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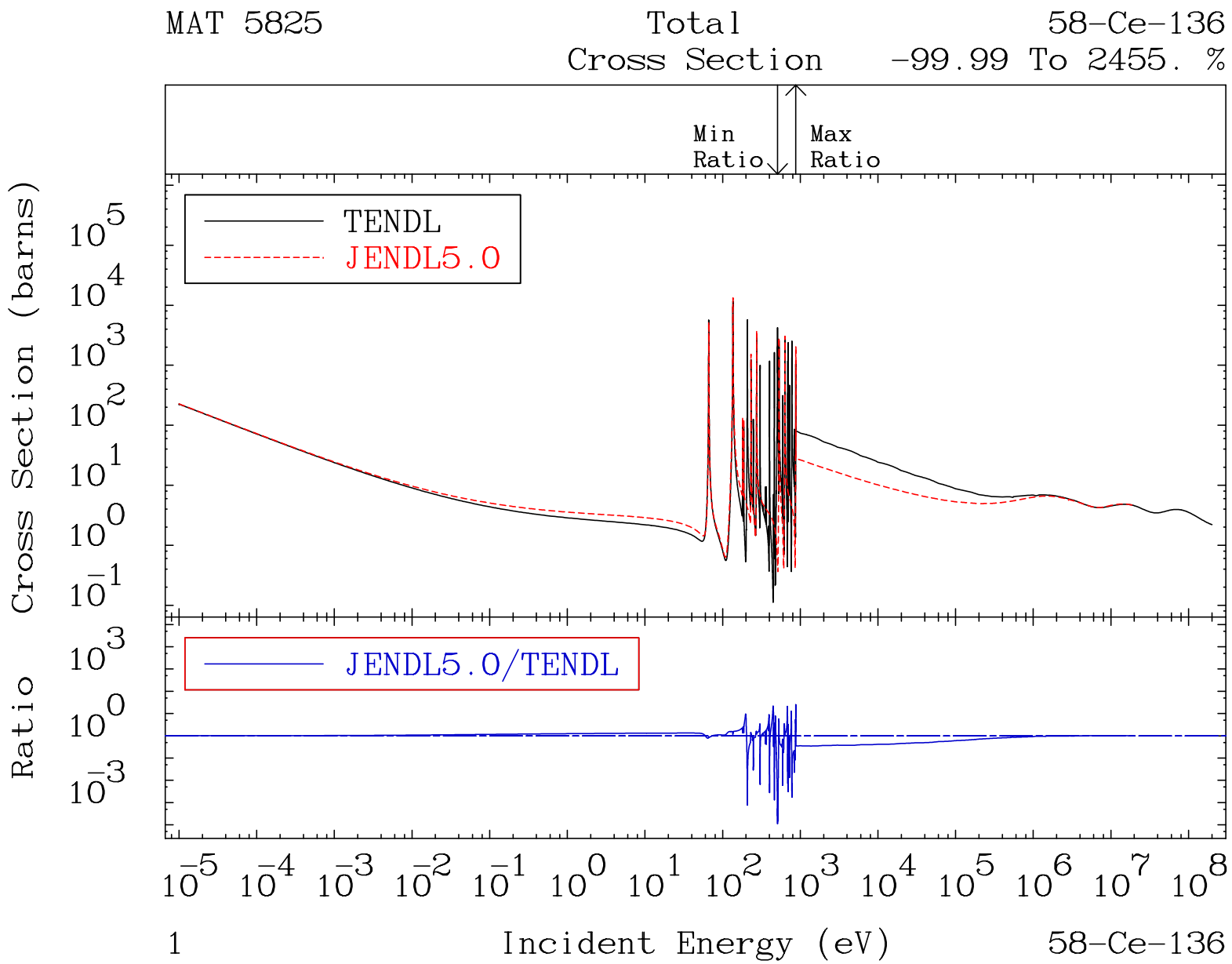
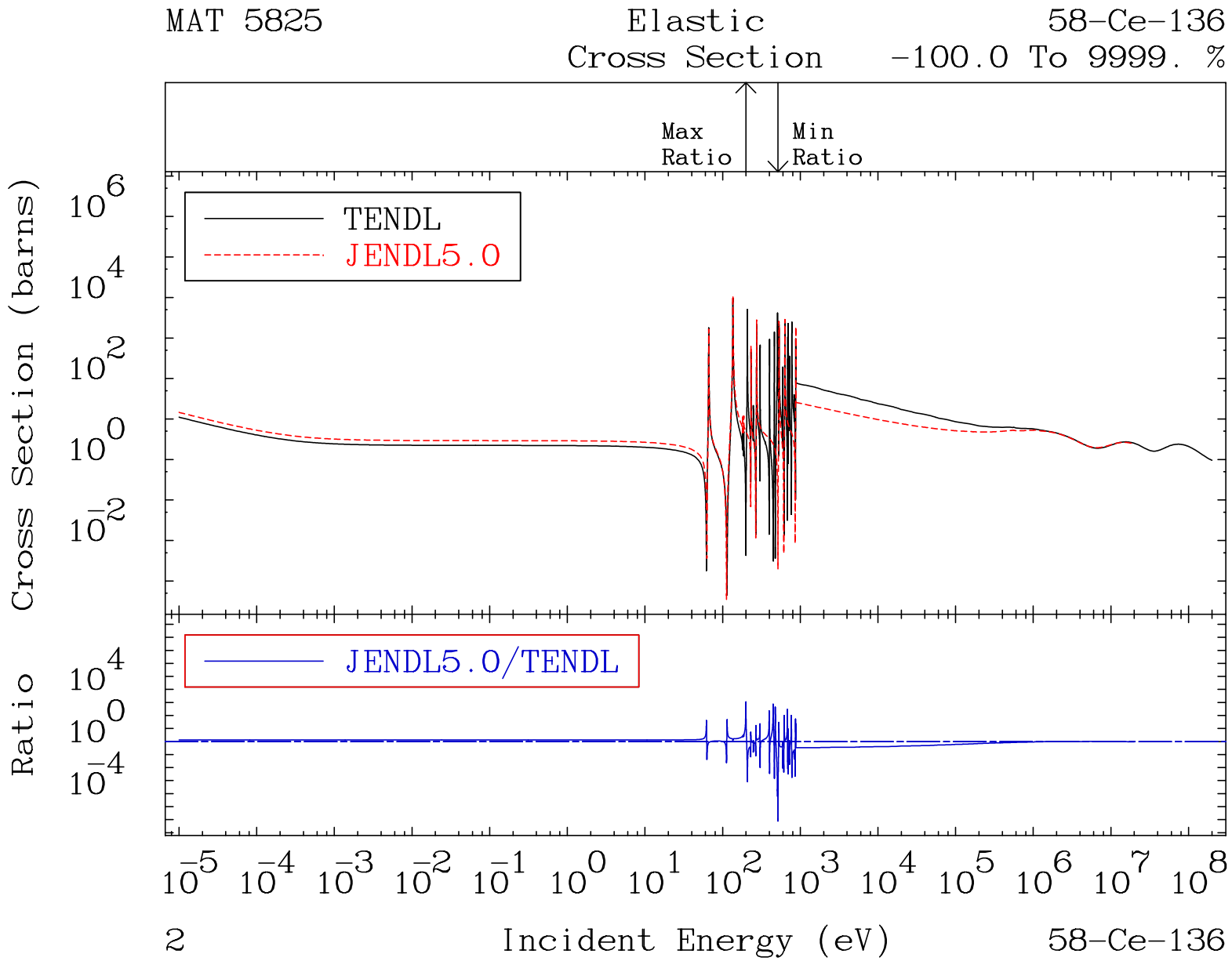
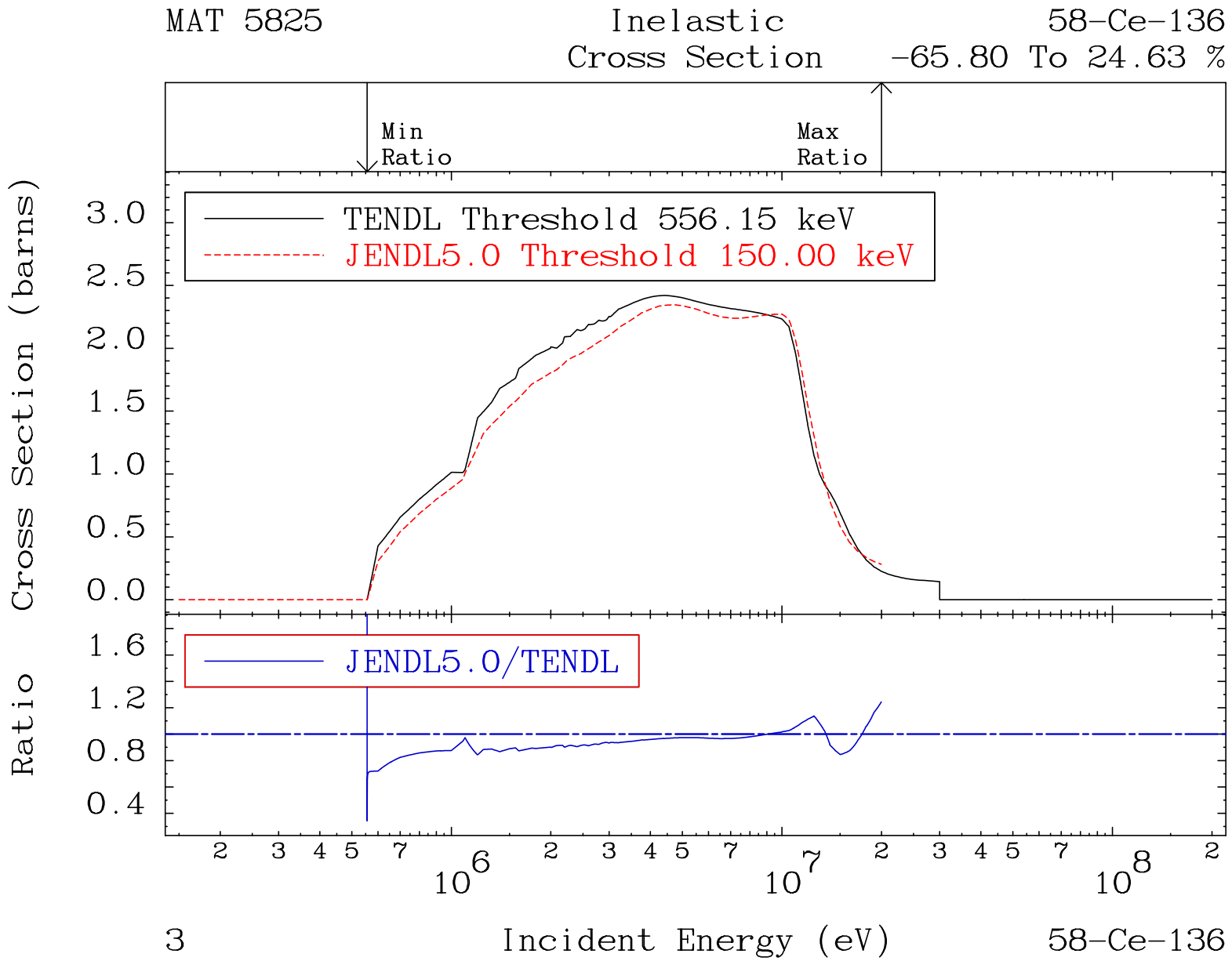
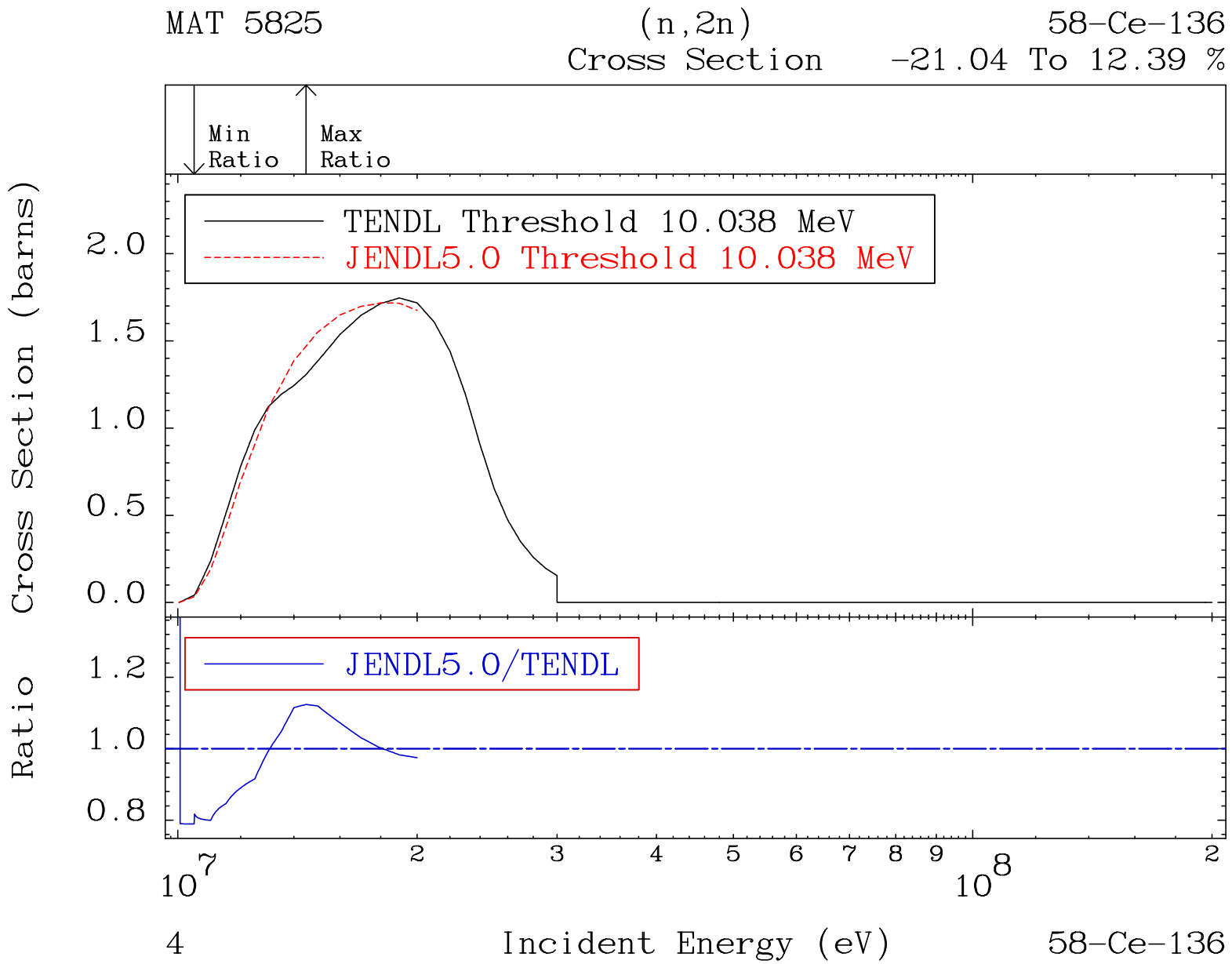
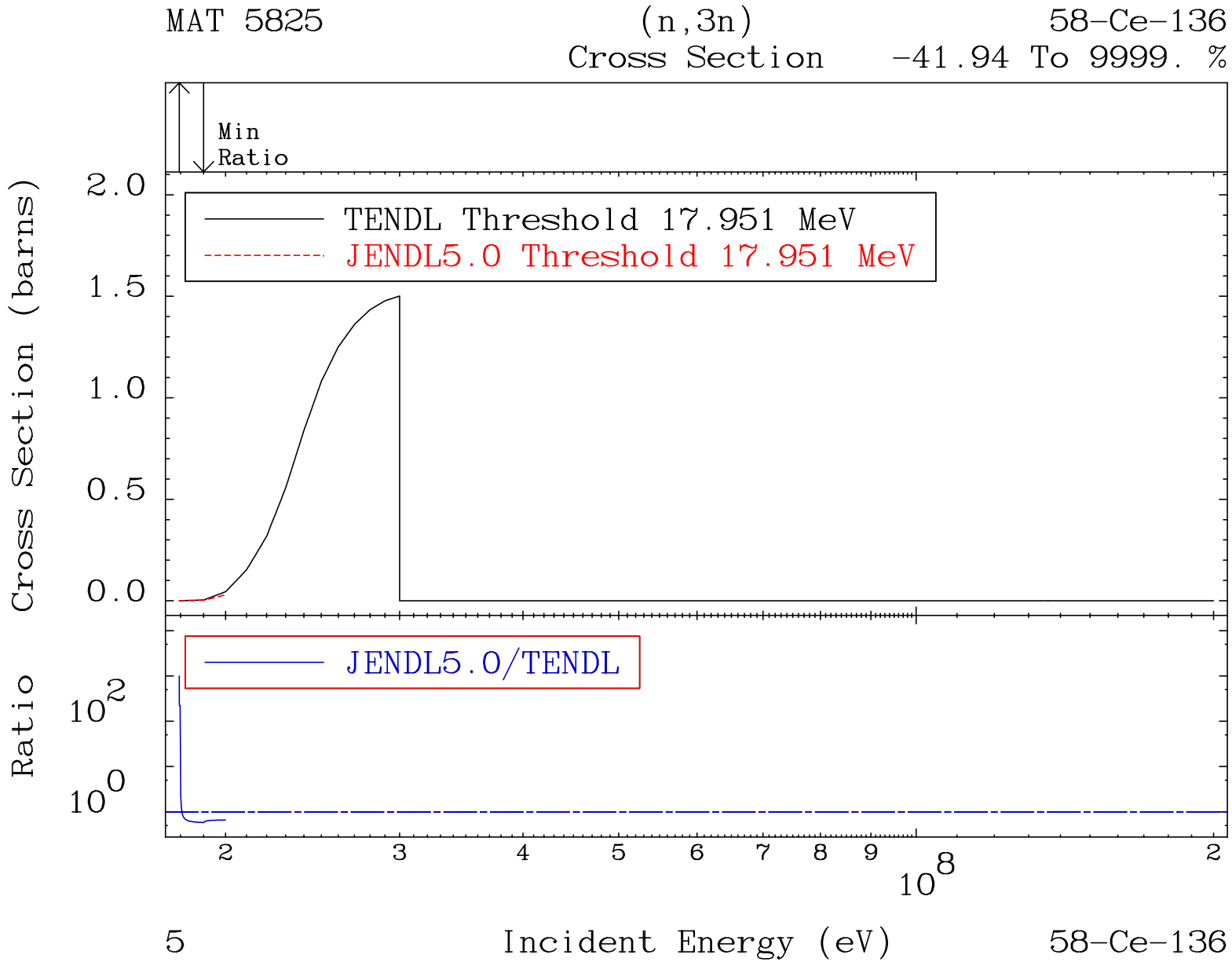
Press Mouse Button to Start

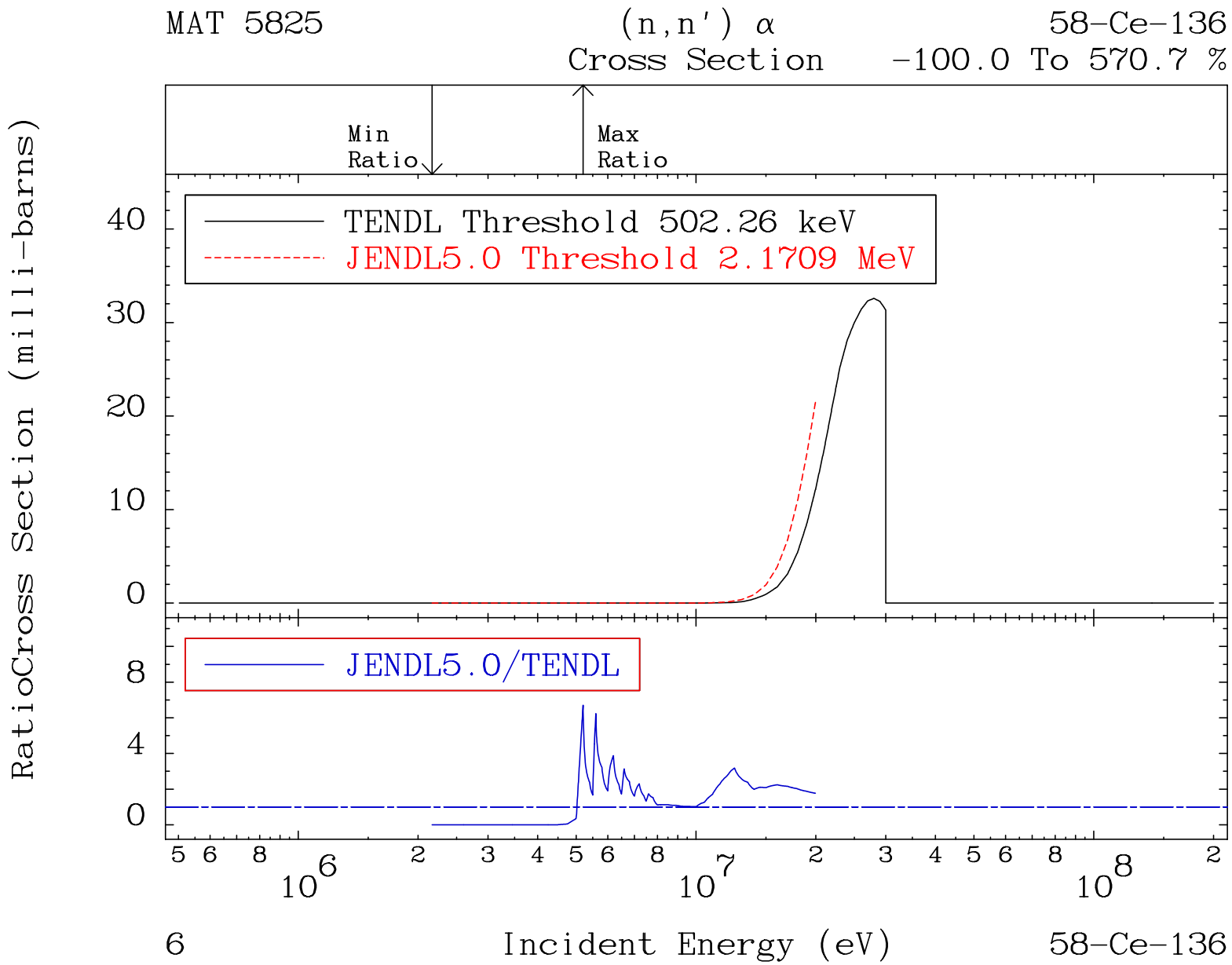

MAT 5825
Total
Cross Section
58-Ce-136
-99.99 To 2455. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
58-Ce-136

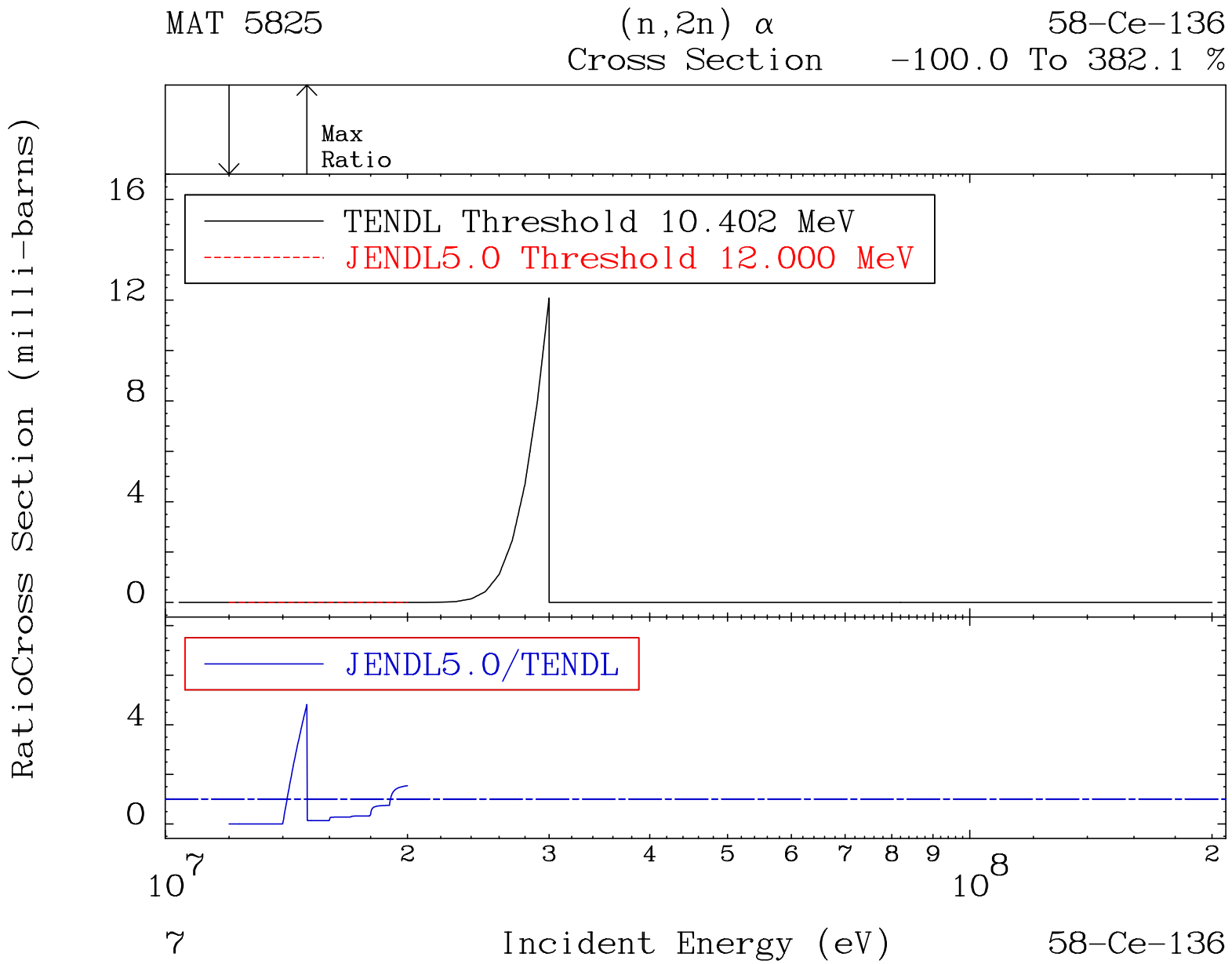

MAT 5825
Elastic
Cross Section
58-Ce-136
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
58-Ce-136

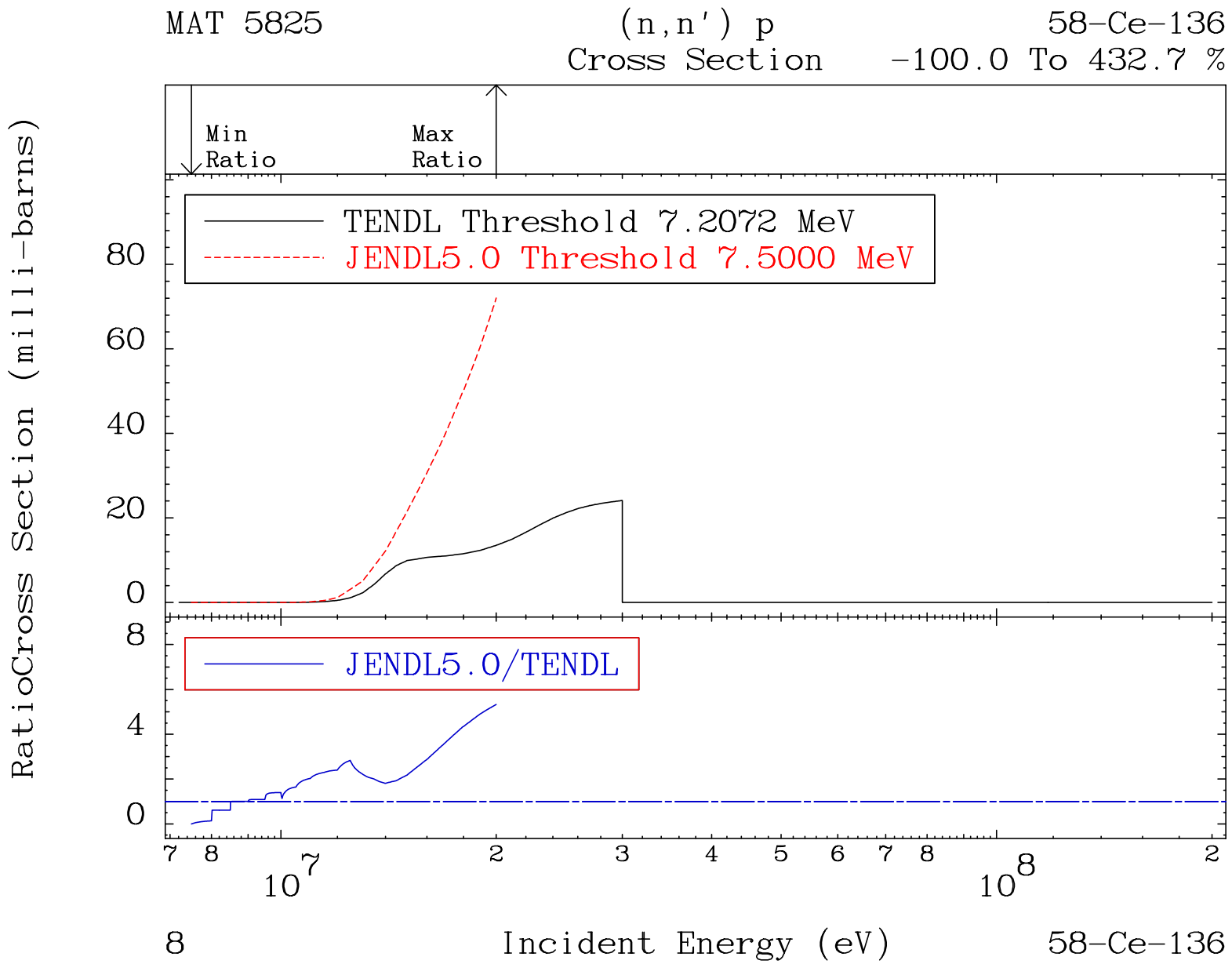

MAT 5825
Inelastic
Cross Section
58-Ce-136
-65.80 To 24.63 %
Min
Ratio
Max
Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.2
0.8
0.4
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
58-Ce-136

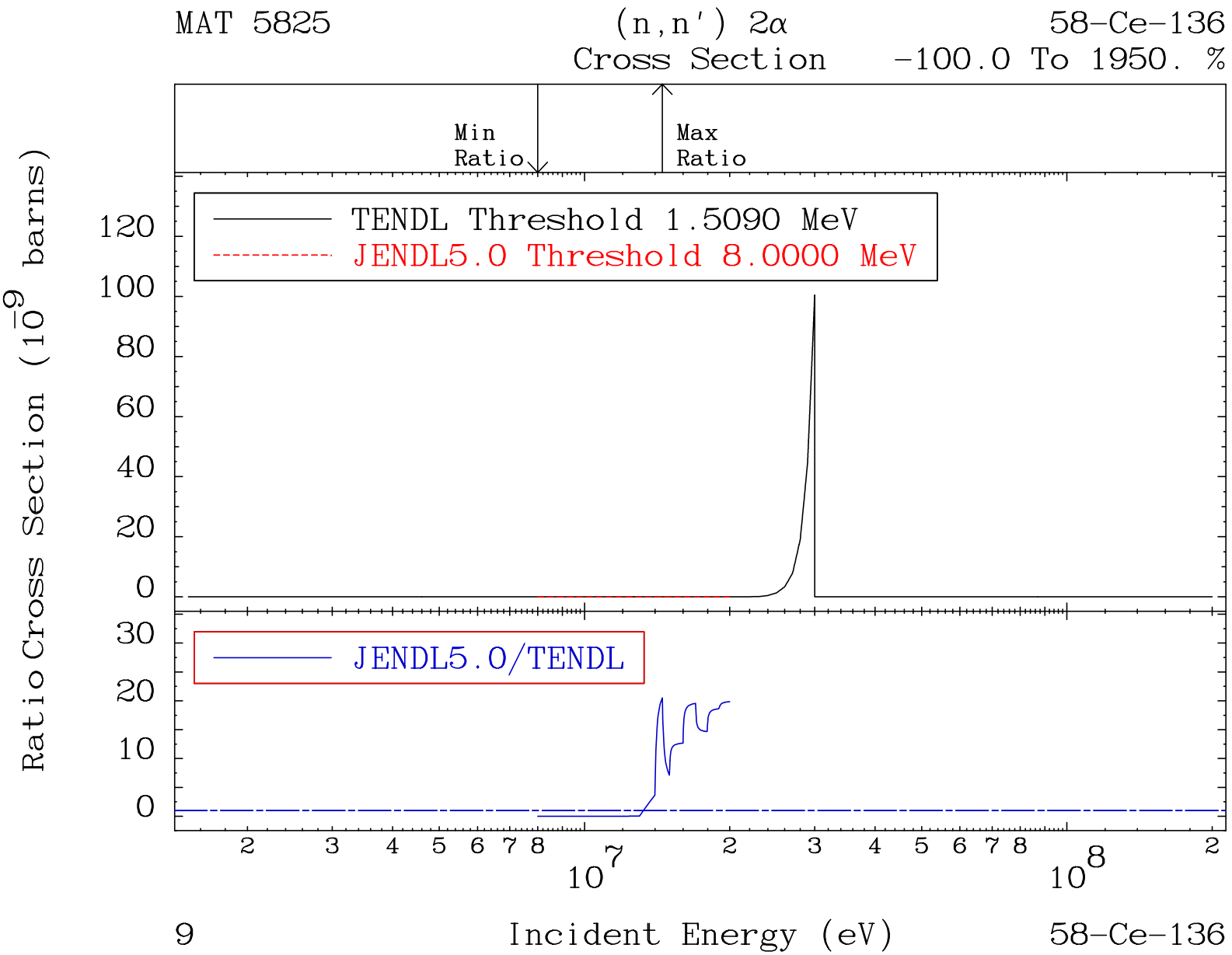

MAT 5825
(n,2n)
Cross Section
58-Ce-136
-21.04 To 12.39 %
Min Ratio
Max Ratio
TENDL Threshold 10.038 MeV
JENDL5.0 Threshold 10.038 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.2
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
4
58-Ce-136

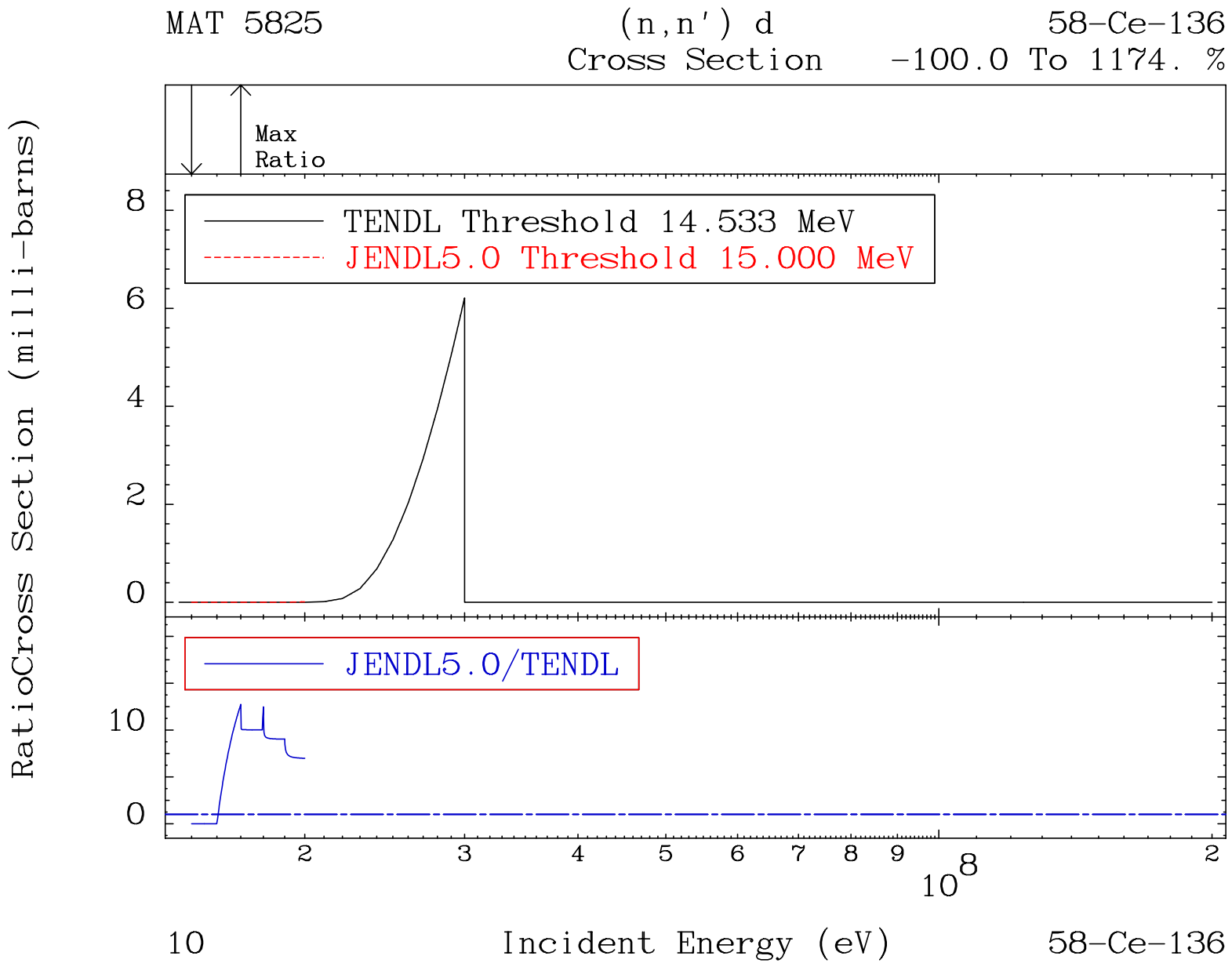

MAT 5825
(n,3n)
58-Ce-136
Cross Section
-41.94 To 9999. %
Min
Ratio
2.0
1.5
1.0
0.5
0.0
TENDL Threshold 17.951 MeV
JENDL5.0 Threshold 17.951 MeV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
58-Ce-136

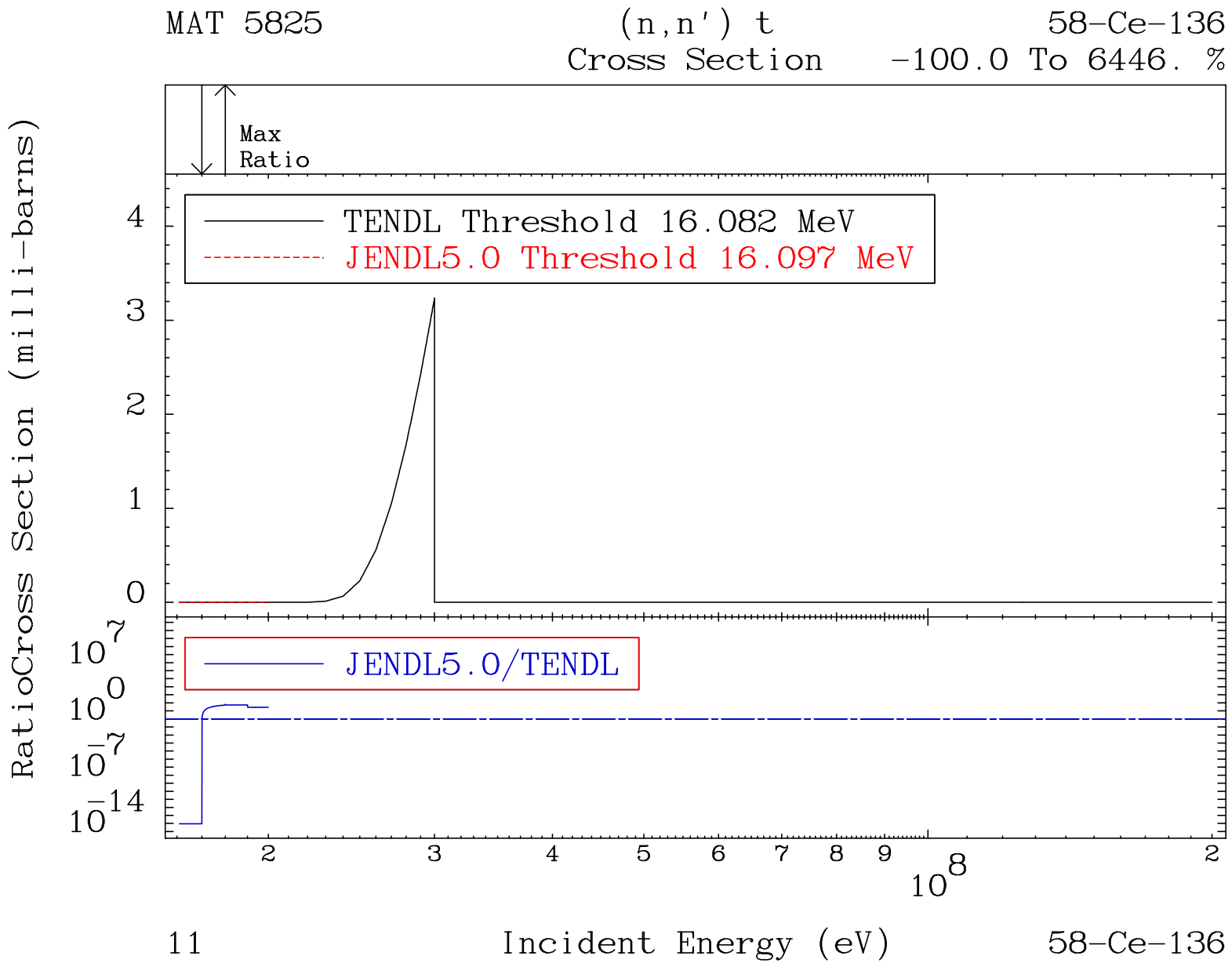

MAT 5825
(n,n') α
Cross Section
58-Ce-136
-100.0 To 570.7 %
Min Ratio
Max Ratio
TENDL Threshold 502.26 keV
JENDL5.0 Threshold 2.1709 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
58-Ce-136

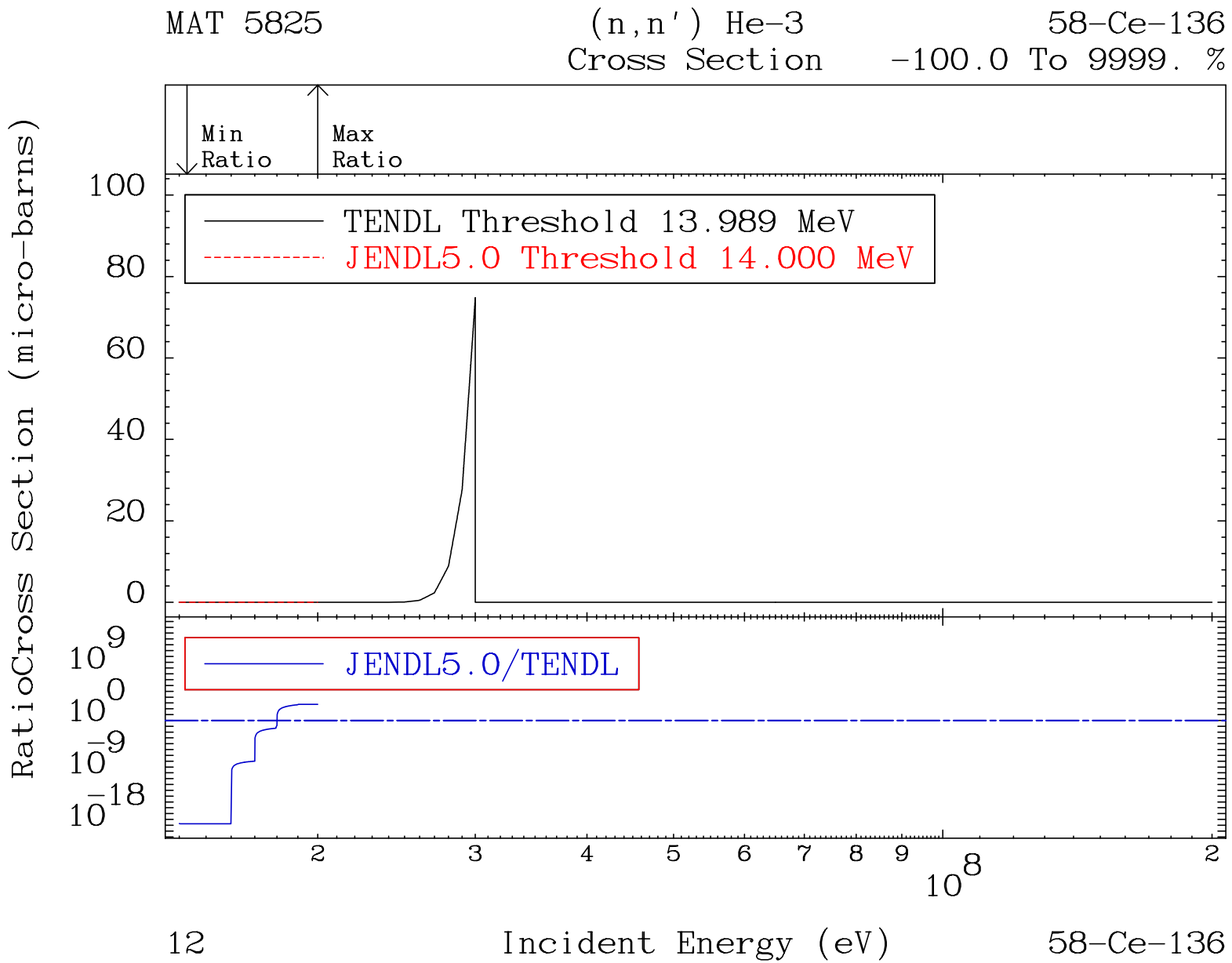

MAT 5825
(n,2n) α
58-Ce-136
Cross Section
-100.0 To 382.1 %
Max
Ratio
16
12
8
4
0
TENDL Threshold 10.402 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
7
Incident Energy (eV)
58-Ce-136

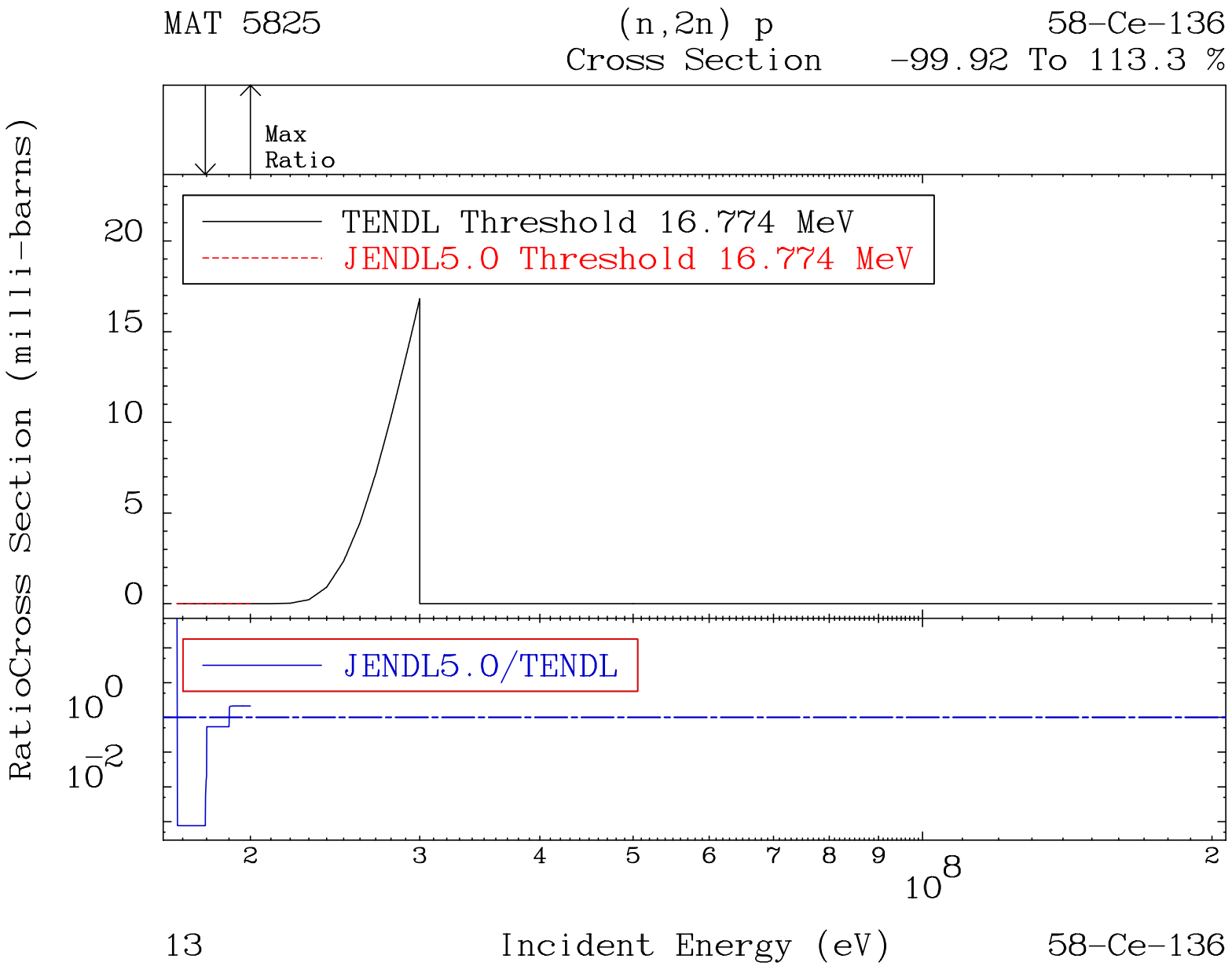

MAT 5825
(n,n') p
Cross Section
58-Ce-136
-100.0 To 432.7 %
Min Ratio
Max Ratio
TENDL Threshold 7.2072 MeV
JENDL5.0 Threshold 7.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
8
4
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
8
Incident Energy (eV)
58-Ce-136

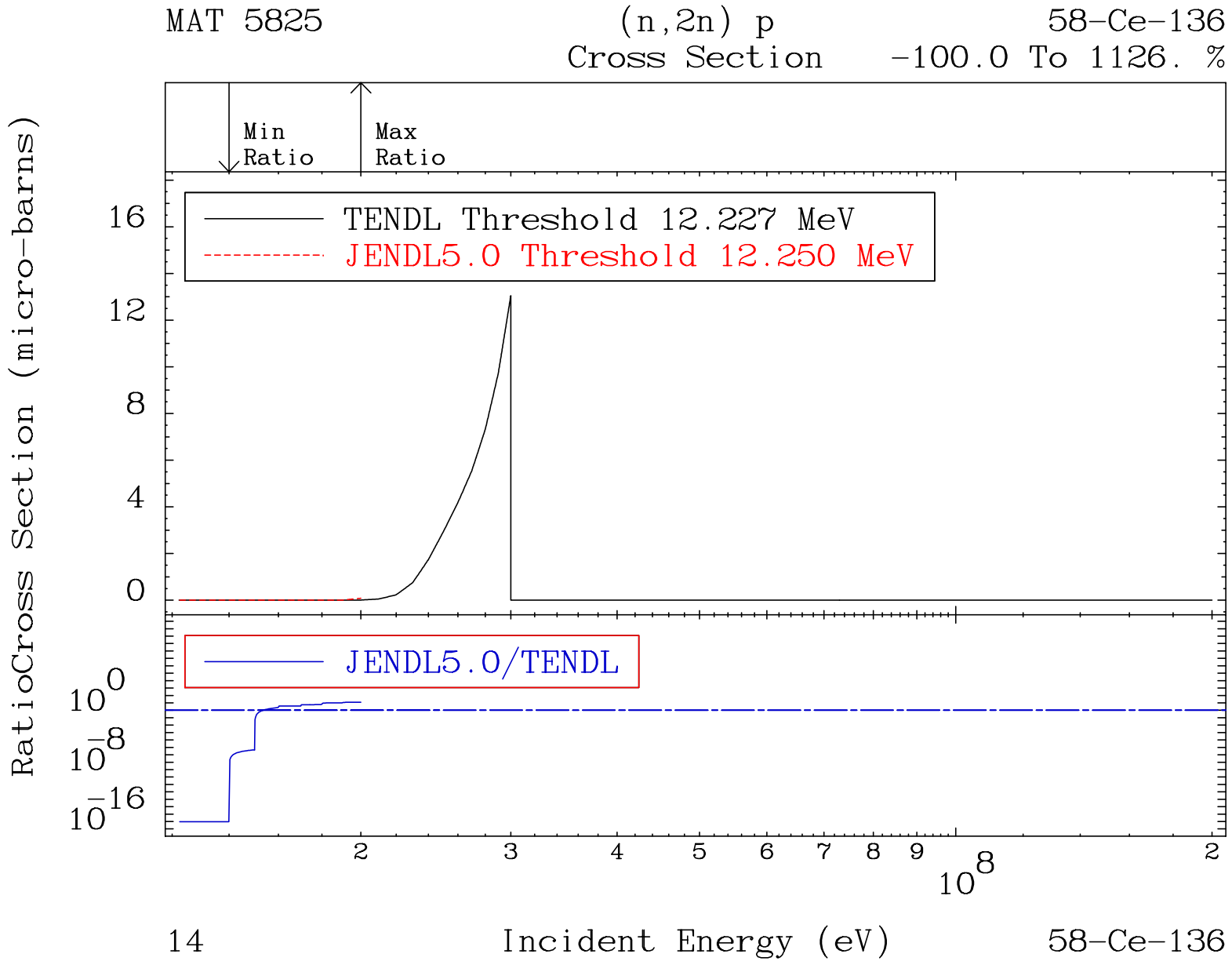

MAT 5825
(n,n') 2α
Cross Section
58-Ce-136
-100.0 To 1950. %
Min Ratio
Max Ratio
TENDL Threshold 1.5090 MeV
JENDL5.0 Threshold 8.0000 MeV
JENDL5.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
9
58-Ce-136

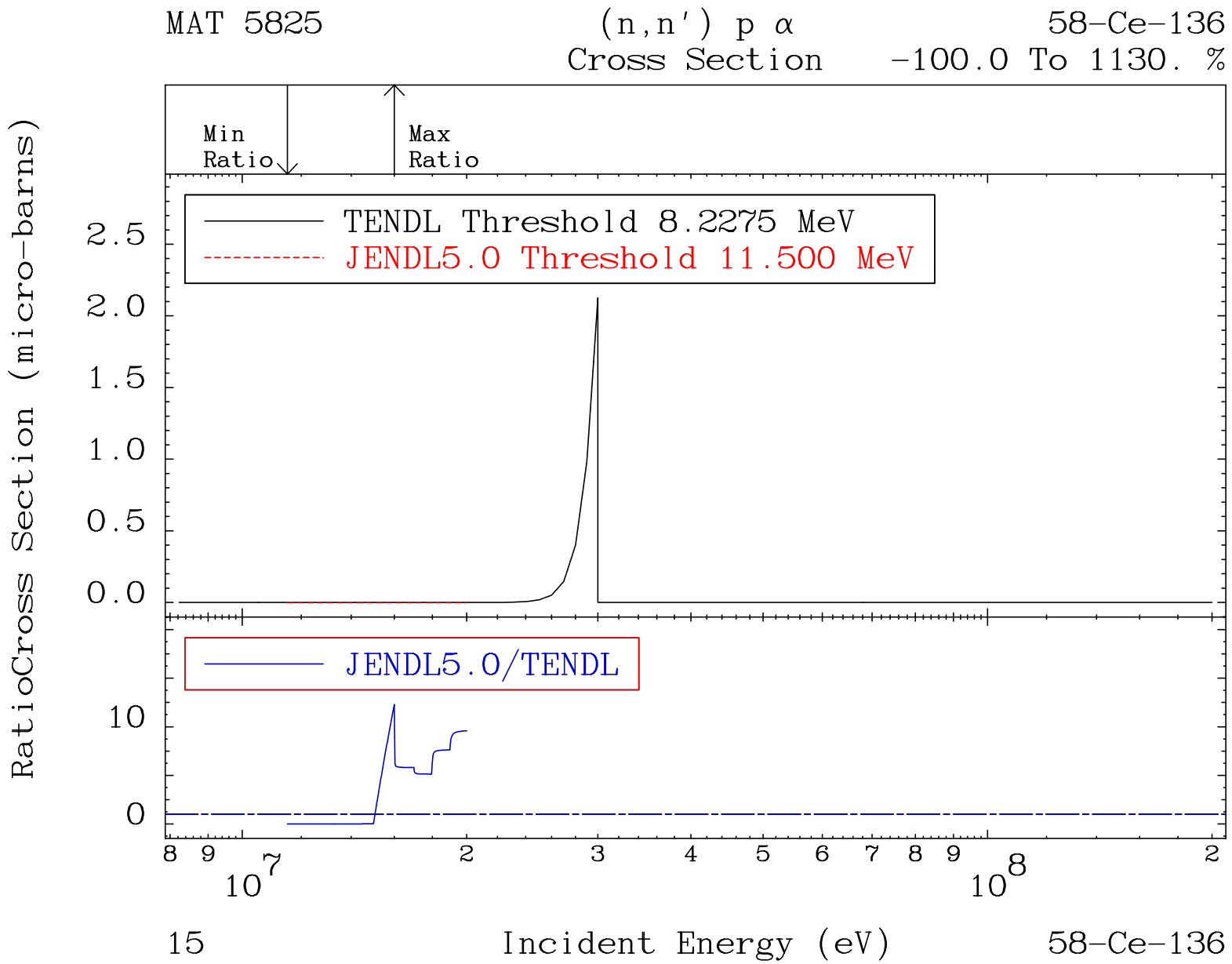

MAT 5825
(n,n') d
Cross Section
58-Ce-136
-100.0 To 1174. %
Max
Ratio
TENDL Threshold 14.533 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
58-Ce-136

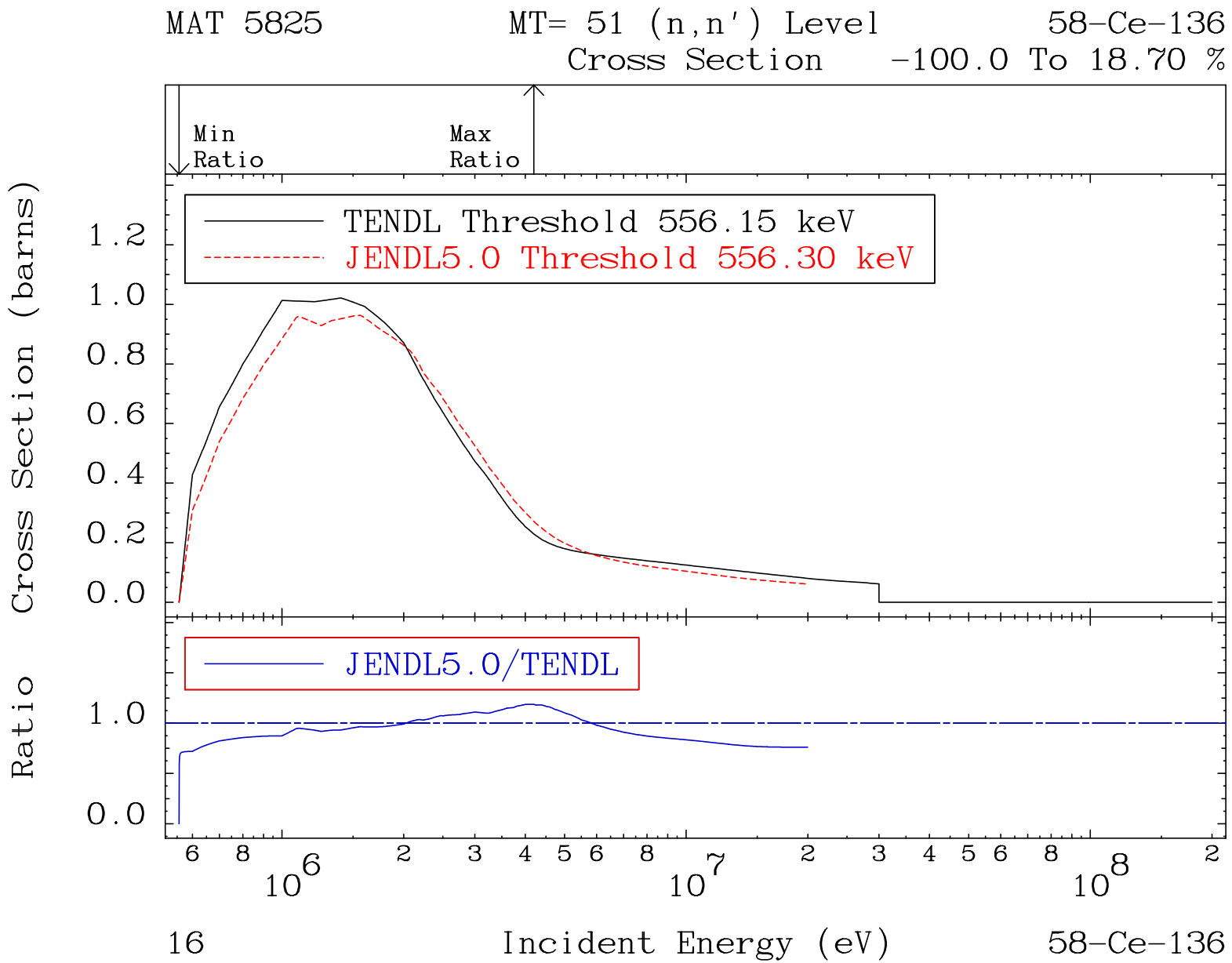

MAT 5825
(n,n') t
Cross Section
58-Ce-136
-100.0 To 6446. %
Max
Ratio
TENDL Threshold 16.082 MeV
JENDL5.0 Threshold 16.097 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
11
58-Ce-136

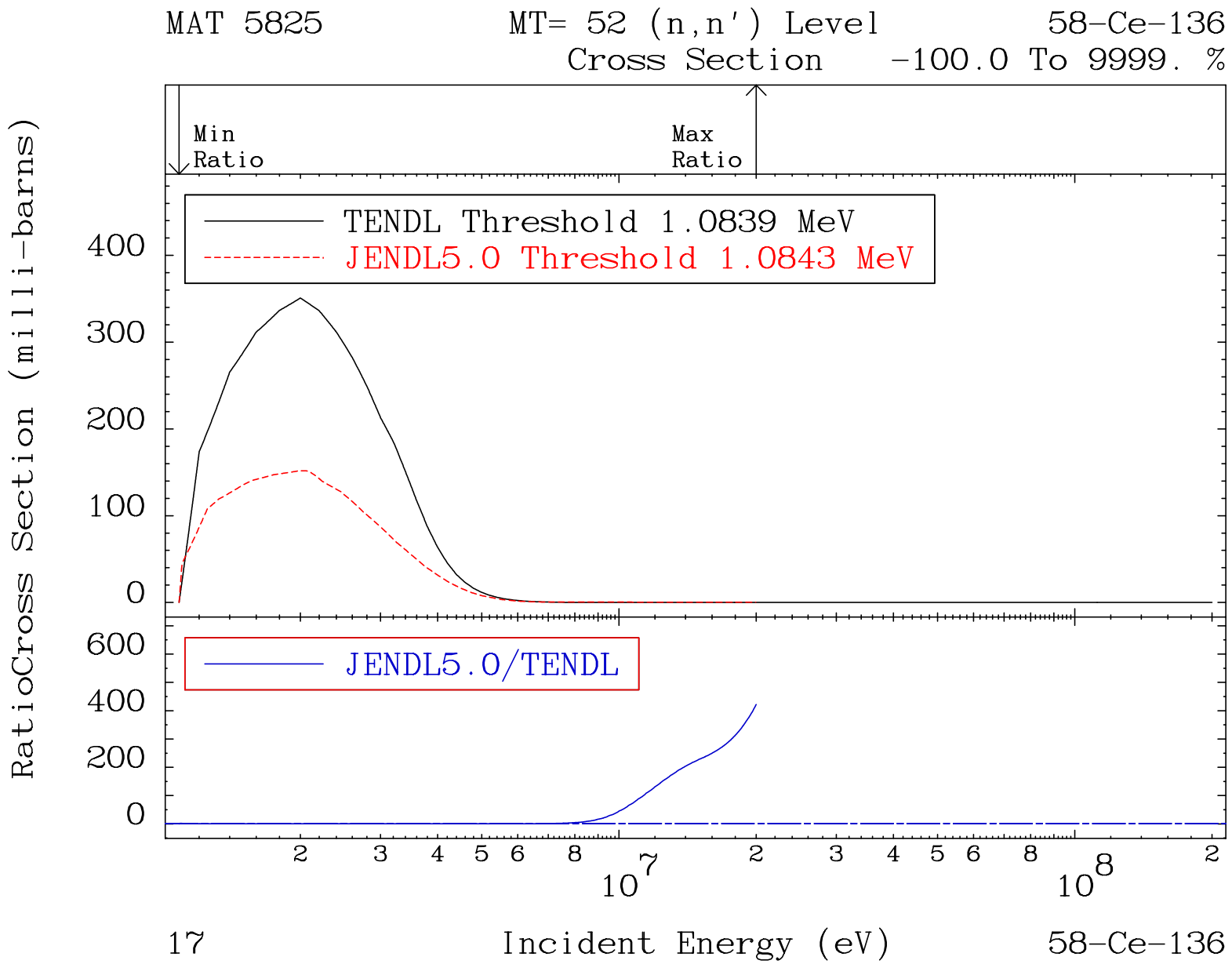

MAT 5825
(n,n') He-3
Cross Section
58-Ce-136
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 13.989 MeV
JENDL5.0 Threshold 14.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
10^9
10^0
10^-9
10^-18
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
58-Ce-136

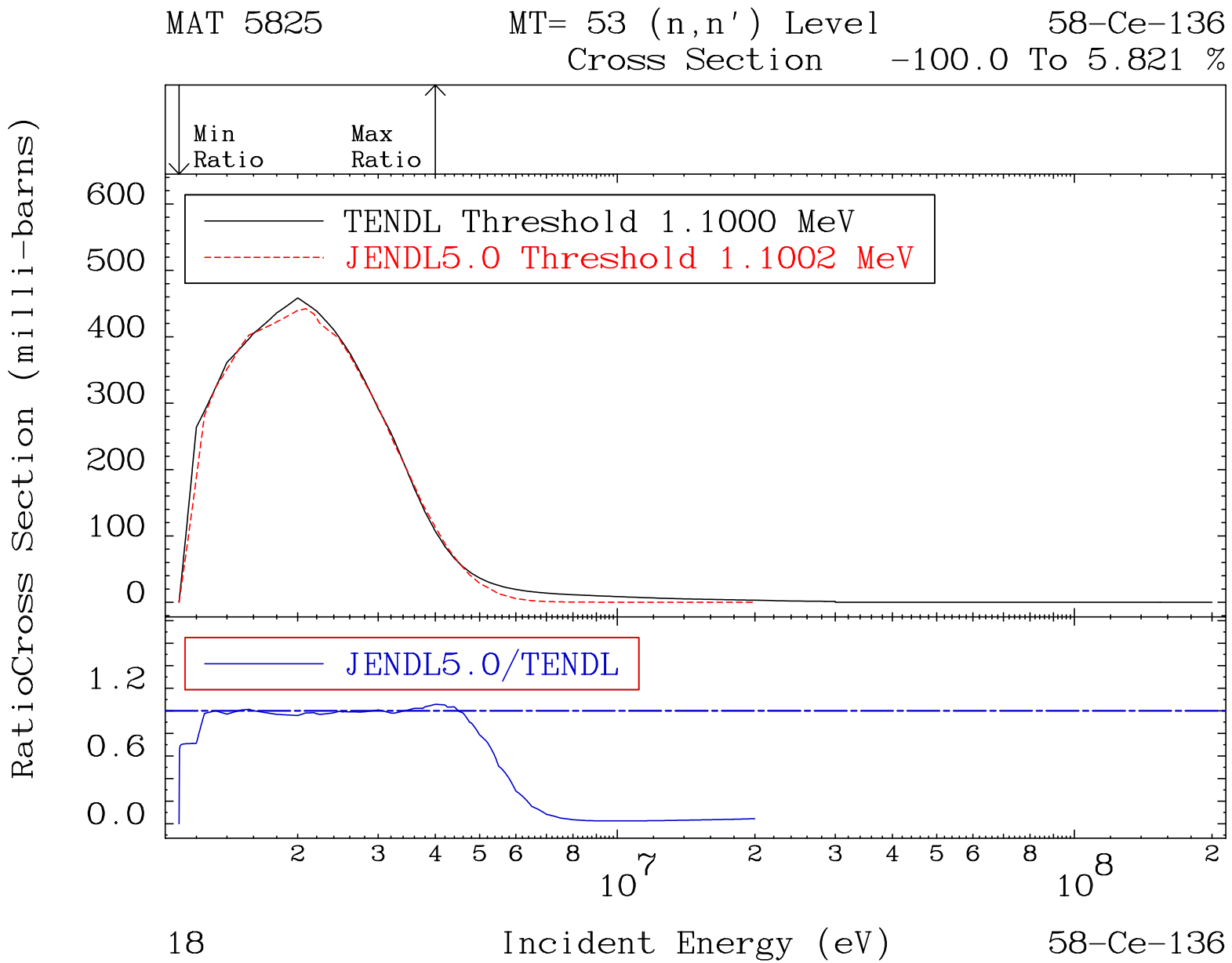

MAT 5825
(n,2n) p
Cross Section
58-Ce-136
-99.92 To 113.3 %
Max
Ratio
TENDL Threshold 16.774 MeV
JENDL5.0 Threshold 16.774 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
$10^{0}$
$10^{-2}$
2
3
4
5
6
7
8
9
$10^{8}$
2
13
Incident Energy (eV)
58-Ce-136

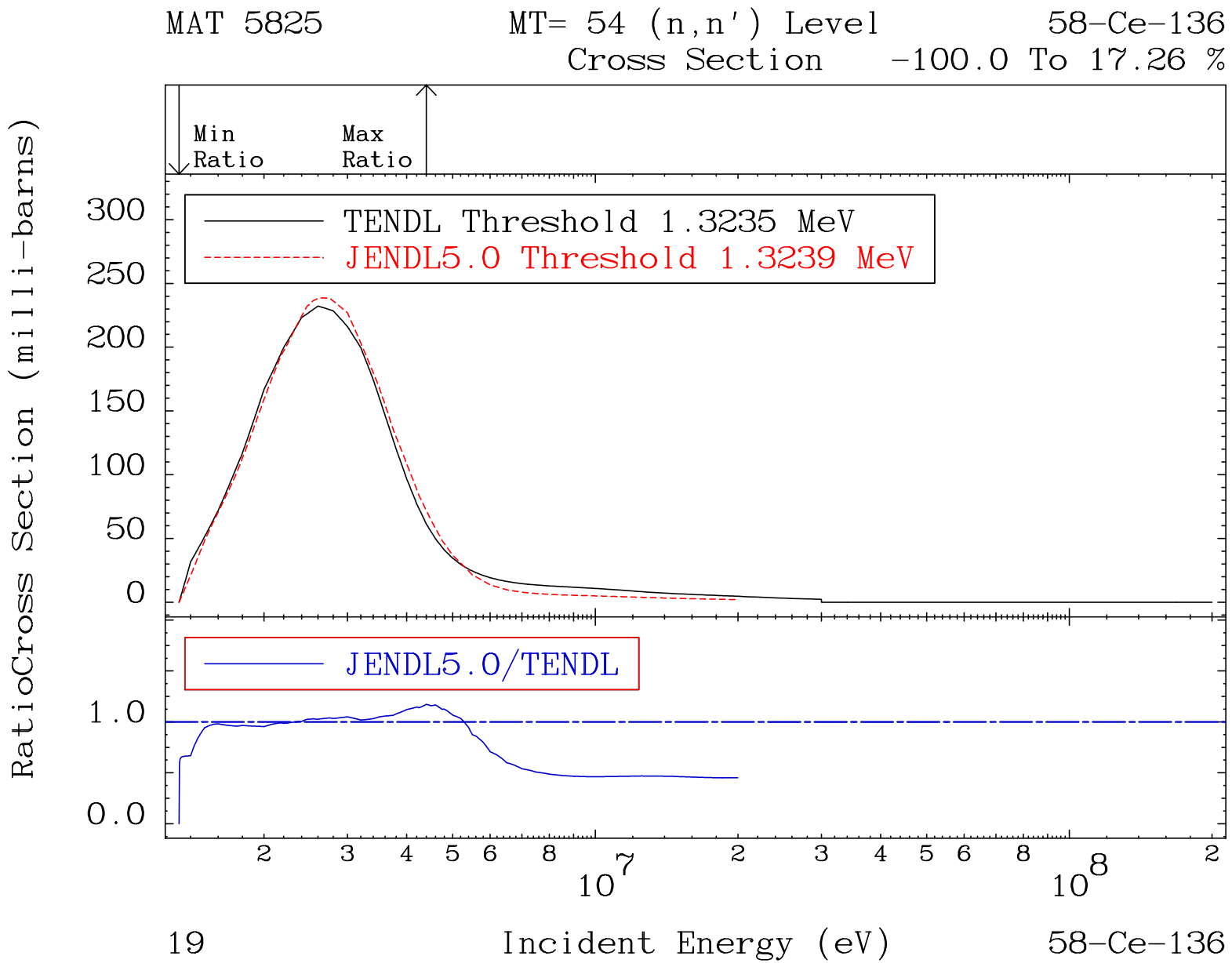

MAT 5825
(n,2n) p
58-Ce-136
Cross Section
-100.0 To 1126. %
Min Ratio
Max Ratio
TENDL Threshold 12.227 MeV
JENDL5.0 Threshold 12.250 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
16
12
8
4
0
10^0
10^-8
10^-16
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
58-Ce-136

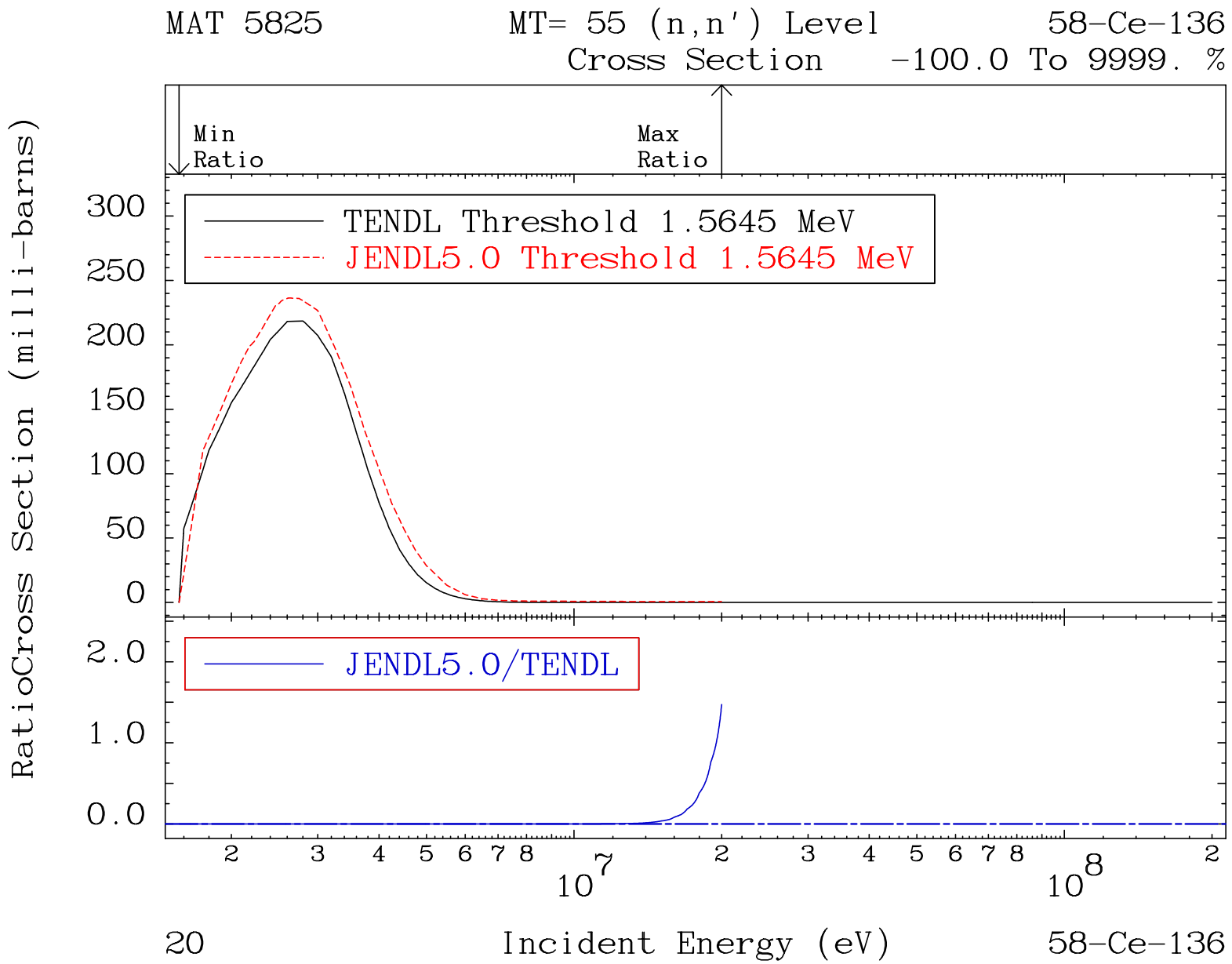

MAT 5825
(n,n') p α
58-Ce-136
Cross Section
-100.0 To 1130. %
Min Ratio
Max Ratio
TENDL Threshold 8.2275 MeV
JENDL5.0 Threshold 11.500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
10
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
58-Ce-136

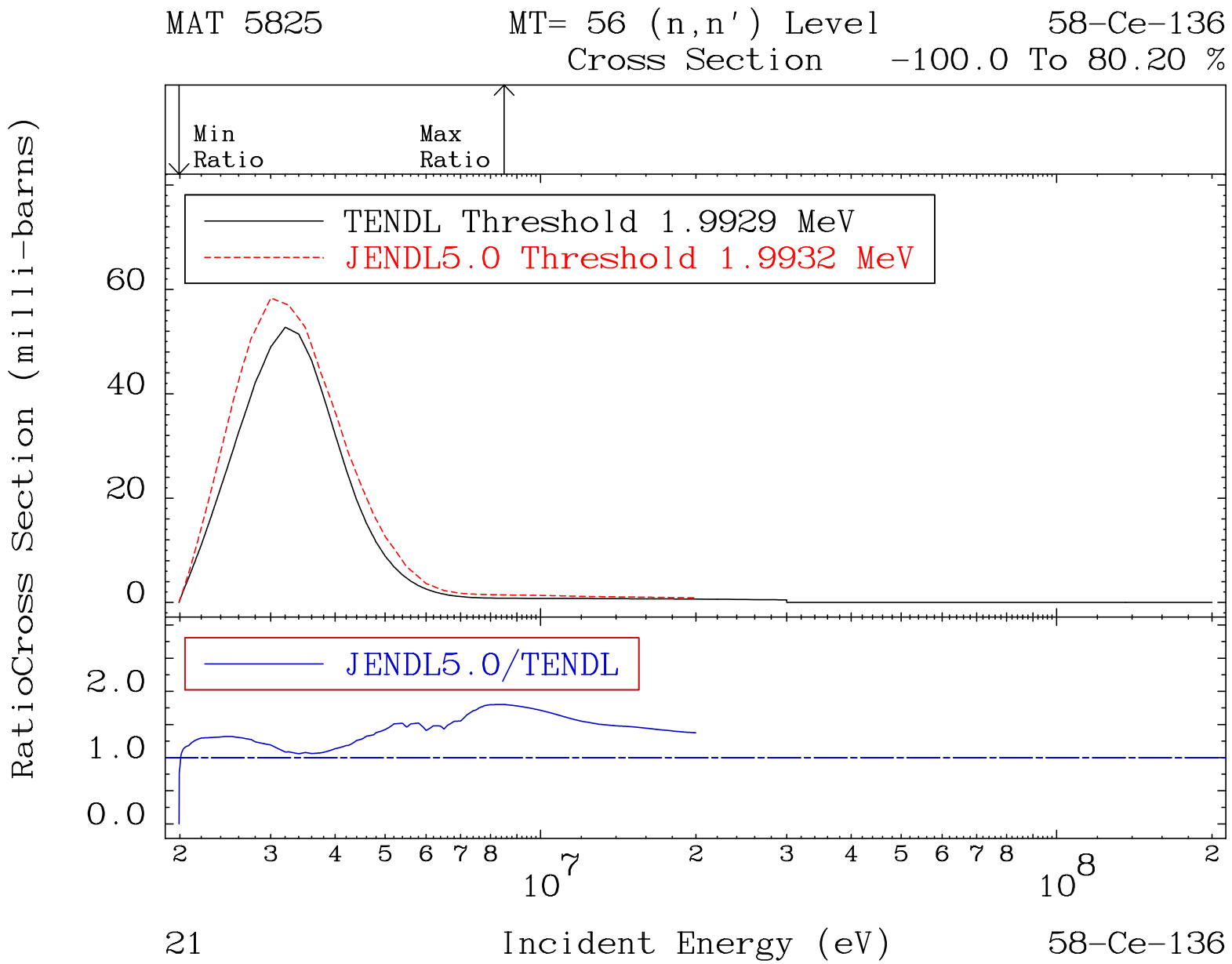

MAT 5825
MT= 51 (n,n') Level
58-Ce-136
Cross Section -100.0 To 18.70 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 556.30 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
1.0
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
58-Ce-136

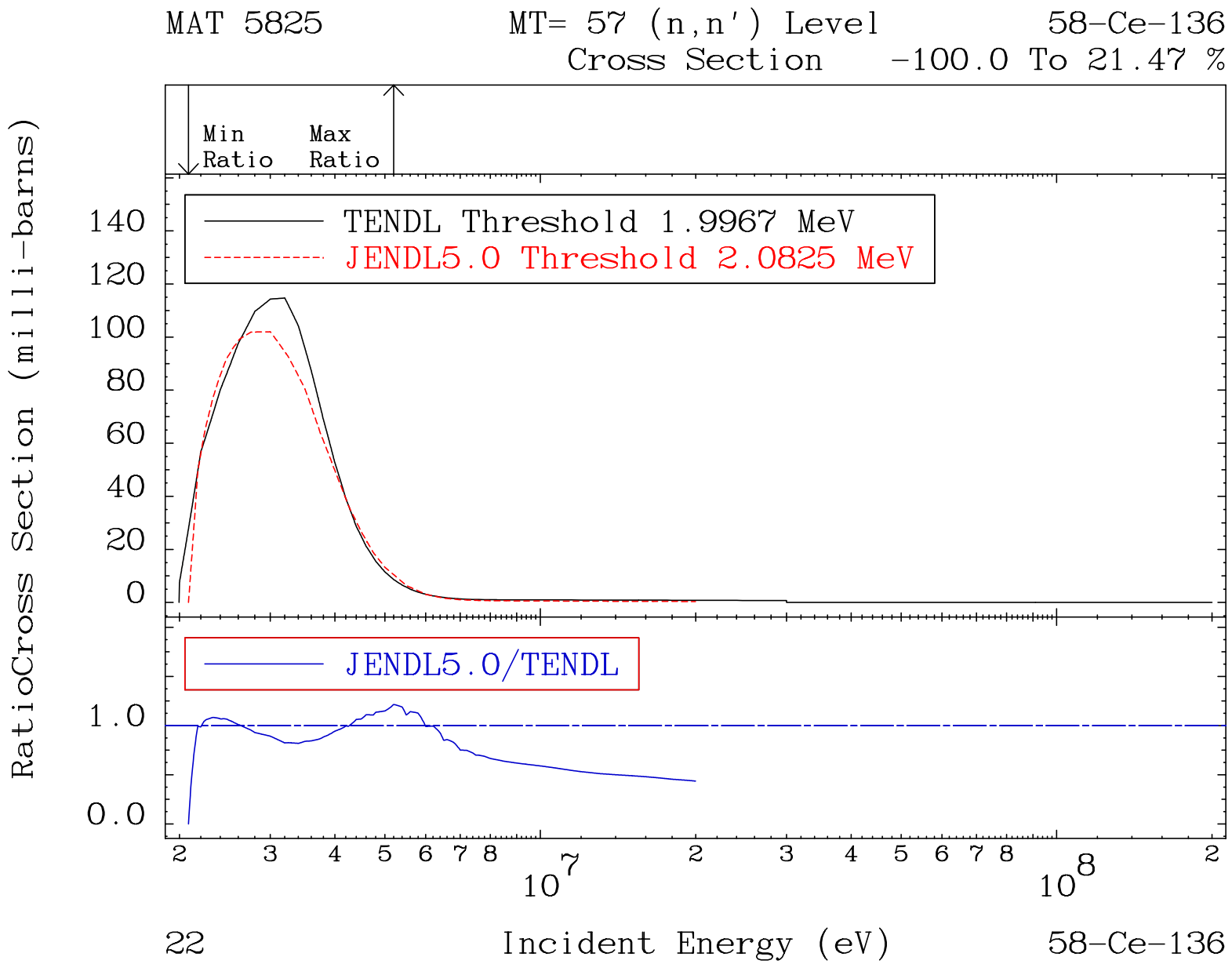

MAT 5825
MT= 52 (n,n') Level
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0839 MeV
JENDL5.0 Threshold 1.0843 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
600
400
200
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
58-Ce-136

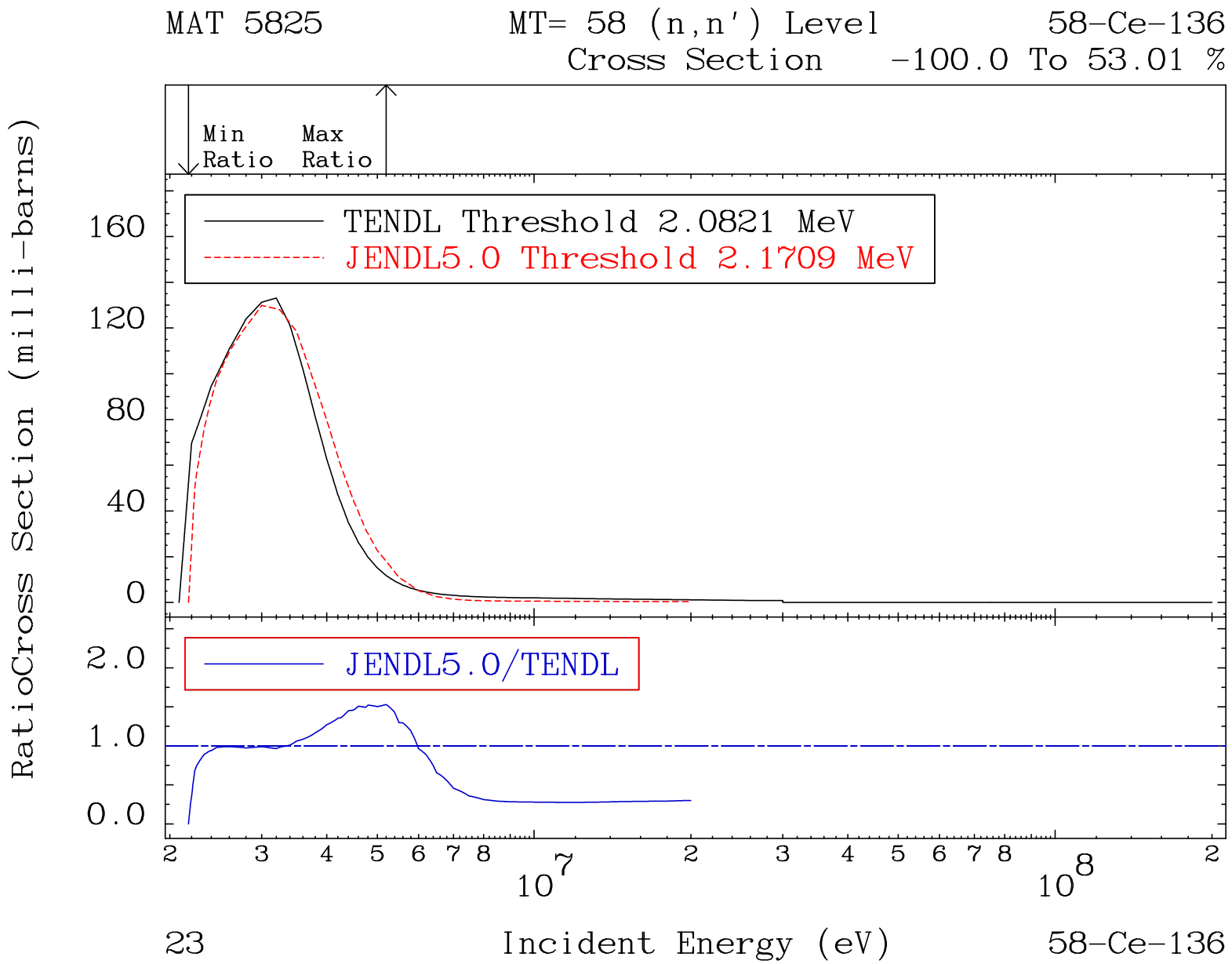

MAT 5825
MT= 53 (n,n') Level
58-Ce-136
Cross Section -100.0 To 5.821 %
Min Ratio
Max Ratio
TENDL Threshold 1.1000 MeV
JENDL5.0 Threshold 1.1002 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
58-Ce-136

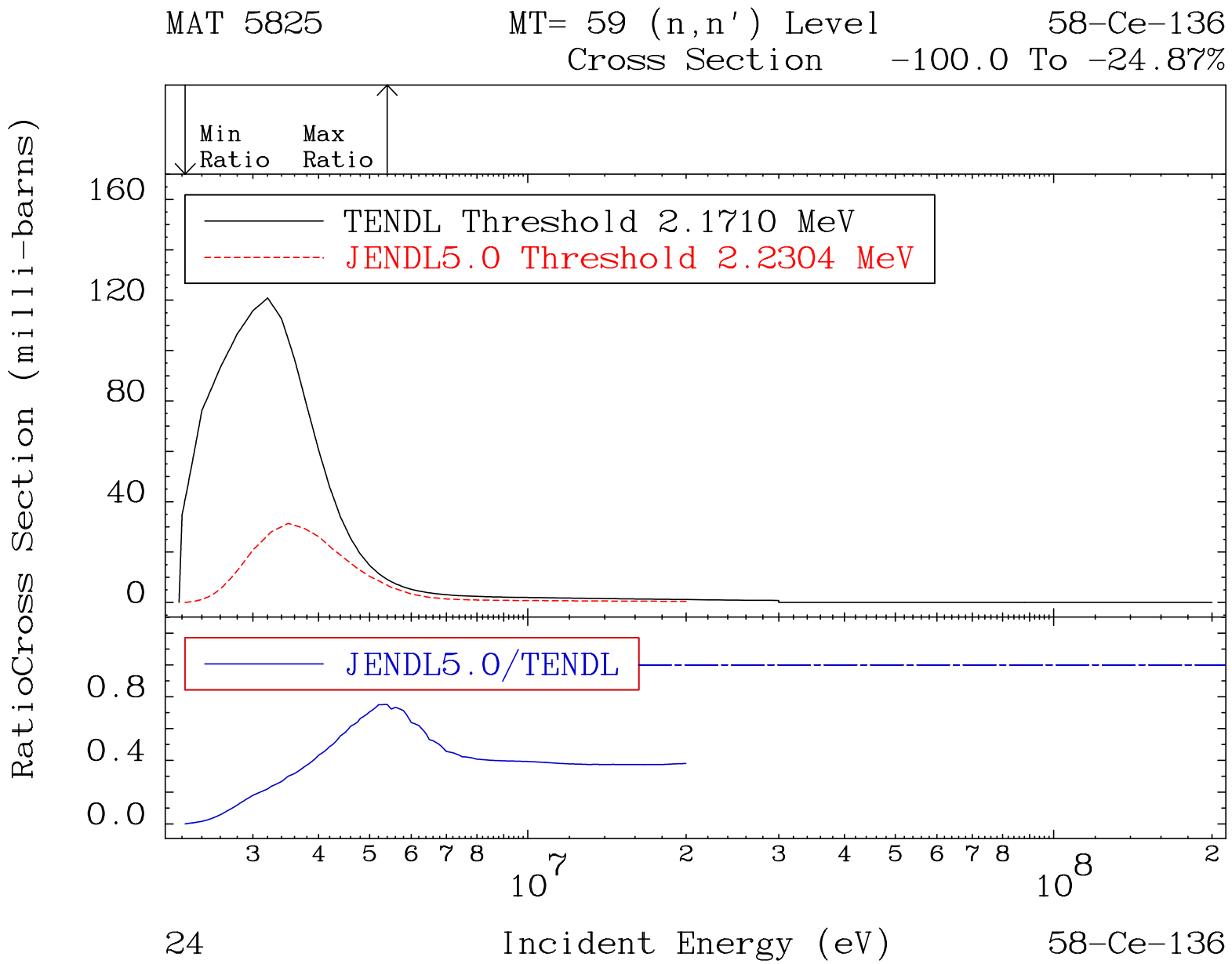

MAT 5825
MT= 54 (n,n') Level
58-Ce-136
Cross Section -100.0 To 17.26 %
Min Ratio
Max Ratio
TENDL Threshold 1.3235 MeV
JENDL5.0 Threshold 1.3239 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
58-Ce-136

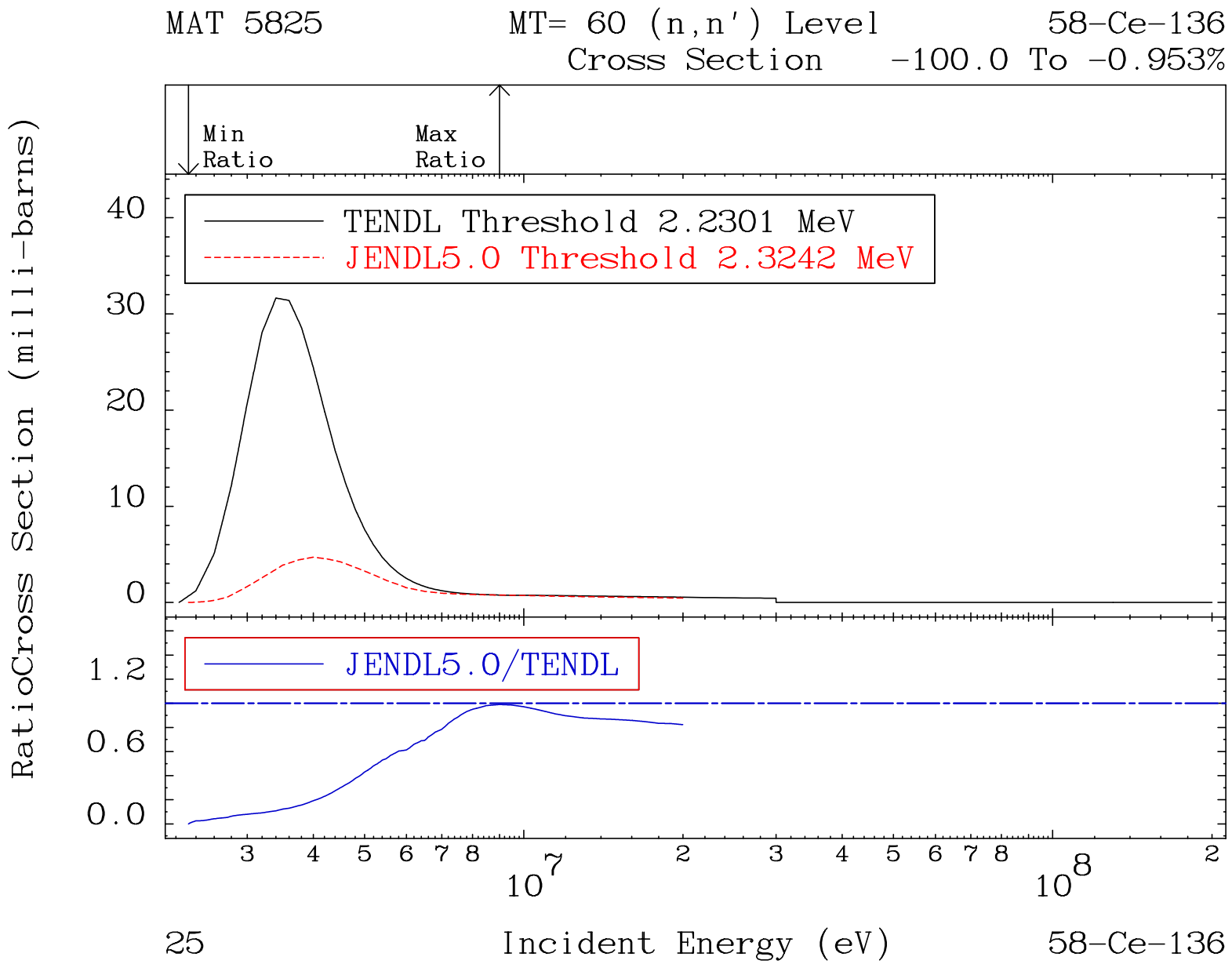

MAT 5825
MT= 55 (n,n') Level
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5645 MeV
JENDL5.0 Threshold 1.5645 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
58-Ce-136

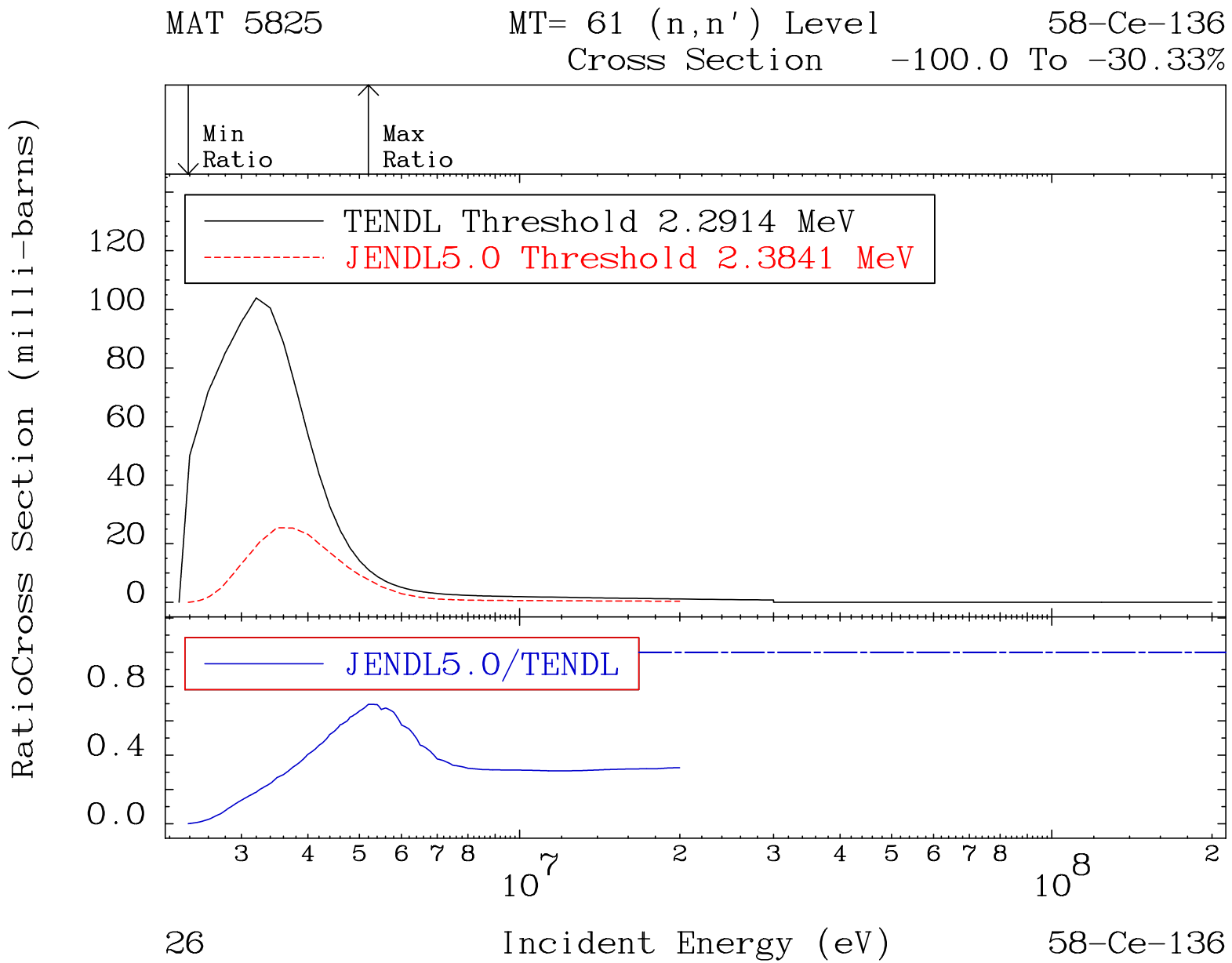

MAT 5825
MT= 56 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 80.20 %
Min Ratio
Max Ratio
TENDL Threshold 1.9929 MeV
JENDL5.0 Threshold 1.9932 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
58-Ce-136

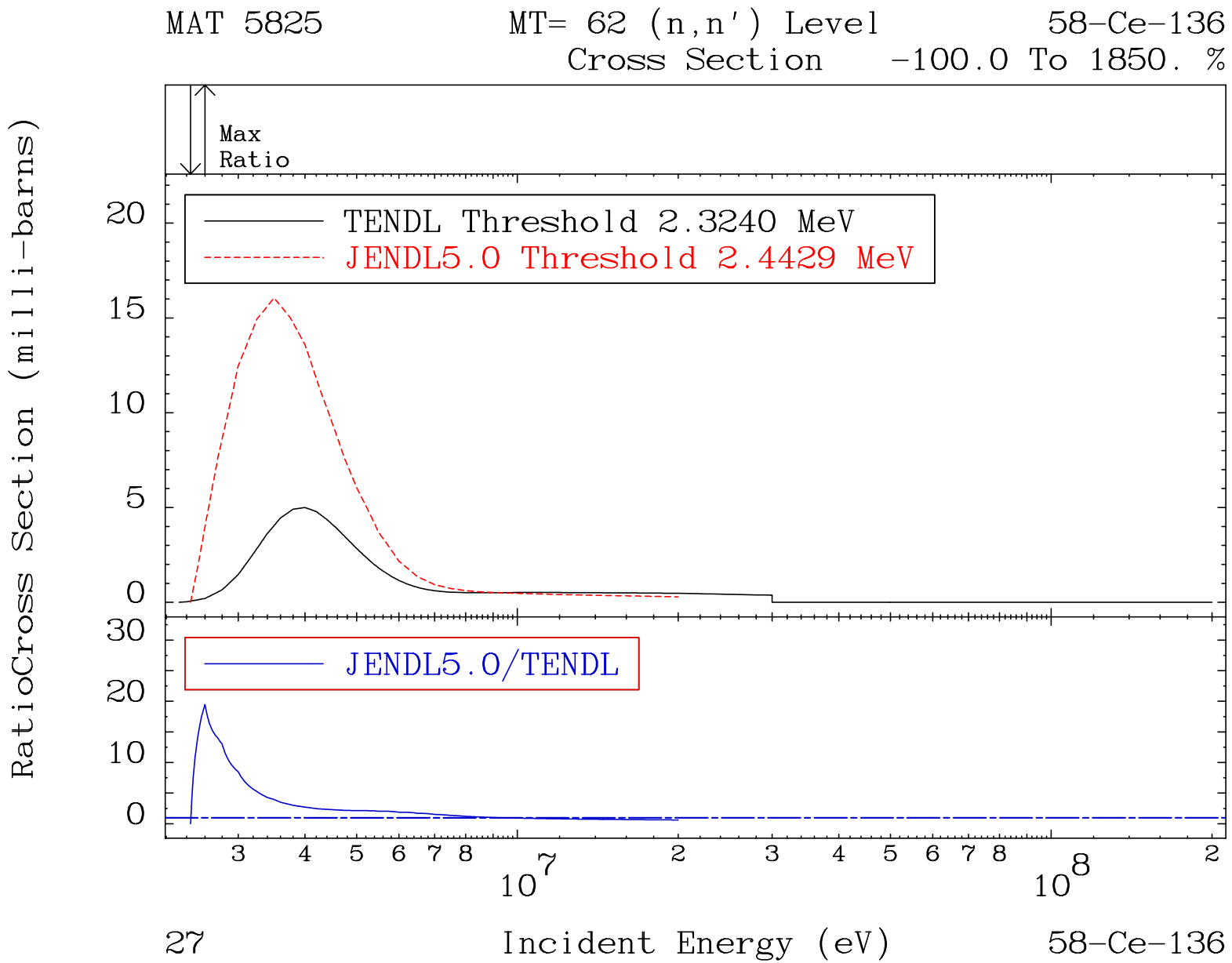

MAT 5825
MT= 57 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 21.47 %
Min Ratio
Max Ratio
TENDL Threshold 1.9967 MeV
JENDL5.0 Threshold 2.0825 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
58-Ce-136

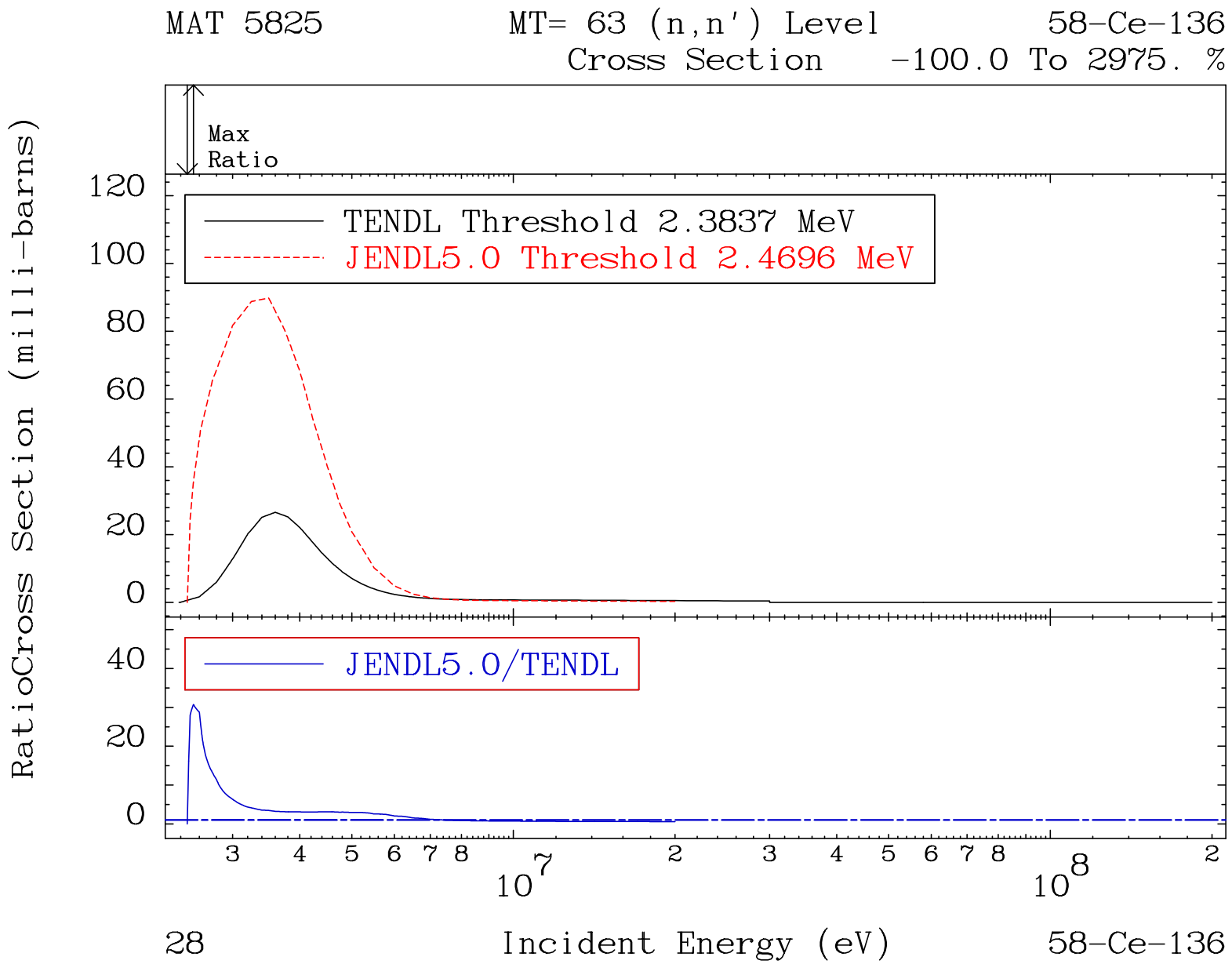

MAT 5825
MT= 58 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 53.01 %
Min Ratio
Max Ratio
TENDL Threshold 2.0821 MeV
JENDL5.0 Threshold 2.1709 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
58-Ce-136

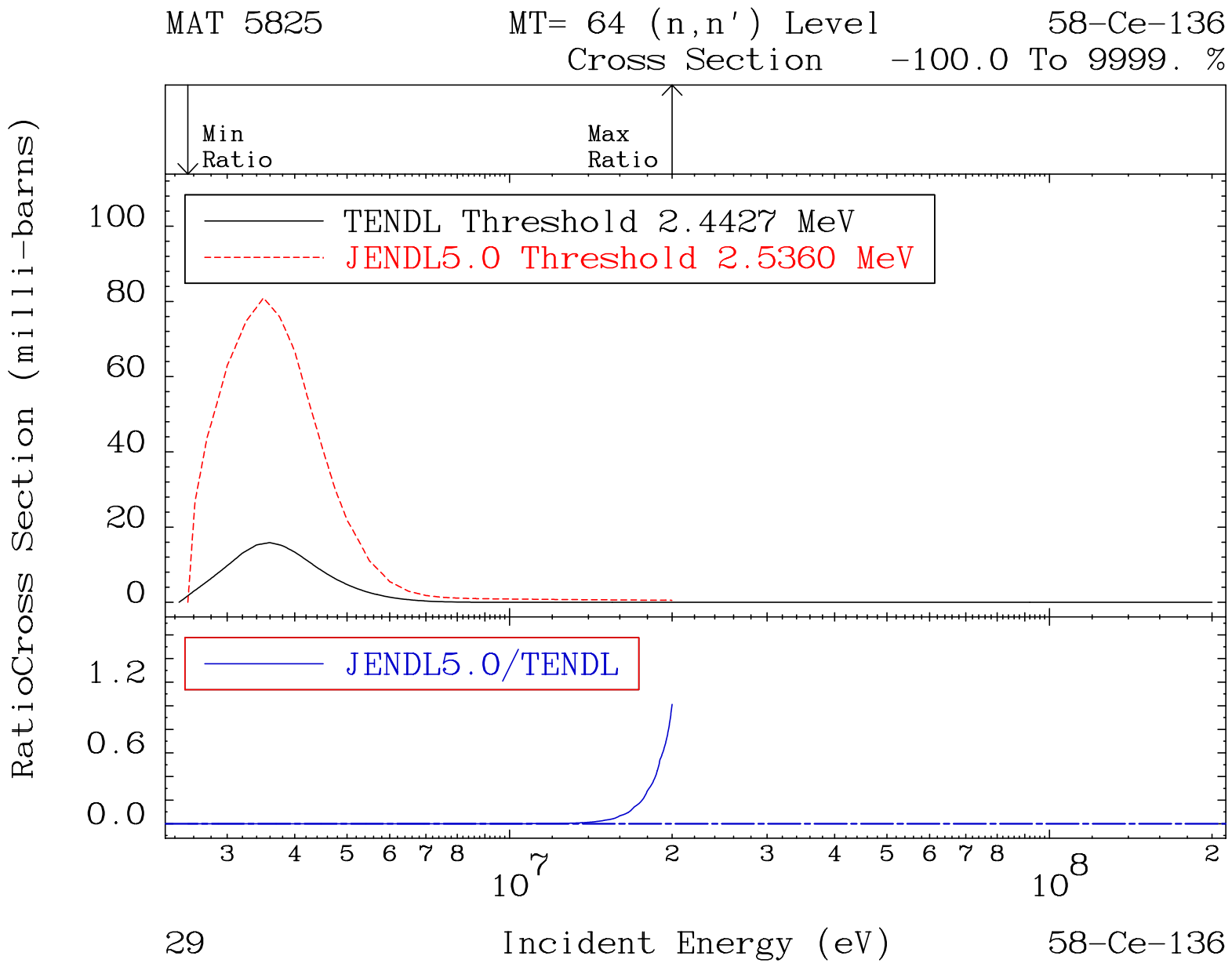

MAT 5825
MT= 59 (n,n') Level
58-Ce-136
Cross Section -100.0 To -24.87%
Min Ratio
Max Ratio
TENDL Threshold 2.1710 MeV
JENDL5.0 Threshold 2.2304 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
24
58-Ce-136

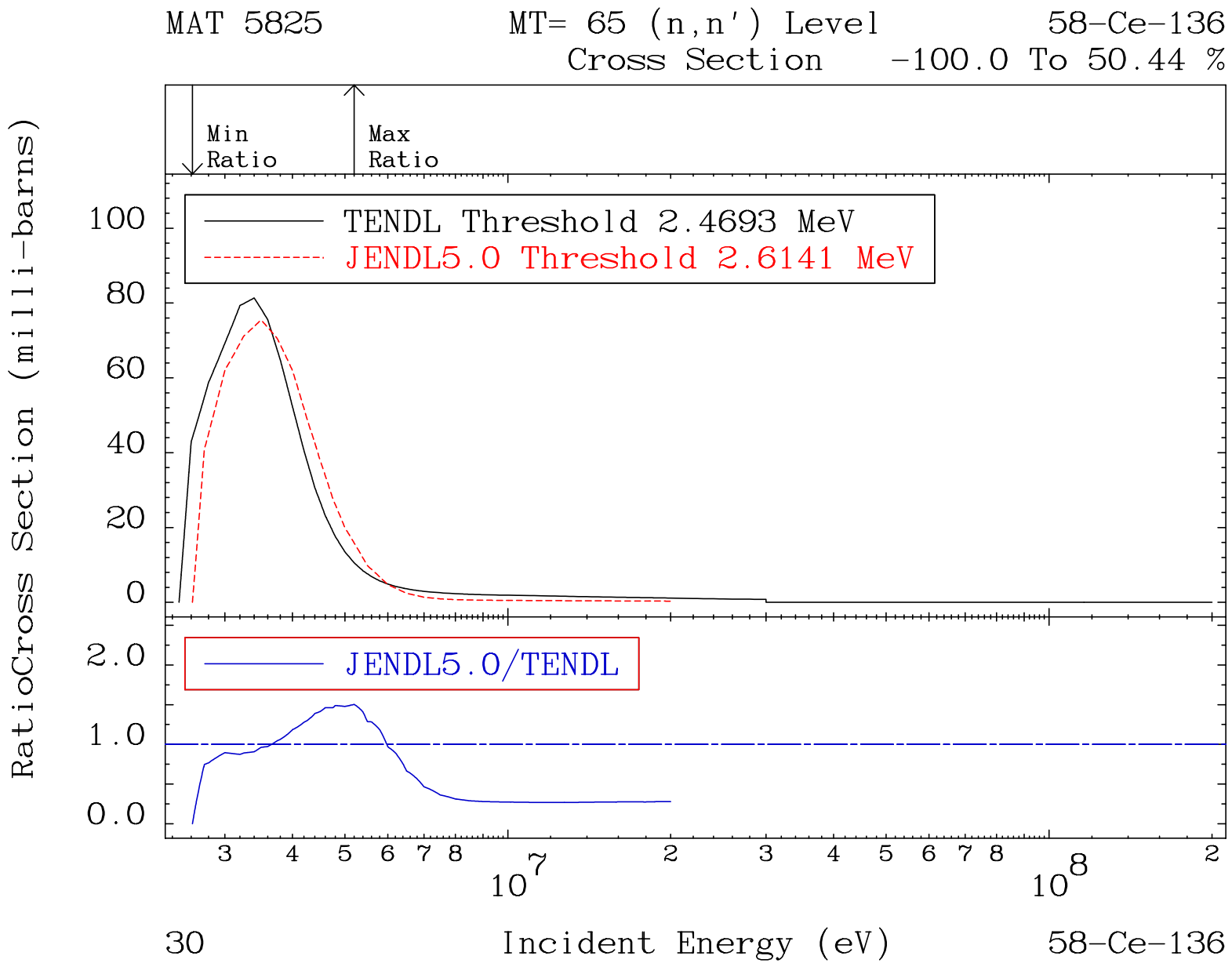

MAT 5825
MT= 60 (n,n') Level
58-Ce-136
Cross Section -100.0 To -0.953%
Min Ratio
Max Ratio
TENDL Threshold 2.2301 MeV
JENDL5.0 Threshold 2.3242 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
58-Ce-136

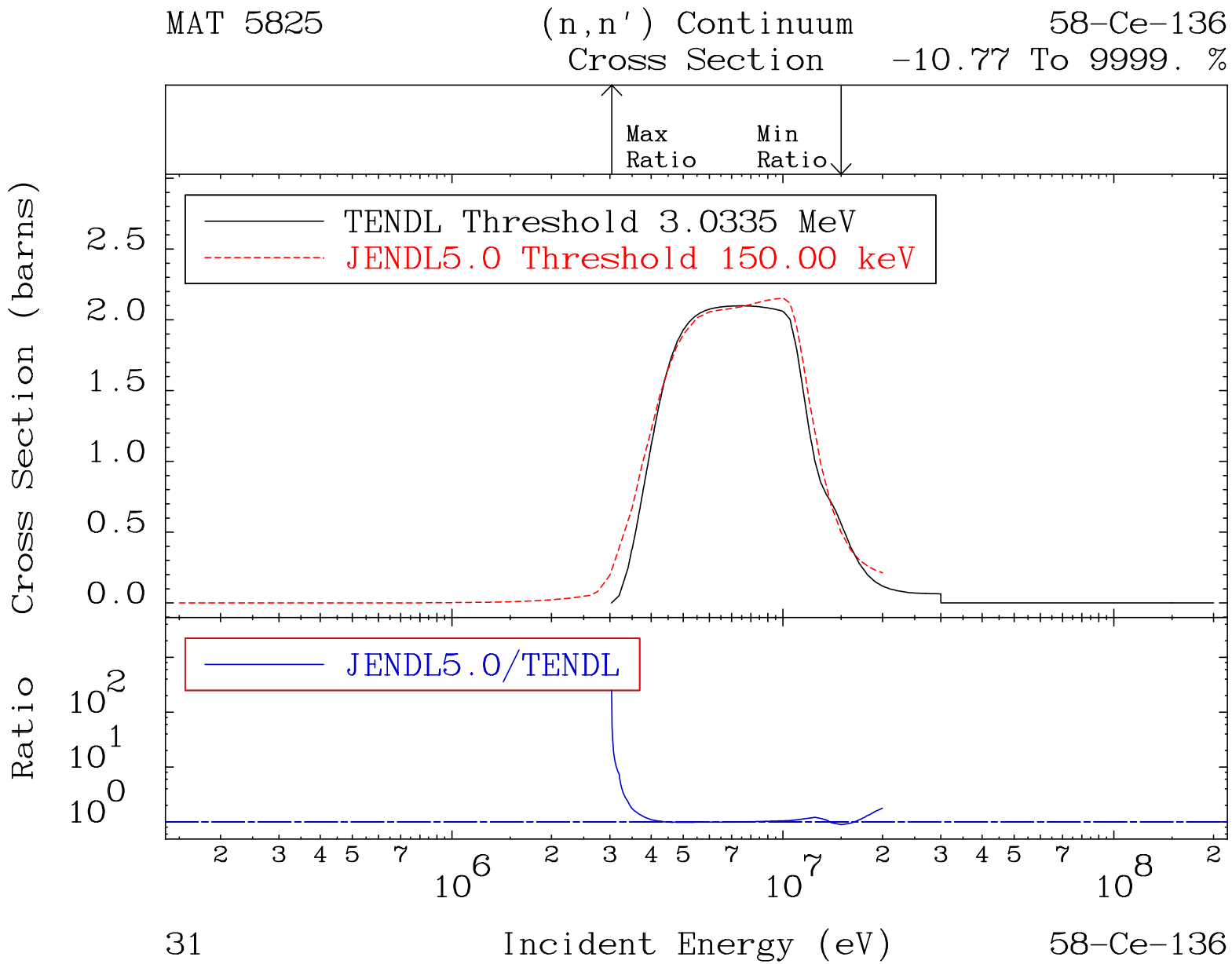

MAT 5825
MT= 61 (n,n') Level
58-Ce-136
Cross Section -100.0 To -30.33%
Min Ratio
Max Ratio
TENDL Threshold 2.2914 MeV
JENDL5.0 Threshold 2.3841 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
58-Ce-136

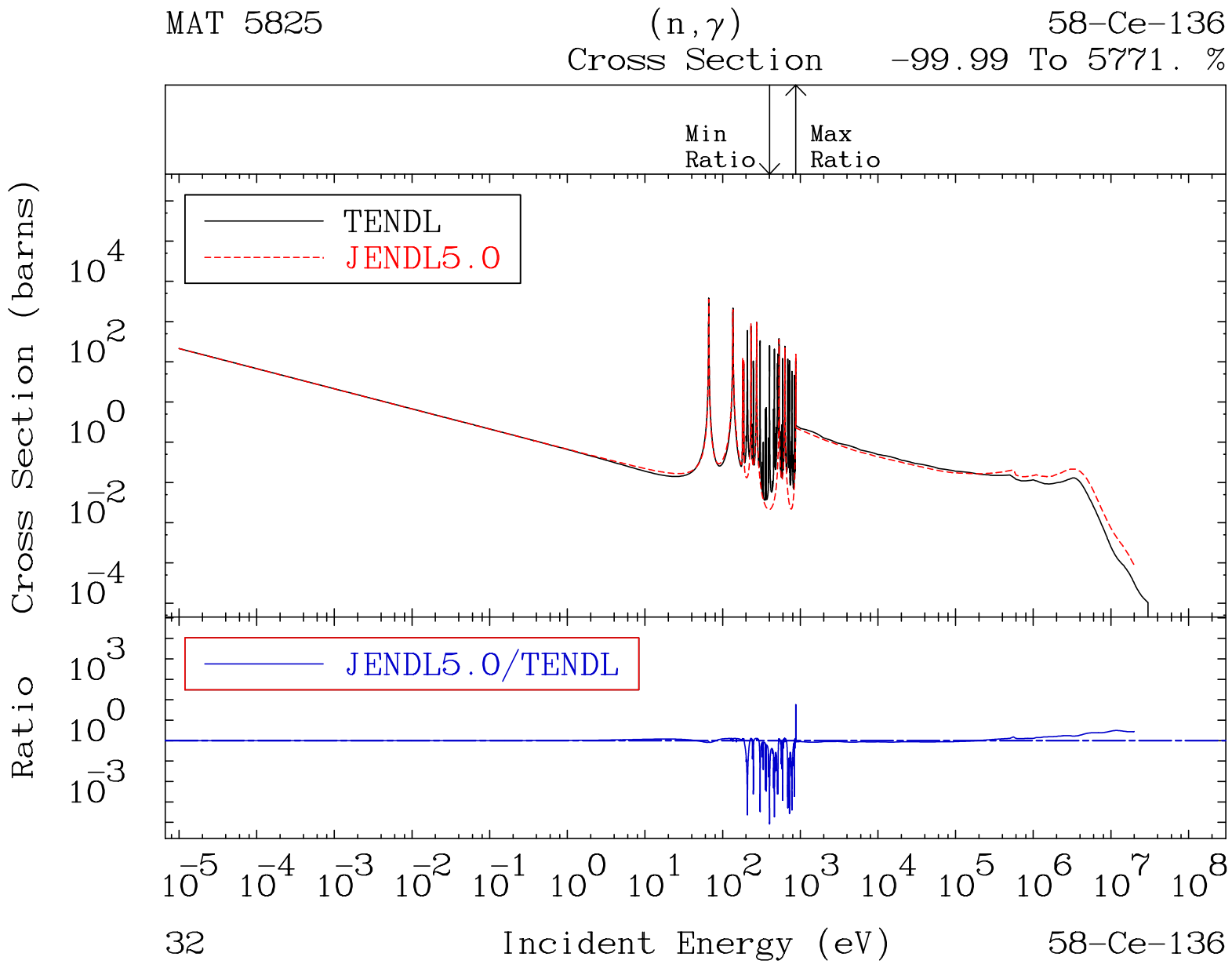

MAT 5825
MT= 62 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 1850. %
Max
Ratio
TENDL Threshold 2.3240 MeV
JENDL5.0 Threshold 2.4429 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
58-Ce-136

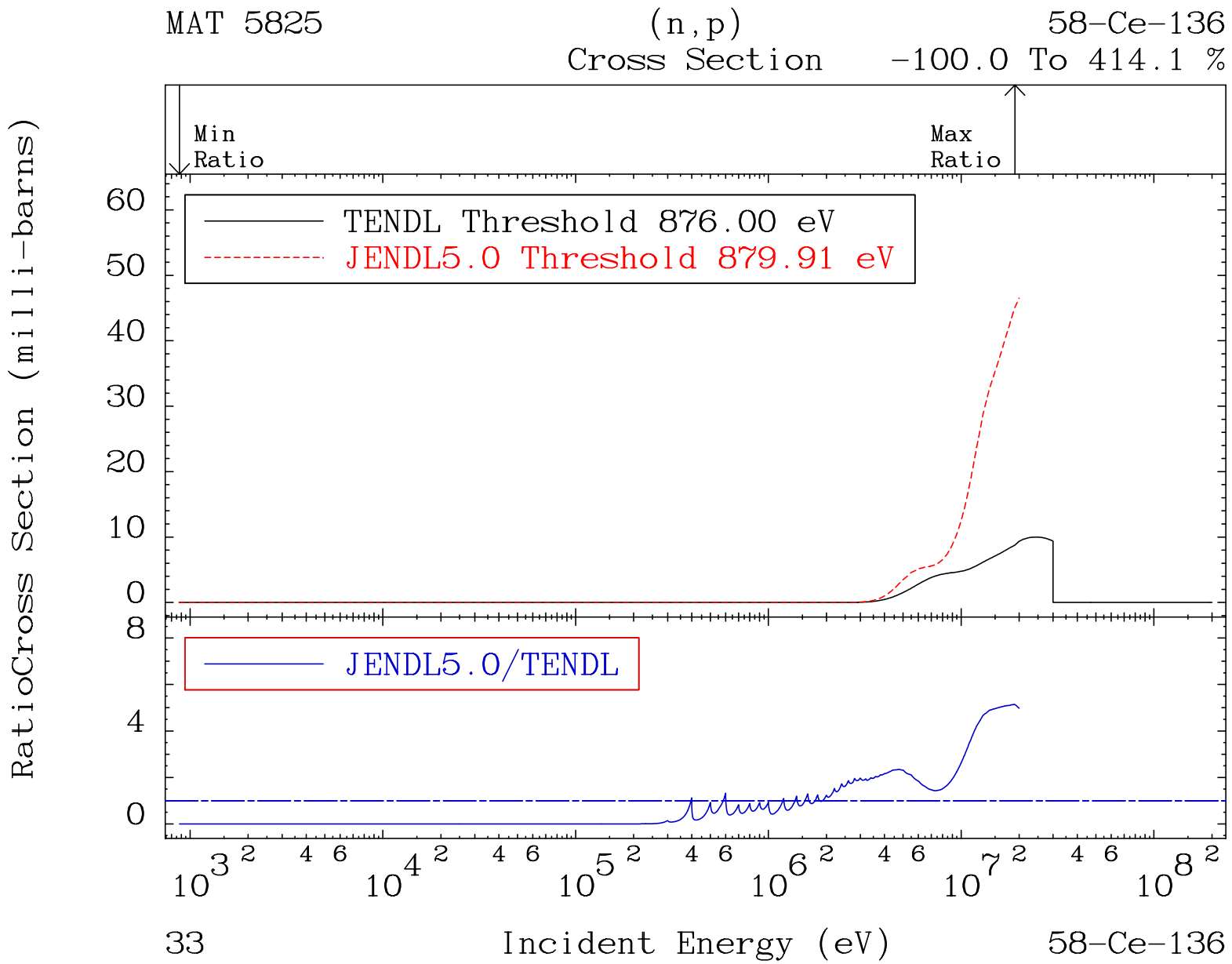

MAT 5825
MT= 63 (n,n') Level
58-Ce-136
Cross Section
-100.0 To 2975. %
Max
Ratio
TENDL Threshold 2.3837 MeV
JENDL5.0 Threshold 2.4696 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
40
20
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
58-Ce-136

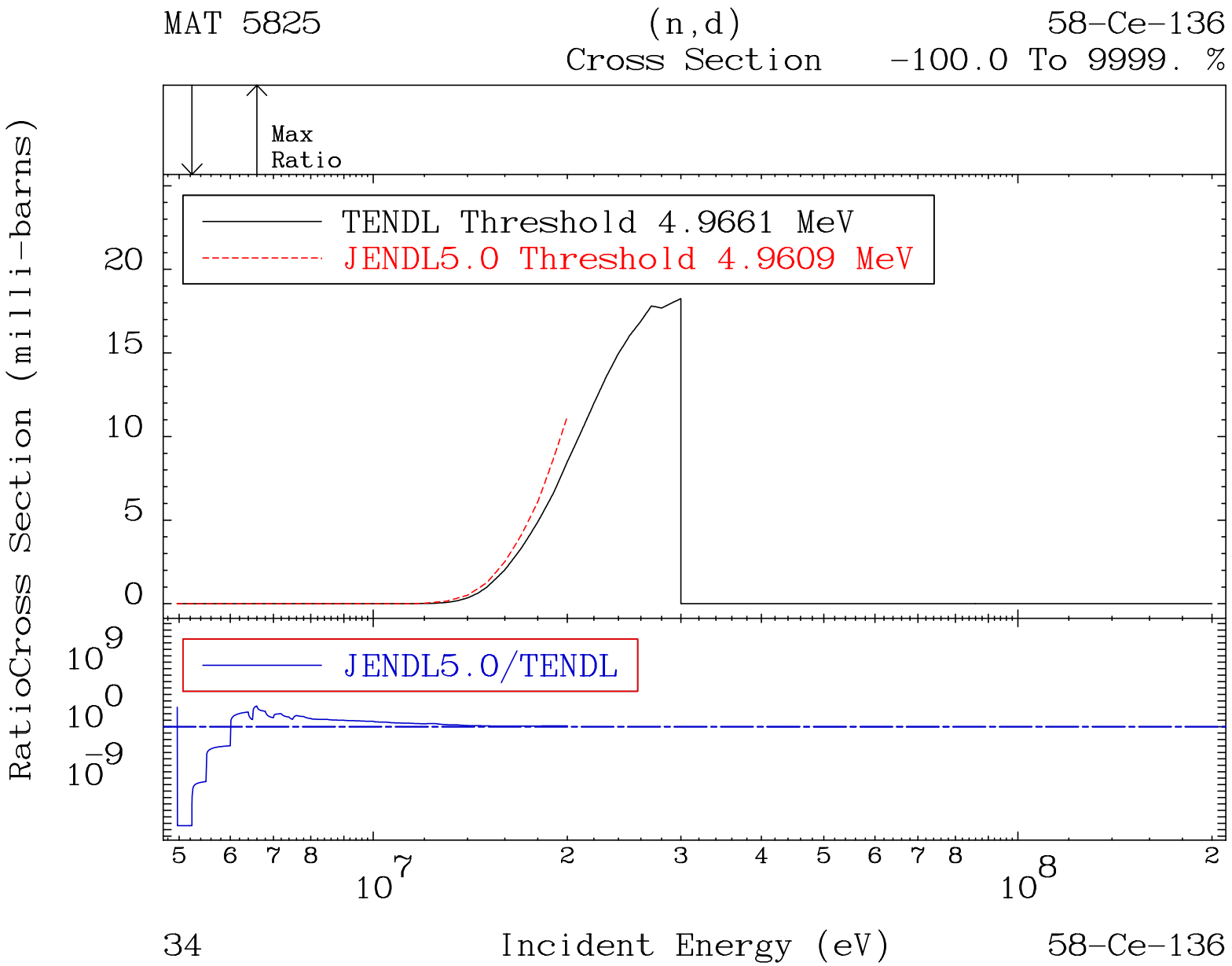

MAT 5825
MT= 64 (n,n') Level
58-Ce-136
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4427 MeV
JENDL5.0 Threshold 2.5360 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
58-Ce-136

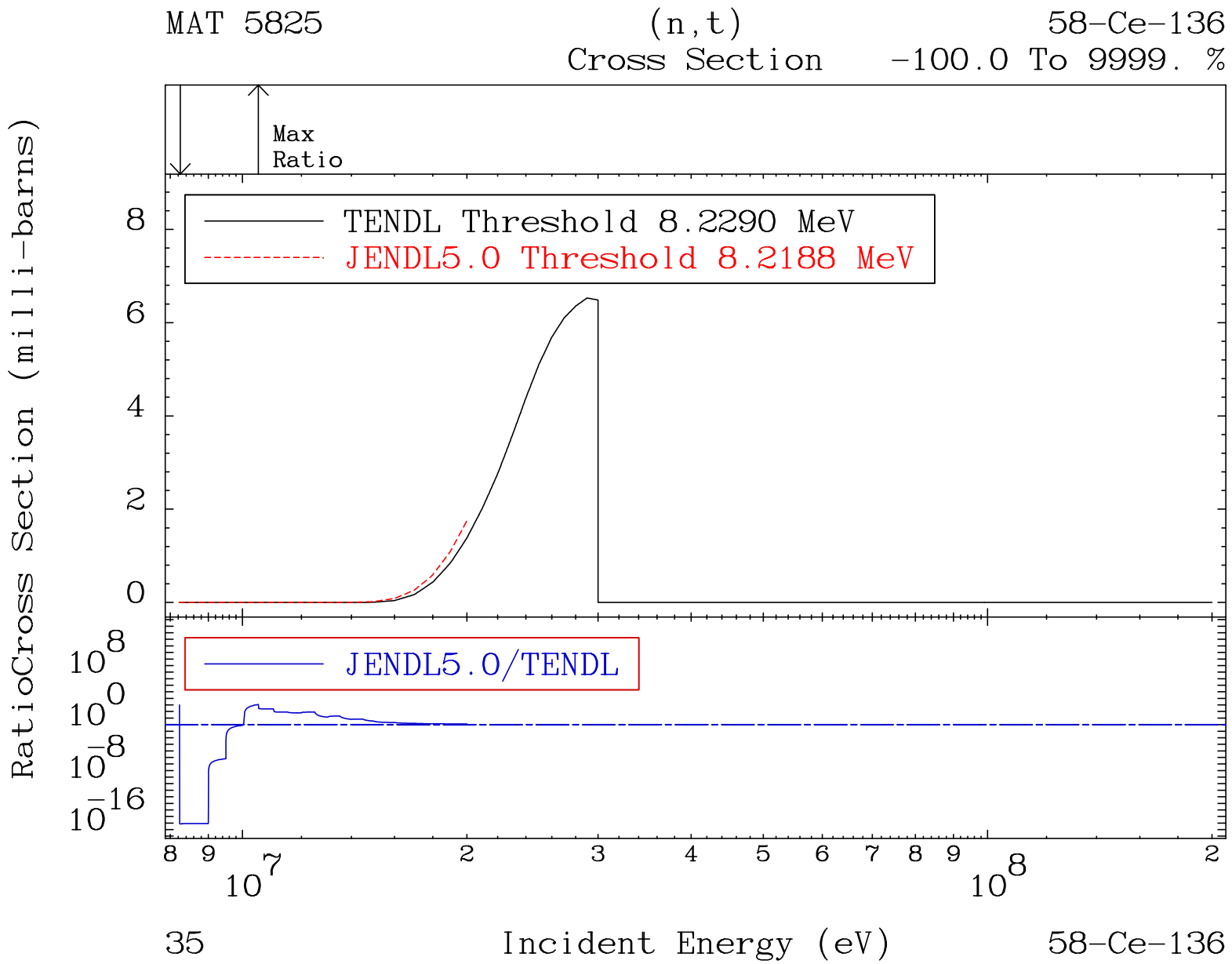

MAT 5825
MT= 65 (n,n') Level
58-Ce-136
Cross Section -100.0 To 50.44 %
Min Ratio
Max Ratio
TENDL Threshold 2.4693 MeV
JENDL5.0 Threshold 2.6141 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
30
58-Ce-136

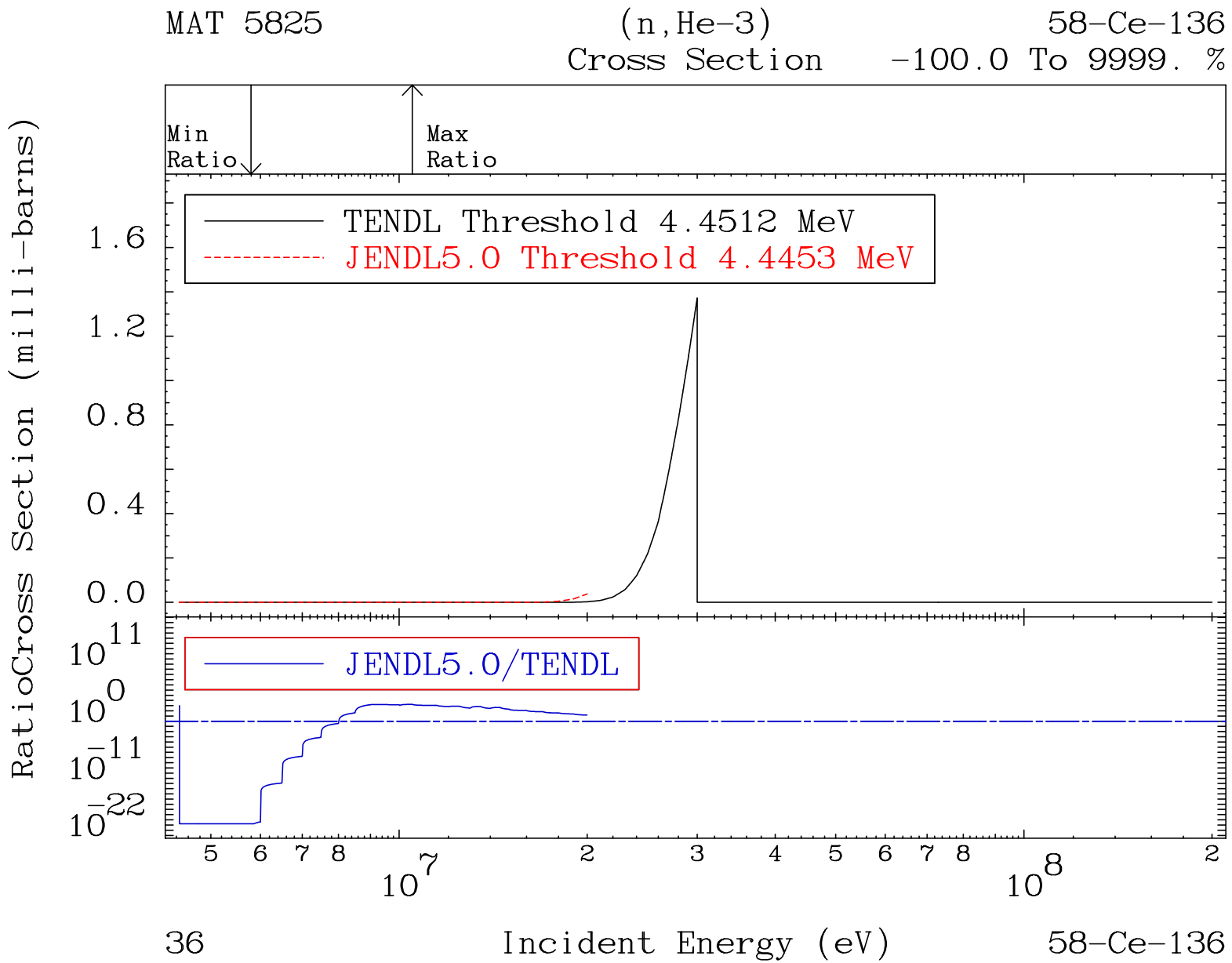

MAT 5825
(n,n') Continuum
Cross Section
58-Ce-136
-10.77 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.0335 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
58-Ce-136

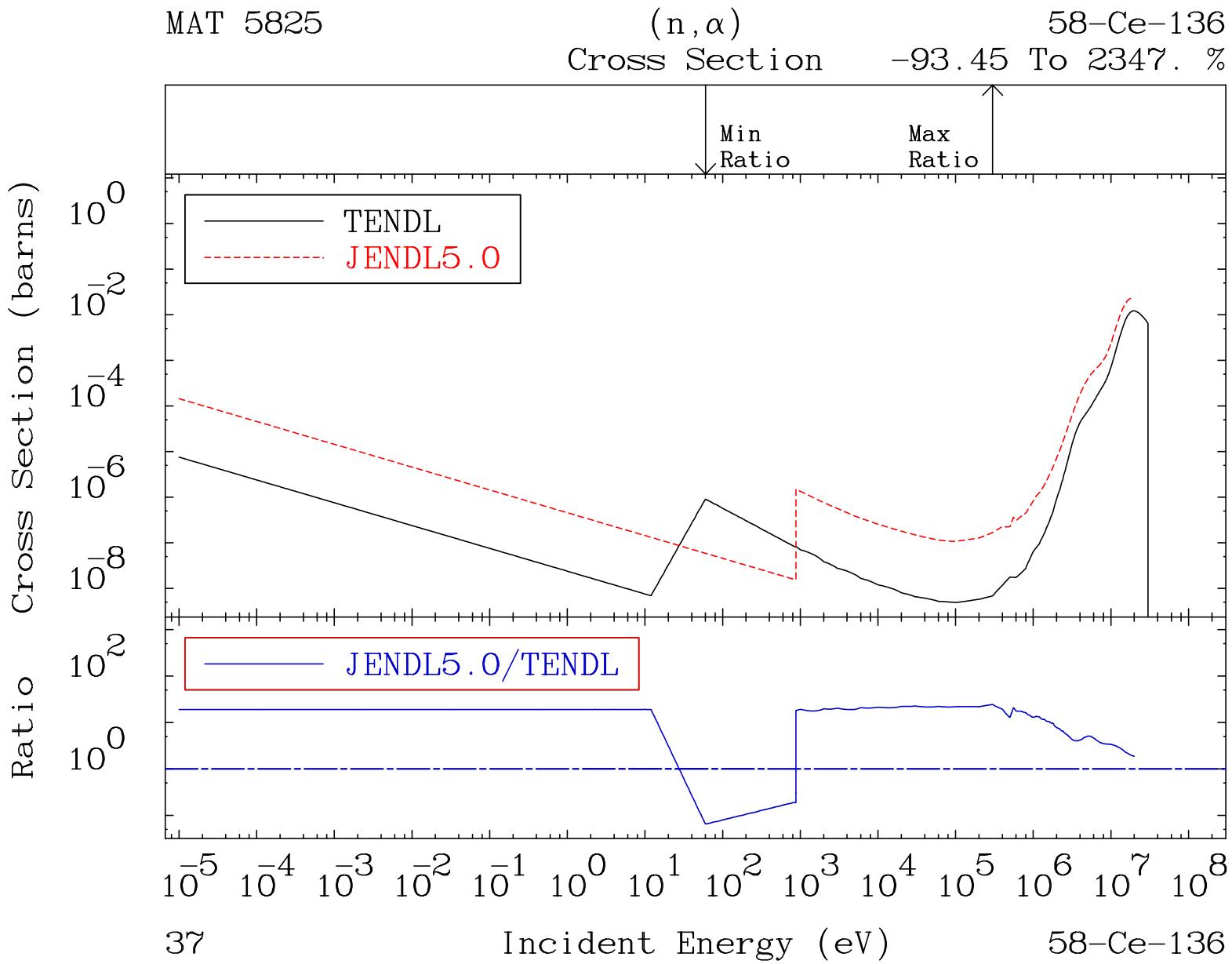

MAT 5825
(n,γ)
58-Ce-136
Cross Section
-99.99 To 5771. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
32
58-Ce-136

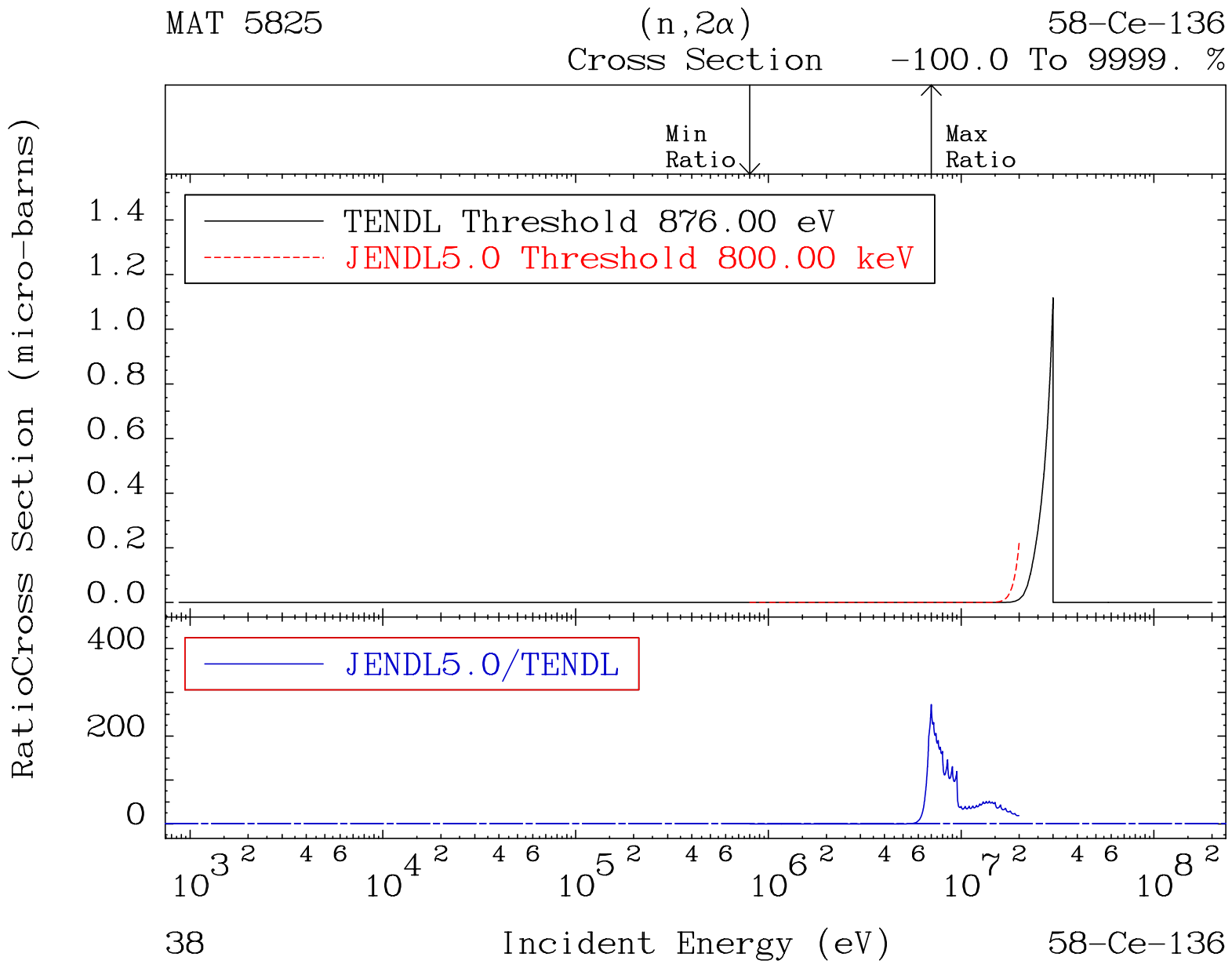

MAT 5825
(n,p)
Cross Section
58-Ce-136
-100.0 To 414.1 %
Min Ratio
Max Ratio
TENDL Threshold 876.00 eV
JENDL5.0 Threshold 879.91 eV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
33
58-Ce-136

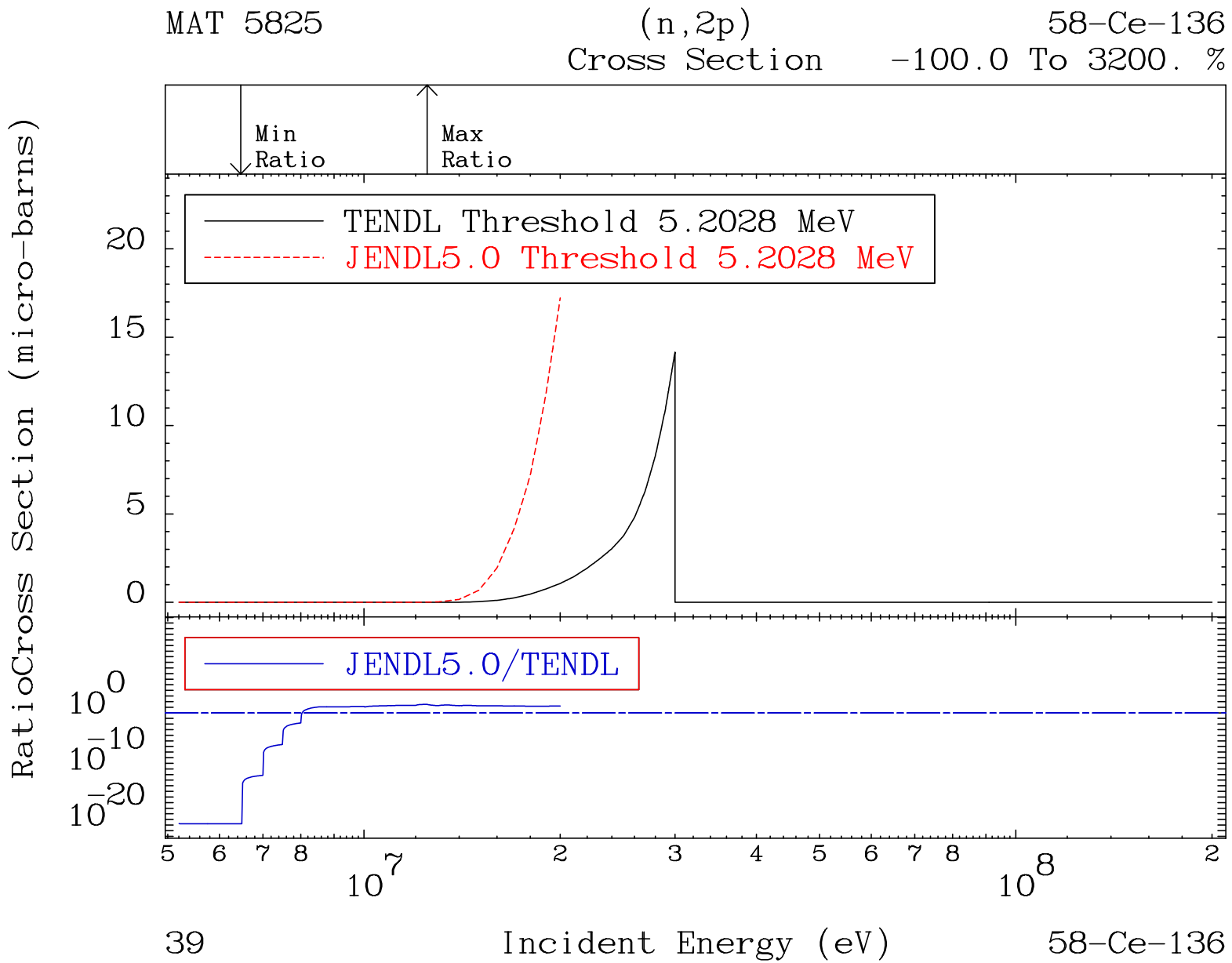

MAT 5825
(n,d)
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.9661 MeV
JENDL5.0 Threshold 4.9609 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
34
58-Ce-136

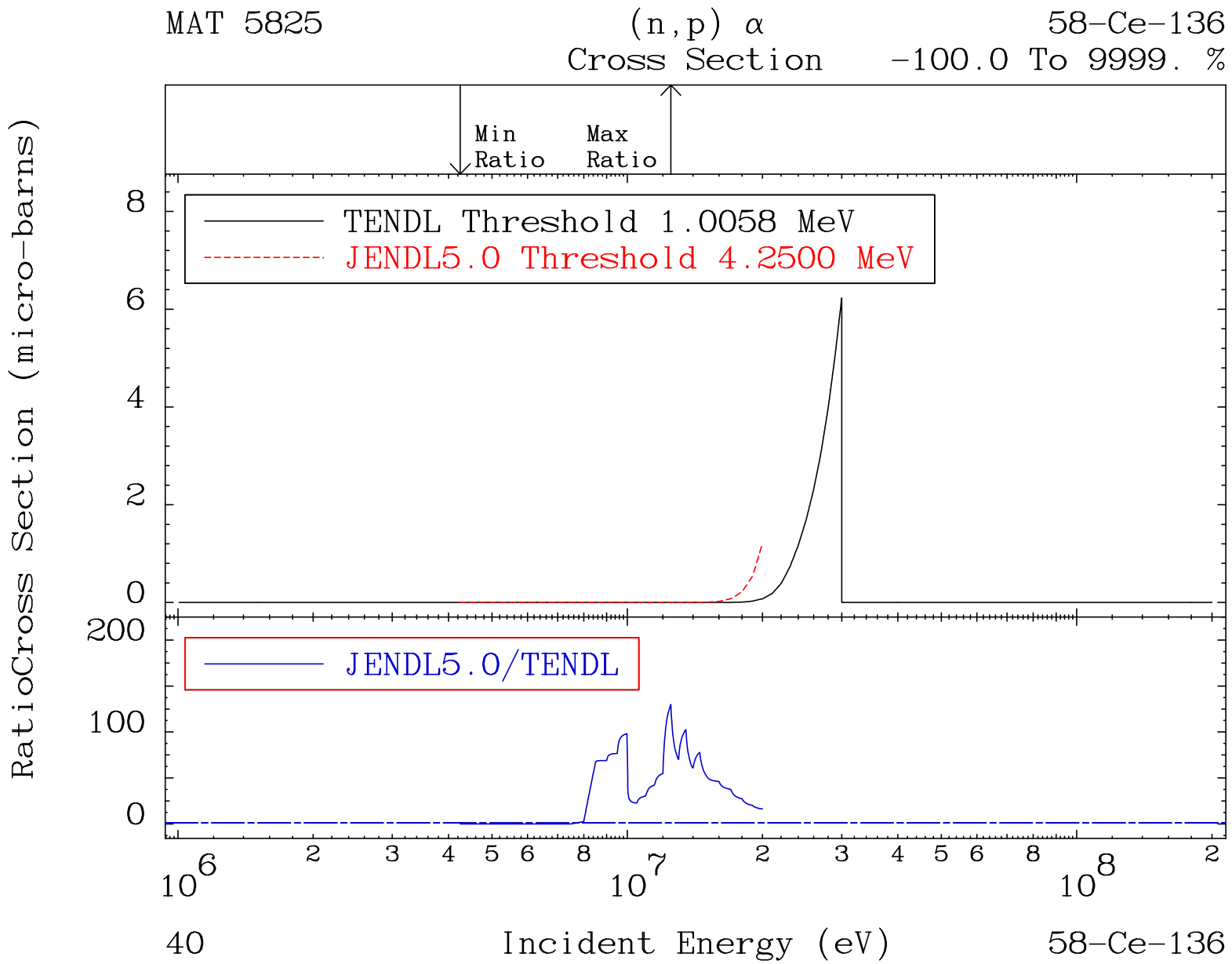

MAT 5825
(n,t)
Cross Section
58-Ce-136
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.2290 MeV
JENDL5.0 Threshold 8.2188 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
35
58-Ce-136

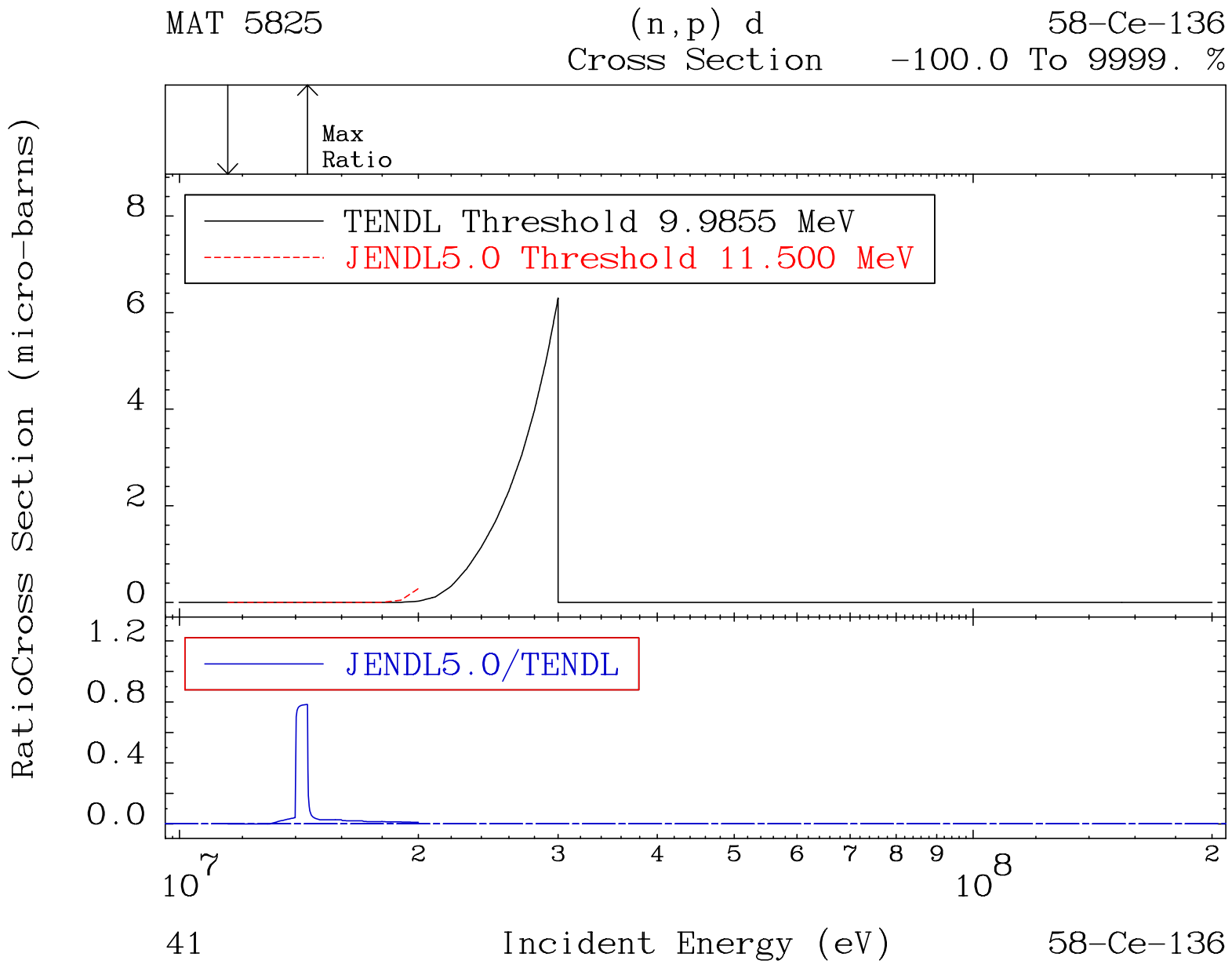

MAT 5825
(n,He-3)
Cross Section
58-Ce-136
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4512 MeV
JENDL5.0 Threshold 4.4453 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
10^11
10^0
10^-11
10^-22
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
58-Ce-136

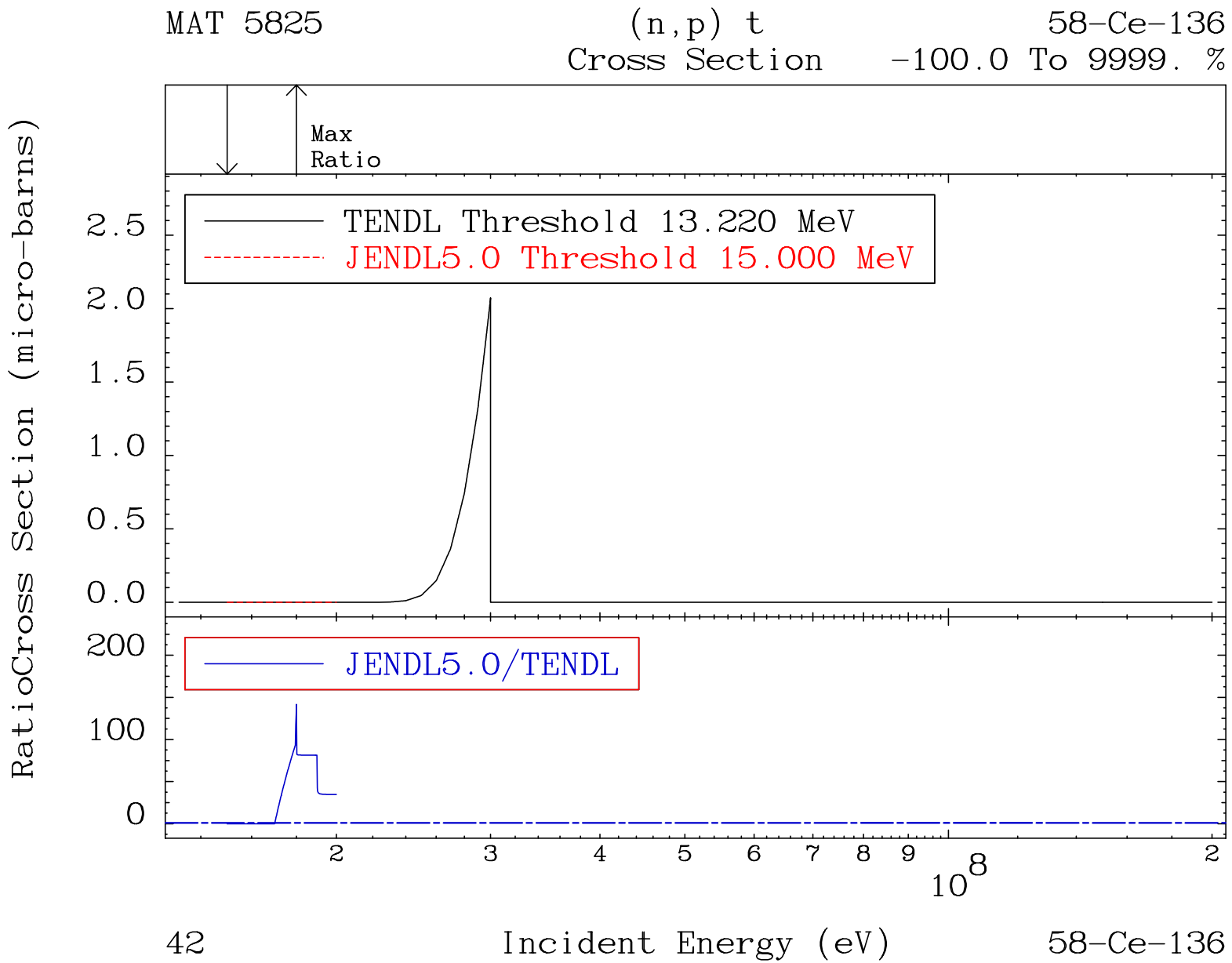

MAT 5825
(n,α)
Cross Section
58-Ce-136
-93.45 To 2347. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
58-Ce-136

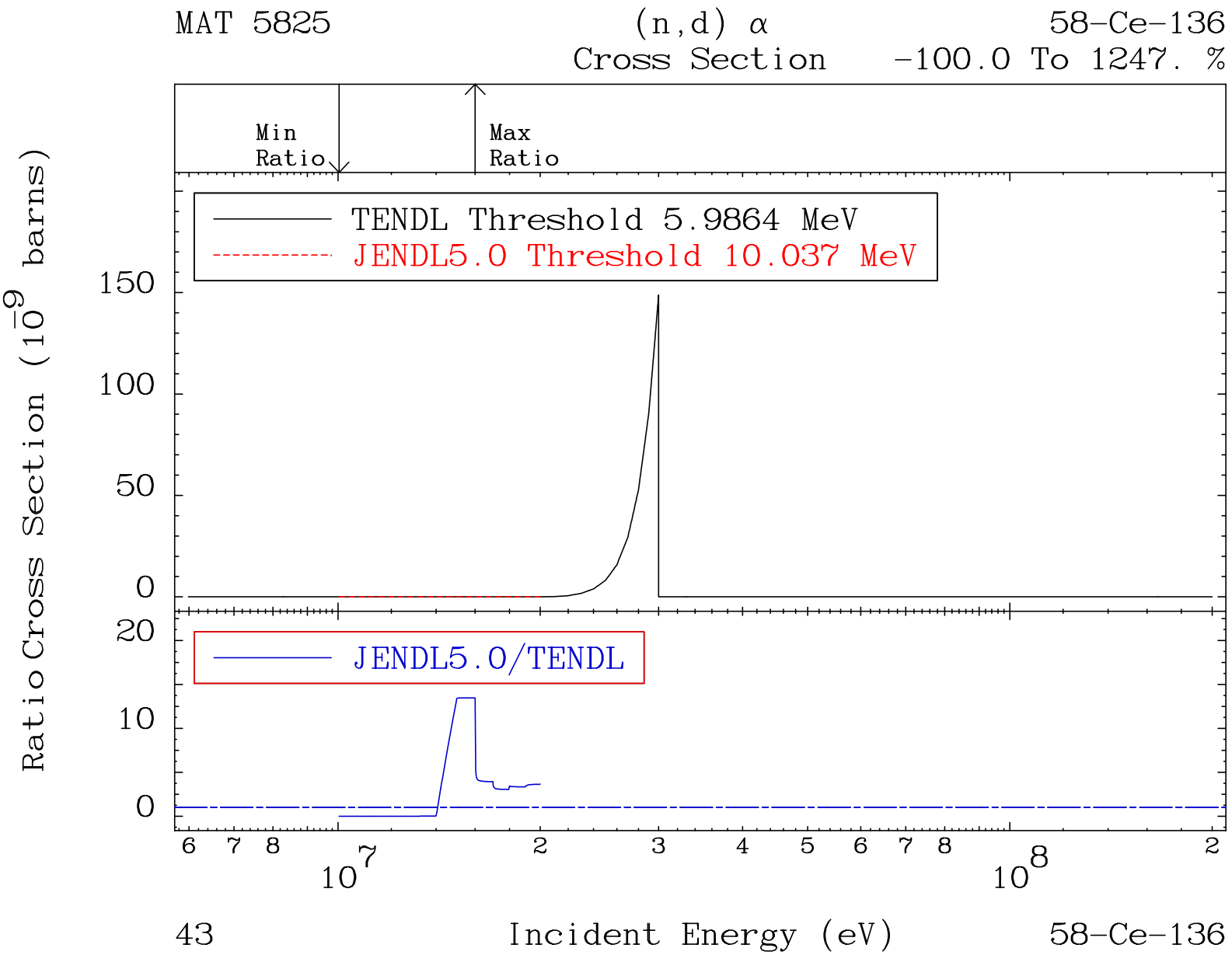

MAT 5825
(n,2α)
58-Ce-136
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 876.00 eV
JENDL5.0 Threshold 800.00 keV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
400
200
0
10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
38
Incident Energy (eV)
58-Ce-136

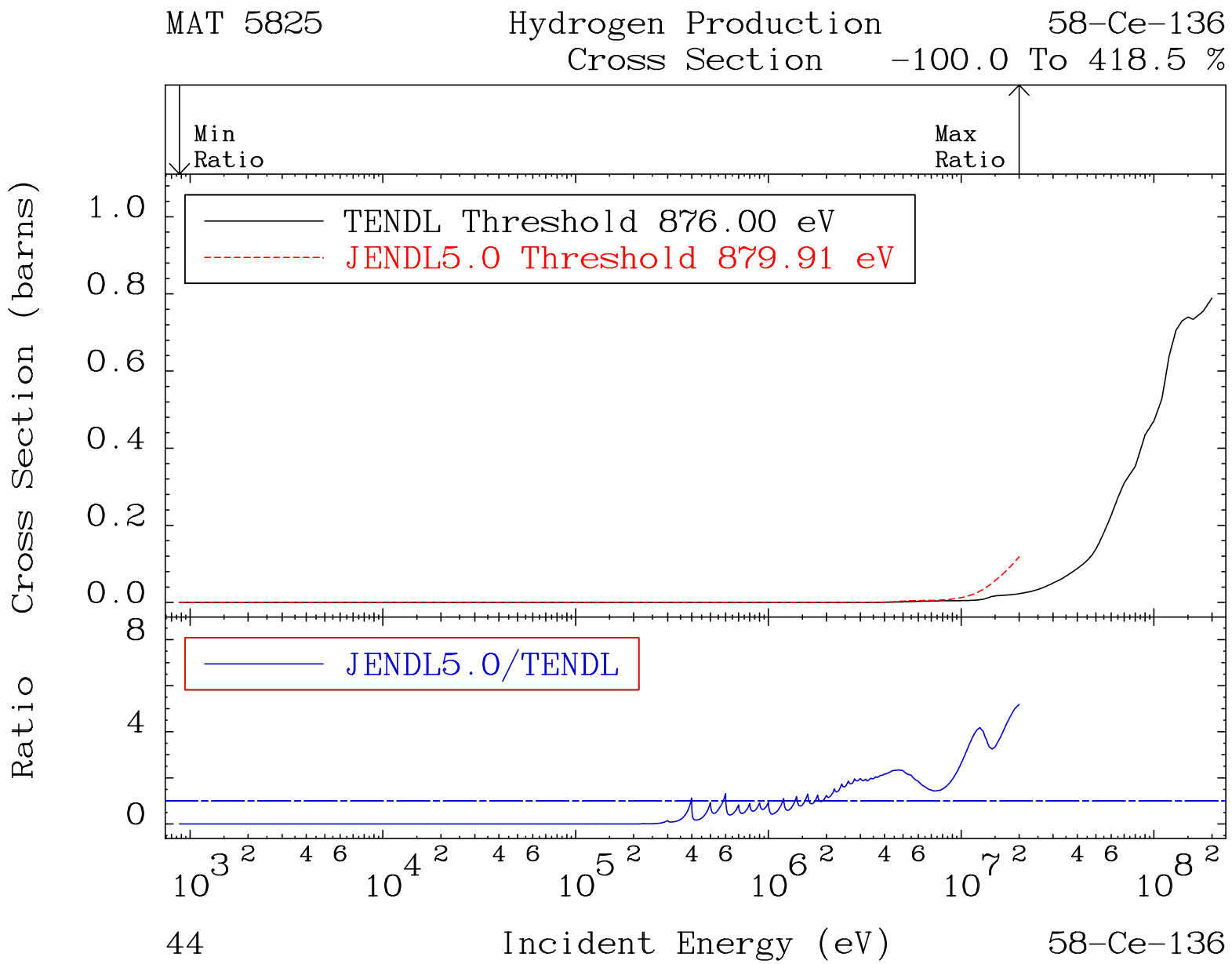

MAT 5825
(n,2p)
58-Ce-136
Cross Section
-100.0 To 3200. %
Min Ratio
Max Ratio
TENDL Threshold 5.2028 MeV
JENDL5.0 Threshold 5.2028 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
39
58-Ce-136

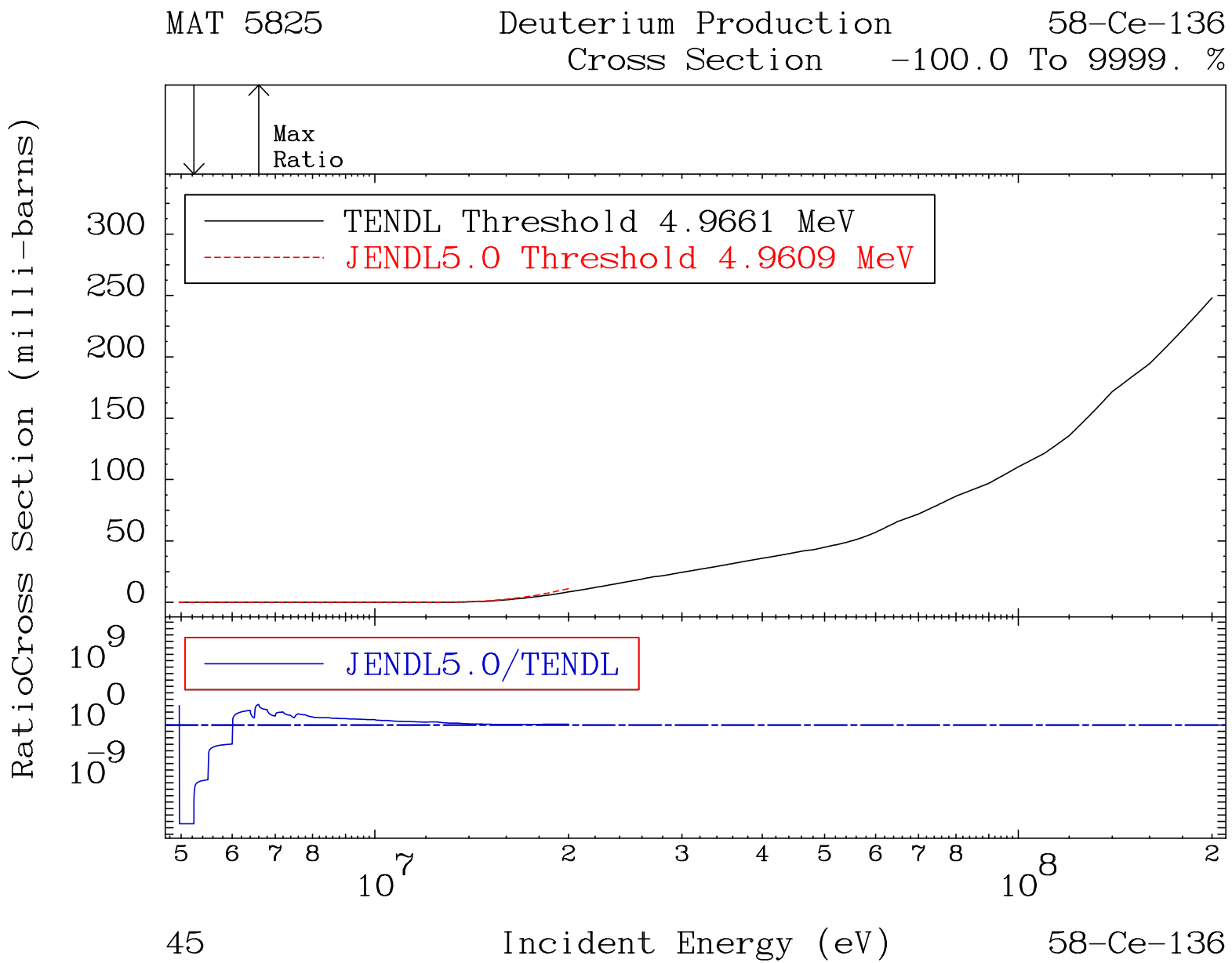

MAT 5825
(n,p) α
58-Ce-136
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0058 MeV
JENDL5.0 Threshold 4.2500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
40
58-Ce-136

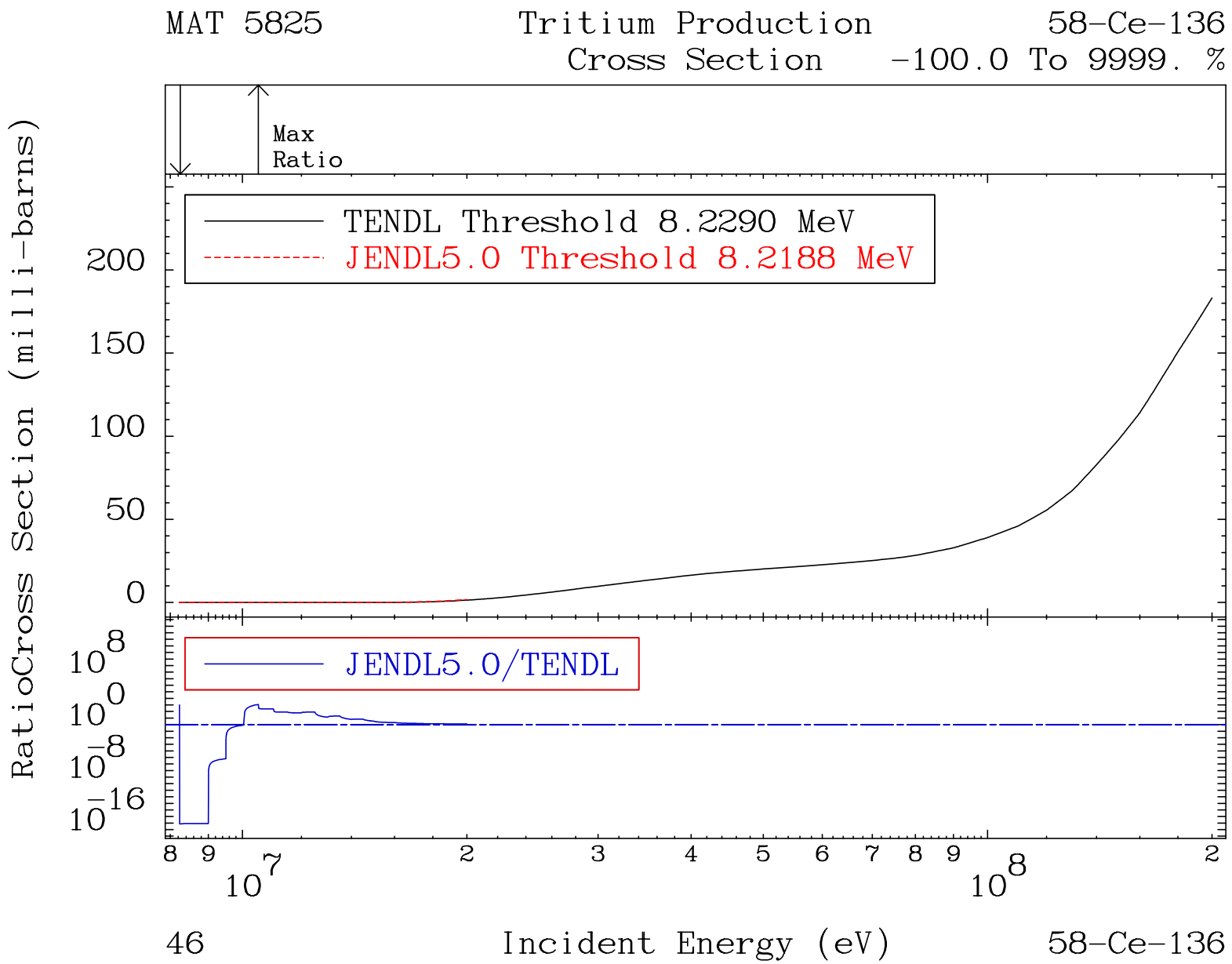

MAT 5825
(n,p) d
Cross Section
58-Ce-136
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.9855 MeV
JENDL5.0 Threshold 11.500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
41
58-Ce-136

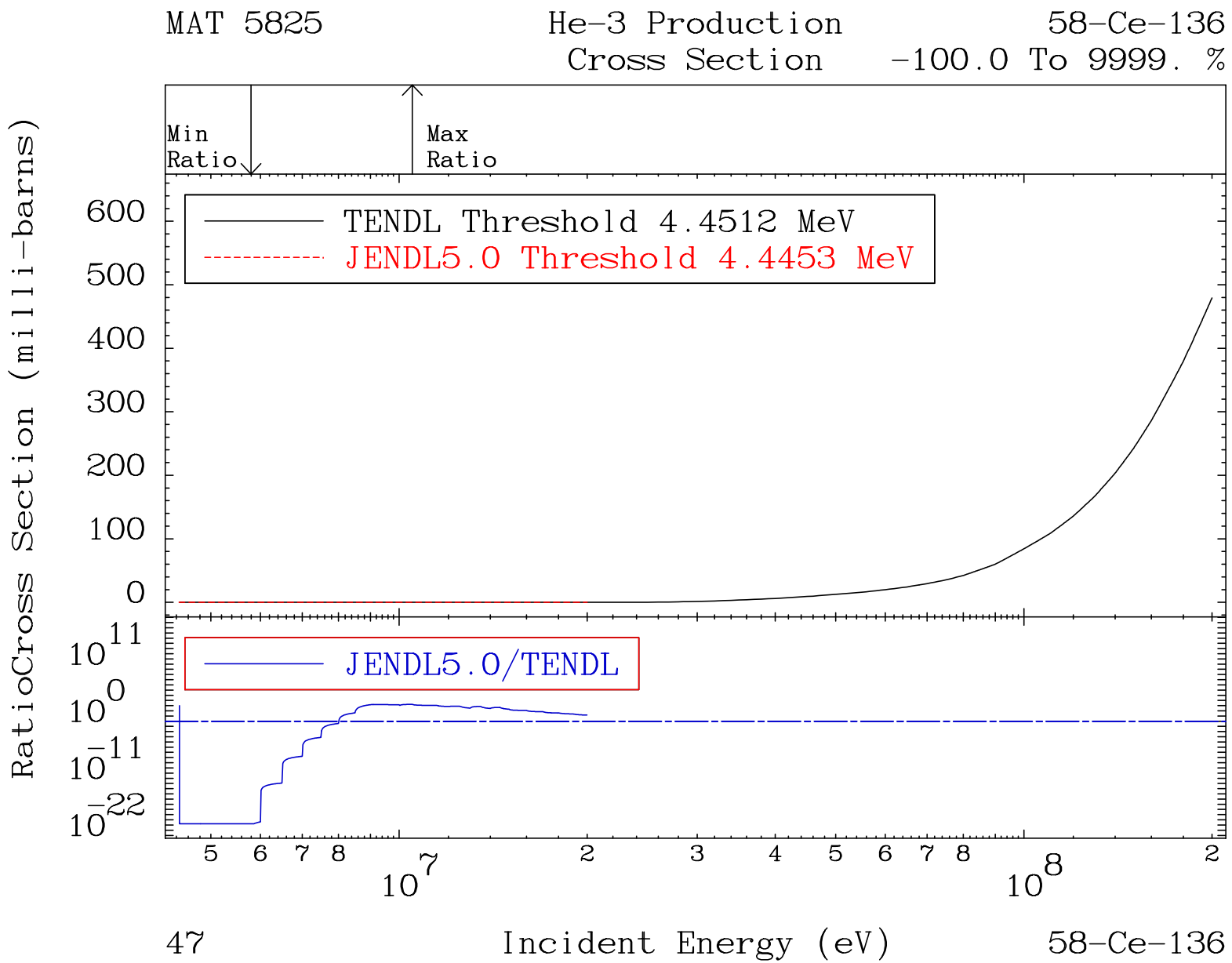

MAT 5825
(n,p) t
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.220 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
200
100
0
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
58-Ce-136

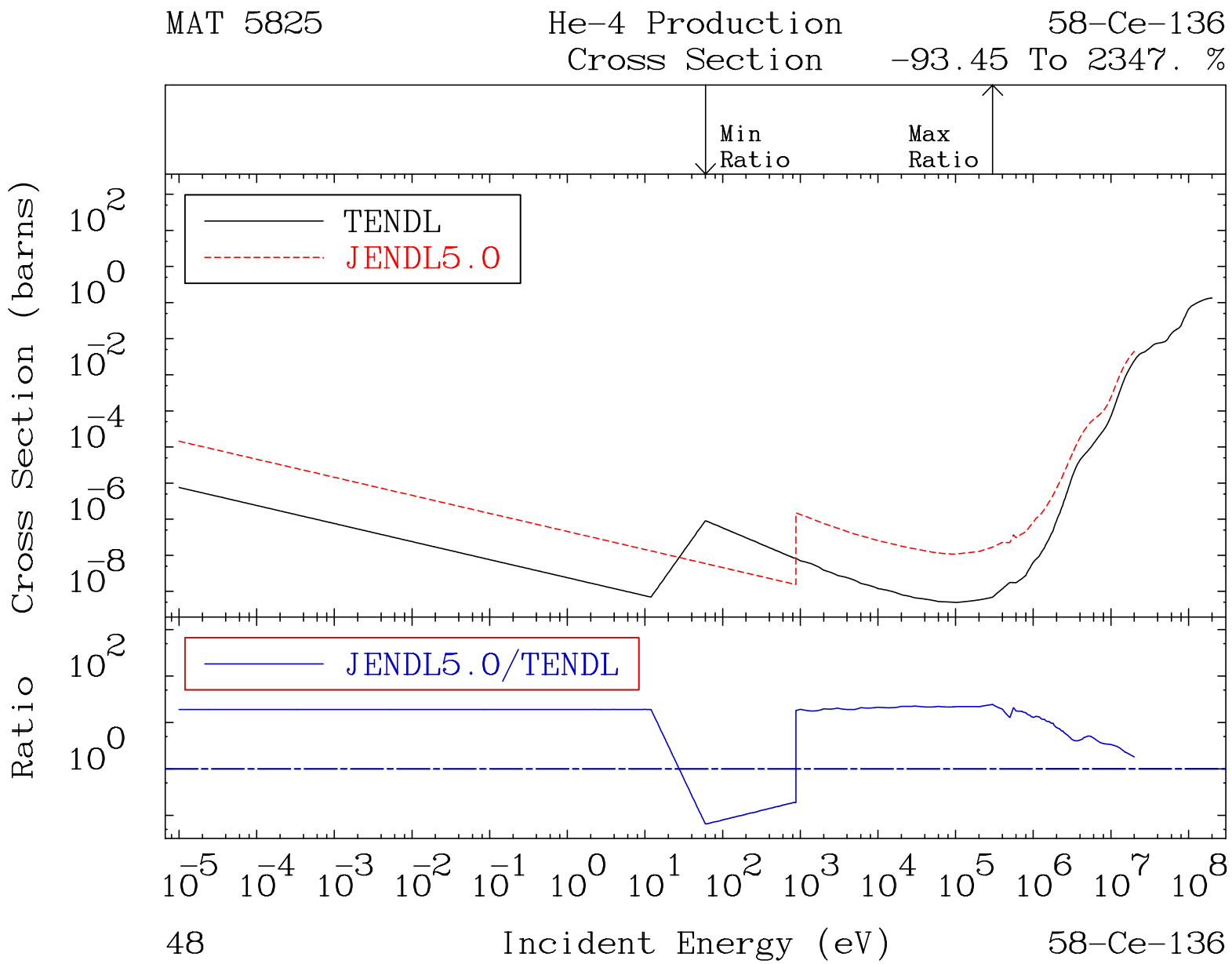

MAT 5825
(n,d) α
58-Ce-136
Cross Section
-100.0 To 1247. %
Min Ratio
Max Ratio
TENDL Threshold 5.9864 MeV
JENDL5.0 Threshold 10.037 MeV
JENDL5.0/TENDL
Ratio Cross Section (10^-9 barns)
150
100
50
0
20
10
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
58-Ce-136

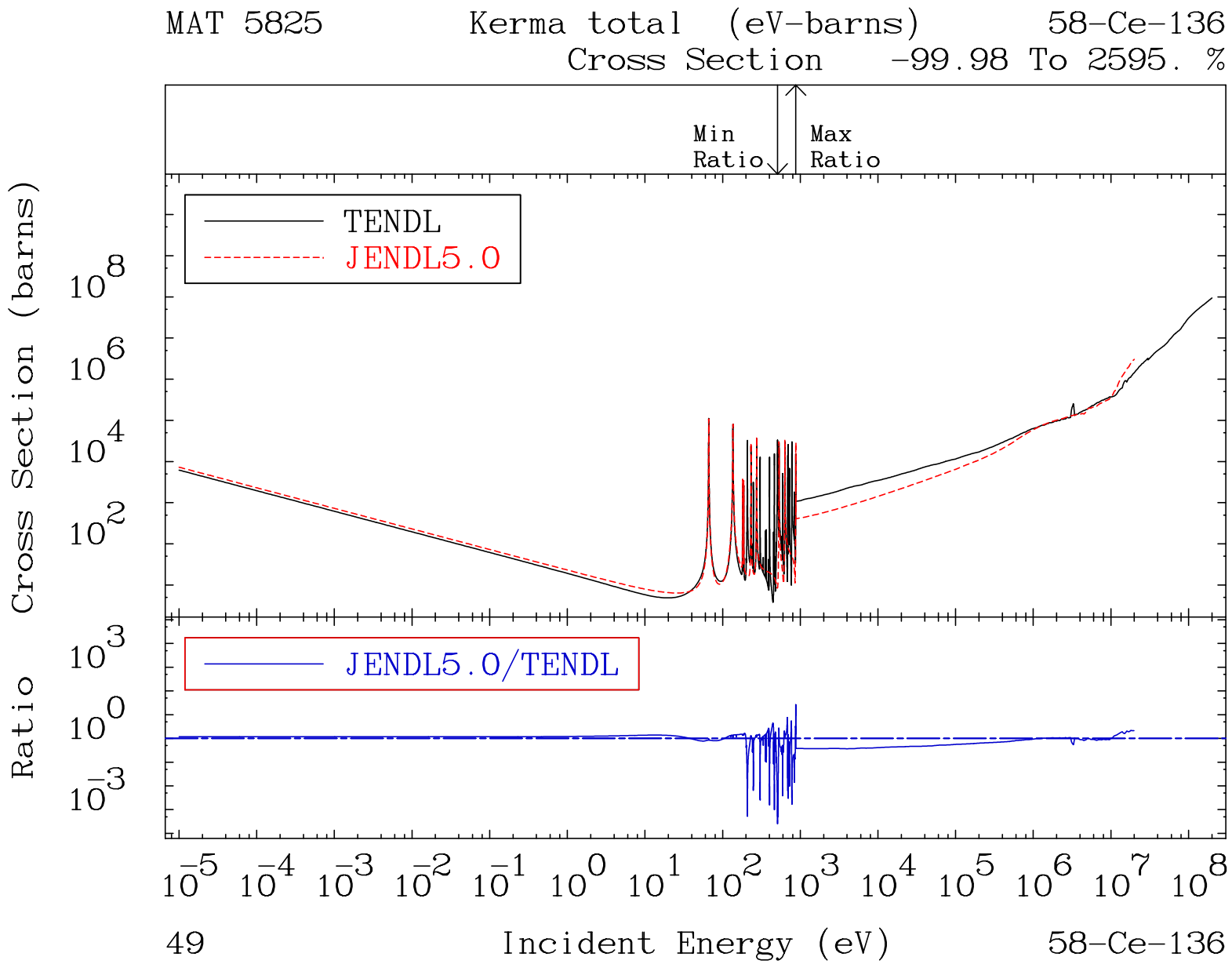

MAT 5825
Hydrogen Production
58-Ce-136
Cross Section
-100.0 To 418.5 %
Min Ratio
Max Ratio
TENDL Threshold 876.00 eV
JENDL5.0 Threshold 879.91 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
Incident Energy (eV)
44
58-Ce-136

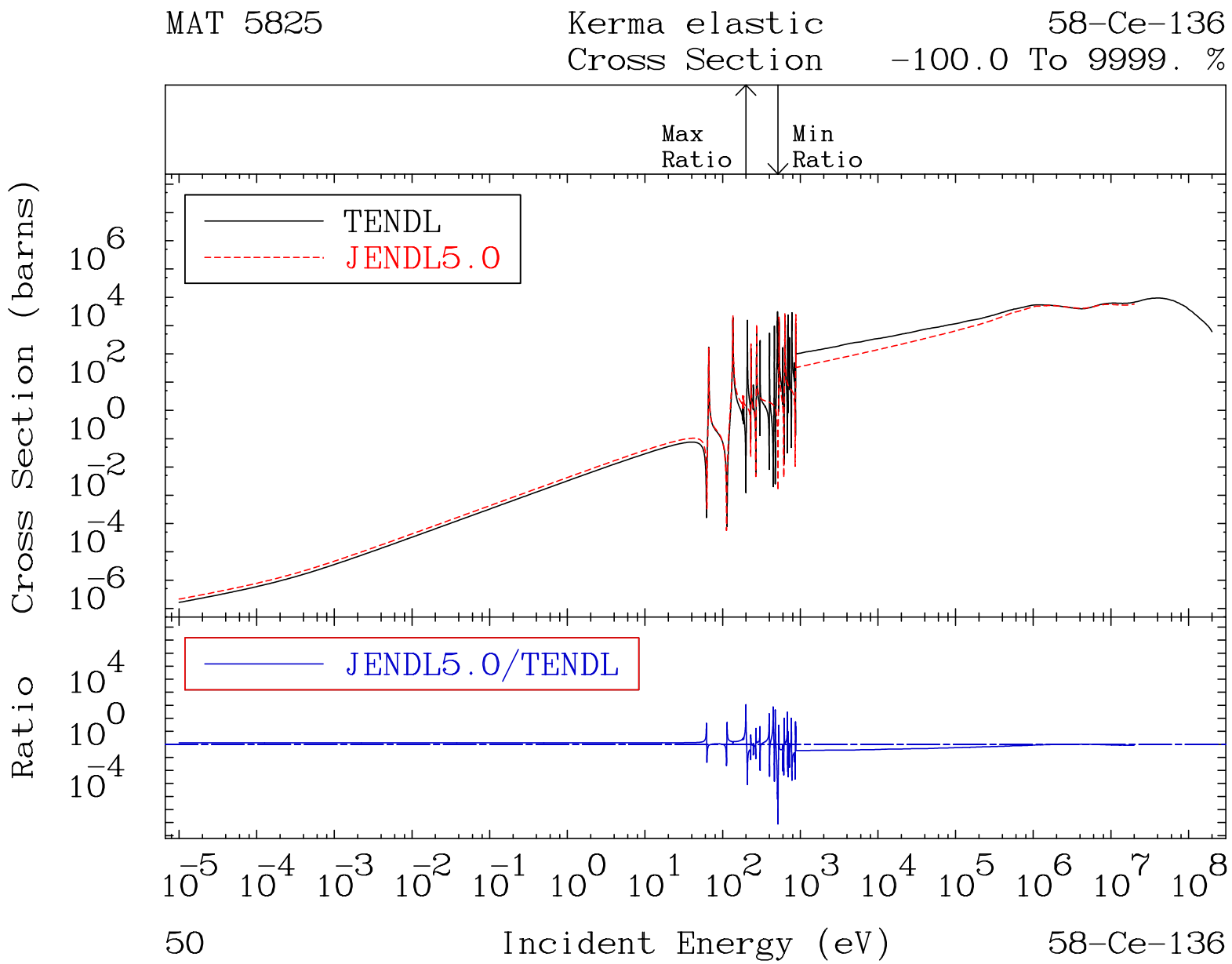

MAT 5825
Deuterium Production
58-Ce-136
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.9661 MeV
JENDL5.0 Threshold 4.9609 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^9
10^0
10^-9
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
58-Ce-136

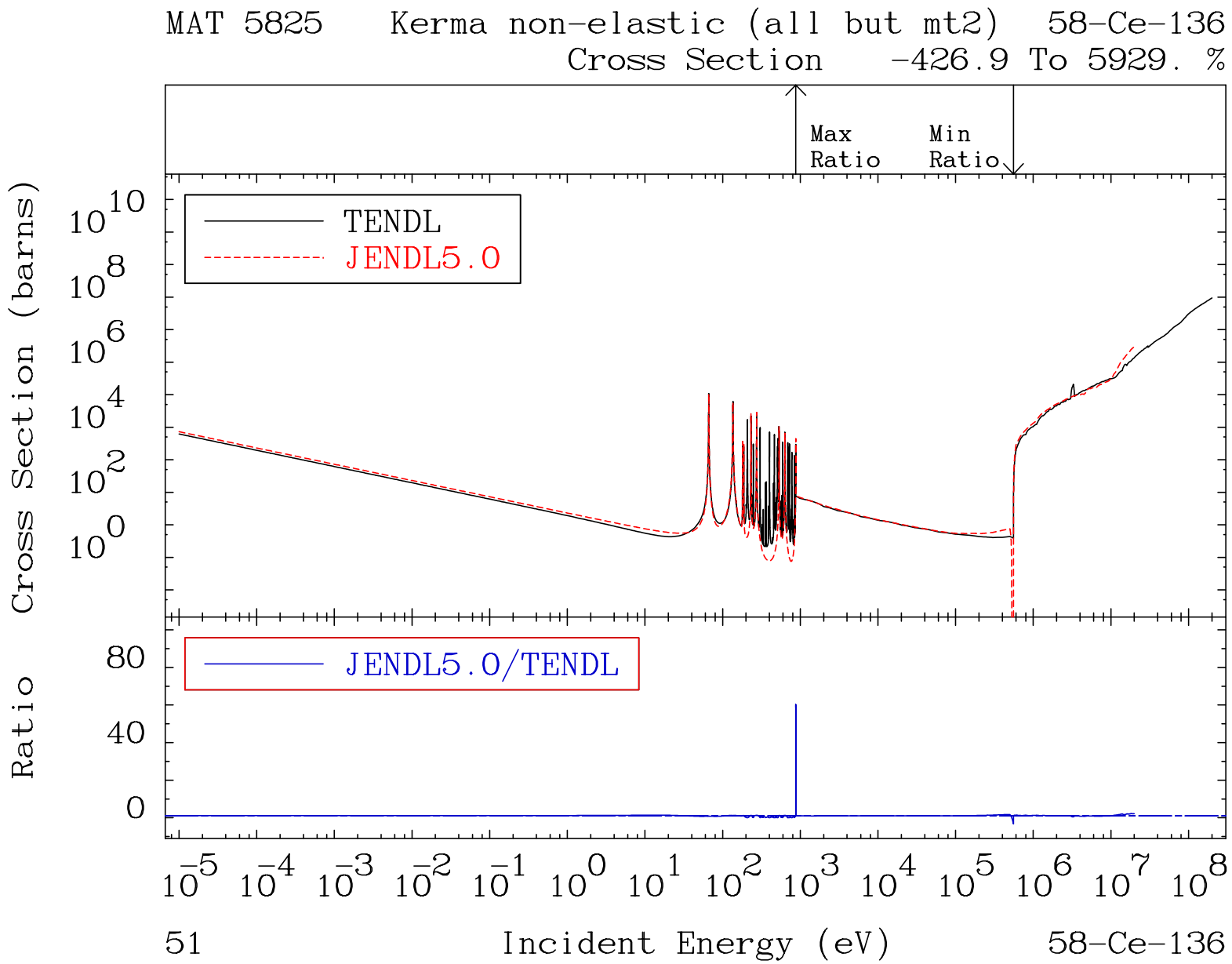

MAT 5825
Tritium Production
58-Ce-136
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.2290 MeV
JENDL5.0 Threshold 8.2188 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^8
10^0
10^-8
10^-16
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
58-Ce-136

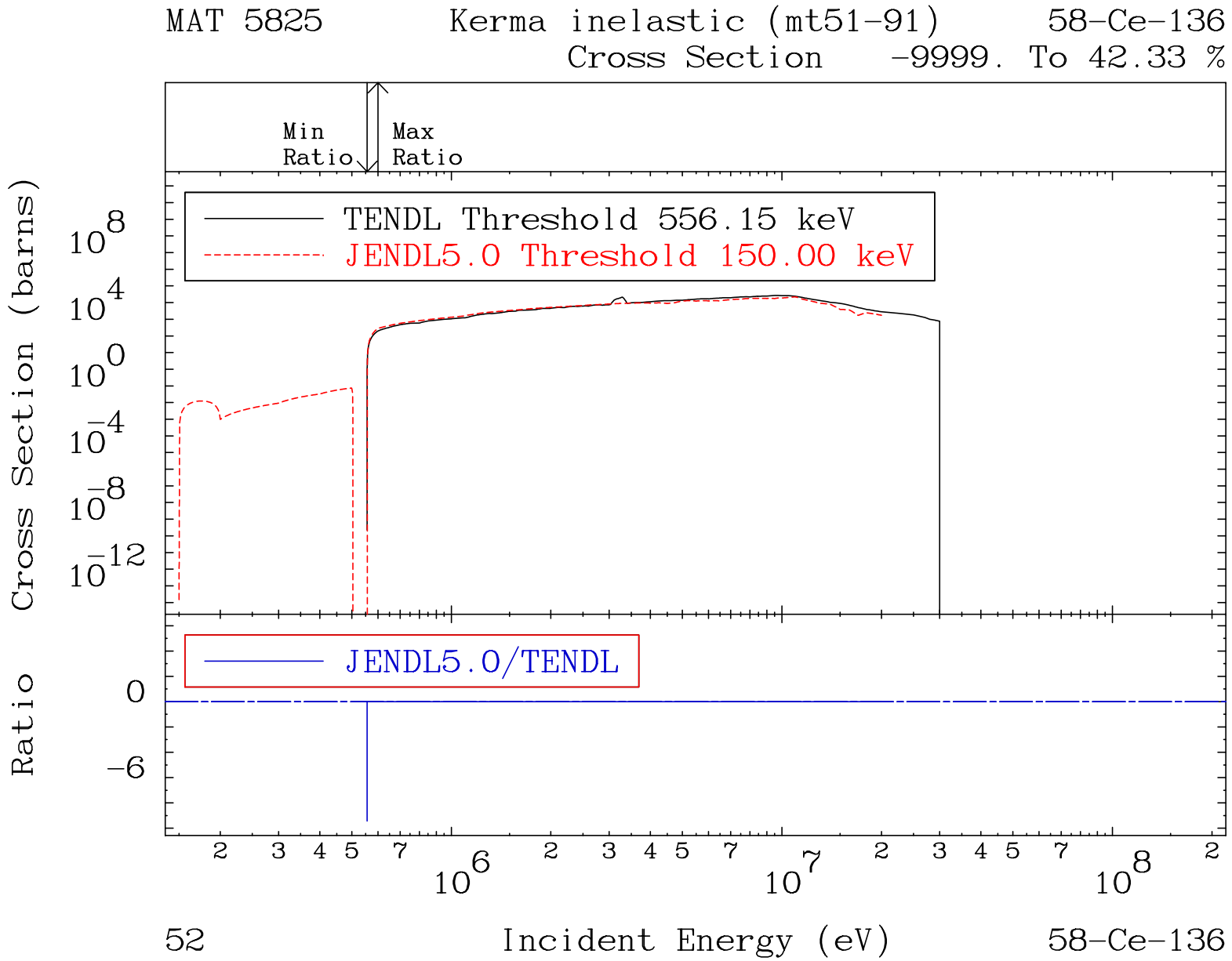

MAT 5825
He-3 Production
Cross Section
58-Ce-136
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4512 MeV
JENDL5.0 Threshold 4.4453 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
10^11
10^0
10^-11
10^-22
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
58-Ce-136

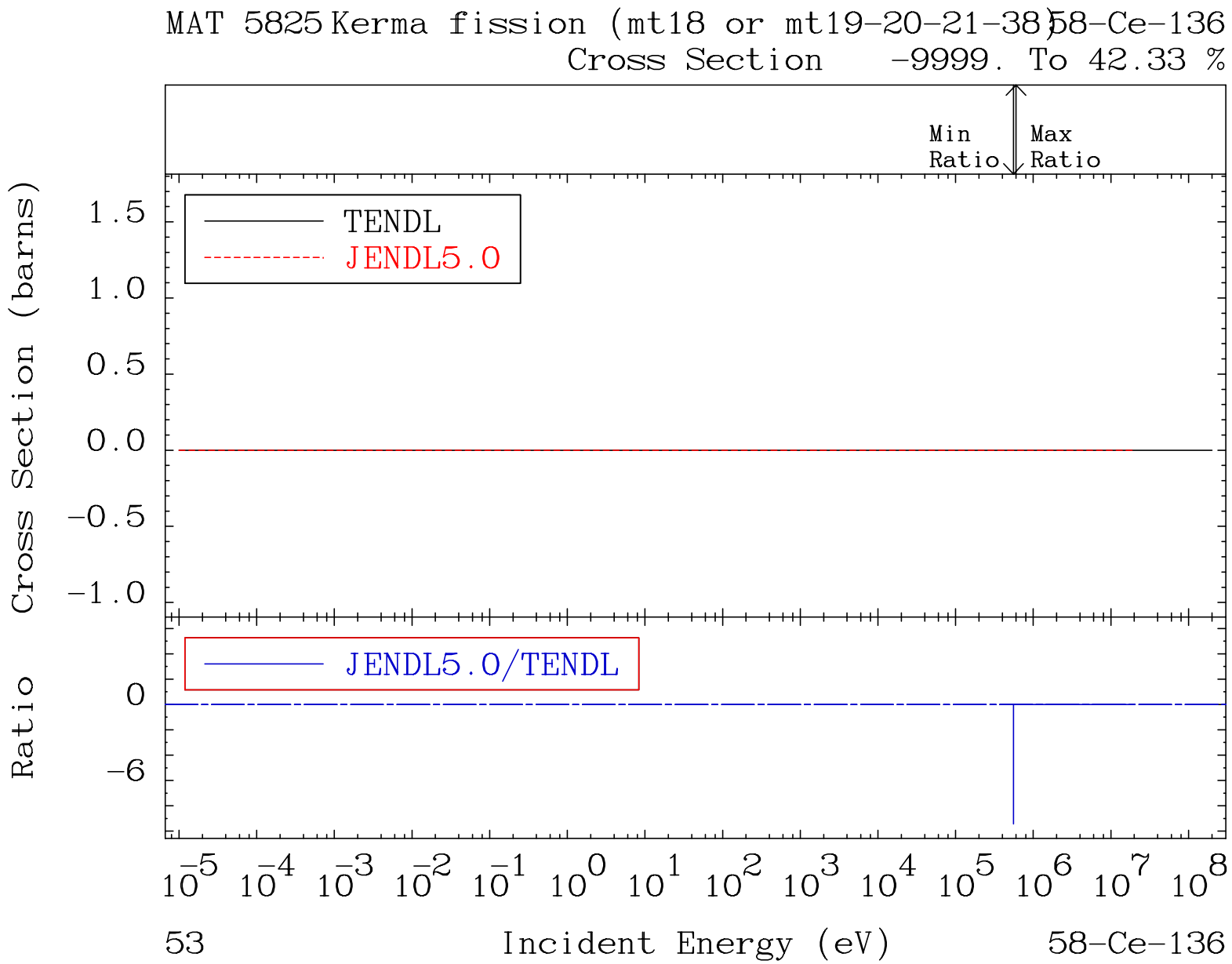

MAT 5825
He-4 Production
Cross Section
58-Ce-136
-93.45 To 2347. %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
58-Ce-136

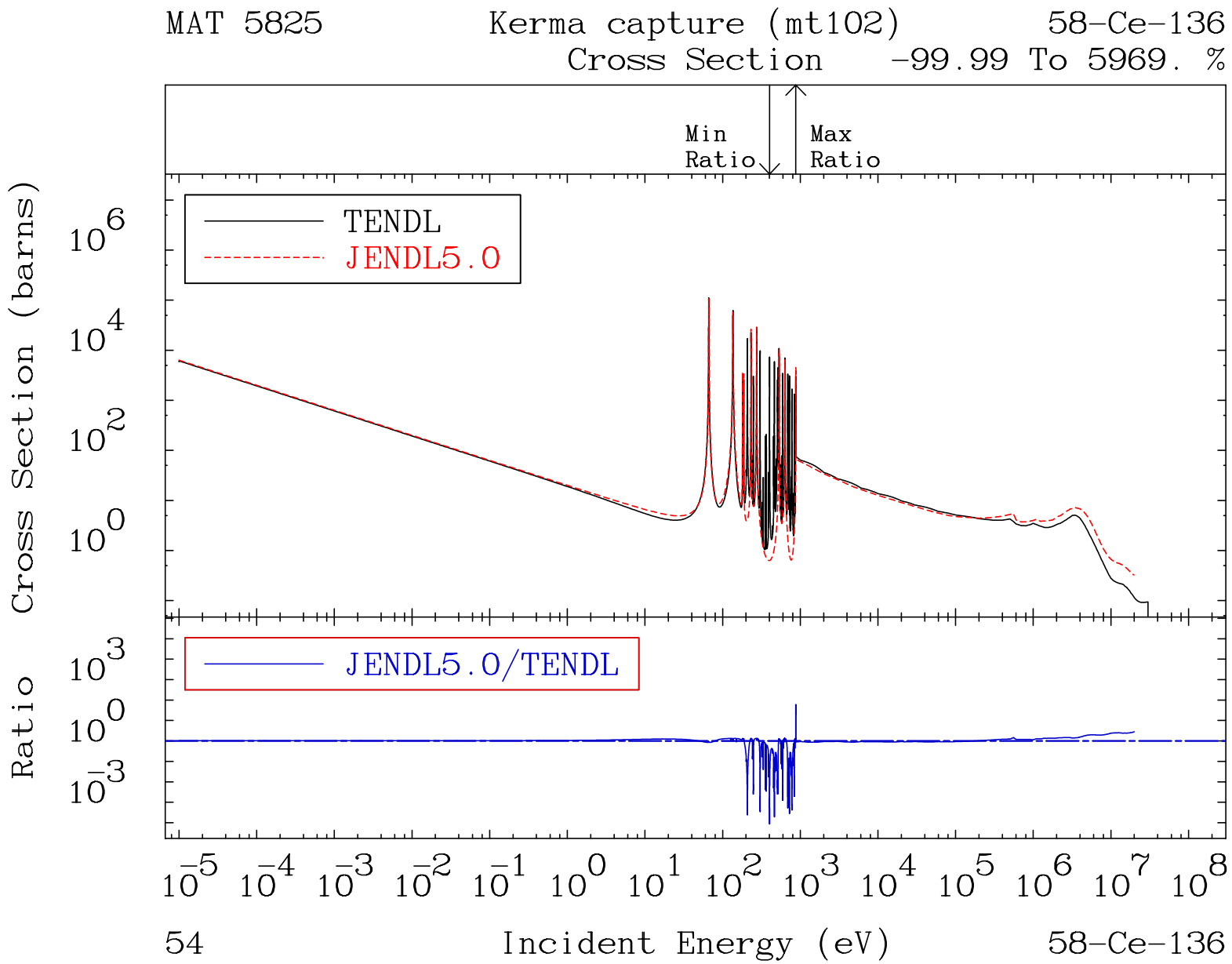

MAT 5825
Kerma total (eV-barns)
58-Ce-136
Cross Section -99.98 To 2595. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
58-Ce-136

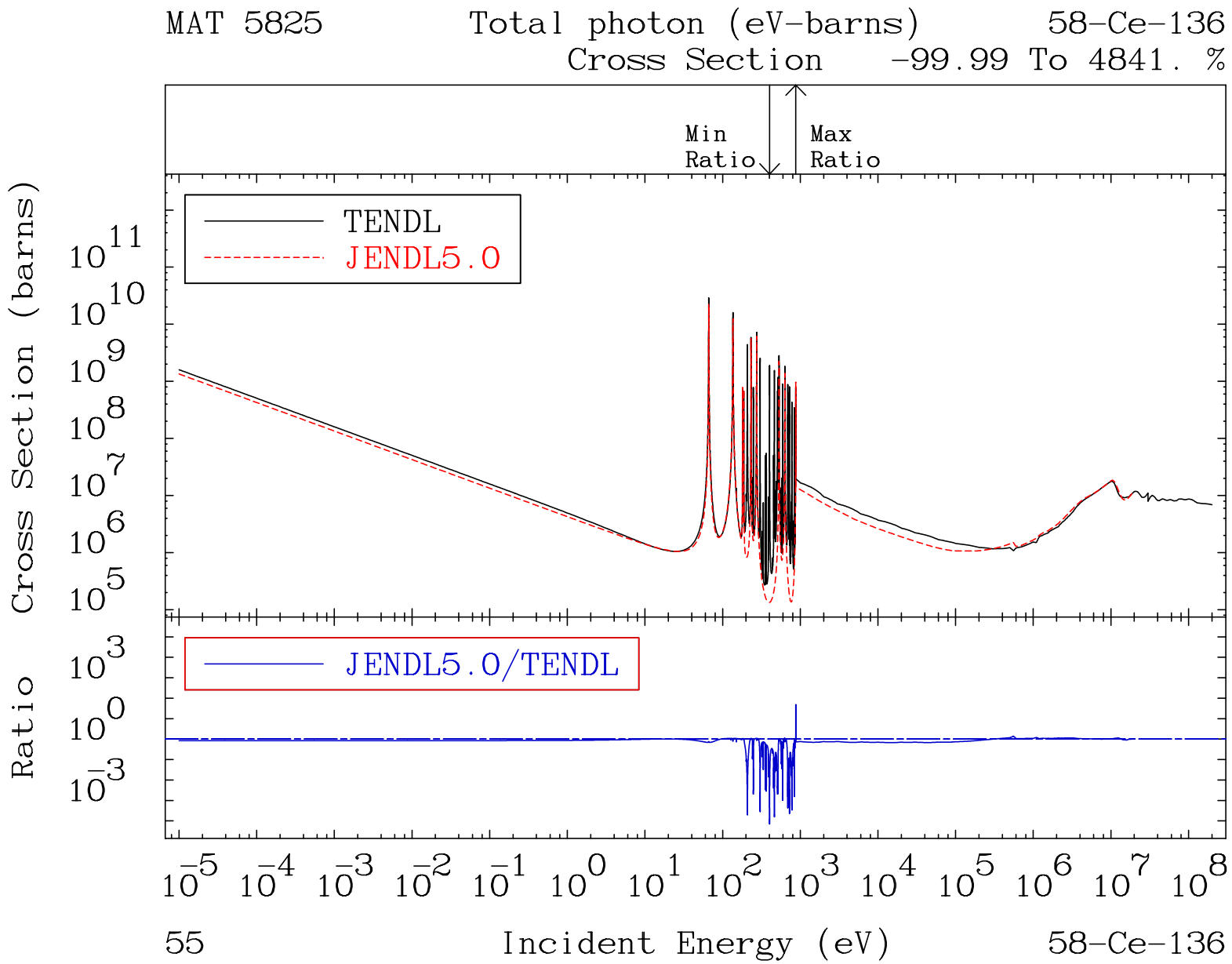

MAT 5825
Kerma elastic
Cross Section
58-Ce-136
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
58-Ce-136

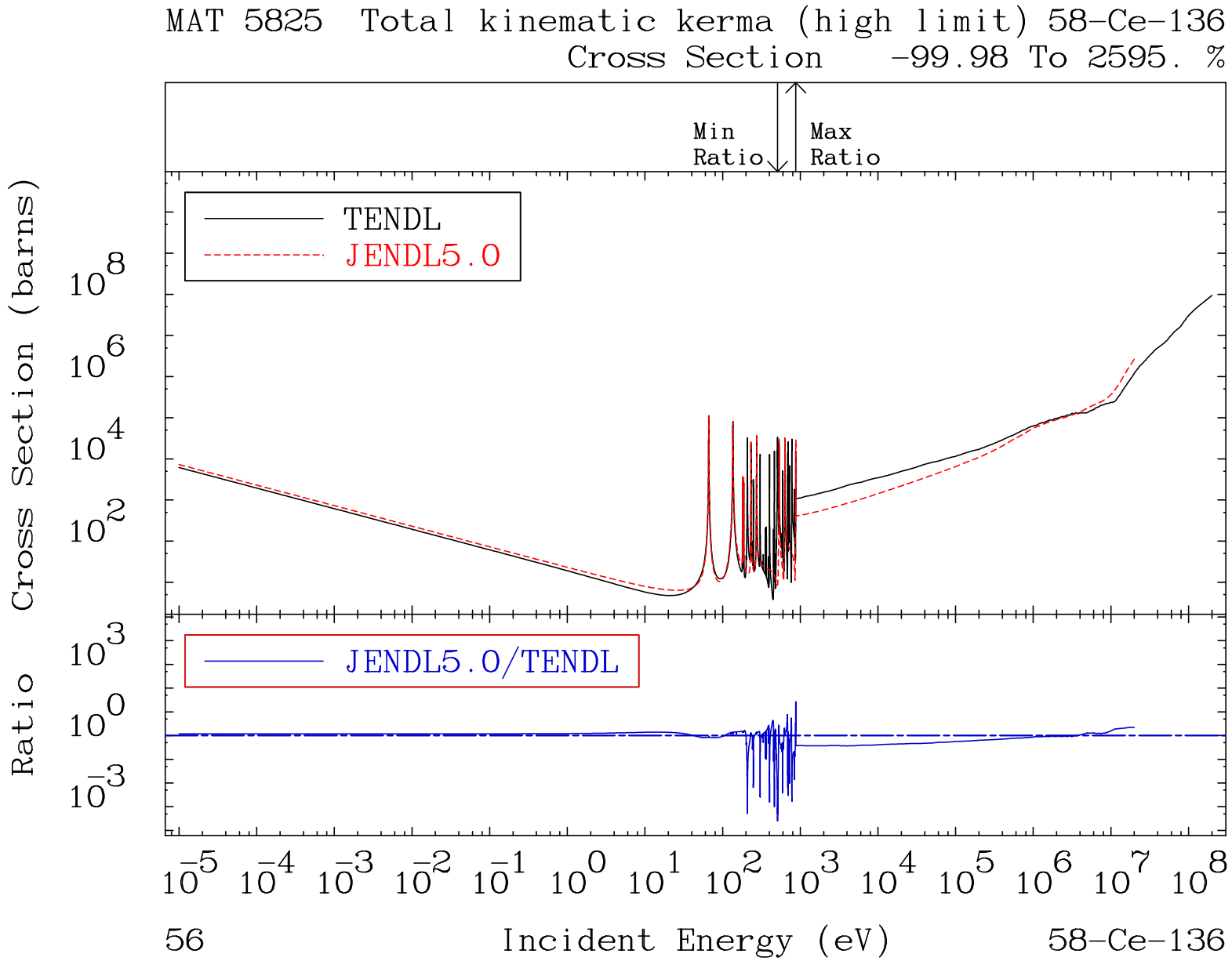

MAT 5825 Kerma non-elastic (all but mt2) 58-Ce-136
Cross Section -426.9 To 5929. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
58-Ce-136

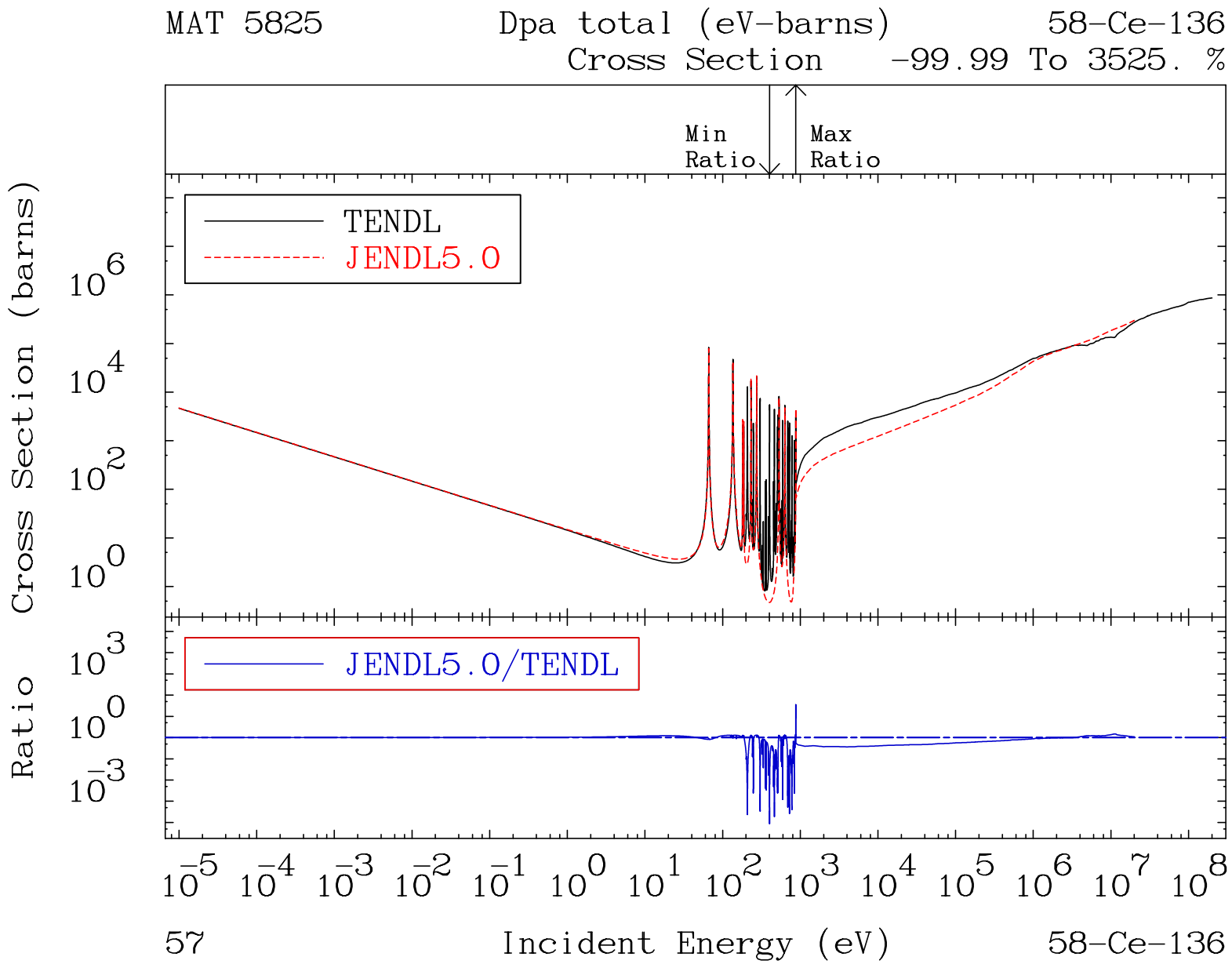

MAT 5825
Kerma inelastic (mt51-91)
58-Ce-136
Cross Section -9999. To 42.33 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
58-Ce-136

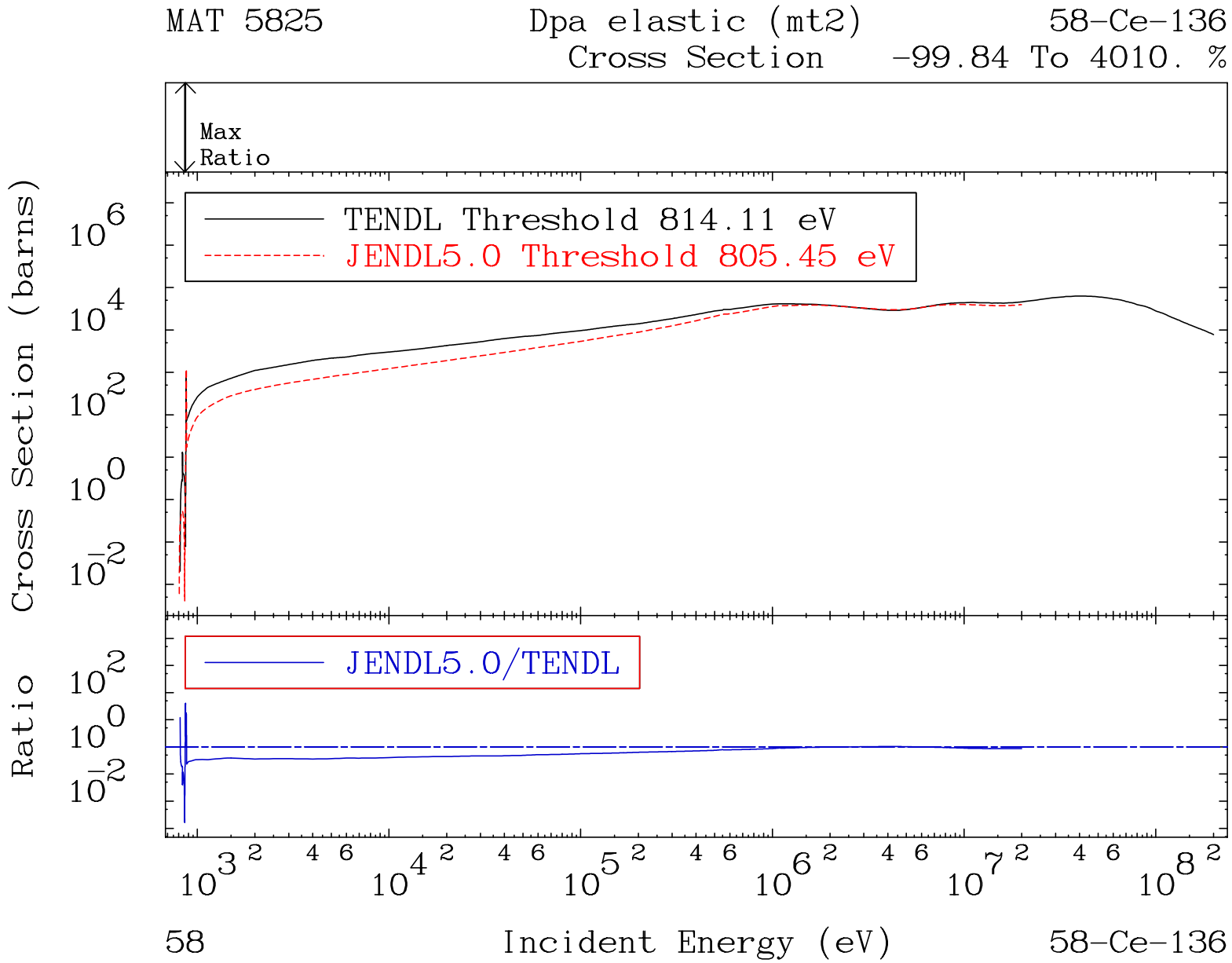

MAT 5825 Kerma fission (mt18 or mt19-20-21-38) 58-Ce-136
Cross Section -9999. To 42.33 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
53
Incident Energy (eV)
58-Ce-136

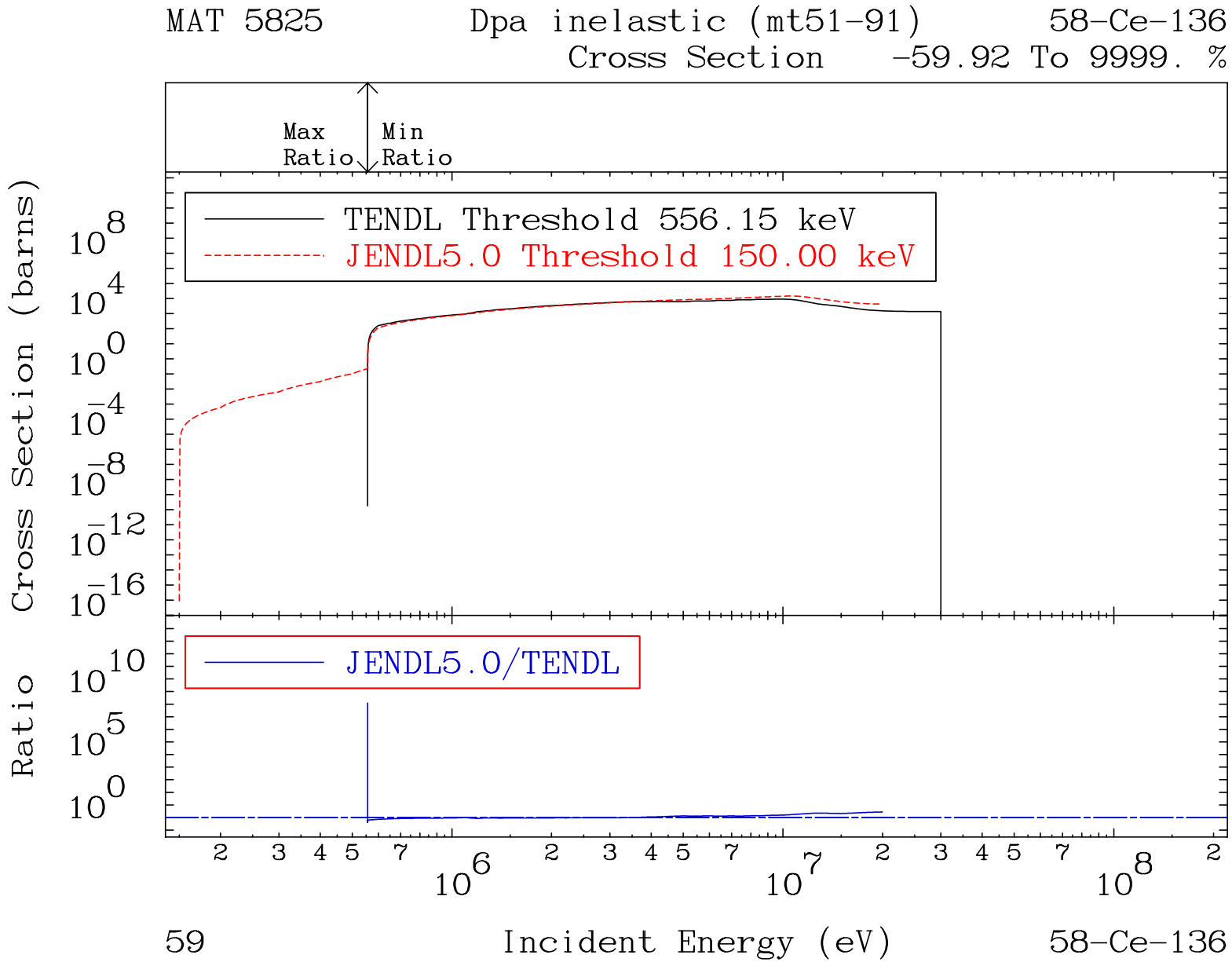

MAT 5825
Kerma capture (mt102)
58-Ce-136
Cross Section -99.99 To 5969. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
58-Ce-136

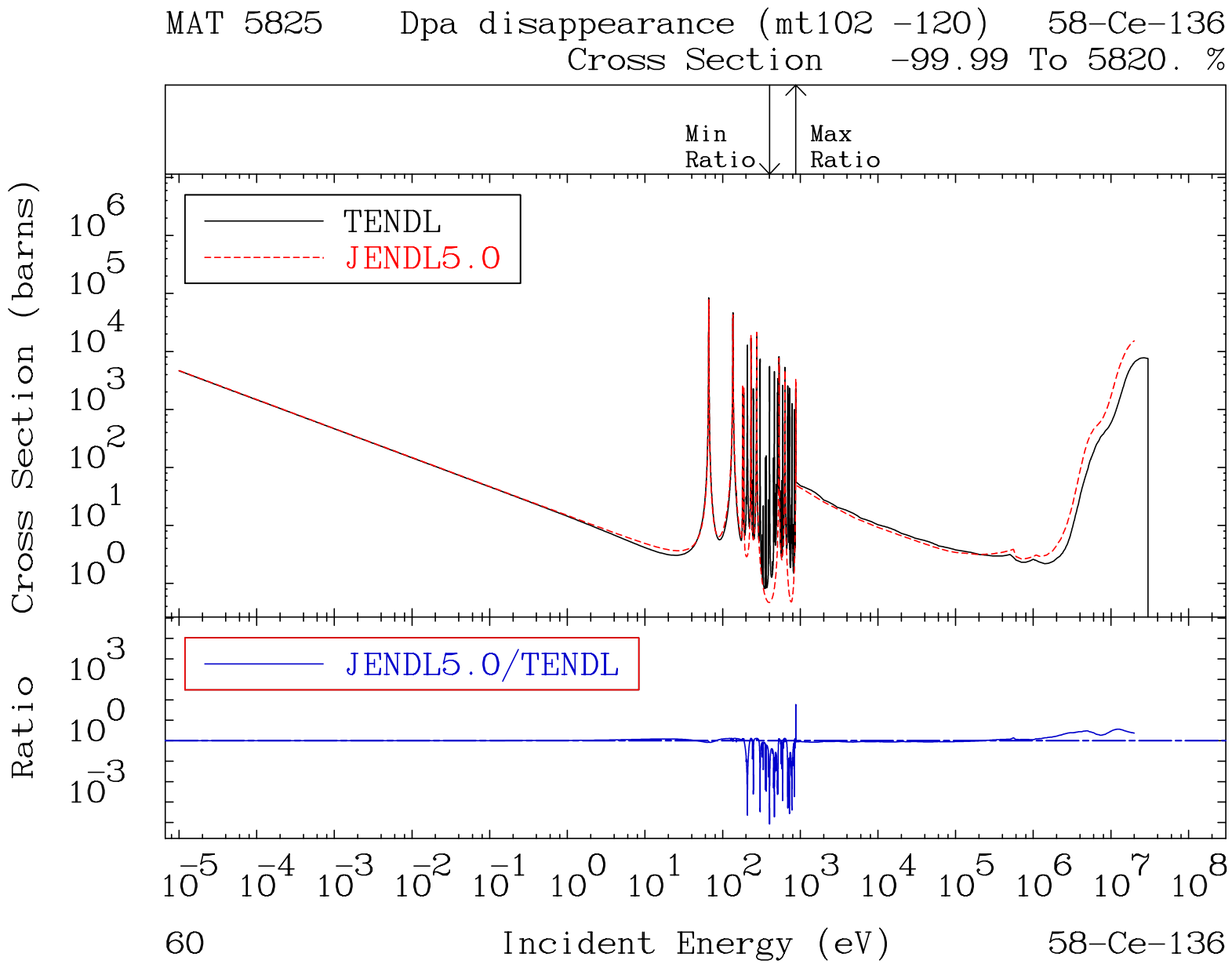

MAT 5825
Total photon (eV-barns)
58-Ce-136
Cross Section -99.99 To 4841. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
58-Ce-136

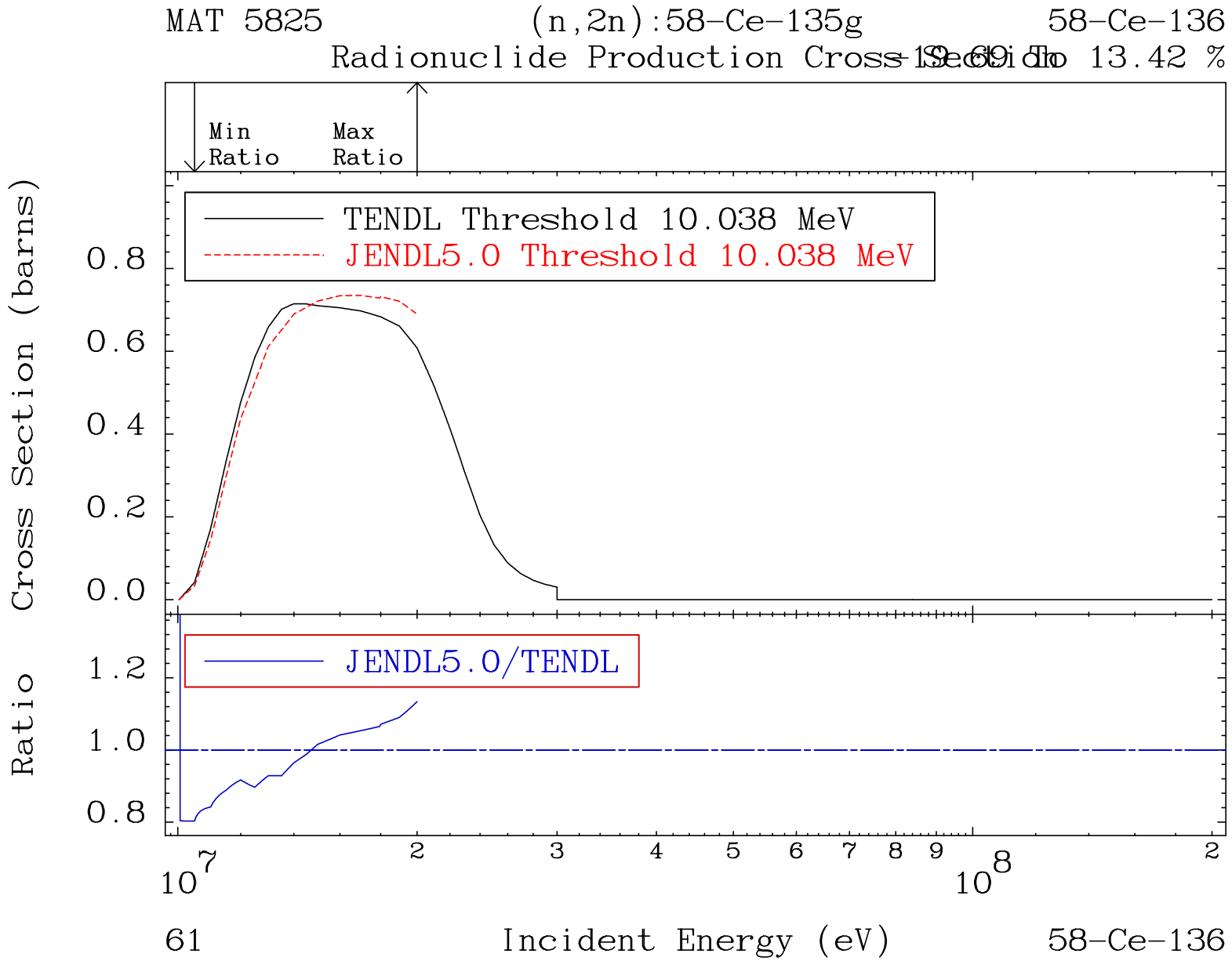

MAT 5825 Total kinematic kerma (high limit) 58-Ce-136
Cross Section -99.98 To 2595. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
58-Ce-136

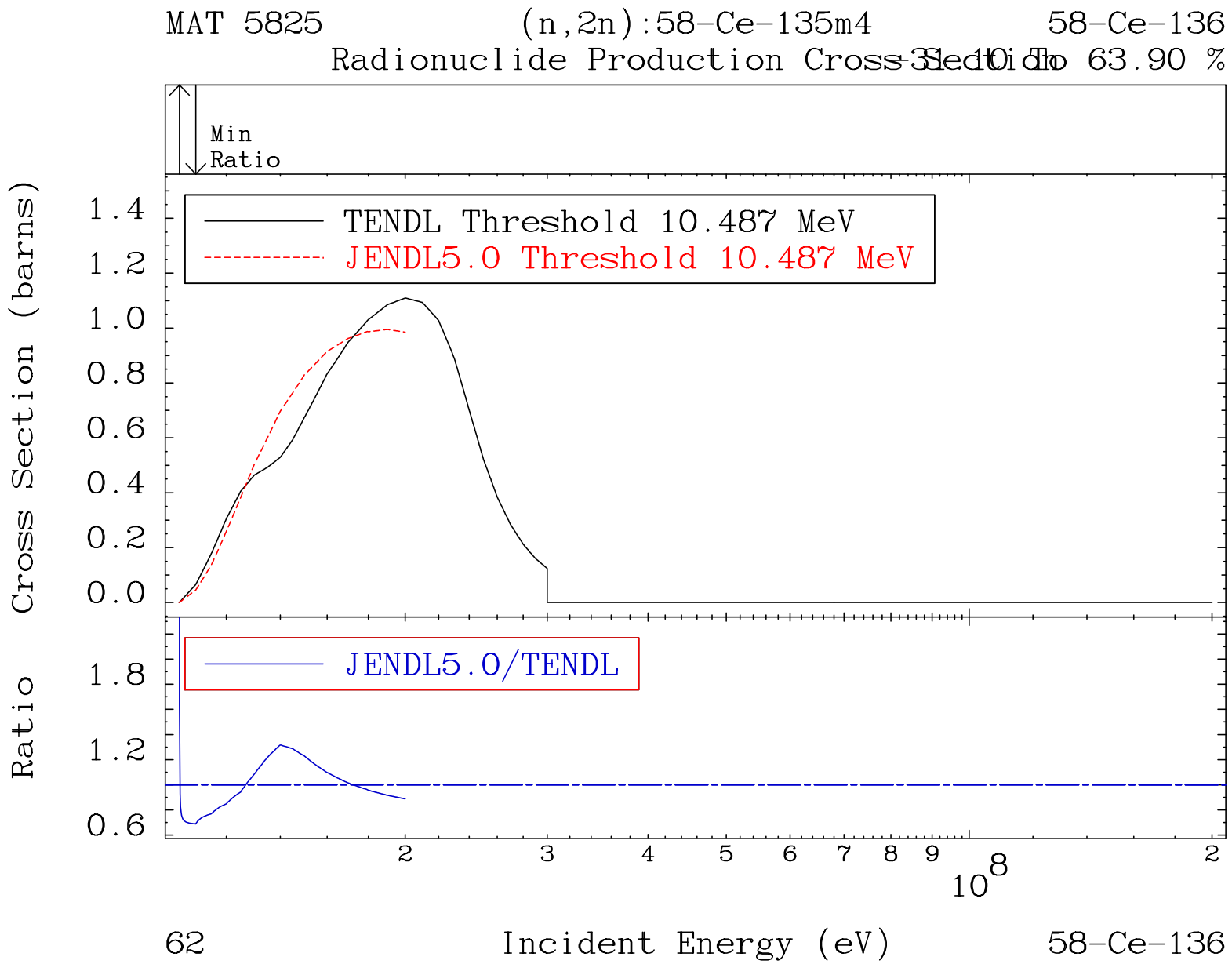

MAT 5825
Dpa total (eV-barns)
58-Ce-136
Cross Section -99.99 To 3525. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
58-Ce-136

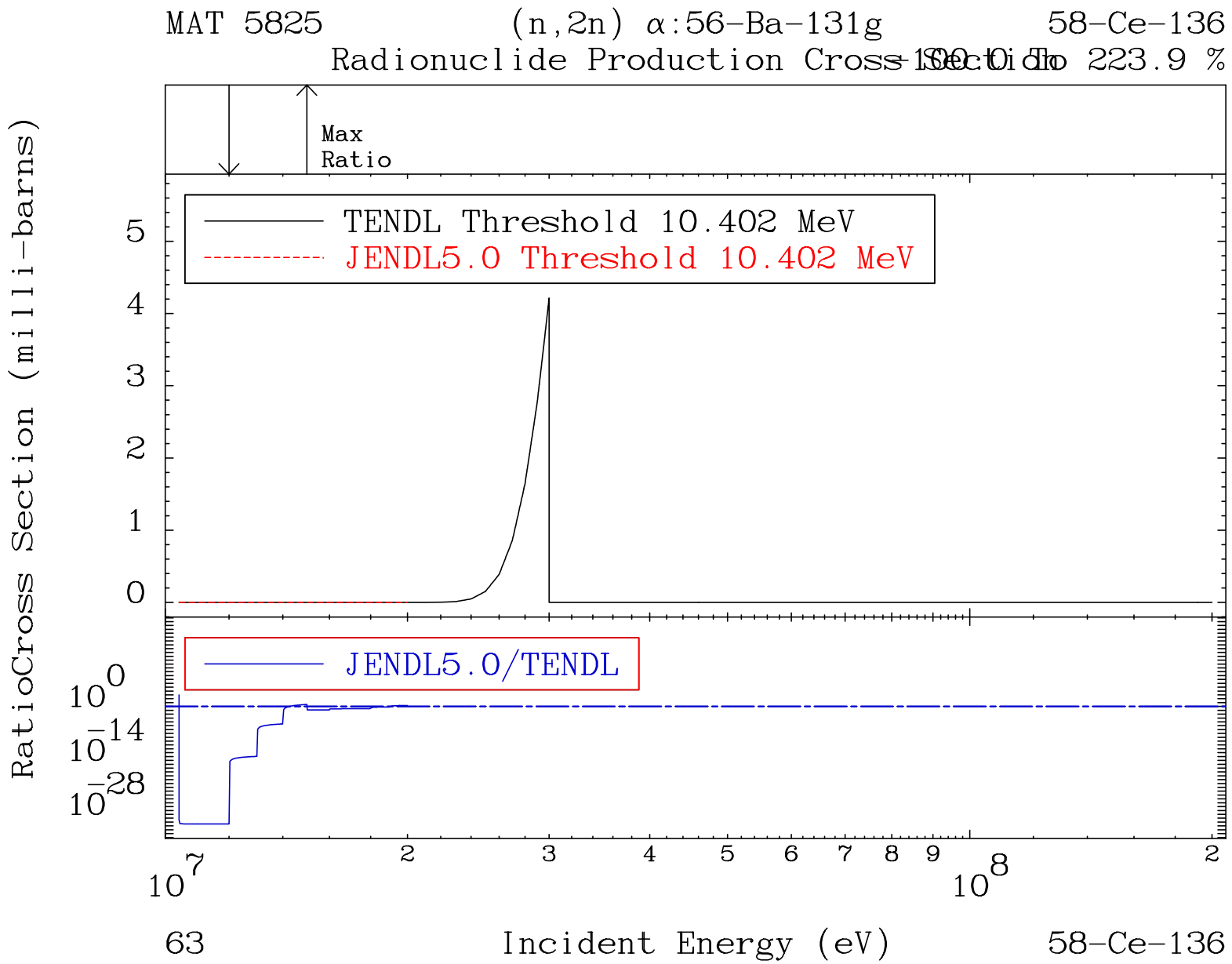

MAT 5825
Dpa elastic (mt2)
Cross Section
58-Ce-136
-99.84 To 4010. %
Max
Ratio
TENDL Threshold 814.11 eV
JENDL5.0 Threshold 805.45 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
58-Ce-136

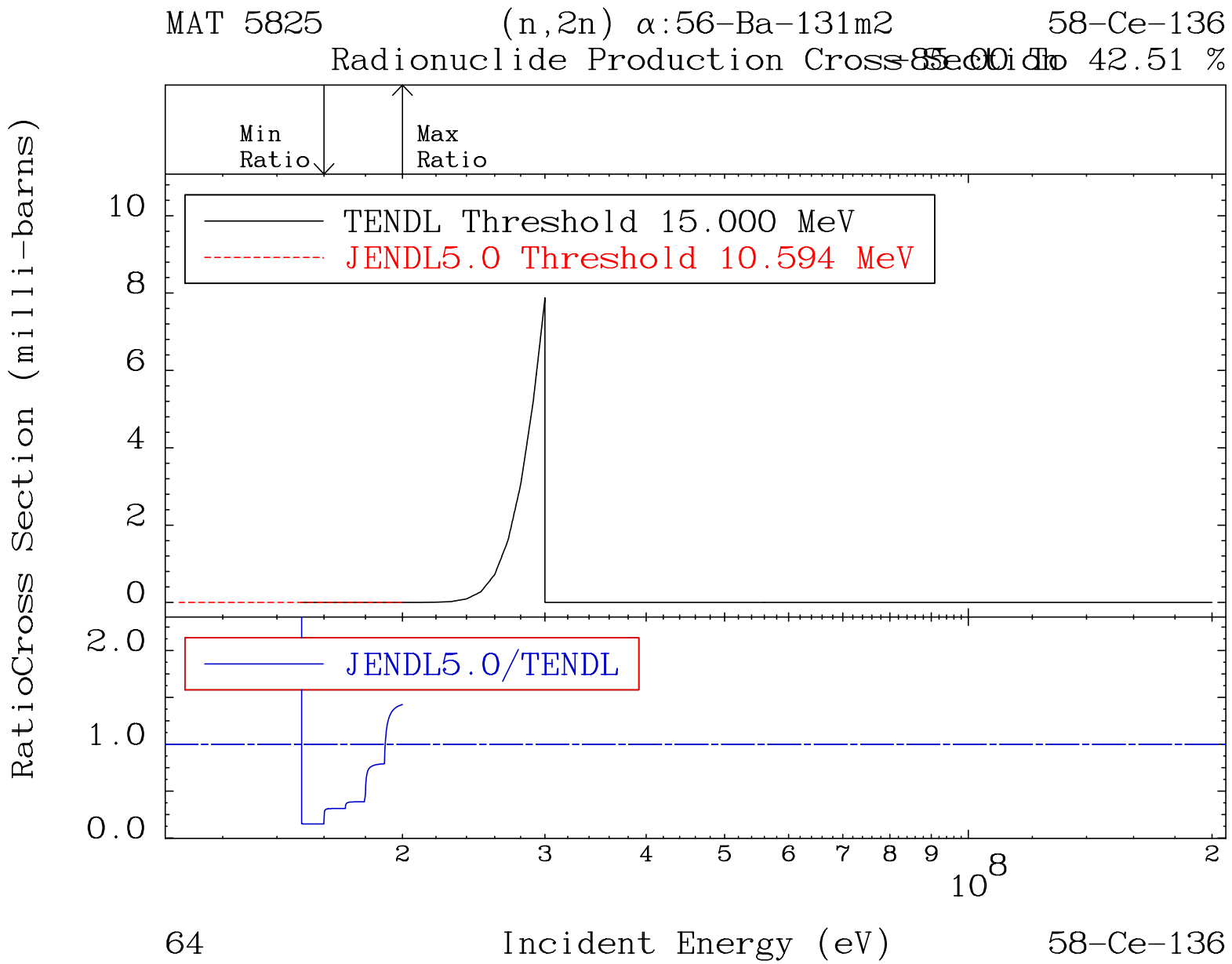

MAT 5825
Dpa inelastic (mt51-91)
58-Ce-136
Cross Section -59.92 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 556.15 keV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
58-Ce-136

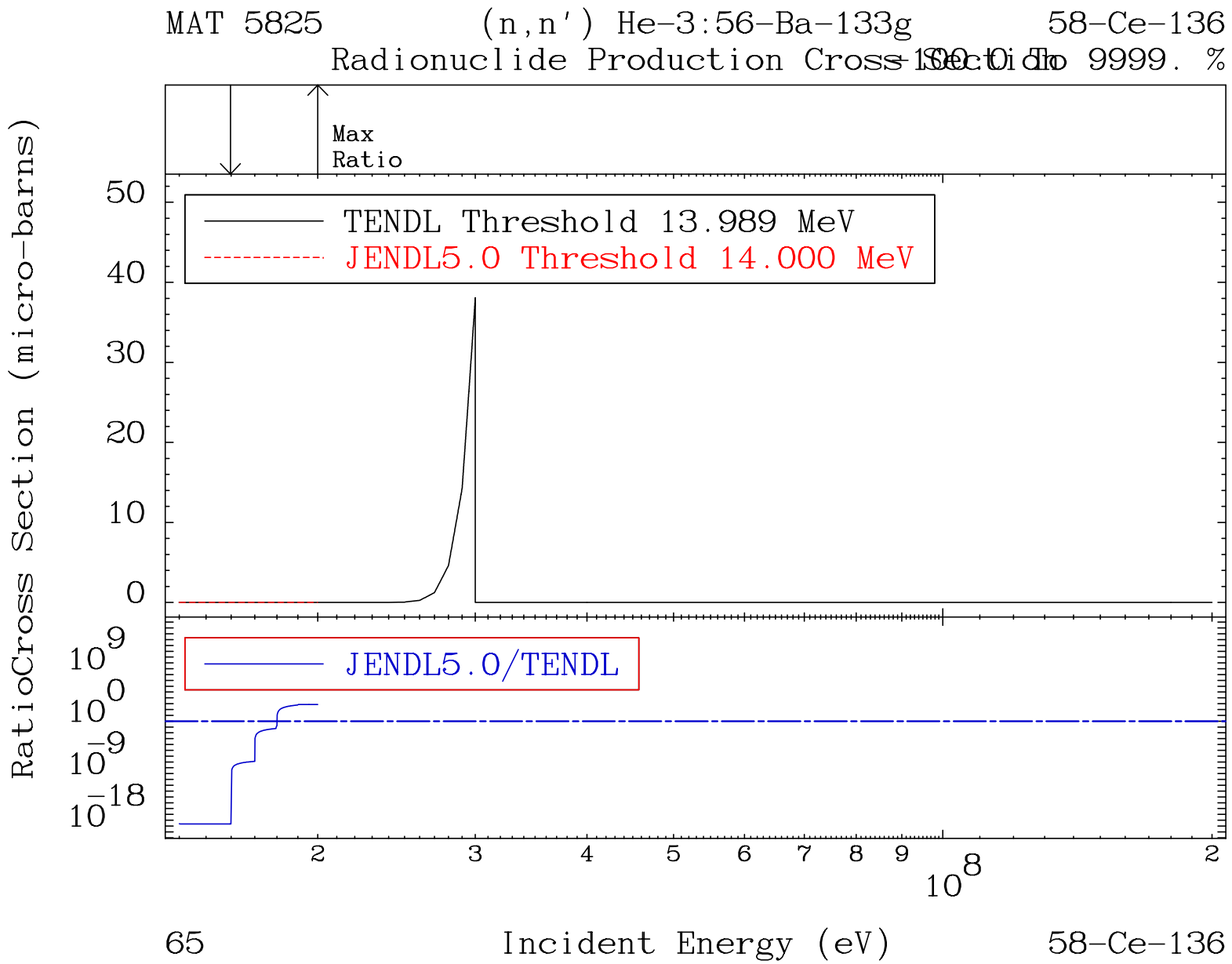

MAT 5825 Dpa disappearance (mt102 -120) 58-Ce-136
Cross Section -99.99 To 5820. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
58-Ce-136

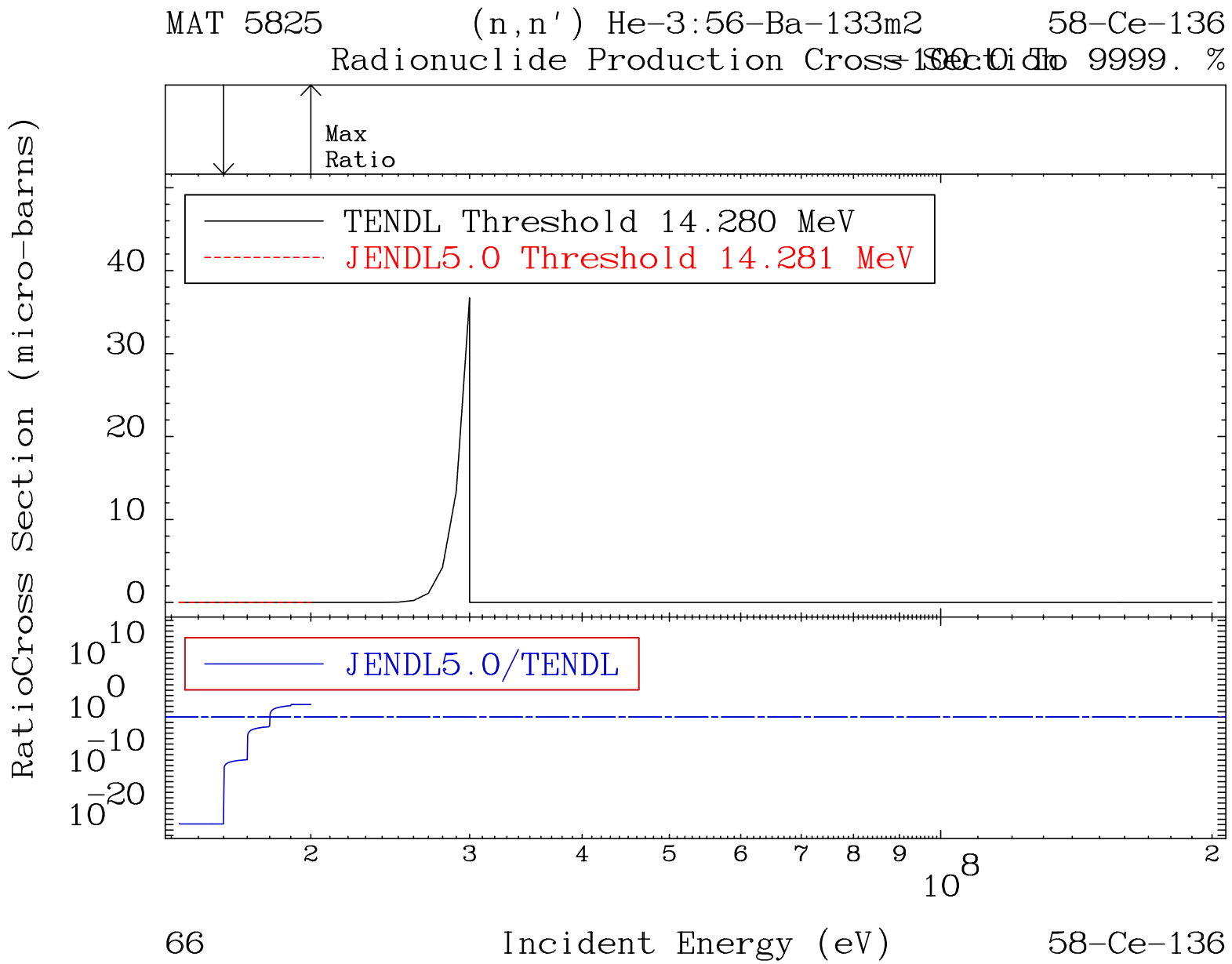

MAT 5825
(n,2n):58-Ce-135g
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.038 MeV
JENDL5.0 Threshold 10.038 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
0.0
0.2
0.4
0.6
0.8
1.0
1.2
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
58-Ce-136

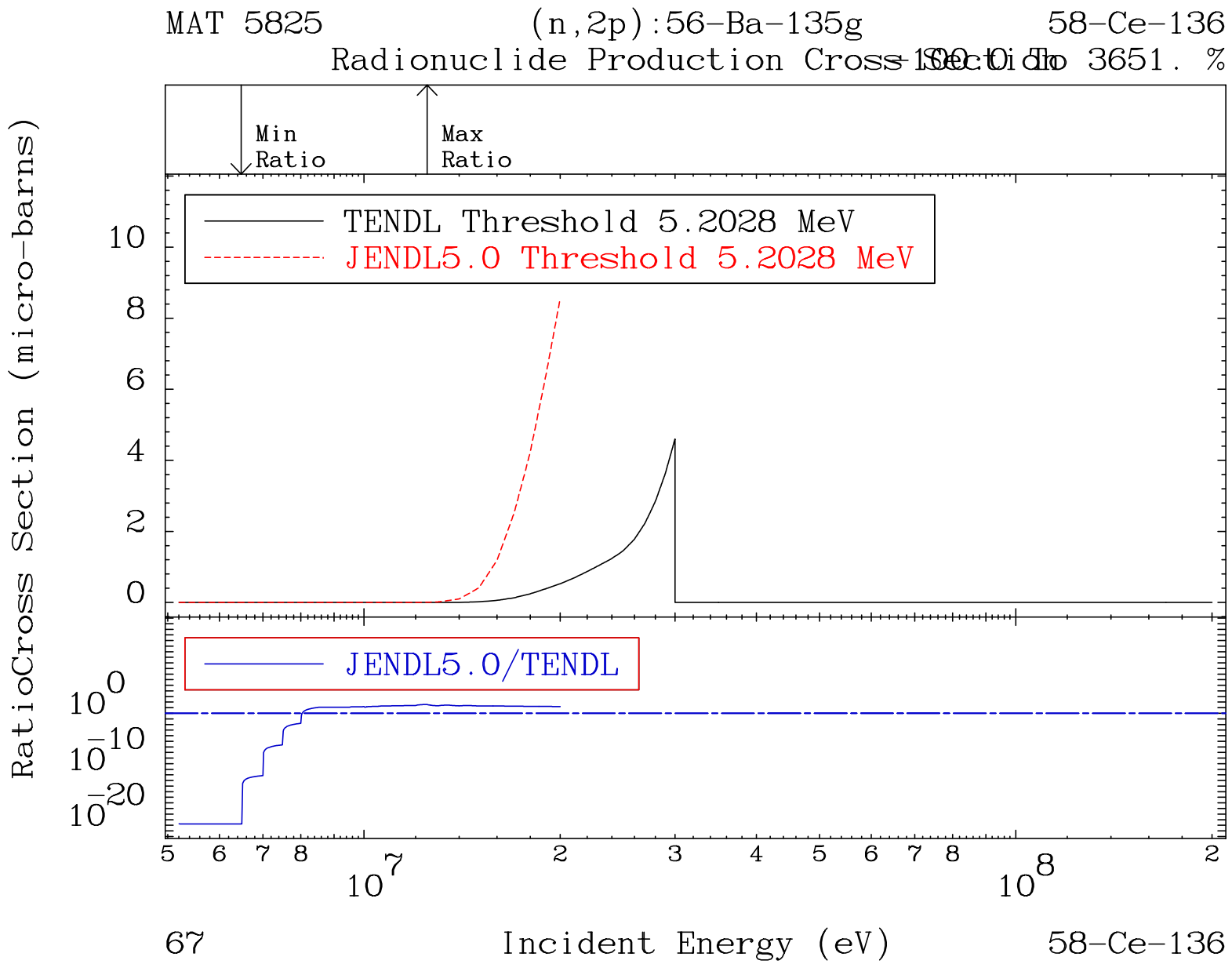

MAT 5825
(n,2n):58-Ce-135m4
58-Ce-136
Radionuclide Production Cross Section To 63.90 %
Min
Ratio
TENDL Threshold 10.487 MeV
JENDL5.0 Threshold 10.487 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.8
1.2
0.6
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
58-Ce-136

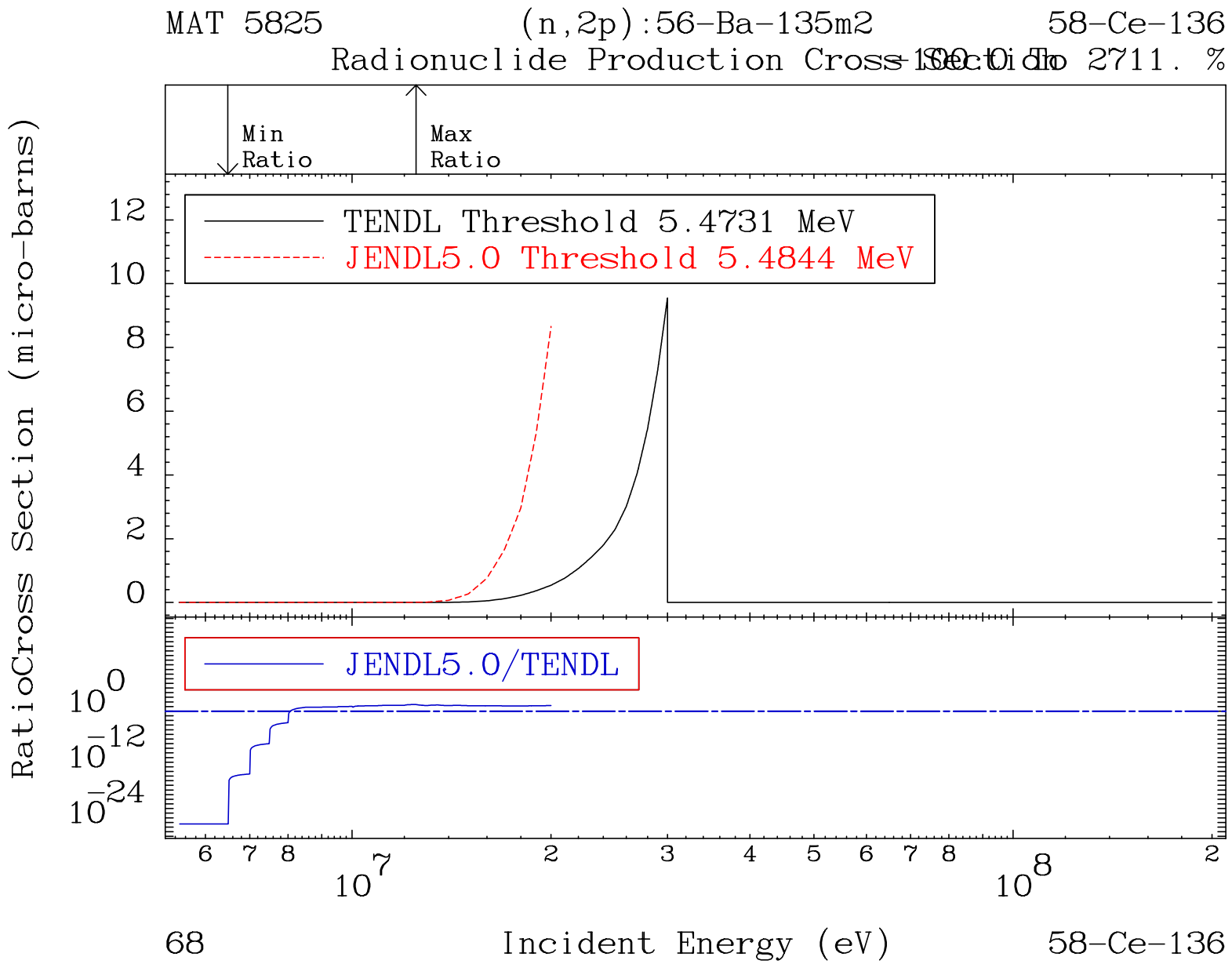

MAT 5825
(n,2n) α:56-Ba-131g
58-Ce-136
Radionuclide Production Cross Section To 223.9 %
Max
Ratio
TENDL Threshold 10.402 MeV
JENDL5.0 Threshold 10.402 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
63
58-Ce-136

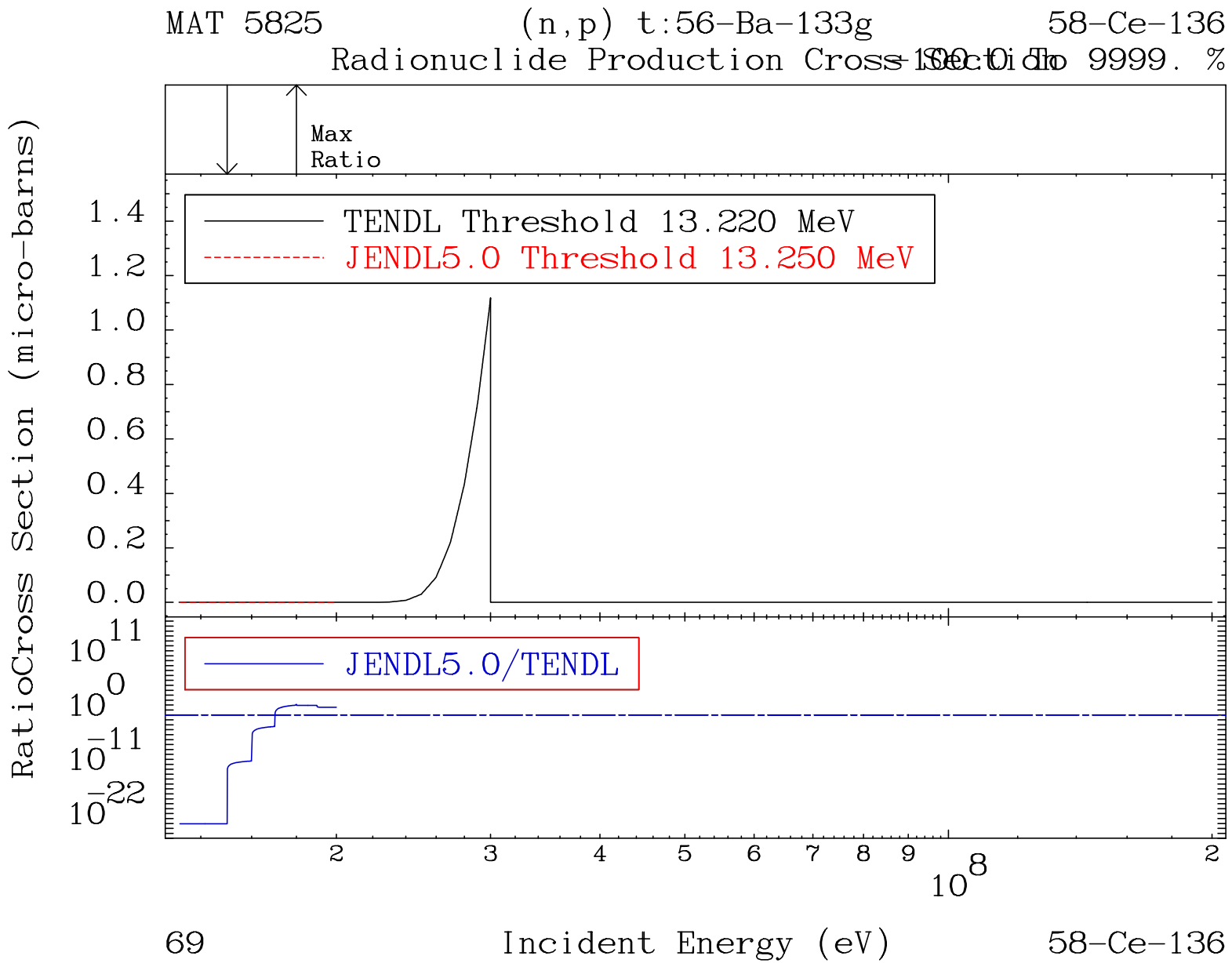

MAT 5825
(n,2n) α:56-Ba-131m2
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 15.000 MeV
JENDL5.0 Threshold 10.594 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
64
58-Ce-136

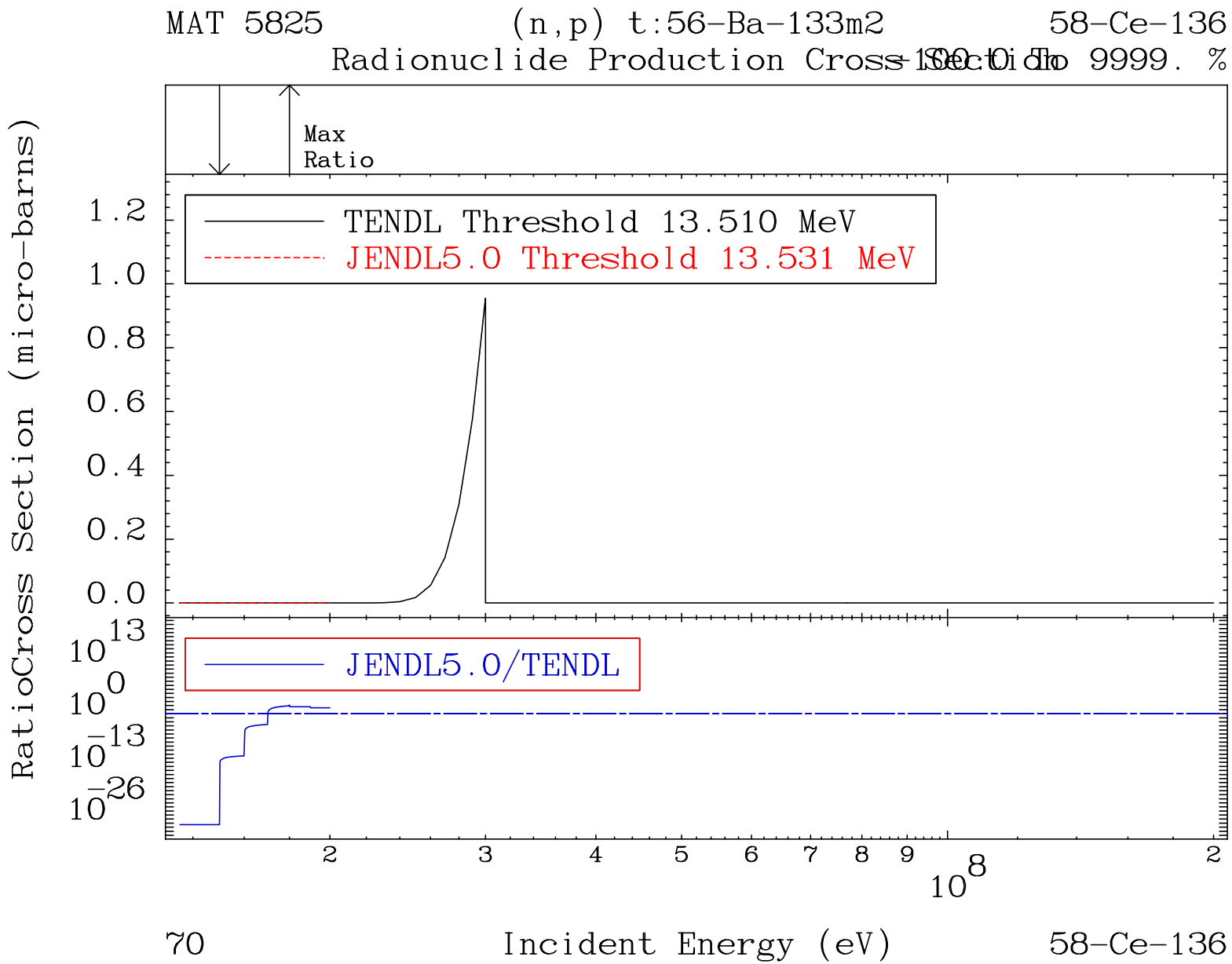

MAT 5825
(n,n') He-3:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 13.989 MeV
JENDL5.0 Threshold 14.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
50
40
30
20
10
0
10^9
10^0
10^-9
10^-18
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
58-Ce-136

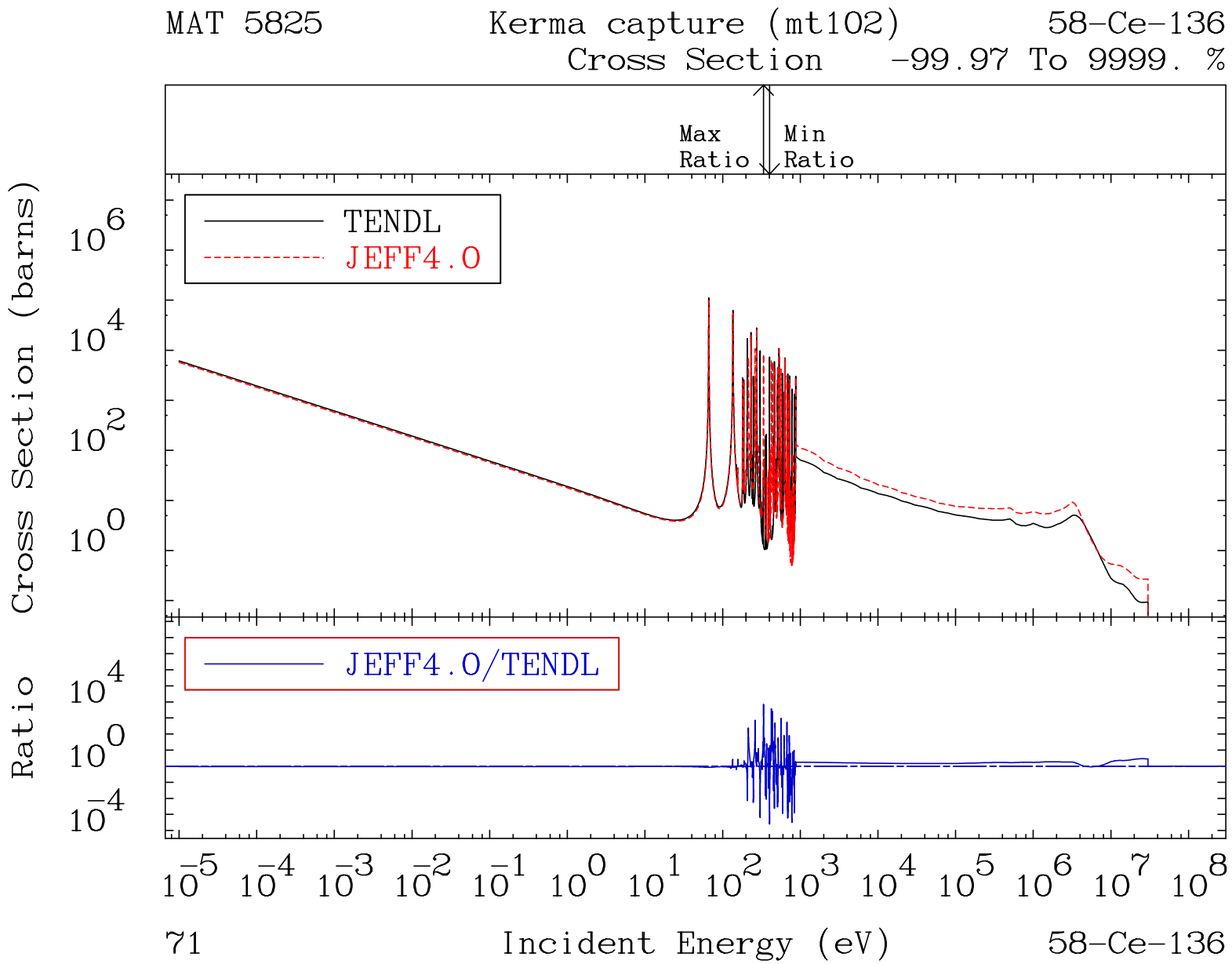

MAT 5825 (n,n') He-3:56-Ba-133m2 58-Ce-136
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 14.280 MeV
JENDL5.0 Threshold 14.281 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
40
30
20
10
0
10^10
10^0
10^-10
10^-20
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
58-Ce-136

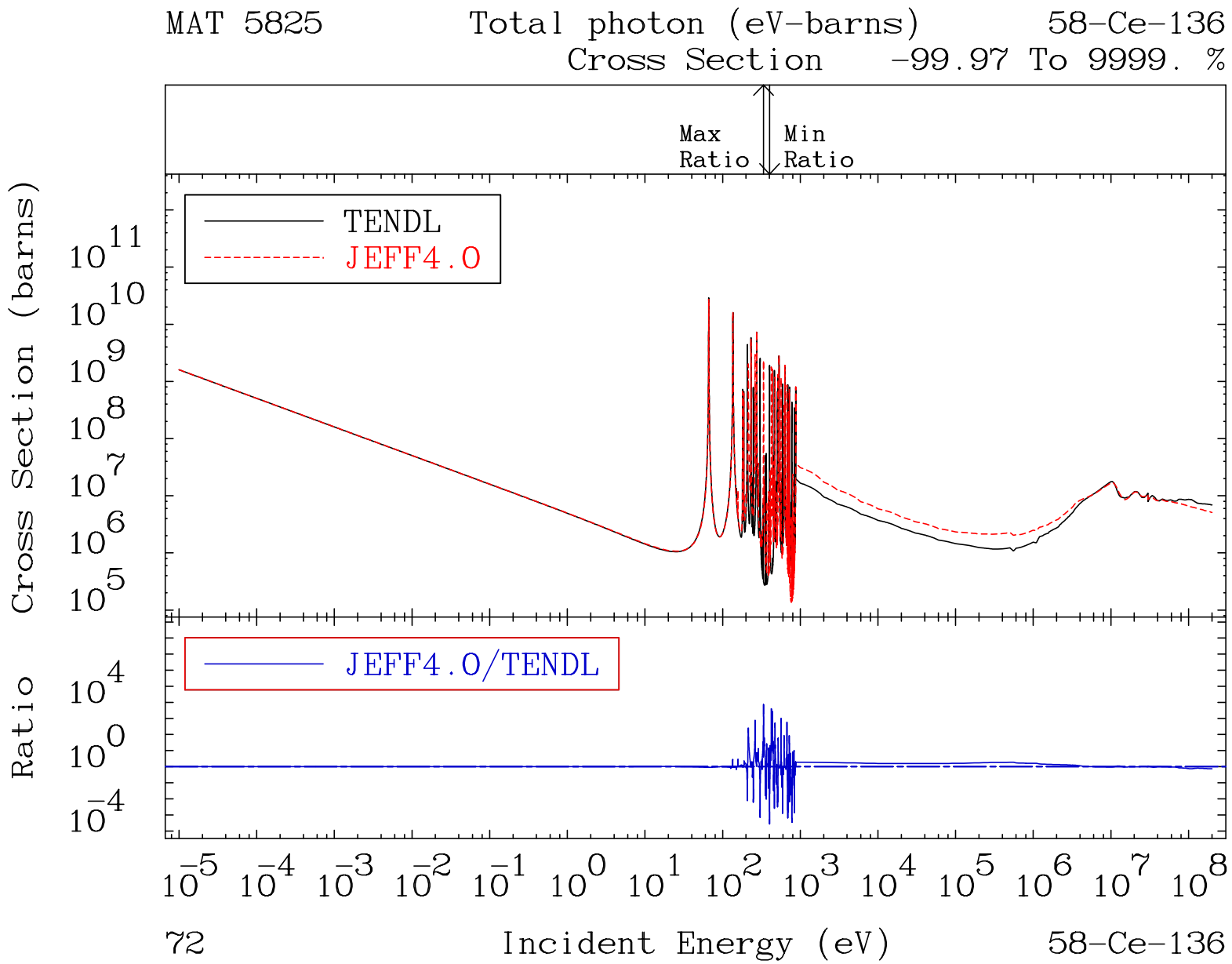

MAT 5825
(n,2p):56-Ba-135g
58-Ce-136
Radionuclide Production Cross Section To 3651. %
Min Ratio
Max Ratio
TENDL Threshold 5.2028 MeV
JENDL5.0 Threshold 5.2028 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
67
58-Ce-136

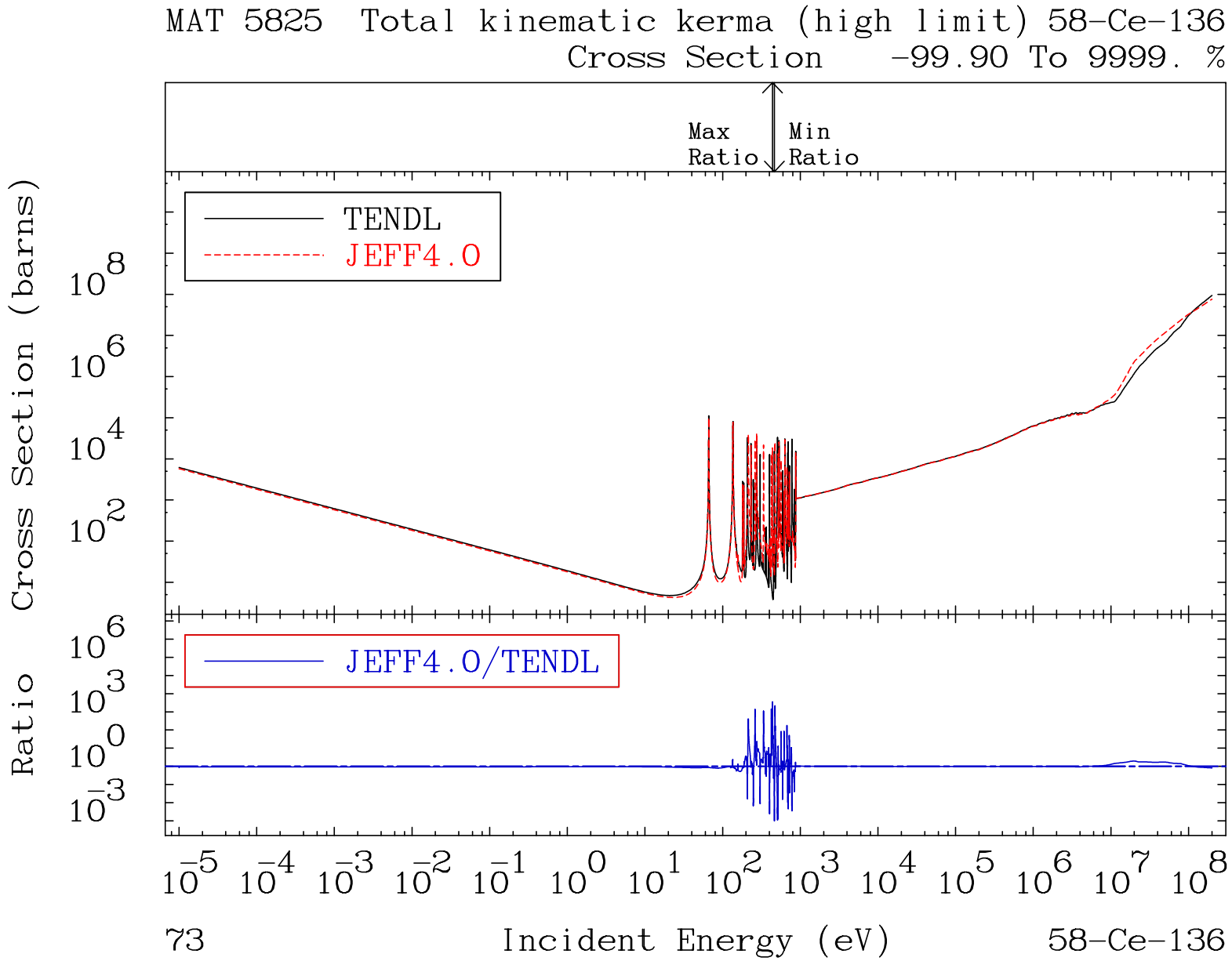

MAT 5825
(n,2p):56-Ba-135m2
58-Ce-136
Radionuclide Production Cross Section To 2711. %
Min Ratio
Max Ratio
TENDL Threshold 5.4731 MeV
JENDL5.0 Threshold 5.4844 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
68
58-Ce-136

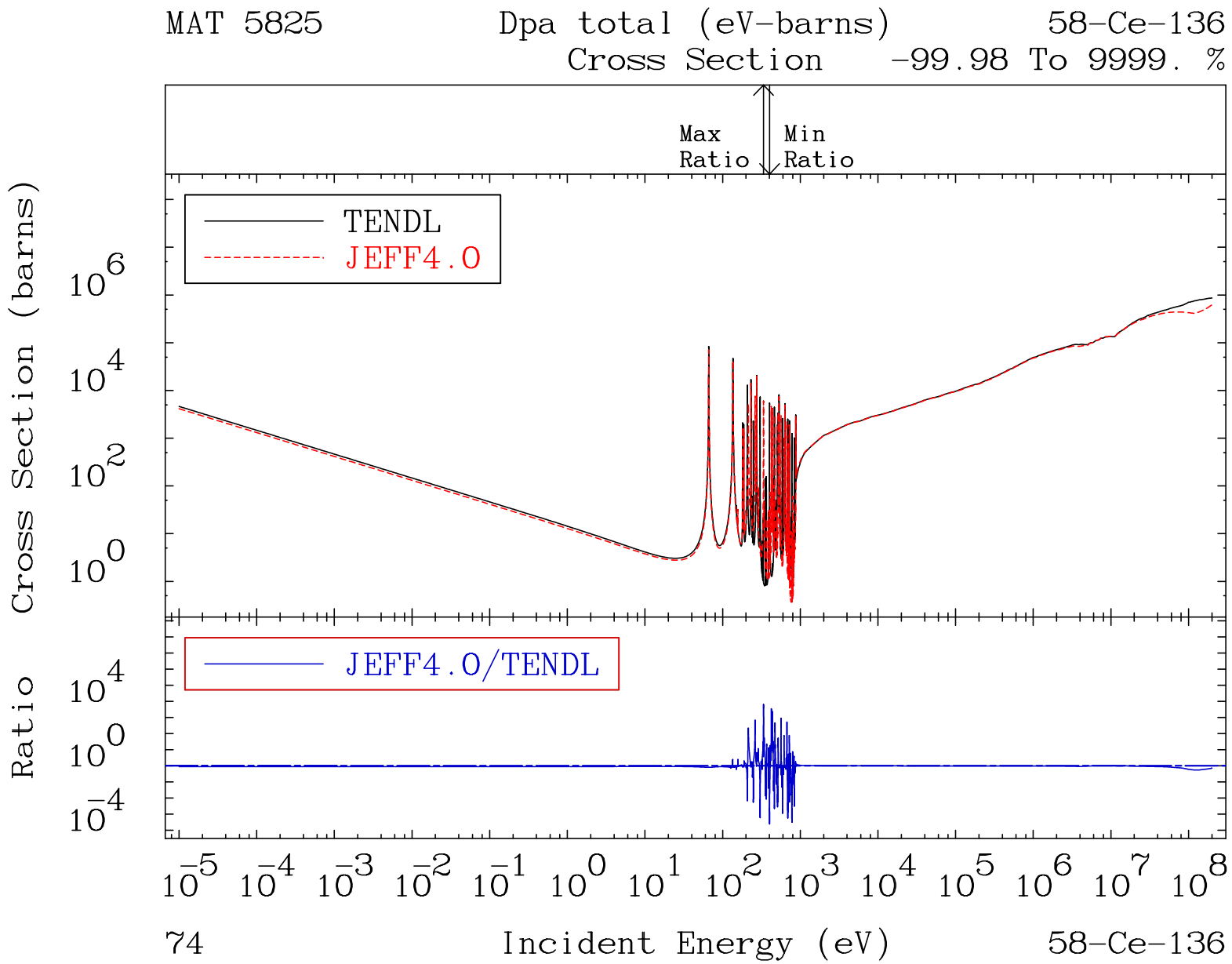

MAT 5825
(n,p) t:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 13.220 MeV
JENDL5.0 Threshold 13.250 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
69
58-Ce-136

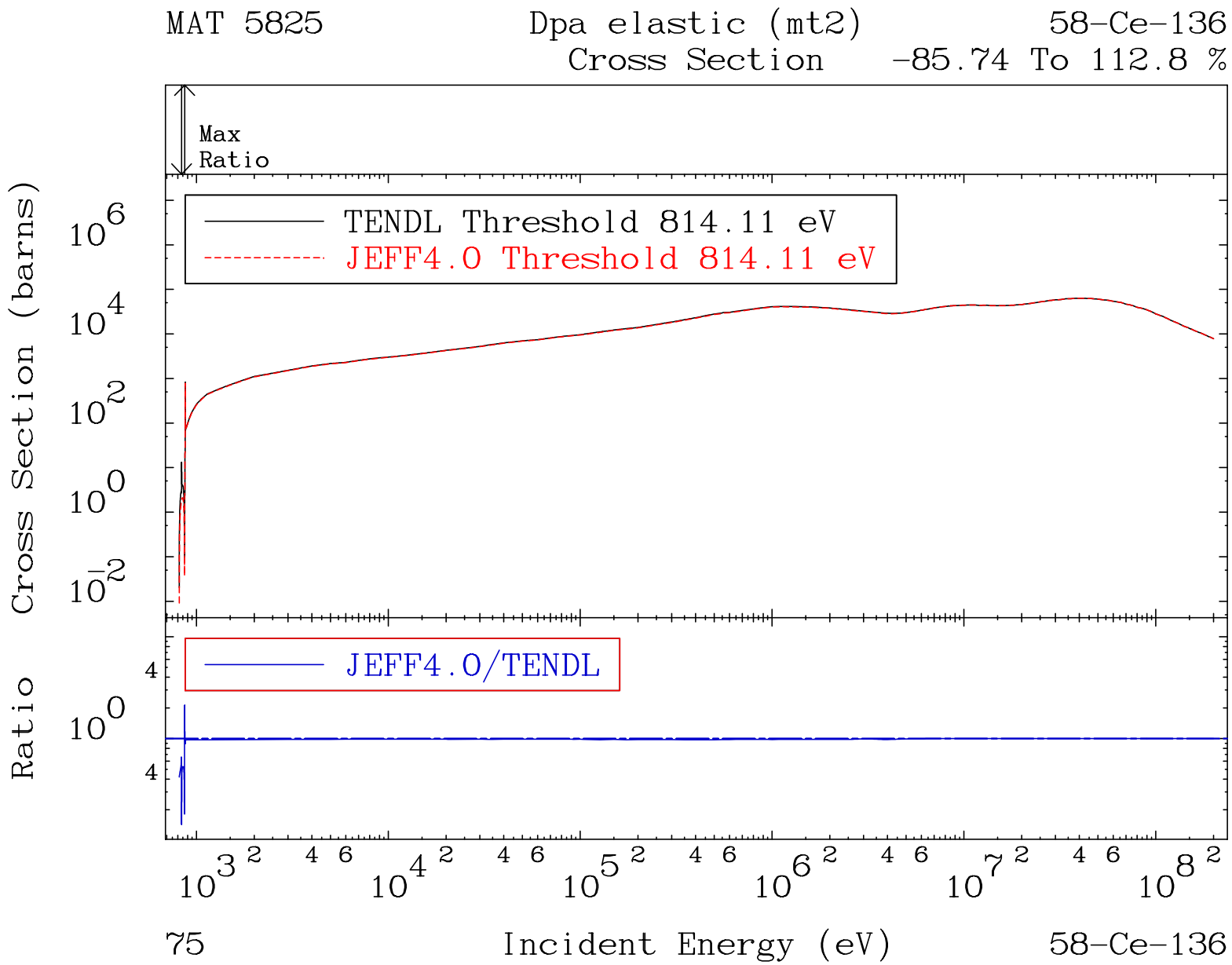

MAT 5825
(n,p) t:56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 13.510 MeV
JENDL5.0 Threshold 13.531 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
70
58-Ce-136

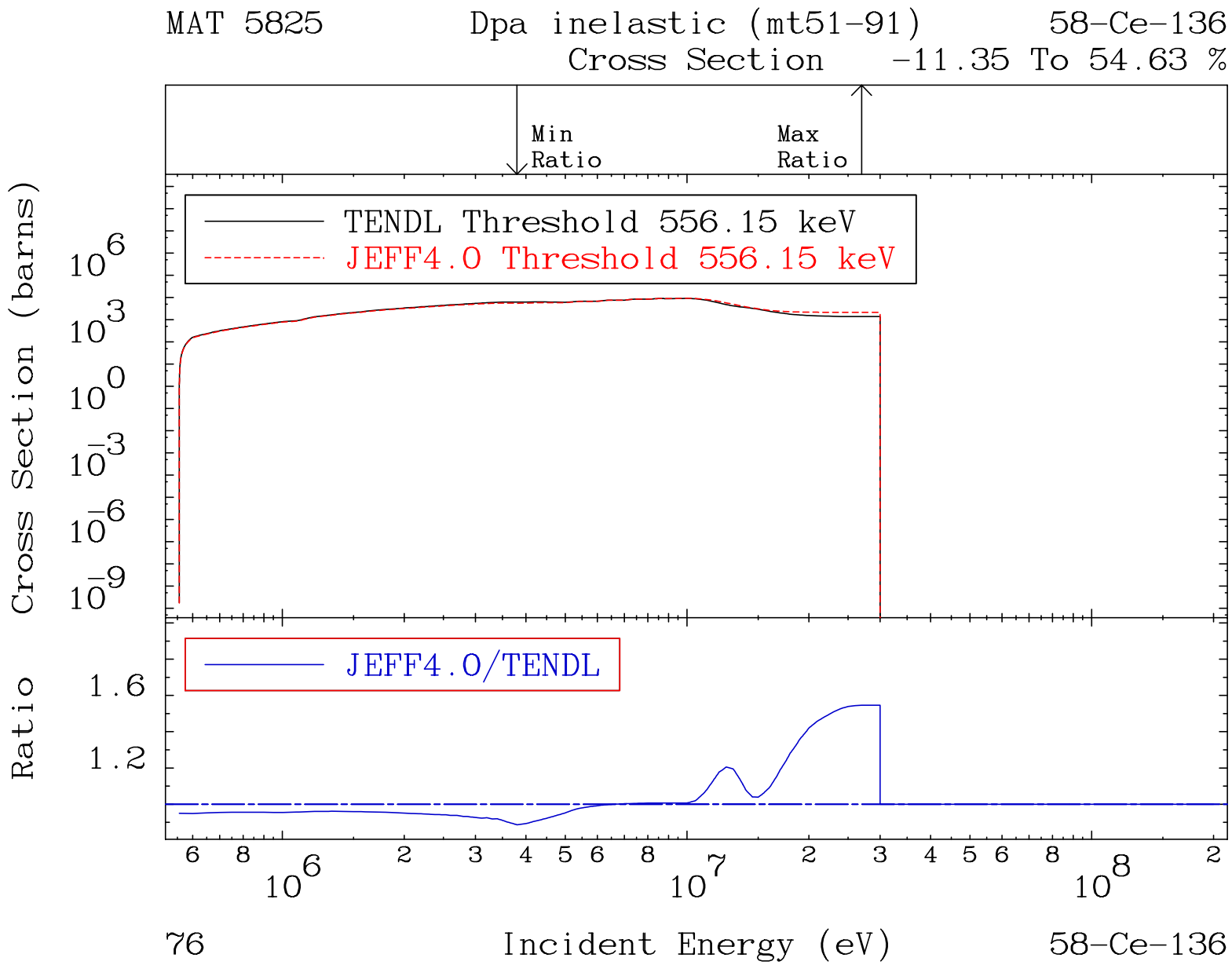

MAT 5825
Kerma capture (mt102)
58-Ce-136
Cross Section -99.97 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
71
58-Ce-136

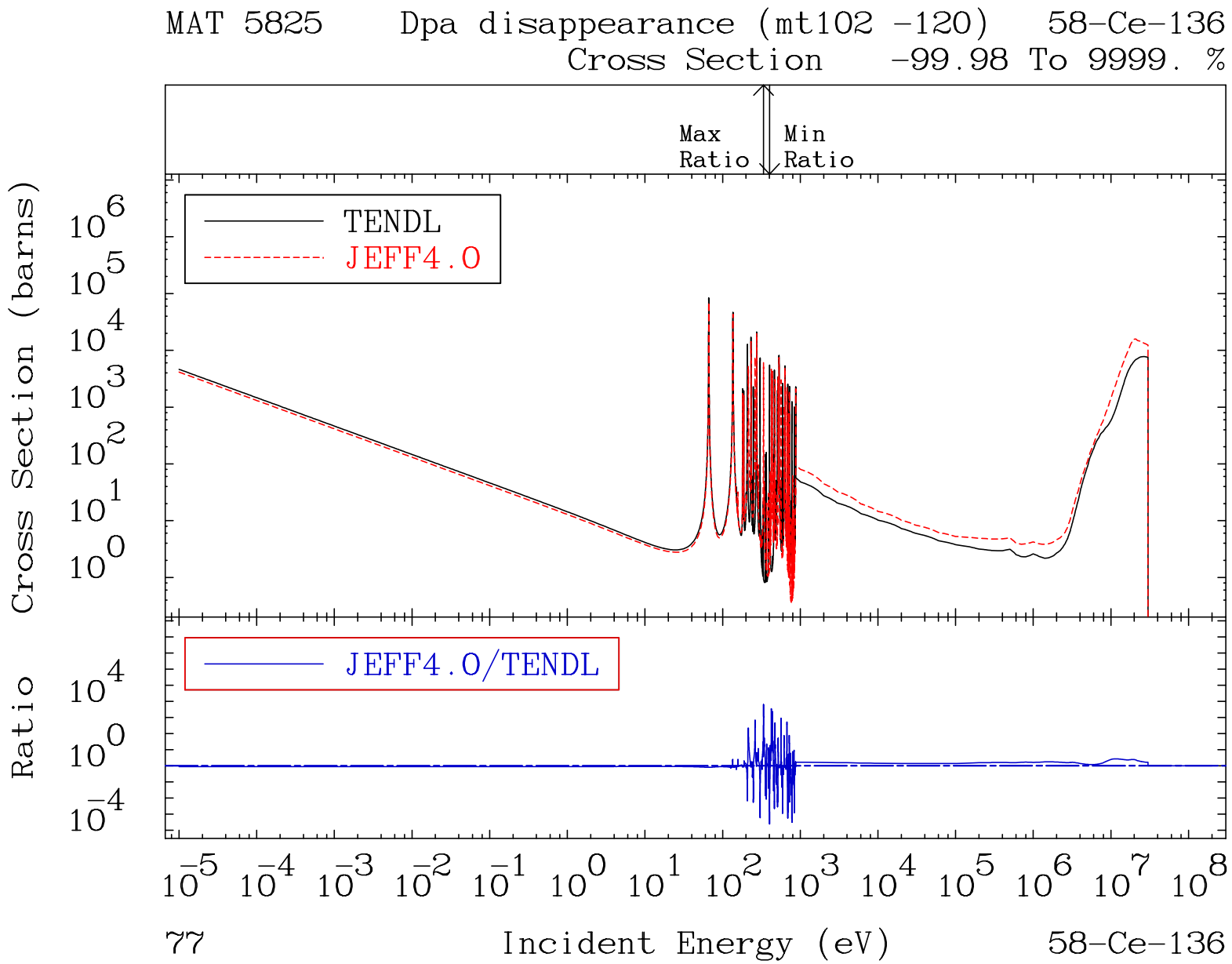

MAT 5825
Total photon (eV-barns)
58-Ce-136
Cross Section -99.97 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
72
58-Ce-136

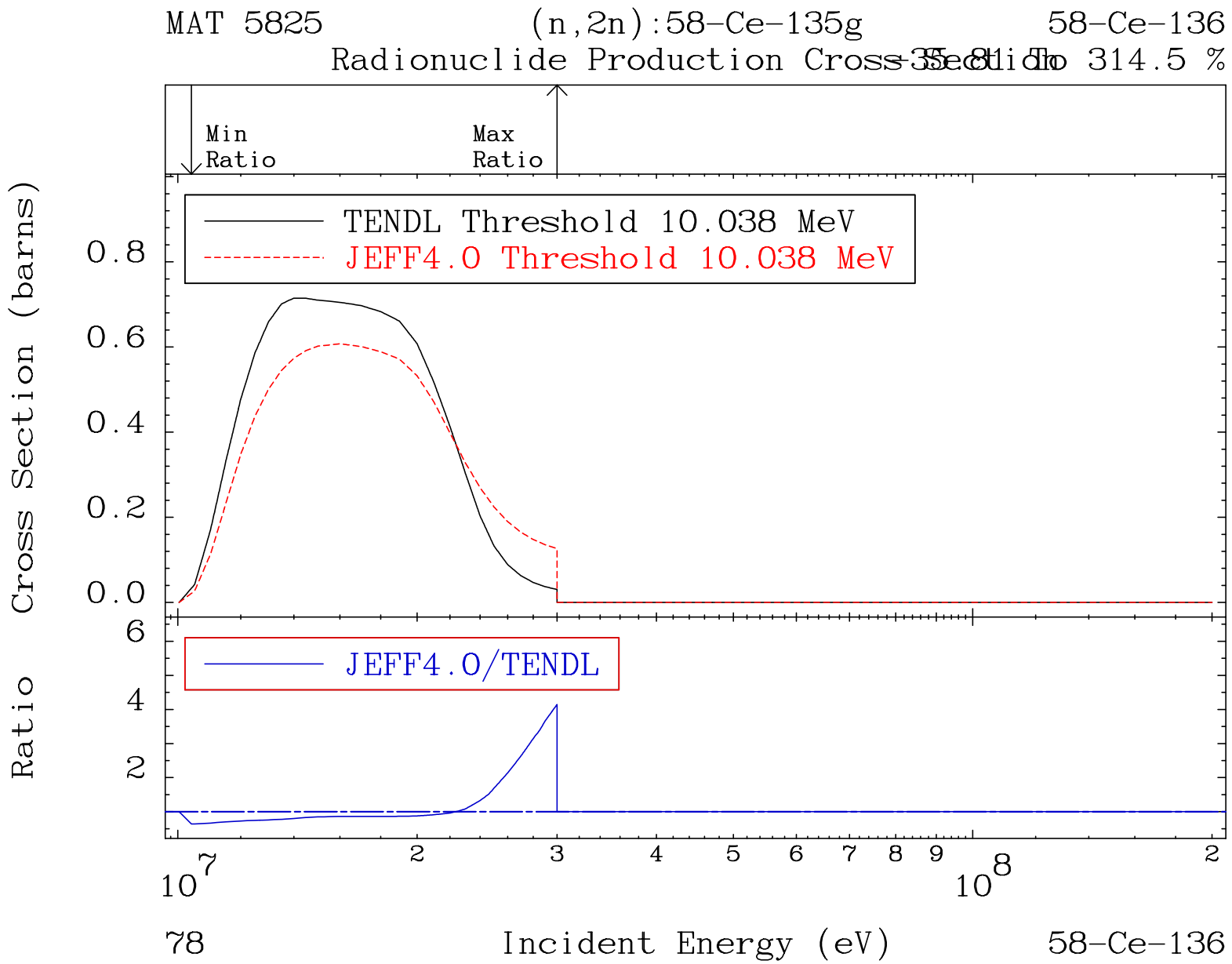

MAT 5825 Total kinematic kerma (high limit) 58-Ce-136
Cross Section -99.90 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
58-Ce-136

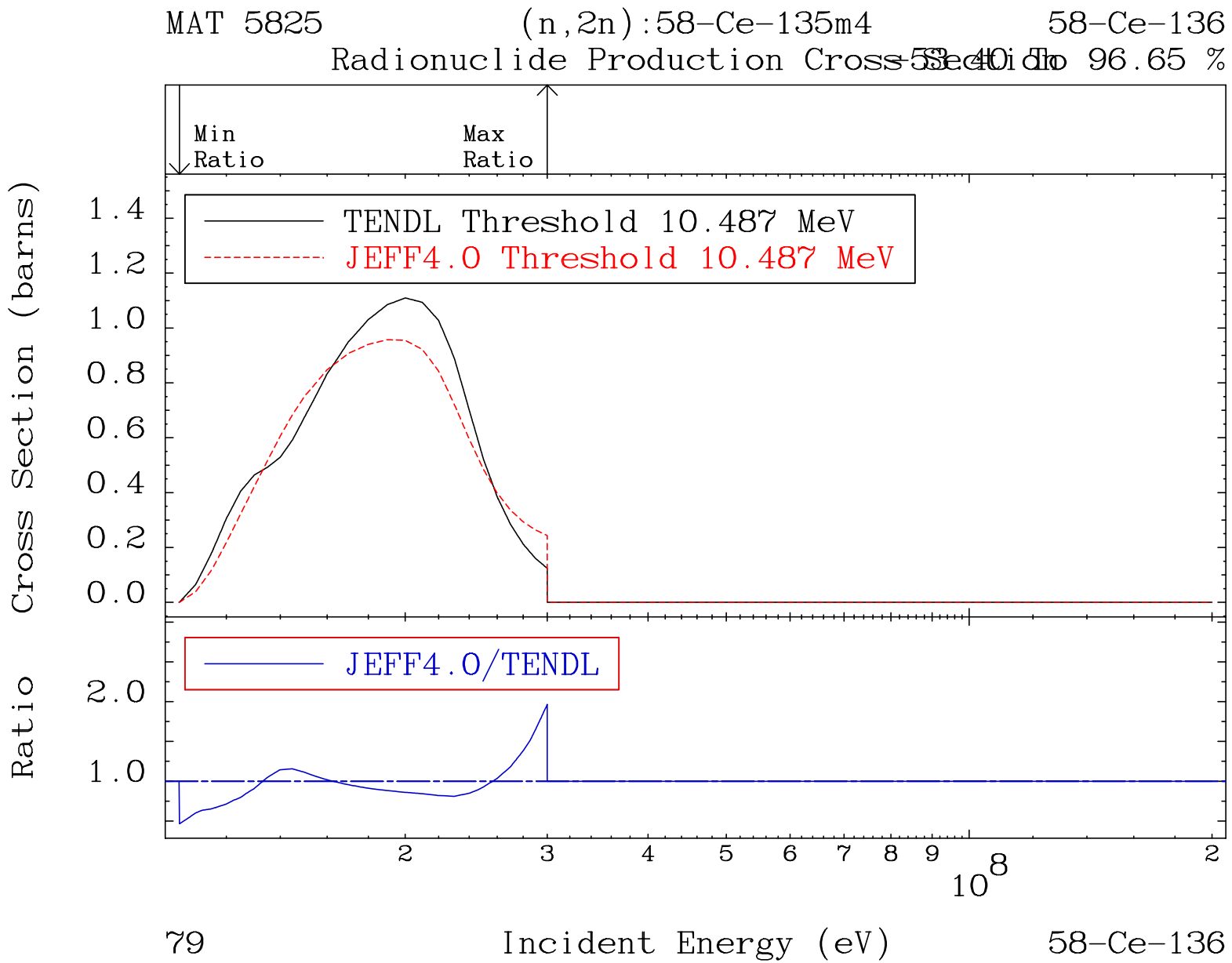

MAT 5825
Dpa total (eV-barns)
58-Ce-136
Cross Section
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
74
58-Ce-136

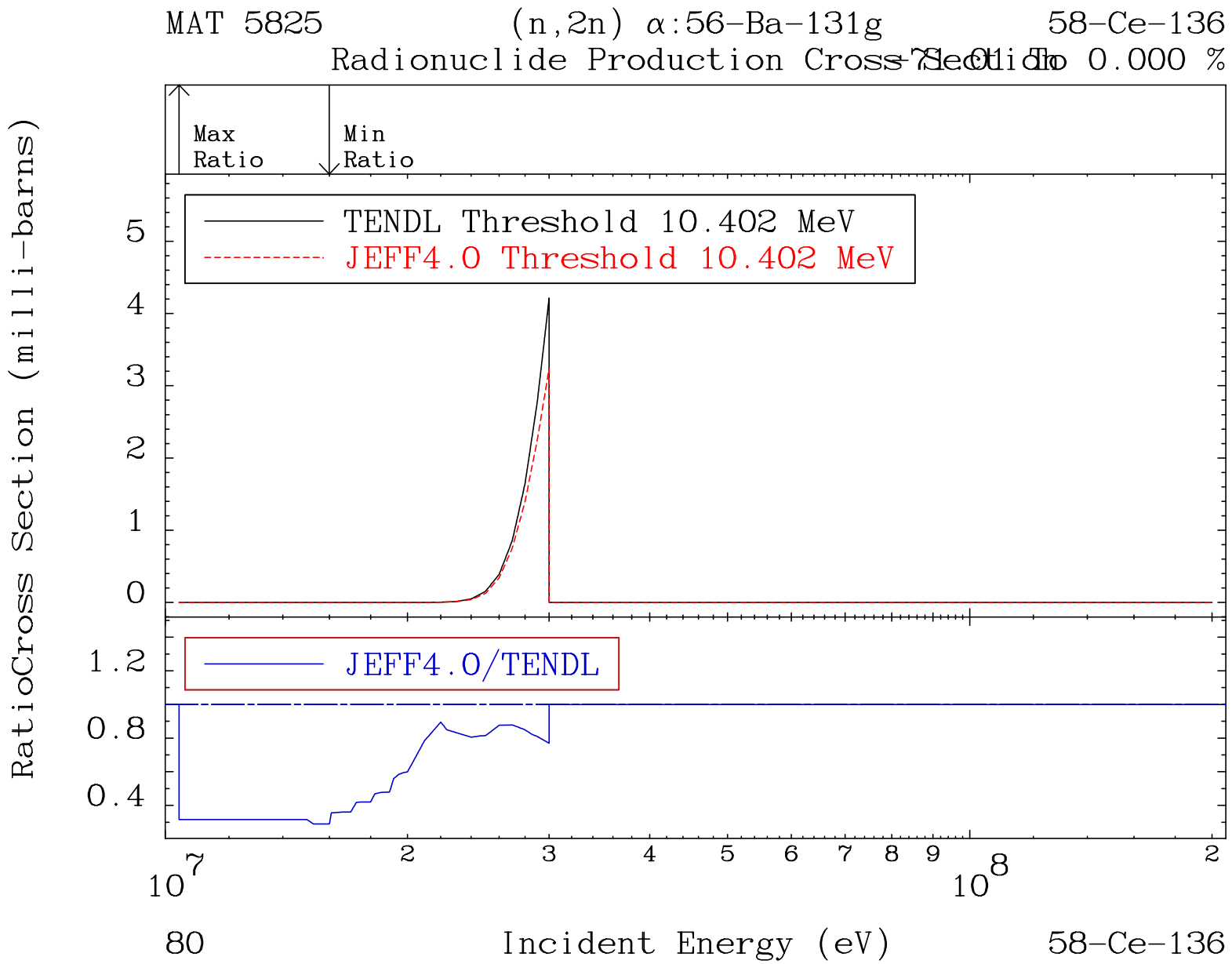

MAT 5825
Dpa elastic (mt2)
Cross Section
58-Ce-136
-85.74 To 112.8 %
Max
Ratio
TENDL Threshold 814.11 eV
JEFF4.0 Threshold 814.11 eV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
58-Ce-136

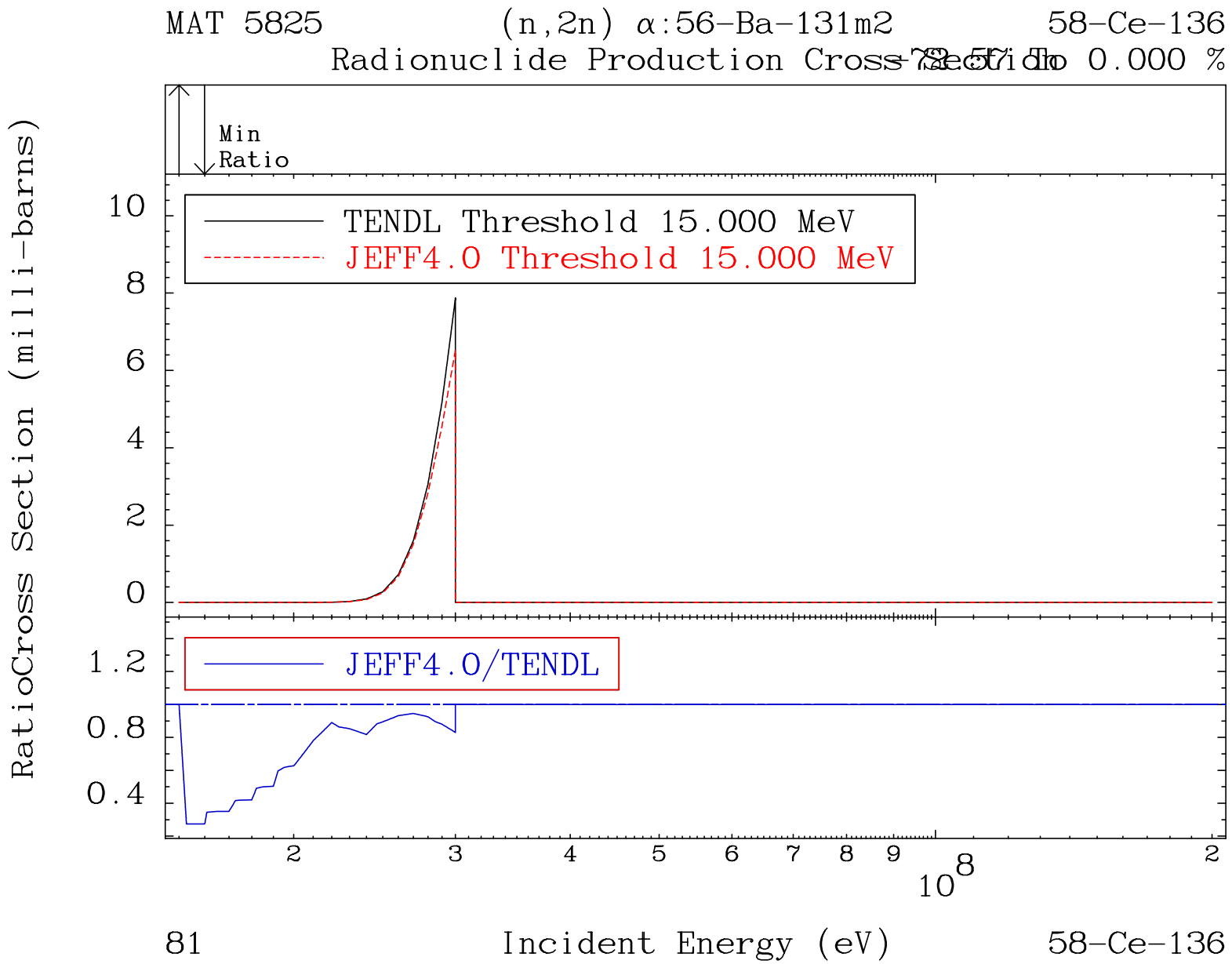

MAT 5825
Dpa inelastic (mt51-91)
58-Ce-136
Cross Section
-11.35 To 54.63 %
Min Ratio
Max Ratio
TENDL Threshold 556.15 keV
JEFF4.0 Threshold 556.15 keV
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
76
58-Ce-136

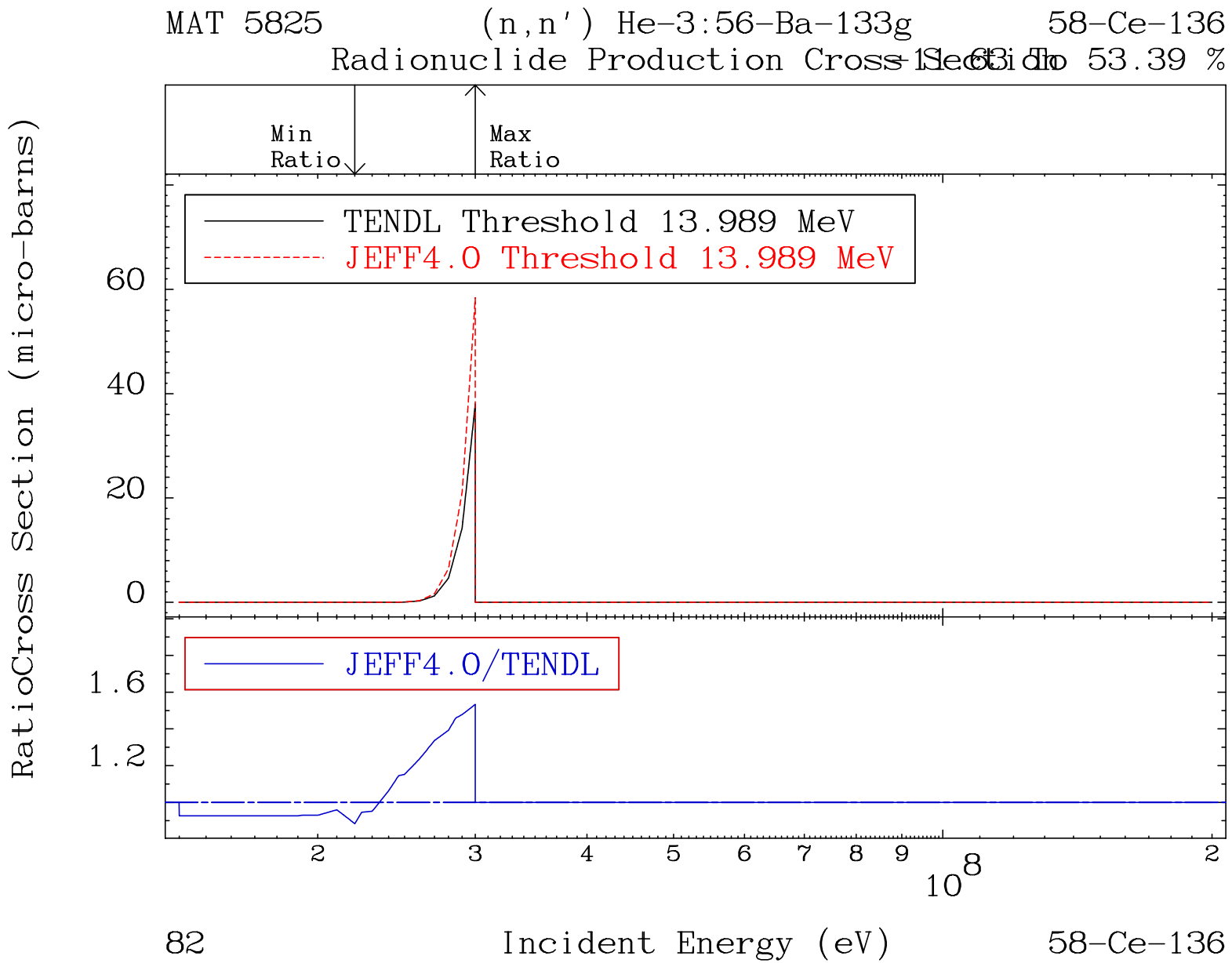

MAT 5825 Dpa disappearance (mt102 -120) 58-Ce-136
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
58-Ce-136

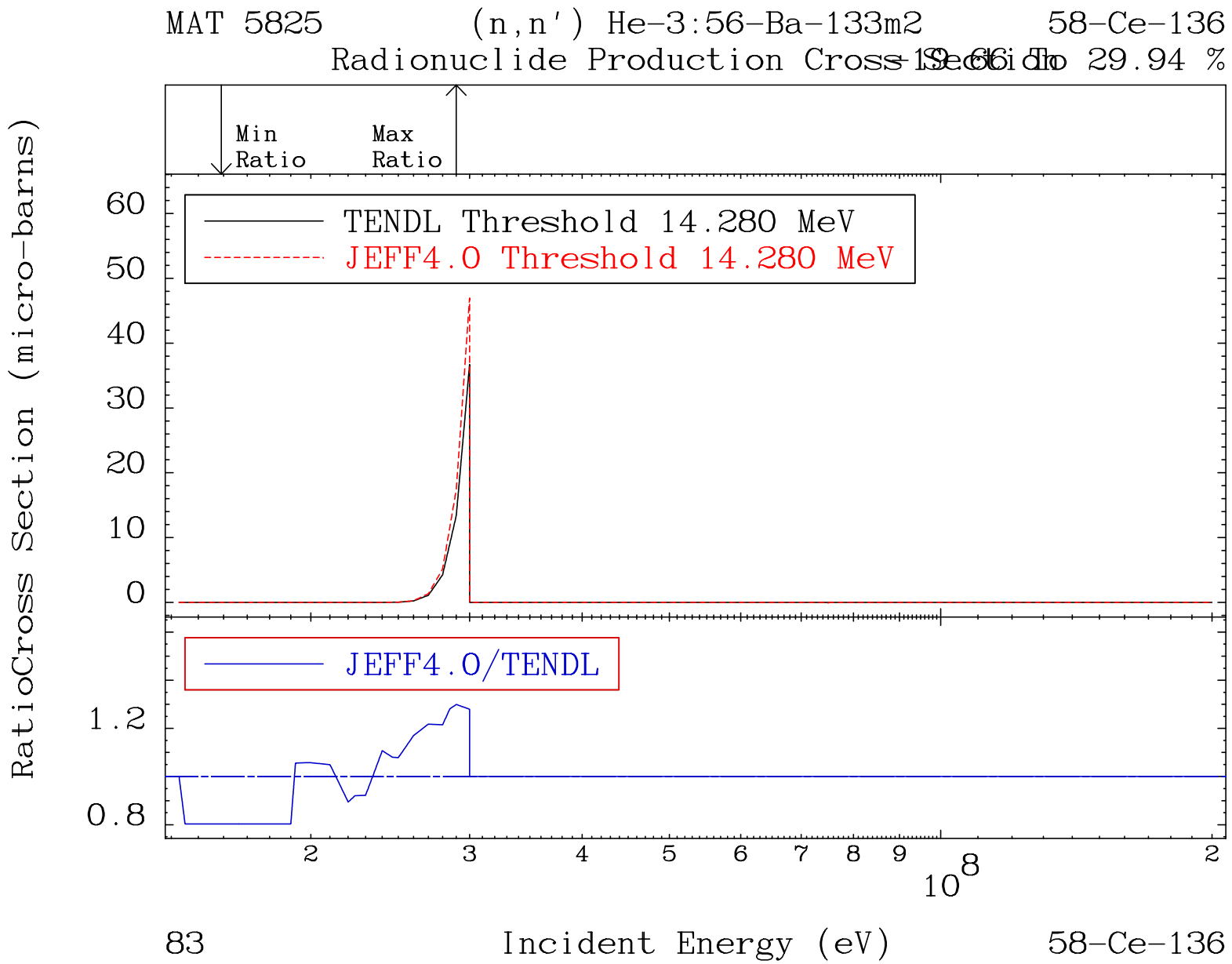

MAT 5825
(n,2n):58-Ce-135g
58-Ce-136
Radionuclide Production Cross Section
-35.8 to 314.5 %
Min Ratio
Max Ratio
TENDL Threshold 10.038 MeV
JEFF4.0 Threshold 10.038 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
0.0
0.2
0.4
0.6
0.8
2
4
6
$10^7$
$10^8$
2
3
4
5
6
7
8
9
2
78
Incident Energy (eV)
58-Ce-136

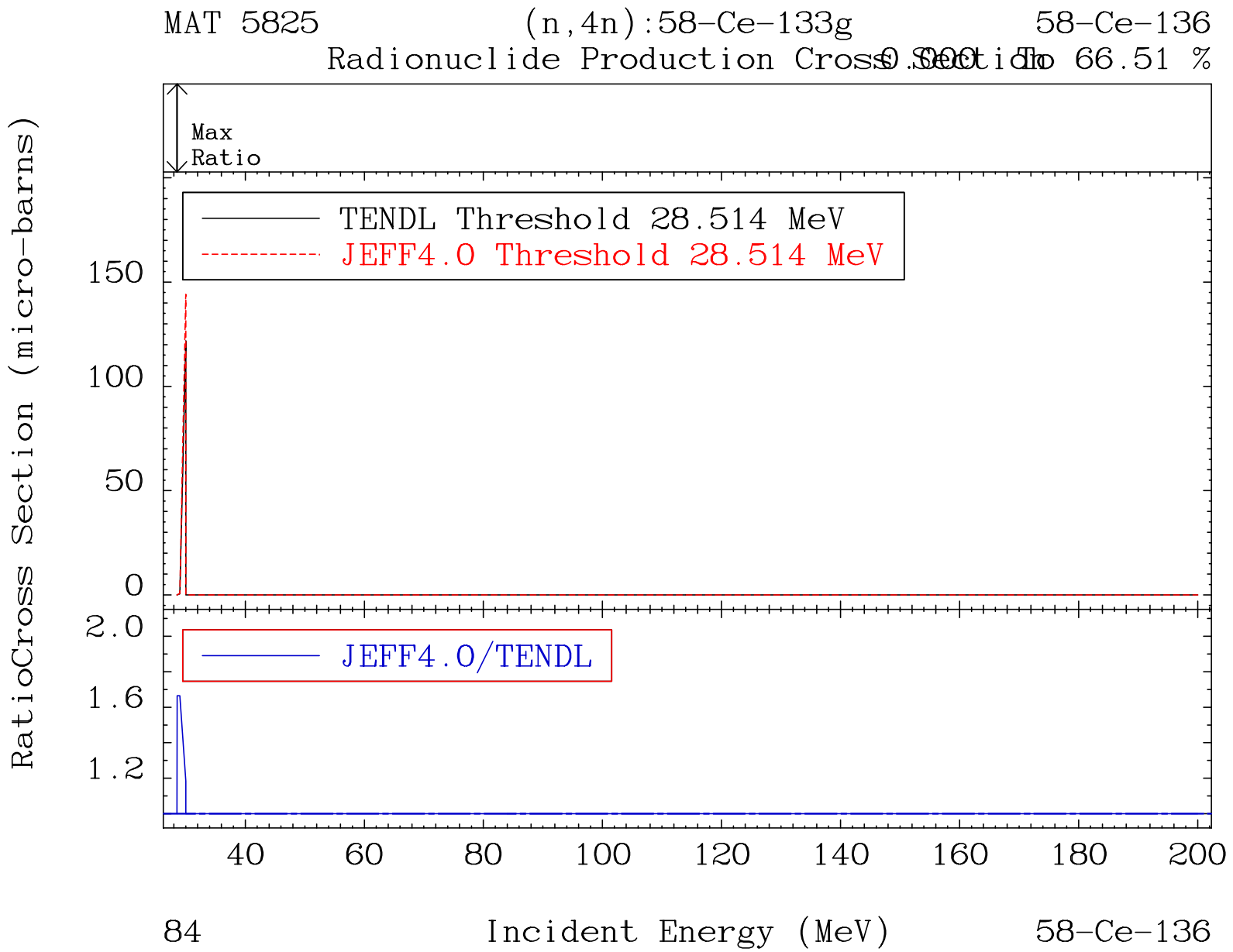

MAT 5825
(n,2n):58-Ce-135m4
58-Ce-136
Radionuclide Production Cross Section To 96.65 %
Min Ratio
Max Ratio
TENDL Threshold 10.487 MeV
JEFF4.0 Threshold 10.487 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF4.0/TENDL
Ratio
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
79
Incident Energy (eV)
58-Ce-136

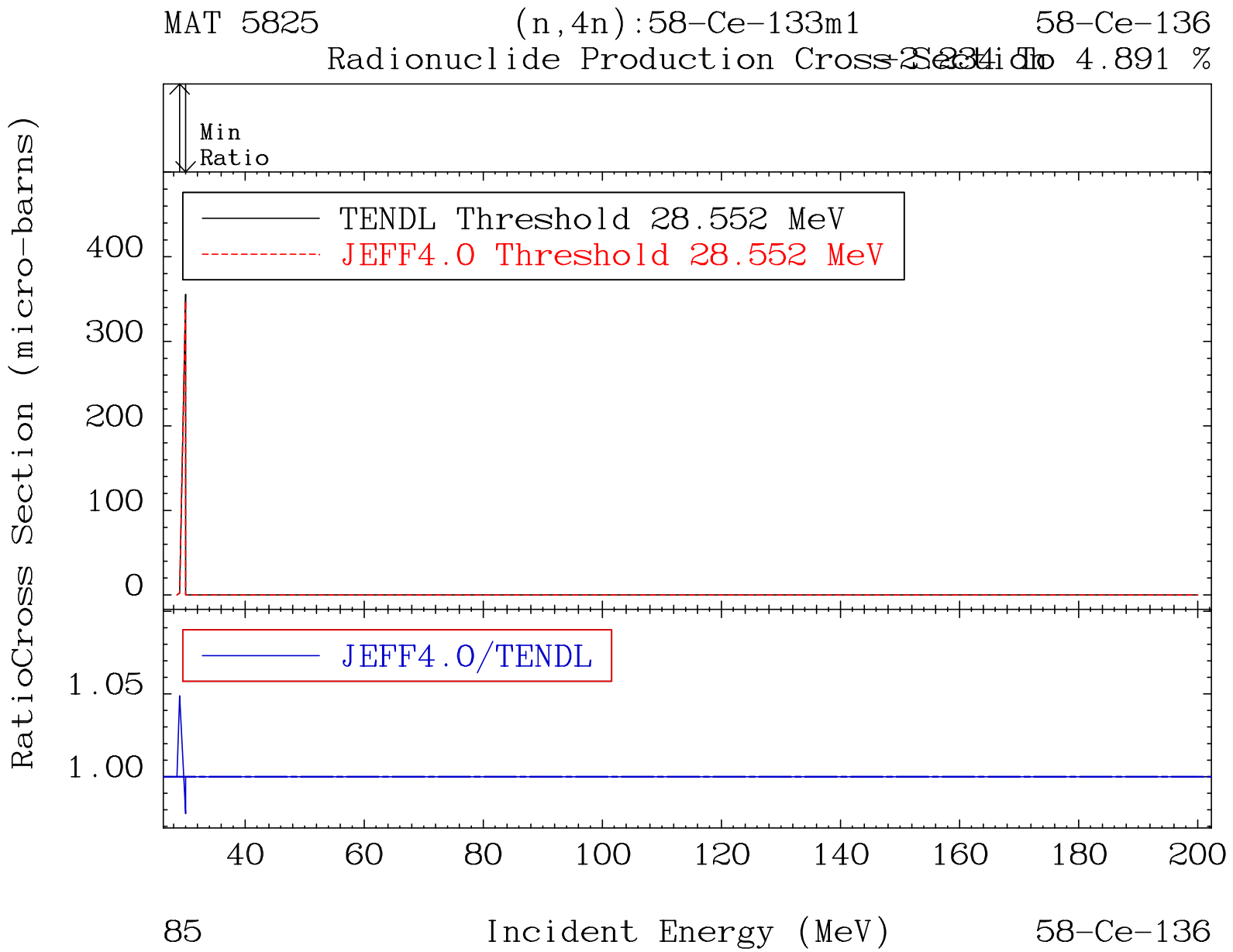

MAT 5825
(n,2n) α:56-Ba-131g
58-Ce-136
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 10.402 MeV
JEFF4.0 Threshold 10.402 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
80
58-Ce-136

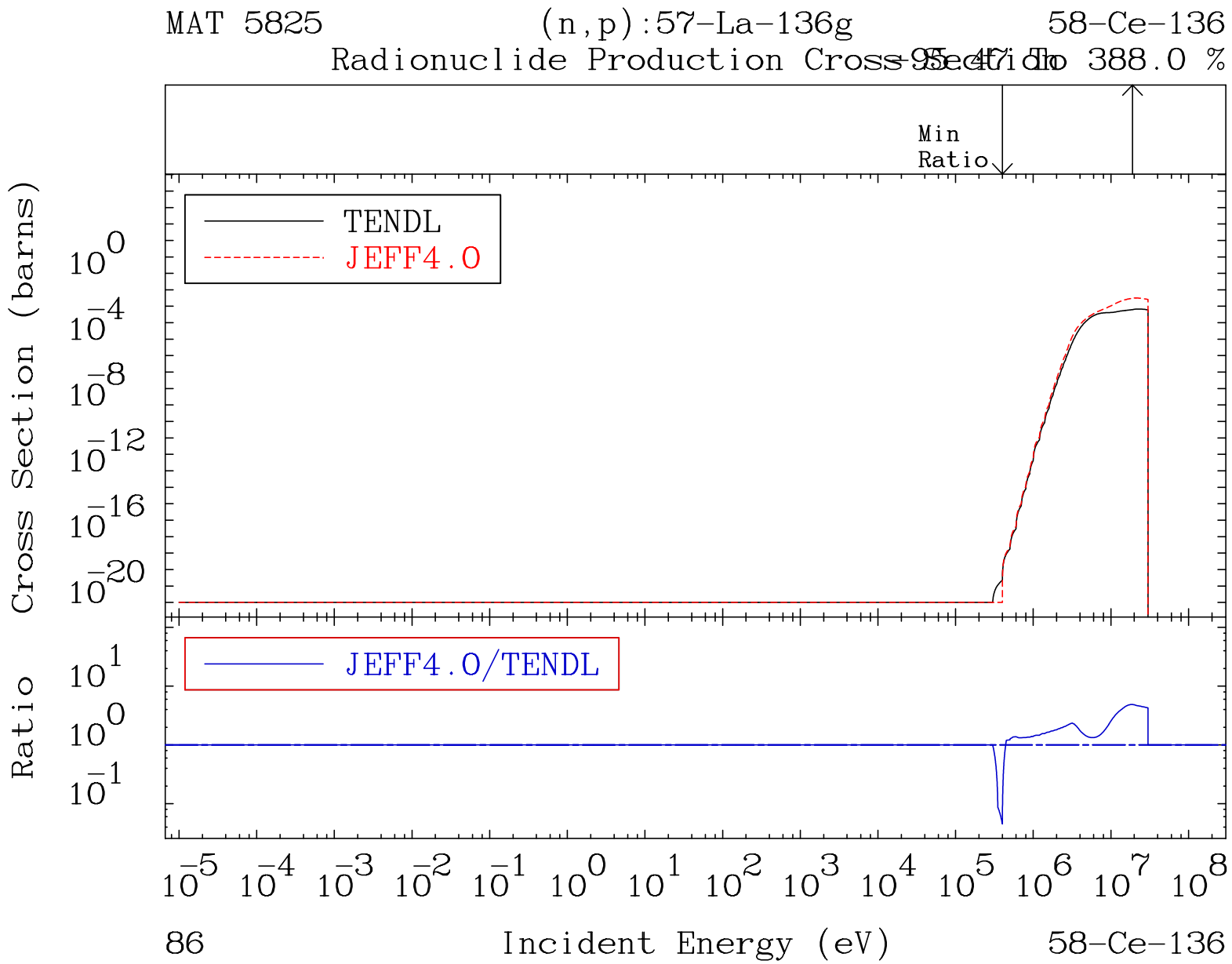

MAT 5825
(n,2n) α:56-Ba-131m2
58-Ce-136
Radionuclide Production Cross Section To 0.000 %
Min
Ratio
TENDL Threshold 15.000 MeV
JEFF4.0 Threshold 15.000 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
58-Ce-136

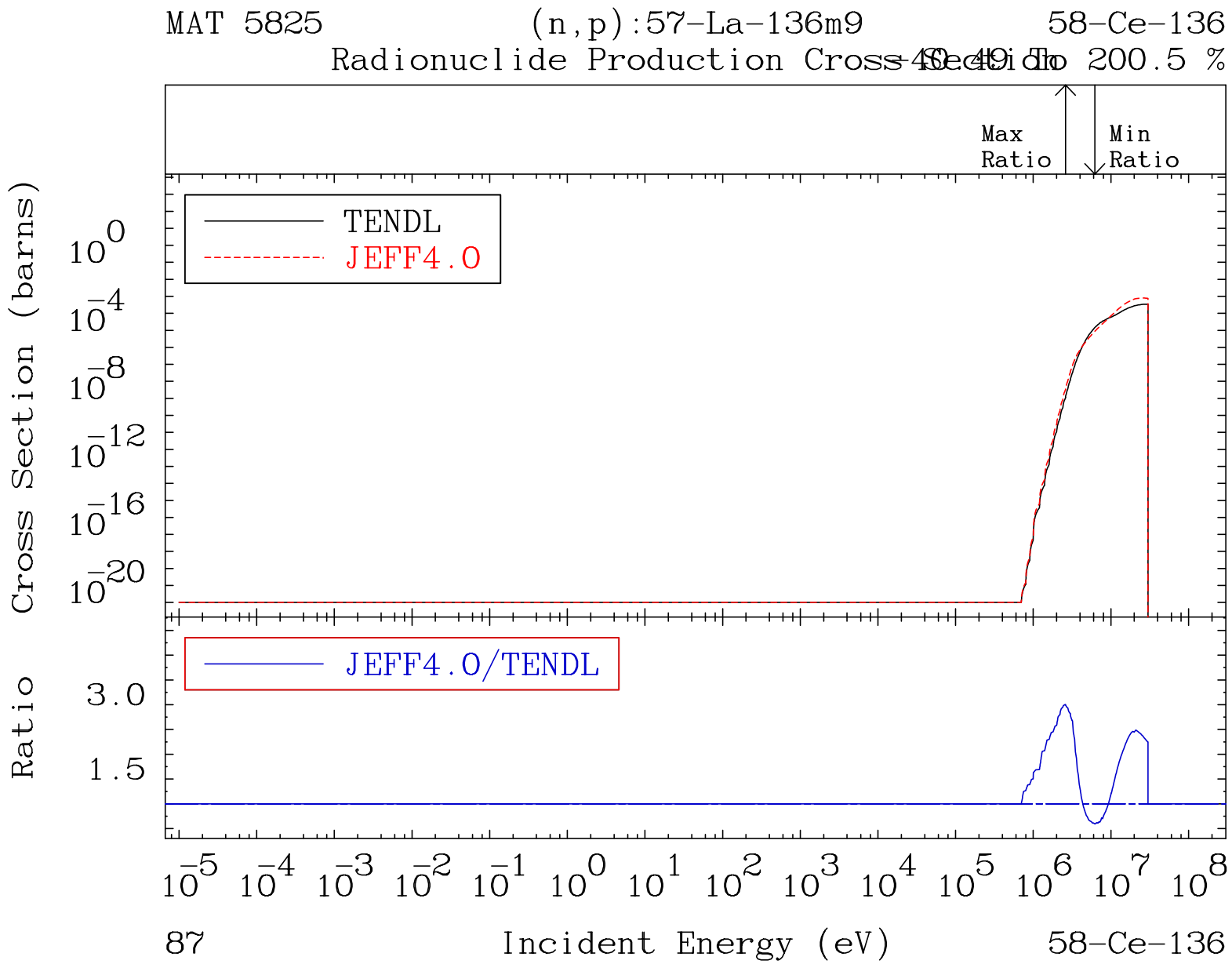

MAT 5825
(n,n') He-3:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section To 53.39 %
Min Ratio
Max Ratio
TENDL Threshold 13.989 MeV
JEFF4.0 Threshold 13.989 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
60
40
20
0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
58-Ce-136

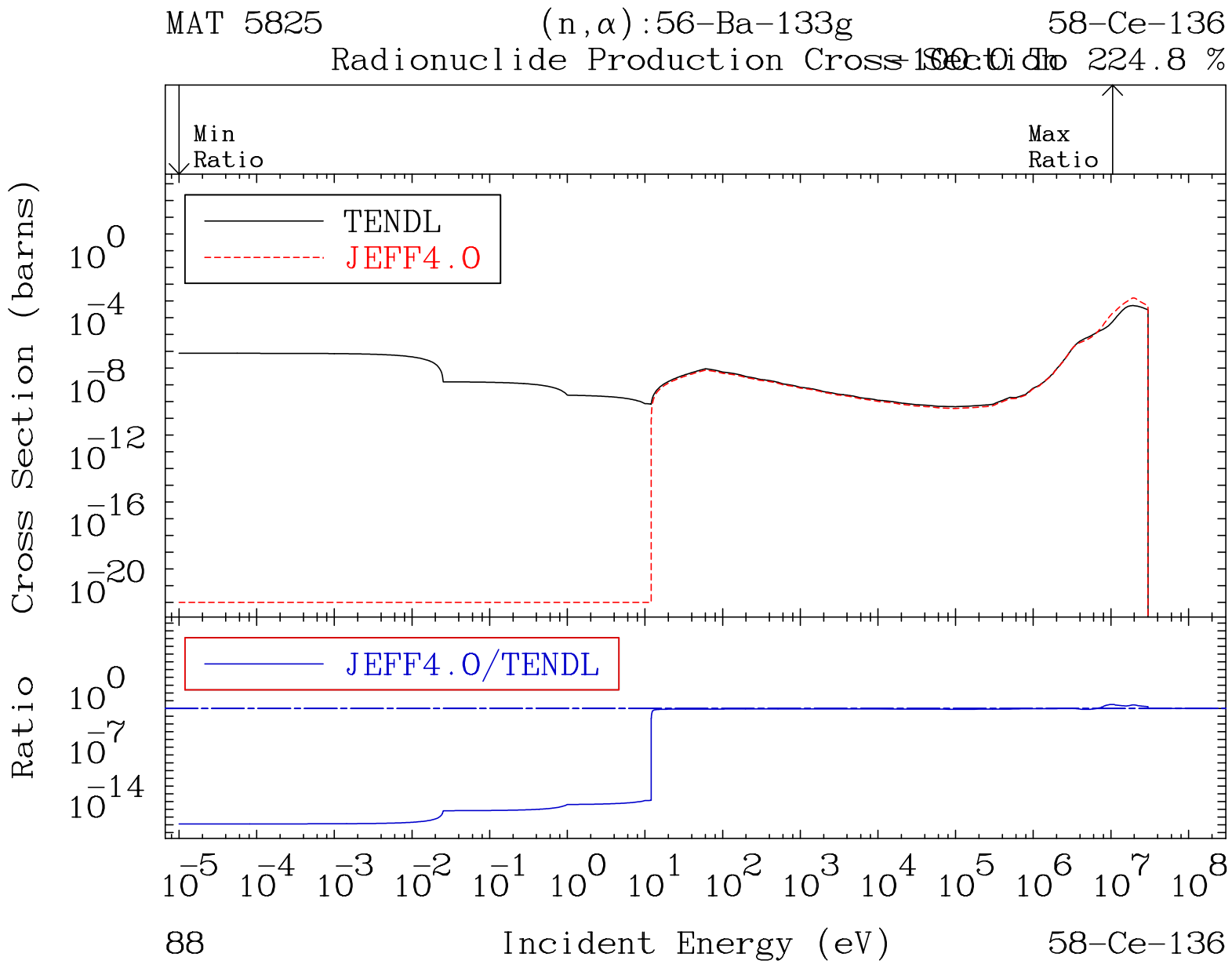

MAT 5825
(n,n') He-3:56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 14.280 MeV
JEFF4.0 Threshold 14.280 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
83
58-Ce-136

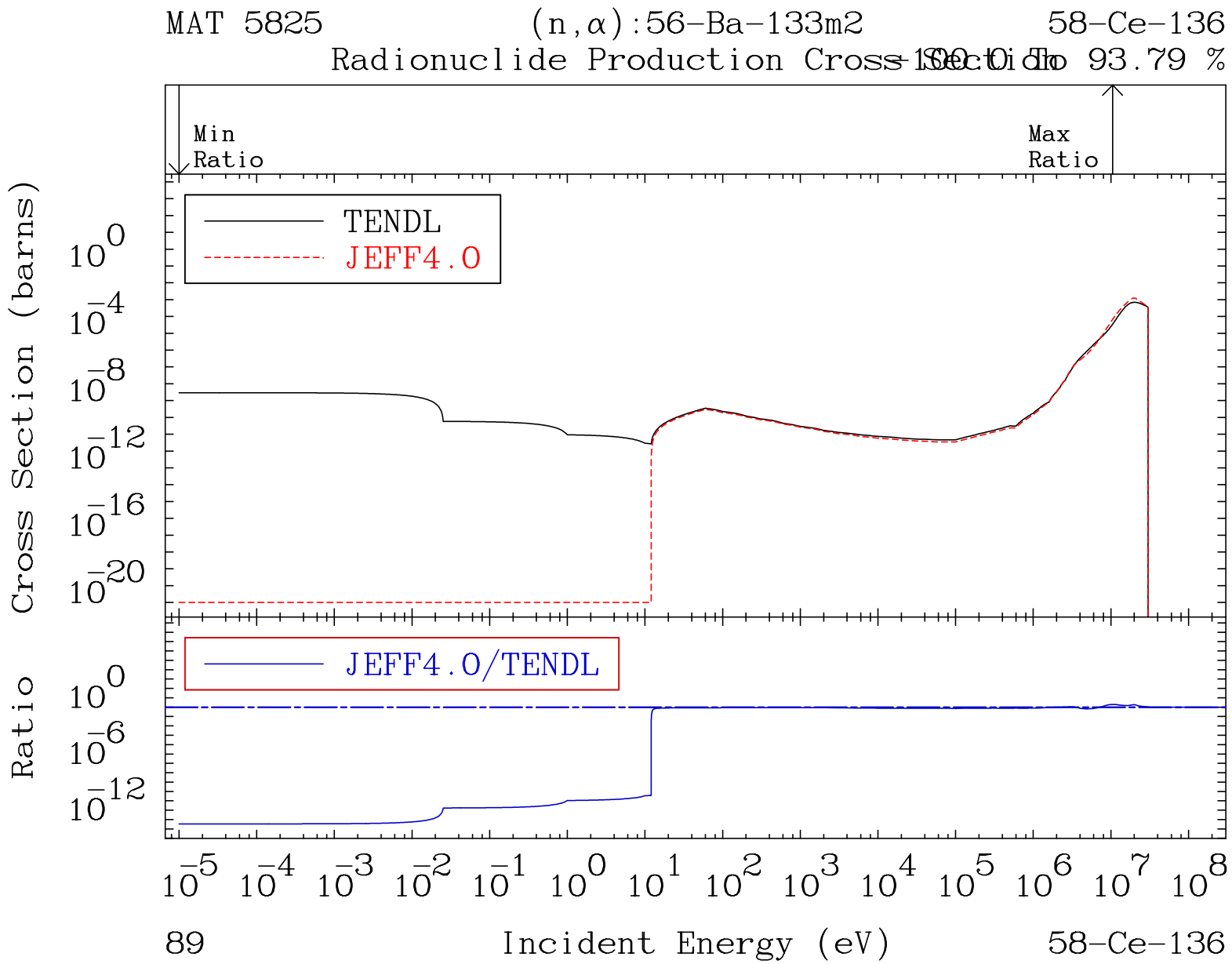

MAT 5825
(n,4n):58-Ce-133g
58-Ce-136
Radionuclide Production Cross Section
0.000 To 66.51 %
Max
Ratio
TENDL Threshold 28.514 MeV
JEFF4.0 Threshold 28.514 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
150
100
50
0
2.0
1.6
1.2
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
58-Ce-136

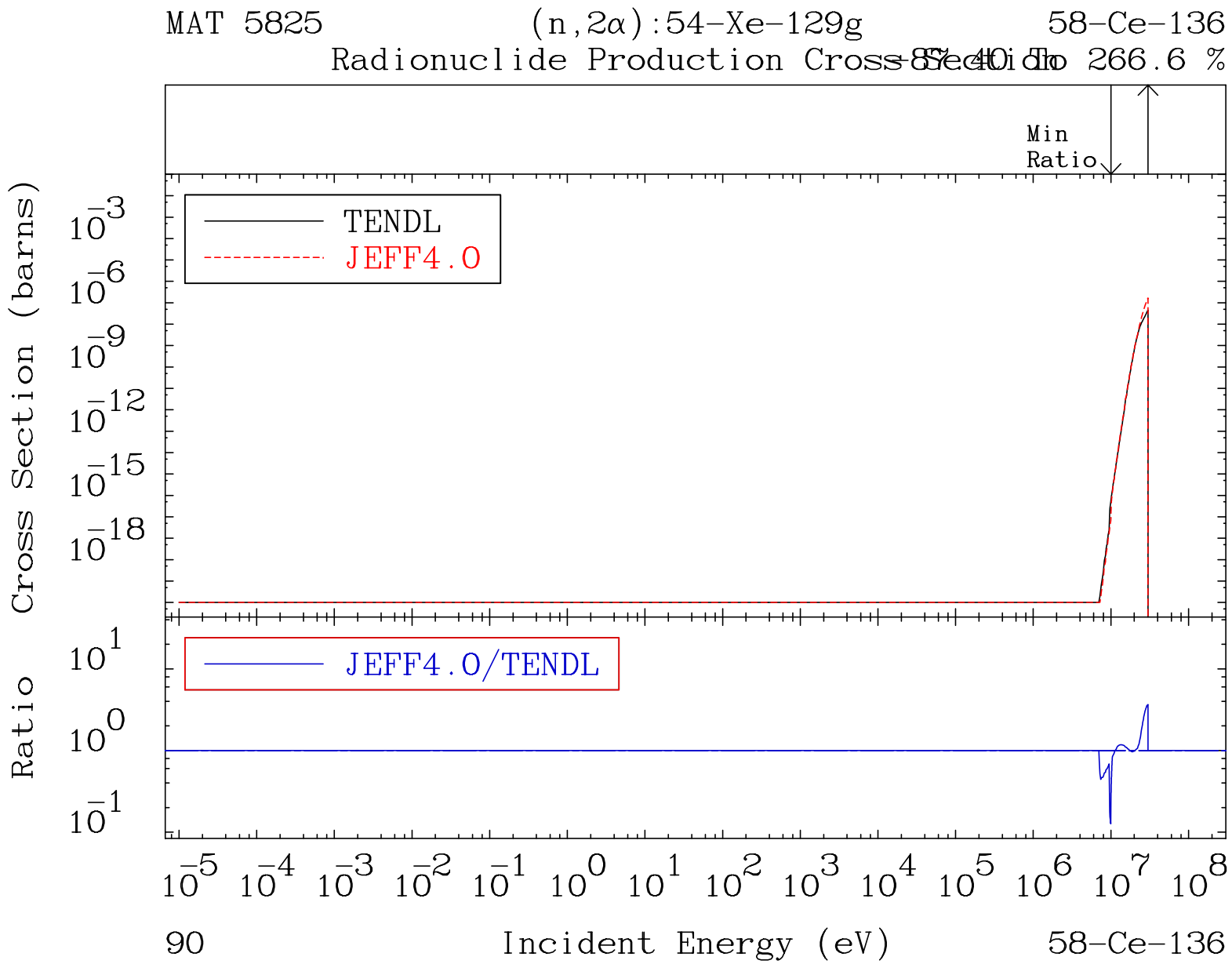

MAT 5825
(n,4n):58-Ce-133m1
58-Ce-136
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 28.552 MeV
JEFF4.0 Threshold 28.552 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
1.05
1.00
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
58-Ce-136

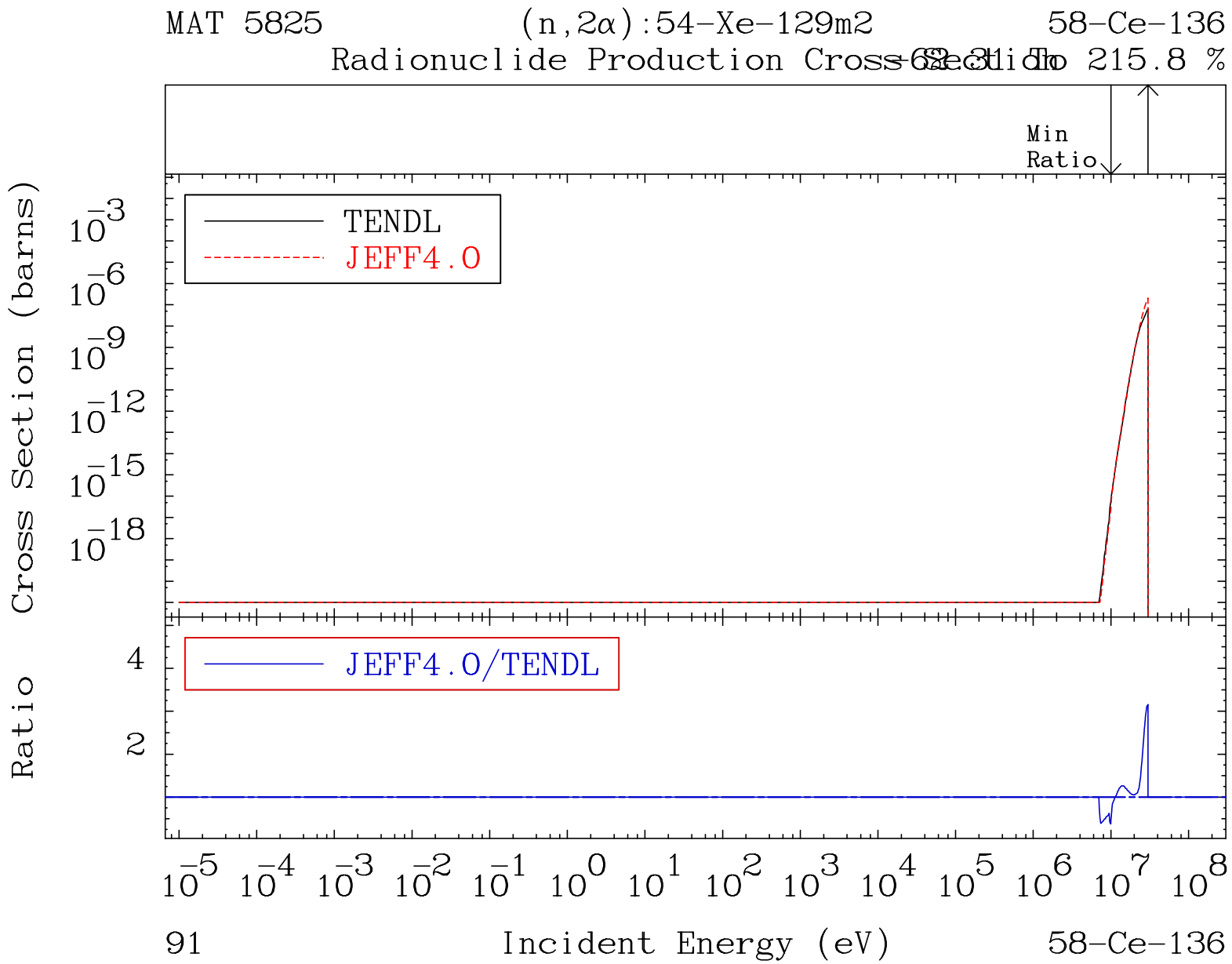

MAT 5825
(n,p):57-La-136g
58-Ce-136
Radionuclide Production Cross Section
-95.47 To 388.0 %
Min
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
86
58-Ce-136

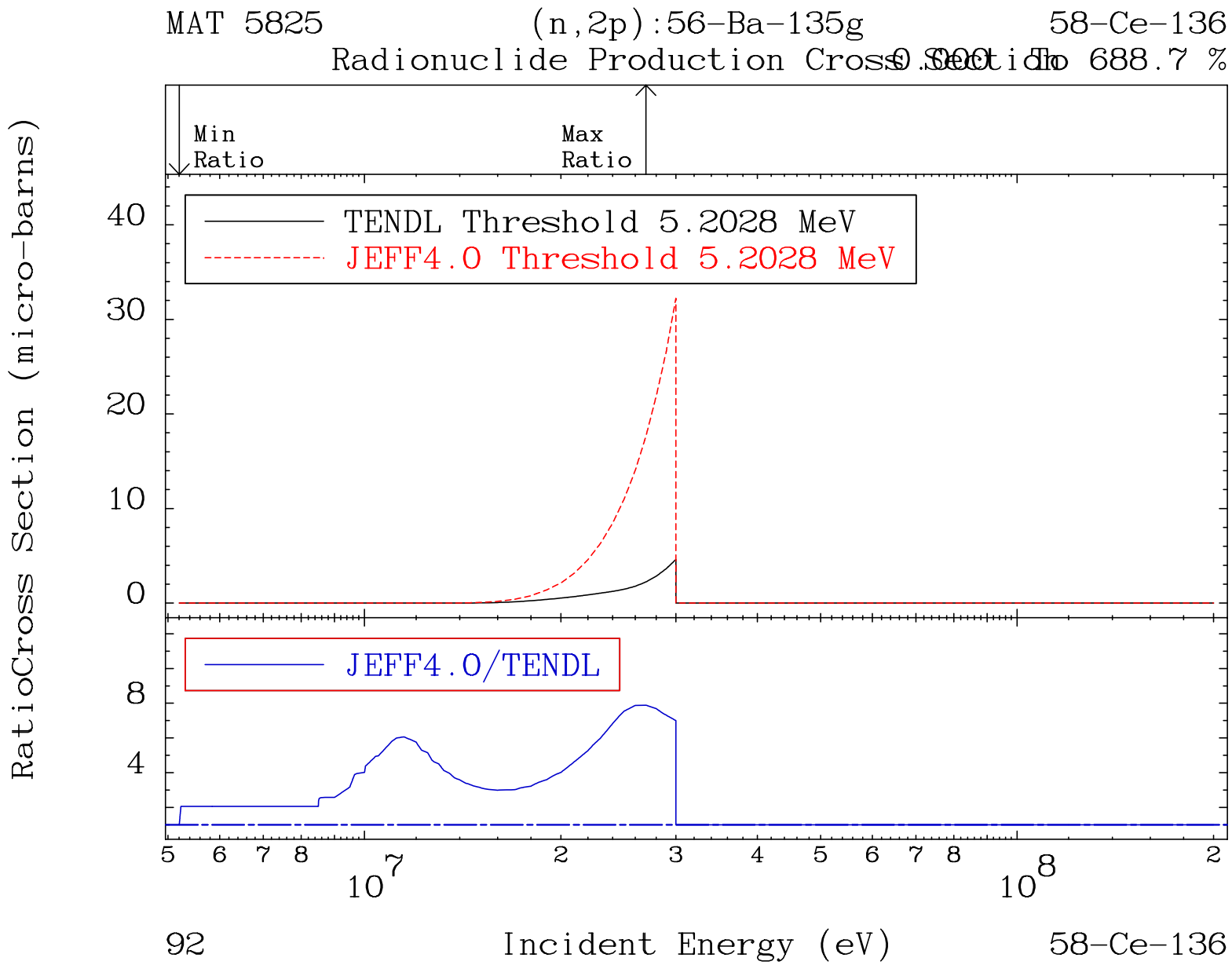

MAT 5825
(n,p):57-La-136m9
58-Ce-136
Radionuclide Production Cross Section To 200.5 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
87
58-Ce-136

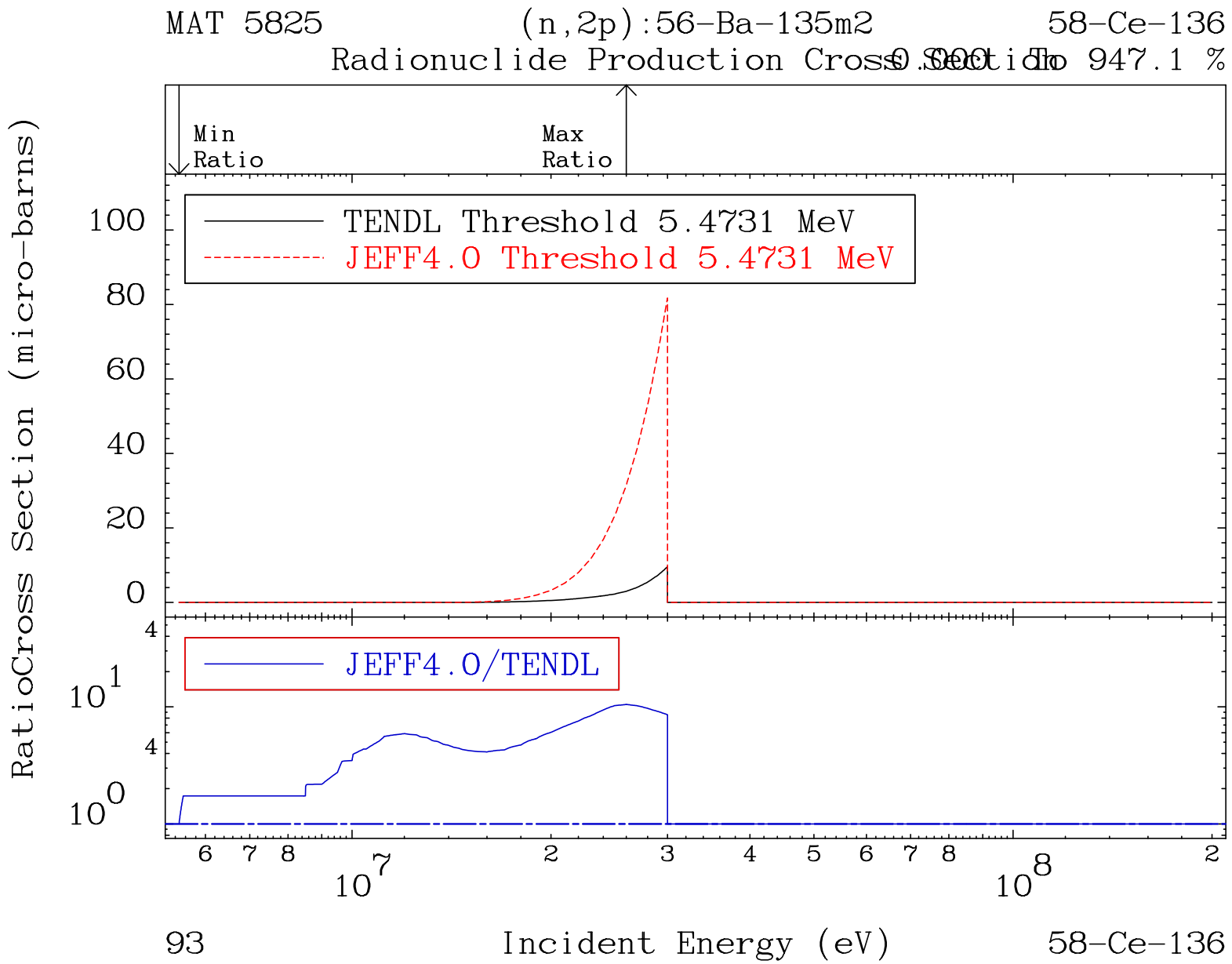

MAT 5825
(n,α):56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
88
58-Ce-136

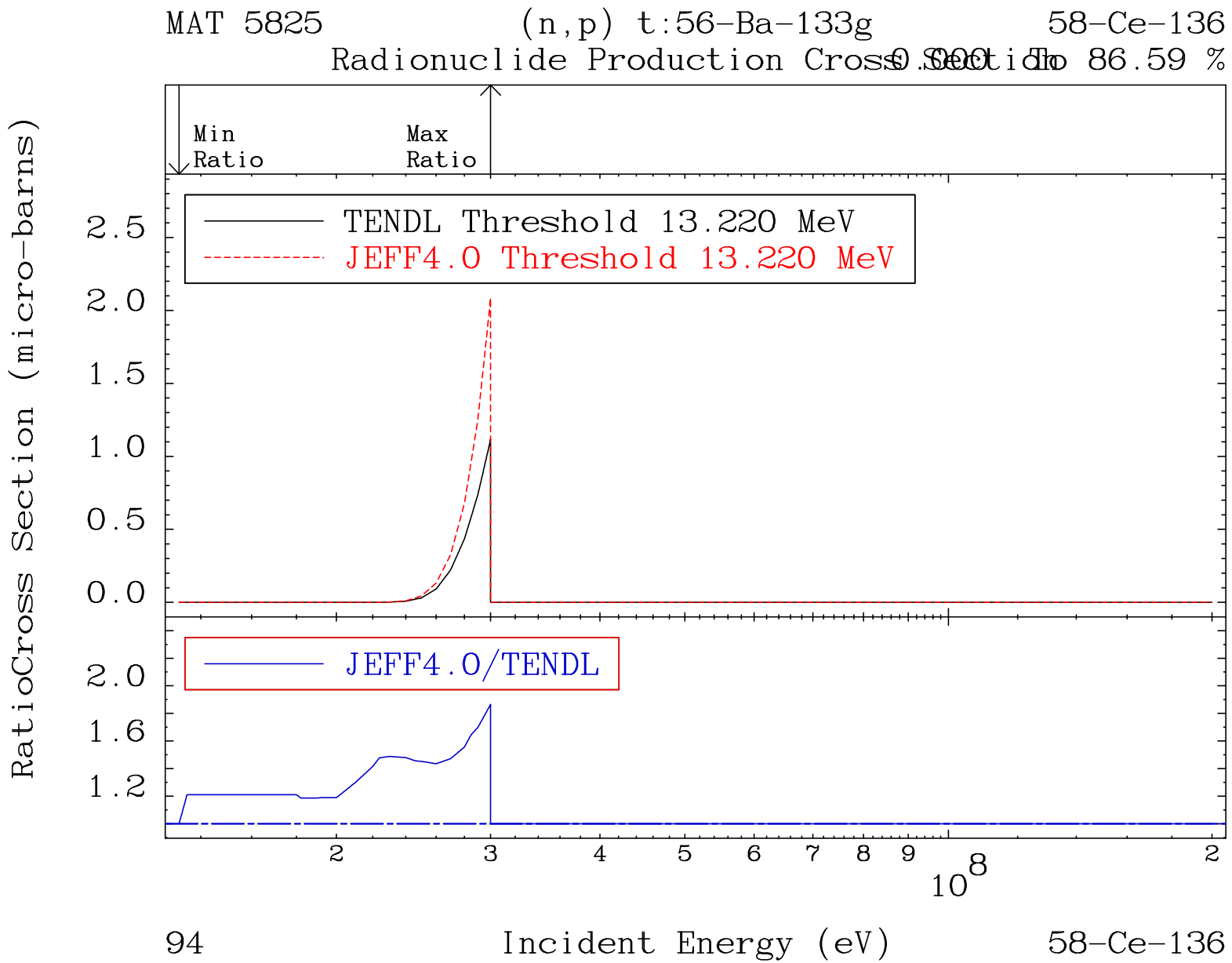

MAT 5825
(n,α):56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section To 93.79 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
89
58-Ce-136

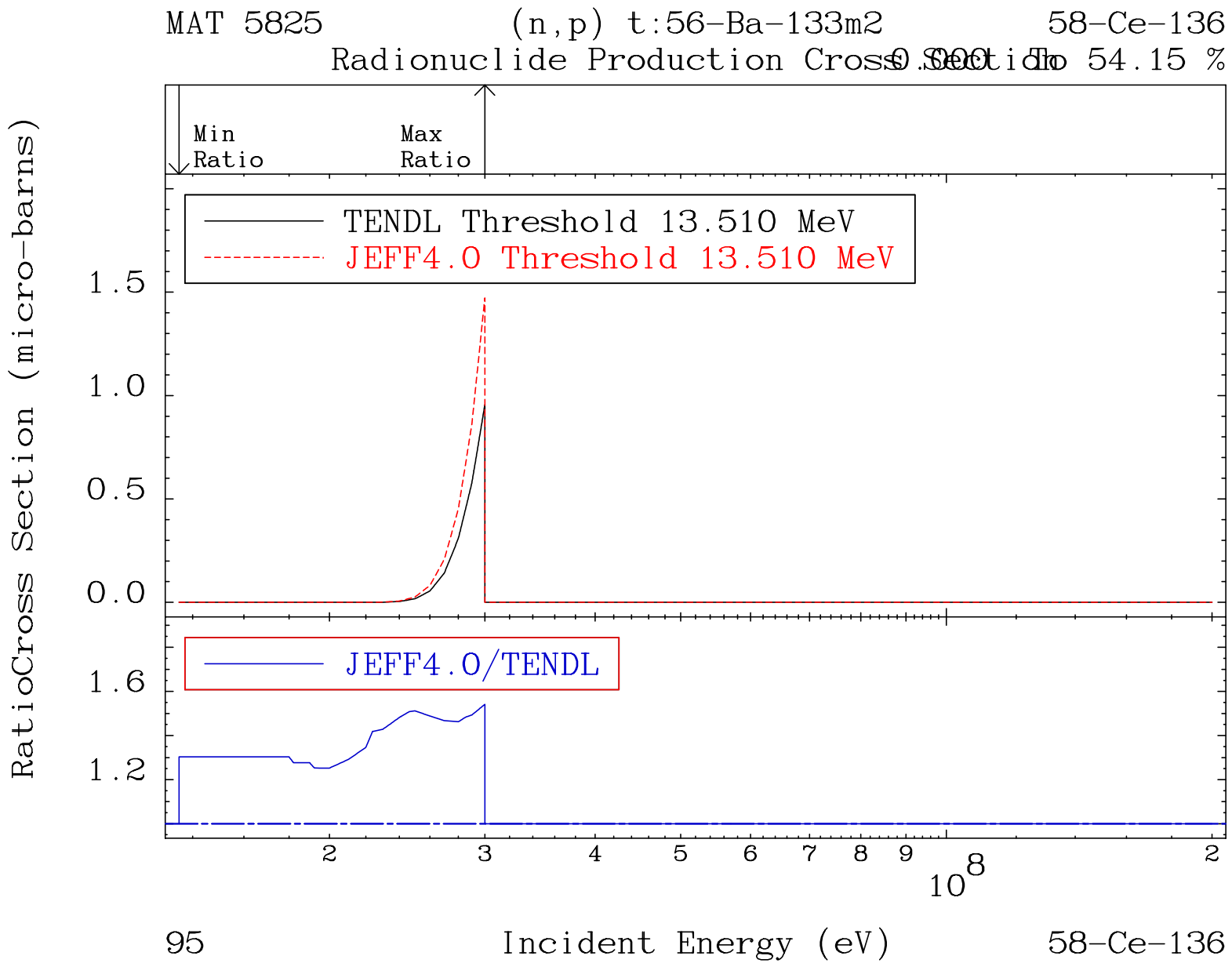

MAT 5825
(n,2α):54-Xe-129g
58-Ce-136
Radionuclide Production Cross Section To 266.6 %
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
90
58-Ce-136


MAT 5825
(n,2α):54-Xe-129m2
58-Ce-136
Radionuclide Production Cross Section
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
91
58-Ce-136


MAT 5825
(n,2p):56-Ba-135g
58-Ce-136
Radionuclide Production Cross Section
0.000 To 688.7 %
Min Ratio
Max Ratio
TENDL Threshold 5.2028 MeV
JEFF4.0 Threshold 5.2028 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
92
58-Ce-136


MAT 5825
(n,2p):56-Ba-135m2
58-Ce-136
Radionuclide Production Cross Section
0.000 To 947.1 %
Min Ratio
Max Ratio
TENDL Threshold 5.4731 MeV
JEFF4.0 Threshold 5.4731 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
4
$10^1$
4
$10^0$
6 7 8
$10^7$
2 3 4 5 6 7 8
$10^8$
2
93
Incident Energy (eV)
58-Ce-136


MAT 5825
(n,p) t:56-Ba-133g
58-Ce-136
Radionuclide Production Cross Section
0.000 To 86.59 %
Min Ratio
Max Ratio
TENDL Threshold 13.220 MeV
JEFF4.0 Threshold 13.220 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
58-Ce-136


MAT 5825
(n,p) t:56-Ba-133m2
58-Ce-136
Radionuclide Production Cross Section
0.000 To 54.15 %
Min Ratio
Max Ratio
TENDL Threshold 13.510 MeV
JEFF4.0 Threshold 13.510 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
1.5
1.0
0.5
0.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
58-Ce-136