Program Complot
(Version 2018-1)
by
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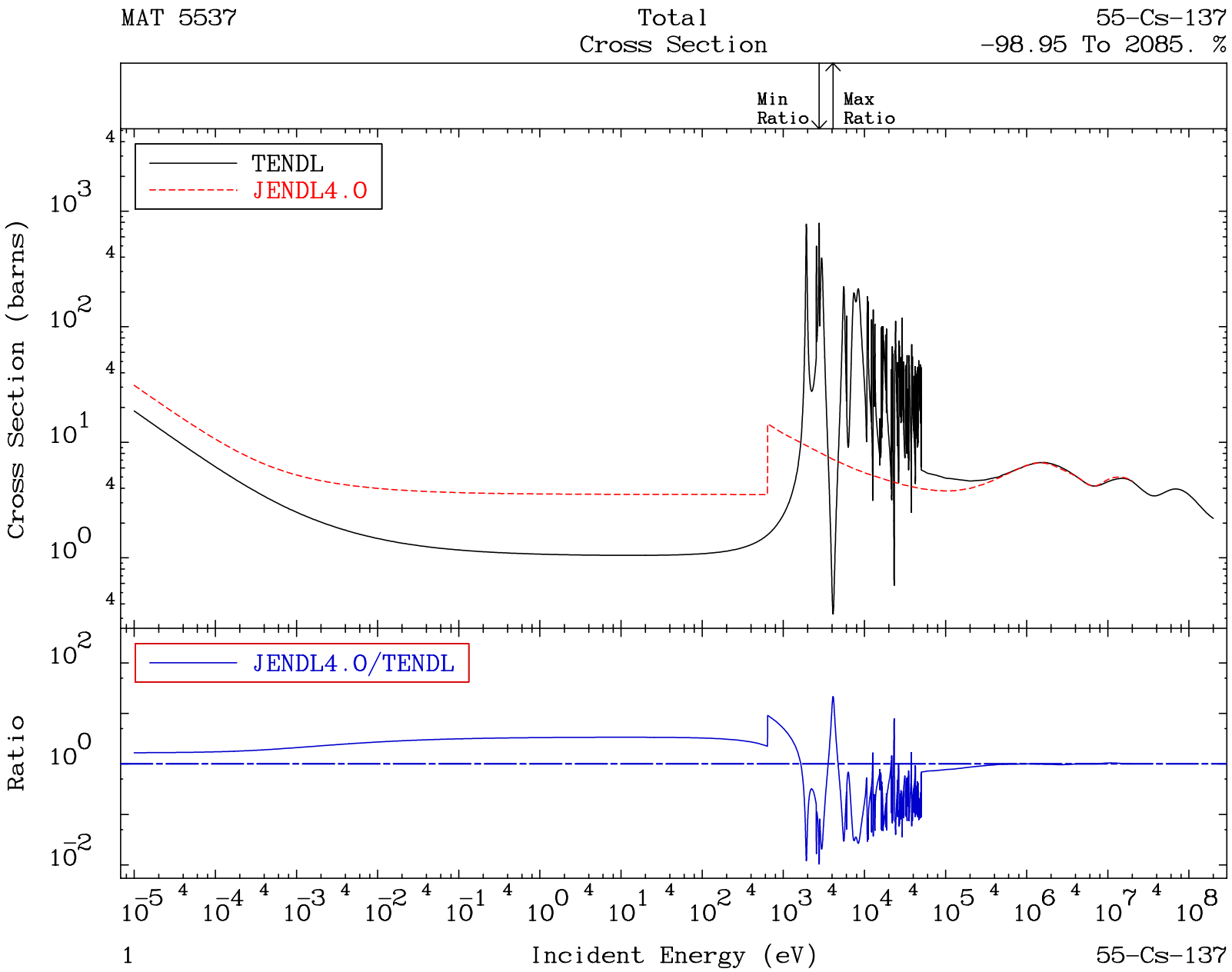
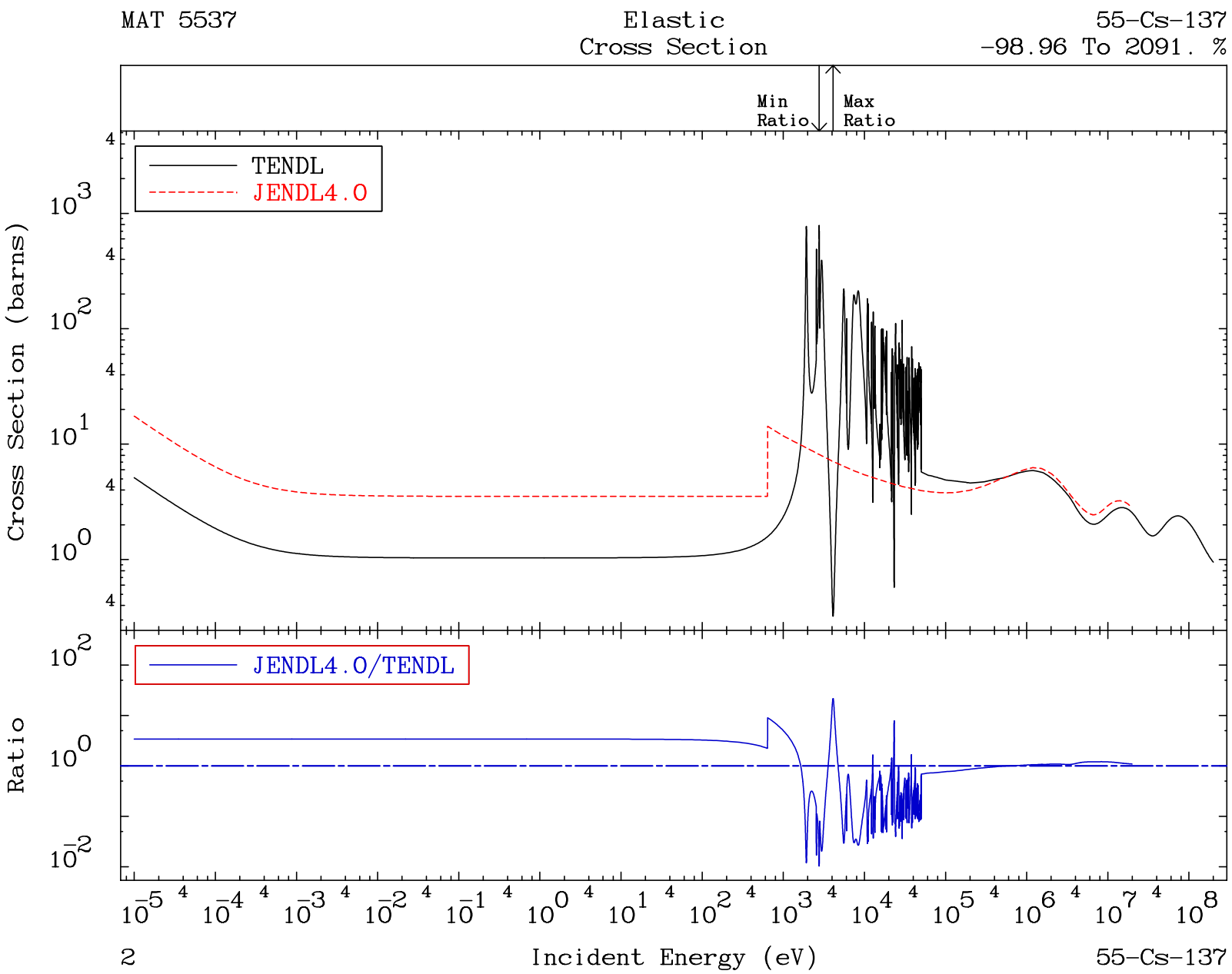
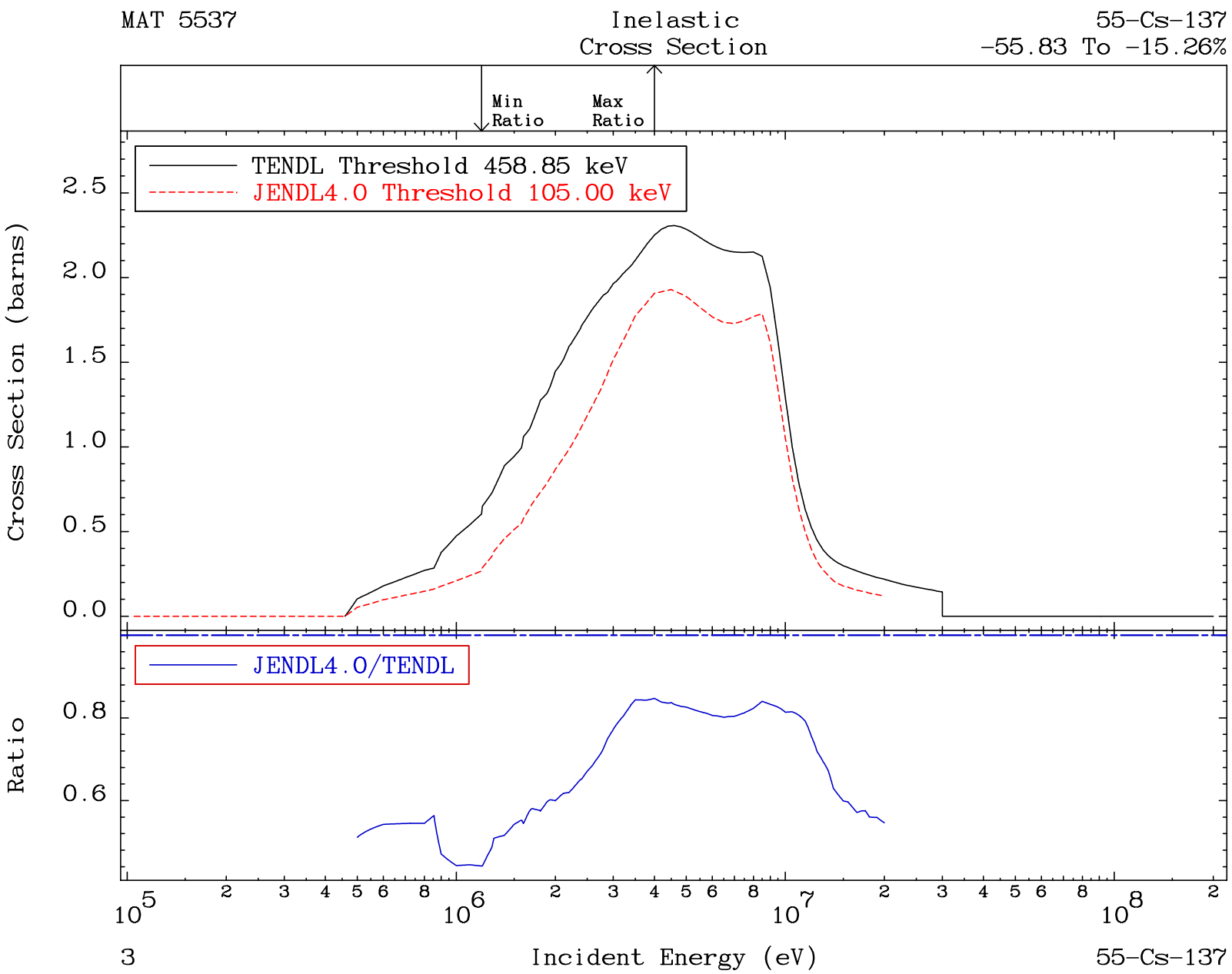
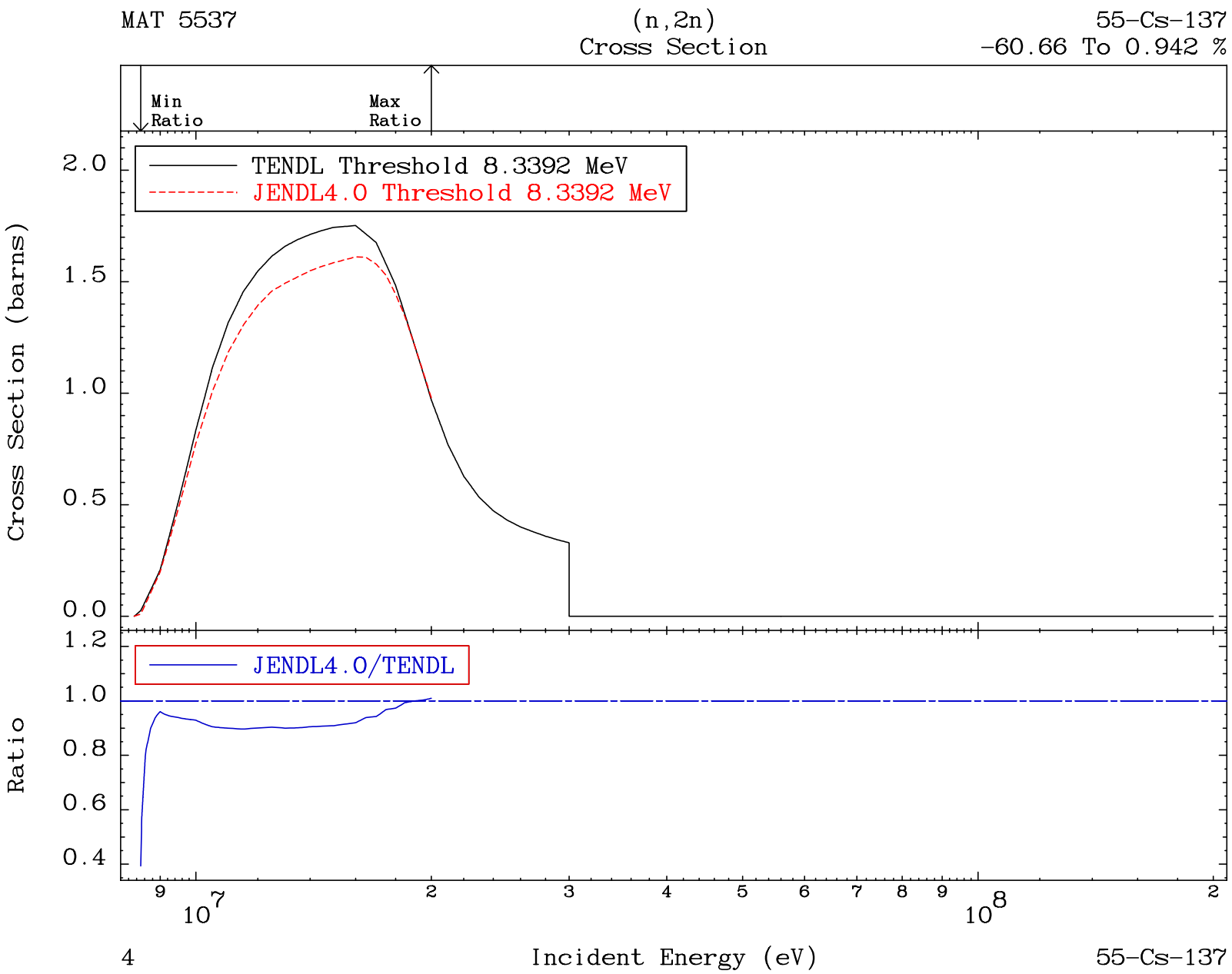
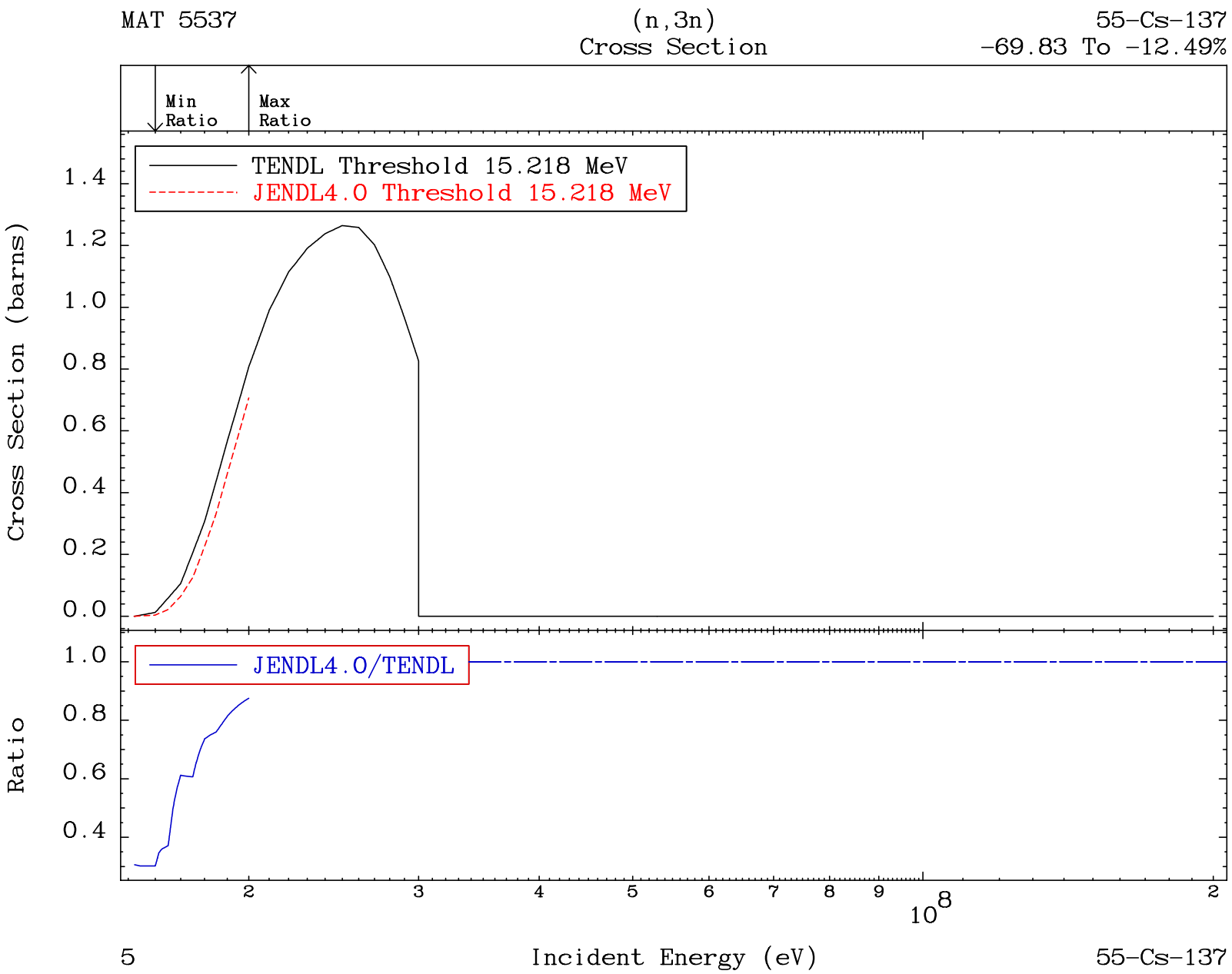
Press Mouse Button to Start

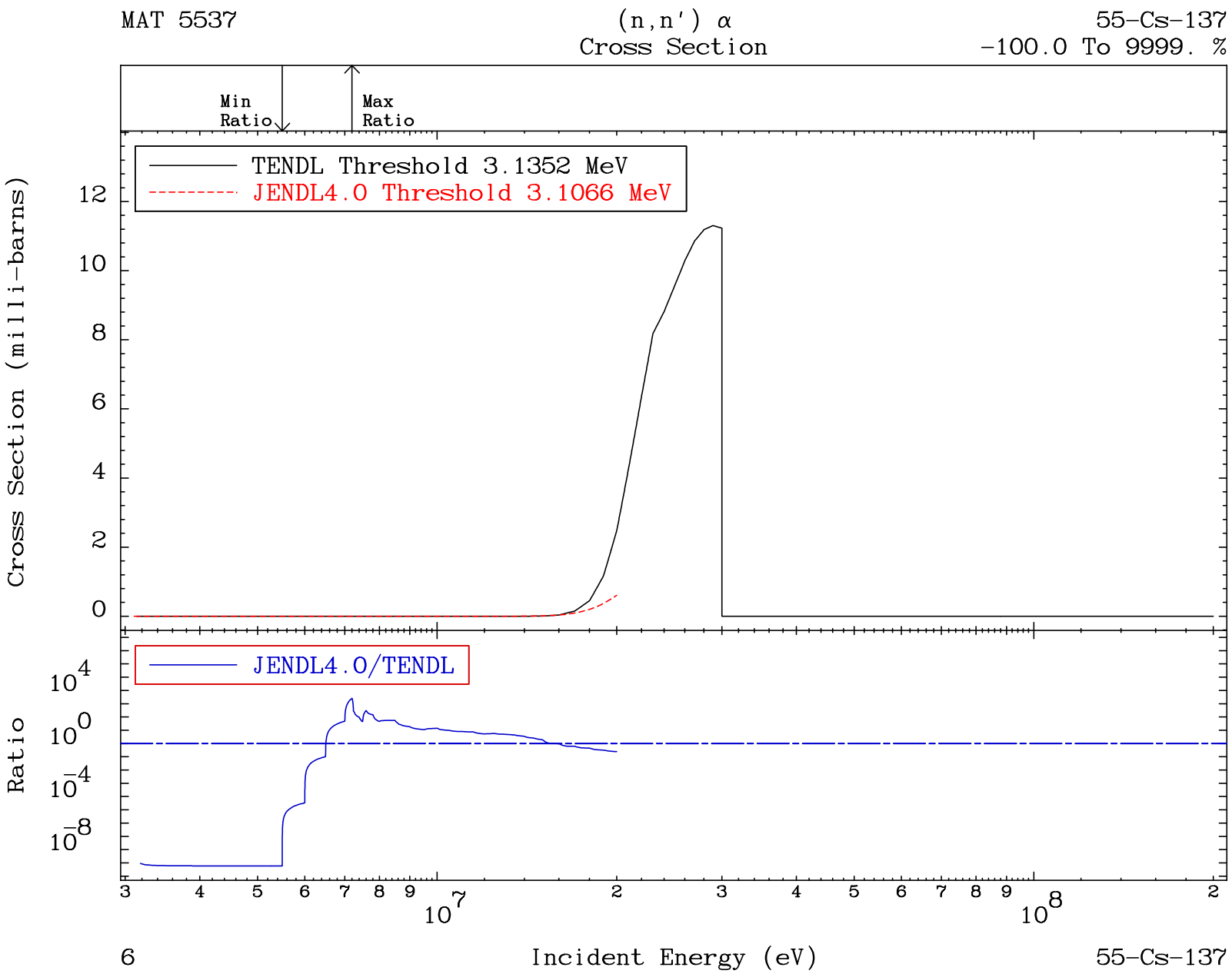

MAT 5537
Total
Cross Section
55-Cs-137
-98.95 To 2085. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
55-Cs-137

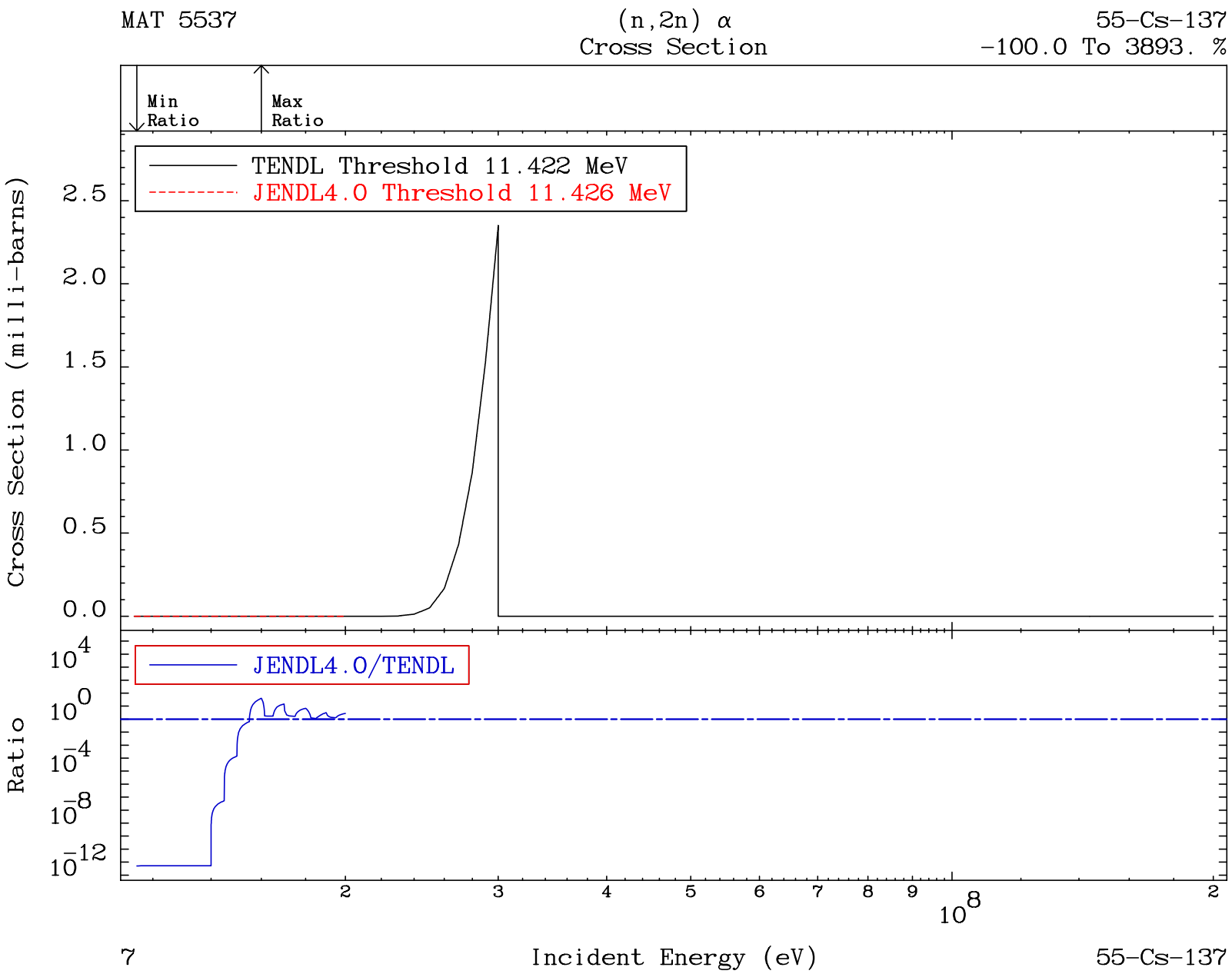

MAT 5537
Elastic
Cross Section
55-Cs-137
-98.96 To 2091. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
55-Cs-137

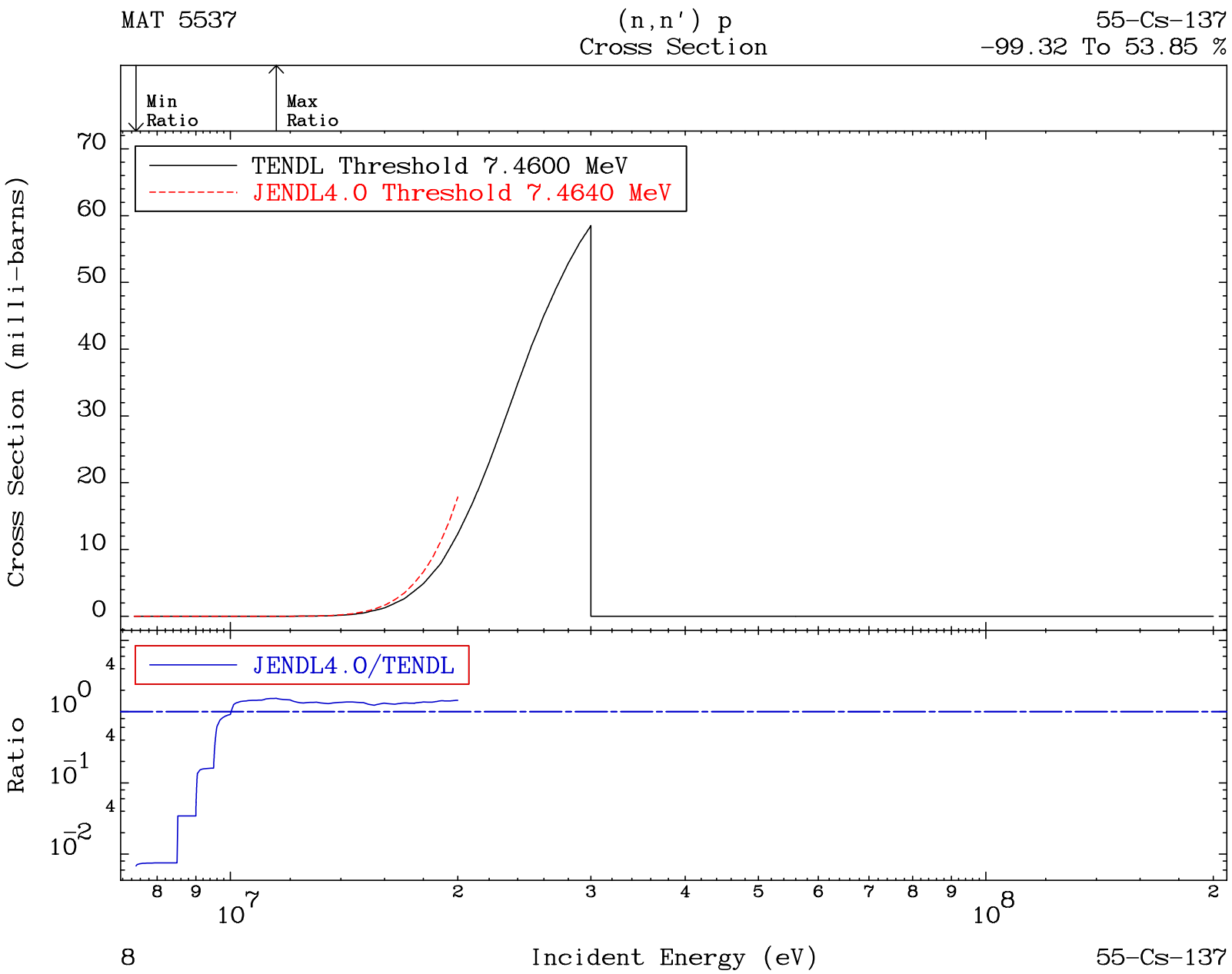

MAT 5537
Inelastic
Cross Section
55-Cs-137
-55.83 To -15.26%
Min
Ratio
Max
Ratio
TENDL Threshold 458.85 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
0.8
0.6
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
55-Cs-137

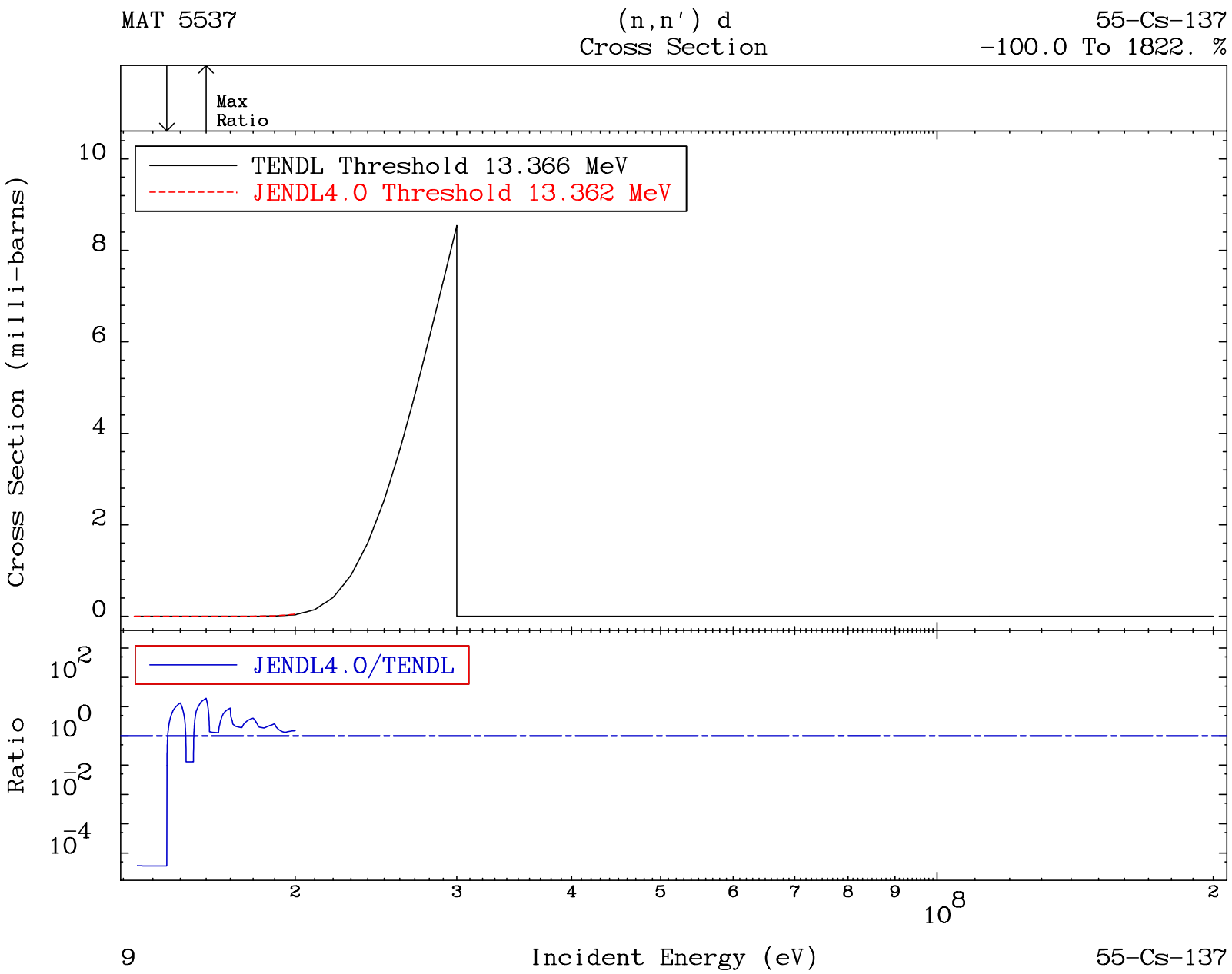

MAT 5537
(n,2n)
Cross Section
55-Cs-137
-60.66 To 0.942 %
Min Ratio
Max Ratio
TENDL Threshold 8.3392 MeV
JENDL4.0 Threshold 8.3392 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
1.2
1.0
0.8
0.6
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
55-Cs-137

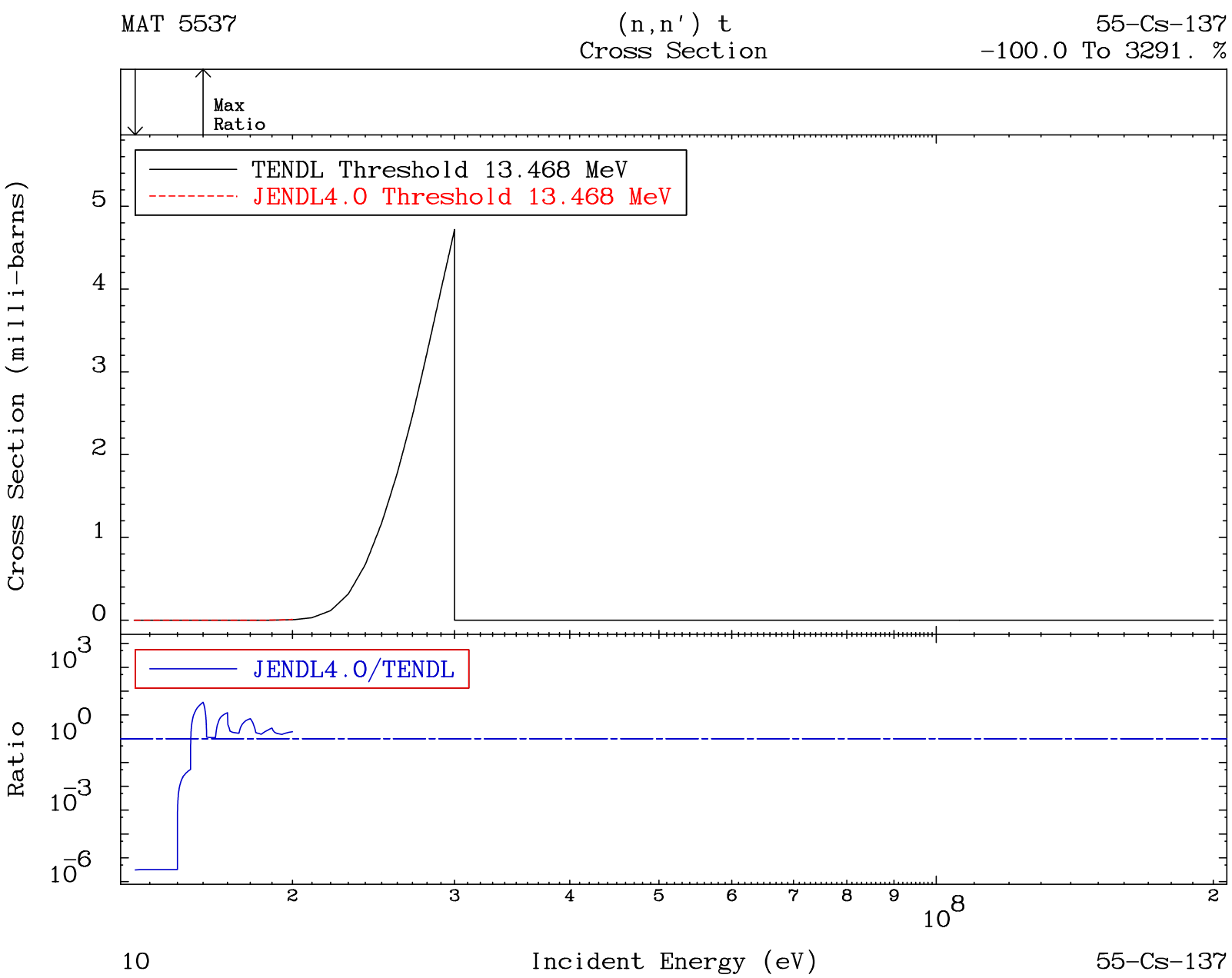

MAT 5537
(n,3n)
Cross Section
55-Cs-137
-69.83 To -12.49%
Min Ratio
Max Ratio
TENDL Threshold 15.218 MeV
JENDL4.0 Threshold 15.218 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
1.0
0.8
0.6
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
55-Cs-137

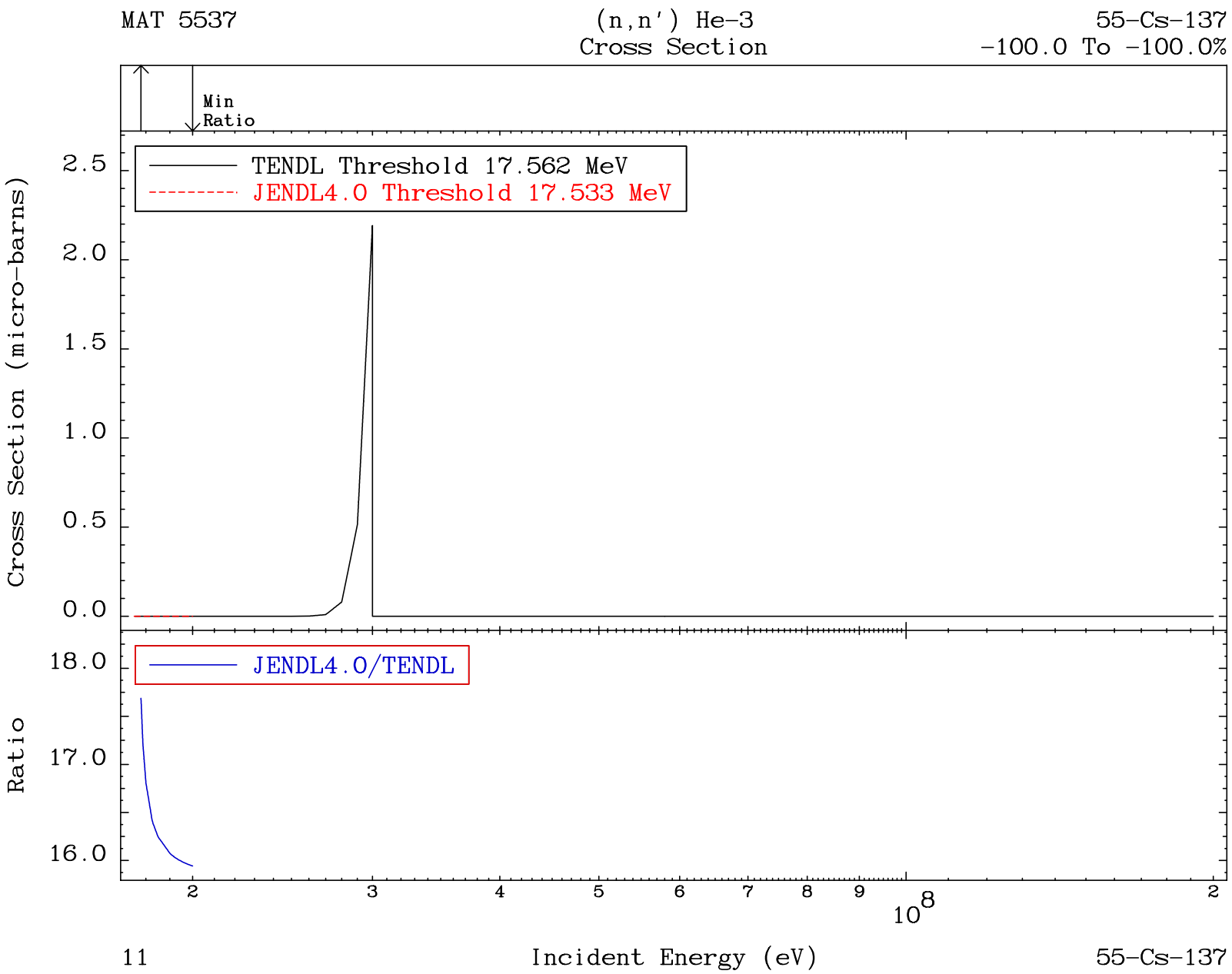

MAT 5537
(n,n') α
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1352 MeV
JENDL4.0 Threshold 3.1066 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
6
55-Cs-137

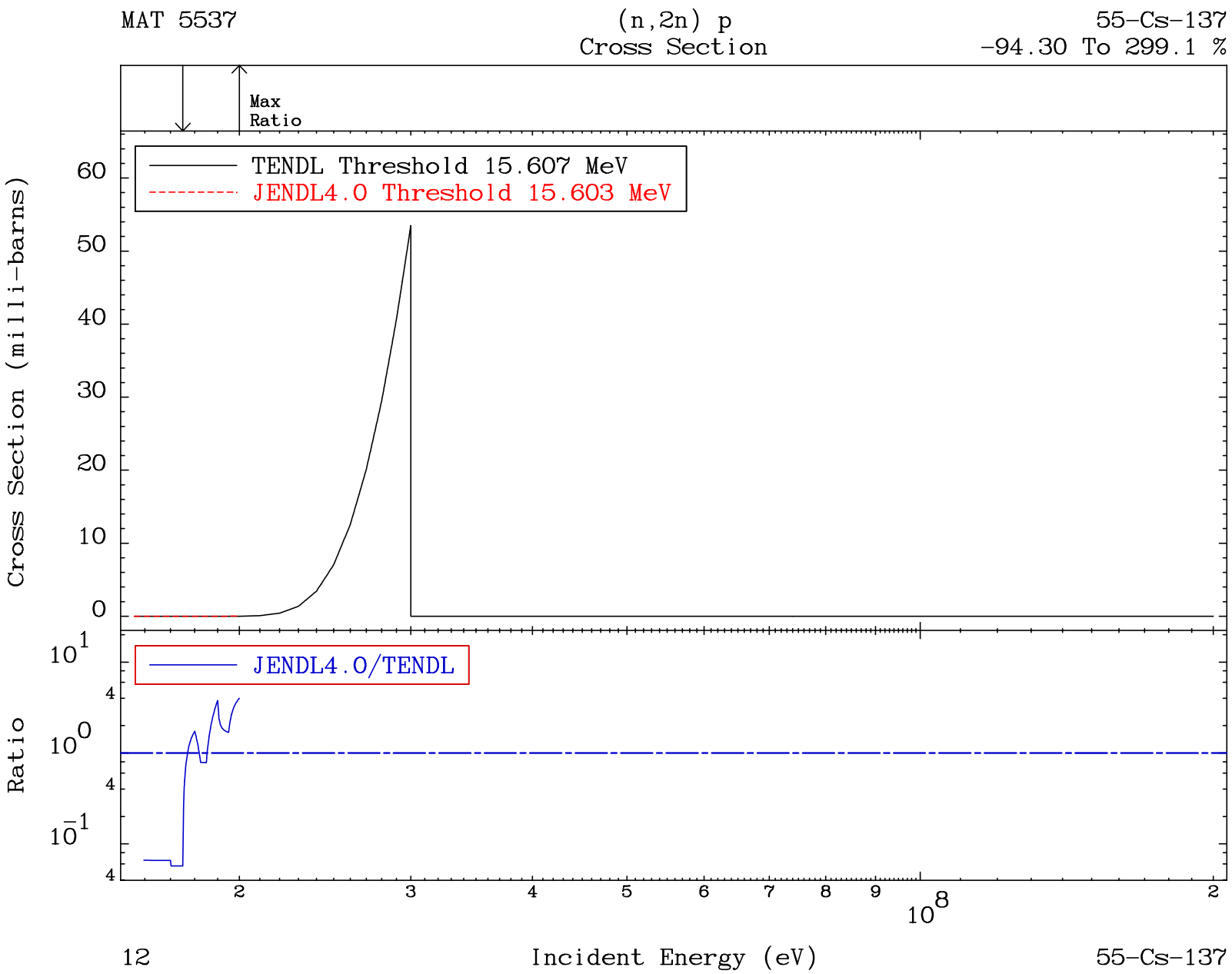

MAT 5537
(n,2n) α
Cross Section
55-Cs-137
-100.0 To 3893. %
Min Ratio
Max Ratio
TENDL Threshold 11.422 MeV
JENDL4.0 Threshold 11.426 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^4
10^0
10^-4
10^-8
10^-12
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
55-Cs-137

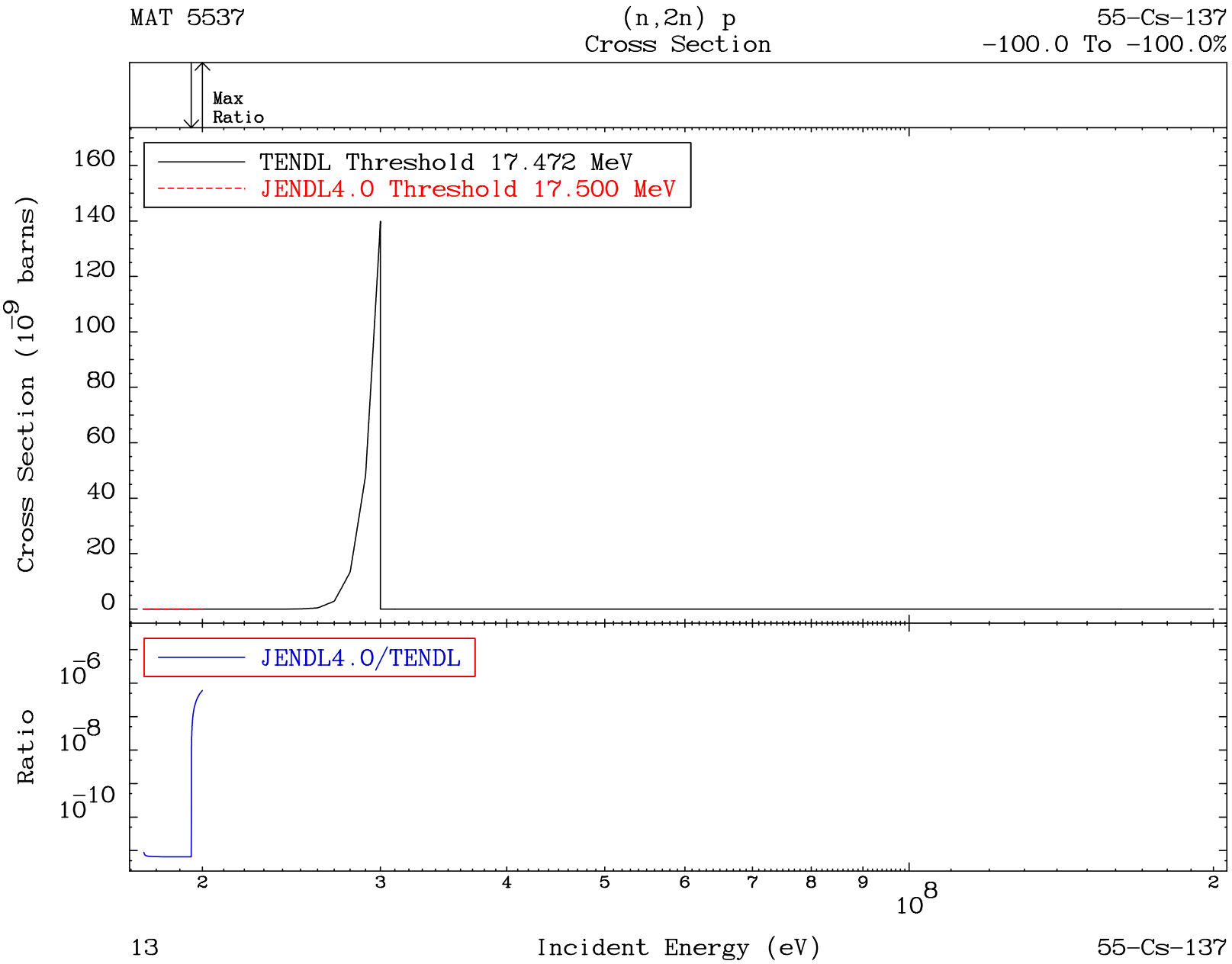

MAT 5537
(n,n') p
Cross Section
55-Cs-137
-99.32 To 53.85 %
Min Ratio
Max Ratio
TENDL Threshold 7.4600 MeV
JENDL4.0 Threshold 7.4640 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
8
55-Cs-137

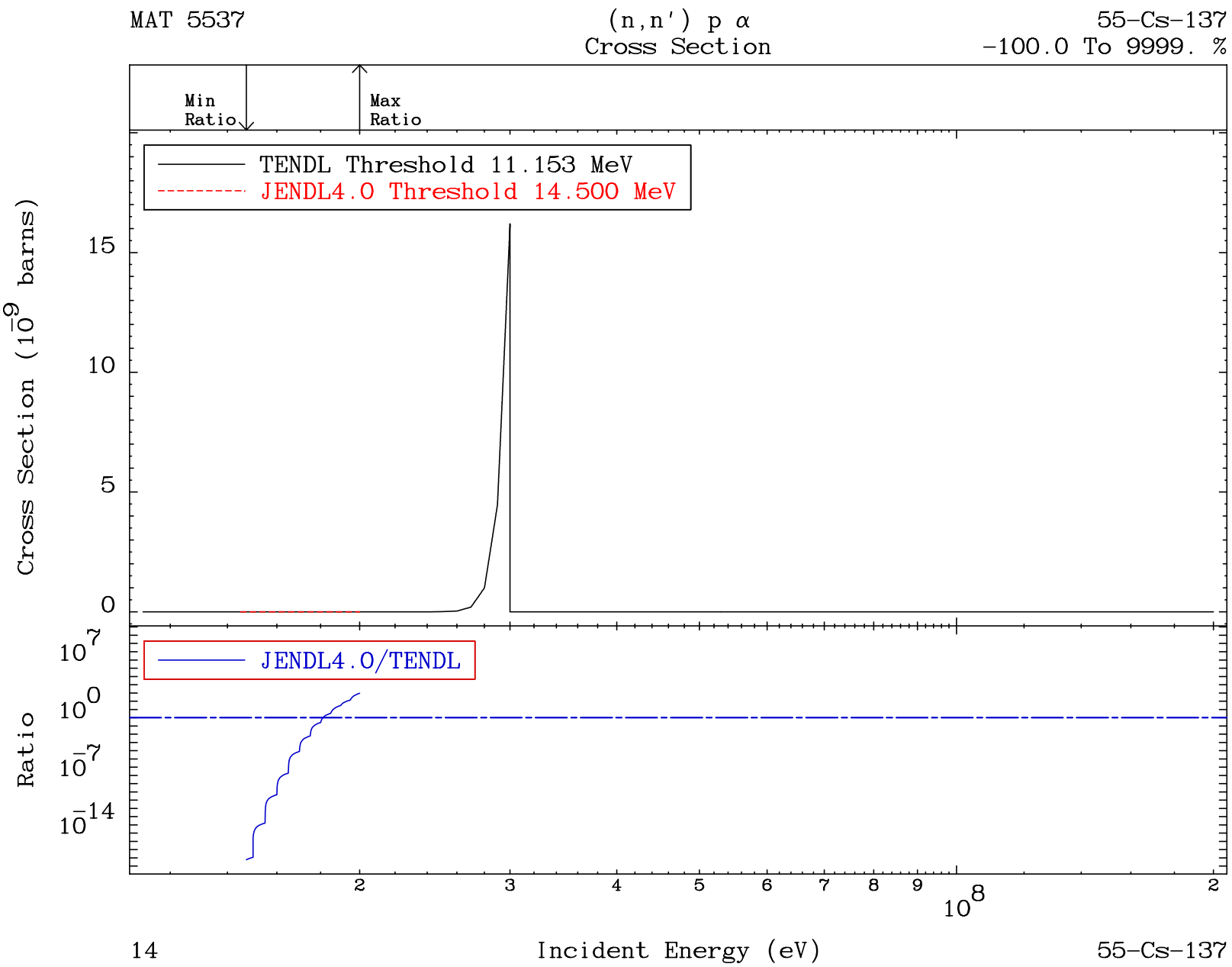

MAT 5537
(n,n') d
Cross Section
55-Cs-137
-100.0 To 1822. %
Max
Ratio
TENDL Threshold 13.366 MeV
JENDL4.0 Threshold 13.362 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
9
55-Cs-137

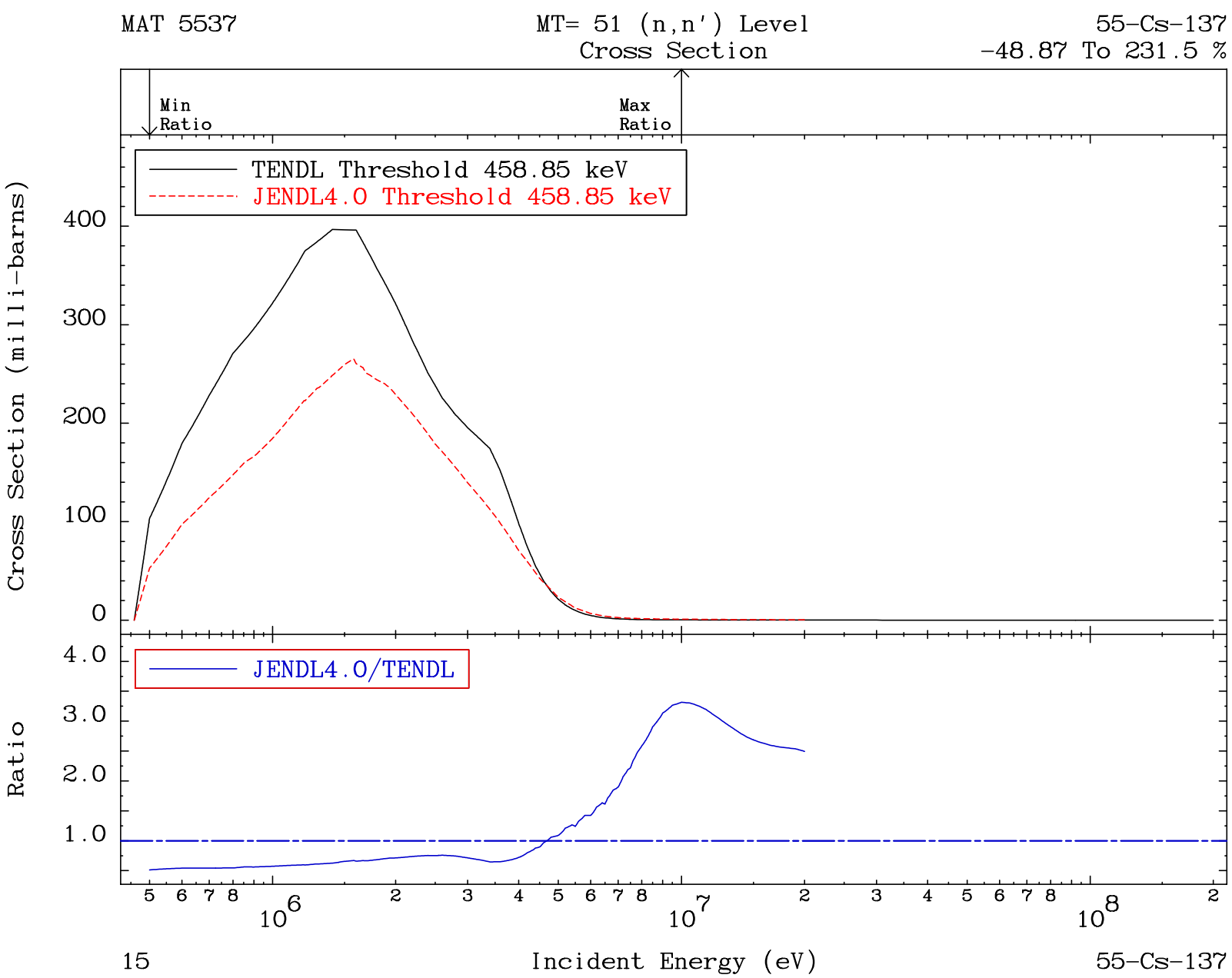

MAT 5537
(n,n') t
Cross Section
55-Cs-137
-100.0 To 3291. %
Max
Ratio
TENDL Threshold 13.468 MeV
JENDL4.0 Threshold 13.468 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
55-Cs-137

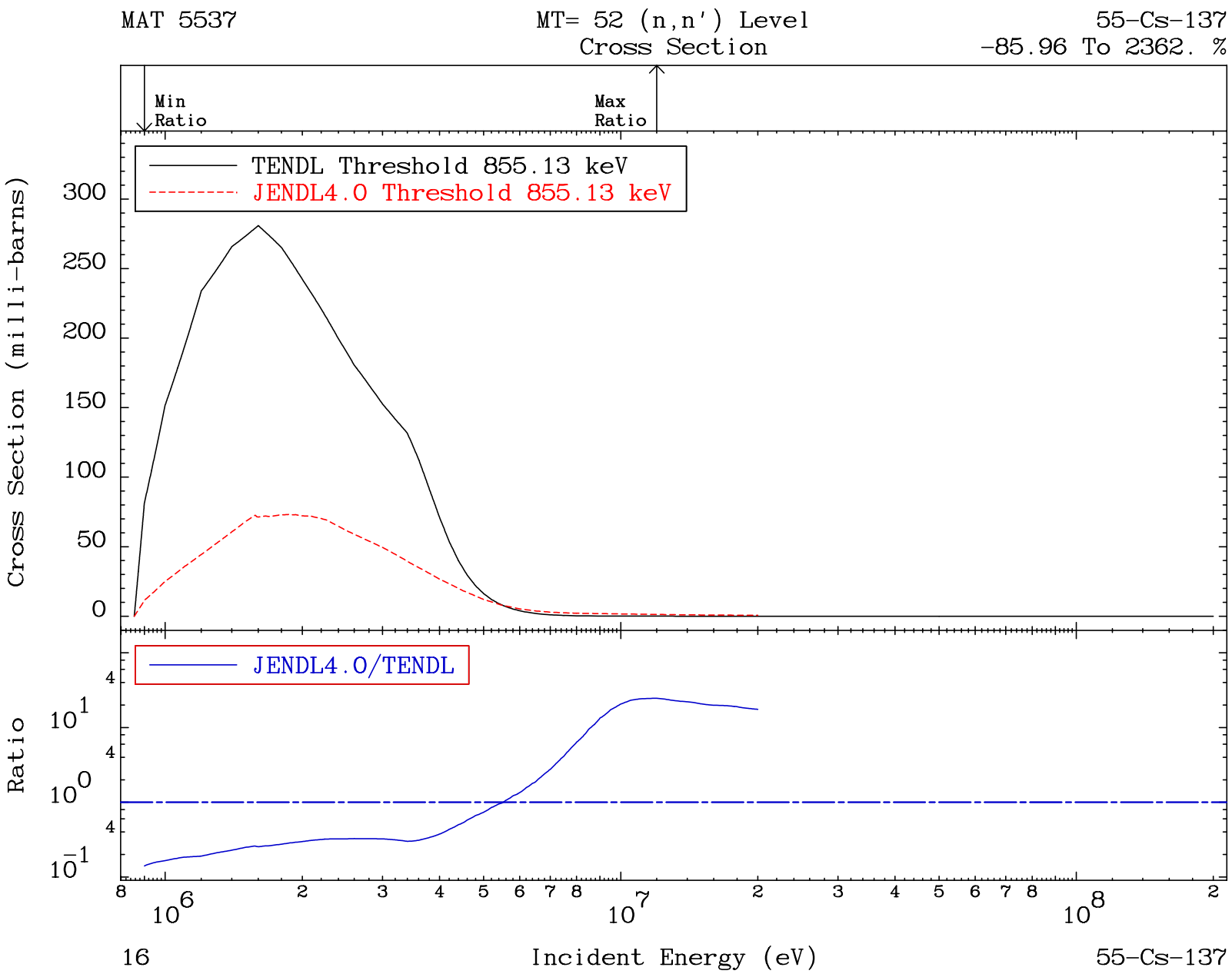

MAT 5537
(n,n') He-3
Cross Section
55-Cs-137
-100.0 To -100.0%
Min
Ratio
TENDL Threshold 17.562 MeV
JENDL4.0 Threshold 17.533 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
18.0
17.0
16.0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
55-Cs-137

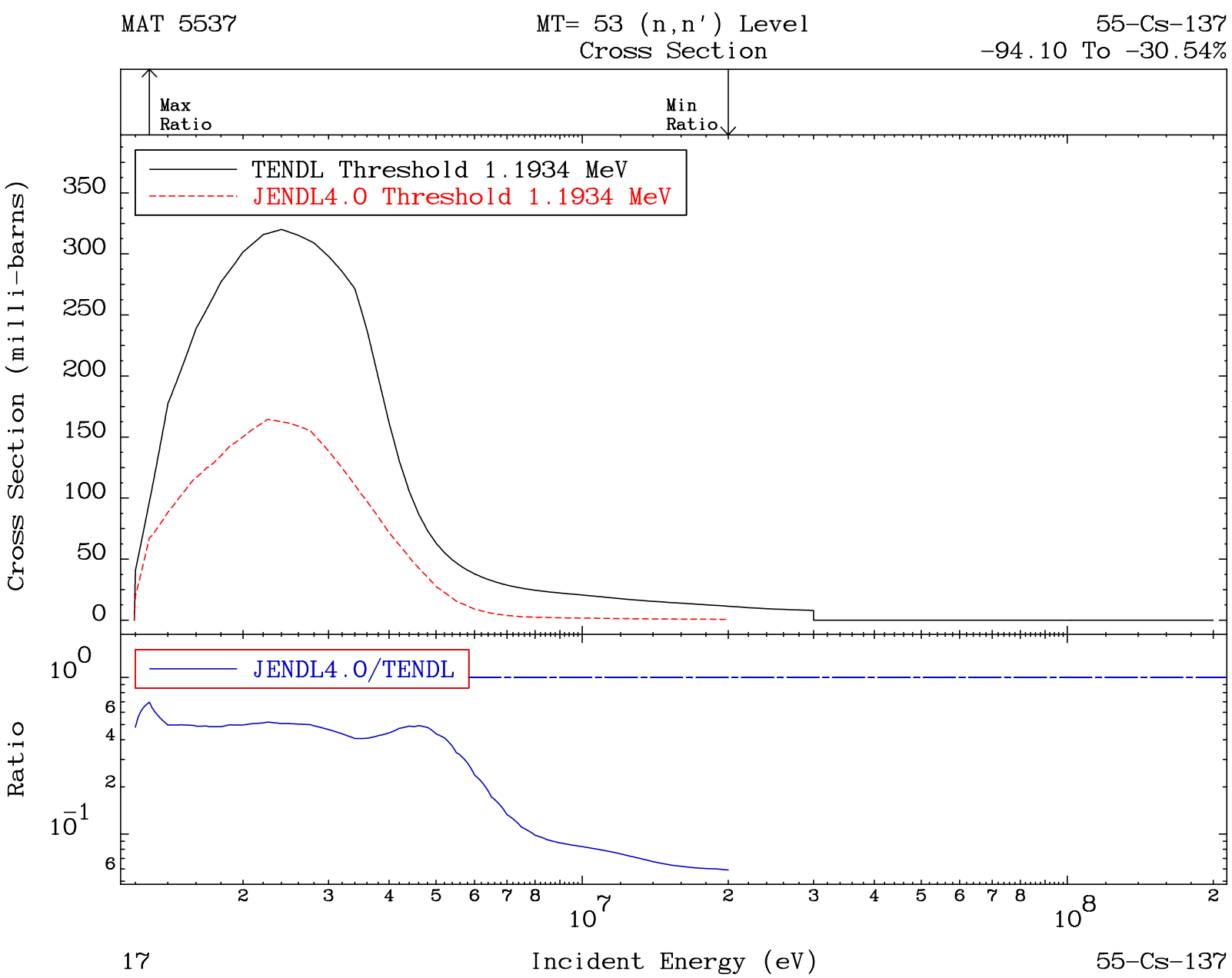

MAT 5537
(n,2n) p
Cross Section
55-Cs-137
-94.30 To 299.1 %
Max
Ratio
TENDL Threshold 15.607 MeV
JENDL4.0 Threshold 15.603 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
55-Cs-137

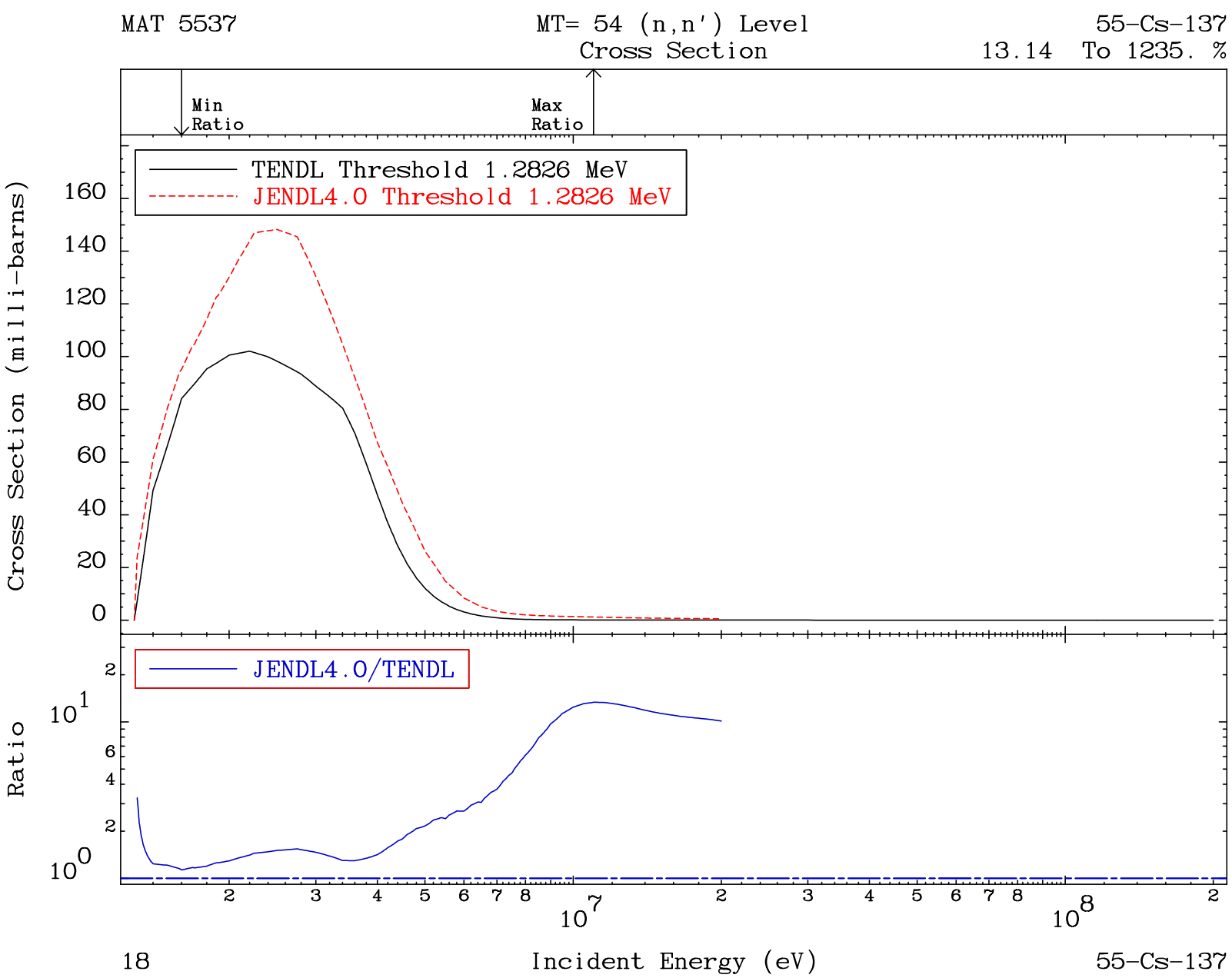

MAT 5537
(n,2n) p
Cross Section
55-Cs-137
-100.0 To -100.0%
Max
Ratio
TENDL Threshold 17.472 MeV
JENDL4.0 Threshold 17.500 MeV
Cross Section (10^-9 barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
55-Cs-137

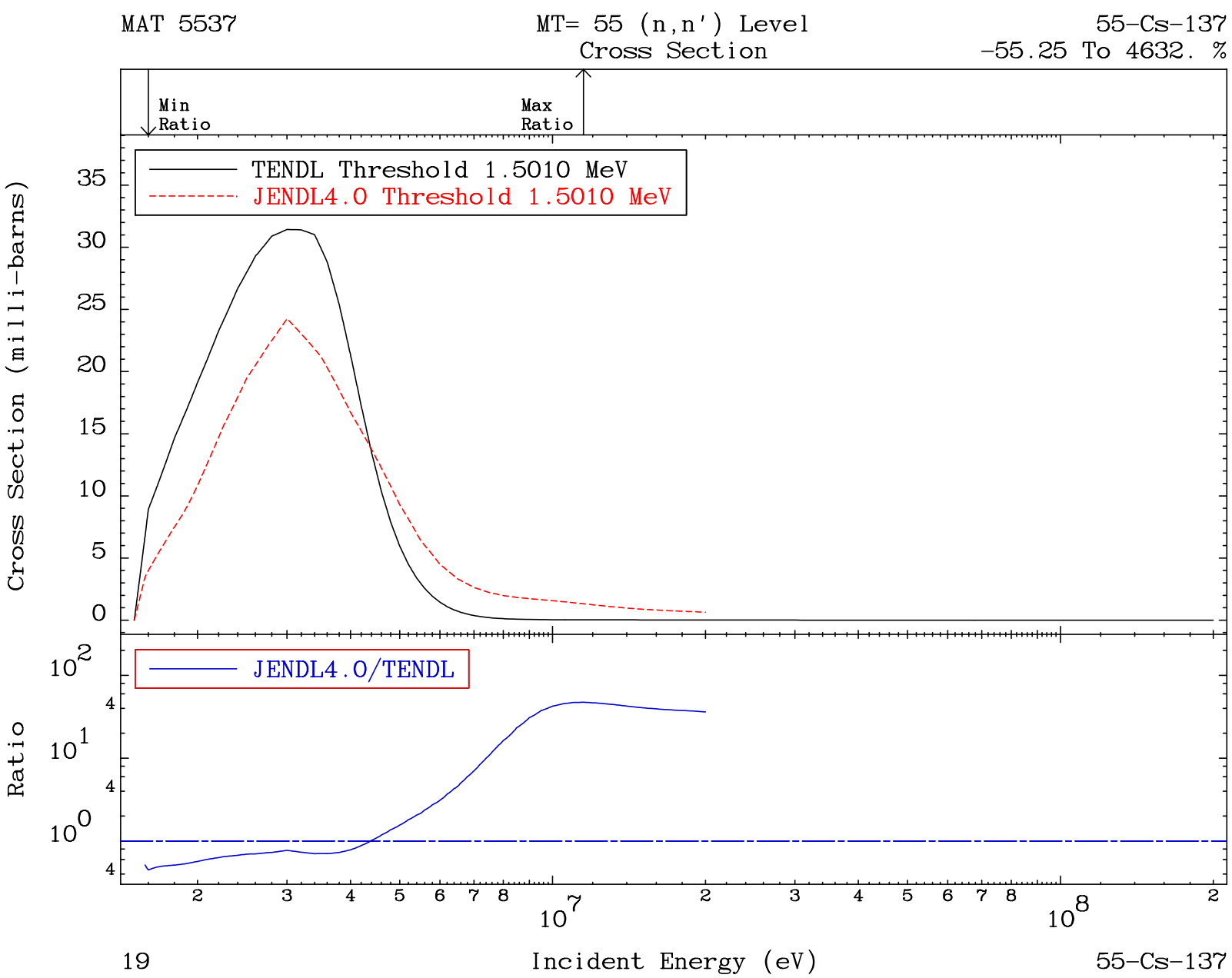

MAT 5537
(n,n') p α
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.153 MeV
JENDL4.0 Threshold 14.500 MeV
Cross Section (10^{-9} barns)
15
10
5
0
JENDL4.0/TENDL
Ratio
10^{7}
10^{0}
10^{-7}
10^{-14}
2
3
4
5
6
7
8
9
10^{8}
2
14
Incident Energy (eV)
55-Cs-137

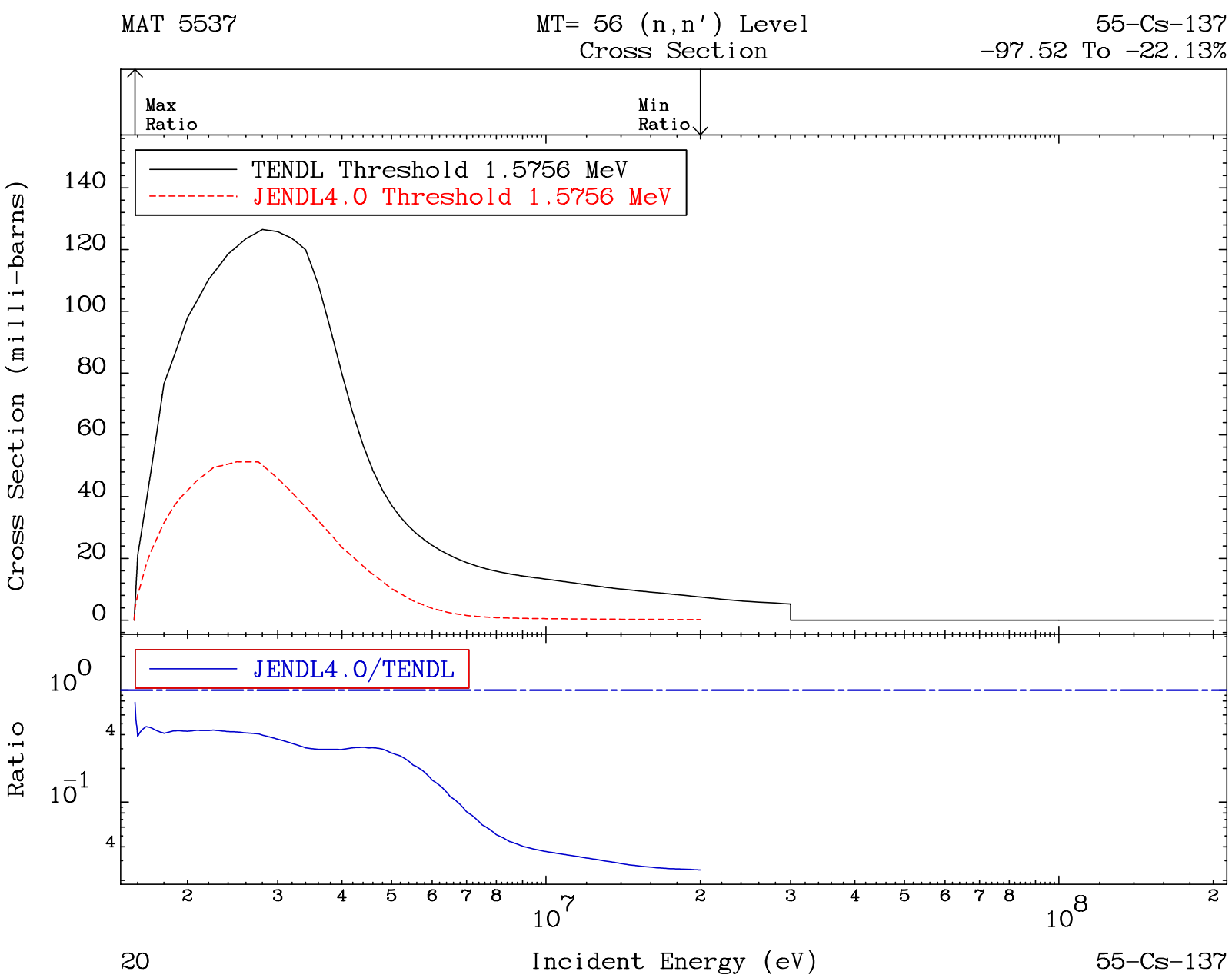

MAT 5537
MT= 51 (n,n') Level
Cross Section
55-Cs-137
-48.87 To 231.5 %
Min
Ratio
Max
Ratio
TENDL Threshold 458.85 keV
JENDL4.0 Threshold 458.85 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
4.0
3.0
2.0
1.0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
55-Cs-137

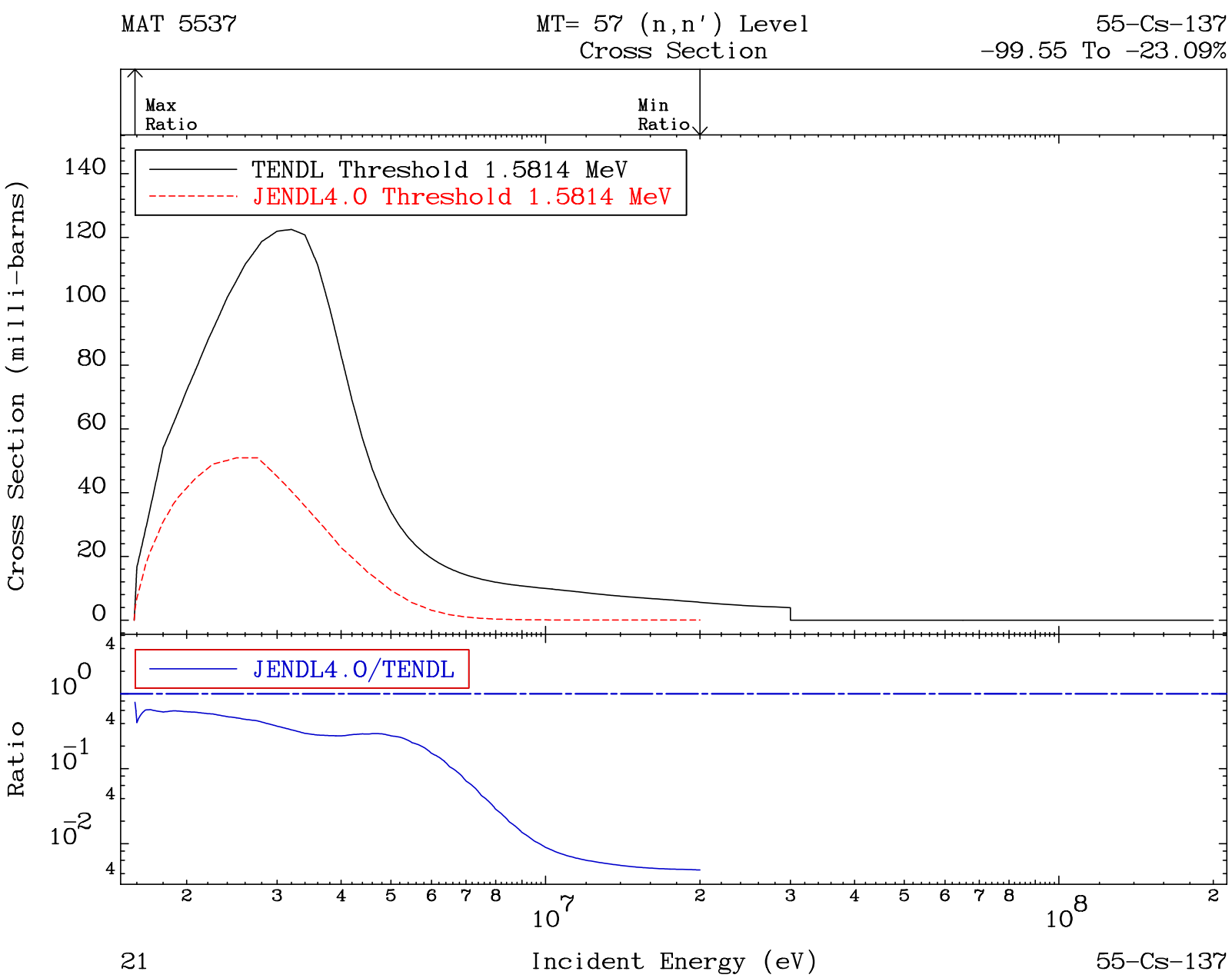

MAT 5537
MT= 52 (n,n') Level
Cross Section
55-Cs-137
-85.96 To 2362. %
Min
Ratio
Max
Ratio
TENDL Threshold 855.13 keV
JENDL4.0 Threshold 855.13 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^6
10^7
10^8
Incident Energy (eV)
16
55-Cs-137

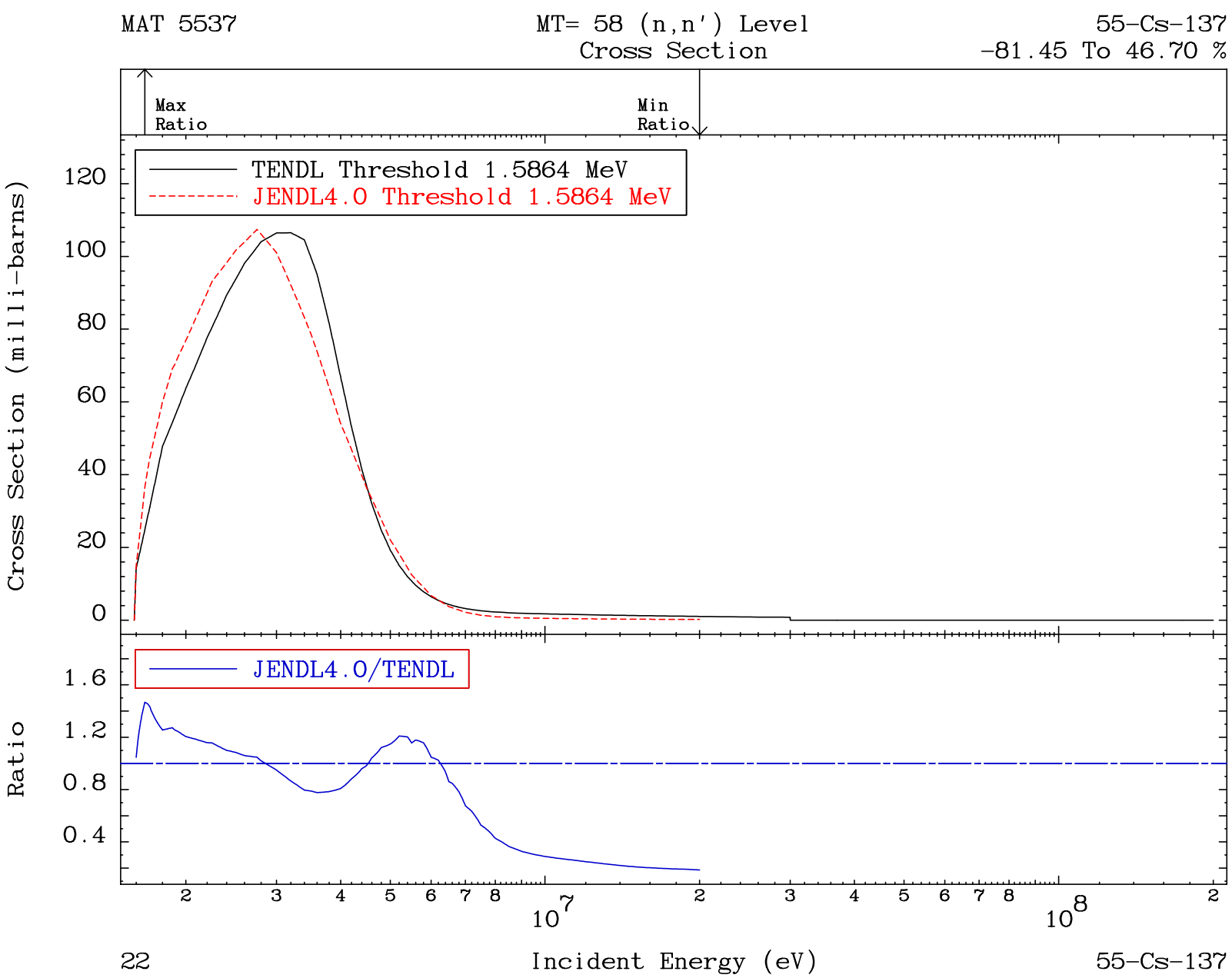

MAT 5537
MT= 53 (n,n') Level
Cross Section
55-Cs-137
-94.10 To -30.54%
Max Ratio
Min Ratio
TENDL Threshold 1.1934 MeV
JENDL4.0 Threshold 1.1934 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
6
4
2
10^-1
6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
55-Cs-137

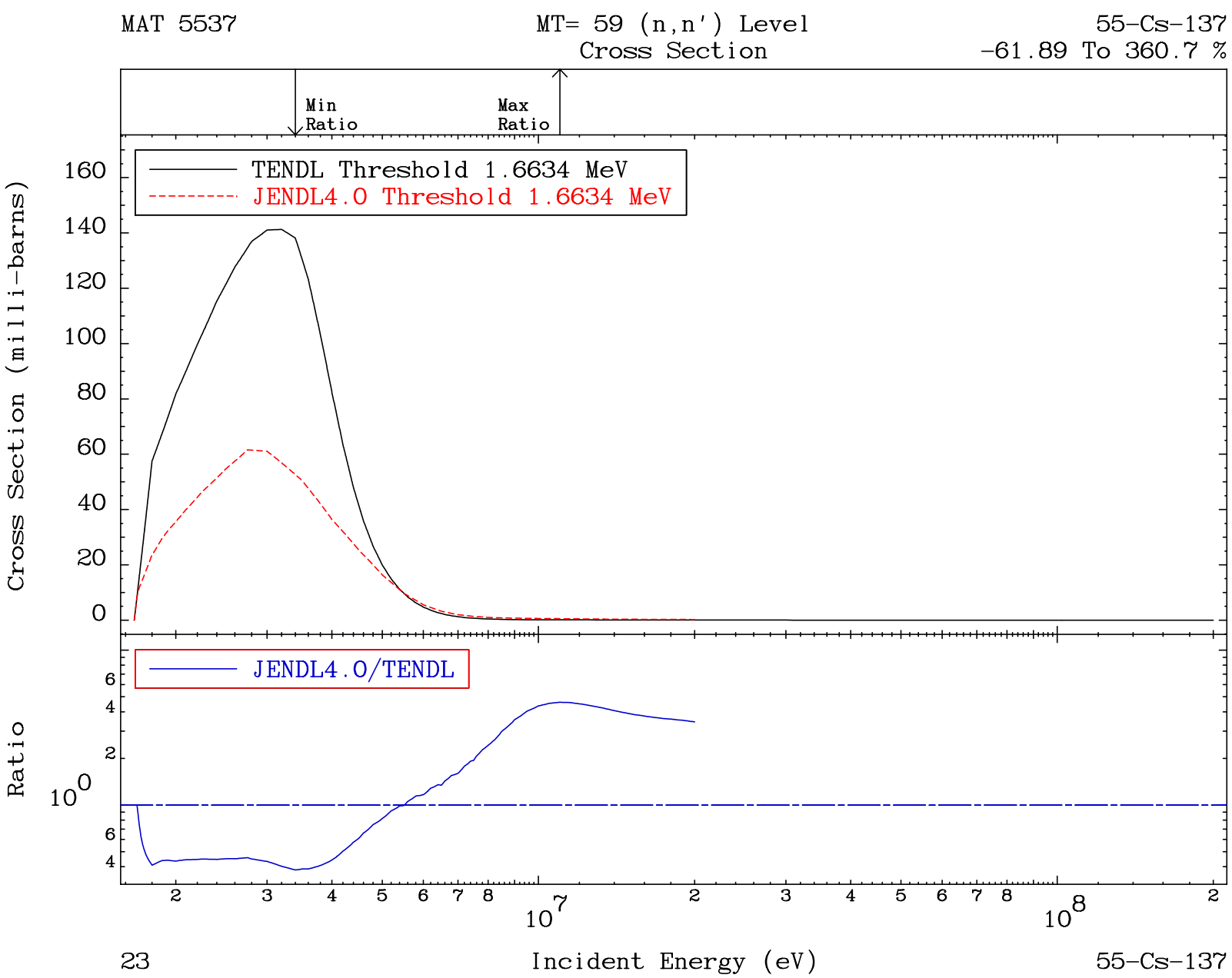

MAT 5537
MT= 54 (n,n') Level
Cross Section
55-Cs-137
13.14 To 1235. %
Min Ratio
Max Ratio
TENDL Threshold 1.2826 MeV
JENDL4.0 Threshold 1.2826 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^1
10^0
2
6
4
2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
55-Cs-137

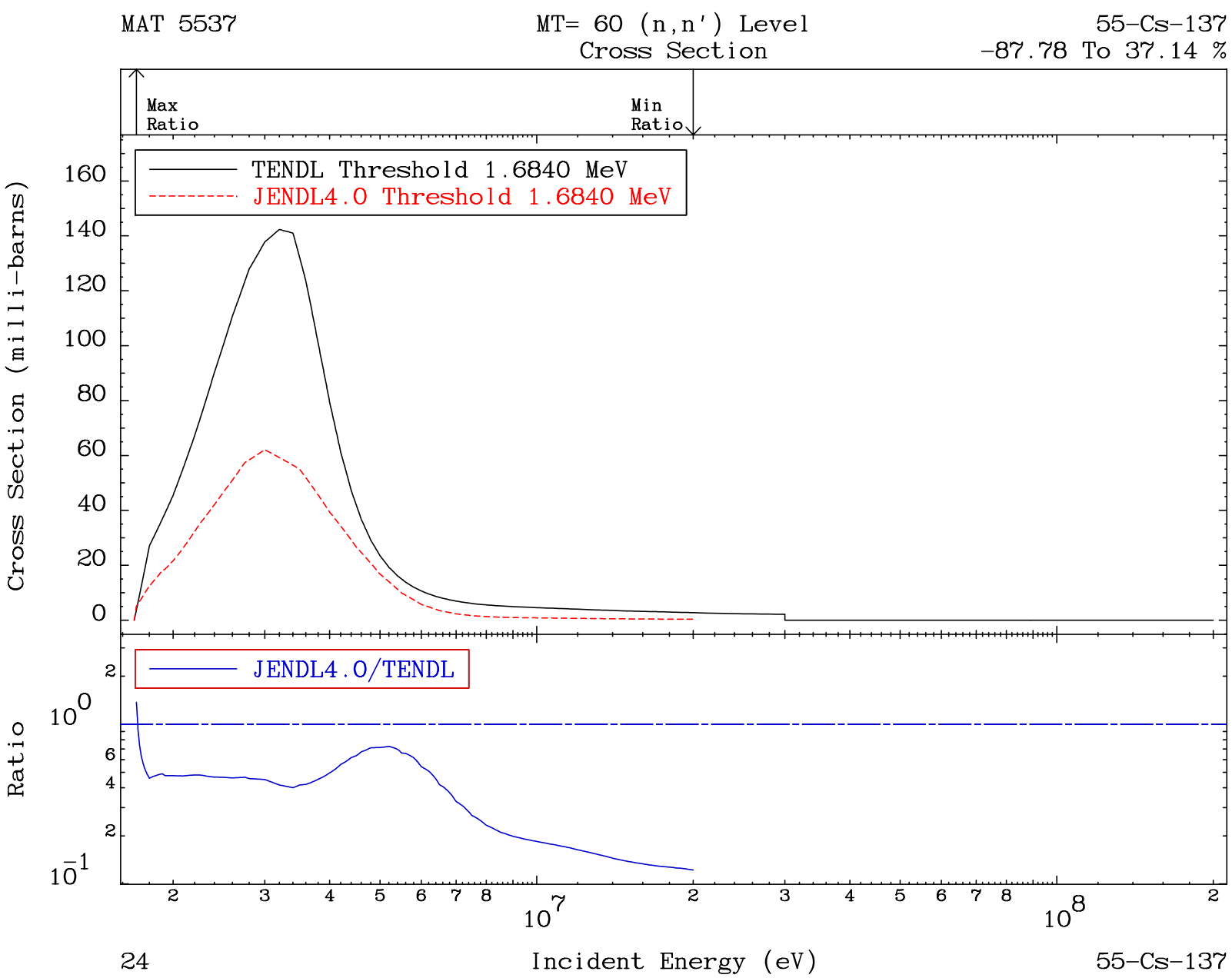

MAT 5537
MT= 55 (n,n') Level
Cross Section
55-Cs-137
-55.25 To 4632. %
Min Ratio
Max Ratio
TENDL Threshold 1.5010 MeV
JENDL4.0 Threshold 1.5010 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
19
55-Cs-137

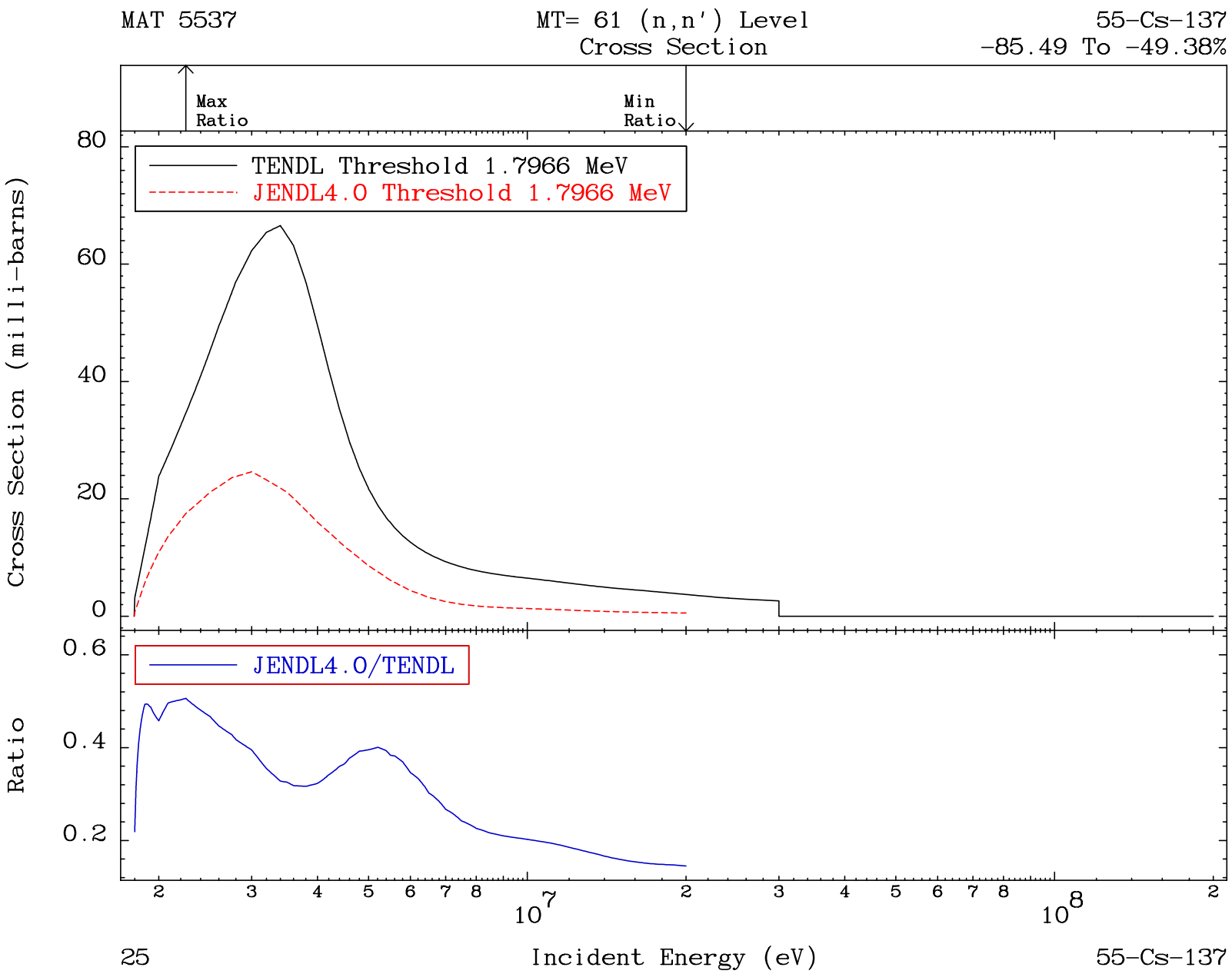

MAT 5537
MT= 56 (n,n') Level
Cross Section
55-Cs-137
-97.52 To -22.13%
Max
Ratio
Min
Ratio
TENDL Threshold 1.5756 MeV
JENDL4.0 Threshold 1.5756 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
55-Cs-137

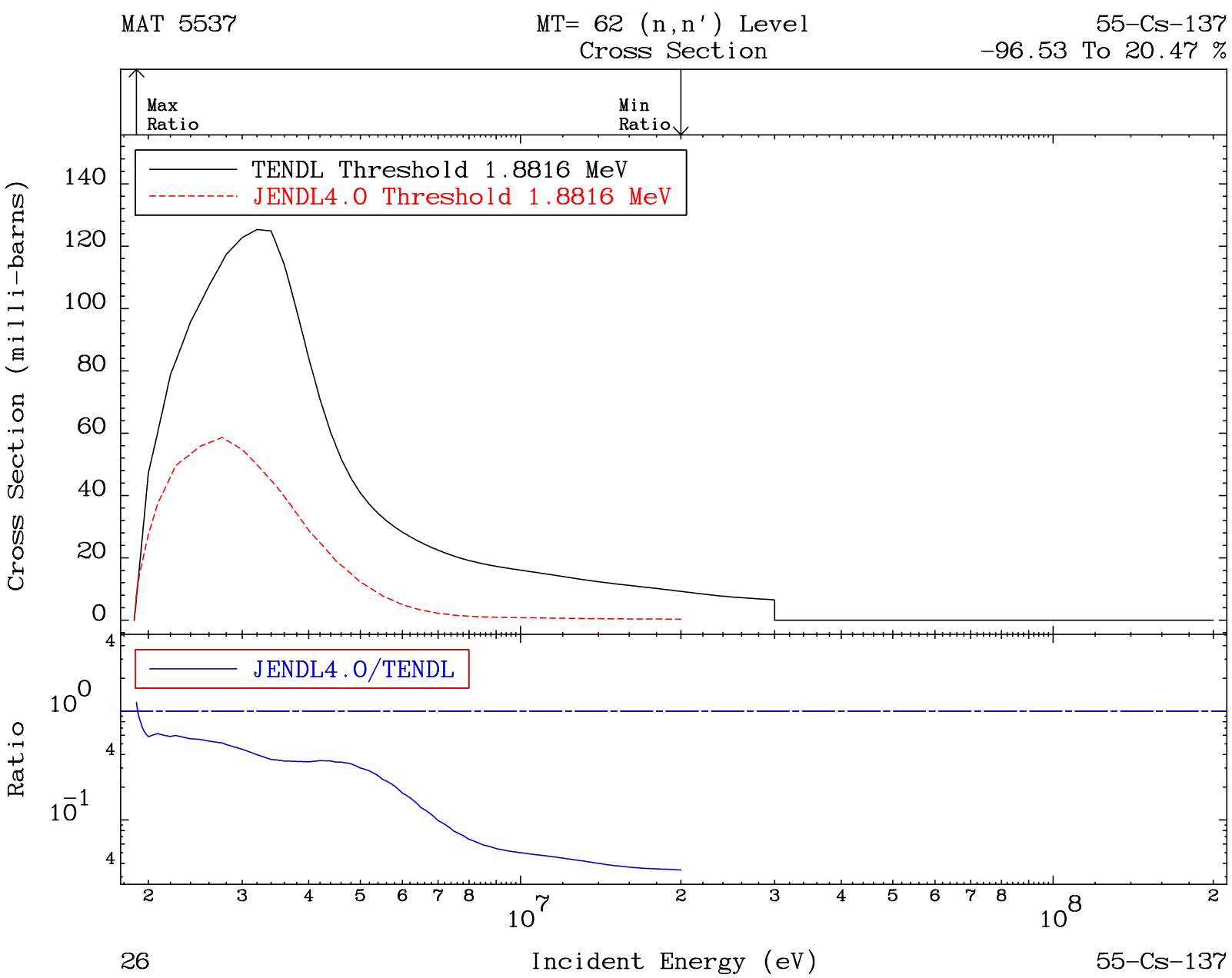

MAT 5537
MT= 57 (n,n') Level
Cross Section
55-Cs-137
-99.55 To -23.09%
Max
Ratio
Min
Ratio
TENDL Threshold 1.5814 MeV
JENDL4.0 Threshold 1.5814 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
21
55-Cs-137

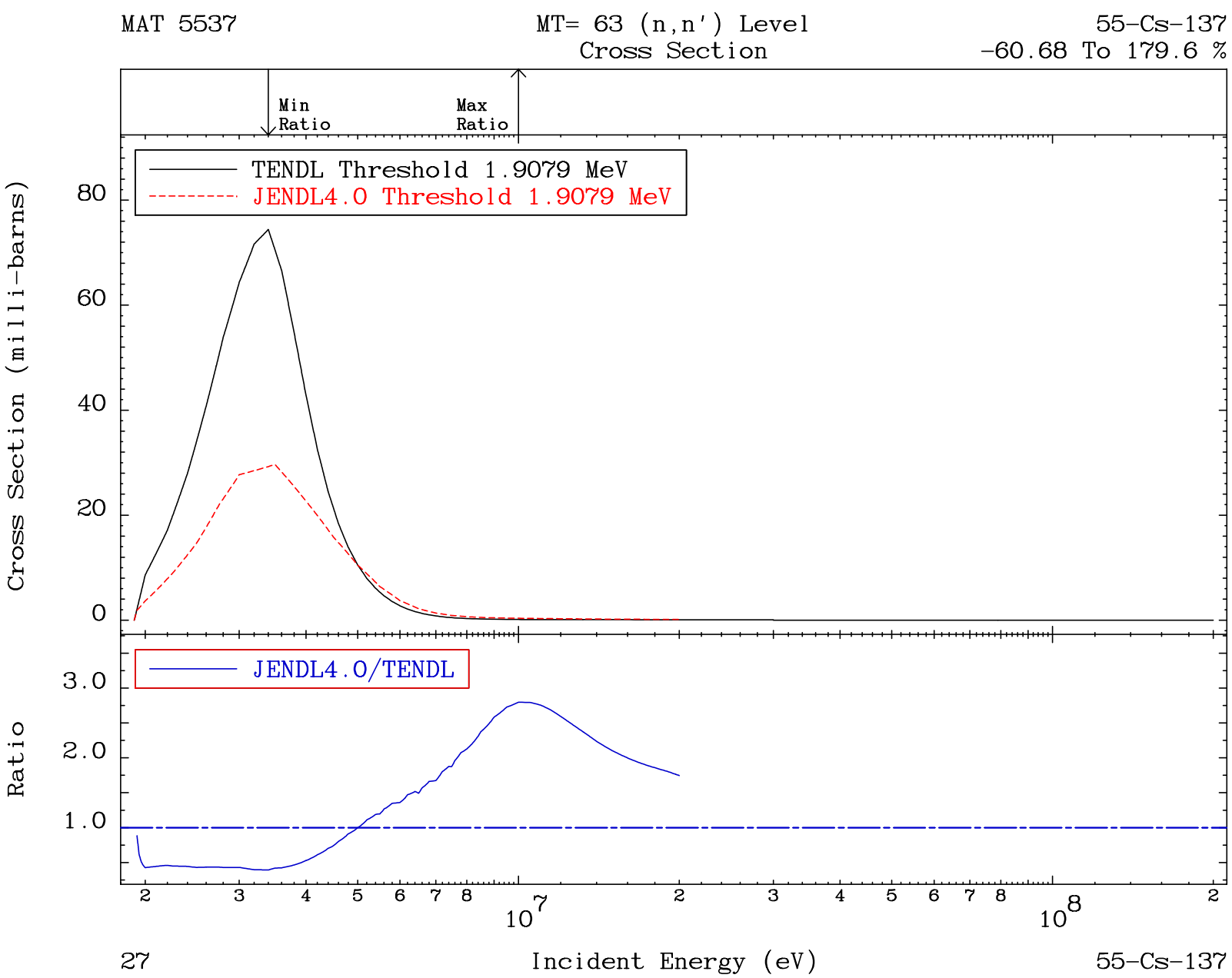

MAT 5537
MT= 58 (n,n') Level
Cross Section
55-Cs-137
-81.45 To 46.70 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.5864 MeV
JENDL4.0 Threshold 1.5864 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
55-Cs-137

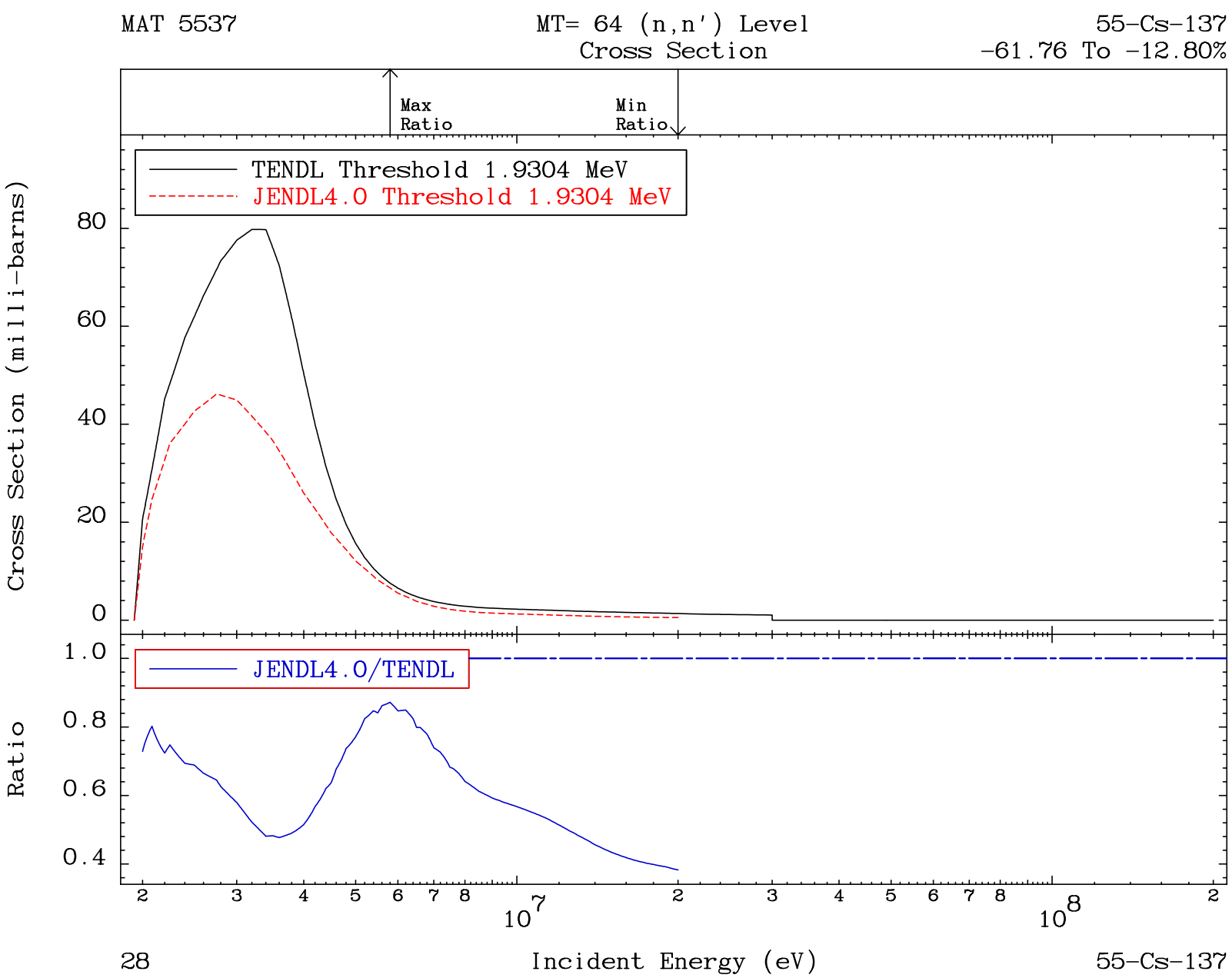

MAT 5537
MT= 59 (n,n') Level
Cross Section
55-Cs-137
-61.89 To 360.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.6634 MeV
JENDL4.0 Threshold 1.6634 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
55-Cs-137

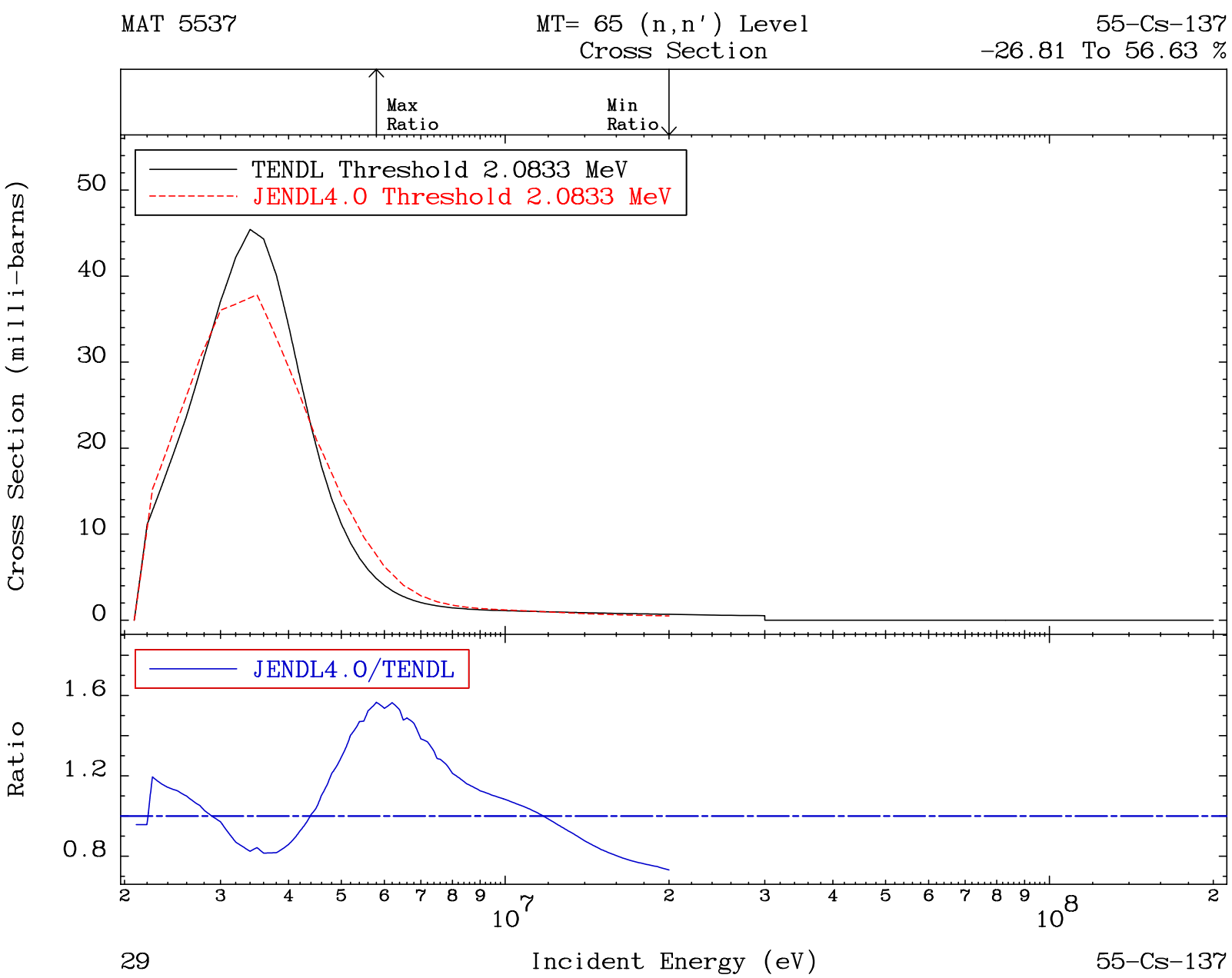

MAT 5537
MT= 60 (n,n') Level
Cross Section
55-Cs-137
-87.78 To 37.14 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.6840 MeV
JENDL4.0 Threshold 1.6840 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
2
10^0
6
4
2
10^-1
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
55-Cs-137

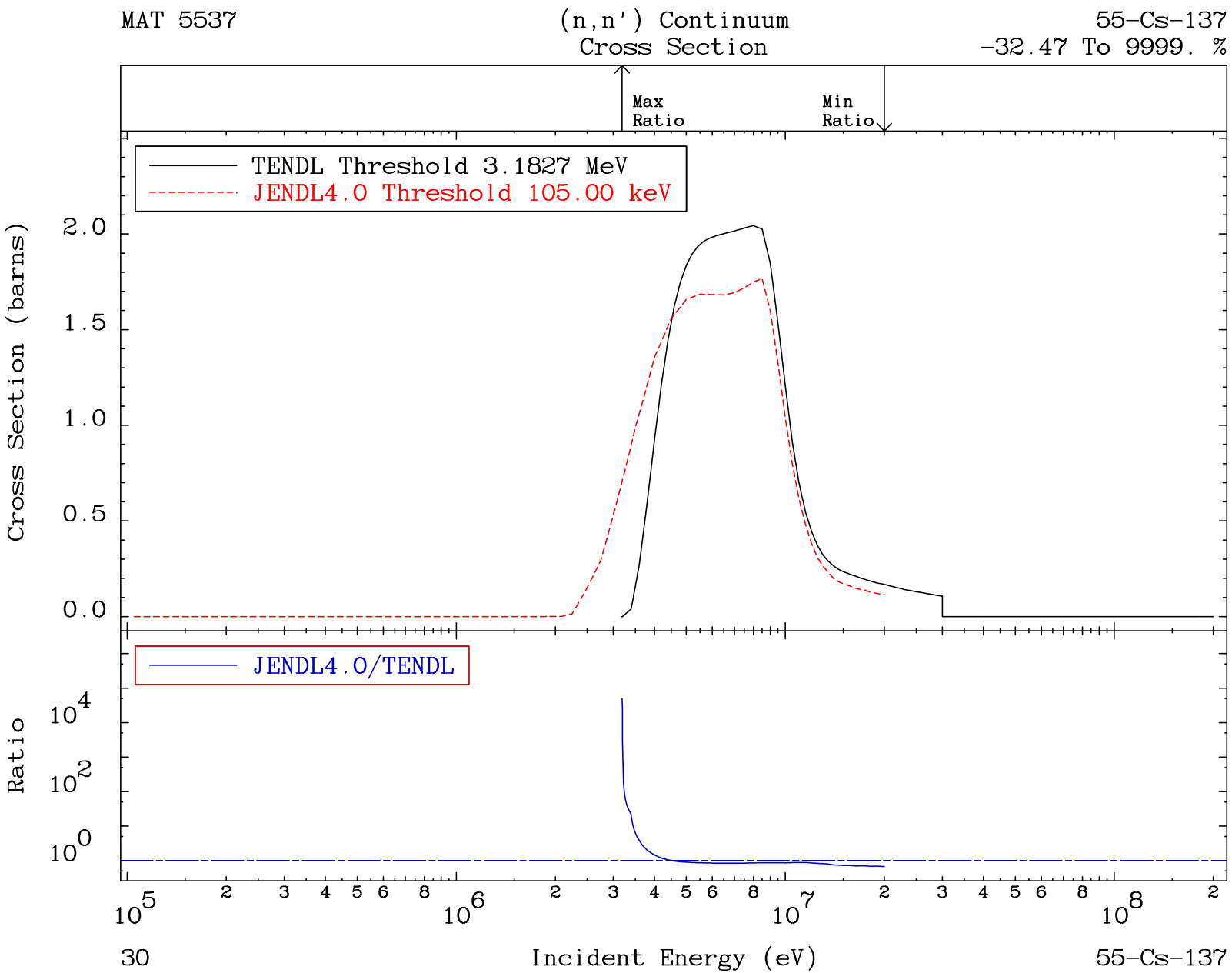

MAT 5537
MT= 61 (n,n') Level
Cross Section
55-Cs-137
-85.49 To -49.38%
Max Ratio
Min Ratio
TENDL Threshold 1.7966 MeV
JENDL4.0 Threshold 1.7966 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
0.6
0.4
0.2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
55-Cs-137

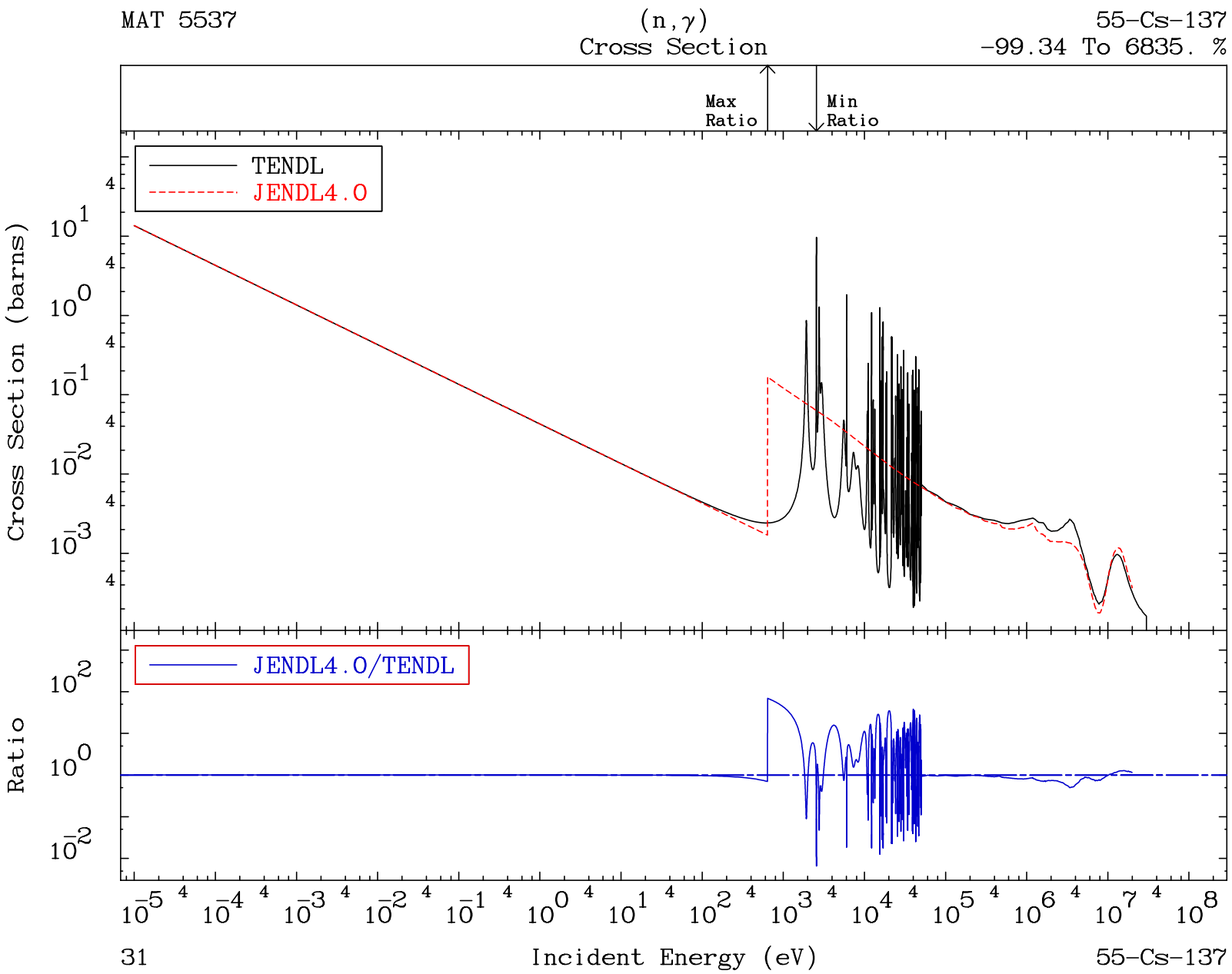

MAT 5537
MT= 62 (n,n') Level
Cross Section
55-Cs-137
-96.53 To 20.47 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8816 MeV
JENDL4.0 Threshold 1.8816 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
26
Incident Energy (eV)
55-Cs-137

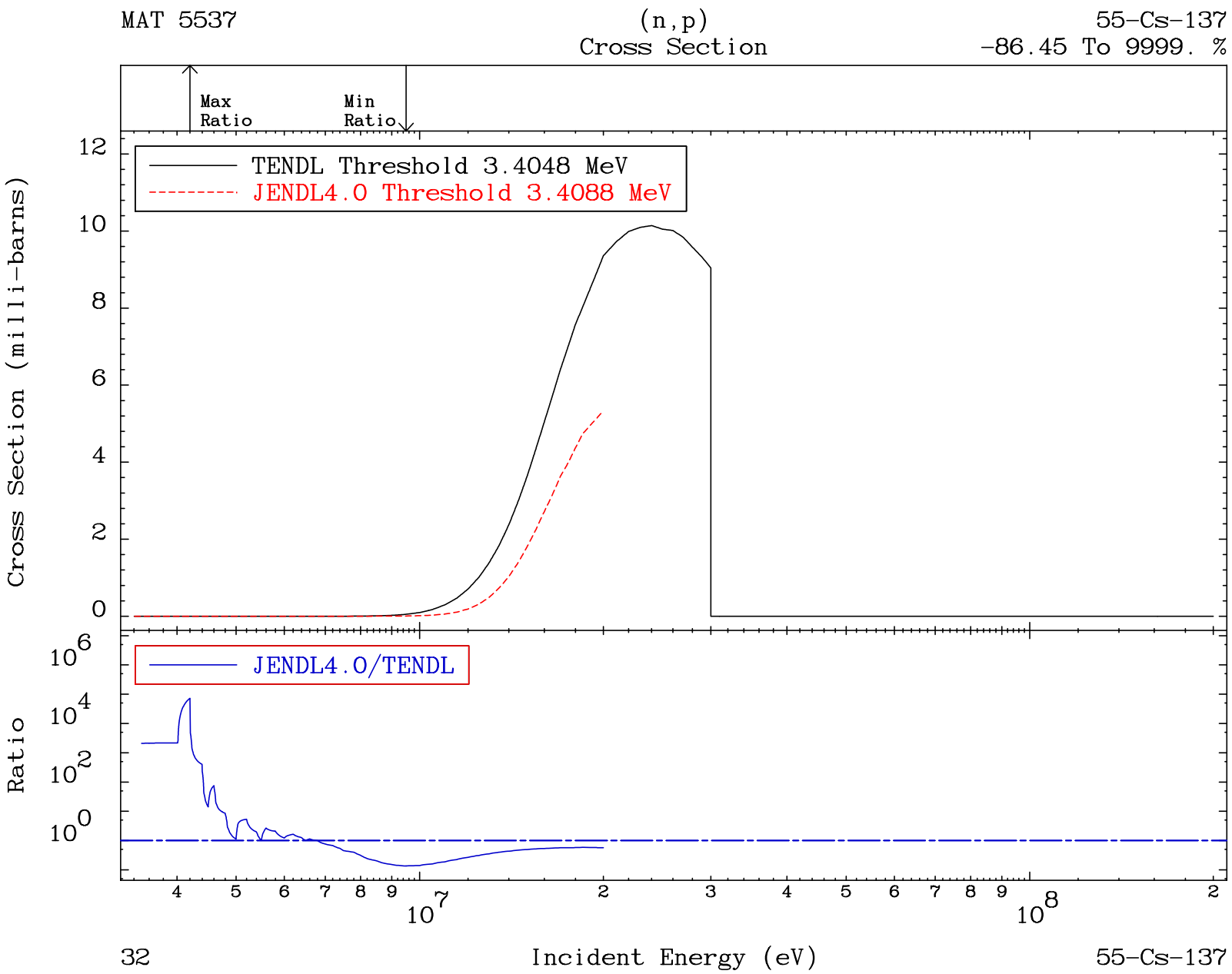

MAT 5537
MT= 63 (n,n') Level
Cross Section
55-Cs-137
-60.68 To 179.6 %
Min Ratio
Max Ratio
TENDL Threshold 1.9079 MeV
JENDL4.0 Threshold 1.9079 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
55-Cs-137

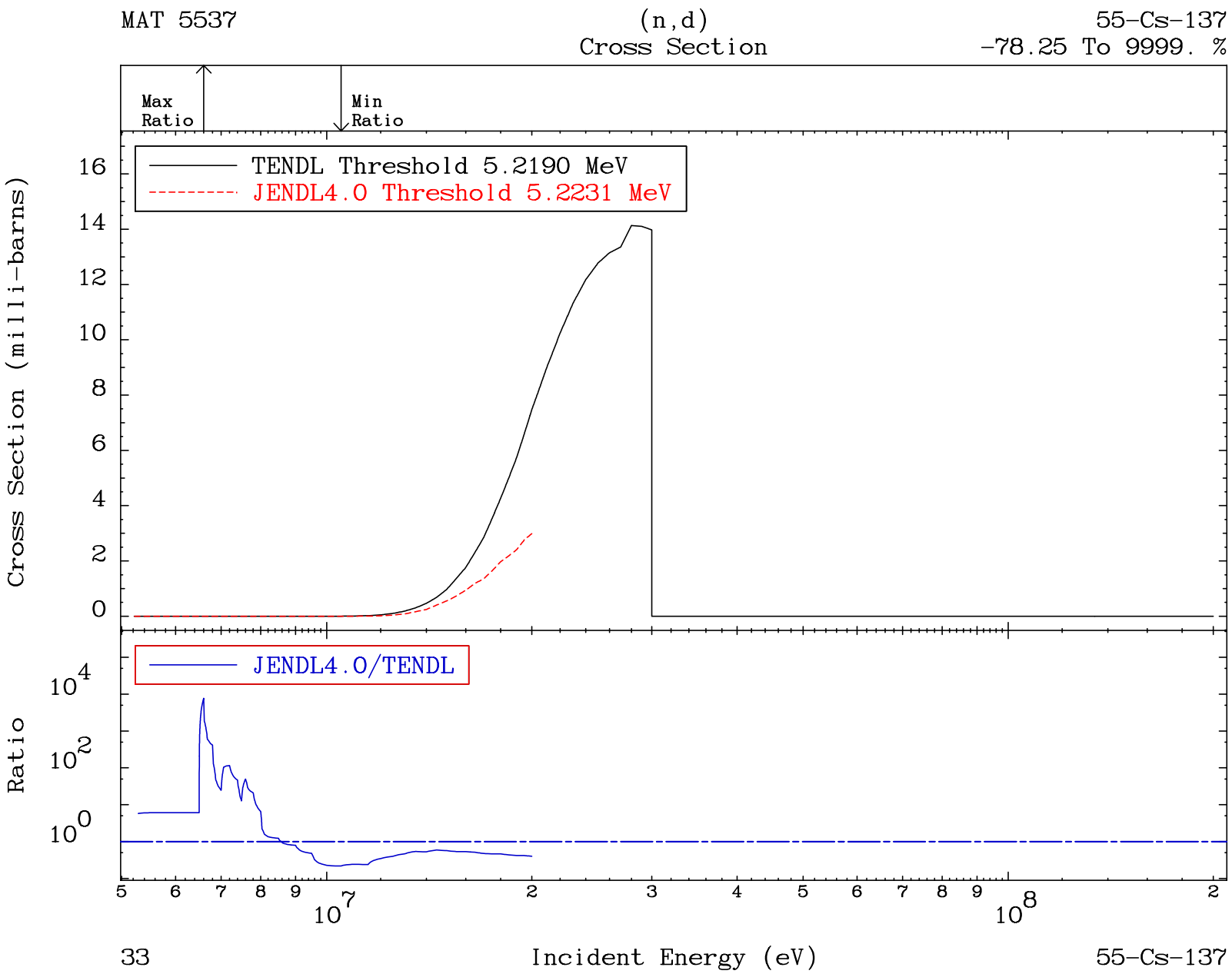

MAT 5537
MT= 64 (n,n') Level
Cross Section
55-Cs-137
-61.76 To -12.80%
Max
Ratio
Min
Ratio
TENDL Threshold 1.9304 MeV
JENDL4.0 Threshold 1.9304 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
1.0
0.8
0.6
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
55-Cs-137

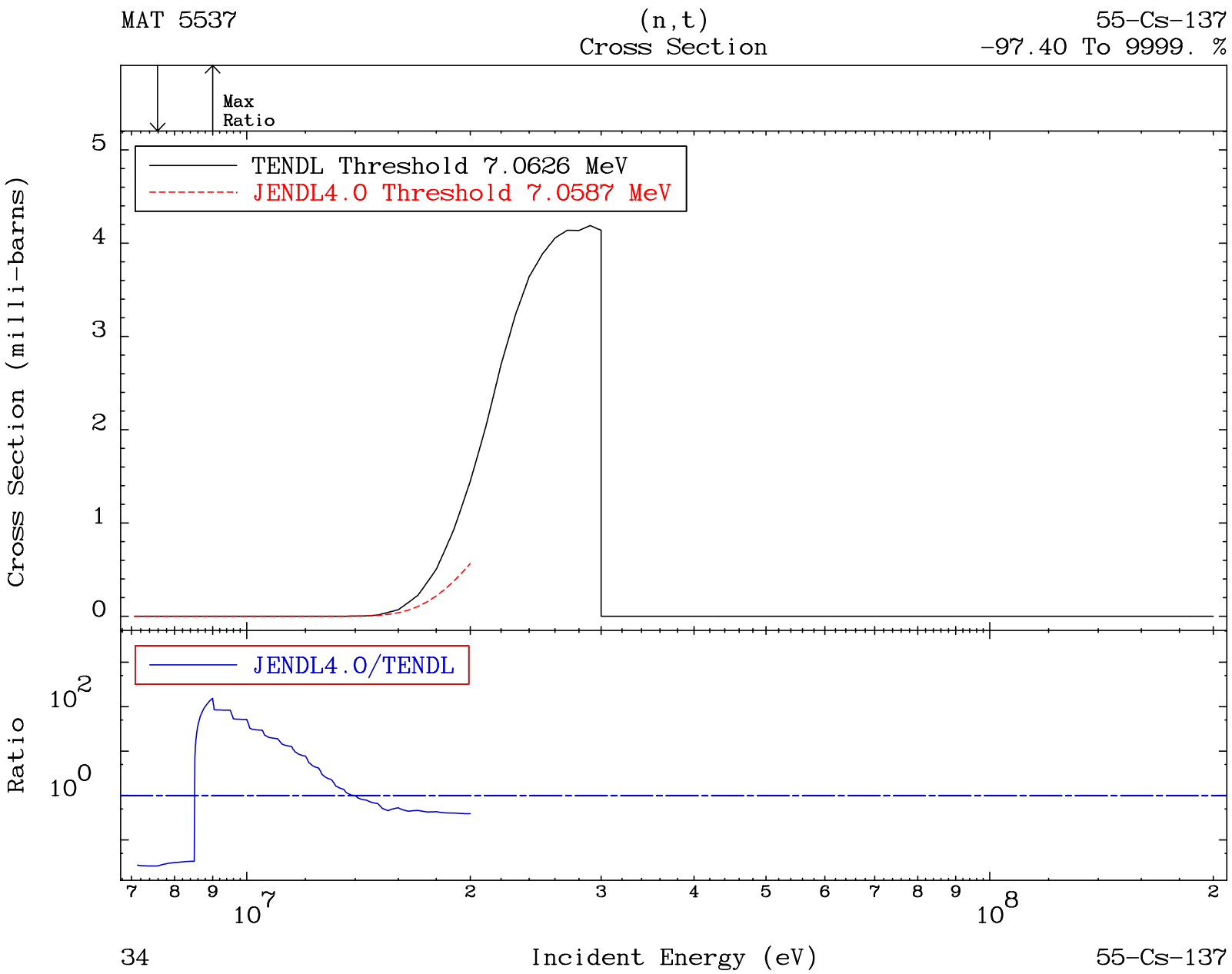

MAT 5537
MT= 65 (n,n') Level
Cross Section
55-Cs-137
-26.81 To 56.63 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.0833 MeV
JENDL4.0 Threshold 2.0833 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
55-Cs-137

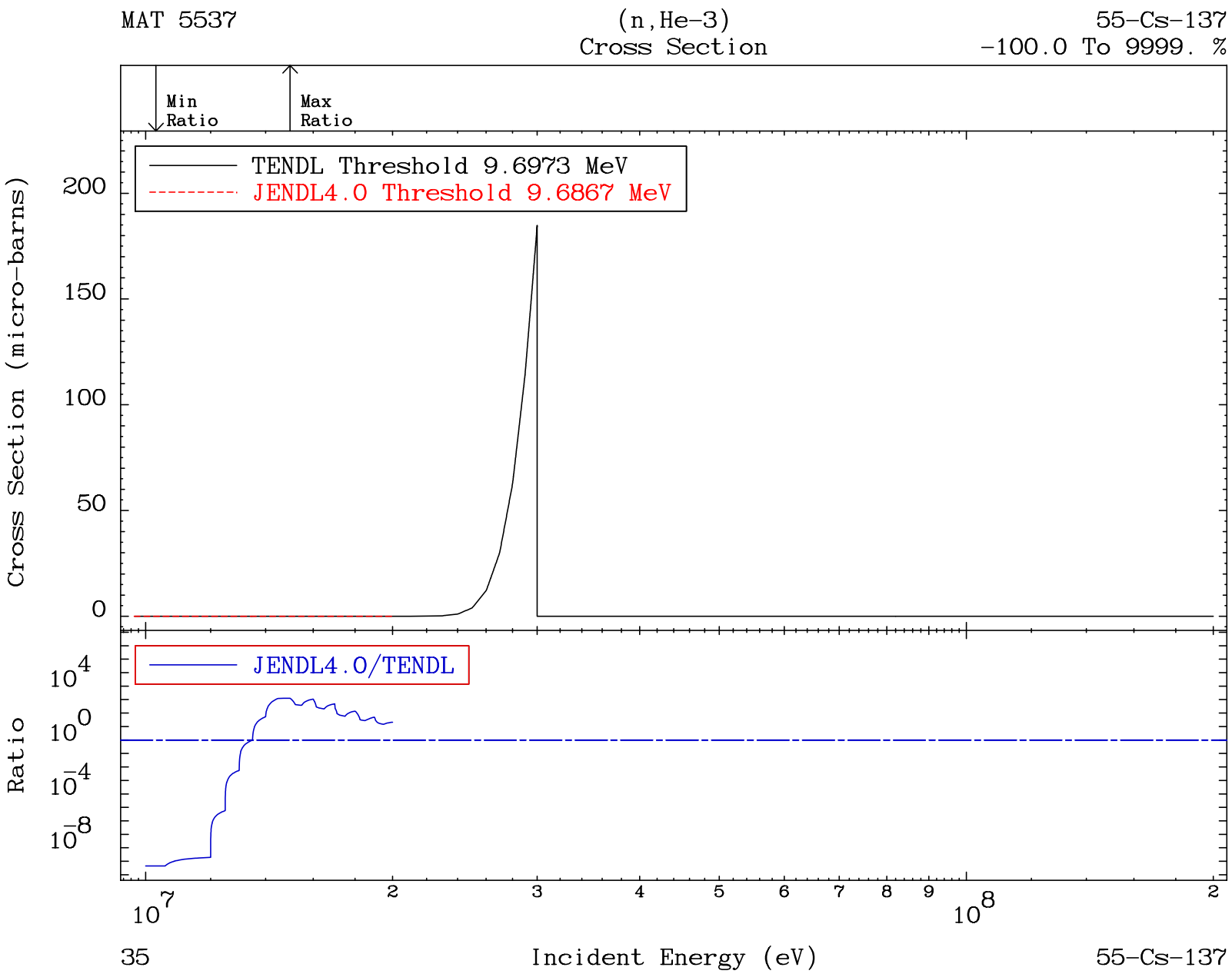

MAT 5537
(n,n') Continuum
Cross Section
55-Cs-137
-32.47 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 3.1827 MeV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
30
Incident Energy (eV)
55-Cs-137

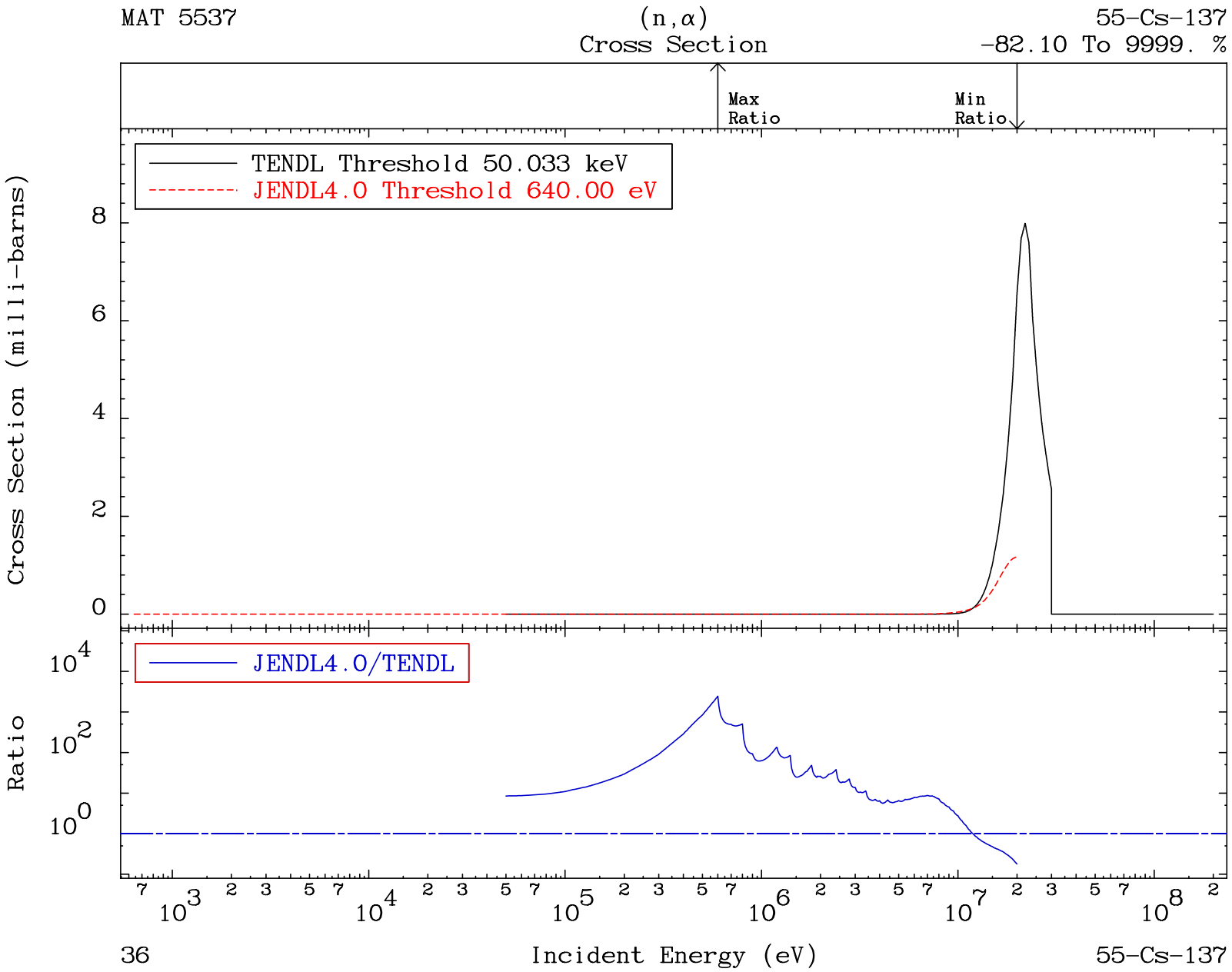

MAT 5537
(n,γ)
Cross Section
55-Cs-137
-99.34 To 6835. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
31
55-Cs-137

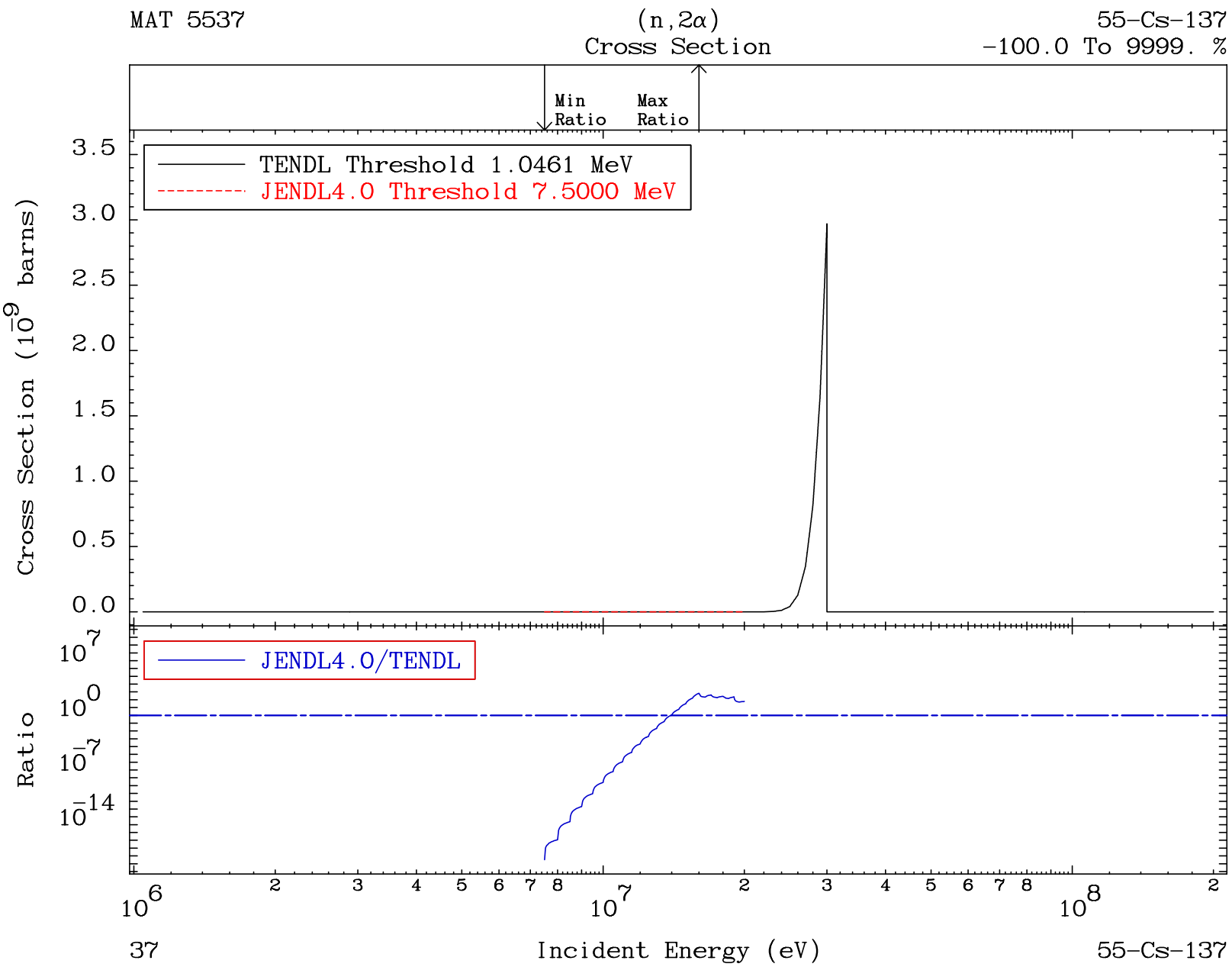

MAT 5537
(n,p)
Cross Section
55-Cs-137
-86.45 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.4048 MeV
JENDL4.0 Threshold 3.4088 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
32
55-Cs-137

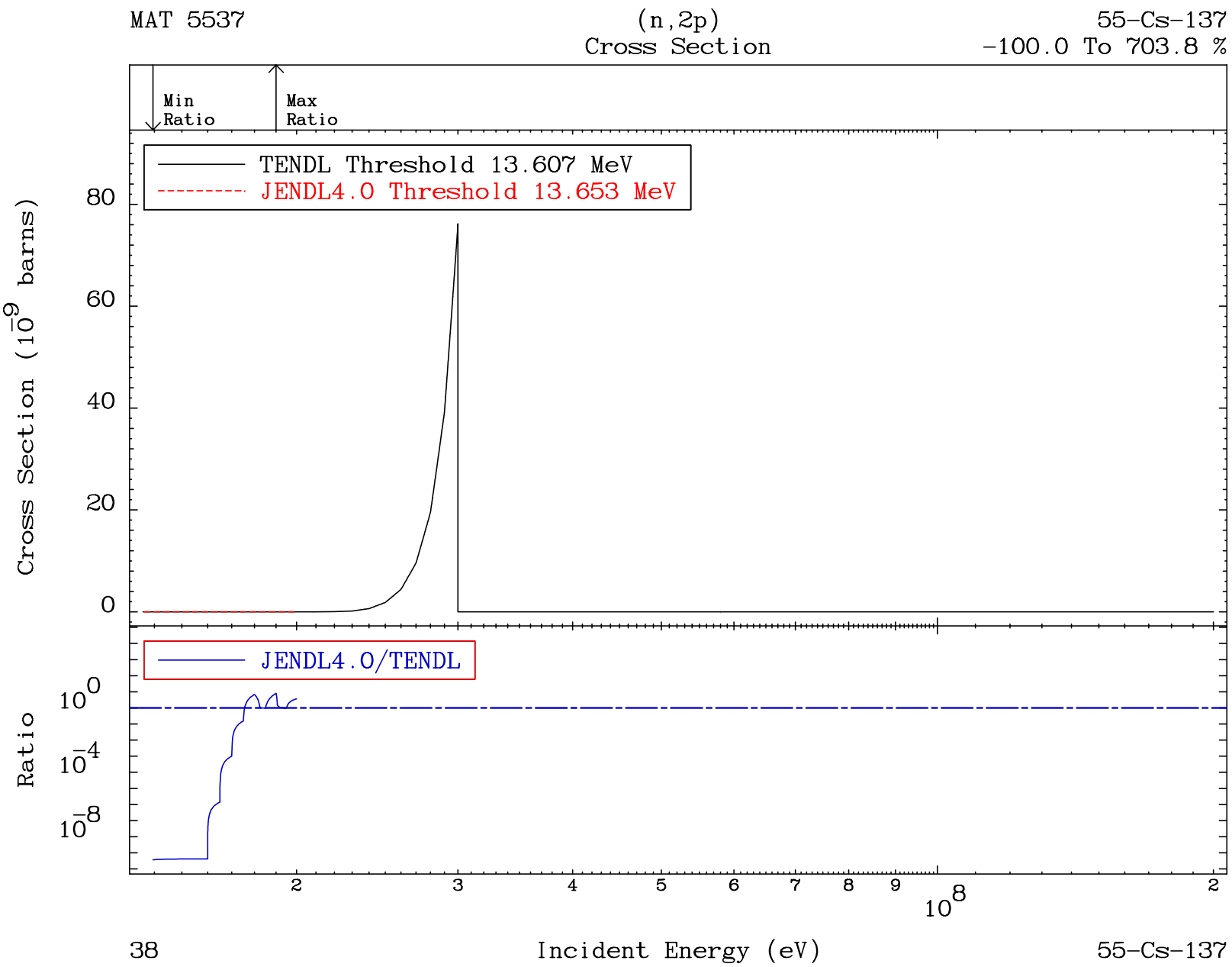

MAT 5537
(n,d)
Cross Section
55-Cs-137
-78.25 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.2190 MeV
JENDL4.0 Threshold 5.2231 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
55-Cs-137

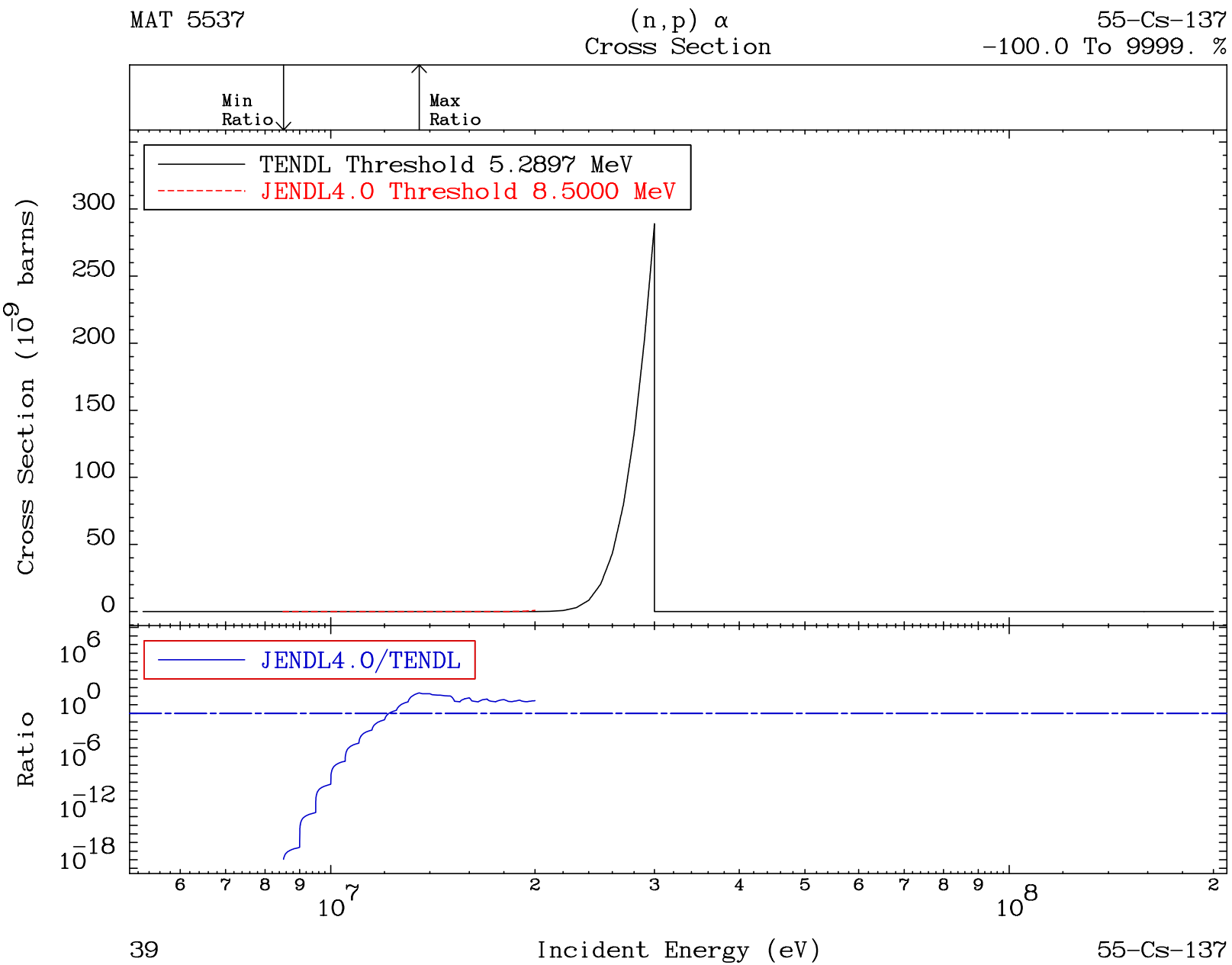

MAT 5537
(n,t)
Cross Section
55-Cs-137
-97.40 To 9999. %
Max
Ratio
TENDL Threshold 7.0626 MeV
JENDL4.0 Threshold 7.0587 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
34
55-Cs-137

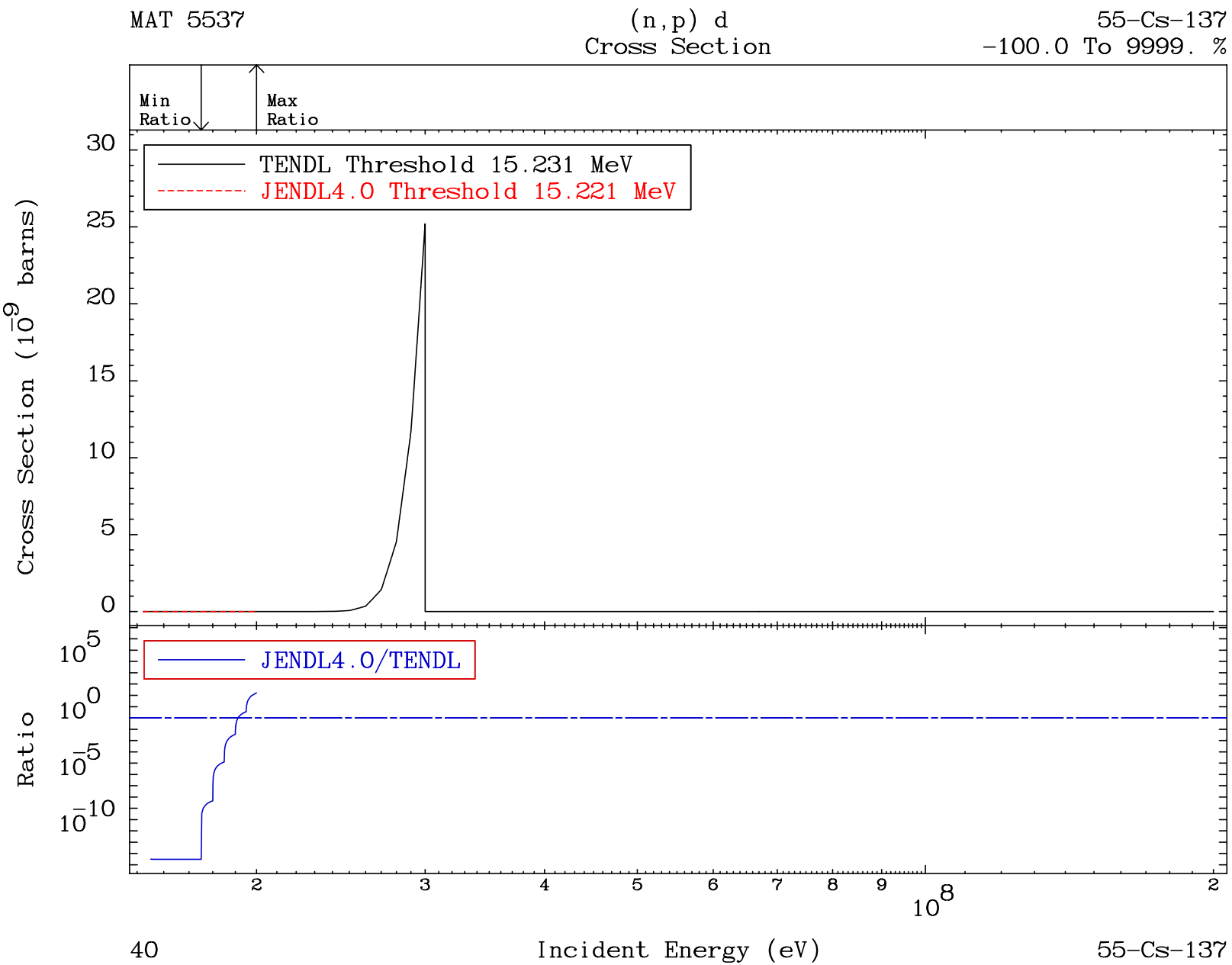

MAT 5537
(n,He-3)
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.6973 MeV
JENDL4.0 Threshold 9.6867 MeV
Cross Section (micro-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^4
10^0
10^-4
10^-8
10^7
2
3
4
5
6
7
8
9
10^8
2
35
Incident Energy (eV)
55-Cs-137

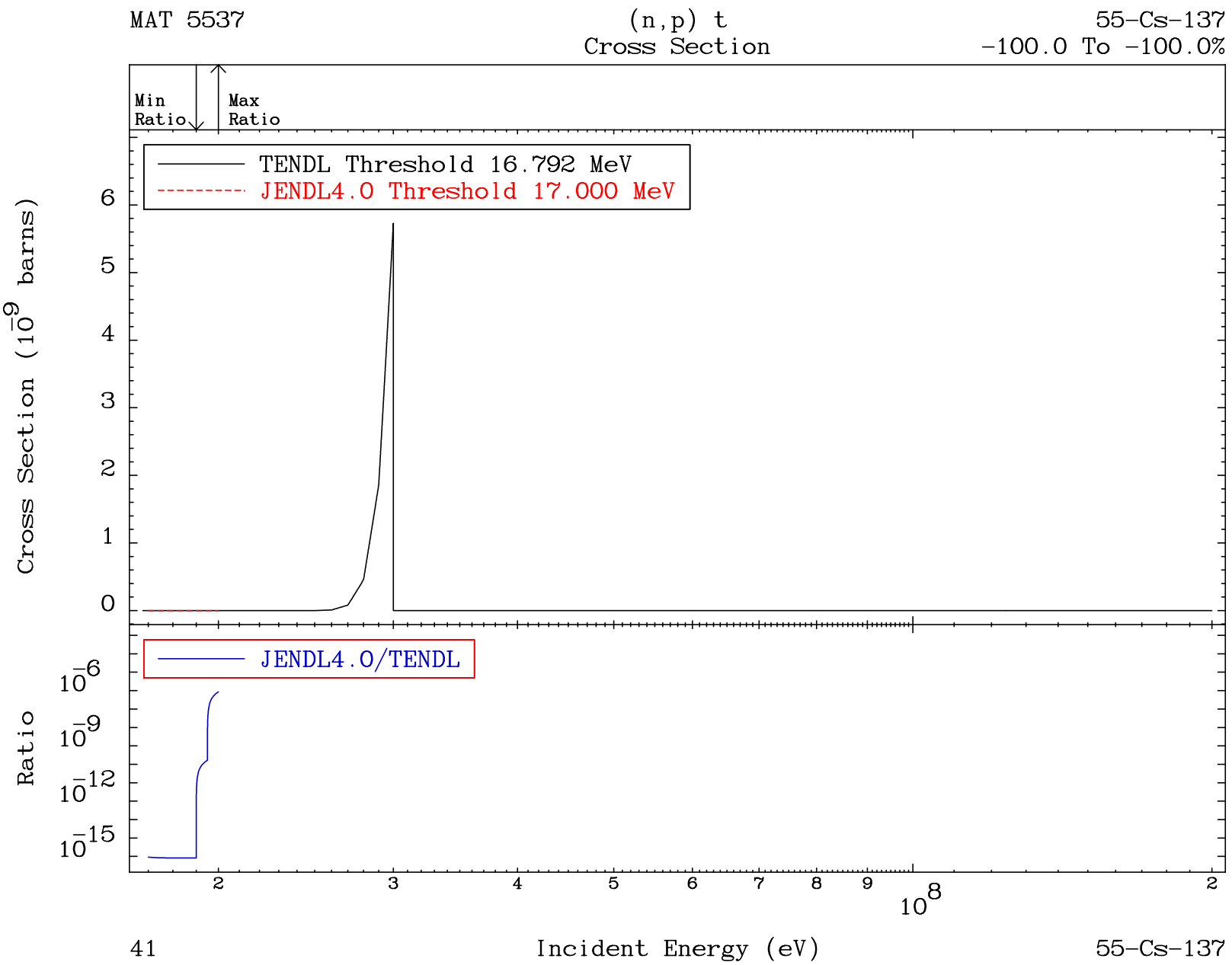

MAT 5537
(n,α)
Cross Section
55-Cs-137
-82.10 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 50.033 keV
JENDL4.0 Threshold 640.00 eV
Cross Section (milli-barns)
0
2
4
6
8
JENDL4.0/TENDL
Ratio
10^0
10^2
10^4
10^3
10^4
10^5
10^6
10^7
10^8
36
Incident Energy (eV)
55-Cs-137

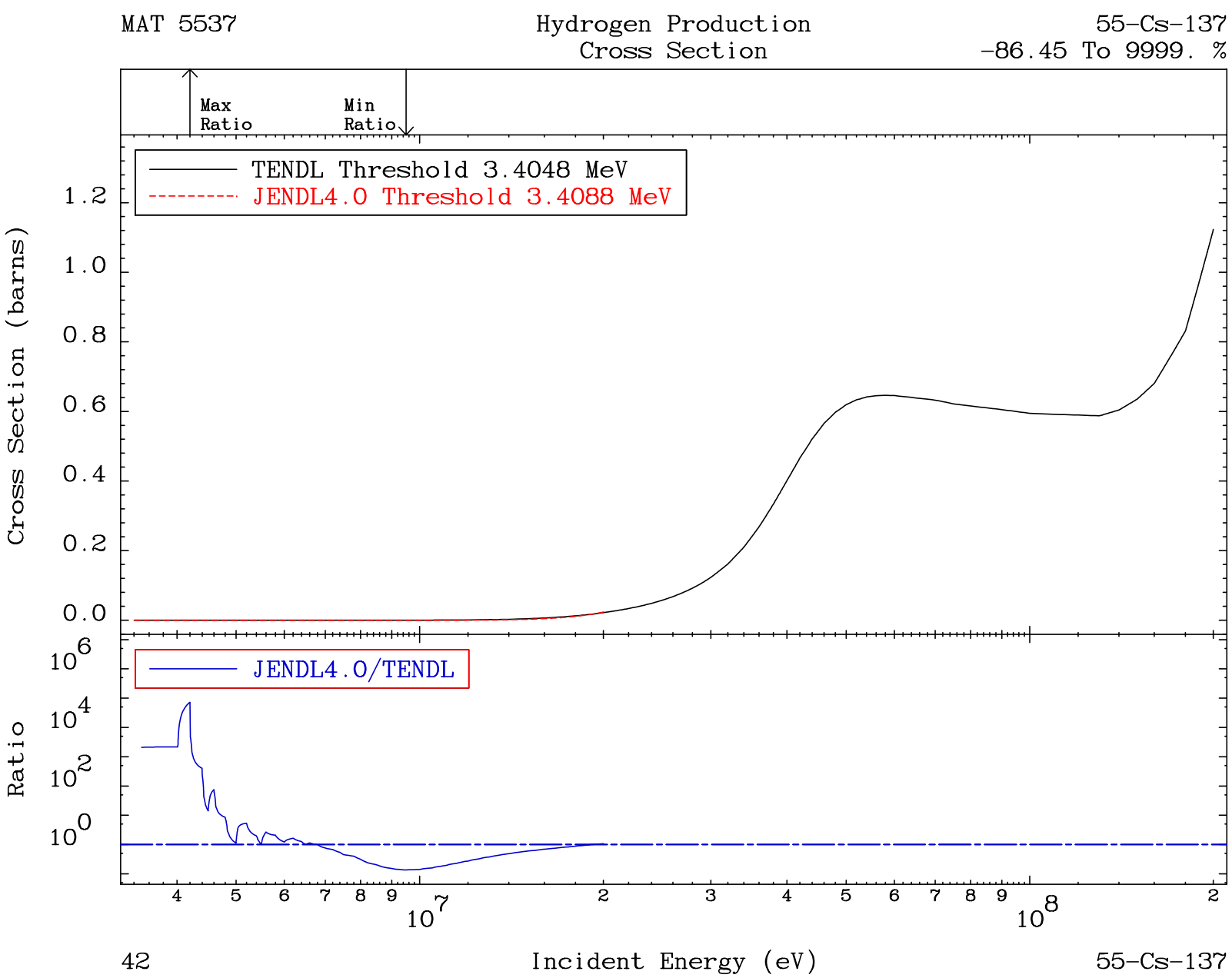

MAT 5537
(n,2α)
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0461 MeV
JENDL4.0 Threshold 7.5000 MeV
Cross Section (10^-9 barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^7
10^0
10^-7
10^-14
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
55-Cs-137

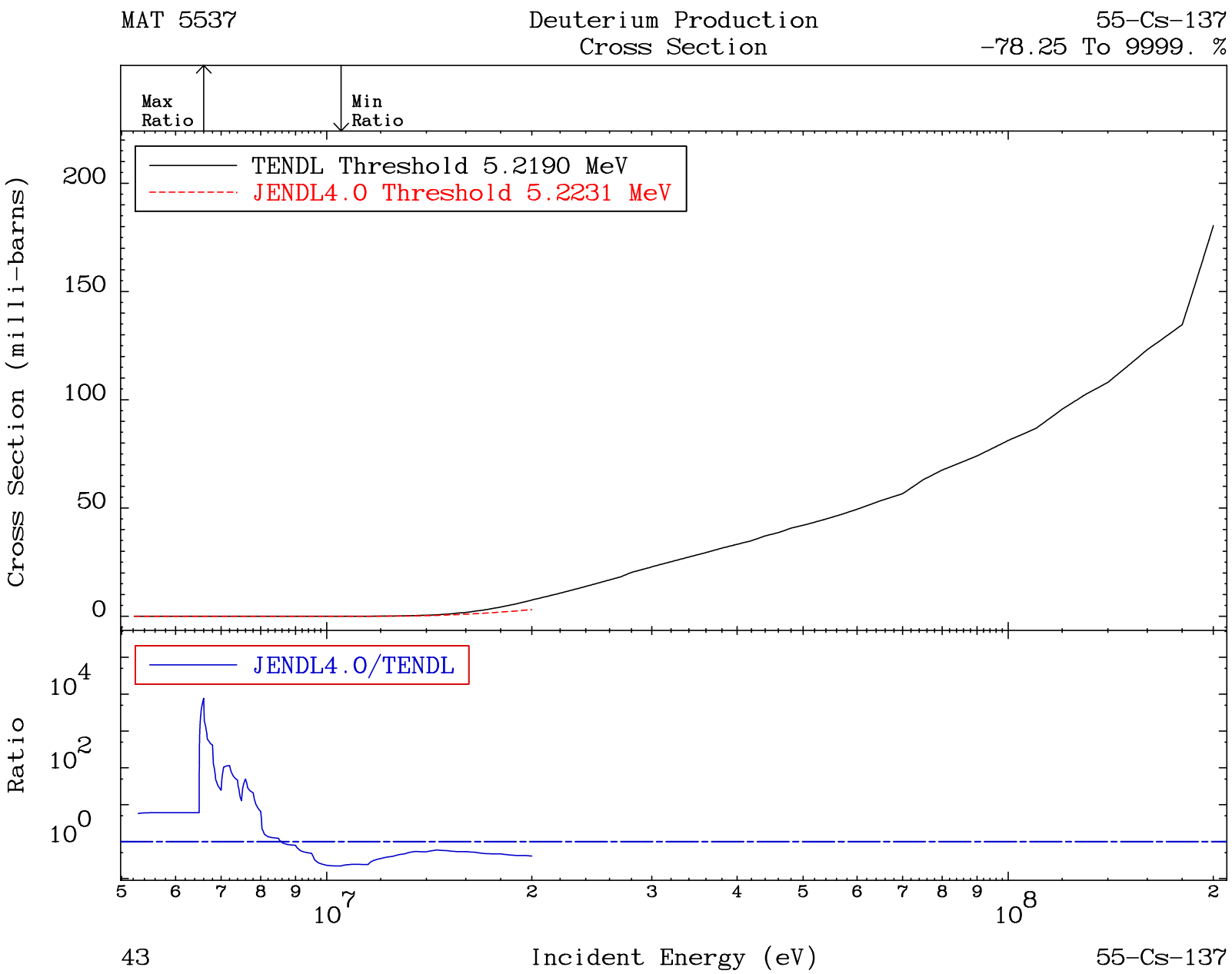

MAT 5537
(n,2p)
Cross Section
55-Cs-137
-100.0 To 703.8 %
Min Ratio
Max Ratio
TENDL Threshold 13.607 MeV
JENDL4.0 Threshold 13.653 MeV
Cross Section (10^{-9} barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^{0}
10^{-4}
10^{-8}
2
3
4
5
6
7
8
9
10^{8}
2
38
Incident Energy (eV)
55-Cs-137

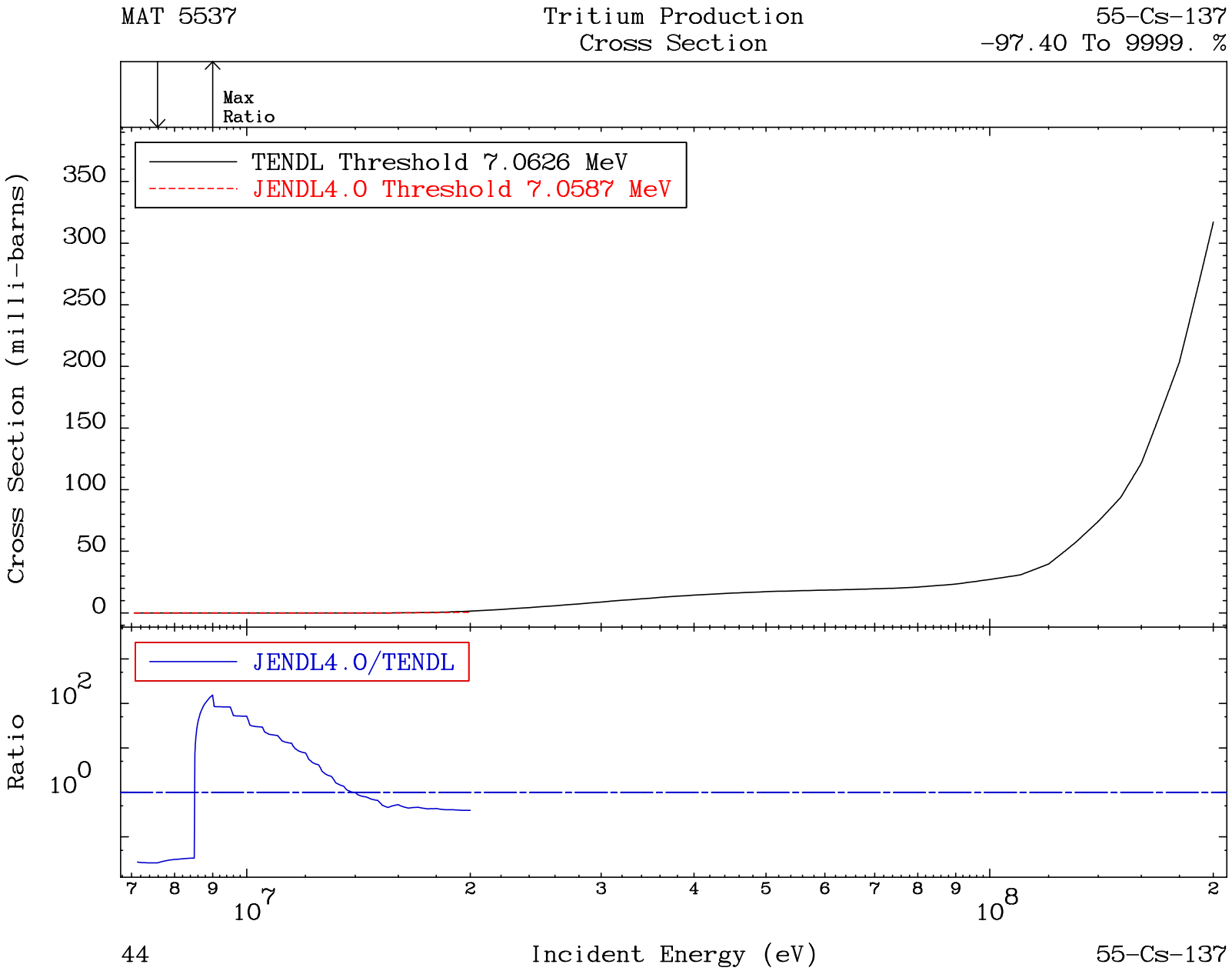

MAT 5537
(n,p) α
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2897 MeV
JENDL4.0 Threshold 8.5000 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^{6}
10^{0}
10^{-6}
10^{-12}
10^{-18}
6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
39
Incident Energy (eV)
55-Cs-137

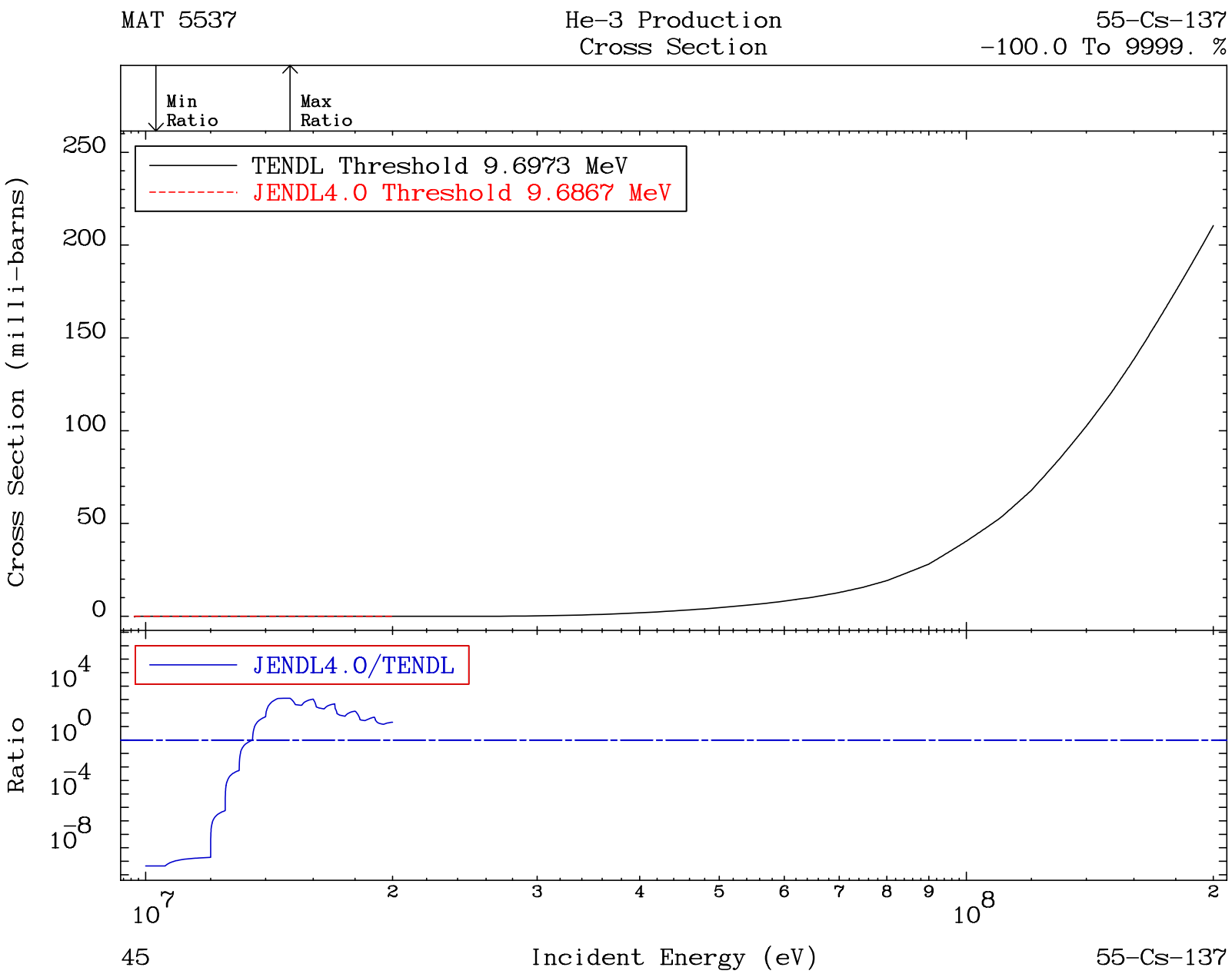

MAT 5537
(n,p) d
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 15.231 MeV
JENDL4.0 Threshold 15.221 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^{5}
10^{0}
10^{-5}
10^{-10}
2
3
4
5
6
7
8
9
10^{8}
2
40
Incident Energy (eV)
55-Cs-137

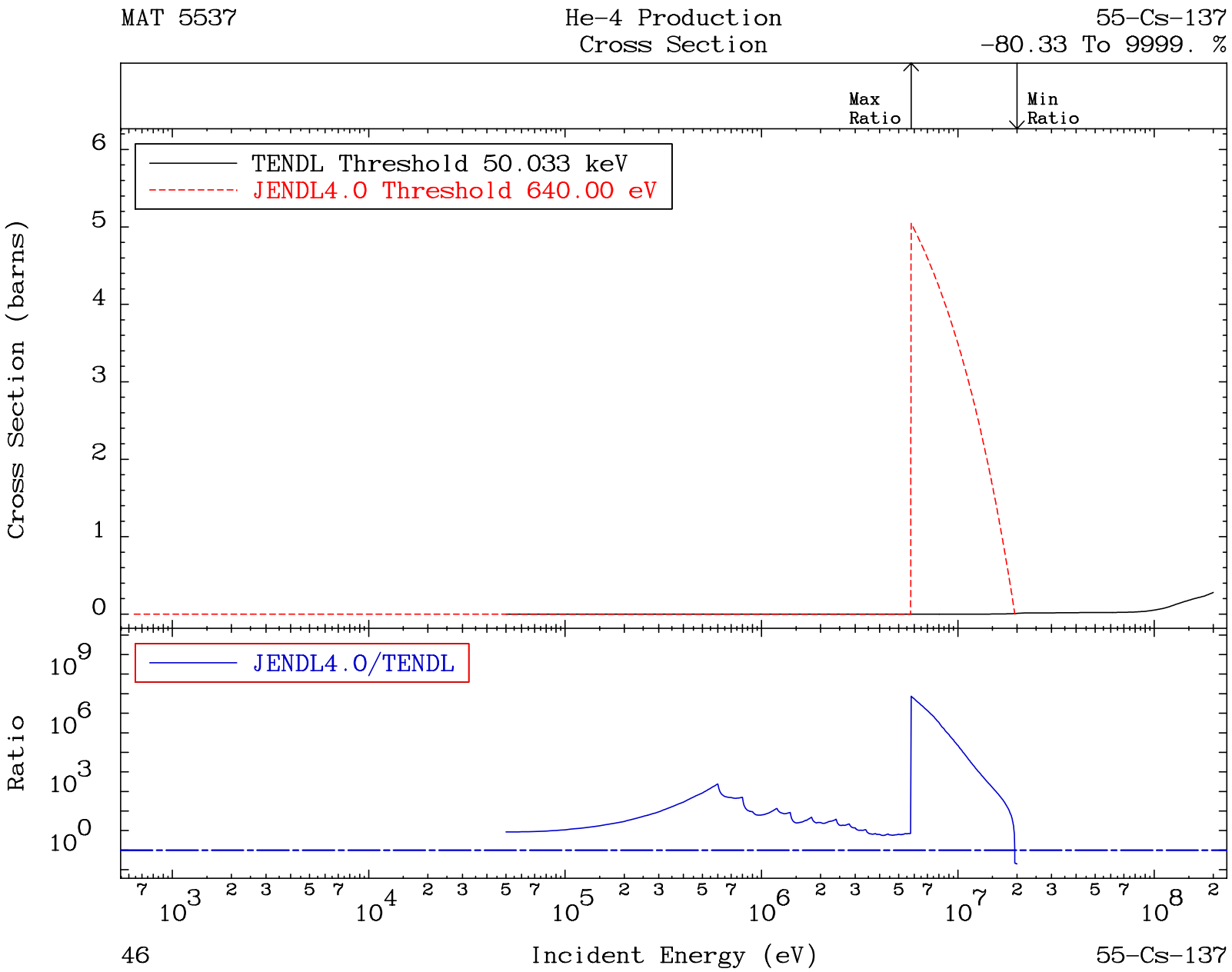

MAT 5537
(n,p) t
Cross Section
55-Cs-137
-100.0 To -100.0%
Min Ratio
Max Ratio
TENDL Threshold 16.792 MeV
JENDL4.0 Threshold 17.000 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
5
6
JENDL4.0/TENDL
Ratio
10^{-6}
10^{-9}
10^{-12}
10^{-15}
2
3
4
5
6
7
8
9
10^{8}
2
41
Incident Energy (eV)
55-Cs-137

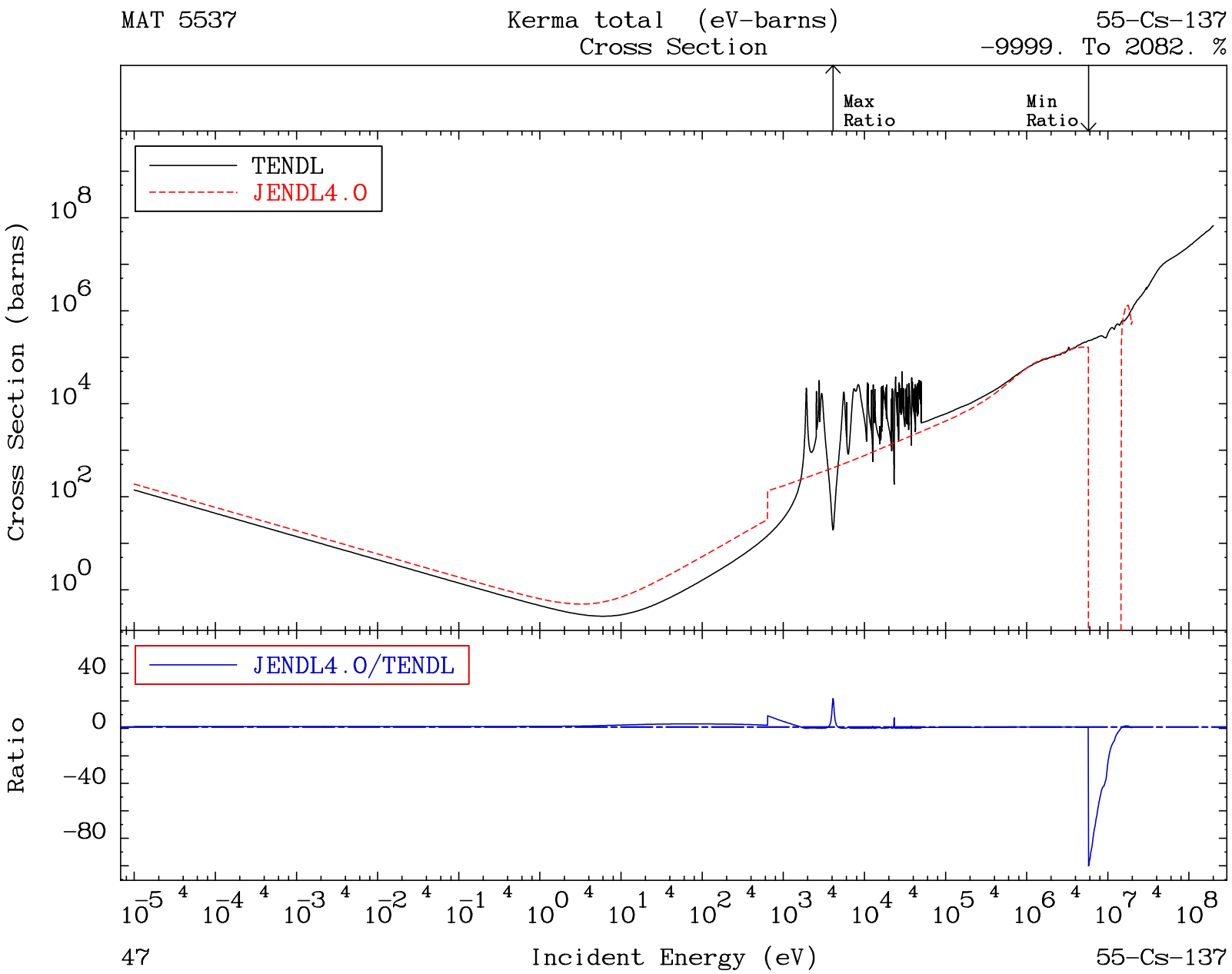

MAT 5537
Hydrogen Production
Cross Section
55-Cs-137
-86.45 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.4048 MeV
JENDL4.0 Threshold 3.4088 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
55-Cs-137

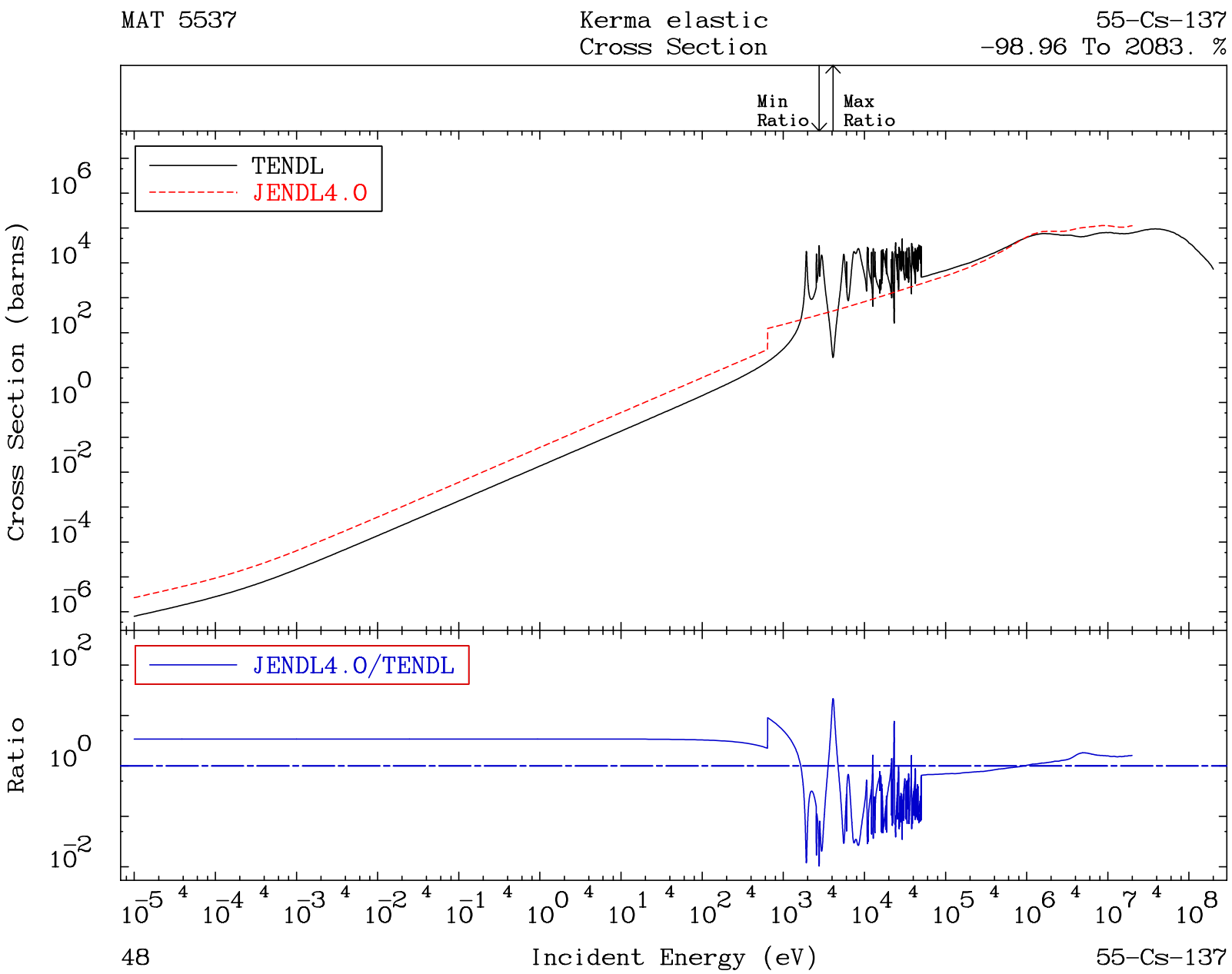

MAT 5537
Deuterium Production
Cross Section
55-Cs-137
-78.25 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.2190 MeV
JENDL4.0 Threshold 5.2231 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
55-Cs-137

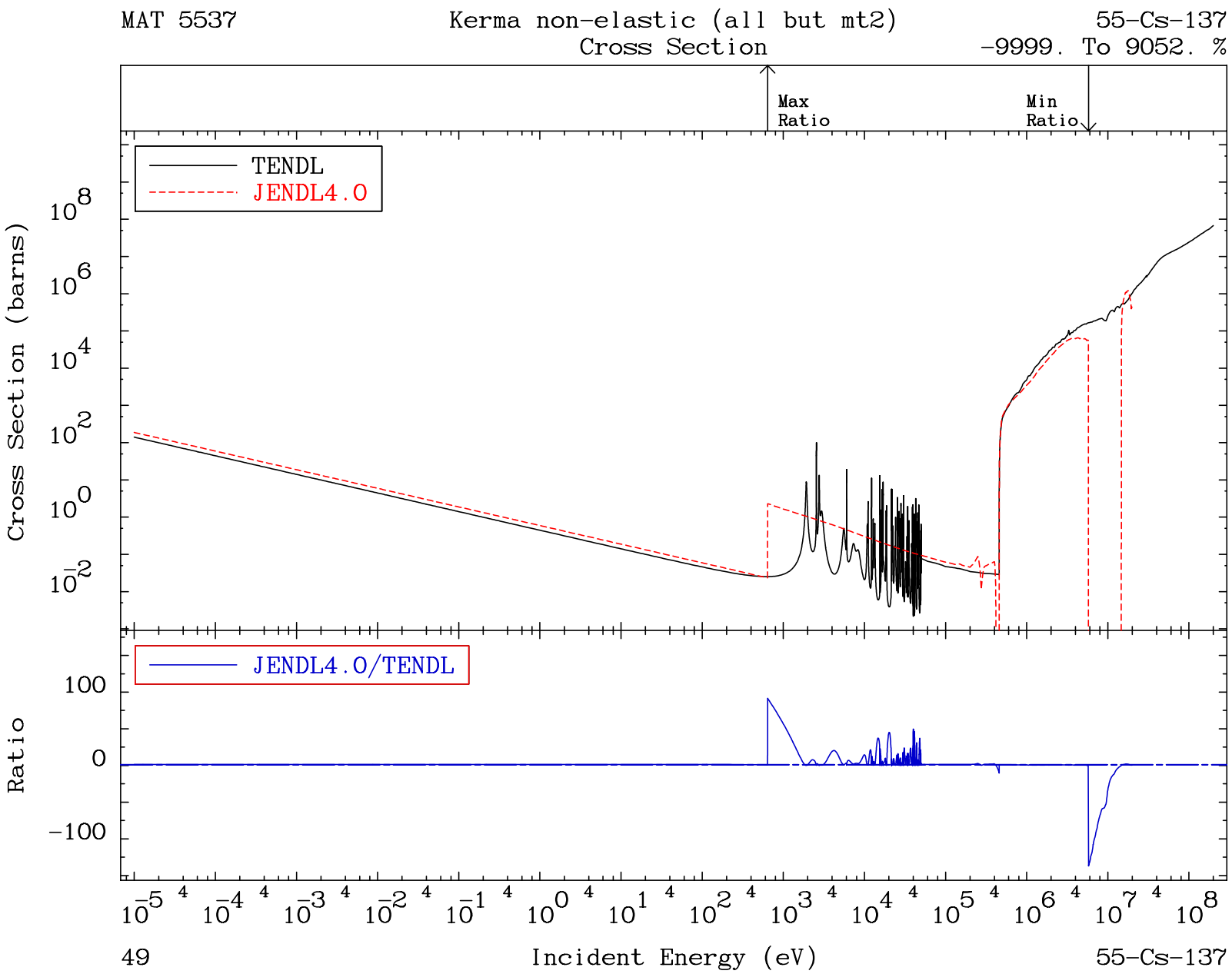

MAT 5537
Tritium Production
Cross Section
55-Cs-137
-97.40 To 9999. %
Max
Ratio
TENDL Threshold 7.0626 MeV
JENDL4.0 Threshold 7.0587 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
55-Cs-137

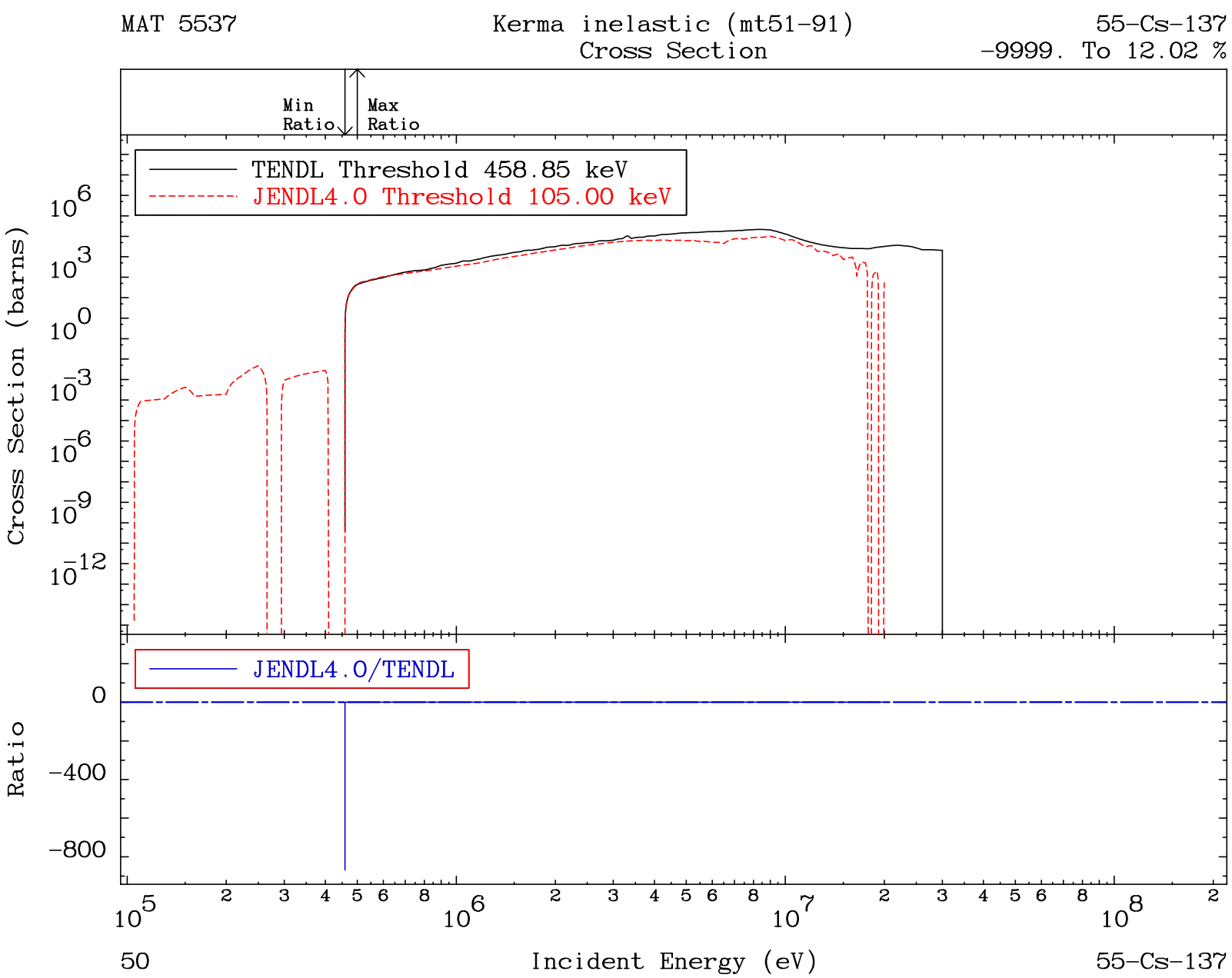

MAT 5537
He-3 Production
Cross Section
55-Cs-137
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.6973 MeV
JENDL4.0 Threshold 9.6867 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^4
10^0
10^-4
10^-8
10^7
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
55-Cs-137

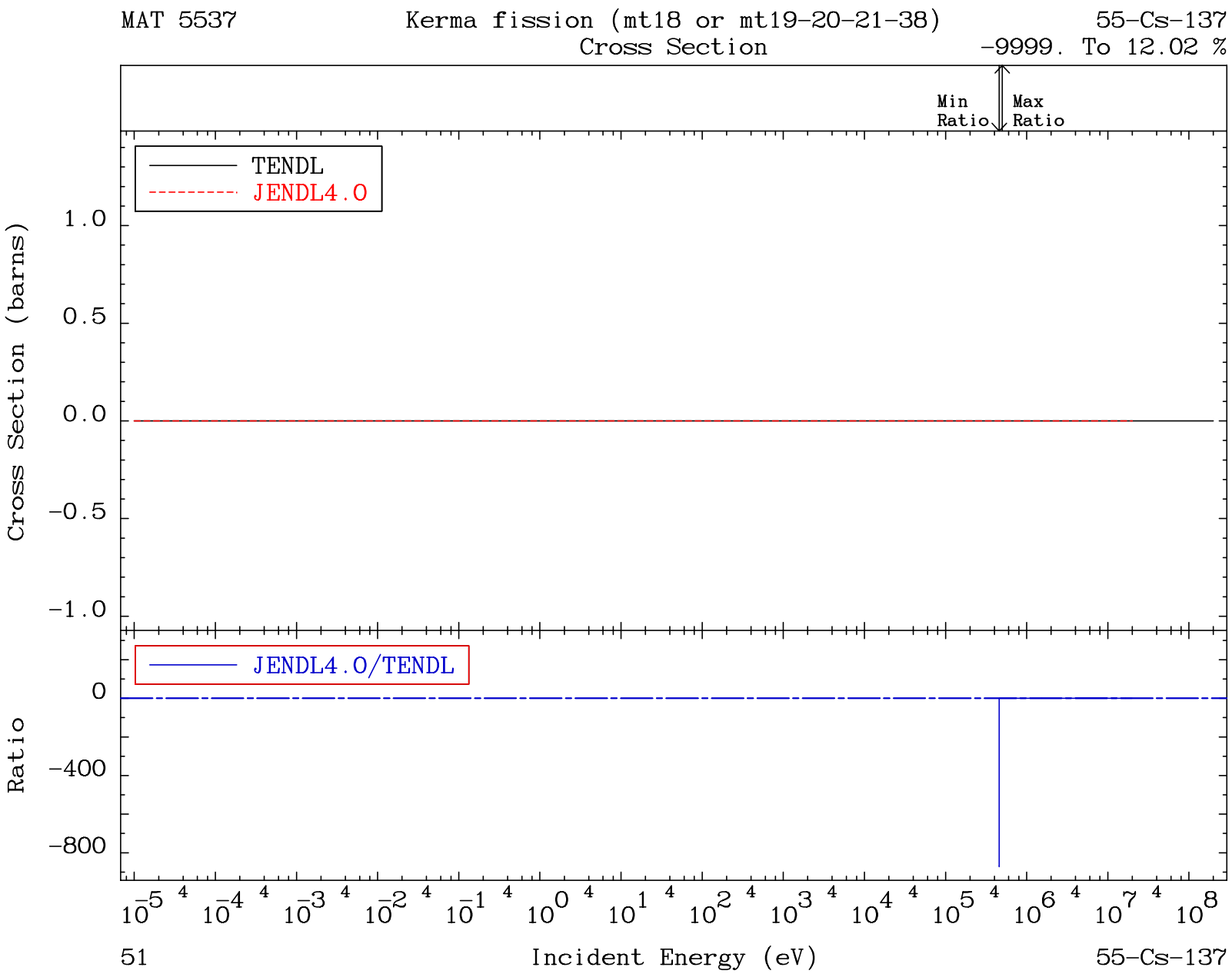

MAT 5537
He-4 Production
Cross Section
55-Cs-137
-80.33 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 50.033 keV
JENDL4.0 Threshold 640.00 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
46
55-Cs-137

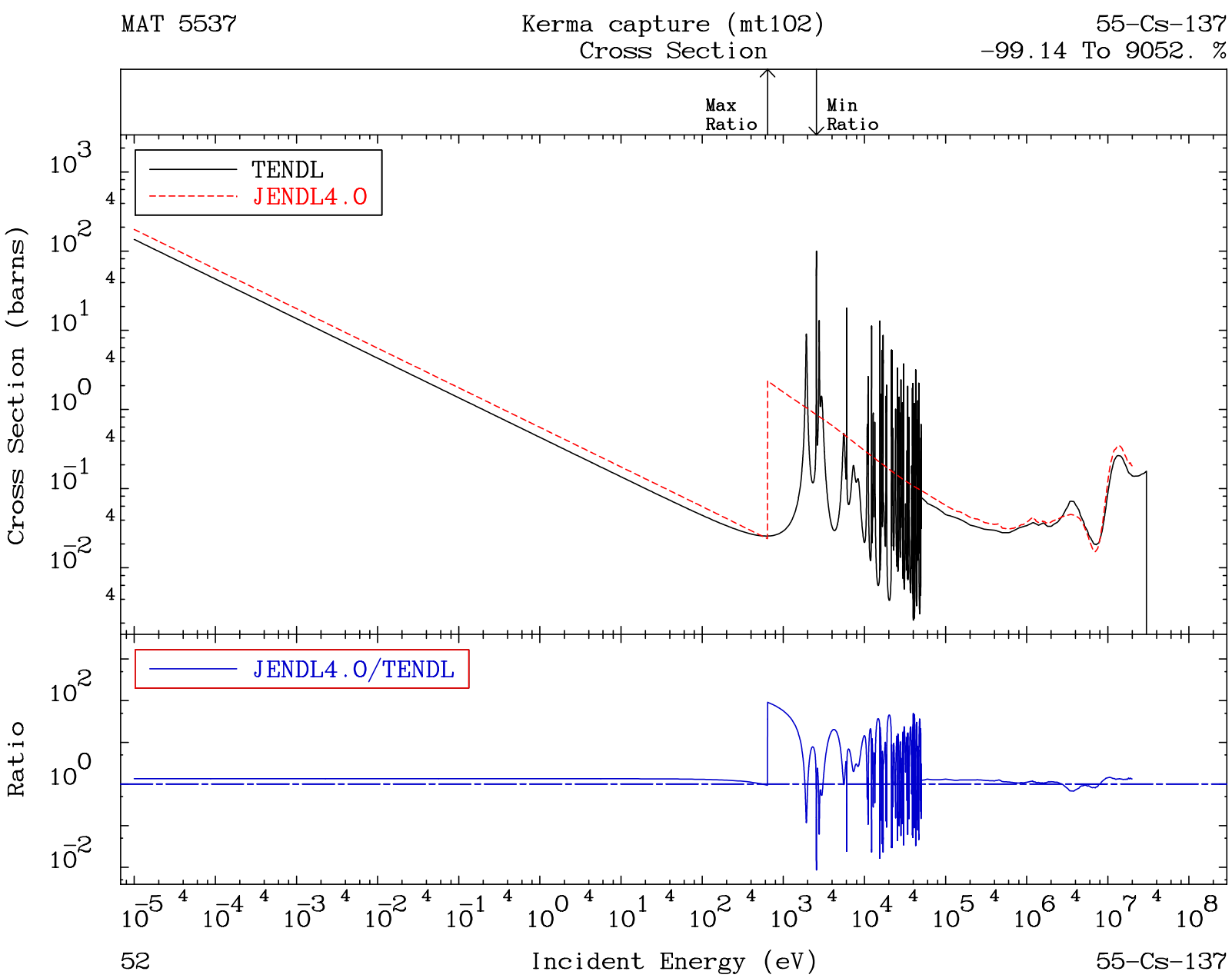

MAT 5537
Kerma total (eV-barns)
Cross Section
55-Cs-137
-9999. To 2082. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
47
55-Cs-137

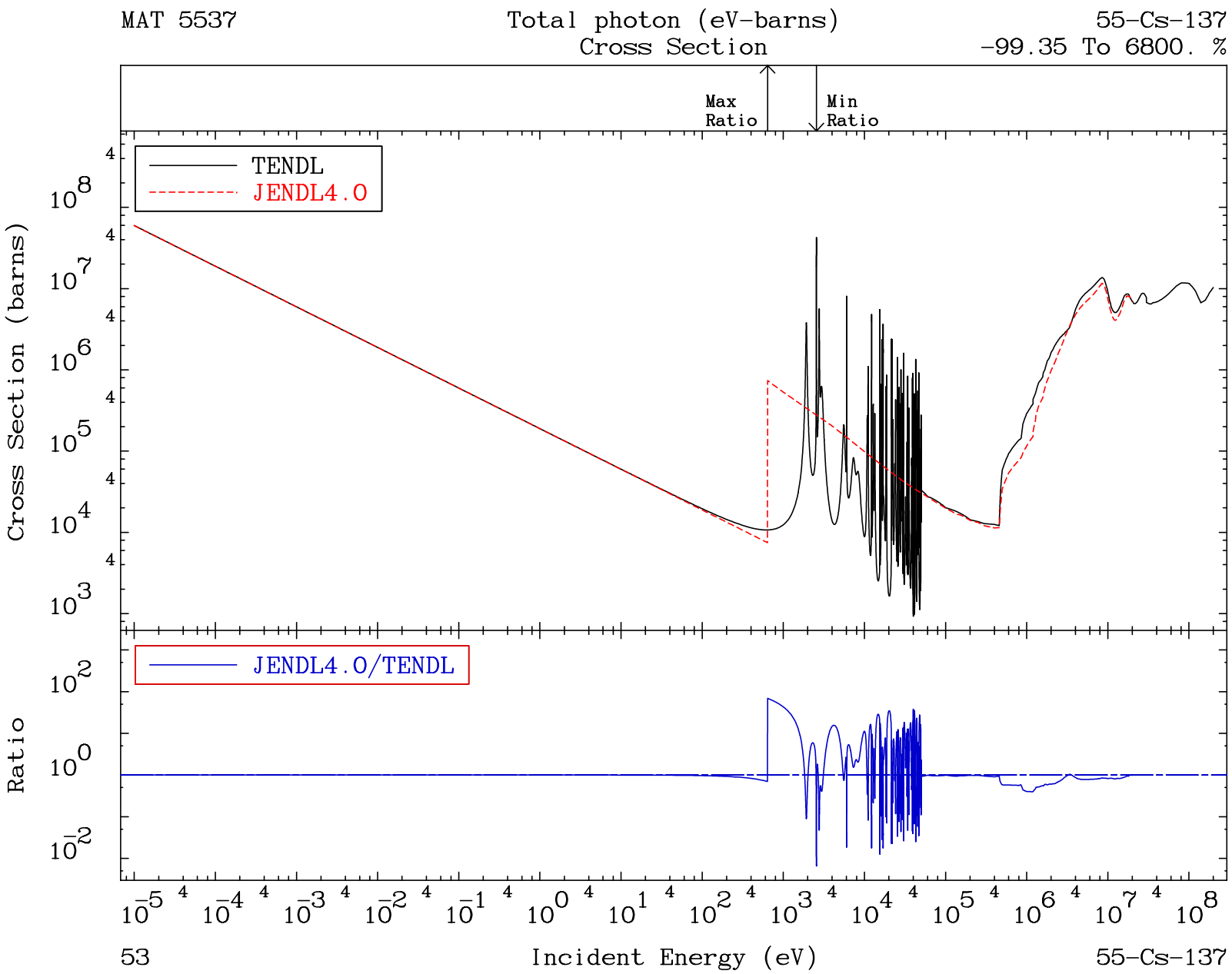

MAT 5537
Kerma elastic
Cross Section
55-Cs-137
-98.96 To 2083. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
48
55-Cs-137

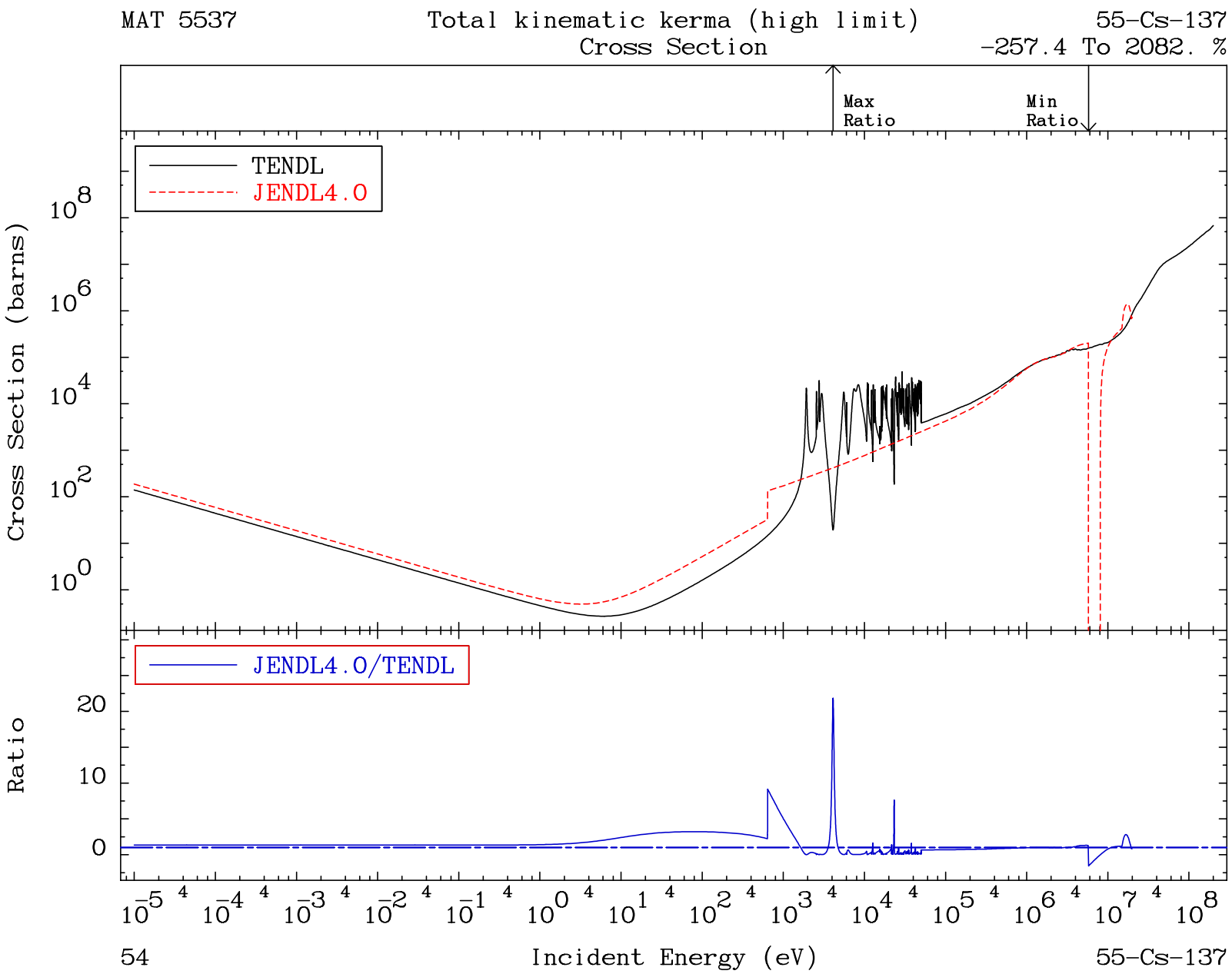

MAT 5537
Kerma non-elastic (all but mt2)
Cross Section
55-Cs-137
-9999. To 9052. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
49
55-Cs-137

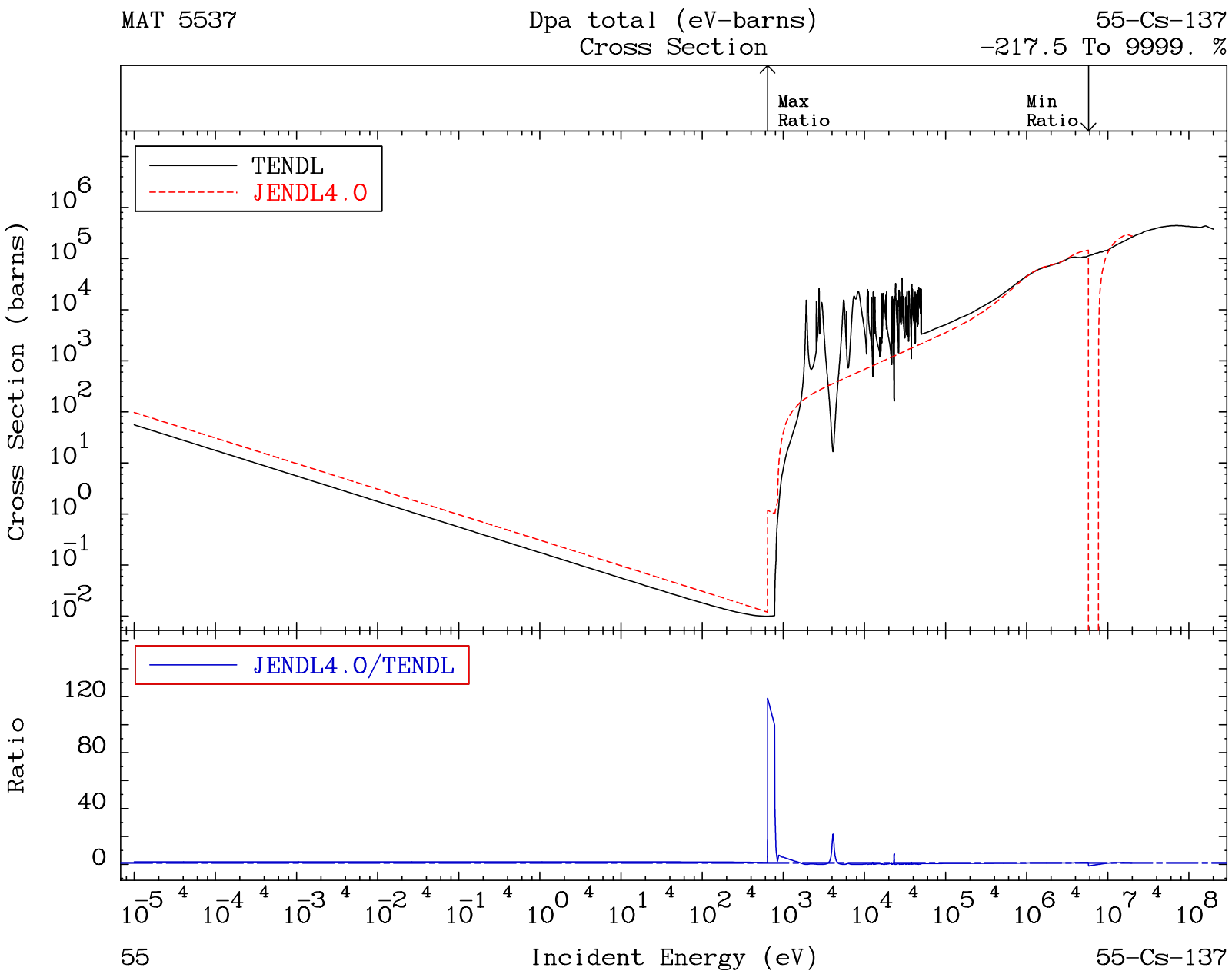

MAT 5537
Kerma inelastic (mt51-91)
Cross Section
55-Cs-137
-9999. To 12.02 %
Min Ratio
Max Ratio
TENDL Threshold 458.85 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
50
55-Cs-137

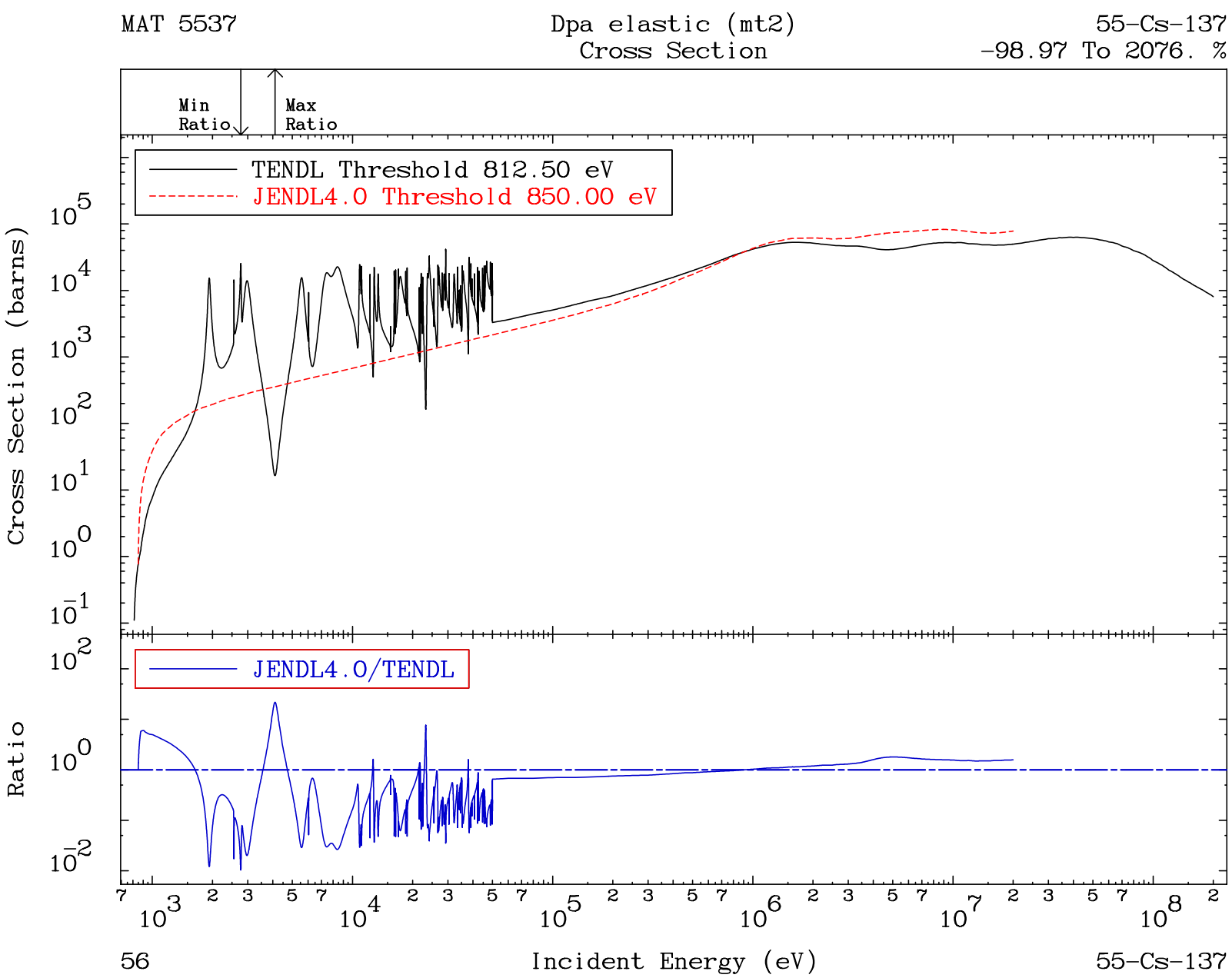

MAT 5537
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
55-Cs-137
-9999. To 12.02 %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
0
-400
-800
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
51
Incident Energy (eV)
55-Cs-137

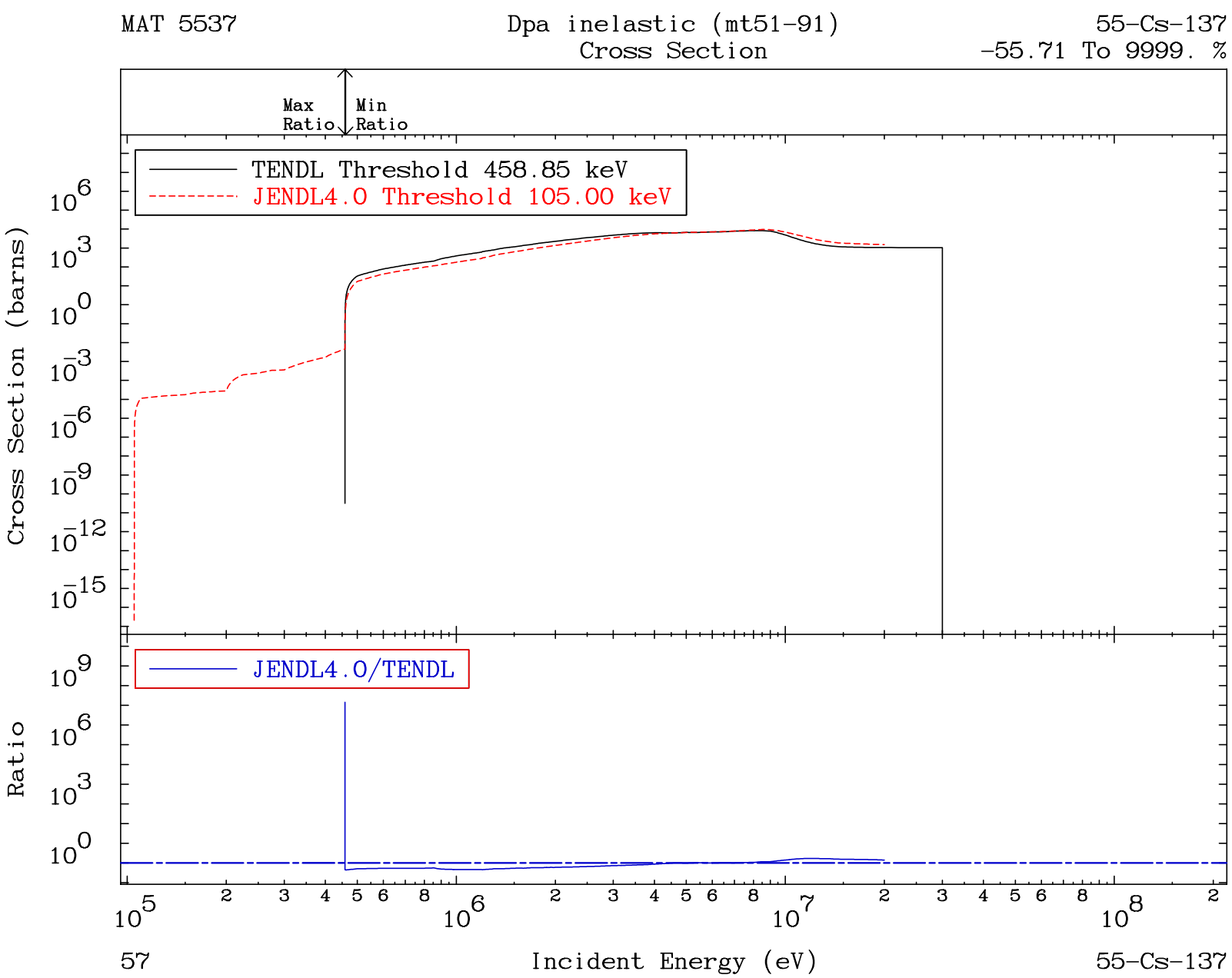

MAT 5537
Kerma capture (mt102)
Cross Section
55-Cs-137
-99.14 To 9052. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
52
55-Cs-137

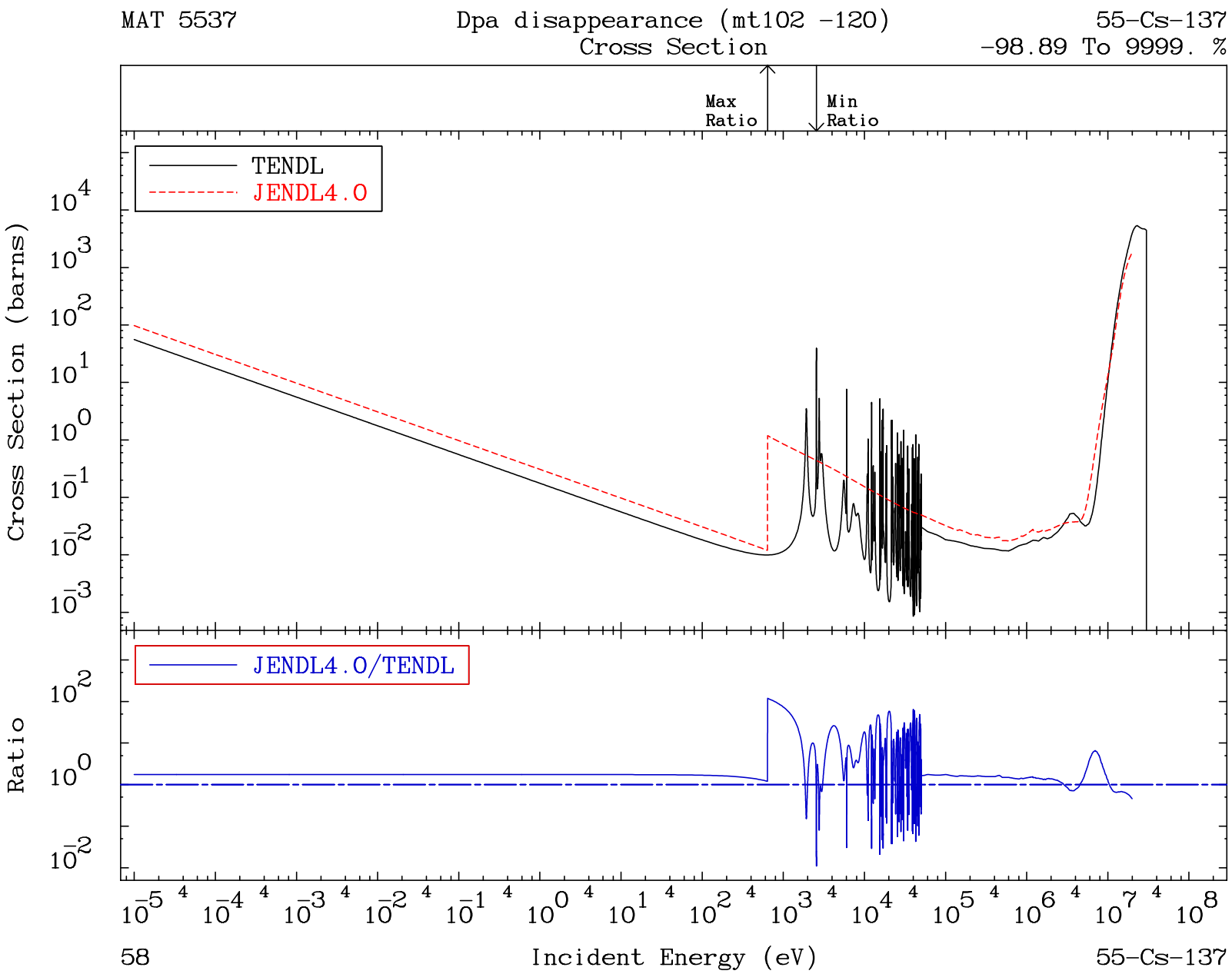

MAT 5537
Total photon (eV-barns)
Cross Section
55-Cs-137
-99.35 To 6800. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
53
55-Cs-137

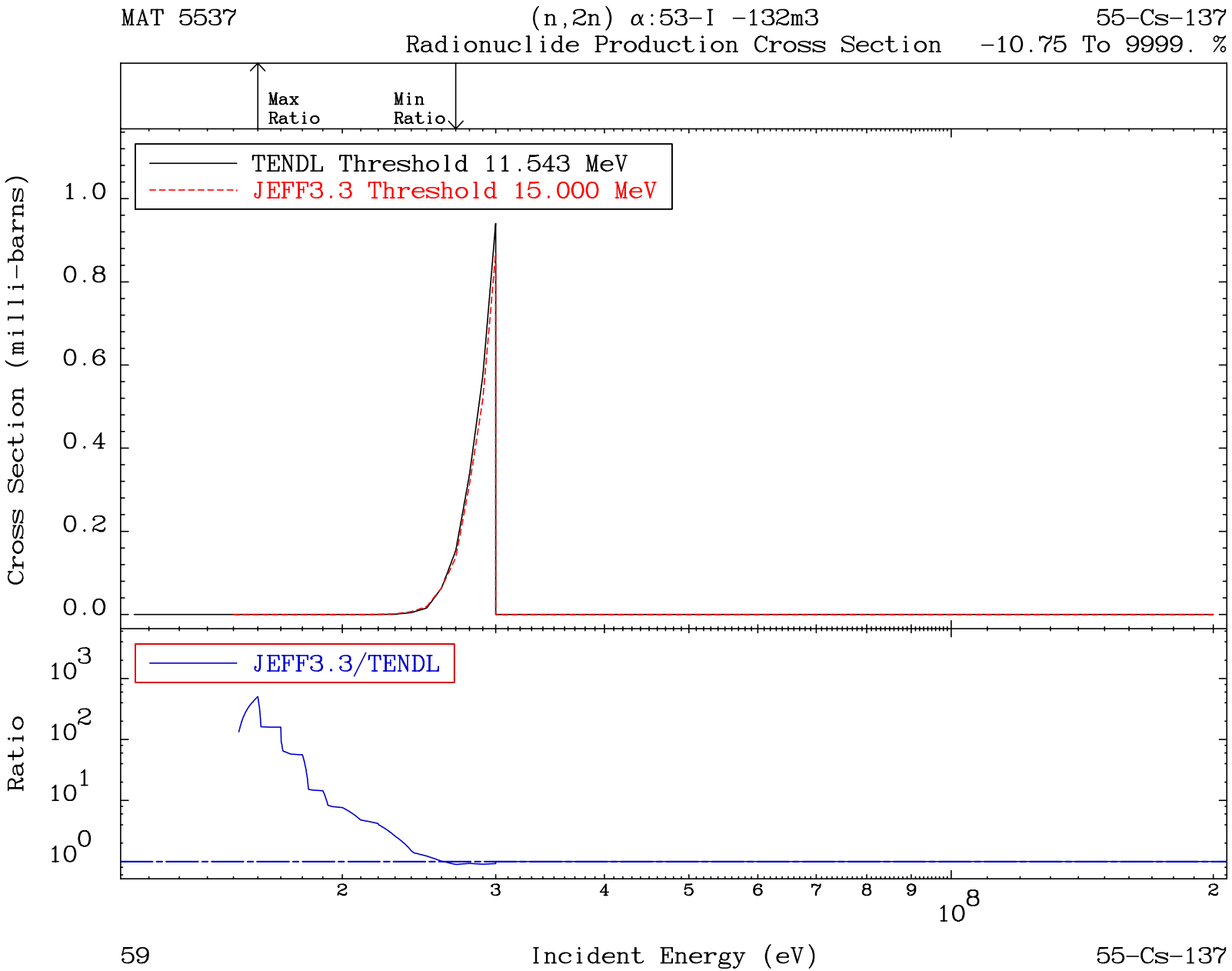

MAT 5537
Total kinematic kerma (high limit)
Cross Section
55-Cs-137
-257.4 To 2082. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
54
55-Cs-137

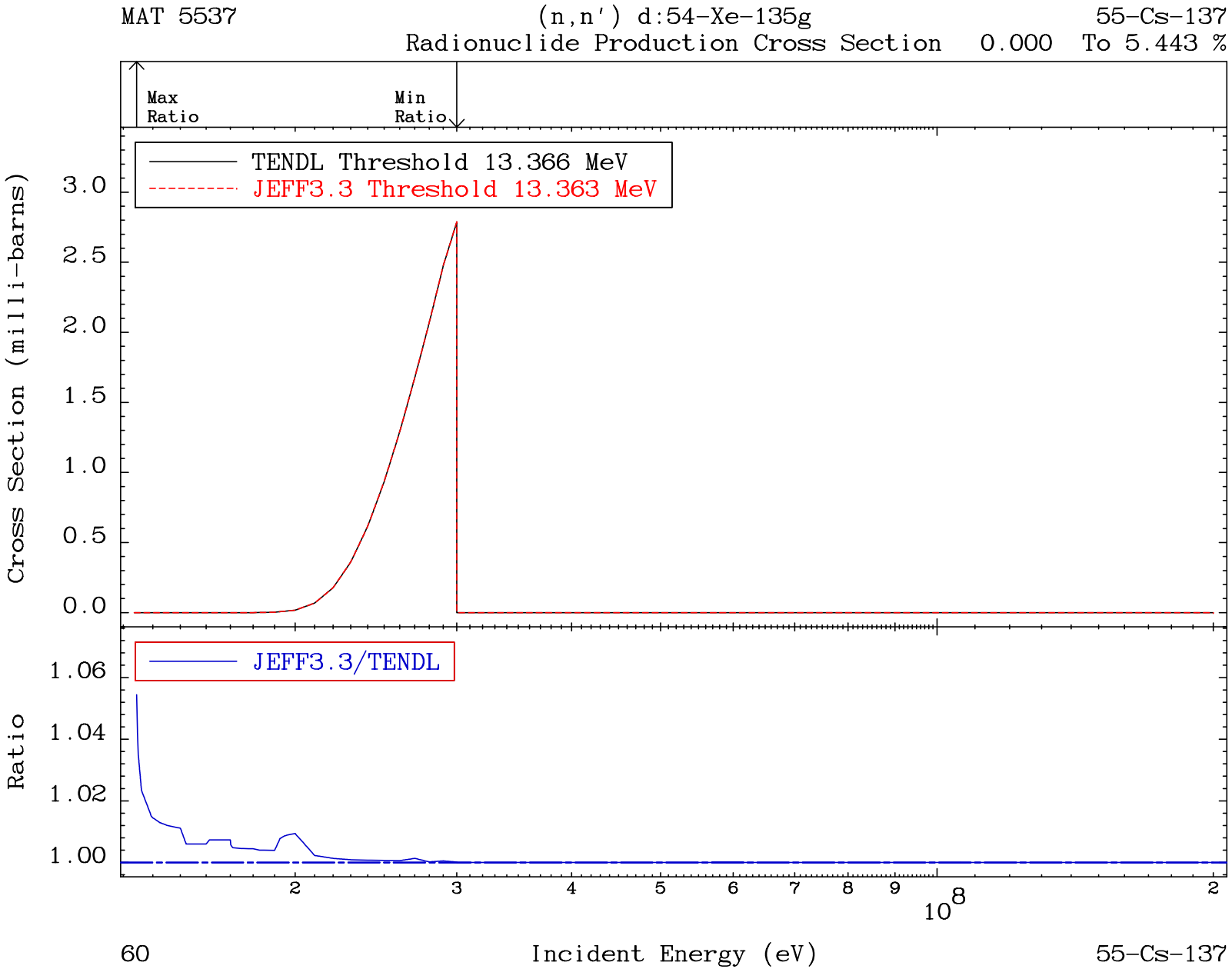

MAT 5537
Dpa total (eV-barns)
Cross Section
55-Cs-137
-217.5 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
55
55-Cs-137

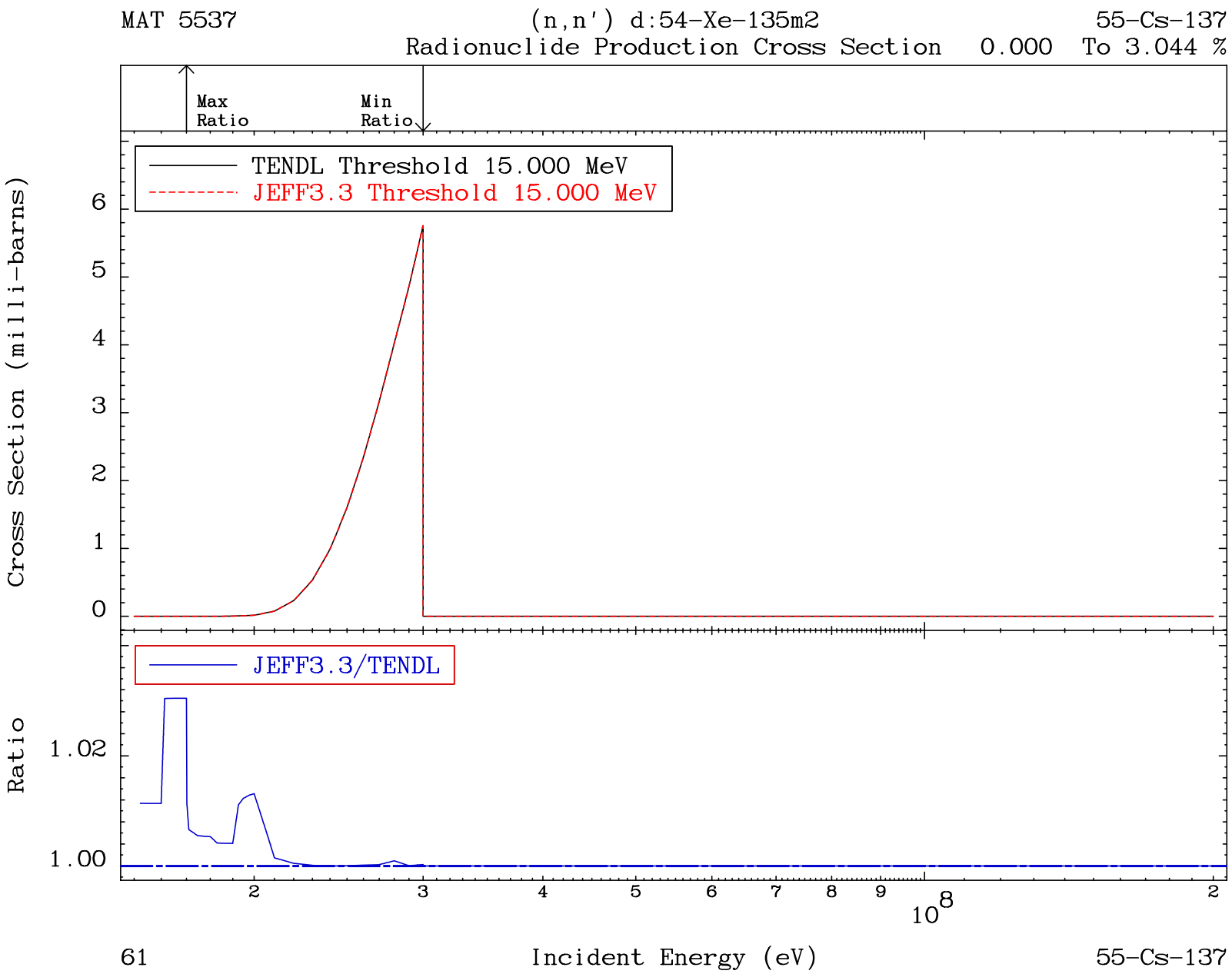

MAT 5537
Dpa elastic (mt2)
Cross Section
55-Cs-137
-98.97 To 2076. %
Min Ratio
Max Ratio
TENDL Threshold 812.50 eV
JENDL4.0 Threshold 850.00 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
56
55-Cs-137

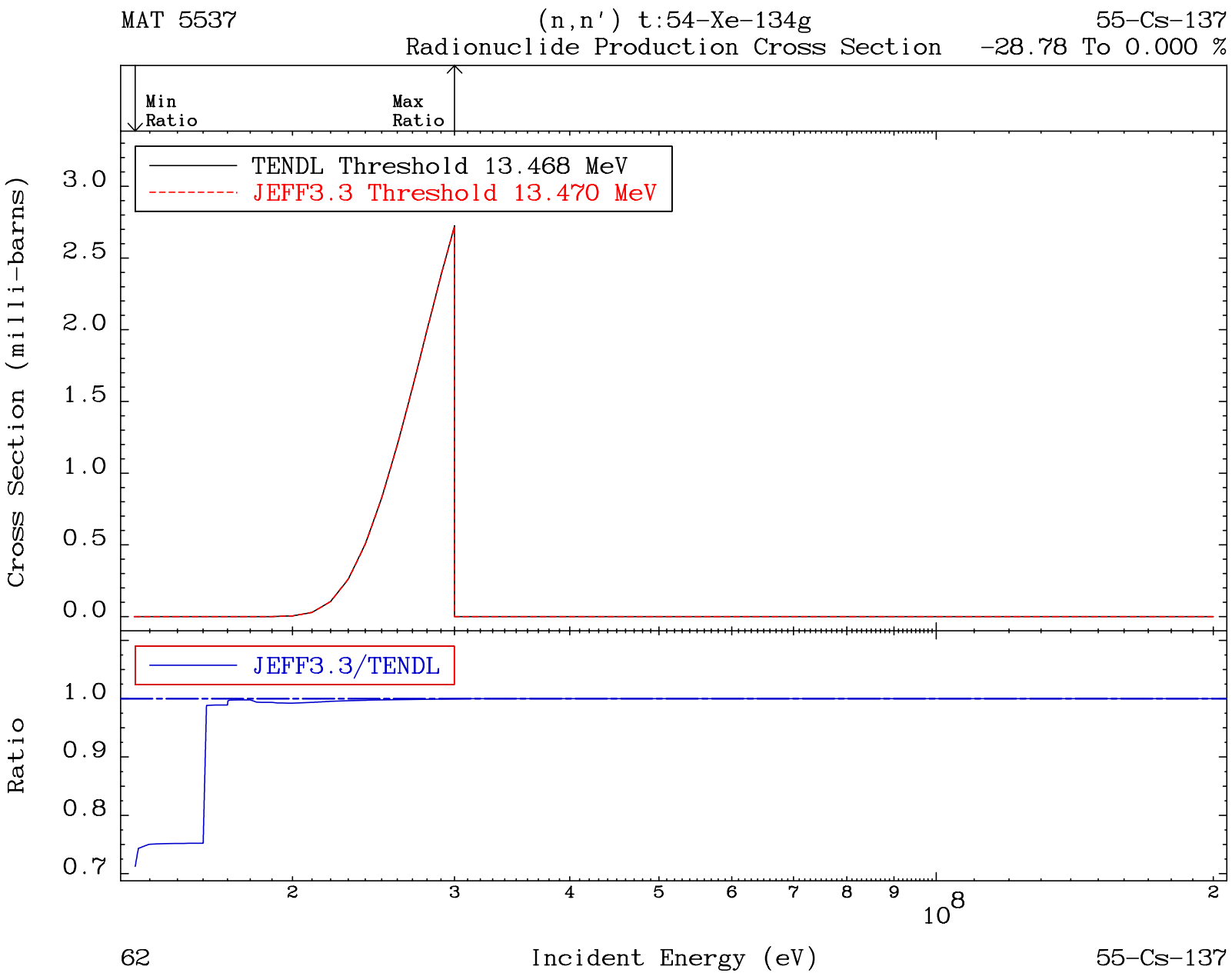

MAT 5537
Dpa inelastic (mt51-91)
Cross Section
55-Cs-137
-55.71 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 458.85 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
57
55-Cs-137

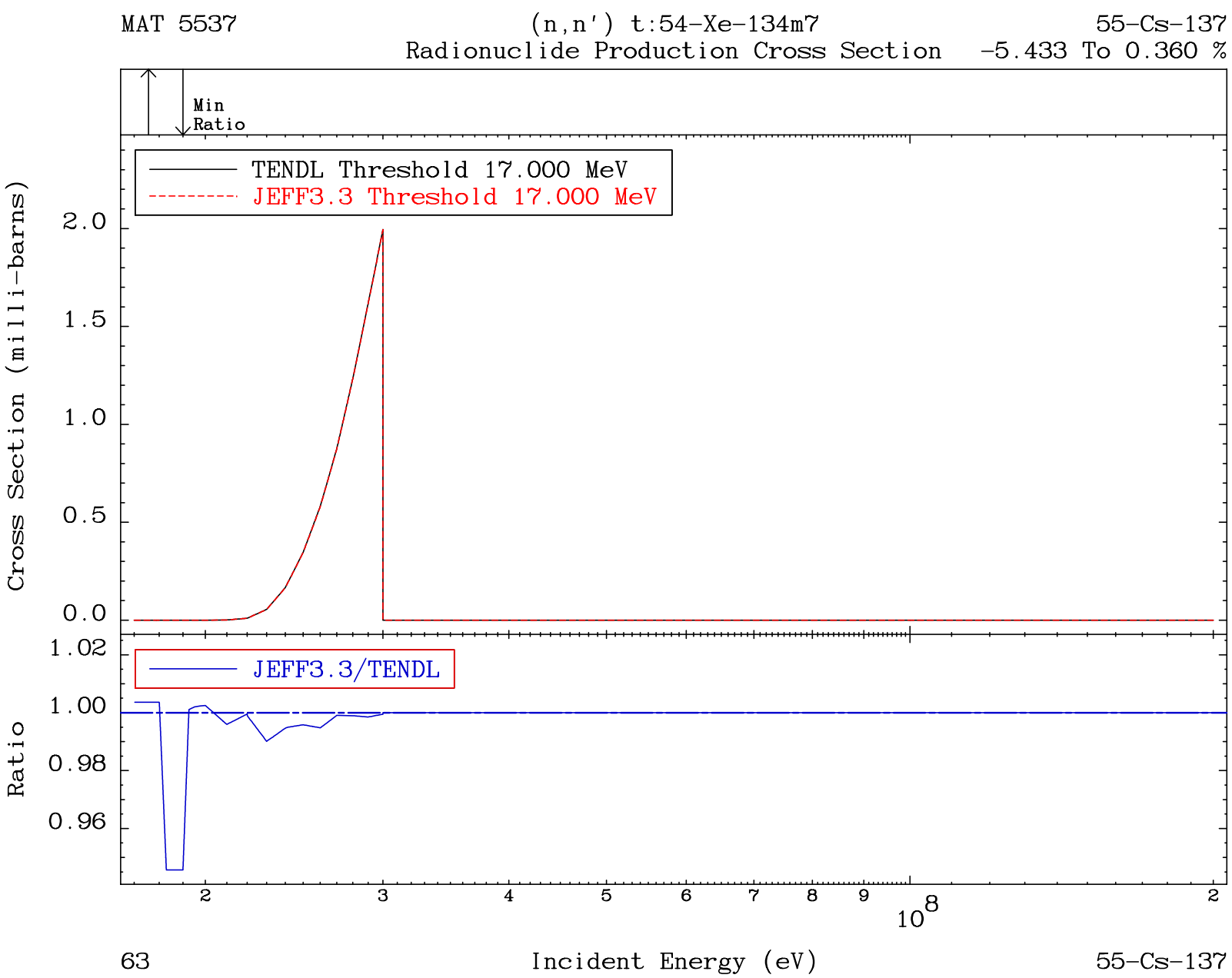

MAT 5537
Dpa disappearance (mt102 -120)
Cross Section
55-Cs-137
-98.89 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
58
55-Cs-137

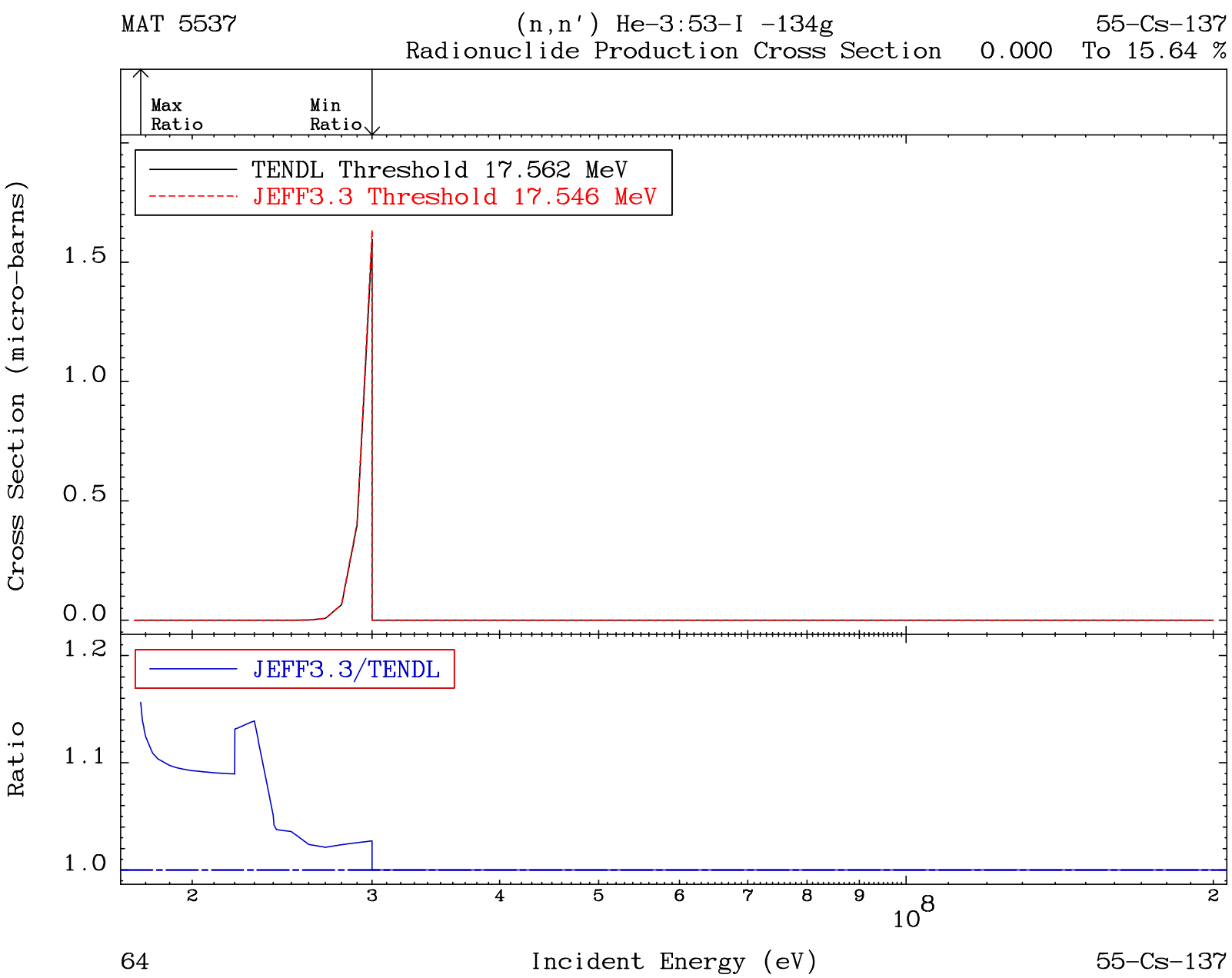

MAT 5537
(n,2n) α:53-I -132m3
55-Cs-137
Radionuclide Production Cross Section -10.75 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.543 MeV
JEFF3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
55-Cs-137

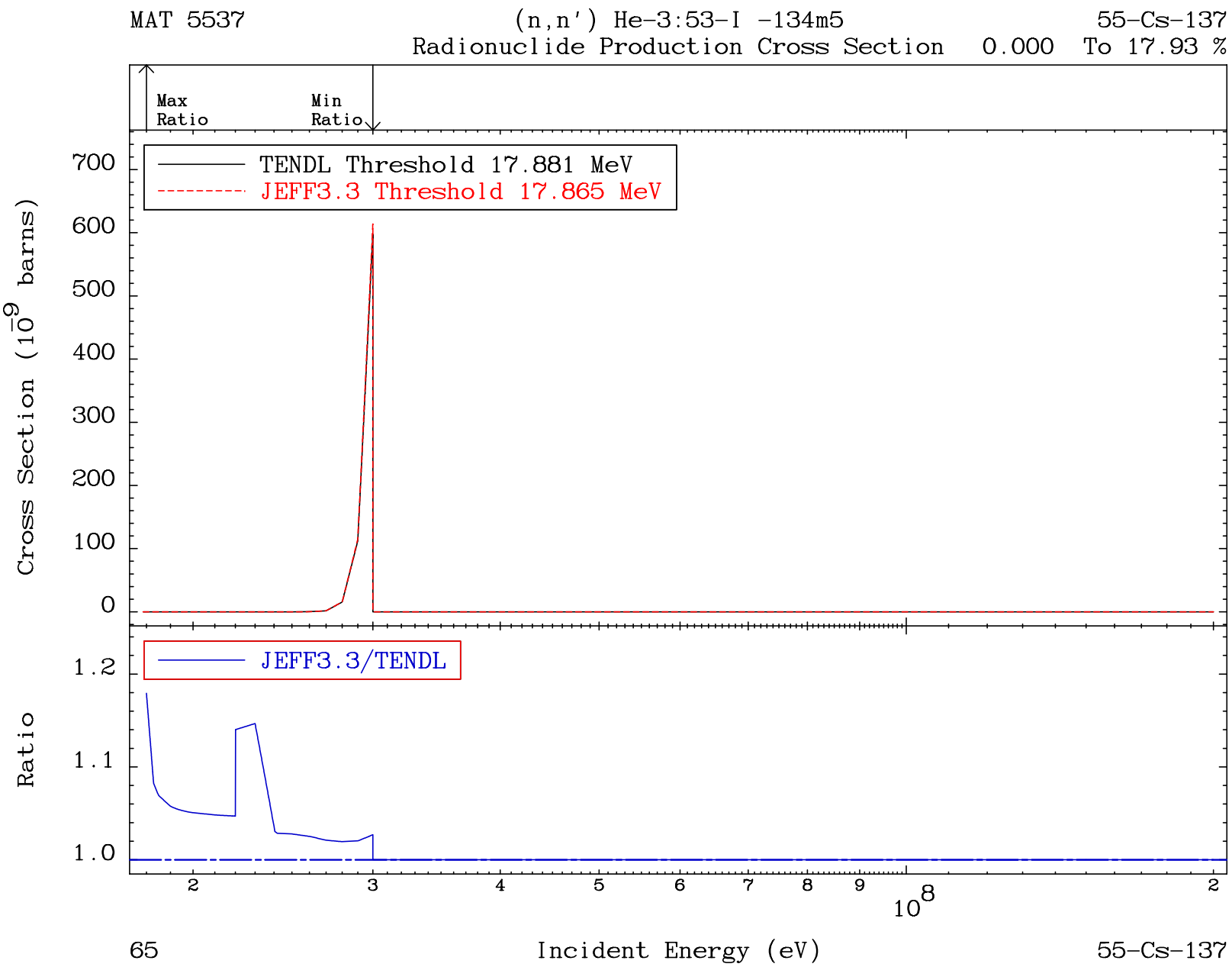

MAT 5537
(n,n') d:54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 5.443 %
Max Ratio
Min Ratio
TENDL Threshold 13.366 MeV
JEFF3.3 Threshold 13.363 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
55-Cs-137

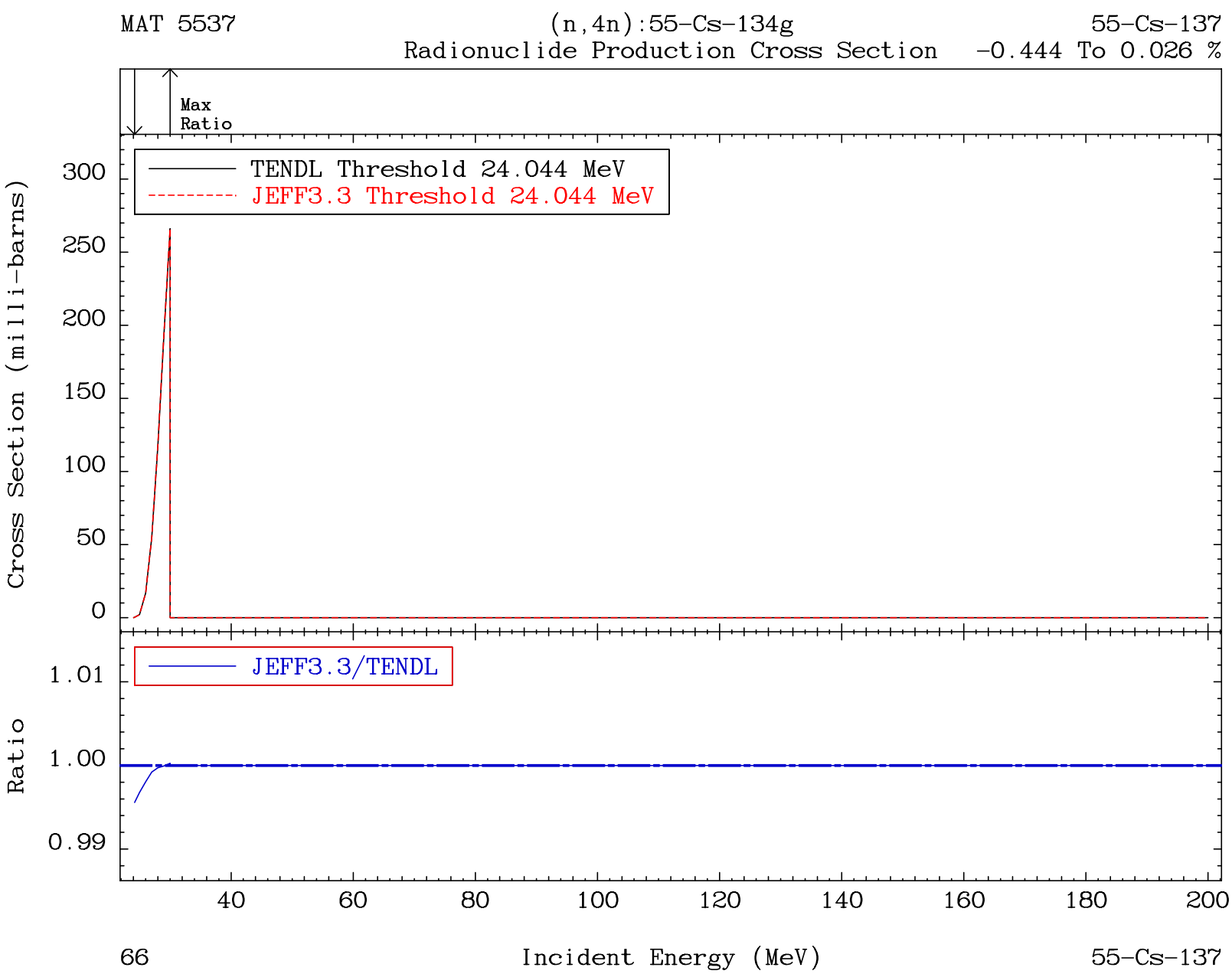

MAT 5537
(n,n') d:54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section 0.000 To 3.044 %
Max Ratio
Min Ratio
TENDL Threshold 15.000 MeV
JEFF3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
1.00
1.02
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
55-Cs-137

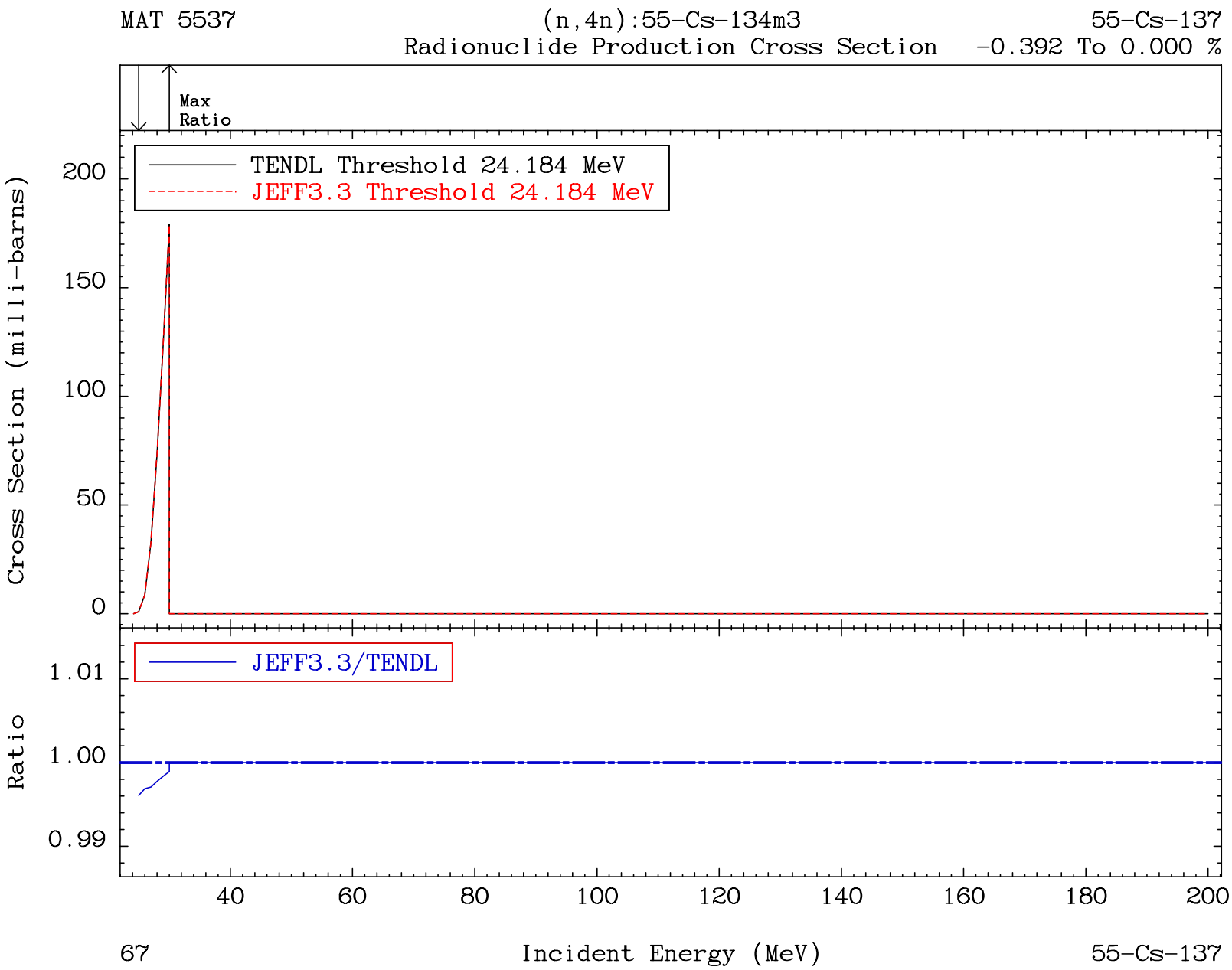

MAT 5537
(n,n') t:54-Xe-134g
55-Cs-137
Radionuclide Production Cross Section
-28.78 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.468 MeV
JEFF3.3 Threshold 13.470 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
0.7
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
55-Cs-137

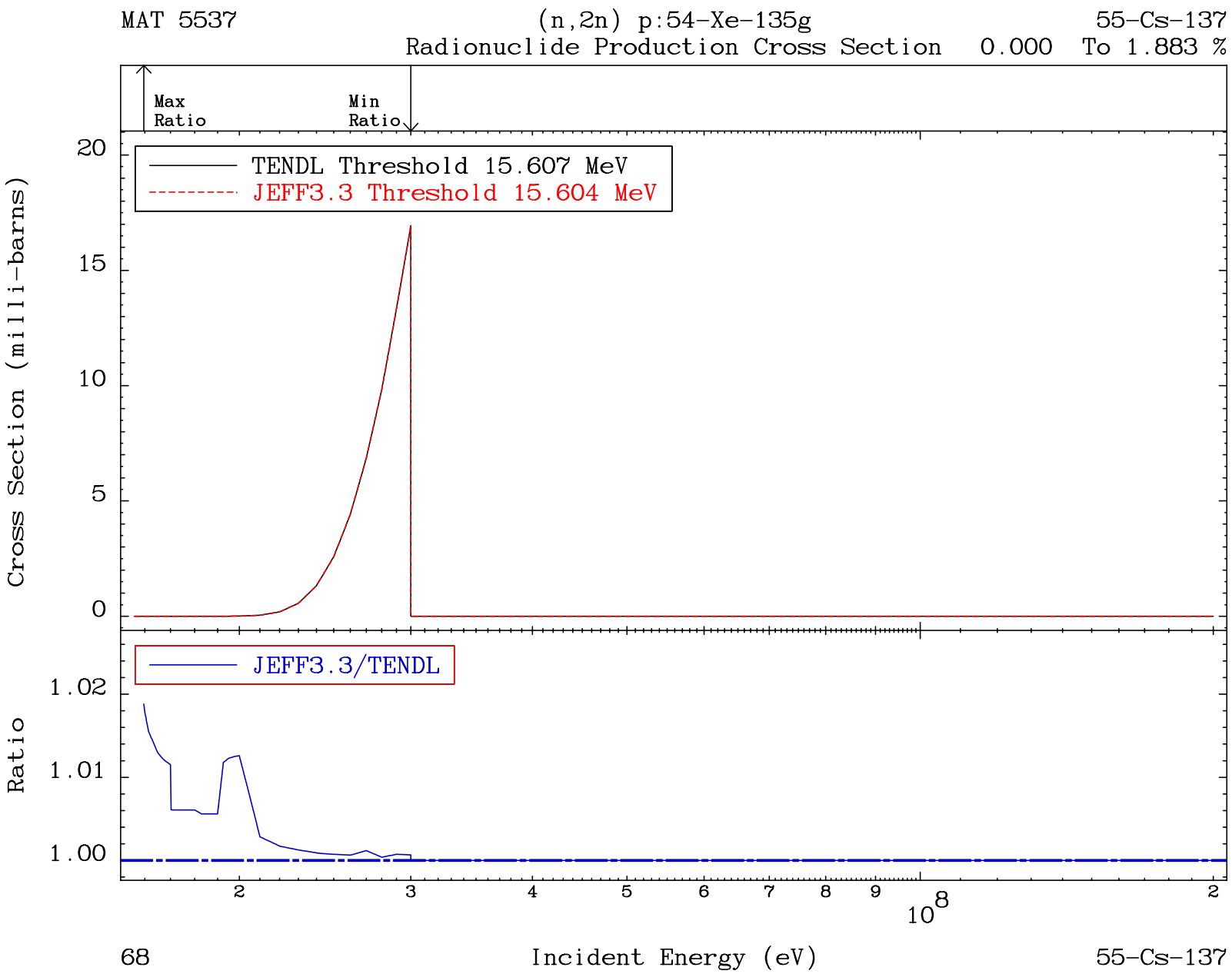

MAT 5537
(n,n') t:54-Xe-134m7
55-Cs-137
Radionuclide Production Cross Section
-5.433 To 0.360 %
Min
Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 17.000 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
55-Cs-137

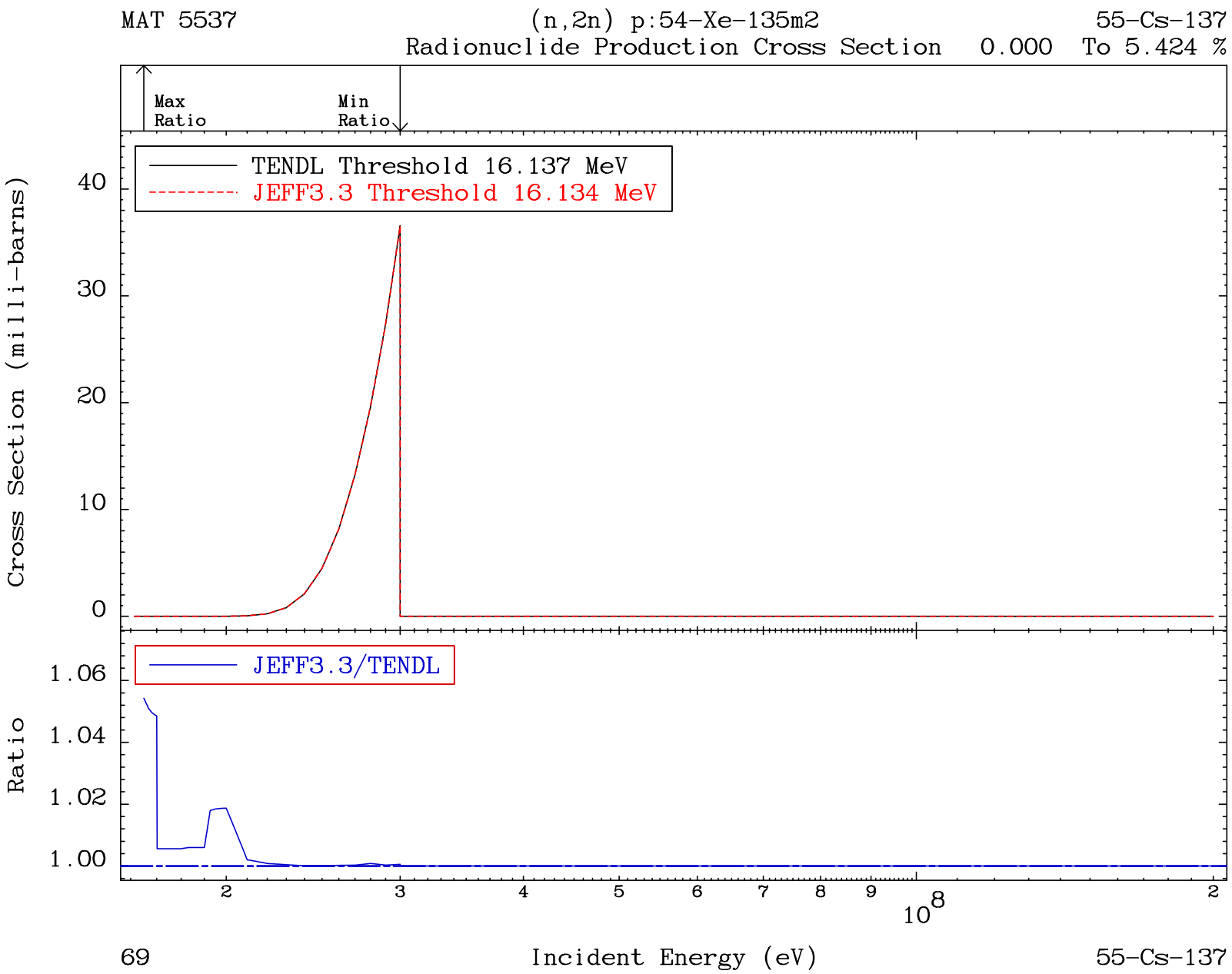

MAT 5537
(n,n') He-3:53-I -134g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 15.64 %
Max Ratio
Min Ratio
TENDL Threshold 17.562 MeV
JEFF3.3 Threshold 17.546 MeV
Cross Section (micro-barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
55-Cs-137

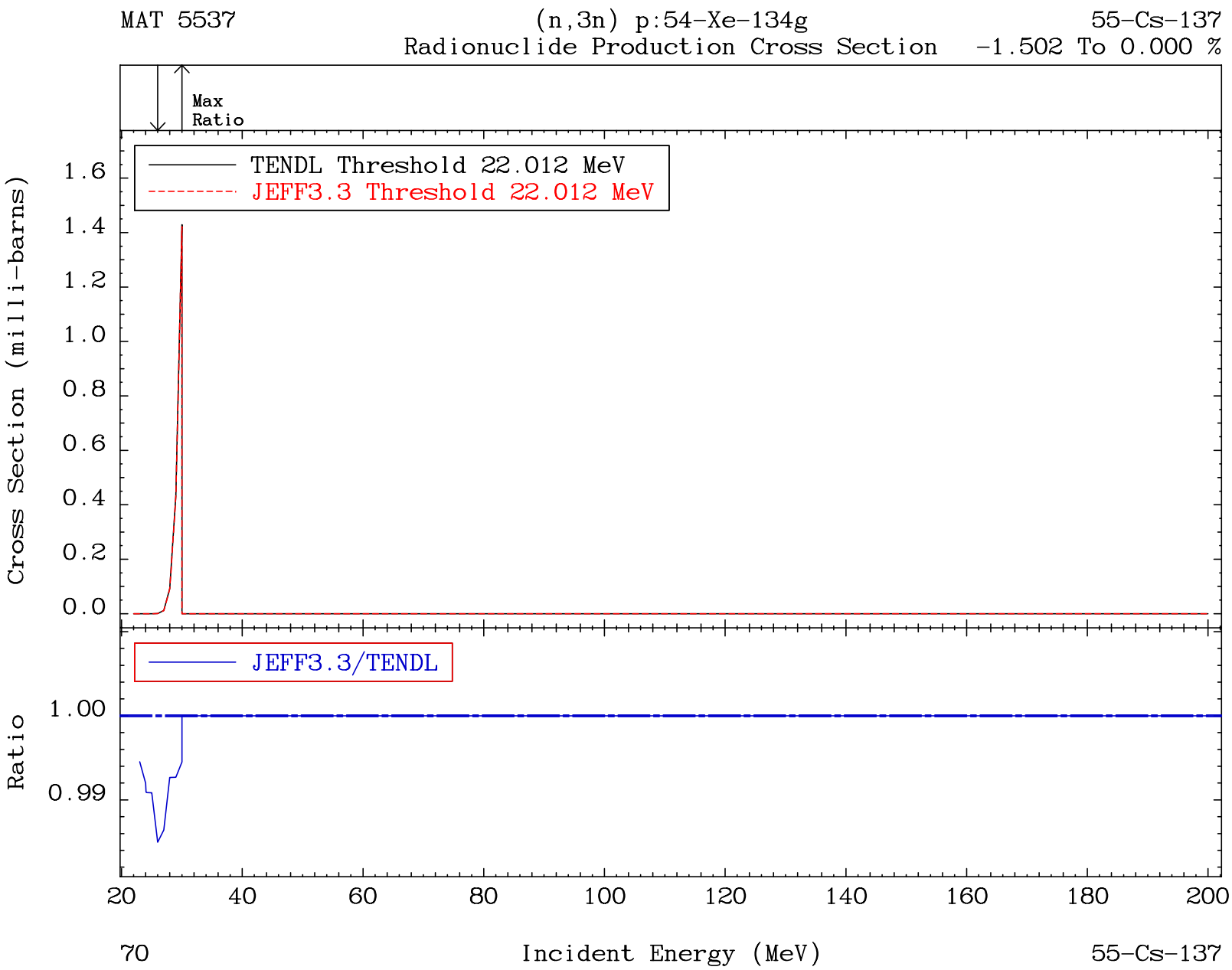

MAT 5537
(n,n') He-3:53-I -134m5
55-Cs-137
Radionuclide Production Cross Section 0.000 To 17.93 %
Max Ratio
Min Ratio
TENDL Threshold 17.881 MeV
JEFF3.3 Threshold 17.865 MeV
Cross Section (10^{-9} barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
55-Cs-137

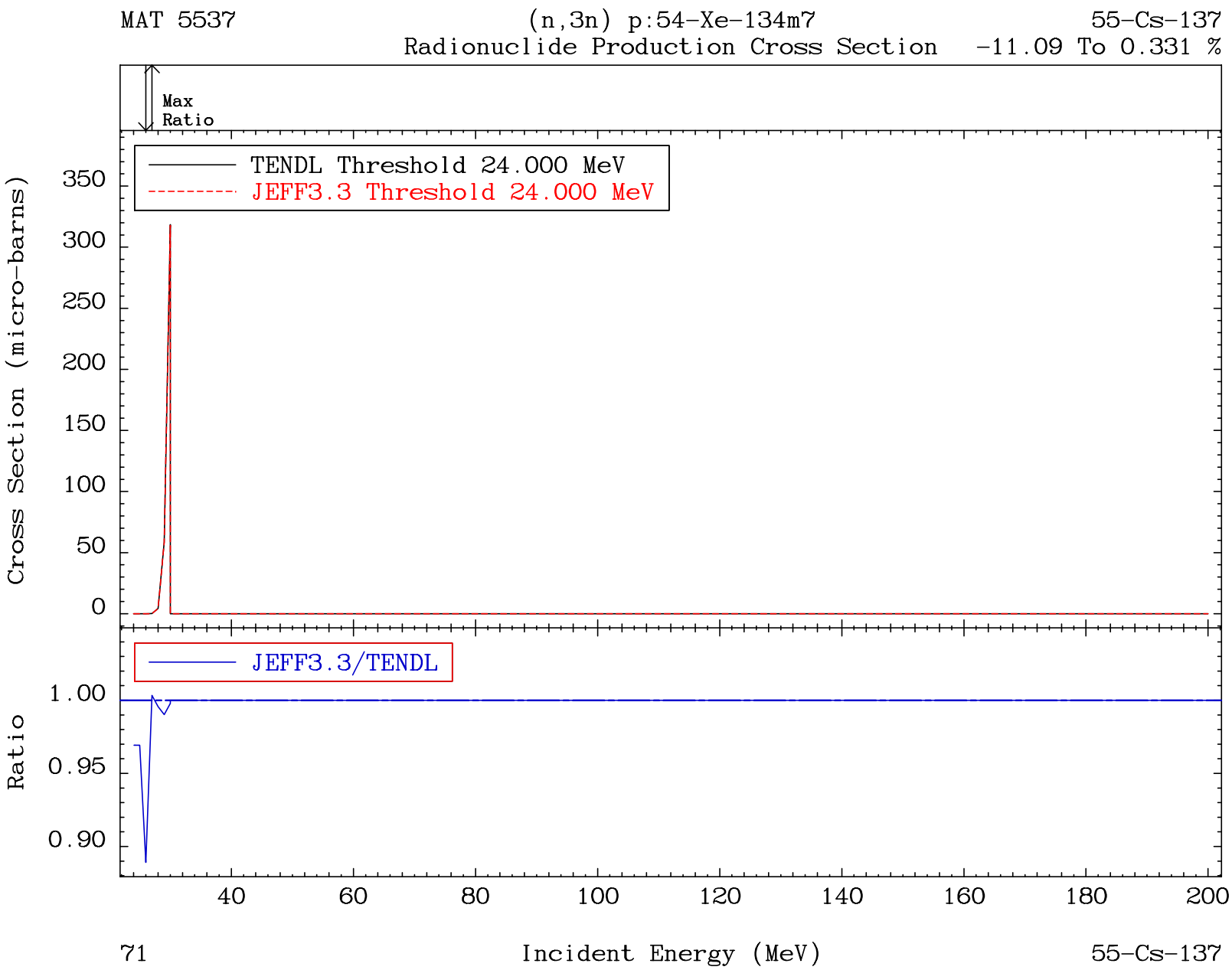

MAT 5537
(n,4n):55-Cs-134g
55-Cs-137
Radionuclide Production Cross Section
-0.444 To 0.026 %
Max
Ratio
TENDL Threshold 24.044 MeV
JEFF3.3 Threshold 24.044 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
66
Incident Energy (MeV)
55-Cs-137

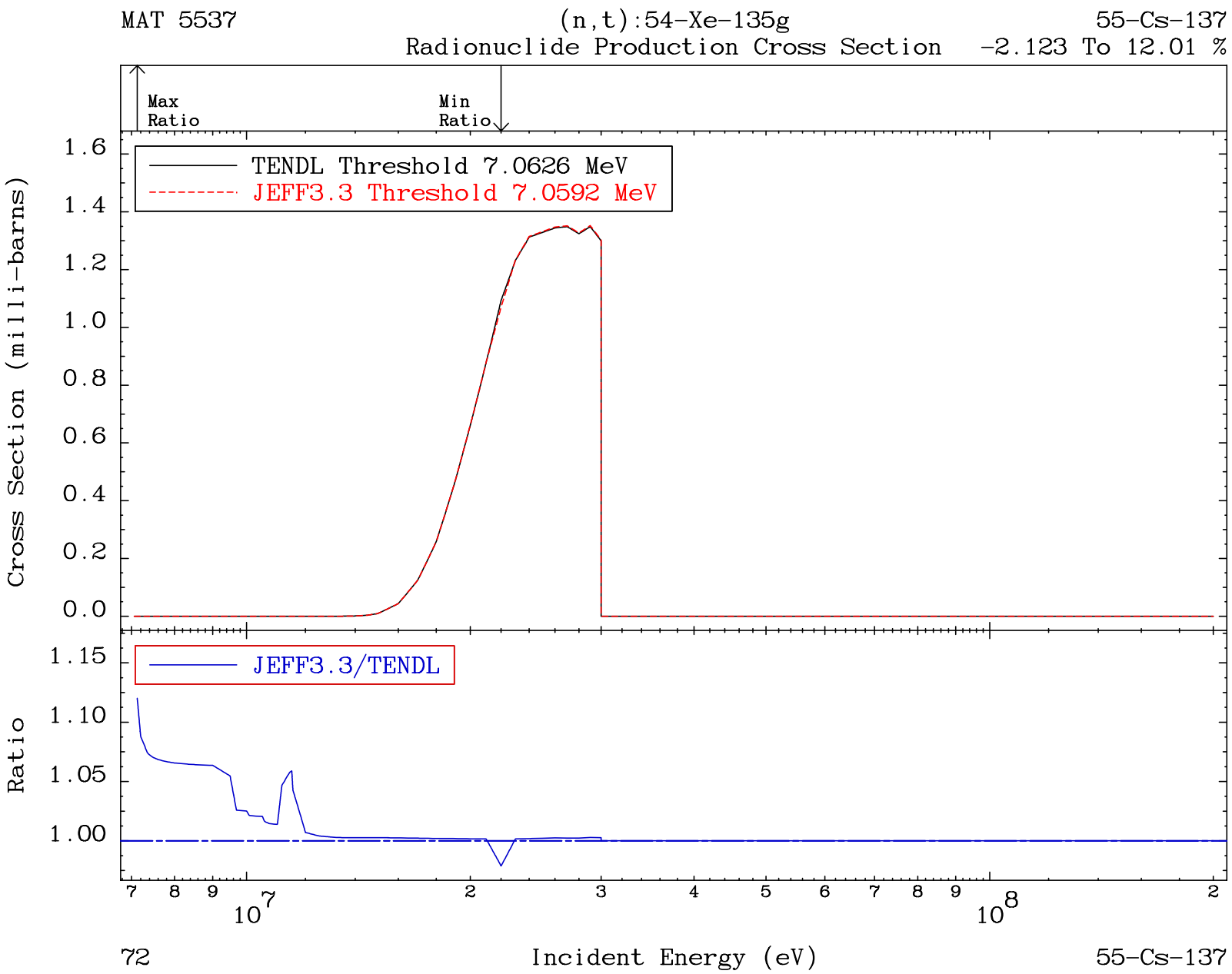

MAT 5537
(n,4n):55-Cs-134m3
55-Cs-137
Radionuclide Production Cross Section
-0.392 To 0.000 %
Max
Ratio
TENDL Threshold 24.184 MeV
JEFF3.3 Threshold 24.184 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
67
Incident Energy (MeV)
55-Cs-137

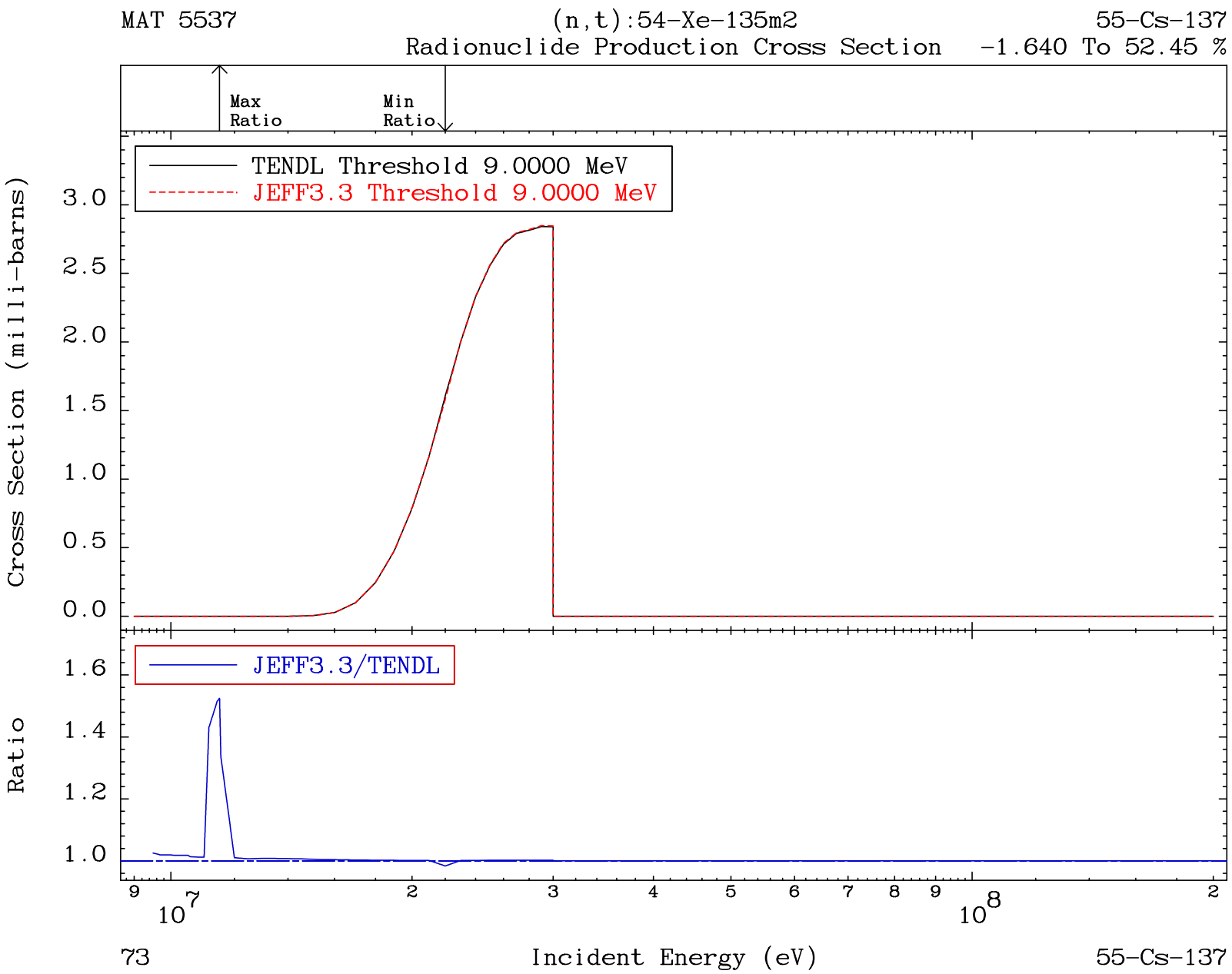

MAT 5537
(n,2n) p:54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 1.883 %
Max Ratio
Min Ratio
TENDL Threshold 15.607 MeV
JEFF3.3 Threshold 15.604 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
55-Cs-137

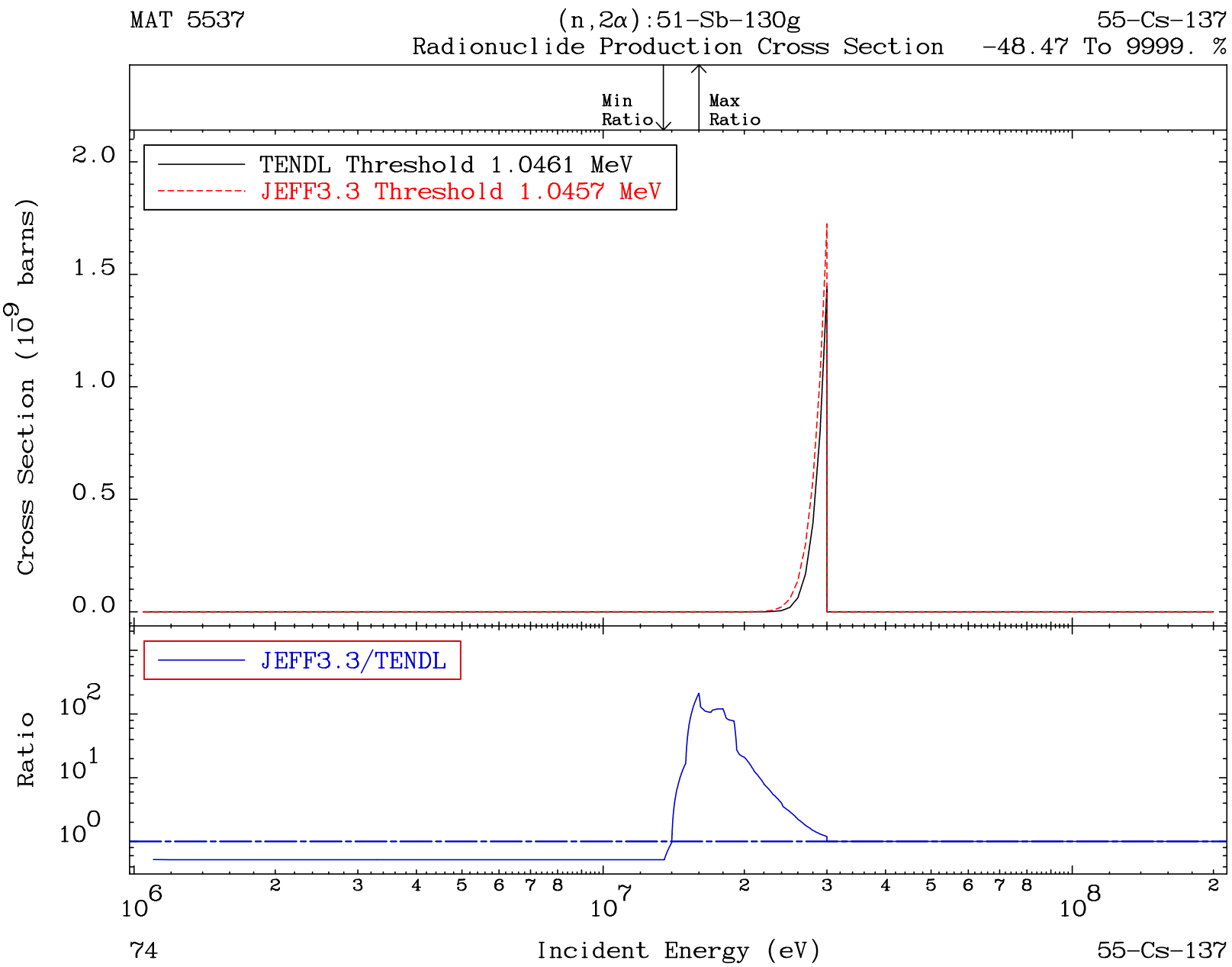

MAT 5537
(n,2n) p:54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section 0.000 To 5.424 %
Max Ratio
Min Ratio
TENDL Threshold 16.137 MeV
JEFF3.3 Threshold 16.134 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
55-Cs-137

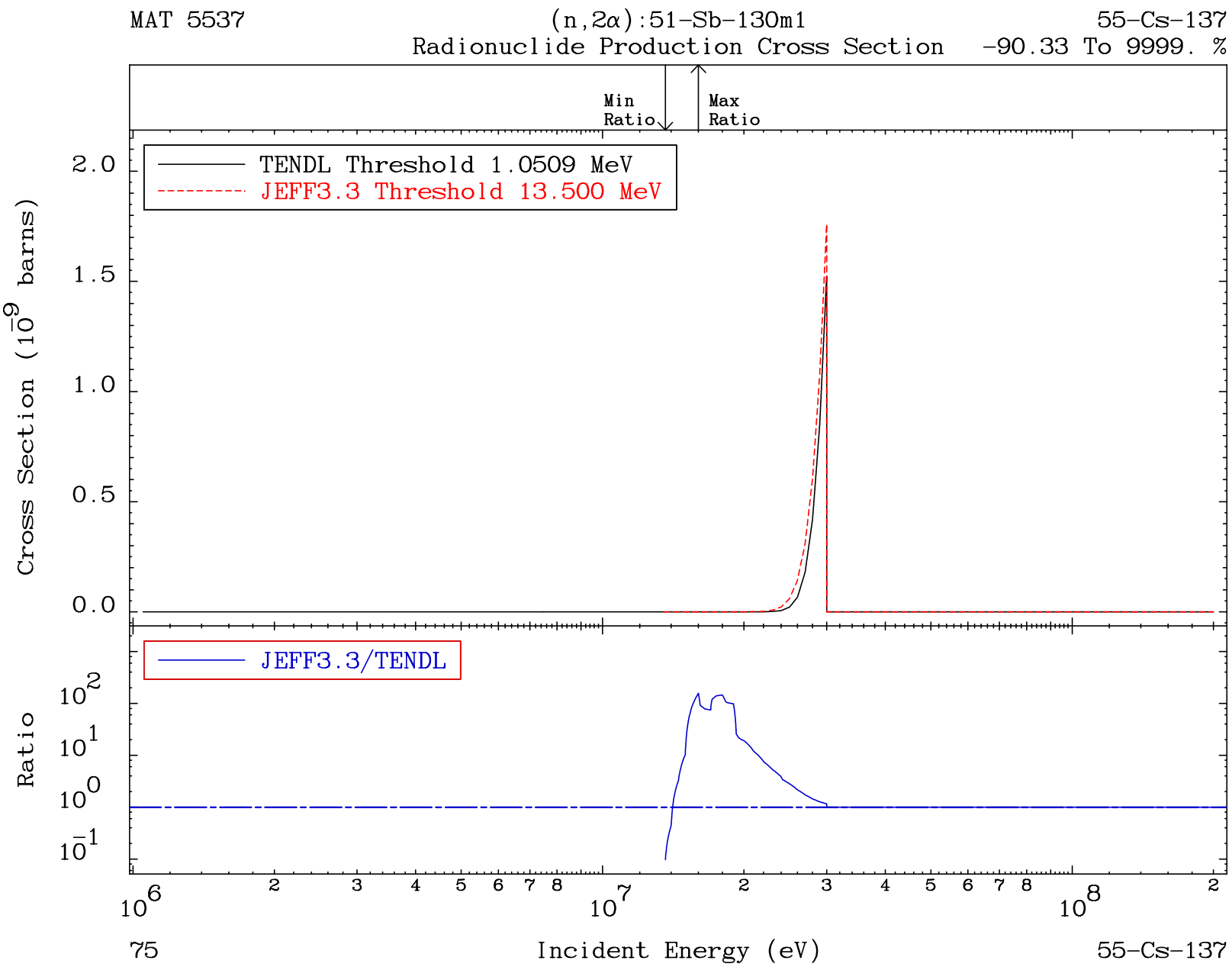

MAT 5537
(n,3n) p:54-Xe-134g
55-Cs-137
Radionuclide Production Cross Section
-1.502 To 0.000 %
Max
Ratio
TENDL Threshold 22.012 MeV
JEFF3.3 Threshold 22.012 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.99
20
40
60
80
100
120
140
160
180
200
70
Incident Energy (MeV)
55-Cs-137

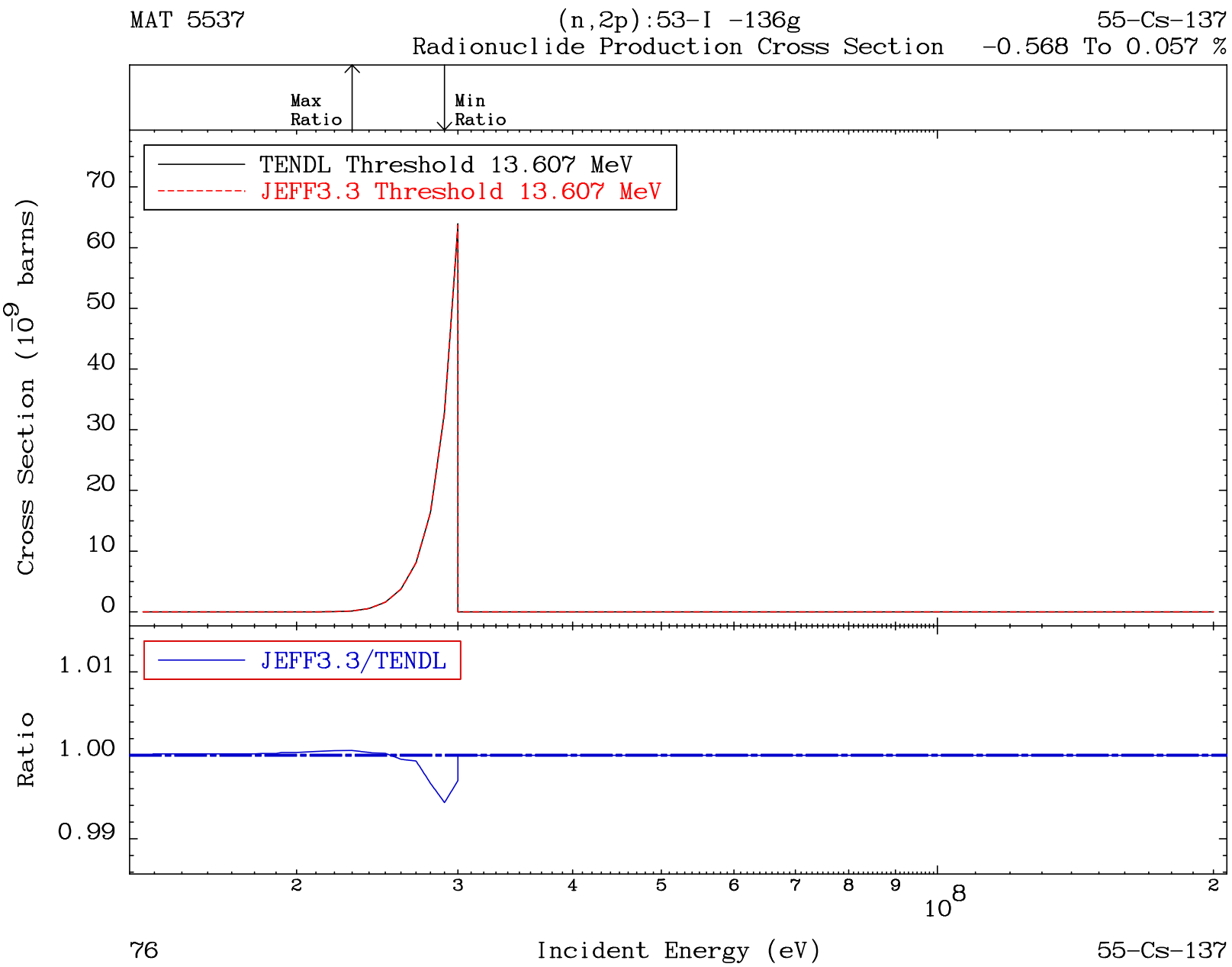

MAT 5537
(n,3n) p:54-Xe-134m7
55-Cs-137
Radionuclide Production Cross Section
-11.09 To 0.331 %
Max
Ratio
TENDL Threshold 24.000 MeV
JEFF3.3 Threshold 24.000 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
40
60
80
100
120
140
160
180
200
71
Incident Energy (MeV)
55-Cs-137

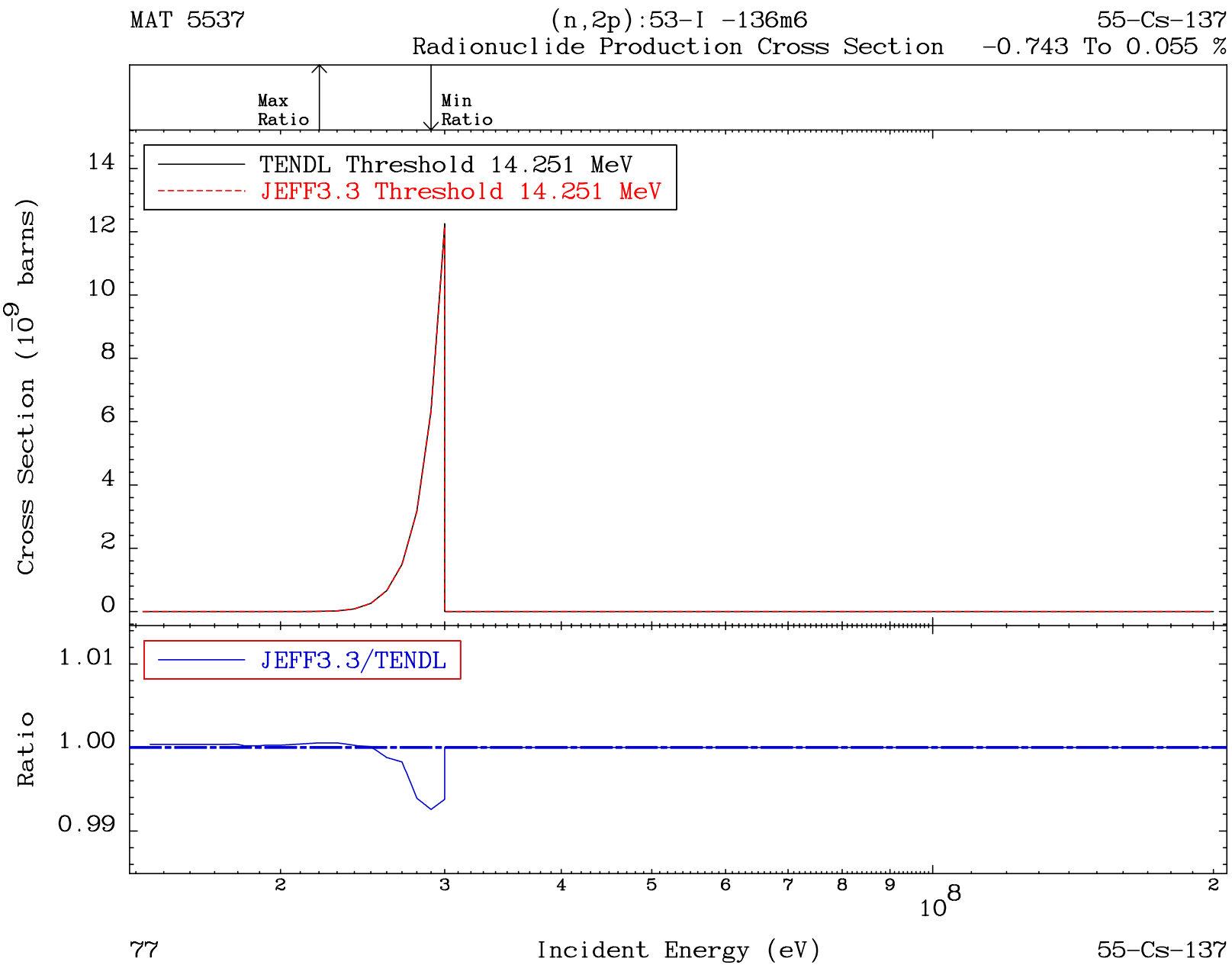

MAT 5537
(n,t):54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section
-2.123 To 12.01 %
Max Ratio
Min Ratio
TENDL Threshold 7.0626 MeV
JEFF3.3 Threshold 7.0592 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
72
Incident Energy (eV)
55-Cs-137

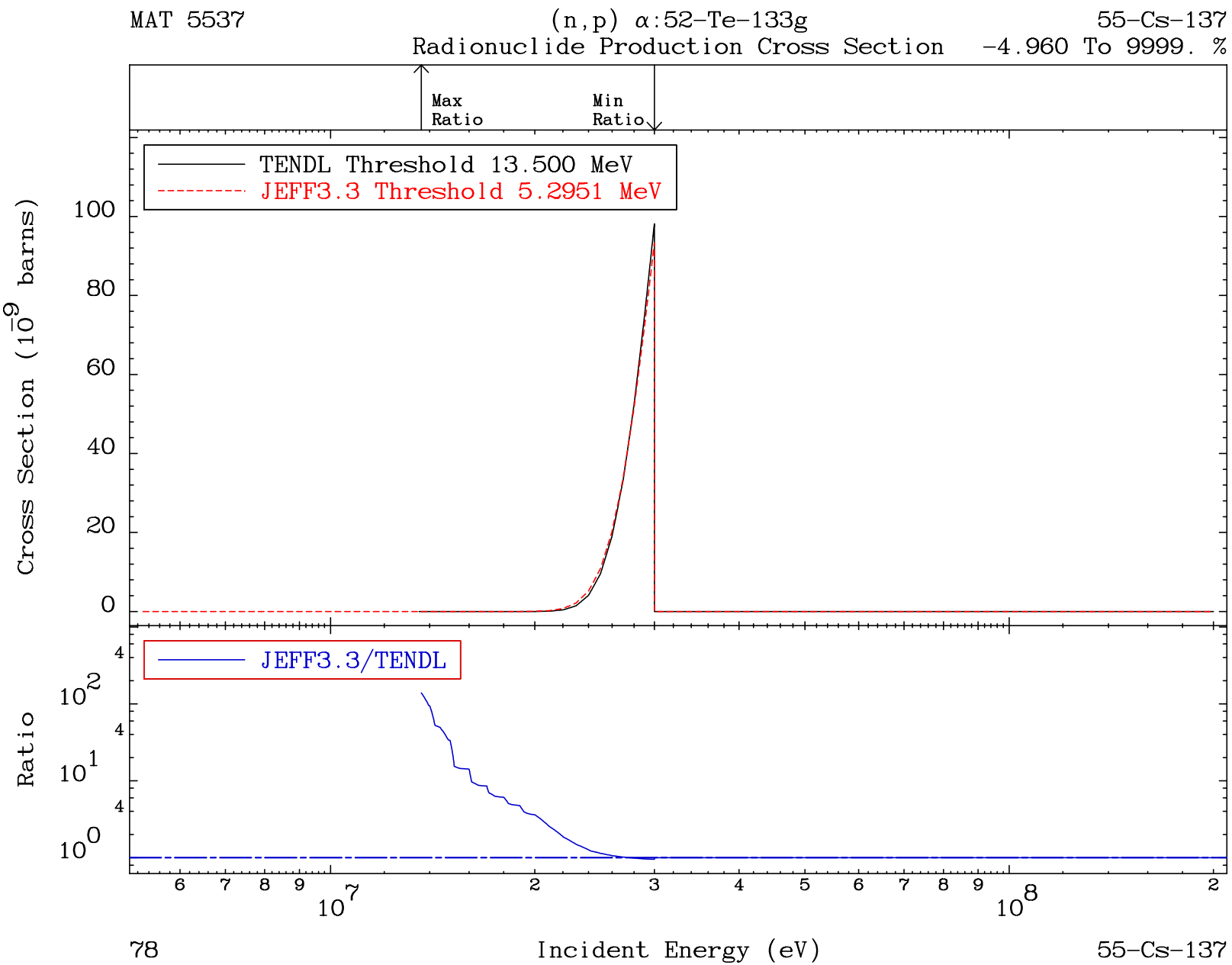

MAT 5537
(n,t):54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section -1.640 To 52.45 %
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 9.0000 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
55-Cs-137

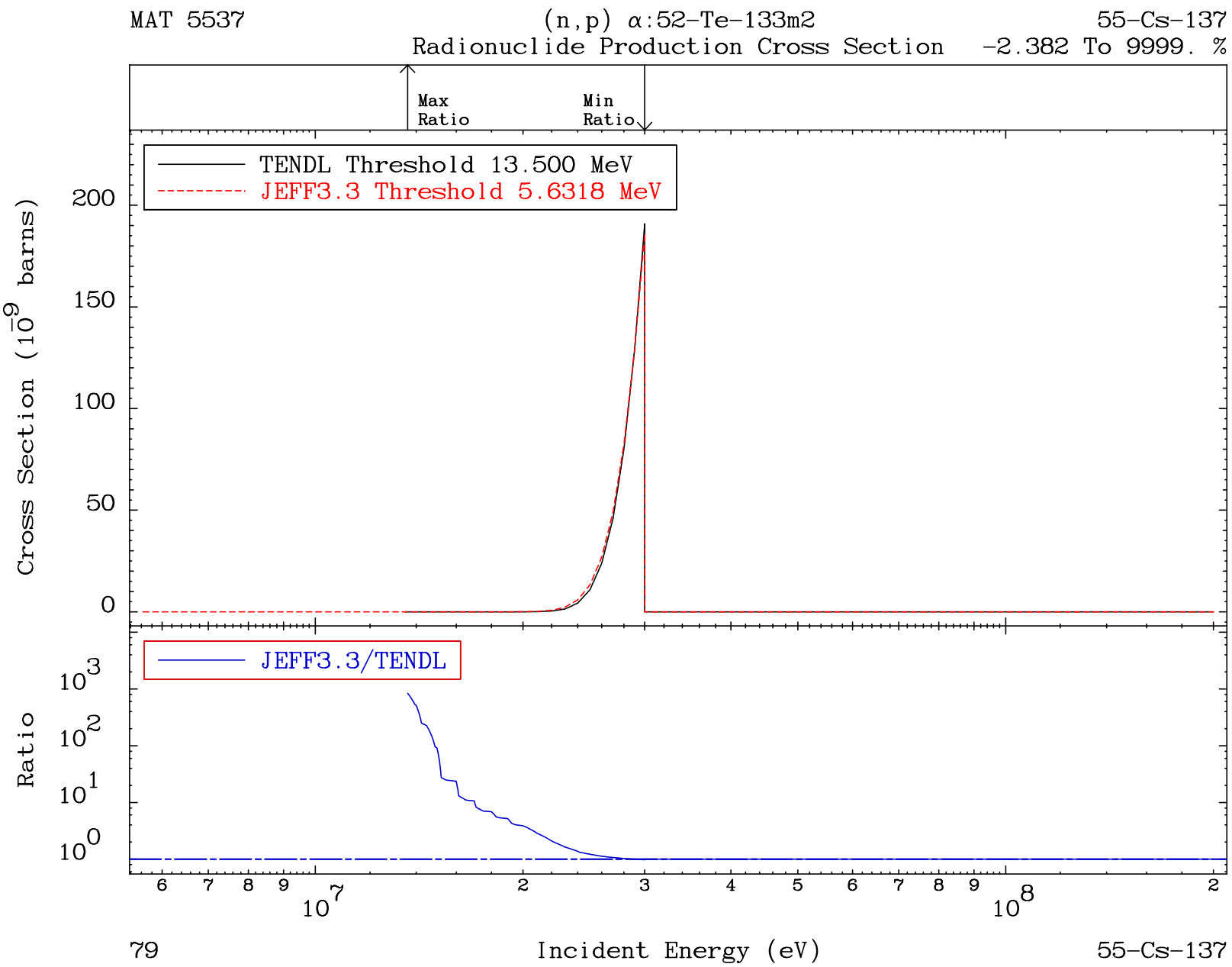

MAT 5537
(n,2α):51-Sb-130g
55-Cs-137
Radionuclide Production Cross Section -48.47 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0461 MeV
JEFF3.3 Threshold 1.0457 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^6
10^7
10^8
2 3 4 5 6 7 8
74
Incident Energy (eV)
55-Cs-137

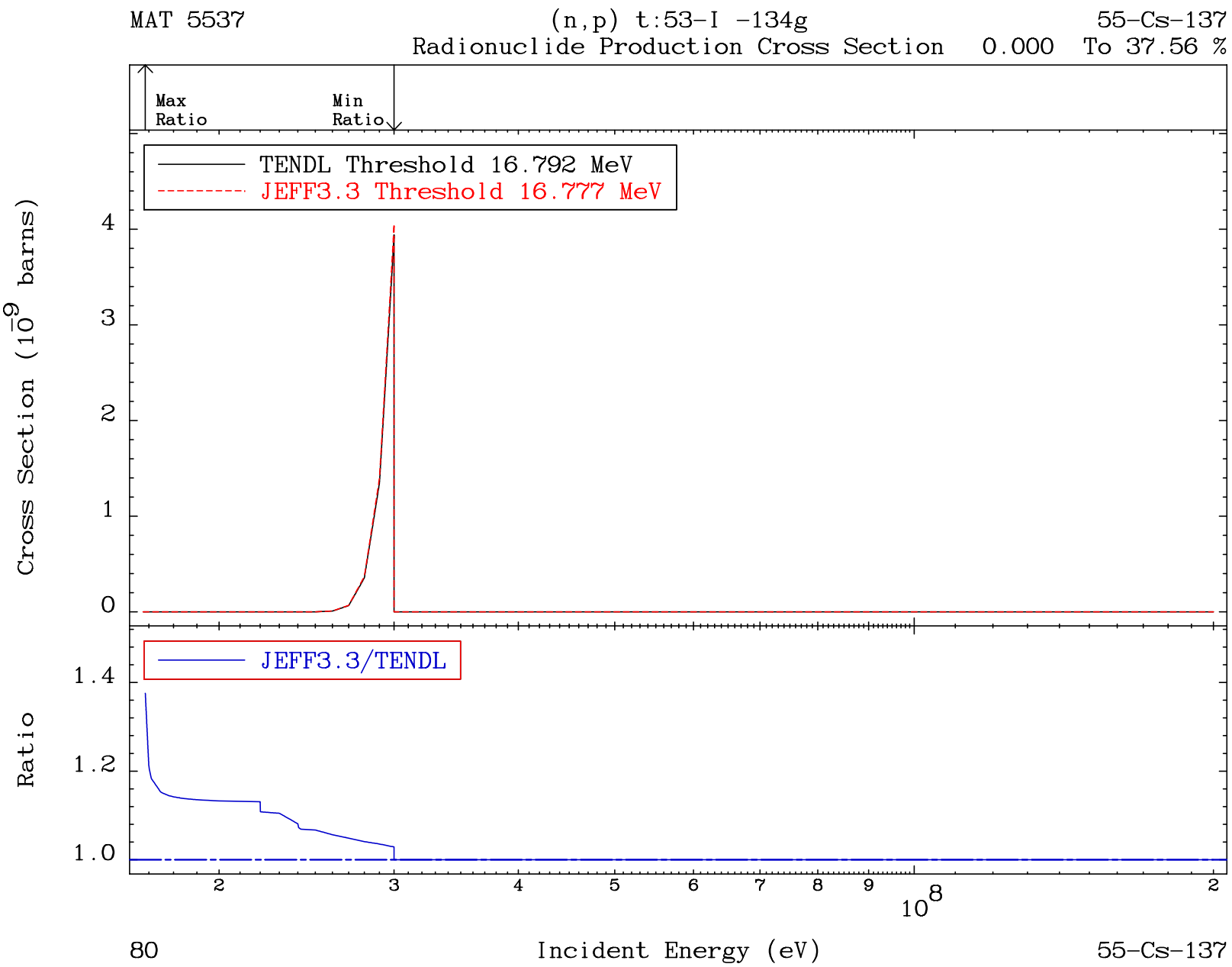

MAT 5537
(n,2α):51-Sb-130m1
55-Cs-137
Radionuclide Production Cross Section -90.33 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0509 MeV
JEFF3.3 Threshold 13.500 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
10^{-1}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
75
55-Cs-137

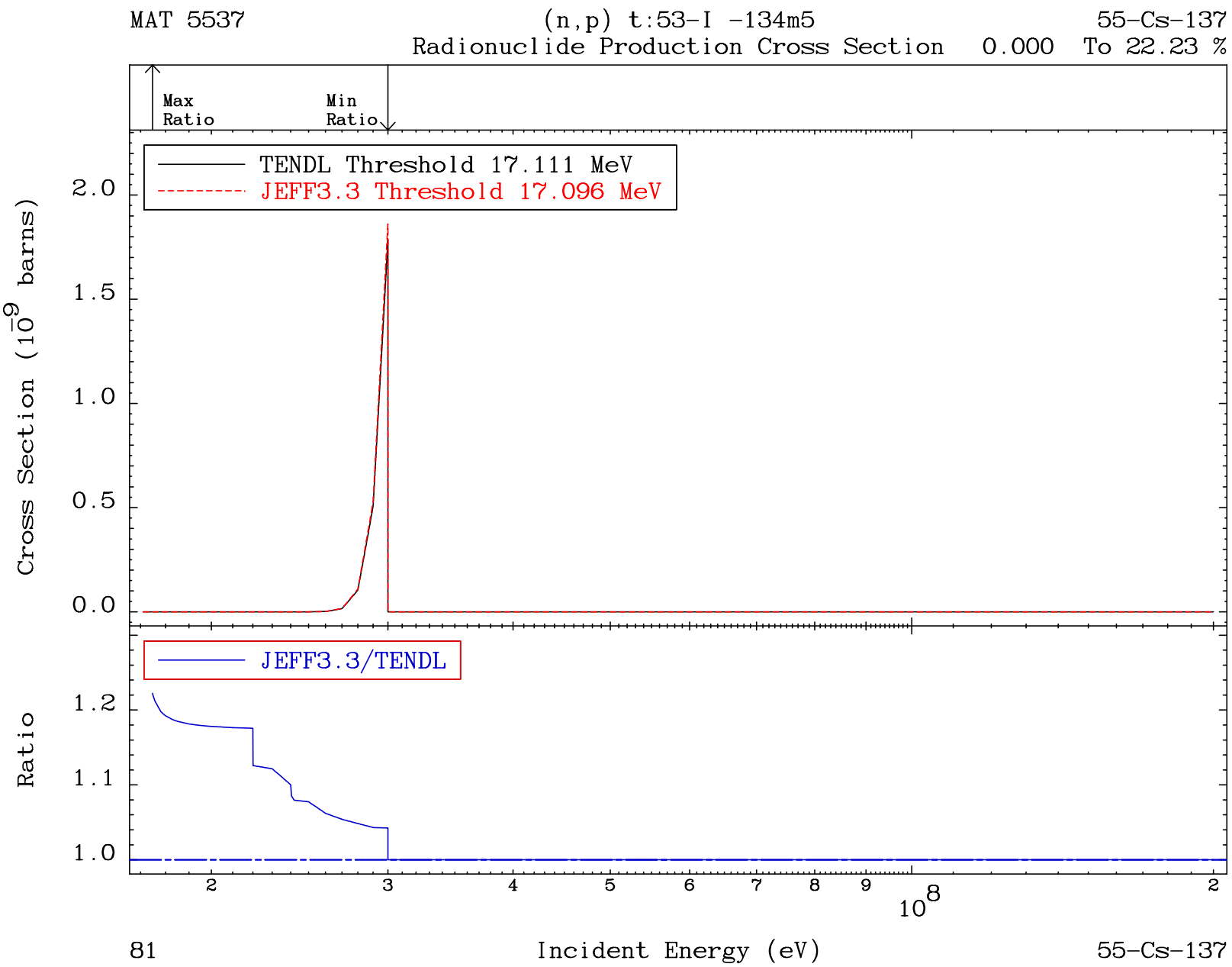

MAT 5537
(n,2p):53-I -136g
55-Cs-137
Radionuclide Production Cross Section
-0.568 To 0.057 %
Max Ratio
Min Ratio
TENDL Threshold 13.607 MeV
JEFF3.3 Threshold 13.607 MeV
Cross Section (10^{-9} barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
55-Cs-137


MAT 5537
(n,2p):53-I -136m6
55-Cs-137
Radionuclide Production Cross Section
-0.743 To 0.055 %
Max Ratio
Min Ratio
TENDL Threshold 14.251 MeV
JEFF3.3 Threshold 14.251 MeV
Cross Section (10^{-9} barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
55-Cs-137


MAT 5537
(n,p) α:52-Te-133g
55-Cs-137
Radionuclide Production Cross Section
-4.960 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.500 MeV
JEFF3.3 Threshold 5.2951 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
78
Incident Energy (eV)
55-Cs-137


MAT 5537
(n,p) α:52-Te-133m2
55-Cs-137
Radionuclide Production Cross Section
-2.382 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.500 MeV
JEFF3.3 Threshold 5.6318 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
79
Incident Energy (eV)
55-Cs-137


MAT 5537
(n,p) t:53-I -134g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 37.56 %
Max Ratio
Min Ratio
TENDL Threshold 16.792 MeV
JEFF3.3 Threshold 16.777 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
80
55-Cs-137


MAT 5537
(n,p) t:53-I -134m5
55-Cs-137
Radionuclide Production Cross Section 0.000 To 22.23 %
Max Ratio
Min Ratio
TENDL Threshold 17.111 MeV
JEFF3.3 Threshold 17.096 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
55-Cs-137