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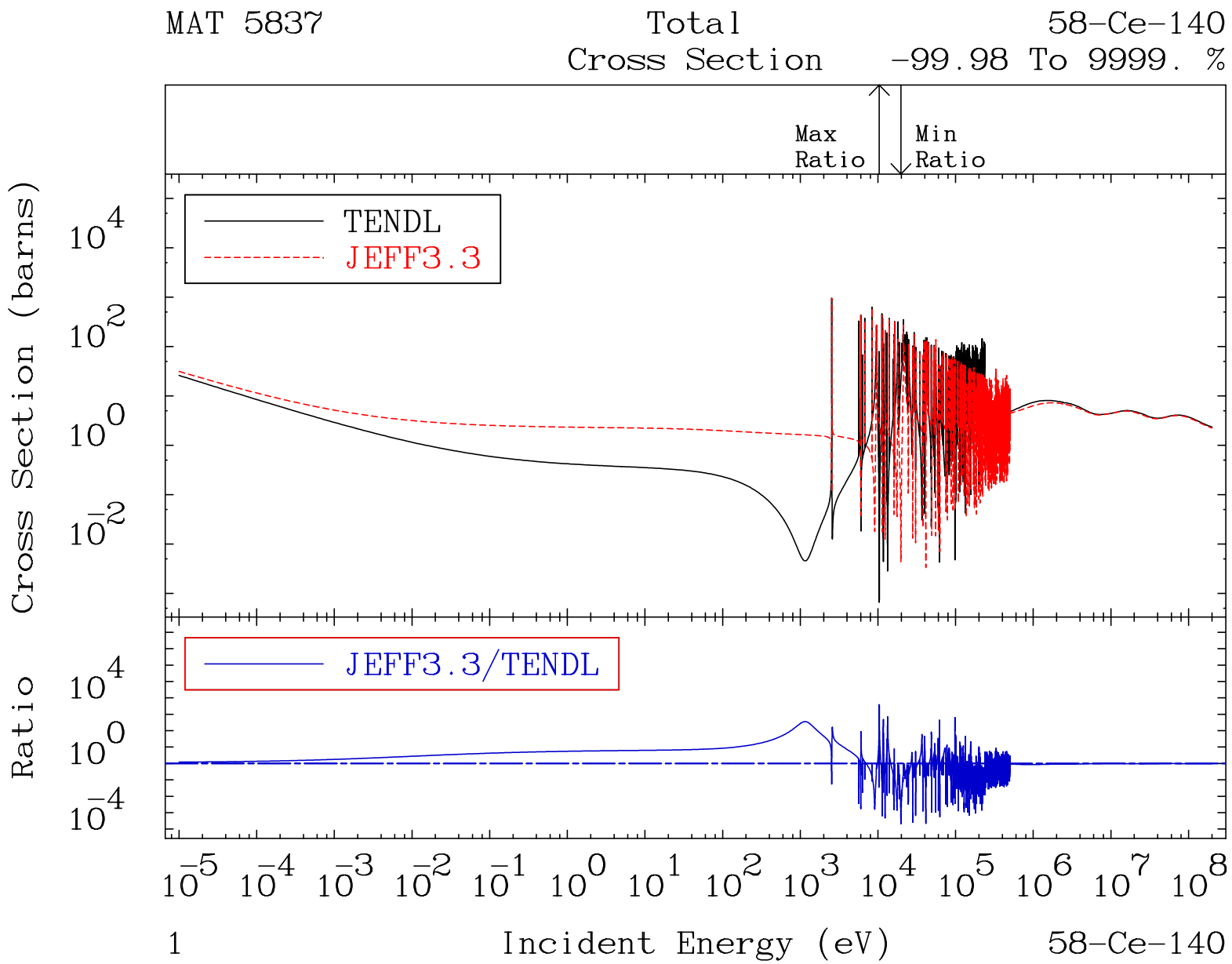
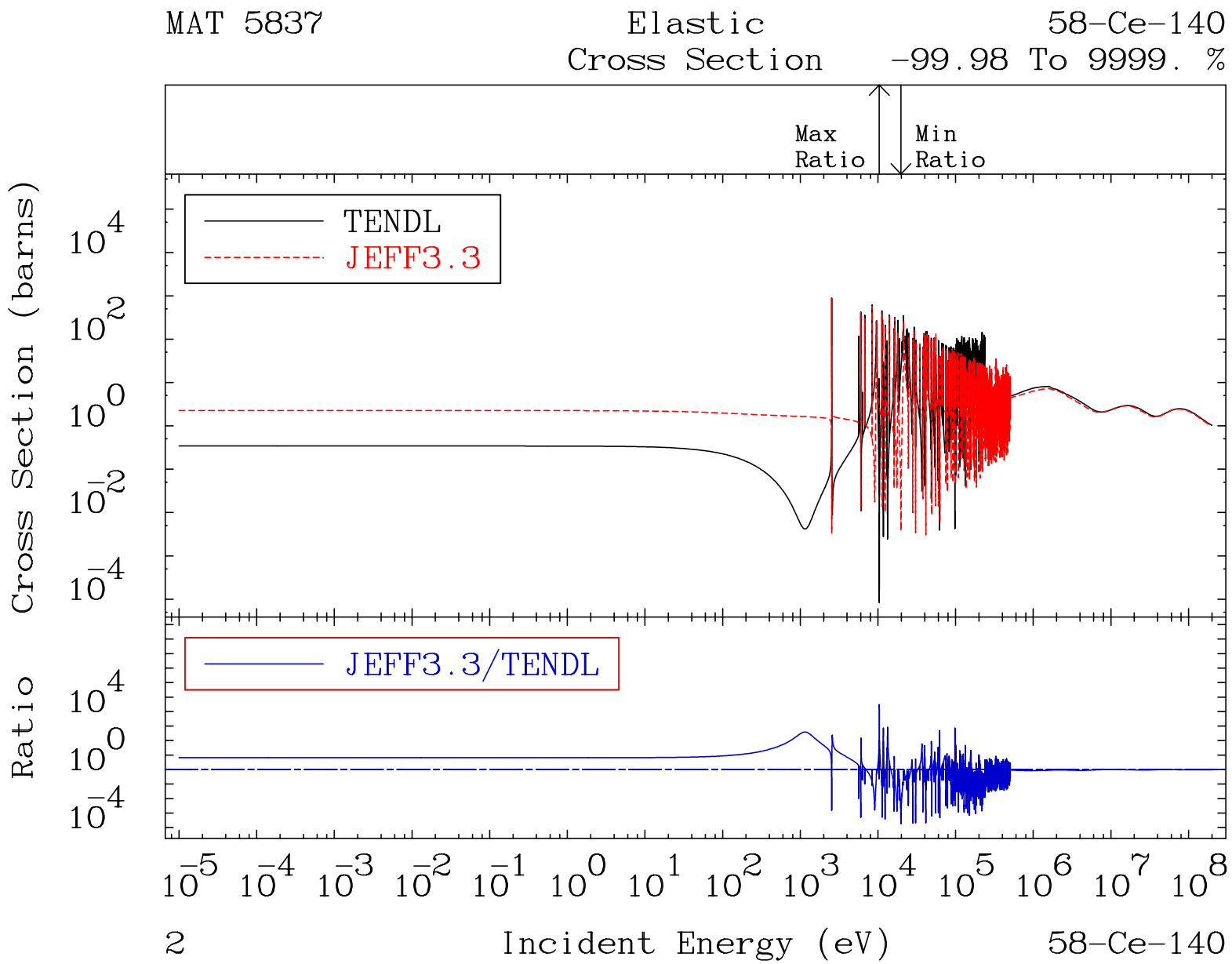
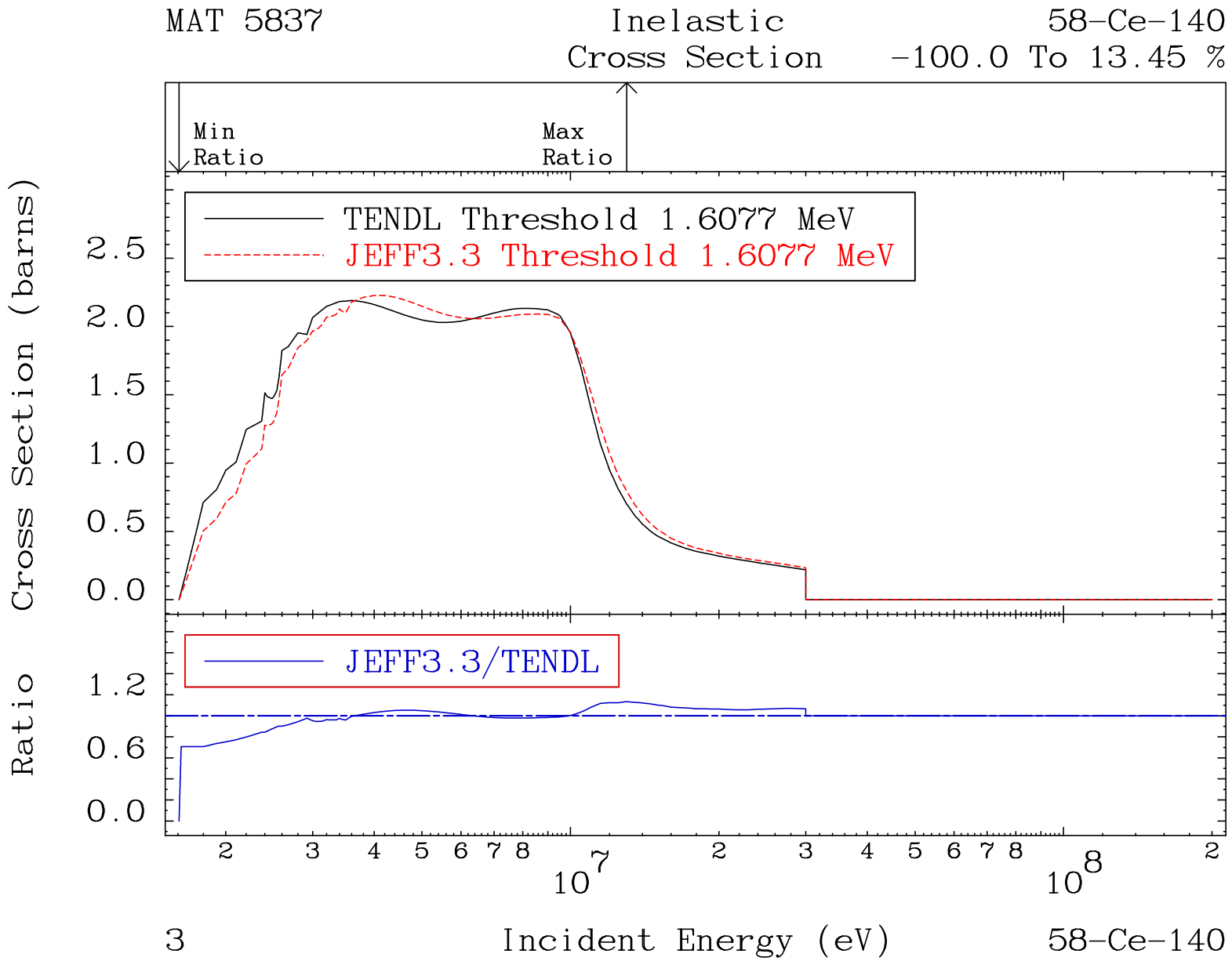
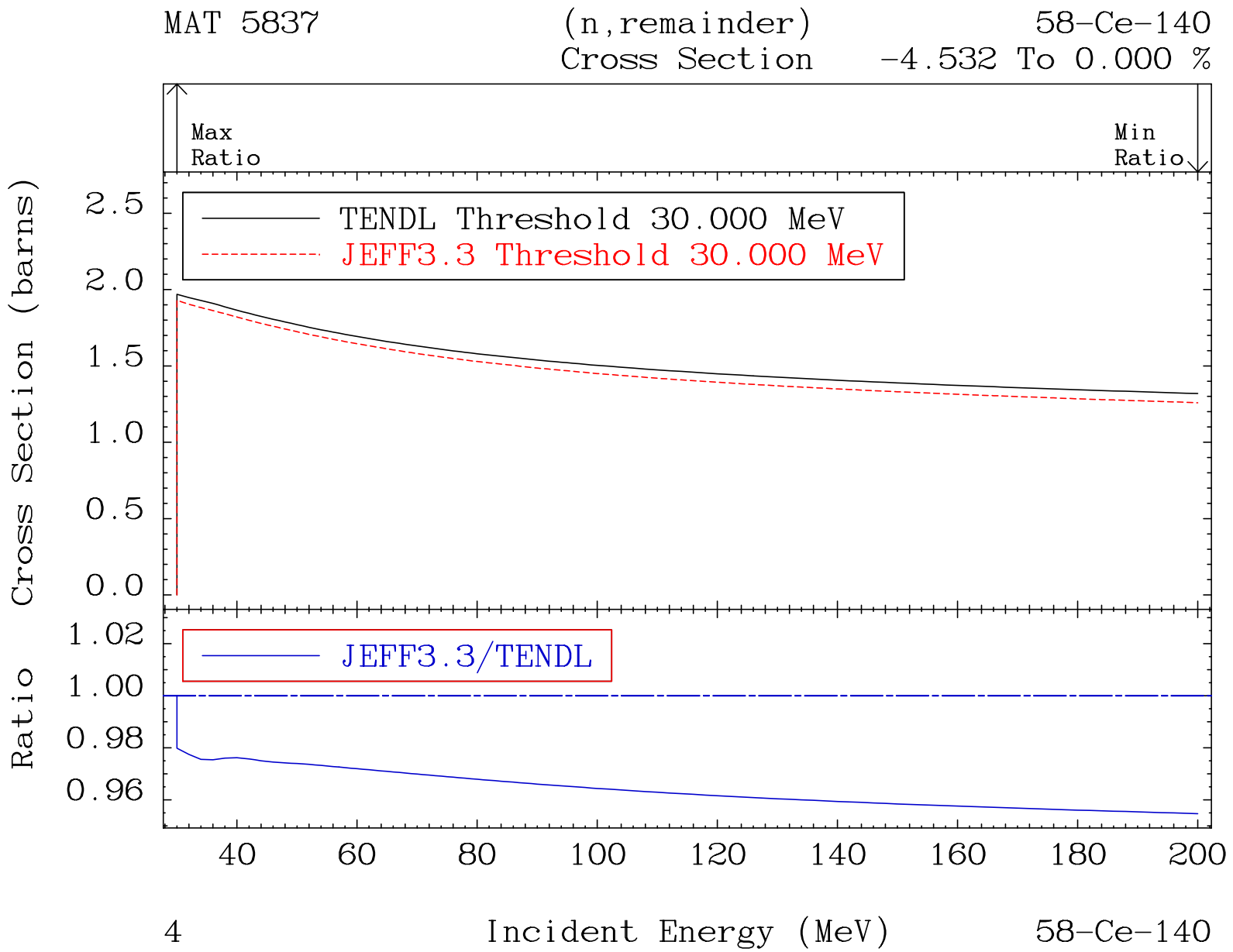
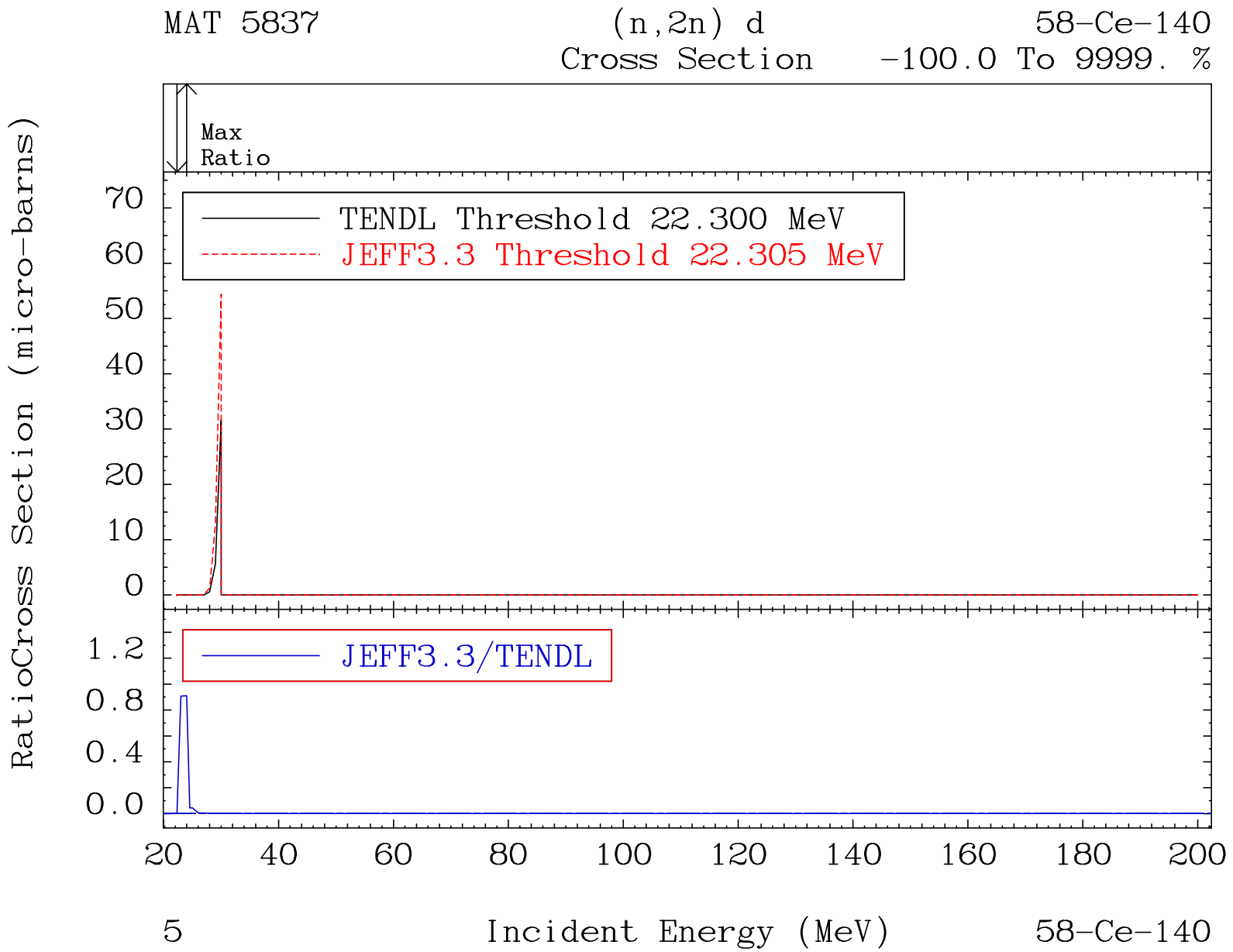
Press Mouse Button to Start

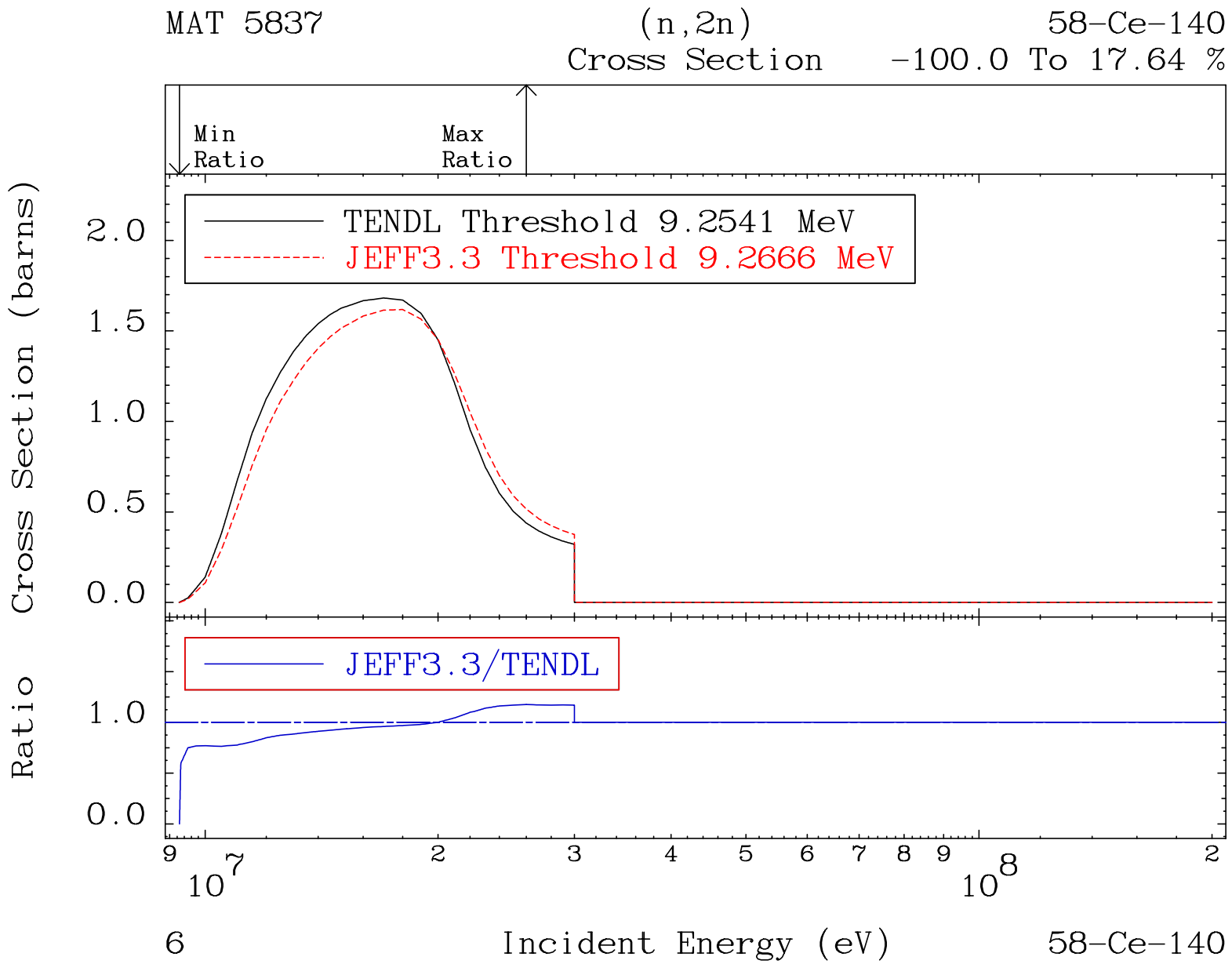

MAT 5837
Total
Cross Section
58-Ce-140
-99.98 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
58-Ce-140

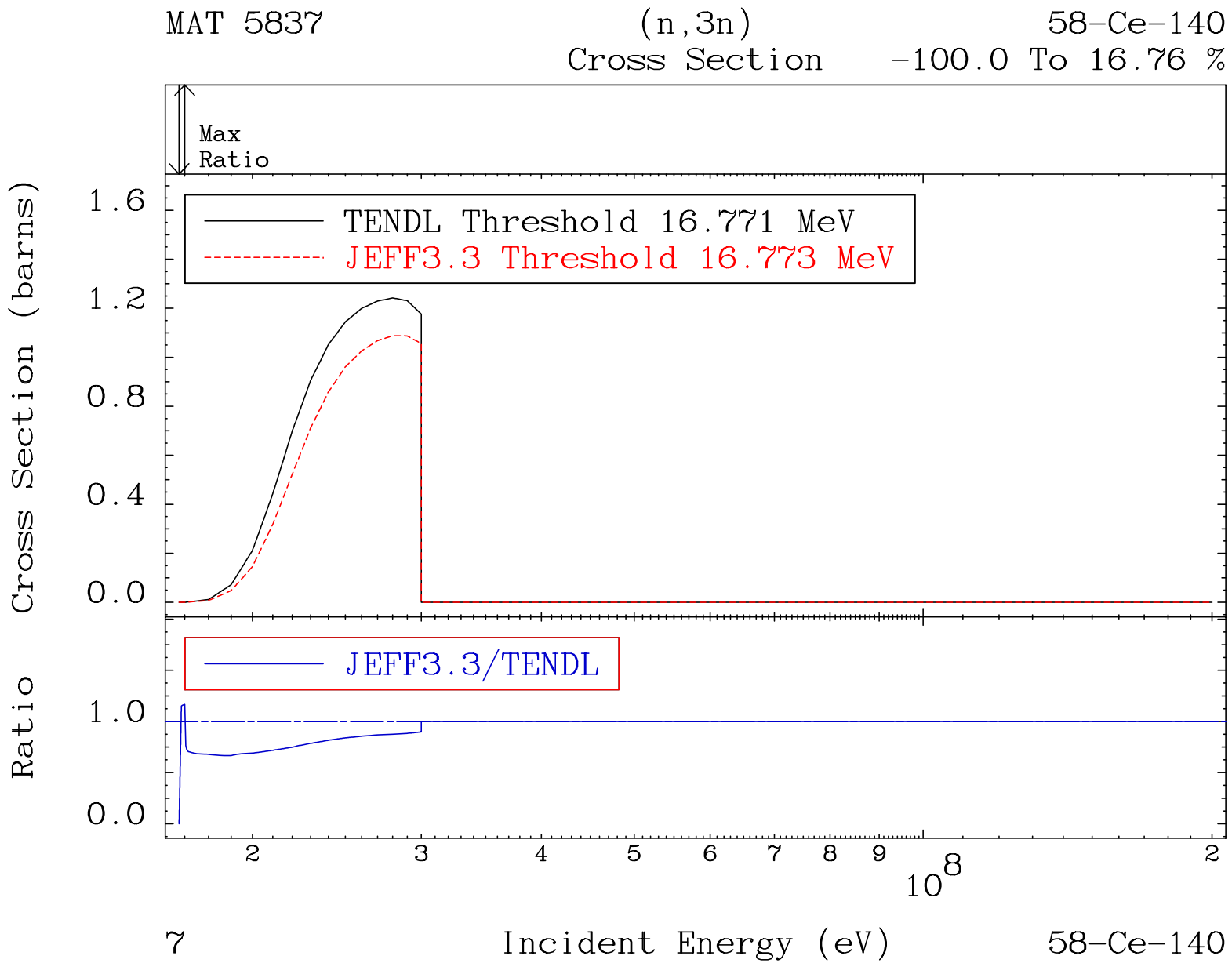

MAT 5837
Elastic
Cross Section
58-Ce-140
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
58-Ce-140

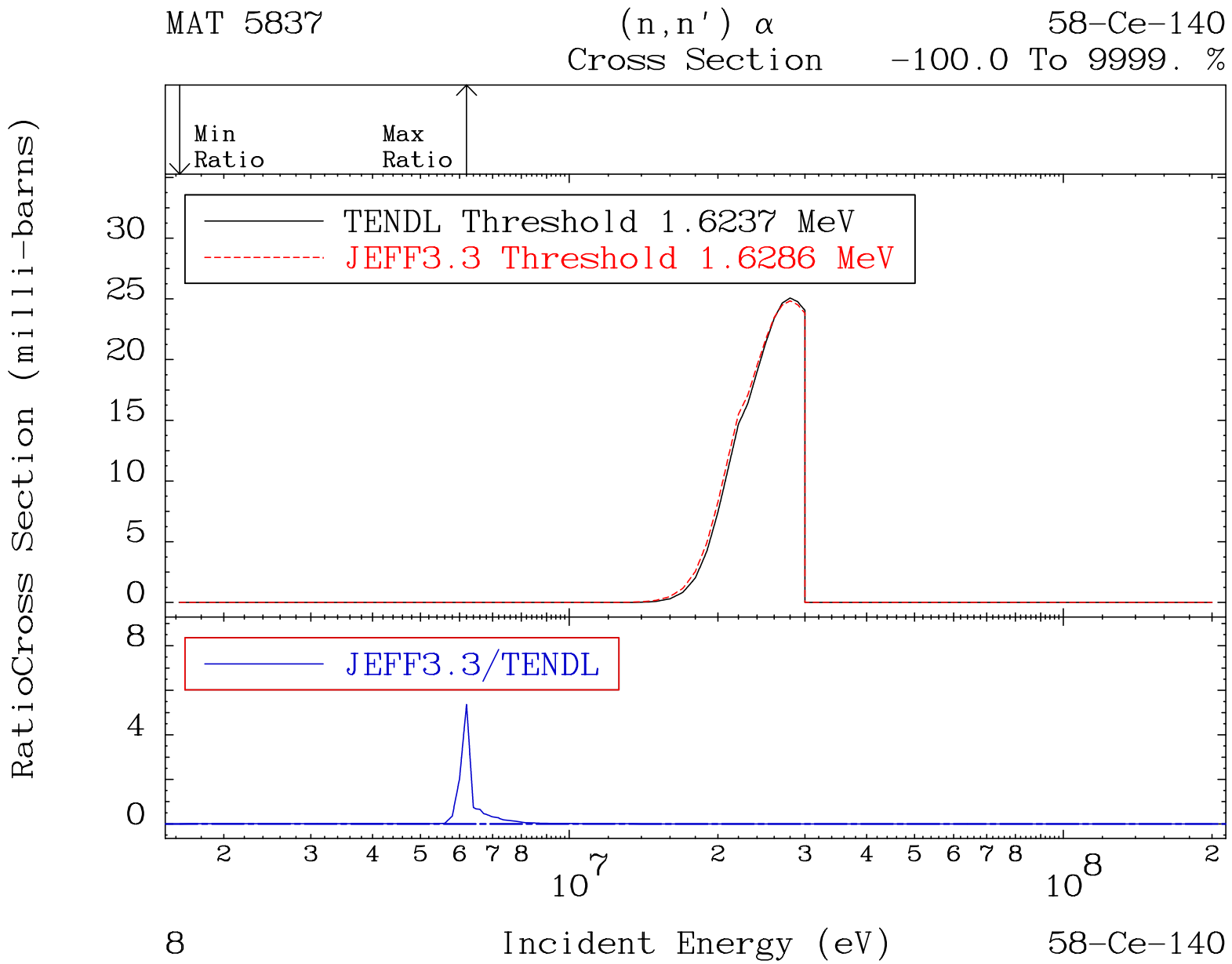

MAT 5837
Inelastic
Cross Section
58-Ce-140
-100.0 To 13.45 %
Min Ratio
Max Ratio
TENDL Threshold 1.6077 MeV
JEFF3.3 Threshold 1.6077 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
58-Ce-140

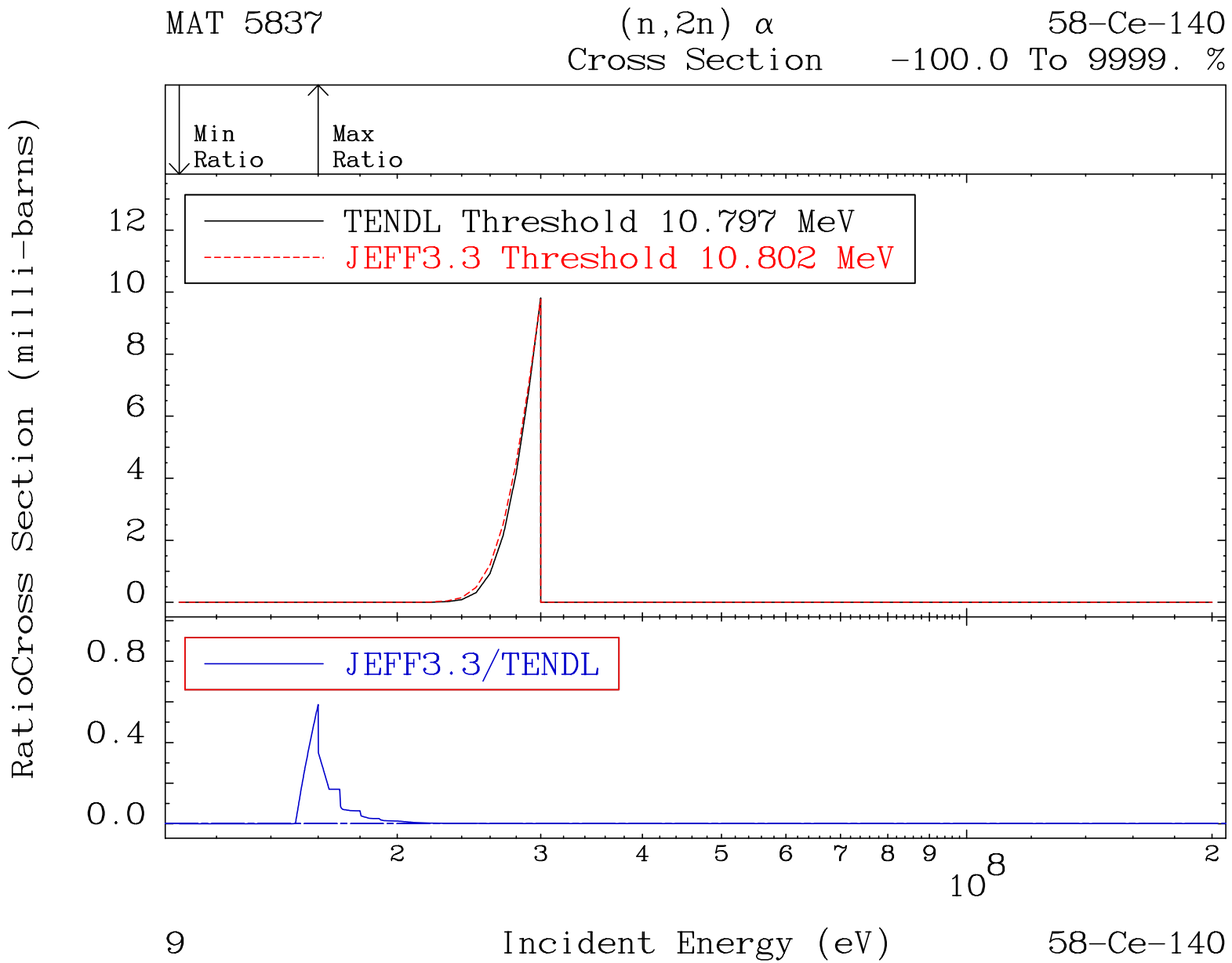

MAT 5837
(n,remainder)
Cross Section
58-Ce-140
-4.532 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 30.000 MeV
JEFF3.3 Threshold 30.000 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.02
1.00
0.98
0.96
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
4
58-Ce-140

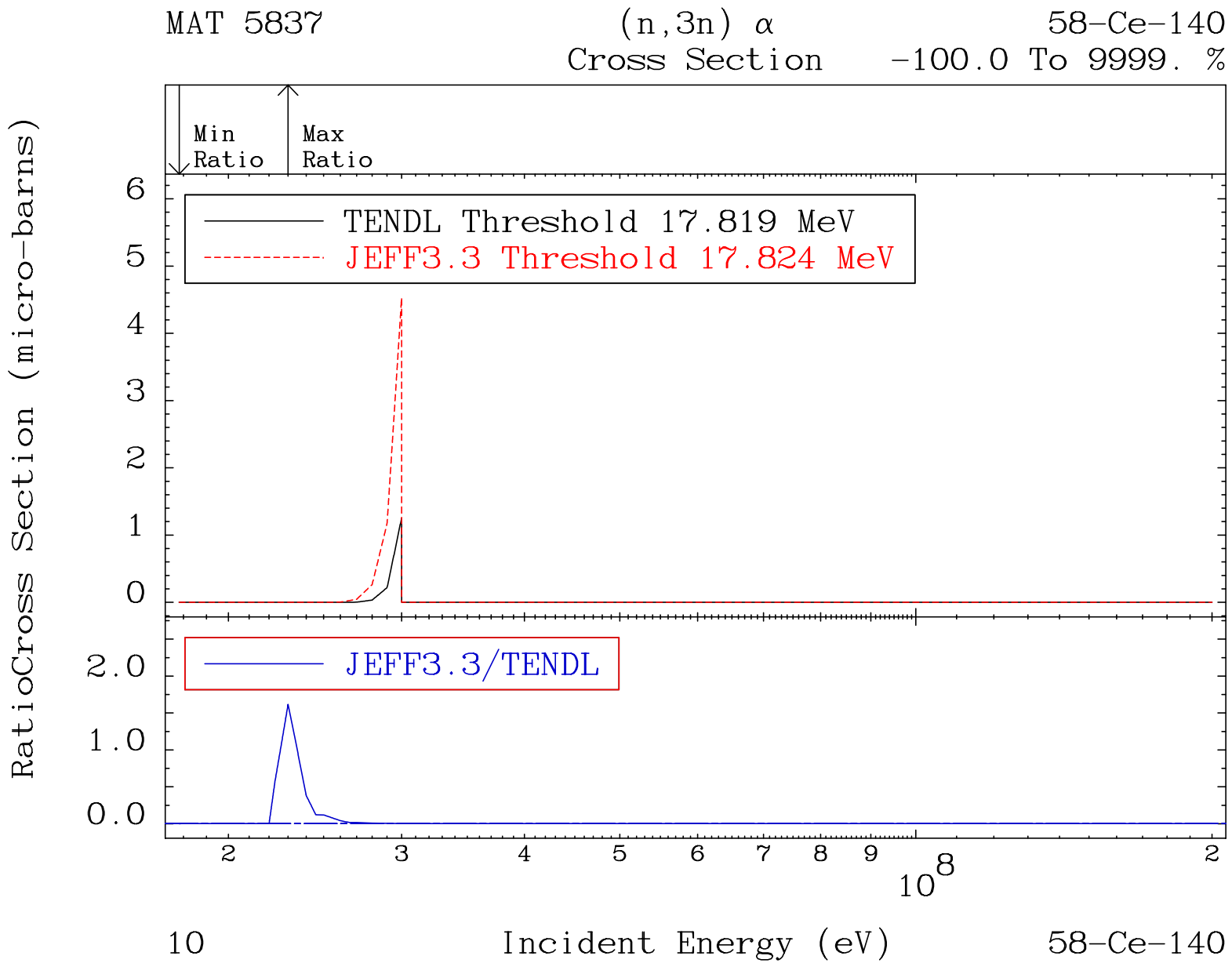

MAT 5837
(n,2n) d
Cross Section
58-Ce-140
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 22.300 MeV
JEFF3.3 Threshold 22.305 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
70
60
50
40
30
20
10
0
1.2
0.8
0.4
0.0
20
40
60
80
100
120
140
160
180
200
5
Incident Energy (MeV)
58-Ce-140

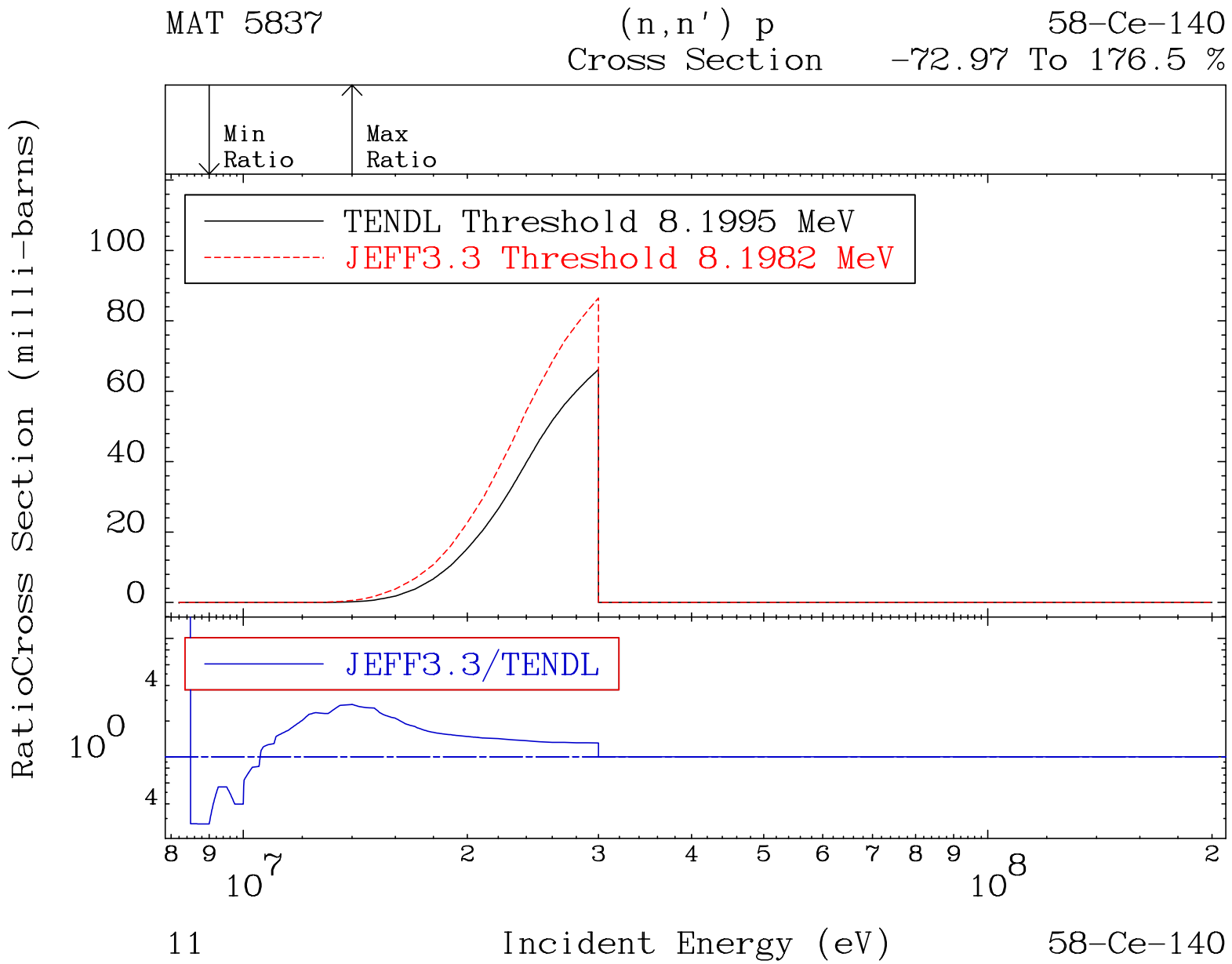

MAT 5837
(n,2n)
Cross Section
58-Ce-140
-100.0 To 17.64 %
Min Ratio
Max Ratio
TENDL Threshold 9.2541 MeV
JEFF3.3 Threshold 9.2666 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
58-Ce-140

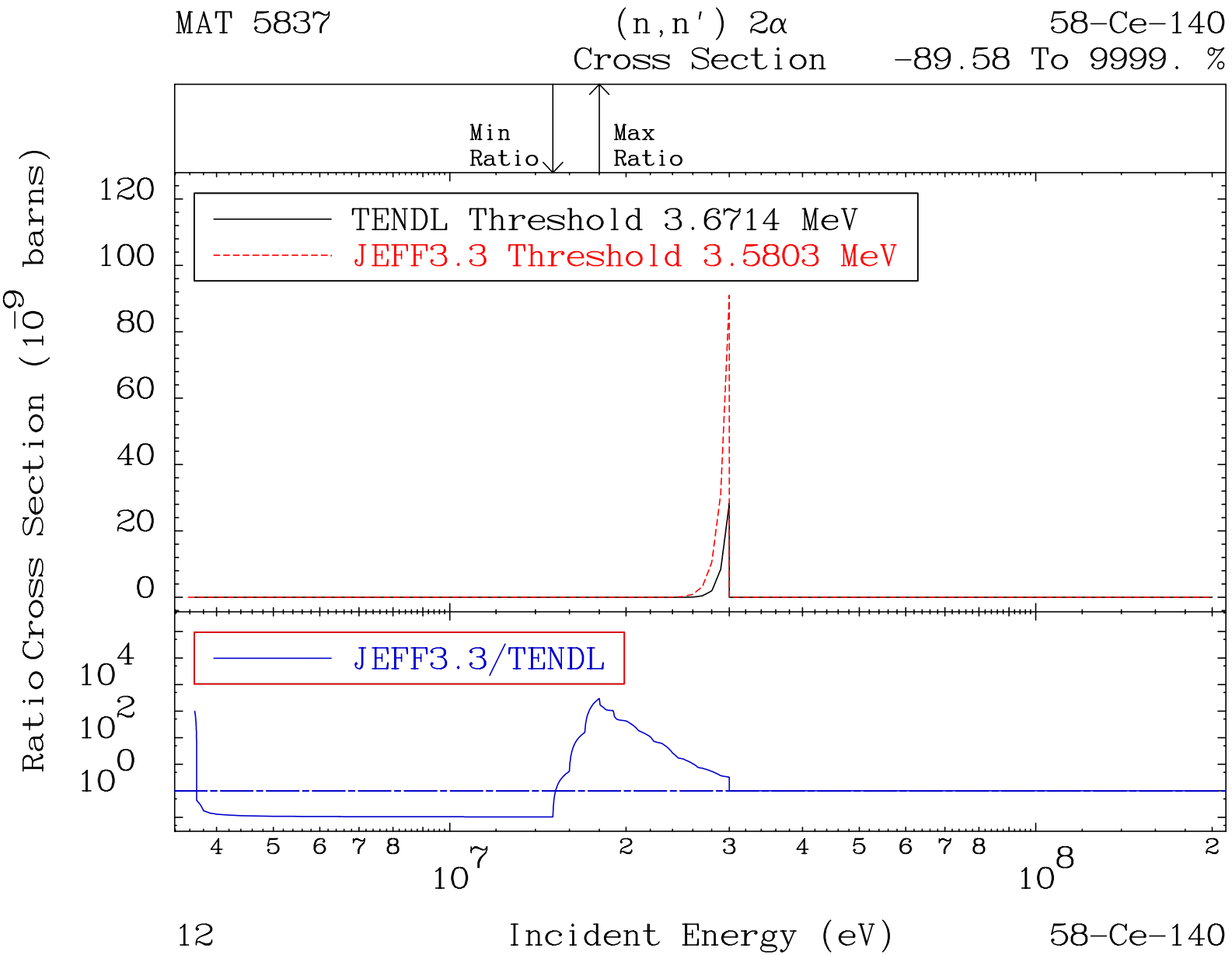

MAT 5837
(n,3n)
Cross Section
58-Ce-140
-100.0 To 16.76 %
Max
Ratio
TENDL Threshold 16.771 MeV
JEFF3.3 Threshold 16.773 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
58-Ce-140

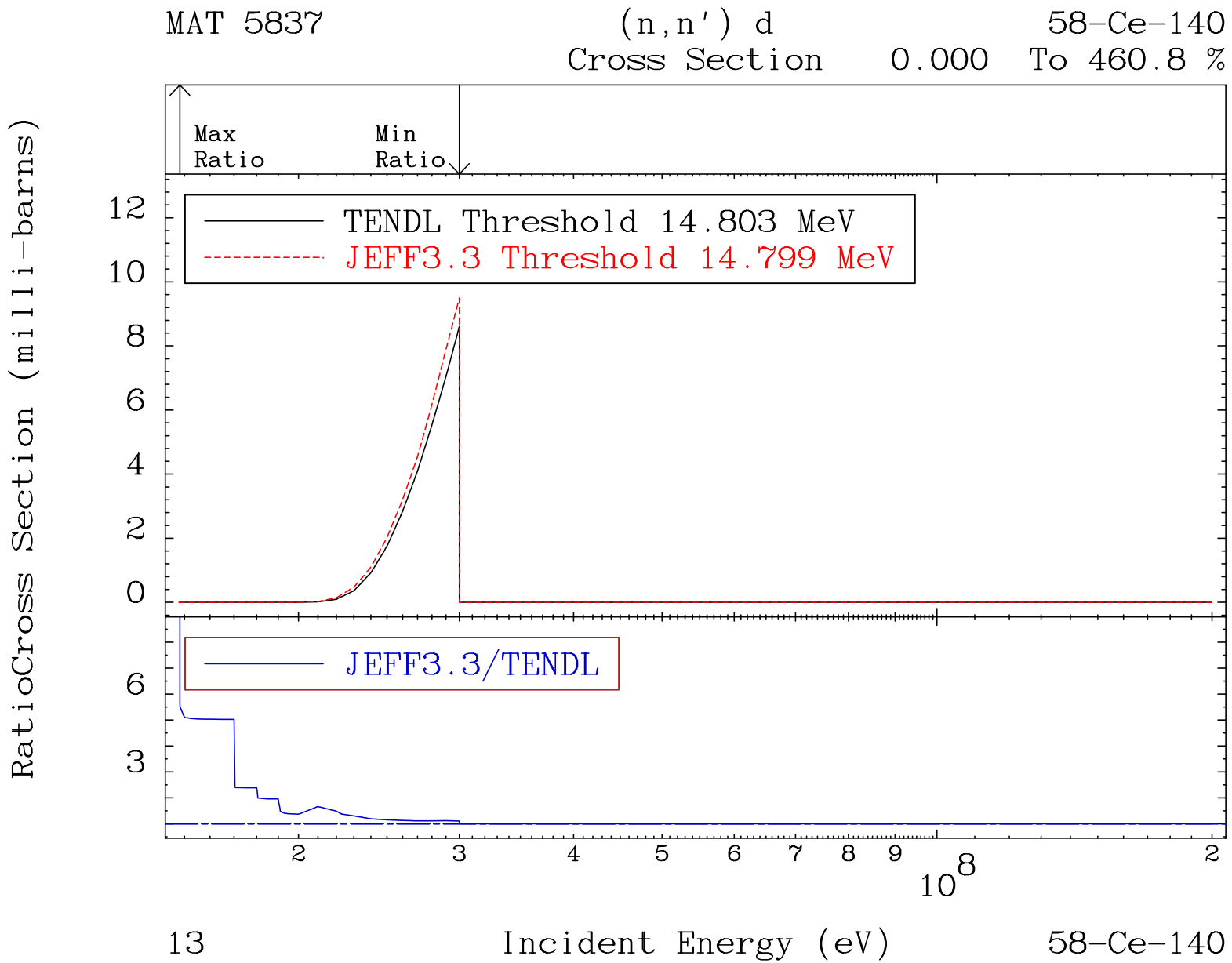

MAT 5837
(n,n') α
Cross Section
58-Ce-140
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.6237 MeV
JEFF3.3 Threshold 1.6286 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
58-Ce-140

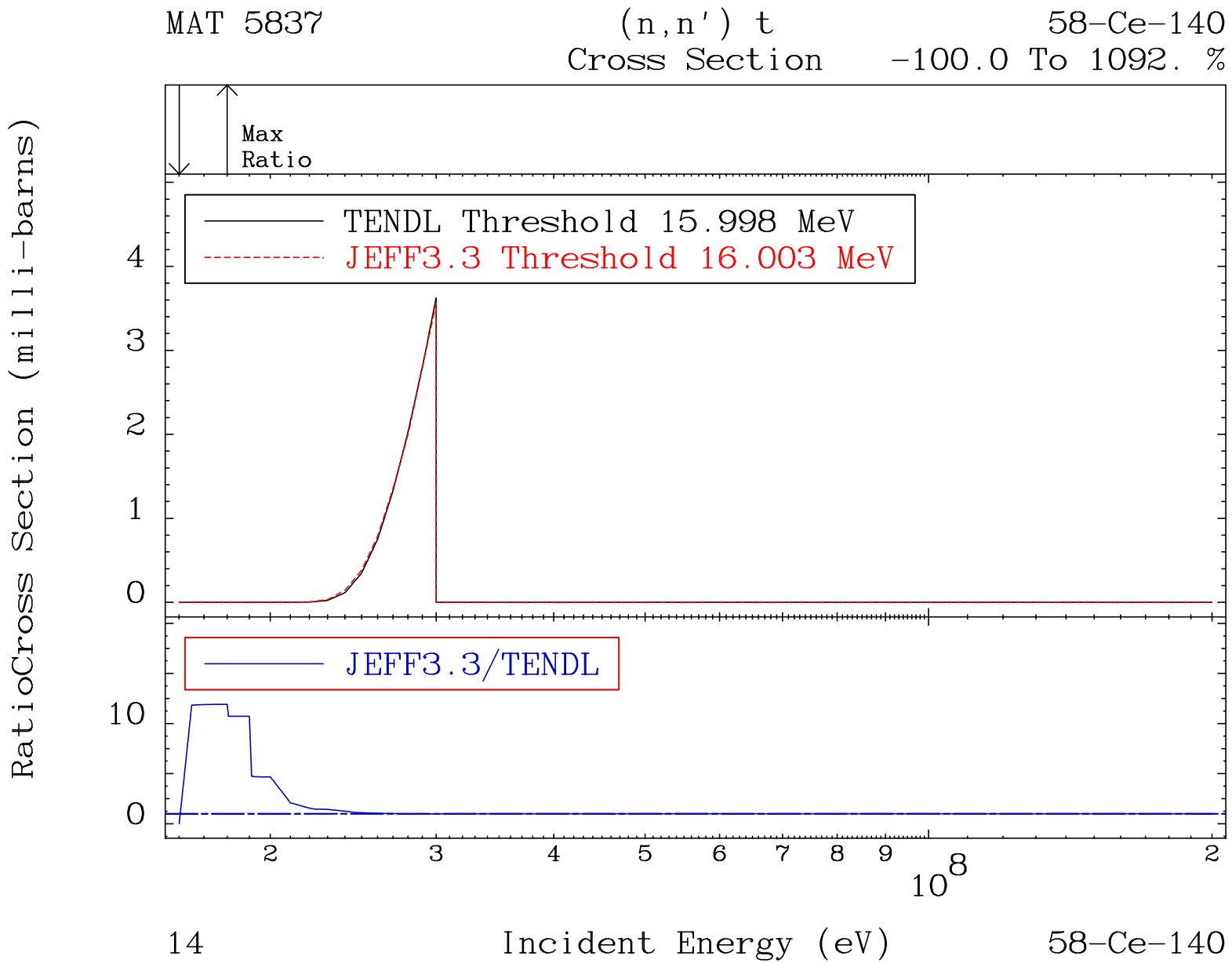

MAT 5837
(n,2n) α
58-Ce-140
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.797 MeV
JEFF3.3 Threshold 10.802 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
58-Ce-140

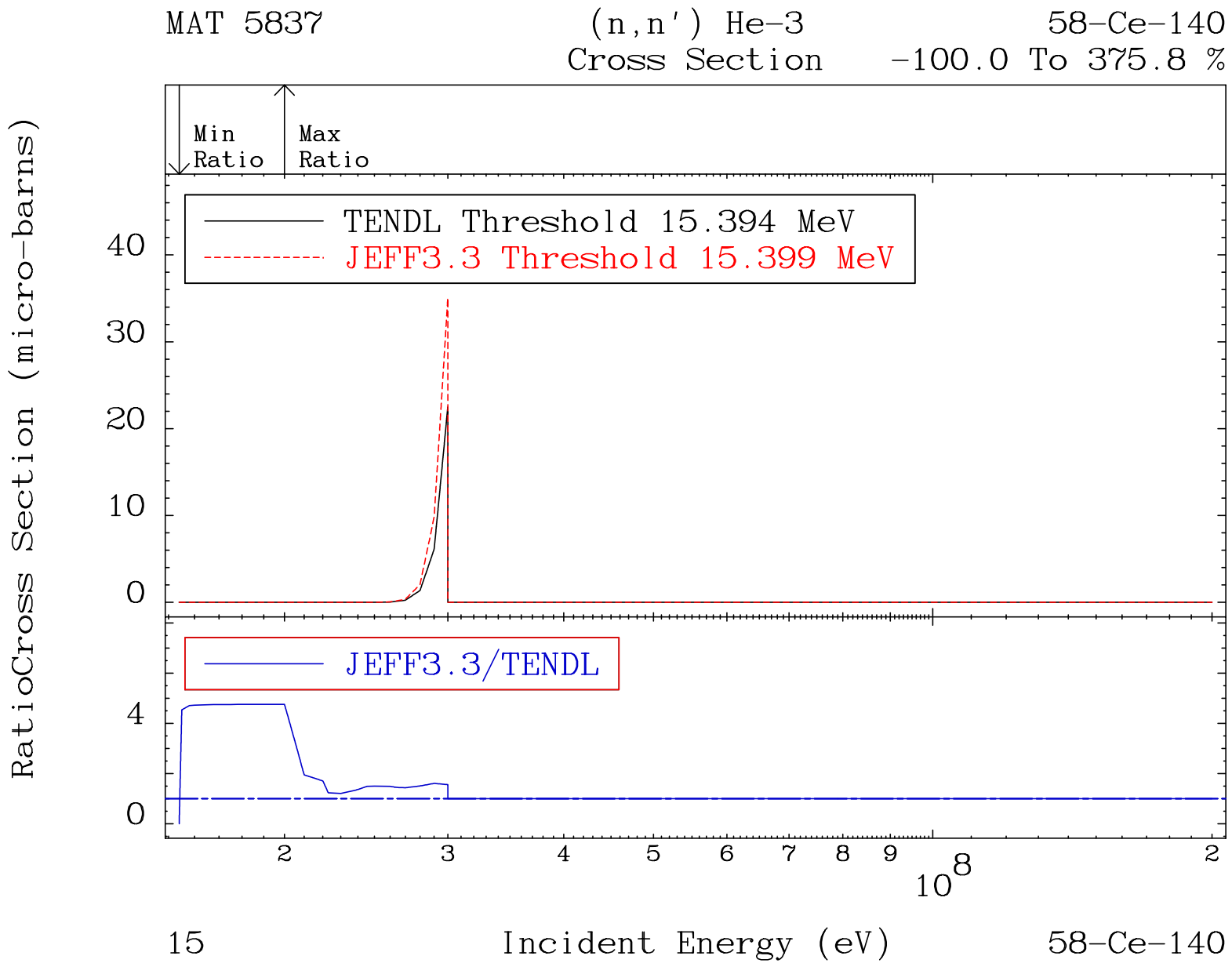

MAT 5837
(n,3n) α
58-Ce-140
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 17.819 MeV
JEFF3.3 Threshold 17.824 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
10
58-Ce-140

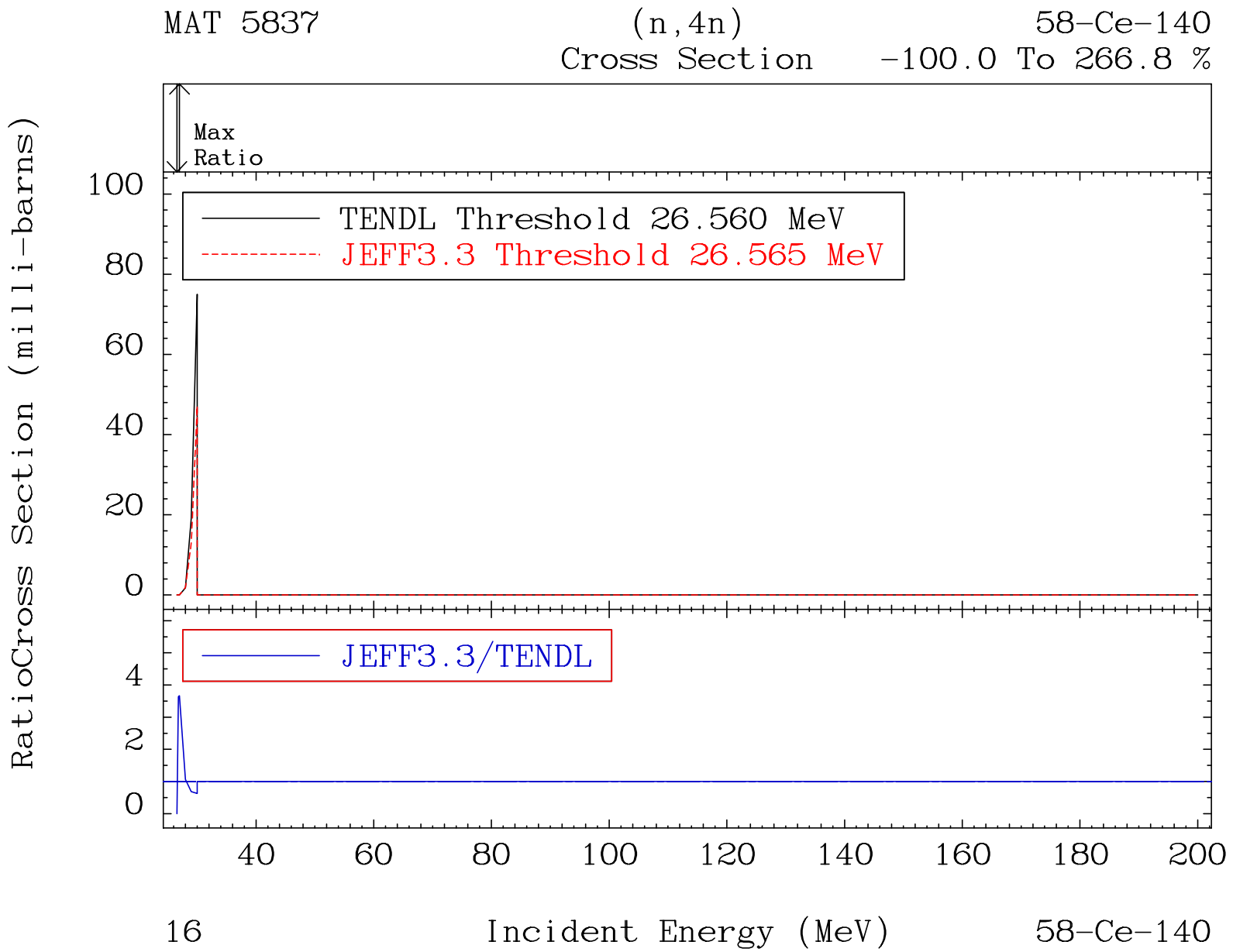

MAT 5837
(n,n') p
Cross Section
58-Ce-140
-72.97 To 176.5 %
Min Ratio
Max Ratio
TENDL Threshold 8.1995 MeV
JEFF3.3 Threshold 8.1982 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^0
4
4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
58-Ce-140

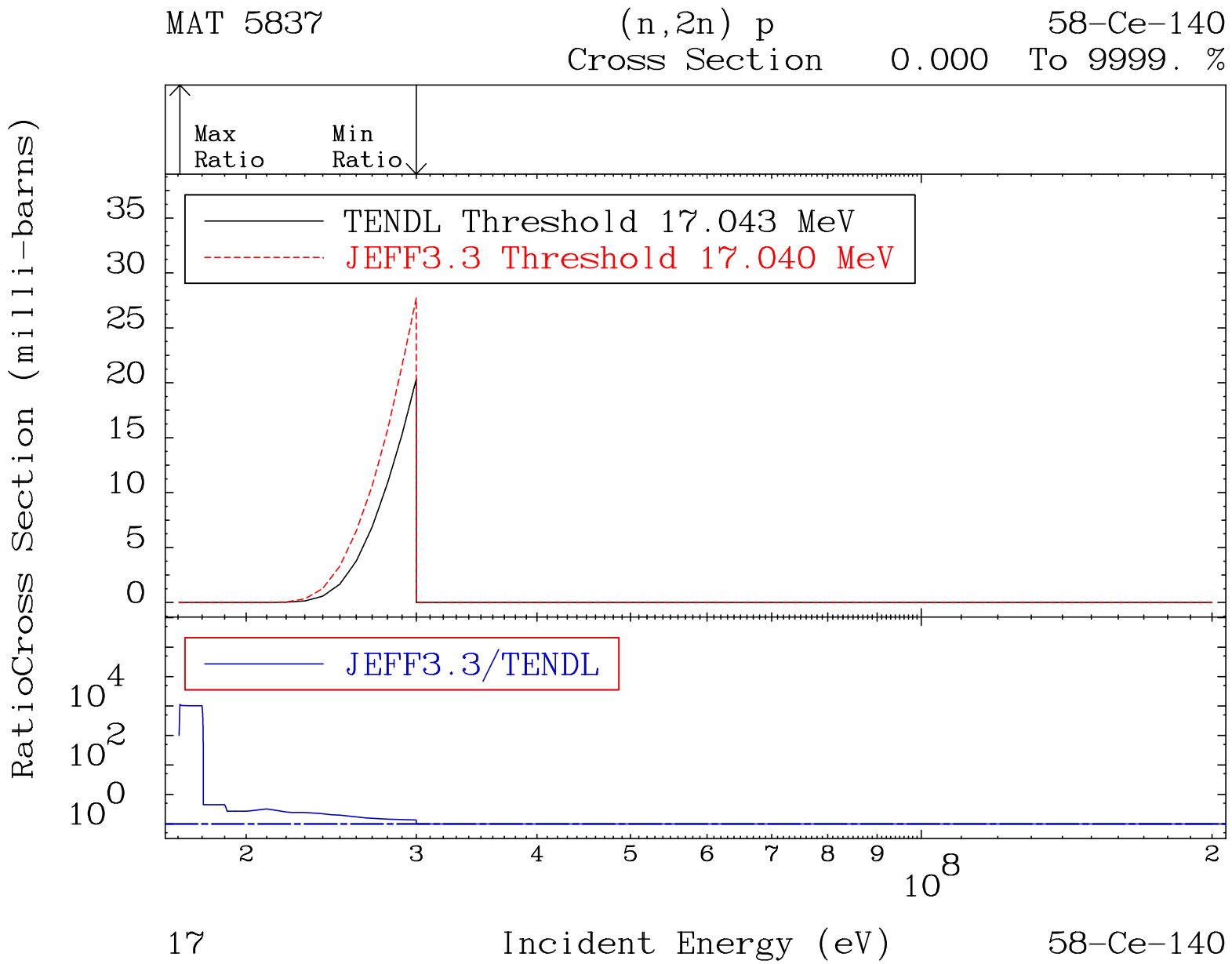

MAT 5837
(n,n') 2α
58-Ce-140
Cross Section
-89.58 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.6714 MeV
JEFF3.3 Threshold 3.5803 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
120
100
80
60
40
20
0
10^4
10^2
10^0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
12
58-Ce-140

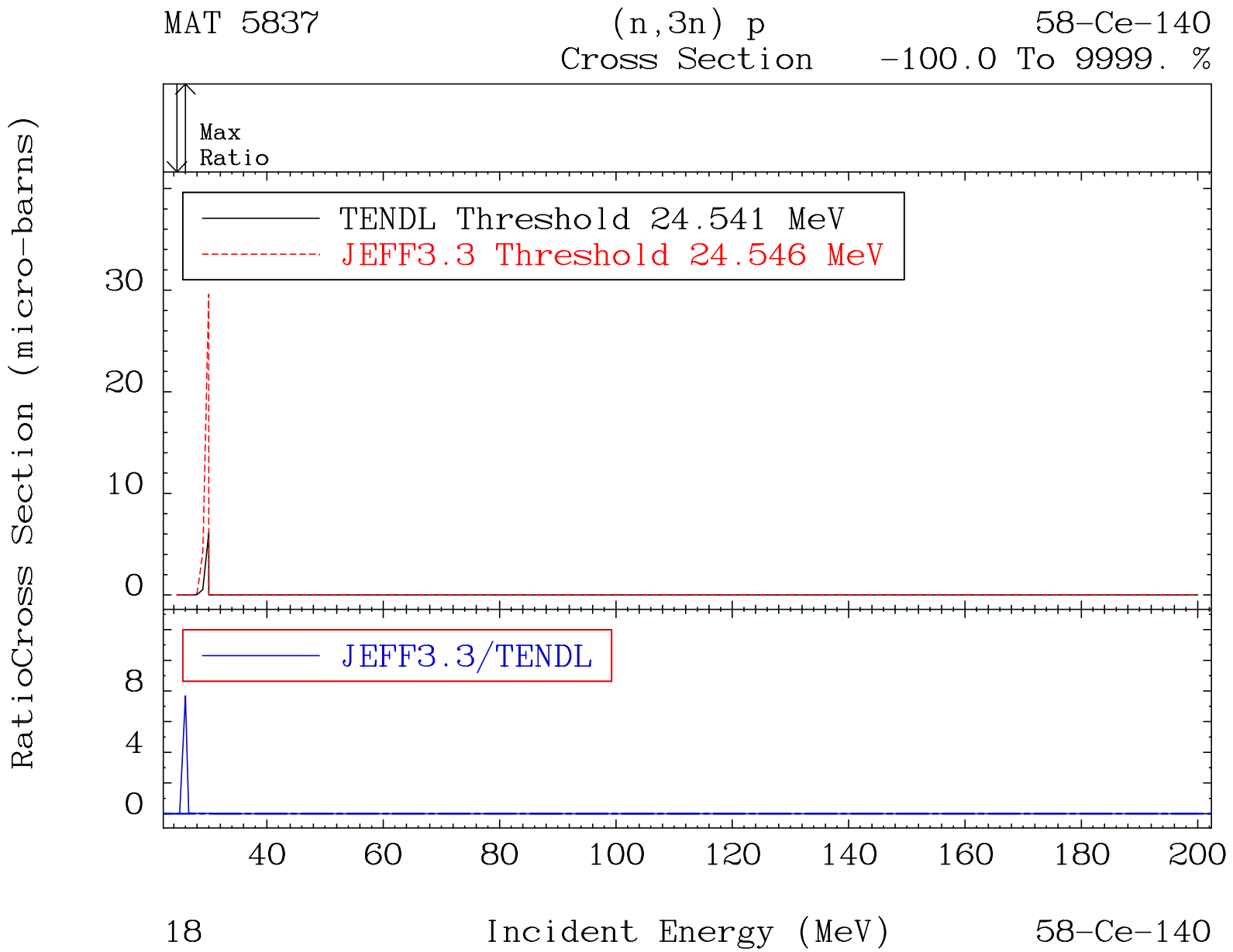

MAT 5837
(n,n') d
Cross Section
58-Ce-140
0.000 To 460.8 %
Max Ratio
Min Ratio
TENDL Threshold 14.803 MeV
JEFF3.3 Threshold 14.799 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
6
3
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
58-Ce-140

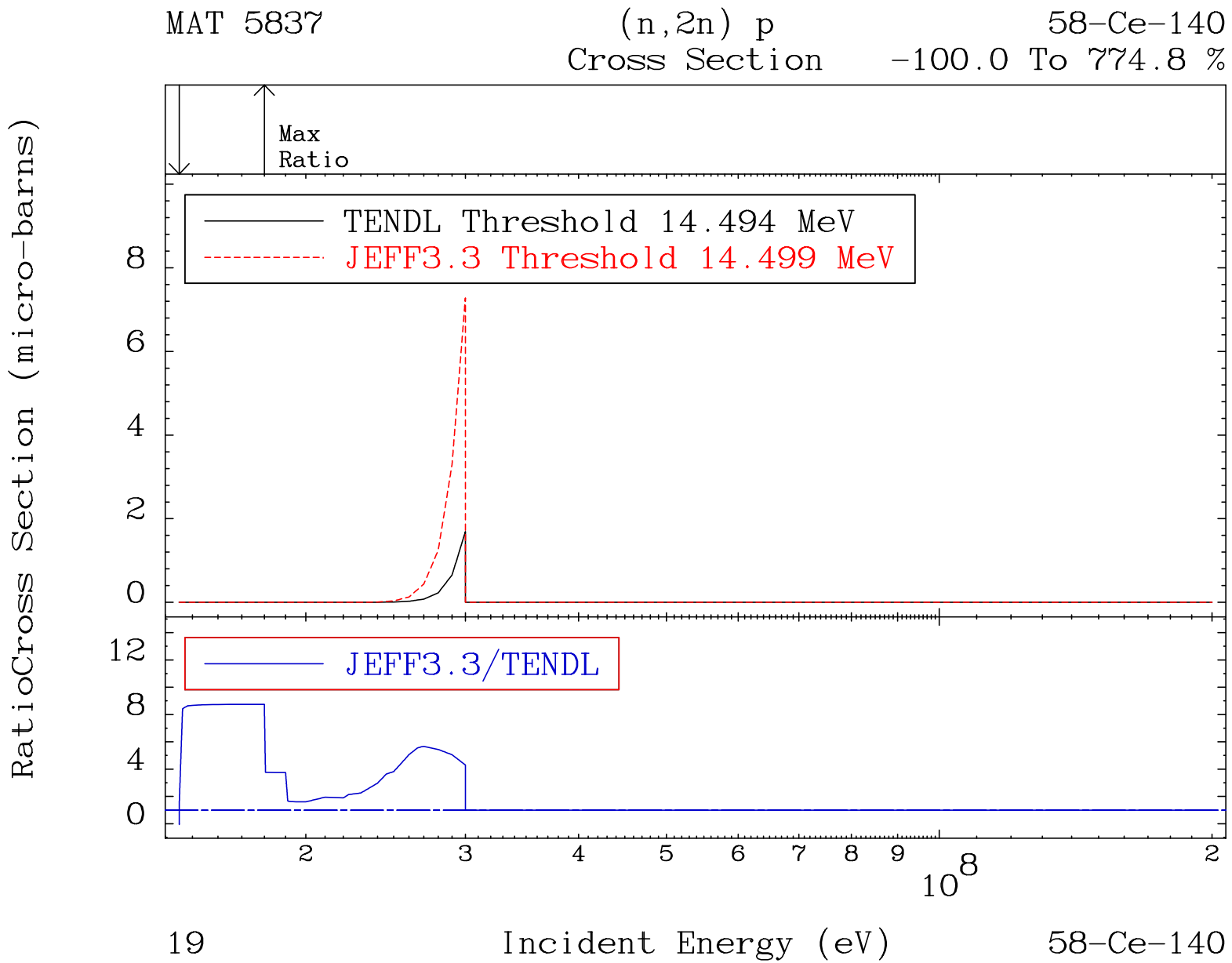

MAT 5837
(n,n') t
Cross Section
58-Ce-140
-100.0 To 1092. %
Max
Ratio
TENDL Threshold 15.998 MeV
JEFF3.3 Threshold 16.003 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
10
0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
58-Ce-140

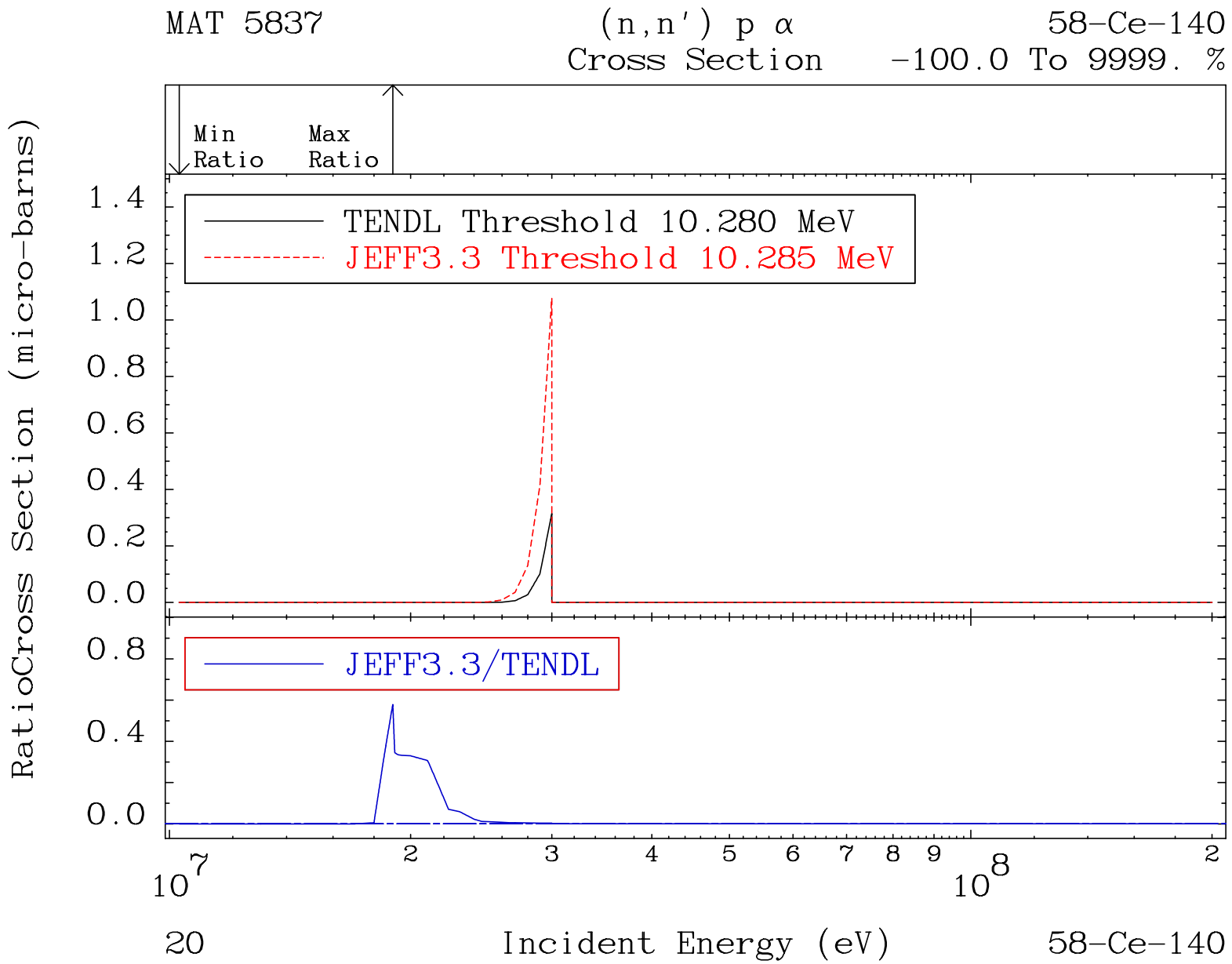

MAT 5837
(n,n') He-3
Cross Section
58-Ce-140
-100.0 To 375.8 %
Min Ratio
Max Ratio
TENDL Threshold 15.394 MeV
JEFF3.3 Threshold 15.399 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
40
30
20
10
0
4
0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
58-Ce-140

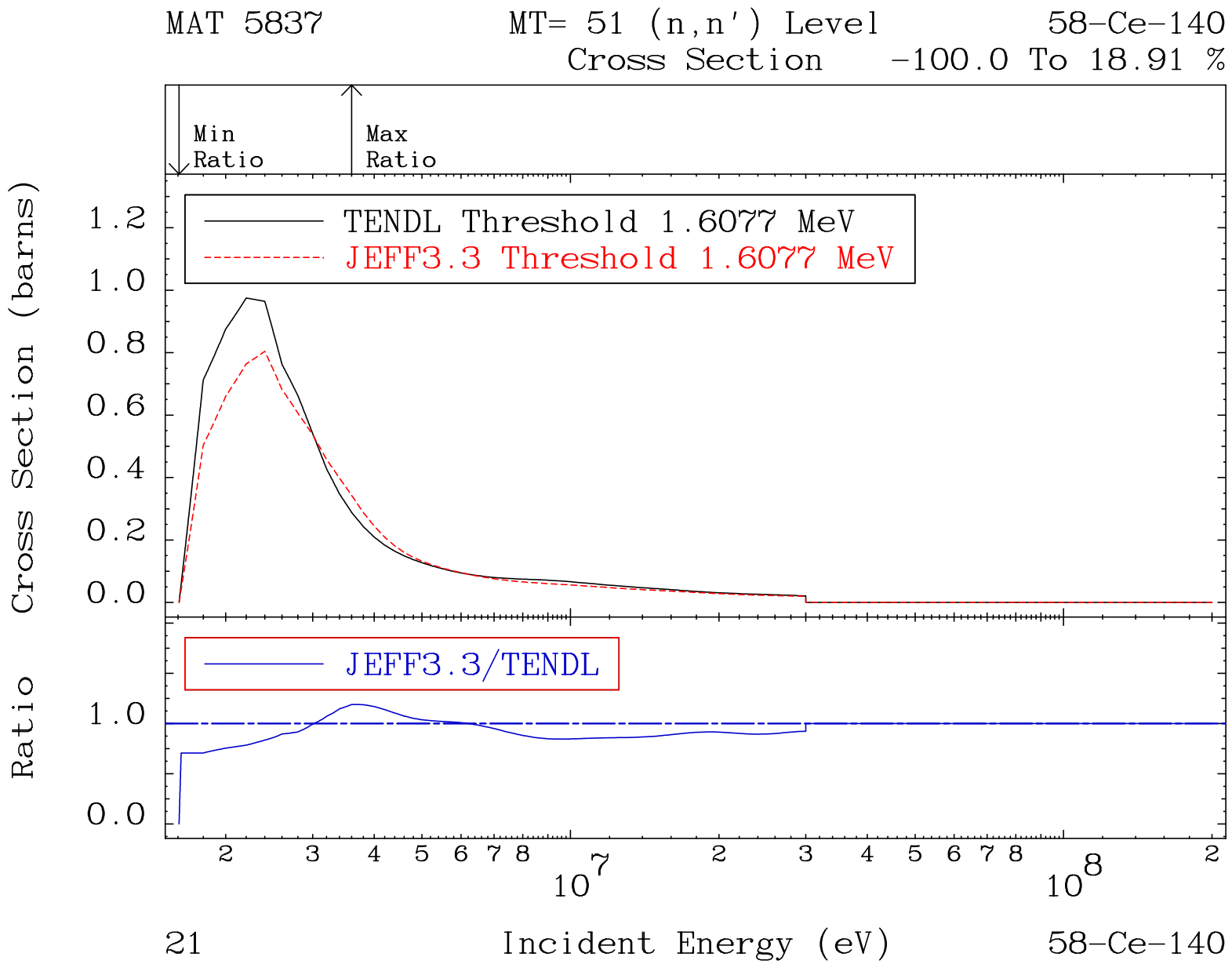

MAT 5837
(n,4n)
Cross Section
58-Ce-140
-100.0 To 266.8 %
Max
Ratio
TENDL Threshold 26.560 MeV
JEFF3.3 Threshold 26.565 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
4
2
0
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
58-Ce-140

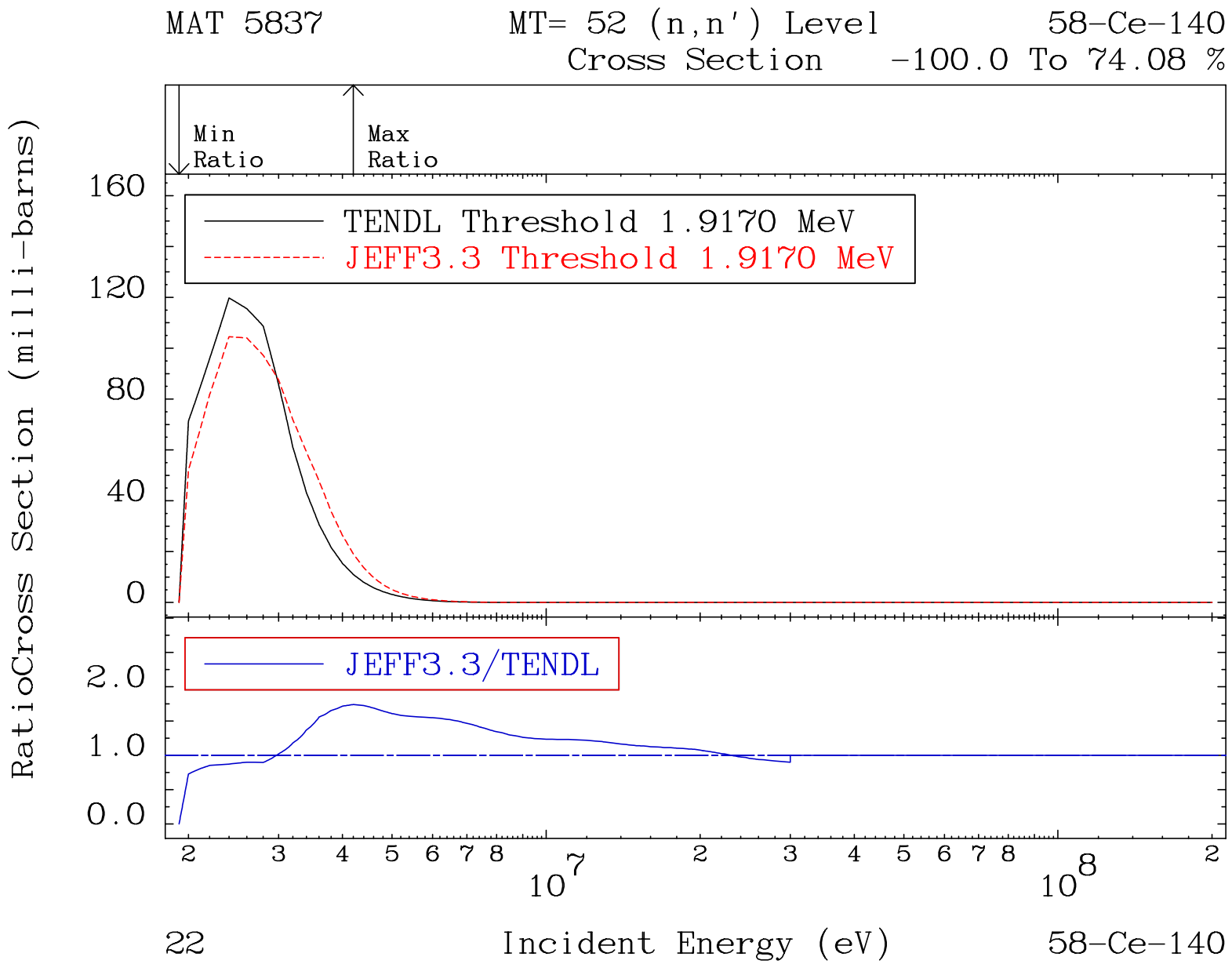

MAT 5837
(n,2n) p
58-Ce-140
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 17.043 MeV
JEFF3.3 Threshold 17.040 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
58-Ce-140

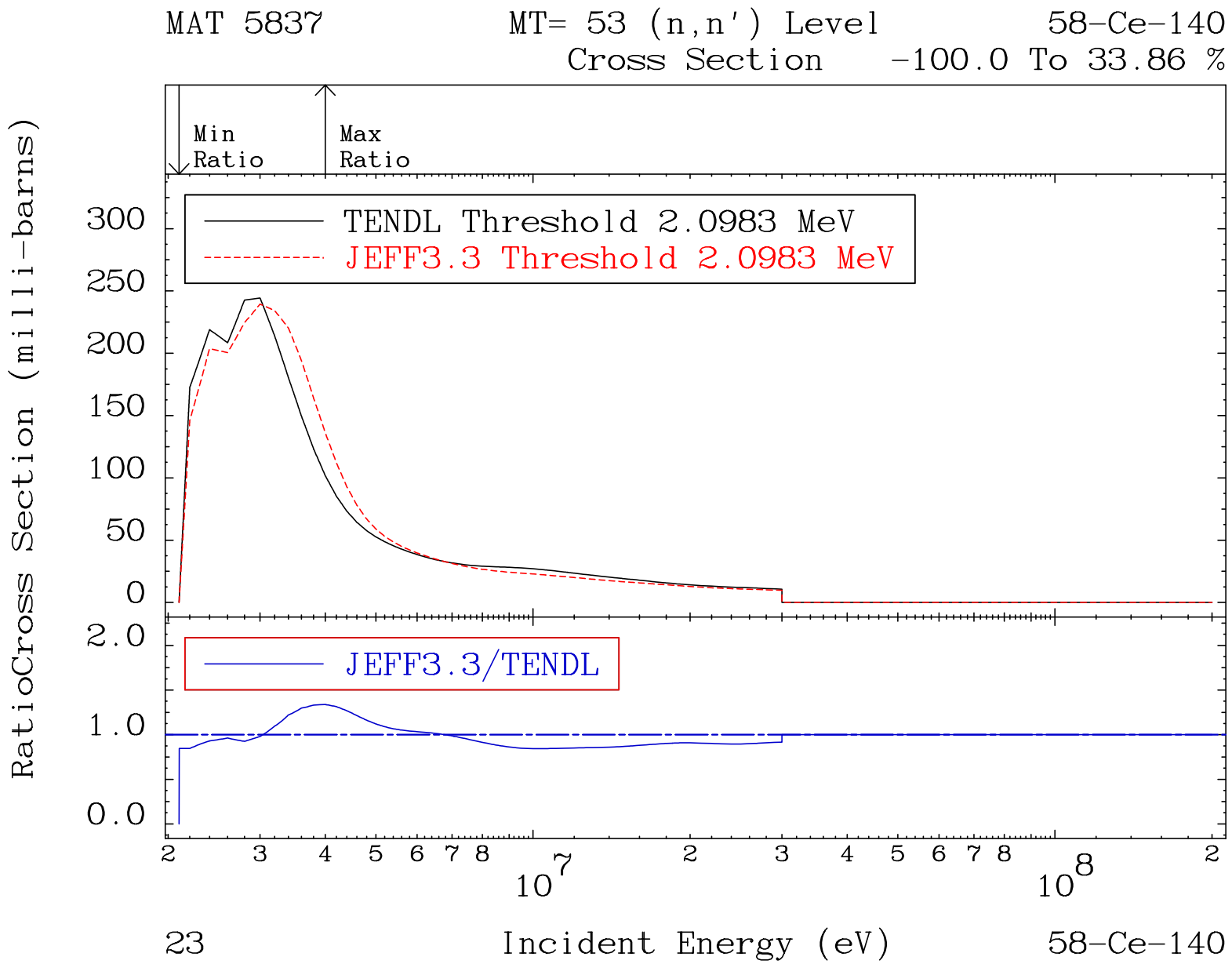

MAT 5837
(n,3n) p
58-Ce-140
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 24.541 MeV
JEFF3.3 Threshold 24.546 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
30
20
10
0
8
4
0
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
58-Ce-140

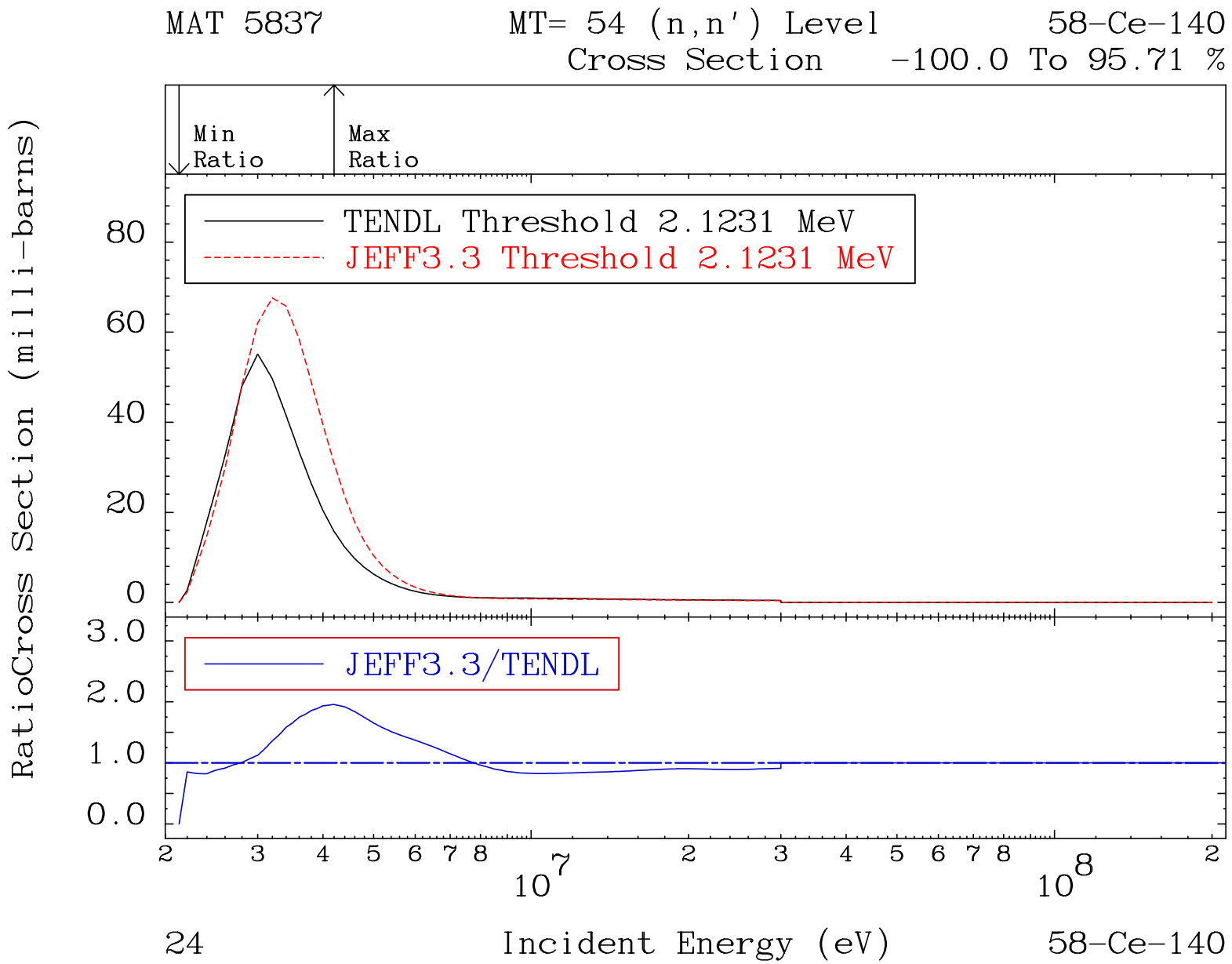

MAT 5837
(n,2n) p
Cross Section
58-Ce-140
-100.0 To 774.8 %
Max
Ratio
TENDL Threshold 14.494 MeV
JEFF3.3 Threshold 14.499 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
19
58-Ce-140

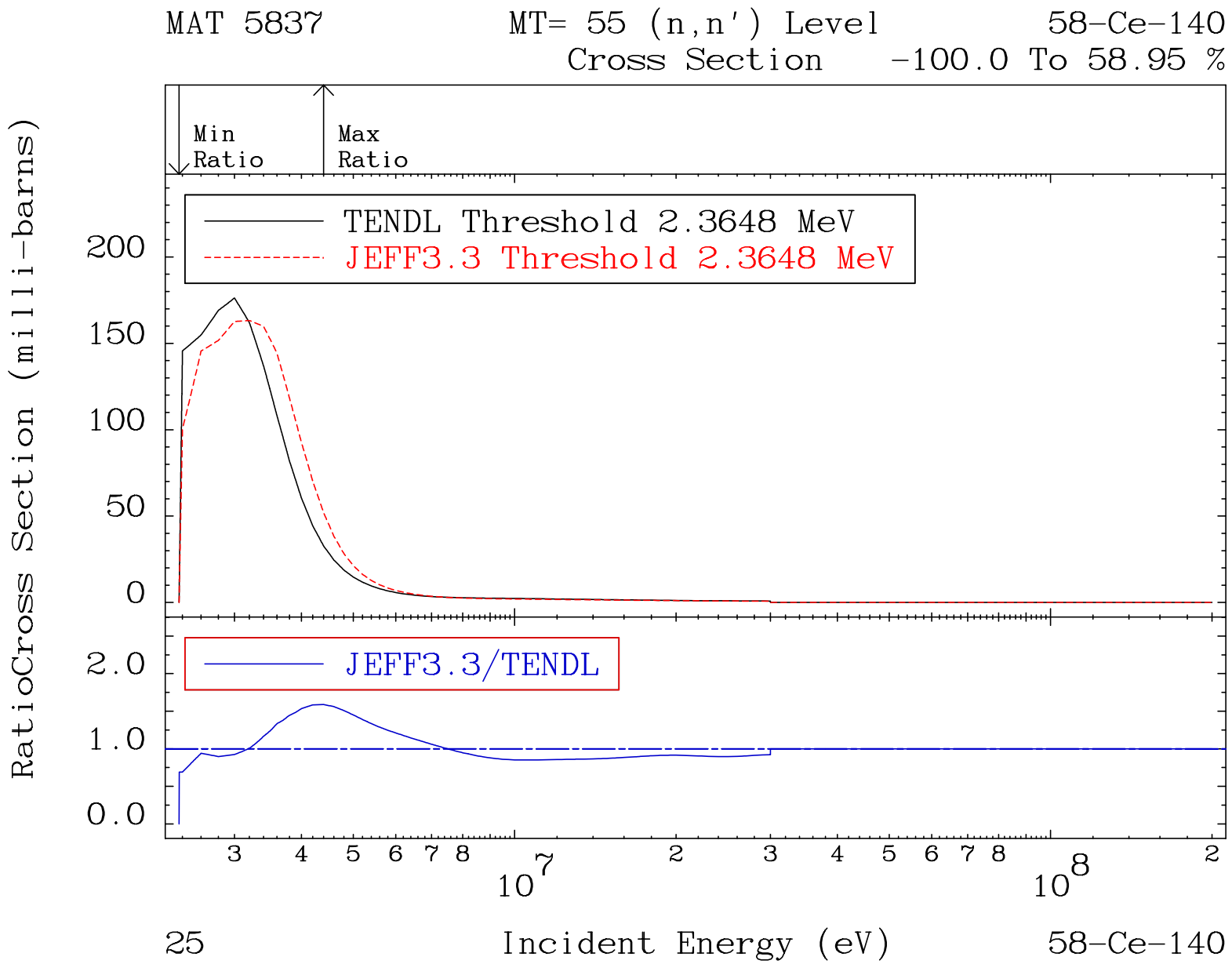

MAT 5837
(n,n') p α
58-Ce-140
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.280 MeV
JEFF3.3 Threshold 10.285 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.8
0.4
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
58-Ce-140

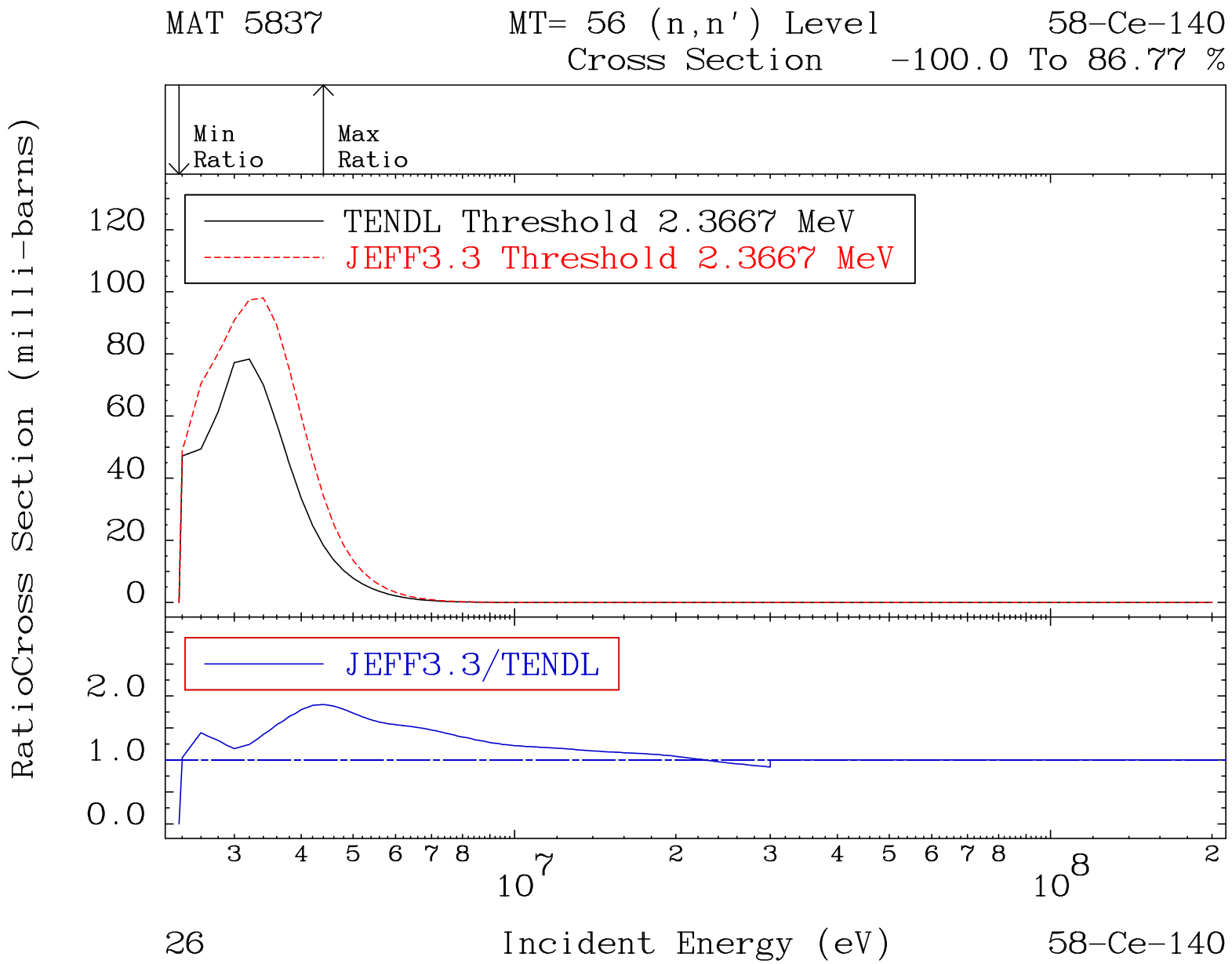

MAT 5837
MT= 51 (n,n') Level
58-Ce-140
Cross Section -100.0 To 18.91 %
Min Ratio
Max Ratio
TENDL Threshold 1.6077 MeV
JEFF3.3 Threshold 1.6077 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
21
58-Ce-140

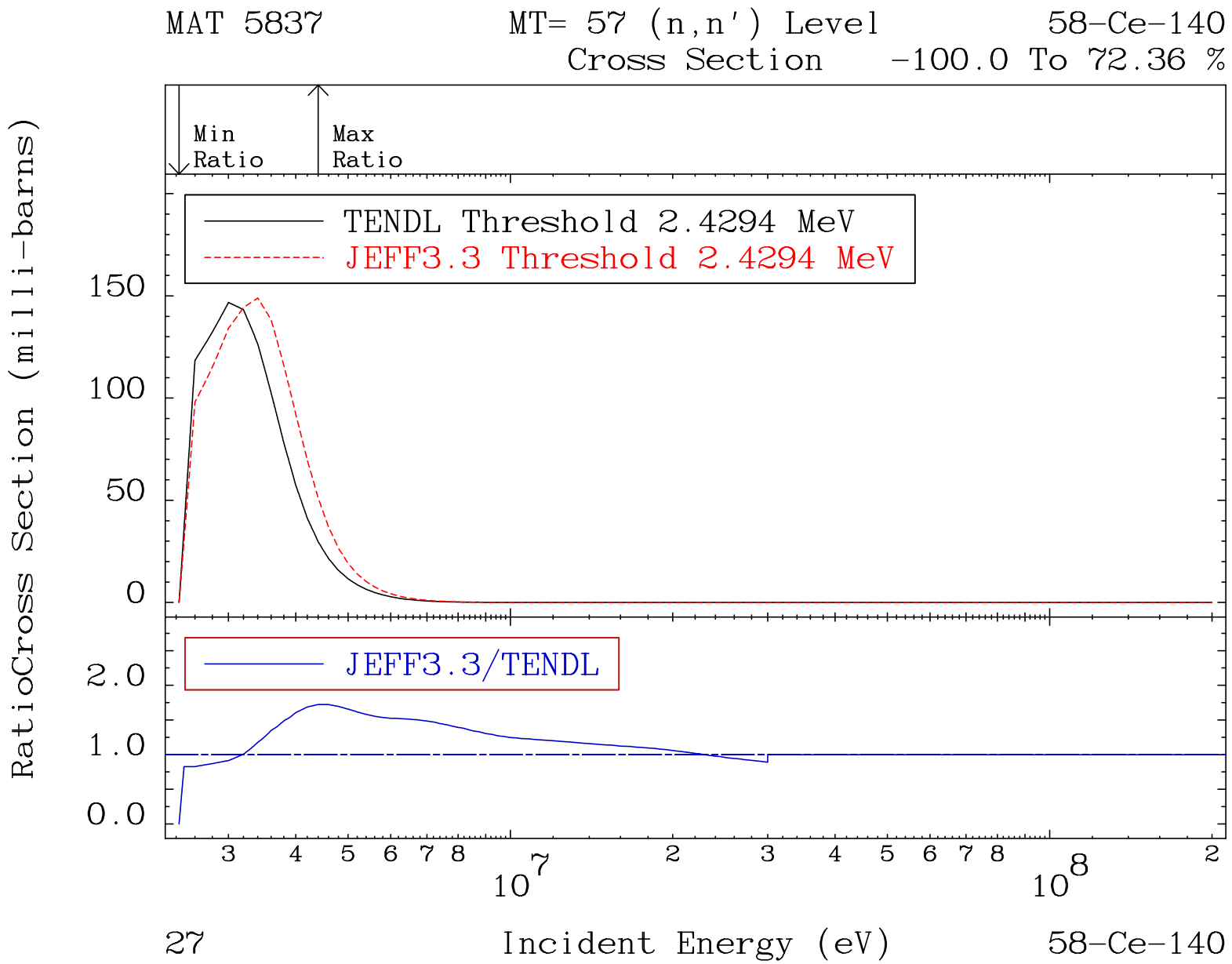

MAT 5837
MT= 52 (n,n') Level
58-Ce-140
Cross Section -100.0 To 74.08 %
Min Ratio
Max Ratio
TENDL Threshold 1.9170 MeV
JEFF3.3 Threshold 1.9170 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
58-Ce-140

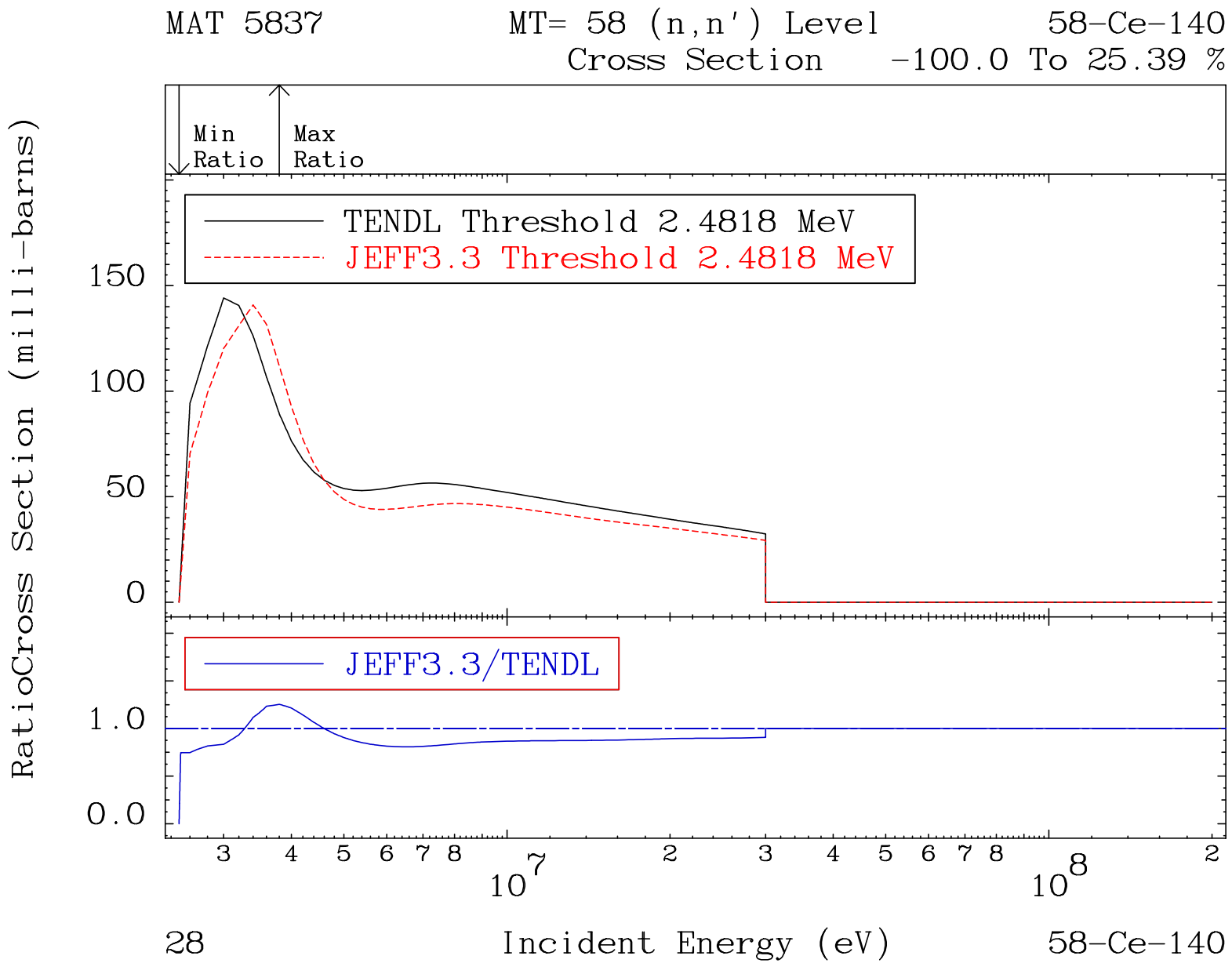

MAT 5837
MT= 53 (n,n') Level
58-Ce-140
Cross Section -100.0 To 33.86 %
Min Ratio
Max Ratio
TENDL Threshold 2.0983 MeV
JEFF3.3 Threshold 2.0983 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
58-Ce-140

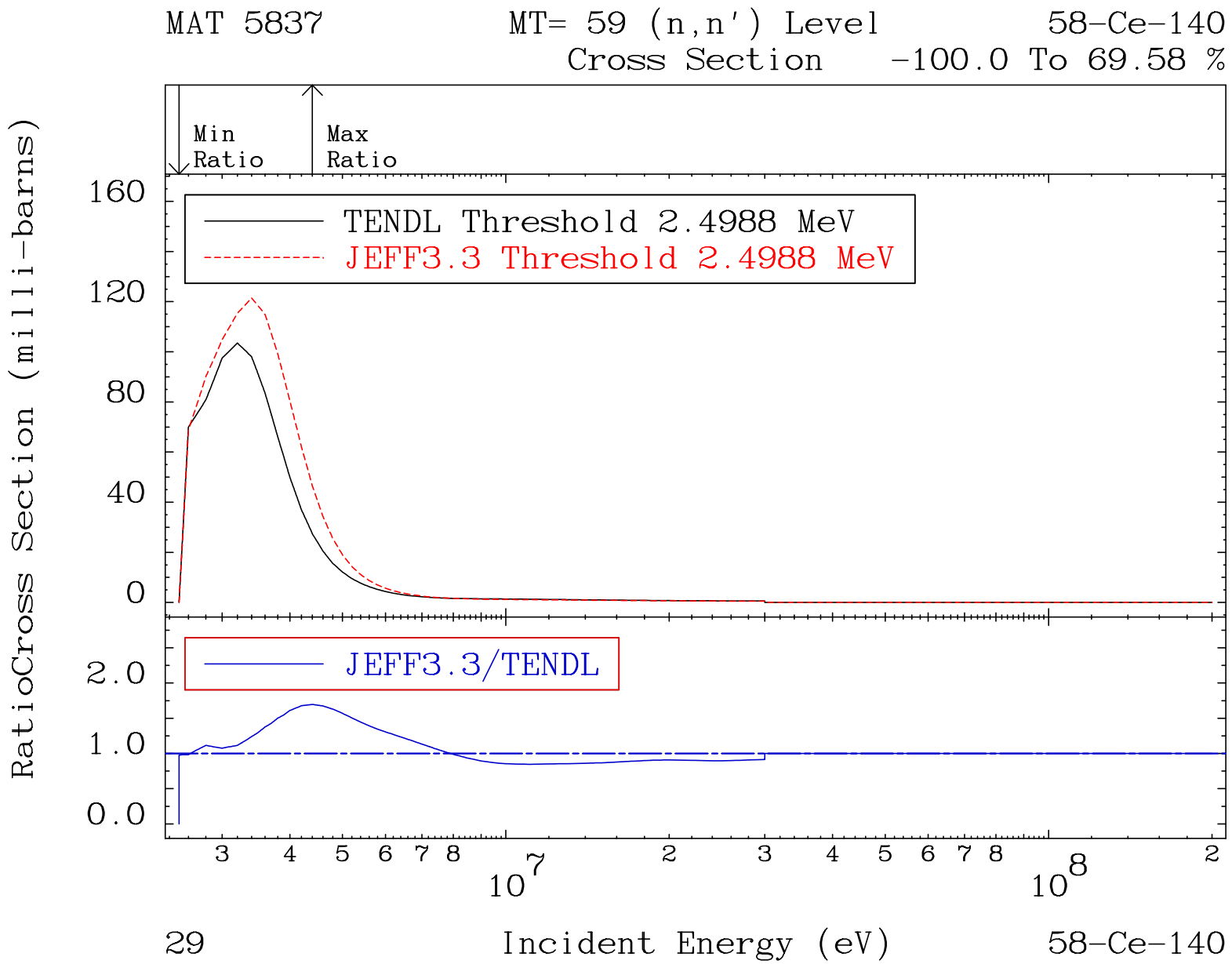

MAT 5837
MT= 54 (n,n') Level
58-Ce-140
Cross Section -100.0 To 95.71 %
Min Ratio
Max Ratio
TENDL Threshold 2.1231 MeV
JEFF3.3 Threshold 2.1231 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
58-Ce-140

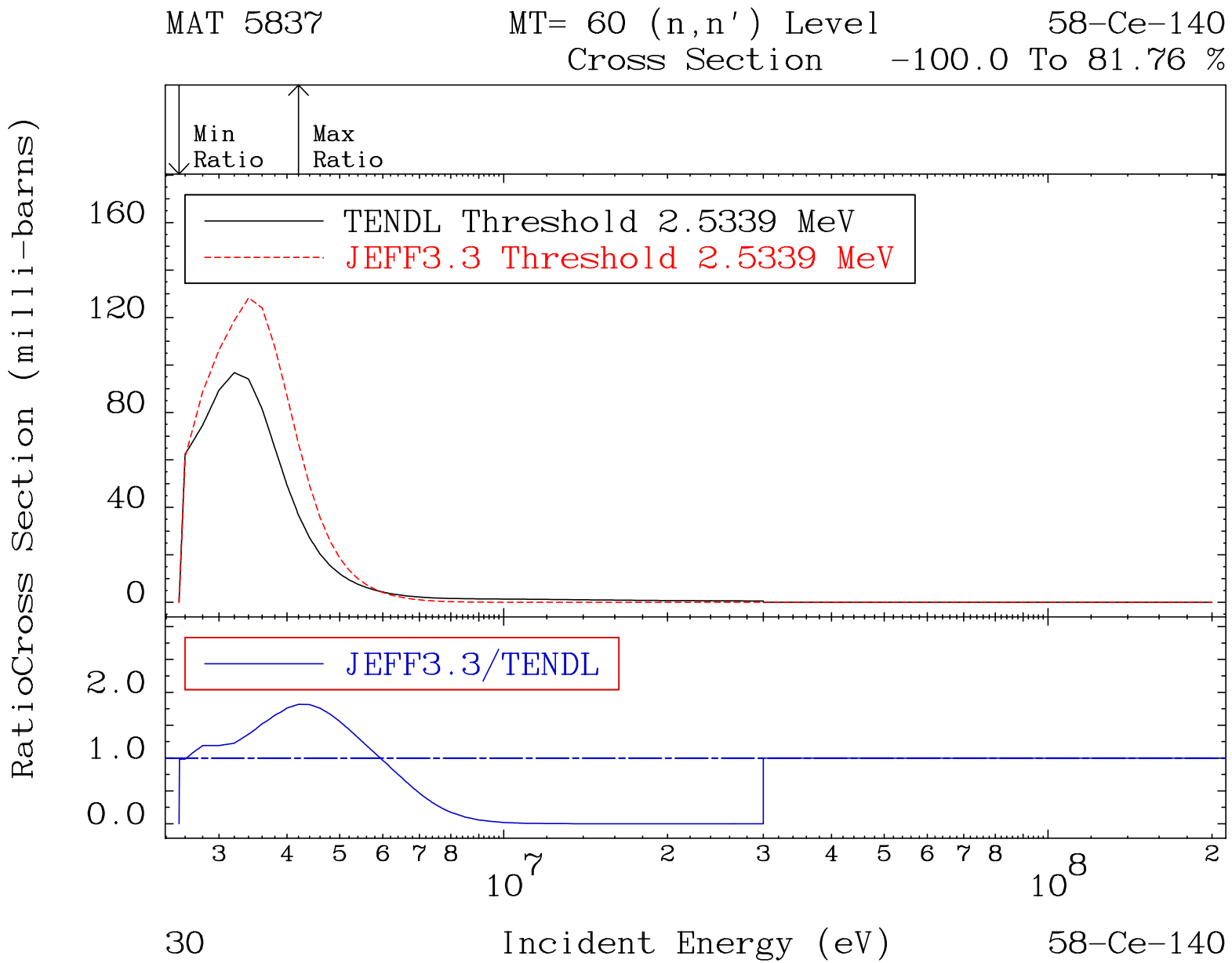

MAT 5837
MT= 55 (n,n') Level
58-Ce-140
Cross Section -100.0 To 58.95 %
Min Ratio
Max Ratio
TENDL Threshold 2.3648 MeV
JEFF3.3 Threshold 2.3648 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
58-Ce-140

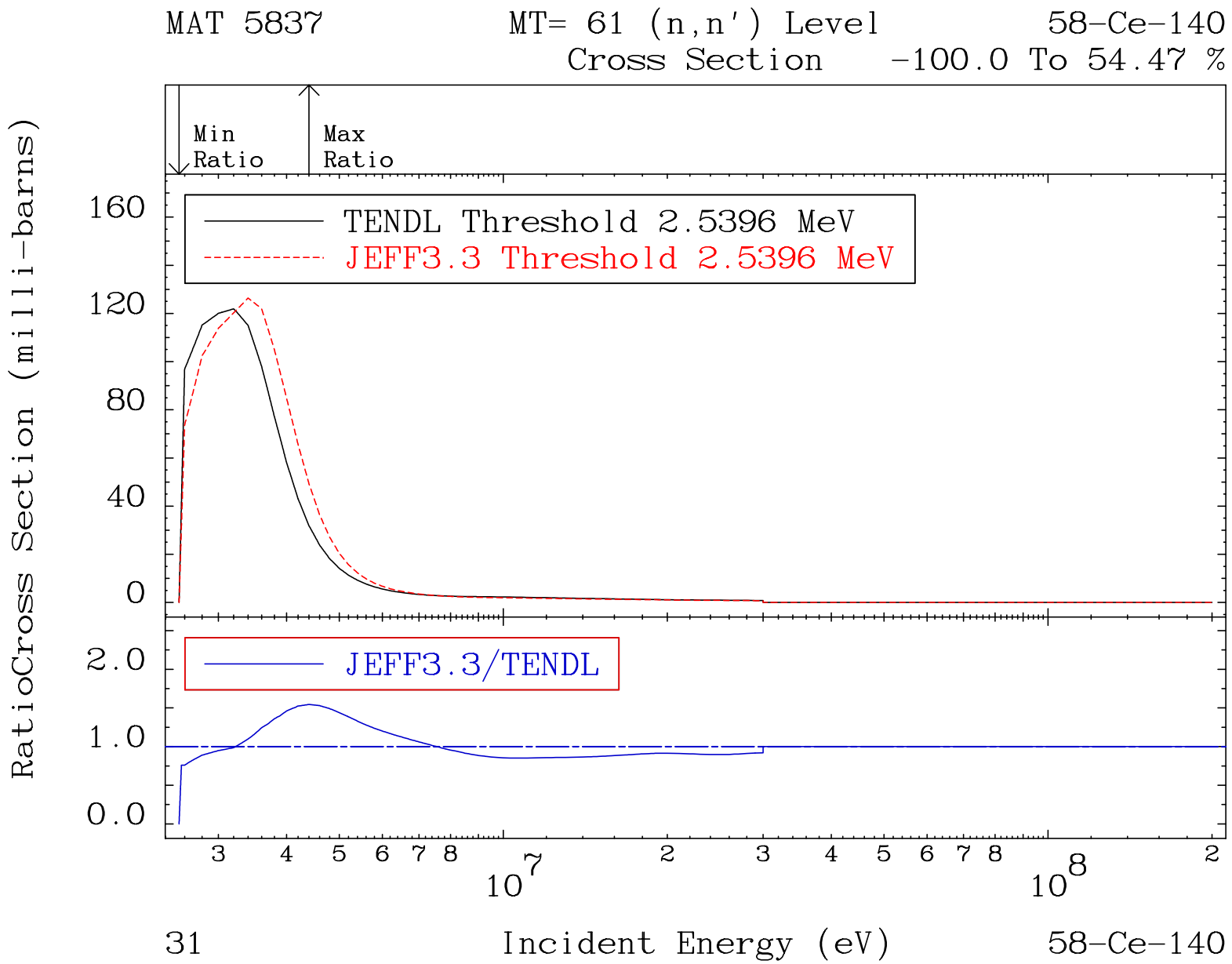

MAT 5837
MT= 56 (n,n') Level
58-Ce-140
Cross Section -100.0 To 86.77 %
Min Ratio
Max Ratio
TENDL Threshold 2.3667 MeV
JEFF3.3 Threshold 2.3667 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
58-Ce-140

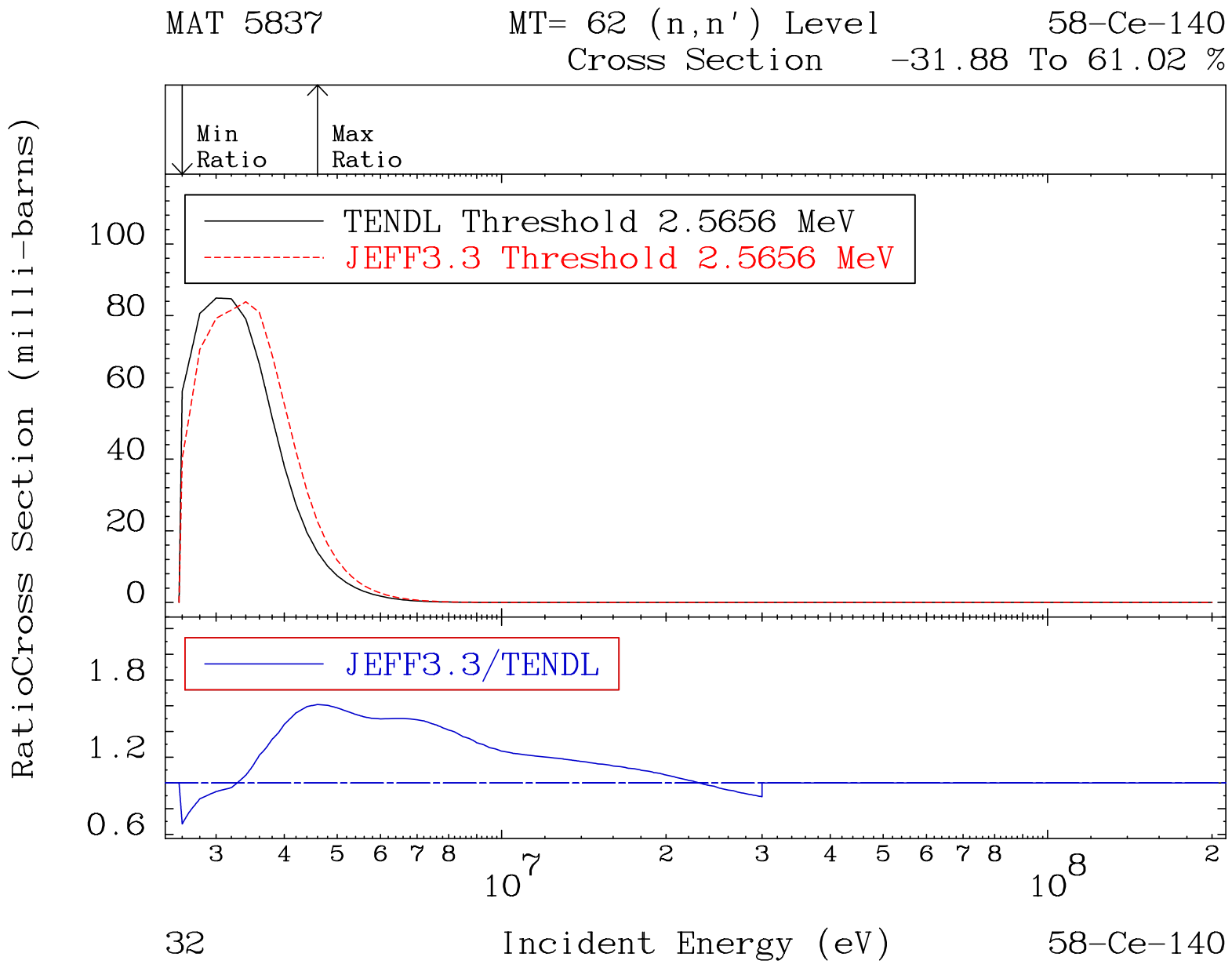

MAT 5837
MT= 57 (n,n') Level
58-Ce-140
Cross Section -100.0 To 72.36 %
Min Ratio
Max Ratio
TENDL Threshold 2.4294 MeV
JEFF3.3 Threshold 2.4294 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
150
100
50
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
58-Ce-140

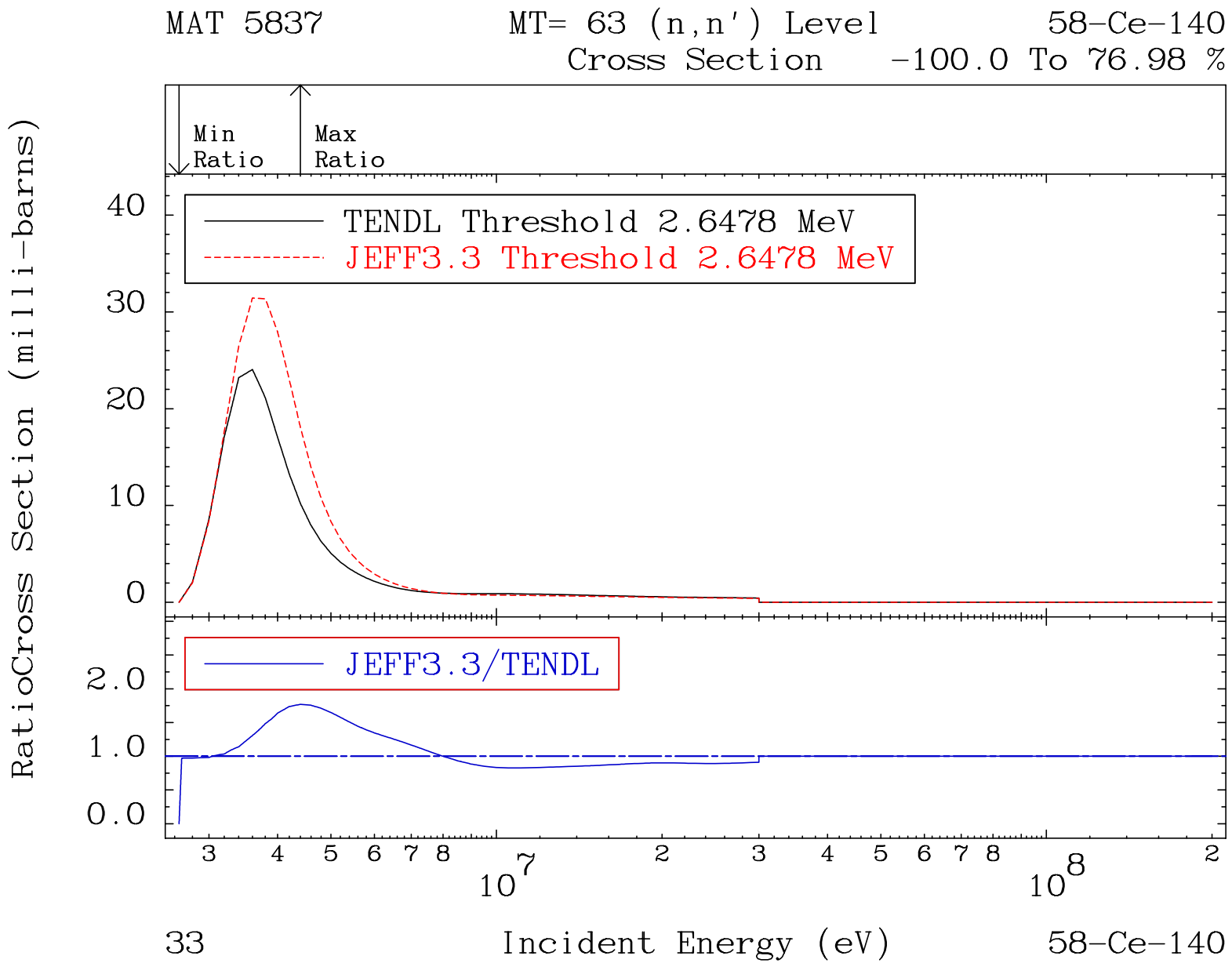

MAT 5837
MT= 58 (n,n') Level
58-Ce-140
Cross Section
-100.0 To 25.39 %
Min Ratio
Max Ratio
TENDL Threshold 2.4818 MeV
JEFF3.3 Threshold 2.4818 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
150
100
50
0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
58-Ce-140

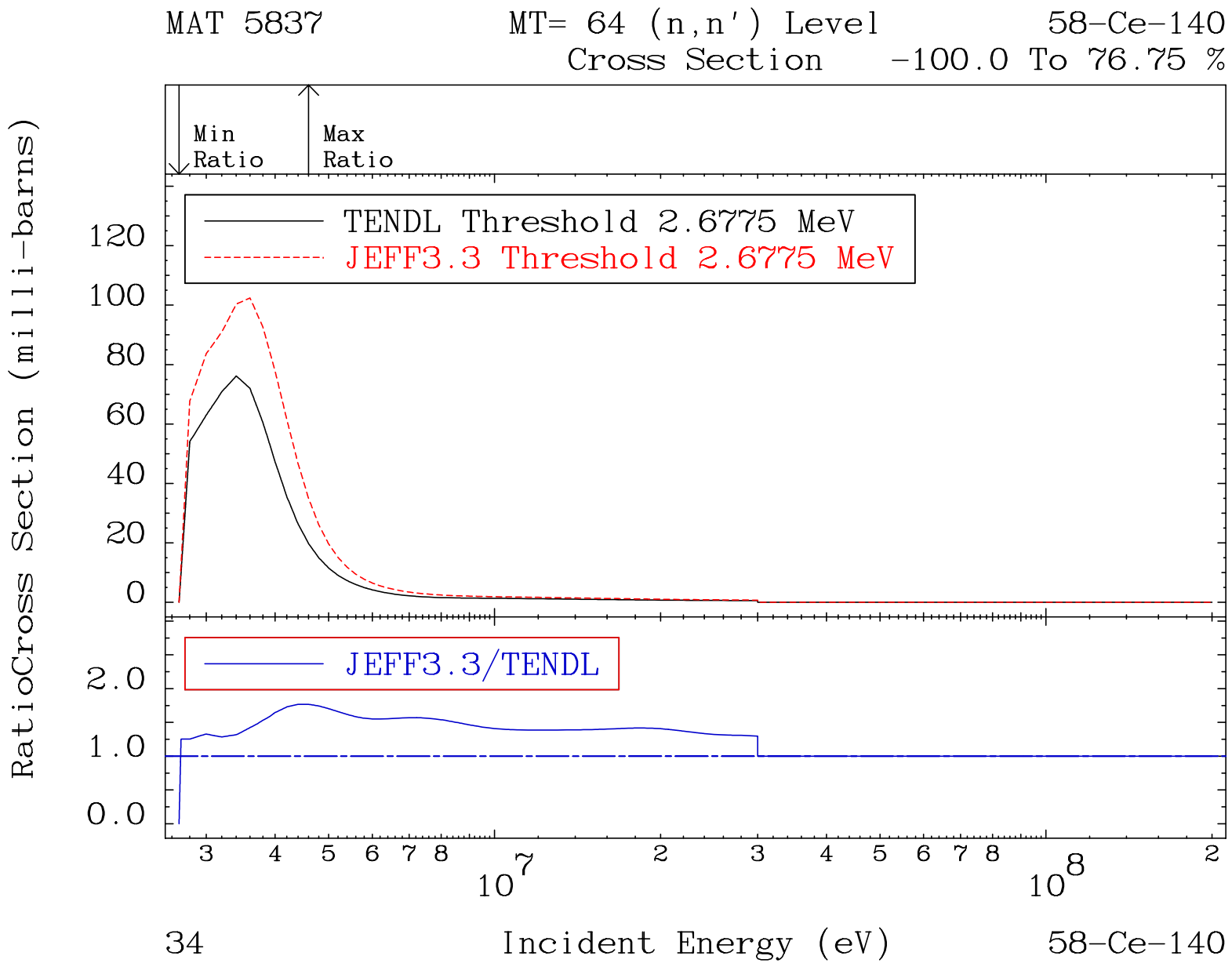

MAT 5837
MT= 59 (n,n') Level
58-Ce-140
Cross Section -100.0 To 69.58 %
Min Ratio
Max Ratio
TENDL Threshold 2.4988 MeV
JEFF3.3 Threshold 2.4988 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
58-Ce-140

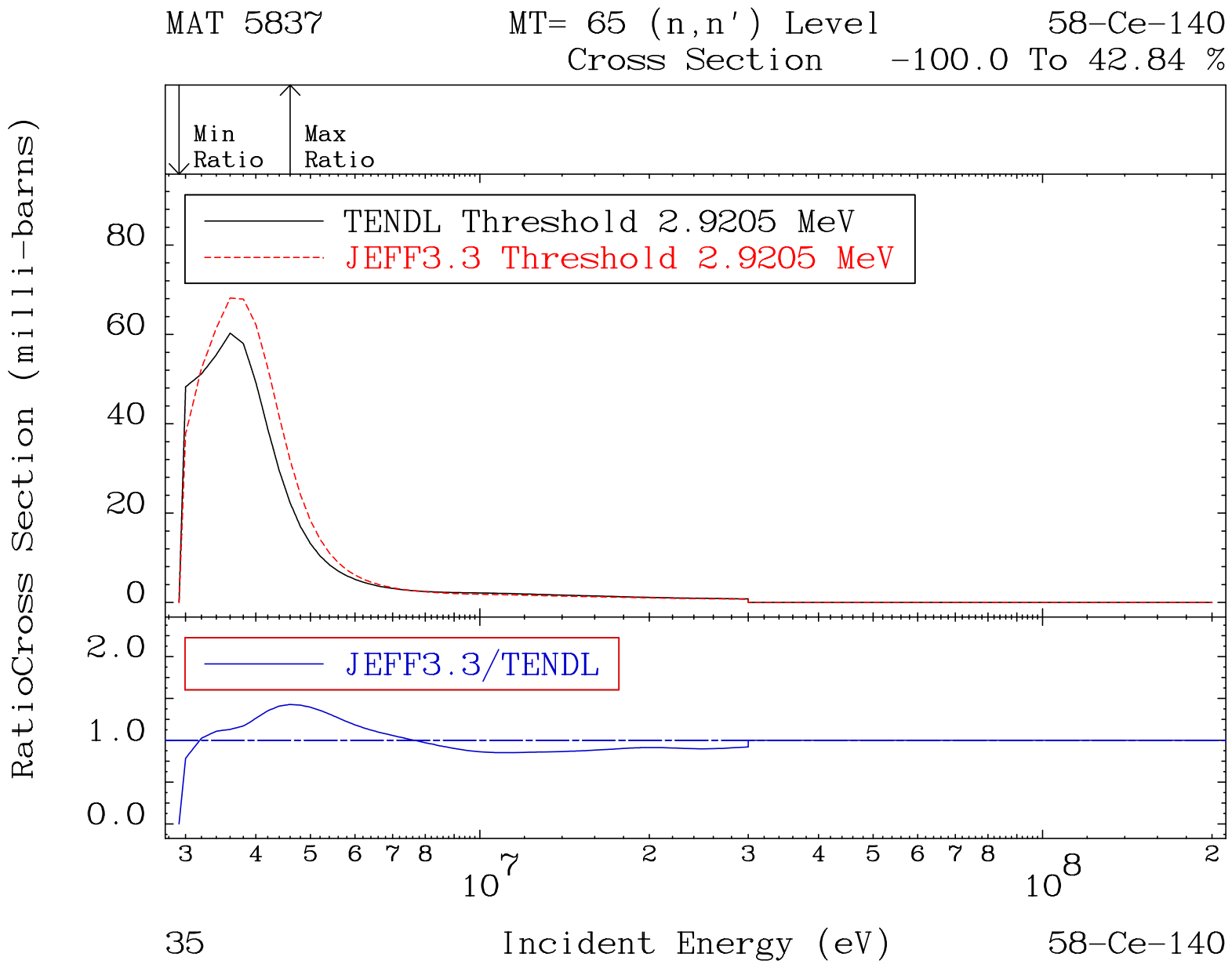

MAT 5837
MT= 60 (n,n') Level
58-Ce-140
Cross Section
-100.0 To 81.76 %
Min Ratio
Max Ratio
TENDL Threshold 2.5339 MeV
JEFF3.3 Threshold 2.5339 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
58-Ce-140

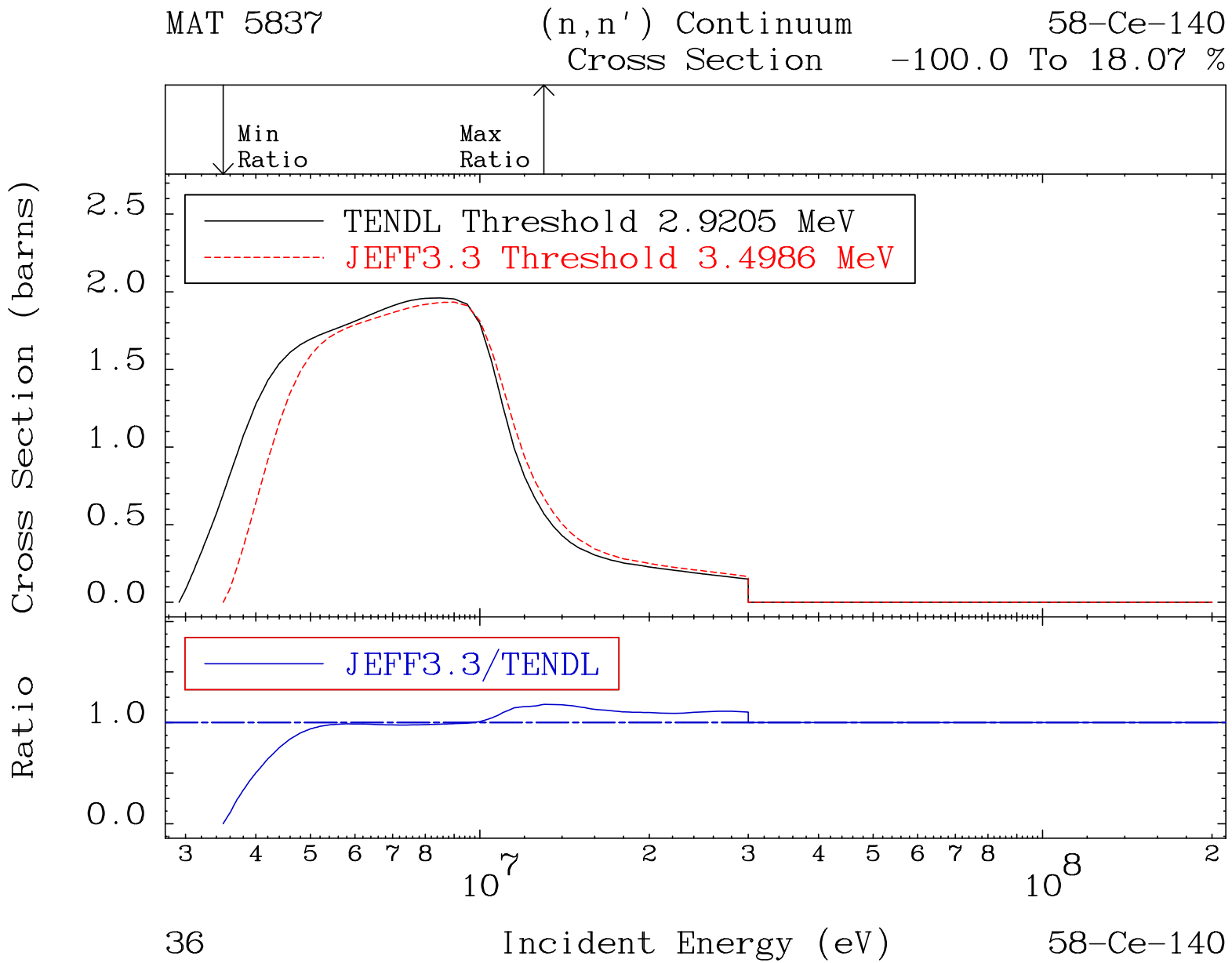

MAT 5837
MT= 61 (n,n') Level
58-Ce-140
Cross Section -100.0 To 54.47 %
Min Ratio
Max Ratio
TENDL Threshold 2.5396 MeV
JEFF3.3 Threshold 2.5396 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
58-Ce-140

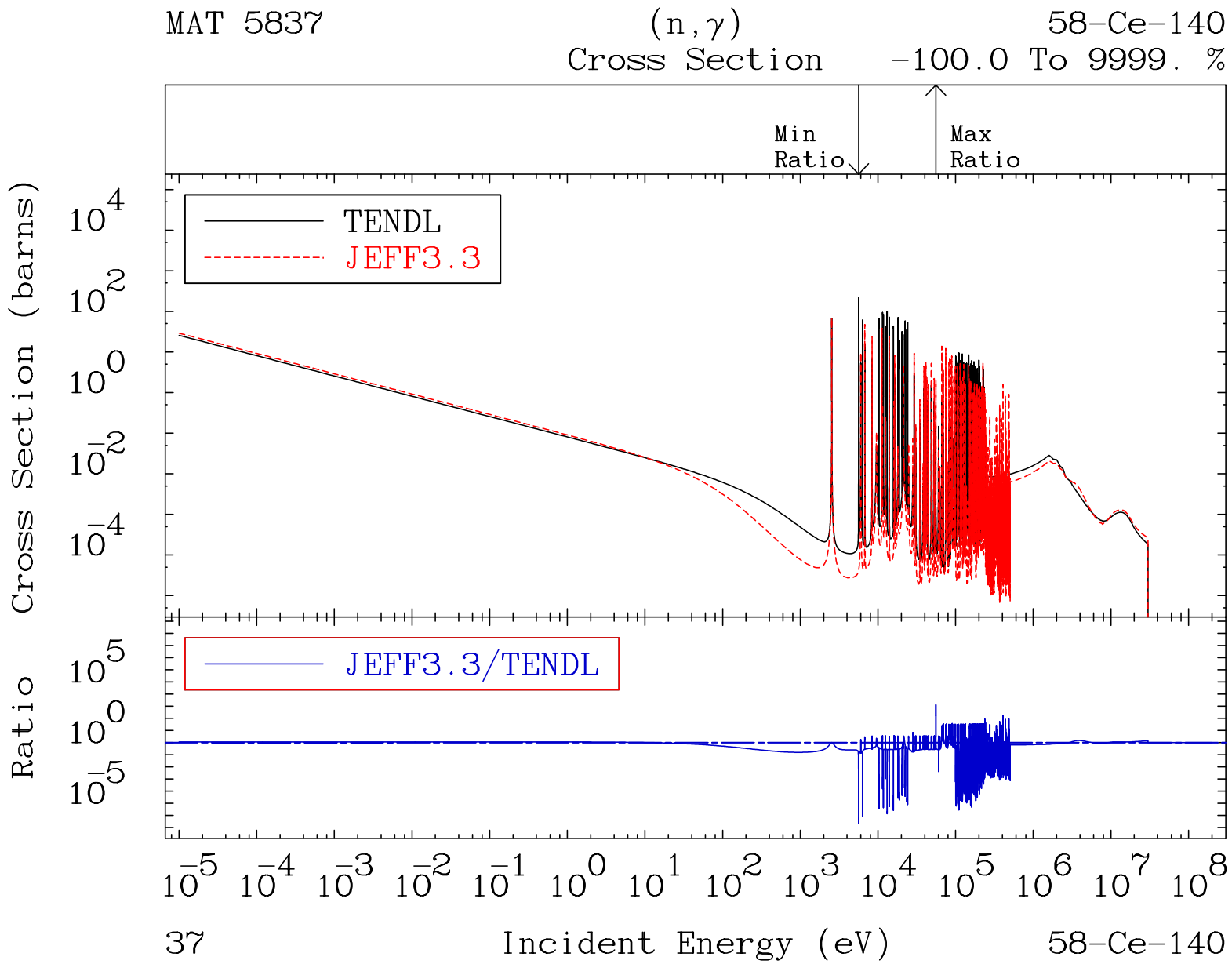

MAT 5837
MT= 62 (n,n') Level
58-Ce-140
Cross Section
-31.88 To 61.02 %
Min Ratio
Max Ratio
TENDL Threshold 2.5656 MeV
JEFF3.3 Threshold 2.5656 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.8
1.2
0.6
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
58-Ce-140

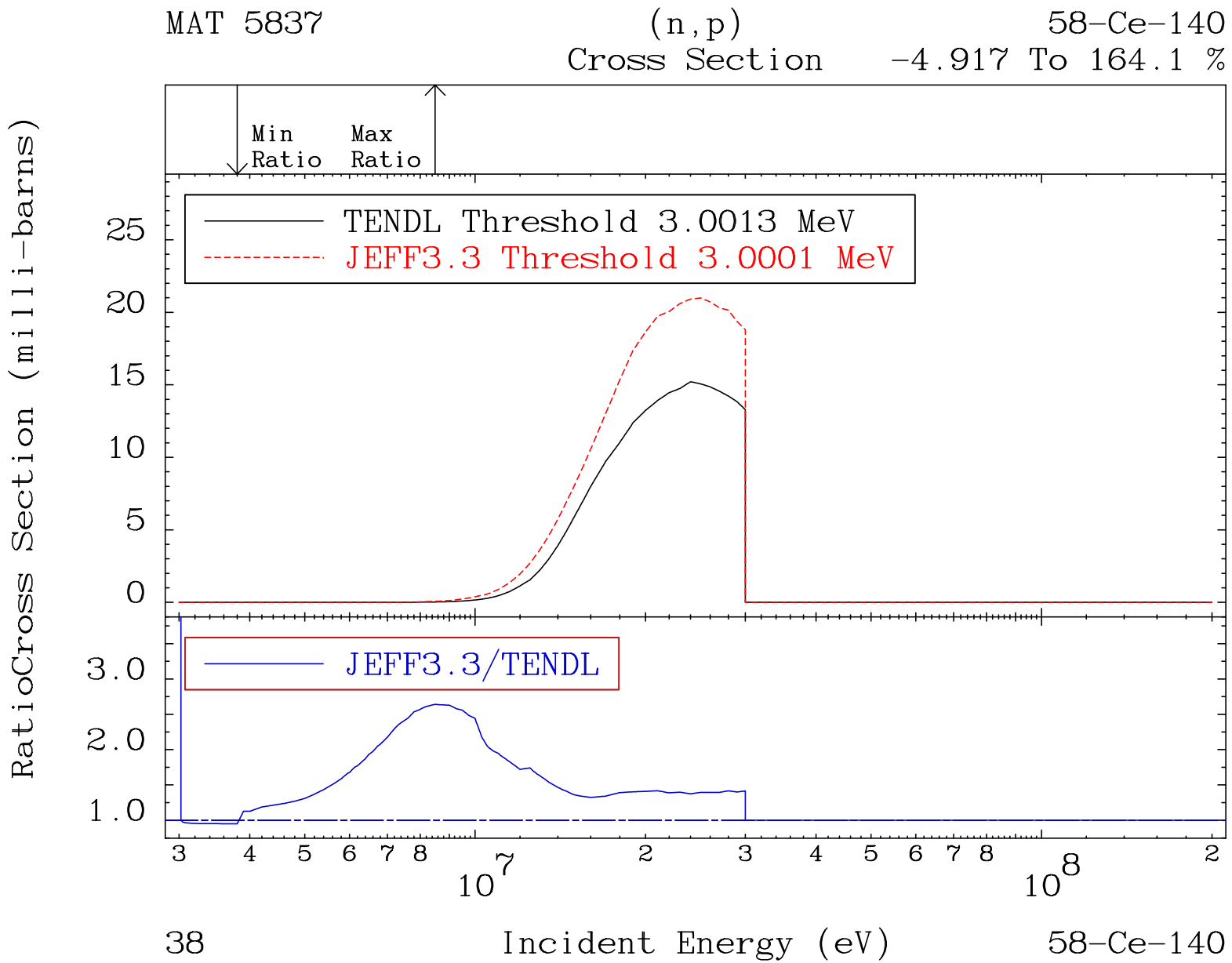

MAT 5837
MT= 63 (n,n') Level
58-Ce-140
Cross Section
-100.0 To 76.98 %
Min Ratio
Max Ratio
TENDL Threshold 2.6478 MeV
JEFF3.3 Threshold 2.6478 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
58-Ce-140

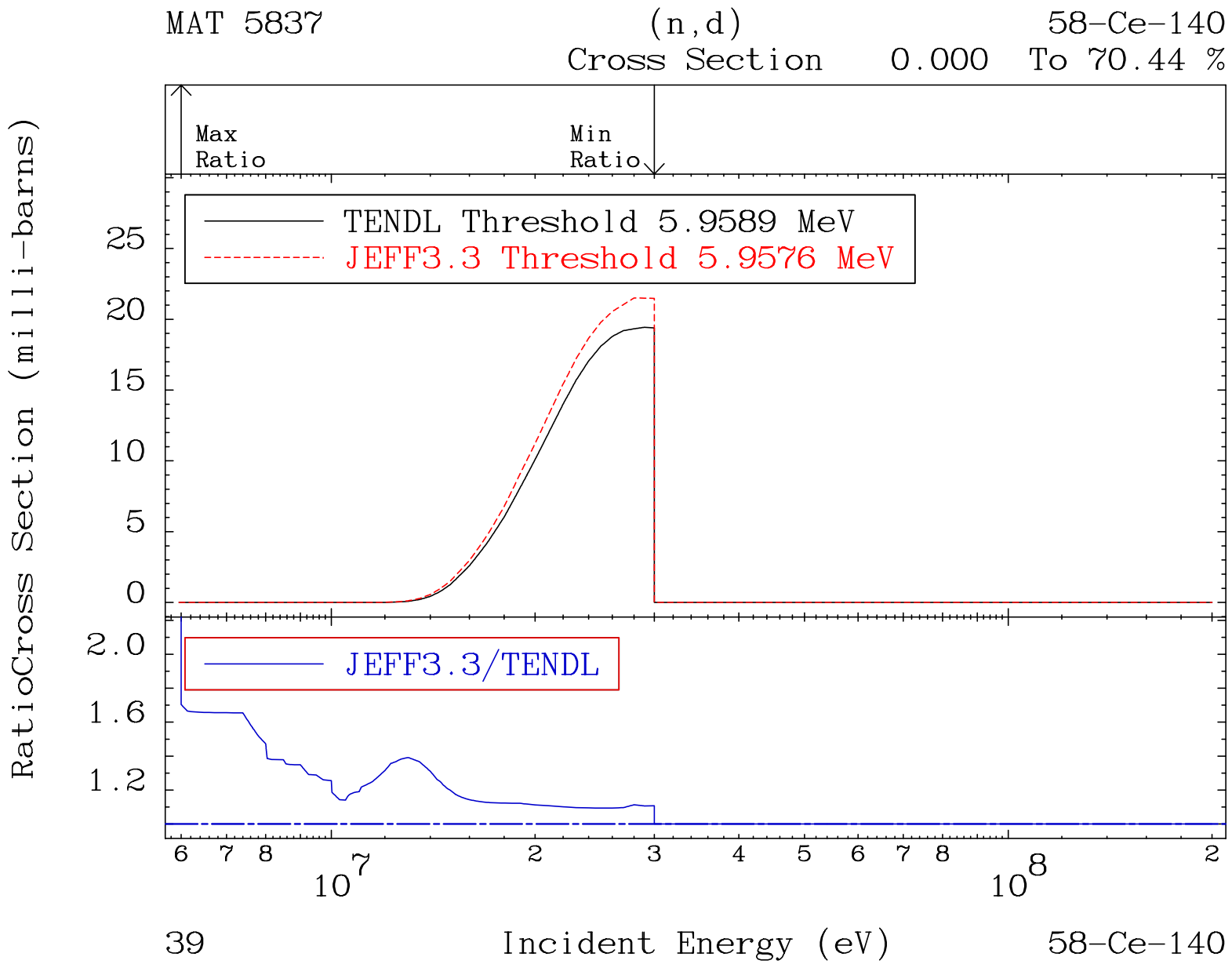

MAT 5837
MT= 64 (n,n') Level
58-Ce-140
Cross Section
-100.0 To 76.75 %
Min Ratio
Max Ratio
TENDL Threshold 2.6775 MeV
JEFF3.3 Threshold 2.6775 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
58-Ce-140

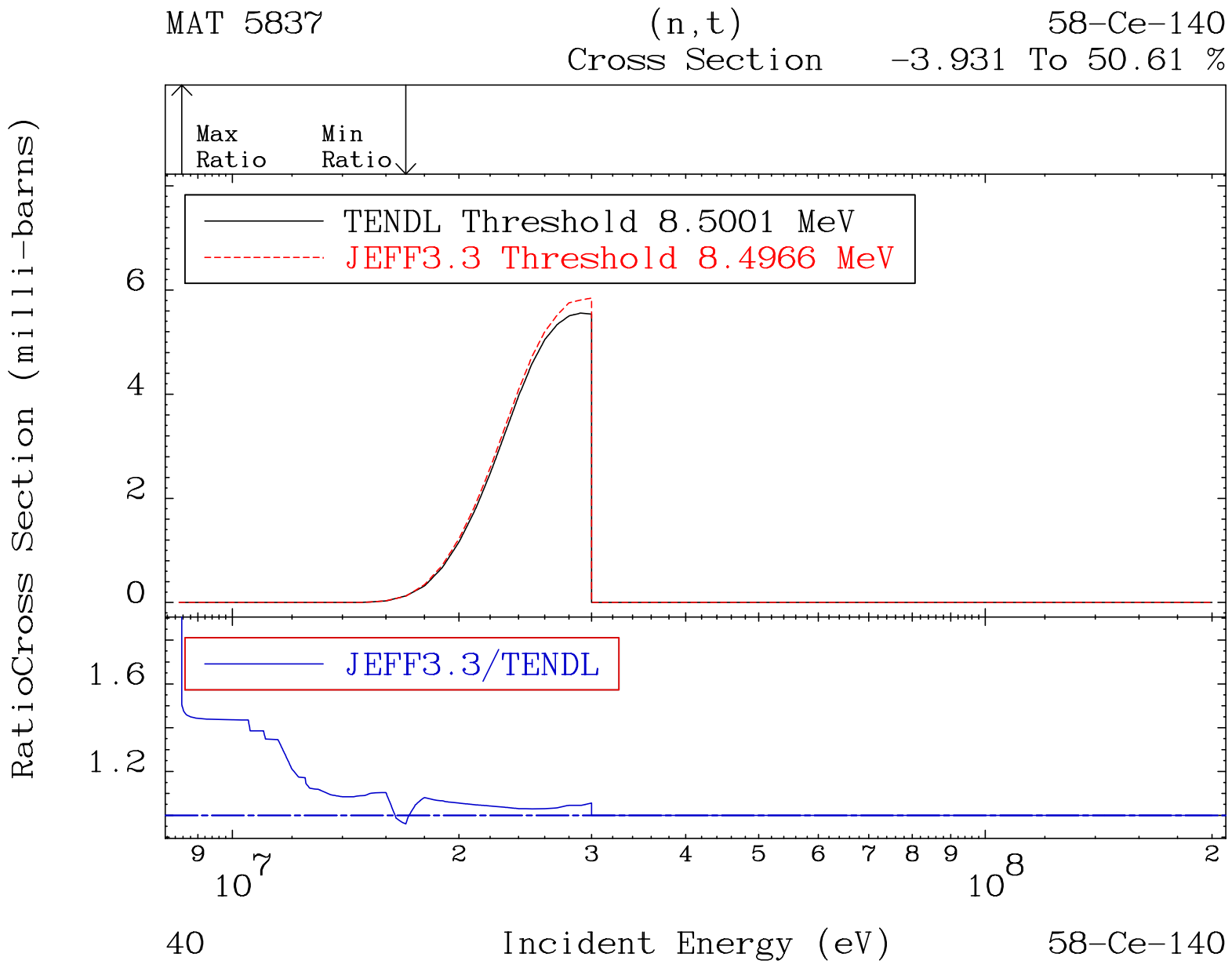

MAT 5837
MT= 65 (n,n') Level
58-Ce-140
Cross Section
-100.0 To 42.84 %
Min Ratio
Max Ratio
TENDL Threshold 2.9205 MeV
JEFF3.3 Threshold 2.9205 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
58-Ce-140

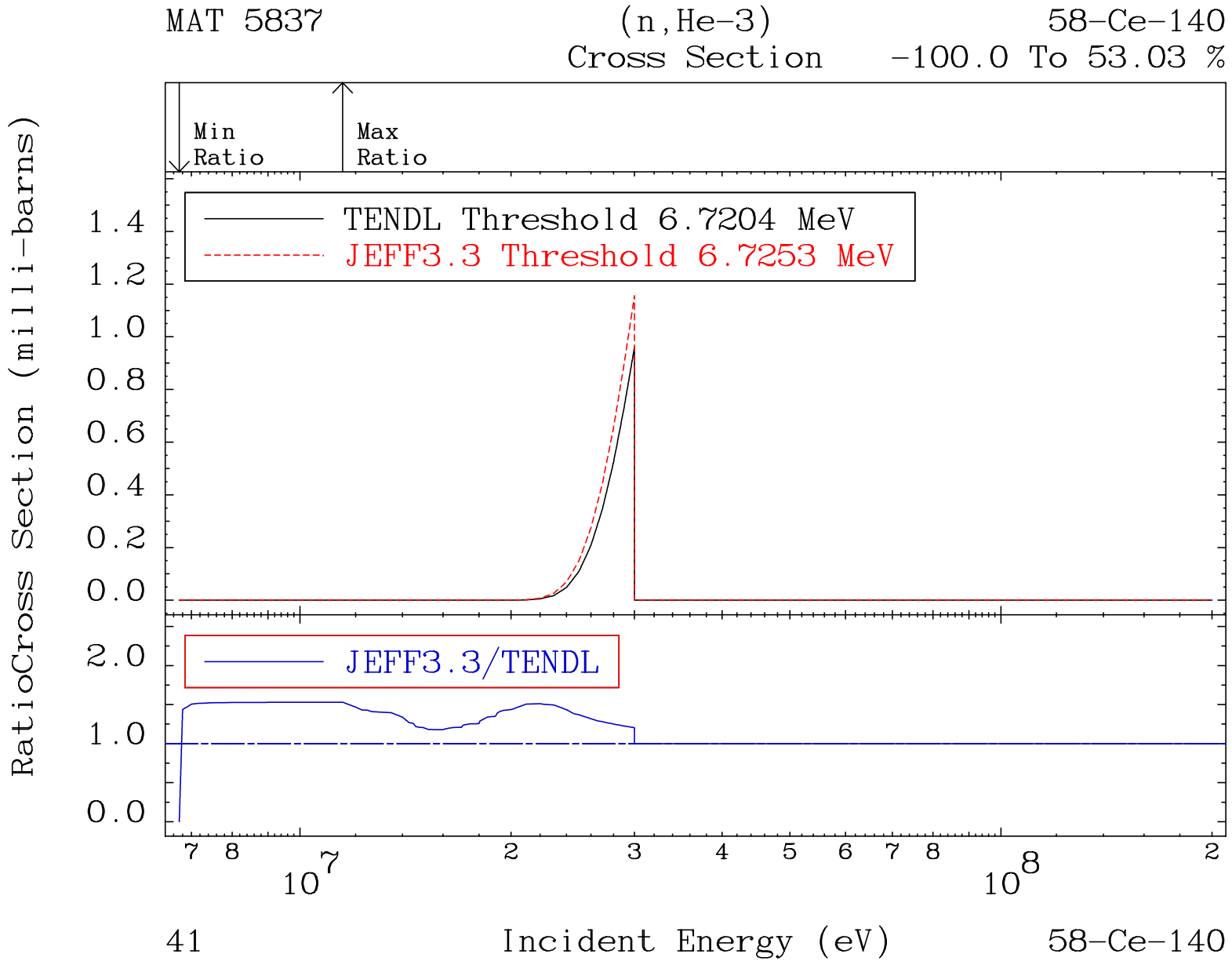

MAT 5837
(n,n') Continuum
Cross Section
58-Ce-140
-100.0 To 18.07 %
Min Ratio
Max Ratio
TENDL Threshold 2.9205 MeV
JEFF3.3 Threshold 3.4986 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
36
58-Ce-140

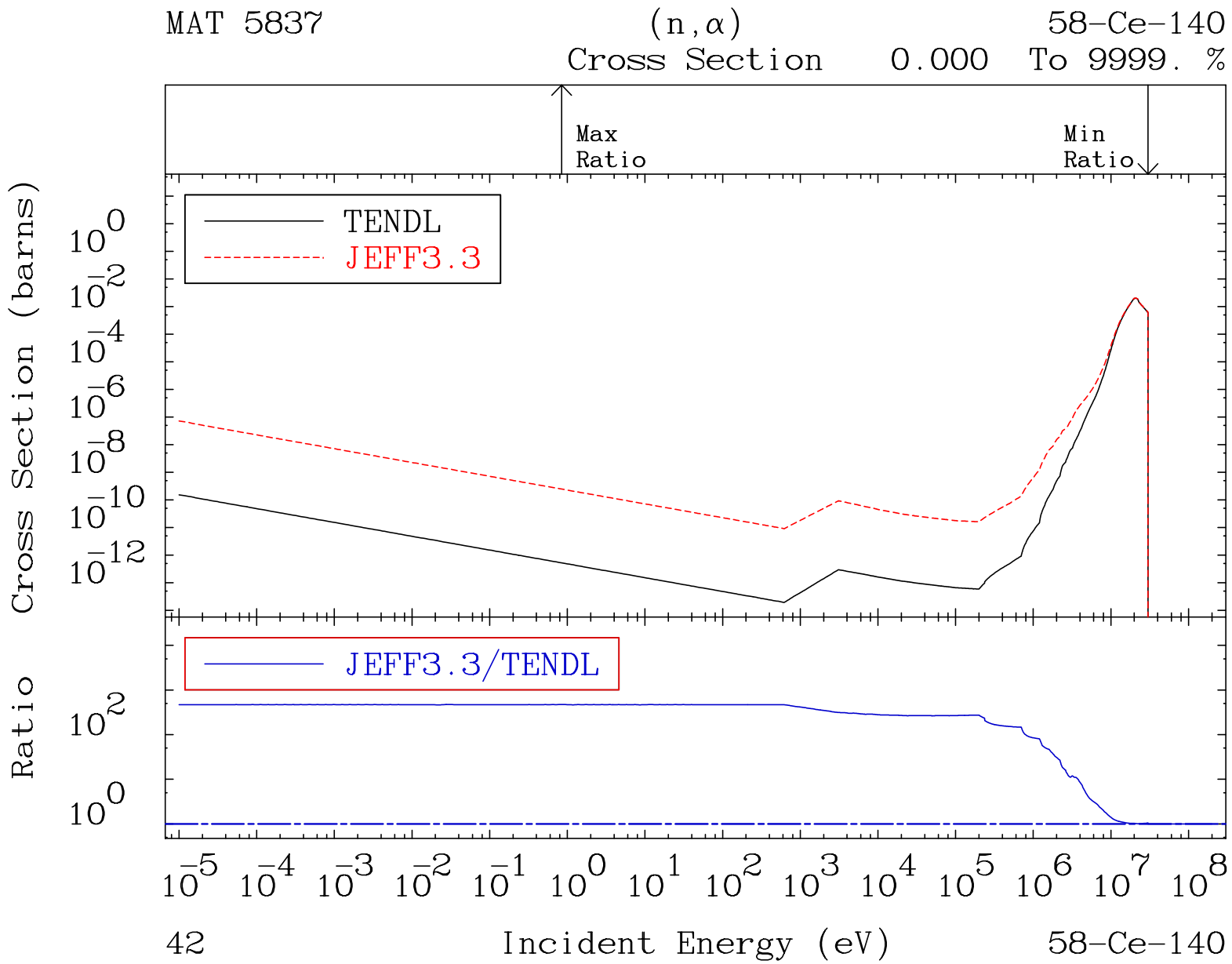

MAT 5837
(n,γ)
Cross Section
58-Ce-140
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
58-Ce-140

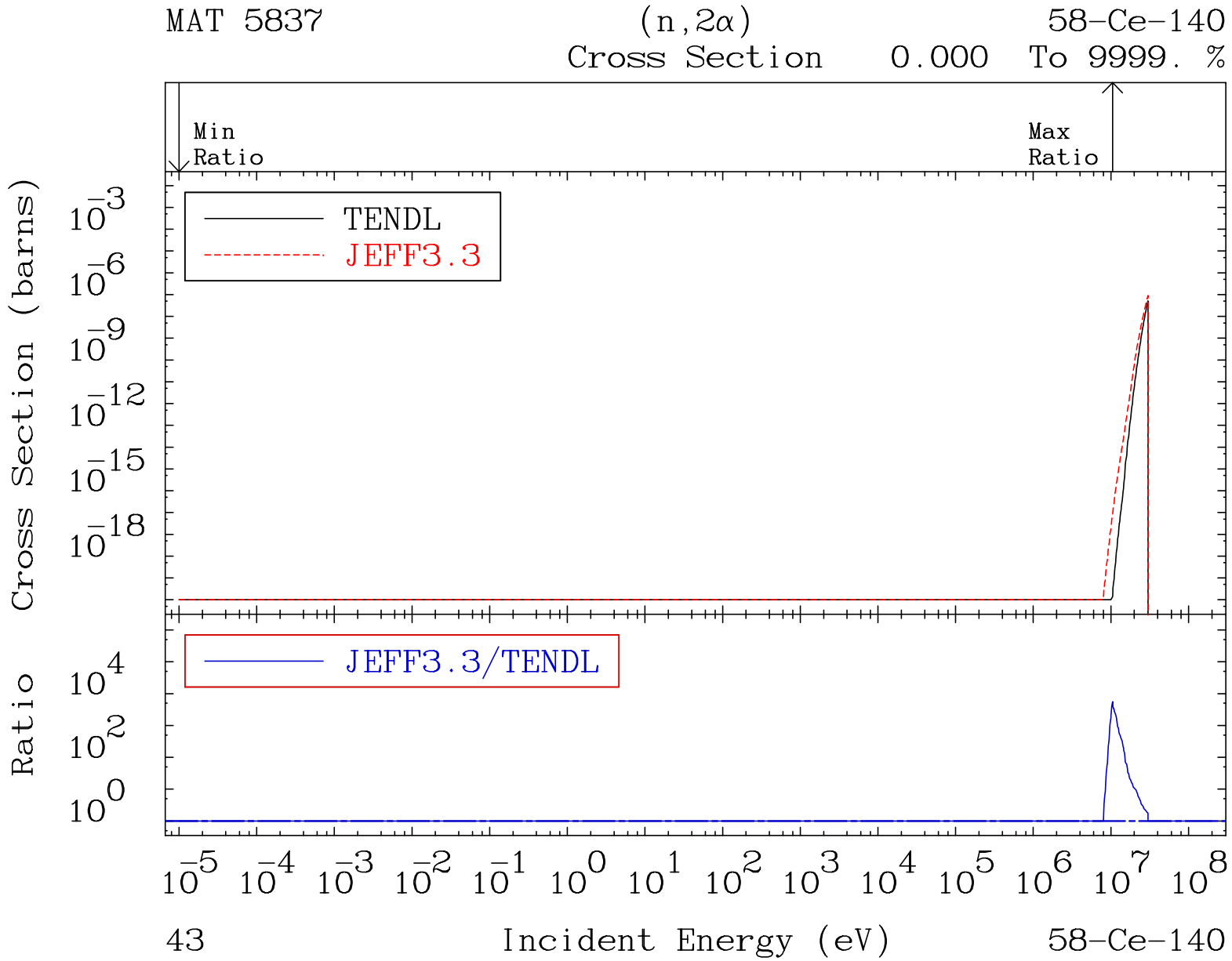

MAT 5837
(n,p)
58-Ce-140
Cross Section
-4.917 To 164.1 %
Min Ratio
Max Ratio
TENDL Threshold 3.0013 MeV
JEFF3.3 Threshold 3.0001 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
3.0
2.0
1.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
58-Ce-140

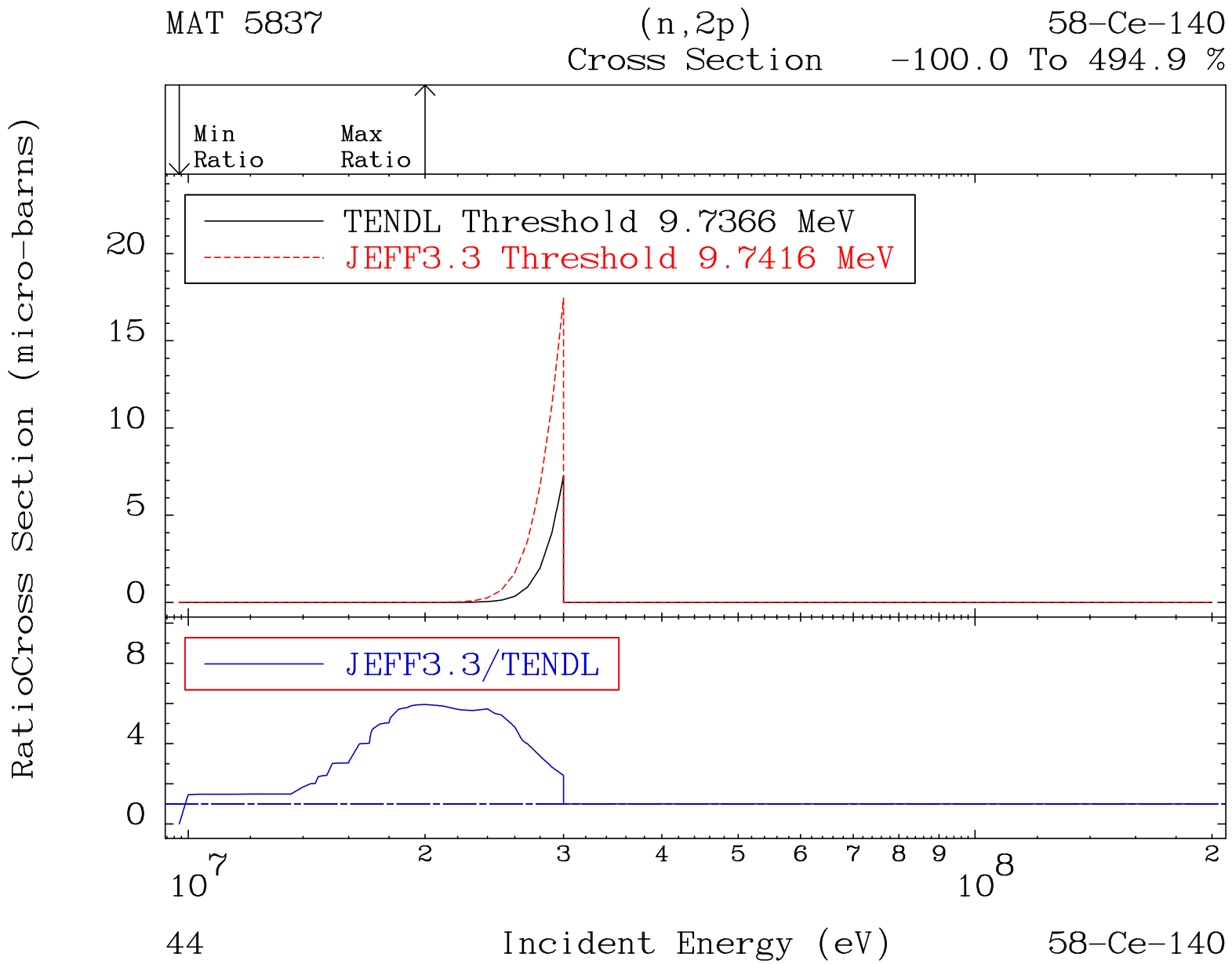

MAT 5837
(n,d)
58-Ce-140
Cross Section 0.000 To 70.44 %
Max Ratio
Min Ratio
TENDL Threshold 5.9589 MeV
JEFF3.3 Threshold 5.9576 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.6
1.2
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
58-Ce-140

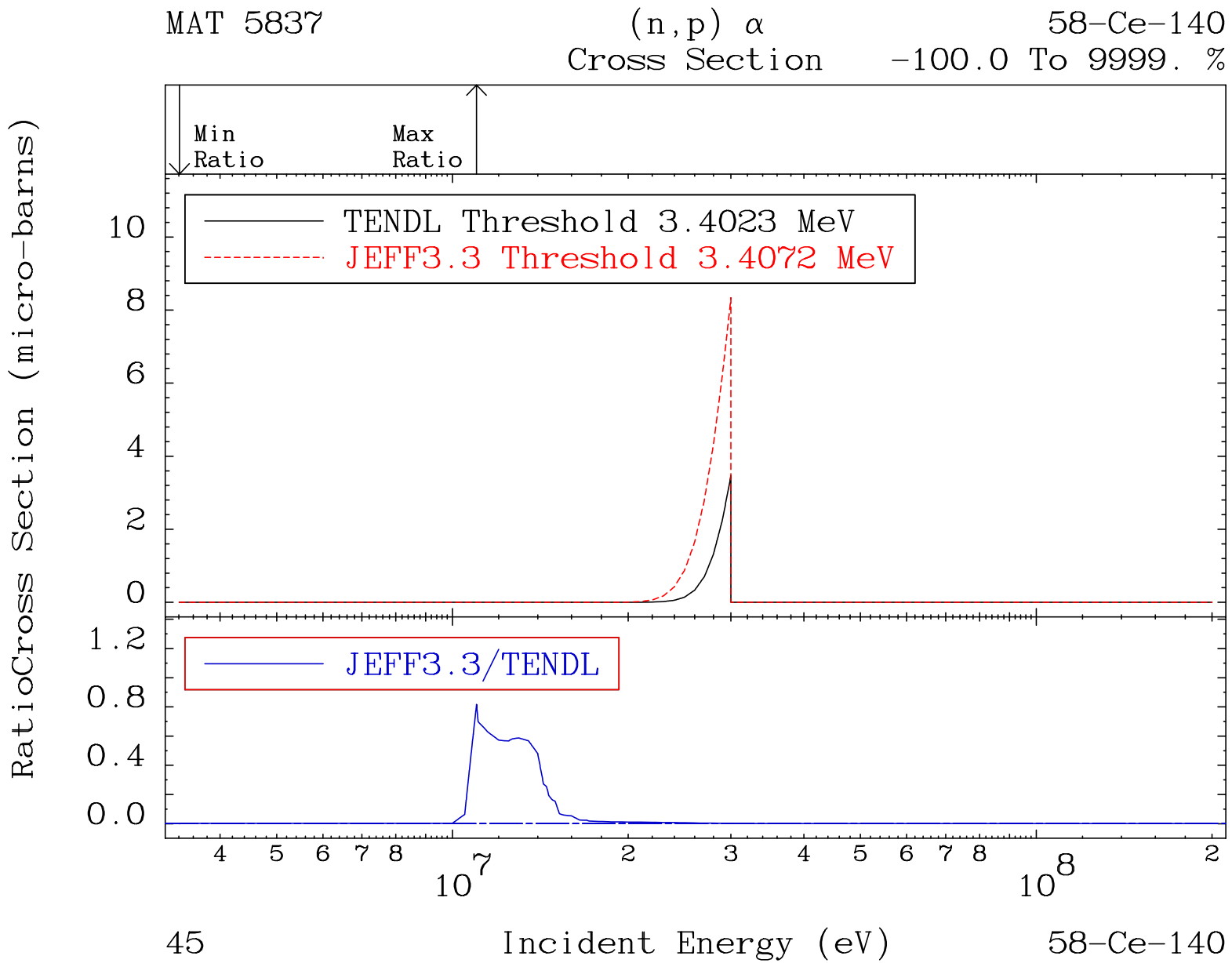

MAT 5837
(n,t)
Cross Section
58-Ce-140
-3.931 To 50.61 %
Max Ratio
Min Ratio
TENDL Threshold 8.5001 MeV
JEFF3.3 Threshold 8.4966 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
6
4
2
0
1.6
1.2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
58-Ce-140

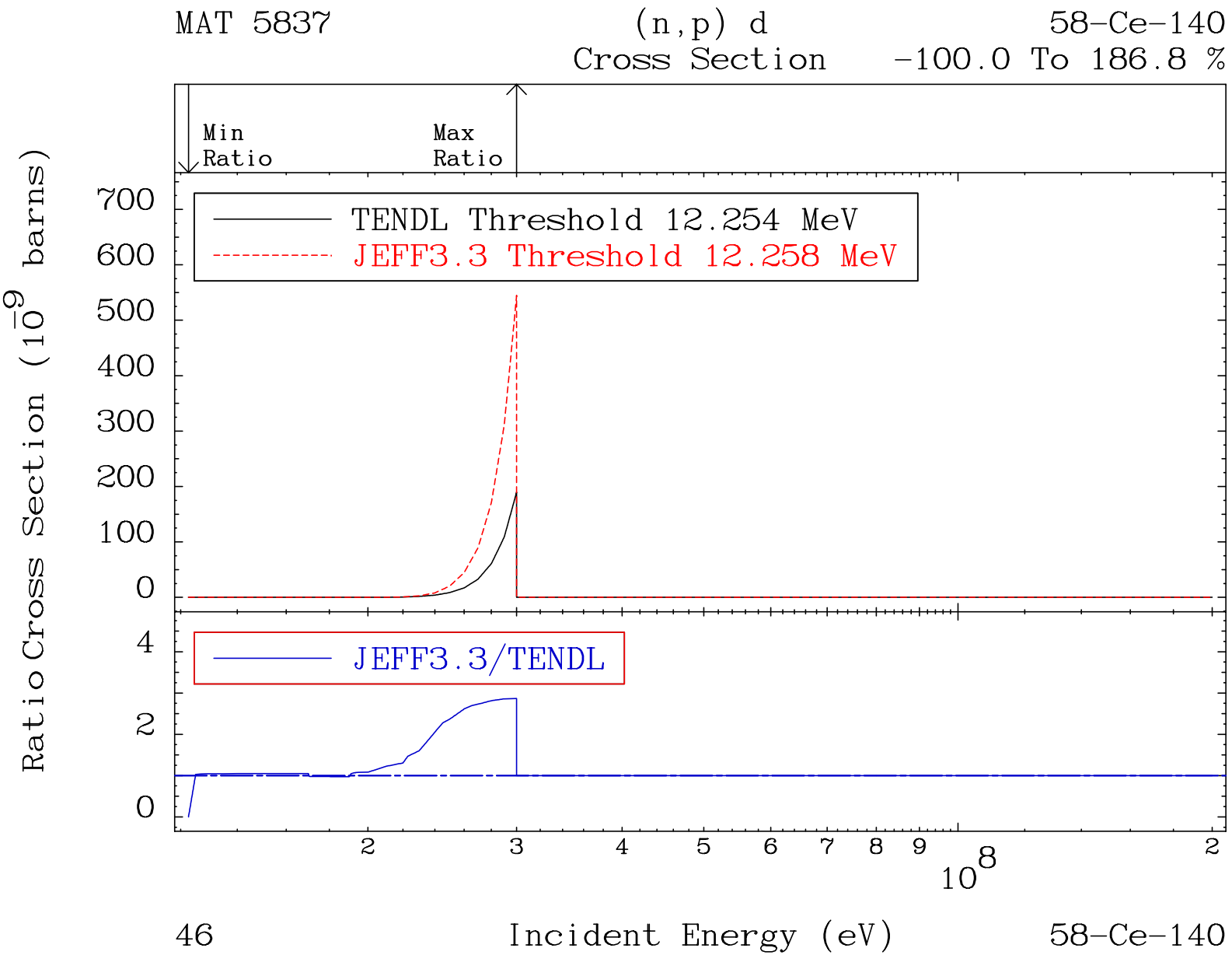

MAT 5837
(n,He-3)
Cross Section
58-Ce-140
-100.0 To 53.03 %
Min Ratio
Max Ratio
TENDL Threshold 6.7204 MeV
JEFF3.3 Threshold 6.7253 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
41
Incident Energy (eV)
58-Ce-140

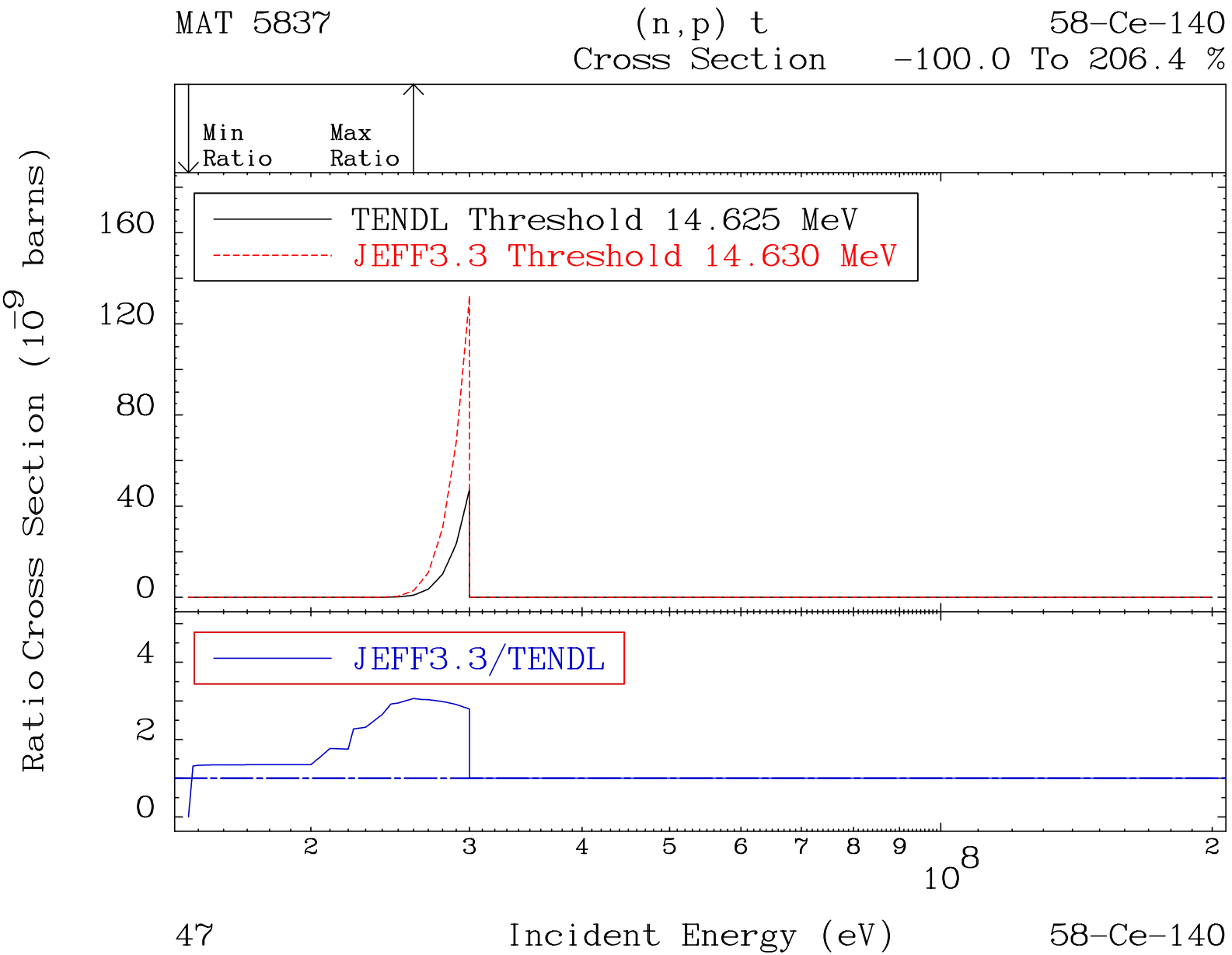

MAT 5837
(n,α)
58-Ce-140
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
58-Ce-140

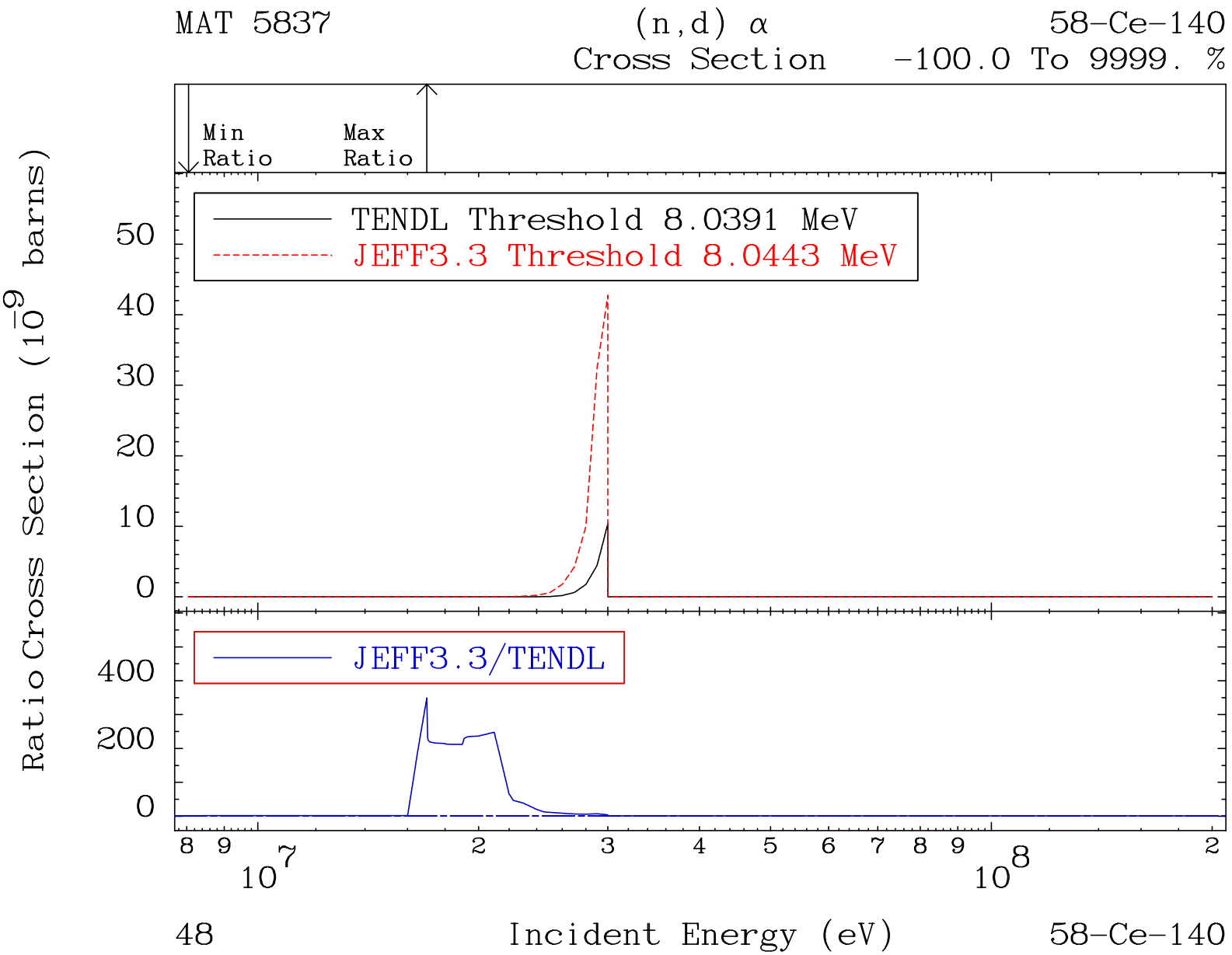

MAT 5837
(n,2α)
58-Ce-140
Cross Section 0.000 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
58-Ce-140

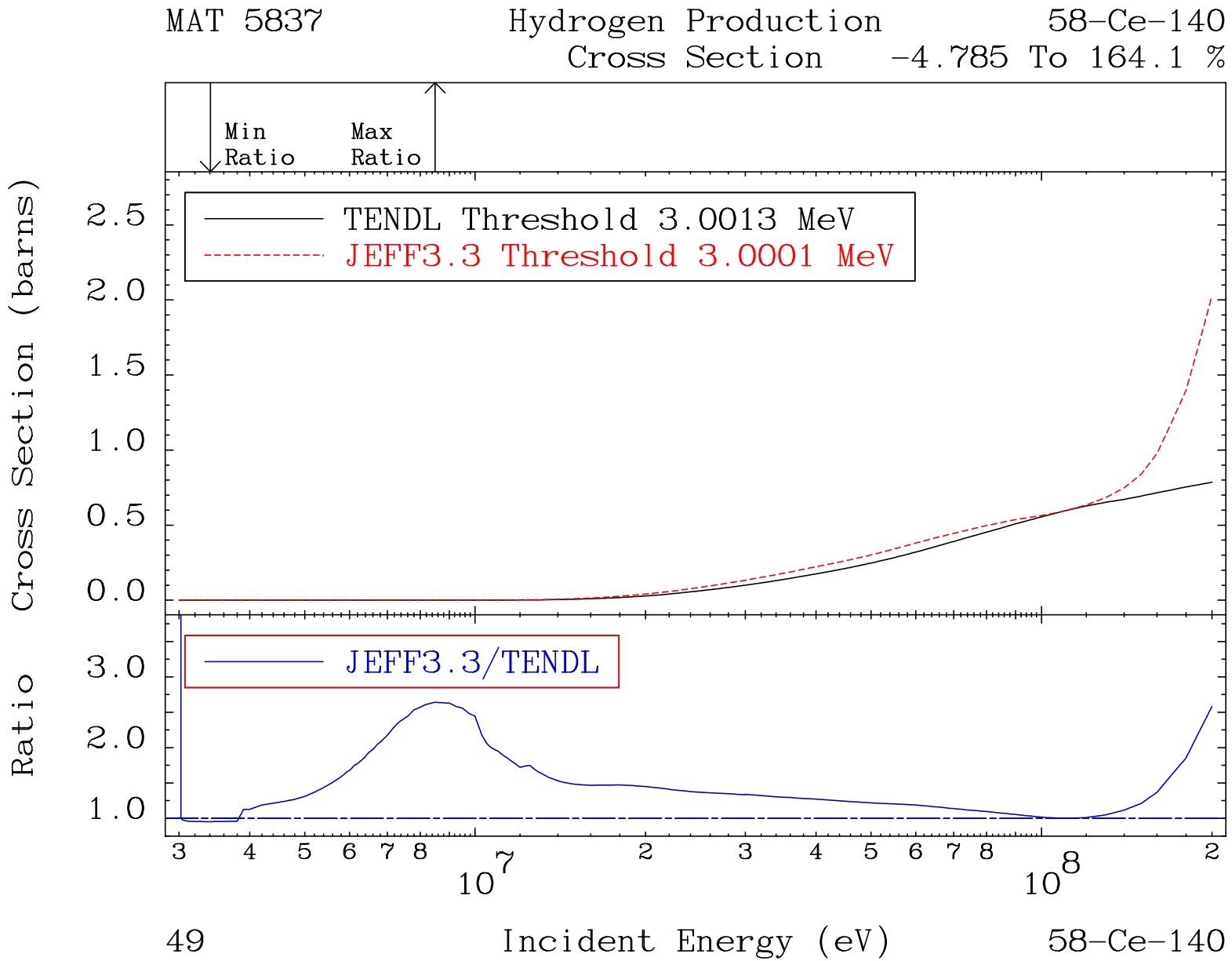

MAT 5837
(n,2p)
58-Ce-140
Cross Section
-100.0 To 494.9 %
Min Ratio
Max Ratio
TENDL Threshold 9.7366 MeV
JEFF3.3 Threshold 9.7416 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
20
15
10
5
0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
58-Ce-140

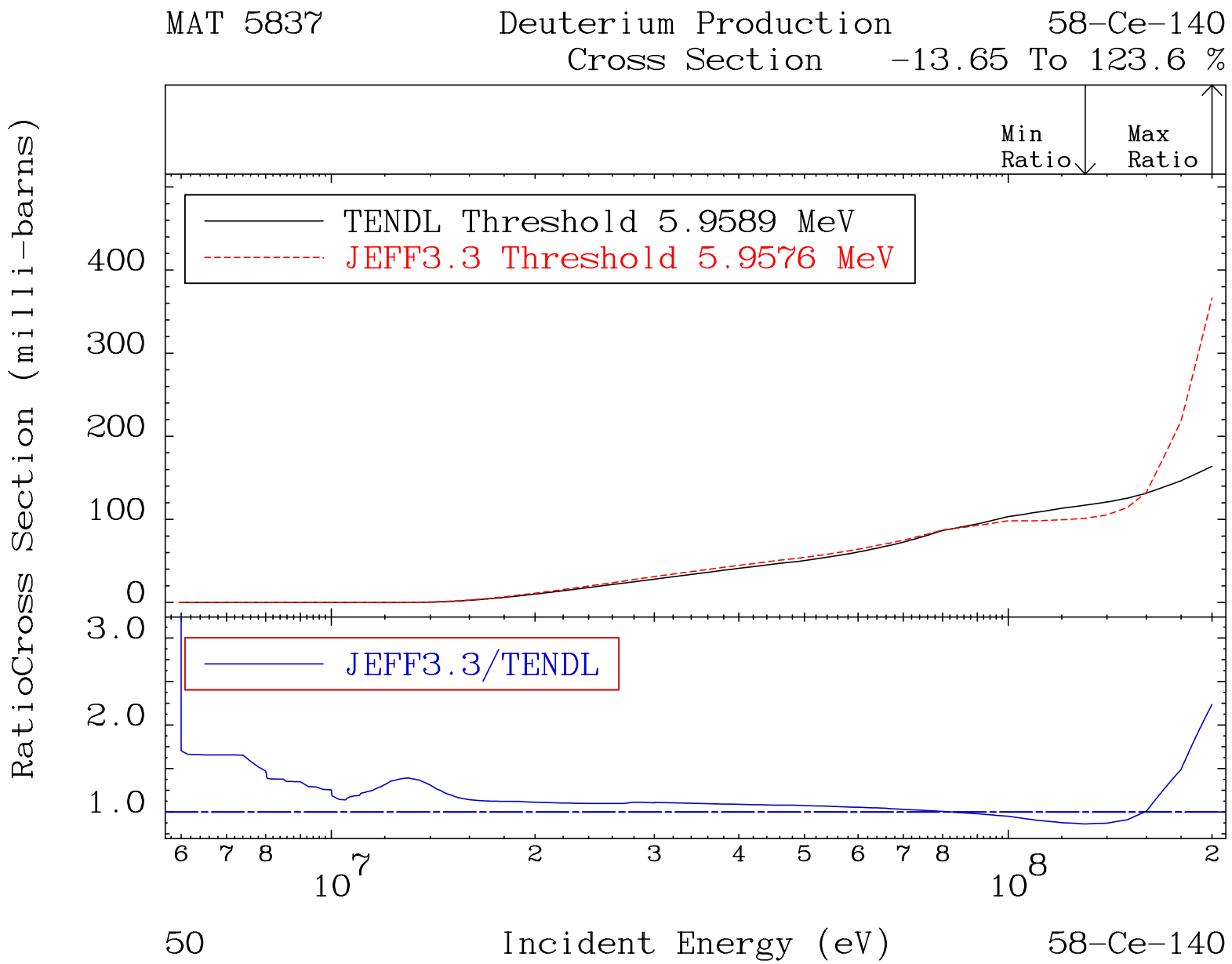

MAT 5837
(n,p) α
58-Ce-140
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.4023 MeV
JEFF3.3 Threshold 3.4072 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
10
8
6
4
2
0
1.2
0.8
0.4
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
58-Ce-140

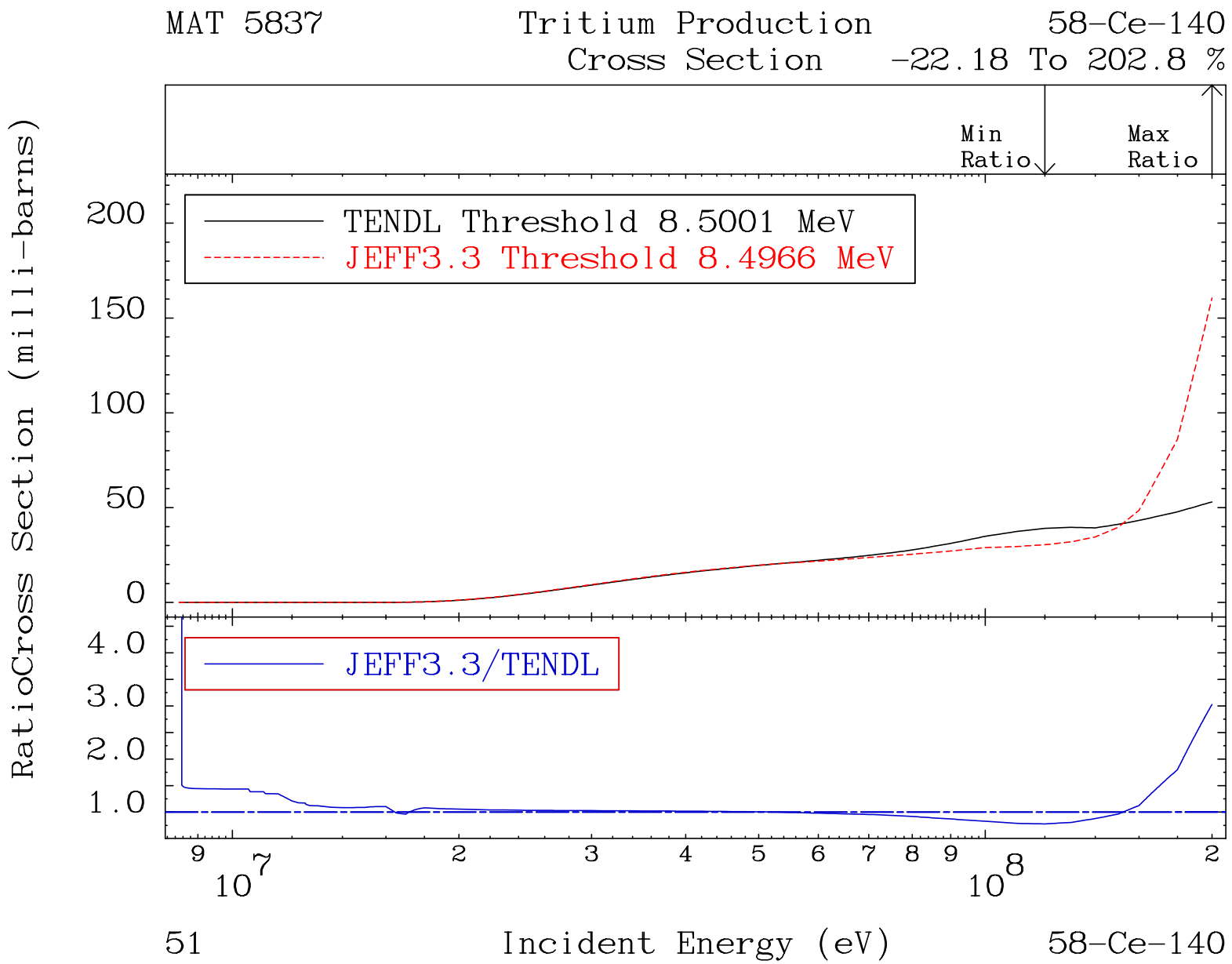

MAT 5837
(n,p) d
Cross Section
58-Ce-140
-100.0 To 186.8 %
Min Ratio
Max Ratio
TENDL Threshold 12.254 MeV
JEFF3.3 Threshold 12.258 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
700
600
500
400
300
200
100
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
58-Ce-140

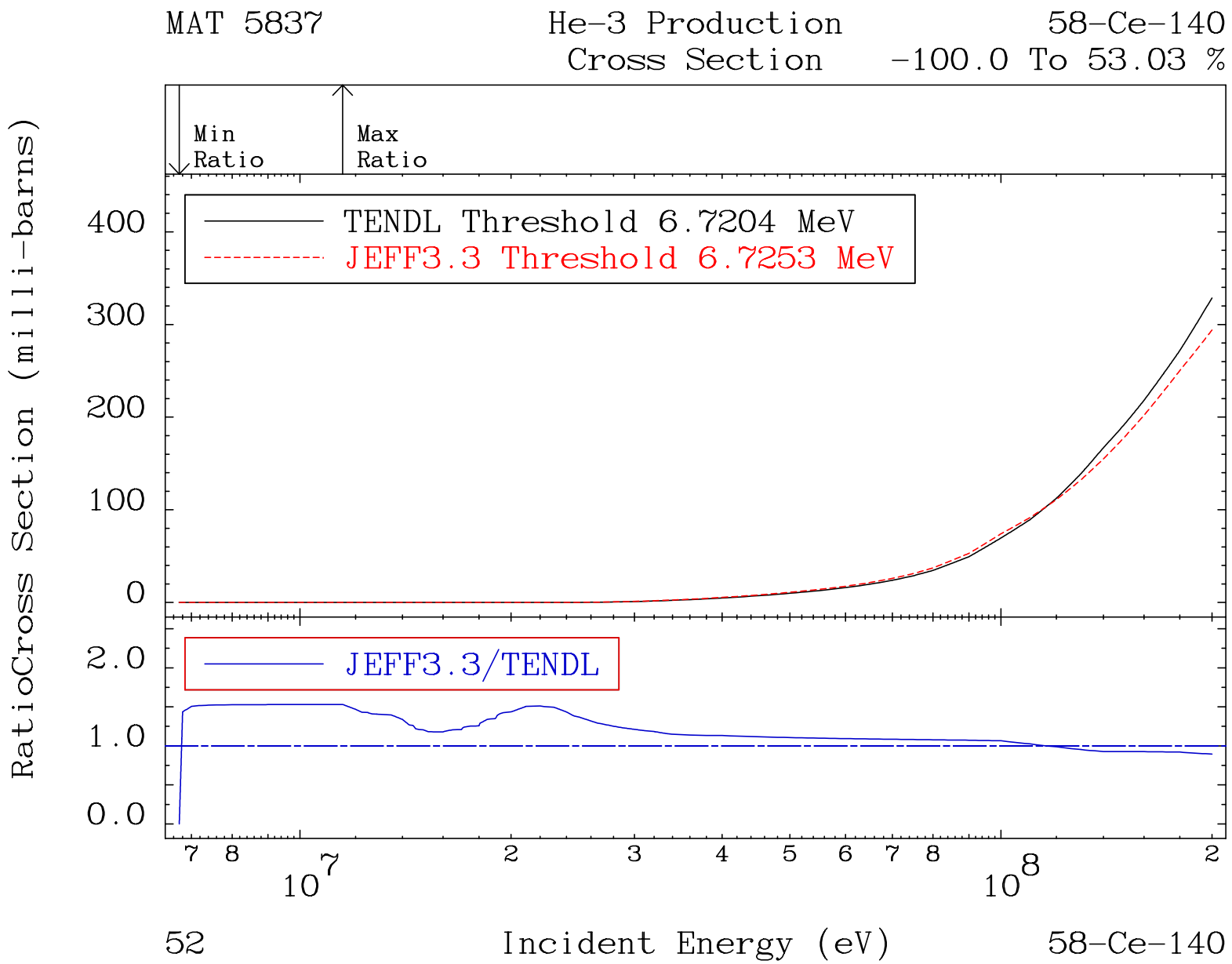

MAT 5837
(n,p) t
Cross Section
58-Ce-140
-100.0 To 206.4 %
Min Ratio
Max Ratio
TENDL Threshold 14.625 MeV
JEFF3.3 Threshold 14.630 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
160
120
80
40
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
58-Ce-140

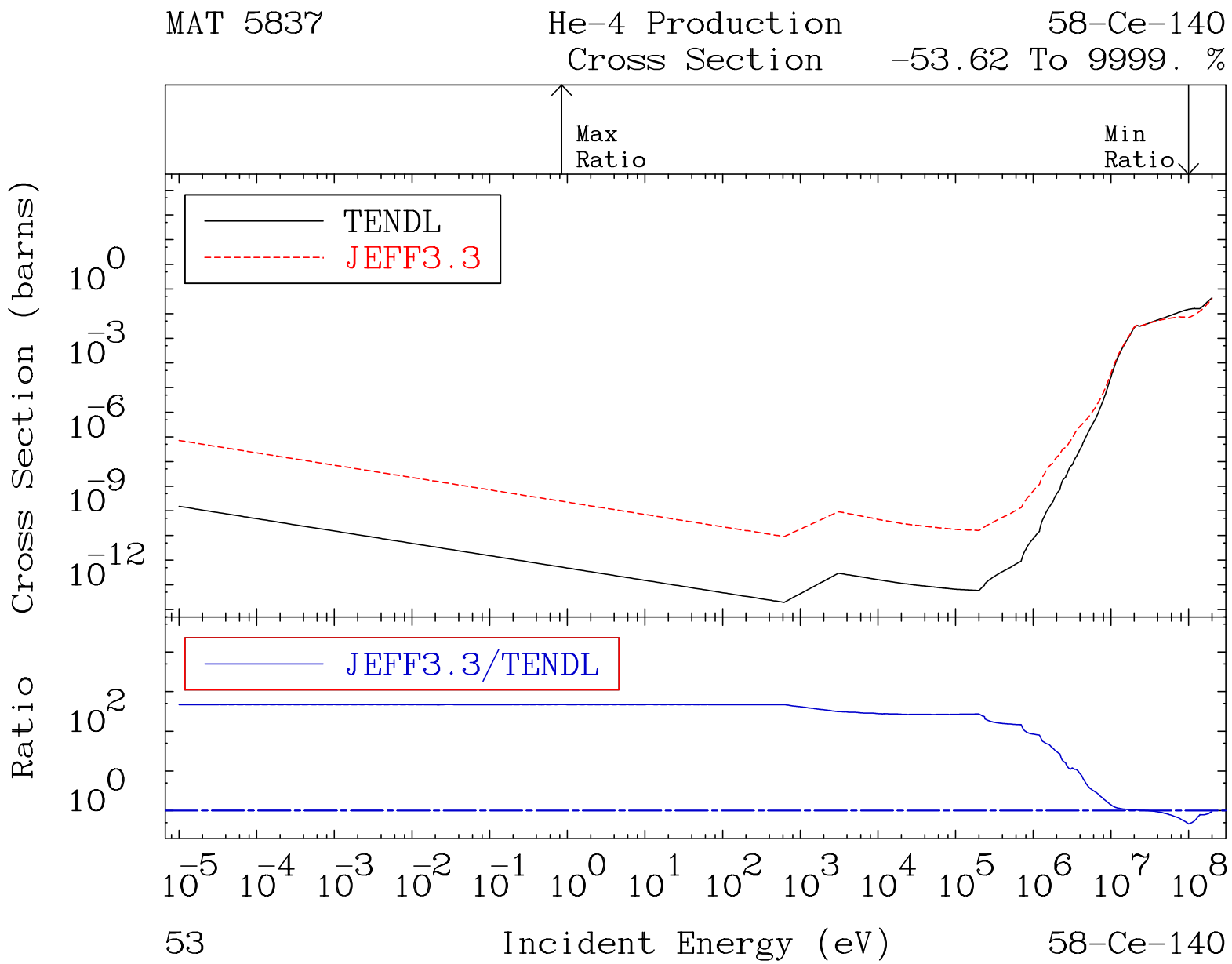

MAT 5837
(n,d) α
58-Ce-140
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.0391 MeV
JEFF3.3 Threshold 8.0443 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
50
40
30
20
10
0
400
200
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
58-Ce-140

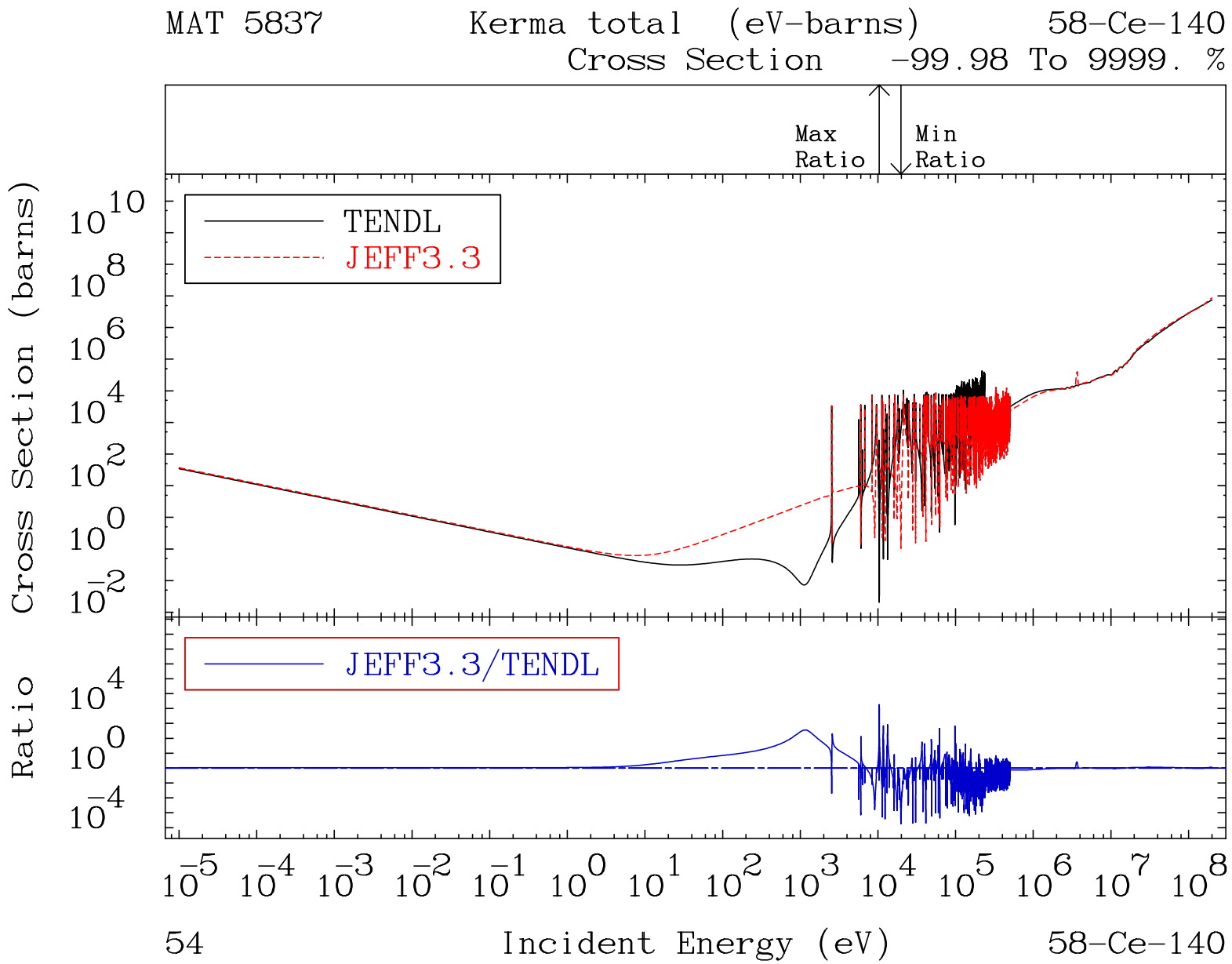

MAT 5837
Hydrogen Production
58-Ce-140
Cross Section
-4.785 To 164.1 %
Min Ratio
Max Ratio
TENDL Threshold 3.0013 MeV
JEFF3.3 Threshold 3.0001 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
3.0
2.0
1.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
49
Incident Energy (eV)
58-Ce-140

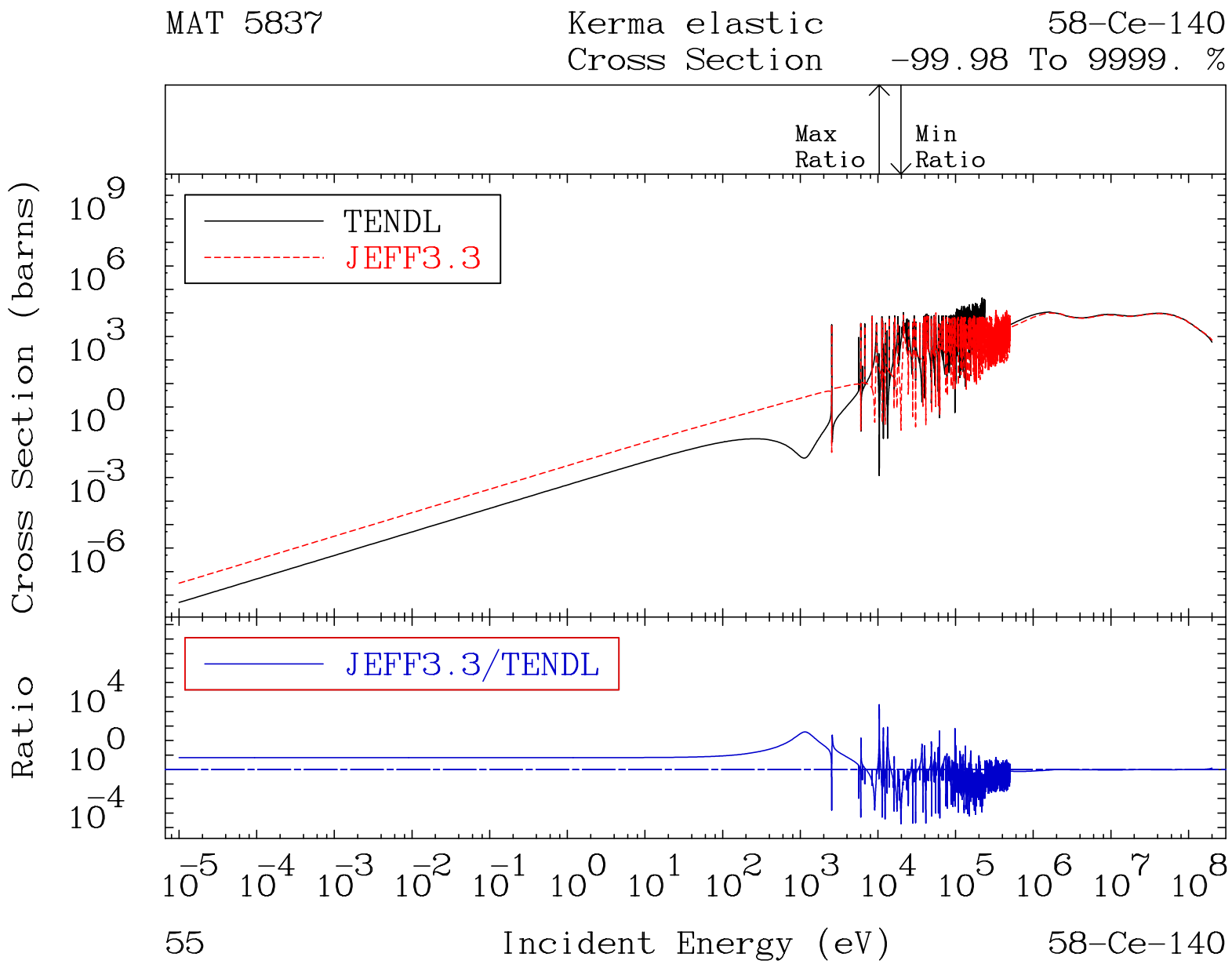

MAT 5837
Deuterium Production
58-Ce-140
Cross Section
-13.65 To 123.6 %
Min Ratio
Max Ratio
TENDL Threshold 5.9589 MeV
JEFF3.3 Threshold 5.9576 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
3.0
2.0
1.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
50
Incident Energy (eV)
58-Ce-140

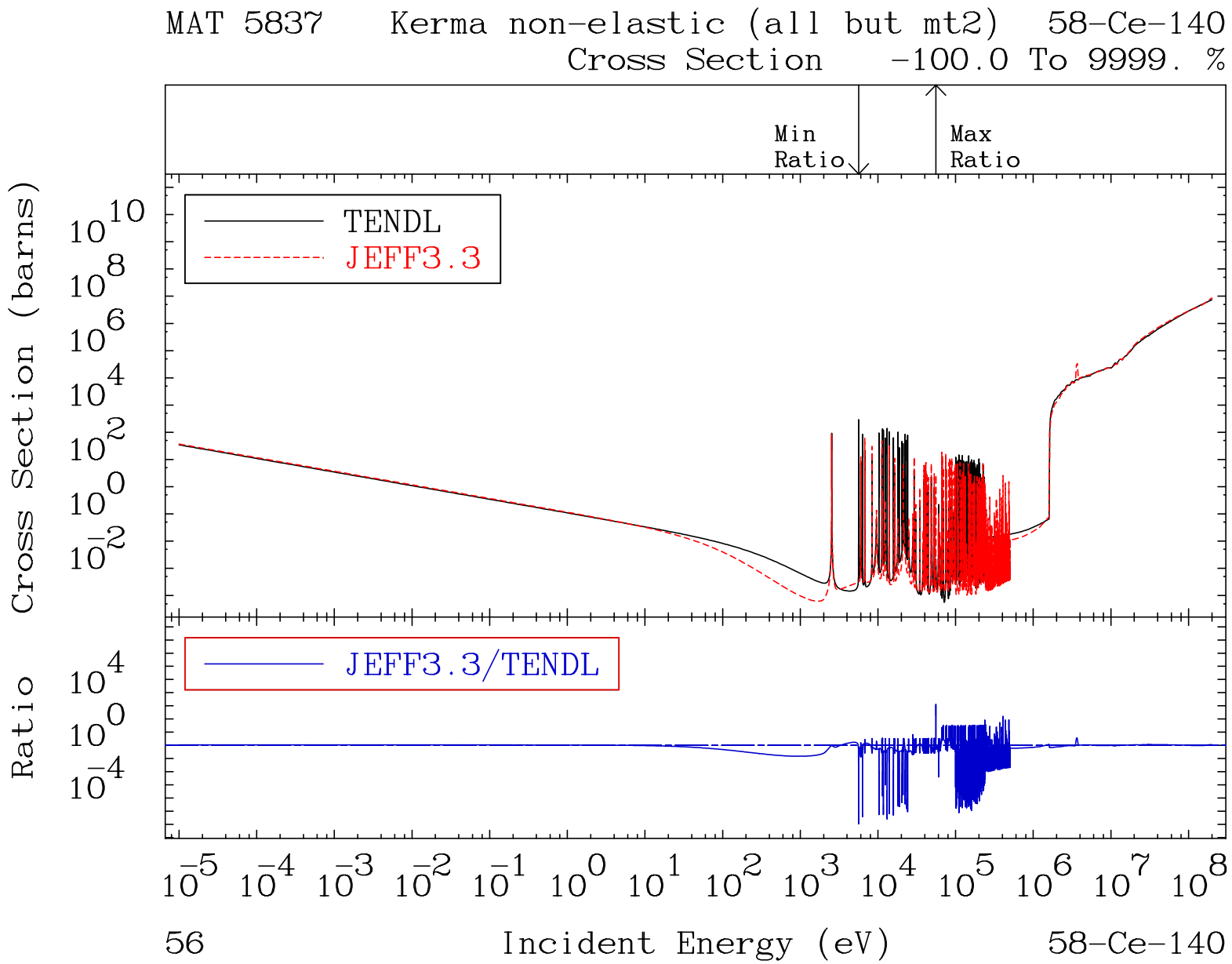

MAT 5837
Tritium Production
Cross Section
58-Ce-140
-22.18 To 202.8 %
Min Ratio
Max Ratio
TENDL Threshold 8.5001 MeV
JEFF3.3 Threshold 8.4966 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
4.0
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
58-Ce-140

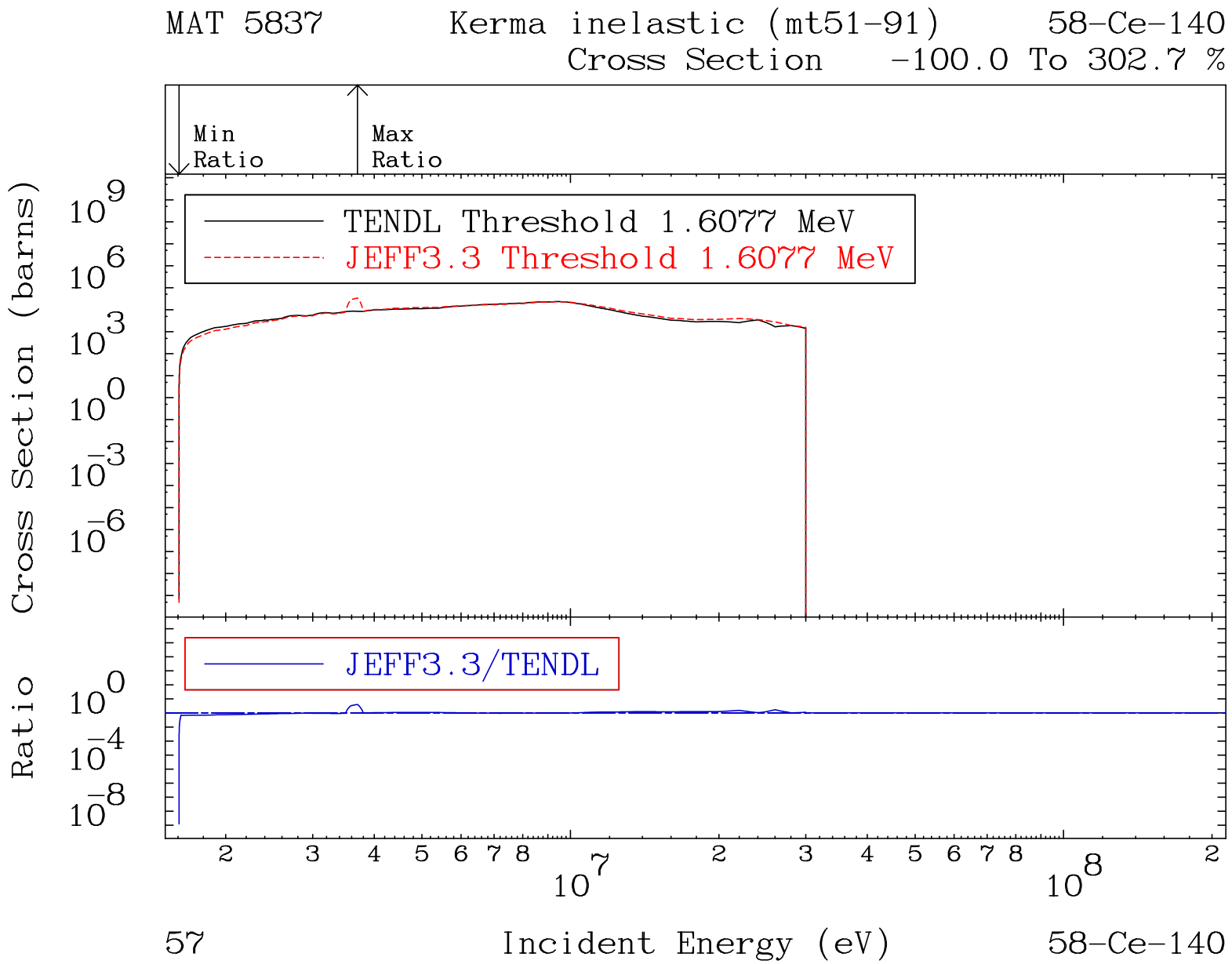

MAT 5837
He-3 Production
Cross Section
58-Ce-140
-100.0 To 53.03 %
Min Ratio
Max Ratio
TENDL Threshold 6.7204 MeV
JEFF3.3 Threshold 6.7253 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
52
Incident Energy (eV)
58-Ce-140

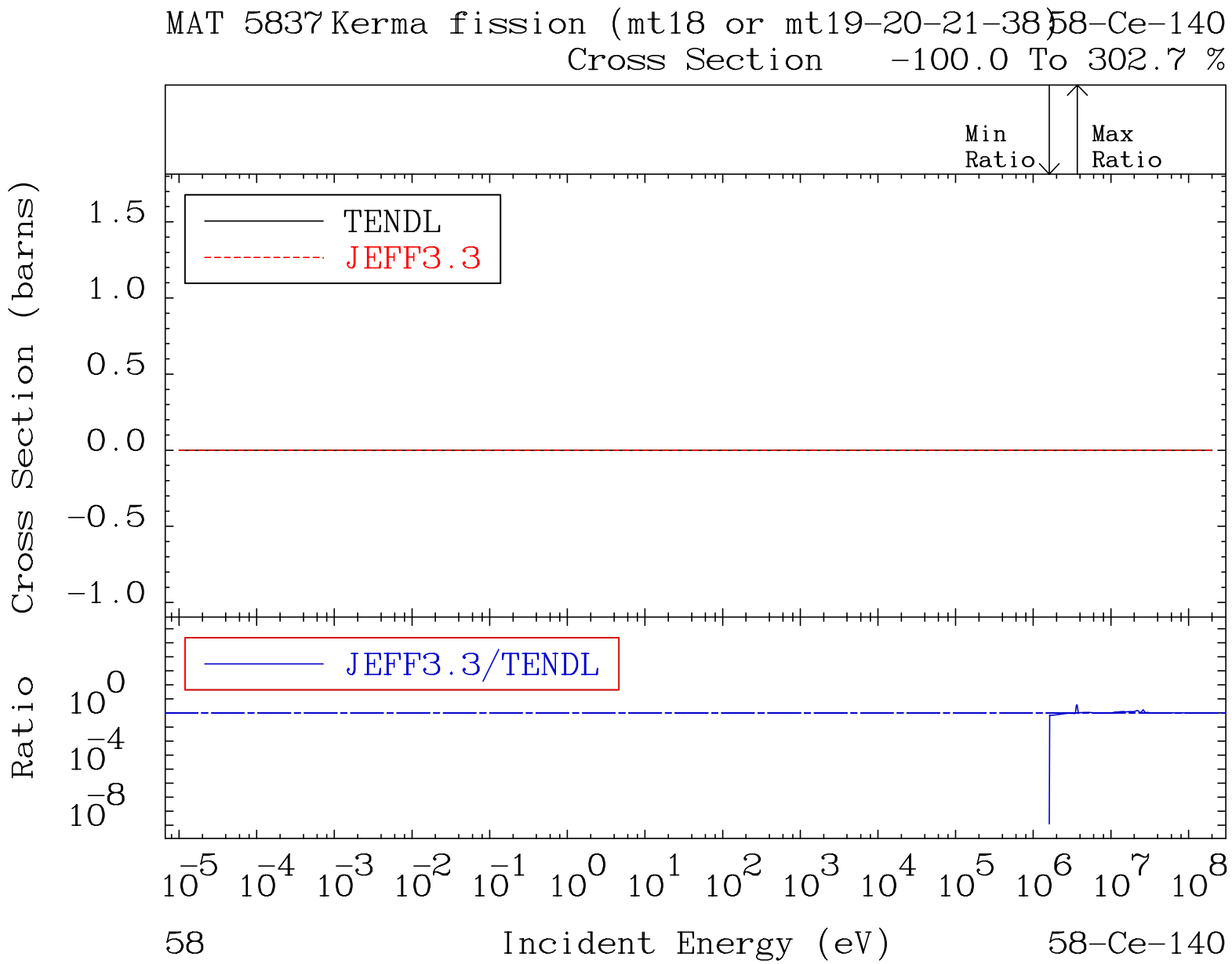

MAT 5837
He-4 Production
Cross Section
58-Ce-140
-53.62 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
58-Ce-140

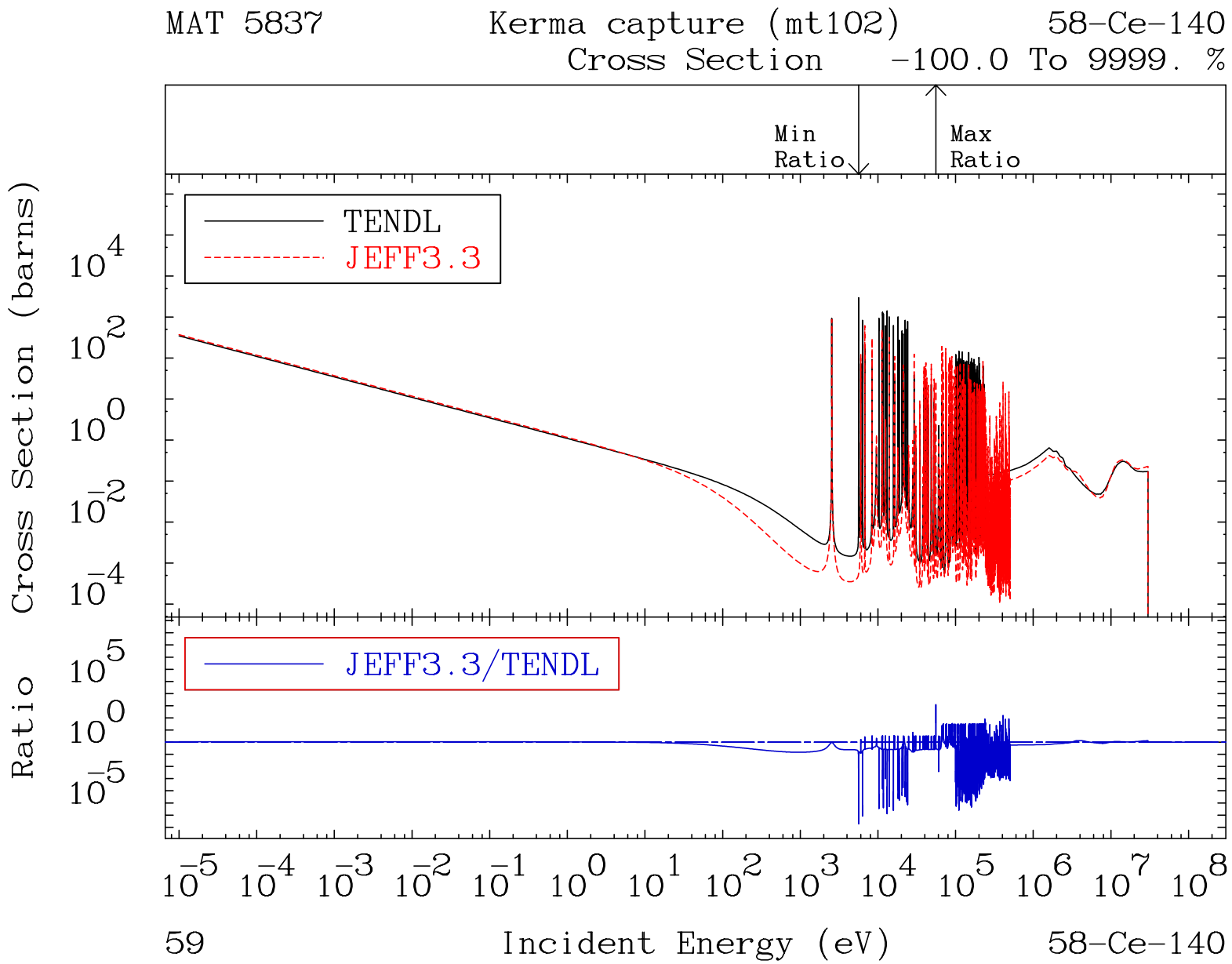

MAT 5837
Kerma total (eV-barns)
58-Ce-140
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
58-Ce-140

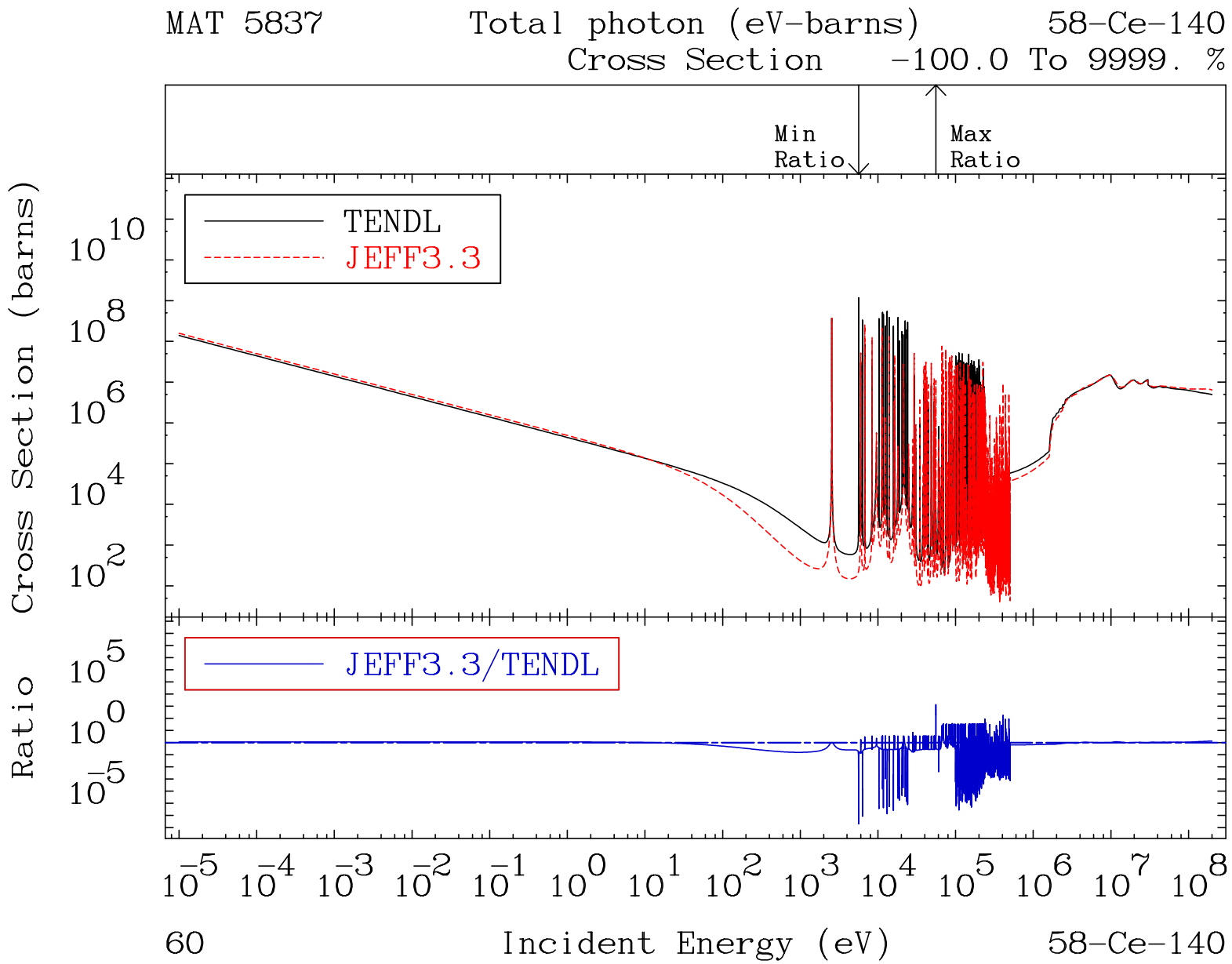

MAT 5837
Kerma elastic
Cross Section
58-Ce-140
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
58-Ce-140

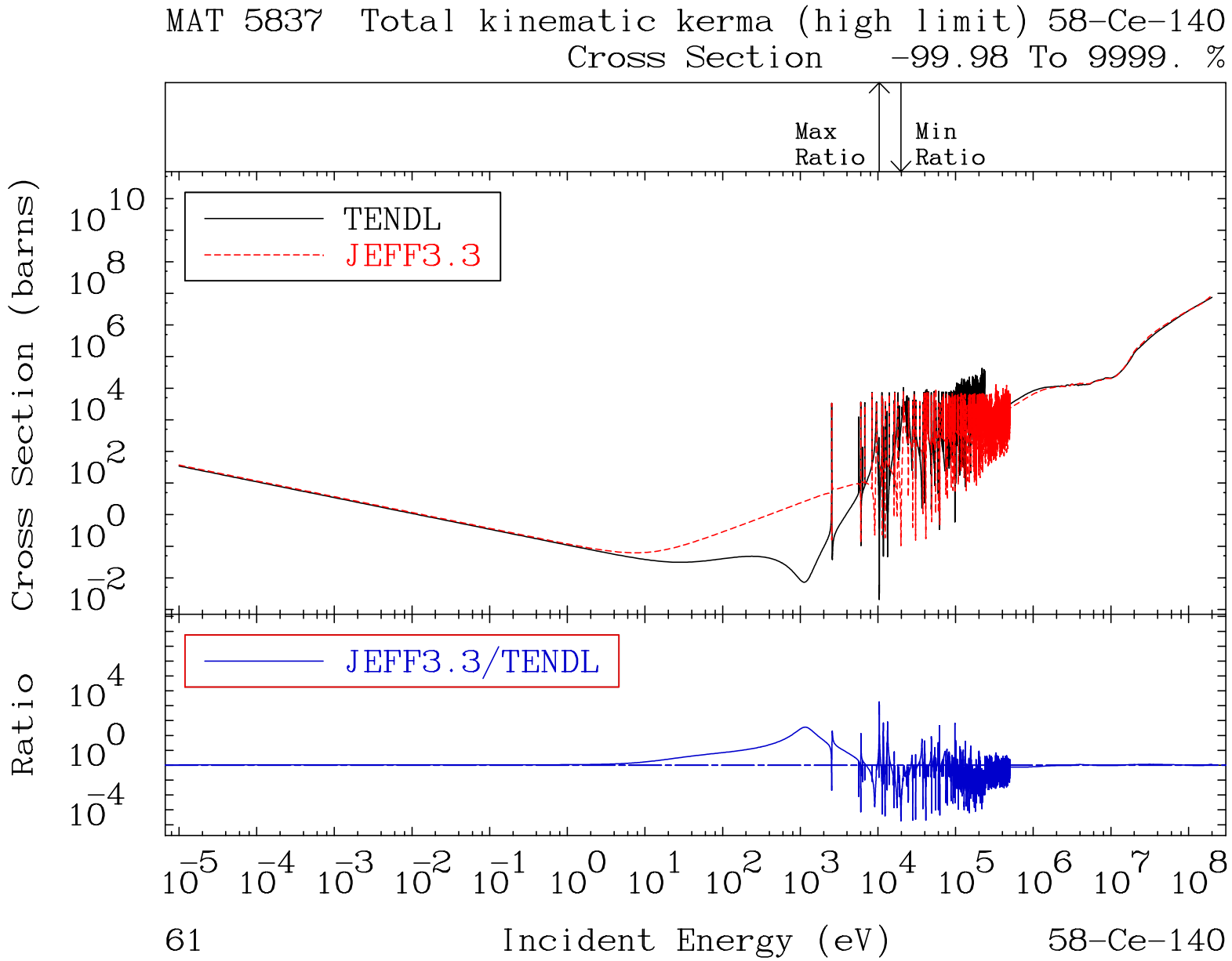

MAT 5837 Kerma non-elastic (all but mt2) 58-Ce-140
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
58-Ce-140

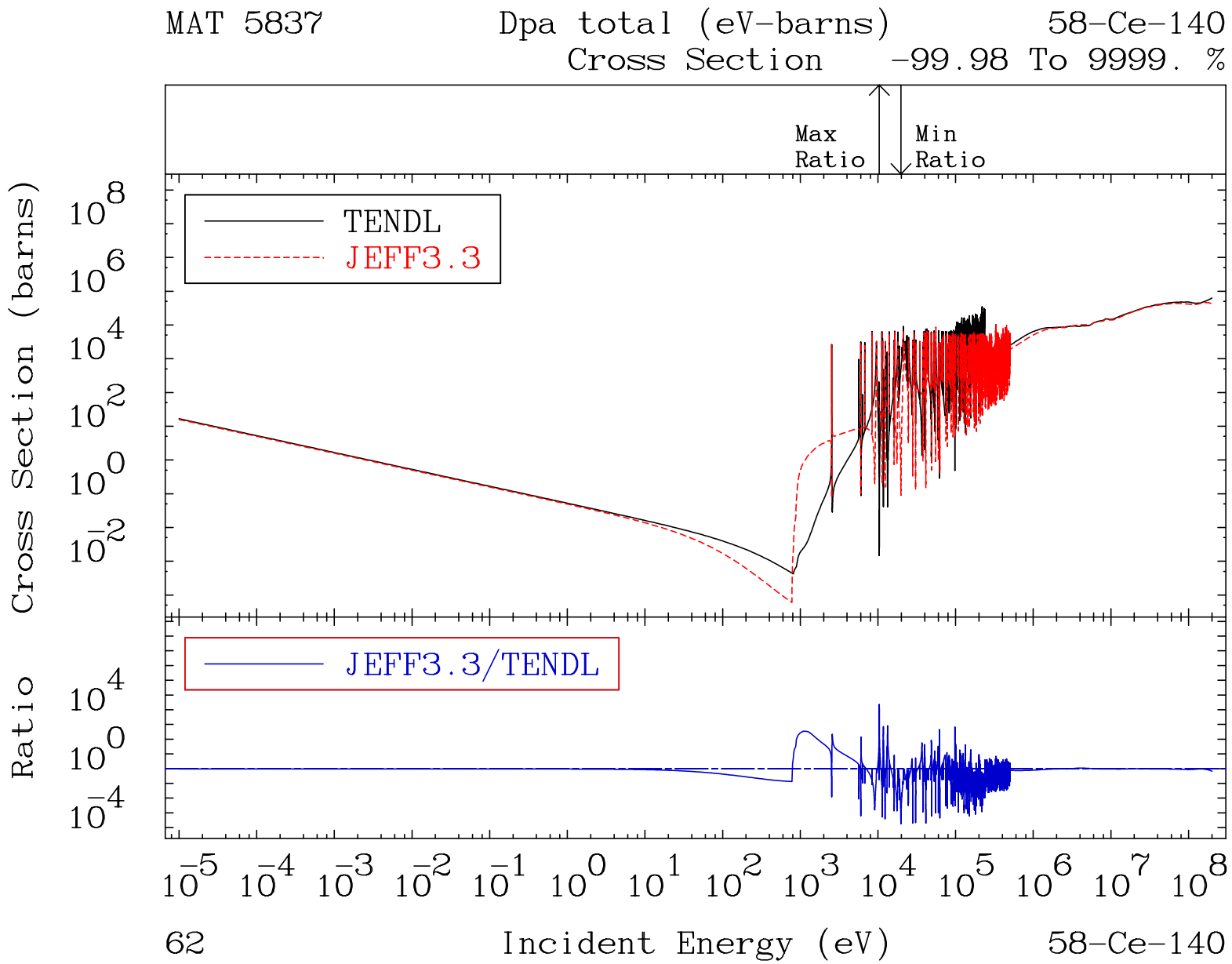

MAT 5837
Kerma inelastic (mt51-91)
58-Ce-140
Cross Section -100.0 To 302.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.6077 MeV
JEFF3.3 Threshold 1.6077 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
58-Ce-140

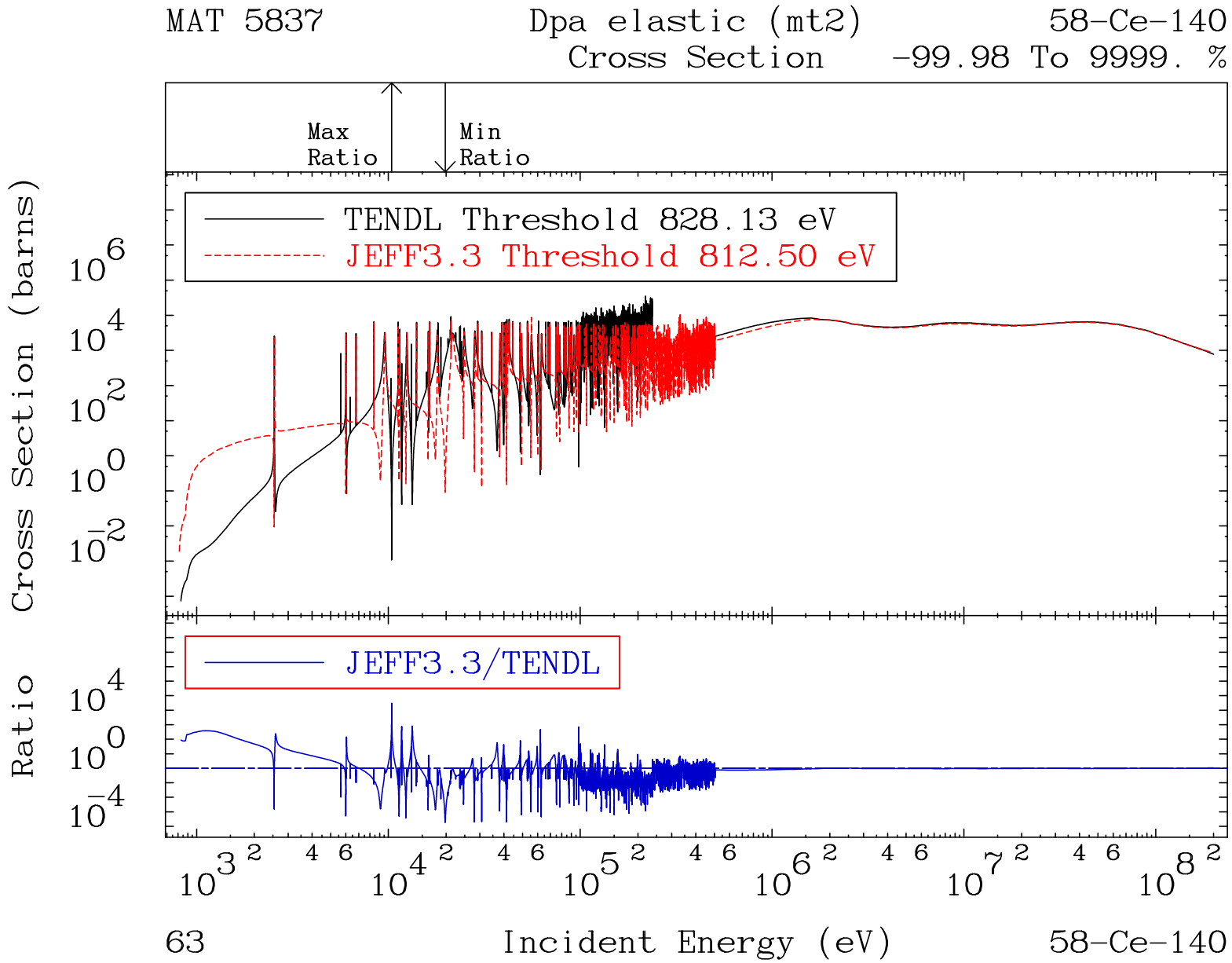

MAT 5837 Kerma fission (mt18 or mt19-20-21-38) 58-Ce-140
Cross Section -100.0 To 302.7 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-4}
10^{-8}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
58
Incident Energy (eV)
58-Ce-140

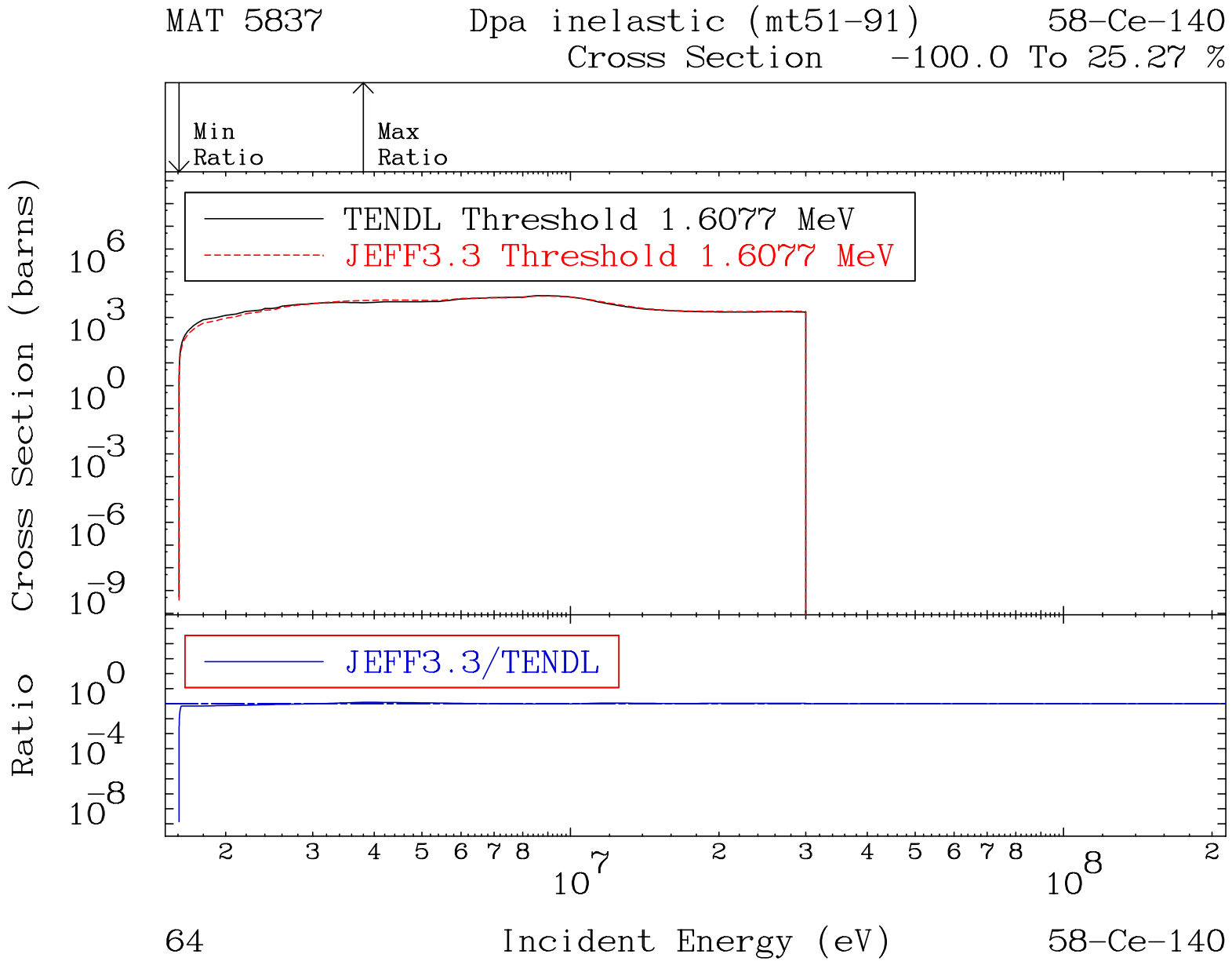

MAT 5837
Kerma capture (mt102)
58-Ce-140
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
58-Ce-140

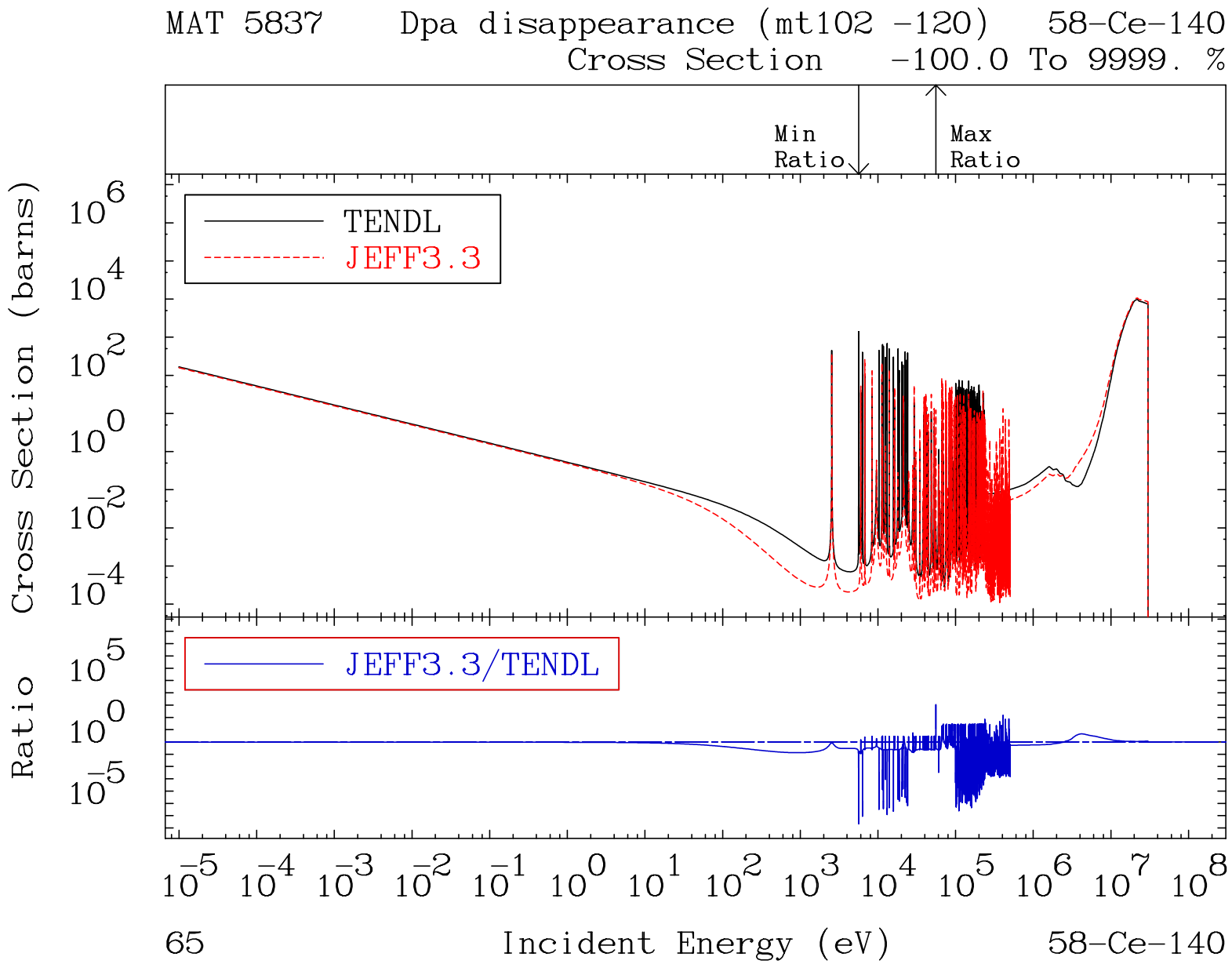

MAT 5837
Total photon (eV-barns)
58-Ce-140
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
58-Ce-140

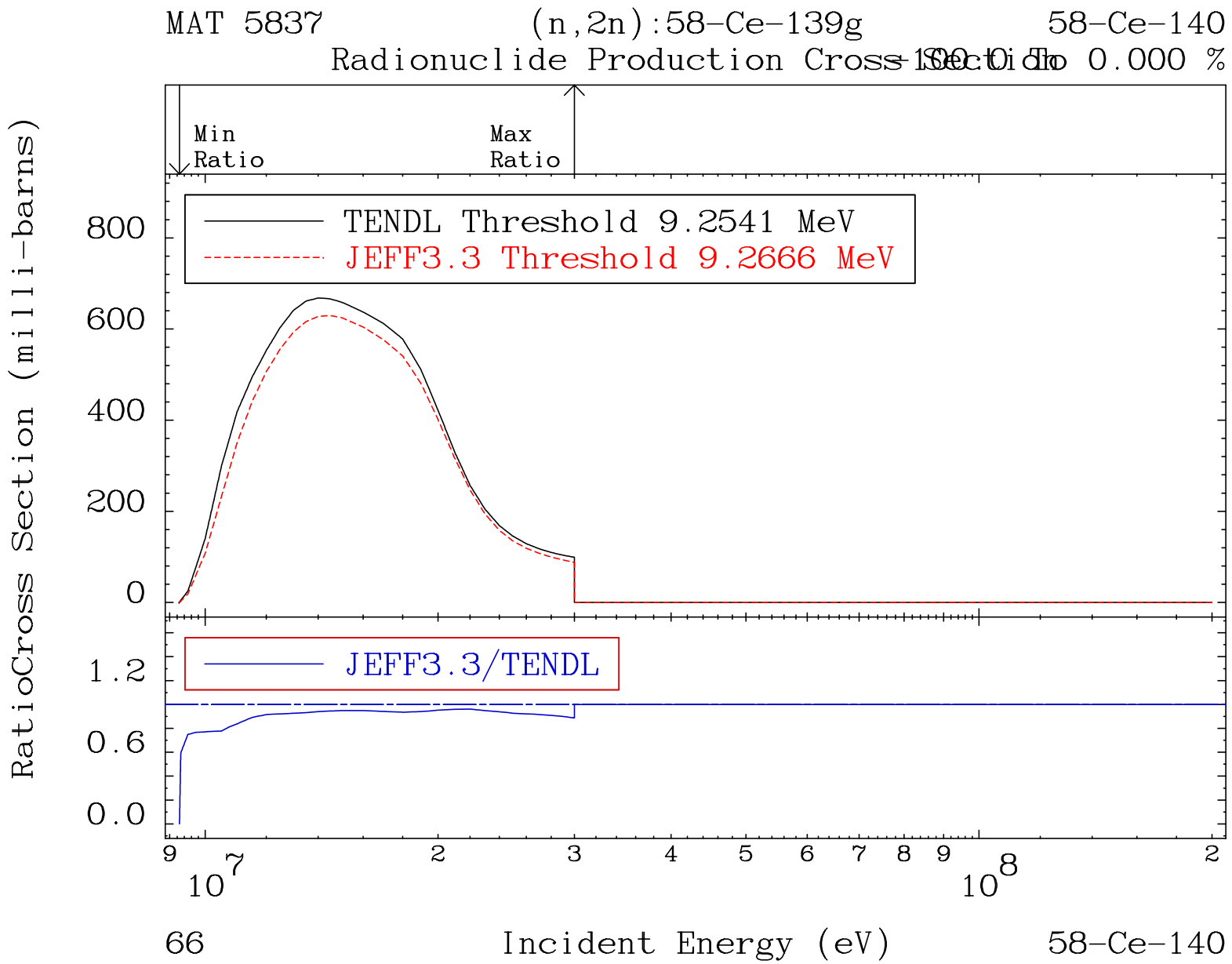

MAT 5837 Total kinematic kerma (high limit) 58-Ce-140
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
58-Ce-140

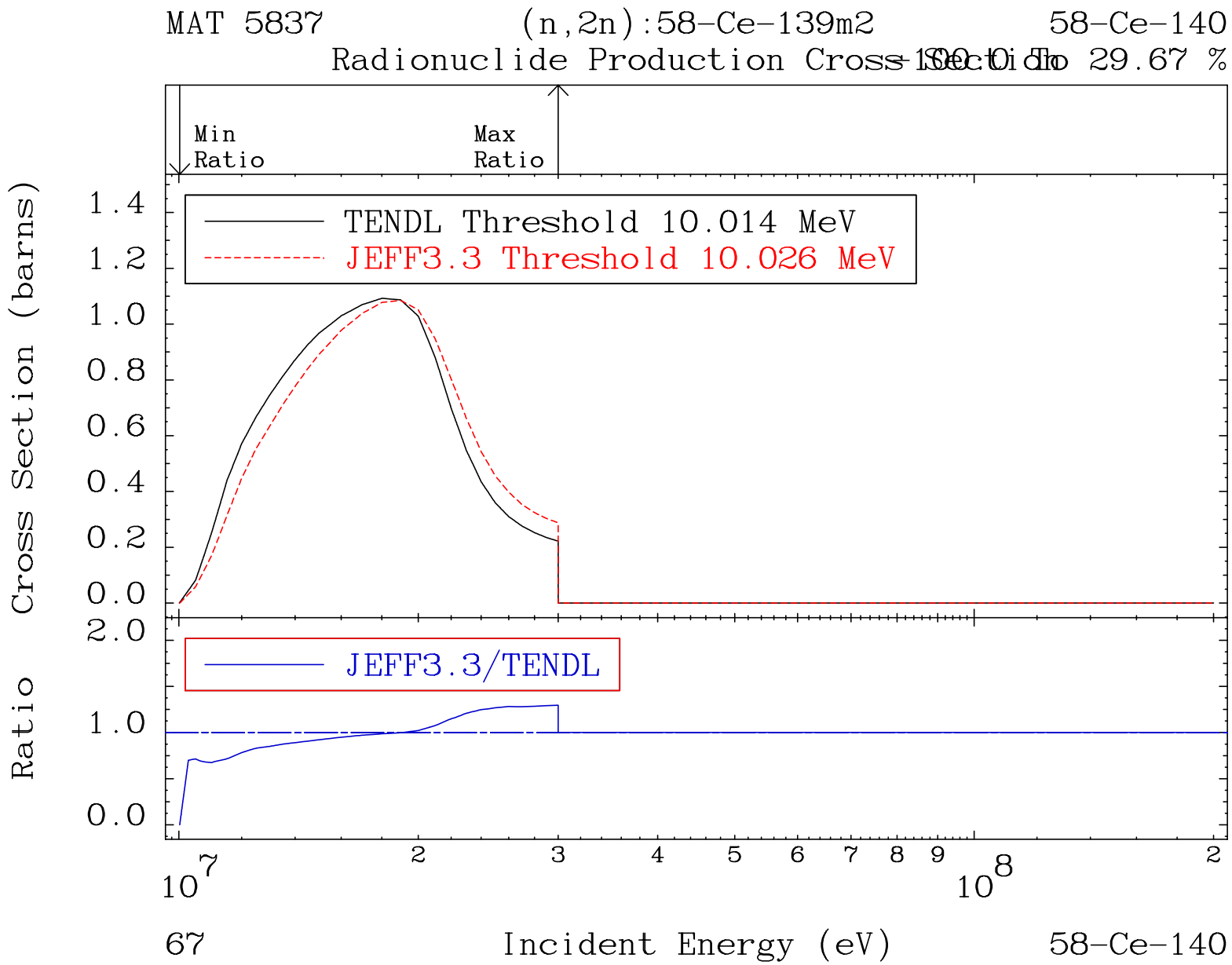

MAT 5837
Dpa total (eV-barns)
58-Ce-140
Cross Section
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
58-Ce-140

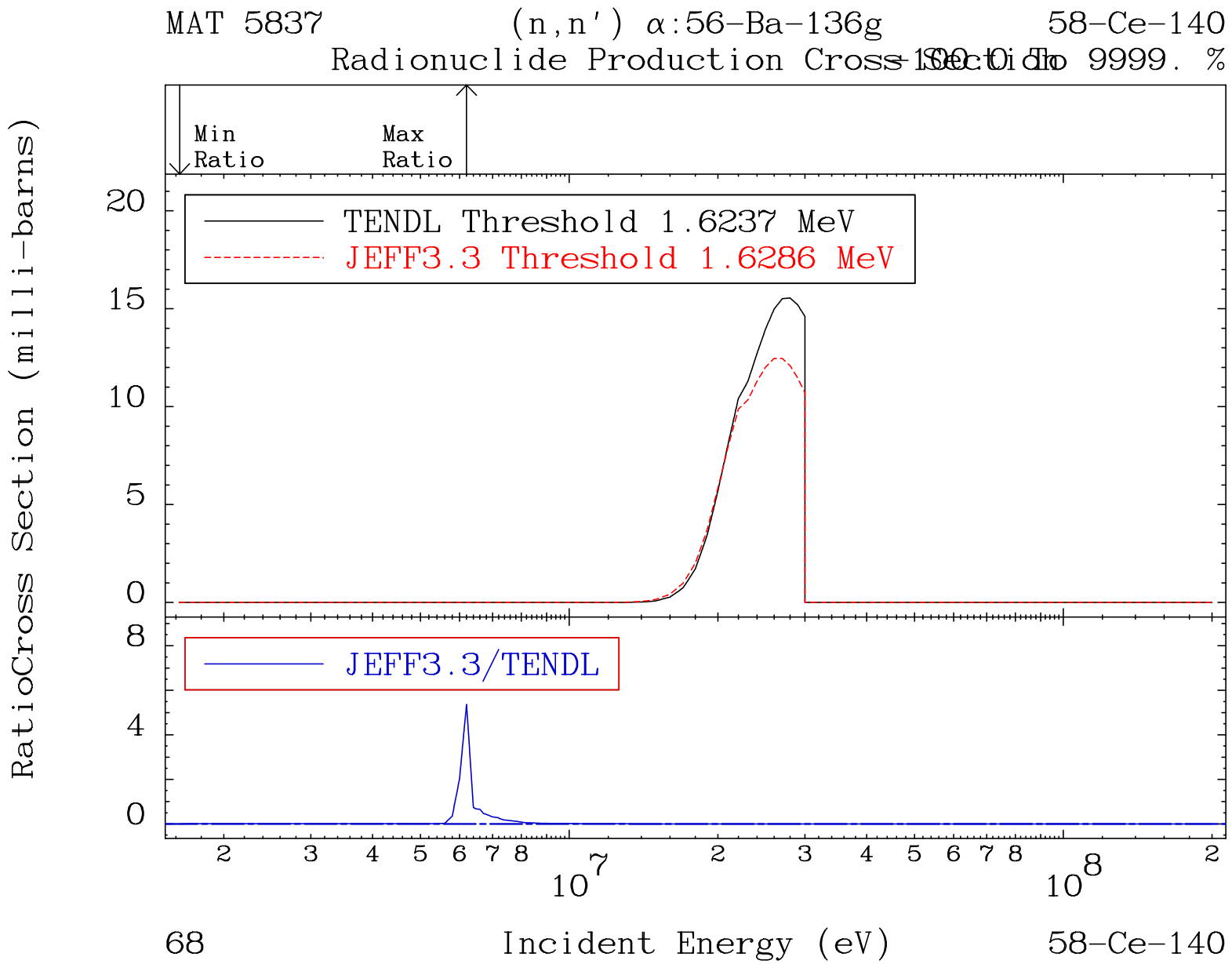

MAT 5837
Dpa elastic (mt2)
Cross Section
58-Ce-140
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 828.13 eV
JEFF3.3 Threshold 812.50 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
58-Ce-140

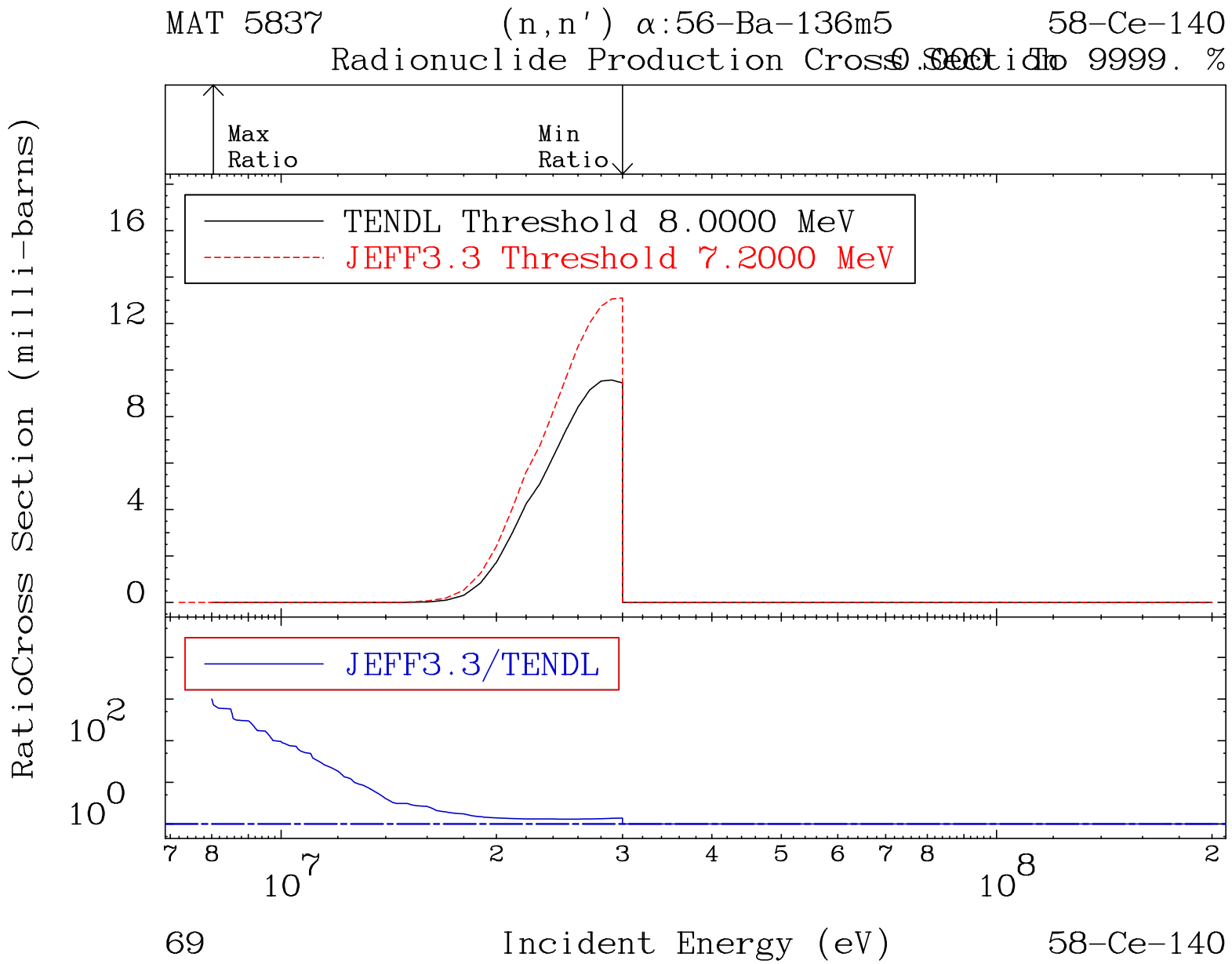

MAT 5837
Dpa inelastic (mt51-91)
58-Ce-140
Cross Section
-100.0 To 25.27 %
Min Ratio
Max Ratio
TENDL Threshold 1.6077 MeV
JEFF3.3 Threshold 1.6077 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
58-Ce-140

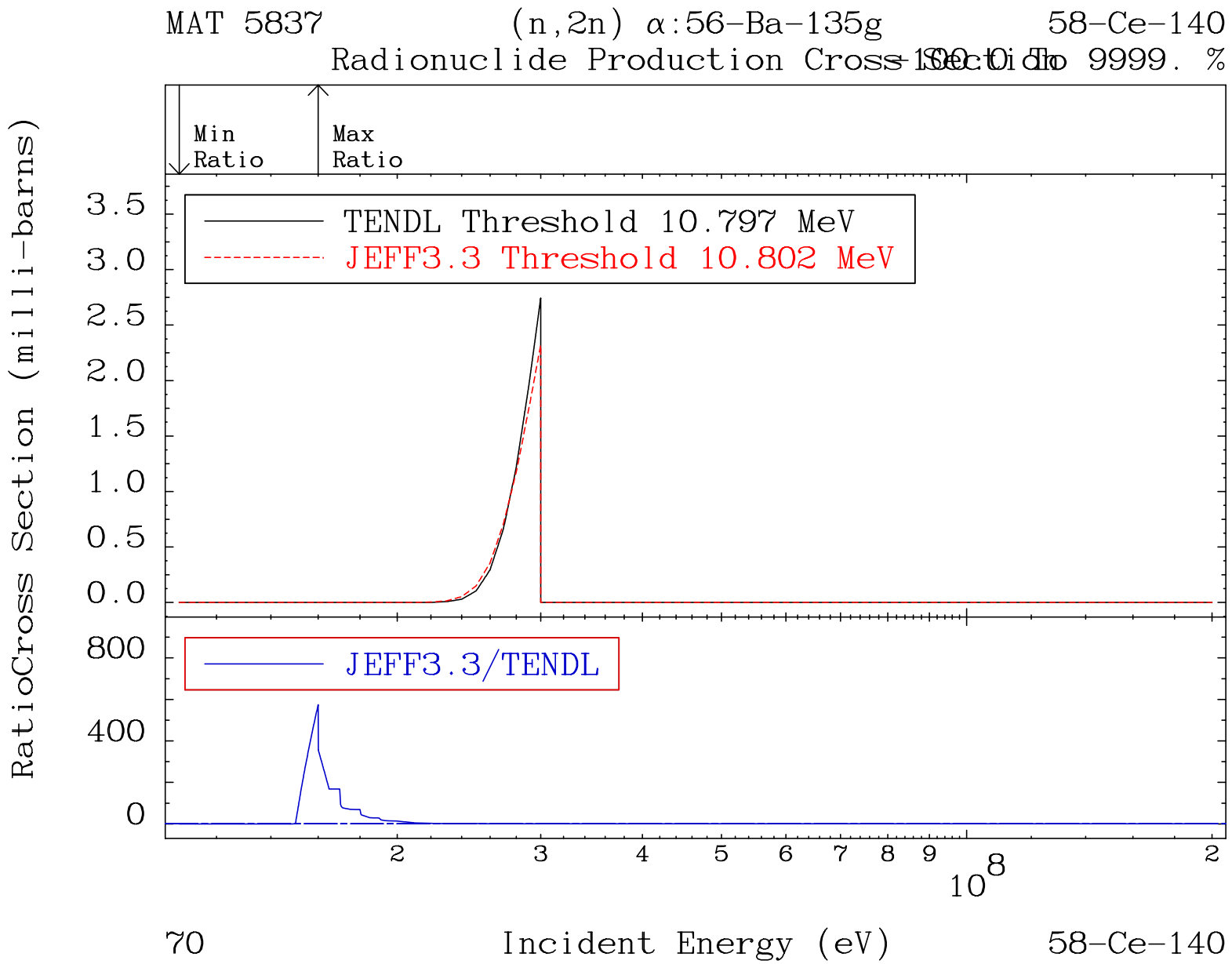

MAT 5837 Dpa disappearance (mt102 -120) 58-Ce-140
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
58-Ce-140

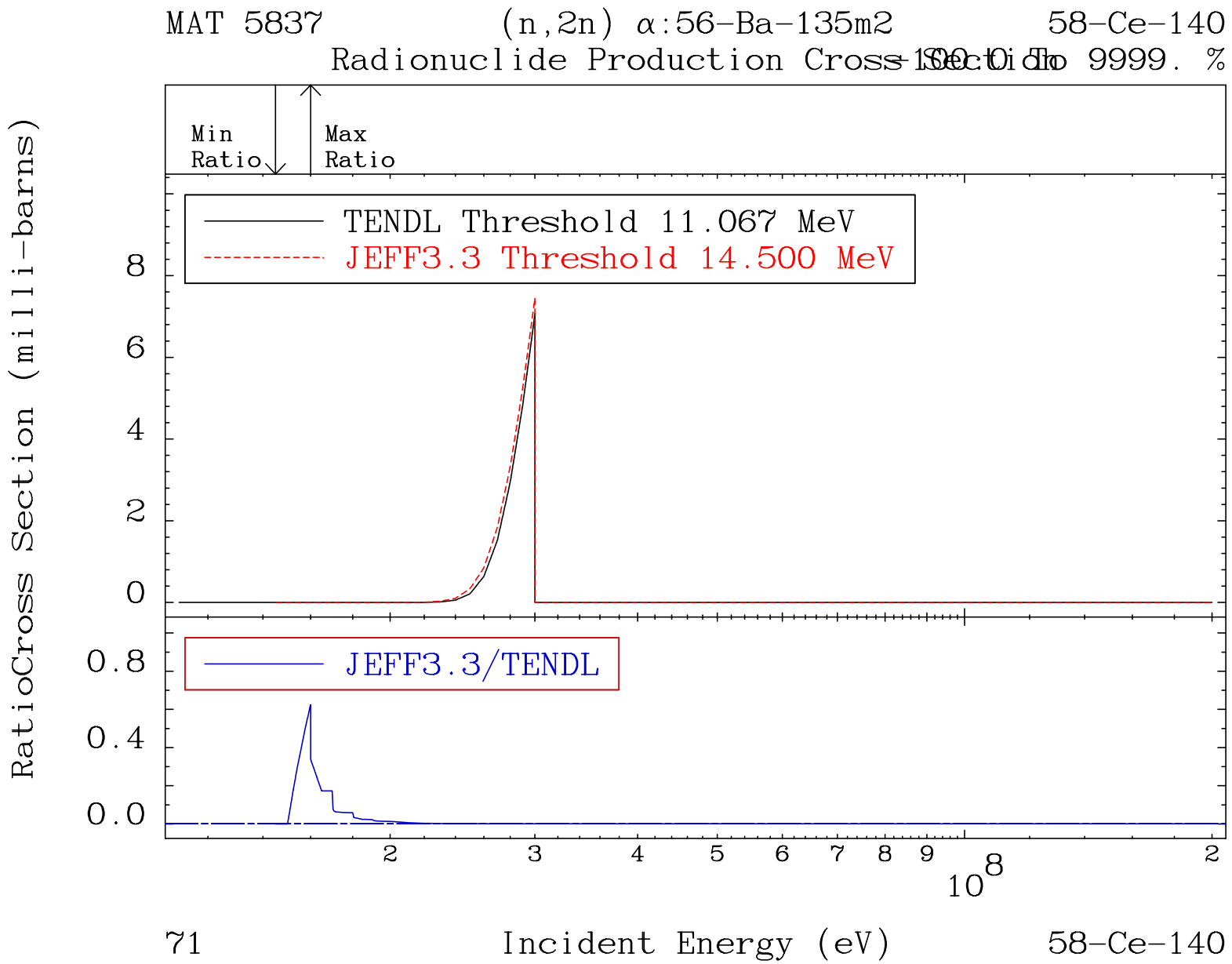

MAT 5837
(n,2n):58-Ce-139g
58-Ce-140
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.2541 MeV
JEFF3.3 Threshold 9.2666 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
58-Ce-140

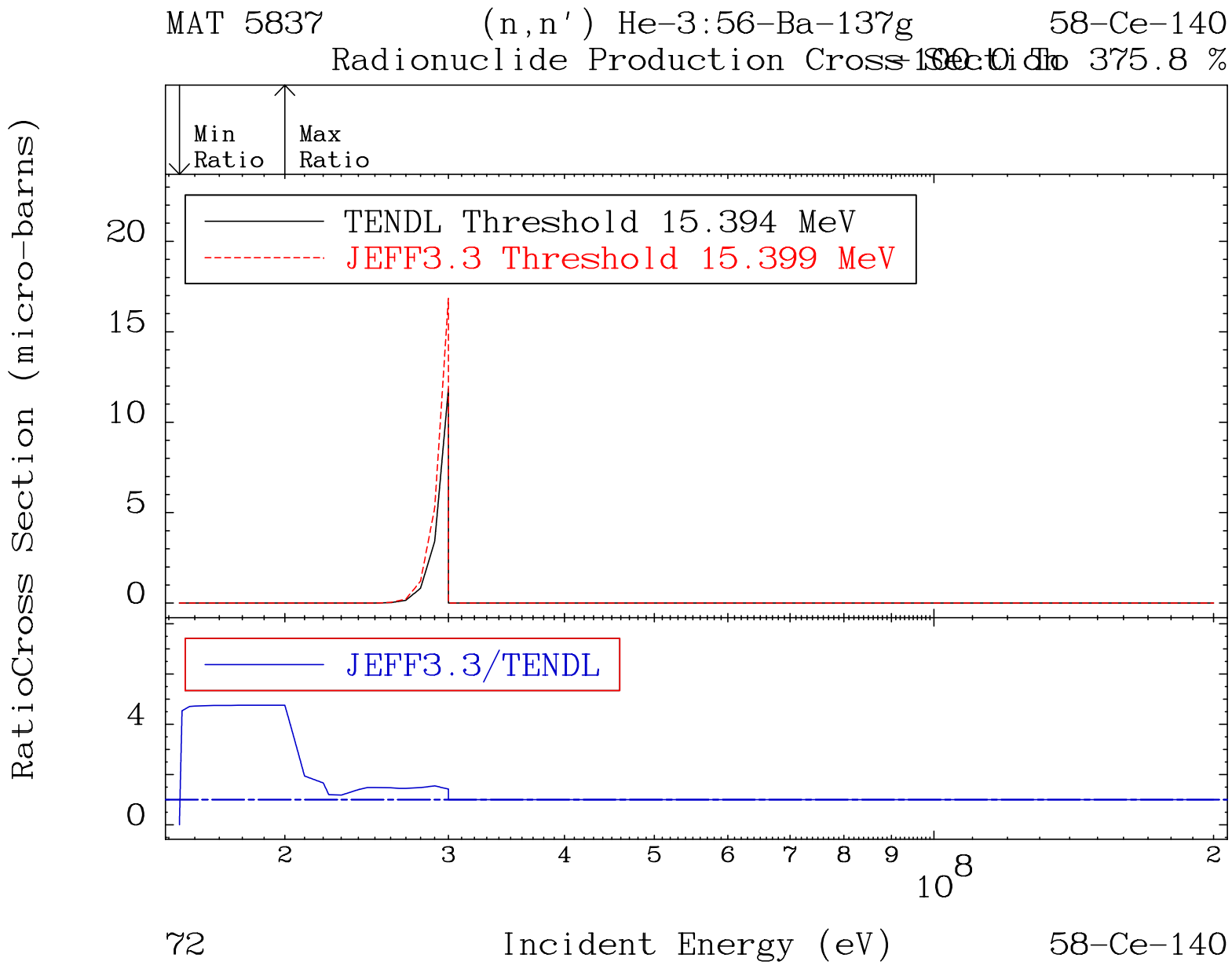

MAT 5837
(n,2n):58-Ce-139m2
58-Ce-140
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.014 MeV
JEFF3.3 Threshold 10.026 MeV
JEFF3.3/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
67
58-Ce-140

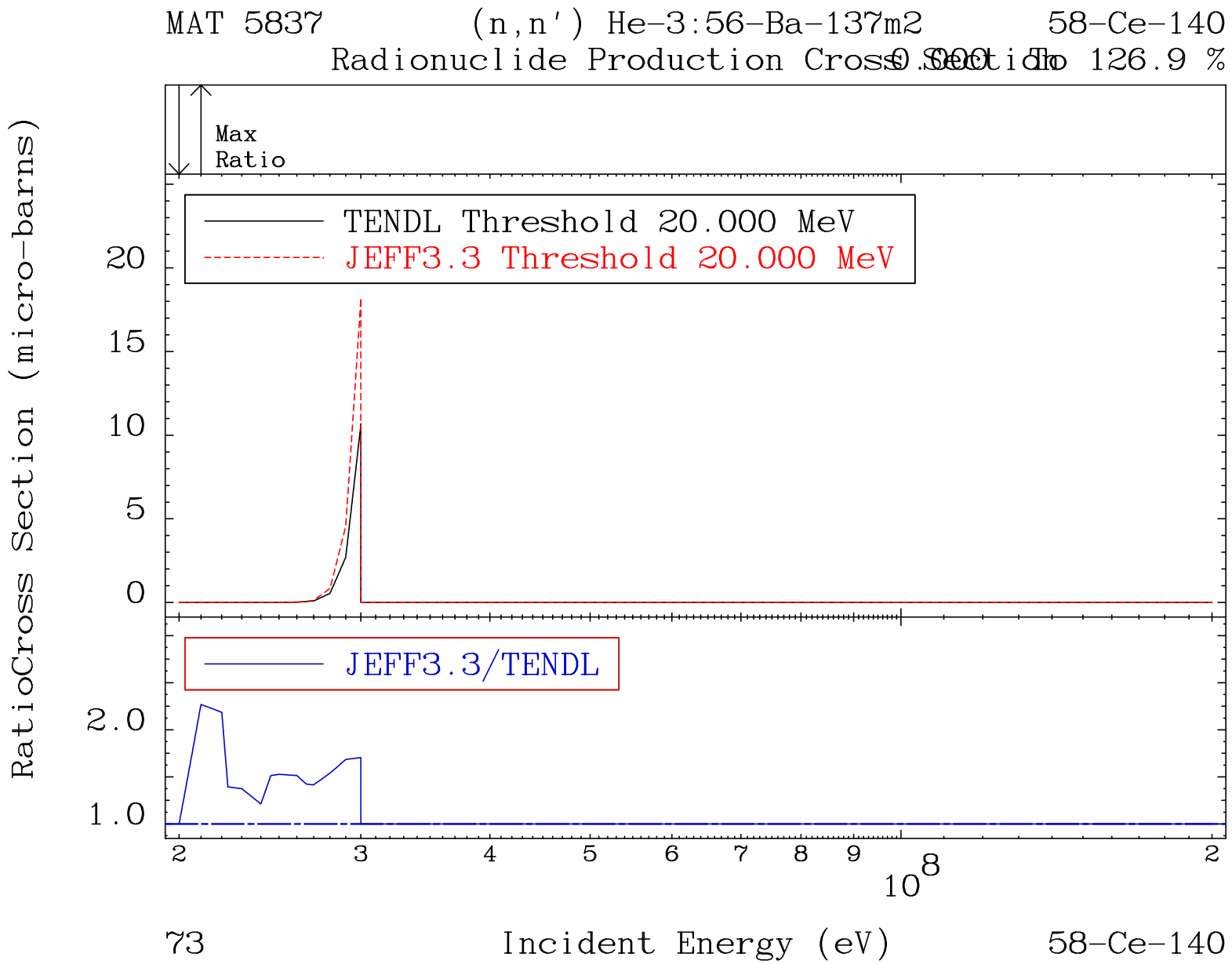

MAT 5837
(n,n') α:56-Ba-136g
58-Ce-140
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 1.6237 MeV
JEFF3.3 Threshold 1.6286 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
68
58-Ce-140


MAT 5837
(n,n') α:56-Ba-136m5
58-Ce-140
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.0000 MeV
JEFF3.3 Threshold 7.2000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
10^2
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
69
Incident Energy (eV)
58-Ce-140


MAT 5837
(n,2n) α:56-Ba-135g
58-Ce-140
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 10.797 MeV
JEFF3.3 Threshold 10.802 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
800
400
0
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
58-Ce-140

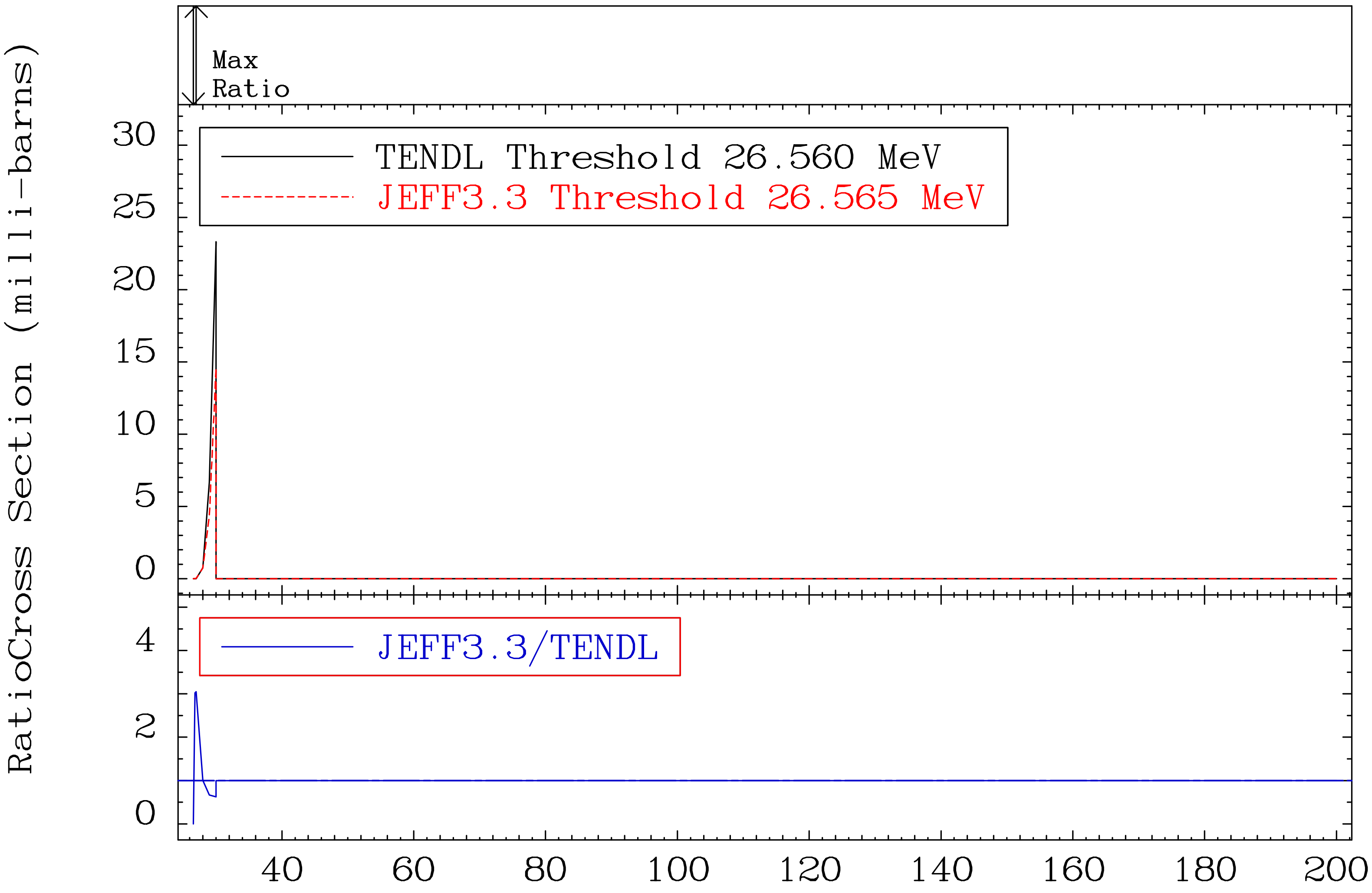

MAT 5837
(n,2n) α:56-Ba-135m2
58-Ce-140
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.067 MeV
JEFF3.3 Threshold 14.500 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
71
58-Ce-140


MAT 5837 (n,n') He-3:56-Ba-137g 58-Ce-140
Radionuclide Production Cross Section Up To 375.8 %
Min Ratio
Max Ratio
TENDL Threshold 15.394 MeV
JEFF3.3 Threshold 15.399 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
72
58-Ce-140

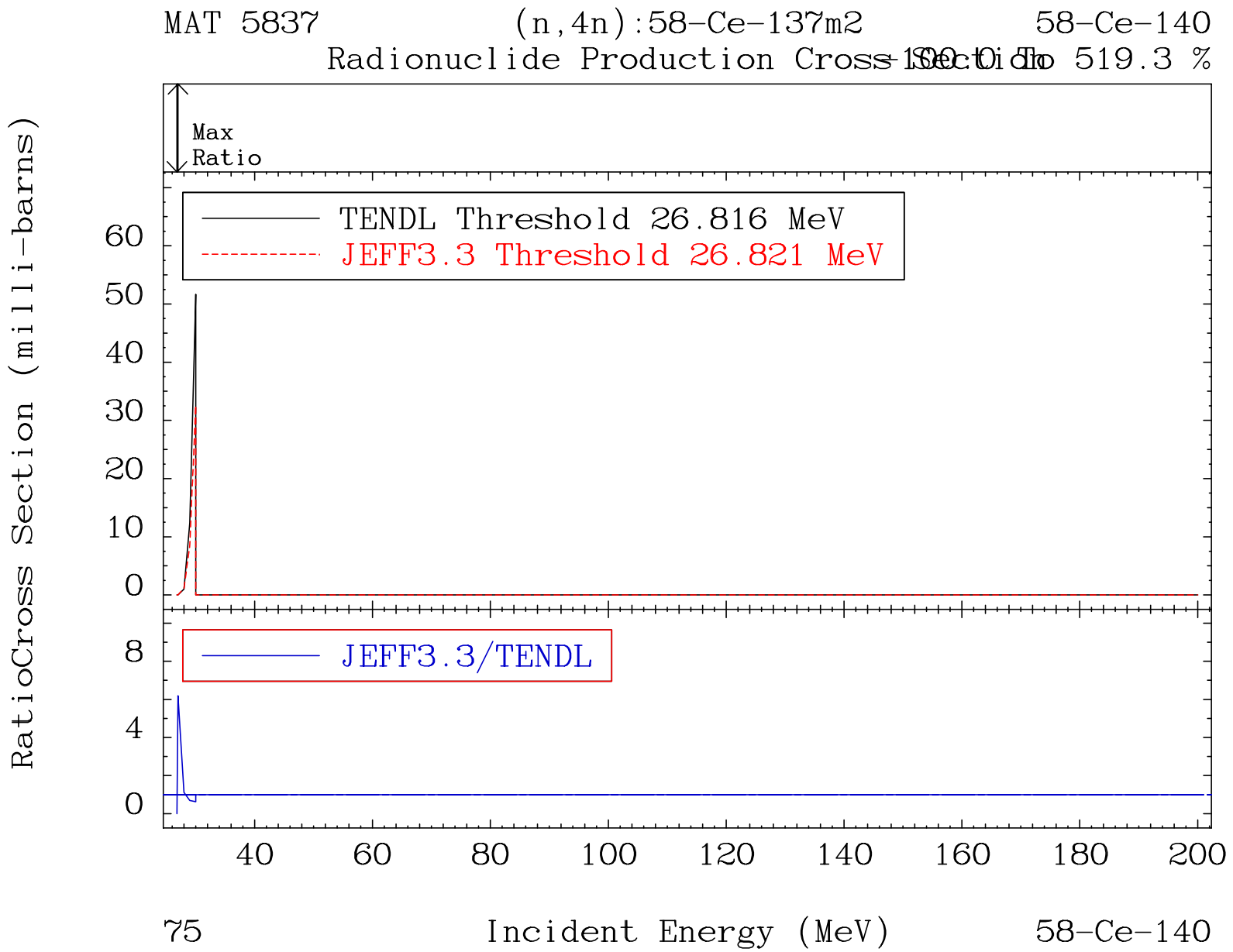

MAT 5837 (n,n') He-3:56-Ba-137m2 58-Ce-140
Radionuclide Production Cross Section To 126.9 %
Max
Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 20.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
20
15
10
5
0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
73
Incident Energy (eV)
58-Ce-140

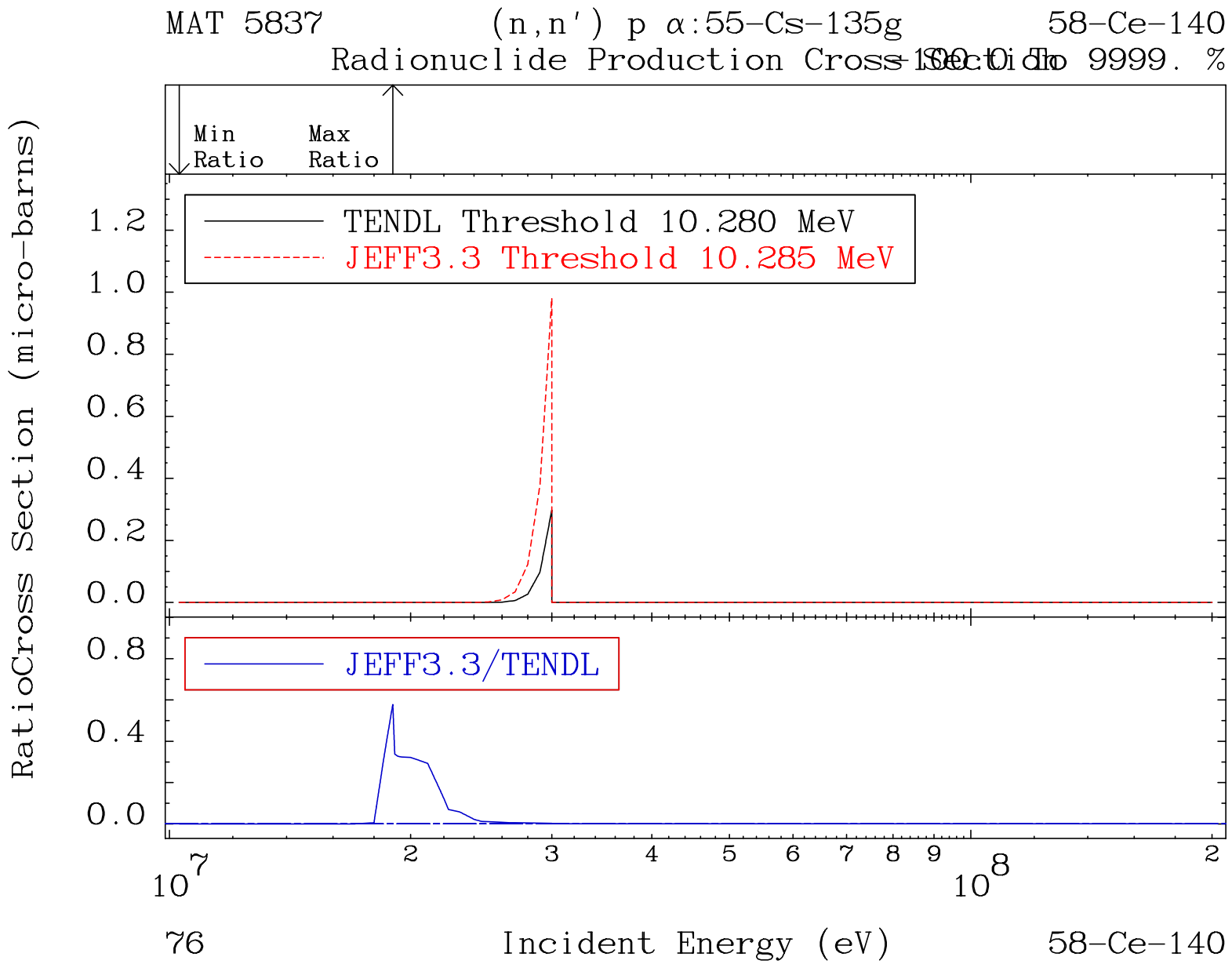
MAT 5837 (n,4n):58-Ce-137g 58-Ce-140

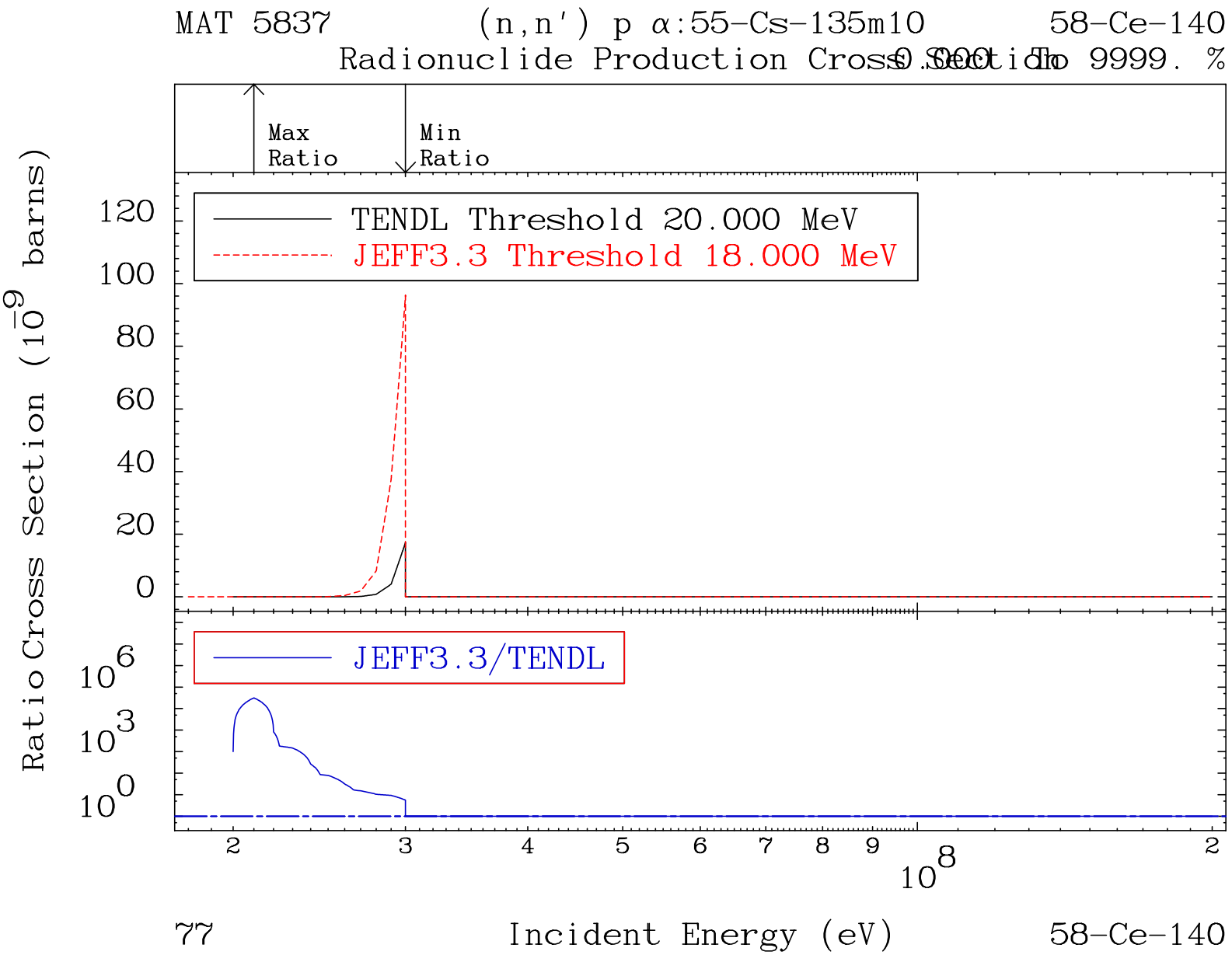
Radionuclide Production Cross Section -100.0 To 205.0 %

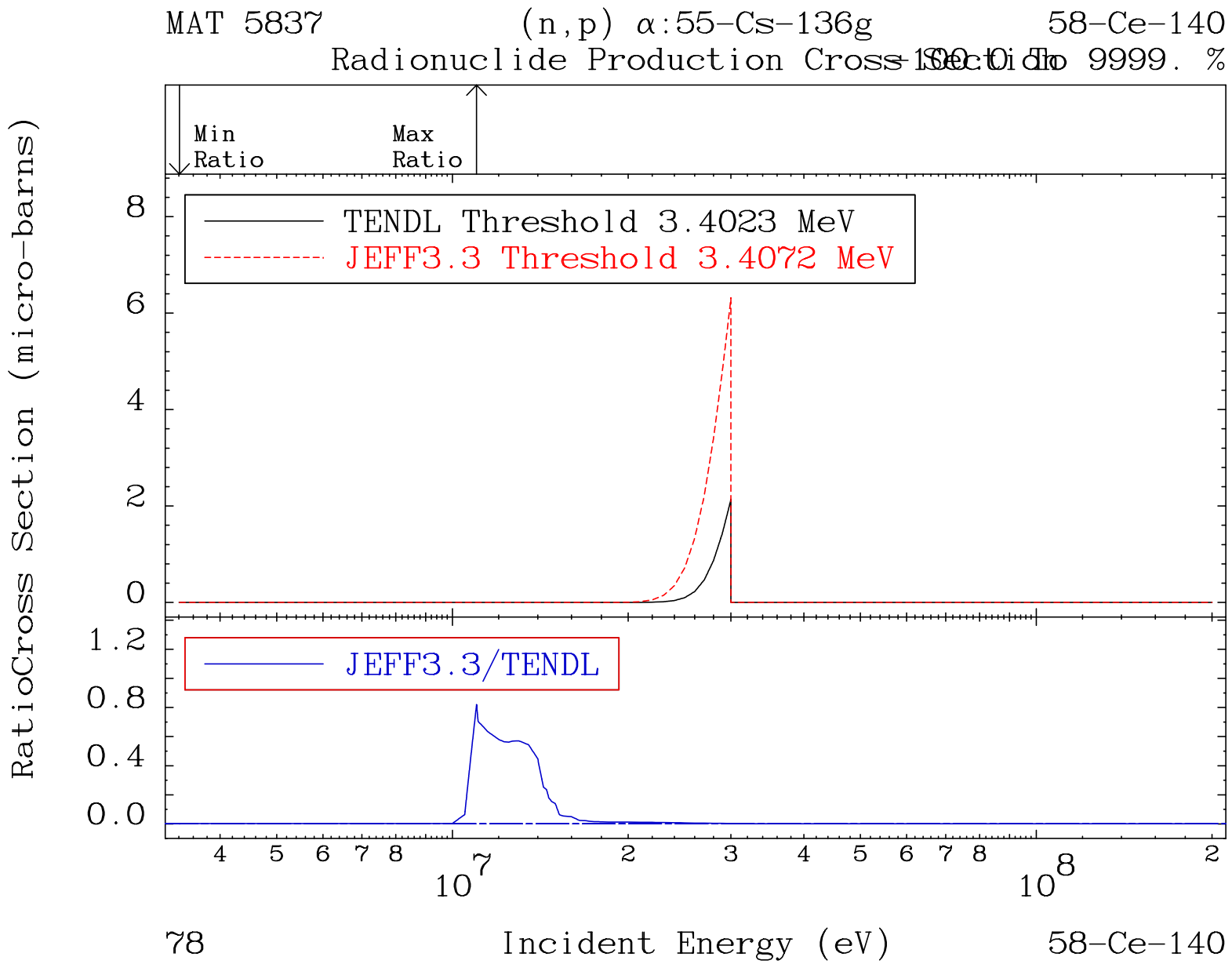


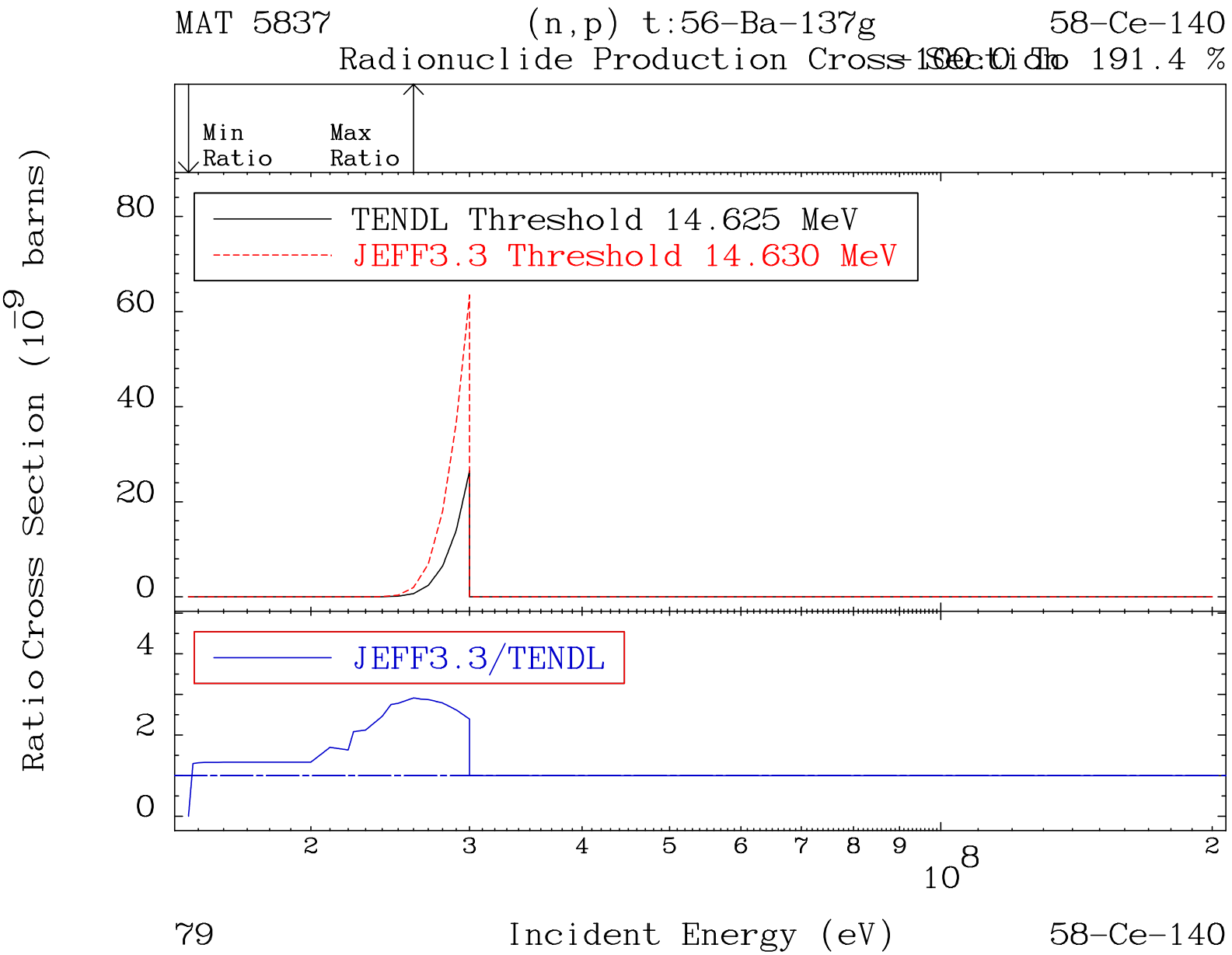
 Incident Energy (MeV) 58-Ce-140

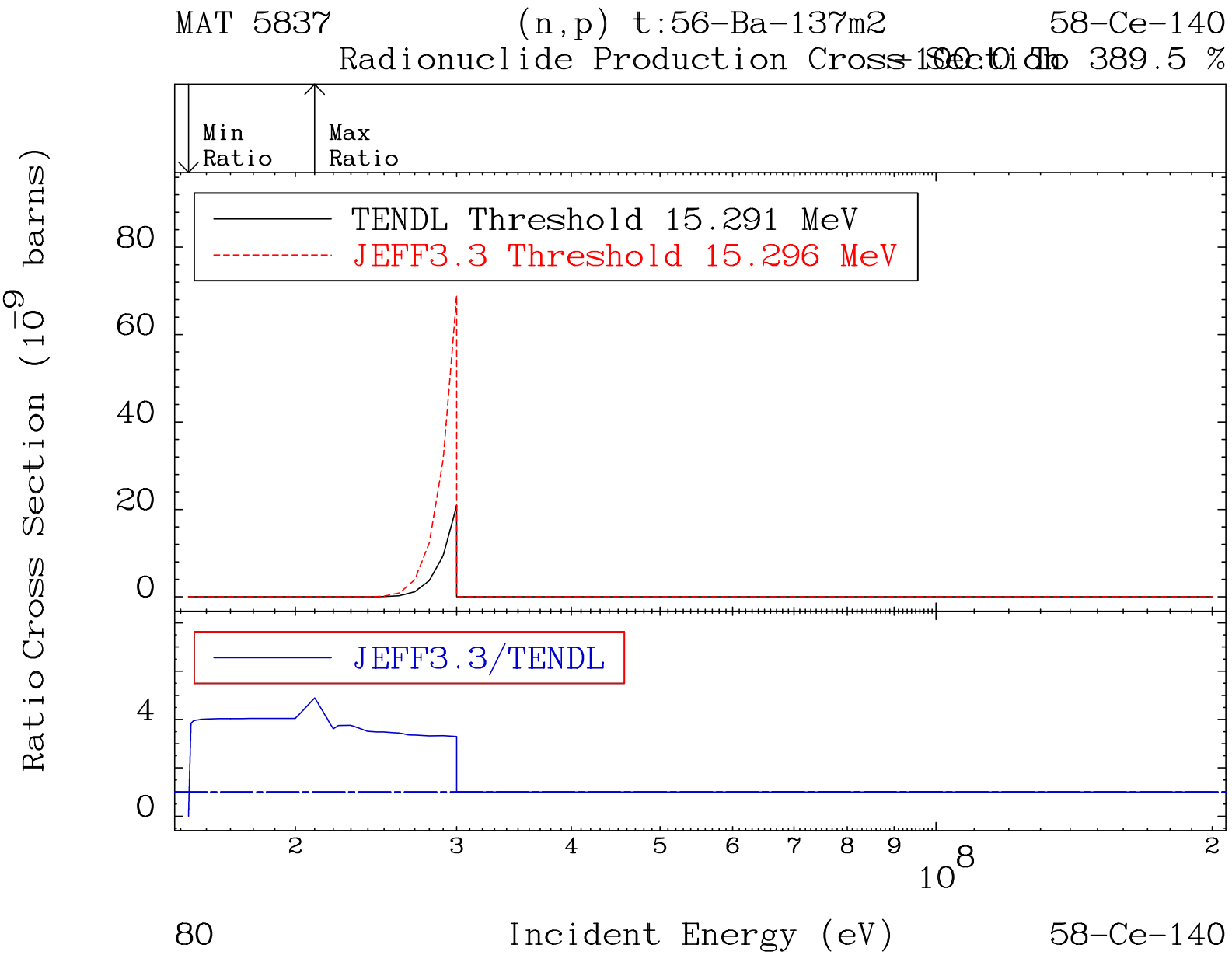

MAT 5837
(n,4n):58-Ce-137m2
58-Ce-140
Radionuclide Production Cross Section To 519.3 %
Max
Ratio
TENDL Threshold 26.816 MeV
JEFF3.3 Threshold 26.821 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
8
4
0
40
60
80
100
120
140
160
180
200
75
Incident Energy (MeV)
58-Ce-140

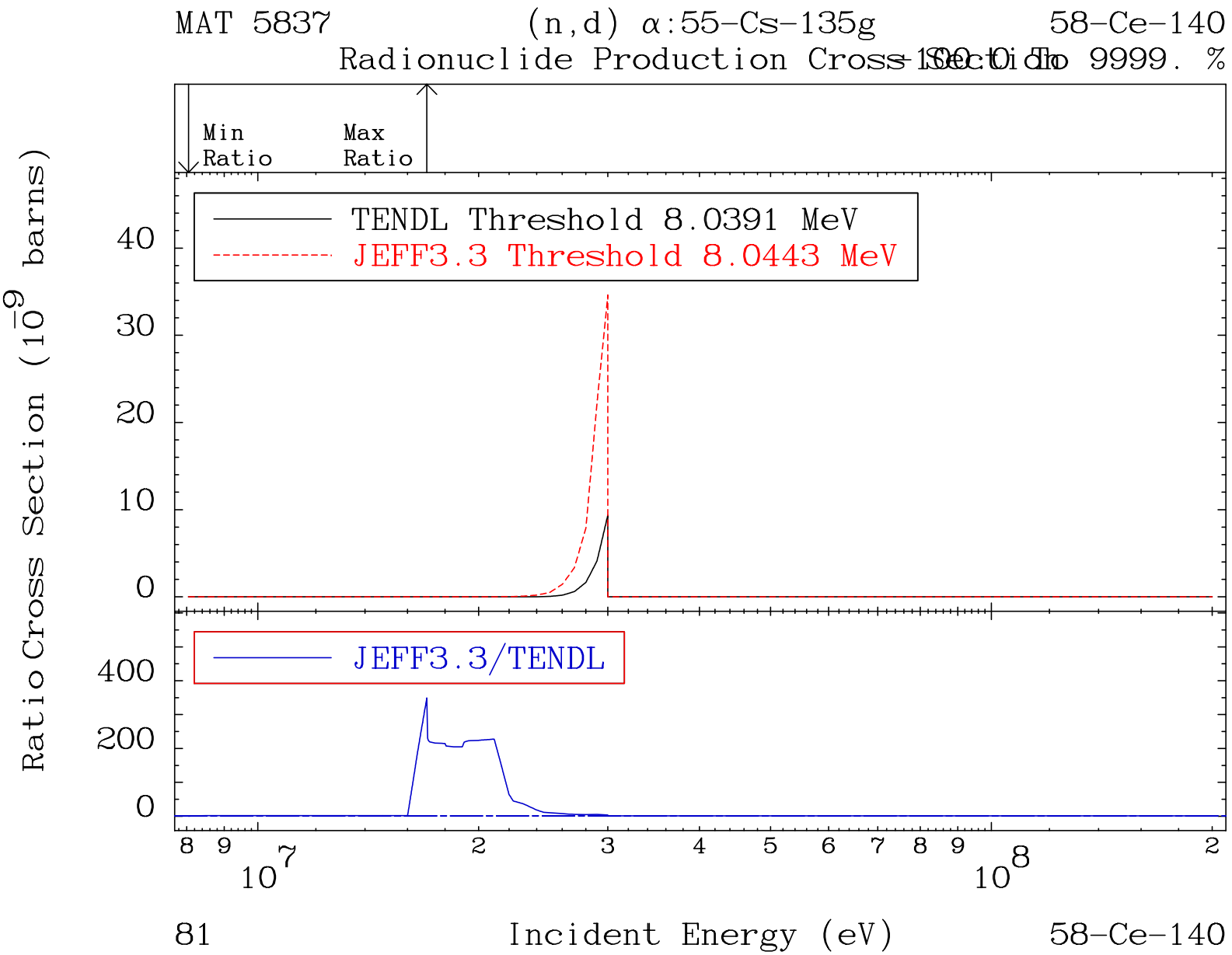

MAT 5837
(n,n') p α:55-Cs-135g
58-Ce-140
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.280 MeV
JEFF3.3 Threshold 10.285 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
76
58-Ce-140

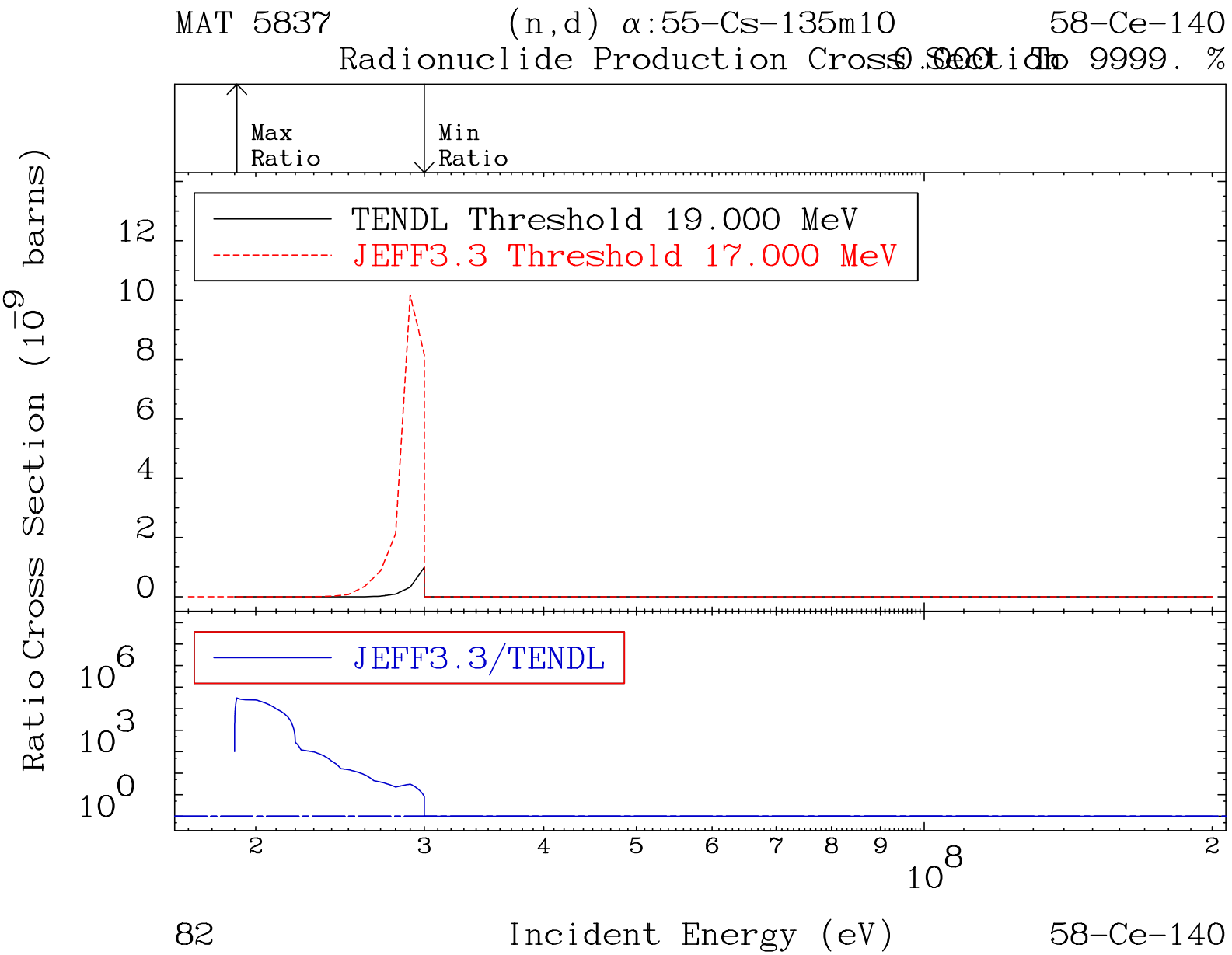

MAT 5837 (n,n') p α:55-Cs-135m10 58-Ce-140
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 18.000 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
10^{6}
10^{3}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
77
Incident Energy (eV)
58-Ce-140


MAT 5837
(n,p) α:55-Cs-136g
58-Ce-140
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.4023 MeV
JEFF3.3 Threshold 3.4072 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
78
58-Ce-140


MAT 5837
(n,p) t:56-Ba-137g
58-Ce-140
Radionuclide Production Cross Section To 191.4 %
Min Ratio
Max Ratio
TENDL Threshold 14.625 MeV
JEFF3.3 Threshold 14.630 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
10^8
79
58-Ce-140


MAT 5837
(n,p) t:56-Ba-137m2
58-Ce-140
Radionuclide Production Cross Section To 389.5 %
Min Ratio
Max Ratio
TENDL Threshold 15.291 MeV
JEFF3.3 Threshold 15.296 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
80
60
40
20
0
4
0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
58-Ce-140


MAT 5837
(n,d) α:55-Cs-135g
58-Ce-140
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.0391 MeV
JEFF3.3 Threshold 8.0443 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
40
30
20
10
0
400
200
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
81
Incident Energy (eV)
58-Ce-140


MAT 5837
(n,d) α:55-Cs-135m10
58-Ce-140
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 17.000 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
0
2
4
6
8
10
12
10^{6}
10^{3}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
82
Incident Energy (eV)
58-Ce-140