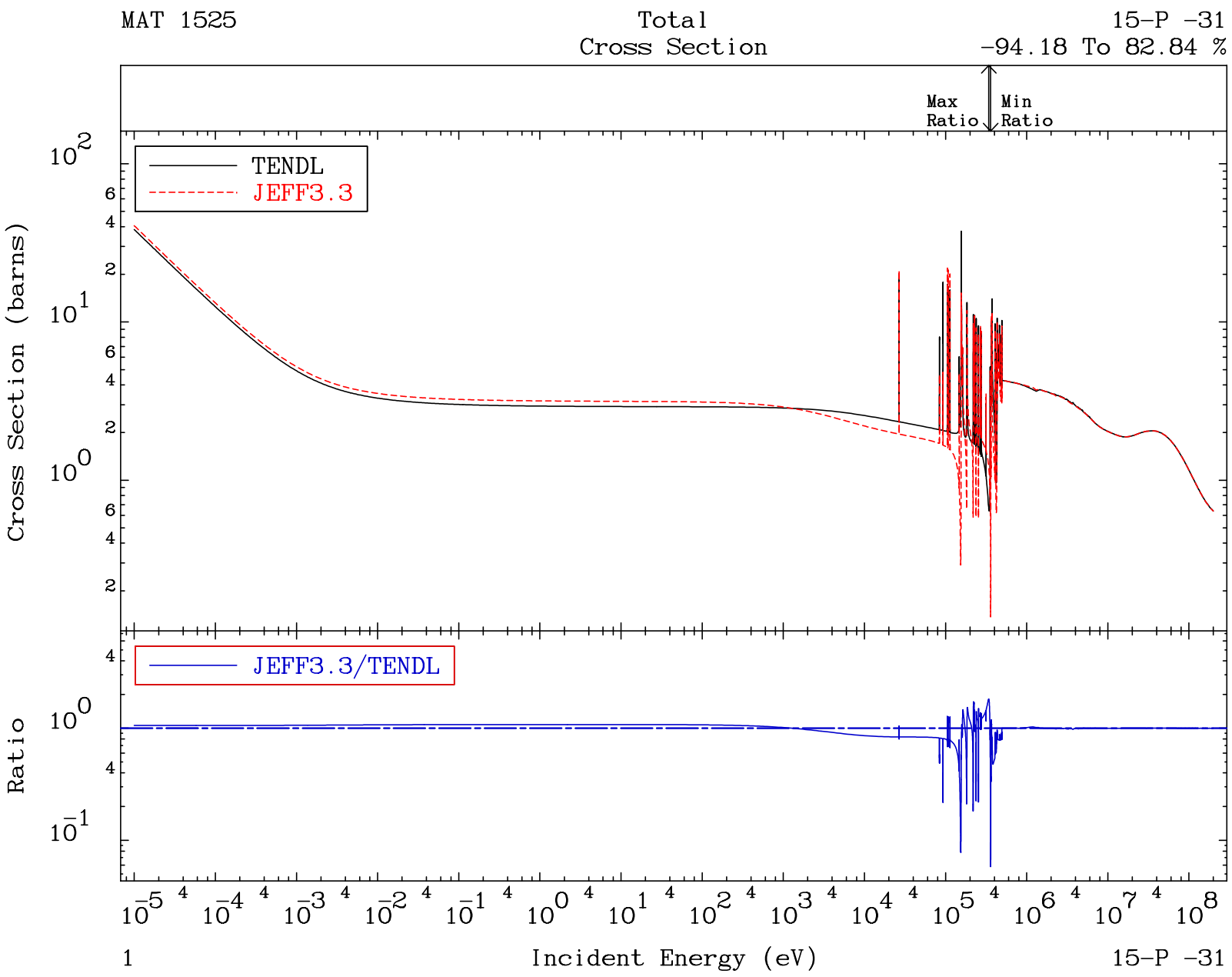
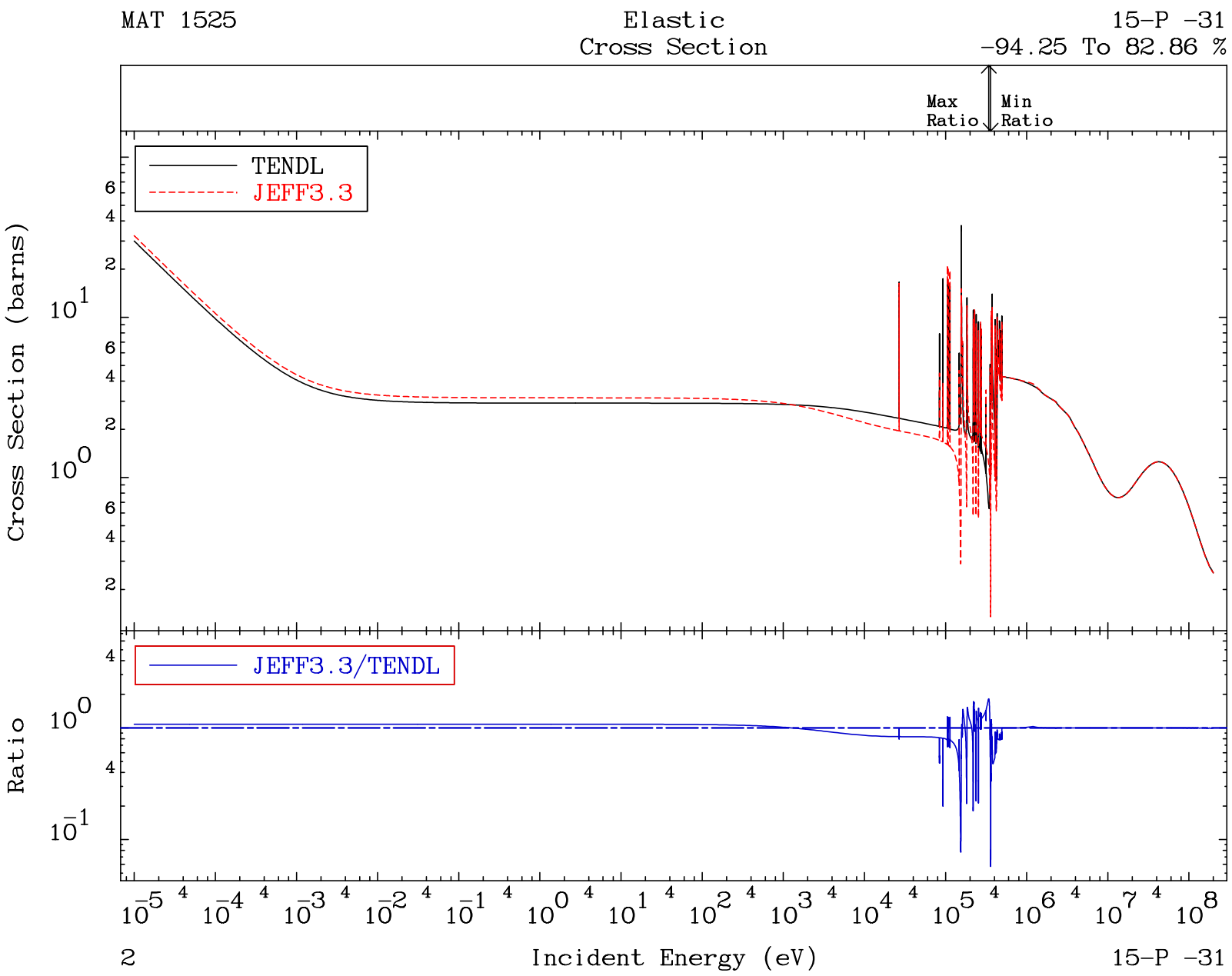
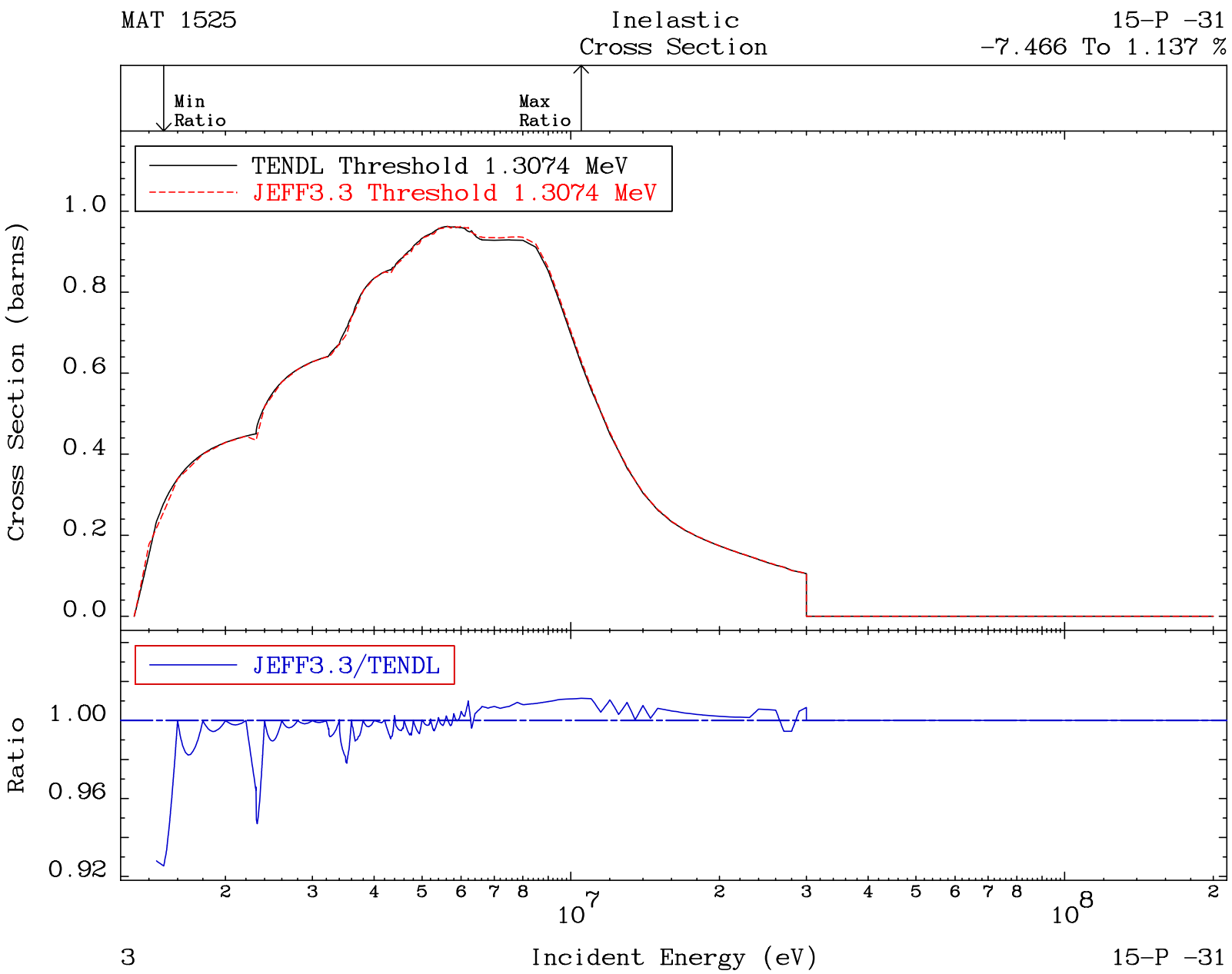
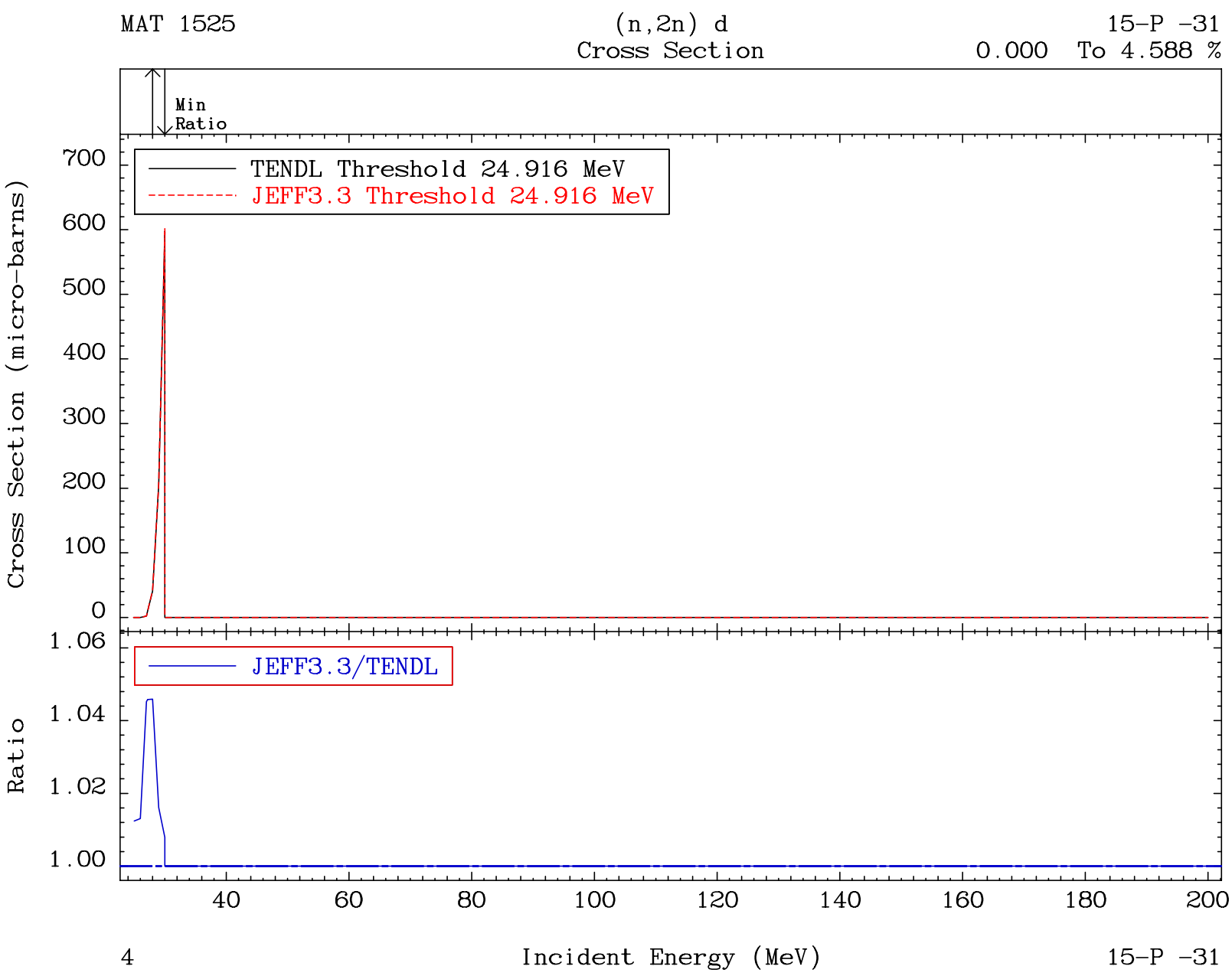
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

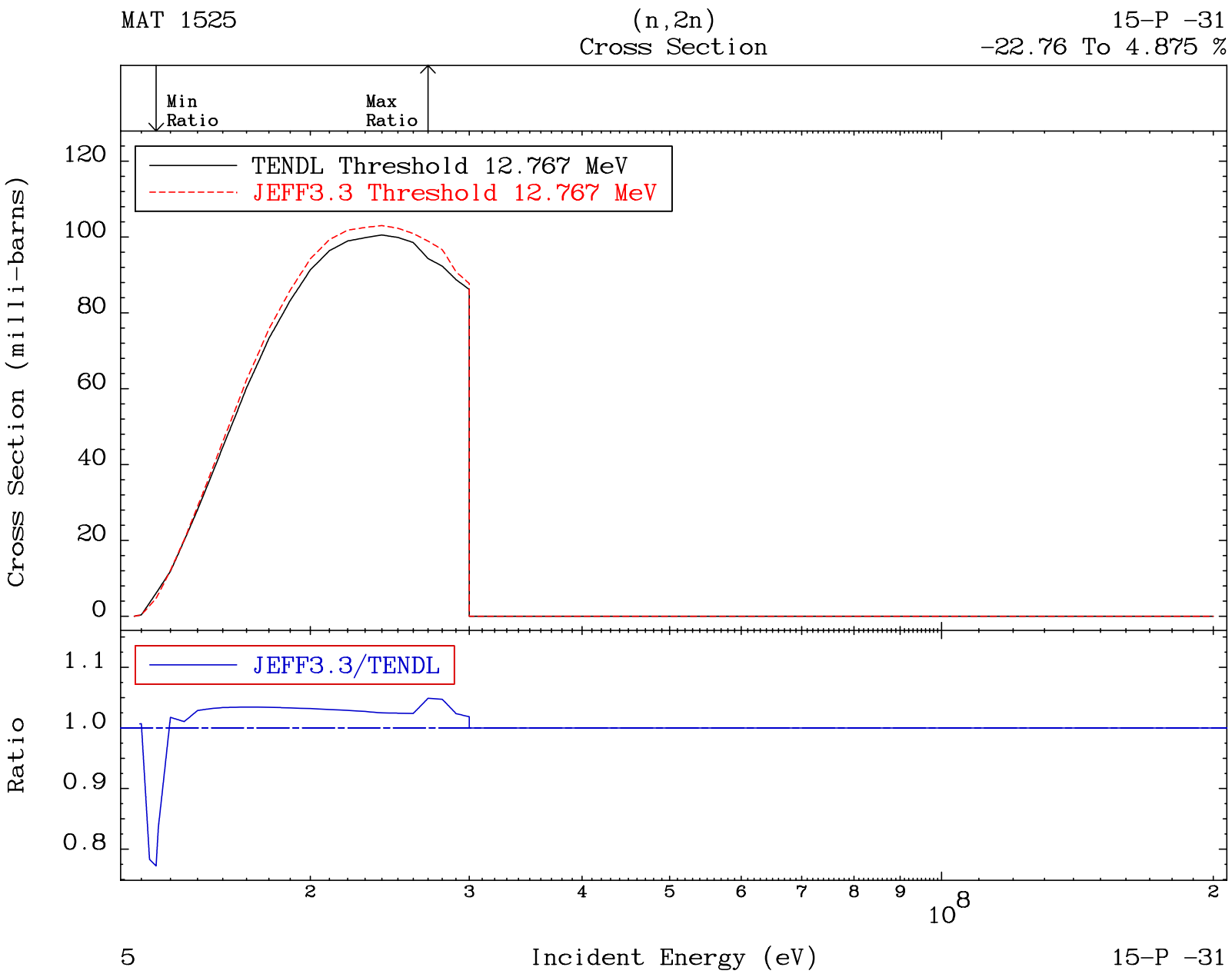
Press Mouse Button to Start

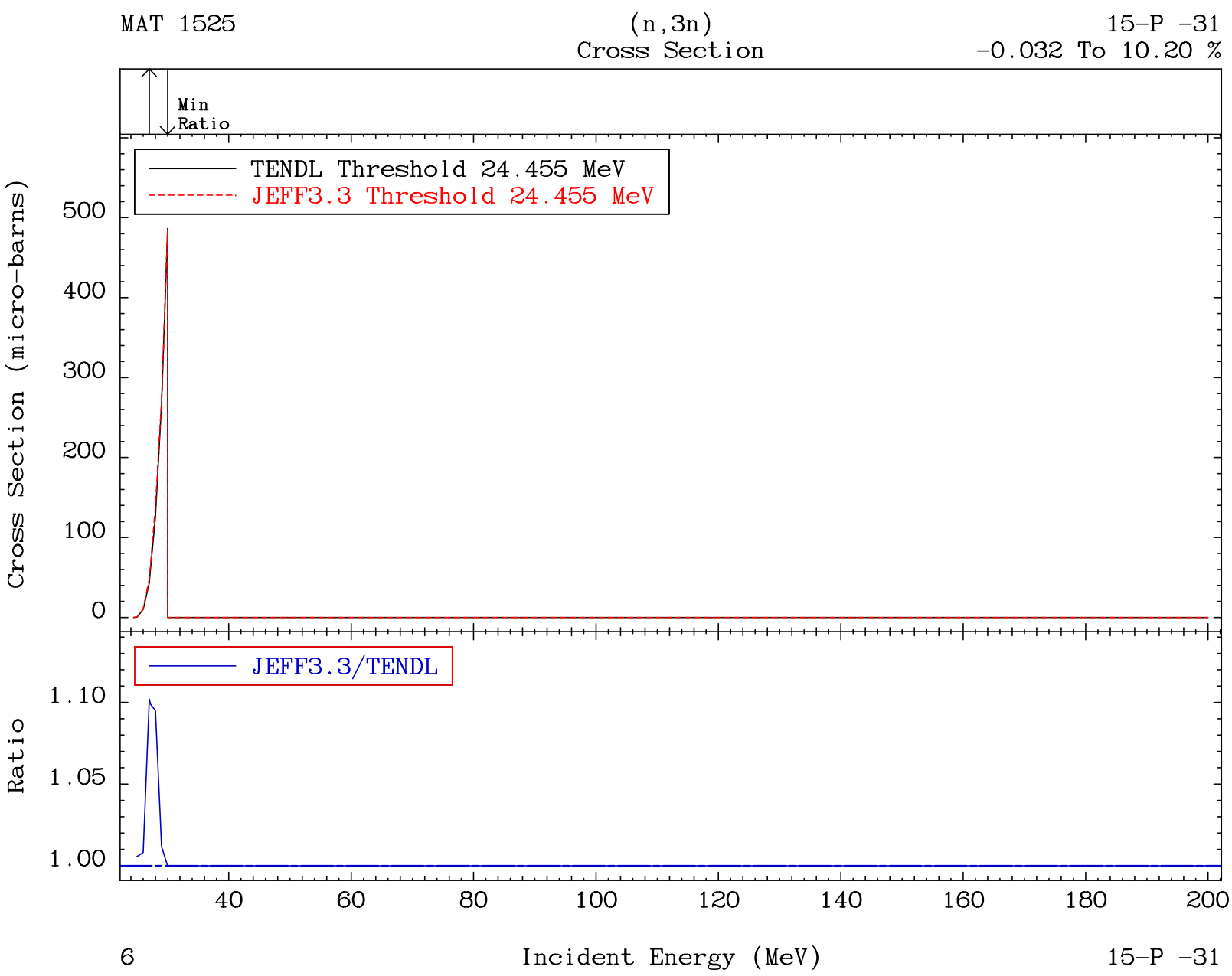

MAT 1525
Total
Cross Section
15-P -31
-94.18 To 82.84 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
15-P -31

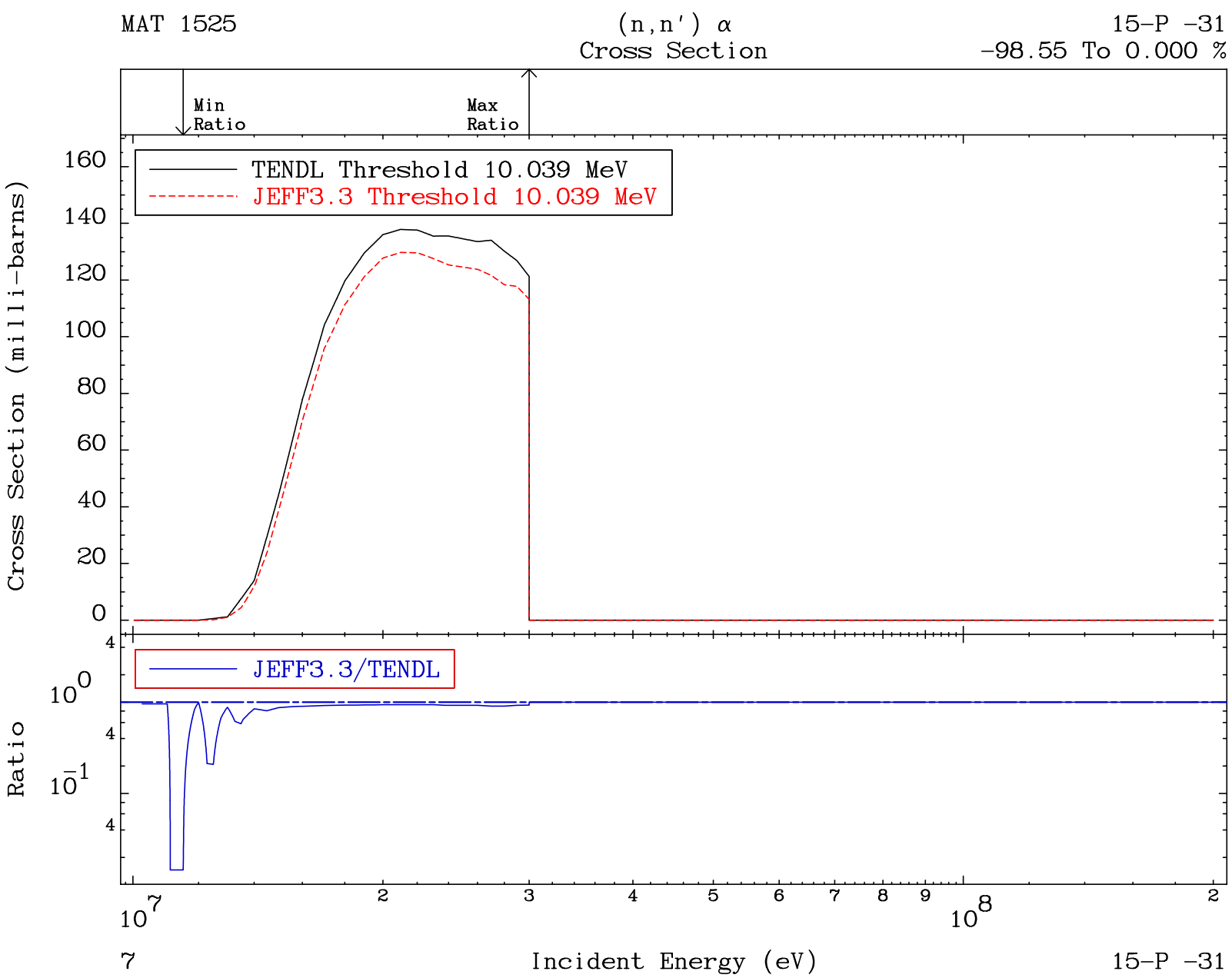

MAT 1525
Elastic
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
15-P -31

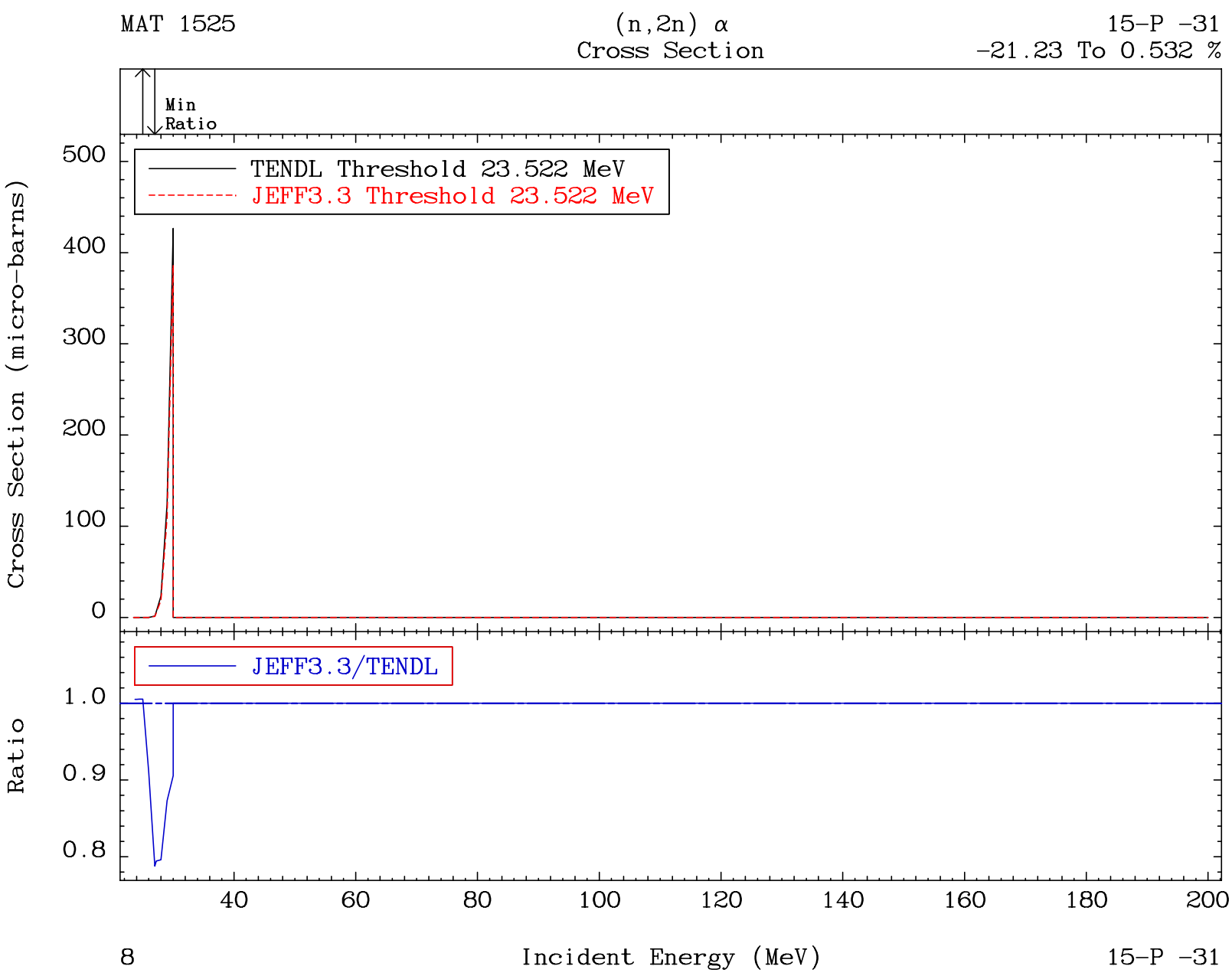

MAT 1525
Inelastic
Cross Section
15-P -31
-7.466 To 1.137 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3074 MeV
JEFF3.3 Threshold 1.3074 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.96
0.92
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
15-P -31

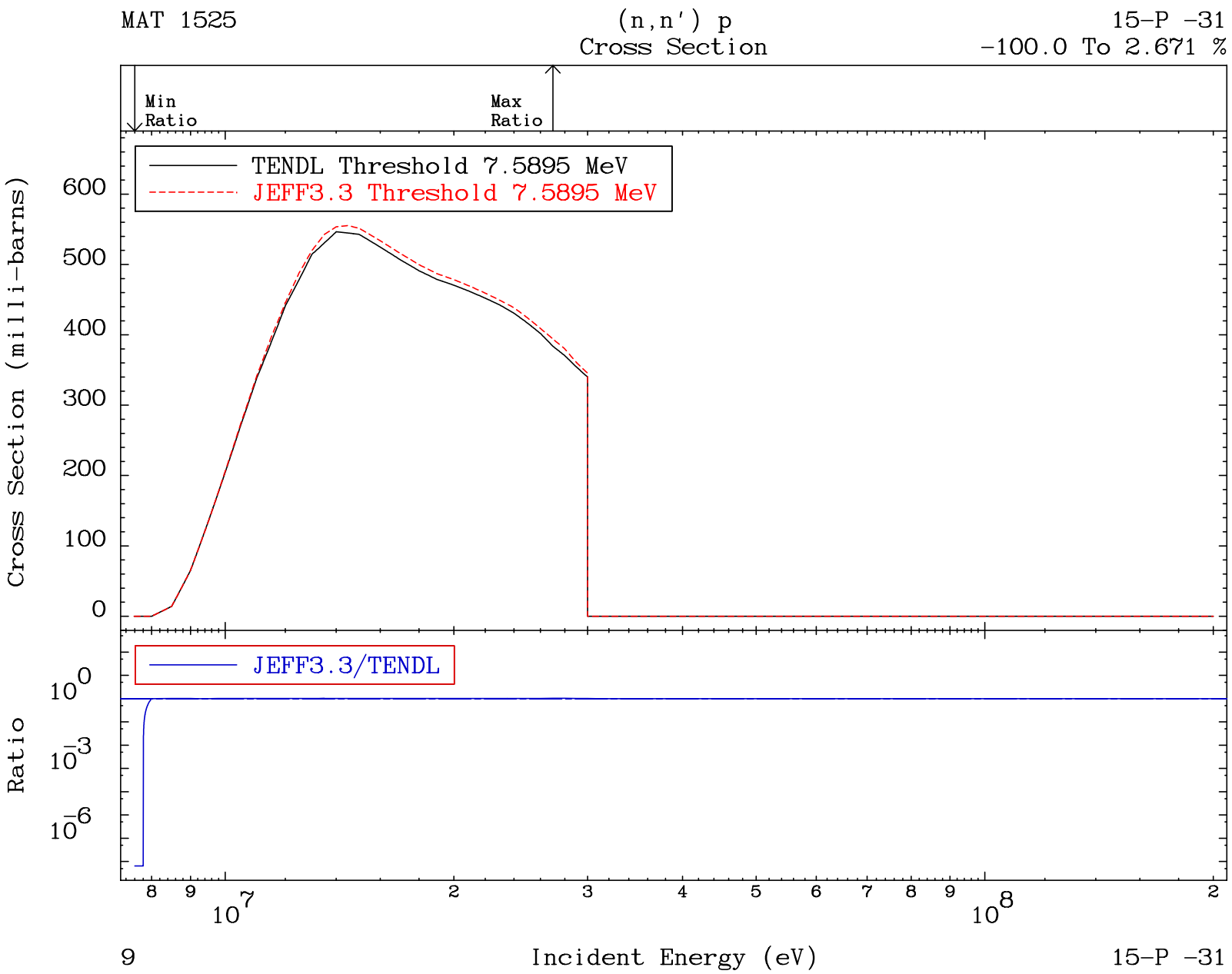

MAT 1525
(n,2n) d
Cross Section
15-P -31
0.000 To 4.588 %
Min
Ratio
TENDL Threshold 24.916 MeV
JEFF3.3 Threshold 24.916 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
15-P -31

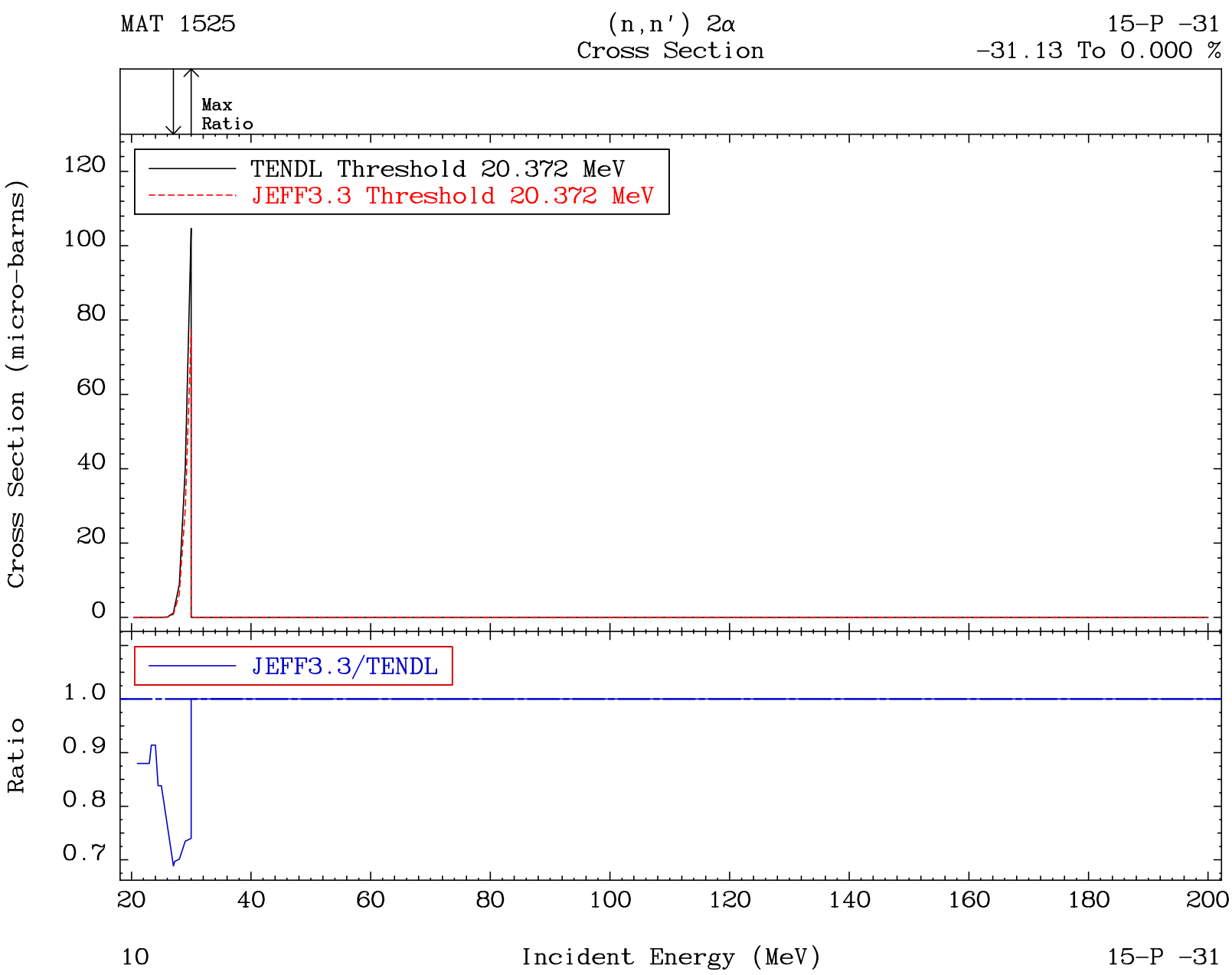

MAT 1525
(n,2n)
Cross Section
15-P -31
-22.76 To 4.875 %
Min Ratio
Max Ratio
TENDL Threshold 12.767 MeV
JEFF3.3 Threshold 12.767 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
15-P -31

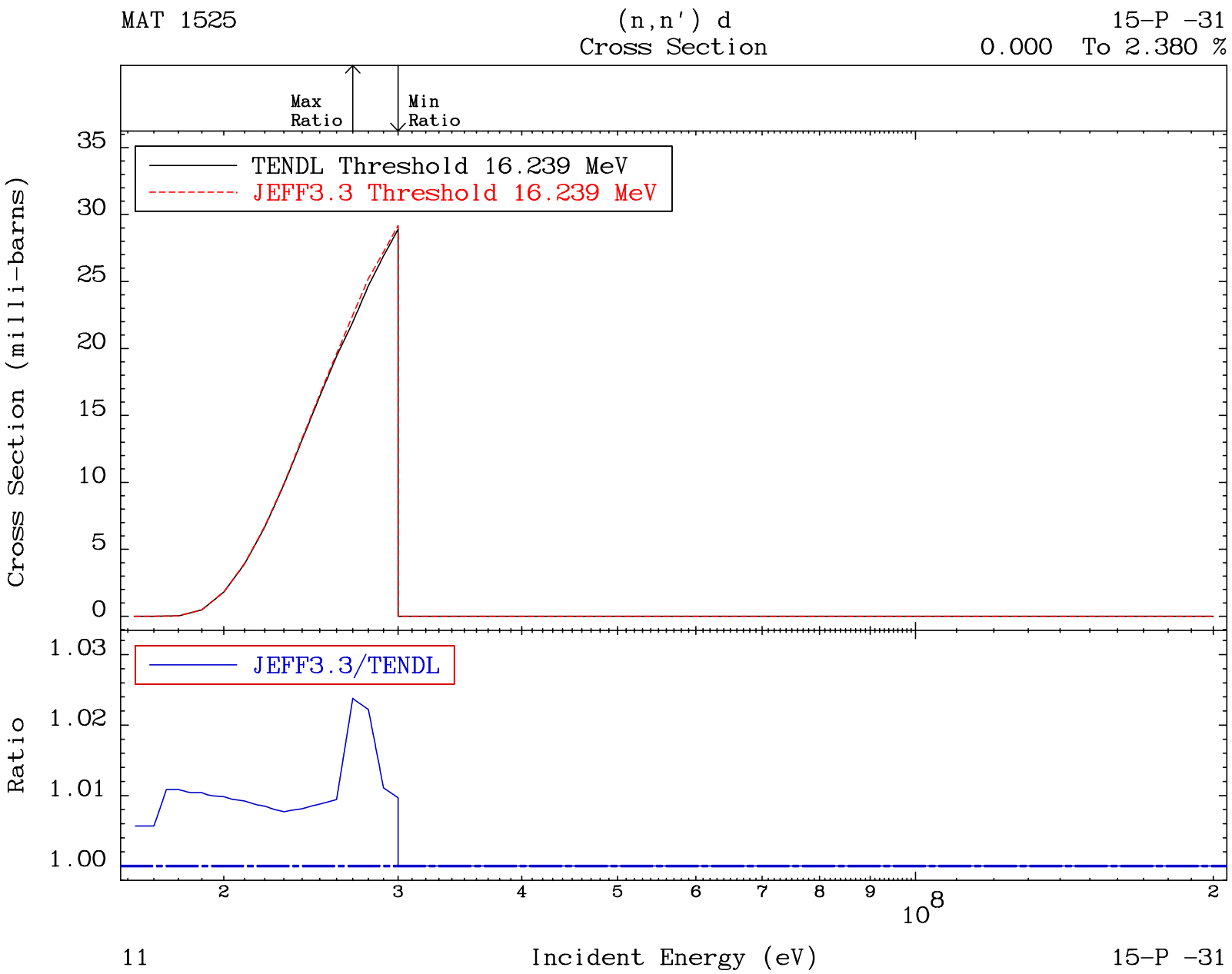

MAT 1525
(n,3n)
Cross Section
15-P -31
-0.032 To 10.20 %
Min
Ratio
TENDL Threshold 24.455 MeV
JEFF3.3 Threshold 24.455 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
40
60
80
100
120
140
160
180
200
6
Incident Energy (MeV)
15-P -31

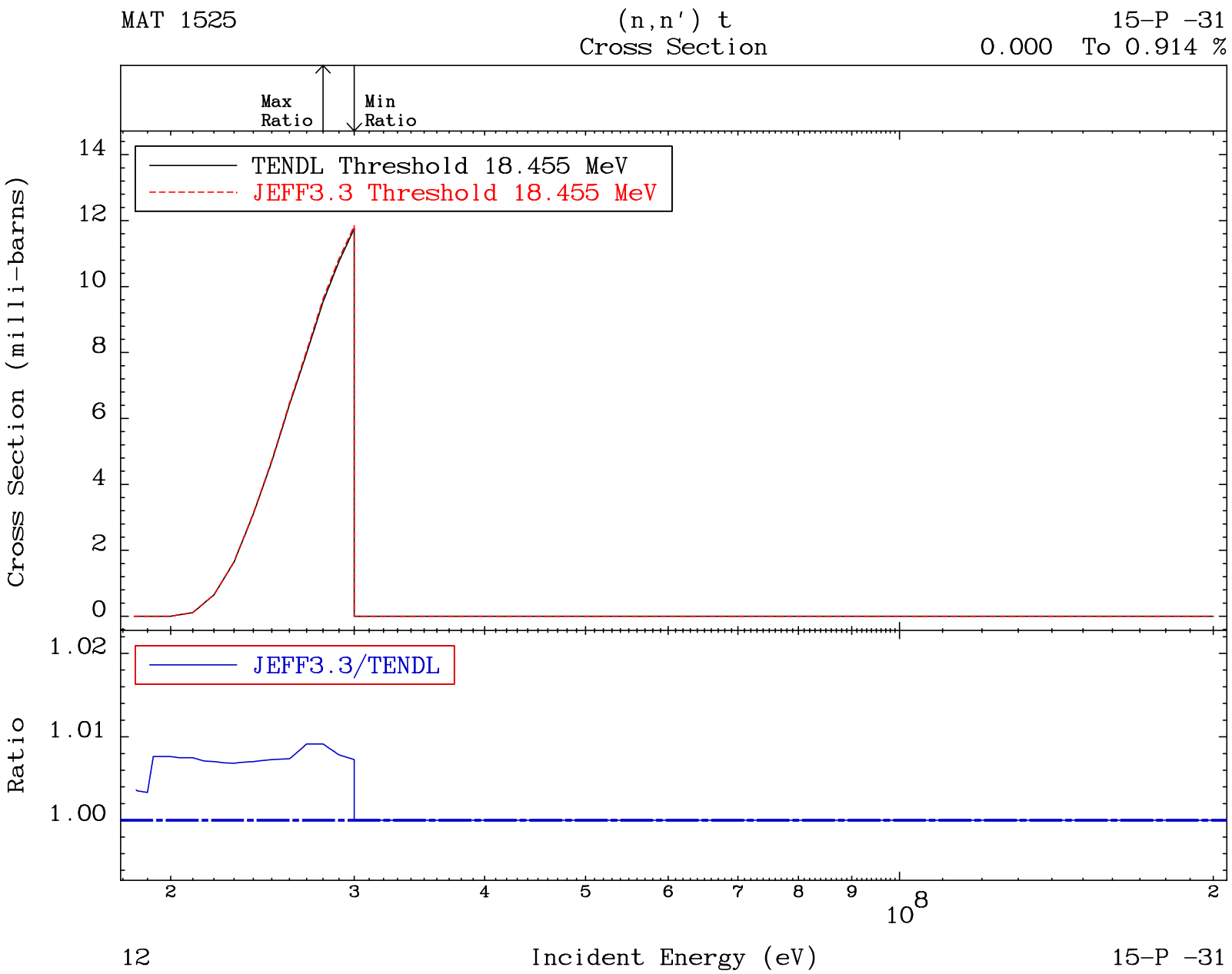

MAT 1525
(n,n') α
Cross Section
15-P -31
-98.55 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 10.039 MeV
JEFF3.3 Threshold 10.039 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
10^-1
10^7
10^8
Incident Energy (eV)
15-P -31

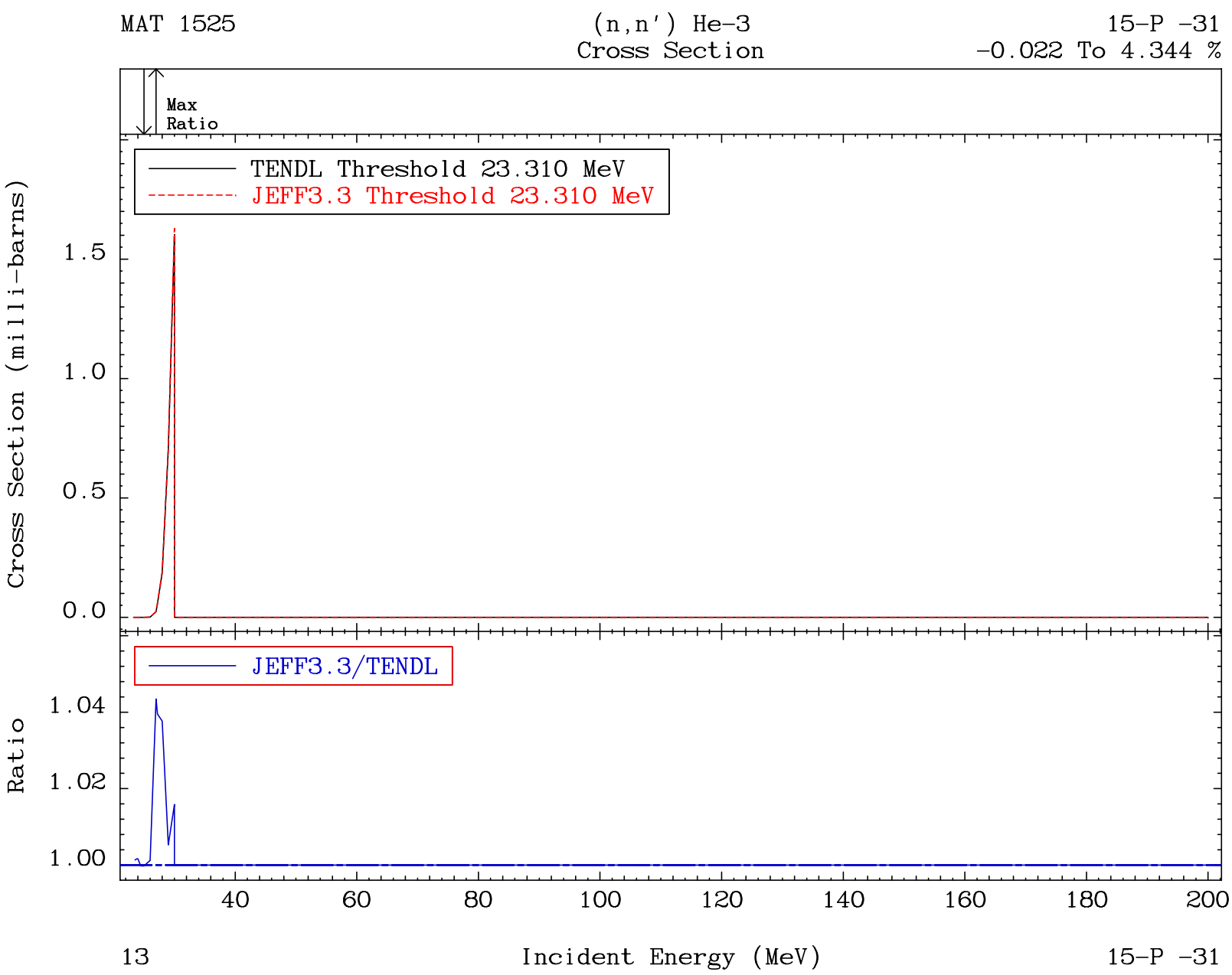

MAT 1525
(n,2n) α
Cross Section
15-P -31
-21.23 To 0.532 %
Min
Ratio
TENDL Threshold 23.522 MeV
JEFF3.3 Threshold 23.522 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
40
60
80
100
120
140
160
180
200
8
Incident Energy (MeV)
15-P -31

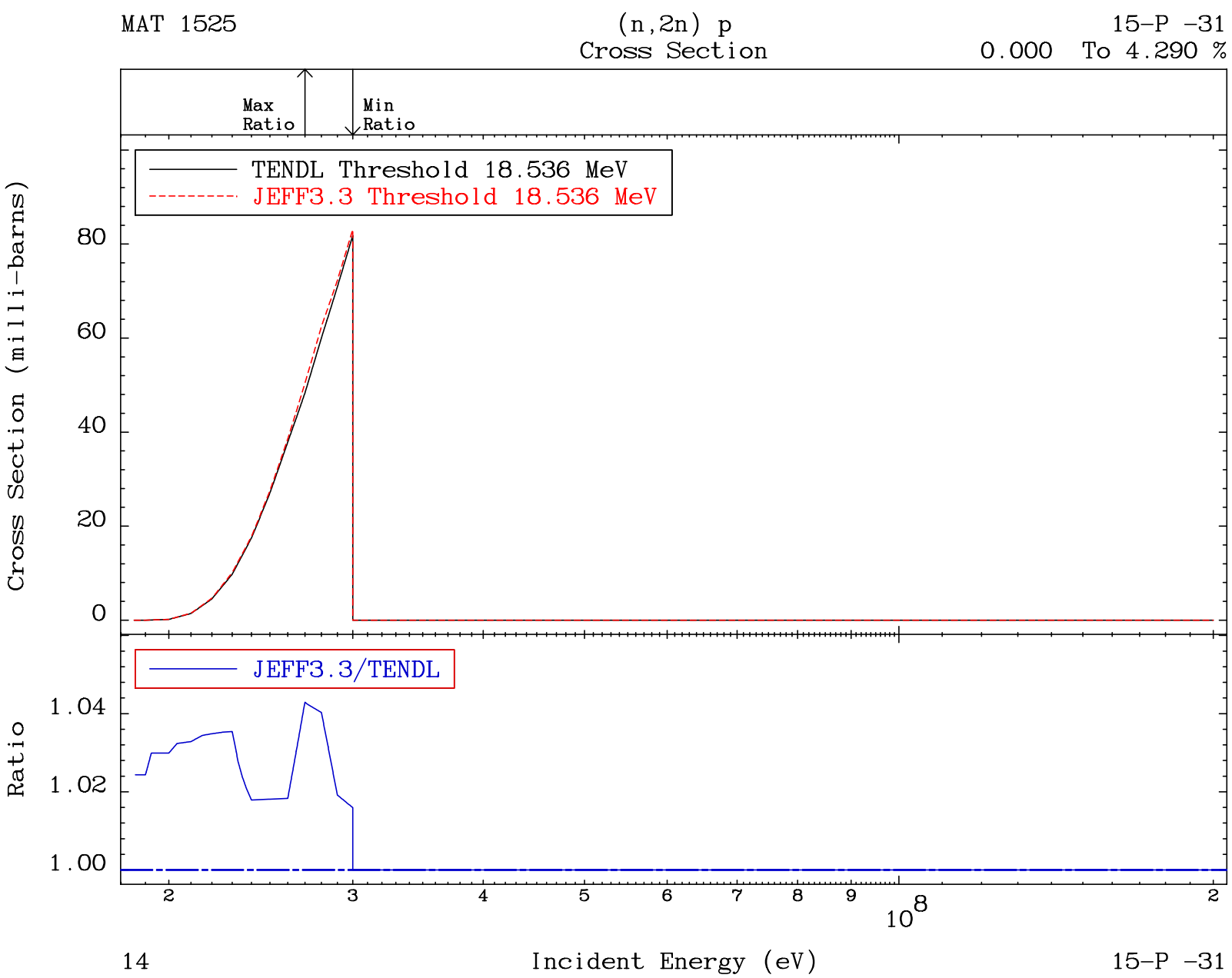

MAT 1525
(n,n') p
Cross Section
15-P -31
-100.0 To 2.671 %
Min Ratio
Max Ratio
TENDL Threshold 7.5895 MeV
JEFF3.3 Threshold 7.5895 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^0
10^-3
10^-6
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
15-P -31

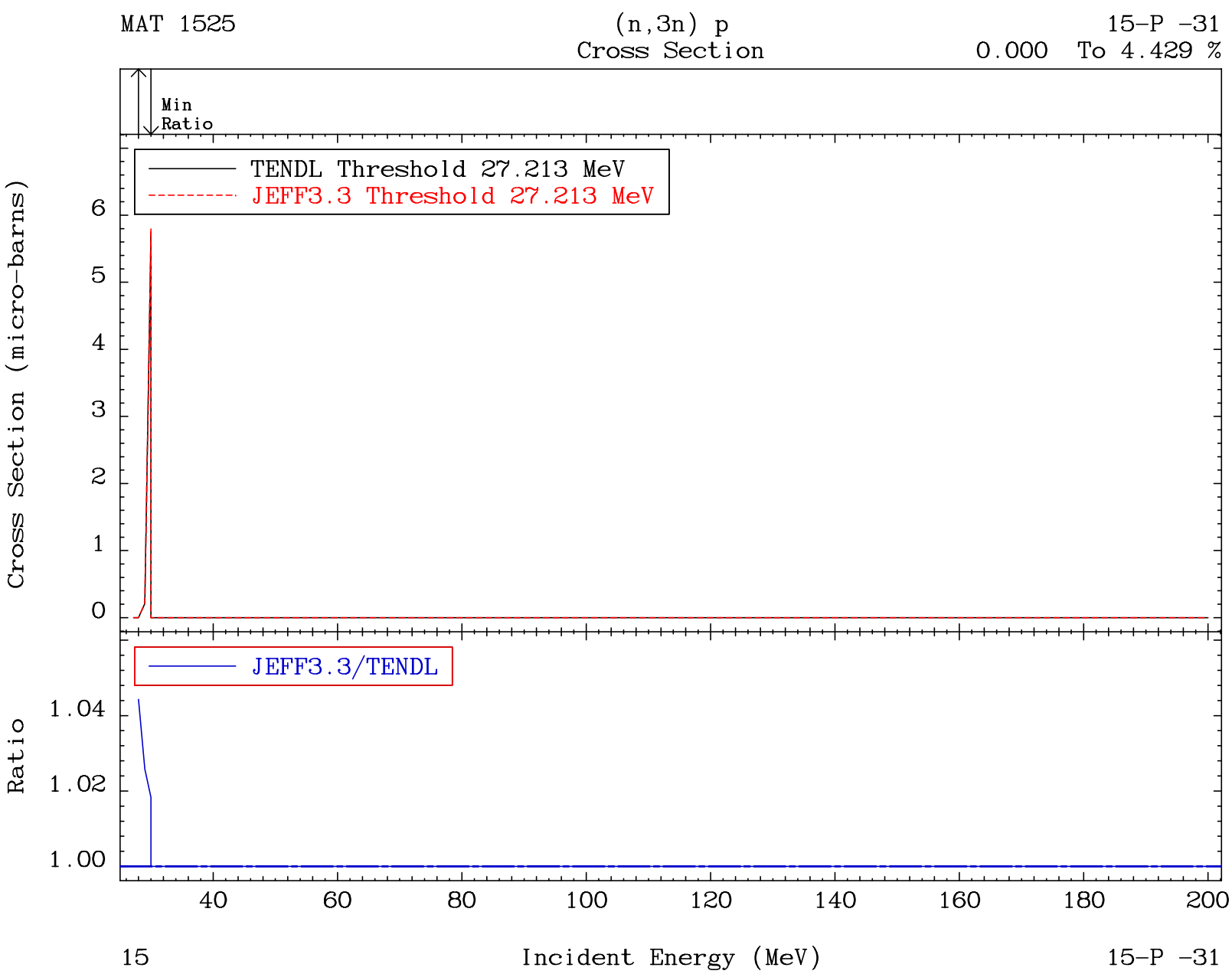

MAT 1525
(n,n') 2α
Cross Section
15-P -31
-31.13 To 0.000 %
Max
Ratio
TENDL Threshold 20.372 MeV
JEFF3.3 Threshold 20.372 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
0.7
20
40
60
80
100
120
140
160
180
200
10
Incident Energy (MeV)
15-P -31

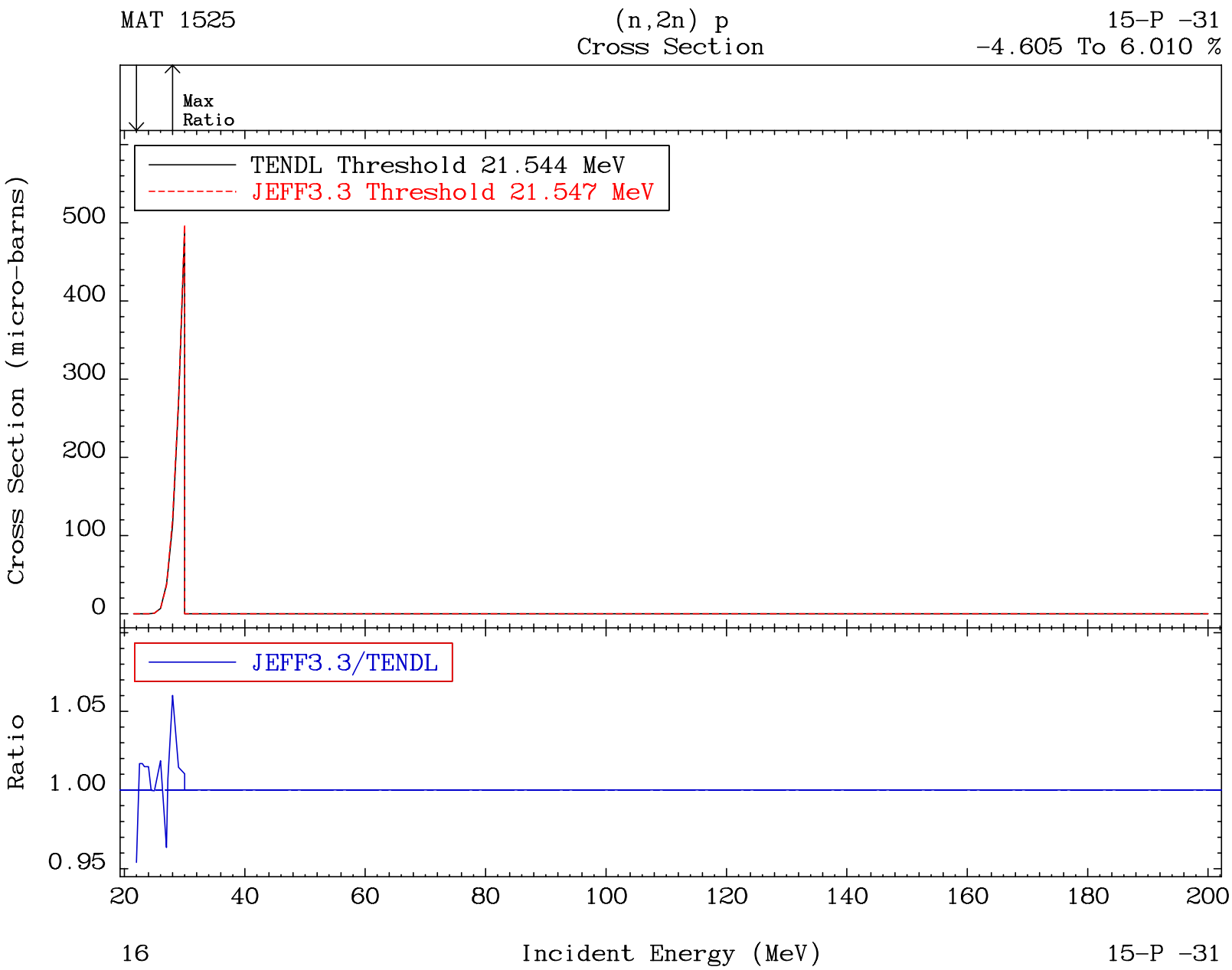

MAT 1525
(n,n') d
Cross Section
15-P -31
0.000 To 2.380 %
Max Ratio
Min Ratio
TENDL Threshold 16.239 MeV
JEFF3.3 Threshold 16.239 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
15-P -31

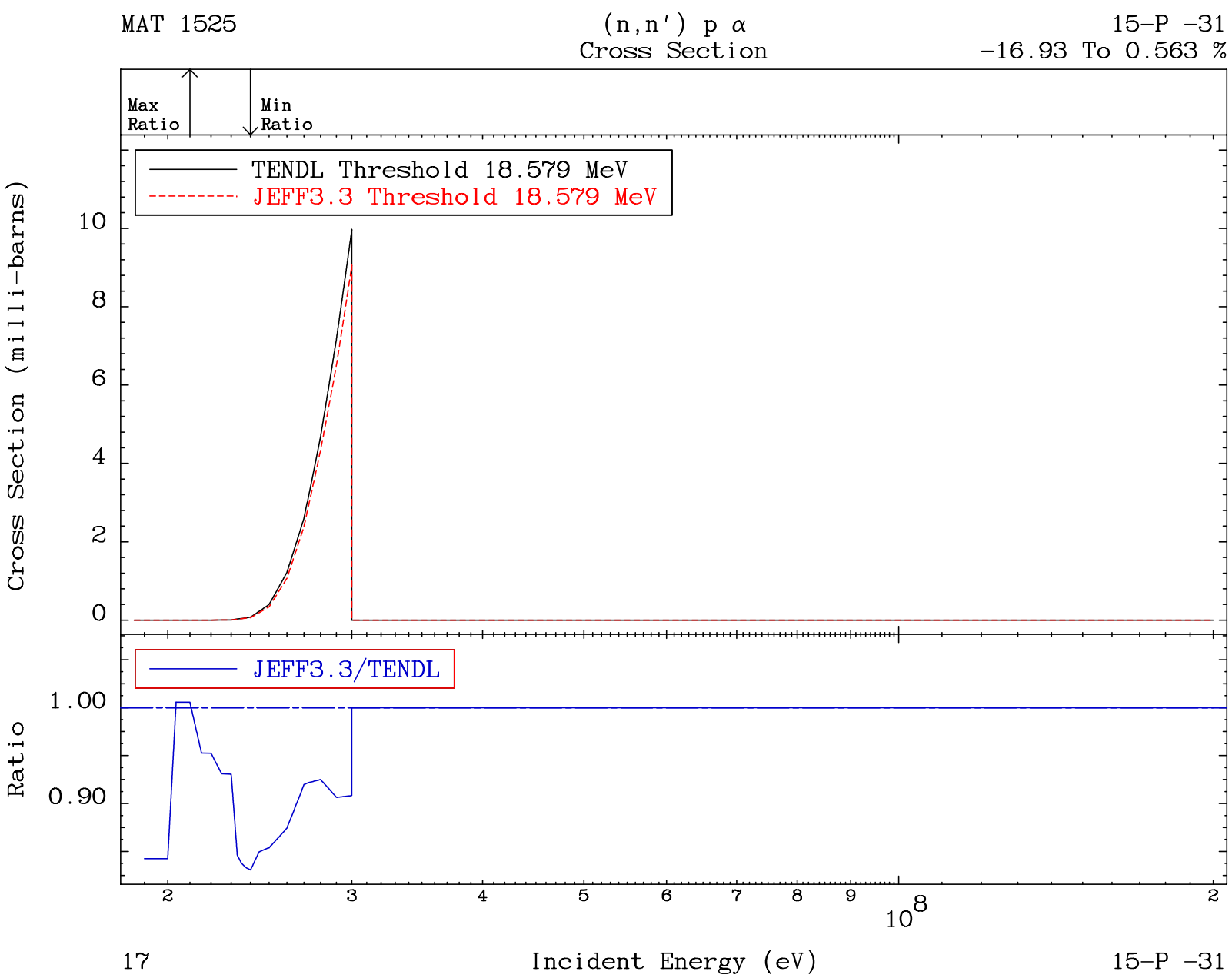

MAT 1525
(n,n') t
Cross Section
15-P -31
0.000 To 0.914 %
Max Ratio
Min Ratio
TENDL Threshold 18.455 MeV
JEFF3.3 Threshold 18.455 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
2
10^8
12
Incident Energy (eV)
15-P -31

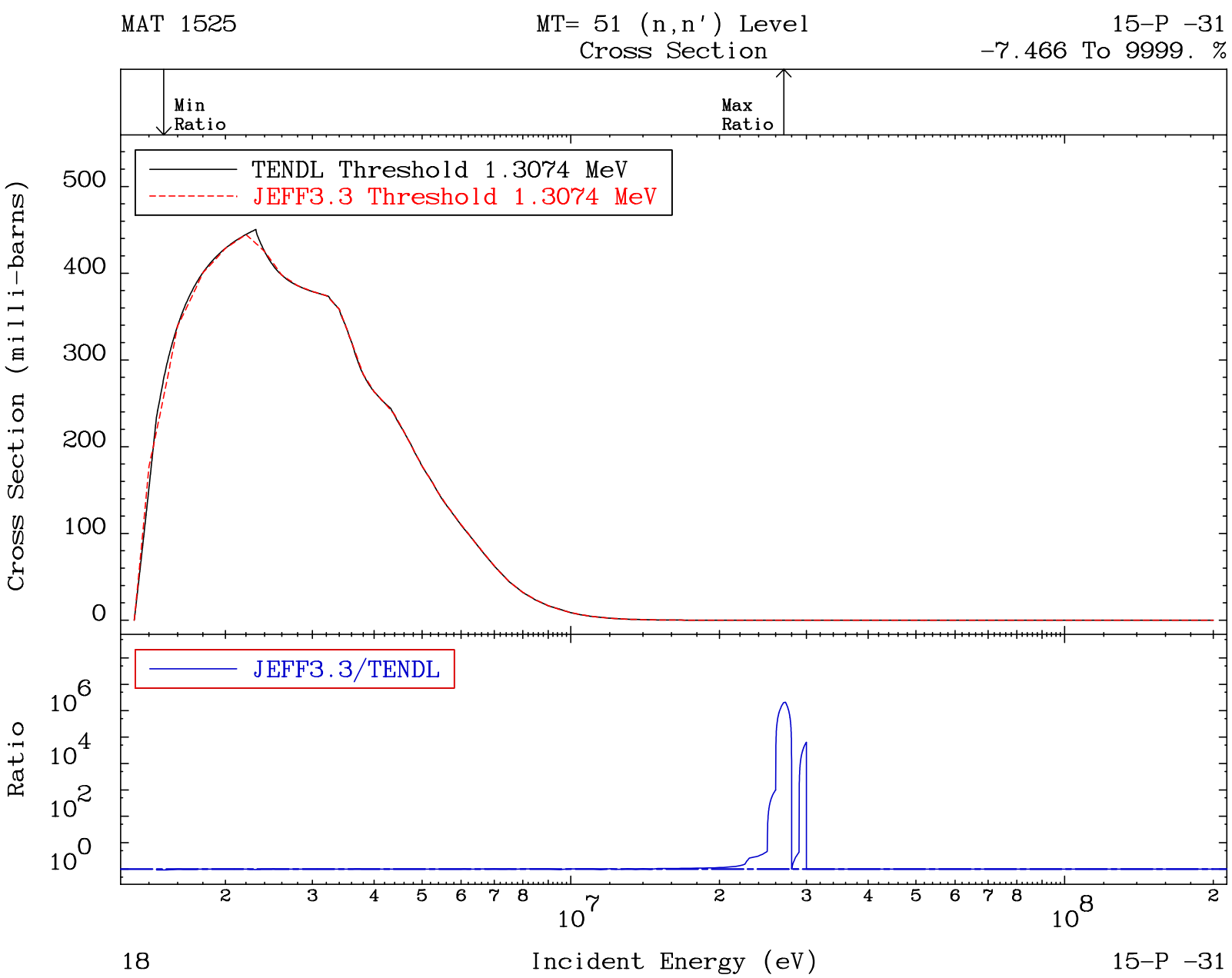

MAT 1525
(n,n') He-3
Cross Section
15-P -31
-0.022 To 4.344 %
Max
Ratio
TENDL Threshold 23.310 MeV
JEFF3.3 Threshold 23.310 MeV
Cross Section (milli-barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
15-P -31

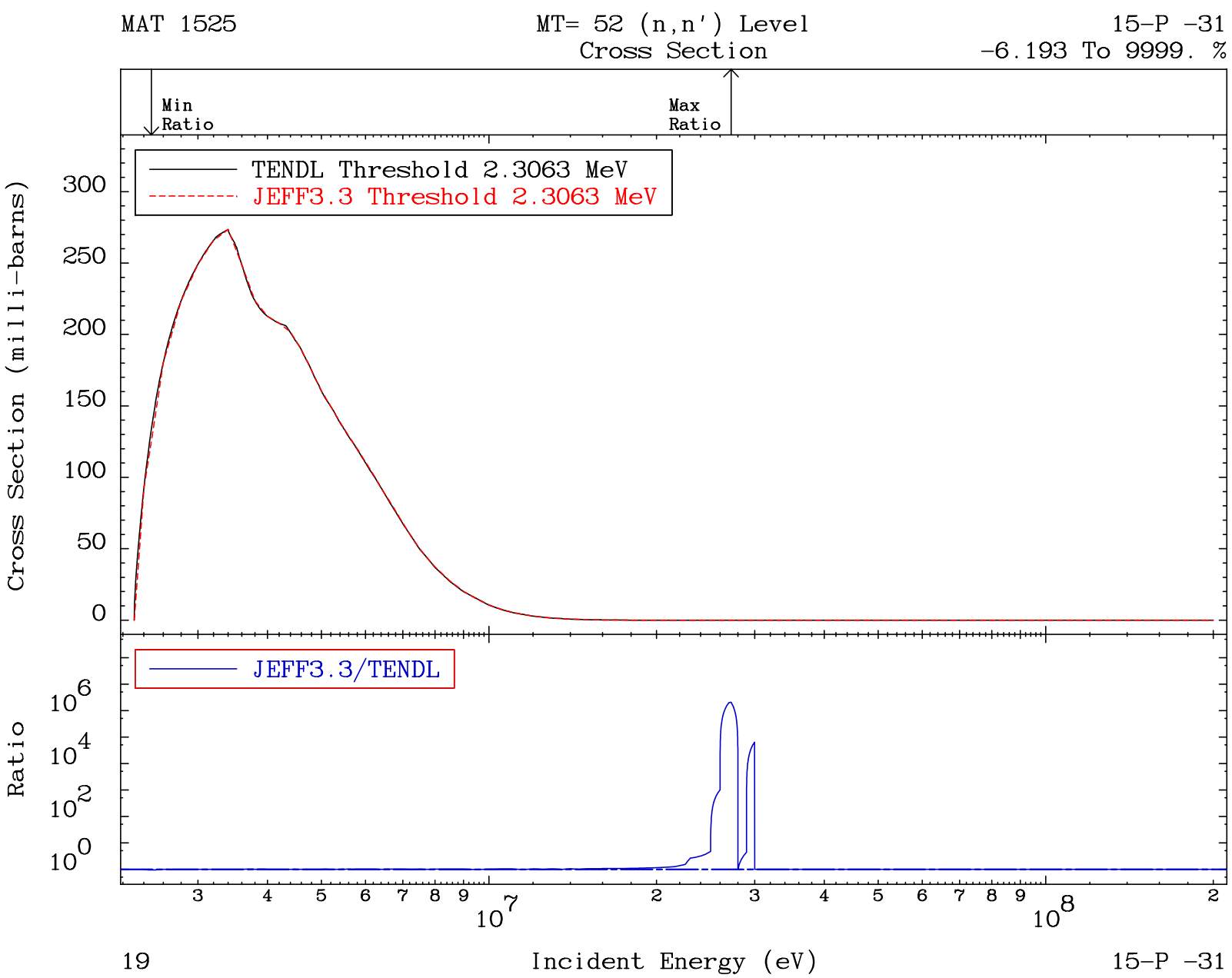

MAT 1525
(n,2n) p
Cross Section
15-P -31
0.000 To 4.290 %
Max Ratio
Min Ratio
TENDL Threshold 18.536 MeV
JEFF3.3 Threshold 18.536 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
15-P -31

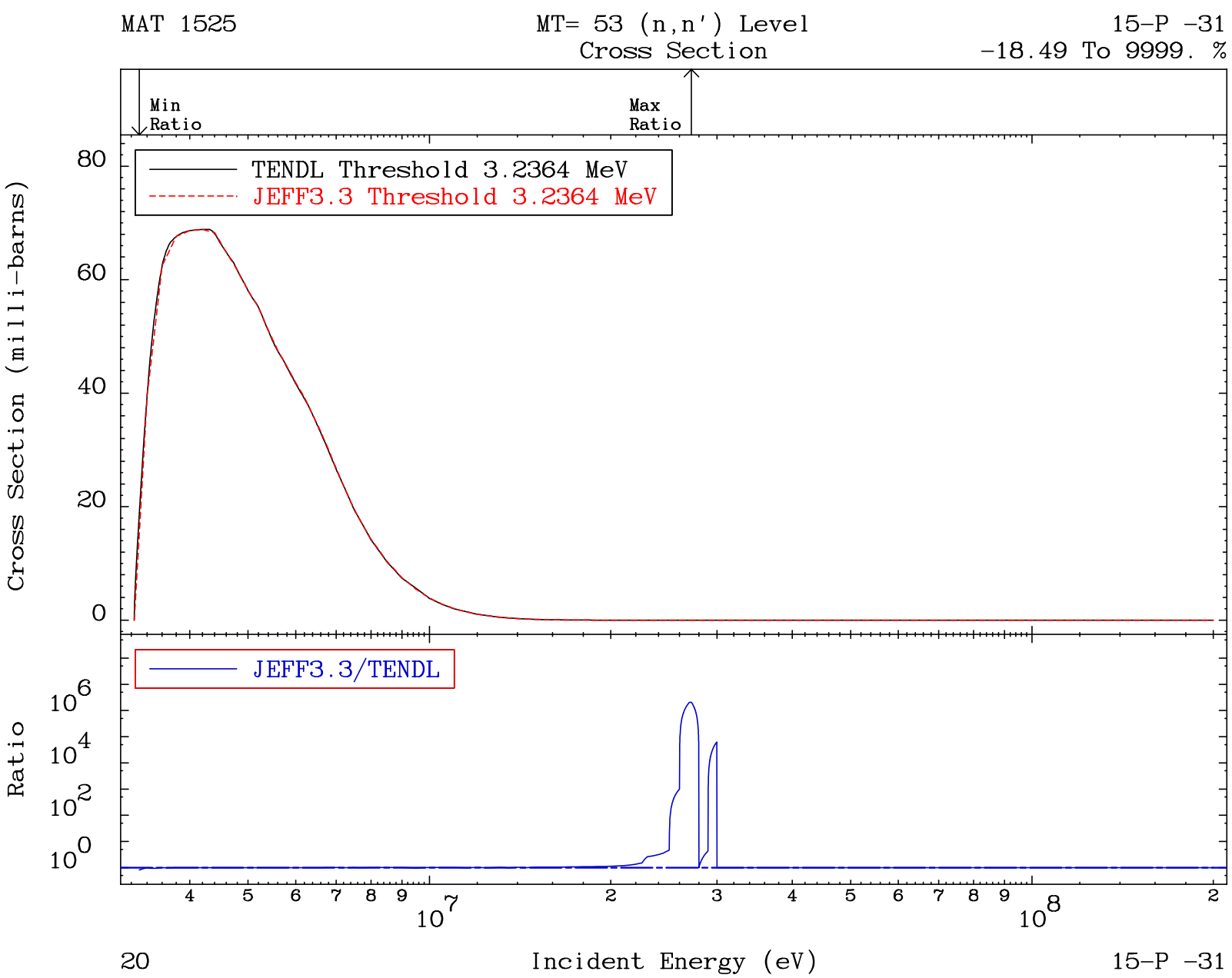

MAT 1525
(n,3n) p
Cross Section
15-P -31
0.000 To 4.429 %
Min
Ratio
TENDL Threshold 27.213 MeV
JEFF3.3 Threshold 27.213 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
15-P -31

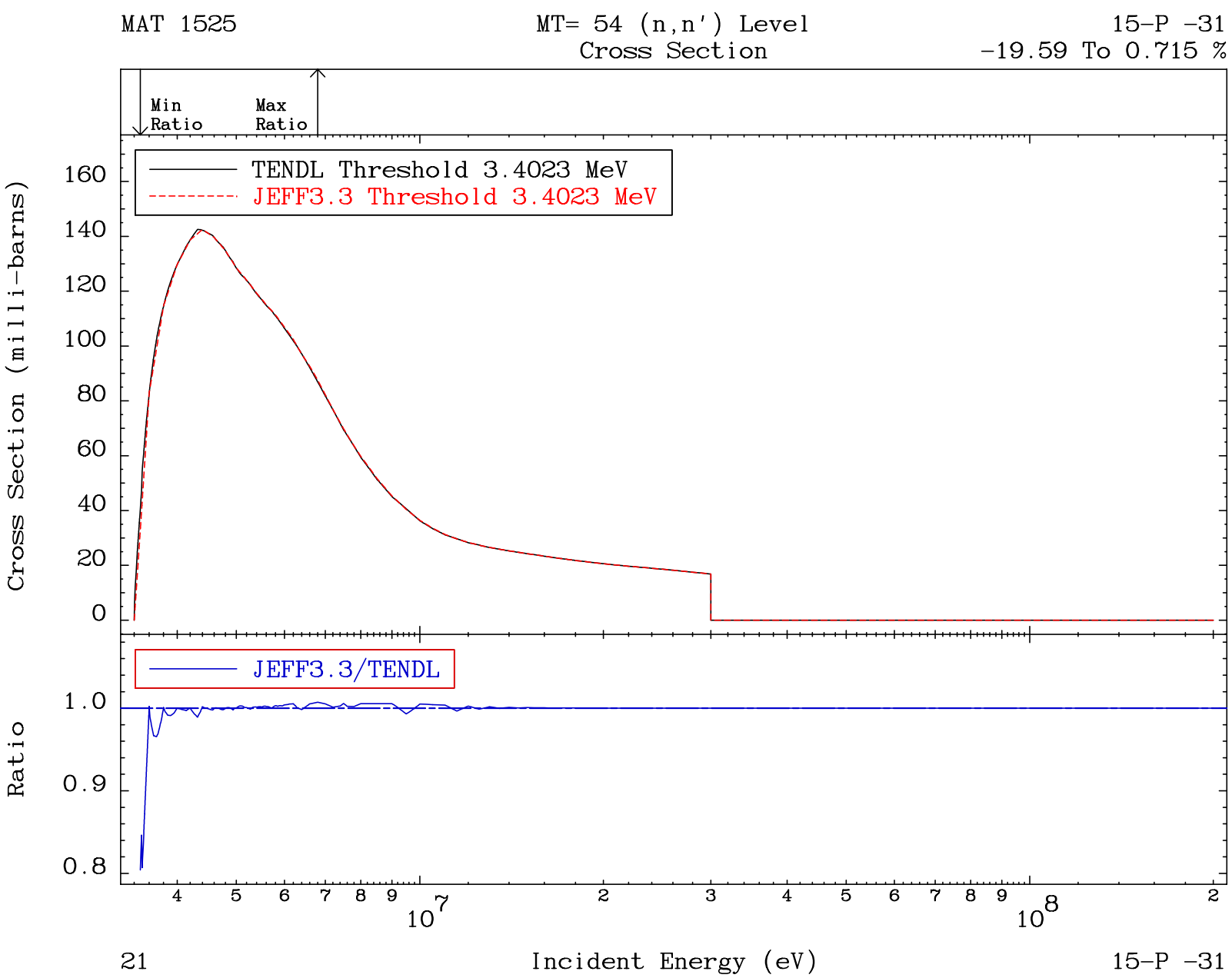

MAT 1525
(n,2n) p
Cross Section
15-P -31
-4.605 To 6.010 %
Max
Ratio
TENDL Threshold 21.544 MeV
JEFF3.3 Threshold 21.547 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
15-P -31

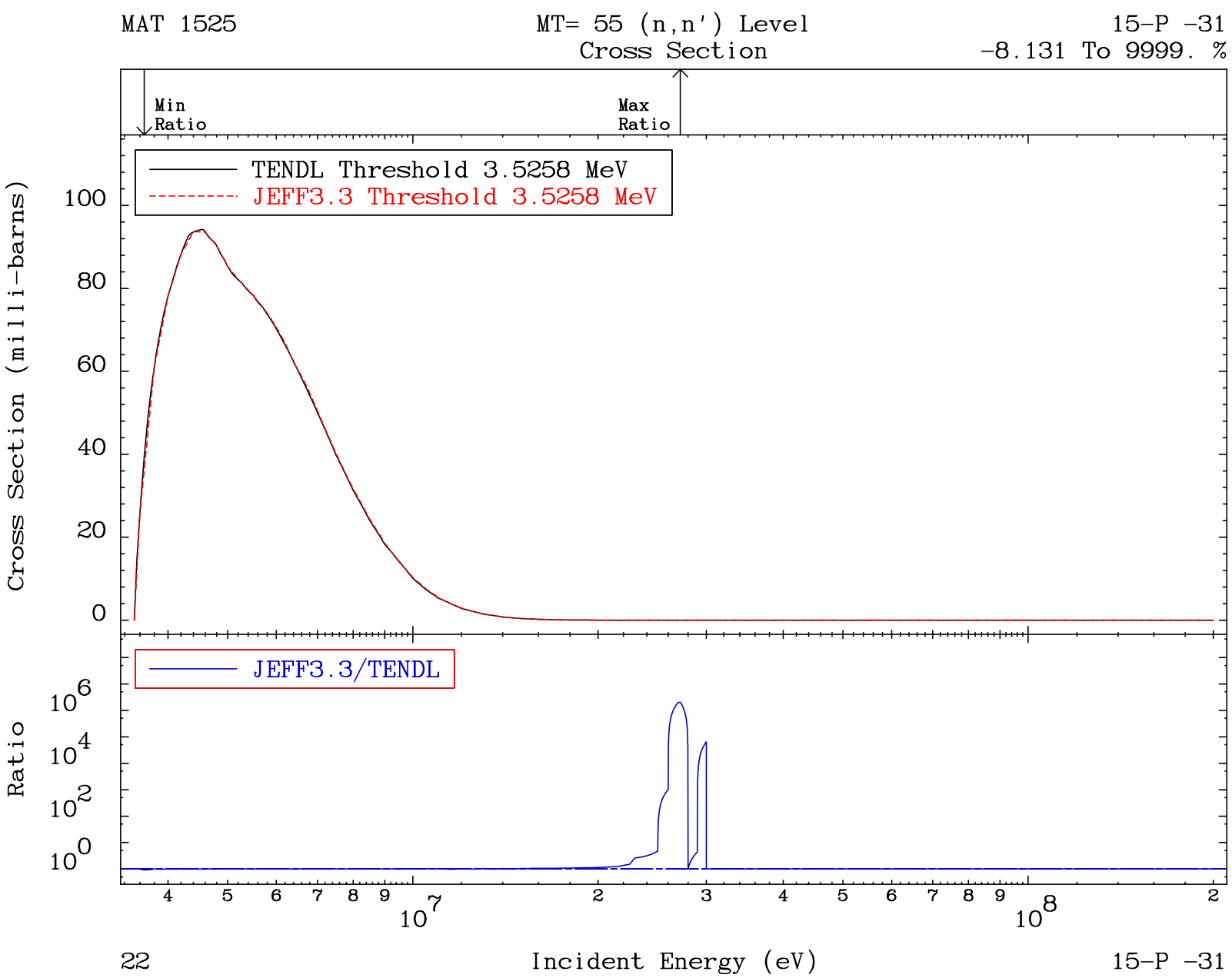

MAT 1525
(n,n') p α
Cross Section
15-P -31
-16.93 To 0.563 %
Max Ratio
Min Ratio
TENDL Threshold 18.579 MeV
JEFF3.3 Threshold 18.579 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.00
0.90
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
15-P -31

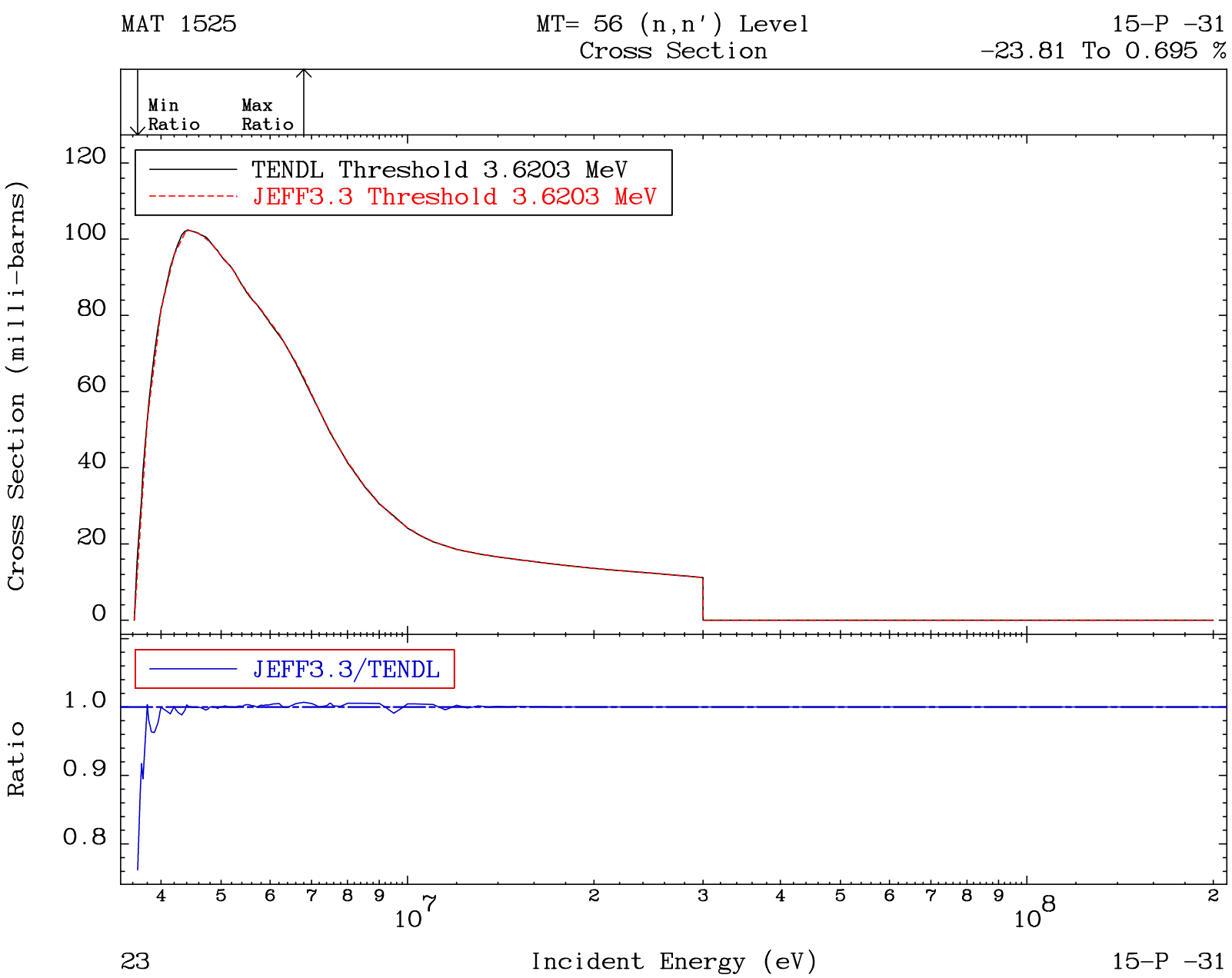

MAT 1525
MT= 51 (n,n') Level
Cross Section
15-P -31
-7.466 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3074 MeV
JEFF3.3 Threshold 1.3074 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
15-P -31

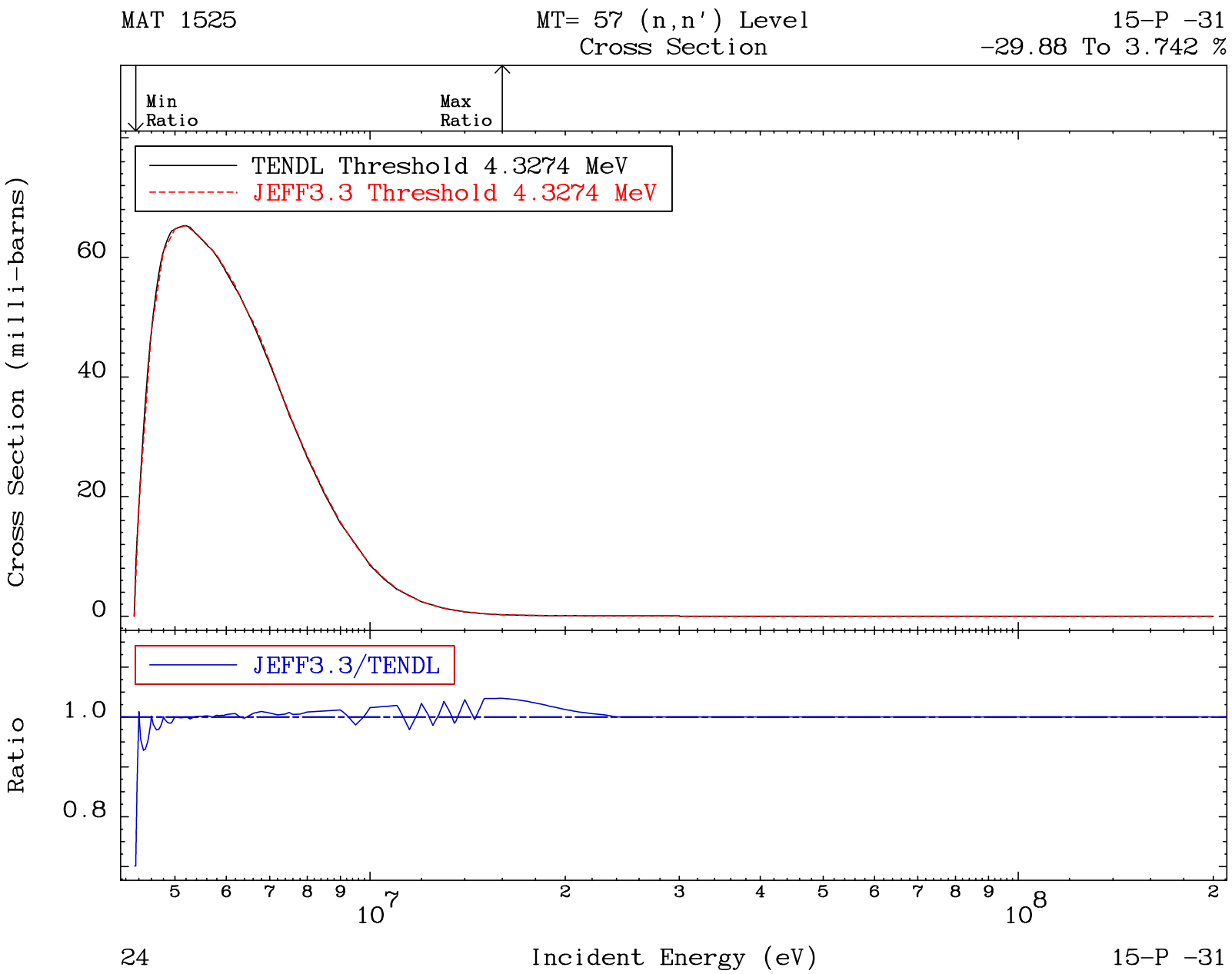

MAT 1525
MT= 52 (n,n') Level
Cross Section
15-P -31
-6.193 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3063 MeV
JEFF3.3 Threshold 2.3063 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
19
Incident Energy (eV)
15-P -31

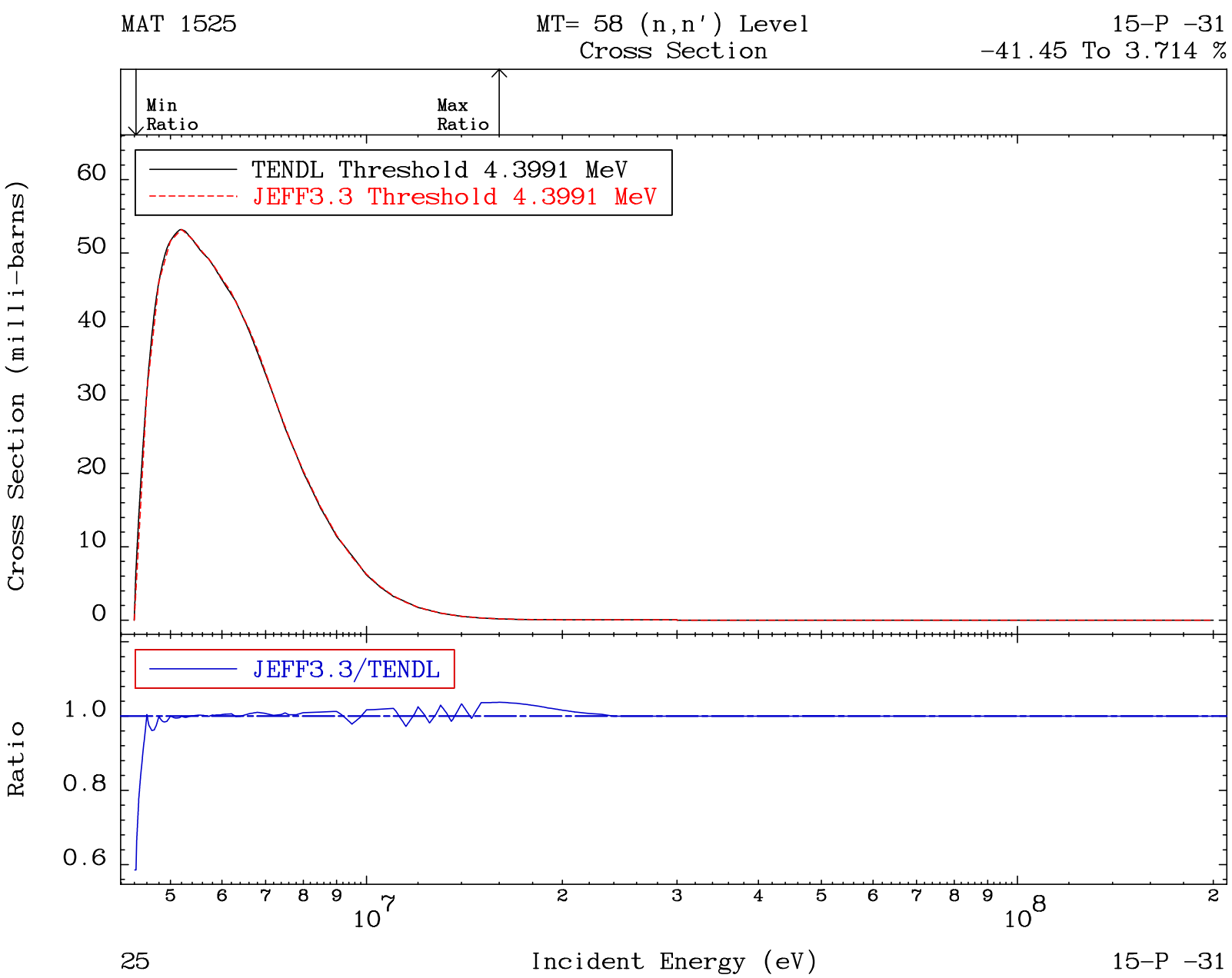

MAT 1525
MT= 53 (n,n') Level
Cross Section
15-P -31
-18.49 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 3.2364 MeV
JEFF3.3 Threshold 3.2364 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
15-P -31

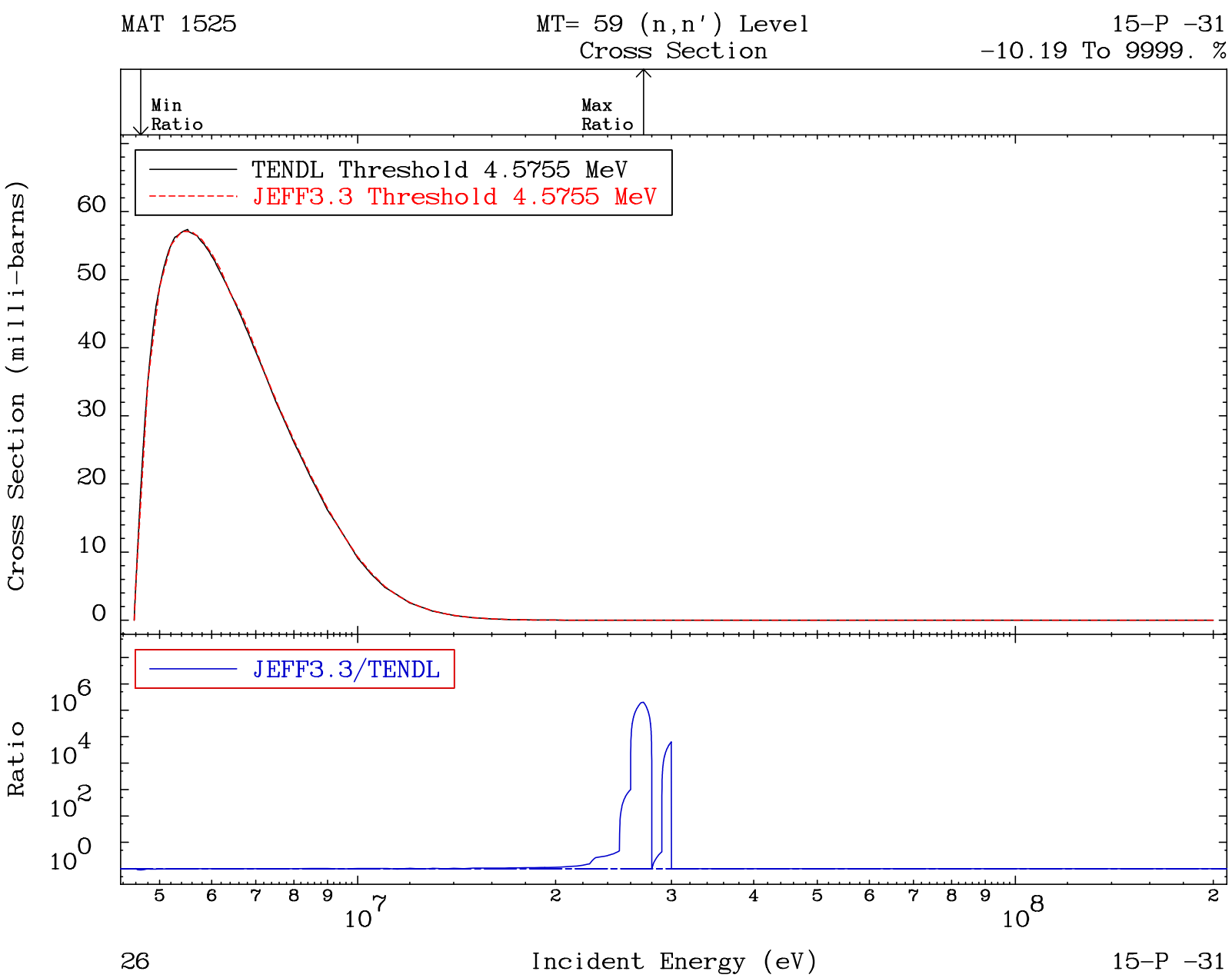

MAT 1525
MT= 54 (n,n') Level
Cross Section
15-P -31
-19.59 To 0.715 %
Min Ratio
Max Ratio
TENDL Threshold 3.4023 MeV
JEFF3.3 Threshold 3.4023 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
15-P -31

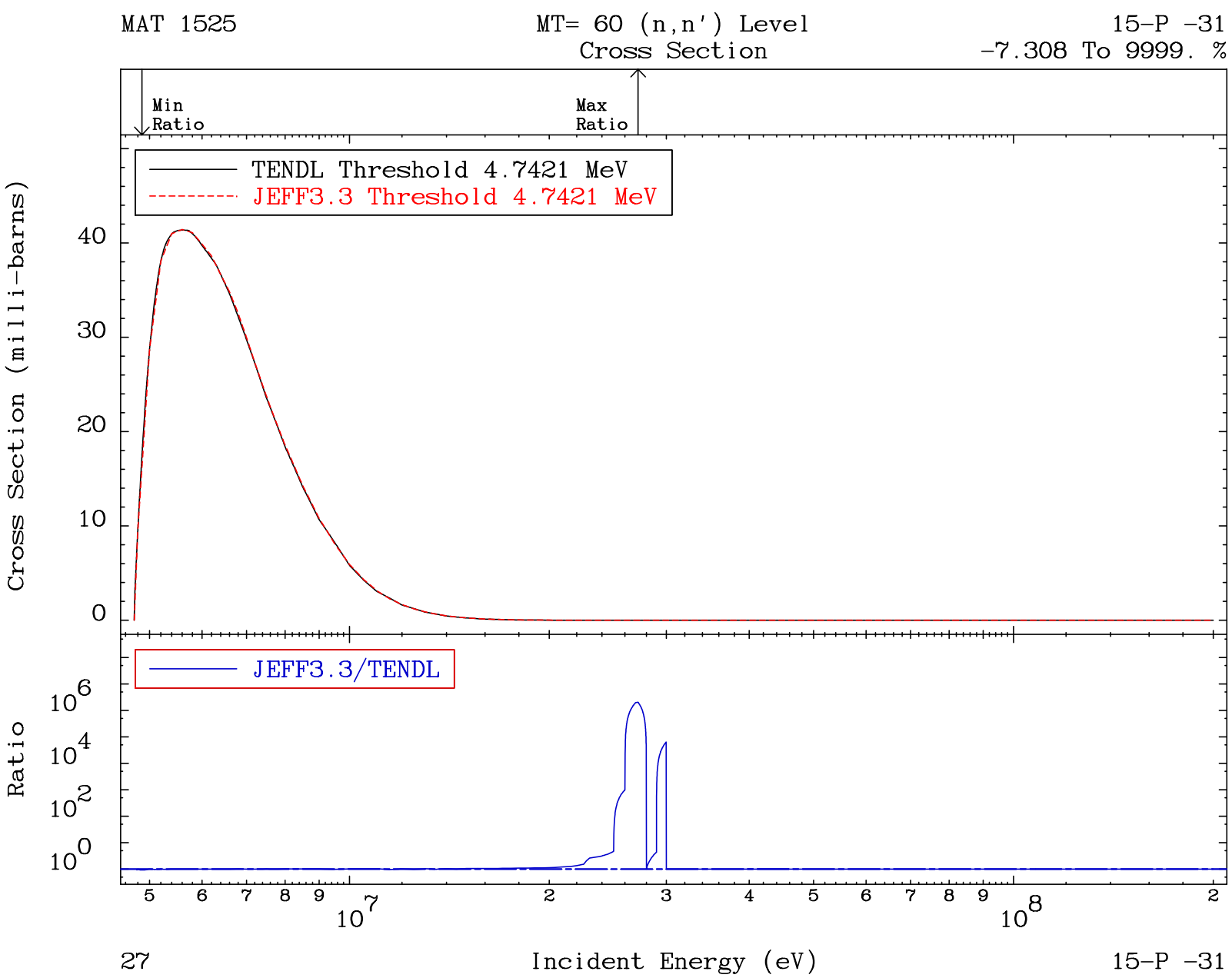

MAT 1525
MT= 55 (n,n') Level
Cross Section
15-P -31
-8.131 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 3.5258 MeV
JEFF3.3 Threshold 3.5258 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
15-P -31

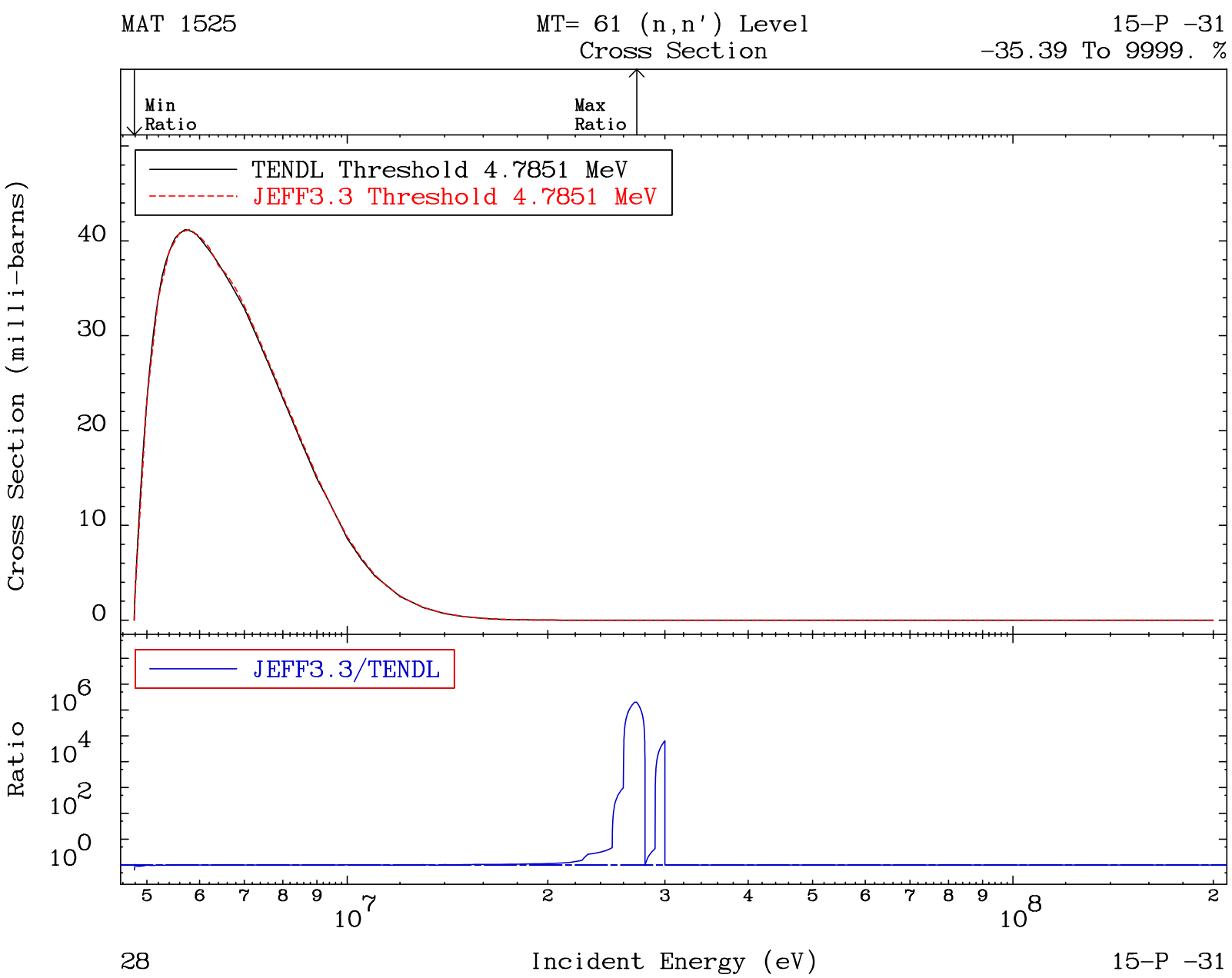

MAT 1525
MT= 56 (n,n') Level
Cross Section
15-P -31
-23.81 To 0.695 %
Min Ratio
Max Ratio
TENDL Threshold 3.6203 MeV
JEFF3.3 Threshold 3.6203 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
15-P -31

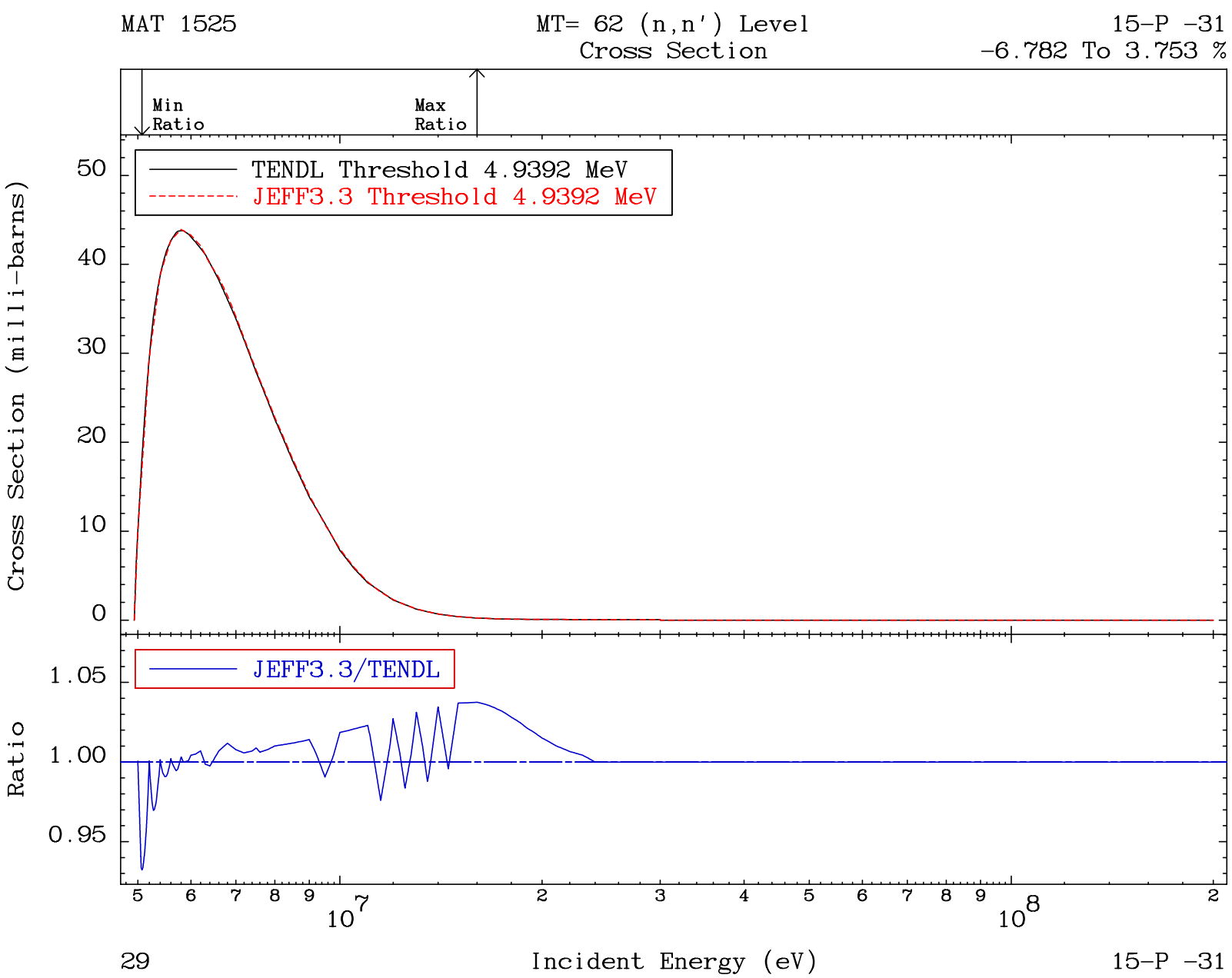

MAT 1525
MT= 57 (n,n') Level
Cross Section
15-P -31
-29.88 To 3.742 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.3274 MeV
JEFF3.3 Threshold 4.3274 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.0
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
15-P -31

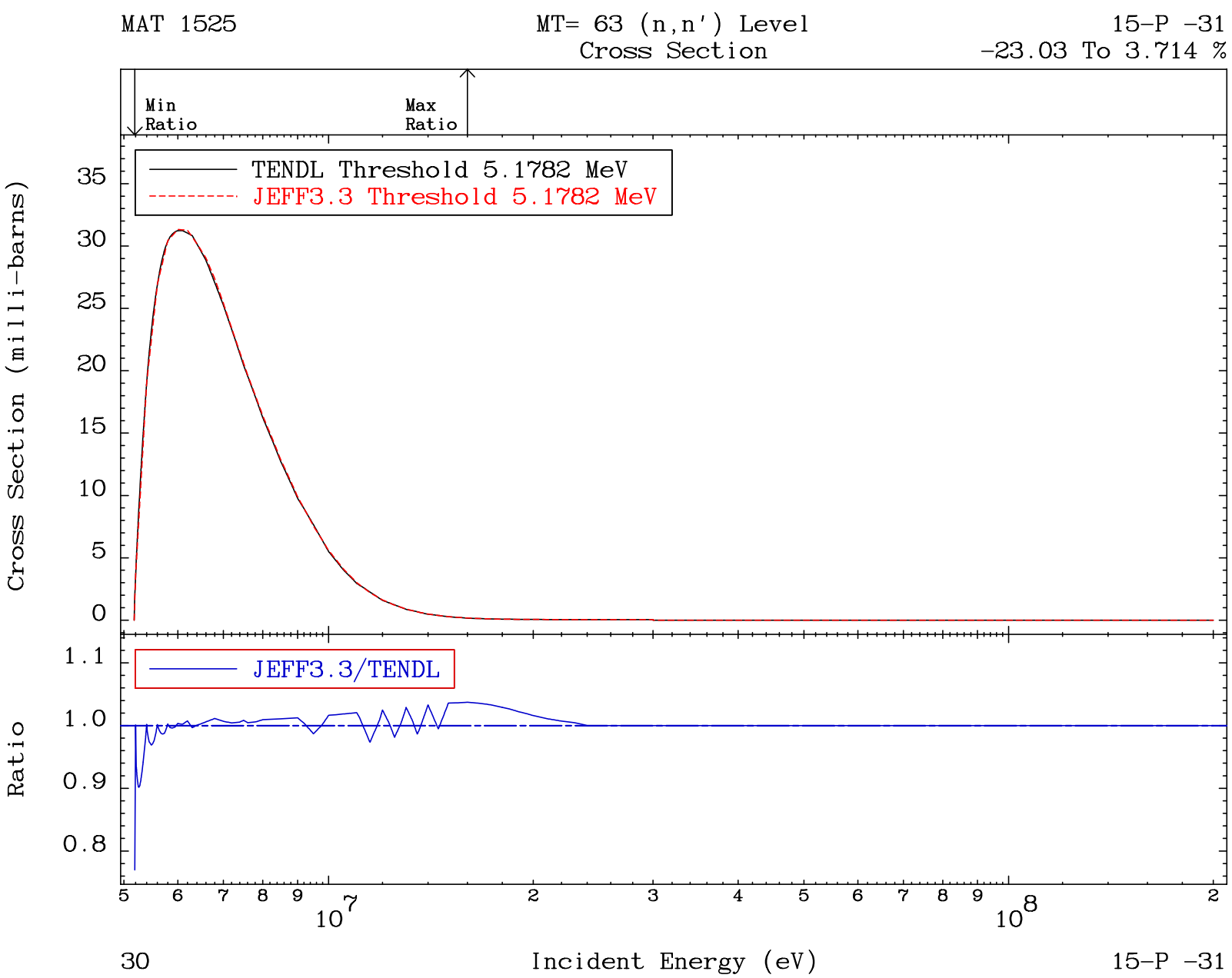

MAT 1525
MT= 58 (n,n') Level
Cross Section
15-P -31
-41.45 To 3.714 %
Min Ratio
Max Ratio
TENDL Threshold 4.3991 MeV
JEFF3.3 Threshold 4.3991 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.8
0.6
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
15-P -31

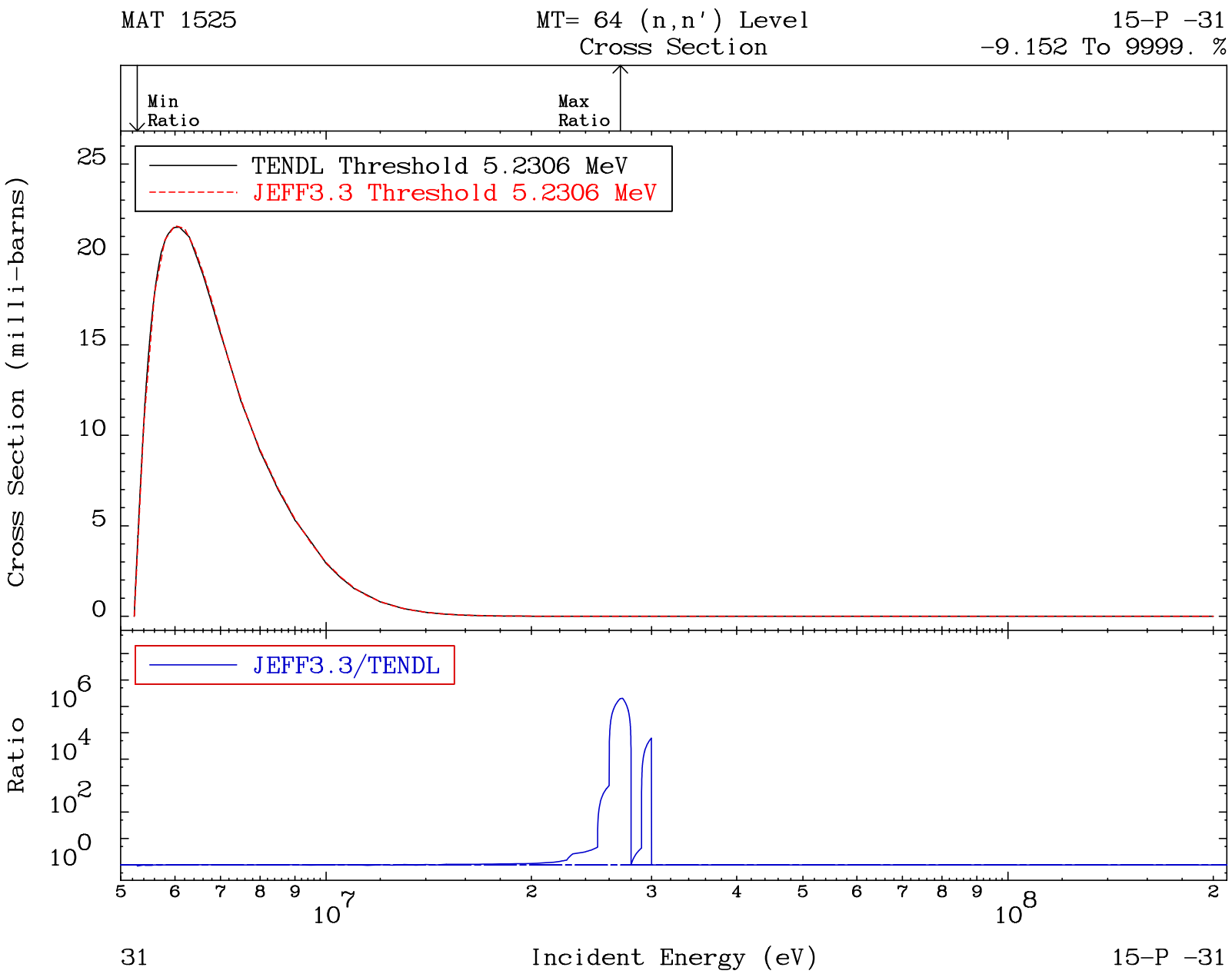

MAT 1525
MT= 59 (n,n') Level
Cross Section
15-P -31
-10.19 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 4.5755 MeV
JEFF3.3 Threshold 4.5755 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
26
Incident Energy (eV)
15-P -31

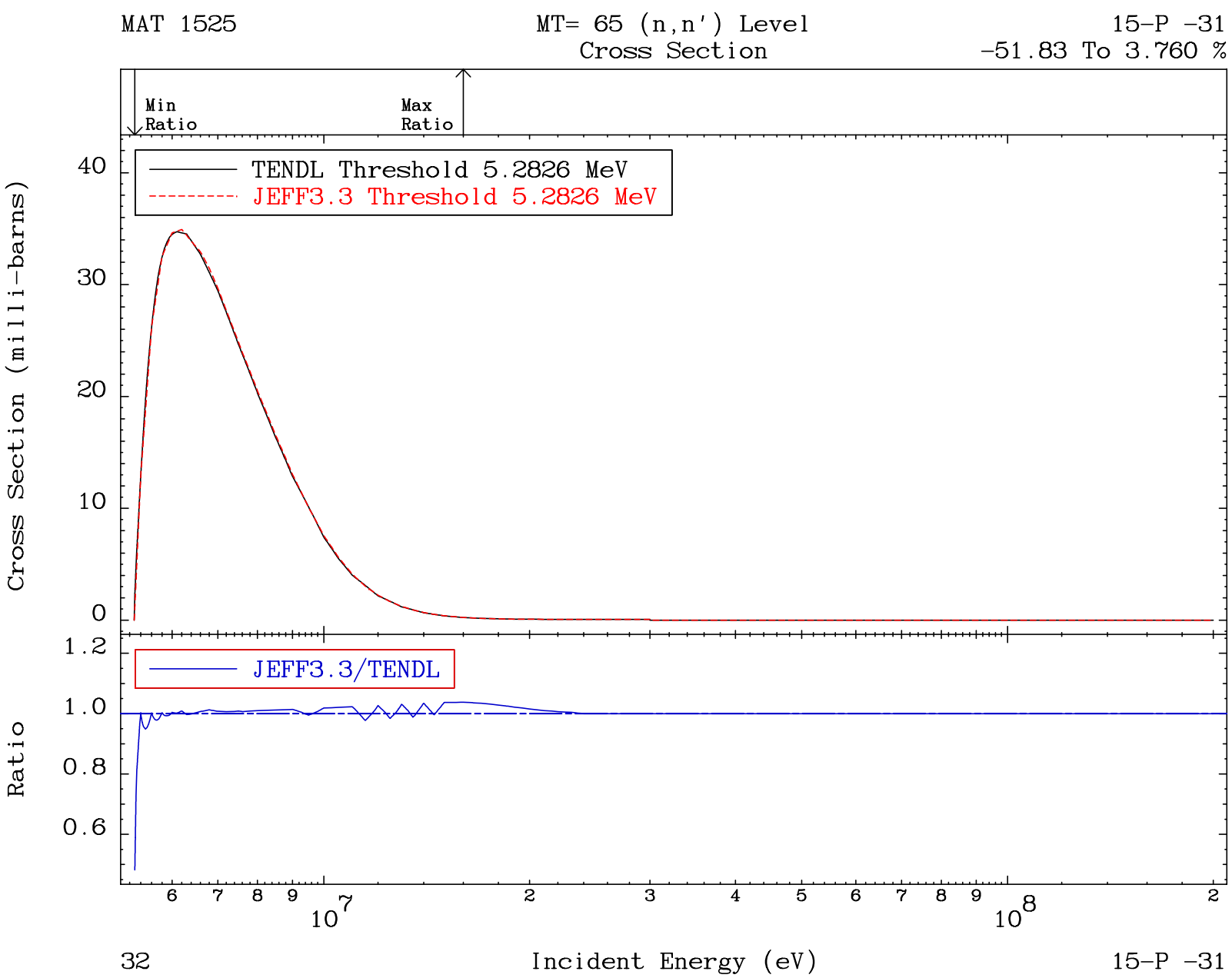

MAT 1525
MT= 60 (n,n') Level
Cross Section
15-P -31
-7.308 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 4.7421 MeV
JEFF3.3 Threshold 4.7421 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
15-P -31

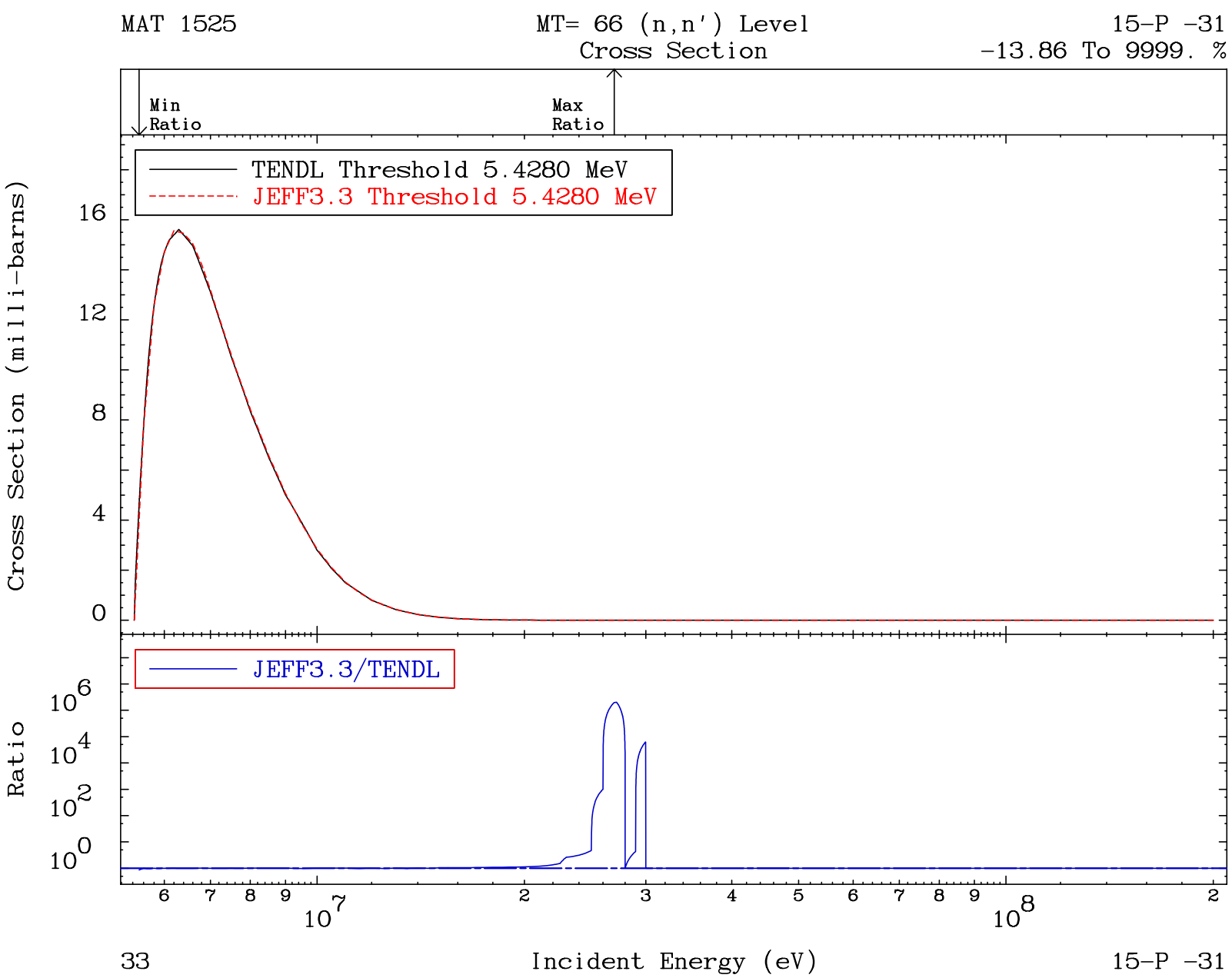

MAT 1525
MT= 61 (n,n') Level
Cross Section
15-P -31
-35.39 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.7851 MeV
JEFF3.3 Threshold 4.7851 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
15-P -31

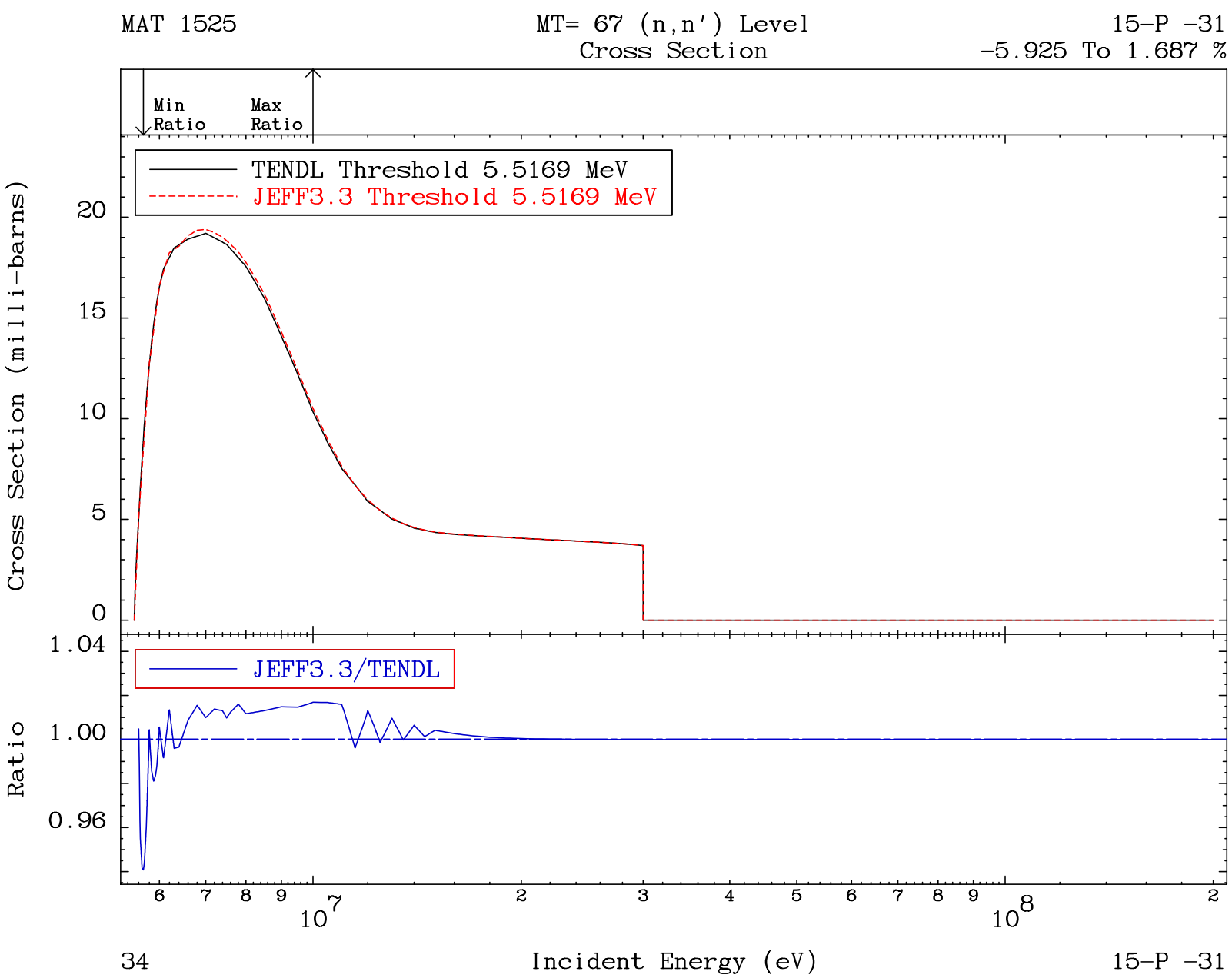

MAT 1525
MT= 62 (n,n') Level
Cross Section
15-P -31
-6.782 To 3.753 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.9392 MeV
JEFF3.3 Threshold 4.9392 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
15-P -31

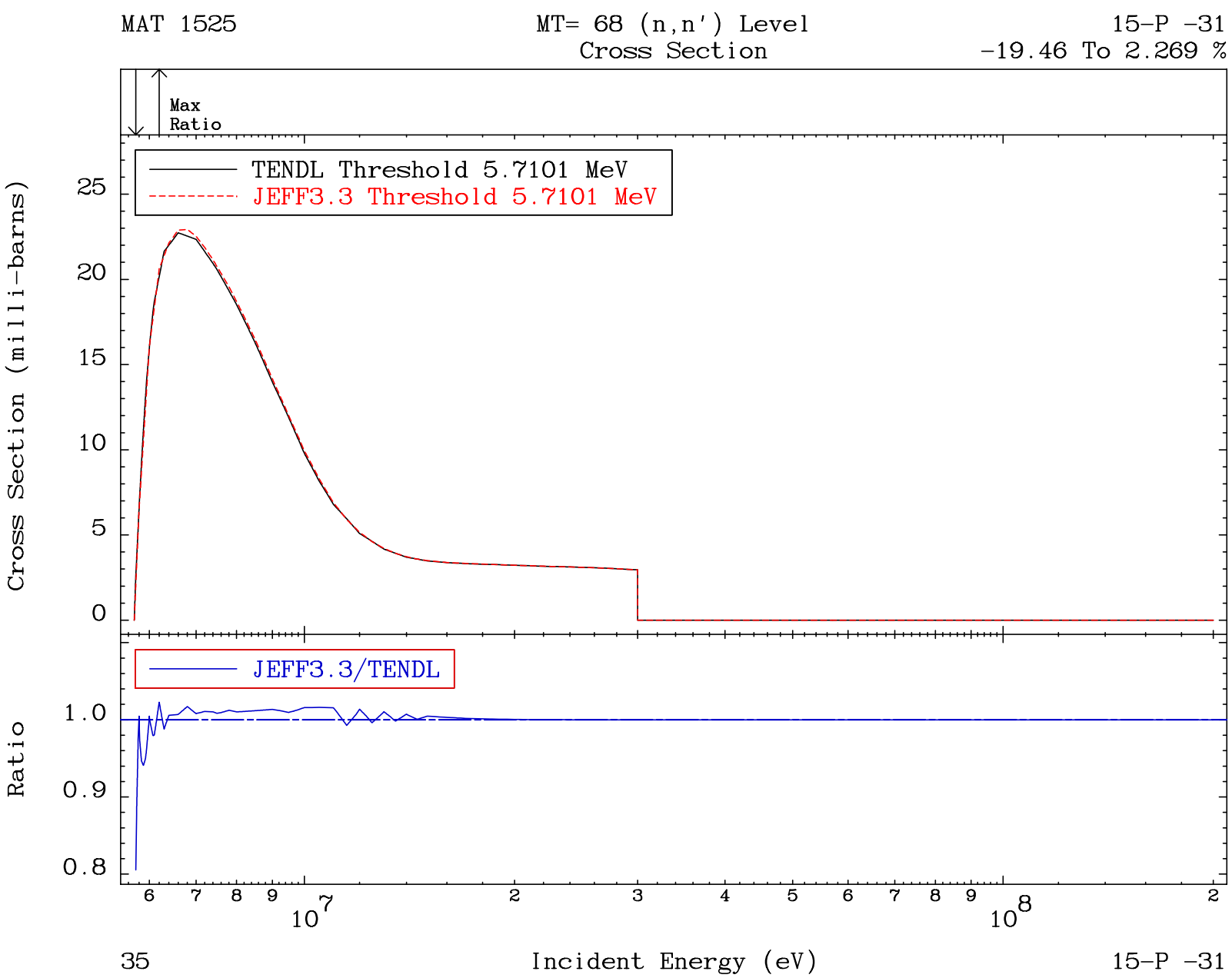

MAT 1525
MT= 63 (n,n') Level
Cross Section
15-P -31
-23.03 To 3.714 %
Min Ratio
Max Ratio
TENDL Threshold 5.1782 MeV
JEFF3.3 Threshold 5.1782 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
15-P -31

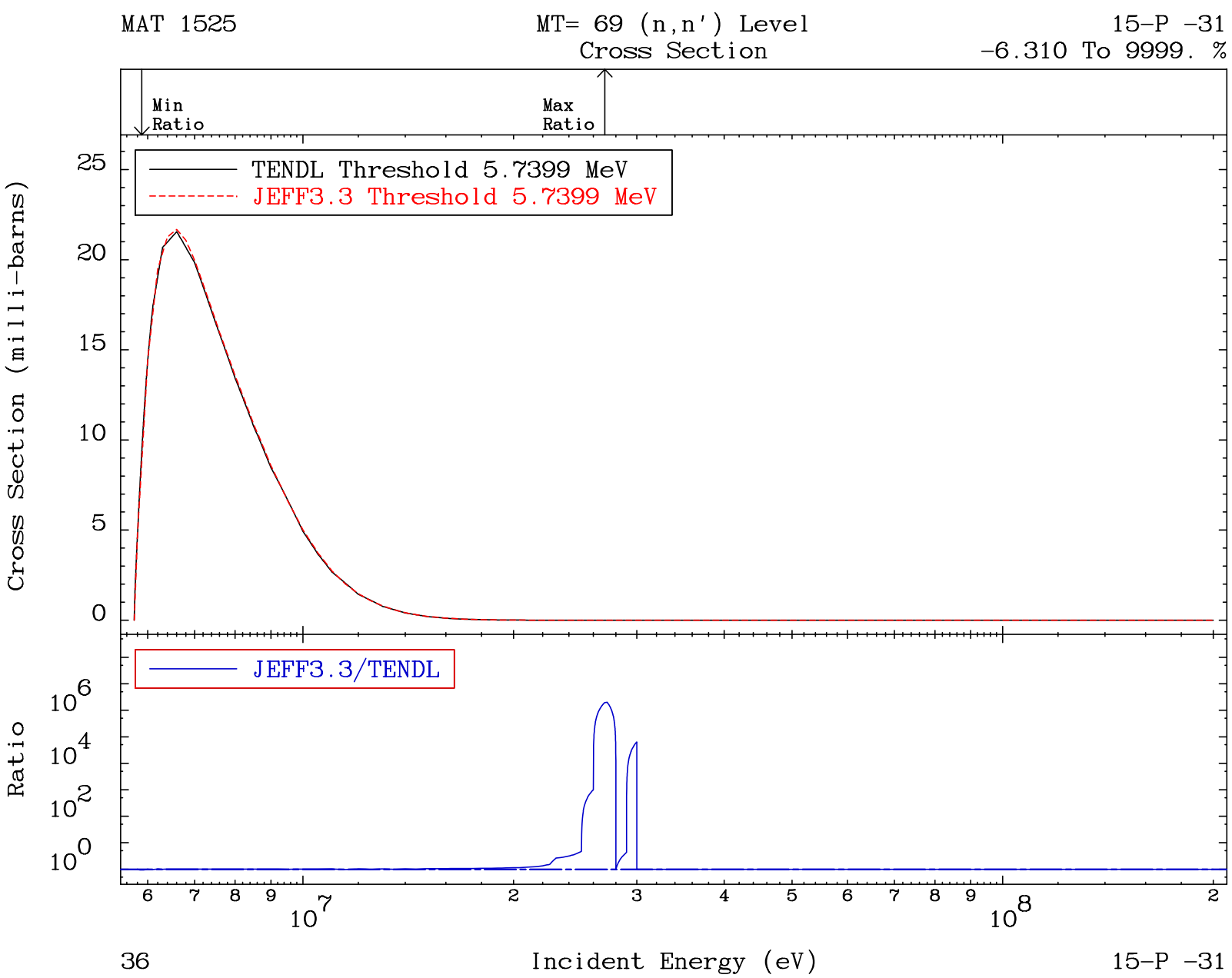

MAT 1525
MT= 64 (n,n') Level
Cross Section
15-P -31
-9.152 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 5.2306 MeV
JEFF3.3 Threshold 5.2306 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
15-P -31

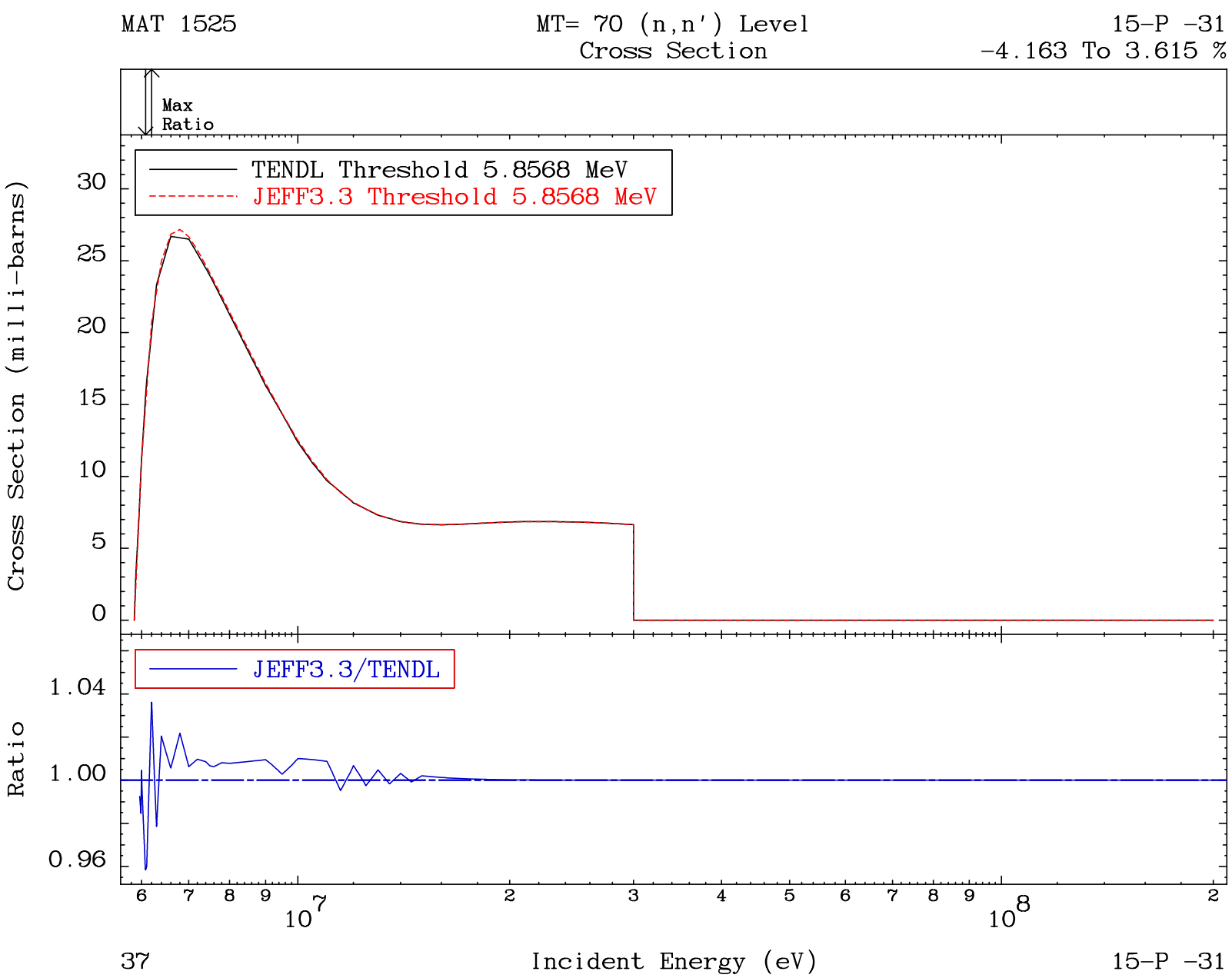

MAT 1525
MT= 65 (n,n') Level
Cross Section
15-P -31
-51.83 To 3.760 %
Min Ratio
Max Ratio
TENDL Threshold 5.2826 MeV
JEFF3.3 Threshold 5.2826 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
0.6
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
15-P -31

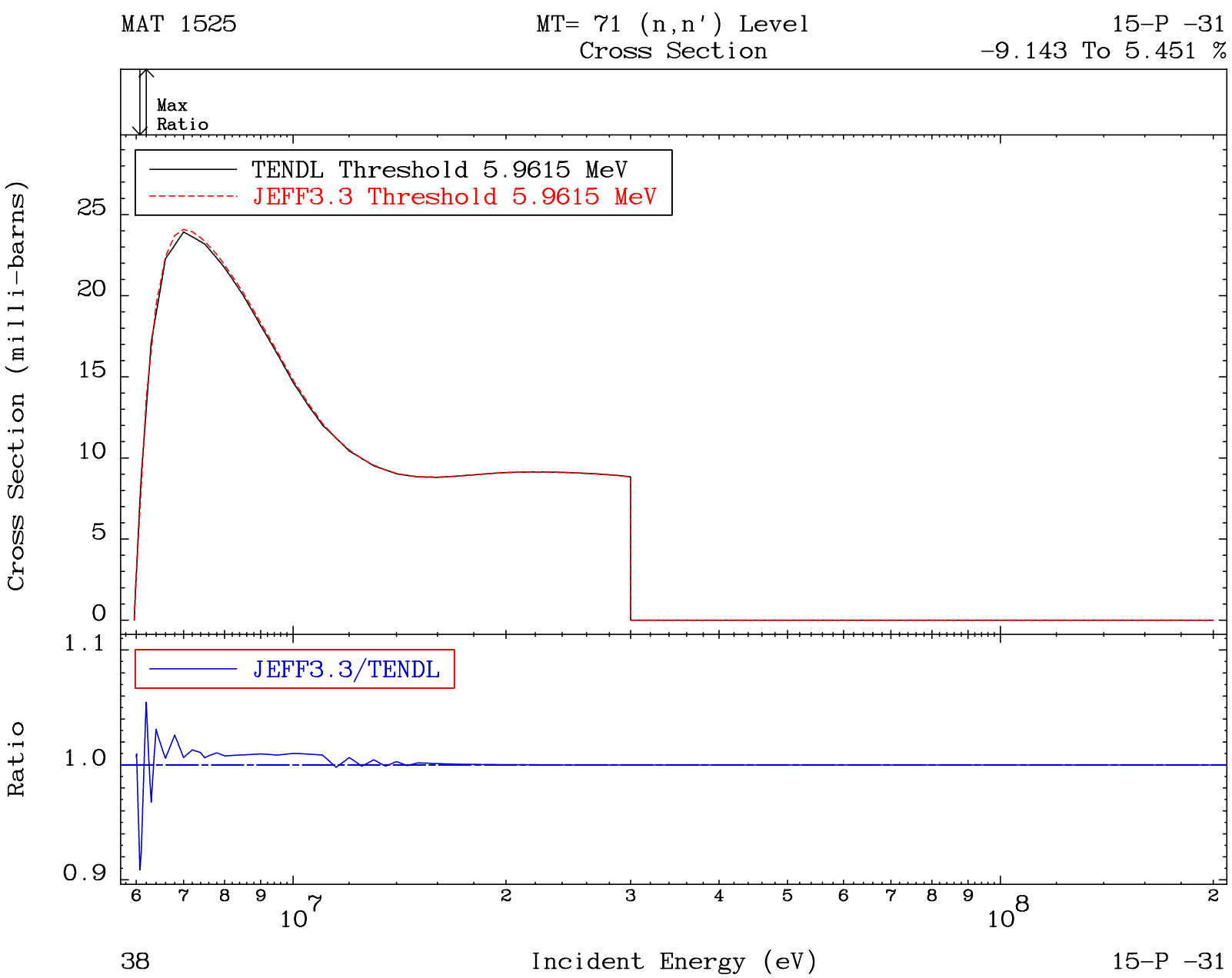

MAT 1525
MT= 66 (n,n') Level
Cross Section
15-P -31
-13.86 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 5.4280 MeV
JEFF3.3 Threshold 5.4280 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
33
Incident Energy (eV)
15-P -31

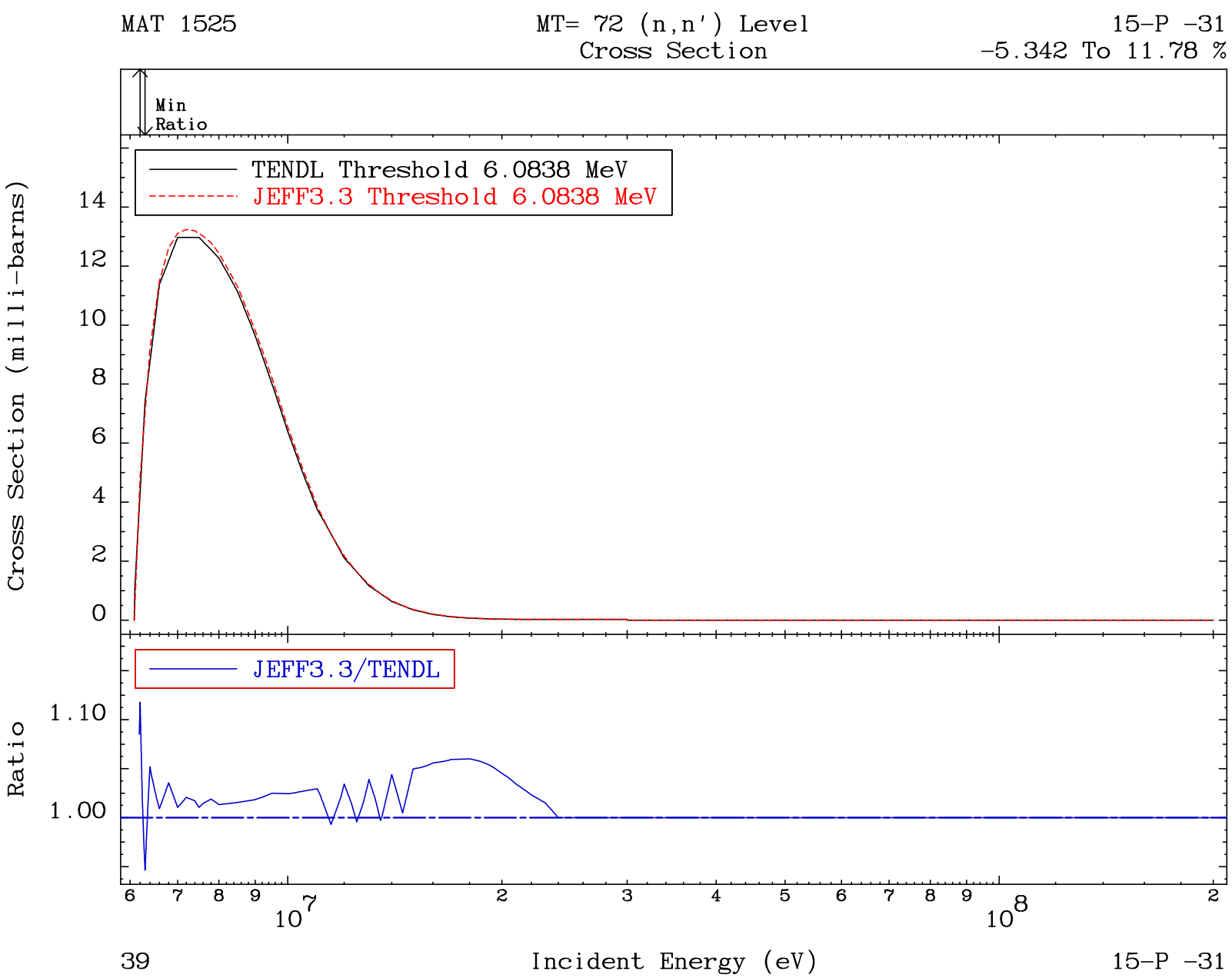

MAT 1525
MT= 67 (n,n') Level
Cross Section
15-P -31
-5.925 To 1.687 %
Min Ratio
Max Ratio
TENDL Threshold 5.5169 MeV
JEFF3.3 Threshold 5.5169 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.00
0.96
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
15-P -31

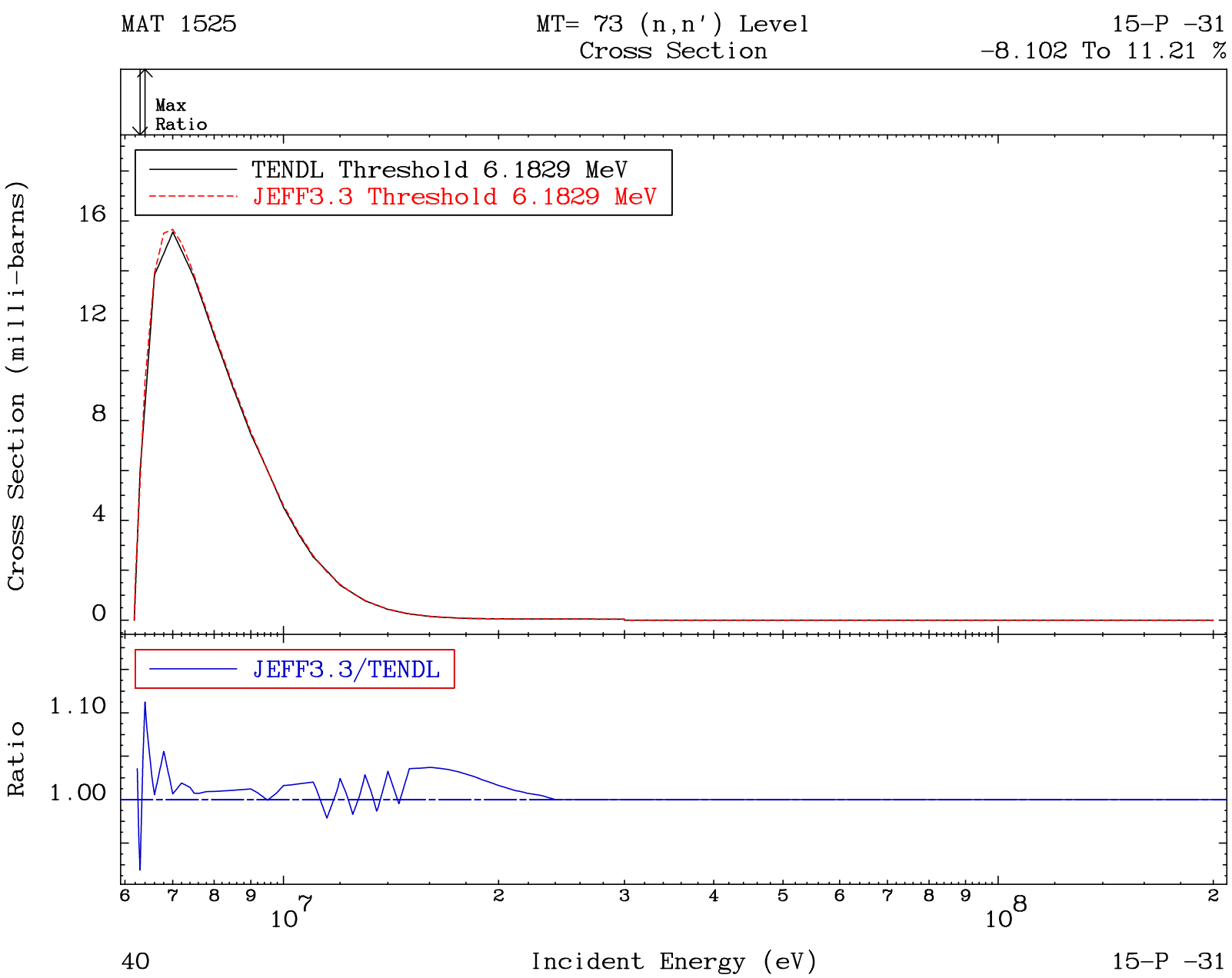

MAT 1525
MT= 68 (n,n') Level
Cross Section
15-P -31
-19.46 To 2.269 %
Max
Ratio
TENDL Threshold 5.7101 MeV
JEFF3.3 Threshold 5.7101 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
15-P -31

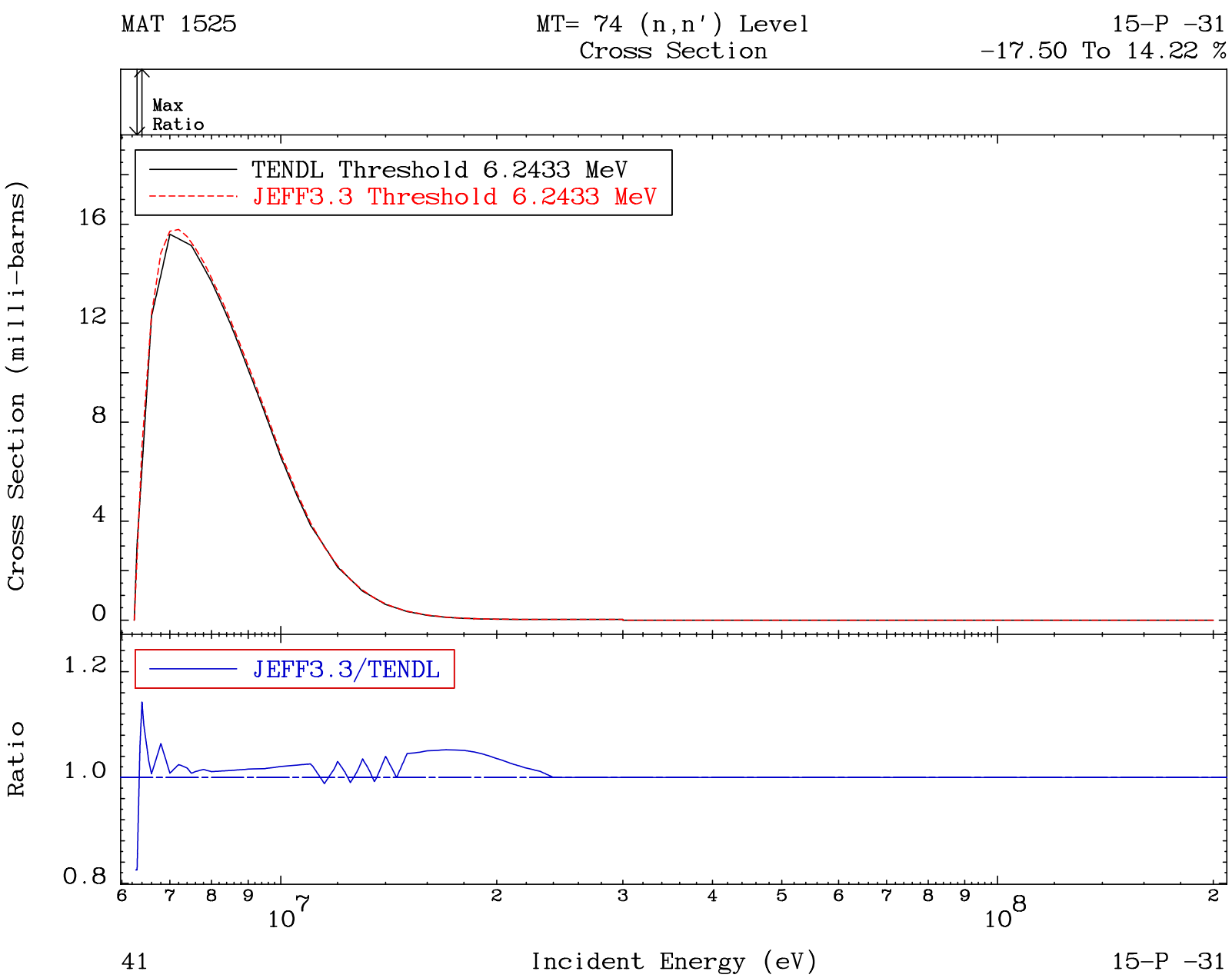

MAT 1525
MT= 69 (n,n') Level
Cross Section
15-P -31
-6.310 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 5.7399 MeV
JEFF3.3 Threshold 5.7399 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
15-P -31

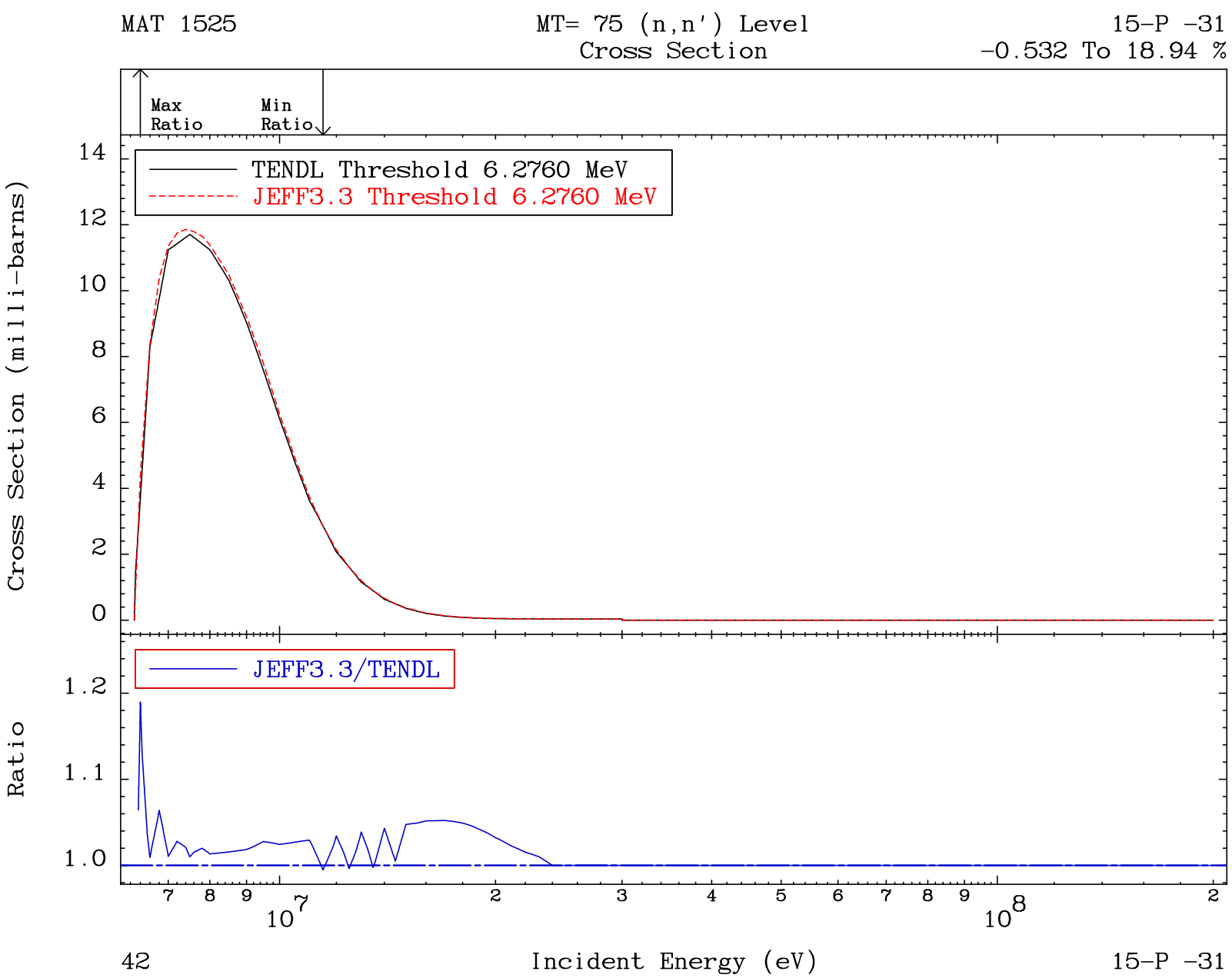

MAT 1525
MT= 70 (n,n') Level
Cross Section
15-P -31
-4.163 To 3.615 %
Max
Ratio
TENDL Threshold 5.8568 MeV
JEFF3.3 Threshold 5.8568 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.00
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
15-P -31

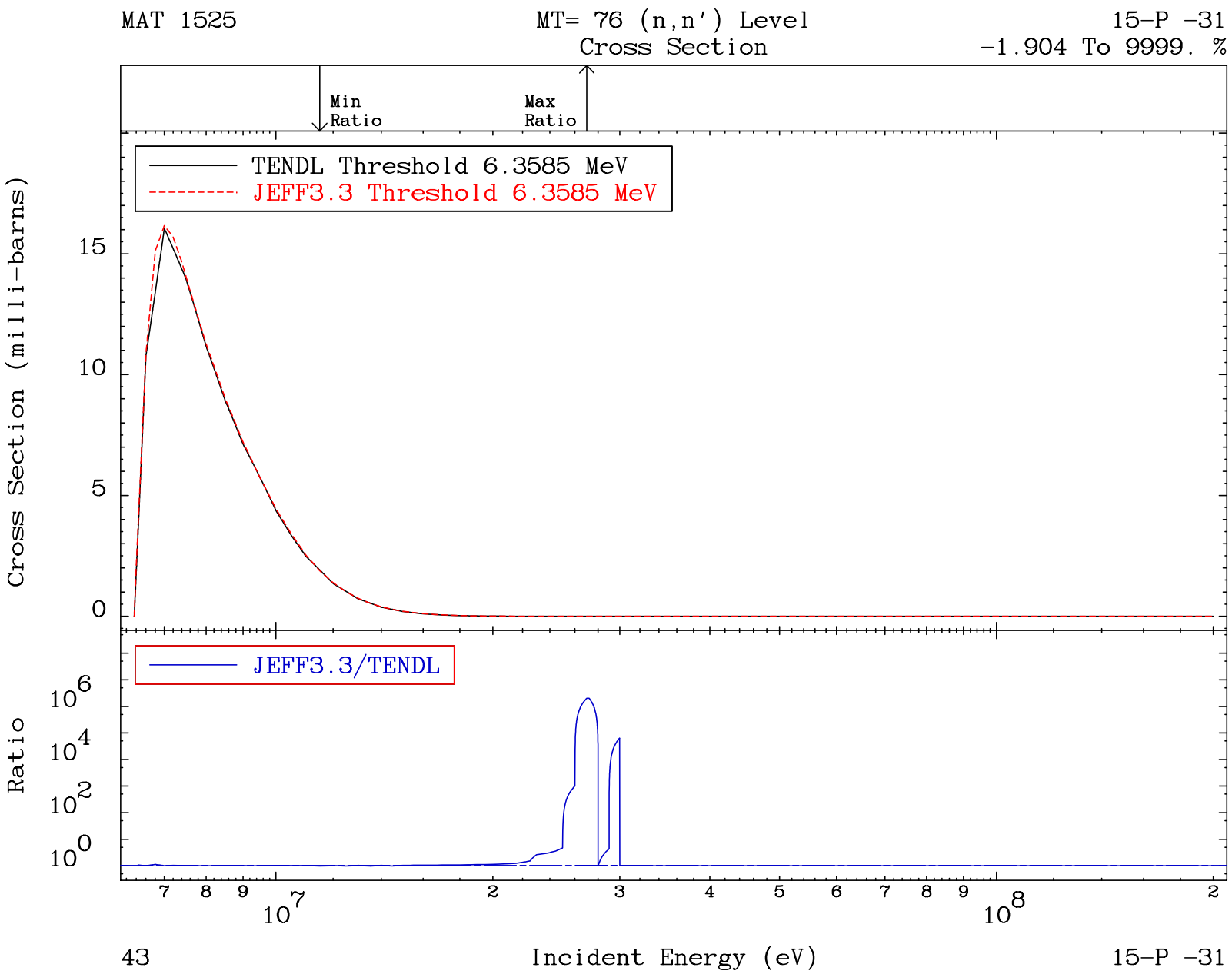

MAT 1525
MT= 71 (n,n') Level
Cross Section
15-P -31
-9.143 To 5.451 %
Max
Ratio
TENDL Threshold 5.9615 MeV
JEFF3.3 Threshold 5.9615 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
15-P -31

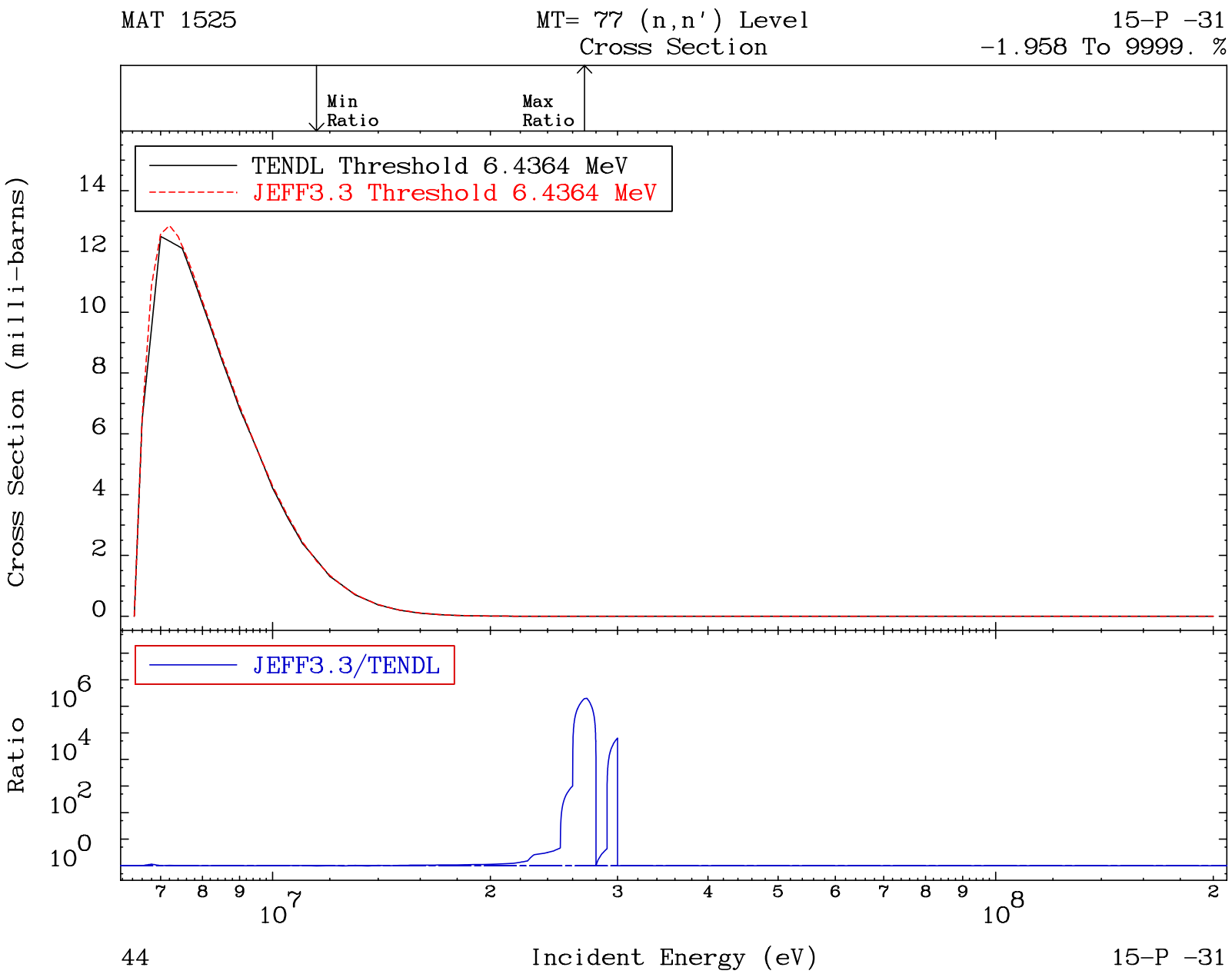

MAT 1525
MT= 72 (n,n') Level
Cross Section
15-P -31
-5.342 To 11.78 %
Min
Ratio
TENDL Threshold 6.0838 MeV
JEFF3.3 Threshold 6.0838 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.10
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
15-P -31

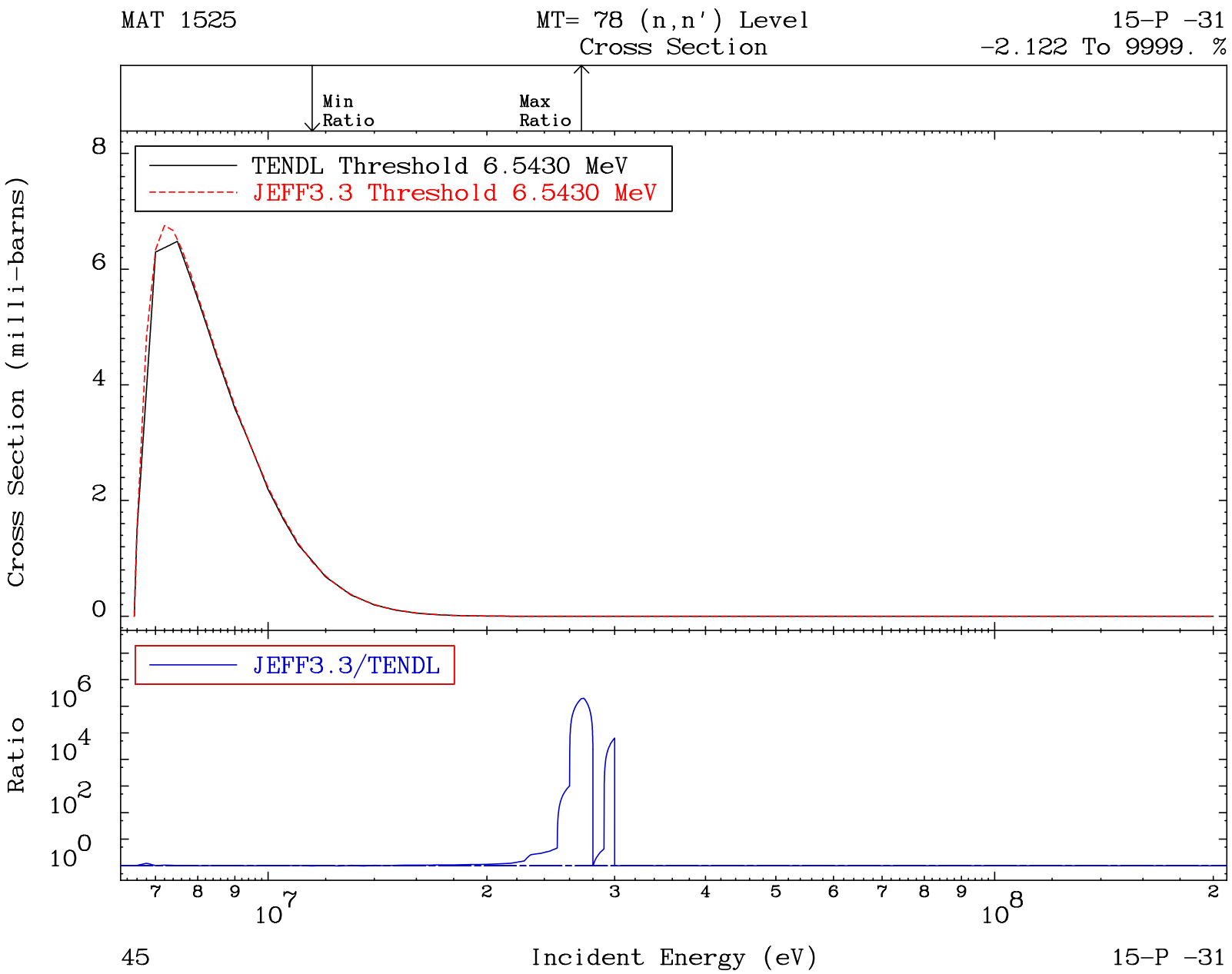

MAT 1525
MT= 73 (n,n') Level
Cross Section
15-P -31
-8.102 To 11.21 %
Max
Ratio
TENDL Threshold 6.1829 MeV
JEFF3.3 Threshold 6.1829 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.10
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
15-P -31

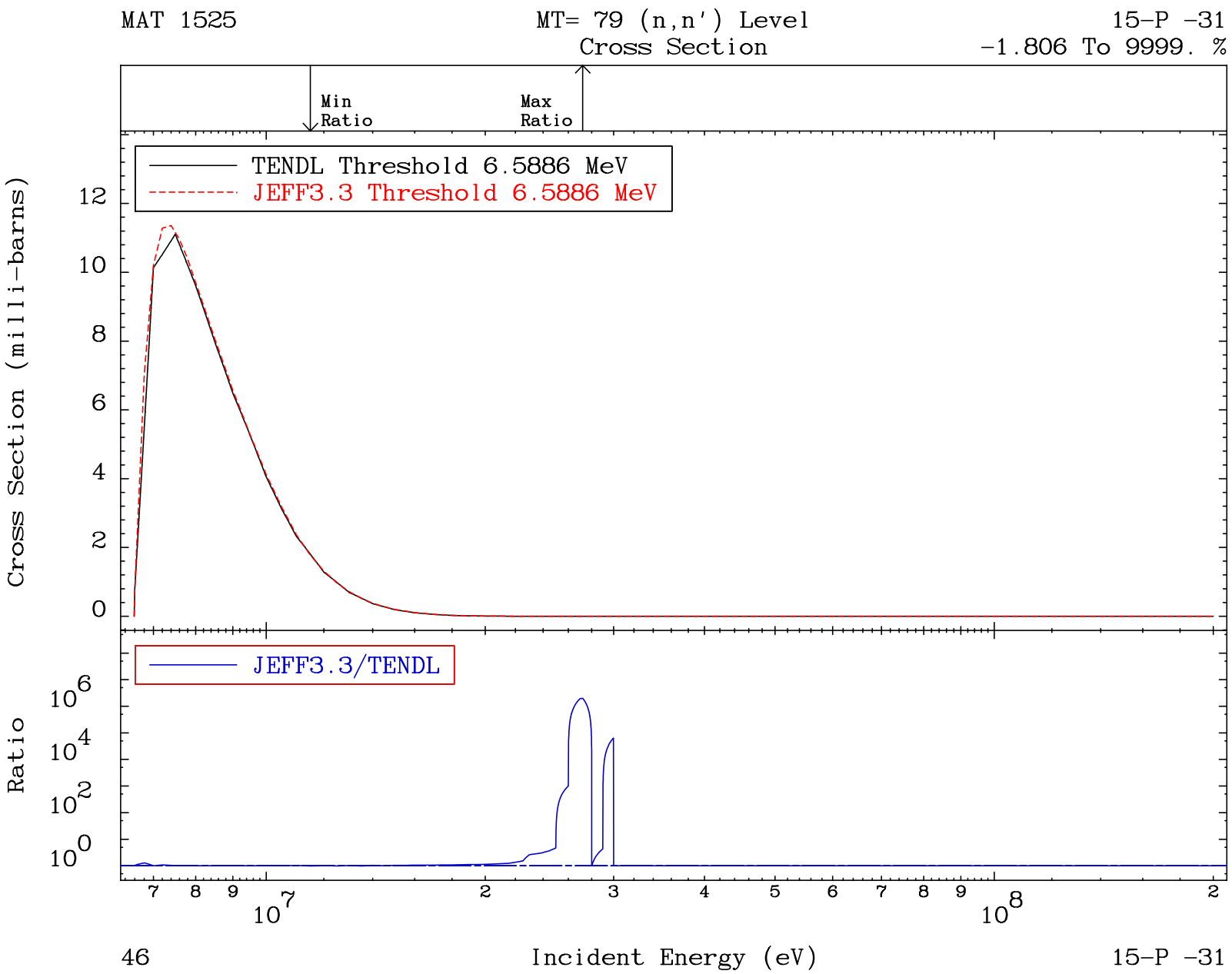

MAT 1525
MT= 74 (n,n') Level
Cross Section
15-P -31
-17.50 To 14.22 %
Max
Ratio
TENDL Threshold 6.2433 MeV
JEFF3.3 Threshold 6.2433 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
15-P -31

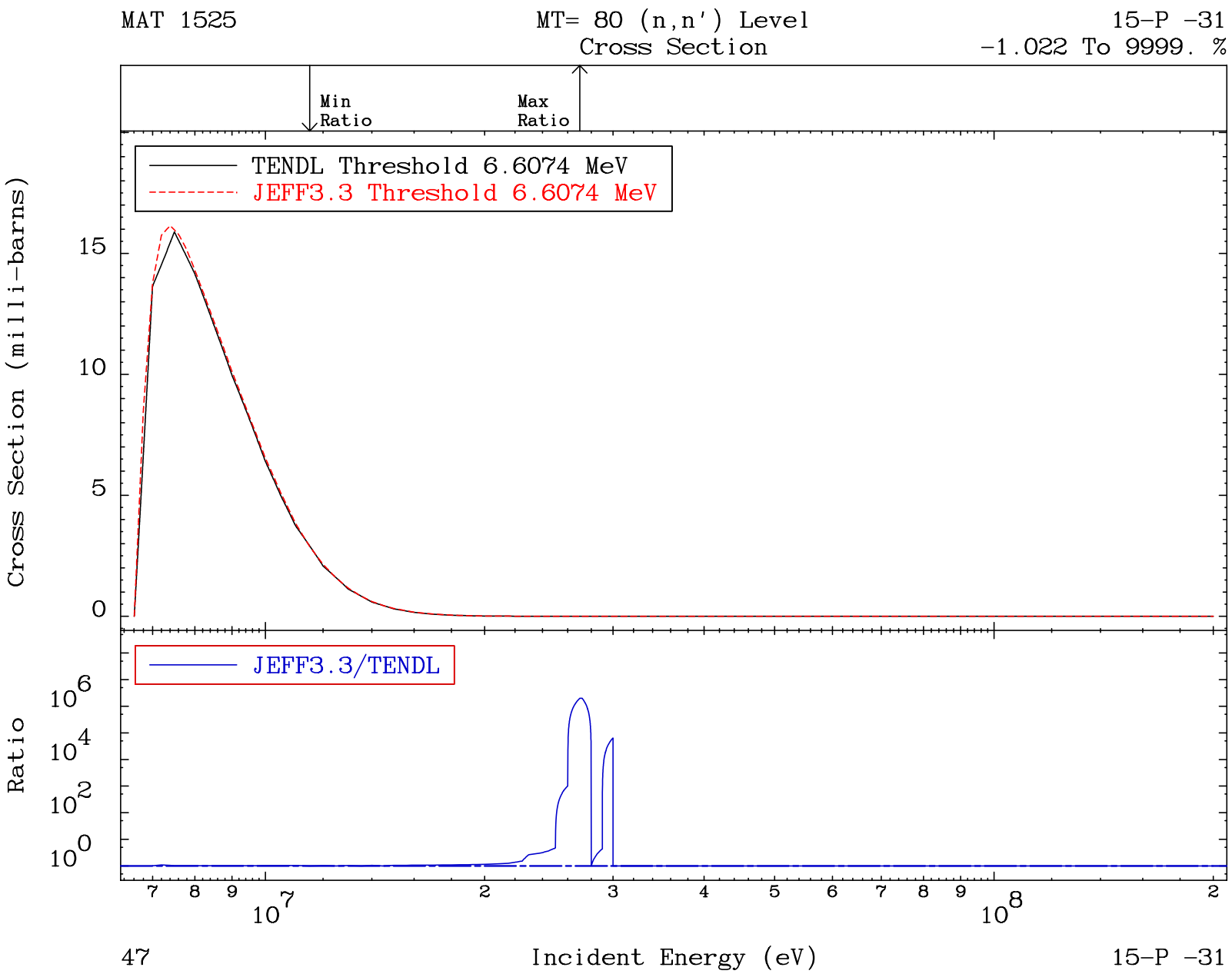

MAT 1525
MT= 75 (n,n') Level
Cross Section
15-P -31
-0.532 To 18.94 %
Max Ratio
Min Ratio
TENDL Threshold 6.2760 MeV
JEFF3.3 Threshold 6.2760 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
42
15-P -31

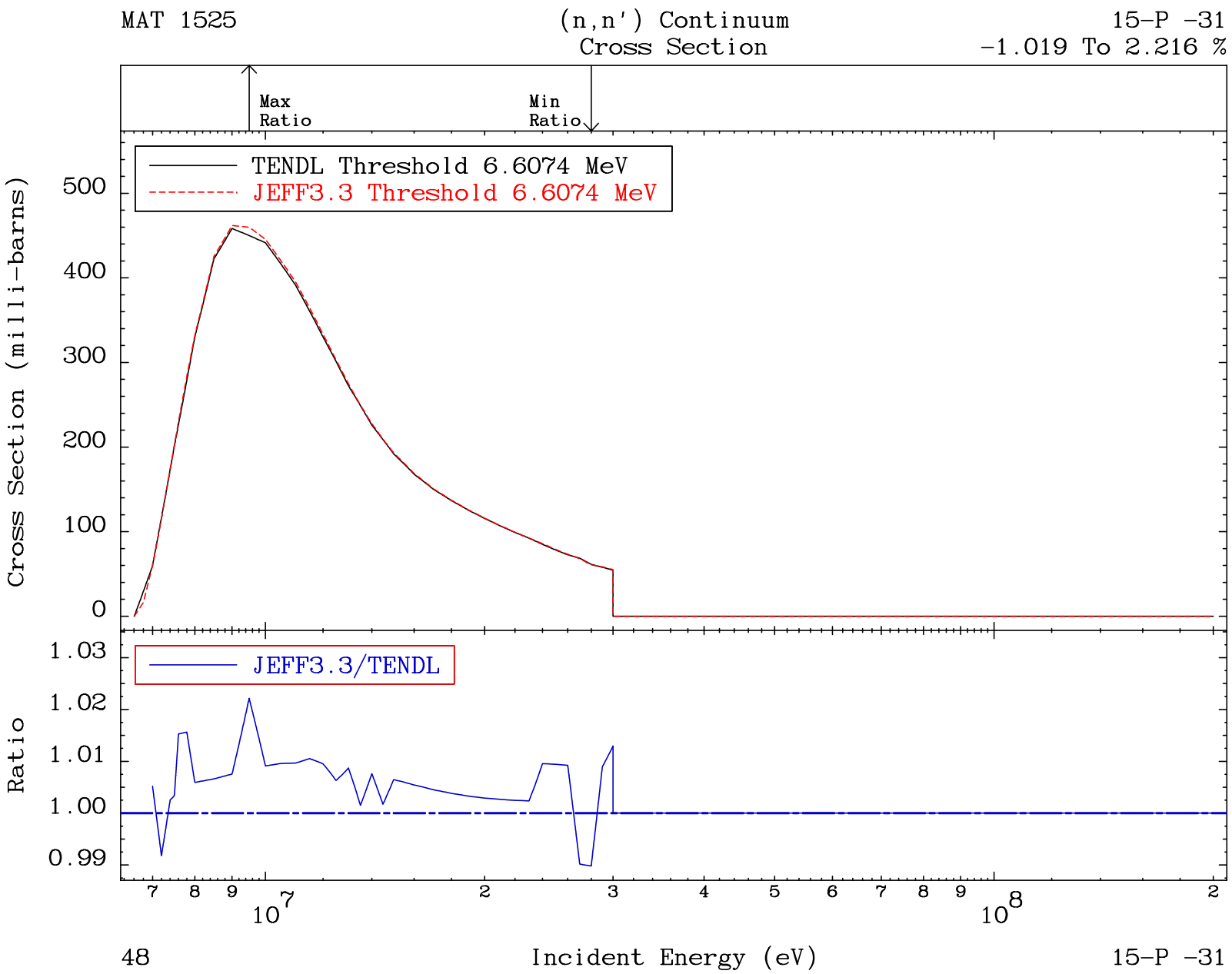

MAT 1525
MT= 76 (n,n') Level
Cross Section
15-P -31
-1.904 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3585 MeV
JEFF3.3 Threshold 6.3585 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
15-P -31

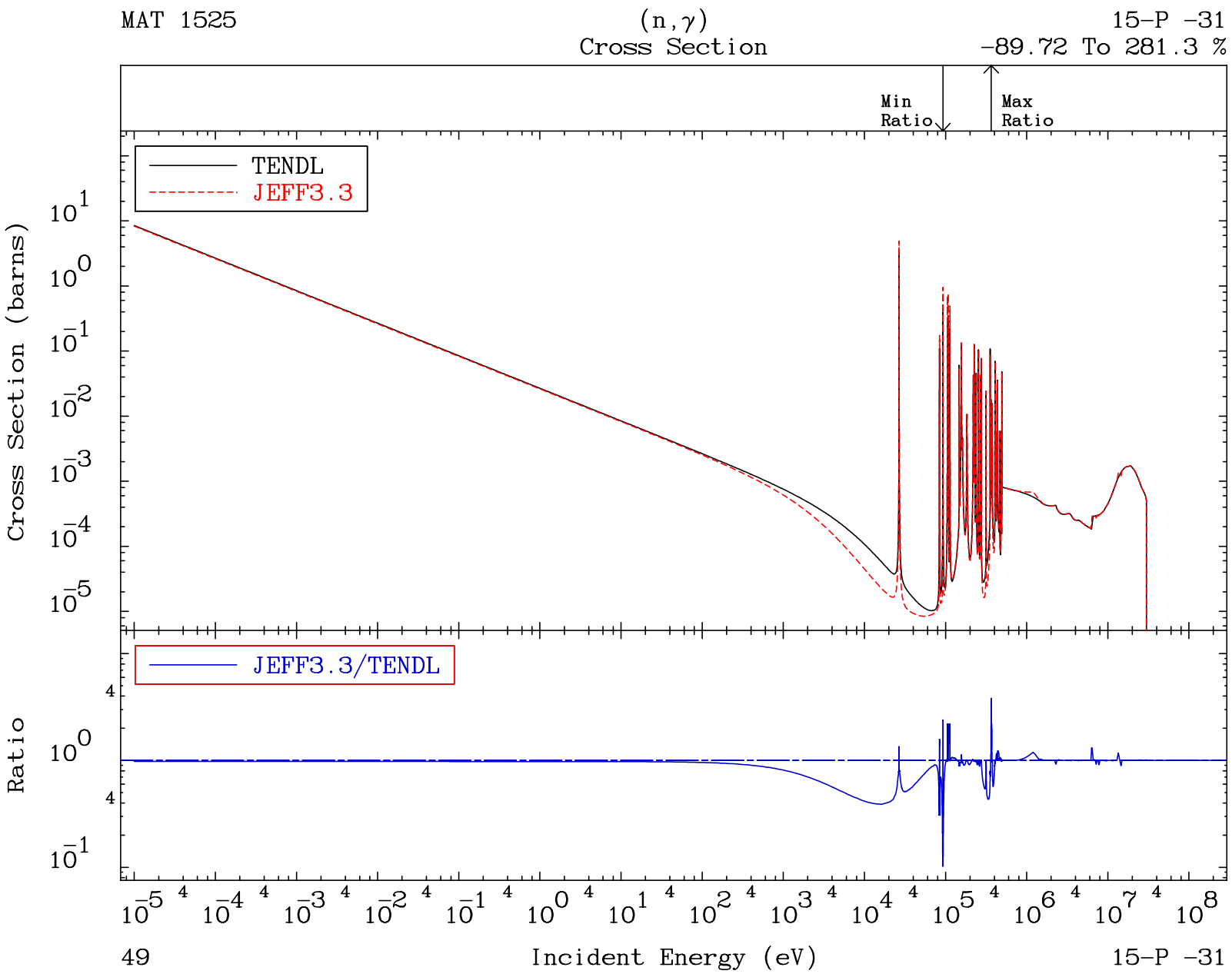

MAT 1525
MT= 77 (n,n') Level
Cross Section
15-P -31
-1.958 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.4364 MeV
JEFF3.3 Threshold 6.4364 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
44
15-P -31

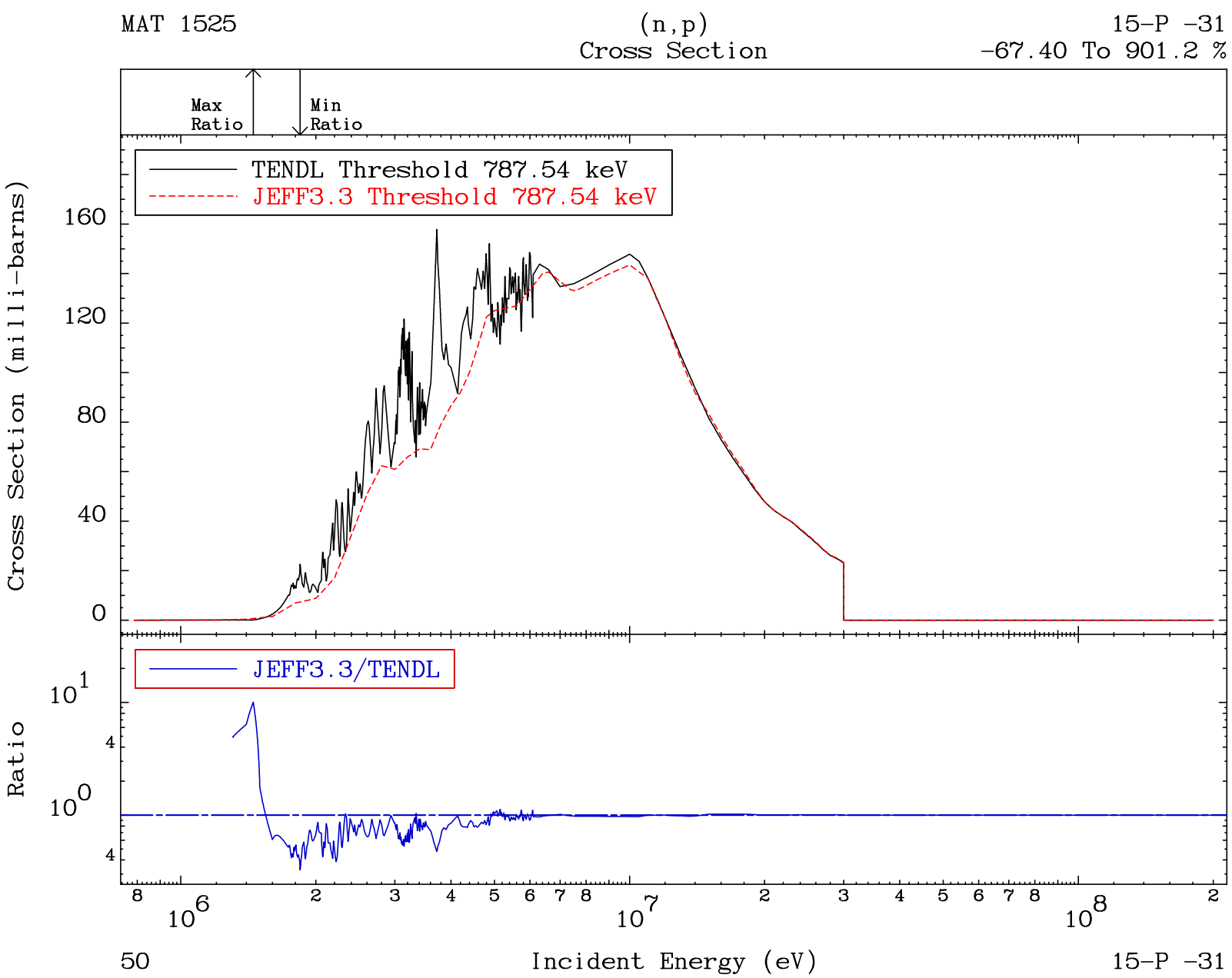

MAT 1525
MT= 78 (n,n') Level
Cross Section
15-P -31
-2.122 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 6.5430 MeV
JEFF3.3 Threshold 6.5430 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
15-P -31

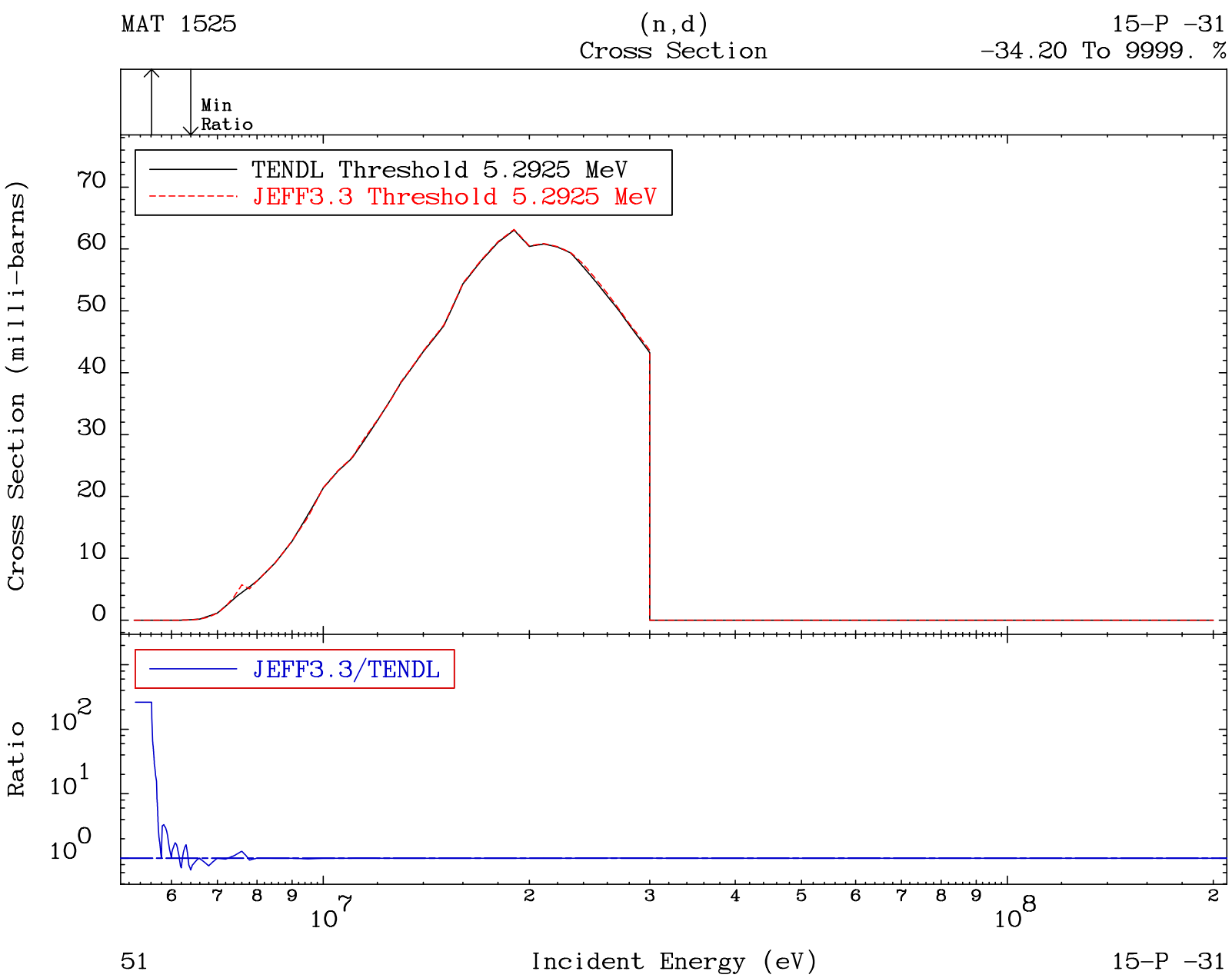

MAT 1525
MT= 79 (n,n') Level
Cross Section
15-P -31
-1.806 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 6.5886 MeV
JEFF3.3 Threshold 6.5886 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
10^0
10^2
10^4
10^6
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
46
Incident Energy (eV)
15-P -31

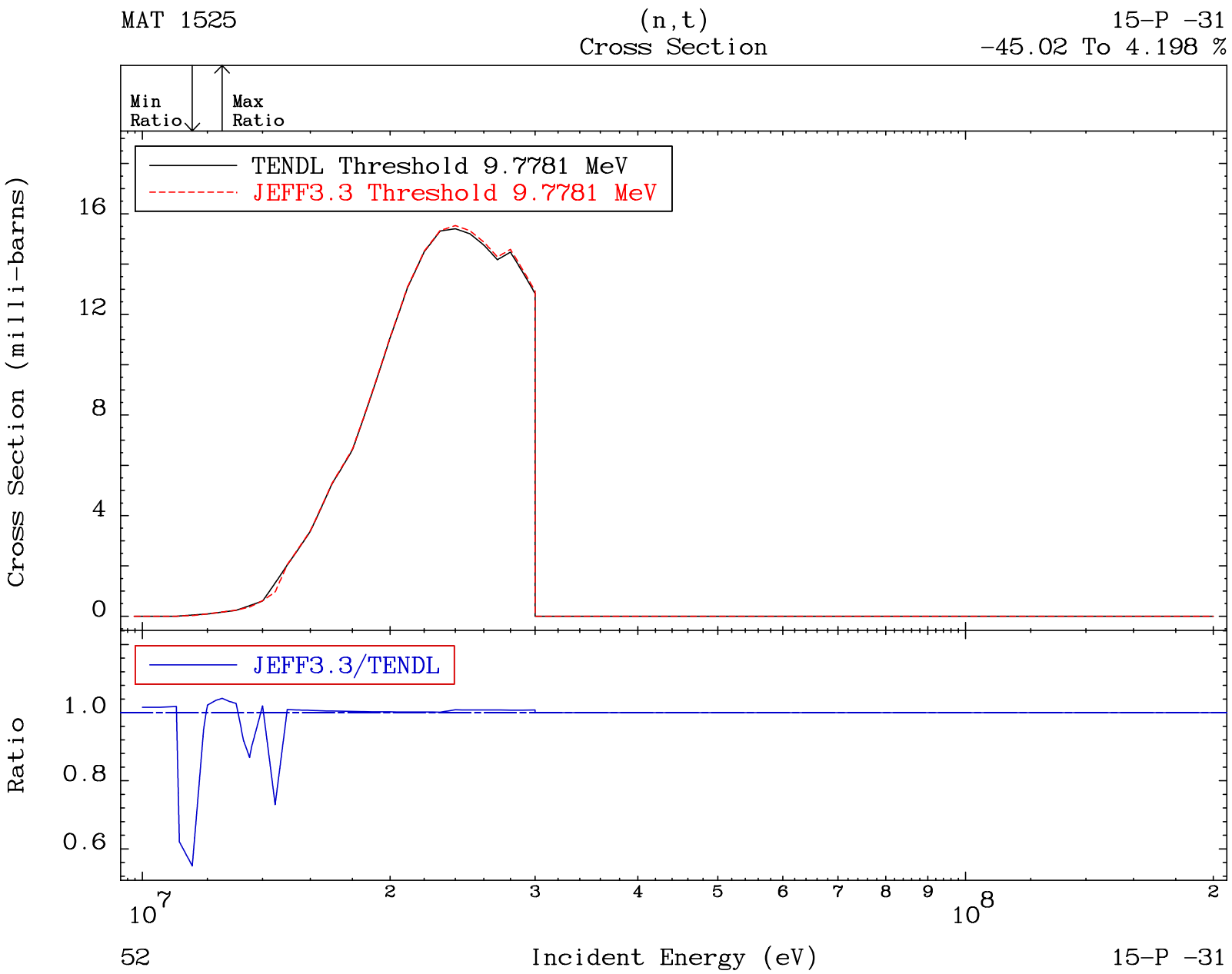

MAT 1525
MT= 80 (n,n') Level
Cross Section
15-P -31
-1.022 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.6074 MeV
JEFF3.3 Threshold 6.6074 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
15-P -31

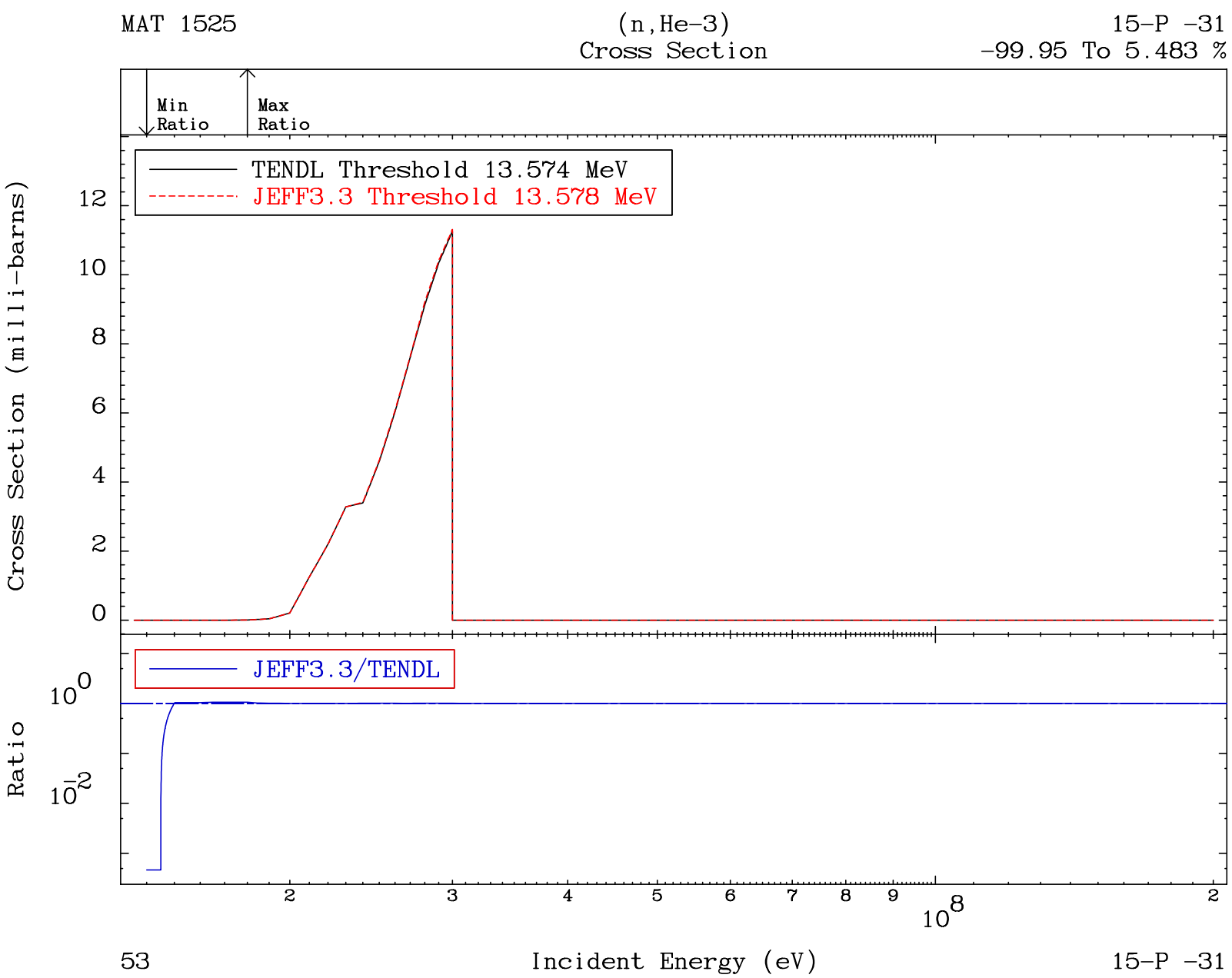

MAT 1525
(n,n') Continuum
Cross Section
15-P -31
-1.019 To 2.216 %
Max Ratio
Min Ratio
TENDL Threshold 6.6074 MeV
JEFF3.3 Threshold 6.6074 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
15-P -31

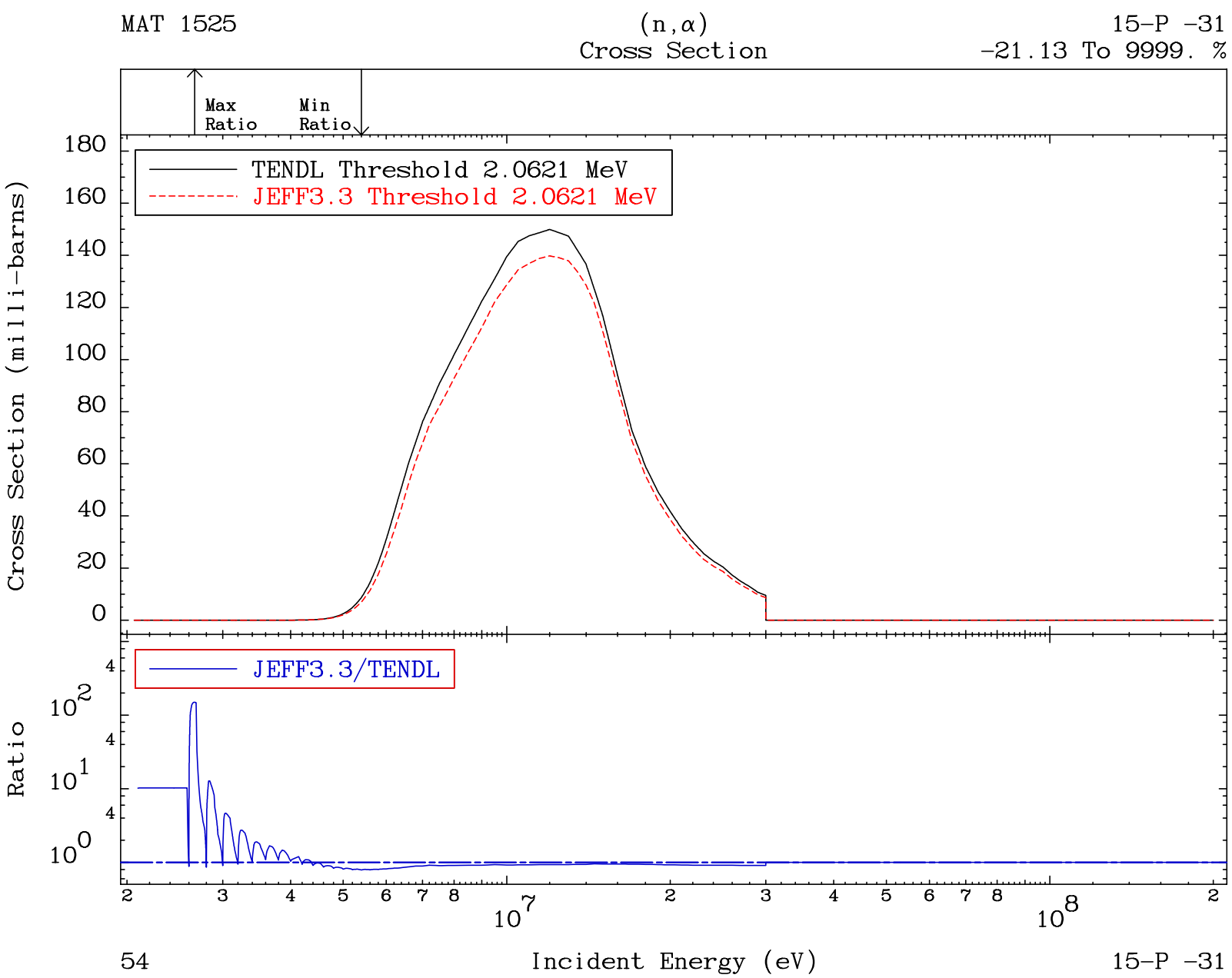

MAT 1525
(n,γ)
Cross Section
15-P -31
-89.72 To 281.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
15-P -31

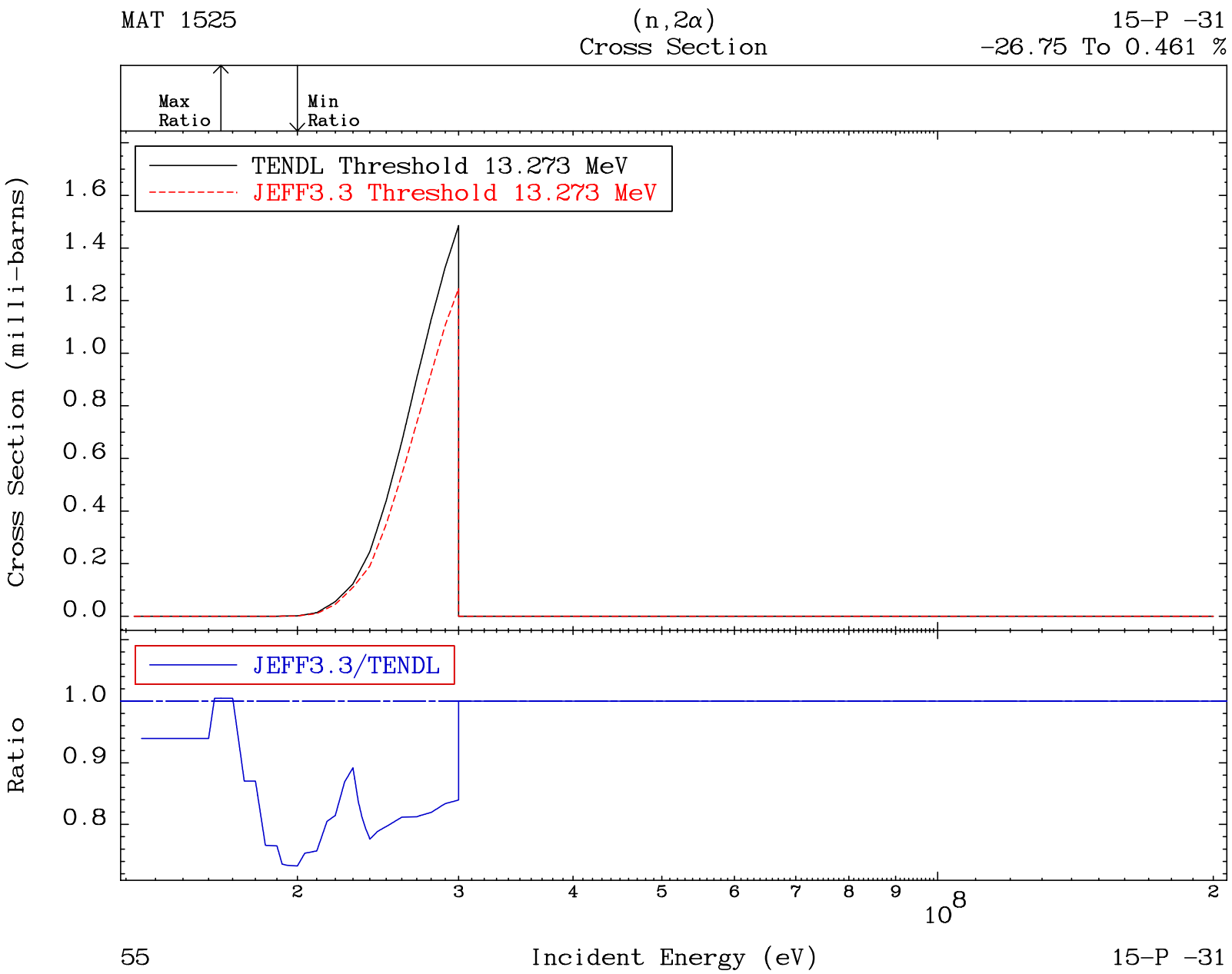

MAT 1525
(n,p)
Cross Section
15-P -31
-67.40 To 901.2 %
Max Ratio
Min Ratio
TENDL Threshold 787.54 keV
JEFF3.3 Threshold 787.54 keV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
10^1
4
10^0
4
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
50
Incident Energy (eV)
15-P -31

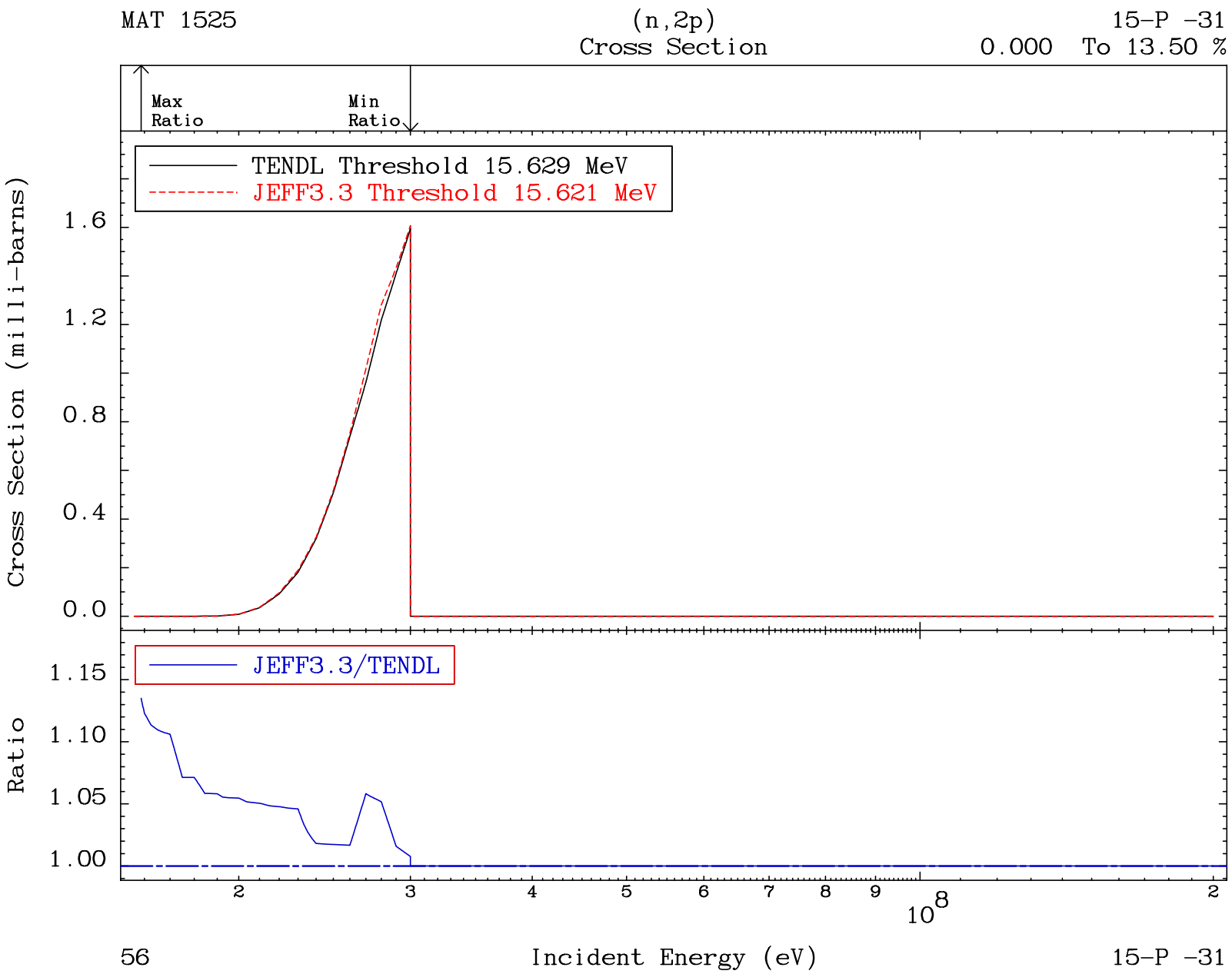

MAT 1525
(n,d)
Cross Section
15-P -31
-34.20 To 9999. %
Min
Ratio
TENDL Threshold 5.2925 MeV
JEFF3.3 Threshold 5.2925 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
51
Incident Energy (eV)
15-P -31

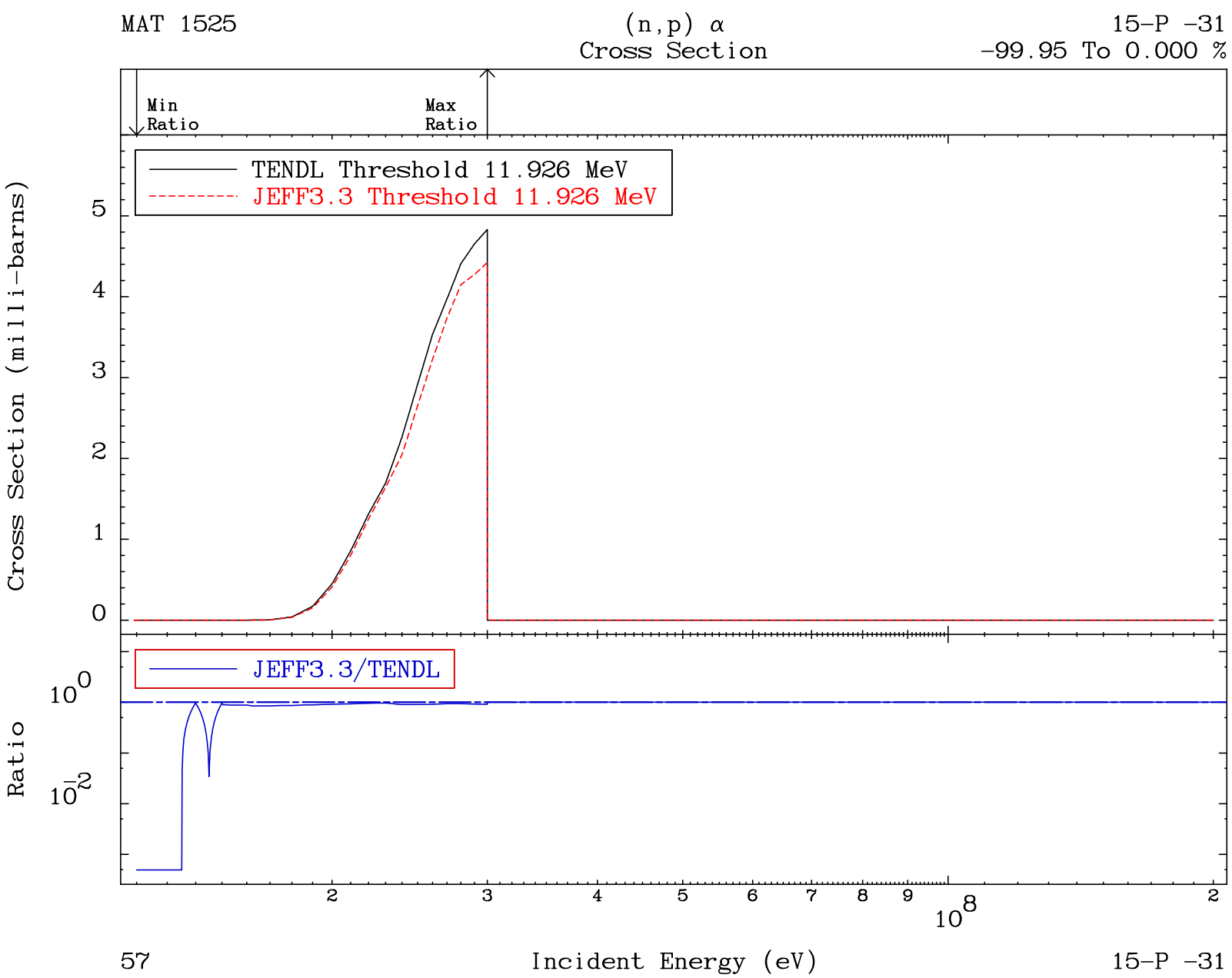

MAT 1525
(n,t)
Cross Section
15-P -31
-45.02 To 4.198 %
Min Ratio
Max Ratio
TENDL Threshold 9.7781 MeV
JEFF3.3 Threshold 9.7781 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.0
0.8
0.6
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
15-P -31

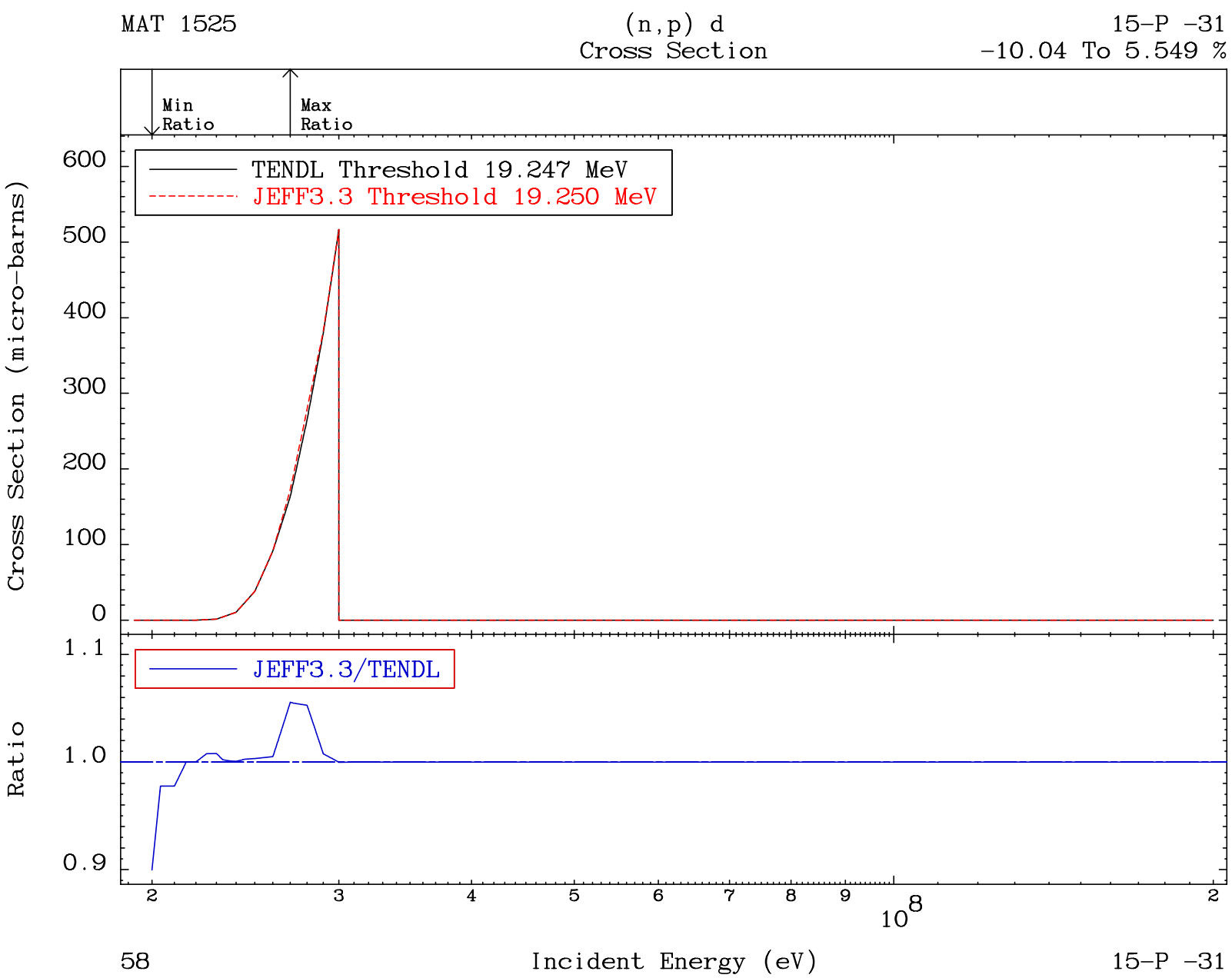

MAT 1525
(n,He-3)
Cross Section
15-P -31
-99.95 To 5.483 %
Min Ratio
Max Ratio
TENDL Threshold 13.574 MeV
JEFF3.3 Threshold 13.578 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
15-P -31

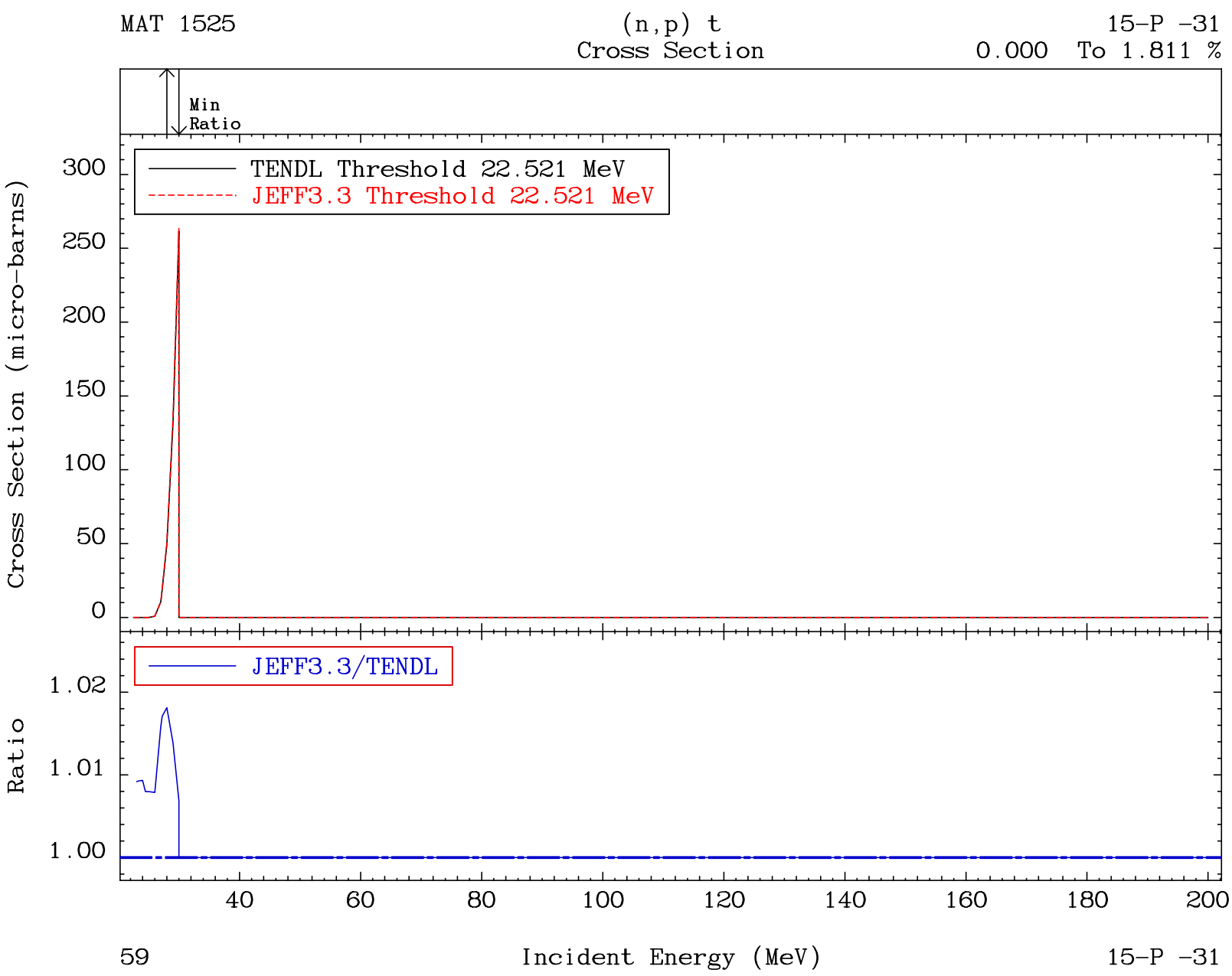

MAT 1525
(n,α)
Cross Section
15-P -31
-21.13 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0621 MeV
JEFF3.3 Threshold 2.0621 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
54
Incident Energy (eV)
15-P -31

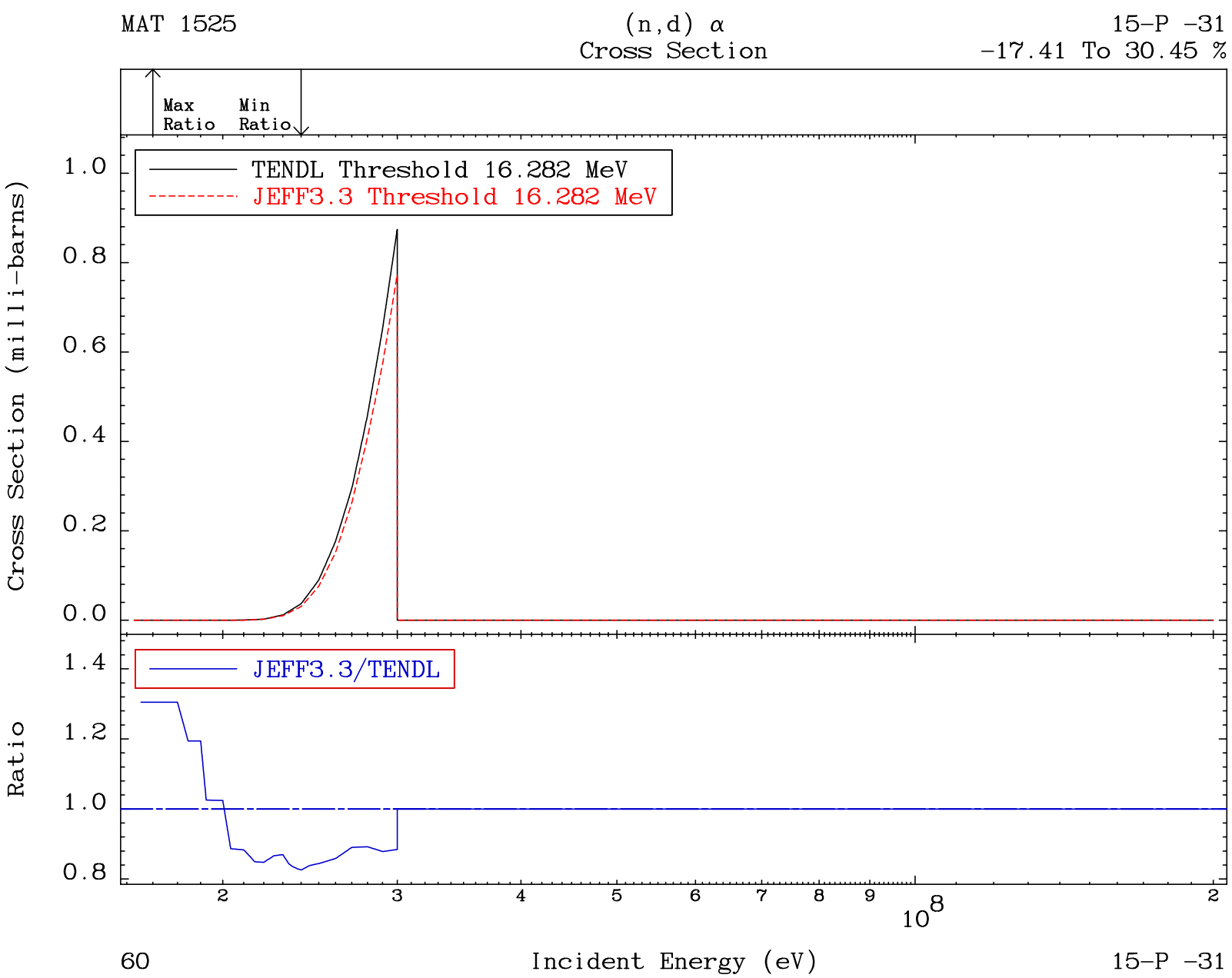

MAT 1525
(n,2α)
Cross Section
15-P -31
-26.75 To 0.461 %
Max Ratio
Min Ratio
TENDL Threshold 13.273 MeV
JEFF3.3 Threshold 13.273 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
15-P -31

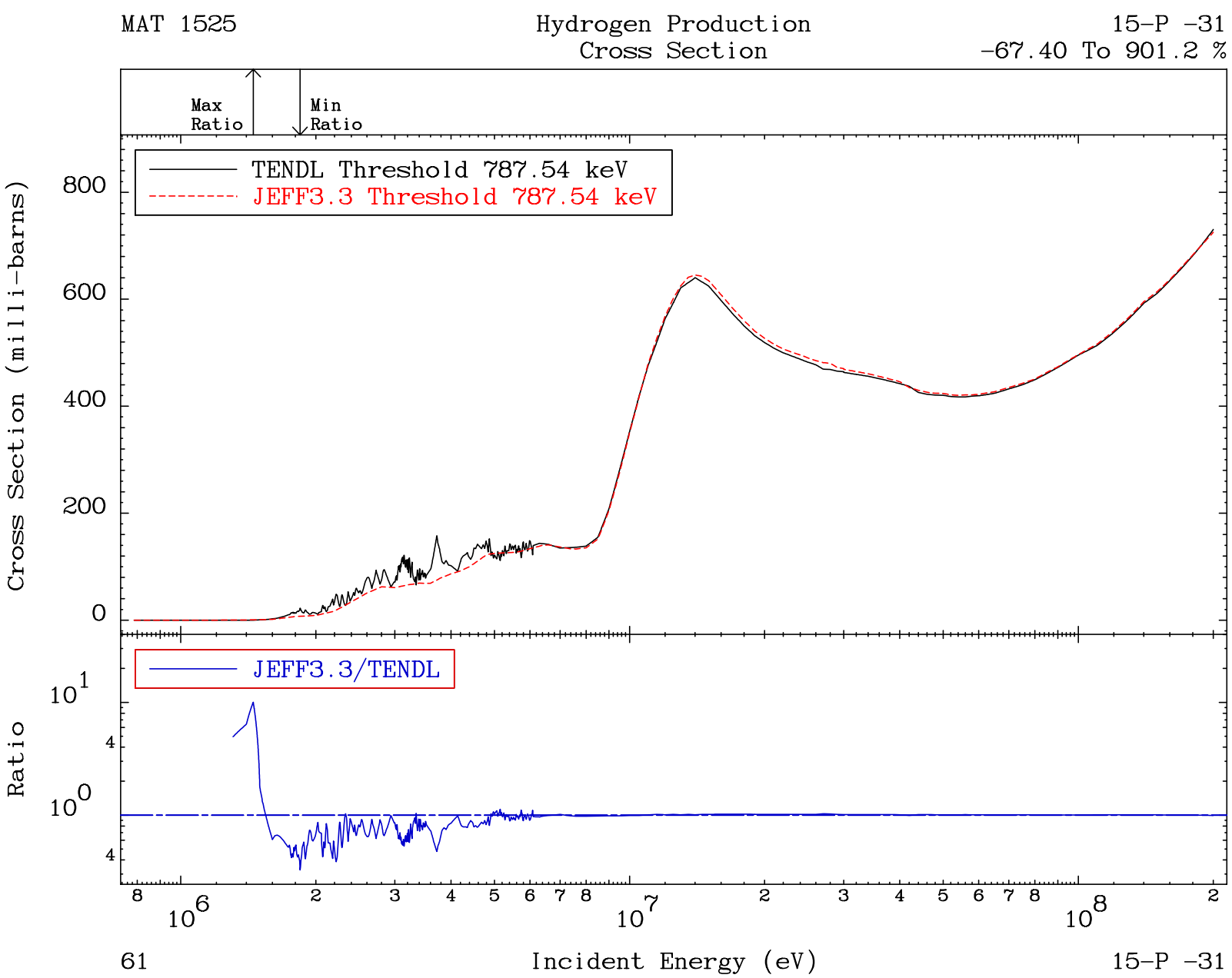

MAT 1525
(n,2p)
Cross Section
15-P -31
0.000 To 13.50 %
Max Ratio
Min Ratio
TENDL Threshold 15.629 MeV
JEFF3.3 Threshold 15.621 MeV
Cross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
15-P -31

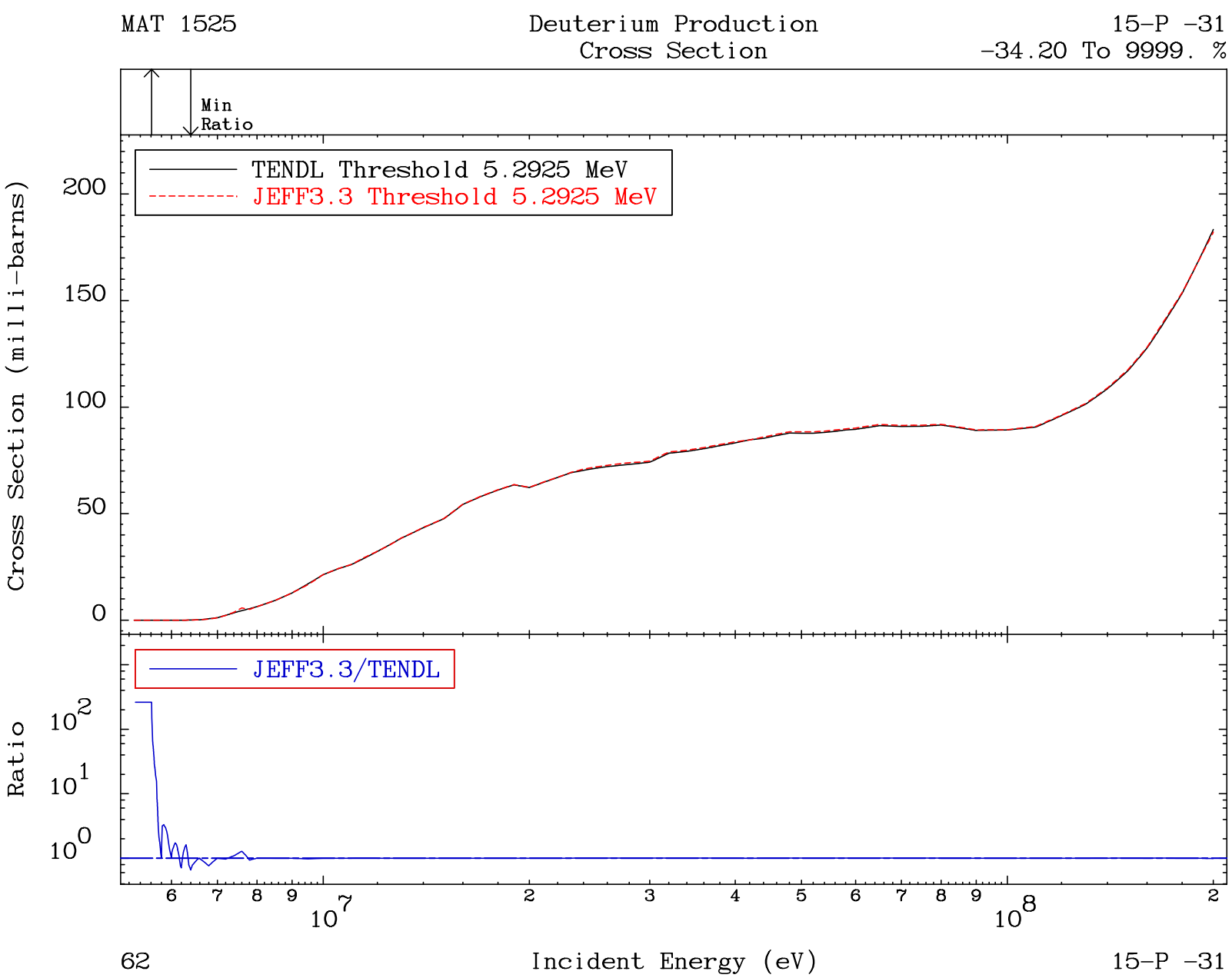

MAT 1525
(n,p) α
Cross Section
15-P -31
-99.95 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.926 MeV
JEFF3.3 Threshold 11.926 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
15-P -31

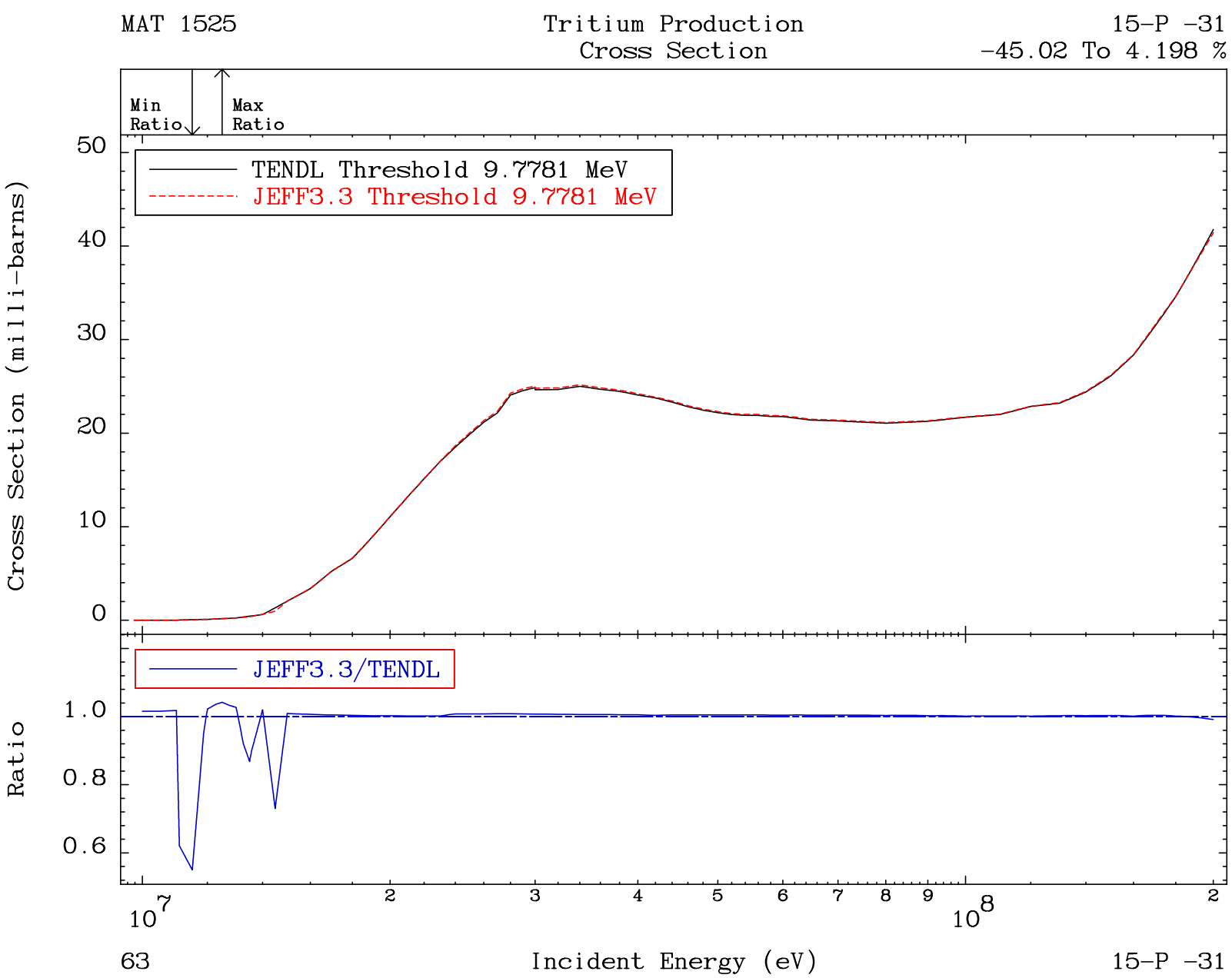

MAT 1525
(n,p) d
Cross Section
15-P -31
-10.04 To 5.549 %
Min Ratio
Max Ratio
TENDL Threshold 19.247 MeV
JEFF3.3 Threshold 19.250 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
15-P -31

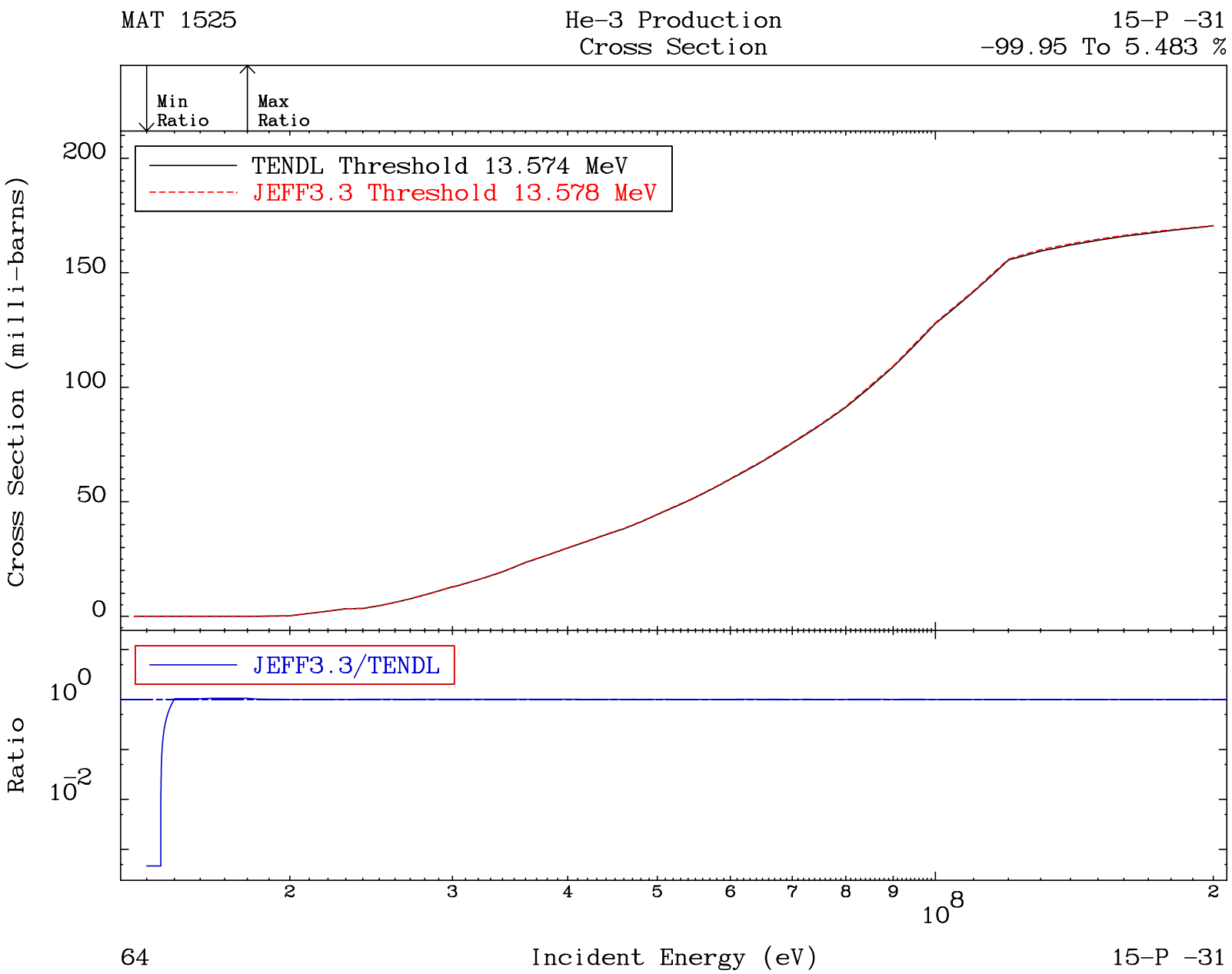

MAT 1525
(n,p) t
Cross Section
15-P -31
0.000 To 1.811 %
Min
Ratio
TENDL Threshold 22.521 MeV
JEFF3.3 Threshold 22.521 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
59
Incident Energy (MeV)
15-P -31

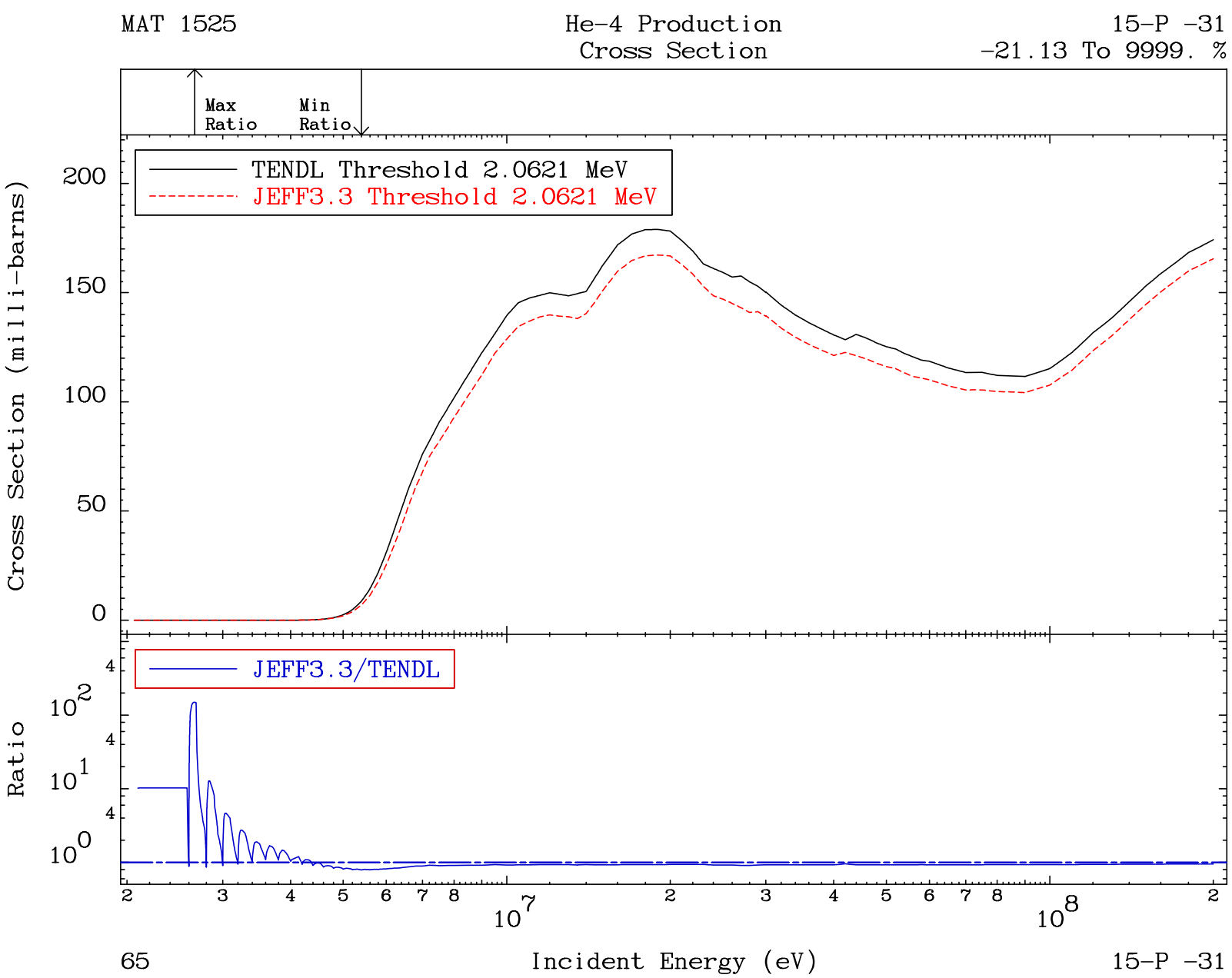

MAT 1525
(n,d) α
Cross Section
15-P -31
-17.41 To 30.45 %
Max Ratio
Min Ratio
TENDL Threshold 16.282 MeV
JEFF3.3 Threshold 16.282 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
15-P -31

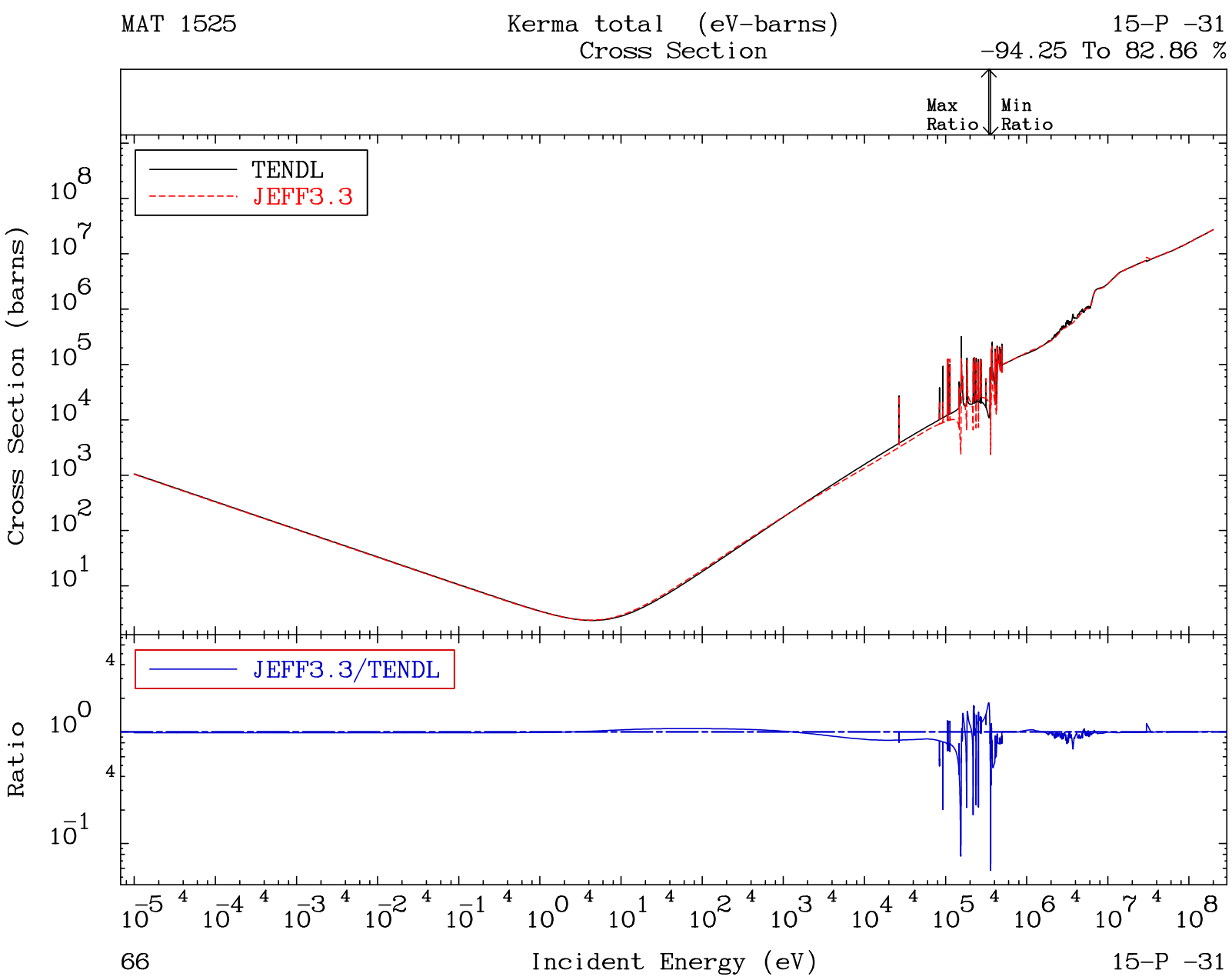

MAT 1525
Hydrogen Production
Cross Section
15-P -31
-67.40 To 901.2 %
Max Ratio
Min Ratio
TENDL Threshold 787.54 keV
JEFF3.3 Threshold 787.54 keV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
10^1
4
10^0
4
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
61
Incident Energy (eV)
15-P -31

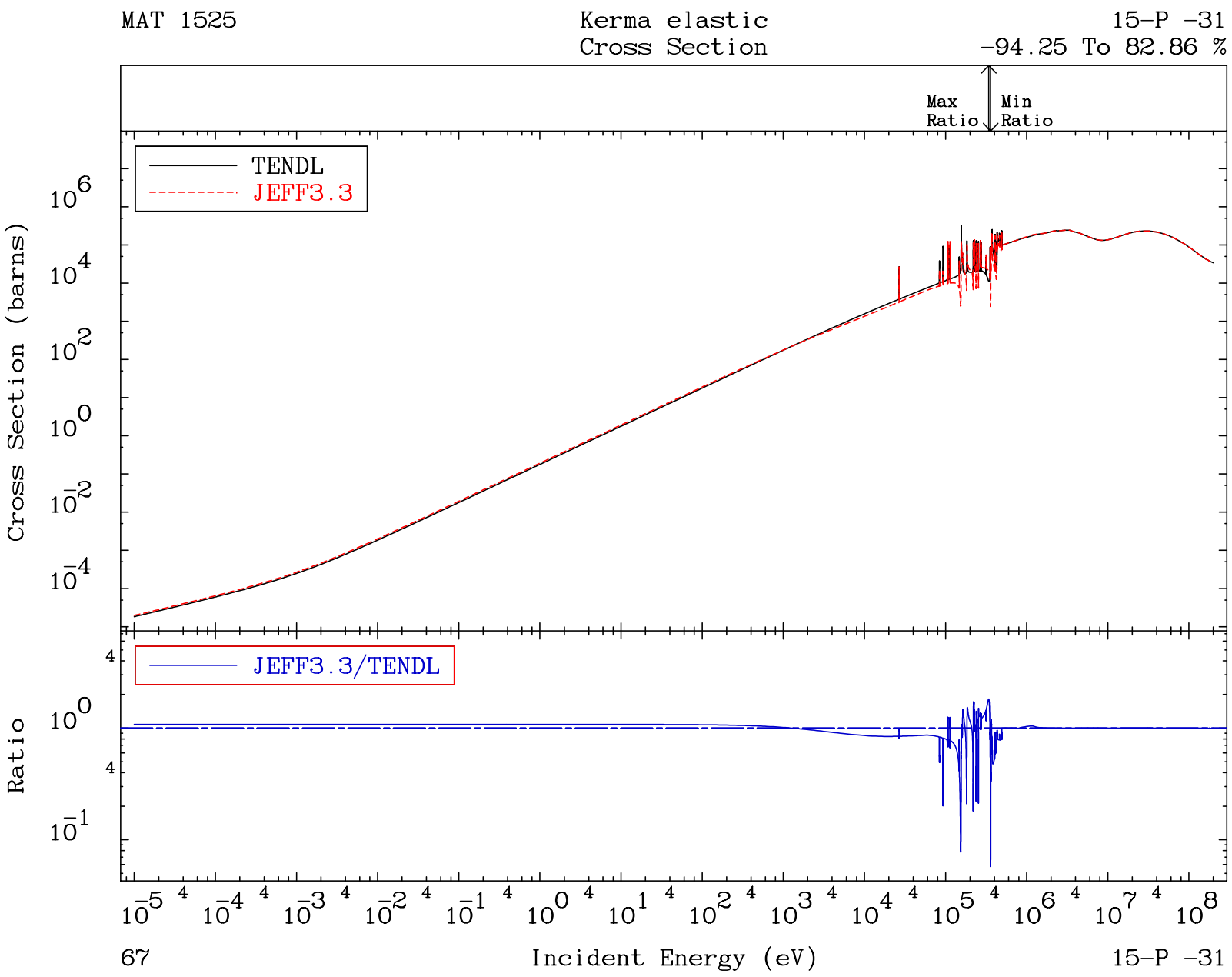

MAT 1525
Deuterium Production
Cross Section
15-P -31
-34.20 To 9999. %
Min
Ratio
TENDL Threshold 5.2925 MeV
JEFF3.3 Threshold 5.2925 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
62
Incident Energy (eV)
15-P -31

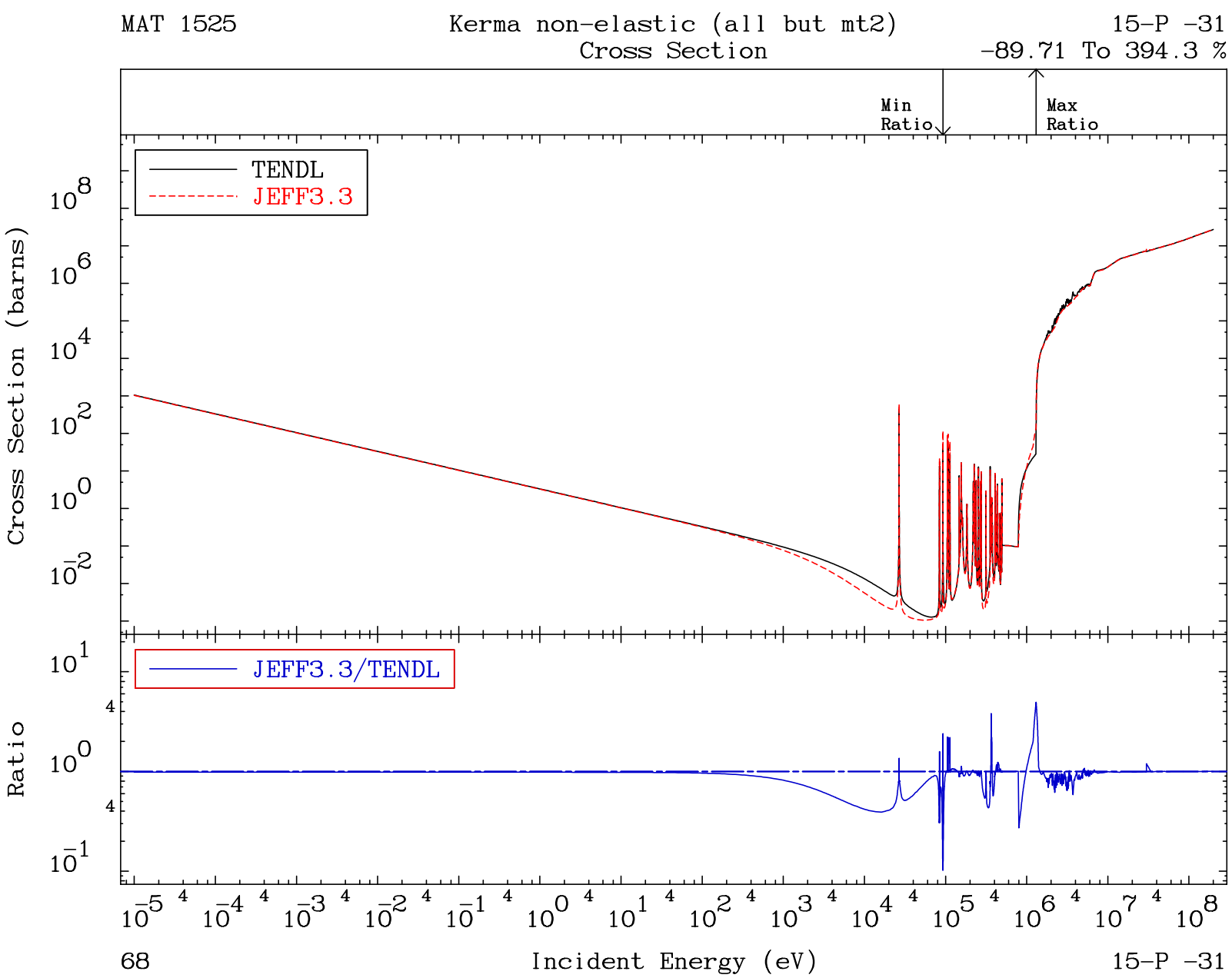

MAT 1525
Tritium Production
Cross Section
15-P -31
-45.02 To 4.198 %
Min Ratio
Max Ratio
TENDL Threshold 9.7781 MeV
JEFF3.3 Threshold 9.7781 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.8
0.6
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
15-P -31

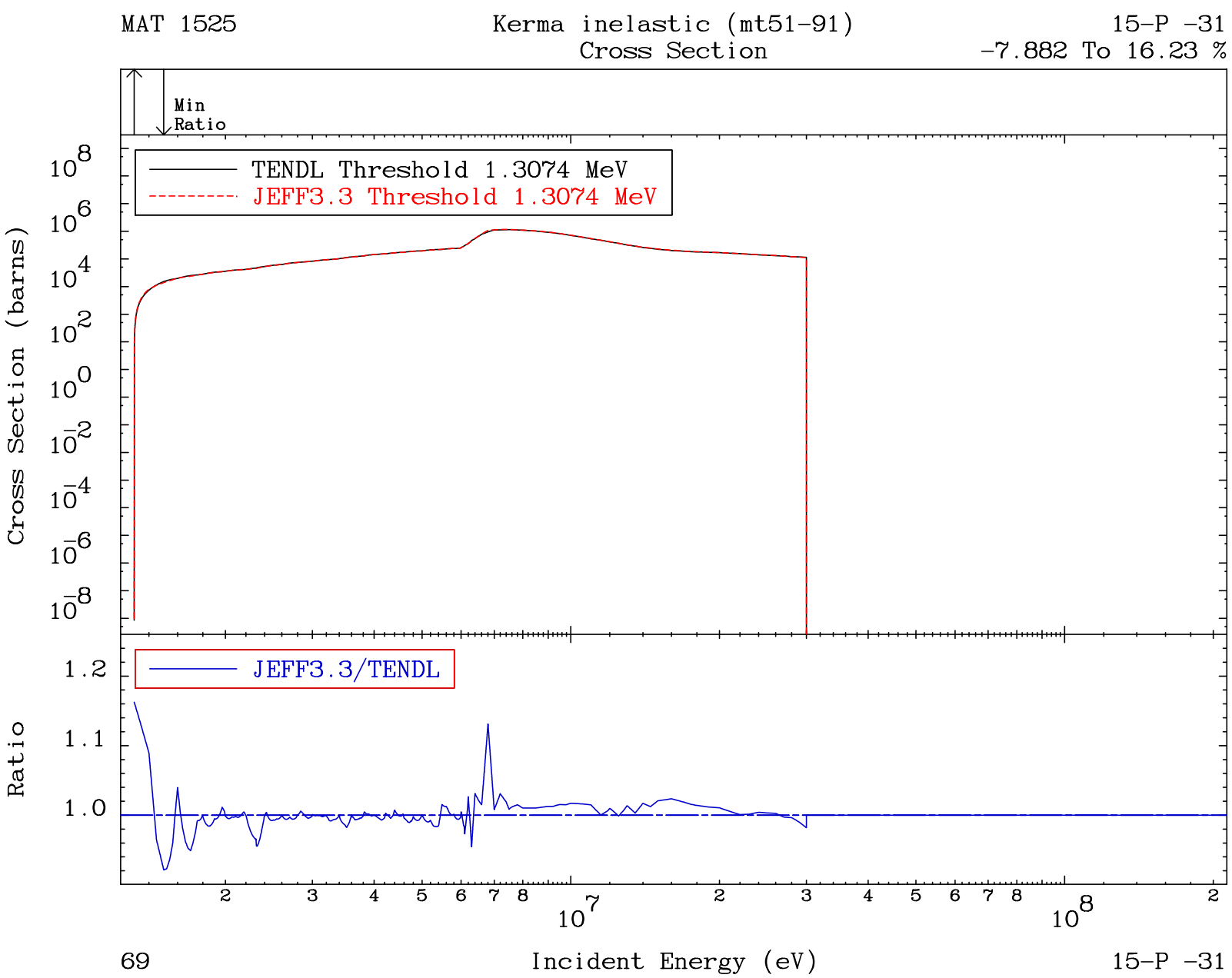

MAT 1525
He-3 Production
Cross Section
15-P -31
-99.95 To 5.483 %
Min Ratio
Max Ratio
TENDL Threshold 13.574 MeV
JEFF3.3 Threshold 13.578 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
15-P -31

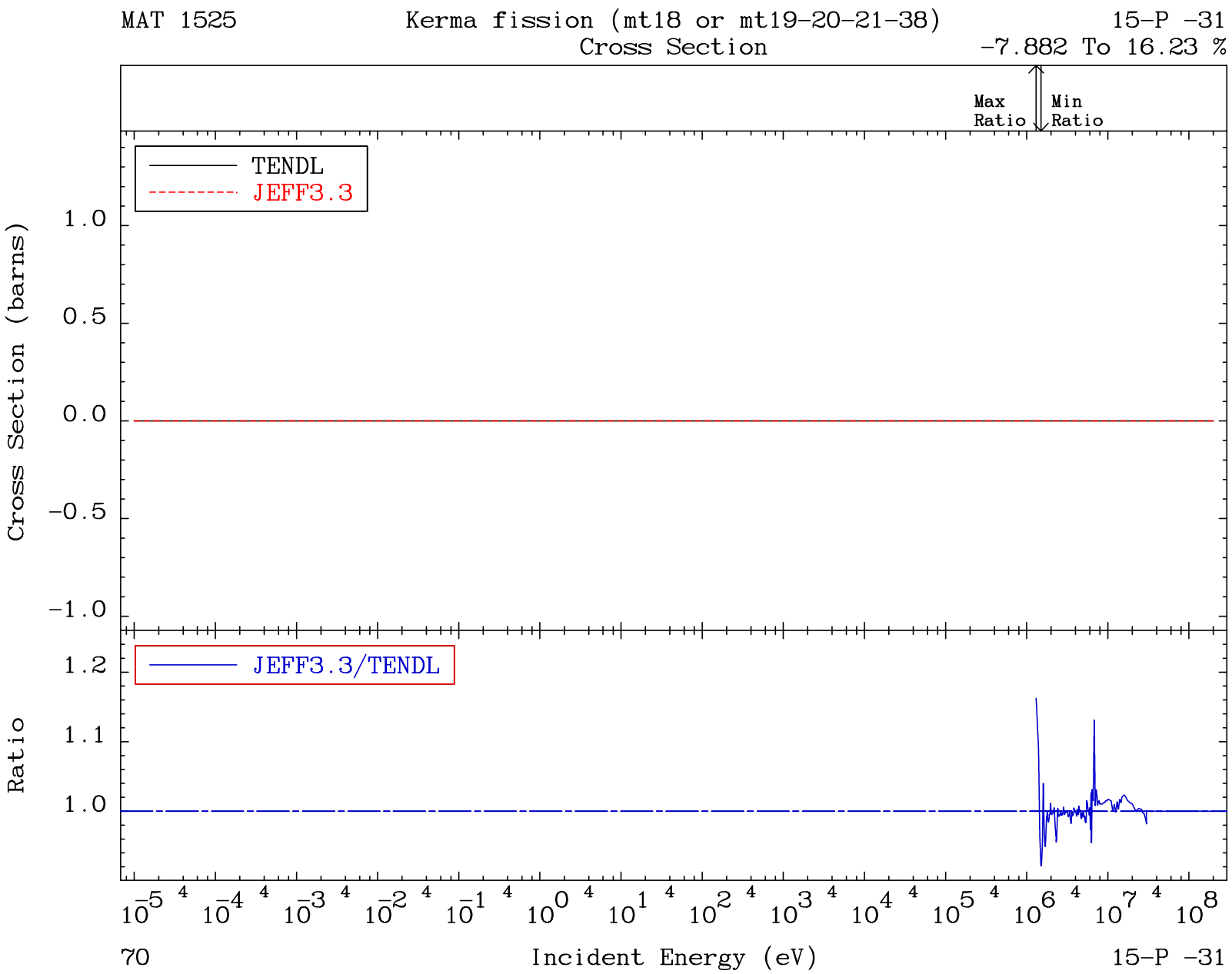

MAT 1525
He-4 Production
Cross Section
15-P -31
-21.13 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0621 MeV
JEFF3.3 Threshold 2.0621 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
65
Incident Energy (eV)
15-P -31

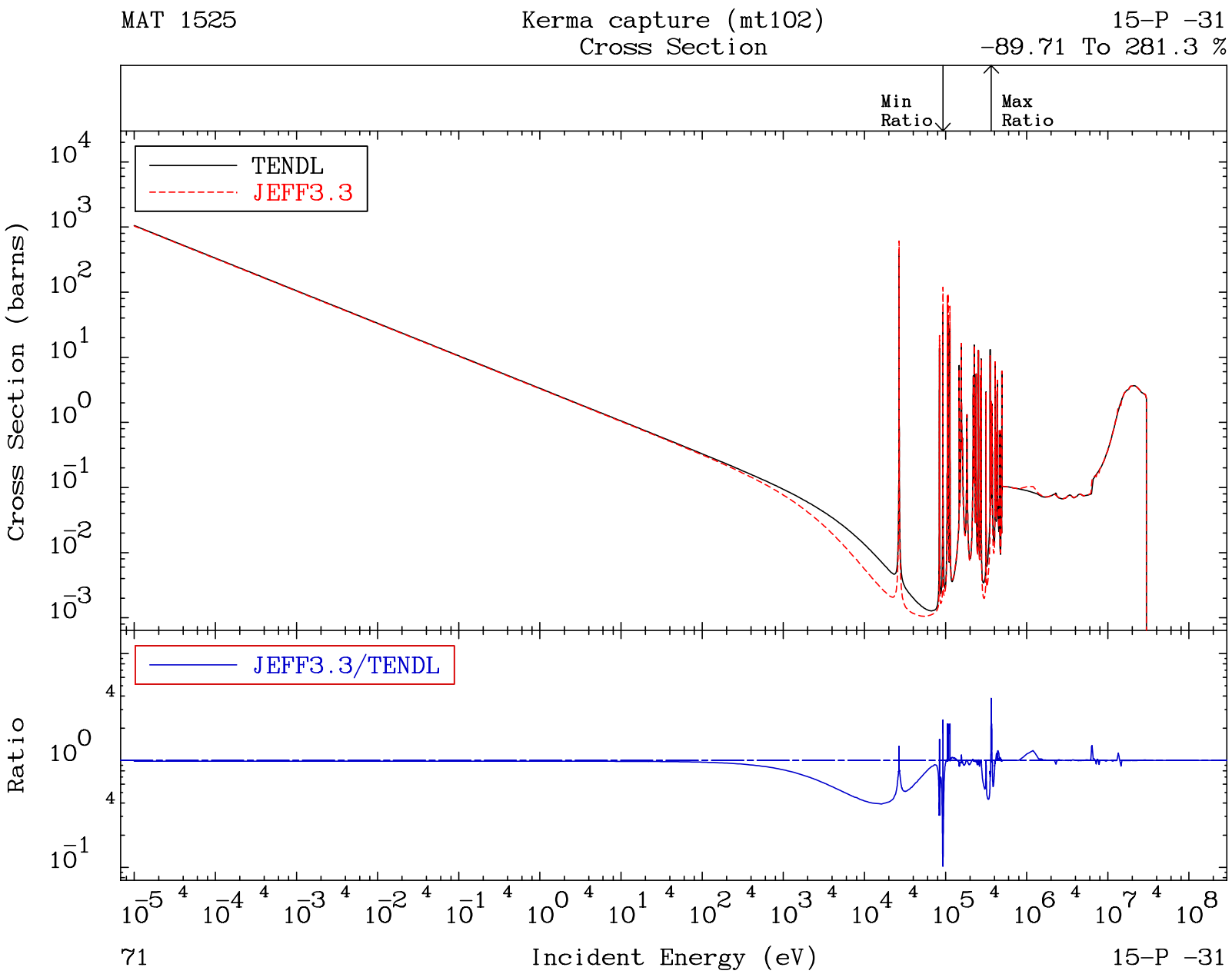

MAT 1525
Kerma total (eV-barns)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
15-P -31

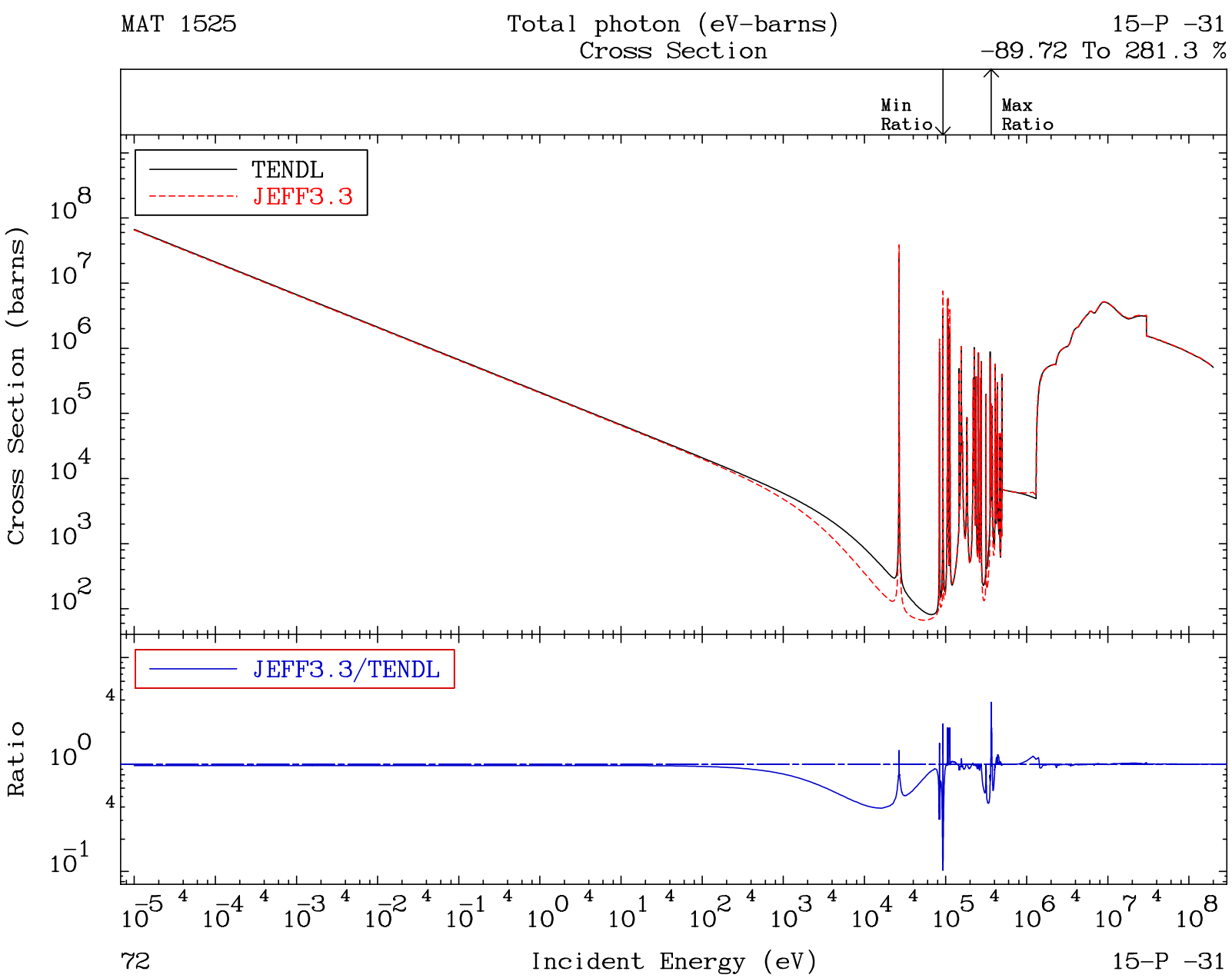

MAT 1525
Kerma elastic
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
15-P -31

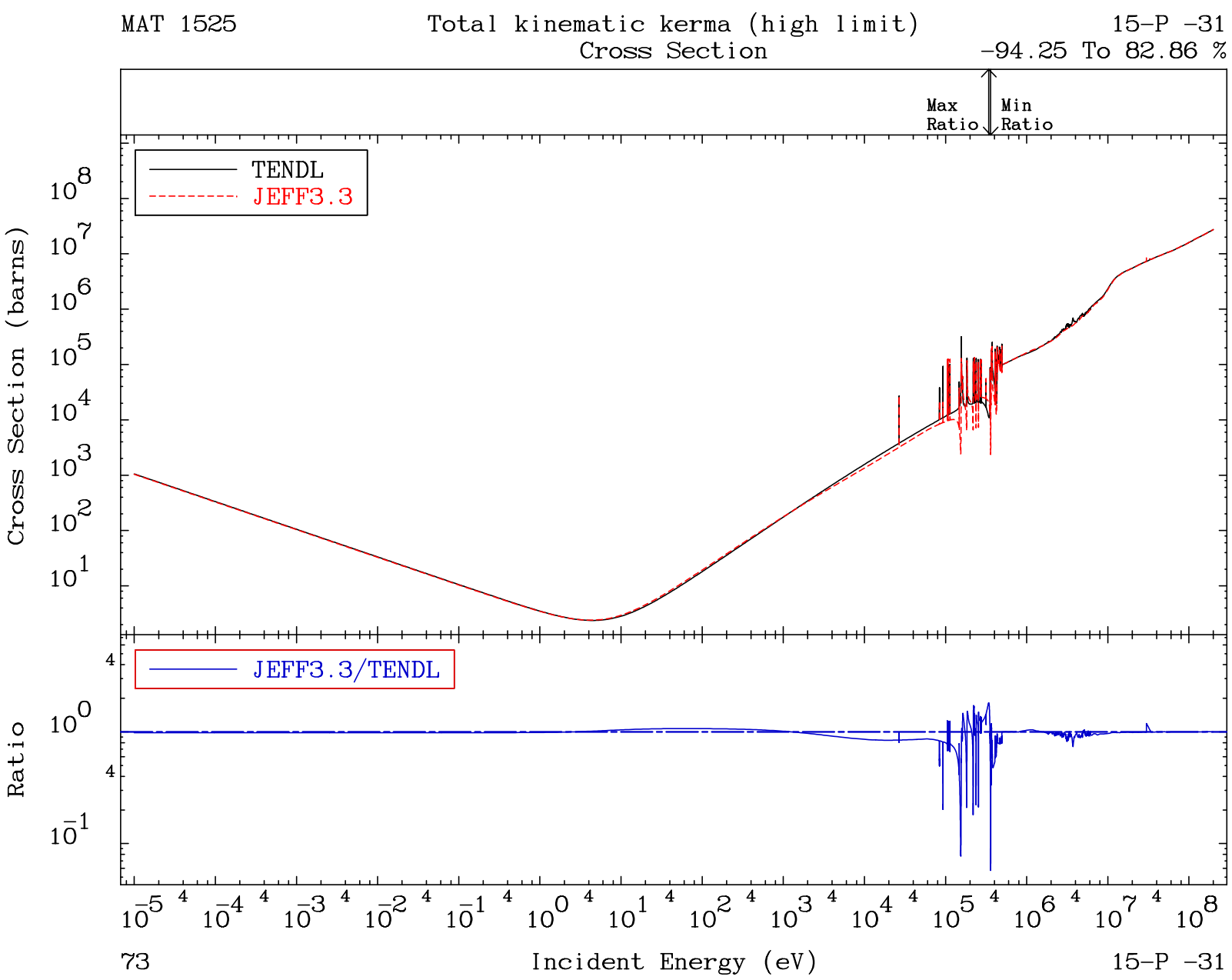

MAT 1525
Kerma non-elastic (all but mt2)
Cross Section
15-P -31
-89.71 To 394.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
15-P -31

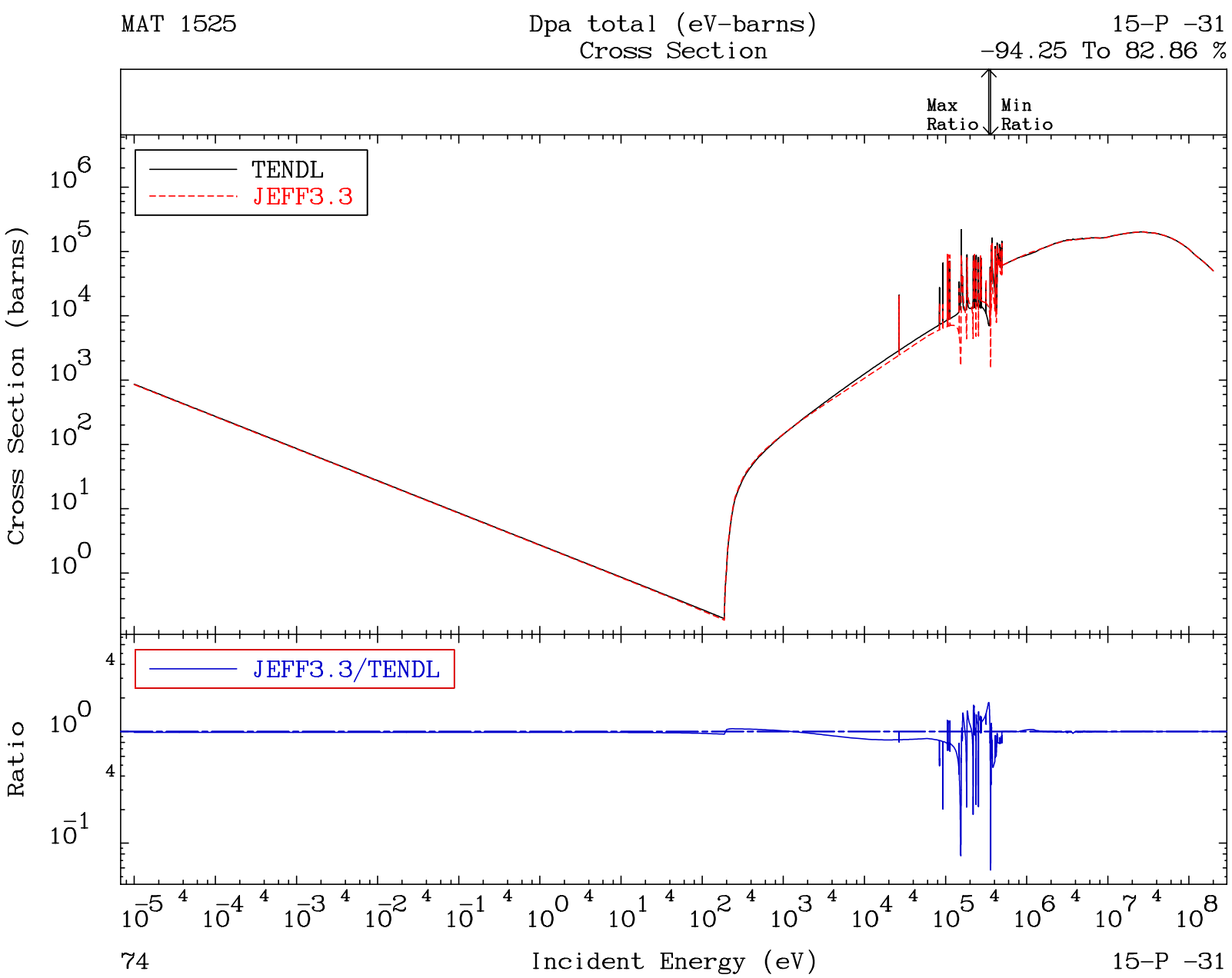

MAT 1525
Kerma inelastic (mt51-91)
Cross Section
15-P -31
-7.882 To 16.23 %
Min
Ratio
TENDL Threshold 1.3074 MeV
JEFF3.3 Threshold 1.3074 MeV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
15-P -31

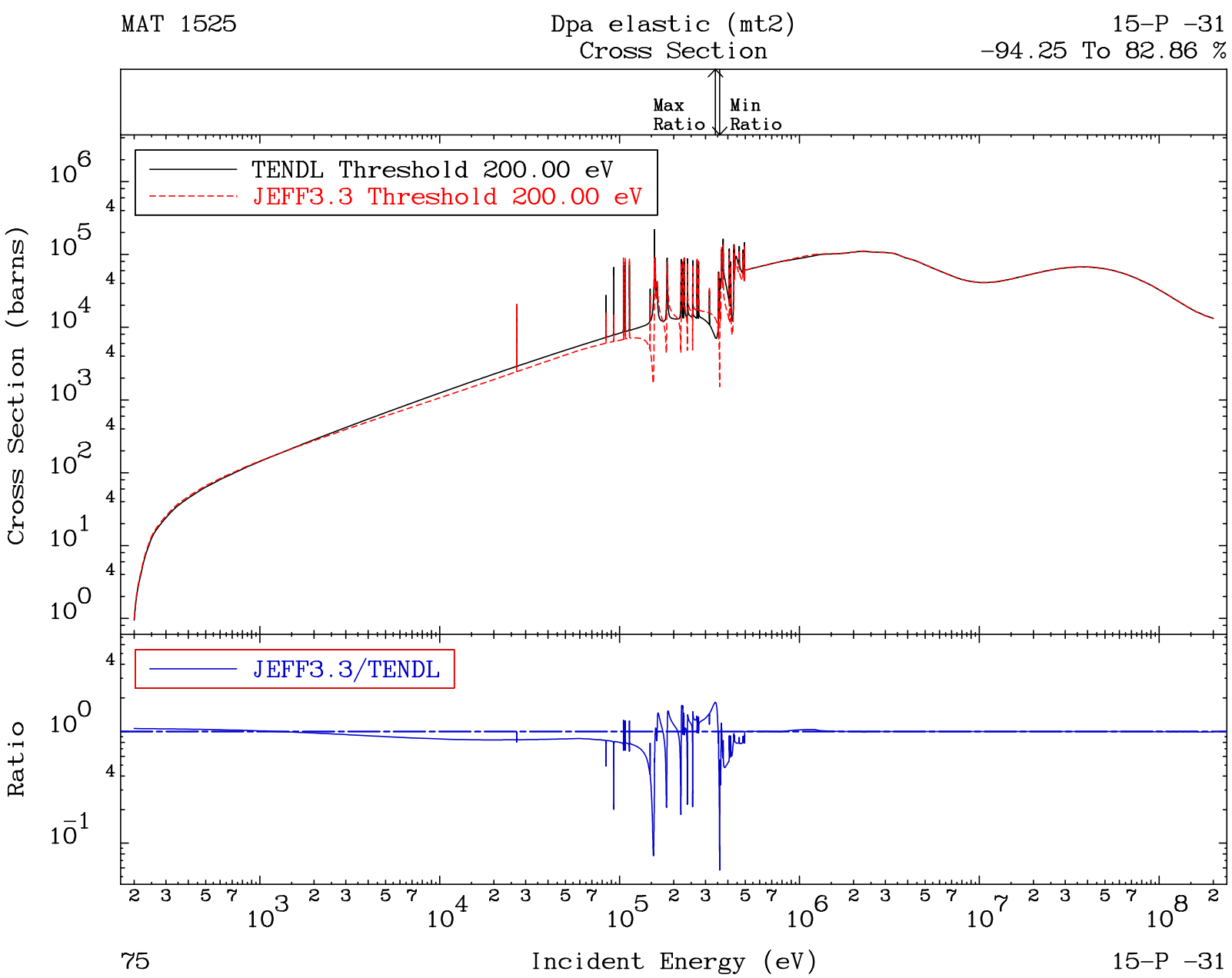

MAT 1525
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
15-P -31
-7.882 To 16.23 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
70
Incident Energy (eV)
15-P -31

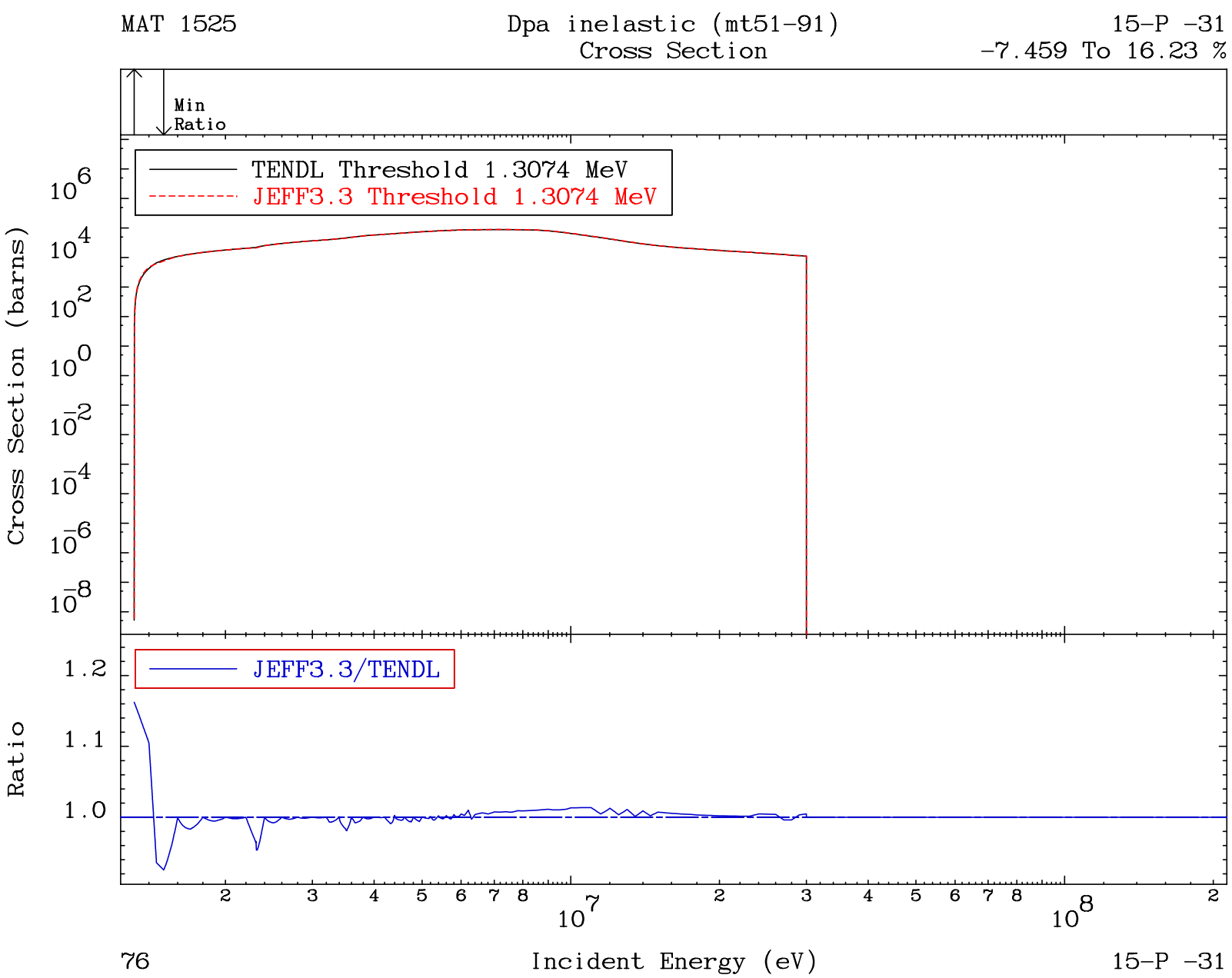

MAT 1525
Kerma capture (mt102)
Cross Section
15-P -31
-89.71 To 281.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
15-P -31

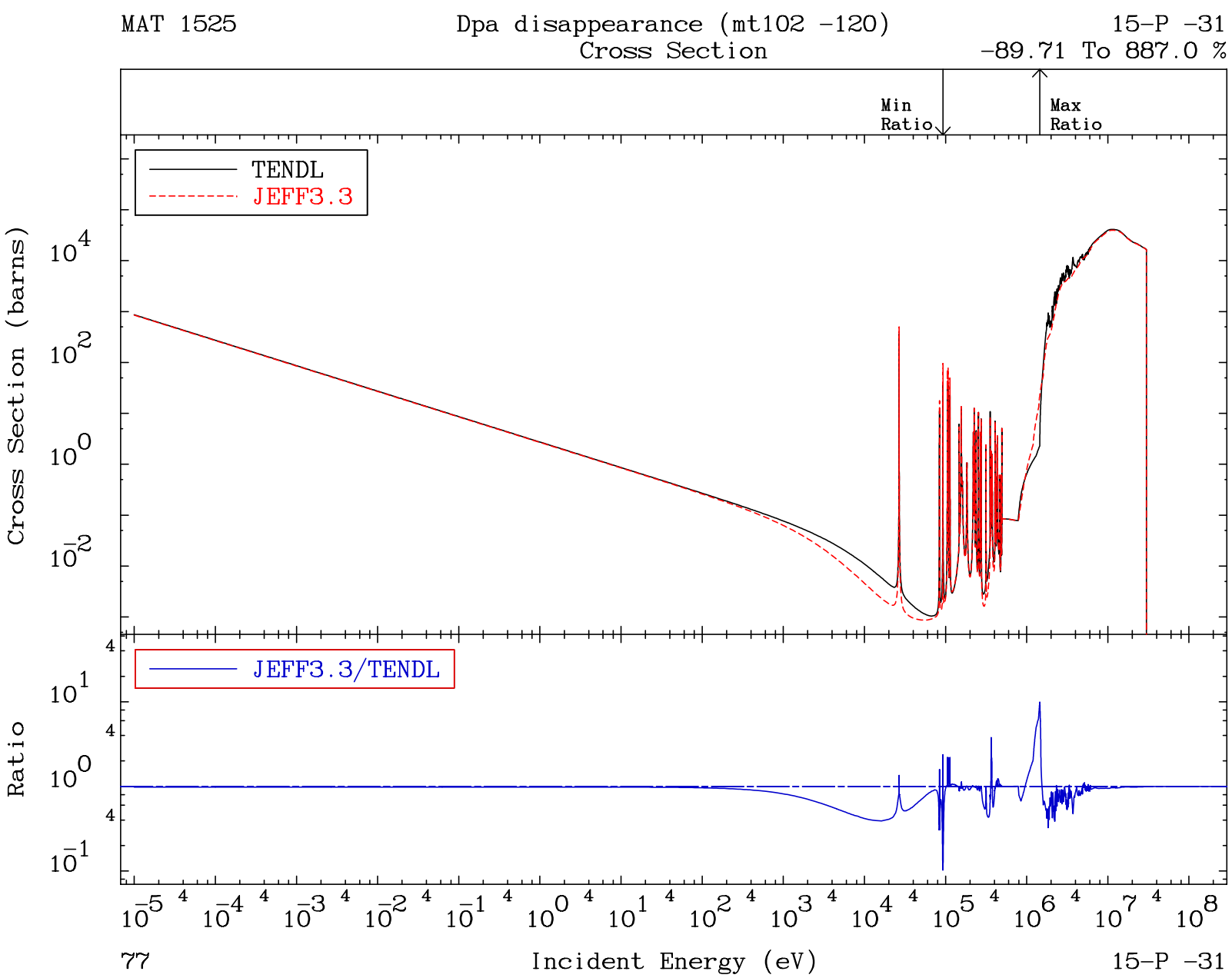

MAT 1525
Total photon (eV-barns)
Cross Section
15-P -31
-89.72 To 281.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
15-P -31

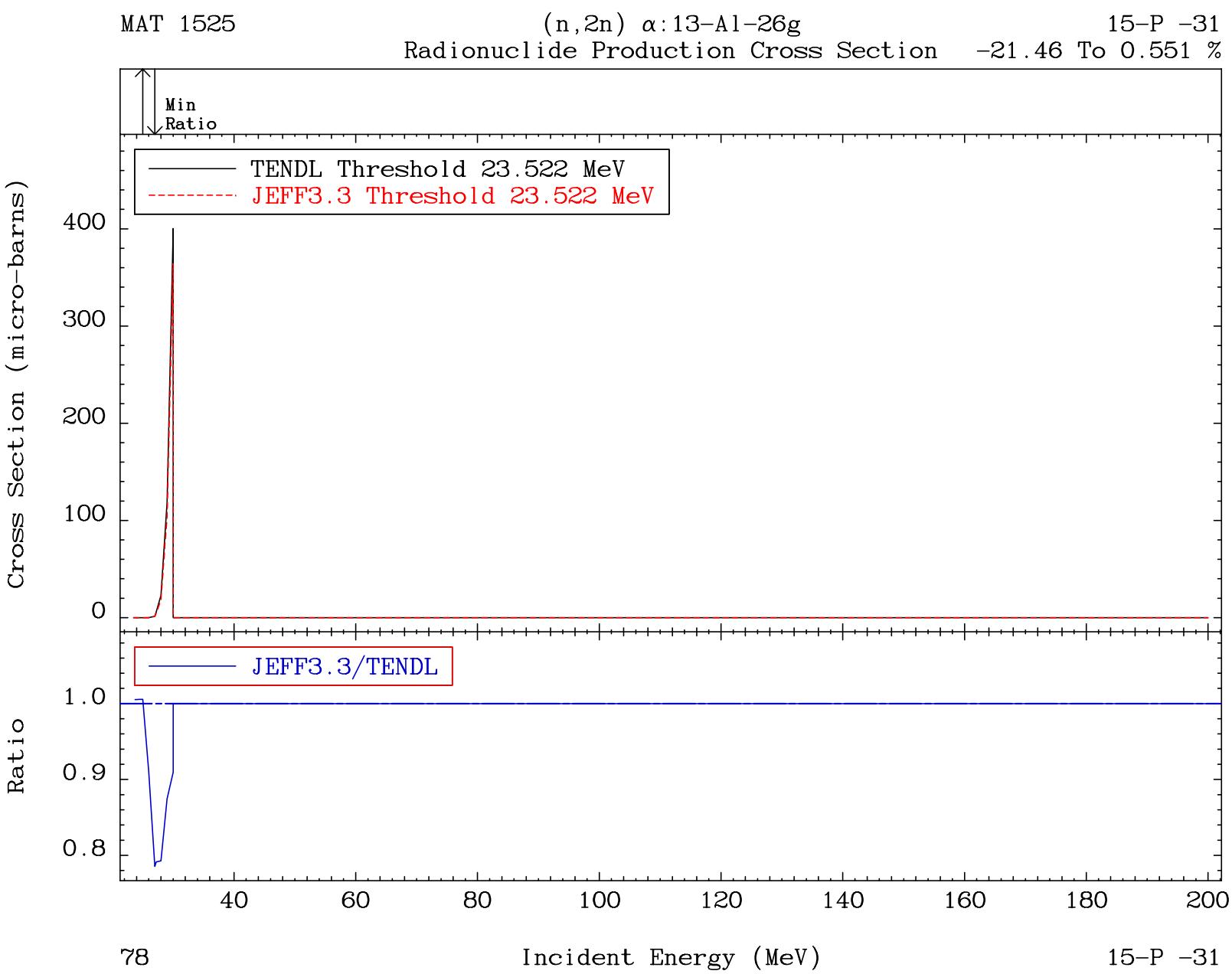

MAT 1525
Total kinematic kerma (high limit)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
15-P -31

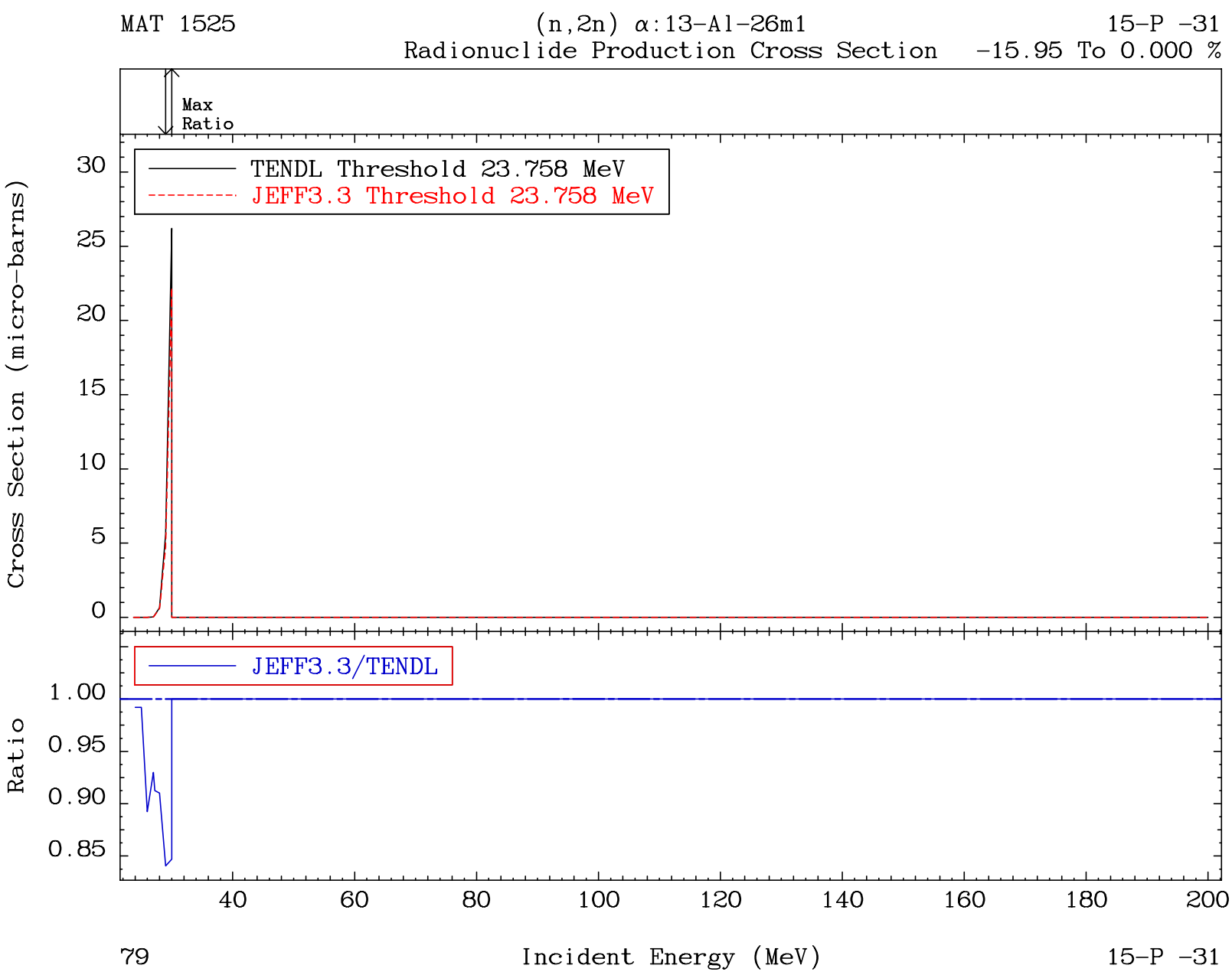

MAT 1525
Dpa total (eV-barns)
Cross Section
15-P -31
-94.25 To 82.86 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
15-P -31


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
-7.459 To 16.23 %
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
-89.71 To 887.0 %
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
-21.46 To 0.551 %
Min
Ratio
TENDL Threshold 23.522 MeV
JEFF3.3 Threshold 23.522 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
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
-15.95 To 0.000 %
Max
Ratio
TENDL Threshold 23.758 MeV
JEFF3.3 Threshold 23.758 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
0.85
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
15-P -31