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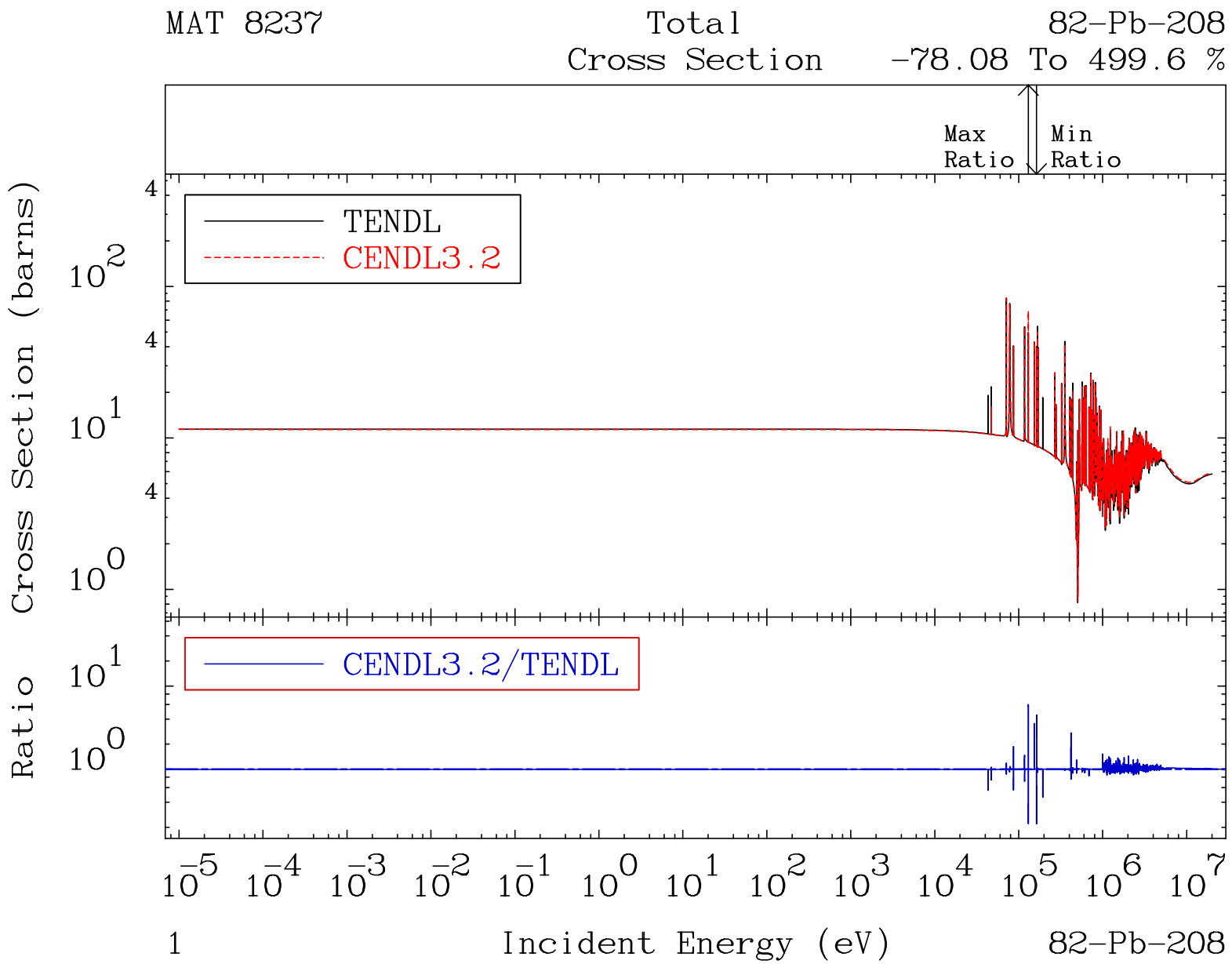
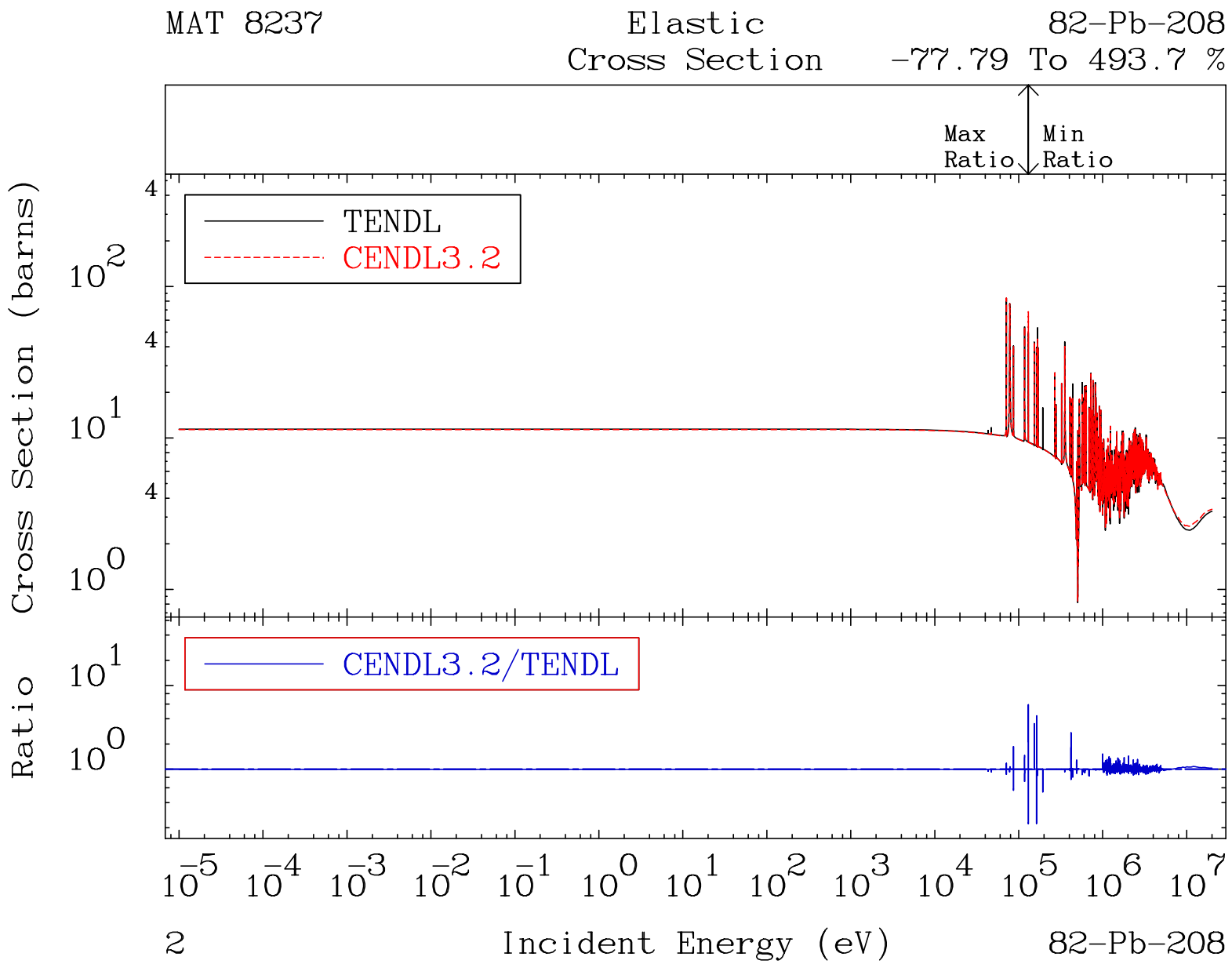
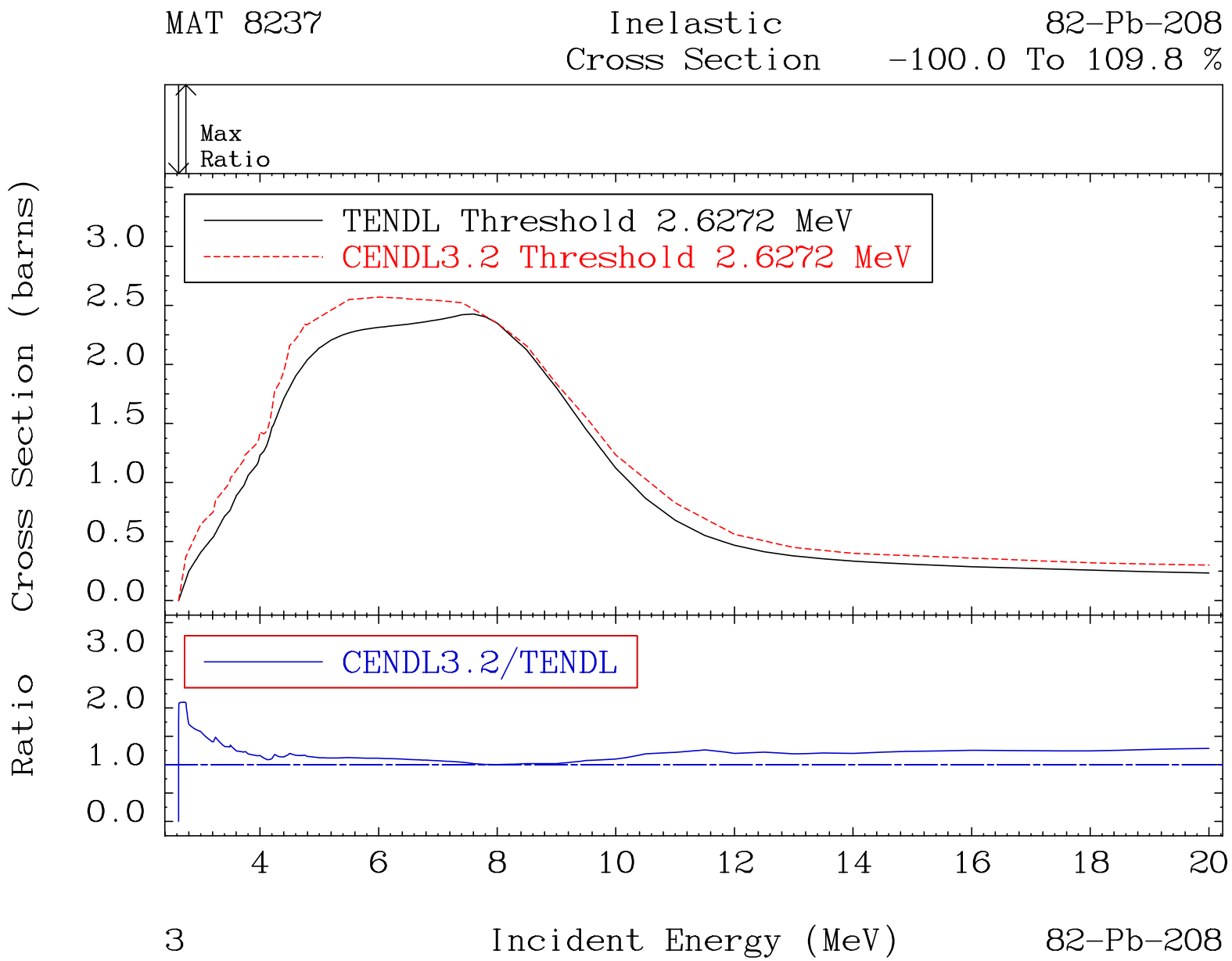
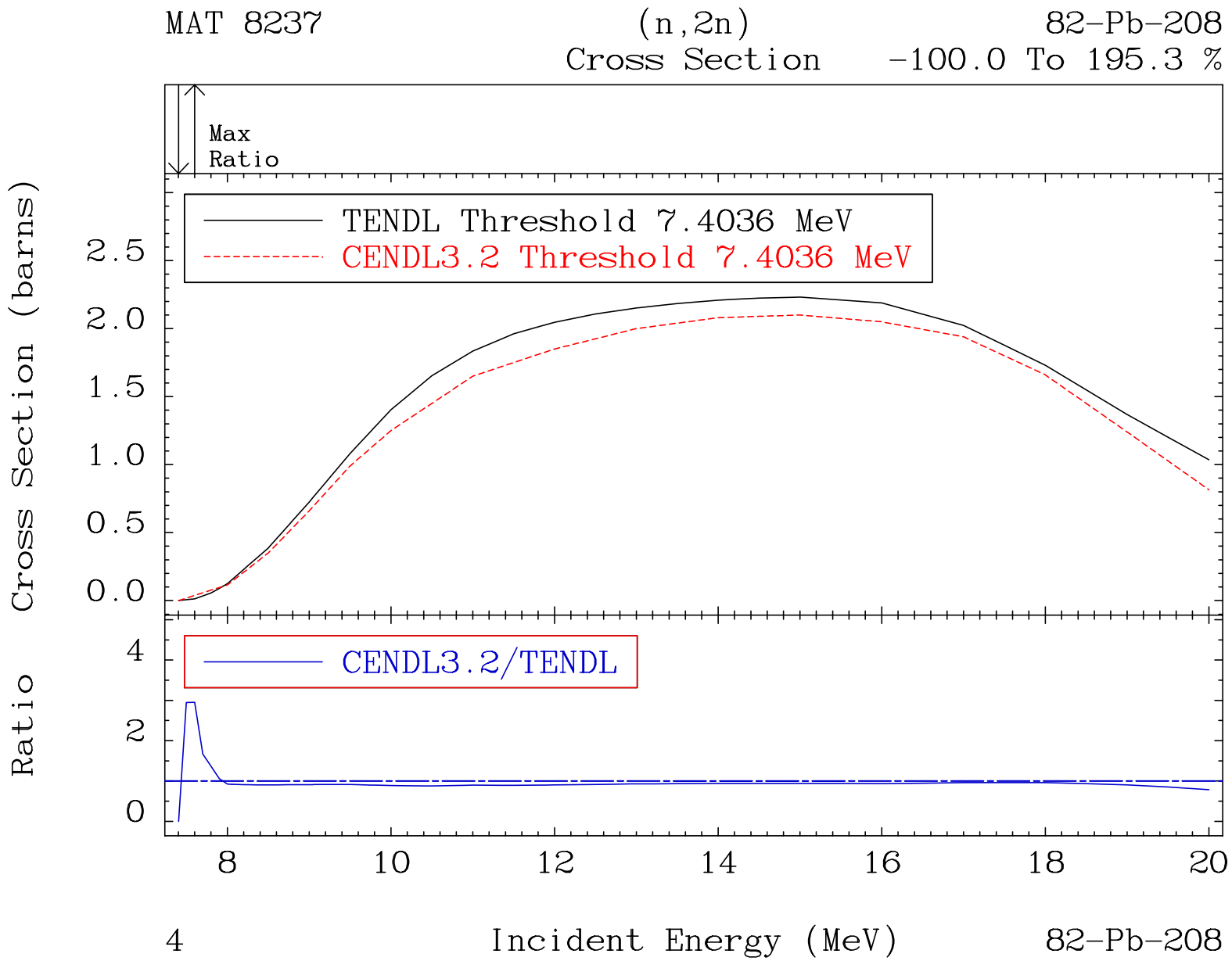
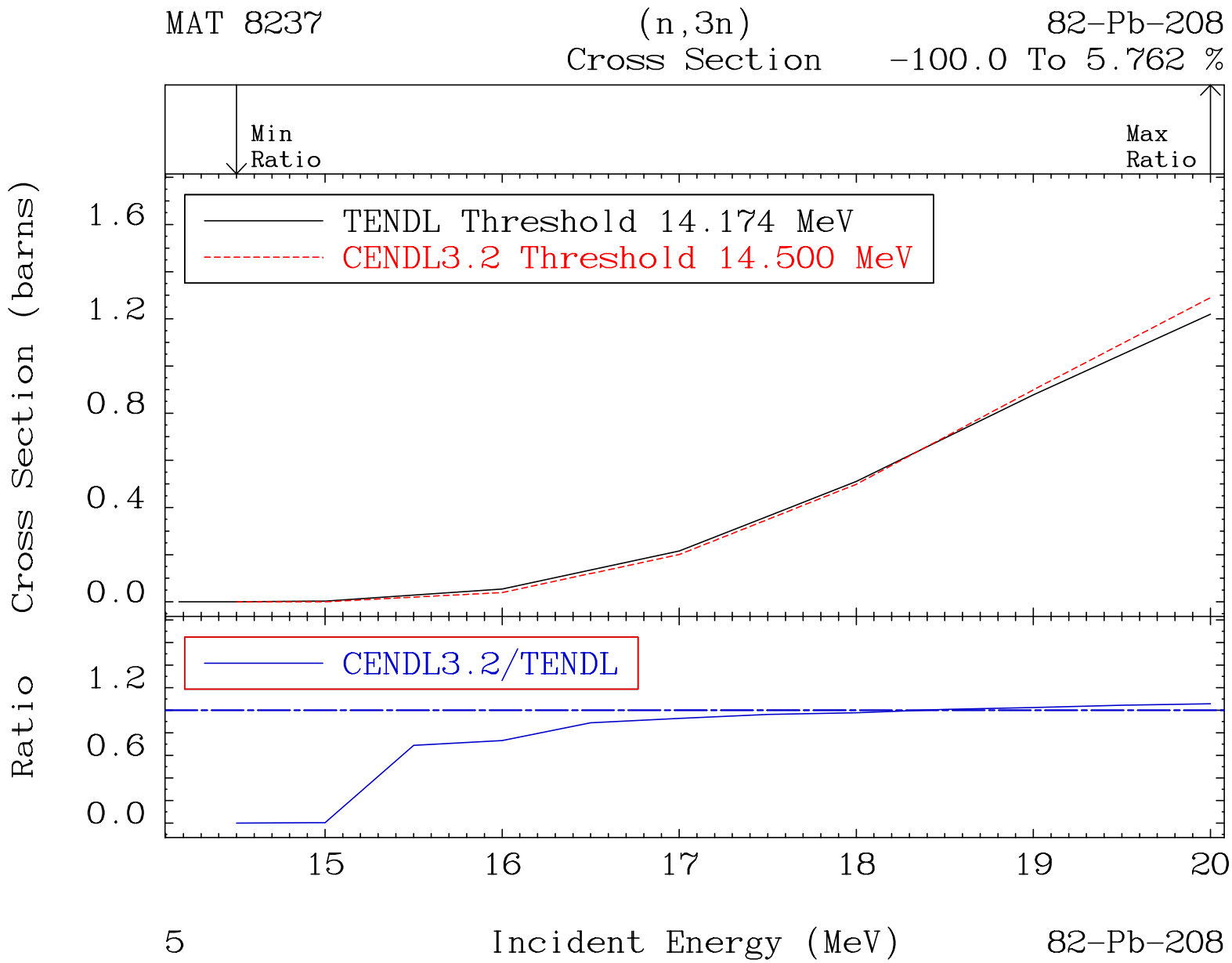
Press Mouse Button to Start

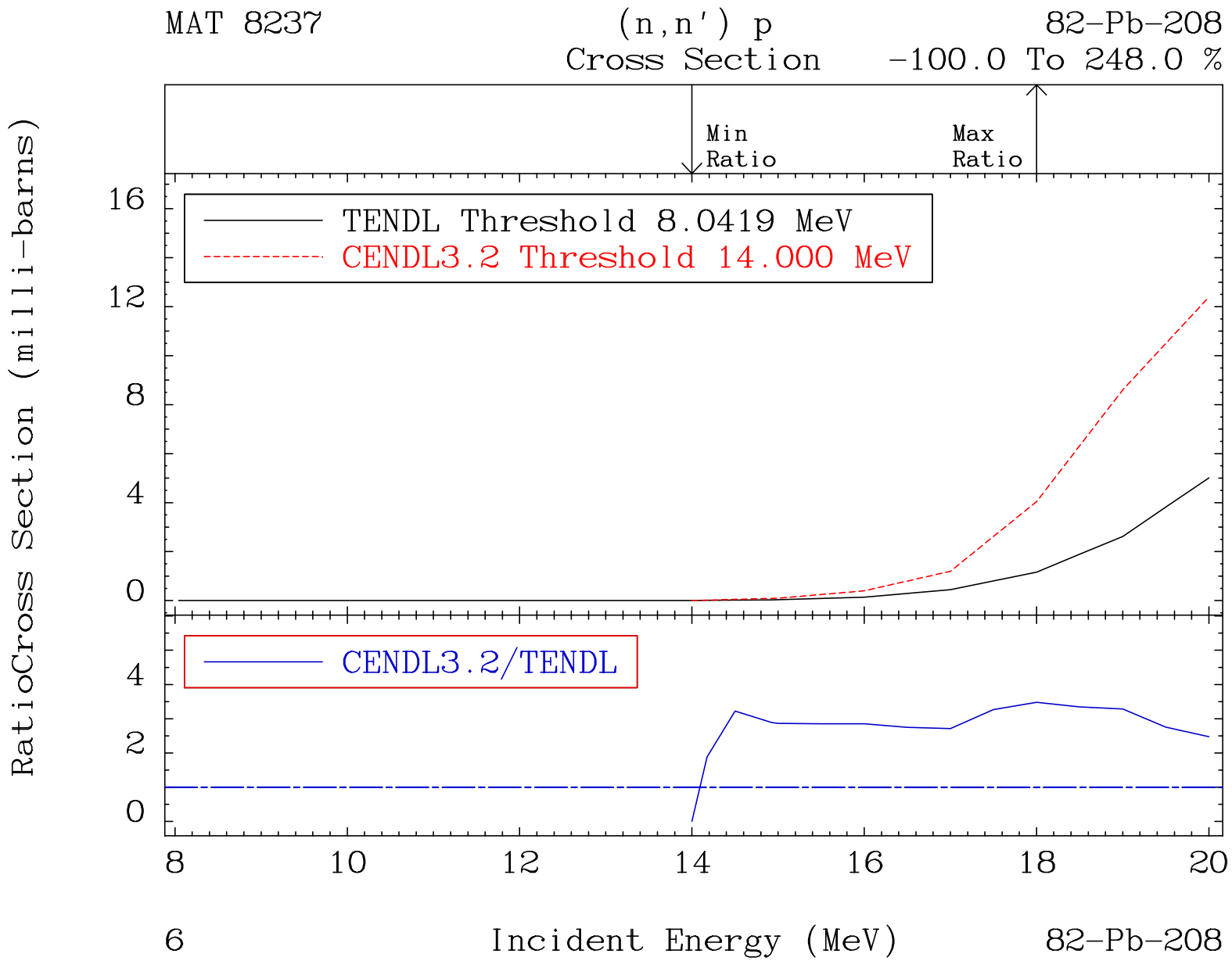

MAT 8237
Total
Cross Section
82-Pb-208
-78.08 To 499.6 %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
82-Pb-208

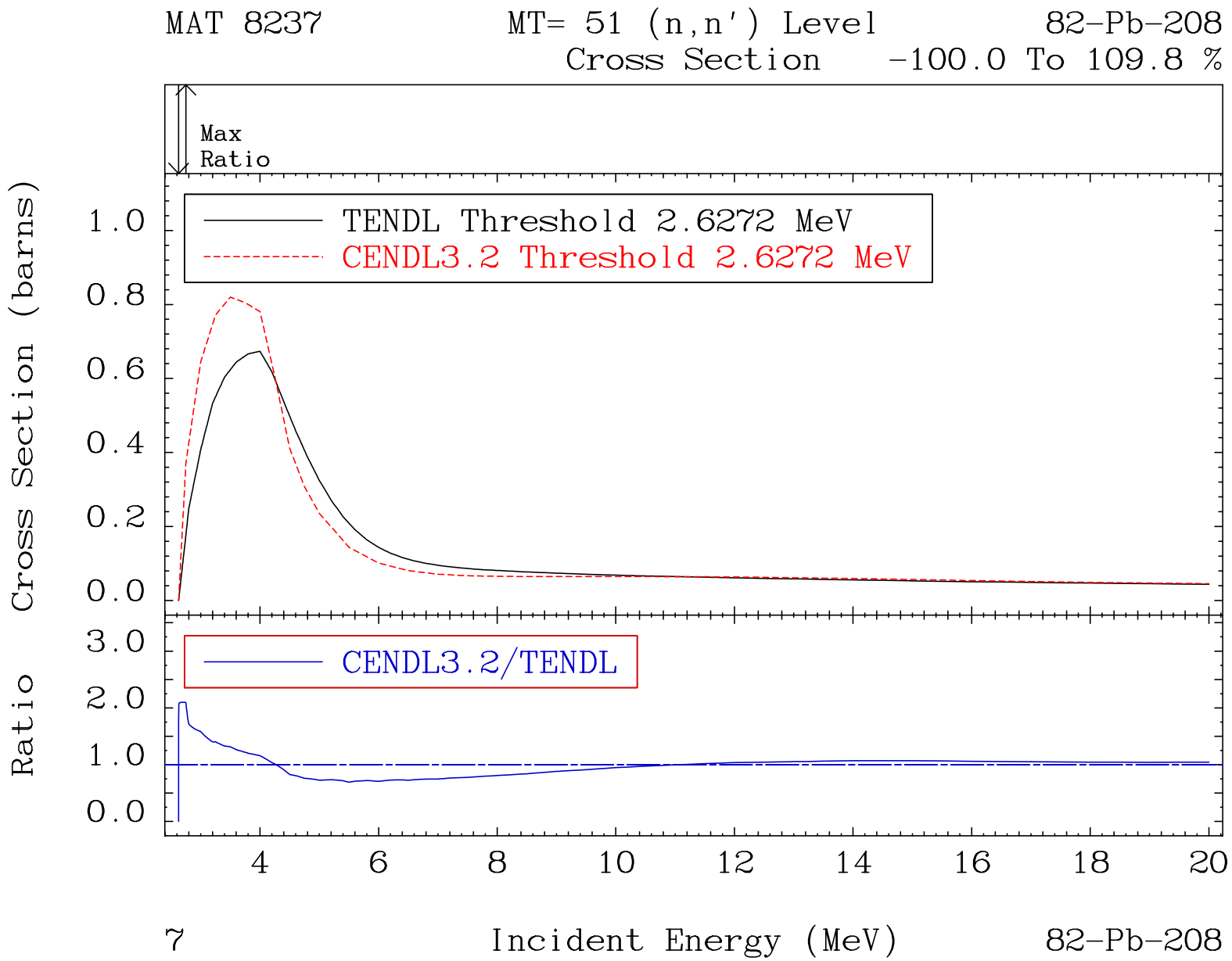

MAT 8237
Elastic
Cross Section
82-Pb-208
-77.79 To 493.7 %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
82-Pb-208
2

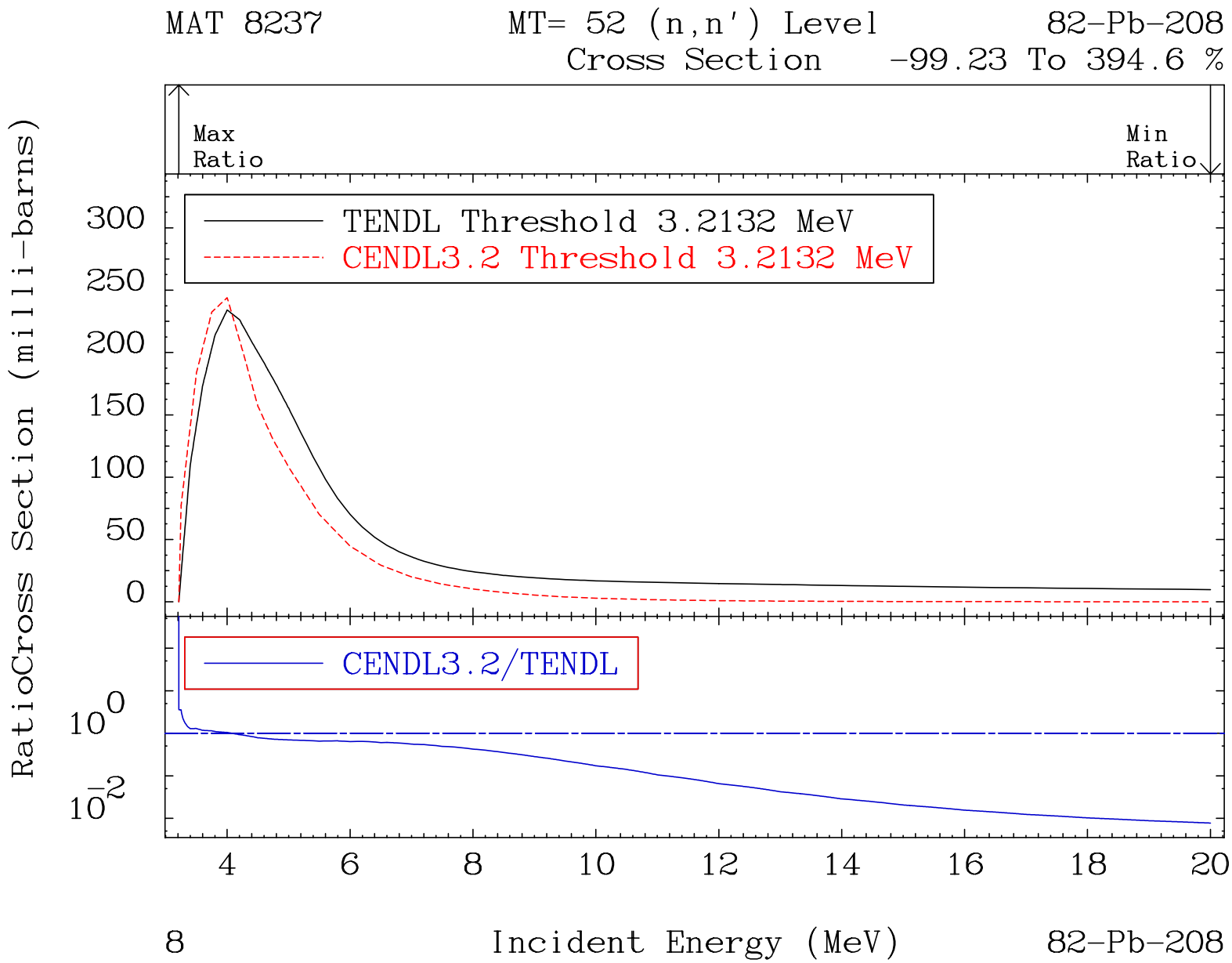

MAT 8237
Inelastic
Cross Section
82-Pb-208
-100.0 To 109.8 %
Max
Ratio
TENDL Threshold 2.6272 MeV
CENDL3.2 Threshold 2.6272 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4
6
8
10
12
14
16
18
20
3
Incident Energy (MeV)
82-Pb-208

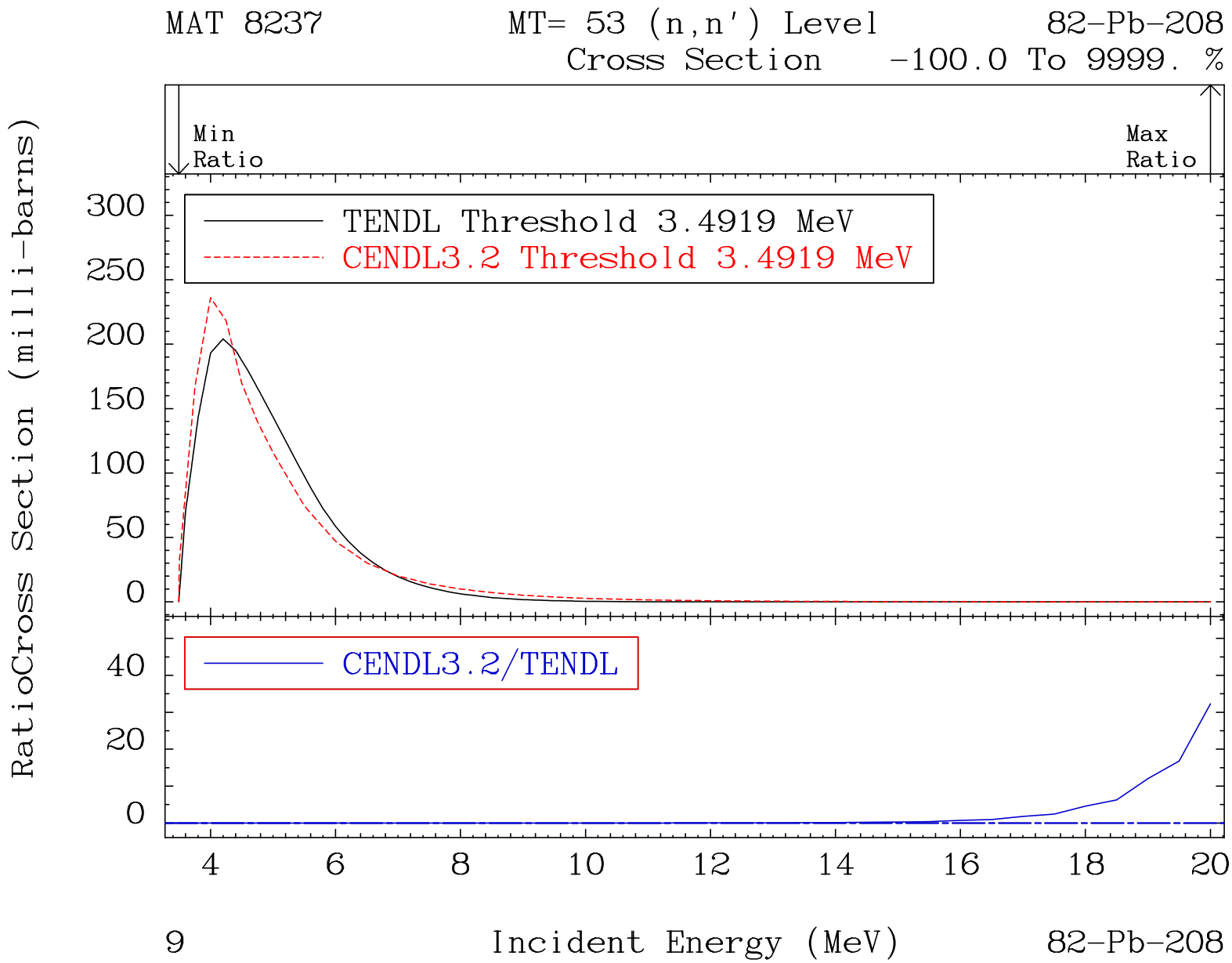

MAT 8237
(n,2n)
Cross Section
82-Pb-208
-100.0 To 195.3 %
Max
Ratio
TENDL Threshold 7.4036 MeV
CENDL3.2 Threshold 7.4036 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
4
2
0
8
10
12
14
16
18
20
4
Incident Energy (MeV)
82-Pb-208

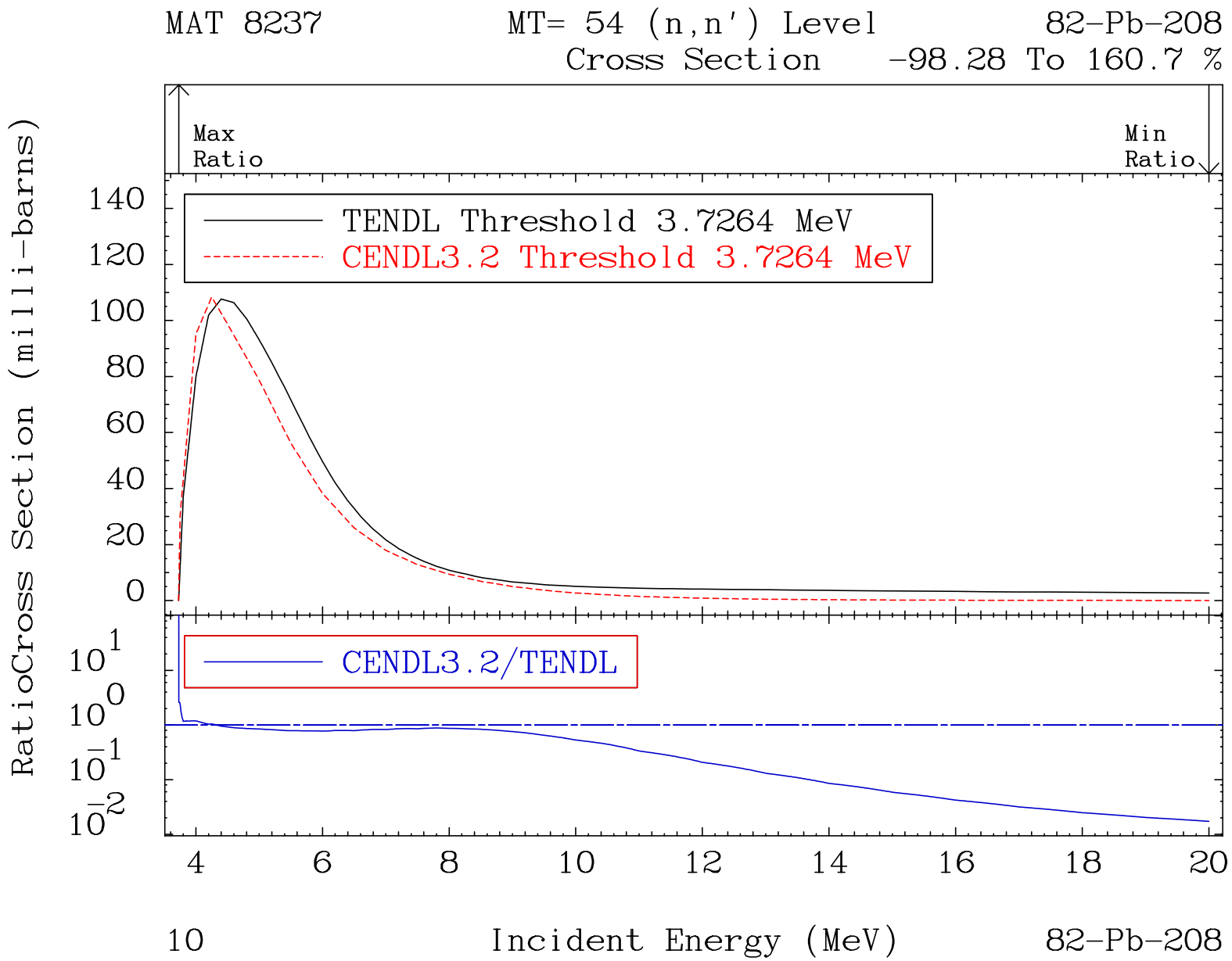

MAT 8237
(n,3n)
Cross Section
82-Pb-208
-100.0 To 5.762 %
Min Ratio
Max Ratio
TENDL Threshold 14.174 MeV
CENDL3.2 Threshold 14.500 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
15
16
17
18
19
20
5
Incident Energy (MeV)
82-Pb-208

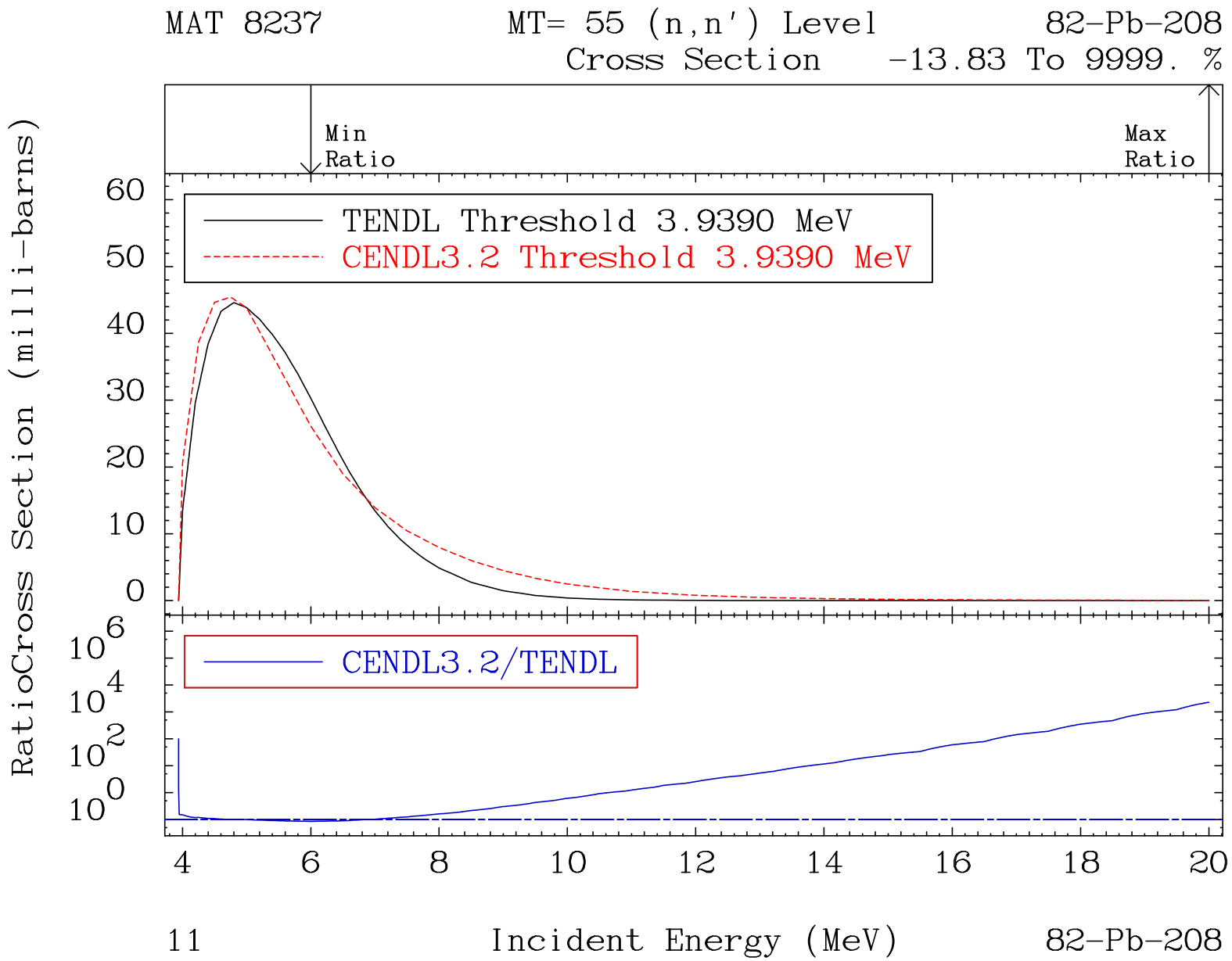

MAT 8237
(n,n') p
Cross Section
82-Pb-208
-100.0 To 248.0 %
Min
Ratio
Max
Ratio
TENDL Threshold 8.0419 MeV
CENDL3.2 Threshold 14.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
4
2
0
8
10
12
14
16
18
20
6
Incident Energy (MeV)
82-Pb-208

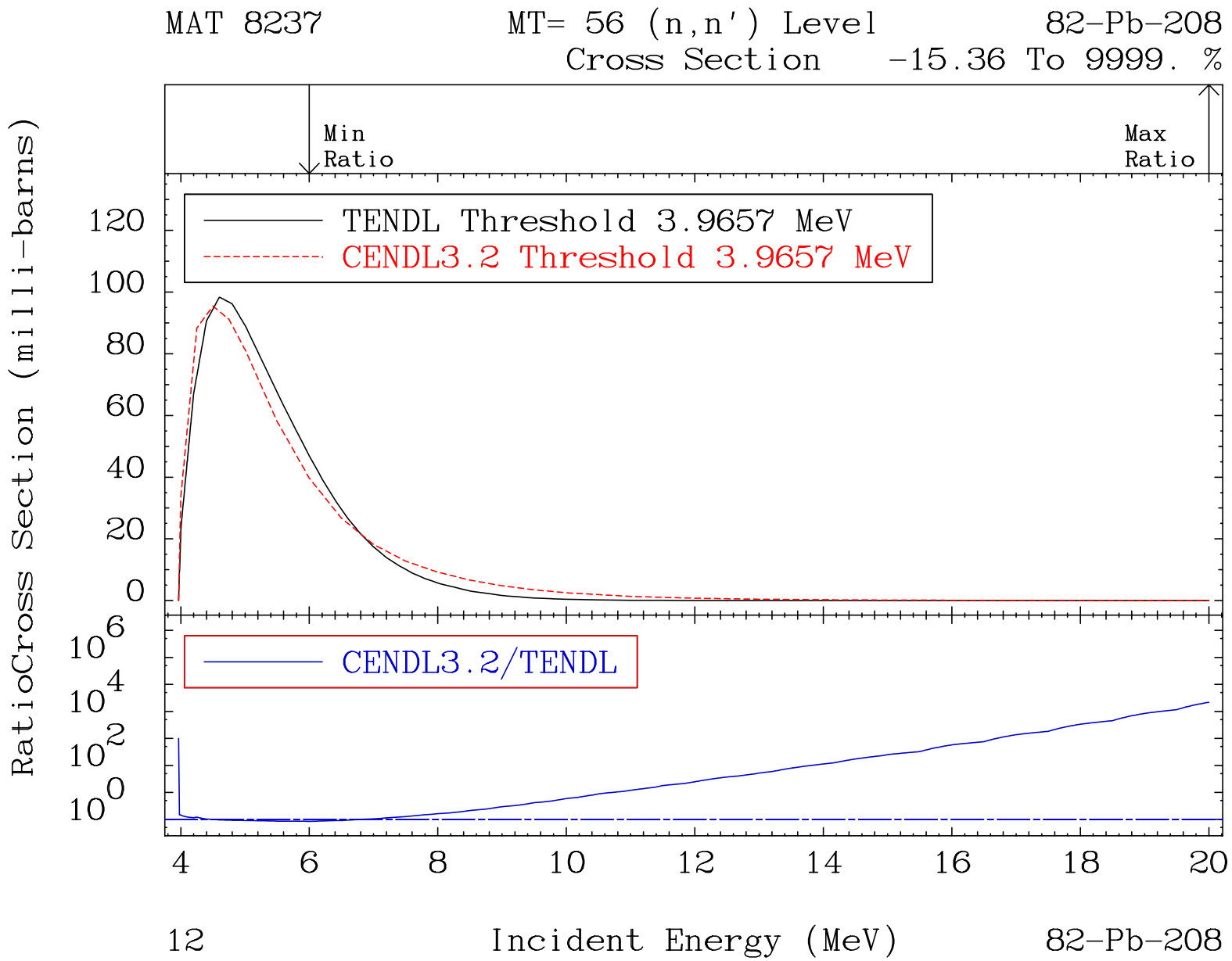

MAT 8237
MT= 51 (n,n') Level
82-Pb-208
Cross Section -100.0 To 109.8 %
Max
Ratio
TENDL Threshold 2.6272 MeV
CENDL3.2 Threshold 2.6272 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
4
6
8
10
12
14
16
18
20
7
Incident Energy (MeV)
82-Pb-208

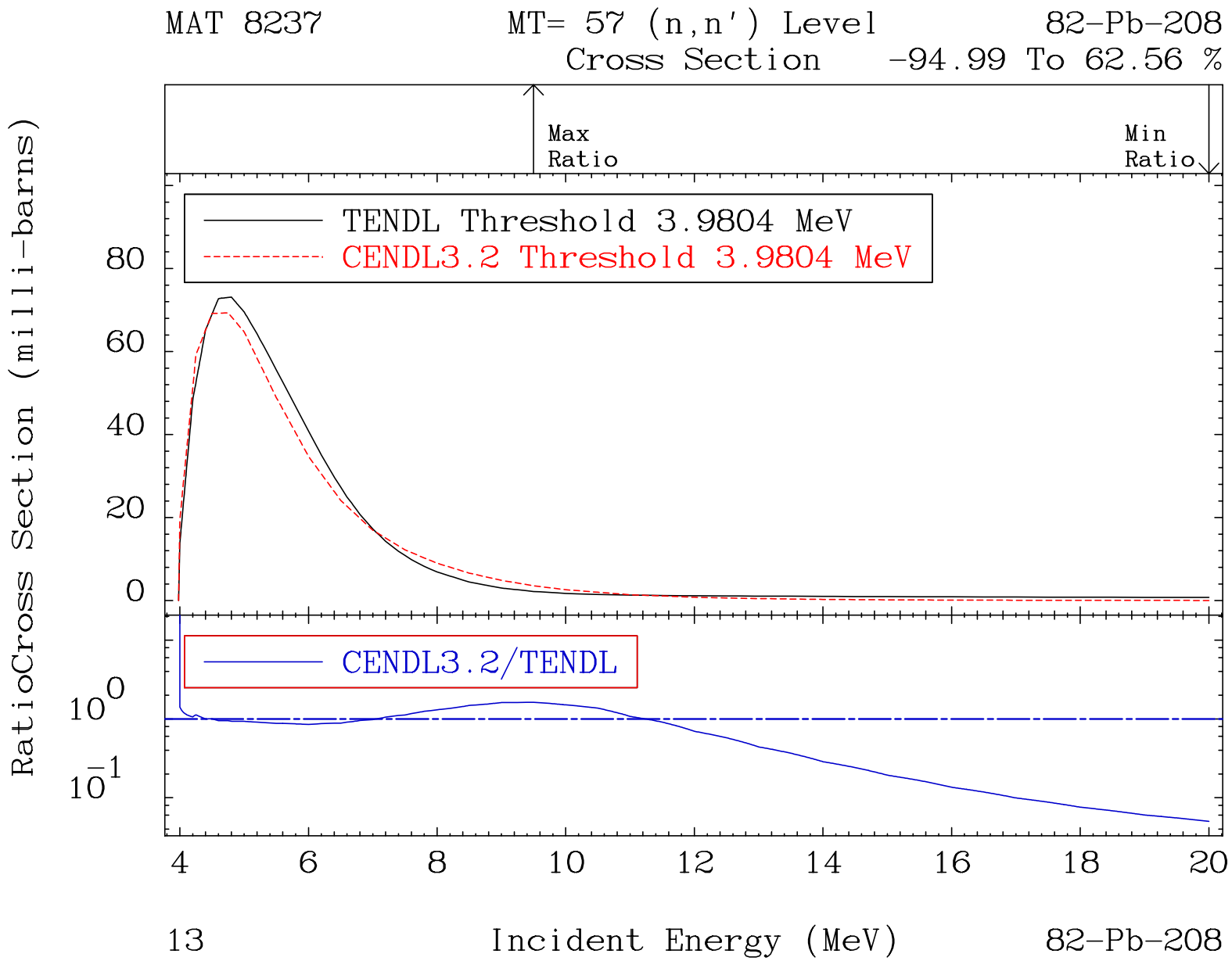

MAT 8237
MT= 52 (n,n') Level
82-Pb-208
Cross Section
-99.23 To 394.6 %
Max Ratio
Min Ratio
TENDL Threshold 3.2132 MeV
CENDL3.2 Threshold 3.2132 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^0
10^-2
4
6
8
10
12
14
16
18
20
8
Incident Energy (MeV)
82-Pb-208

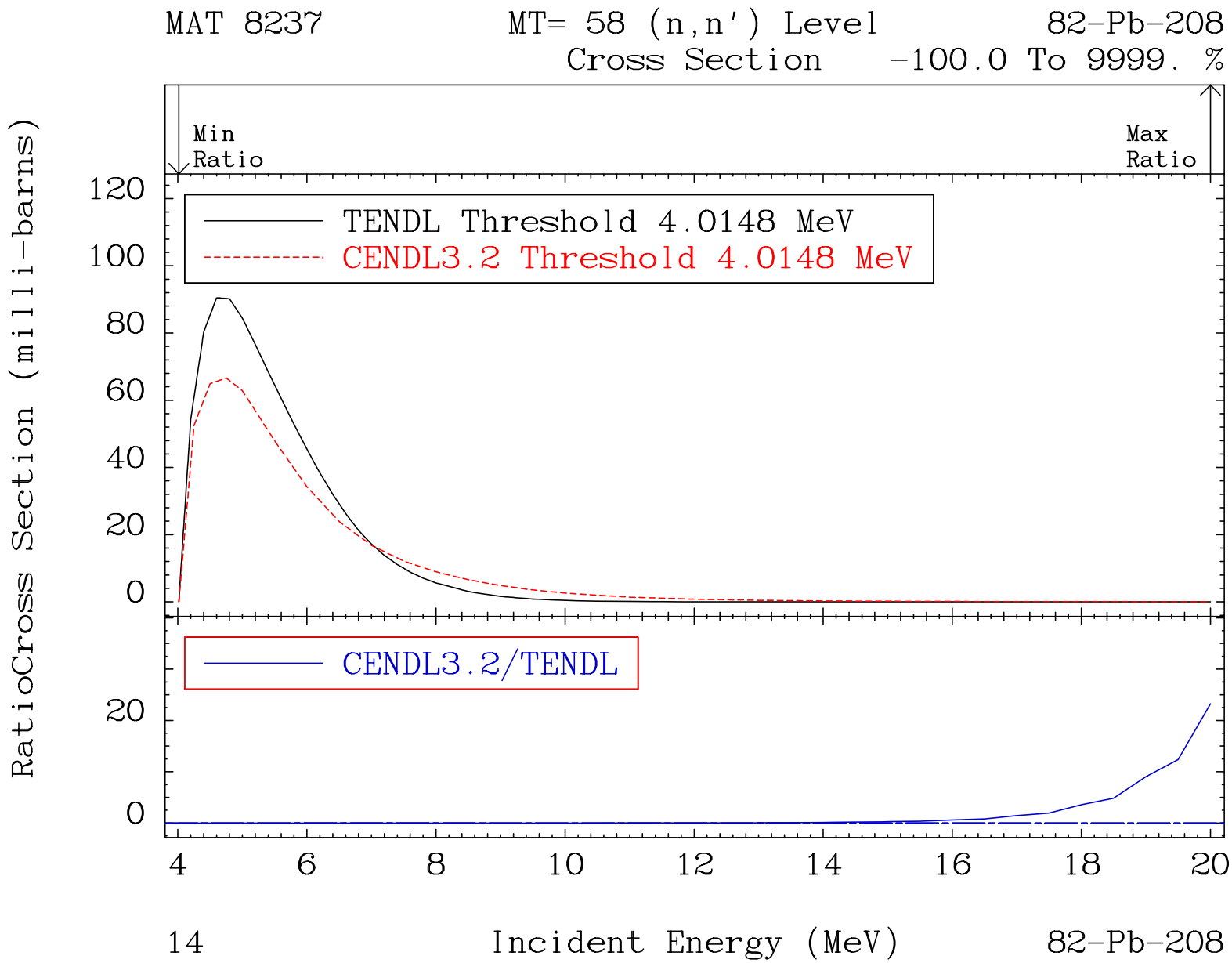

MAT 8237
MT= 53 (n,n') Level
82-Pb-208
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.4919 MeV
CENDL3.2 Threshold 3.4919 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
40
20
0
4
6
8
10
12
14
16
18
20
9
Incident Energy (MeV)
82-Pb-208

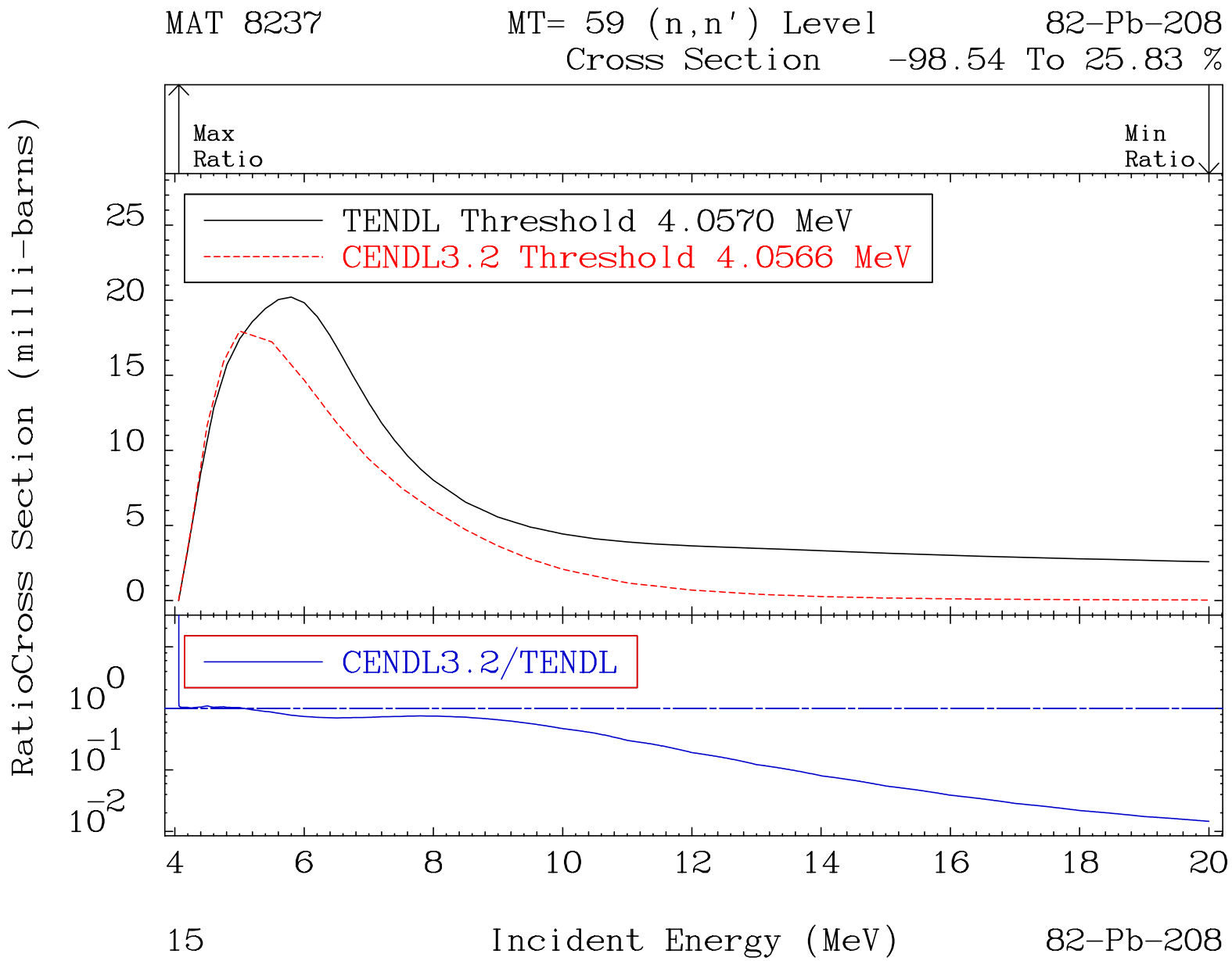

MAT 8237
MT= 54 (n,n') Level
82-Pb-208
Cross Section
-98.28 To 160.7 %
Max Ratio
Min Ratio
TENDL Threshold 3.7264 MeV
CENDL3.2 Threshold 3.7264 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^1
10^0
10^-1
10^-2
4
6
8
10
12
14
16
18
20
10
Incident Energy (MeV)
82-Pb-208

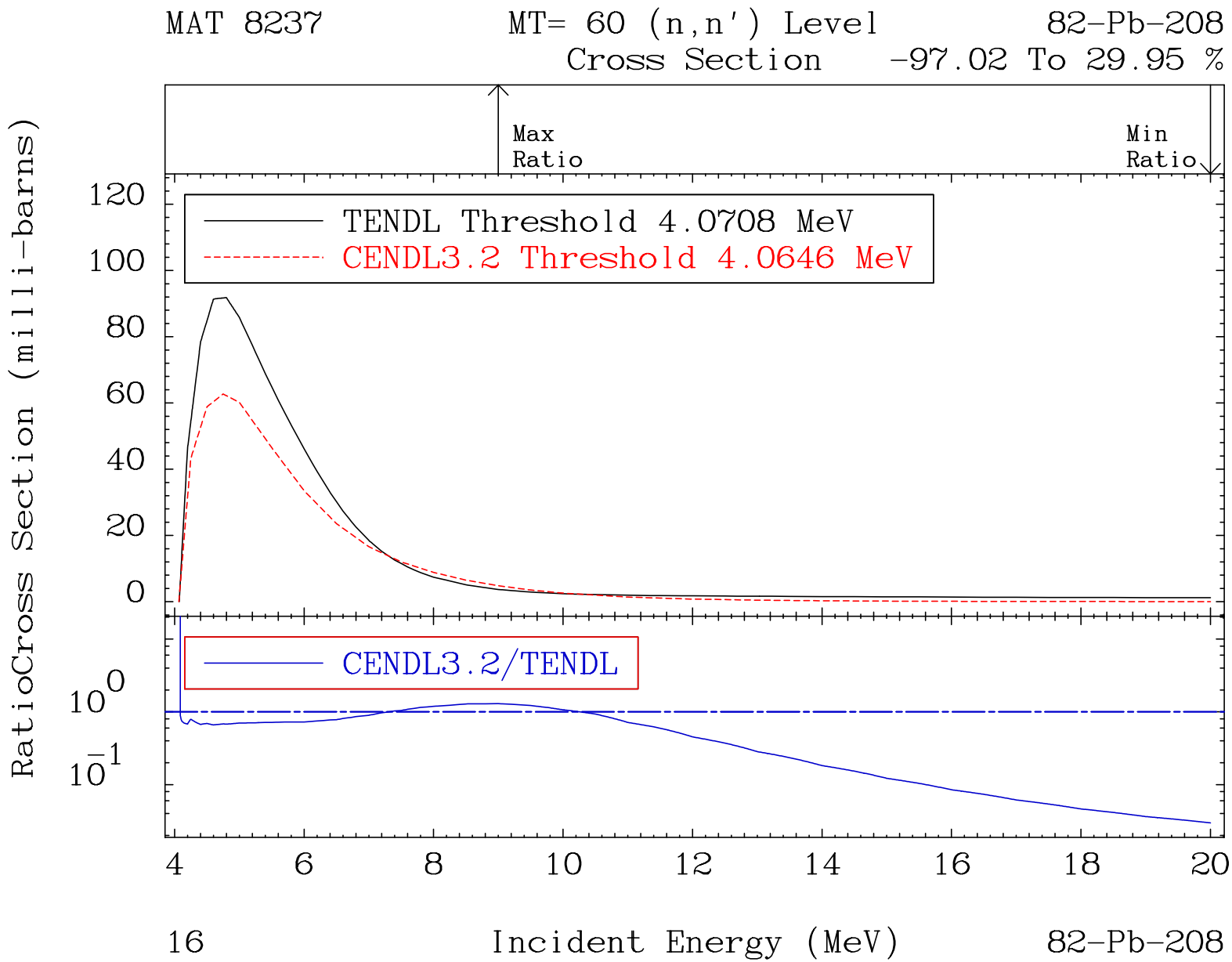

MAT 8237
MT= 55 (n,n') Level
82-Pb-208
Cross Section -13.83 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.9390 MeV
CENDL3.2 Threshold 3.9390 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
11
82-Pb-208

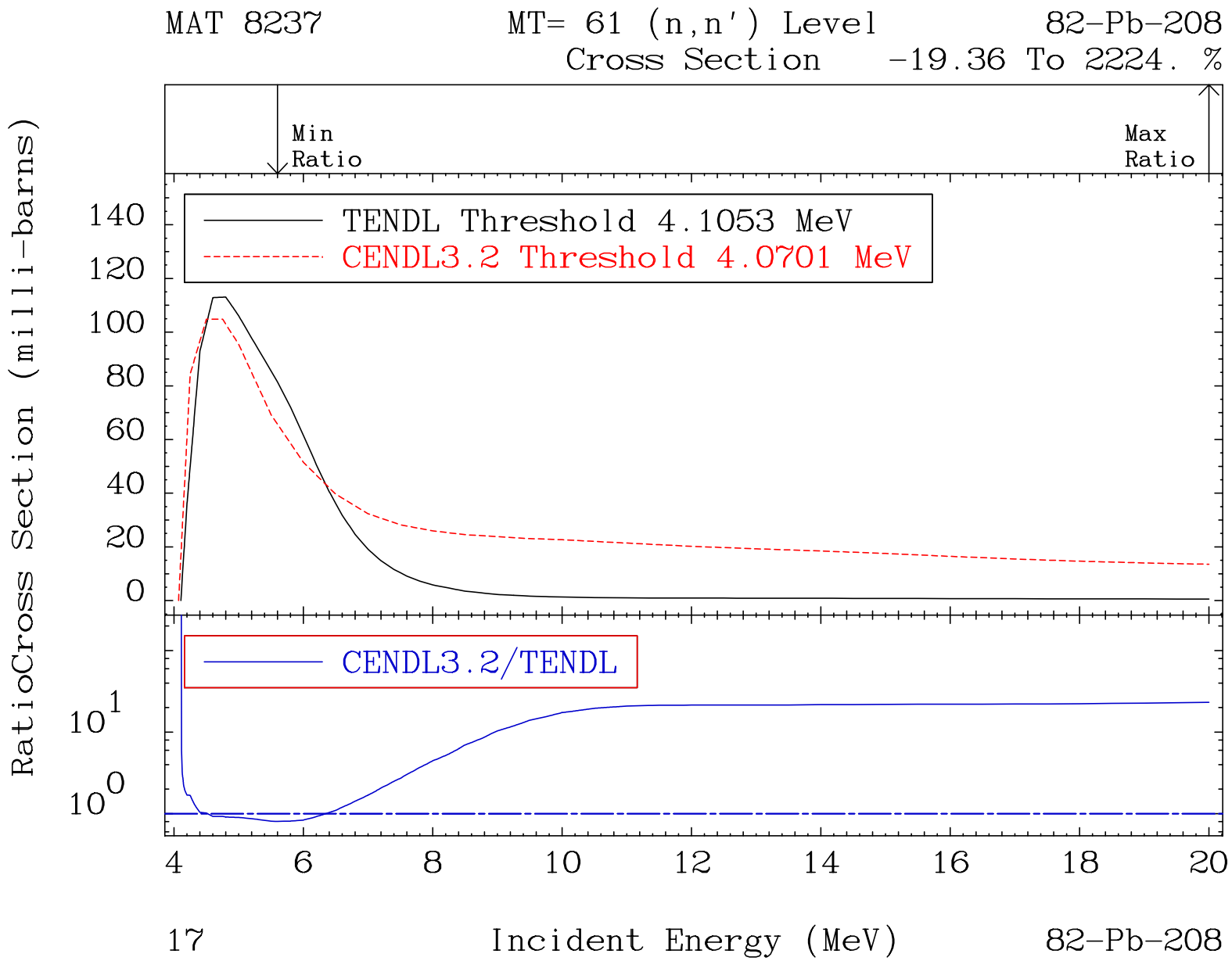

MAT 8237
MT= 56 (n,n') Level
82-Pb-208
Cross Section -15.36 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.9657 MeV
CENDL3.2 Threshold 3.9657 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^6
10^4
10^2
10^0
4
6
8
10
12
14
16
18
20
12
Incident Energy (MeV)
82-Pb-208

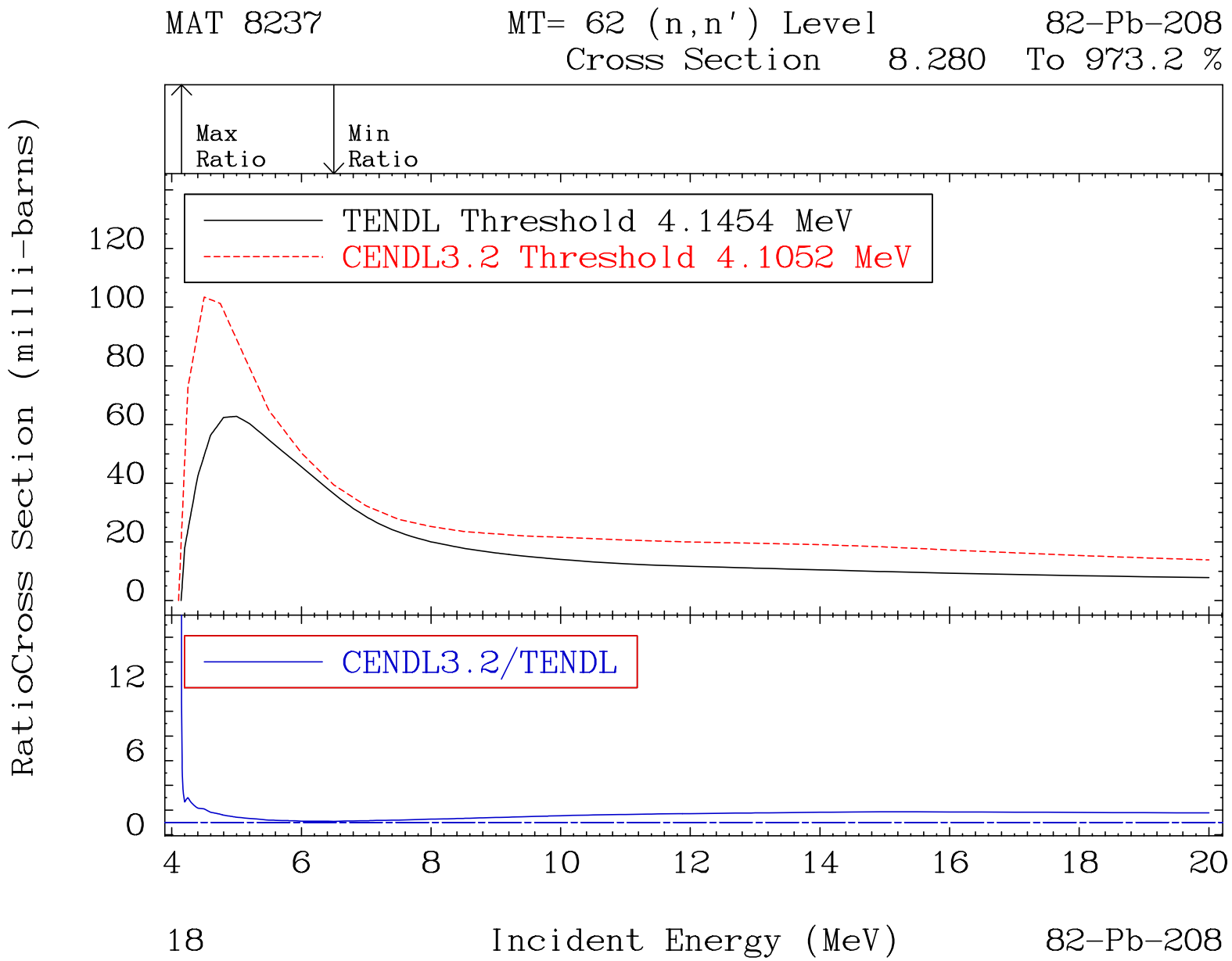

MAT 8237
MT= 57 (n,n') Level
82-Pb-208
Cross Section
-94.99 To 62.56 %
Max Ratio
Min Ratio
TENDL Threshold 3.9804 MeV
CENDL3.2 Threshold 3.9804 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^0
10^-1
4
6
8
10
12
14
16
18
20
13
Incident Energy (MeV)
82-Pb-208

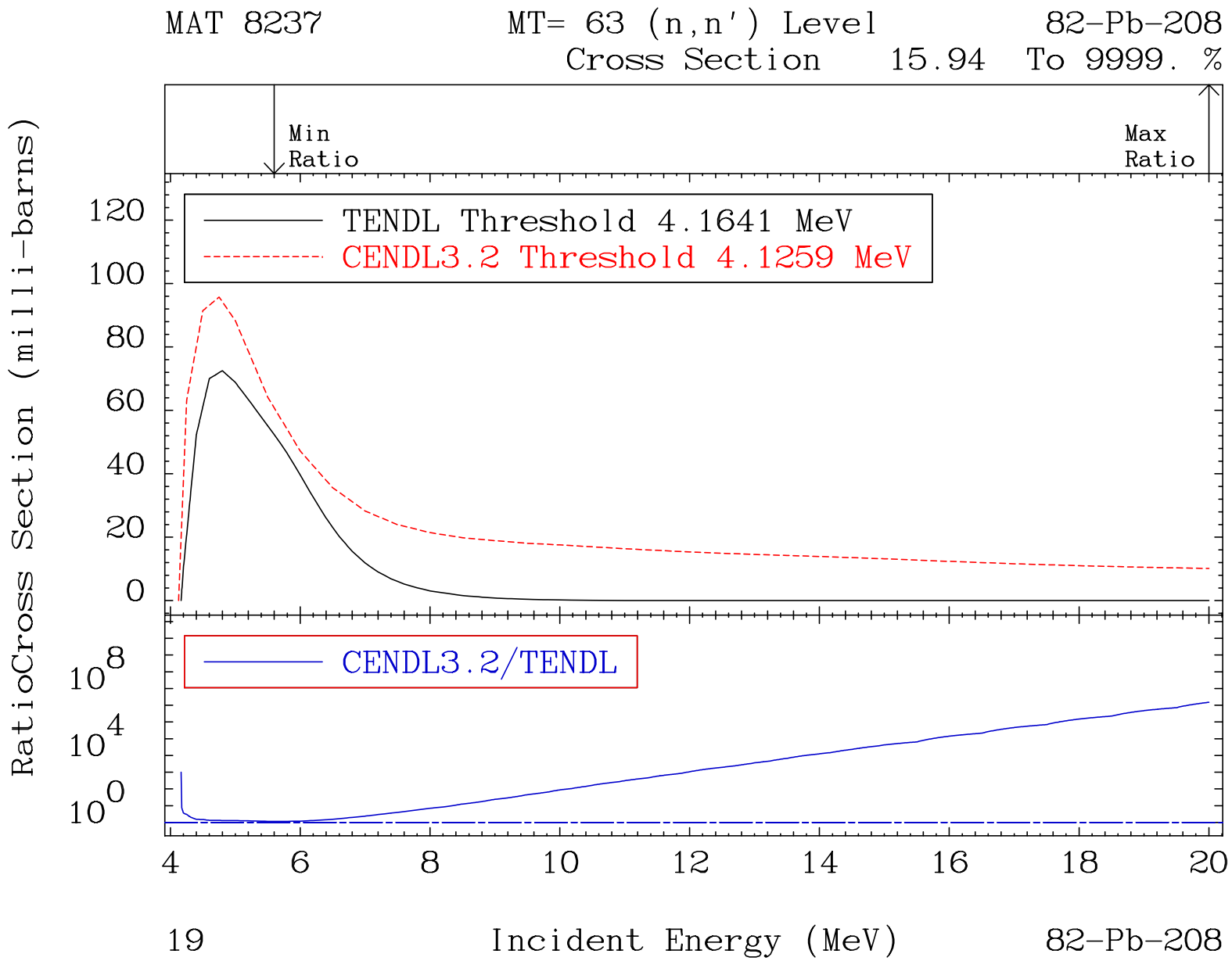

MAT 8237
MT= 58 (n,n') Level
Cross Section
82-Pb-208
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0148 MeV
CENDL3.2 Threshold 4.0148 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
20
0
4
6
8
10
12
14
16
18
20
14
Incident Energy (MeV)
82-Pb-208

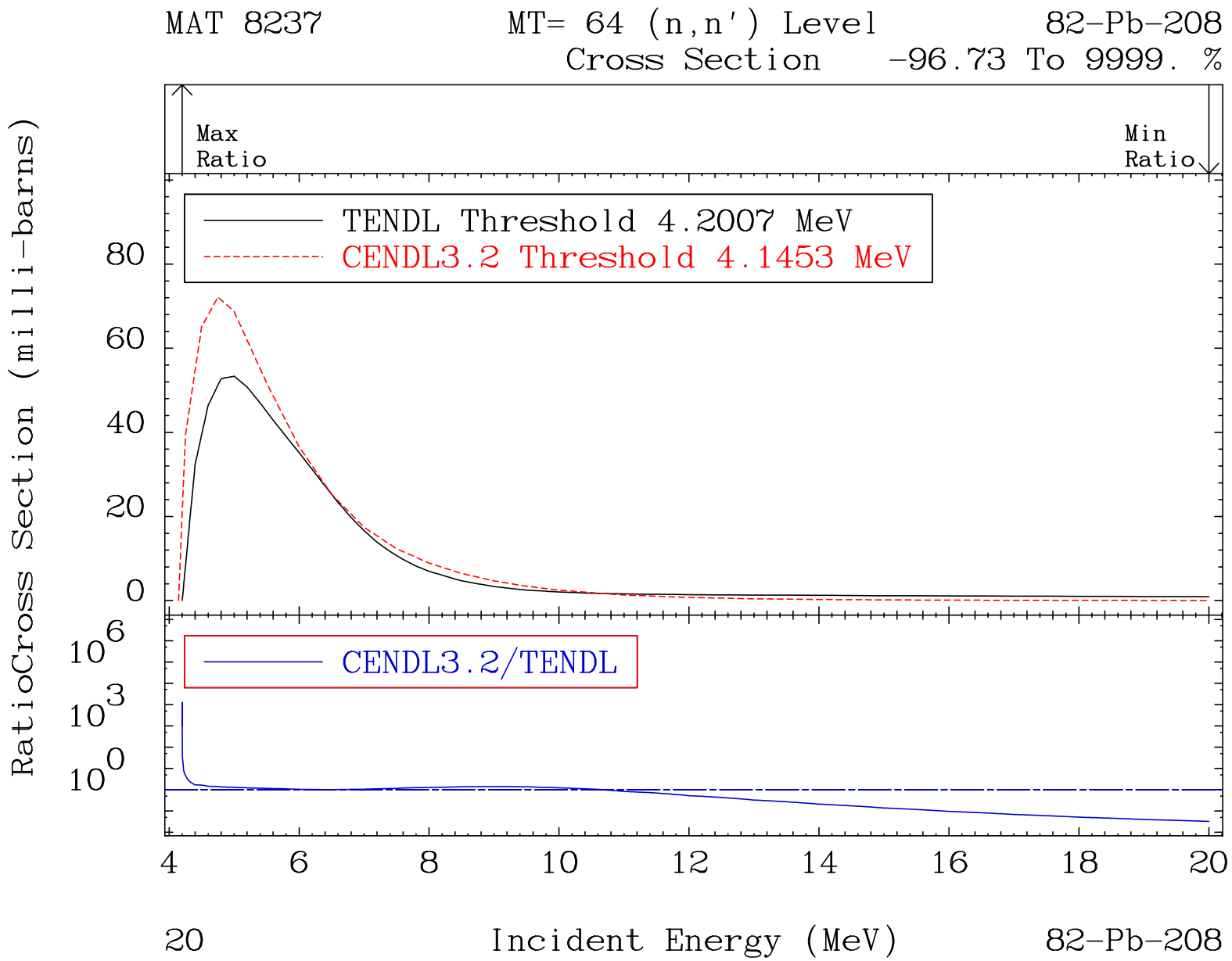

MAT 8237
MT= 59 (n,n') Level
Cross Section
82-Pb-208
-98.54 To 25.83 %
Max Ratio
Min Ratio
TENDL Threshold 4.0570 MeV
CENDL3.2 Threshold 4.0566 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
10^{0}
10^{-1}
10^{-2}
4
6
8
10
12
14
16
18
20
15
Incident Energy (MeV)
82-Pb-208

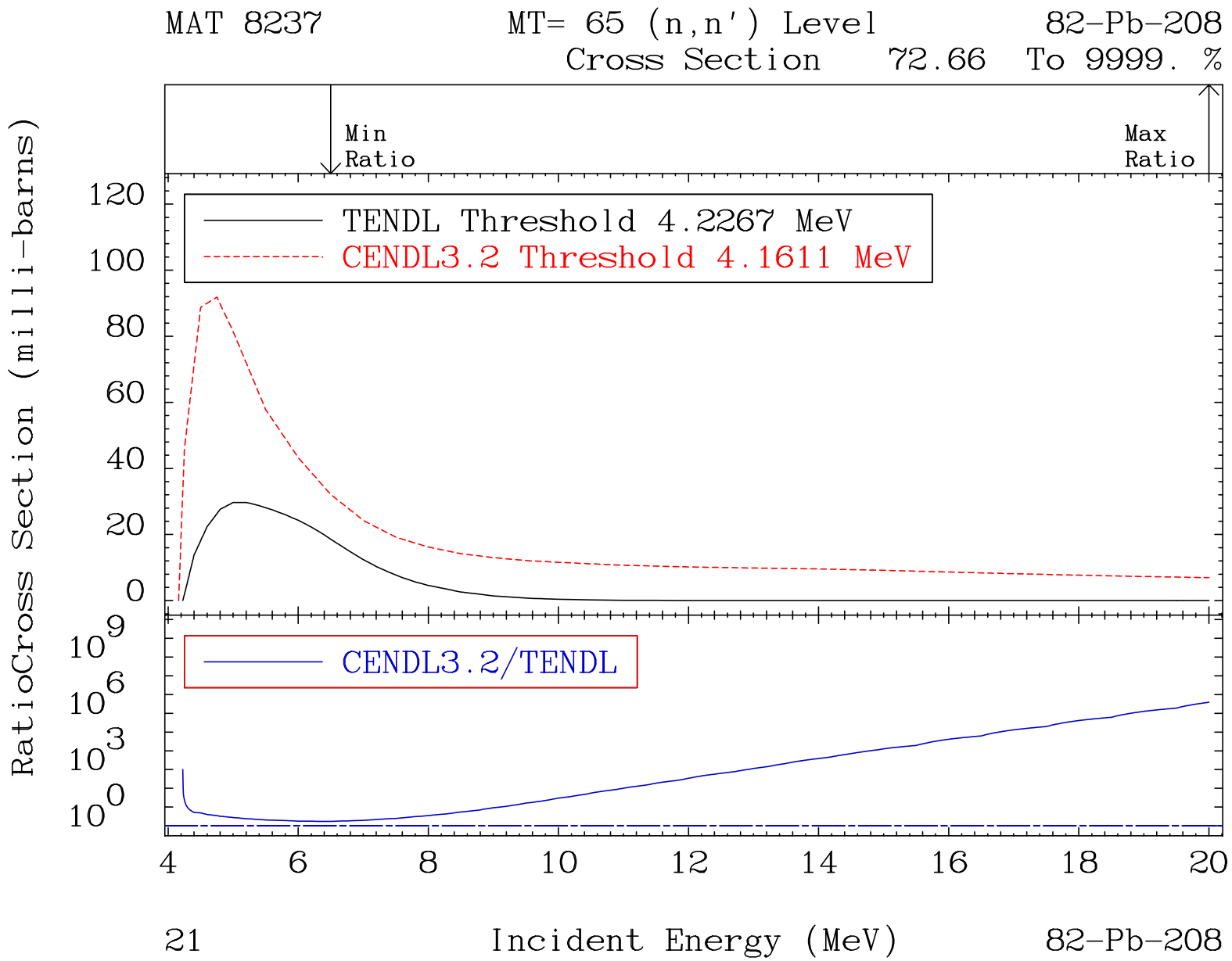

MAT 8237
MT= 60 (n,n') Level
Cross Section
82-Pb-208
-97.02 To 29.95 %
Max Ratio
Min Ratio
TENDL Threshold 4.0708 MeV
CENDL3.2 Threshold 4.0646 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^{0}
10^{-1}
4
6
8
10
12
14
16
18
20
16
Incident Energy (MeV)
82-Pb-208

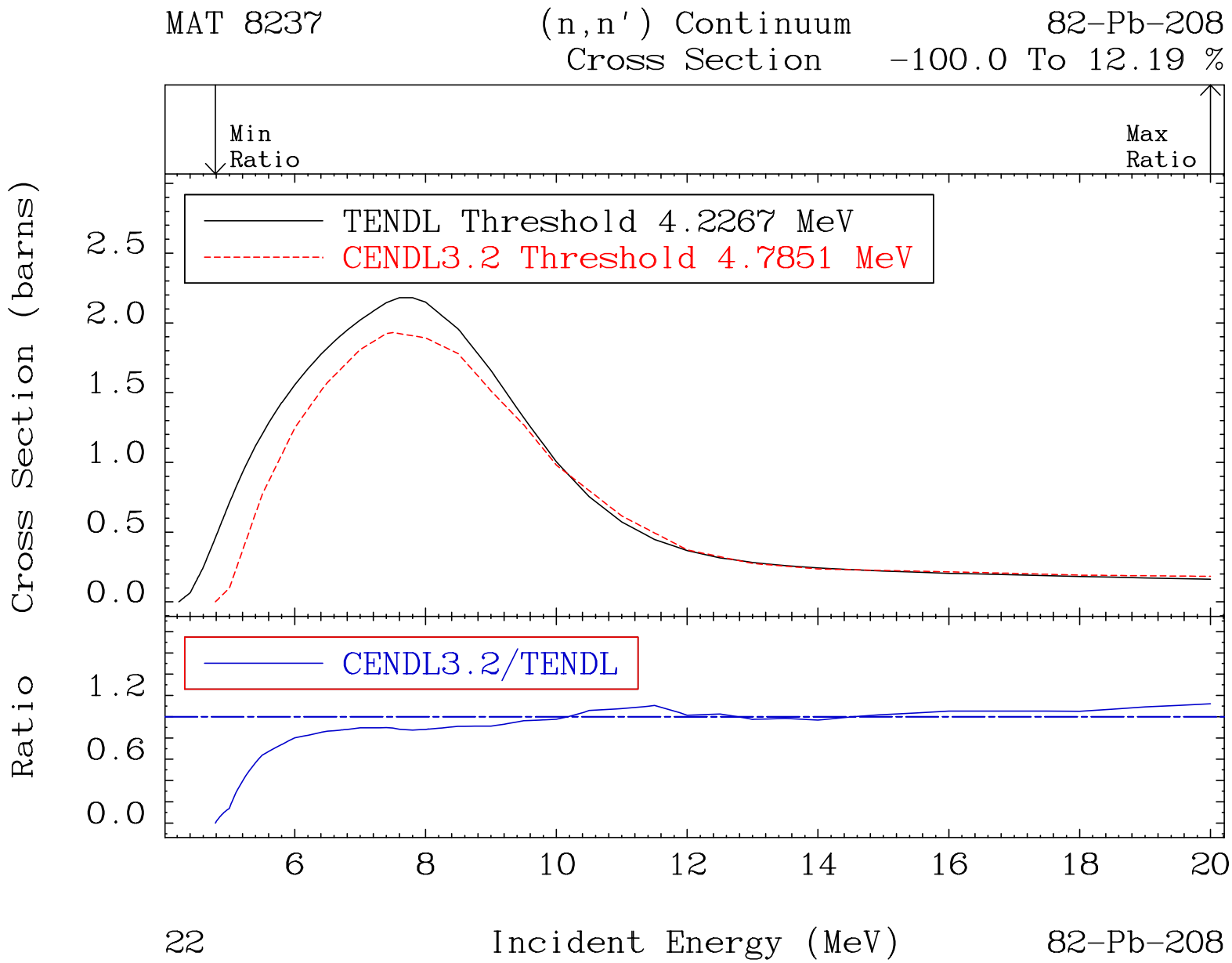

MAT 8237
MT= 61 (n,n') Level
82-Pb-208
Cross Section -19.36 To 2224. %
Min Ratio
Max Ratio
TENDL Threshold 4.1053 MeV
CENDL3.2 Threshold 4.0701 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^1
10^0
4
6
8
10
12
14
16
18
20
17
Incident Energy (MeV)
82-Pb-208

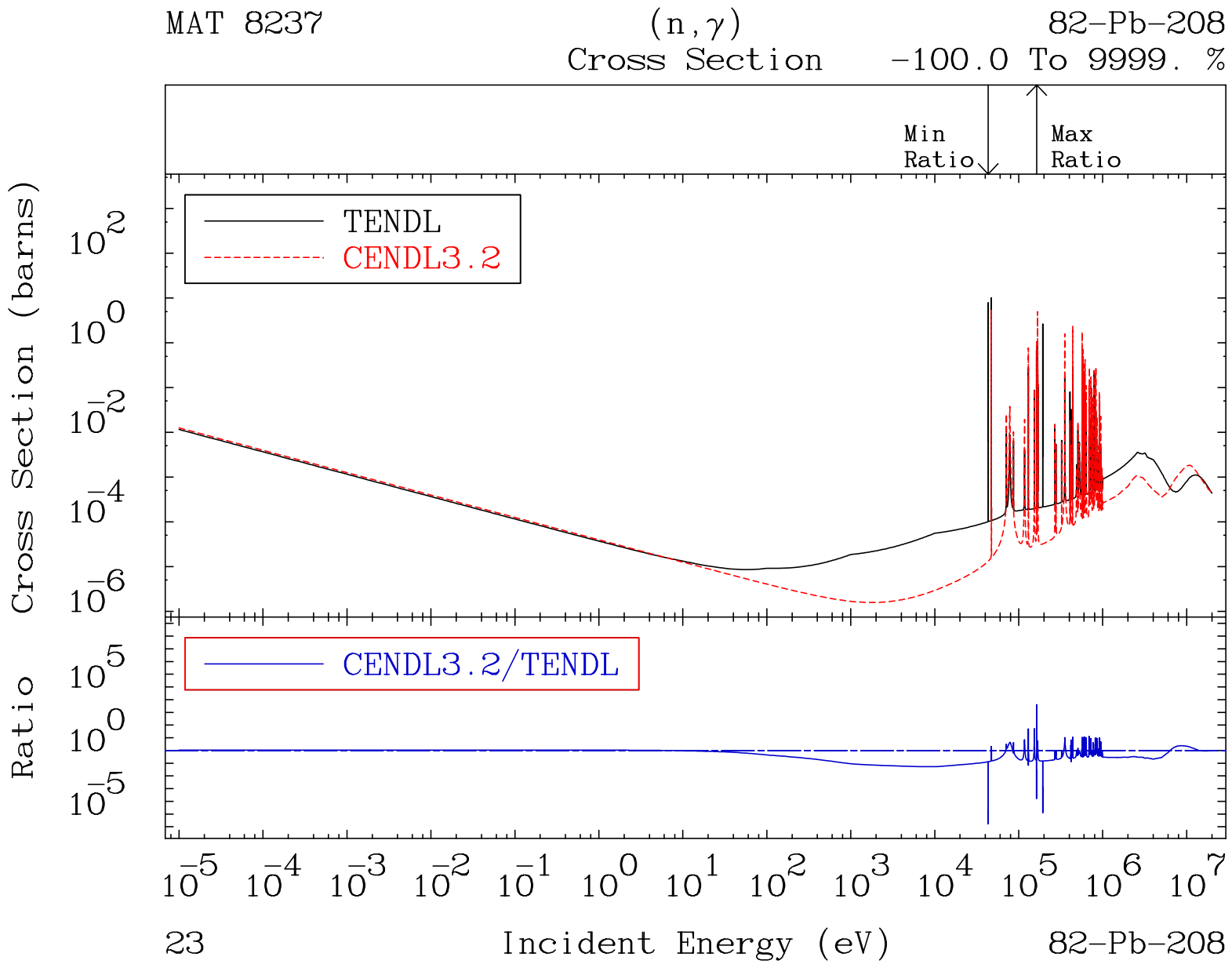

MAT 8237
MT= 62 (n,n') Level
82-Pb-208
Cross Section 8.280 To 973.2 %
Max Ratio
Min Ratio
TENDL Threshold 4.1454 MeV
CENDL3.2 Threshold 4.1052 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
12
6
0
4
6
8
10
12
14
16
18
20
18
Incident Energy (MeV)
82-Pb-208

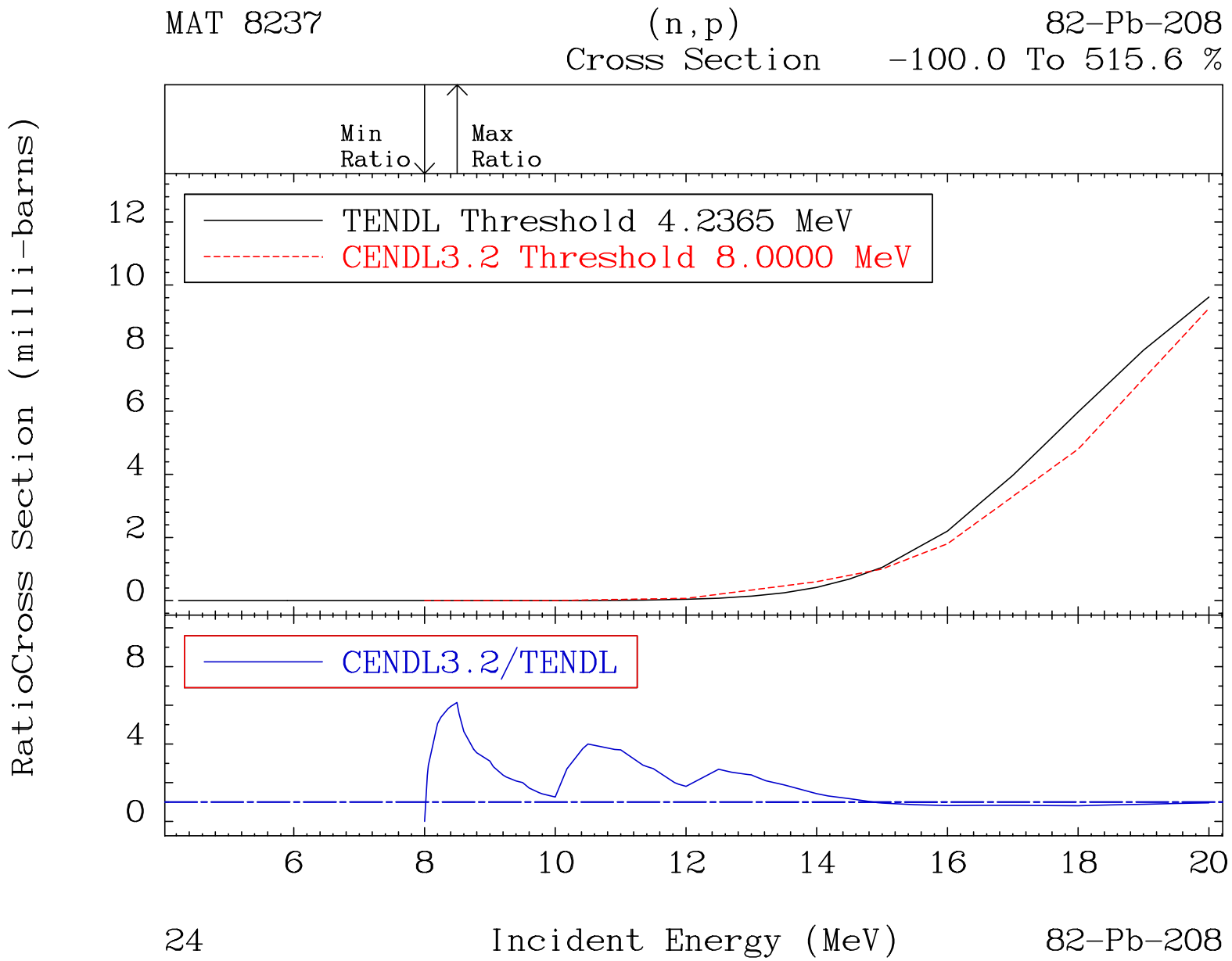

MAT 8237
MT= 63 (n,n') Level
82-Pb-208
Cross Section 15.94 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.1641 MeV
CENDL3.2 Threshold 4.1259 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^8
10^4
10^0
4
6
8
10
12
14
16
18
20
19
Incident Energy (MeV)
82-Pb-208

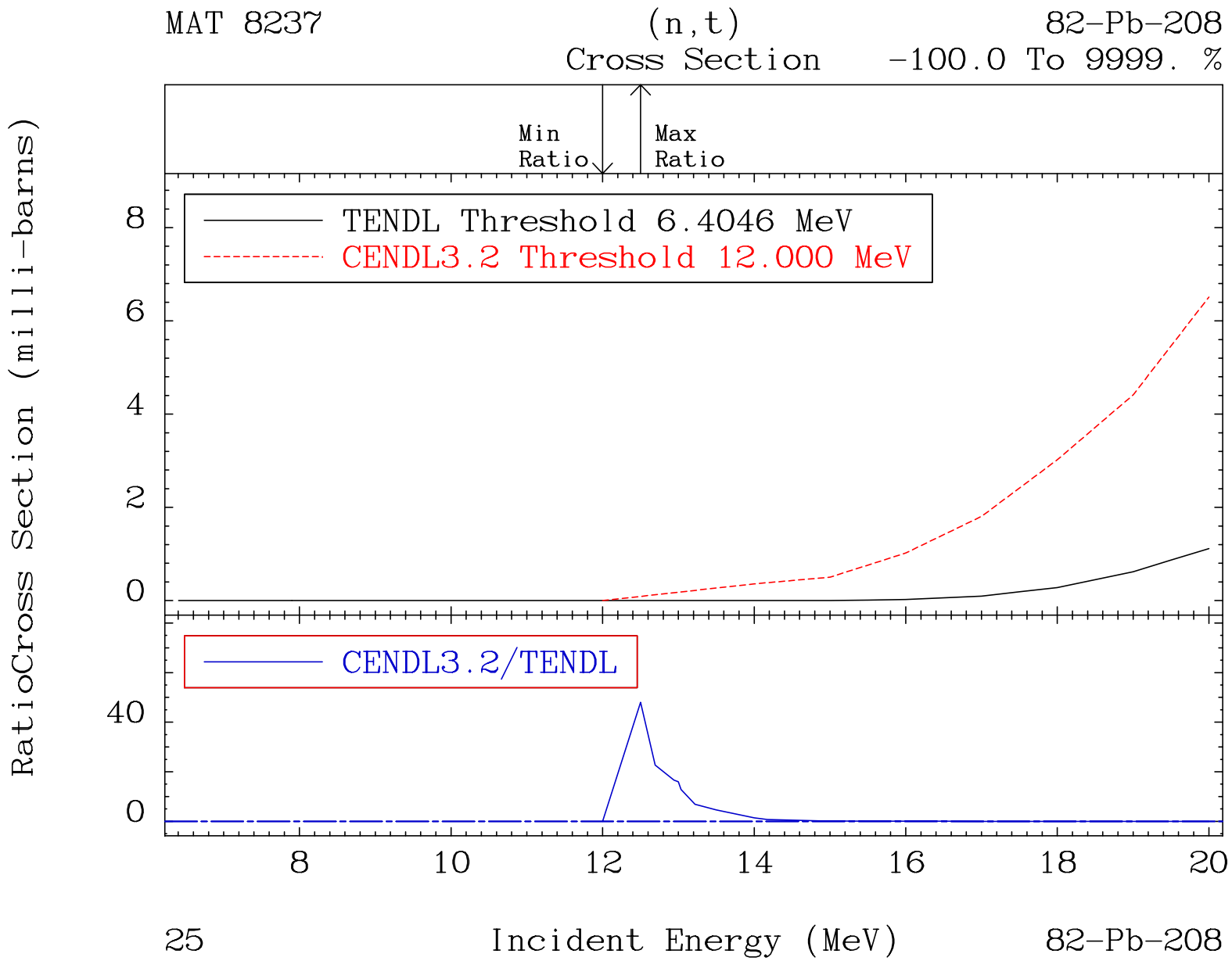

MAT 8237
MT= 64 (n,n') Level
82-Pb-208
Cross Section -96.73 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.2007 MeV
CENDL3.2 Threshold 4.1453 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^6
10^3
10^0
4
6
8
10
12
14
16
18
20
20
Incident Energy (MeV)
82-Pb-208

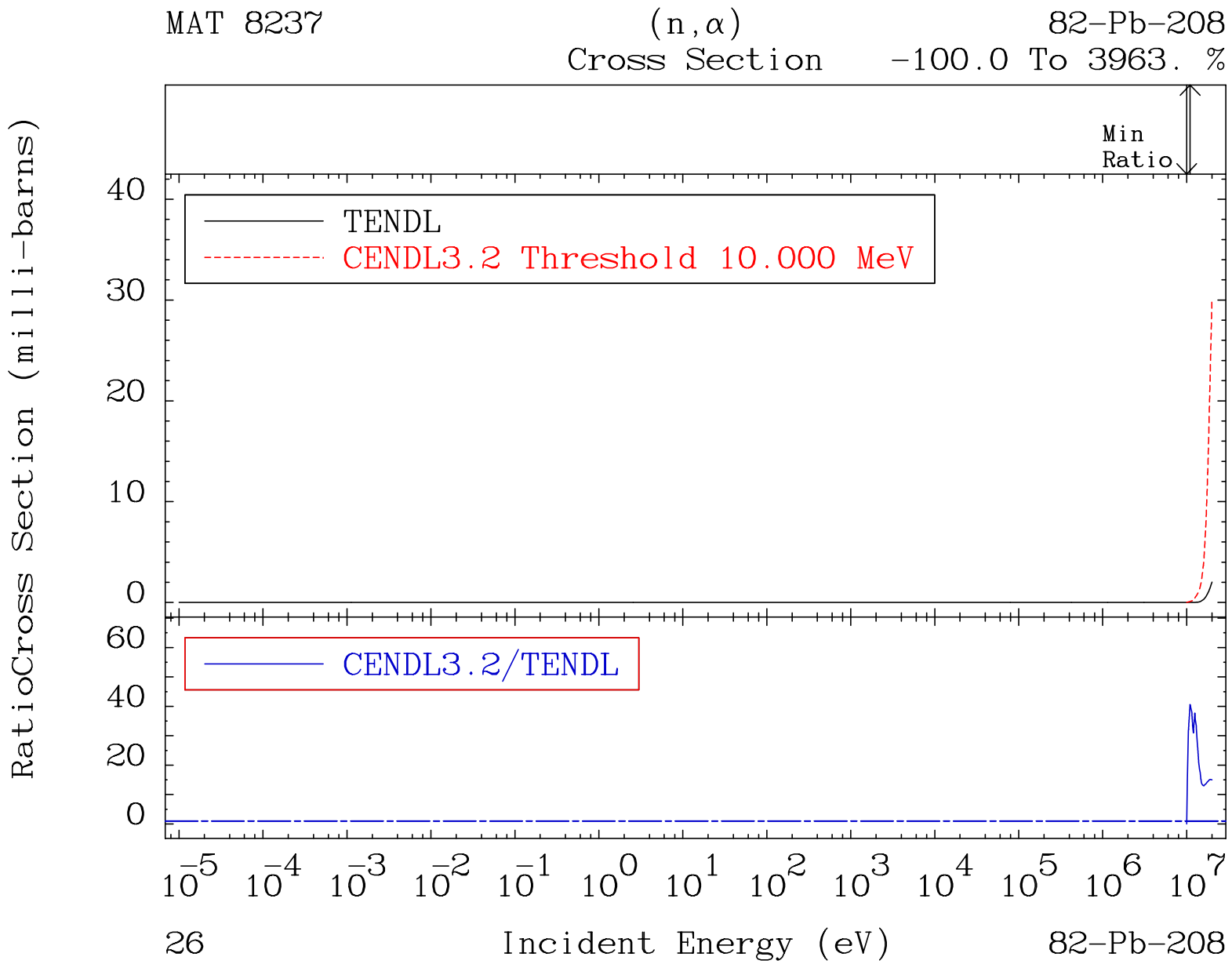

MAT 8237
MT= 65 (n,n') Level
82-Pb-208
Cross Section 72.66 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.2267 MeV
CENDL3.2 Threshold 4.1611 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^9
10^6
10^3
10^0
4
6
8
10
12
14
16
18
20
21
Incident Energy (MeV)
82-Pb-208

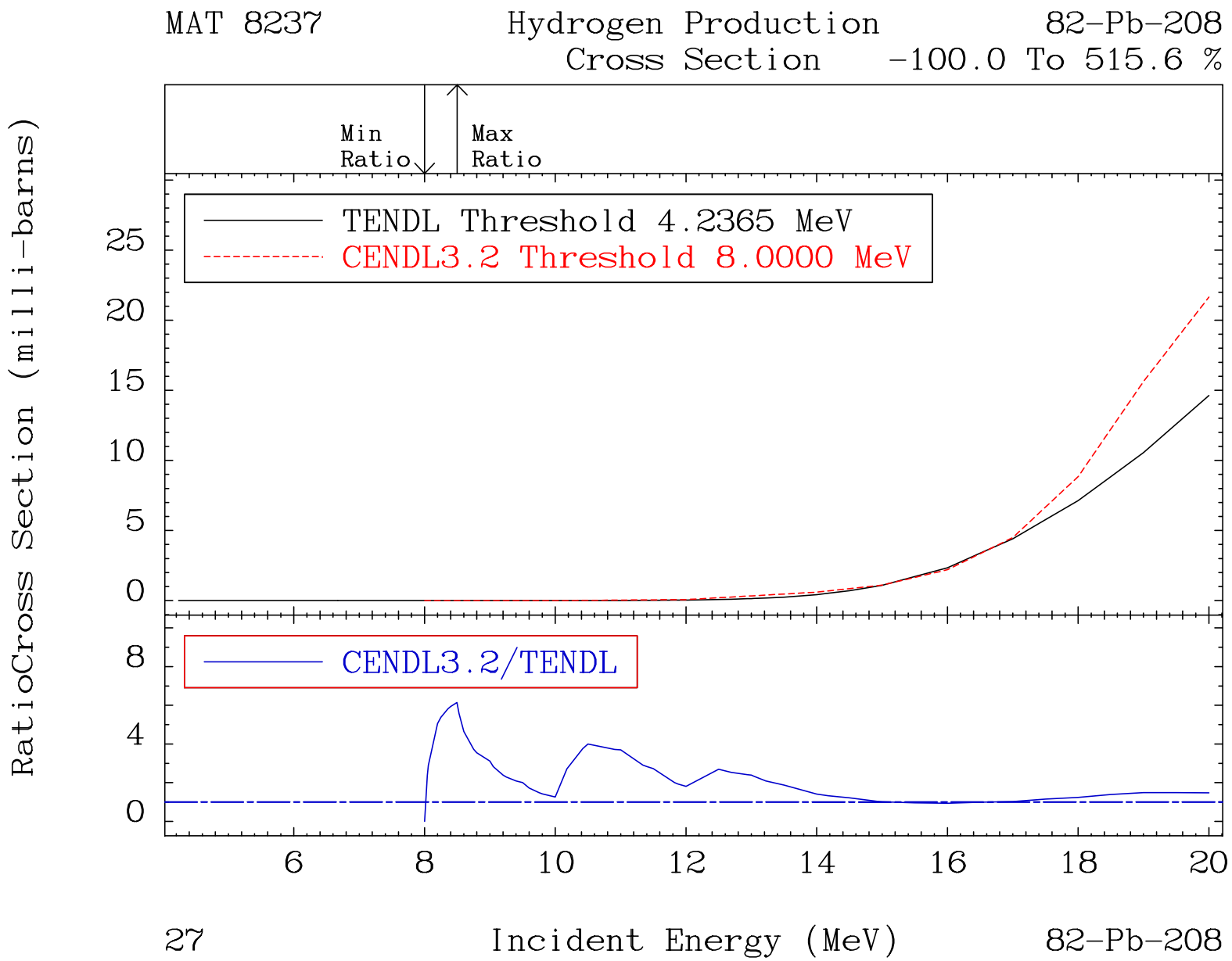

MAT 8237
(n,n') Continuum
Cross Section
82-Pb-208
-100.0 To 12.19 %
Min Ratio
Max Ratio
TENDL Threshold 4.2267 MeV
CENDL3.2 Threshold 4.7851 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
6
8
10
12
14
16
18
20
22
Incident Energy (MeV)
82-Pb-208

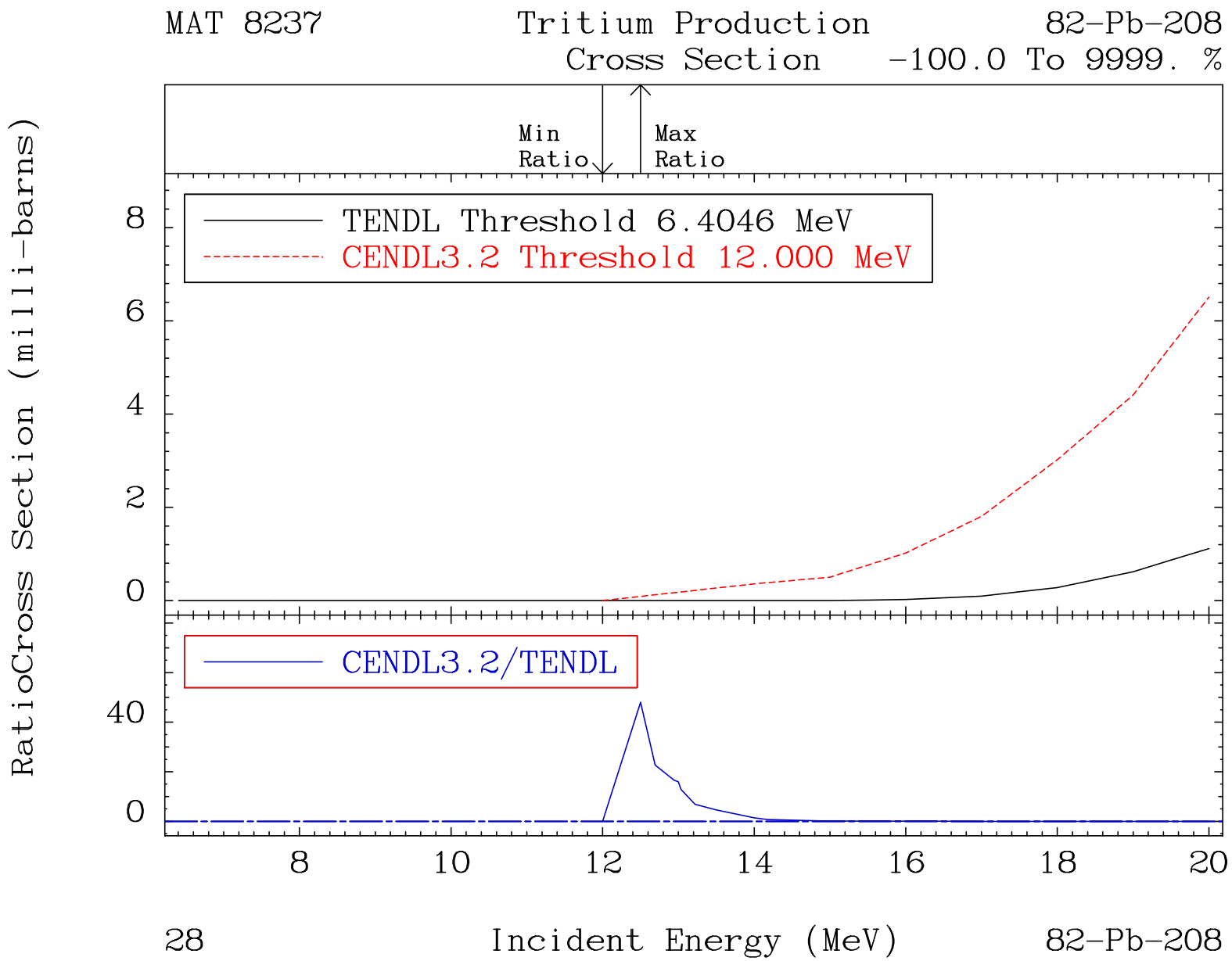

MAT 8237
(n,γ)
Cross Section
82-Pb-208
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
82-Pb-208

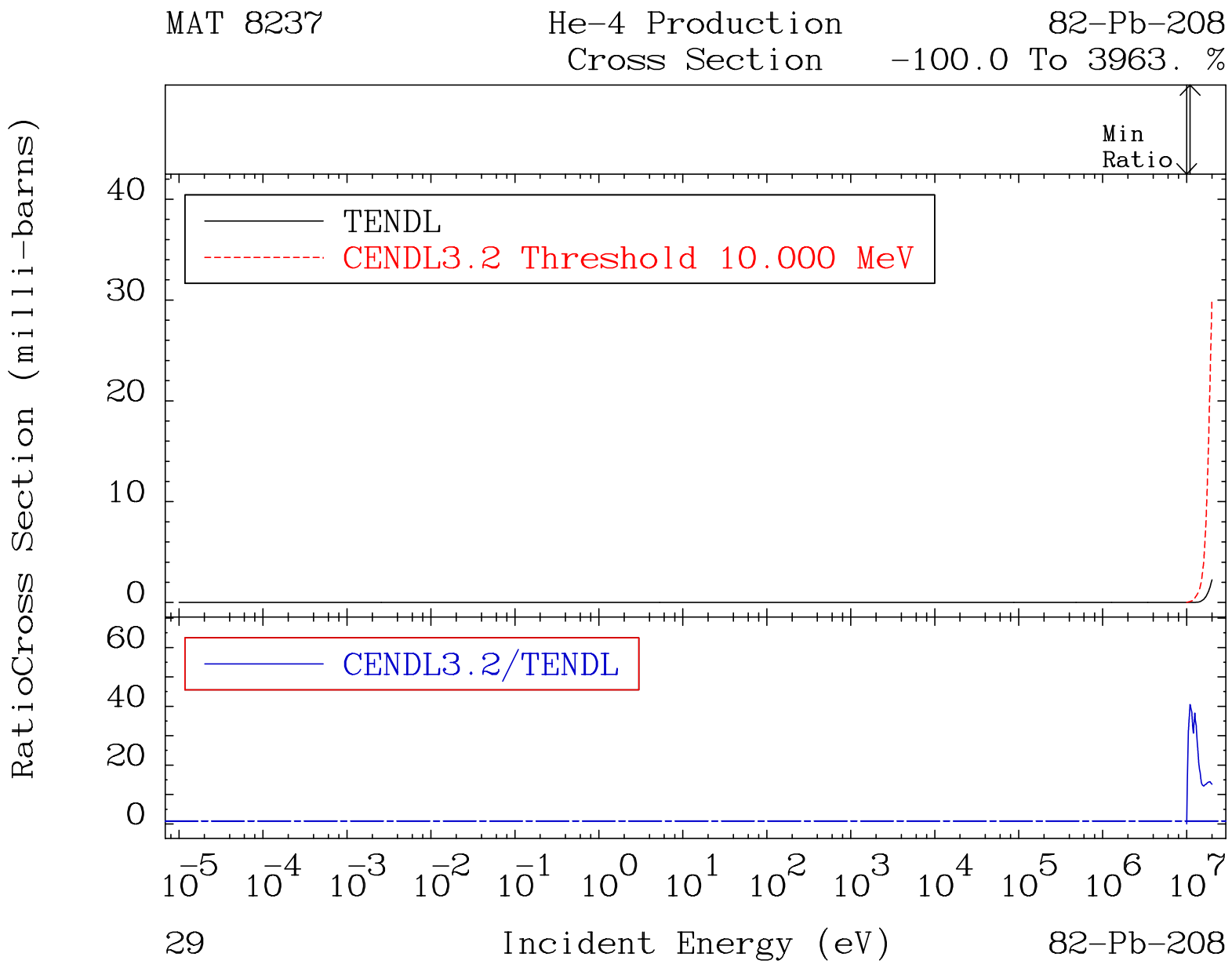

MAT 8237
(n,p)
82-Pb-208
Cross Section
-100.0 To 515.6 %
Min Ratio
Max Ratio
TENDL Threshold 4.2365 MeV
CENDL3.2 Threshold 8.0000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
24
82-Pb-208

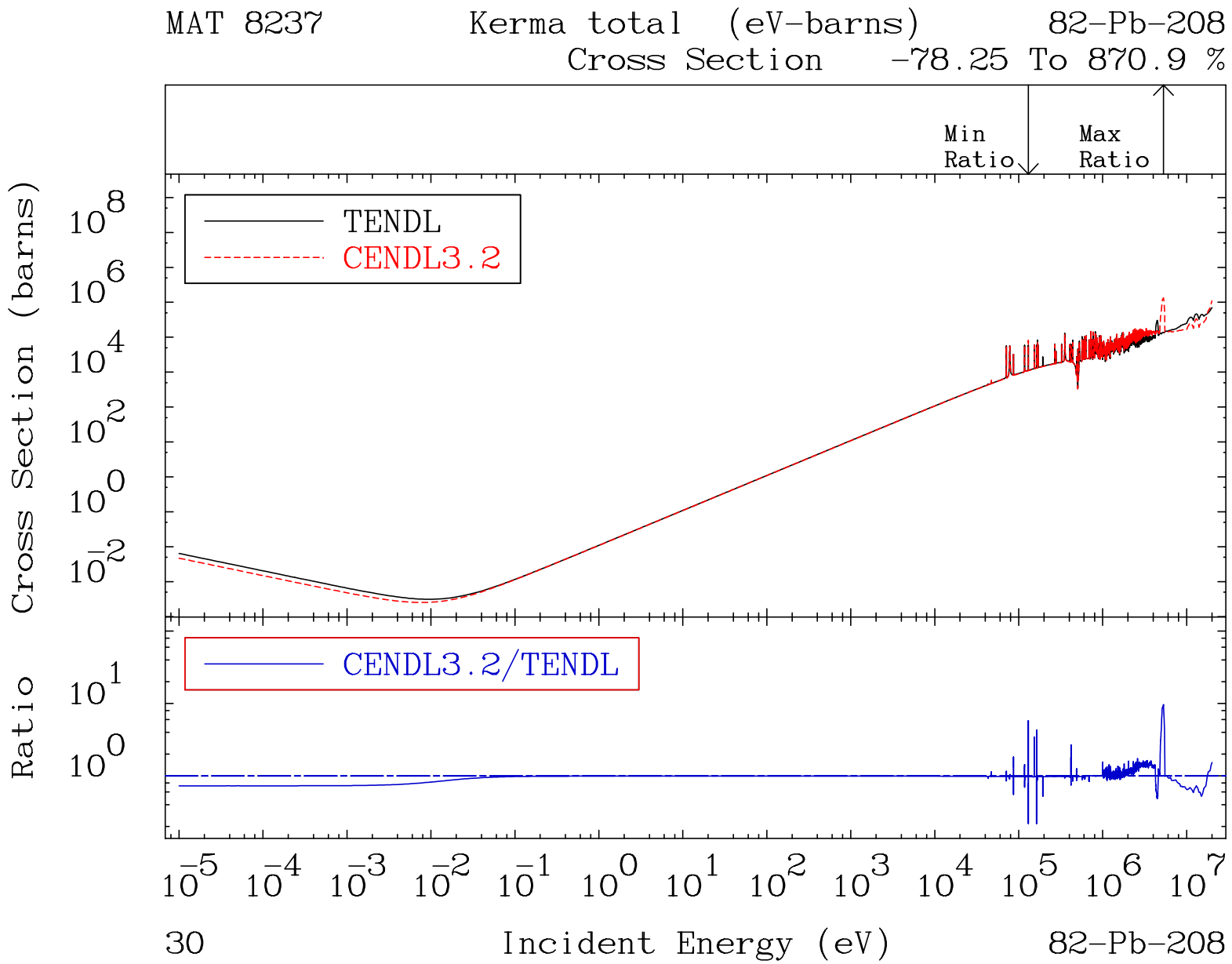

MAT 8237
(n,t)
Cross Section
82-Pb-208
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.4046 MeV
CENDL3.2 Threshold 12.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
25
82-Pb-208

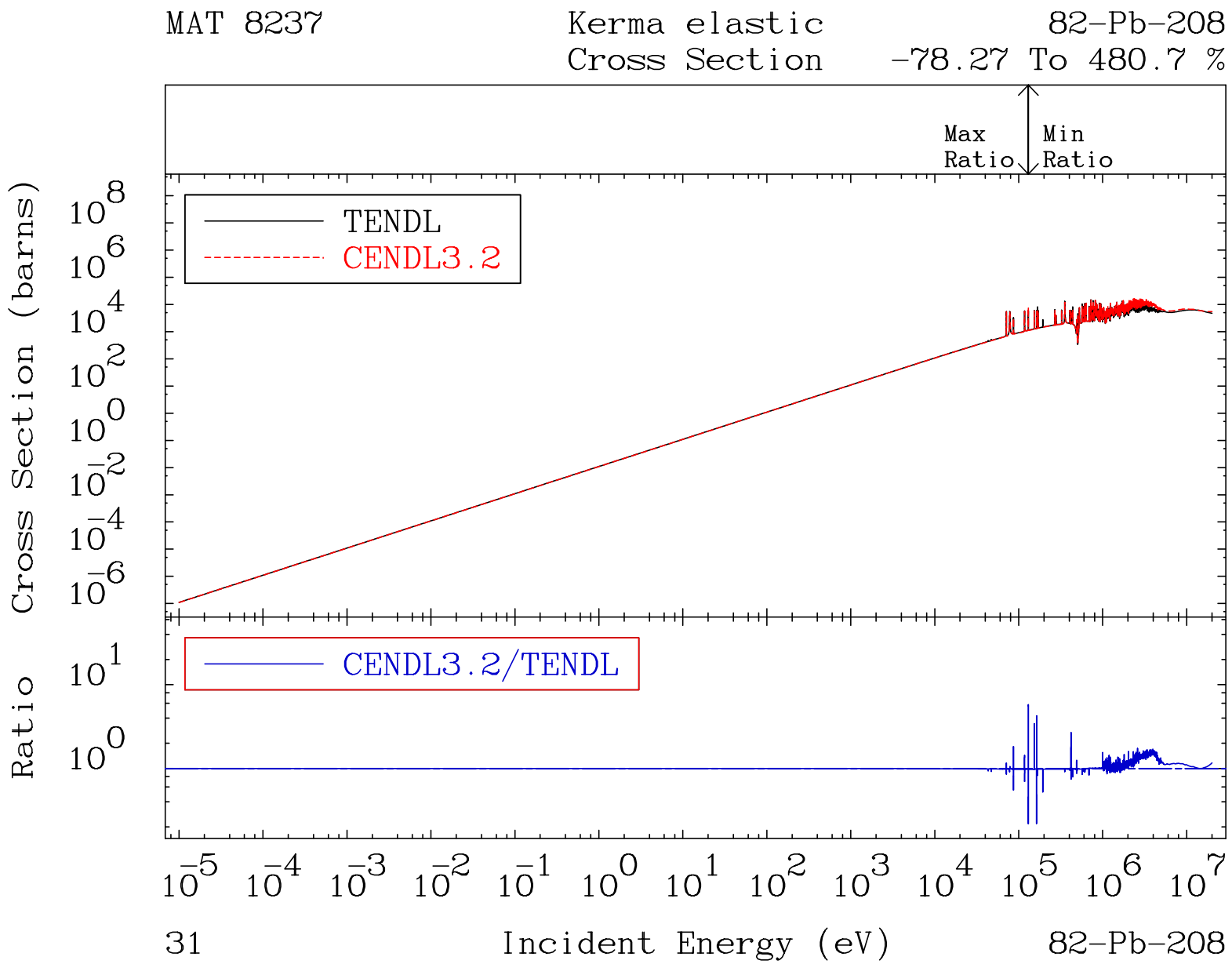

MAT 8237
(n,α)
Cross Section
82-Pb-208
-100.0 To 3963. %
Min
Ratio
TENDL
CENDL3.2 Threshold 10.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
60
40
20
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7
26
Incident Energy (eV)
82-Pb-208

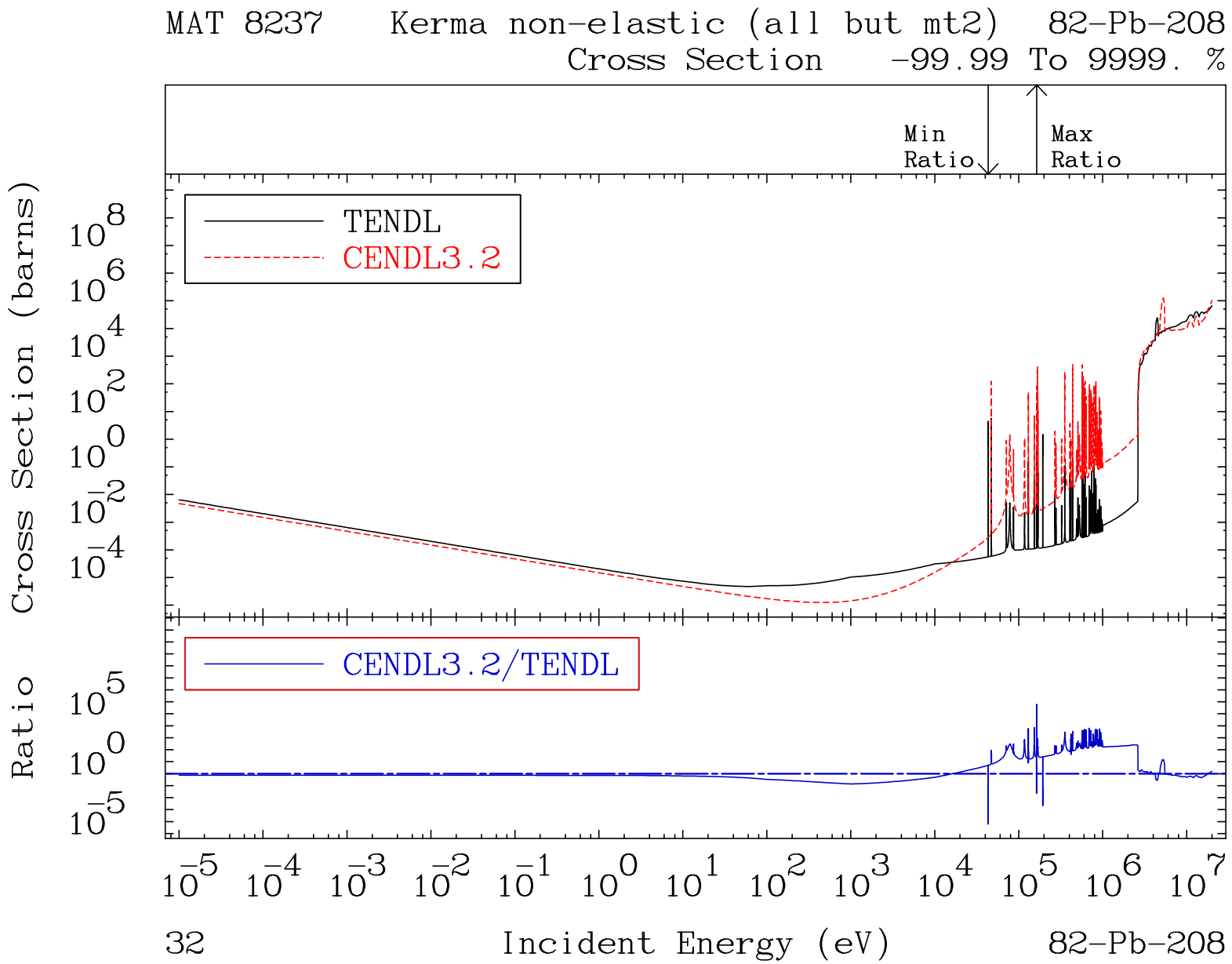

MAT 8237
Hydrogen Production
82-Pb-208
Cross Section
-100.0 To 515.6 %
Min Ratio
Max Ratio
TENDL Threshold 4.2365 MeV
CENDL3.2 Threshold 8.0000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
27
82-Pb-208

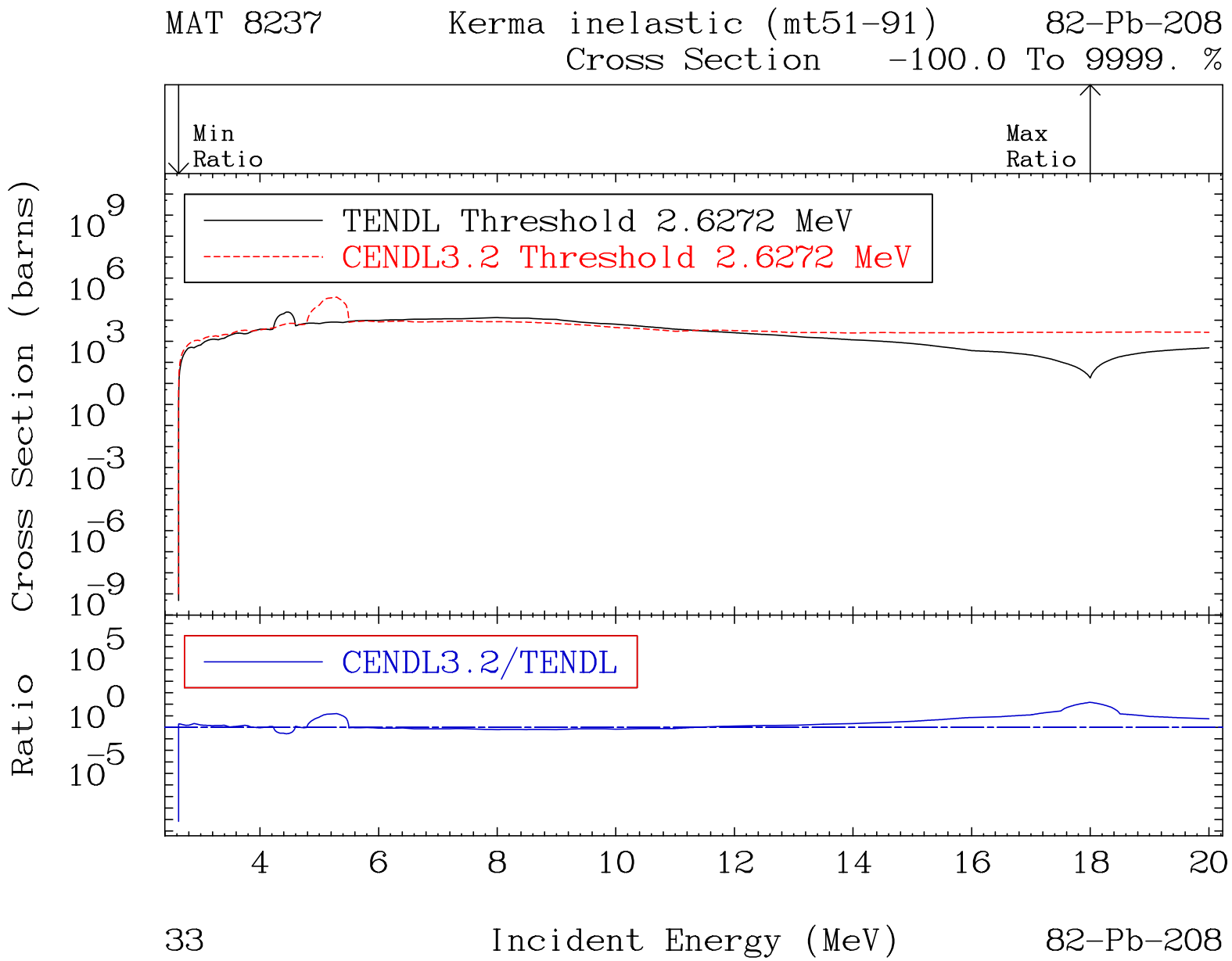

MAT 8237
Tritium Production
Cross Section
82-Pb-208
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.4046 MeV
CENDL3.2 Threshold 12.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
0
2
4
6
8
0
40
8
10
12
14
16
18
20
28
Incident Energy (MeV)
82-Pb-208

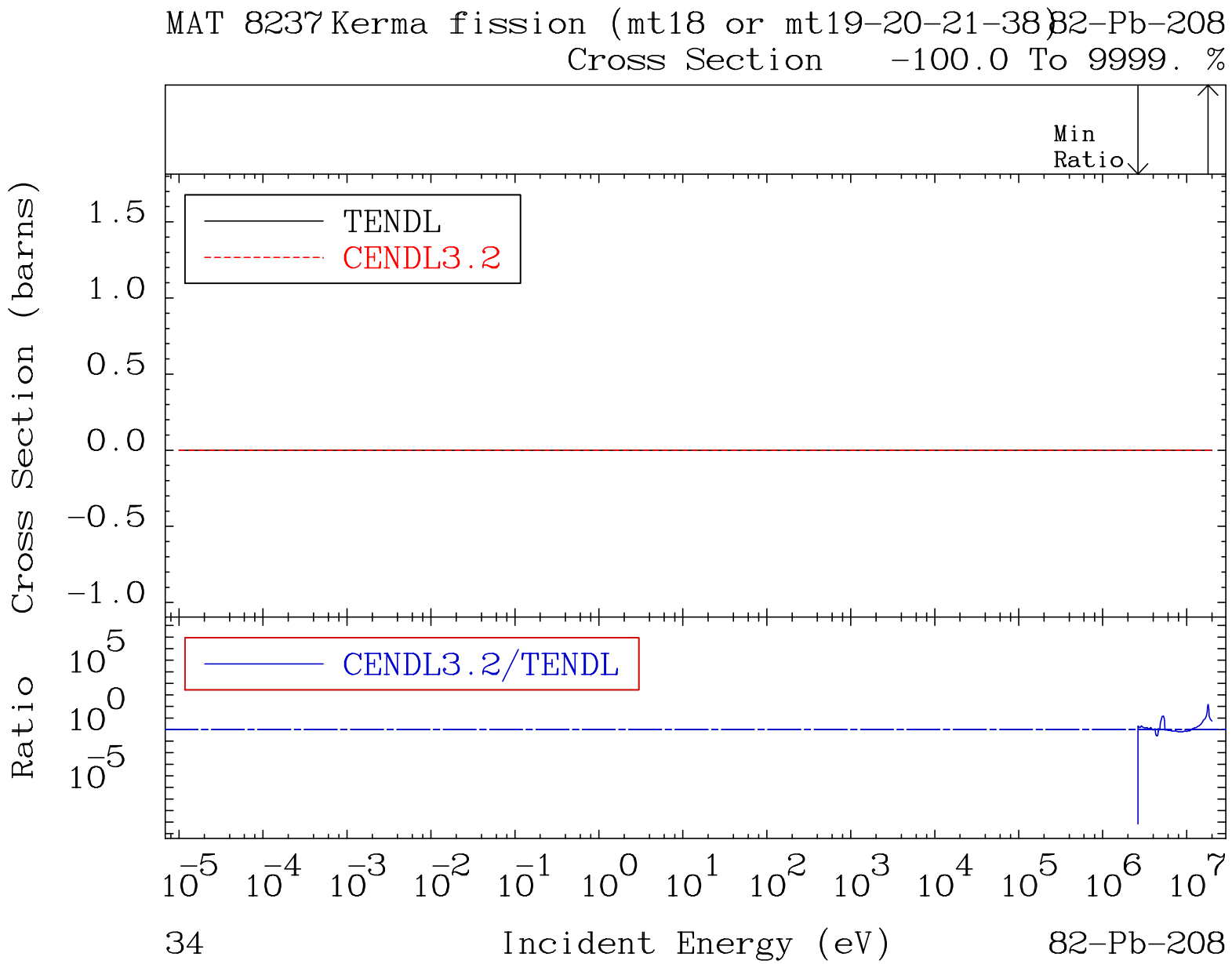

MAT 8237
He-4 Production
Cross Section
82-Pb-208
-100.0 To 3963. %
Min
Ratio
TENDL
CENDL3.2 Threshold 10.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
60
40
20
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7}
29
Incident Energy (eV)
82-Pb-208

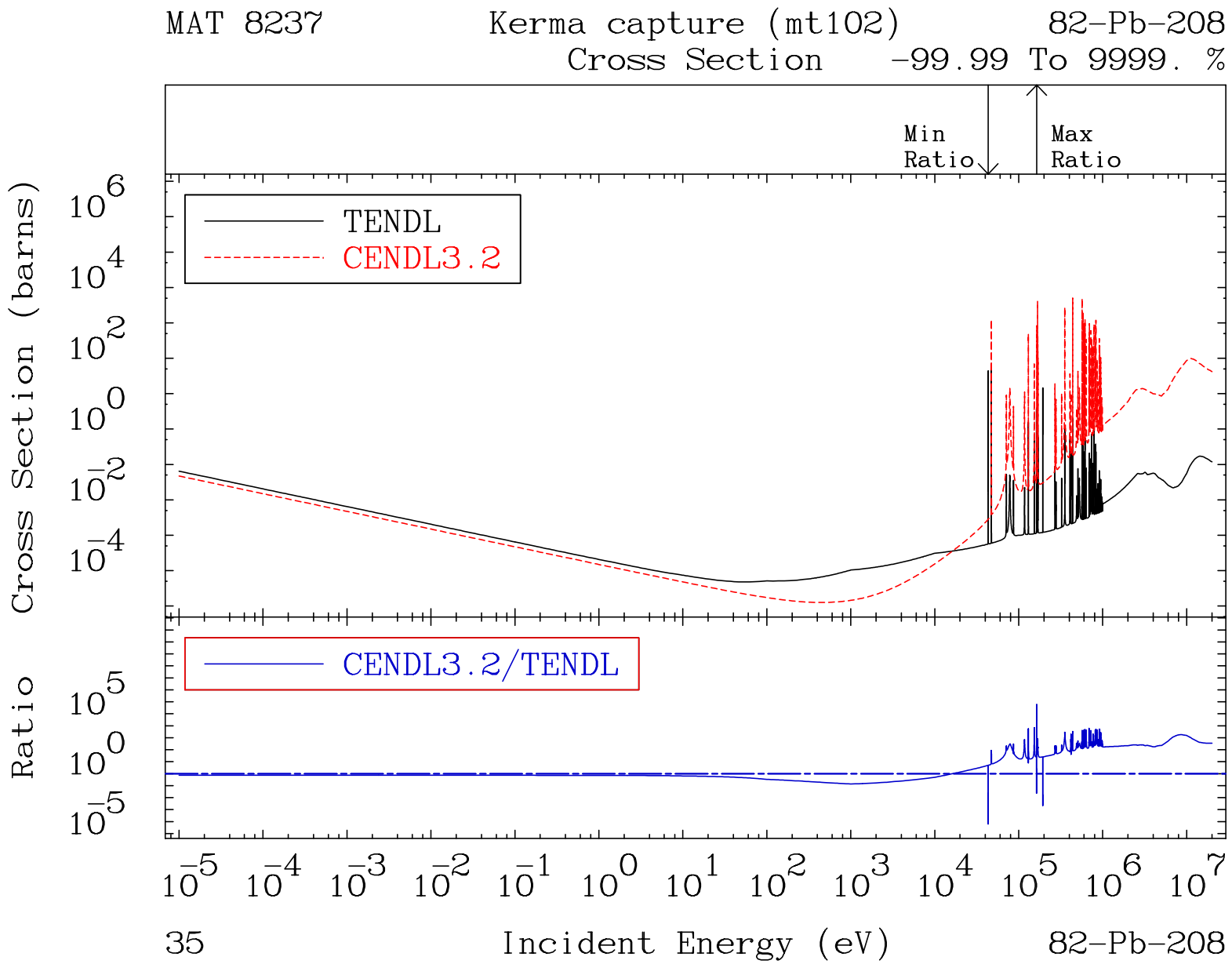

MAT 8237
Kerma total (eV-barns)
82-Pb-208
Cross Section -78.25 To 870.9 %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
82-Pb-208

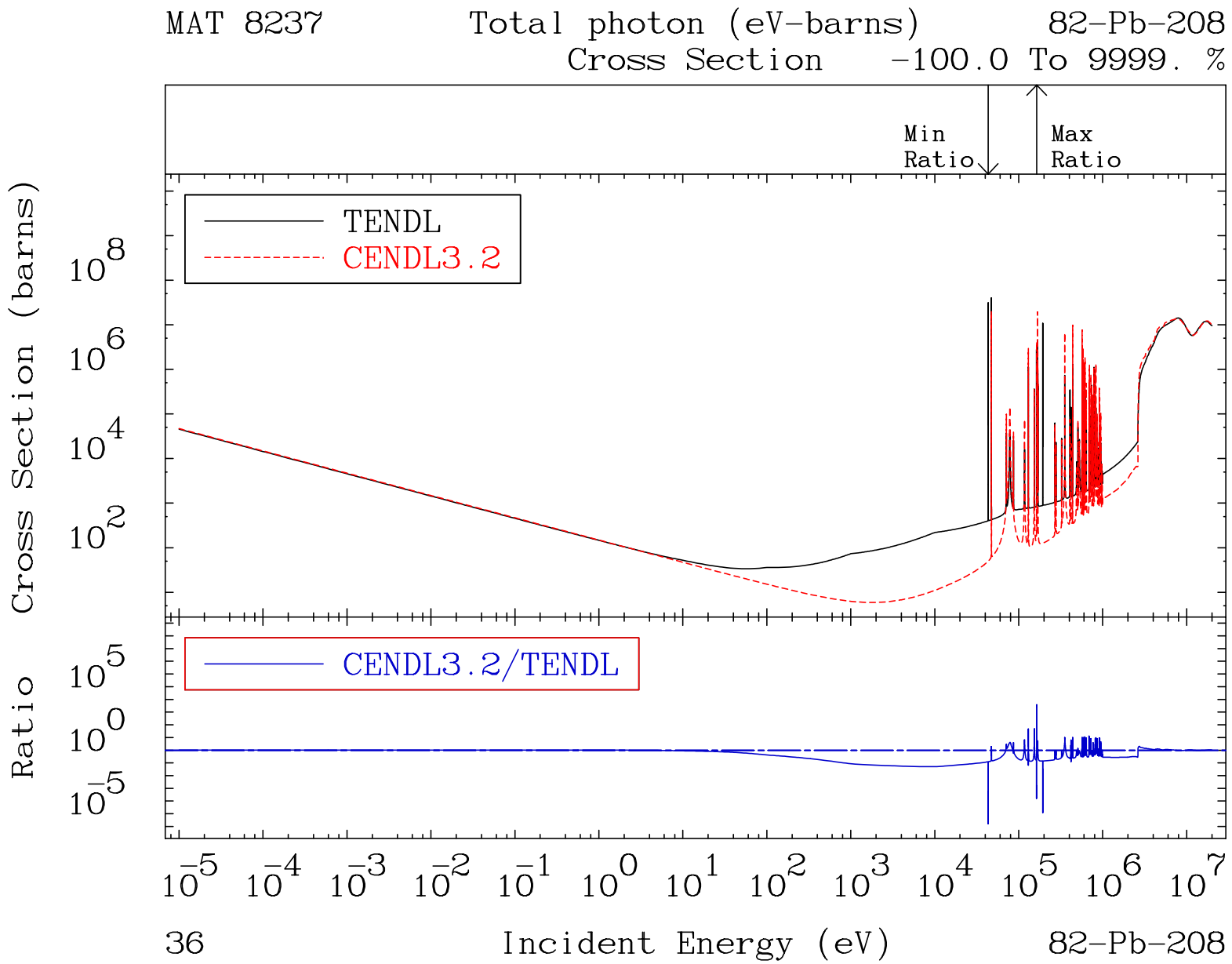

MAT 8237
Kerma elastic
Cross Section
82-Pb-208
-78.27 To 480.7 %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
82-Pb-208

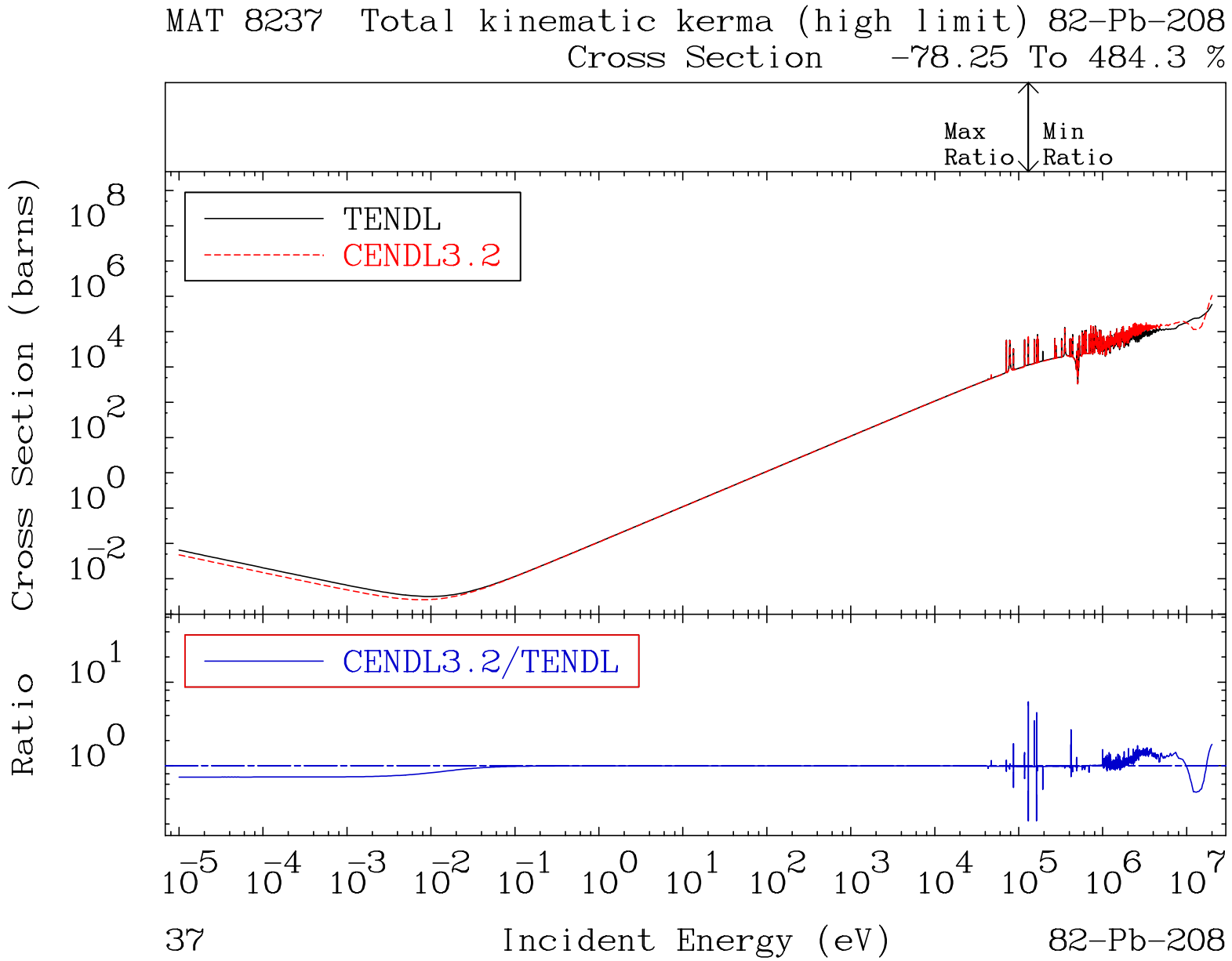

MAT 8237 Kerma non-elastic (all but mt2) 82-Pb-208
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
82-Pb-208

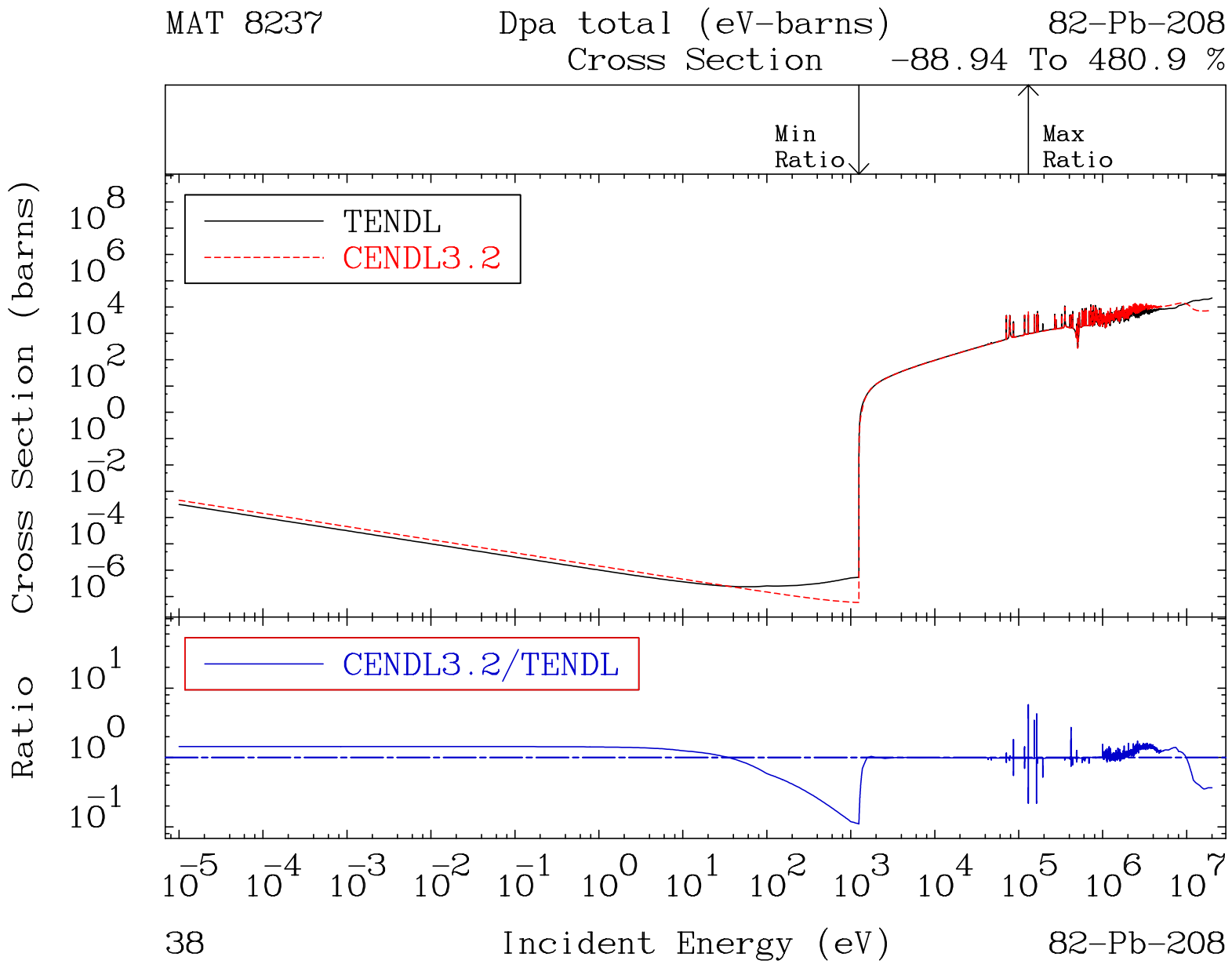

MAT 8237
Kerma inelastic (mt51-91)
82-Pb-208
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.6272 MeV
CENDL3.2 Threshold 2.6272 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
10^9
10^6
10^3
10^0
10^-3
10^-6
10^-9
10^5
10^0
10^-5
4
6
8
10
12
14
16
18
20
33
Incident Energy (MeV)
82-Pb-208

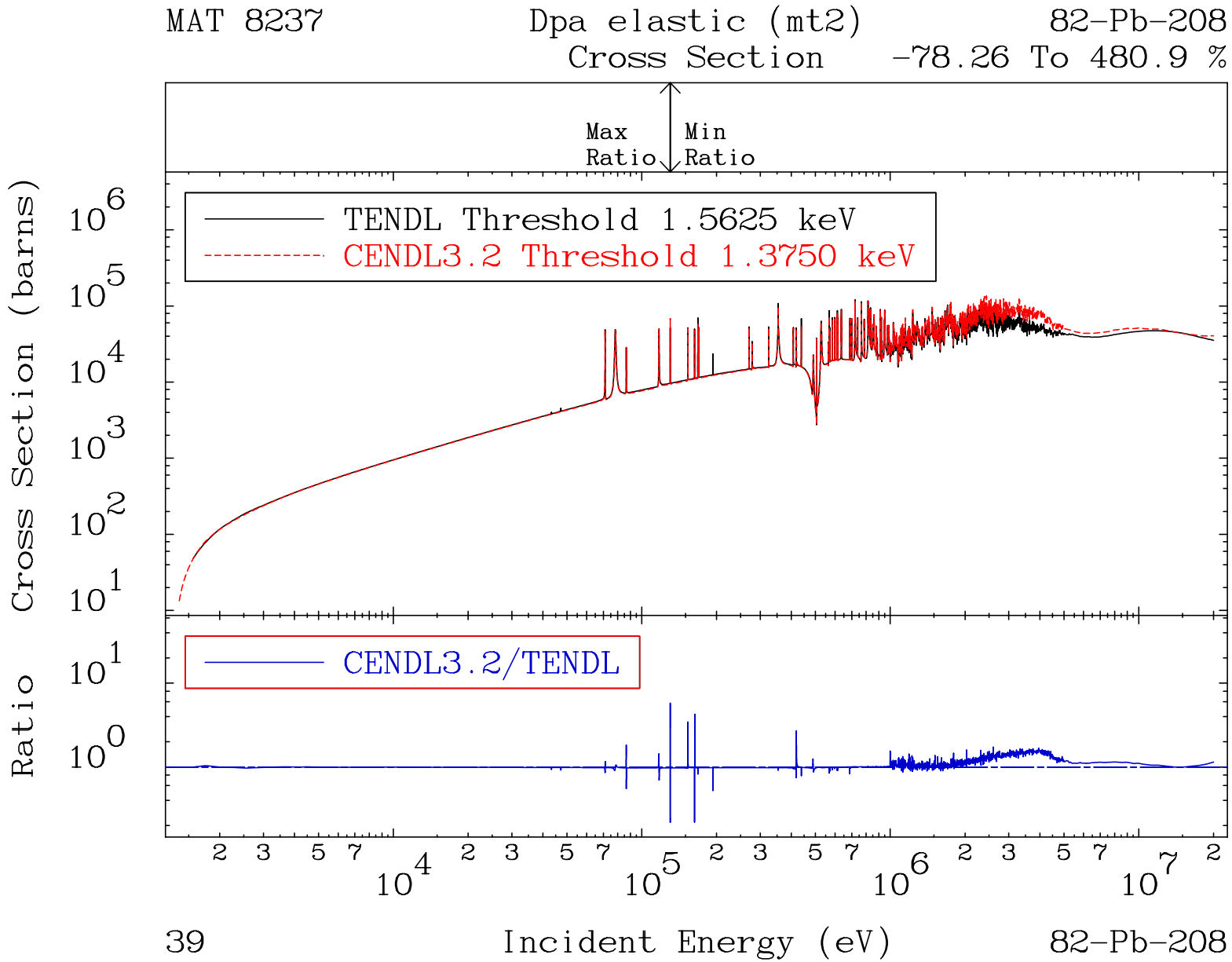

MAT 8237 Kerma fission (mt18 or mt19-20-21-38) 82-Pb-208
Cross Section -100.0 To 9999. %
Min
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7}
34
Incident Energy (eV)
82-Pb-208

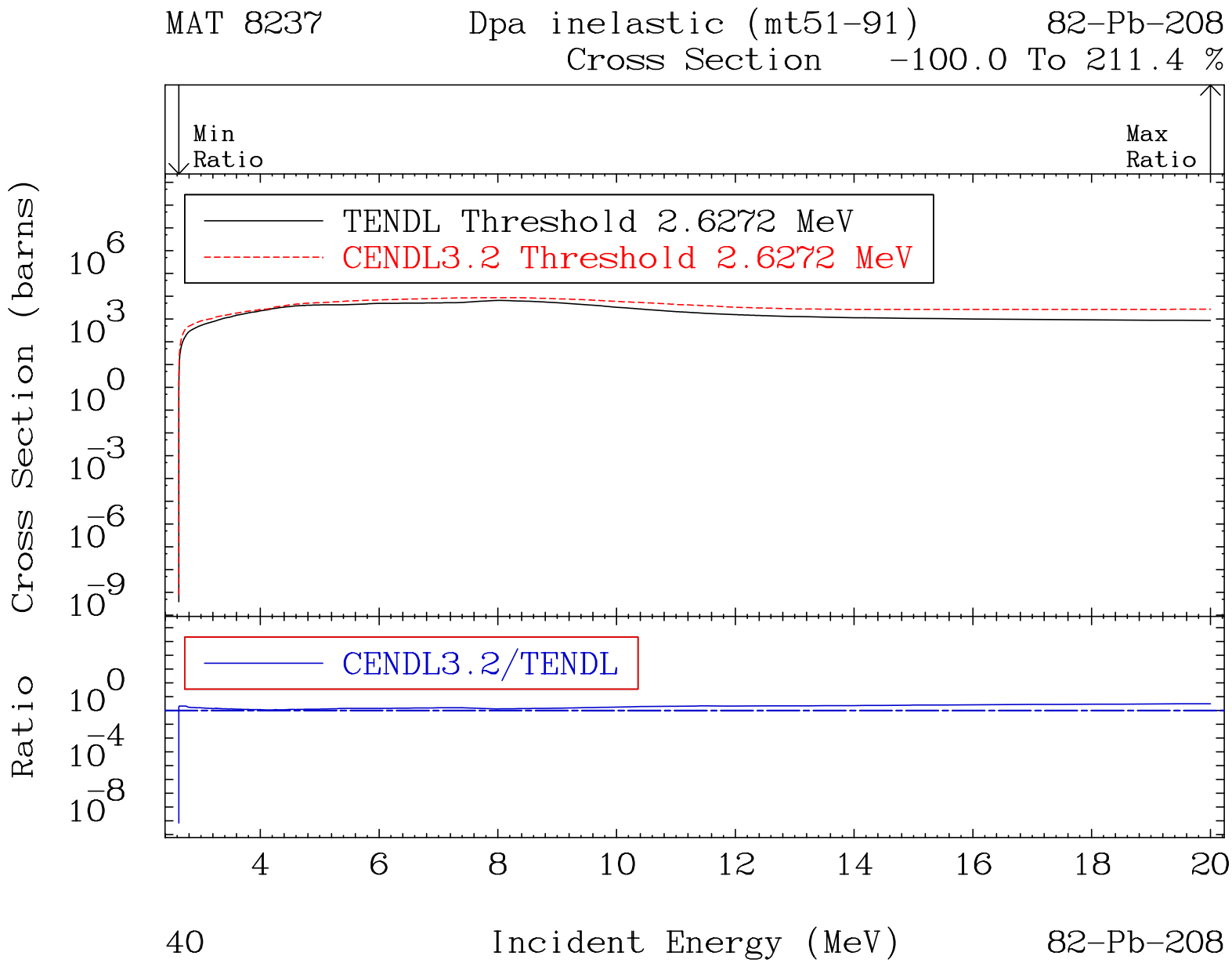

MAT 8237
Kerma capture (mt102)
82-Pb-208
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
82-Pb-208

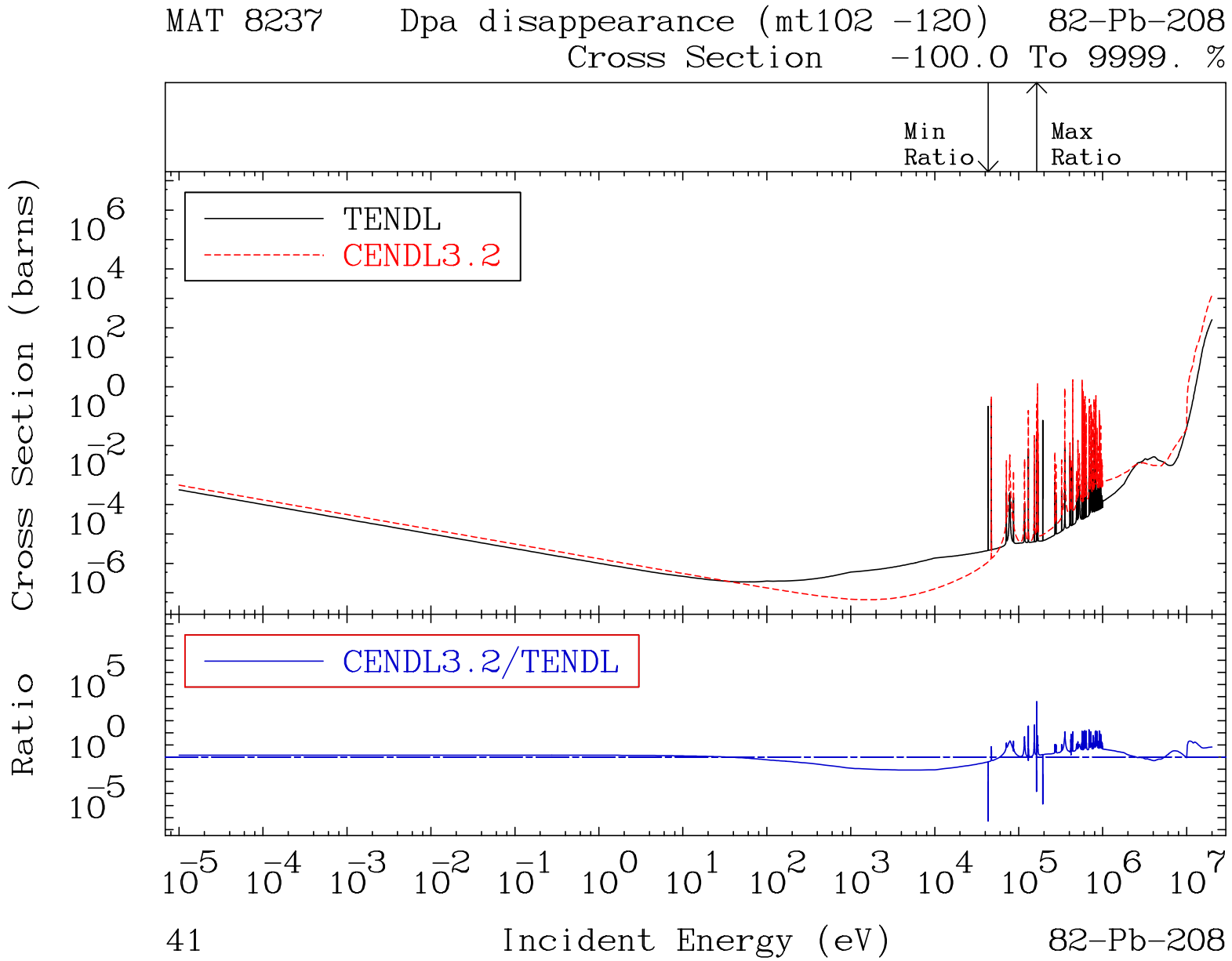

MAT 8237
Total photon (eV-barns)
82-Pb-208
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
82-Pb-208

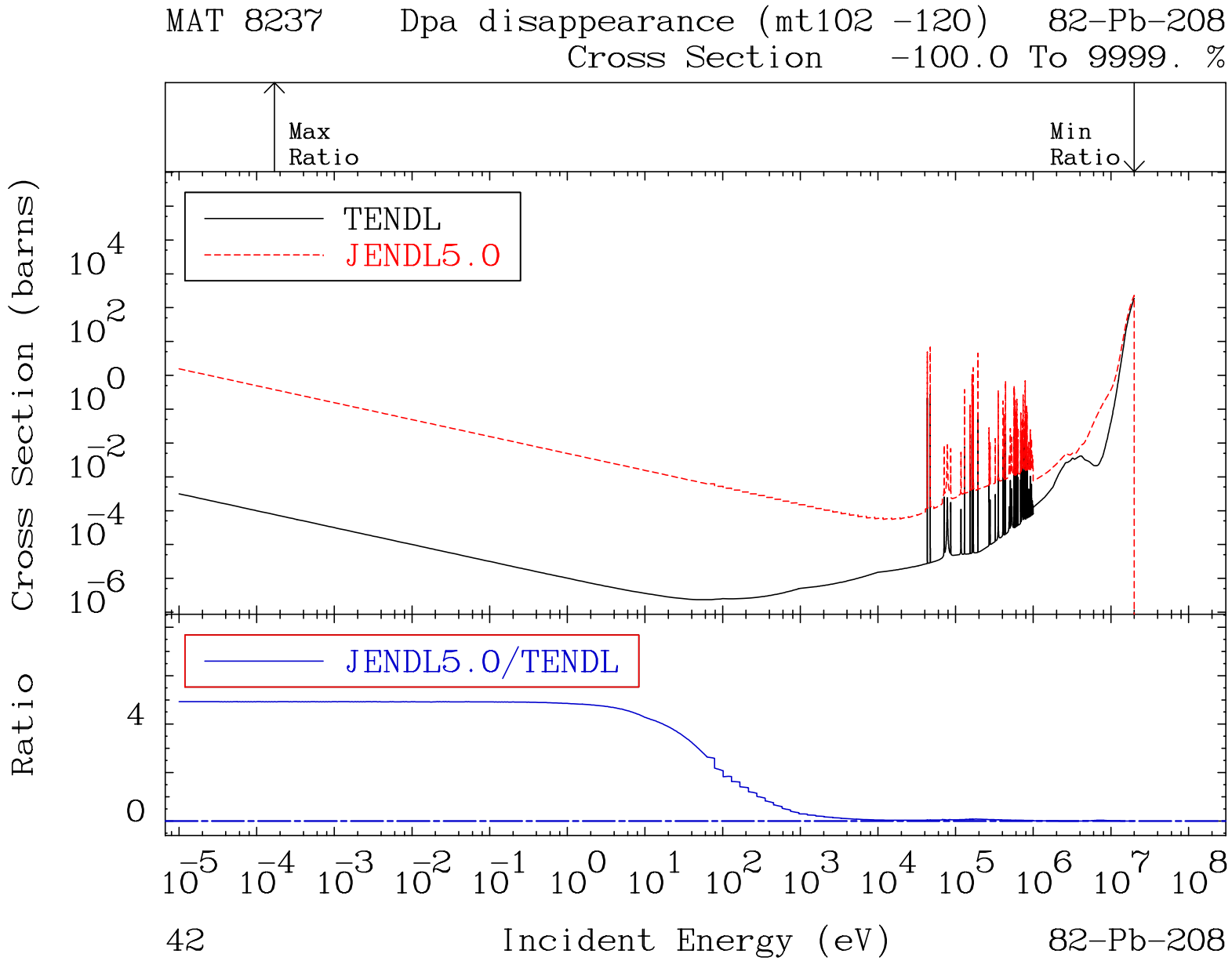

MAT 8237 Total kinematic kerma (high limit) 82-Pb-208
Cross Section -78.25 To 484.3 %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
82-Pb-208

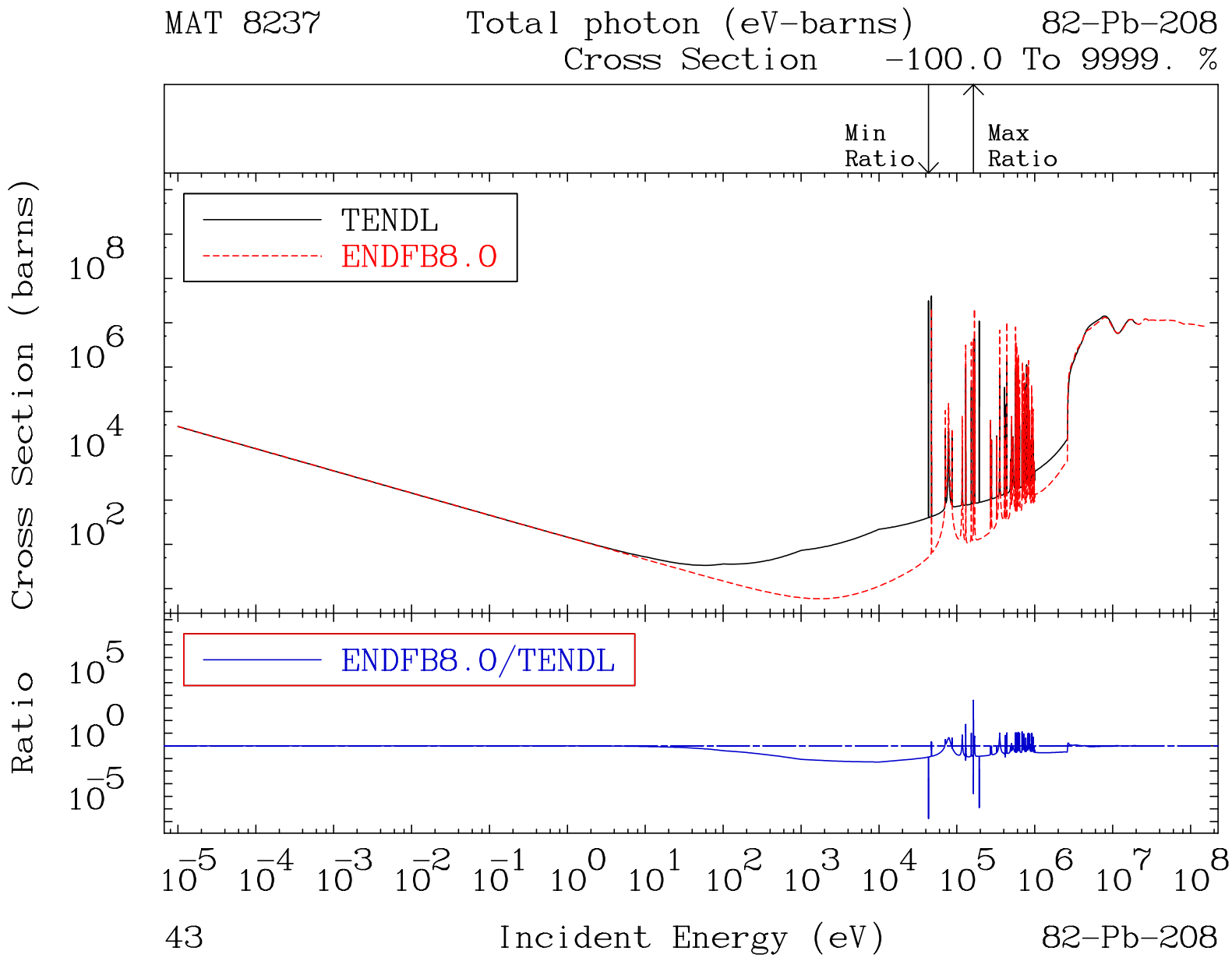

MAT 8237
Dpa total (eV-barns)
82-Pb-208
Cross Section
-88.94 To 480.9 %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
82-Pb-208

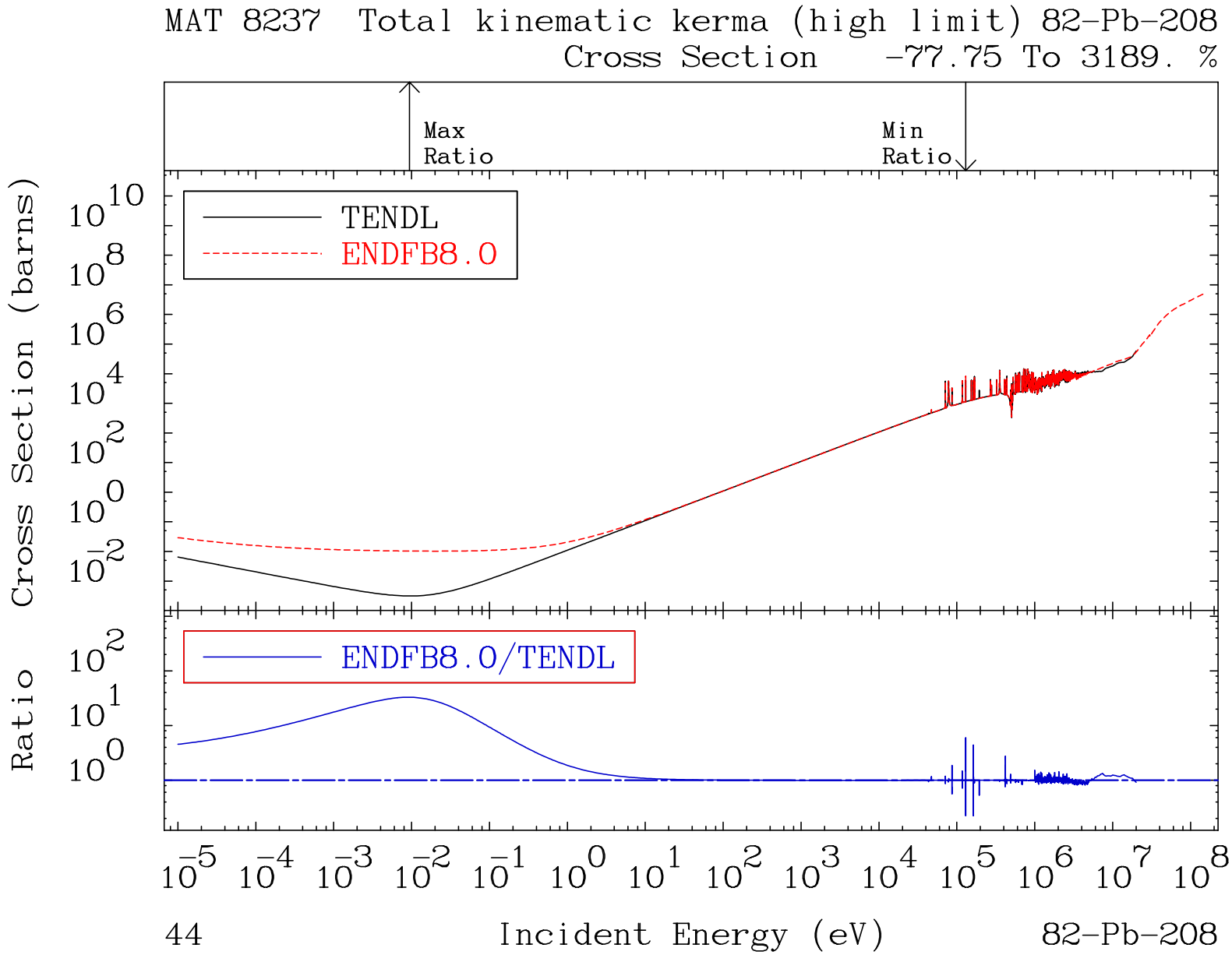

MAT 8237
Dpa elastic (mt2)
Cross Section
82-Pb-208
-78.26 To 480.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.5625 keV
CENDL3.2 Threshold 1.3750 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
82-Pb-208

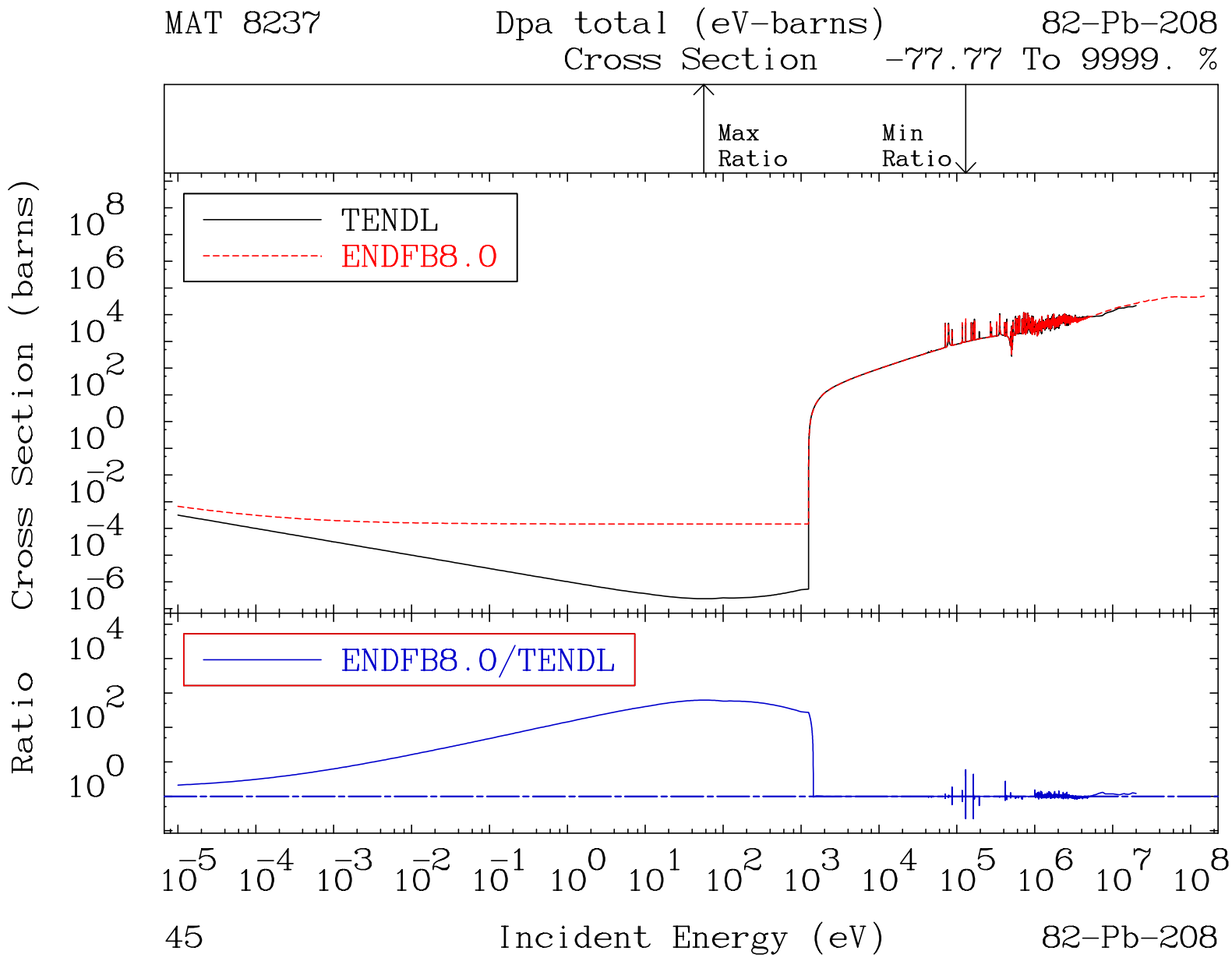

MAT 8237
Dpa inelastic (mt51-91)
82-Pb-208
Cross Section
-100.0 To 211.4 %
Min Ratio
Max Ratio
TENDL Threshold 2.6272 MeV
CENDL3.2 Threshold 2.6272 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
10^6
10^3
10^0
10^-3
10^-6
10^-9
10^0
10^-4
10^-8
4
6
8
10
12
14
16
18
20
40
Incident Energy (MeV)
82-Pb-208

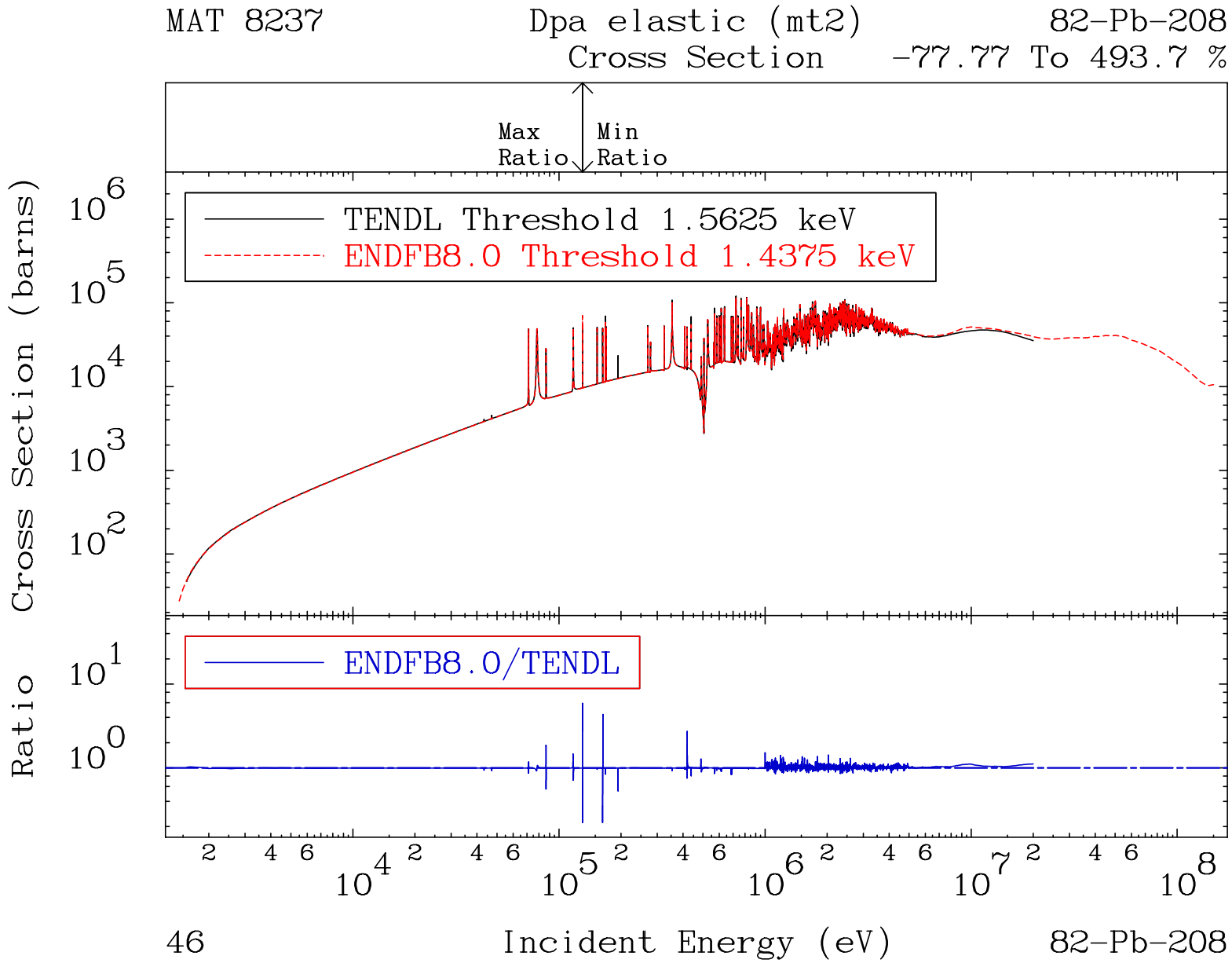

MAT 8237 Dpa disappearance (mt102 -120) 82-Pb-208
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
41
82-Pb-208

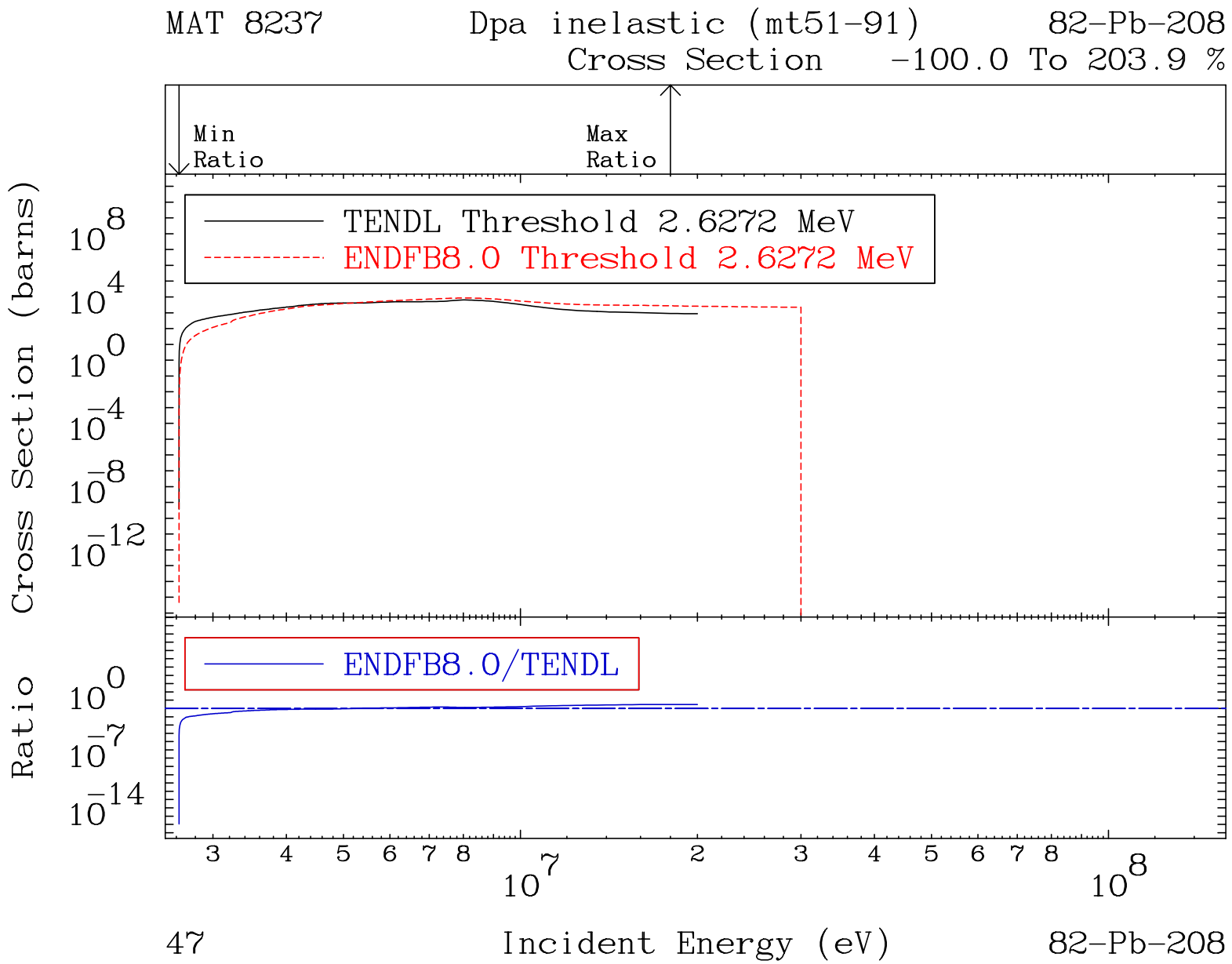

MAT 8237 Dpa disappearance (mt102 -120) 82-Pb-208
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
42
82-Pb-208

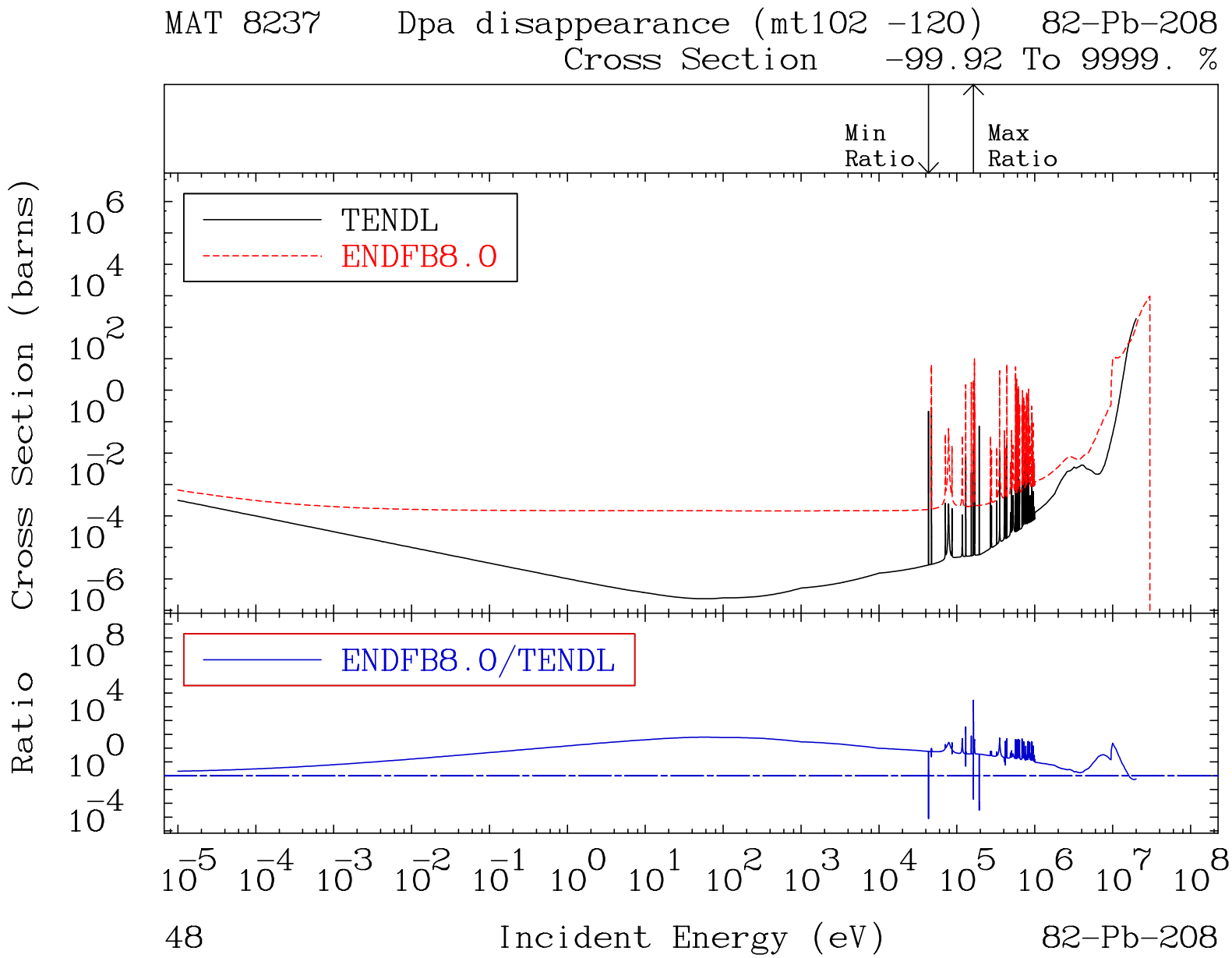

MAT 8237
Total photon (eV-barns)
82-Pb-208
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
82-Pb-208


MAT 8237 Total kinematic kerma (high limit) 82-Pb-208
Cross Section -77.75 To 3189. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
82-Pb-208


MAT 8237
Dpa total (eV-barns)
82-Pb-208
Cross Section -77.77 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
82-Pb-208


MAT 8237
Dpa elastic (mt2)
Cross Section
82-Pb-208
-77.77 To 493.7 %
Max Ratio
Min Ratio
TENDL Threshold 1.5625 keV
ENDFB8.0 Threshold 1.4375 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
82-Pb-208


MAT 8237
Dpa inelastic (mt51-91)
82-Pb-208
Cross Section -100.0 To 203.9 %
Min Ratio
Max Ratio
TENDL Threshold 2.6272 MeV
ENDFB8.0 Threshold 2.6272 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
82-Pb-208


MAT 8237 Dpa disappearance (mt102 -120) 82-Pb-208
Cross Section -99.92 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
82-Pb-208