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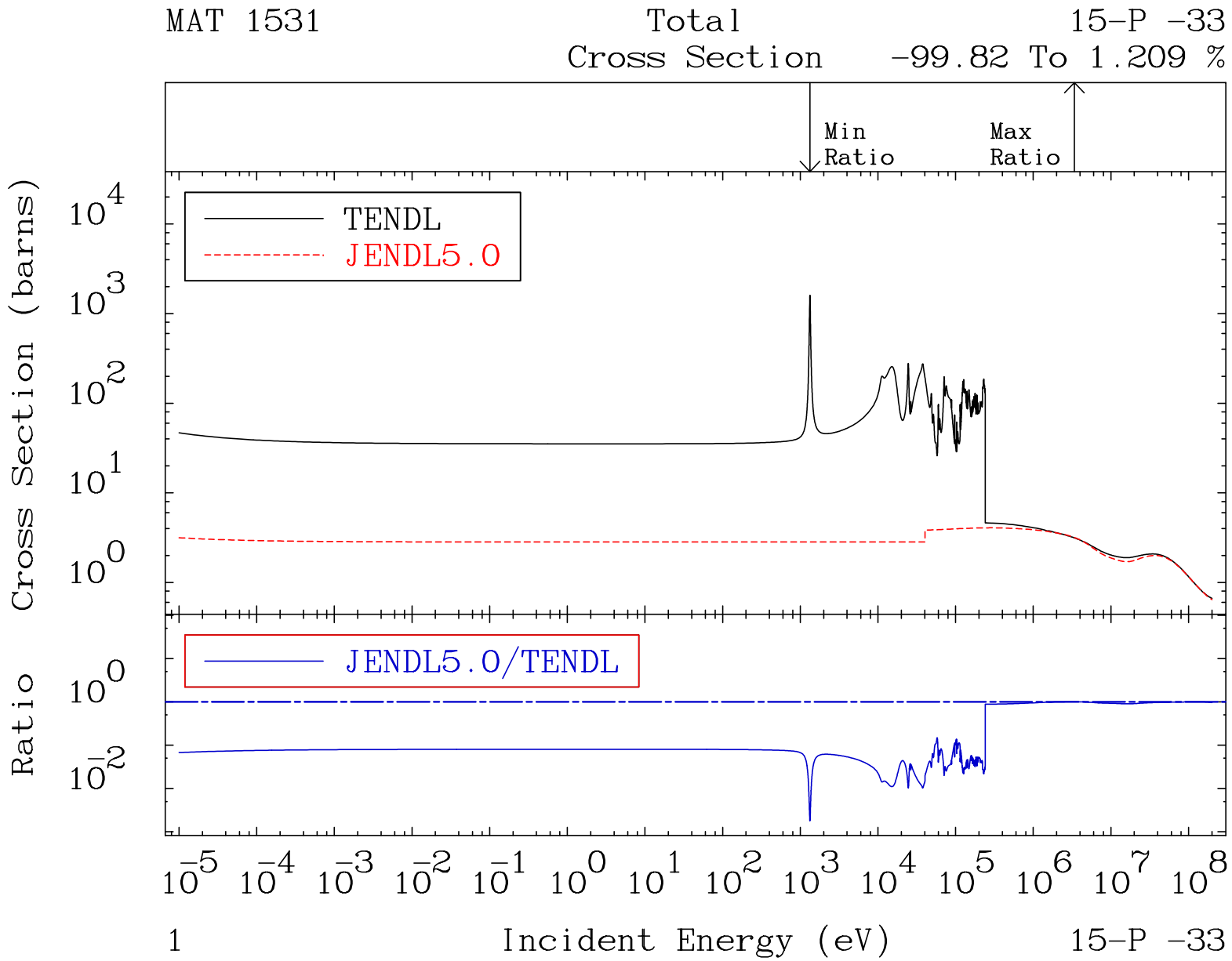
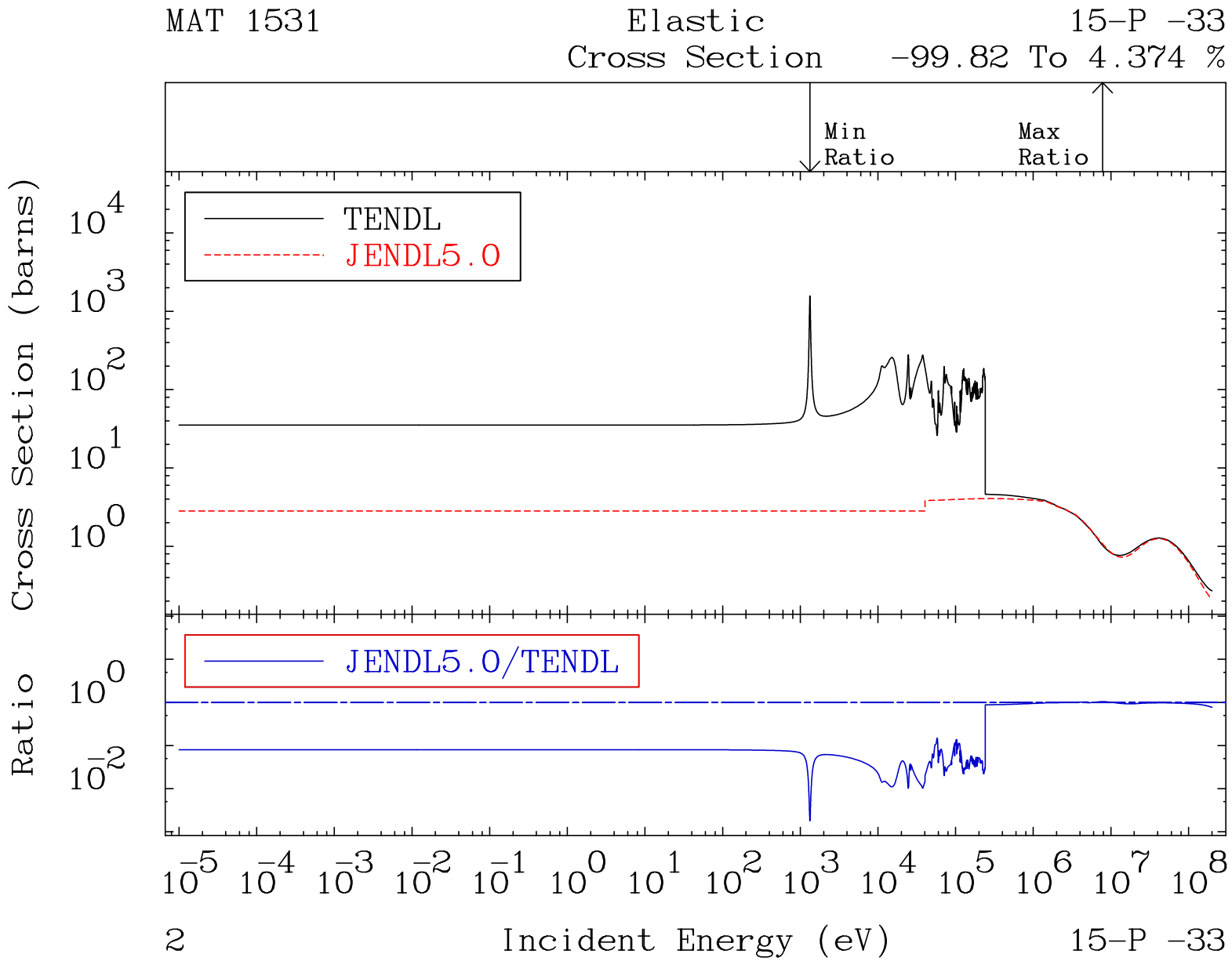
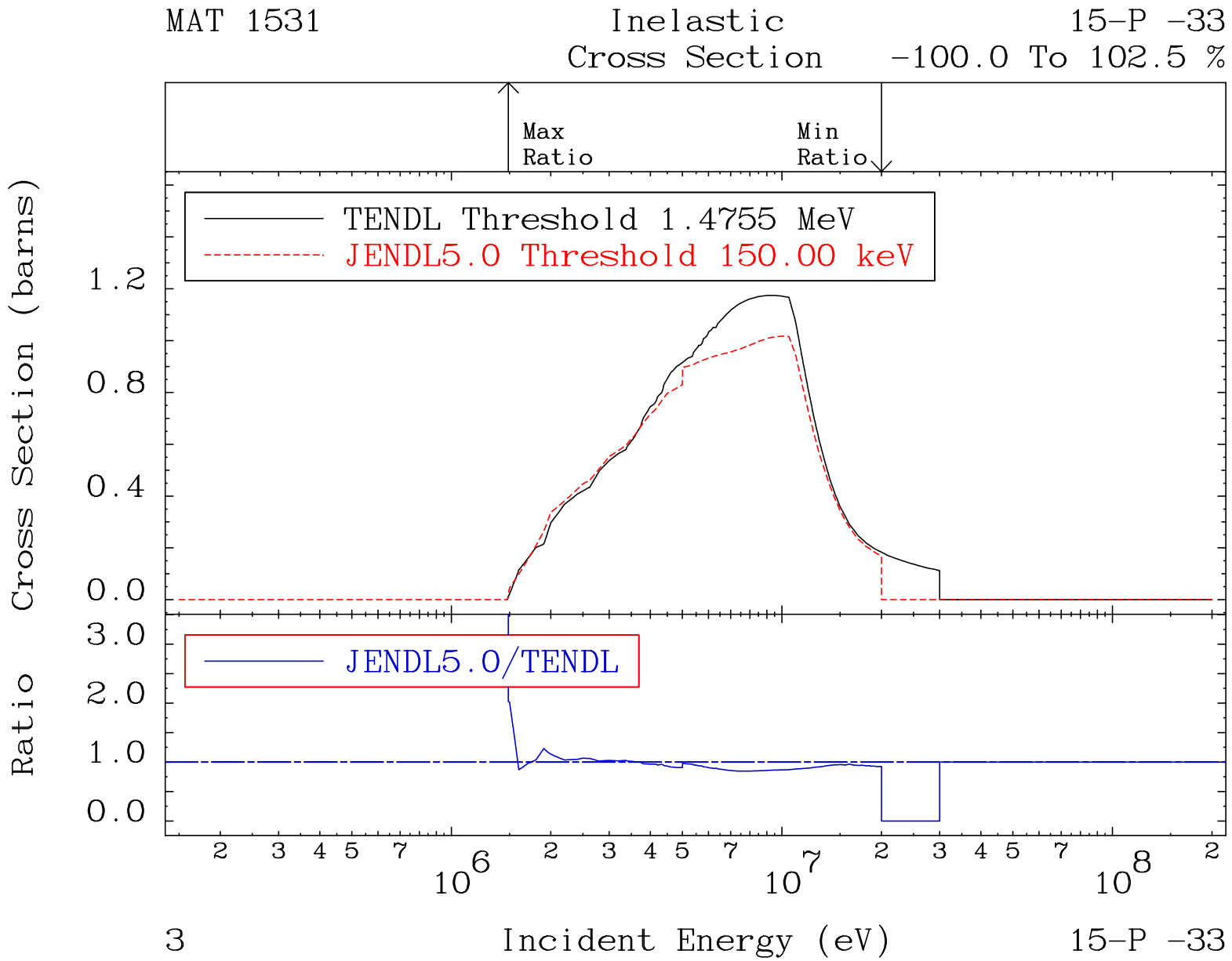
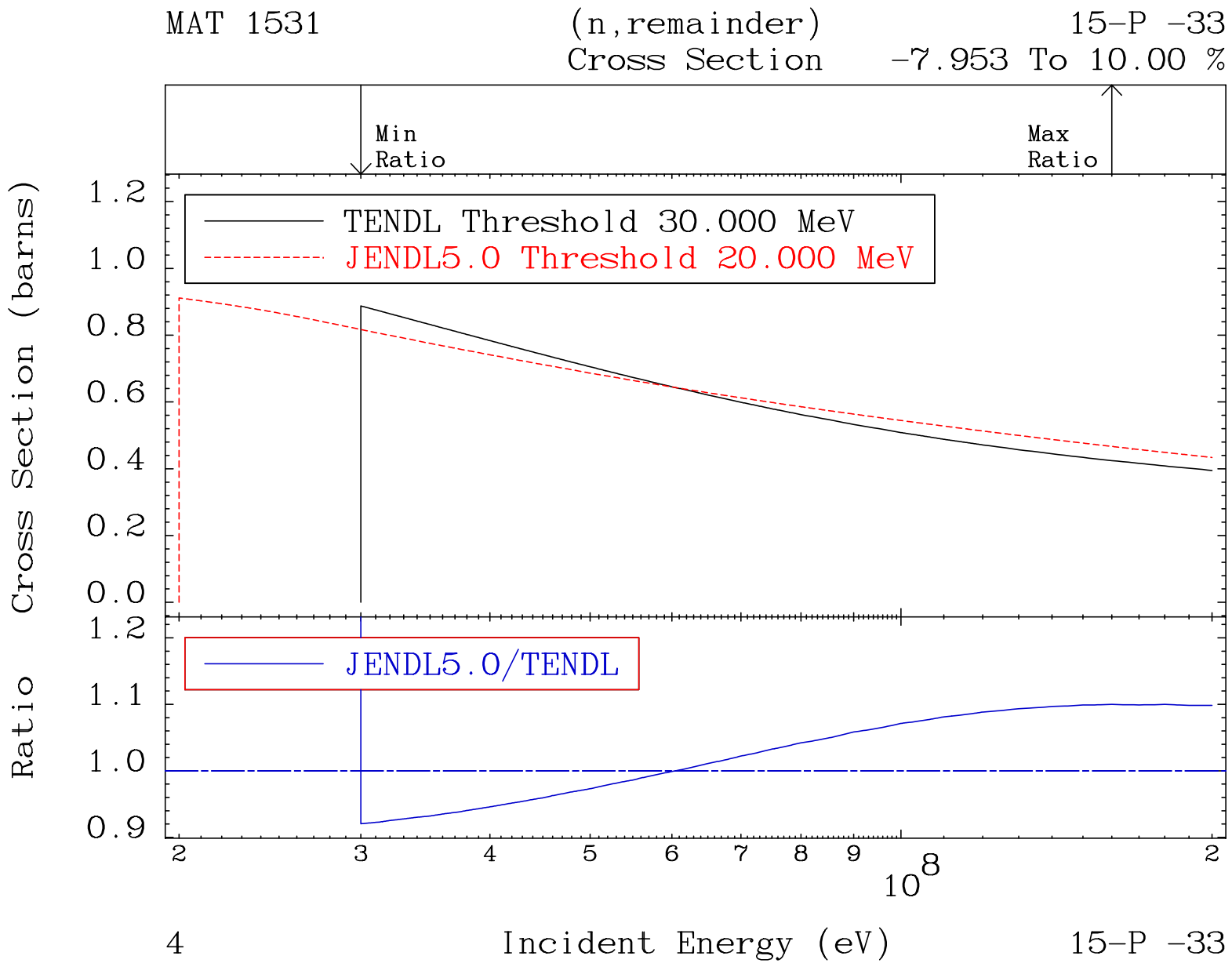
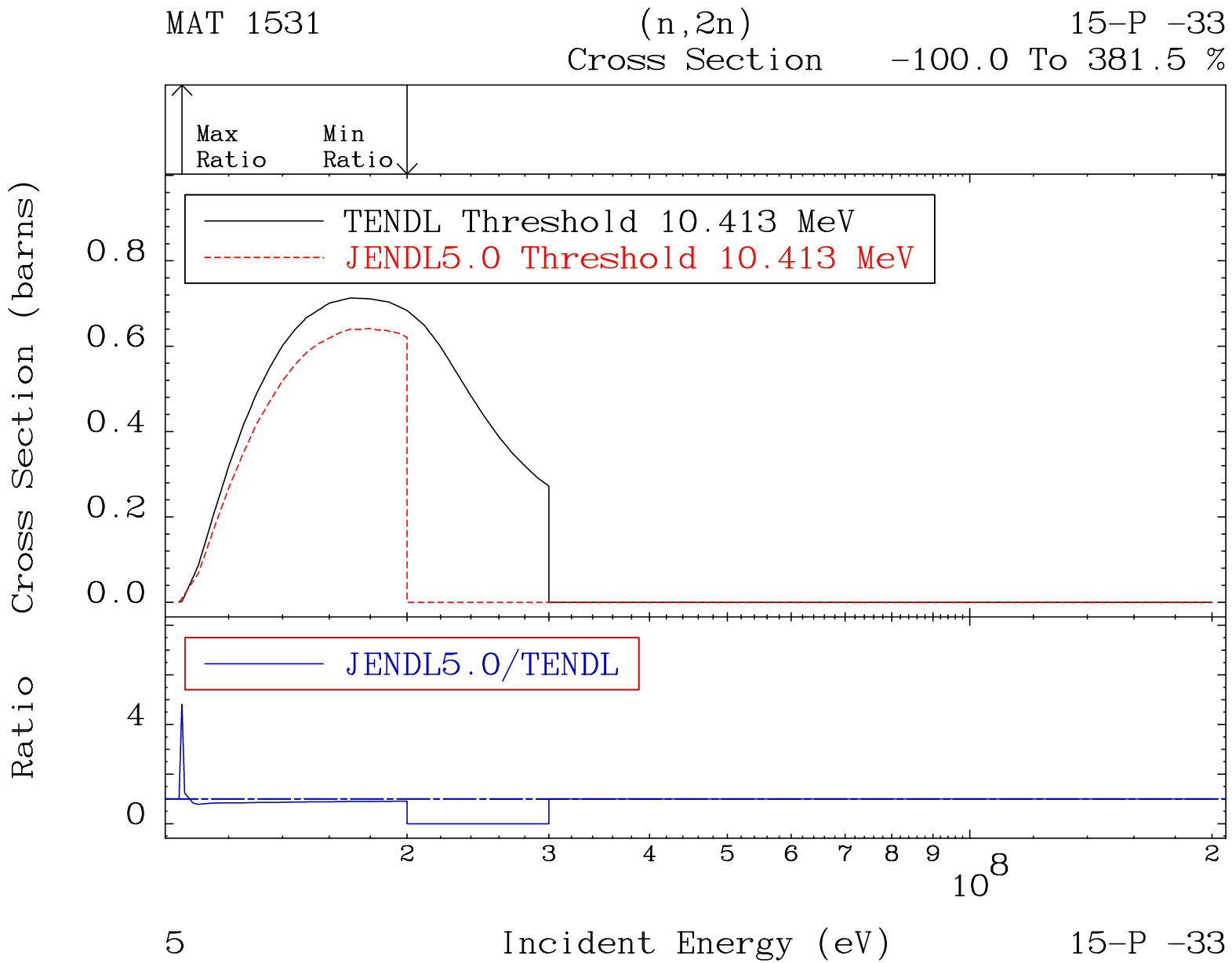
Press Mouse Button to Start

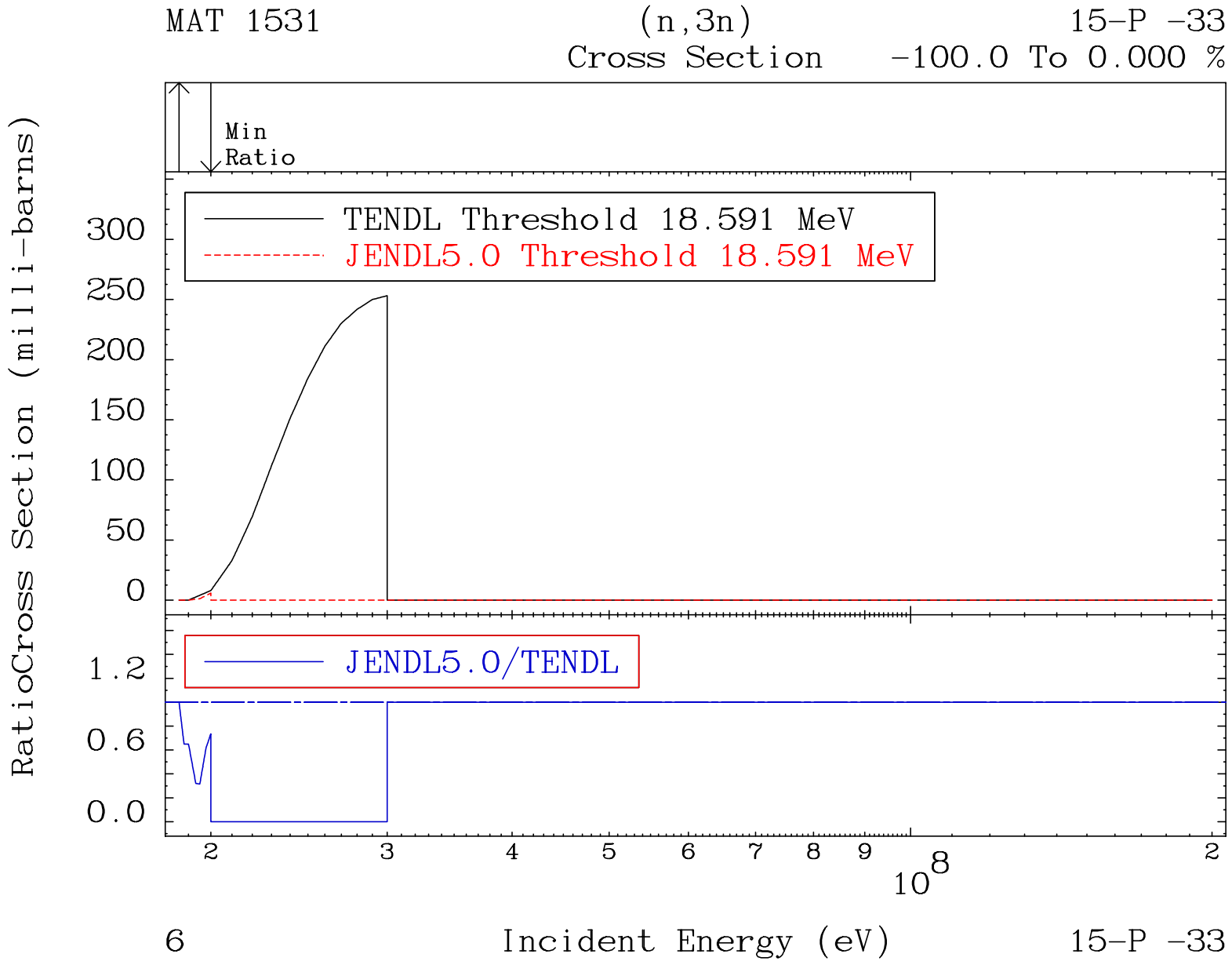

MAT 1531
Total
Cross Section
15-P -33
-99.82 To 1.209 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
15-P -33

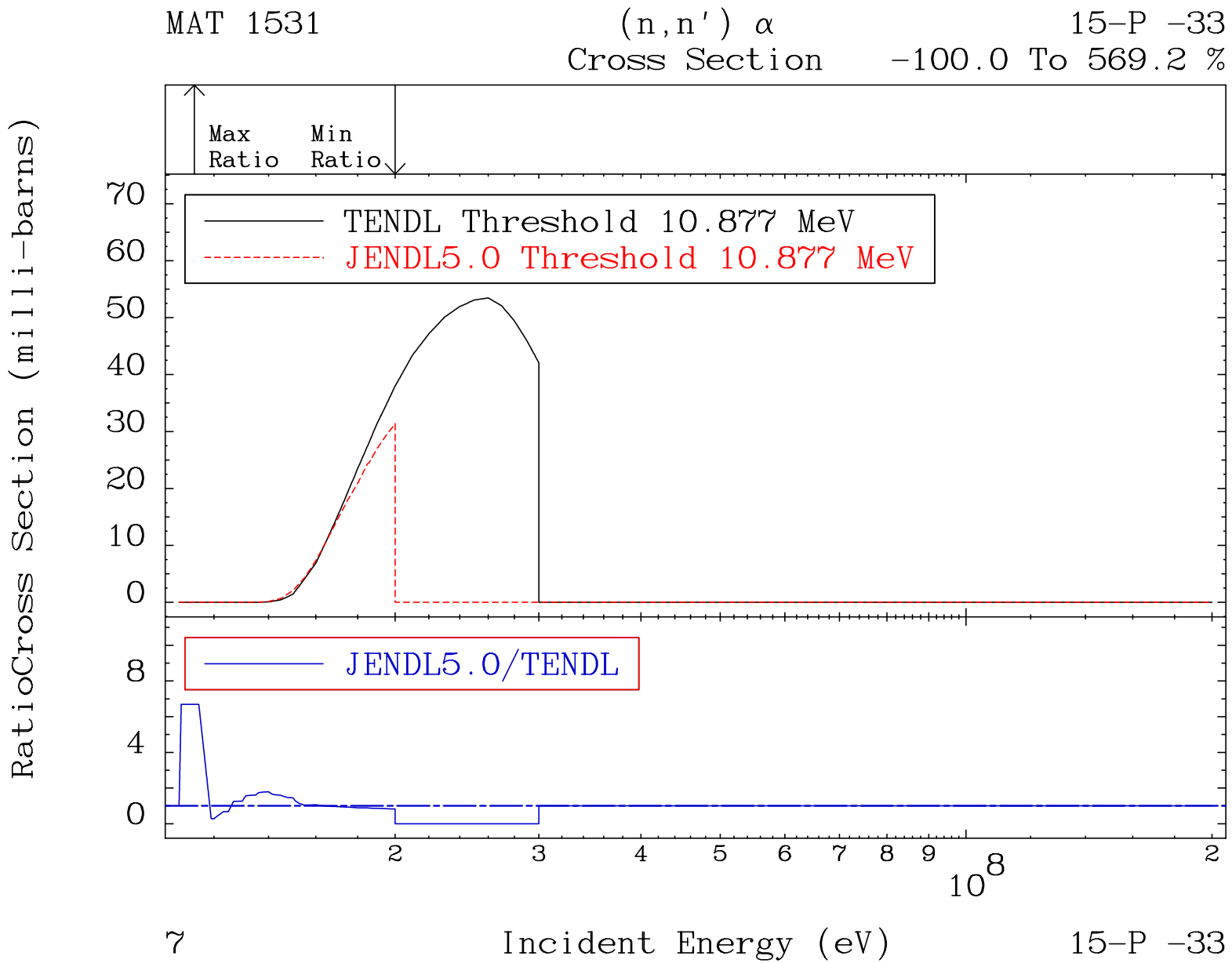

MAT 1531
Elastic
Cross Section
15-P -33
-99.82 To 4.374 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
15-P -33

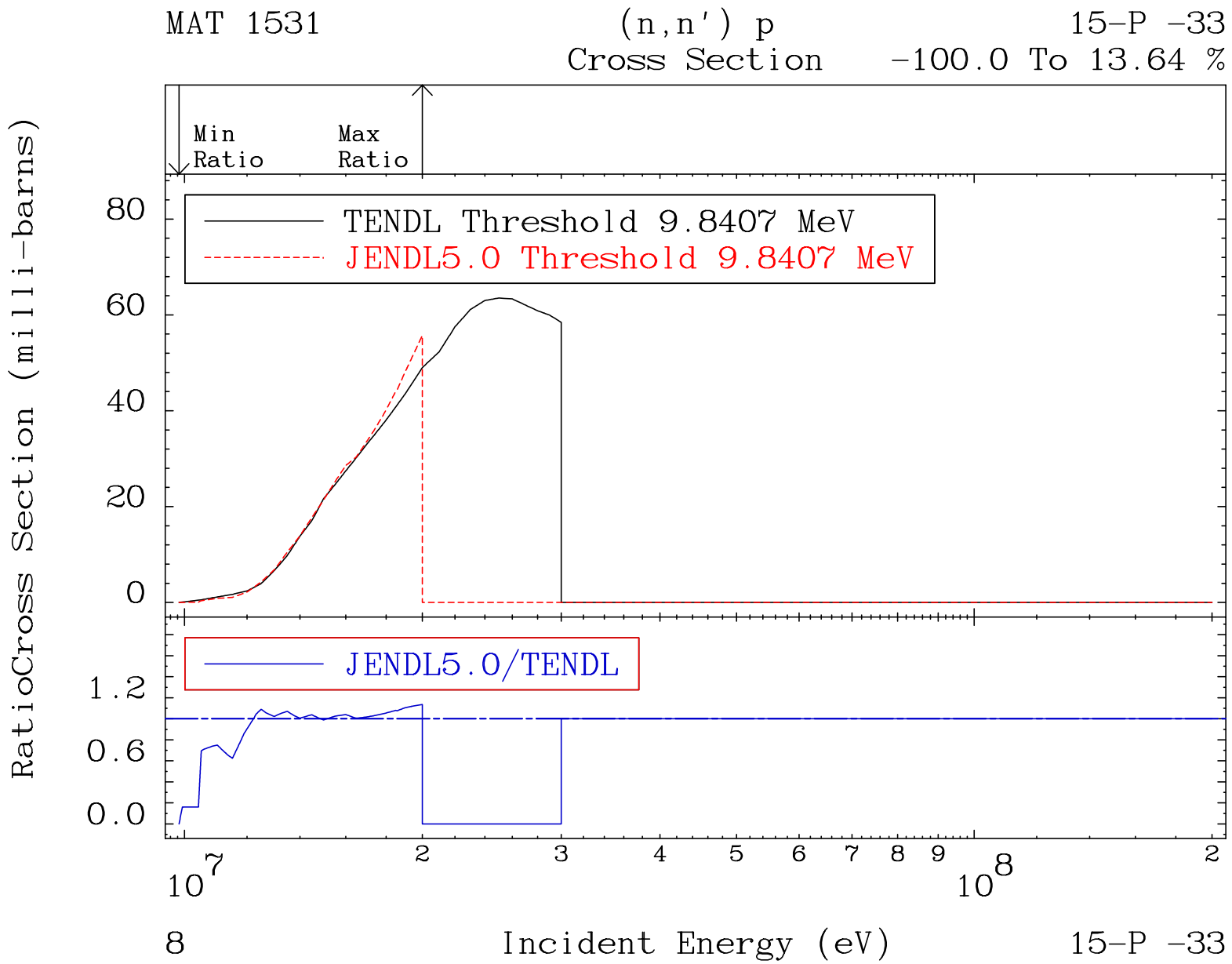

MAT 1531
Inelastic
Cross Section
15-P -33
-100.0 To 102.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4755 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
3.0
2.0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
3
Incident Energy (eV)
15-P -33

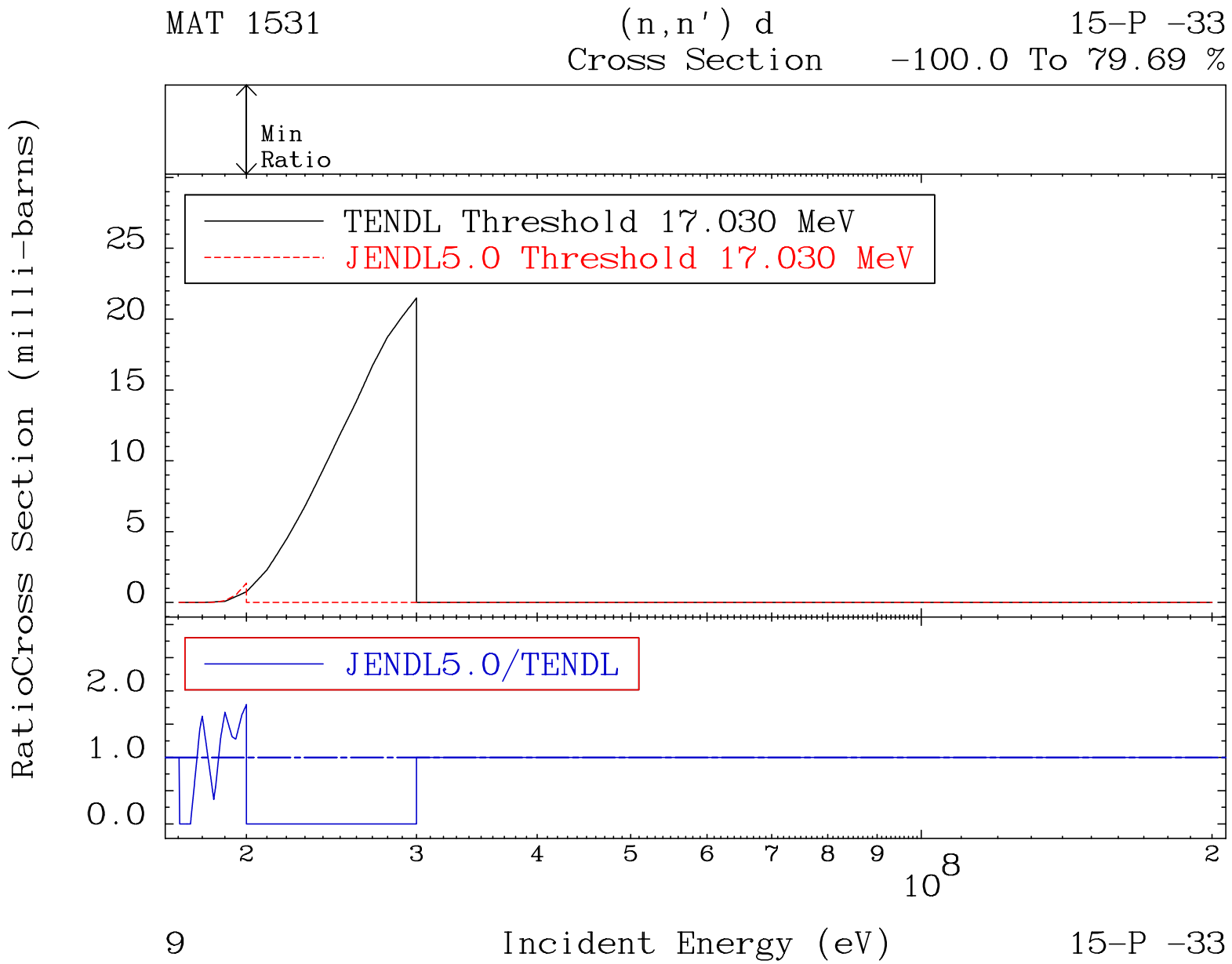

MAT 1531
(n,remainder)
Cross Section
15-P -33
-7.953 To 10.00 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.2
1.1
1.0
0.9
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
15-P -33

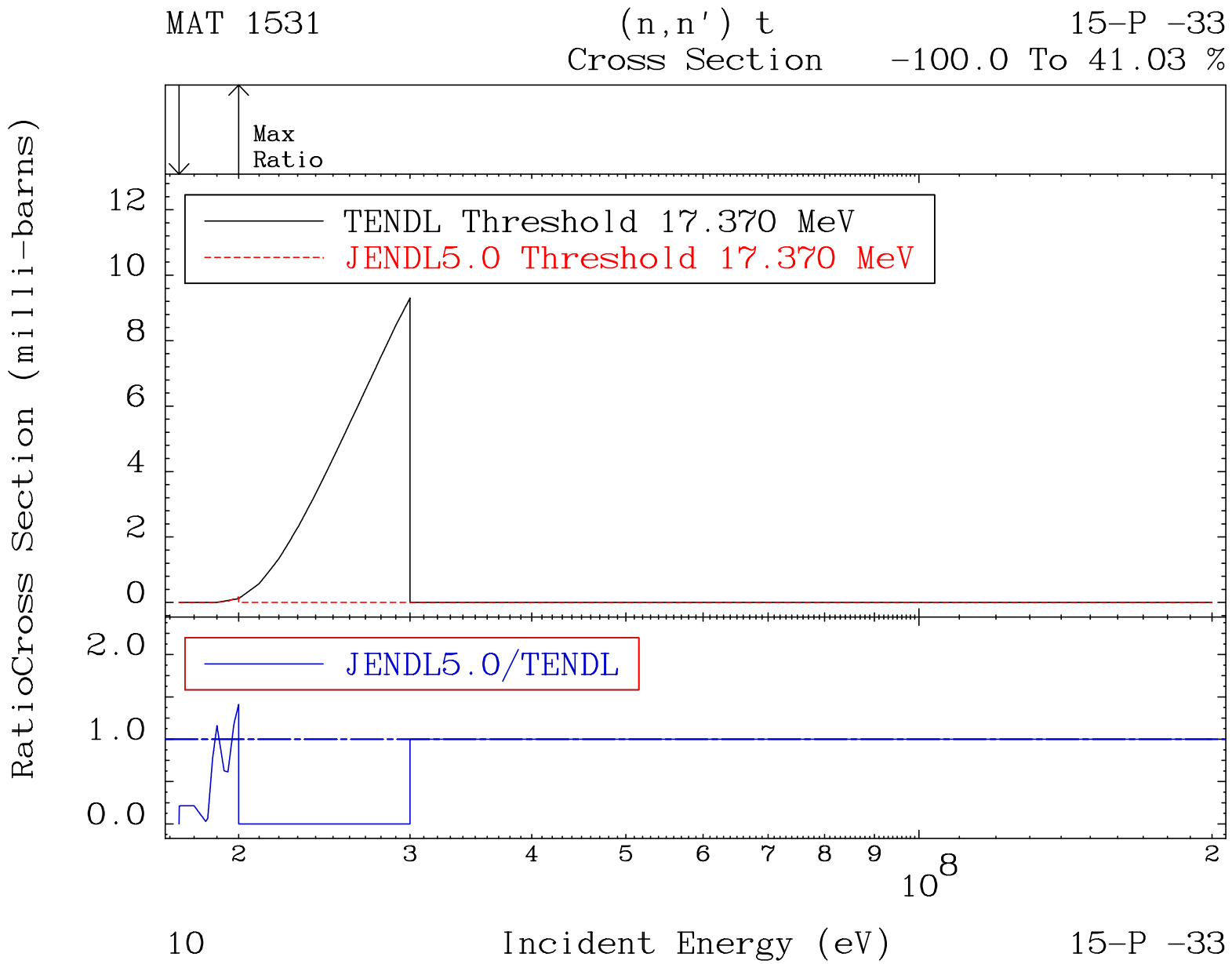

MAT 1531
(n,2n)
Cross Section
15-P -33
-100.0 To 381.5 %
Max Ratio
Min Ratio
TENDL Threshold 10.413 MeV
JENDL5.0 Threshold 10.413 MeV
0.8
0.6
0.4
0.2
0.0
Cross Section (barns)
JENDL5.0/TENDL
4
0
Ratio
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
15-P -33

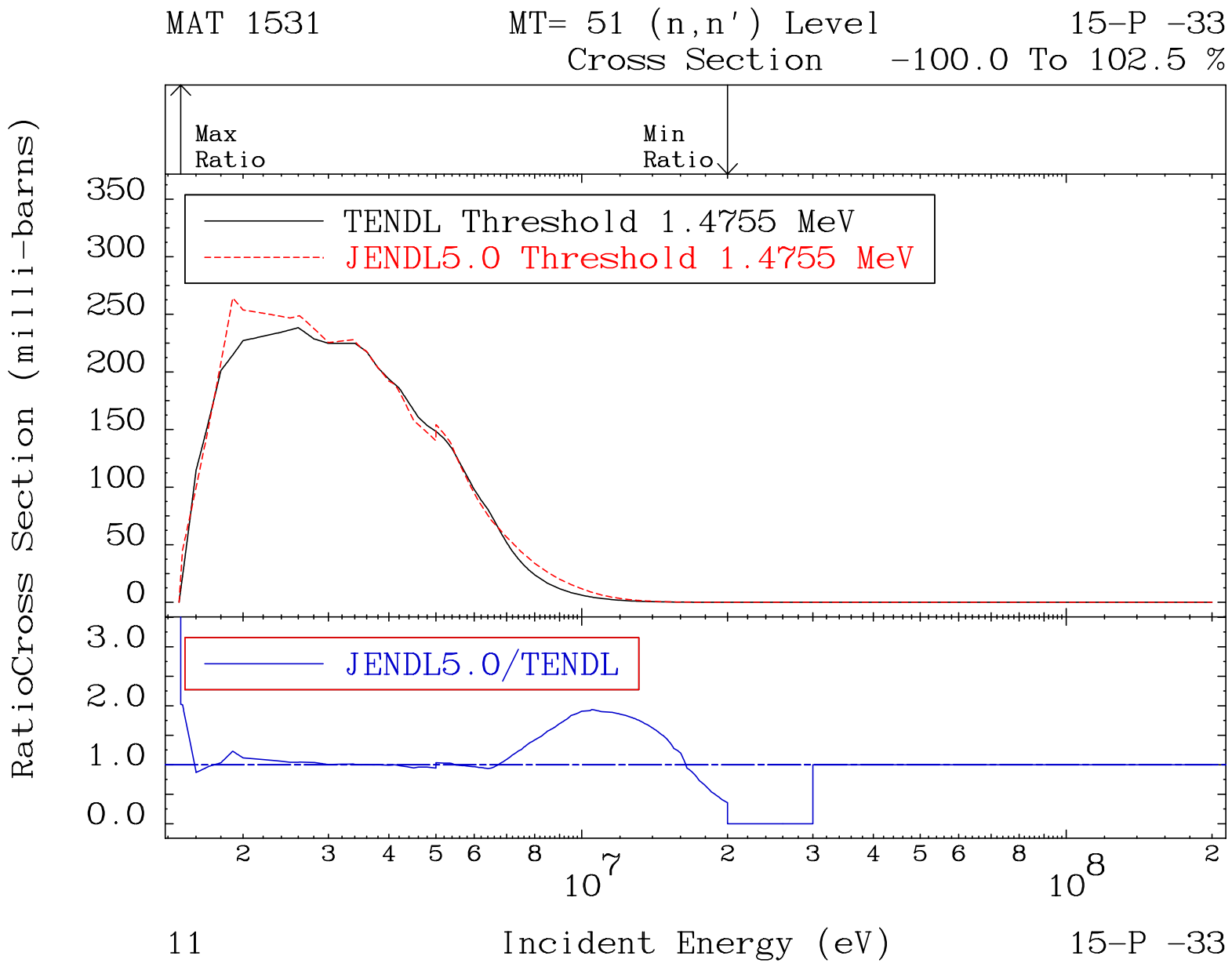

MAT 1531
(n,3n)
Cross Section
15-P -33
-100.0 To 0.000 %
Min
Ratio
TENDL Threshold 18.591 MeV
JENDL5.0 Threshold 18.591 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
15-P -33

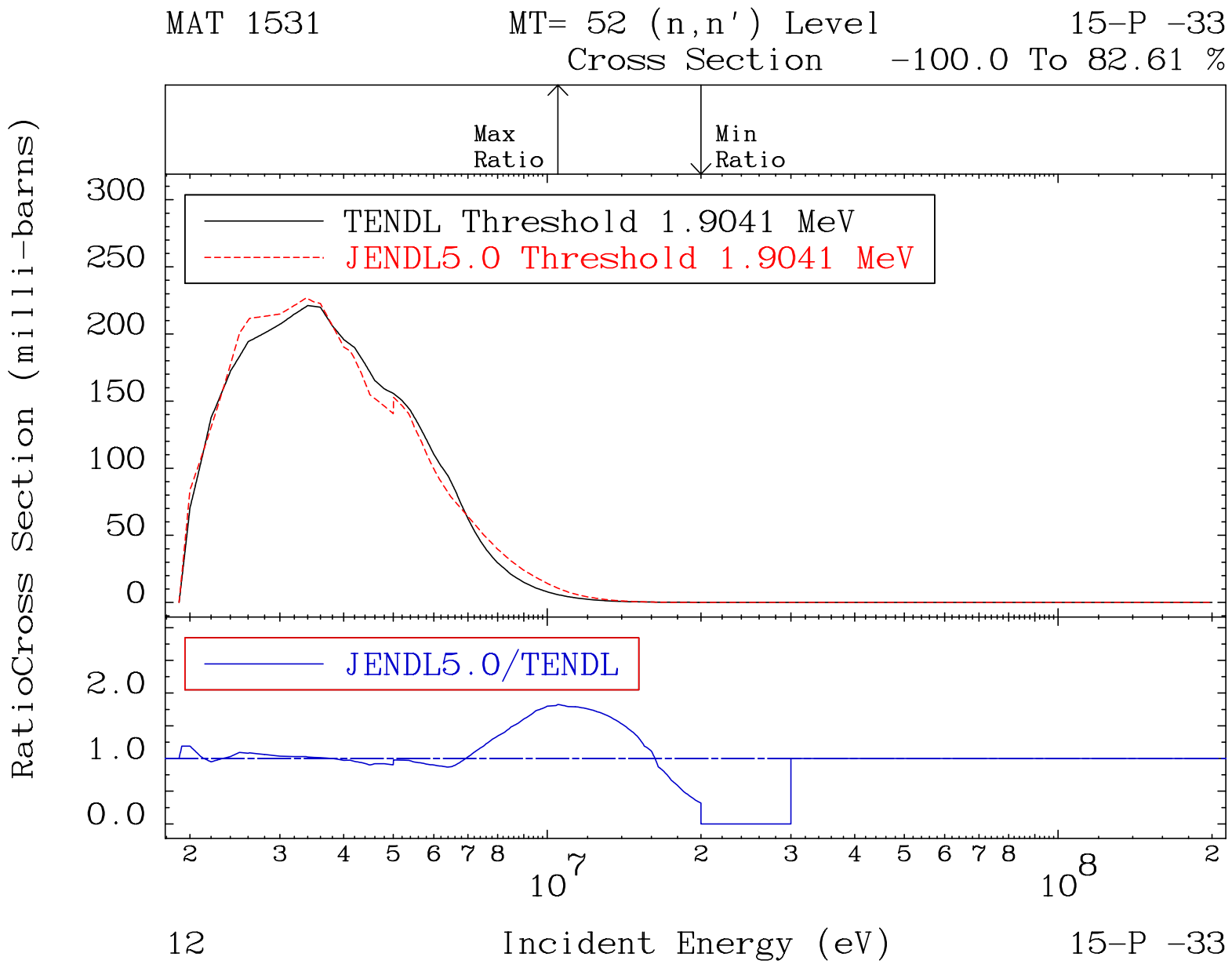

MAT 1531
(n,n') α
Cross Section
15-P -33
-100.0 To 569.2 %
Max Ratio
Min Ratio
TENDL Threshold 10.877 MeV
JENDL5.0 Threshold 10.877 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
7
Incident Energy (eV)
15-P -33

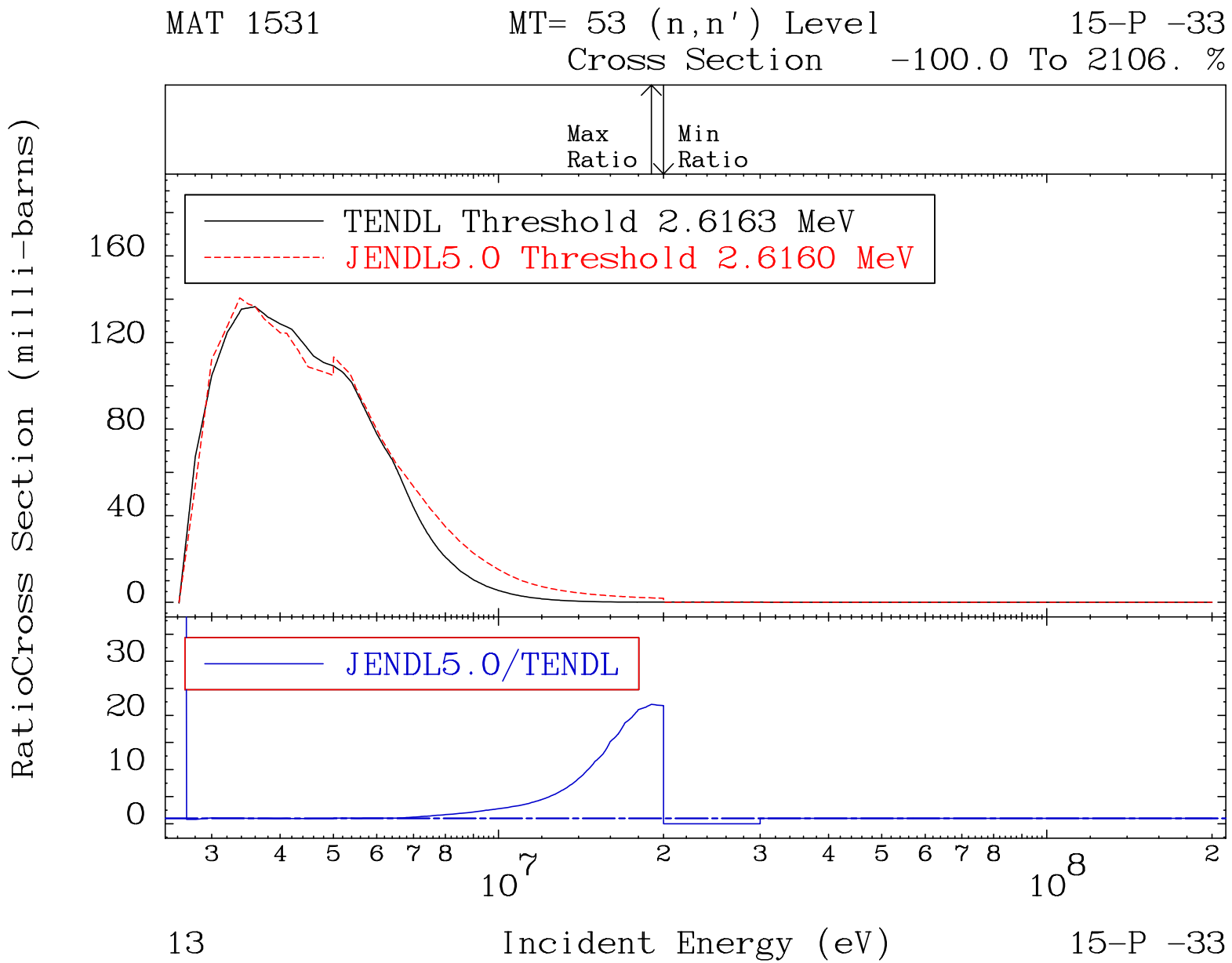

MAT 1531
(n,n') p
Cross Section
15-P -33
-100.0 To 13.64 %
Min Ratio
Max Ratio
TENDL Threshold 9.8407 MeV
JENDL5.0 Threshold 9.8407 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
8
15-P -33

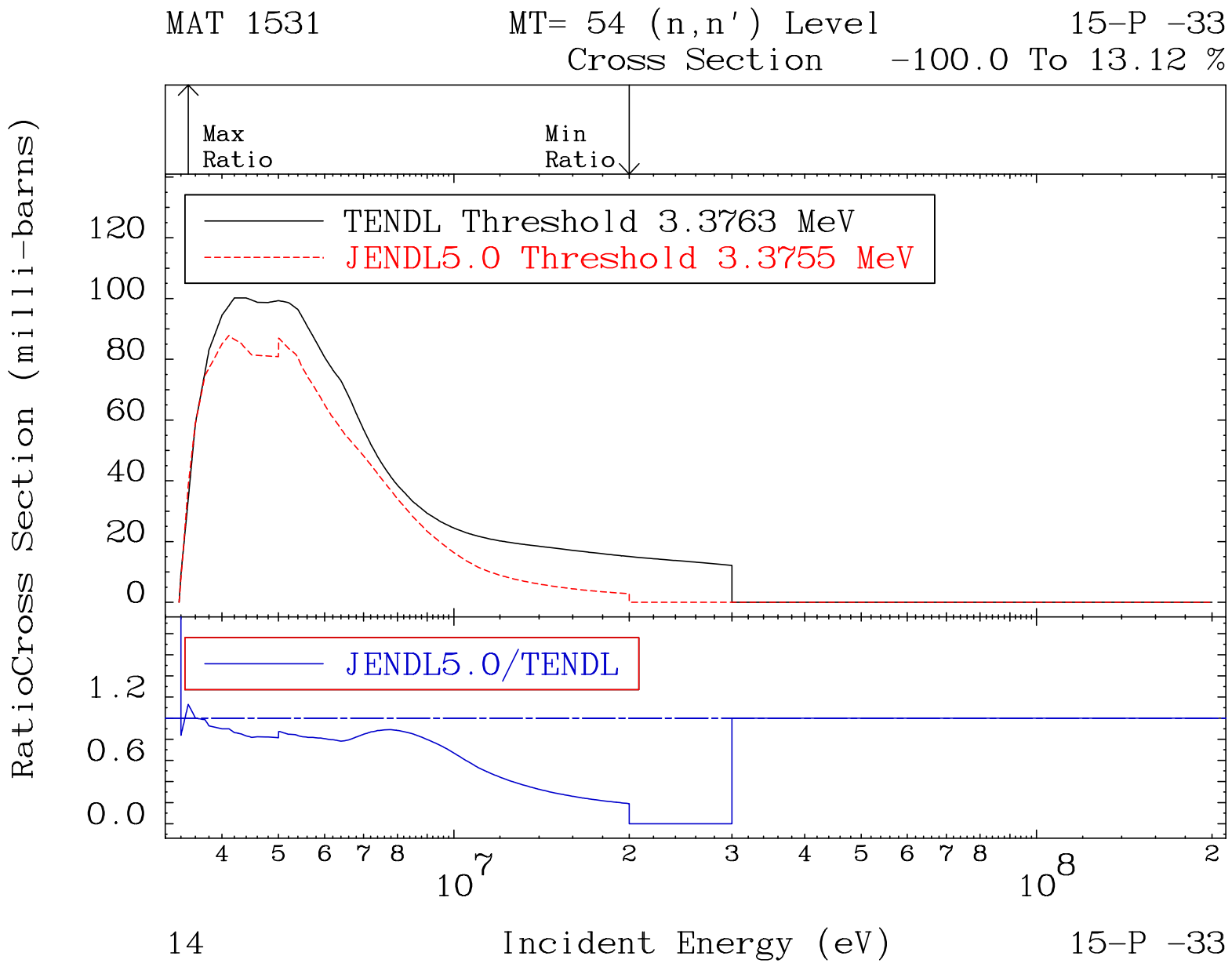

MAT 1531
(n,n') d
Cross Section
15-P -33
-100.0 To 79.69 %
Min
Ratio
TENDL Threshold 17.030 MeV
JENDL5.0 Threshold 17.030 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
15-P -33

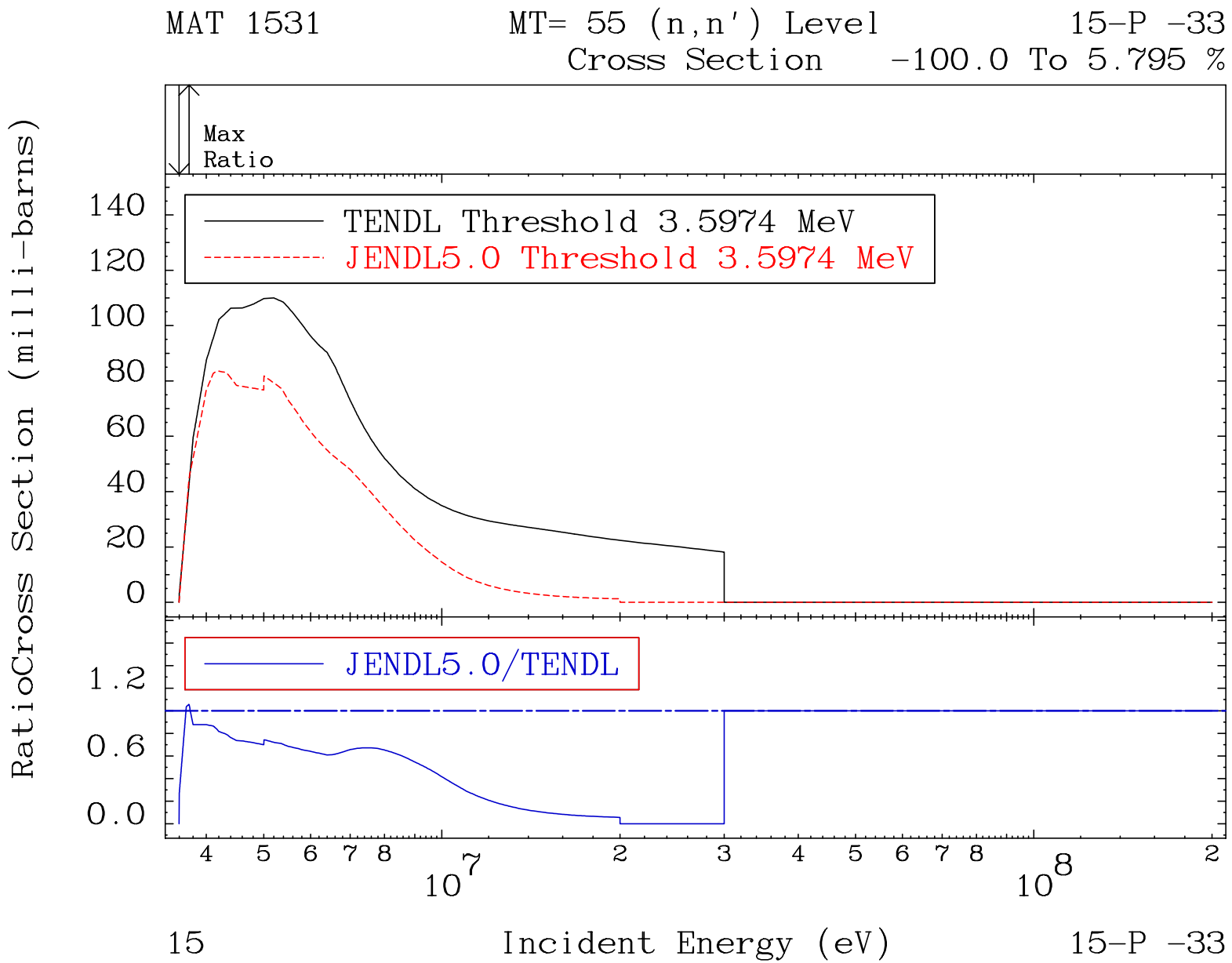

MAT 1531
(n,n') t
Cross Section
15-P -33
-100.0 To 41.03 %
Max
Ratio
TENDL Threshold 17.370 MeV
JENDL5.0 Threshold 17.370 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
15-P -33

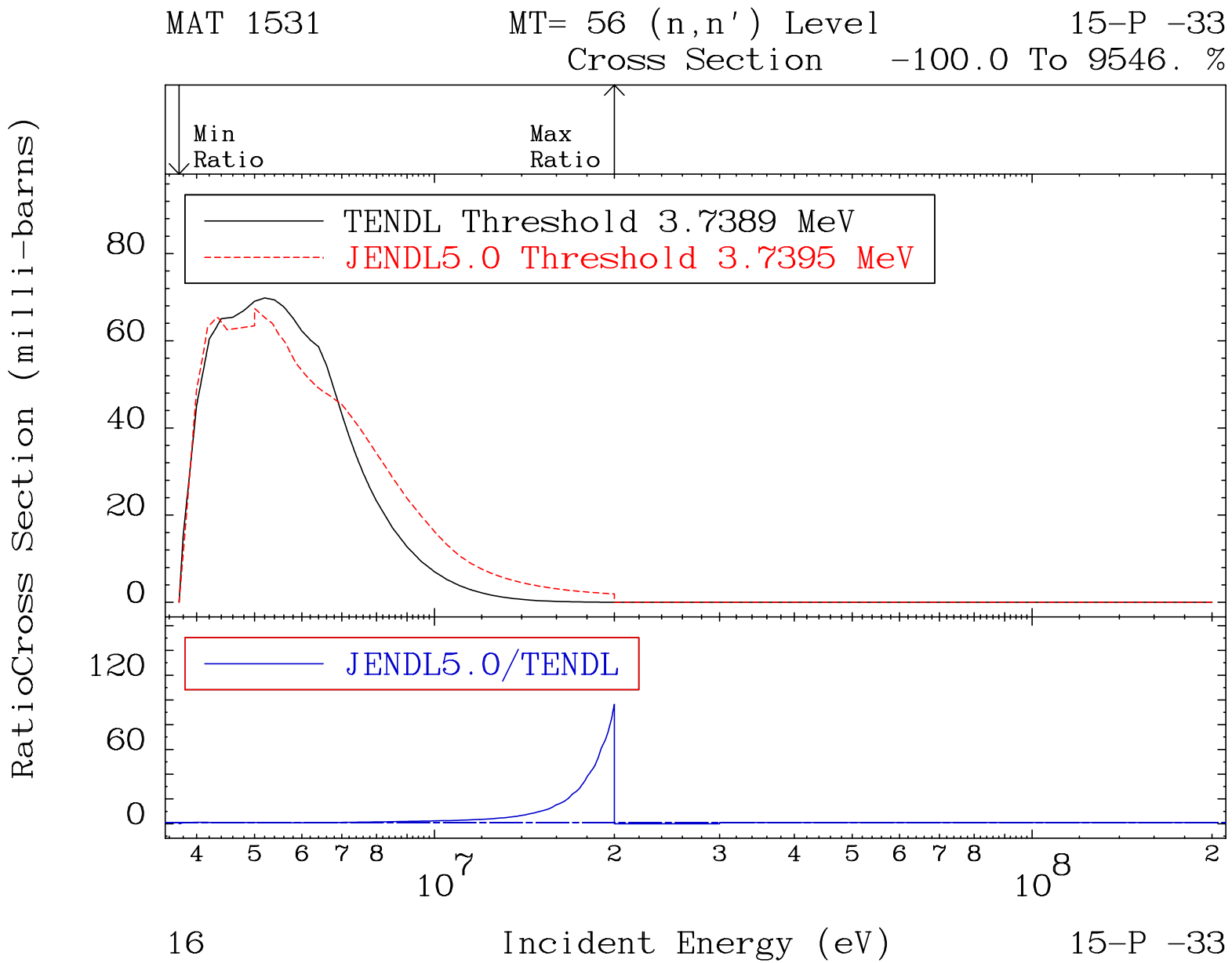

MAT 1531
MT= 51 (n,n') Level
15-P -33
Cross Section -100.0 To 102.5 %
Max Ratio
Min Ratio
TENDL Threshold 1.4755 MeV
JENDL5.0 Threshold 1.4755 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
15-P -33

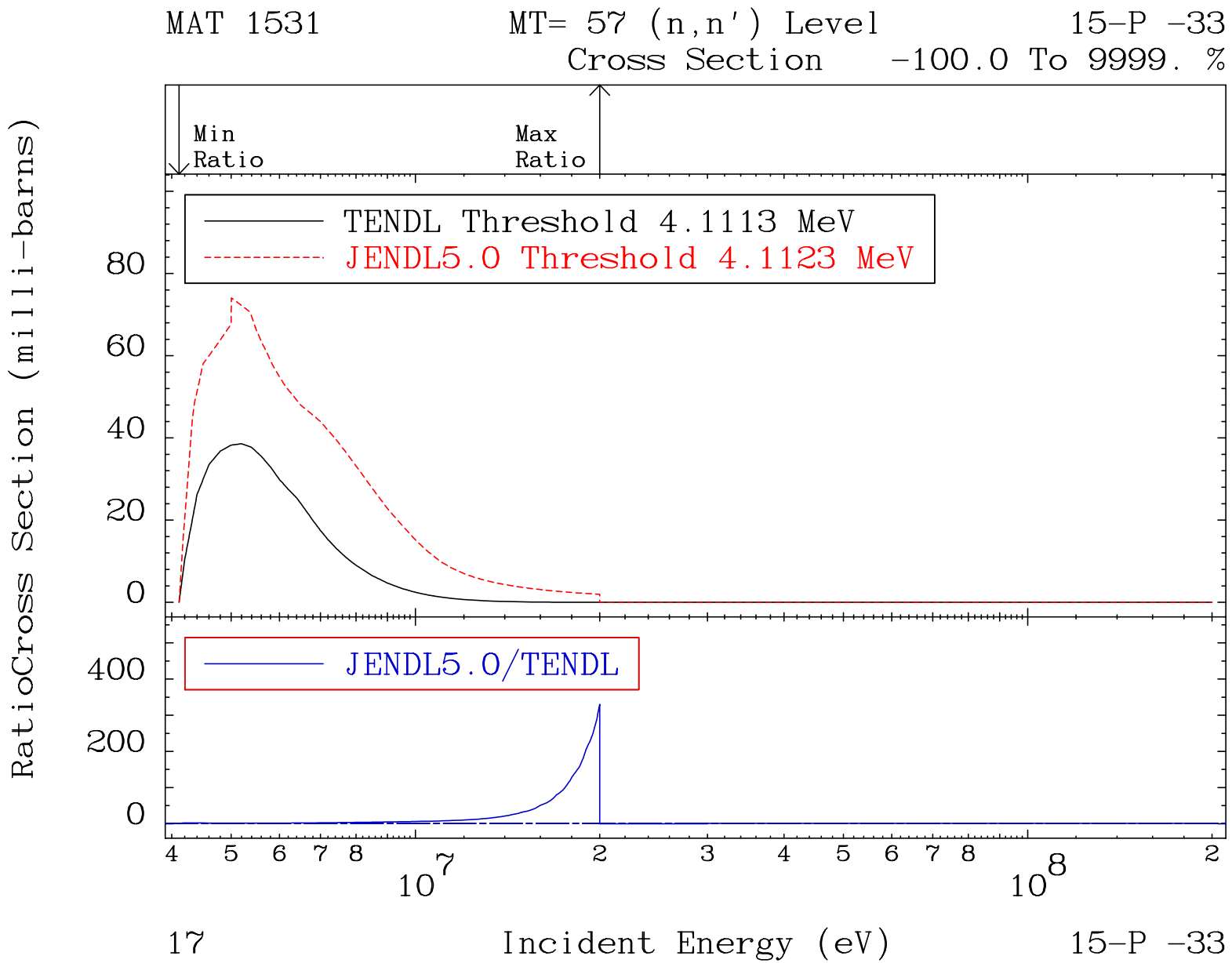

MAT 1531
MT= 52 (n,n') Level
15-P -33
Cross Section -100.0 To 82.61 %
Max Ratio
Min Ratio
TENDL Threshold 1.9041 MeV
JENDL5.0 Threshold 1.9041 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
15-P -33

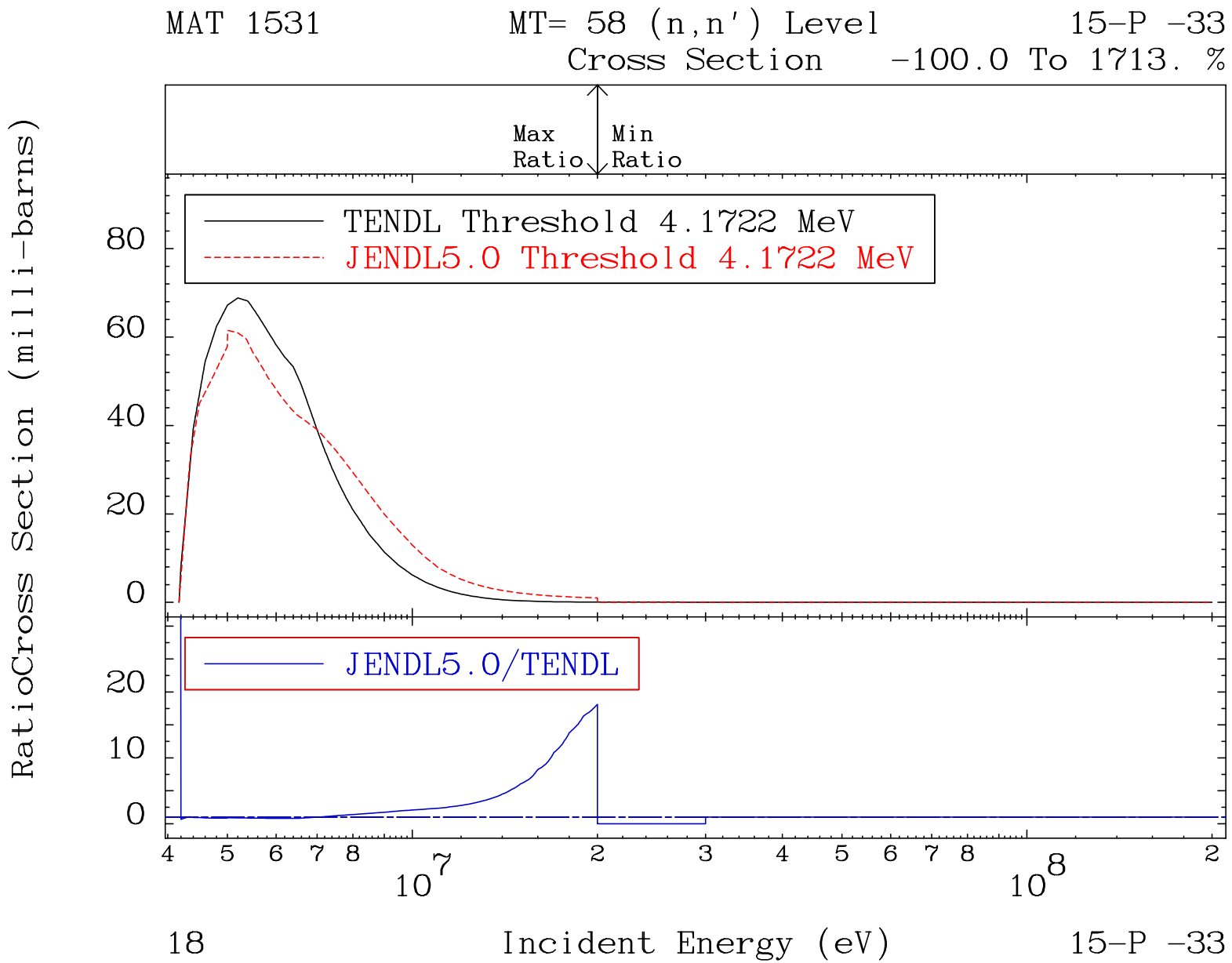

MAT 1531
MT= 53 (n,n') Level
15-P -33
Cross Section -100.0 To 2106. %
Max Ratio
Min Ratio
TENDL Threshold 2.6163 MeV
JENDL5.0 Threshold 2.6160 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
30
20
10
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
15-P -33

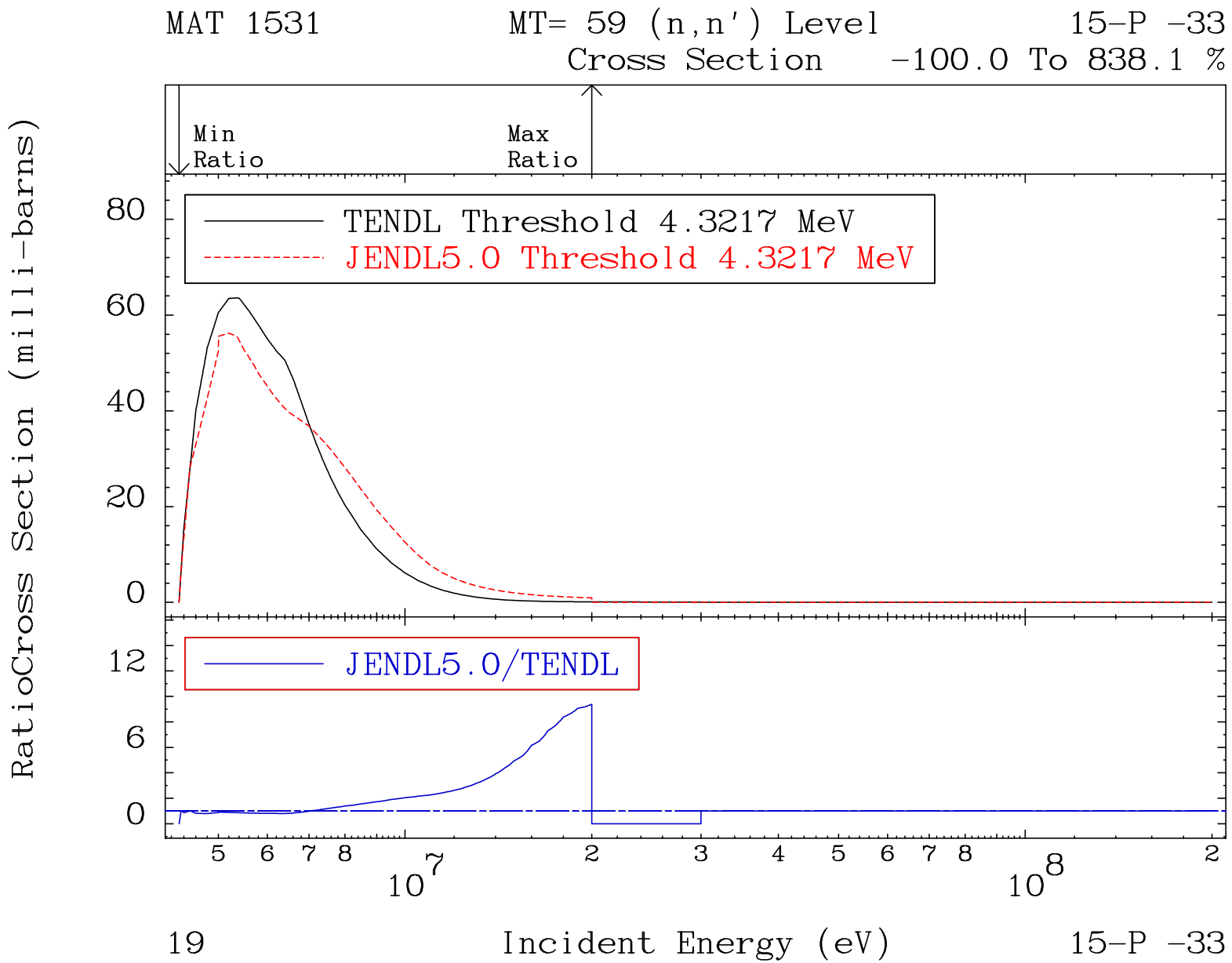

MAT 1531
MT= 54 (n,n') Level
15-P -33
Cross Section -100.0 To 13.12 %
Max Ratio
Min Ratio
TENDL Threshold 3.3763 MeV
JENDL5.0 Threshold 3.3755 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
15-P -33

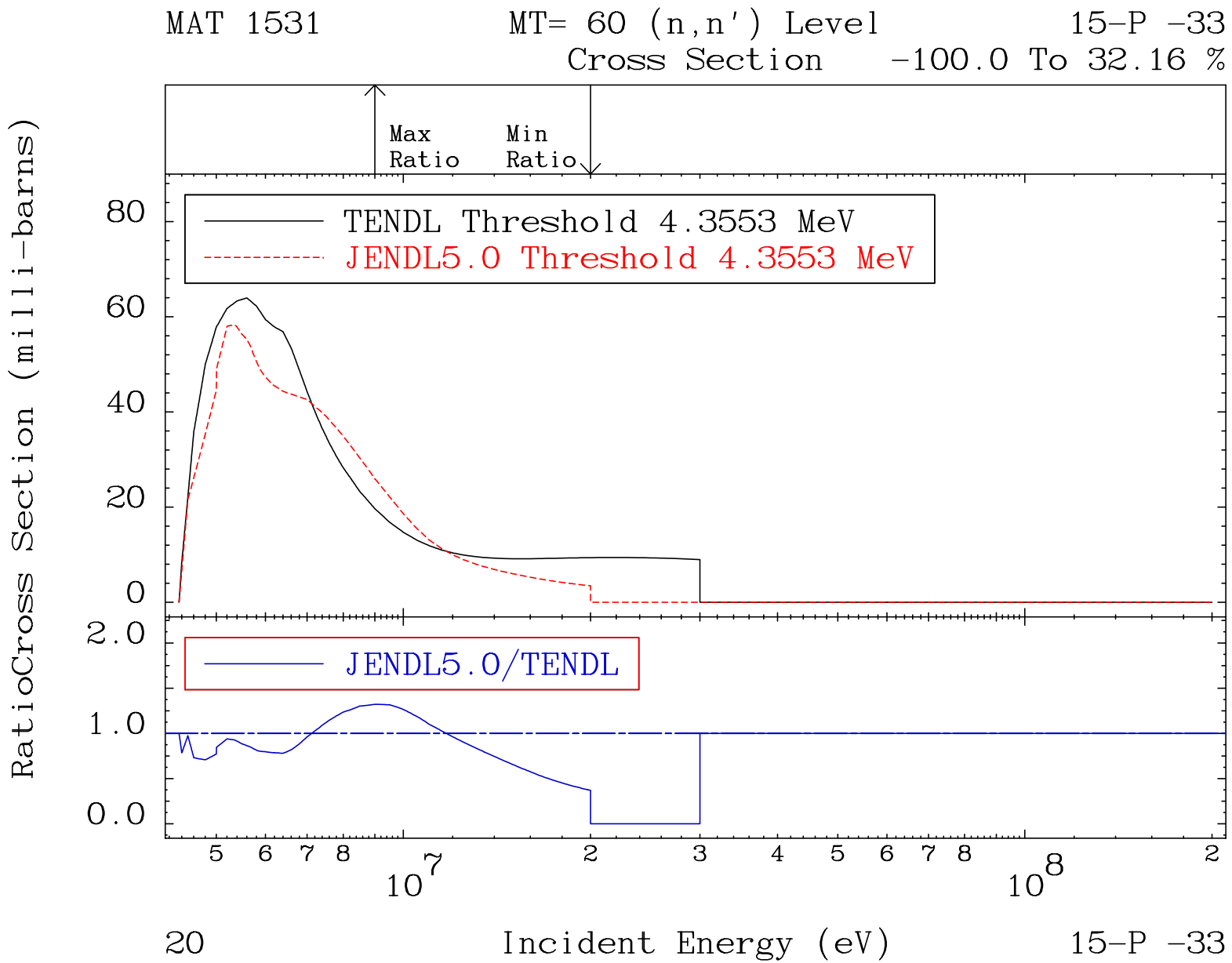

MAT 1531
MT= 55 (n,n') Level
15-P -33
Cross Section -100.0 To 5.795 %
Max
Ratio
TENDL Threshold 3.5974 MeV
JENDL5.0 Threshold 3.5974 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.2
0.6
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
15-P -33

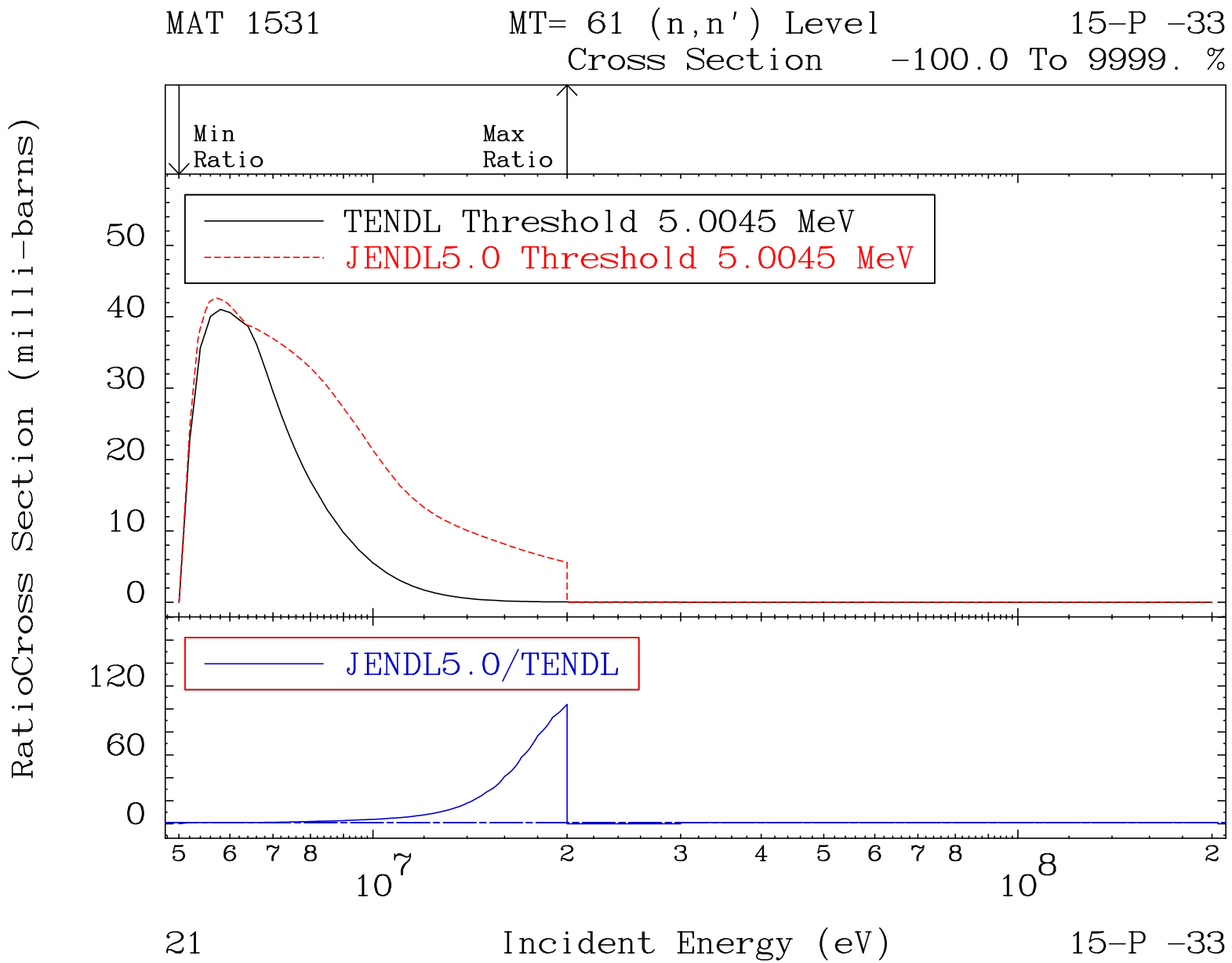

MAT 1531
MT= 56 (n,n') Level
15-P -33
Cross Section -100.0 To 9546. %
Min Ratio
Max Ratio
TENDL Threshold 3.7389 MeV
JENDL5.0 Threshold 3.7395 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
120
60
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
15-P -33

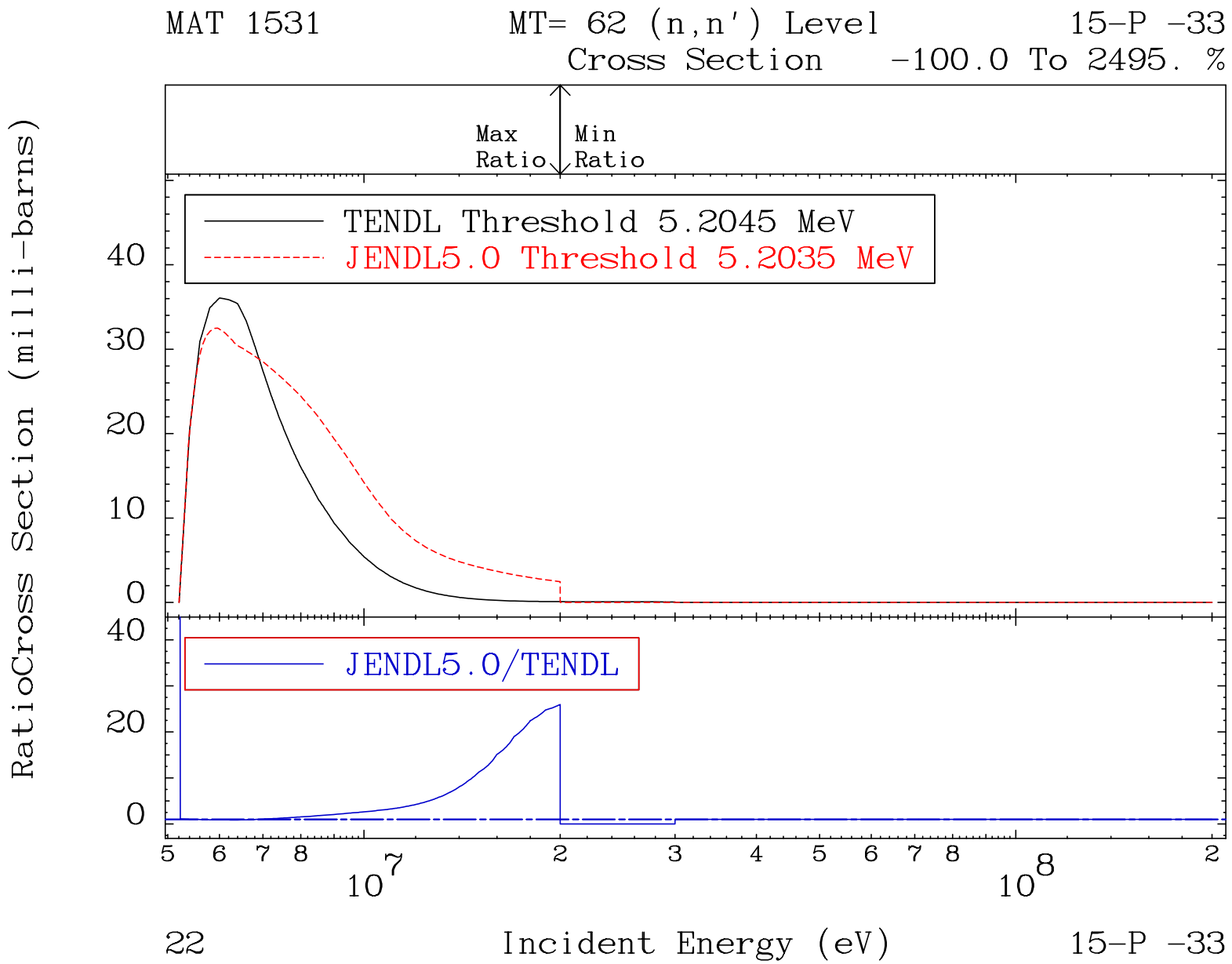

MAT 1531
MT= 57 (n,n') Level
15-P -33
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.1113 MeV
JENDL5.0 Threshold 4.1123 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
400
200
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
15-P -33

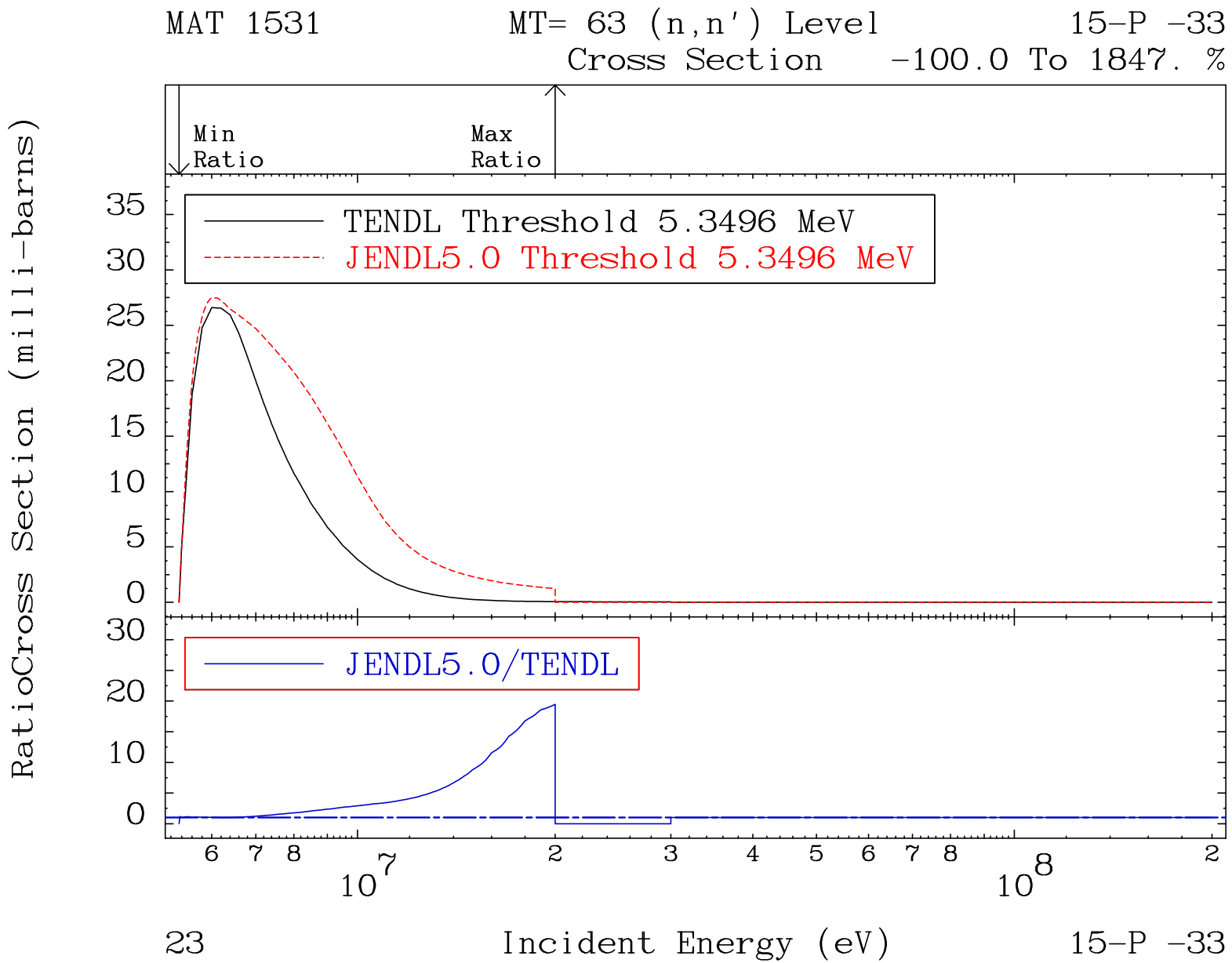

MAT 1531
MT= 58 (n,n') Level
15-P -33
Cross Section -100.0 To 1713. %
Max Ratio
Min Ratio
TENDL Threshold 4.1722 MeV
JENDL5.0 Threshold 4.1722 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
20
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
15-P -33

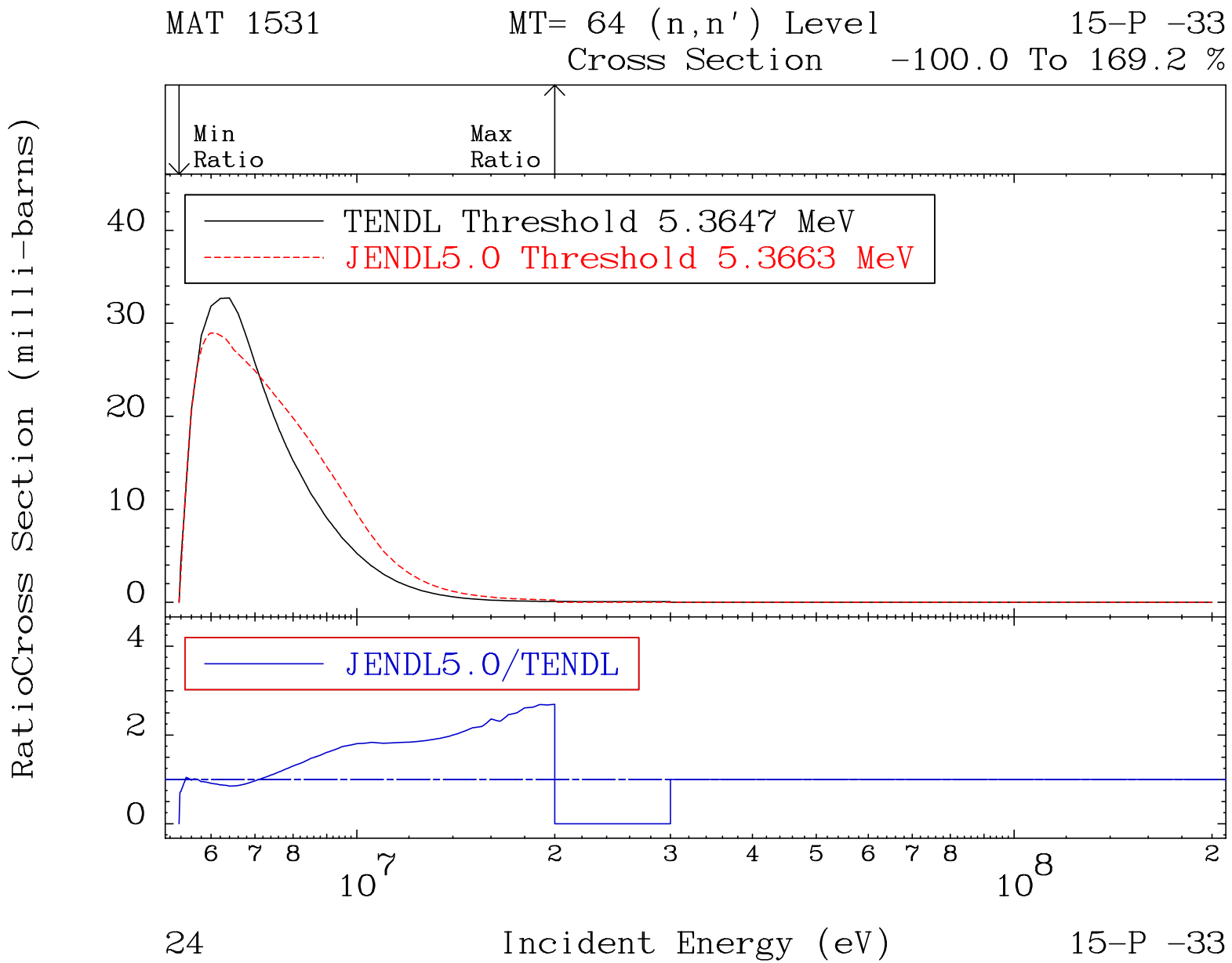

MAT 1531
MT= 59 (n,n') Level
15-P -33
Cross Section
-100.0 To 838.1 %
Min Ratio
Max Ratio
TENDL Threshold 4.3217 MeV
JENDL5.0 Threshold 4.3217 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
12
6
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
15-P -33

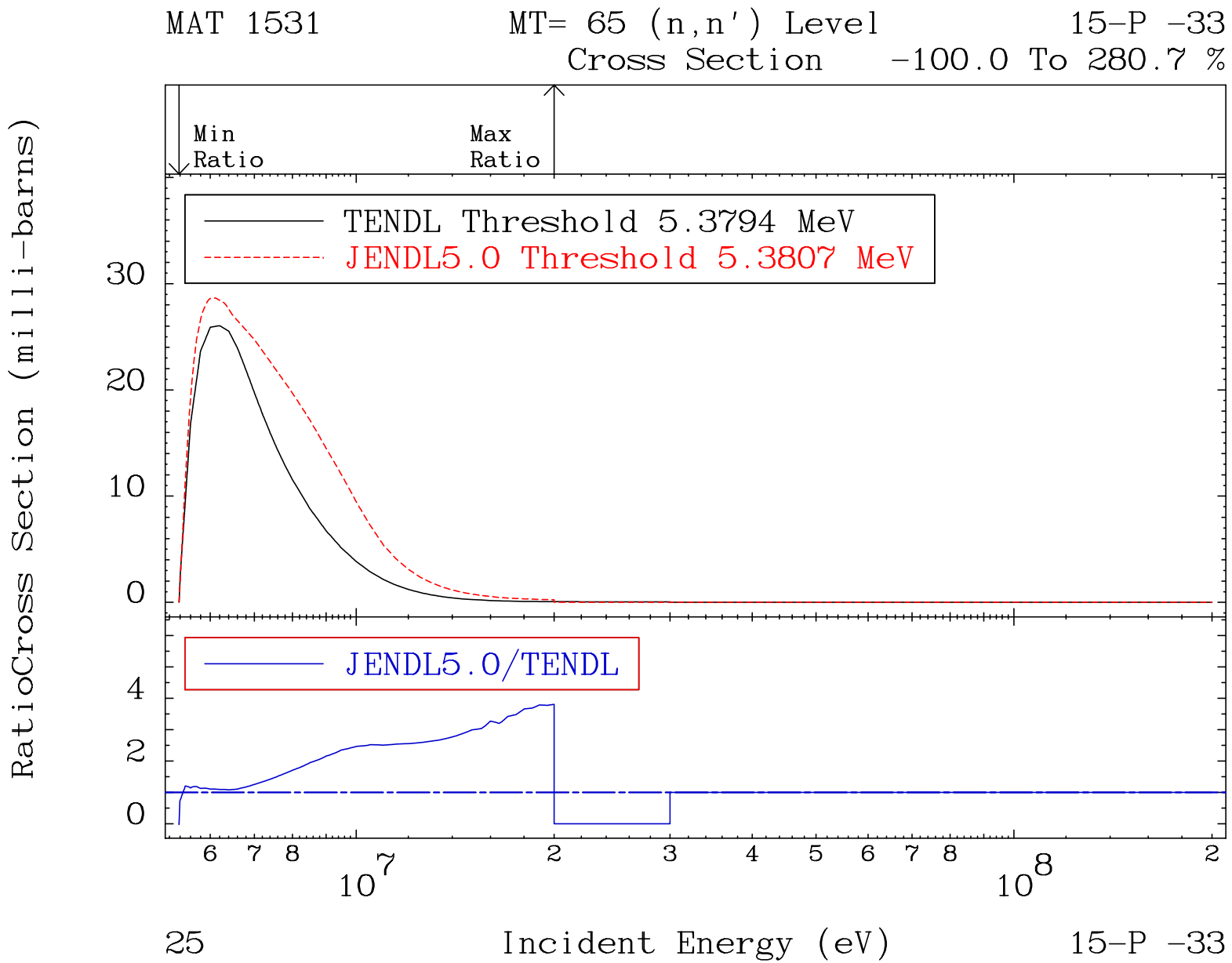

MAT 1531
MT= 60 (n,n') Level
15-P -33
Cross Section -100.0 To 32.16 %
Max Ratio
Min Ratio
TENDL Threshold 4.3553 MeV
JENDL5.0 Threshold 4.3553 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
15-P -33

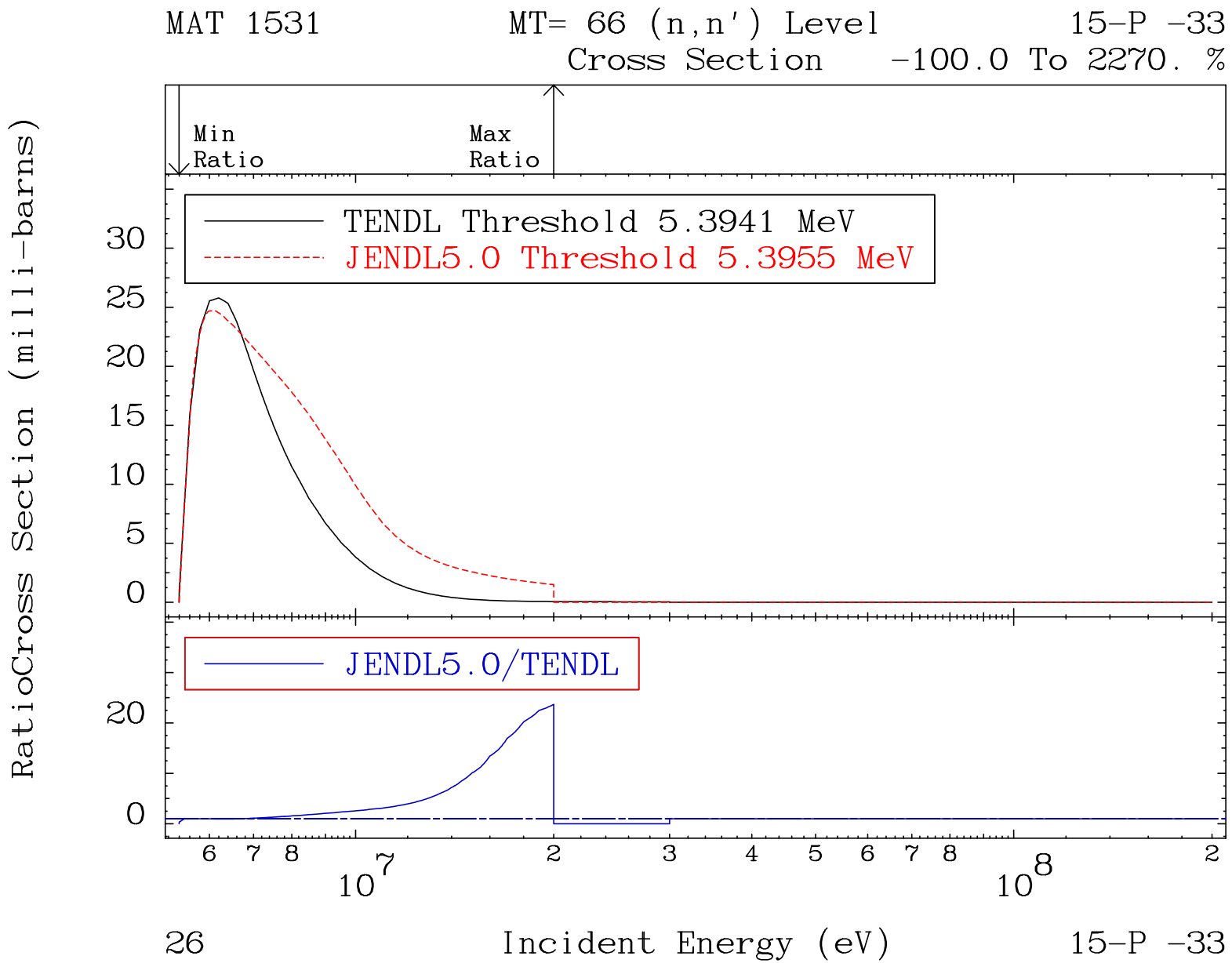

MAT 1531
MT= 61 (n,n') Level
15-P -33
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.0045 MeV
JENDL5.0 Threshold 5.0045 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
120
60
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
15-P -33

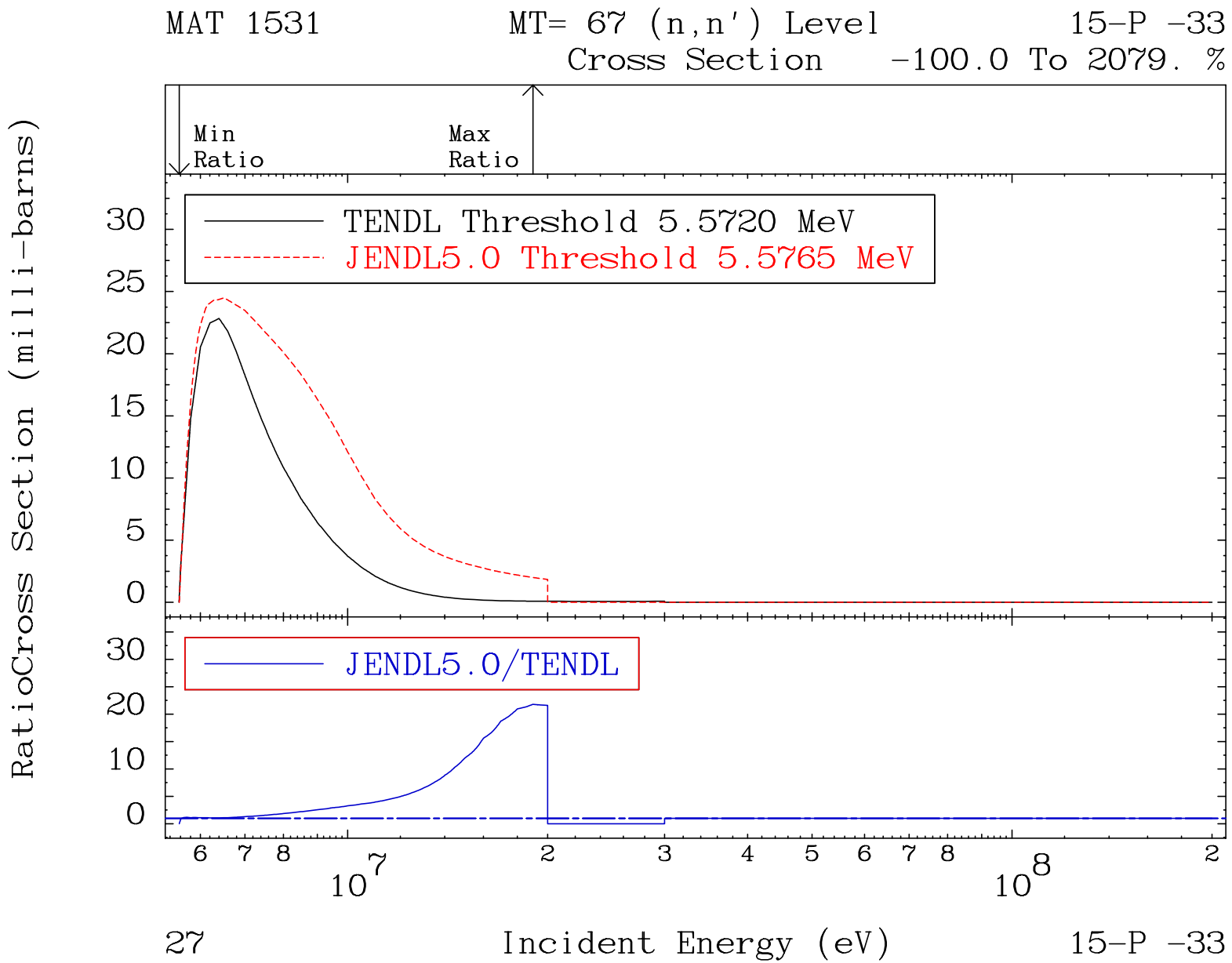

MAT 1531
MT= 62 (n,n') Level
15-P -33
Cross Section -100.0 To 2495. %
Max Ratio
Min Ratio
TENDL Threshold 5.2045 MeV
JENDL5.0 Threshold 5.2035 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
40
20
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
15-P -33

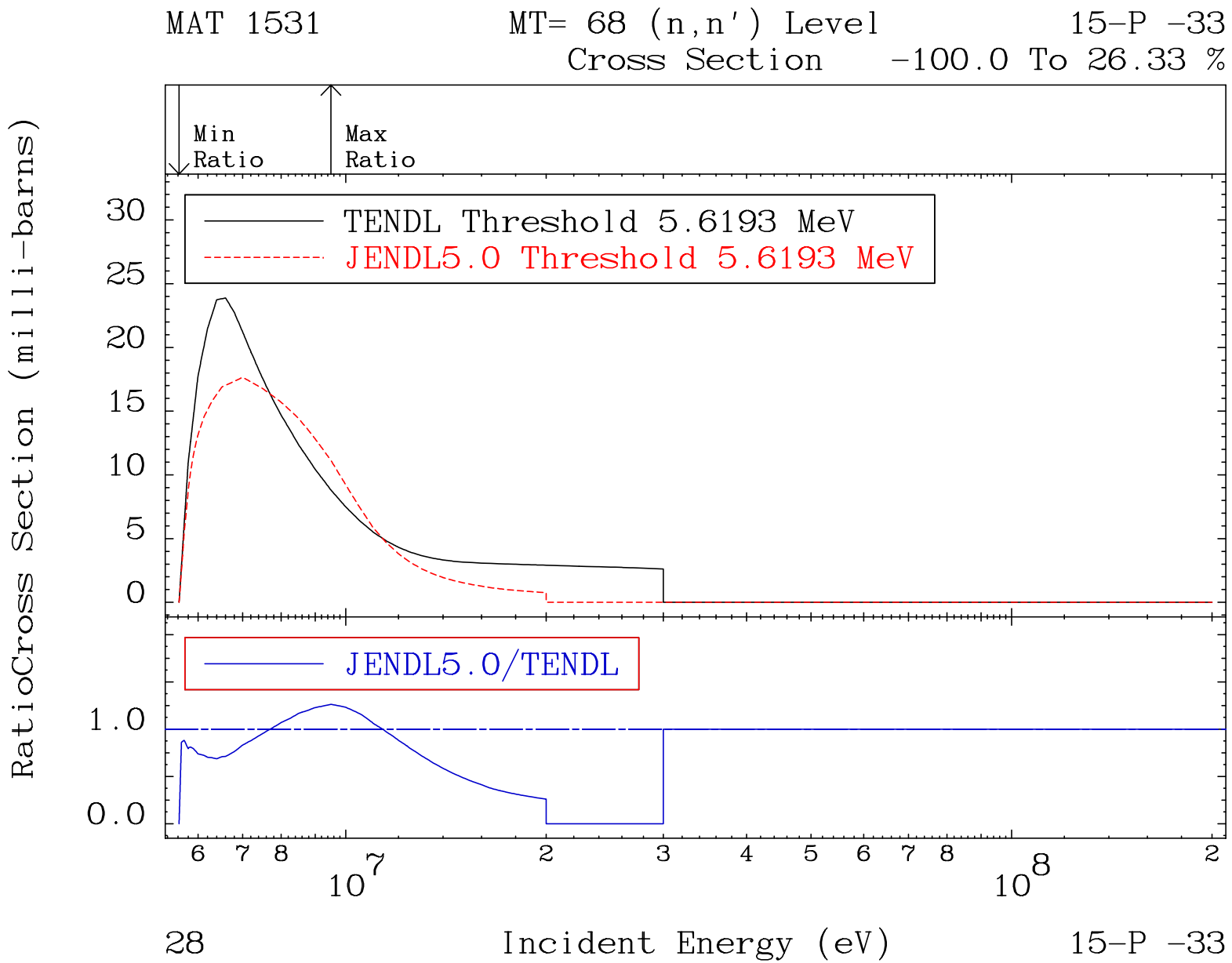

MAT 1531
MT= 63 (n,n') Level
15-P -33
Cross Section -100.0 To 1847. %
Min Ratio
Max Ratio
TENDL Threshold 5.3496 MeV
JENDL5.0 Threshold 5.3496 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
30
20
10
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
15-P -33

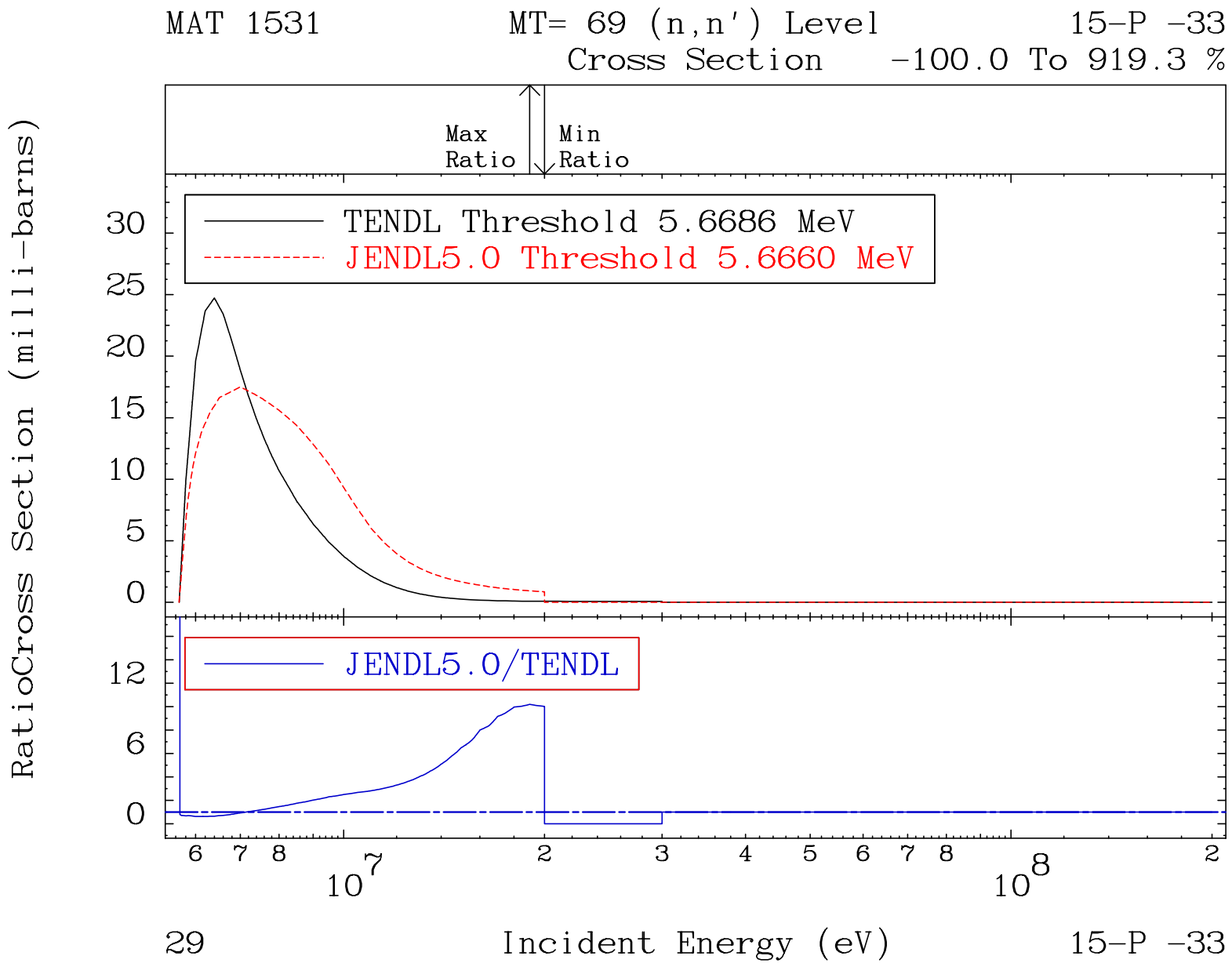

MAT 1531
MT= 64 (n,n') Level
15-P -33
Cross Section -100.0 To 169.2 %
Min Ratio
Max Ratio
TENDL Threshold 5.3647 MeV
JENDL5.0 Threshold 5.3663 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
15-P -33

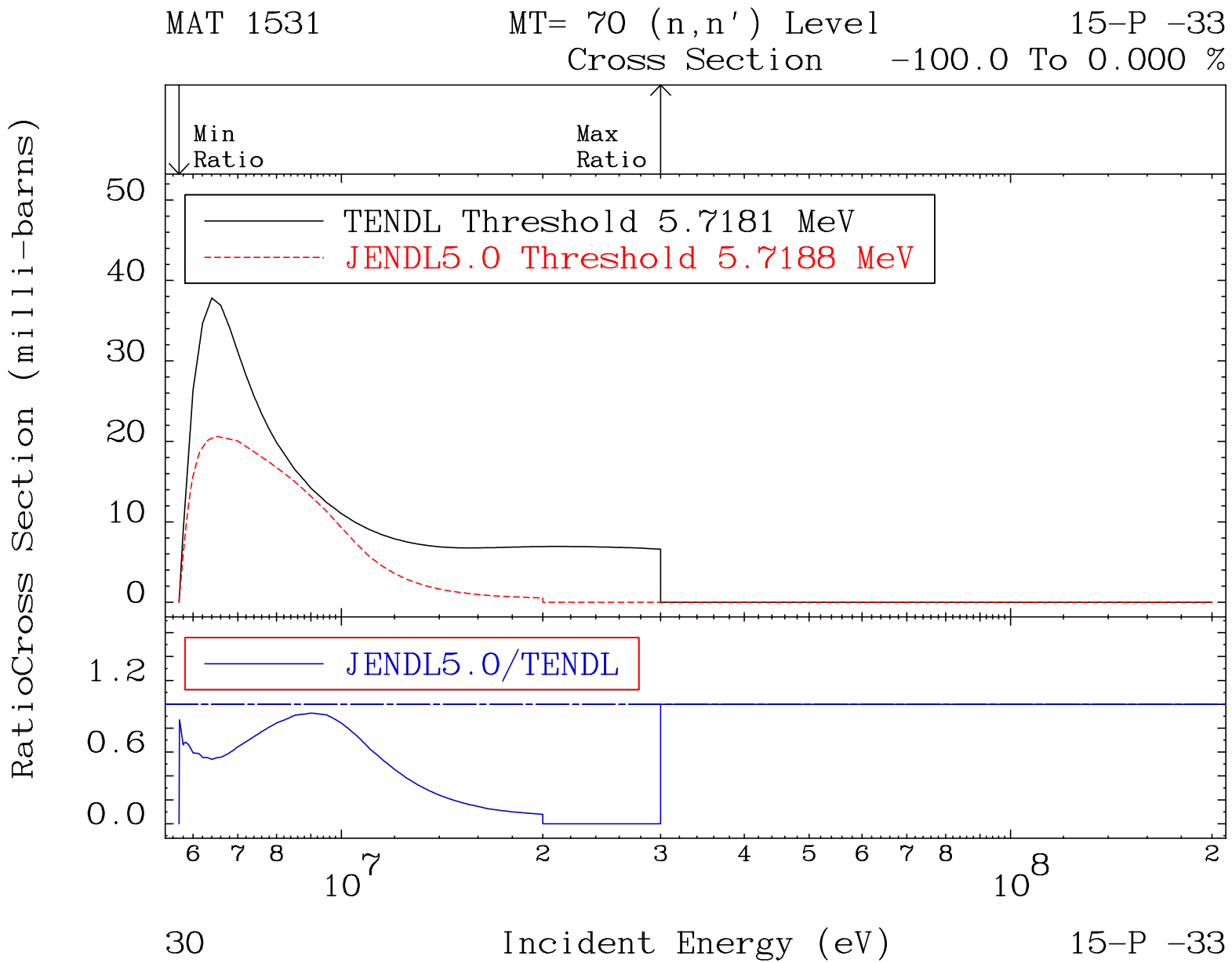

MAT 1531
MT= 65 (n,n') Level
15-P -33
Cross Section -100.0 To 280.7 %
Min Ratio
Max Ratio
TENDL Threshold 5.3794 MeV
JENDL5.0 Threshold 5.3807 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
4
2
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
15-P -33

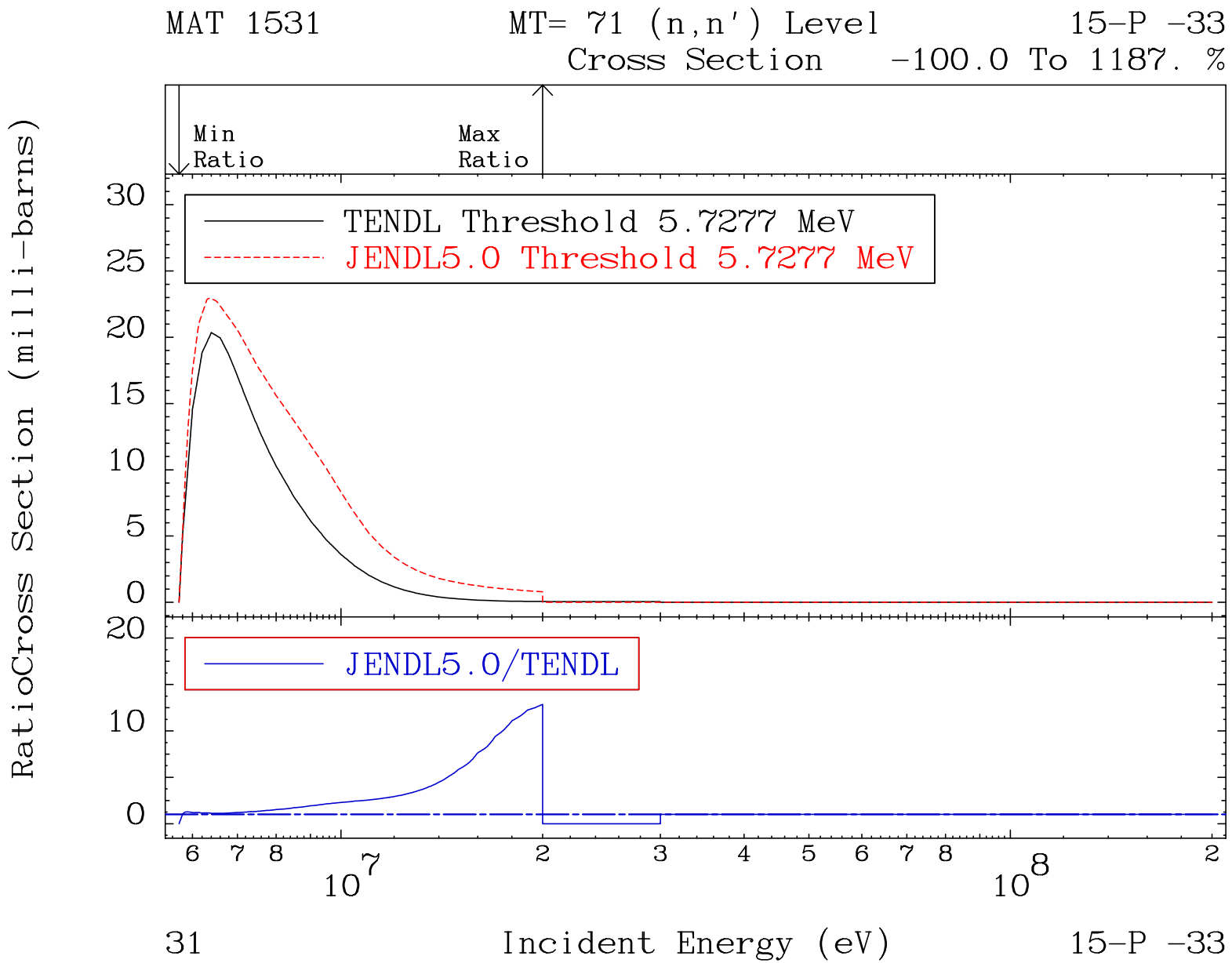

MAT 1531
MT= 66 (n,n') Level
15-P -33
Cross Section -100.0 To 2270. %
Min Ratio
Max Ratio
TENDL Threshold 5.3941 MeV
JENDL5.0 Threshold 5.3955 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
20
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
15-P -33

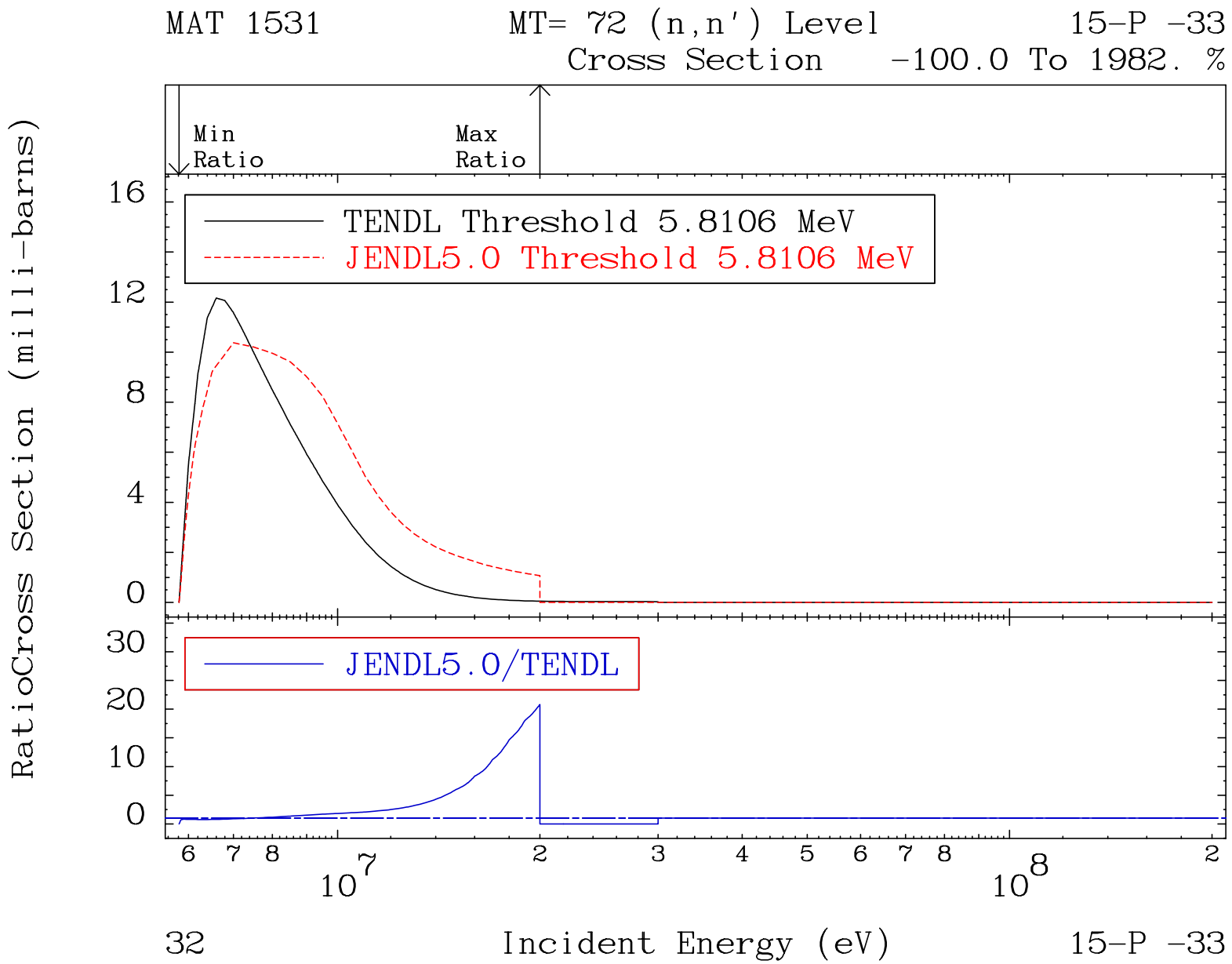

MAT 1531
MT= 67 (n,n') Level
15-P -33
Cross Section -100.0 To 2079. %
Min Ratio
Max Ratio
TENDL Threshold 5.5720 MeV
JENDL5.0 Threshold 5.5765 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
27
15-P -33

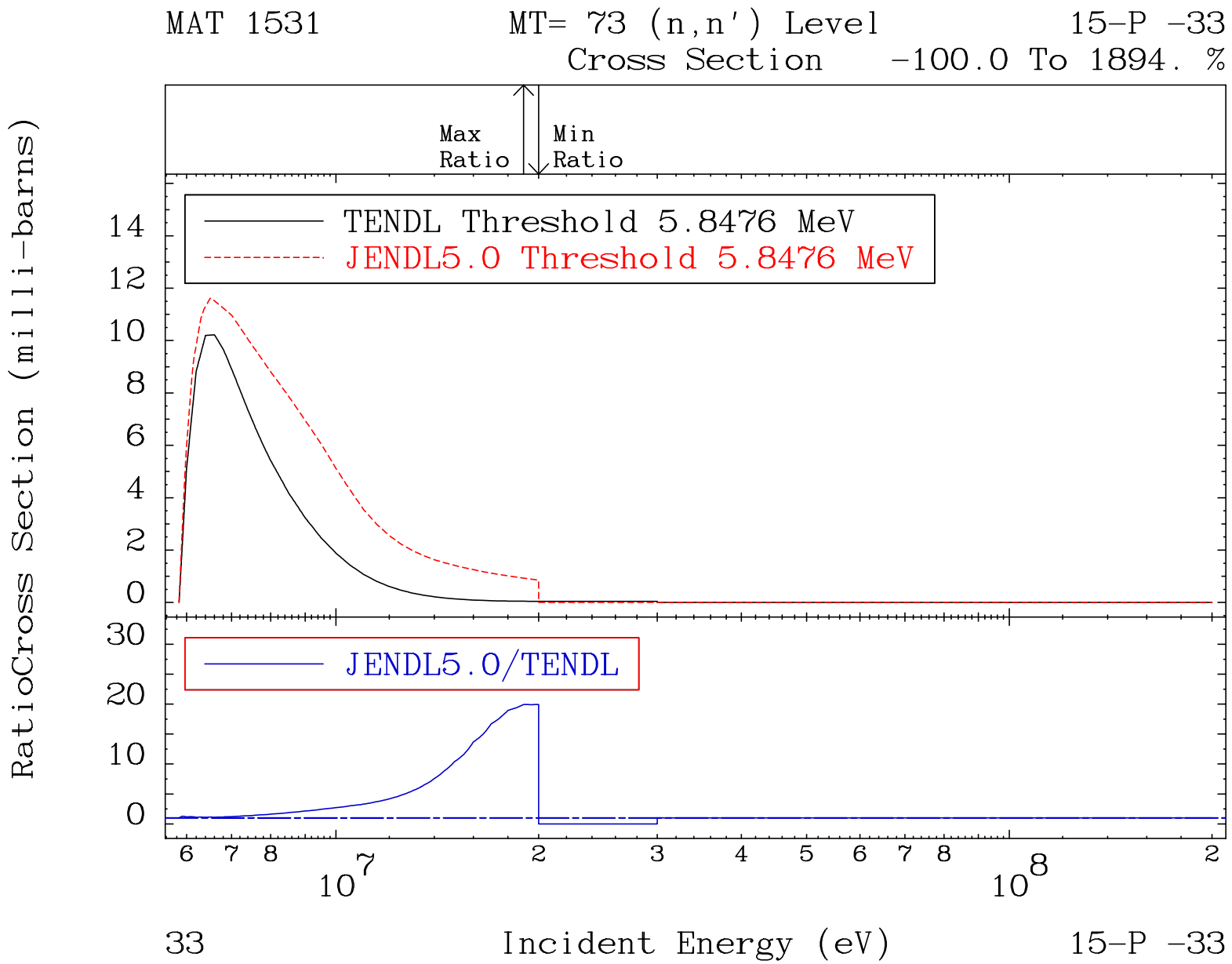

MAT 1531
MT= 68 (n,n') Level
15-P -33
Cross Section
-100.0 To 26.33 %
Min Ratio
Max Ratio
TENDL Threshold 5.6193 MeV
JENDL5.0 Threshold 5.6193 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.0
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
15-P -33

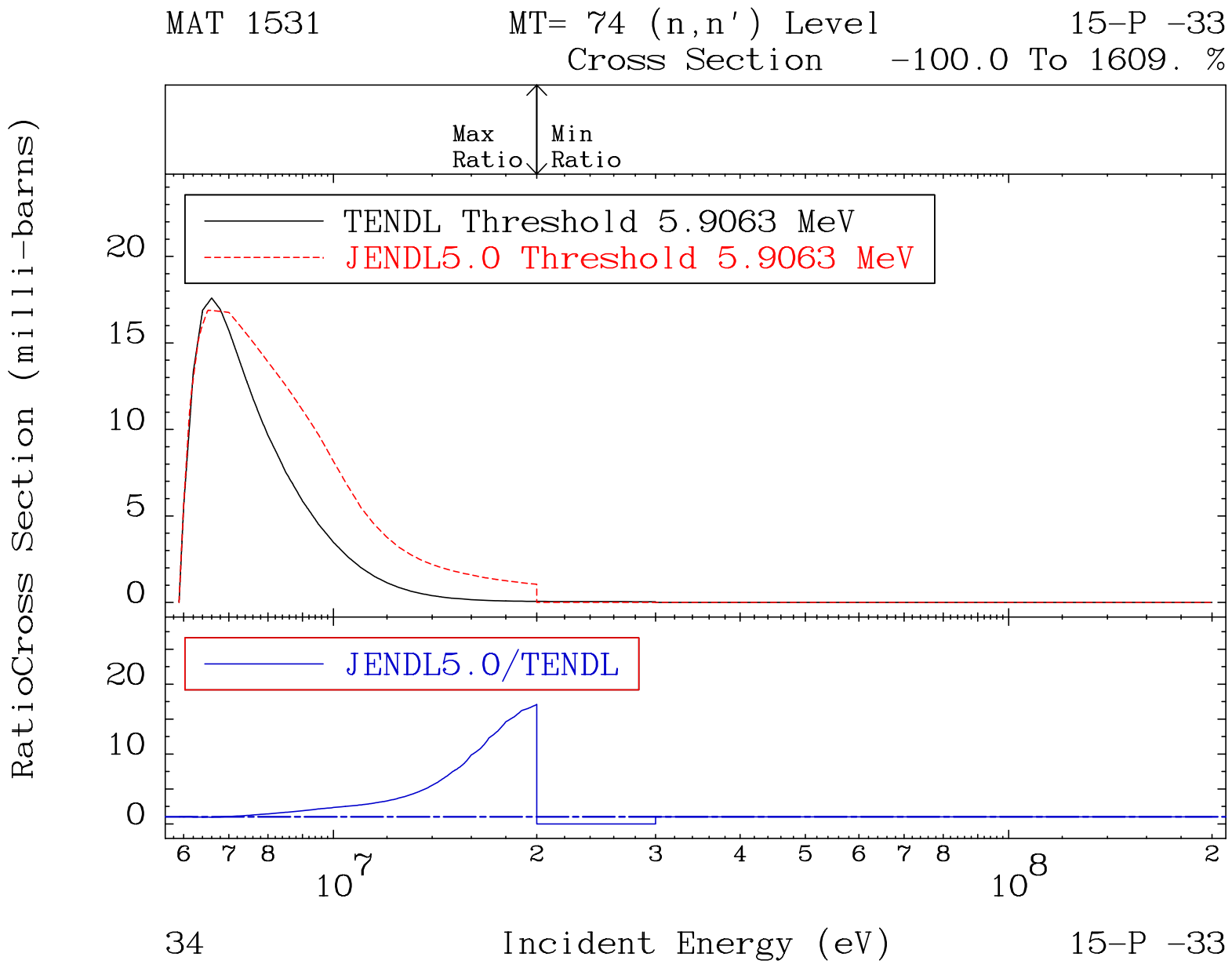

MAT 1531
MT= 69 (n,n') Level
15-P -33
Cross Section -100.0 To 919.3 %
Max Ratio
Min Ratio
TENDL Threshold 5.6686 MeV
JENDL5.0 Threshold 5.6660 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
12
6
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
15-P -33

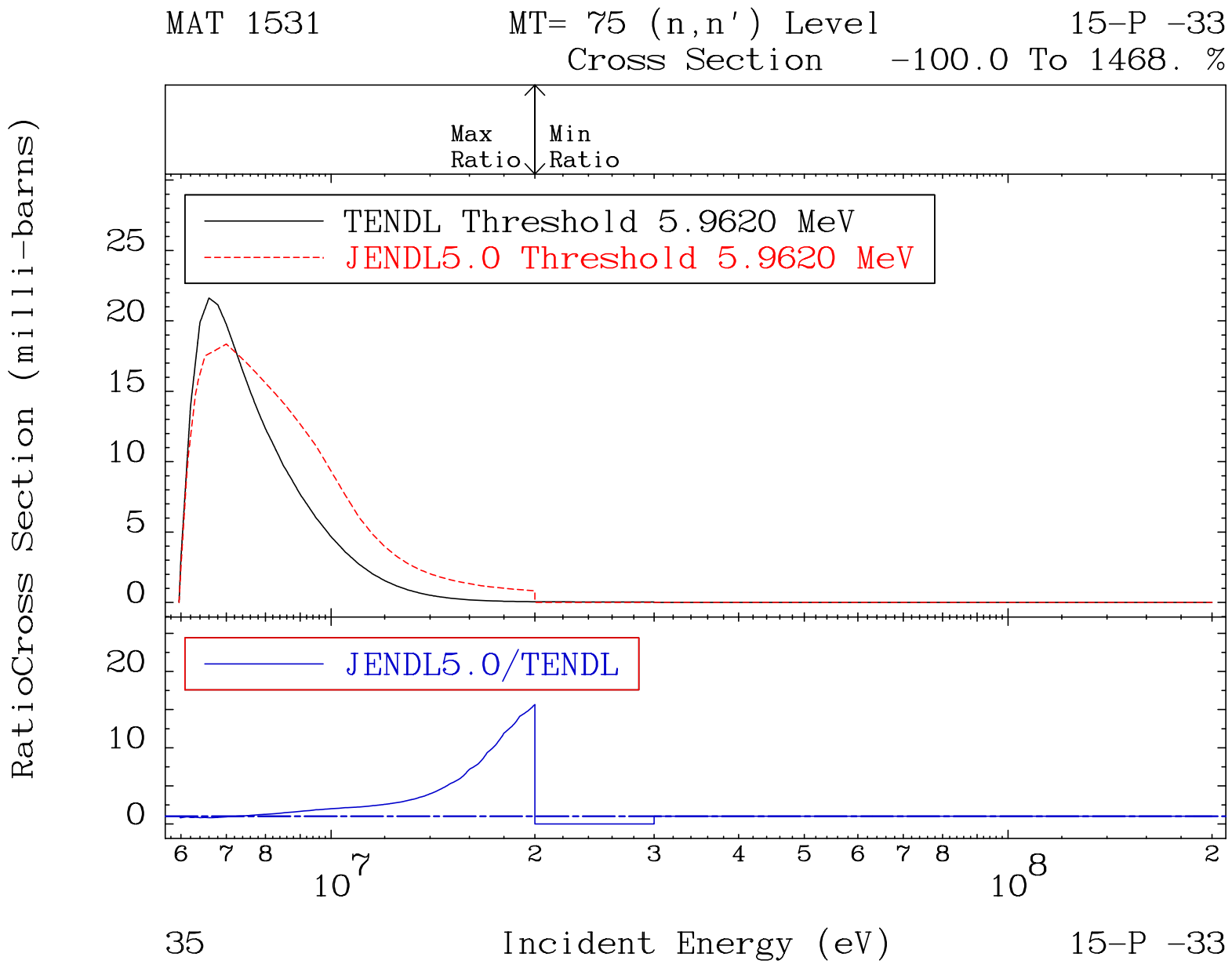

MAT 1531
MT= 70 (n,n') Level
15-P -33
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.7181 MeV
JENDL5.0 Threshold 5.7188 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
15-P -33

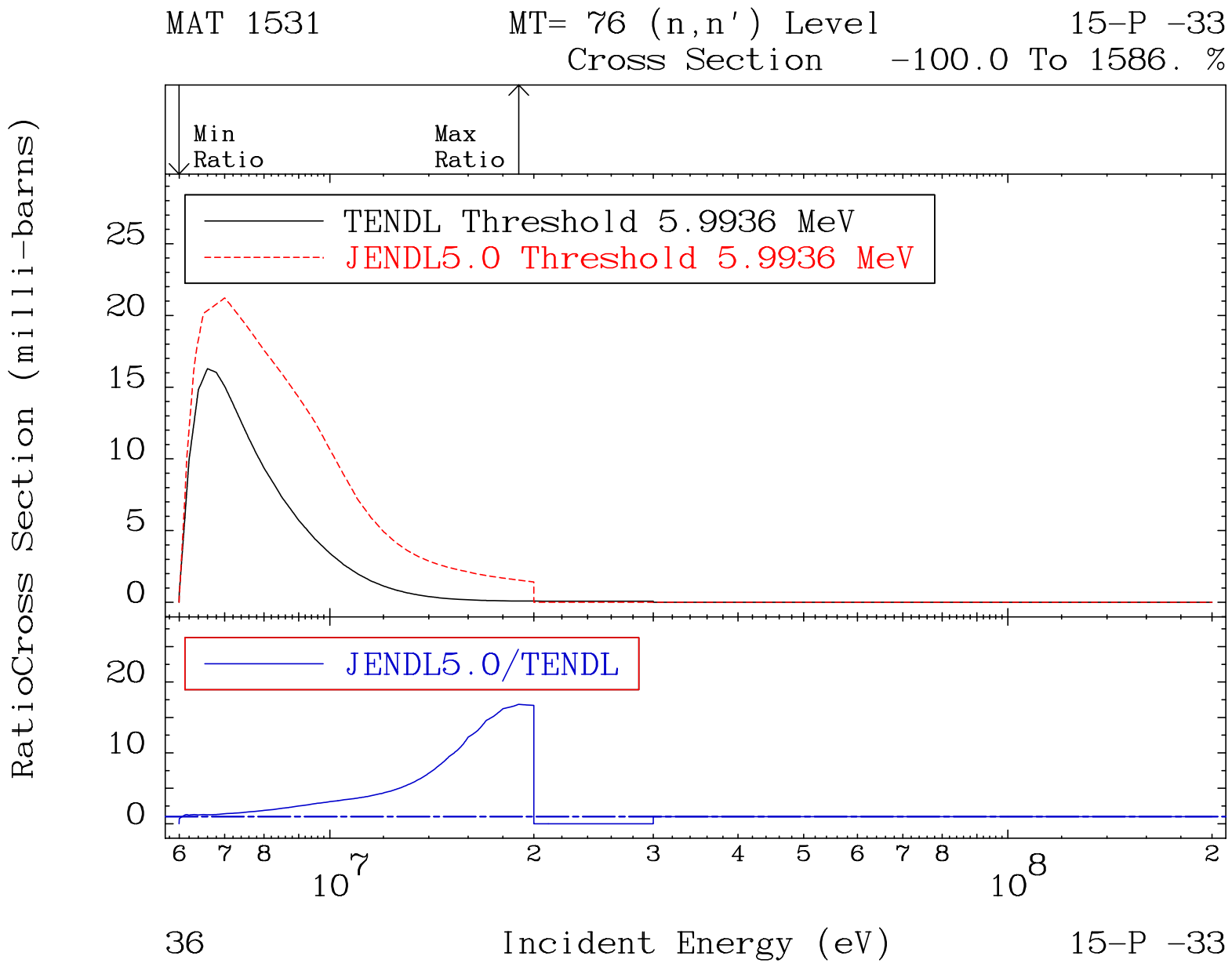

MAT 1531
MT= 71 (n,n') Level
15-P -33
Cross Section -100.0 To 1187. %
Min Ratio
Max Ratio
TENDL Threshold 5.7277 MeV
JENDL5.0 Threshold 5.7277 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
31
15-P -33

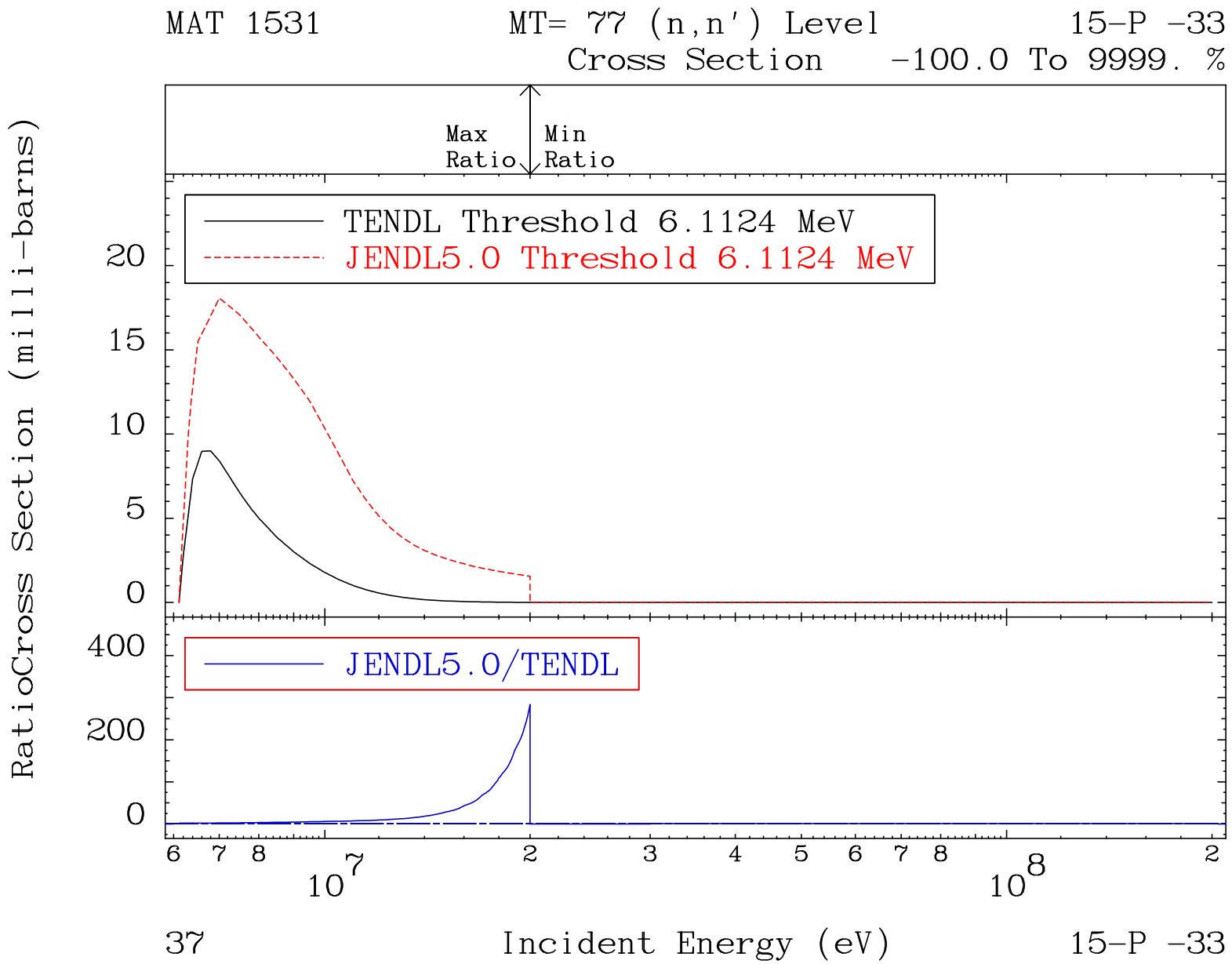

MAT 1531
MT= 72 (n,n') Level
15-P -33
Cross Section -100.0 To 1982. %
Min Ratio
Max Ratio
TENDL Threshold 5.8106 MeV
JENDL5.0 Threshold 5.8106 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
30
20
10
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
15-P -33

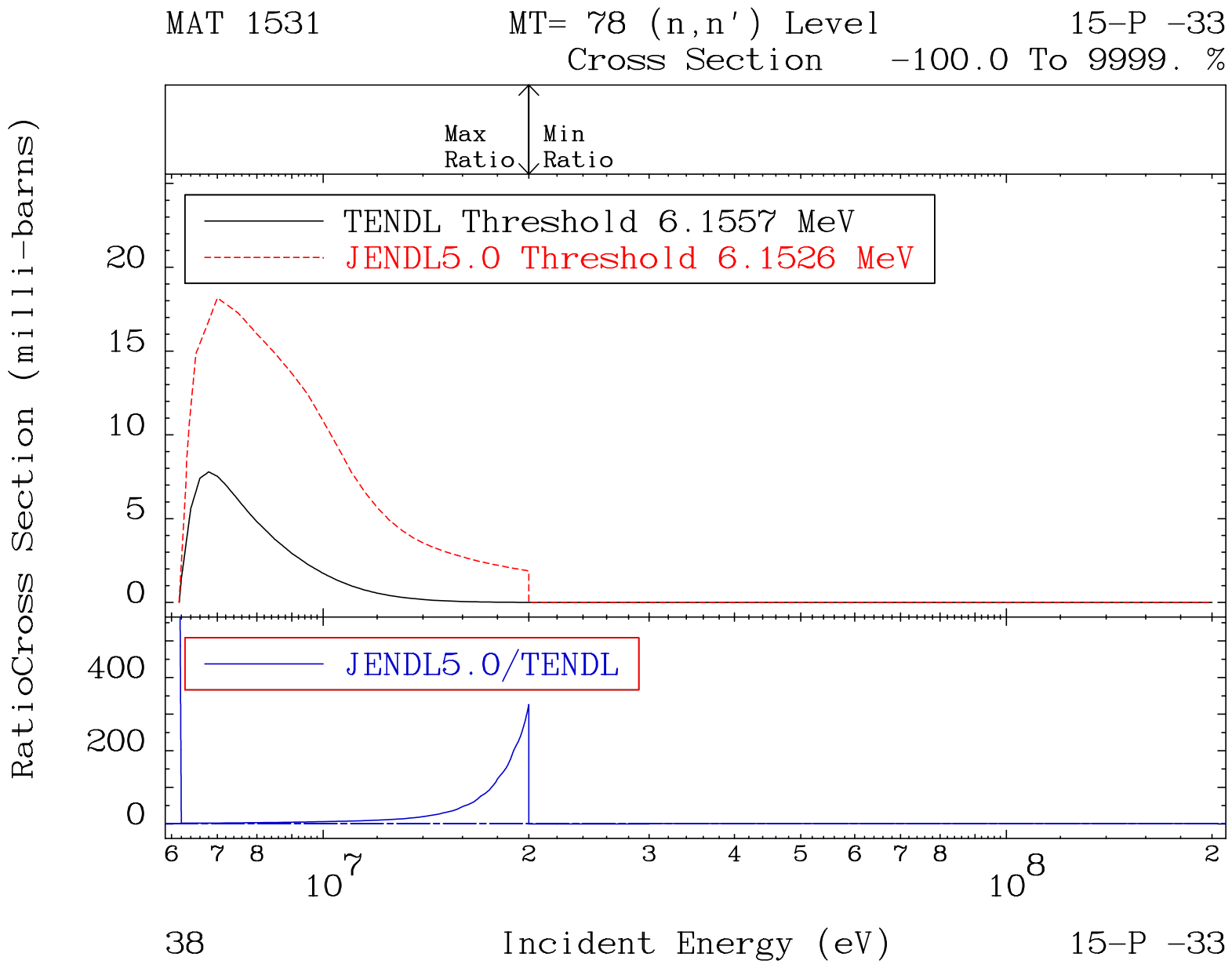

MAT 1531
MT= 73 (n,n') Level
15-P -33
Cross Section -100.0 To 1894. %
Max Ratio
Min Ratio
TENDL Threshold 5.8476 MeV
JENDL5.0 Threshold 5.8476 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
33
15-P -33

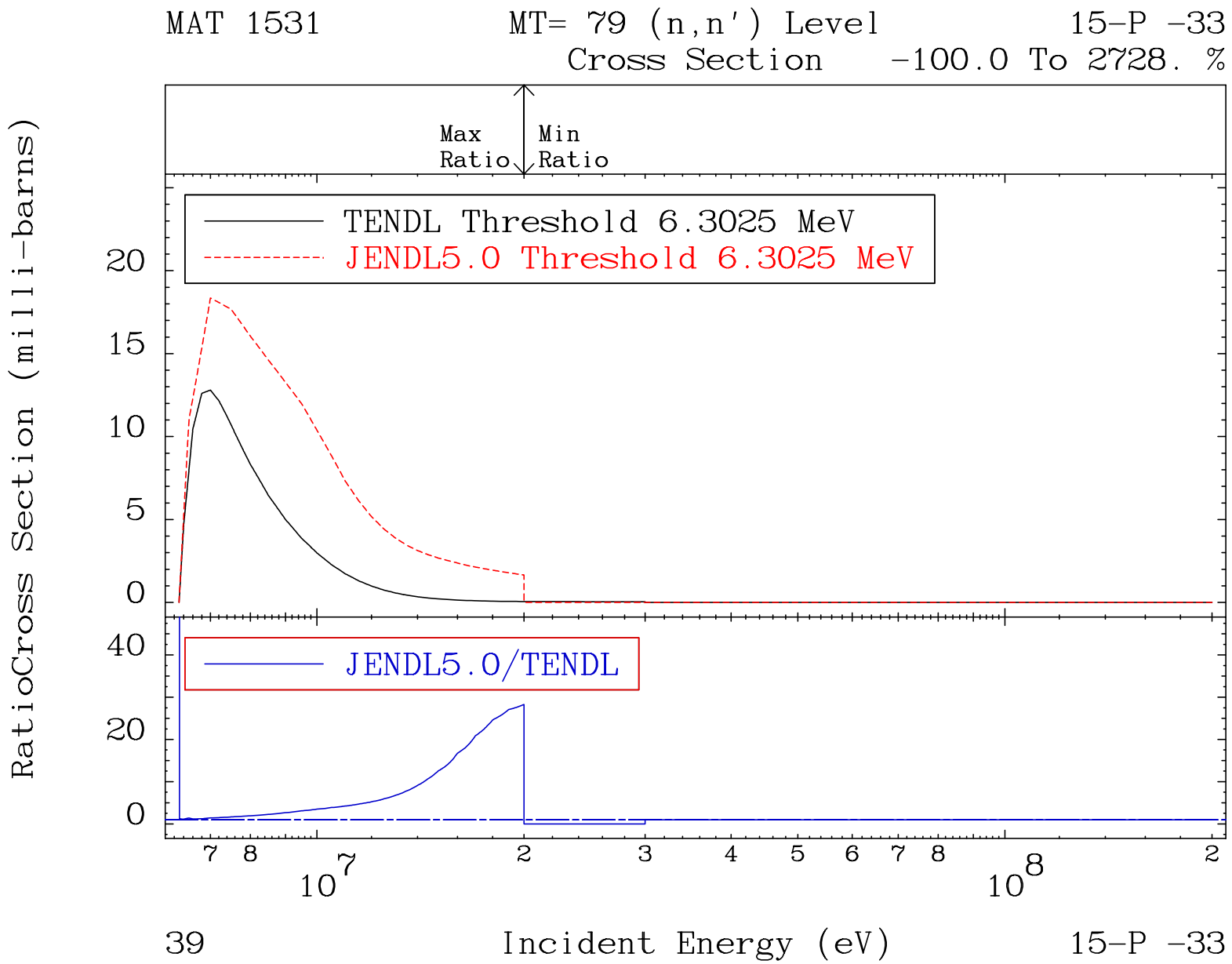

MAT 1531
MT= 74 (n,n') Level
15-P -33
Cross Section -100.0 To 1609. %
Max Ratio
Min Ratio
TENDL Threshold 5.9063 MeV
JENDL5.0 Threshold 5.9063 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
15-P -33

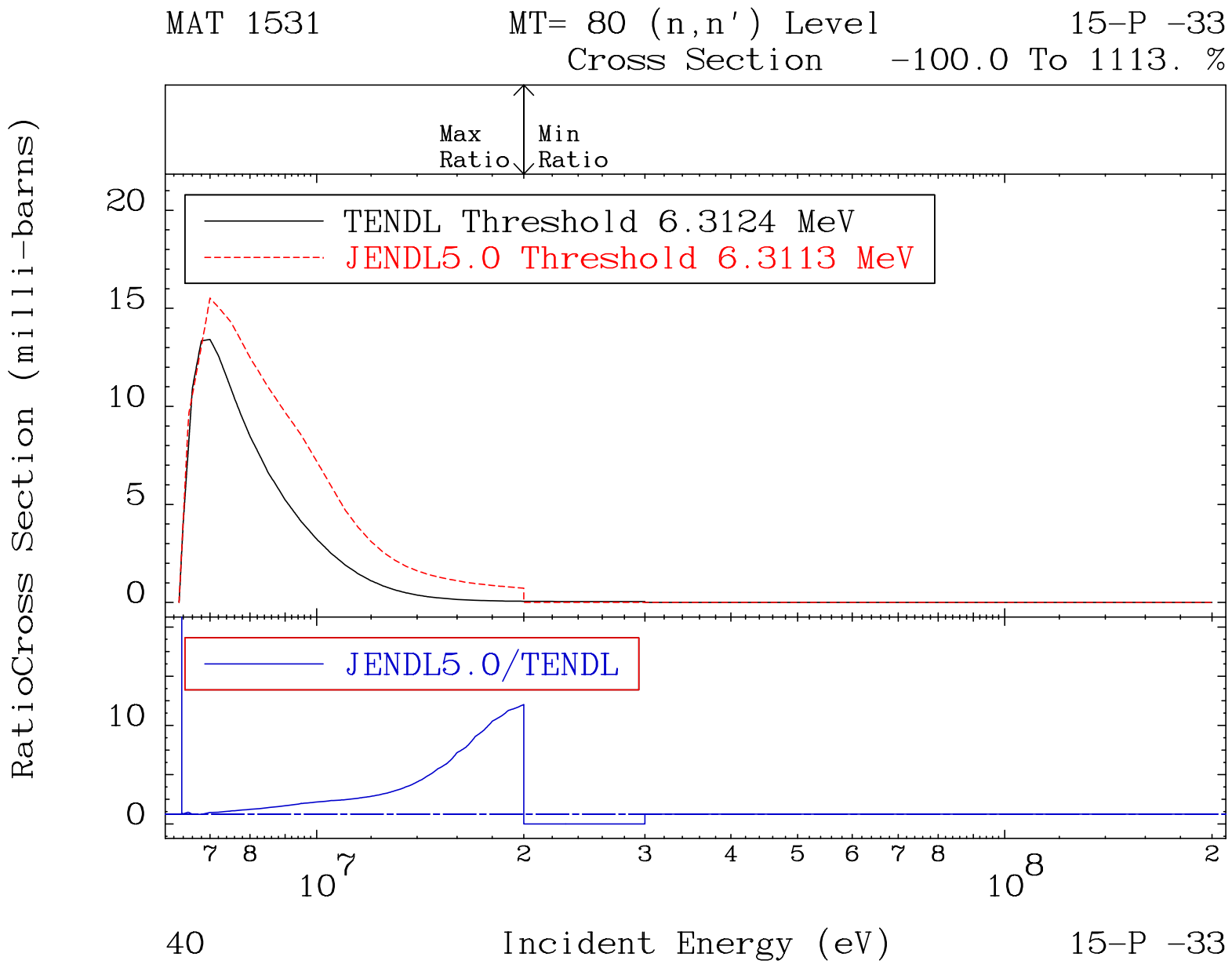

MAT 1531
MT= 75 (n,n') Level
15-P -33
Cross Section -100.0 To 1468. %
Max Ratio
Min Ratio
TENDL Threshold 5.9620 MeV
JENDL5.0 Threshold 5.9620 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
35
15-P -33

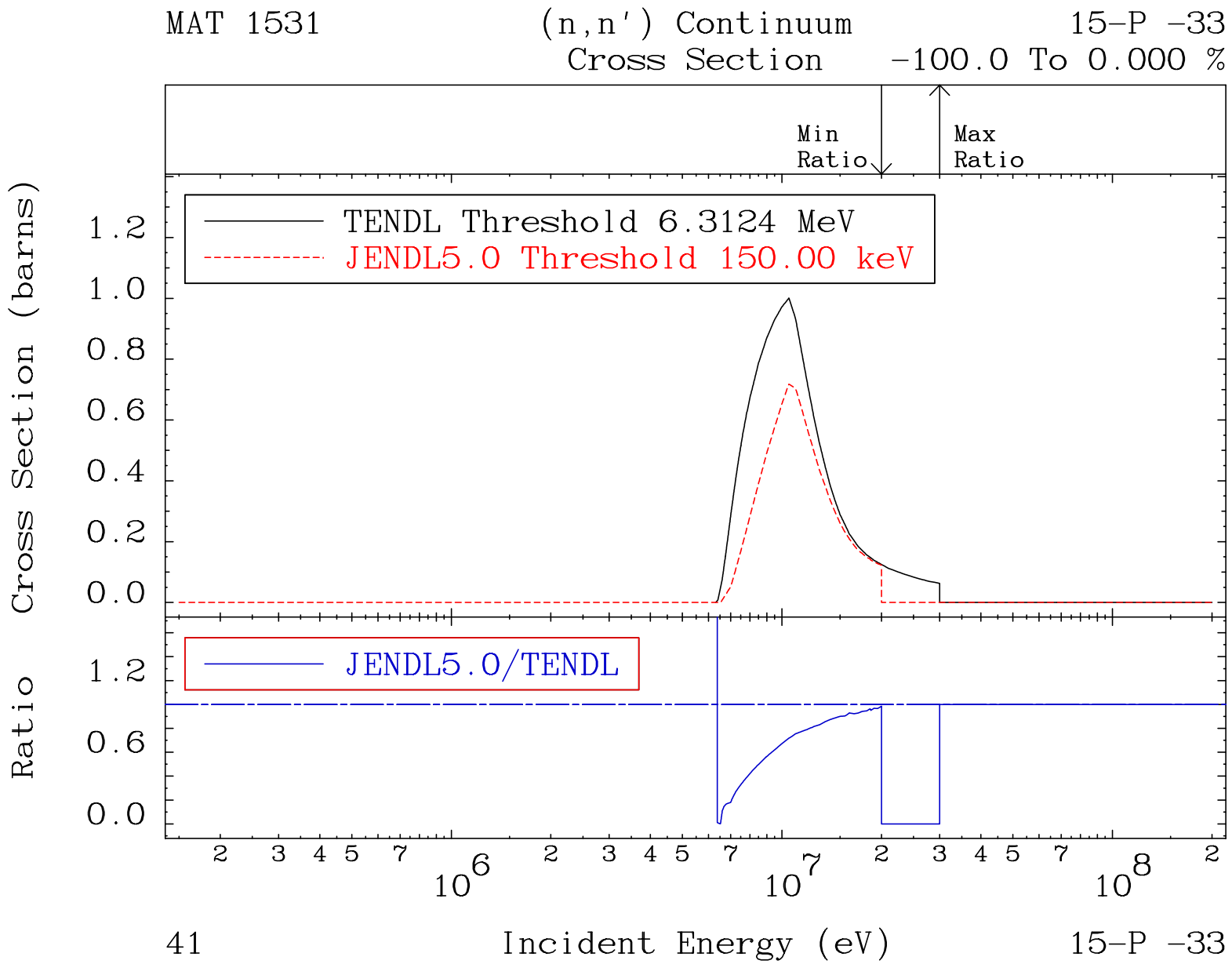

MAT 1531
MT= 76 (n,n') Level
15-P -33
Cross Section -100.0 To 1586. %
Min Ratio
Max Ratio
TENDL Threshold 5.9936 MeV
JENDL5.0 Threshold 5.9936 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
36
15-P -33

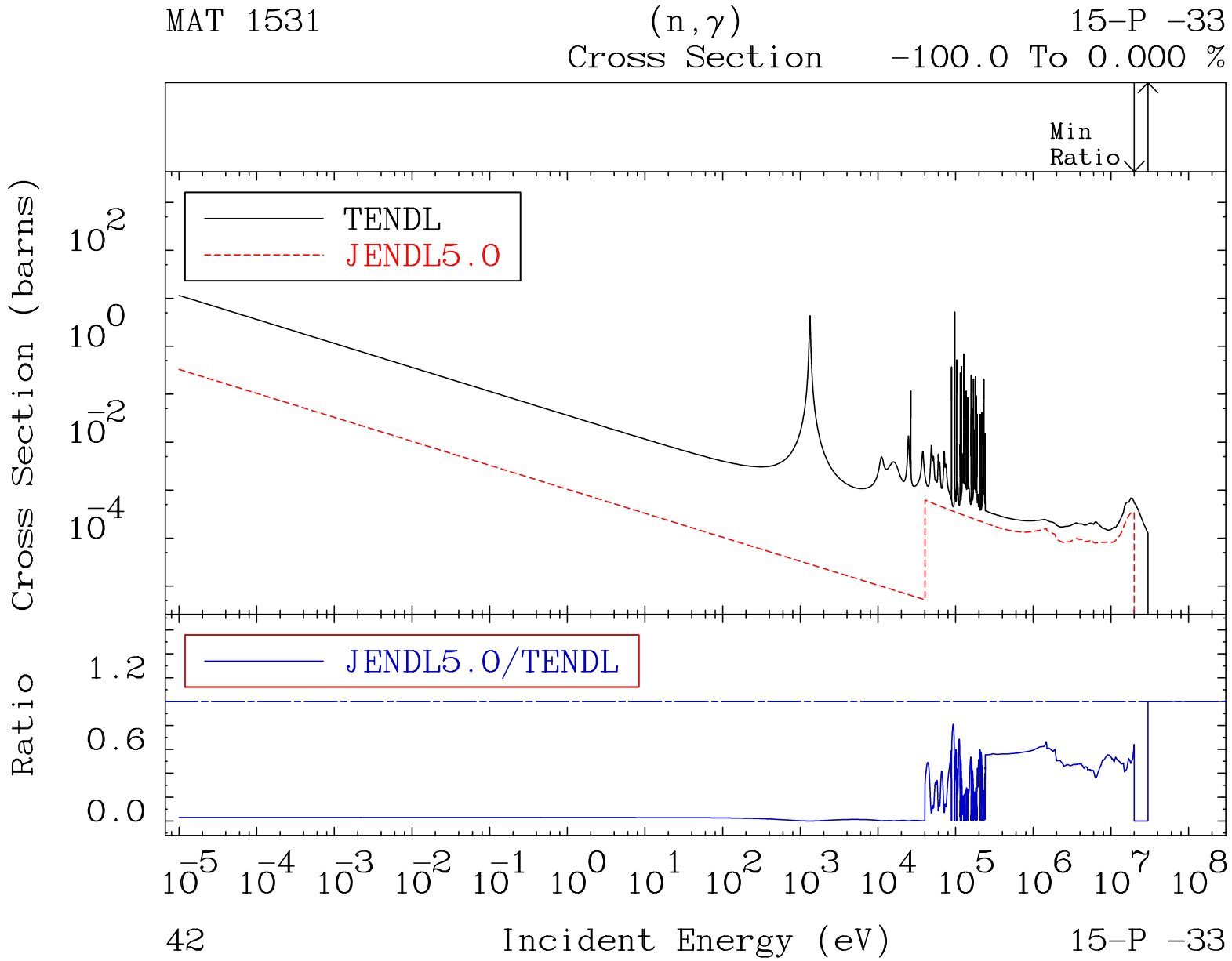

MAT 1531
MT= 77 (n,n') Level
15-P -33
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1124 MeV
JENDL5.0 Threshold 6.1124 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
400
200
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
15-P -33

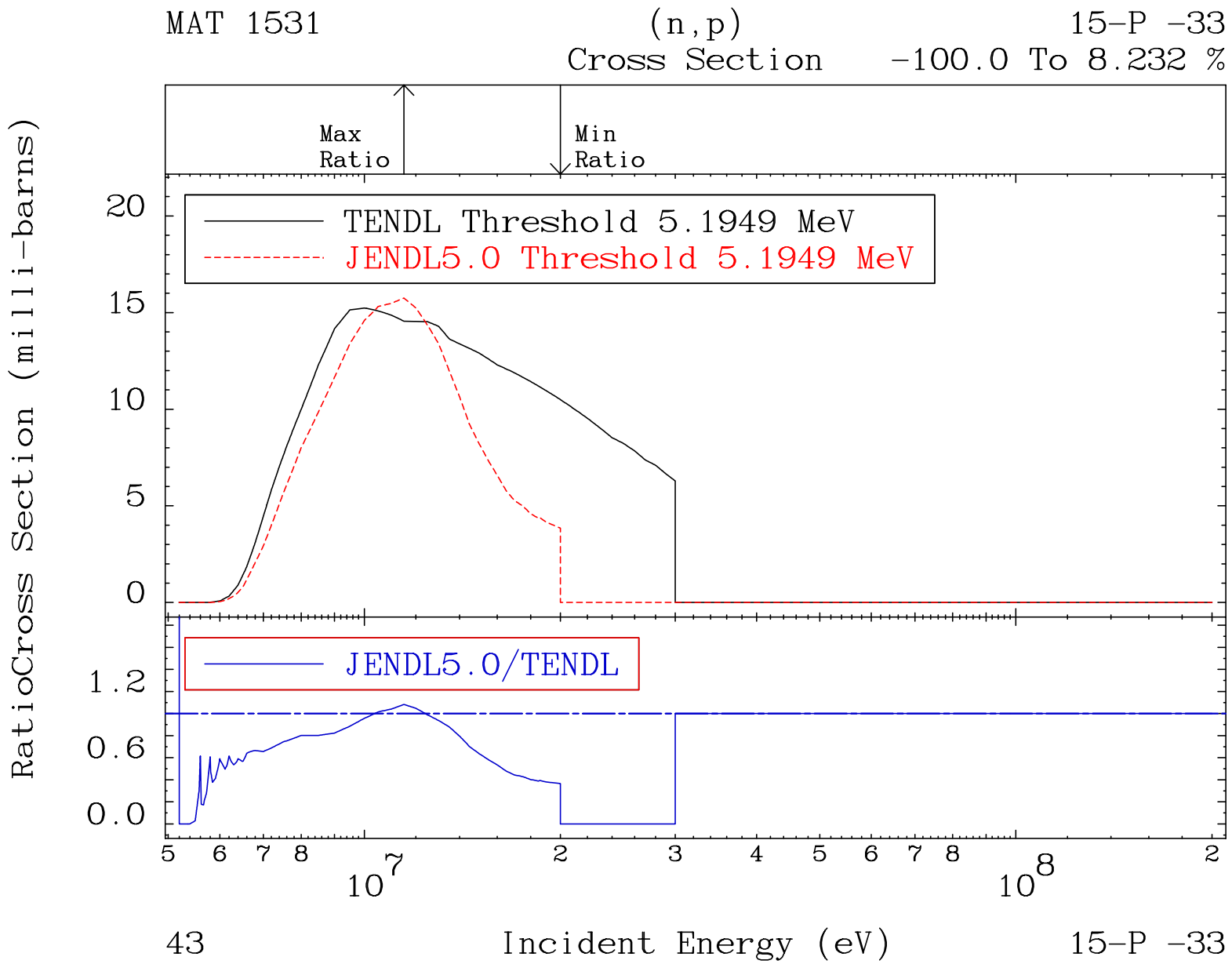

MAT 1531
MT= 78 (n,n') Level
15-P -33
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1557 MeV
JENDL5.0 Threshold 6.1526 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
400
200
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
15-P -33

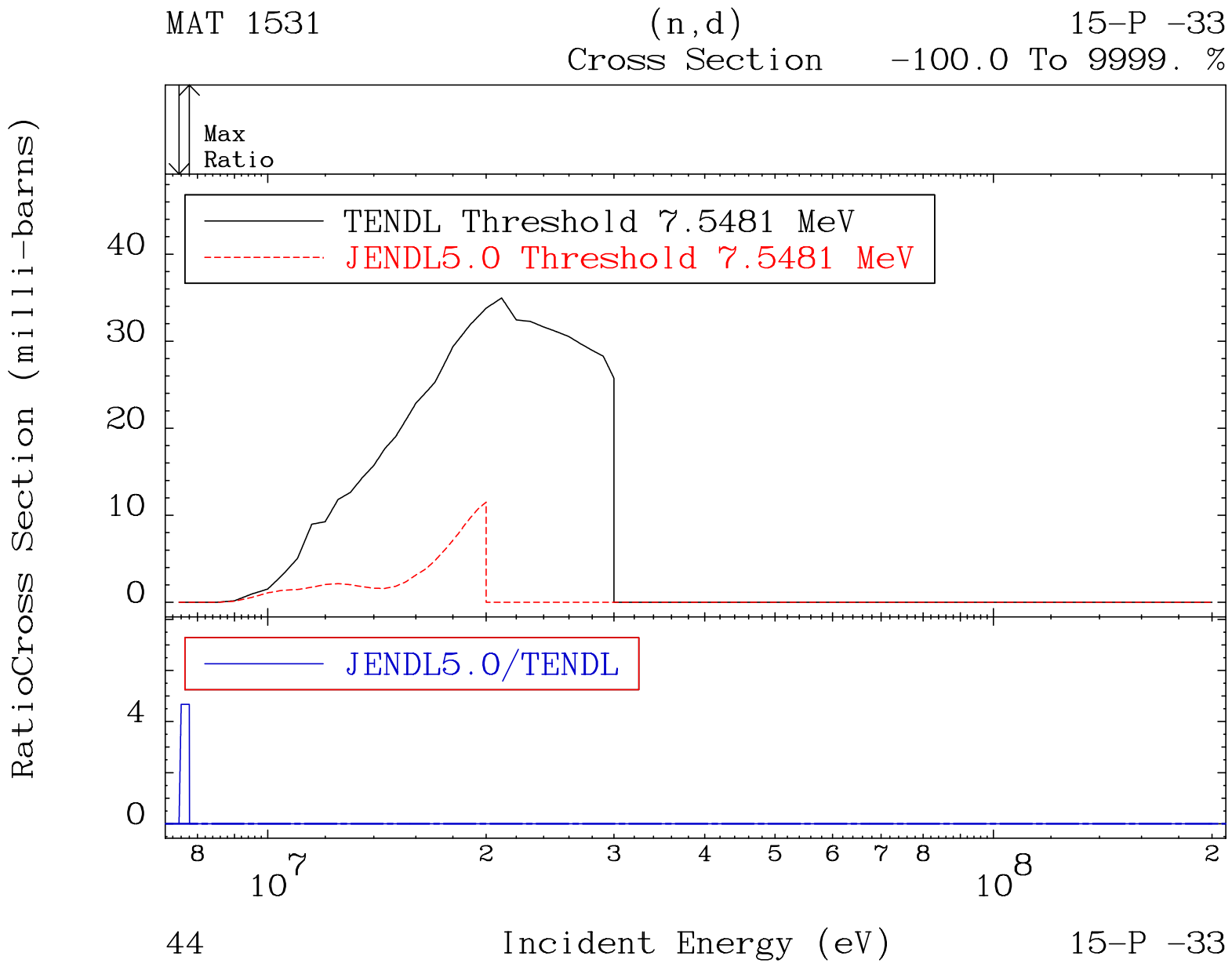

MAT 1531
MT= 79 (n,n') Level
15-P -33
Cross Section -100.0 To 2728. %
Max Ratio
Min Ratio
TENDL Threshold 6.3025 MeV
JENDL5.0 Threshold 6.3025 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
39
15-P -33

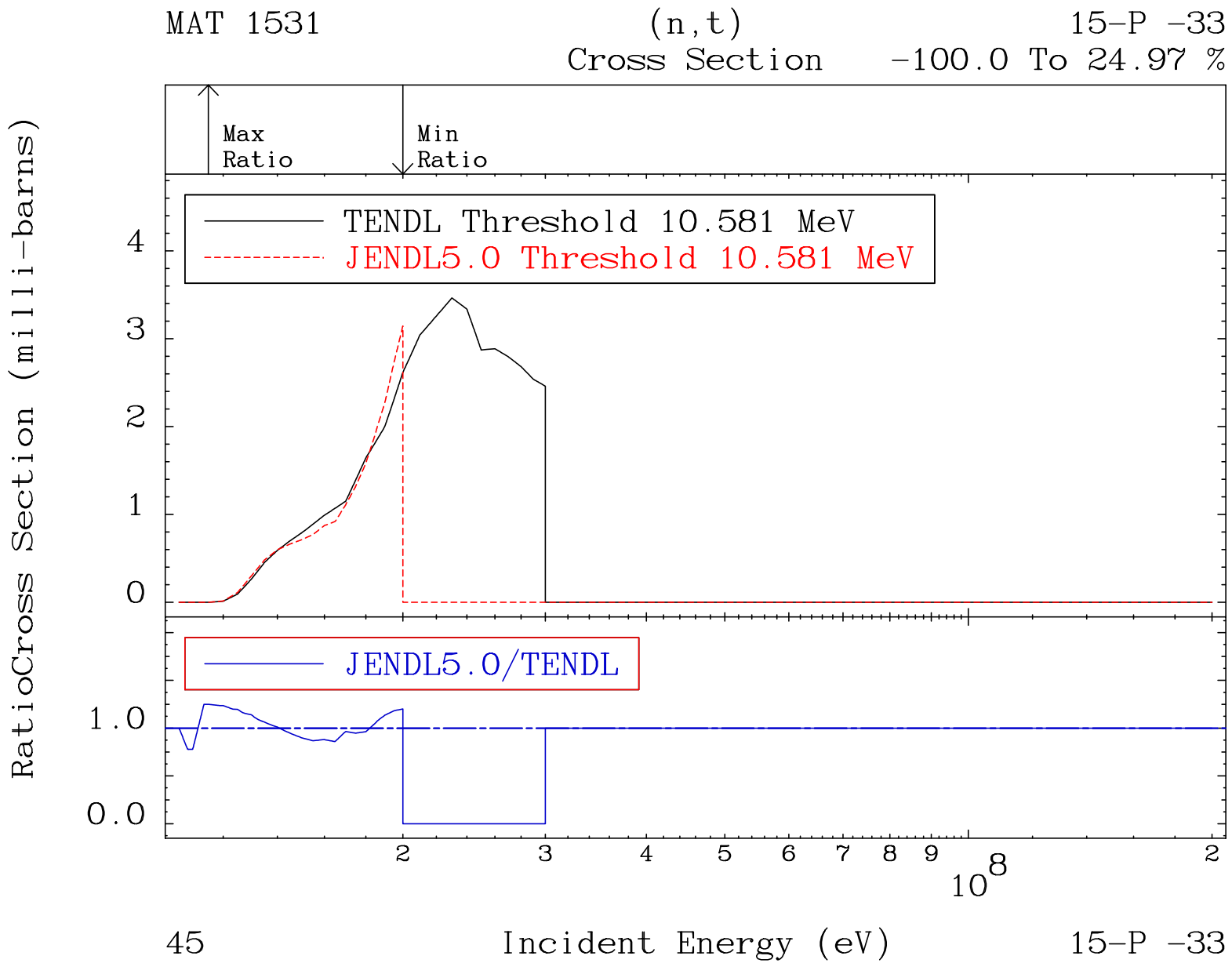

MAT 1531
MT= 80 (n,n') Level
15-P -33
Cross Section -100.0 To 1113. %
Max Ratio
Min Ratio
TENDL Threshold 6.3124 MeV
JENDL5.0 Threshold 6.3113 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
10
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
40
15-P -33

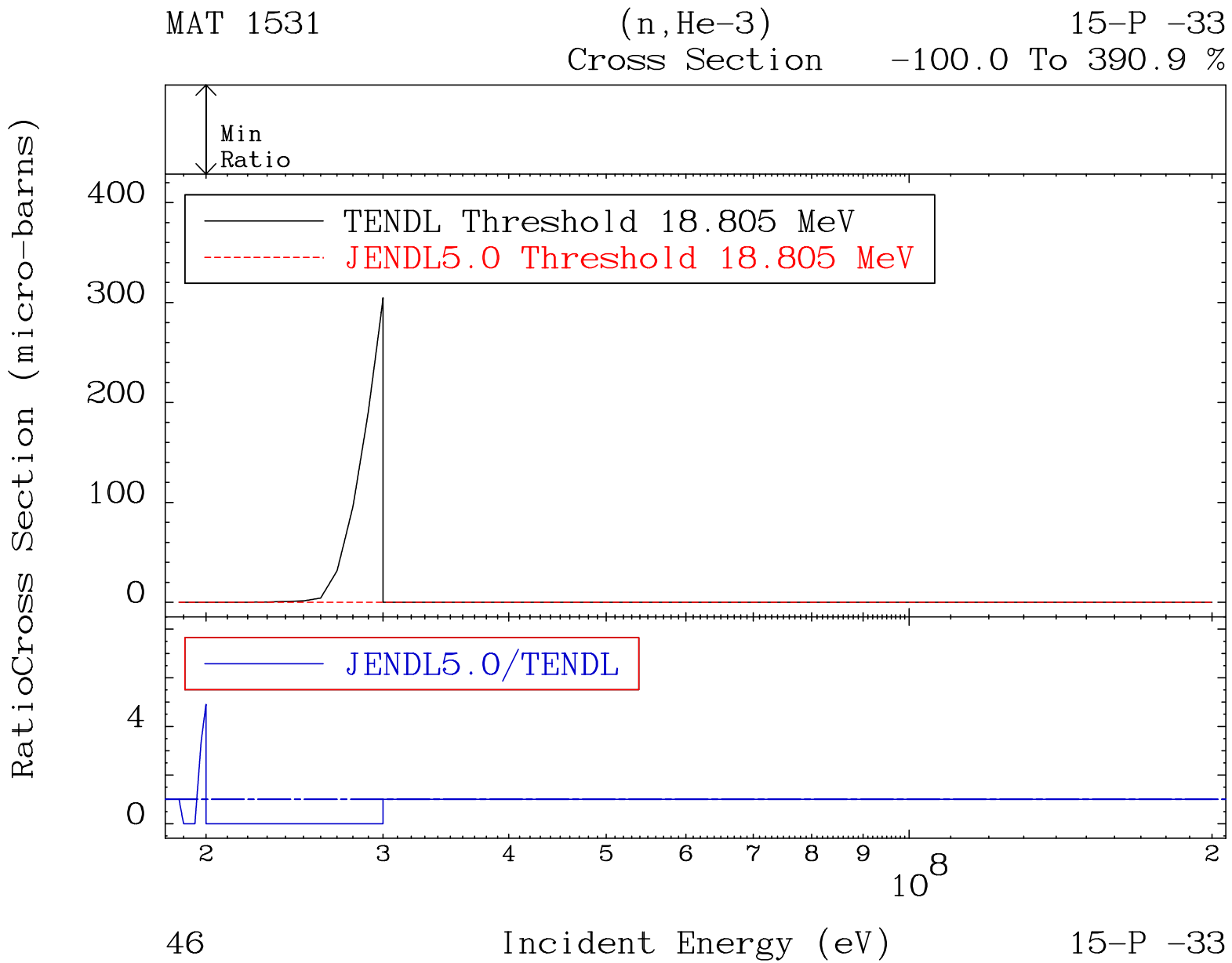

MAT 1531
(n,n') Continuum
Cross Section
15-P -33
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.3124 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
41
15-P -33

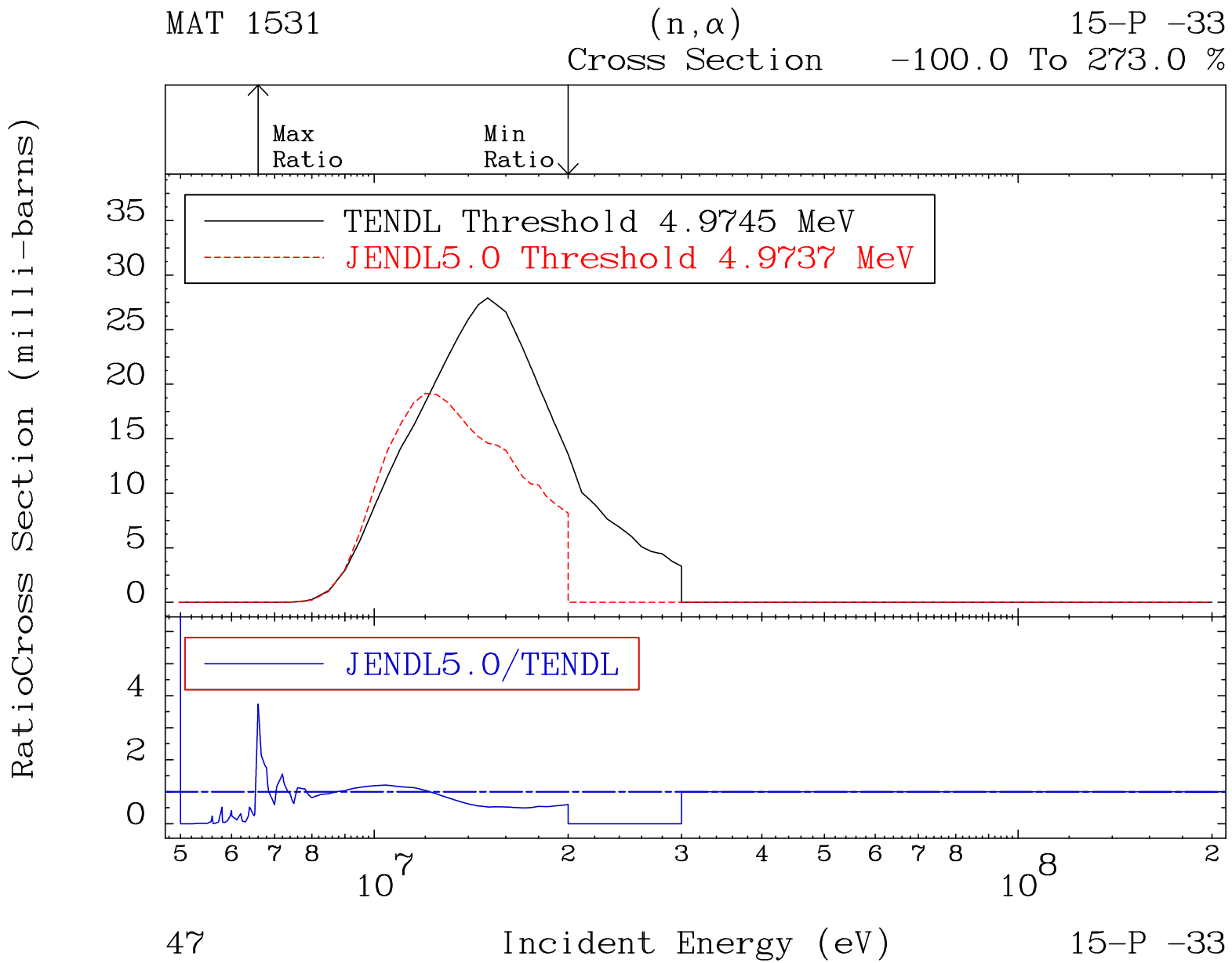

MAT 1531
(n,γ)
Cross Section
15-P -33
-100.0 To 0.000 %
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^2
10^0
10^-2
10^-4
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
42
Incident Energy (eV)
15-P -33

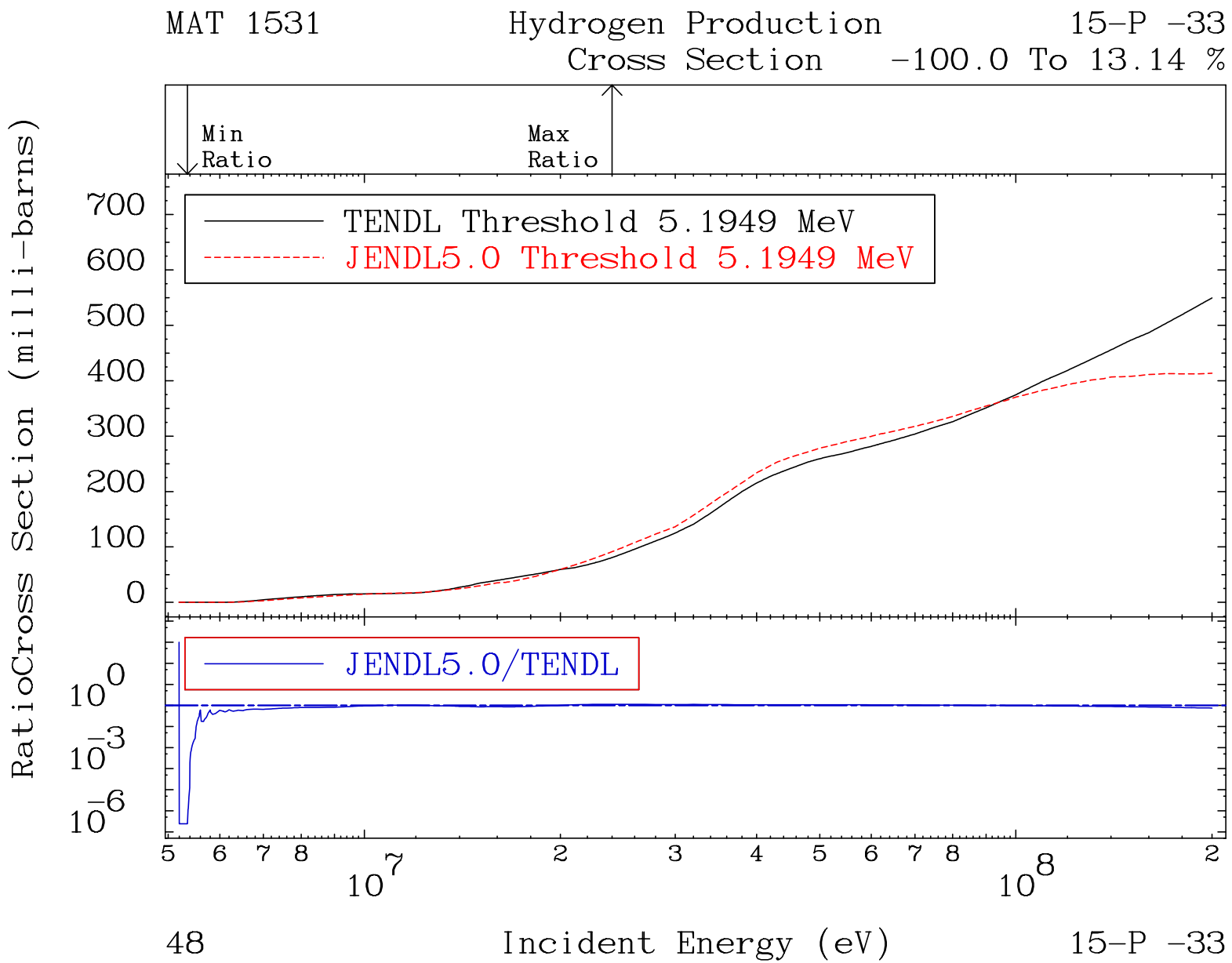

MAT 1531
(n,p)
15-P -33
Cross Section
-100.0 To 8.232 %
Max Ratio
Min Ratio
TENDL Threshold 5.1949 MeV
JENDL5.0 Threshold 5.1949 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
15-P -33

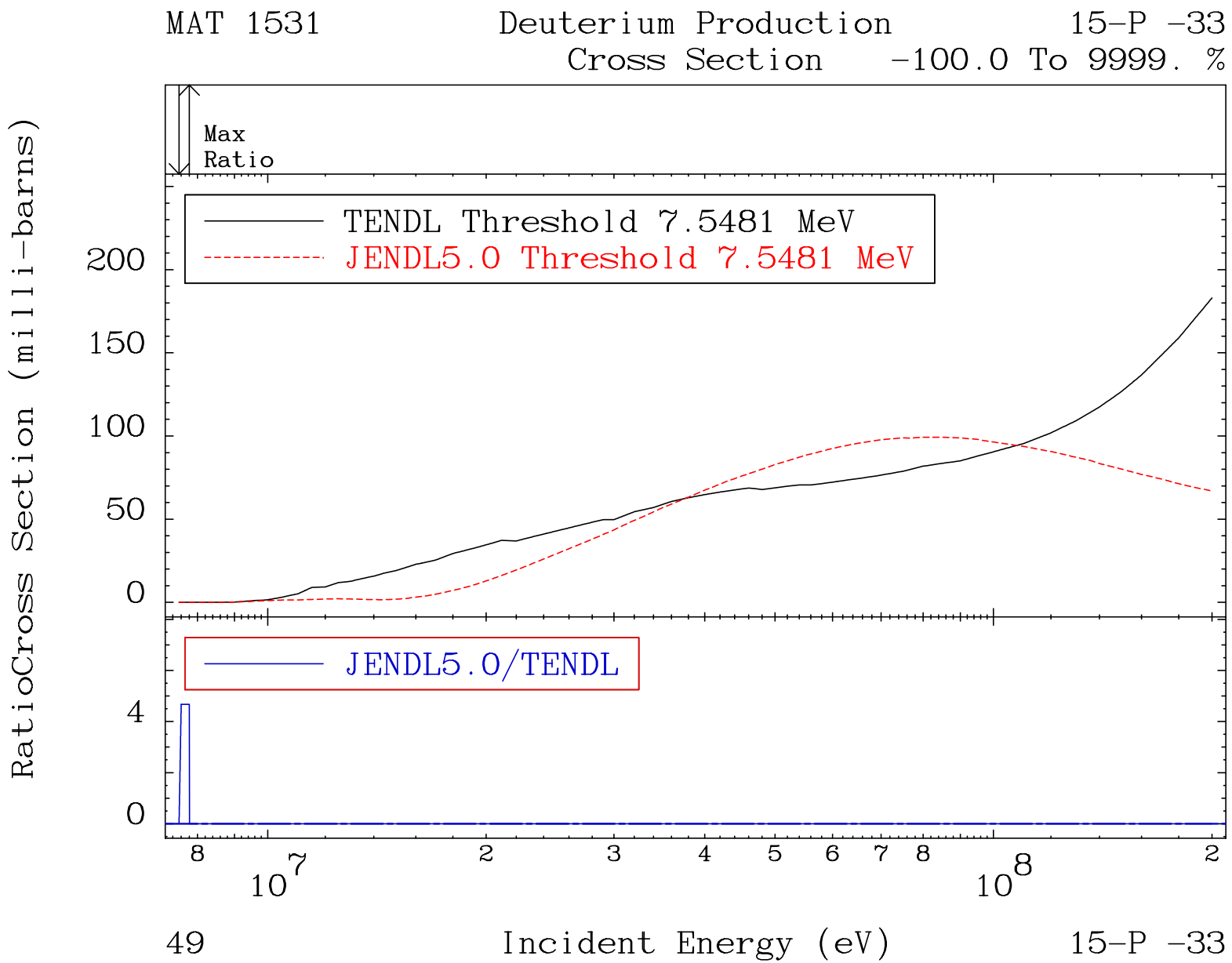

MAT 1531
(n,d)
15-P -33
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.5481 MeV
JENDL5.0 Threshold 7.5481 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
0
8
2
3
4
5
6
7
8
2
10^7
10^8
44
Incident Energy (eV)
15-P -33

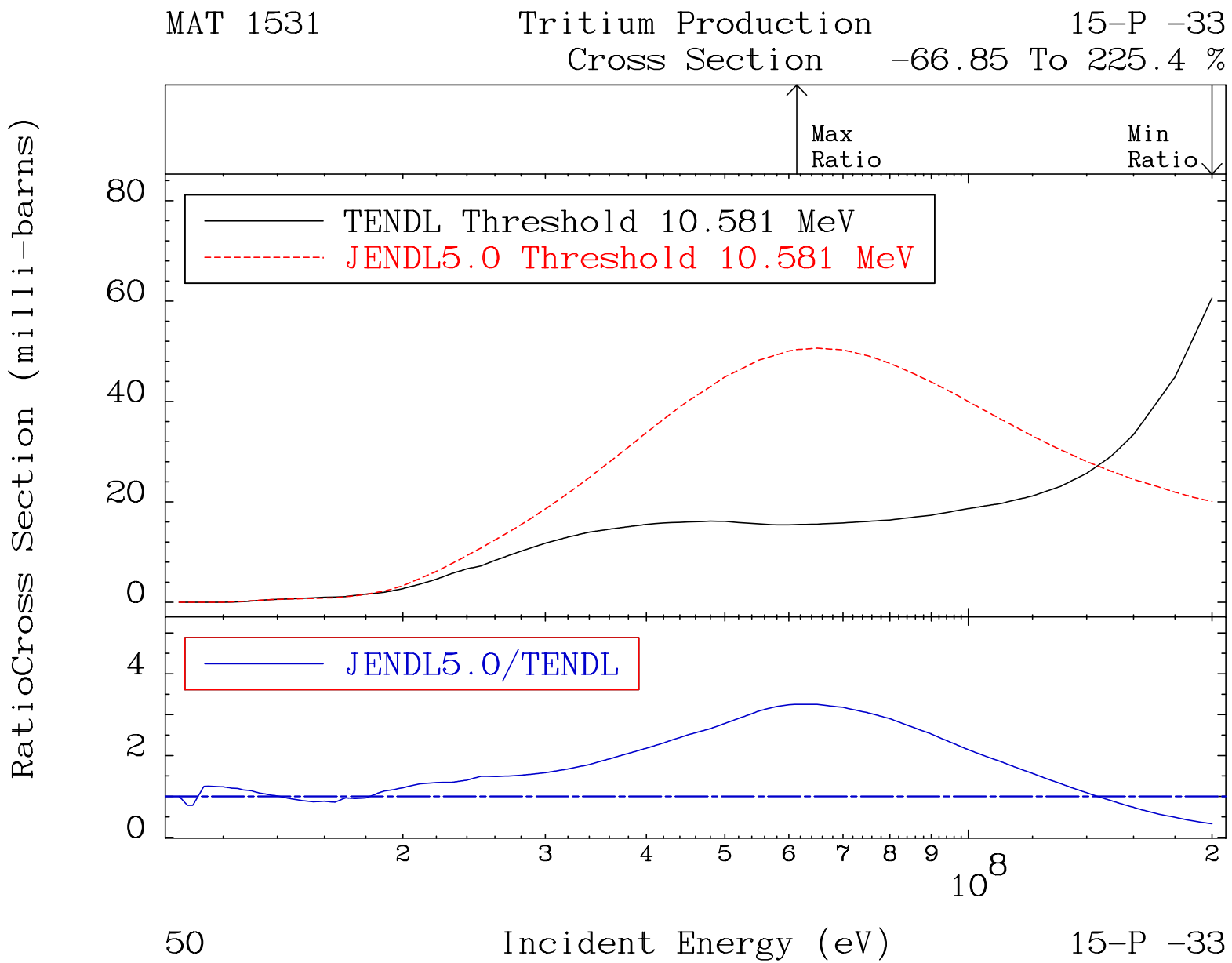

MAT 1531
(n,t)
15-P -33
Cross Section
-100.0 To 24.97 %
Max Ratio
Min Ratio
TENDL Threshold 10.581 MeV
JENDL5.0 Threshold 10.581 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
15-P -33

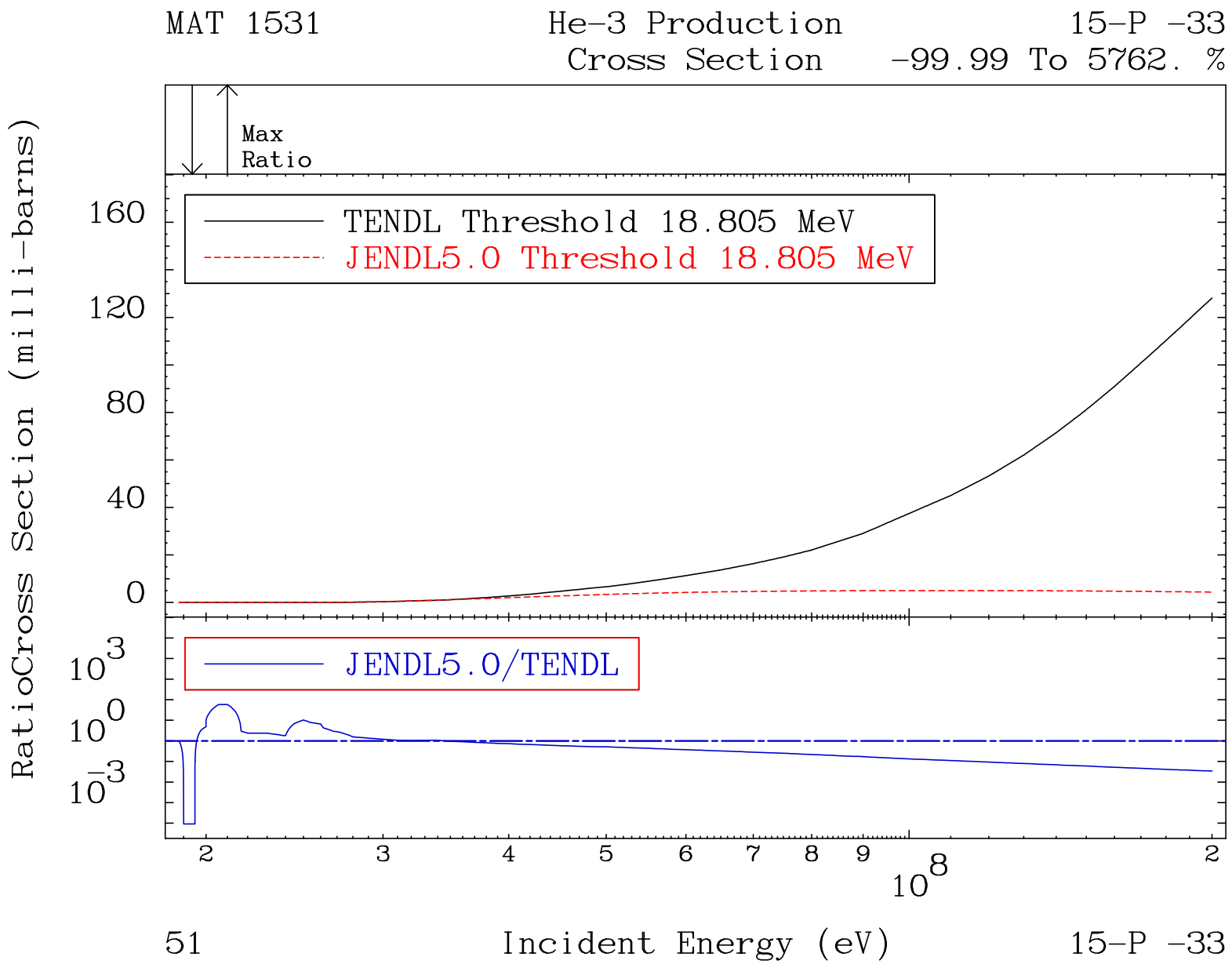

MAT 1531
(n,He-3)
15-P -33
Cross Section
-100.0 To 390.9 %
Min
Ratio
400
300
200
100
0
TENDL Threshold 18.805 MeV
JENDL5.0 Threshold 18.805 MeV
JENDL5.0/TENDL
4
0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (micro-barns)
46
Incident Energy (eV)
15-P -33

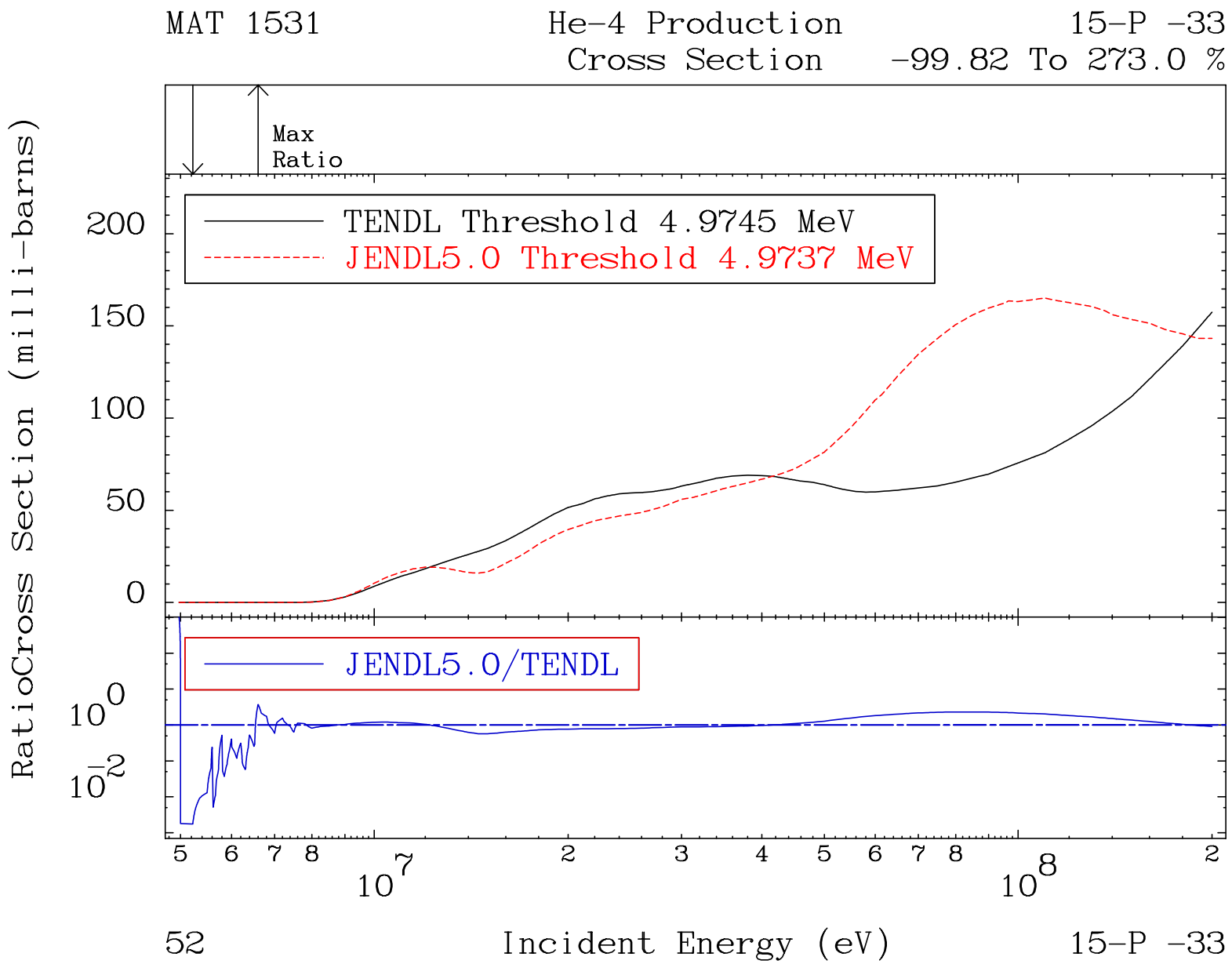

MAT 1531
(n,α)
15-P -33
Cross Section
-100.0 To 273.0 %
Max Ratio
Min Ratio
TENDL Threshold 4.9745 MeV
JENDL5.0 Threshold 4.9737 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
4
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
15-P -33

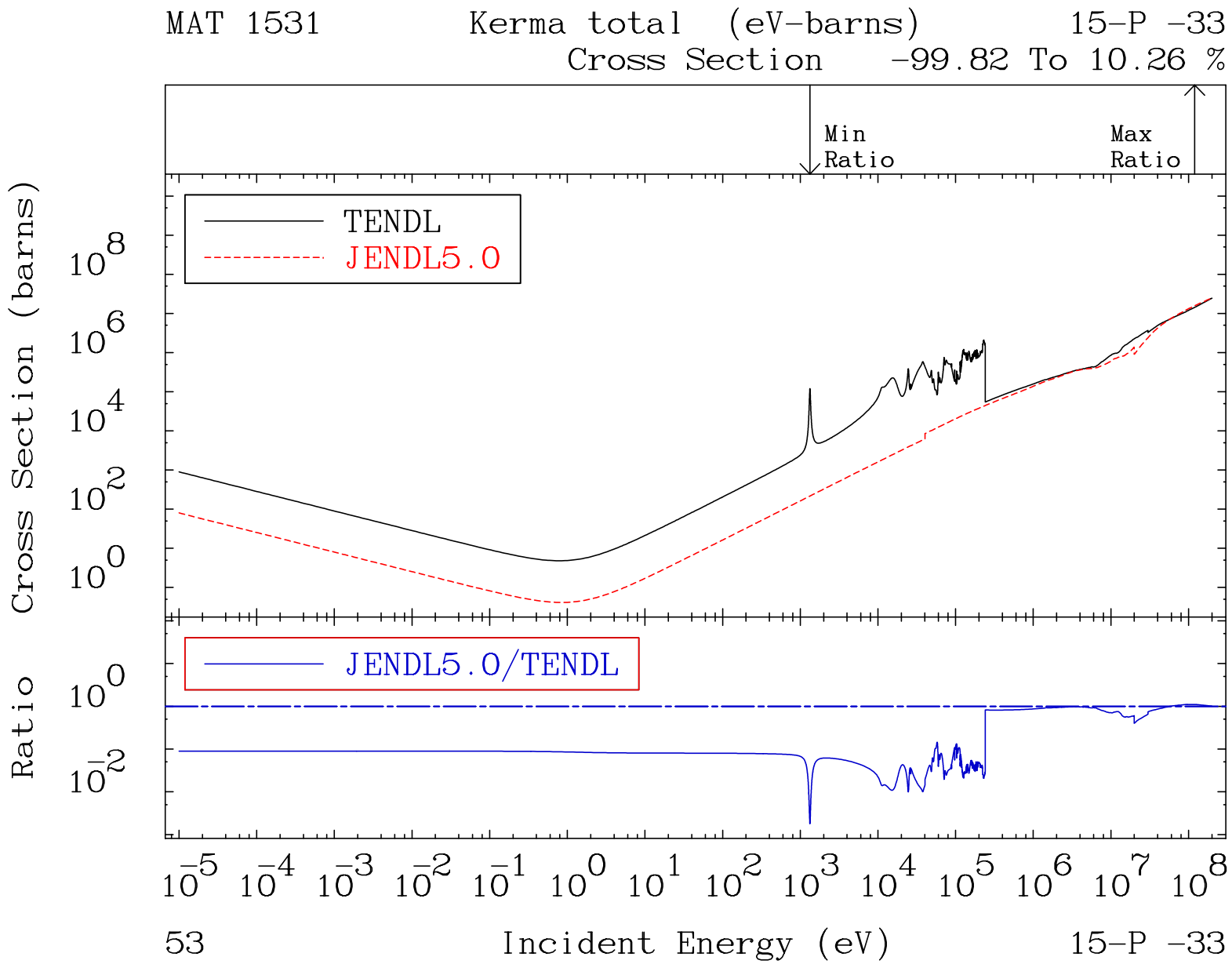

MAT 1531
Hydrogen Production
15-P -33
Cross Section -100.0 To 13.14 %
Min Ratio
Max Ratio
TENDL Threshold 5.1949 MeV
JENDL5.0 Threshold 5.1949 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
10^0
10^-3
10^-6
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
48
Incident Energy (eV)
15-P -33

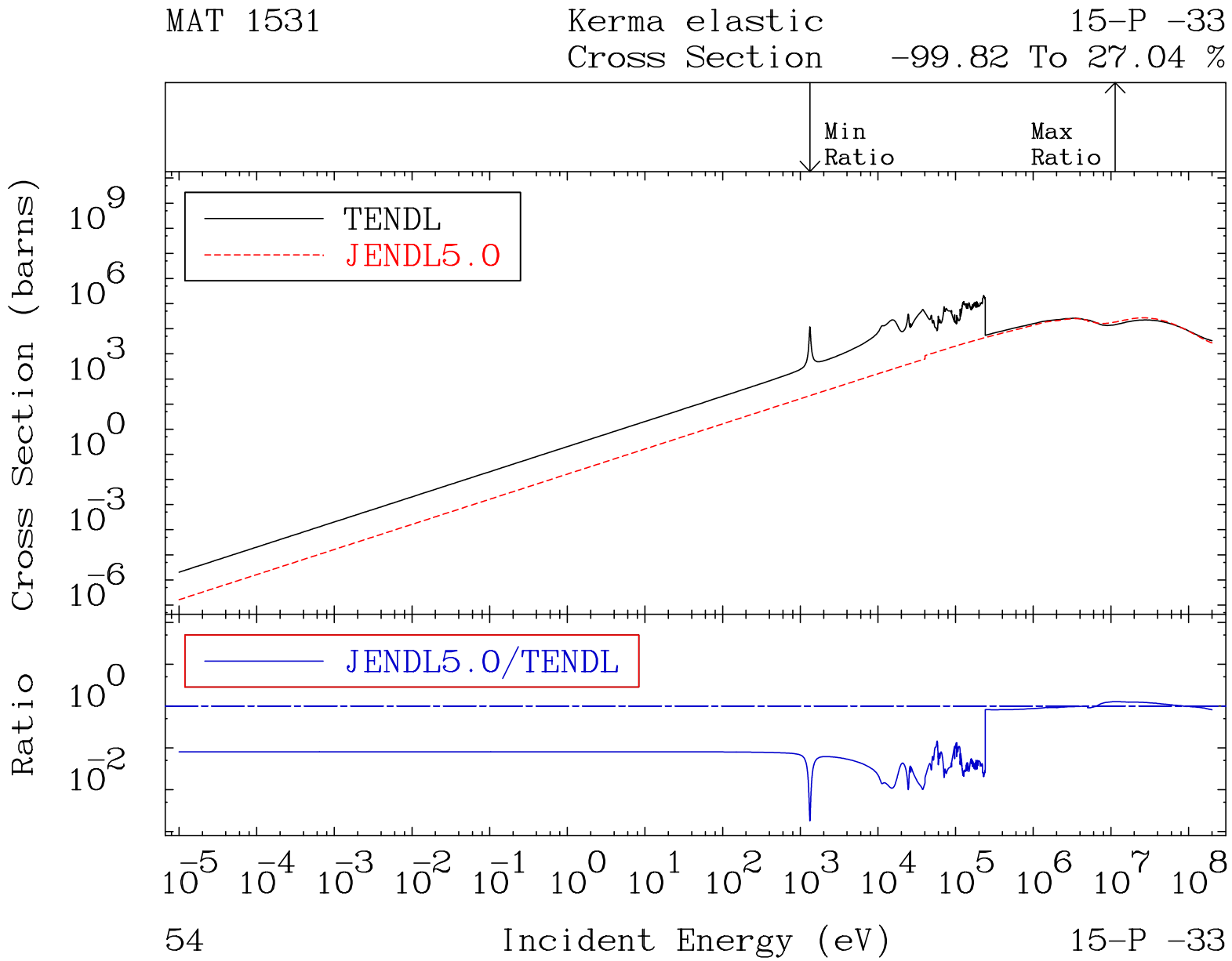

MAT 1531
Deuterium Production
15-P -33
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.5481 MeV
JENDL5.0 Threshold 7.5481 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
4
0
8
2
3
4
5
6
7
8
2
10^7
10^8
49
Incident Energy (eV)
15-P -33

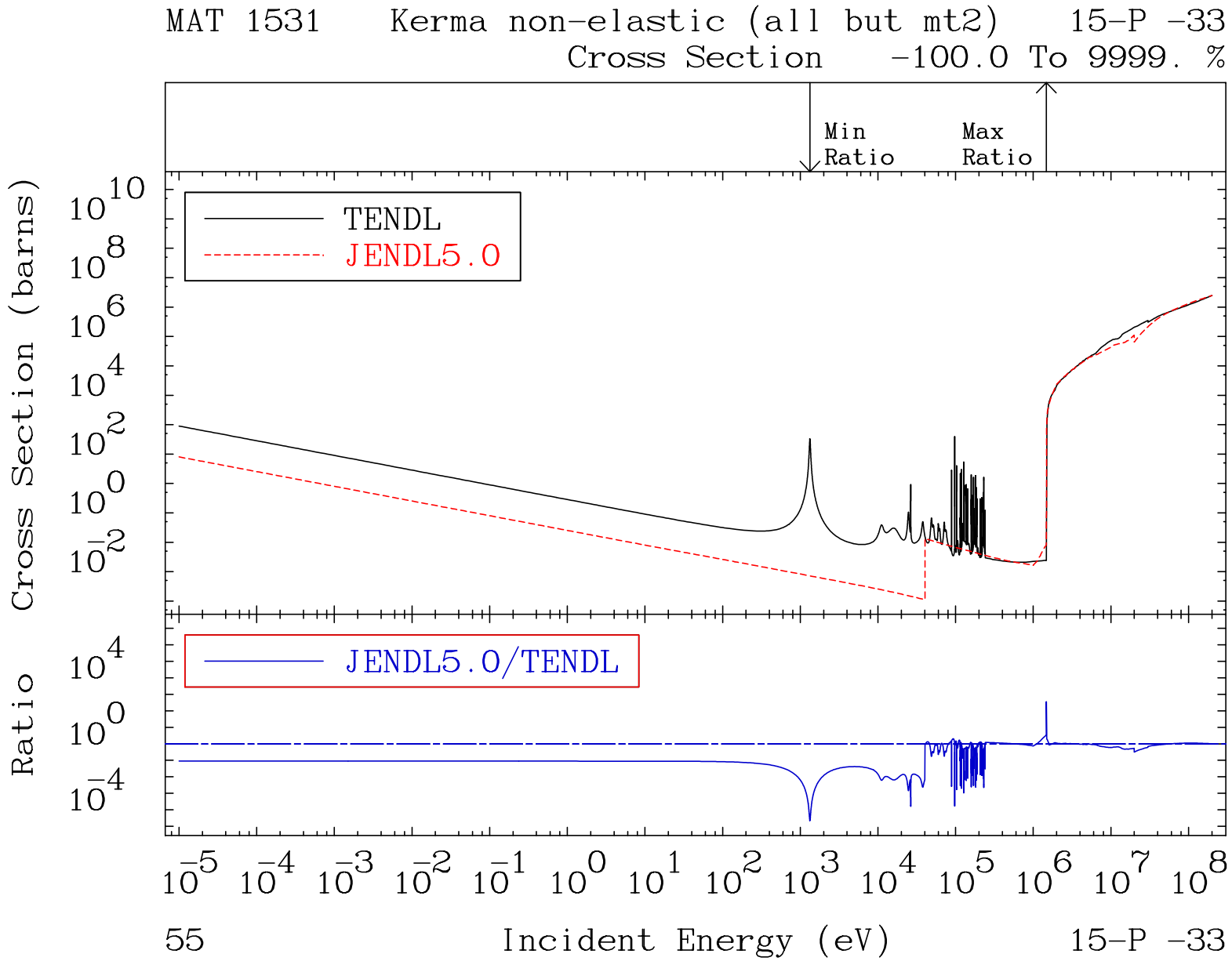

MAT 1531
Tritium Production
Cross Section
15-P -33
-66.85 To 225.4 %
Max Ratio
Min Ratio
TENDL Threshold 10.581 MeV
JENDL5.0 Threshold 10.581 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
15-P -33

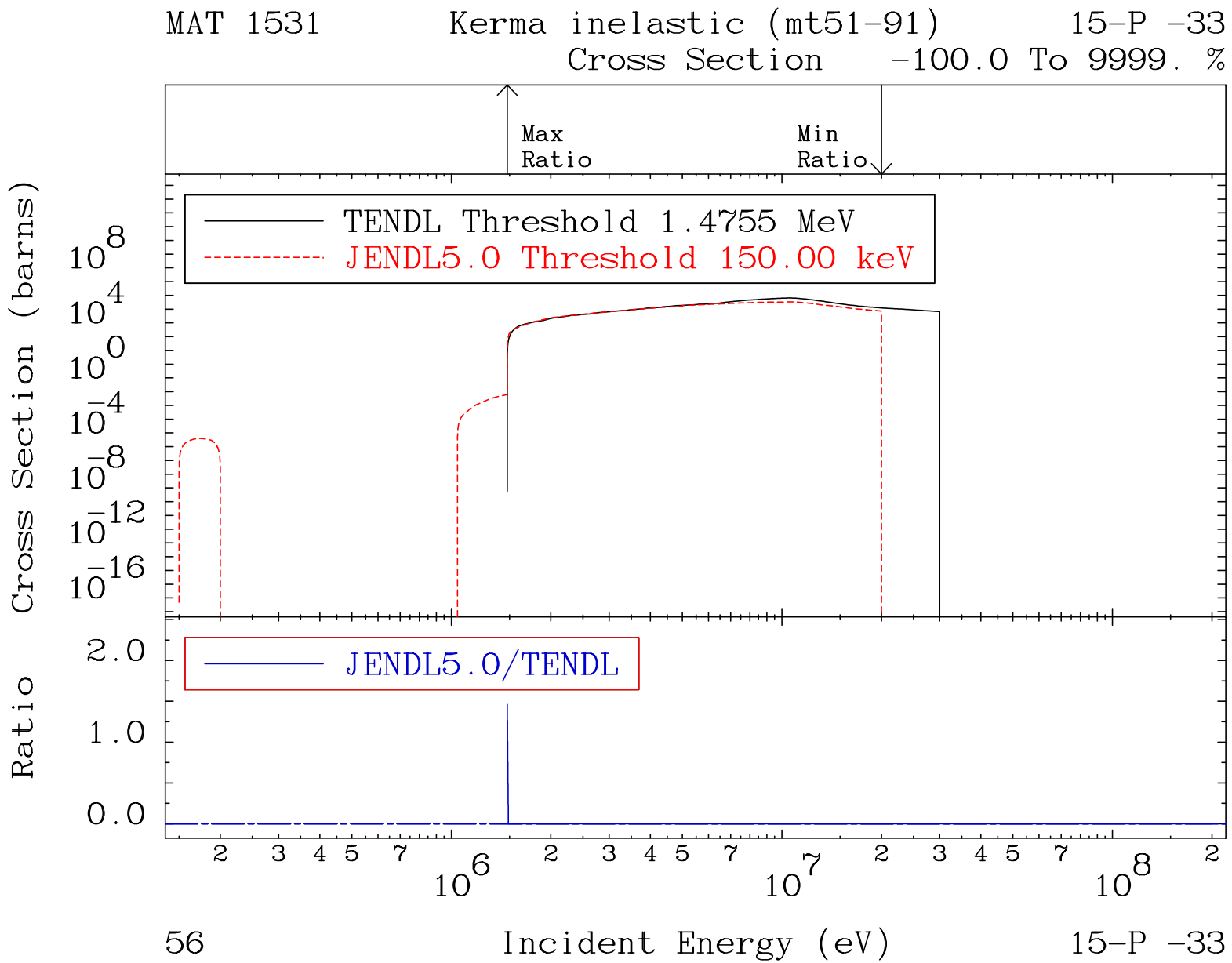

MAT 1531
He-3 Production
Cross Section
15-P -33
-99.99 To 5762. %
Max
Ratio
TENDL Threshold 18.805 MeV
JENDL5.0 Threshold 18.805 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^3
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
15-P -33

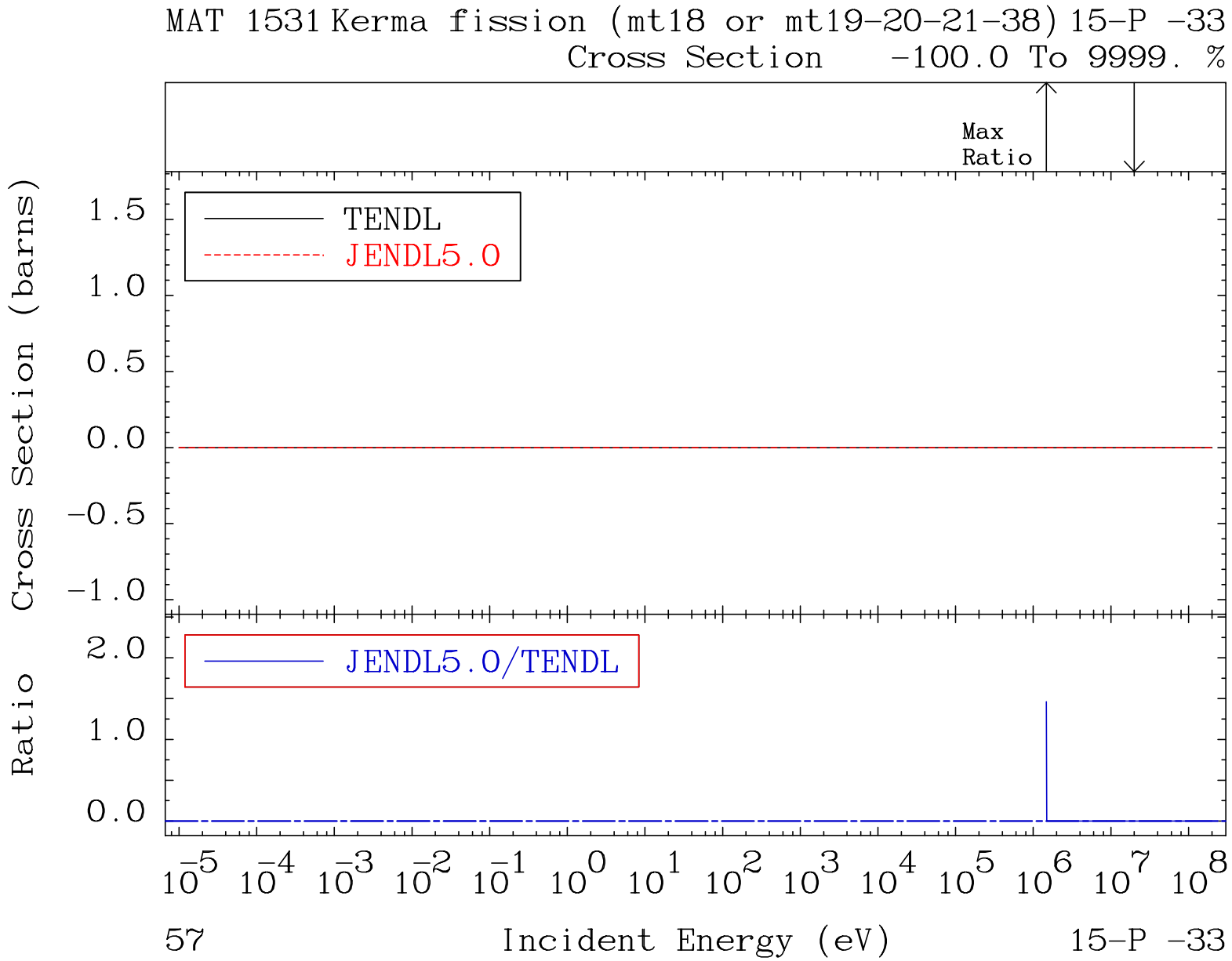

MAT 1531
He-4 Production
Cross Section
15-P -33
-99.82 To 273.0 %
Max
Ratio
TENDL Threshold 4.9745 MeV
JENDL5.0 Threshold 4.9737 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^0
10^-2
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
52
Incident Energy (eV)
15-P -33

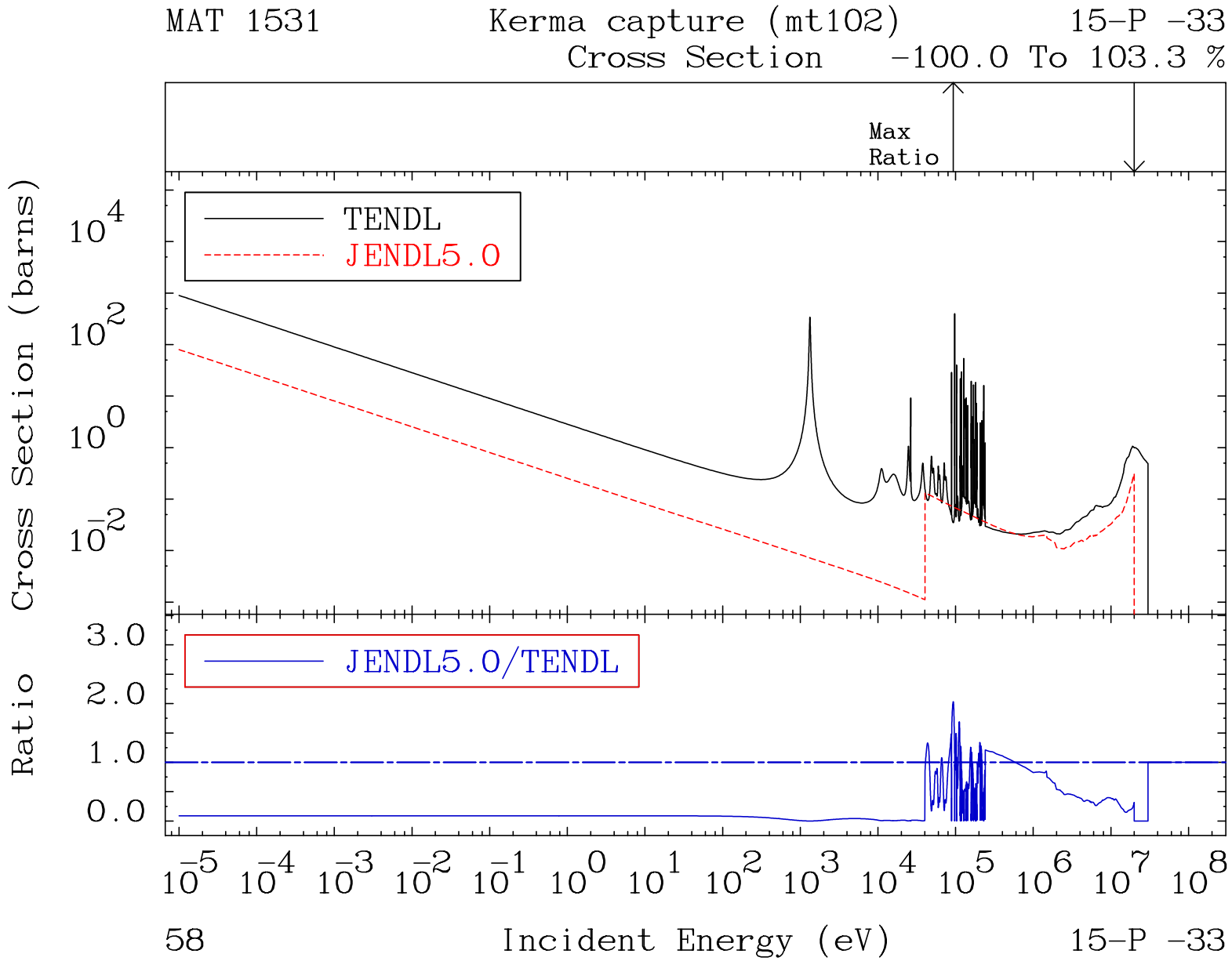

MAT 1531
Kerma total (eV-barns)
15-P -33
Cross Section -99.82 To 10.26 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
53
15-P -33

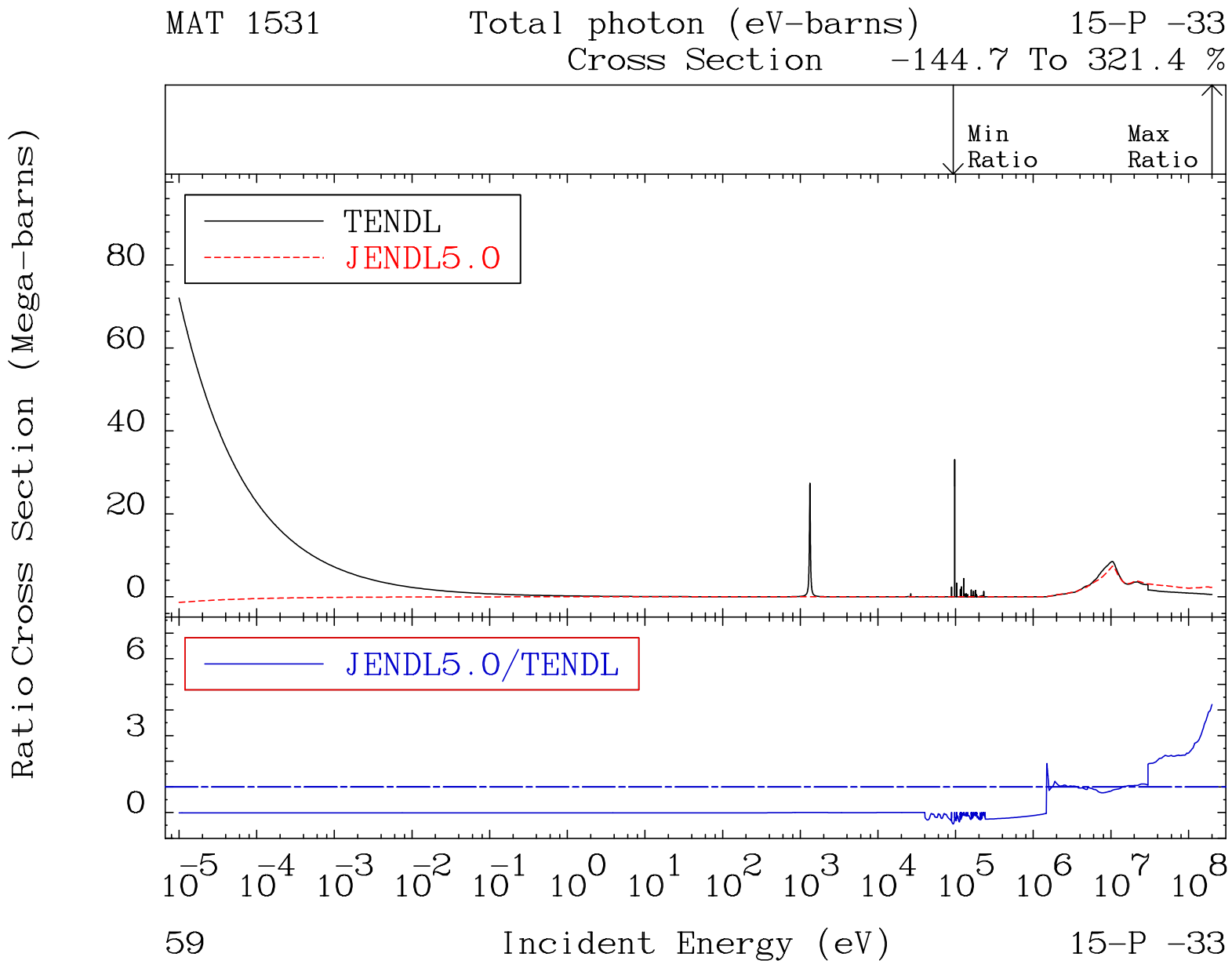

MAT 1531
Kerma elastic
Cross Section
15-P -33
-99.82 To 27.04 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
15-P -33

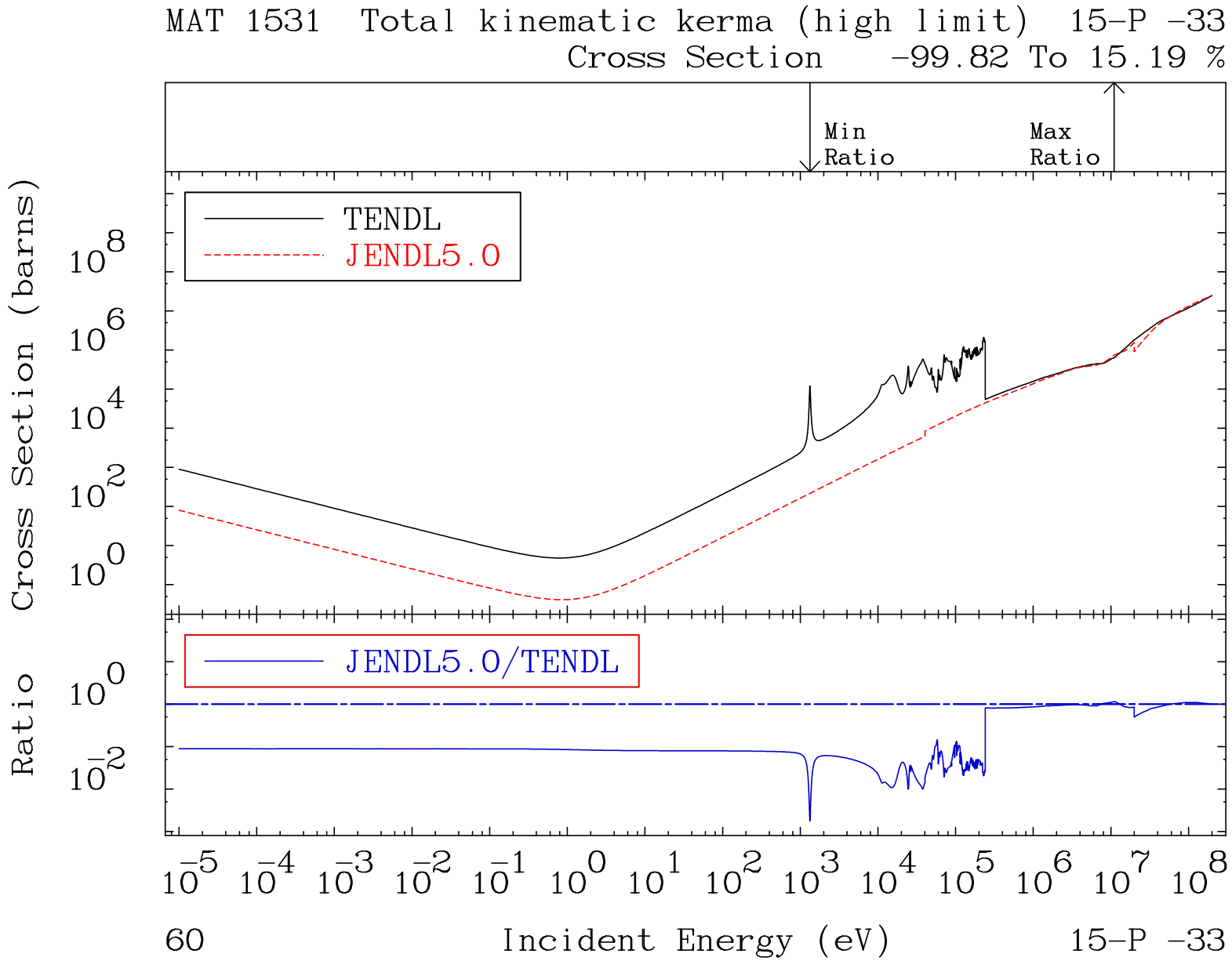

MAT 1531 Kerma non-elastic (all but mt2) 15-P -33
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
15-P -33

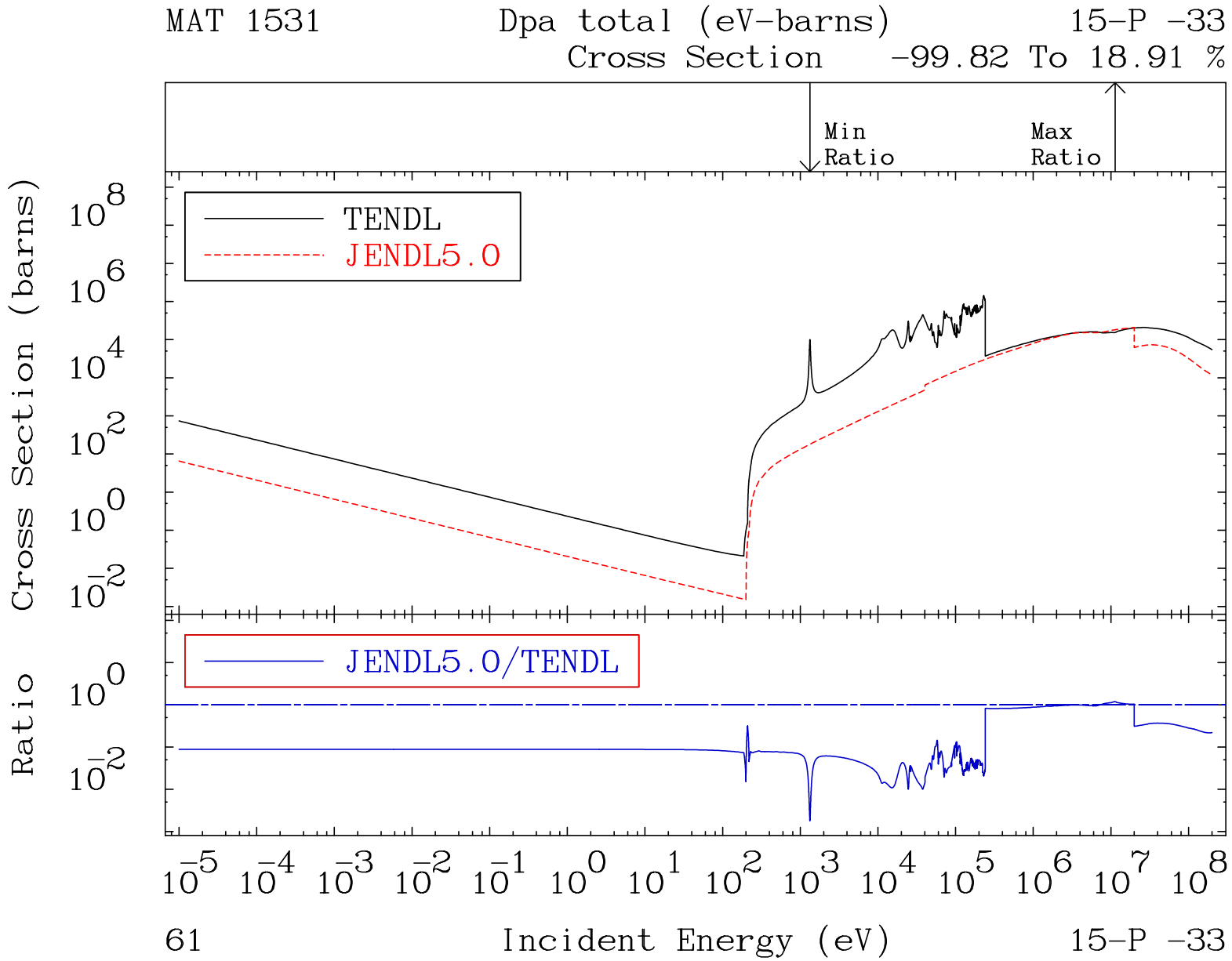

MAT 1531
Kerma inelastic (mt51-91)
15-P -33
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4755 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
56
15-P -33

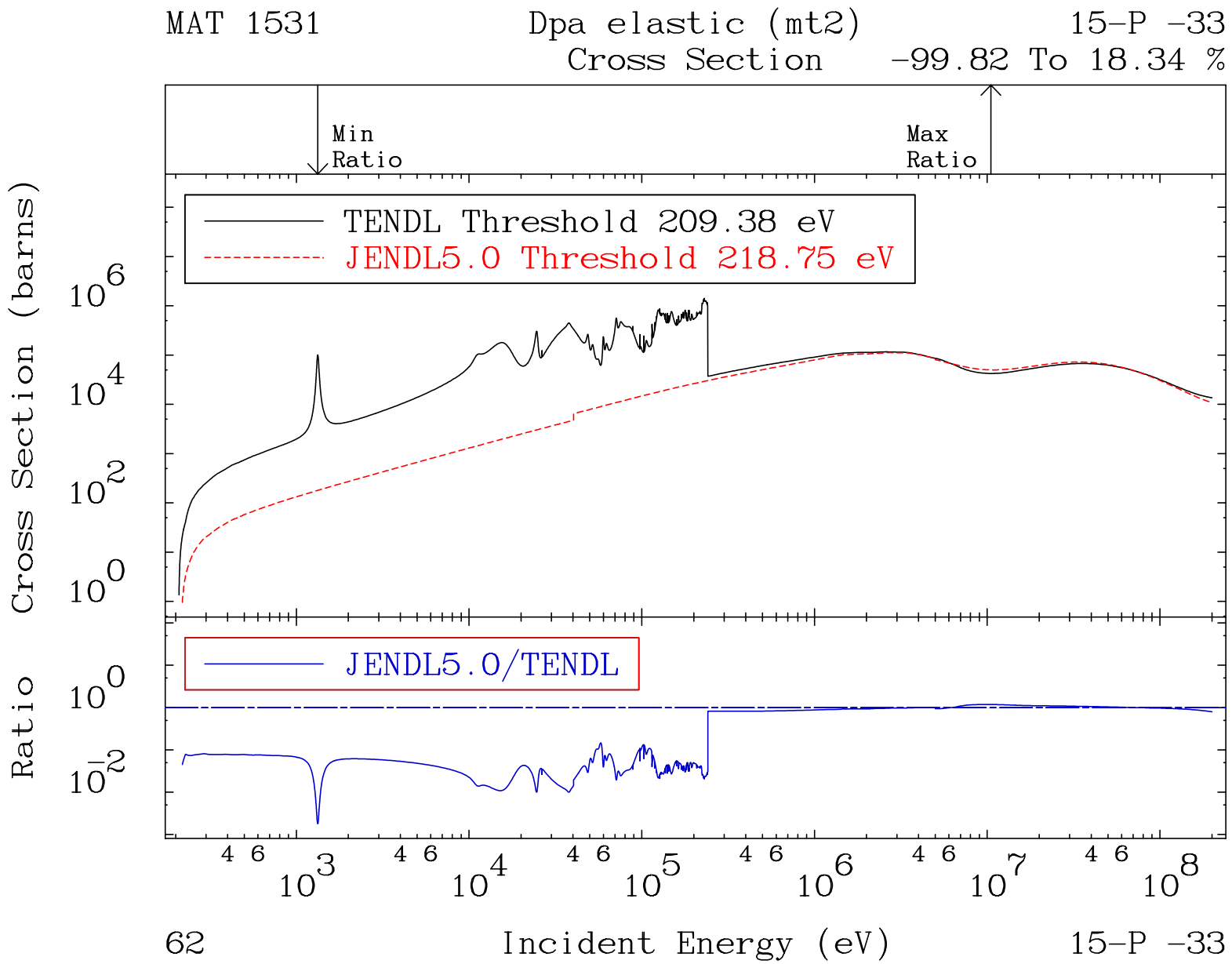

MAT 1531 Kerma fission (mt18 or mt19-20-21-38) 15-P -33
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
57
Incident Energy (eV)
15-P -33

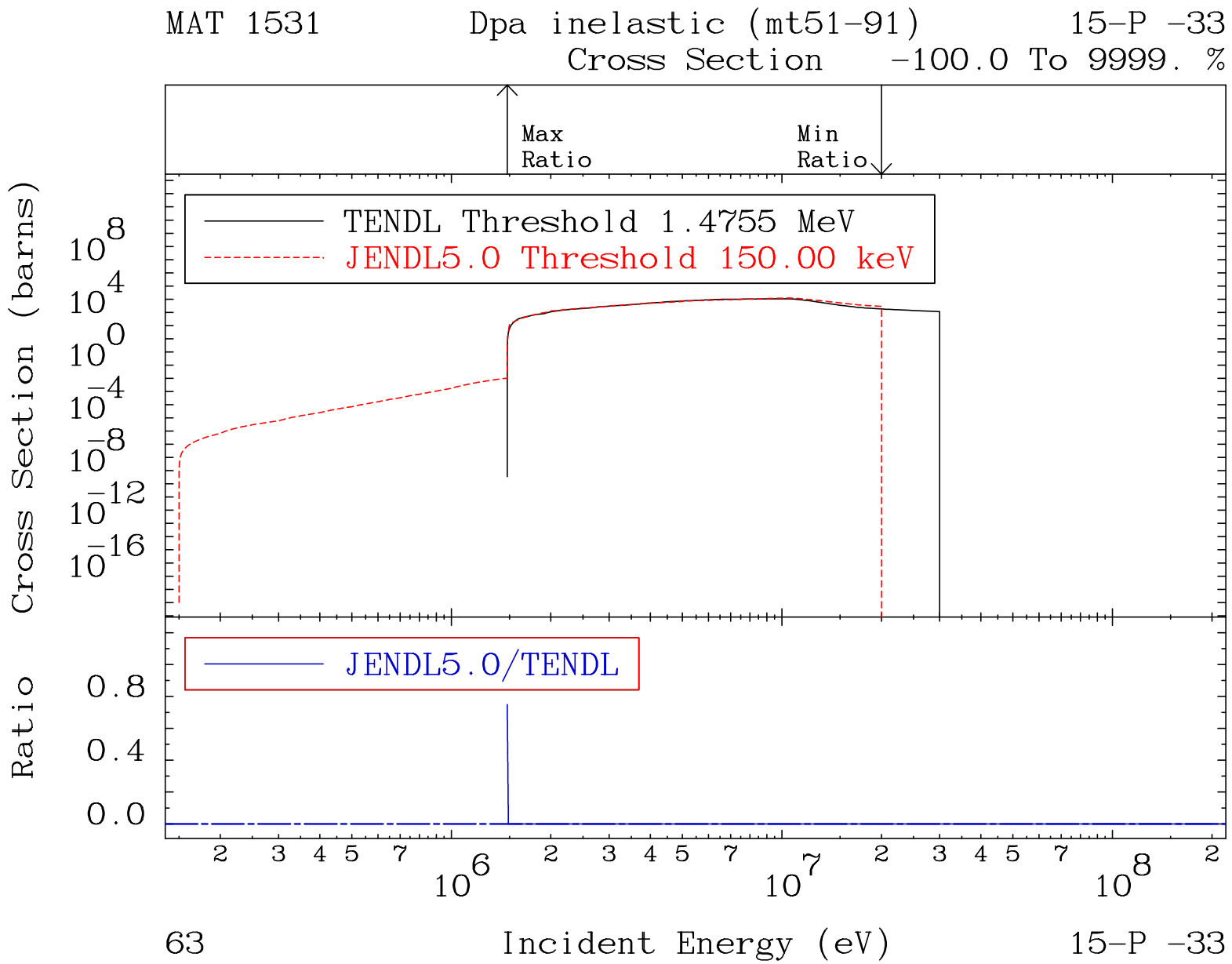

MAT 1531
Kerma capture (mt102)
15-P -33
Cross Section -100.0 To 103.3 %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
58
15-P -33

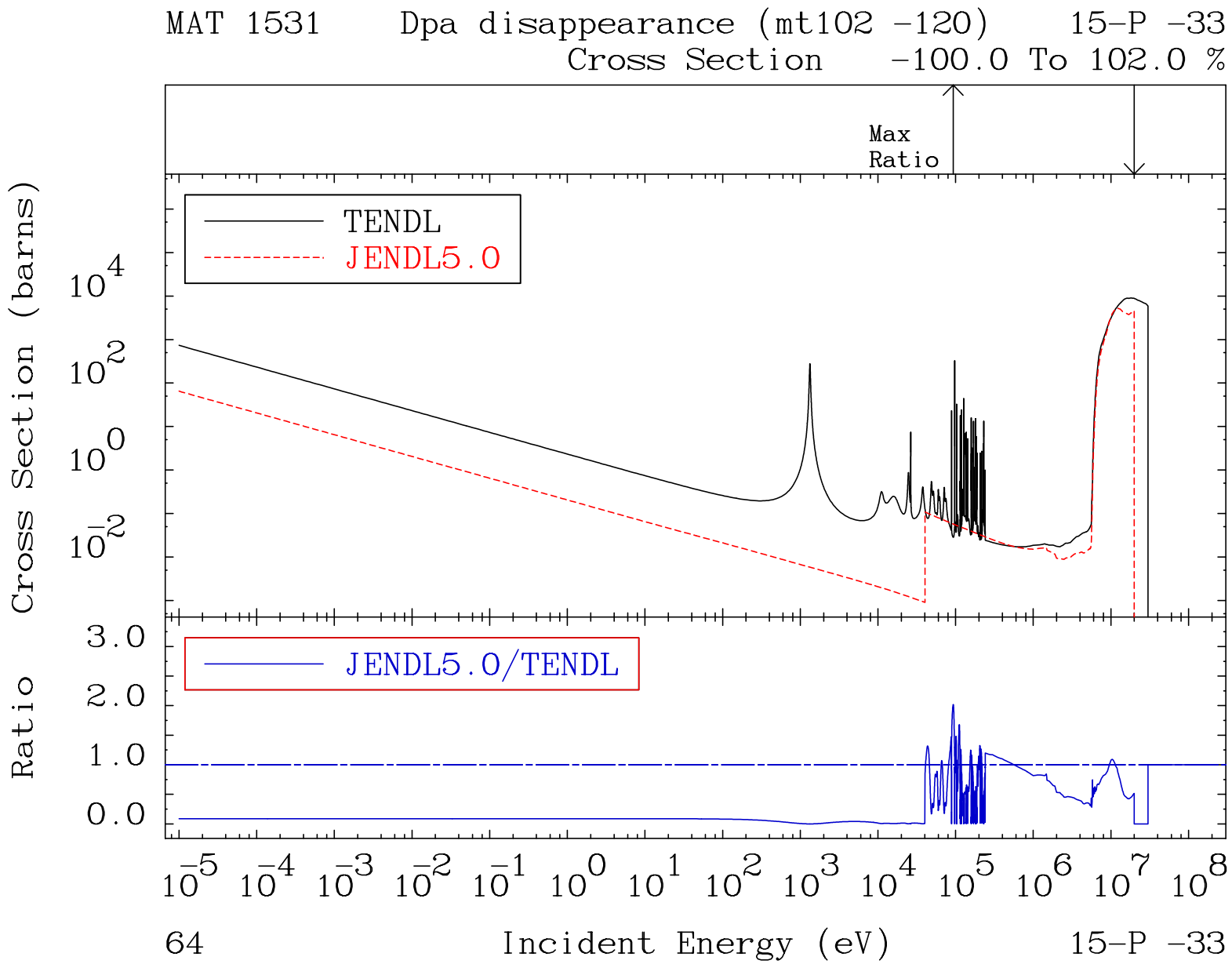

MAT 1531
Total photon (eV-barns)
15-P -33
Cross Section -144.7 To 321.4 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
80
60
40
20
0
6
3
0
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
59
Incident Energy (eV)
15-P -33

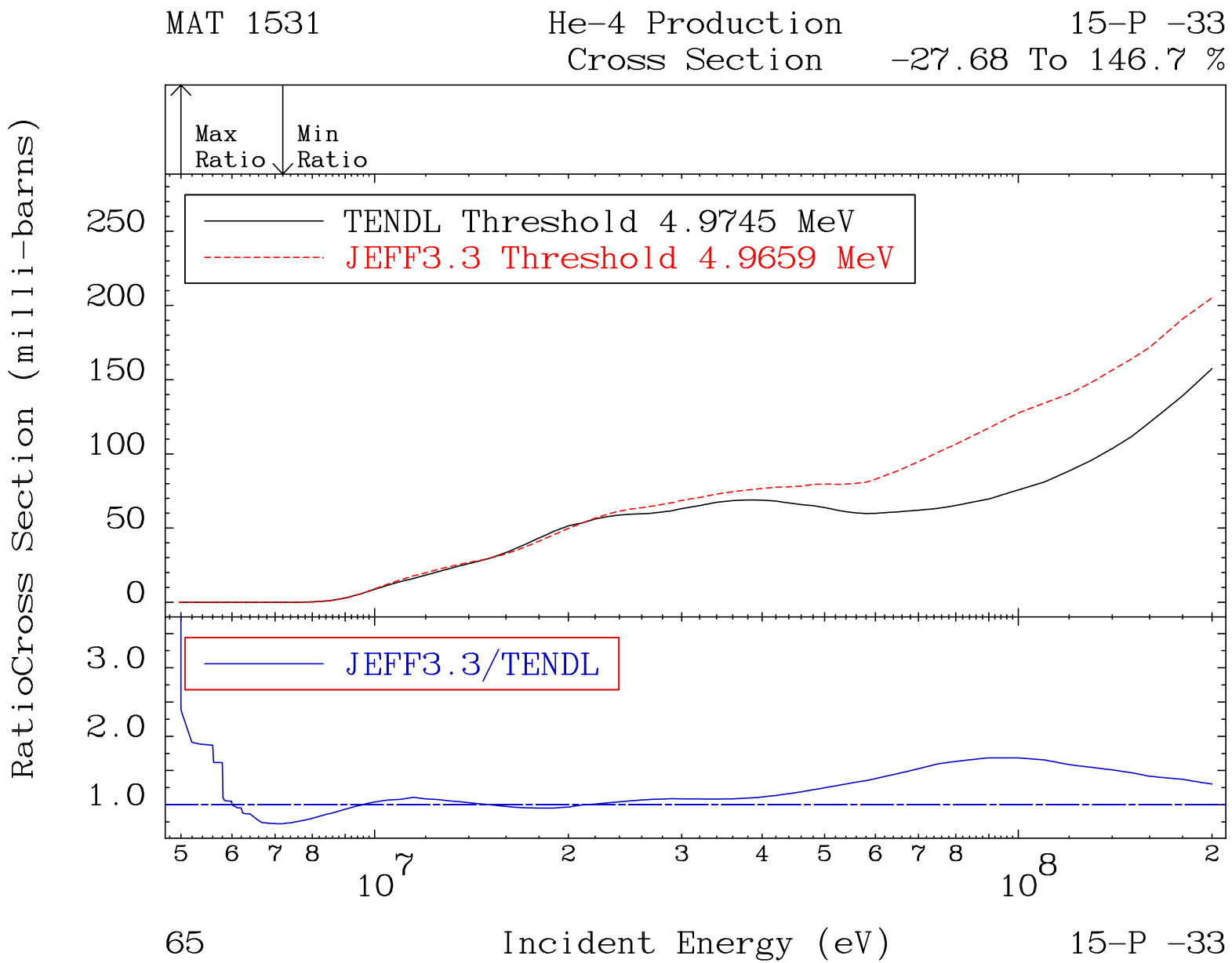

MAT 1531 Total kinematic kerma (high limit) 15-P -33
Cross Section -99.82 To 15.19 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
15-P -33

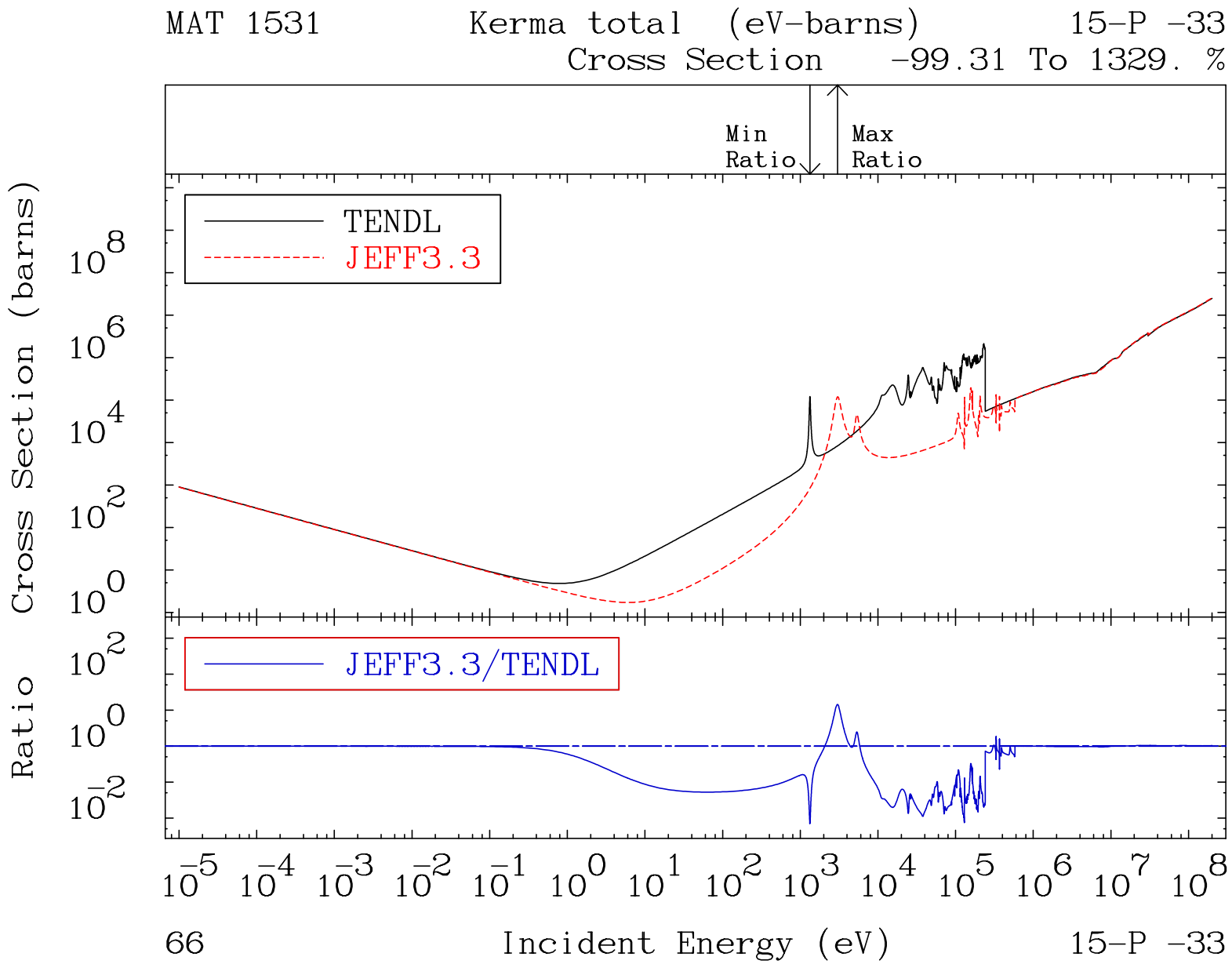

MAT 1531
Dpa total (eV-barns)
15-P -33
Cross Section -99.82 To 18.91 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
15-P -33

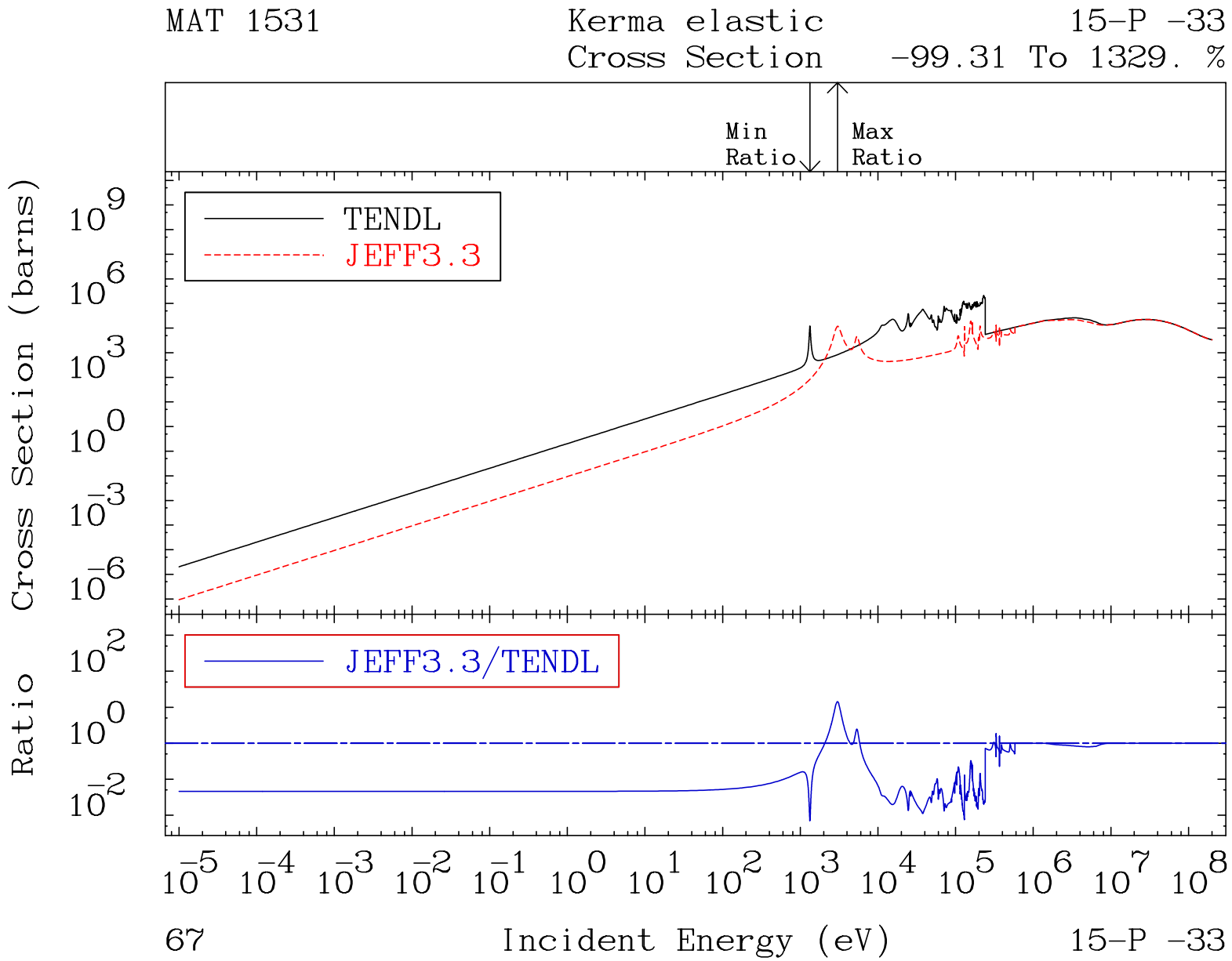

MAT 1531
Dpa elastic (mt2)
Cross Section
15-P -33
-99.82 To 18.34 %
Min Ratio
Max Ratio
TENDL Threshold 209.38 eV
JENDL5.0 Threshold 218.75 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
15-P -33

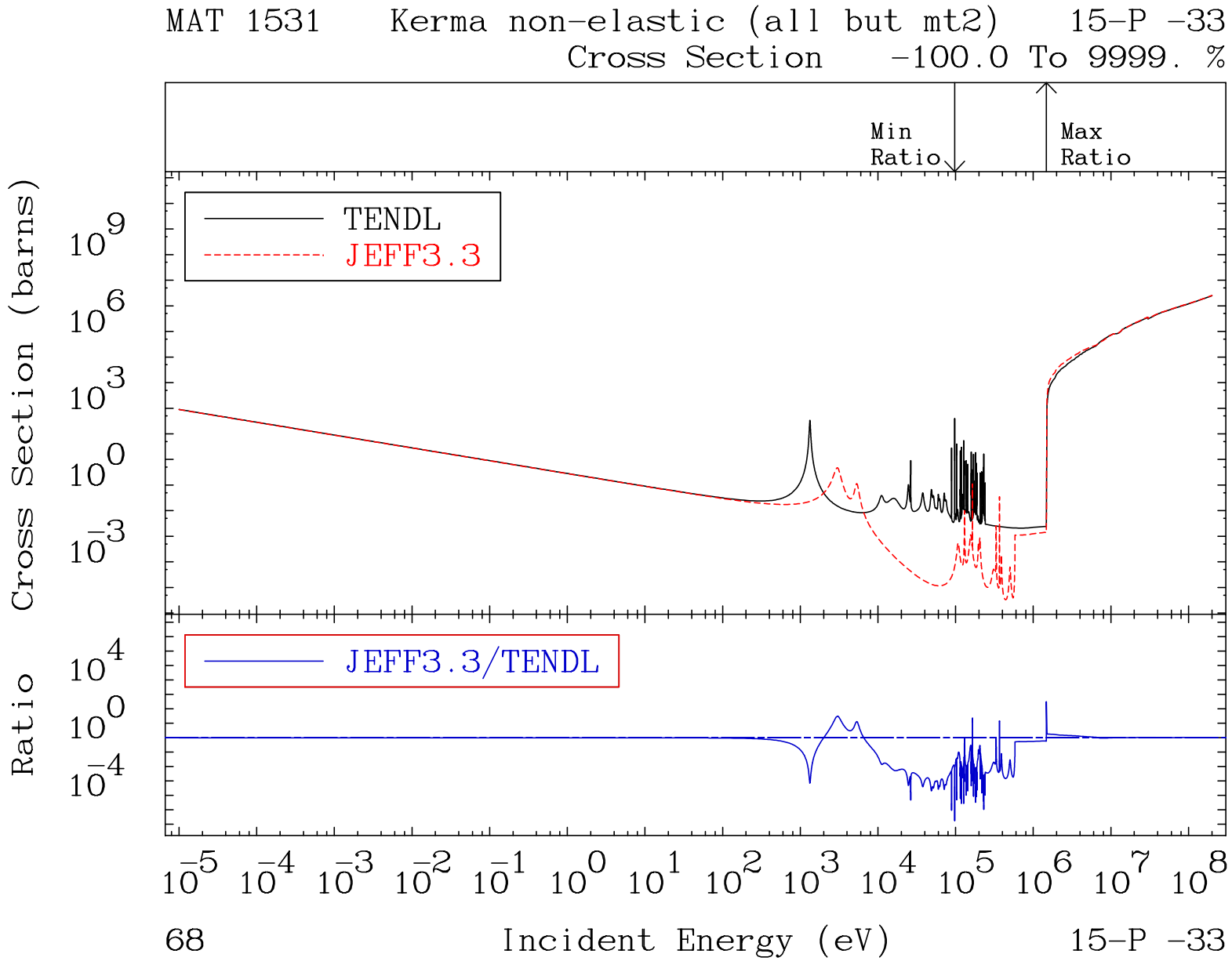

MAT 1531
Dpa inelastic (mt51-91)
15-P -33
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4755 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
10^8
10^4
10^0
10^-4
10^-8
10^-12
10^-16
JENDL5.0/TENDL
Ratio
0.8
0.4
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
63
Incident Energy (eV)
15-P -33

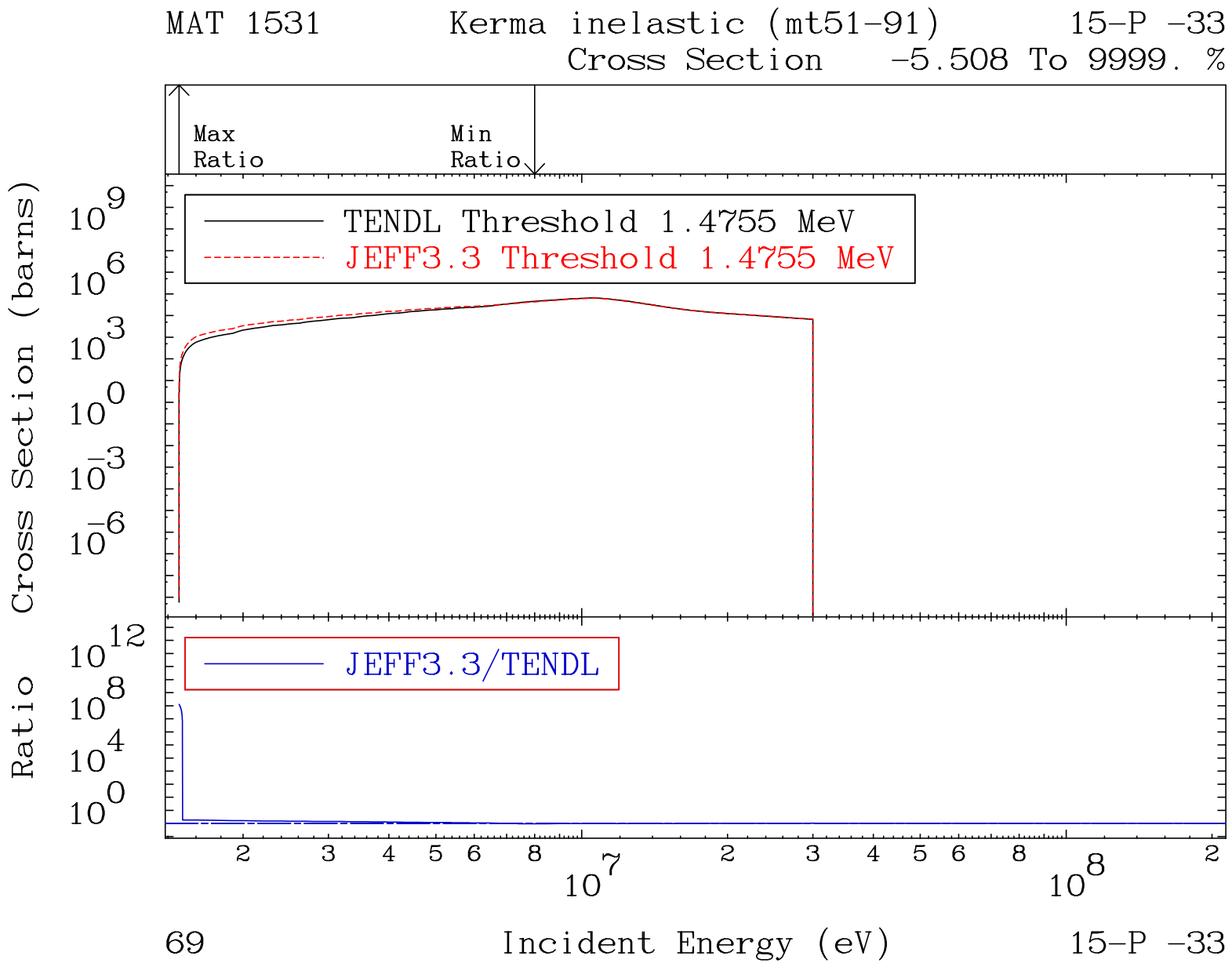

MAT 1531 Dpa disappearance (mt102 -120) 15-P -33
Cross Section -100.0 To 102.0 %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^4
10^2
10^0
10^-2
JENDL5.0/TENDL
Ratio
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
64
Incident Energy (eV)
15-P -33

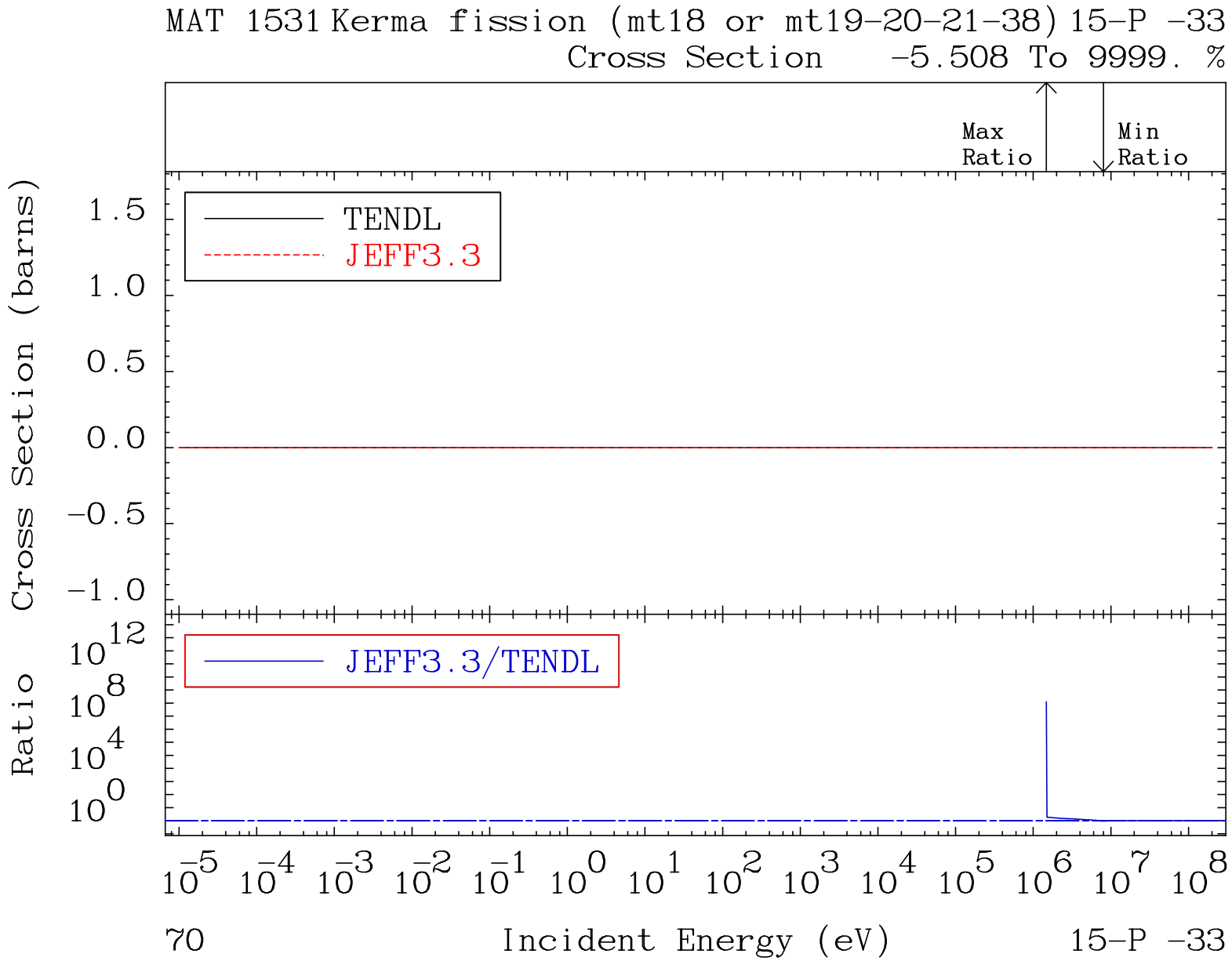

MAT 1531
He-4 Production
Cross Section
15-P -33
-27.68 To 146.7 %
Max Ratio
Min Ratio
TENDL Threshold 4.9745 MeV
JEFF3.3 Threshold 4.9659 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
3.0
2.0
1.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
15-P -33

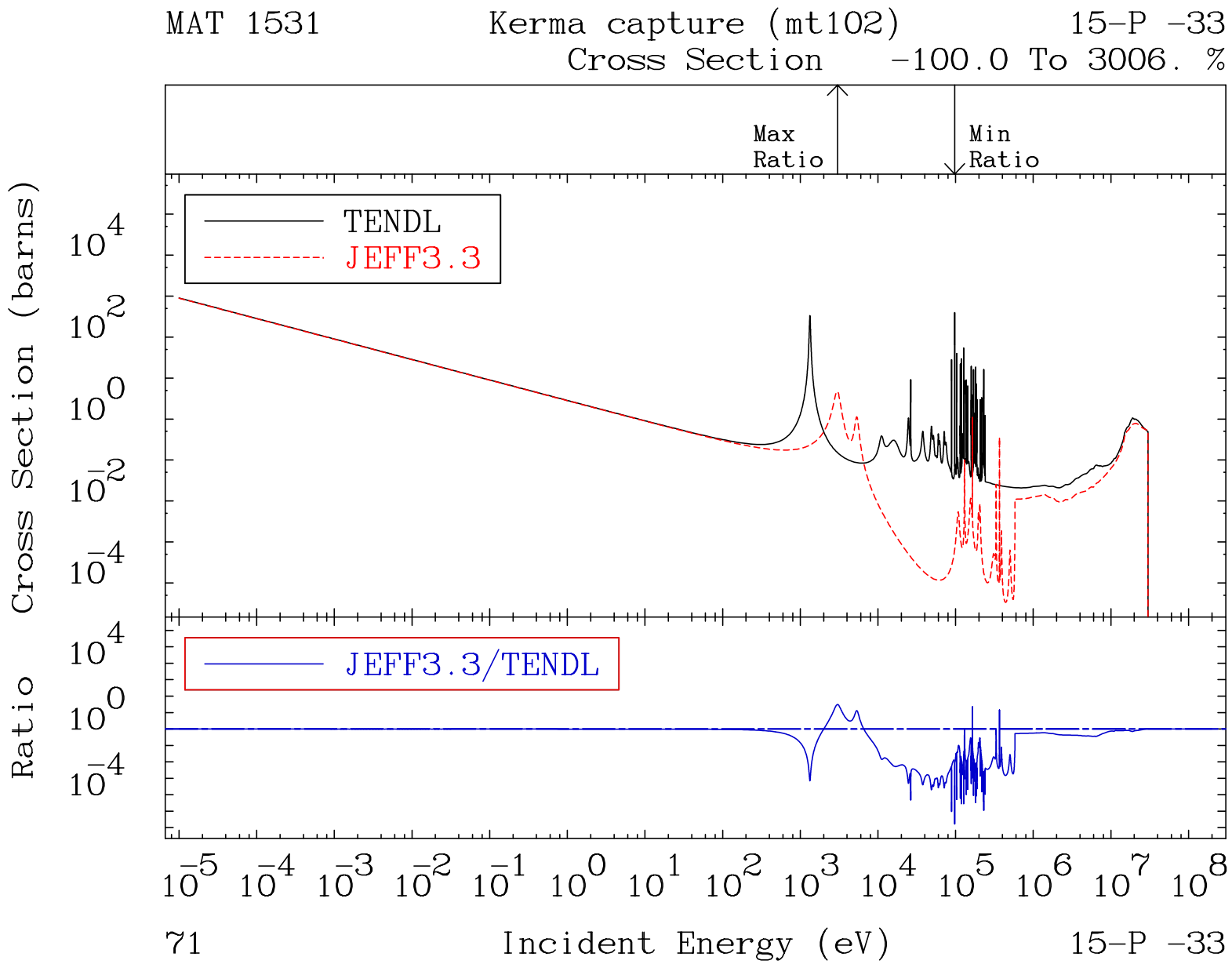

MAT 1531
Kerma total (eV-barns)
15-P -33
Cross Section -99.31 To 1329. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
15-P -33

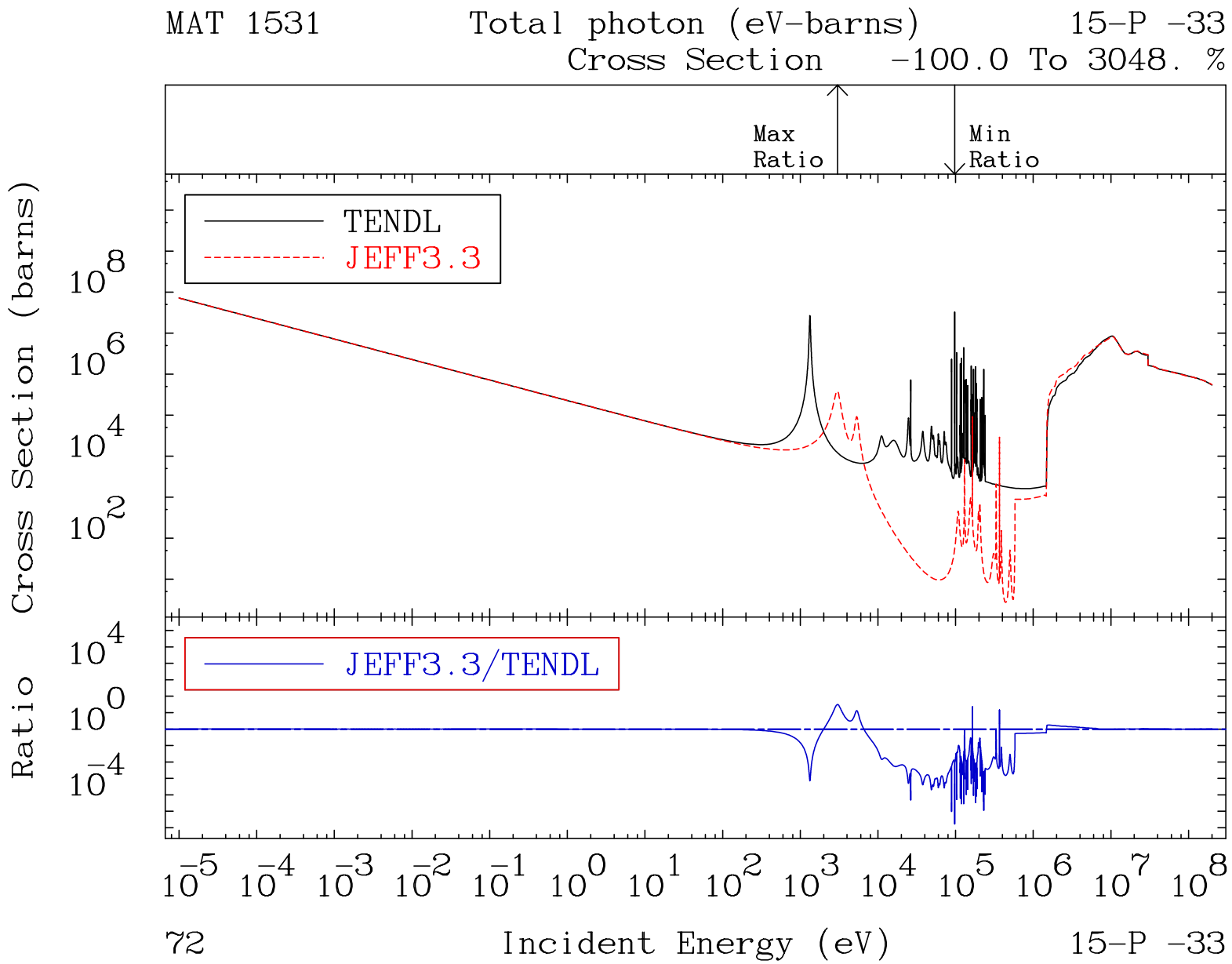

MAT 1531
Kerma elastic
15-P -33
Cross Section
-99.31 To 1329. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
15-P -33

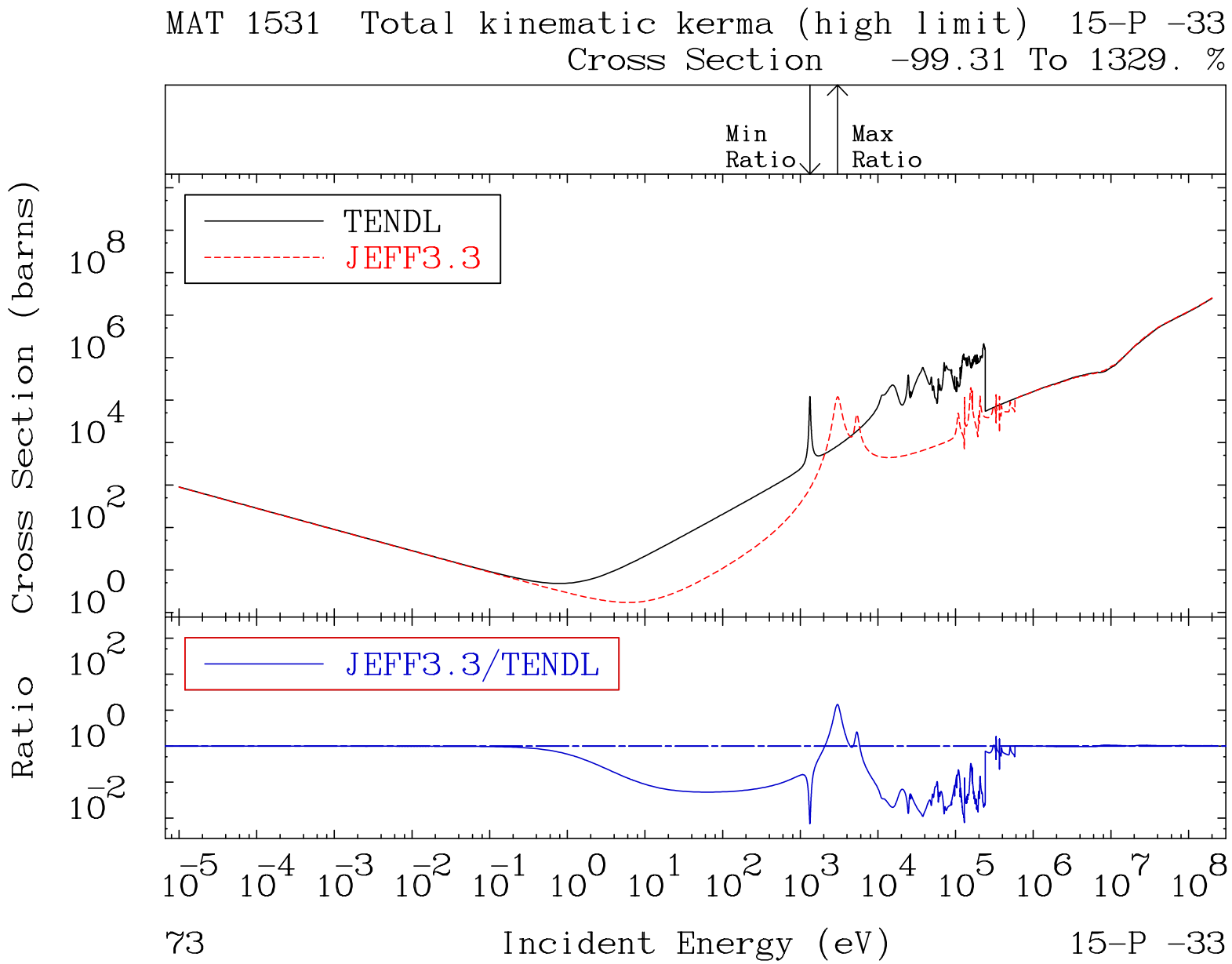

MAT 1531 Kerma non-elastic (all but mt2) 15-P -33
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
15-P -33

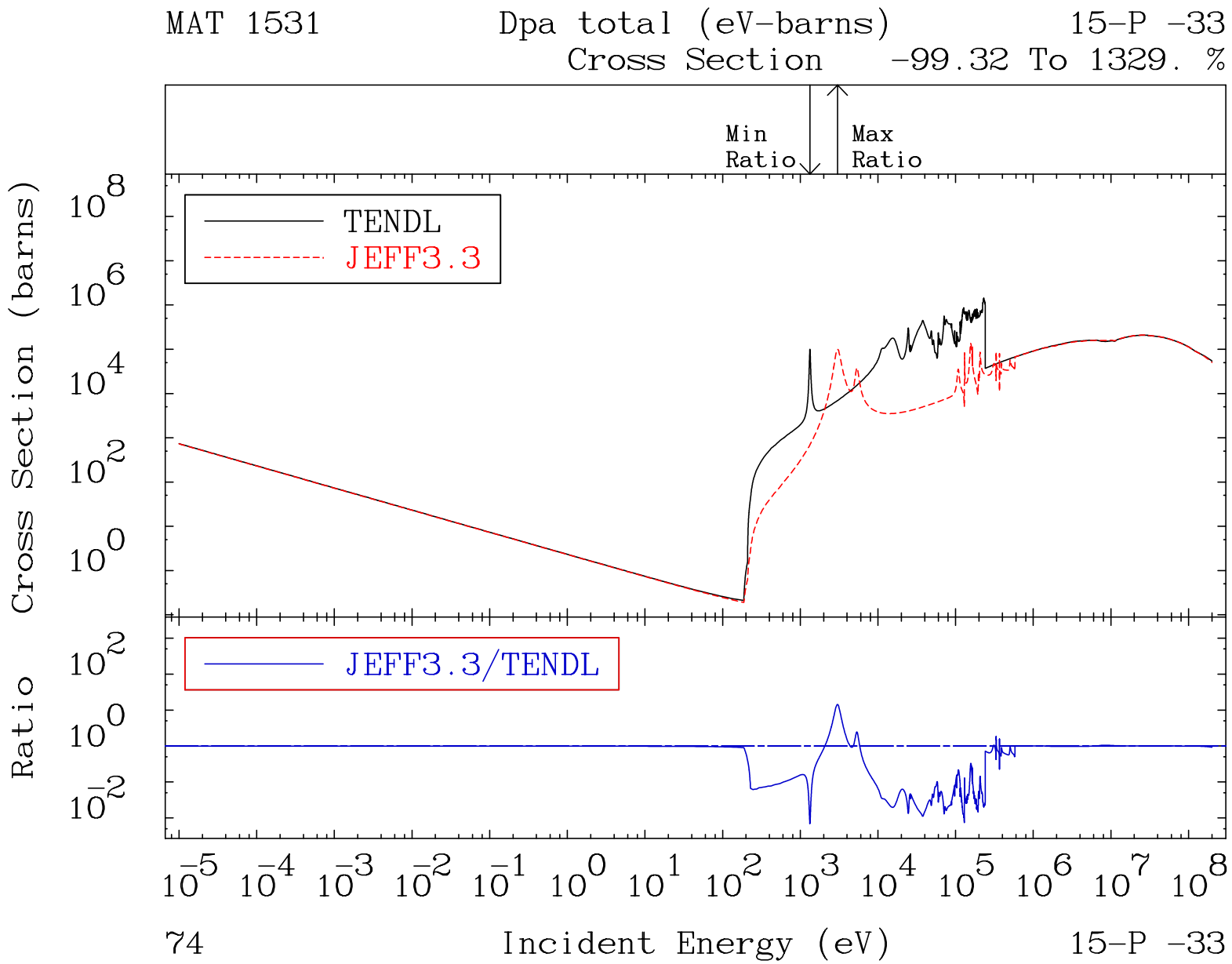

MAT 1531
Kerma inelastic (mt51-91)
15-P -33
Cross Section -5.508 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4755 MeV
JEFF3.3 Threshold 1.4755 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
15-P -33

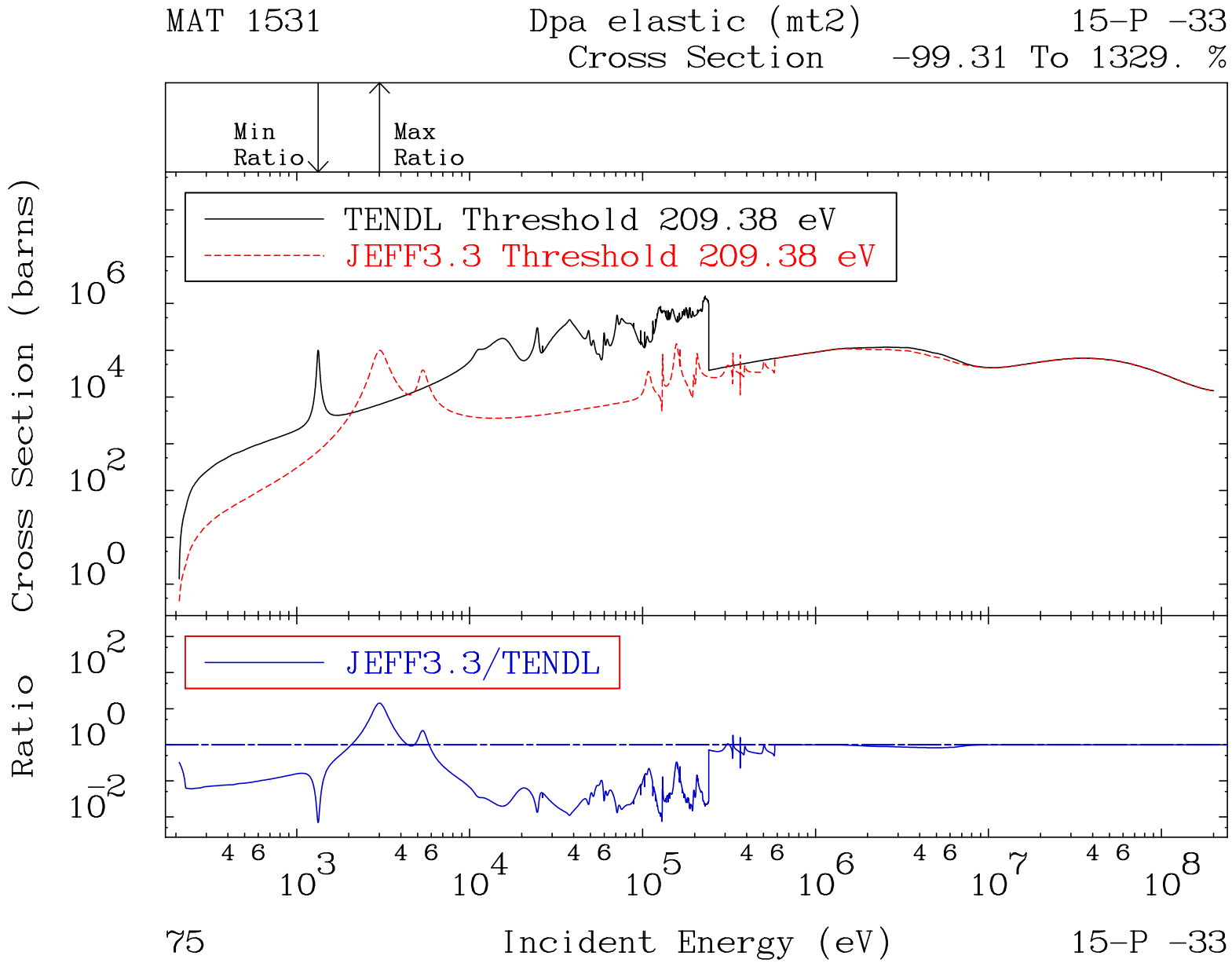

MAT 1531 Kerma fission (mt18 or mt19-20-21-38) 15-P -33
Cross Section -5.508 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
$10^{12}$
$10^{8}$
$10^{4}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
70
Incident Energy (eV)
15-P -33

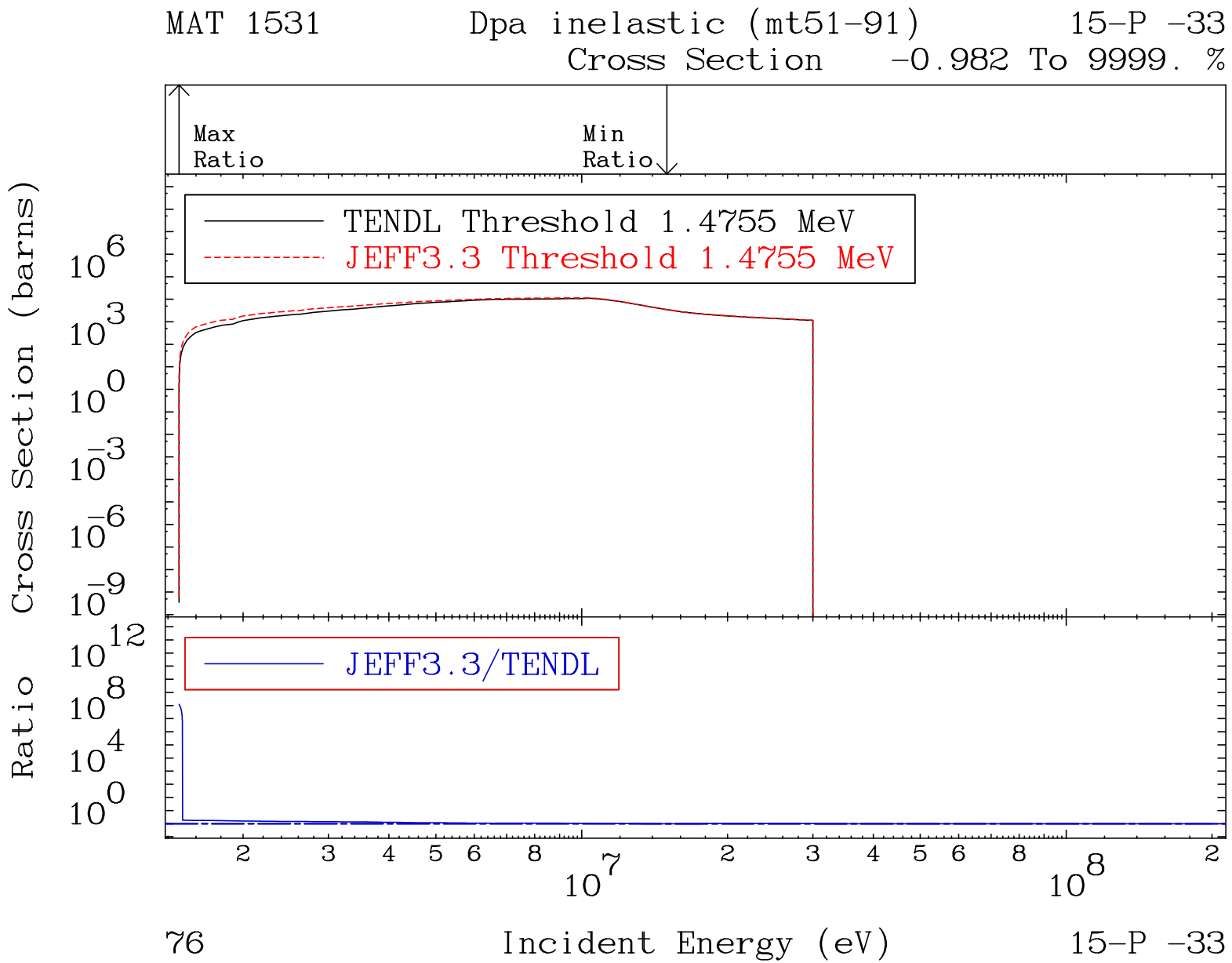

MAT 1531
Kerma capture (mt102)
15-P -33
Cross Section -100.0 To 3006. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
15-P -33

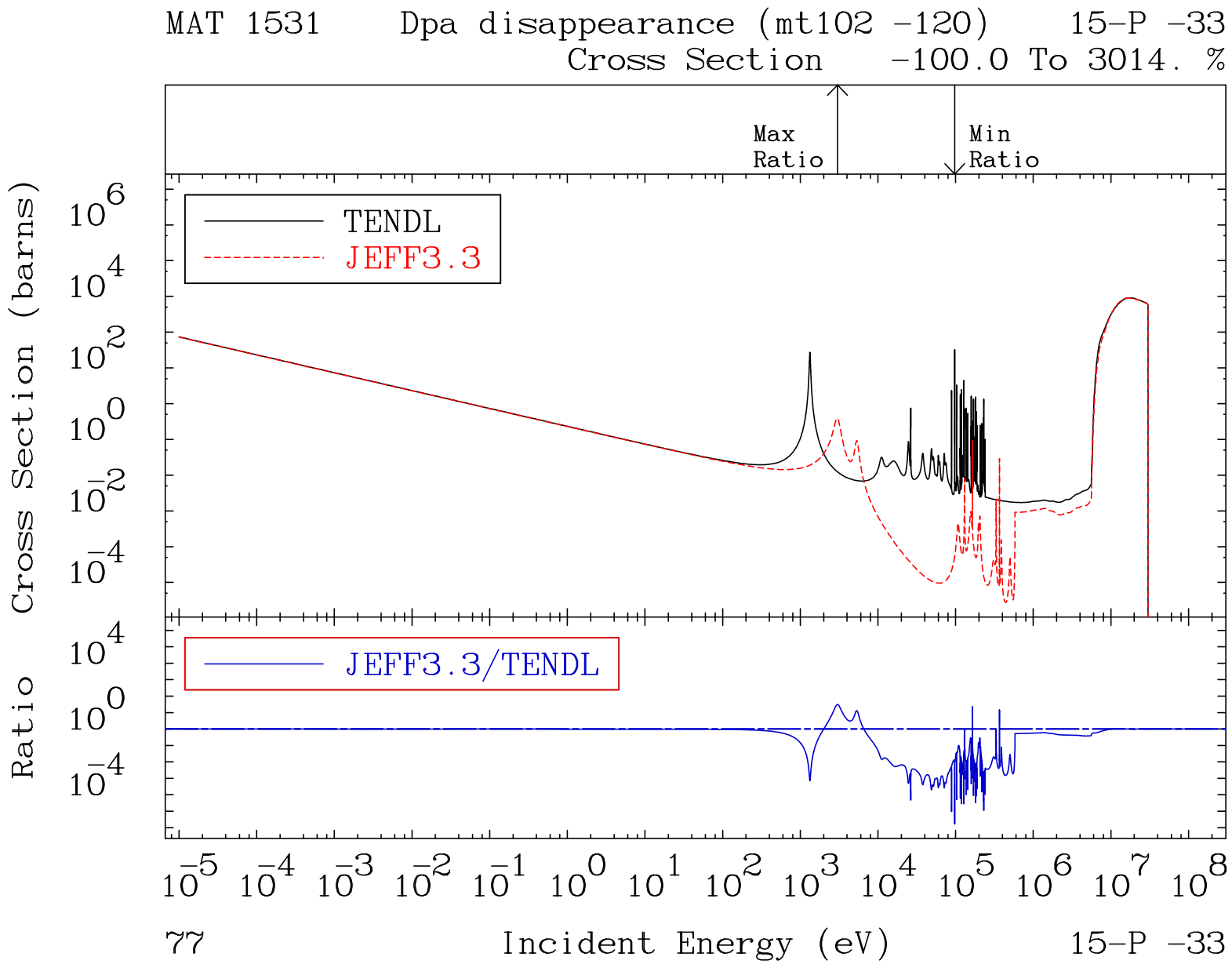

MAT 1531
Total photon (eV-barns)
15-P -33
Cross Section -100.0 To 3048. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
15-P -33


MAT 1531 Total kinematic kerma (high limit) 15-P -33
Cross Section -99.31 To 1329. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
15-P -33


MAT 1531
Dpa total (eV-barns)
15-P -33
Cross Section -99.32 To 1329. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
15-P -33


MAT 1531
Dpa elastic (mt2)
Cross Section
15-P -33
-99.31 To 1329. %
Min Ratio
Max Ratio
TENDL Threshold 209.38 eV
JEFF3.3 Threshold 209.38 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
15-P -33


MAT 1531
Dpa inelastic (mt51-91)
15-P -33
Cross Section -0.982 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4755 MeV
JEFF3.3 Threshold 1.4755 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
15-P -33


MAT 1531 Dpa disappearance (mt102 -120) 15-P -33
Cross Section -100.0 To 3014. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
15-P -33