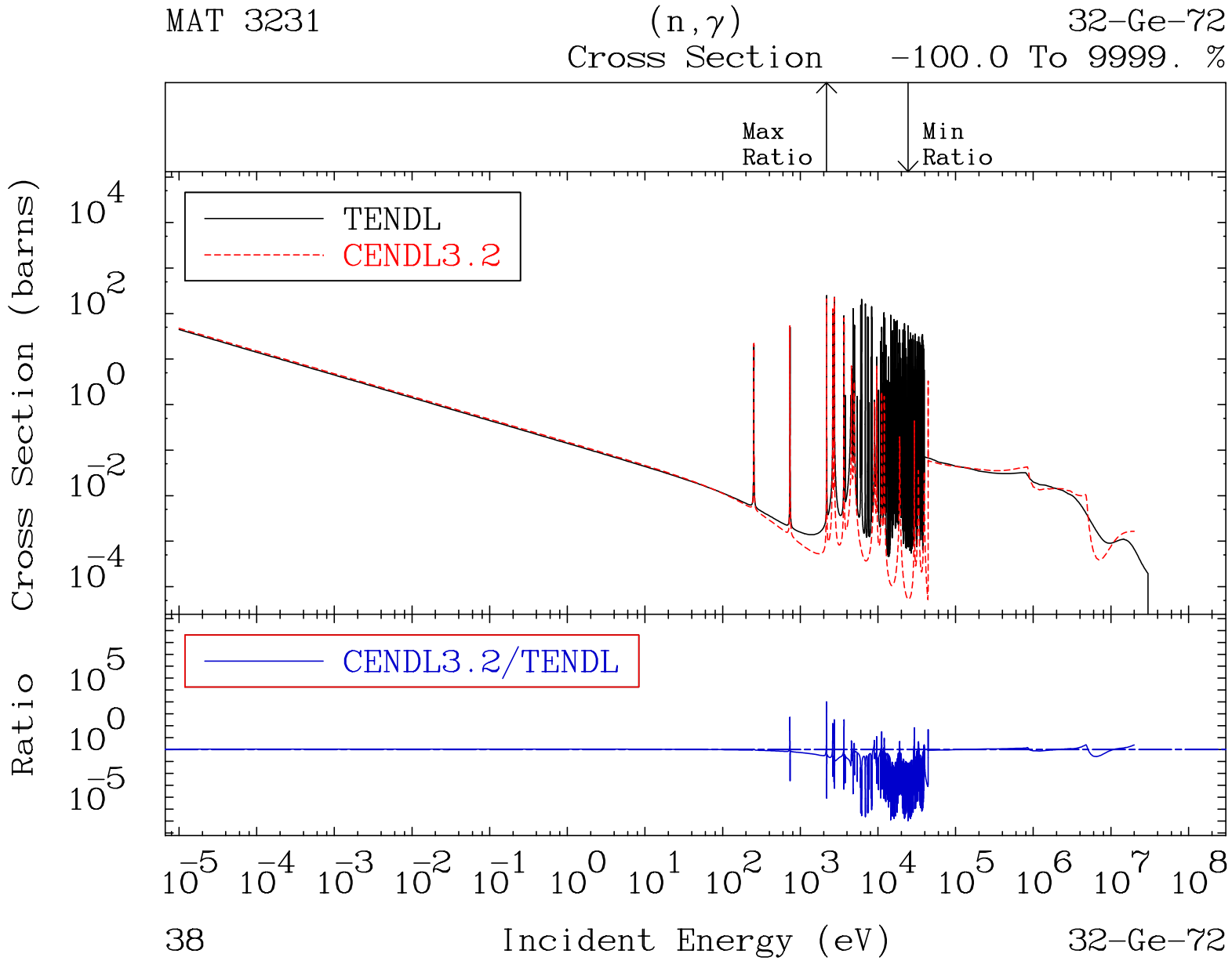

MAT 3231
MT= 76 (n,n') Level
32-Ge-72
Cross Section -100.0 To 272.5 %
Min Ratio
Max Ratio
TENDL Threshold 3.1327 MeV
CENDL3.2 Threshold 3.2956 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
32-Ge-72

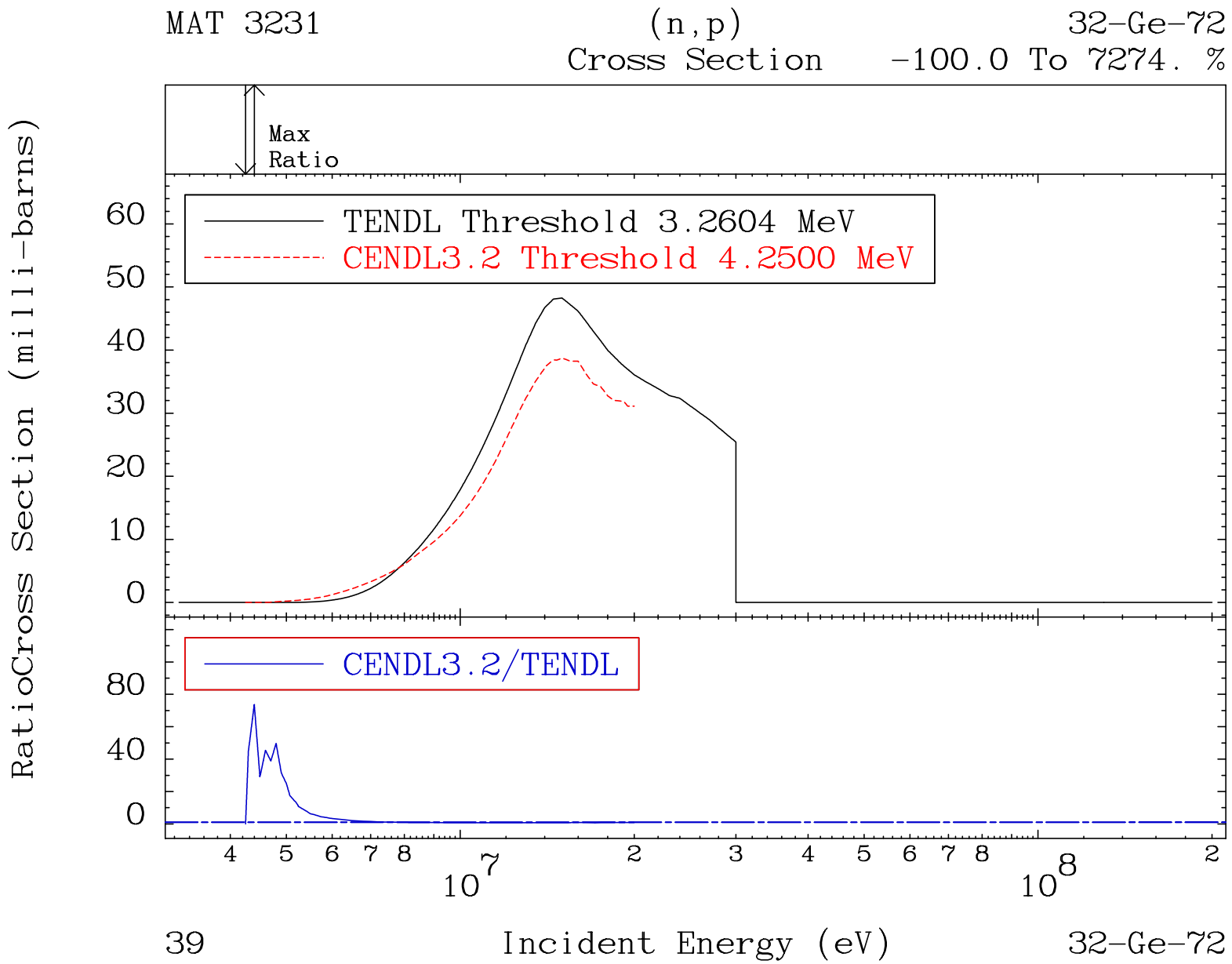

MAT 3231
MT= 77 (n,n') Level
32-Ge-72
Cross Section -100.0 To 78.37 %
Max
Ratio
TENDL Threshold 3.1376 MeV
CENDL3.2 Threshold 3.3716 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
32-Ge-72

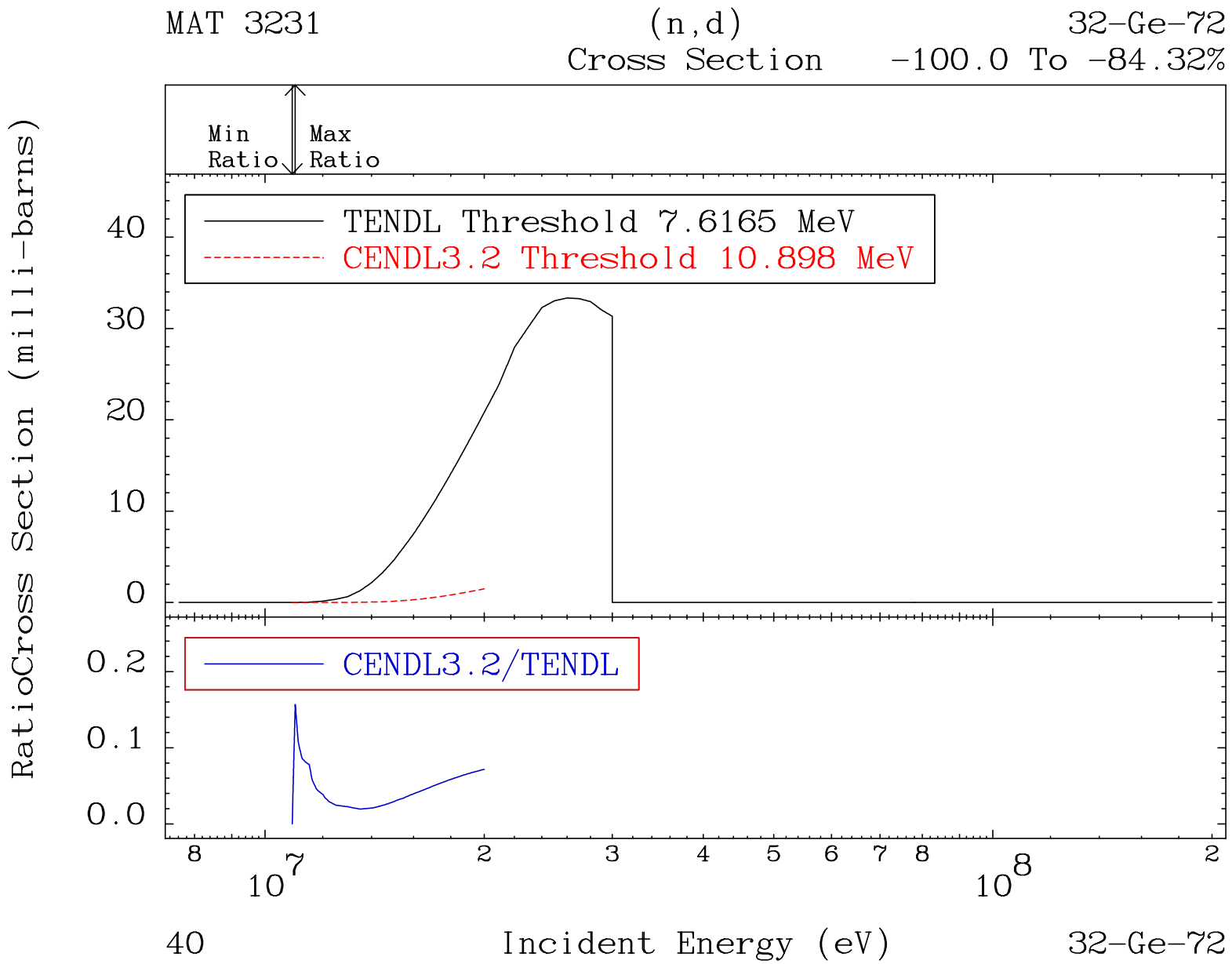

MAT 3231
MT= 78 (n,n') Level
32-Ge-72
Cross Section -100.0 To 97.18 %
Max
Ratio
TENDL Threshold 3.1727 MeV
CENDL3.2 Threshold 3.4416 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
3.0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
32-Ge-72

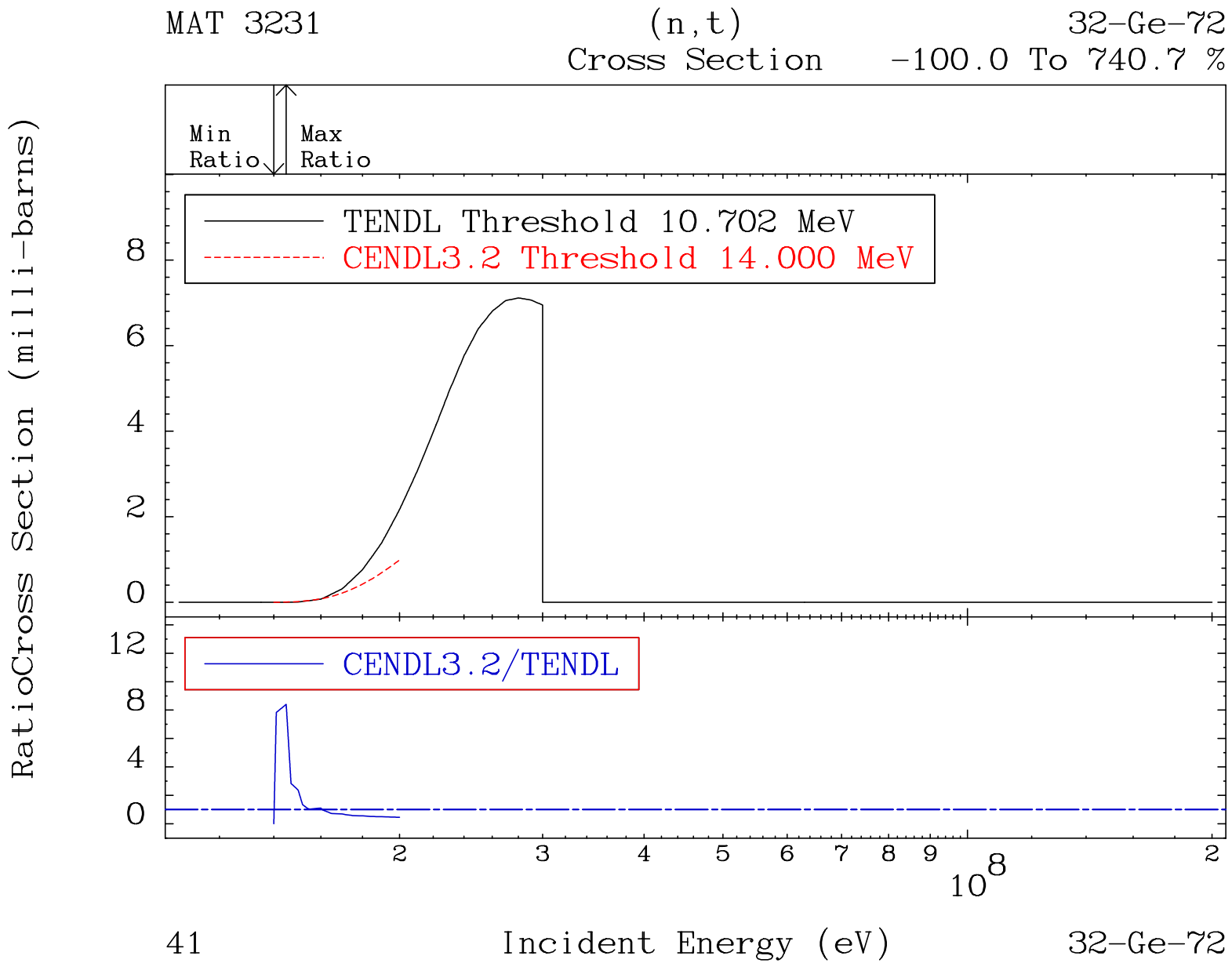

MAT 3231
MT= 79 (n,n') Level
32-Ge-72
Cross Section
-100.0 To 157.9 %
Max
Ratio
TENDL Threshold 3.1749 MeV
CENDL3.2 Threshold 3.4678 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
32-Ge-72

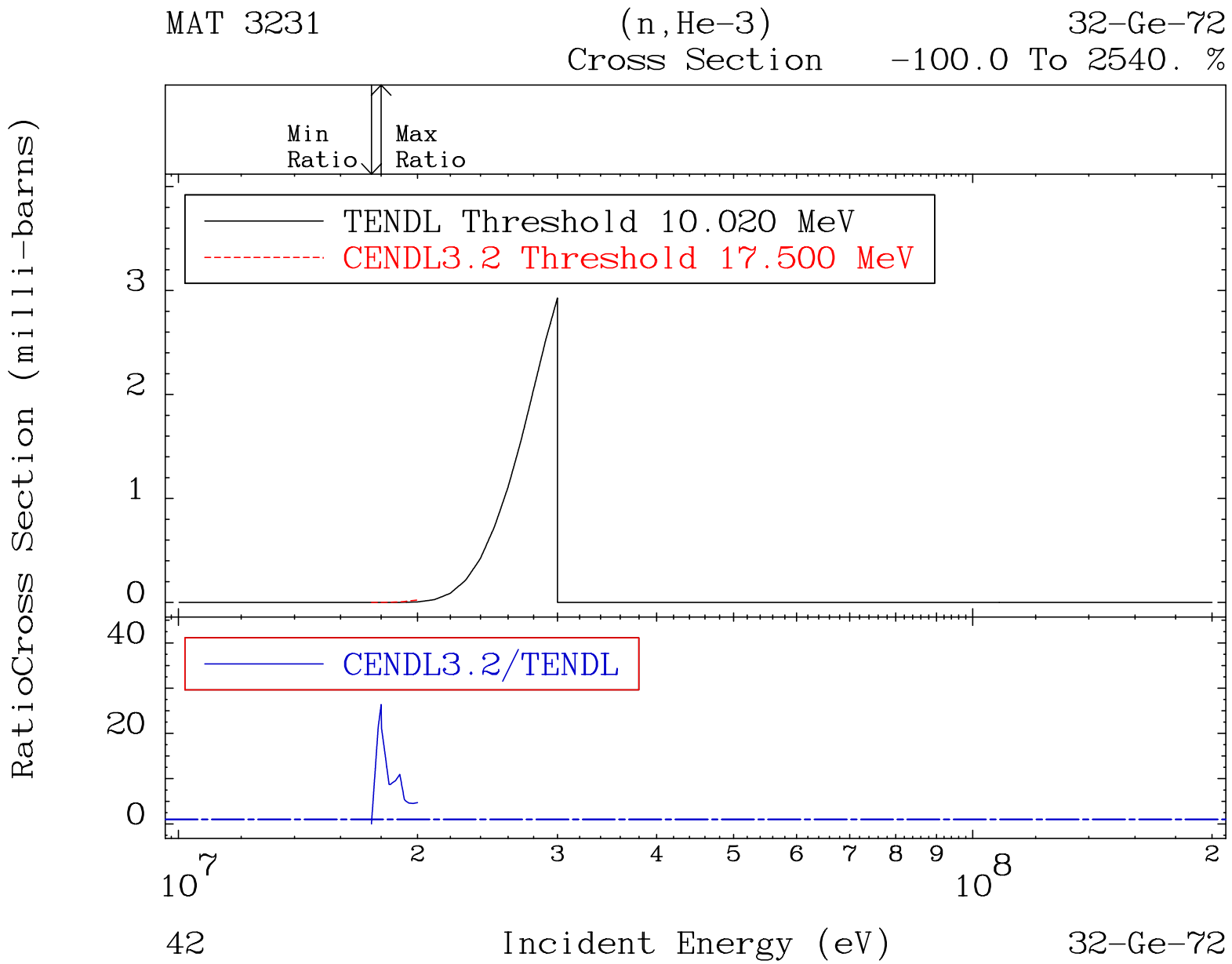

MAT 3231
(n,n') Continuum
Cross Section
32-Ge-72
-100.0 To -1.724%
Min Ratio
Max Ratio
TENDL Threshold 3.1749 MeV
CENDL3.2 Threshold 4.7000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
32-Ge-72

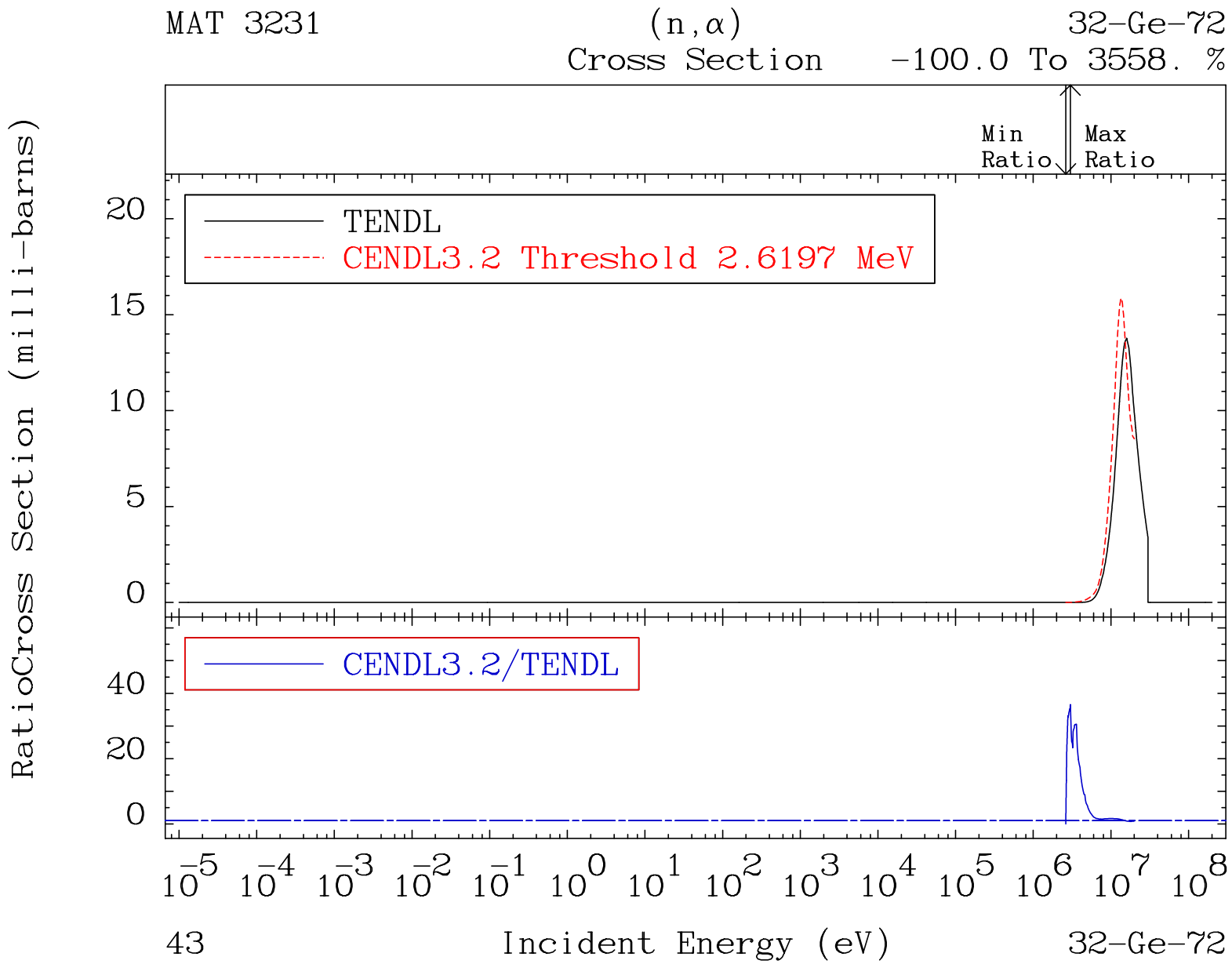

MAT 3231
(n,γ)
Cross Section
32-Ge-72
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
32-Ge-72

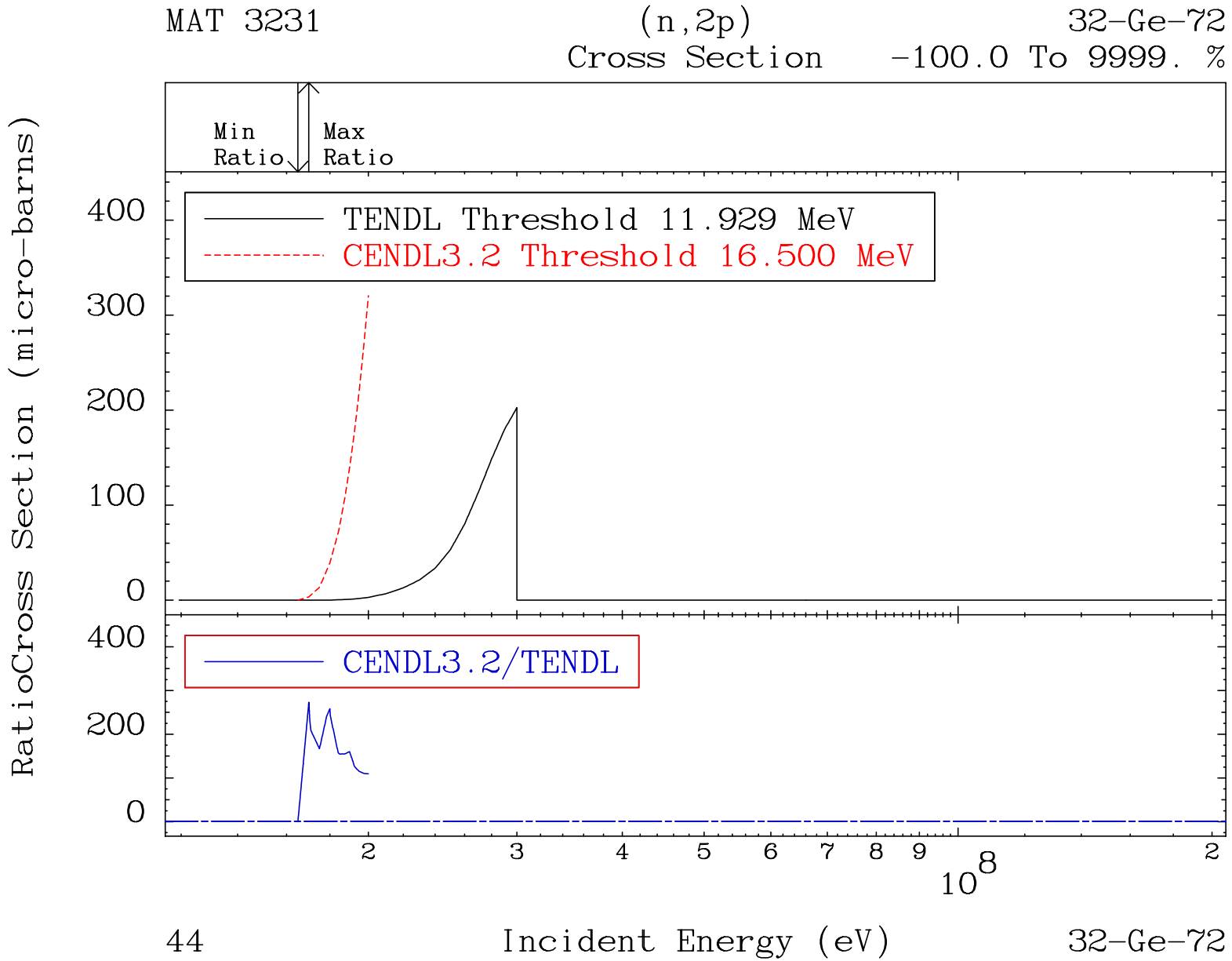

MAT 3231
(n,p)
32-Ge-72
Cross Section
-100.0 To 7274. %
Max
Ratio
TENDL Threshold 3.2604 MeV
CENDL3.2 Threshold 4.2500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
80
40
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
32-Ge-72

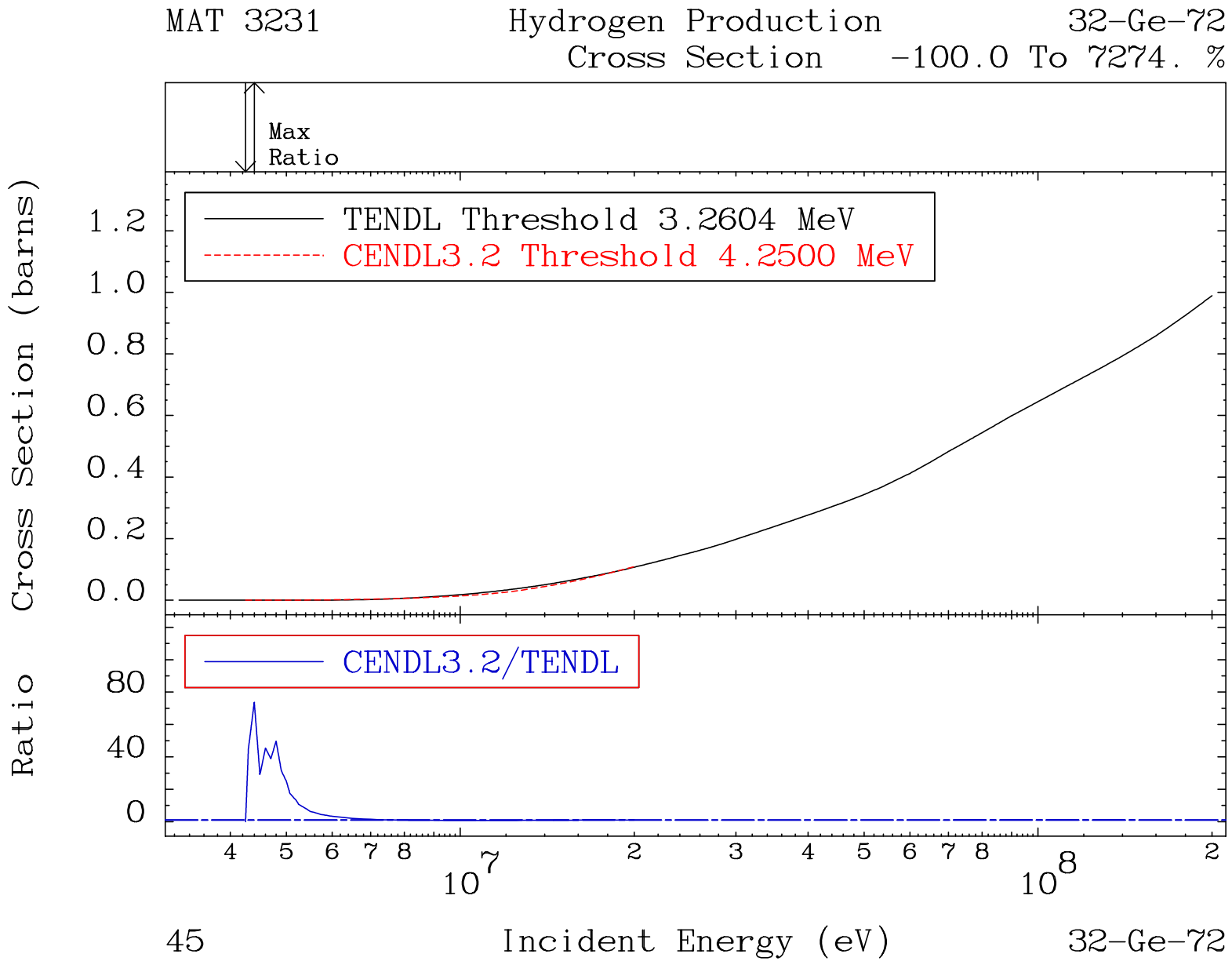

MAT 3231
(n,d)
Cross Section
32-Ge-72
-100.0 To -84.32%
Min Ratio
Max Ratio
TENDL Threshold 7.6165 MeV
CENDL3.2 Threshold 10.898 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
0.2
0.1
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
40
Incident Energy (eV)
32-Ge-72

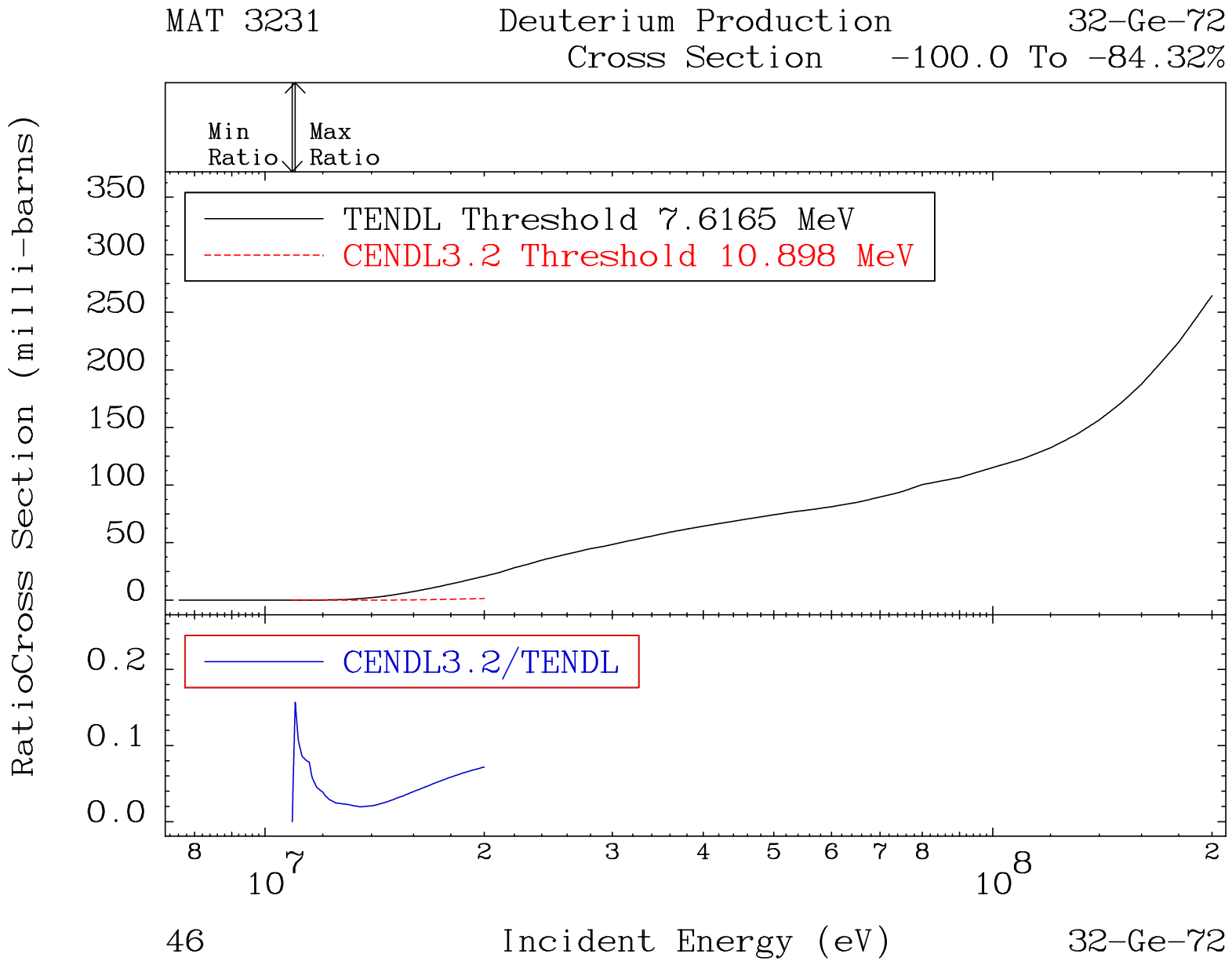

MAT 3231
(n,t)
32-Ge-72
Cross Section
-100.0 To 740.7 %
Min Ratio
Max Ratio
TENDL Threshold 10.702 MeV
CENDL3.2 Threshold 14.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
0
2
4
6
8
0
4
8
12
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
32-Ge-72

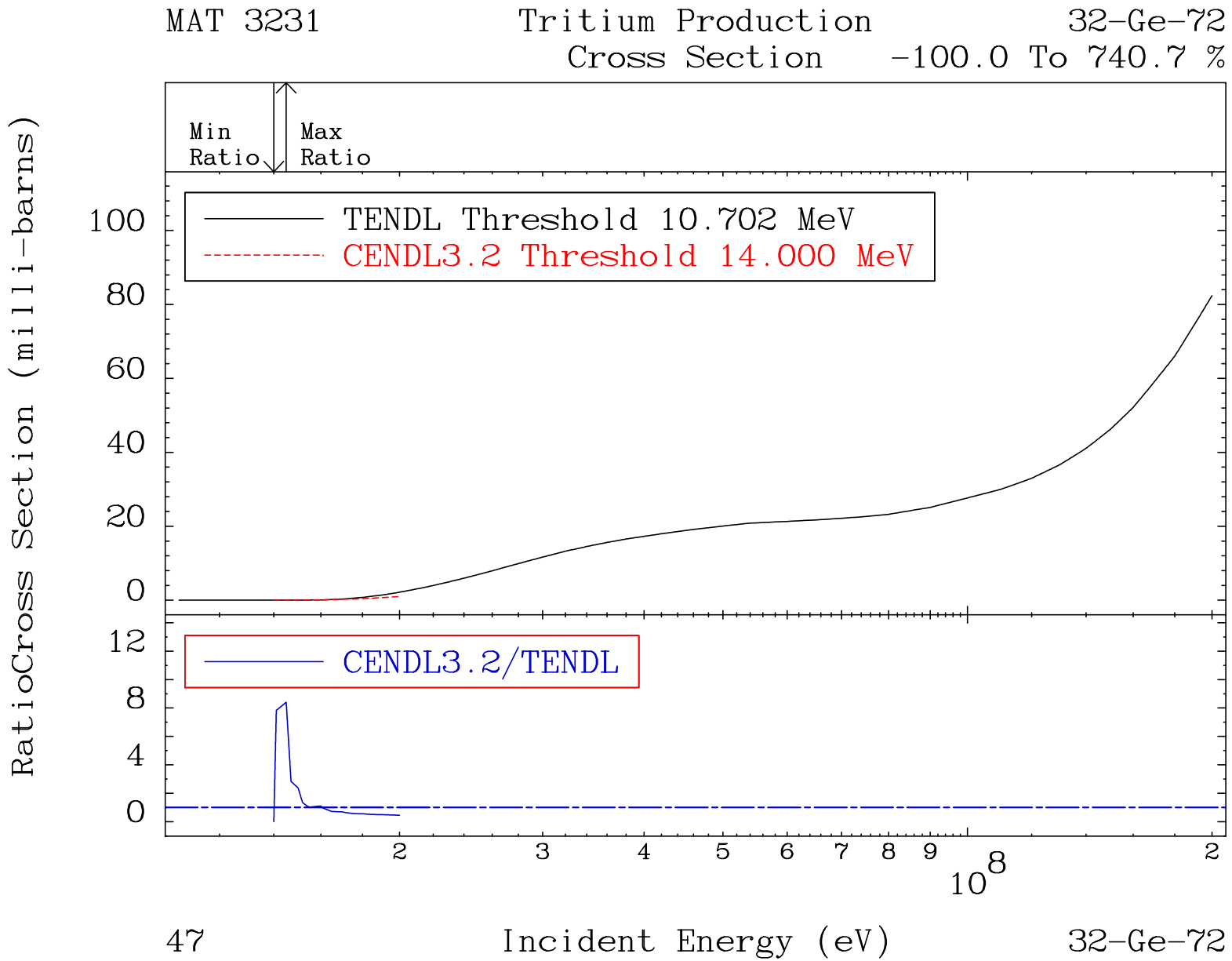

MAT 3231
(n,He-3)
32-Ge-72
Cross Section
-100.0 To 2540. %
Min Ratio
Max Ratio
TENDL Threshold 10.020 MeV
CENDL3.2 Threshold 17.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
42
32-Ge-72

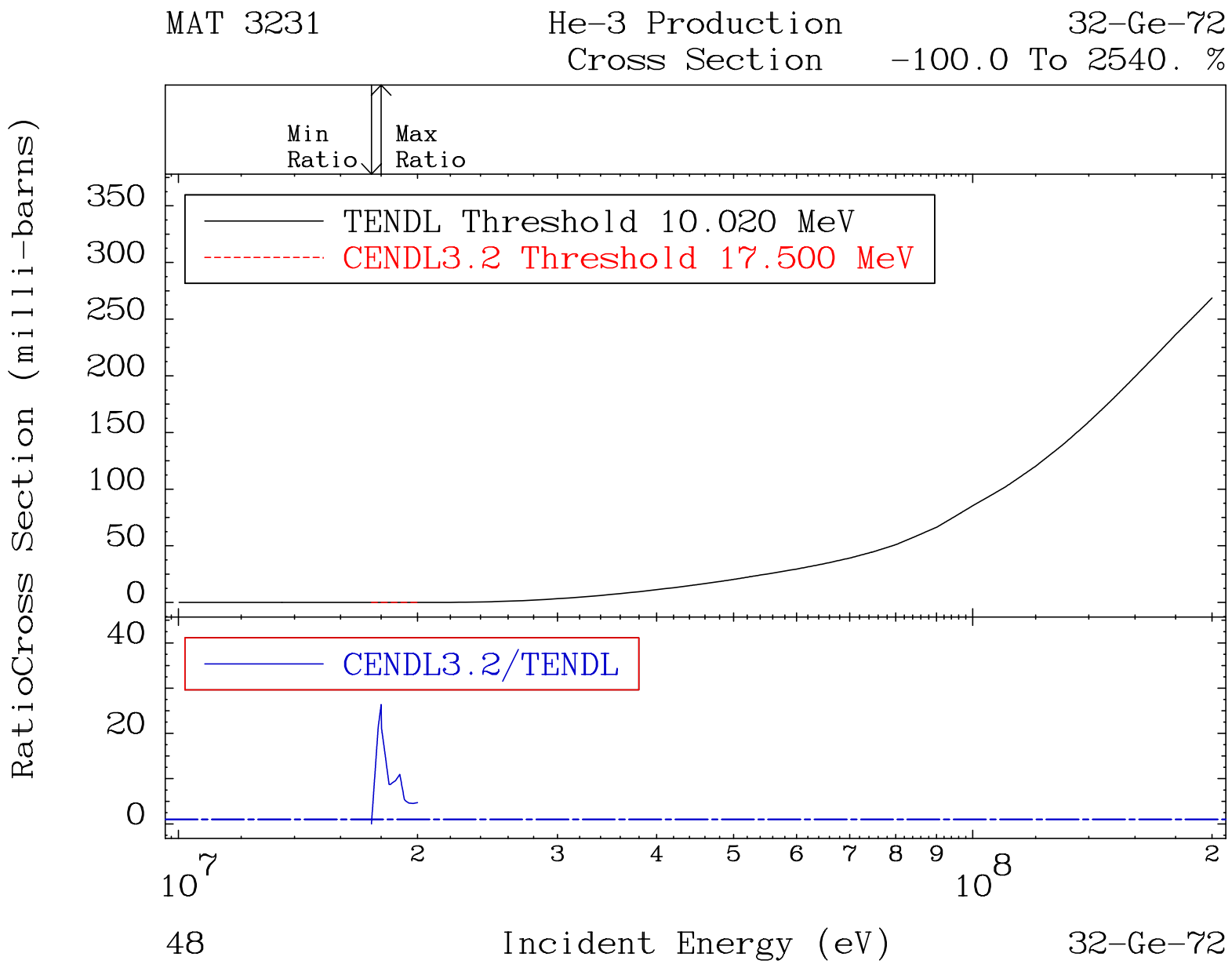

MAT 3231
(n,α)
32-Ge-72
Cross Section
-100.0 To 3558. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 2.6197 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
43
32-Ge-72

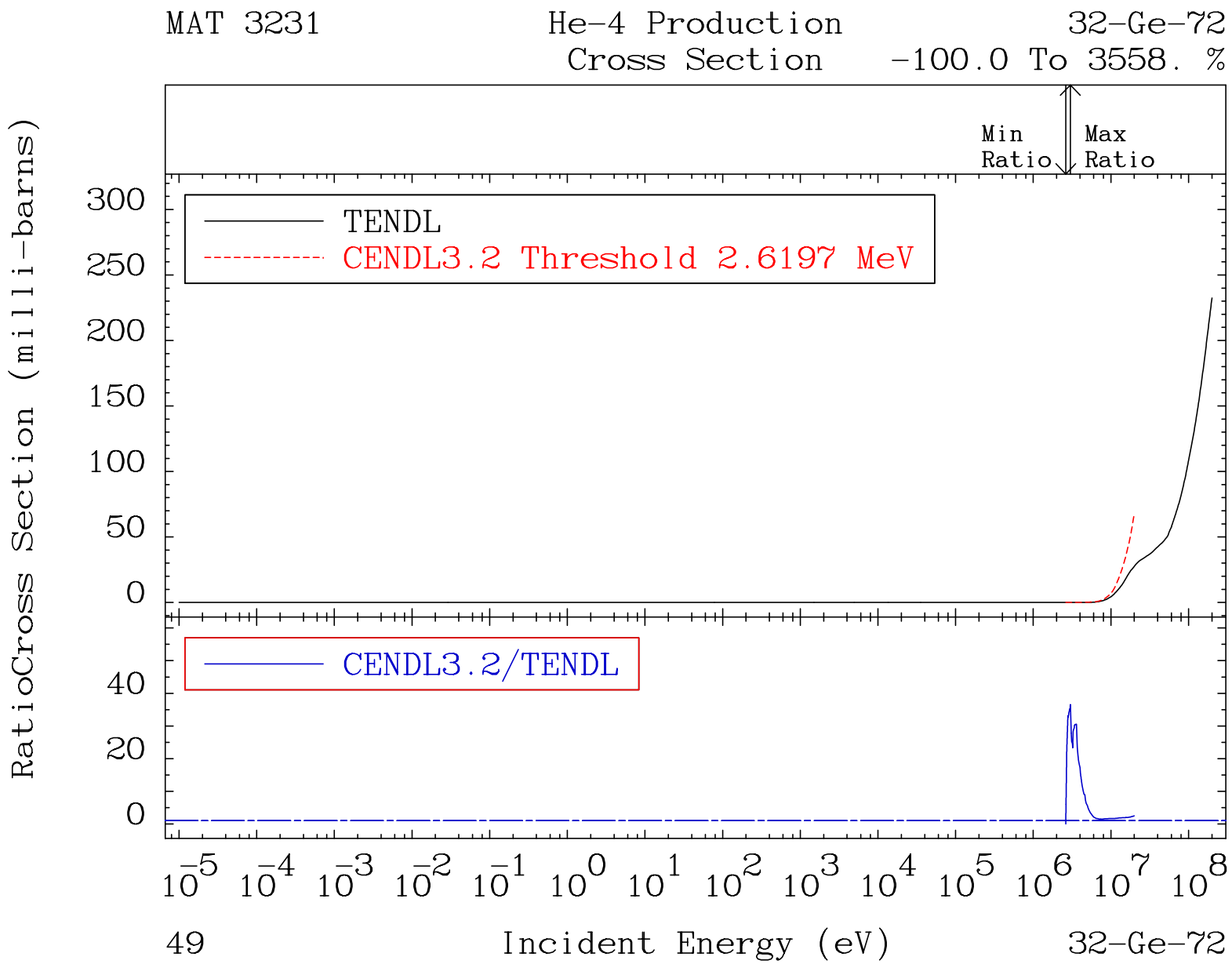

MAT 3231
(n,2p)
32-Ge-72
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.929 MeV
CENDL3.2 Threshold 16.500 MeV
CENDL3.2/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
400
200
0
2
3
4
5
6
7
8
9
2
10^8
44
Incident Energy (eV)
32-Ge-72

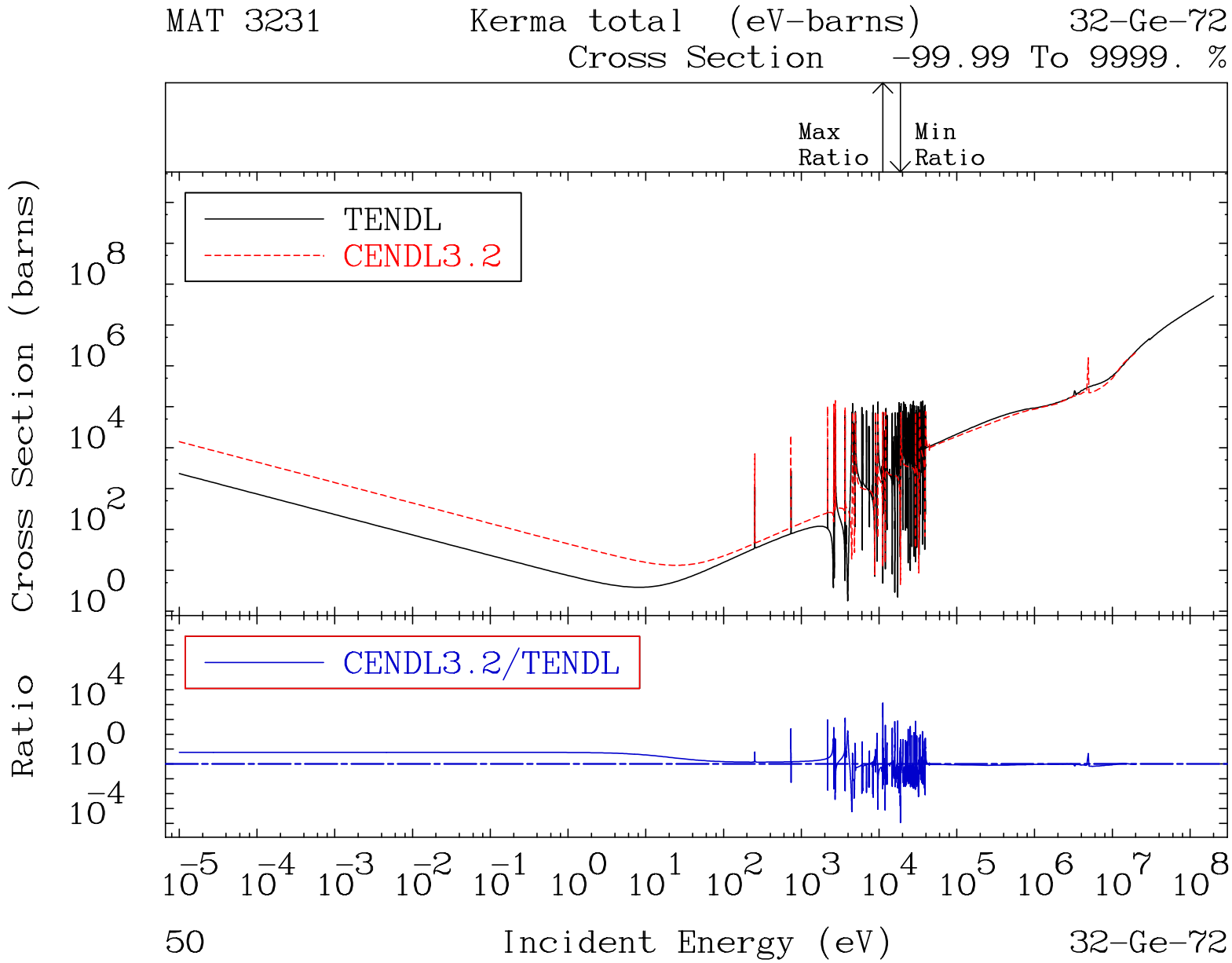

MAT 3231
Hydrogen Production
32-Ge-72
Cross Section -100.0 To 7274. %
Max
Ratio
TENDL Threshold 3.2604 MeV
CENDL3.2 Threshold 4.2500 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
80
40
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
32-Ge-72

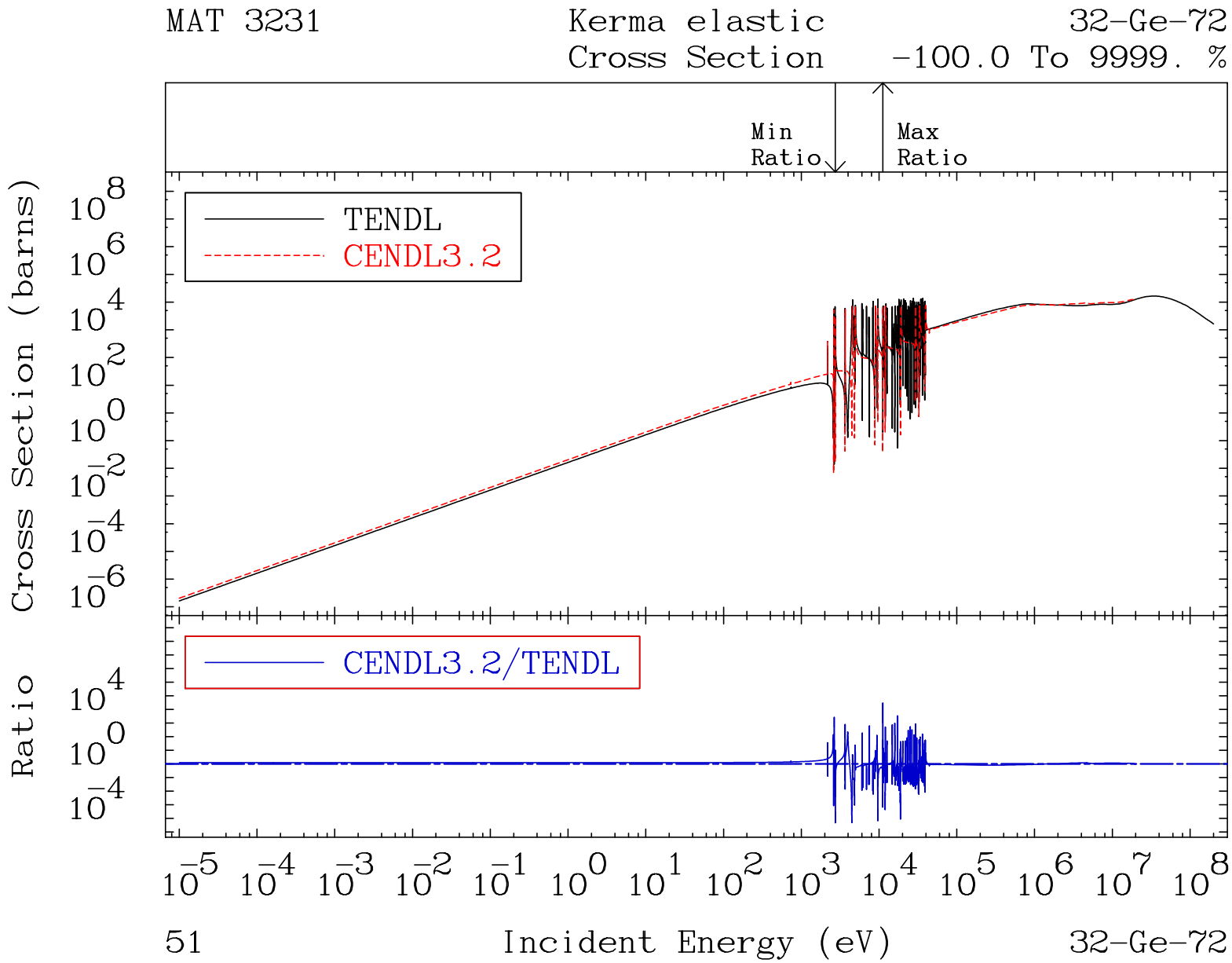

MAT 3231
Deuterium Production
32-Ge-72
Cross Section -100.0 To -84.32%
Min Ratio
Max Ratio
TENDL Threshold 7.6165 MeV
CENDL3.2 Threshold 10.898 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
0.2
0.1
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
46
Incident Energy (eV)
32-Ge-72

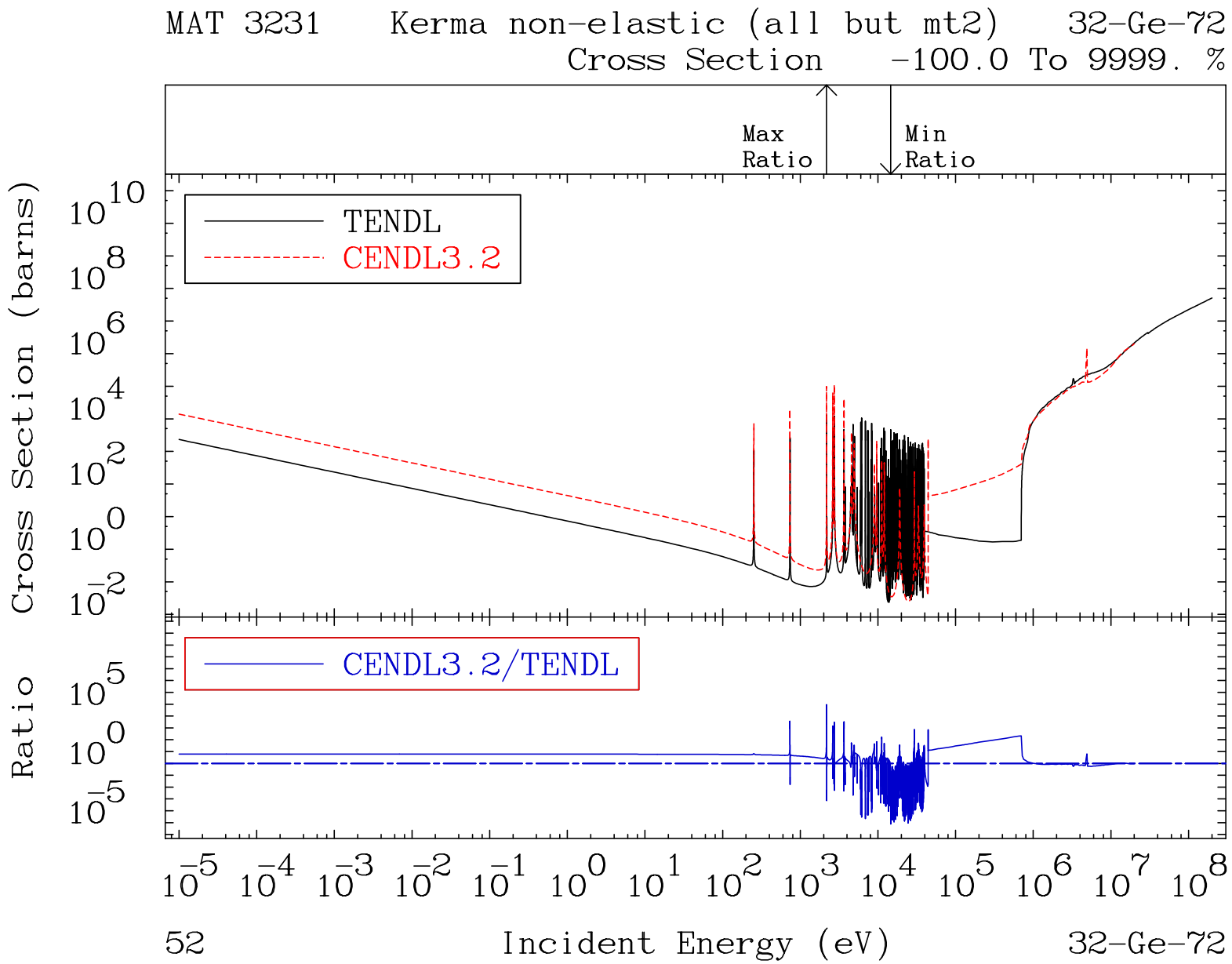

MAT 3231
Tritium Production
32-Ge-72
Cross Section -100.0 To 740.7 %
Min Ratio
Max Ratio
TENDL Threshold 10.702 MeV
CENDL3.2 Threshold 14.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
12
8
4
0
2
3
4
5
6
7
8
9
2
10^8
47
Incident Energy (eV)
32-Ge-72

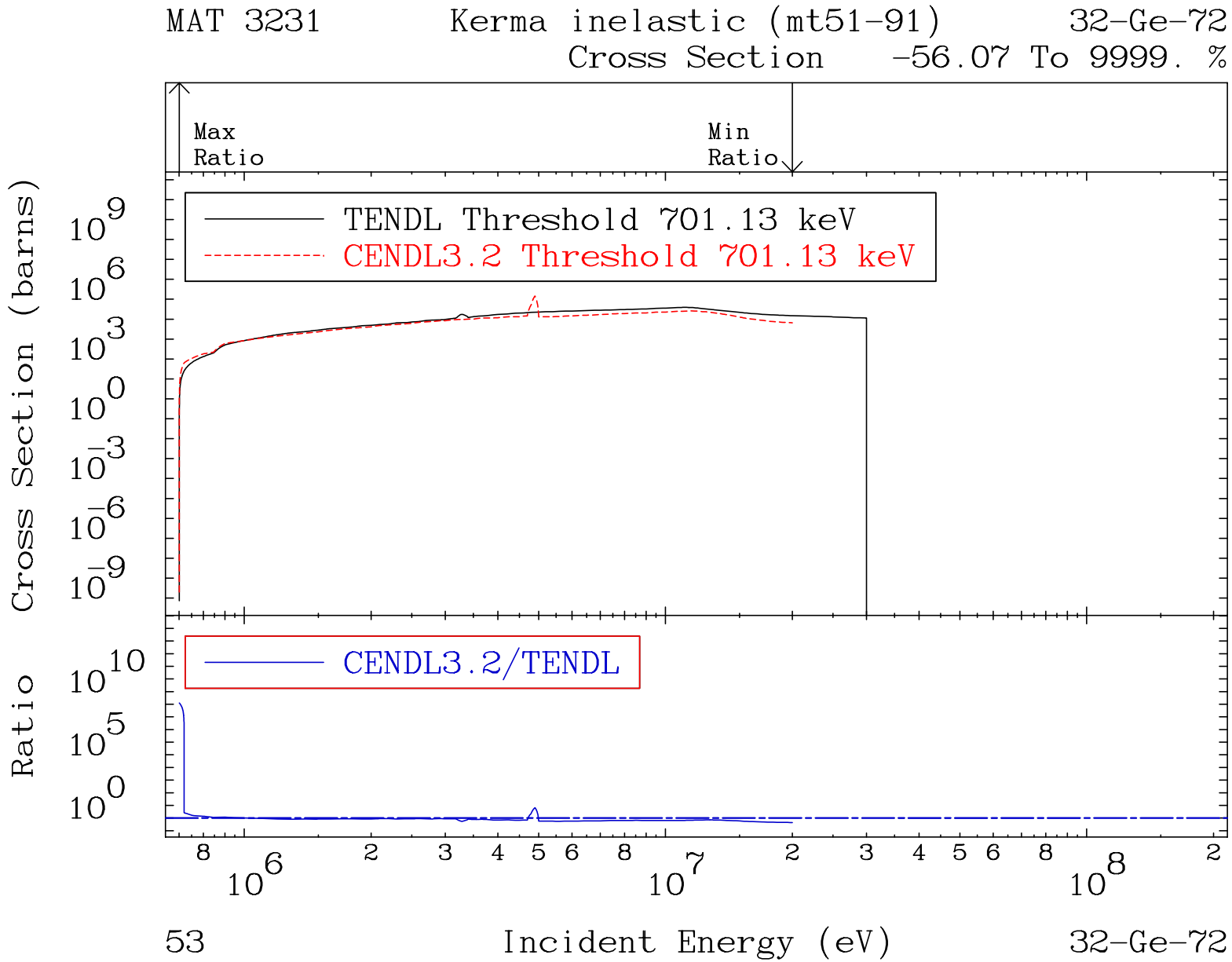

MAT 3231
He-3 Production
Cross Section
32-Ge-72
-100.0 To 2540. %
Min Ratio
Max Ratio
TENDL Threshold 10.020 MeV
CENDL3.2 Threshold 17.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
40
20
0
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
32-Ge-72

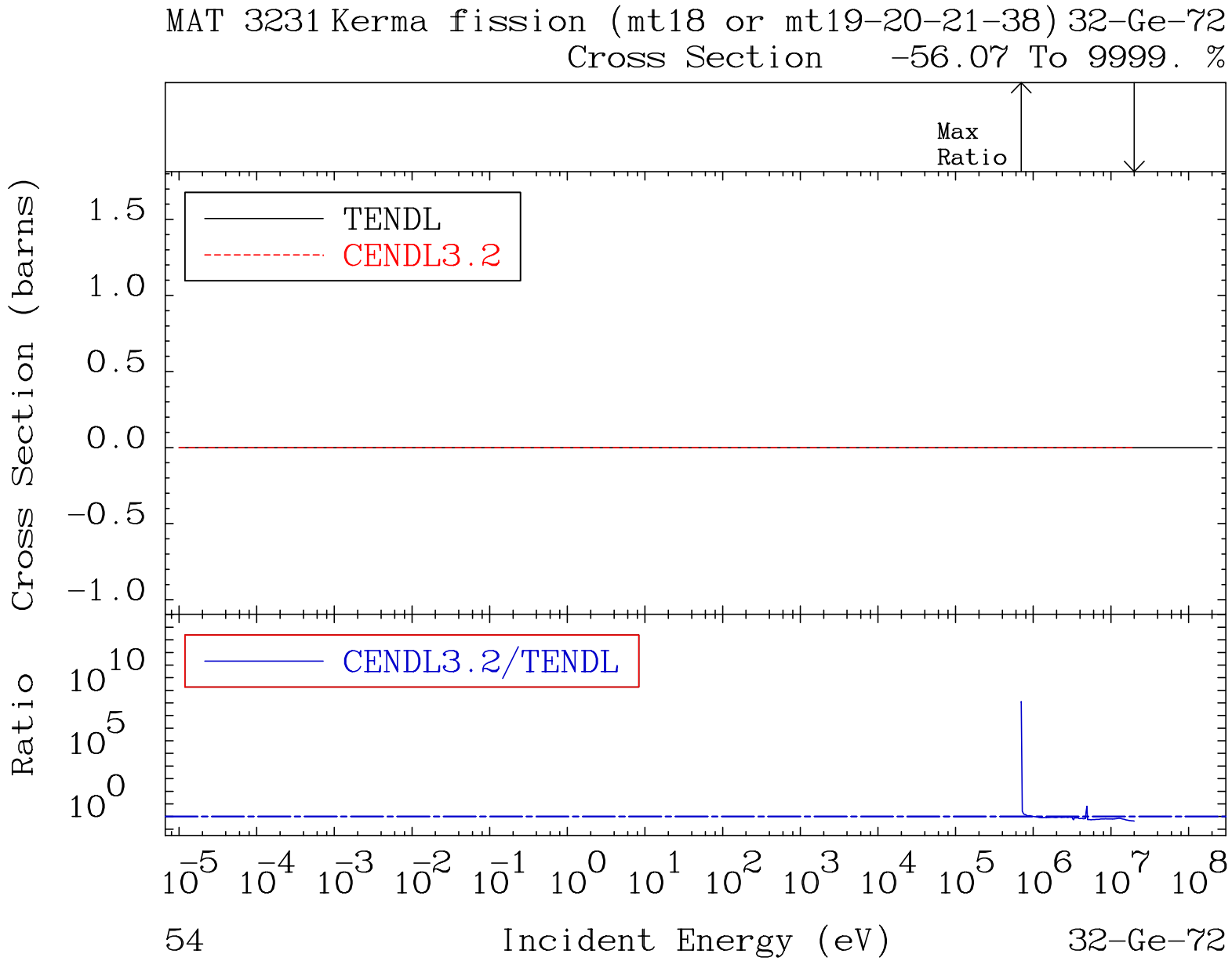

MAT 3231
He-4 Production
Cross Section
32-Ge-72
-100.0 To 3558. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 2.6197 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
40
20
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
49
Incident Energy (eV)
32-Ge-72

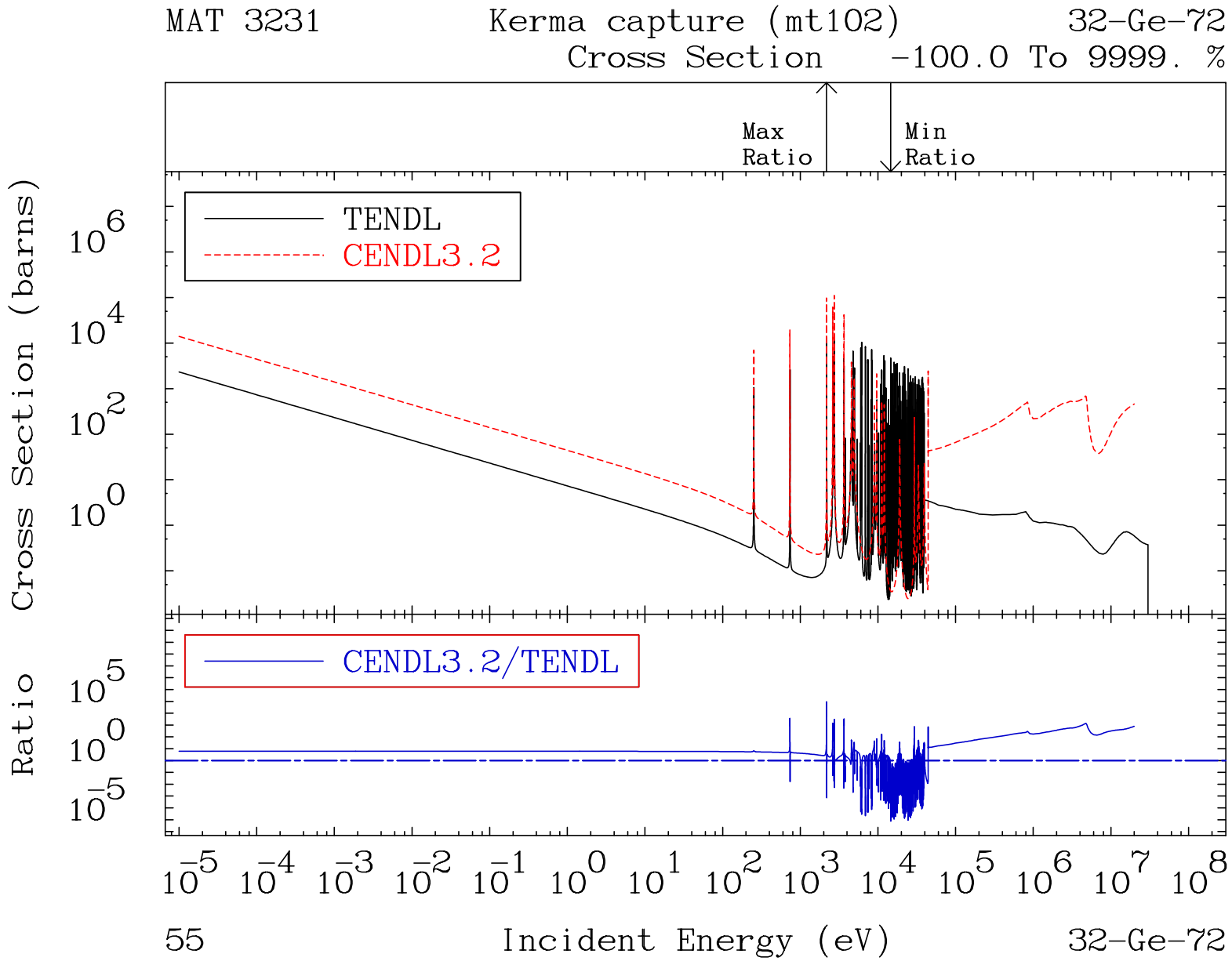

MAT 3231
Kerma total (eV-barns)
32-Ge-72
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
50
32-Ge-72

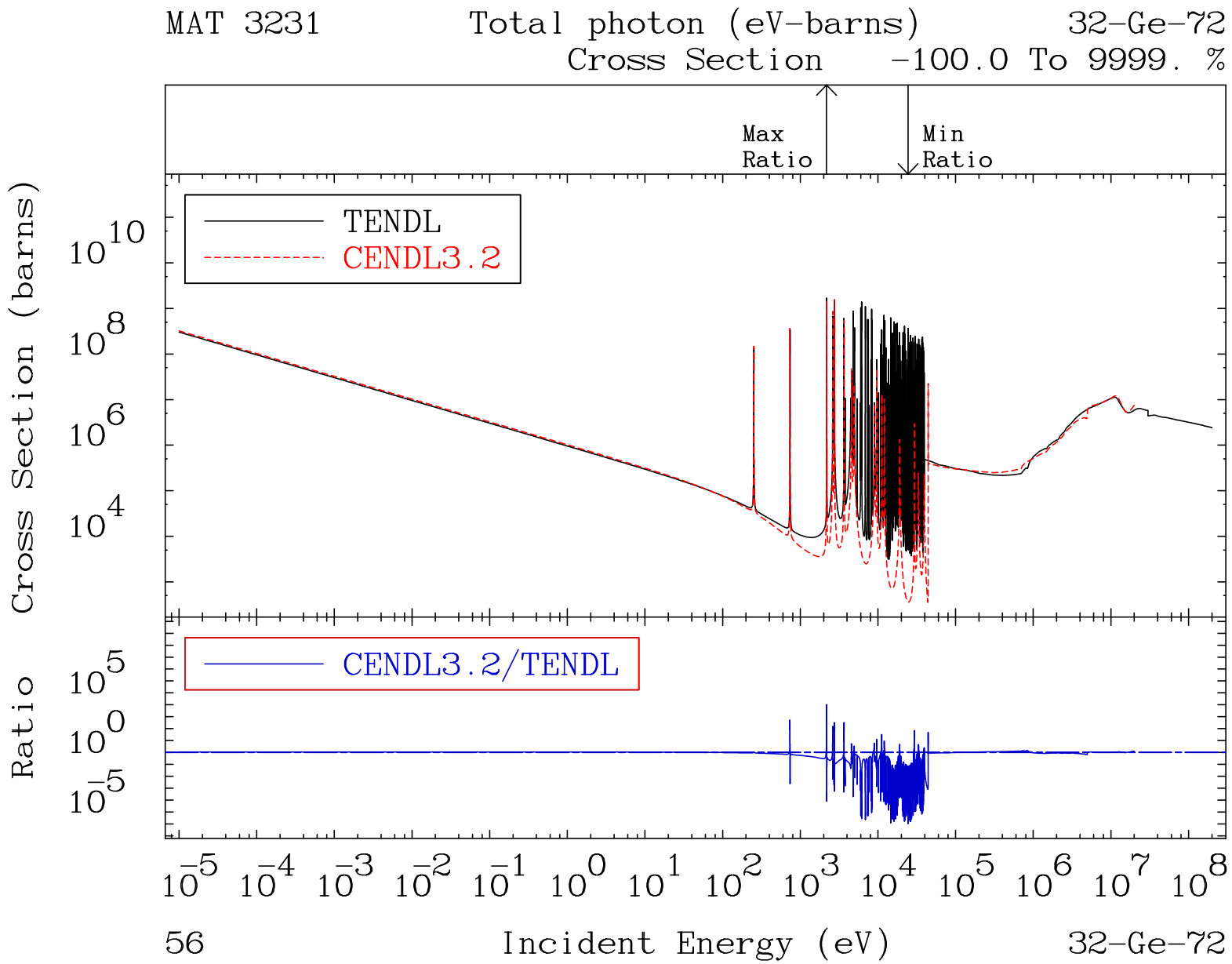

MAT 3231
Kerma elastic
Cross Section
32-Ge-72
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
32-Ge-72

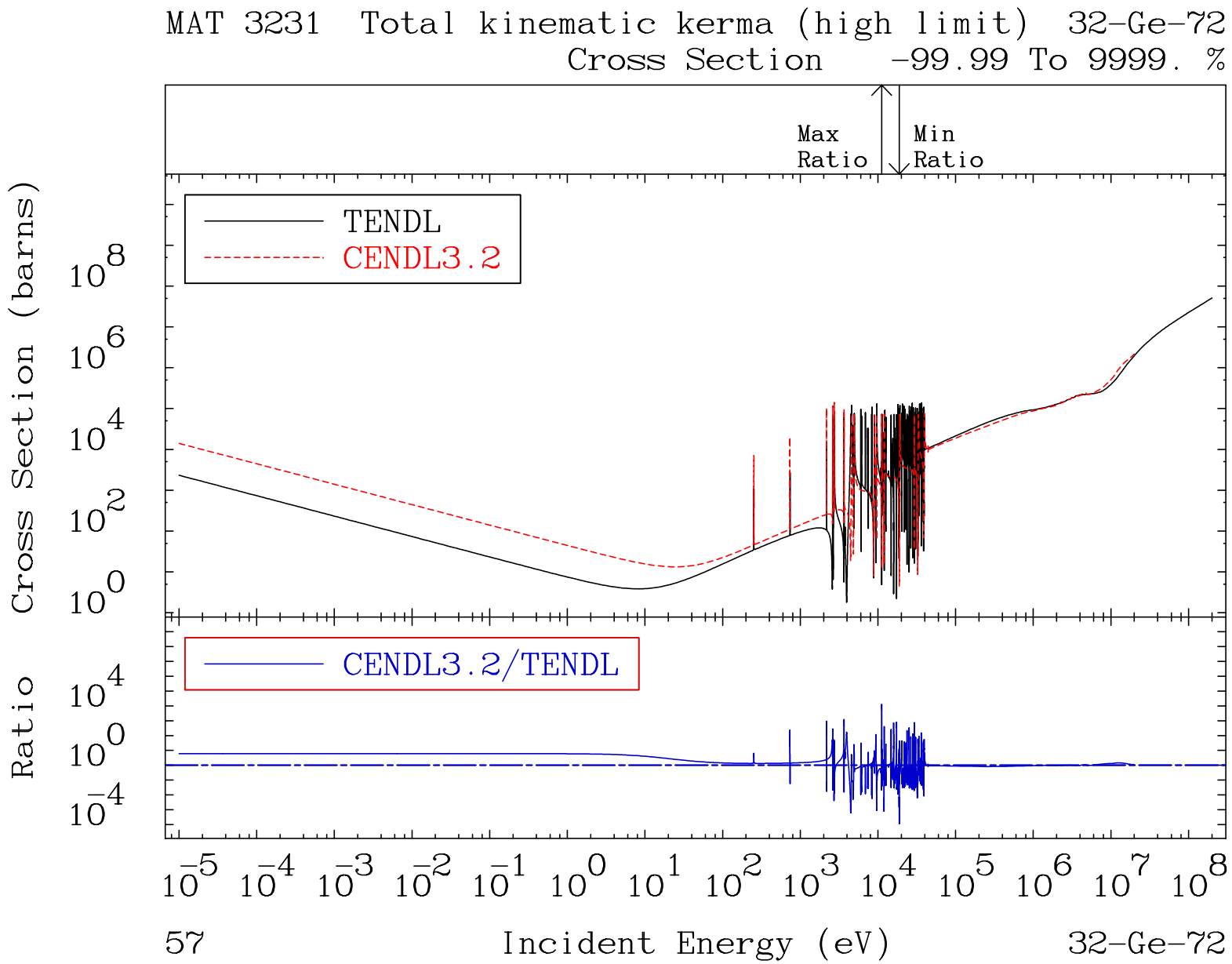

MAT 3231 Kerma non-elastic (all but mt2) 32-Ge-72
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
52
32-Ge-72

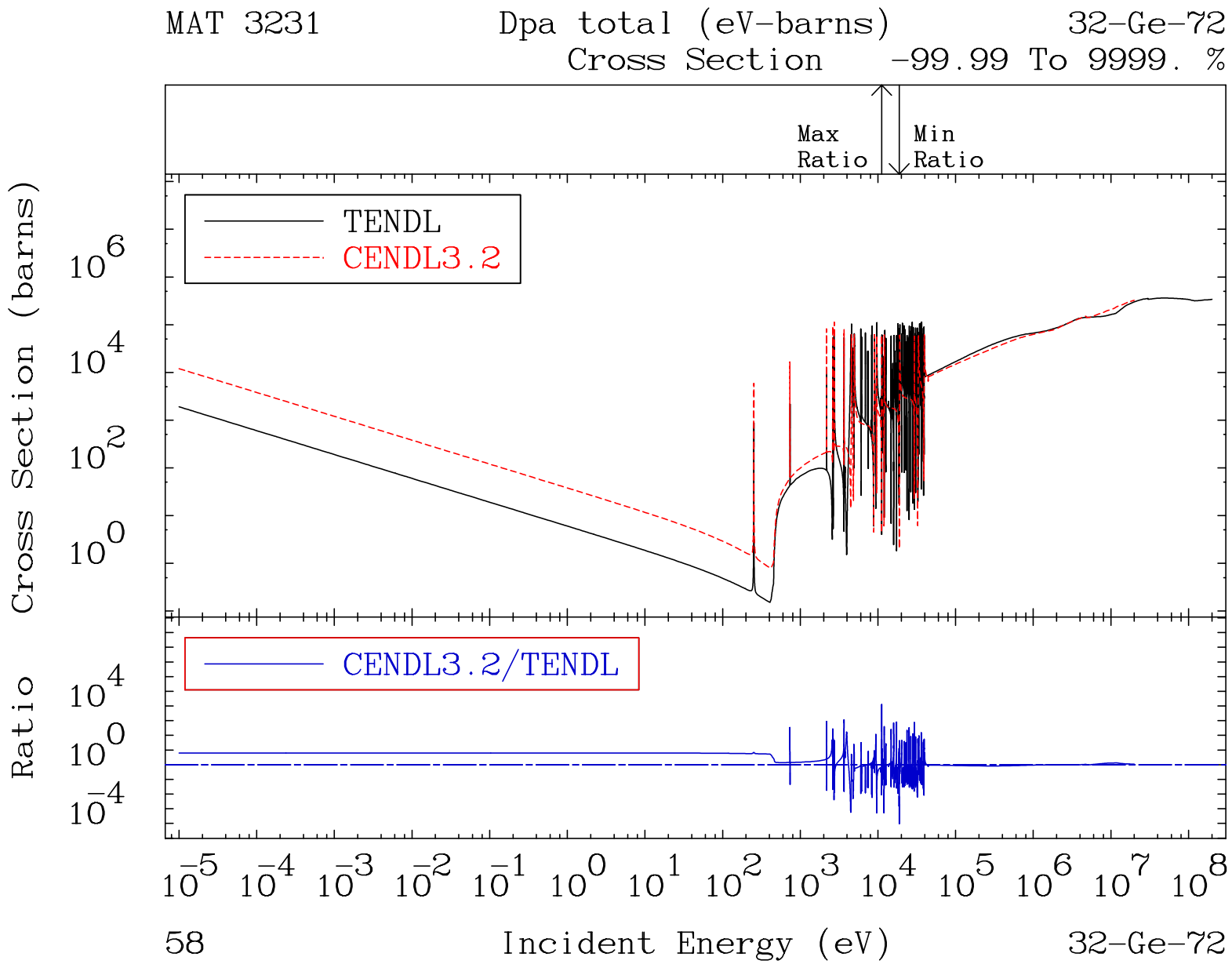

MAT 3231
Kerma inelastic (mt51-91)
32-Ge-72
Cross Section -56.07 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 701.13 keV
CENDL3.2 Threshold 701.13 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
32-Ge-72

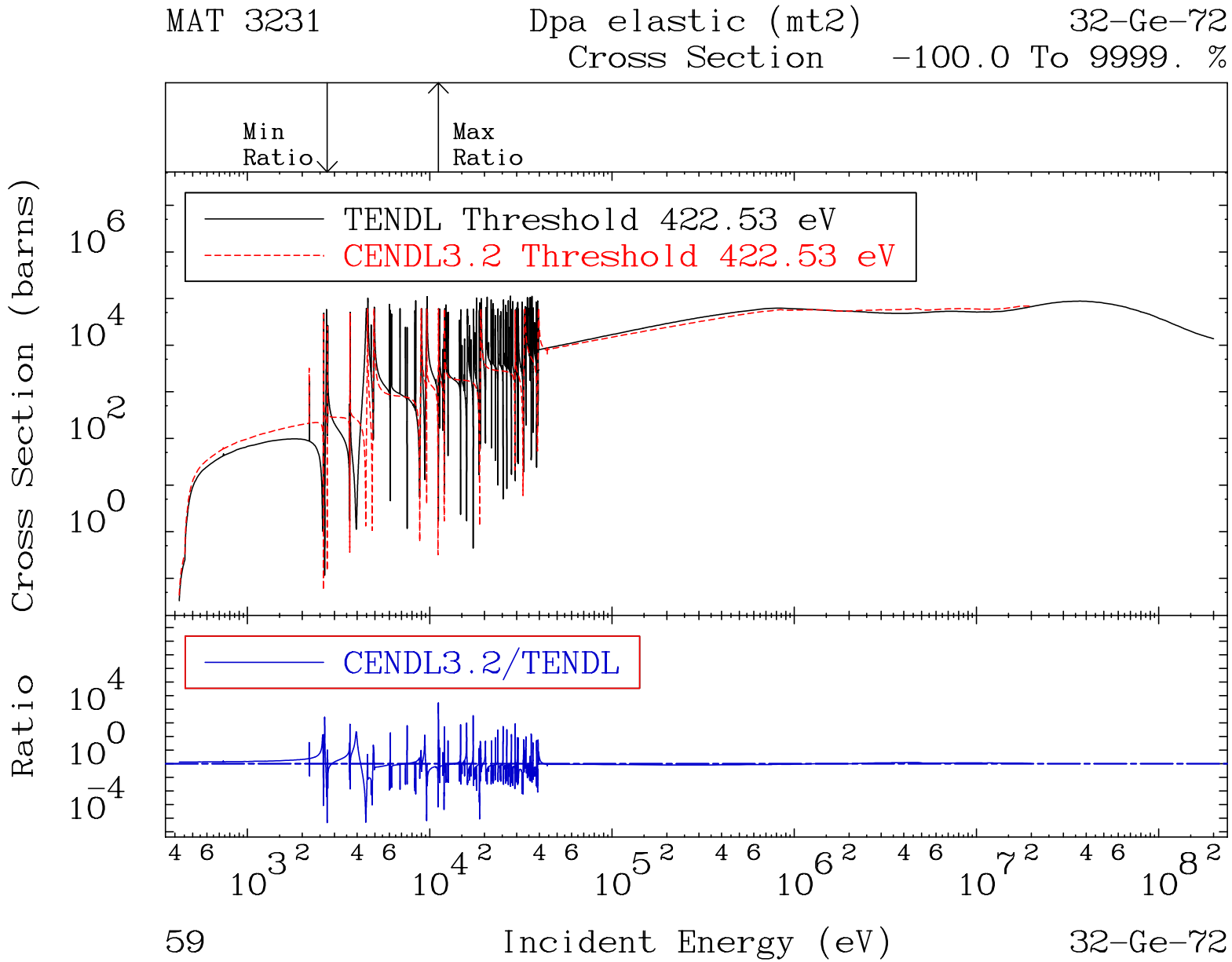

MAT 3231 Kerma fission (mt18 or mt19-20-21-38) 32-Ge-72
Cross Section -56.07 To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{10}
10^{5}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
54
Incident Energy (eV)
32-Ge-72

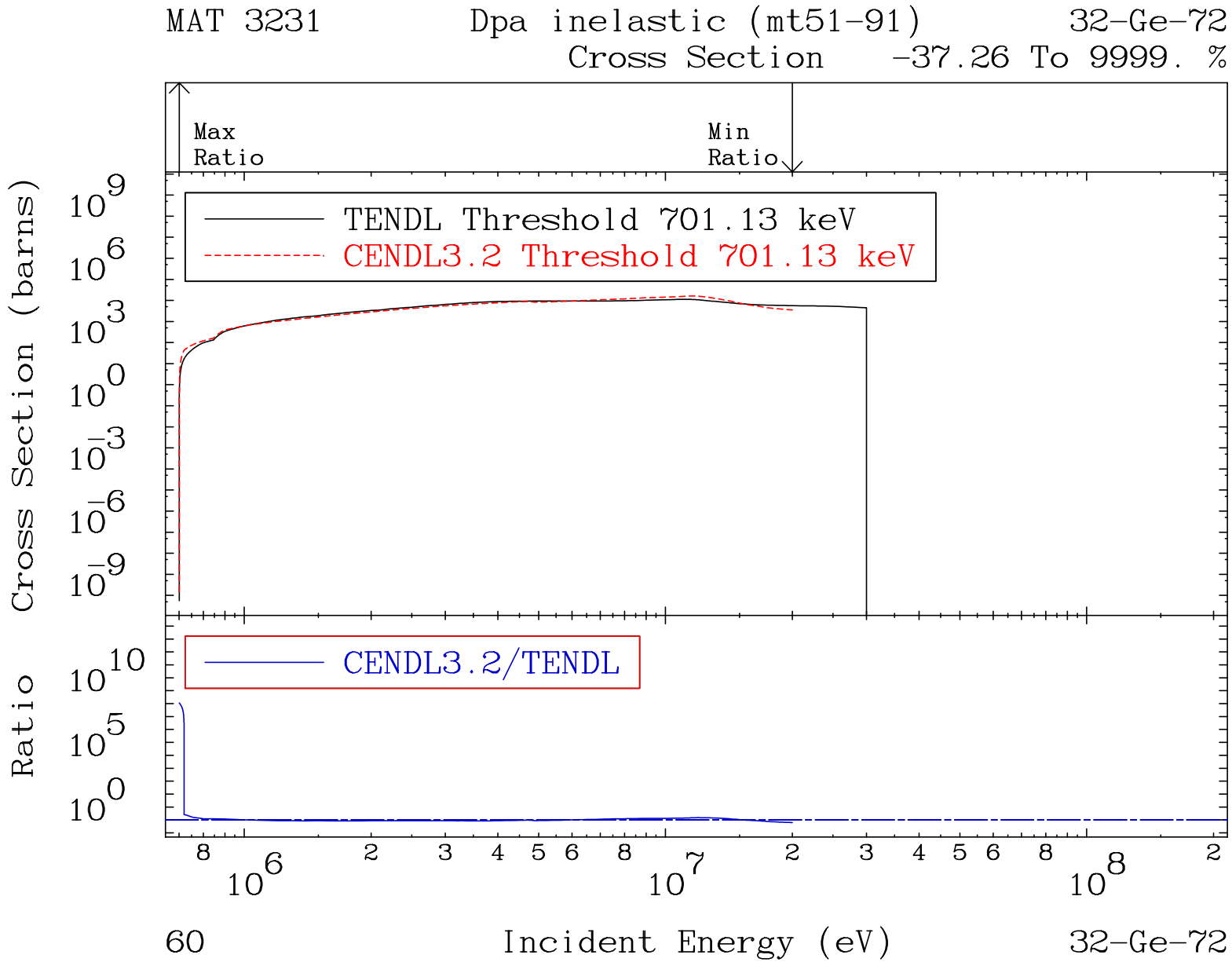

MAT 3231
Kerma capture (mt102)
32-Ge-72
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
32-Ge-72

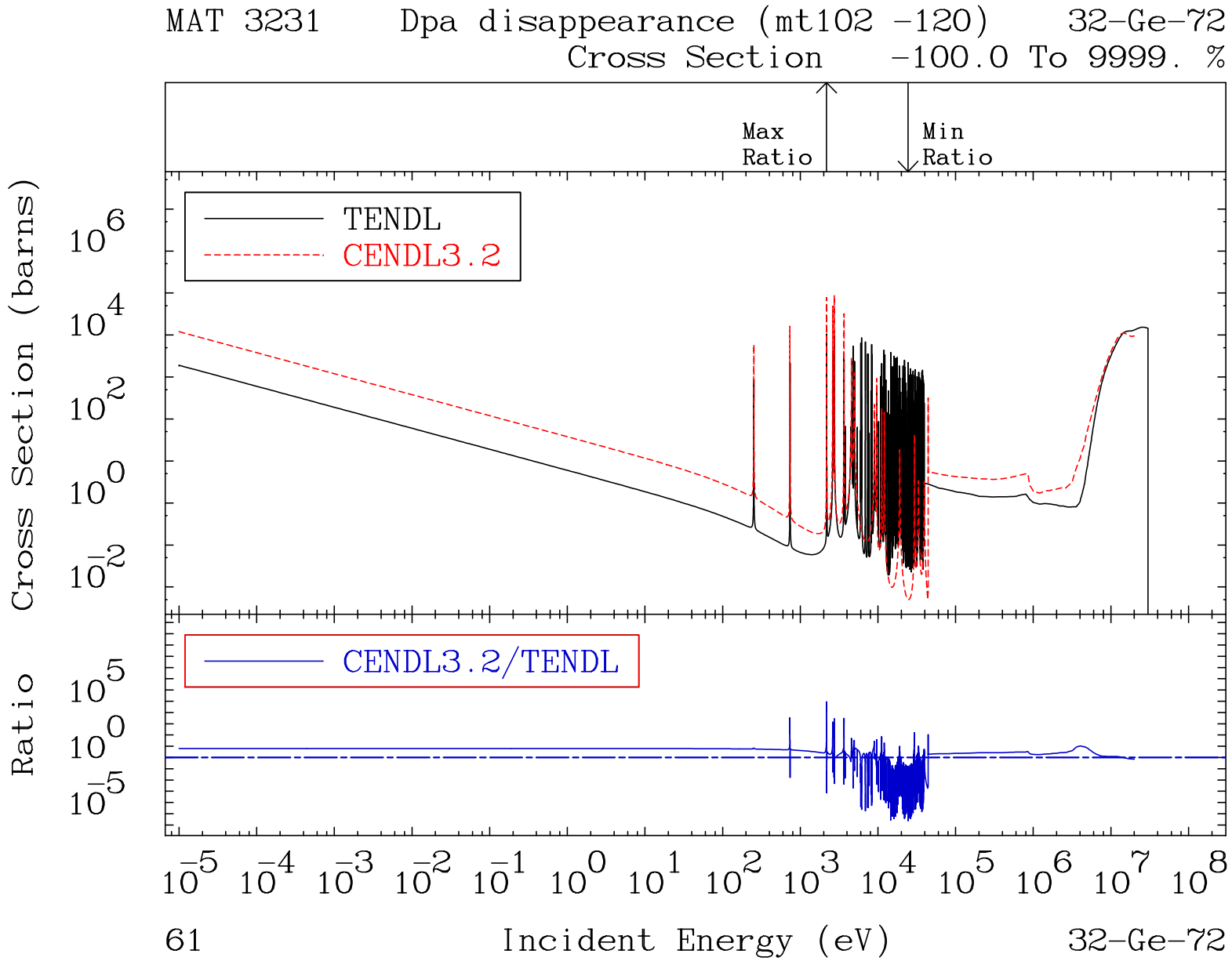

MAT 3231
Total photon (eV-barns)
32-Ge-72
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^{10}
10^{8}
10^{6}
10^{4}
CENDL3.2/TENDL
Ratio
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
56
Incident Energy (eV)
32-Ge-72

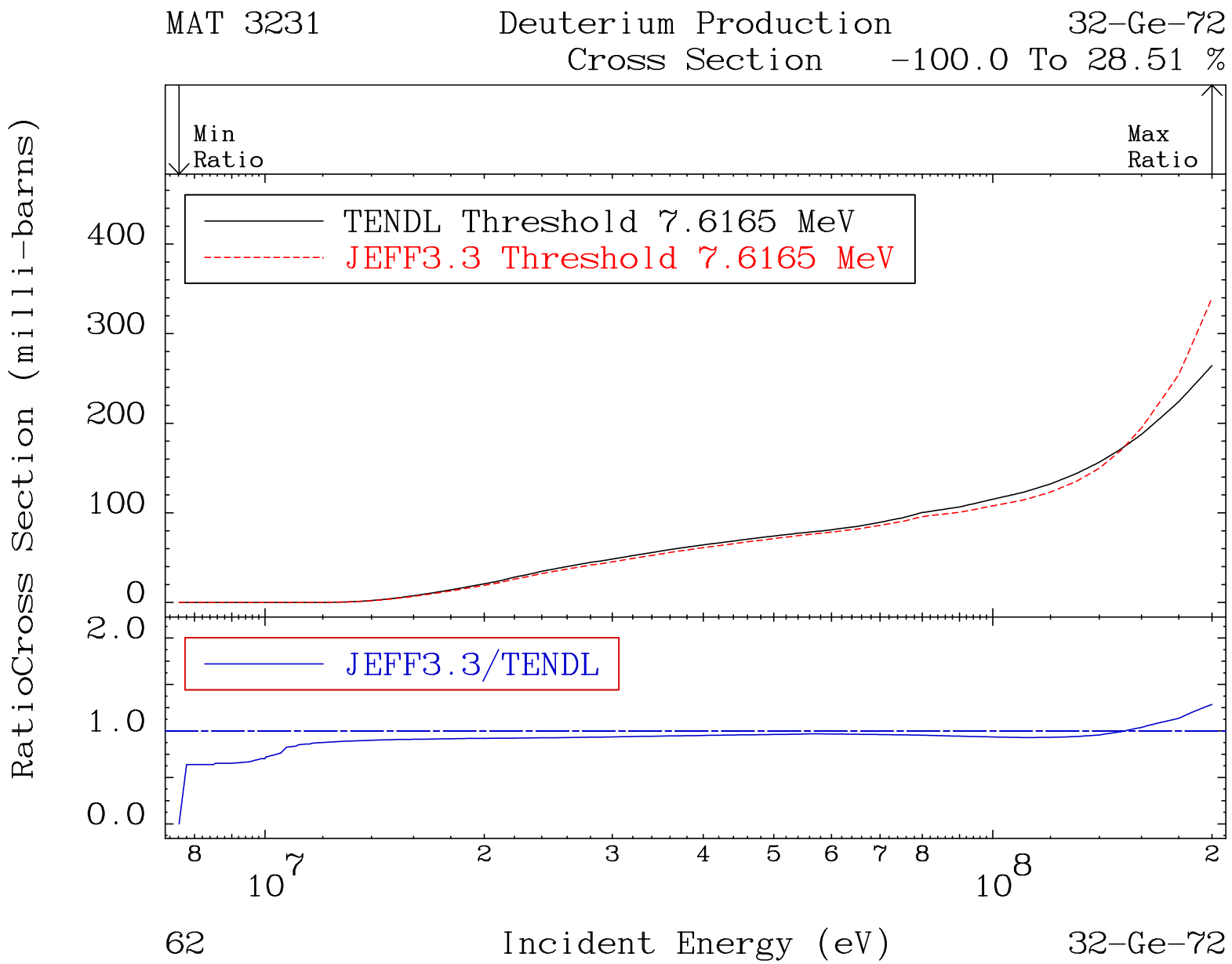

MAT 3231 Total kinematic kerma (high limit) 32-Ge-72
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
57
32-Ge-72

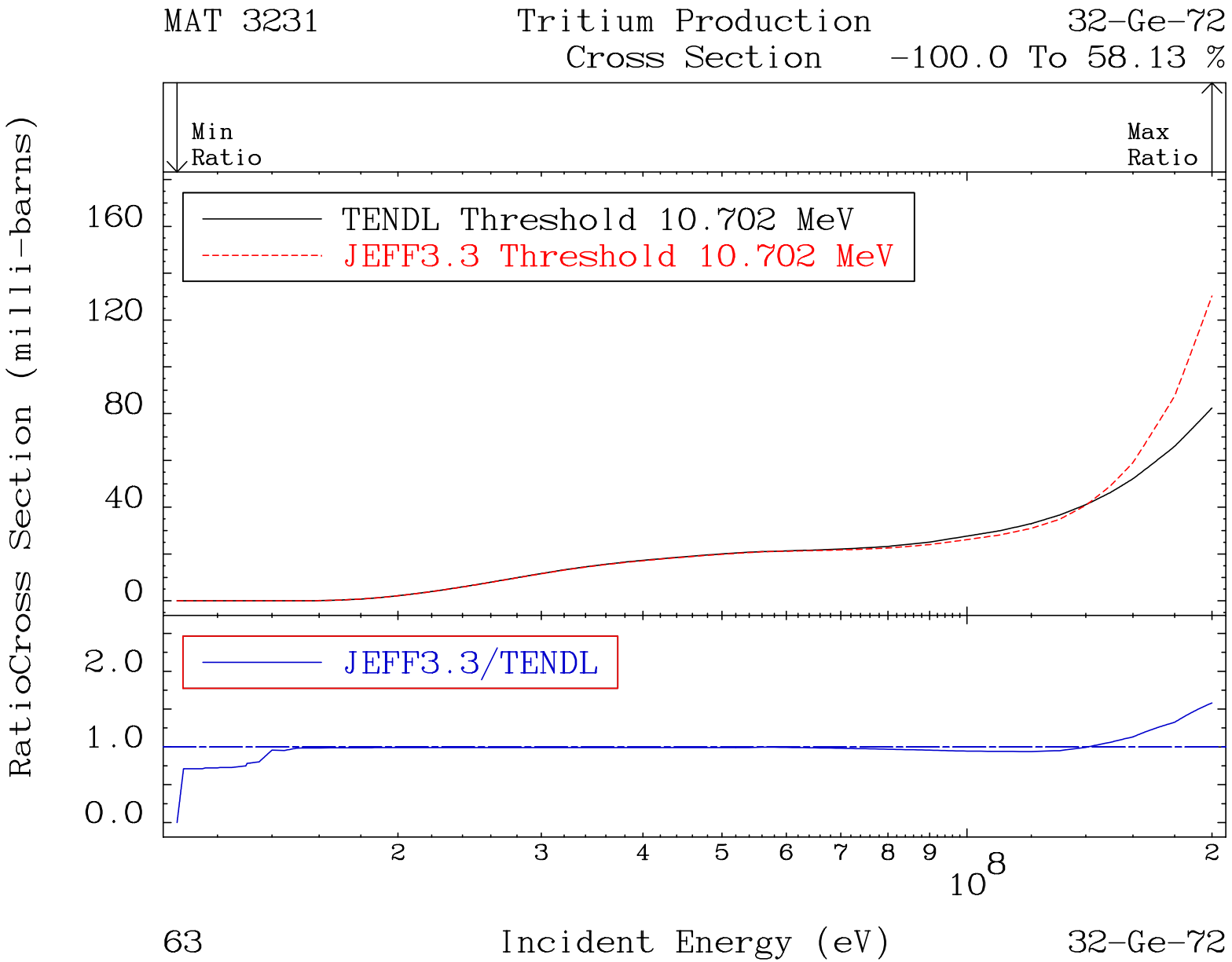

MAT 3231
Dpa total (eV-barns)
32-Ge-72
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
32-Ge-72

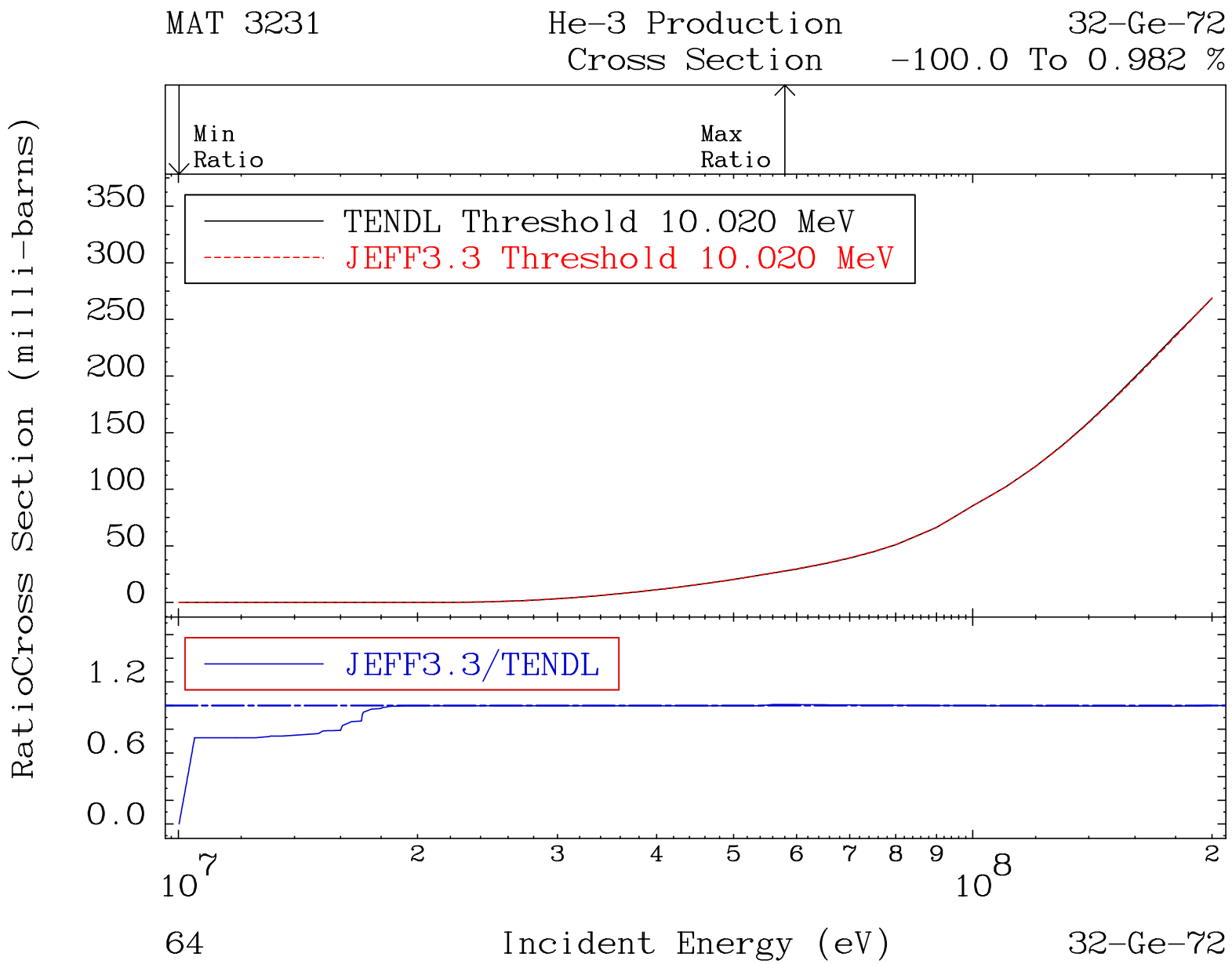

MAT 3231
Dpa elastic (mt2)
Cross Section
32-Ge-72
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 422.53 eV
CENDL3.2 Threshold 422.53 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
32-Ge-72

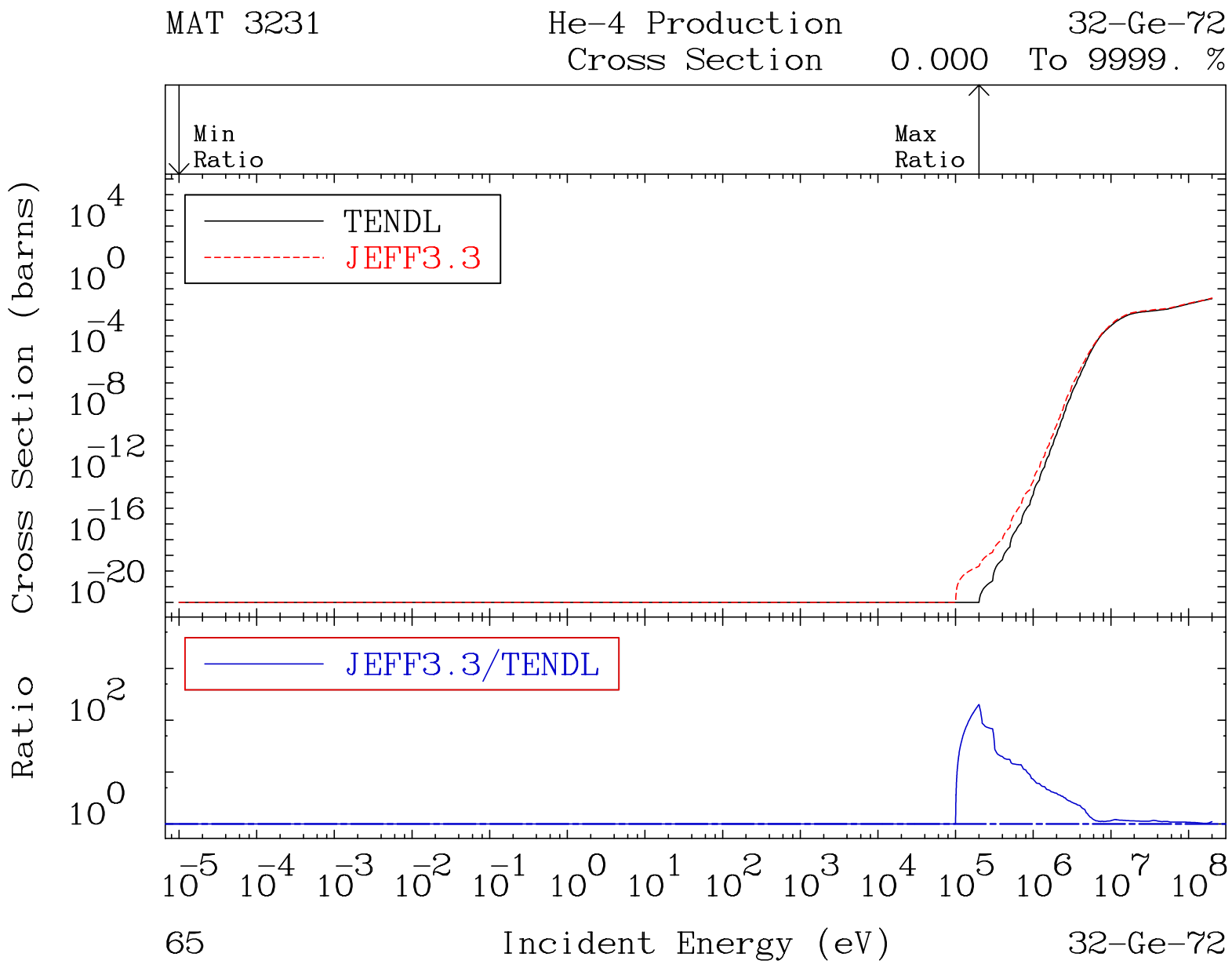

MAT 3231
Dpa inelastic (mt51-91)
32-Ge-72
Cross Section
-37.26 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 701.13 keV
CENDL3.2 Threshold 701.13 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
32-Ge-72

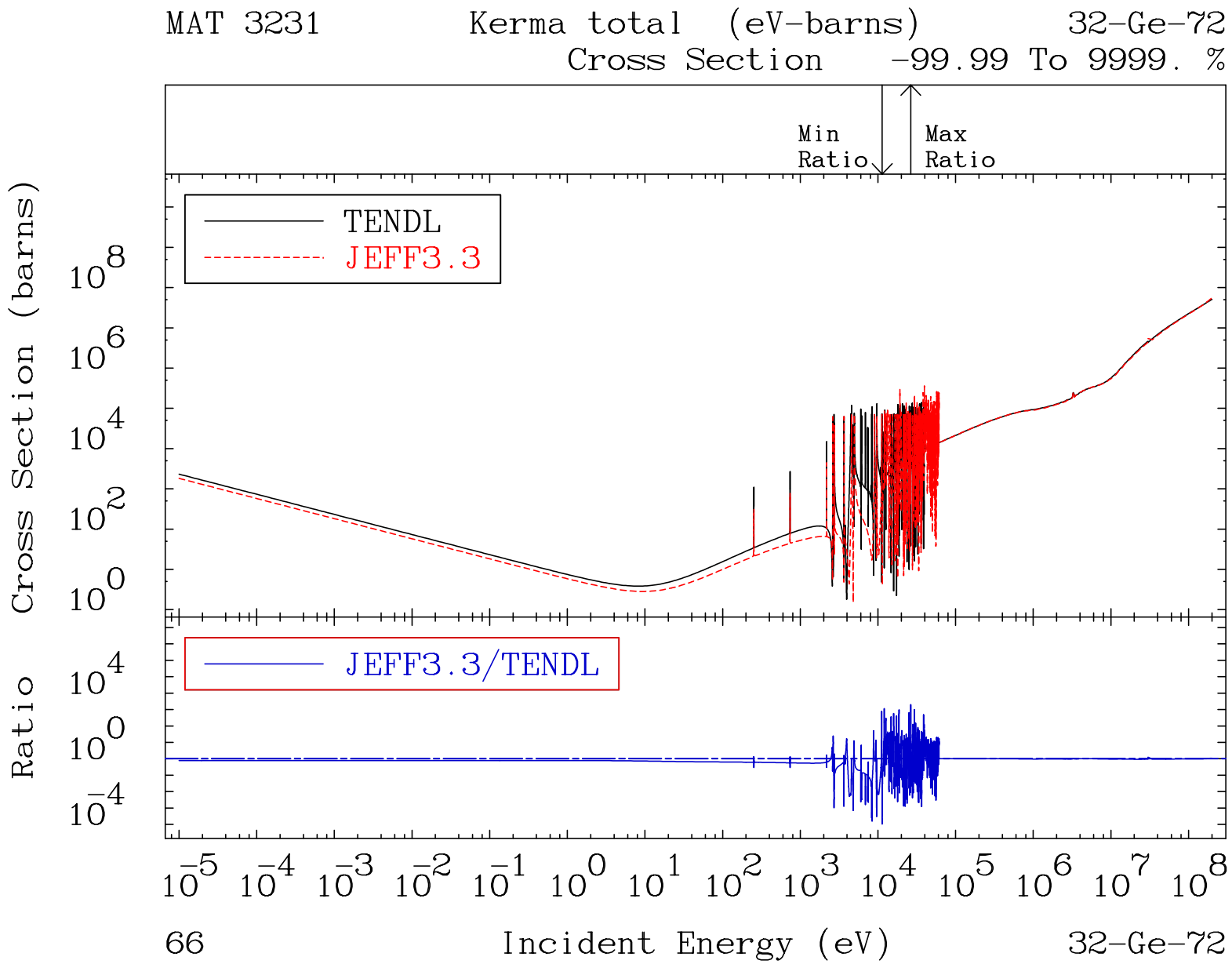

MAT 3231 Dpa disappearance (mt102 -120) 32-Ge-72
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
61
32-Ge-72

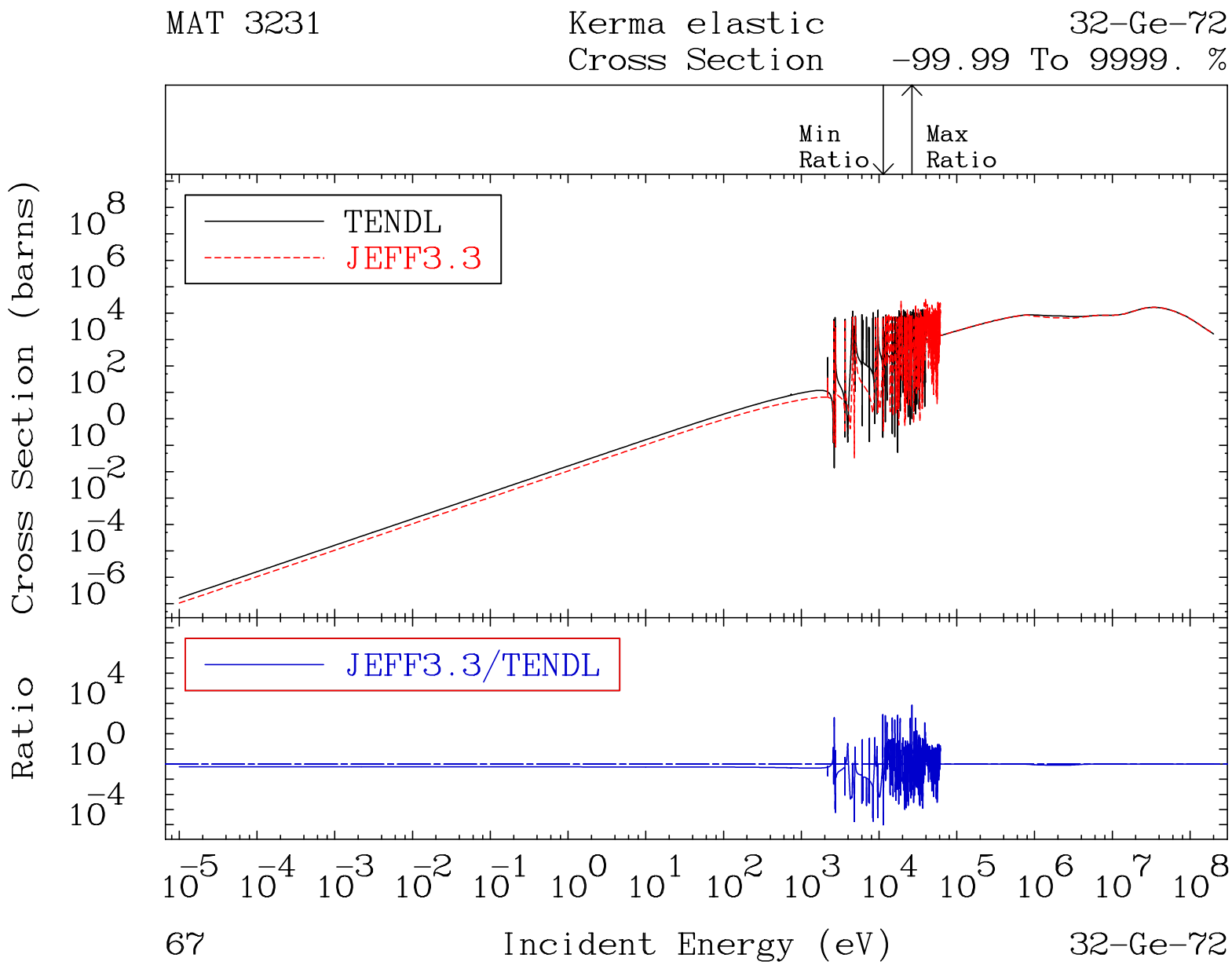

MAT 3231
Deuterium Production
32-Ge-72
Cross Section
-100.0 To 28.51 %
Min Ratio
Max Ratio
TENDL Threshold 7.6165 MeV
JEFF3.3 Threshold 7.6165 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
62
Incident Energy (eV)
32-Ge-72

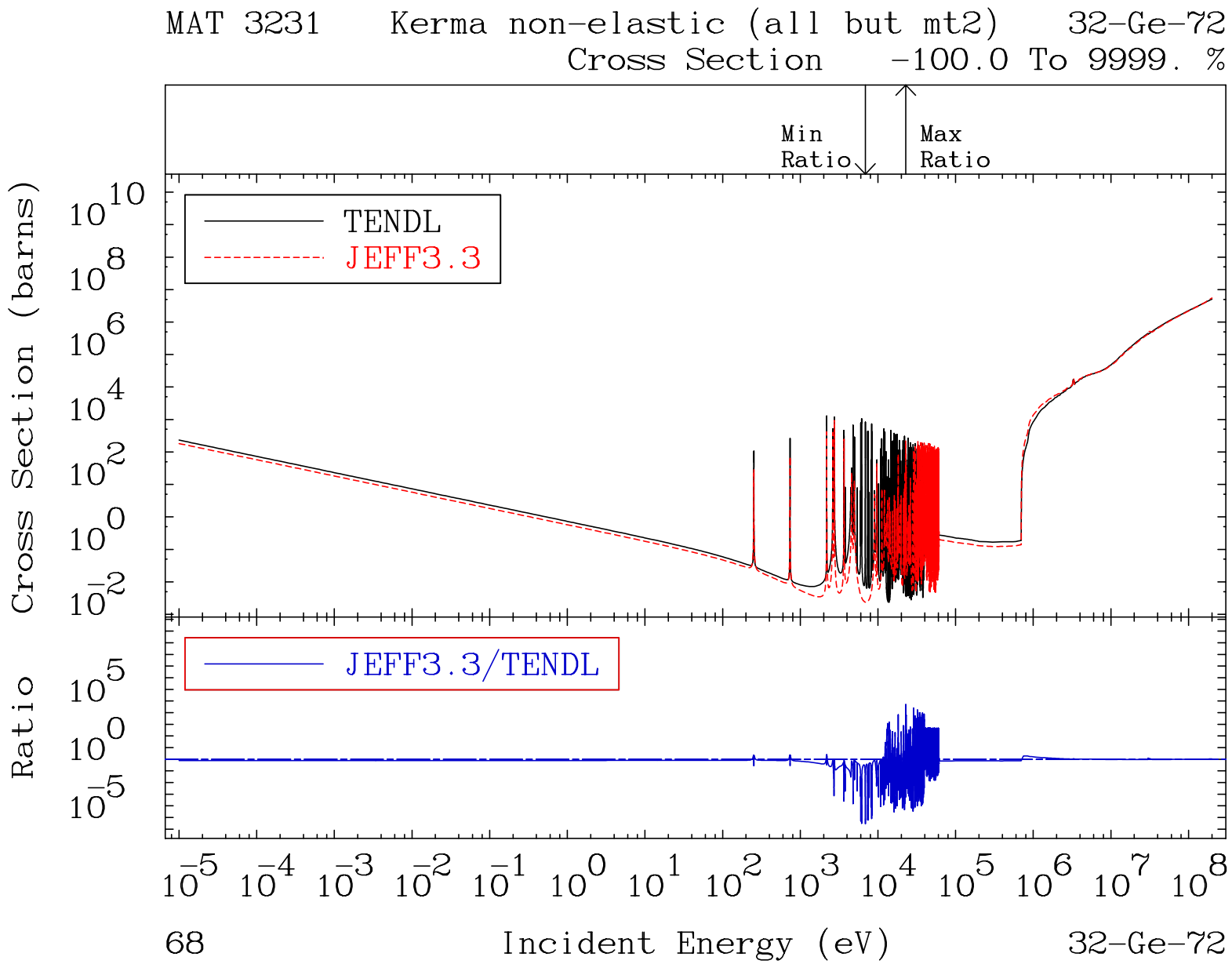

MAT 3231
Tritium Production
Cross Section
32-Ge-72
-100.0 To 58.13 %
Min Ratio
Max Ratio
TENDL Threshold 10.702 MeV
JEFF3.3 Threshold 10.702 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
32-Ge-72

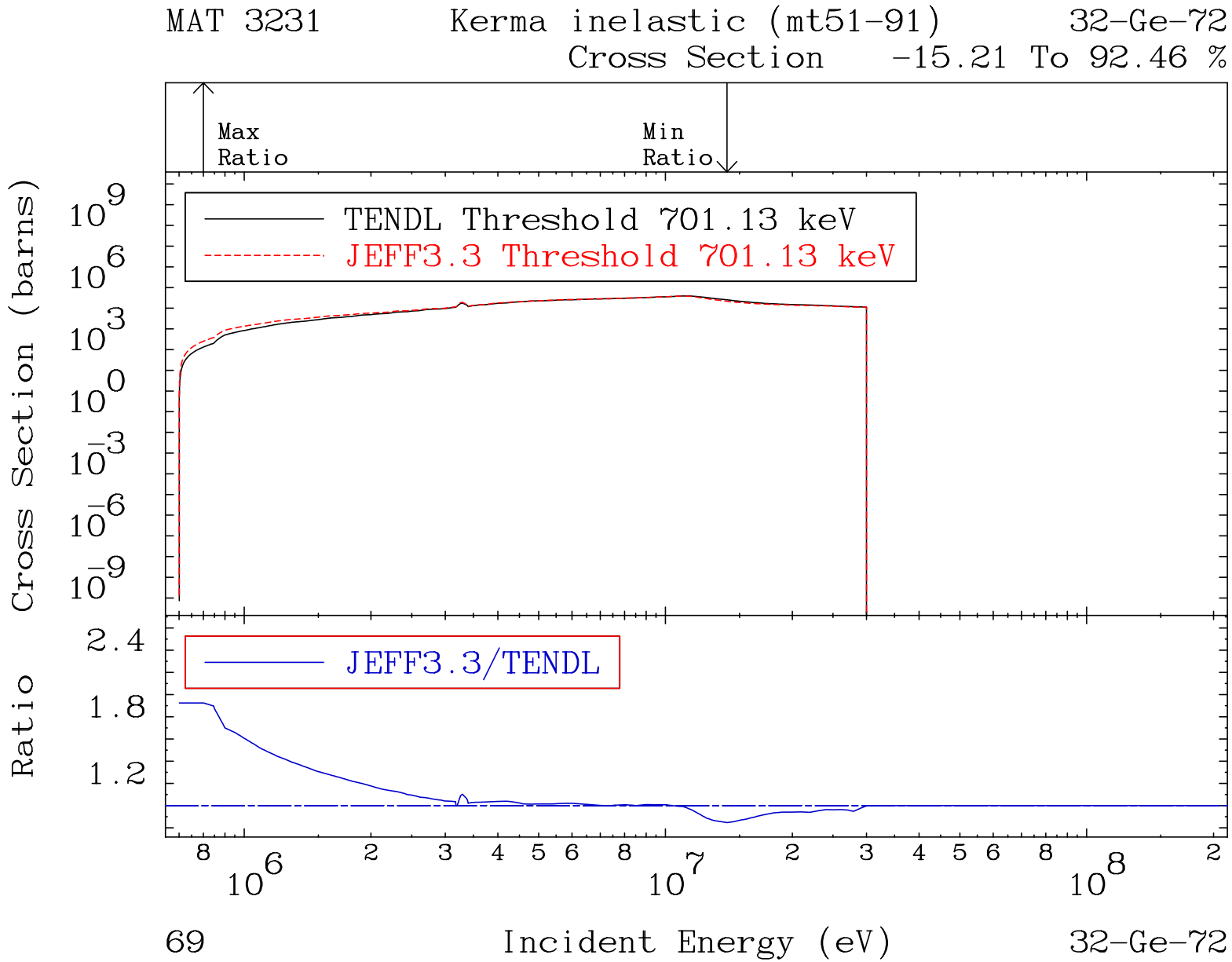

MAT 3231
He-3 Production
Cross Section
32-Ge-72
-100.0 To 0.982 %
Min Ratio
Max Ratio
TENDL Threshold 10.020 MeV
JEFF3.3 Threshold 10.020 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
32-Ge-72

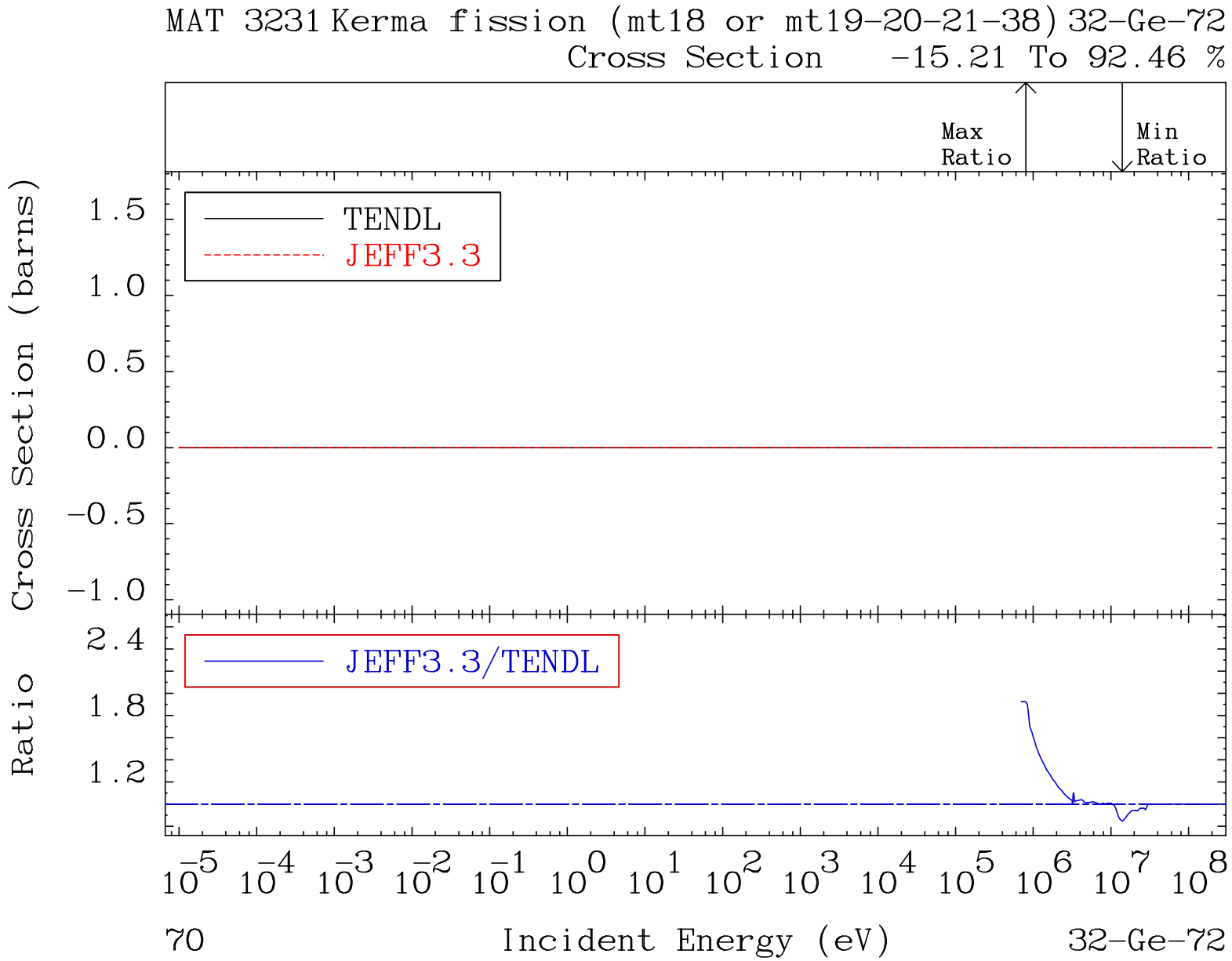

MAT 3231
He-4 Production
Cross Section
32-Ge-72
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
32-Ge-72

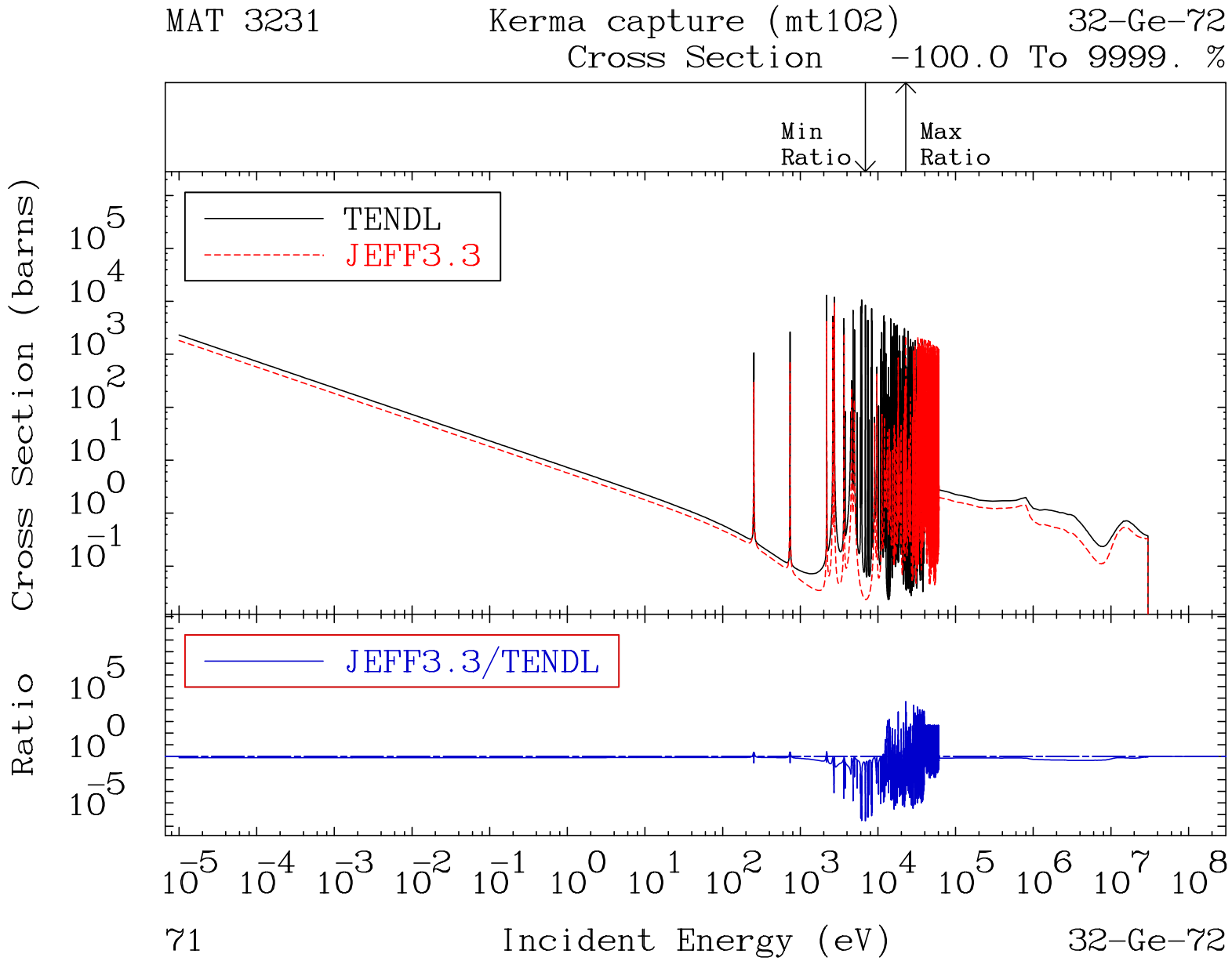

MAT 3231
Kerma total (eV-barns)
32-Ge-72
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
32-Ge-72

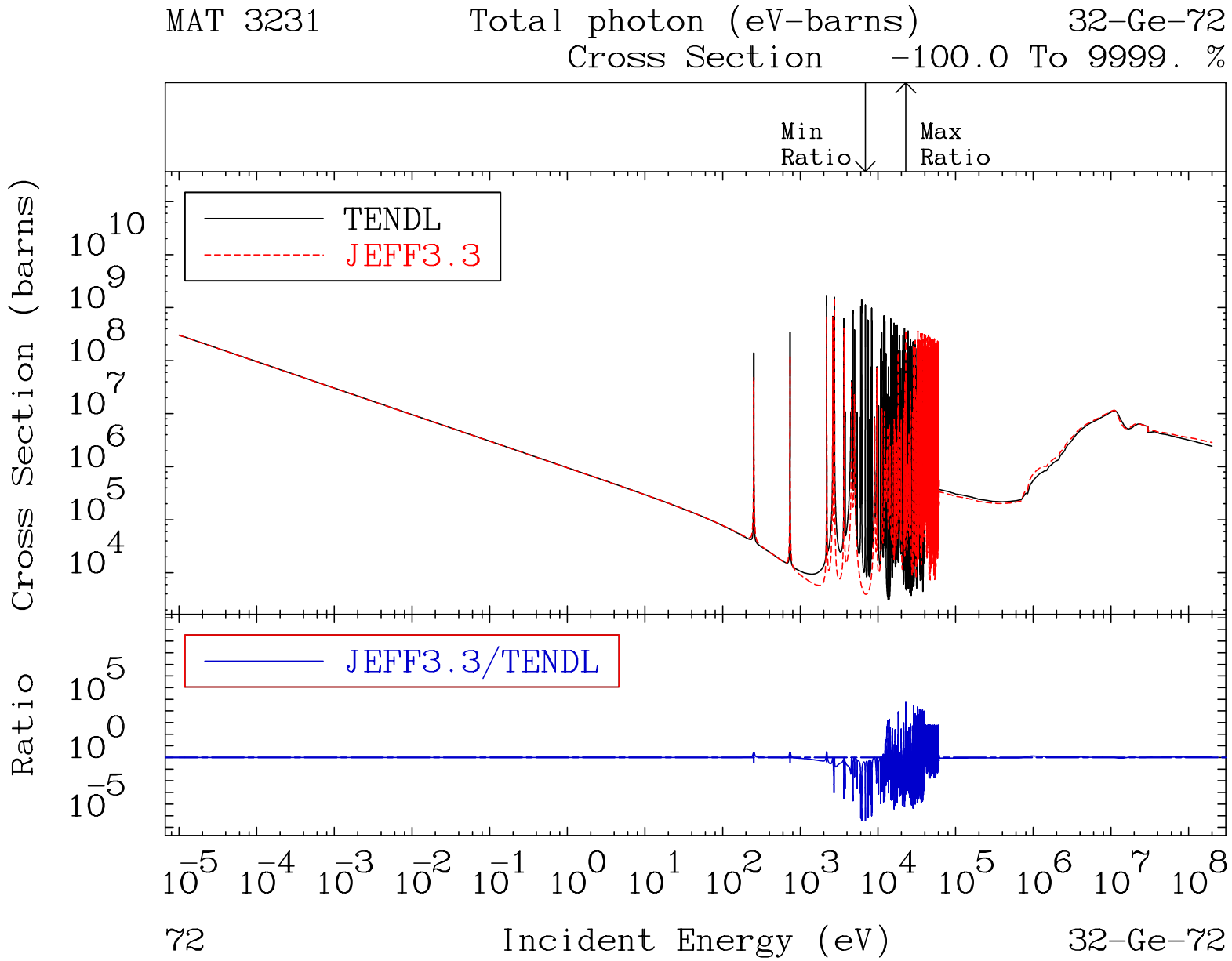

MAT 3231
Kerma elastic
Cross Section
32-Ge-72
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
32-Ge-72

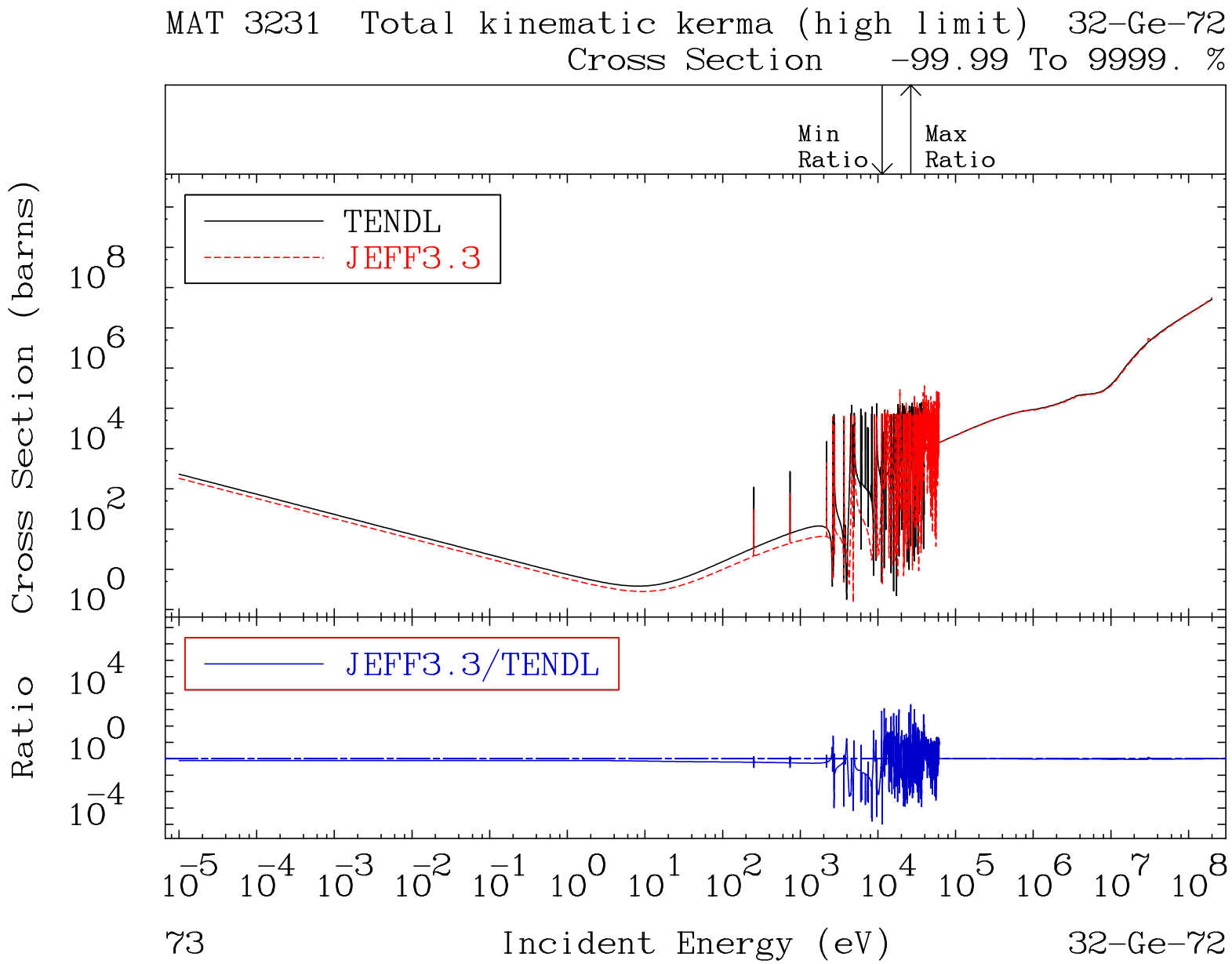

MAT 3231 Kerma non-elastic (all but mt2) 32-Ge-72
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
32-Ge-72

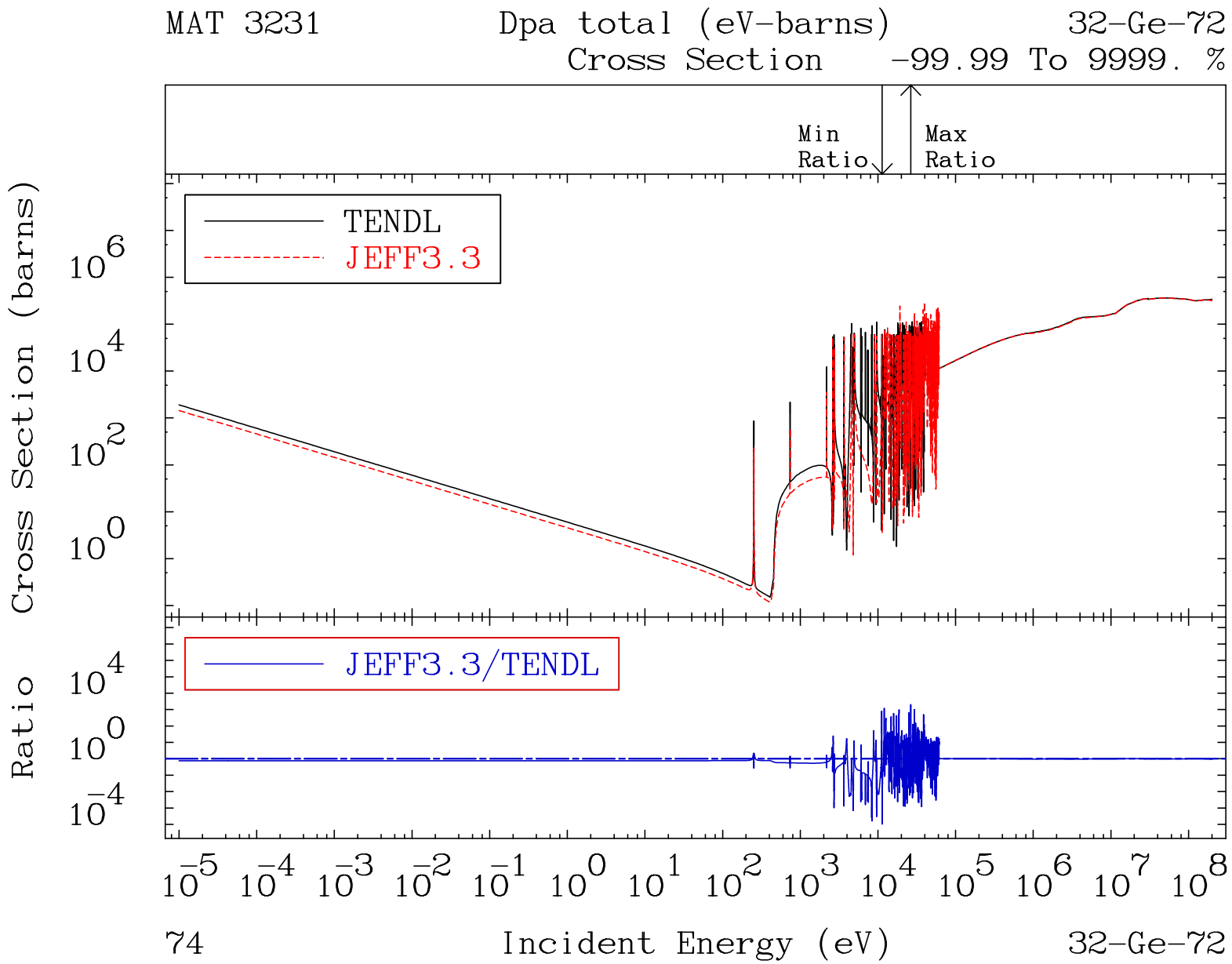

MAT 3231
Kerma inelastic (mt51-91)
32-Ge-72
Cross Section -15.21 To 92.46 %
Max Ratio
Min Ratio
TENDL Threshold 701.13 keV
JEFF3.3 Threshold 701.13 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
32-Ge-72

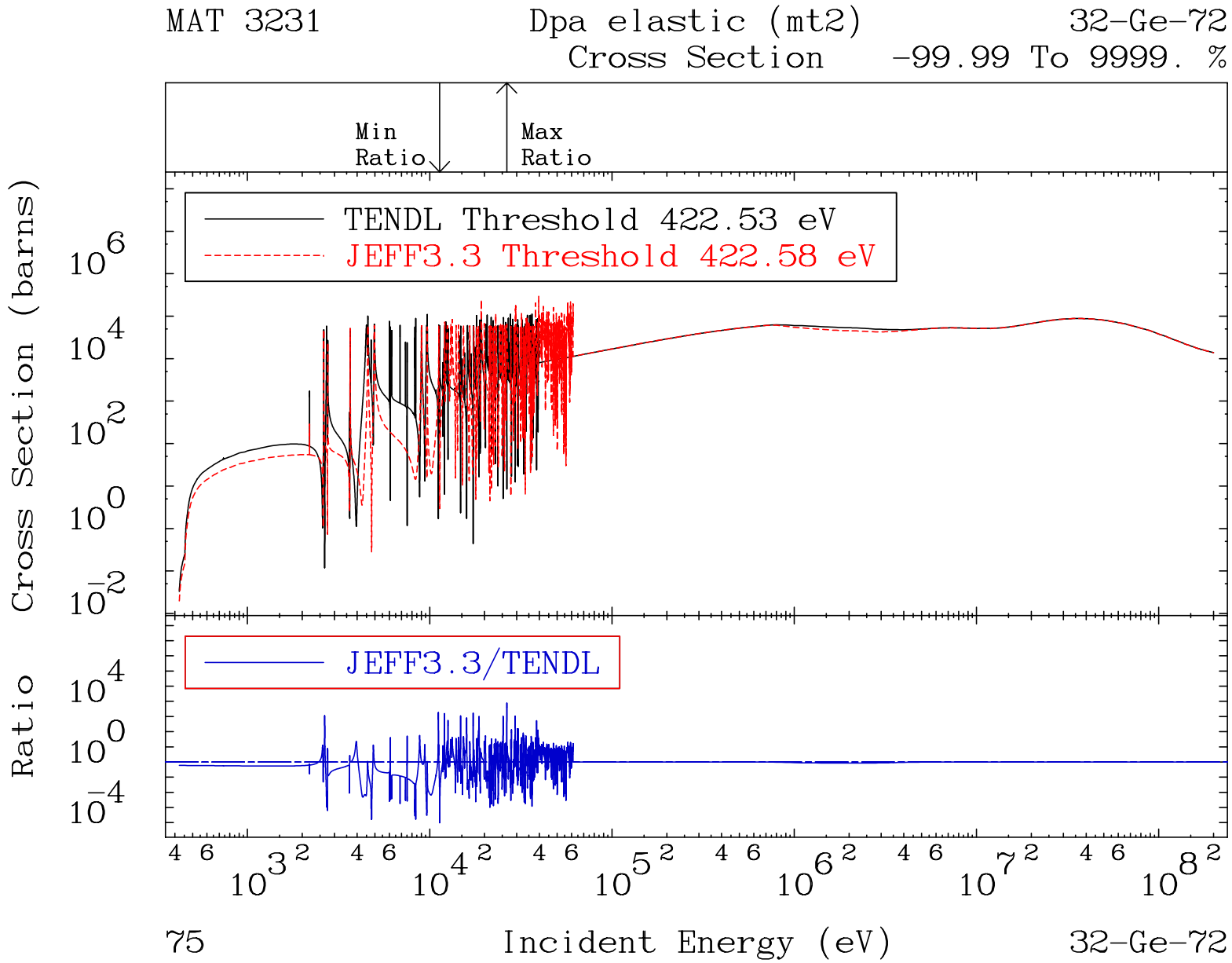

MAT 3231 Kerma fission (mt18 or mt19-20-21-38) 32-Ge-72
Cross Section -15.21 To 92.46 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2.4
1.8
1.2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
70
Incident Energy (eV)
32-Ge-72

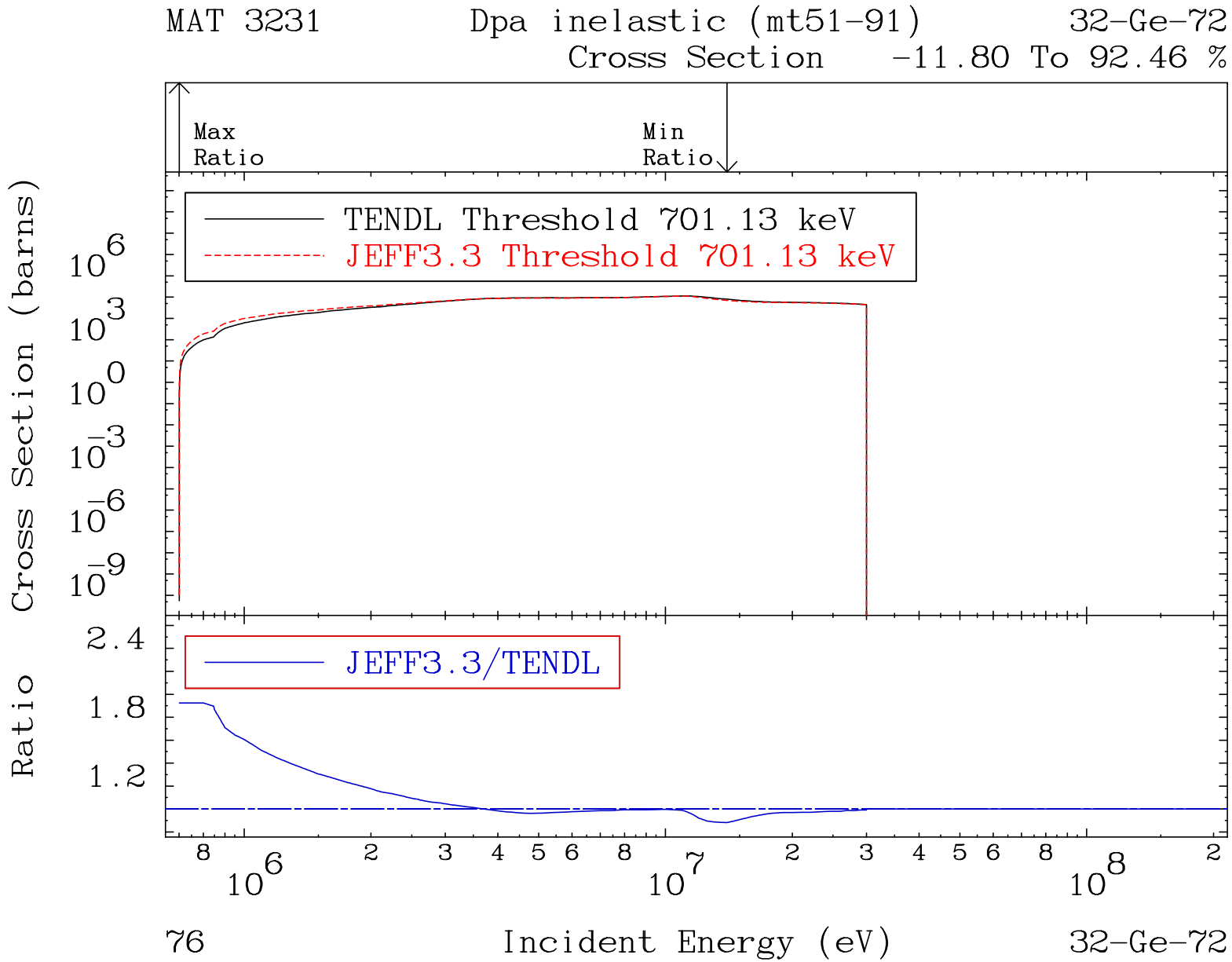

MAT 3231
Kerma capture (mt102)
32-Ge-72
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
32-Ge-72

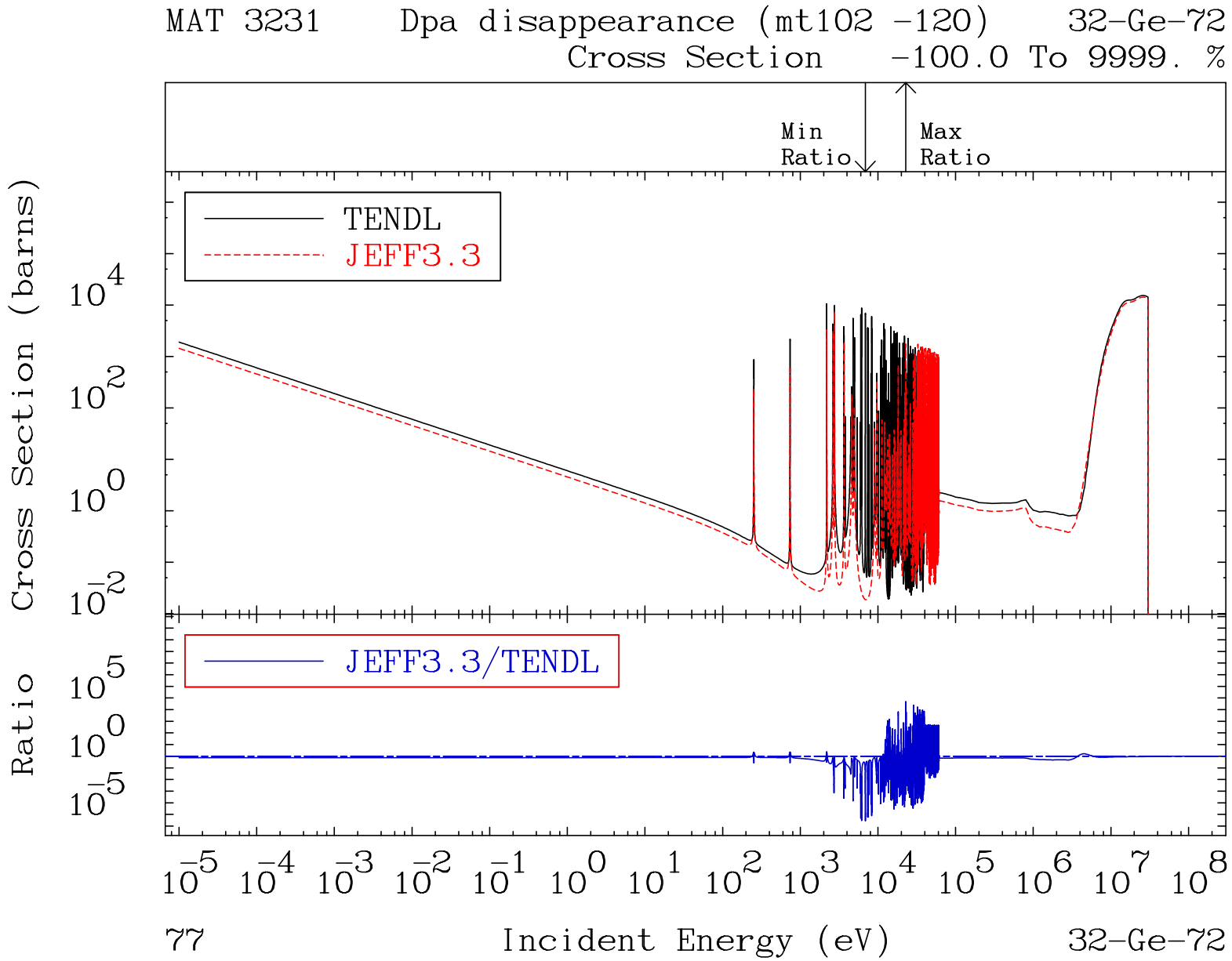

MAT 3231
Total photon (eV-barns)
32-Ge-72
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
32-Ge-72

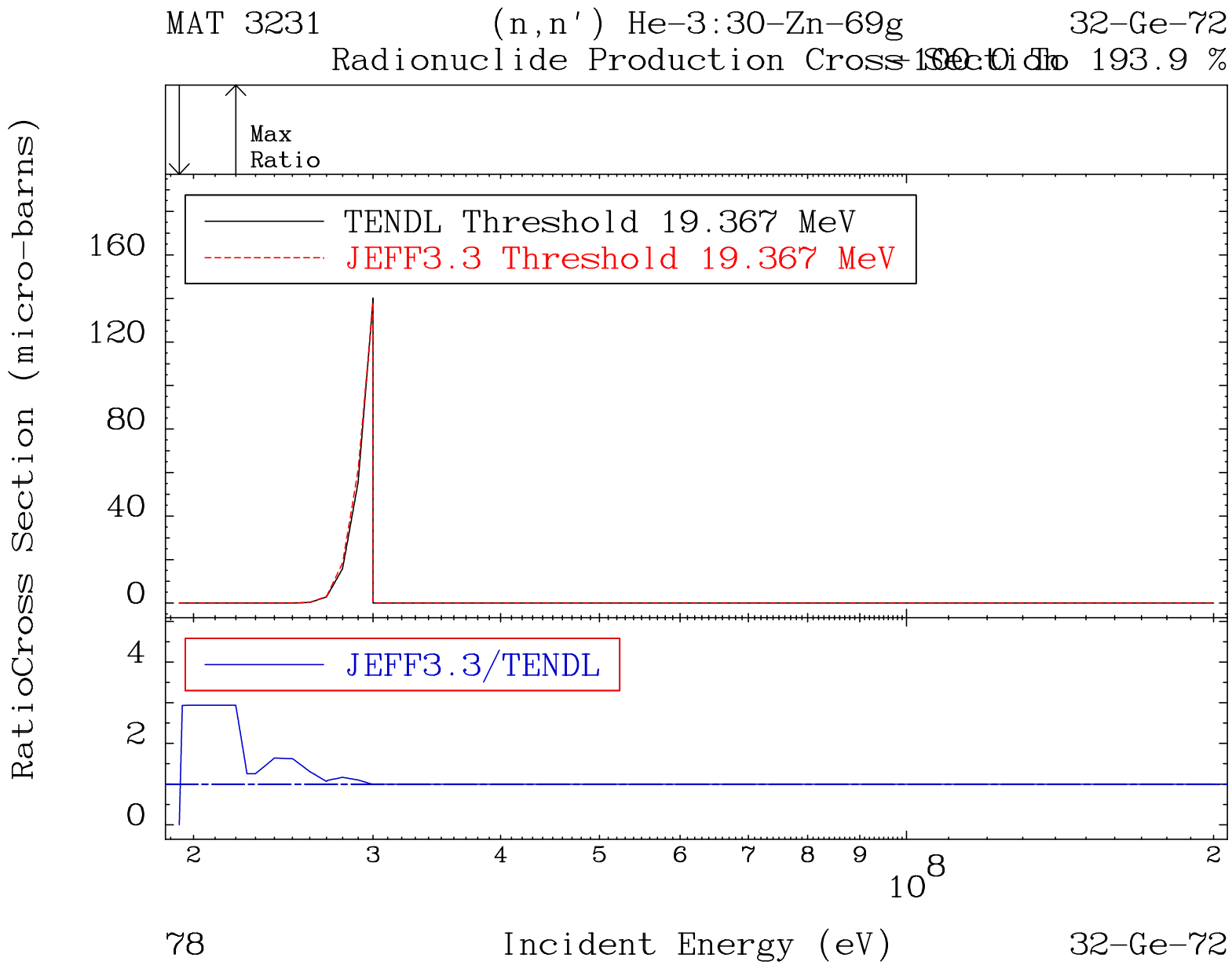

MAT 3231 Total kinematic kerma (high limit) 32-Ge-72
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
32-Ge-72

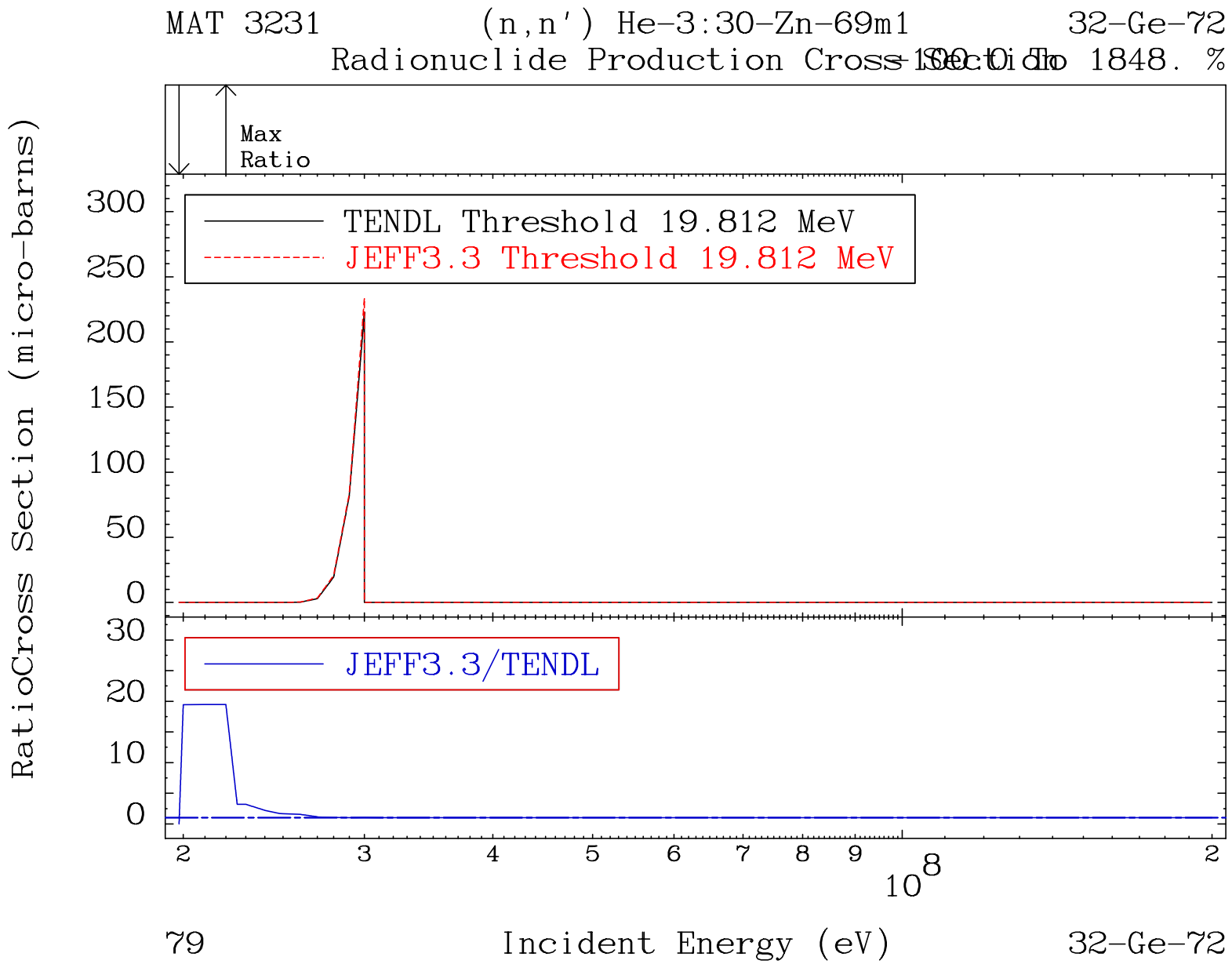

MAT 3231
Dpa total (eV-barns)
32-Ge-72
Cross Section
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
32-Ge-72

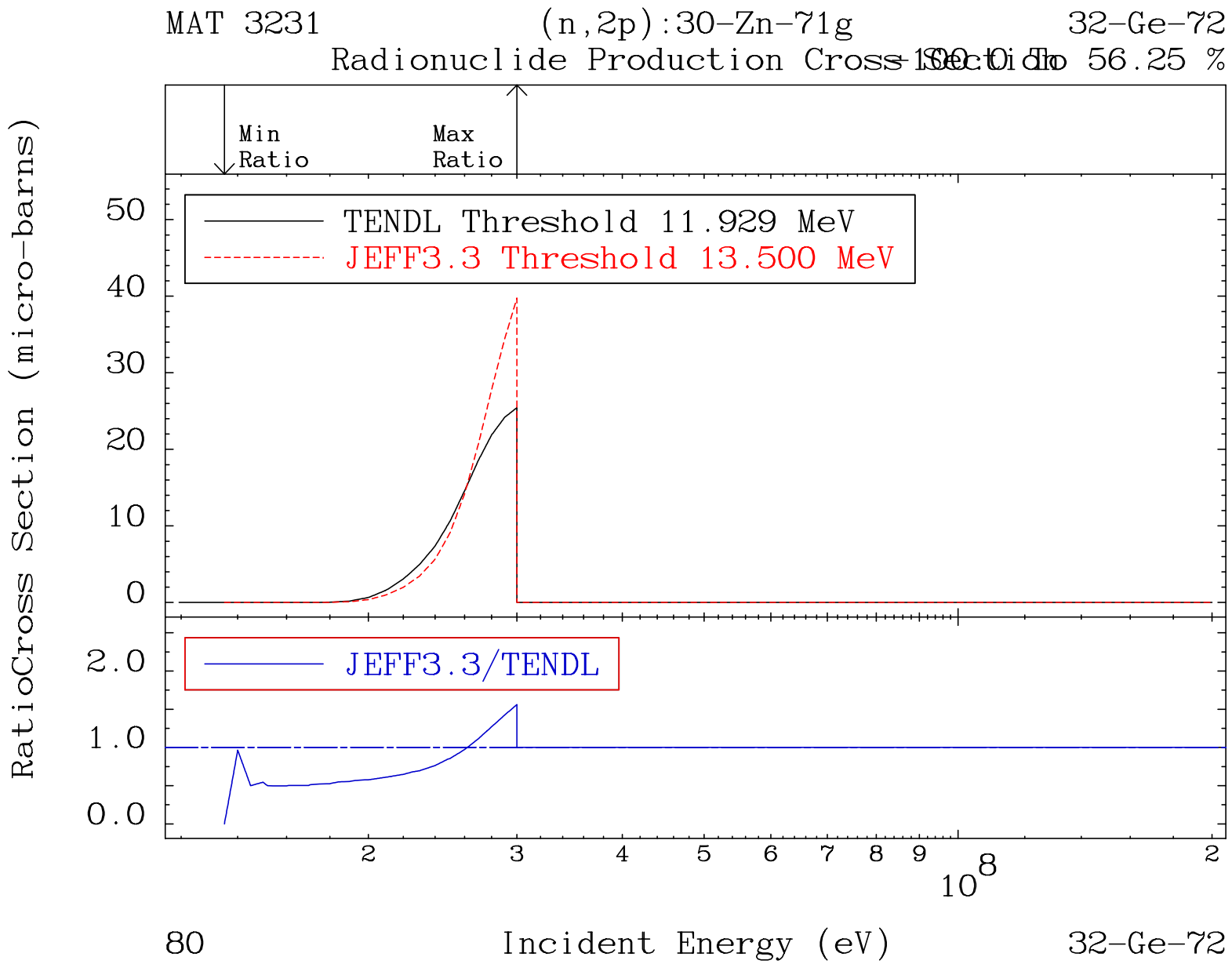

MAT 3231
Dpa elastic (mt2)
Cross Section
32-Ge-72
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 422.53 eV
JEFF3.3 Threshold 422.58 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
32-Ge-72

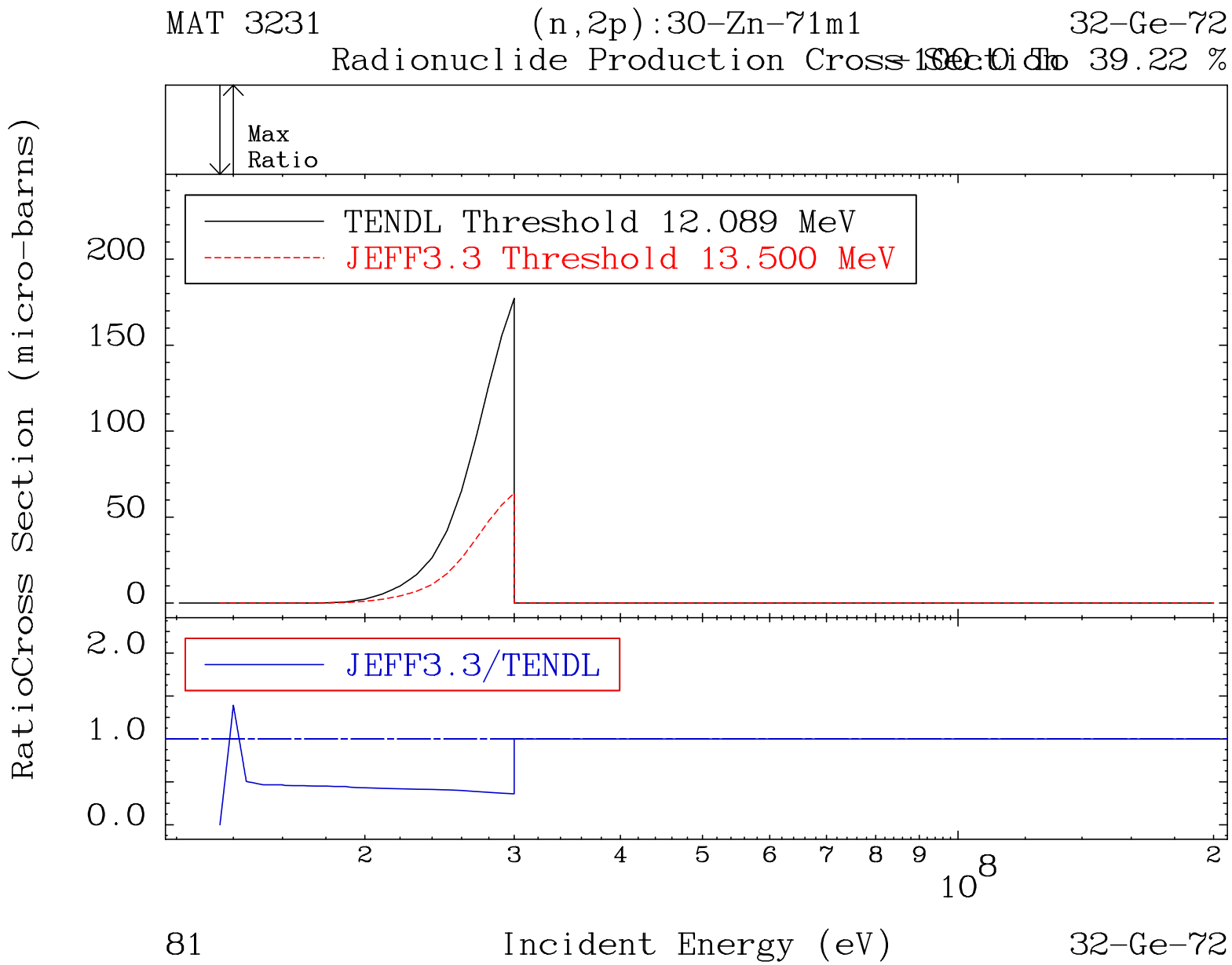

MAT 3231
Dpa inelastic (mt51-91)
32-Ge-72
Cross Section -11.80 To 92.46 %
Max Ratio
Min Ratio
TENDL Threshold 701.13 keV
JEFF3.3 Threshold 701.13 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
32-Ge-72

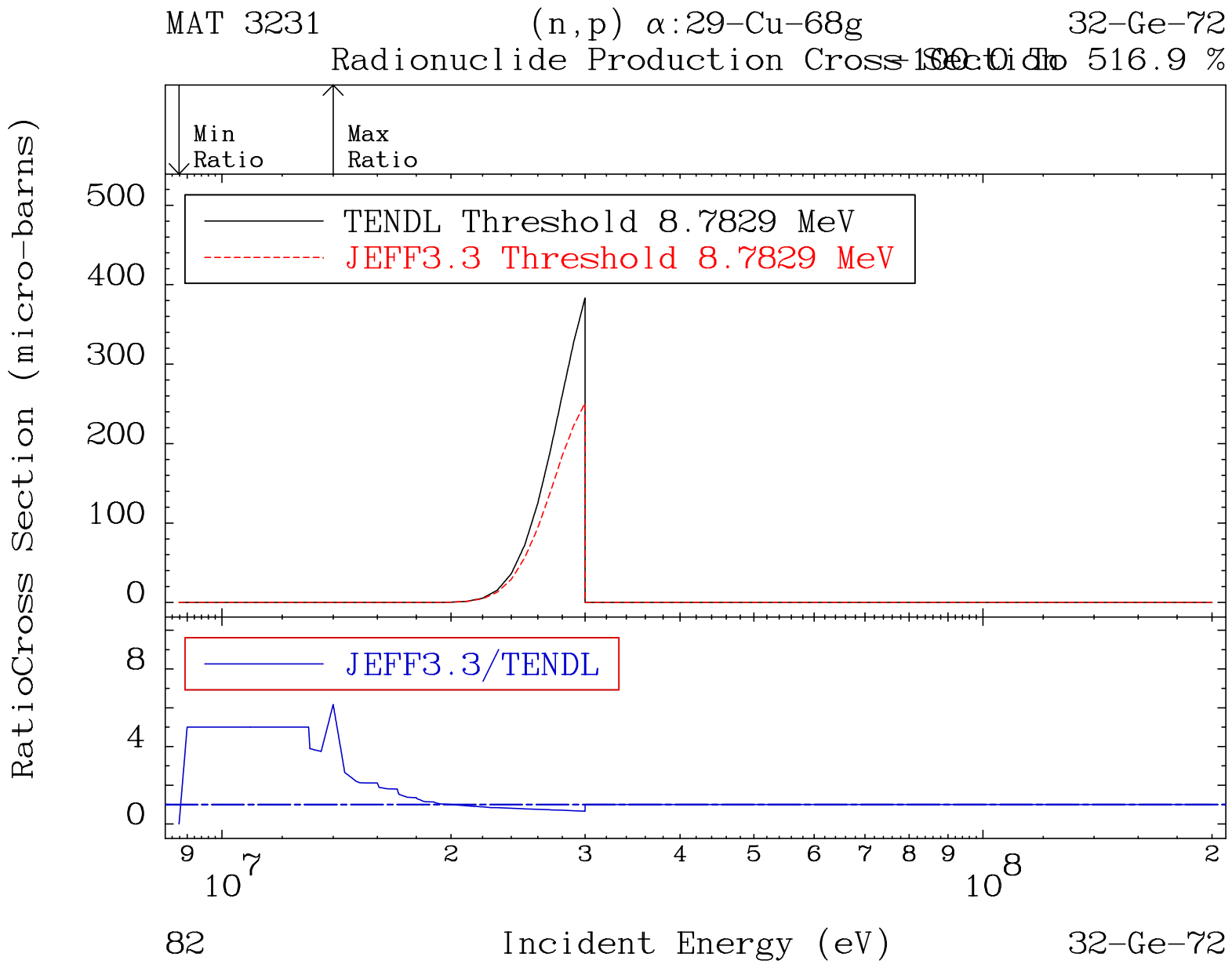

MAT 3231 Dpa disappearance (mt102 -120) 32-Ge-72
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
32-Ge-72

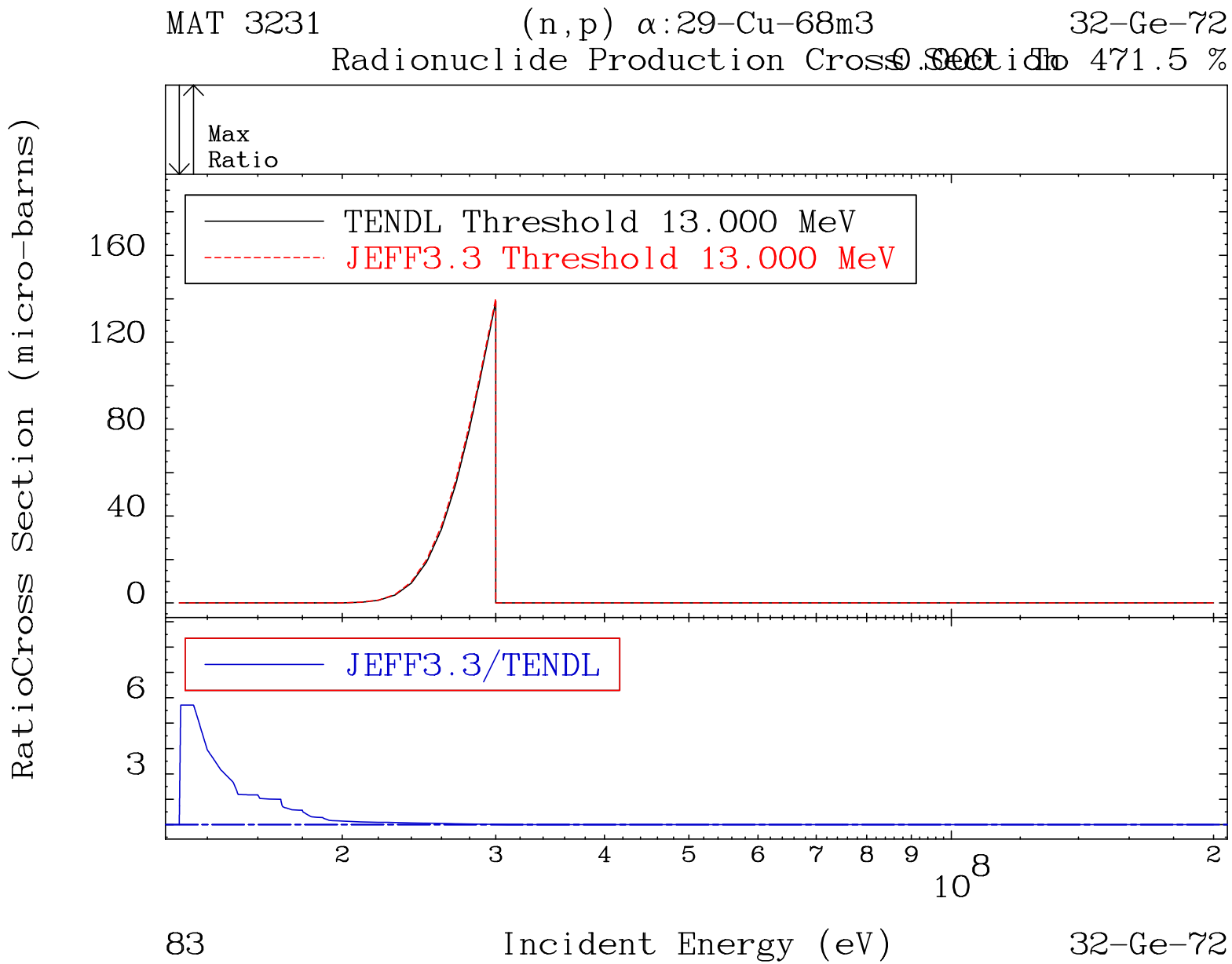

MAT 3231
(n,n') He-3:30-Zn-69g
32-Ge-72
Radionuclide Production Cross Section To 193.9 %
Max
Ratio
TENDL Threshold 19.367 MeV
JEFF3.3 Threshold 19.367 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
32-Ge-72

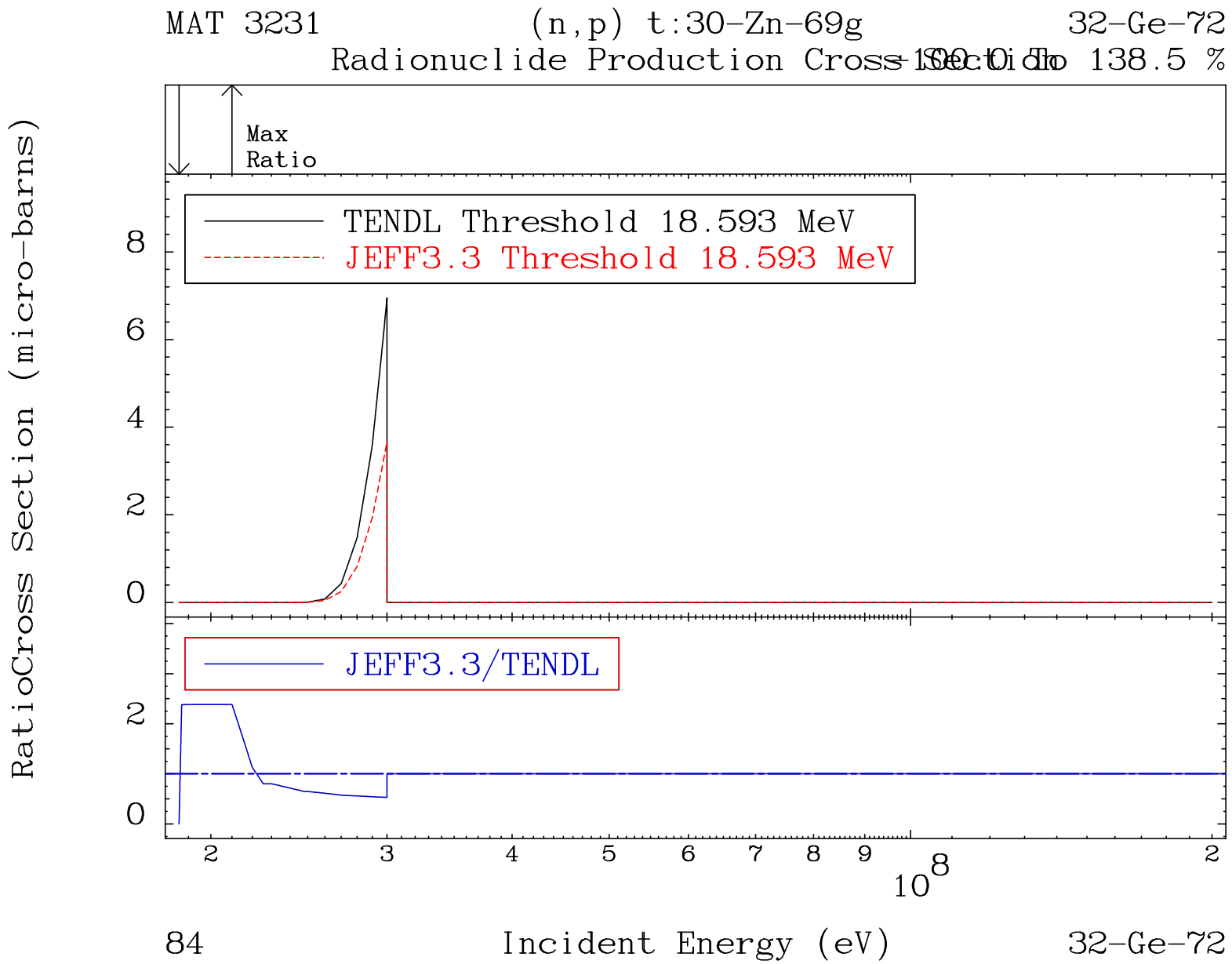

MAT 3231
(n,n') He-3:30-Zn-69m1
32-Ge-72
Radionuclide Production Cross Section To 1848. %
Max
Ratio
TENDL Threshold 19.812 MeV
JEFF3.3 Threshold 19.812 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
300
250
200
150
100
50
0
30
20
10
0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
32-Ge-72

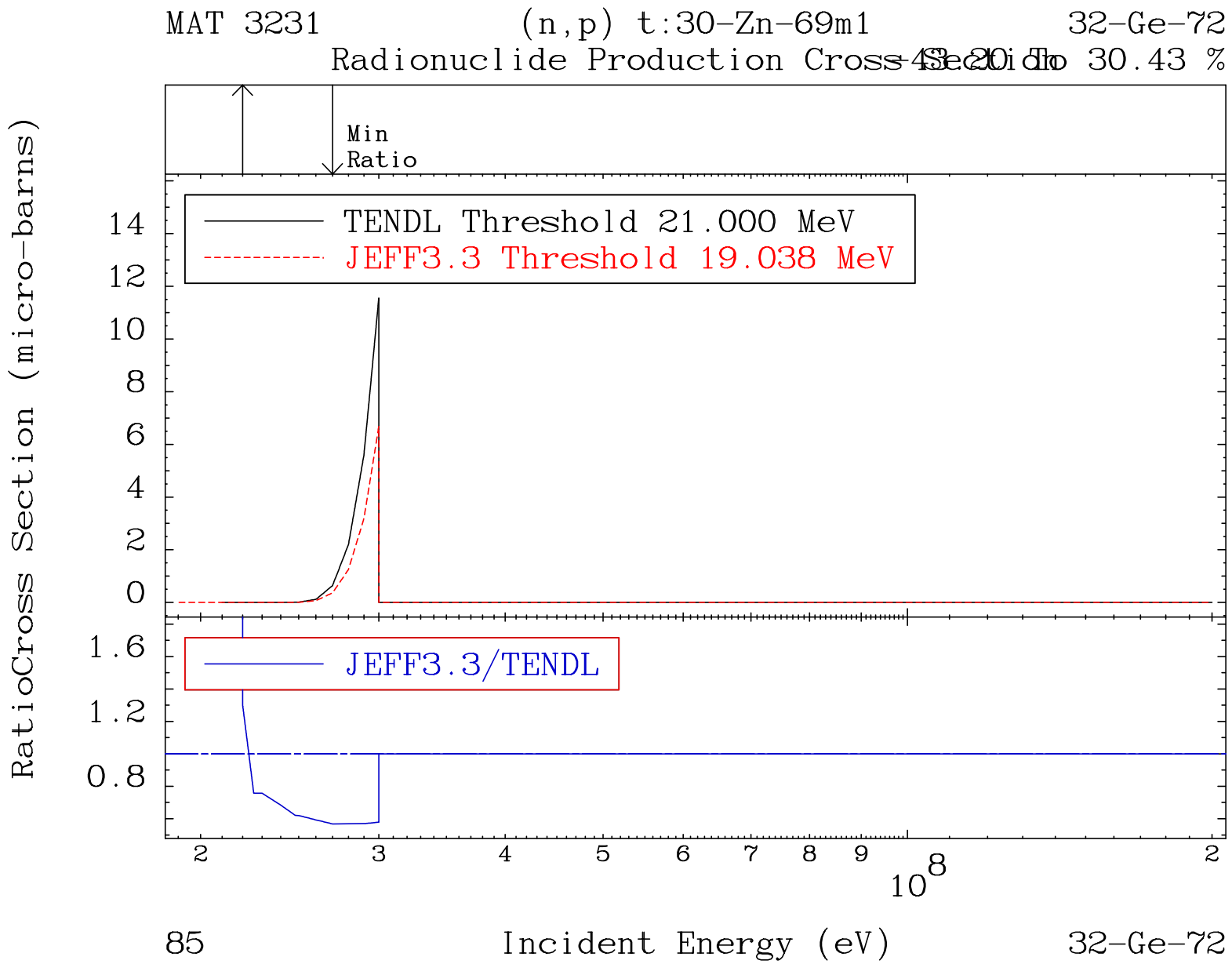

MAT 3231
(n,2p):30-Zn-71g
32-Ge-72
Radionuclide Production Cross Section To 56.25 %
Min Ratio
Max Ratio
TENDL Threshold 11.929 MeV
JEFF3.3 Threshold 13.500 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
80
32-Ge-72


MAT 3231
(n,2p):30-Zn-71m1
32-Ge-72
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 12.089 MeV
JEFF3.3 Threshold 13.500 MeV
RatioCross Section (micro-barns)
200
150
100
50
0
2.0
1.0
0.0
JEFF3.3/TENDL
2
3
4
5
6
7
8
9
2
10^8
81
Incident Energy (eV)
32-Ge-72


MAT 3231
(n,p) α:29-Cu-68g
32-Ge-72
Radionuclide Production Cross Section To 516.9 %
Min Ratio
Max Ratio
TENDL Threshold 8.7829 MeV
JEFF3.3 Threshold 8.7829 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
500
400
300
200
100
0
8
4
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
32-Ge-72


MAT 3231
(n,p) α:29-Cu-68m3
32-Ge-72
Radionuclide Production Cross Section
0.000 To 471.5 %
Max
Ratio
TENDL Threshold 13.000 MeV
JEFF3.3 Threshold 13.000 MeV
160
120
80
40
0
JEFF3.3/TENDL
6
3
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (micro-barns)
83
Incident Energy (eV)
32-Ge-72


MAT 3231
(n,p) t:30-Zn-69g
32-Ge-72
Radionuclide Production Cross Section To 138.5 %
Max
Ratio
TENDL Threshold 18.593 MeV
JEFF3.3 Threshold 18.593 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
0
2
4
6
8
0
2
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
32-Ge-72


MAT 3231
(n,p) t:30-Zn-69m1
32-Ge-72
Radionuclide Production Cross-Section To 30.43 %
Min
Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 19.038 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
14
12
10
8
6
4
2
0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
32-Ge-72