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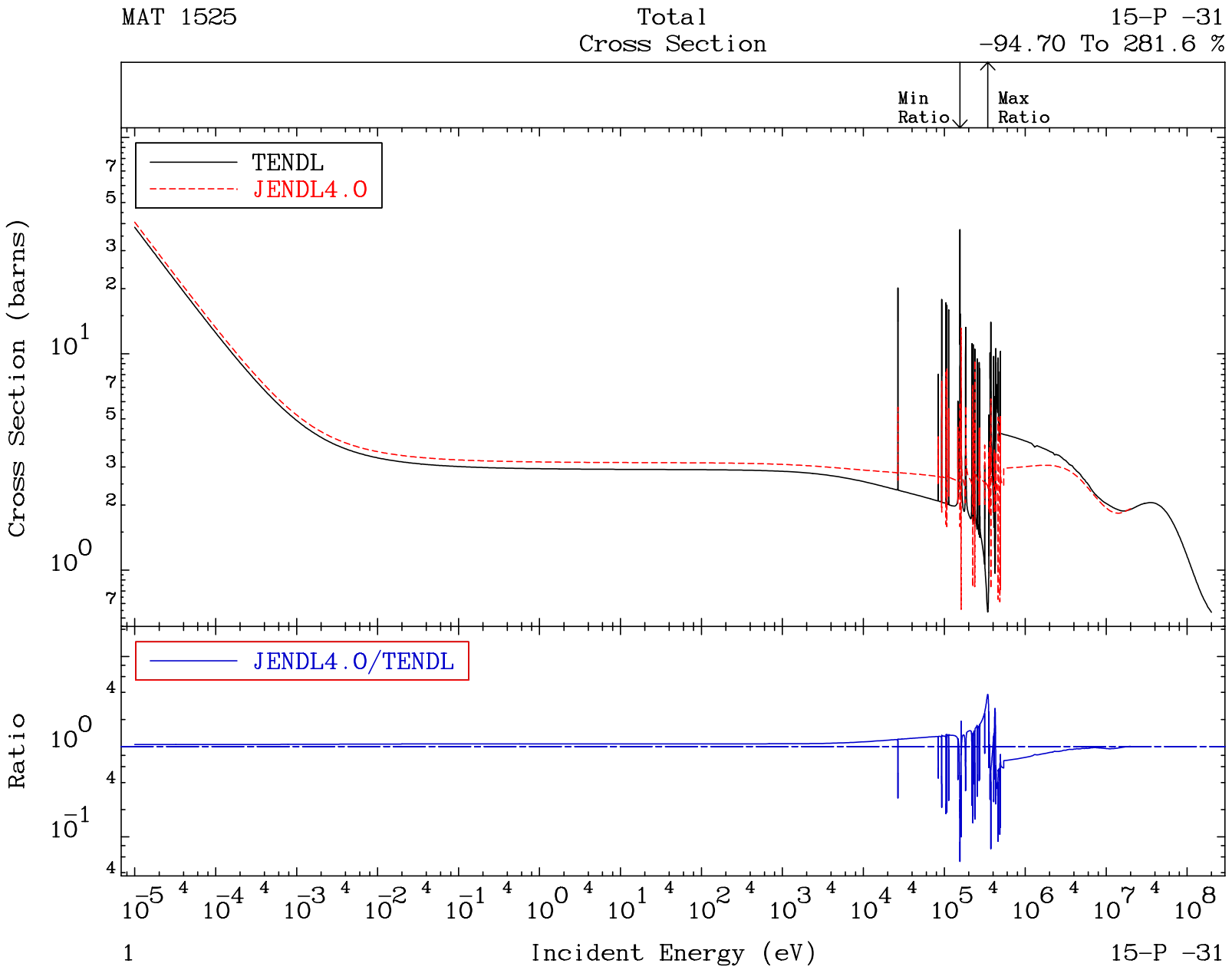
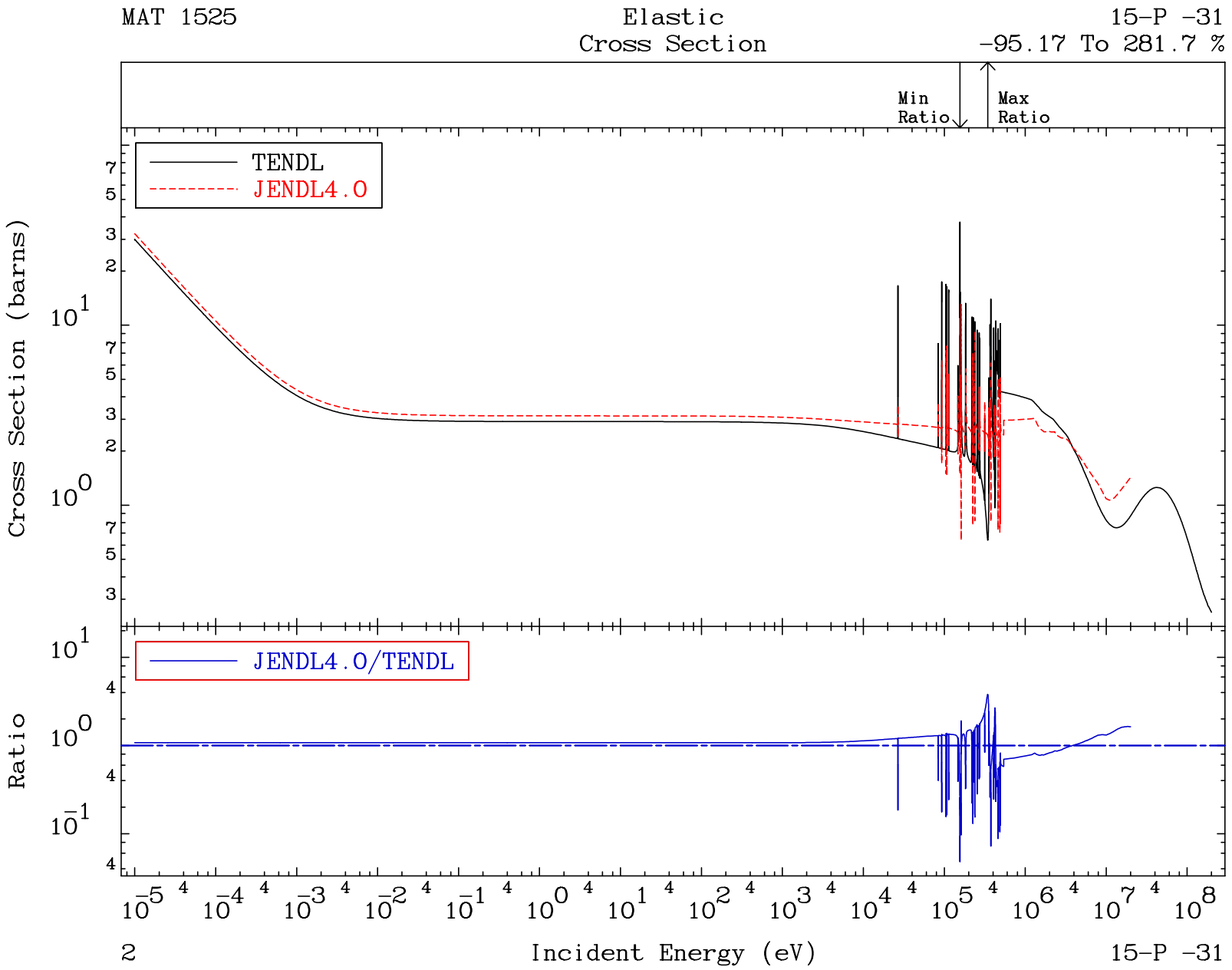
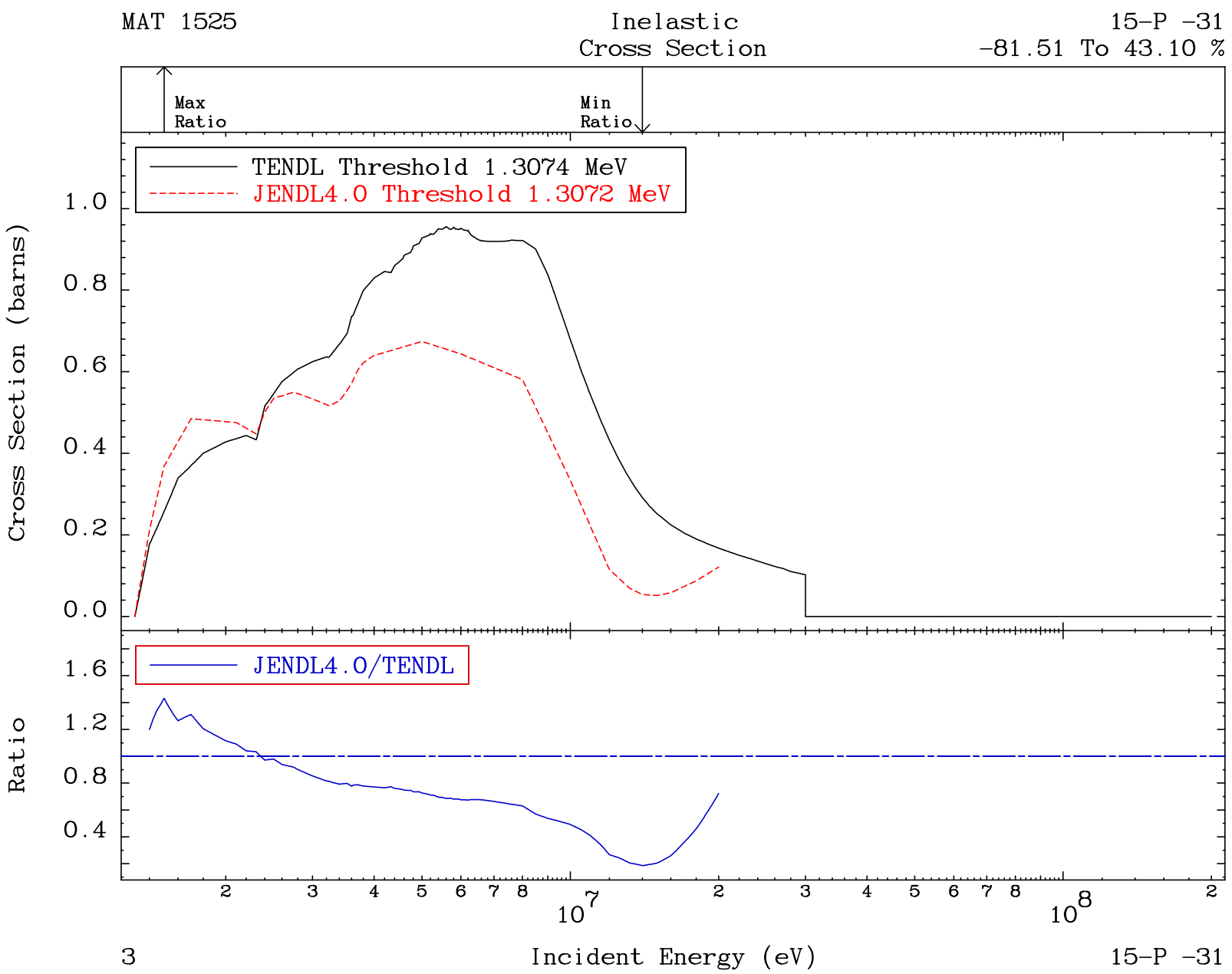
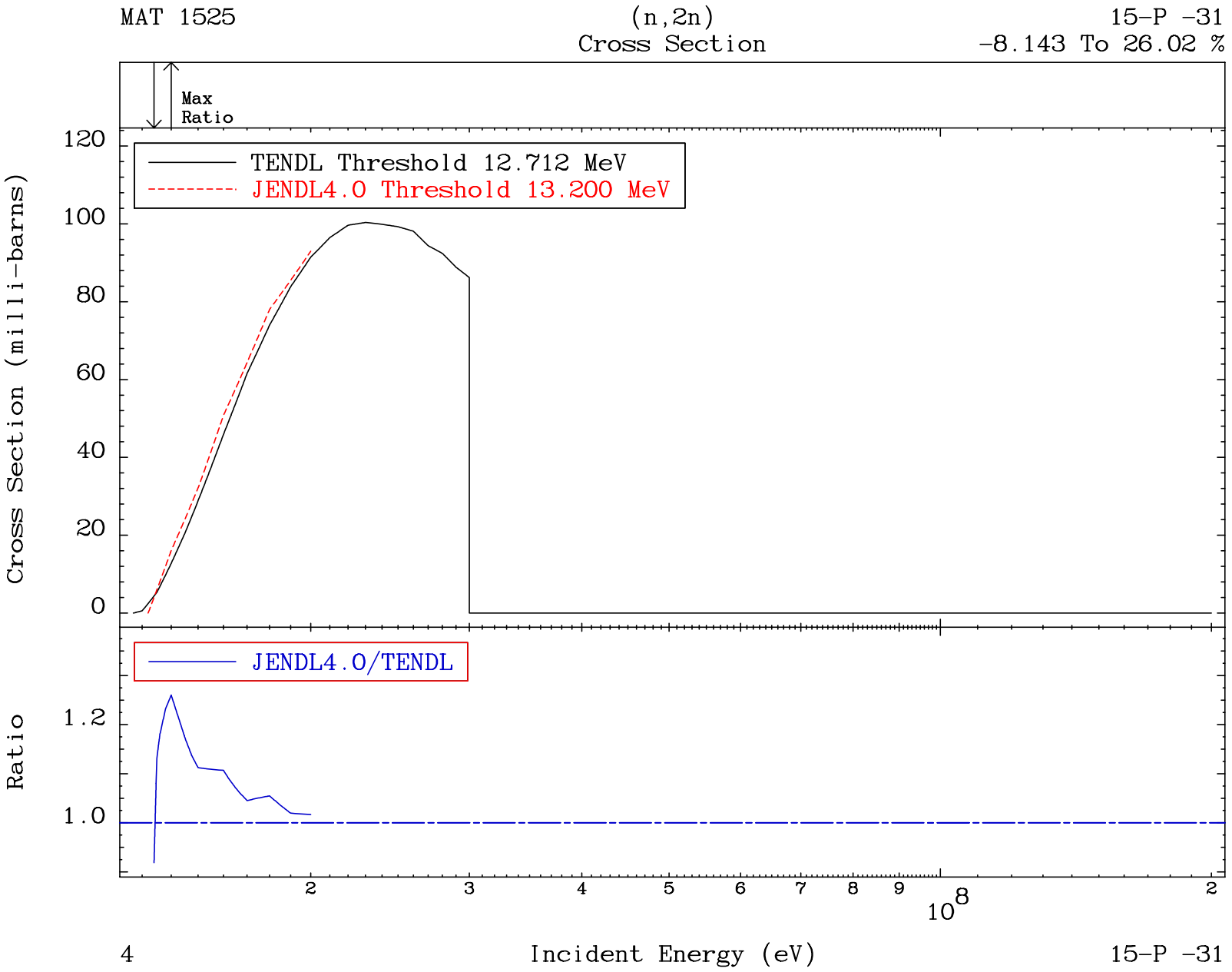
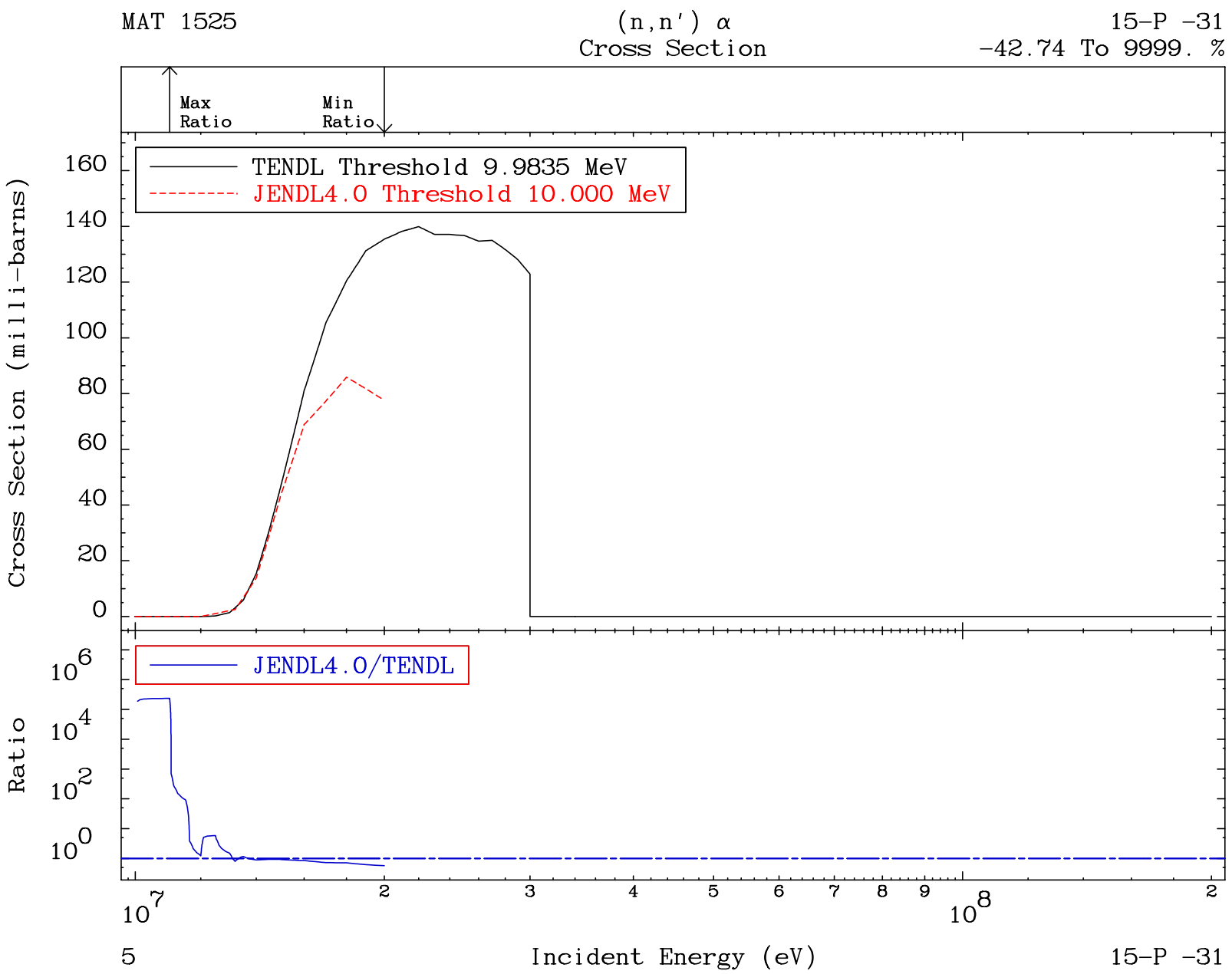
Press Mouse Button to Start

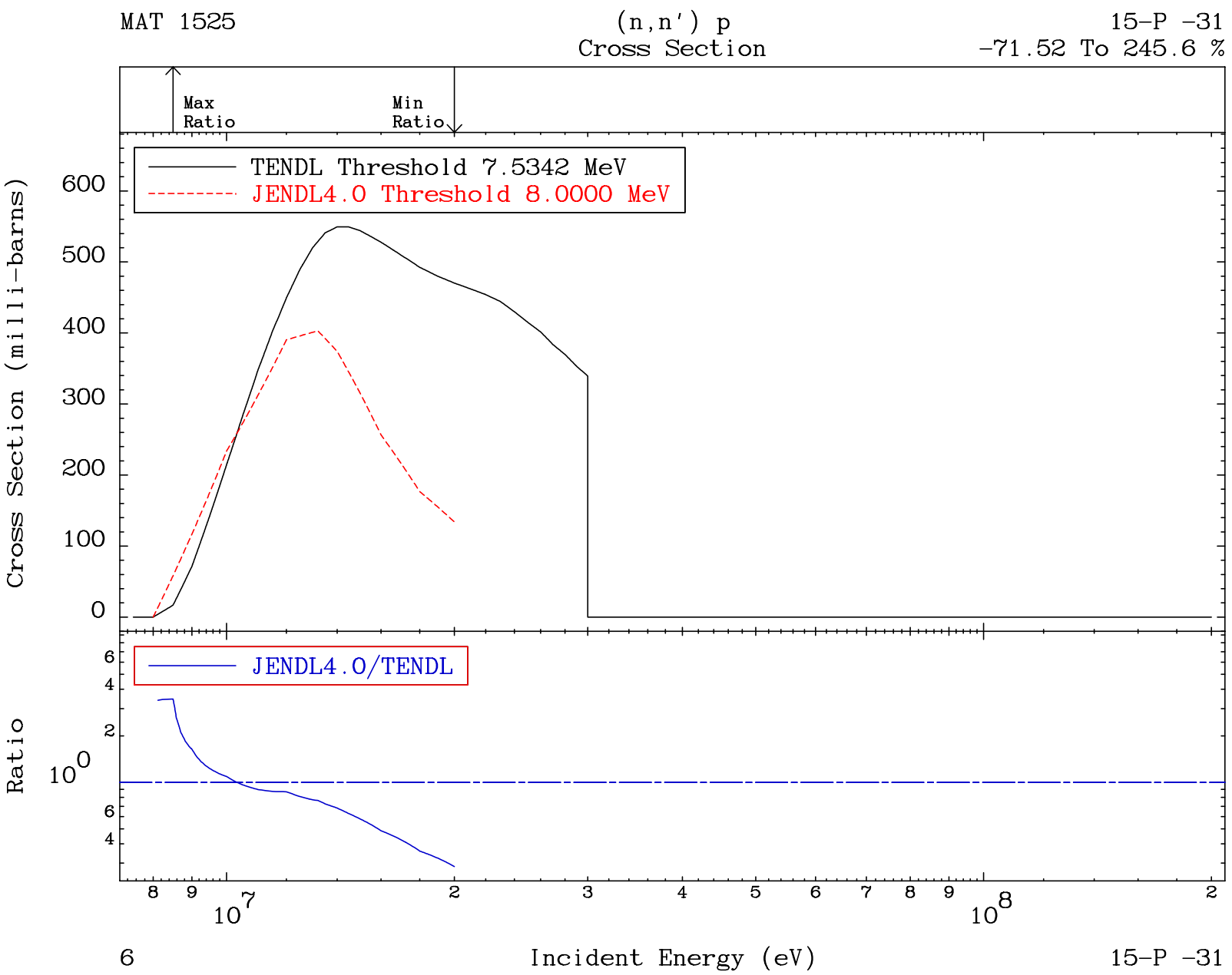

MAT 1525
Total
Cross Section
15-P -31
-94.70 To 281.6 %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
15-P -31

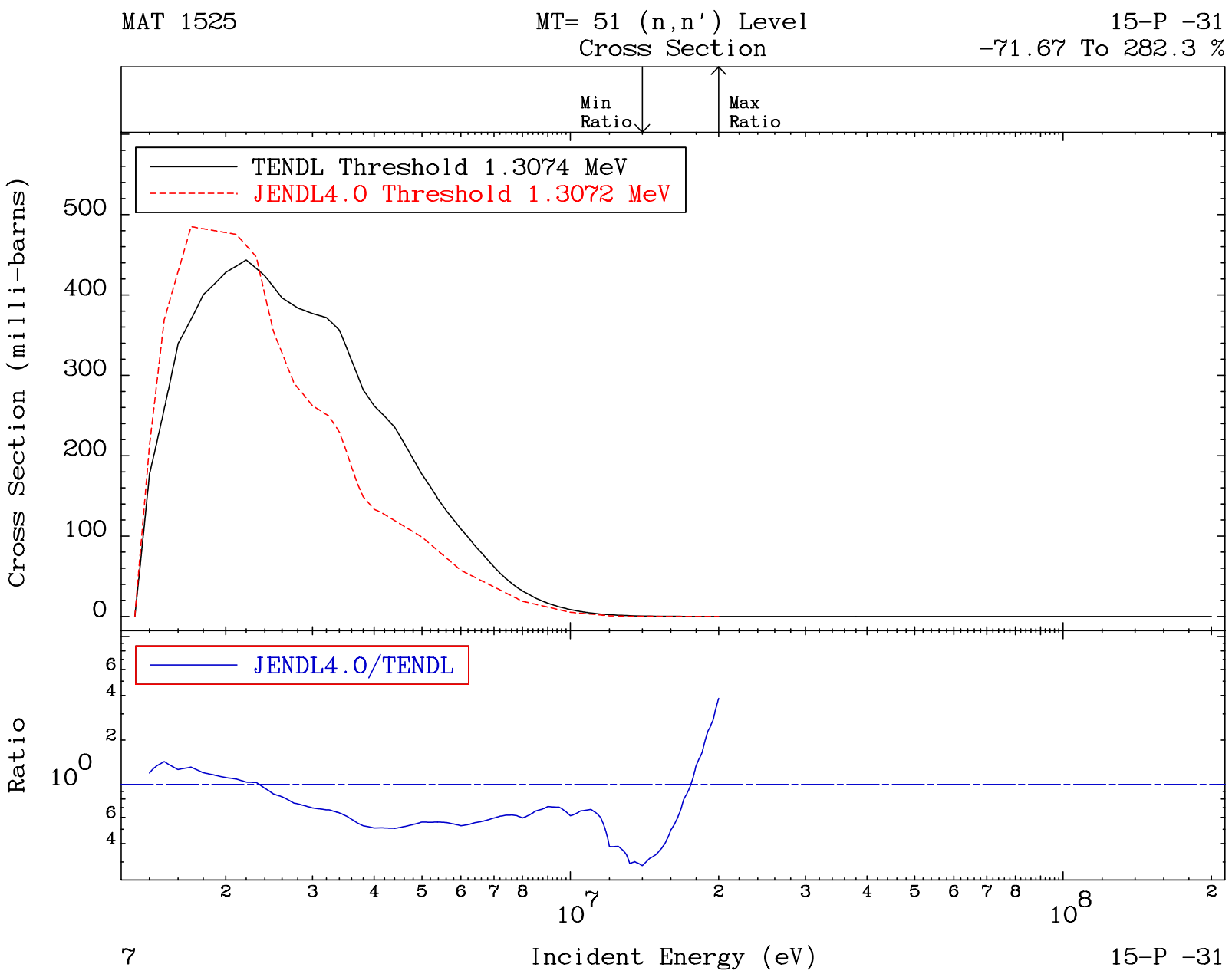

MAT 1525
Elastic
Cross Section
15-P -31
-95.17 To 281.7 %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
15-P -31

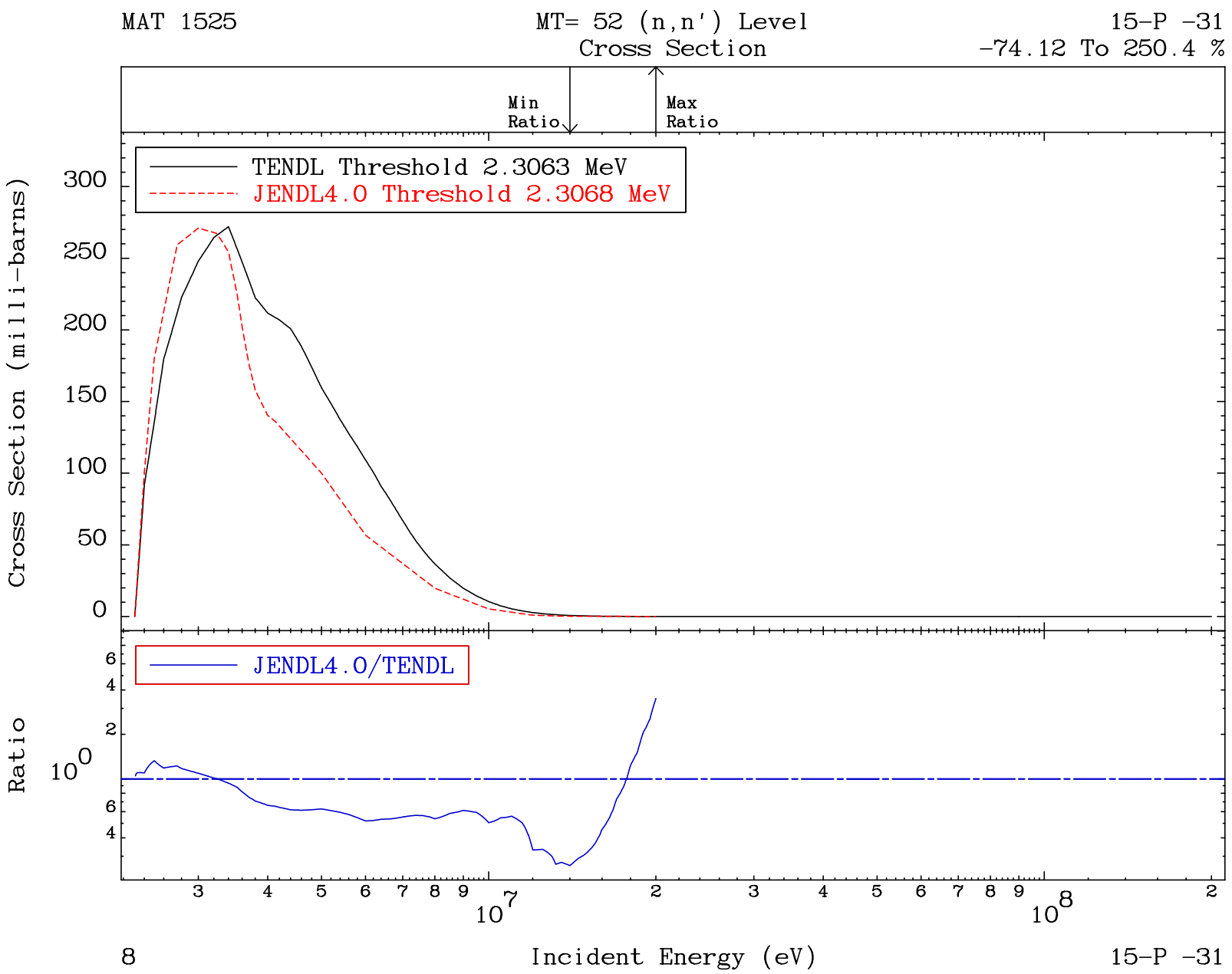

MAT 1525
Inelastic
Cross Section
15-P -31
-81.51 To 43.10 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3074 MeV
JENDL4.0 Threshold 1.3072 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
15-P -31

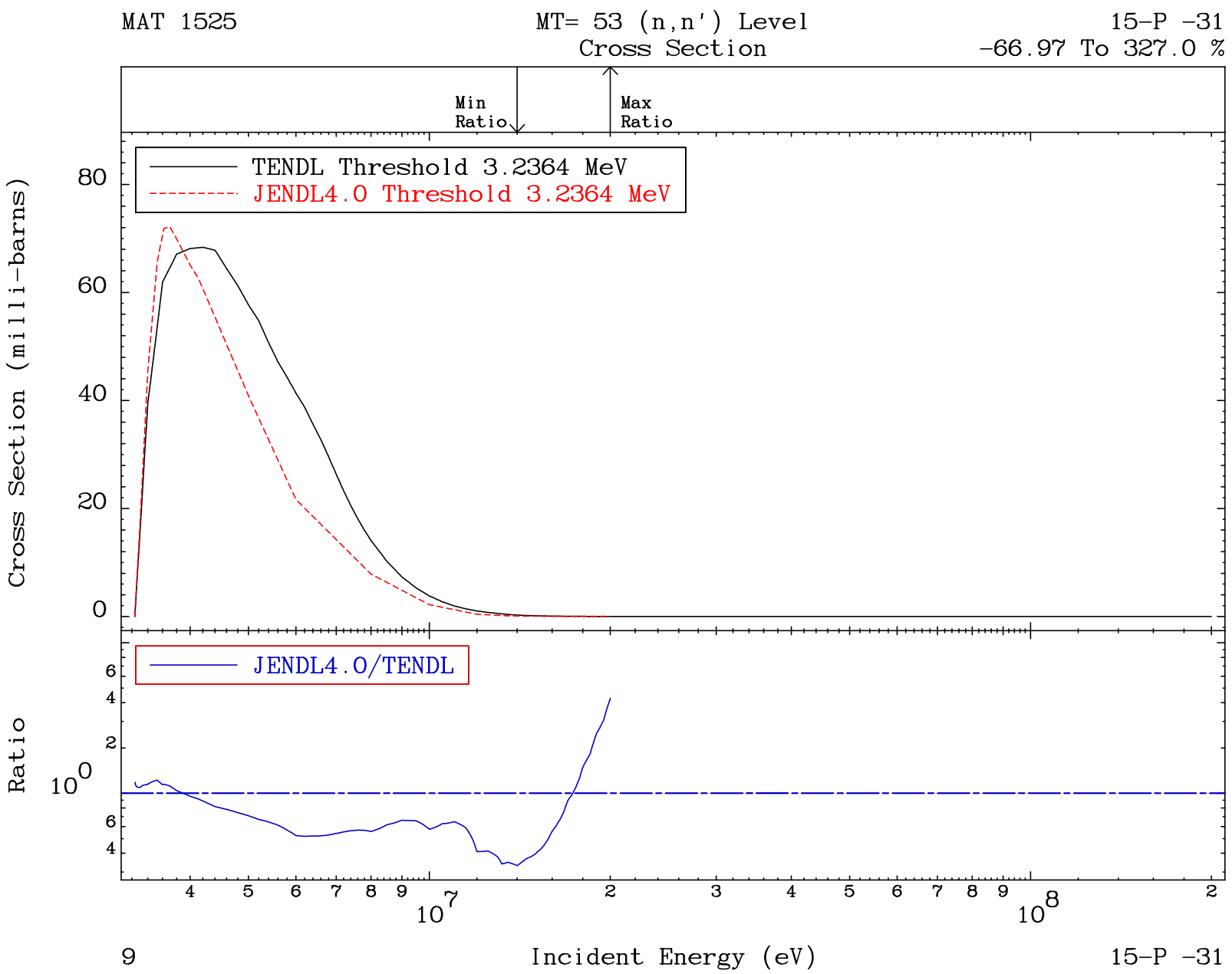

MAT 1525
(n,2n)
Cross Section
15-P -31
-8.143 To 26.02 %
Max
Ratio
TENDL Threshold 12.712 MeV
JENDL4.0 Threshold 13.200 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
15-P -31

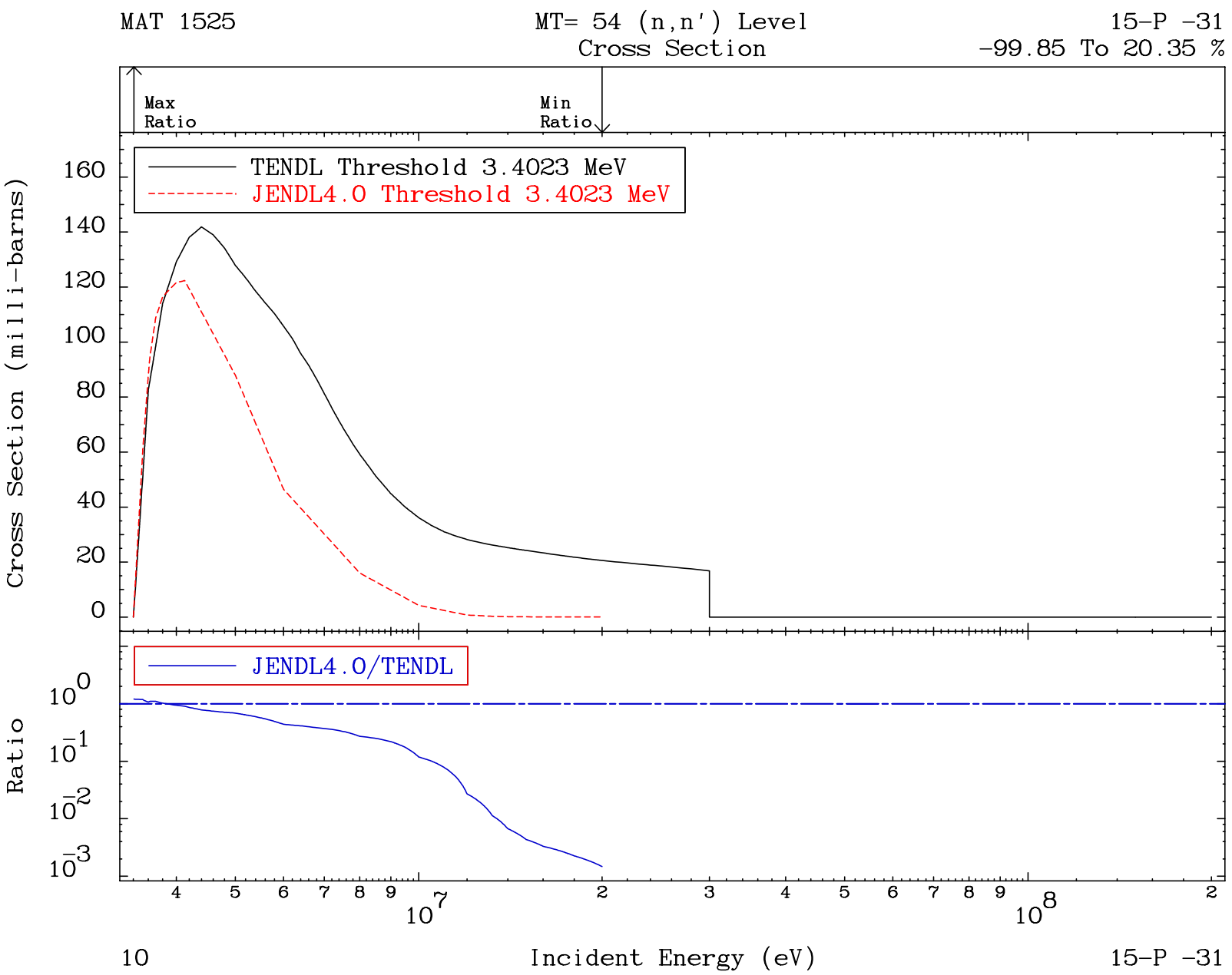

MAT 1525
(n,n') α
Cross Section
15-P -31
-42.74 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.9835 MeV
JENDL4.0 Threshold 10.000 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
15-P -31

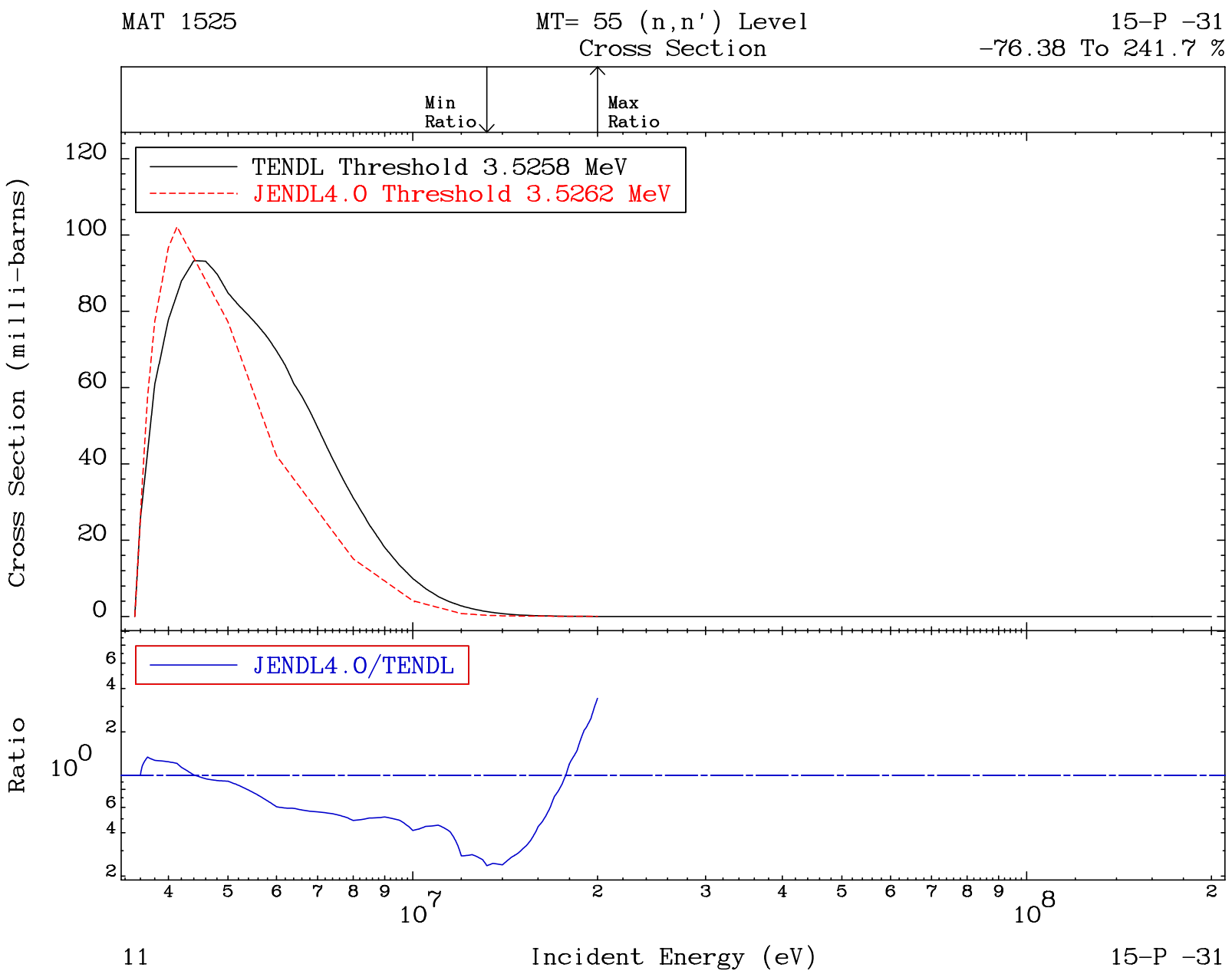

MAT 1525
(n,n') p
Cross Section
15-P -31
-71.52 To 245.6 %
Max Ratio
Min Ratio
TENDL Threshold 7.5342 MeV
JENDL4.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
6
15-P -31

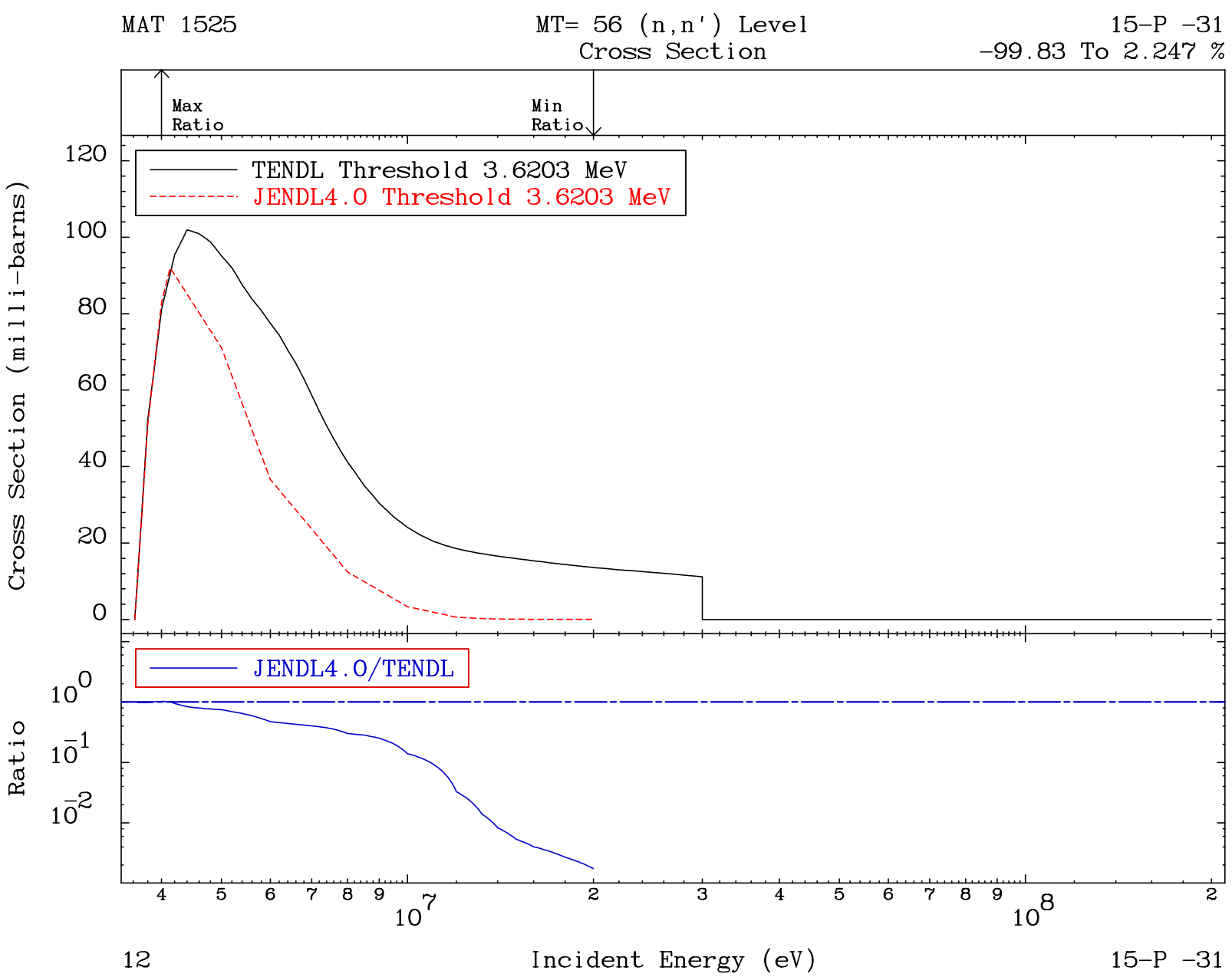

MAT 1525
MT= 51 (n,n') Level
Cross Section
15-P -31
-71.67 To 282.3 %
Min Ratio
Max Ratio
TENDL Threshold 1.3074 MeV
JENDL4.0 Threshold 1.3072 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
15-P -31

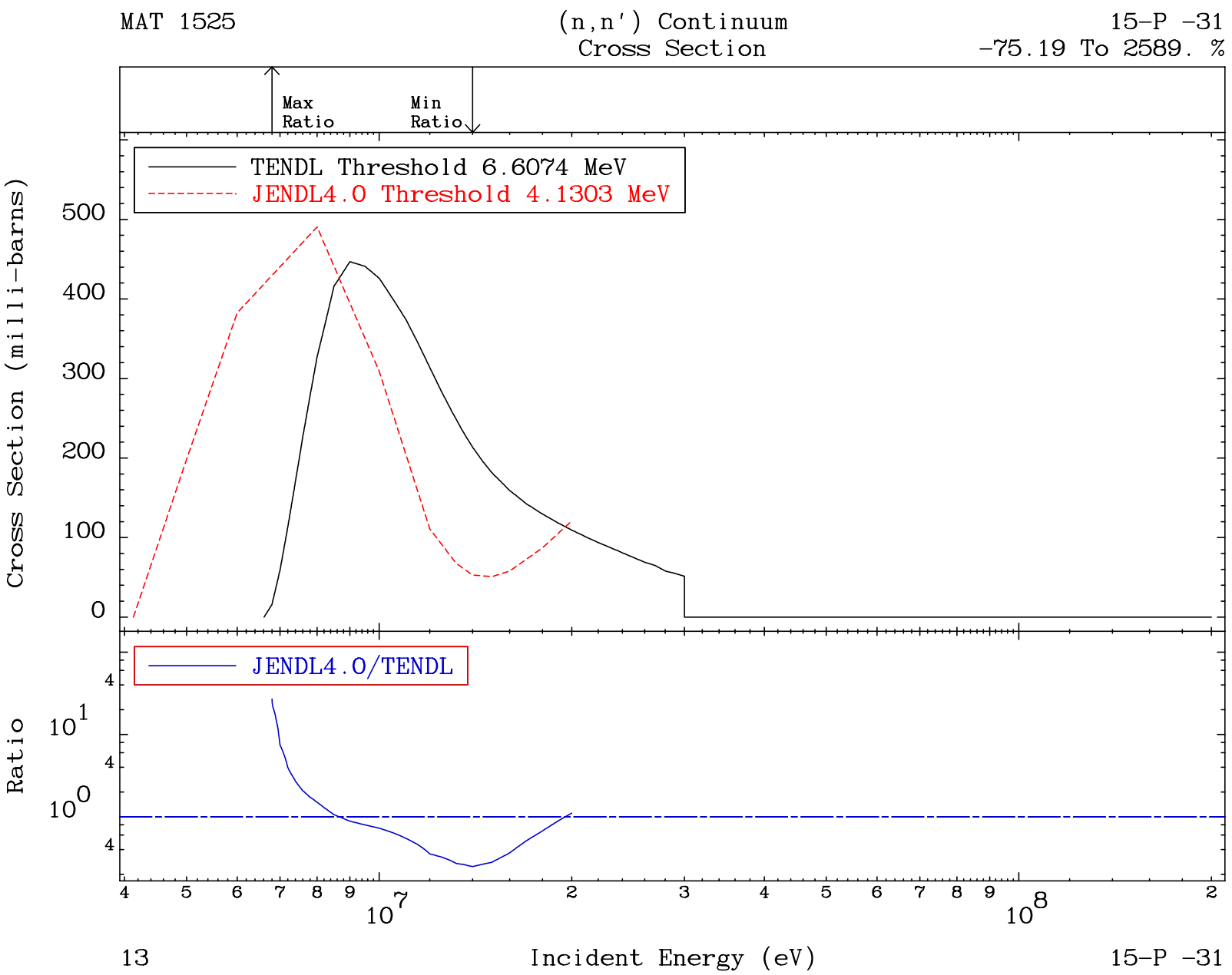

MAT 1525
MT= 52 (n,n') Level
Cross Section
15-P -31
-74.12 To 250.4 %
Min Ratio
Max Ratio
TENDL Threshold 2.3063 MeV
JENDL4.0 Threshold 2.3068 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
15-P -31

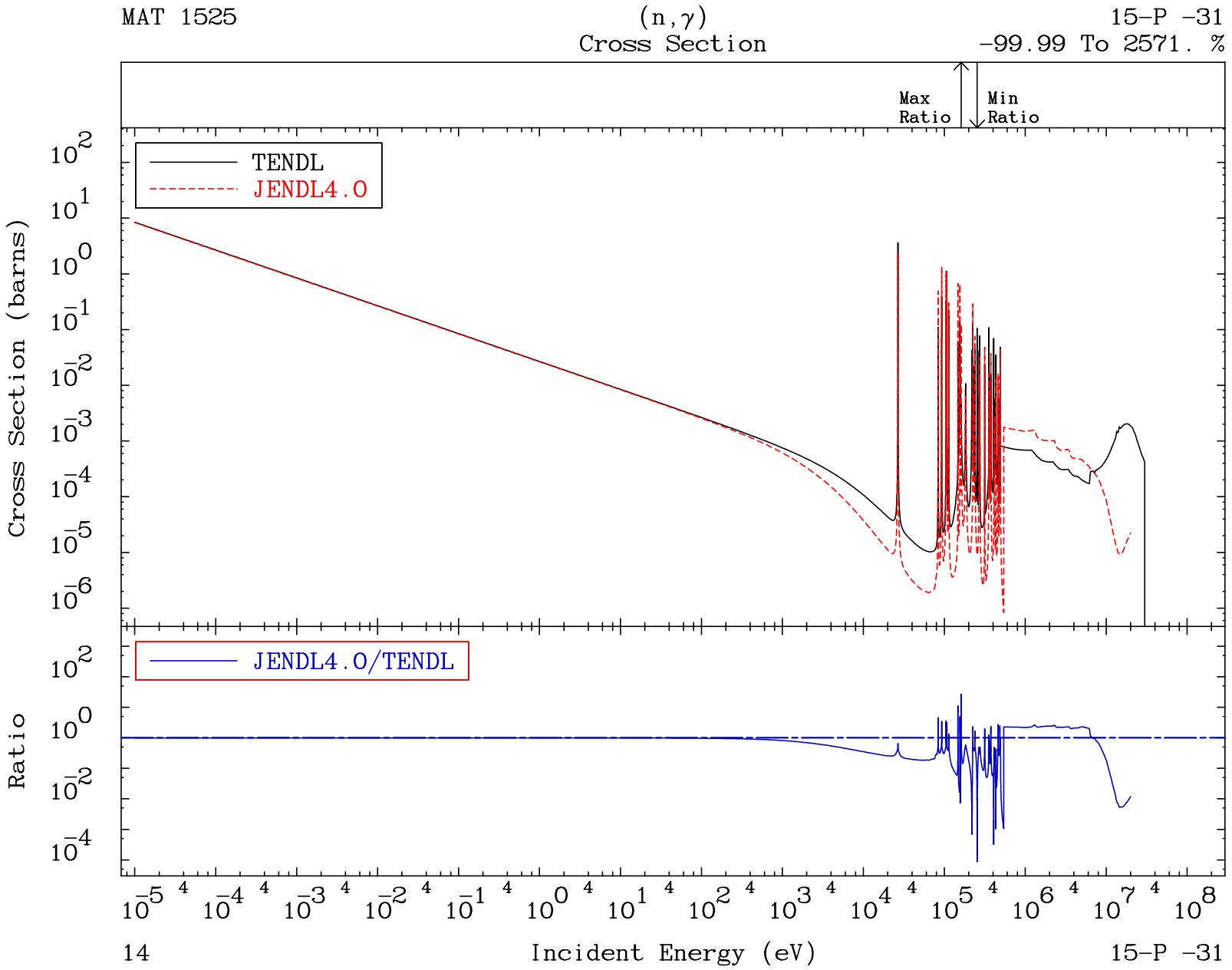

MAT 1525
MT= 53 (n,n') Level
Cross Section
15-P -31
-66.97 To 327.0 %
Min Ratio
Max Ratio
TENDL Threshold 3.2364 MeV
JENDL4.0 Threshold 3.2364 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
15-P -31

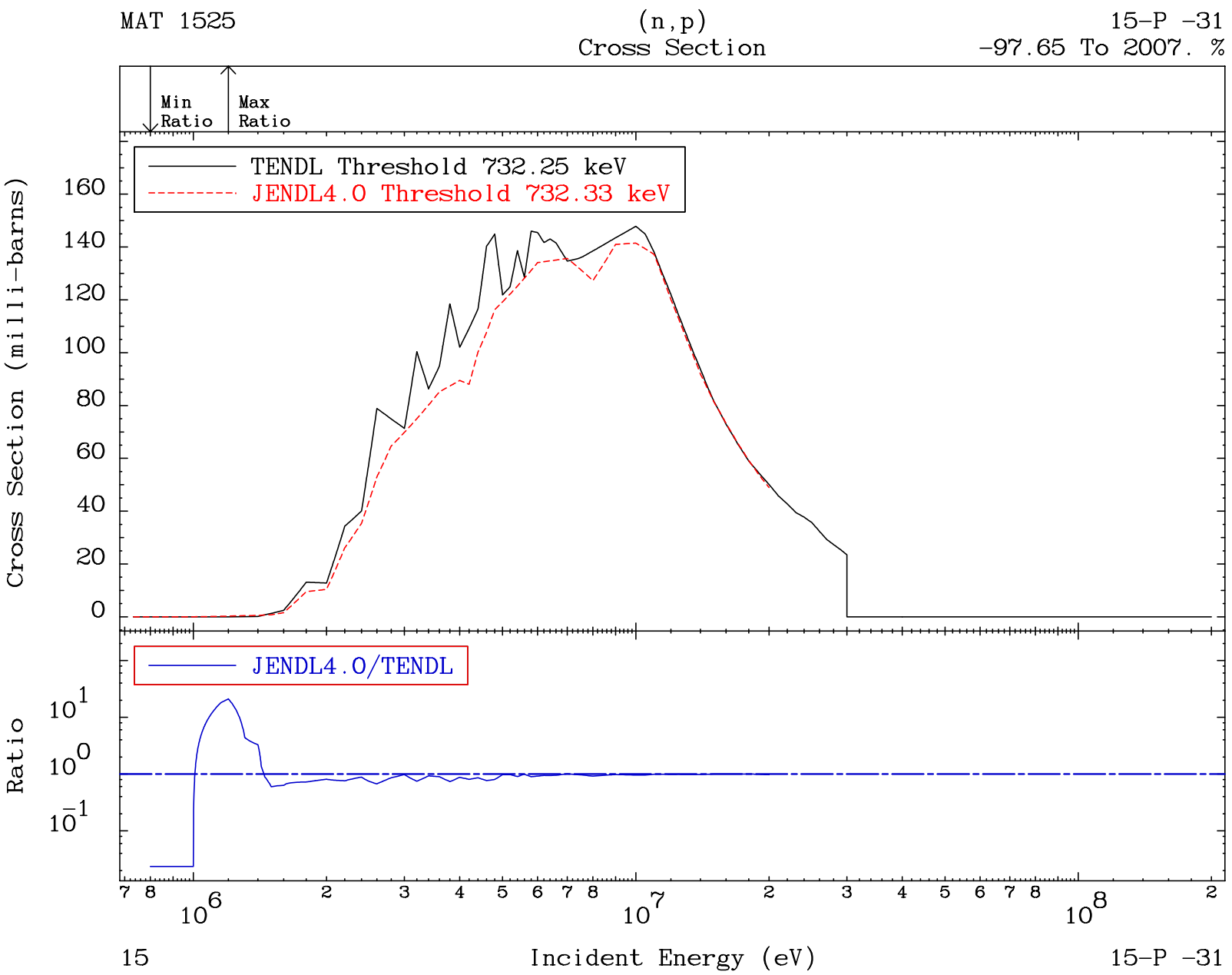

MAT 1525
MT= 54 (n,n') Level
Cross Section
15-P -31
-99.85 To 20.35 %
Max Ratio
Min Ratio
TENDL Threshold 3.4023 MeV
JENDL4.0 Threshold 3.4023 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
10^-3
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
15-P -31

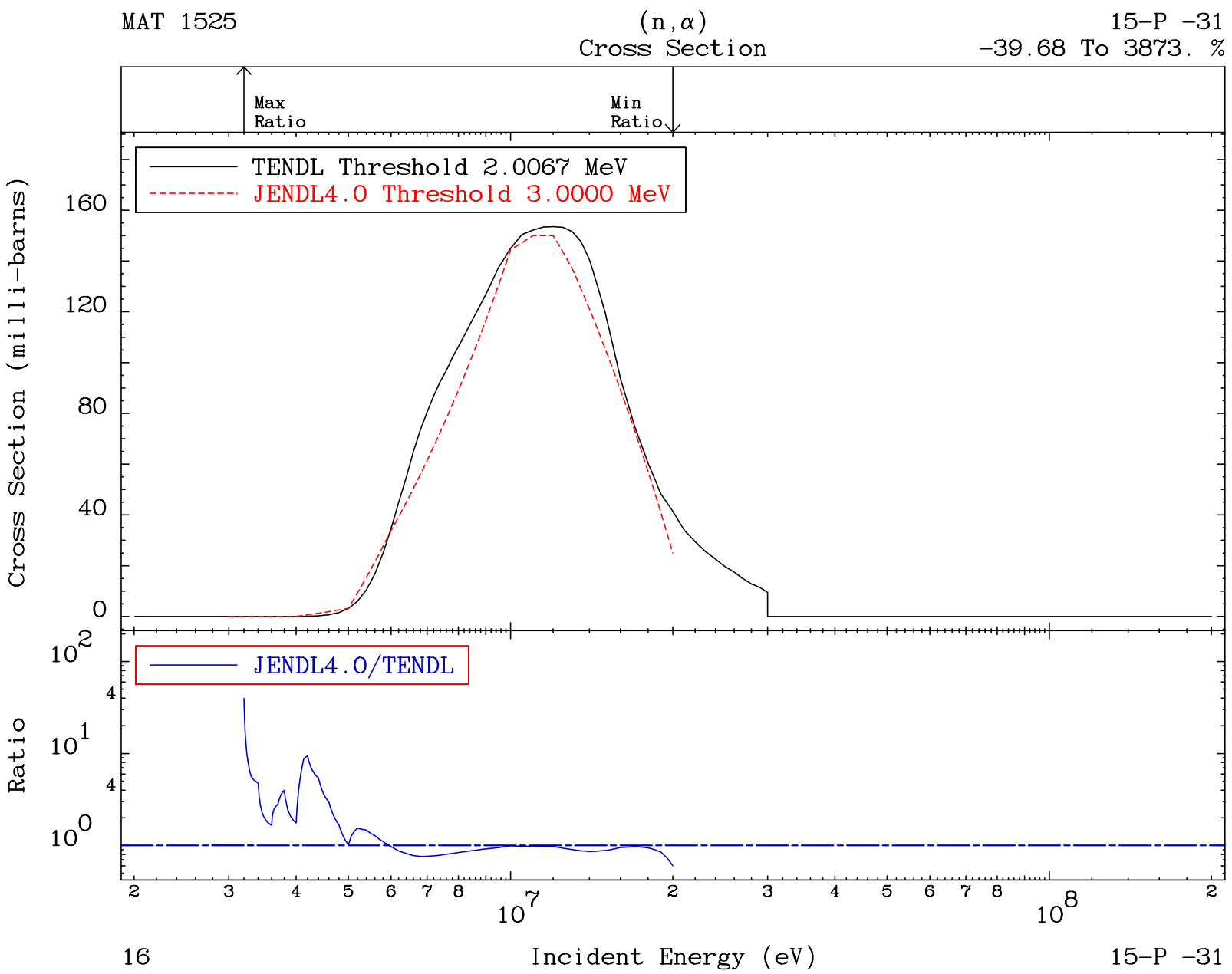

MAT 1525
MT= 55 (n,n') Level
Cross Section
15-P -31
-76.38 To 241.7 %
Min Ratio
Max Ratio
TENDL Threshold 3.5258 MeV
JENDL4.0 Threshold 3.5262 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
6
4
2
6
4
2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
15-P -31

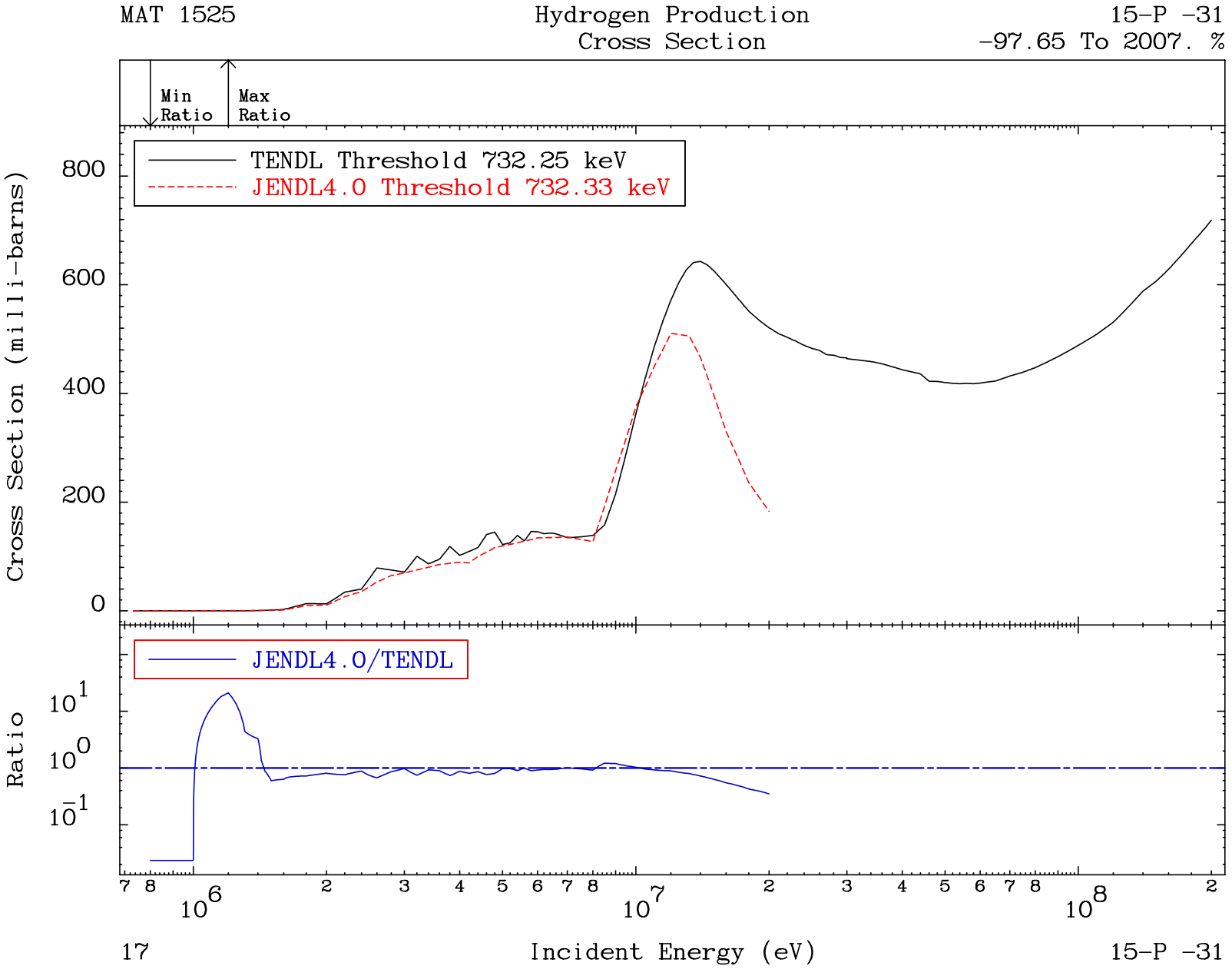

MAT 1525
MT= 56 (n,n') Level
Cross Section
15-P -31
-99.83 To 2.247 %
Max Ratio
Min Ratio
TENDL Threshold 3.6203 MeV
JENDL4.0 Threshold 3.6203 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
15-P -31

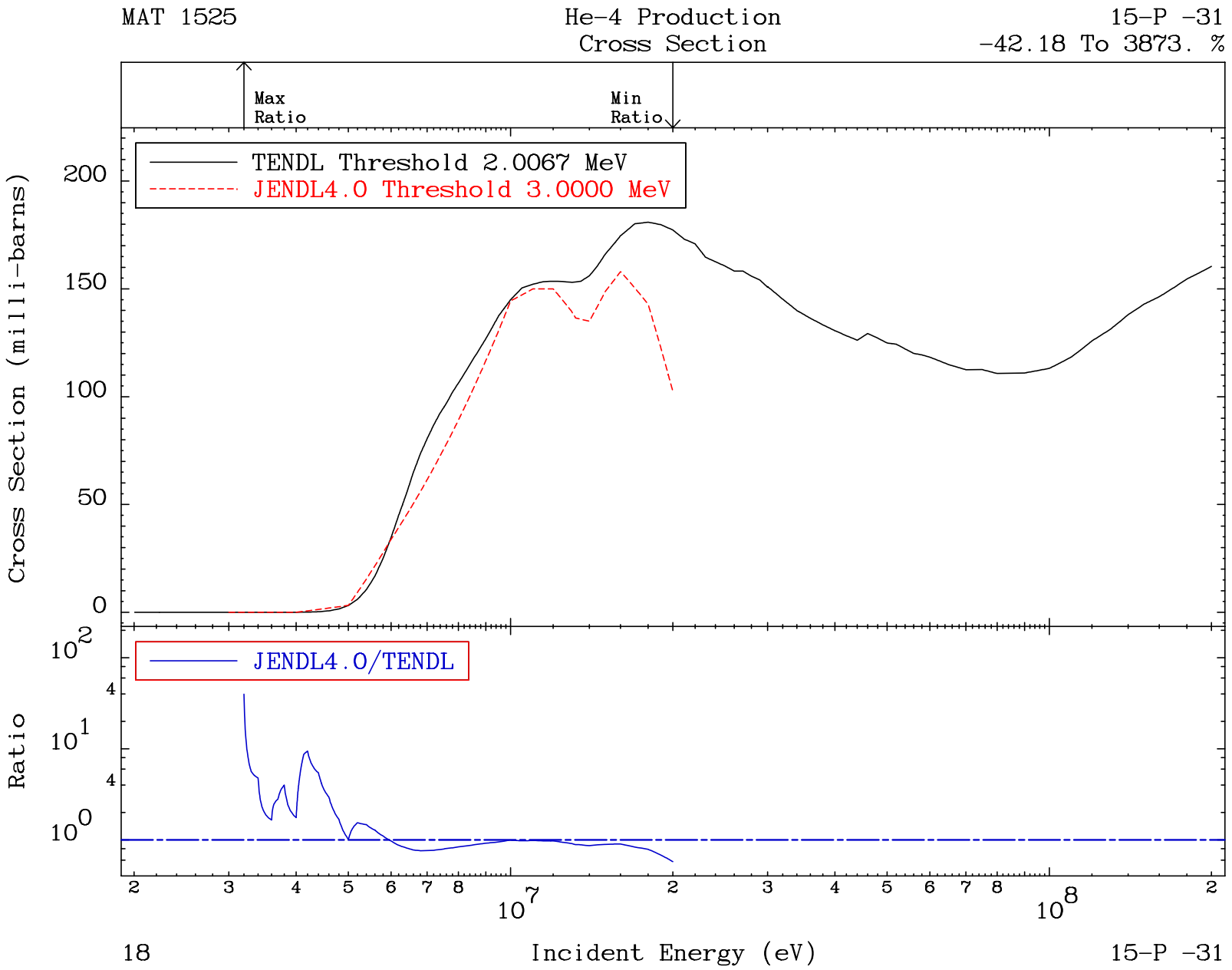

MAT 1525
(n,n') Continuum
Cross Section
15-P -31
-75.19 To 2589. %
Max Ratio
Min Ratio
TENDL Threshold 6.6074 MeV
JENDL4.0 Threshold 4.1303 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^1
10^0
4
4
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
15-P -31

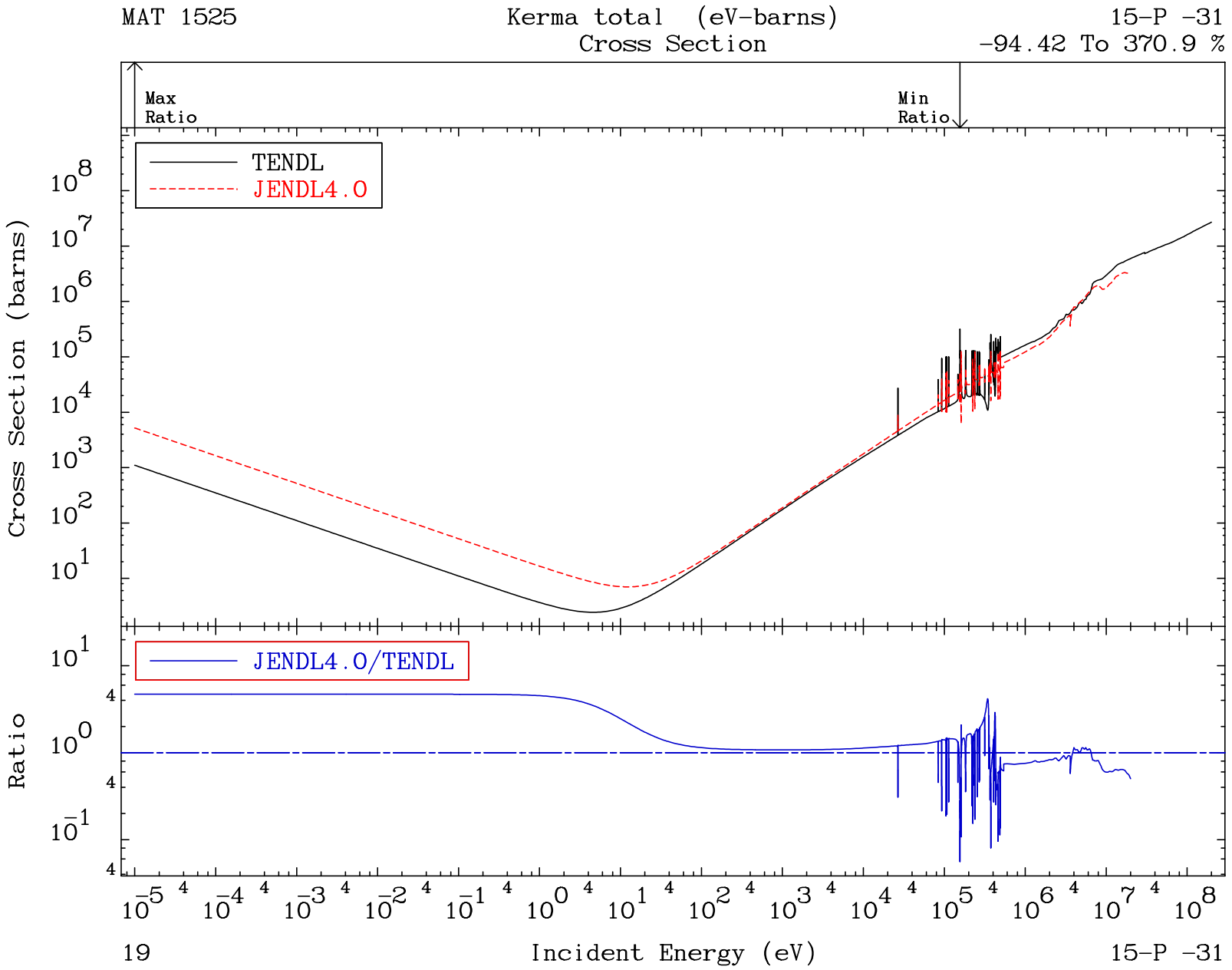

MAT 1525
(n,γ)
Cross Section
15-P -31
-99.99 To 2571. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
14
15-P -31

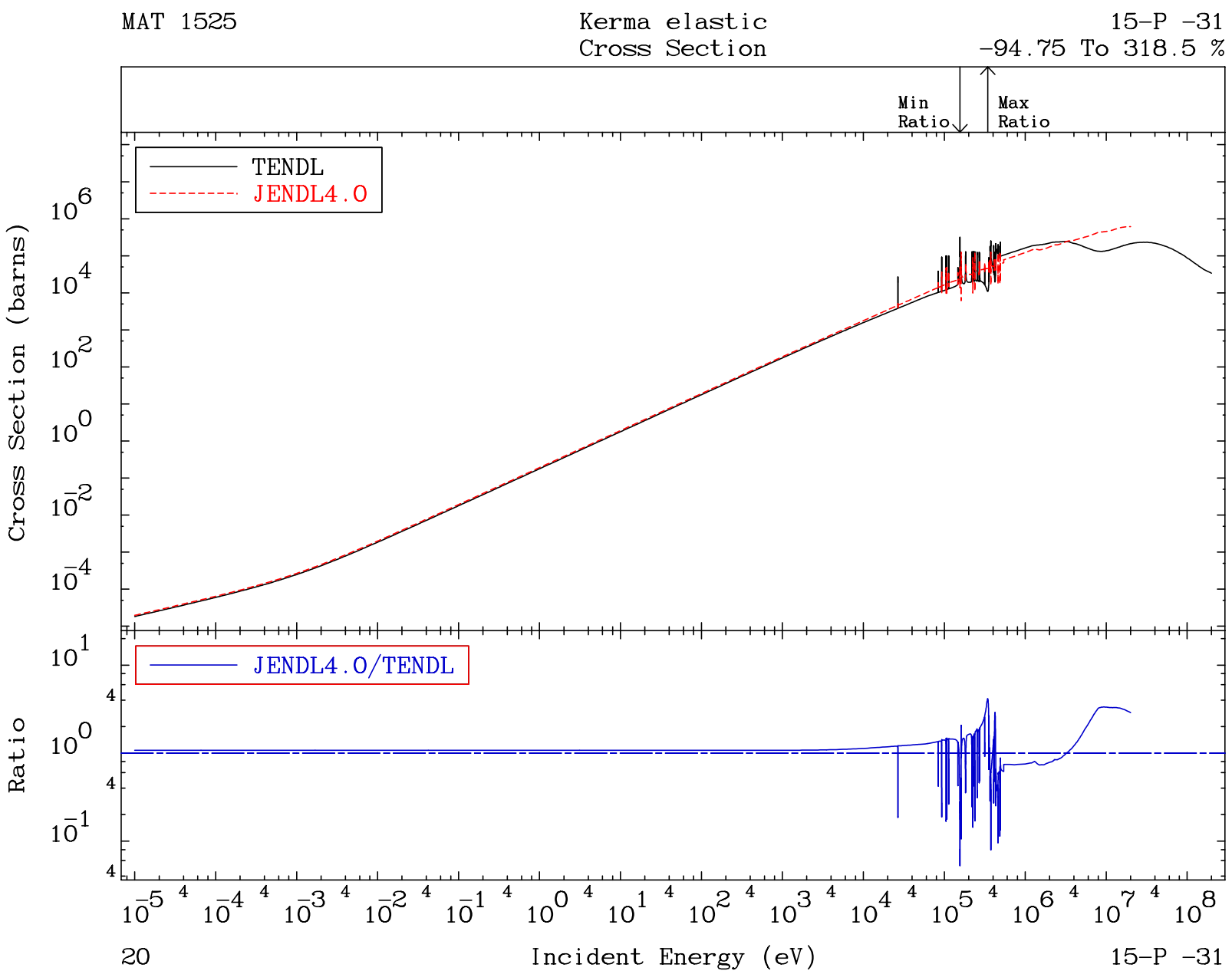

MAT 1525
(n,p)
Cross Section
15-P -31
-97.65 To 2007. %
Min Ratio
Max Ratio
TENDL Threshold 732.25 keV
JENDL4.0 Threshold 732.33 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
15-P -31

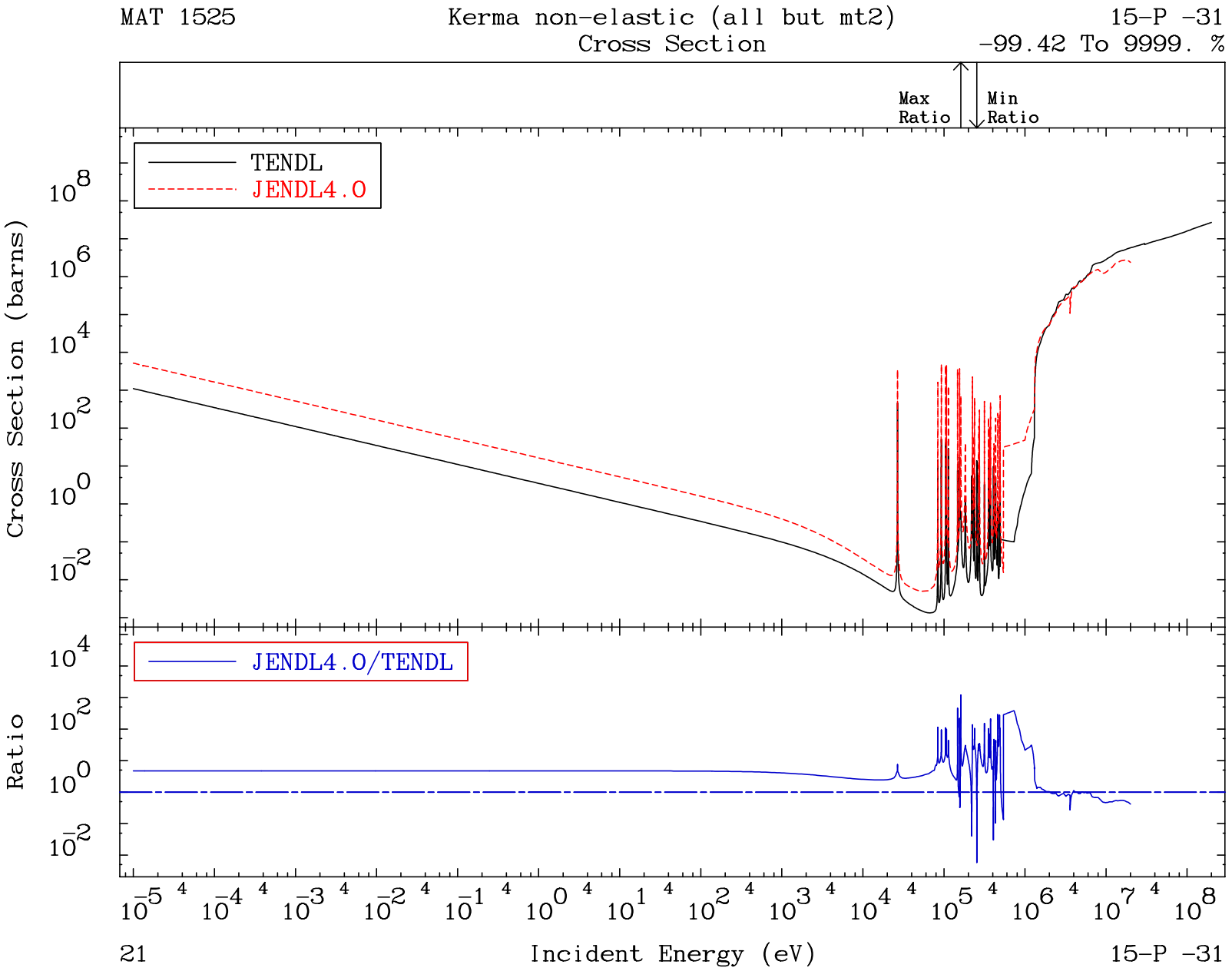

MAT 1525
(n,α)
Cross Section
15-P -31
-39.68 To 3873. %
Max Ratio
Min Ratio
TENDL Threshold 2.0067 MeV
JENDL4.0 Threshold 3.0000 MeV
Cross Section (milli-barns)
160
120
80
40
0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
4
4
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
15-P -31

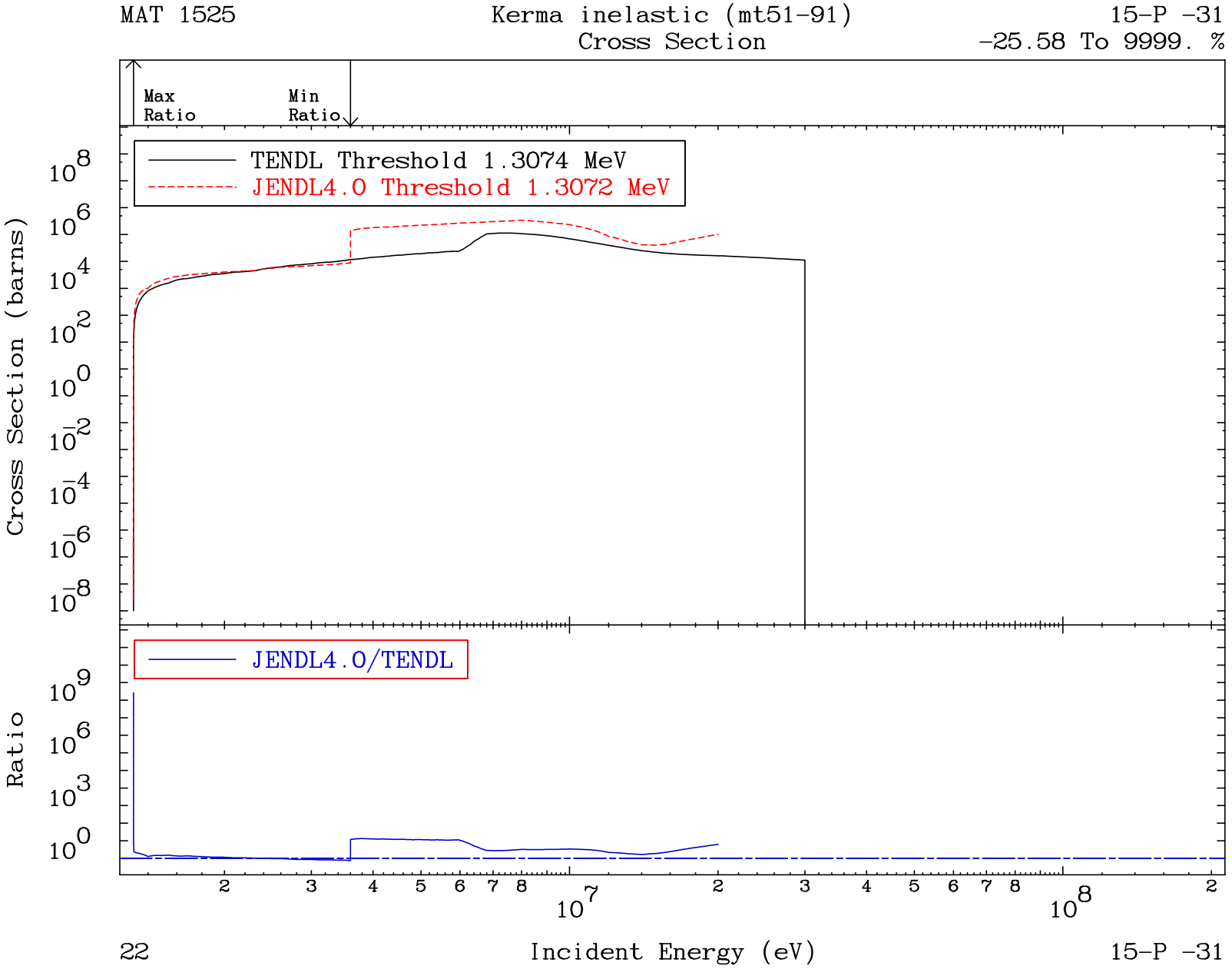

MAT 1525
Hydrogen Production
Cross Section
15-P -31
-97.65 To 2007. %
Min Ratio
Max Ratio
TENDL Threshold 732.25 keV
JENDL4.0 Threshold 732.33 keV
Cross Section (milli-barns)
800
600
400
200
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
15-P -31

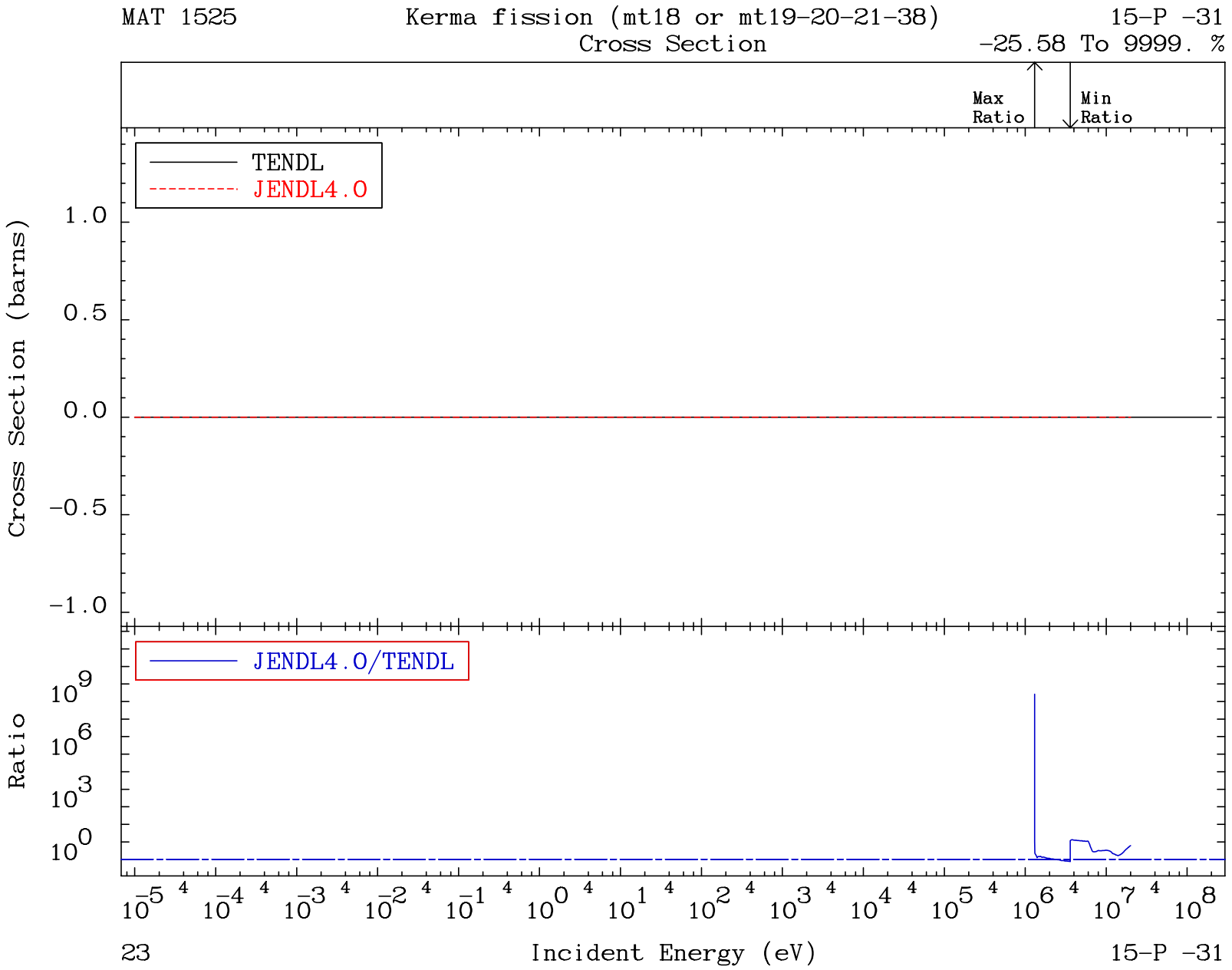

MAT 1525
He-4 Production
Cross Section
15-P -31
-42.18 To 3873. %
Max Ratio
Min Ratio
TENDL Threshold 2.0067 MeV
JENDL4.0 Threshold 3.0000 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
4
4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
15-P -31

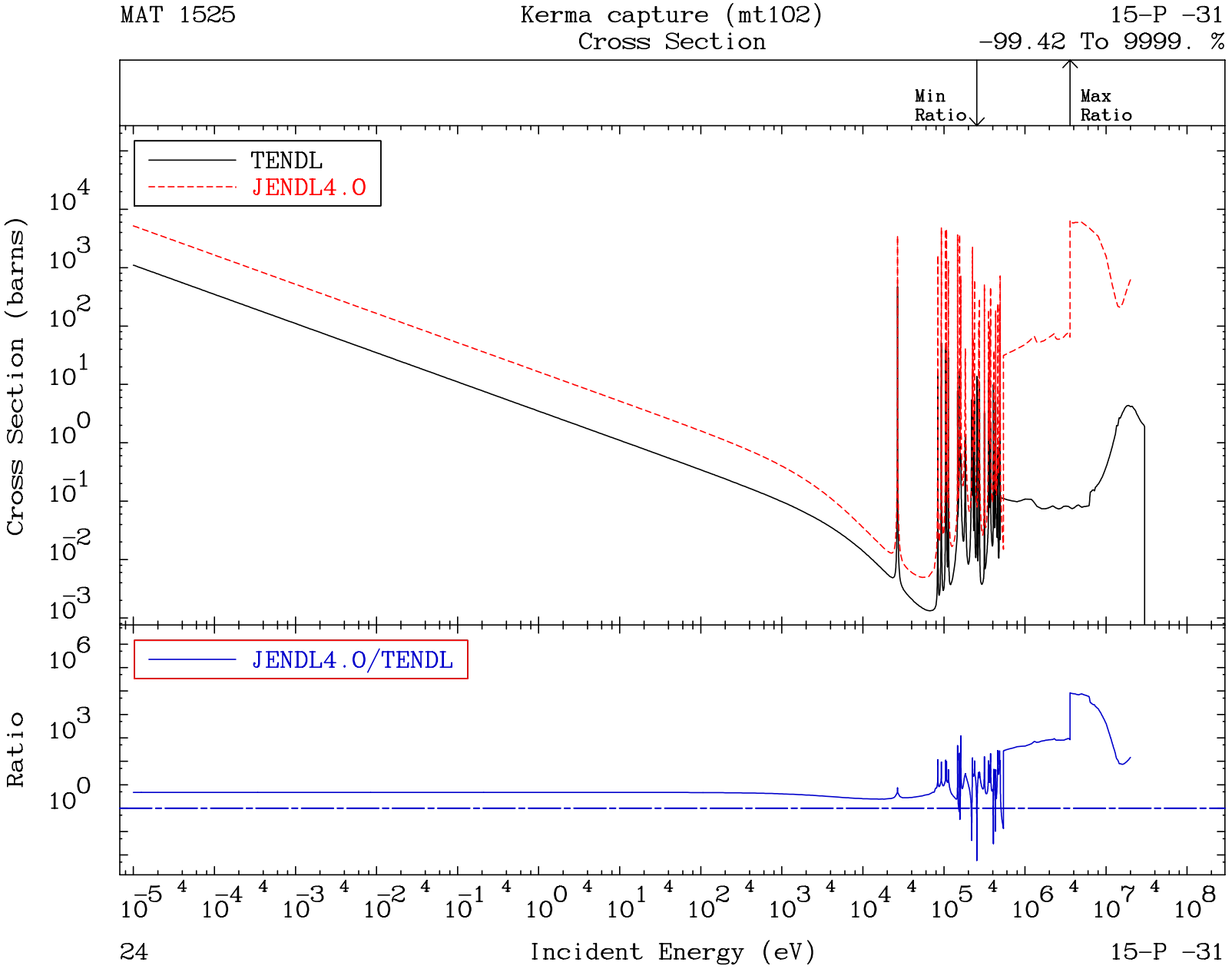

MAT 1525
Kerma total (eV-barns)
Cross Section
15-P -31
-94.42 To 370.9 %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
19
15-P -31

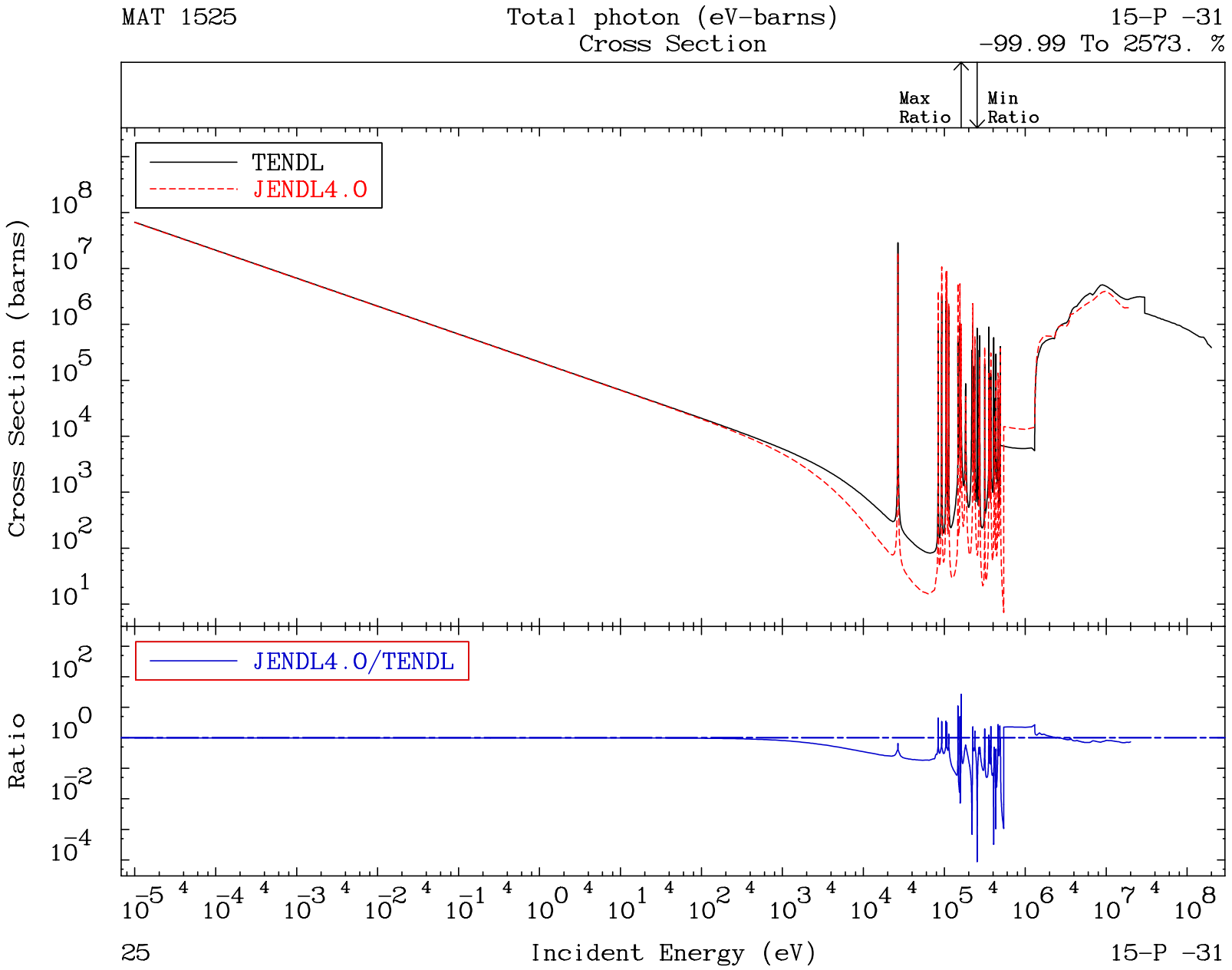

MAT 1525
Kerma elastic
Cross Section
15-P -31
-94.75 To 318.5 %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
20
15-P -31

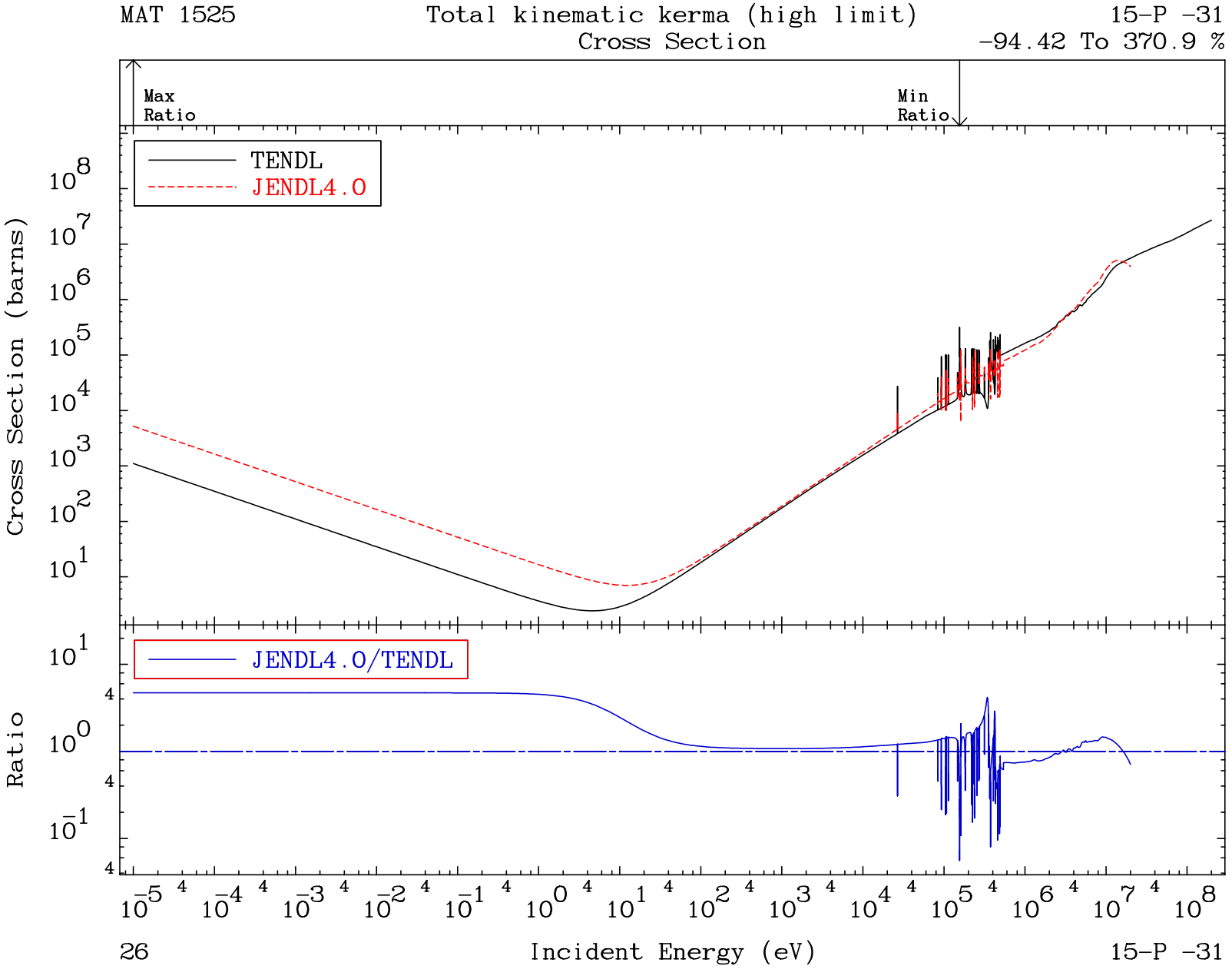

MAT 1525
Kerma non-elastic (all but mt2)
Cross Section
15-P -31
-99.42 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
21
15-P -31

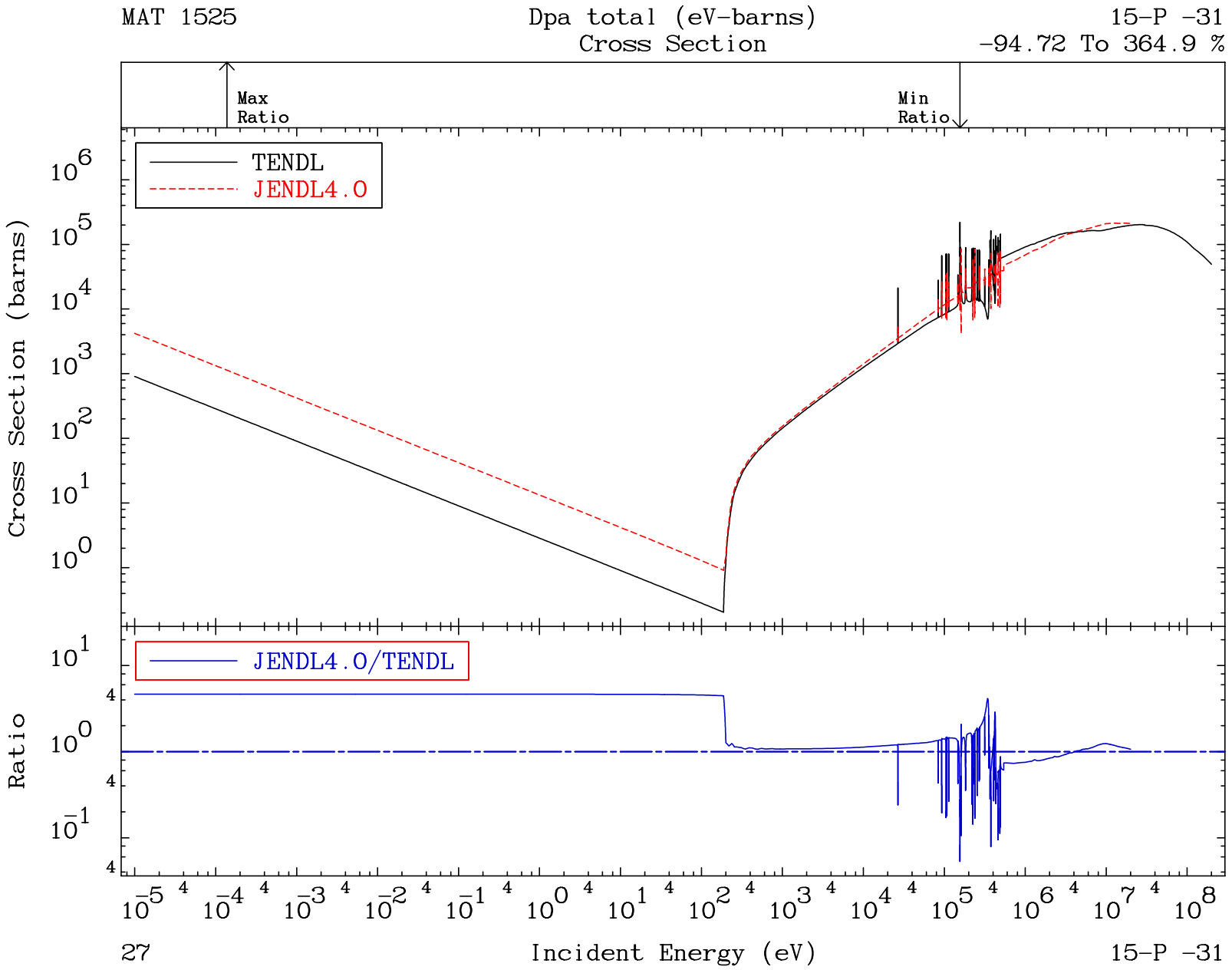

MAT 1525
Kerma inelastic (mt51-91)
Cross Section
15-P -31
-25.58 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.3074 MeV
JENDL4.0 Threshold 1.3072 MeV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
22
15-P -31

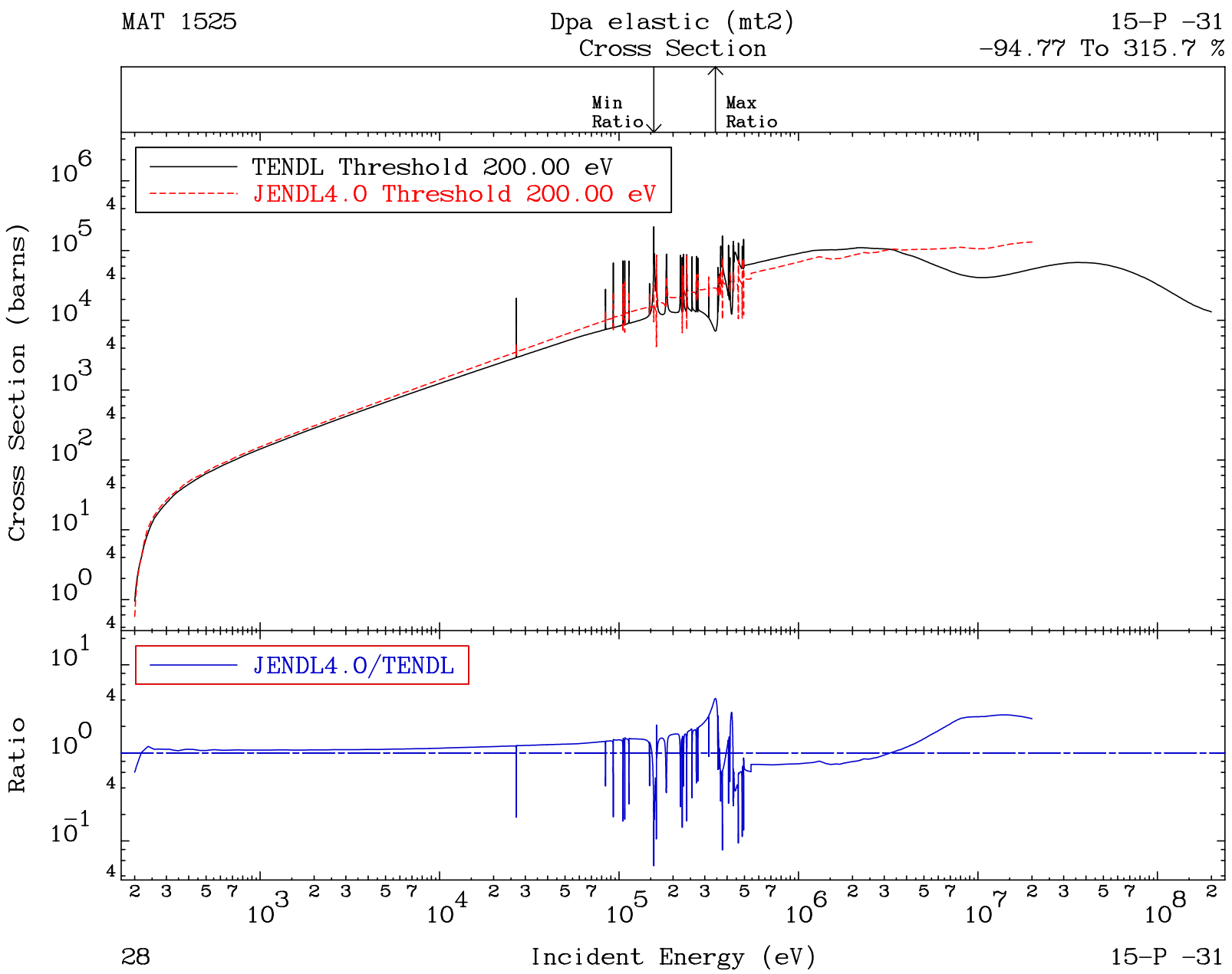

MAT 1525
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
15-P -31
-25.58 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
23
Incident Energy (eV)
15-P -31

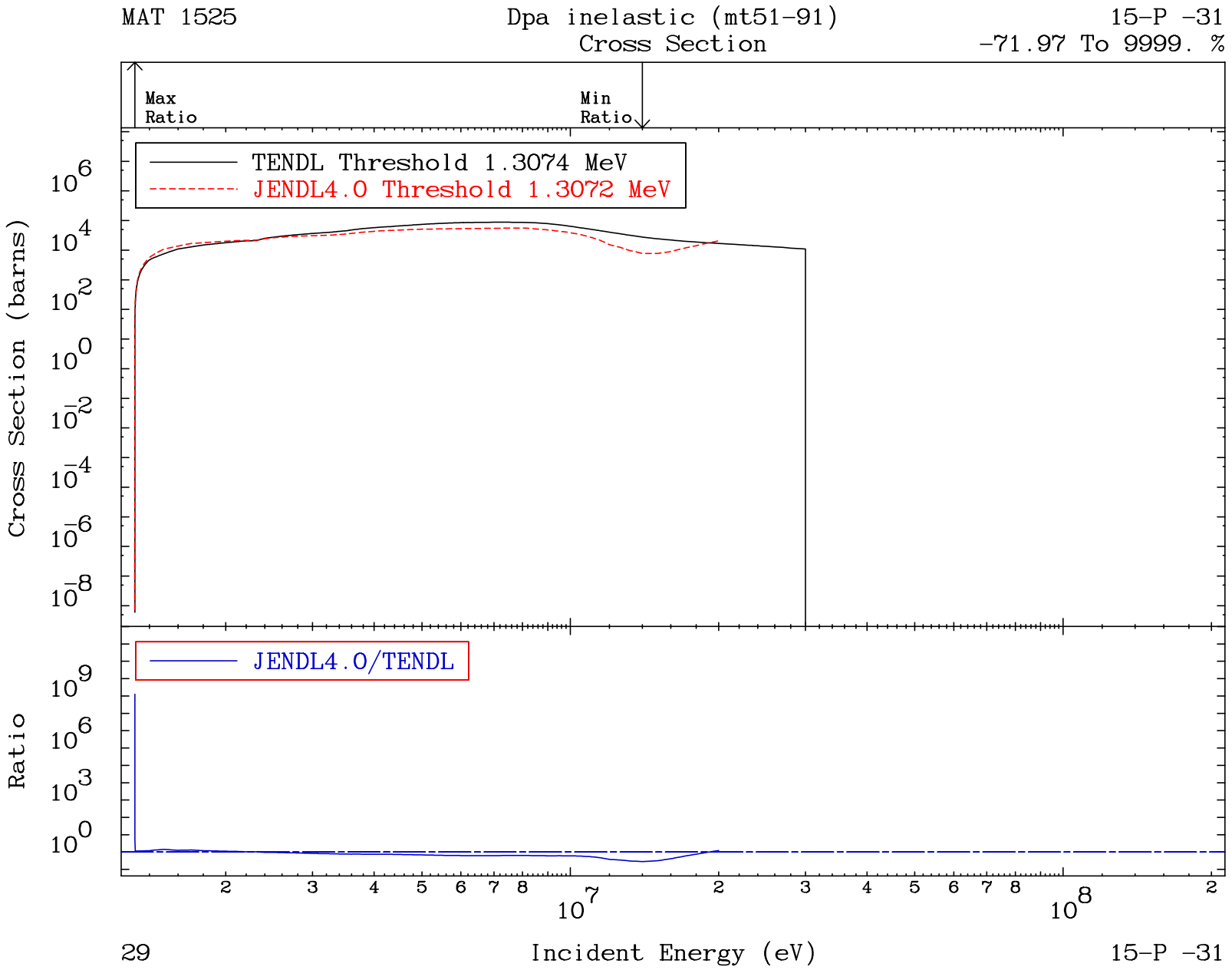

MAT 1525
Kerma capture (mt102)
Cross Section
15-P -31
-99.42 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
24
15-P -31

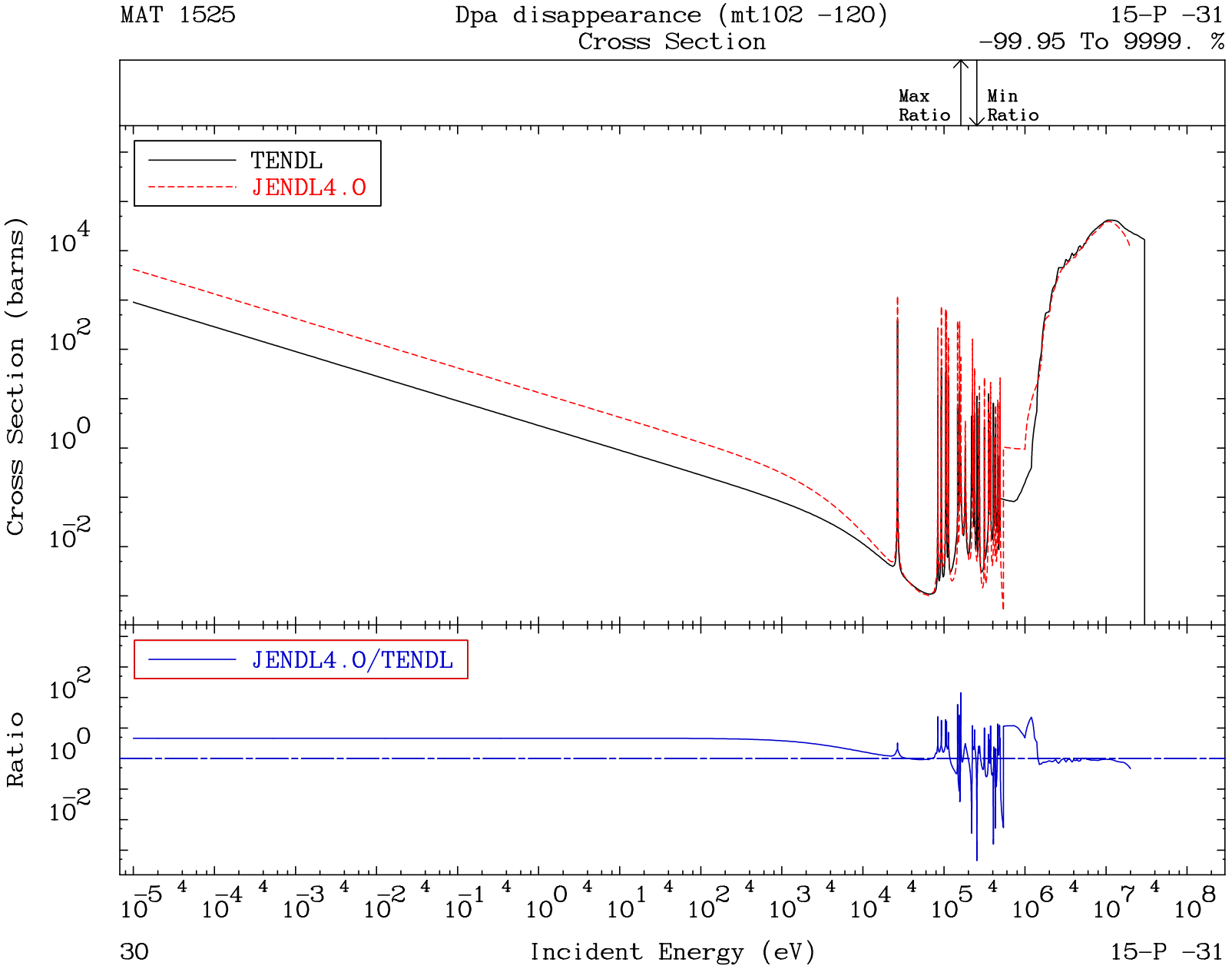

MAT 1525
Total photon (eV-barns)
Cross Section
15-P -31
-99.99 To 2573. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
25
15-P -31

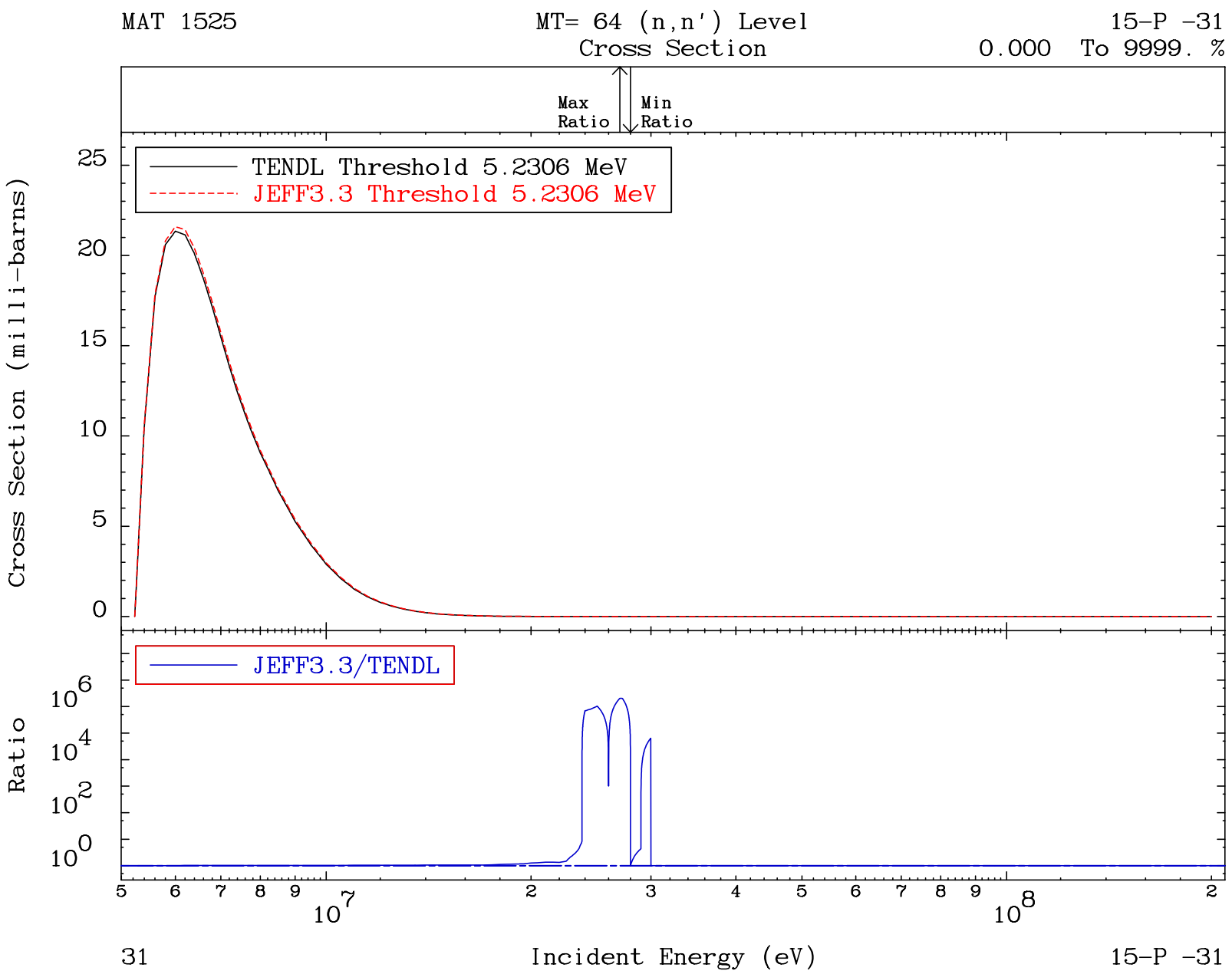

MAT 1525
Total kinematic kerma (high limit)
Cross Section
15-P -31
-94.42 To 370.9 %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
26
15-P -31

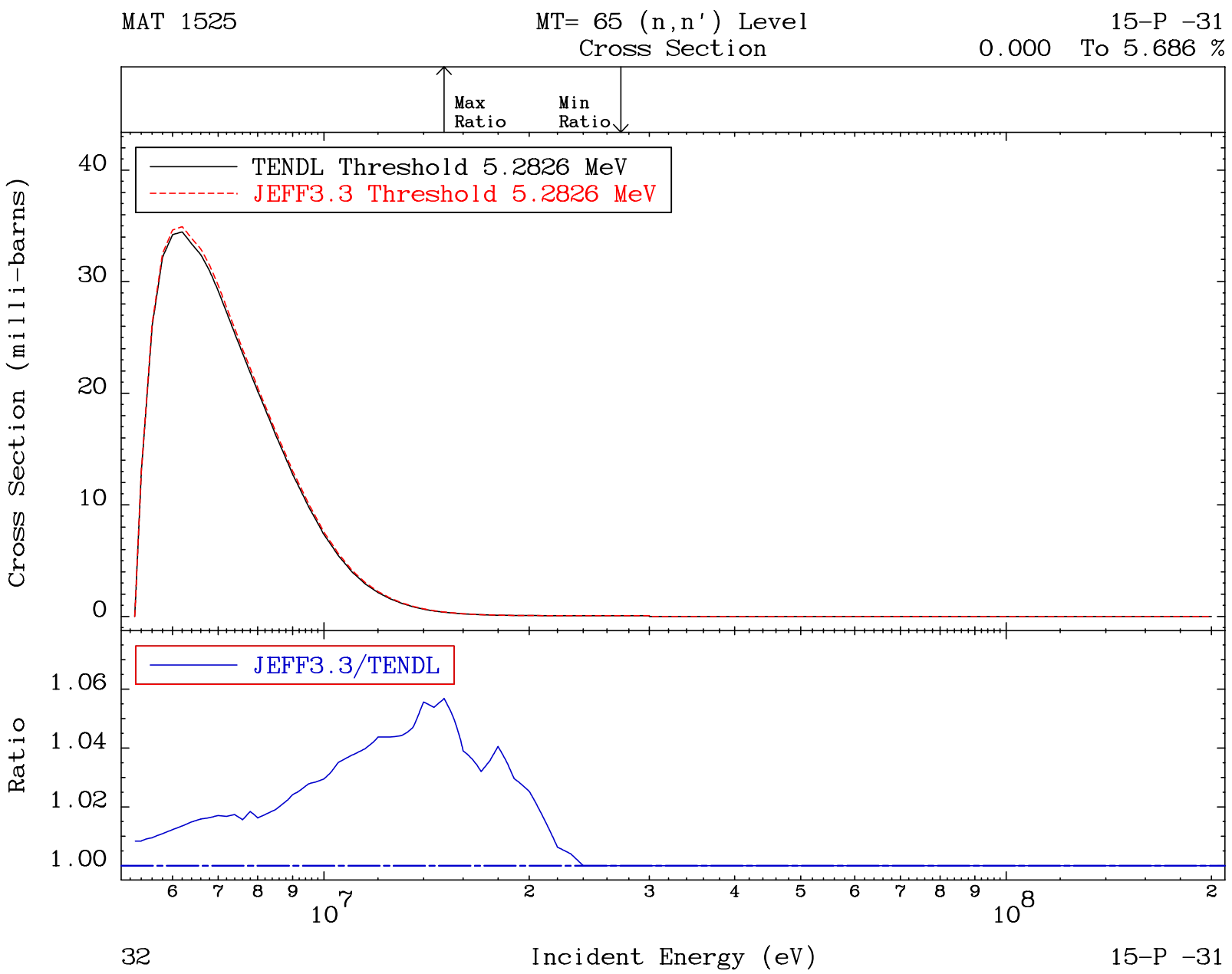

MAT 1525
Dpa total (eV-barns)
Cross Section
15-P -31
-94.72 To 364.9 %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
27
15-P -31

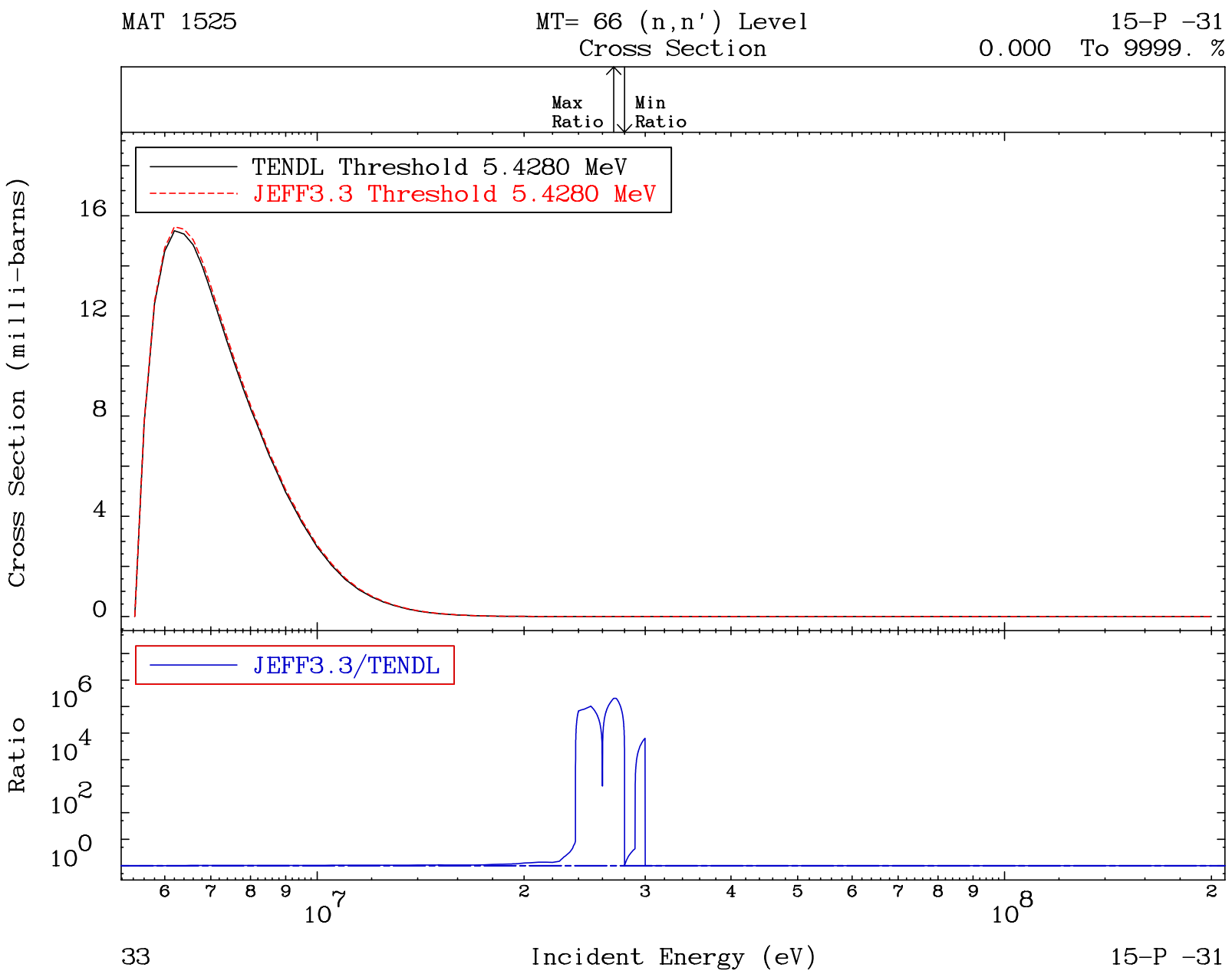

MAT 1525
Dpa elastic (mt2)
Cross Section
15-P -31
-94.77 To 315.7 %
Min Ratio
Max Ratio
TENDL Threshold 200.00 eV
JENDL4.0 Threshold 200.00 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
28
Incident Energy (eV)
15-P -31

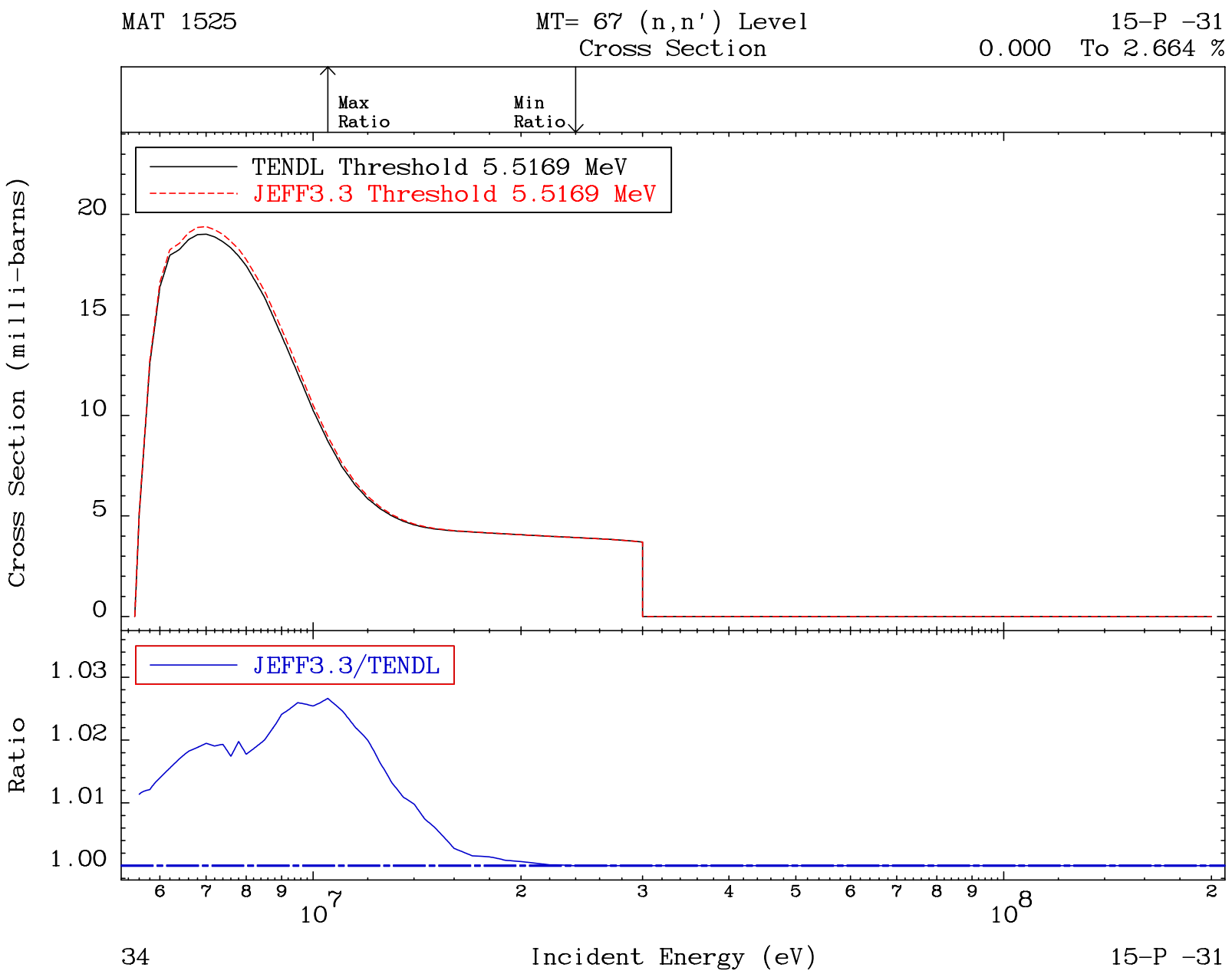

MAT 1525
Dpa inelastic (mt51-91)
Cross Section
15-P -31
-71.97 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.3074 MeV
JENDL4.0 Threshold 1.3072 MeV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
29
15-P -31

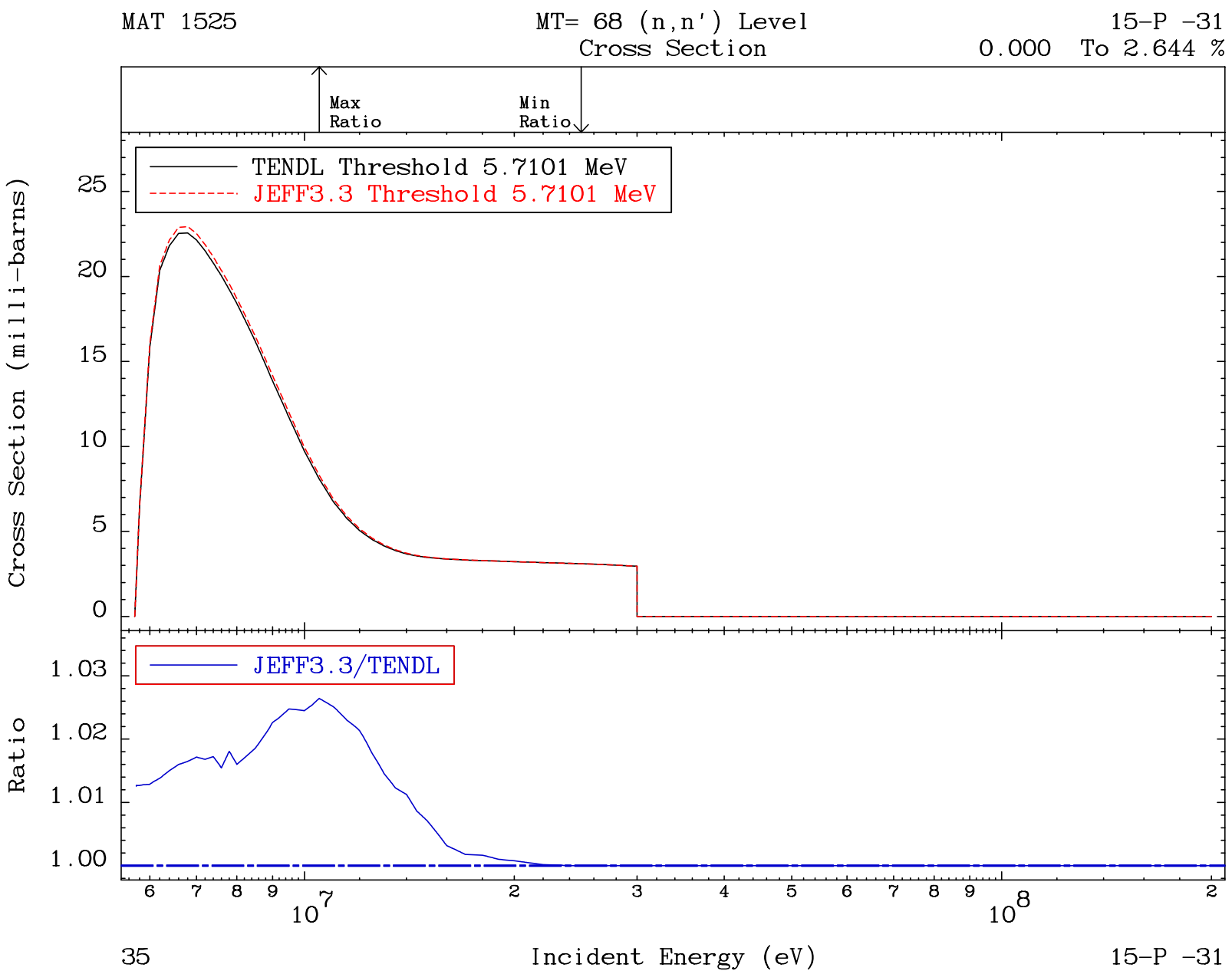

MAT 1525
Dpa disappearance (mt102 -120)
Cross Section
15-P -31
-99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
30
15-P -31

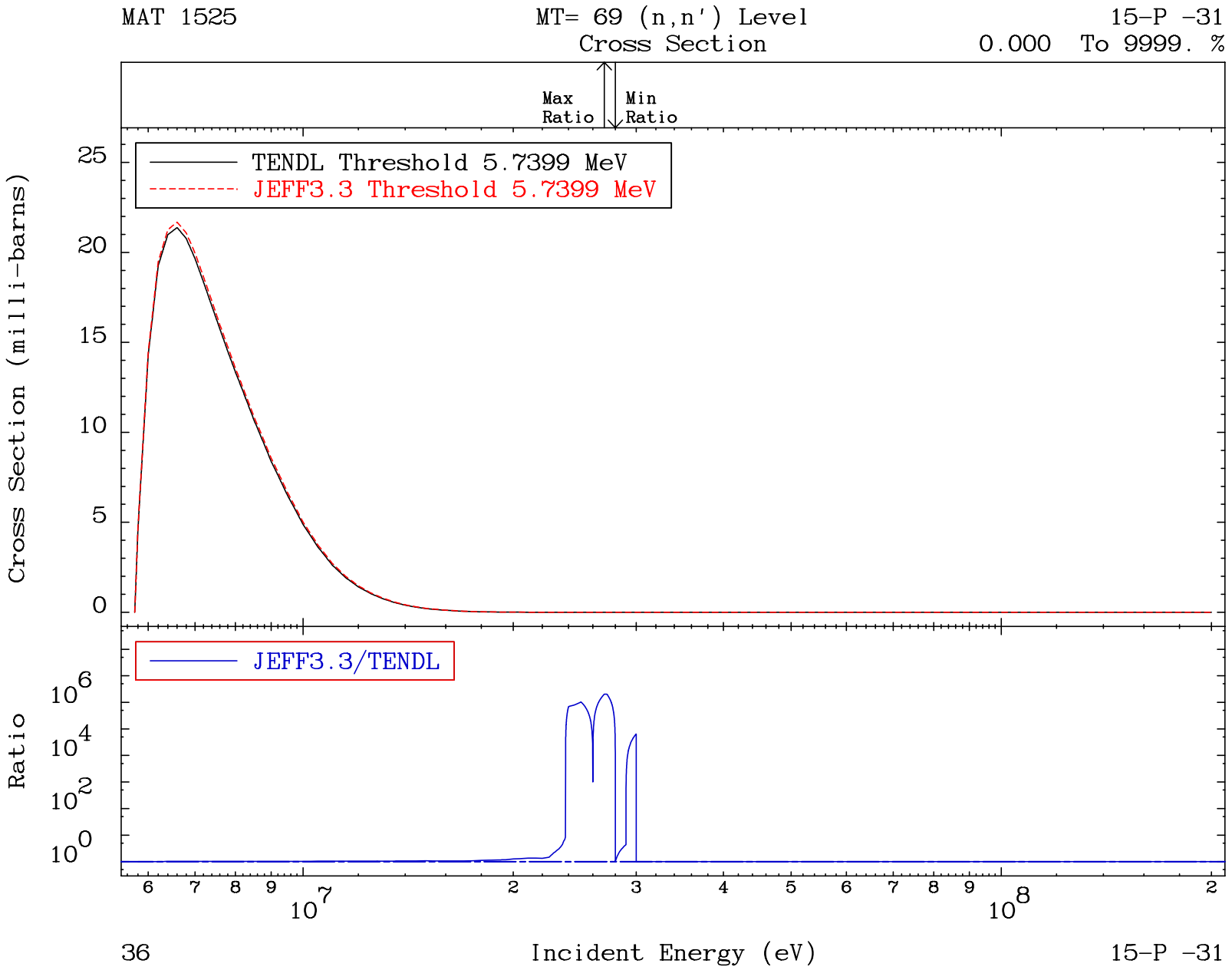

MAT 1525
MT= 64 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.2306 MeV
JEFF3.3 Threshold 5.2306 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
15-P -31

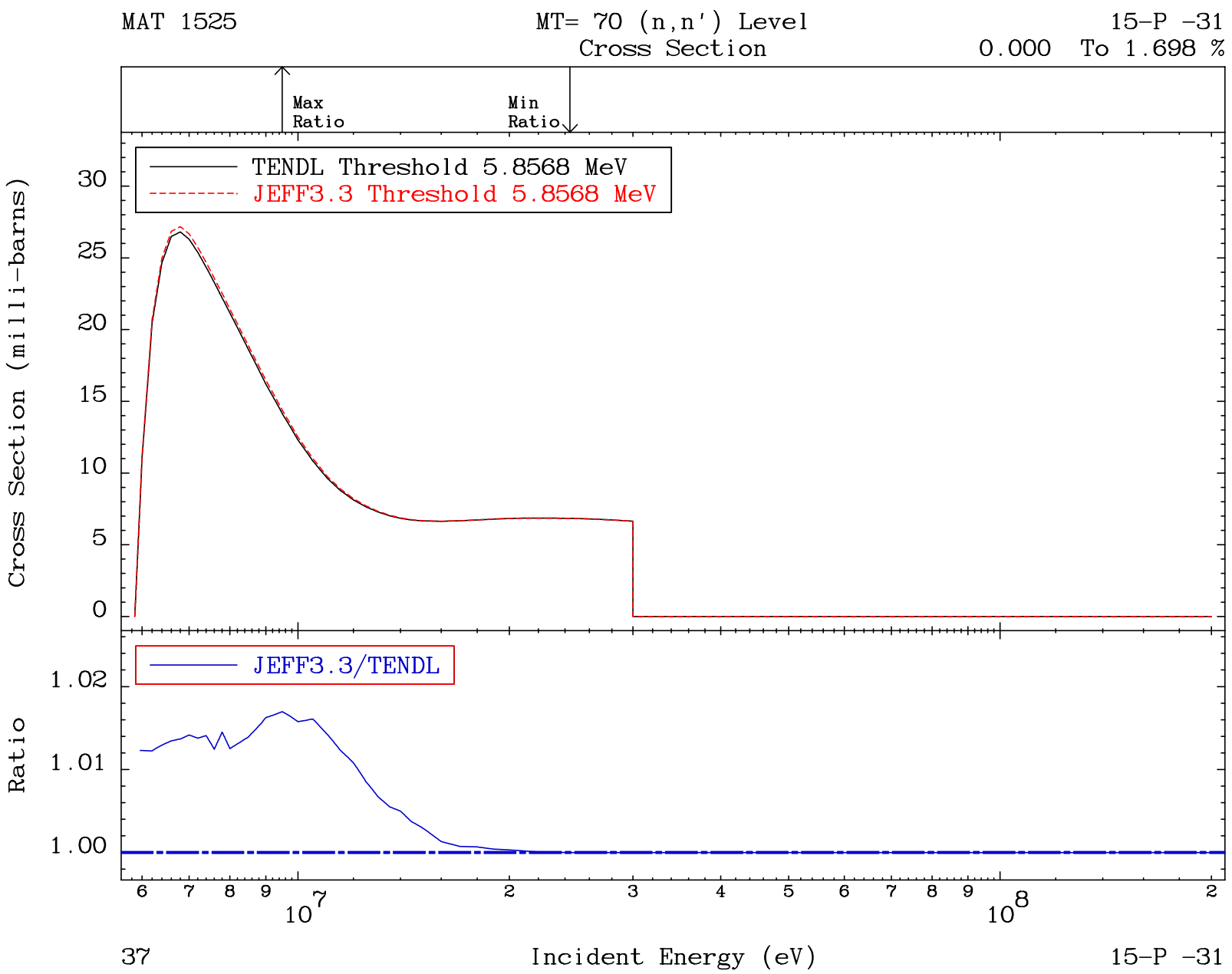

MAT 1525
MT= 65 (n,n') Level
Cross Section
15-P -31
0.000 To 5.686 %
Max Ratio
Min Ratio
TENDL Threshold 5.2826 MeV
JEFF3.3 Threshold 5.2826 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
15-P -31

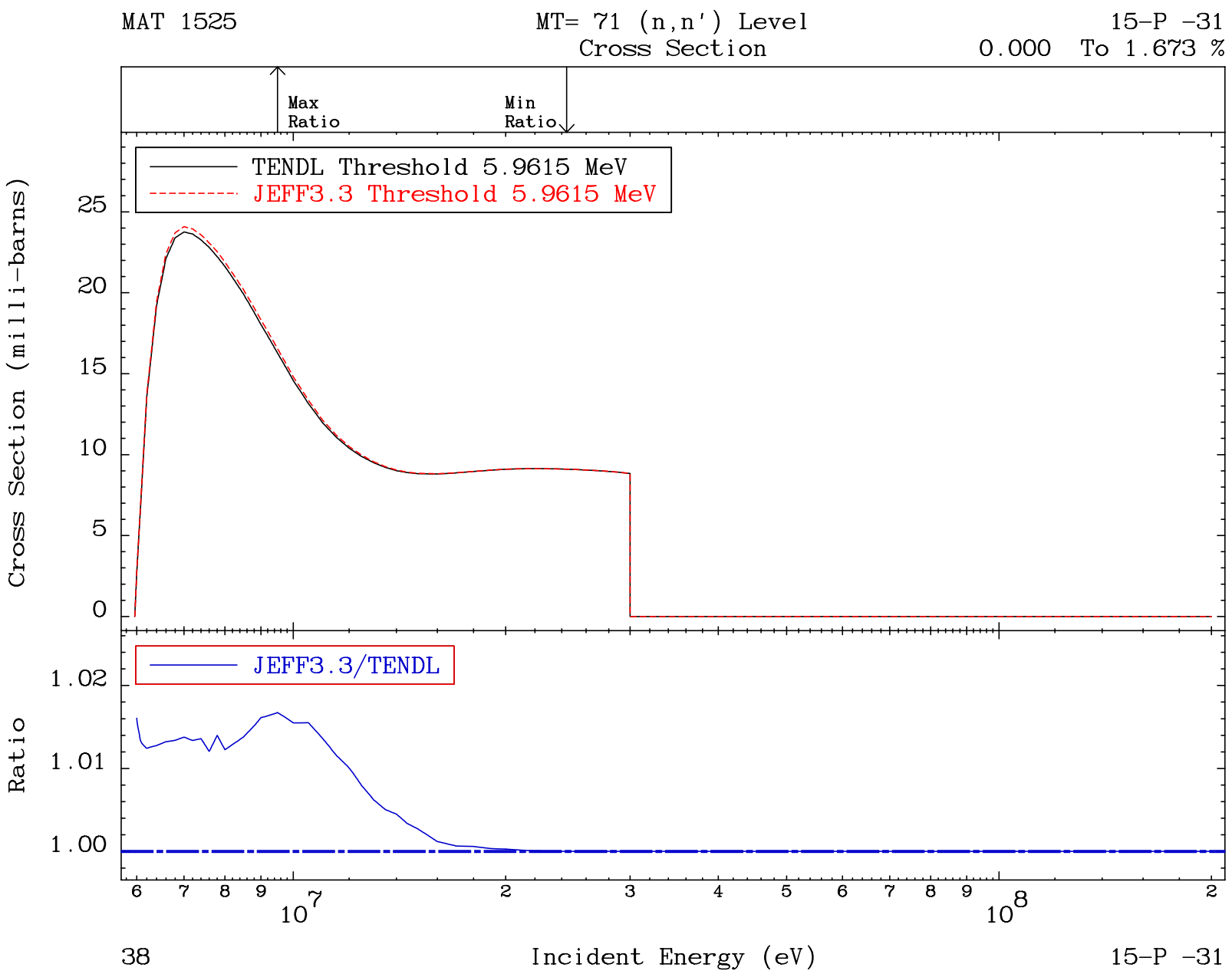

MAT 1525
MT= 66 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.4280 MeV
JEFF3.3 Threshold 5.4280 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
15-P -31

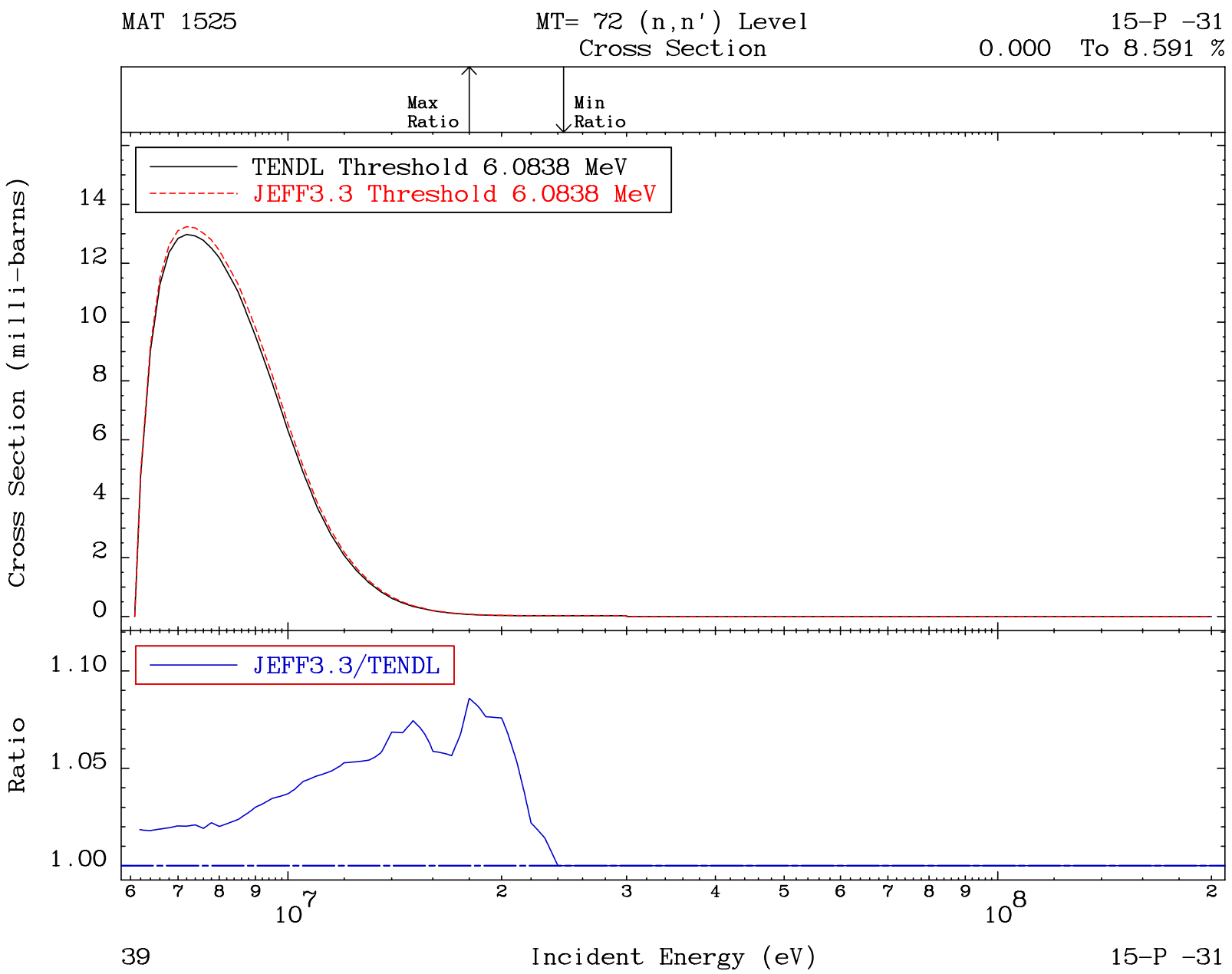

MAT 1525
MT= 67 (n,n') Level
Cross Section
15-P -31
0.000 To 2.664 %
Max Ratio
Min Ratio
TENDL Threshold 5.5169 MeV
JEFF3.3 Threshold 5.5169 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
15-P -31

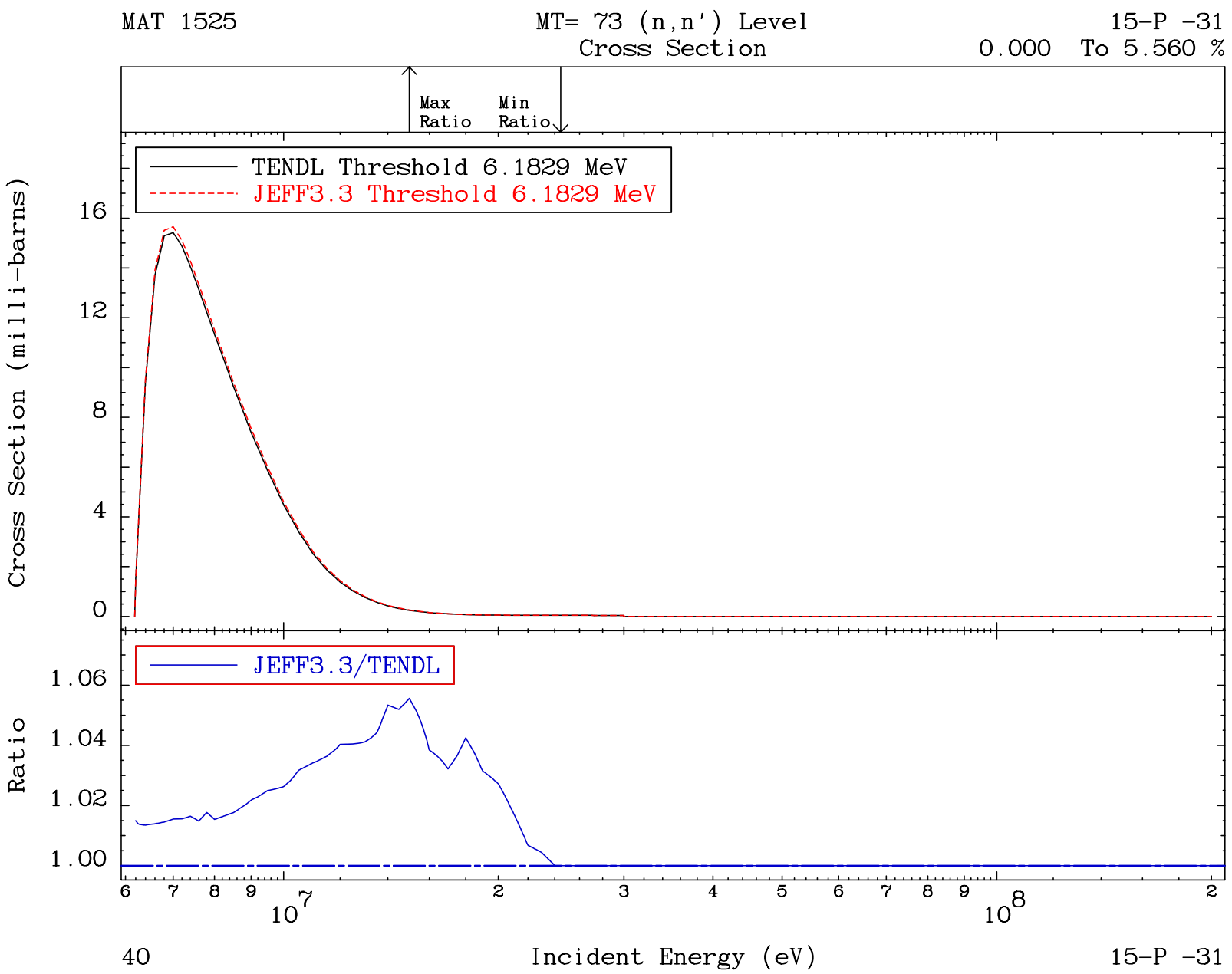

MAT 1525
MT= 68 (n,n') Level
Cross Section
15-P -31
0.000 To 2.644 %
Max Ratio
Min Ratio
TENDL Threshold 5.7101 MeV
JEFF3.3 Threshold 5.7101 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
15-P -31

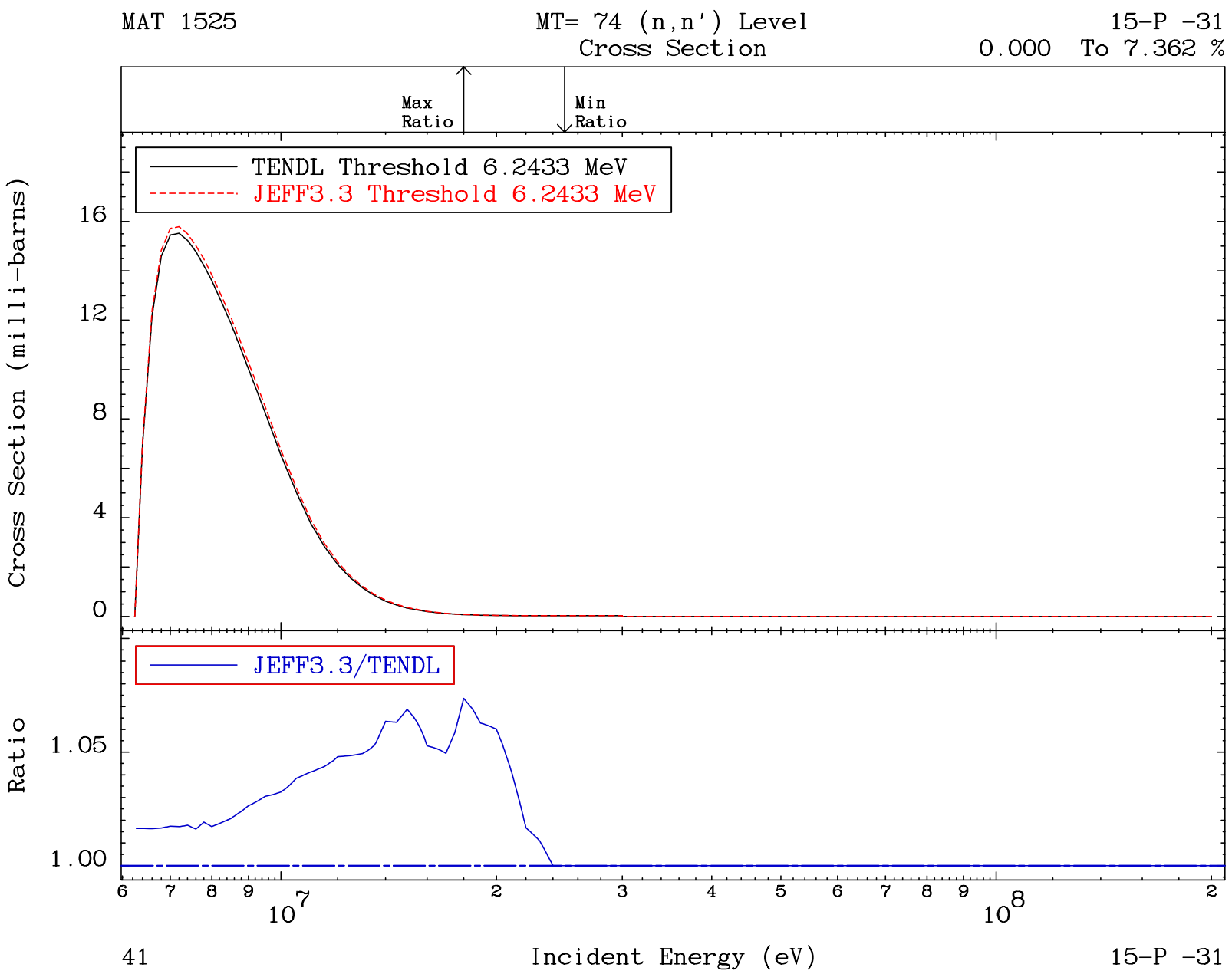

MAT 1525
MT= 69 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.7399 MeV
JEFF3.3 Threshold 5.7399 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
15-P -31

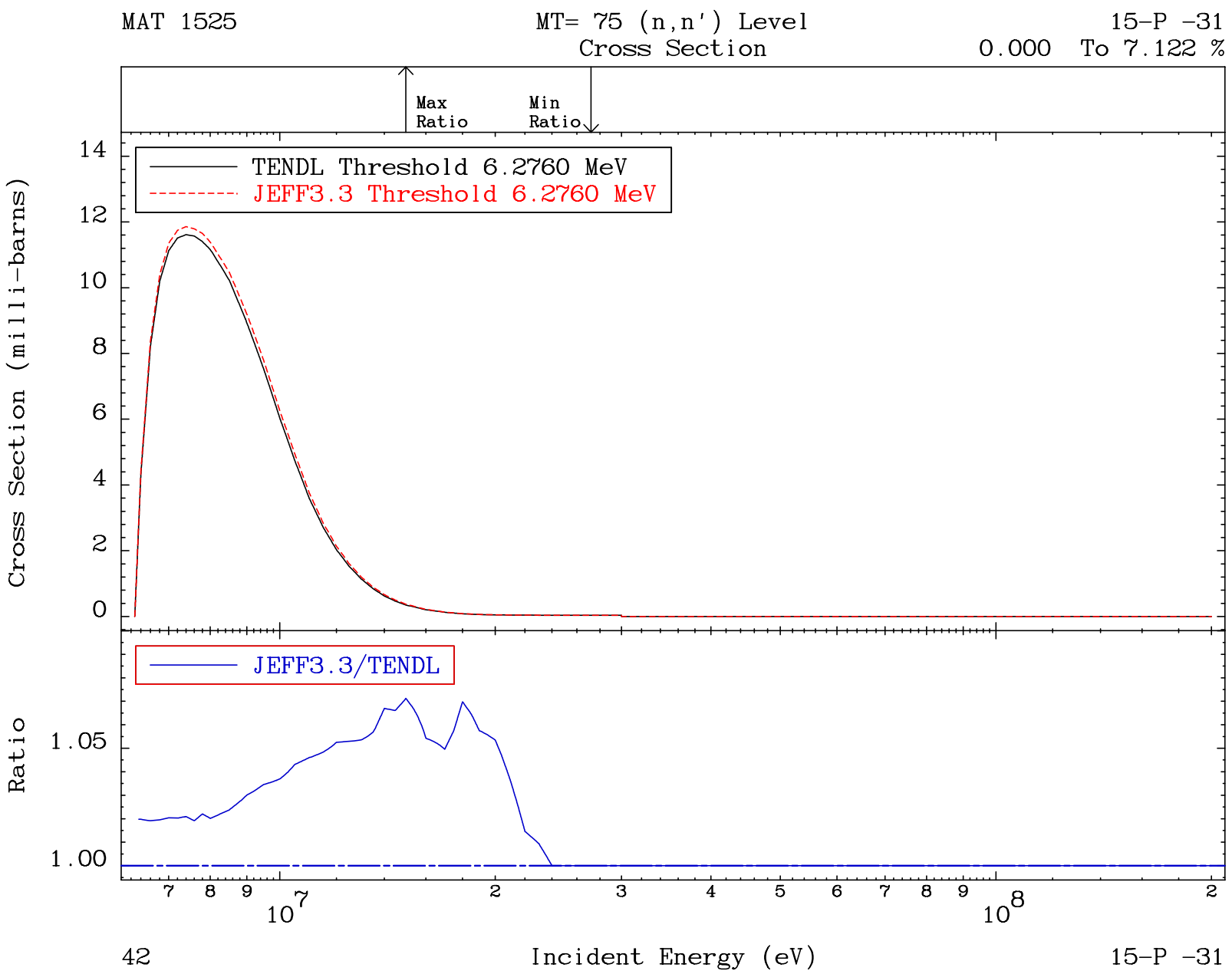

MAT 1525
MT= 70 (n,n') Level
Cross Section
15-P -31
0.000 To 1.698 %
Max Ratio
Min Ratio
TENDL Threshold 5.8568 MeV
JEFF3.3 Threshold 5.8568 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
15-P -31

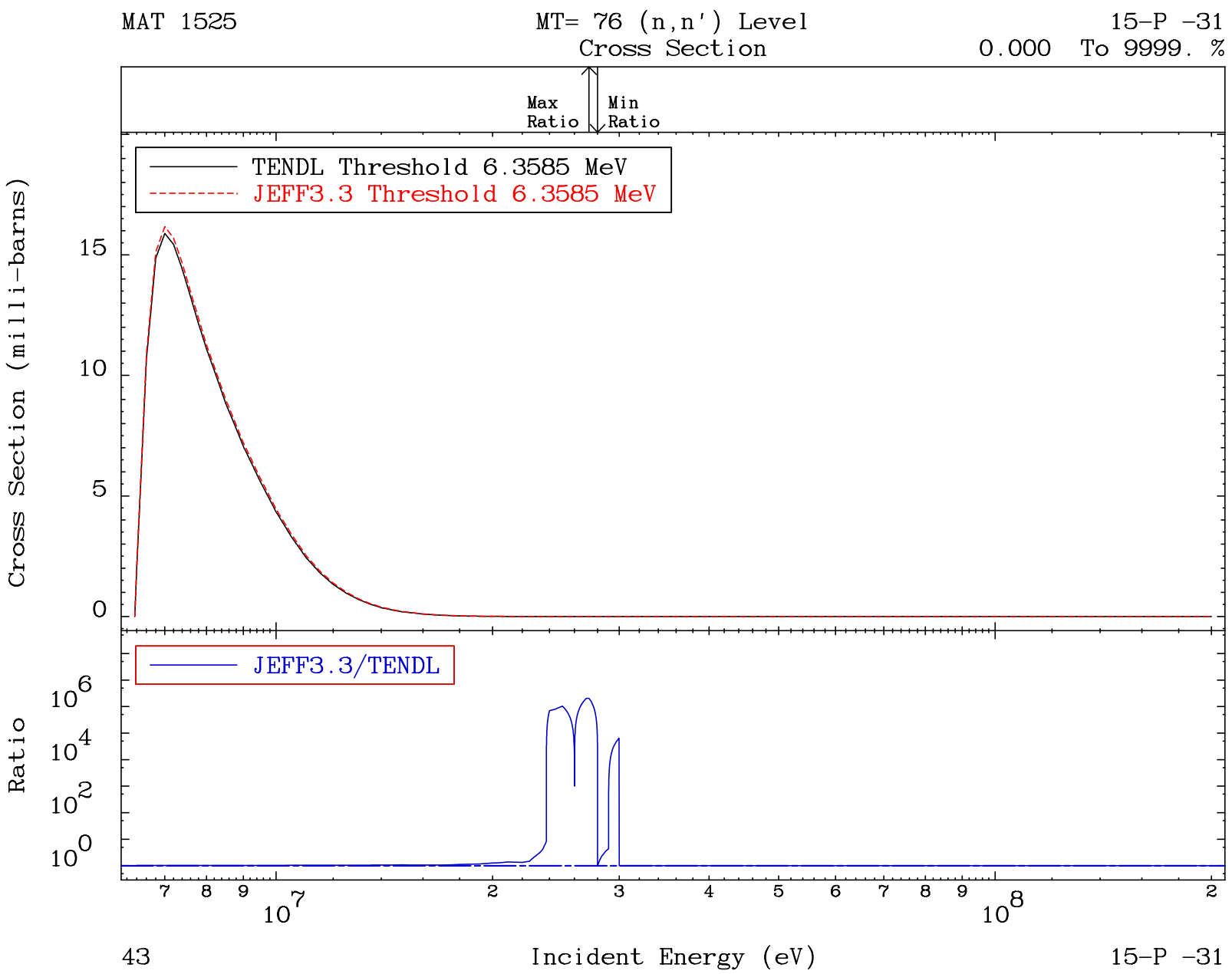

MAT 1525
MT= 71 (n,n') Level
Cross Section
15-P -31
0.000 To 1.673 %
Max Ratio
Min Ratio
TENDL Threshold 5.9615 MeV
JEFF3.3 Threshold 5.9615 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
15-P -31

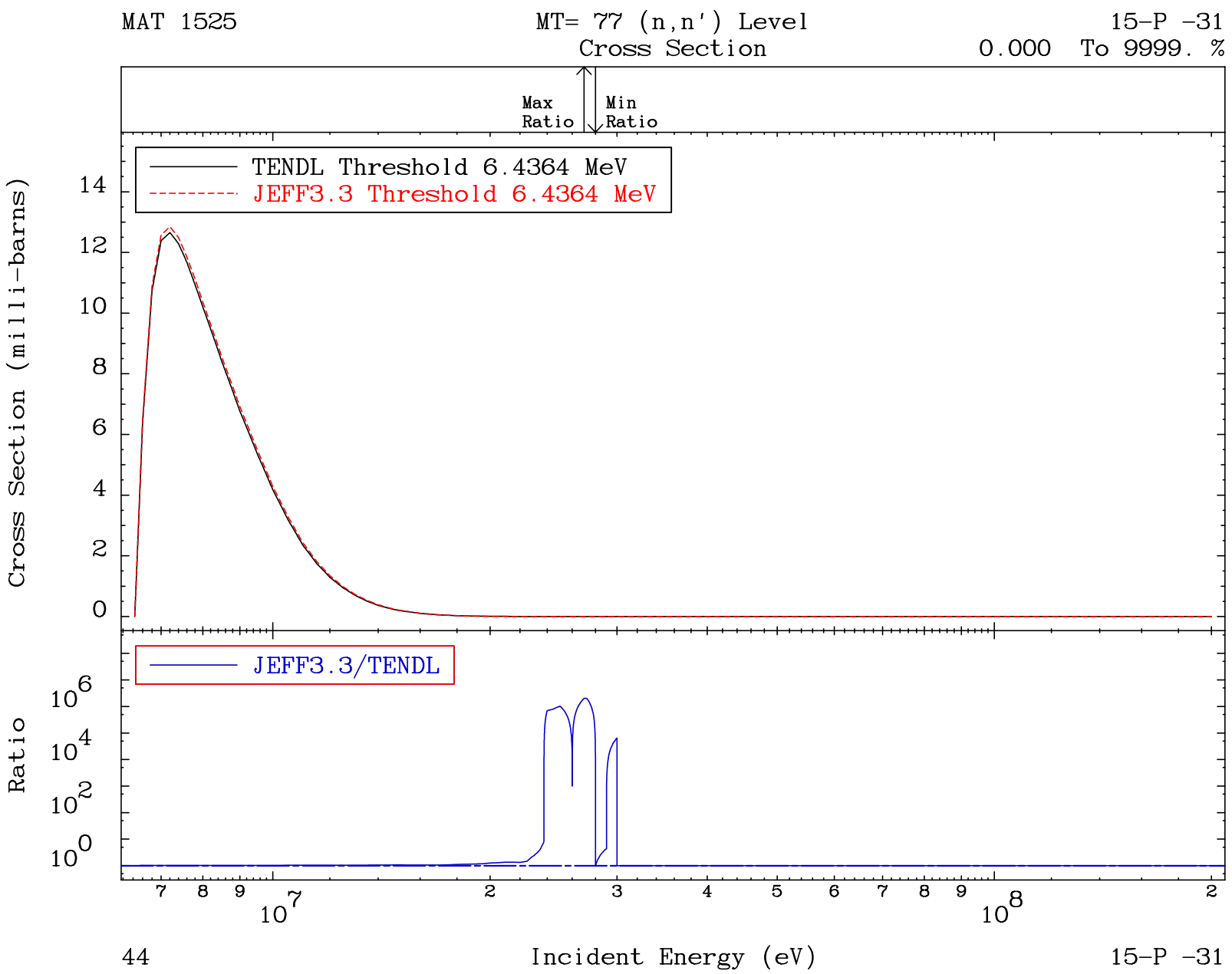

MAT 1525
MT= 72 (n,n') Level
Cross Section
15-P -31
0.000 To 8.591 %
Max Ratio
Min Ratio
TENDL Threshold 6.0838 MeV
JEFF3.3 Threshold 6.0838 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
15-P -31

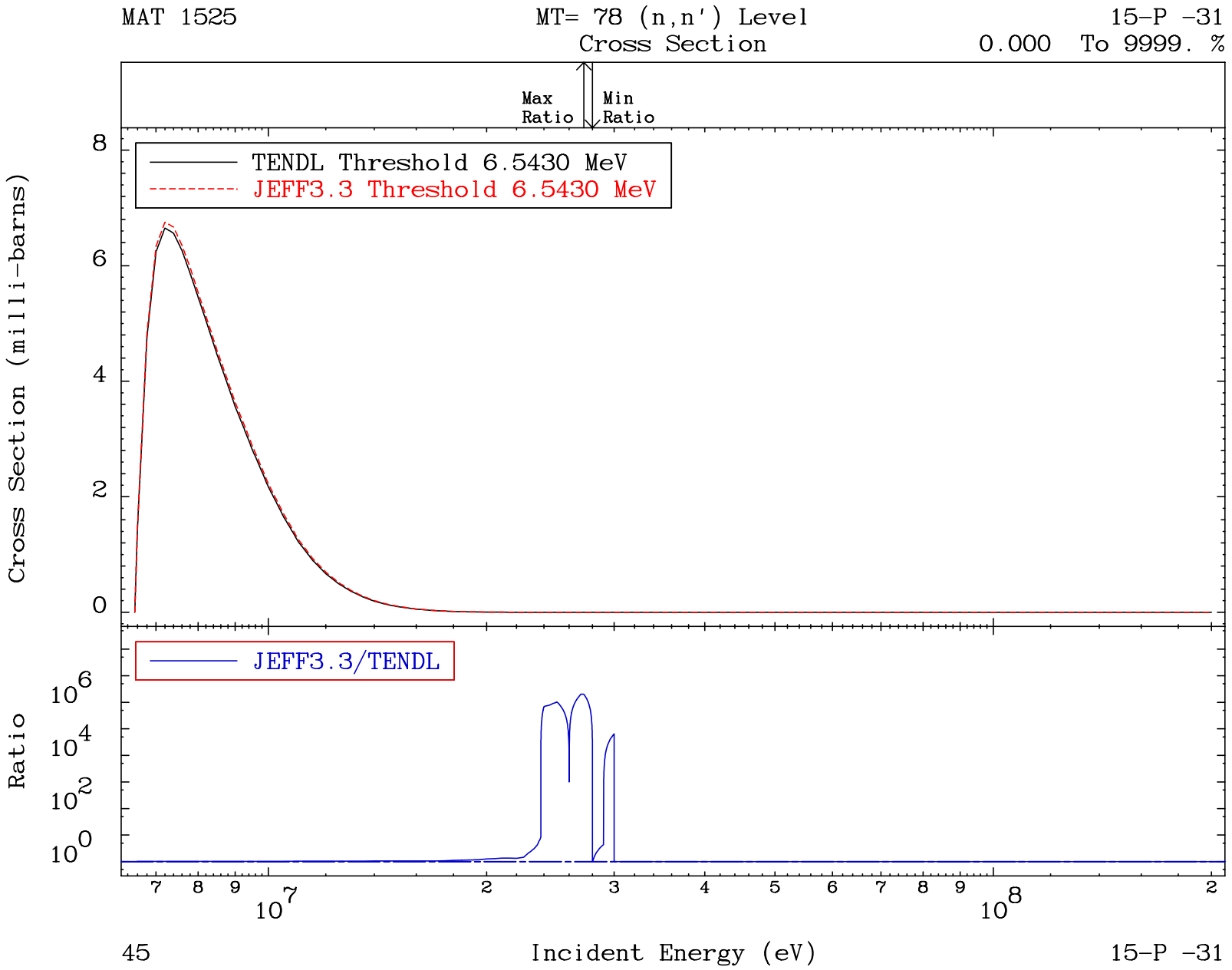

MAT 1525
MT= 73 (n,n') Level
Cross Section
15-P -31
0.000 To 5.560 %
Max Ratio
Min Ratio
TENDL Threshold 6.1829 MeV
JEFF3.3 Threshold 6.1829 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
15-P -31

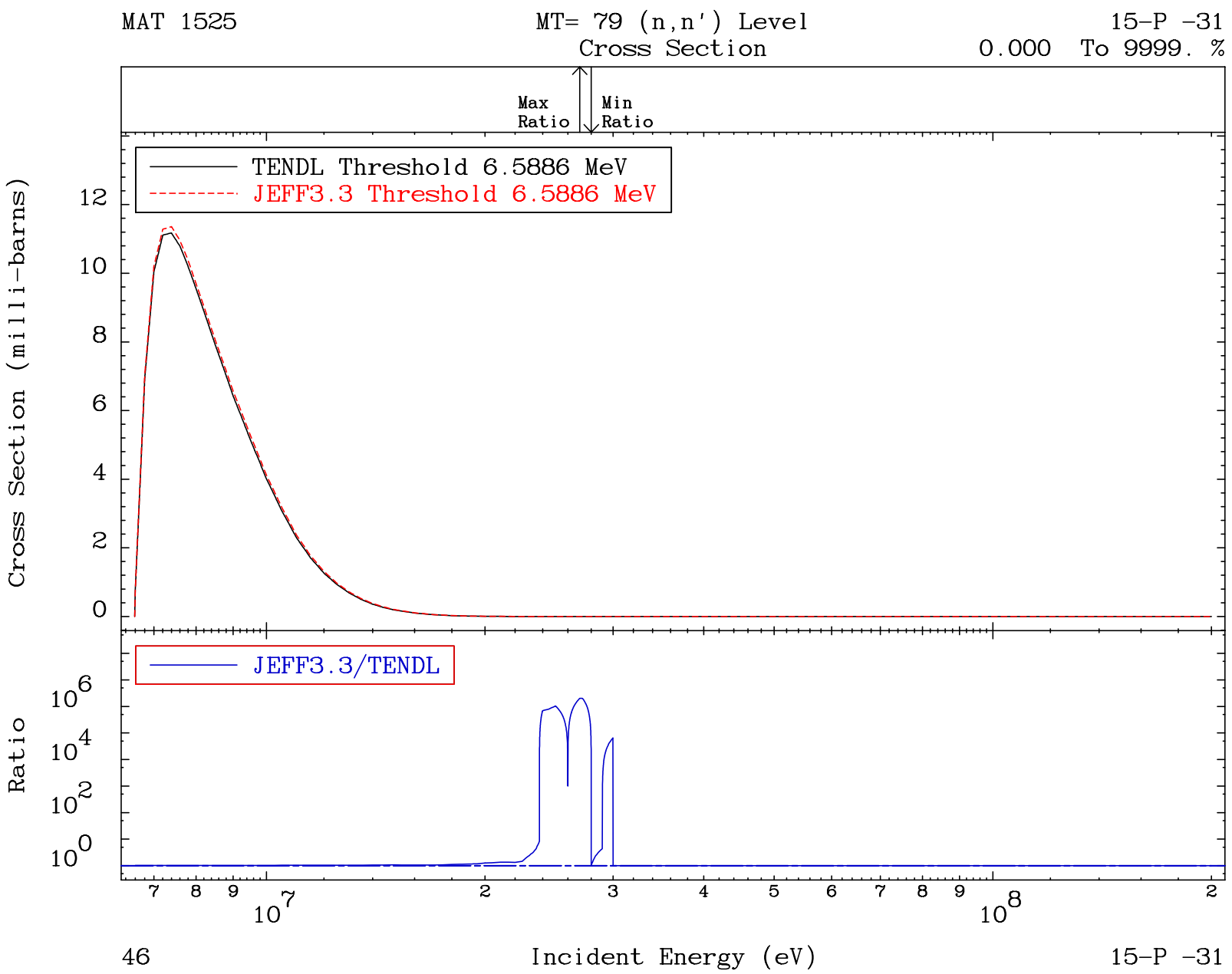

MAT 1525
MT= 74 (n,n') Level
Cross Section
15-P -31
0.000 To 7.362 %
Max Ratio
Min Ratio
TENDL Threshold 6.2433 MeV
JEFF3.3 Threshold 6.2433 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.05
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
15-P -31

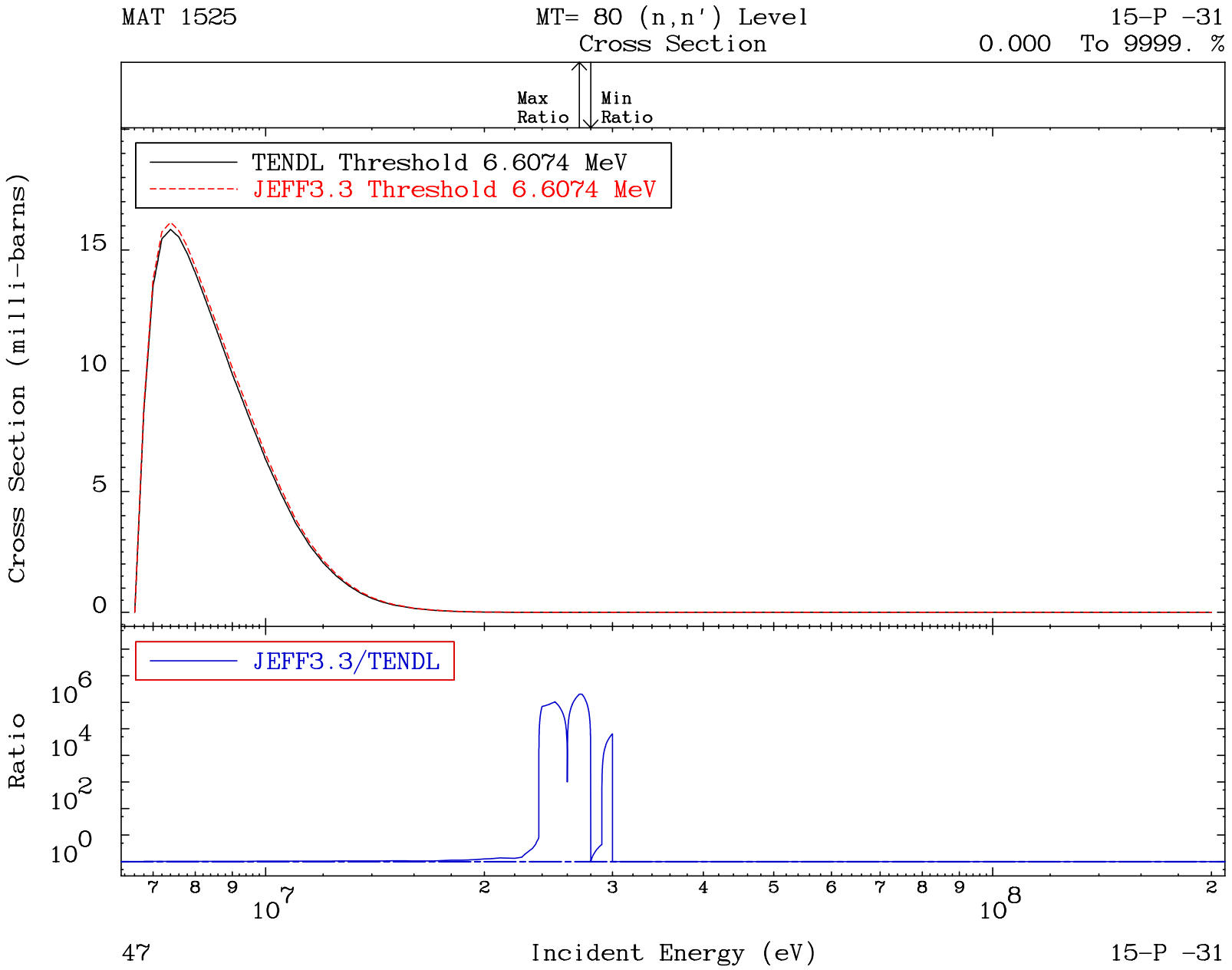

MAT 1525
MT= 75 (n,n') Level
Cross Section
15-P -31
0.000 To 7.122 %
Max Ratio
Min Ratio
TENDL Threshold 6.2760 MeV
JEFF3.3 Threshold 6.2760 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.05
1.00
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
42
Incident Energy (eV)
15-P -31

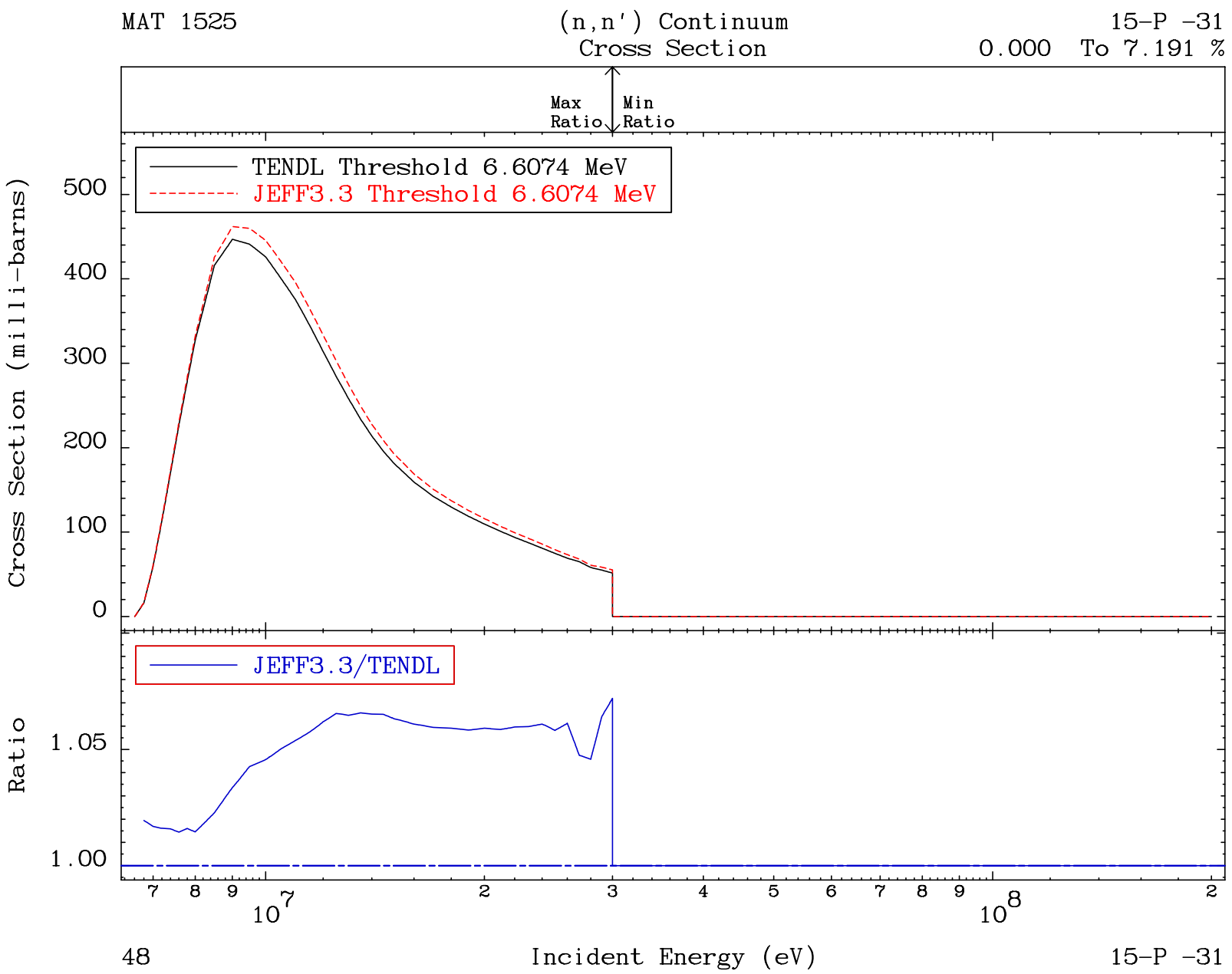

MAT 1525
MT= 76 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.3585 MeV
JEFF3.3 Threshold 6.3585 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
15-P -31

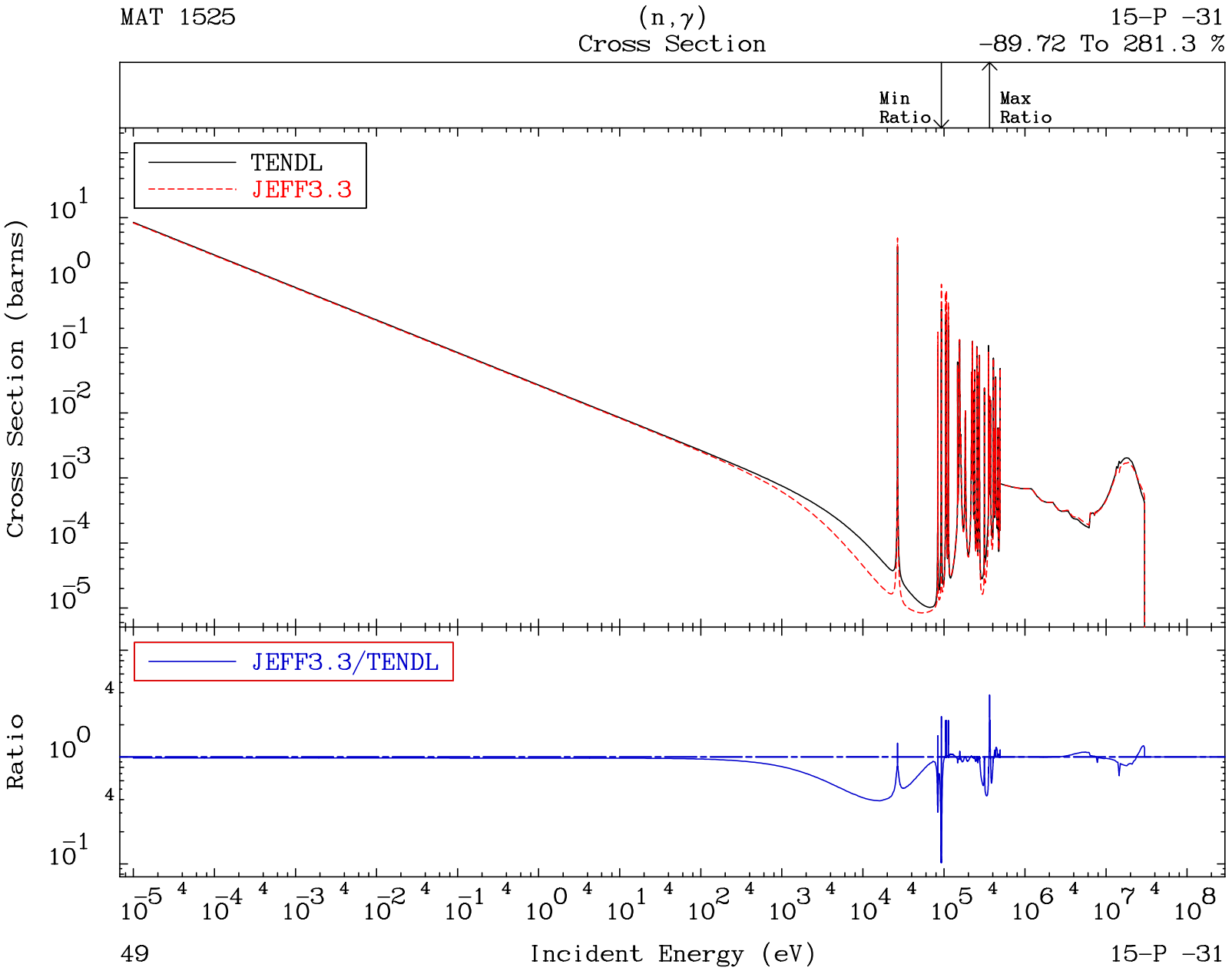

MAT 1525
MT= 77 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.4364 MeV
JEFF3.3 Threshold 6.4364 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
44
15-P -31

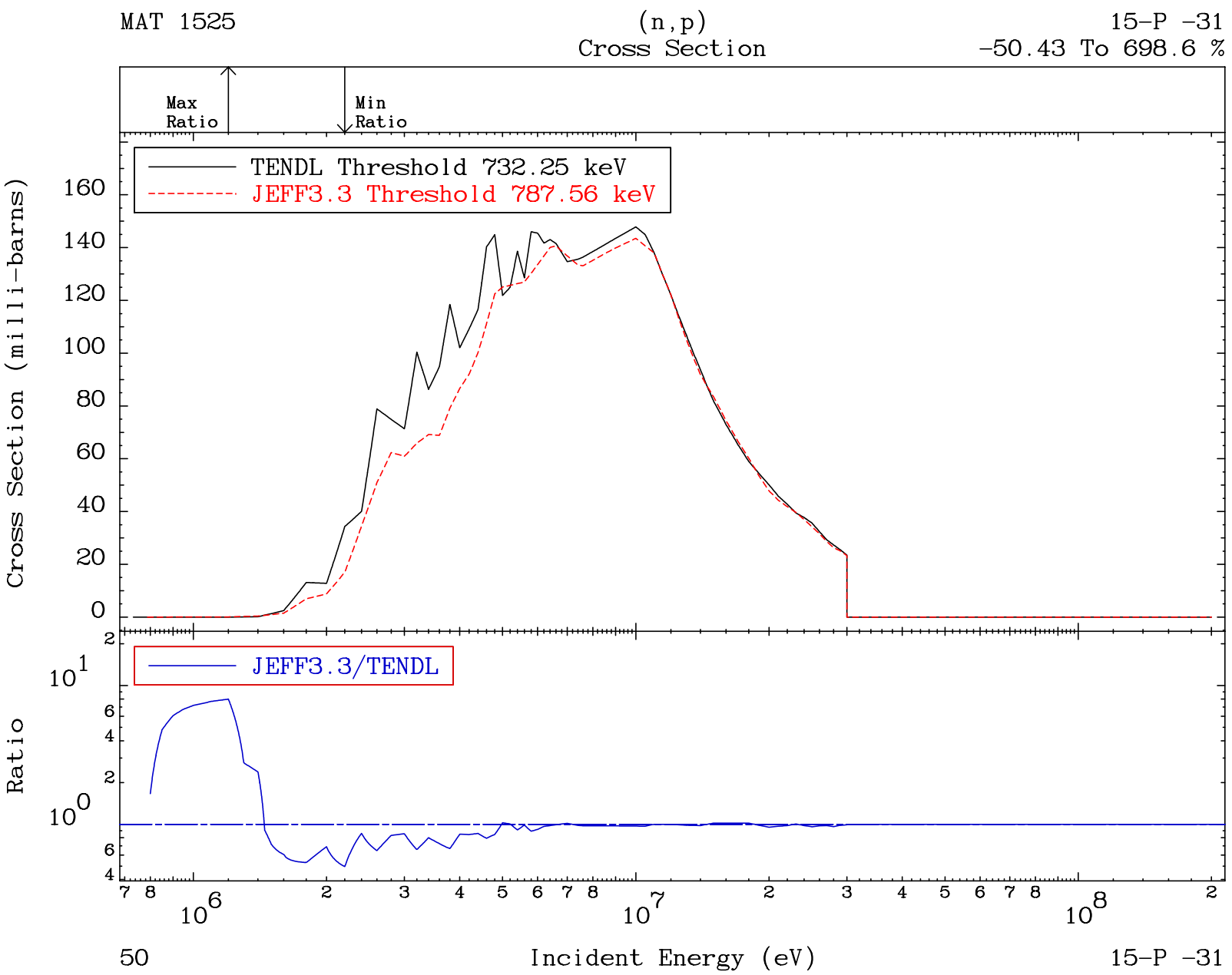

MAT 1525
MT= 78 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.5430 MeV
JEFF3.3 Threshold 6.5430 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
15-P -31

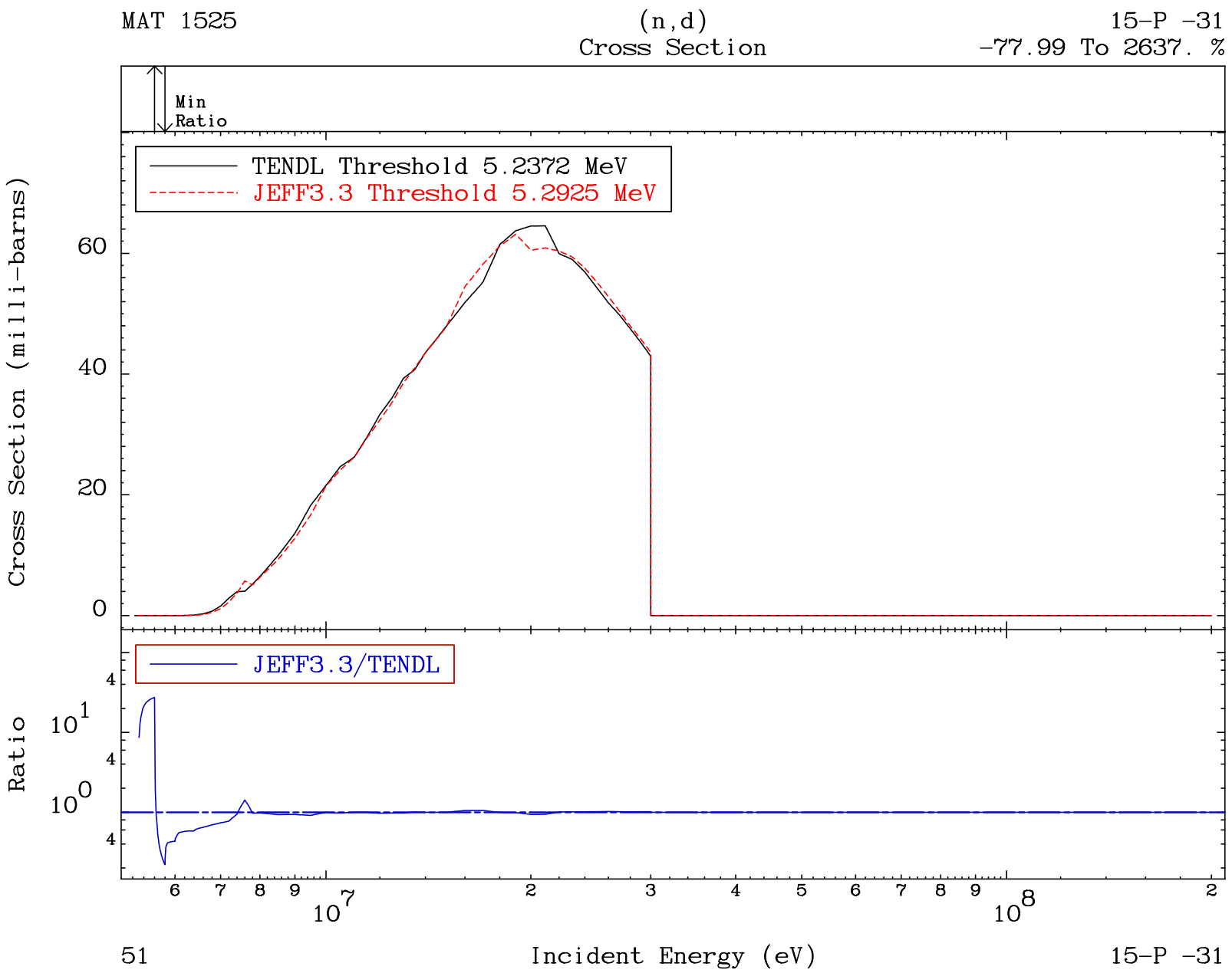

MAT 1525
MT= 79 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.5886 MeV
JEFF3.3 Threshold 6.5886 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
15-P -31

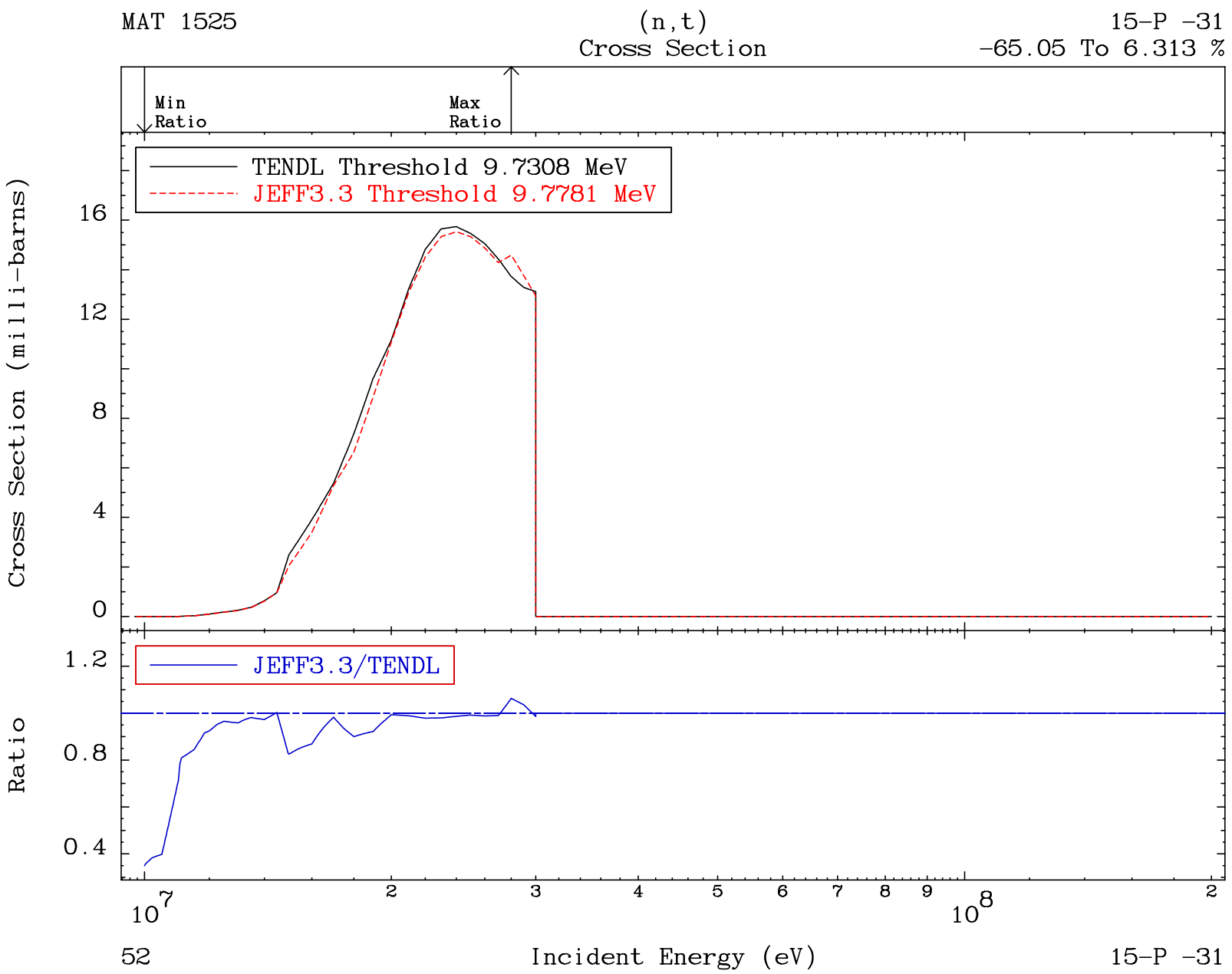

MAT 1525
MT= 80 (n,n') Level
Cross Section
15-P -31
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.6074 MeV
JEFF3.3 Threshold 6.6074 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
15-P -31

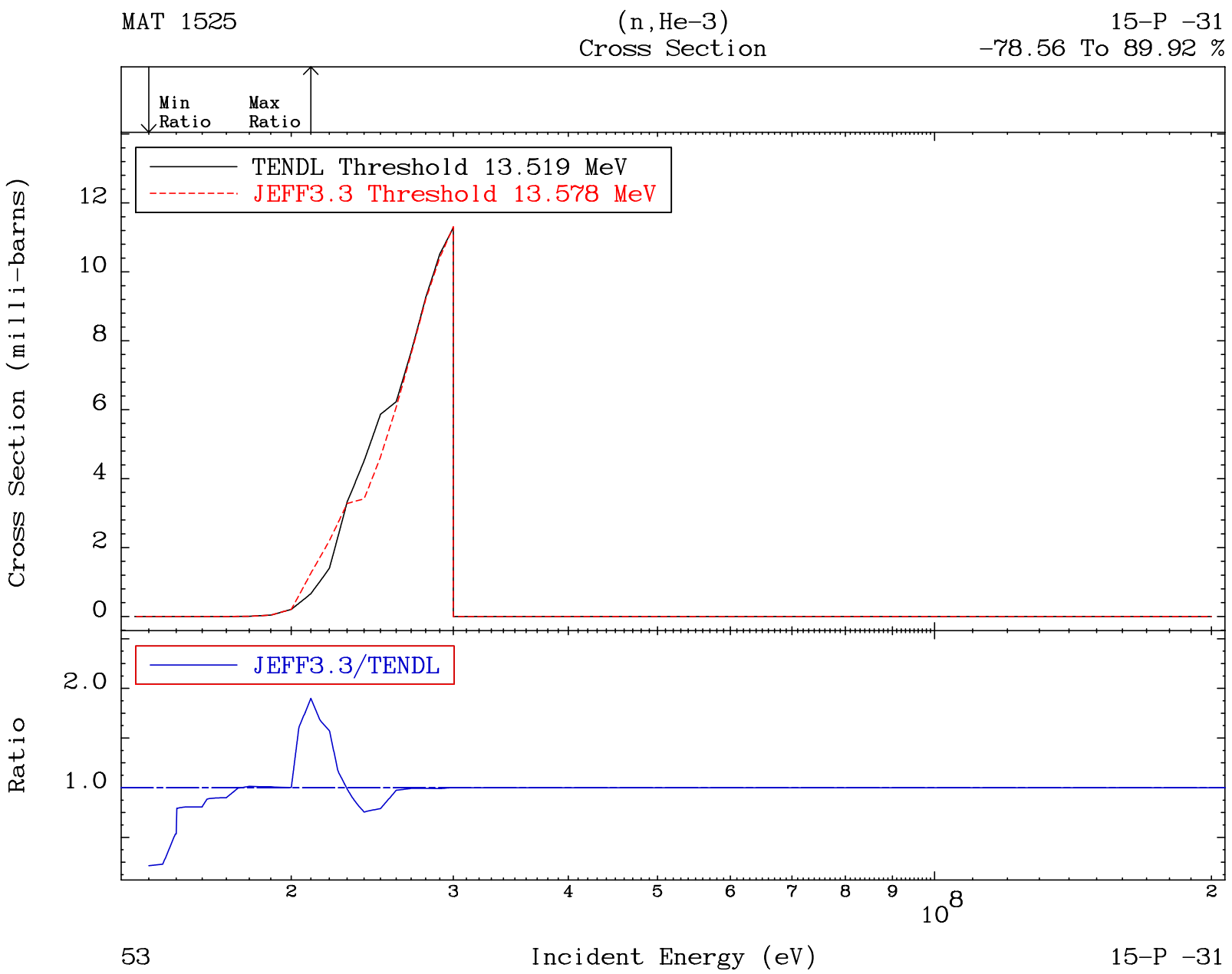

MAT 1525
(n,n') Continuum
Cross Section
15-P -31
0.000 To 7.191 %
Max Ratio
Min Ratio
TENDL Threshold 6.6074 MeV
JEFF3.3 Threshold 6.6074 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.05
1.00
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
48
Incident Energy (eV)
15-P -31

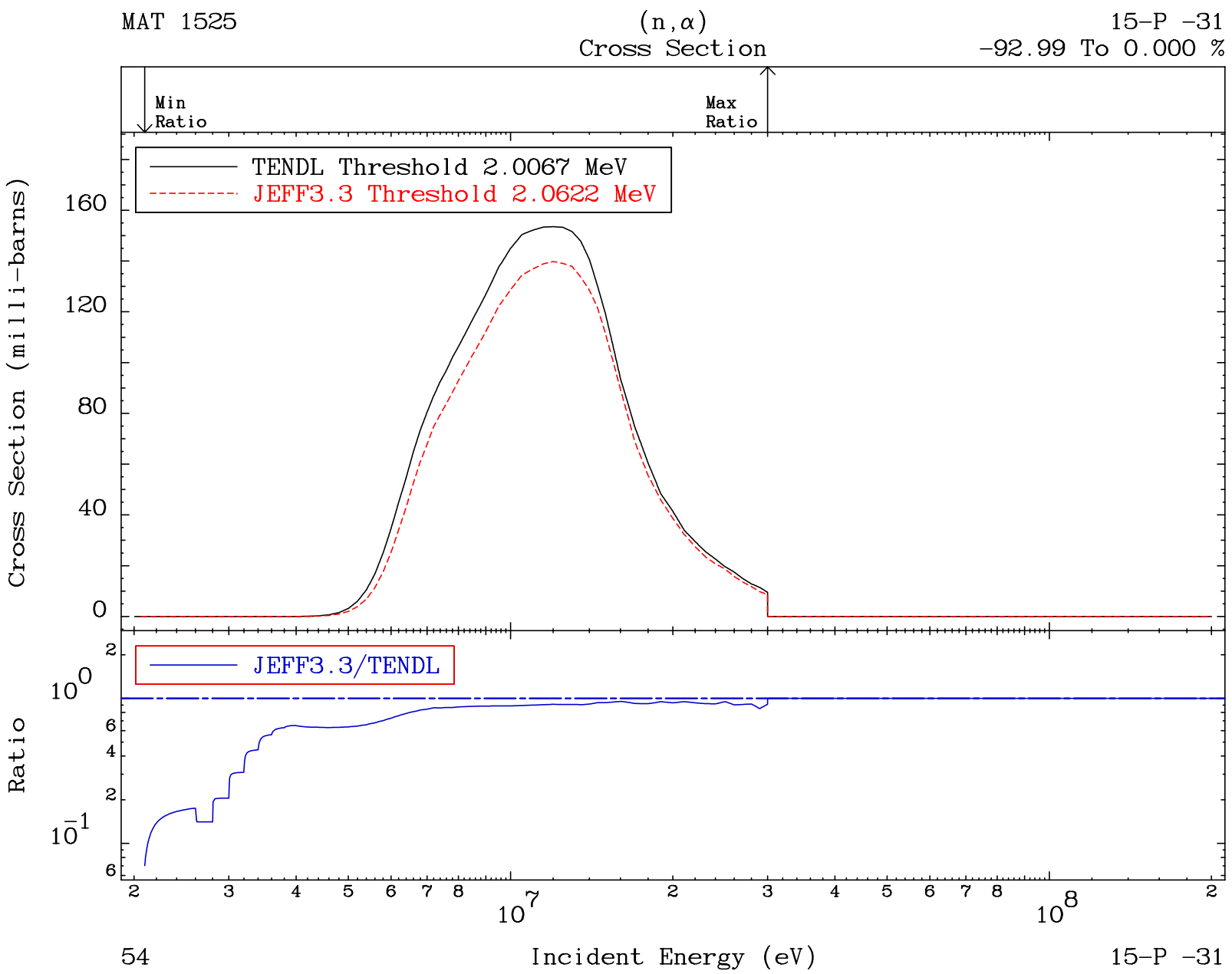

MAT 1525
(n,γ)
Cross Section
15-P -31
-89.72 To 281.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
15-P -31

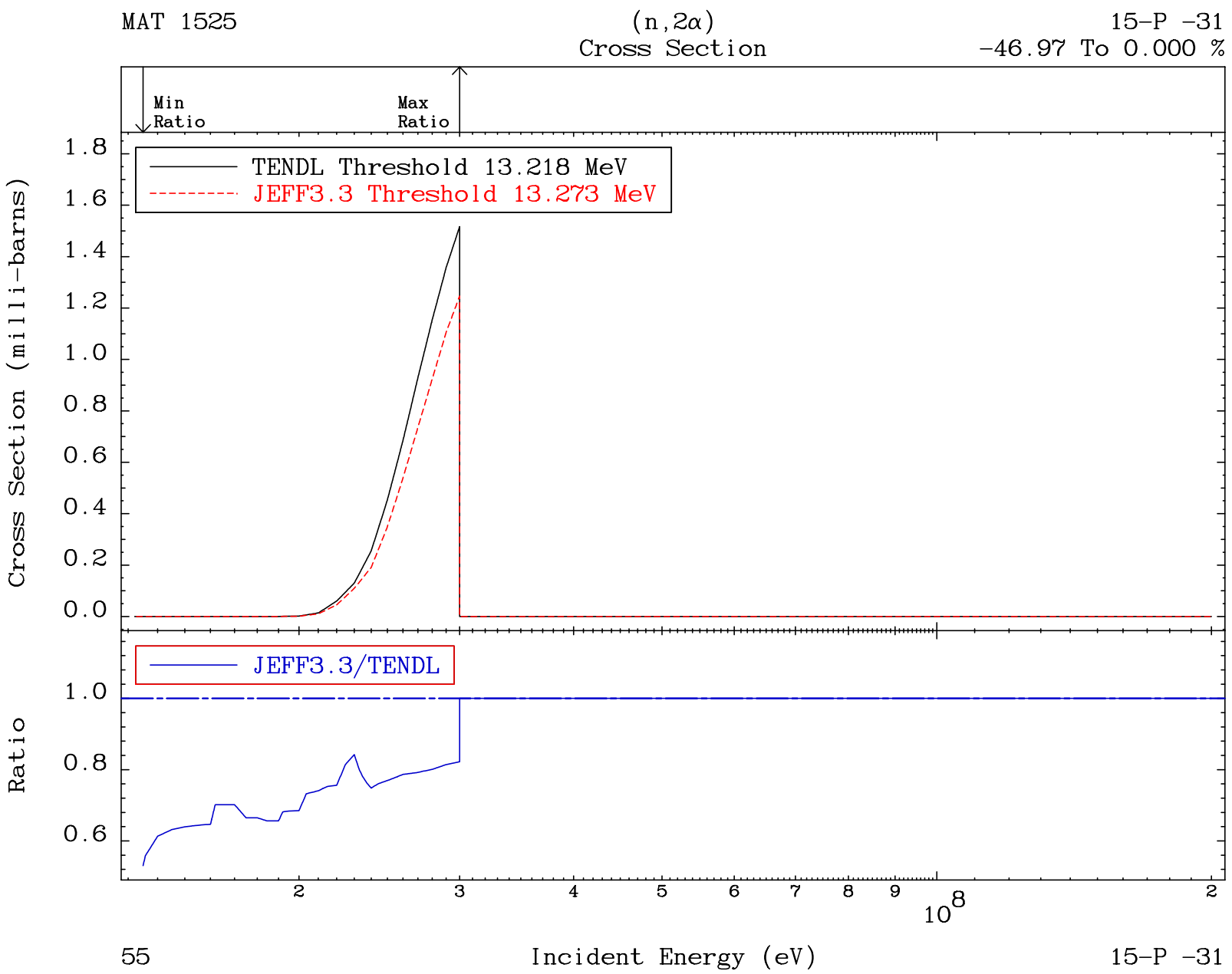

MAT 1525
(n,p)
Cross Section
15-P -31
-50.43 To 698.6 %
Max Ratio
Min Ratio
TENDL Threshold 732.25 keV
JEFF3.3 Threshold 787.56 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^6
10^7
10^8
50
Incident Energy (eV)
15-P -31

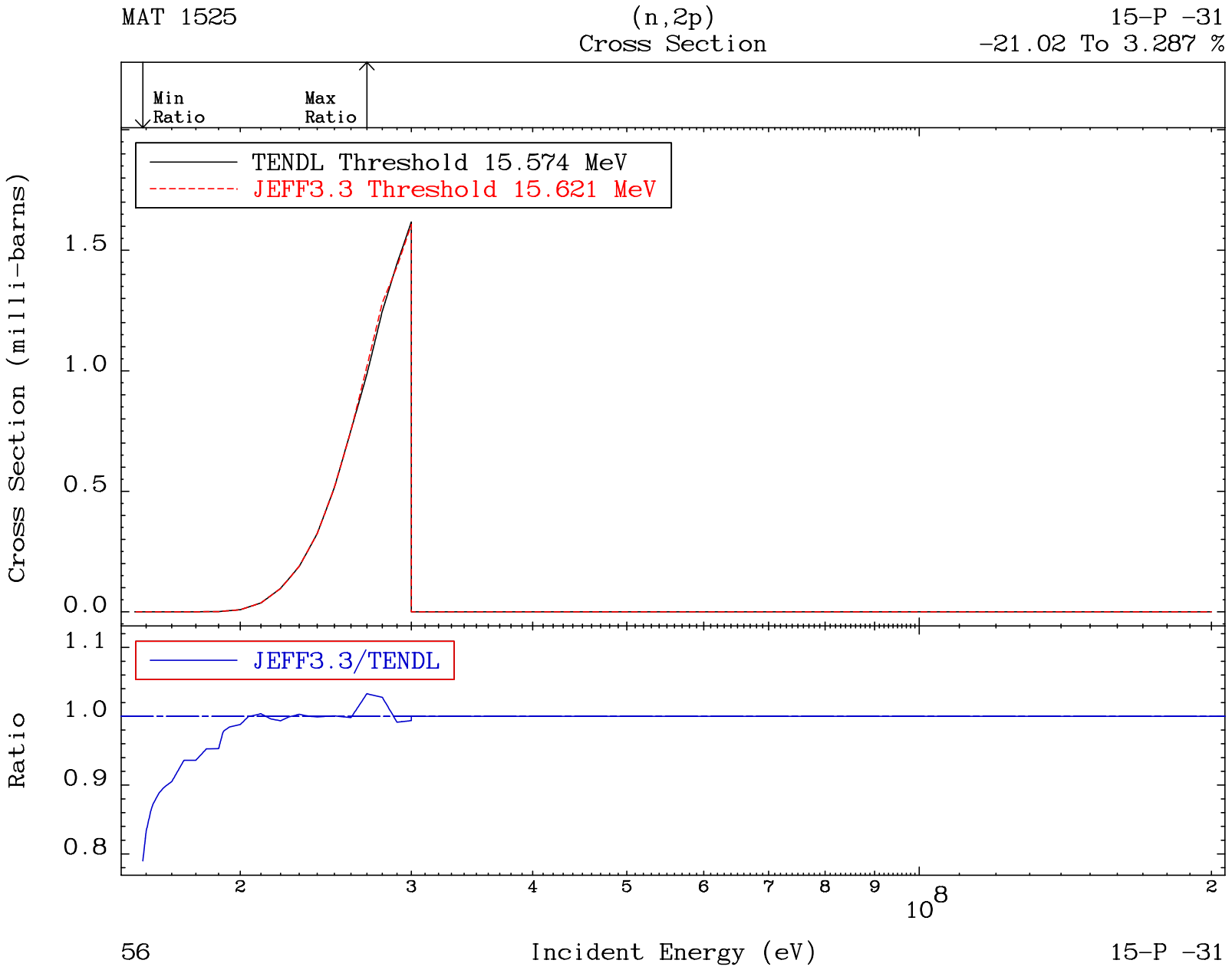

MAT 1525
(n,d)
Cross Section
15-P -31
-77.99 To 2637. %
Min
Ratio
TENDL Threshold 5.2372 MeV
JEFF3.3 Threshold 5.2925 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
15-P -31

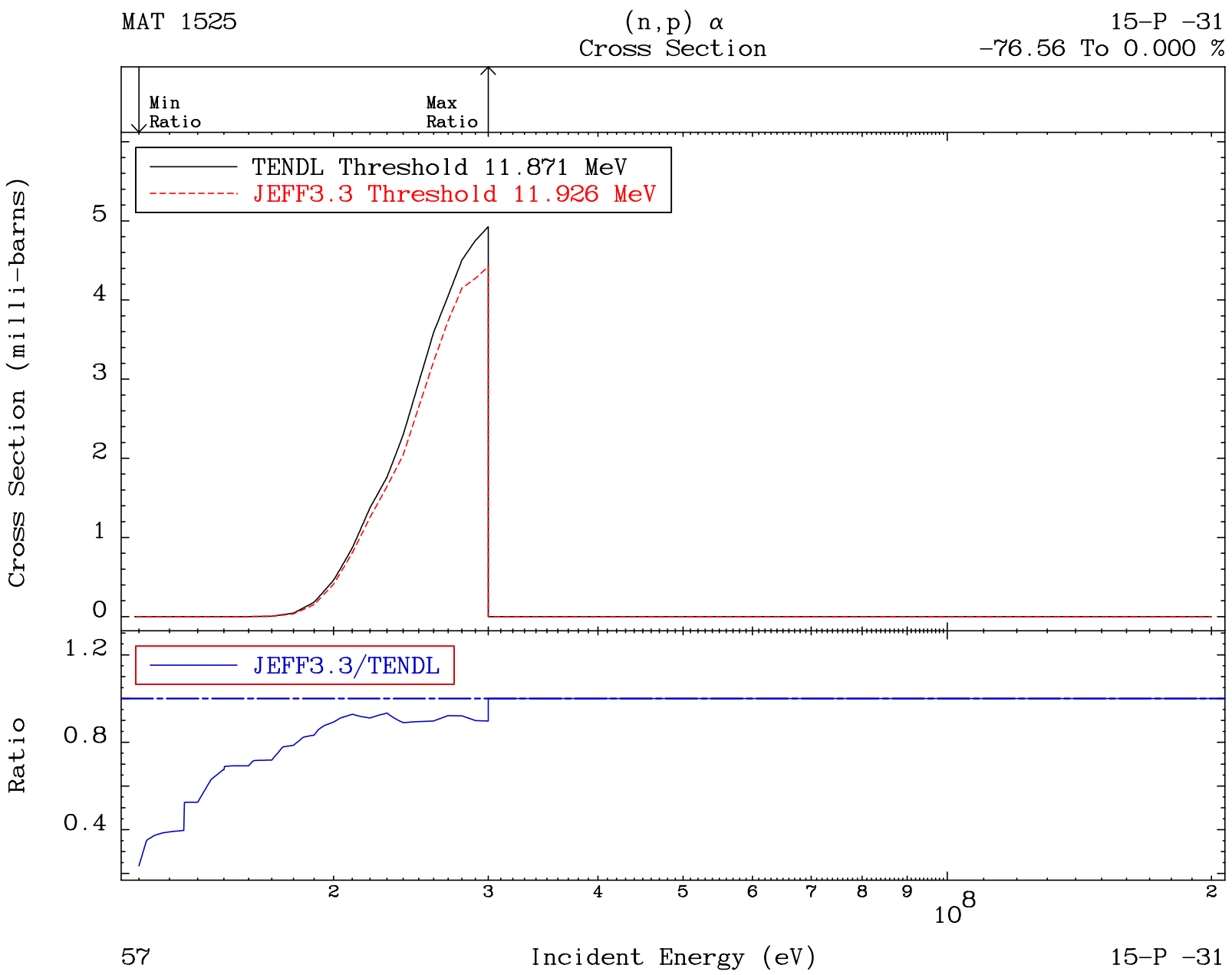

MAT 1525
(n,t)
Cross Section
15-P -31
-65.05 To 6.313 %
Min Ratio
Max Ratio
TENDL Threshold 9.7308 MeV
JEFF3.3 Threshold 9.7781 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.2
0.8
0.4
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
15-P -31

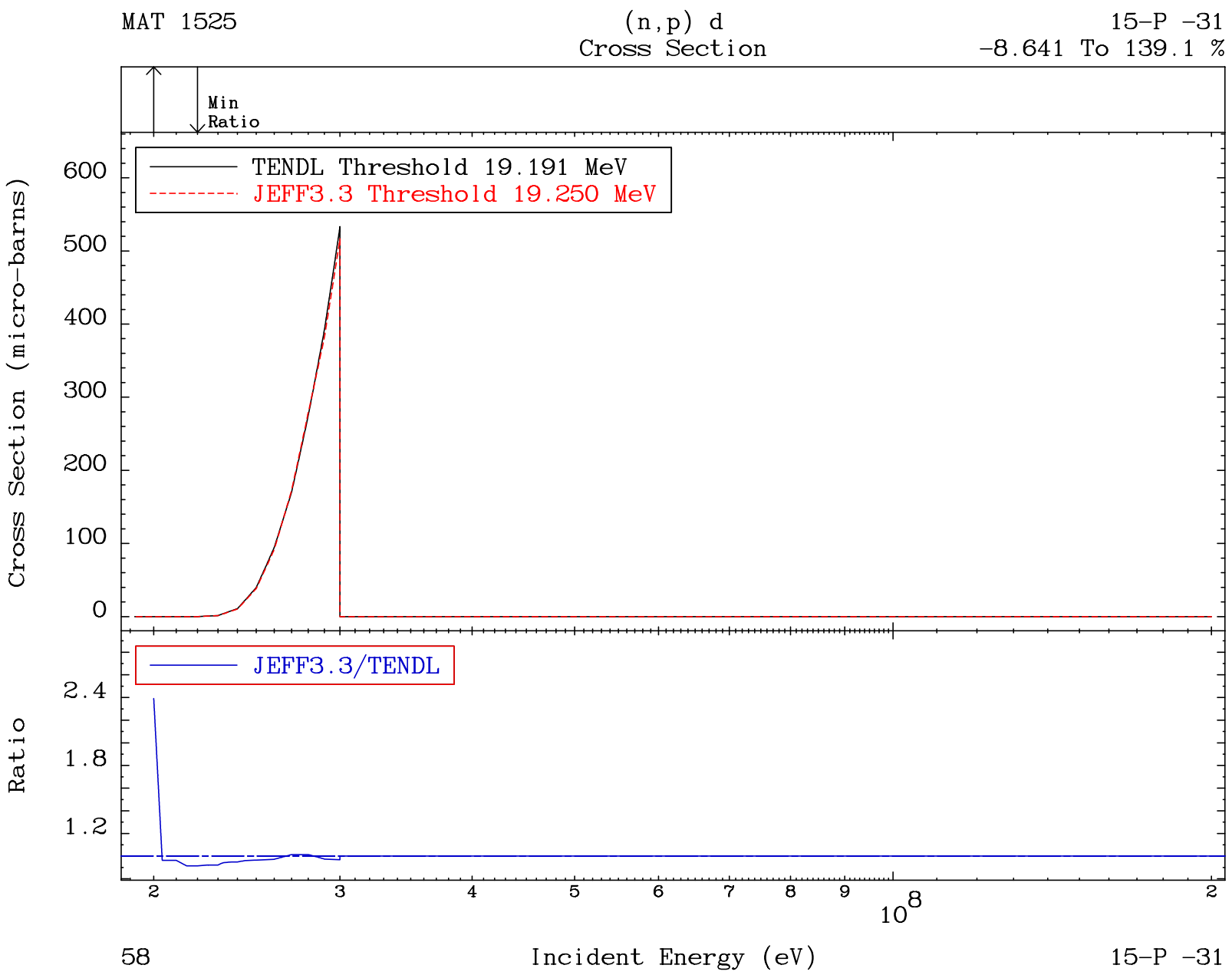

MAT 1525
(n,He-3)
Cross Section
15-P -31
-78.56 To 89.92 %
Min Ratio
Max Ratio
TENDL Threshold 13.519 MeV
JEFF3.3 Threshold 13.578 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
15-P -31

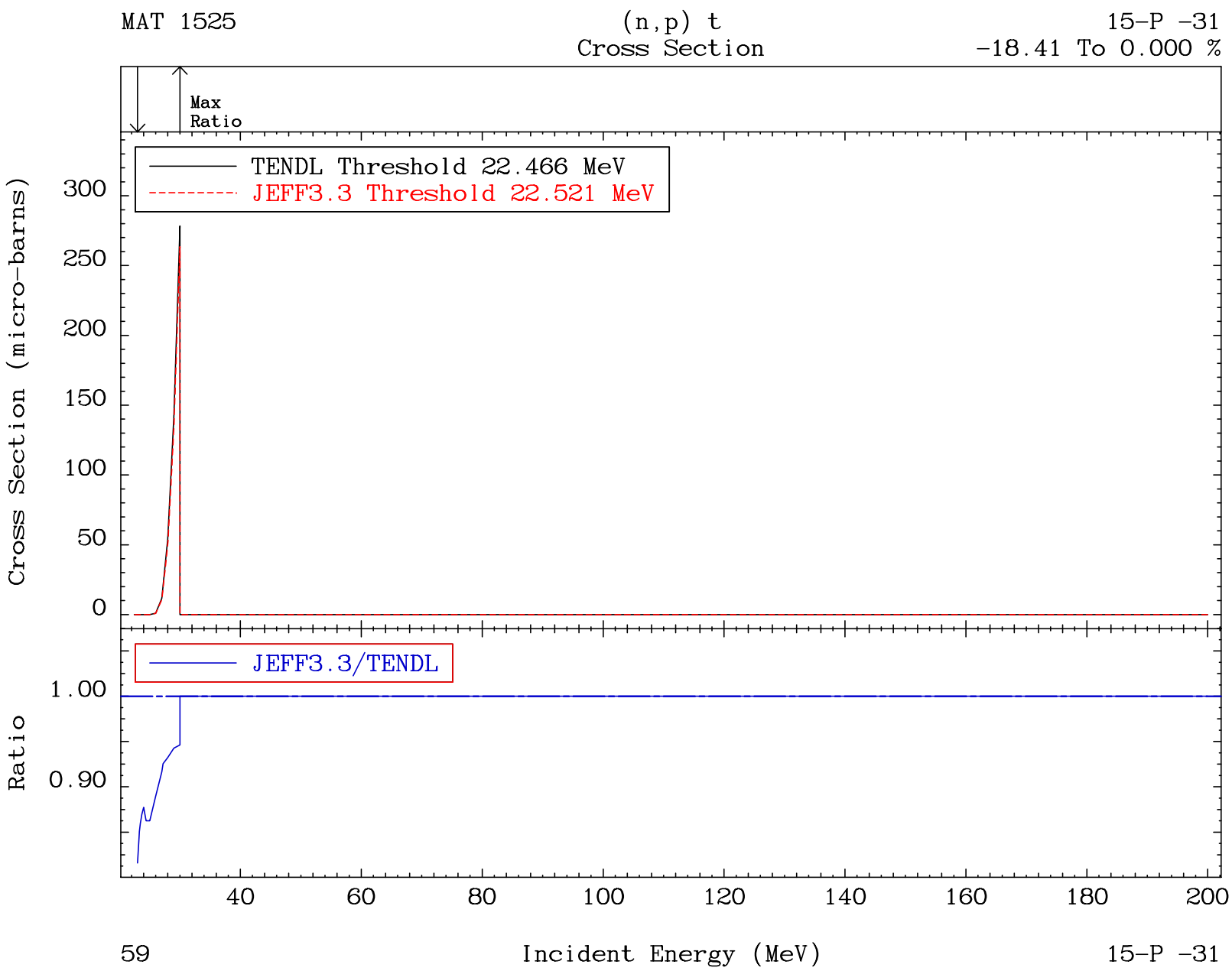

MAT 1525
(n,α)
Cross Section
15-P -31
-92.99 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.0067 MeV
JEFF3.3 Threshold 2.0622 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
10^0
10^-1
2
6
4
2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
54
Incident Energy (eV)
15-P -31

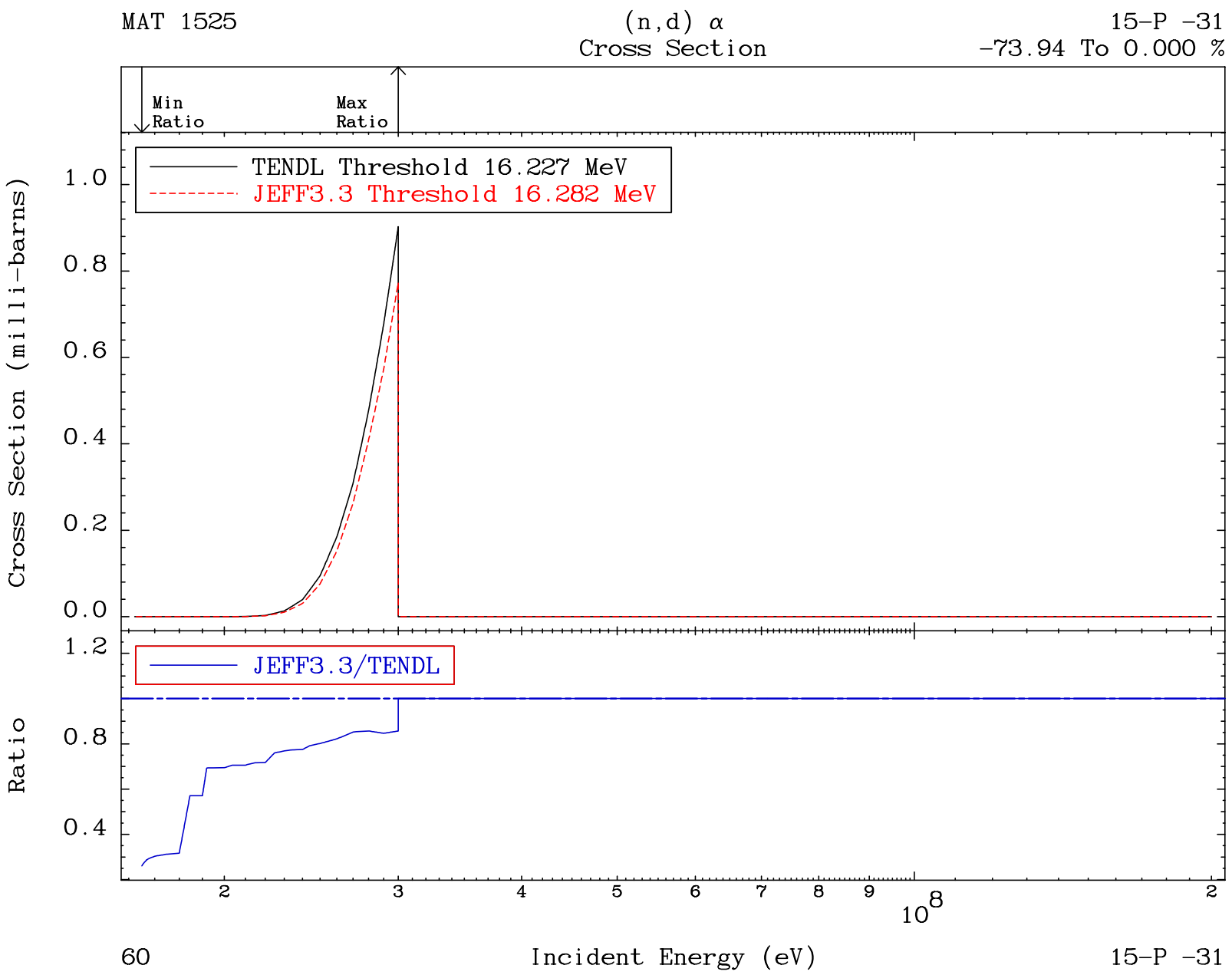

MAT 1525
(n,2α)
Cross Section
15-P -31
-46.97 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.218 MeV
JEFF3.3 Threshold 13.273 MeV
Cross Section (milli-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
15-P -31

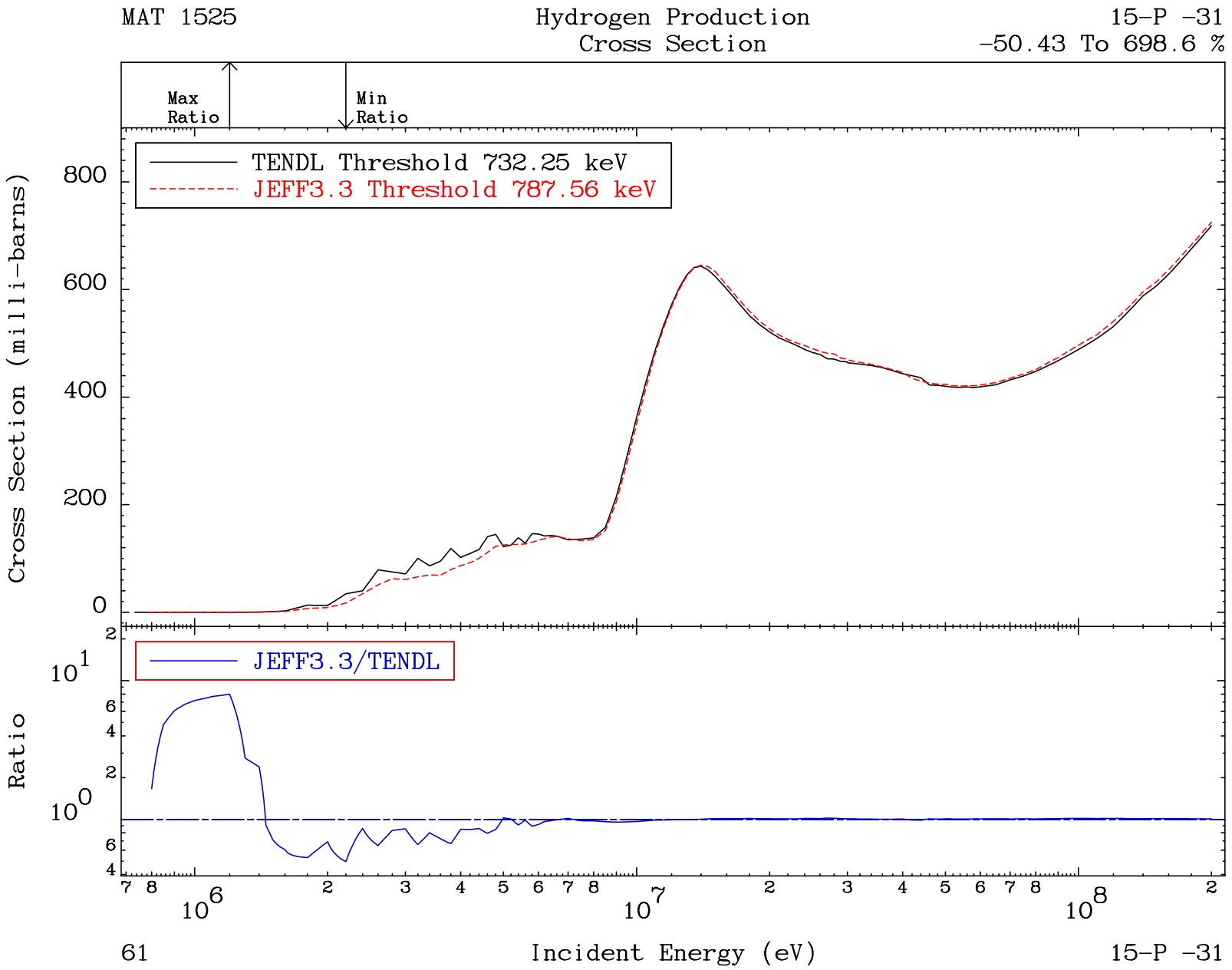

MAT 1525
(n,2p)
Cross Section
15-P -31
-21.02 To 3.287 %
Min Ratio
Max Ratio
TENDL Threshold 15.574 MeV
JEFF3.3 Threshold 15.621 MeV
Cross Section (milli-barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
15-P -31

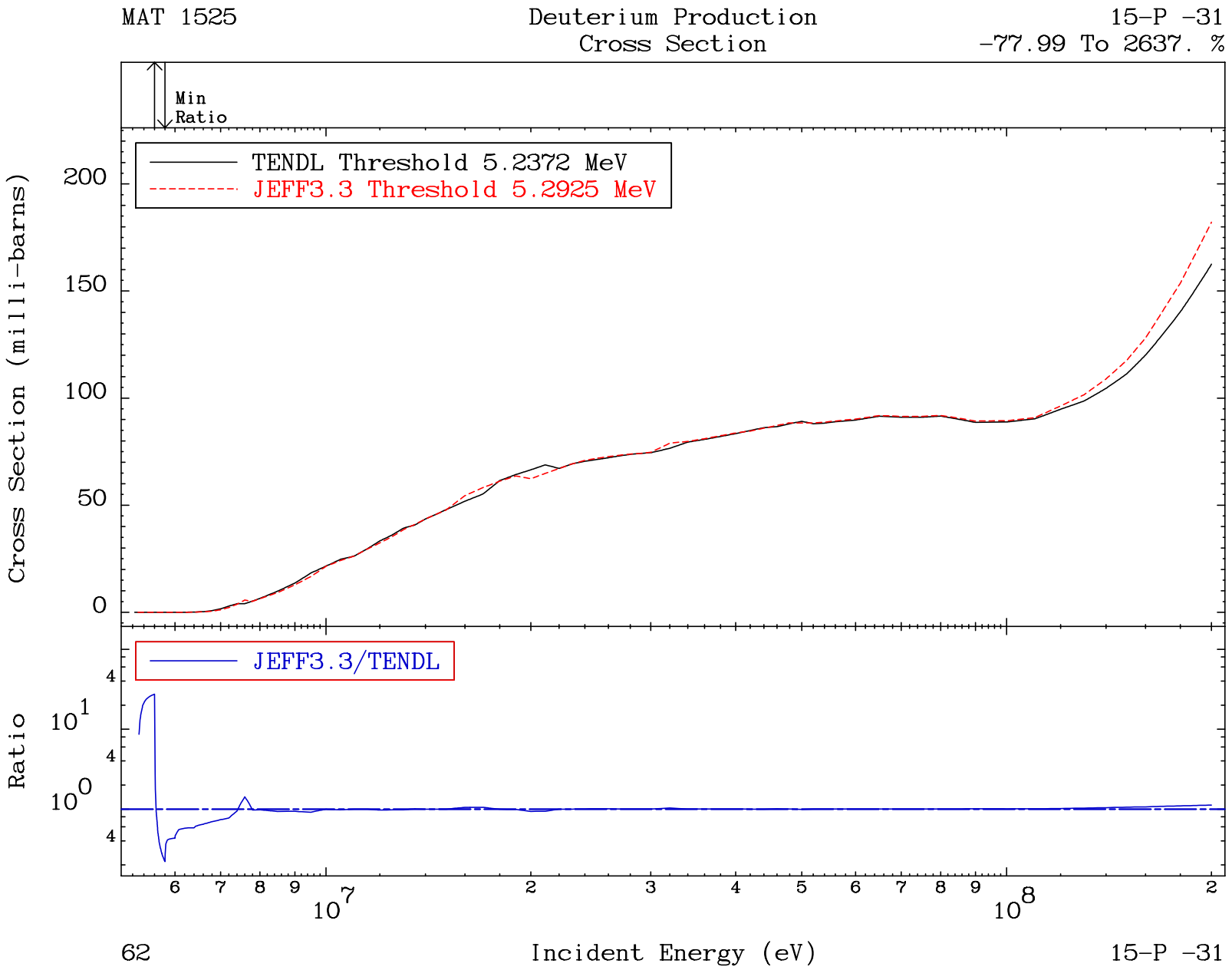

MAT 1525
(n,p) α
Cross Section
15-P -31
-76.56 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.871 MeV
JEFF3.3 Threshold 11.926 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
15-P -31

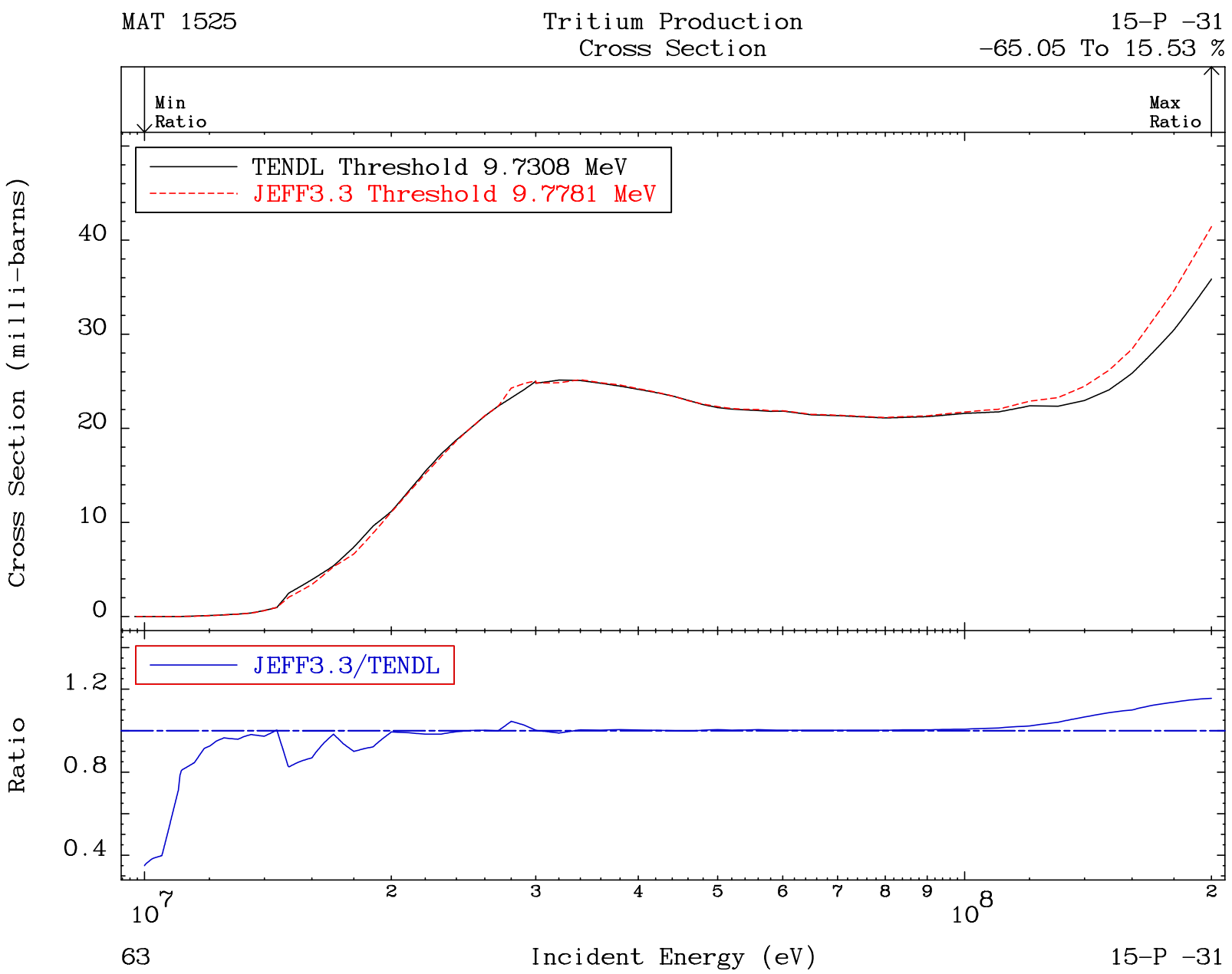

MAT 1525
(n,p) d
Cross Section
15-P -31
-8.641 To 139.1 %
Min
Ratio
TENDL Threshold 19.191 MeV
JEFF3.3 Threshold 19.250 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
15-P -31

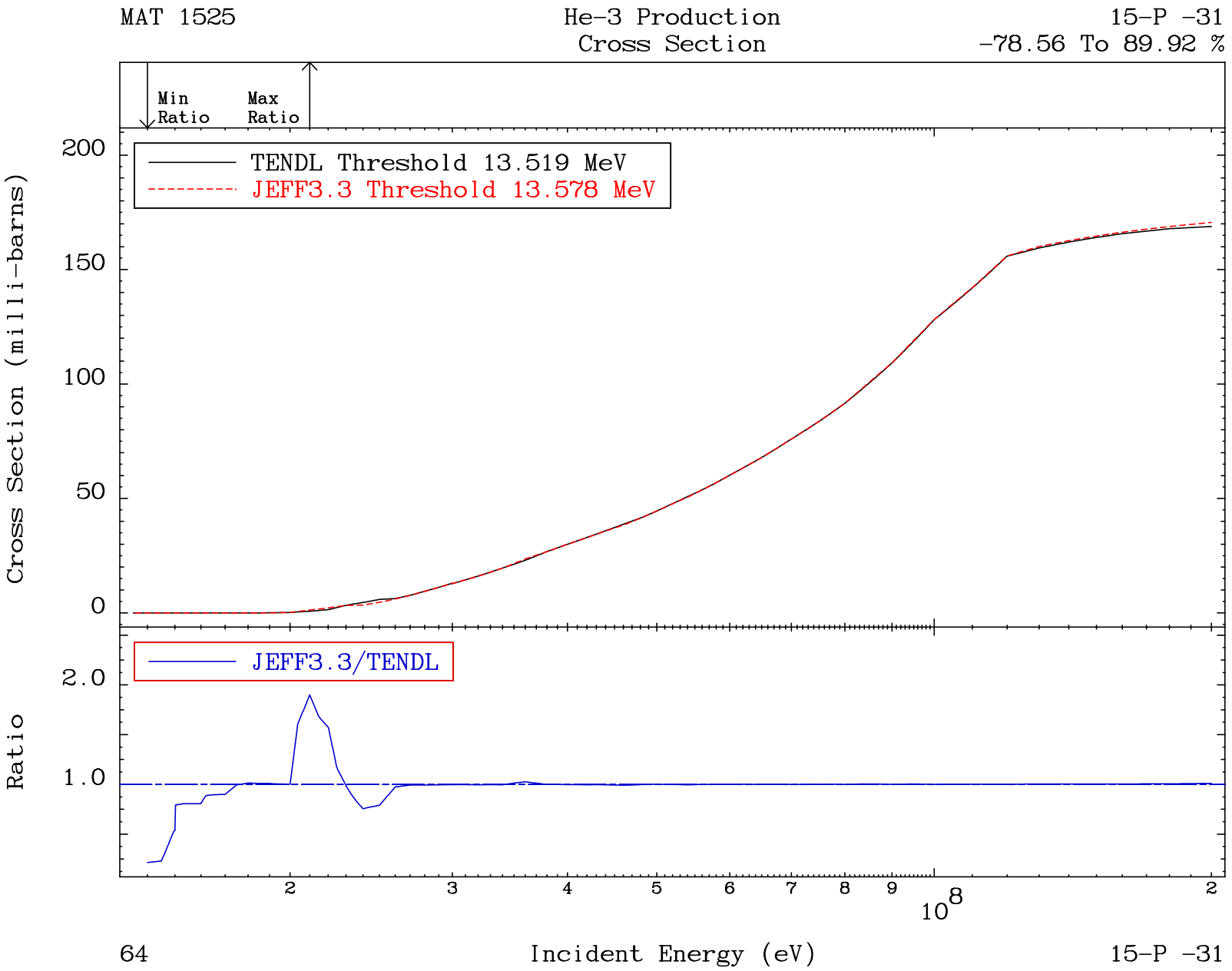

MAT 1525
(n,p) t
Cross Section
15-P -31
-18.41 To 0.000 %
Max
Ratio
TENDL Threshold 22.466 MeV
JEFF3.3 Threshold 22.521 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.90
40
60
80
100
120
140
160
180
200
59
Incident Energy (MeV)
15-P -31

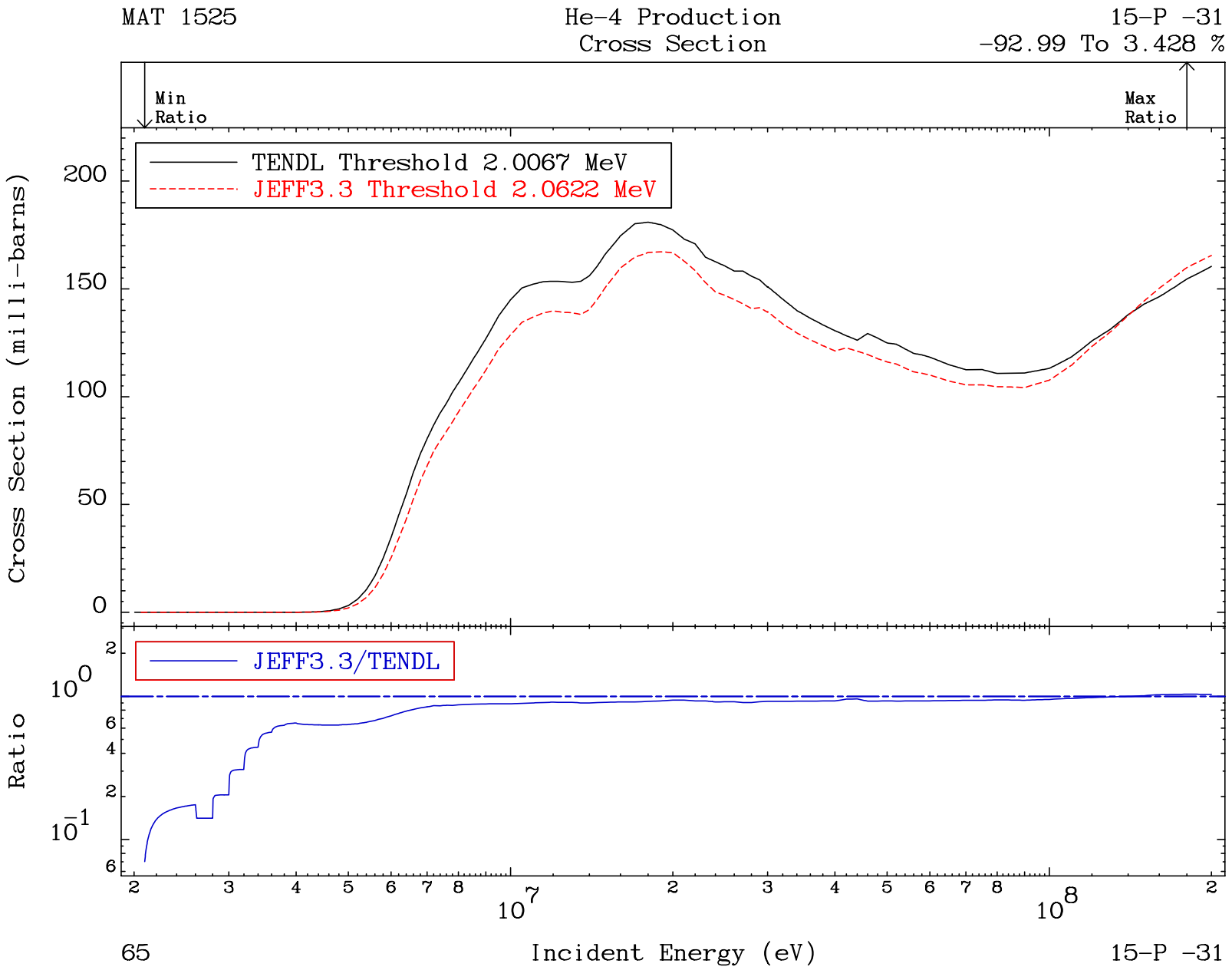

MAT 1525
(n,d) α
Cross Section
15-P -31
-73.94 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.227 MeV
JEFF3.3 Threshold 16.282 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
15-P -31

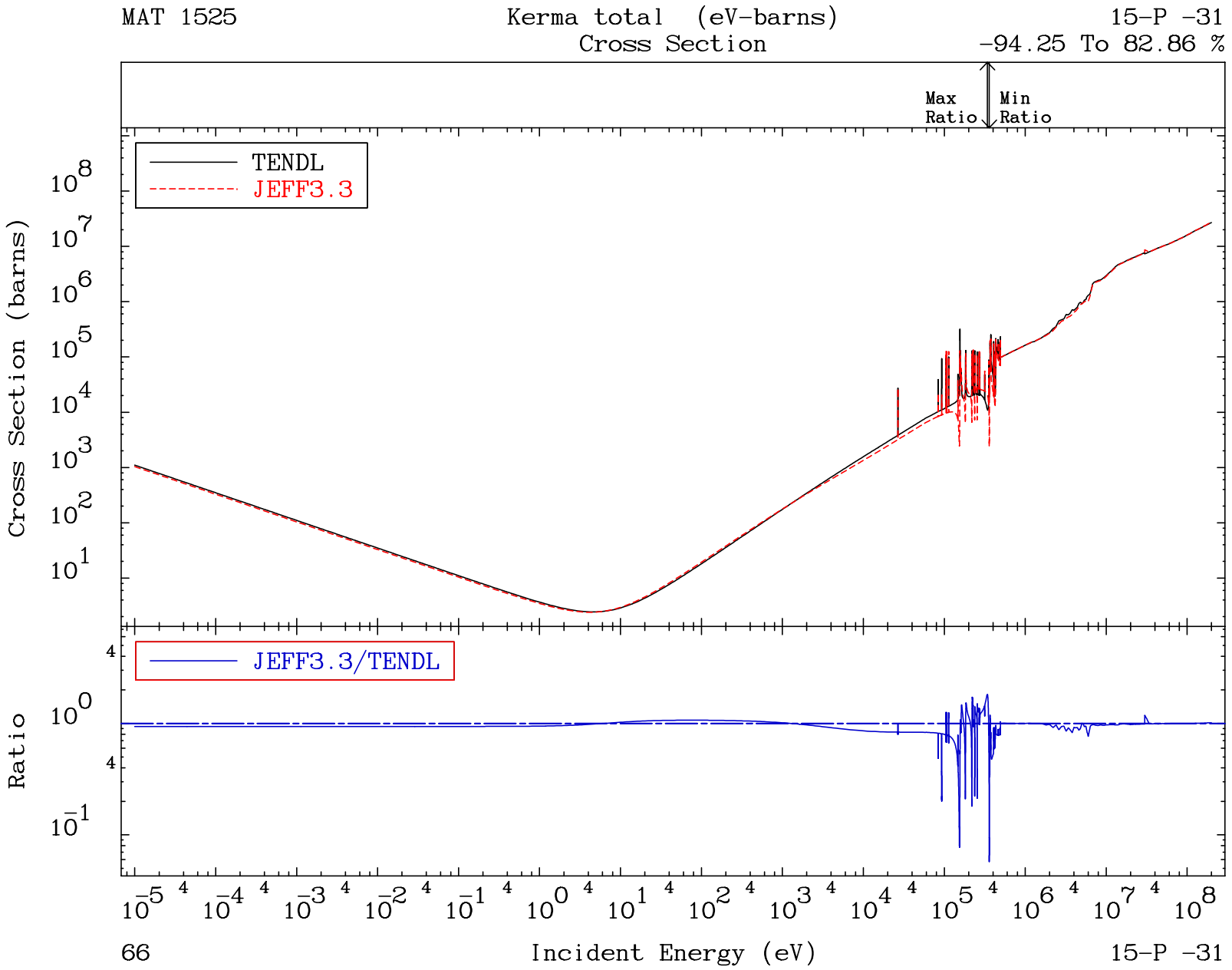

MAT 1525
Hydrogen Production
Cross Section
15-P -31
-50.43 To 698.6 %
Max Ratio
Min Ratio
TENDL Threshold 732.25 keV
JEFF3.3 Threshold 787.56 keV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^6
10^7
10^8
Incident Energy (eV)
61
15-P -31

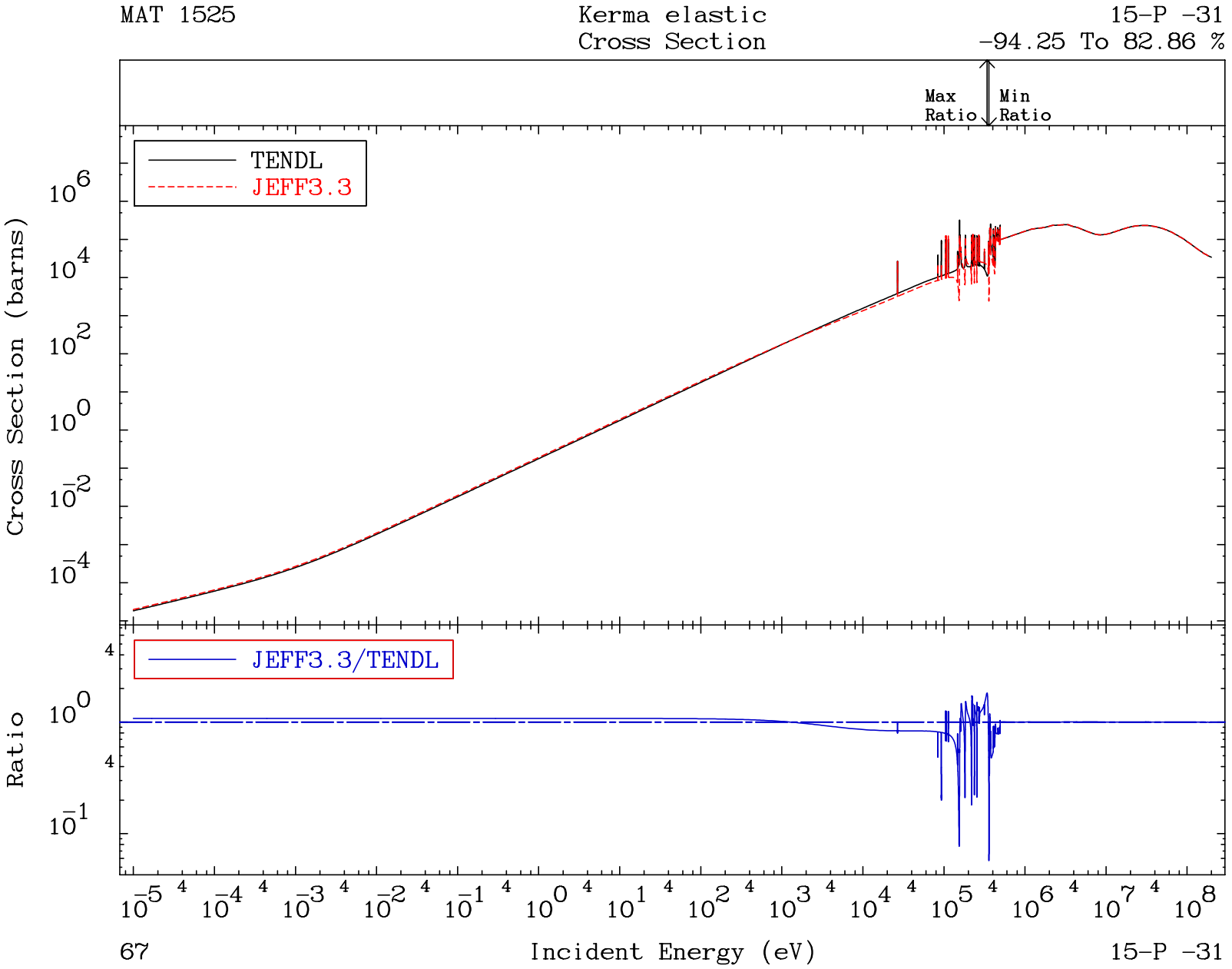

MAT 1525
Deuterium Production
Cross Section
15-P -31
-77.99 To 2637. %
Min
Ratio
TENDL Threshold 5.2372 MeV
JEFF3.3 Threshold 5.2925 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
15-P -31

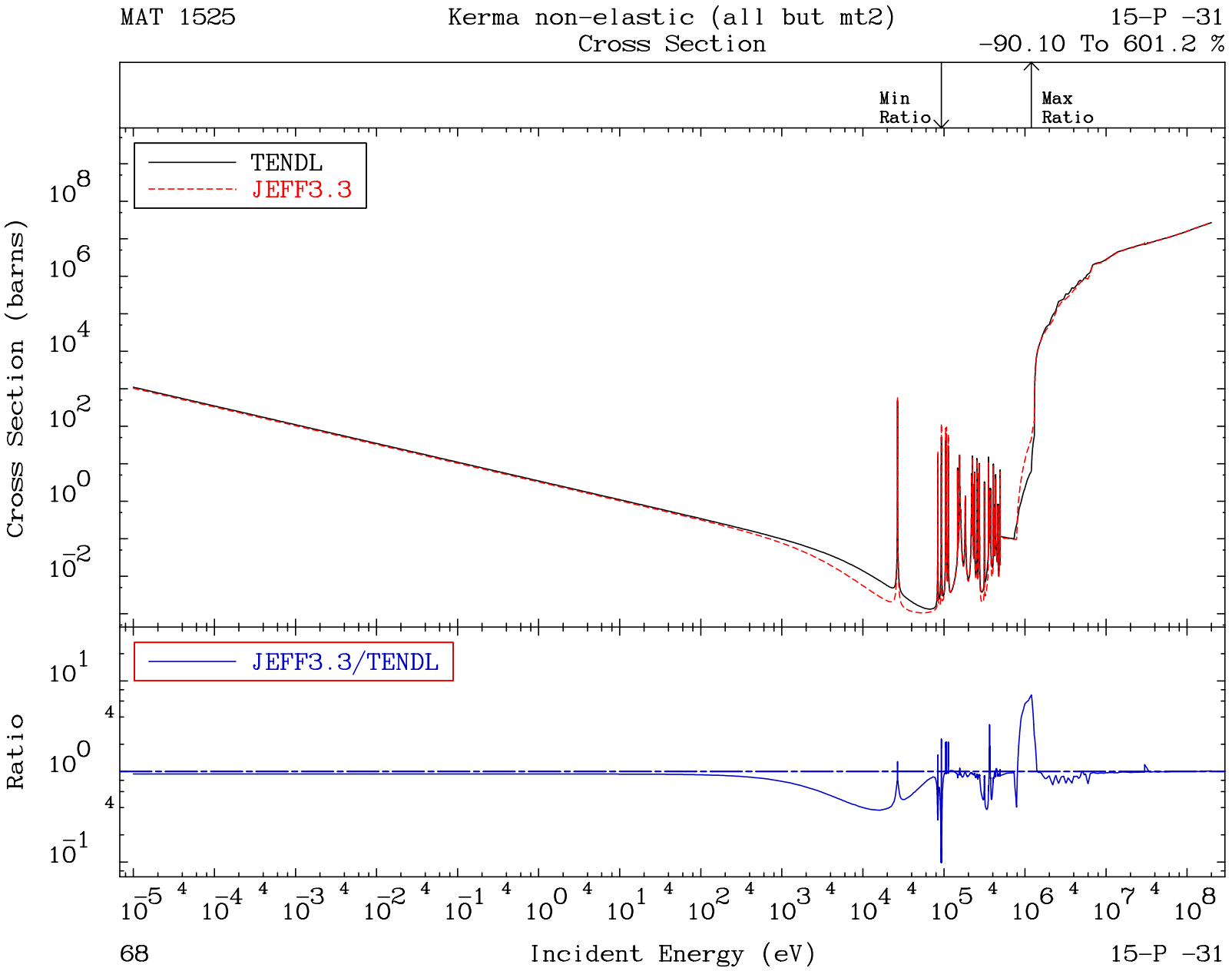

MAT 1525
Tritium Production
Cross Section
15-P -31
-65.05 To 15.53 %
Min Ratio
Max Ratio
TENDL Threshold 9.7308 MeV
JEFF3.3 Threshold 9.7781 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
0.8
0.4
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
15-P -31

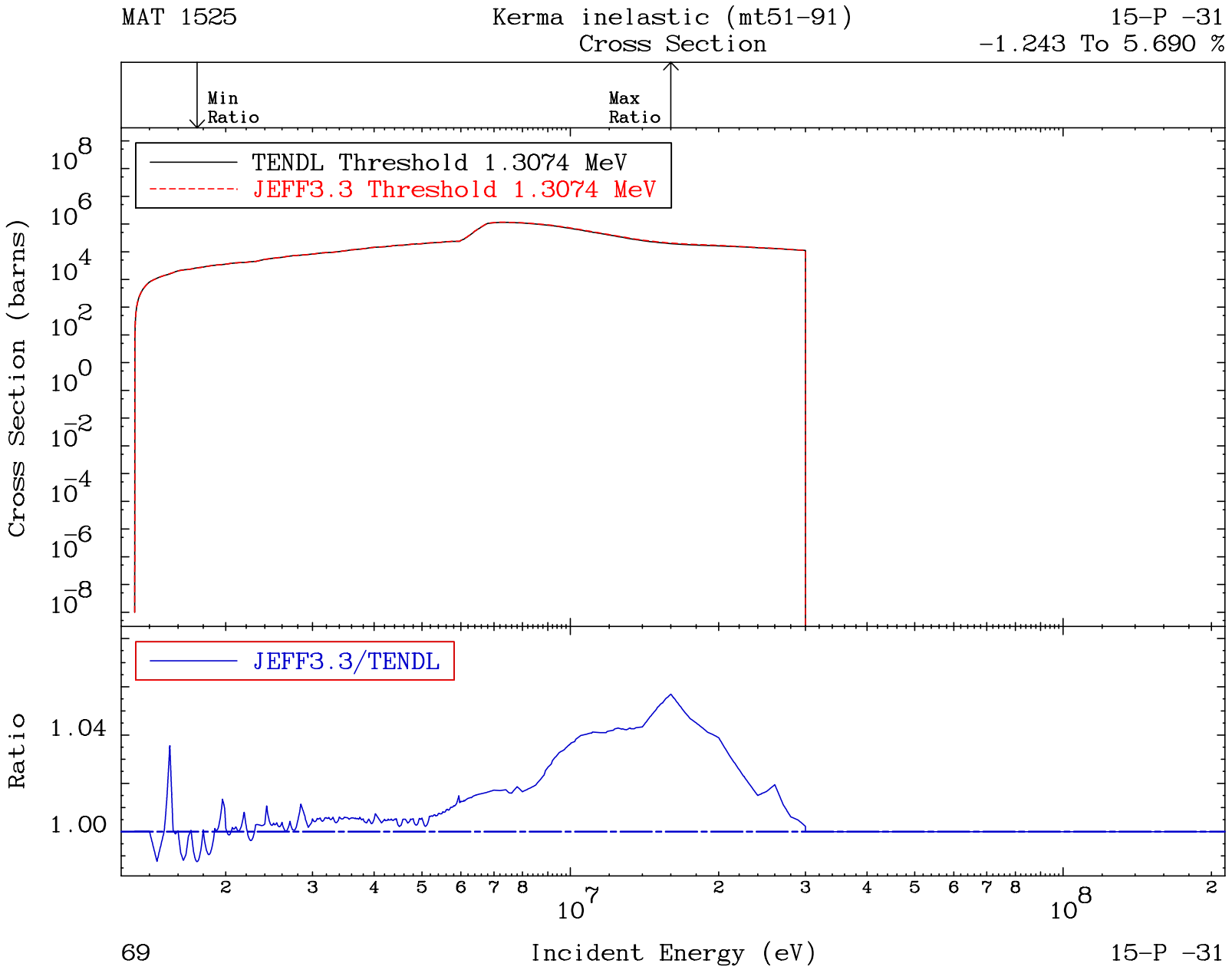

MAT 1525
He-3 Production
Cross Section
15-P -31
-78.56 To 89.92 %
Min Ratio
Max Ratio
TENDL Threshold 13.519 MeV
JEFF3.3 Threshold 13.578 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
15-P -31

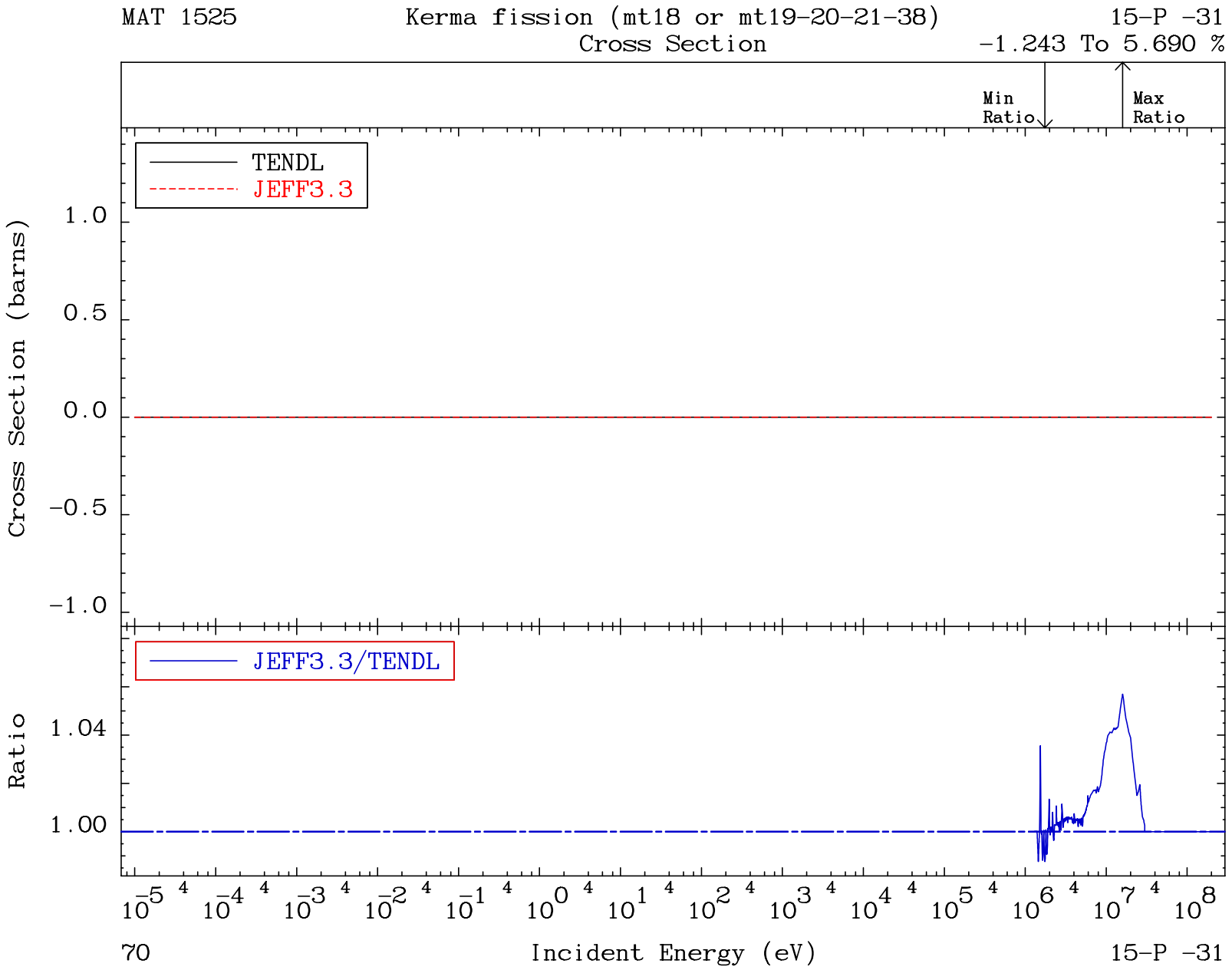

MAT 1525
He-4 Production
Cross Section
15-P -31
-92.99 To 3.428 %
Min Ratio
Max Ratio
TENDL Threshold 2.0067 MeV
JEFF3.3 Threshold 2.0622 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^0
10^-1
2
6
4
2
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
15-P -31

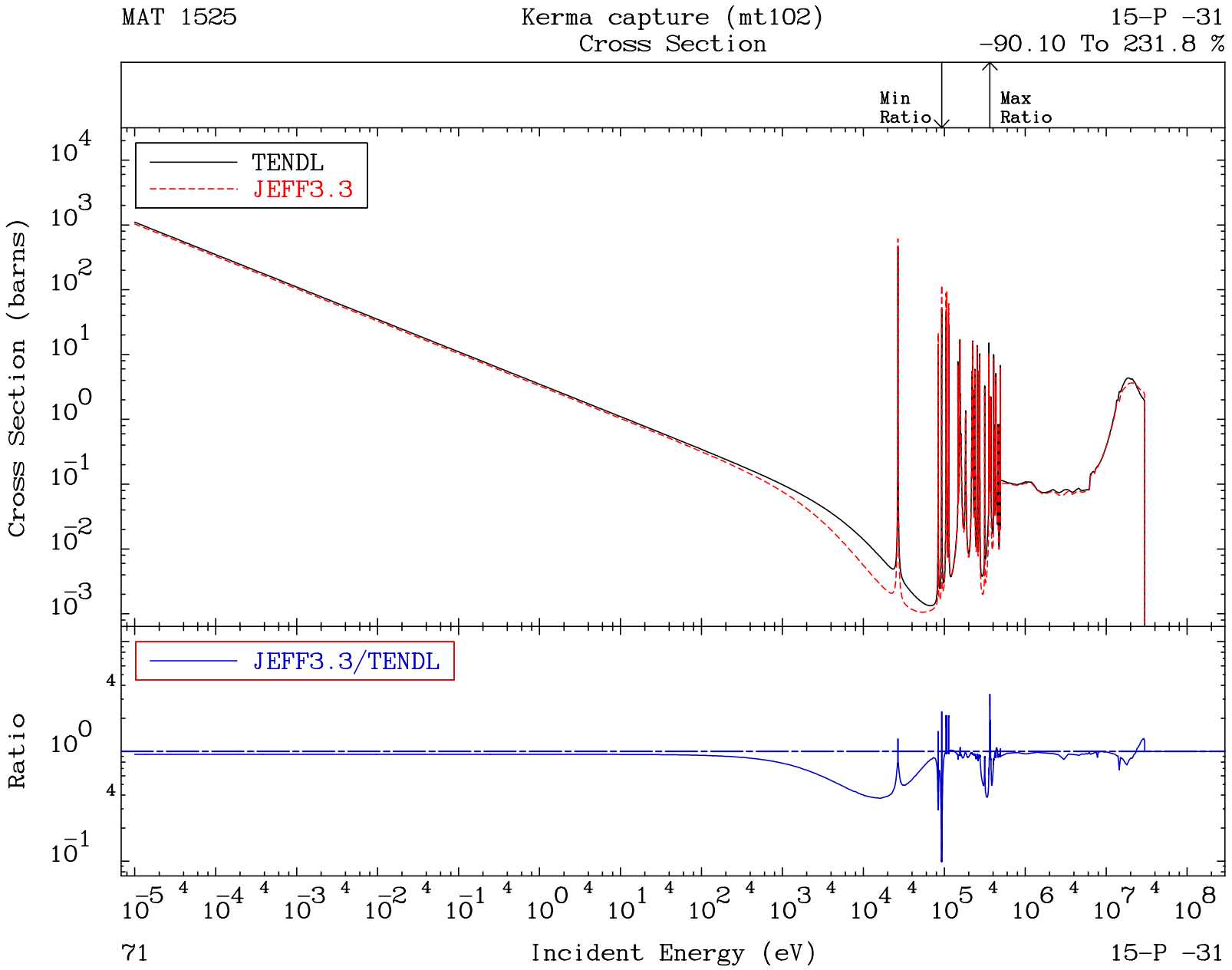

MAT 1525
Kerma total (eV-barns)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
15-P -31

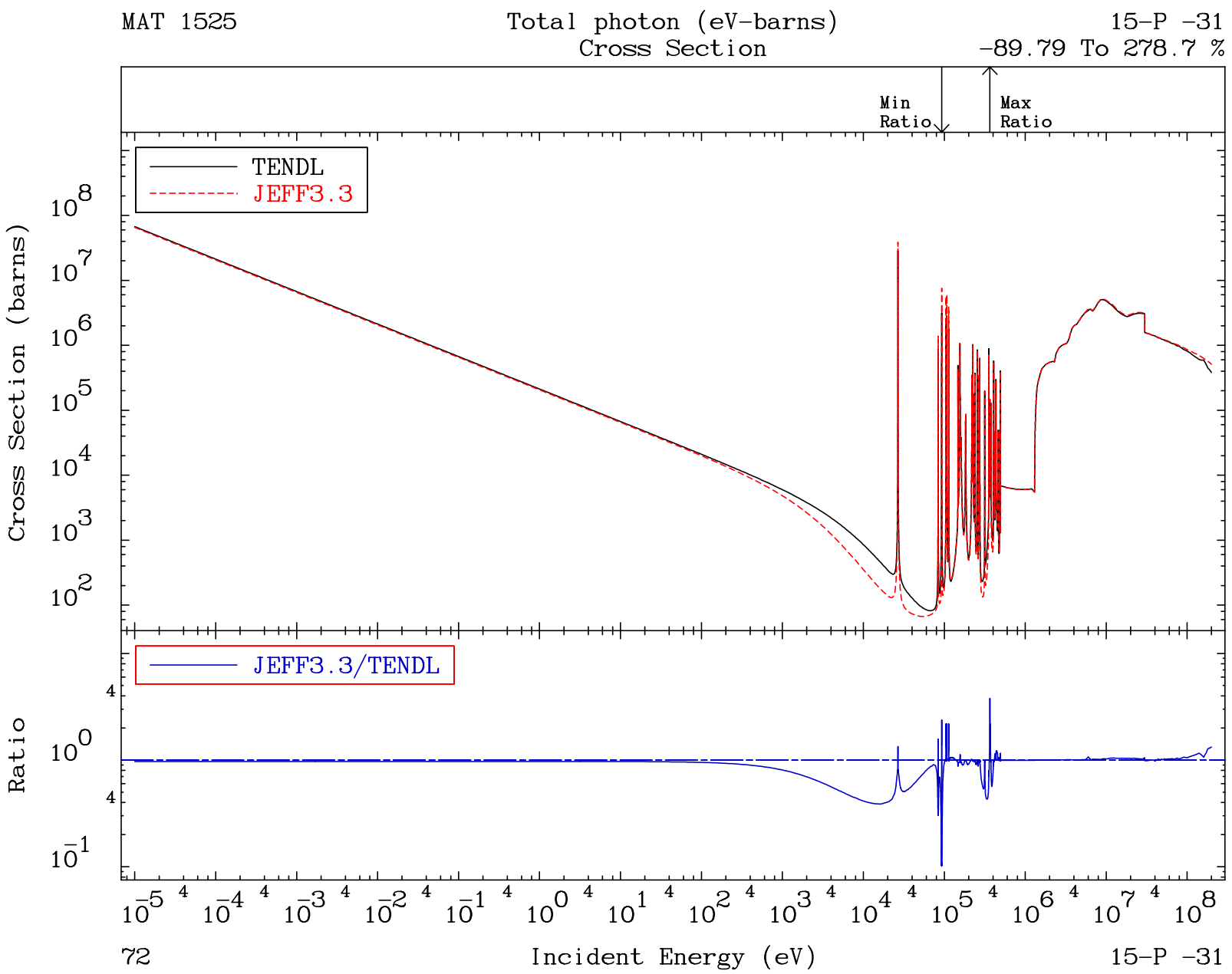

MAT 1525
Kerma elastic
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
15-P -31

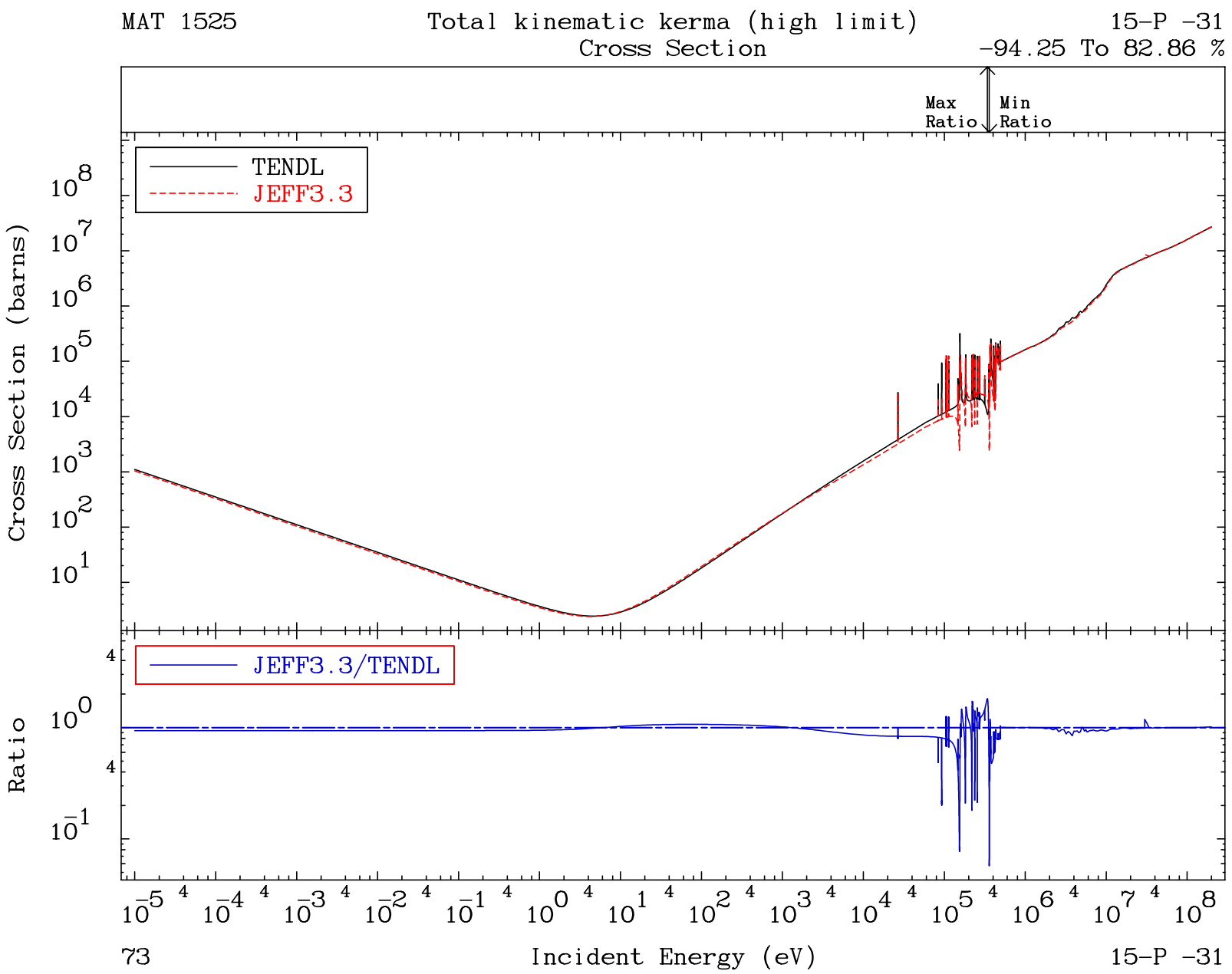

MAT 1525
Kerma non-elastic (all but mt2)
Cross Section
15-P -31
-90.10 To 601.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
15-P -31

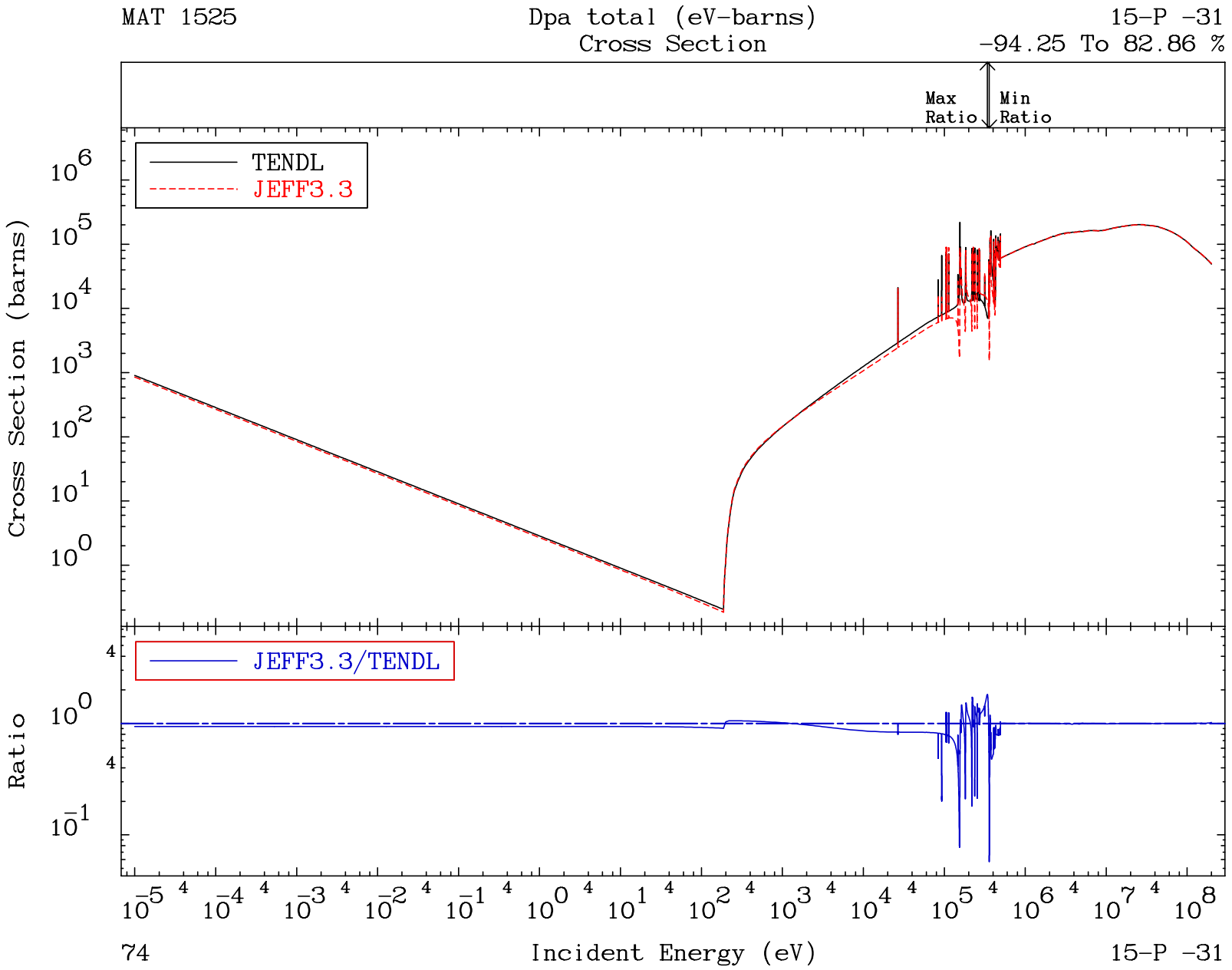

MAT 1525
Kerma inelastic (mt51-91)
Cross Section
15-P -31
-1.243 To 5.690 %
Min Ratio
Max Ratio
TENDL Threshold 1.3074 MeV
JEFF3.3 Threshold 1.3074 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
15-P -31

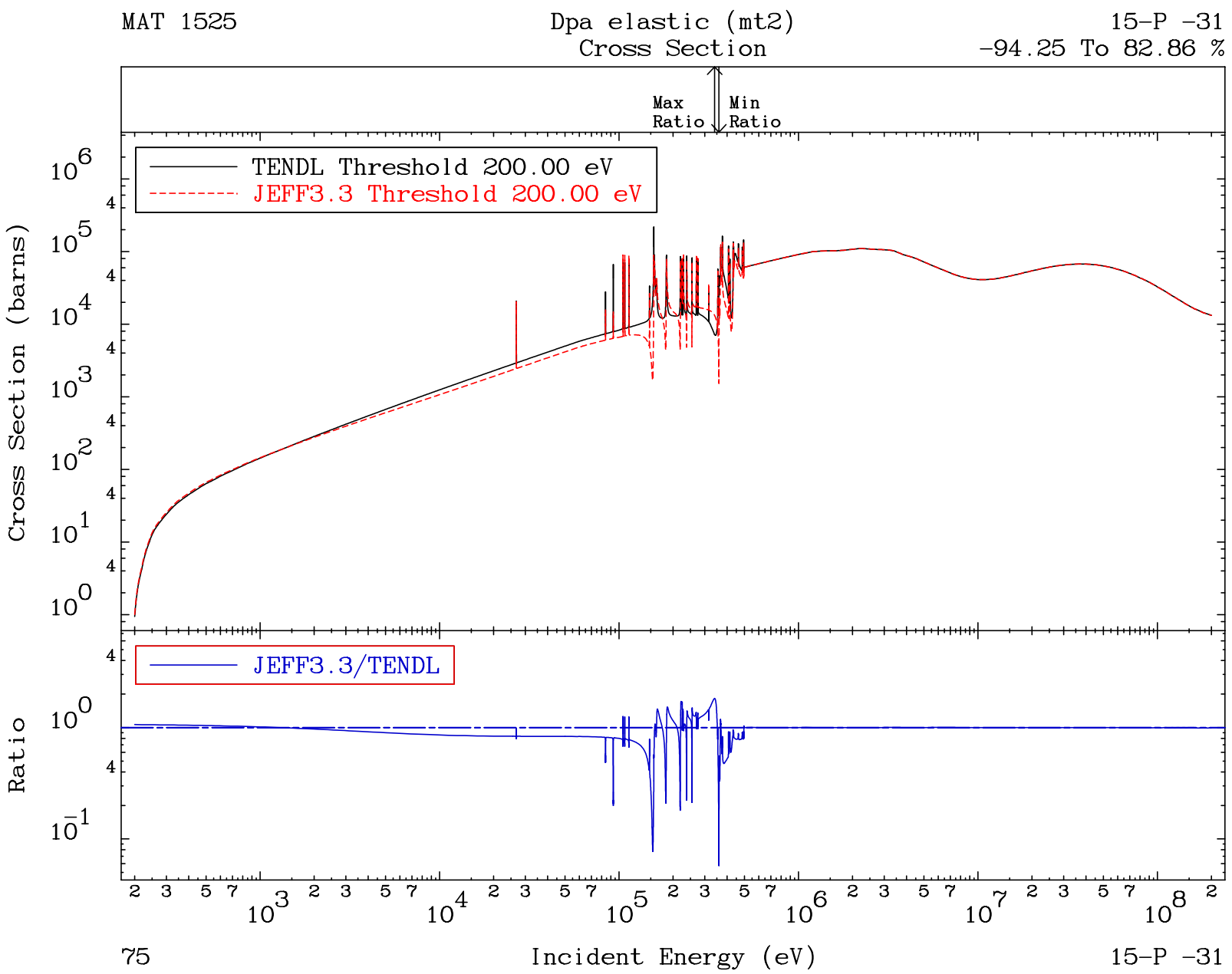

MAT 1525
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
15-P -31
-1.243 To 5.690 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.04
1.00
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
70
Incident Energy (eV)
15-P -31

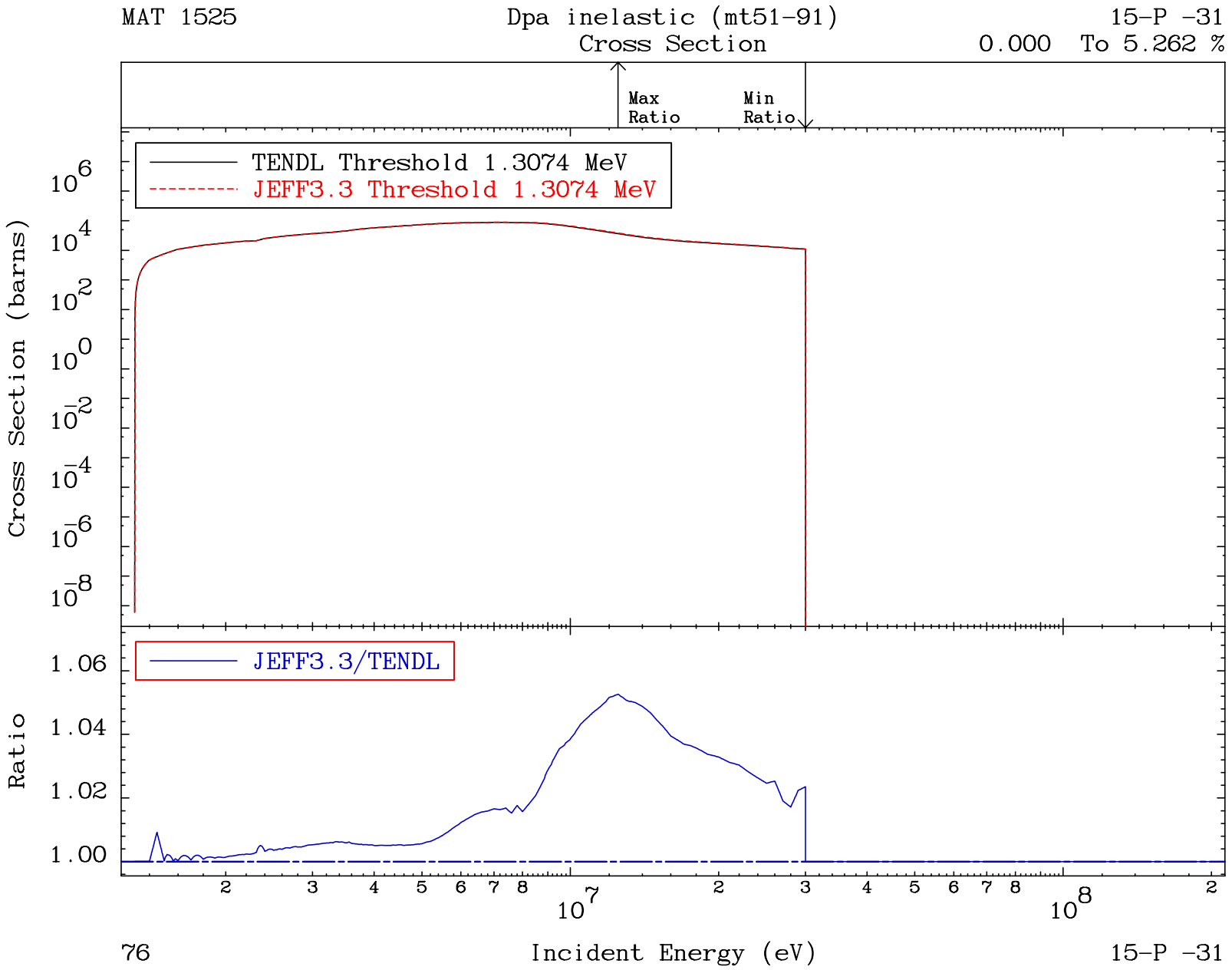

MAT 1525
Kerma capture (mt102)
Cross Section
15-P -31
-90.10 To 231.8 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
15-P -31

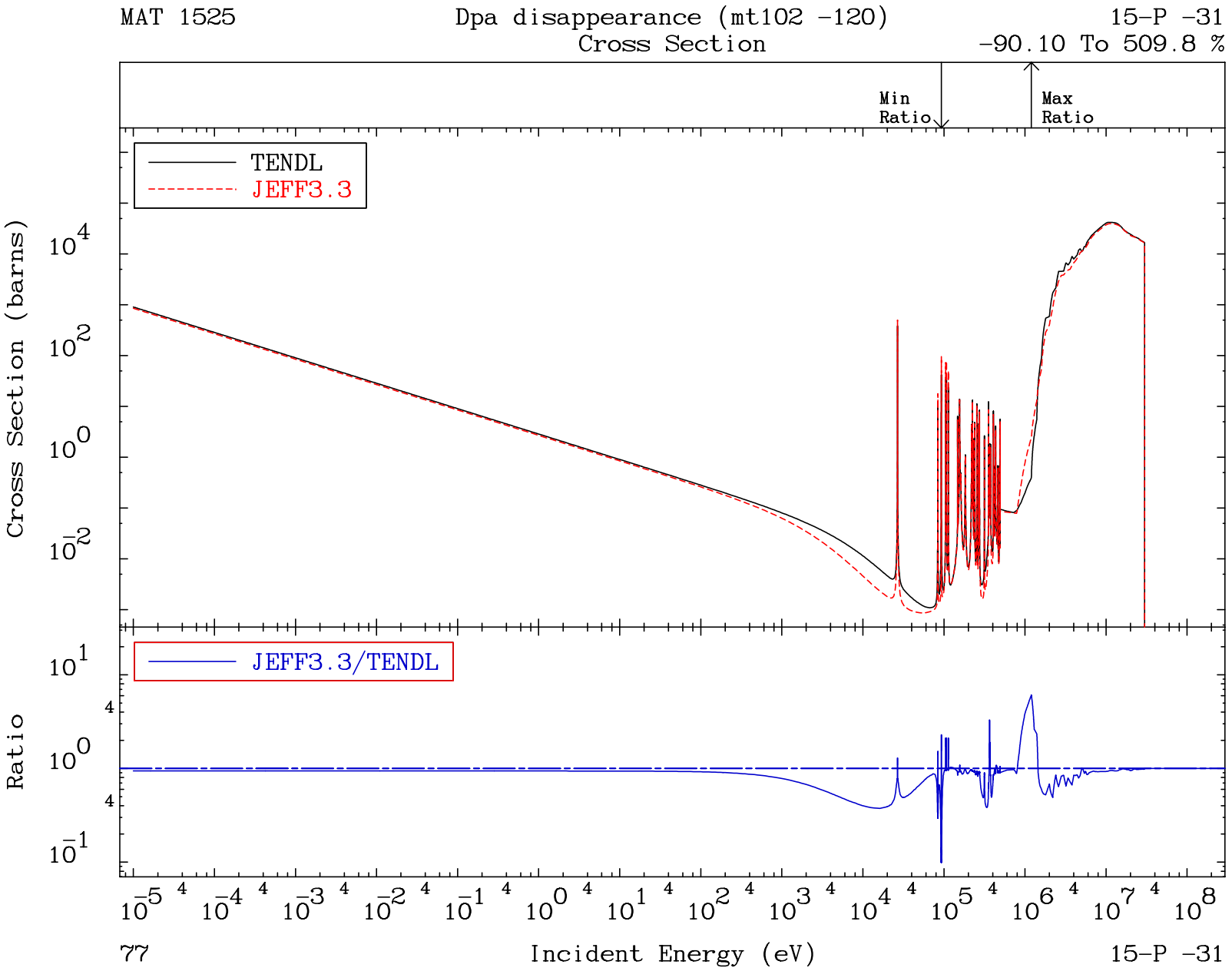

MAT 1525
Total photon (eV-barns)
Cross Section
15-P -31
-89.79 To 278.7 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
15-P -31

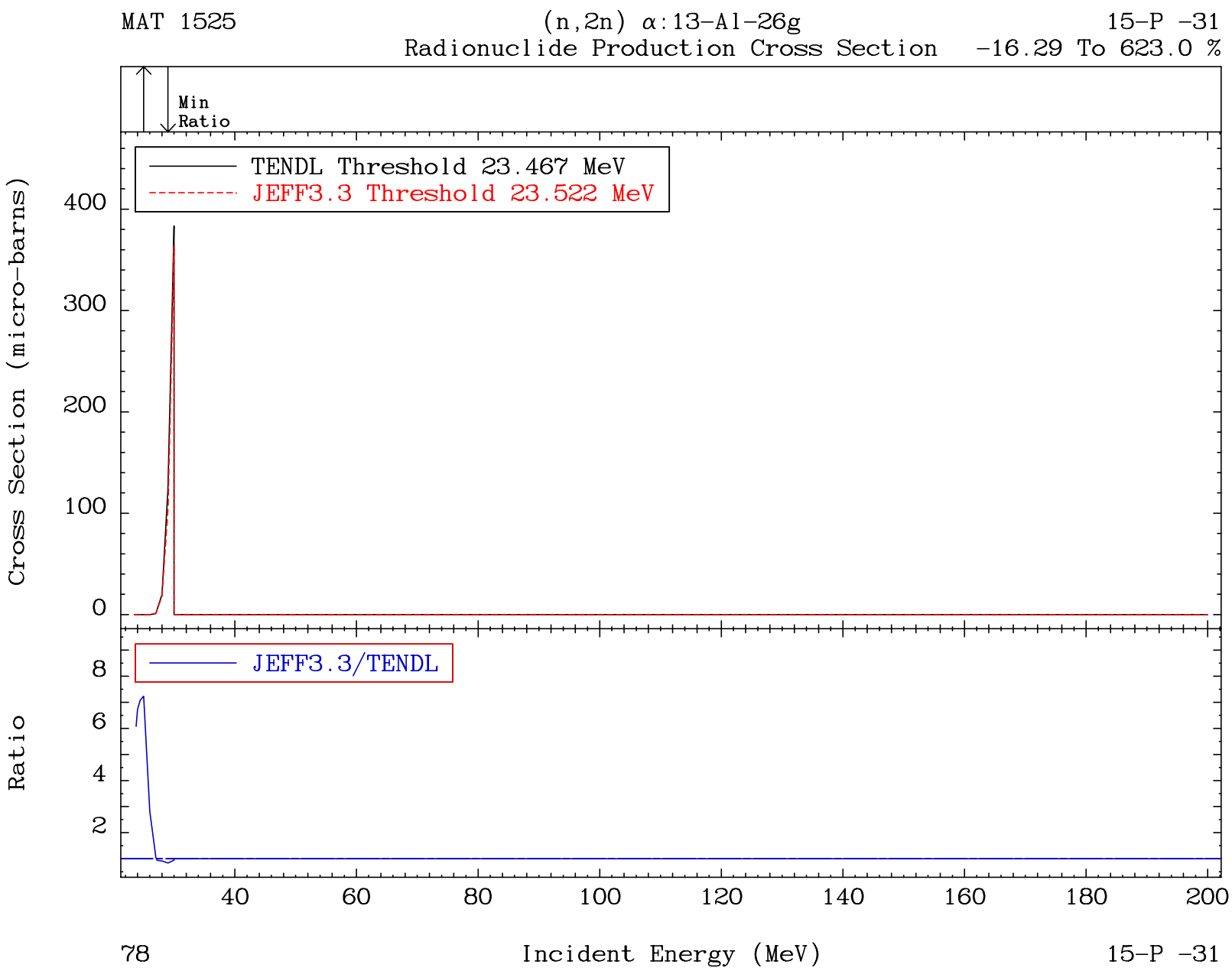

MAT 1525
Total kinematic kerma (high limit)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
15-P -31

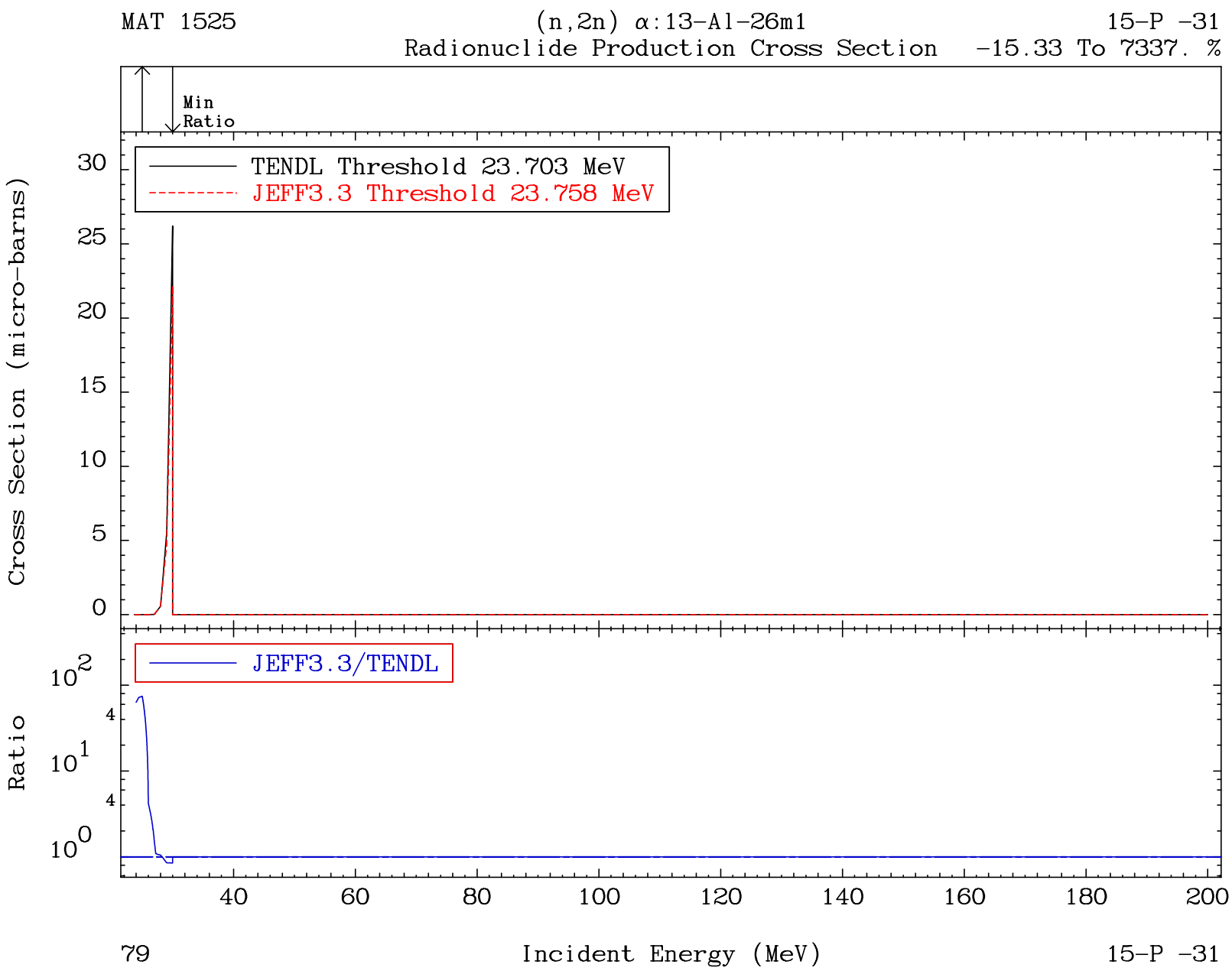

MAT 1525
Dpa total (eV-barns)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
74
Incident Energy (eV)
15-P -31


MAT 1525
Dpa elastic (mt2)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL Threshold 200.00 eV
JEFF3.3 Threshold 200.00 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
15-P -31


MAT 1525
Dpa inelastic (mt51-91)
Cross Section
15-P -31
0.000 To 5.262 %
Max Ratio
Min Ratio
TENDL Threshold 1.3074 MeV
JEFF3.3 Threshold 1.3074 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
15-P -31


MAT 1525
Dpa disappearance (mt102 -120)
Cross Section
15-P -31
-90.10 To 509.8 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
15-P -31


MAT 1525
(n,2n) α:13-Al-26g
15-P -31
Radionuclide Production Cross Section
-16.29 To 623.0 %
Min
Ratio
TENDL Threshold 23.467 MeV
JEFF3.3 Threshold 23.522 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
8
6
4
2
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
15-P -31


MAT 1525
(n,2n) α:13-Al-26m1
15-P -31
Radionuclide Production Cross Section -15.33 To 7337. %
Min
Ratio
TENDL Threshold 23.703 MeV
JEFF3.3 Threshold 23.758 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
15-P -31