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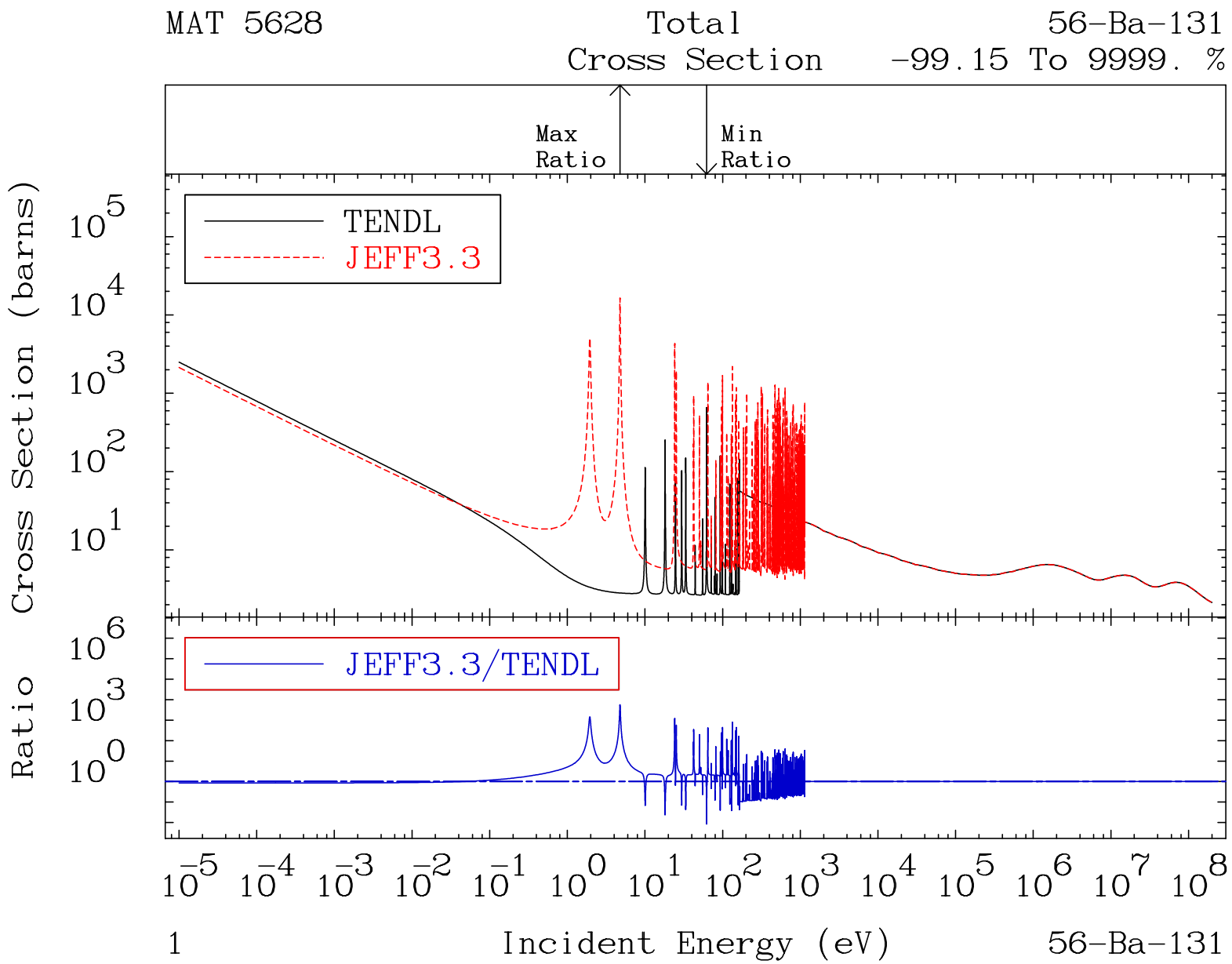
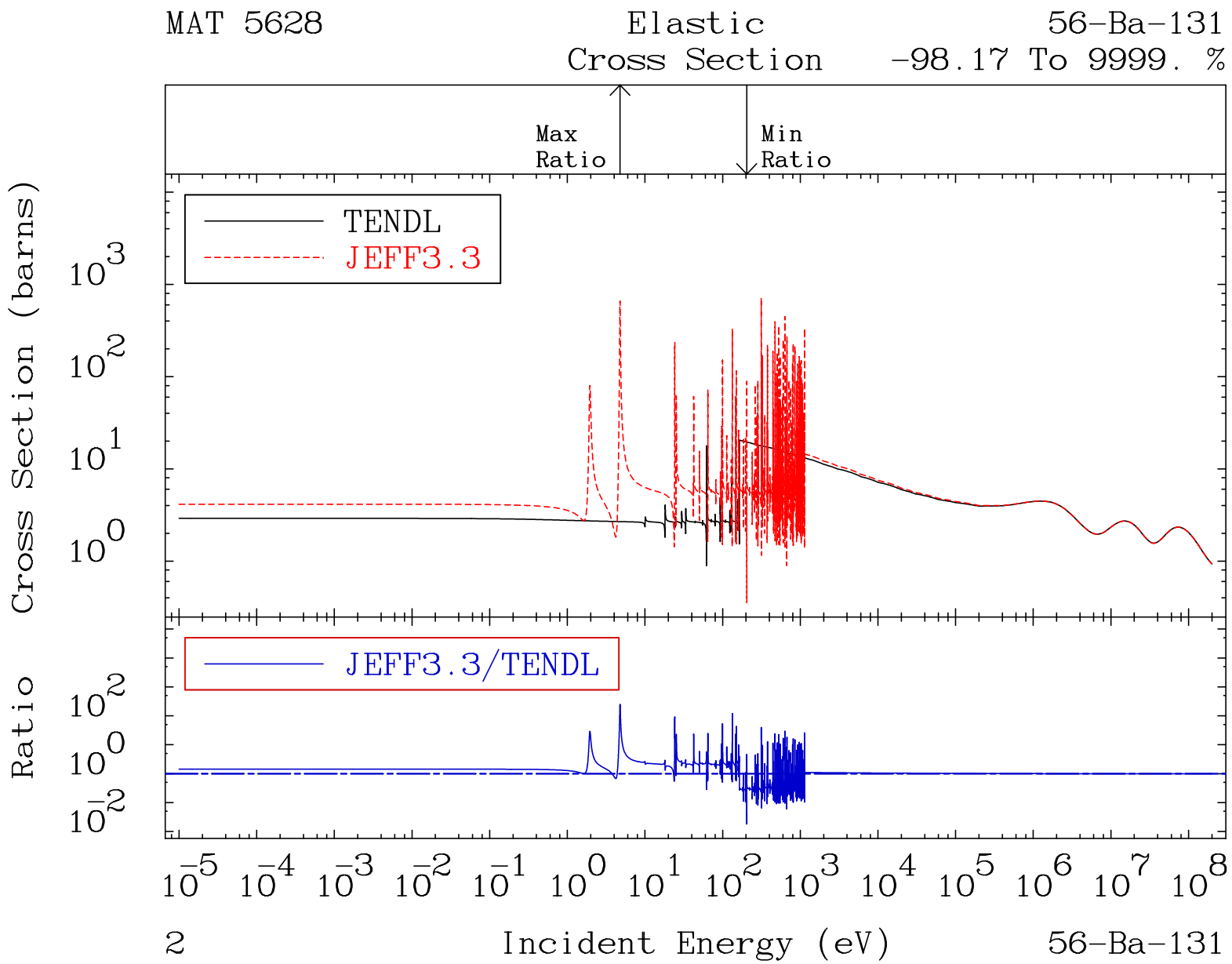
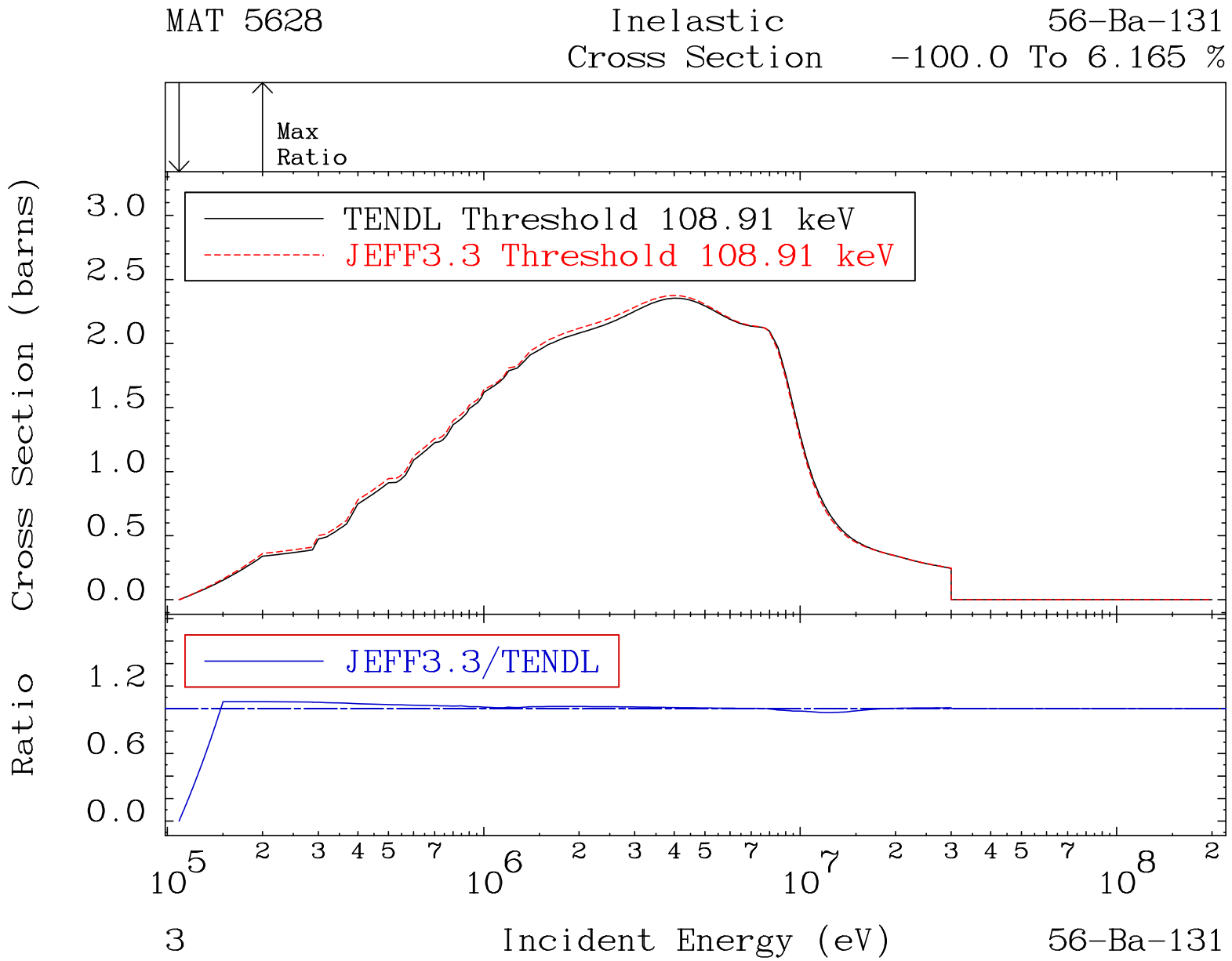
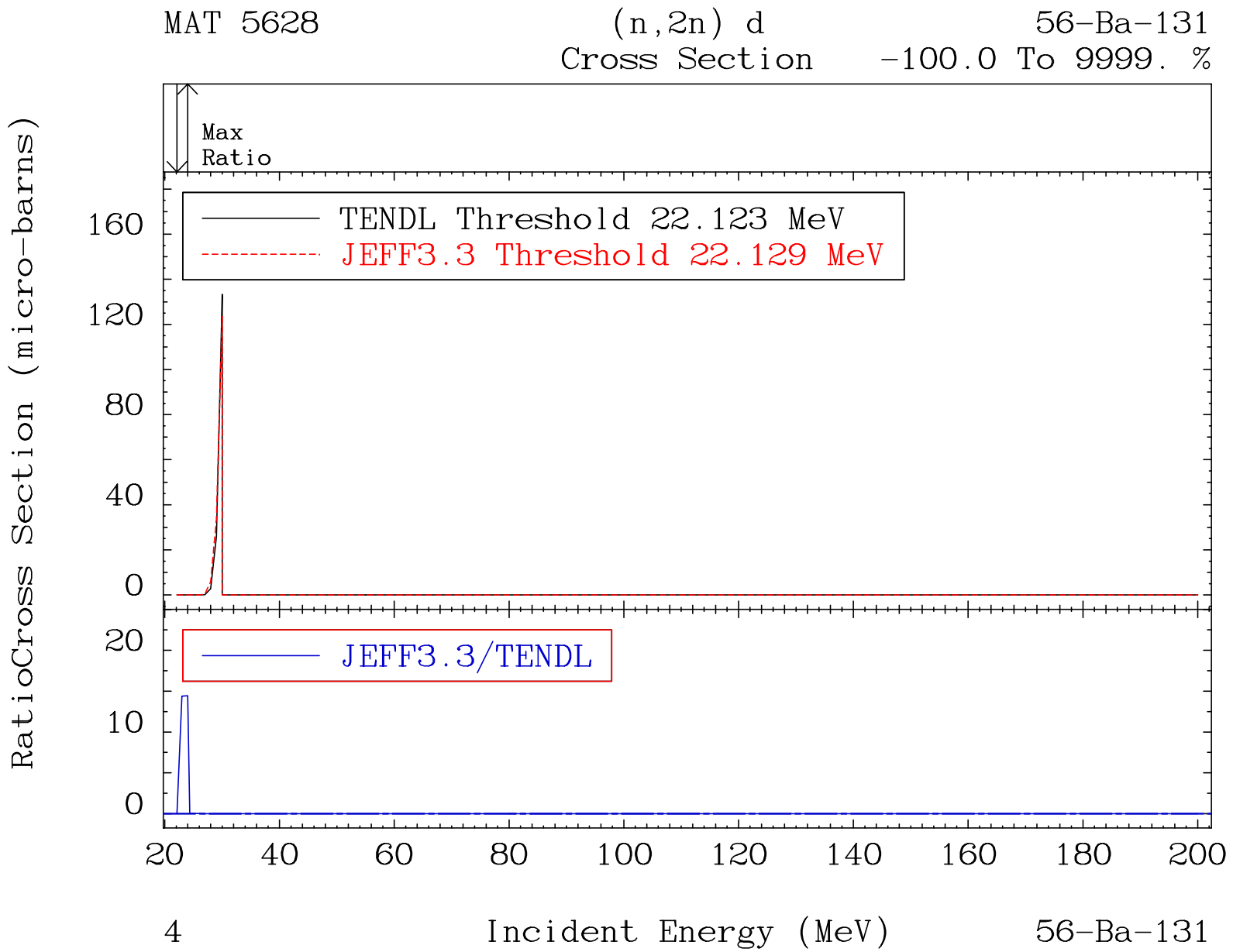
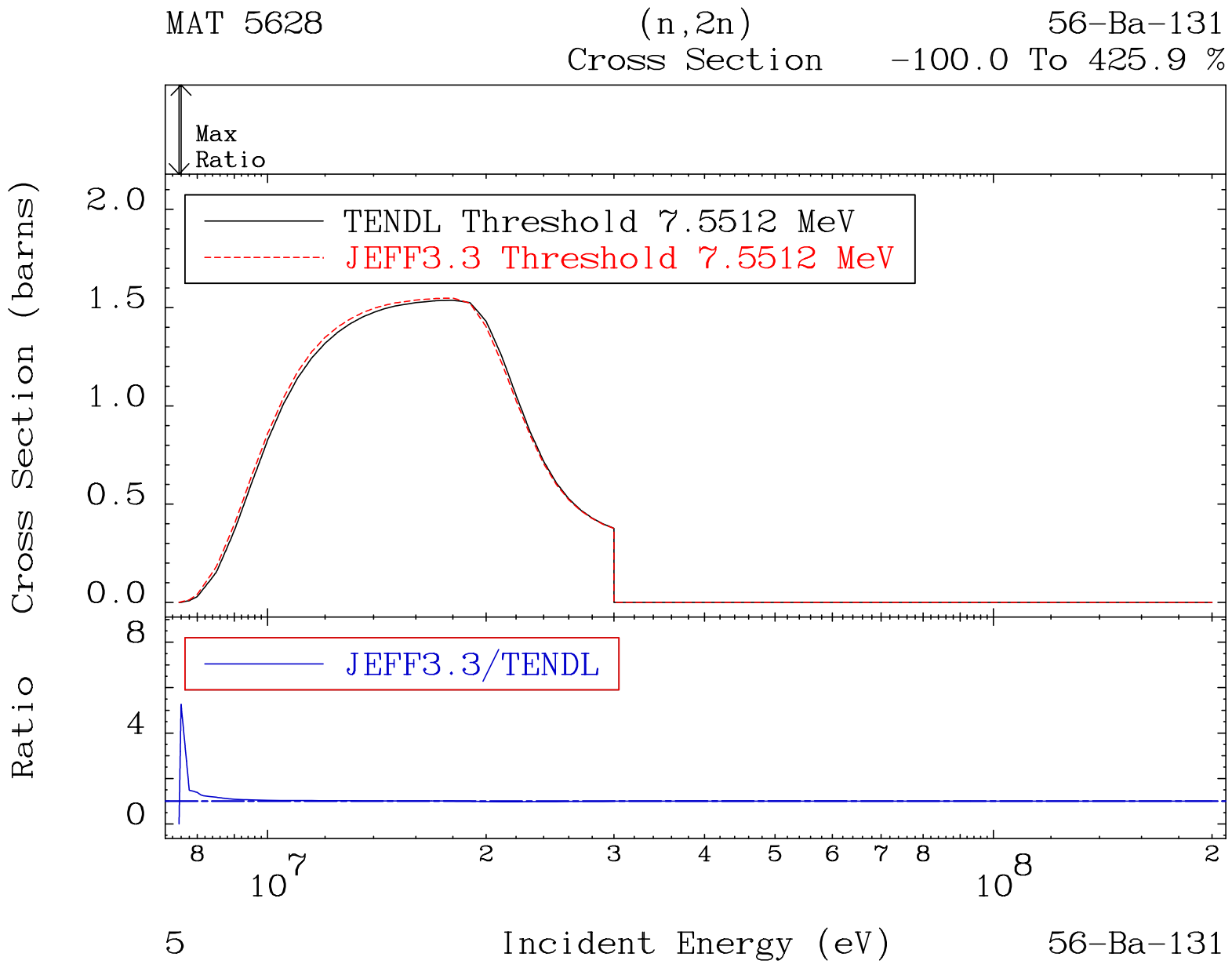
Press Mouse Button to Start

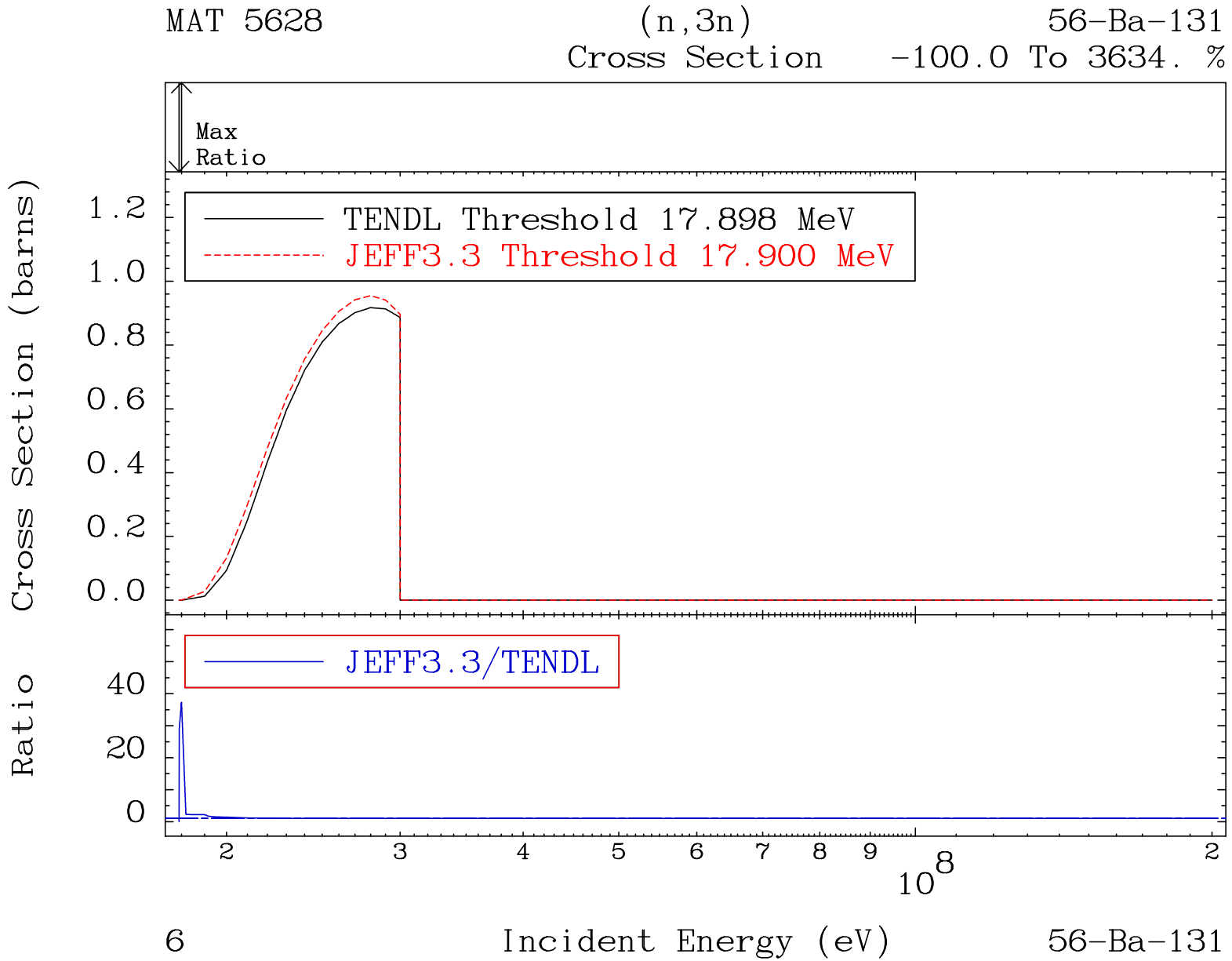

MAT 5628
Total
Cross Section
56-Ba-131
-99.15 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
56-Ba-131

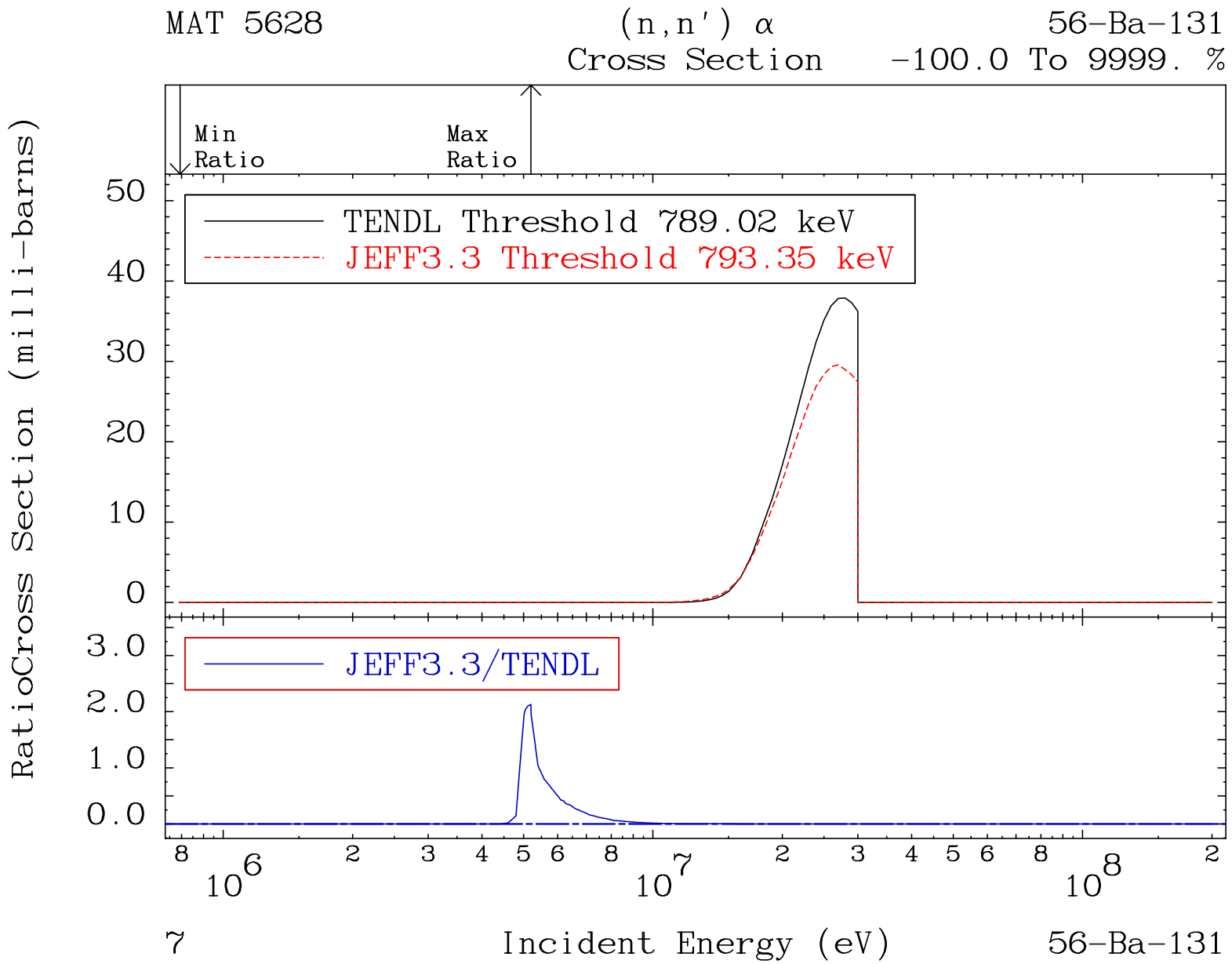

MAT 5628
Elastic
Cross Section
56-Ba-131
-98.17 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
56-Ba-131

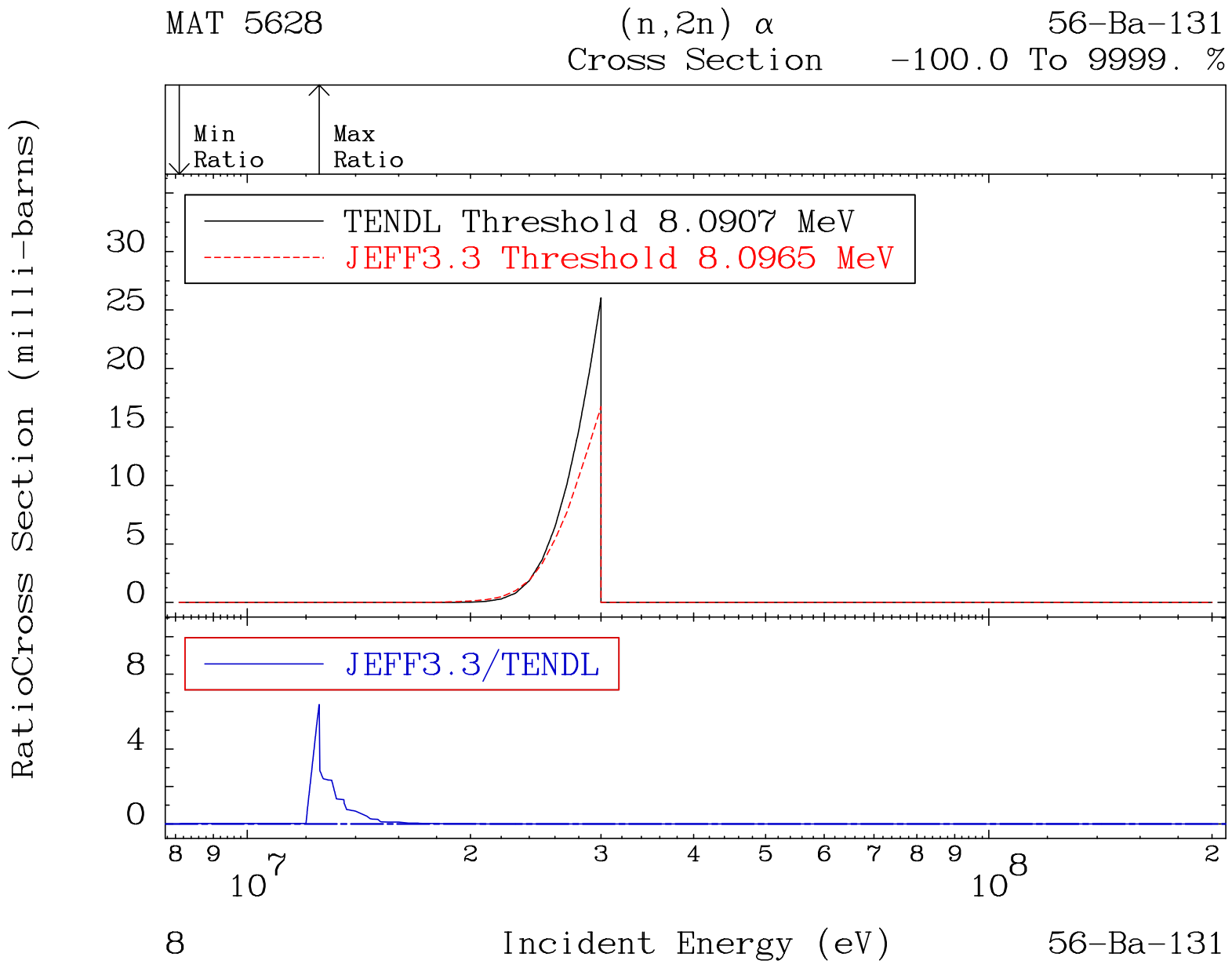

MAT 5628
Inelastic
Cross Section
56-Ba-131
-100.0 To 6.165 %
Max
Ratio
TENDL Threshold 108.91 keV
JEFF3.3 Threshold 108.91 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
56-Ba-131

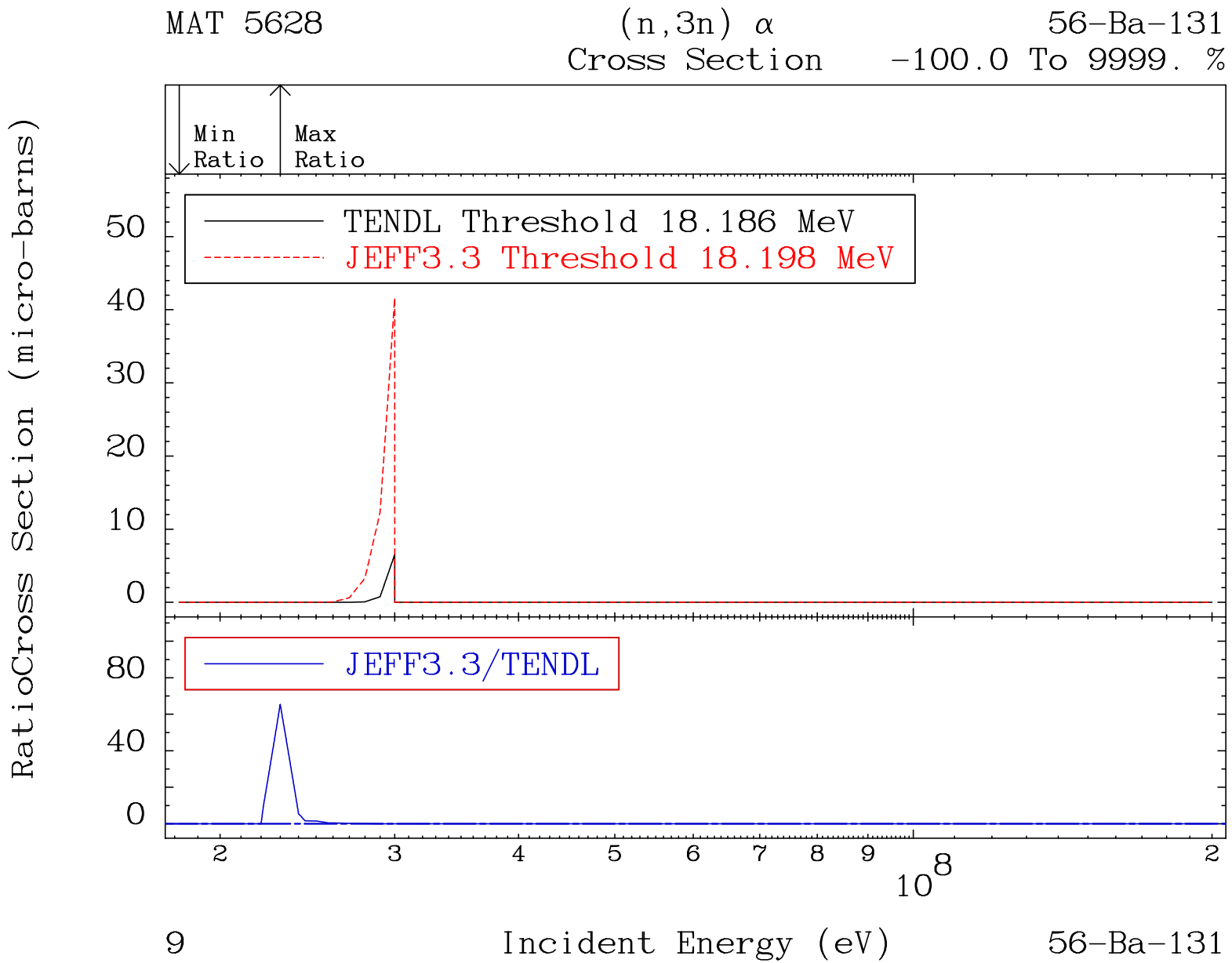

MAT 5628
(n,2n) d
56-Ba-131
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 22.123 MeV
JEFF3.3 Threshold 22.129 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
20
10
0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
56-Ba-131

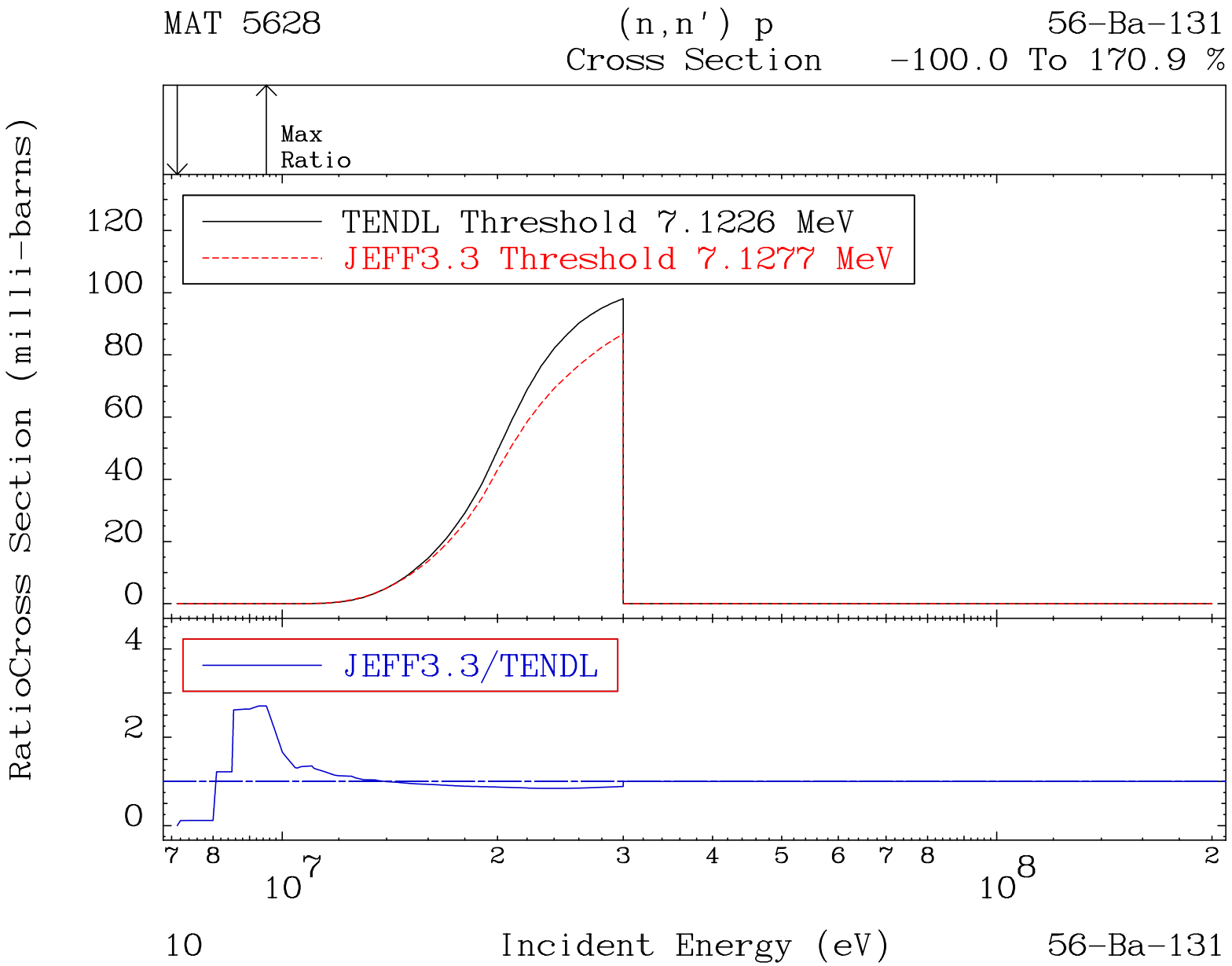

MAT 5628
(n,2n)
Cross Section
56-Ba-131
-100.0 To 425.9 %
Max
Ratio
TENDL Threshold 7.5512 MeV
JEFF3.3 Threshold 7.5512 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
8
4
0
8
10^7
2
3
4
5
6
7
8
10^8
2
5
Incident Energy (eV)
56-Ba-131

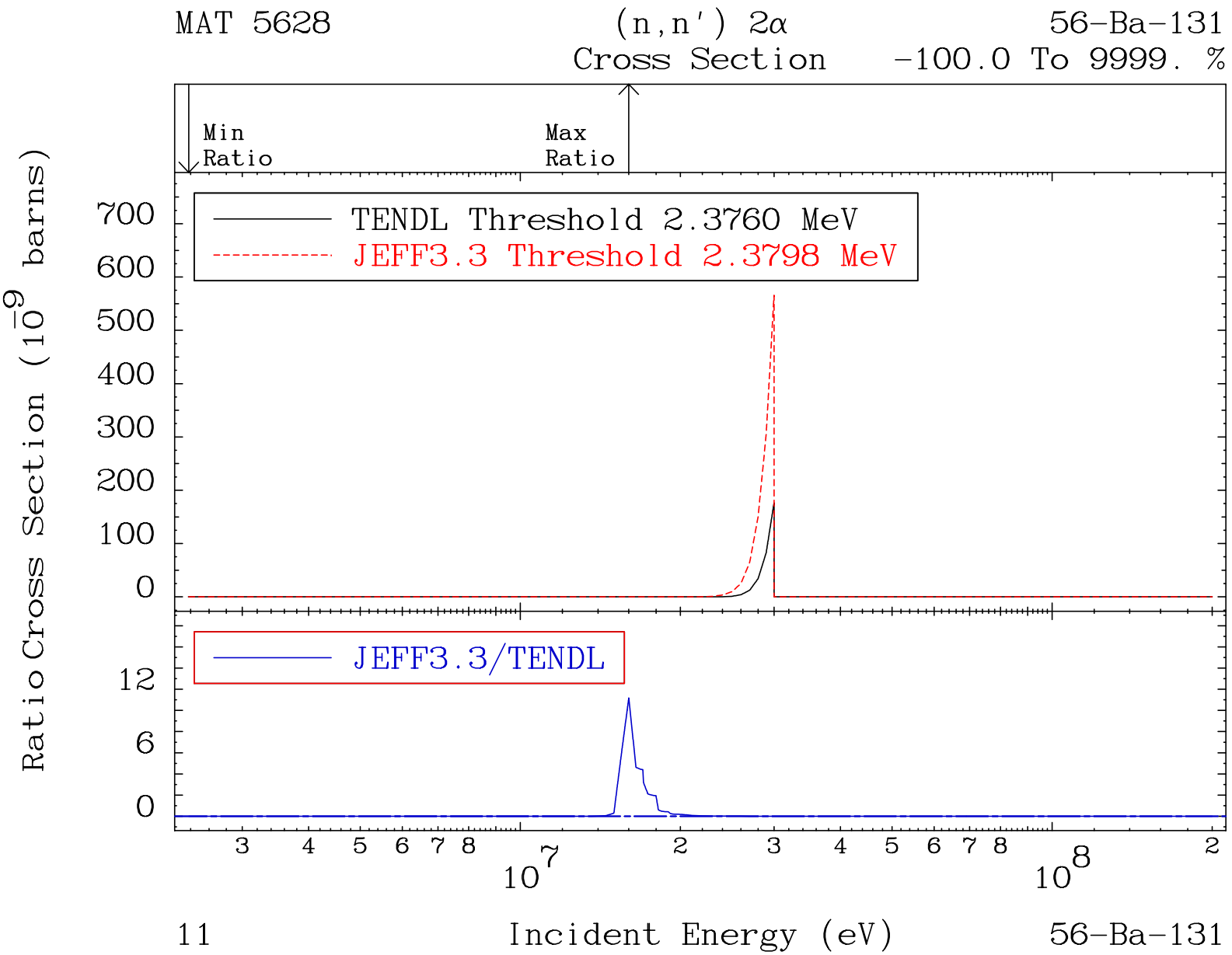

MAT 5628
(n,3n)
56-Ba-131
Cross Section
-100.0 To 3634. %
Max
Ratio
TENDL Threshold 17.898 MeV
JEFF3.3 Threshold 17.900 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
56-Ba-131

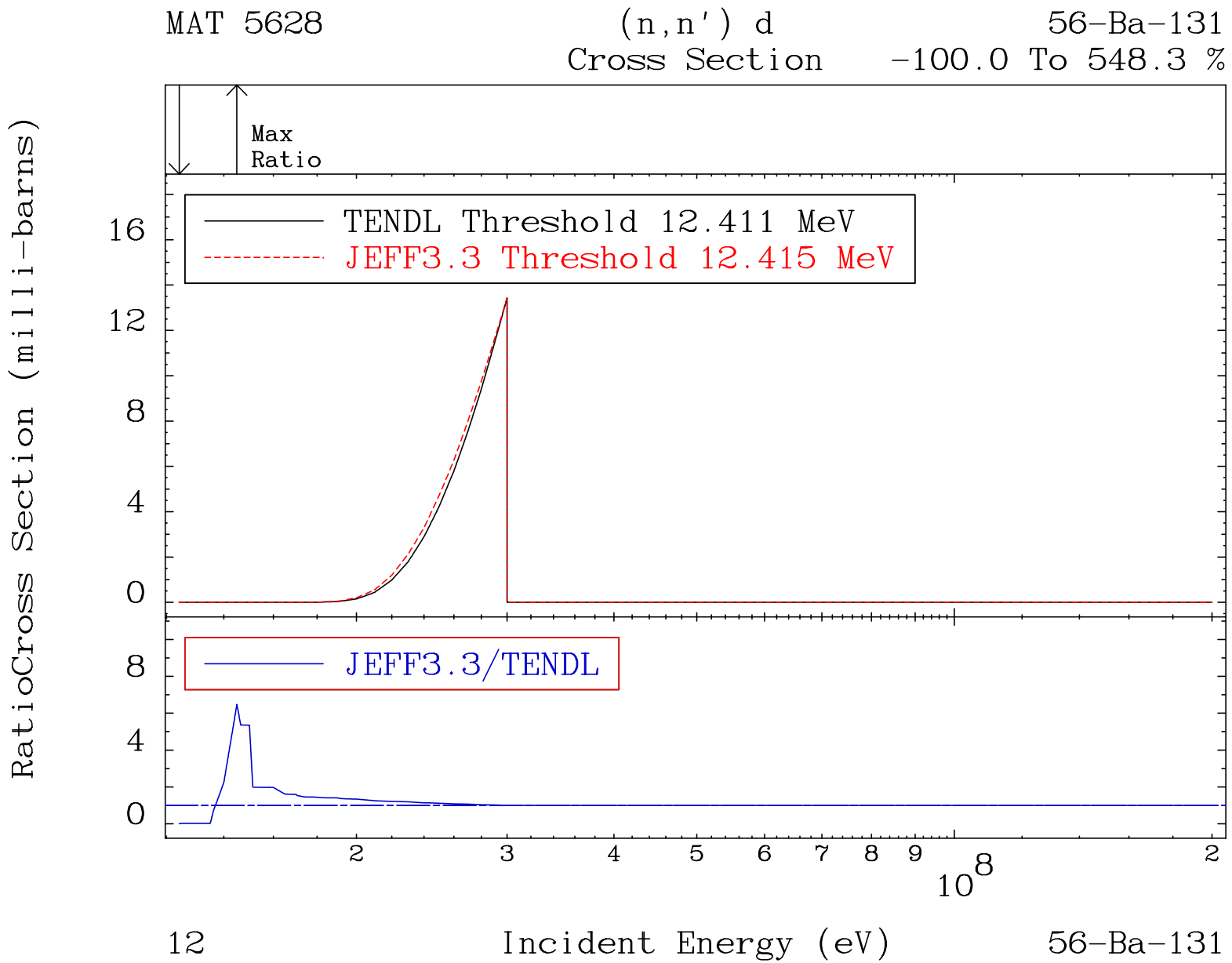

MAT 5628
(n,n') α
Cross Section
56-Ba-131
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 789.02 keV
JEFF3.3 Threshold 793.35 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
3.0
2.0
1.0
0.0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
7
Incident Energy (eV)
56-Ba-131

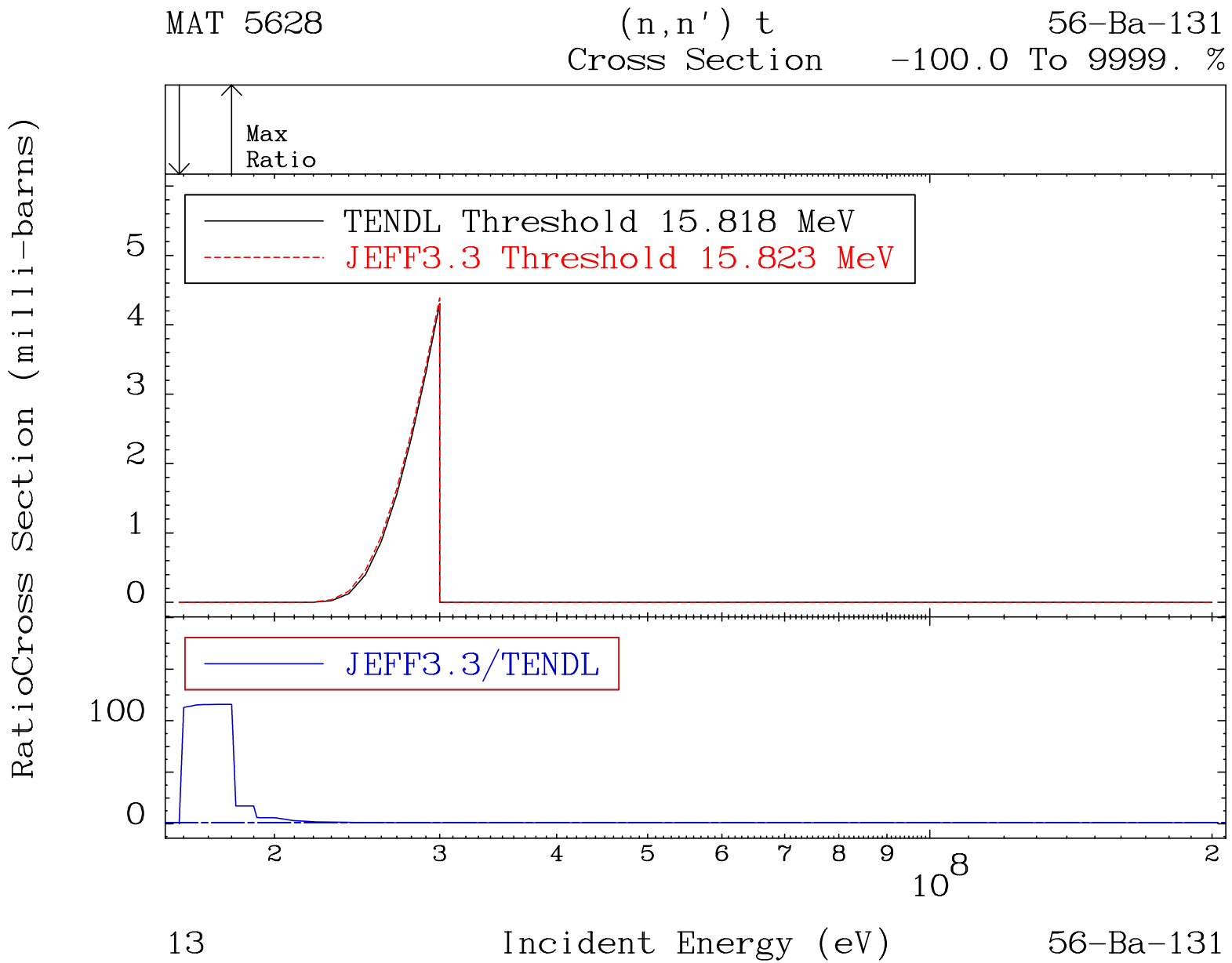

MAT 5628
(n,2n) α
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.0907 MeV
JEFF3.3 Threshold 8.0965 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
8
4
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
56-Ba-131

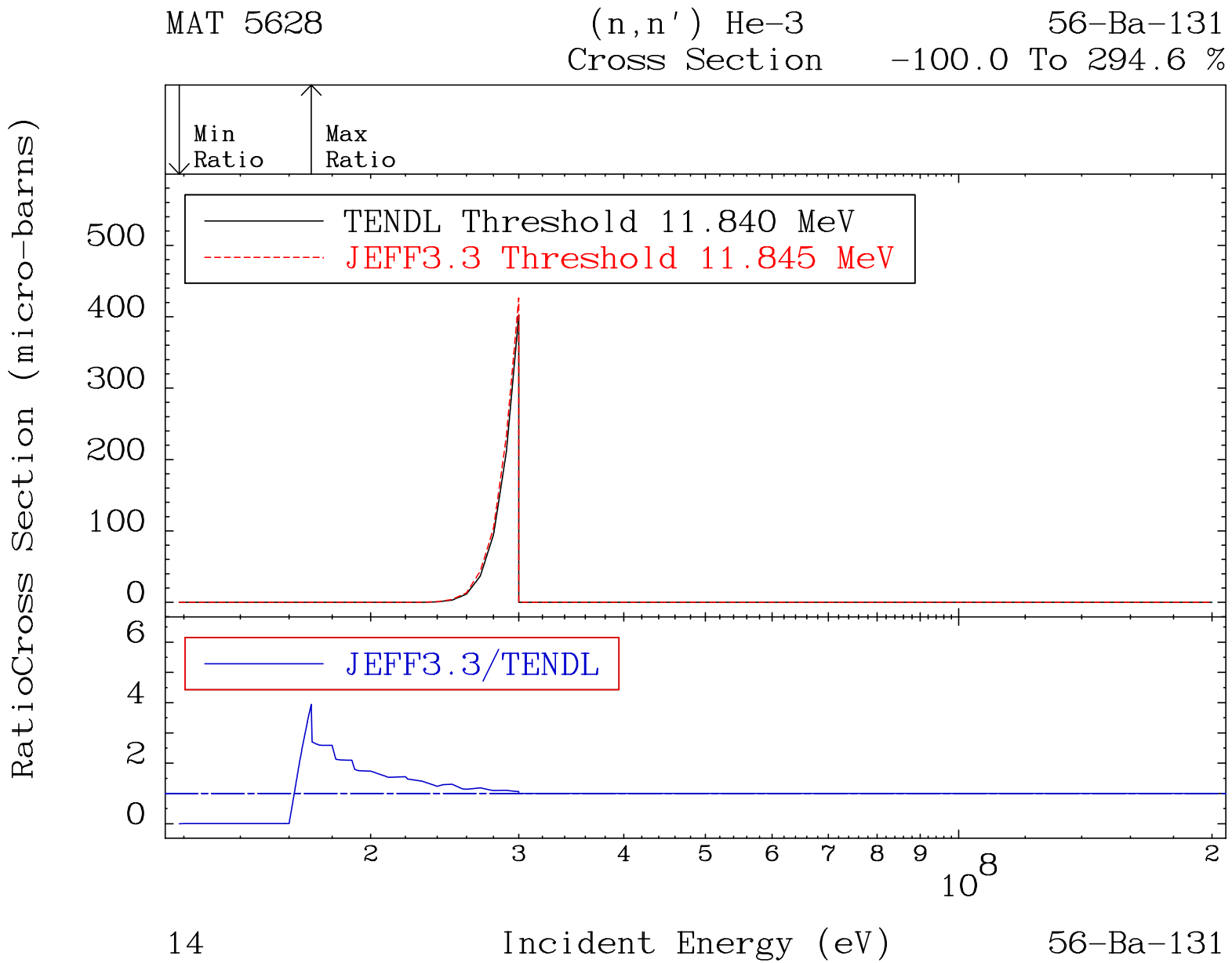

MAT 5628
(n,3n) α
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 18.186 MeV
JEFF3.3 Threshold 18.198 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
50
40
30
20
10
0
80
40
0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
56-Ba-131

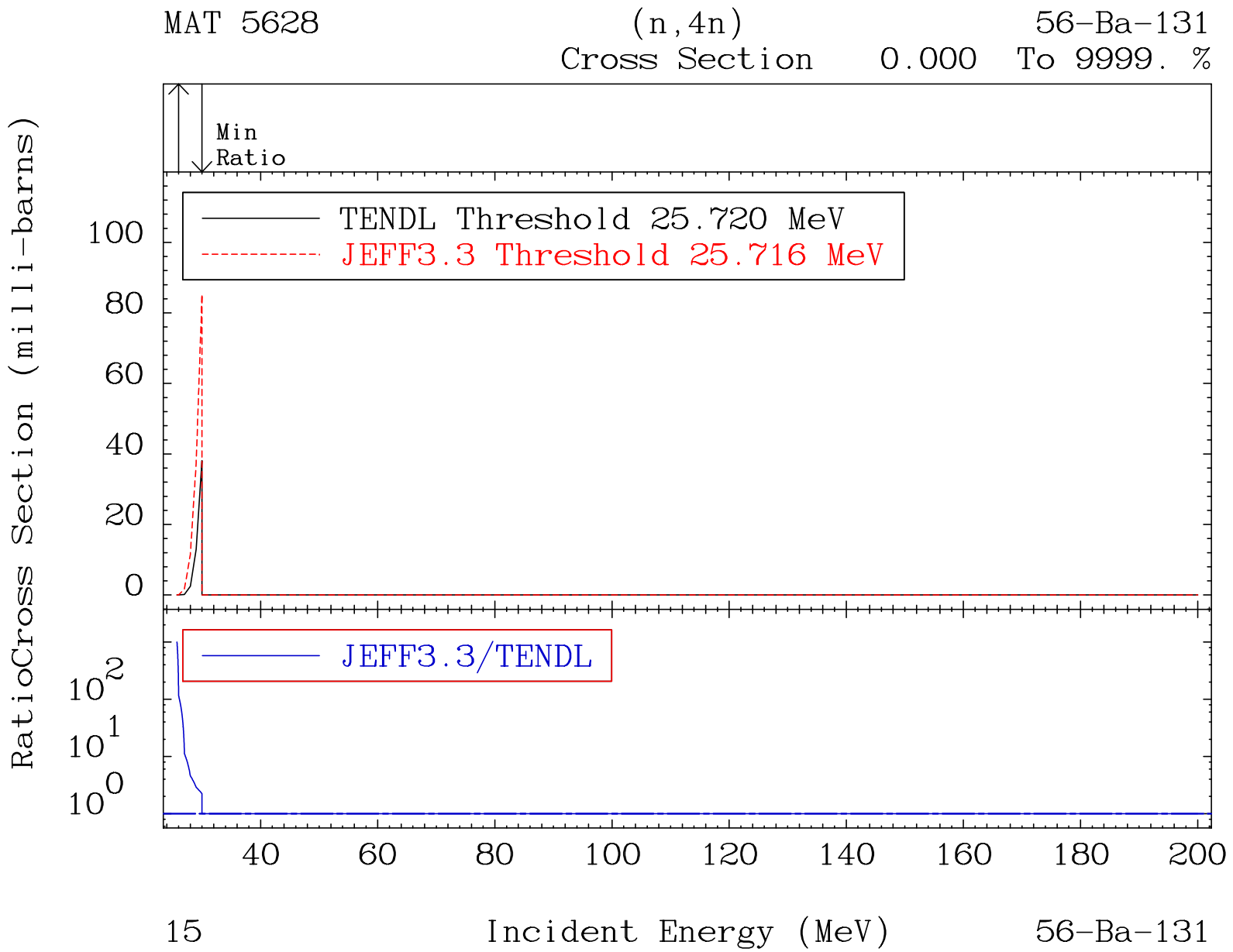

MAT 5628
(n,n') p
Cross Section
56-Ba-131
-100.0 To 170.9 %
Max
Ratio
TENDL Threshold 7.1226 MeV
JEFF3.3 Threshold 7.1277 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
4
2
0
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
56-Ba-131

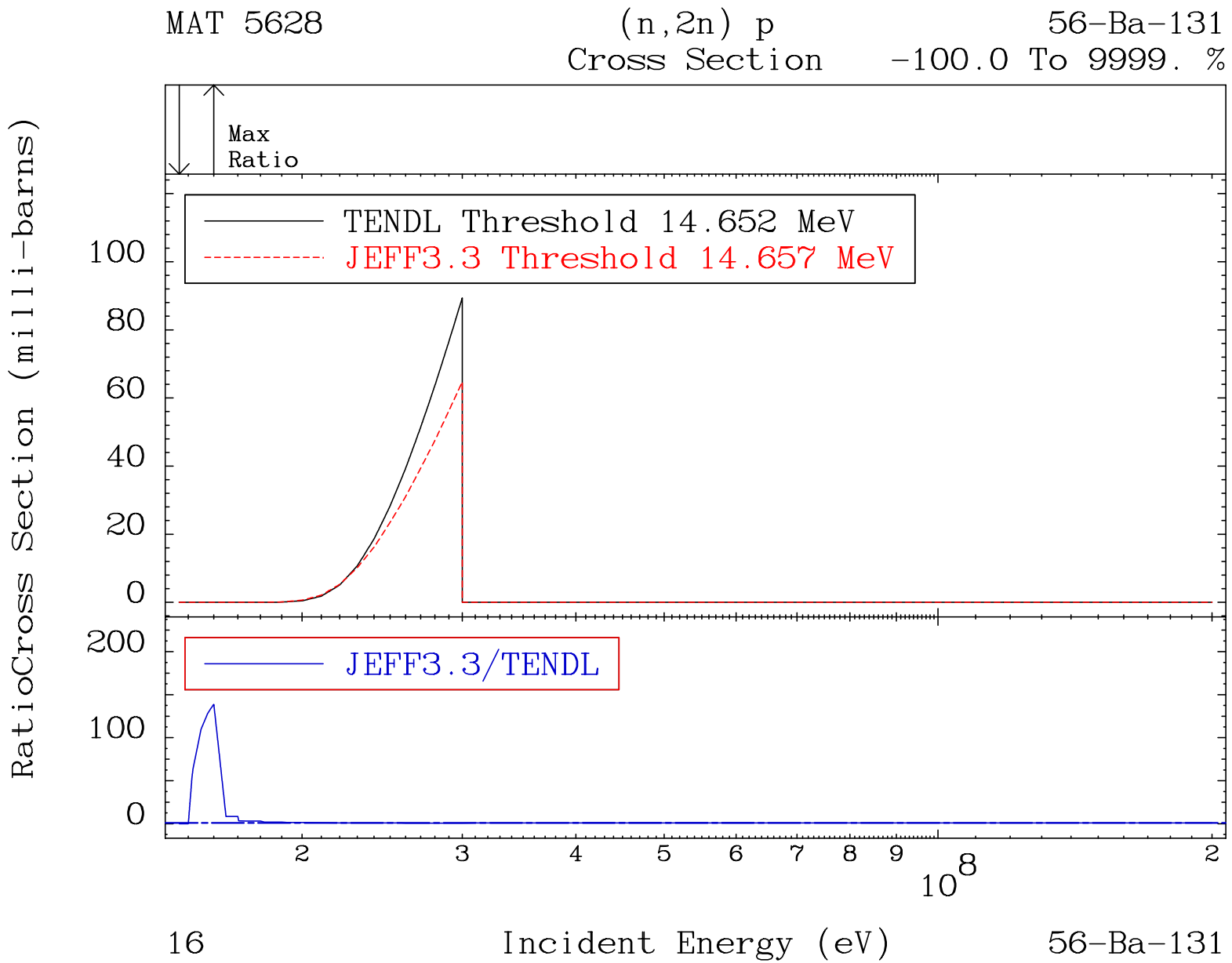

MAT 5628
(n,n') 2α
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3760 MeV
JEFF3.3 Threshold 2.3798 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
700
600
500
400
300
200
100
0
12
6
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
56-Ba-131

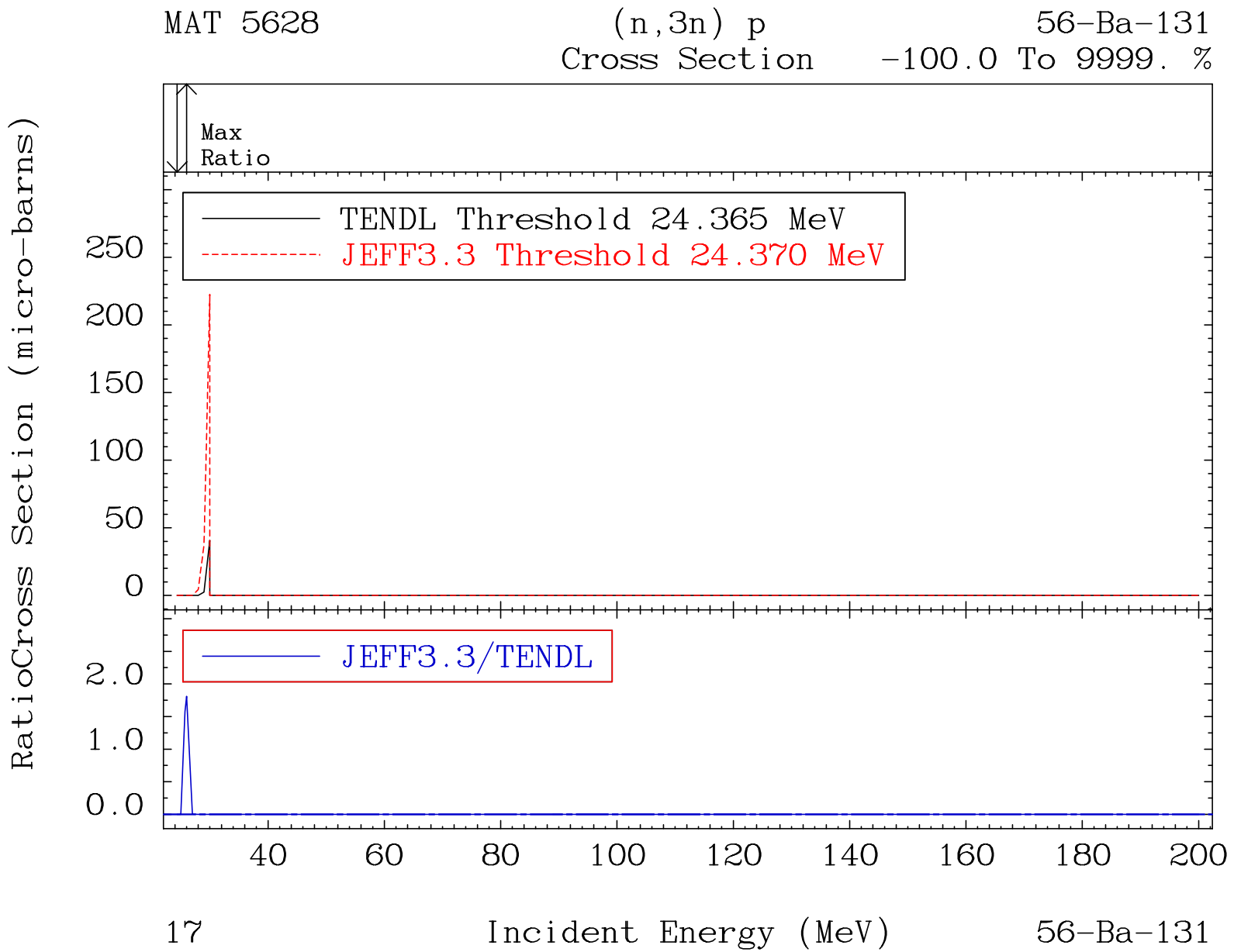

MAT 5628
(n,n') d
Cross Section
56-Ba-131
-100.0 To 548.3 %
Max
Ratio
TENDL Threshold 12.411 MeV
JEFF3.3 Threshold 12.415 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
56-Ba-131

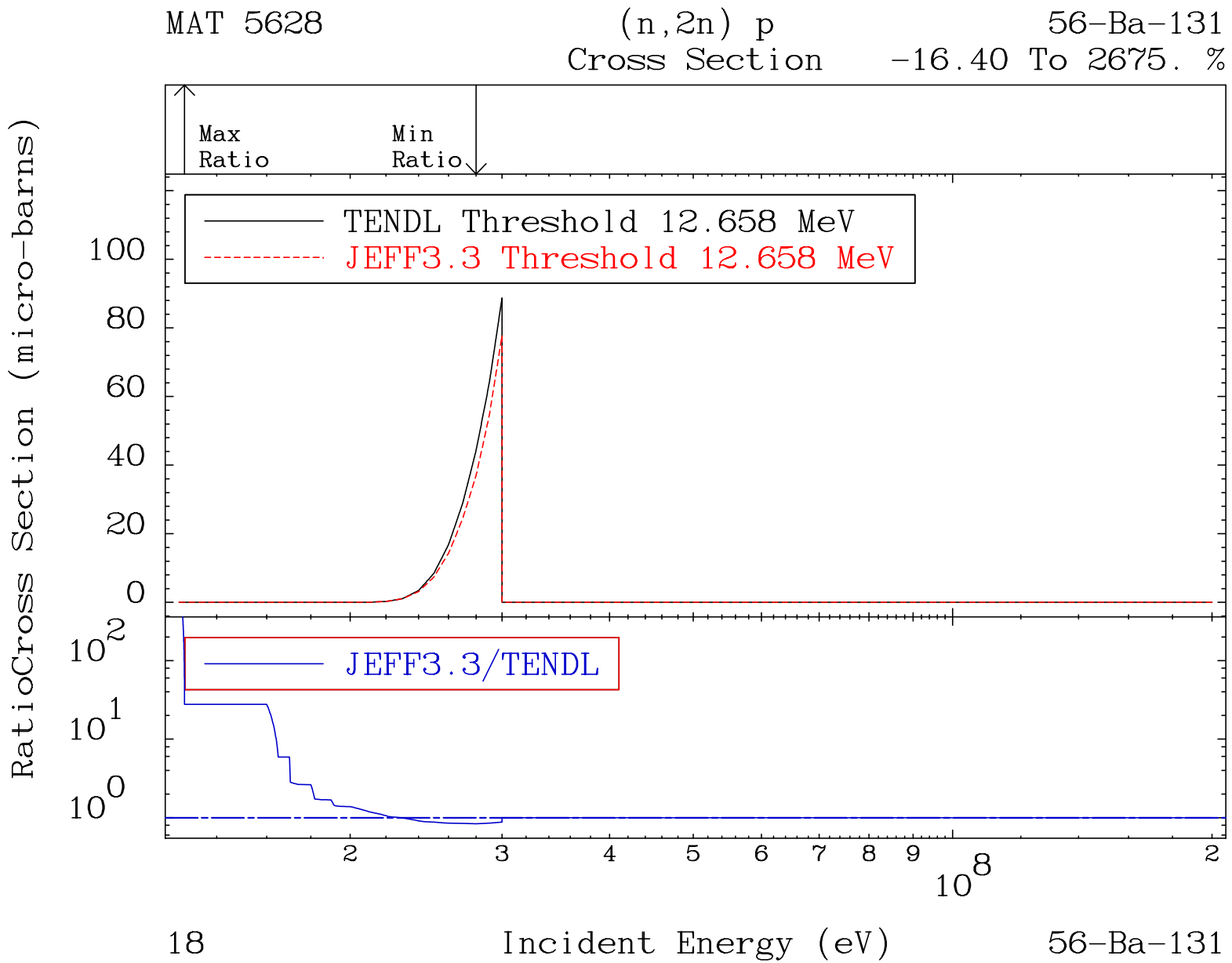

MAT 5628
(n,n') t
Cross Section
56-Ba-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 15.818 MeV
JEFF3.3 Threshold 15.823 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
13
56-Ba-131

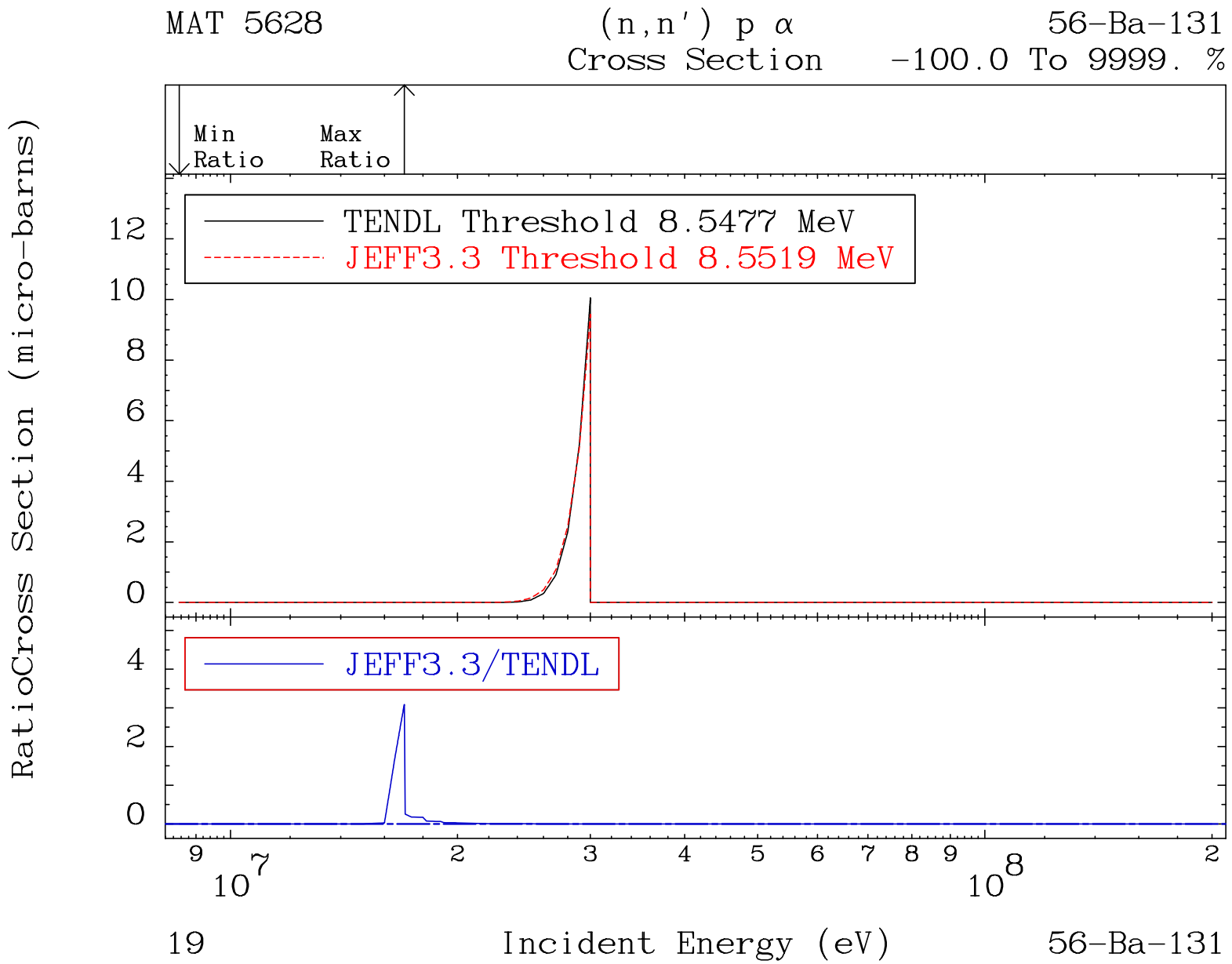

MAT 5628
(n,n') He-3
Cross Section
56-Ba-131
-100.0 To 294.6 %
Min Ratio
Max Ratio
TENDL Threshold 11.840 MeV
JEFF3.3 Threshold 11.845 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
500
400
300
200
100
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
56-Ba-131

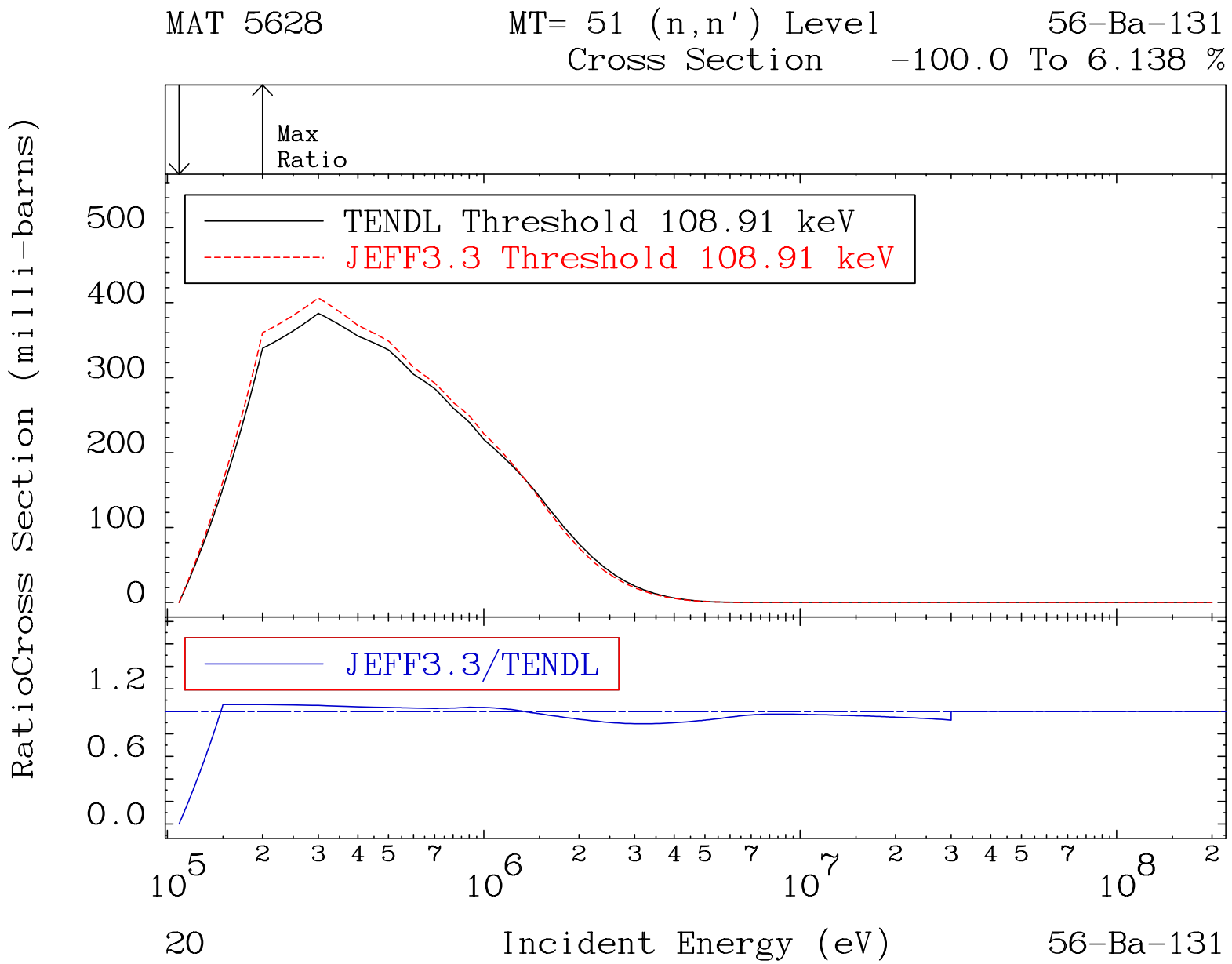

MAT 5628
(n,4n)
56-Ba-131
Cross Section 0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.720 MeV
JEFF3.3 Threshold 25.716 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
56-Ba-131

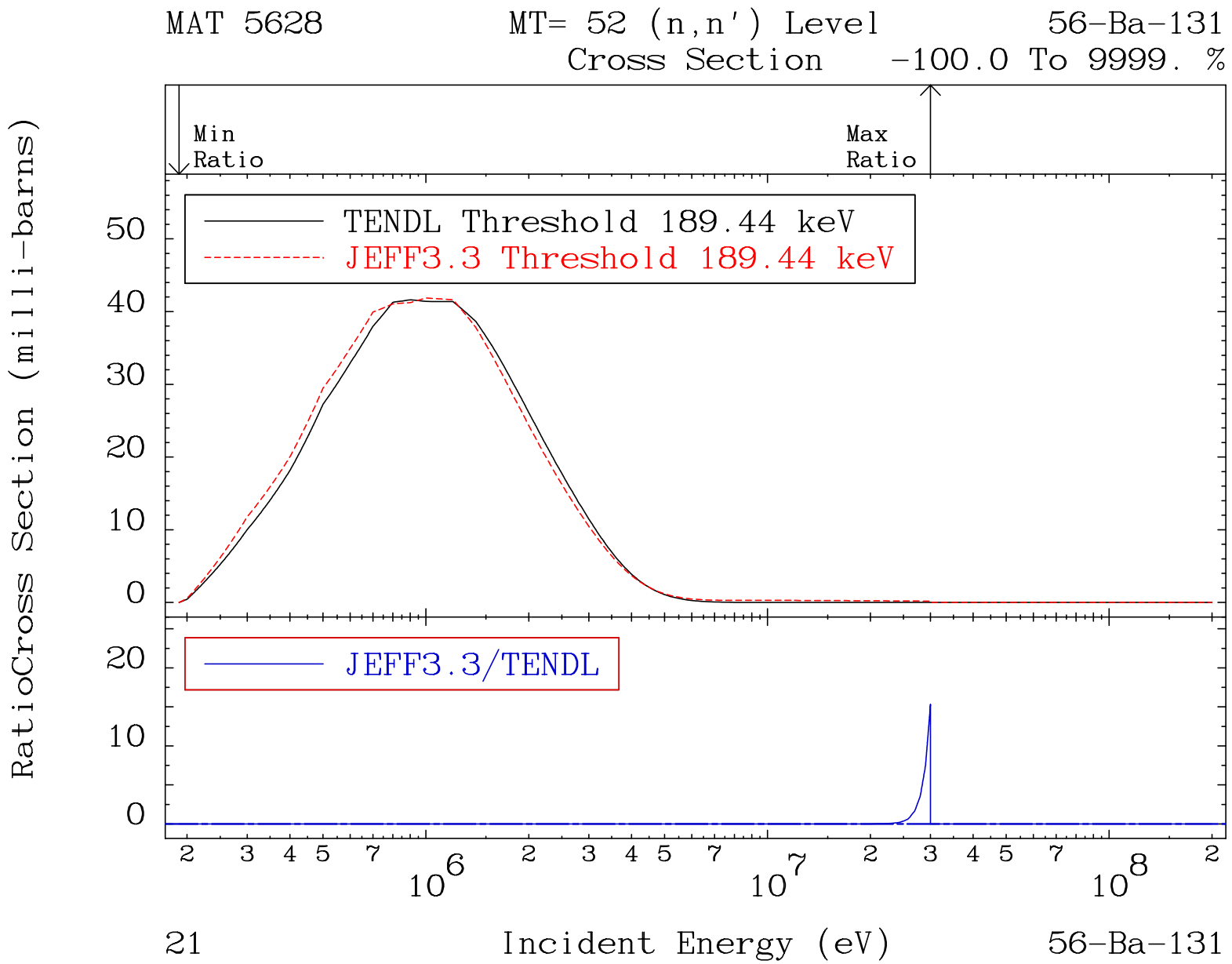

MAT 5628
(n,2n) p
Cross Section
56-Ba-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 14.652 MeV
JEFF3.3 Threshold 14.657 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
100
0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
56-Ba-131

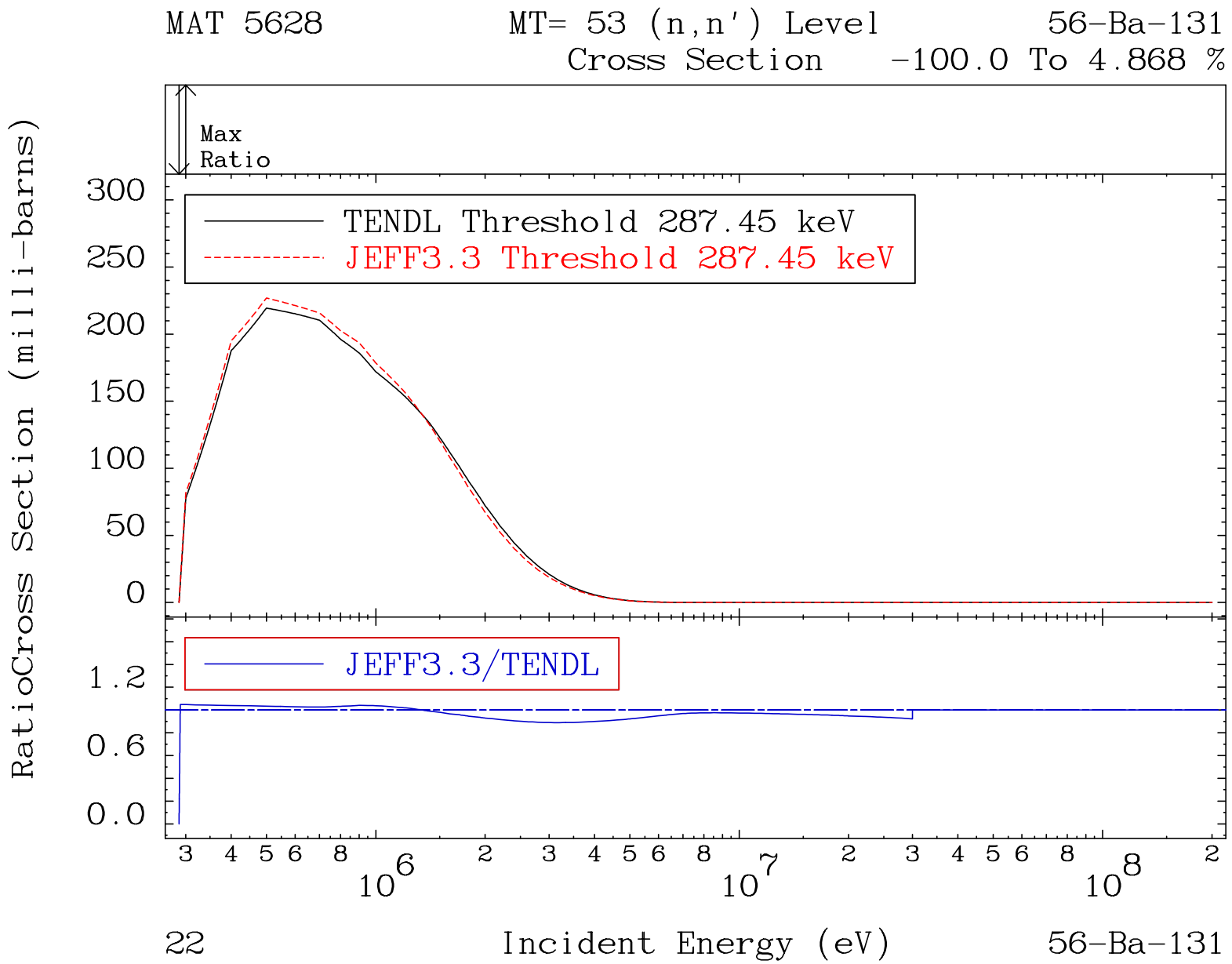

MAT 5628
(n,3n) p
Cross Section
56-Ba-131
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 24.365 MeV
JEFF3.3 Threshold 24.370 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
250
200
150
100
50
0
2.0
1.0
0.0
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
56-Ba-131

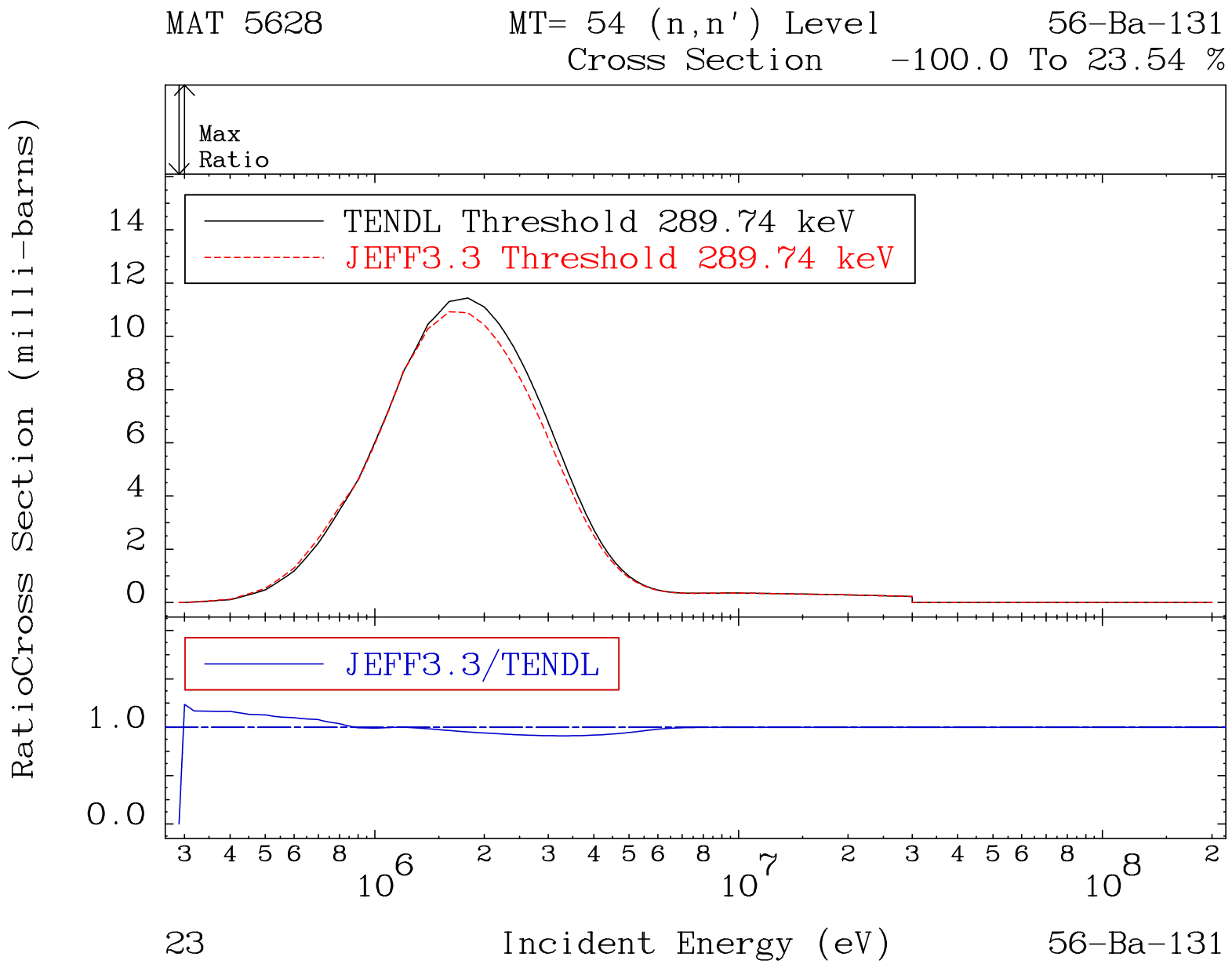

MAT 5628
(n,2n) p
Cross Section
56-Ba-131
-16.40 To 2675. %
Max Ratio
Min Ratio
TENDL Threshold 12.658 MeV
JEFF3.3 Threshold 12.658 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
56-Ba-131

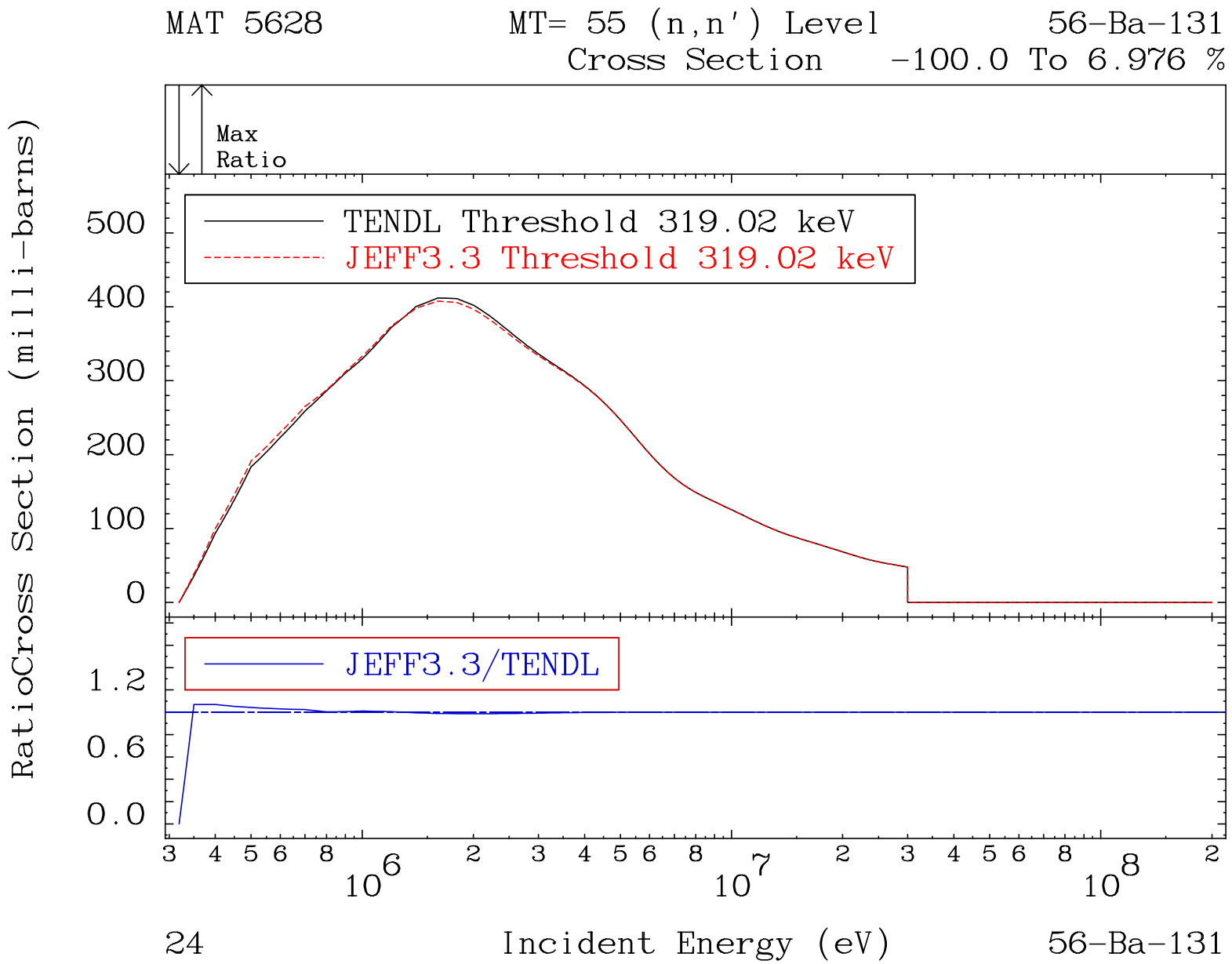

MAT 5628
(n,n') p α
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.5477 MeV
JEFF3.3 Threshold 8.5519 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
19
56-Ba-131

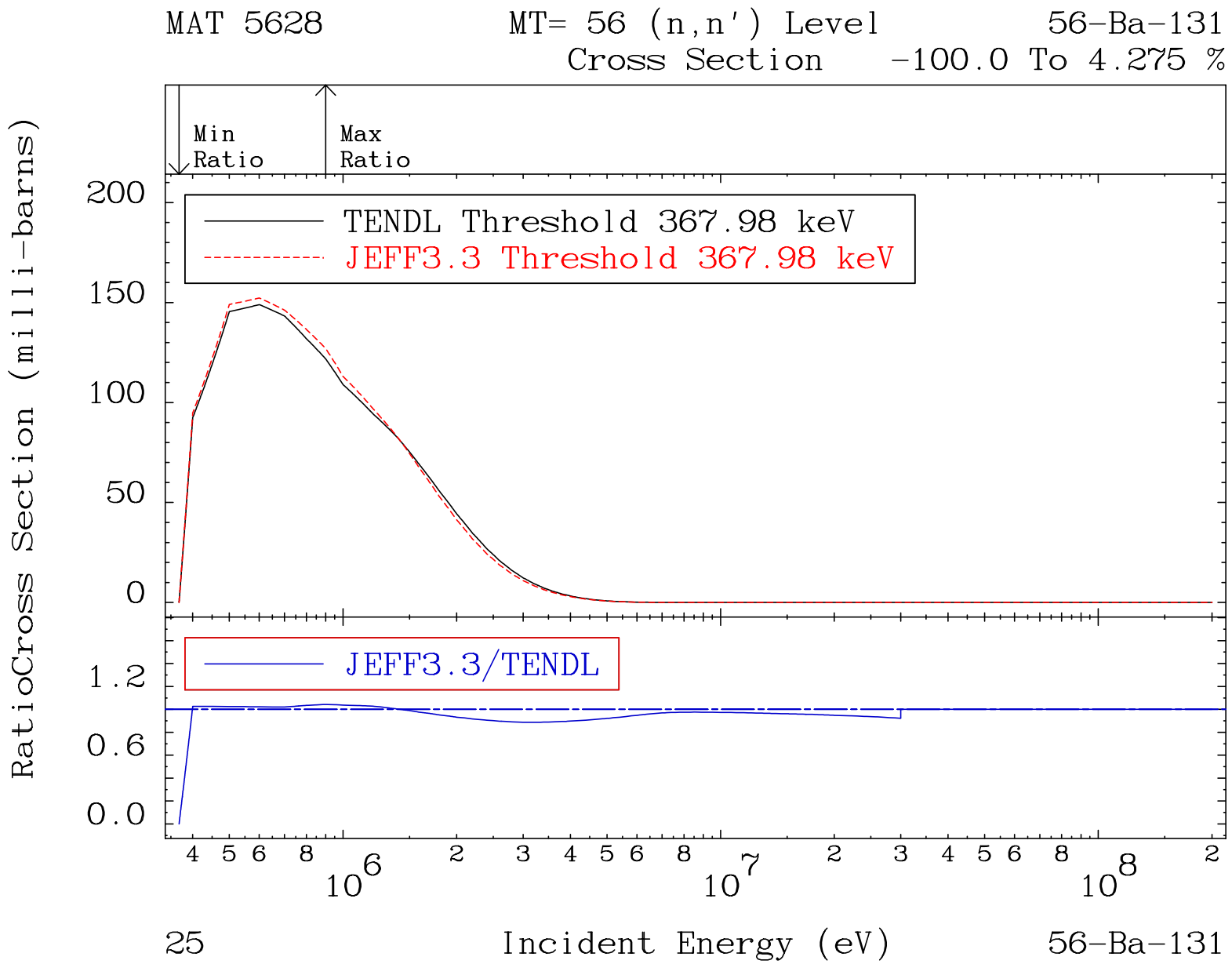

MAT 5628
MT= 51 (n,n') Level
56-Ba-131
Cross Section -100.0 To 6.138 %
Max
Ratio
TENDL Threshold 108.91 keV
JEFF3.3 Threshold 108.91 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 7
10^5
10^6
10^7
10^8
20
Incident Energy (eV)
56-Ba-131

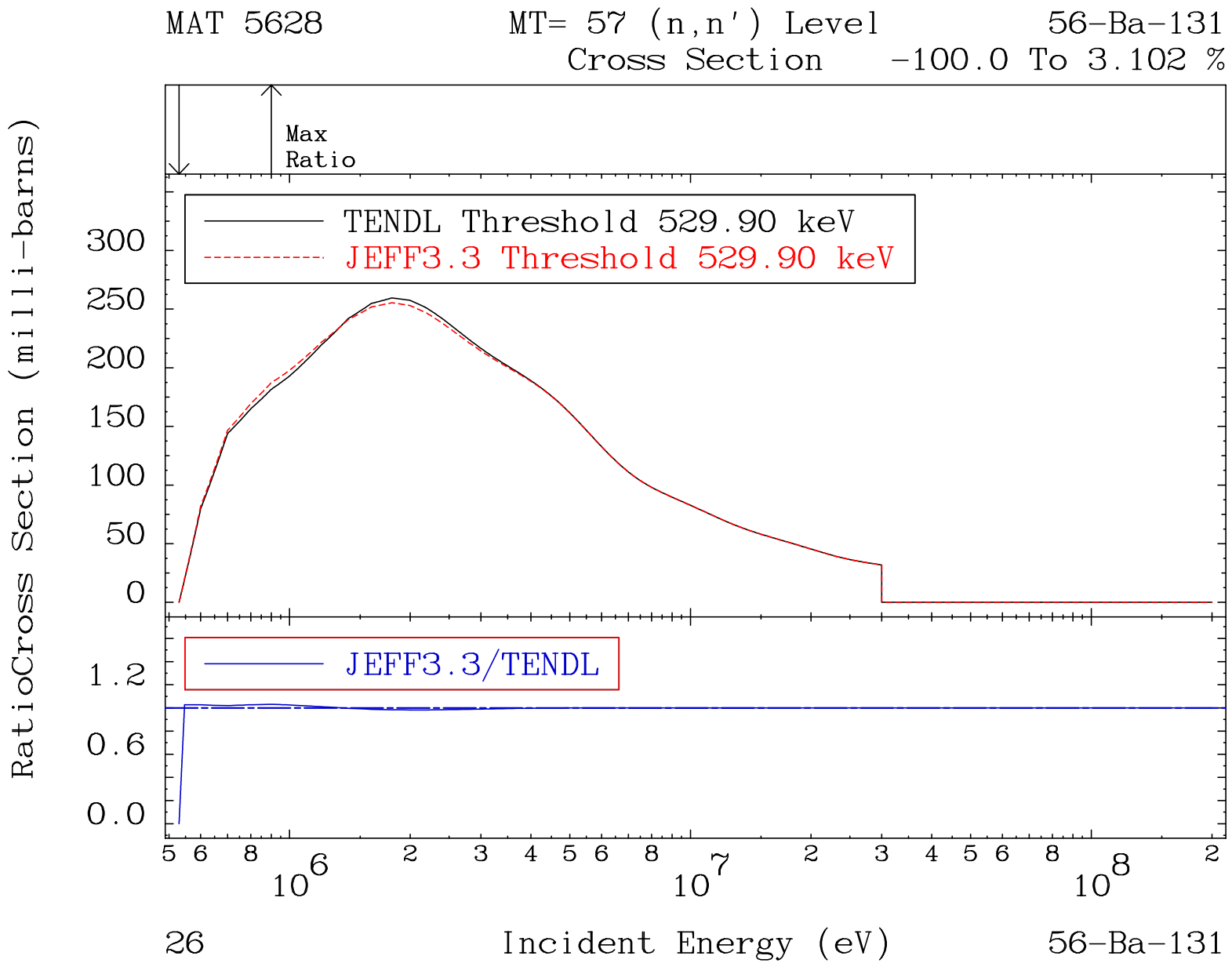

MAT 5628
MT= 52 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 189.44 keV
JEFF3.3 Threshold 189.44 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
56-Ba-131

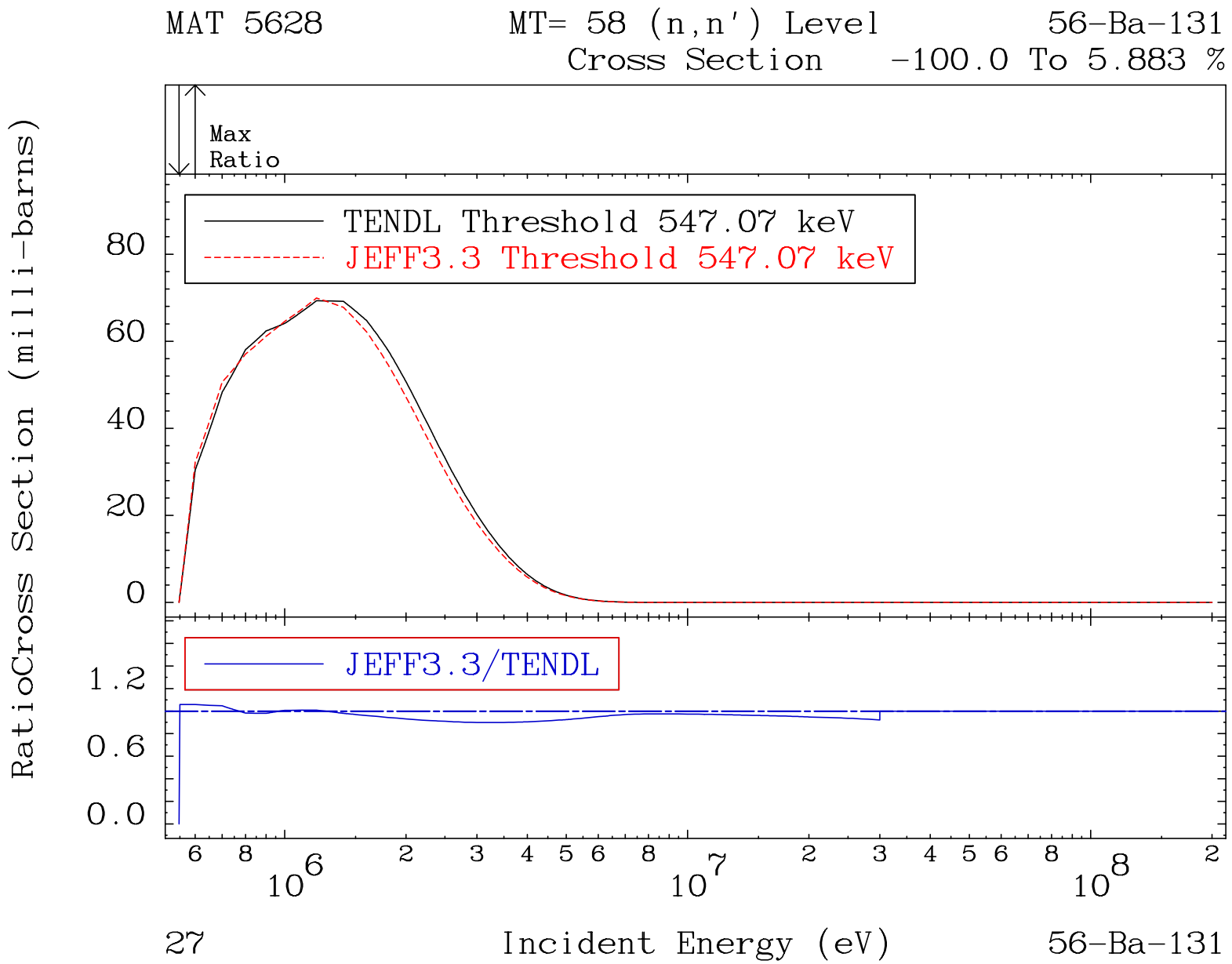

MAT 5628
MT= 53 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 4.868 %
Max
Ratio
TENDL Threshold 287.45 keV
JEFF3.3 Threshold 287.45 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
56-Ba-131

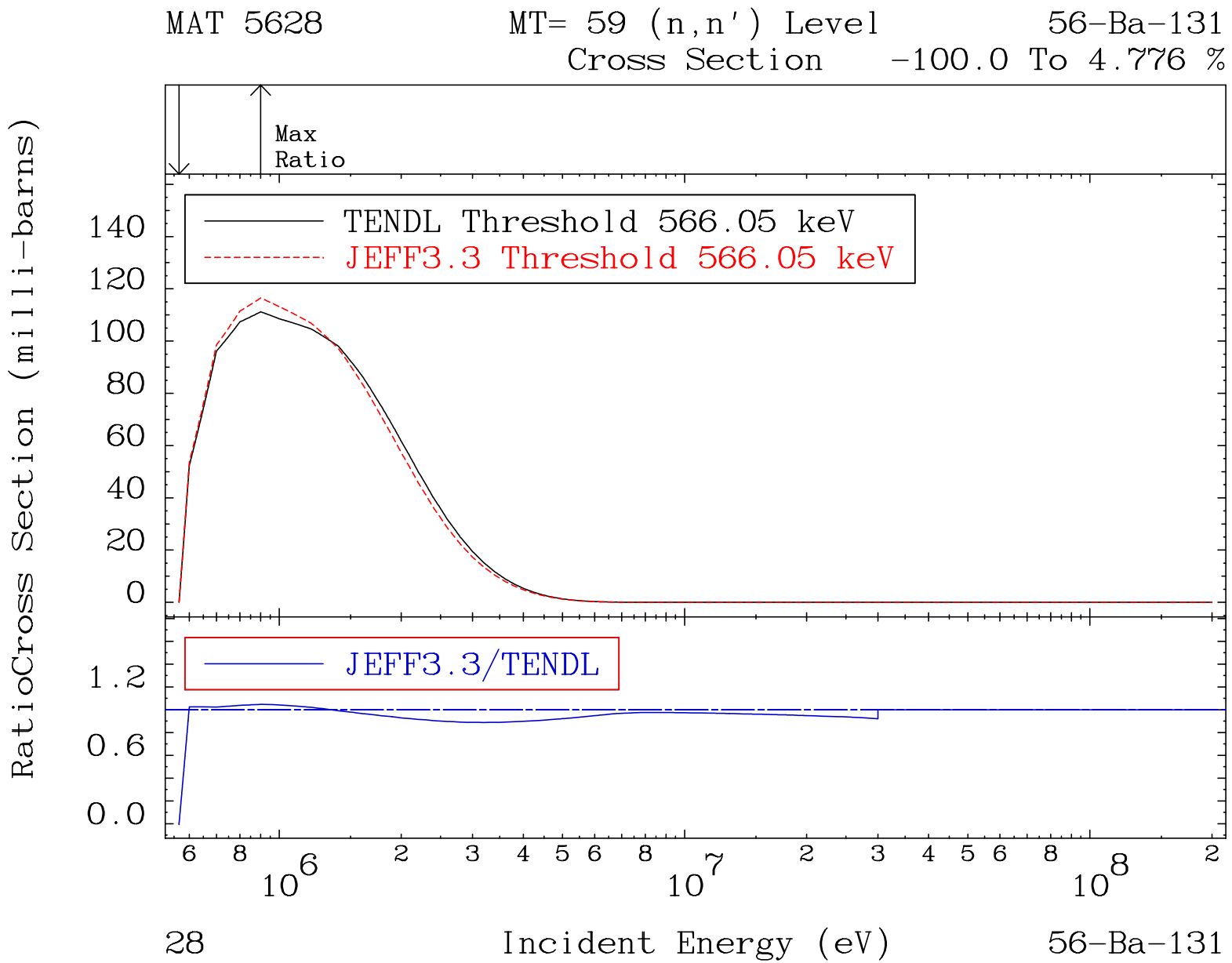

MAT 5628
MT= 54 (n,n') Level
56-Ba-131
Cross Section -100.0 To 23.54 %
Max
Ratio
TENDL Threshold 289.74 keV
JEFF3.3 Threshold 289.74 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
56-Ba-131

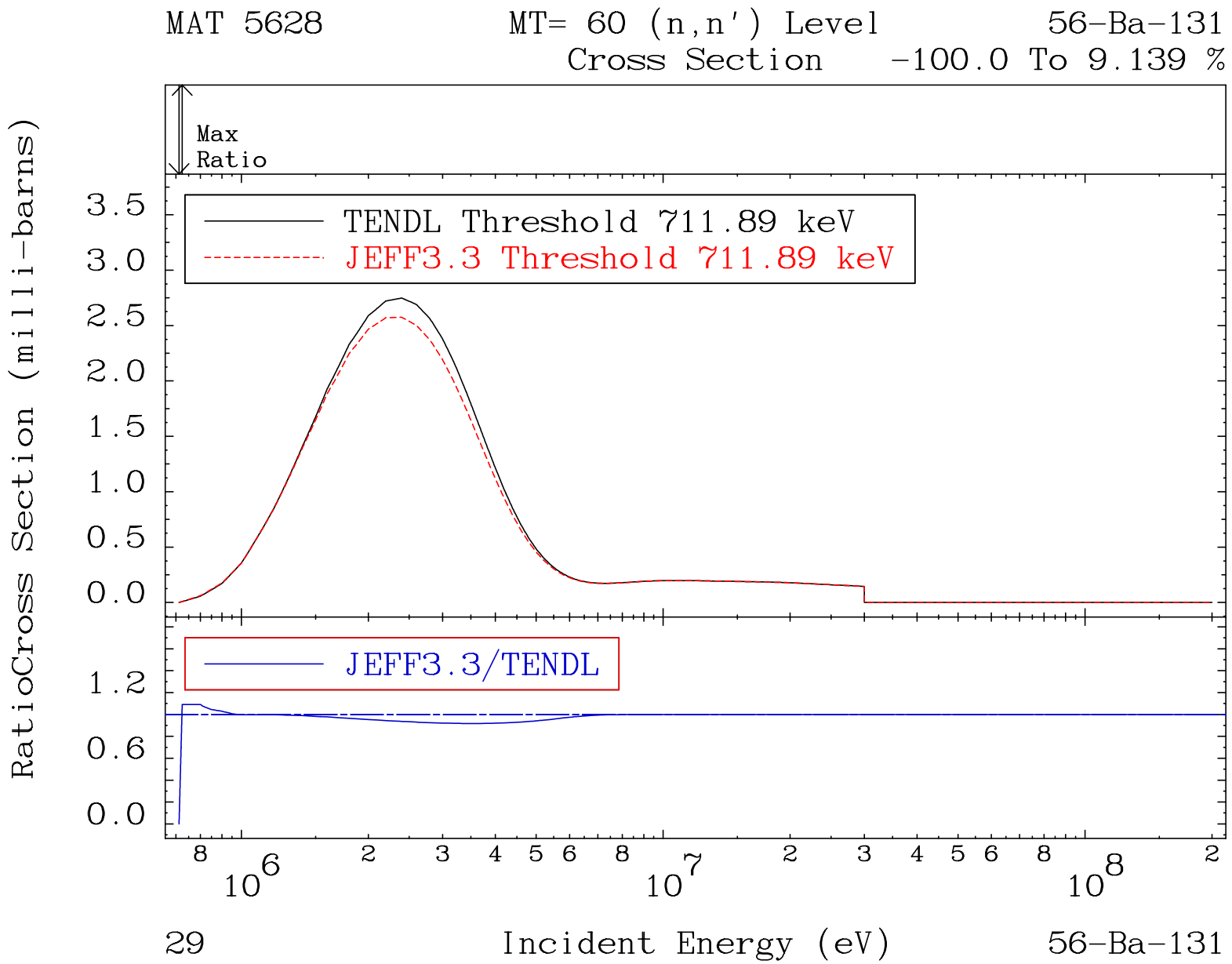

MAT 5628
MT= 55 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 6.976 %
Max
Ratio
TENDL Threshold 319.02 keV
JEFF3.3 Threshold 319.02 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.2
0.6
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
56-Ba-131

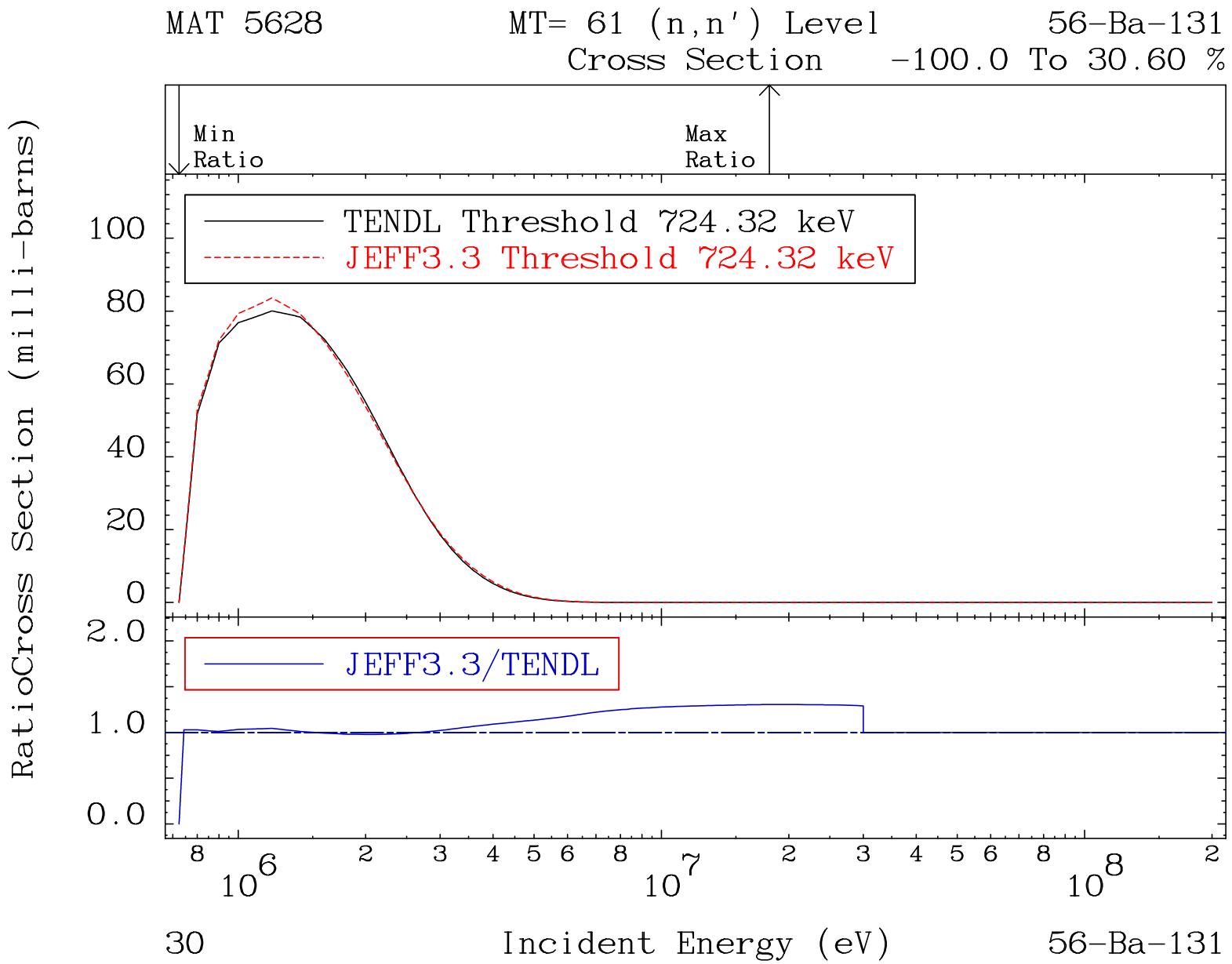

MAT 5628
MT= 56 (n,n') Level
56-Ba-131
Cross Section -100.0 To 4.275 %
Min Ratio
Max Ratio
TENDL Threshold 367.98 keV
JEFF3.3 Threshold 367.98 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
56-Ba-131

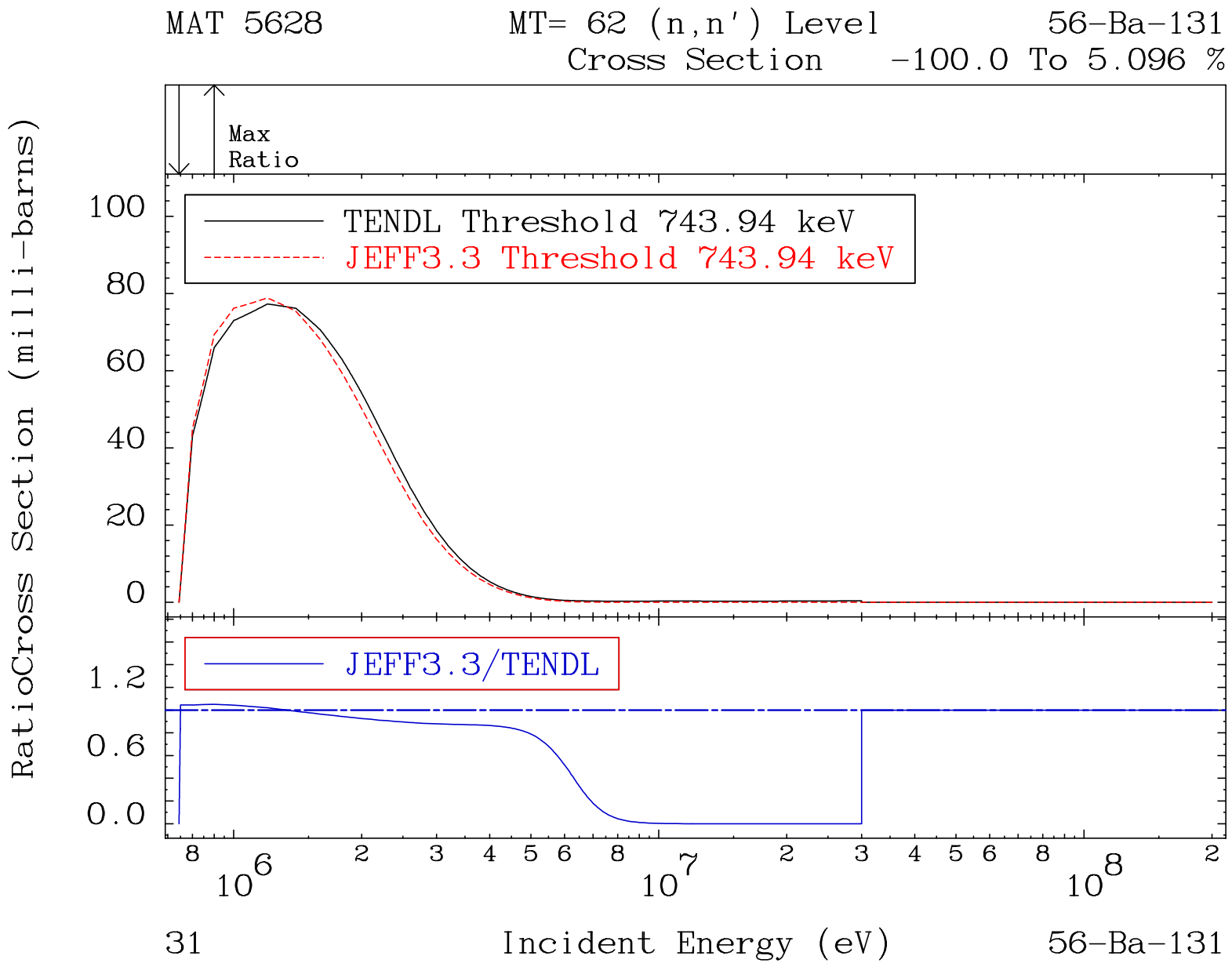

MAT 5628
MT= 57 (n,n') Level
56-Ba-131
Cross Section -100.0 To 3.102 %
Max
Ratio
TENDL Threshold 529.90 keV
JEFF3.3 Threshold 529.90 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
26
Incident Energy (eV)
56-Ba-131

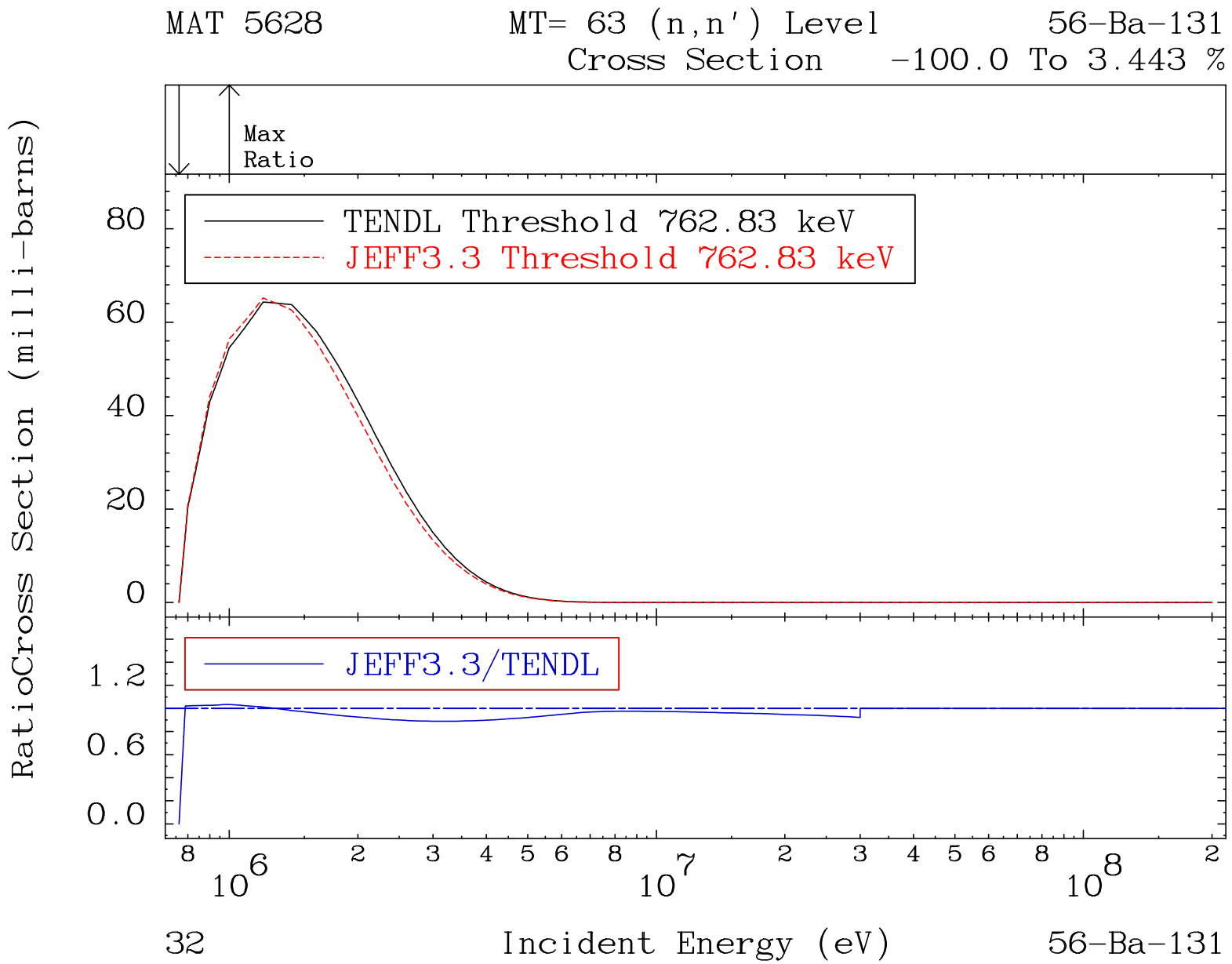

MAT 5628
MT= 58 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 5.883 %
Max
Ratio
TENDL Threshold 547.07 keV
JEFF3.3 Threshold 547.07 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
56-Ba-131

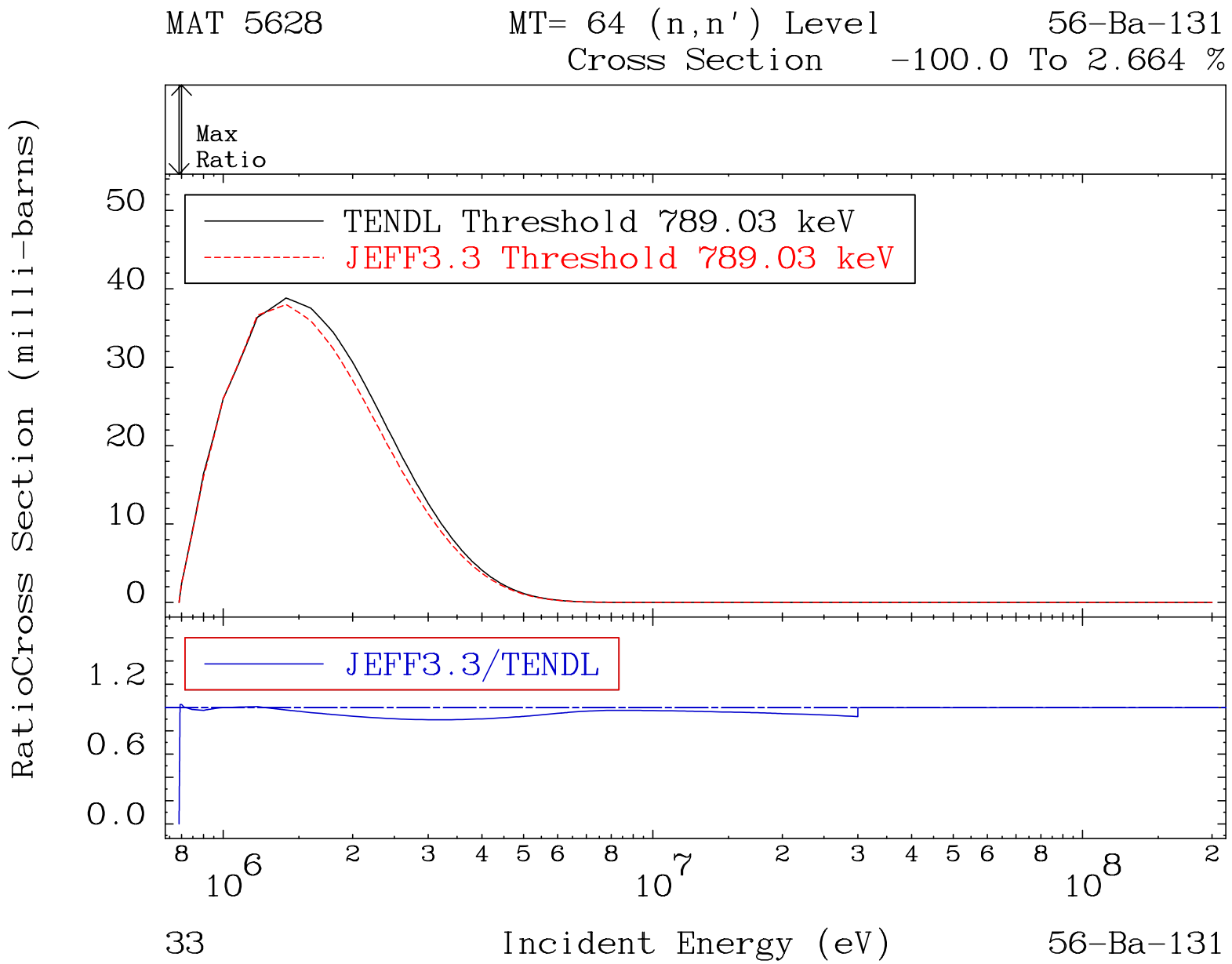

MAT 5628
MT= 59 (n,n') Level
56-Ba-131
Cross Section -100.0 To 4.776 %
Max
Ratio
TENDL Threshold 566.05 keV
JEFF3.3 Threshold 566.05 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.2
0.6
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
56-Ba-131

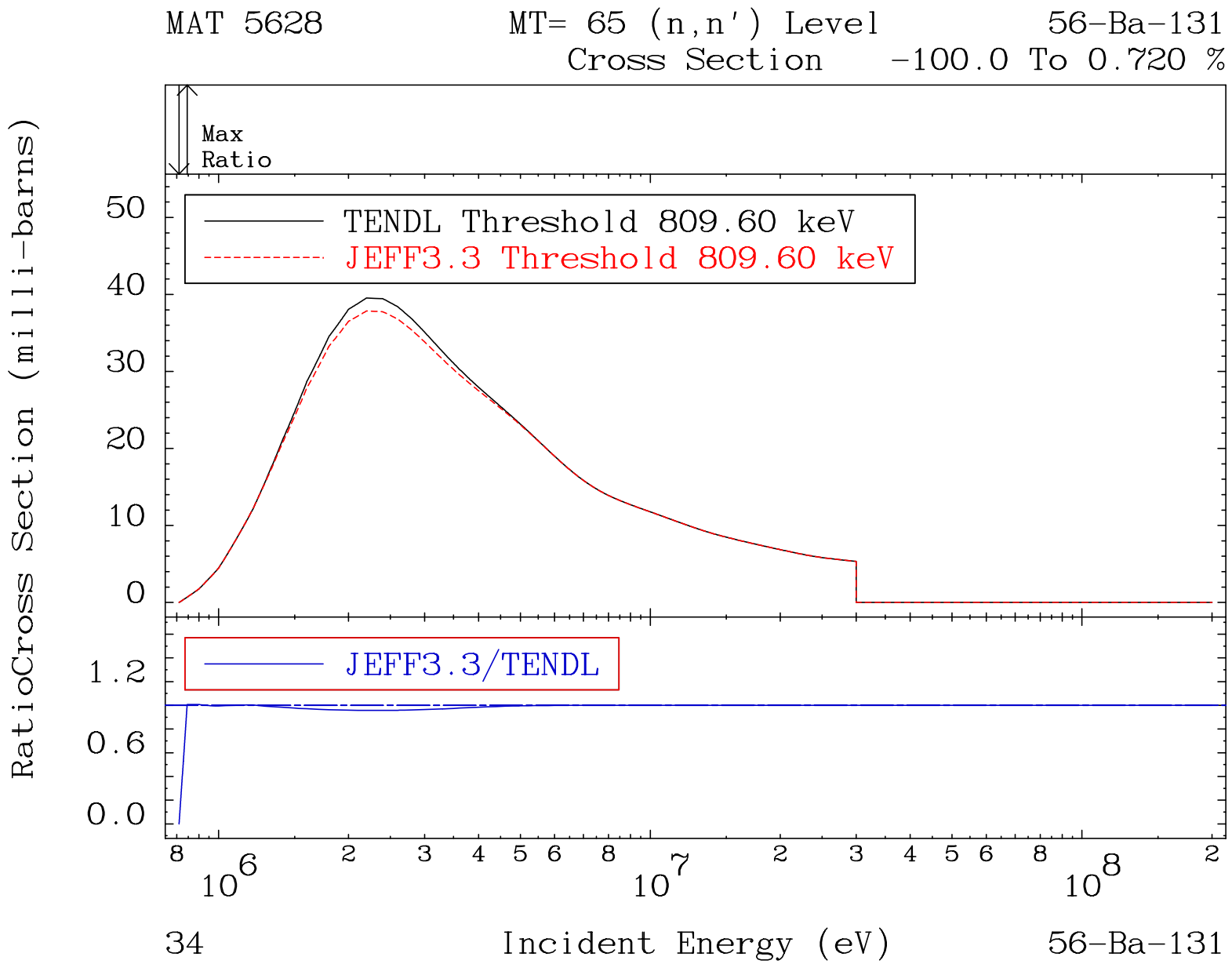

MAT 5628
MT= 60 (n,n') Level
56-Ba-131
Cross Section -100.0 To 9.139 %
Max
Ratio
TENDL Threshold 711.89 keV
JEFF3.3 Threshold 711.89 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
29
Incident Energy (eV)
56-Ba-131

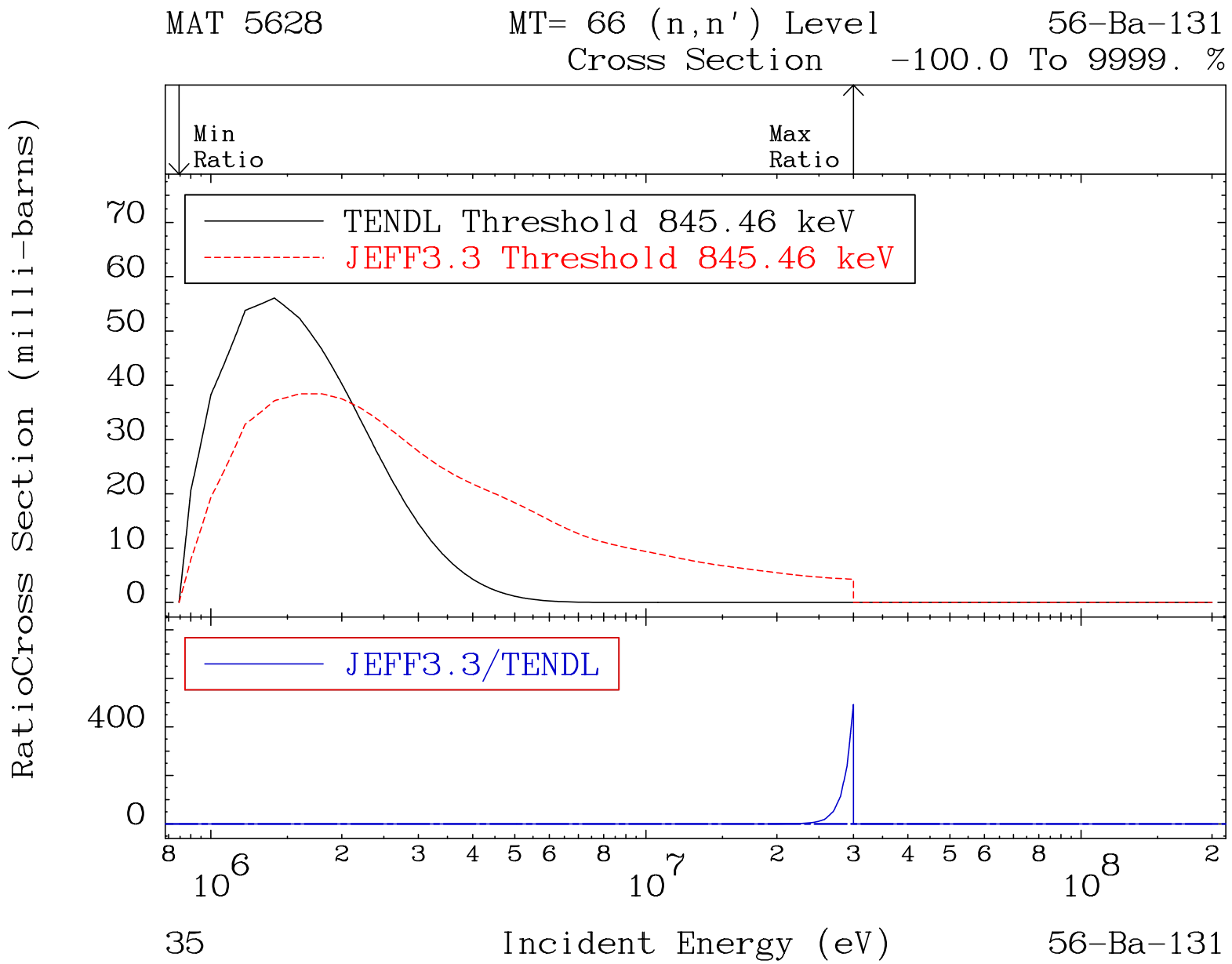

MAT 5628
MT= 61 (n,n') Level
56-Ba-131
Cross Section -100.0 To 30.60 %
Min Ratio
Max Ratio
TENDL Threshold 724.32 keV
JEFF3.3 Threshold 724.32 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
30
Incident Energy (eV)
56-Ba-131

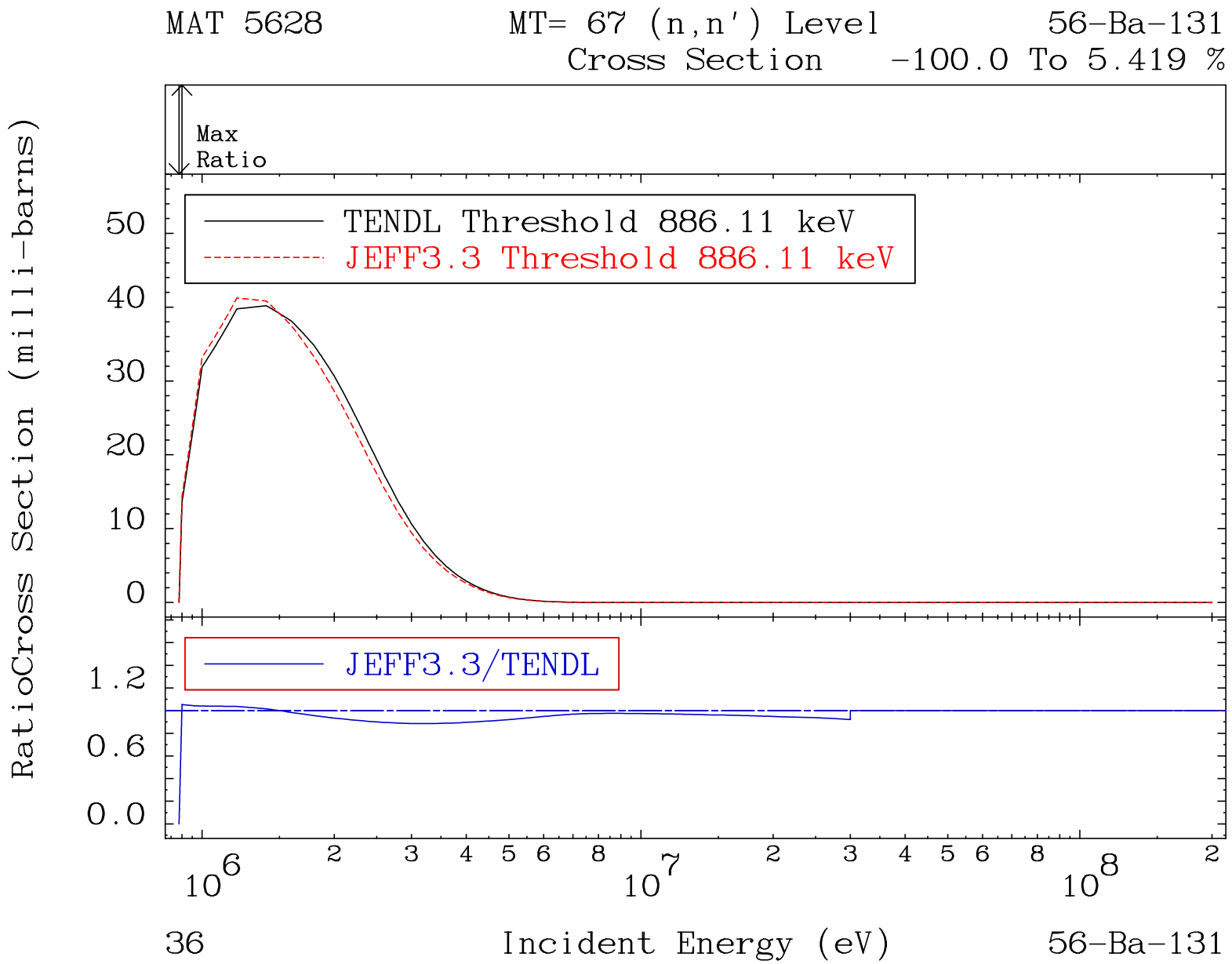

MAT 5628
MT= 62 (n,n') Level
56-Ba-131
Cross Section -100.0 To 5.096 %
Max
Ratio
TENDL Threshold 743.94 keV
JEFF3.3 Threshold 743.94 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
31
Incident Energy (eV)
56-Ba-131

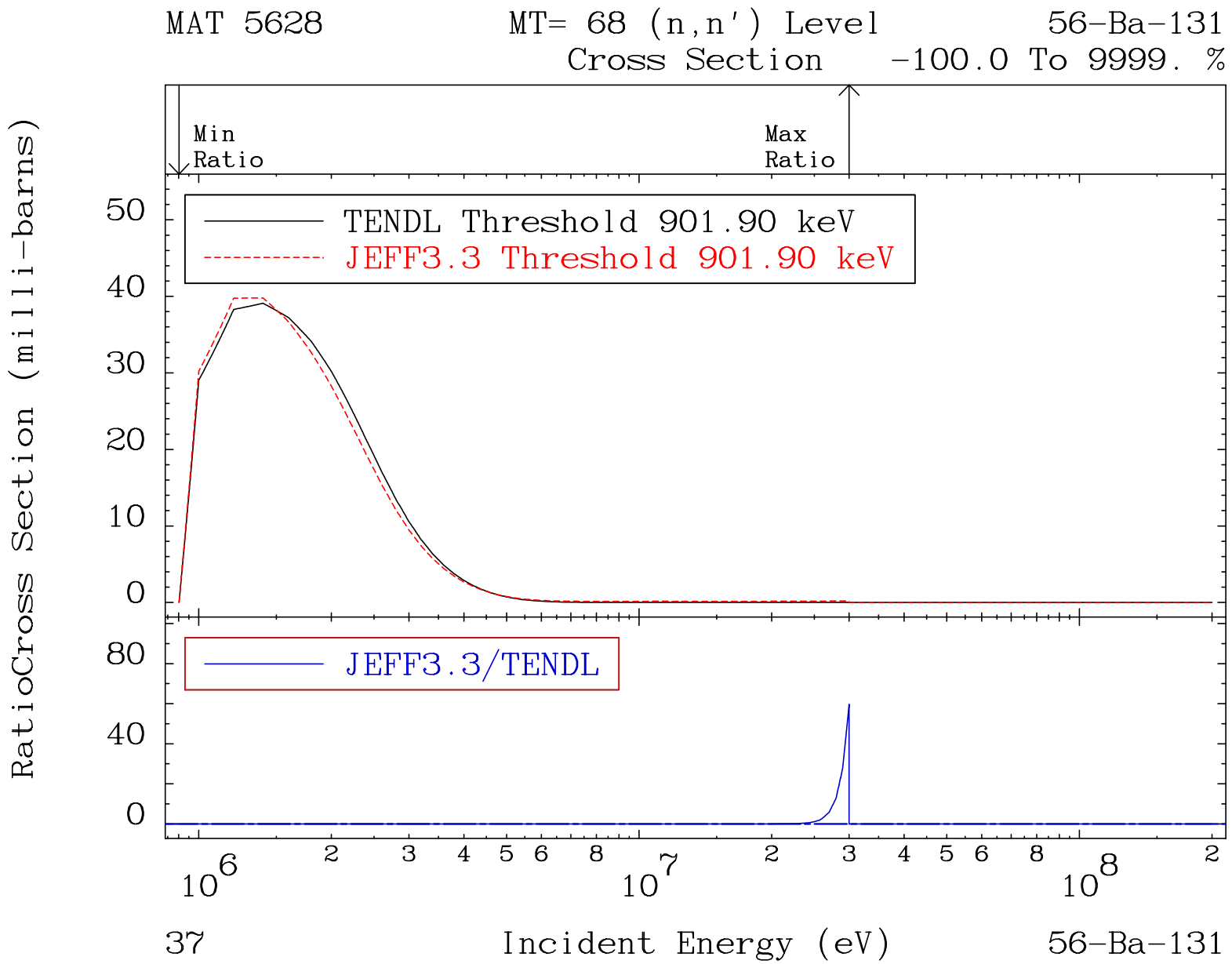

MAT 5628
MT= 63 (n,n') Level
56-Ba-131
Cross Section -100.0 To 3.443 %
Max
Ratio
TENDL Threshold 762.83 keV
JEFF3.3 Threshold 762.83 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
32
Incident Energy (eV)
56-Ba-131

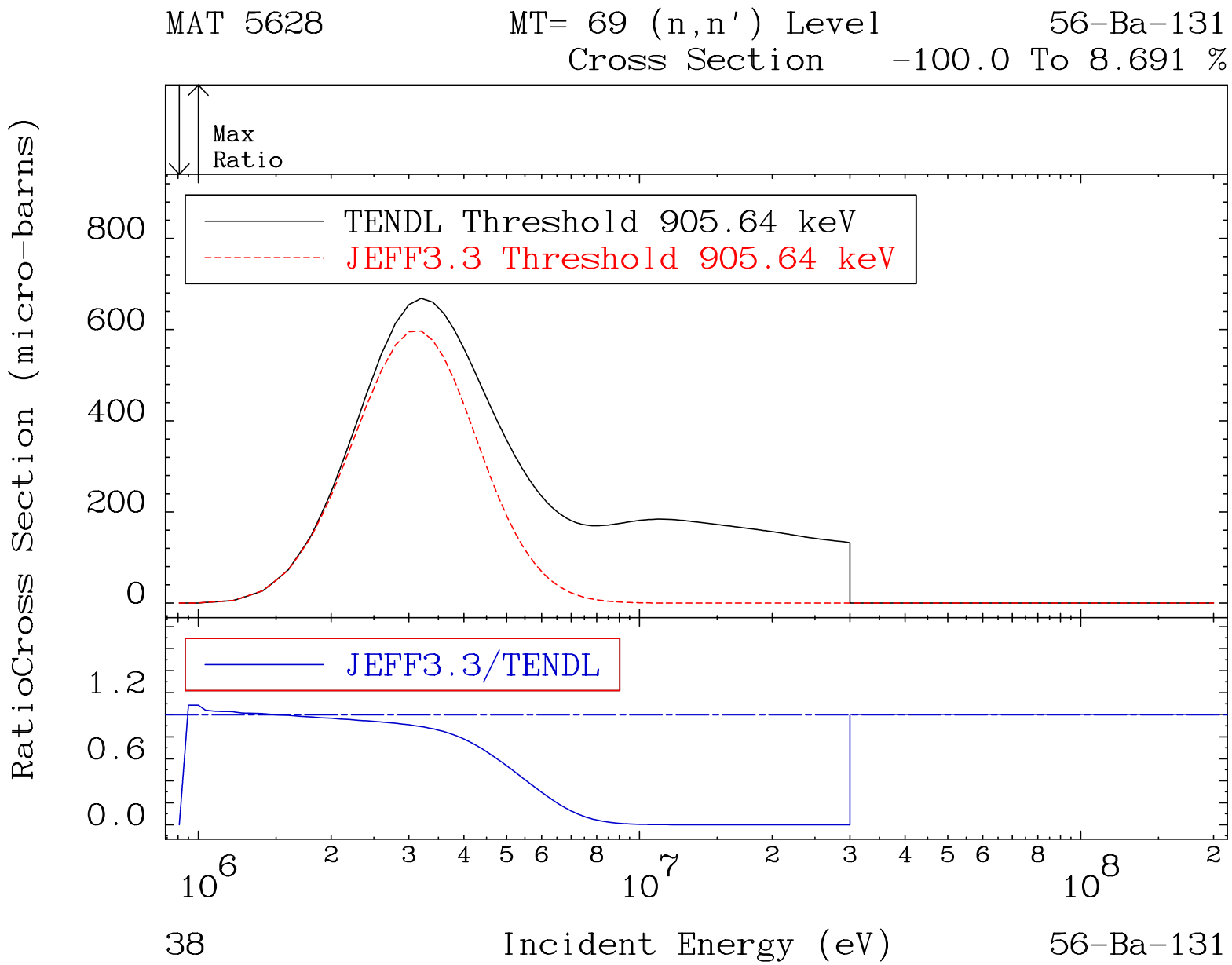

MAT 5628
MT= 64 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 2.664 %
Max
Ratio
TENDL Threshold 789.03 keV
JEFF3.3 Threshold 789.03 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
33
Incident Energy (eV)
56-Ba-131

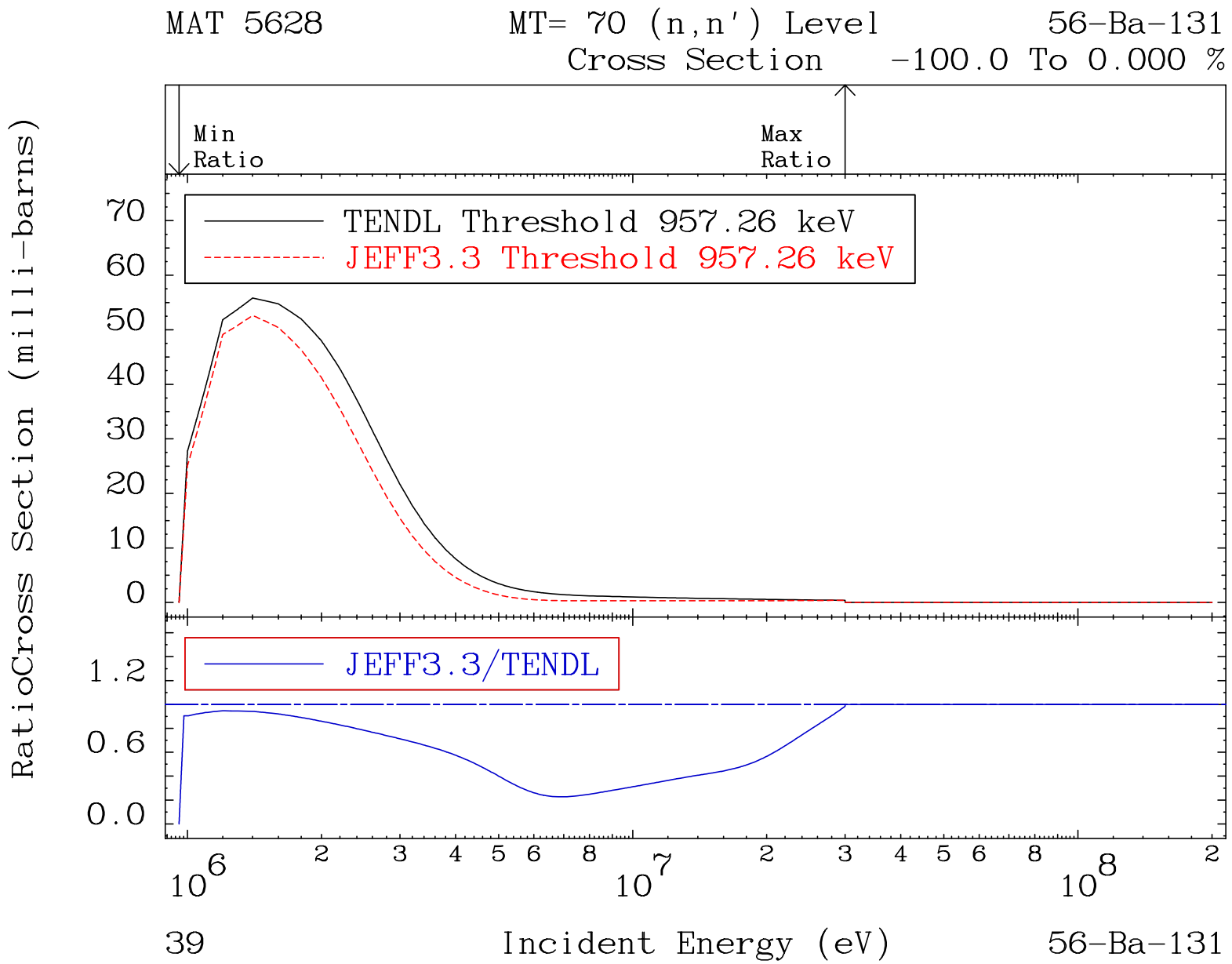

MAT 5628
MT= 65 (n,n') Level
56-Ba-131
Cross Section -100.0 To 0.720 %
Max
Ratio
TENDL Threshold 809.60 keV
JEFF3.3 Threshold 809.60 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
34
Incident Energy (eV)
56-Ba-131

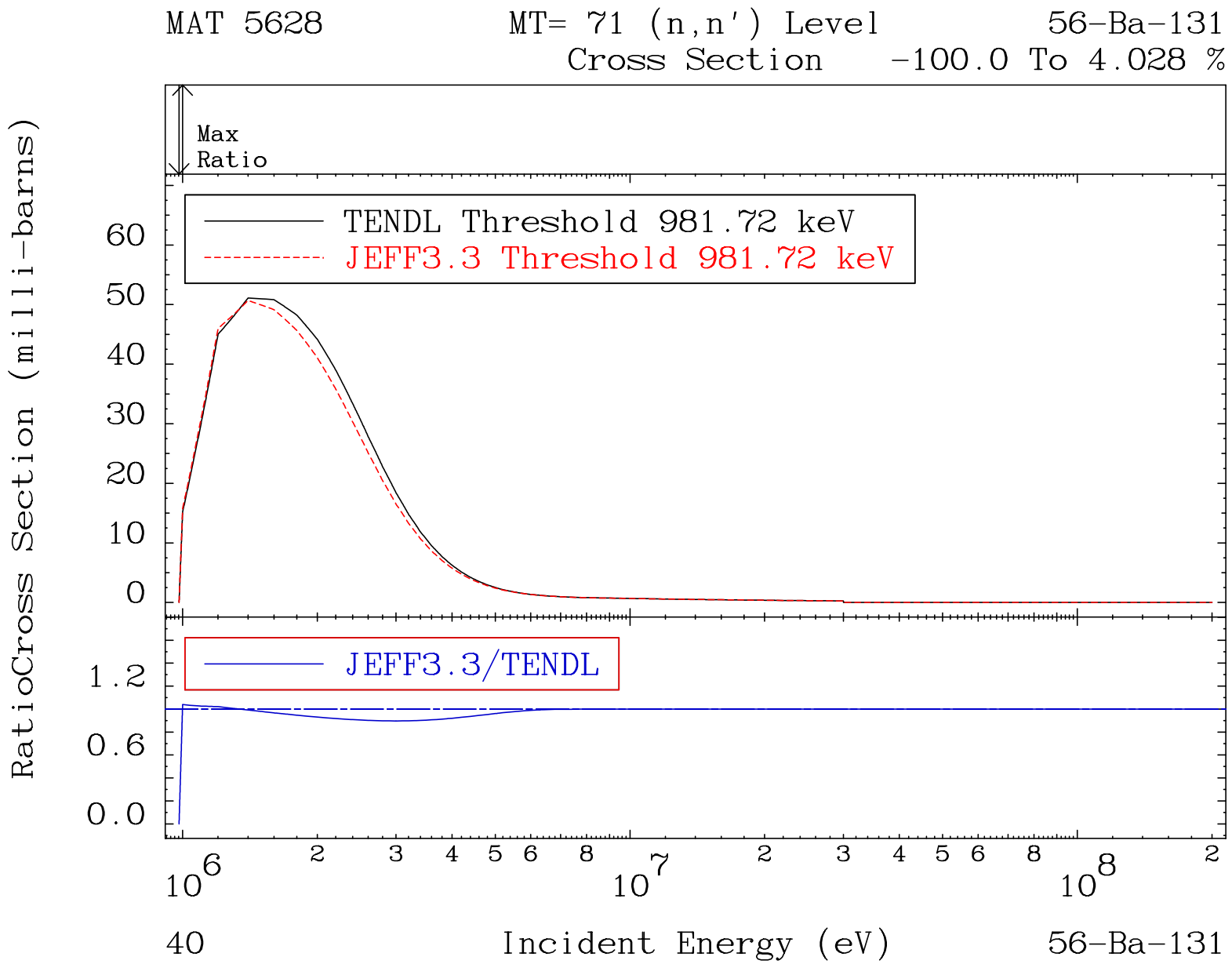

MAT 5628
MT= 66 (n,n') Level
56-Ba-131
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 845.46 keV
JEFF3.3 Threshold 845.46 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
400
0
8
2
3
4
5
6
8
10^6
10^7
10^8
35
Incident Energy (eV)
56-Ba-131

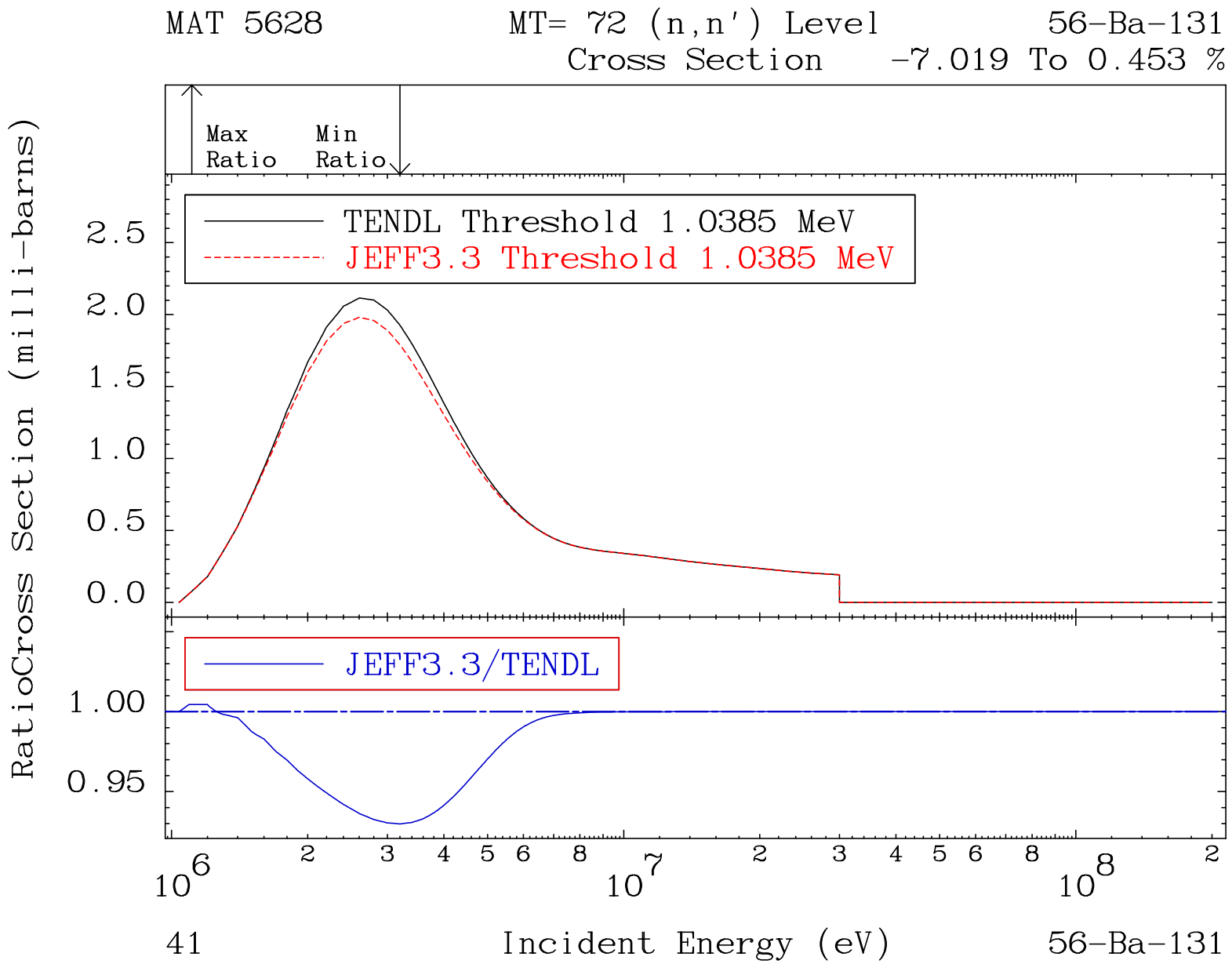

MAT 5628
MT= 67 (n,n') Level
56-Ba-131
Cross Section -100.0 To 5.419 %
Max
Ratio
TENDL Threshold 886.11 keV
JEFF3.3 Threshold 886.11 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
10^6
10^7
10^8
2
3
4
5
6
8
36
Incident Energy (eV)
56-Ba-131

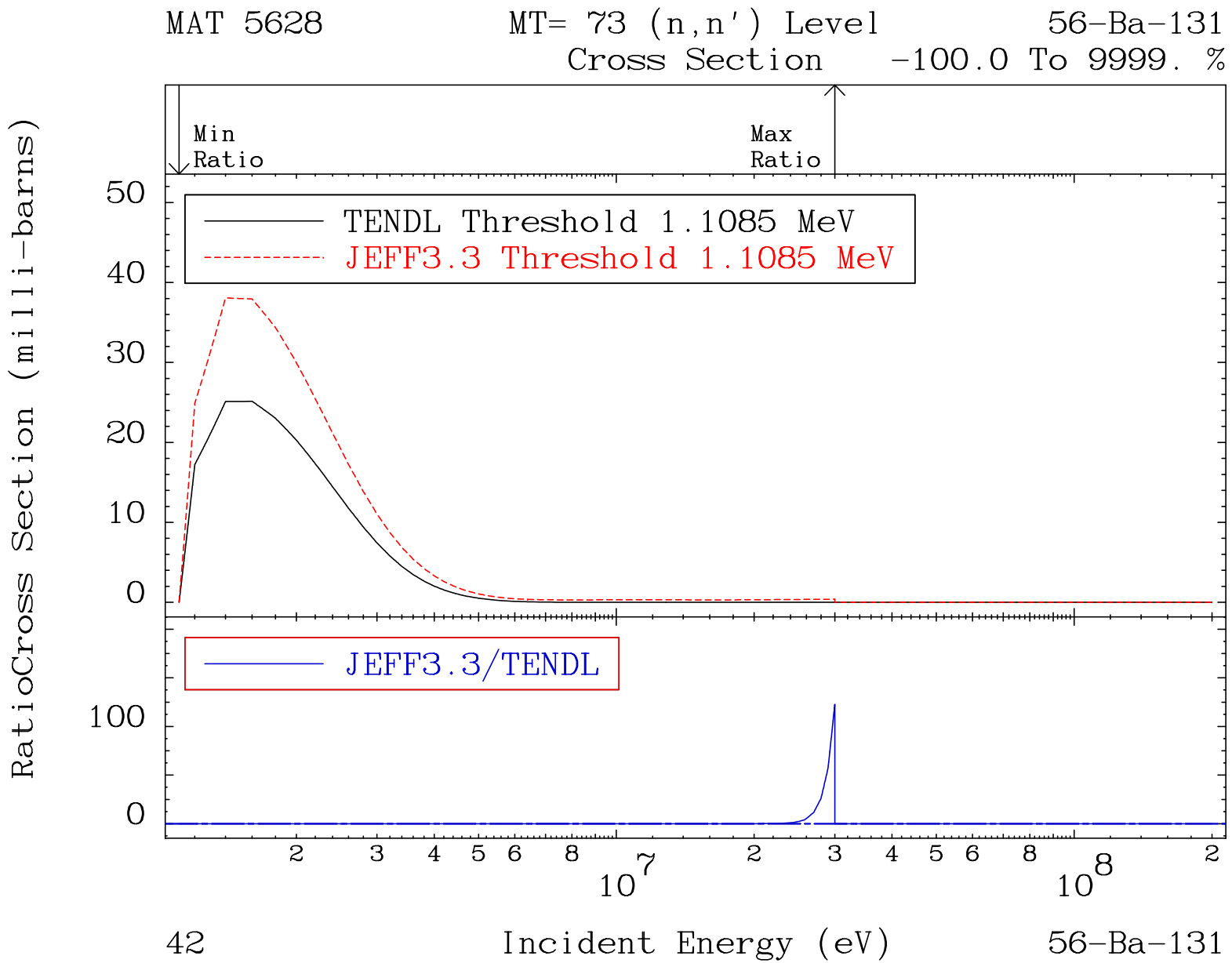

MAT 5628
MT= 68 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 901.90 keV
JEFF3.3 Threshold 901.90 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
80
40
0
10^6
10^7
10^8
2 3 4 5 6 8
Incident Energy (eV)
37
56-Ba-131

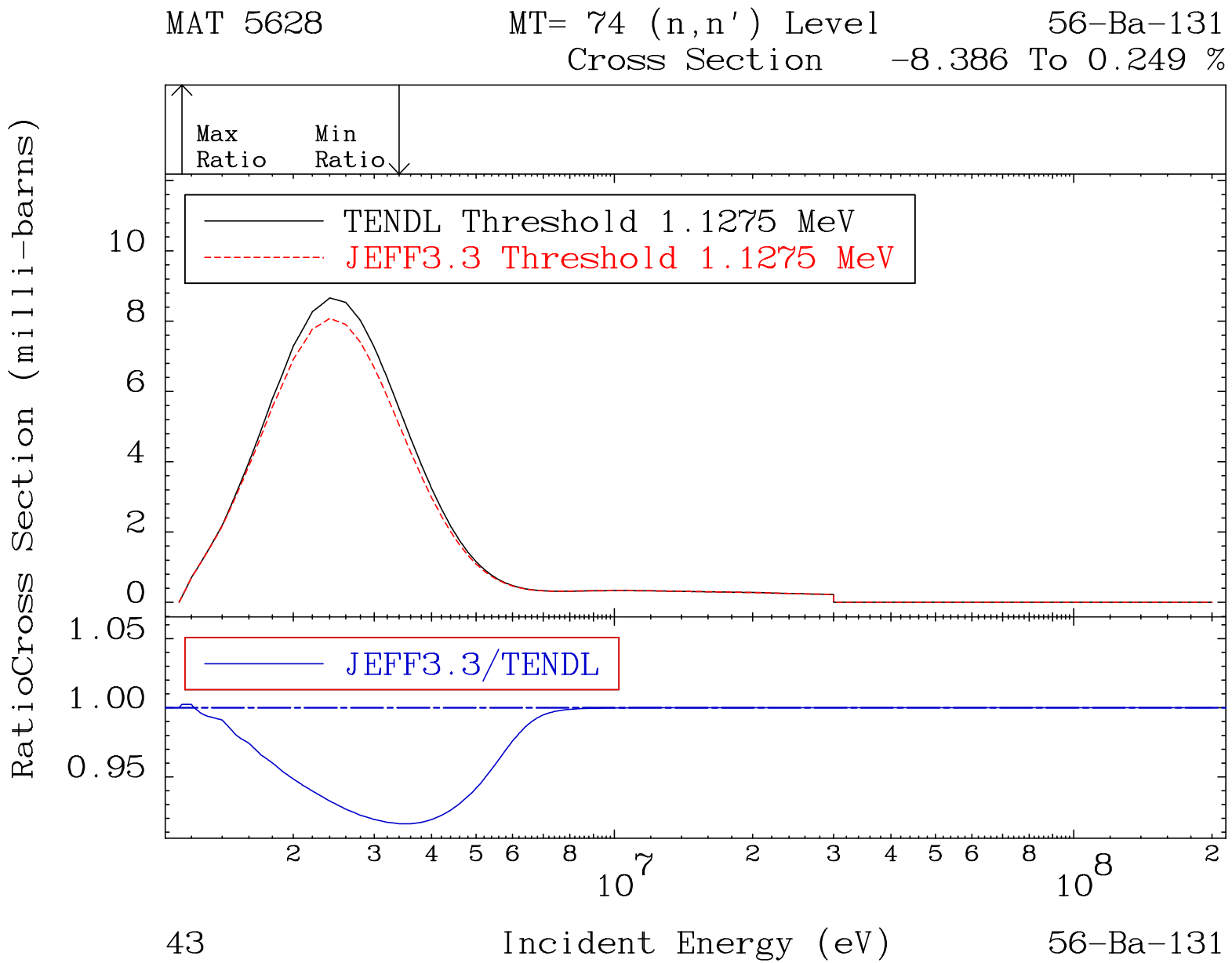

MAT 5628
MT= 69 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 8.691 %
Max
Ratio
TENDL Threshold 905.64 keV
JEFF3.3 Threshold 905.64 keV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
1.2
0.6
0.0
10^6
10^7
10^8
38
Incident Energy (eV)
56-Ba-131

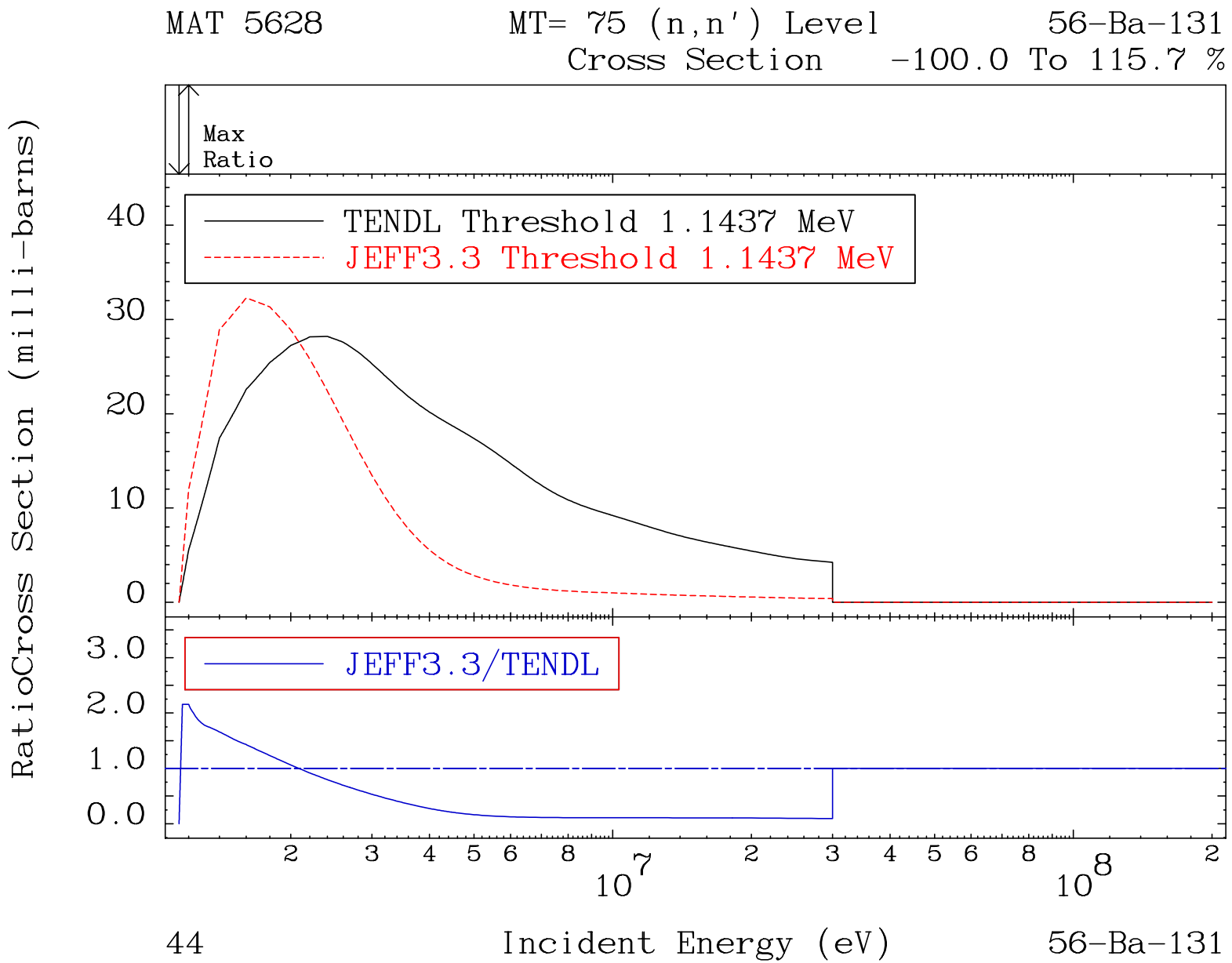

MAT 5628
MT= 70 (n,n') Level
56-Ba-131
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 957.26 keV
JEFF3.3 Threshold 957.26 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.6
0.0
10^6
10^7
10^8
2
3
4
5
6
8
39
Incident Energy (eV)
56-Ba-131

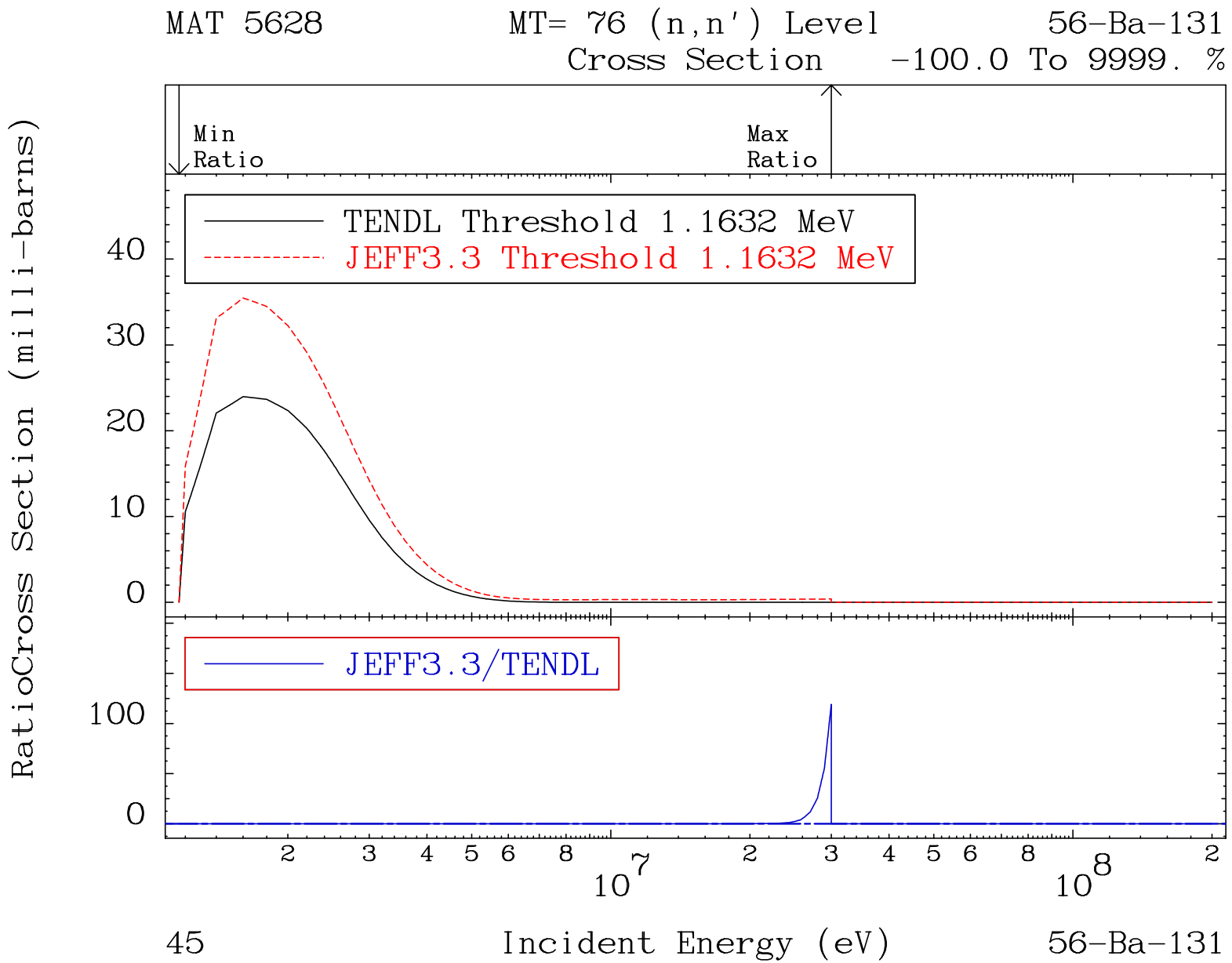

MAT 5628
MT= 71 (n,n') Level
56-Ba-131
Cross Section
-100.0 To 4.028 %
Max
Ratio
TENDL Threshold 981.72 keV
JEFF3.3 Threshold 981.72 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
0.6
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
40
Incident Energy (eV)
56-Ba-131

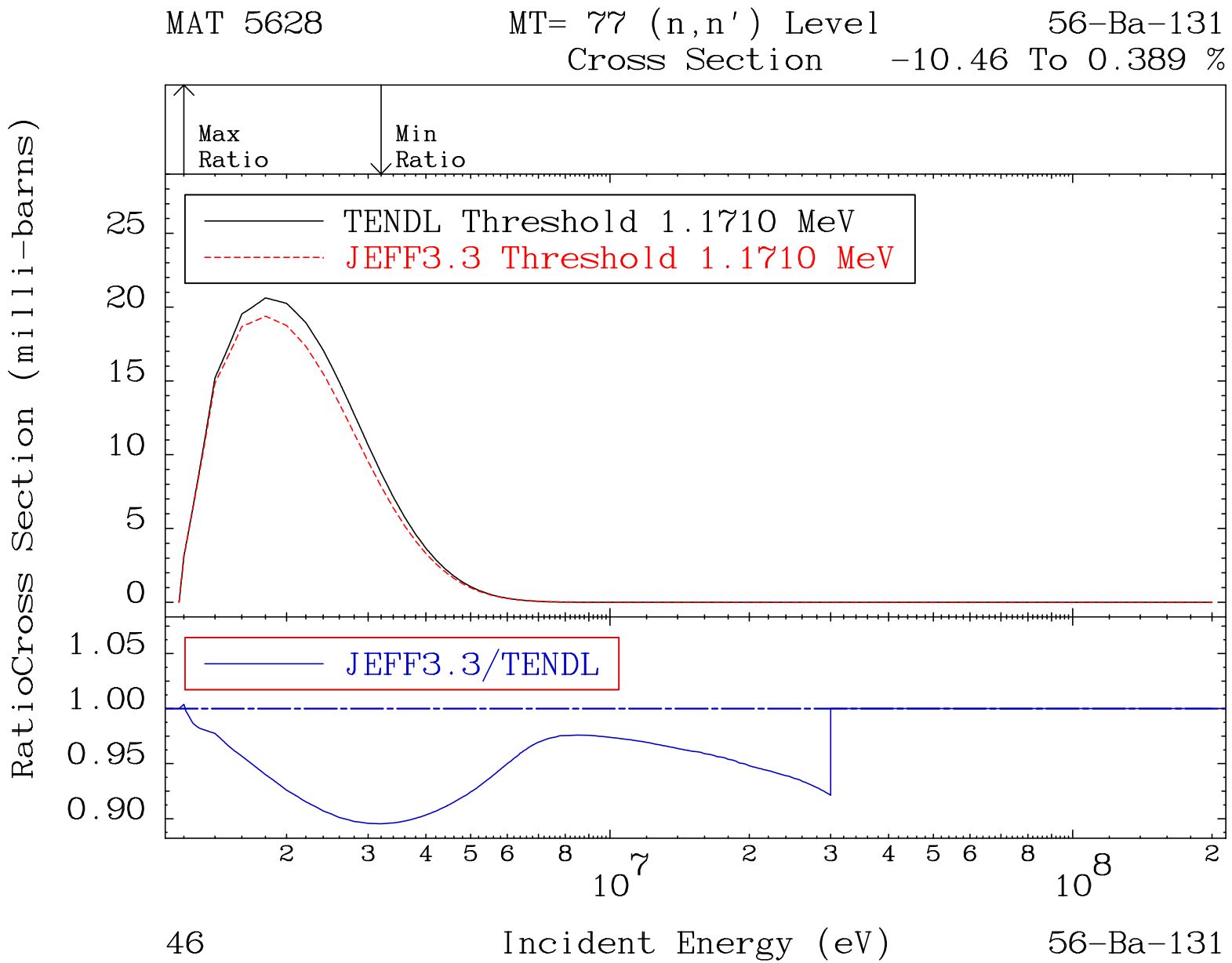

MAT 5628
MT= 72 (n,n') Level
56-Ba-131
Cross Section
-7.019 To 0.453 %
Max Ratio
Min Ratio
TENDL Threshold 1.0385 MeV
JEFF3.3 Threshold 1.0385 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
1.00
0.95
10^6
10^7
10^8
Incident Energy (eV)
41
56-Ba-131

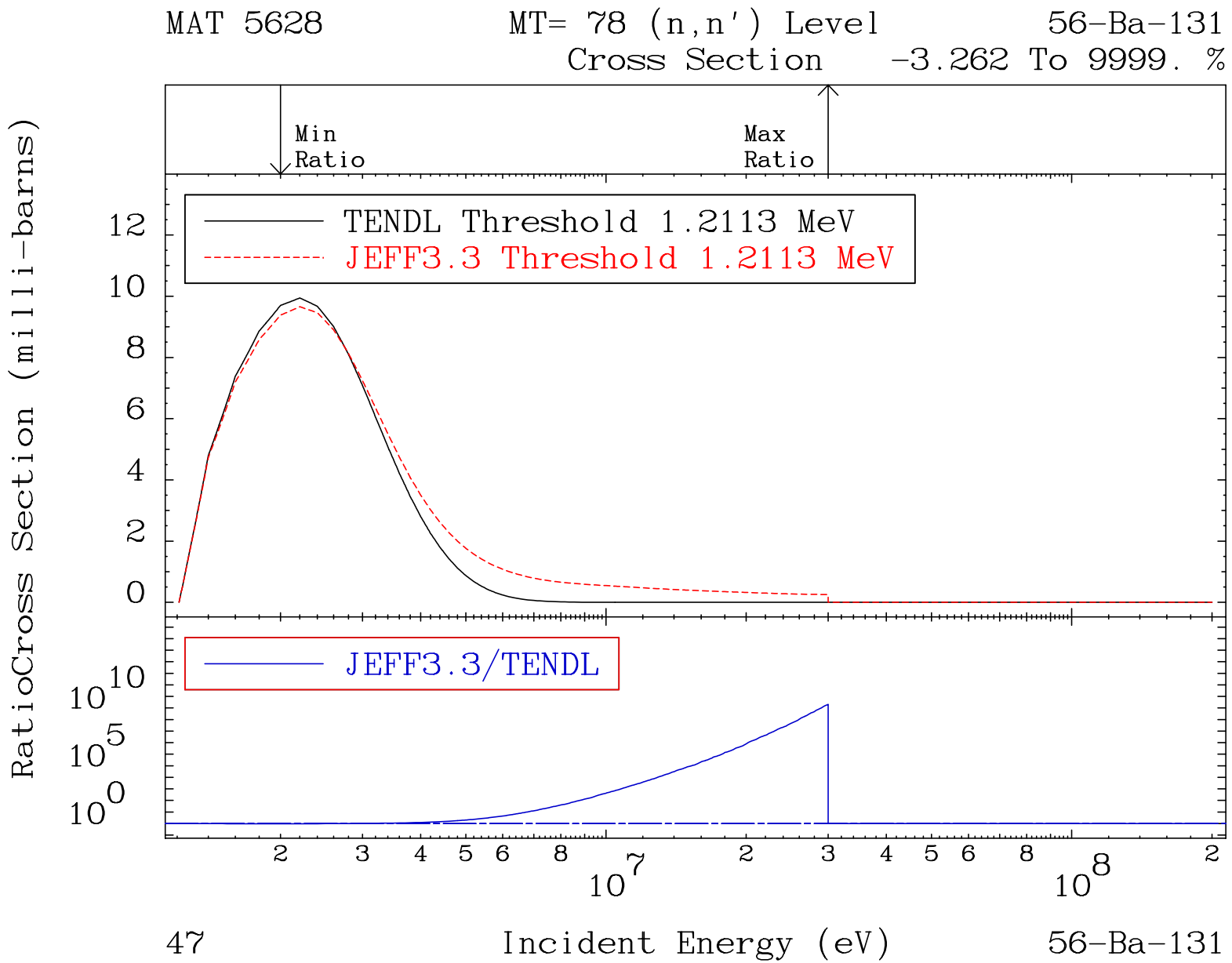

MAT 5628
MT= 73 (n,n') Level
56-Ba-131
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1085 MeV
JEFF3.3 Threshold 1.1085 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
42
Incident Energy (eV)
56-Ba-131

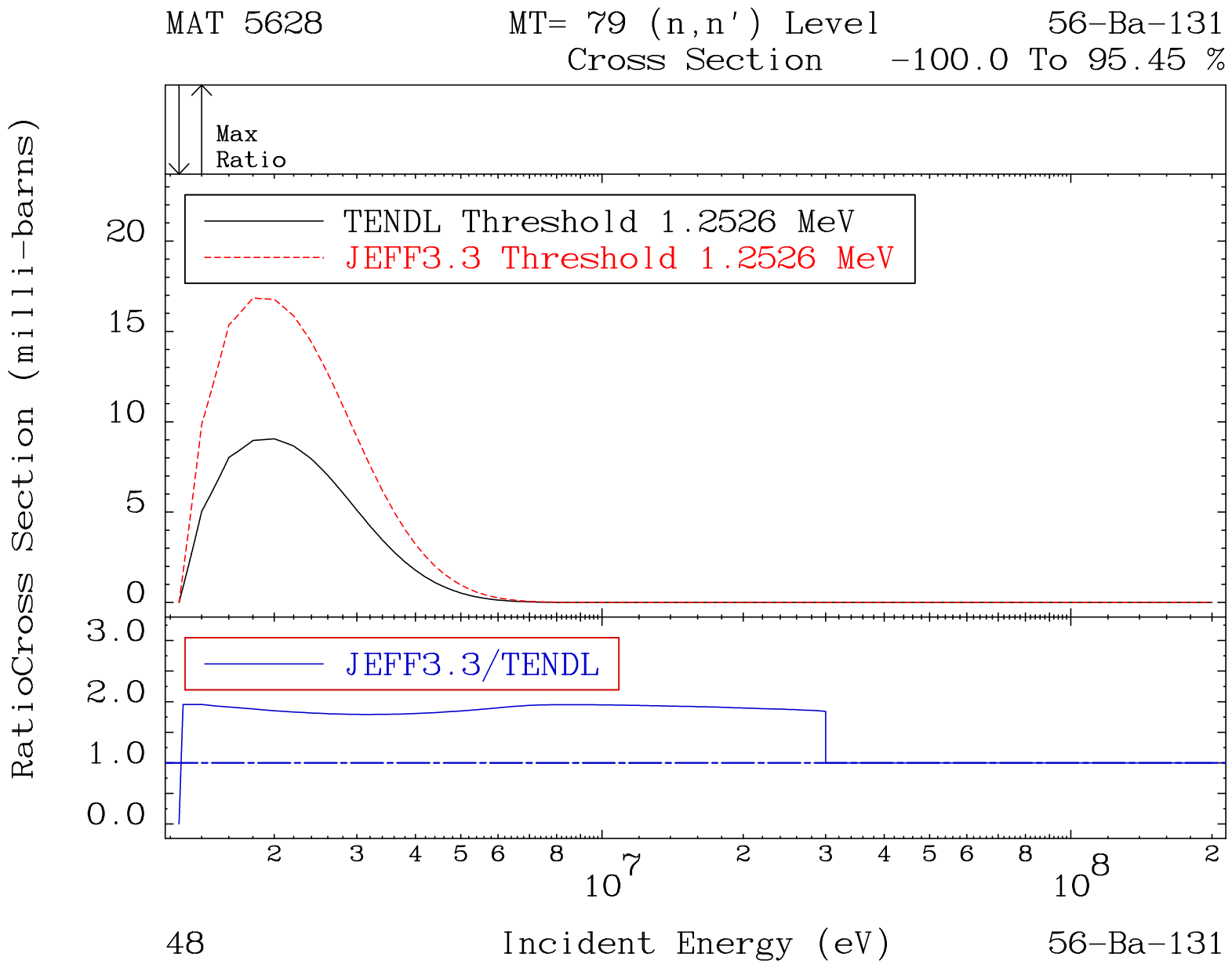

MAT 5628
MT= 74 (n,n') Level
56-Ba-131
Cross Section -8.386 To 0.249 %
Max Ratio
Min Ratio
TENDL Threshold 1.1275 MeV
JEFF3.3 Threshold 1.1275 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.05
1.00
0.95
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
43
Incident Energy (eV)
56-Ba-131

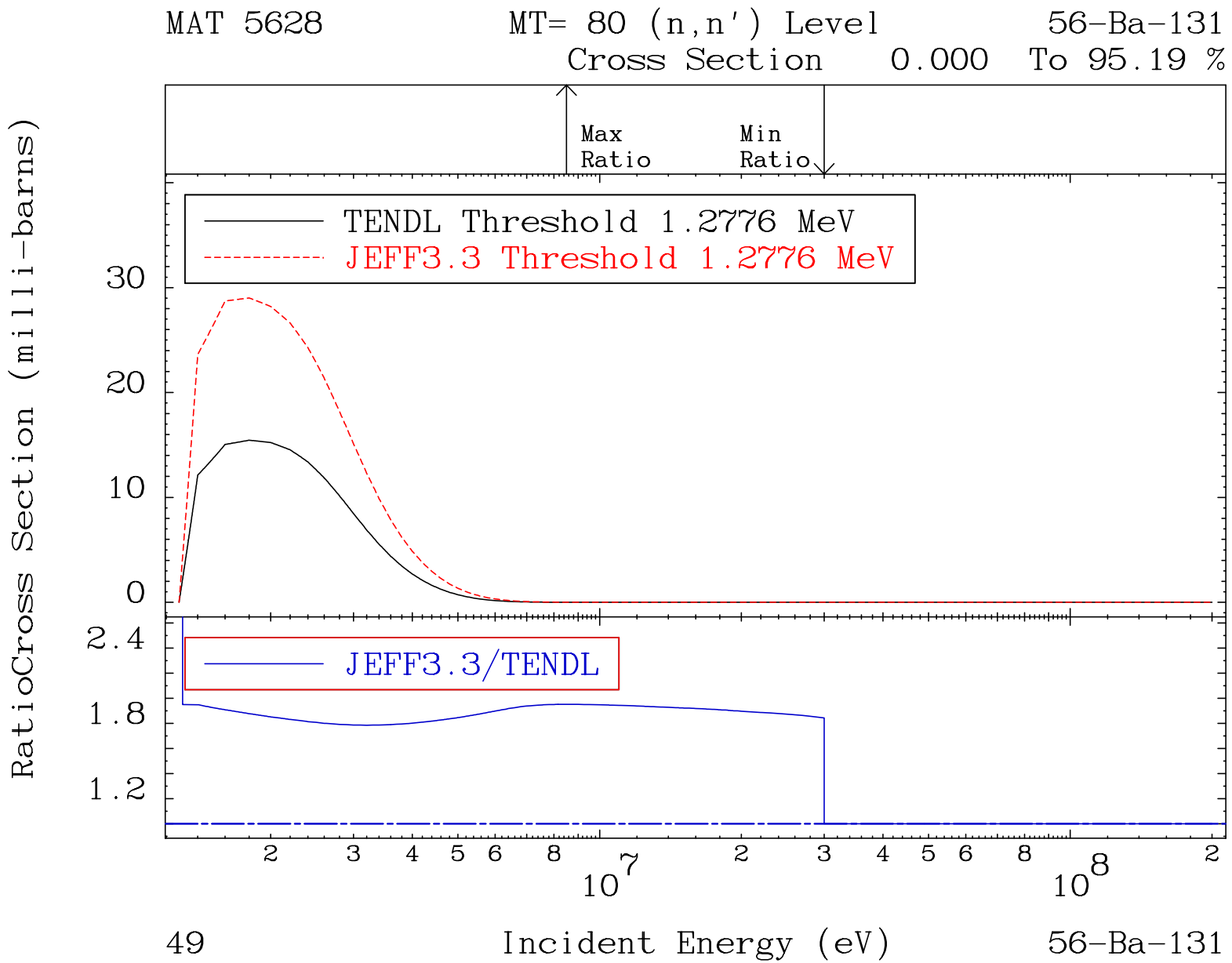

MAT 5628
MT= 75 (n,n') Level
56-Ba-131
Cross Section -100.0 To 115.7 %
Max
Ratio
TENDL Threshold 1.1437 MeV
JEFF3.3 Threshold 1.1437 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
44
Incident Energy (eV)
56-Ba-131

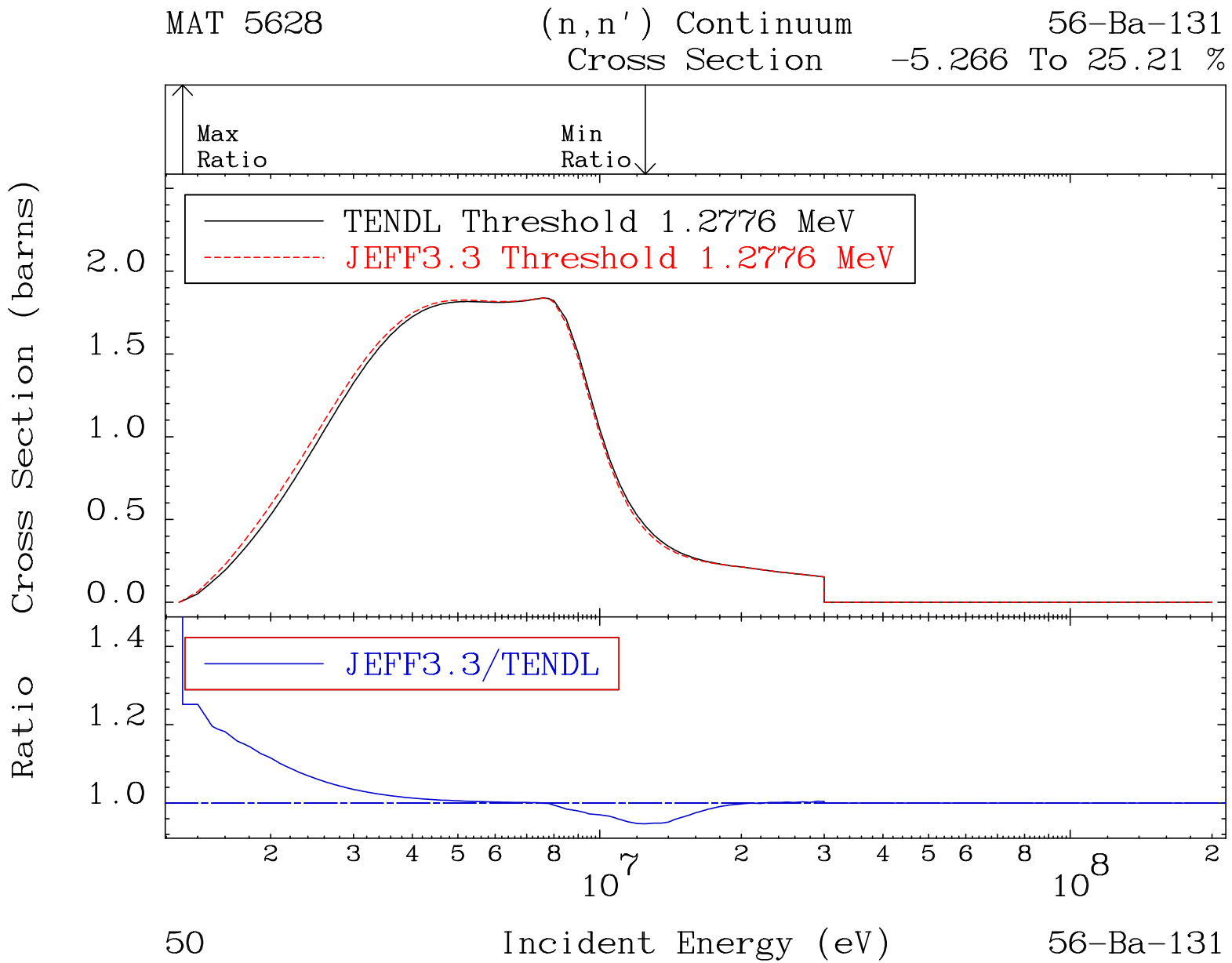

MAT 5628
MT= 76 (n,n') Level
56-Ba-131
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1632 MeV
JEFF3.3 Threshold 1.1632 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
45
Incident Energy (eV)
56-Ba-131

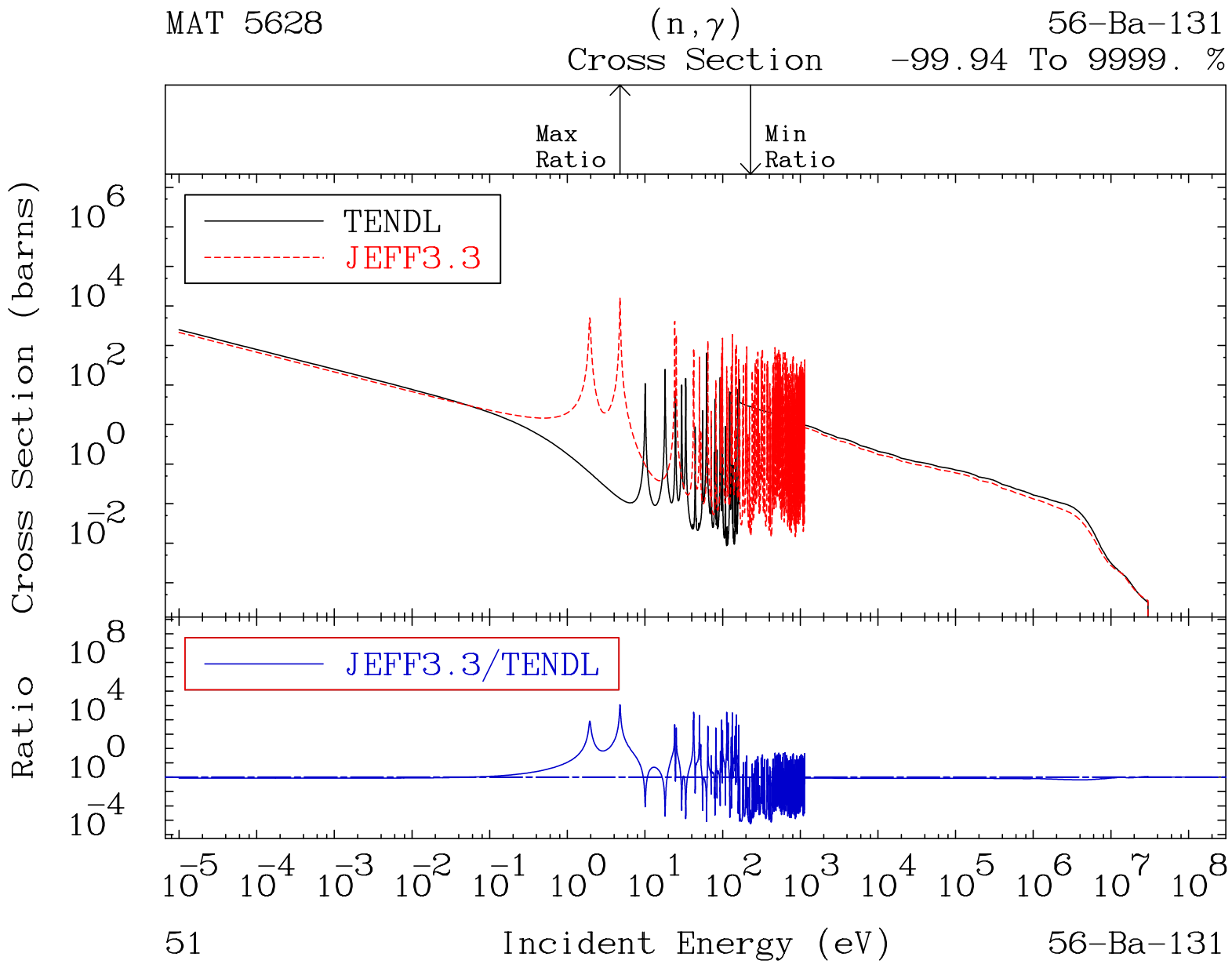

MAT 5628
MT= 77 (n,n') Level
56-Ba-131
Cross Section -10.46 To 0.389 %
Max Ratio
Min Ratio
TENDL Threshold 1.1710 MeV
JEFF3.3 Threshold 1.1710 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.05
1.00
0.95
0.90
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
46
Incident Energy (eV)
56-Ba-131

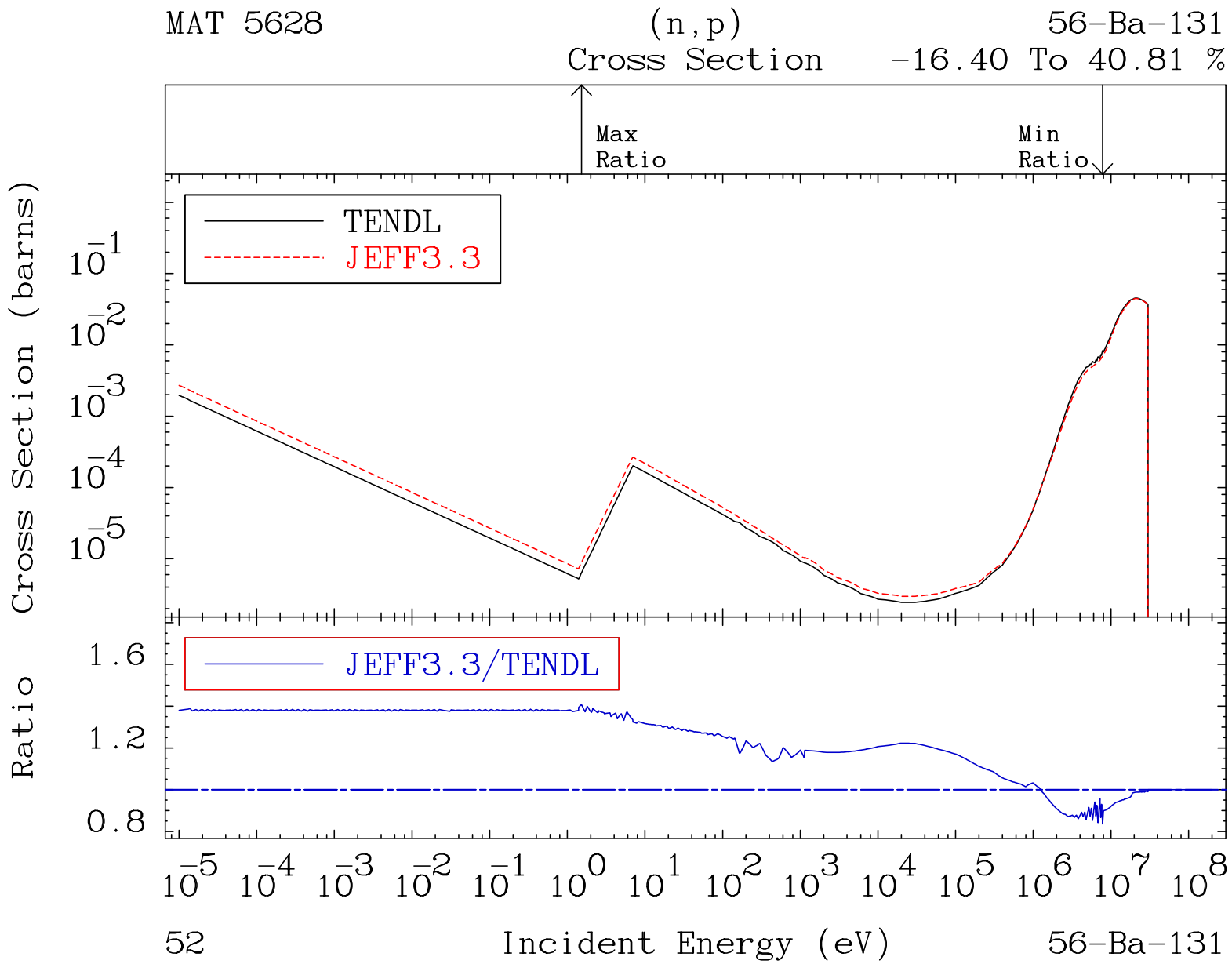

MAT 5628
MT= 78 (n,n') Level
56-Ba-131
Cross Section -3.262 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2113 MeV
JEFF3.3 Threshold 1.2113 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
47
56-Ba-131

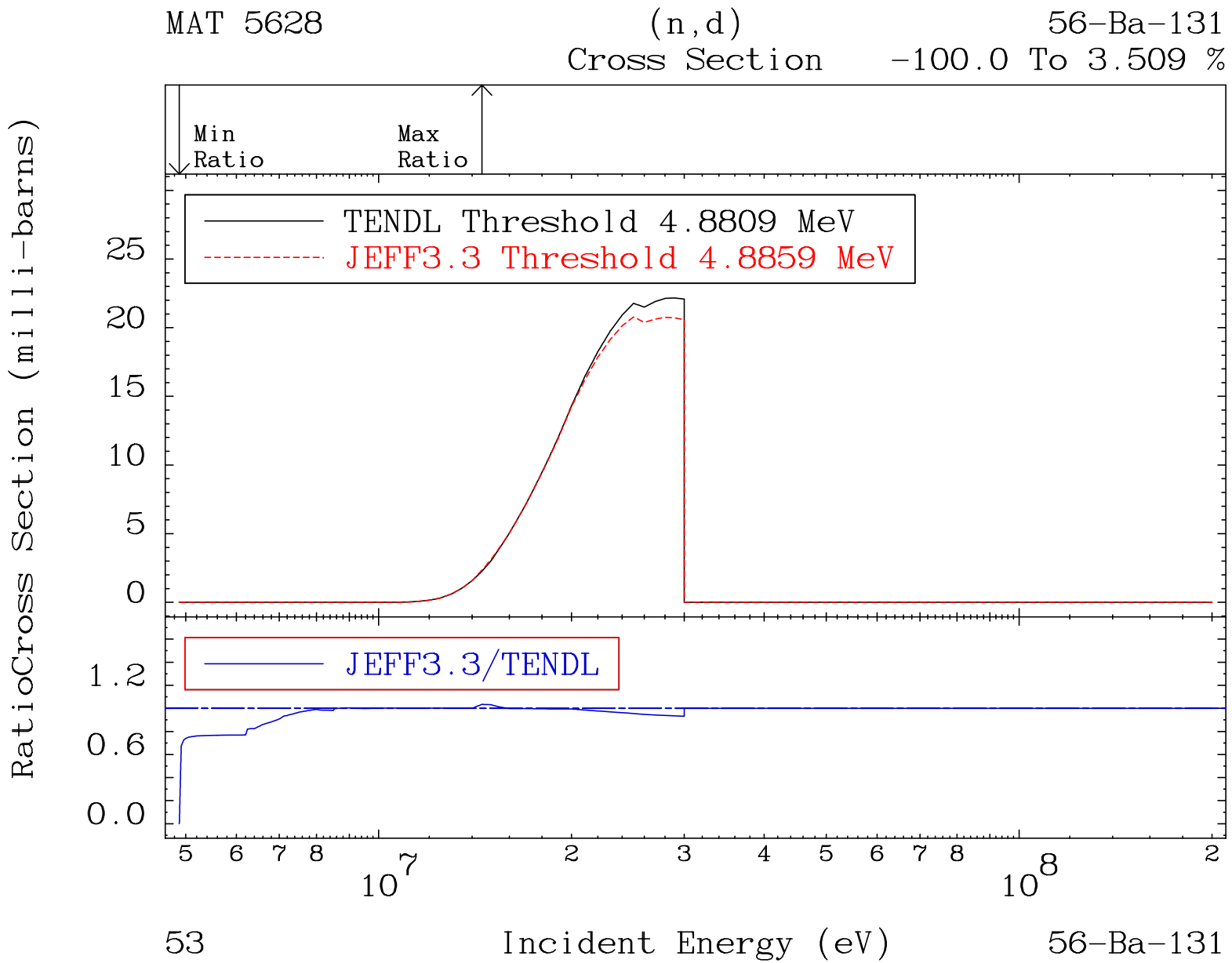

MAT 5628
MT= 79 (n,n') Level
56-Ba-131
Cross Section -100.0 To 95.45 %
Max
Ratio
TENDL Threshold 1.2526 MeV
JEFF3.3 Threshold 1.2526 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
48
Incident Energy (eV)
56-Ba-131

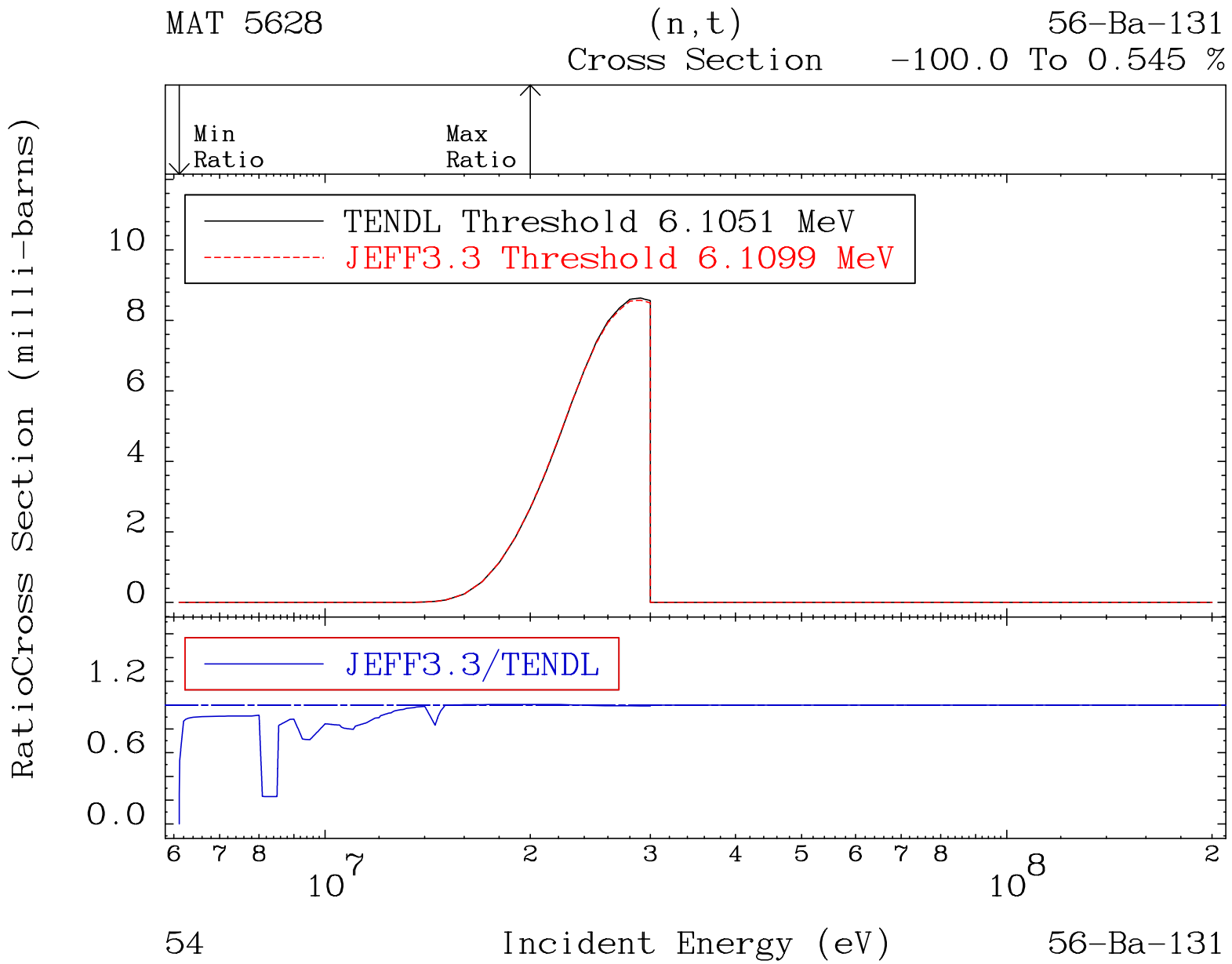

MAT 5628
MT= 80 (n,n') Level
56-Ba-131
Cross Section 0.000 To 95.19 %
Max Ratio
Min Ratio
TENDL Threshold 1.2776 MeV
JEFF3.3 Threshold 1.2776 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
20
10
0
2.4
1.8
1.2
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
49
Incident Energy (eV)
56-Ba-131

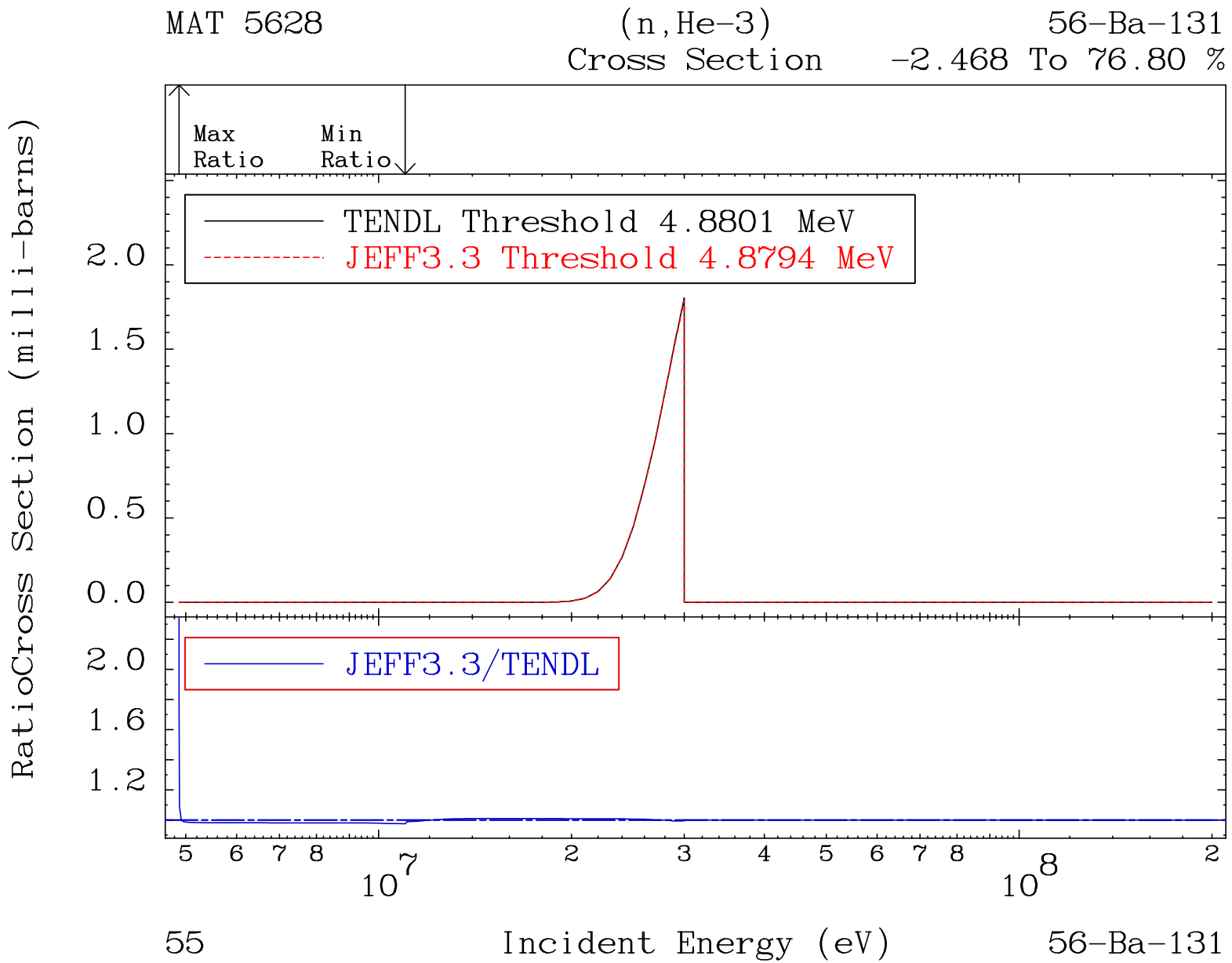

MAT 5628
(n,n') Continuum
Cross Section
56-Ba-131
-5.266 To 25.21 %
Max Ratio
Min Ratio
TENDL Threshold 1.2776 MeV
JEFF3.3 Threshold 1.2776 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.4
1.2
1.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
50
56-Ba-131

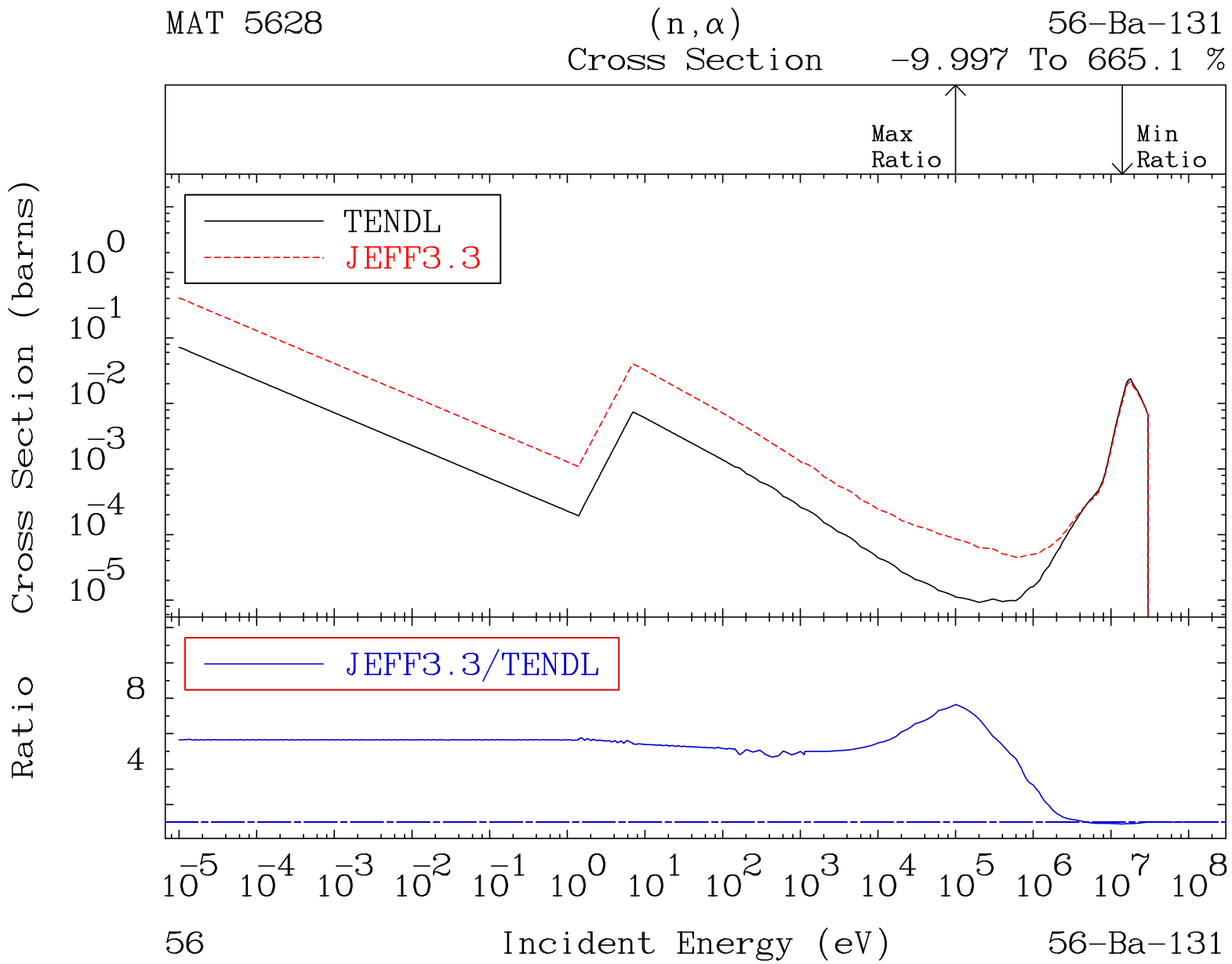

MAT 5628
(n,γ)
Cross Section
56-Ba-131
-99.94 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
56-Ba-131

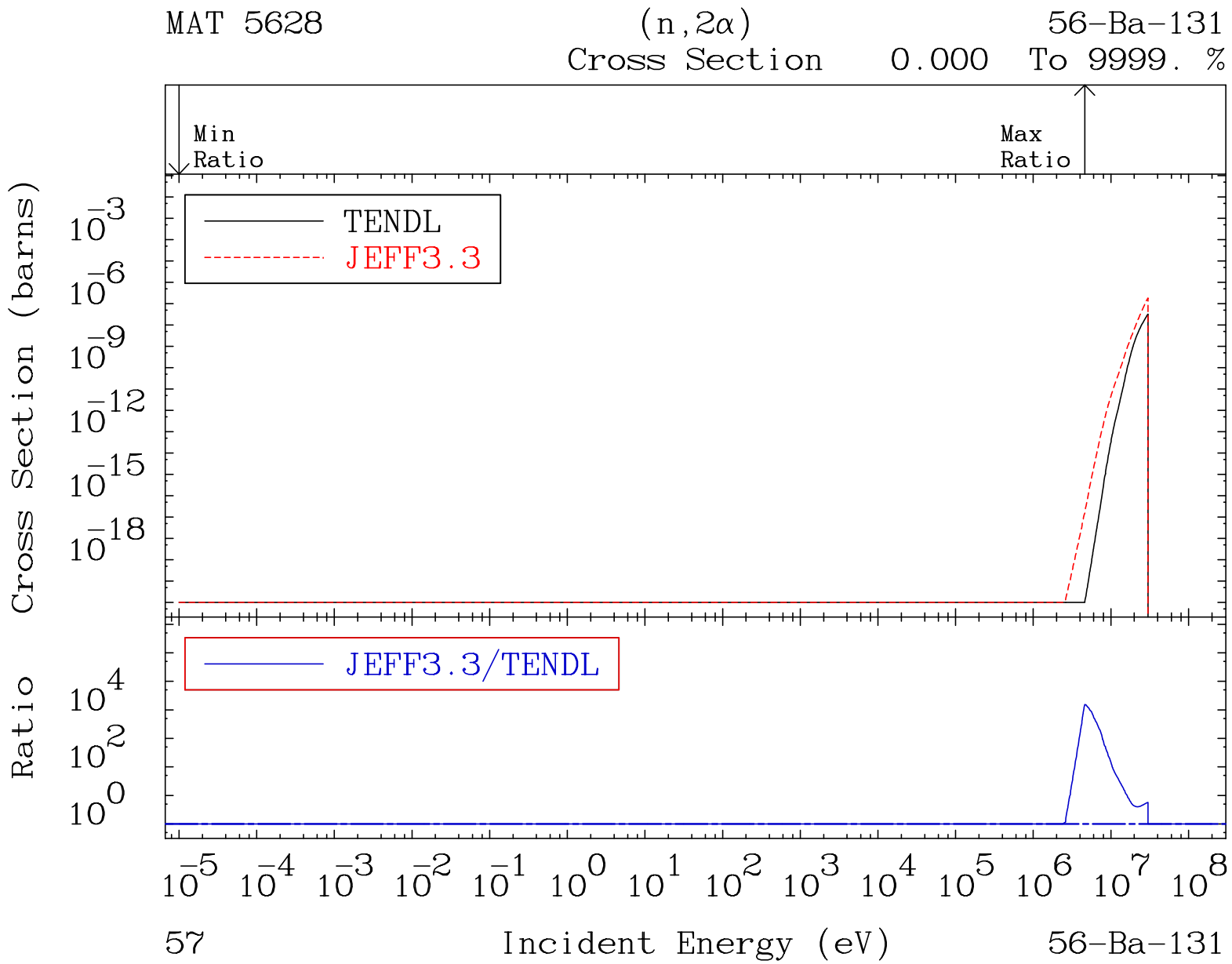

MAT 5628
(n,p)
56-Ba-131
Cross Section
-16.40 To 40.81 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
56-Ba-131

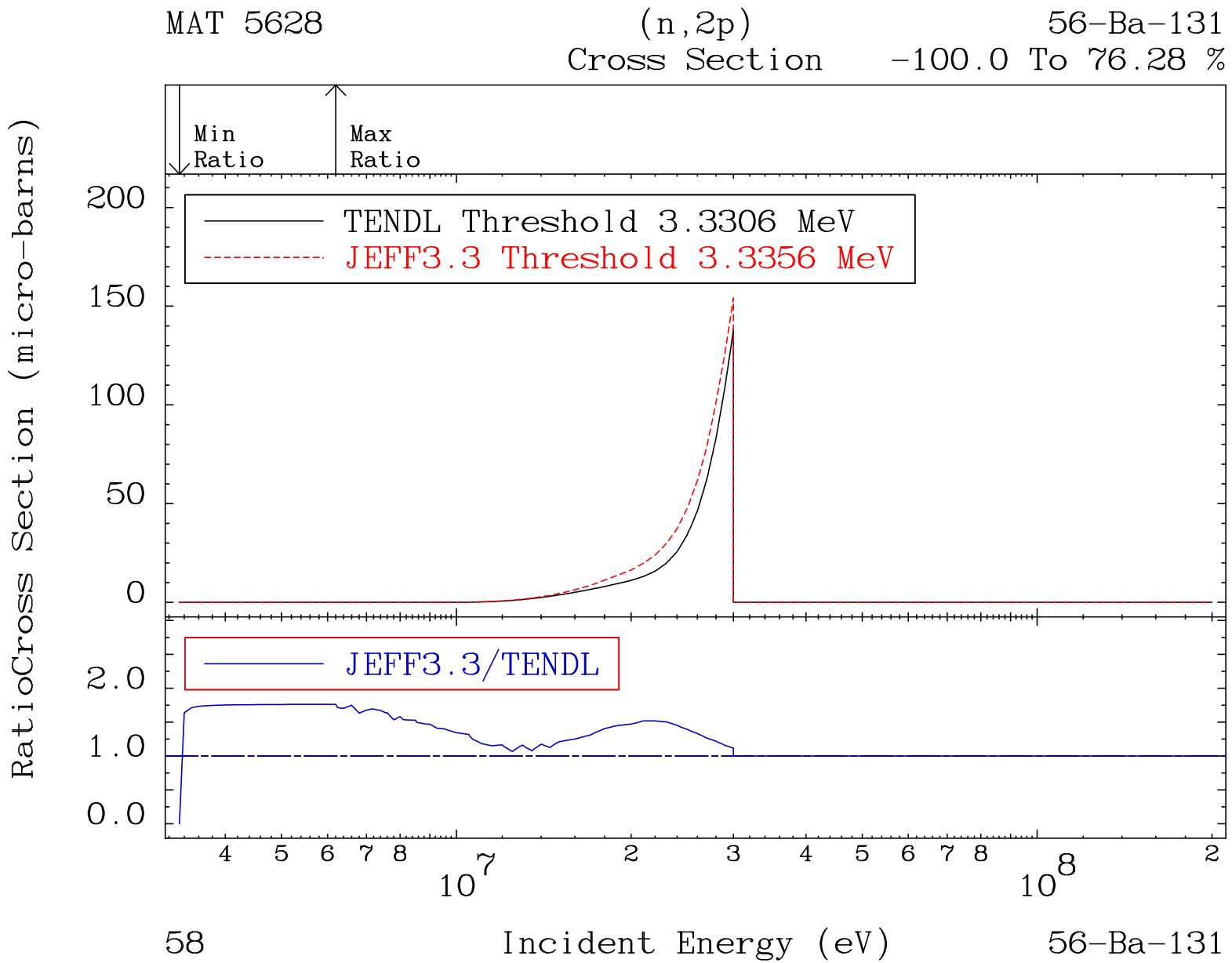

MAT 5628
(n,d)
56-Ba-131
Cross Section
-100.0 To 3.509 %
Min Ratio
Max Ratio
TENDL Threshold 4.8809 MeV
JEFF3.3 Threshold 4.8859 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.2
0.6
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
56-Ba-131

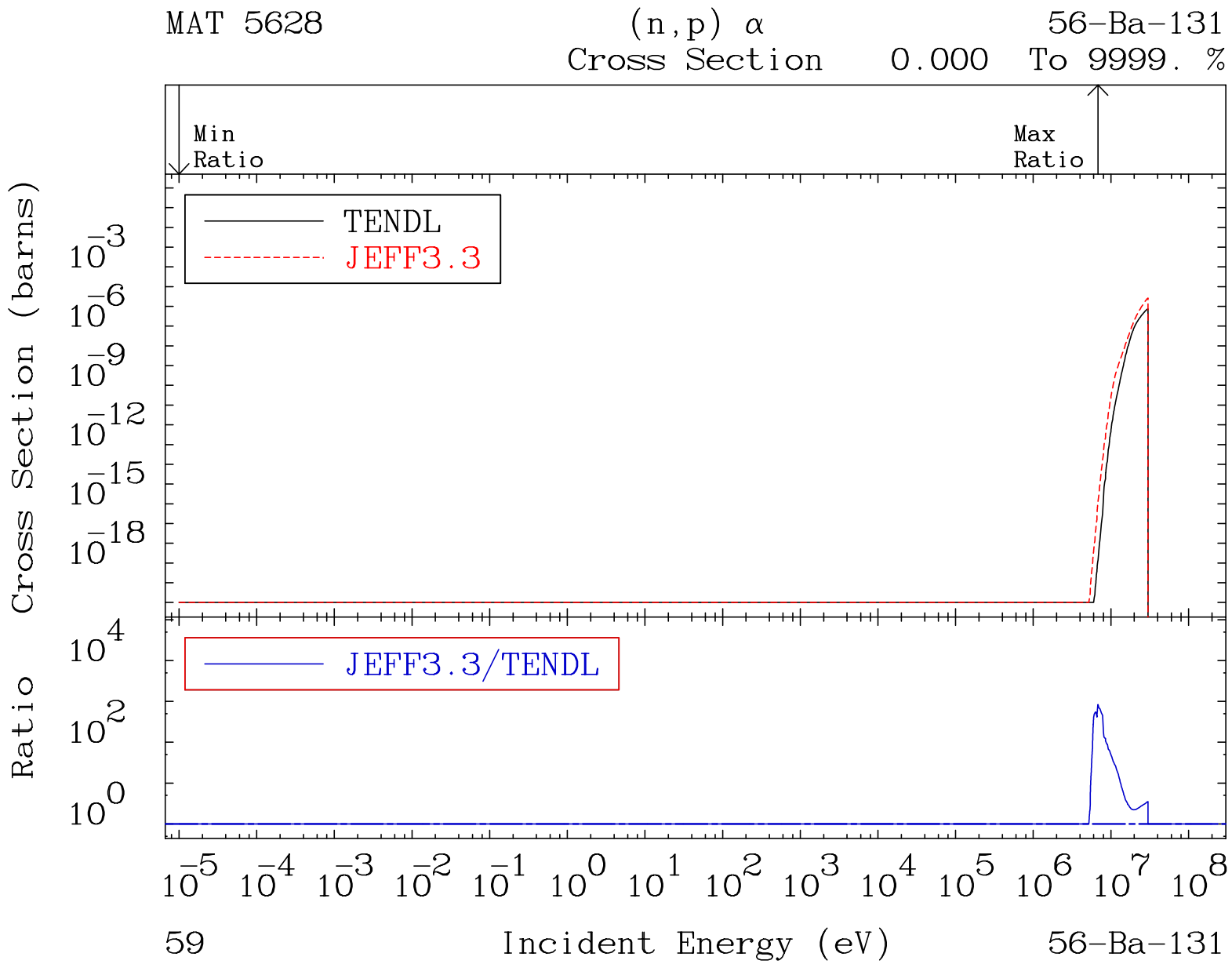

MAT 5628
(n,t)
Cross Section
56-Ba-131
-100.0 To 0.545 %
Min Ratio
Max Ratio
TENDL Threshold 6.1051 MeV
JEFF3.3 Threshold 6.1099 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.6
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
54
Incident Energy (eV)
56-Ba-131

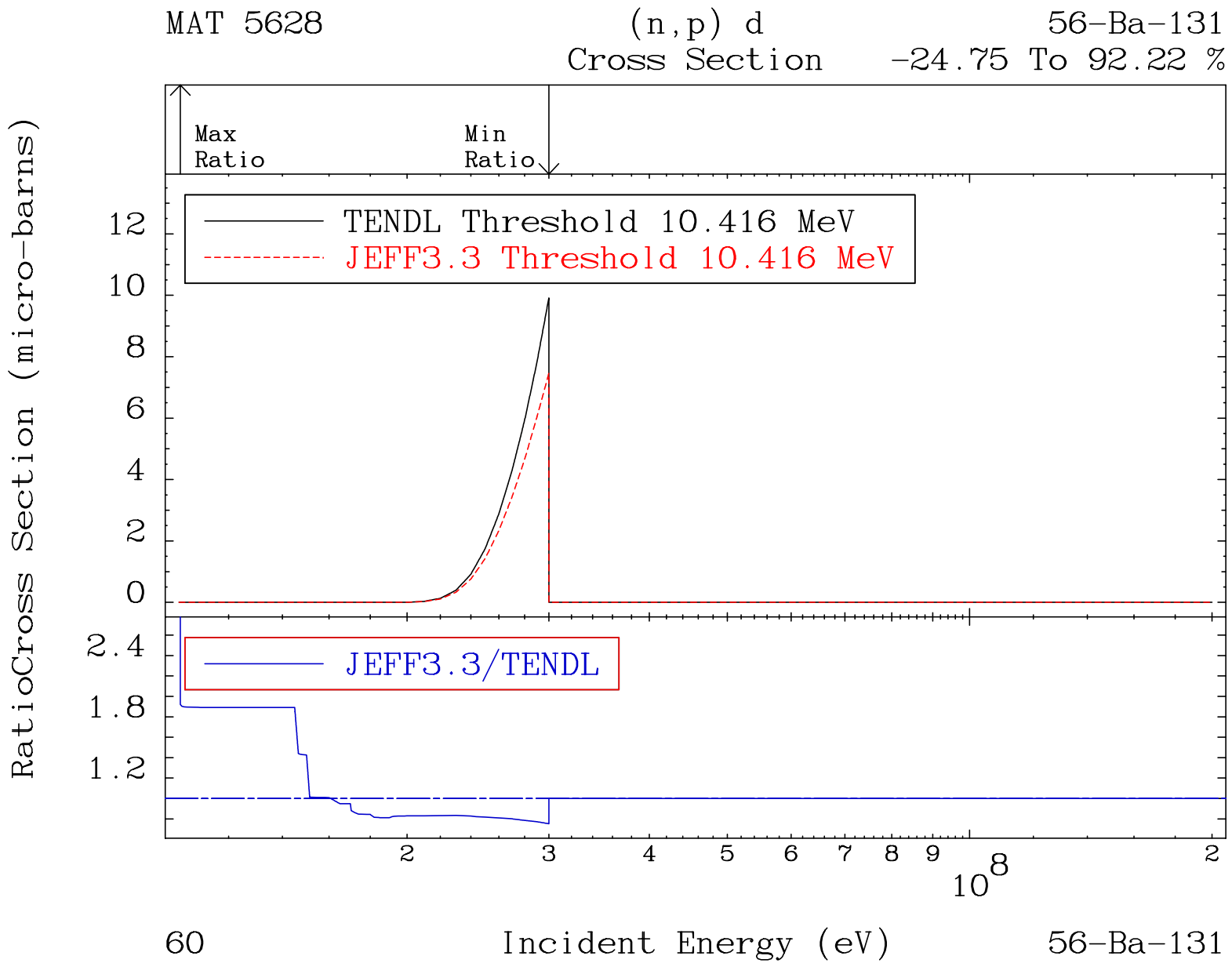

MAT 5628
(n,He-3)
Cross Section
56-Ba-131
-2.468 To 76.80 %
Max Ratio
Min Ratio
TENDL Threshold 4.8801 MeV
JEFF3.3 Threshold 4.8794 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
2.0
1.6
1.2
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
55
Incident Energy (eV)
56-Ba-131

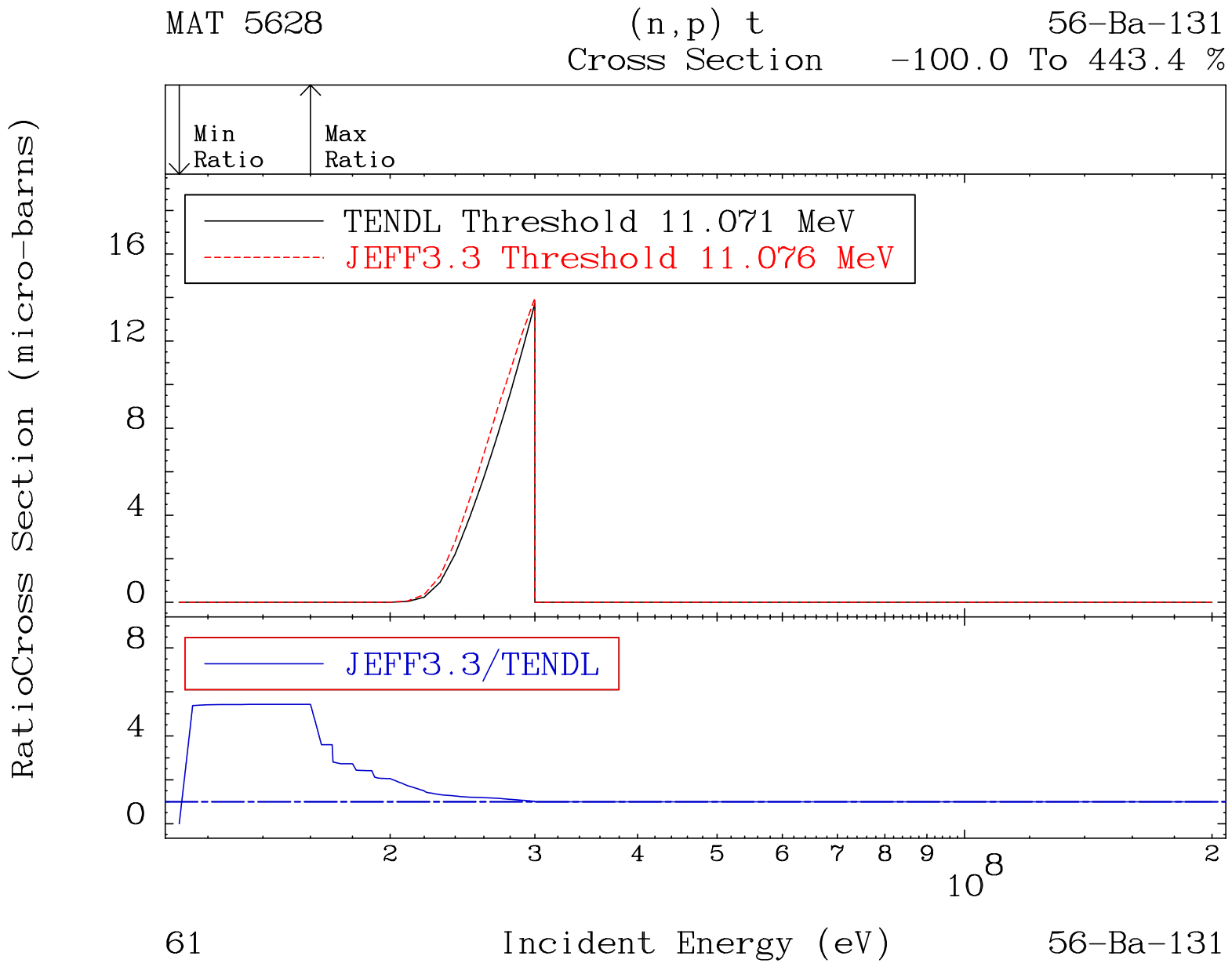

MAT 5628
(n,α)
Cross Section
56-Ba-131
-9.997 To 665.1 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
56-Ba-131

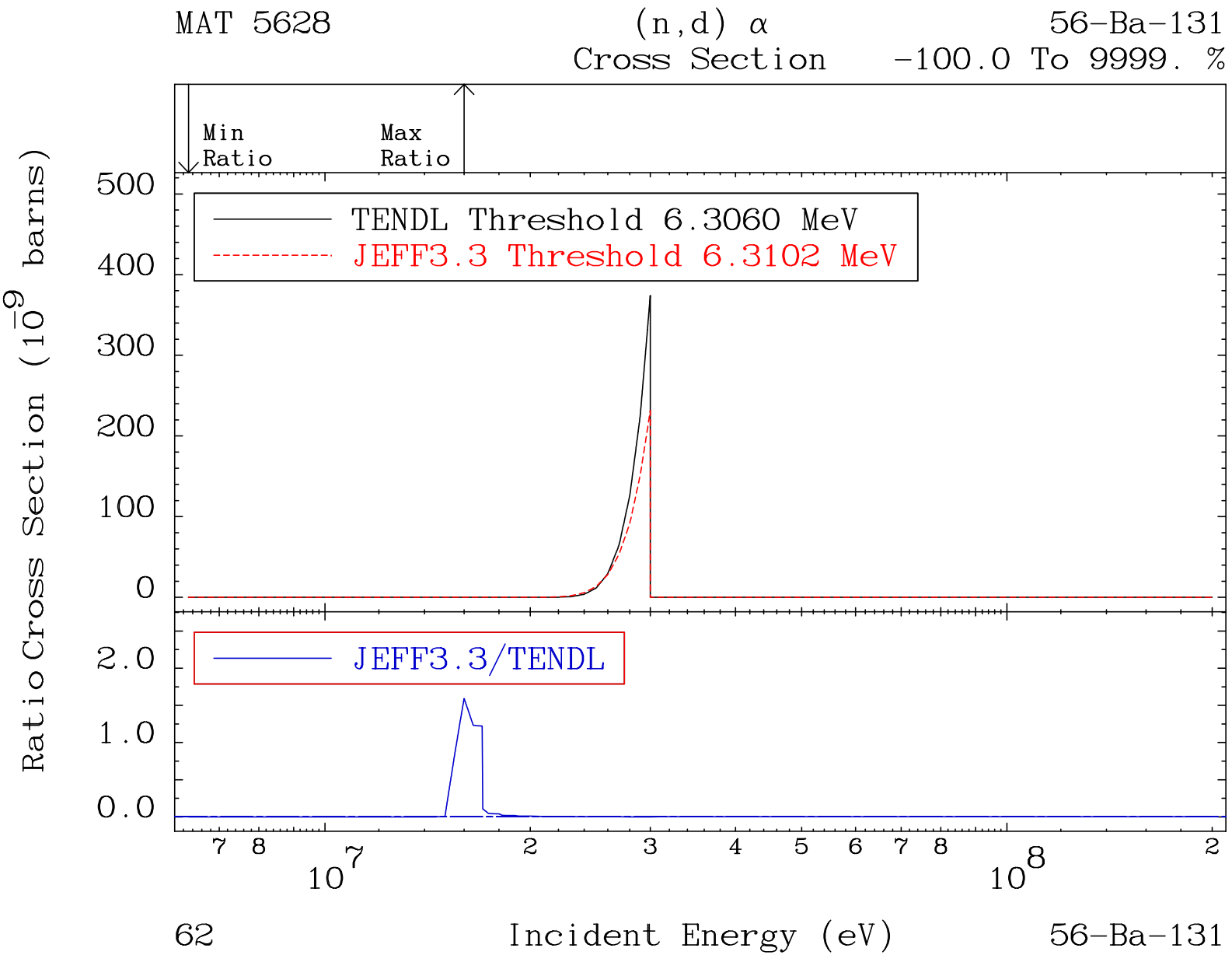

MAT 5628
(n,2α)
56-Ba-131
Cross Section 0.000 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
56-Ba-131

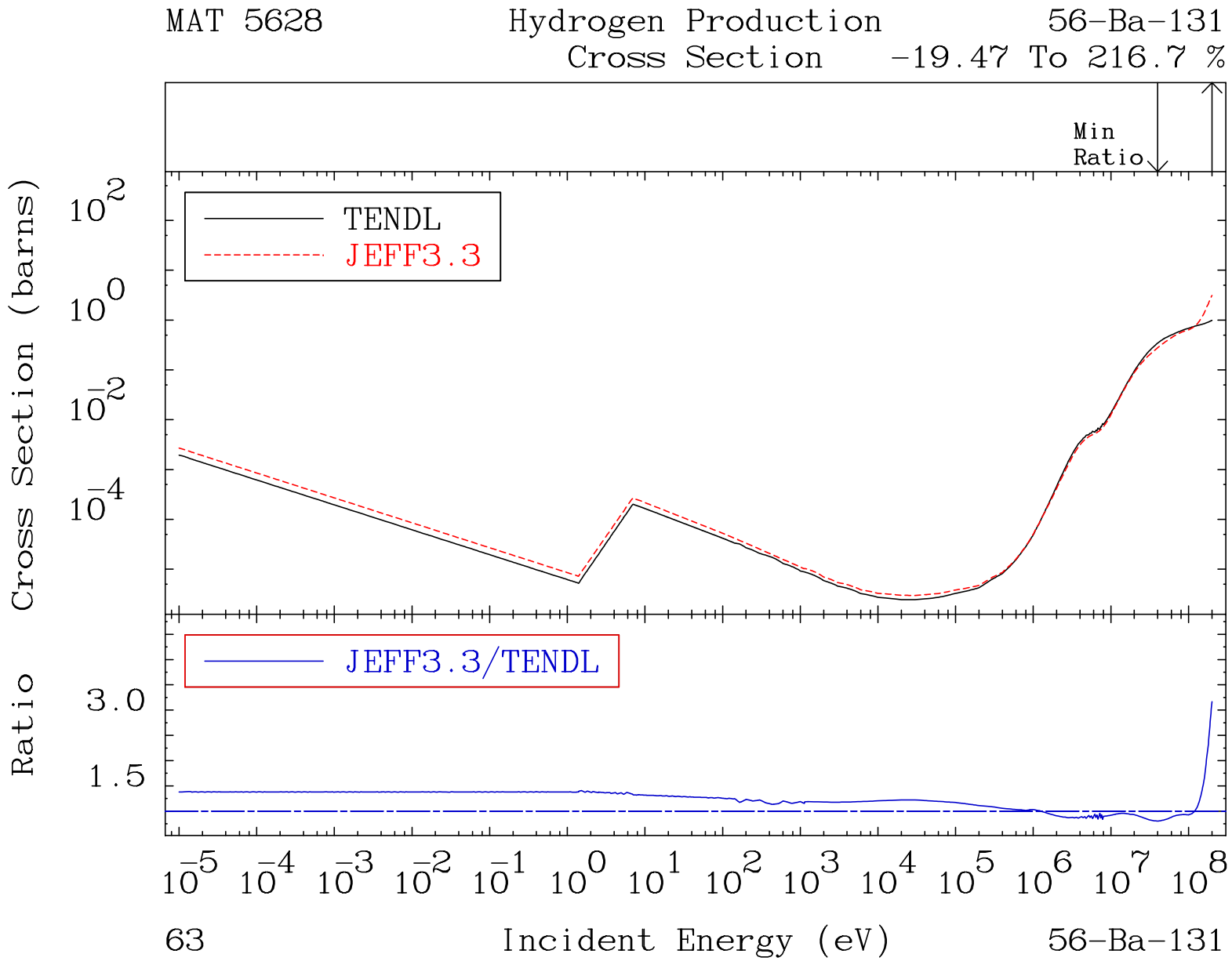

MAT 5628
(n,2p)
56-Ba-131
Cross Section
-100.0 To 76.28 %
Min Ratio
Max Ratio
TENDL Threshold 3.3306 MeV
JEFF3.3 Threshold 3.3356 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
58
Incident Energy (eV)
56-Ba-131

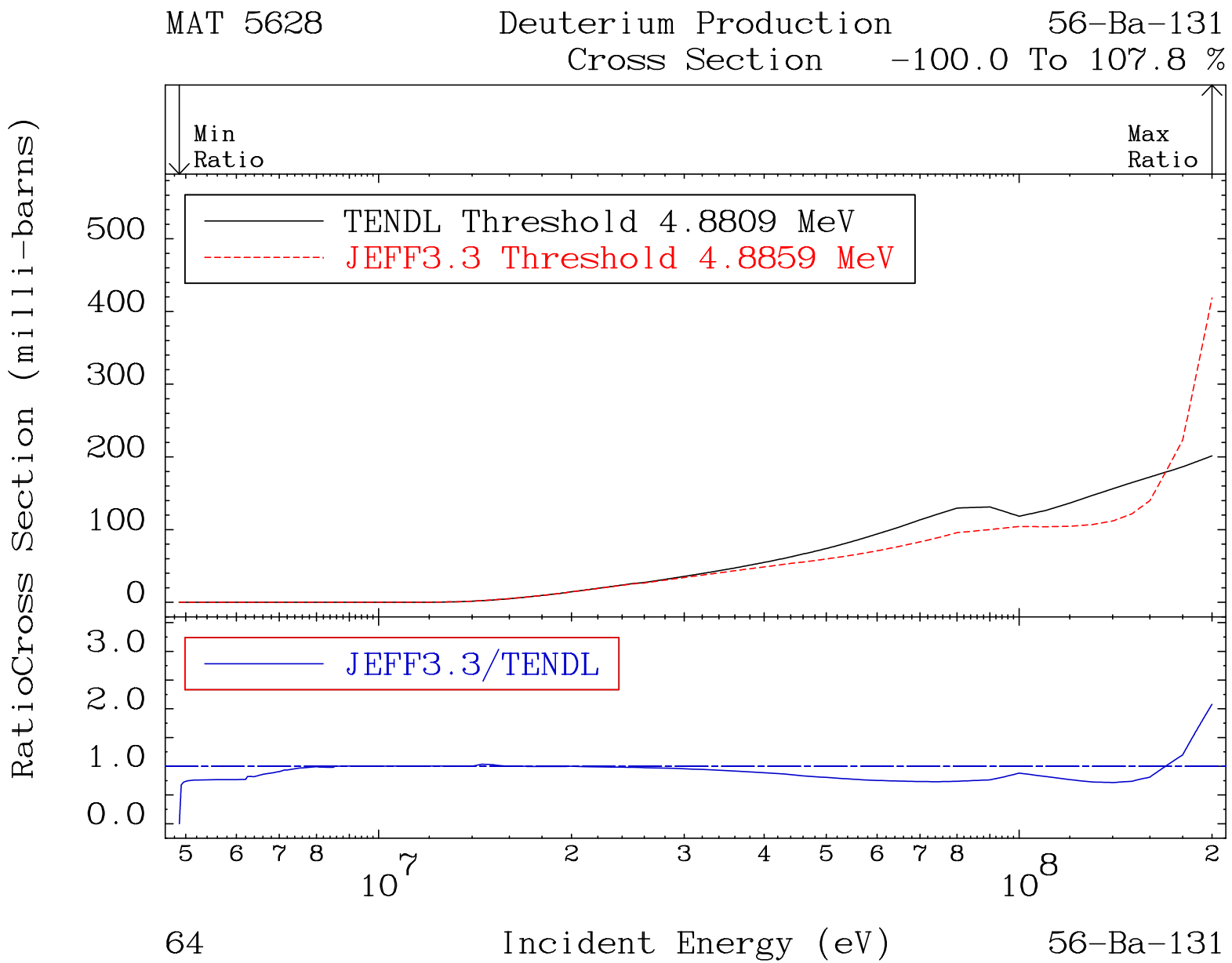

MAT 5628
(n,p) α
56-Ba-131
Cross Section 0.000 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
56-Ba-131

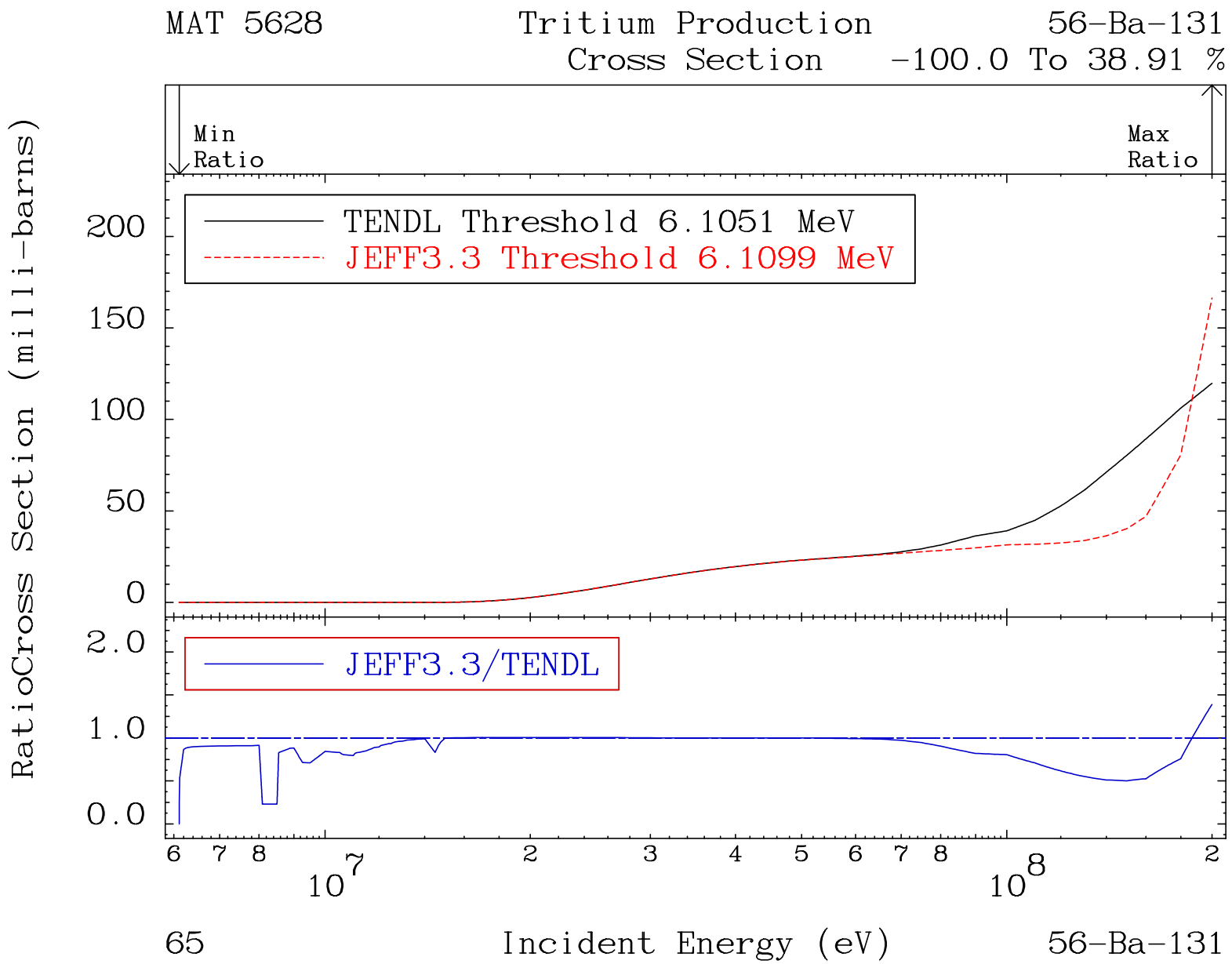

MAT 5628
(n,p) d
Cross Section
56-Ba-131
-24.75 To 92.22 %
Max Ratio
Min Ratio
TENDL Threshold 10.416 MeV
JEFF3.3 Threshold 10.416 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
12
10
8
6
4
2
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
56-Ba-131

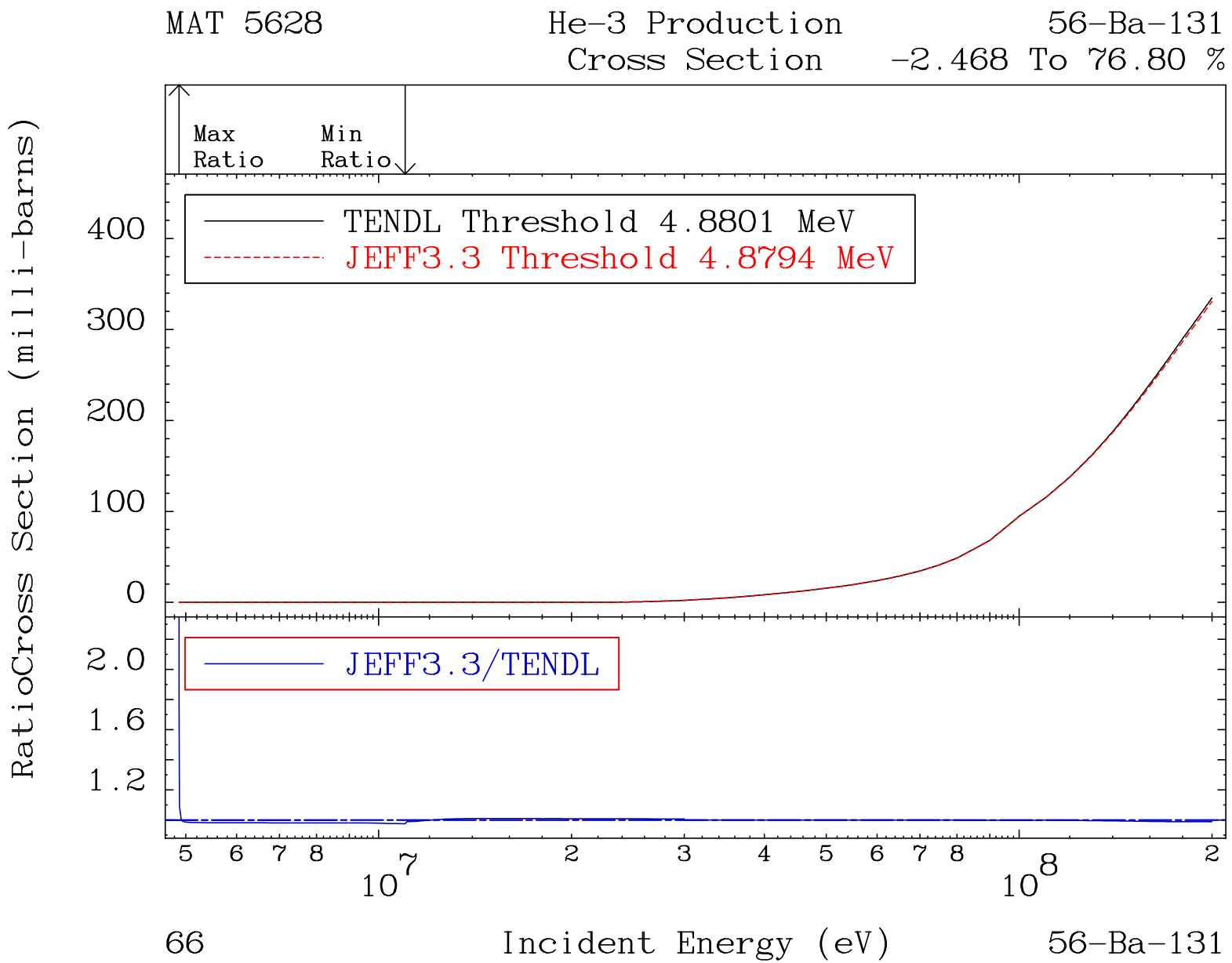

MAT 5628
(n,p) t
Cross Section
56-Ba-131
-100.0 To 443.4 %
Min Ratio
Max Ratio
TENDL Threshold 11.071 MeV
JEFF3.3 Threshold 11.076 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
16
12
8
4
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
56-Ba-131

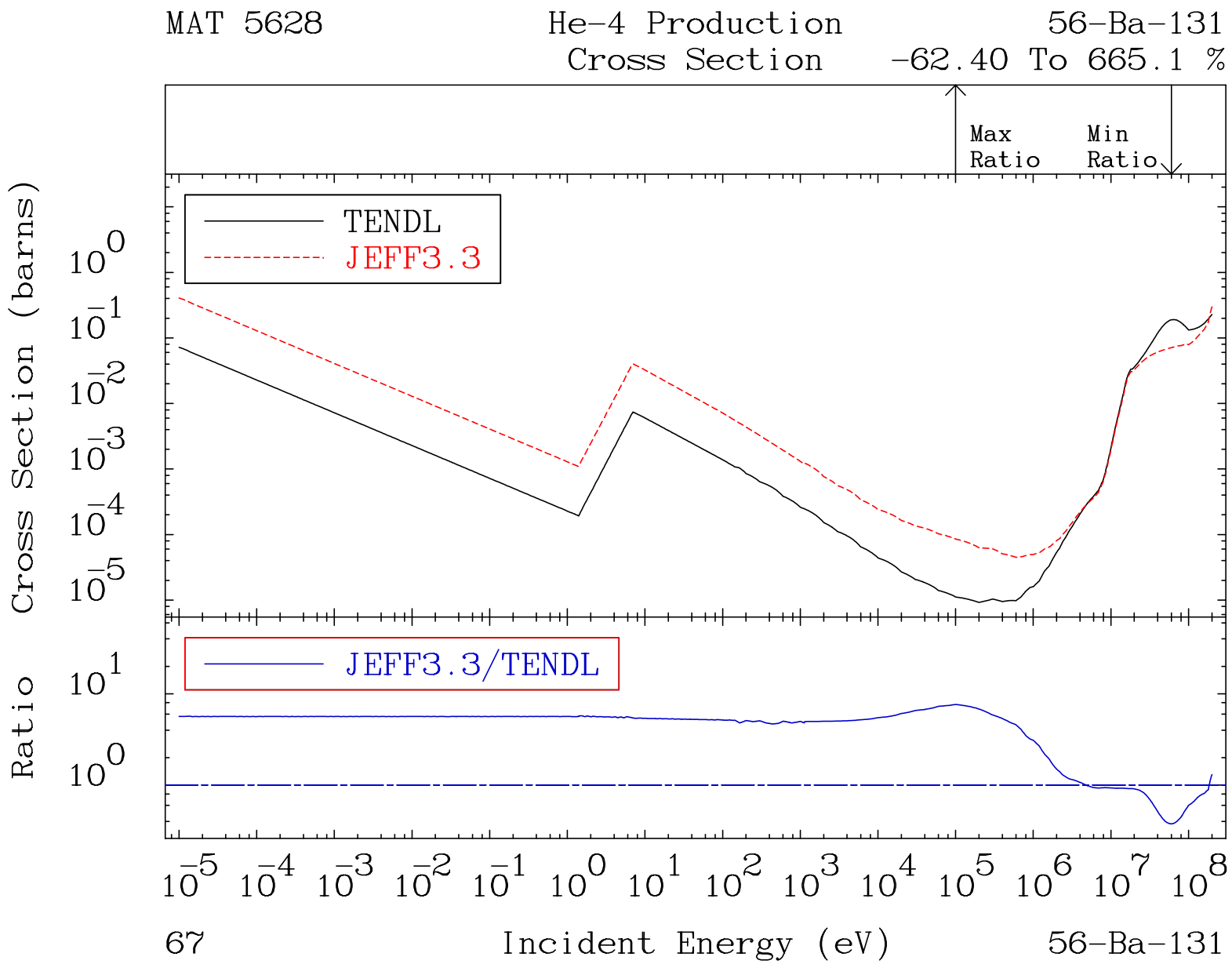

MAT 5628
(n,d) α
Cross Section
56-Ba-131
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3060 MeV
JEFF3.3 Threshold 6.3102 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
500
400
300
200
100
0
2.0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
62
Incident Energy (eV)
56-Ba-131

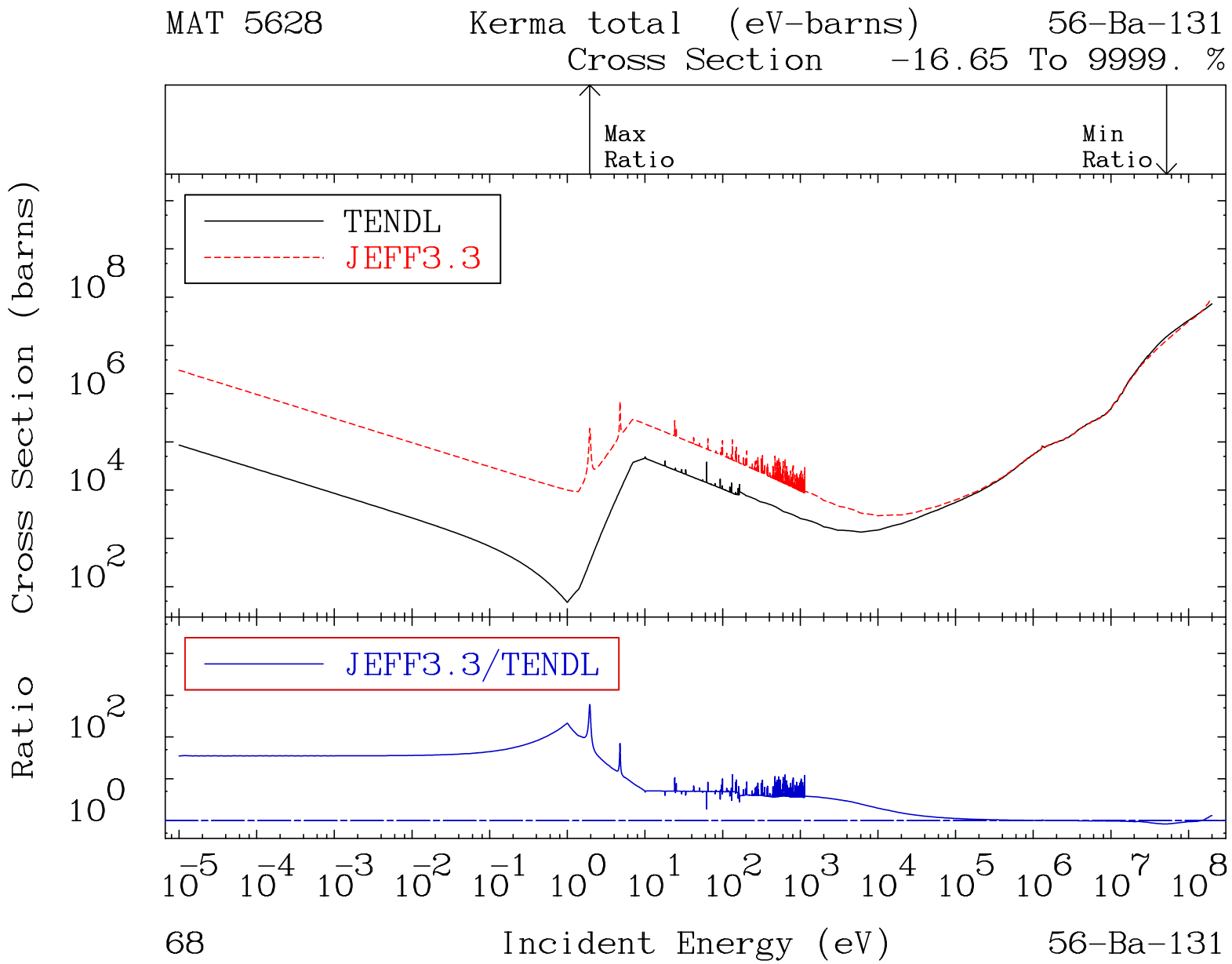

MAT 5628
Hydrogen Production
56-Ba-131
Cross Section
-19.47 To 216.7 %
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
56-Ba-131

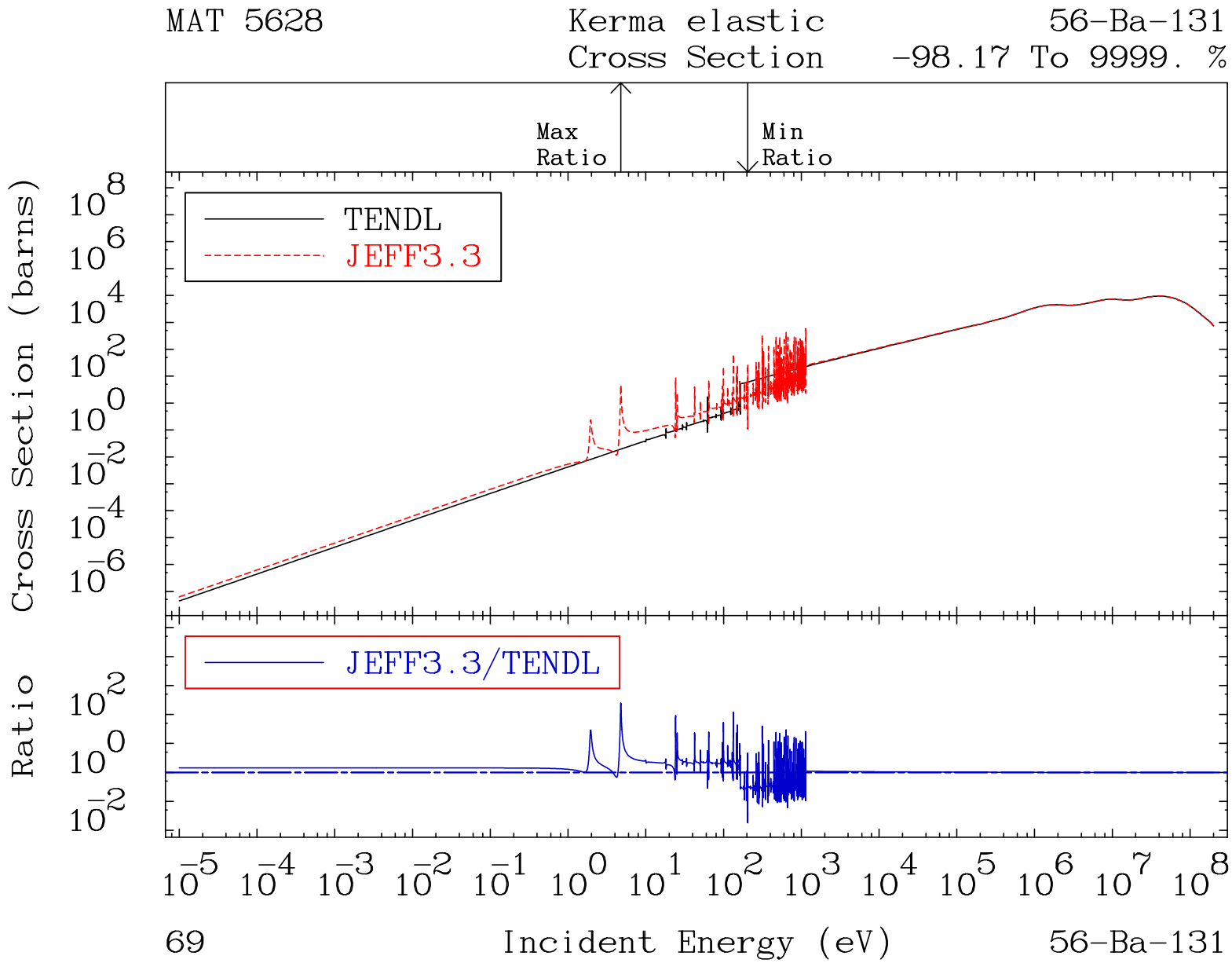

MAT 5628
Deuterium Production
56-Ba-131
Cross Section -100.0 To 107.8 %
Min Ratio
Max Ratio
TENDL Threshold 4.8809 MeV
JEFF3.3 Threshold 4.8859 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
3.0
2.0
1.0
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
64
Incident Energy (eV)
56-Ba-131

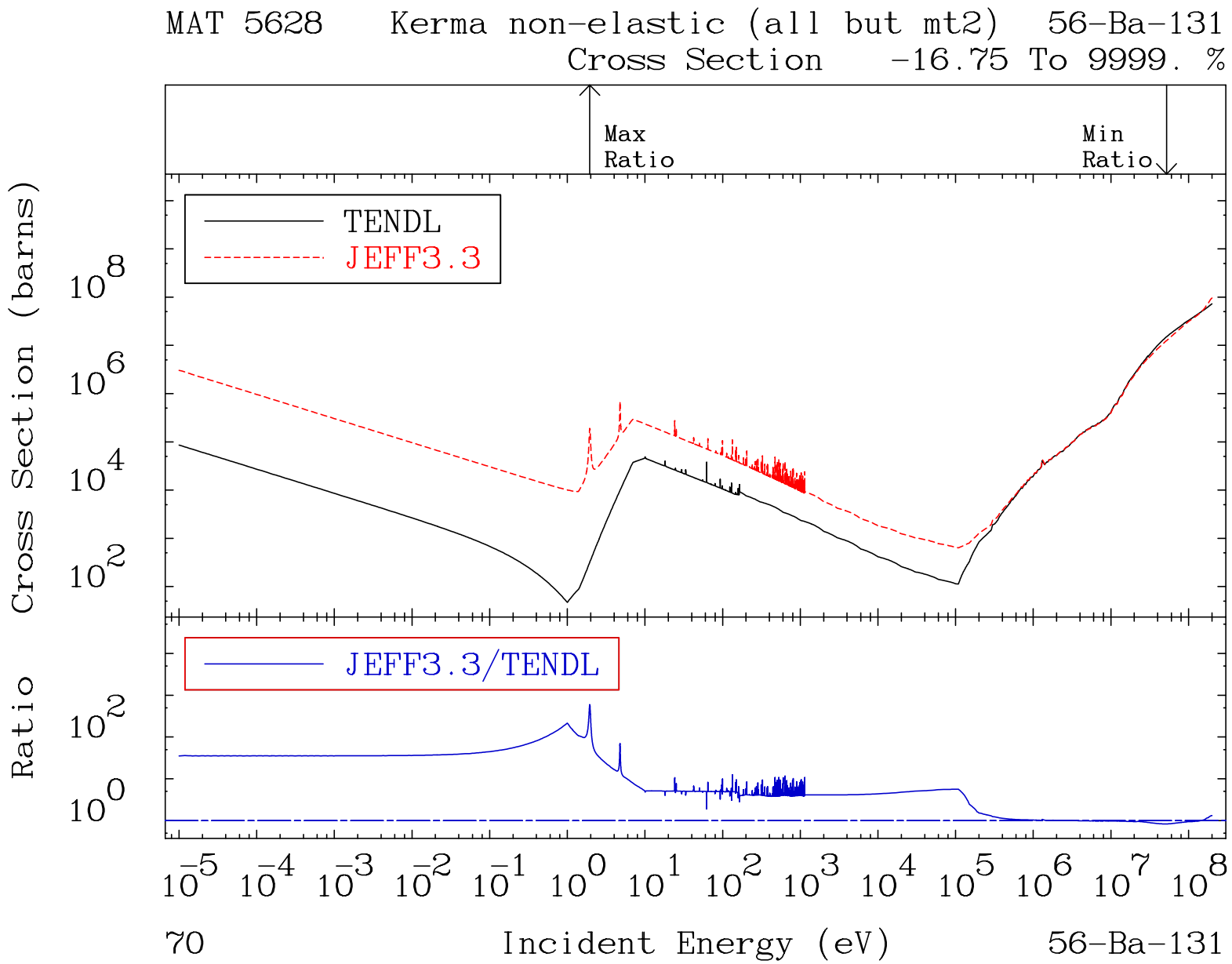

MAT 5628
Tritium Production
56-Ba-131
Cross Section
-100.0 To 38.91 %
Min Ratio
Max Ratio
TENDL Threshold 6.1051 MeV
JEFF3.3 Threshold 6.1099 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
56-Ba-131

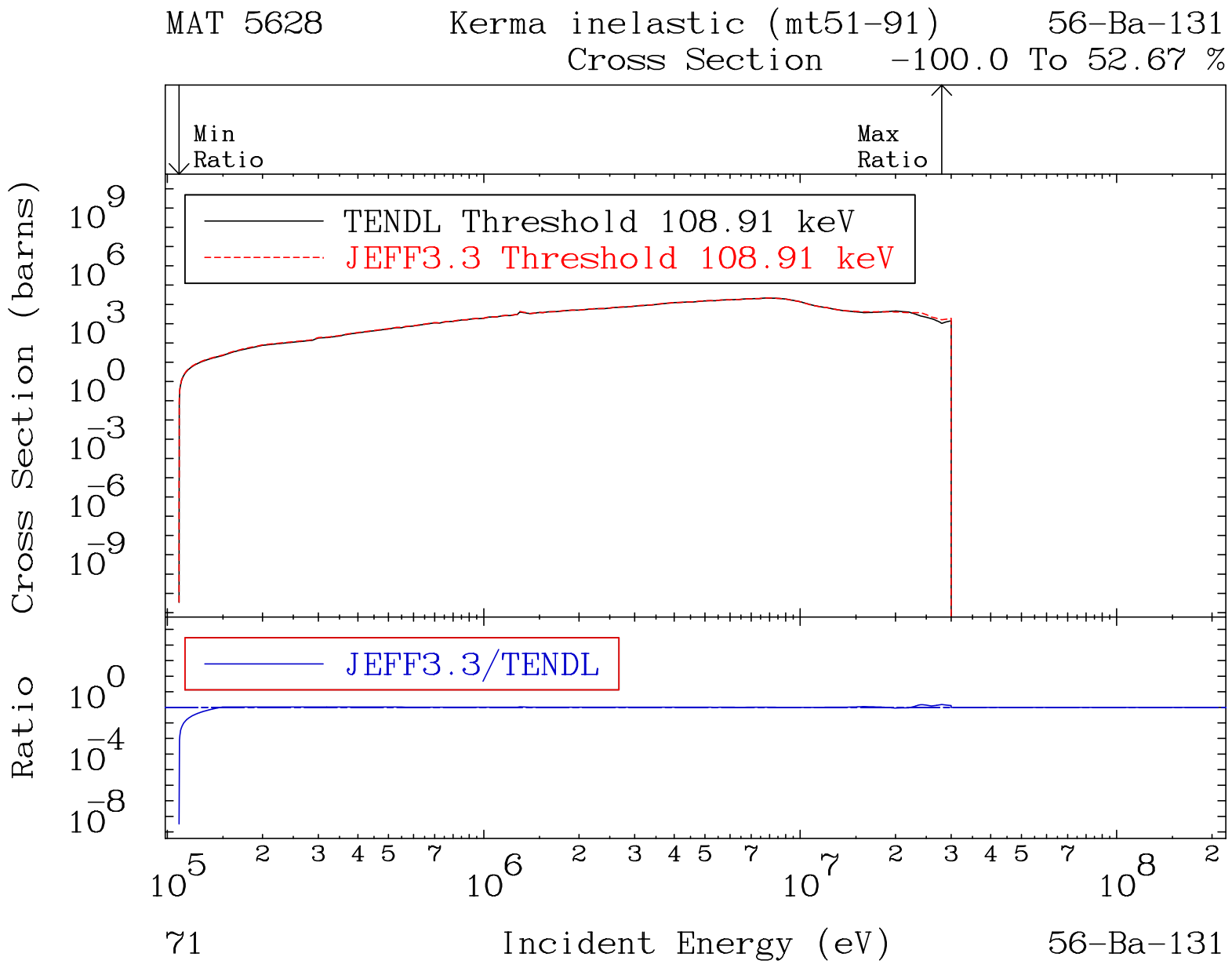

MAT 5628
He-3 Production
Cross Section
56-Ba-131
-2.468 To 76.80 %
Max Ratio
Min Ratio
TENDL Threshold 4.8801 MeV
JEFF3.3 Threshold 4.8794 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.6
1.2
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
66
Incident Energy (eV)
56-Ba-131

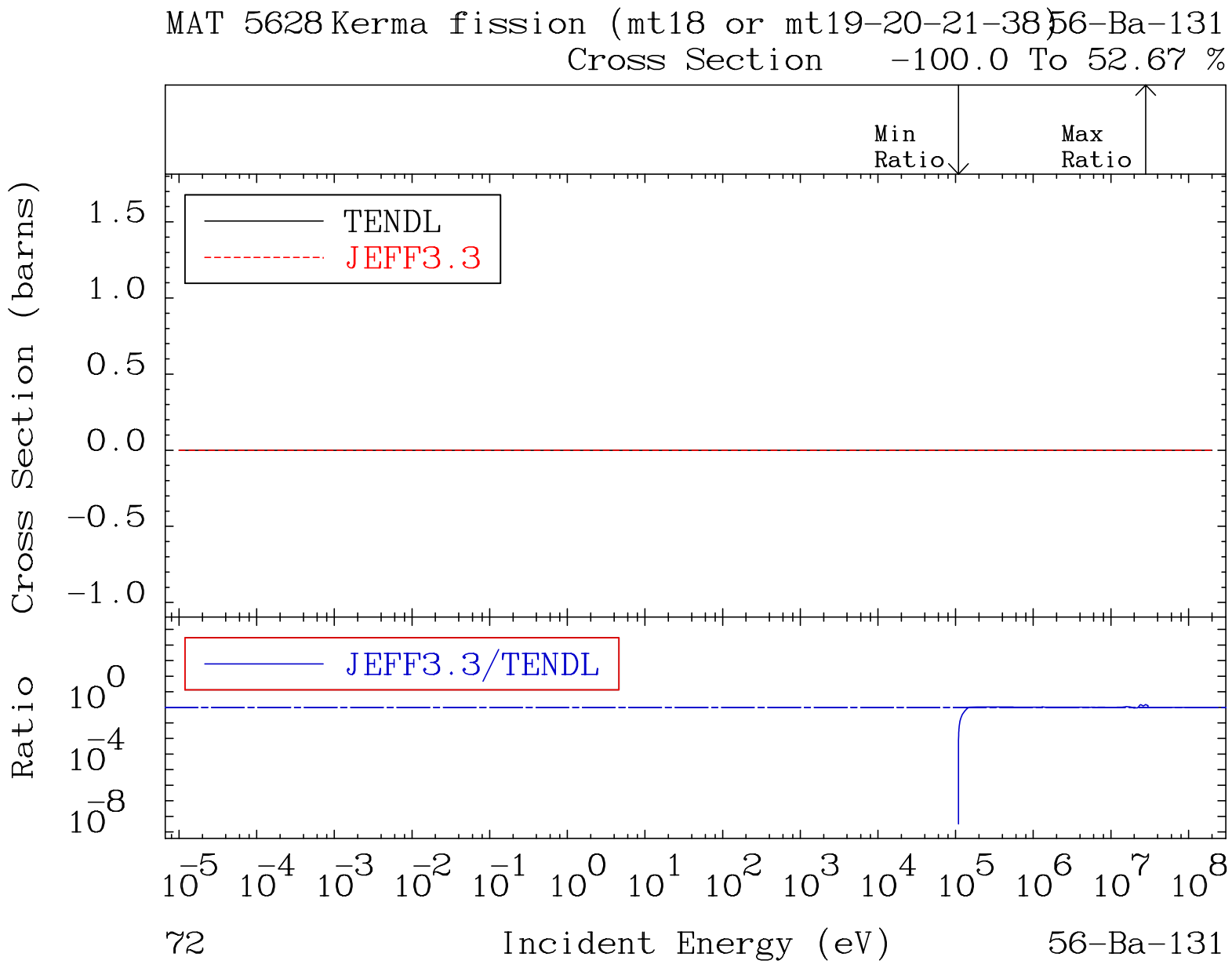

MAT 5628
He-4 Production
Cross Section
56-Ba-131
-62.40 To 665.1 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
56-Ba-131

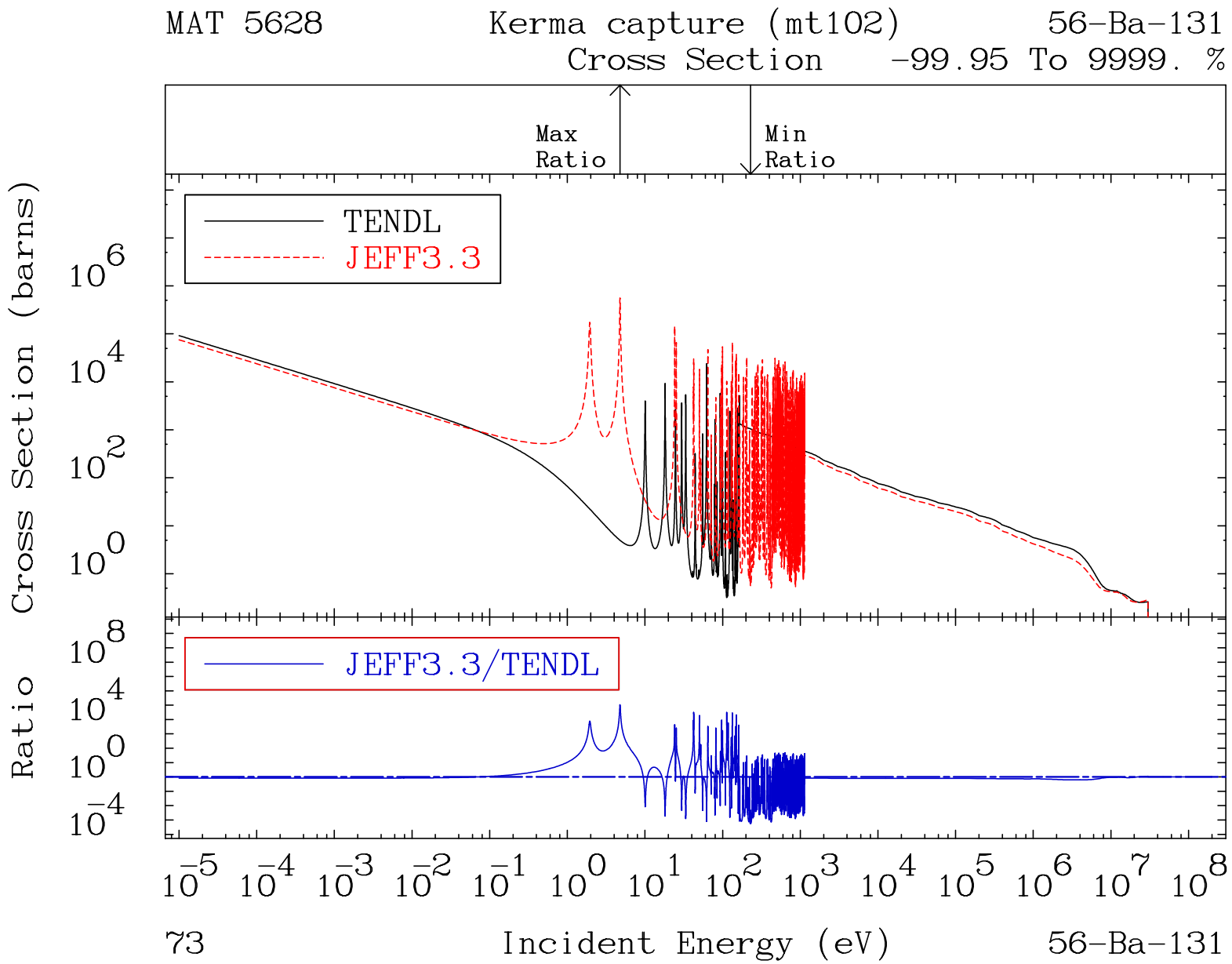

MAT 5628
Kerma total (eV-barns)
56-Ba-131
Cross Section -16.65 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
56-Ba-131

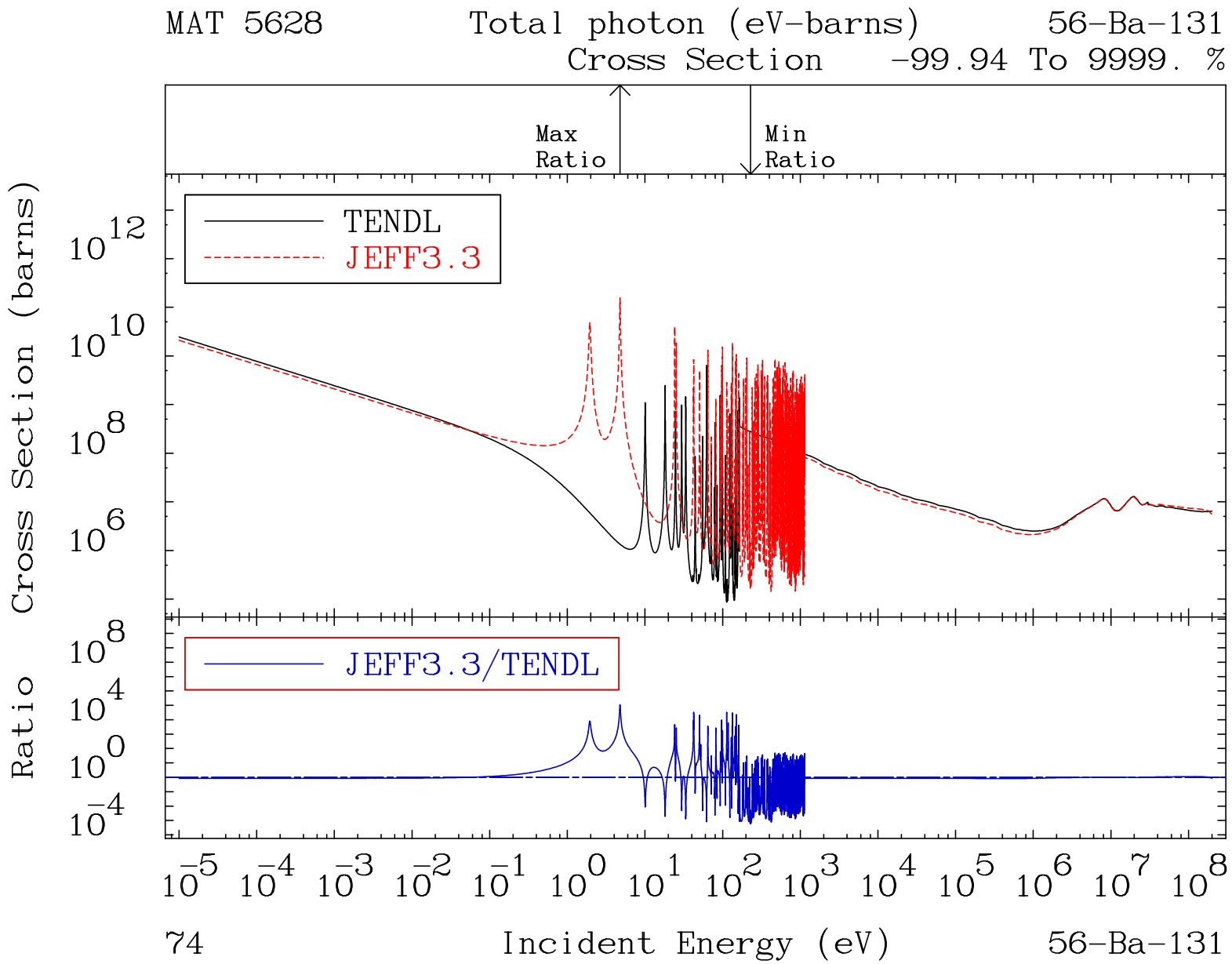

MAT 5628
Kerma elastic
Cross Section
56-Ba-131
-98.17 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
56-Ba-131

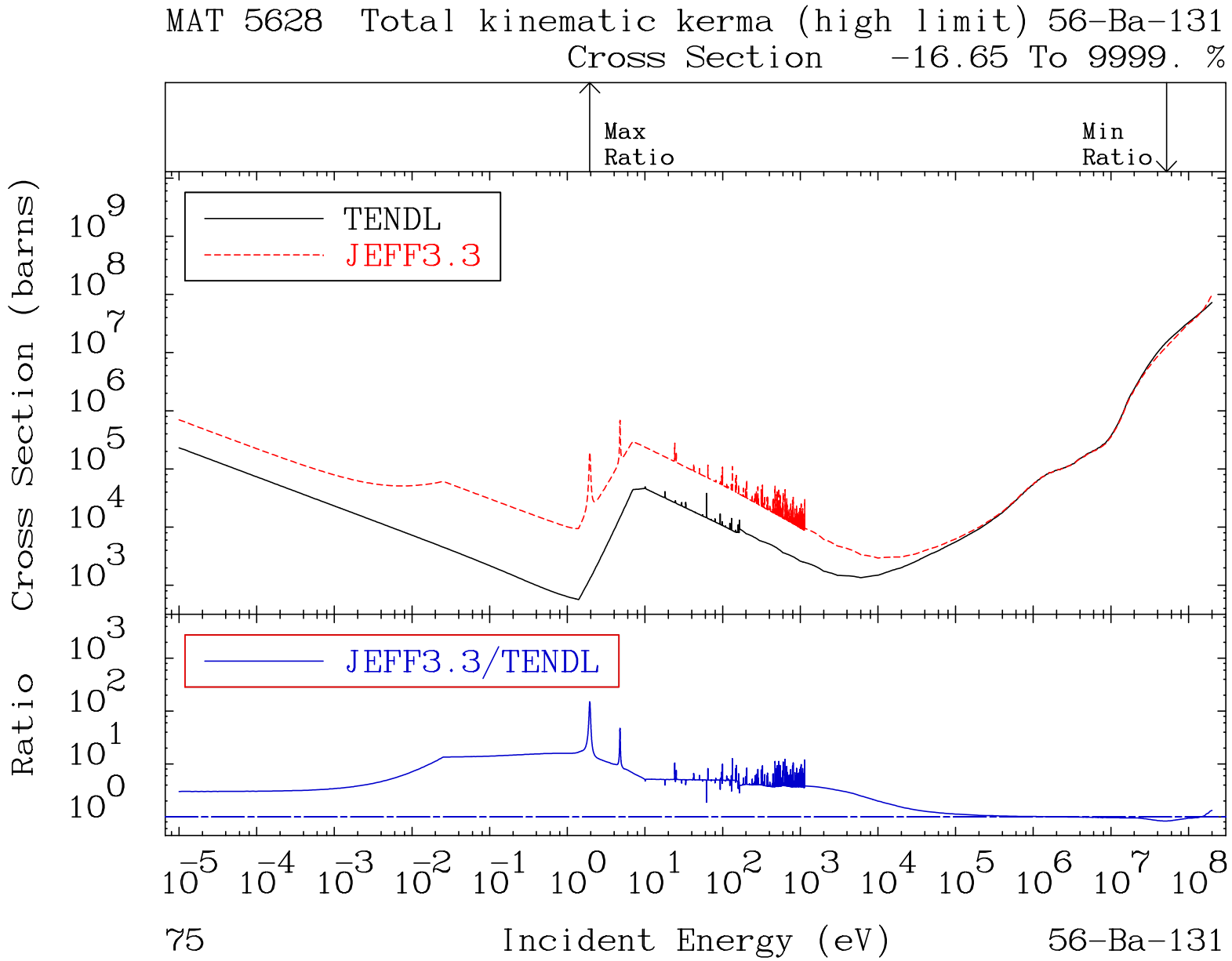

MAT 5628 Kerma non-elastic (all but mt2) 56-Ba-131
Cross Section -16.75 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
56-Ba-131

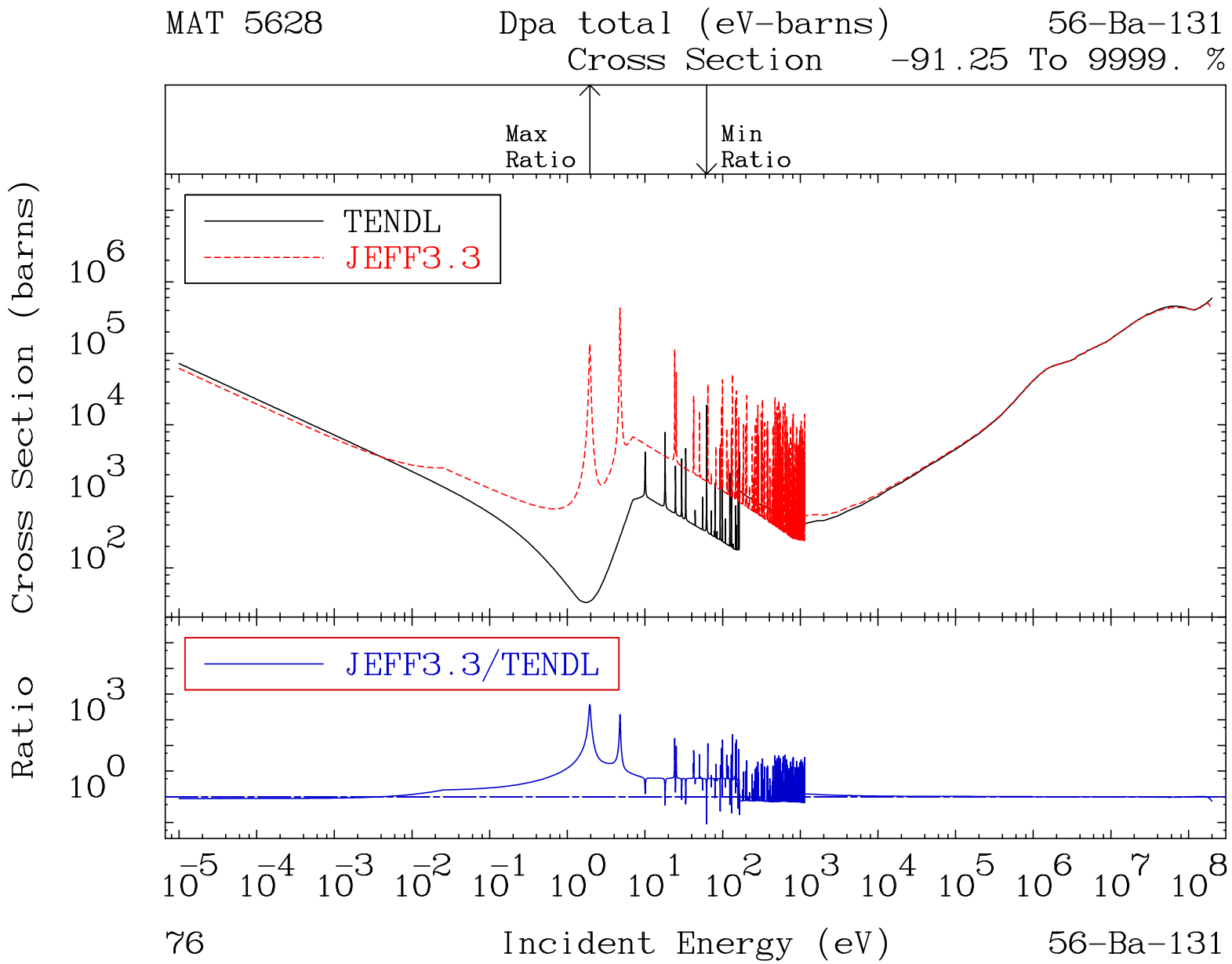

MAT 5628
Kerma inelastic (mt51-91)
56-Ba-131
Cross Section -100.0 To 52.67 %
Min Ratio
Max Ratio
TENDL Threshold 108.91 keV
JEFF3.3 Threshold 108.91 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
56-Ba-131

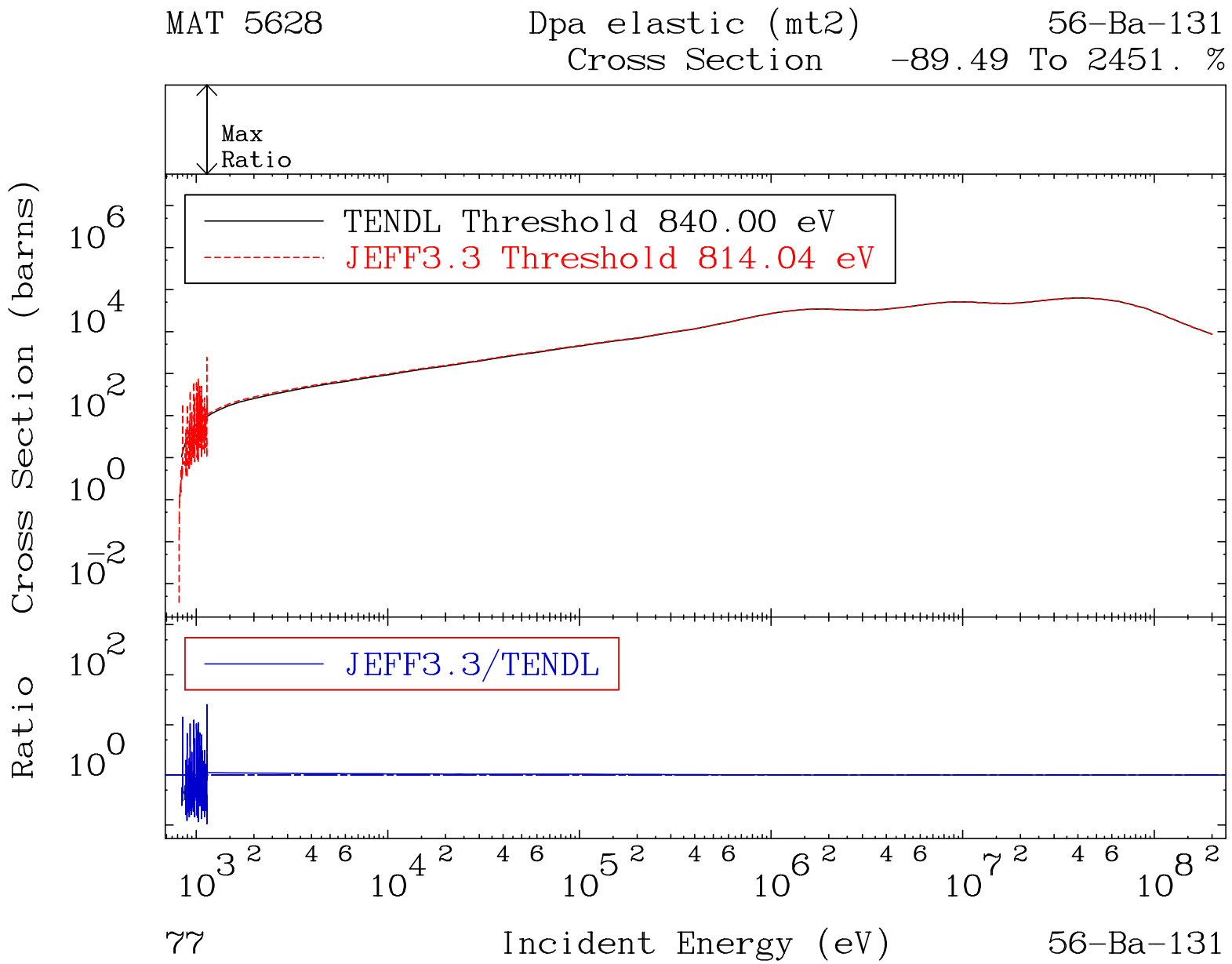

MAT 5628 Kerma fission (mt18 or mt19-20-21-38) 56-Ba-131
Cross Section -100.0 To 52.67 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-4}
10^{-8}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
72
Incident Energy (eV)
56-Ba-131

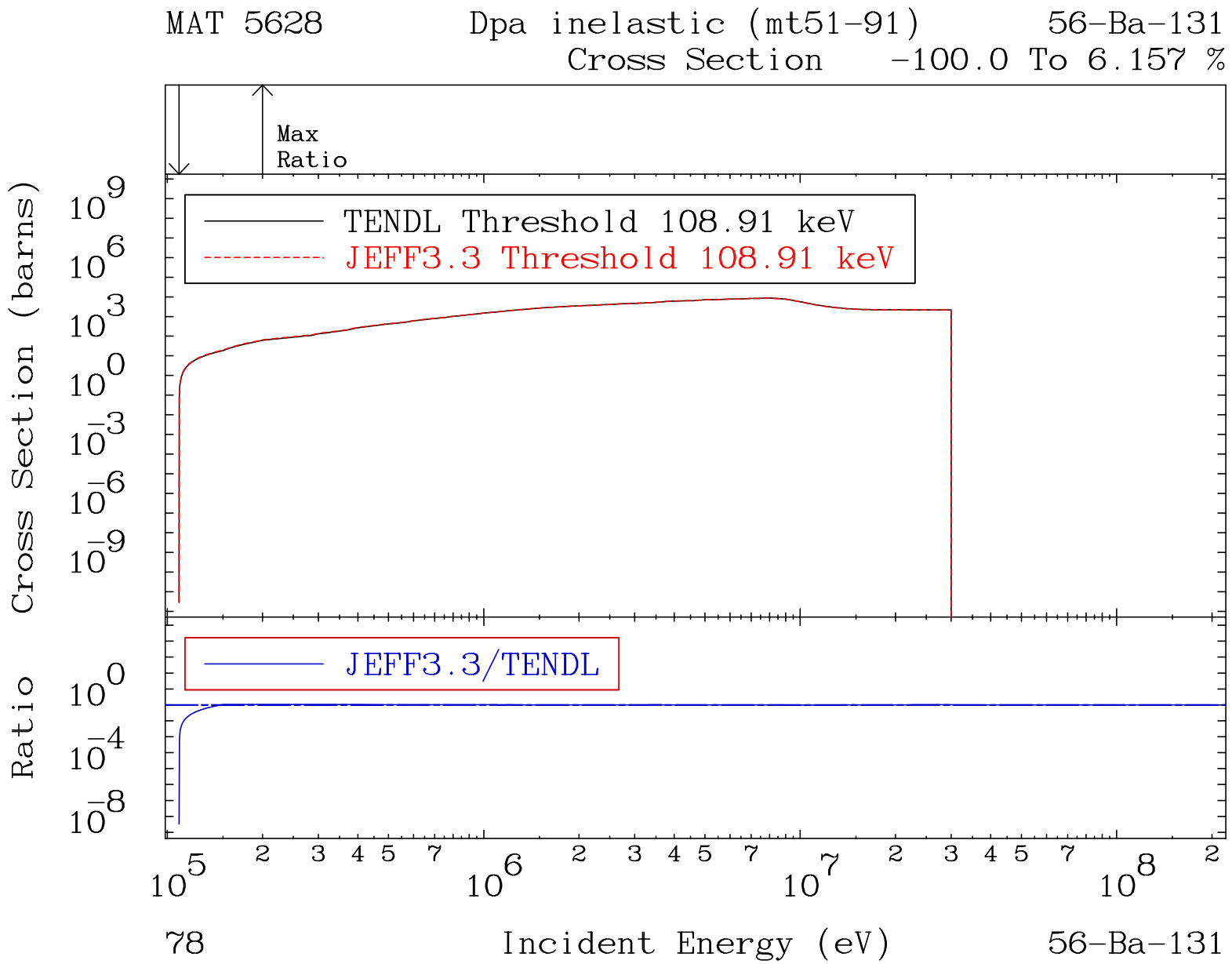

MAT 5628
Kerma capture (mt102)
56-Ba-131
Cross Section -99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
56-Ba-131

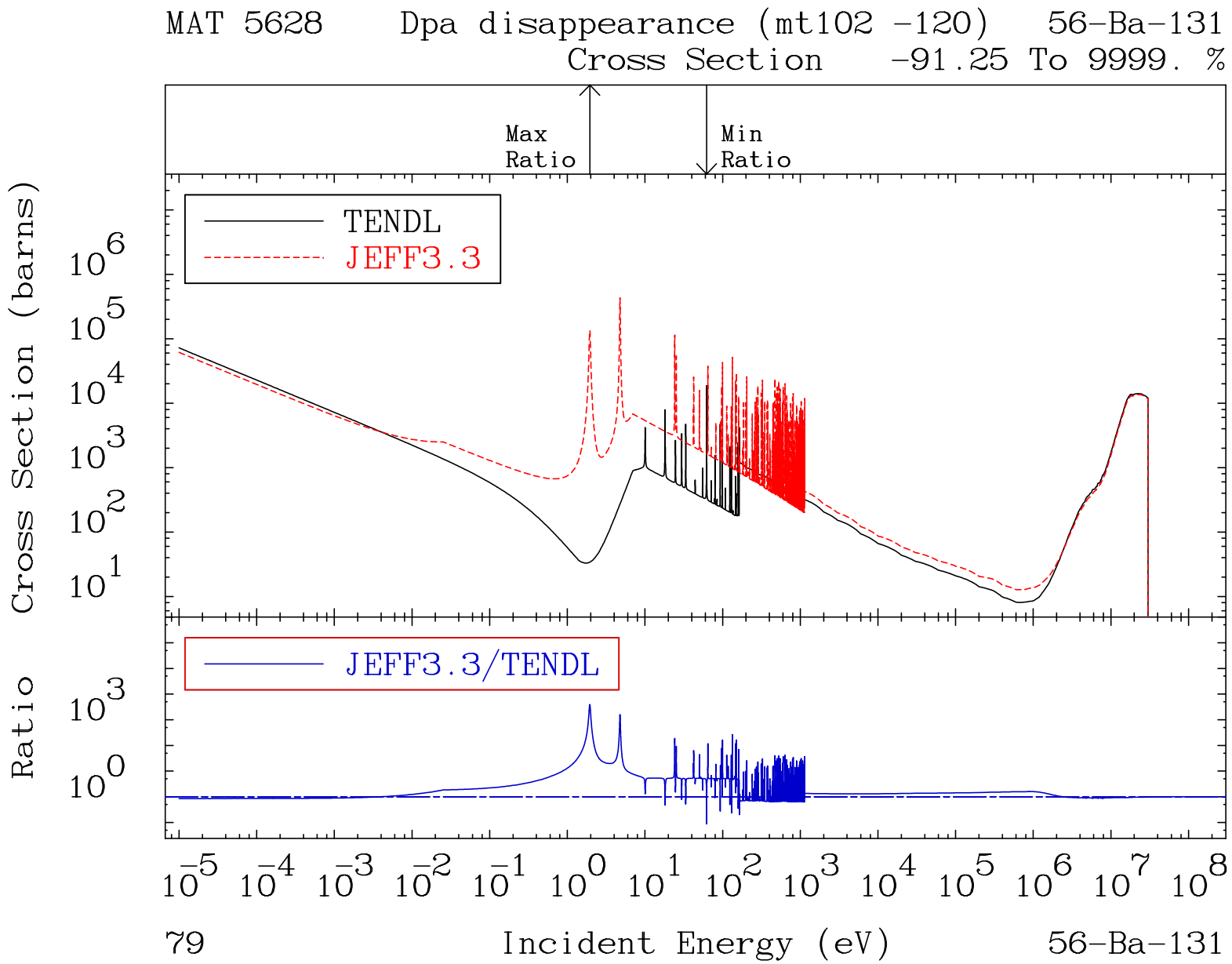

MAT 5628
Total photon (eV-barns)
56-Ba-131
Cross Section -99.94 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
56-Ba-131

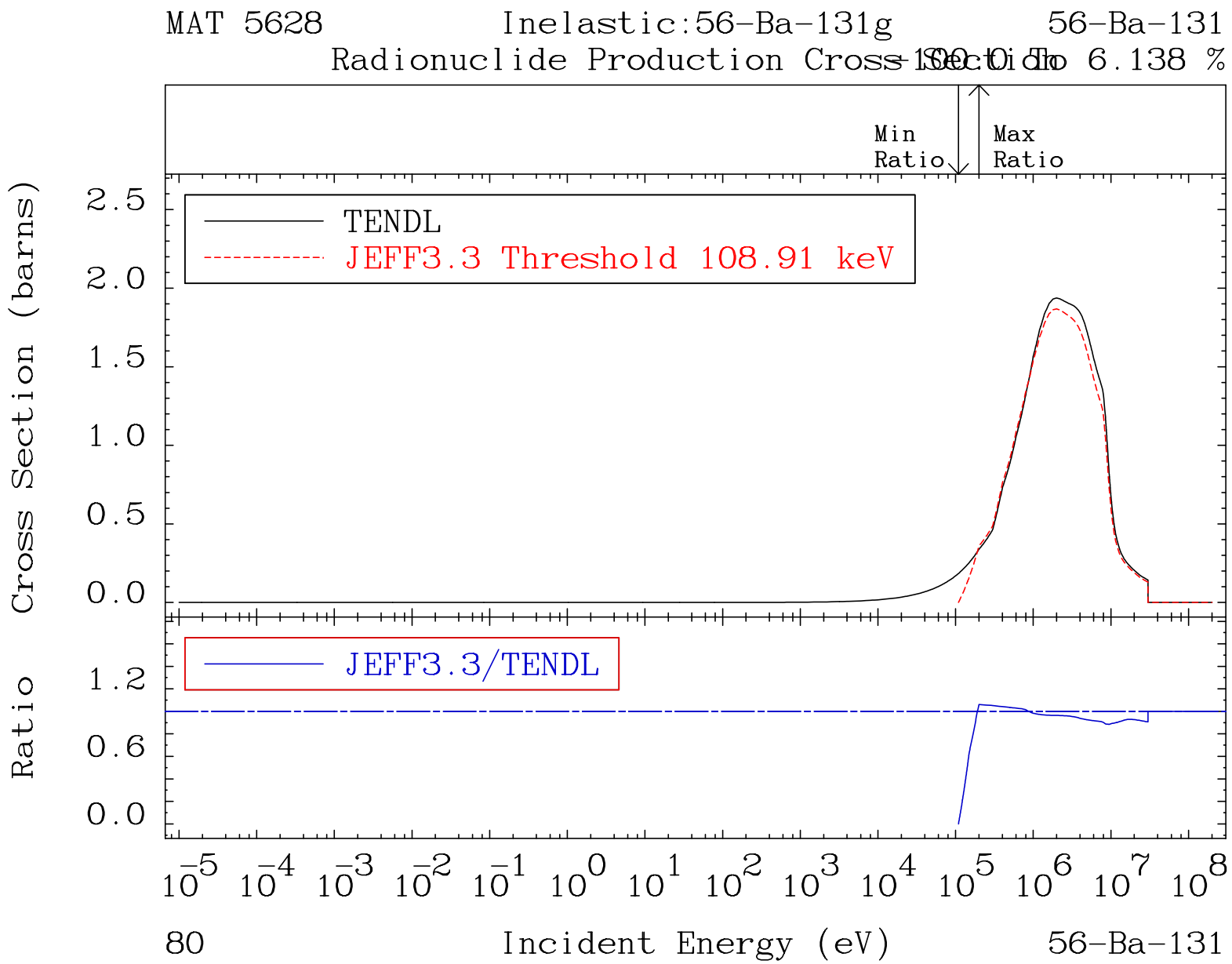

MAT 5628 Total kinematic kerma (high limit) 56-Ba-131
Cross Section -16.65 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
56-Ba-131

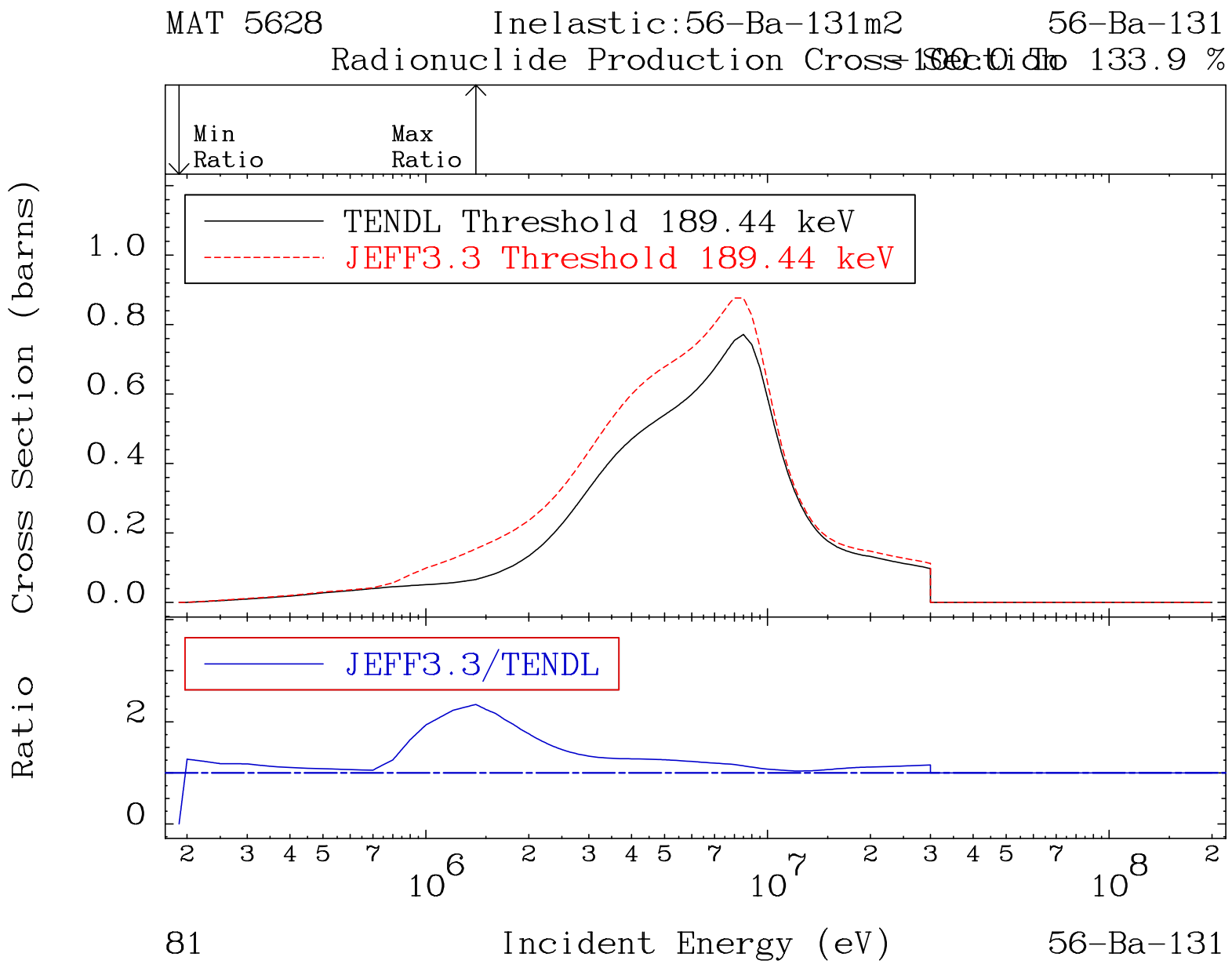

MAT 5628
Dpa total (eV-barns)
56-Ba-131
Cross Section -91.25 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
56-Ba-131

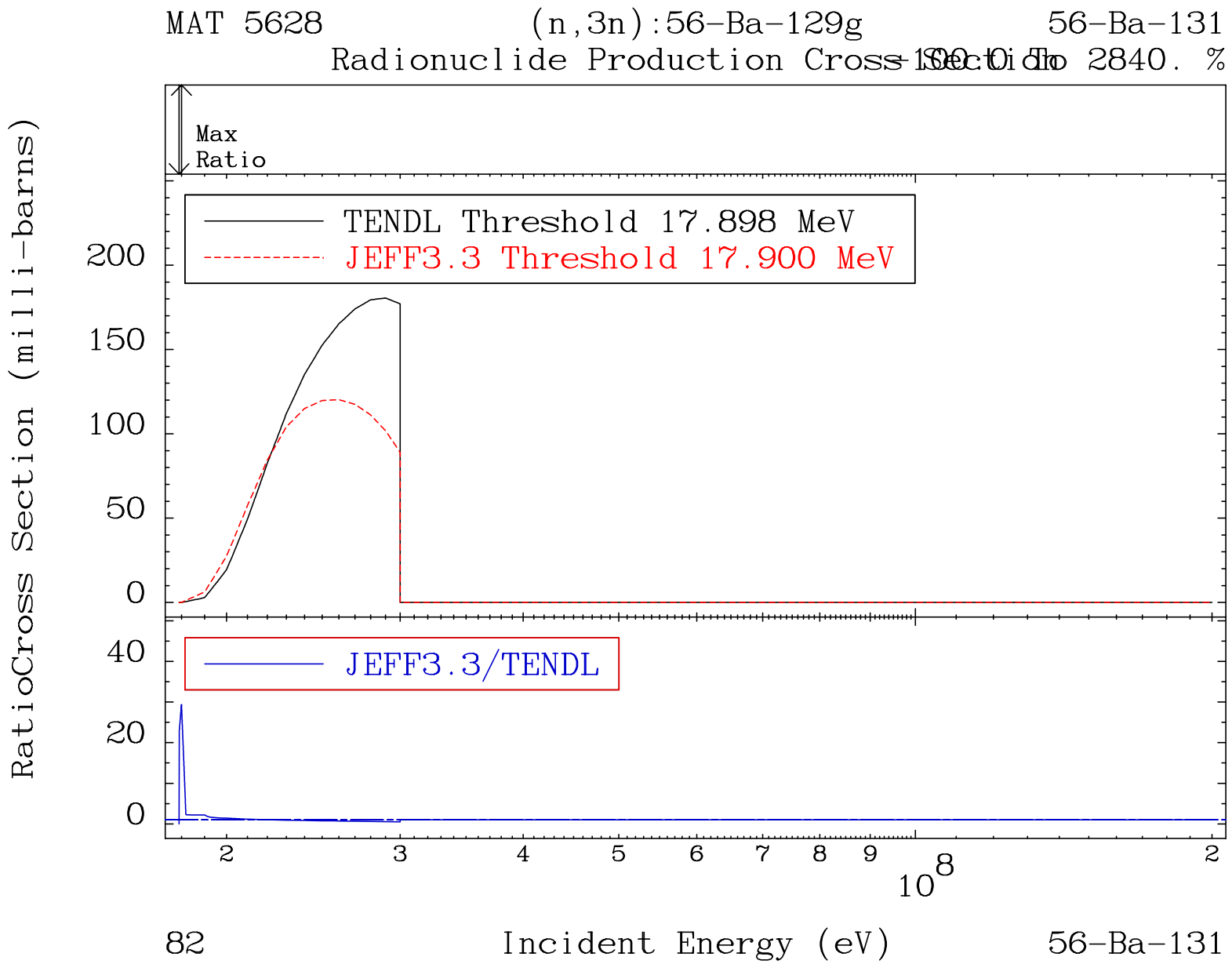

MAT 5628
Dpa elastic (mt2)
Cross Section
56-Ba-131
-89.49 To 2451. %
Max
Ratio
TENDL Threshold 840.00 eV
JEFF3.3 Threshold 814.04 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
56-Ba-131

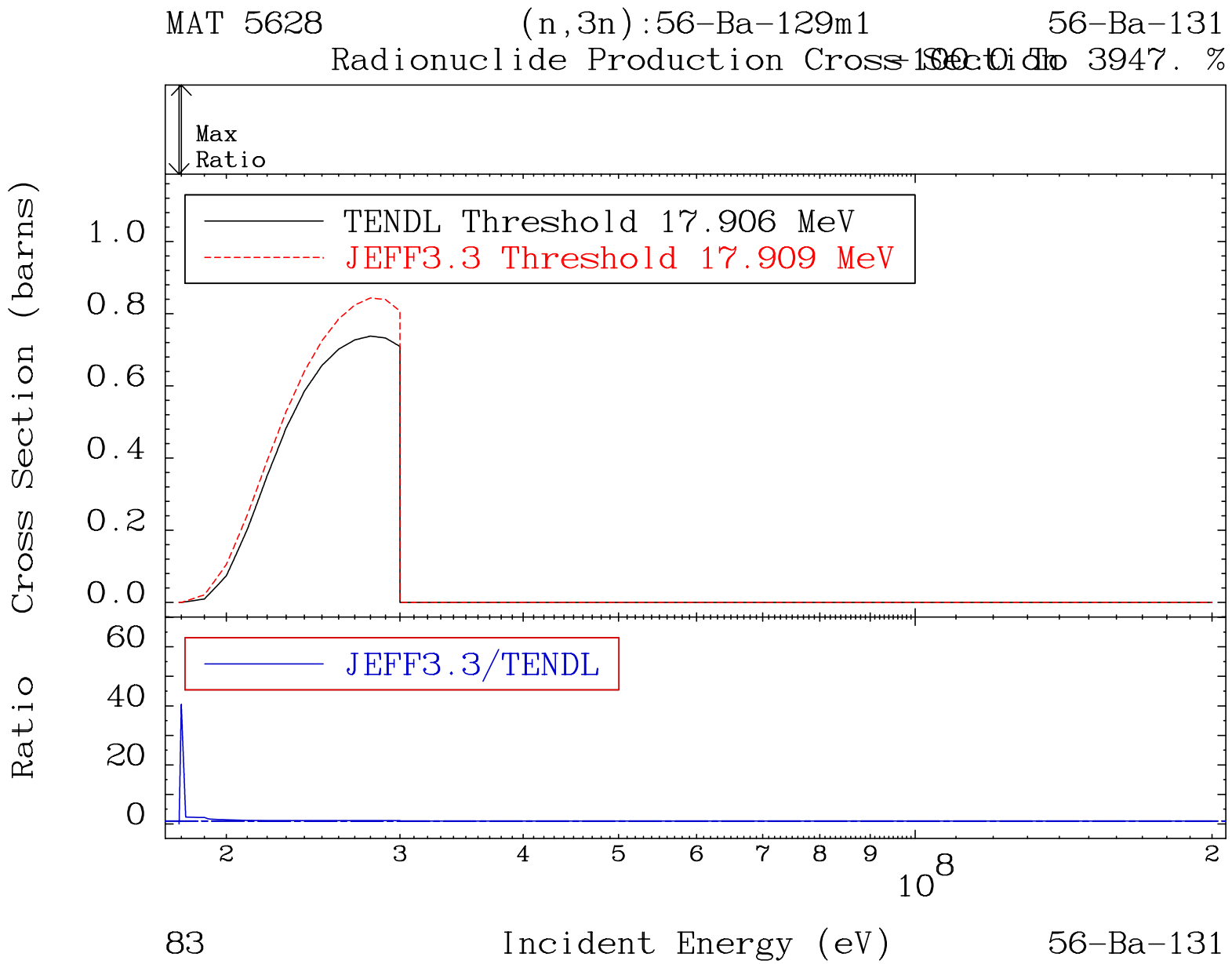

MAT 5628
Dpa inelastic (mt51-91)
56-Ba-131
Cross Section -100.0 To 6.157 %
Max
Ratio
TENDL Threshold 108.91 keV
JEFF3.3 Threshold 108.91 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
56-Ba-131

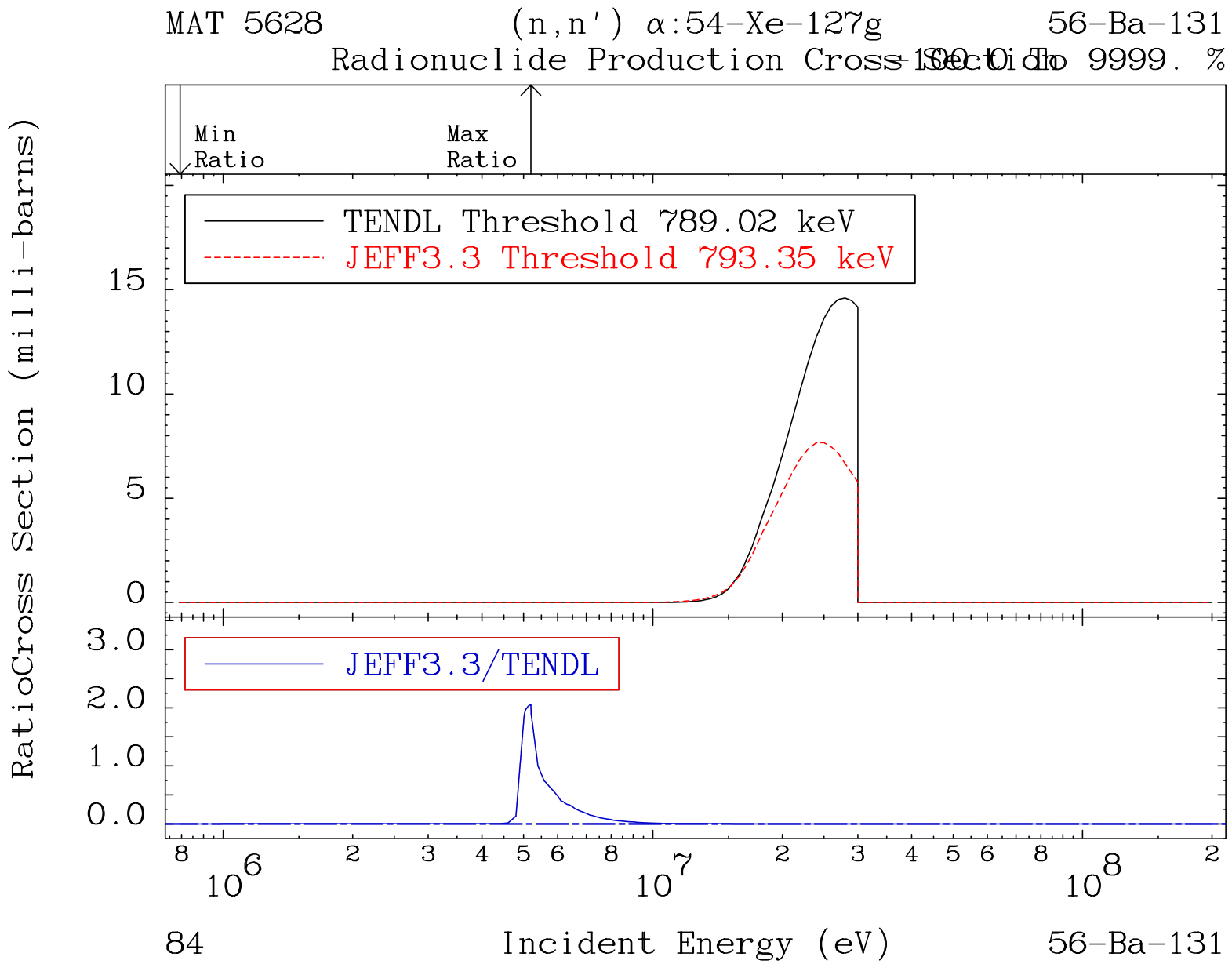

MAT 5628 Dpa disappearance (mt102 -120) 56-Ba-131
Cross Section -91.25 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
79
56-Ba-131

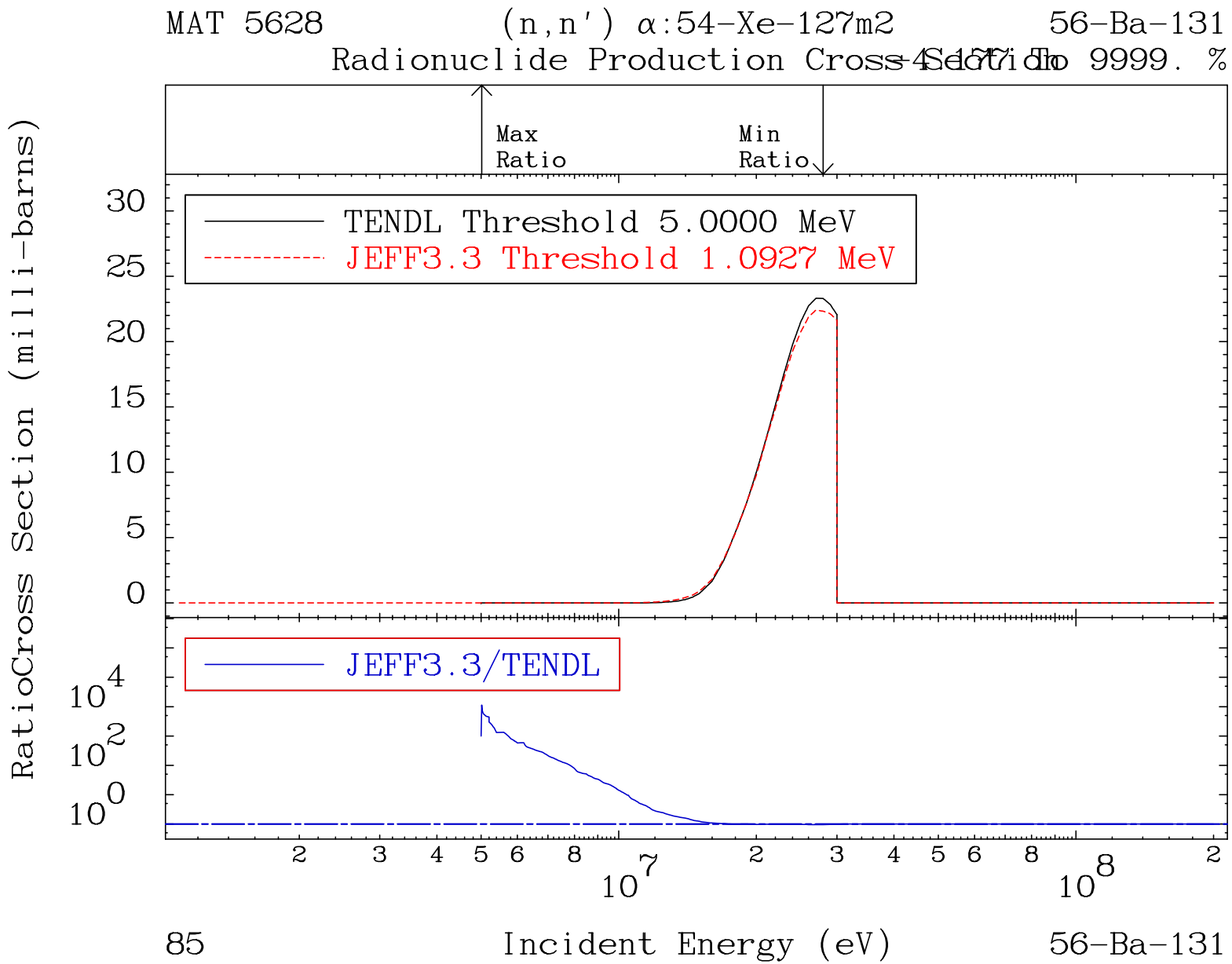

MAT 5628
Inelastic:56-Ba-131g
56-Ba-131
Radionuclide Production Cross Section
Min Ratio = 1.000
Max Ratio = 6.138 %
Min Ratio
Max Ratio
TENDL
JEFF3.3 Threshold 108.91 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
80
Incident Energy (eV)
56-Ba-131

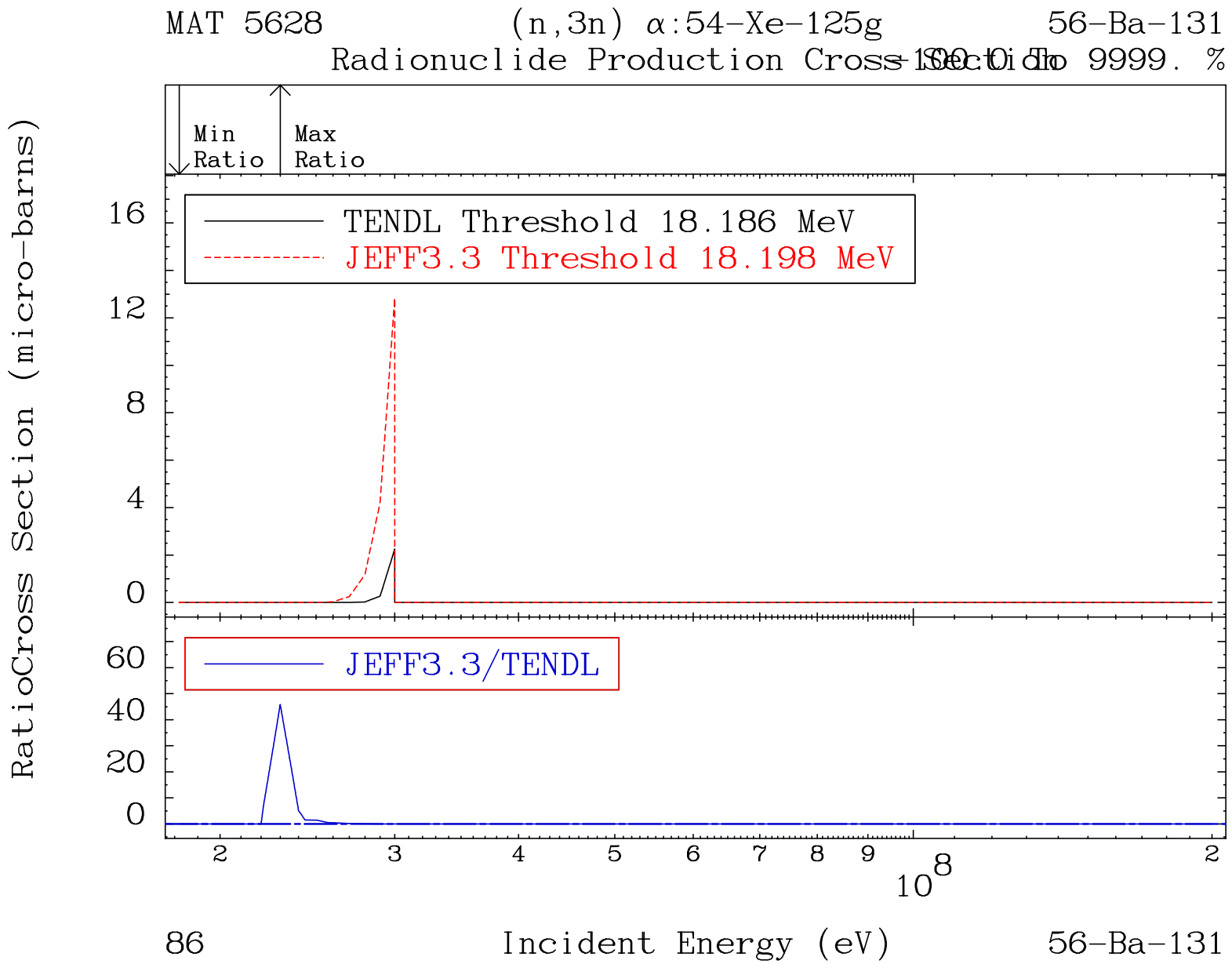

MAT 5628
Inelastic:56-Ba-131m2
56-Ba-131
Radionuclide Production Cross Section To 133.9 %
Min Ratio
Max Ratio
TENDL Threshold 189.44 keV
JEFF3.3 Threshold 189.44 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
2
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
81
Incident Energy (eV)
56-Ba-131

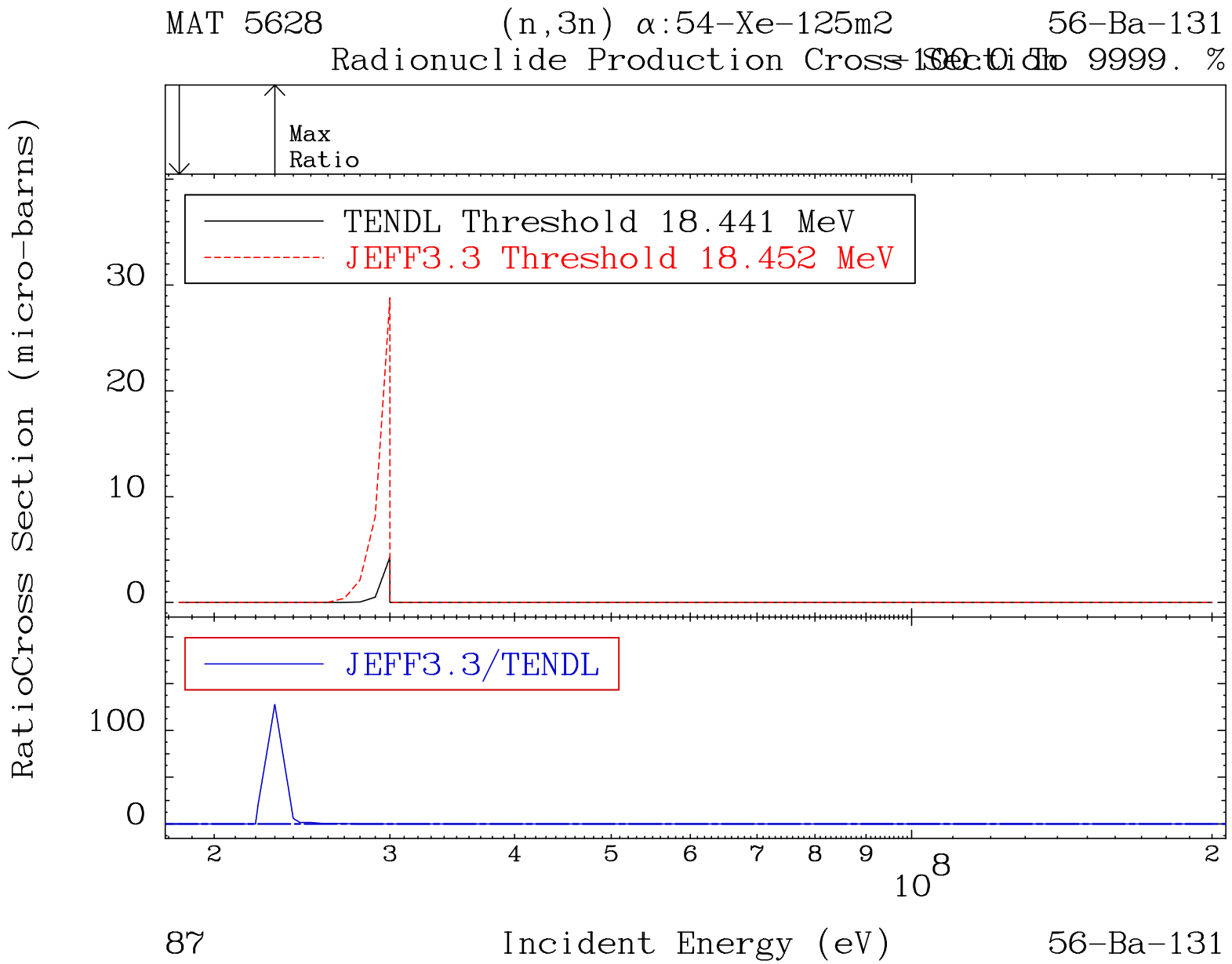

MAT 5628
(n,3n):56-Ba-129g
56-Ba-131
Radionuclide Production Cross Section To 2840. %
Max
Ratio
TENDL Threshold 17.898 MeV
JEFF3.3 Threshold 17.900 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
56-Ba-131

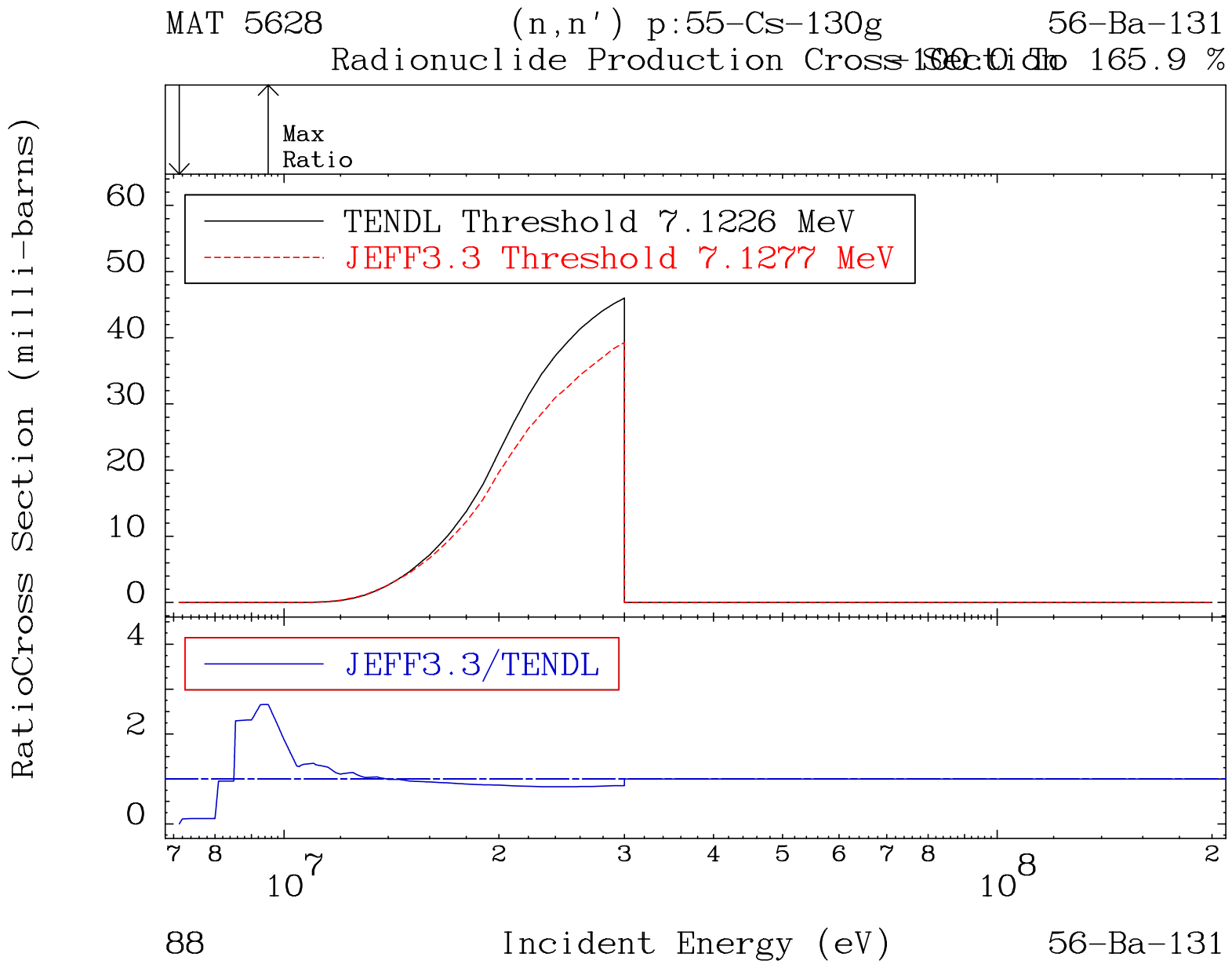

MAT 5628
(n,3n):56-Ba-129m1
56-Ba-131
Radionuclide Production Cross Section To 3947. %
Max
Ratio
TENDL Threshold 17.906 MeV
JEFF3.3 Threshold 17.909 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
60
40
20
0
2
3
4
5
6
7
8
9
2
10^8
83
Incident Energy (eV)
56-Ba-131

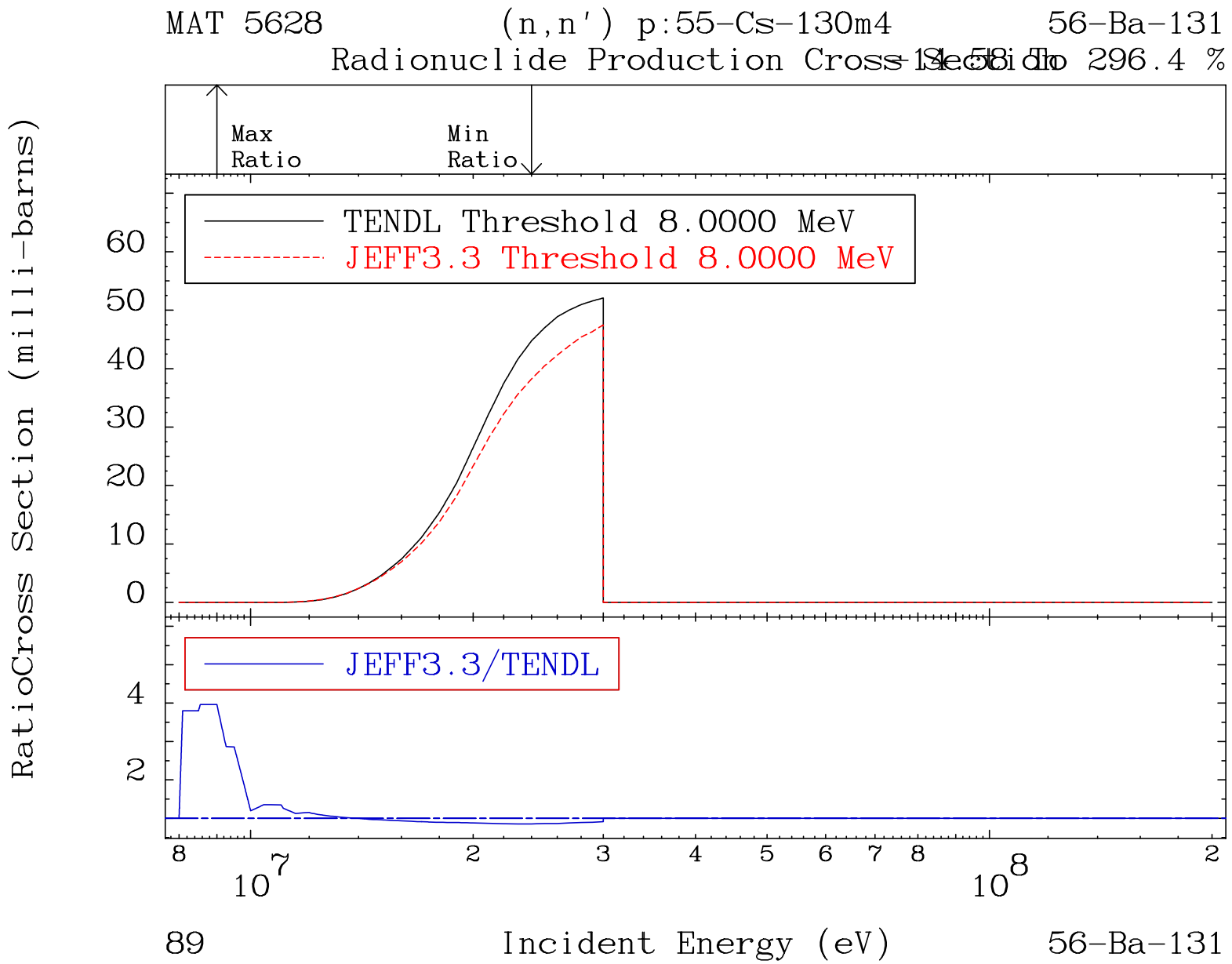

MAT 5628
(n,n') α:54-Xe-127g
56-Ba-131
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 789.02 keV
JEFF3.3 Threshold 793.35 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
15
10
5
0
3.0
2.0
1.0
0.0
8
2
3
4
5
6
8
10^6
10^7
10^8
84
Incident Energy (eV)
56-Ba-131

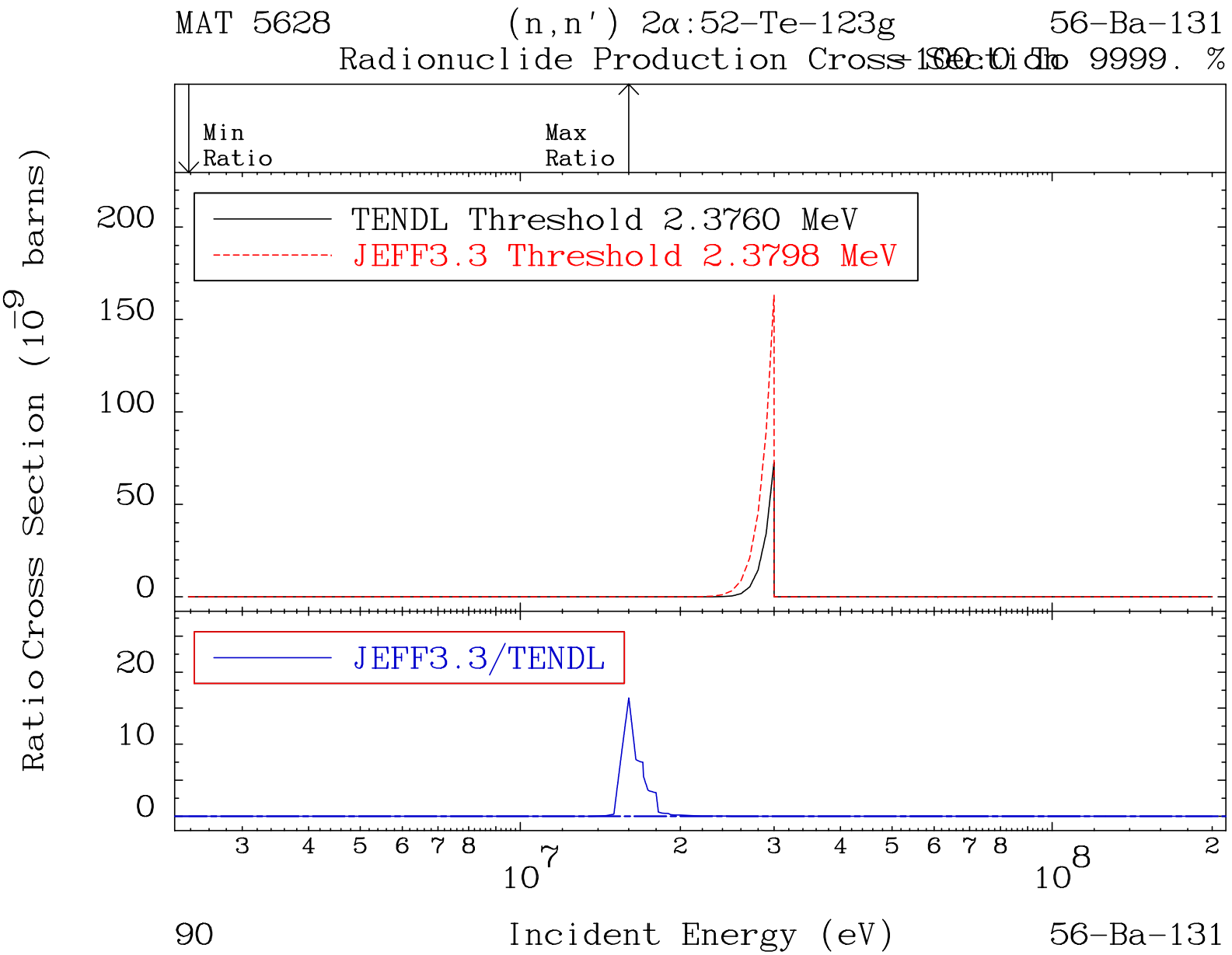

MAT 5628
(n,n') α:54-Xe-127m2
56-Ba-131
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.0000 MeV
JEFF3.3 Threshold 1.0927 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
56-Ba-131

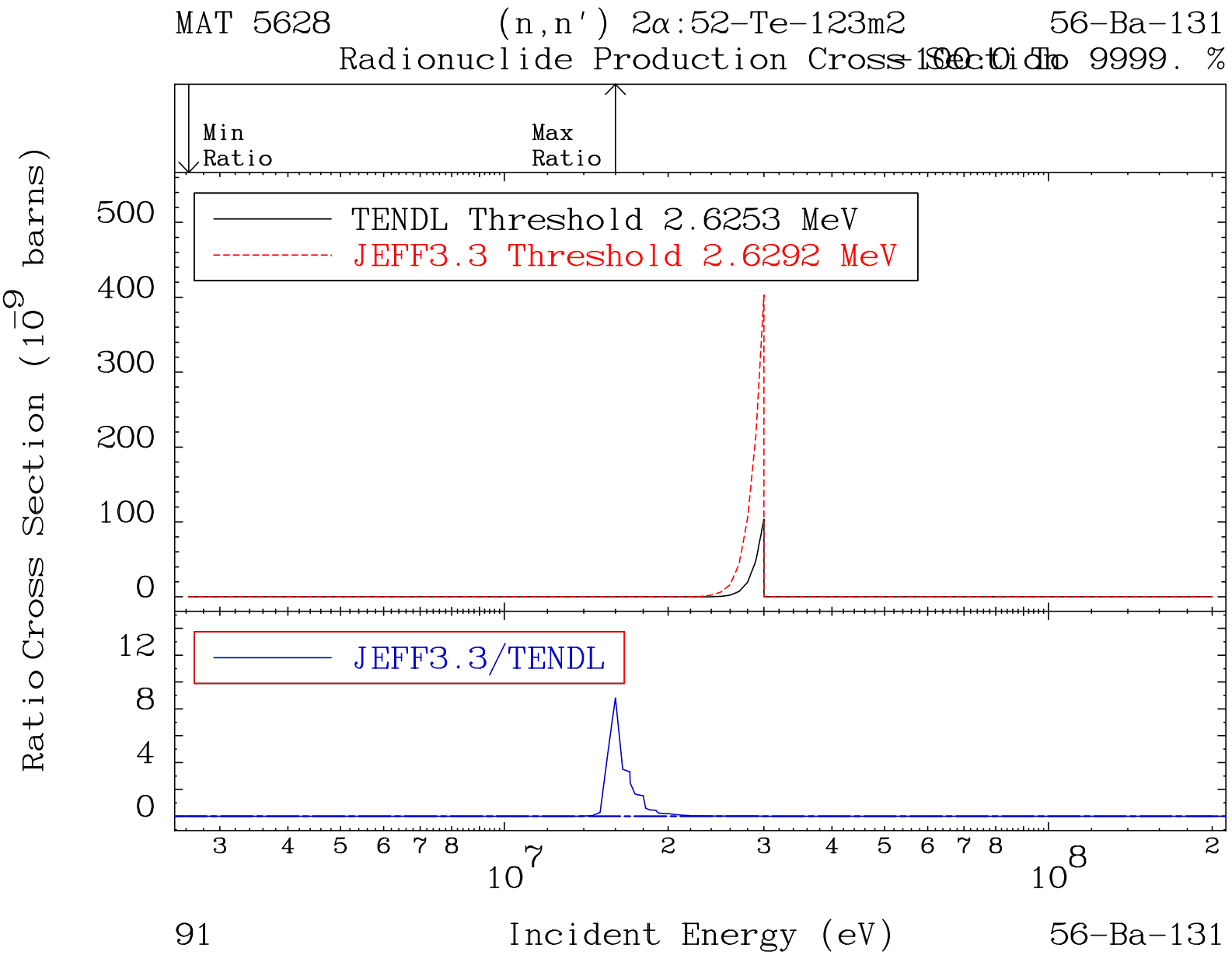

MAT 5628
(n,3n) α:54-Xe-125g
56-Ba-131
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 18.186 MeV
JEFF3.3 Threshold 18.198 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
16
12
8
4
0
60
40
20
0
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
56-Ba-131

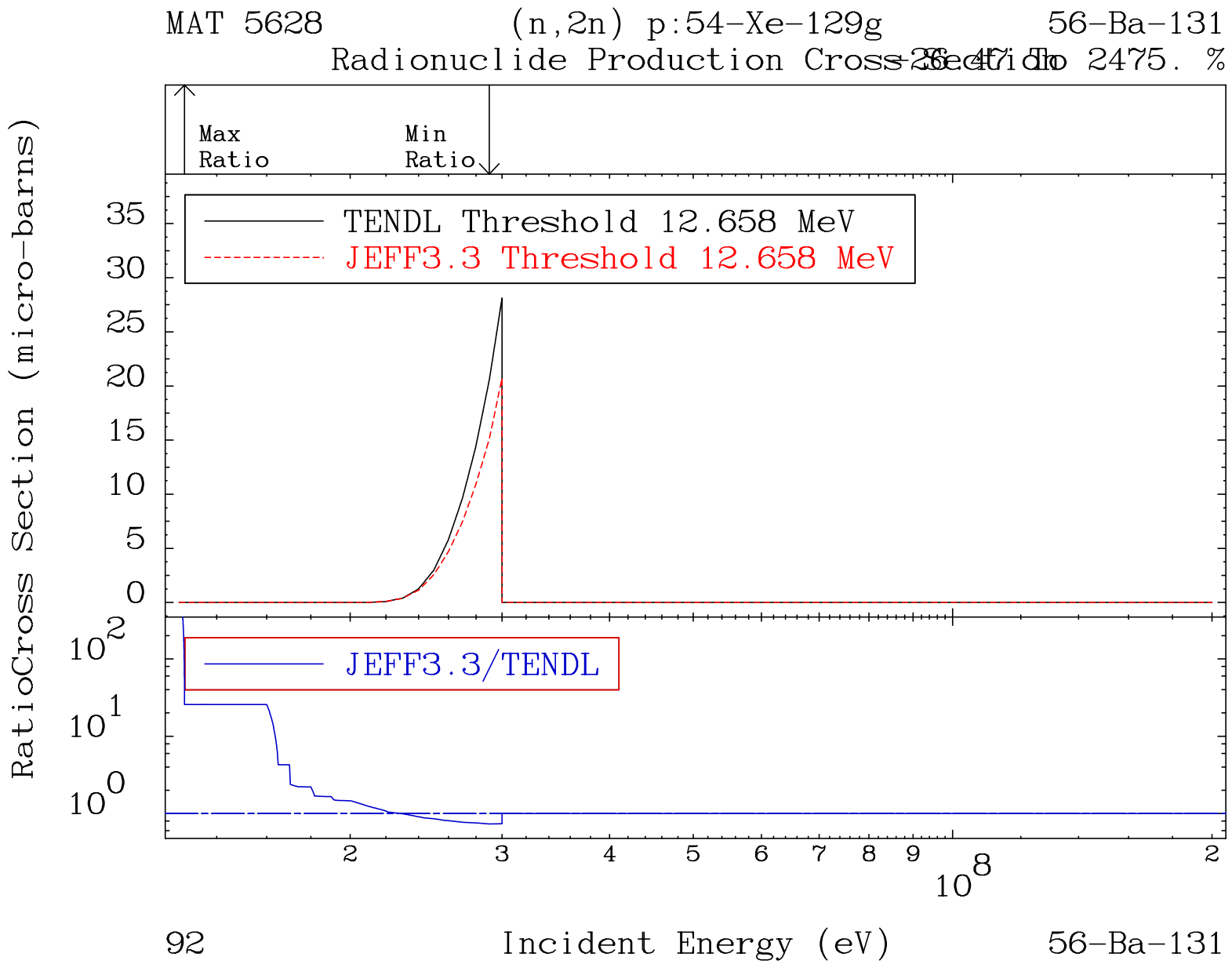

MAT 5628
(n,3n) α:54-Xe-125m2
56-Ba-131
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 18.441 MeV
JEFF3.3 Threshold 18.452 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
30
20
10
0
100
0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
56-Ba-131

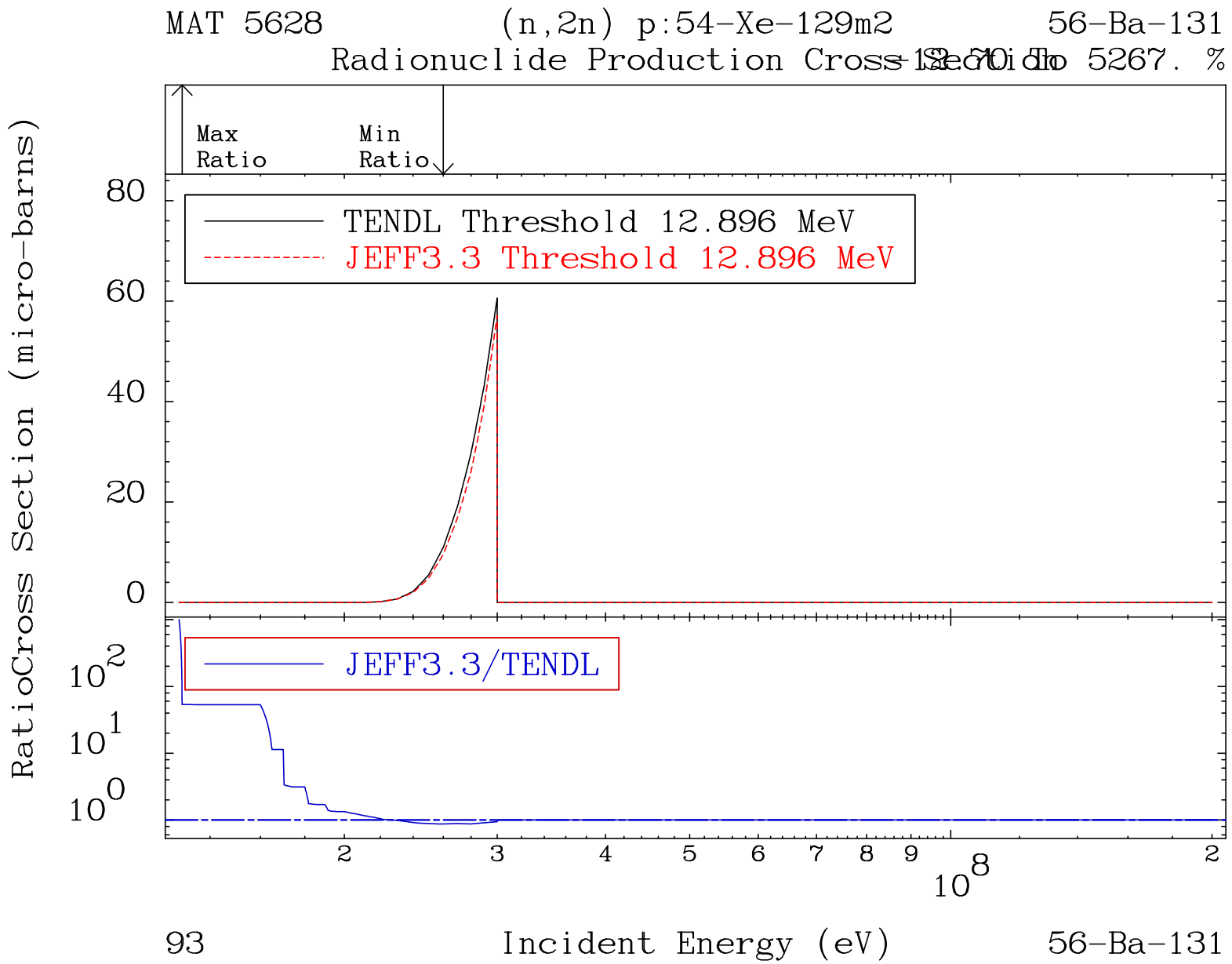

MAT 5628
(n,n') p:55-Cs-130g
56-Ba-131
Radionuclide Production Cross Section To 165.9 %
Max
Ratio
60
50
40
30
20
10
0
TENDL Threshold 7.1226 MeV
JEFF3.3 Threshold 7.1277 MeV
4
2
0
JEFF3.3/TENDL
7 8 10^7 2 3 4 5 6 7 8 10^8 2
RatioCross Section (milli-barns)
88
Incident Energy (eV)
56-Ba-131

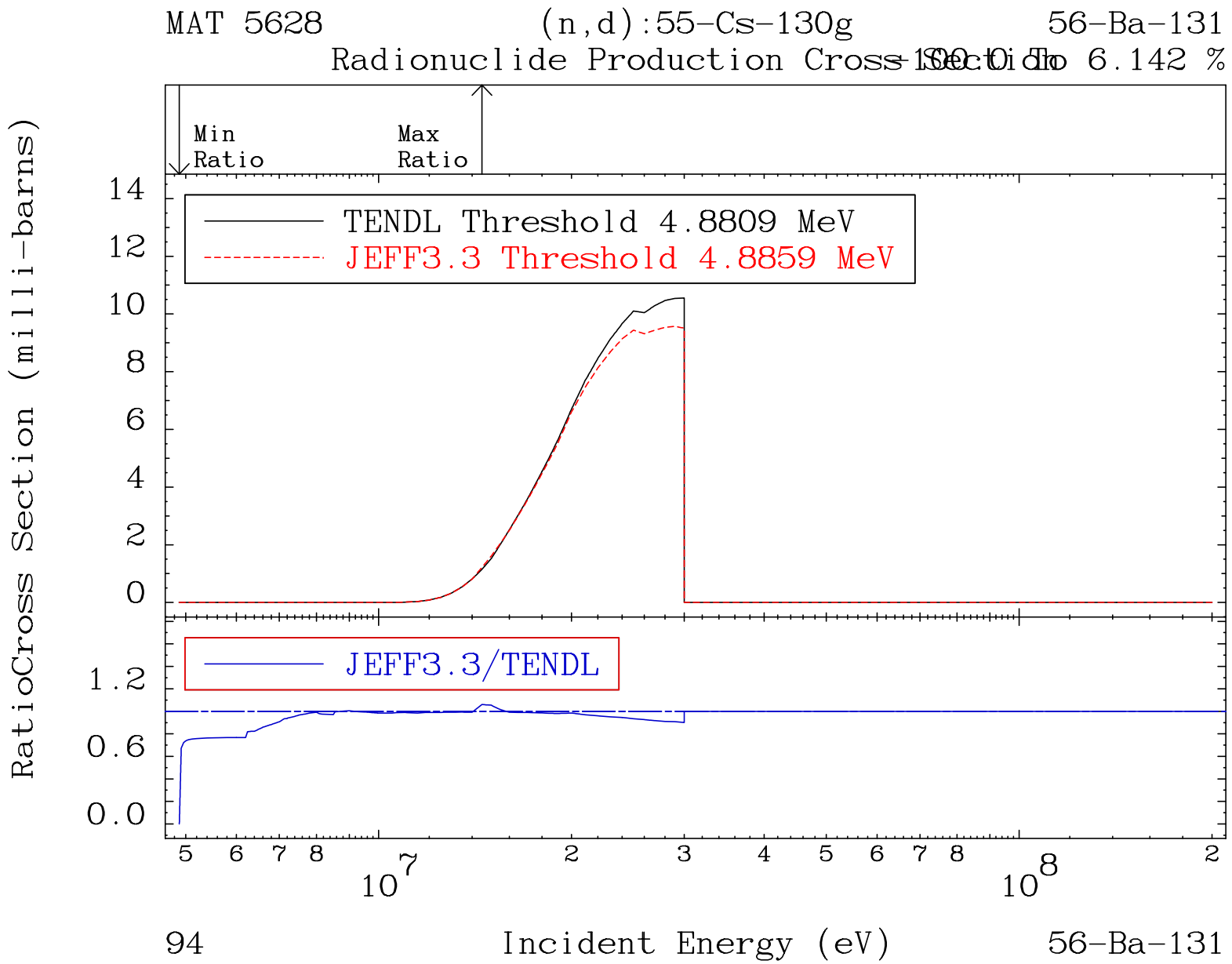

MAT 5628
(n,n') p:55-Cs-130m4
56-Ba-131
Radionuclide Production Cross Section To 296.4 %
Max Ratio
Min Ratio
TENDL Threshold 8.0000 MeV
JEFF3.3 Threshold 8.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
89
56-Ba-131

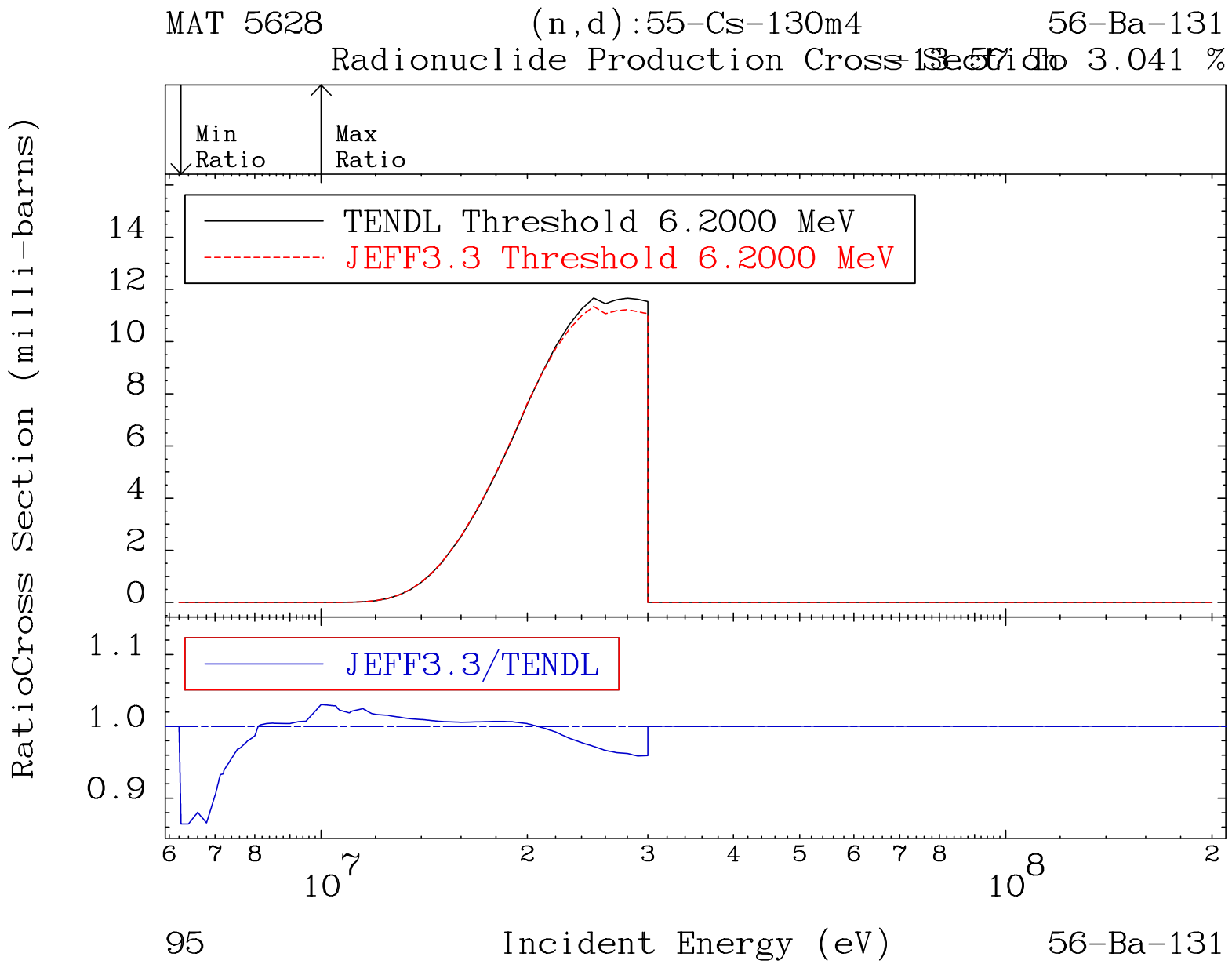

MAT 5628
(n,n') 2α:52-Te-123g
56-Ba-131
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3760 MeV
JEFF3.3 Threshold 2.3798 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
200
150
100
50
0
20
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
90
Incident Energy (eV)
56-Ba-131

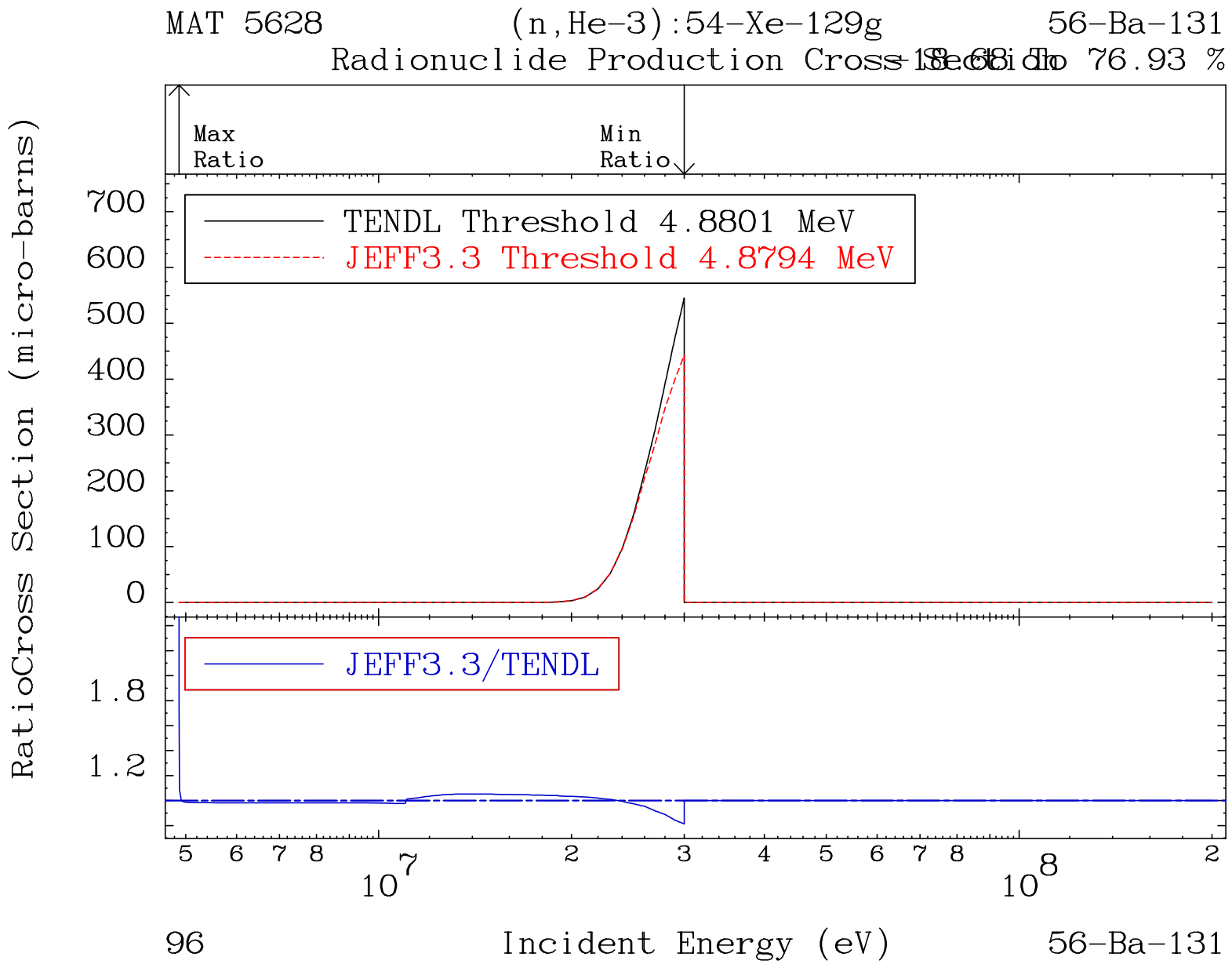

MAT 5628
(n,n') 2α:52-Te-123m2
56-Ba-131
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.6253 MeV
JEFF3.3 Threshold 2.6292 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
500
400
300
200
100
0
12
8
4
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
91
Incident Energy (eV)
56-Ba-131

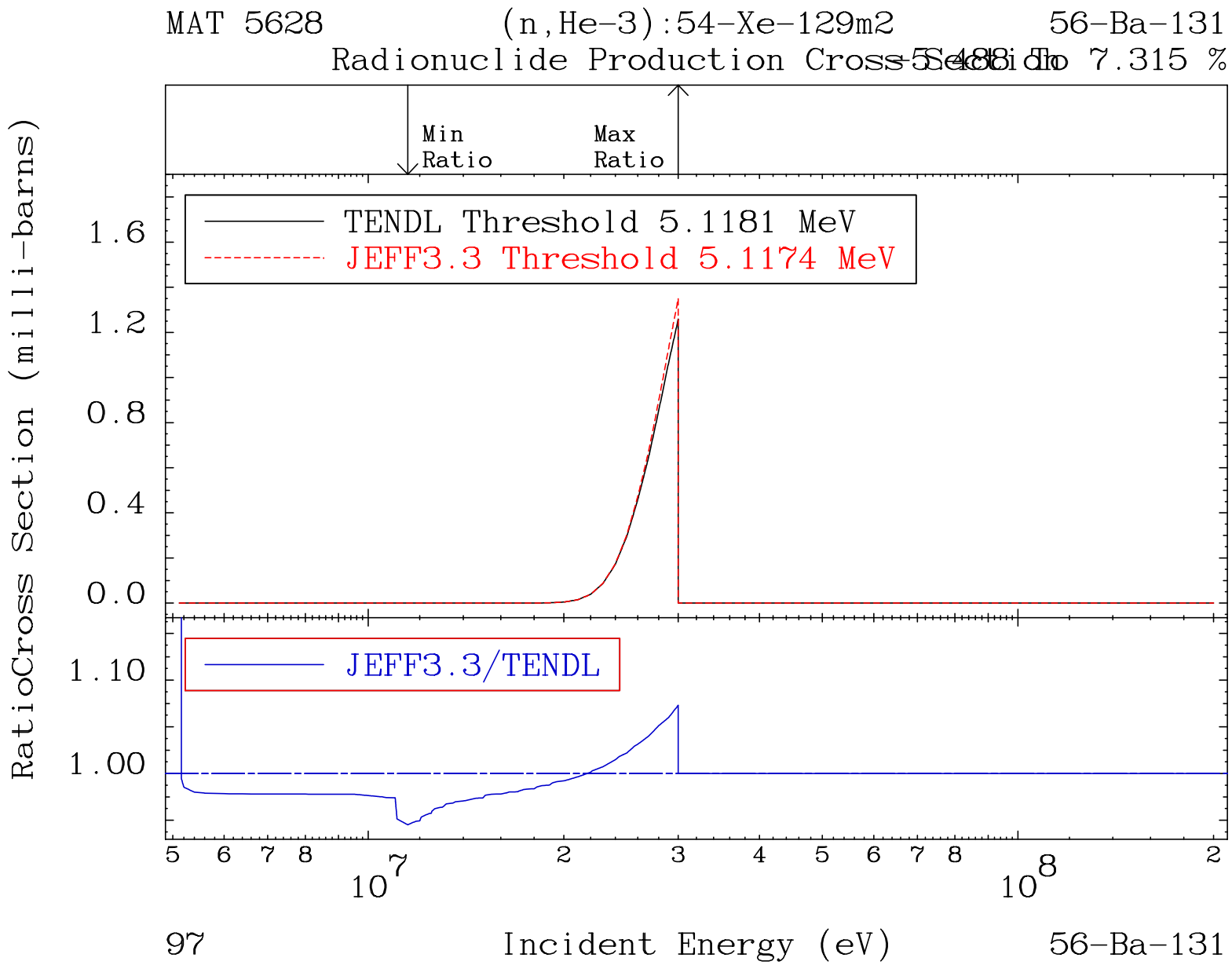

MAT 5628
(n,2n) p:54-Xe-129g
56-Ba-131
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.658 MeV
JEFF3.3 Threshold 12.658 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
92
56-Ba-131

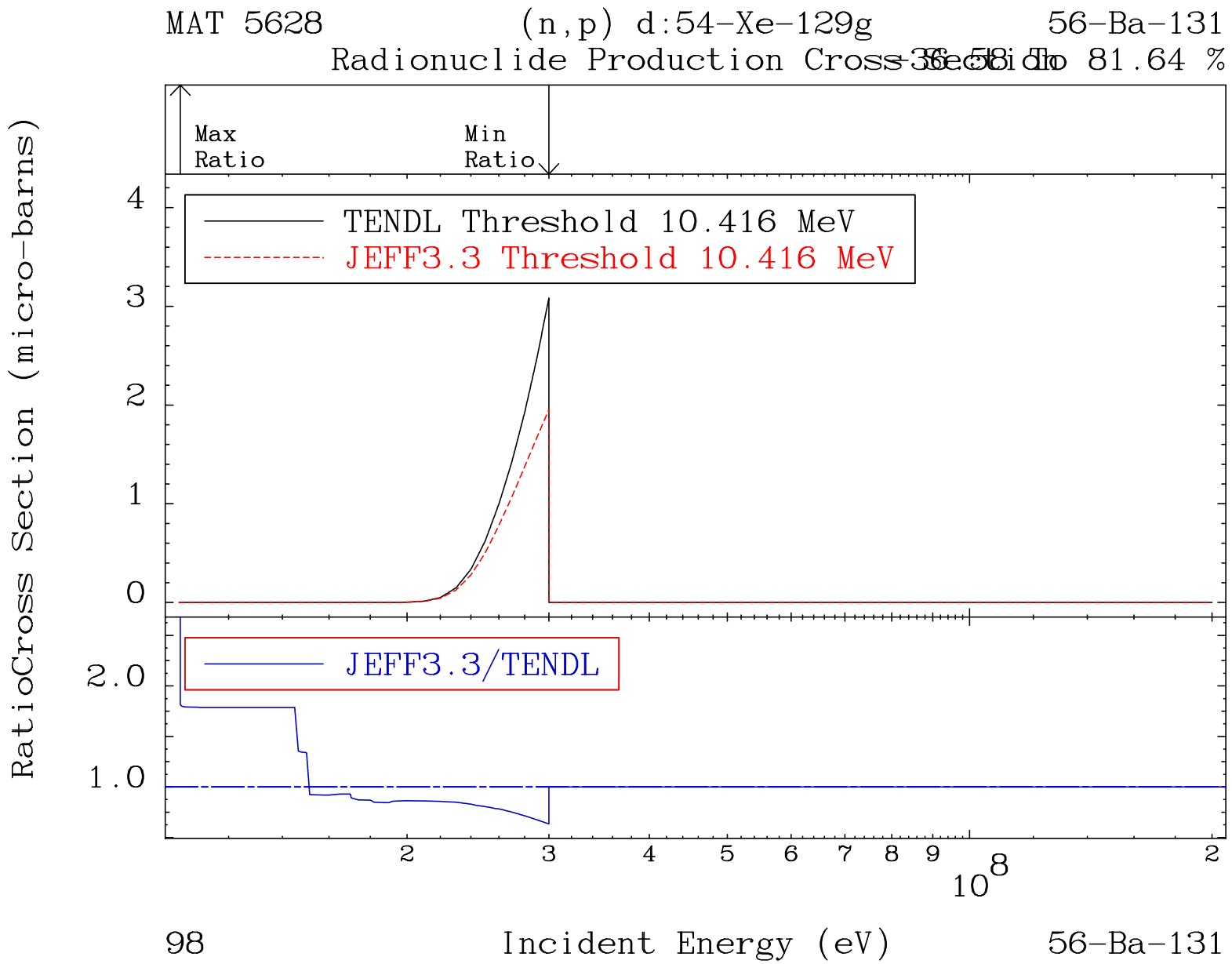

MAT 5628
(n,2n) p:54-Xe-129m2
56-Ba-131
Radionuclide Production Cross Section To 5267. %
Max Ratio
Min Ratio
TENDL Threshold 12.896 MeV
JEFF3.3 Threshold 12.896 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
93
56-Ba-131

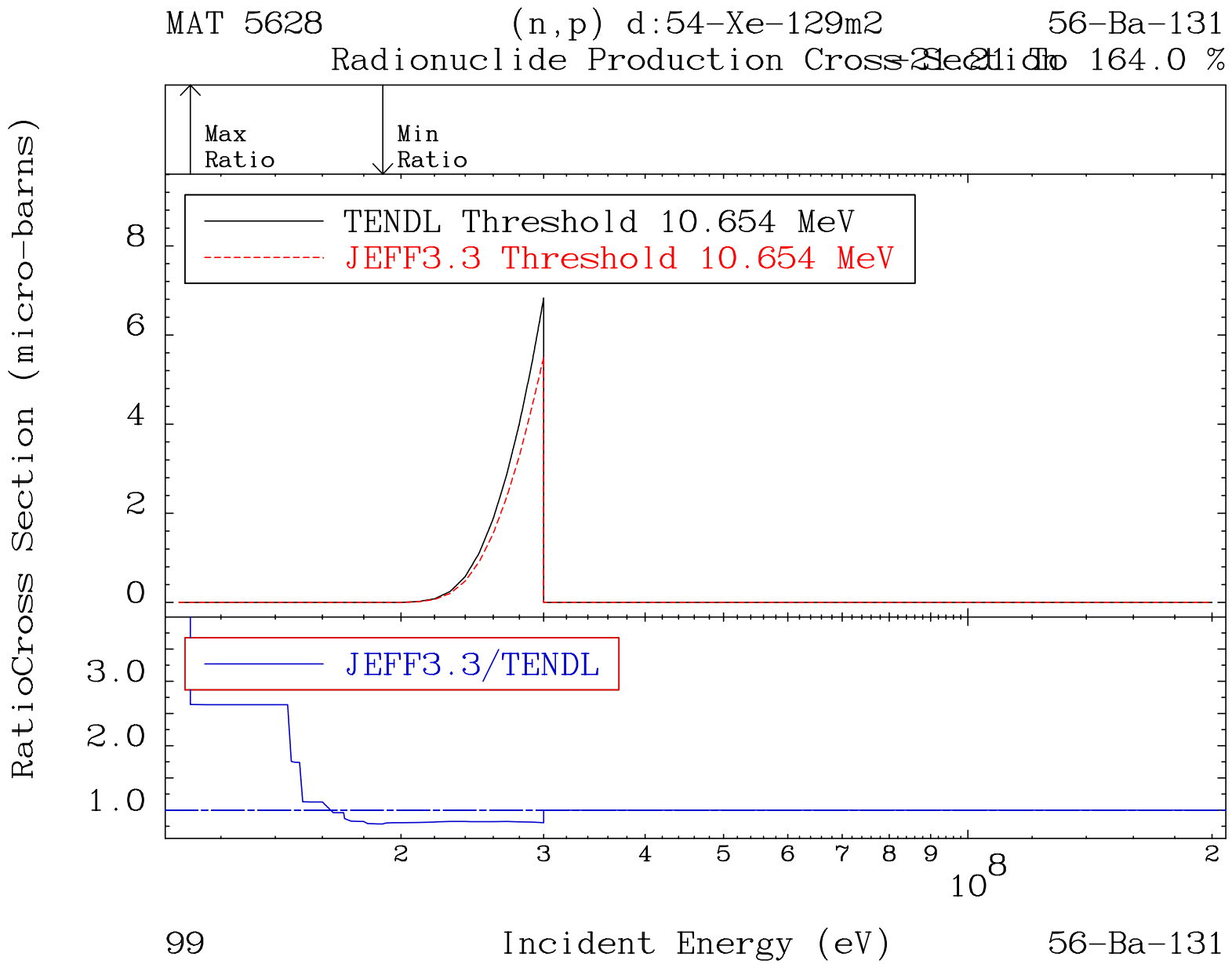

MAT 5628
(n,d):55-Cs-130g
56-Ba-131
Radionuclide Production Cross Section To 6.142 %
Min Ratio
Max Ratio
TENDL Threshold 4.8809 MeV
JEFF3.3 Threshold 4.8859 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
94
56-Ba-131


MAT 5628
(n,d):55-Cs-130m4
56-Ba-131
Radionuclide Production Cross Section To 3.041 %
Min Ratio
Max Ratio
TENDL Threshold 6.2000 MeV
JEFF3.3 Threshold 6.2000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
1.1
1.0
0.9
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
95
Incident Energy (eV)
56-Ba-131


MAT 5628
(n,He-3):54-Xe-129g
56-Ba-131
Radionuclide Production Cross Section To 76.93 %
Max Ratio
Min Ratio
TENDL Threshold 4.8801 MeV
JEFF3.3 Threshold 4.8794 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
700
600
500
400
300
200
100
0
1.8
1.2
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
96
Incident Energy (eV)
56-Ba-131


MAT 5628
(n,He-3):54-Xe-129m2
56-Ba-131
Radionuclide Production Cross Section To 7.315 %
Min Ratio
Max Ratio
TENDL Threshold 5.1181 MeV
JEFF3.3 Threshold 5.1174 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.10
1.00
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
97
Incident Energy (eV)
56-Ba-131


MAT 5628
(n,p) d:54-Xe-129g
56-Ba-131
Radionuclide Production Cross-Section To 81.64 %
Max Ratio
Min Ratio
TENDL Threshold 10.416 MeV
JEFF3.3 Threshold 10.416 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
98
56-Ba-131


MAT 5628
(n,p) d:54-Xe-129m2
56-Ba-131
Radionuclide Production Cross-Section To 164.0 %
Max Ratio
Min Ratio
TENDL Threshold 10.654 MeV
JEFF3.3 Threshold 10.654 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
8
6
4
2
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
99
Incident Energy (eV)
56-Ba-131