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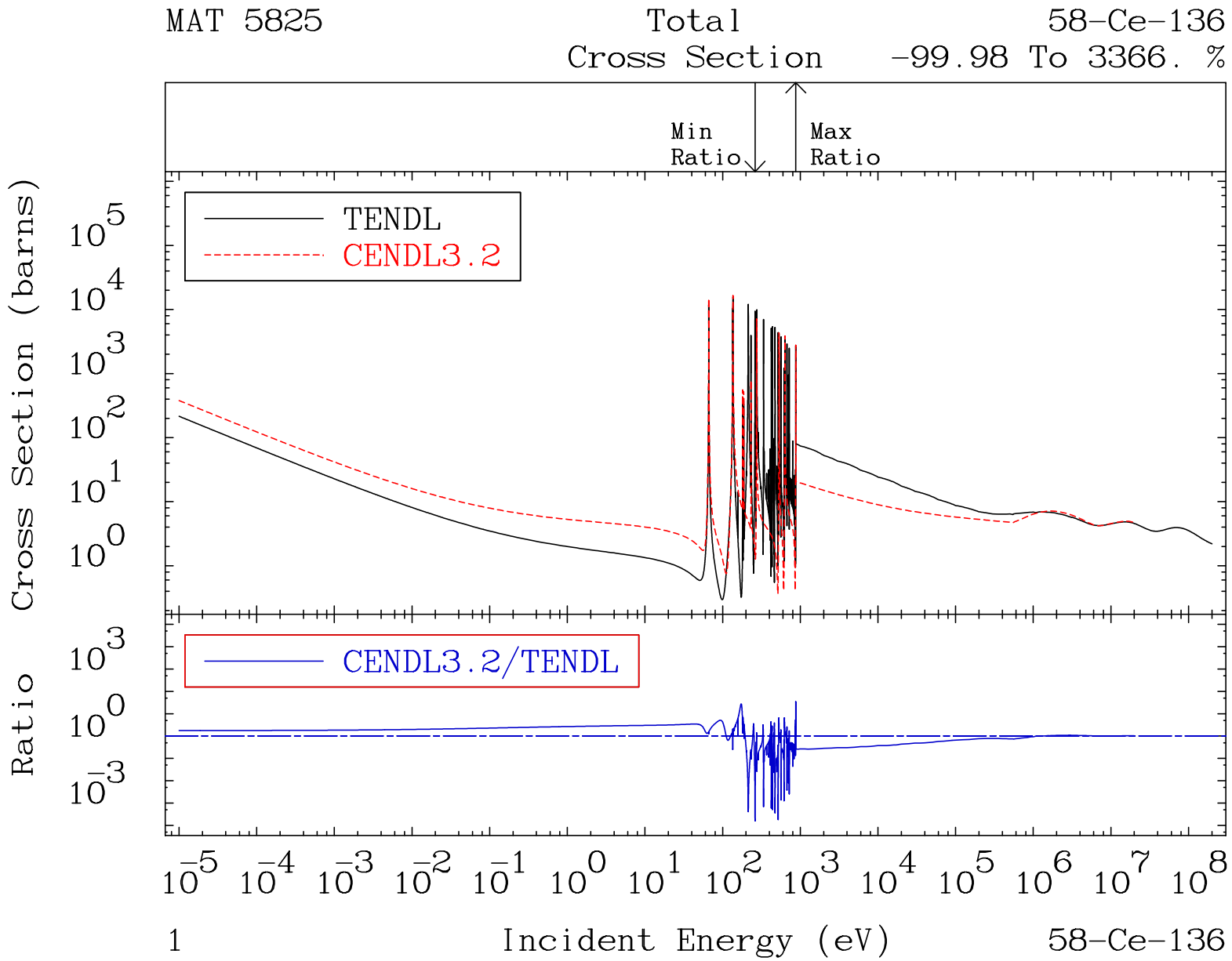
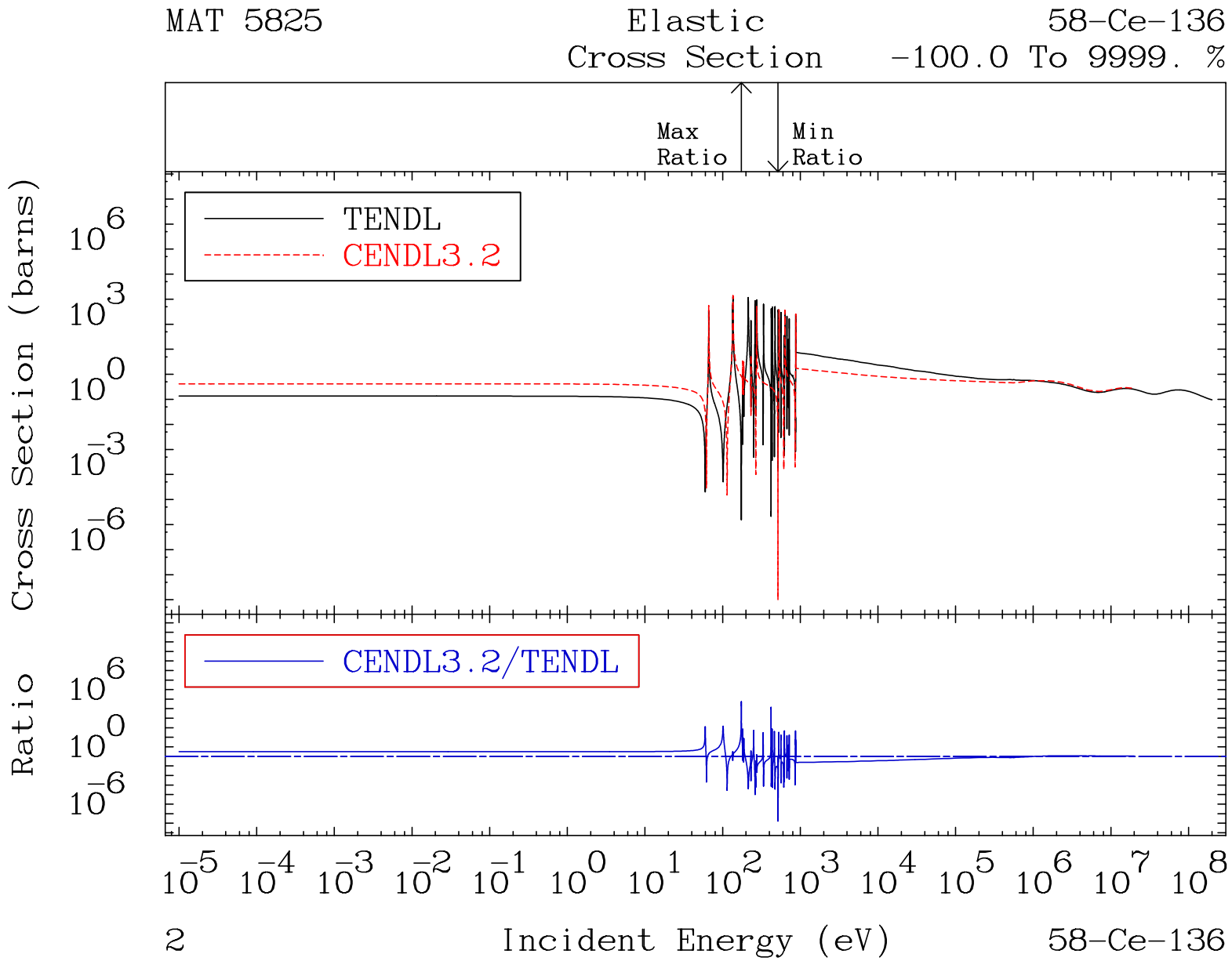
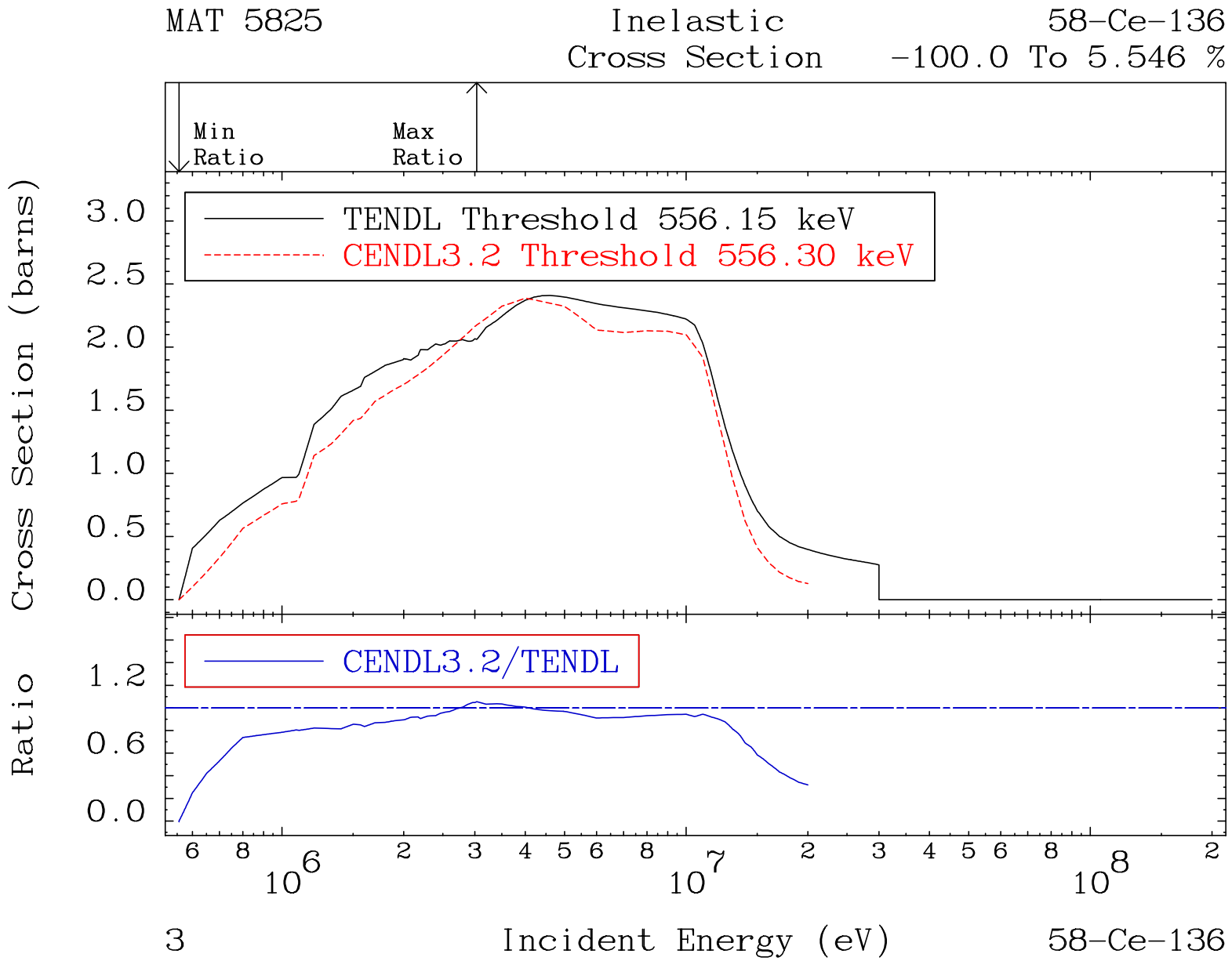
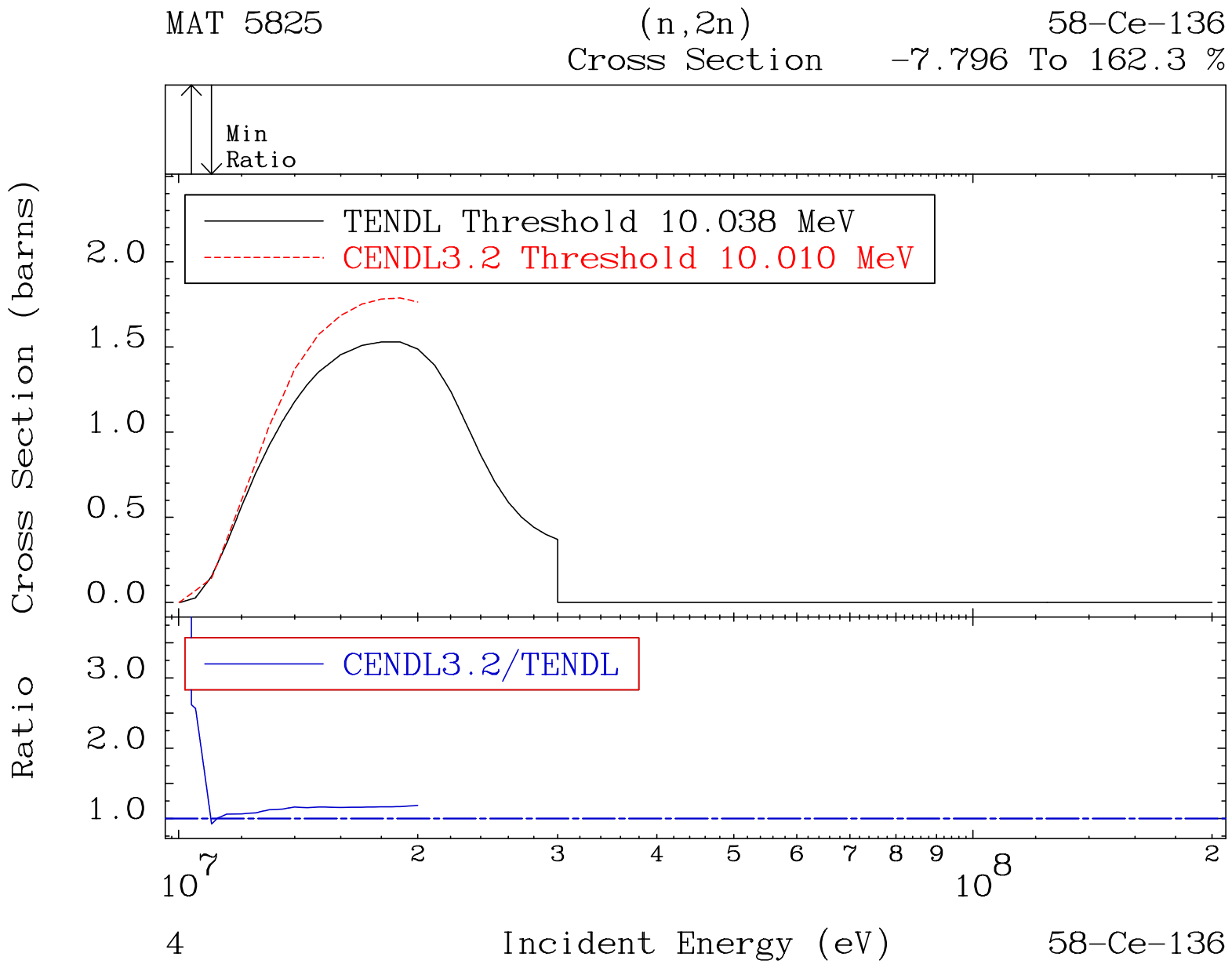
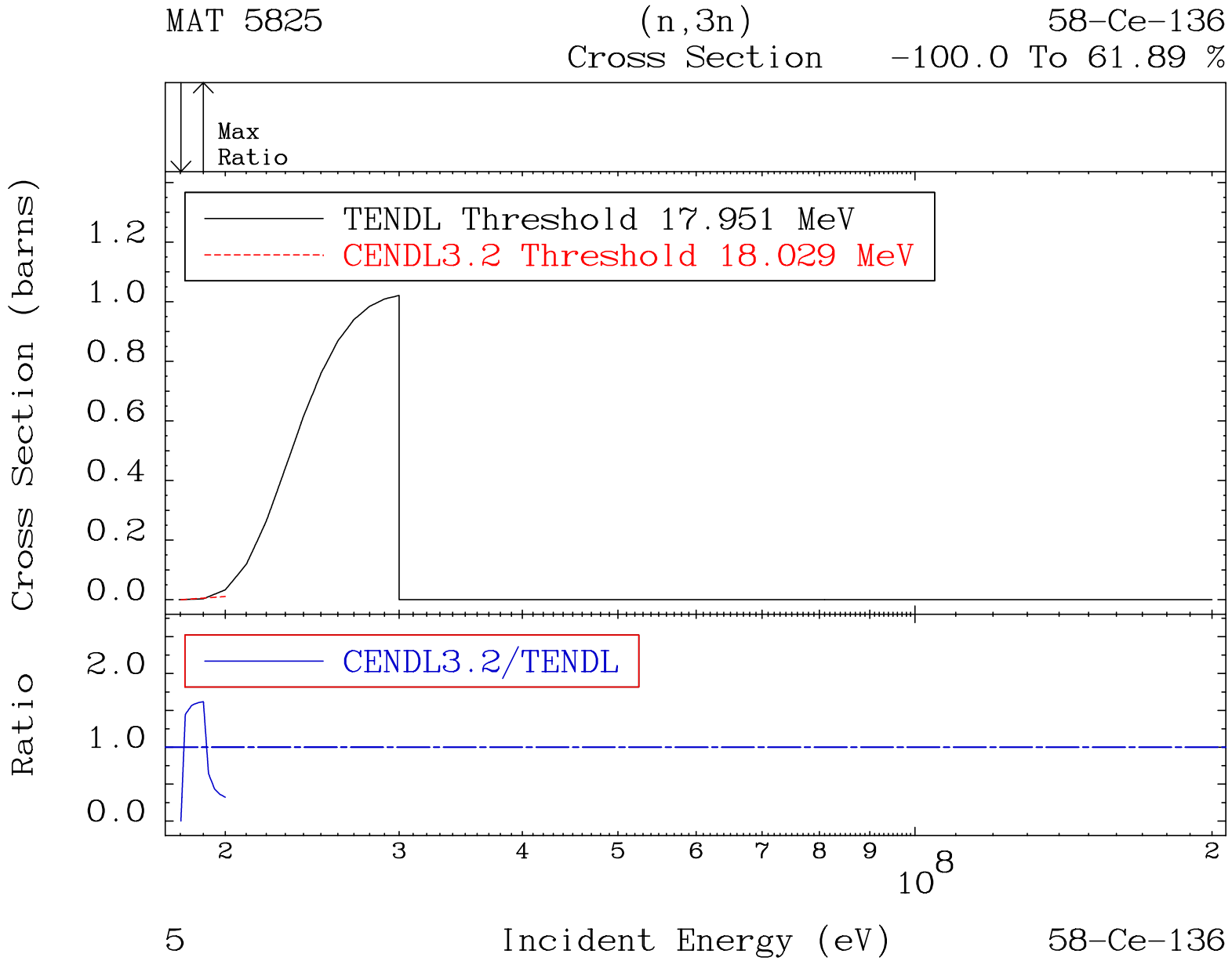
Press Mouse Button to Start

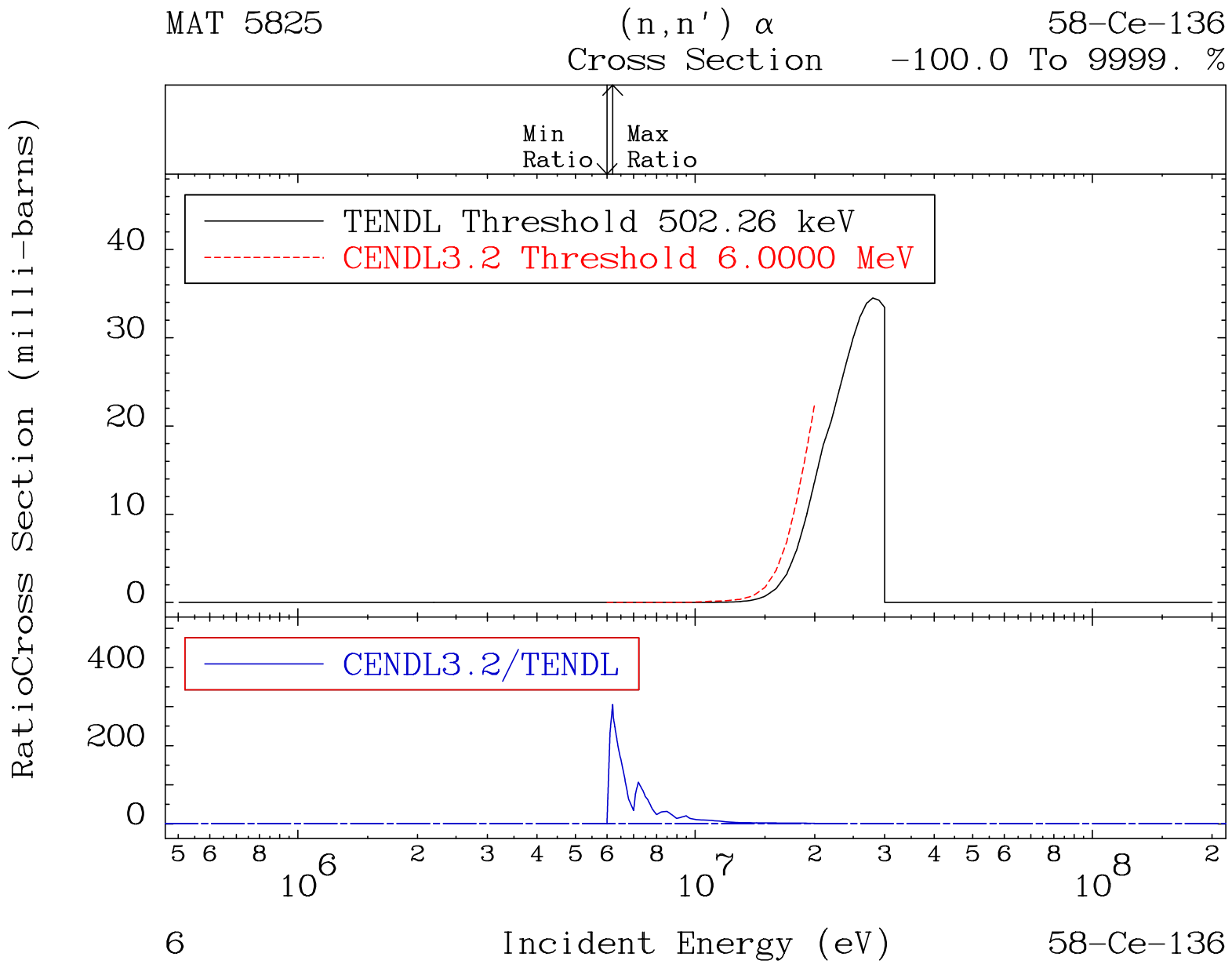

MAT 5825
Total
Cross Section
58-Ce-136
-99.98 To 3366. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
58-Ce-136

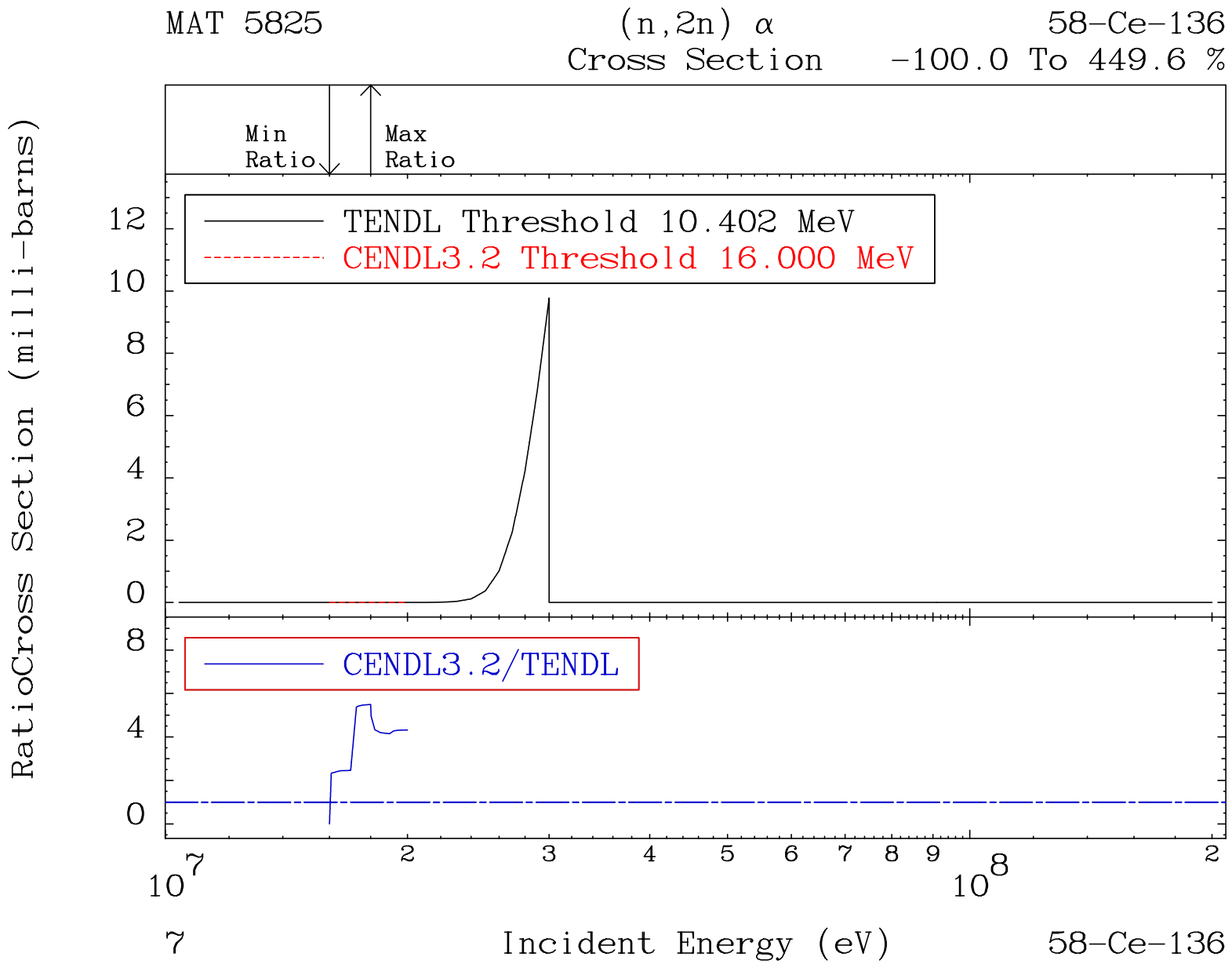

MAT 5825
Elastic
Cross Section
58-Ce-136
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
58-Ce-136

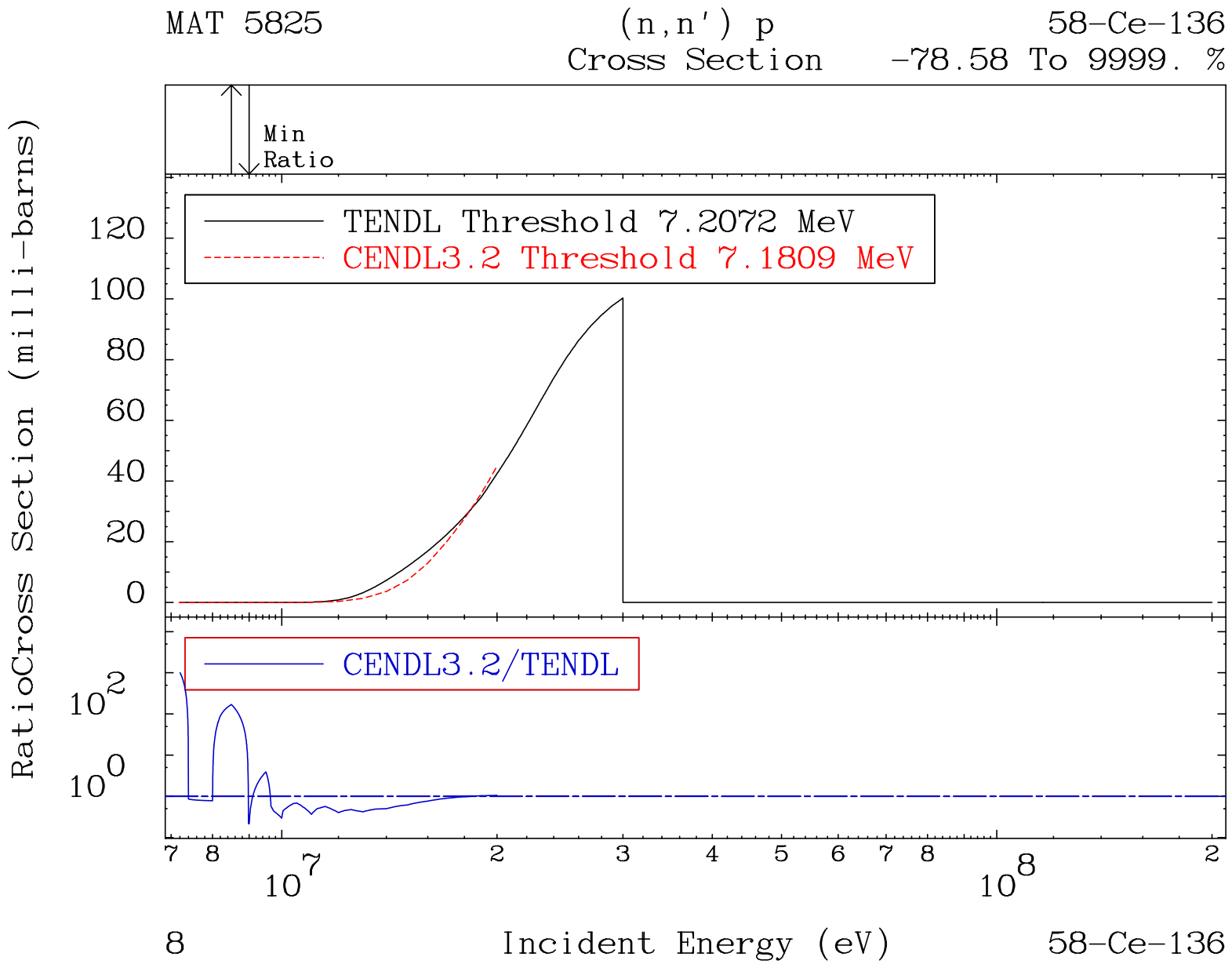

MAT 5825
Inelastic
Cross Section
58-Ce-136
-100.0 To 5.546 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
CENDL3.2 Threshold 556.30 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
58-Ce-136

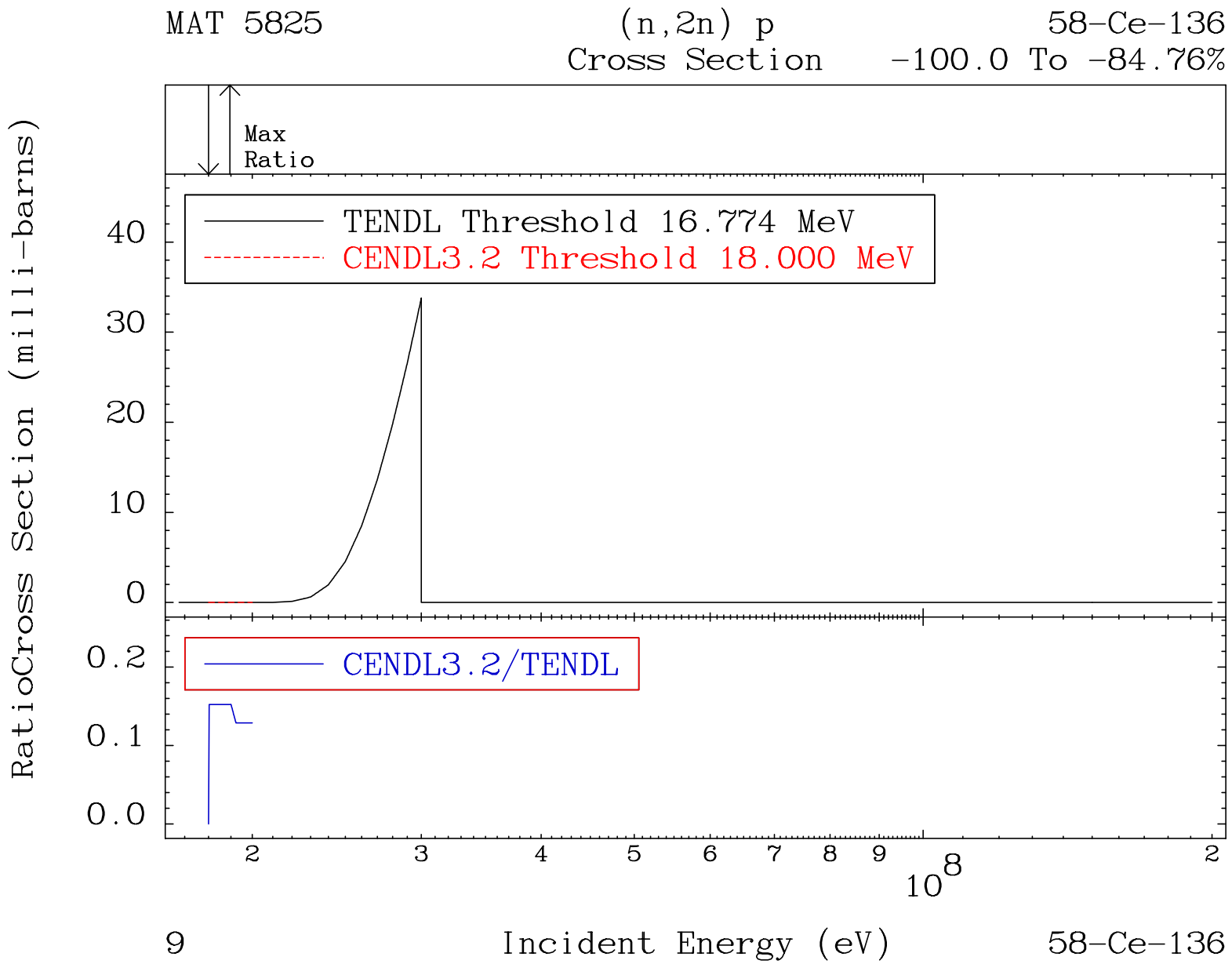

MAT 5825
(n,2n)
Cross Section
58-Ce-136
-7.796 To 162.3 %
Min
Ratio
TENDL Threshold 10.038 MeV
CENDL3.2 Threshold 10.010 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
4
58-Ce-136

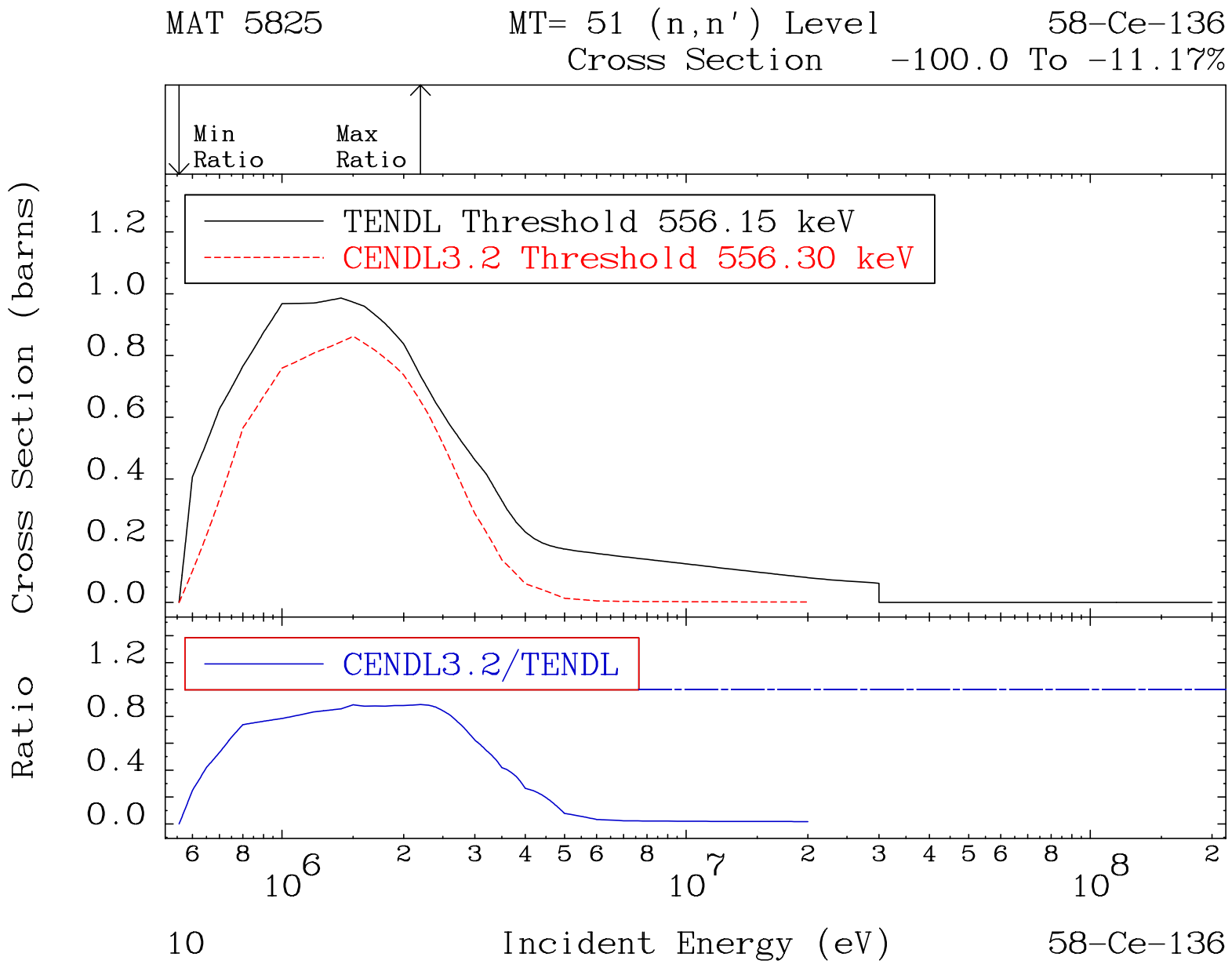

MAT 5825
(n,3n)
Cross Section
58-Ce-136
-100.0 To 61.89 %
Max
Ratio
TENDL Threshold 17.951 MeV
CENDL3.2 Threshold 18.029 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
58-Ce-136

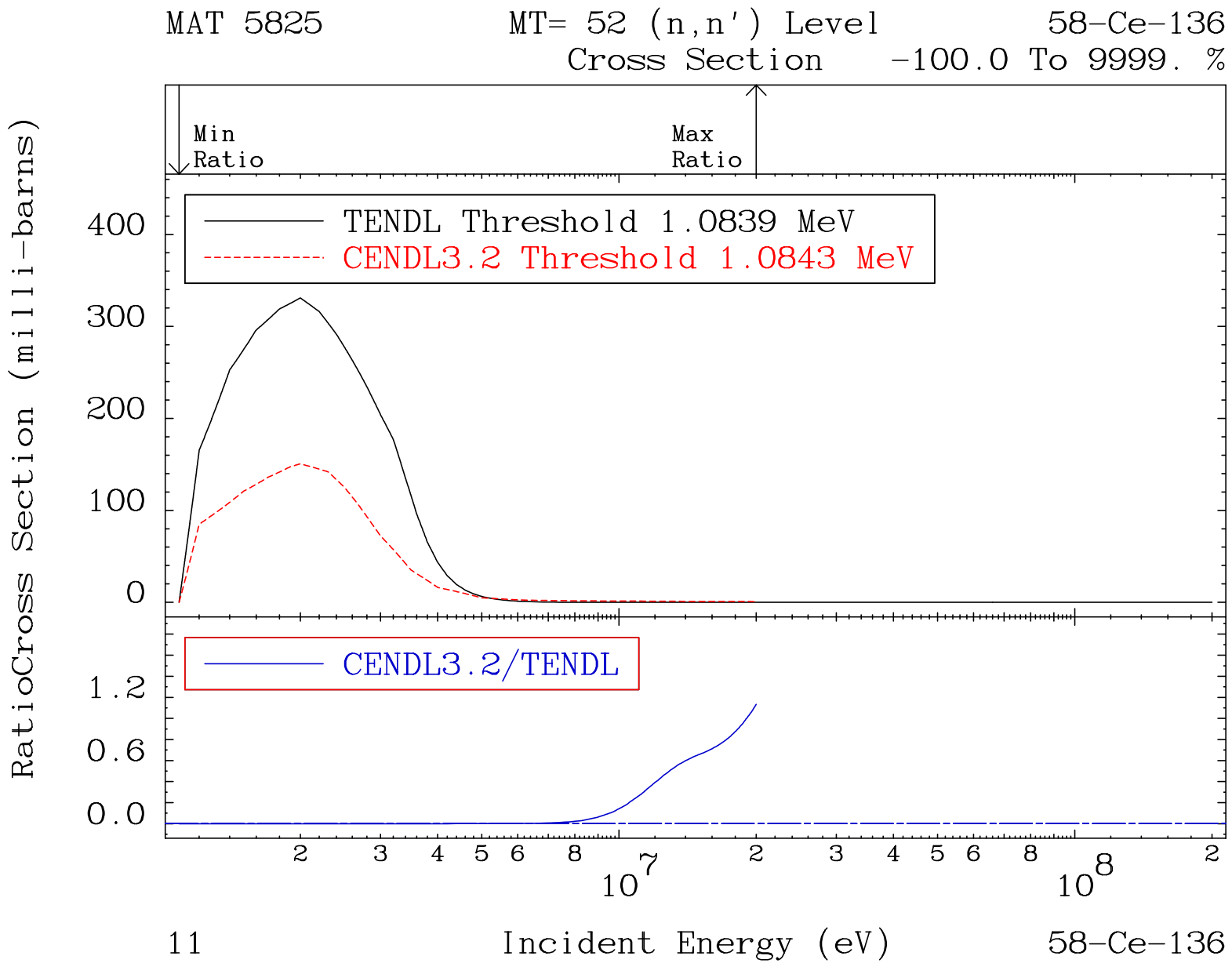

MAT 5825
(n,n') α
58-Ce-136
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 502.26 keV
CENDL3.2 Threshold 6.0000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
400
200
0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
6
Incident Energy (eV)
58-Ce-136

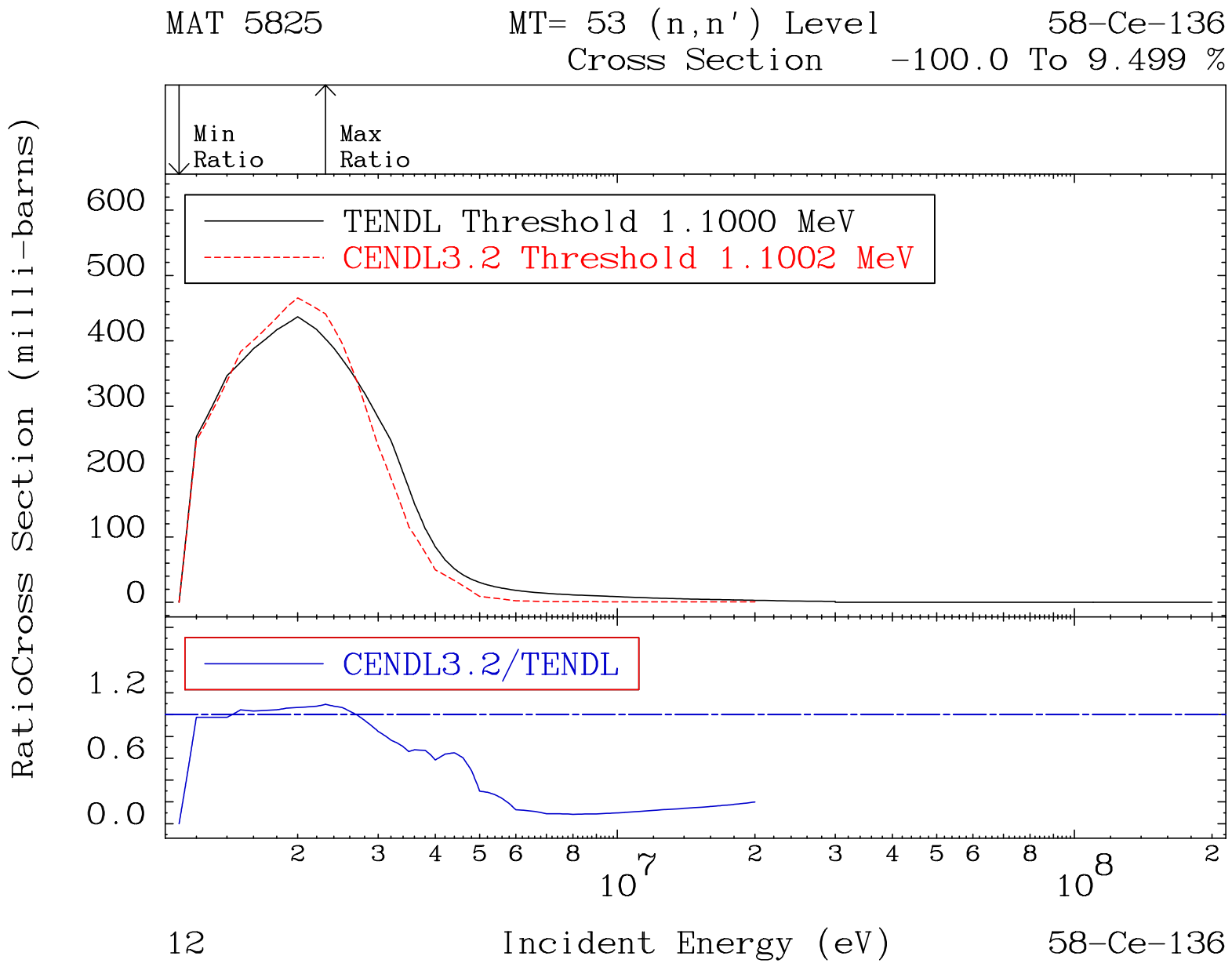

MAT 5825
(n,2n) α
Cross Section
58-Ce-136
-100.0 To 449.6 %
Min Ratio
Max Ratio
TENDL Threshold 10.402 MeV
CENDL3.2 Threshold 16.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
58-Ce-136

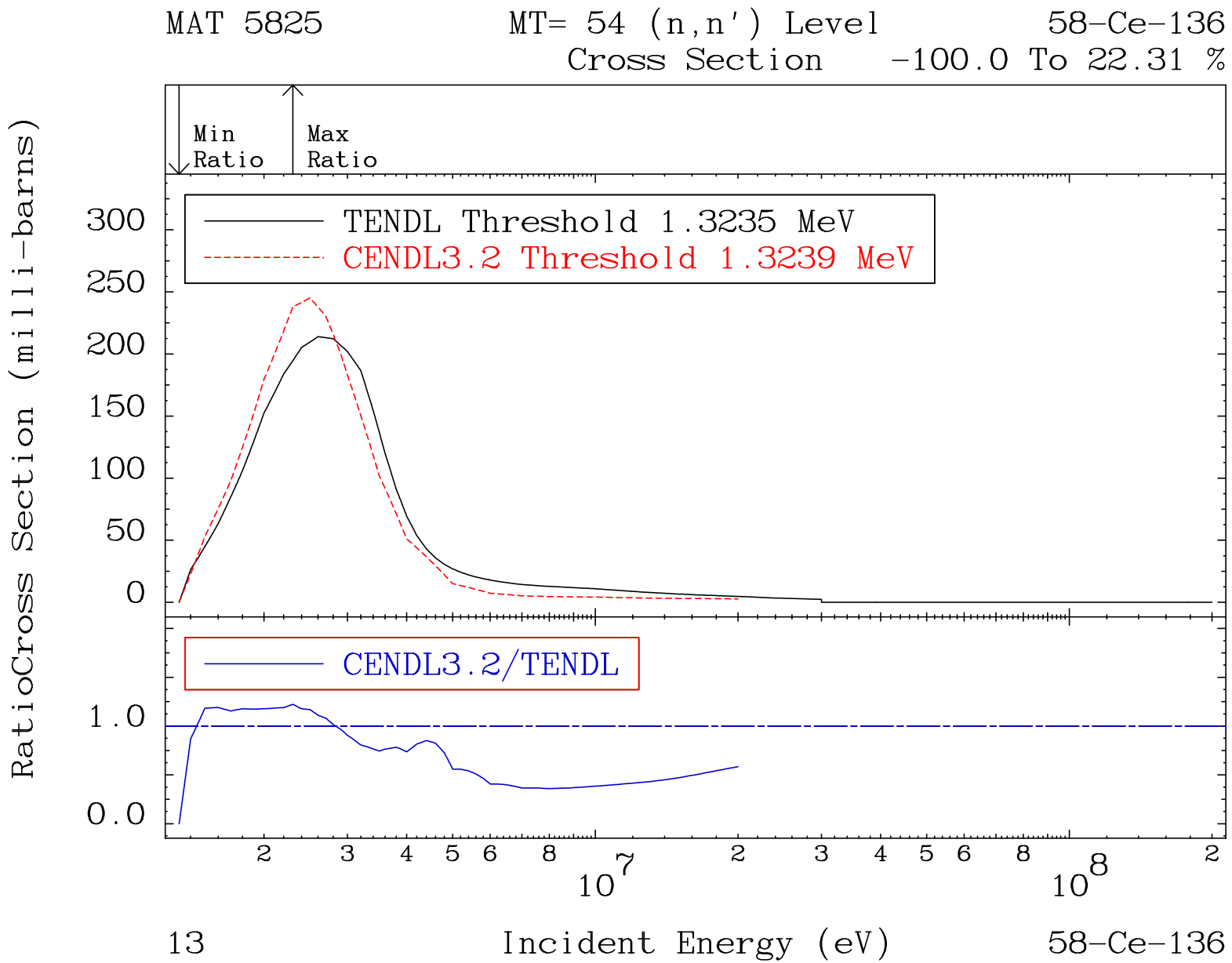

MAT 5825
(n,n') p
Cross Section
58-Ce-136
-78.58 To 9999. %
Min
Ratio
TENDL Threshold 7.2072 MeV
CENDL3.2 Threshold 7.1809 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^2
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
8
Incident Energy (eV)
58-Ce-136

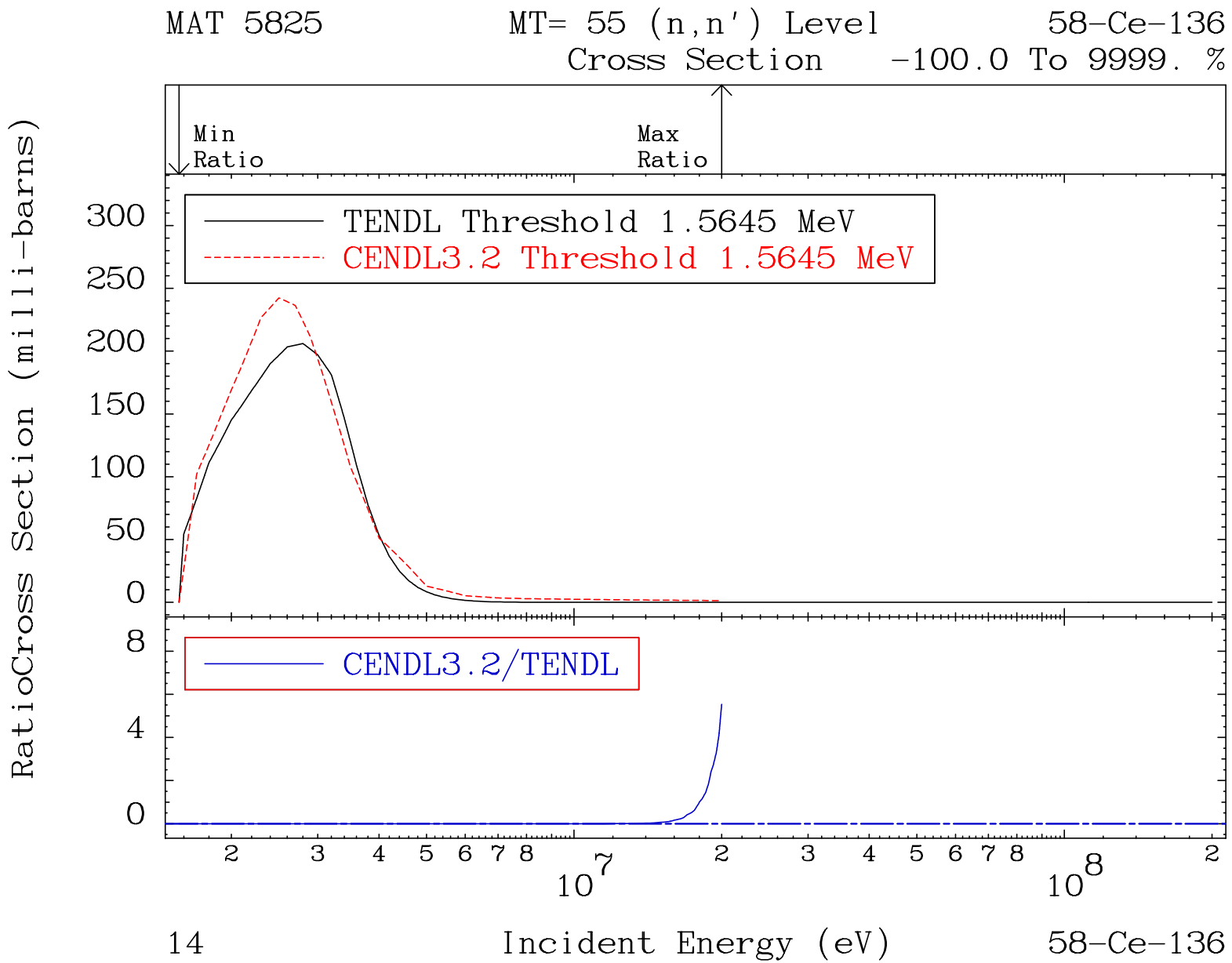

MAT 5825
(n,2n) p
Cross Section
58-Ce-136
-100.0 To -84.76%
Max
Ratio
TENDL Threshold 16.774 MeV
CENDL3.2 Threshold 18.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
0.2
0.1
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
58-Ce-136

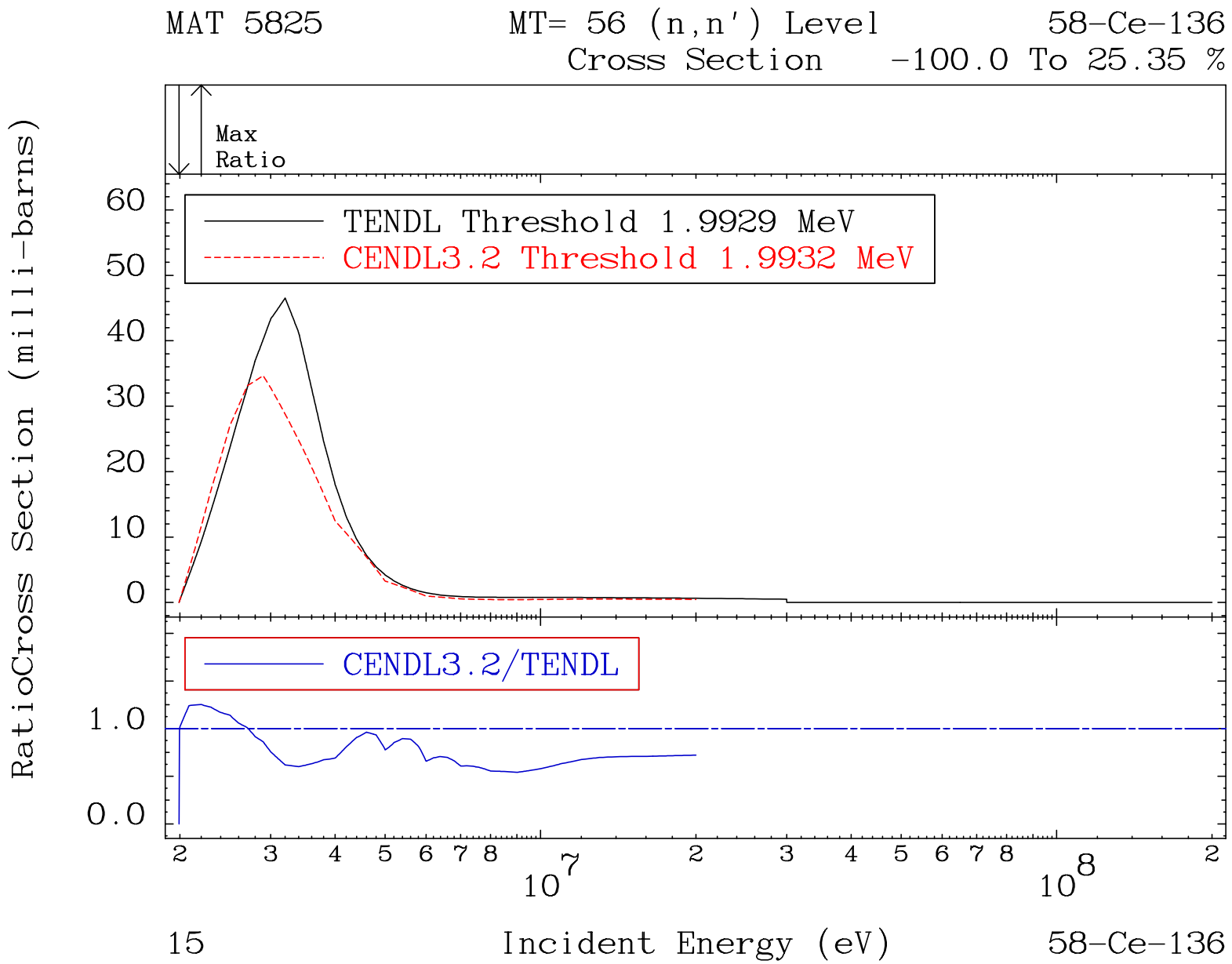

MAT 5825
MT= 51 (n,n') Level
58-Ce-136
Cross Section -100.0 To -11.17%
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
CENDL3.2 Threshold 556.30 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
58-Ce-136

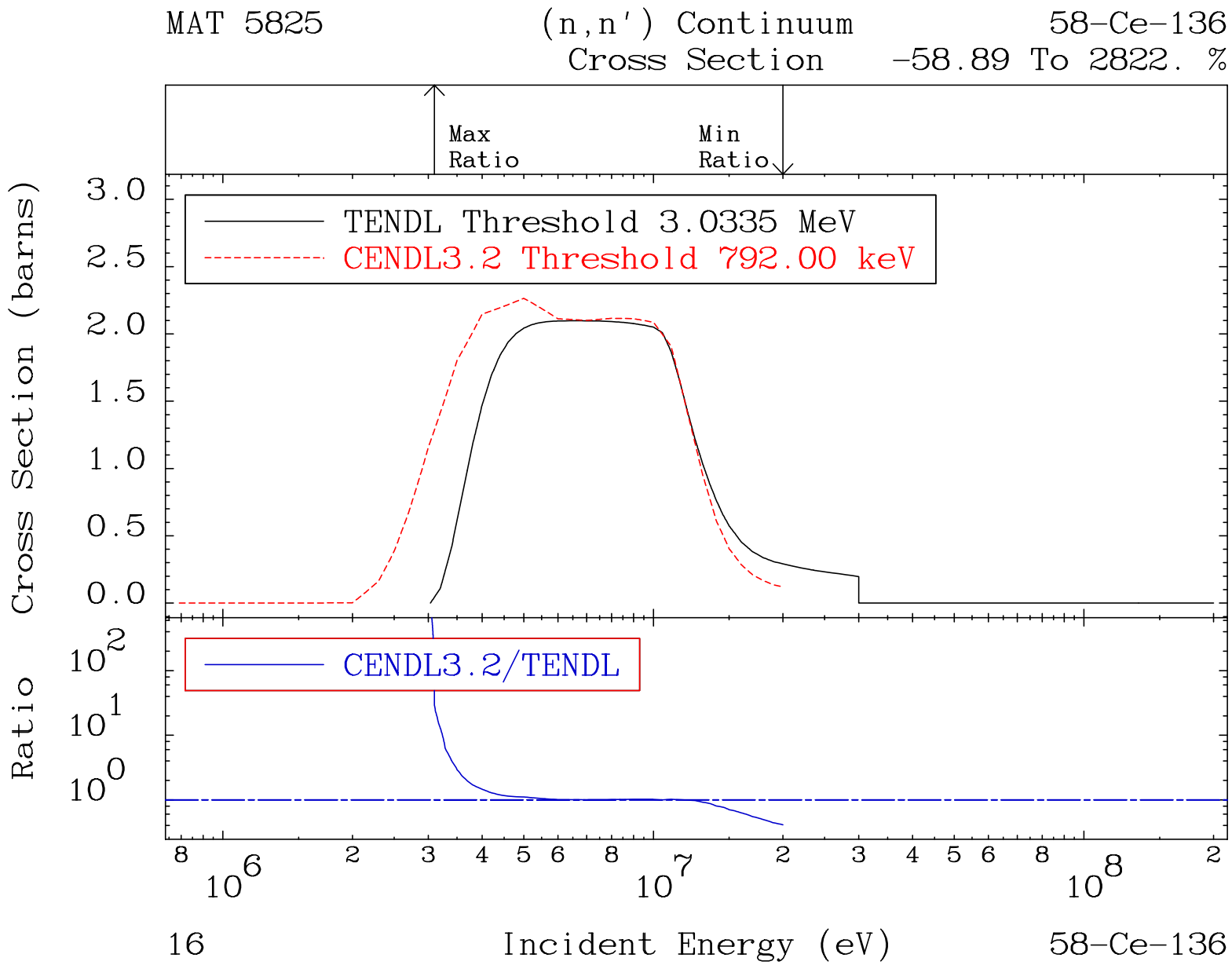

MAT 5825
MT= 52 (n,n') Level
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0839 MeV
CENDL3.2 Threshold 1.0843 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
58-Ce-136

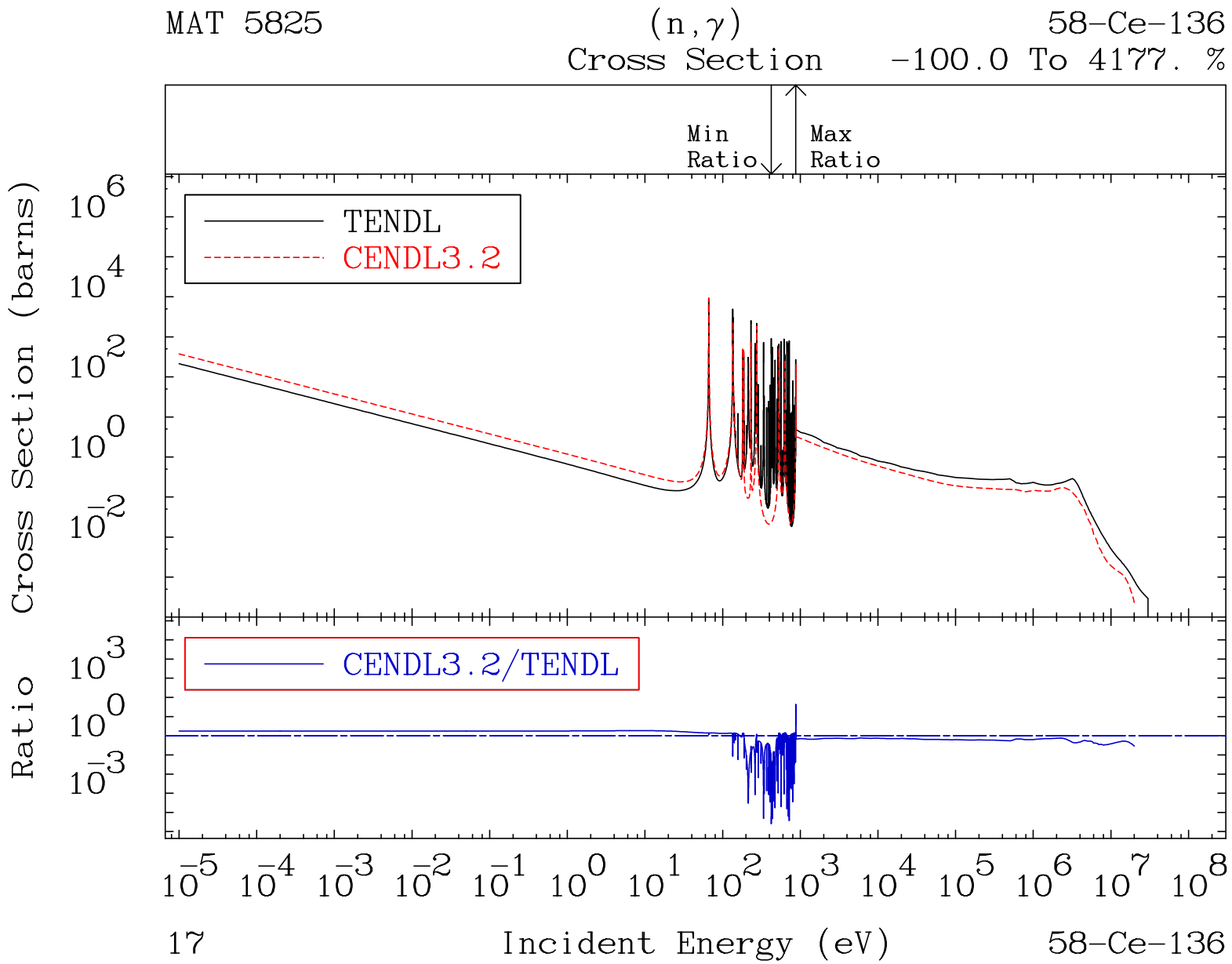

MAT 5825
MT= 53 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 9.499 %
Min Ratio
Max Ratio
TENDL Threshold 1.1000 MeV
CENDL3.2 Threshold 1.1002 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
58-Ce-136

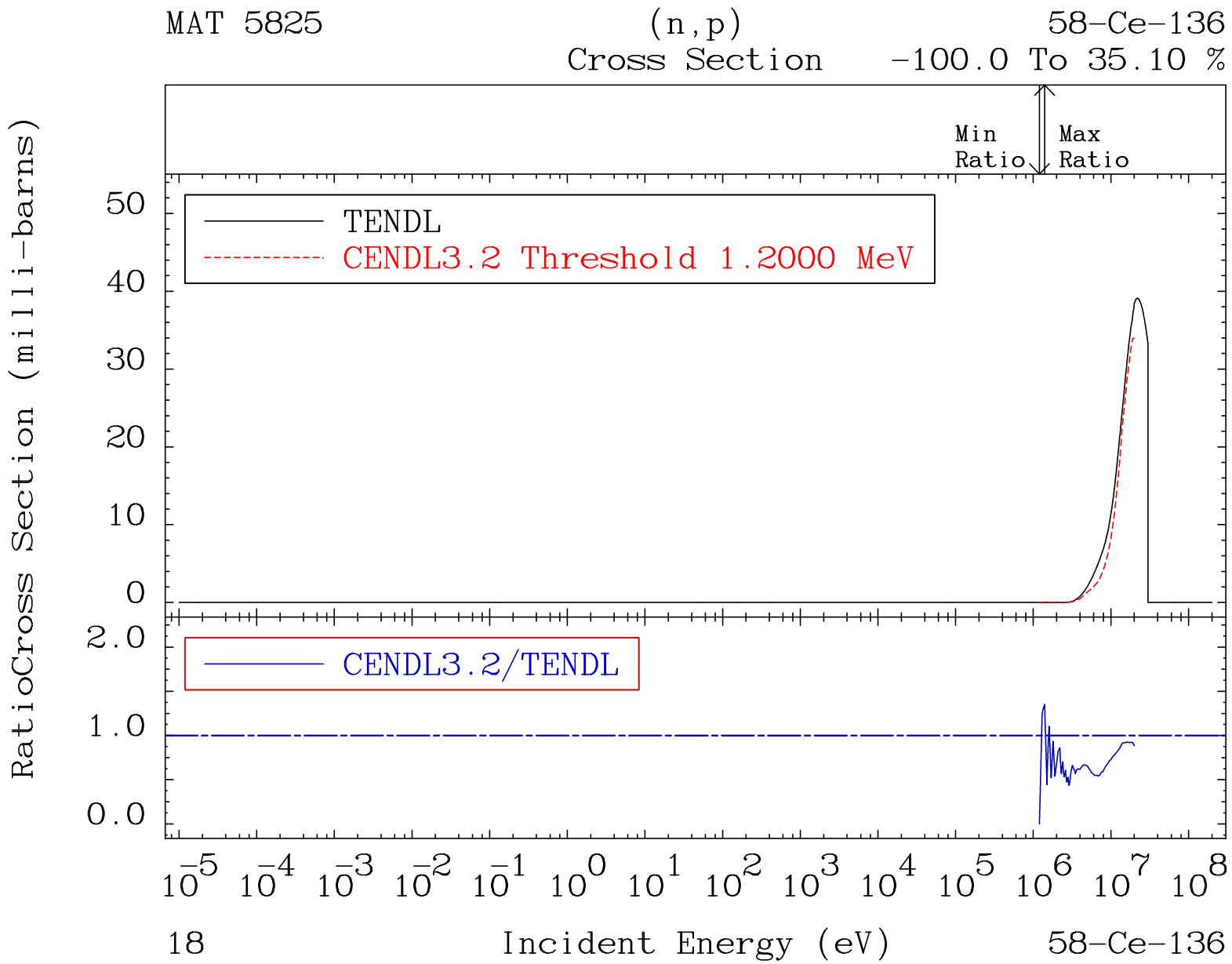

MAT 5825
MT= 54 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 22.31 %
Min Ratio
Max Ratio
TENDL Threshold 1.3235 MeV
CENDL3.2 Threshold 1.3239 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
13
Incident Energy (eV)
58-Ce-136

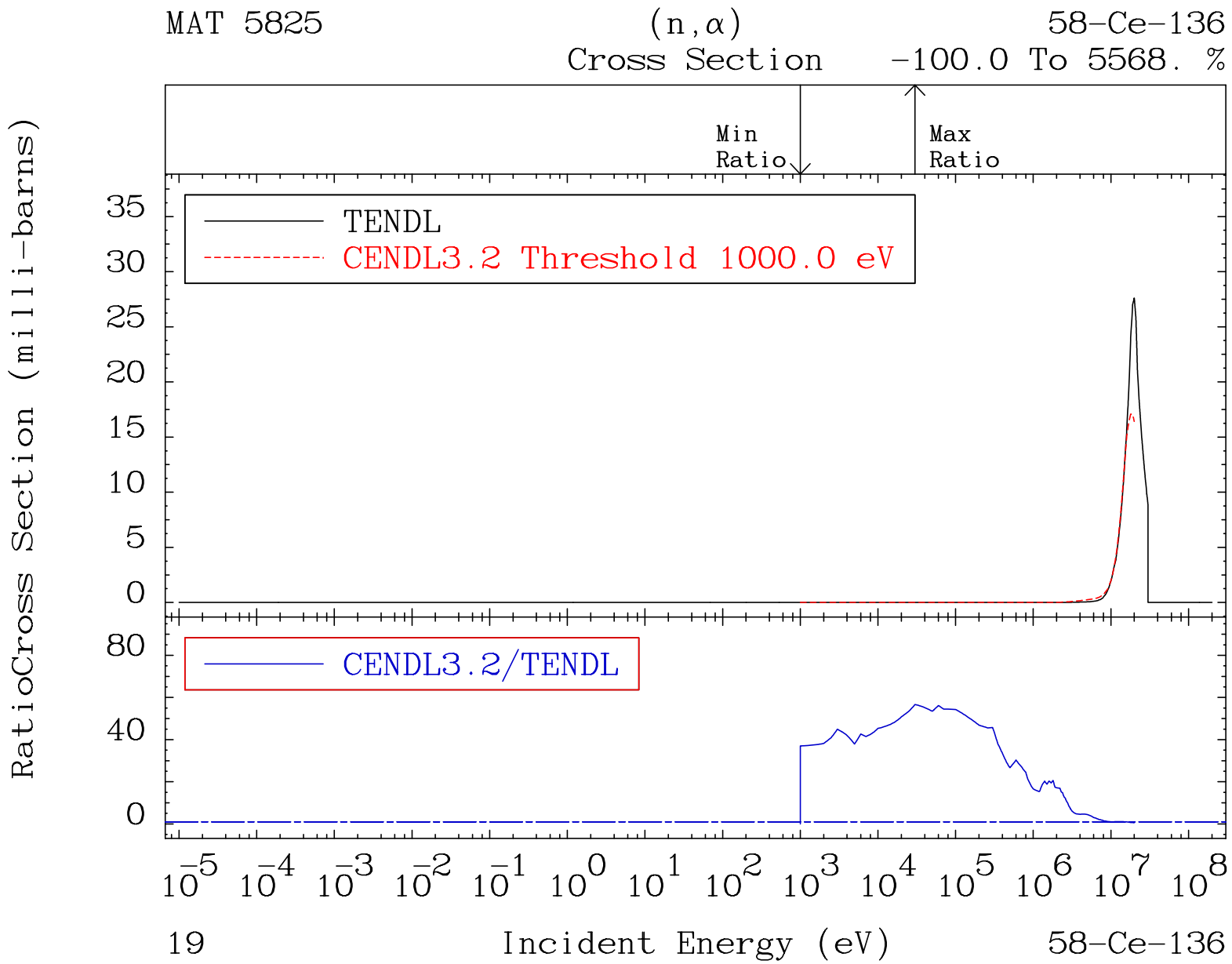

MAT 5825
MT= 55 (n,n') Level
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5645 MeV
CENDL3.2 Threshold 1.5645 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
58-Ce-136

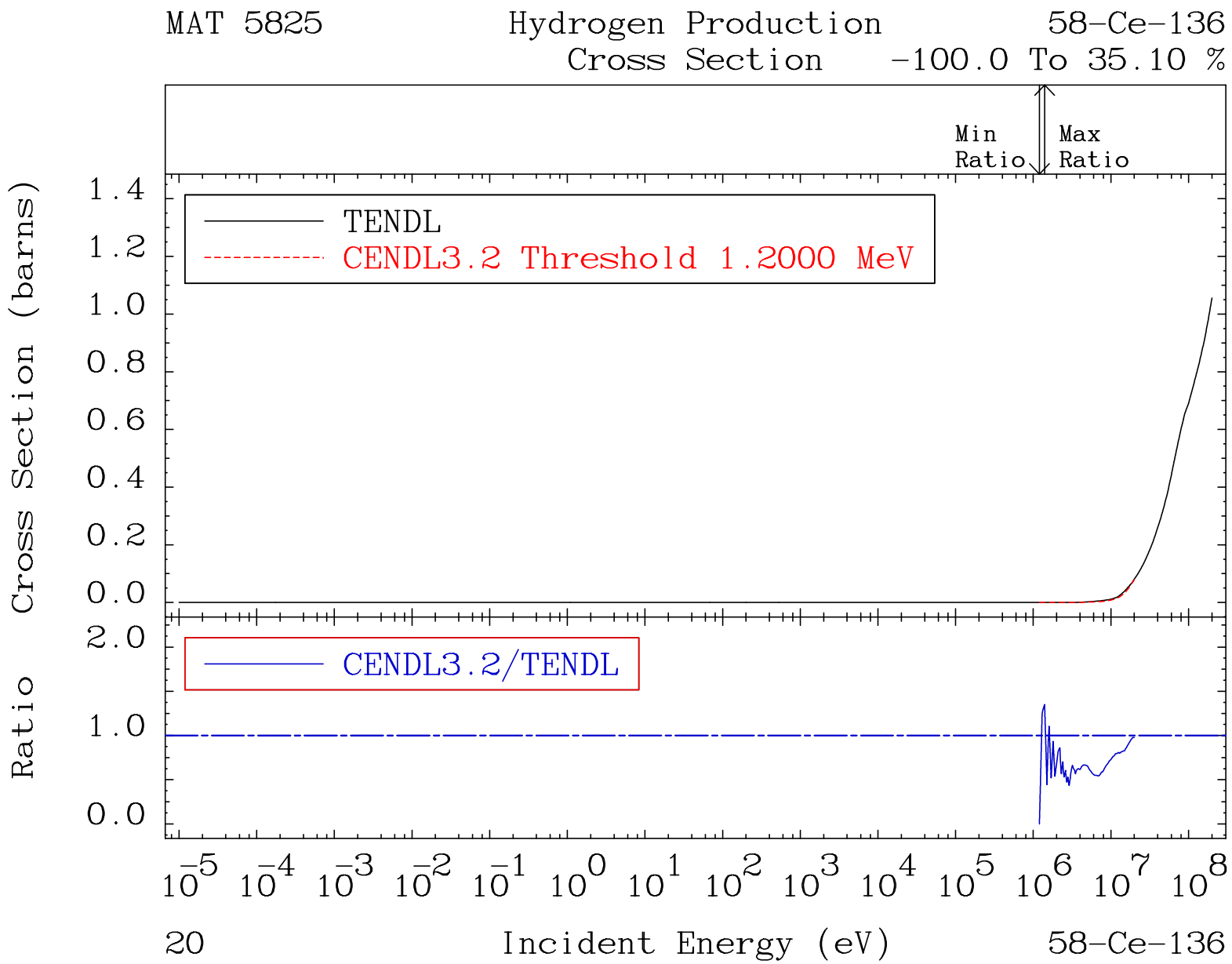

MAT 5825
MT= 56 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 25.35 %
Max
Ratio
TENDL Threshold 1.9929 MeV
CENDL3.2 Threshold 1.9932 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
58-Ce-136

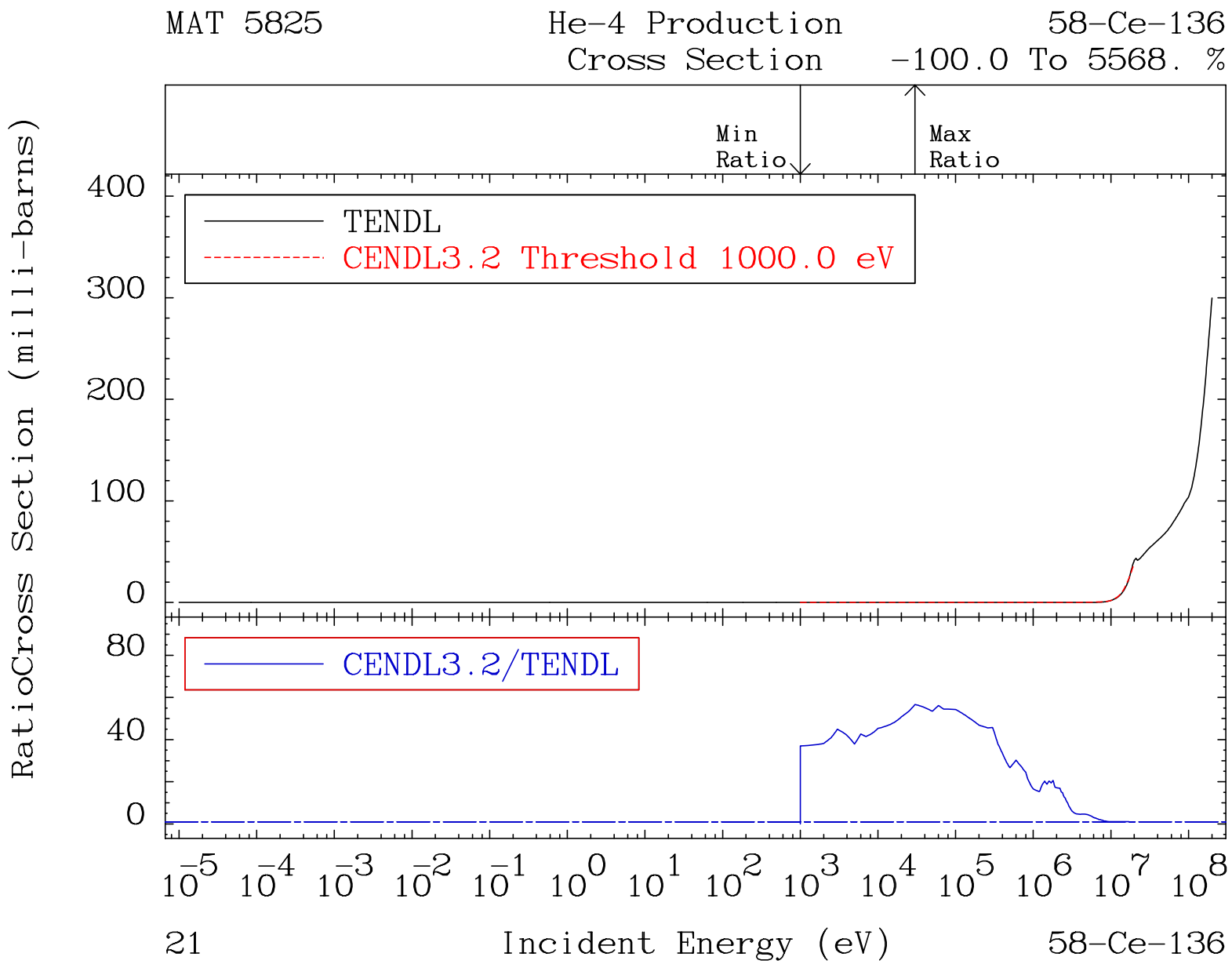

MAT 5825
(n,n') Continuum
Cross Section
58-Ce-136
-58.89 To 2822. %
Max
Ratio
Min
Ratio
TENDL Threshold 3.0335 MeV
CENDL3.2 Threshold 792.00 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
16
58-Ce-136

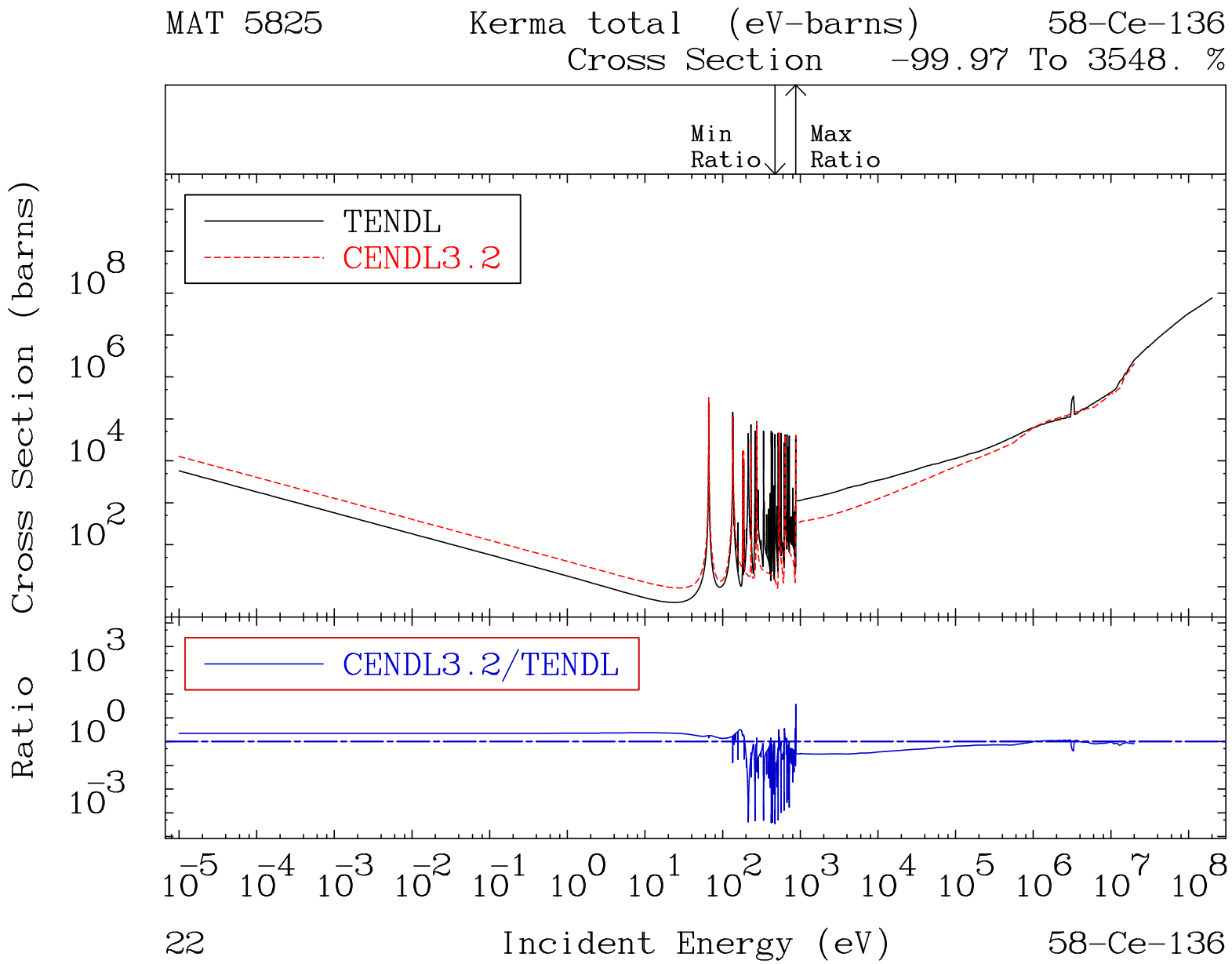

MAT 5825
(n,γ)
Cross Section
58-Ce-136
-100.0 To 4177. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
17
58-Ce-136

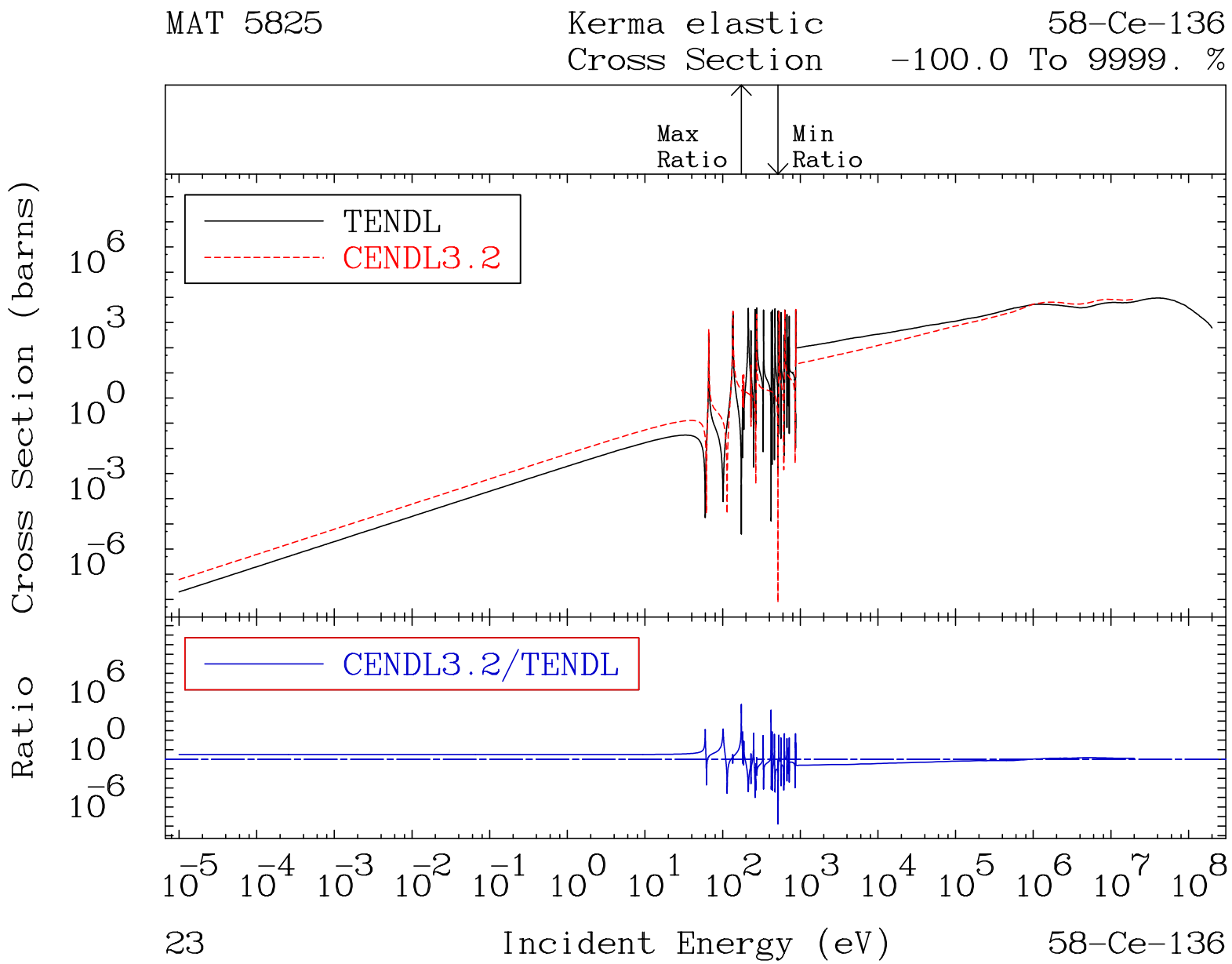

MAT 5825
(n,p)
Cross Section
58-Ce-136
-100.0 To 35.10 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.2000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
18
Incident Energy (eV)
58-Ce-136

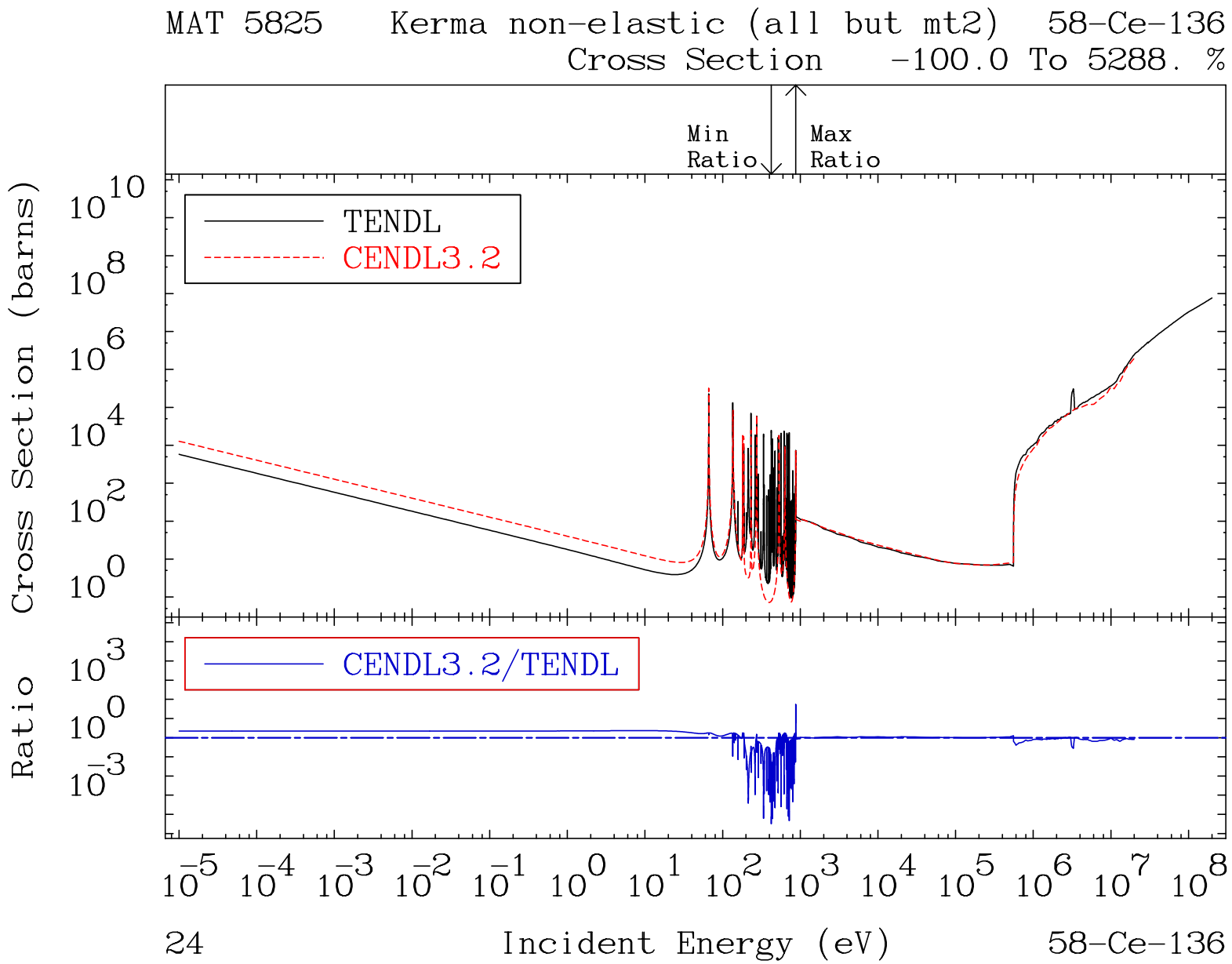

MAT 5825
(n,α)
Cross Section
58-Ce-136
-100.0 To 5568. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1000.0 eV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
80
40
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
19
Incident Energy (eV)
58-Ce-136

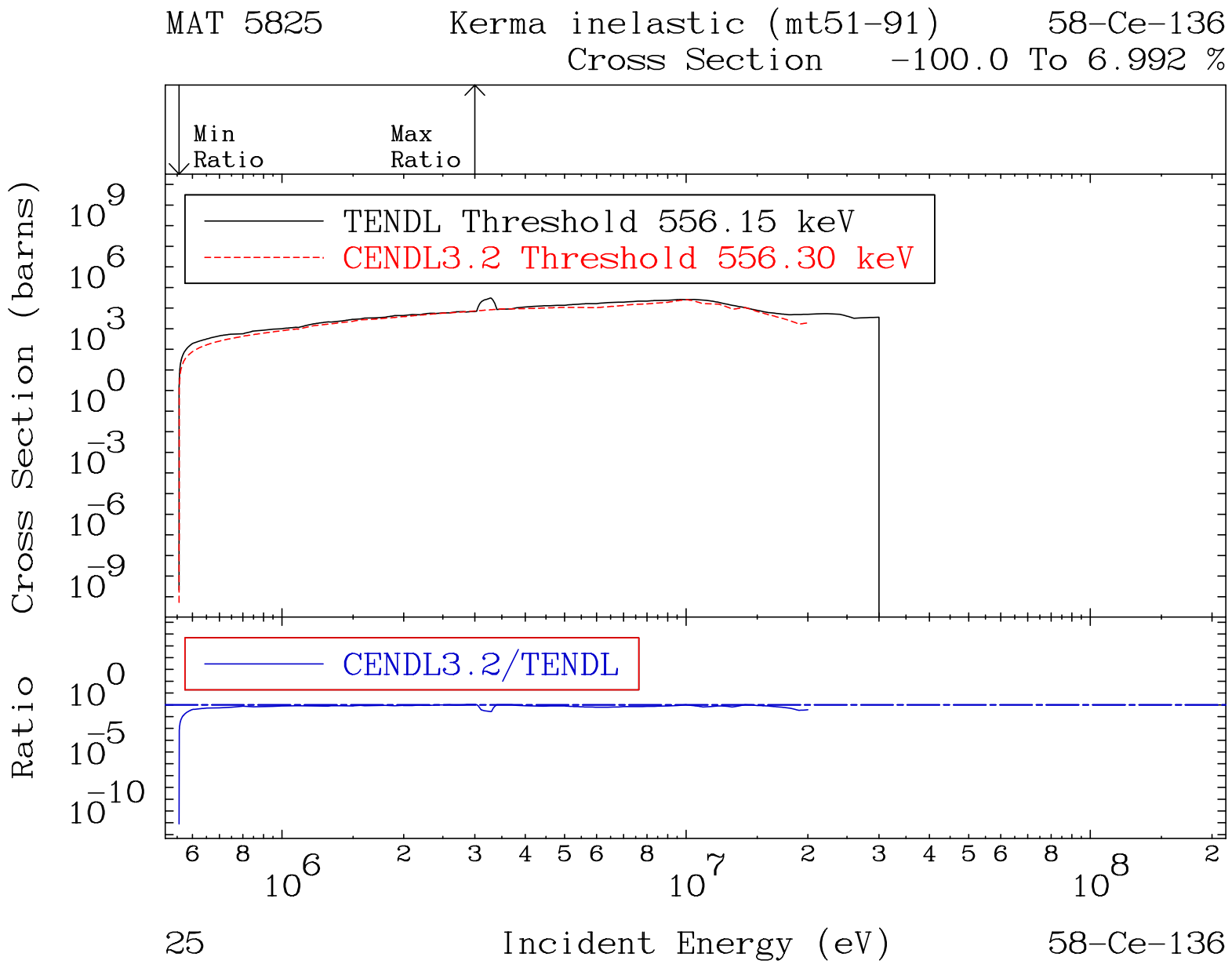

MAT 5825
Hydrogen Production
58-Ce-136
Cross Section
-100.0 To 35.10 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.2000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
20
Incident Energy (eV)
58-Ce-136

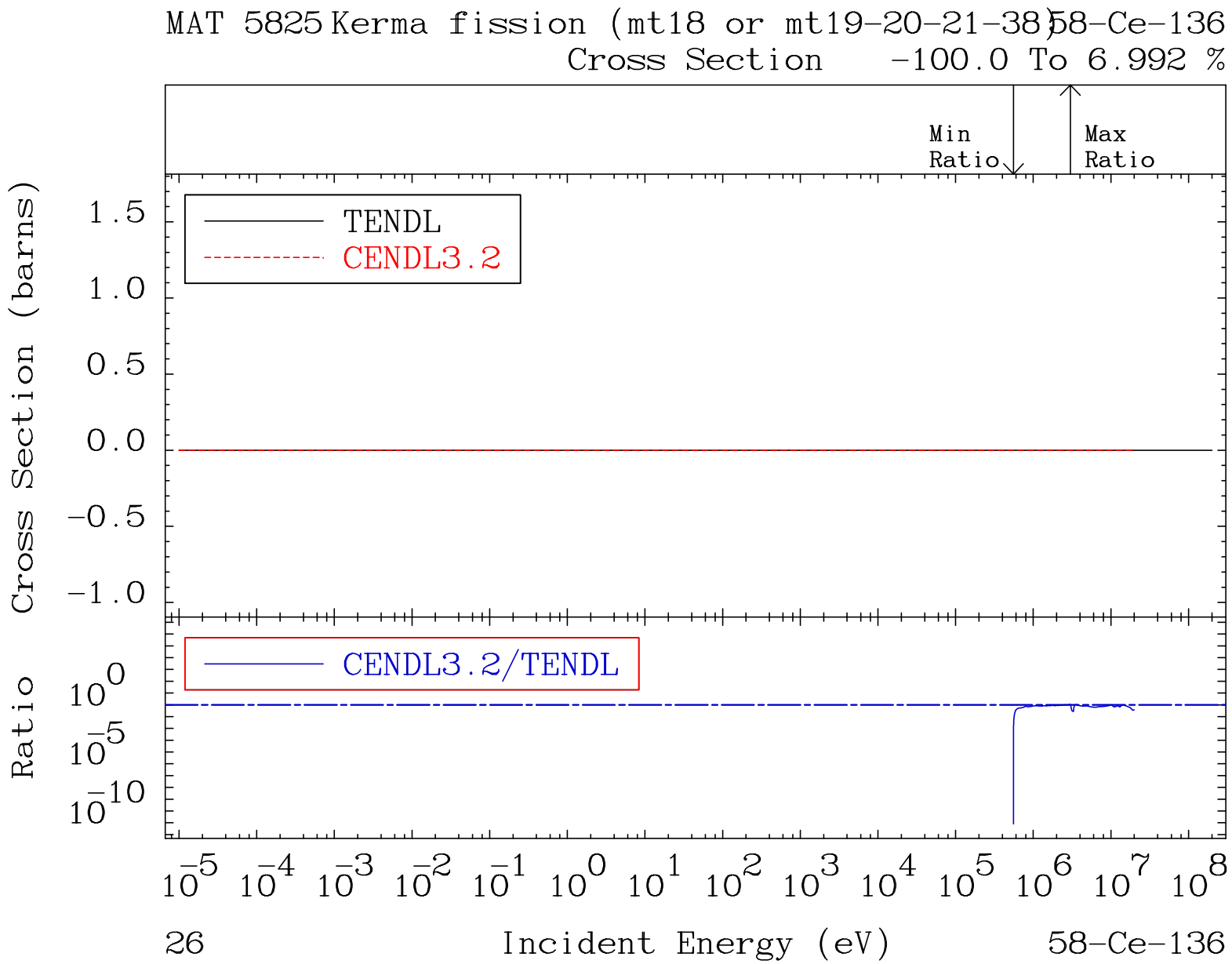

MAT 5825
He-4 Production
Cross Section
58-Ce-136
-100.0 To 5568. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1000.0 eV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
21
Incident Energy (eV)
58-Ce-136

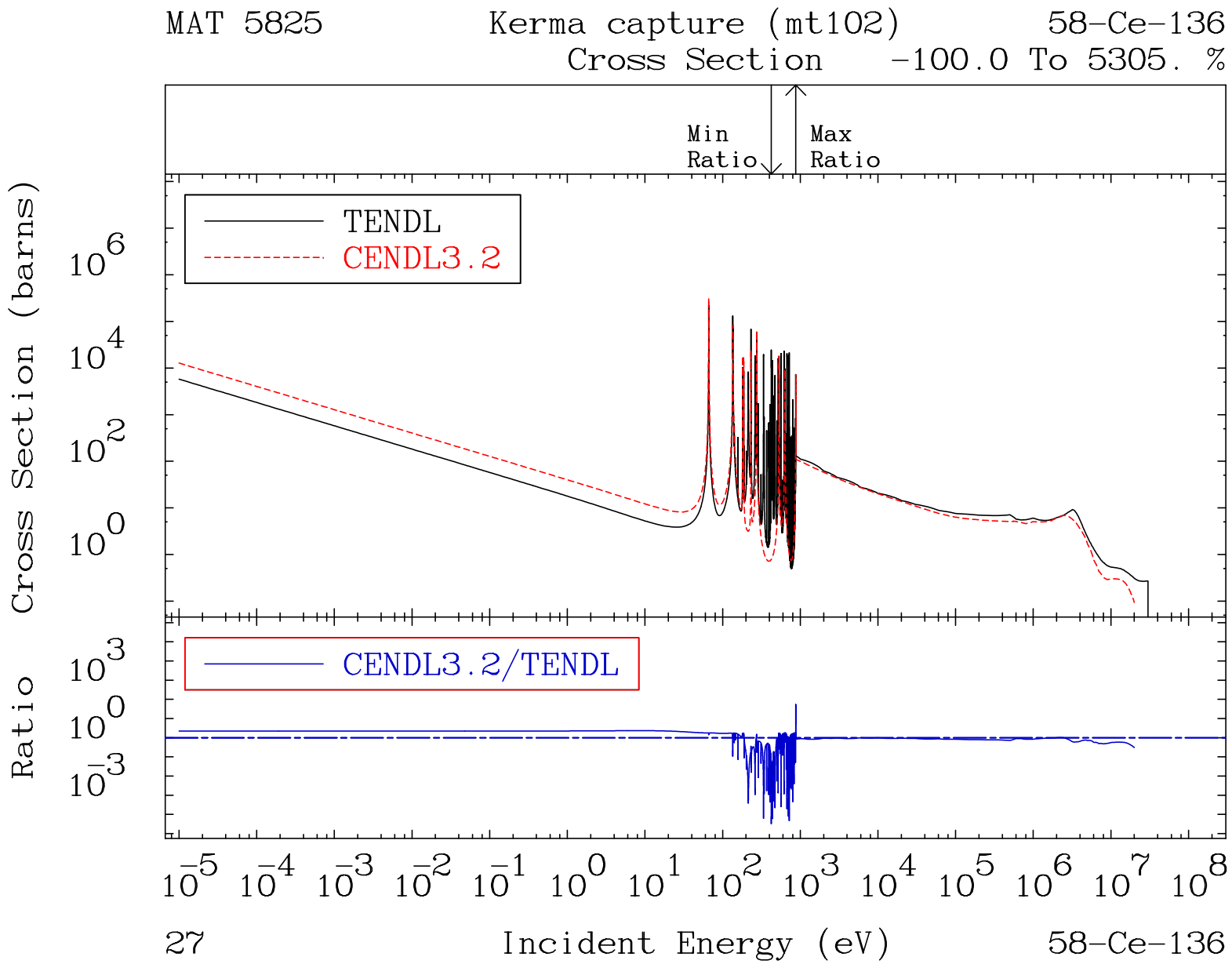

MAT 5825
Kerma total (eV-barns)
58-Ce-136
Cross Section -99.97 To 3548. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
22
58-Ce-136

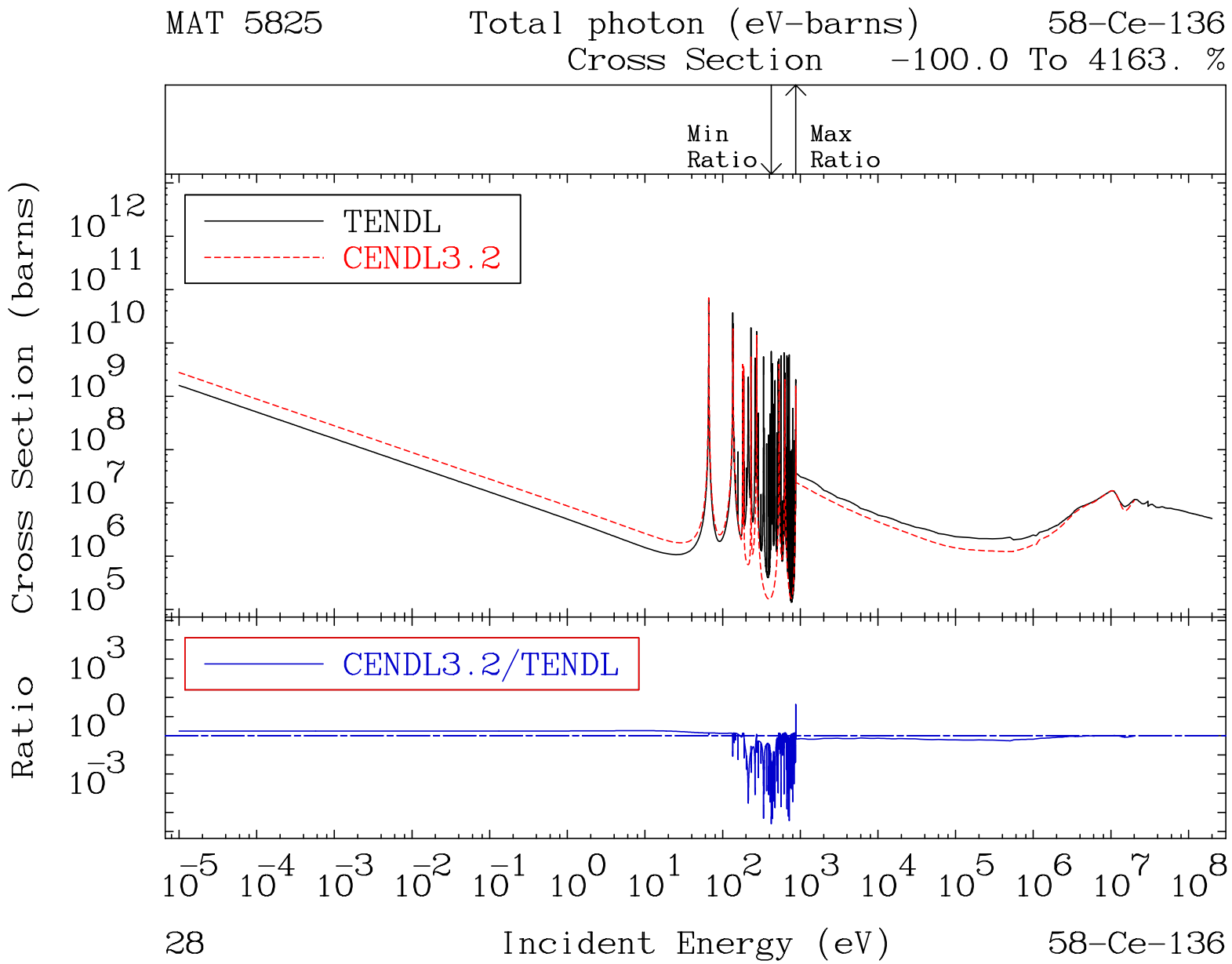

MAT 5825
Kerma elastic
Cross Section
58-Ce-136
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
58-Ce-136

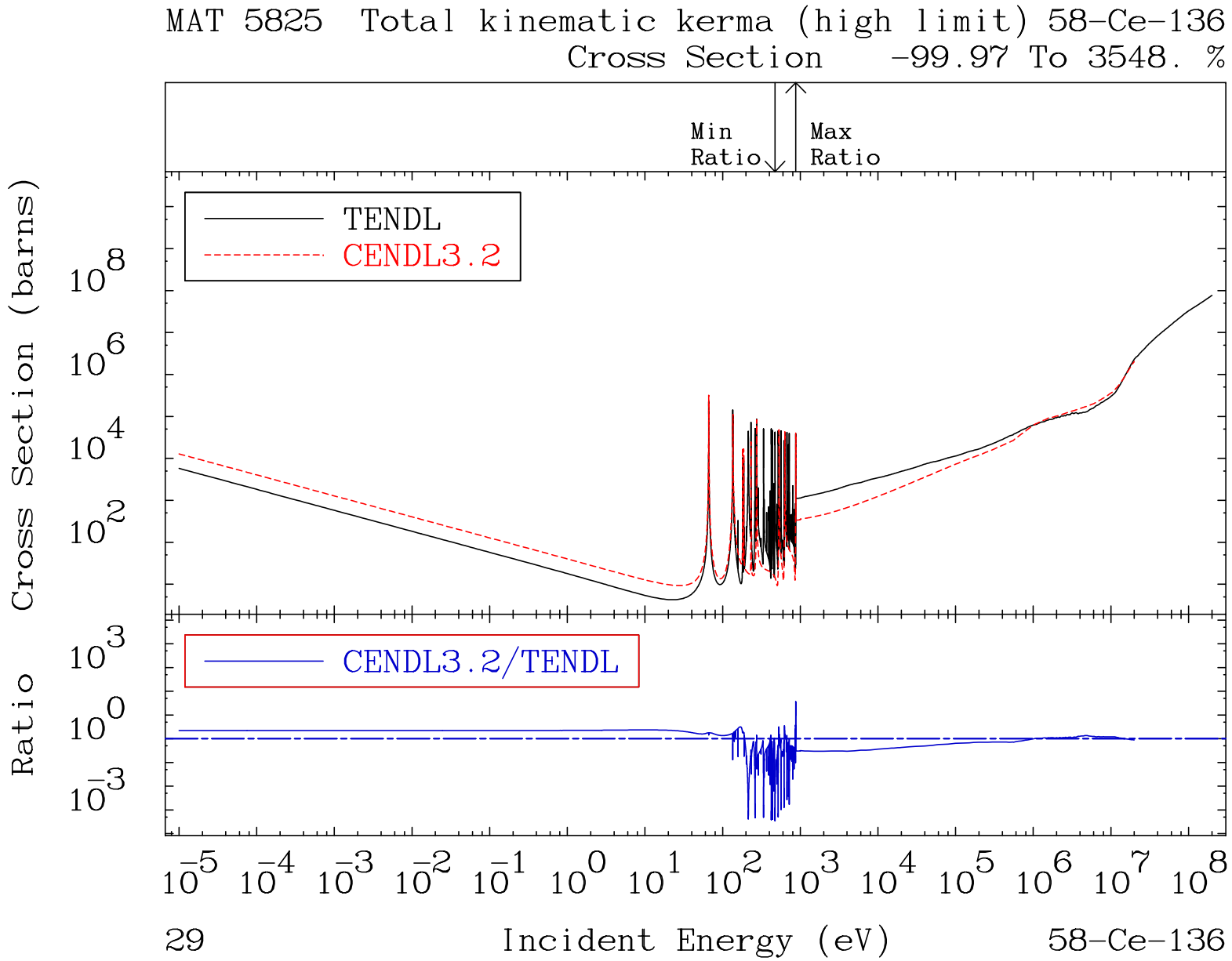

MAT 5825 Kerma non-elastic (all but mt2) 58-Ce-136
Cross Section -100.0 To 5288. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
24
58-Ce-136

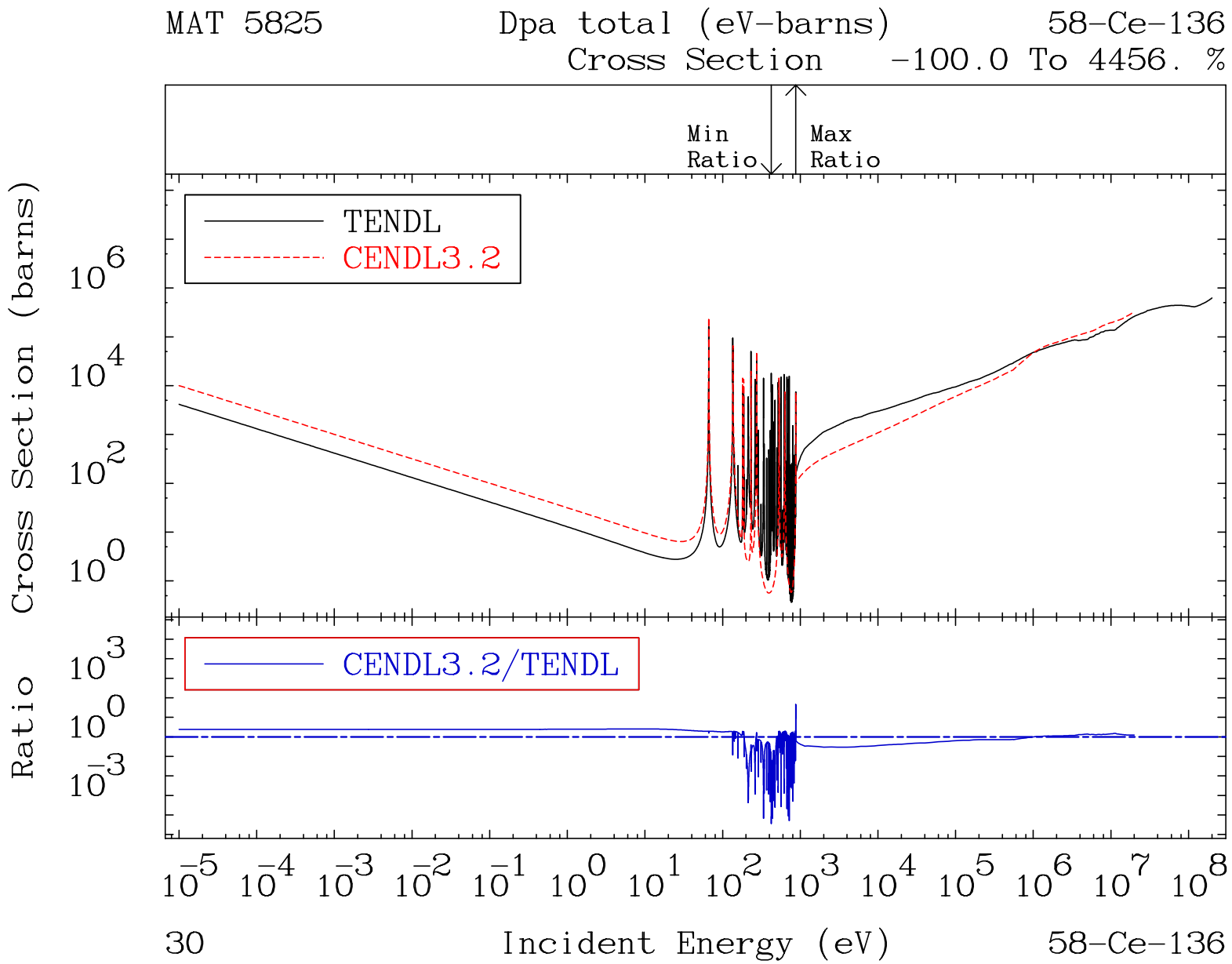

MAT 5825
Kerma inelastic (mt51-91)
58-Ce-136
Cross Section -100.0 To 6.992 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
CENDL3.2 Threshold 556.30 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
25
58-Ce-136

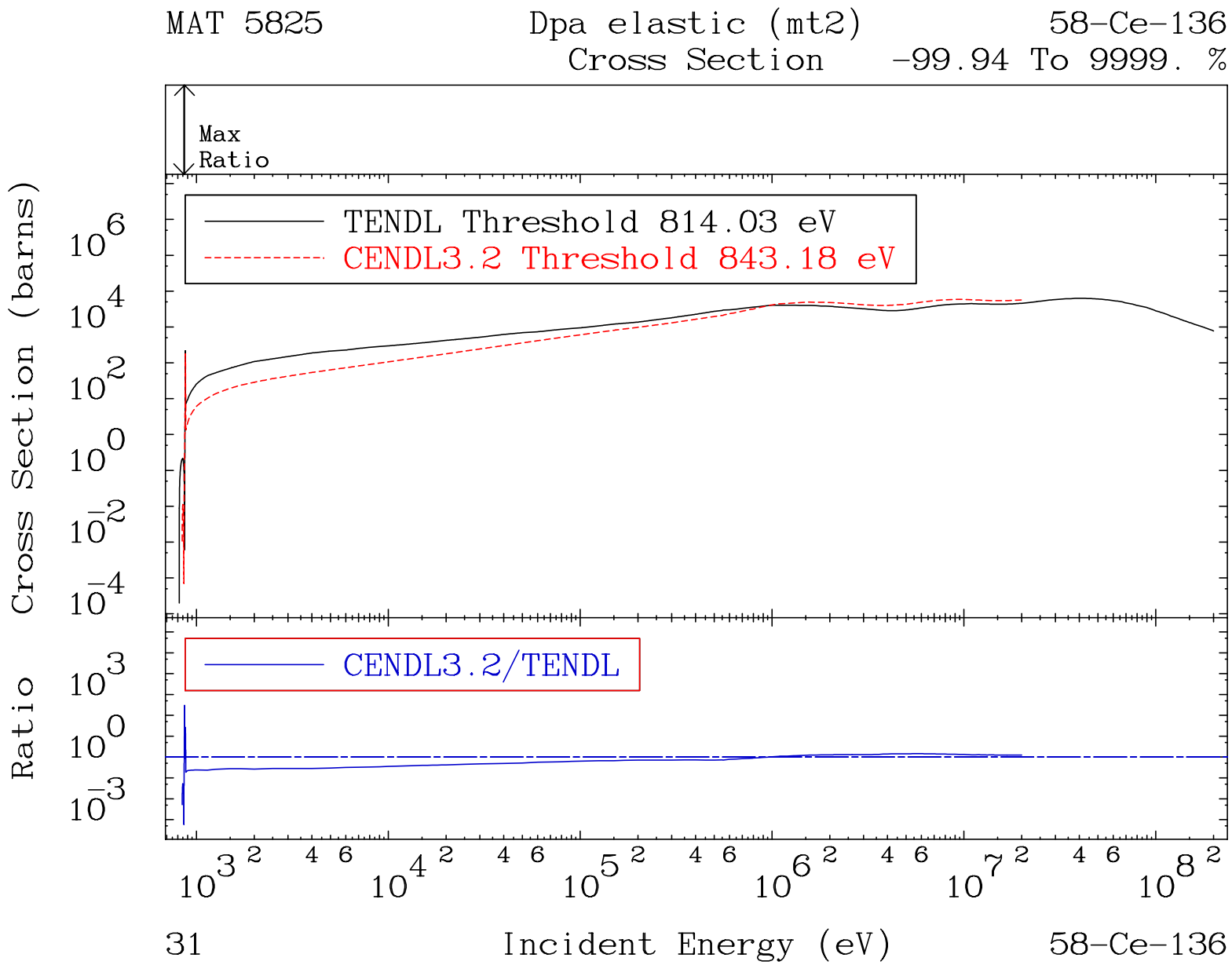

MAT 5825 Kerma fission (mt18 or mt19-20-21-38) 58-Ce-136
Cross Section -100.0 To 6.992 %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-5}
10^{-10}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
26
Incident Energy (eV)
58-Ce-136

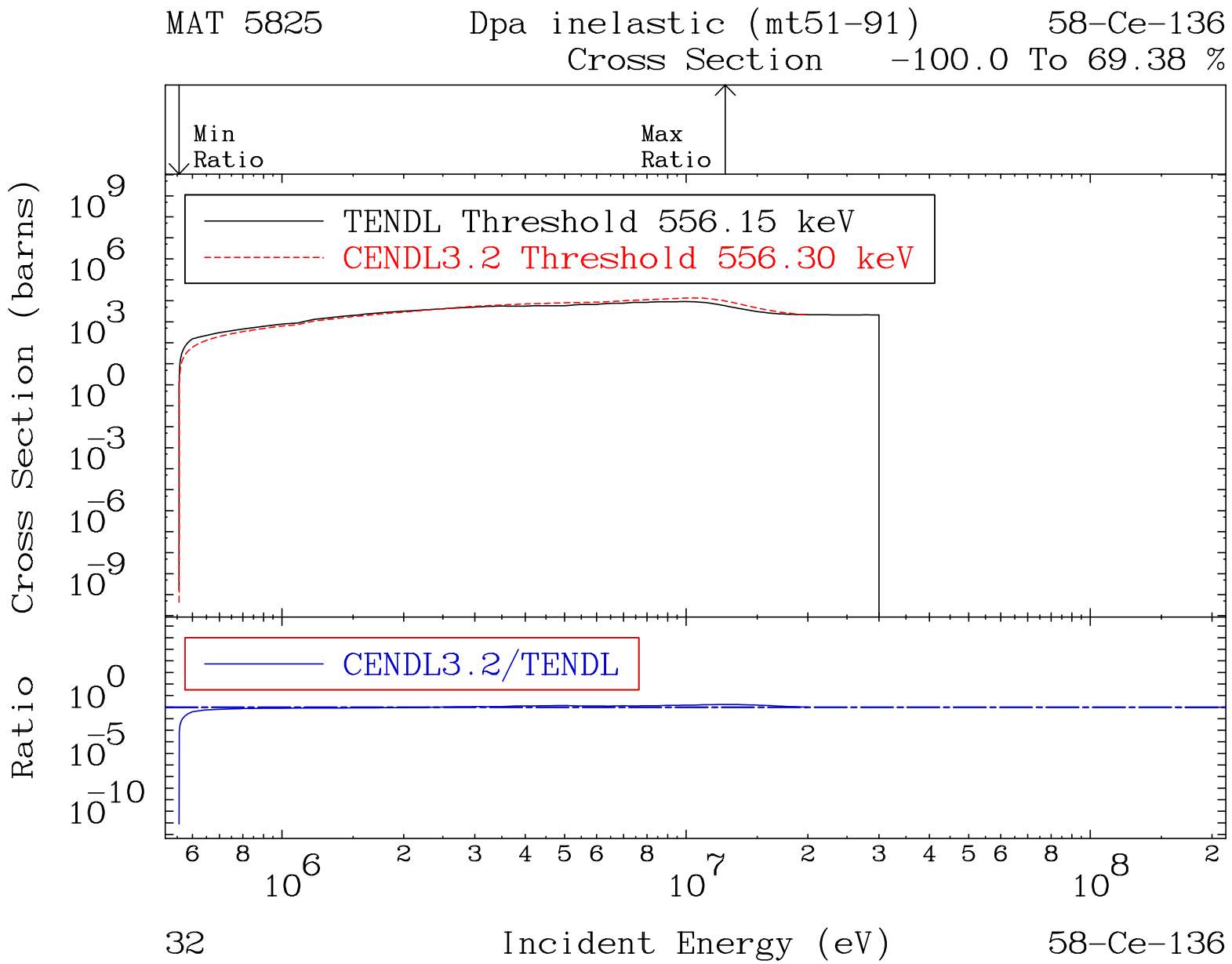

MAT 5825
Kerma capture (mt102)
58-Ce-136
Cross Section -100.0 To 5305. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
27
58-Ce-136

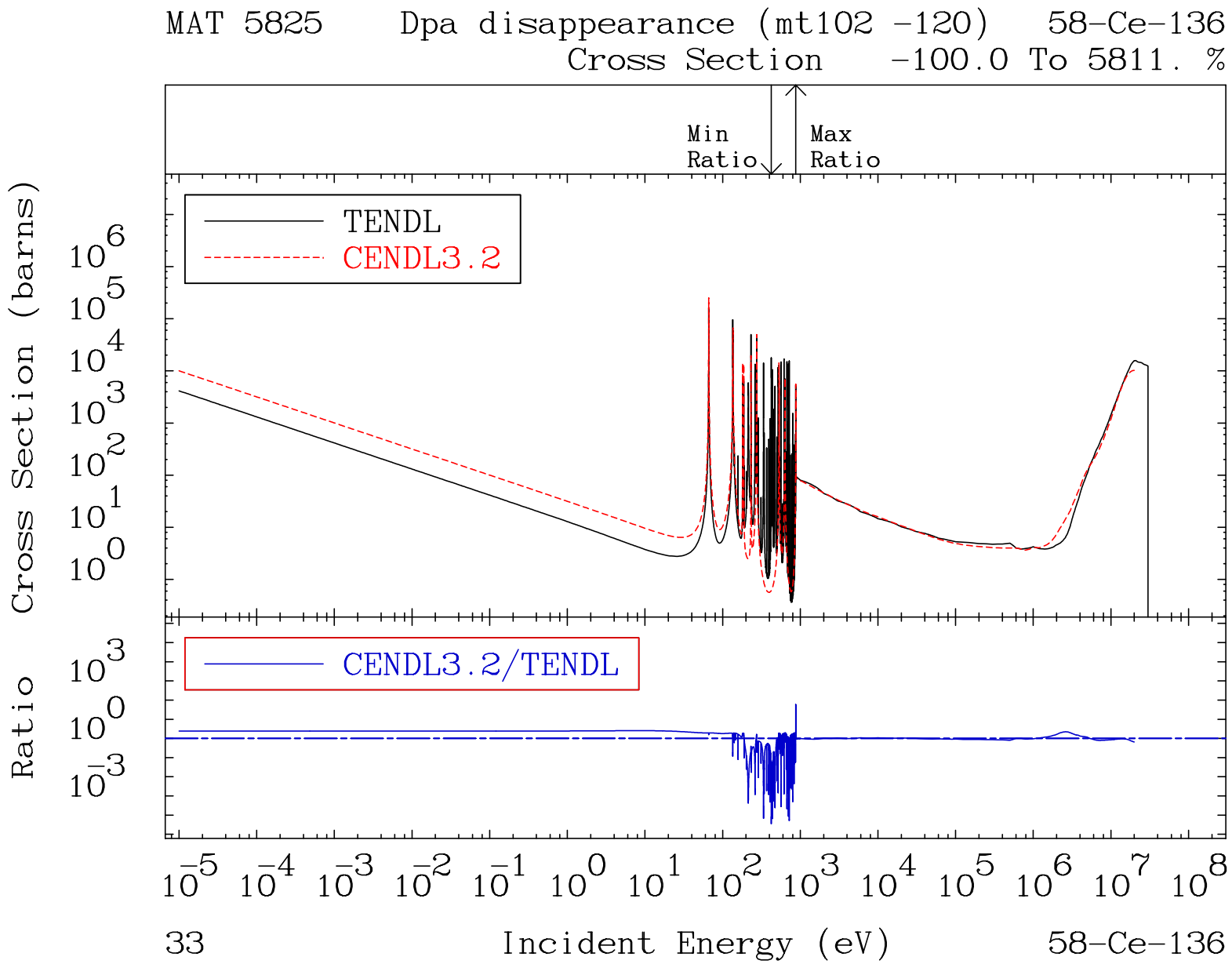

MAT 5825
Total photon (eV-barns)
58-Ce-136
Cross Section -100.0 To 4163. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
28
58-Ce-136

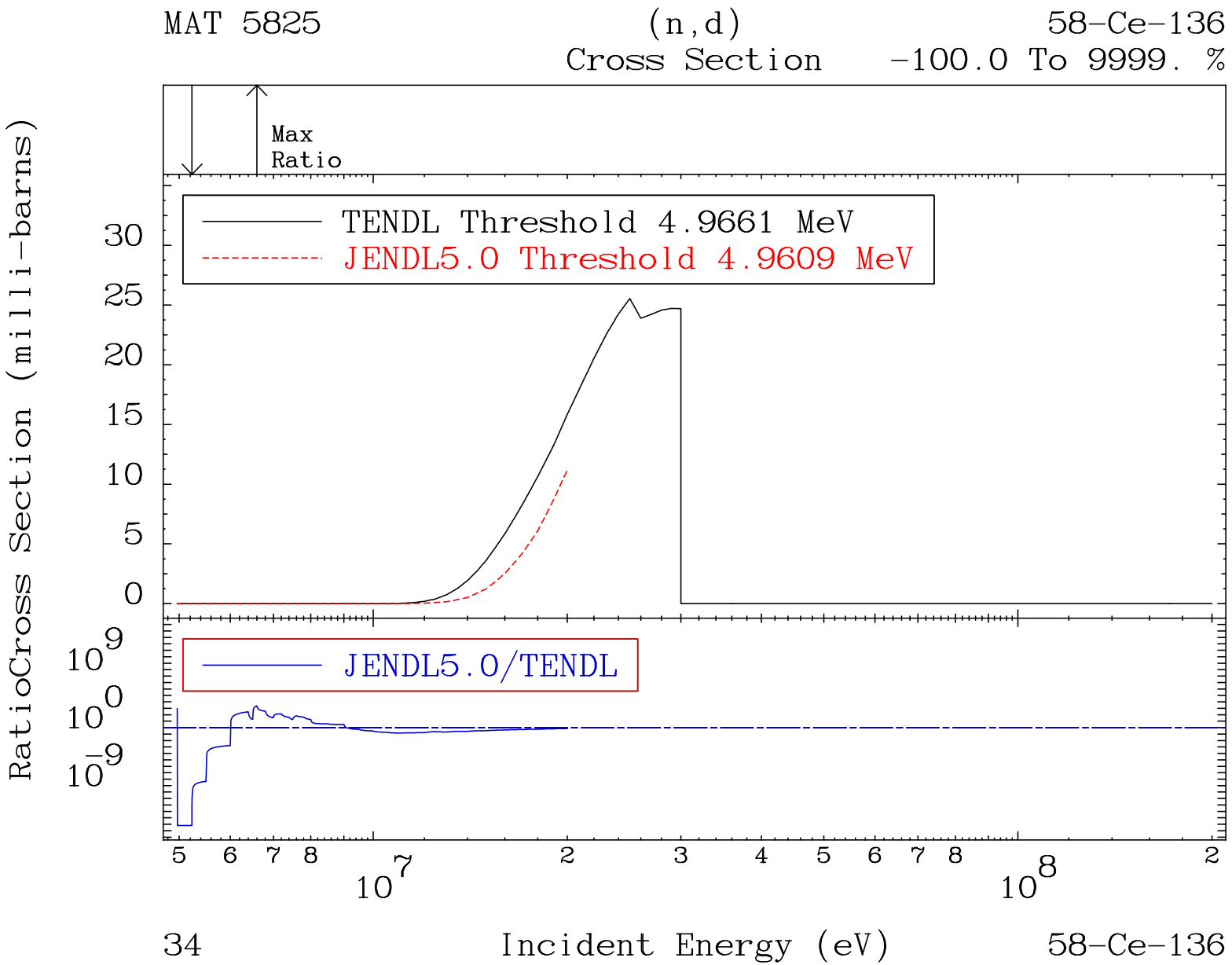

MAT 5825 Total kinematic kerma (high limit) 58-Ce-136
Cross Section -99.97 To 3548. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
58-Ce-136

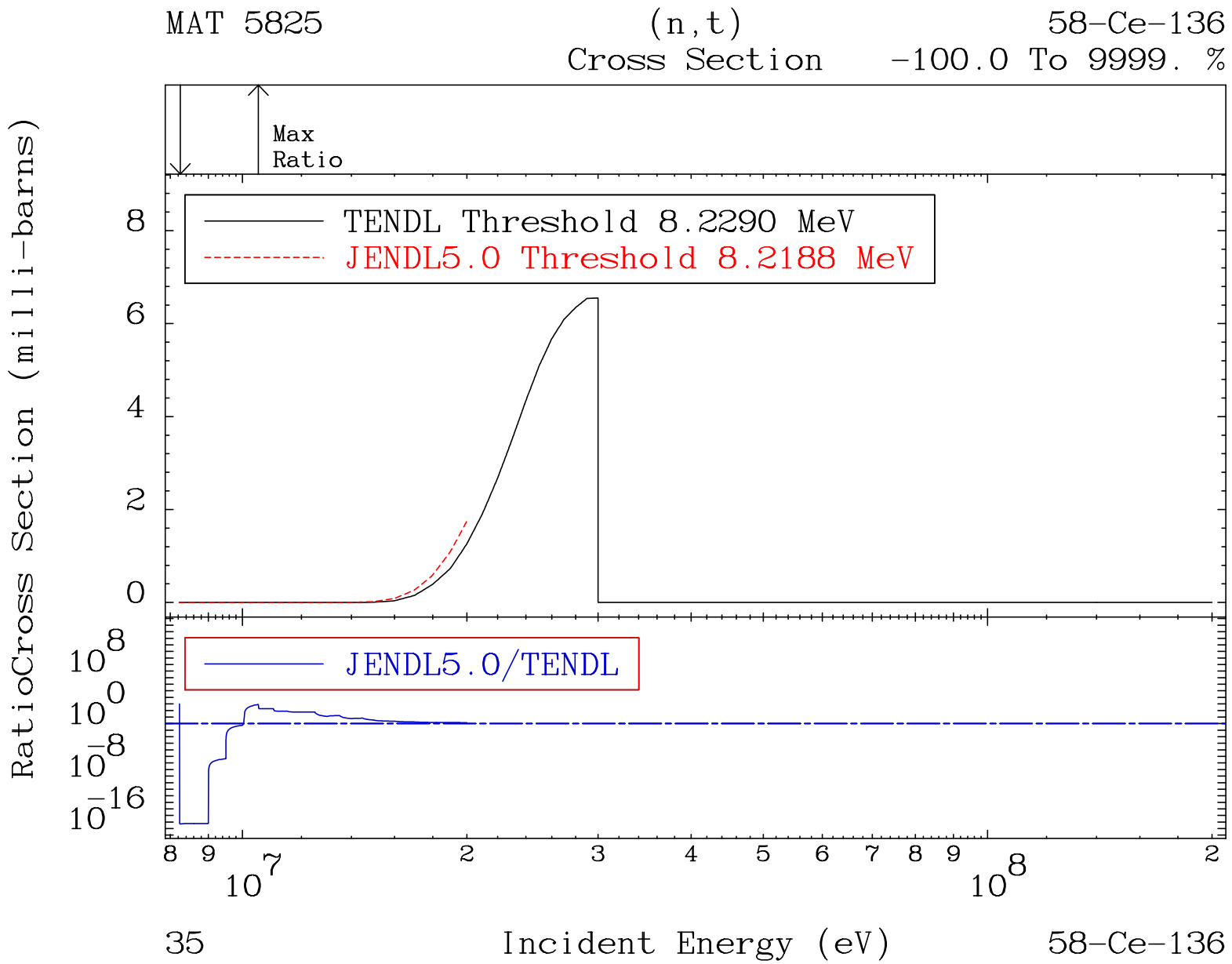

MAT 5825
Dpa total (eV-barns)
58-Ce-136
Cross Section -100.0 To 4456. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
58-Ce-136

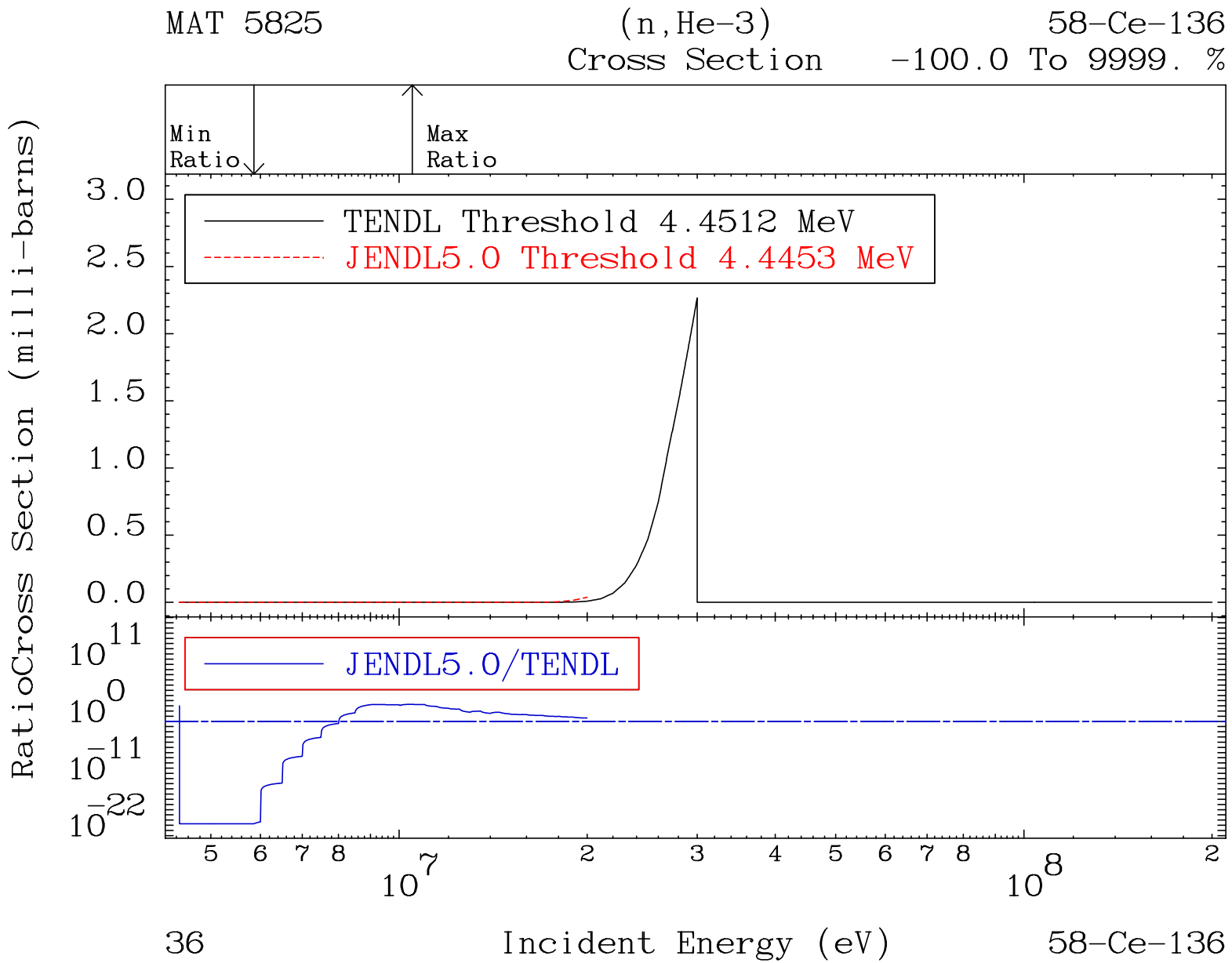

MAT 5825
Dpa elastic (mt2)
Cross Section
58-Ce-136
-99.94 To 9999. %
Max
Ratio
TENDL Threshold 814.03 eV
CENDL3.2 Threshold 843.18 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
58-Ce-136

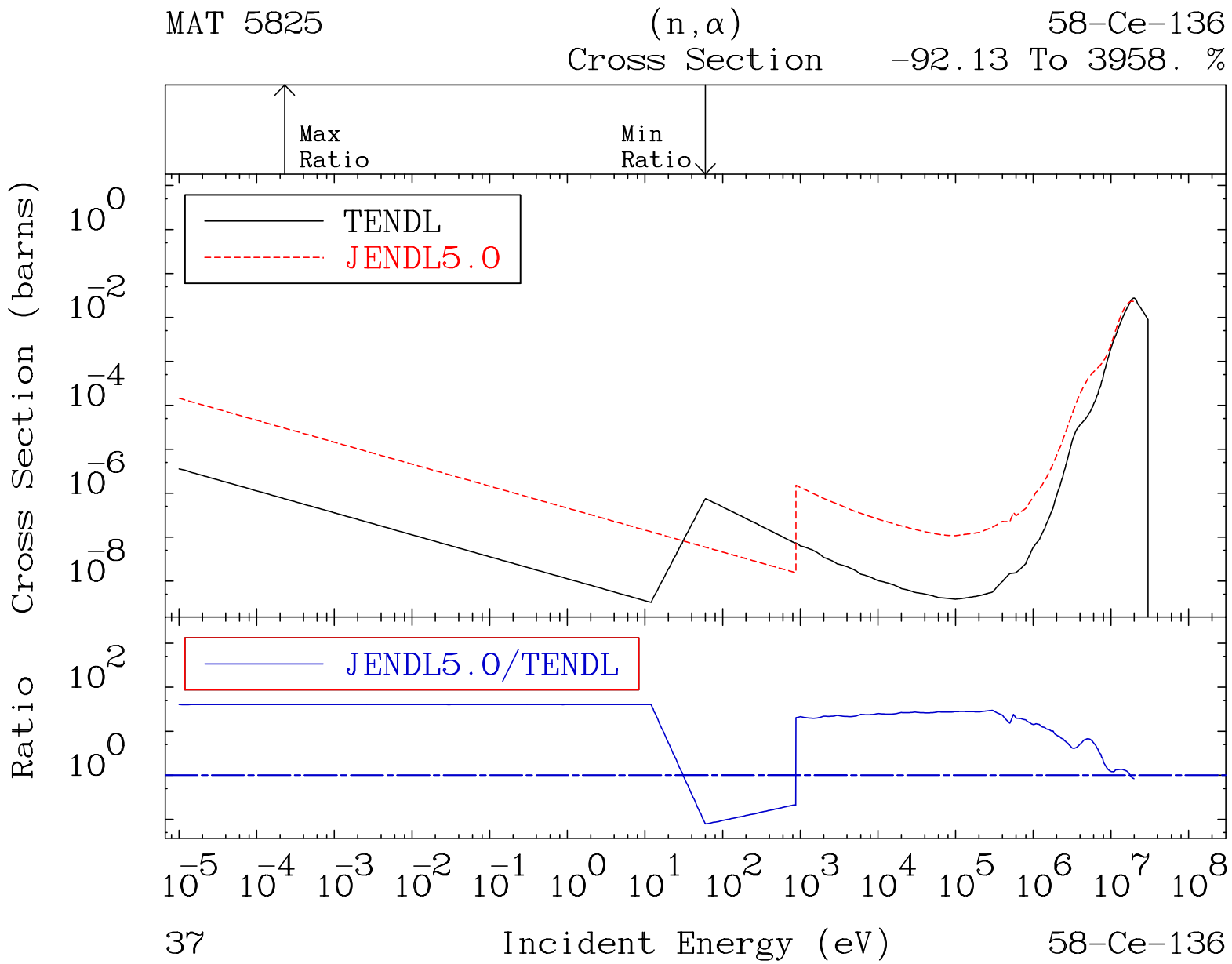

MAT 5825
Dpa inelastic (mt51-91)
58-Ce-136
Cross Section
-100.0 To 69.38 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
CENDL3.2 Threshold 556.30 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
58-Ce-136

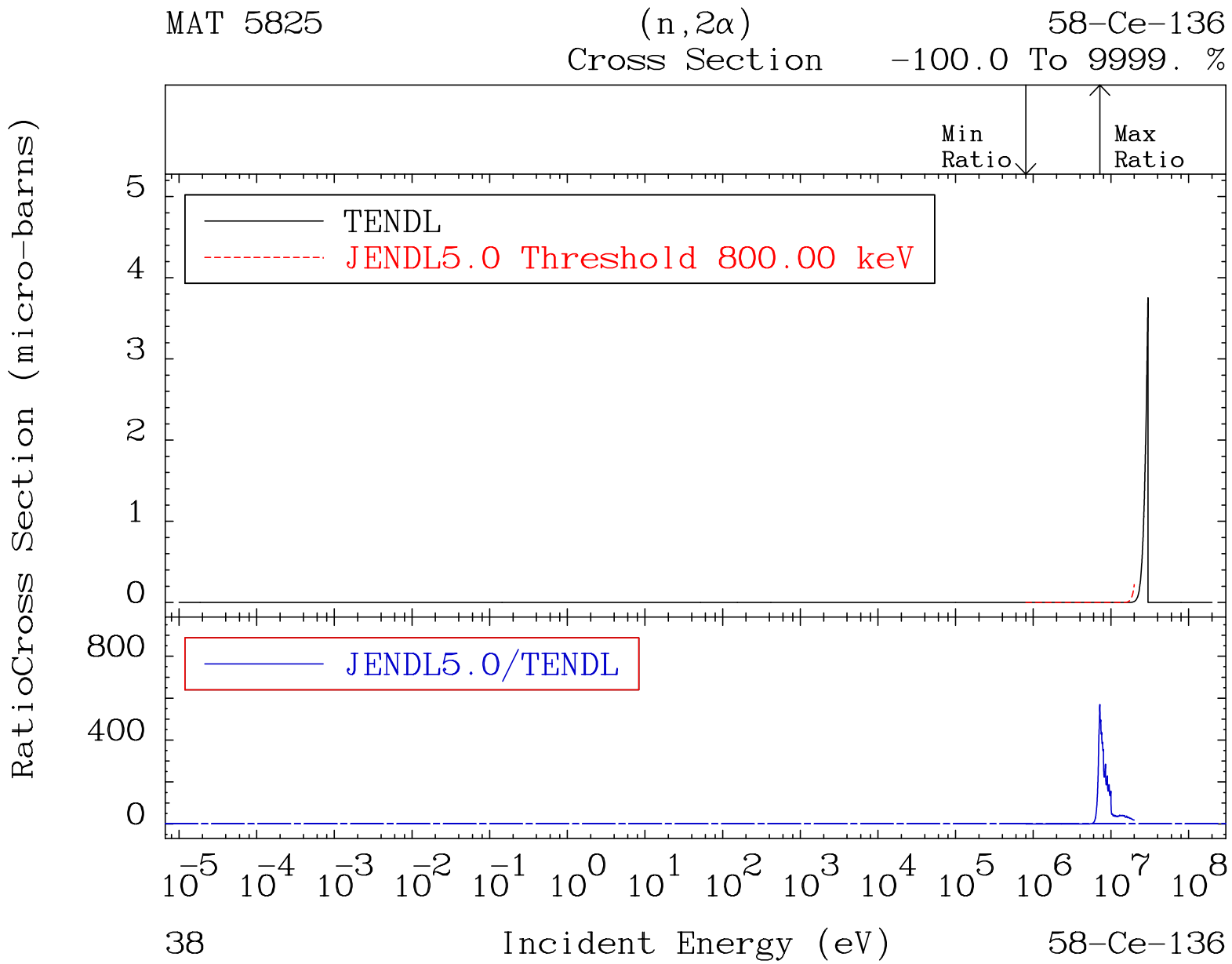

MAT 5825 Dpa disappearance (mt102 -120) 58-Ce-136
Cross Section -100.0 To 5811. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
33
58-Ce-136

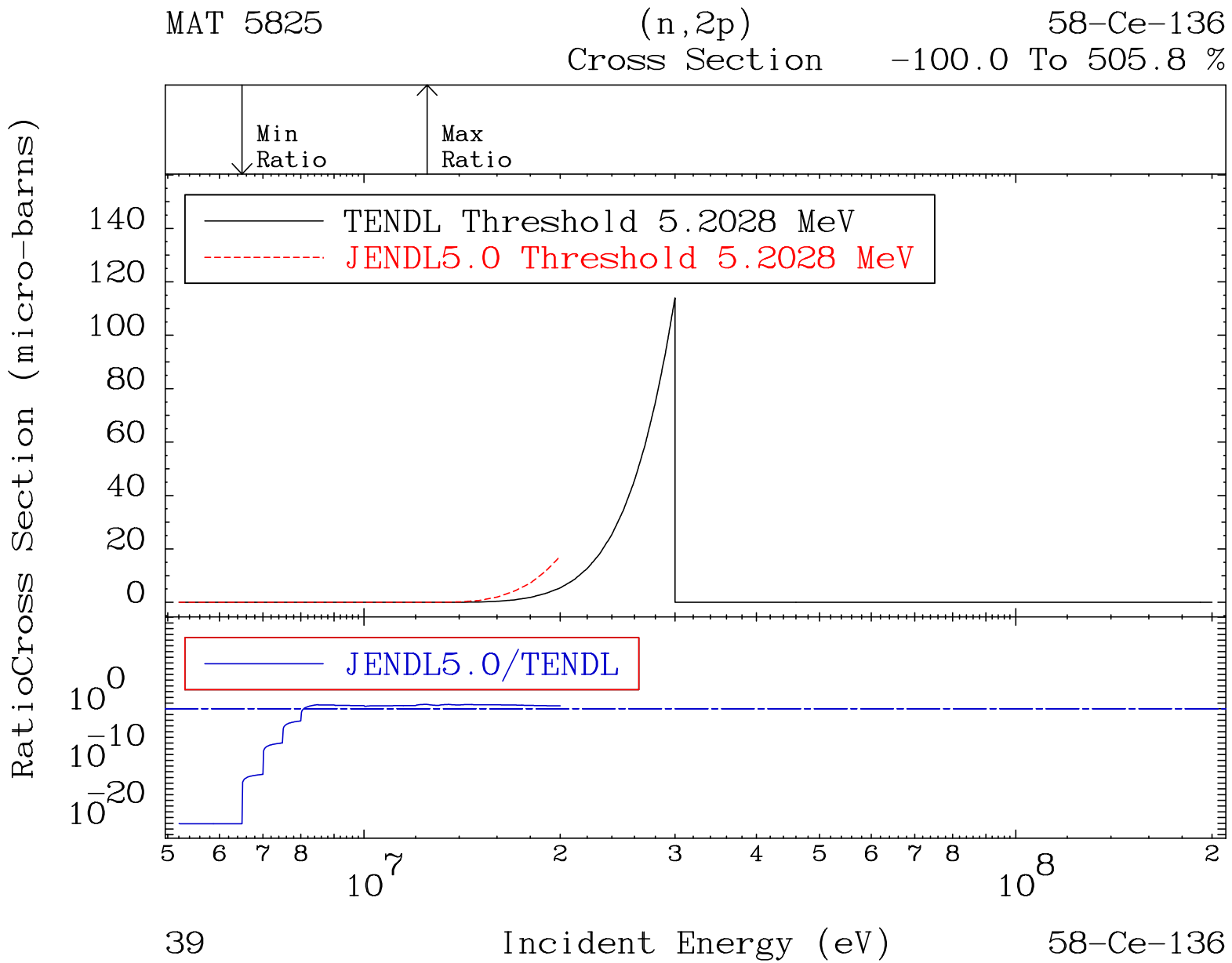

MAT 5825
(n,d)
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.9661 MeV
JENDL5.0 Threshold 4.9609 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
10^9
10^0
10^-9
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
58-Ce-136

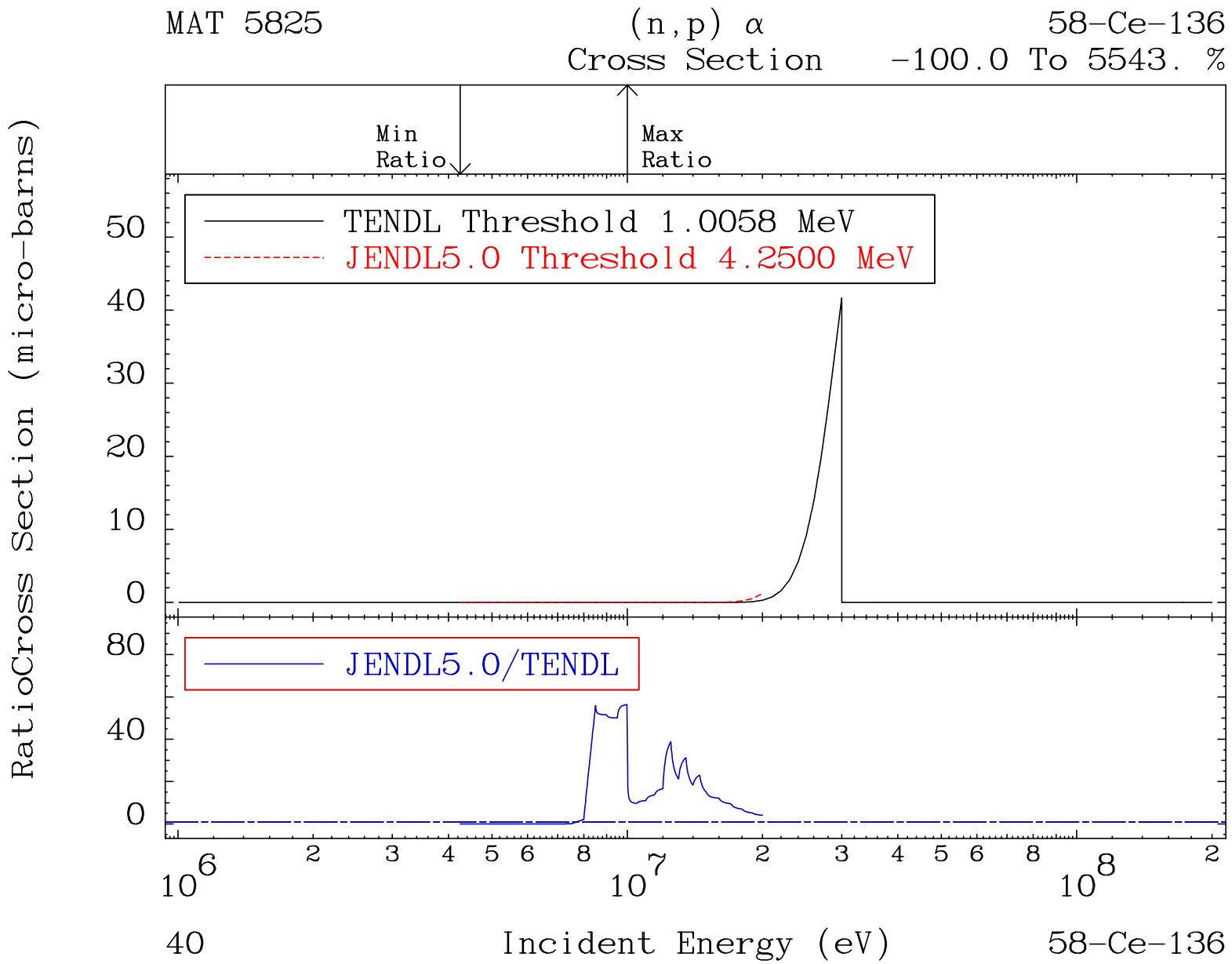

MAT 5825
(n,t)
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.2290 MeV
JENDL5.0 Threshold 8.2188 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
35
58-Ce-136

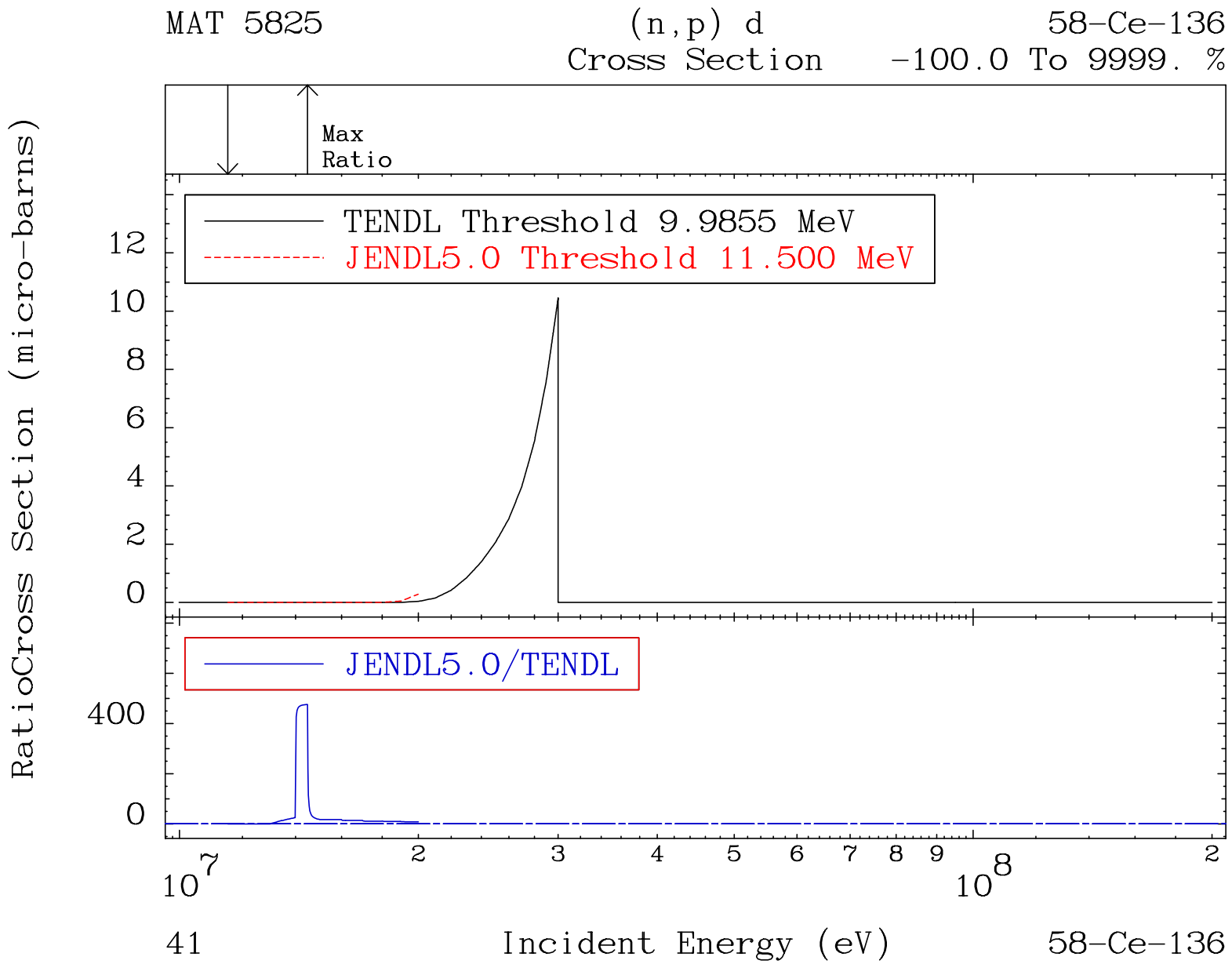

MAT 5825
(n,He-3)
Cross Section
58-Ce-136
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4512 MeV
JENDL5.0 Threshold 4.4453 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^11
10^0
10^-11
10^-22
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
36
58-Ce-136

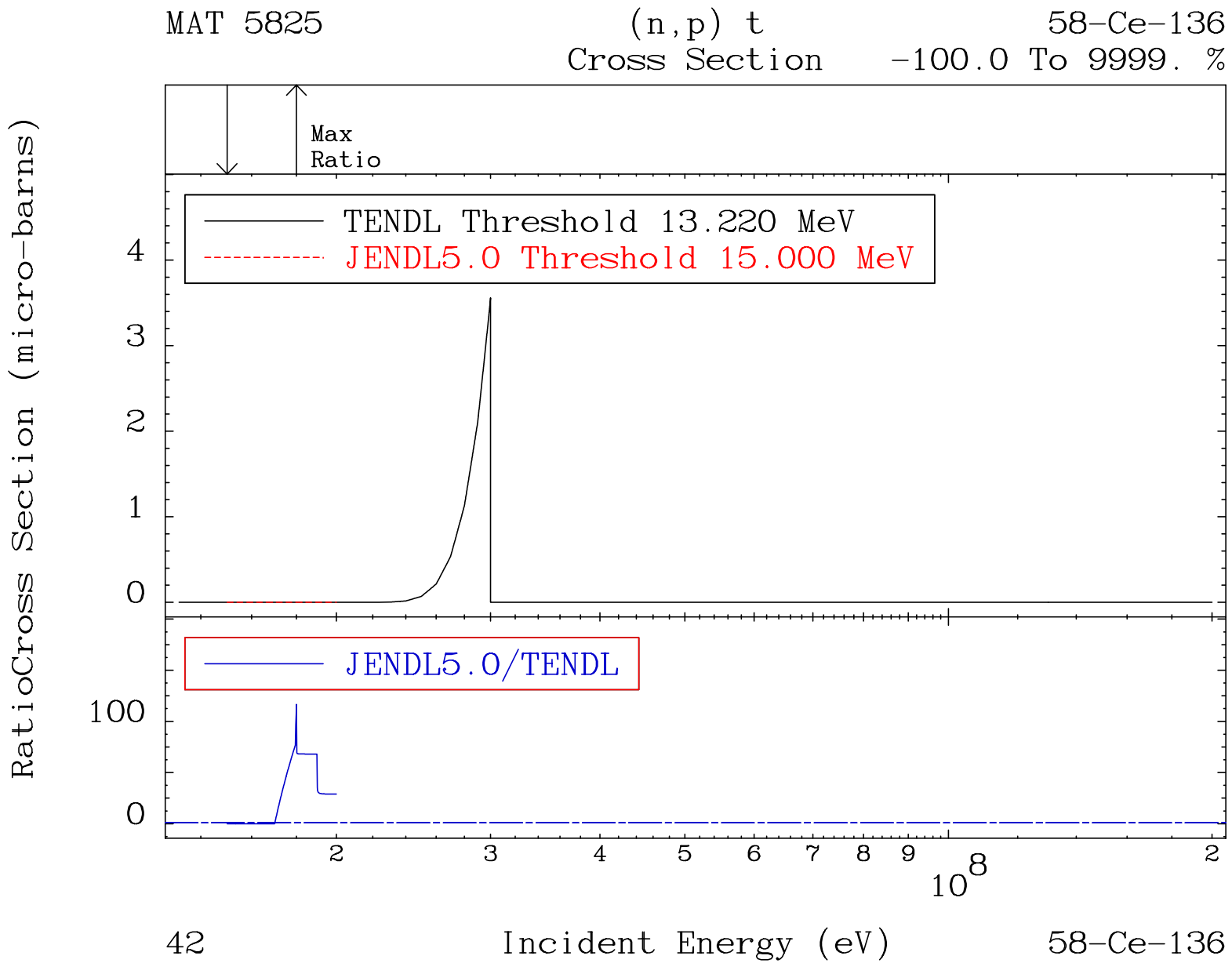

MAT 5825
(n,α)
Cross Section
58-Ce-136
-92.13 To 3958. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
58-Ce-136

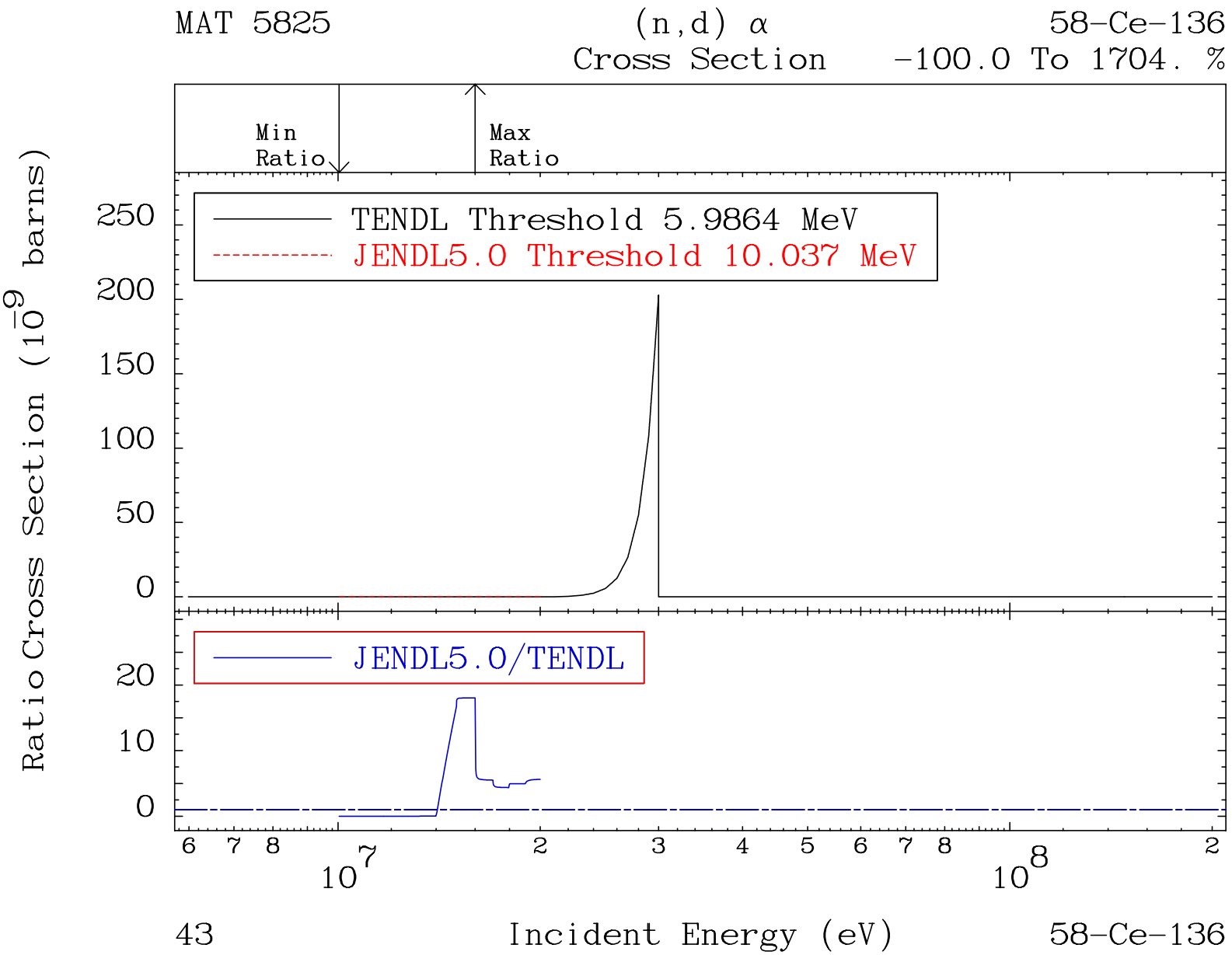

MAT 5825
(n,2α)
58-Ce-136
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 800.00 keV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
38
58-Ce-136

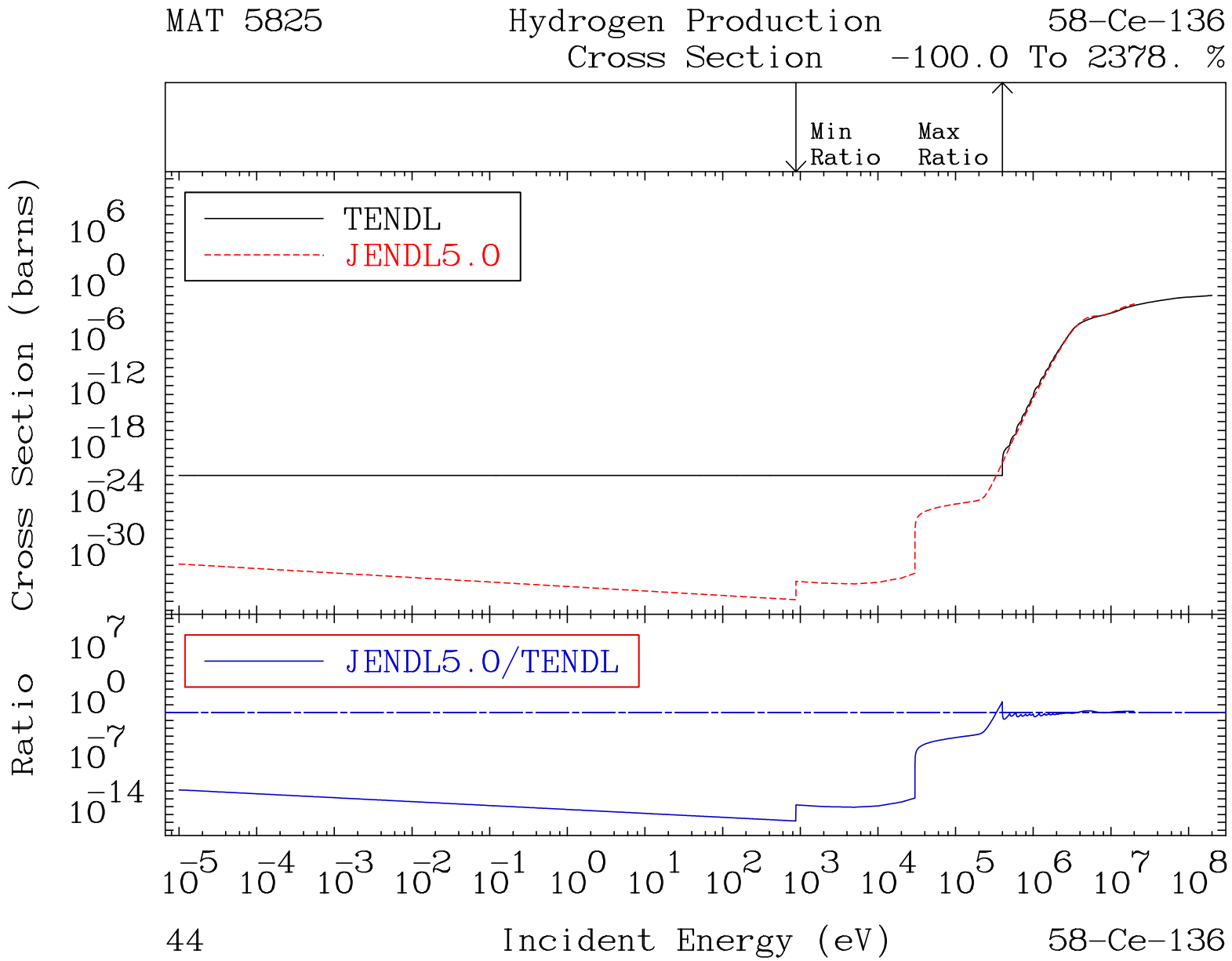

MAT 5825
(n,2p)
58-Ce-136
Cross Section
-100.0 To 505.8 %
Min Ratio
Max Ratio
TENDL Threshold 5.2028 MeV
JENDL5.0 Threshold 5.2028 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
140
120
100
80
60
40
20
0
10^{0}
10^{-10}
10^{-20}
5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
39
Incident Energy (eV)
58-Ce-136

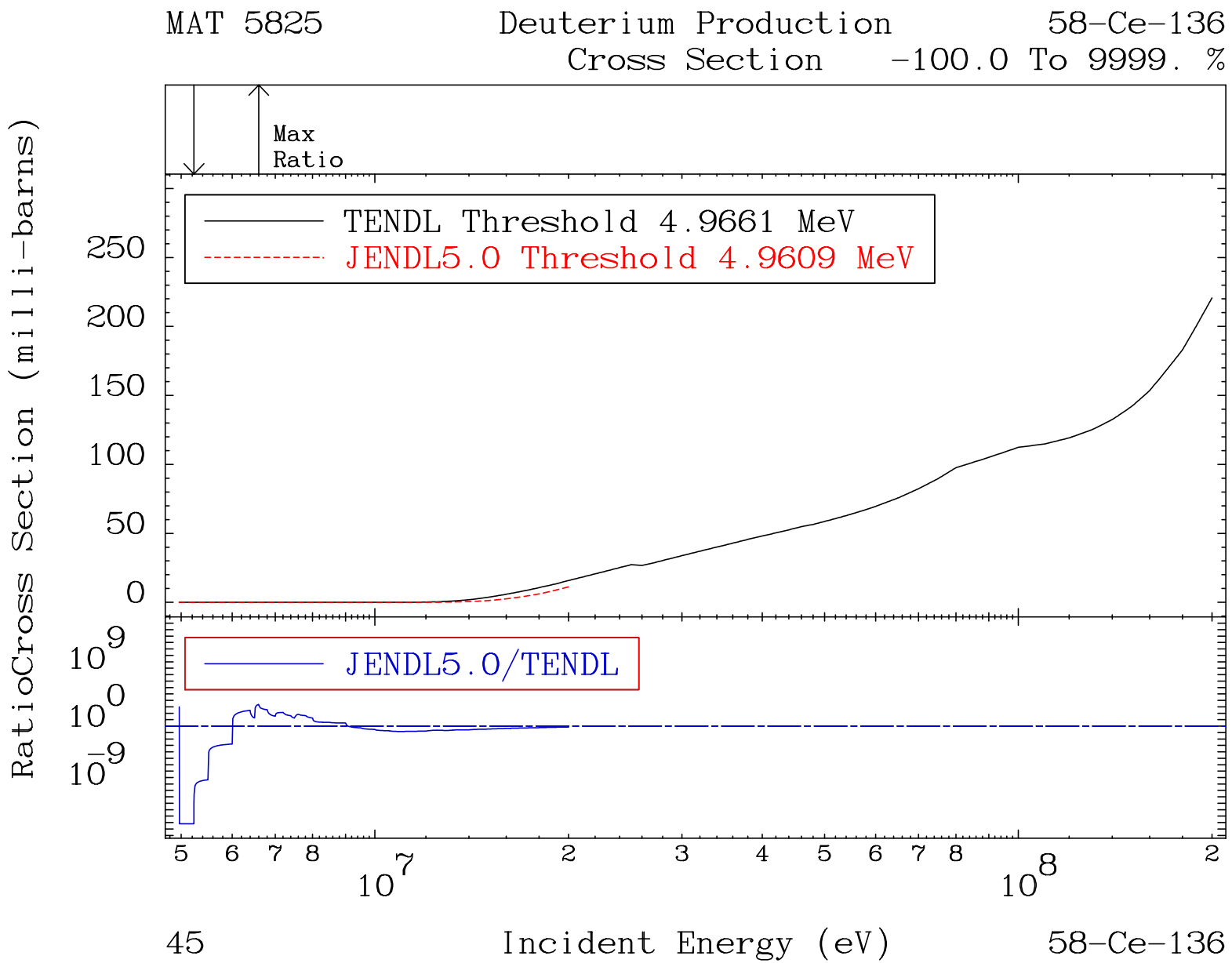

MAT 5825
(n,p) α
58-Ce-136
Cross Section
-100.0 To 5543. %
Min Ratio
Max Ratio
TENDL Threshold 1.0058 MeV
JENDL5.0 Threshold 4.2500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
58-Ce-136
40

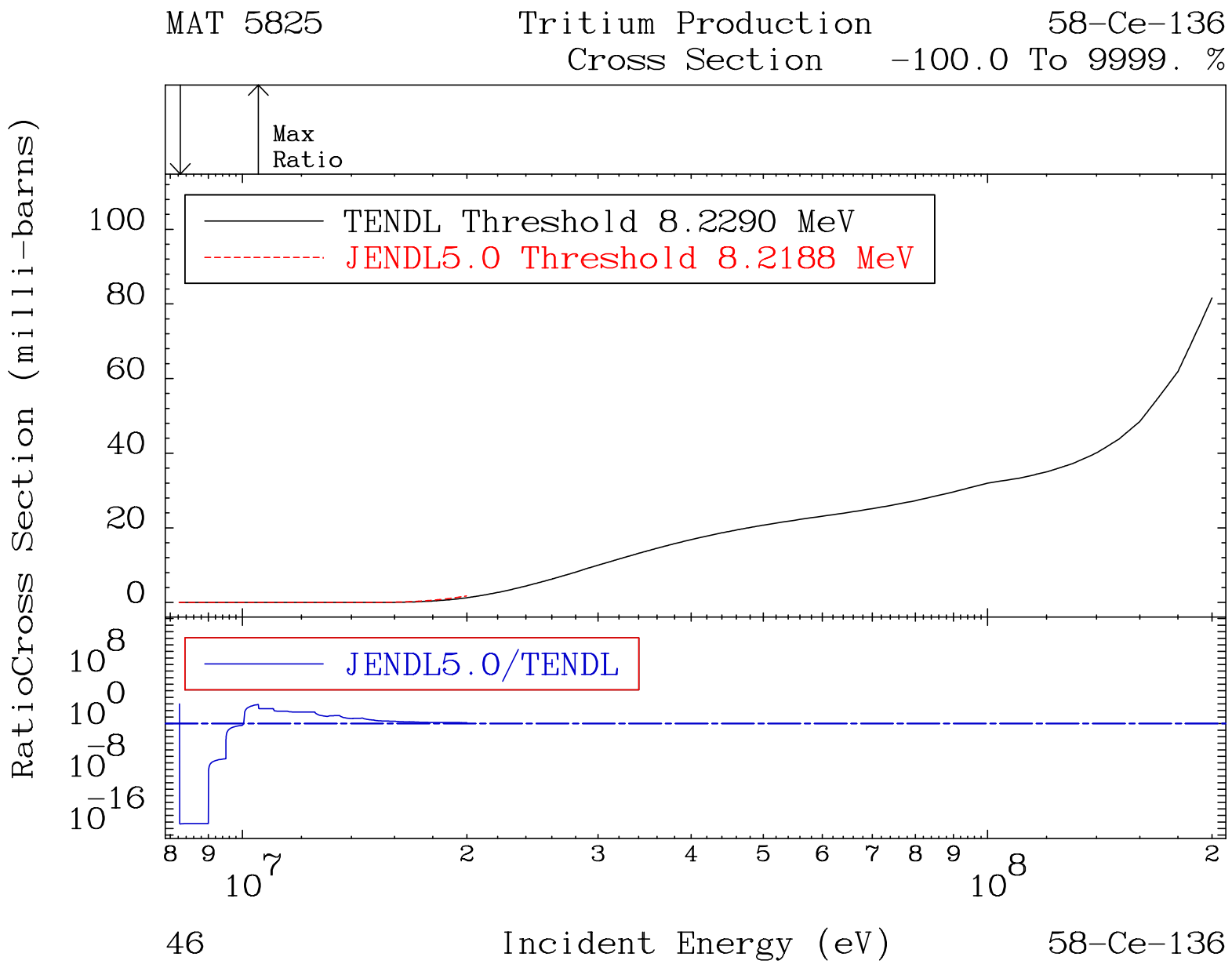

MAT 5825
(n,p) d
Cross Section
58-Ce-136
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.9855 MeV
JENDL5.0 Threshold 11.500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
12
10
8
6
4
2
0
400
0
10^7
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
58-Ce-136

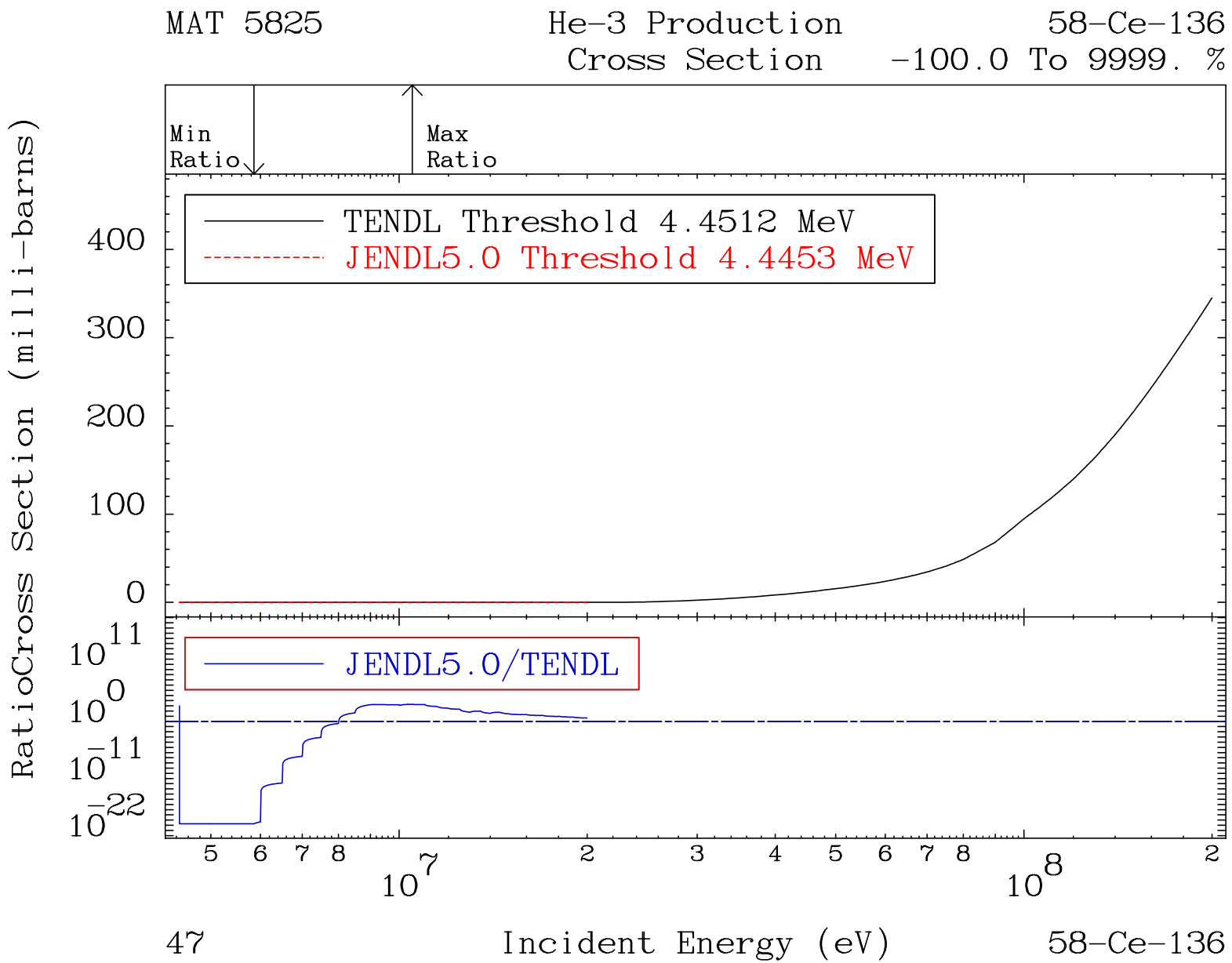

MAT 5825
(n,p) t
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.220 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
4
3
2
1
0
100
0
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
58-Ce-136

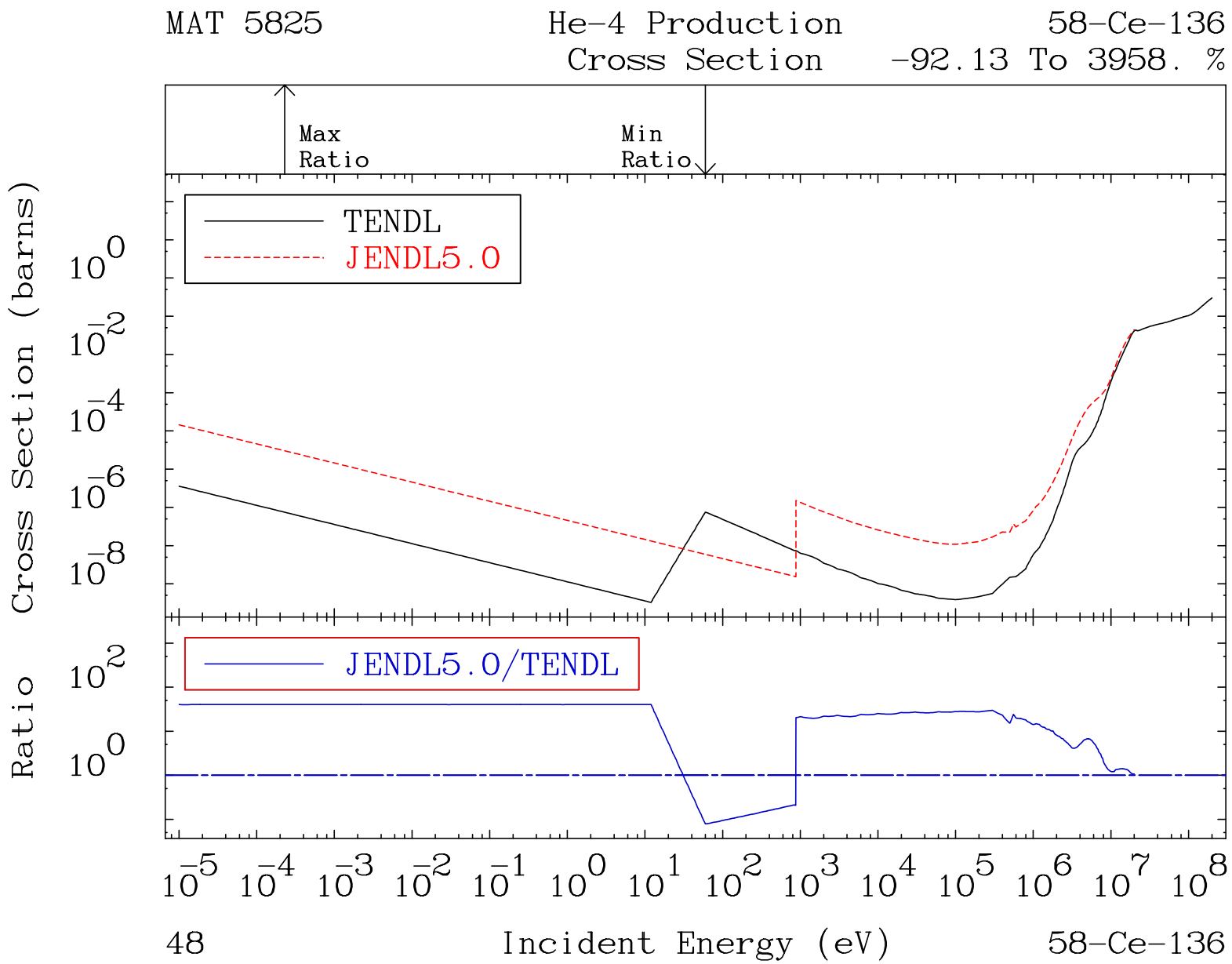

MAT 5825
(n,d) α
58-Ce-136
Cross Section
-100.0 To 1704. %
Min Ratio
Max Ratio
TENDL Threshold 5.9864 MeV
JENDL5.0 Threshold 10.037 MeV
JENDL5.0/TENDL
Ratio Cross Section (10^-9 barns)
250
200
150
100
50
0
20
10
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
58-Ce-136

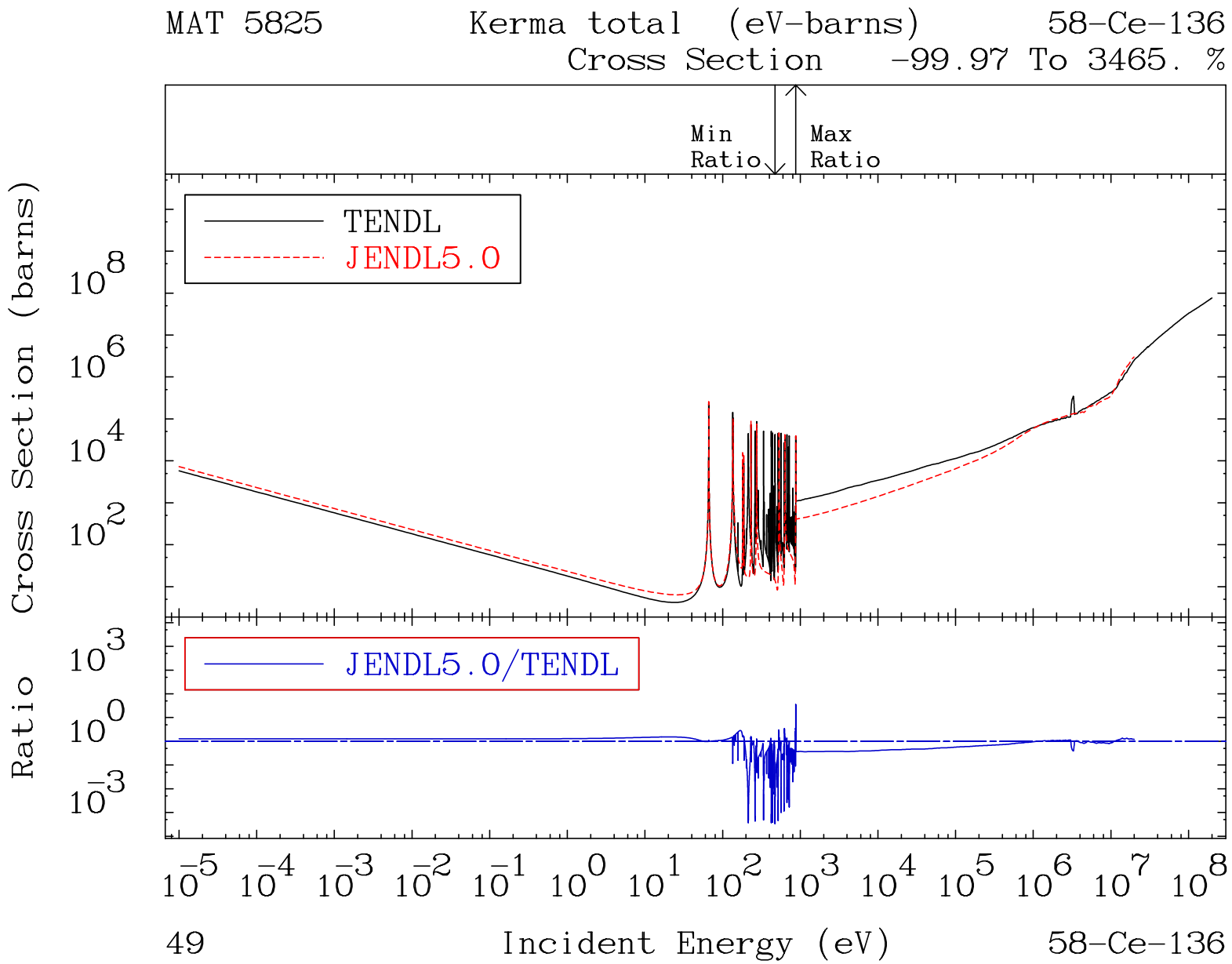

MAT 5825
Hydrogen Production
58-Ce-136
Cross Section
-100.0 To 2378. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
58-Ce-136

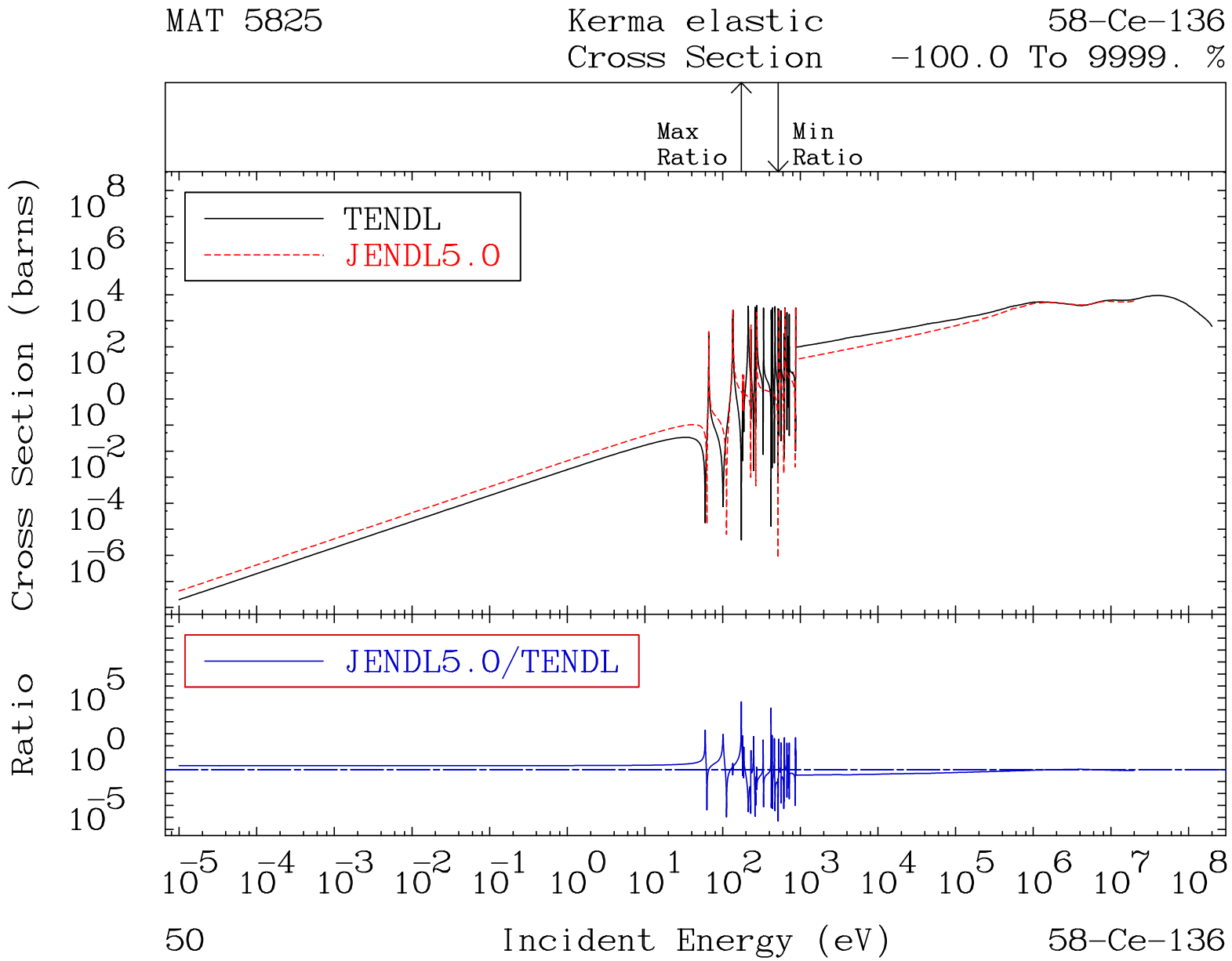

MAT 5825
Deuterium Production
58-Ce-136
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.9661 MeV
JENDL5.0 Threshold 4.9609 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^9
10^0
10^-9
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
58-Ce-136

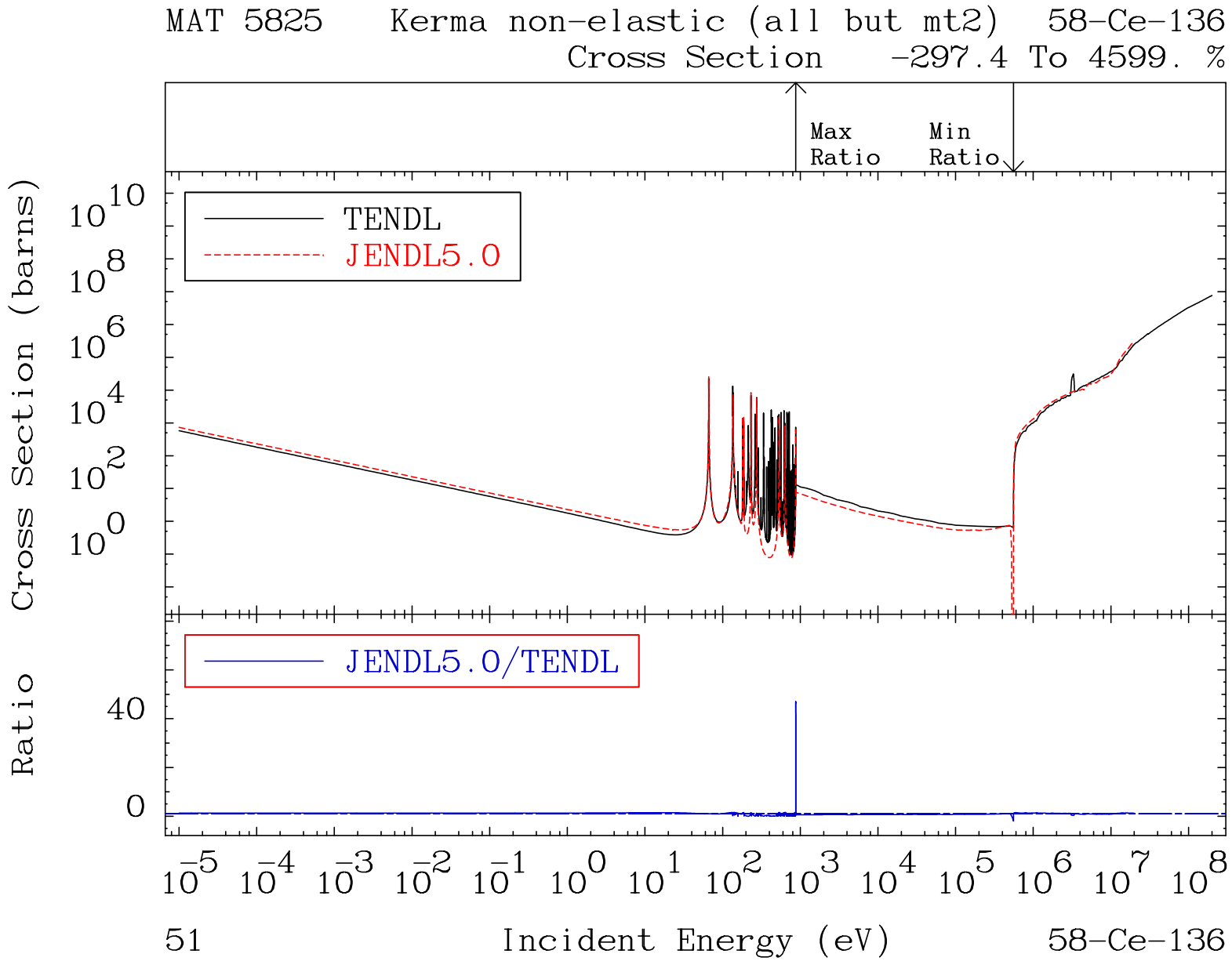

MAT 5825
Tritium Production
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.2290 MeV
JENDL5.0 Threshold 8.2188 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^{8}
10^{0}
10^{-8}
10^{-16}
8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
46
Incident Energy (eV)
58-Ce-136

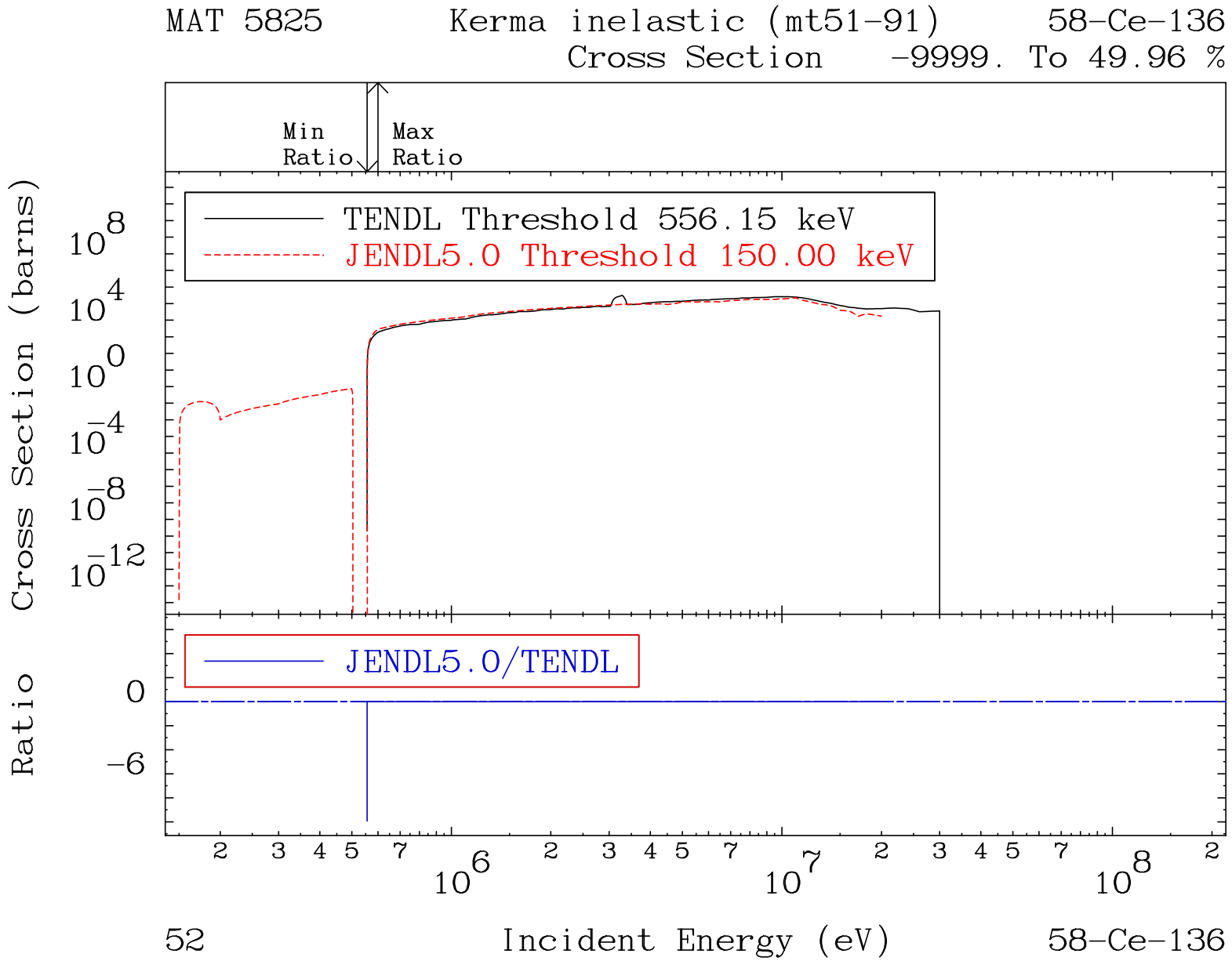

MAT 5825
He-3 Production
Cross Section
58-Ce-136
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4512 MeV
JENDL5.0 Threshold 4.4453 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^11
10^0
10^-11
10^-22
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
58-Ce-136

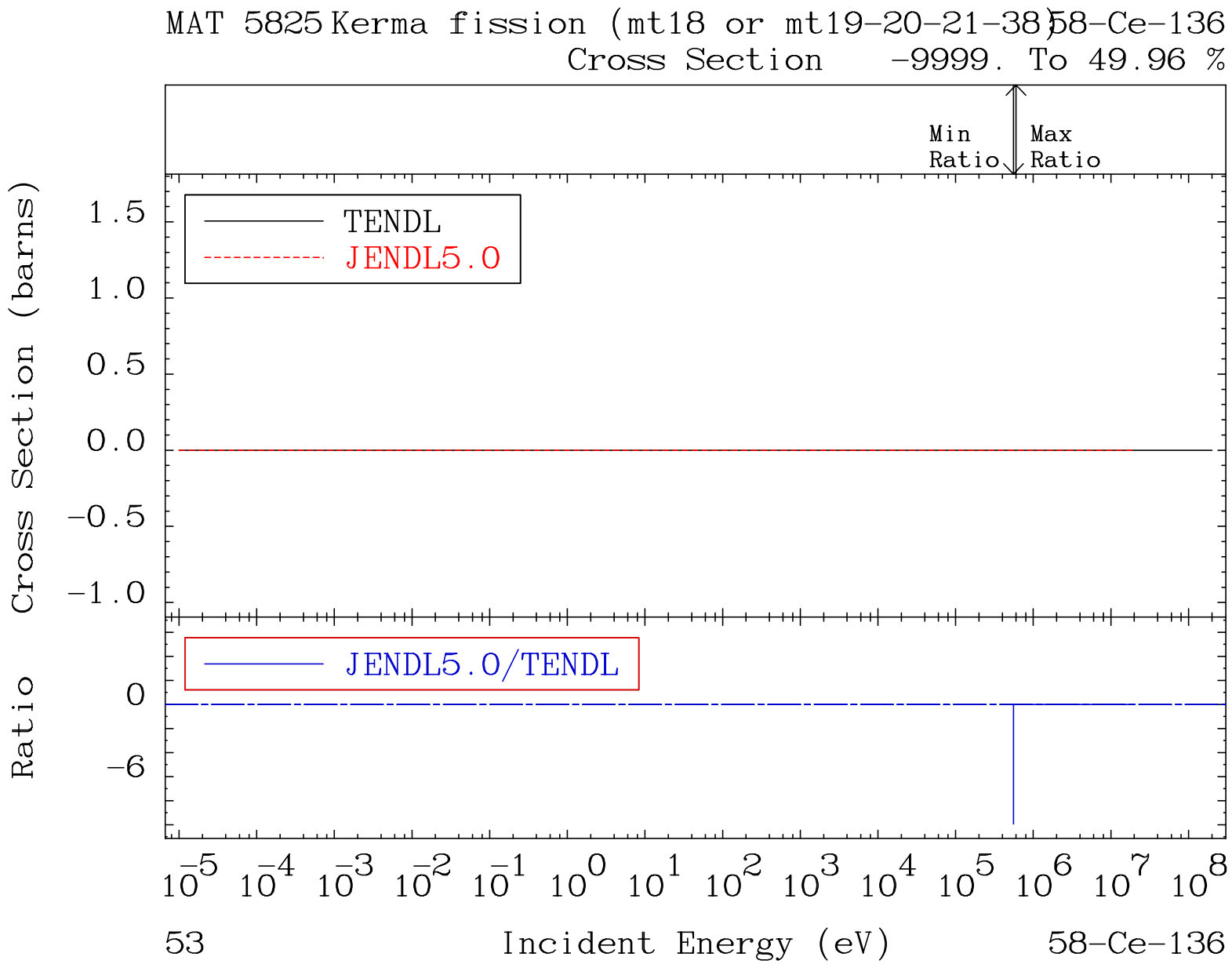

MAT 5825
He-4 Production
Cross Section
58-Ce-136
-92.13 To 3958. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
58-Ce-136

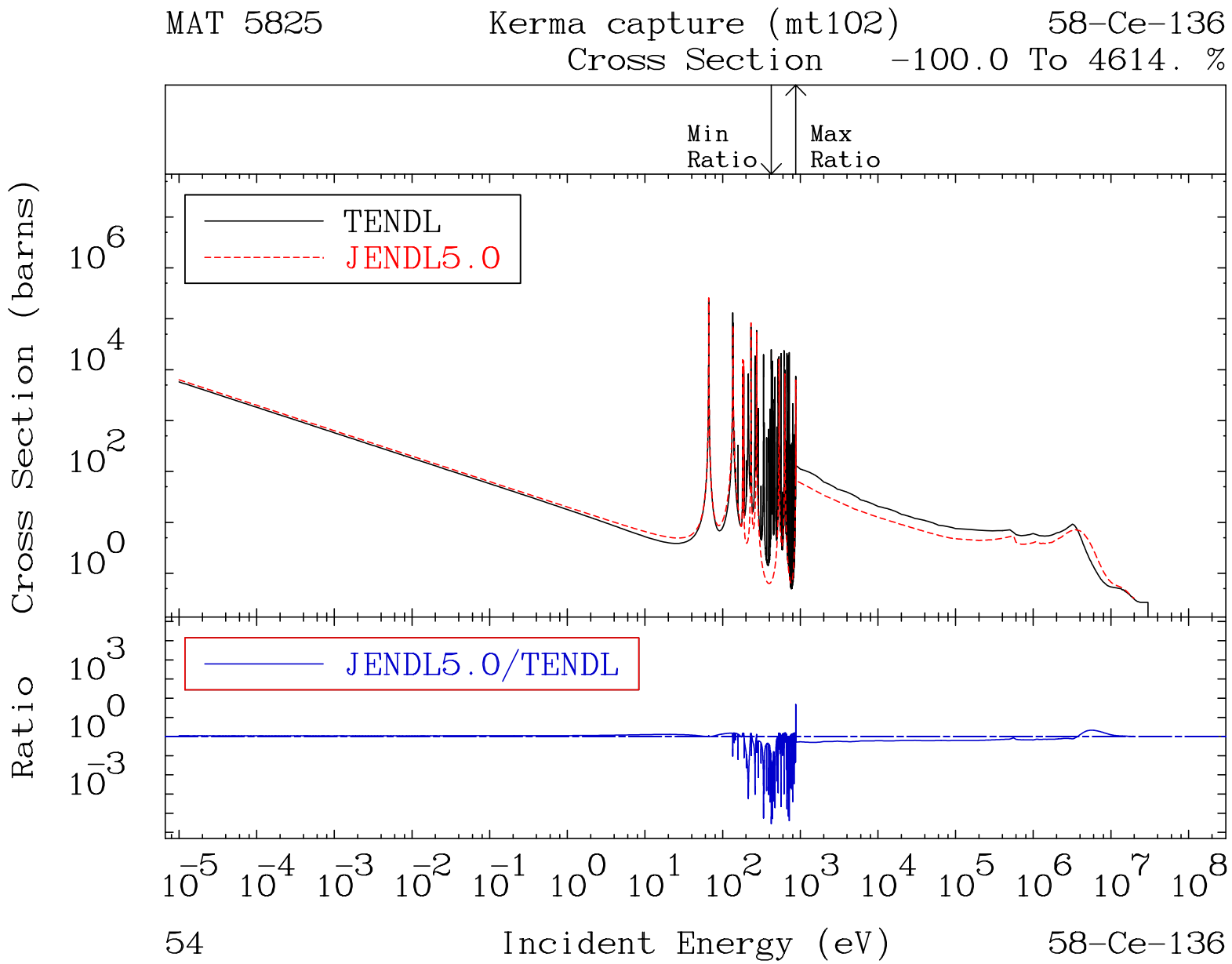

MAT 5825
Kerma total (eV-barns)
58-Ce-136
Cross Section -99.97 To 3465. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
58-Ce-136

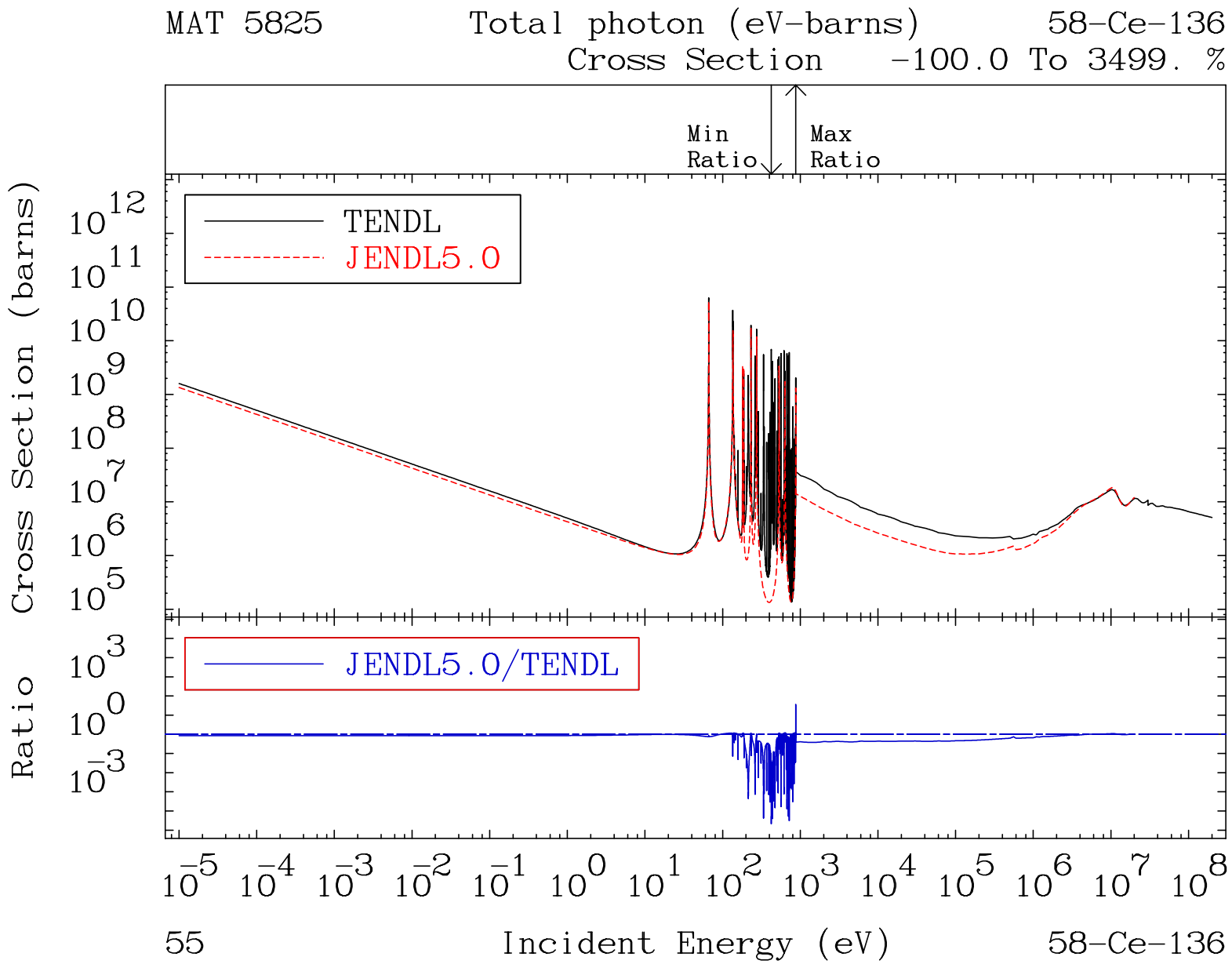

MAT 5825
Kerma elastic
Cross Section
58-Ce-136
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
58-Ce-136

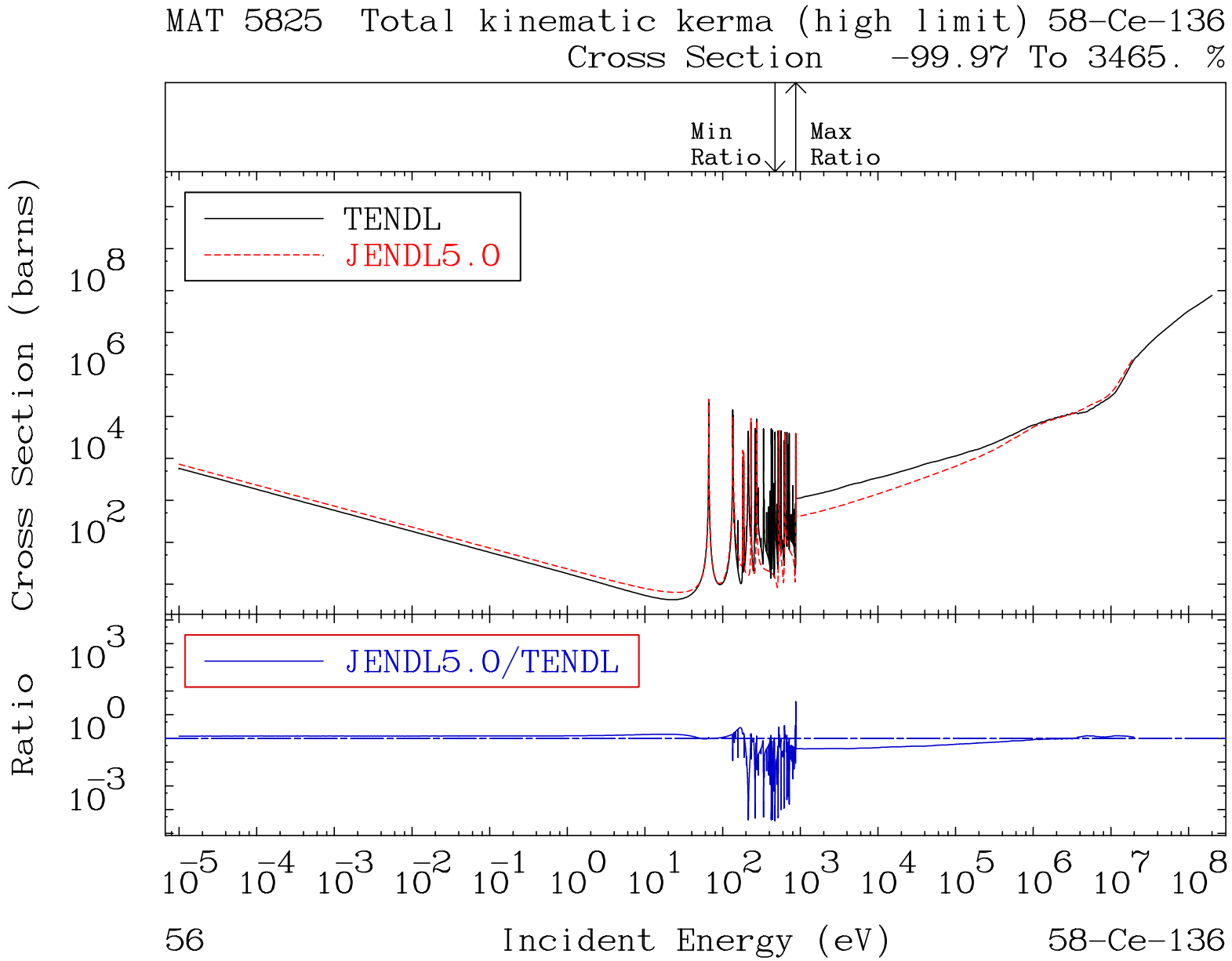

MAT 5825 Kerma non-elastic (all but mt2) 58-Ce-136
Cross Section -297.4 To 4599. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
58-Ce-136

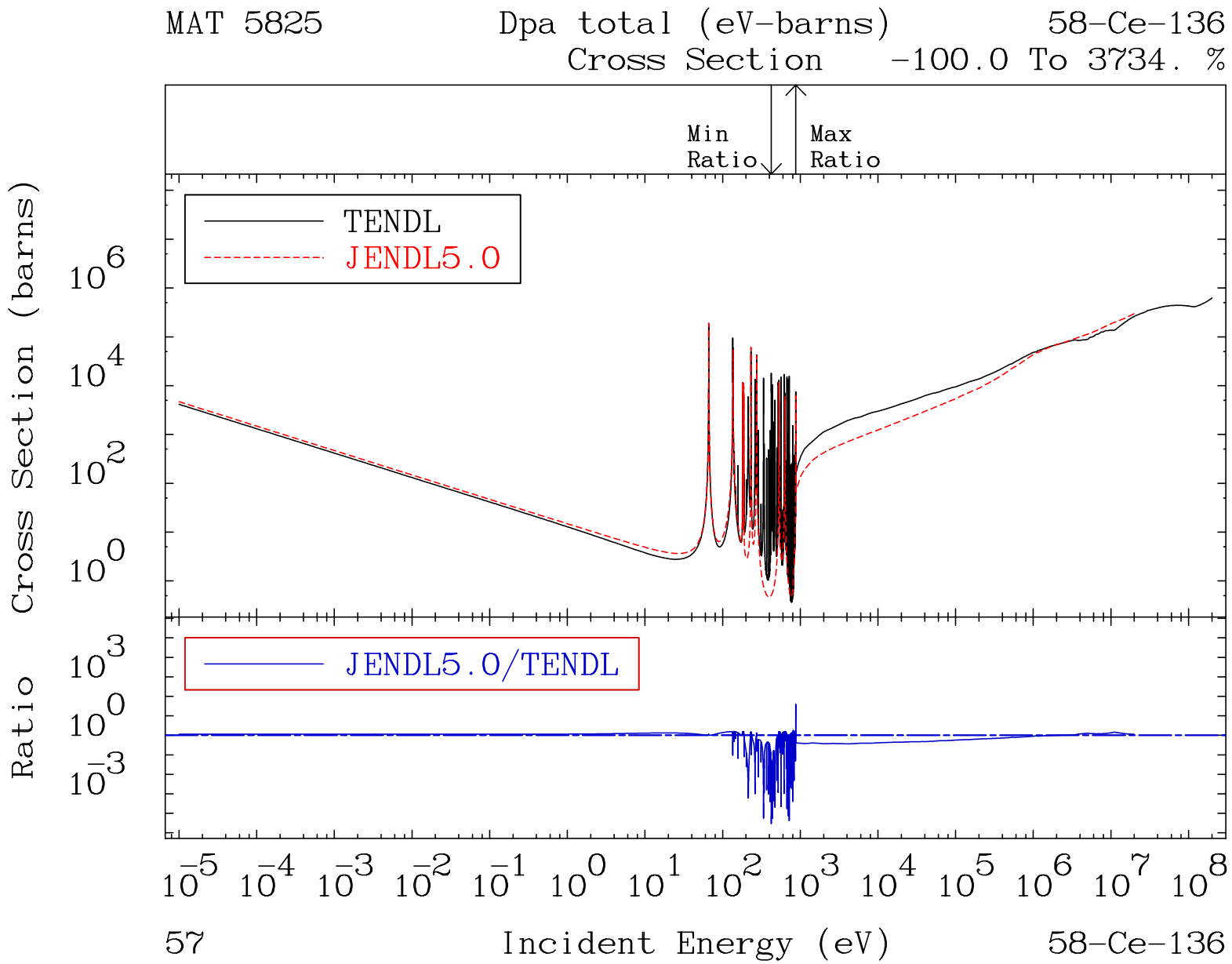

MAT 5825
Kerma inelastic (mt51-91)
58-Ce-136
Cross Section -9999. To 49.96 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
52
58-Ce-136

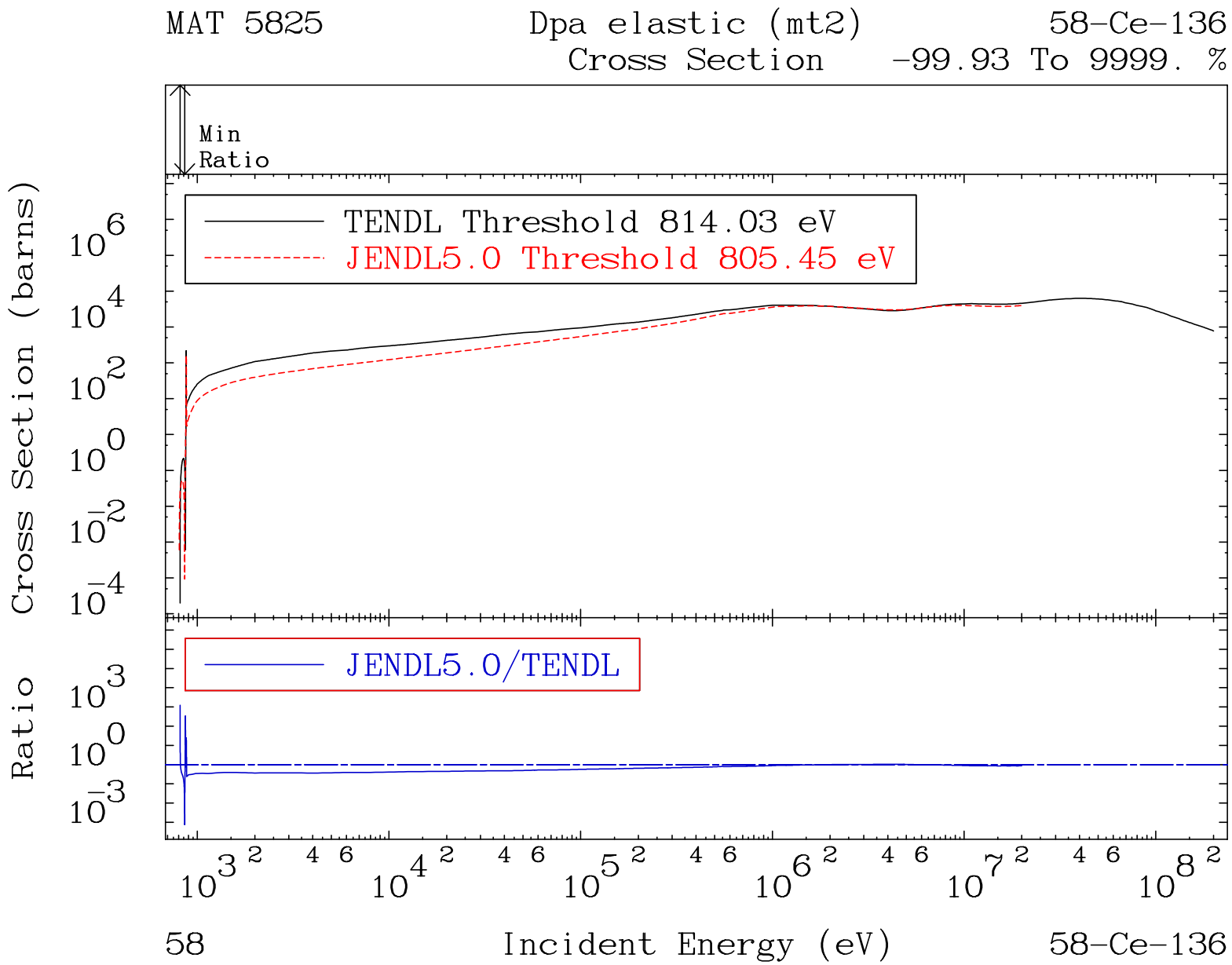

MAT 5825 Kerma fission (mt18 or mt19-20-21-38) 58-Ce-136
Cross Section -9999. To 49.96 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
53
Incident Energy (eV)
58-Ce-136

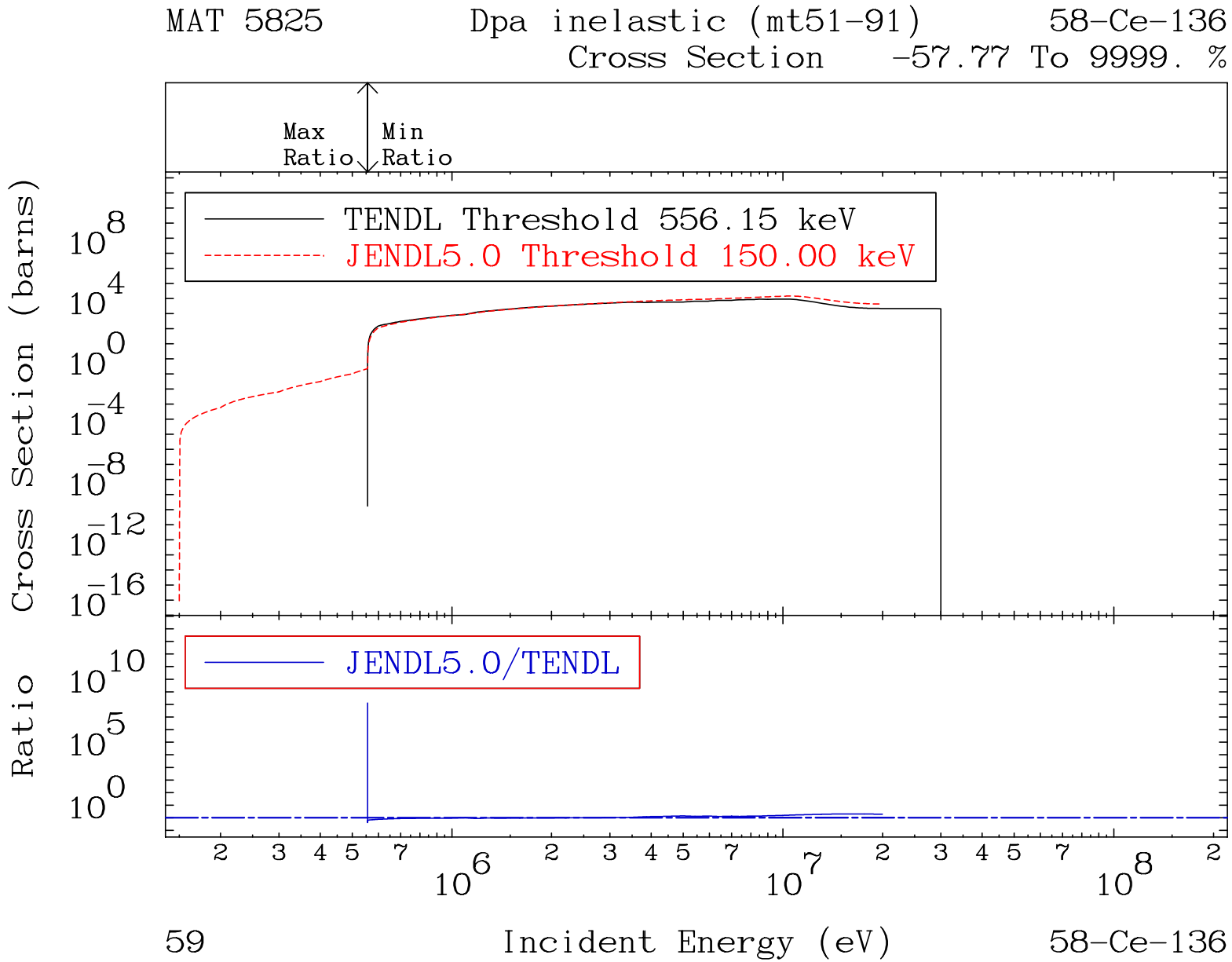

MAT 5825
Kerma capture (mt102)
58-Ce-136
Cross Section -100.0 To 4614. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
58-Ce-136

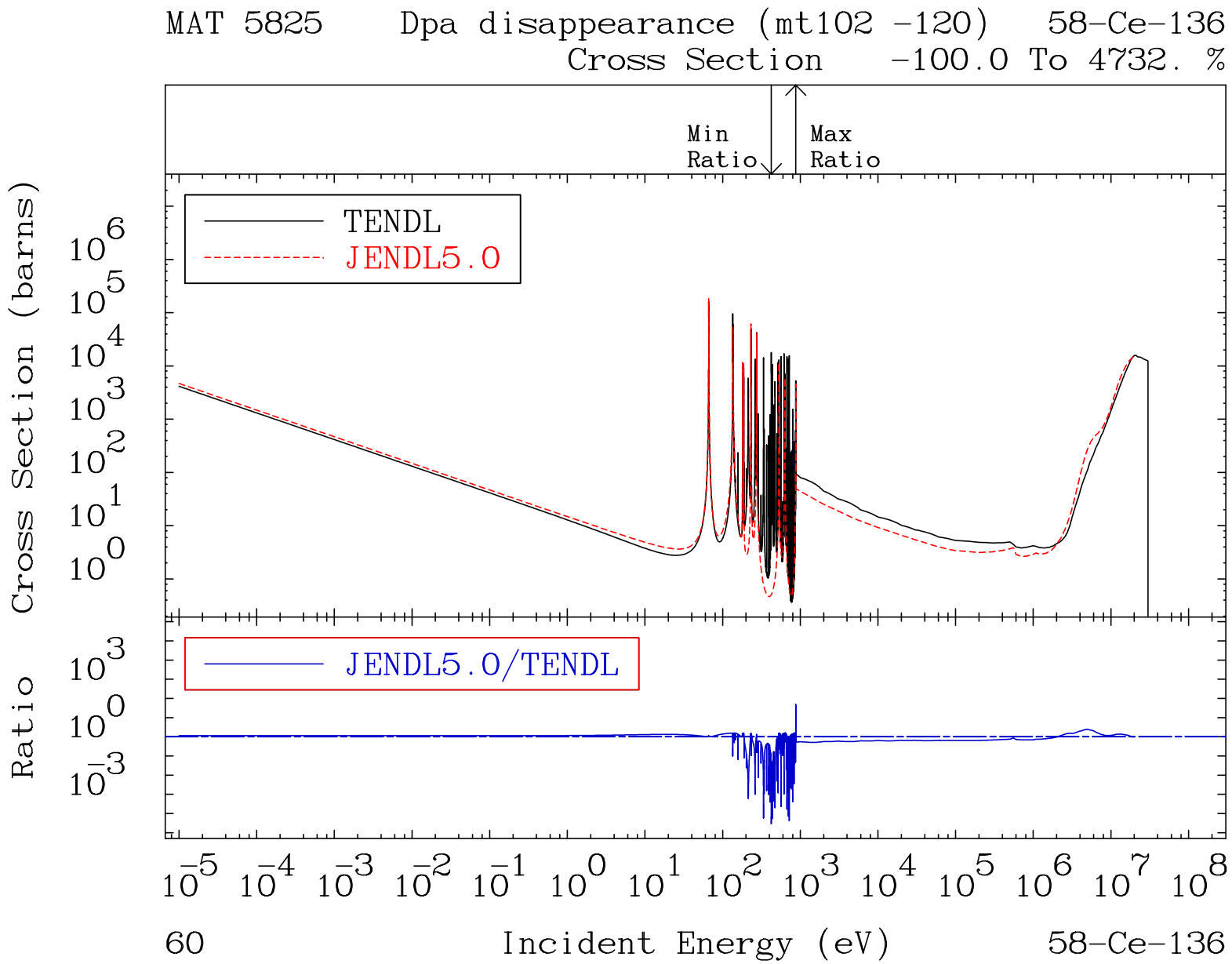

MAT 5825
Total photon (eV-barns)
58-Ce-136
Cross Section -100.0 To 3499. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
58-Ce-136

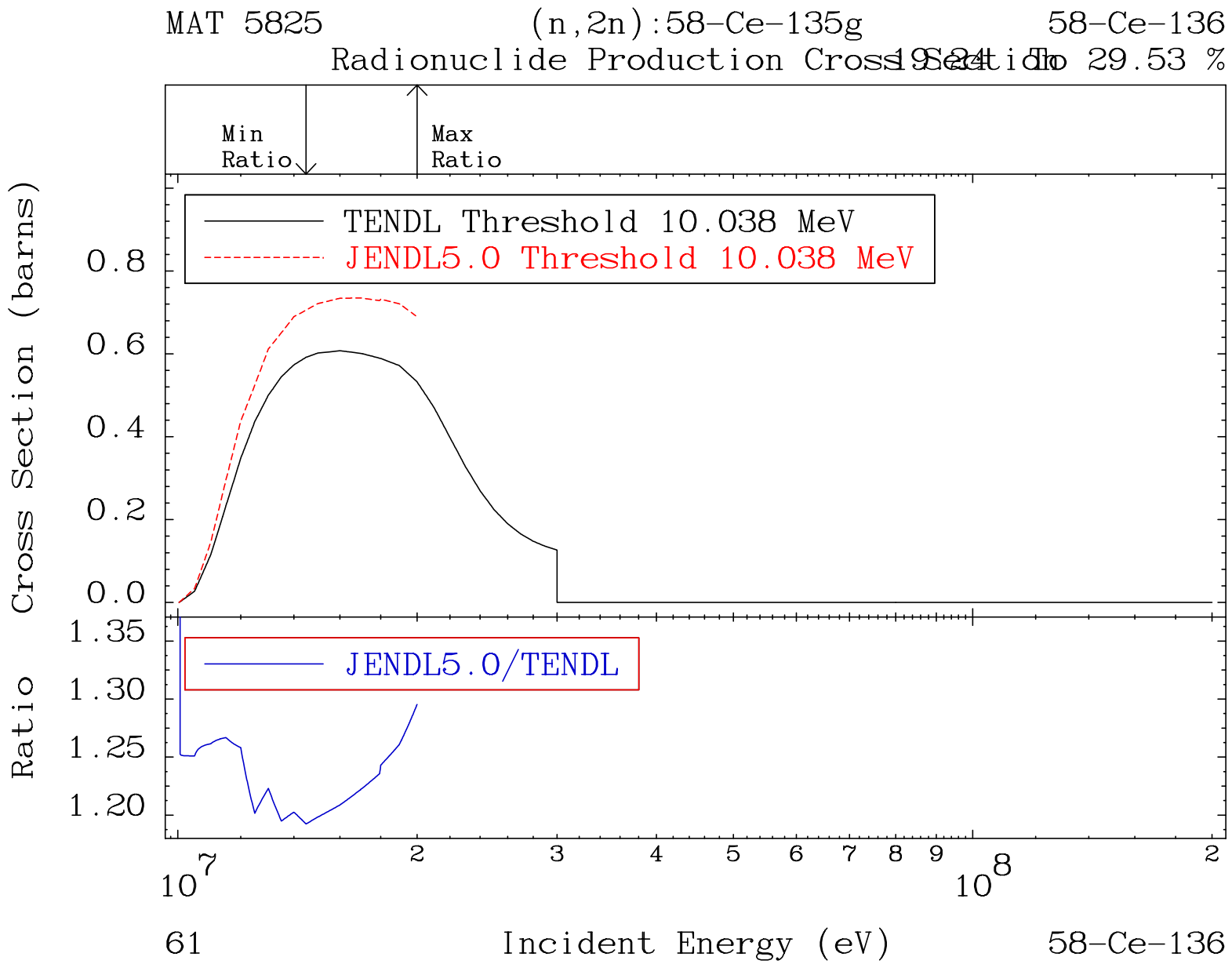

MAT 5825 Total kinematic kerma (high limit) 58-Ce-136
Cross Section -99.97 To 3465. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
58-Ce-136

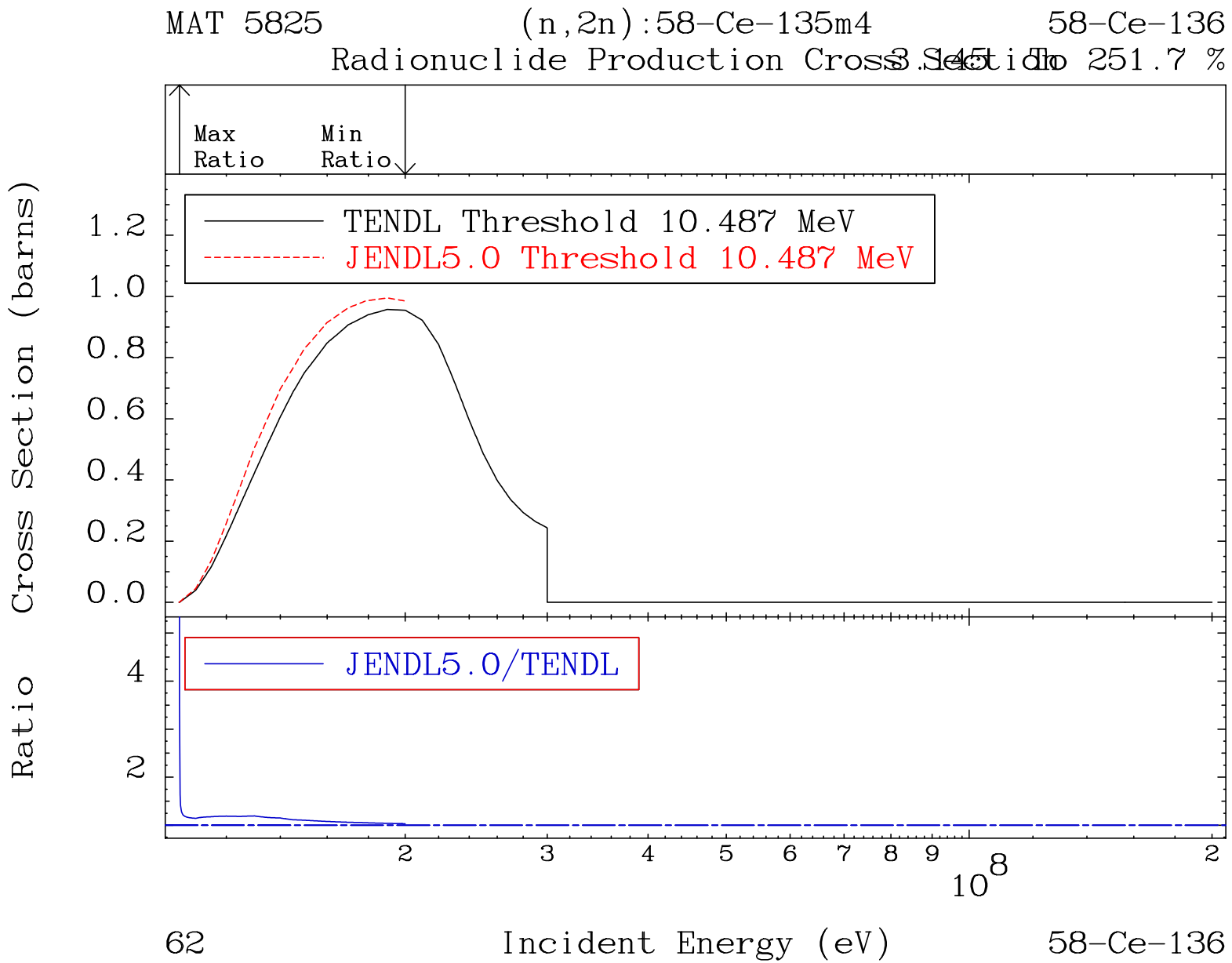

MAT 5825
Dpa total (eV-barns)
58-Ce-136
Cross Section
-100.0 To 3734. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
58-Ce-136

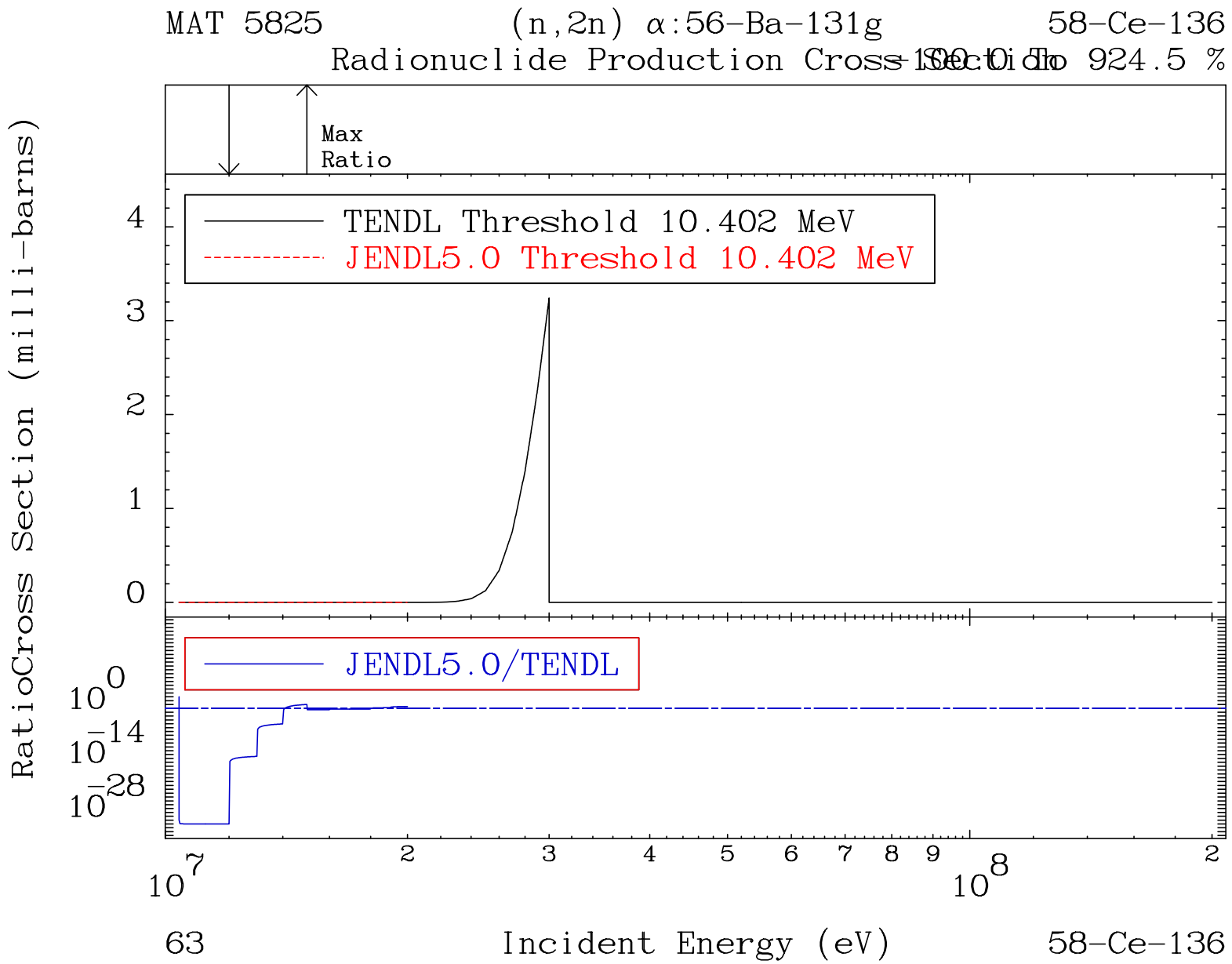

MAT 5825
Dpa elastic (mt2)
Cross Section
58-Ce-136
-99.93 To 9999. %
Min
Ratio
TENDL Threshold 814.03 eV
JENDL5.0 Threshold 805.45 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
58-Ce-136

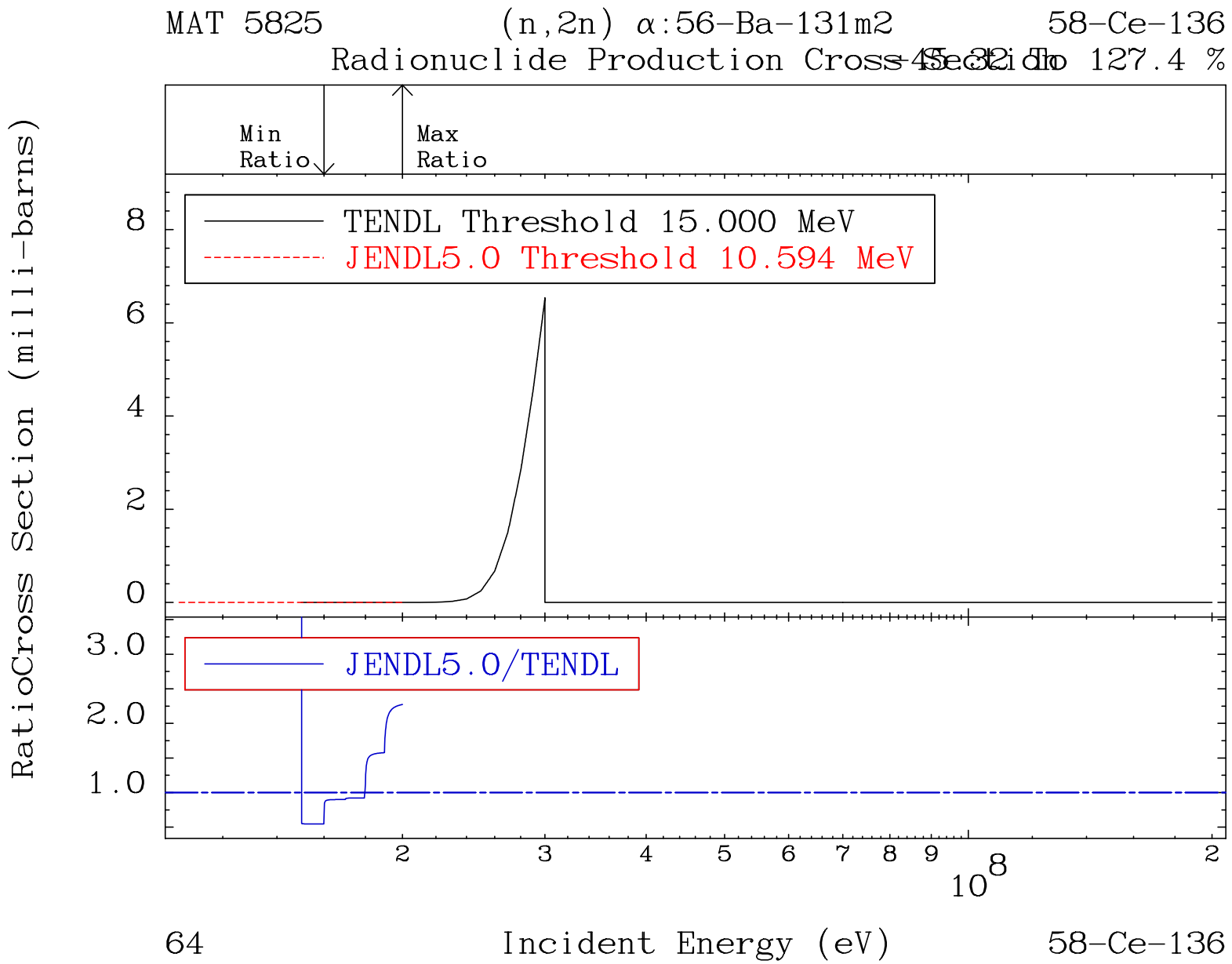

MAT 5825
Dpa inelastic (mt51-91)
58-Ce-136
Cross Section -57.77 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
59
58-Ce-136

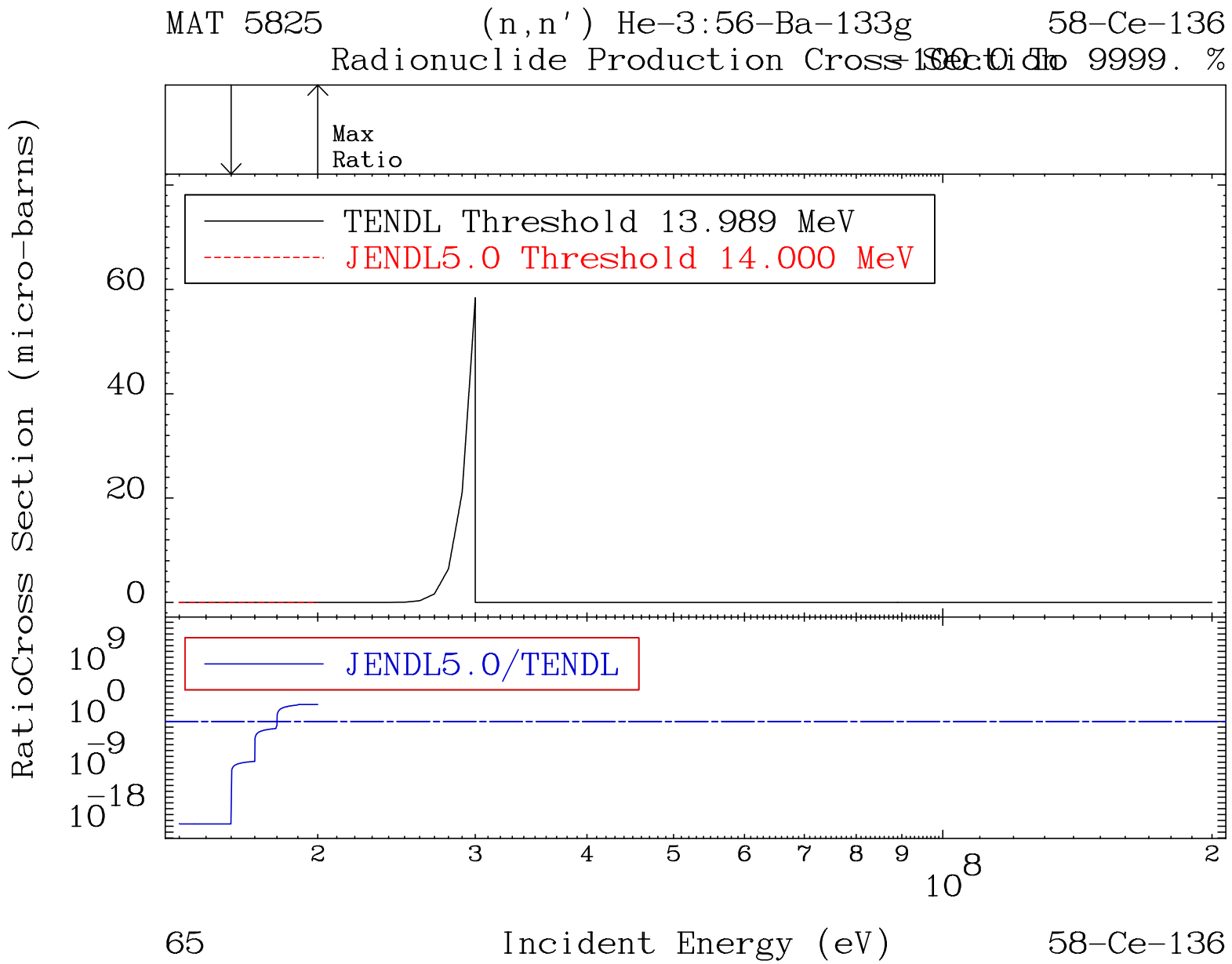

MAT 5825 Dpa disappearance (mt102 -120) 58-Ce-136
Cross Section -100.0 To 4732. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
58-Ce-136

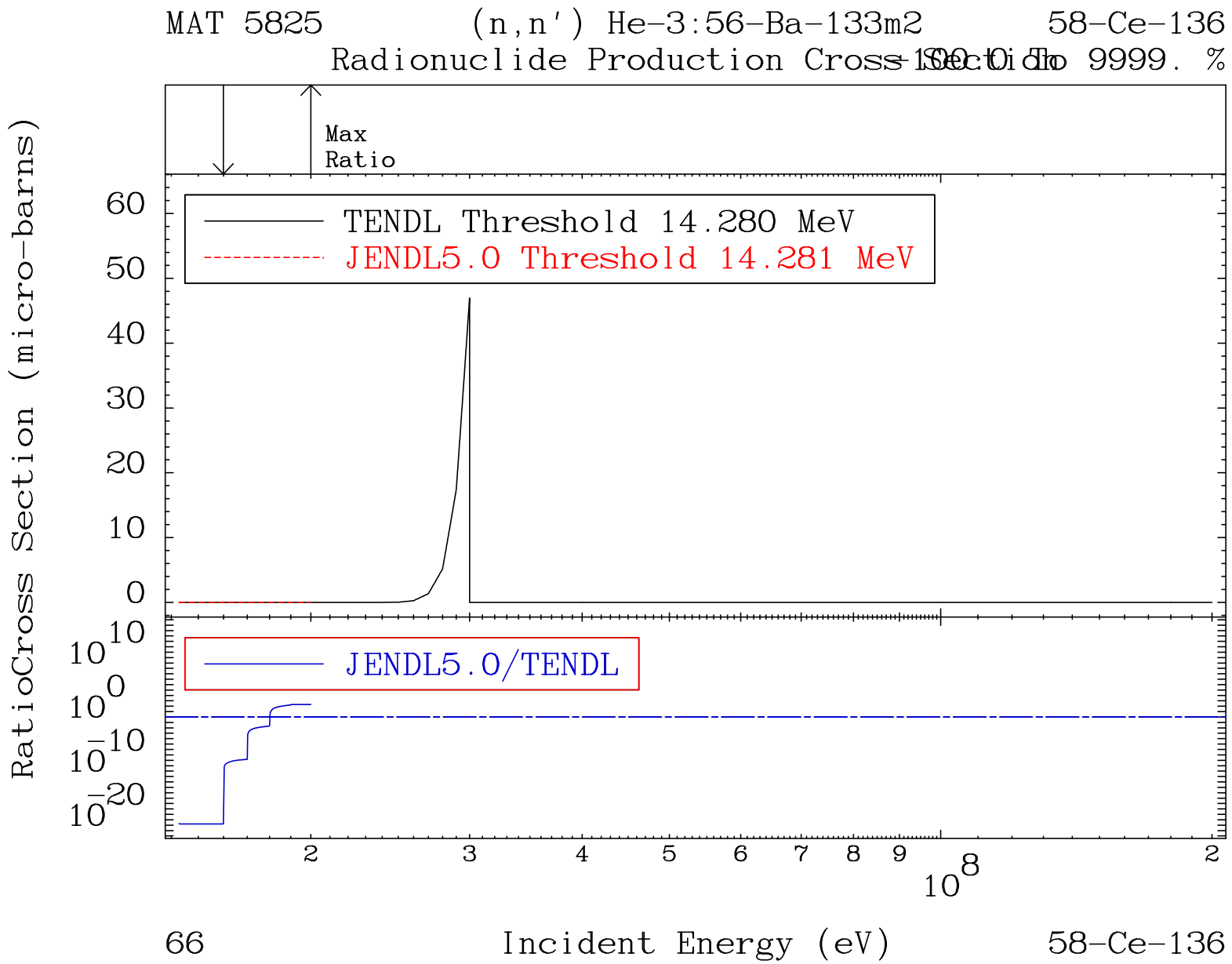

MAT 5825
(n,2n):58-Ce-135g
58-Ce-136
Radionuclide Production Cross Section
1924 to 29.53 %
Min Ratio
Max Ratio
TENDL Threshold 10.038 MeV
JENDL5.0 Threshold 10.038 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
0.8
0.6
0.4
0.2
0.0
1.35
1.30
1.25
1.20
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
58-Ce-136

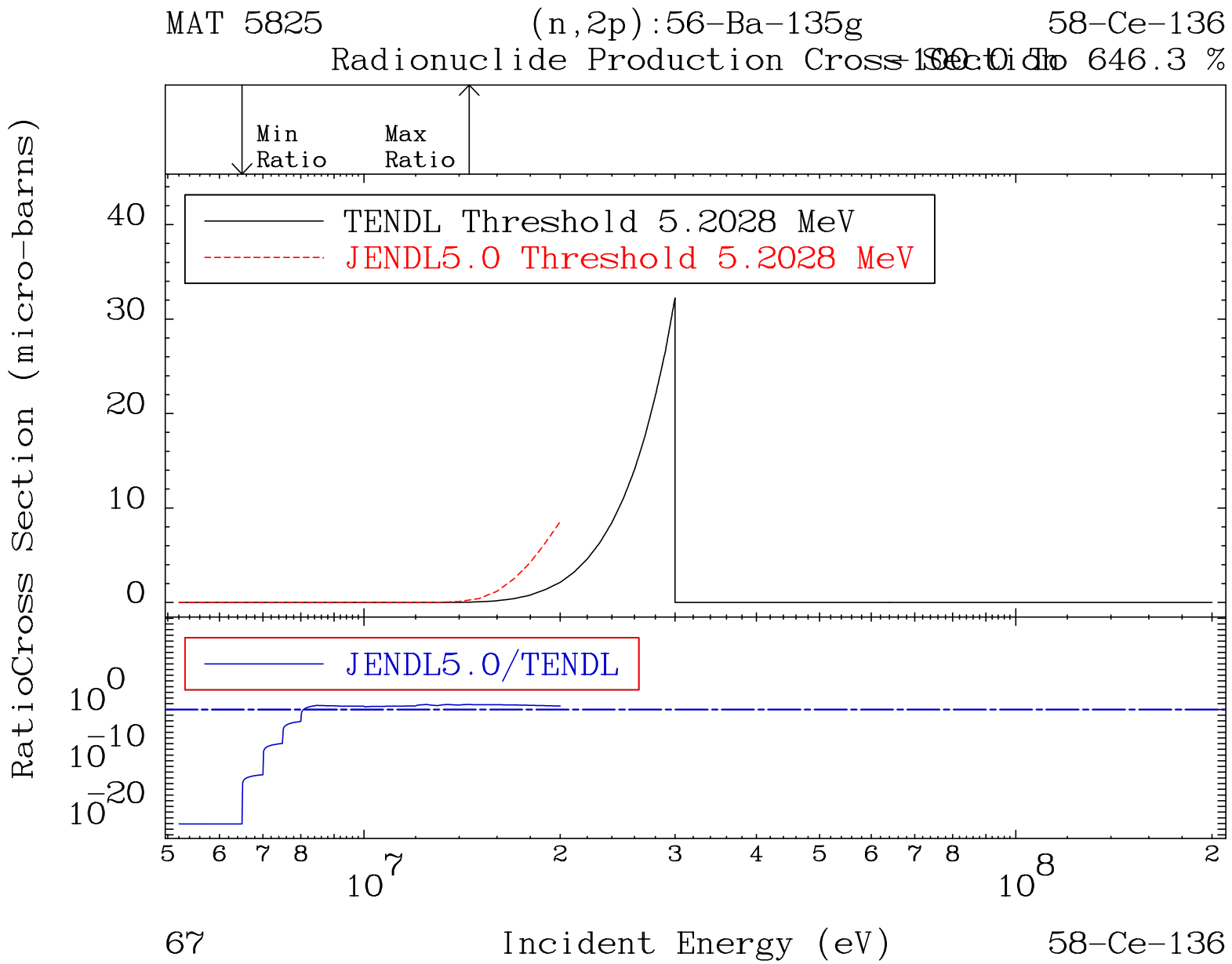

MAT 5825
(n,2n):58-Ce-135m4
58-Ce-136
Radionuclide Production Cross Section
Max Ratio 3.145
Min Ratio 251.7 %
TENDL Threshold 10.487 MeV
JENDL5.0 Threshold 10.487 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
58-Ce-136

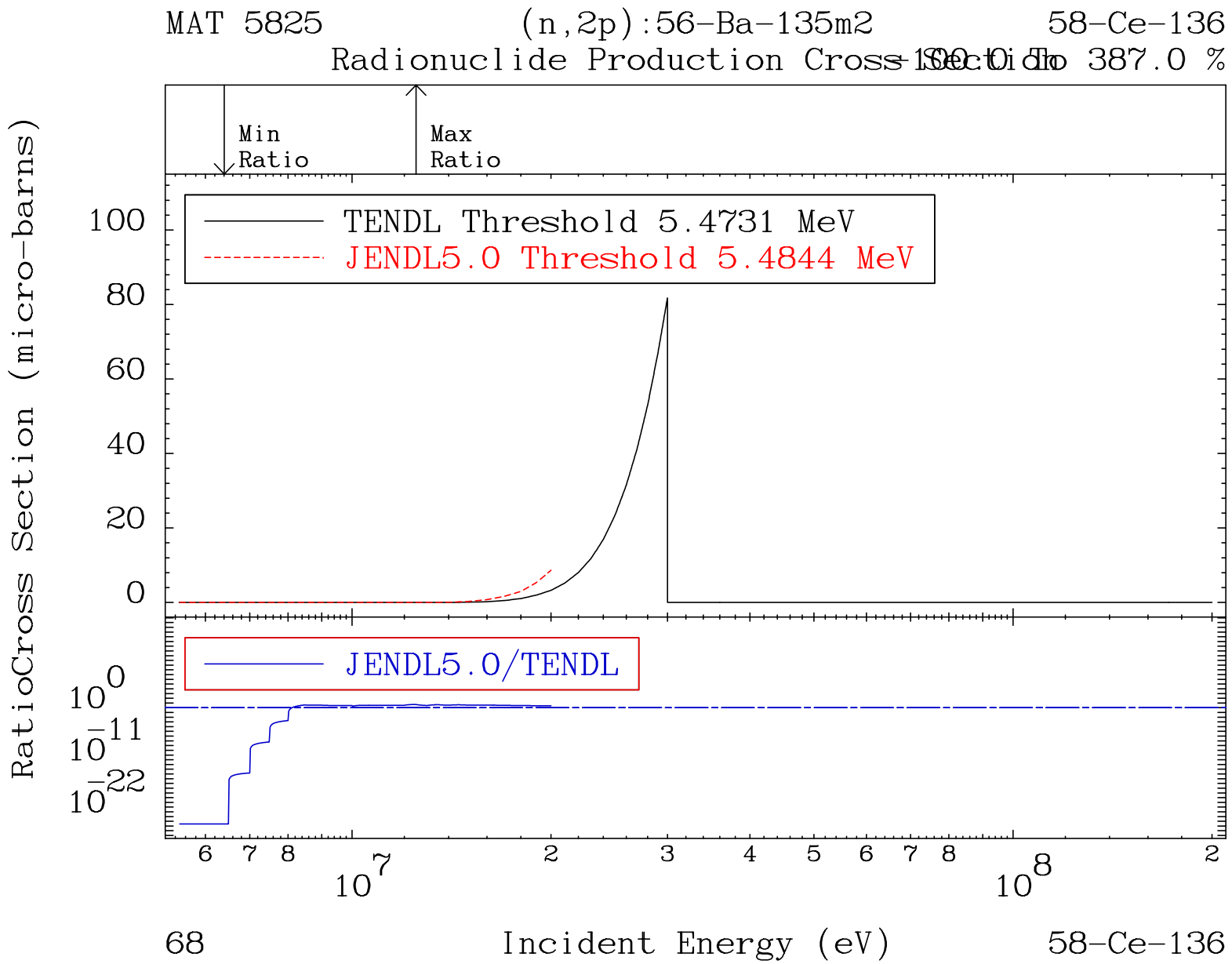

MAT 5825
(n,2n) α:56-Ba-131g
58-Ce-136
Radionuclide Production Cross Section To 924.5 %
Max
Ratio
TENDL Threshold 10.402 MeV
JENDL5.0 Threshold 10.402 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
63
58-Ce-136

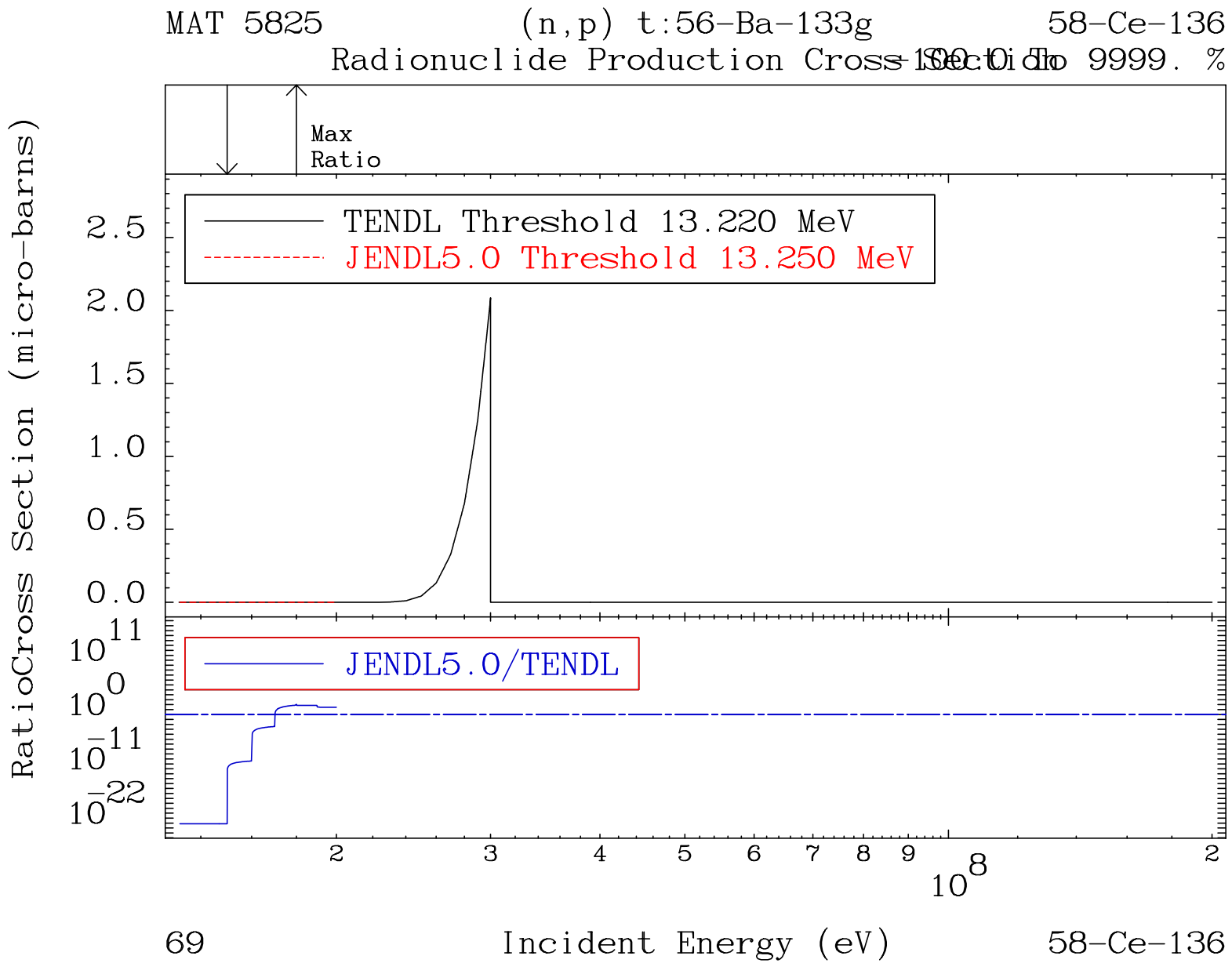

MAT 5825
(n,2n) α:56-Ba-131m2
58-Ce-136
Radionuclide Production Cross Section
45.32 To 127.4 %
Min Ratio
Max Ratio
TENDL Threshold 15.000 MeV
JENDL5.0 Threshold 10.594 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
58-Ce-136

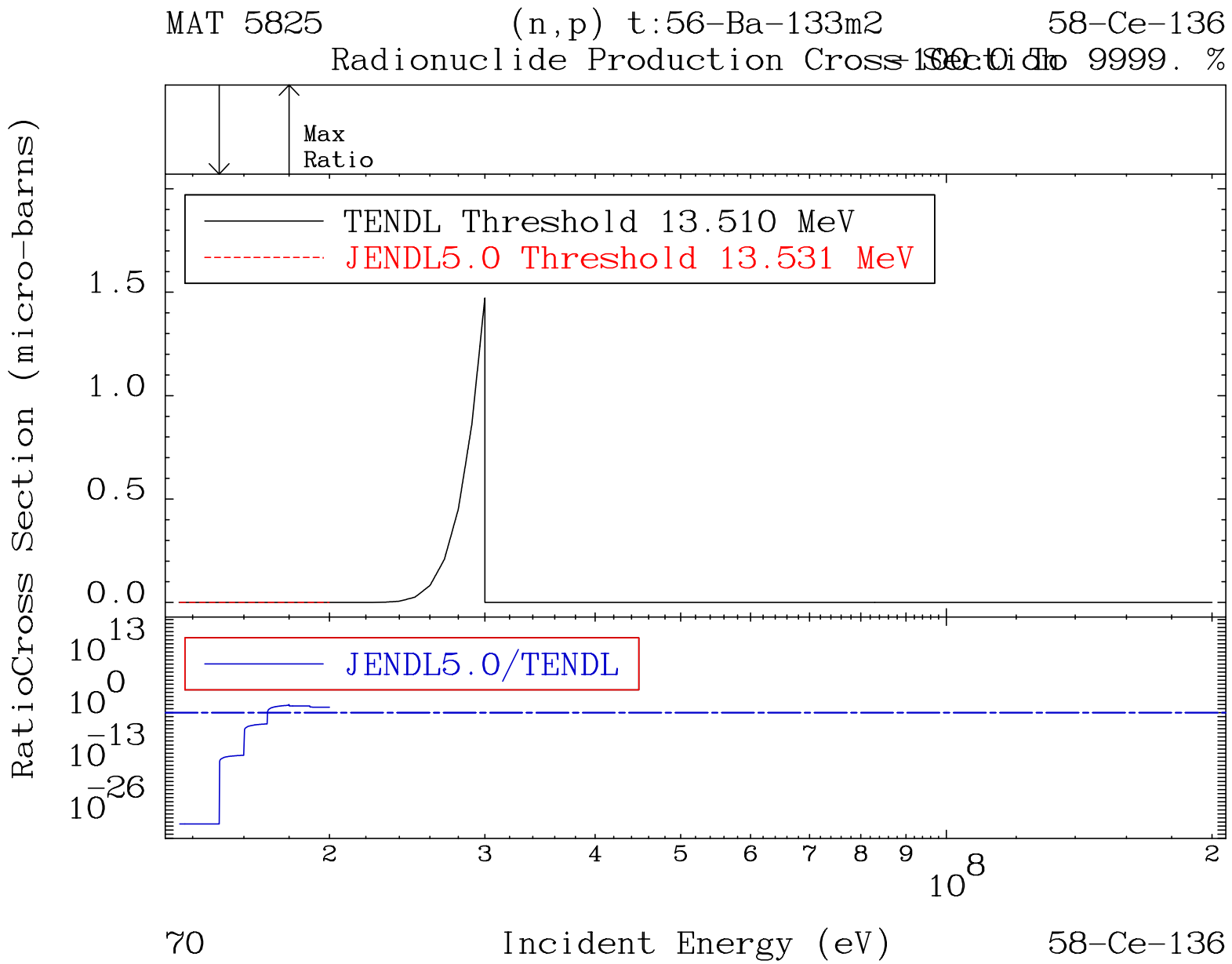

MAT 5825
(n,n') He-3:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.989 MeV
JENDL5.0 Threshold 14.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
60
40
20
0
10^9
10^0
10^-9
10^-18
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
58-Ce-136

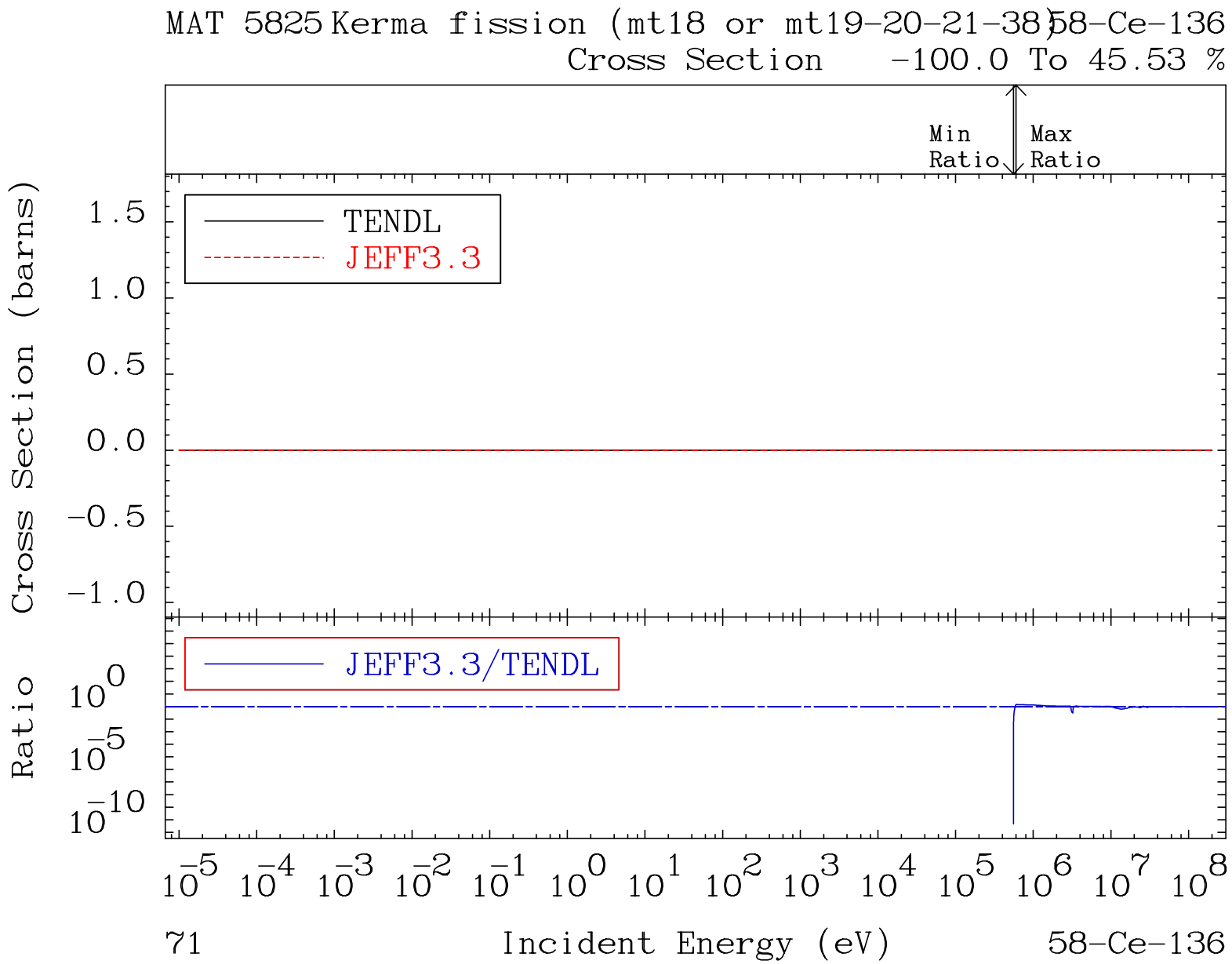

MAT 5825 (n,n') He-3:56-Ba-133m2 58-Ce-136
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 14.280 MeV
JENDL5.0 Threshold 14.281 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
10^10
10^0
10^-10
10^-20
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
58-Ce-136

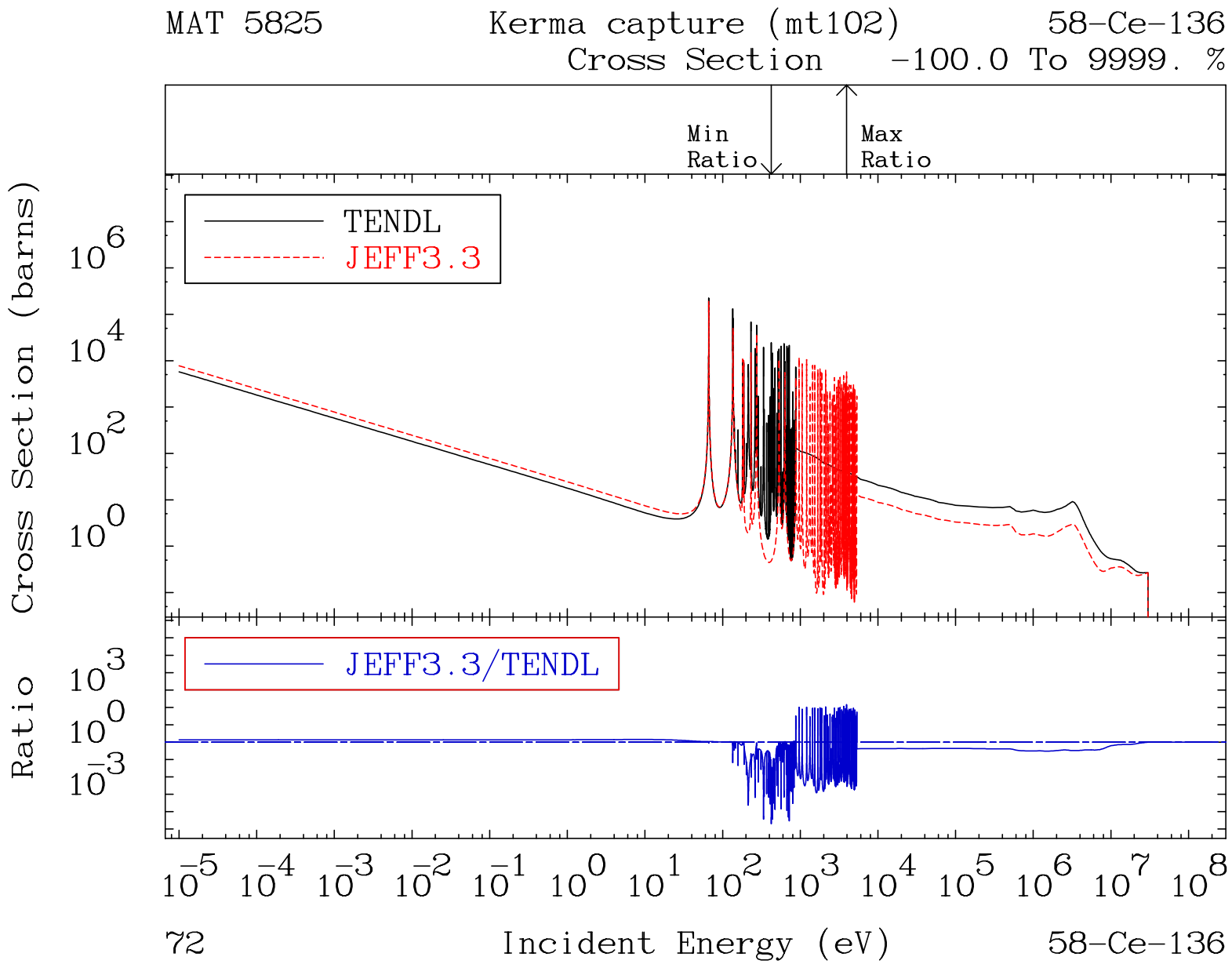

MAT 5825
(n,2p):56-Ba-135g
58-Ce-136
Radionuclide Production Cross Section To 646.3 %
Min Ratio
Max Ratio
TENDL Threshold 5.2028 MeV
JENDL5.0 Threshold 5.2028 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
67
58-Ce-136

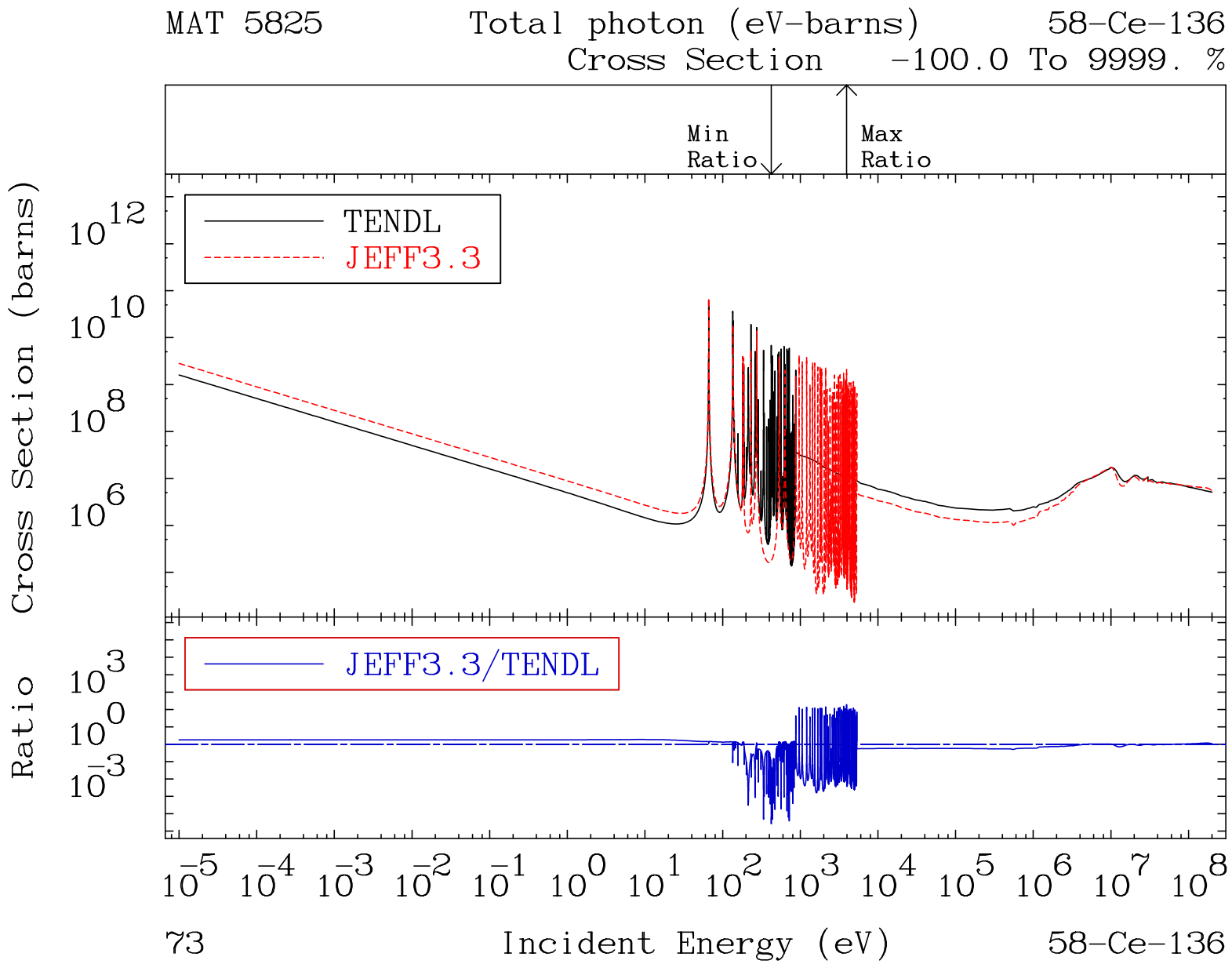

MAT 5825
(n,2p):56-Ba-135m2
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 5.4731 MeV
JENDL5.0 Threshold 5.4844 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
68
58-Ce-136

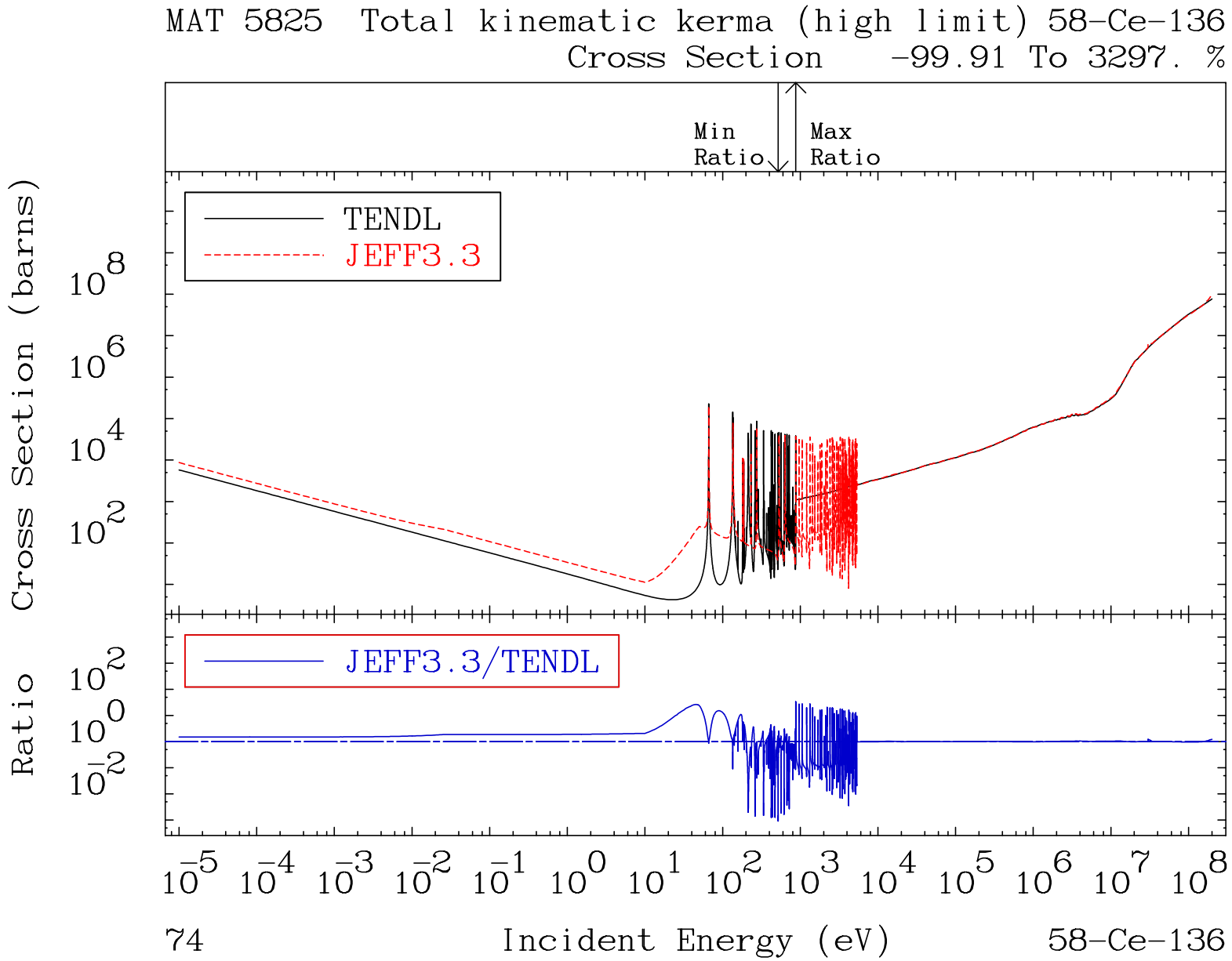

MAT 5825
(n,p) t:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 13.220 MeV
JENDL5.0 Threshold 13.250 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
69
58-Ce-136

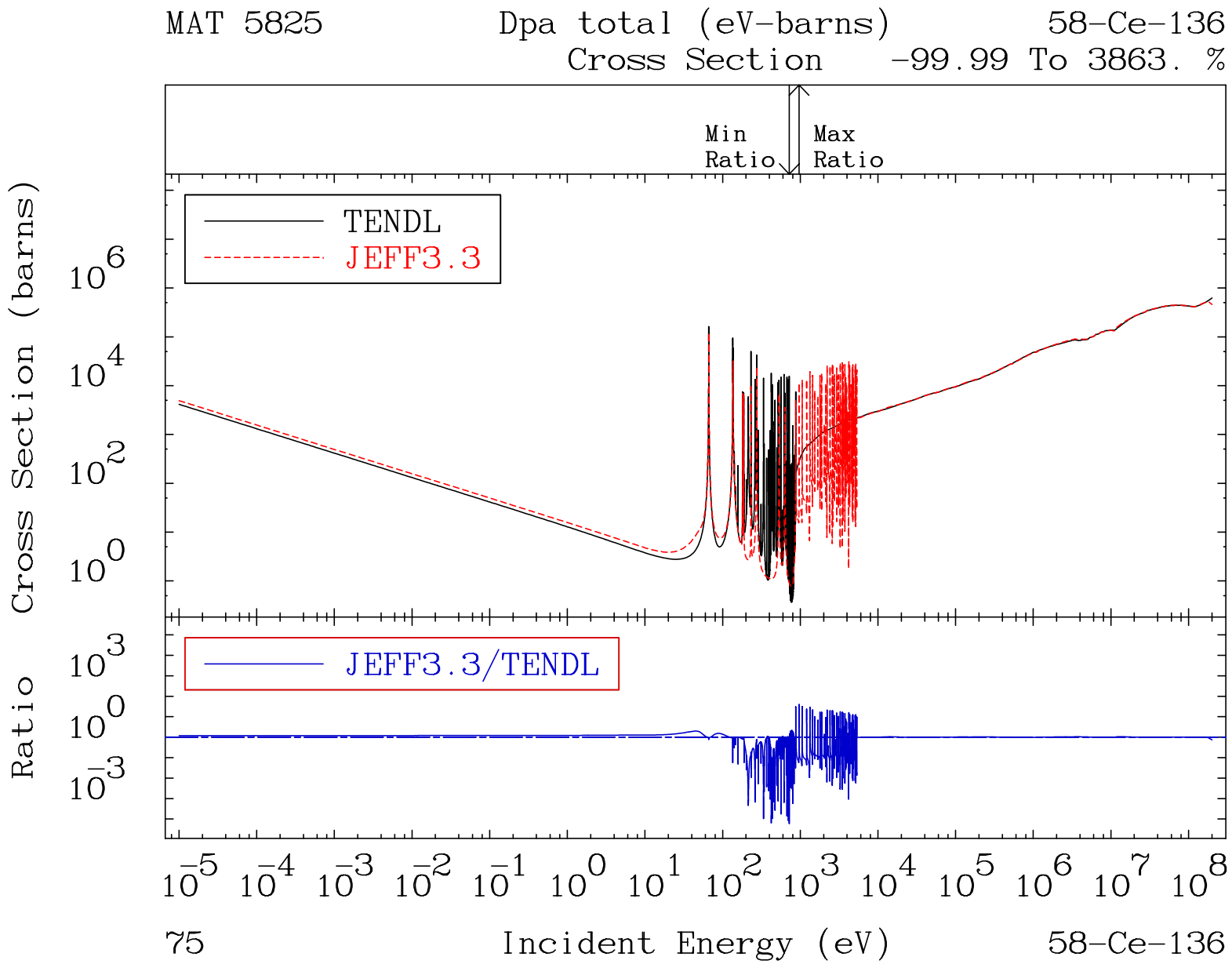

MAT 5825
(n,p) t:56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 13.510 MeV
JENDL5.0 Threshold 13.531 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
1.5
1.0
0.5
0.0
10^13
10^0
10^-13
10^-26
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
58-Ce-136

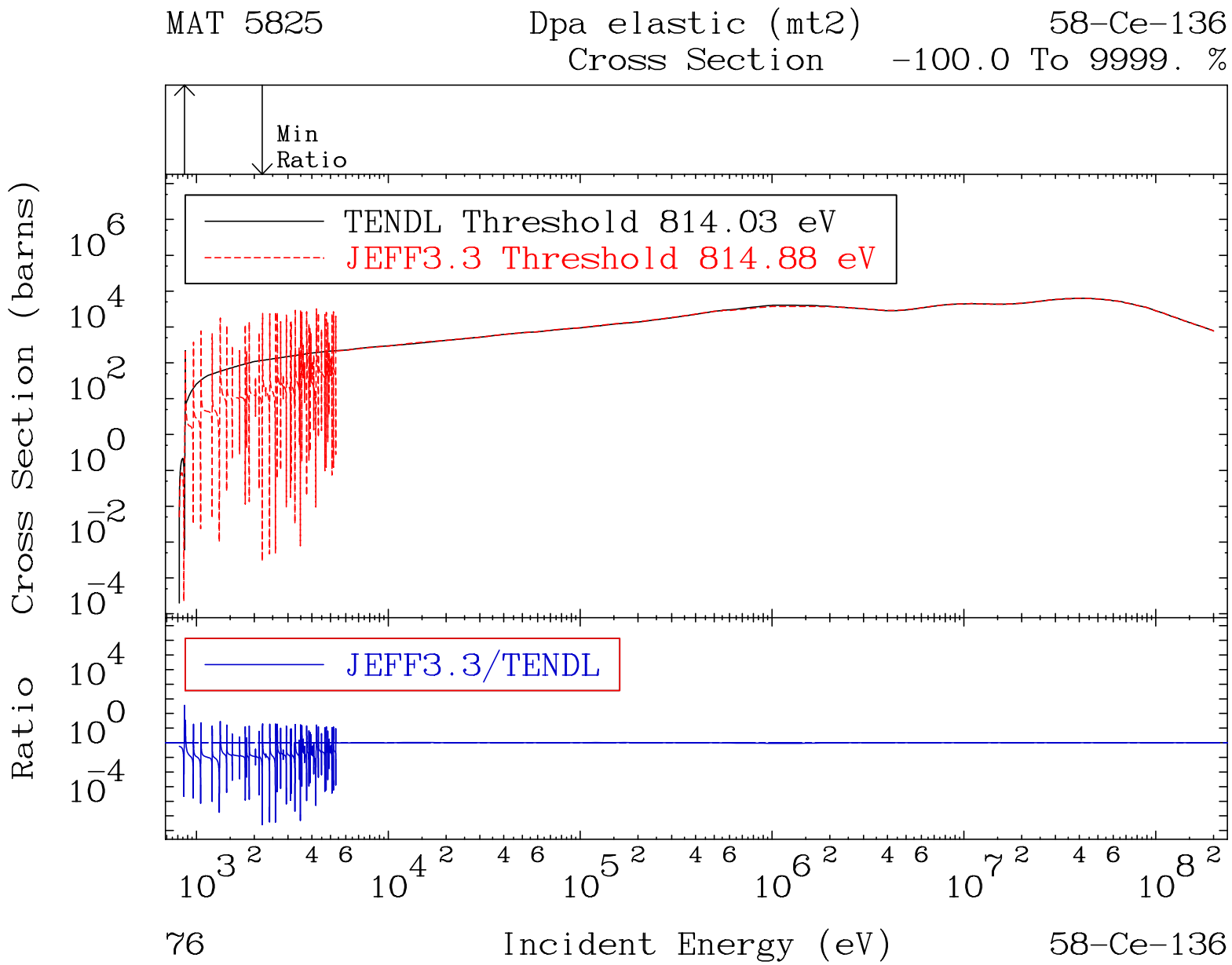

MAT 5825 Kerma fission (mt18 or mt19-20-21-38) 58-Ce-136
Cross Section -100.0 To 45.53 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-5}
10^{-10}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
71
Incident Energy (eV)
58-Ce-136

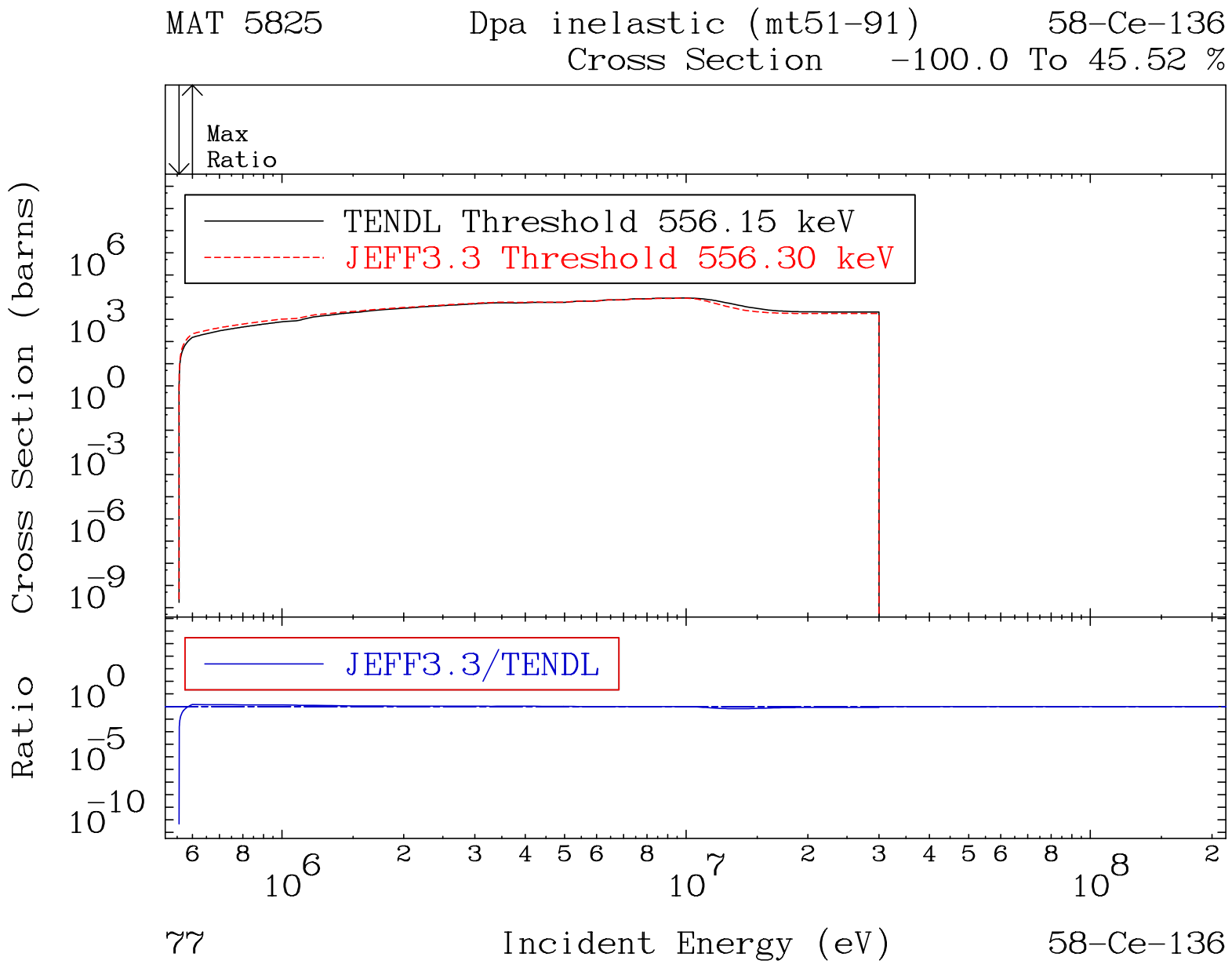

MAT 5825
Kerma capture (mt102)
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
58-Ce-136

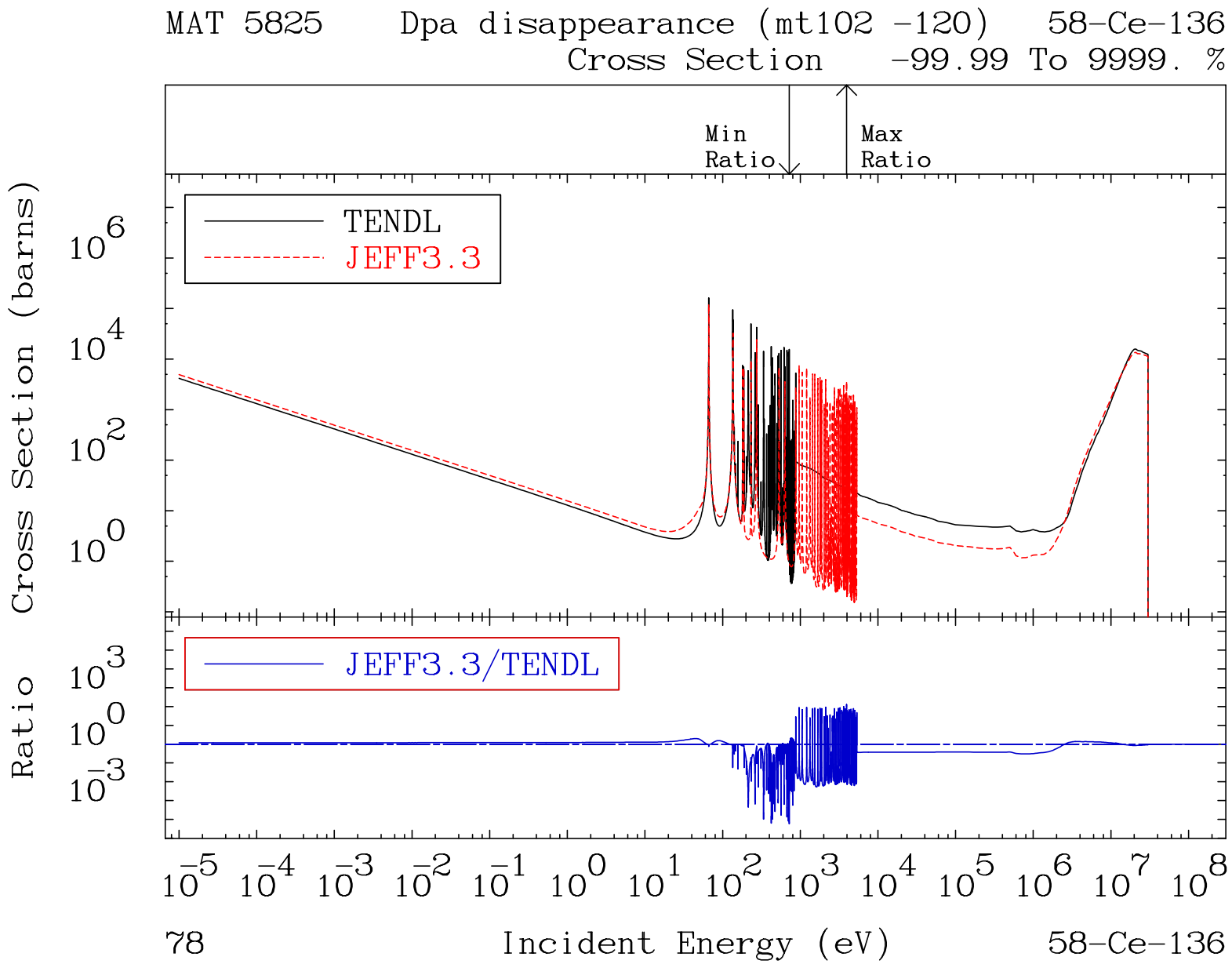

MAT 5825
Total photon (eV-barns)
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
58-Ce-136

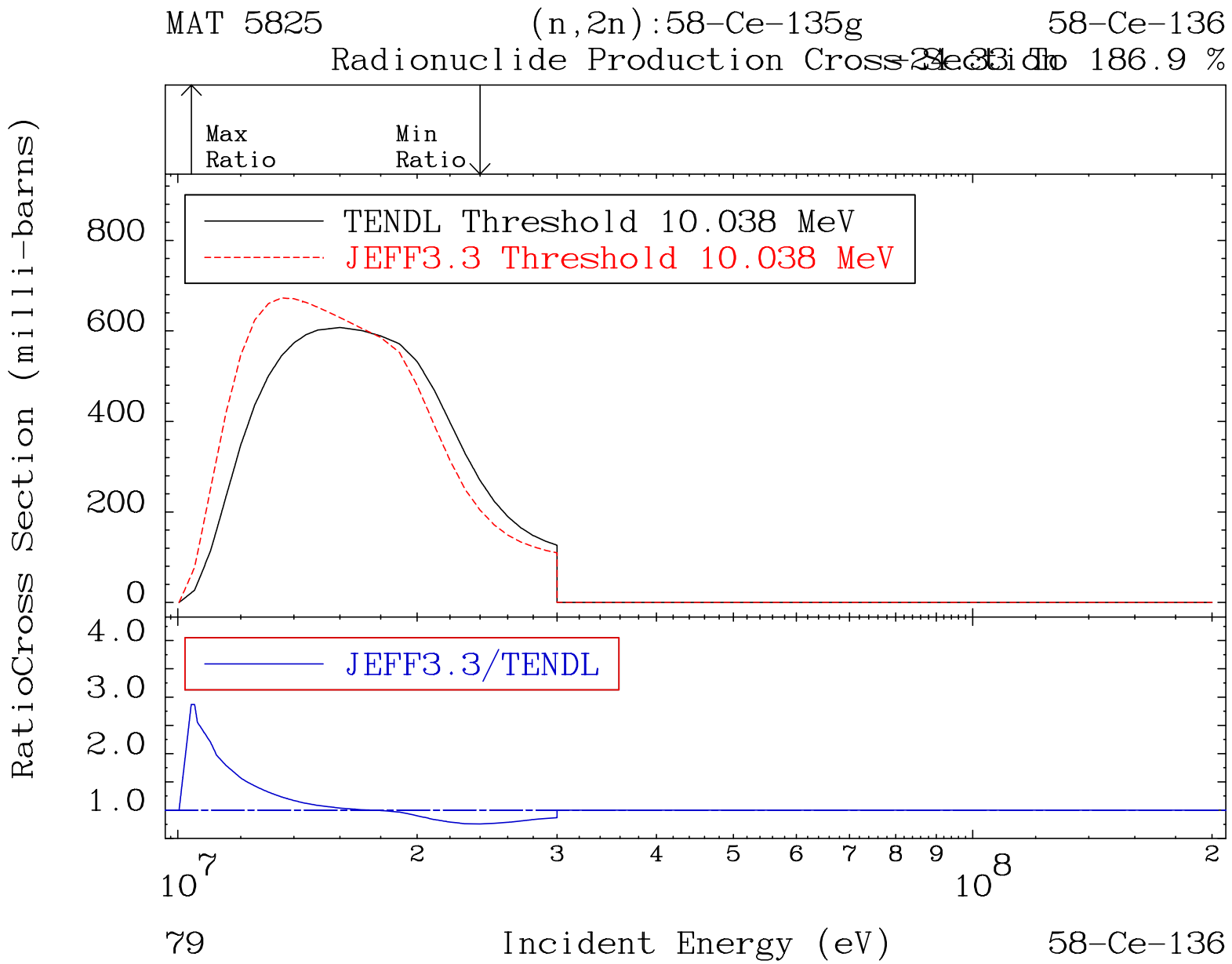

MAT 5825 Total kinematic kerma (high limit) 58-Ce-136
Cross Section -99.91 To 3297. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
58-Ce-136

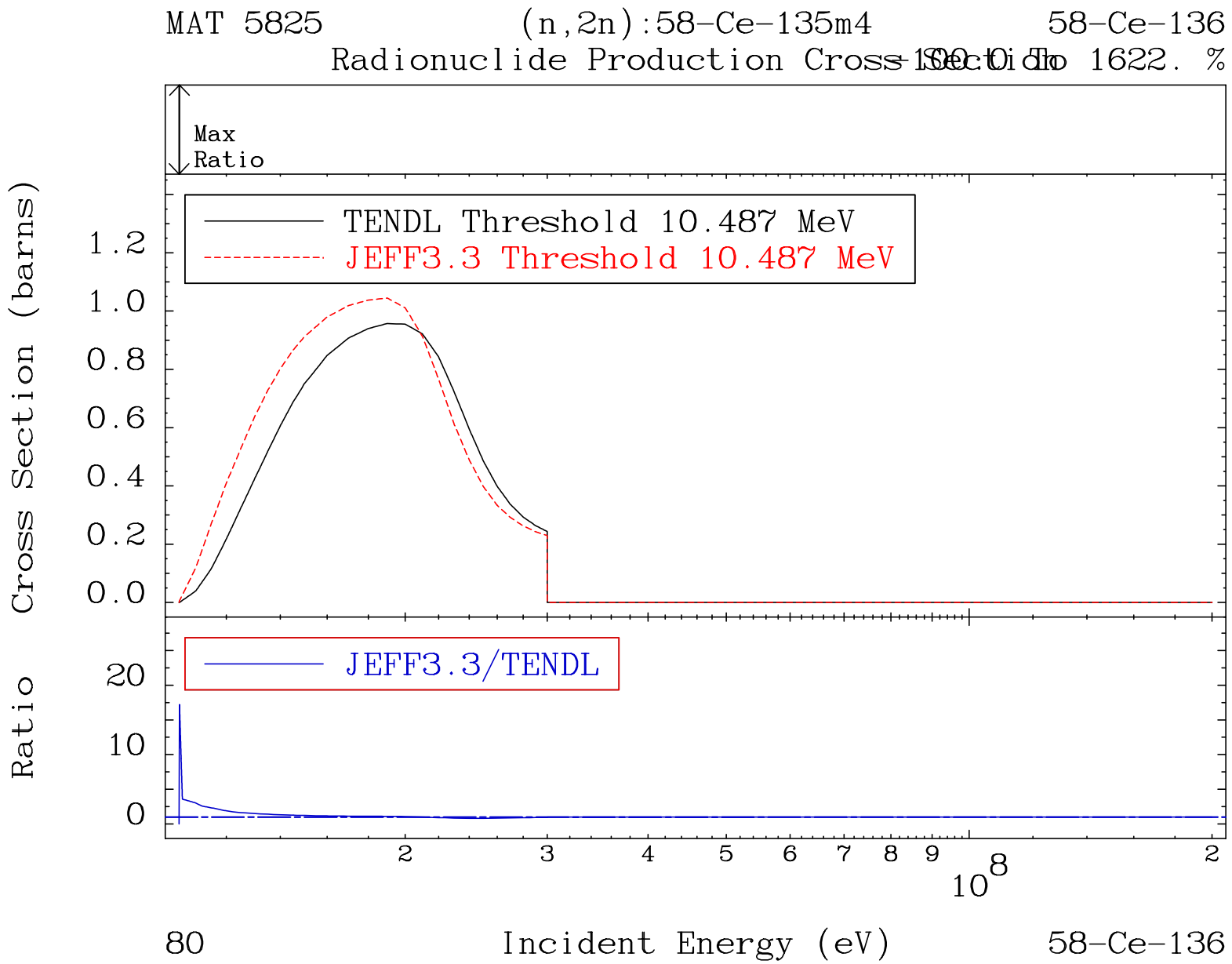

MAT 5825
Dpa total (eV-barns)
58-Ce-136
Cross Section -99.99 To 3863. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
58-Ce-136

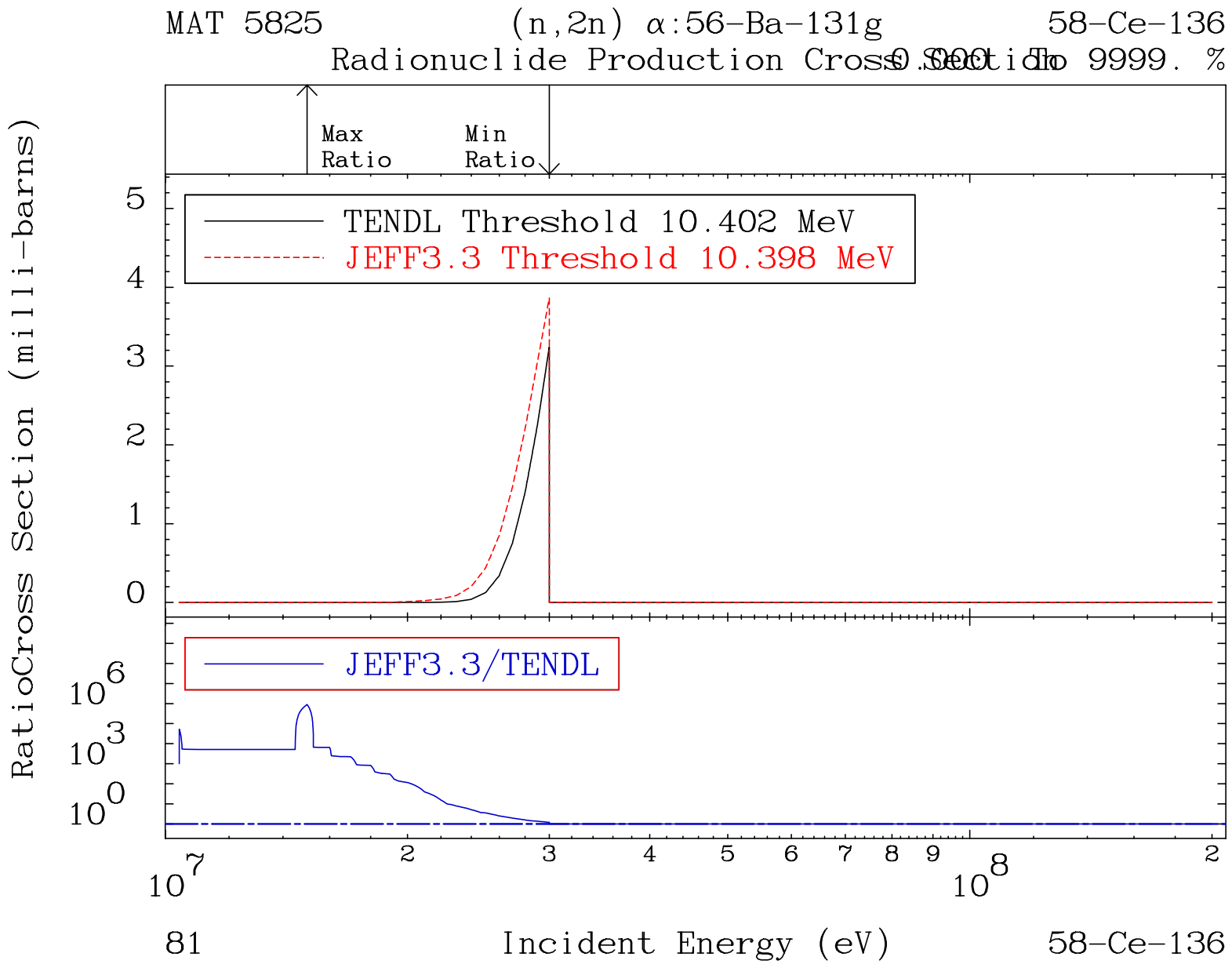

MAT 5825
Dpa elastic (mt2)
Cross Section
58-Ce-136
-100.0 To 9999. %
Min
Ratio
TENDL Threshold 814.03 eV
JEFF3.3 Threshold 814.88 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
58-Ce-136

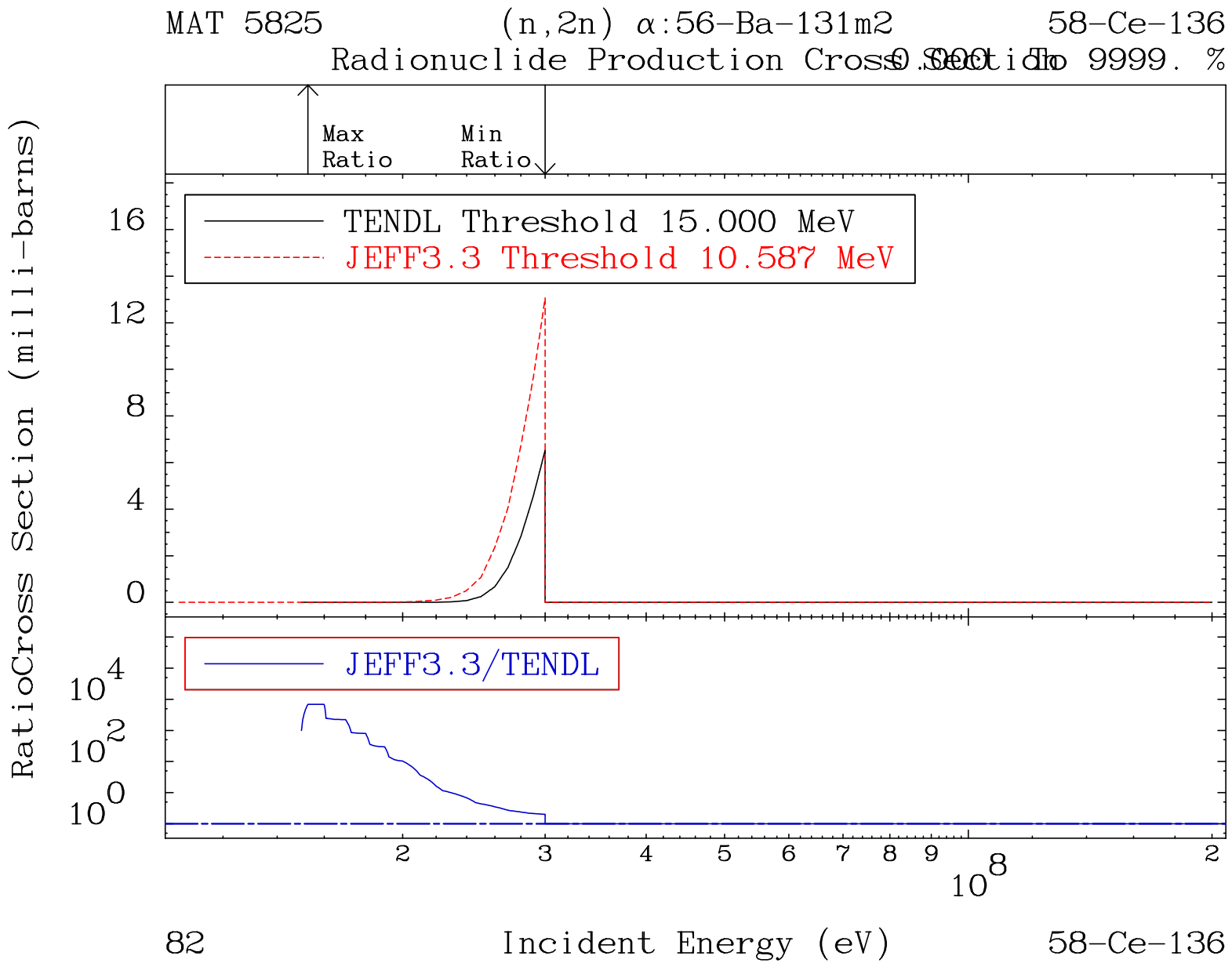

MAT 5825
Dpa inelastic (mt51-91)
58-Ce-136
Cross Section
-100.0 To 45.52 %
Max
Ratio
TENDL Threshold 556.15 keV
JEFF3.3 Threshold 556.30 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
58-Ce-136

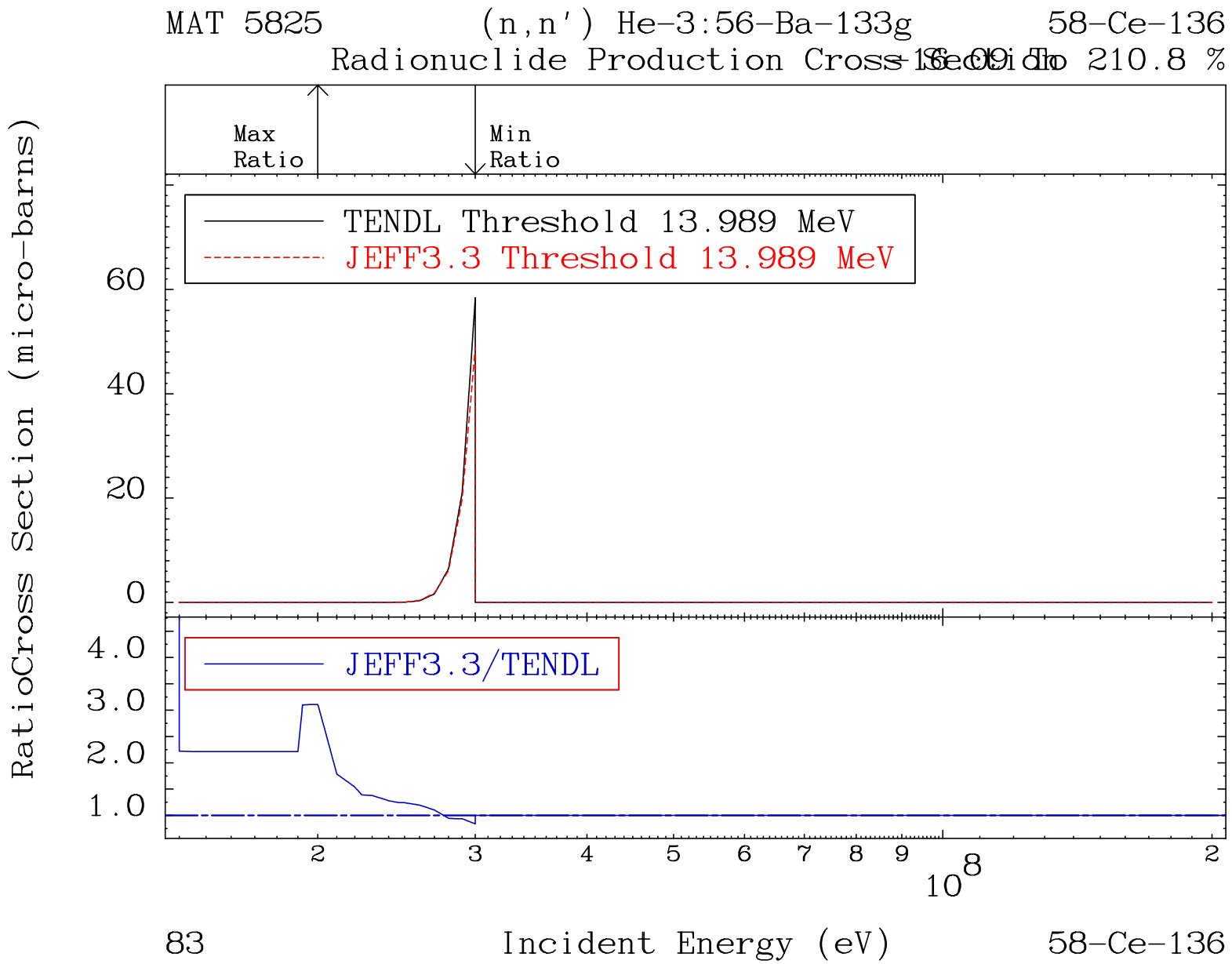

MAT 5825 Dpa disappearance (mt102 -120) 58-Ce-136
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
58-Ce-136

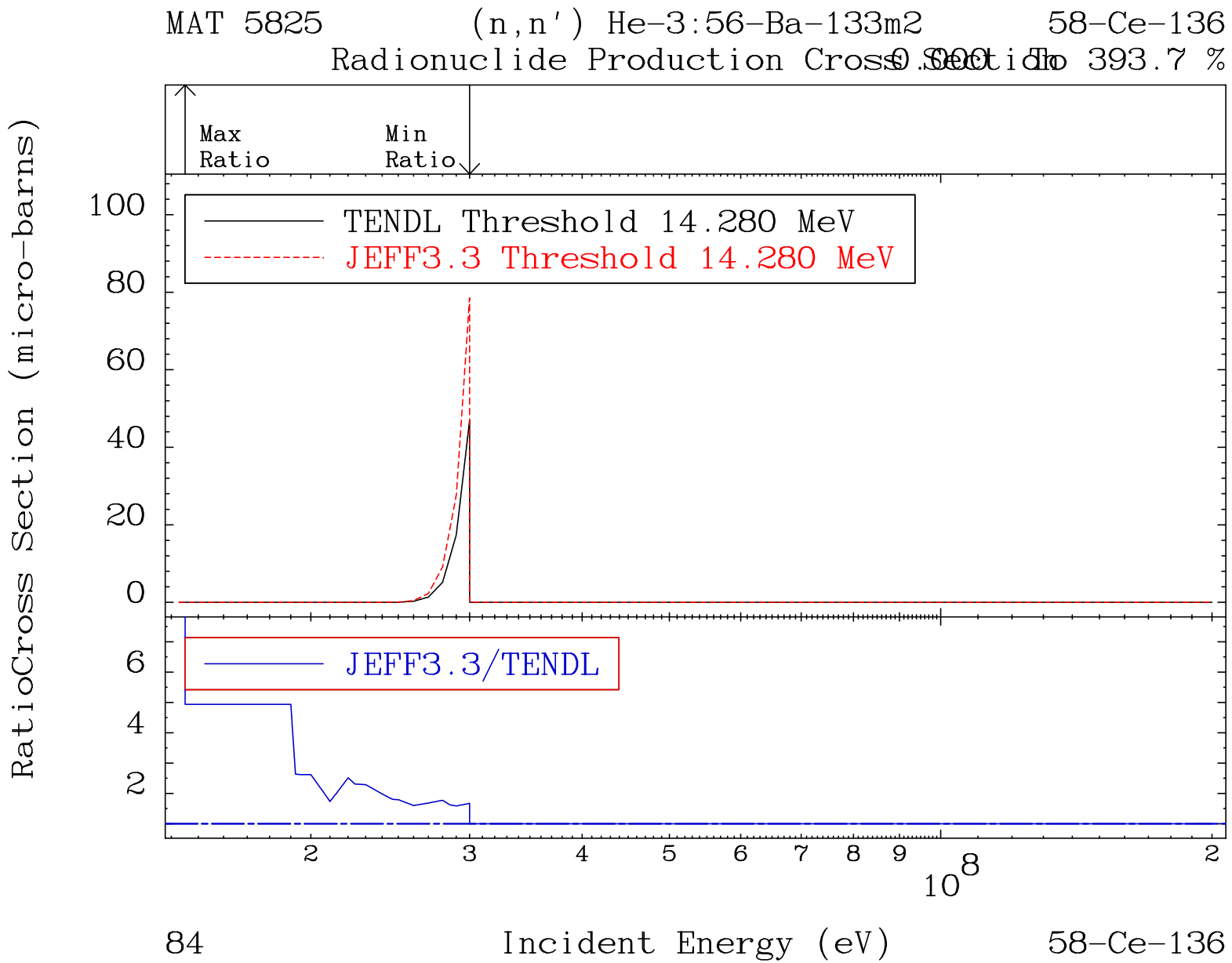

MAT 5825
(n,2n):58-Ce-135g
58-Ce-136
Radionuclide Production Cross Section To 186.9 %
Max Ratio
Min Ratio
TENDL Threshold 10.038 MeV
JEFF3.3 Threshold 10.038 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
4.0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
58-Ce-136

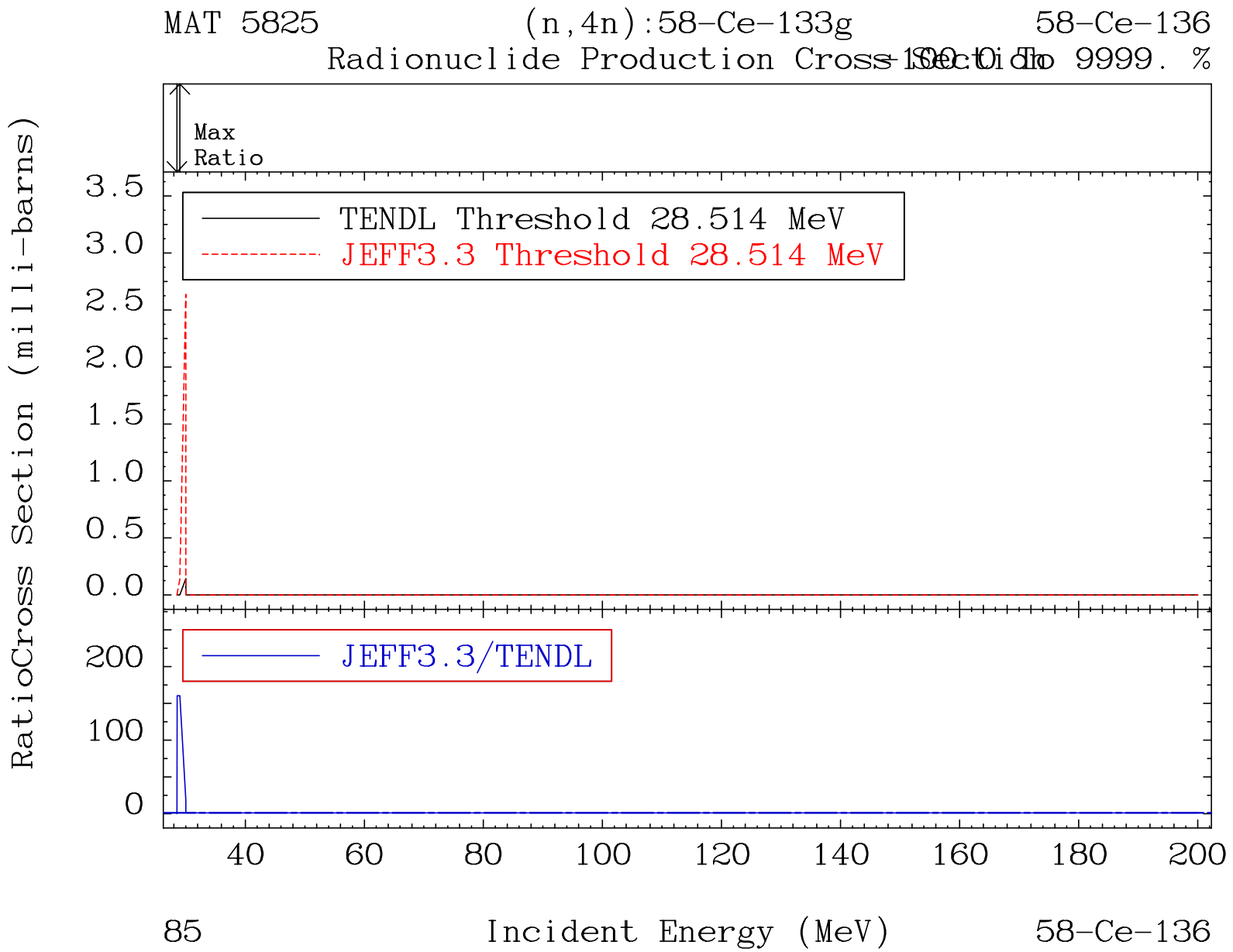

MAT 5825
(n,2n):58-Ce-135m4
58-Ce-136
Radionuclide Production Cross Section To 1622. %
Max
Ratio
TENDL Threshold 10.487 MeV
JEFF3.3 Threshold 10.487 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
20
10
0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
58-Ce-136

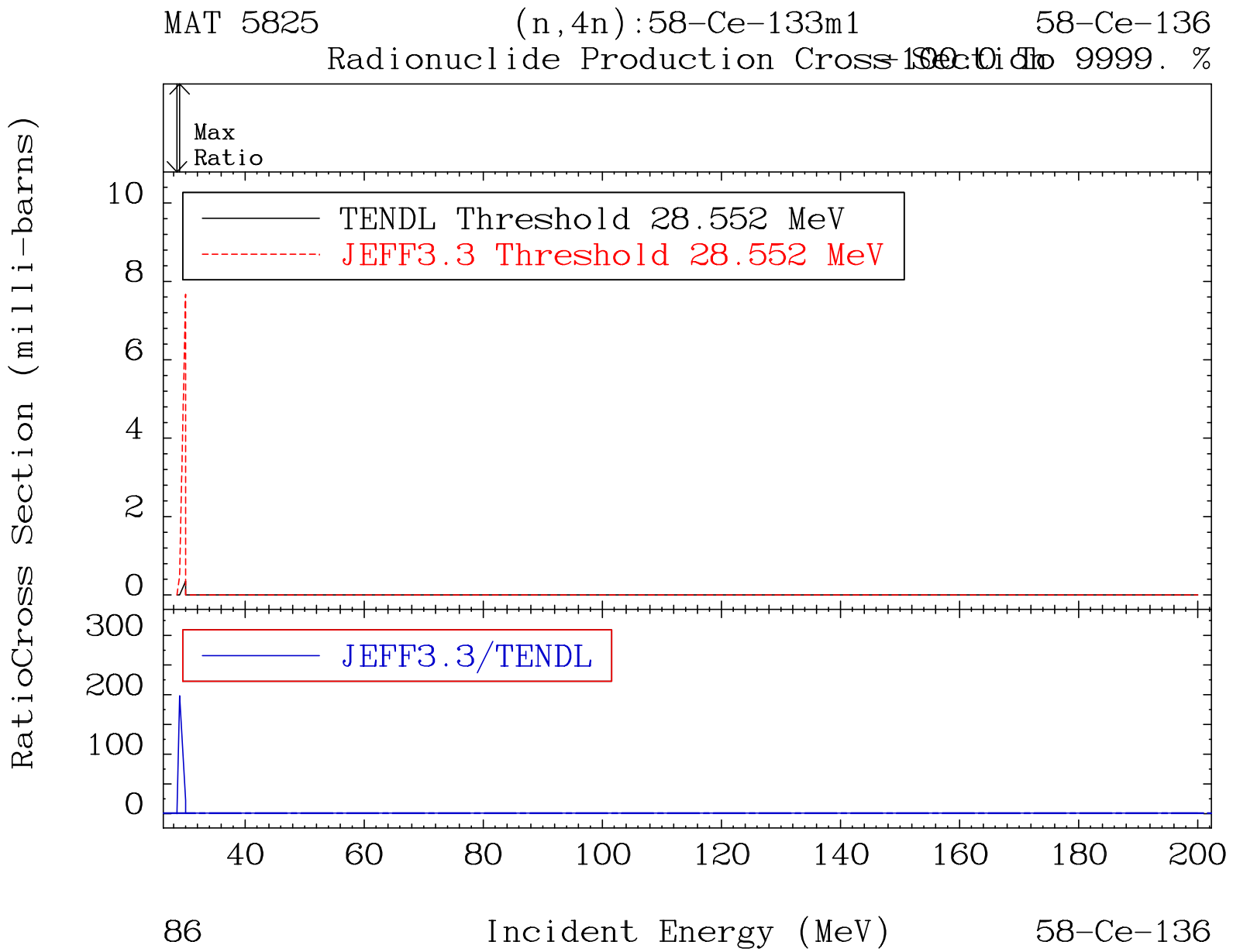

MAT 5825
(n,2n) α:56-Ba-131g
58-Ce-136
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.402 MeV
JEFF3.3 Threshold 10.398 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
81
58-Ce-136

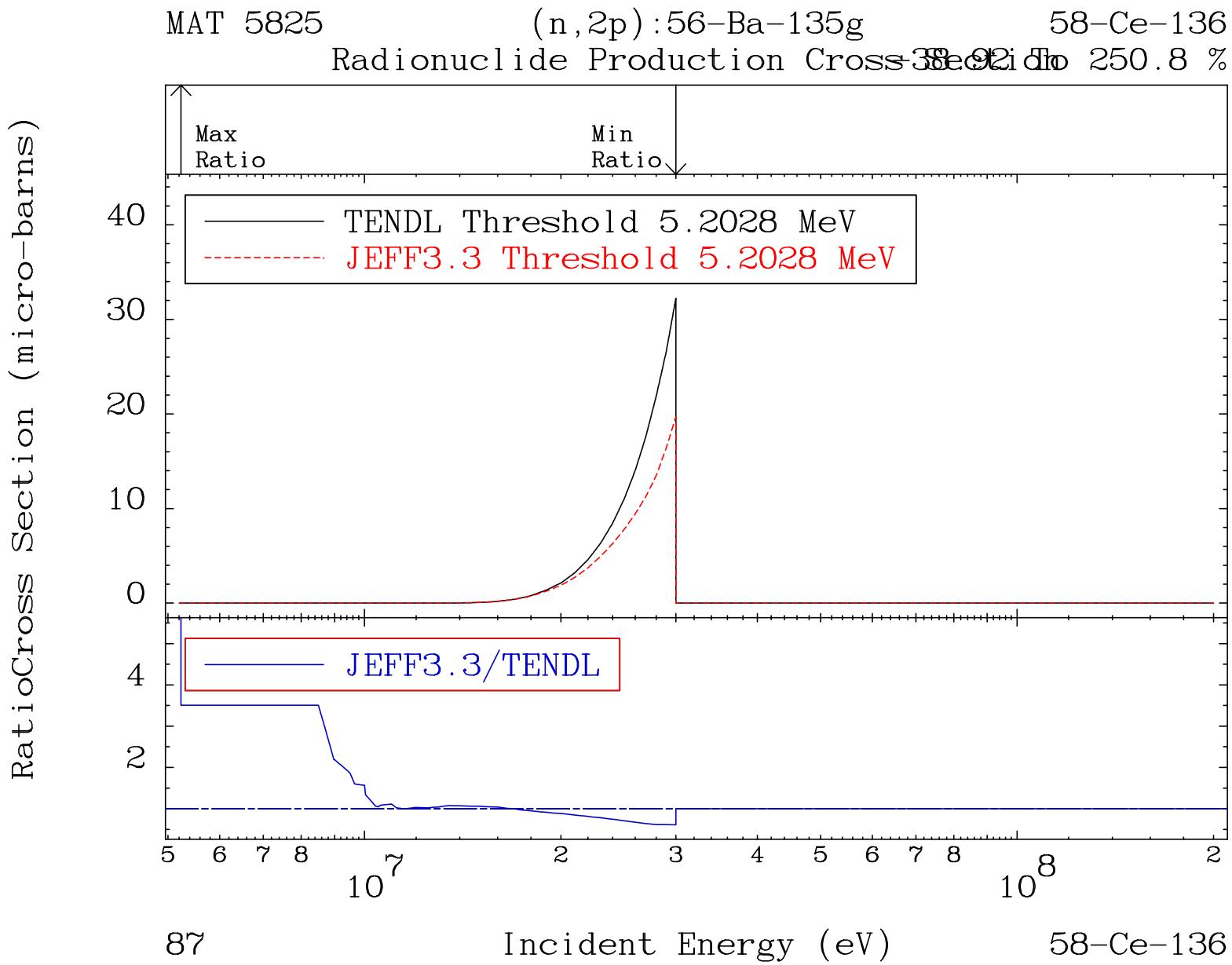

MAT 5825
(n,2n) α:56-Ba-131m2
58-Ce-136
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 15.000 MeV
JEFF3.3 Threshold 10.587 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
58-Ce-136

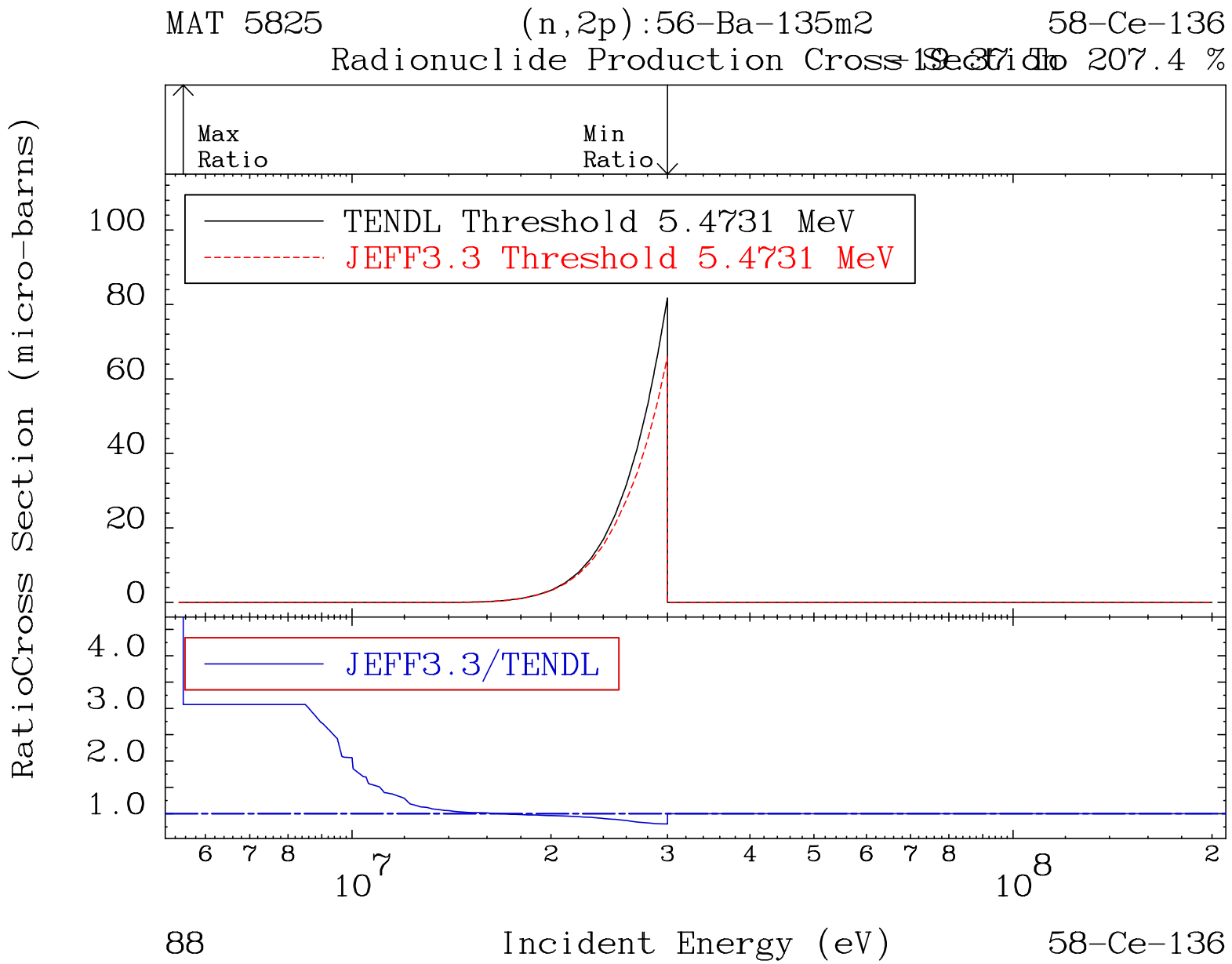

MAT 5825
(n,n') He-3:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 13.989 MeV
JEFF3.3 Threshold 13.989 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
83
58-Ce-136

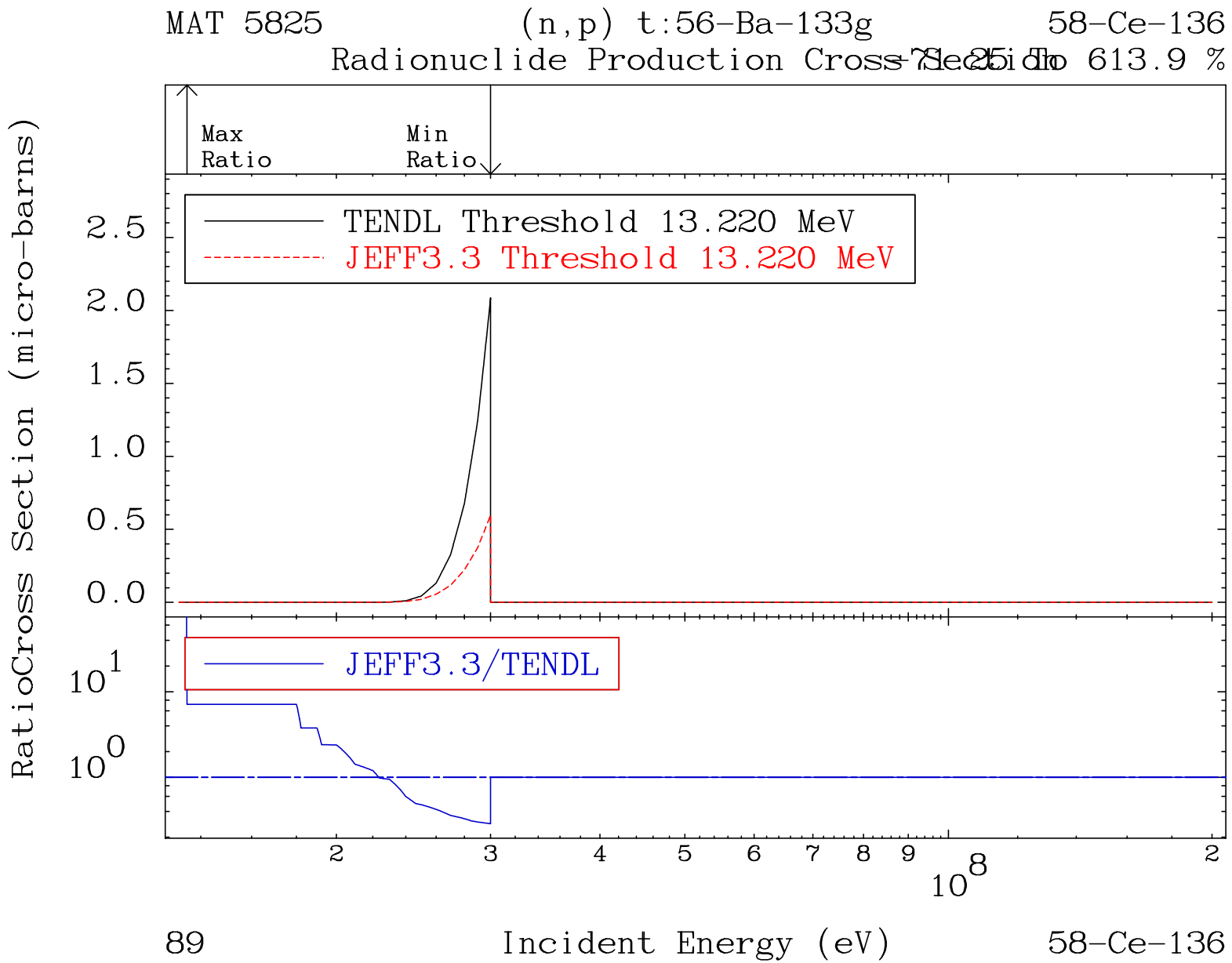

MAT 5825 (n,n') He-3:56-Ba-133m2 58-Ce-136
Radionuclide Production Cross Section
0.000 To 393.7 %
Max Ratio
Min Ratio
TENDL Threshold 14.280 MeV
JEFF3.3 Threshold 14.280 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
6
4
2
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
58-Ce-136

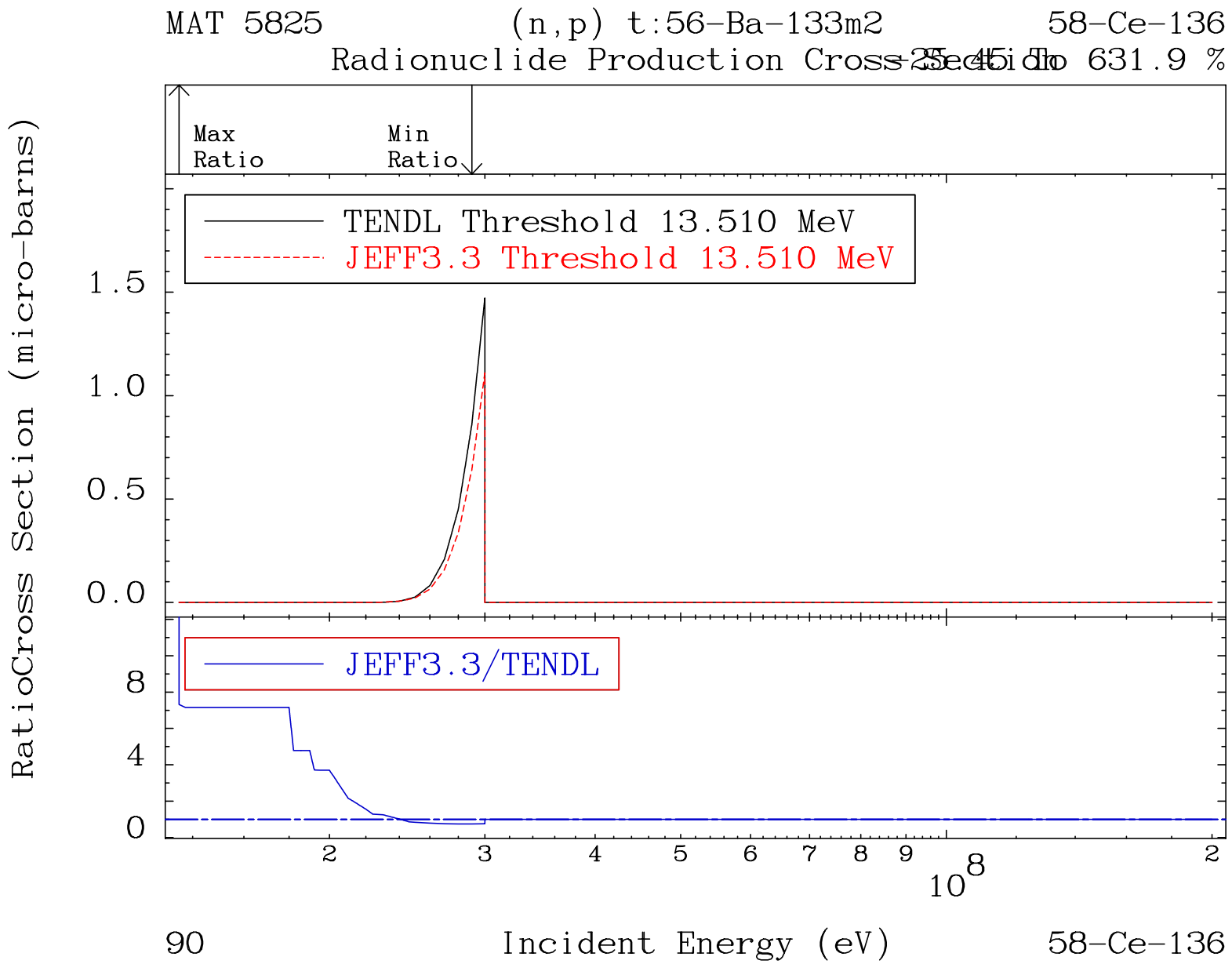

MAT 5825
(n,4n):58-Ce-133g
58-Ce-136
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 28.514 MeV
JEFF3.3 Threshold 28.514 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
200
100
0
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
58-Ce-136


MAT 5825
(n,4n):58-Ce-133m1
58-Ce-136
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 28.552 MeV
JEFF3.3 Threshold 28.552 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
86
58-Ce-136


MAT 5825
(n,2p):56-Ba-135g
58-Ce-136
Radionuclide Production Cross Section To 250.8 %
Max Ratio
Min Ratio
TENDL Threshold 5.2028 MeV
JEFF3.3 Threshold 5.2028 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
40
30
20
10
0
4
2
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
87
Incident Energy (eV)
58-Ce-136


MAT 5825
(n,2p):56-Ba-135m2
58-Ce-136
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 5.4731 MeV
JEFF3.3 Threshold 5.4731 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
88
58-Ce-136


MAT 5825
(n,p) t:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section To 613.9 %
Max Ratio
Min Ratio
TENDL Threshold 13.220 MeV
JEFF3.3 Threshold 13.220 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
58-Ce-136


MAT 5825
(n,p) t:56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section To 631.9 %
Max Ratio
Min Ratio
TENDL Threshold 13.510 MeV
JEFF3.3 Threshold 13.510 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.5
1.0
0.5
0.0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
58-Ce-136