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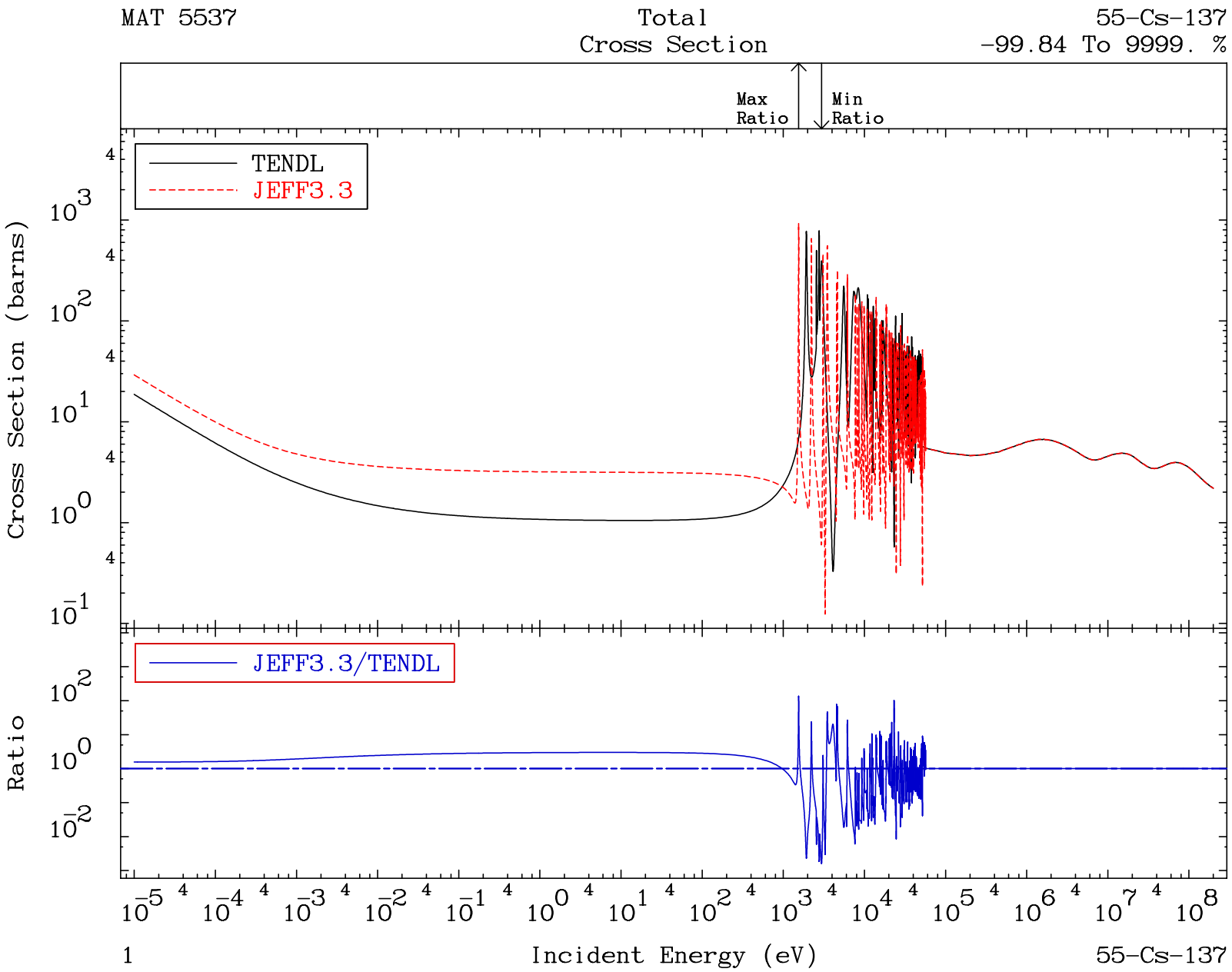
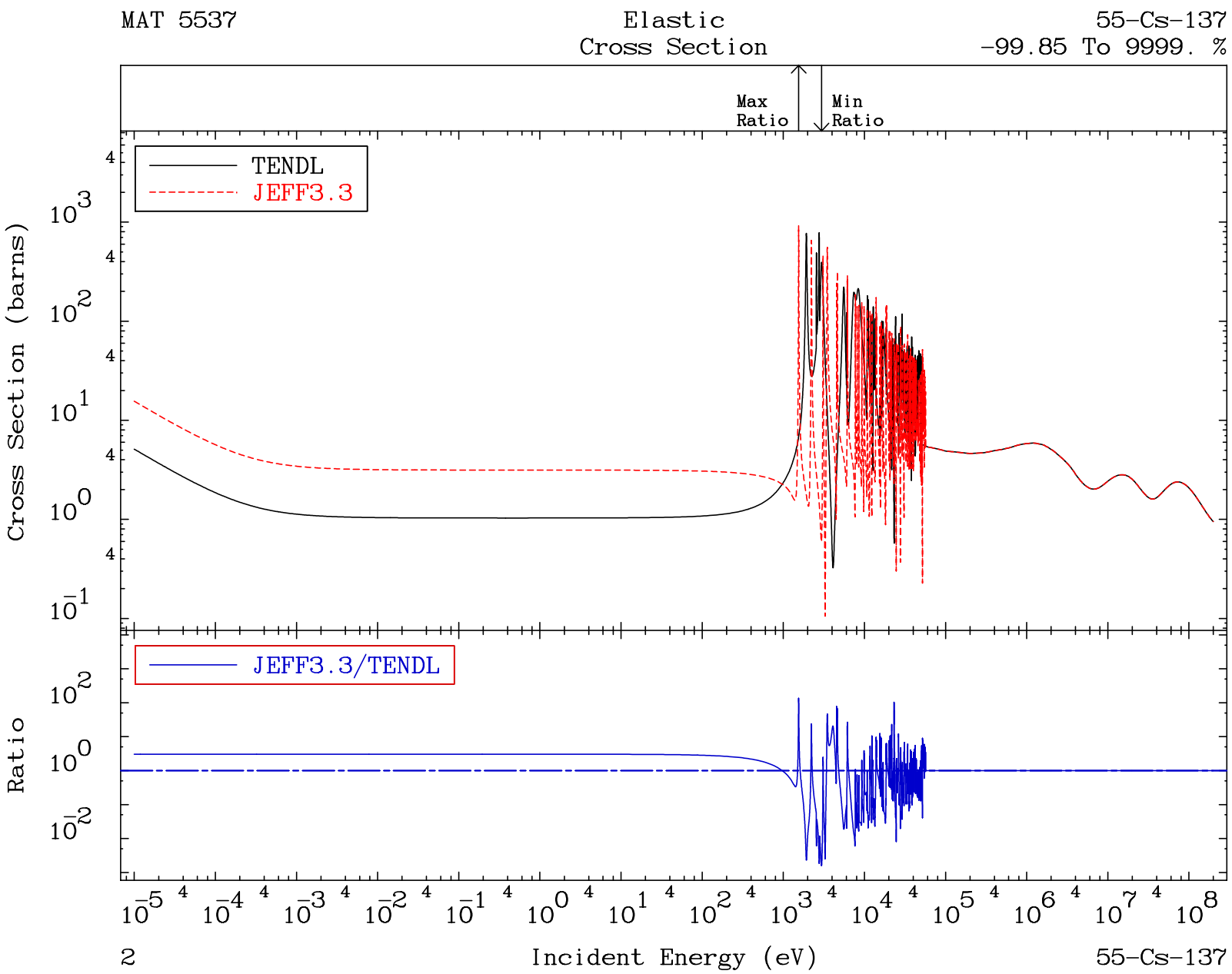
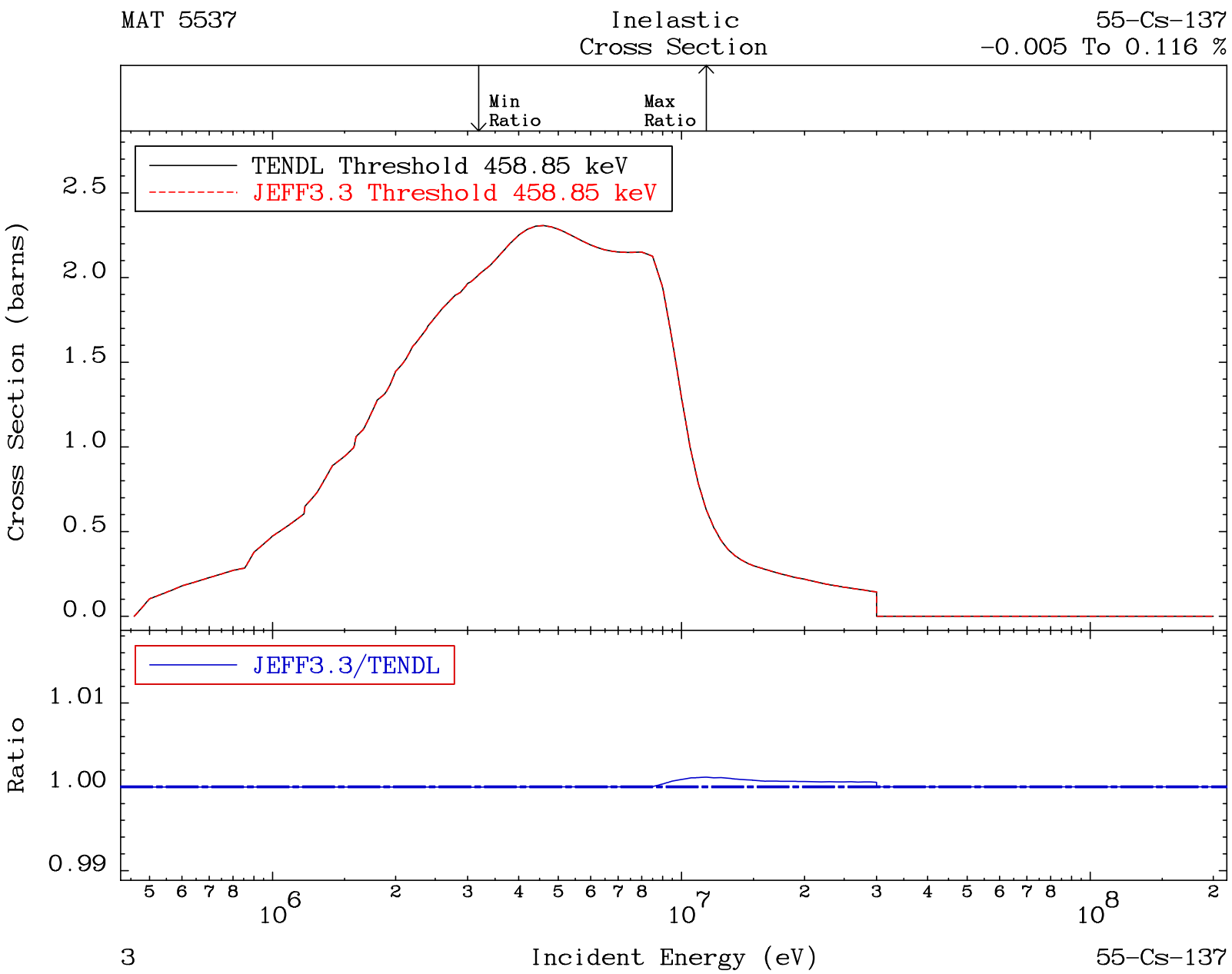
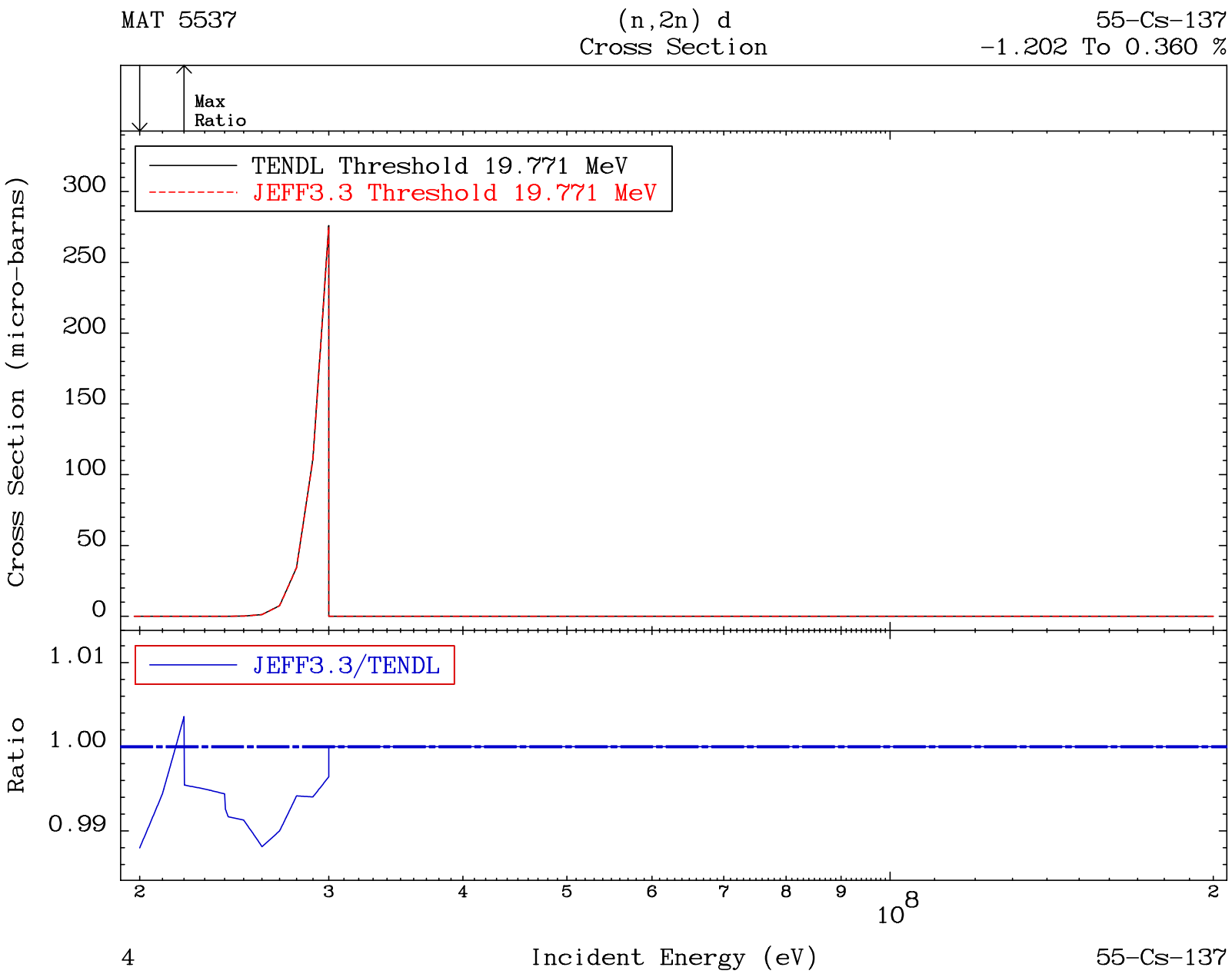
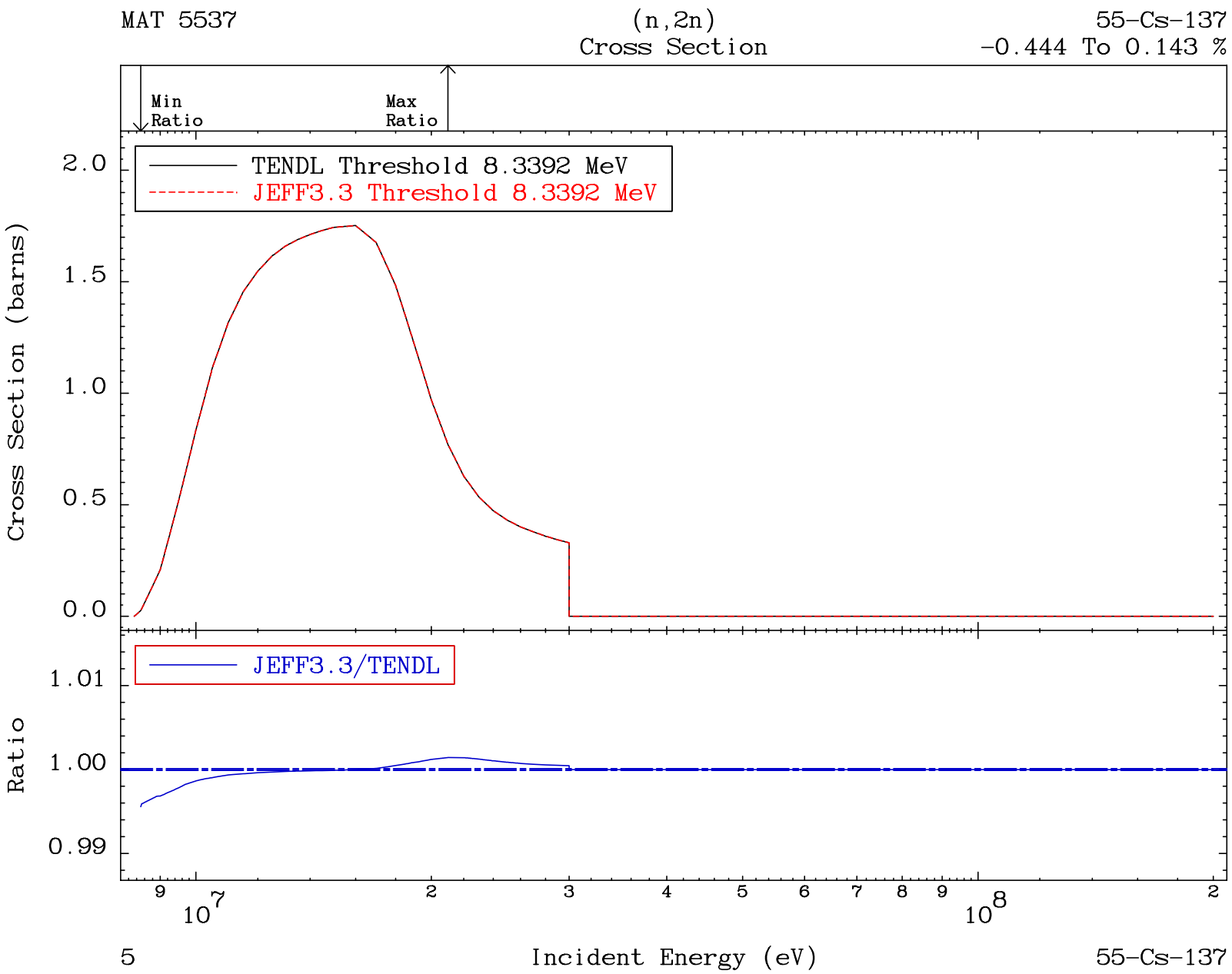
Press Mouse Button to Start

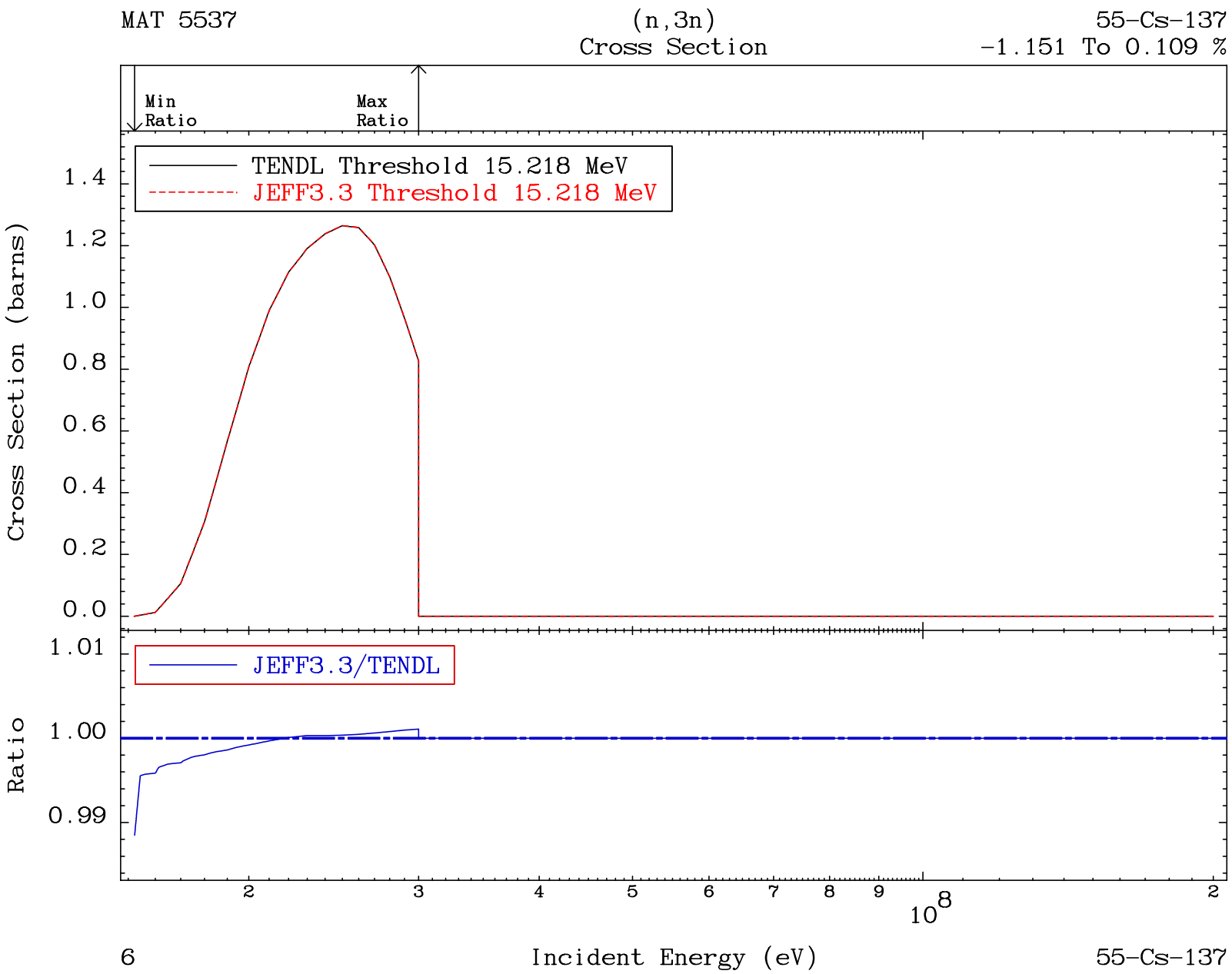

MAT 5537
Total
Cross Section
55-Cs-137
-99.84 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
55-Cs-137

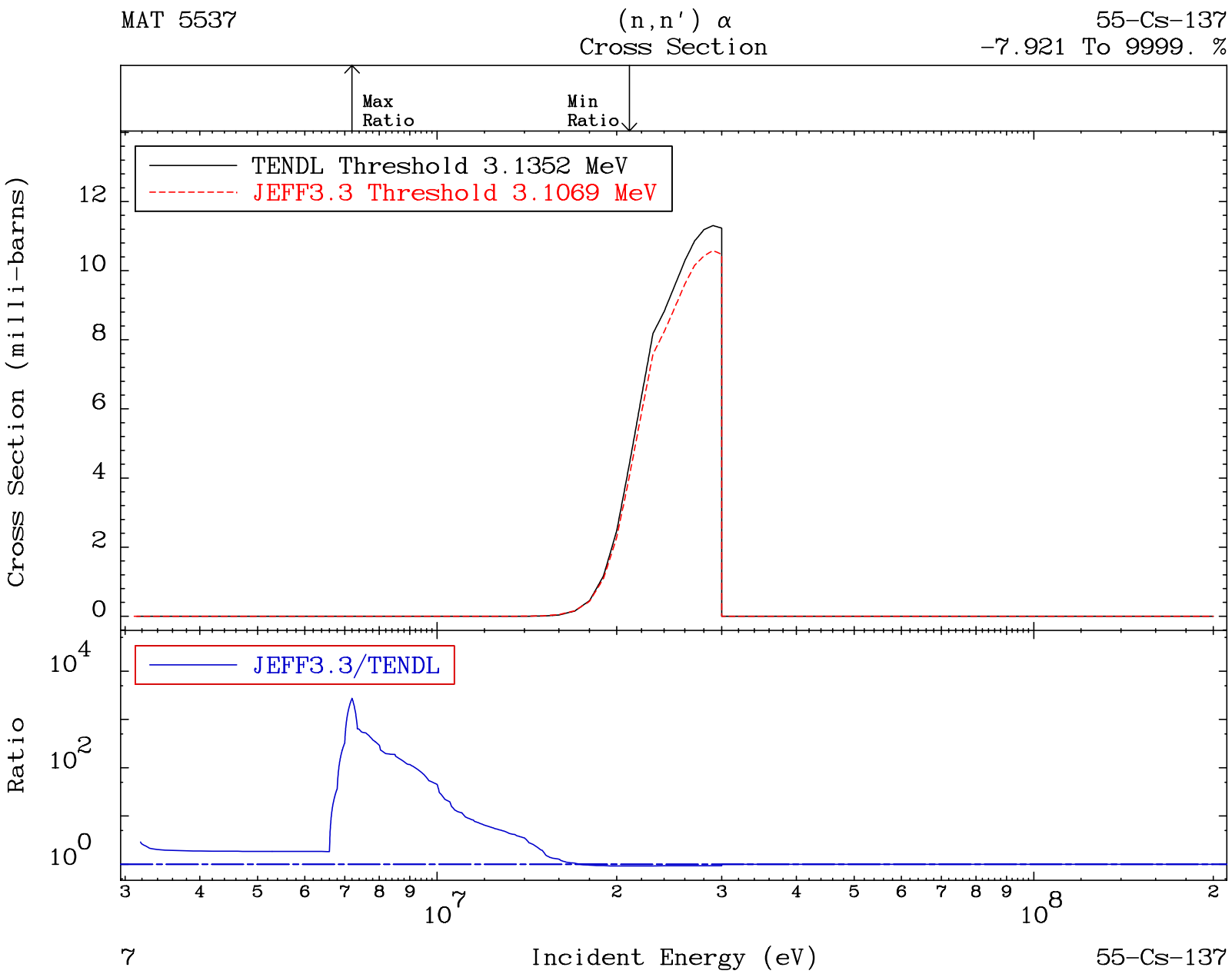

MAT 5537
Elastic
Cross Section
55-Cs-137
-99.85 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
55-Cs-137

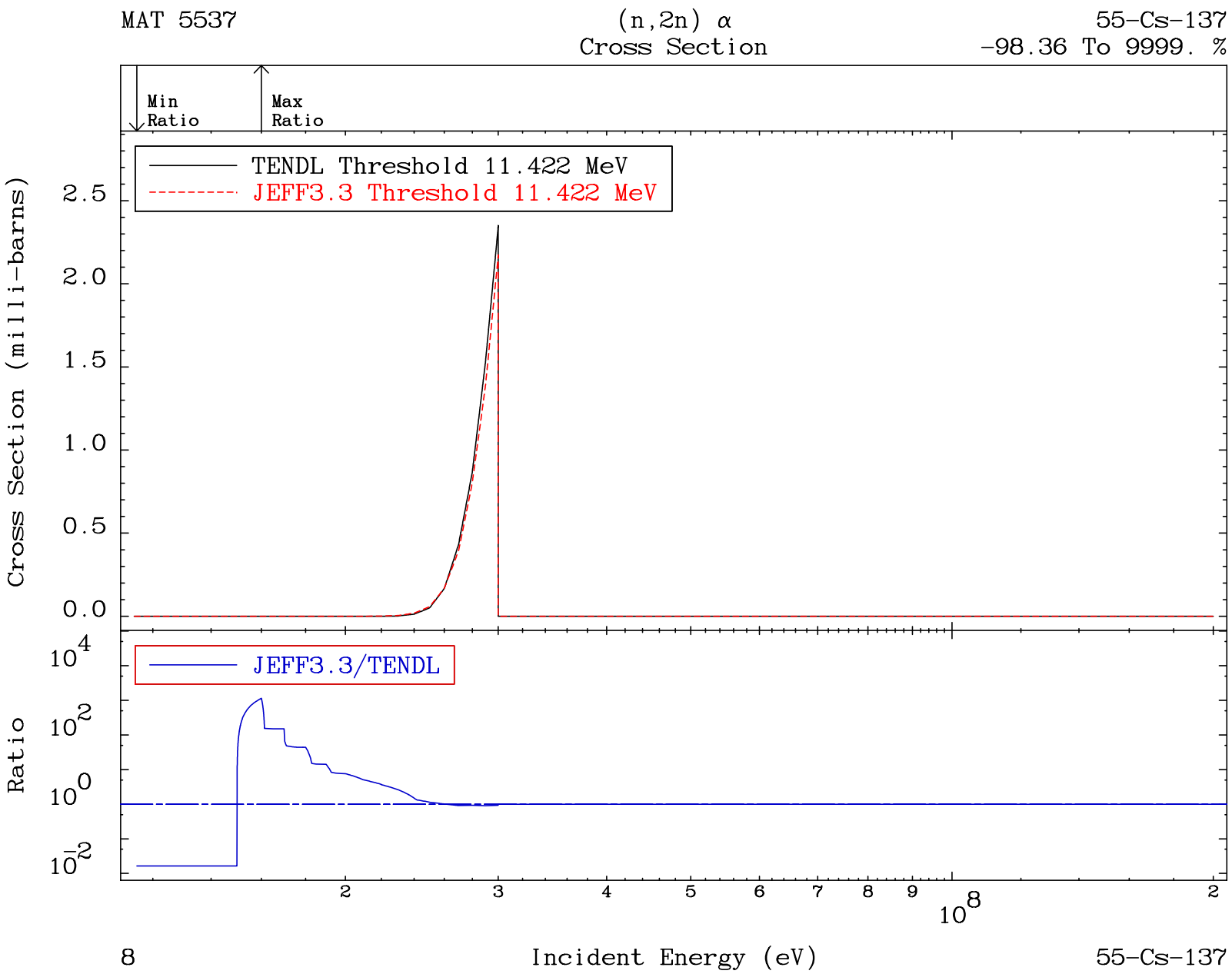

MAT 5537
Inelastic
Cross Section
55-Cs-137
-0.005 To 0.116 %
Min
Ratio
Max
Ratio
TENDL Threshold 458.85 keV
JEFF3.3 Threshold 458.85 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
55-Cs-137

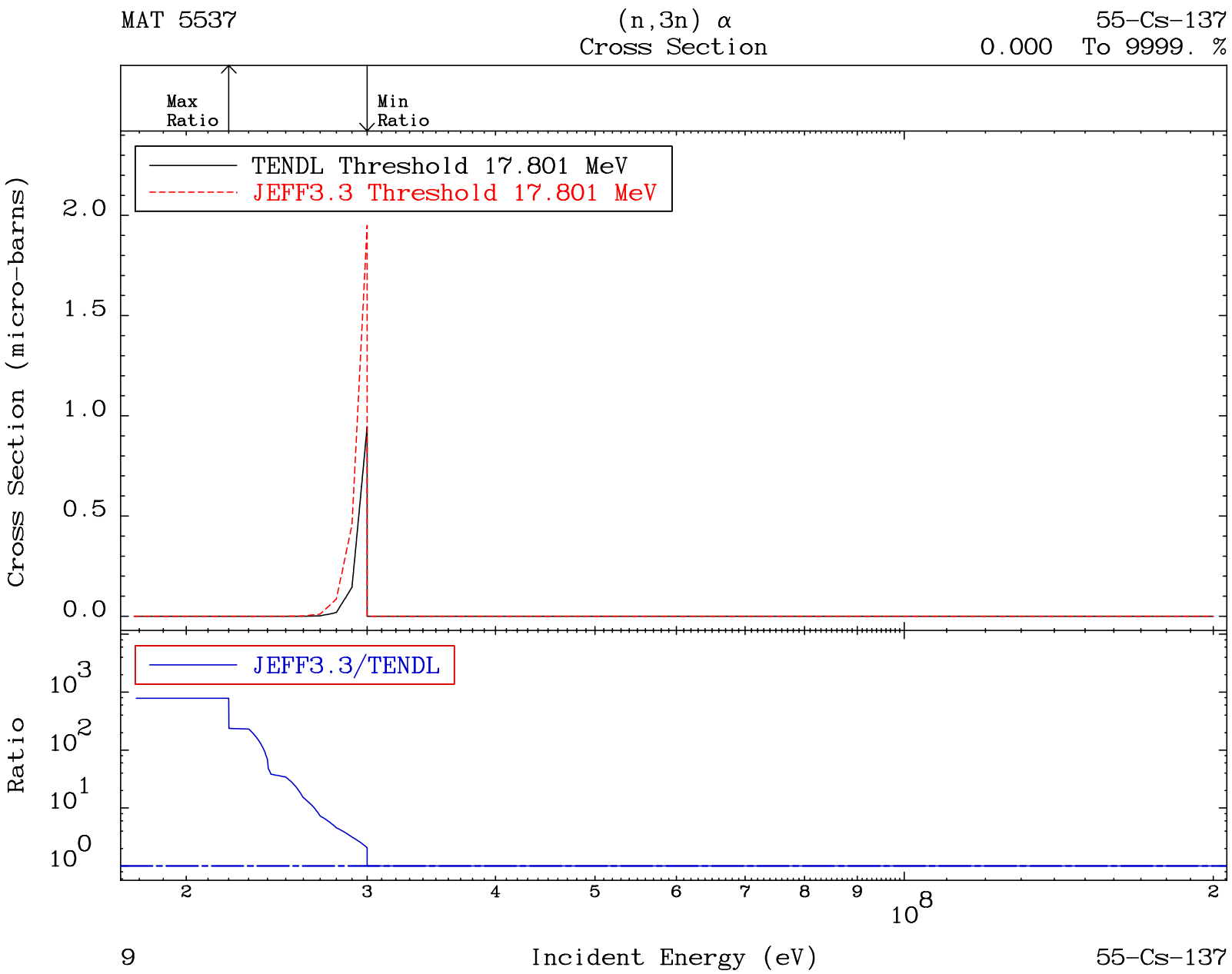

MAT 5537
(n,2n) d
Cross Section
55-Cs-137
-1.202 To 0.360 %
Max
Ratio
TENDL Threshold 19.771 MeV
JEFF3.3 Threshold 19.771 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
55-Cs-137

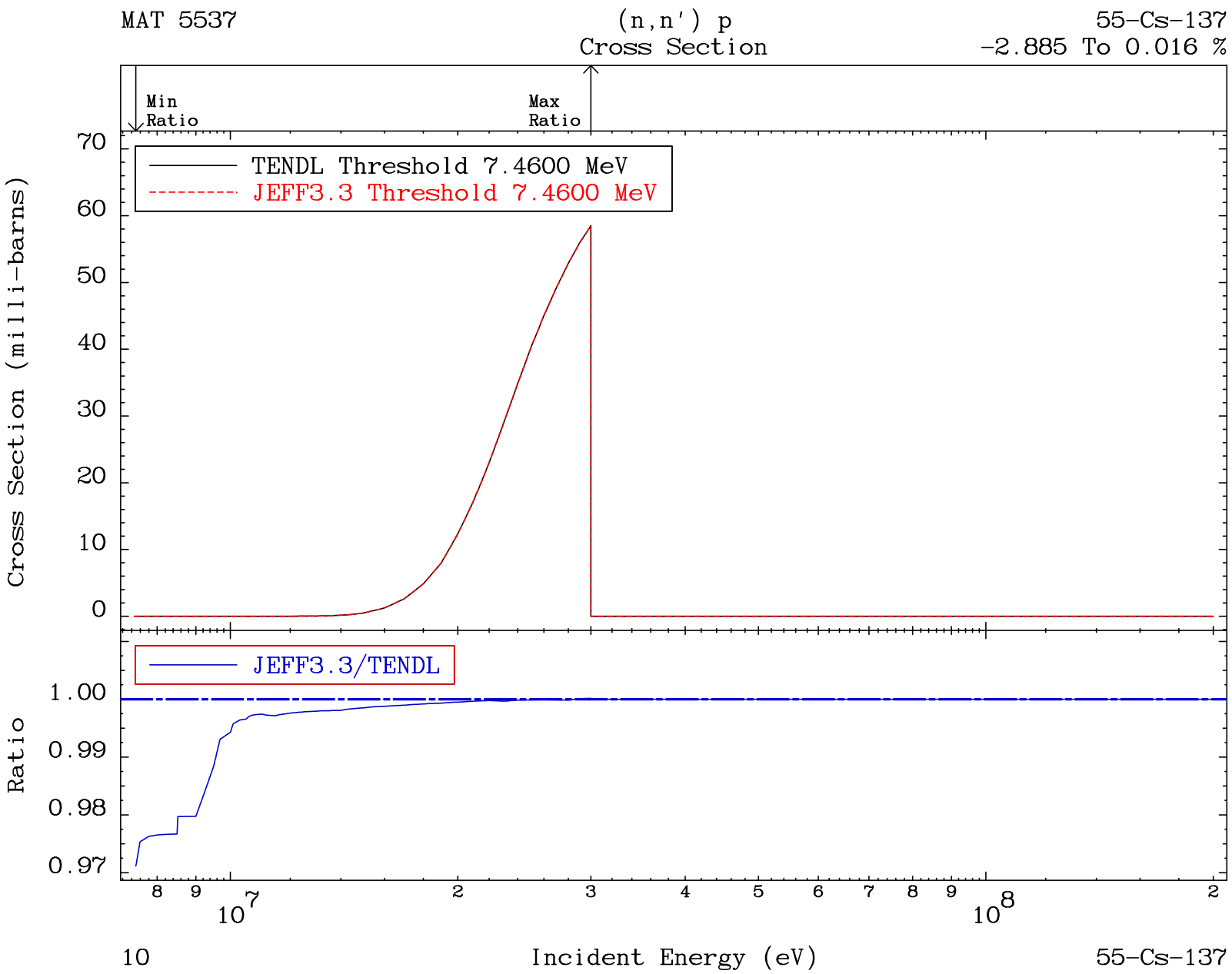

MAT 5537
(n,2n)
Cross Section
55-Cs-137
-0.444 To 0.143 %
Min Ratio
Max Ratio
TENDL Threshold 8.3392 MeV
JEFF3.3 Threshold 8.3392 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
55-Cs-137

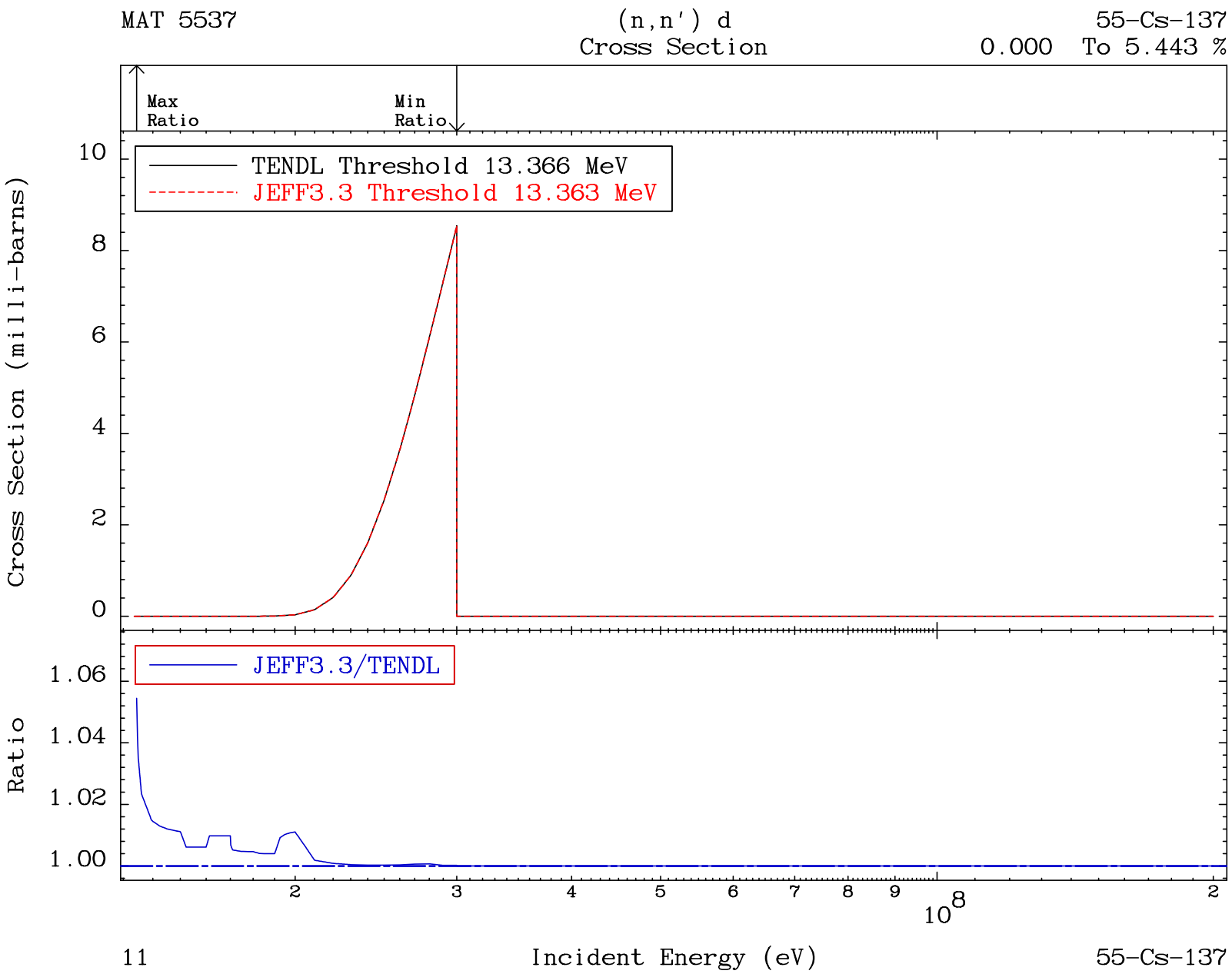

MAT 5537
(n,3n)
Cross Section
55-Cs-137
-1.151 To 0.109 %
Min Ratio
Max Ratio
TENDL Threshold 15.218 MeV
JEFF3.3 Threshold 15.218 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
55-Cs-137

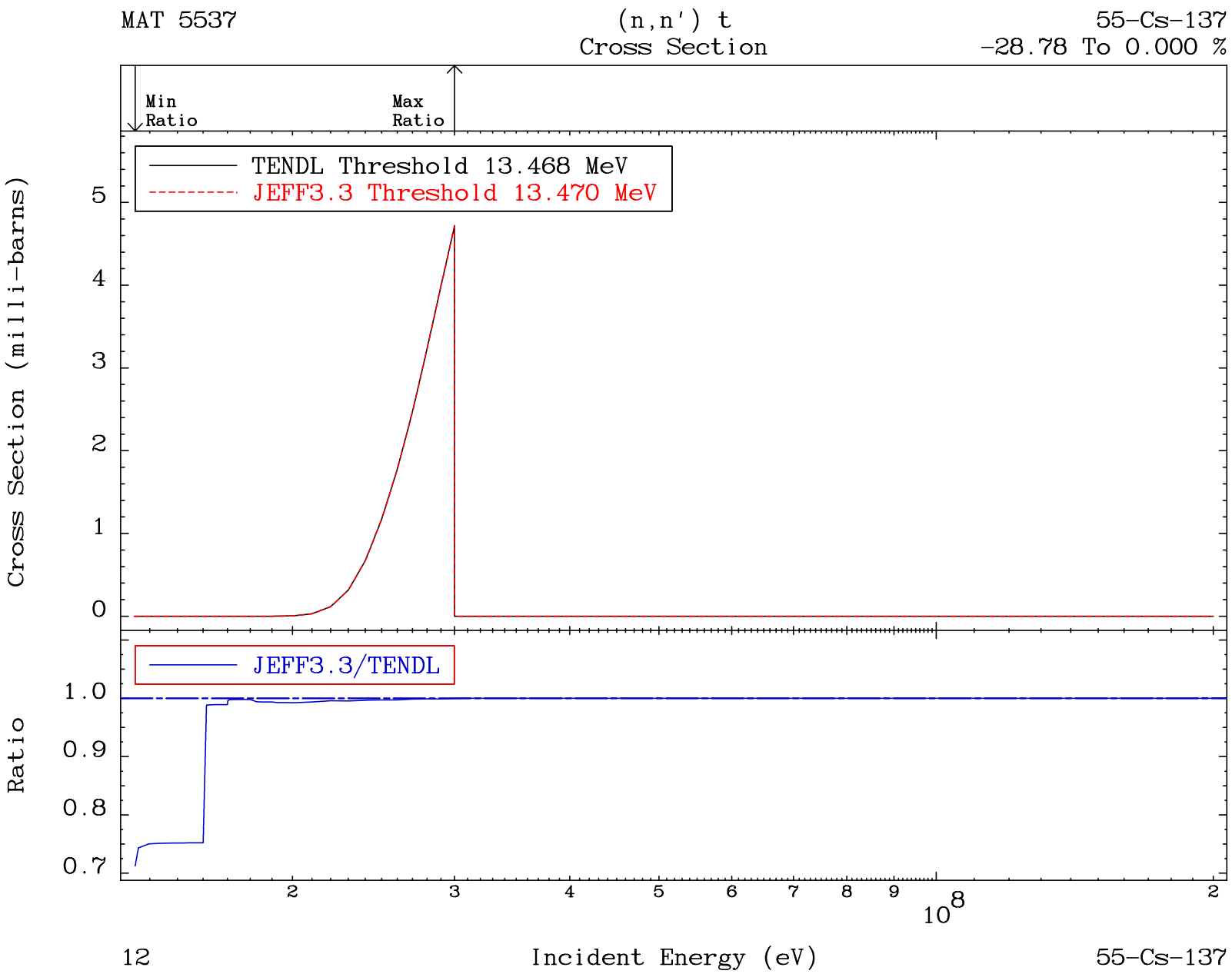

MAT 5537
(n,n') α
Cross Section
55-Cs-137
-7.921 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.1352 MeV
JEFF3.3 Threshold 3.1069 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
7
55-Cs-137

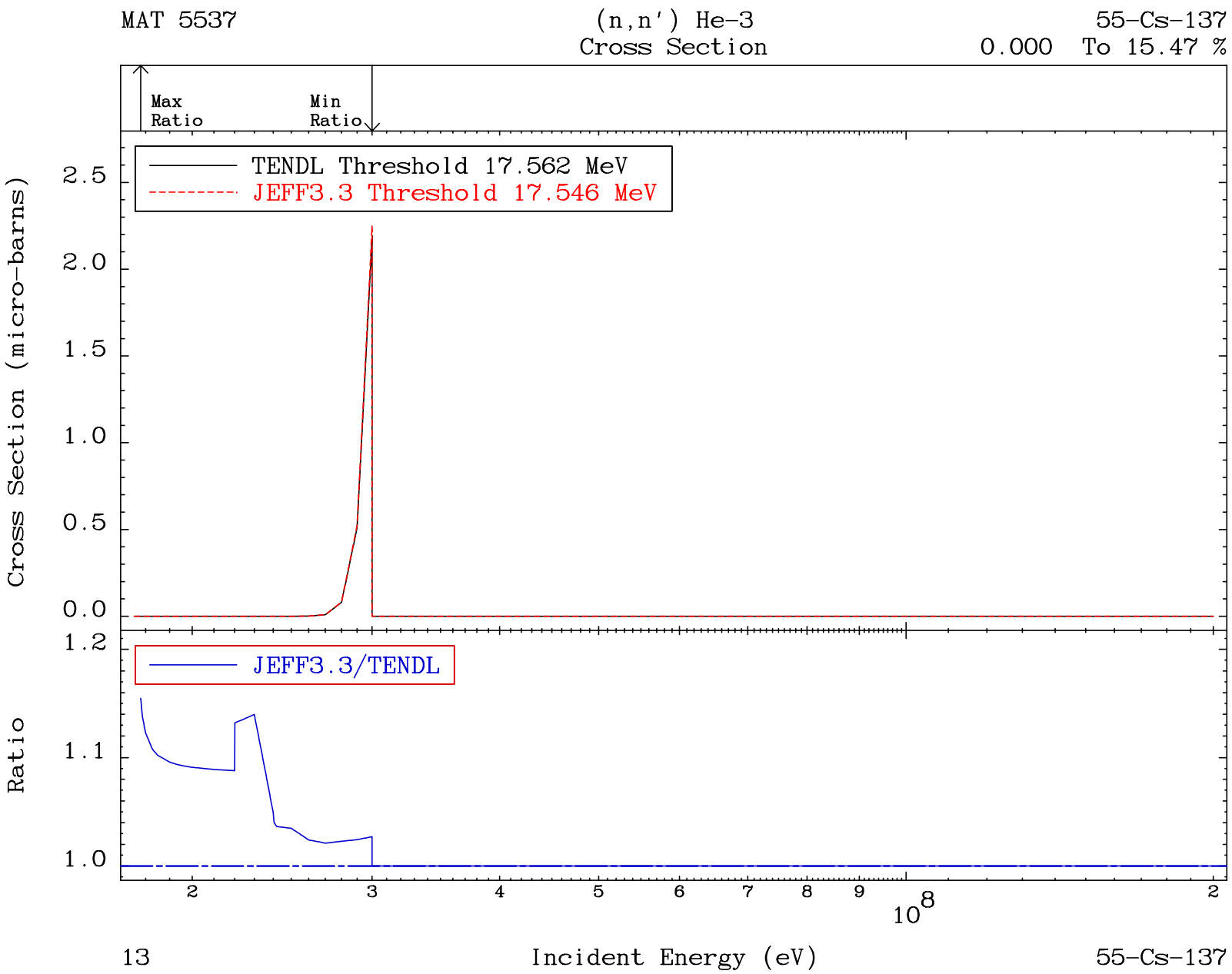

MAT 5537
(n,2n) α
Cross Section
55-Cs-137
-98.36 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.422 MeV
JEFF3.3 Threshold 11.422 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
55-Cs-137

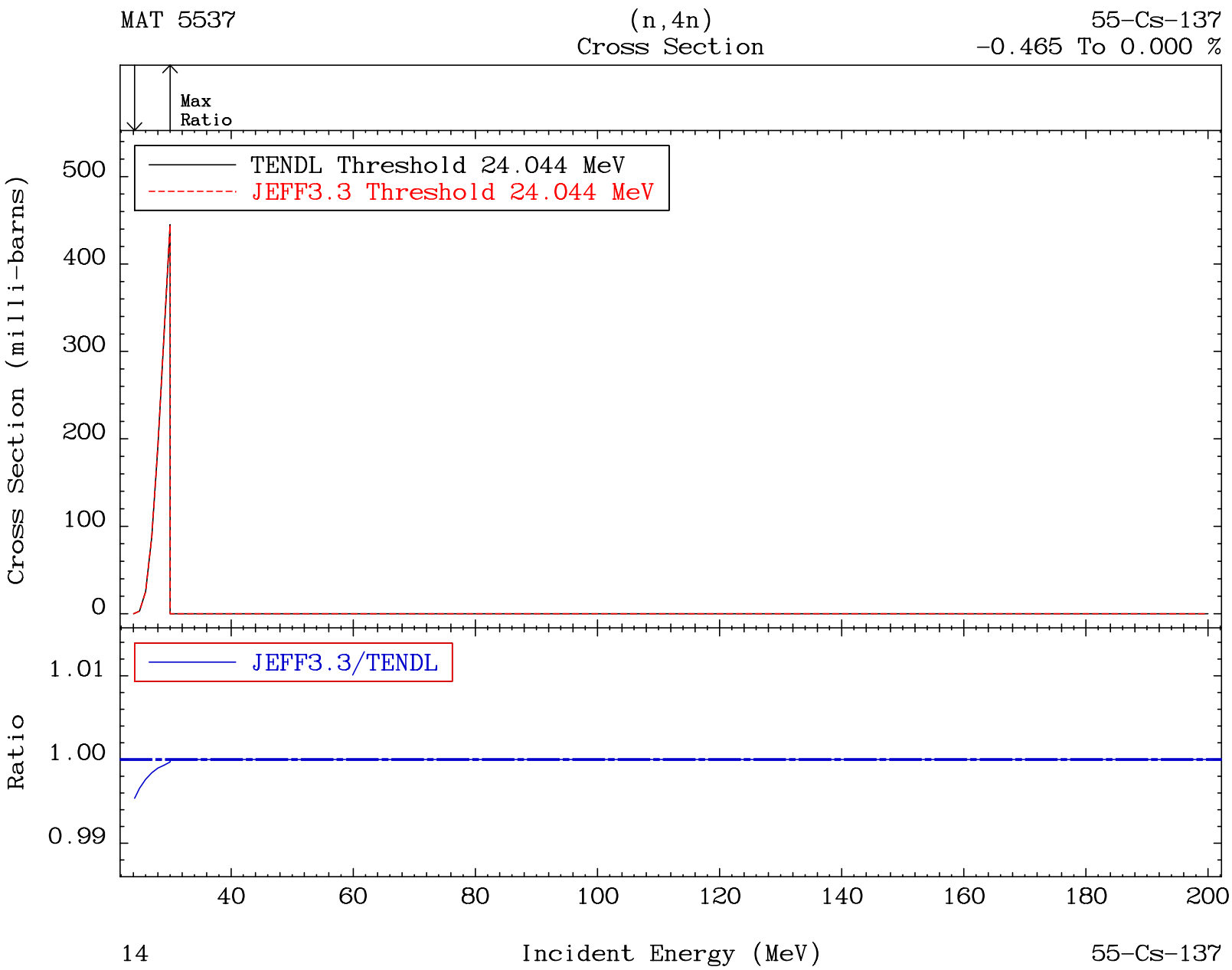

MAT 5537
(n,3n) α
Cross Section
55-Cs-137
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 17.801 MeV
JEFF3.3 Threshold 17.801 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
55-Cs-137

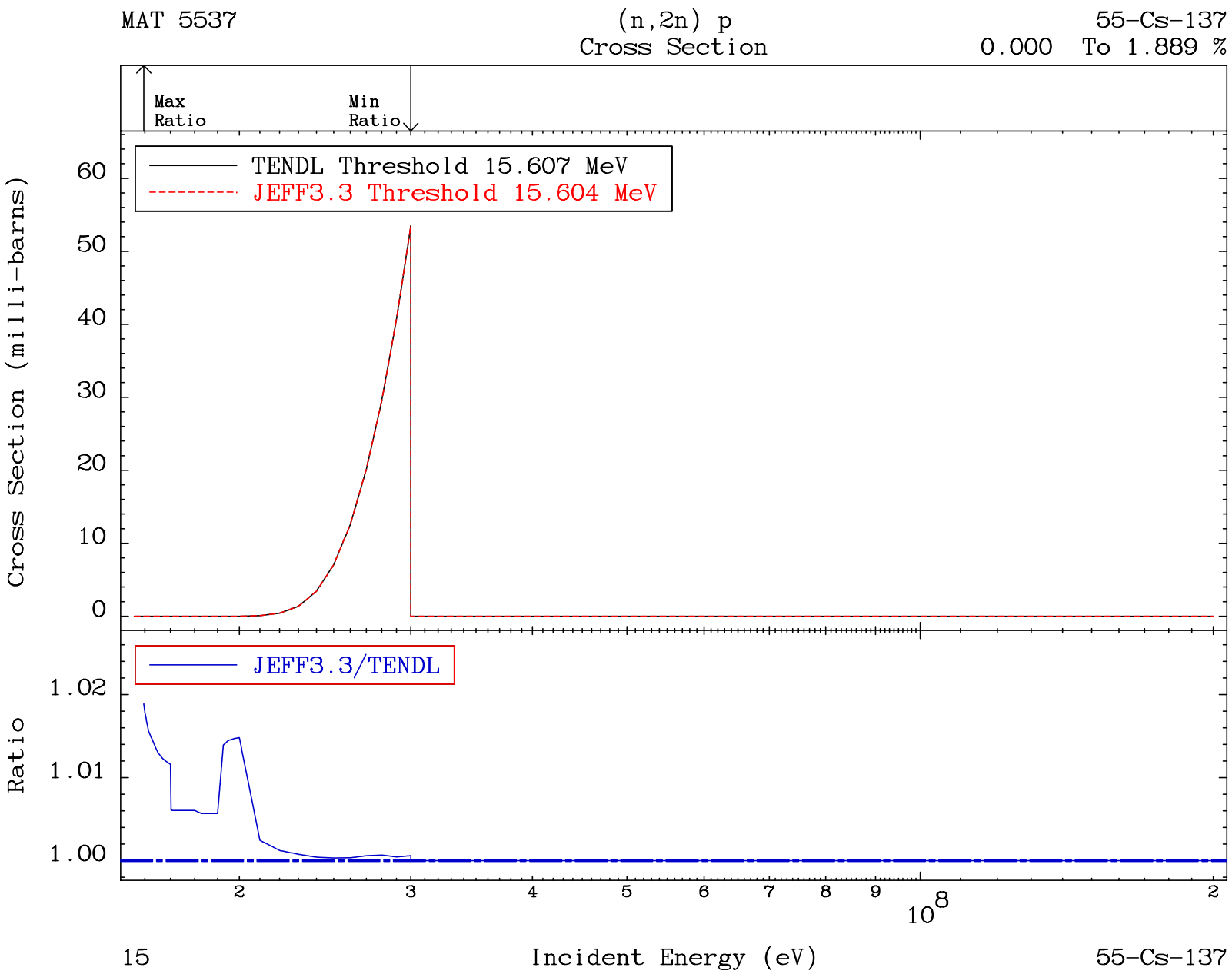

MAT 5537
(n,n') p
Cross Section
55-Cs-137
-2.885 To 0.016 %
Min Ratio
Max Ratio
TENDL Threshold 7.4600 MeV
JEFF3.3 Threshold 7.4600 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
0.97
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
55-Cs-137

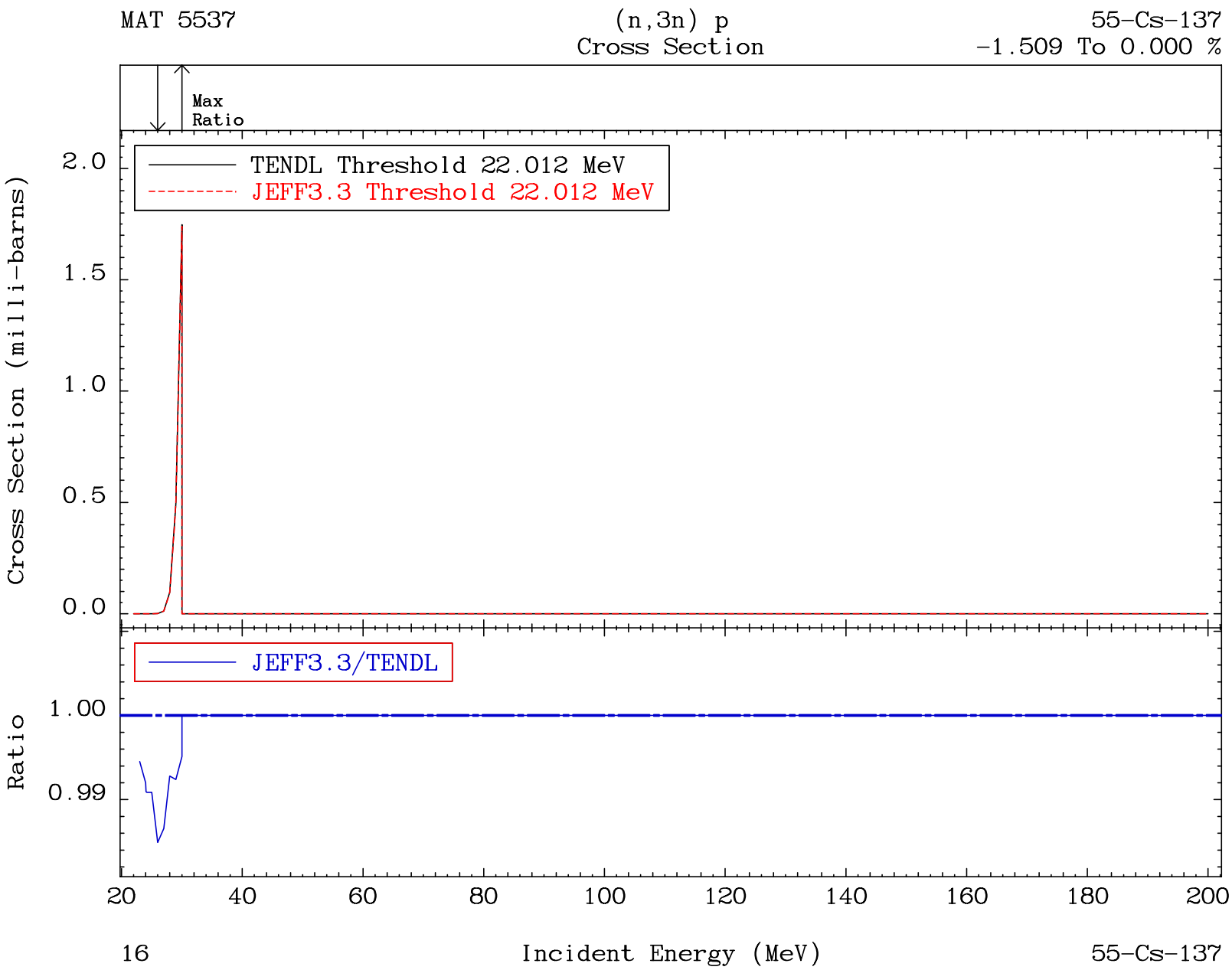

MAT 5537
(n,n') d
Cross Section
55-Cs-137
0.000 To 5.443 %
Max Ratio
Min Ratio
TENDL Threshold 13.366 MeV
JEFF3.3 Threshold 13.363 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
55-Cs-137

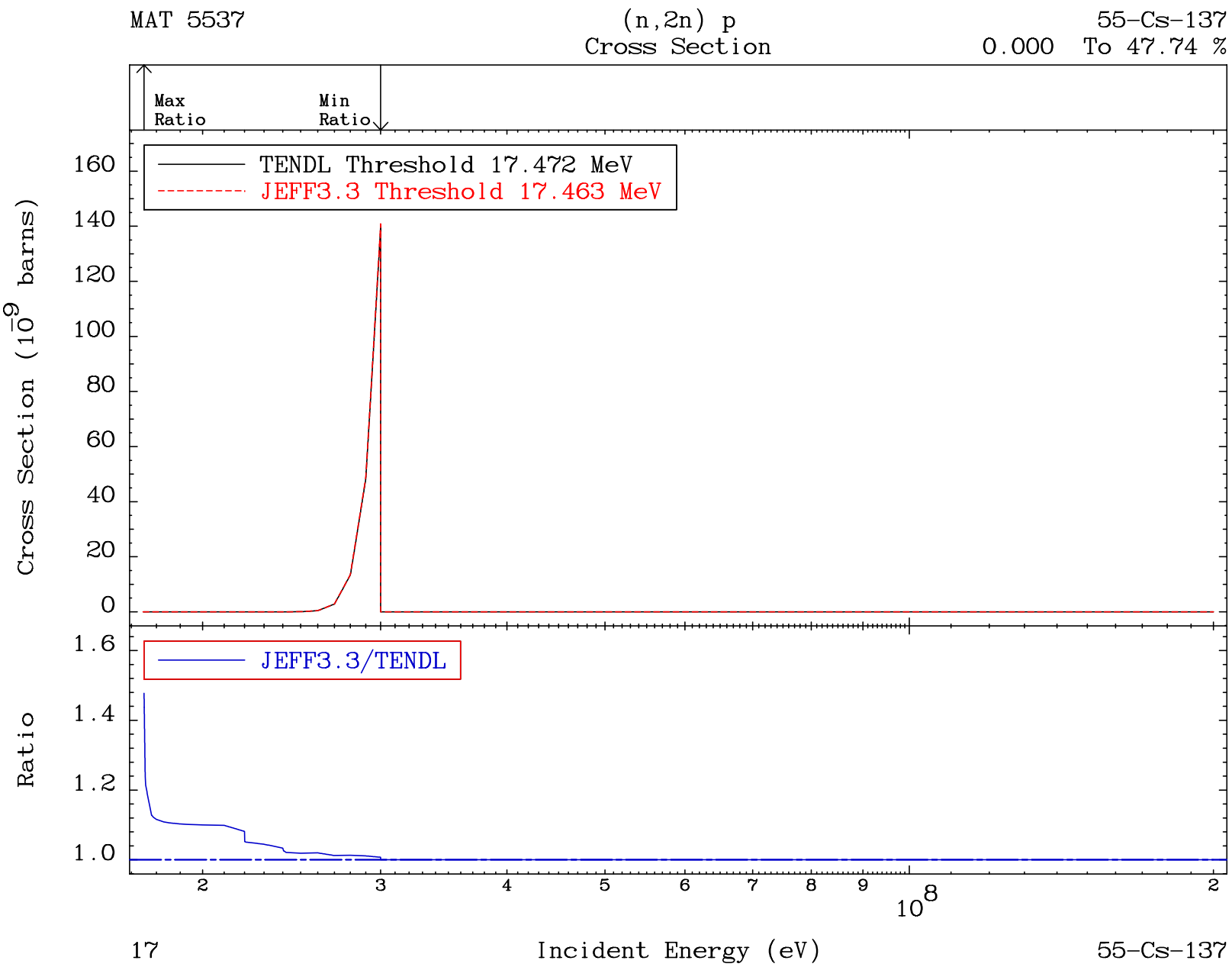

MAT 5537
(n,n') t
Cross Section
55-Cs-137
-28.78 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.468 MeV
JEFF3.3 Threshold 13.470 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.7
0.8
0.9
1.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
55-Cs-137

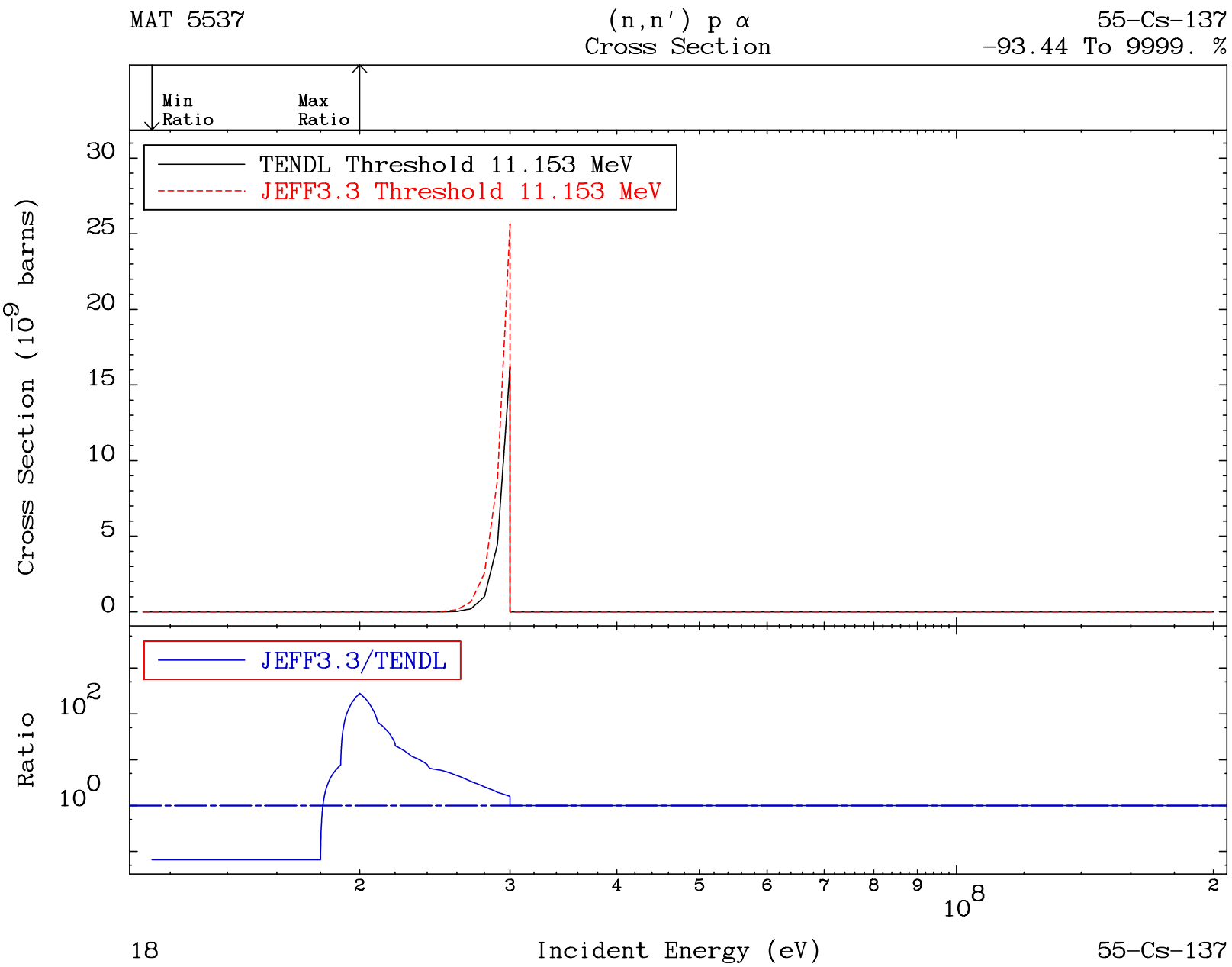

MAT 5537
(n,n') He-3
Cross Section
55-Cs-137
0.000 To 15.47 %
Max Ratio
Min Ratio
TENDL Threshold 17.562 MeV
JEFF3.3 Threshold 17.546 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
55-Cs-137

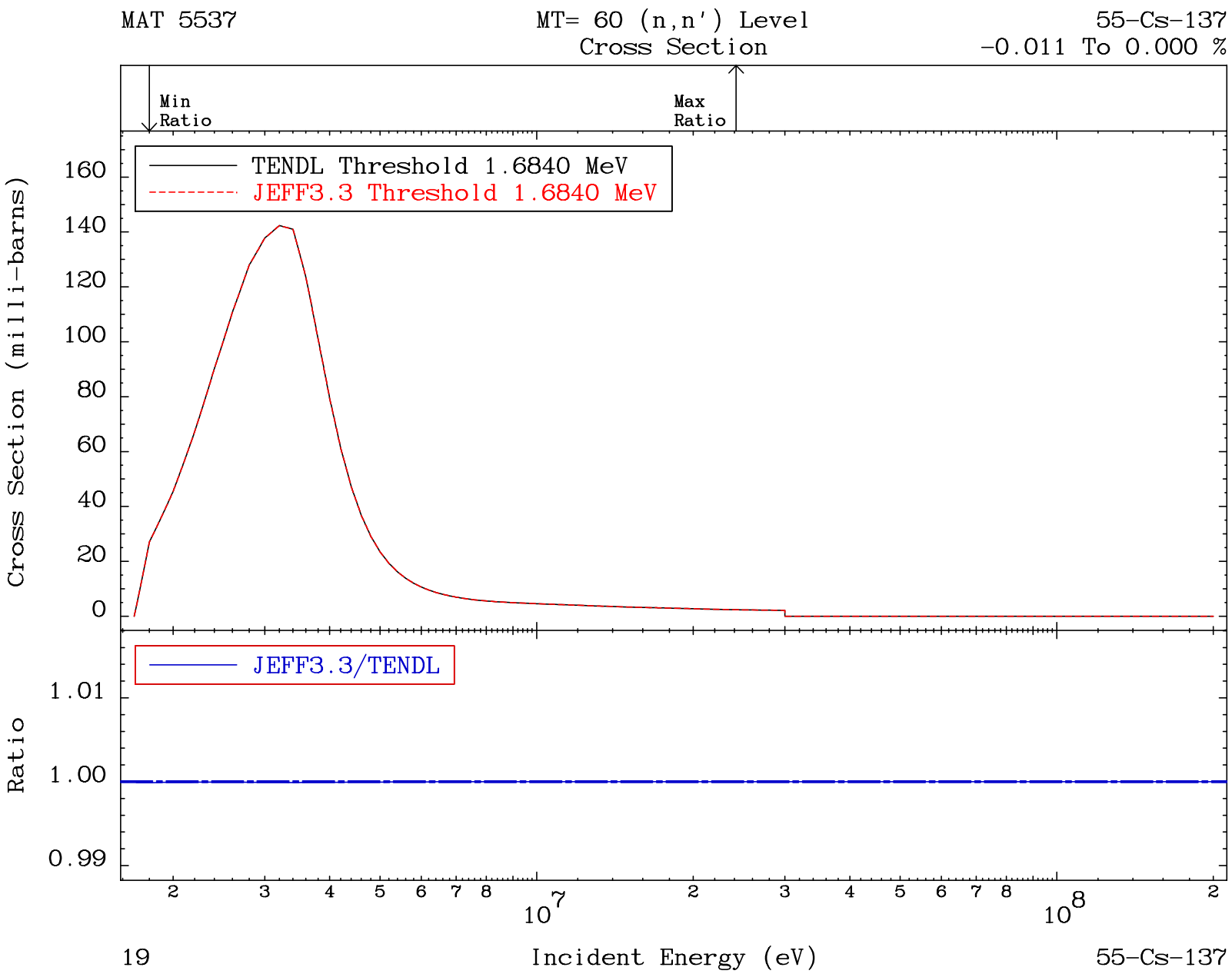

MAT 5537
(n,4n)
Cross Section
55-Cs-137
-0.465 To 0.000 %
Max
Ratio
TENDL Threshold 24.044 MeV
JEFF3.3 Threshold 24.044 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
55-Cs-137

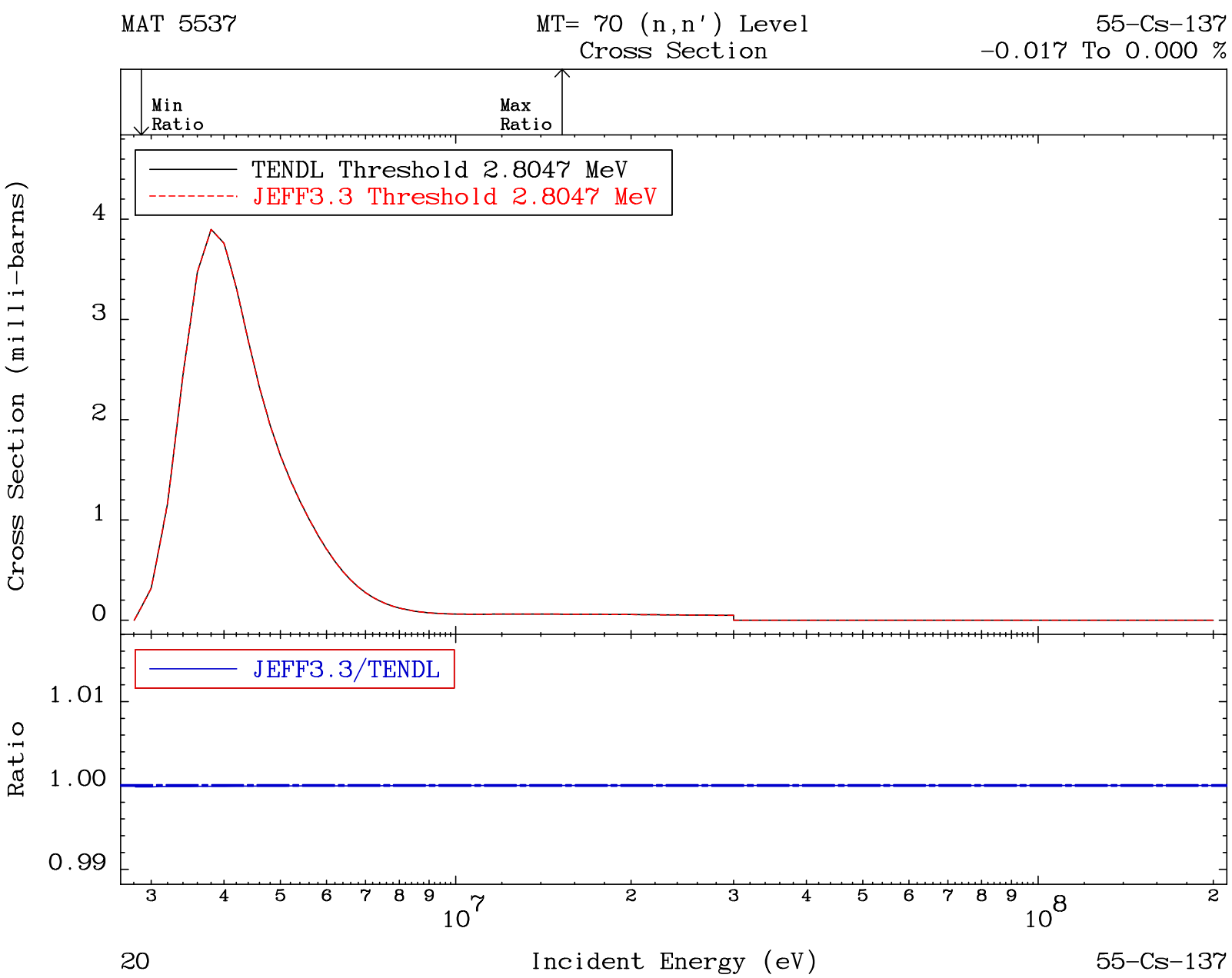

MAT 5537
(n,2n) p
Cross Section
55-Cs-137
0.000 To 1.889 %
Max Ratio
Min Ratio
TENDL Threshold 15.607 MeV
JEFF3.3 Threshold 15.604 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
55-Cs-137

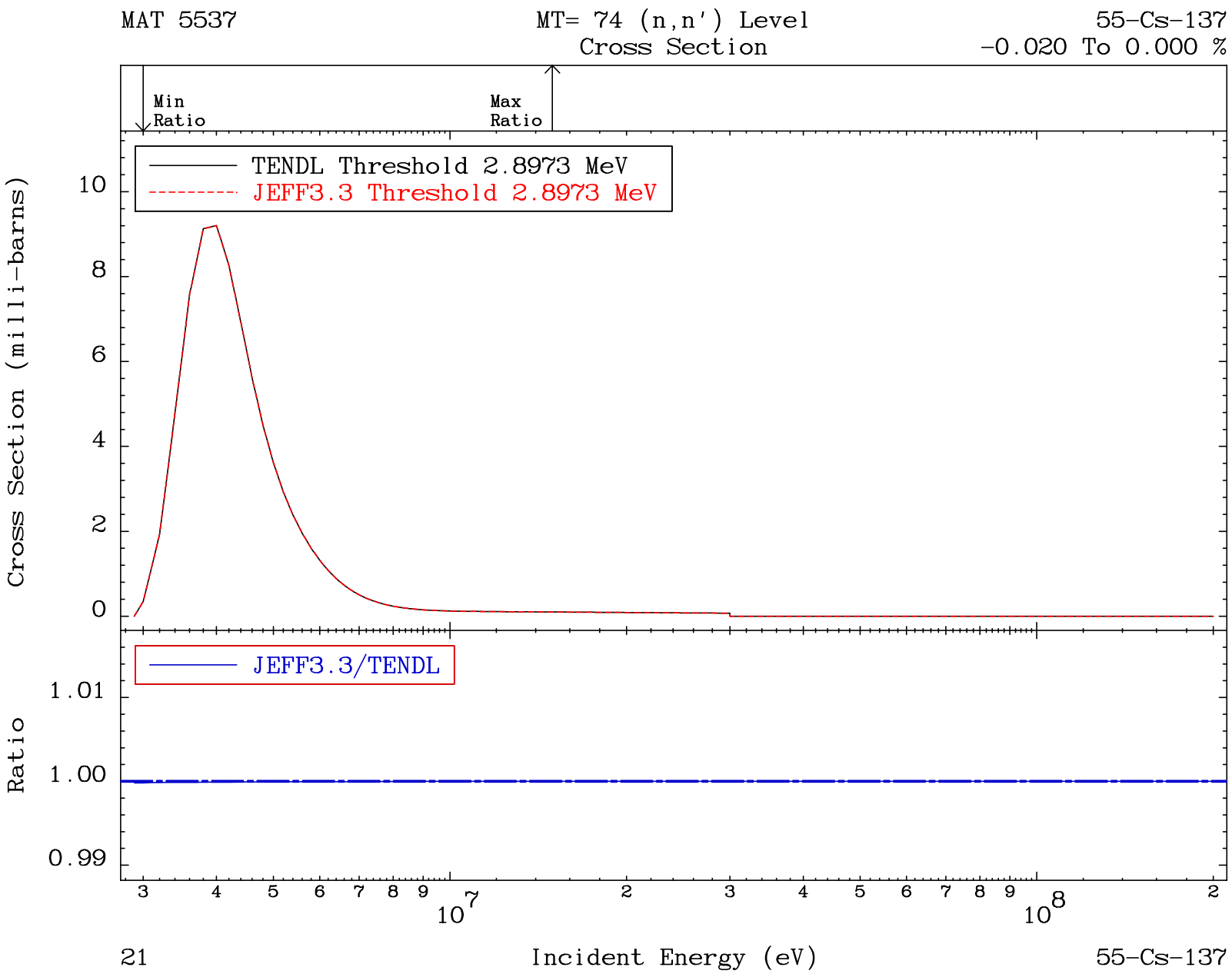

MAT 5537
(n,3n) p
Cross Section
55-Cs-137
-1.509 To 0.000 %
Max
Ratio
TENDL Threshold 22.012 MeV
JEFF3.3 Threshold 22.012 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.99
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
55-Cs-137

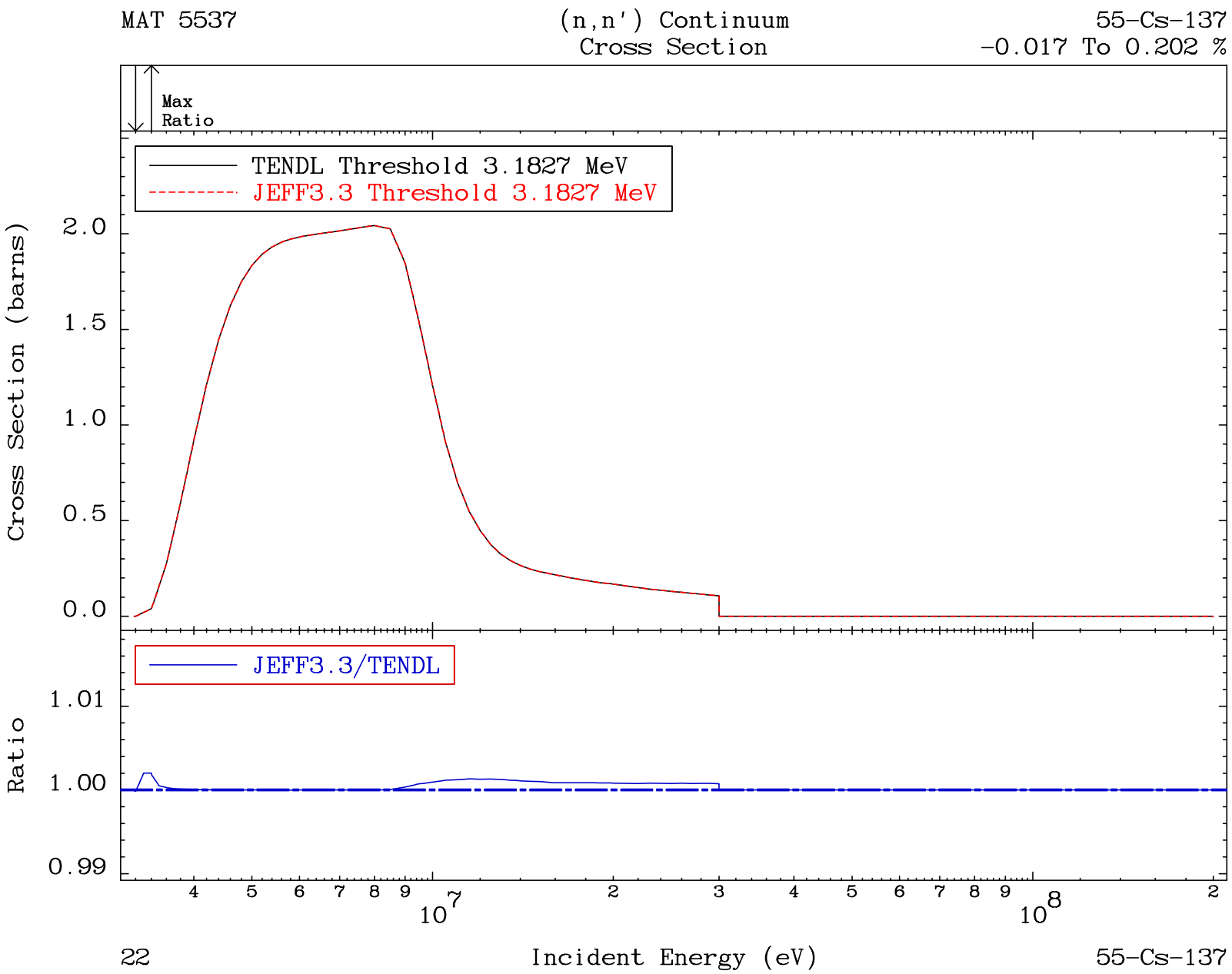

MAT 5537
(n,2n) p
Cross Section
55-Cs-137
0.000 To 47.74 %
Max Ratio
Min Ratio
TENDL Threshold 17.472 MeV
JEFF3.3 Threshold 17.463 MeV
Cross Section (10^{-9} barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
55-Cs-137

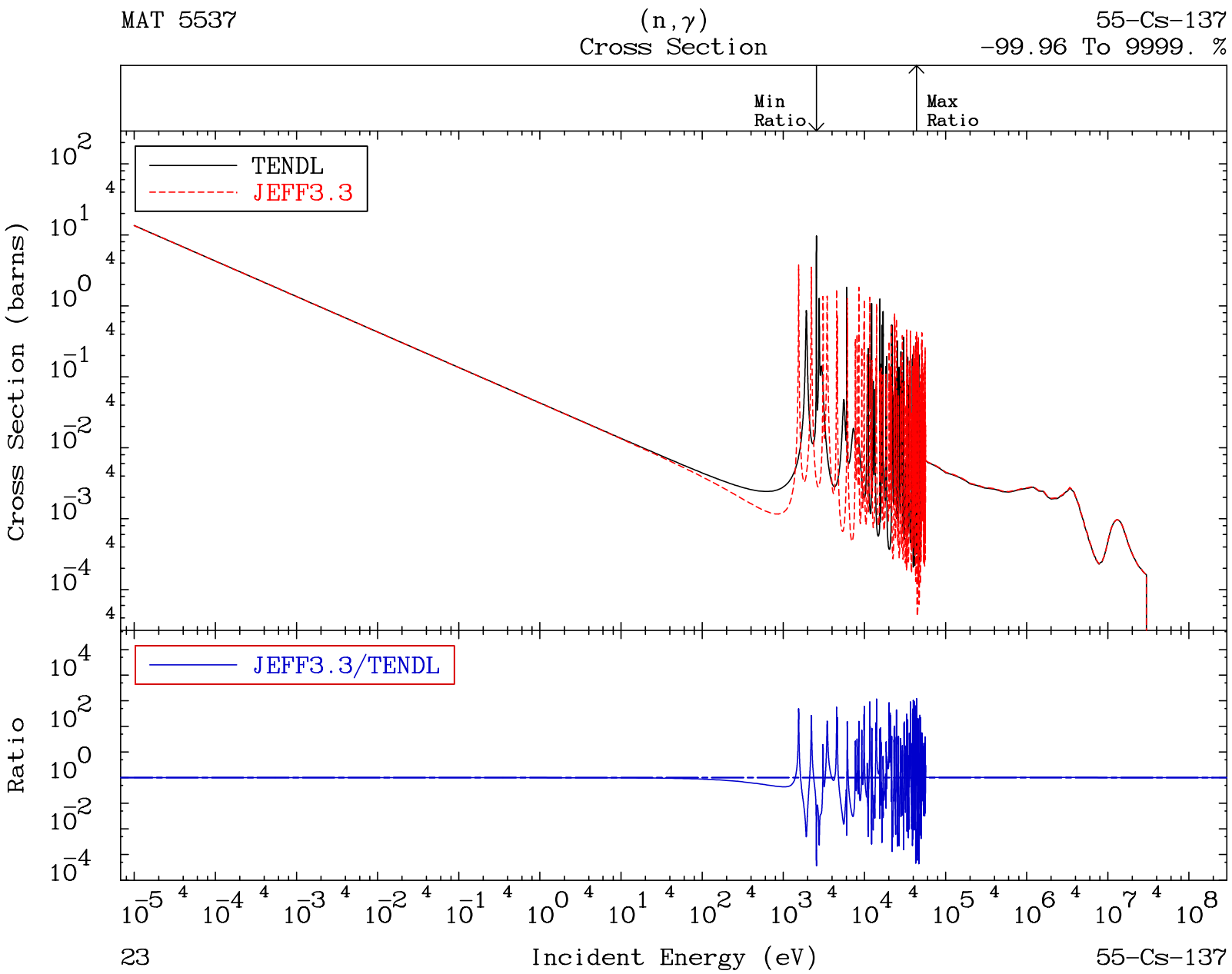

MAT 5537
(n,n') p α
Cross Section
55-Cs-137
-93.44 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.153 MeV
JEFF3.3 Threshold 11.153 MeV
Cross Section (10^-9 barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
55-Cs-137

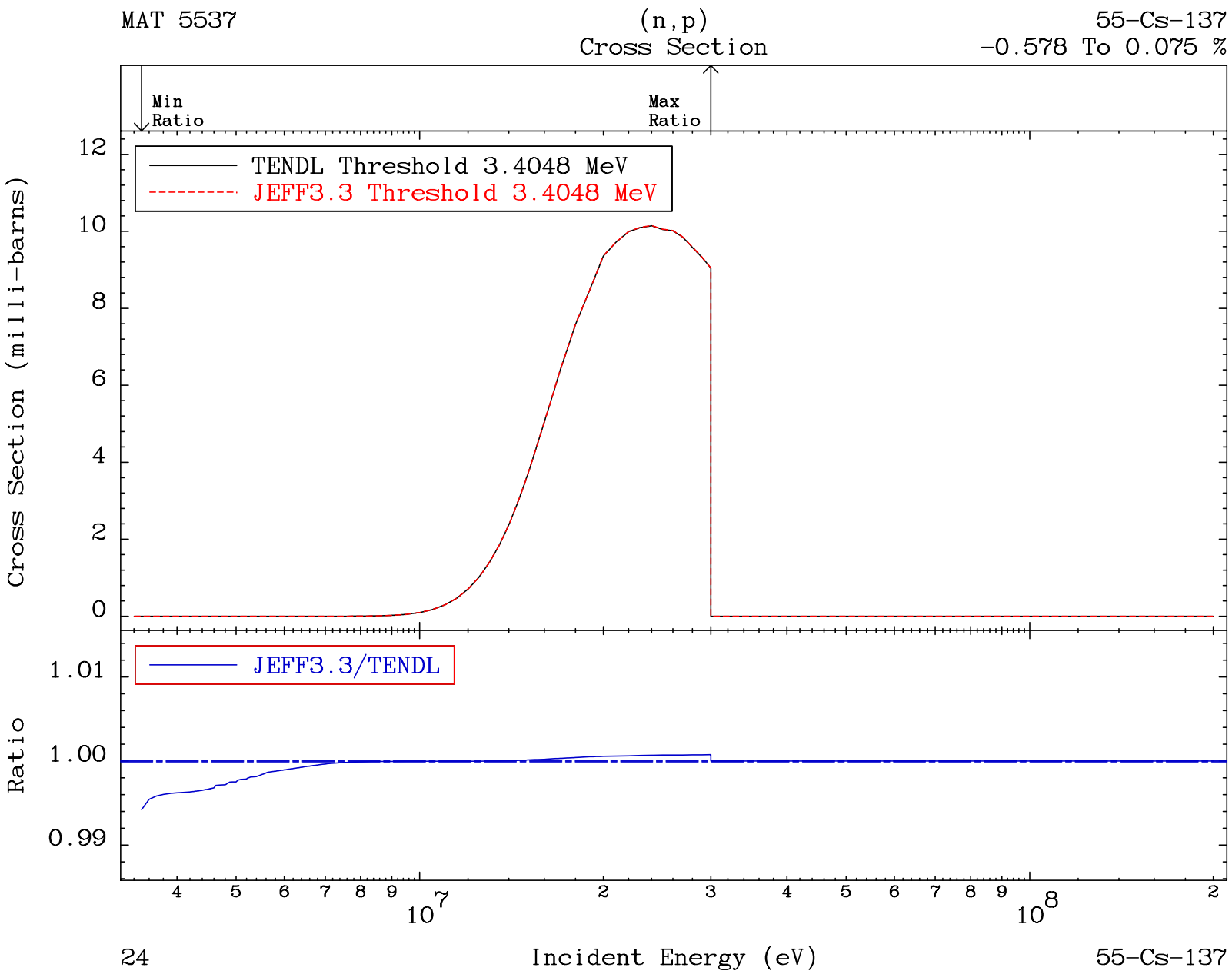

MAT 5537
MT= 60 (n,n') Level
Cross Section
55-Cs-137
-0.011 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6840 MeV
JEFF3.3 Threshold 1.6840 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
55-Cs-137

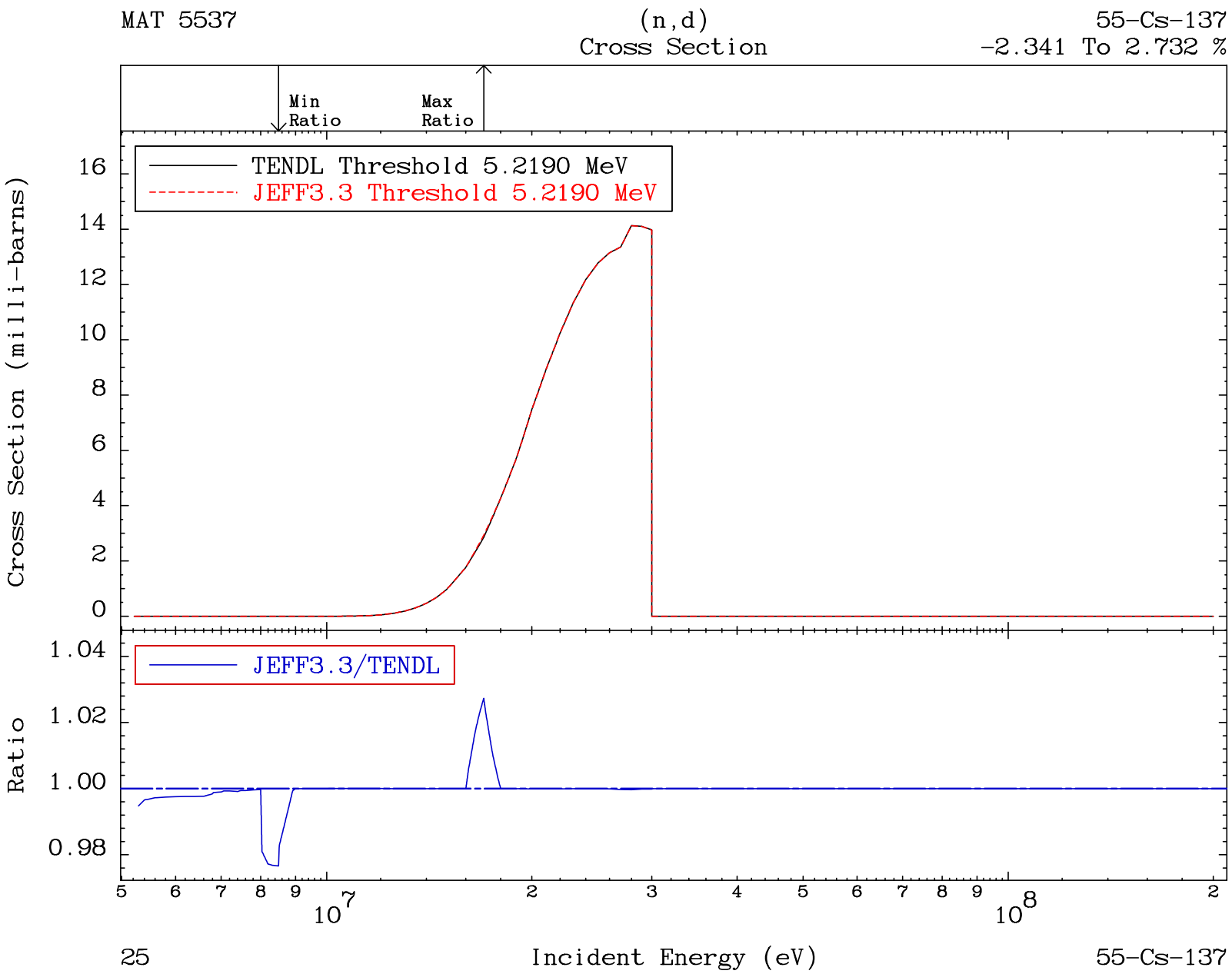

MAT 5537
MT= 70 (n,n') Level
Cross Section
55-Cs-137
-0.017 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8047 MeV
JEFF3.3 Threshold 2.8047 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
55-Cs-137

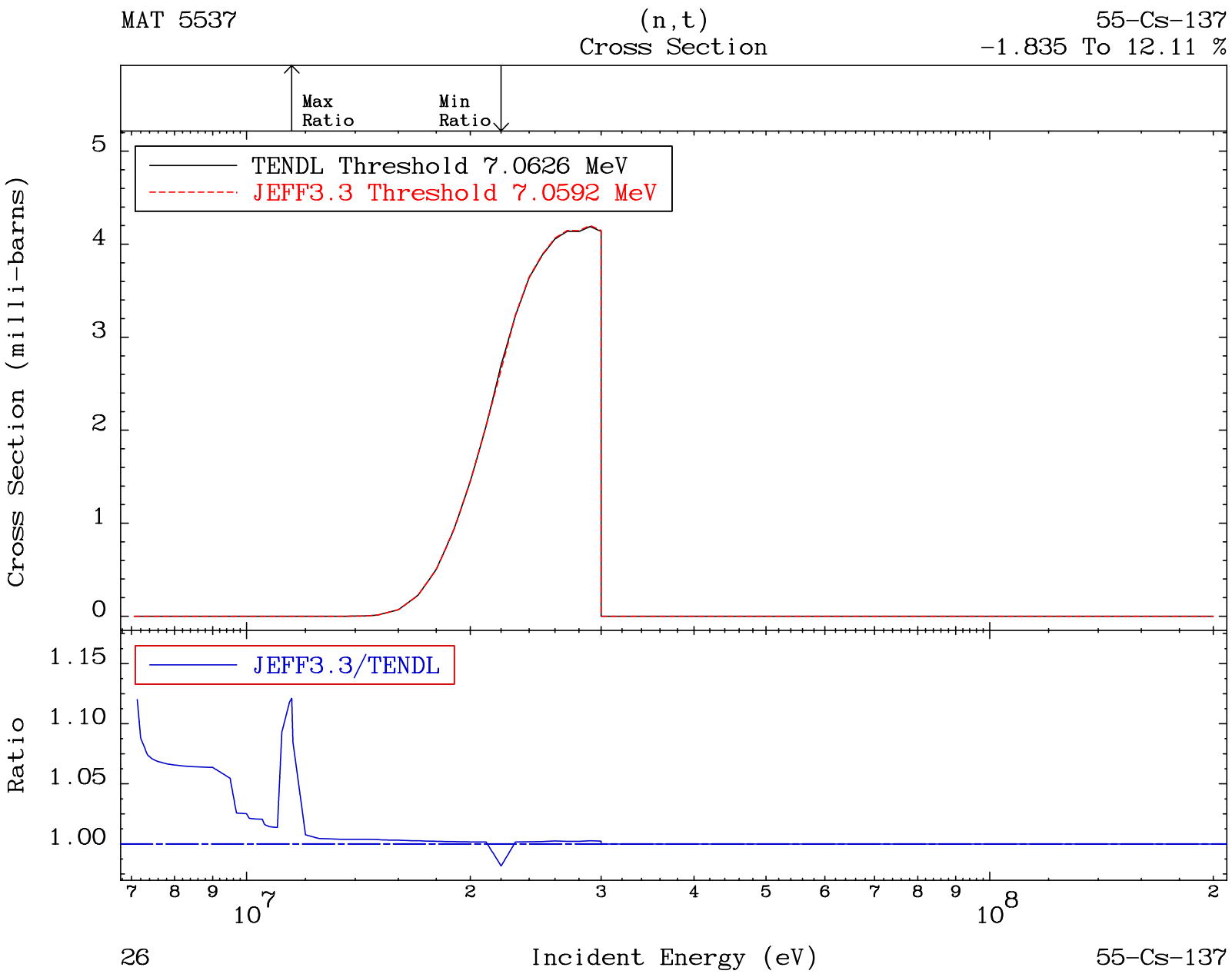

MAT 5537
MT= 74 (n,n') Level
Cross Section
55-Cs-137
-0.020 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8973 MeV
JEFF3.3 Threshold 2.8973 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
55-Cs-137

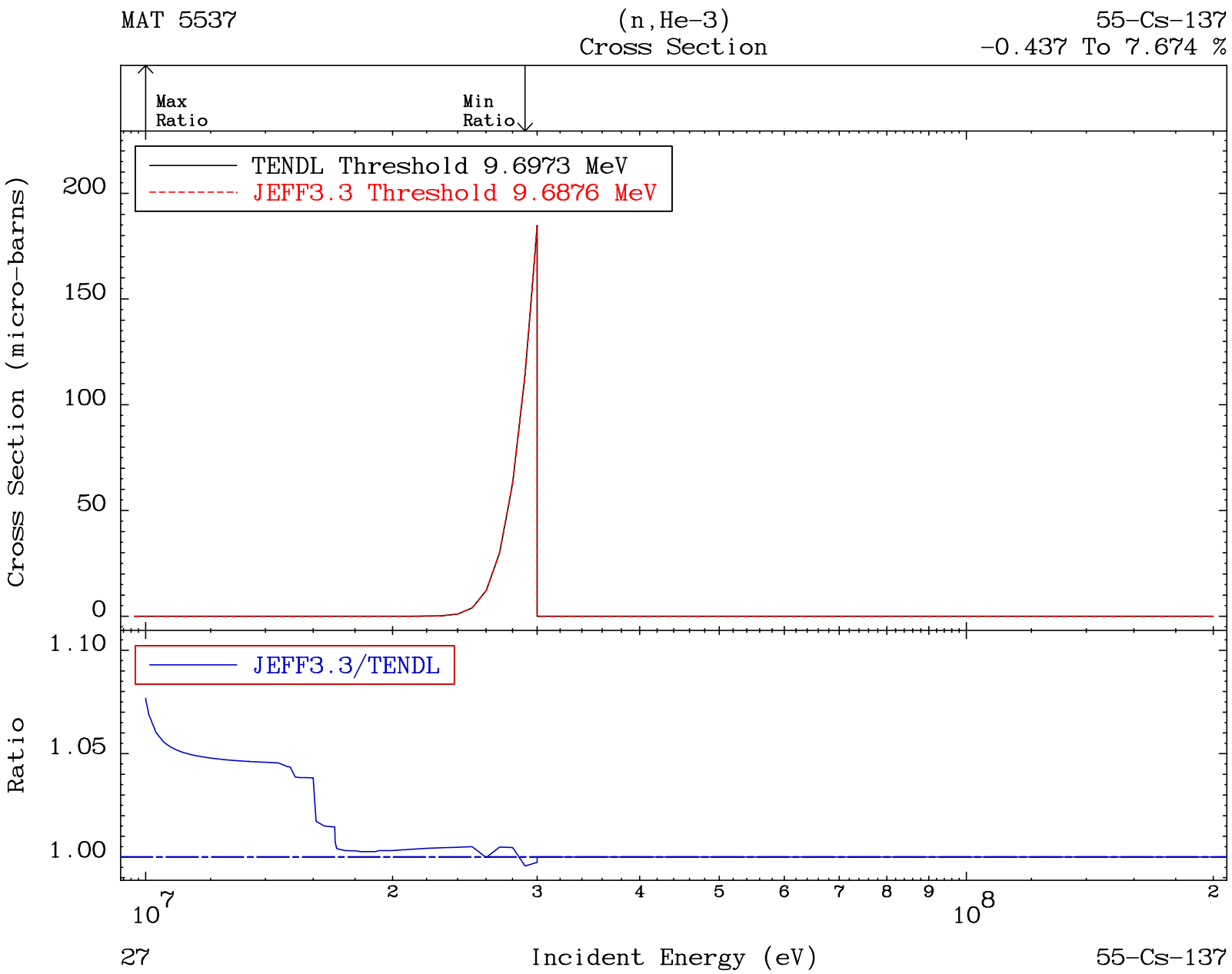

MAT 5537
(n,n') Continuum
Cross Section
55-Cs-137
-0.017 To 0.202 %
Max
Ratio
TENDL Threshold 3.1827 MeV
JEFF3.3 Threshold 3.1827 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
22
Incident Energy (eV)
55-Cs-137

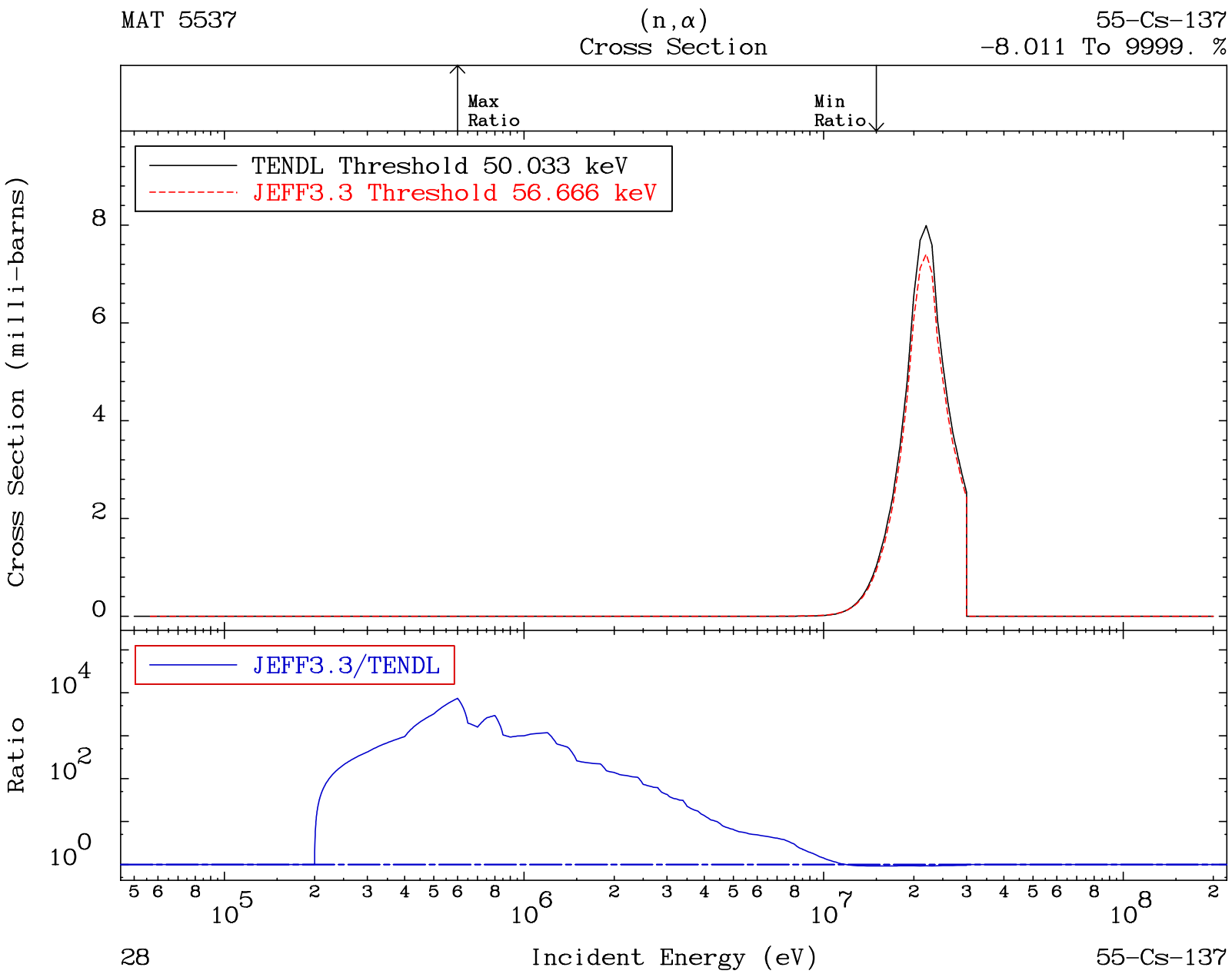

MAT 5537
(n,γ)
Cross Section
55-Cs-137
-99.96 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
23
55-Cs-137

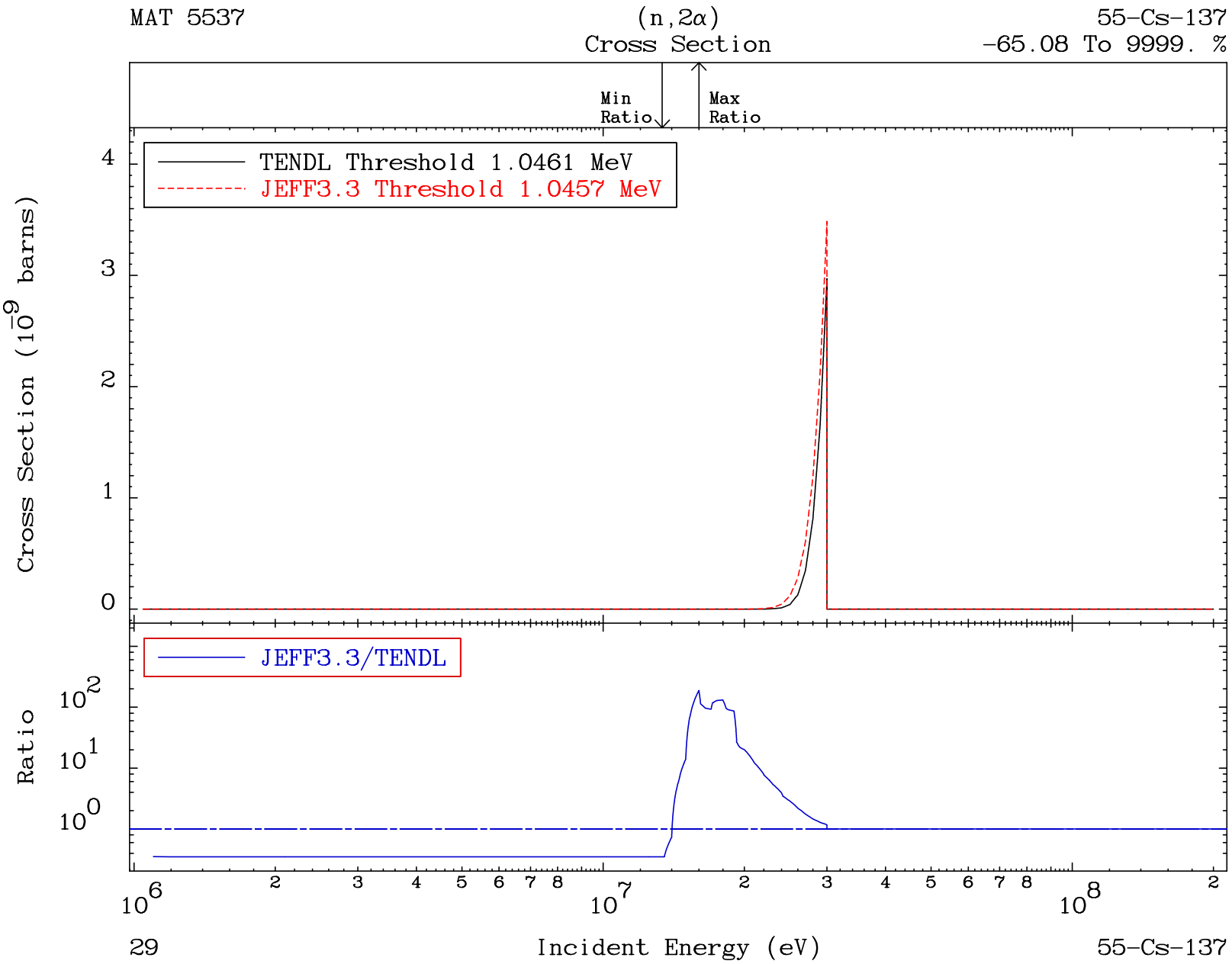

MAT 5537
(n,p)
Cross Section
55-Cs-137
-0.578 To 0.075 %
Min Ratio
Max Ratio
TENDL Threshold 3.4048 MeV
JEFF3.3 Threshold 3.4048 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
55-Cs-137

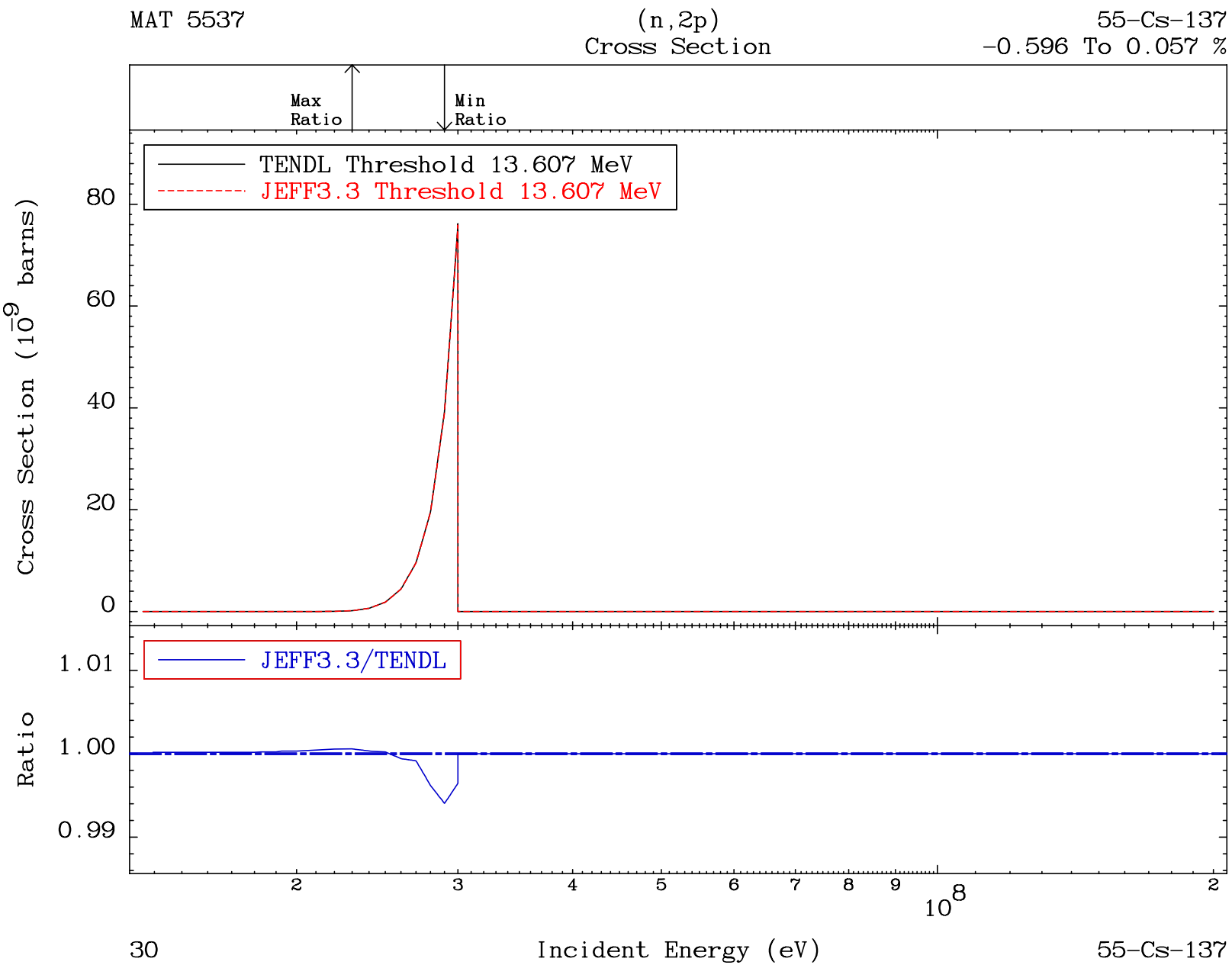

MAT 5537
(n,d)
Cross Section
55-Cs-137
-2.341 To 2.732 %
Min Ratio
Max Ratio
TENDL Threshold 5.2190 MeV
JEFF3.3 Threshold 5.2190 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
55-Cs-137

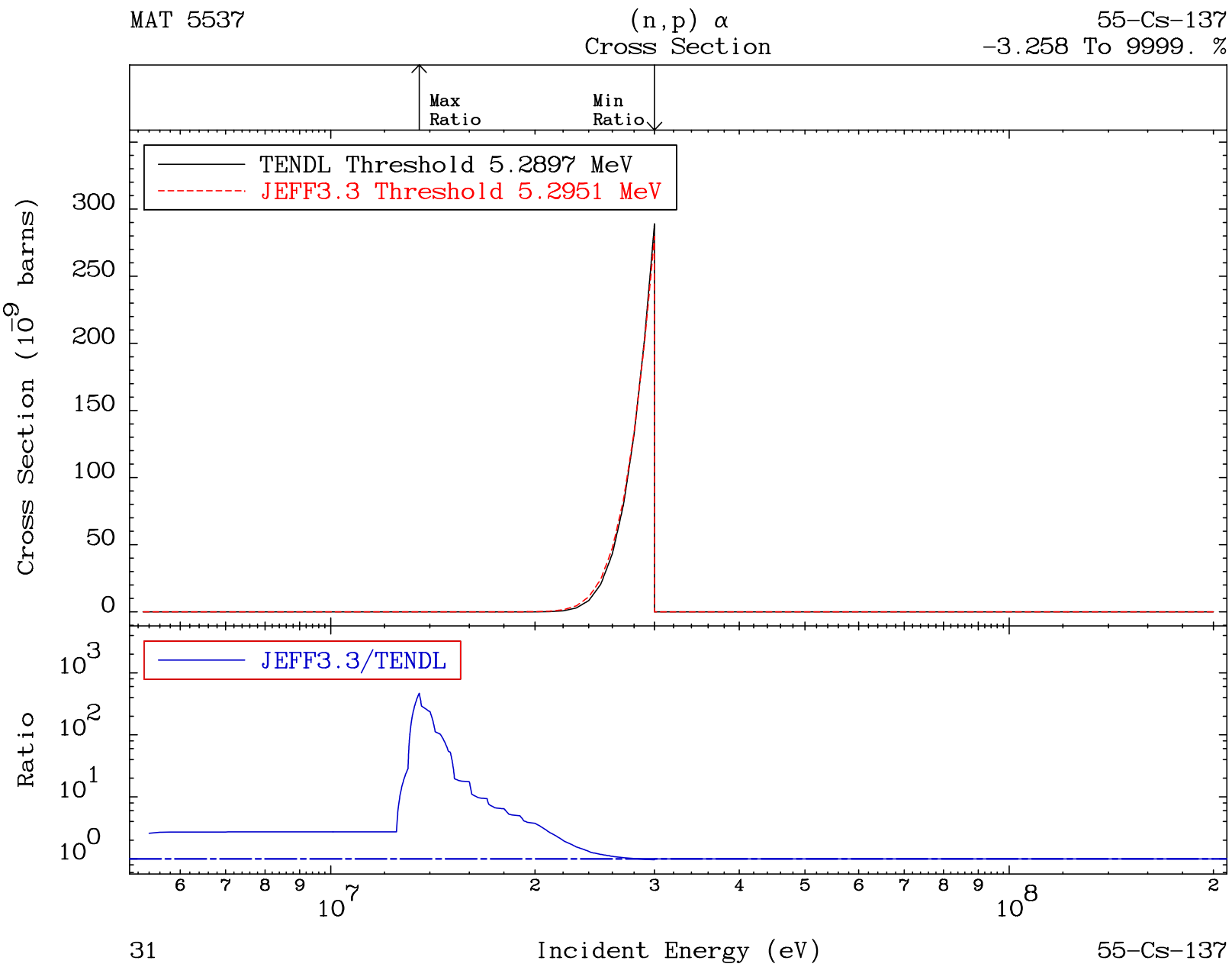

MAT 5537
(n,t)
Cross Section
55-Cs-137
-1.835 To 12.11 %
Max Ratio
Min Ratio
TENDL Threshold 7.0626 MeV
JEFF3.3 Threshold 7.0592 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.00
1.05
1.10
1.15
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
55-Cs-137

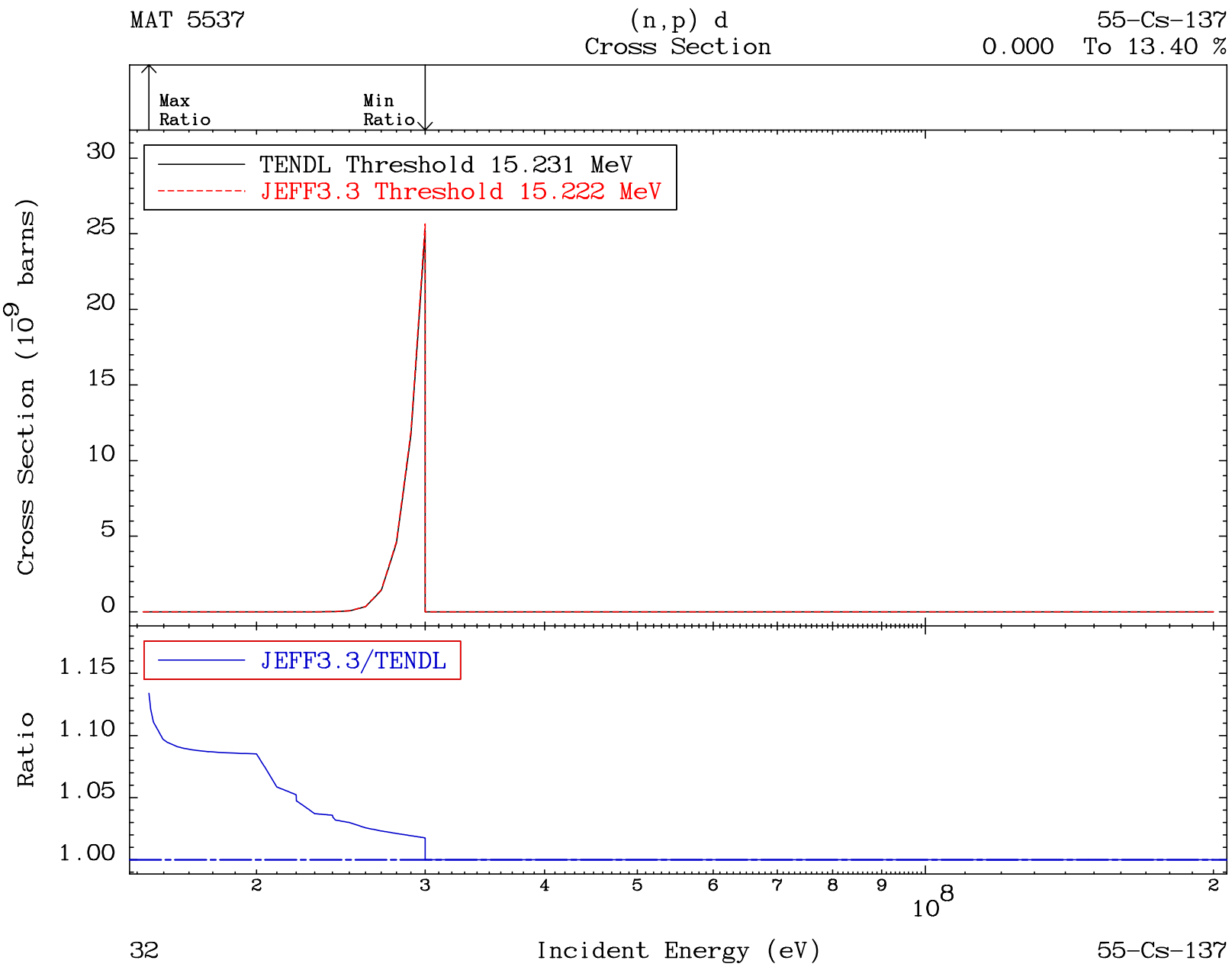

MAT 5537
(n,He-3)
Cross Section
55-Cs-137
-0.437 To 7.674 %
Max Ratio
Min Ratio
TENDL Threshold 9.6973 MeV
JEFF3.3 Threshold 9.6876 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
10^7
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
55-Cs-137

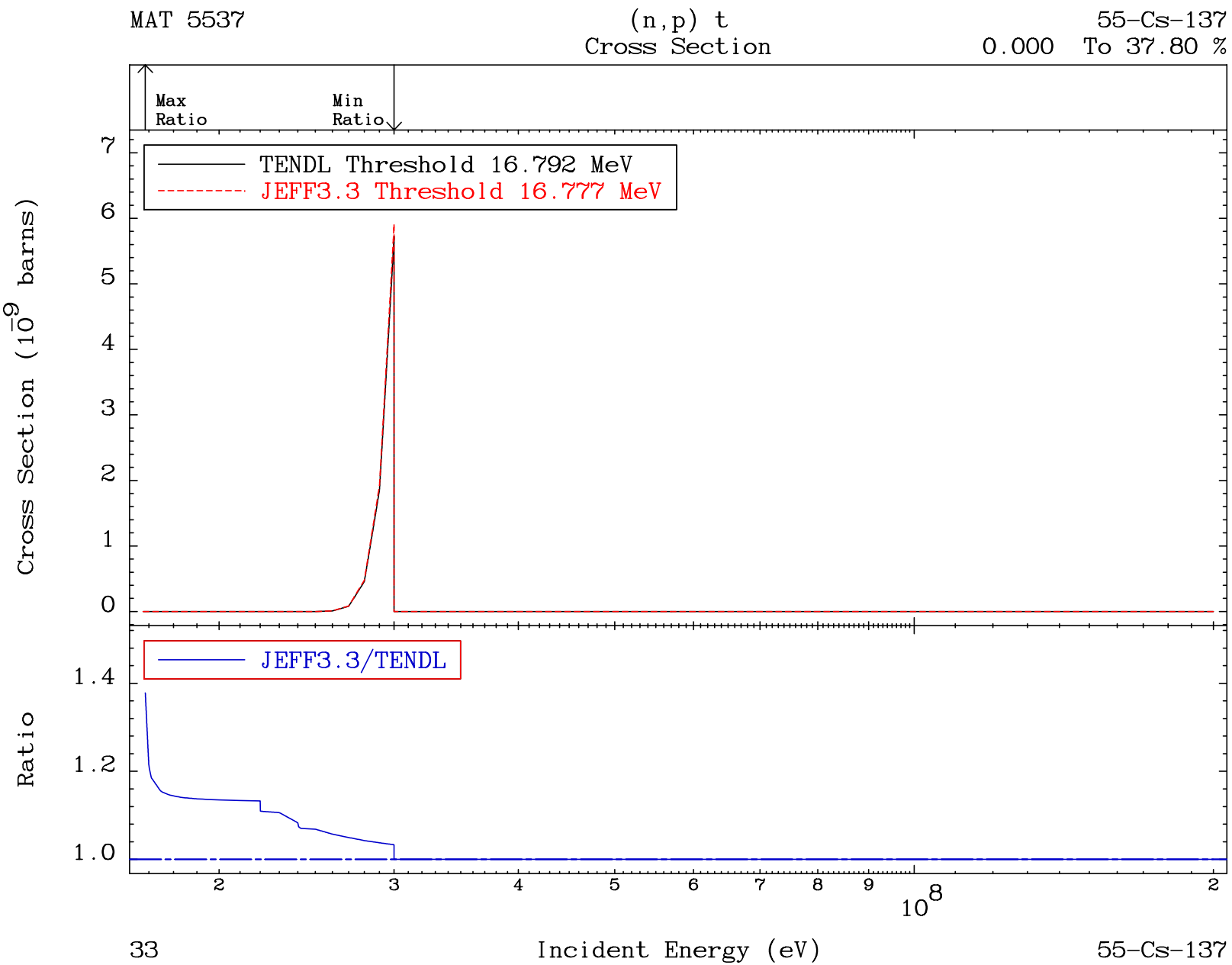

MAT 5537
(n,α)
Cross Section
55-Cs-137
-8.011 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 50.033 keV
JEFF3.3 Threshold 56.666 keV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
10^0
10^2
10^4
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
55-Cs-137

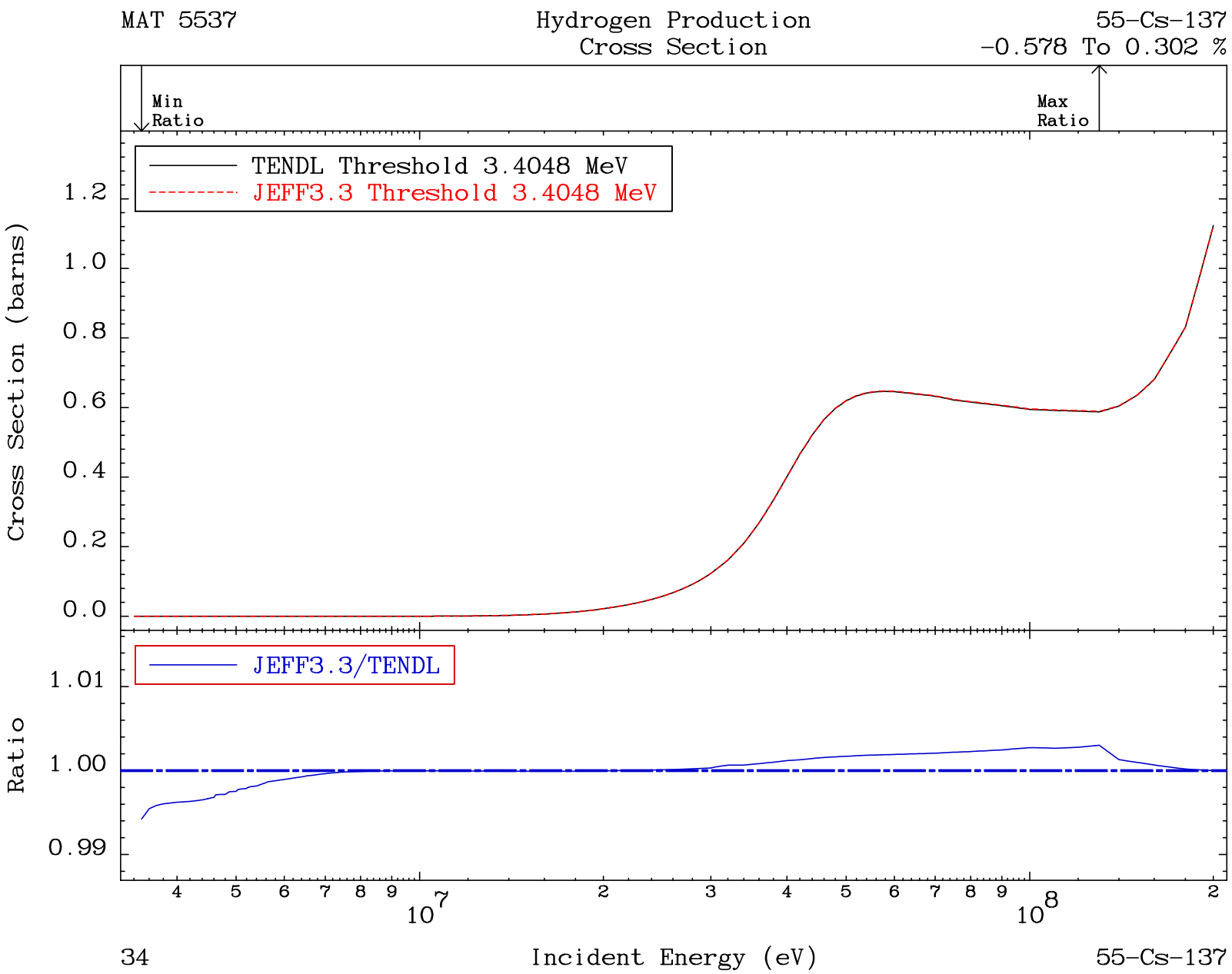

MAT 5537
(n,2α)
Cross Section
55-Cs-137
-65.08 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0461 MeV
JEFF3.3 Threshold 1.0457 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
29
55-Cs-137

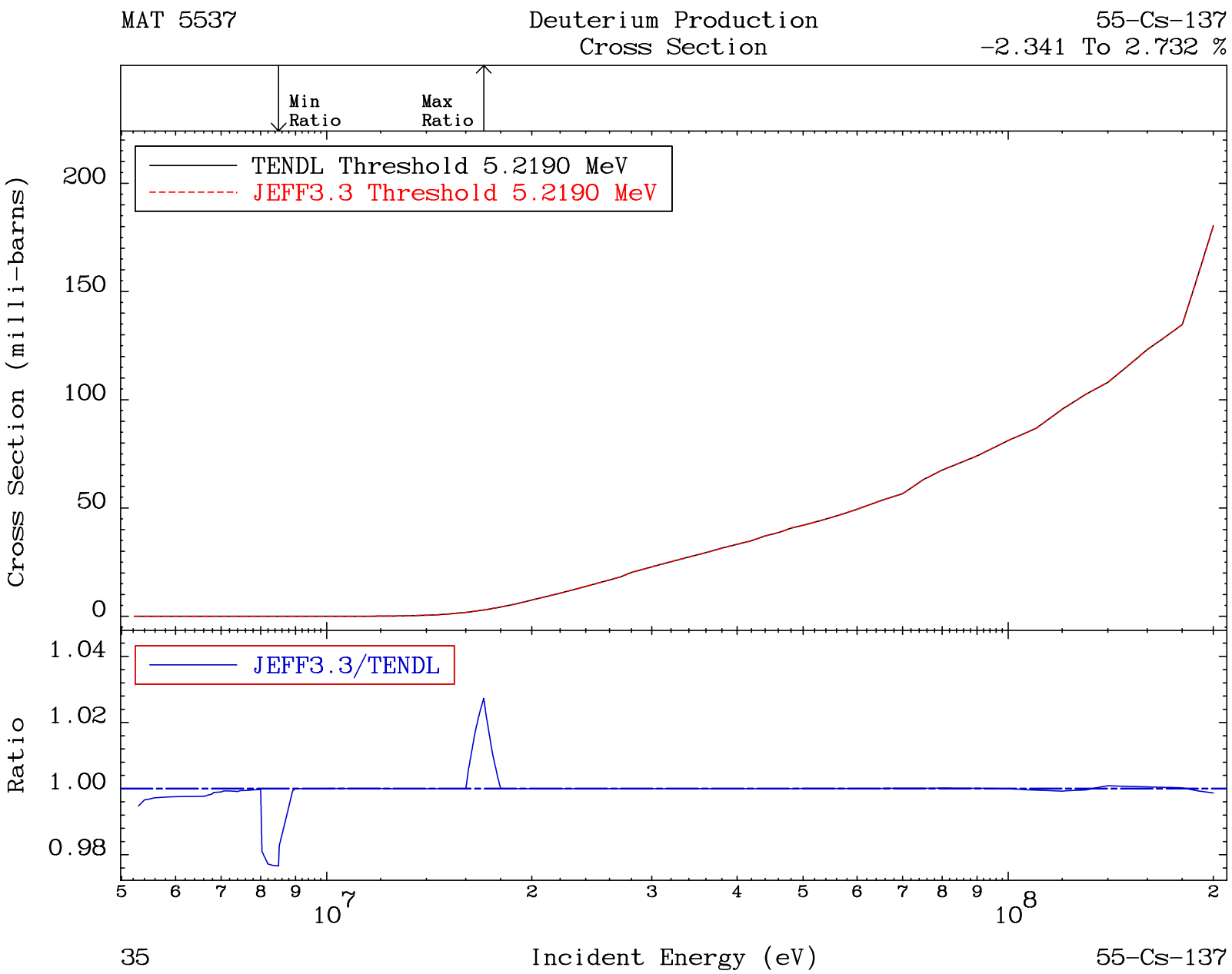

MAT 5537
(n,2p)
Cross Section
55-Cs-137
-0.596 To 0.057 %
Max Ratio
Min Ratio
TENDL Threshold 13.607 MeV
JEFF3.3 Threshold 13.607 MeV
Cross Section (10^{-9} barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
55-Cs-137

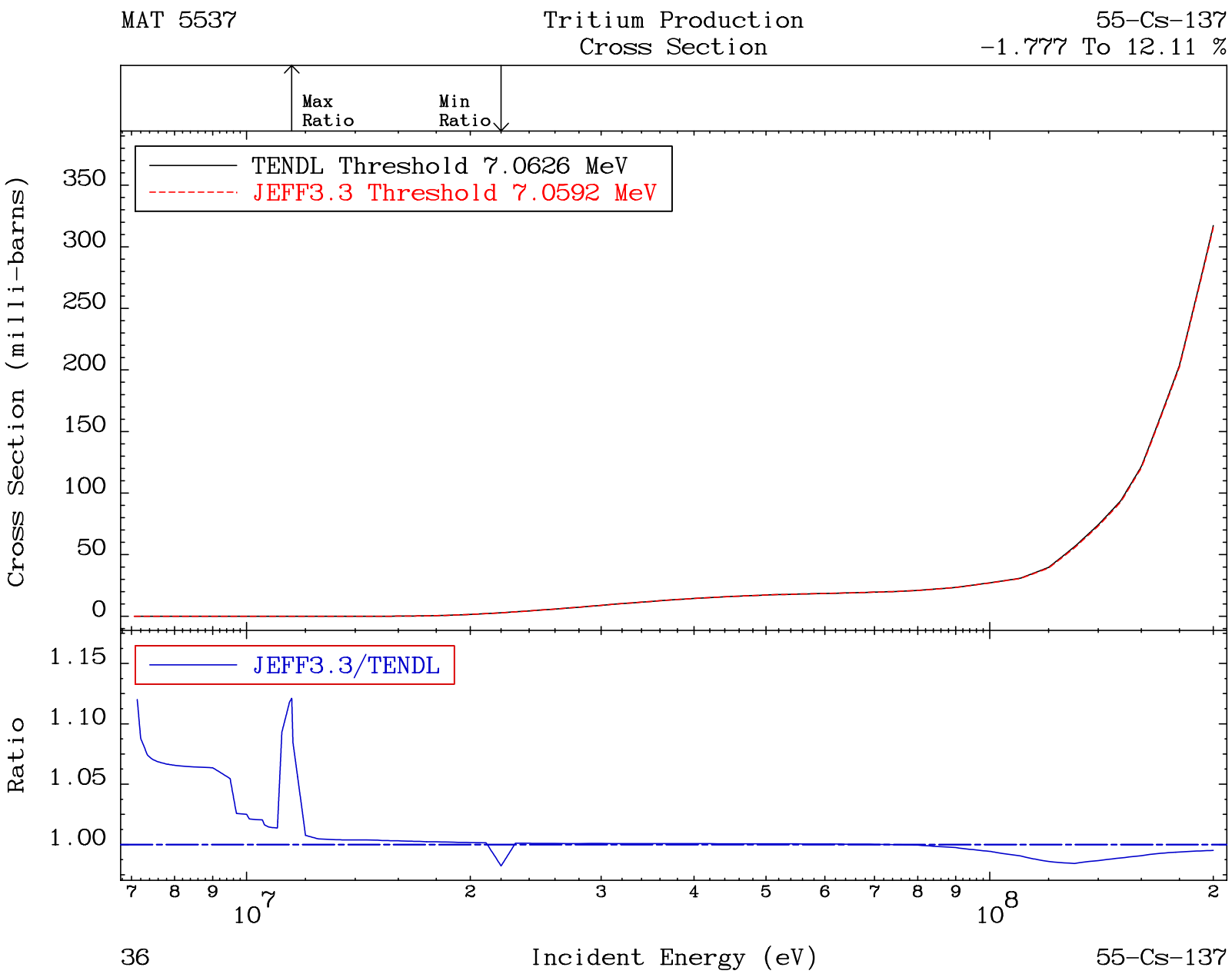

MAT 5537
(n,p) α
Cross Section
55-Cs-137
-3.258 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.2897 MeV
JEFF3.3 Threshold 5.2951 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
55-Cs-137

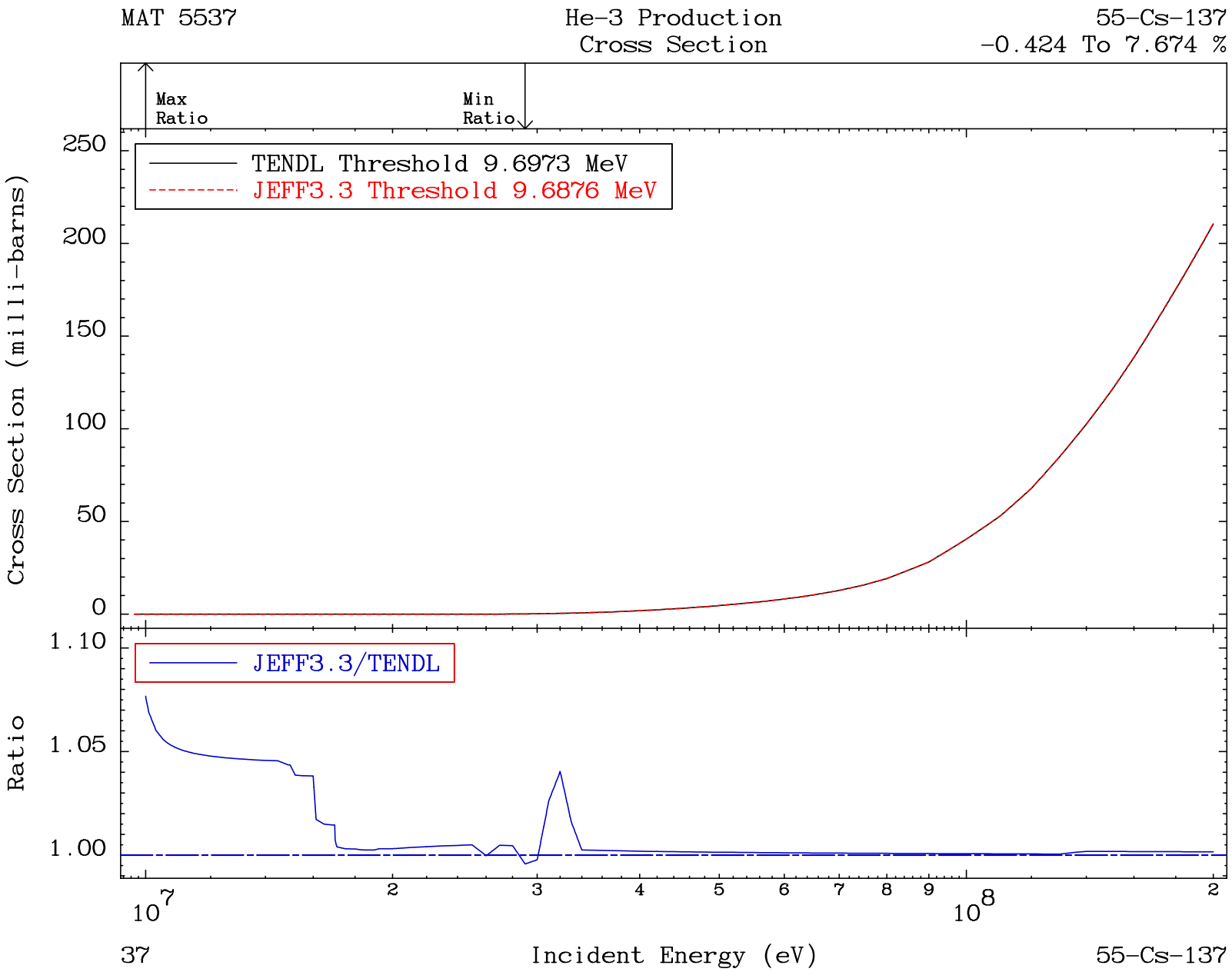

MAT 5537
(n,p) d
Cross Section
55-Cs-137
0.000 To 13.40 %
Max Ratio
Min Ratio
TENDL Threshold 15.231 MeV
JEFF3.3 Threshold 15.222 MeV
Cross Section (10^-9 barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
55-Cs-137

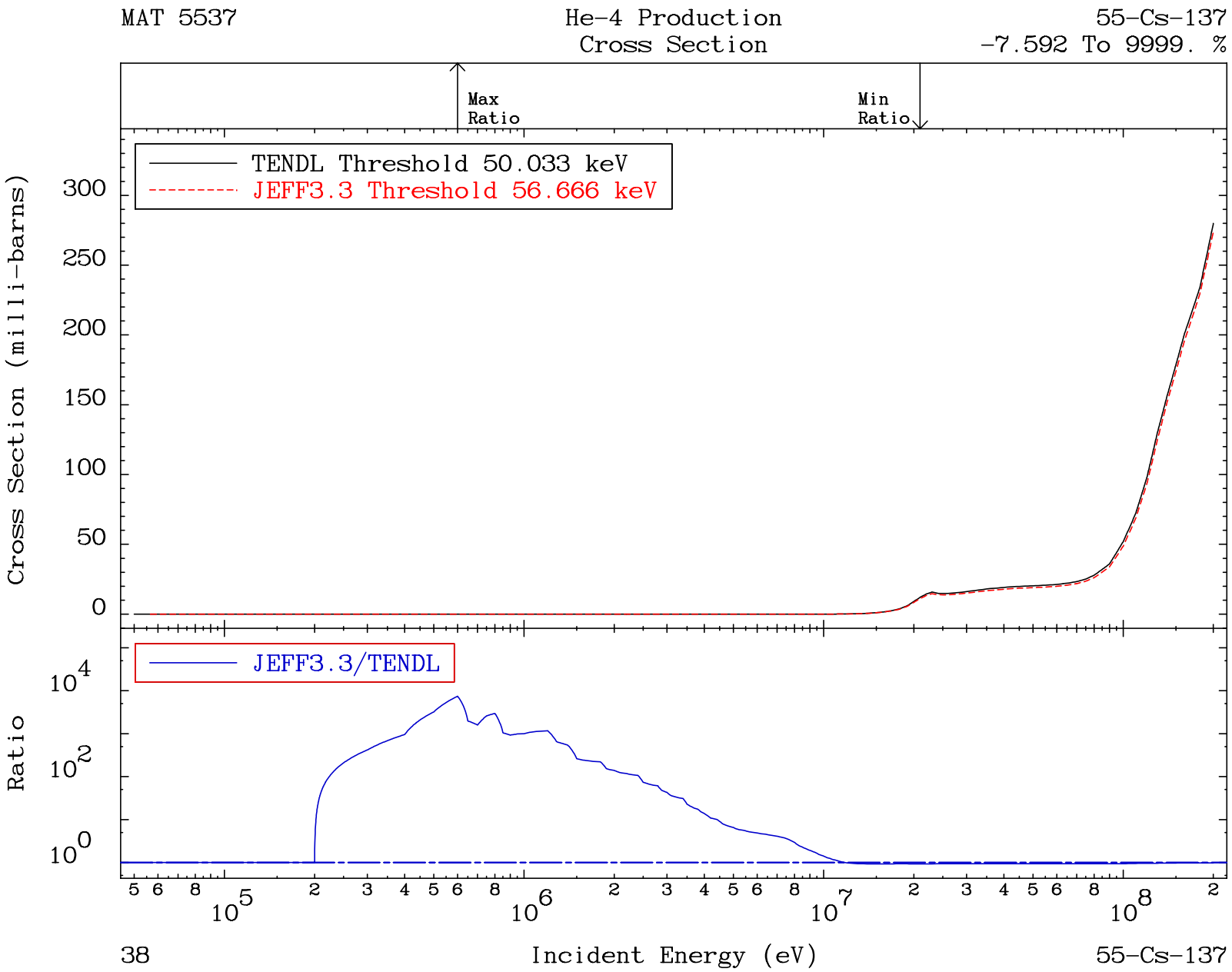

MAT 5537
(n,p) t
Cross Section
55-Cs-137
0.000 To 37.80 %
Max Ratio
Min Ratio
TENDL Threshold 16.792 MeV
JEFF3.3 Threshold 16.777 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
10^{8}
33
55-Cs-137

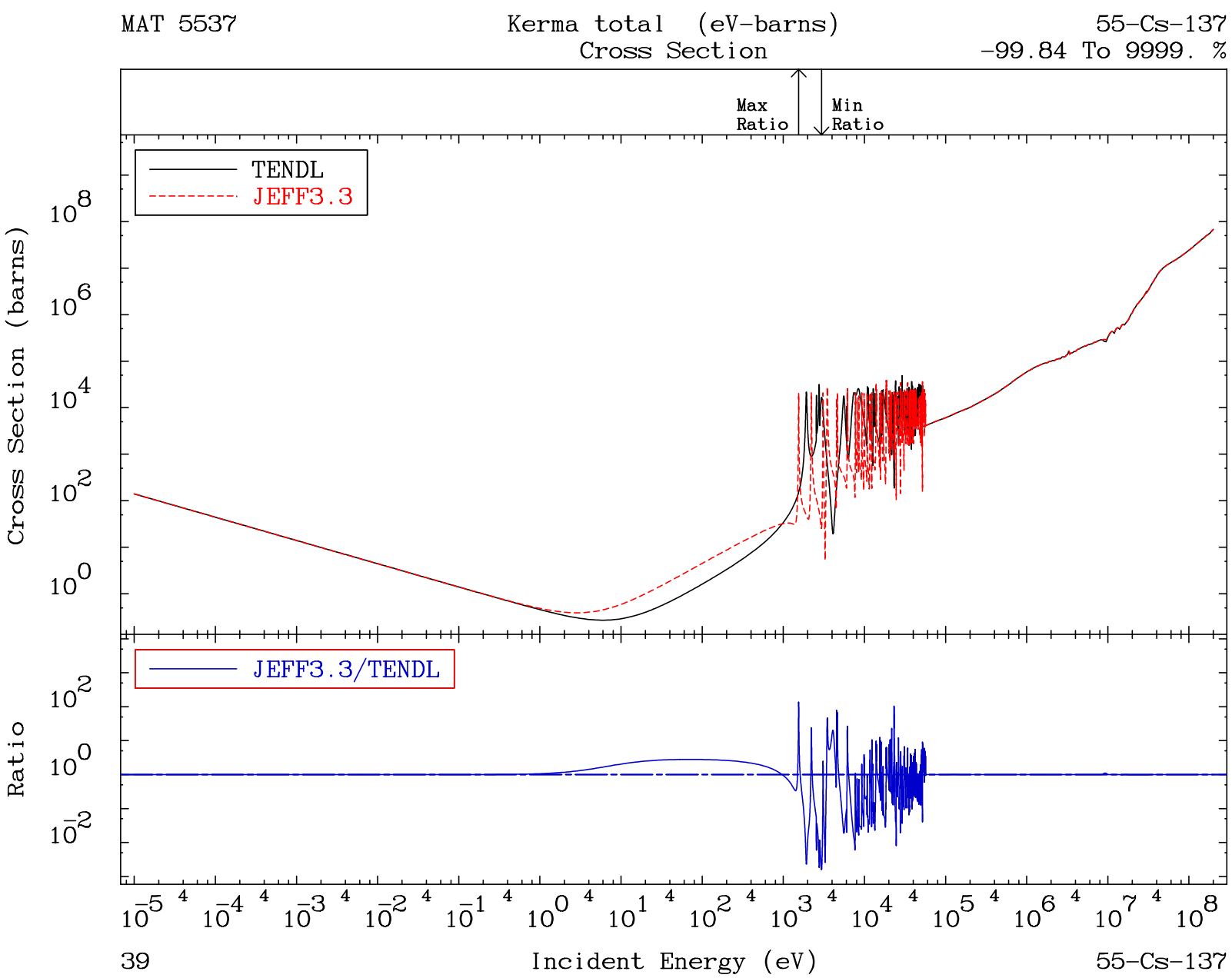

MAT 5537
Hydrogen Production
Cross Section
55-Cs-137
-0.578 To 0.302 %
Min Ratio
Max Ratio
TENDL Threshold 3.4048 MeV
JEFF3.3 Threshold 3.4048 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
55-Cs-137

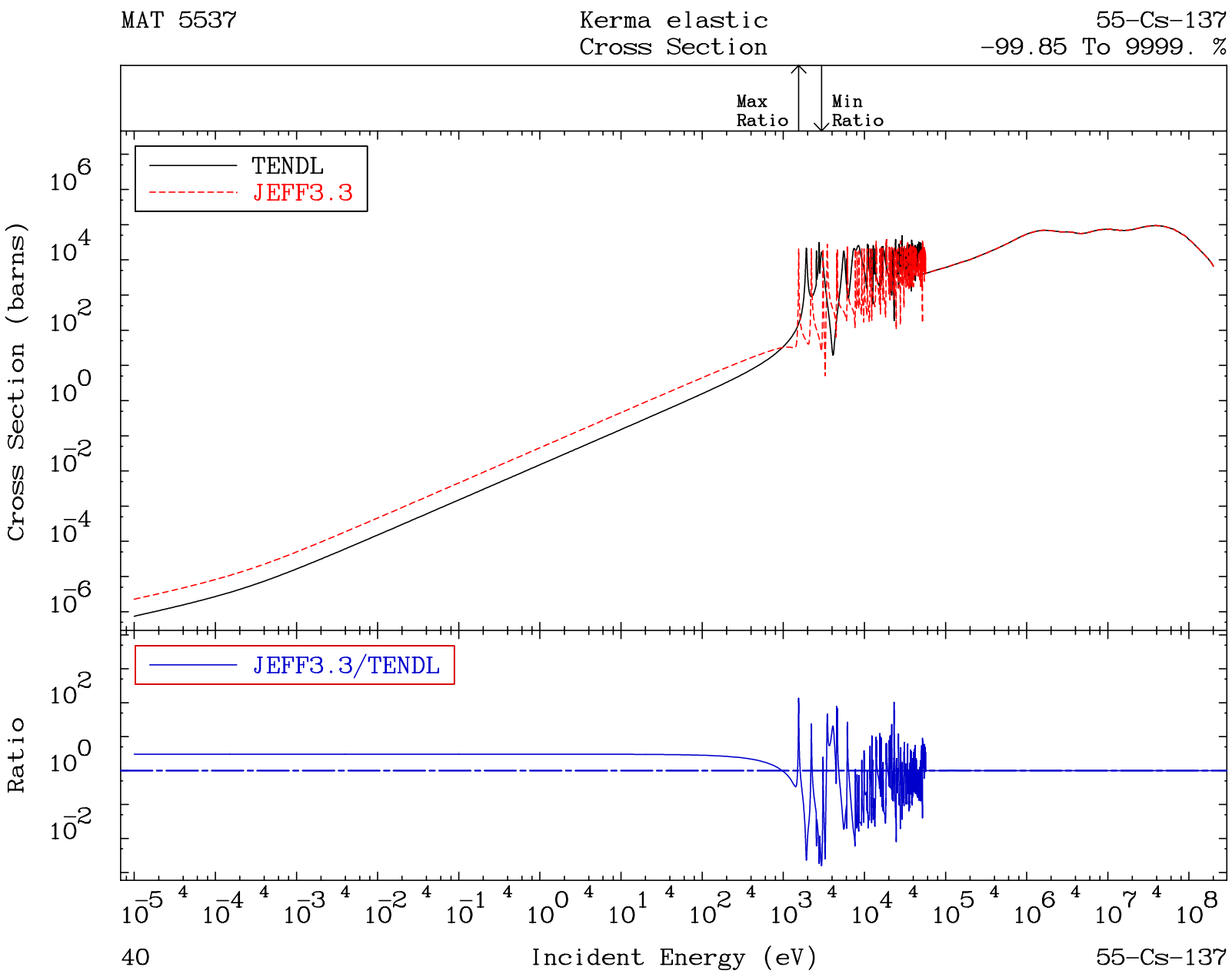

MAT 5537
Deuterium Production
Cross Section
55-Cs-137
-2.341 To 2.732 %
Min Ratio
Max Ratio
TENDL Threshold 5.2190 MeV
JEFF3.3 Threshold 5.2190 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
55-Cs-137

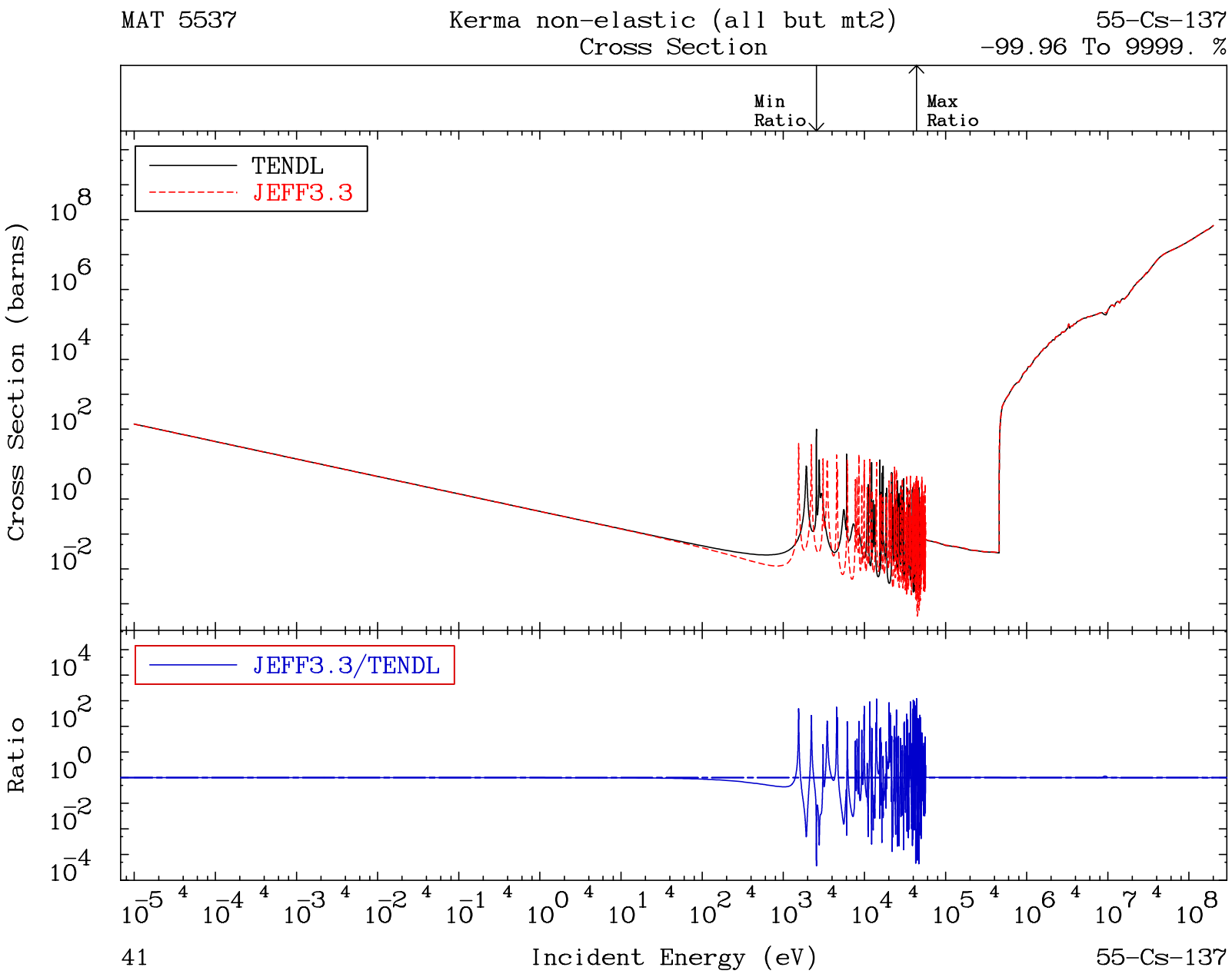

MAT 5537
Tritium Production
Cross Section
55-Cs-137
-1.777 To 12.11 %
Max Ratio
Min Ratio
TENDL Threshold 7.0626 MeV
JEFF3.3 Threshold 7.0592 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
36
Incident Energy (eV)
55-Cs-137

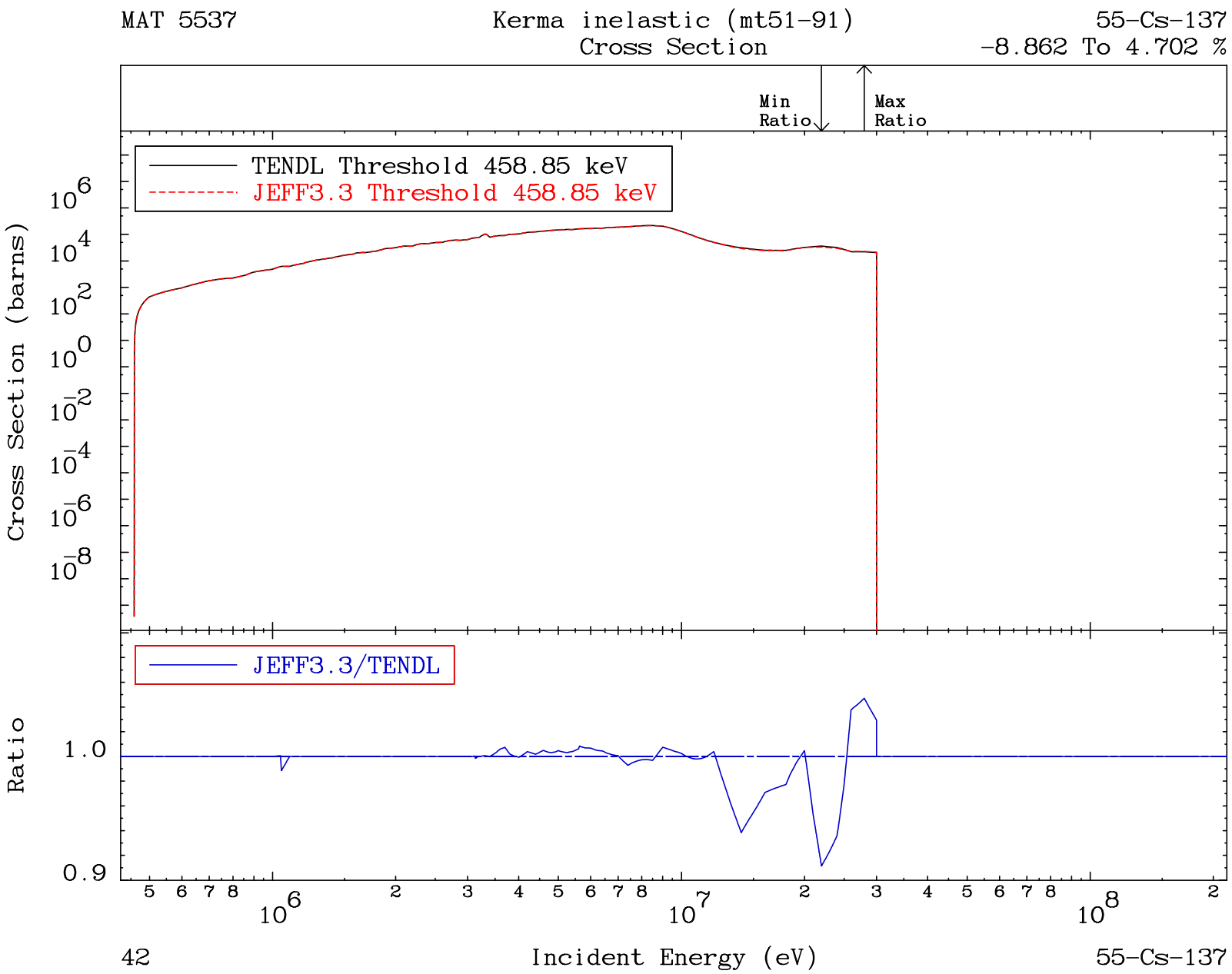

MAT 5537
He-3 Production
Cross Section
55-Cs-137
-0.424 To 7.674 %
Max Ratio
Min Ratio
TENDL Threshold 9.6973 MeV
JEFF3.3 Threshold 9.6876 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
55-Cs-137

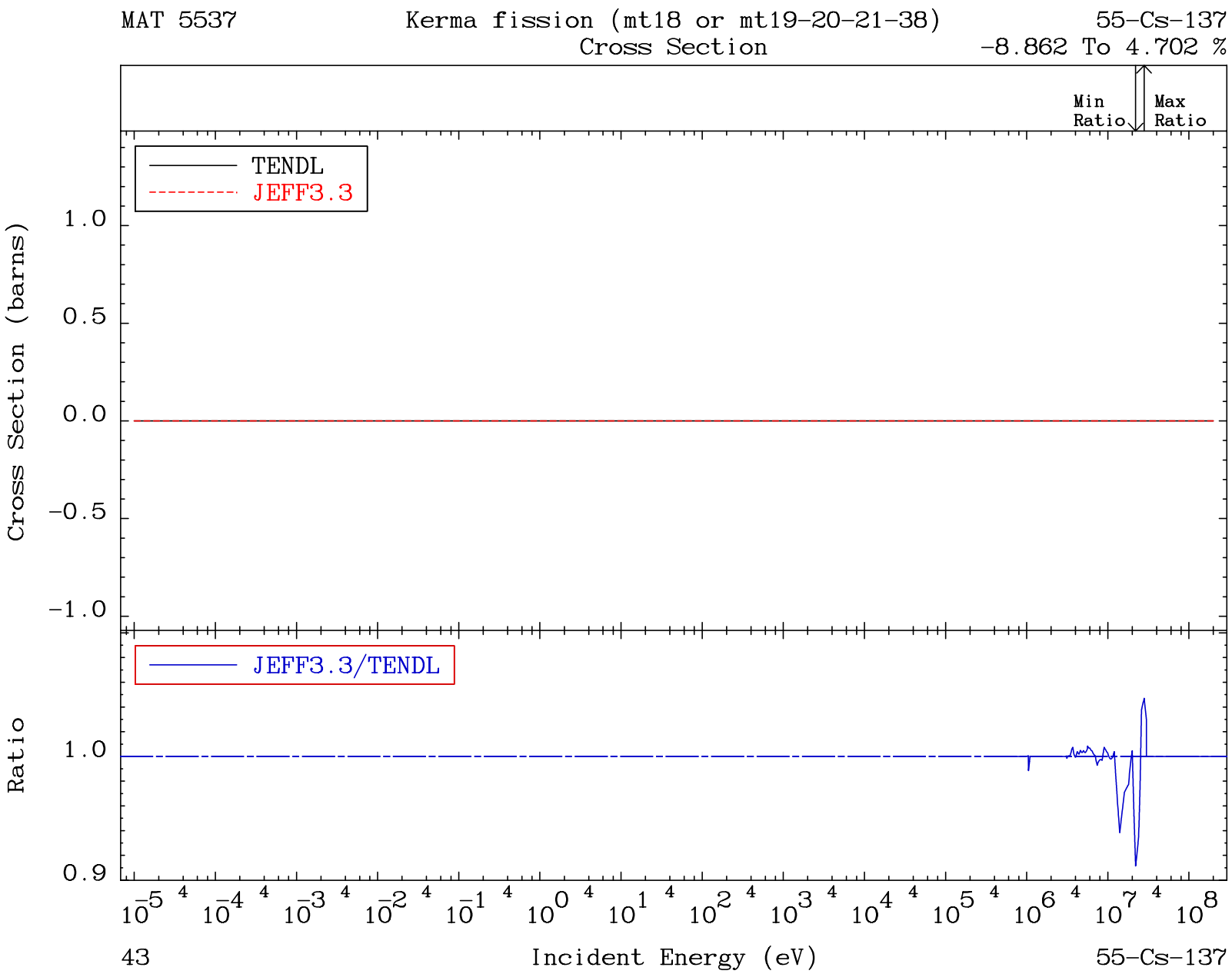

MAT 5537
He-4 Production
Cross Section
55-Cs-137
-7.592 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 50.033 keV
JEFF3.3 Threshold 56.666 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
38
Incident Energy (eV)
55-Cs-137

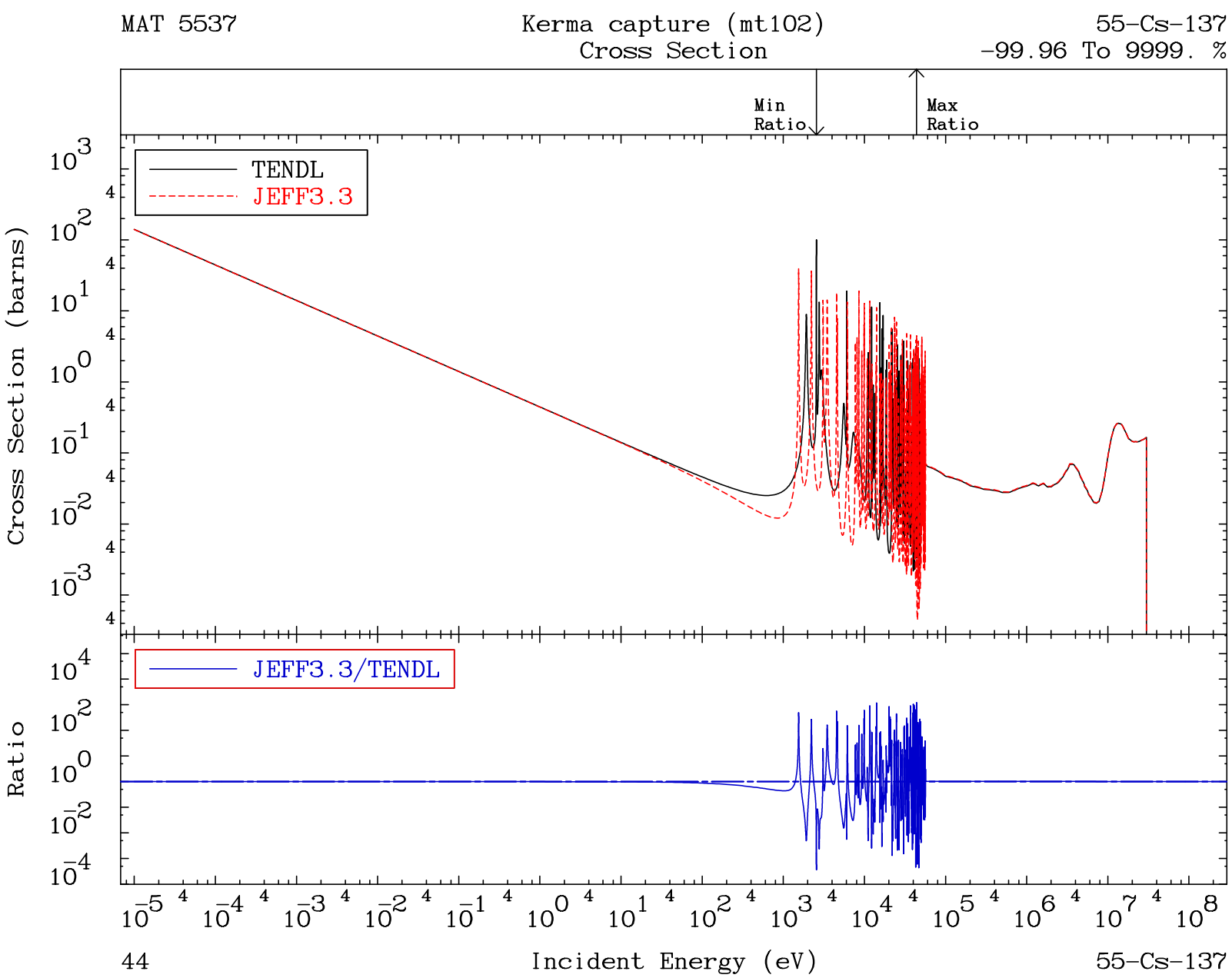

MAT 5537
Kerma total (eV-barns)
Cross Section
55-Cs-137
-99.84 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
39
55-Cs-137

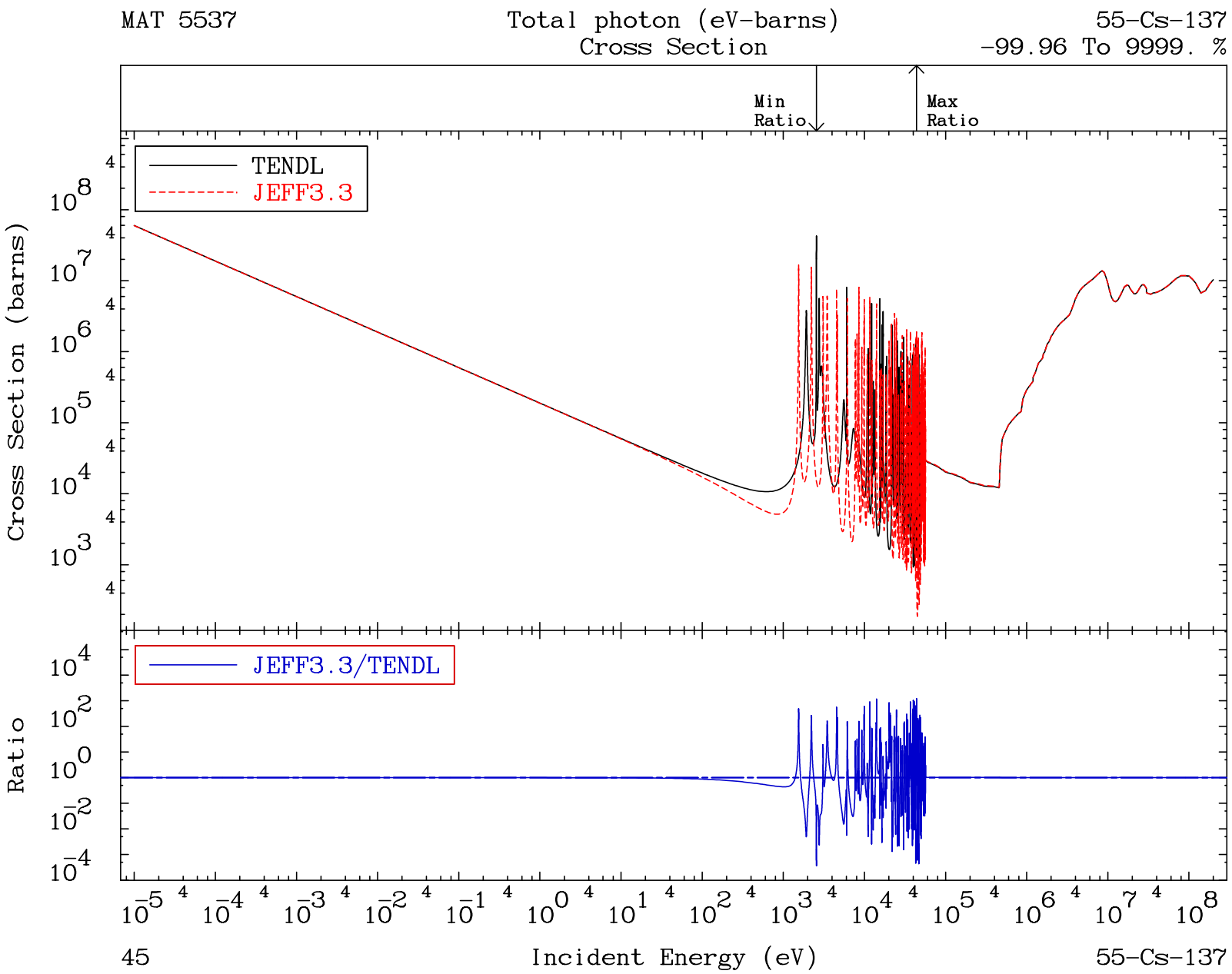

MAT 5537
Kerma elastic
Cross Section
55-Cs-137
-99.85 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
40
55-Cs-137

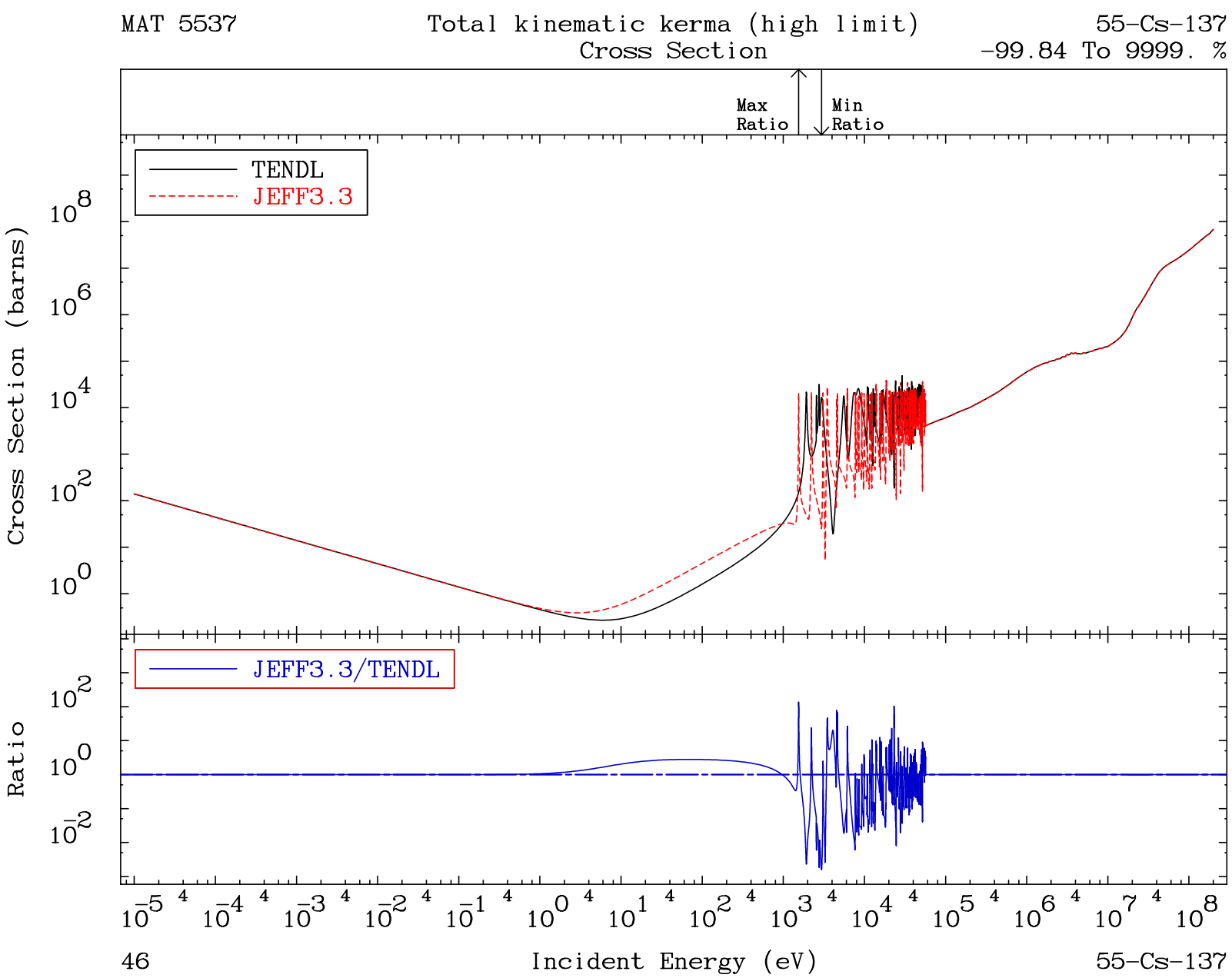

MAT 5537
Kerma non-elastic (all but mt2)
Cross Section
55-Cs-137
-99.96 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
41
55-Cs-137

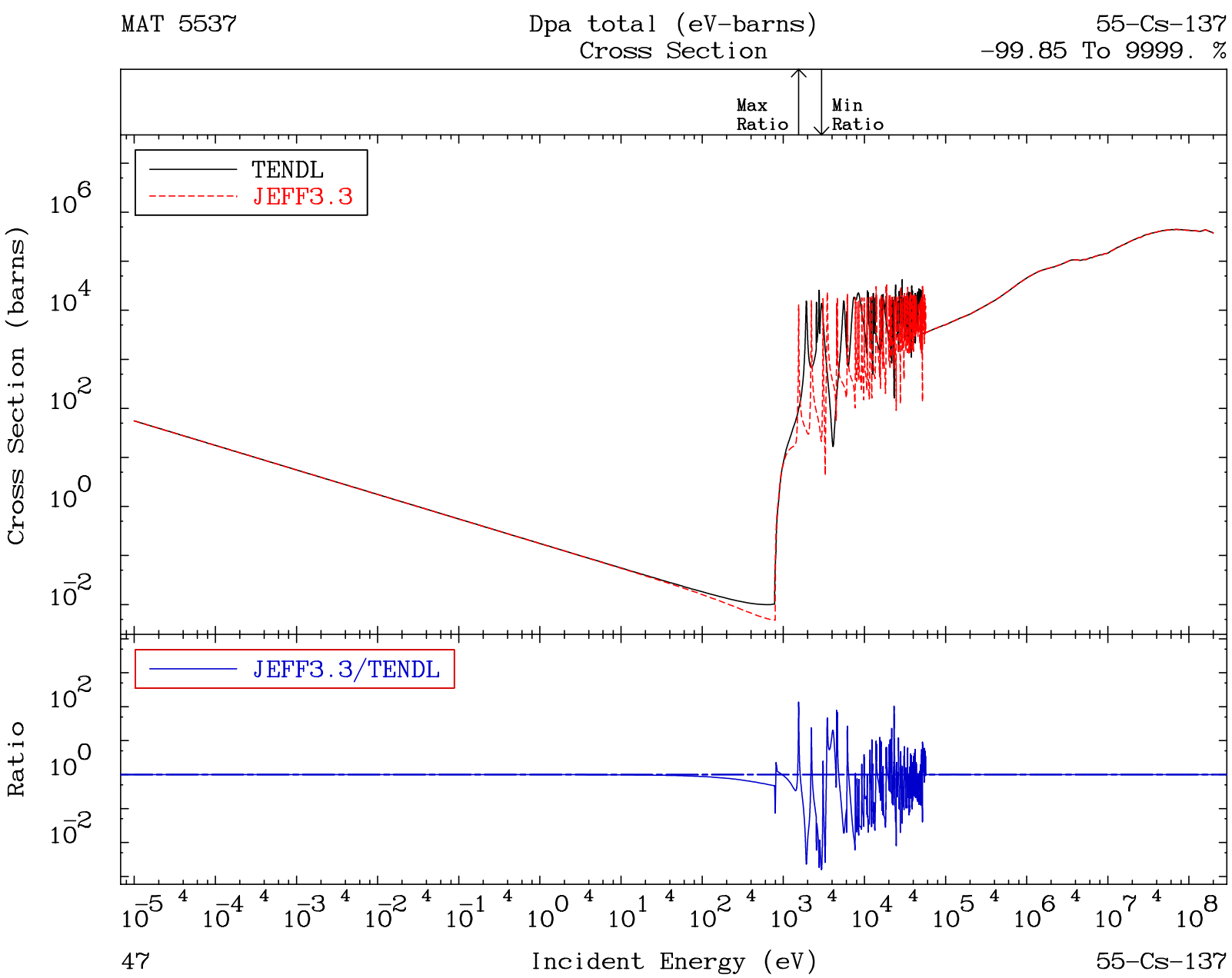

MAT 5537
Kerma inelastic (mt51-91)
Cross Section
55-Cs-137
-8.862 To 4.702 %
Min Ratio
Max Ratio
TENDL Threshold 458.85 keV
JEFF3.3 Threshold 458.85 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
42
55-Cs-137

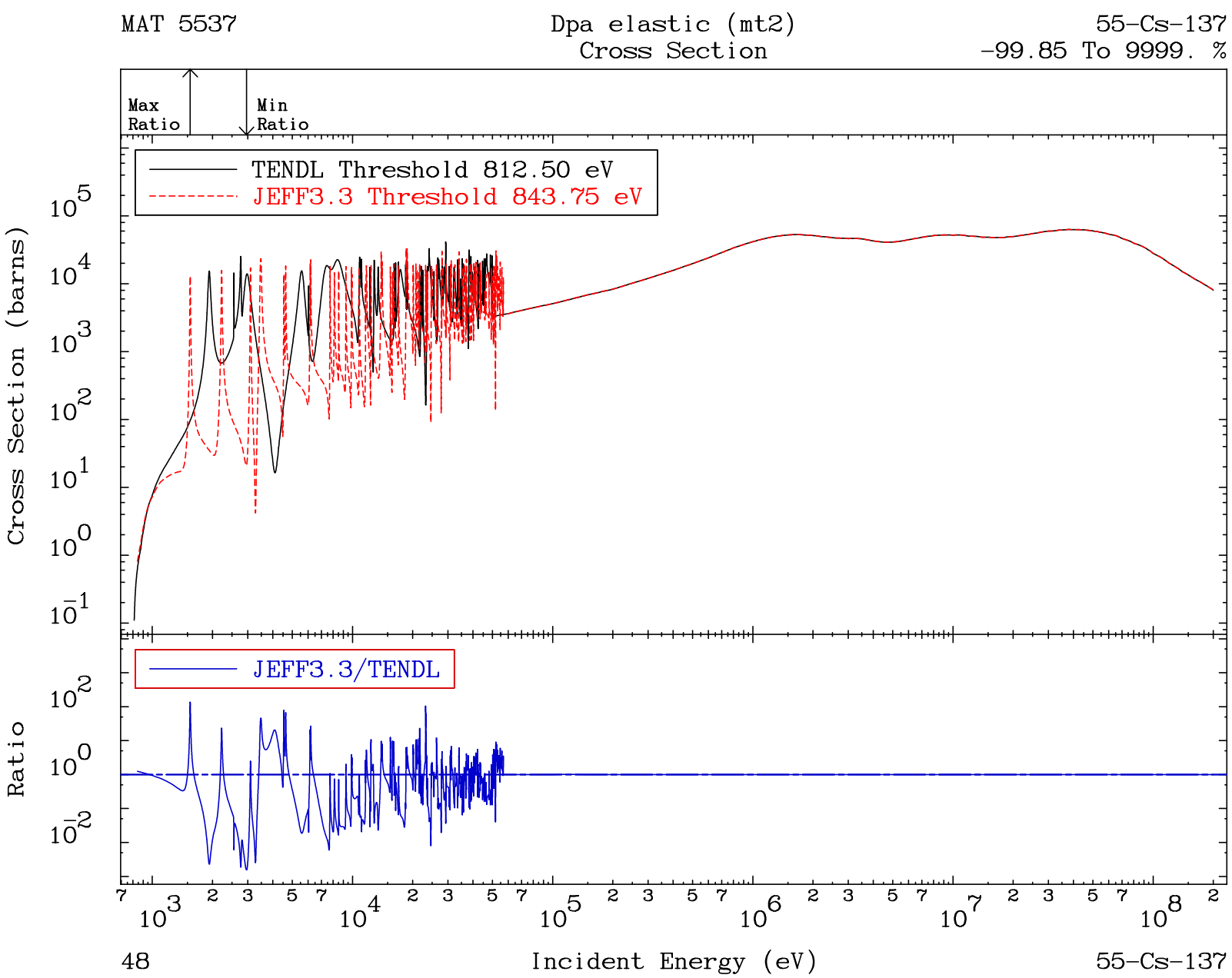

MAT 5537
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
55-Cs-137
-8.862 To 4.702 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.0
0.9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
43
Incident Energy (eV)
55-Cs-137

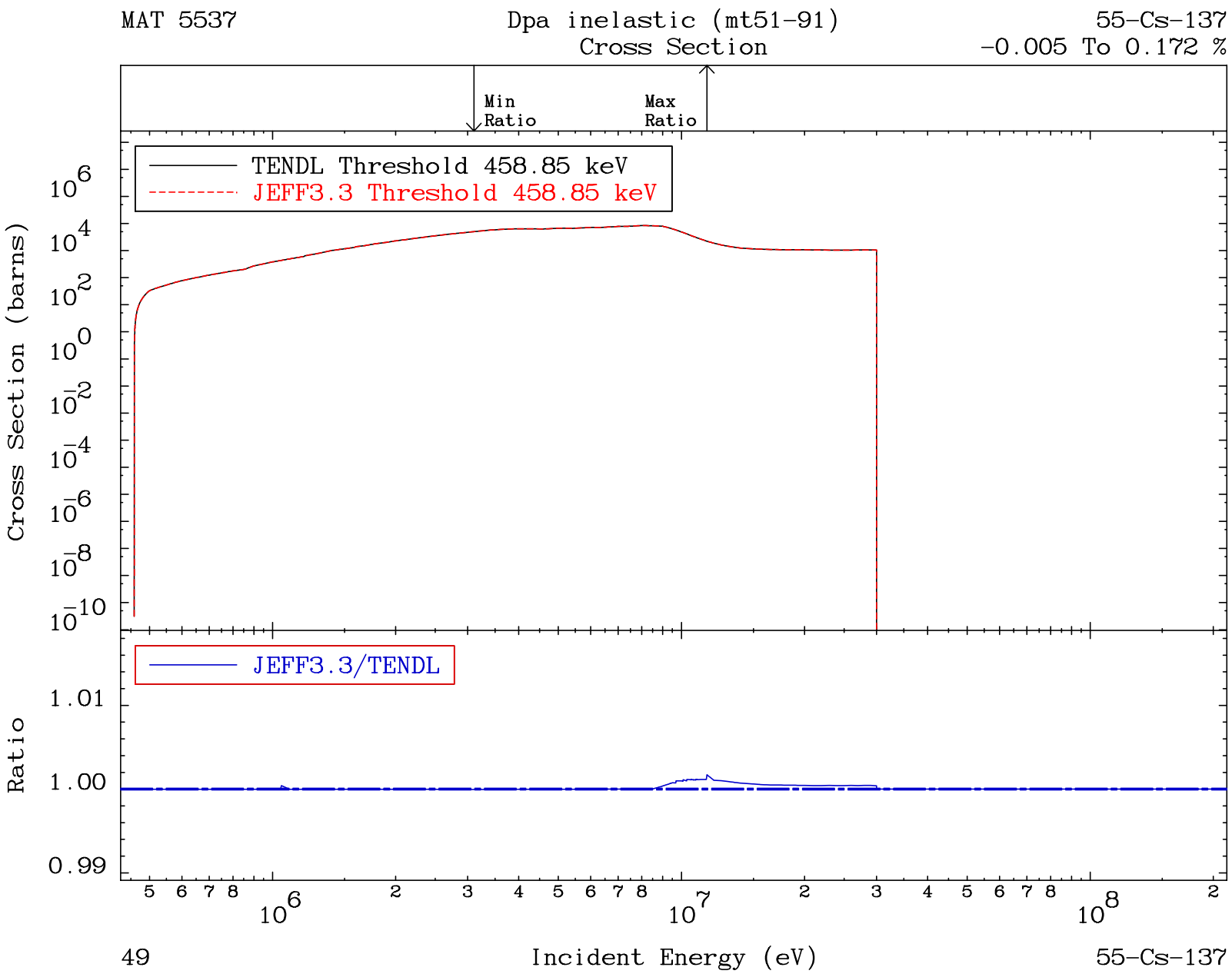

MAT 5537
Kerma capture (mt102)
Cross Section
55-Cs-137
-99.96 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
44
55-Cs-137

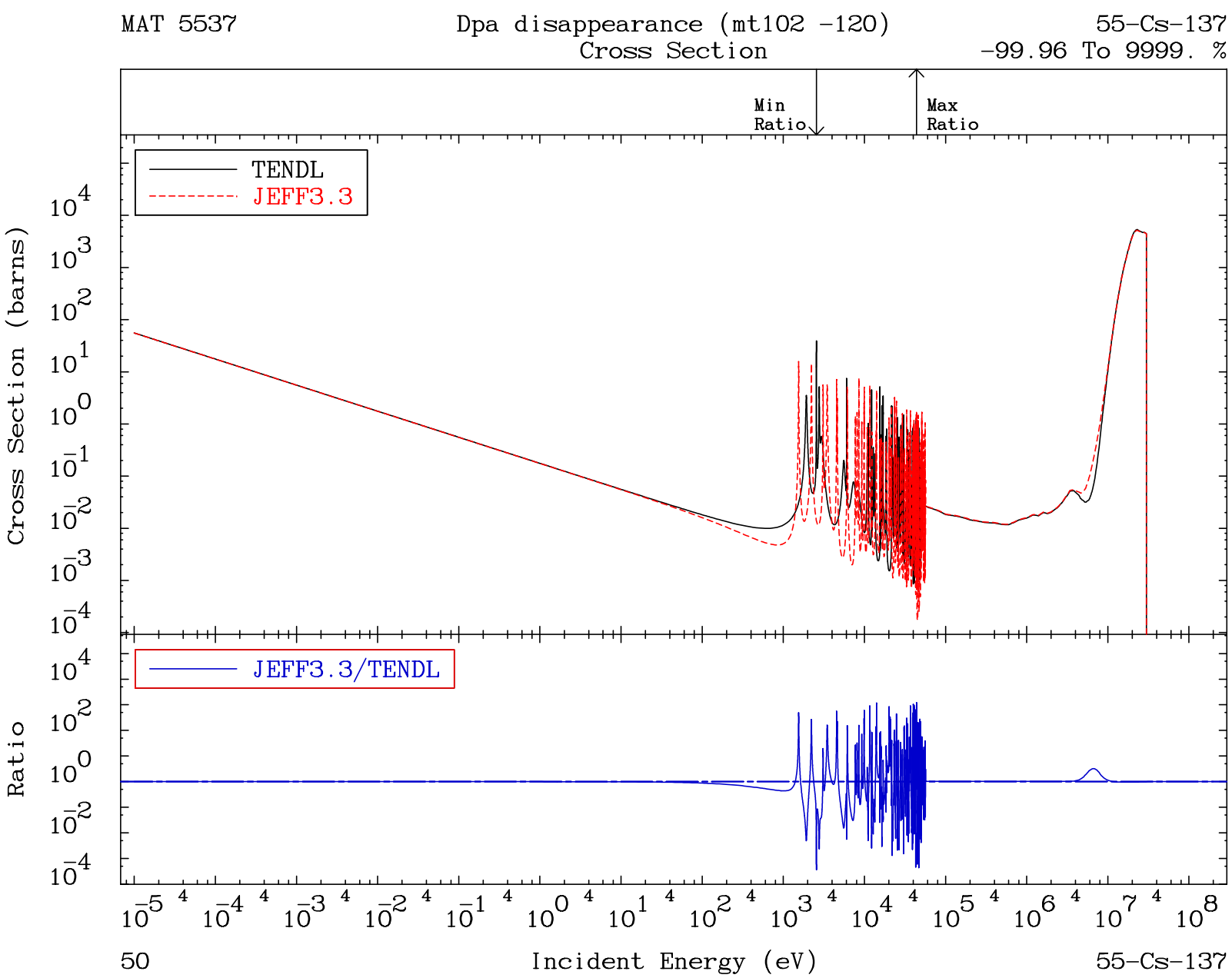

MAT 5537
Total photon (eV-barns)
Cross Section
55-Cs-137
-99.96 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
55-Cs-137

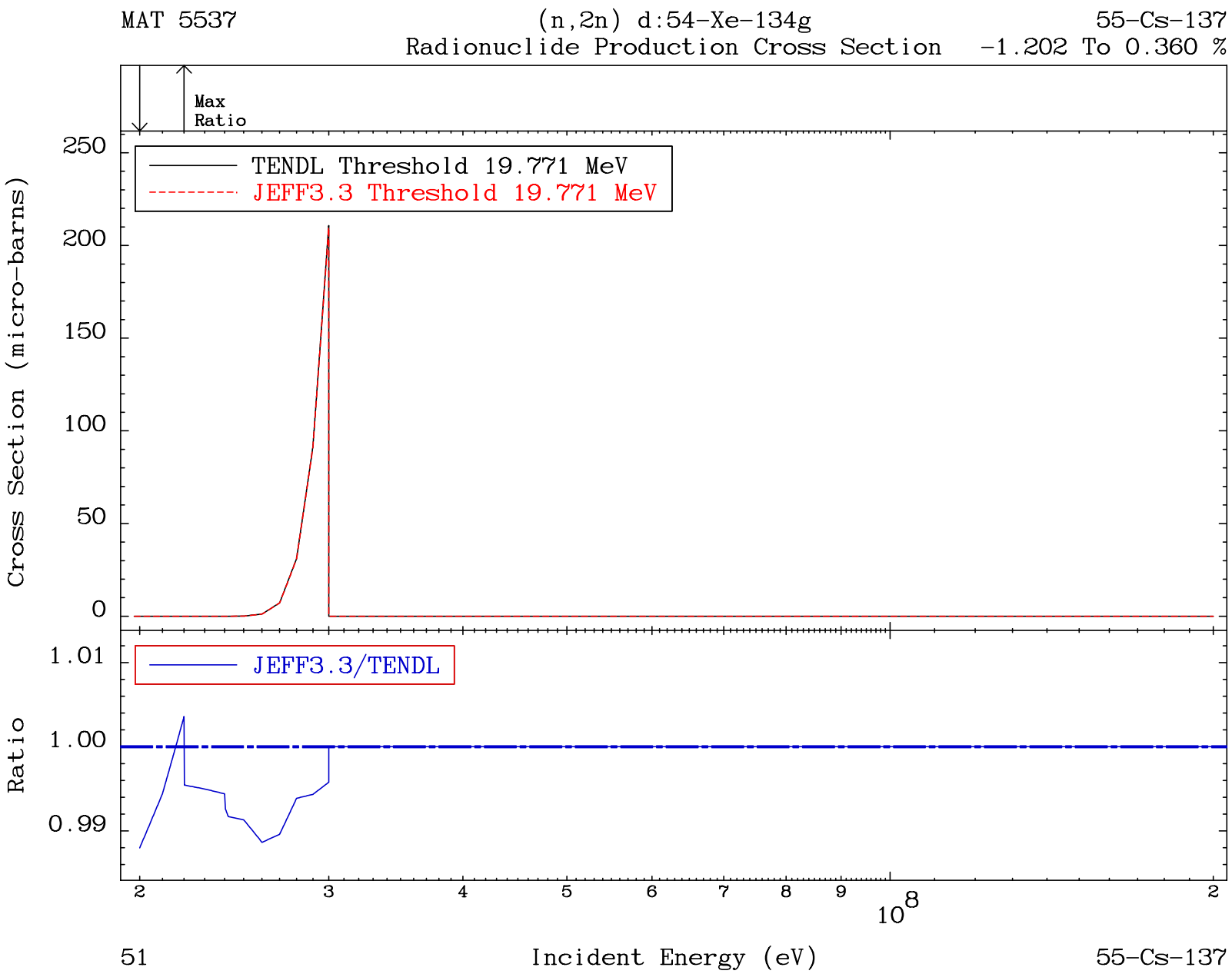

MAT 5537
Total kinematic kerma (high limit)
Cross Section
55-Cs-137
-99.84 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
55-Cs-137

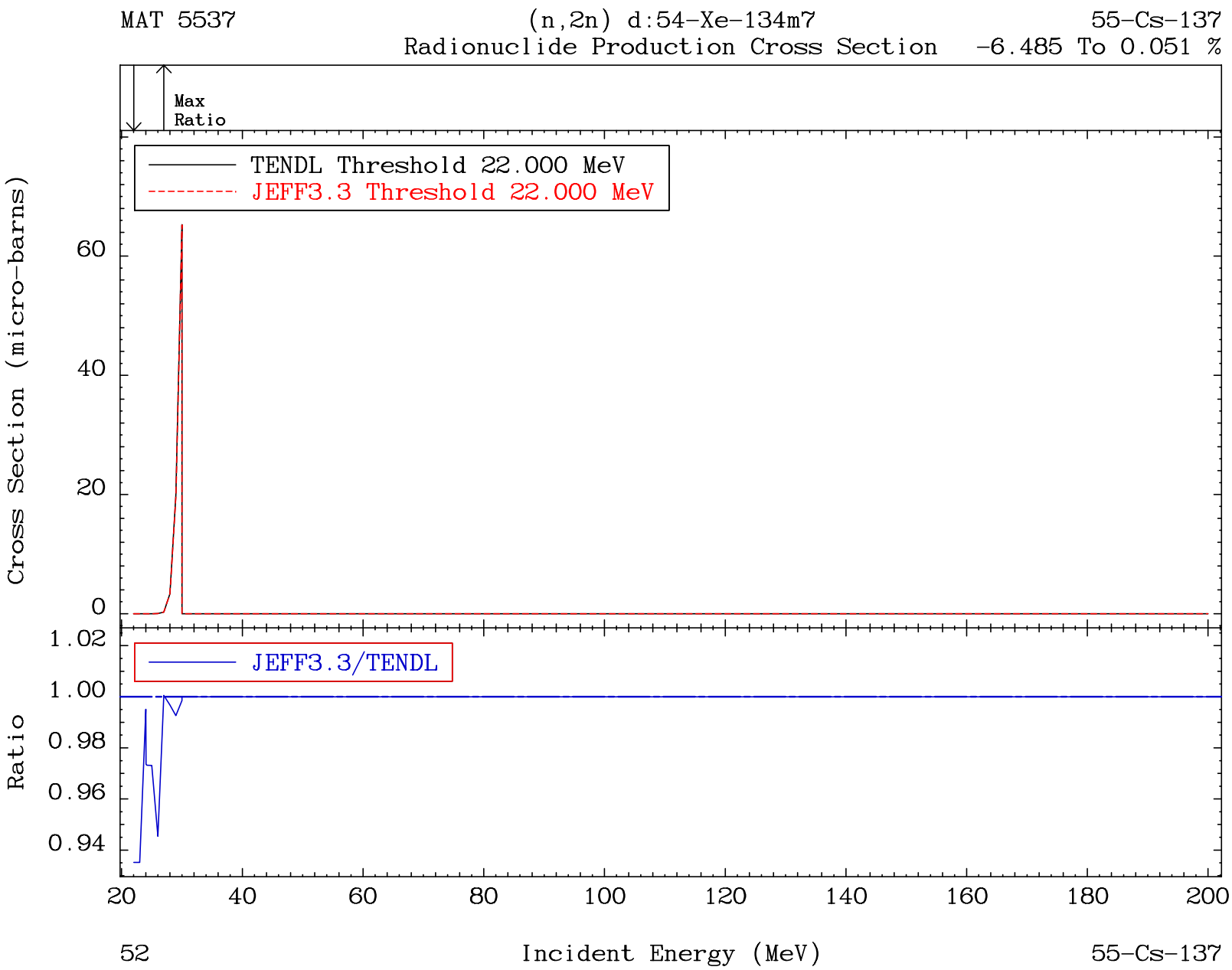

MAT 5537
Dpa total (eV-barns)
Cross Section
55-Cs-137
-99.85 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
47
55-Cs-137

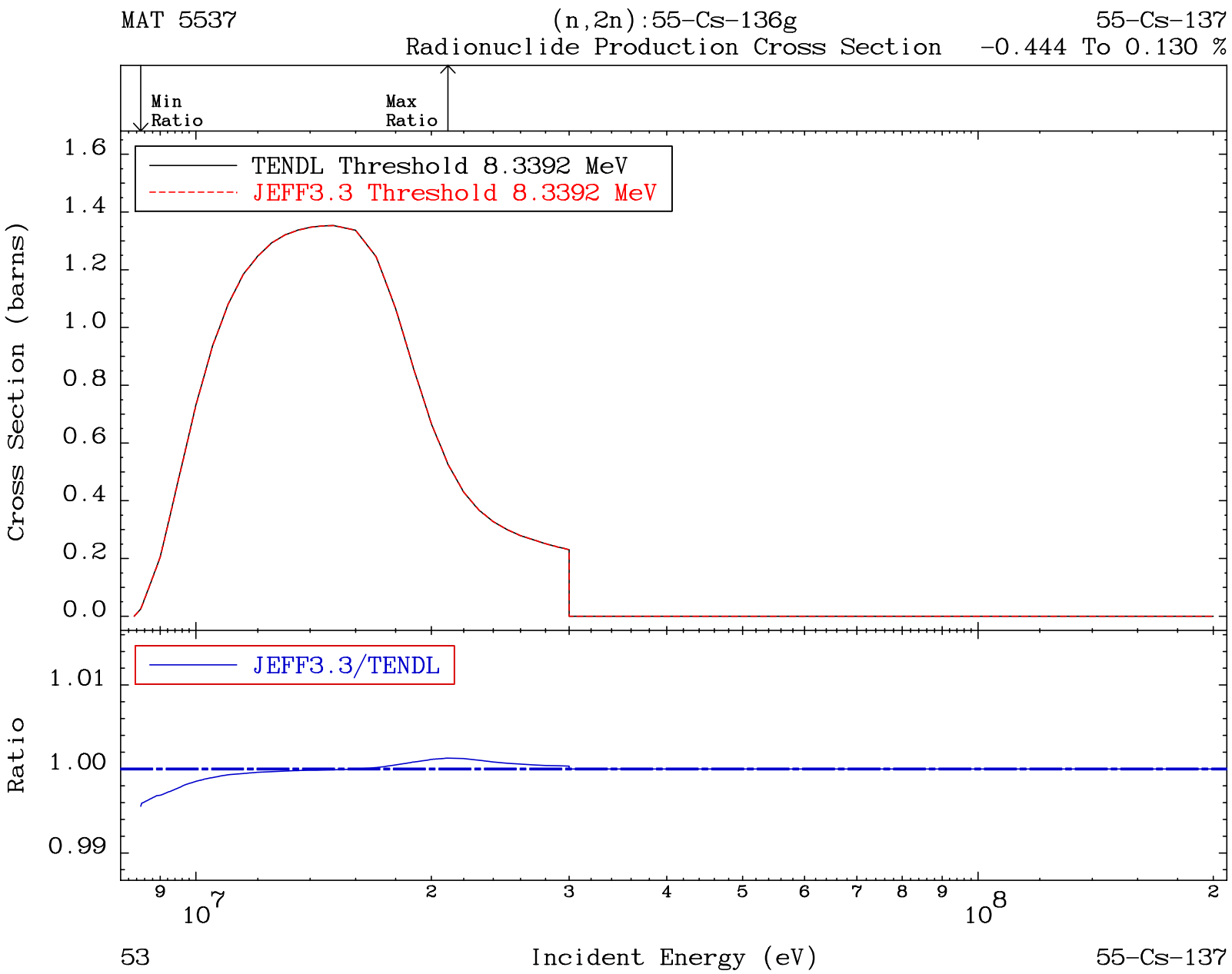

MAT 5537
Dpa elastic (mt2)
Cross Section
55-Cs-137
-99.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 812.50 eV
JEFF3.3 Threshold 843.75 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
48
55-Cs-137

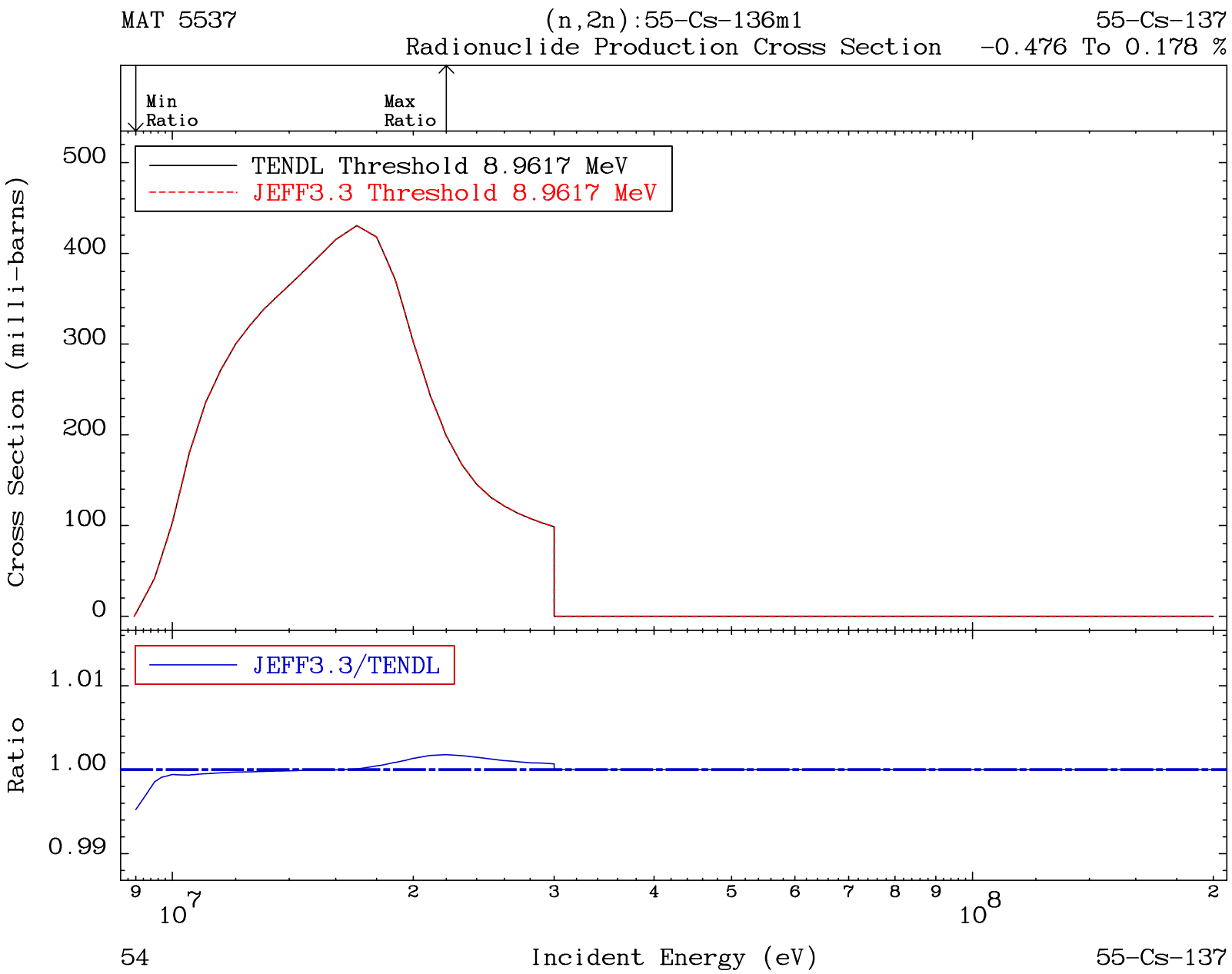

MAT 5537
Dpa inelastic (mt51-91)
Cross Section
55-Cs-137
-0.005 To 0.172 %
Min Ratio
Max Ratio
TENDL Threshold 458.85 keV
JEFF3.3 Threshold 458.85 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
55-Cs-137

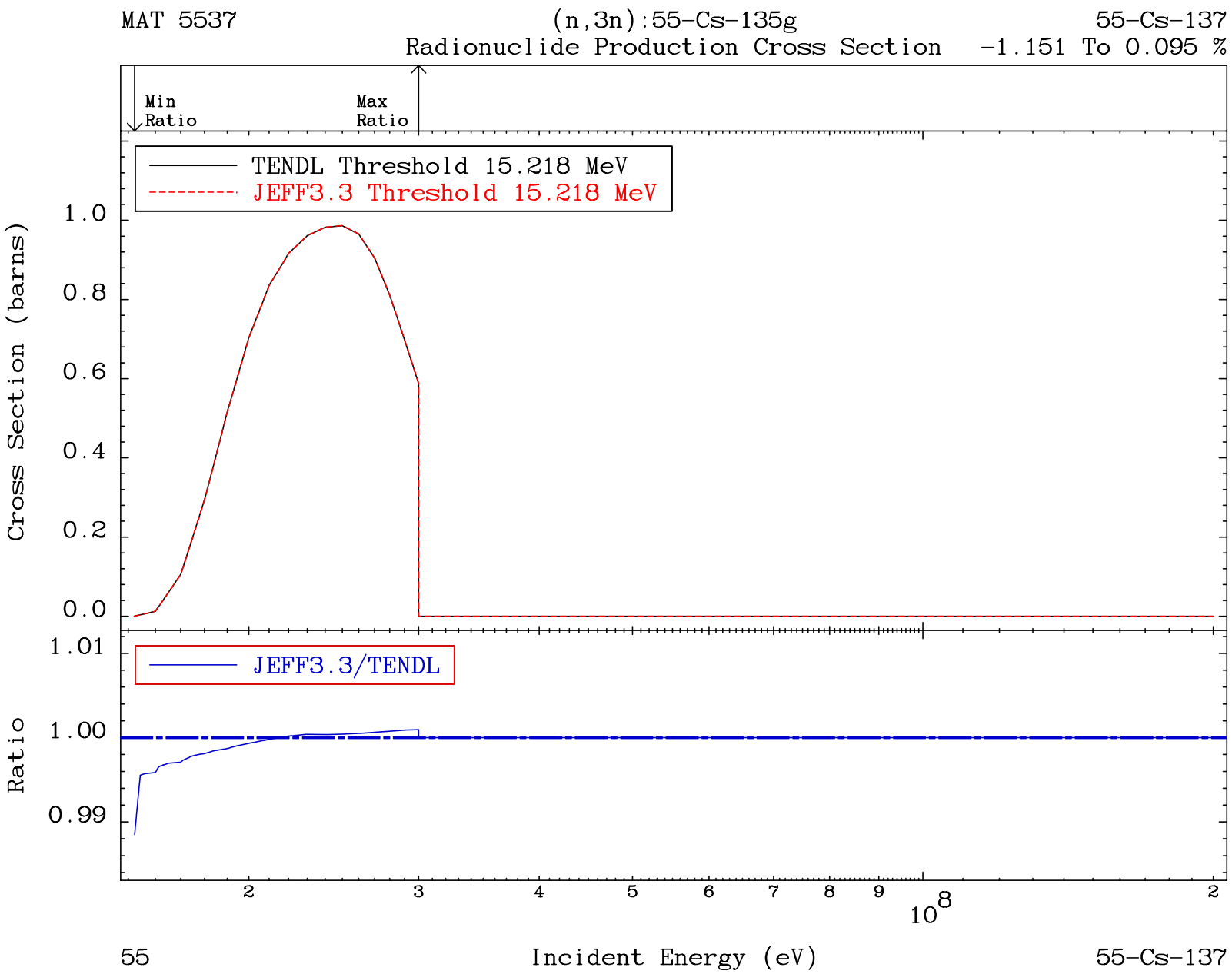

MAT 5537
Dpa disappearance (mt102 -120)
Cross Section
55-Cs-137
-99.96 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
50
55-Cs-137

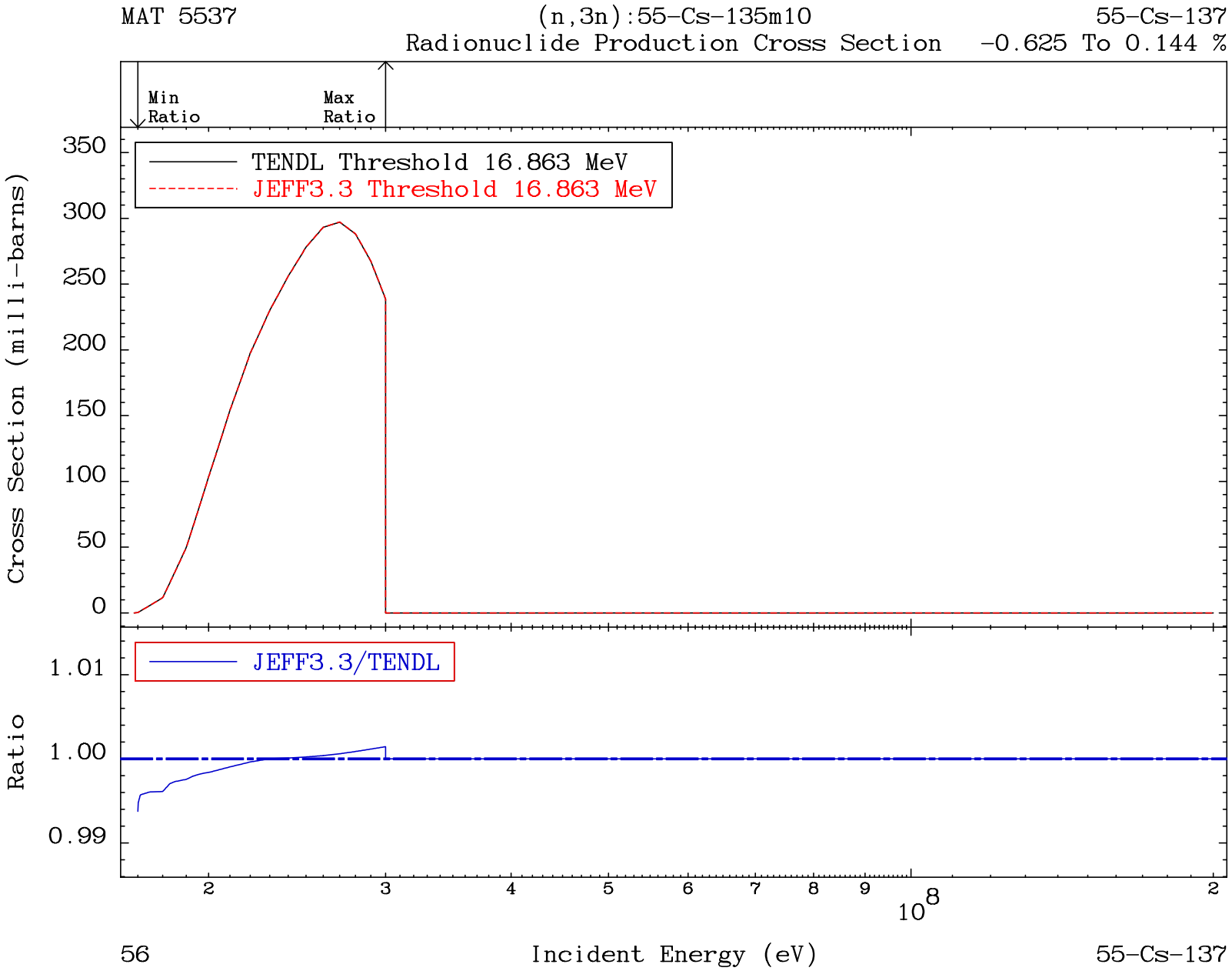

MAT 5537
(n,2n) d:54-Xe-134g
55-Cs-137
Radionuclide Production Cross Section
-1.202 To 0.360 %
Max
Ratio
TENDL Threshold 19.771 MeV
JEFF3.3 Threshold 19.771 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
55-Cs-137

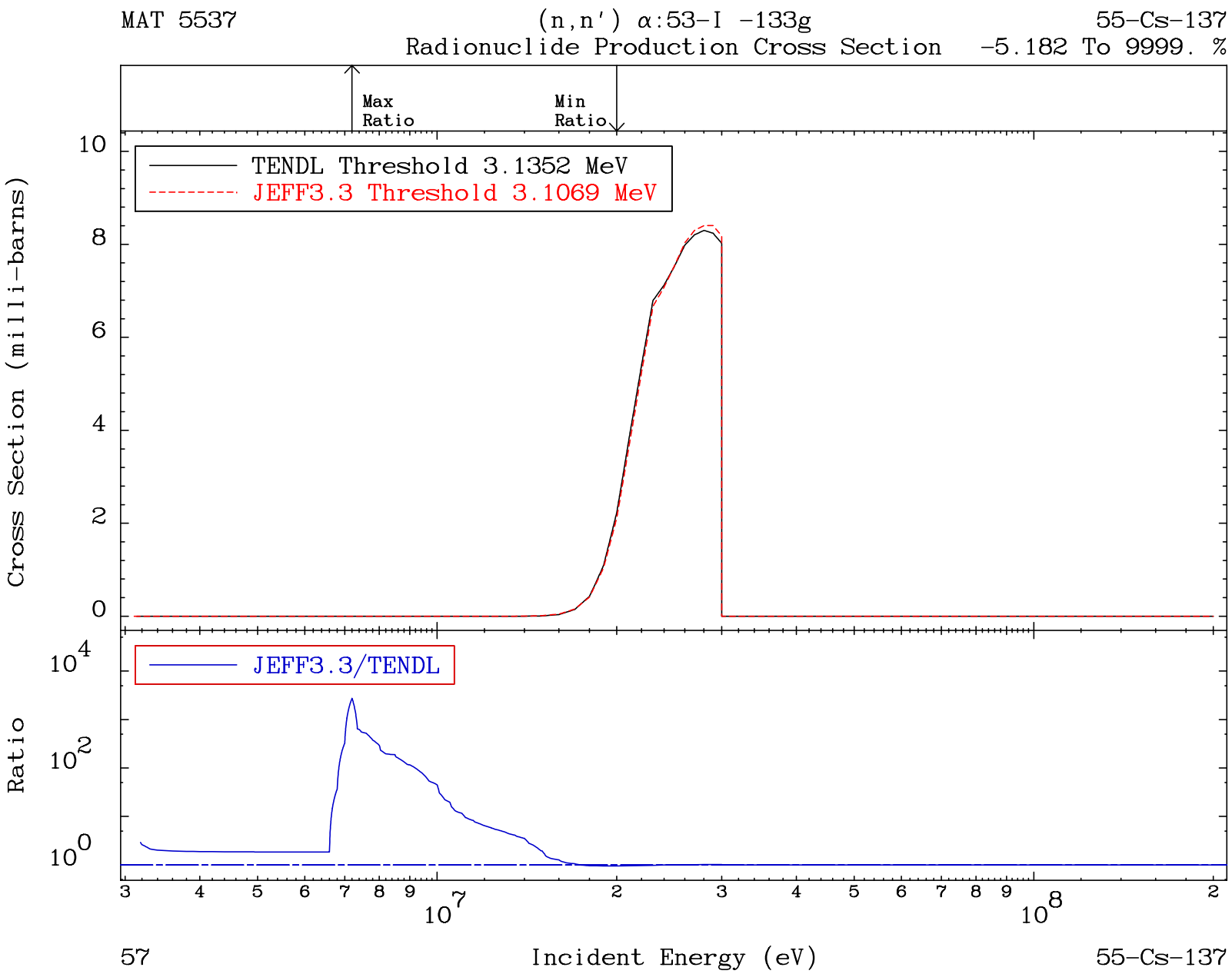

MAT 5537
(n,2n) d:54-Xe-134m7
55-Cs-137
Radionuclide Production Cross Section
-6.485 To 0.051 %
Max
Ratio
TENDL Threshold 22.000 MeV
JEFF3.3 Threshold 22.000 MeV
Cross Section (micro-barns)
0
20
40
60
JEFF3.3/TENDL
Ratio
0.94
0.96
0.98
1.00
1.02
20
40
60
80
100
120
140
160
180
200
52
Incident Energy (MeV)
55-Cs-137

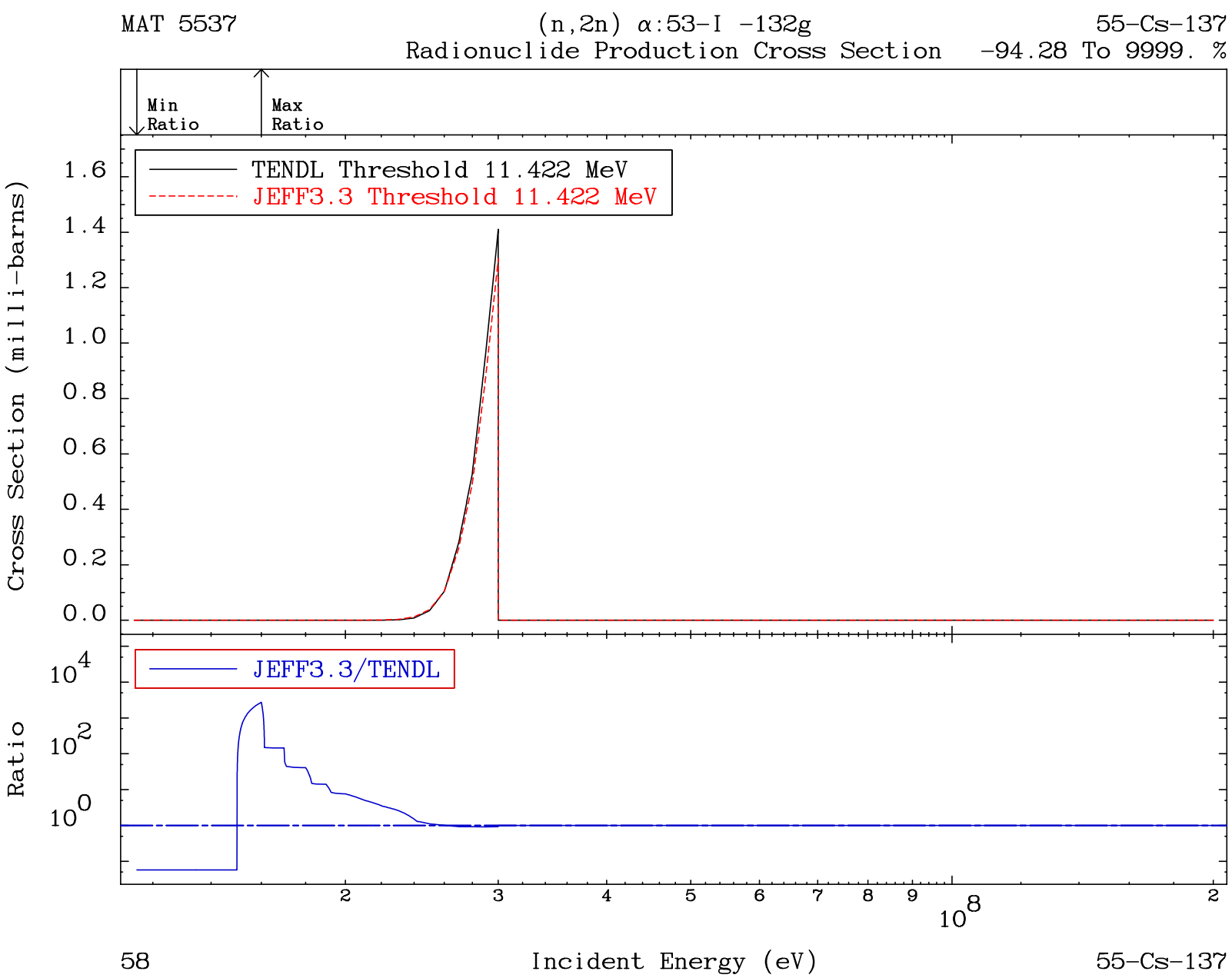

MAT 5537
(n,2n):55-Cs-136g
55-Cs-137
Radionuclide Production Cross Section -0.444 To 0.130 %
Min Ratio
Max Ratio
TENDL Threshold 8.3392 MeV
JEFF3.3 Threshold 8.3392 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
55-Cs-137

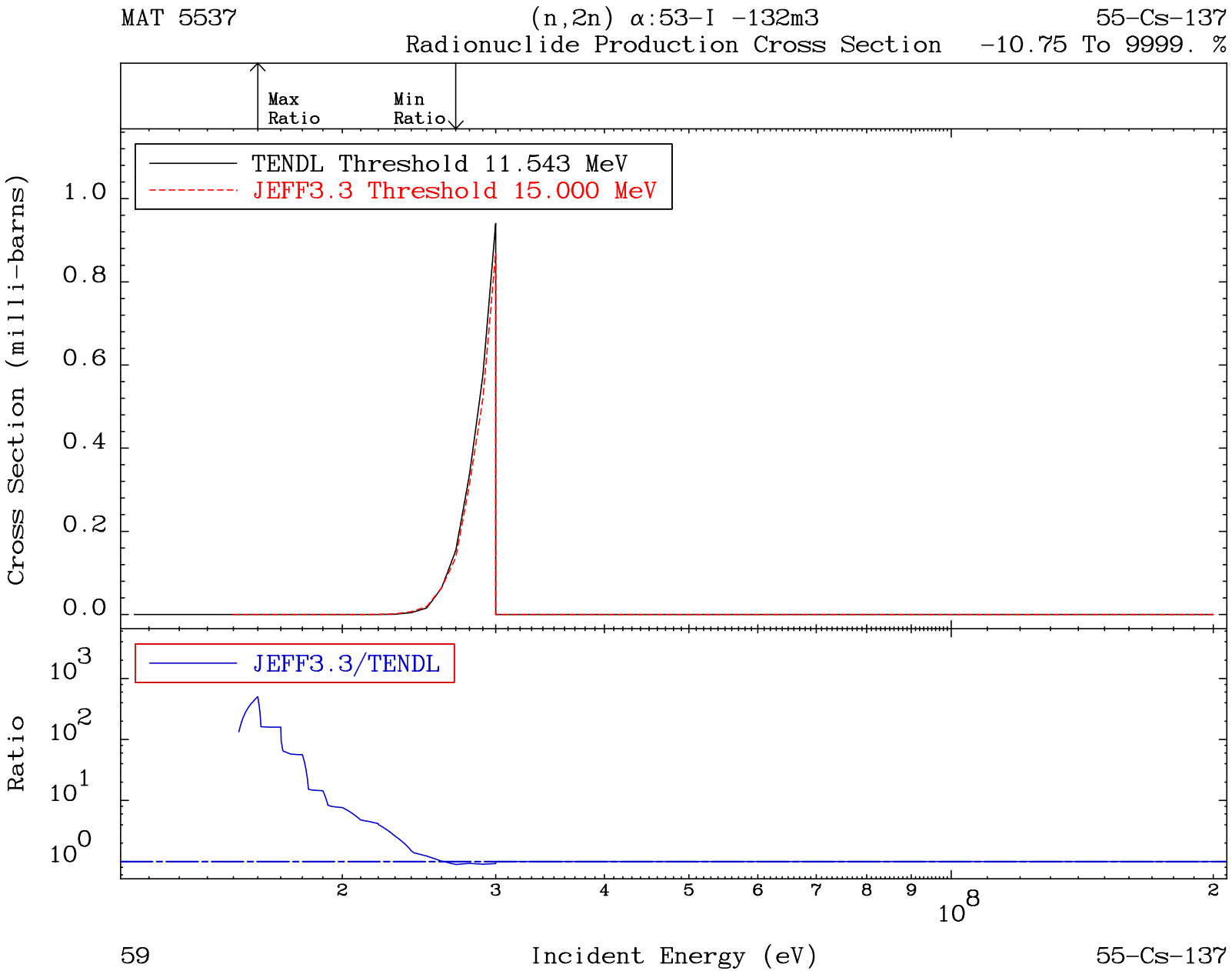

MAT 5537
(n,2n):55-Cs-136m1
55-Cs-137
Radionuclide Production Cross Section -0.476 To 0.178 %
Min Ratio
Max Ratio
TENDL Threshold 8.9617 MeV
JEFF3.3 Threshold 8.9617 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
55-Cs-137

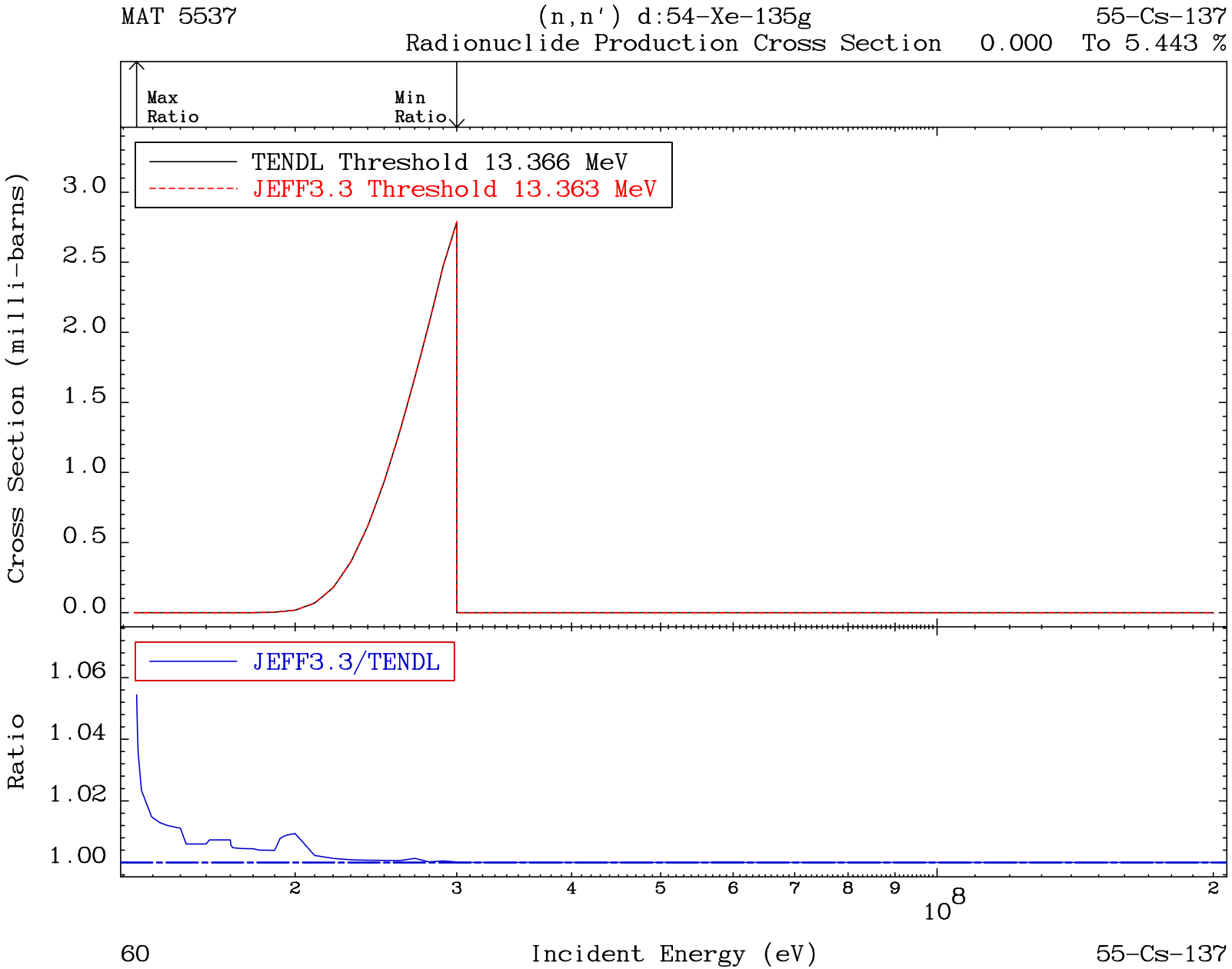

MAT 5537
(n,3n):55-Cs-135g
55-Cs-137
Radionuclide Production Cross Section
-1.151 To 0.095 %
Min Ratio
Max Ratio
TENDL Threshold 15.218 MeV
JEFF3.3 Threshold 15.218 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
55-Cs-137

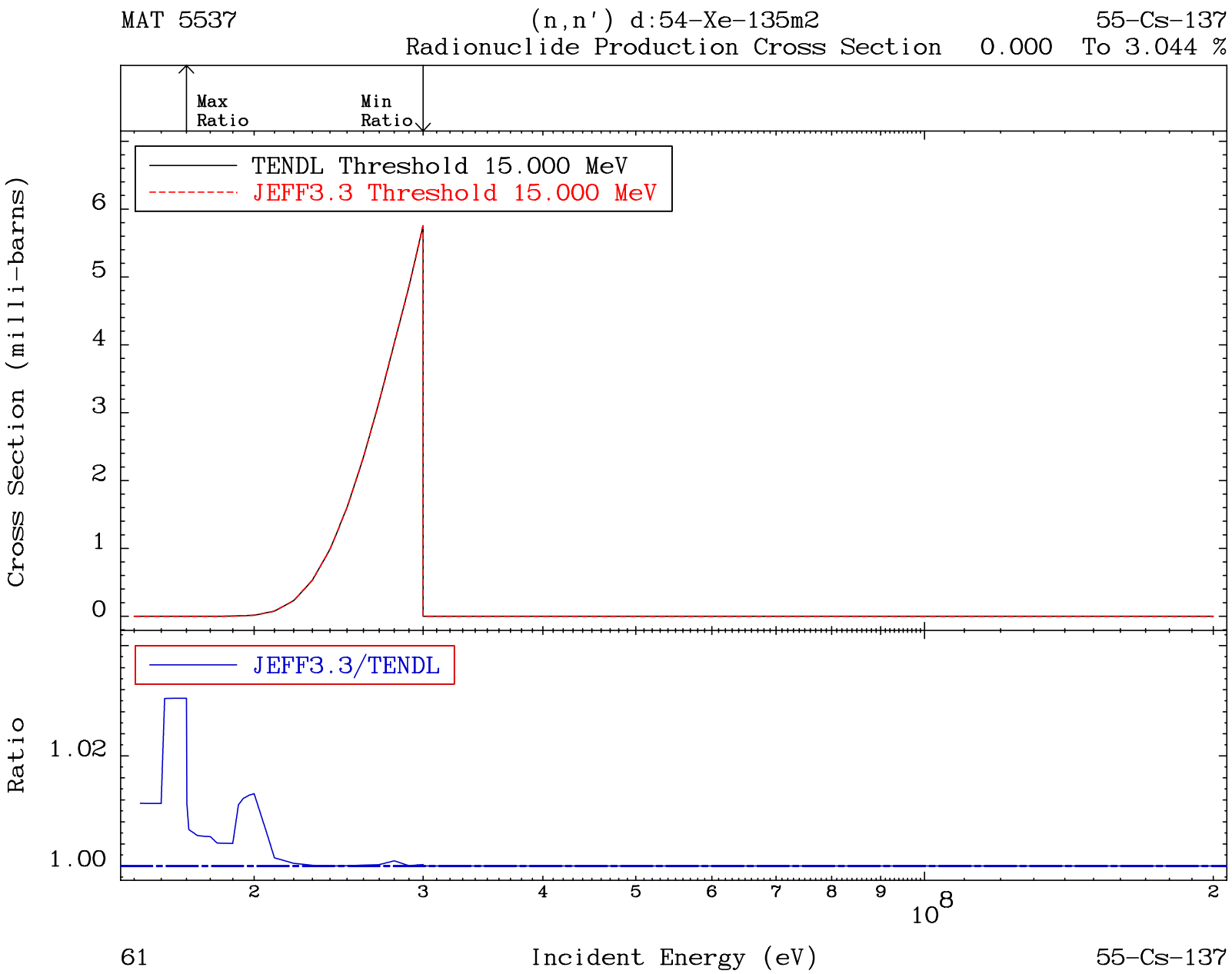

MAT 5537
(n,3n):55-Cs-135m10
55-Cs-137
Radionuclide Production Cross Section
-0.625 To 0.144 %
Min Ratio
Max Ratio
TENDL Threshold 16.863 MeV
JEFF3.3 Threshold 16.863 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
55-Cs-137

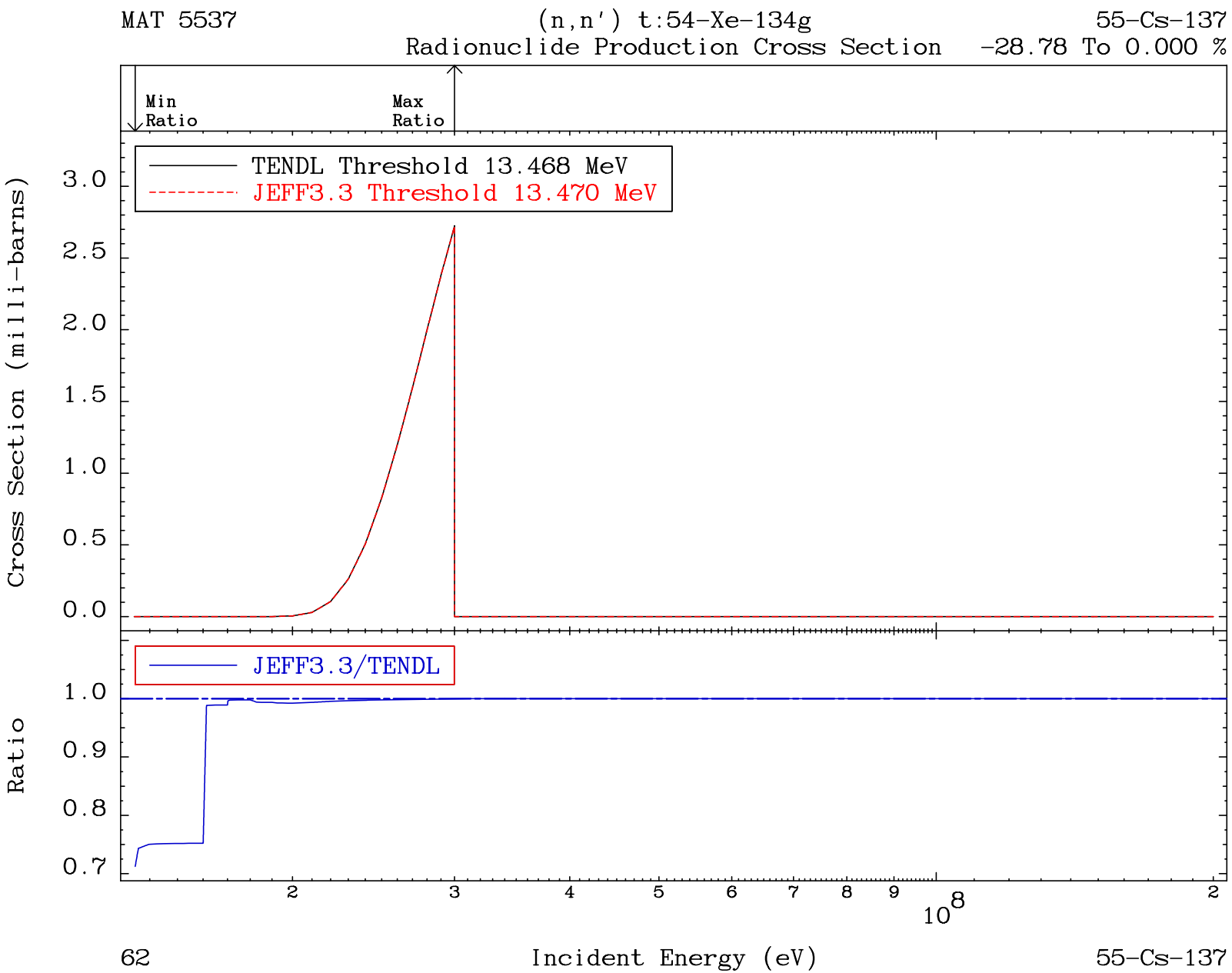

MAT 5537
(n,n') α:53-I -133g
55-Cs-137
Radionuclide Production Cross Section -5.182 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.1352 MeV
JEFF3.3 Threshold 3.1069 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
55-Cs-137

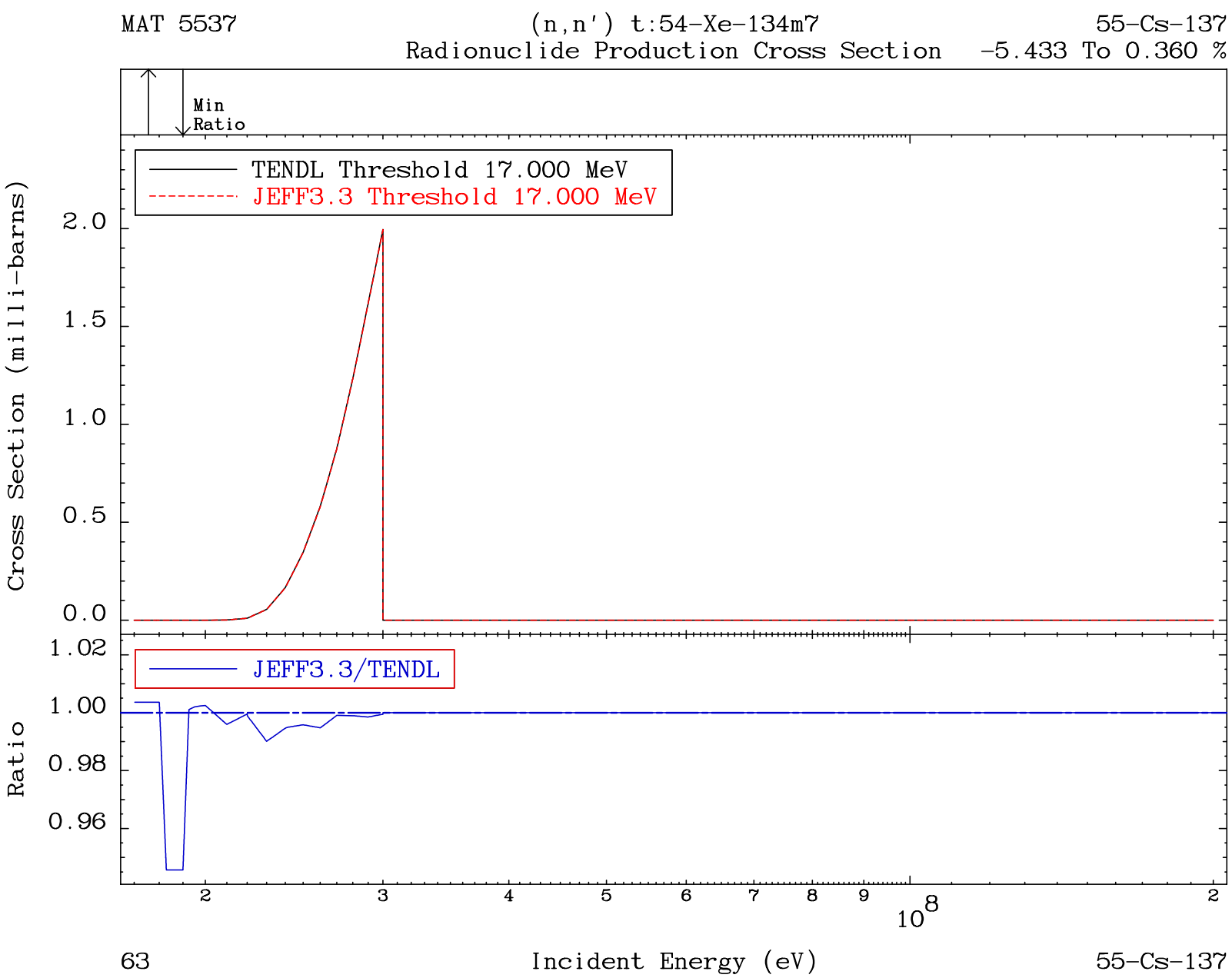

MAT 5537
(n,2n) α:53-I -132g
55-Cs-137
Radionuclide Production Cross Section -94.28 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.422 MeV
JEFF3.3 Threshold 11.422 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
55-Cs-137

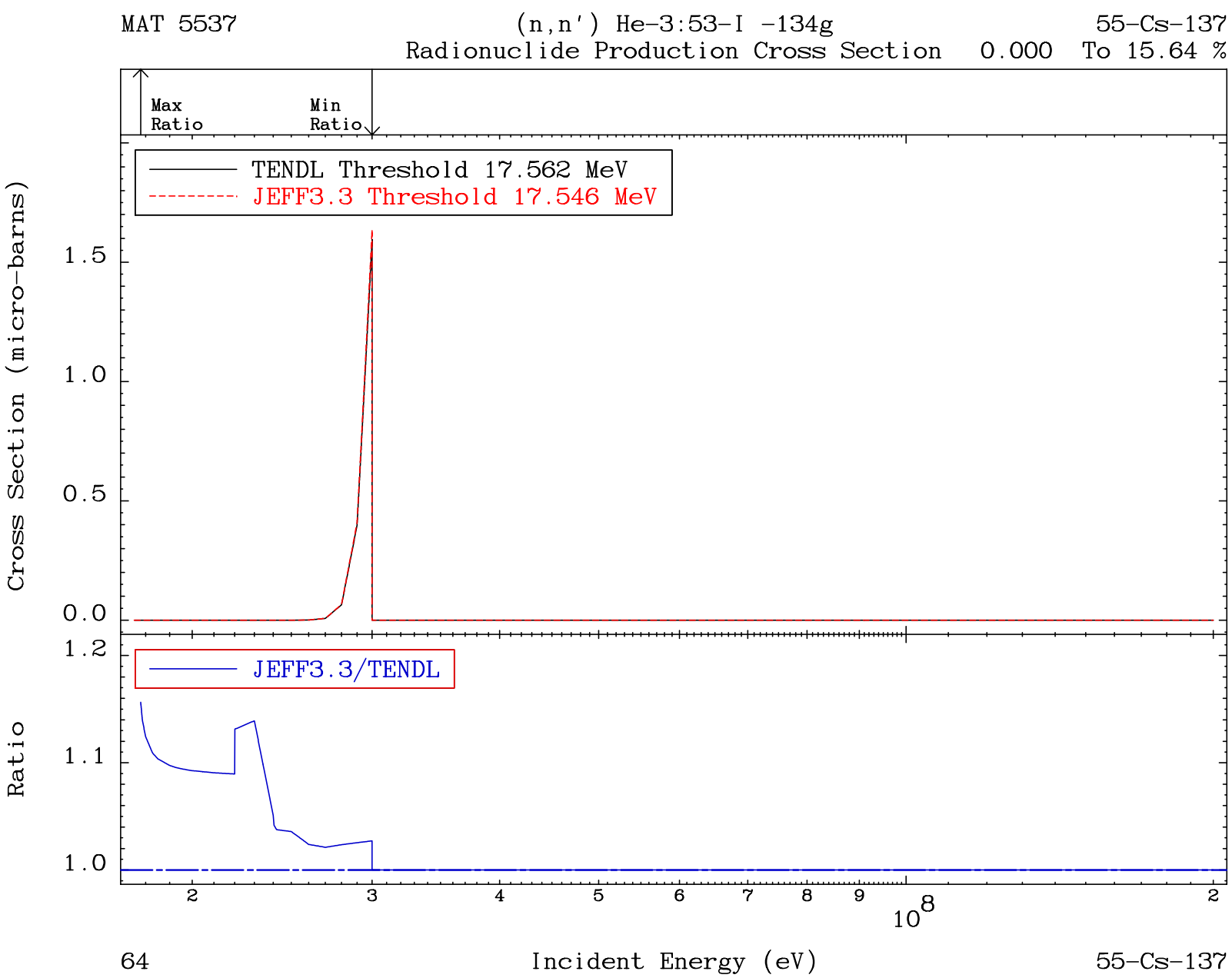

MAT 5537
(n,2n) α:53-I -132m3
55-Cs-137
Radionuclide Production Cross Section -10.75 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.543 MeV
JEFF3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy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

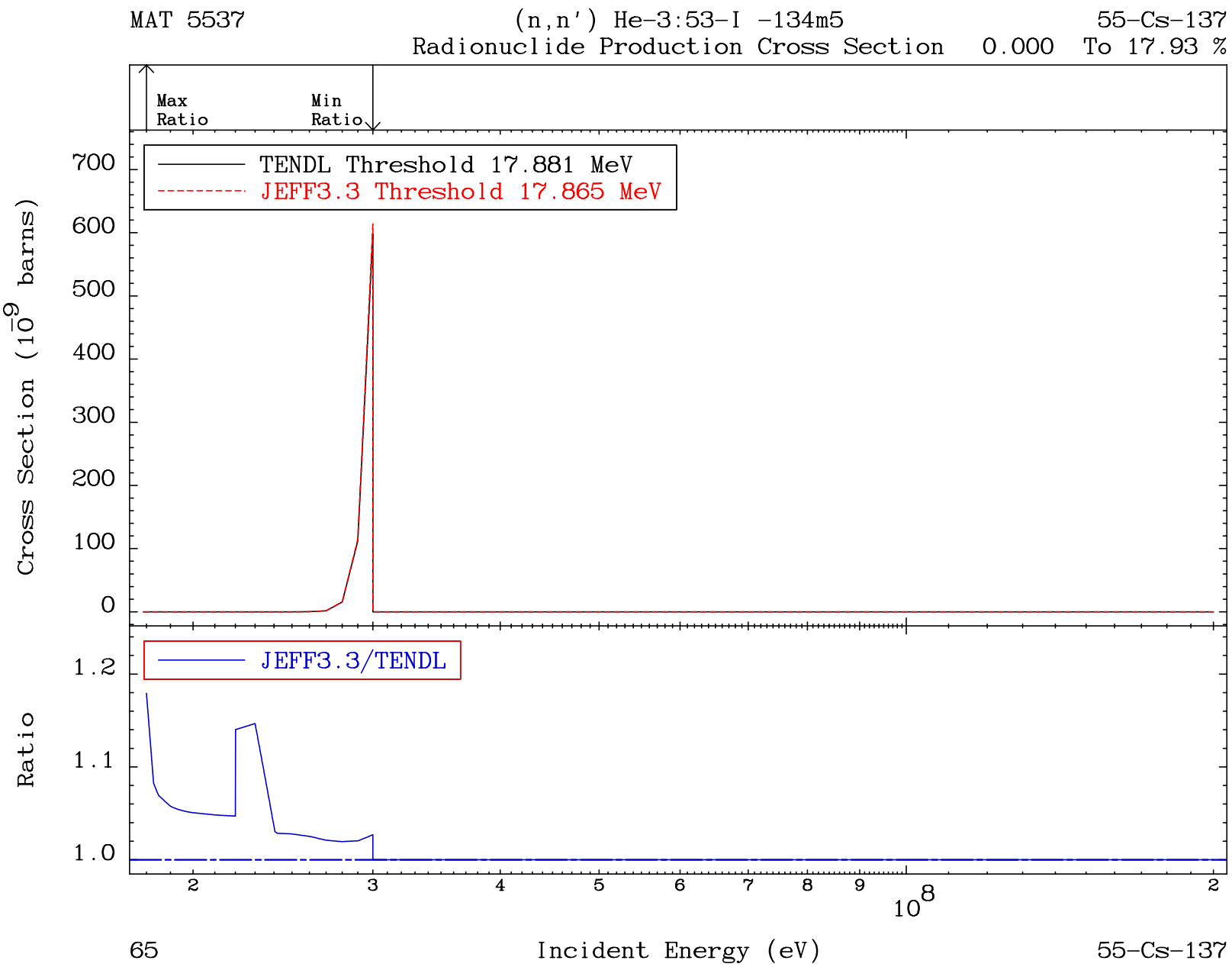

MAT 5537
(n,n') d:54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 5.443 %
Max Ratio
Min Ratio
TENDL Threshold 13.366 MeV
JEFF3.3 Threshold 13.363 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
60
Incident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

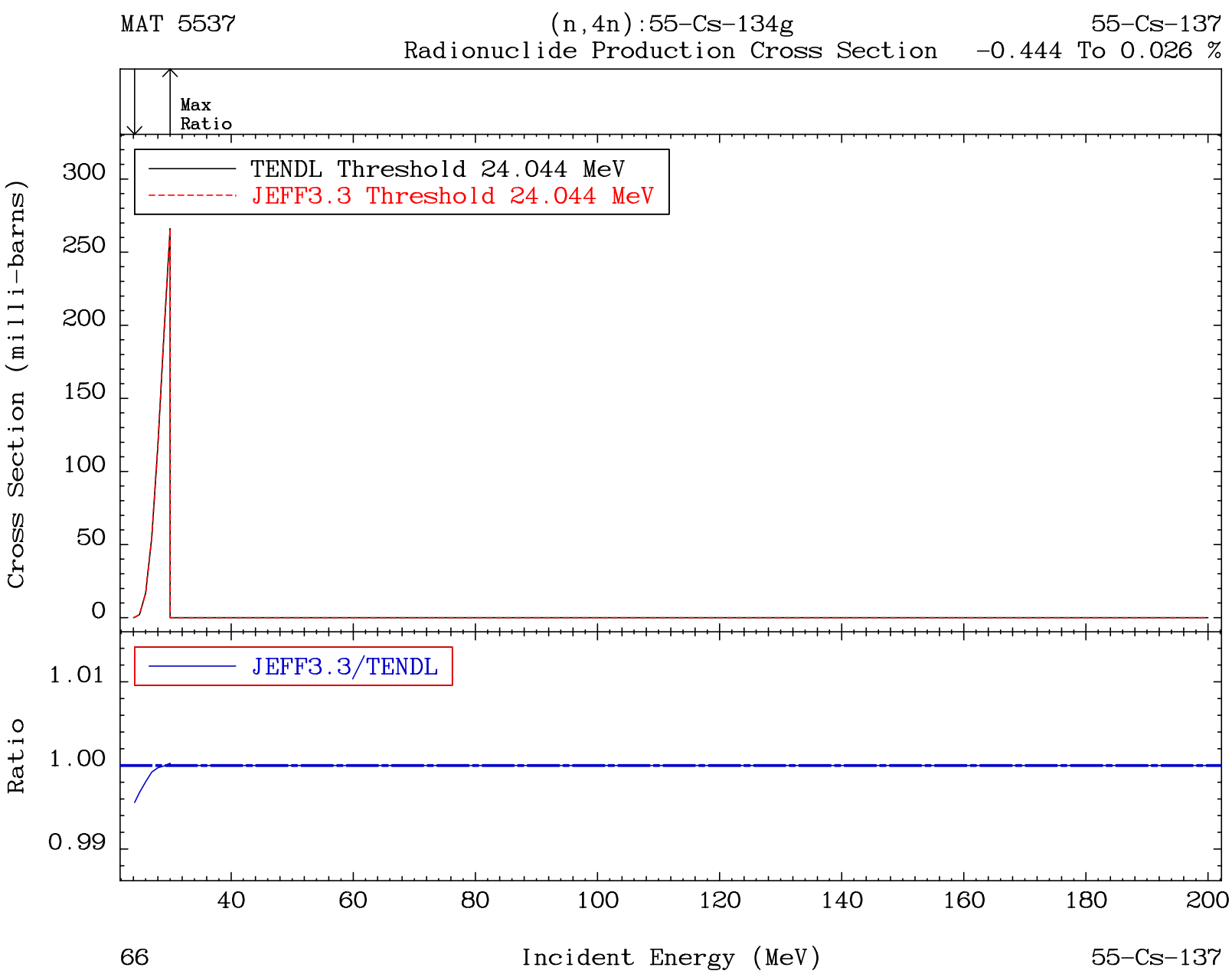

MAT 5537
(n,n') d:54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section 0.000 To 3.044 %
Max Ratio
Min Ratio
TENDL Threshold 15.000 MeV
JEFF3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
1.00
1.02
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
55-Cs-137

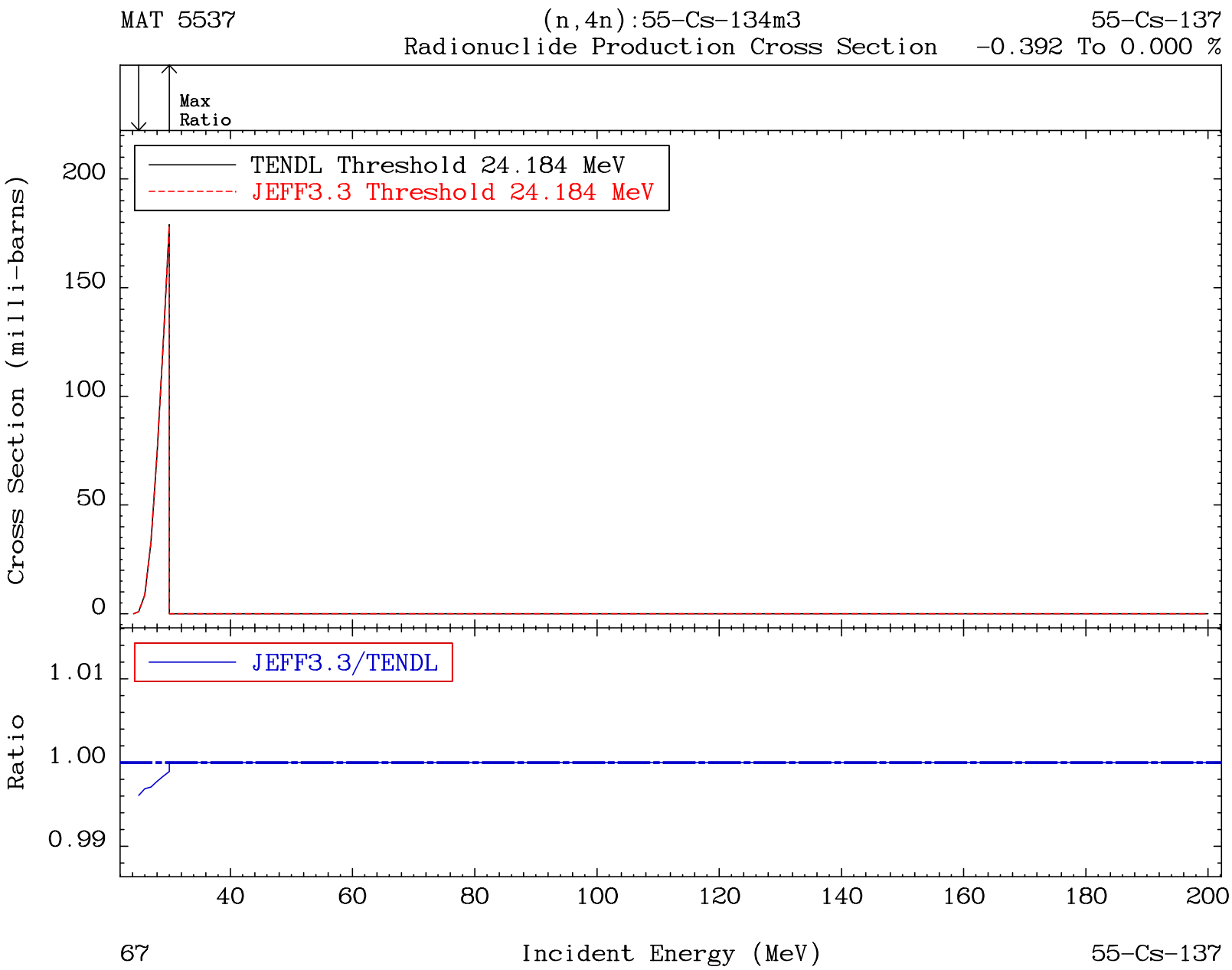

MAT 5537
(n,n') t:54-Xe-134g
55-Cs-137
Radionuclide Production Cross Section
-28.78 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.468 MeV
JEFF3.3 Threshold 13.470 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
0.7
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy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

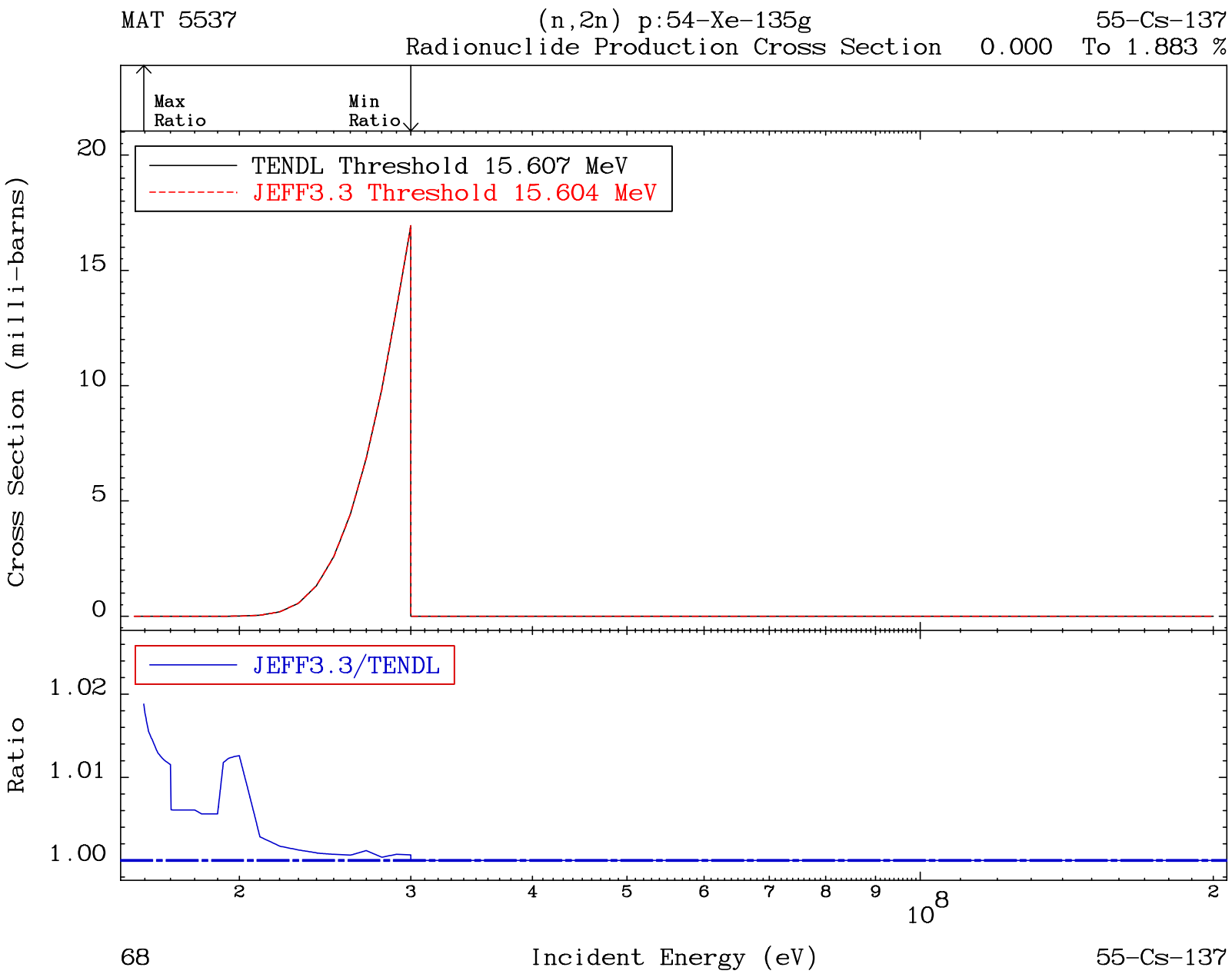

MAT 5537
(n,n') t:54-Xe-134m7
55-Cs-137
Radionuclide Production Cross Section
-5.433 To 0.360 %
Min
Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 17.000 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
55-Cs-137

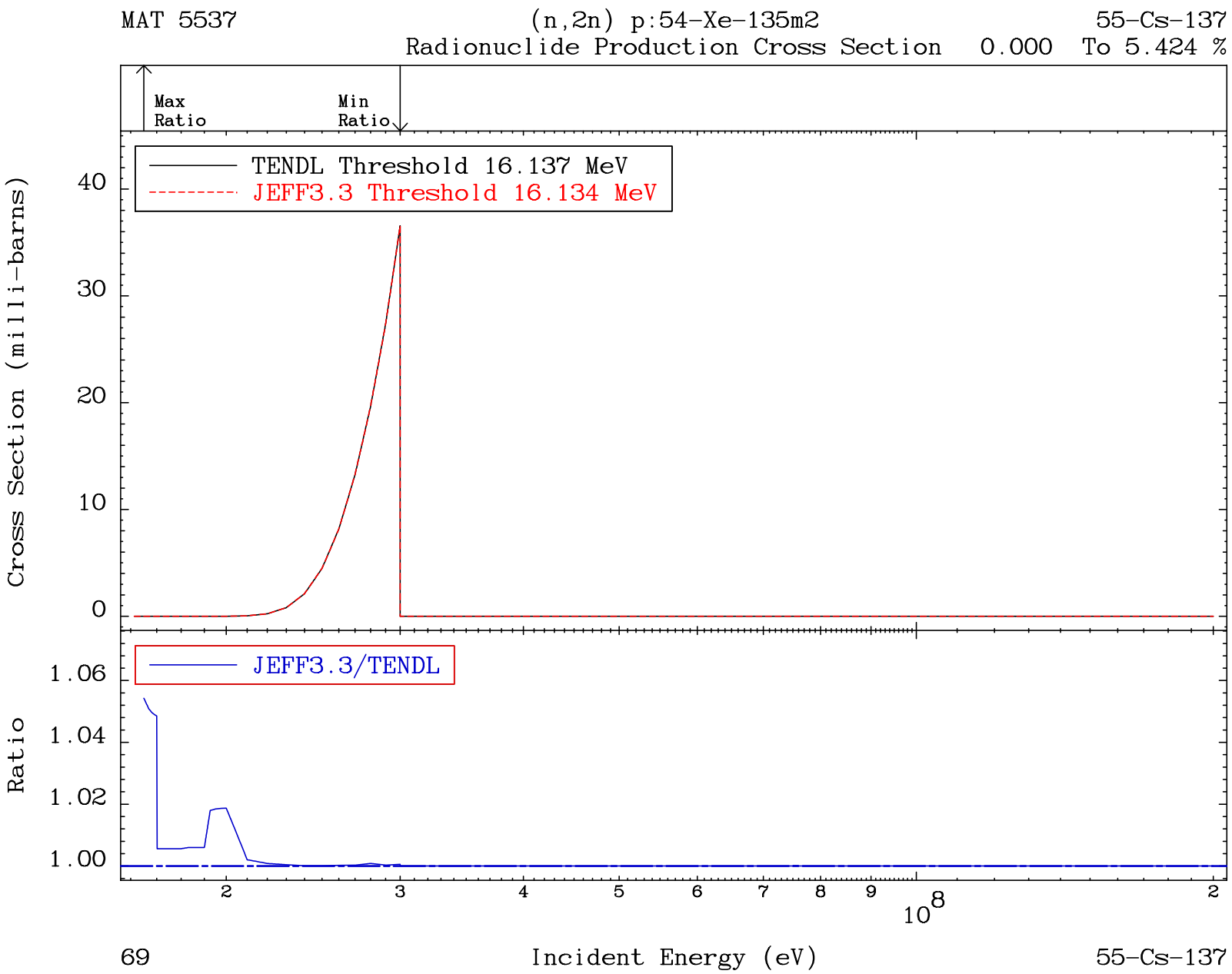

MAT 5537
(n,n') He-3:53-I -134g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 15.64 %
Max Ratio
Min Ratio
TENDL Threshold 17.562 MeV
JEFF3.3 Threshold 17.546 MeV
Cross Section (micro-barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
55-Cs-137

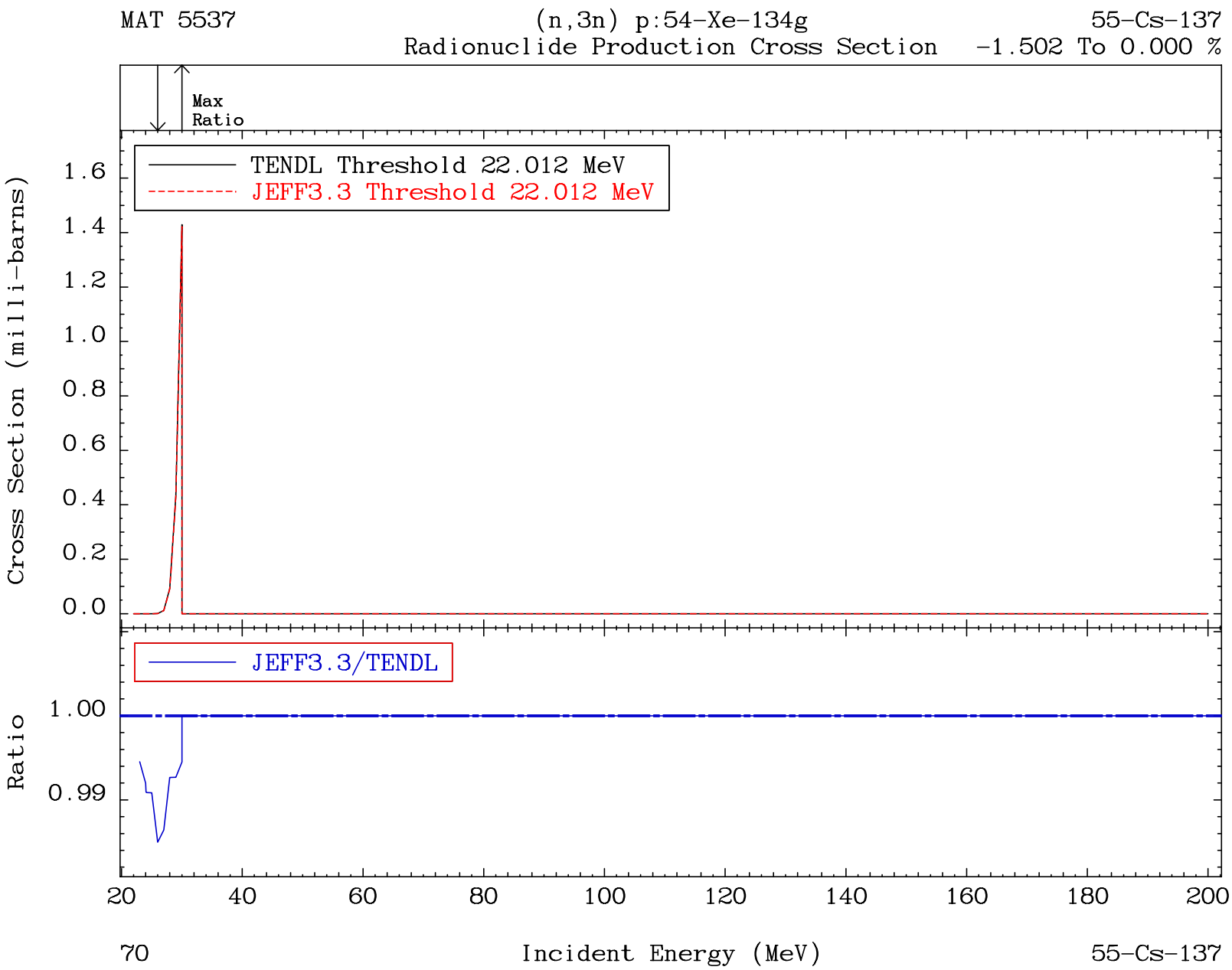

MAT 5537
(n,n') He-3:53-I -134m5
55-Cs-137
Radionuclide Production Cross Section 0.000 To 17.93 %
Max Ratio
Min Ratio
TENDL Threshold 17.881 MeV
JEFF3.3 Threshold 17.865 MeV
Cross Section (10^{-9} barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
65
Incident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

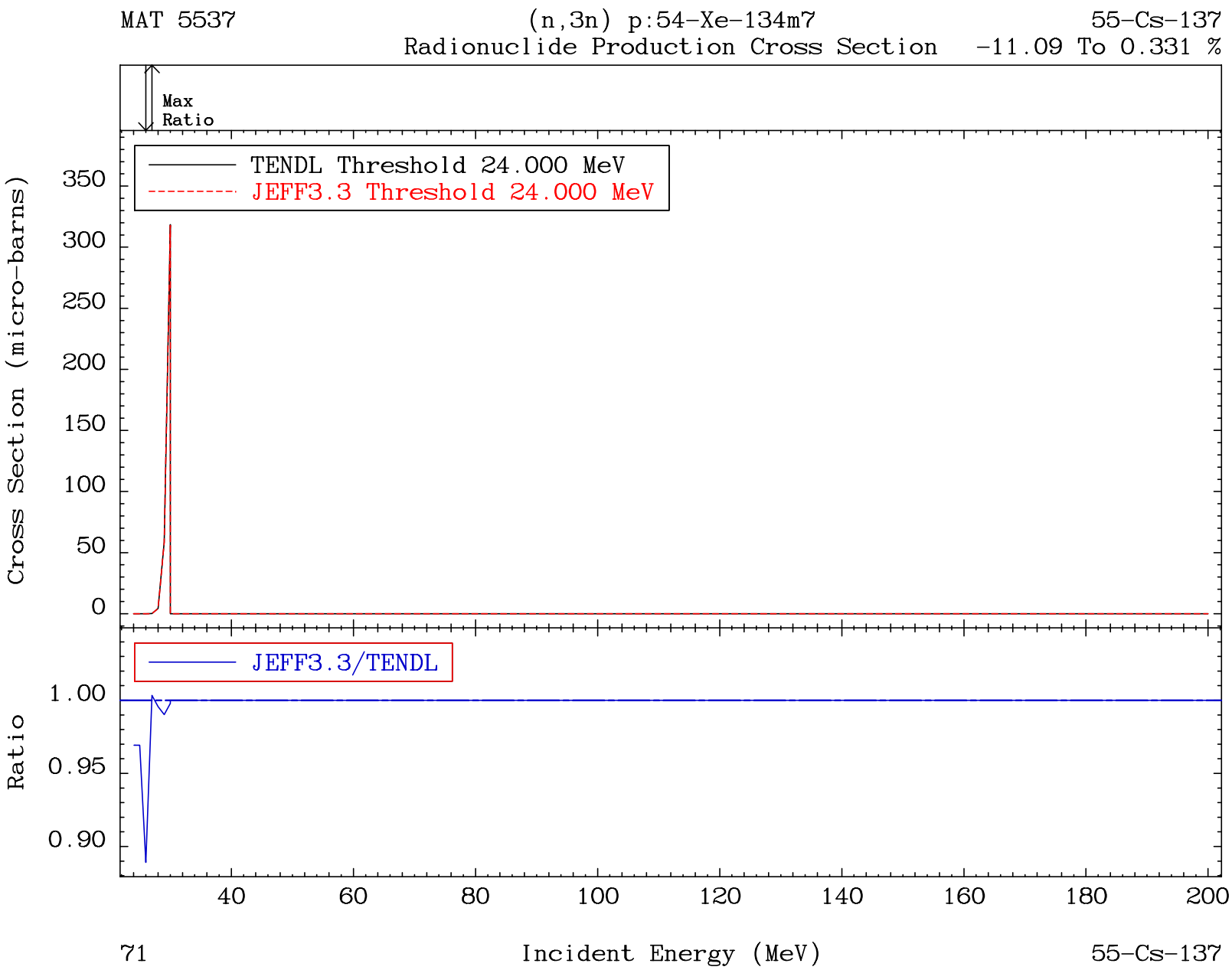

MAT 5537
(n,4n):55-Cs-134g
55-Cs-137
Radionuclide Production Cross Section
-0.444 To 0.026 %
Max
Ratio
TENDL Threshold 24.044 MeV
JEFF3.3 Threshold 24.044 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
66
Incident Energy (MeV)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

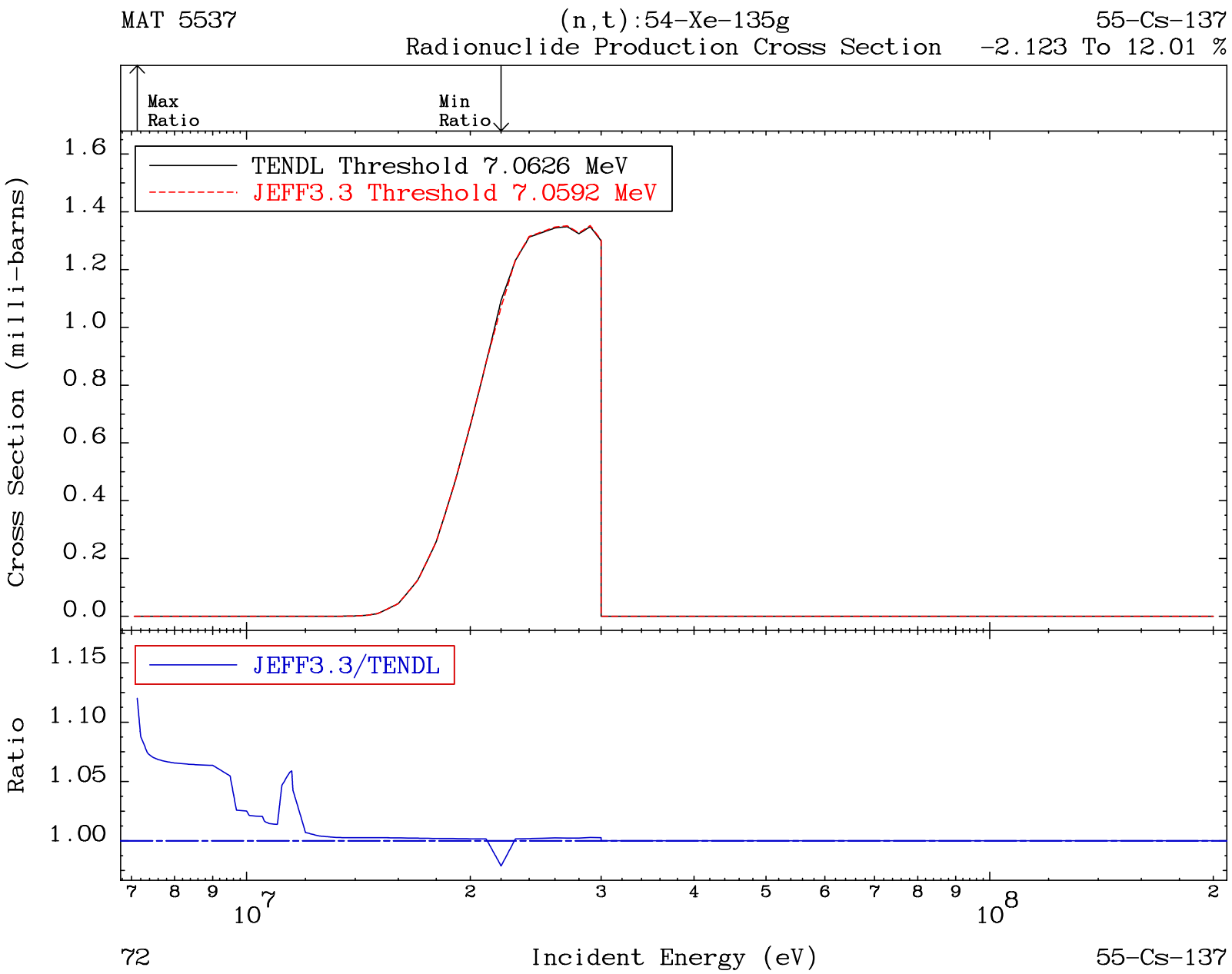

MAT 5537
(n,4n):55-Cs-134m3
55-Cs-137
Radionuclide Production Cross Section
-0.392 To 0.000 %
Max
Ratio
TENDL Threshold 24.184 MeV
JEFF3.3 Threshold 24.184 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
67
Incident Energy (MeV)
55-Cs-137

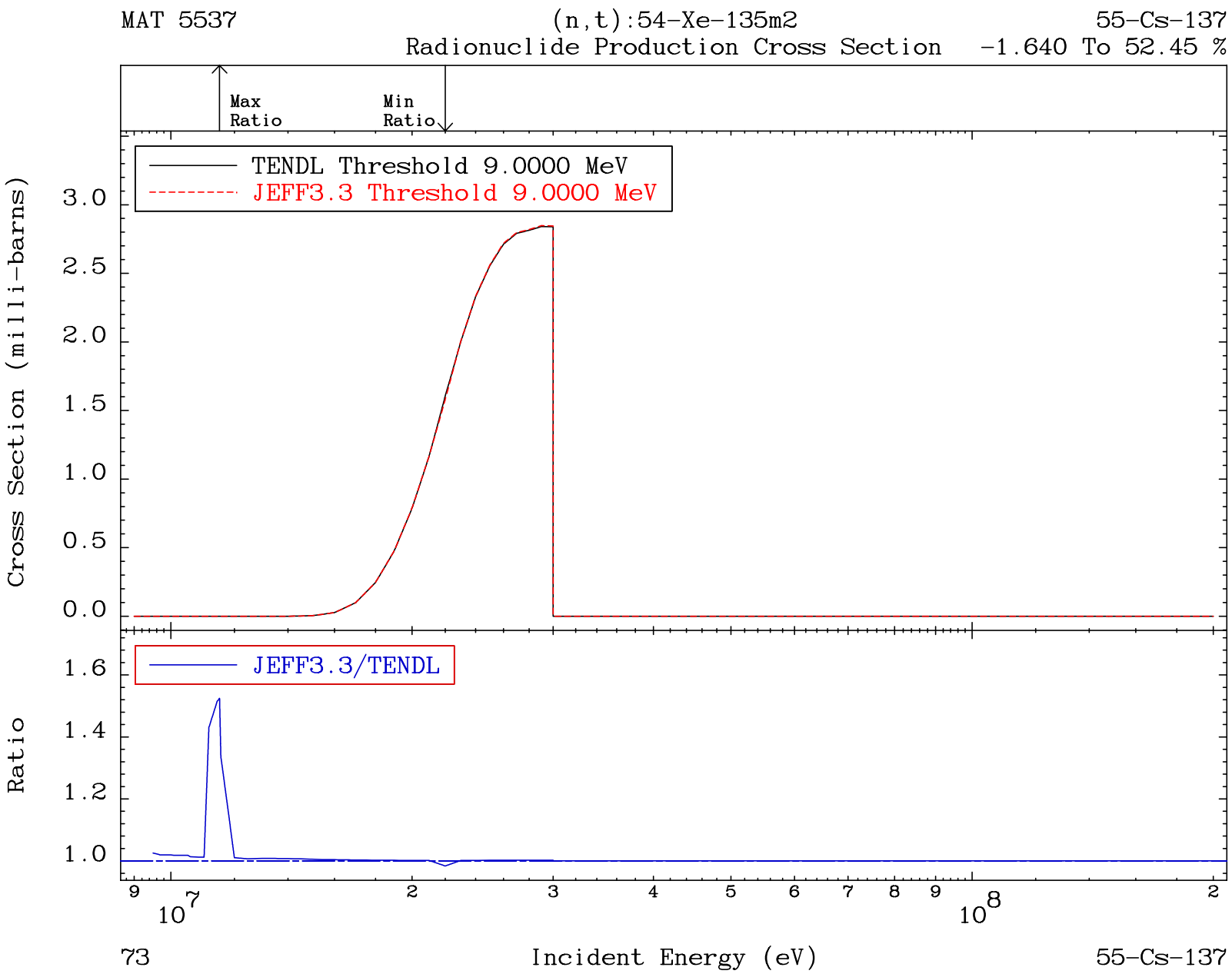

MAT 5537
(n,2n) p:54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section 0.000 To 1.883 %
Max Ratio
Min Ratio
TENDL Threshold 15.607 MeV
JEFF3.3 Threshold 15.604 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
55-Cs-137

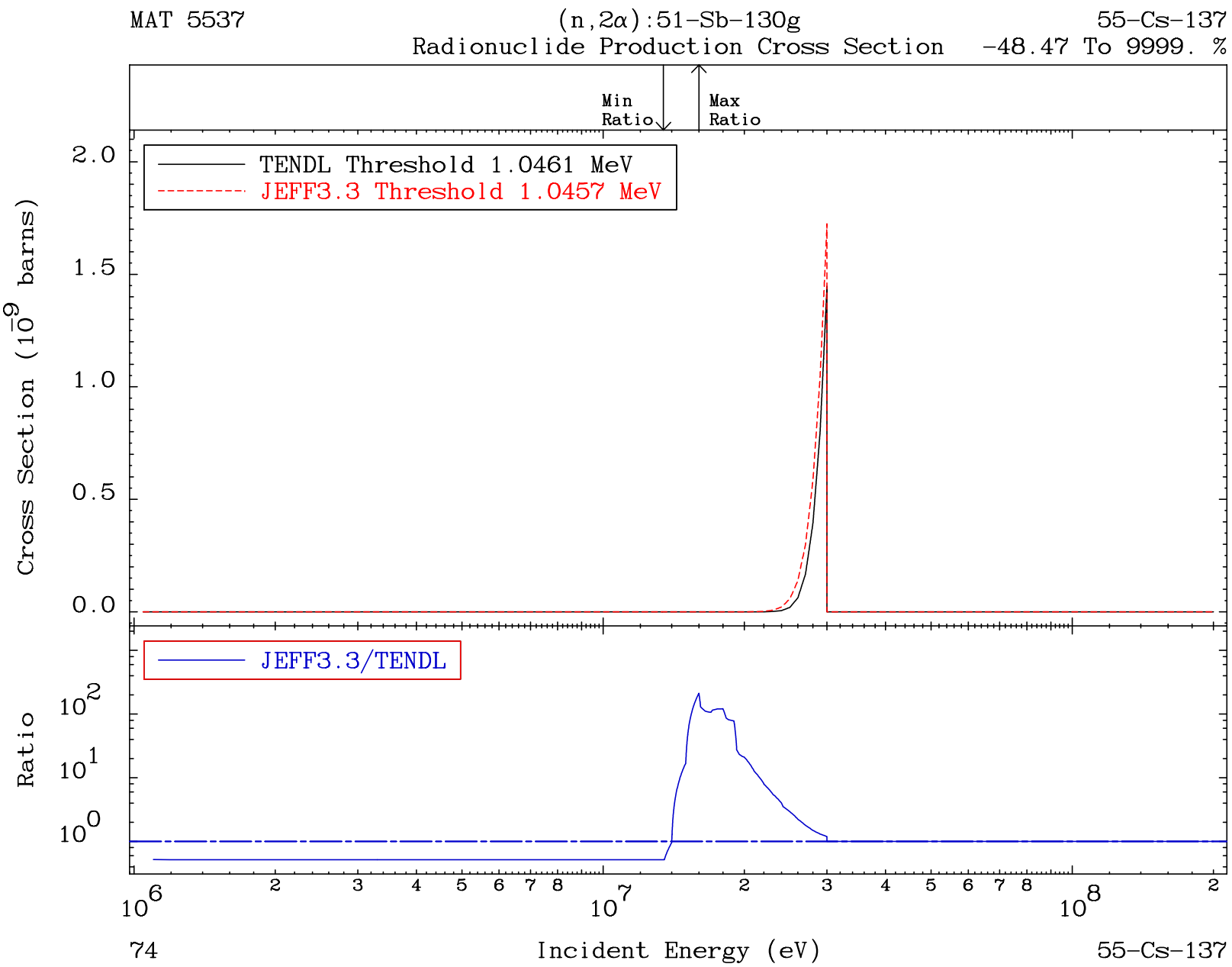

MAT 5537
(n,2n) p:54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section 0.000 To 5.424 %
Max Ratio
Min Ratio
TENDL Threshold 16.137 MeV
JEFF3.3 Threshold 16.134 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
55-Cs-137

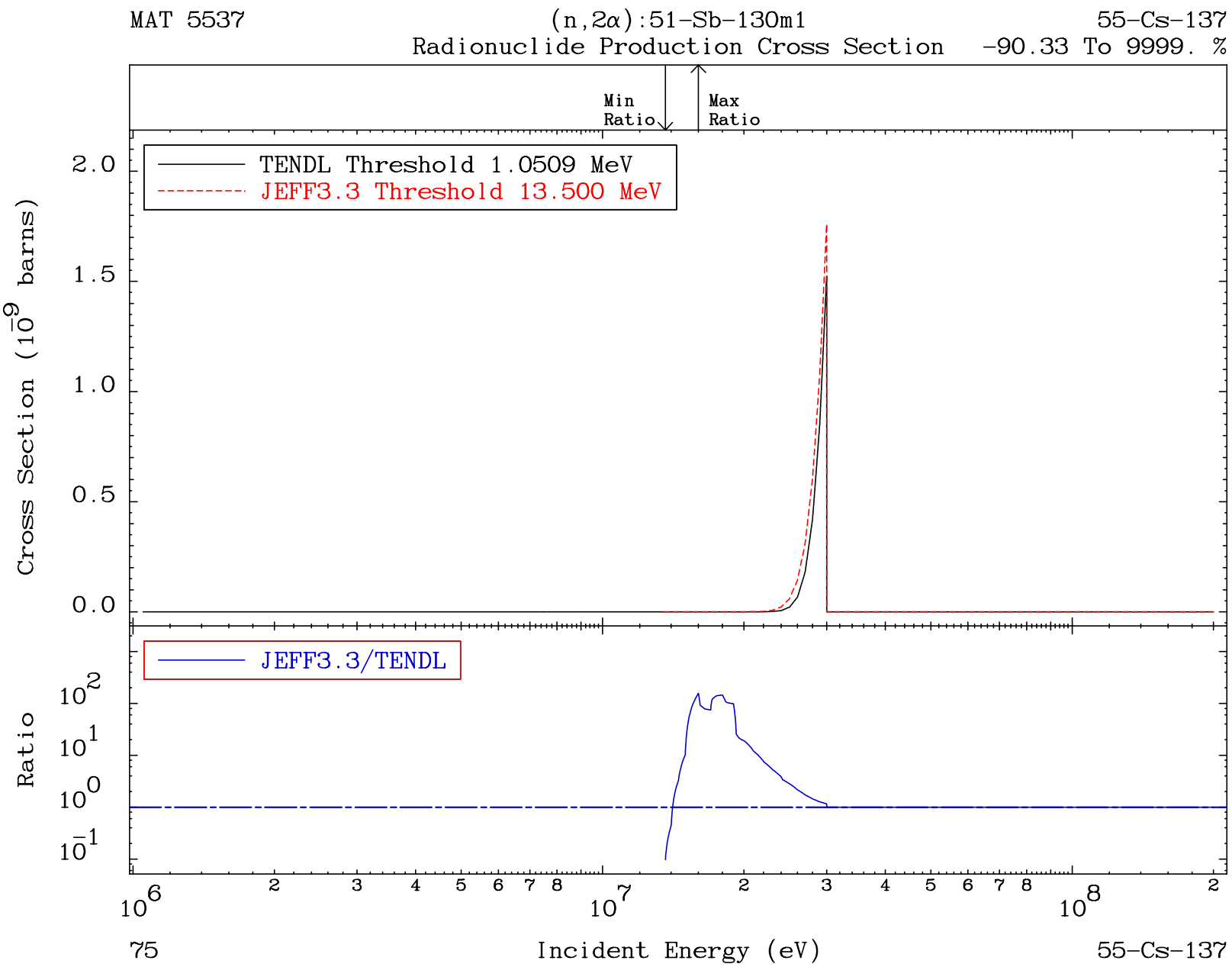

MAT 5537
(n,3n) p:54-Xe-134g
55-Cs-137
Radionuclide Production Cross Section
-1.502 To 0.000 %
Max
Ratio
TENDL Threshold 22.012 MeV
JEFF3.3 Threshold 22.012 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.99
20
40
60
80
100
120
140
160
180
200
70
Incident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

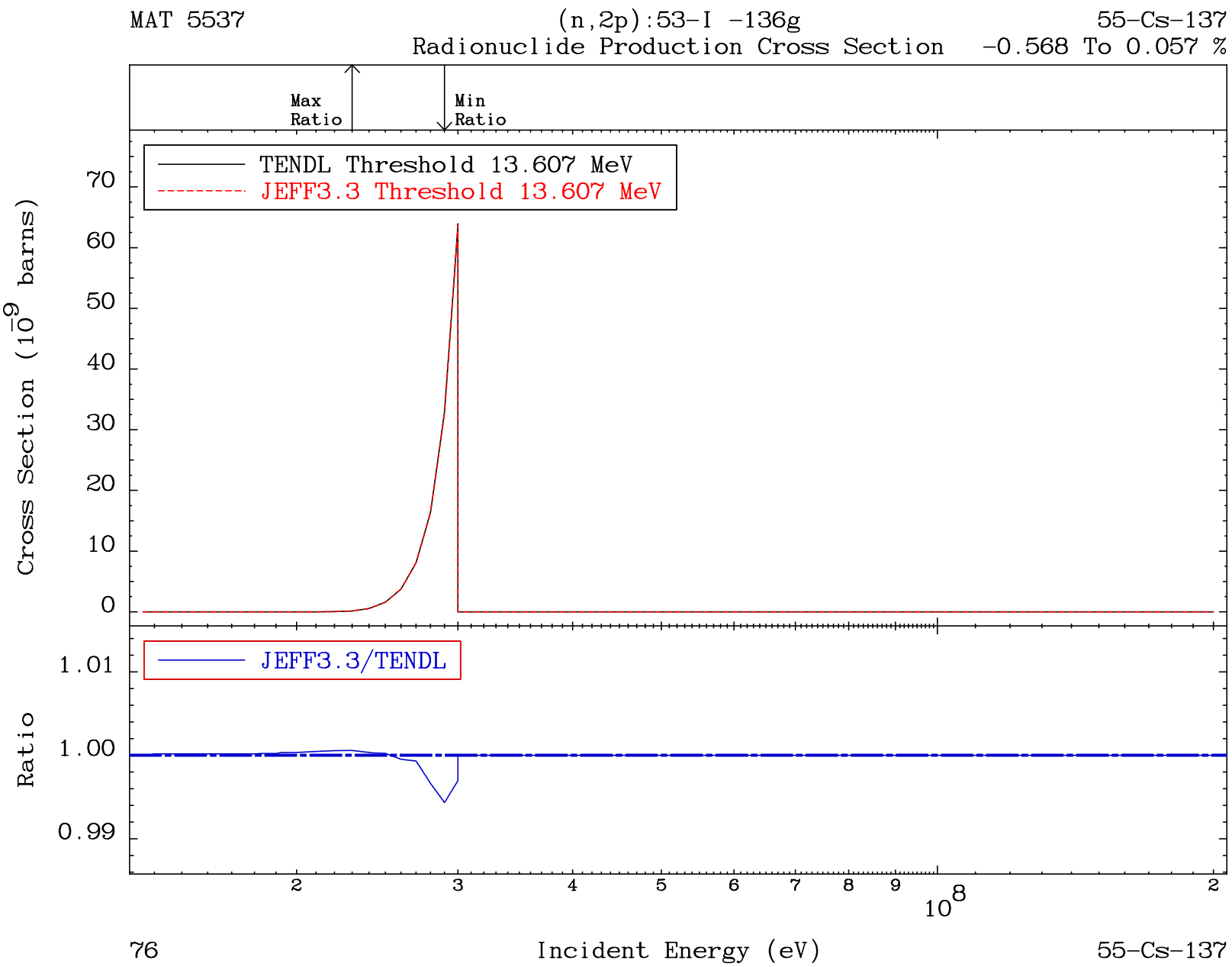

MAT 5537
(n,3n) p:54-Xe-134m7
55-Cs-137
Radionuclide Production Cross Section
-11.09 To 0.331 %
Max
Ratio
TENDL Threshold 24.000 MeV
JEFF3.3 Threshold 24.000 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
40
60
80
100
120
140
160
180
200
71
Incident Energy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

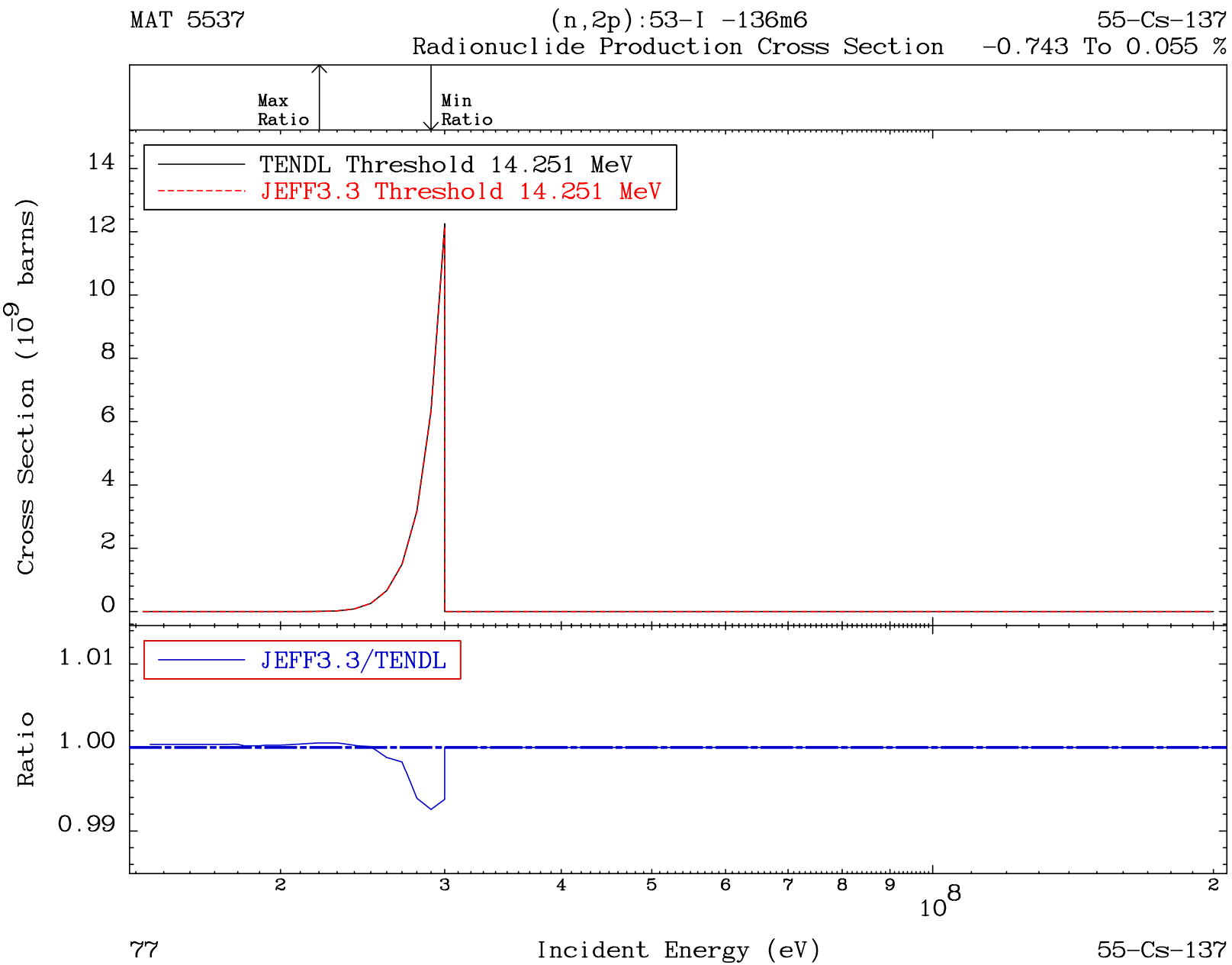

MAT 5537
(n,t):54-Xe-135g
55-Cs-137
Radionuclide Production Cross Section
-2.123 To 12.01 %
Max Ratio
Min Ratio
TENDL Threshold 7.0626 MeV
JEFF3.3 Threshold 7.0592 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8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

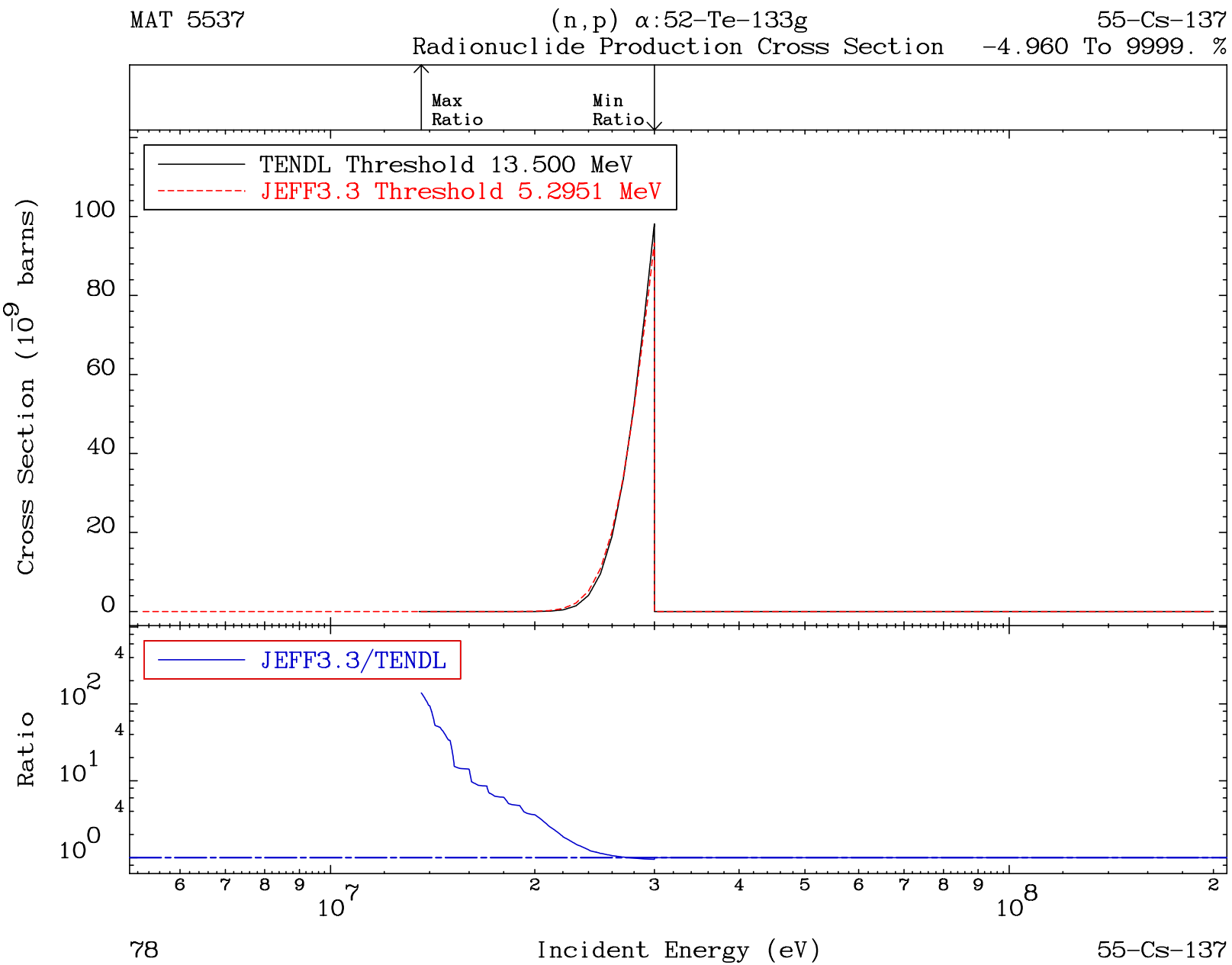

MAT 5537
(n,t):54-Xe-135m2
55-Cs-137
Radionuclide Production Cross Section -1.640 To 52.45 %
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 9.0000 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident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

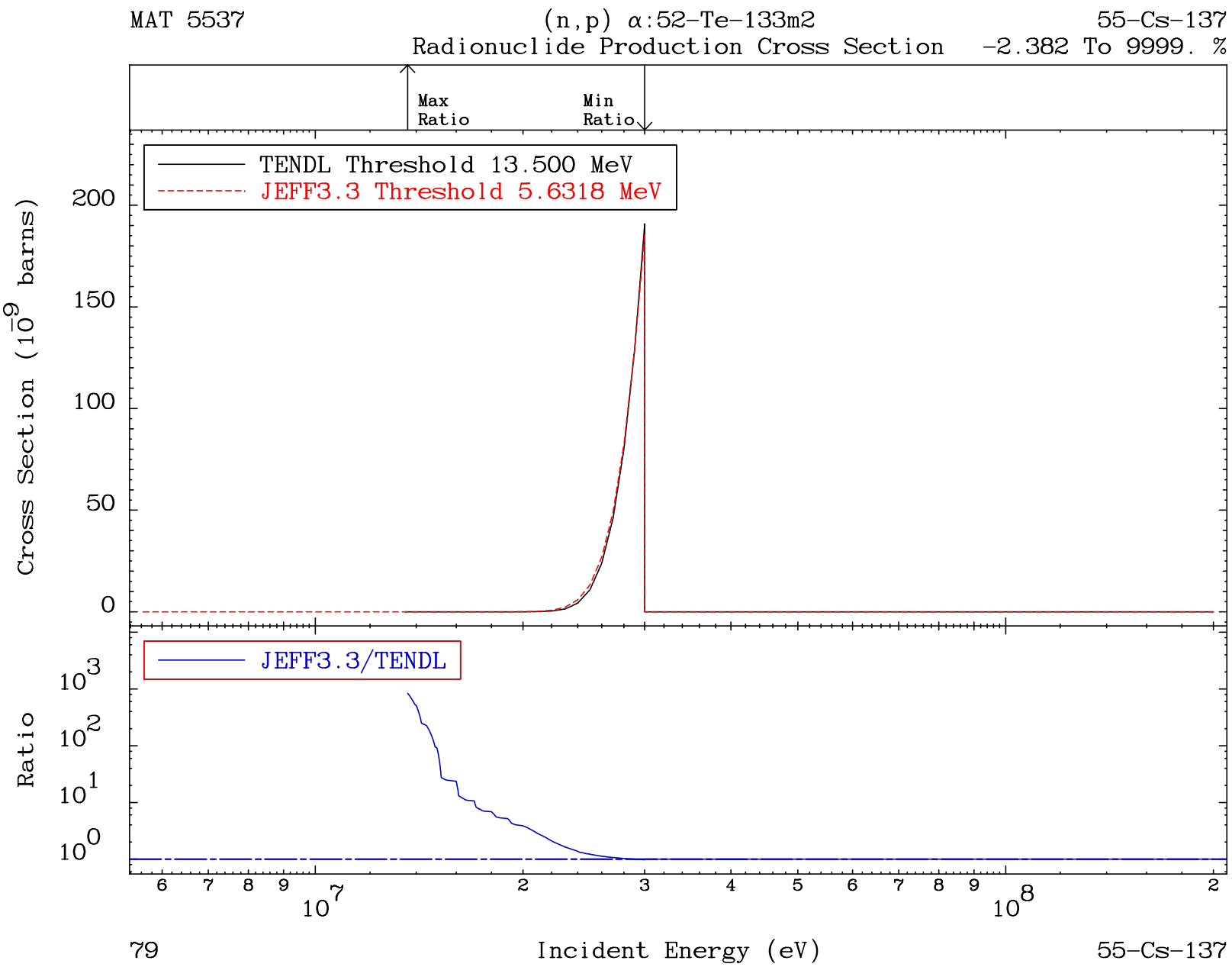

MAT 5537
(n,2α):51-Sb-130g
55-Cs-137
Radionuclide Production Cross Section -48.47 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0461 MeV
JEFF3.3 Threshold 1.0457 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^6
10^7
10^8
2 3 4 5 6 7 8
74
Incident Energy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

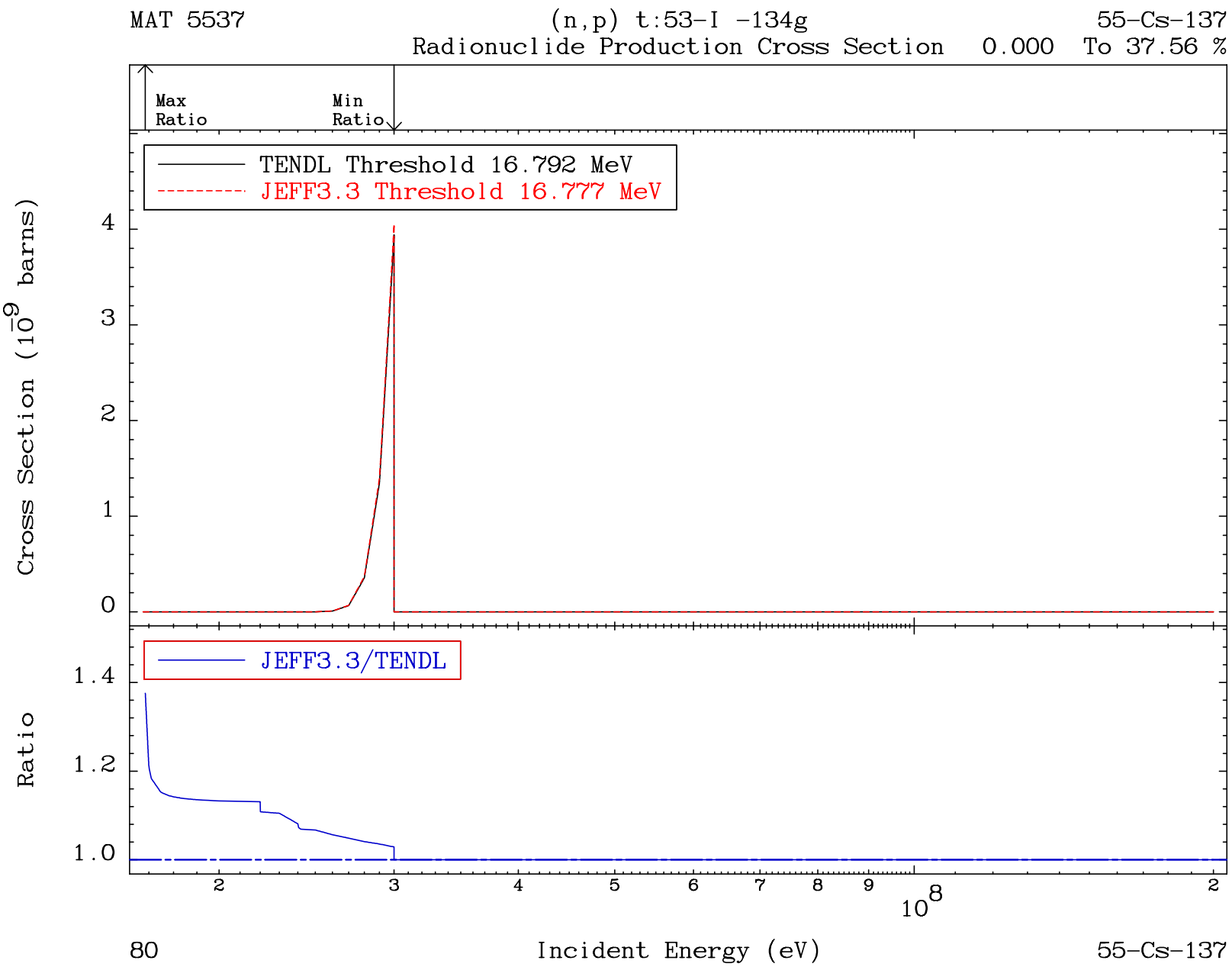

MAT 5537
(n,2α):51-Sb-130m1
55-Cs-137
Radionuclide Production Cross Section -90.33 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0509 MeV
JEFF3.3 Threshold 13.500 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
10^{-1}
10^{6}
10^{7}
10^{8}
Incident Energy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

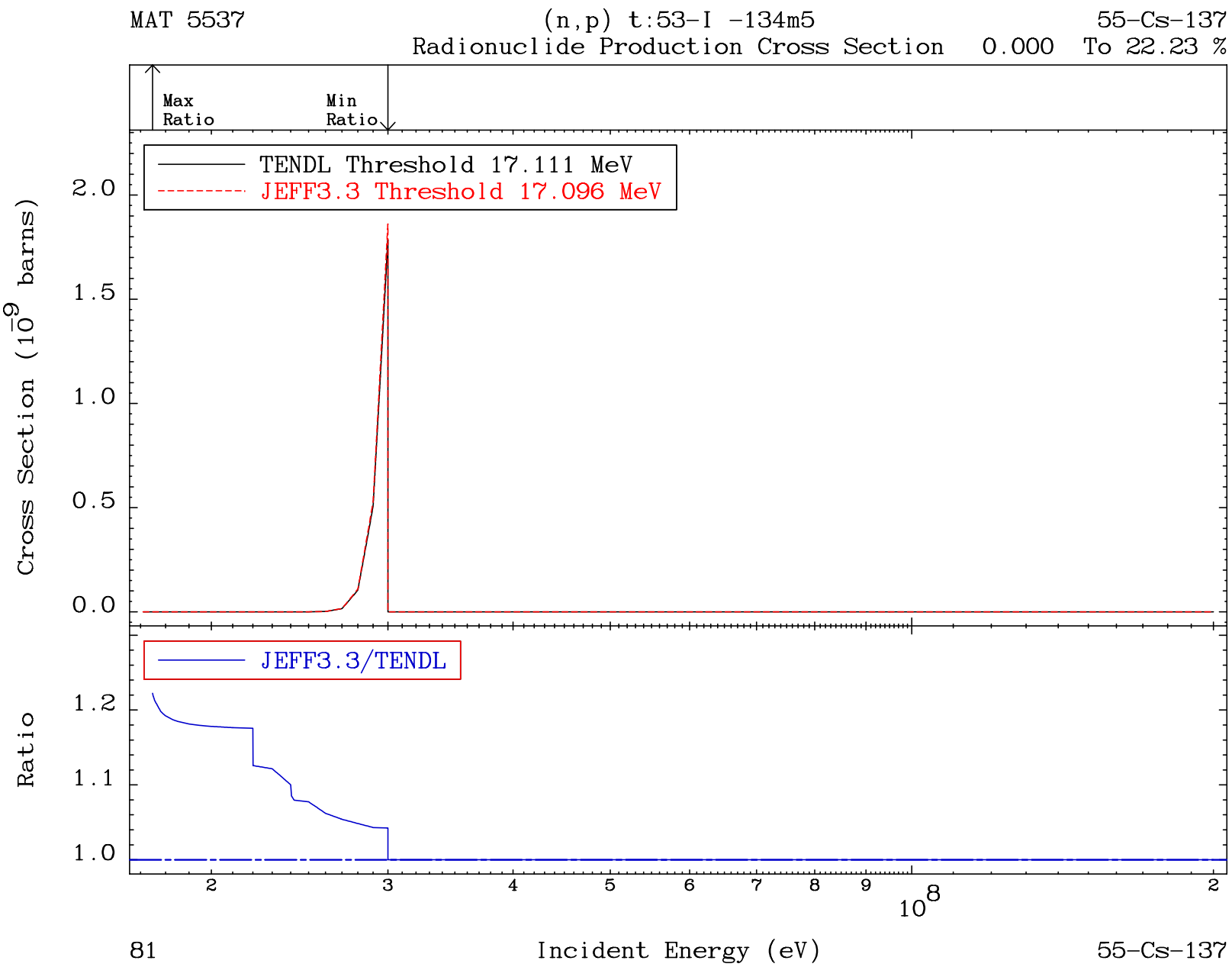

MAT 5537
(n,2p):53-I -136g
55-Cs-137
Radionuclide Production Cross Section
-0.568 To 0.057 %
Max Ratio
Min Ratio
TENDL Threshold 13.607 MeV
JEFF3.3 Threshold 13.607 MeV
Cross Section (10^{-9} barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)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