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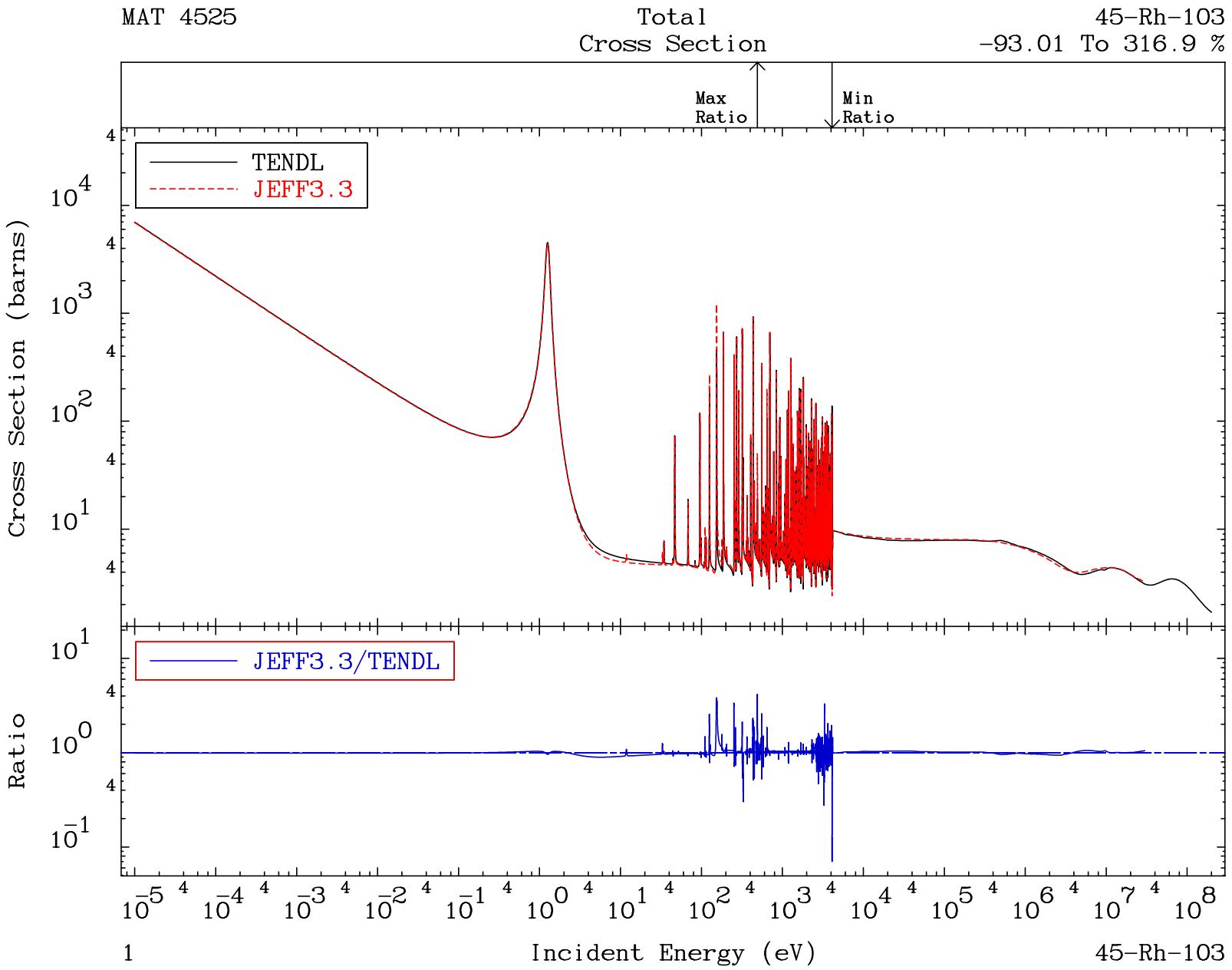
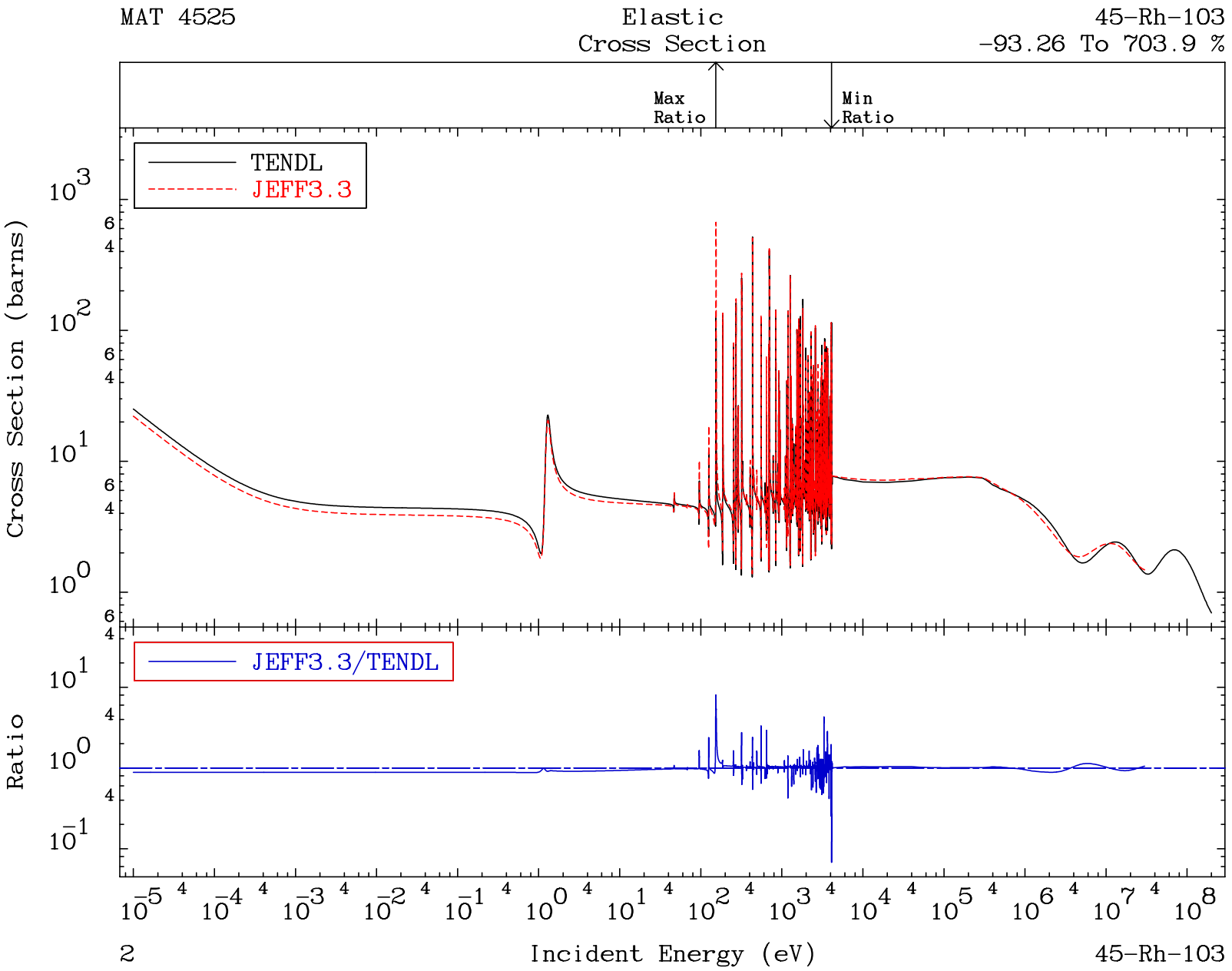
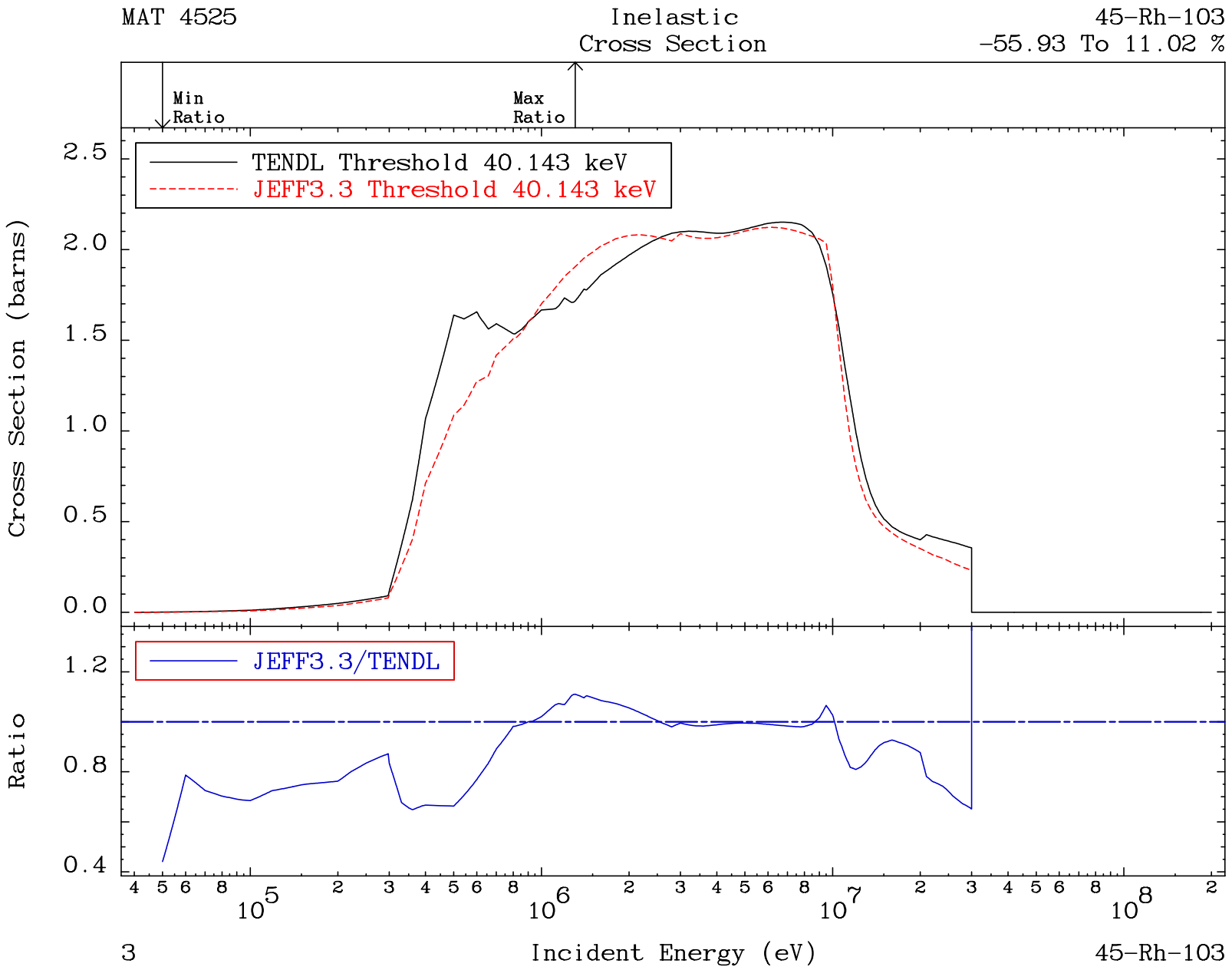
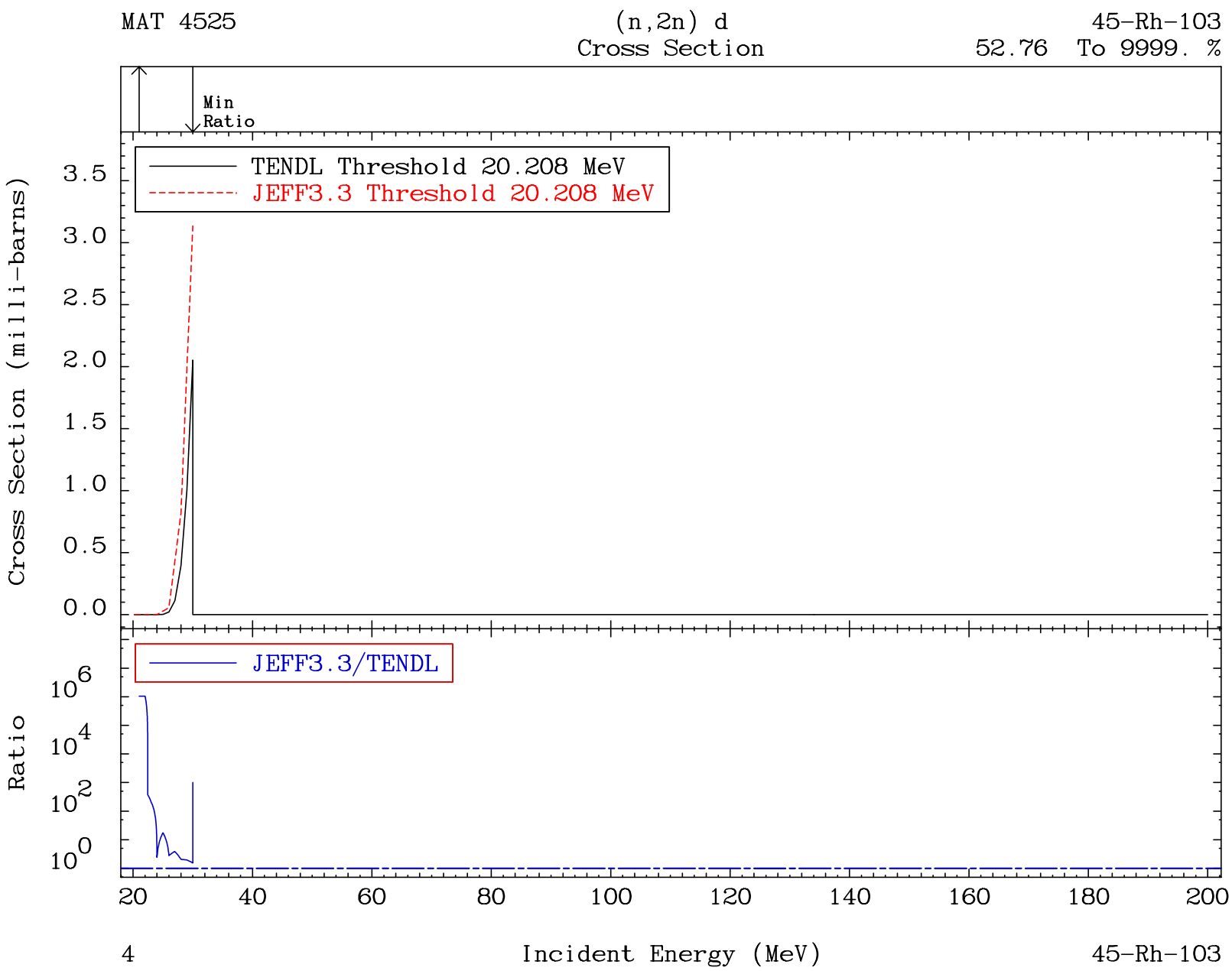
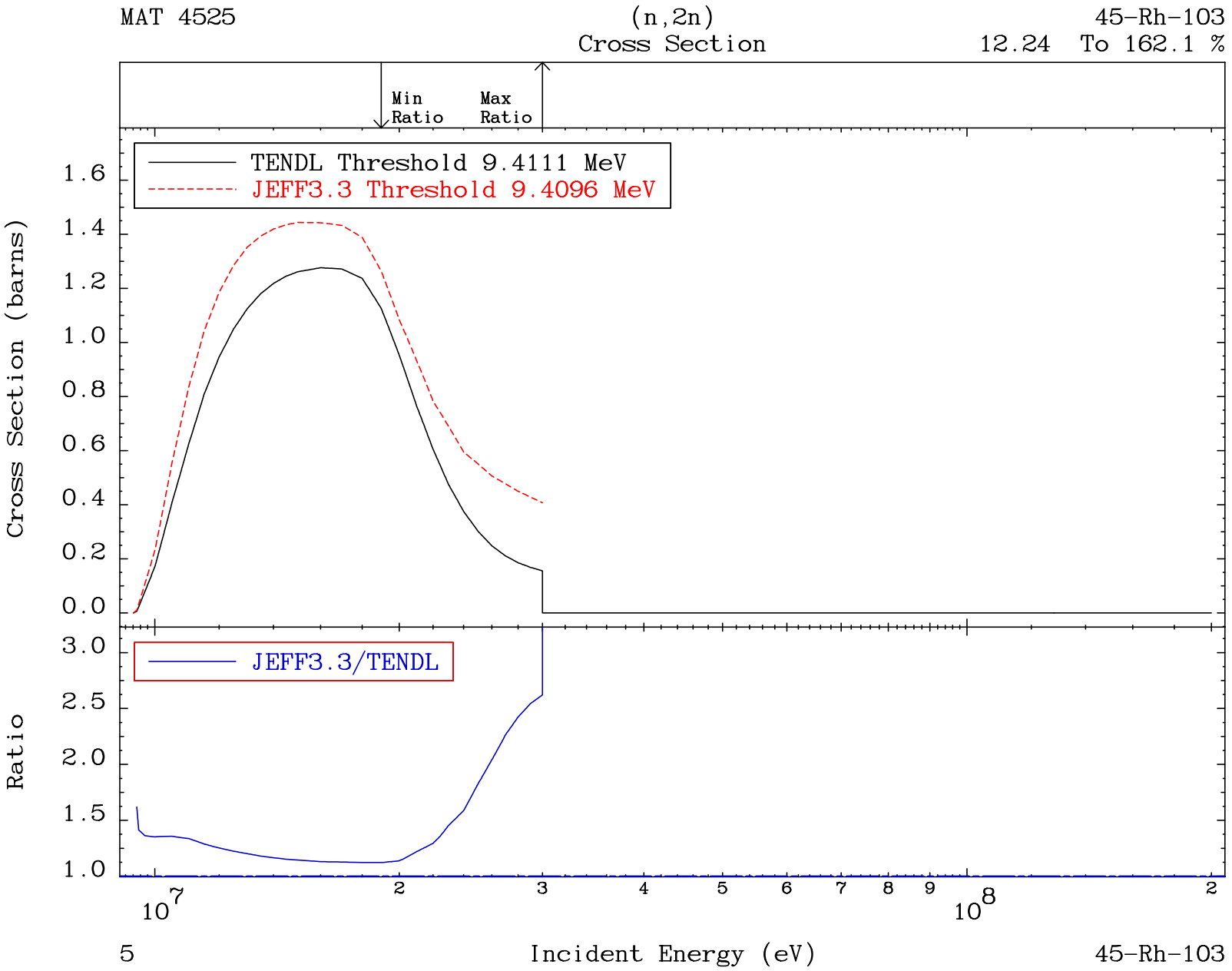
Press Mouse Button to Start

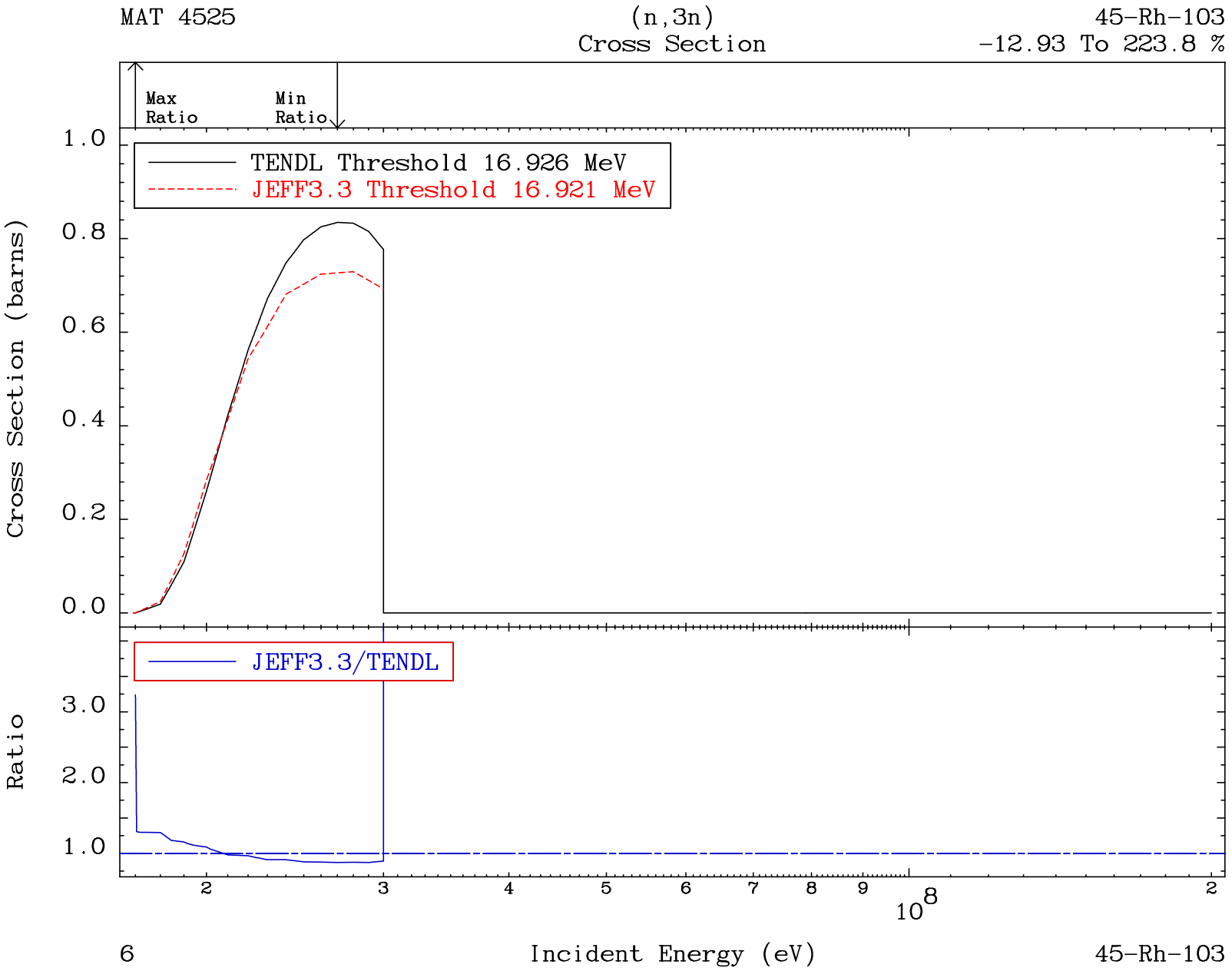

MAT 4525
Total
Cross Section
45-Rh-103
-93.01 To 316.9 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
45-Rh-103

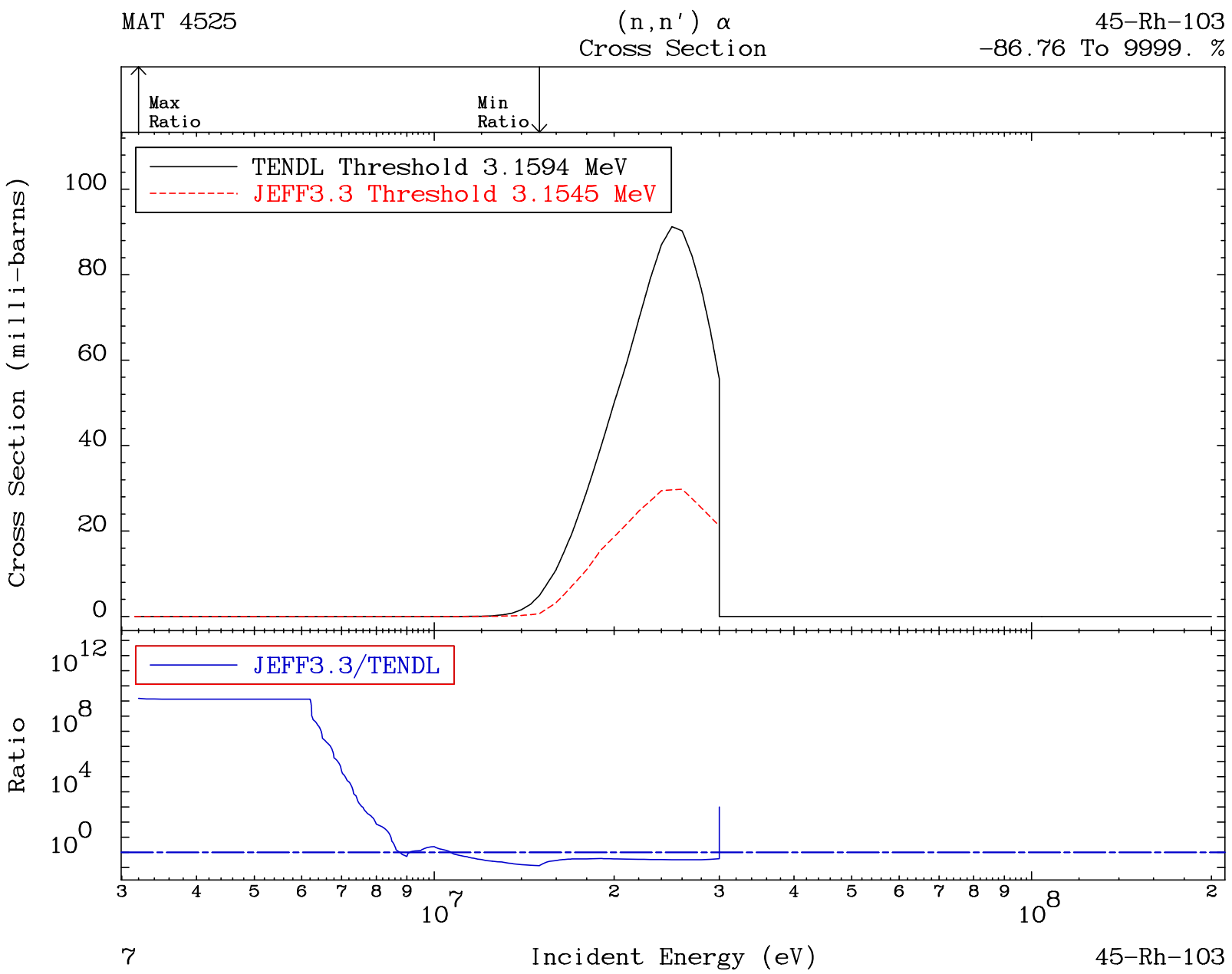

MAT 4525
Elastic
Cross Section
45-Rh-103
-93.26 To 703.9 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
45-Rh-103

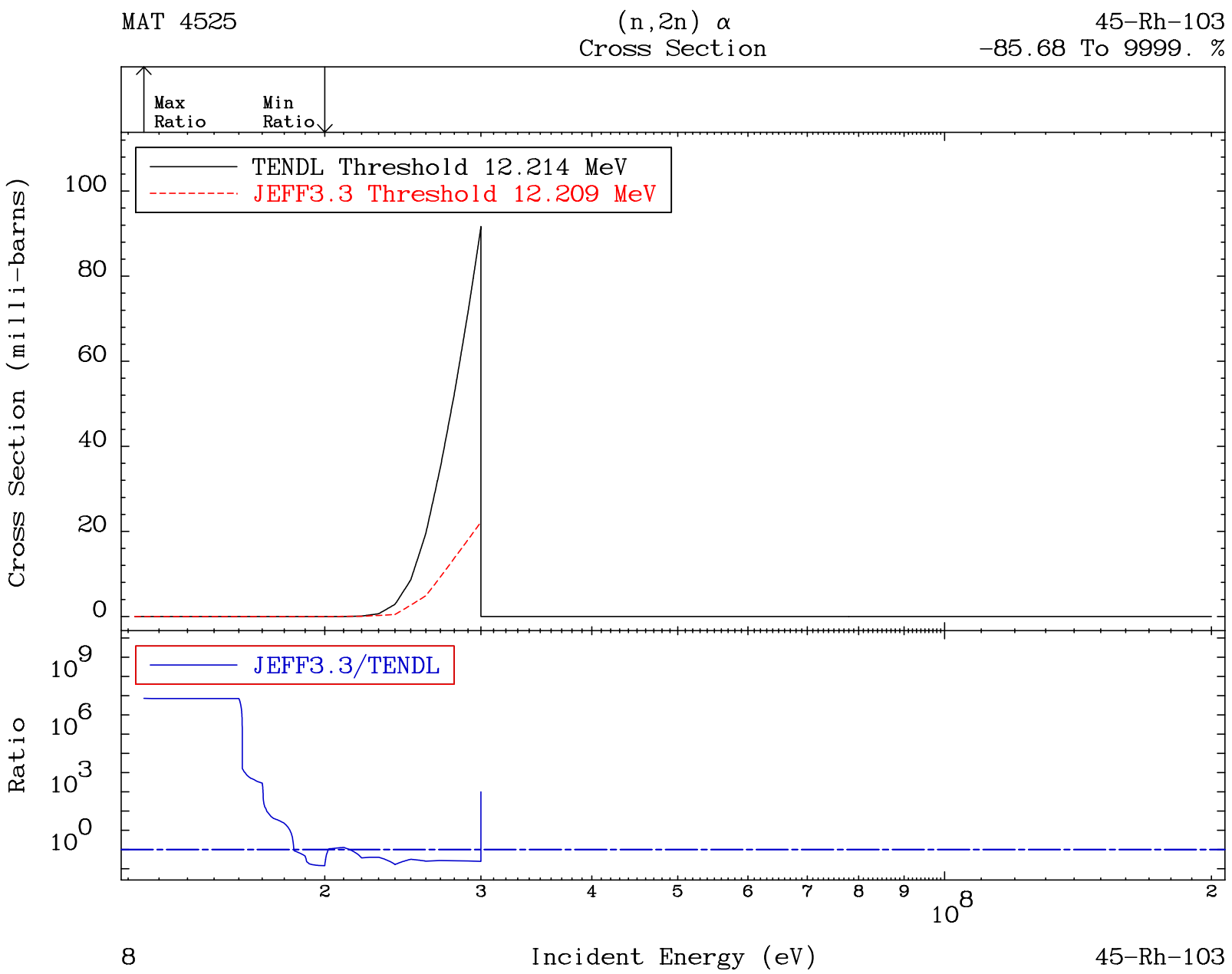

MAT 4525
Inelastic
Cross Section
45-Rh-103
-55.93 To 11.02 %
Min
Ratio
Max
Ratio
TENDL Threshold 40.143 keV
JEFF3.3 Threshold 40.143 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
0.8
0.4
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
45-Rh-103

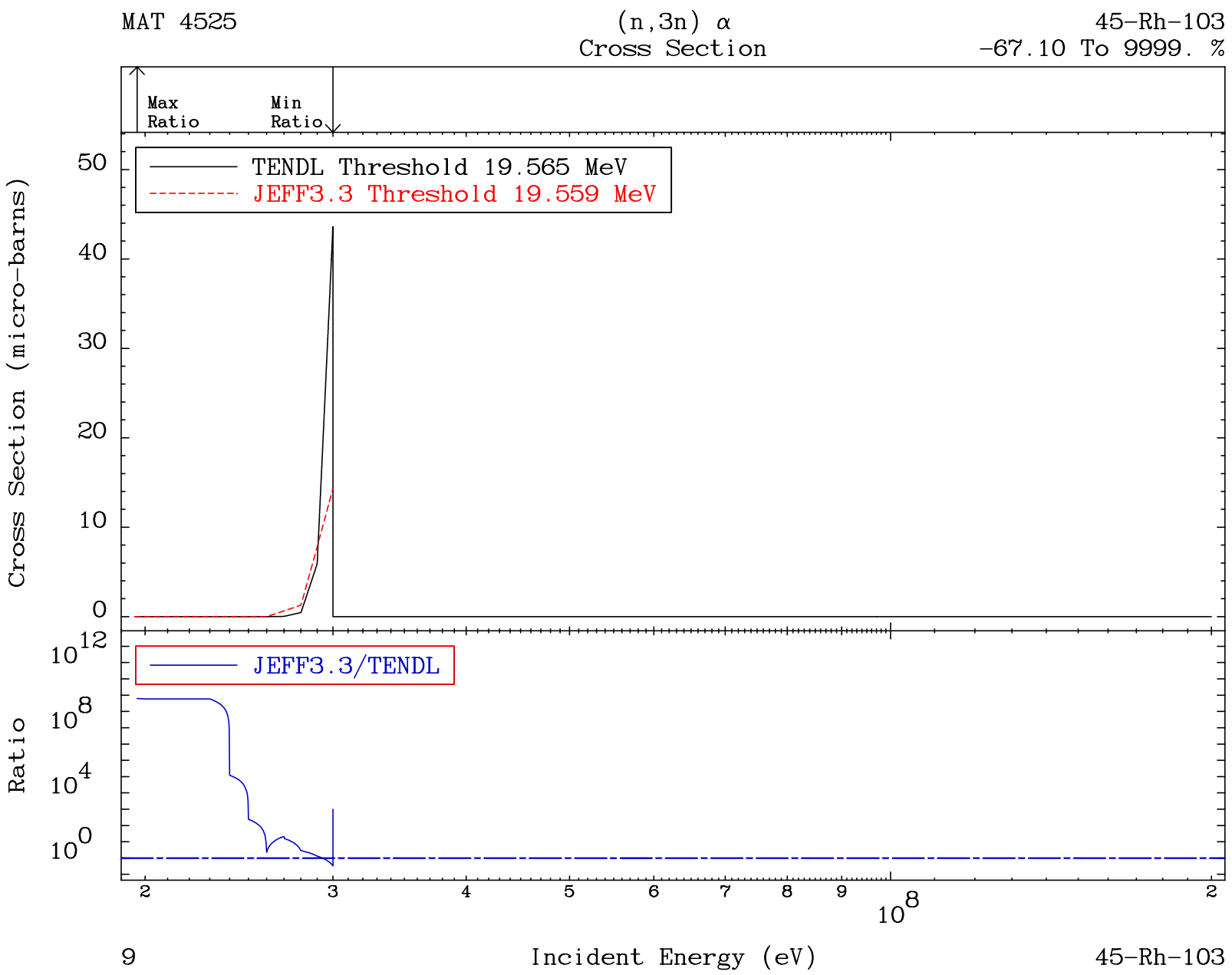

MAT 4525
(n,2n) d
Cross Section
45-Rh-103
52.76 To 9999. %
Min
Ratio
TENDL Threshold 20.208 MeV
JEFF3.3 Threshold 20.208 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
45-Rh-103

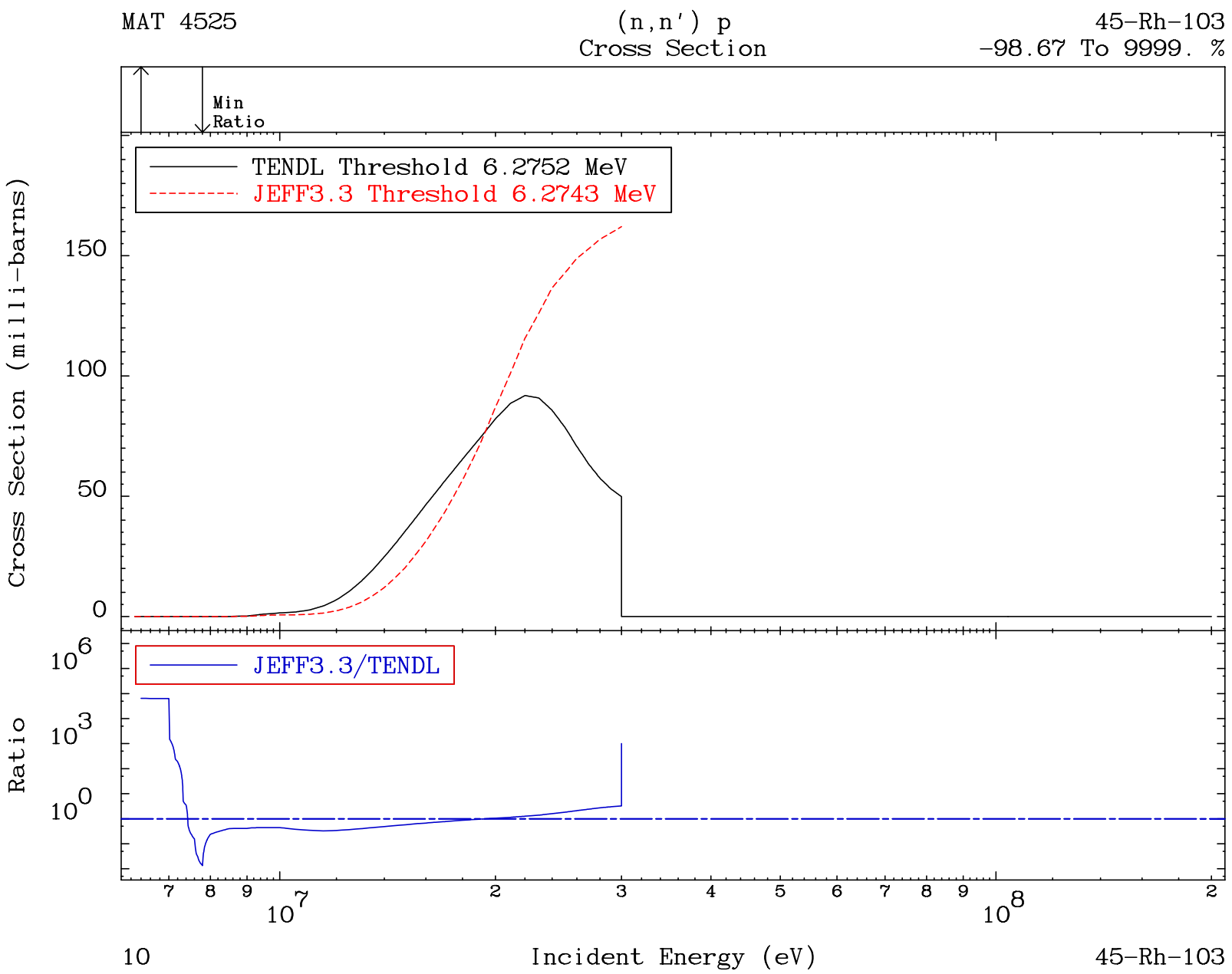

MAT 4525
(n,2n)
Cross Section
45-Rh-103
12.24 To 162.1 %
Min Ratio
Max Ratio
TENDL Threshold 9.4111 MeV
JEFF3.3 Threshold 9.4096 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
3.0
2.5
2.0
1.5
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
45-Rh-103

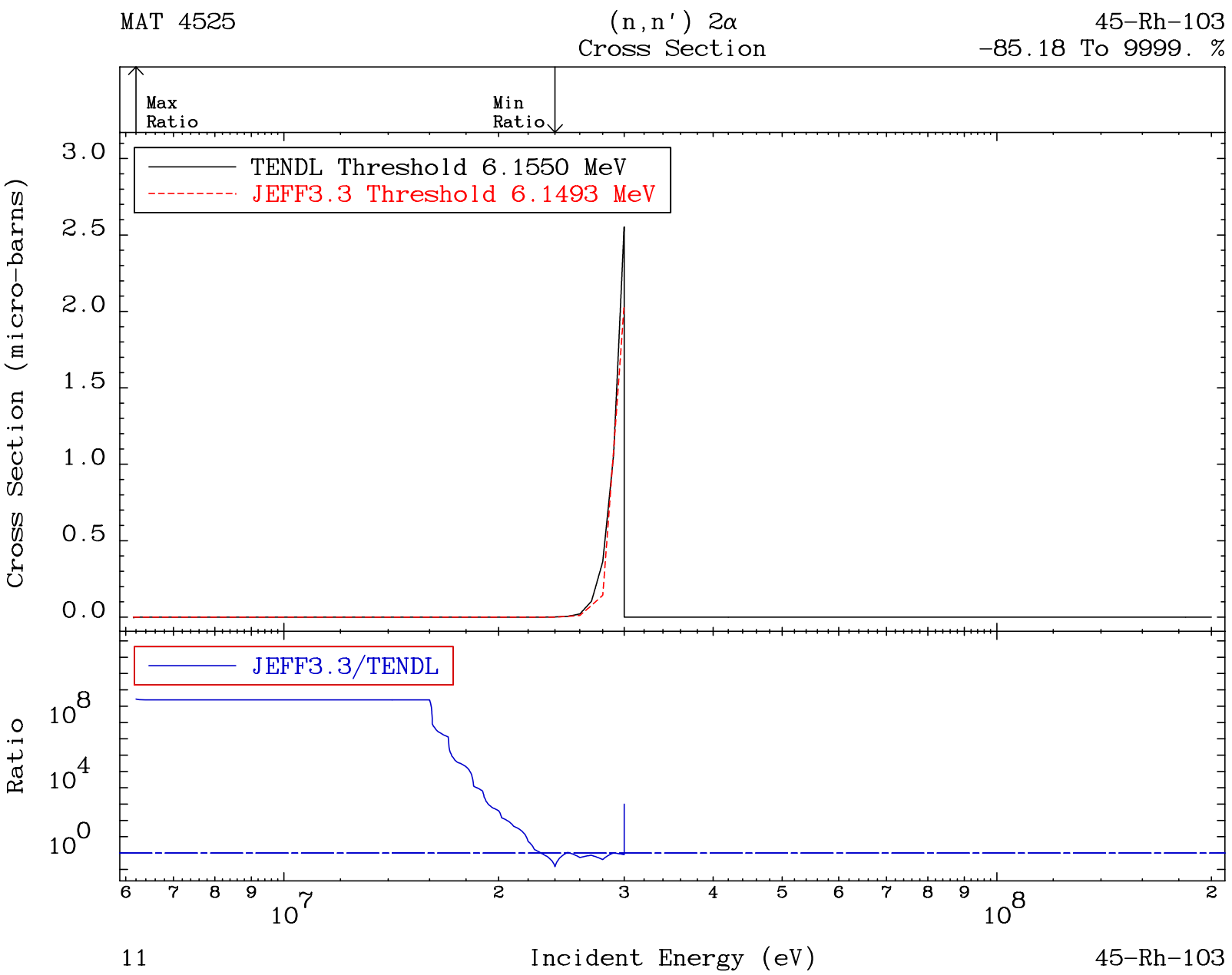

MAT 4525
(n,3n)
Cross Section
45-Rh-103
-12.93 To 223.8 %
Max Ratio
Min Ratio
TENDL Threshold 16.926 MeV
JEFF3.3 Threshold 16.921 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
45-Rh-103

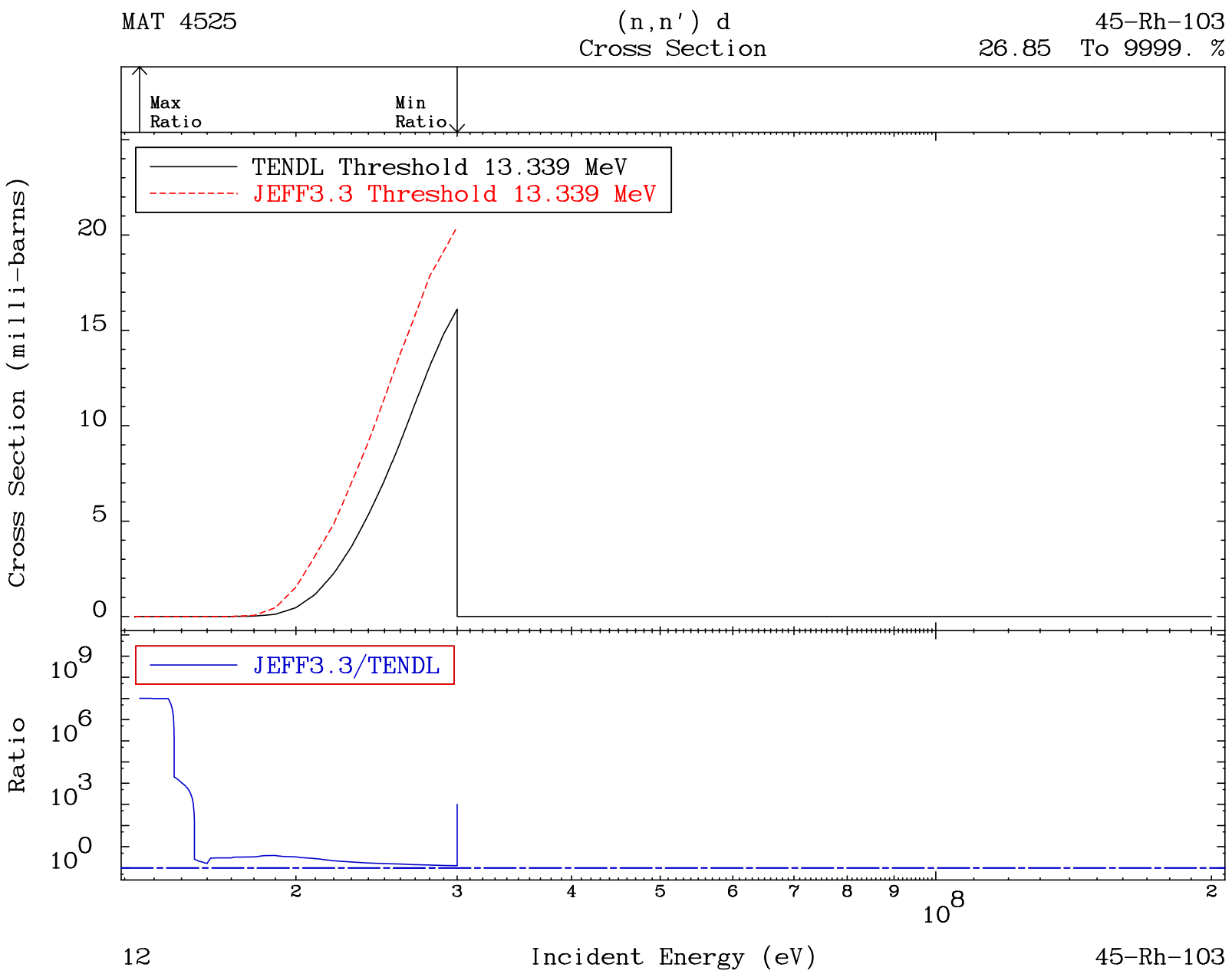

MAT 4525
(n,n') α
Cross Section
45-Rh-103
-86.76 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.1594 MeV
JEFF3.3 Threshold 3.1545 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
45-Rh-103

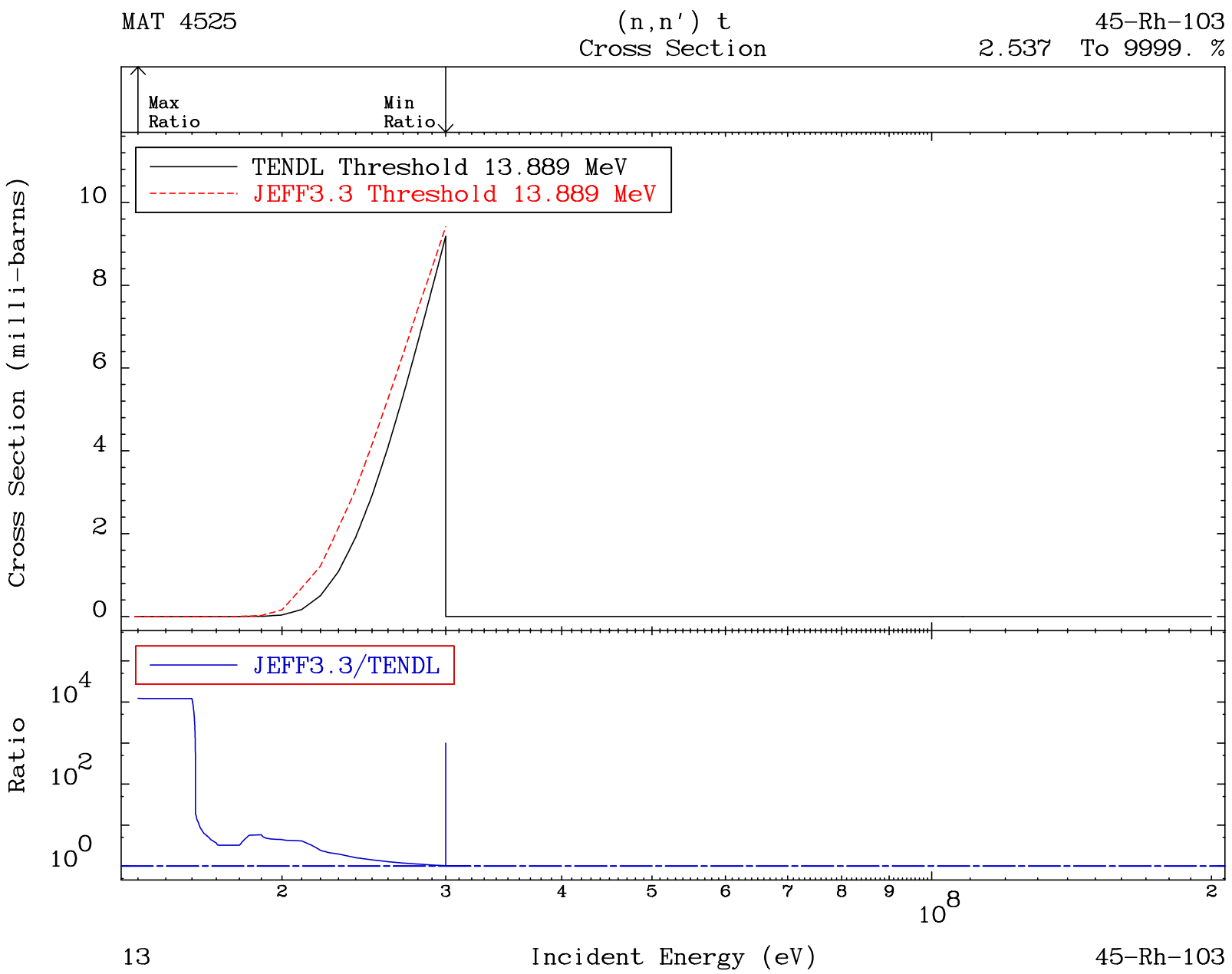

MAT 4525
(n,2n) α
Cross Section
45-Rh-103
-85.68 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.214 MeV
JEFF3.3 Threshold 12.209 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
45-Rh-103

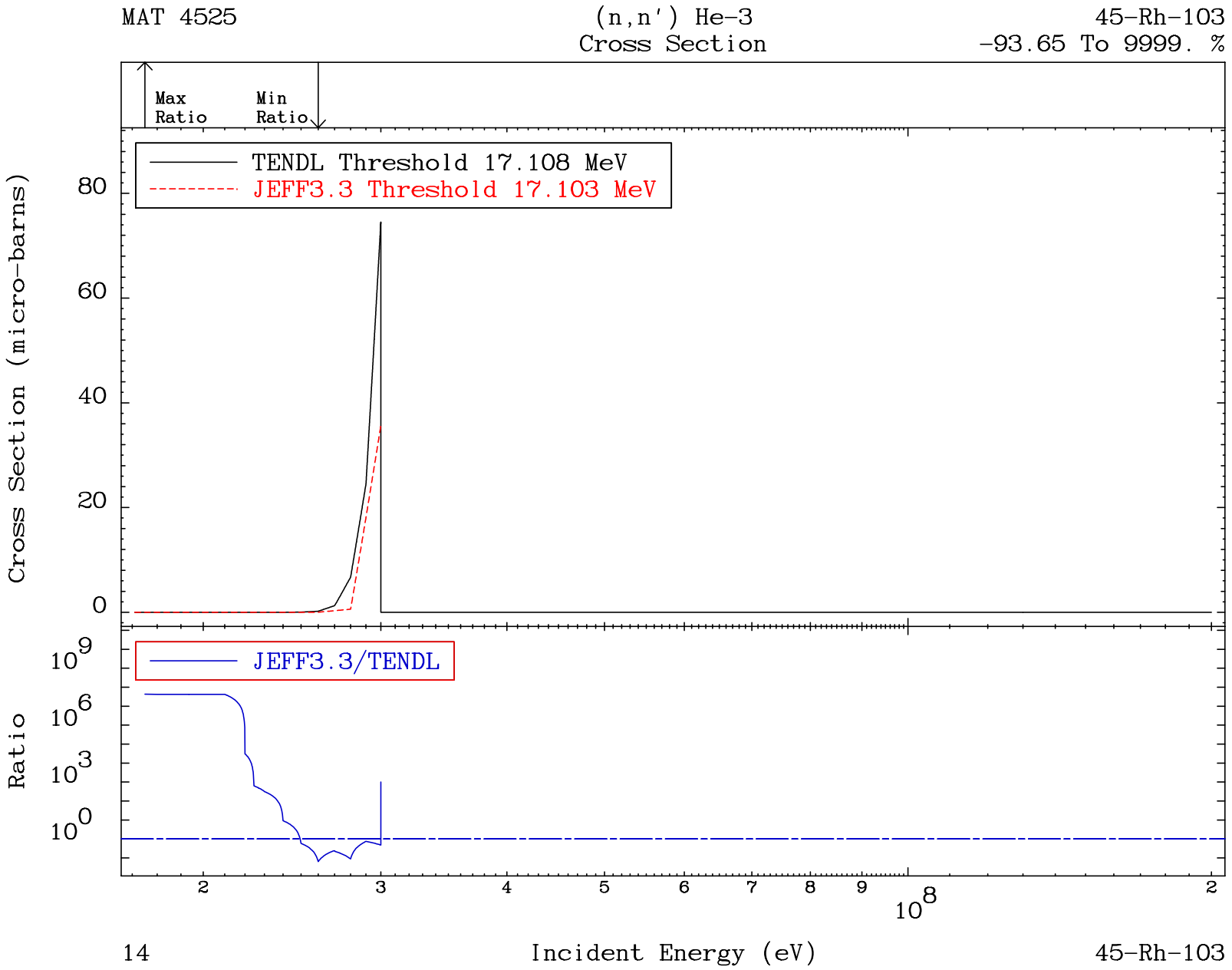

MAT 4525
(n,3n) α
Cross Section
45-Rh-103
-67.10 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.565 MeV
JEFF3.3 Threshold 19.559 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
45-Rh-103

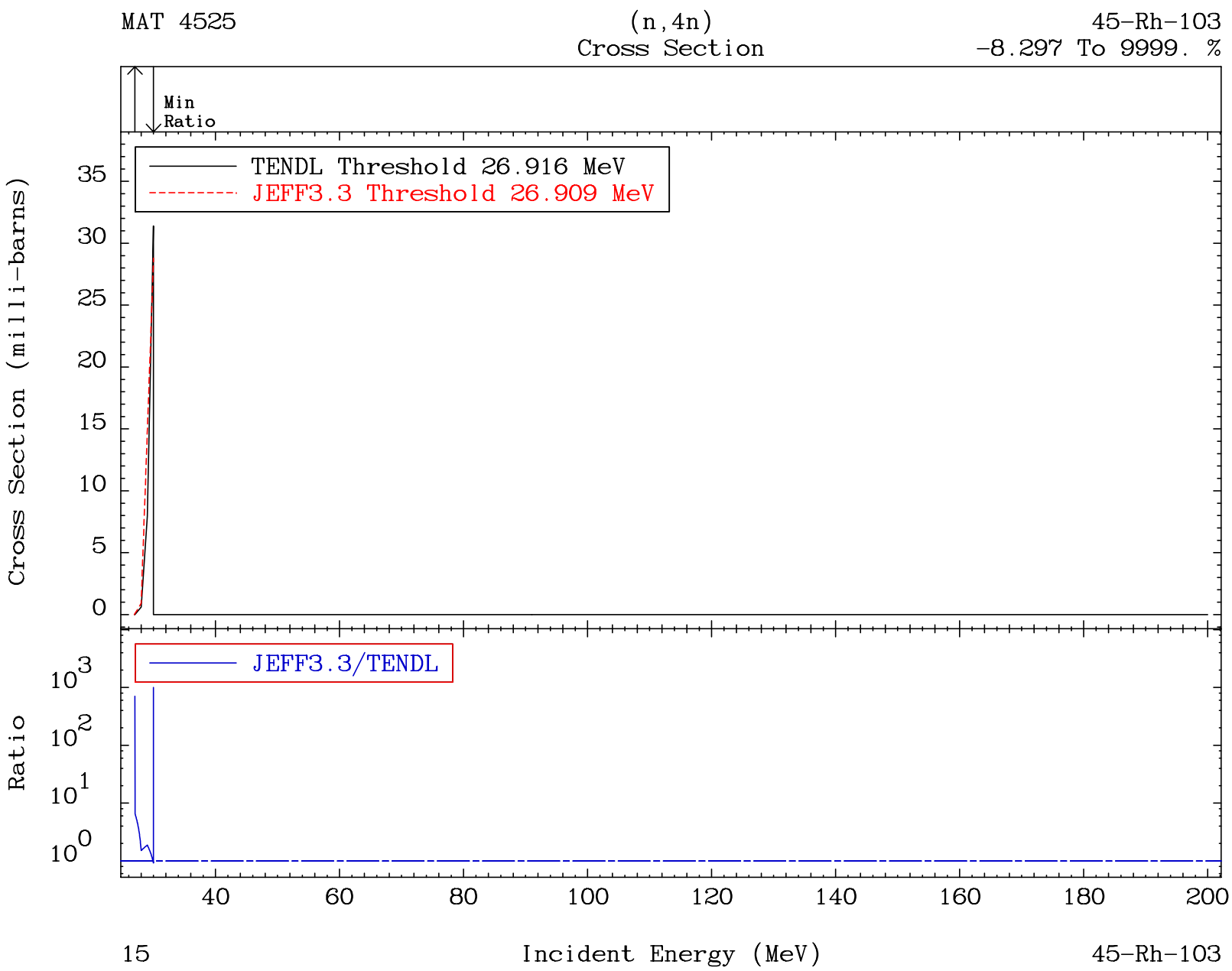

MAT 4525
(n,n') p
Cross Section
45-Rh-103
-98.67 To 9999. %
Min
Ratio
TENDL Threshold 6.2752 MeV
JEFF3.3 Threshold 6.2743 MeV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
45-Rh-103

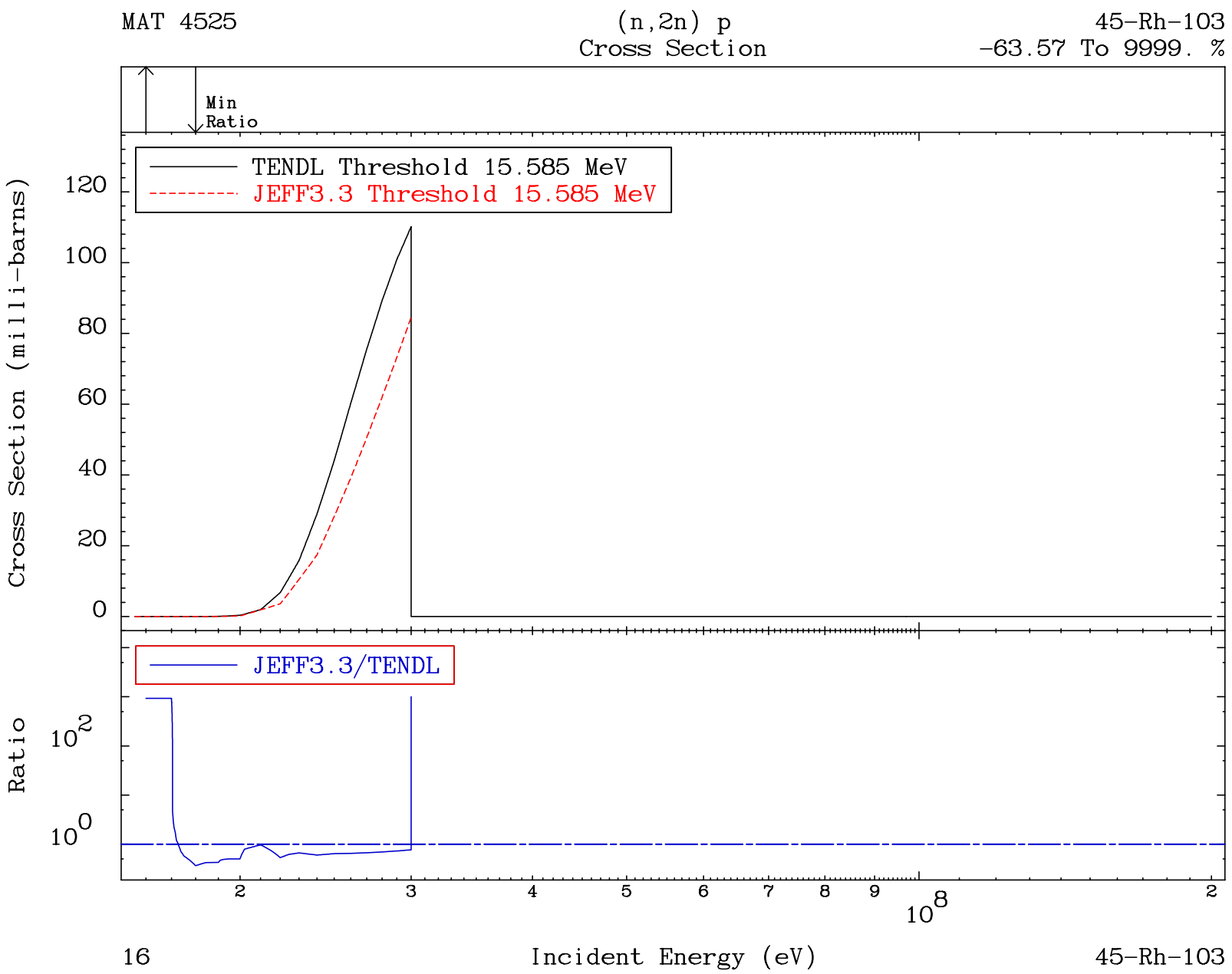

MAT 4525
(n,n') 2α
Cross Section
45-Rh-103
-85.18 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1550 MeV
JEFF3.3 Threshold 6.1493 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
45-Rh-103

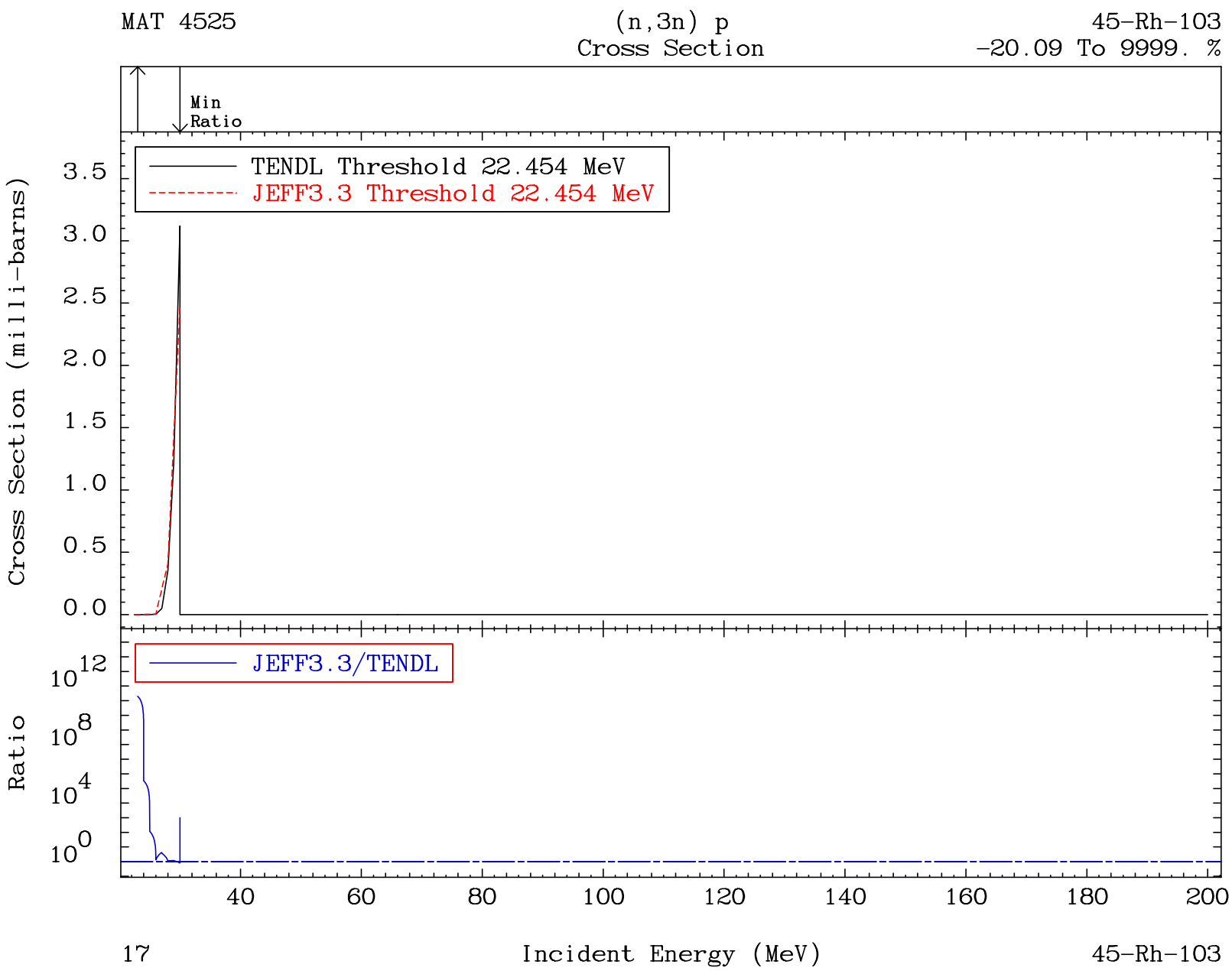

MAT 4525
(n,n') d
Cross Section
45-Rh-103
26.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.339 MeV
JEFF3.3 Threshold 13.339 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
45-Rh-103

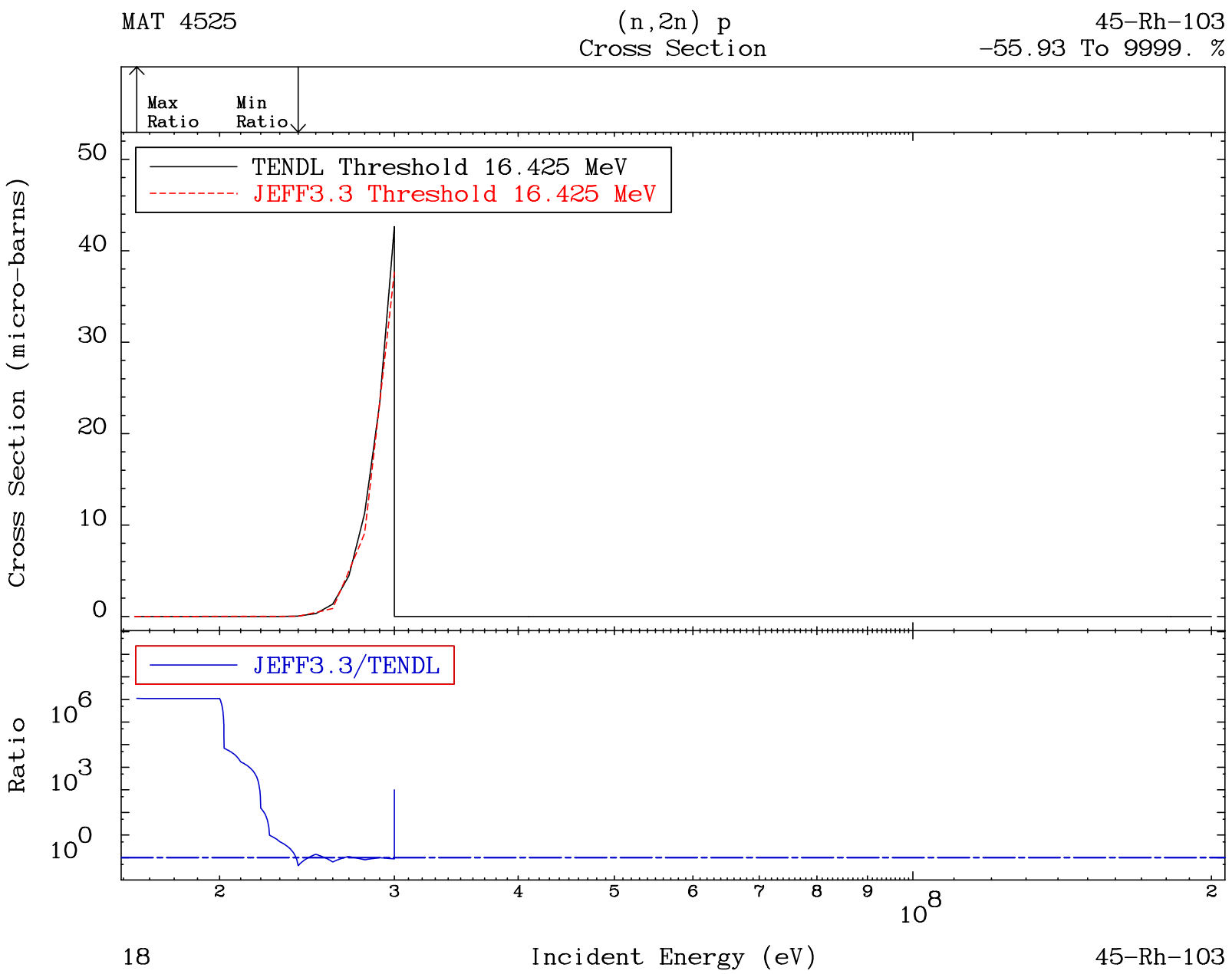

MAT 4525
(n,n') t
Cross Section
45-Rh-103
2.537 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.889 MeV
JEFF3.3 Threshold 13.889 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
13
45-Rh-103

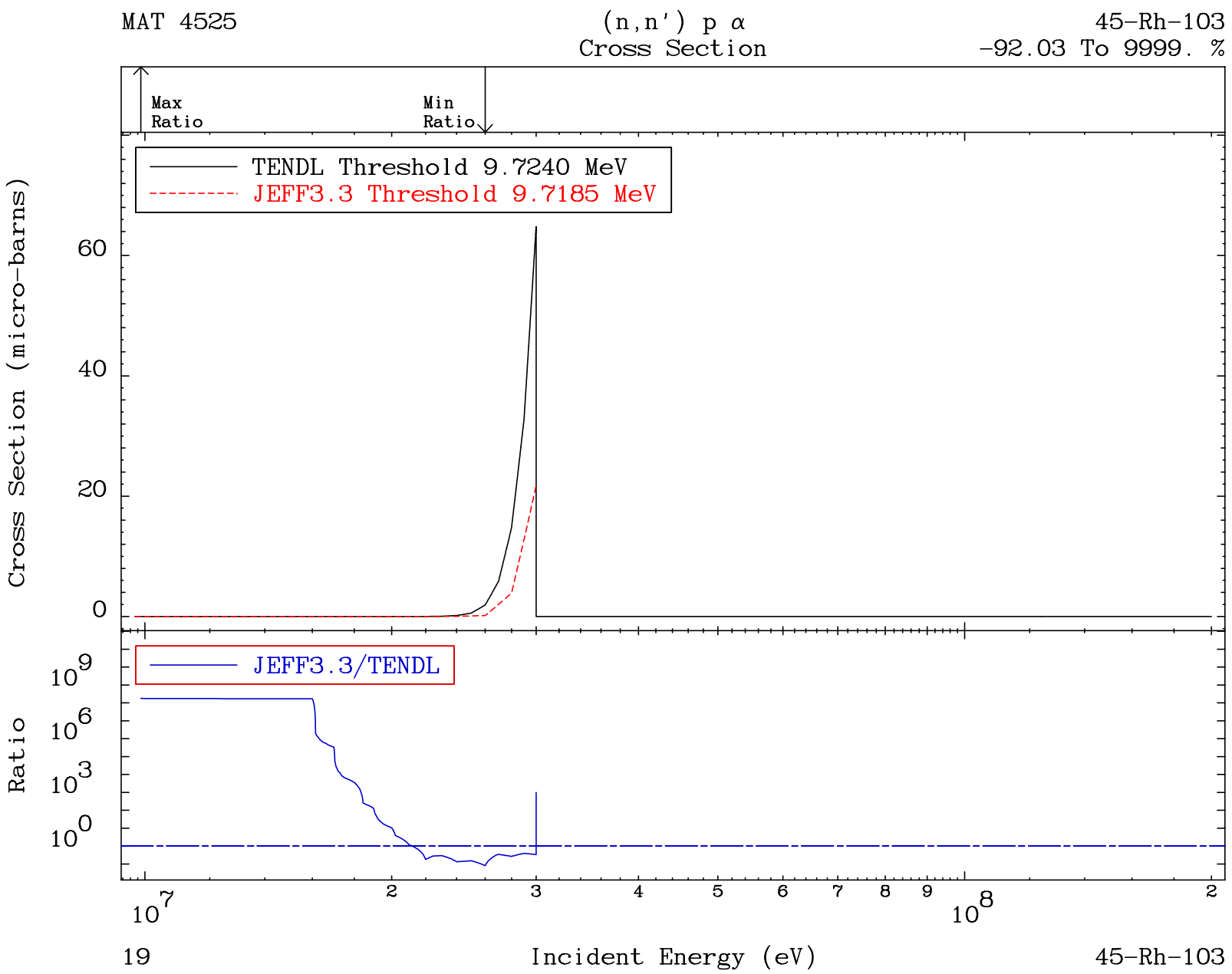

MAT 4525
(n,n') He-3
Cross Section
45-Rh-103
-93.65 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 17.108 MeV
JEFF3.3 Threshold 17.103 MeV
Cross Section (micro-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
45-Rh-103

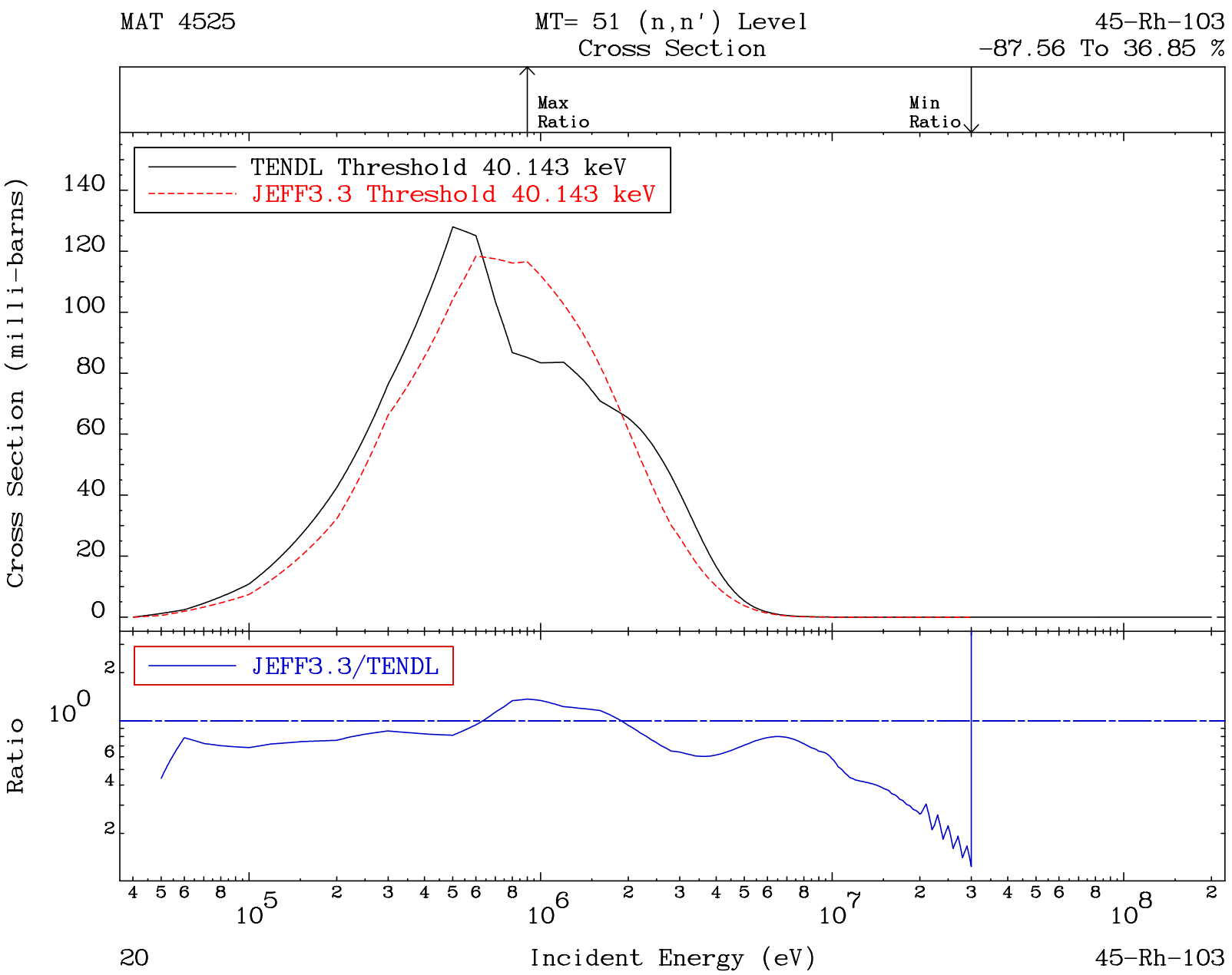

MAT 4525
(n,4n)
Cross Section
45-Rh-103
-8.297 To 9999. %
Min
Ratio
TENDL Threshold 26.916 MeV
JEFF3.3 Threshold 26.909 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
45-Rh-103

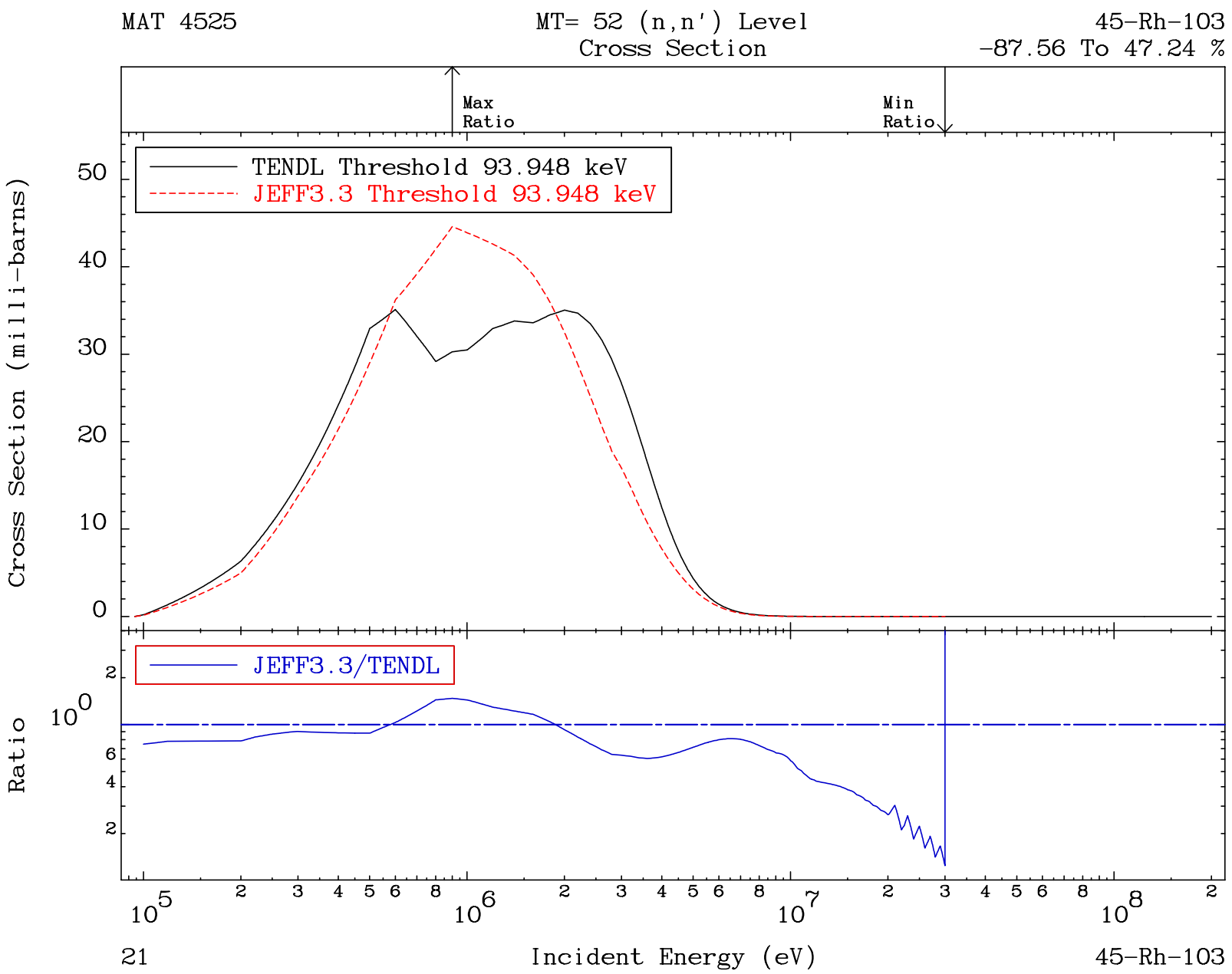

MAT 4525
(n,2n) p
Cross Section
45-Rh-103
-63.57 To 9999. %
Min
Ratio
TENDL Threshold 15.585 MeV
JEFF3.3 Threshold 15.585 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
45-Rh-103

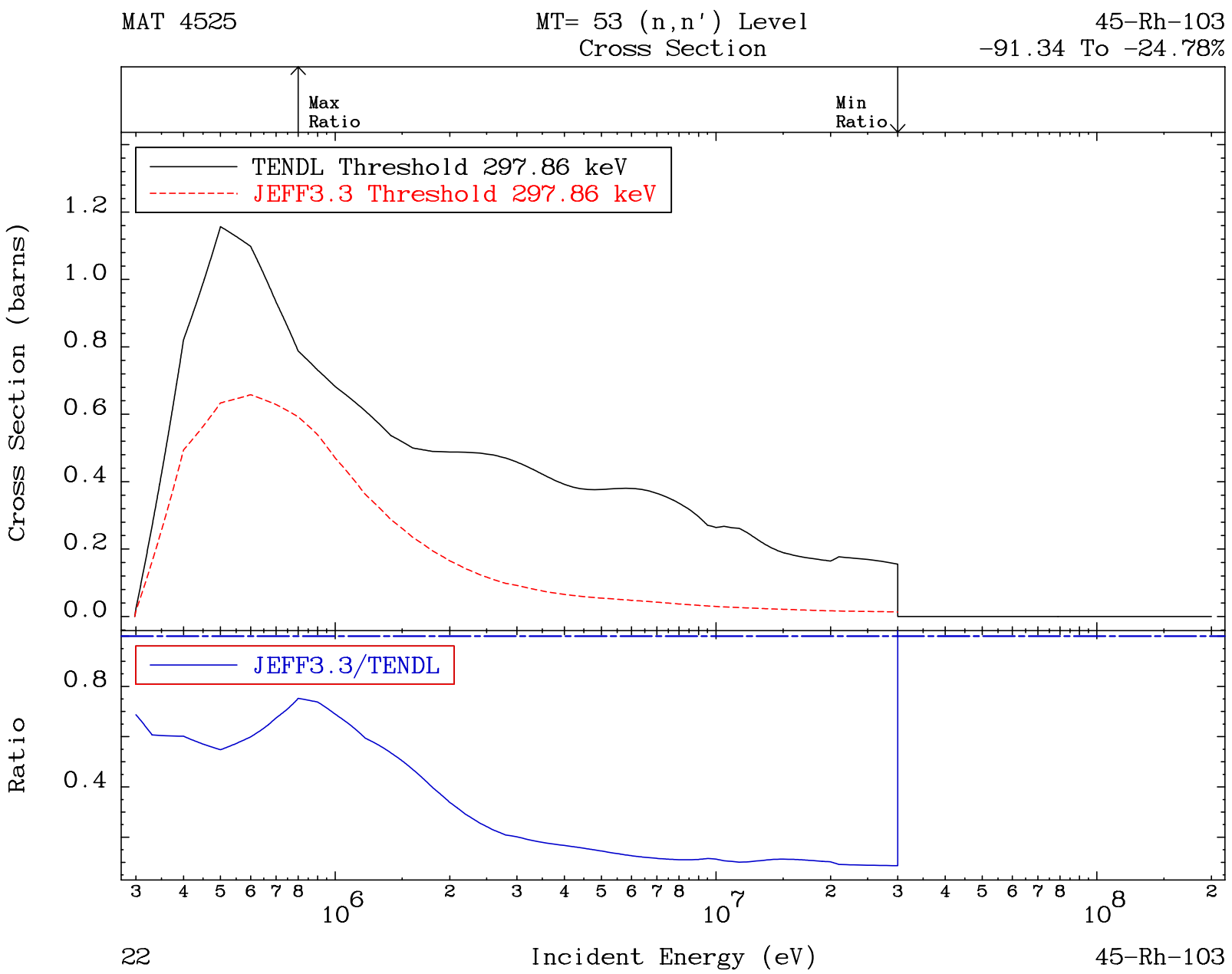

MAT 4525
(n,3n) p
Cross Section
45-Rh-103
-20.09 To 9999. %
Min
Ratio
TENDL Threshold 22.454 MeV
JEFF3.3 Threshold 22.454 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
45-Rh-103

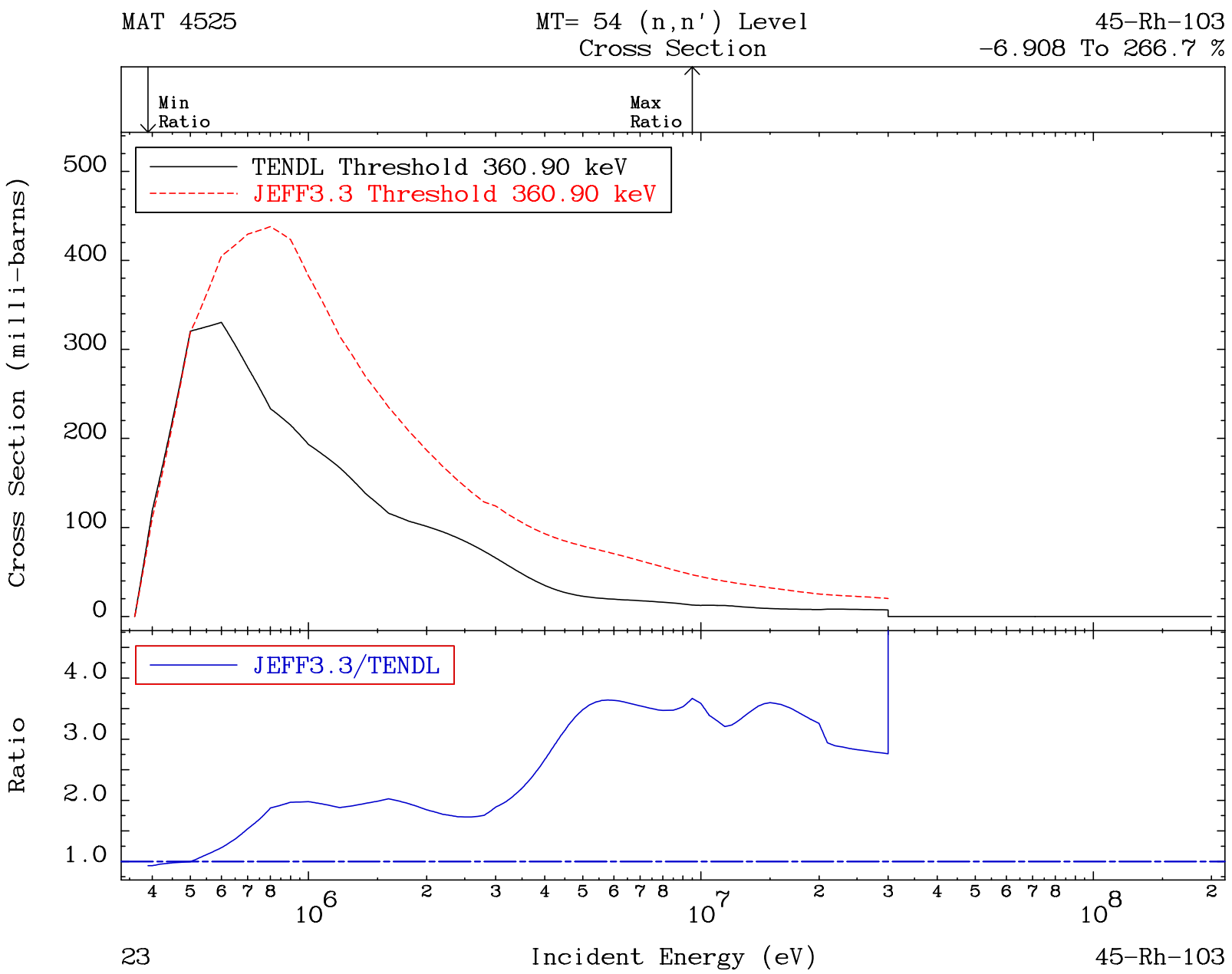

MAT 4525
(n,2n) p
Cross Section
45-Rh-103
-55.93 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.425 MeV
JEFF3.3 Threshold 16.425 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
45-Rh-103

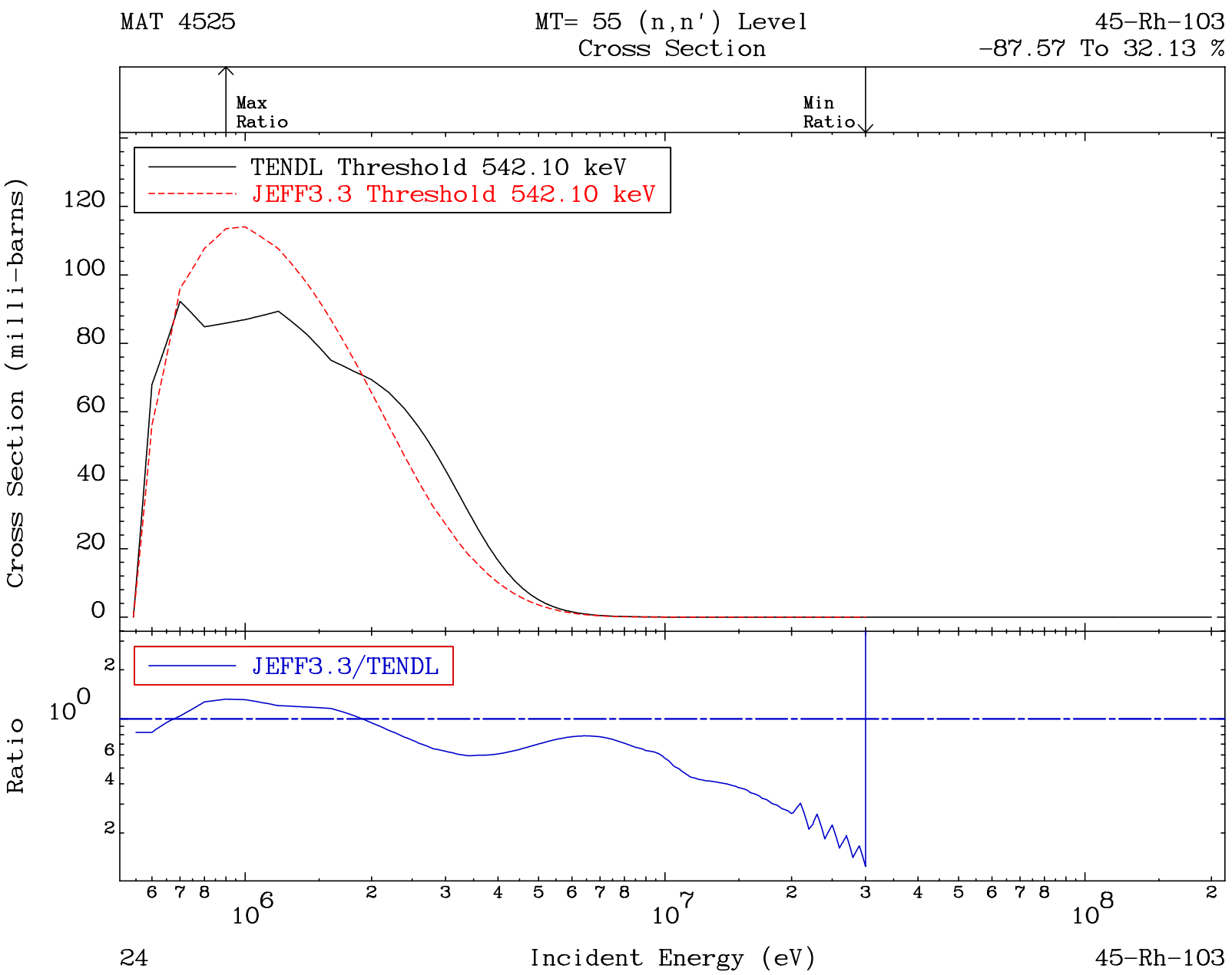

MAT 4525
(n,n') p α
Cross Section
45-Rh-103
-92.03 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.7240 MeV
JEFF3.3 Threshold 9.7185 MeV
Cross Section (micro-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
45-Rh-103

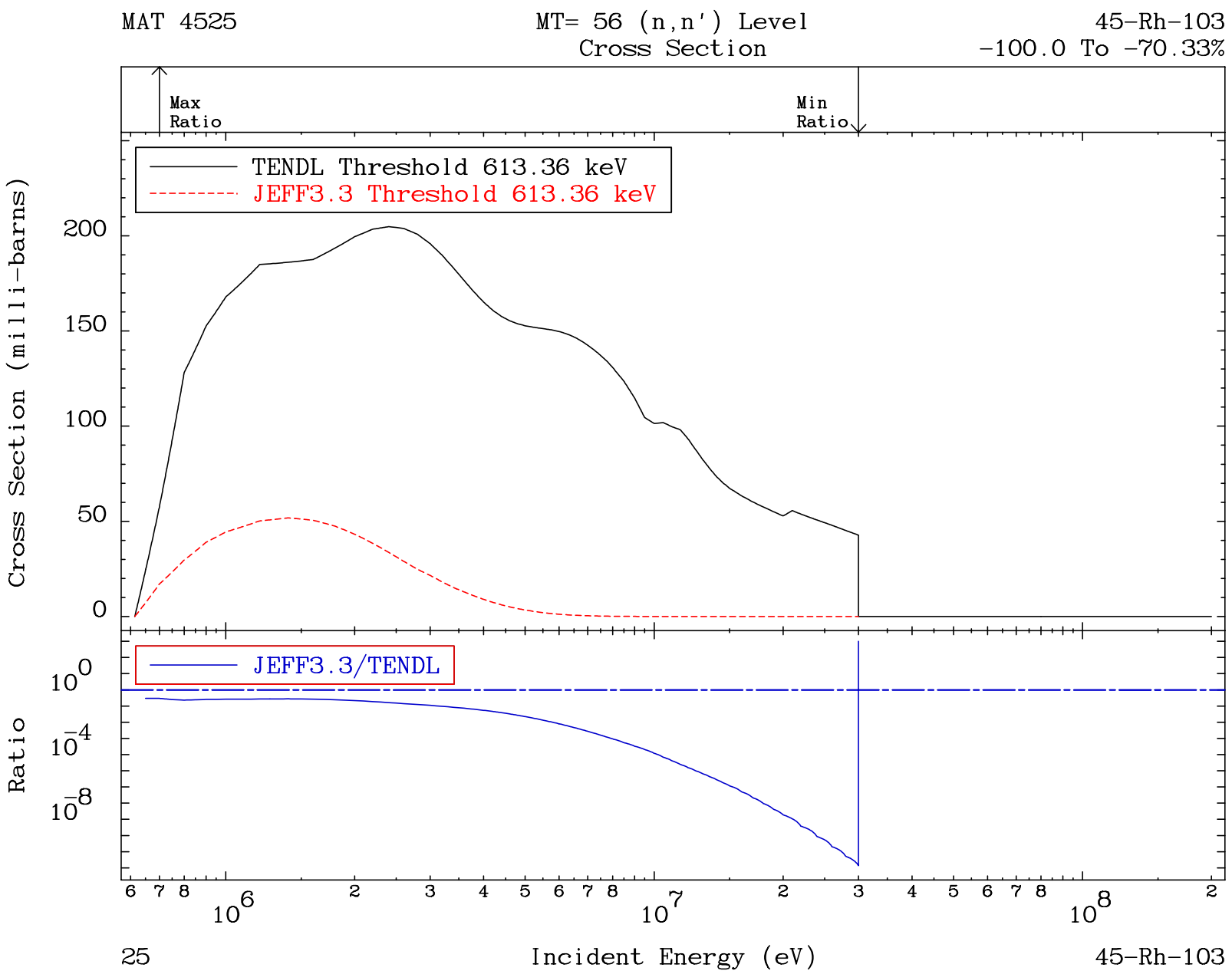

MAT 4525
MT= 51 (n,n') Level
Cross Section
45-Rh-103
-87.56 To 36.85 %
Max
Ratio
Min
Ratio
TENDL Threshold 40.143 keV
JEFF3.3 Threshold 40.143 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
2
6
4
2
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
45-Rh-103

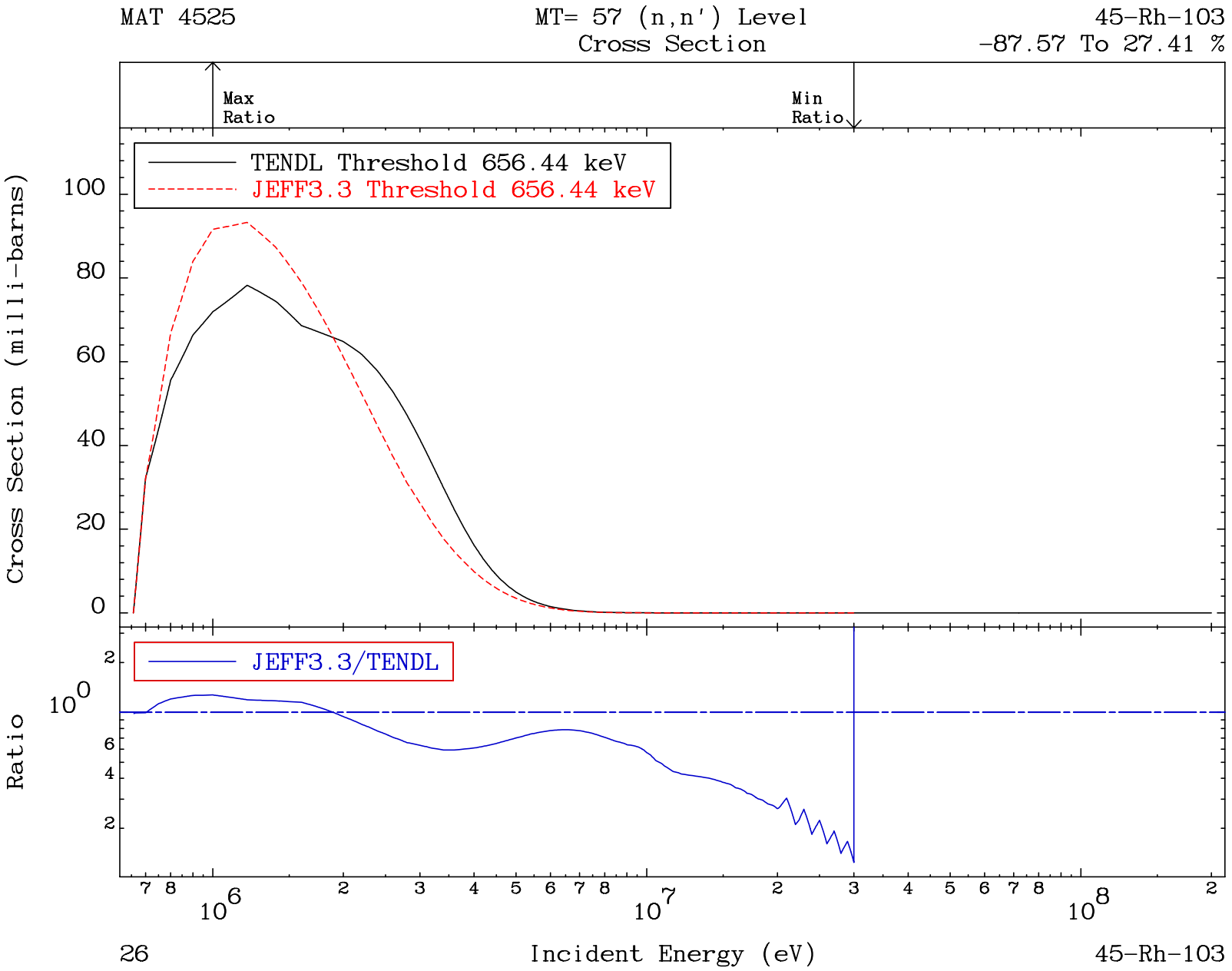

MAT 4525
MT= 52 (n,n') Level
Cross Section
45-Rh-103
-87.56 To 47.24 %
Max
Ratio
Min
Ratio
TENDL Threshold 93.948 keV
JEFF3.3 Threshold 93.948 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^0
2
6
4
2
10^5
10^6
10^7
10^8
21
Incident Energy (eV)
45-Rh-103

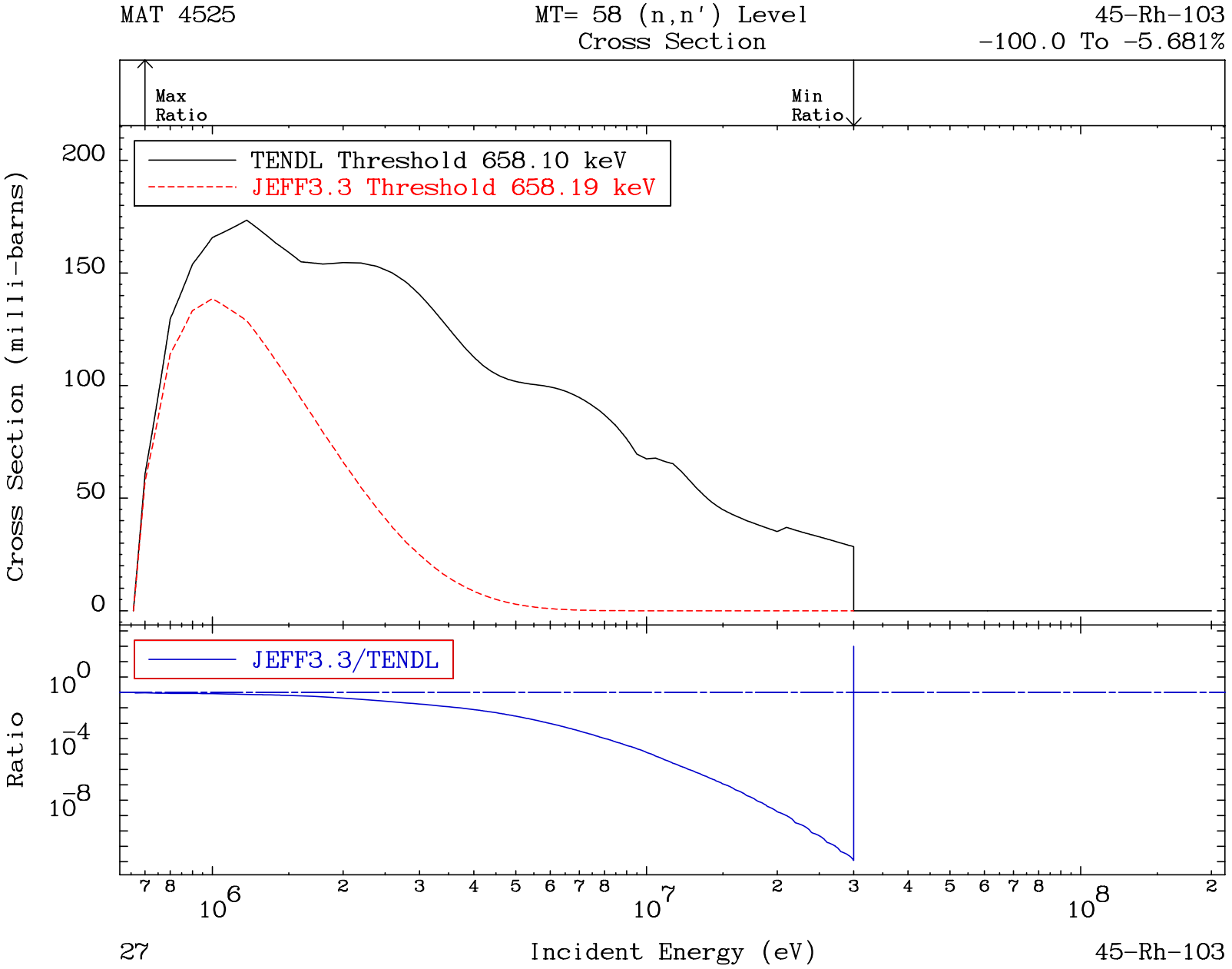

MAT 4525
MT= 53 (n,n') Level
Cross Section
45-Rh-103
-91.34 To -24.78%
Max
Ratio
Min
Ratio
TENDL Threshold 297.86 keV
JEFF3.3 Threshold 297.86 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
0.8
0.4
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
45-Rh-103

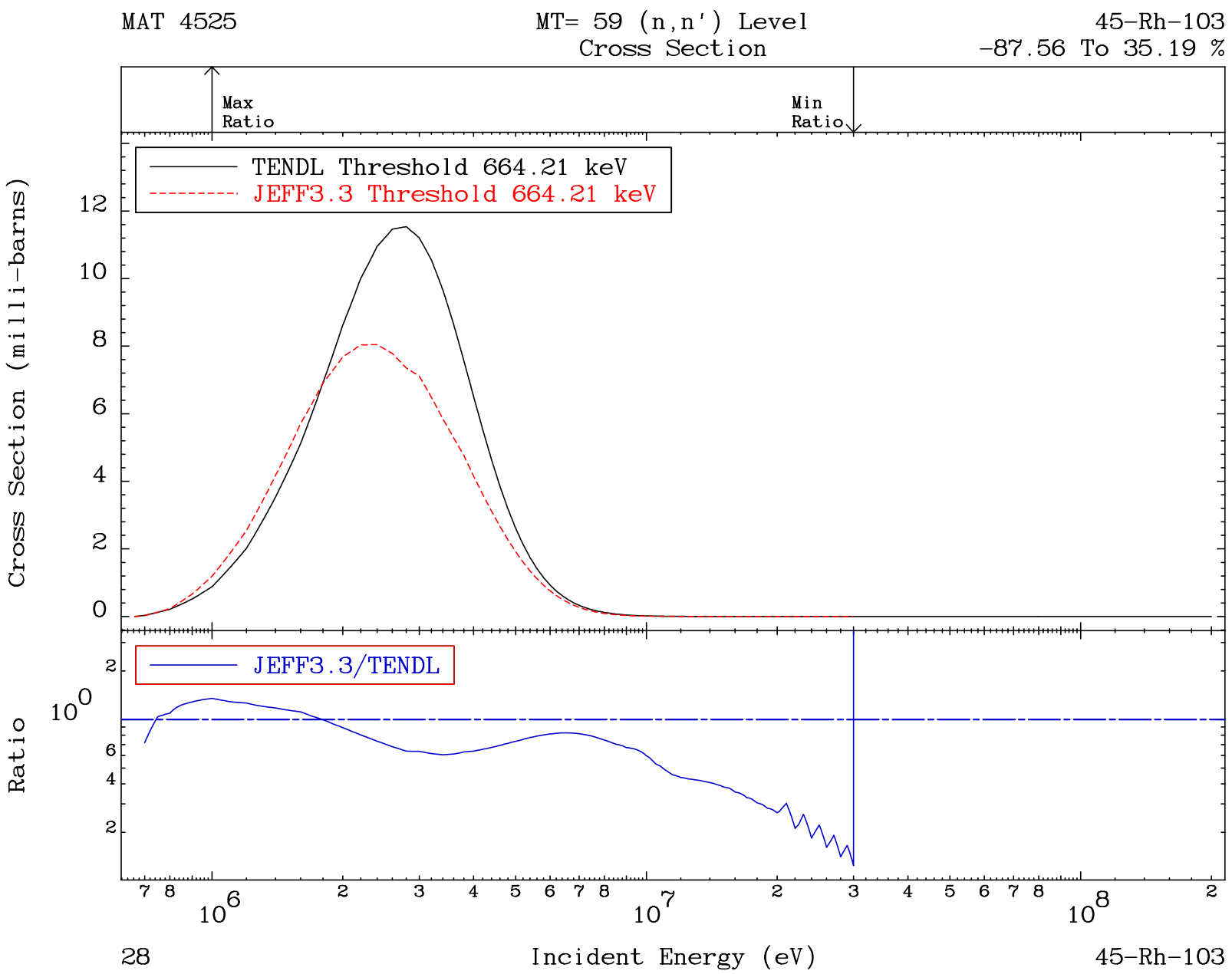

MAT 4525
MT= 54 (n,n') Level
Cross Section
45-Rh-103
-6.908 To 266.7 %
Min
Ratio
Max
Ratio
TENDL Threshold 360.90 keV
JEFF3.3 Threshold 360.90 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
45-Rh-103

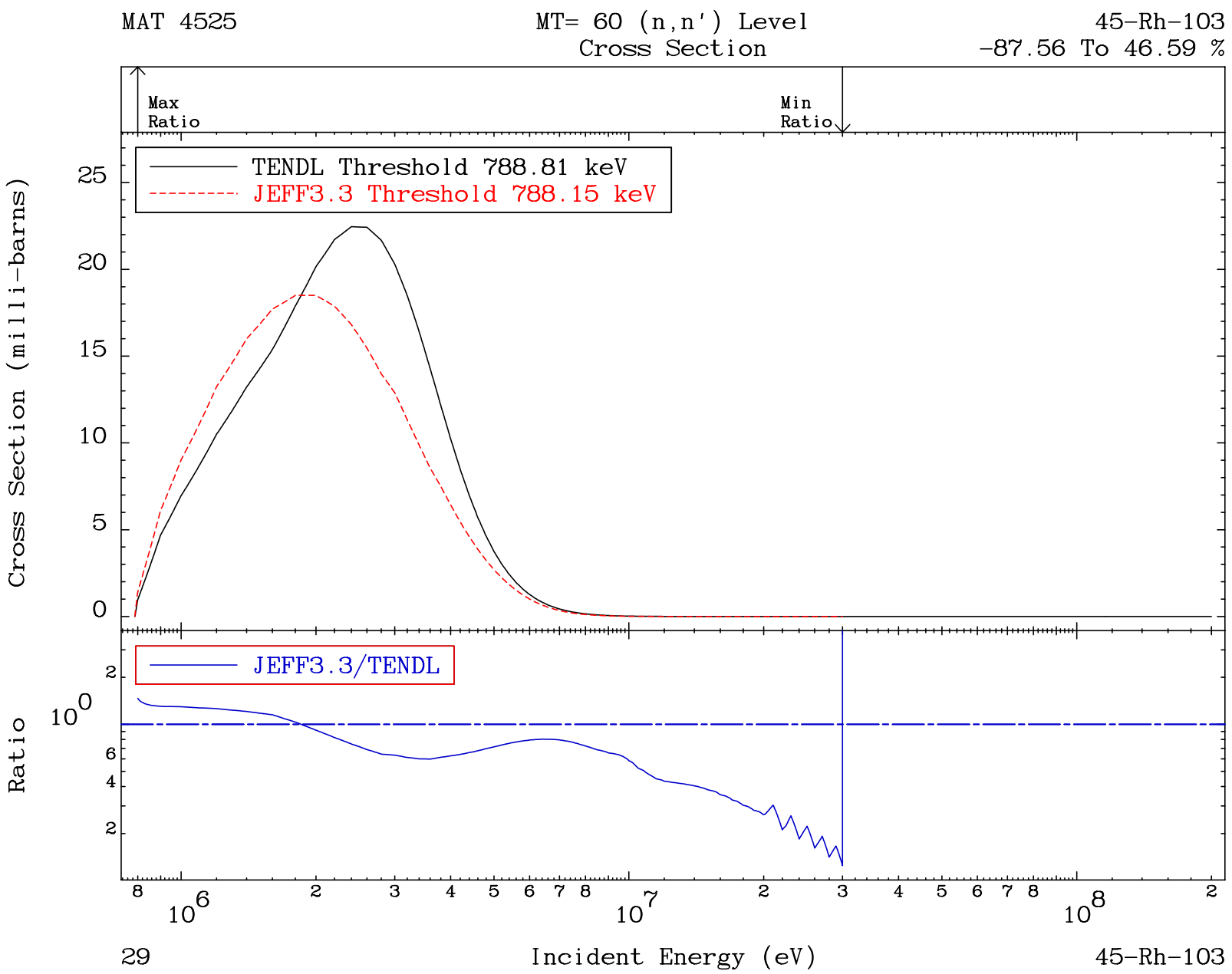

MAT 4525
MT= 55 (n,n') Level
Cross Section
45-Rh-103
-87.57 To 32.13 %
Max
Ratio
Min
Ratio
TENDL Threshold 542.10 keV
JEFF3.3 Threshold 542.10 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^0
6
4
2
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
45-Rh-103

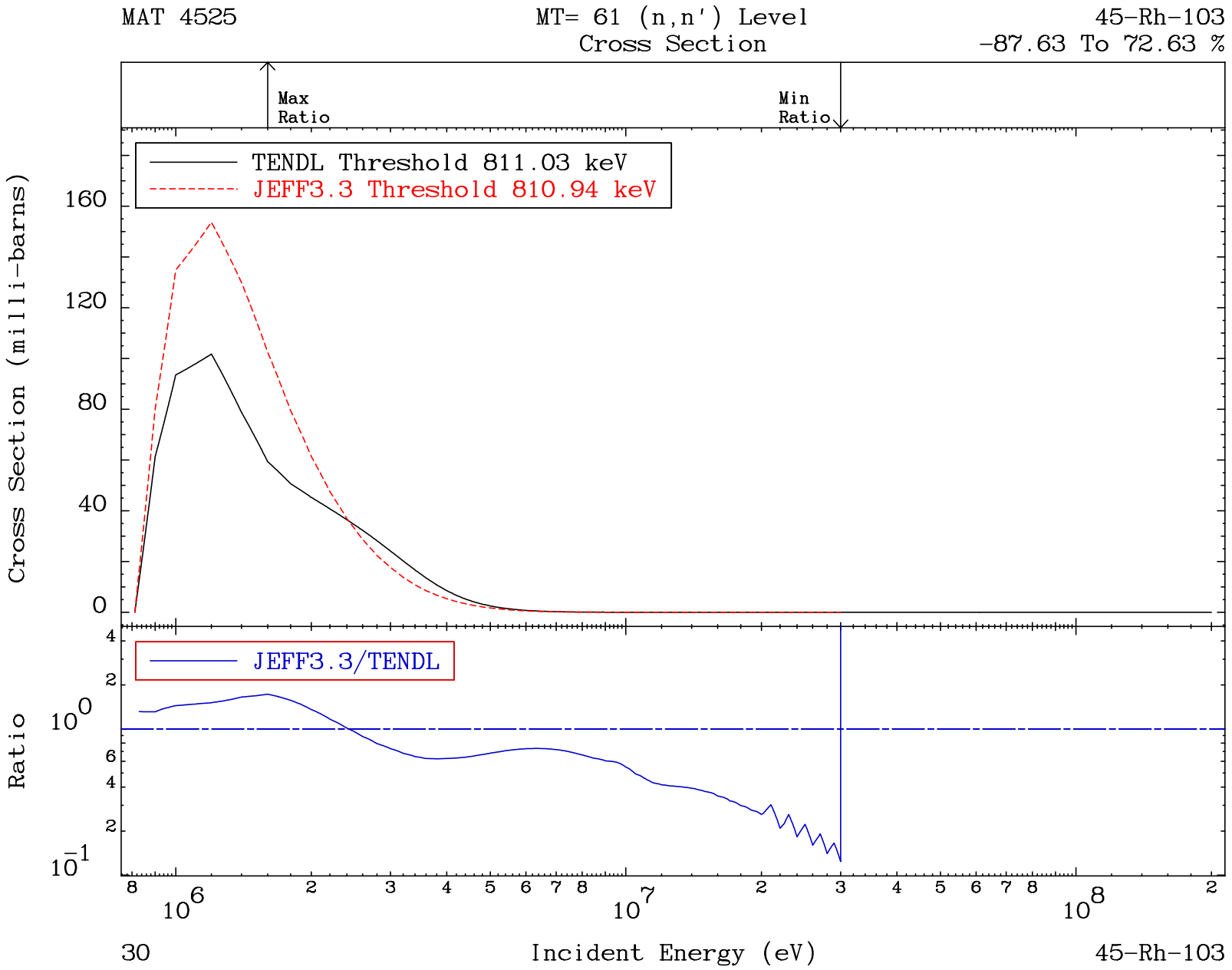

MAT 4525
MT= 56 (n,n') Level
Cross Section
45-Rh-103
-100.0 To -70.33%
Max
Ratio
Min
Ratio
TENDL Threshold 613.36 keV
JEFF3.3 Threshold 613.36 keV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^0
10^-4
10^-8
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
45-Rh-103

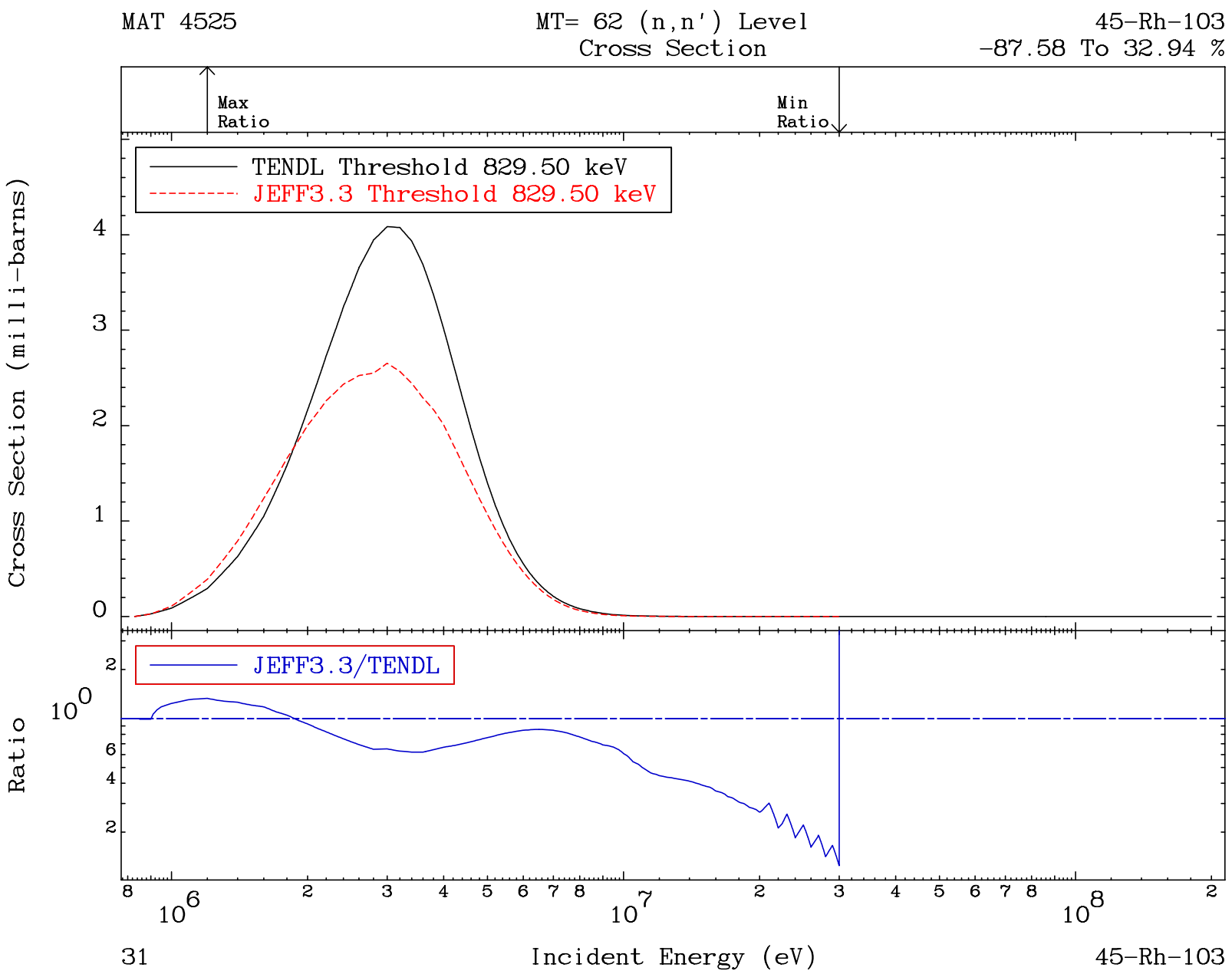

MAT 4525
MT= 57 (n,n') Level
Cross Section
45-Rh-103
-87.57 To 27.41 %
Max
Ratio
Min
Ratio
TENDL Threshold 656.44 keV
JEFF3.3 Threshold 656.44 keV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^0
6
4
2
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
45-Rh-103

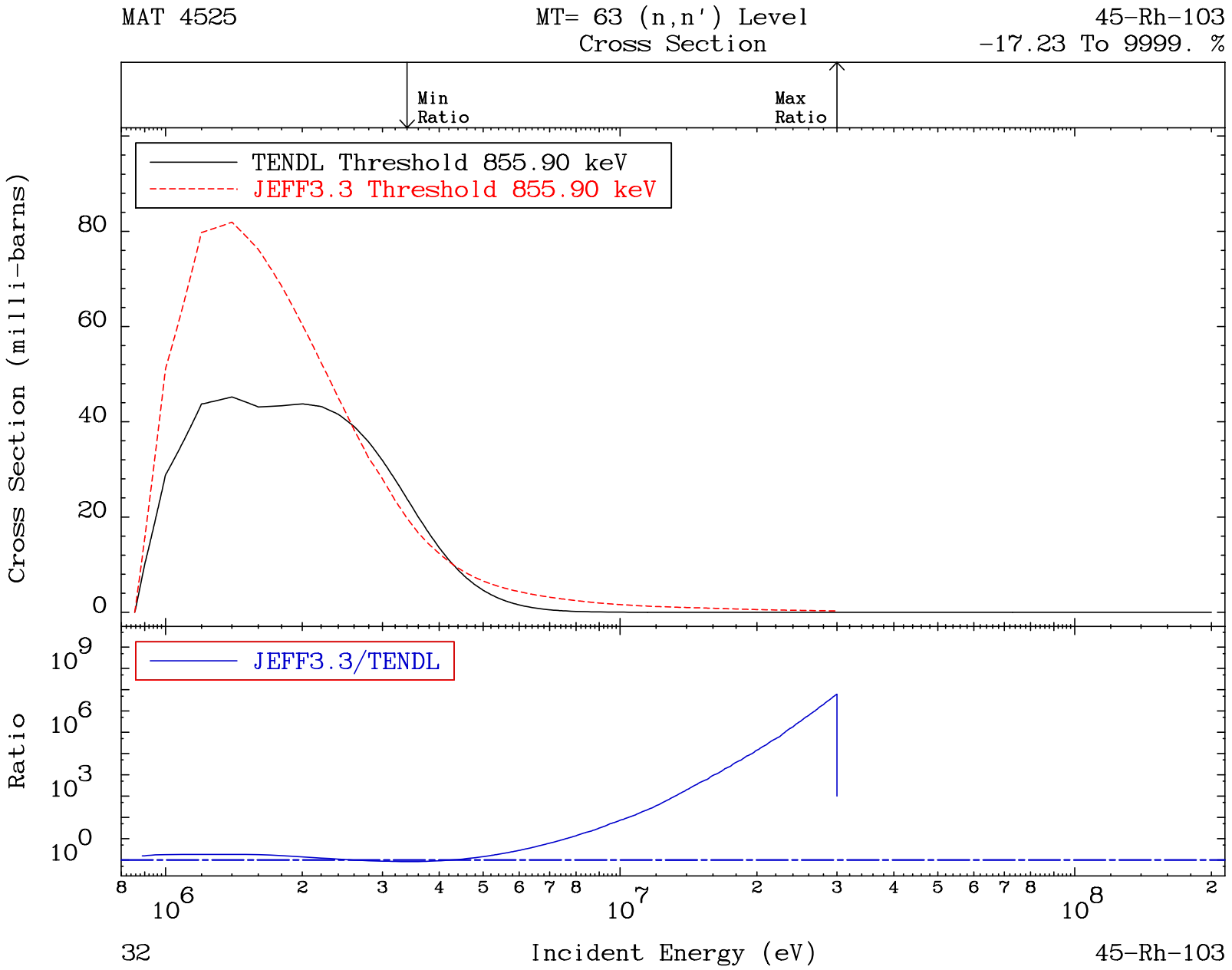

MAT 4525
MT= 58 (n,n') Level
Cross Section
45-Rh-103
-100.0 To -5.681%
Max
Ratio
Min
Ratio
TENDL Threshold 658.10 keV
JEFF3.3 Threshold 658.19 keV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^0
10^-4
10^-8
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
45-Rh-103

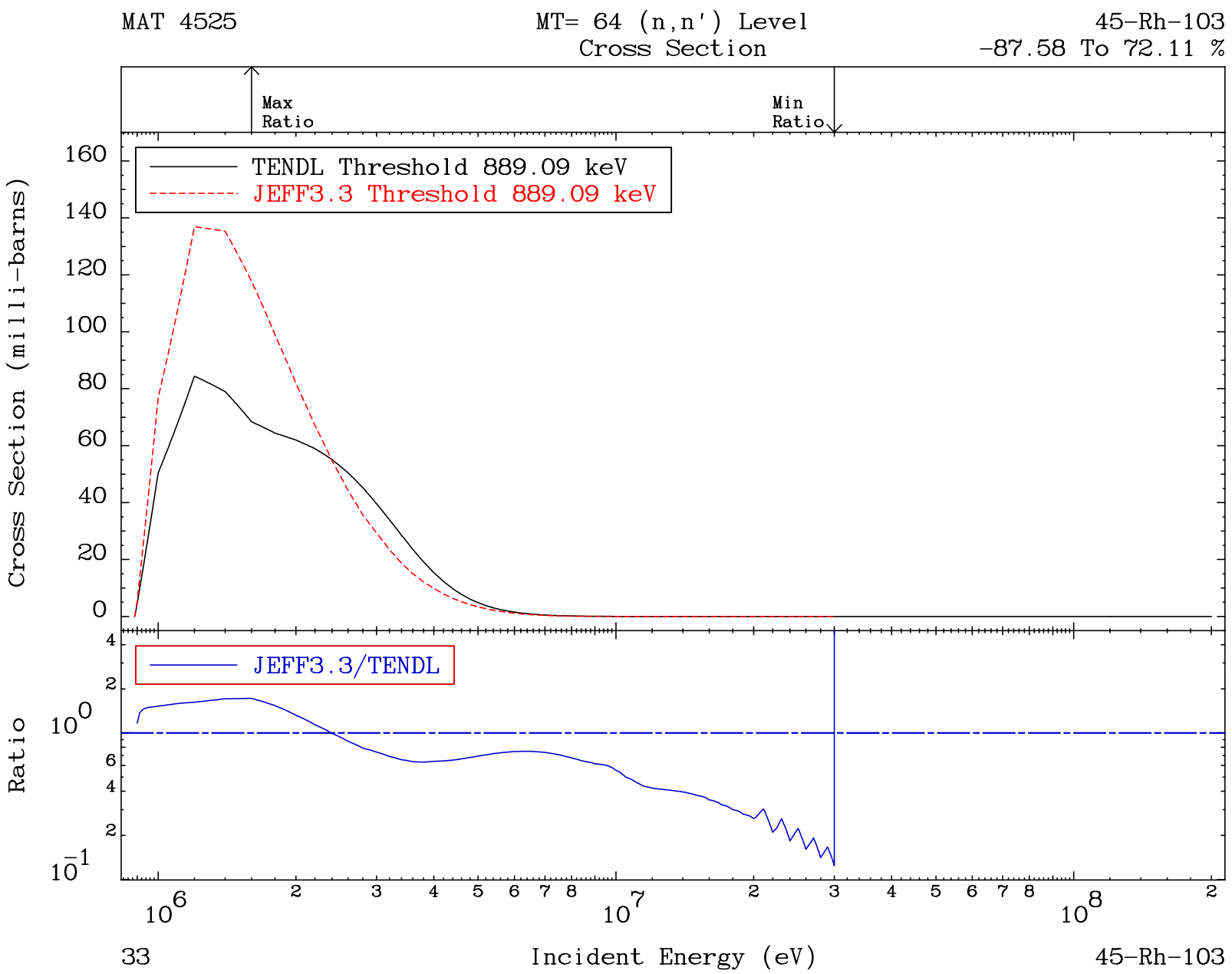

MAT 4525
MT= 59 (n,n') Level
Cross Section
45-Rh-103
-87.56 To 35.19 %
Max
Ratio
Min
Ratio
TENDL Threshold 664.21 keV
JEFF3.3 Threshold 664.21 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
28
45-Rh-103

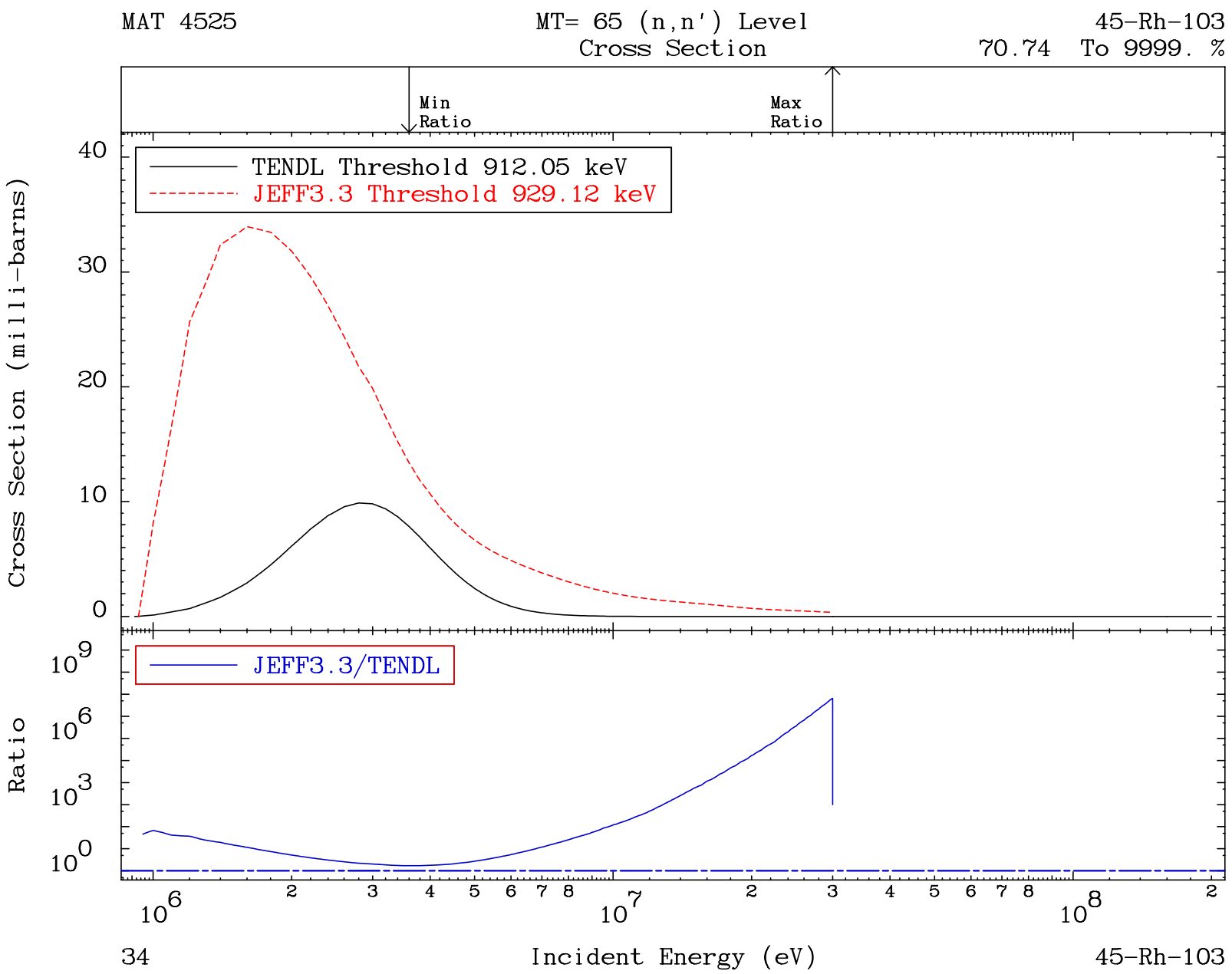

MAT 4525
MT= 60 (n,n') Level
Cross Section
45-Rh-103
-87.56 To 46.59 %
Max
Ratio
Min
Ratio
TENDL Threshold 788.81 keV
JEFF3.3 Threshold 788.15 keV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^0
2
6
4
2
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
45-Rh-103

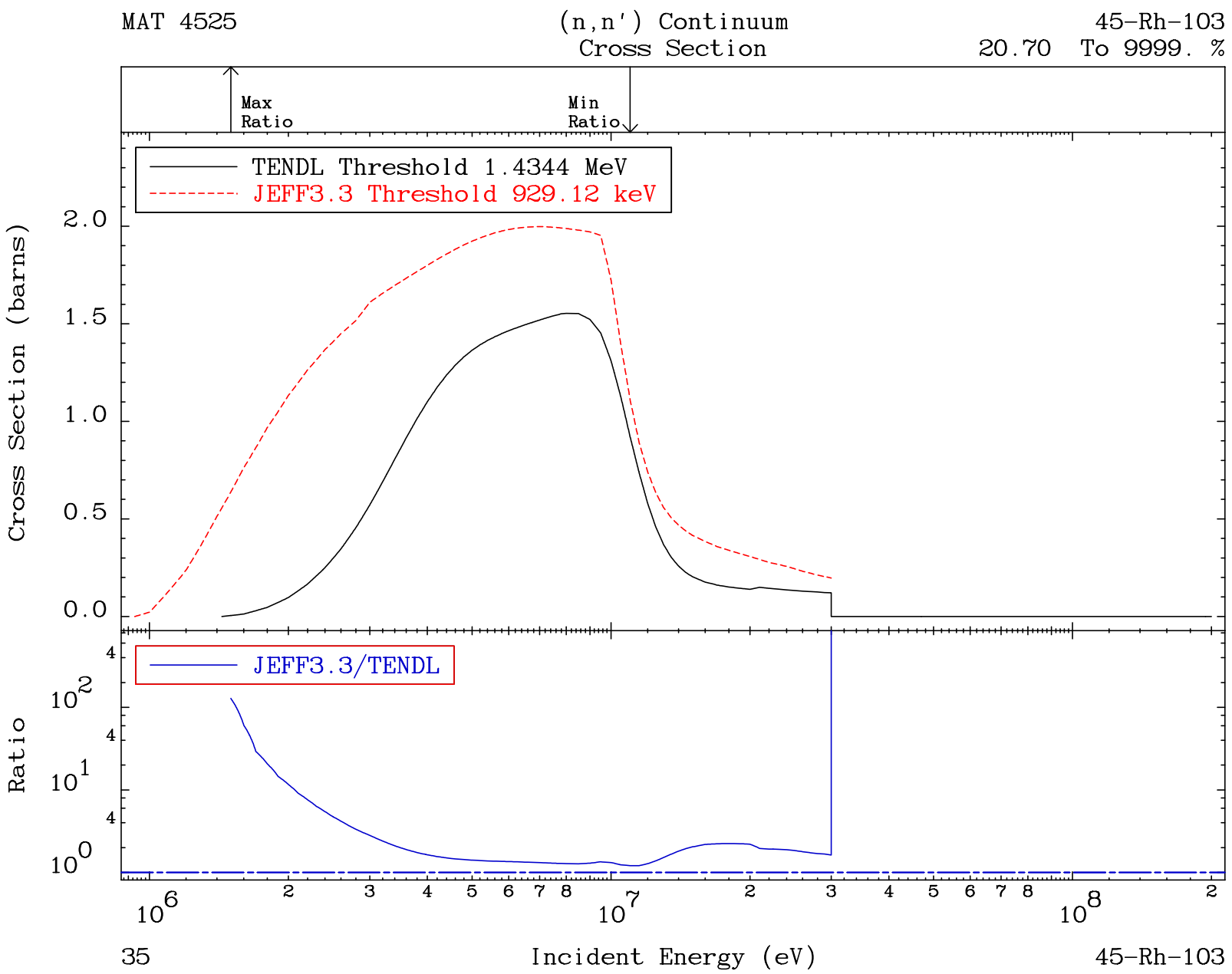

MAT 4525
MT= 61 (n,n') Level
Cross Section
45-Rh-103
-87.63 To 72.63 %
Max
Ratio
Min
Ratio
TENDL Threshold 811.03 keV
JEFF3.3 Threshold 810.94 keV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
4
2
10^0
6
4
2
10^-1
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
45-Rh-103

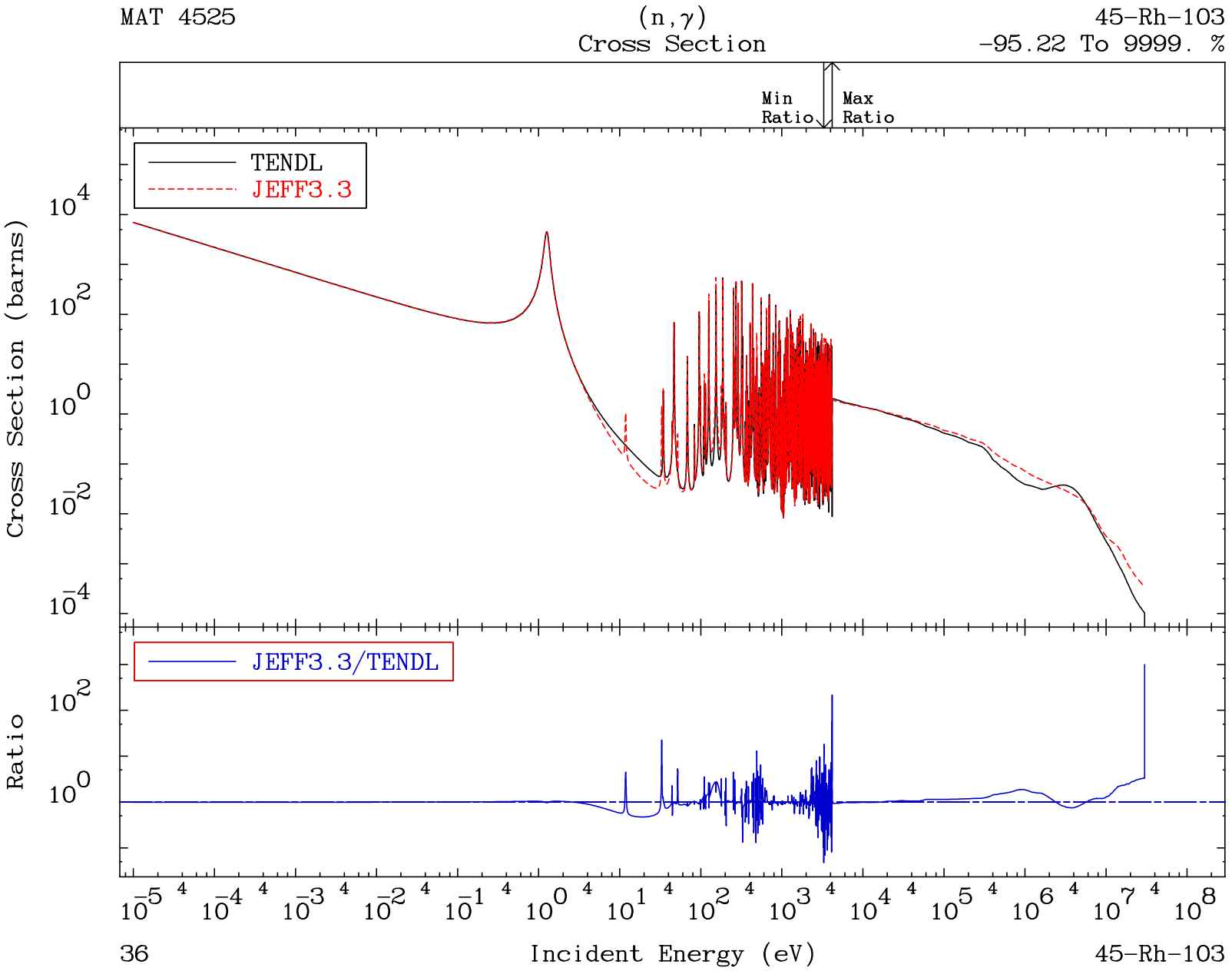

MAT 4525
MT= 62 (n,n') Level
Cross Section
45-Rh-103
-87.58 To 32.94 %
Max
Ratio
Min
Ratio
TENDL Threshold 829.50 keV
JEFF3.3 Threshold 829.50 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
31
45-Rh-103

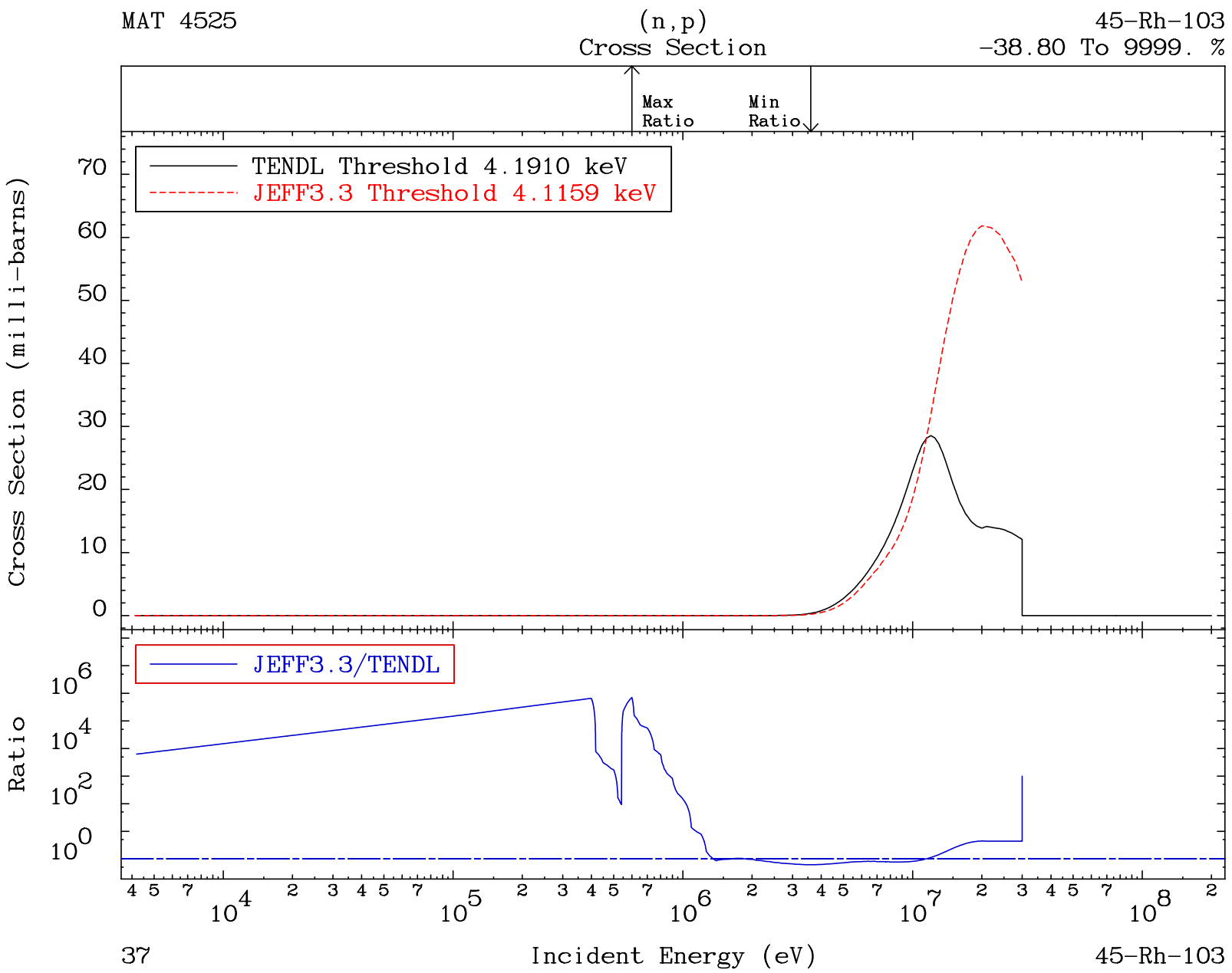

MAT 4525
MT= 63 (n,n') Level
Cross Section
45-Rh-103
-17.23 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 855.90 keV
JEFF3.3 Threshold 855.90 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
45-Rh-103

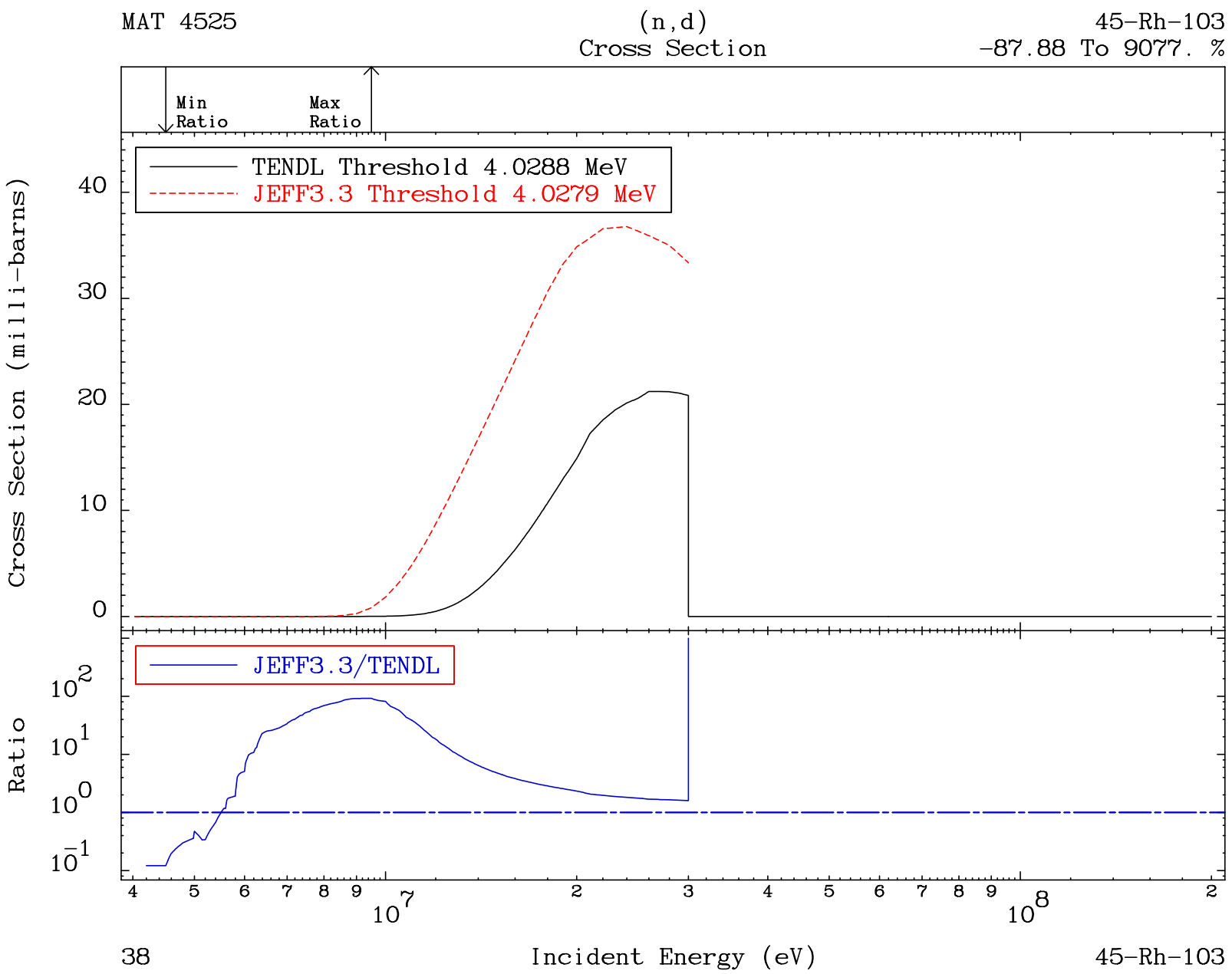

MAT 4525
MT= 64 (n,n') Level
Cross Section
45-Rh-103
-87.58 To 72.11 %
Max
Ratio
Min
Ratio
TENDL Threshold 889.09 keV
JEFF3.3 Threshold 889.09 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
4
2
10^0
6
4
2
10^-1
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
33
Incident Energy (eV)
45-Rh-103

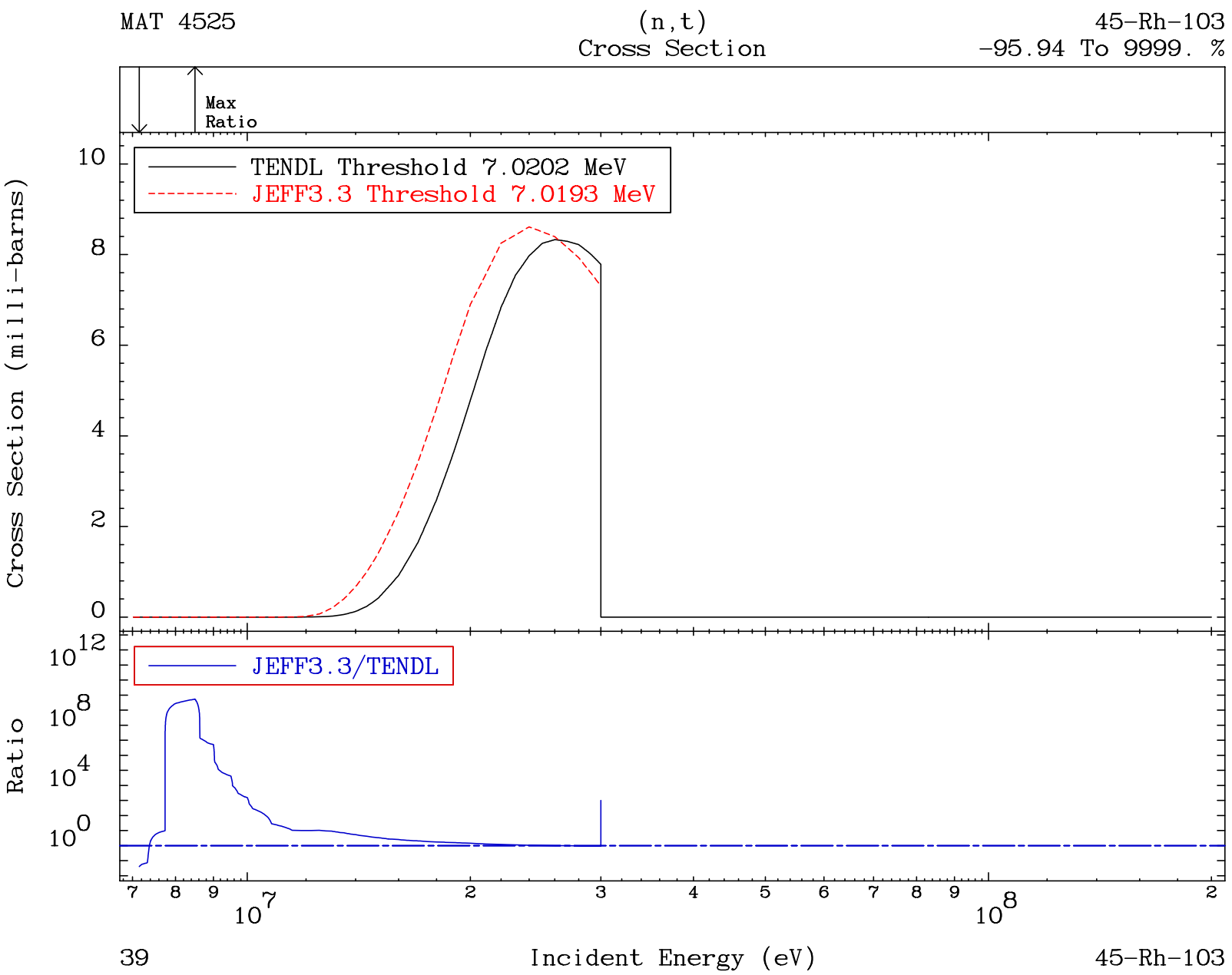

MAT 4525
MT= 65 (n,n') Level
Cross Section
45-Rh-103
70.74 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 912.05 keV
JEFF3.3 Threshold 929.12 keV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
34
Incident Energy (eV)
45-Rh-103

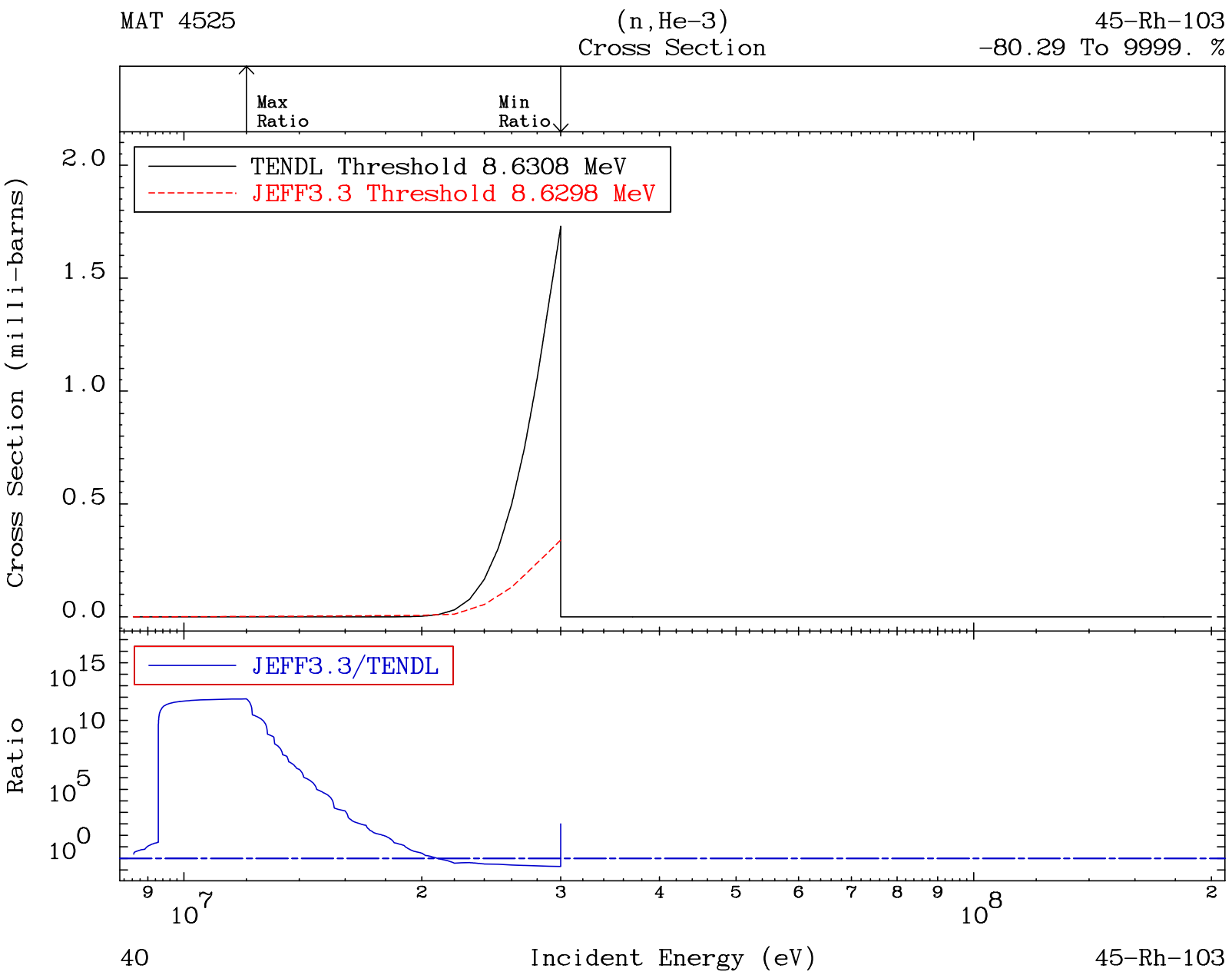

MAT 4525
(n,n') Continuum
Cross Section
45-Rh-103
20.70 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4344 MeV
JEFF3.3 Threshold 929.12 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^6
10^7
10^8
35
Incident Energy (eV)
45-Rh-103

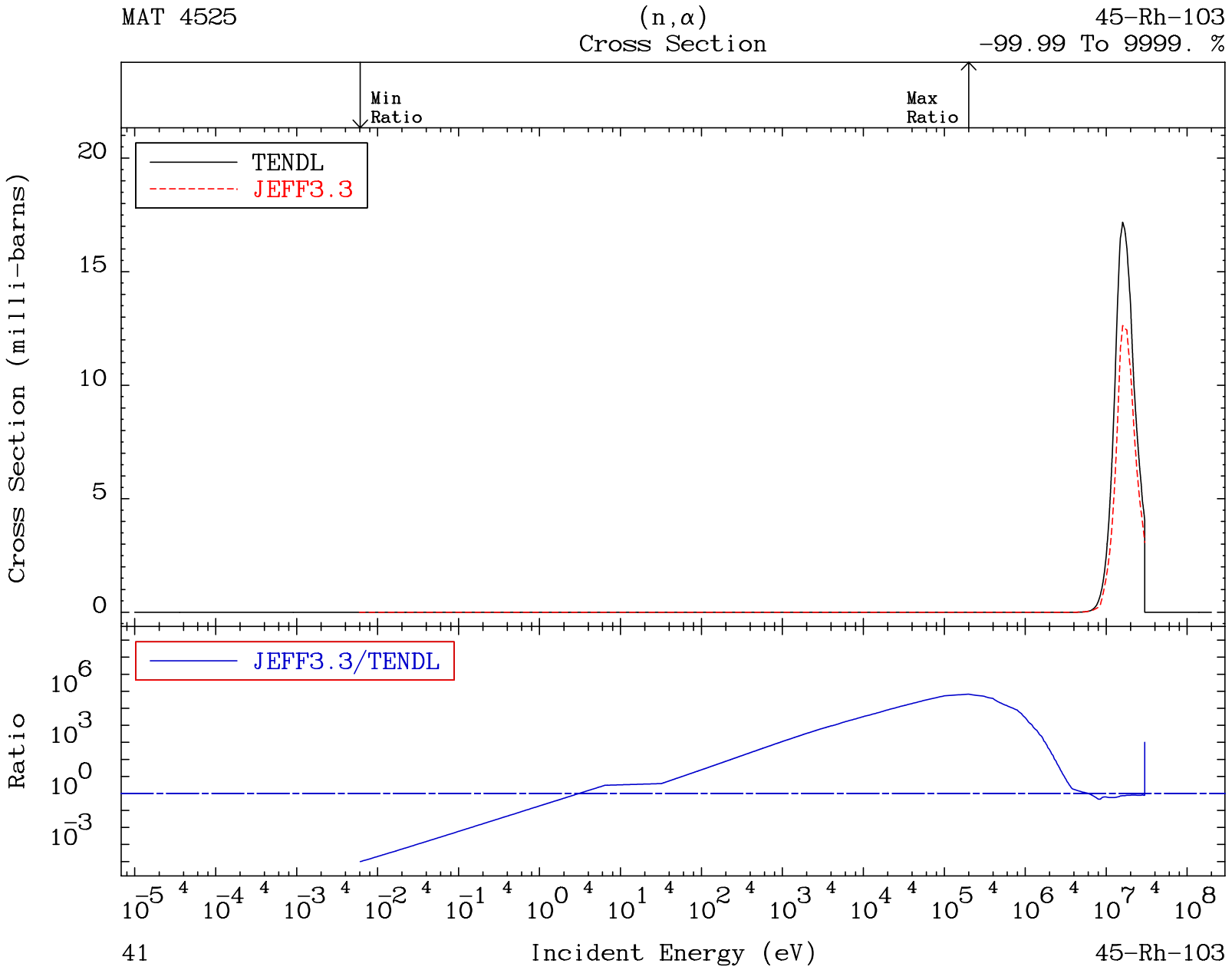

MAT 4525
(n,γ)
Cross Section
45-Rh-103
-95.22 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
36
45-Rh-103

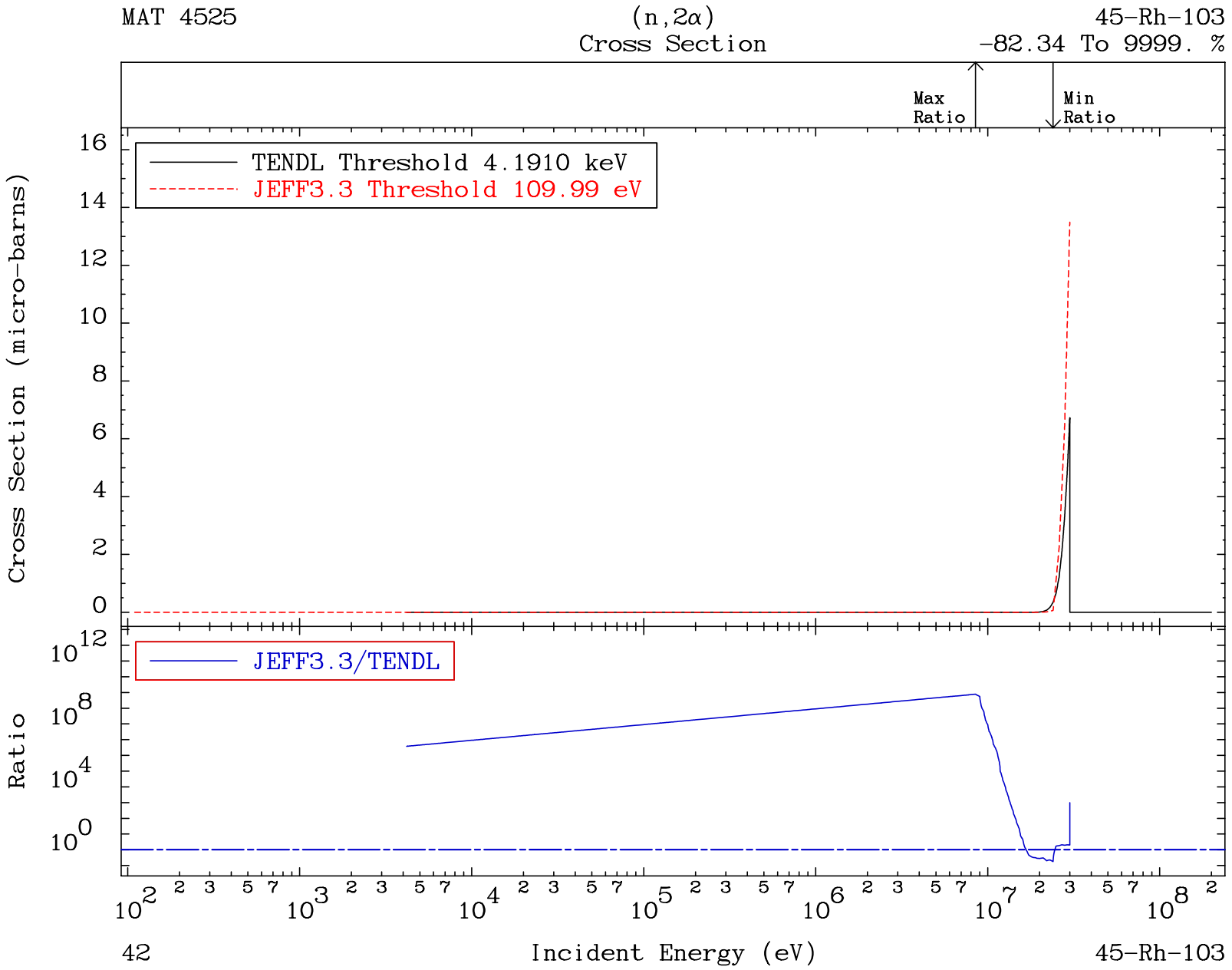

MAT 4525
(n,p)
Cross Section
45-Rh-103
-38.80 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.1910 keV
JEFF3.3 Threshold 4.1159 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
37
Incident Energy (eV)
45-Rh-103

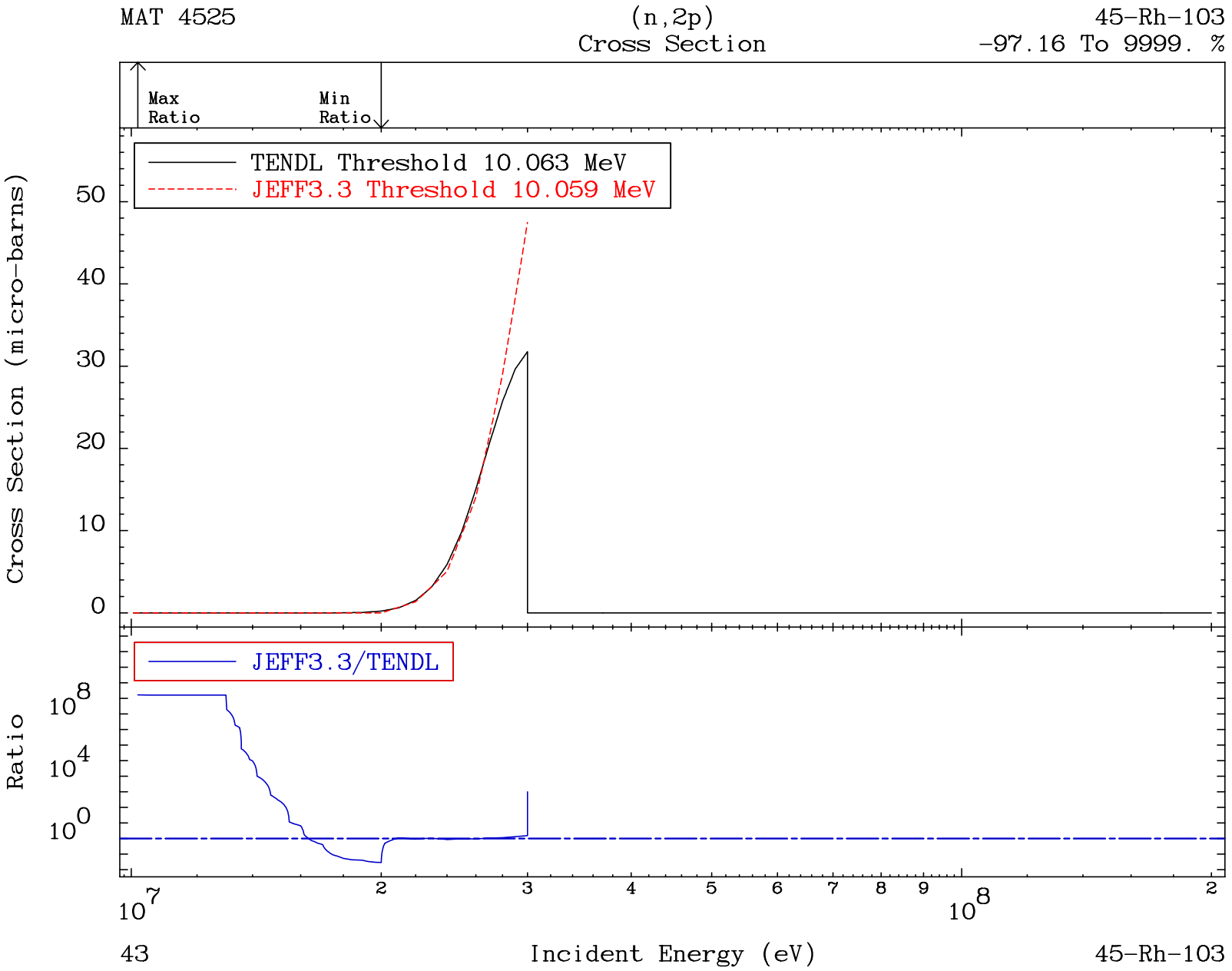

MAT 4525
(n,d)
Cross Section
45-Rh-103
-87.88 To 9077. %
Min Ratio
Max Ratio
TENDL Threshold 4.0288 MeV
JEFF3.3 Threshold 4.0279 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
38
45-Rh-103

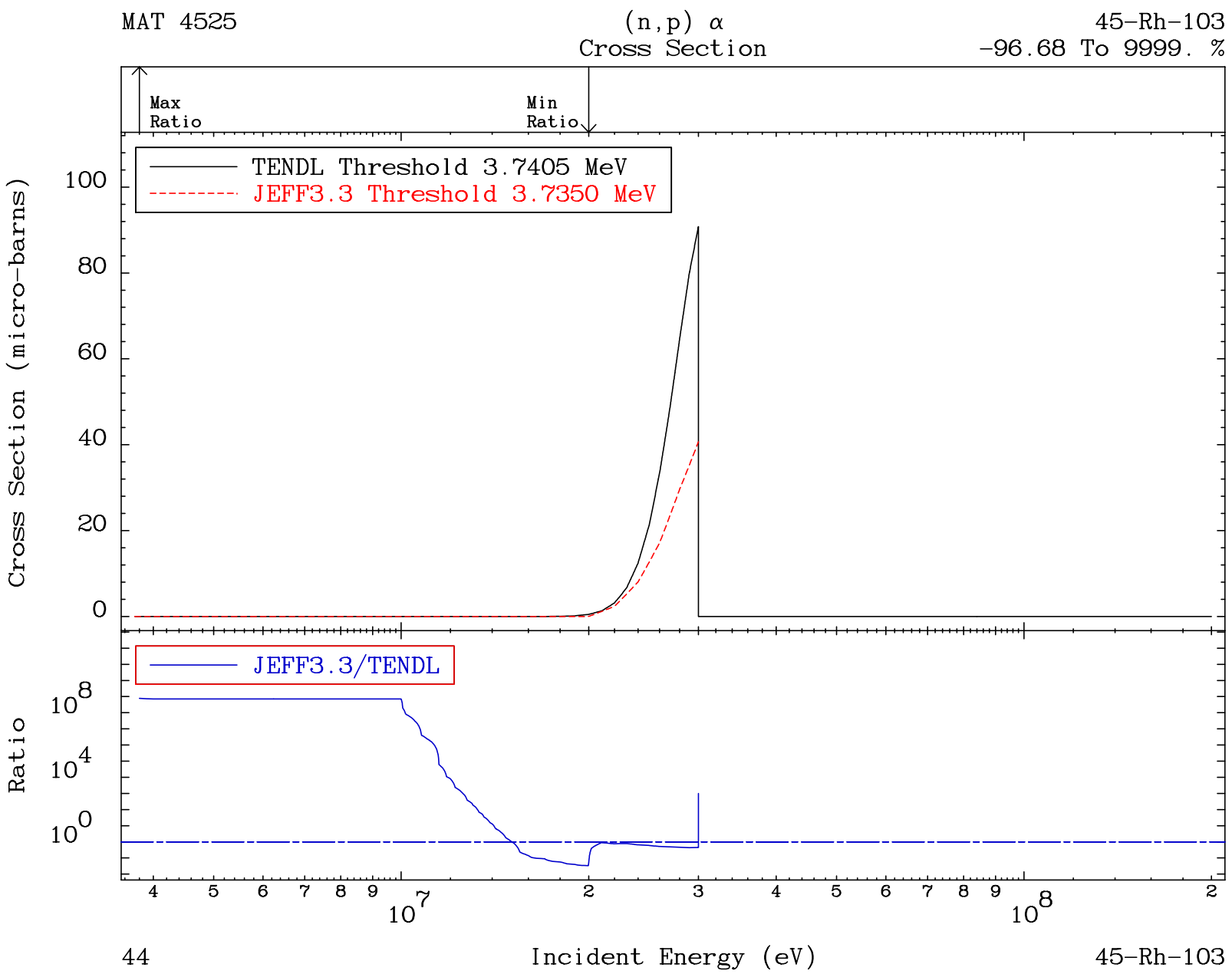

MAT 4525
(n,t)
Cross Section
45-Rh-103
-95.94 To 9999. %
Max
Ratio
TENDL Threshold 7.0202 MeV
JEFF3.3 Threshold 7.0193 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
39
45-Rh-103

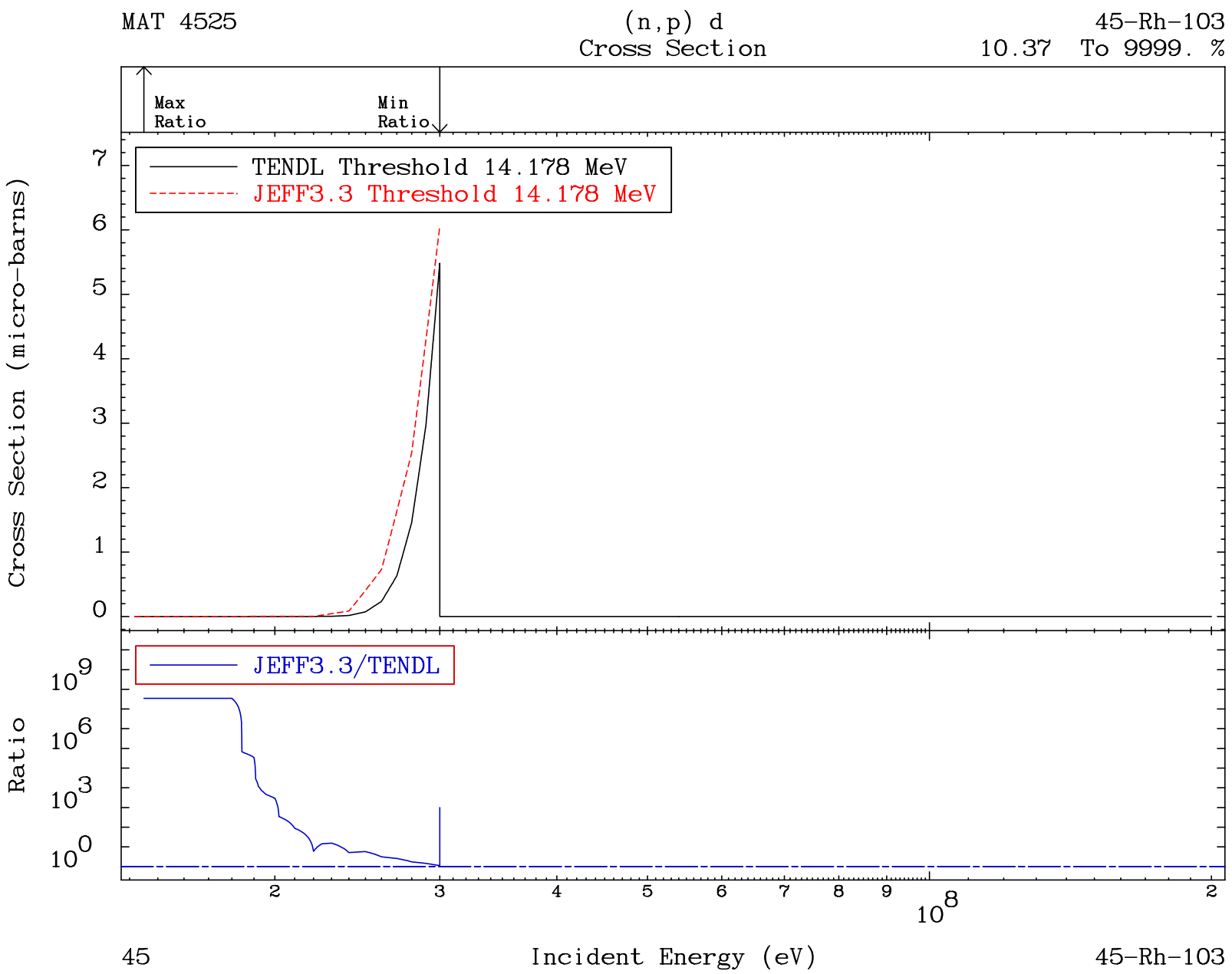

MAT 4525
(n,He-3)
Cross Section
45-Rh-103
-80.29 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.6308 MeV
JEFF3.3 Threshold 8.6298 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^15
10^10
10^5
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
45-Rh-103

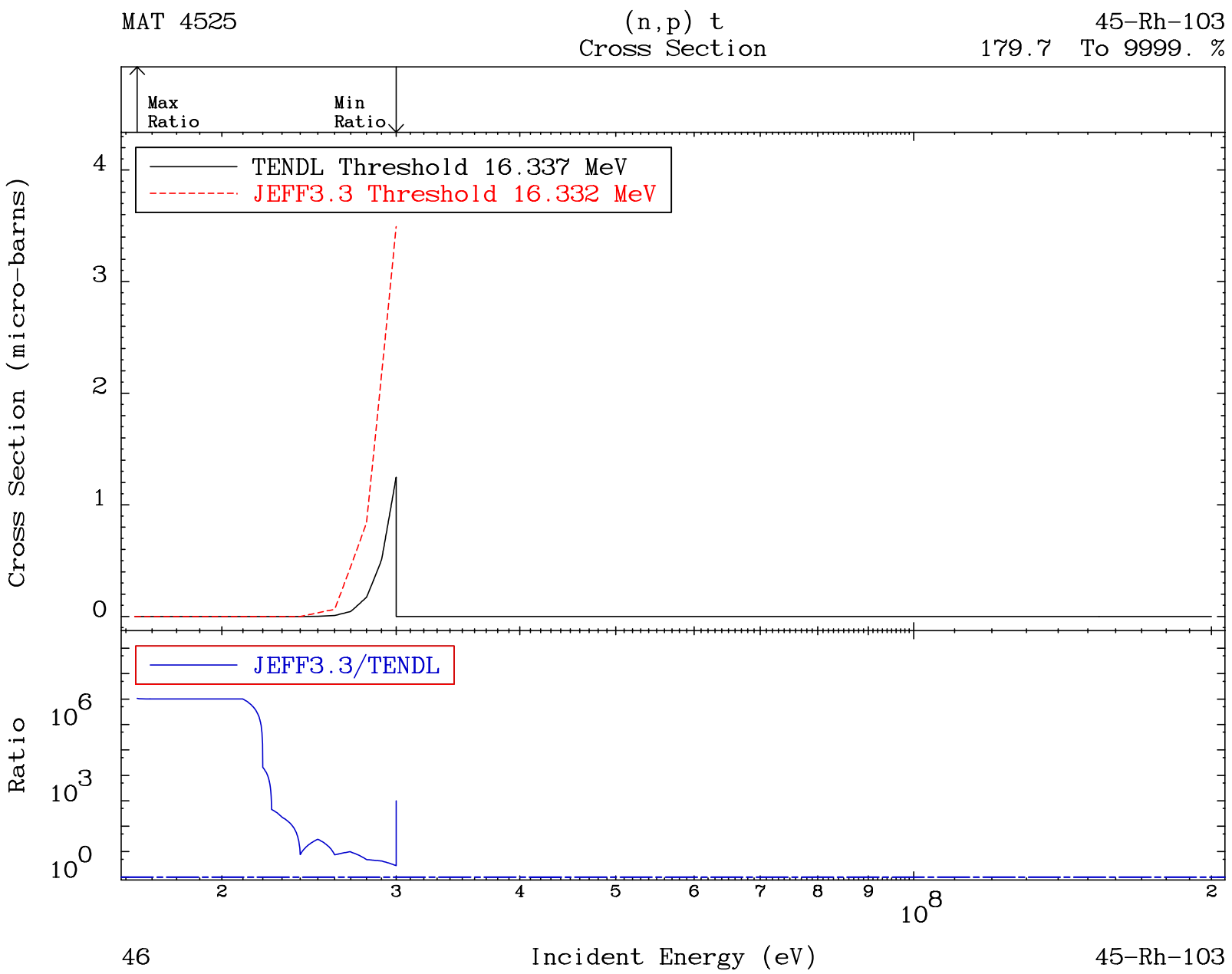

MAT 4525
(n,α)
Cross Section
45-Rh-103
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
45-Rh-103

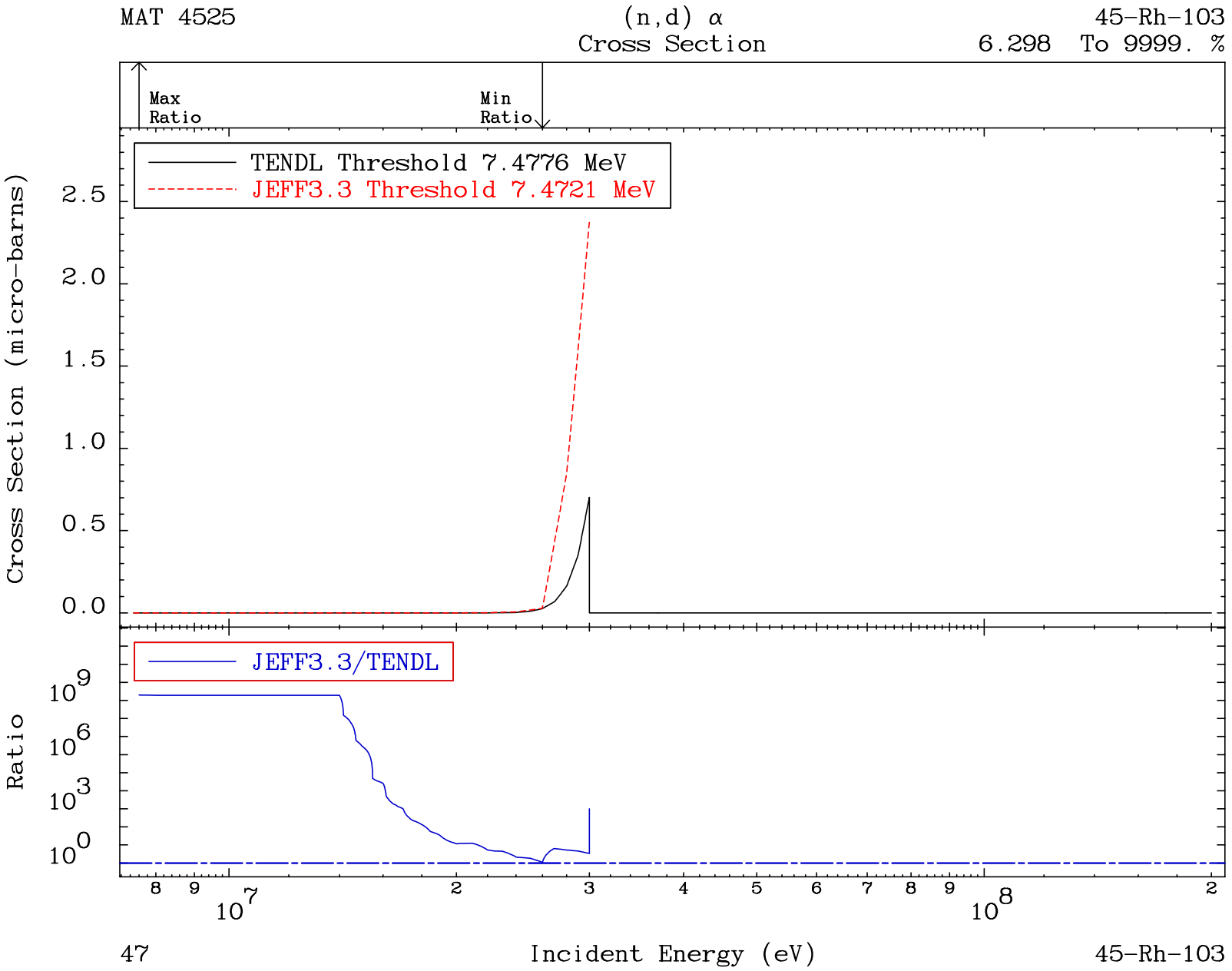

MAT 4525
(n,2α)
Cross Section
45-Rh-103
-82.34 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.1910 keV
JEFF3.3 Threshold 109.99 eV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
42
45-Rh-103

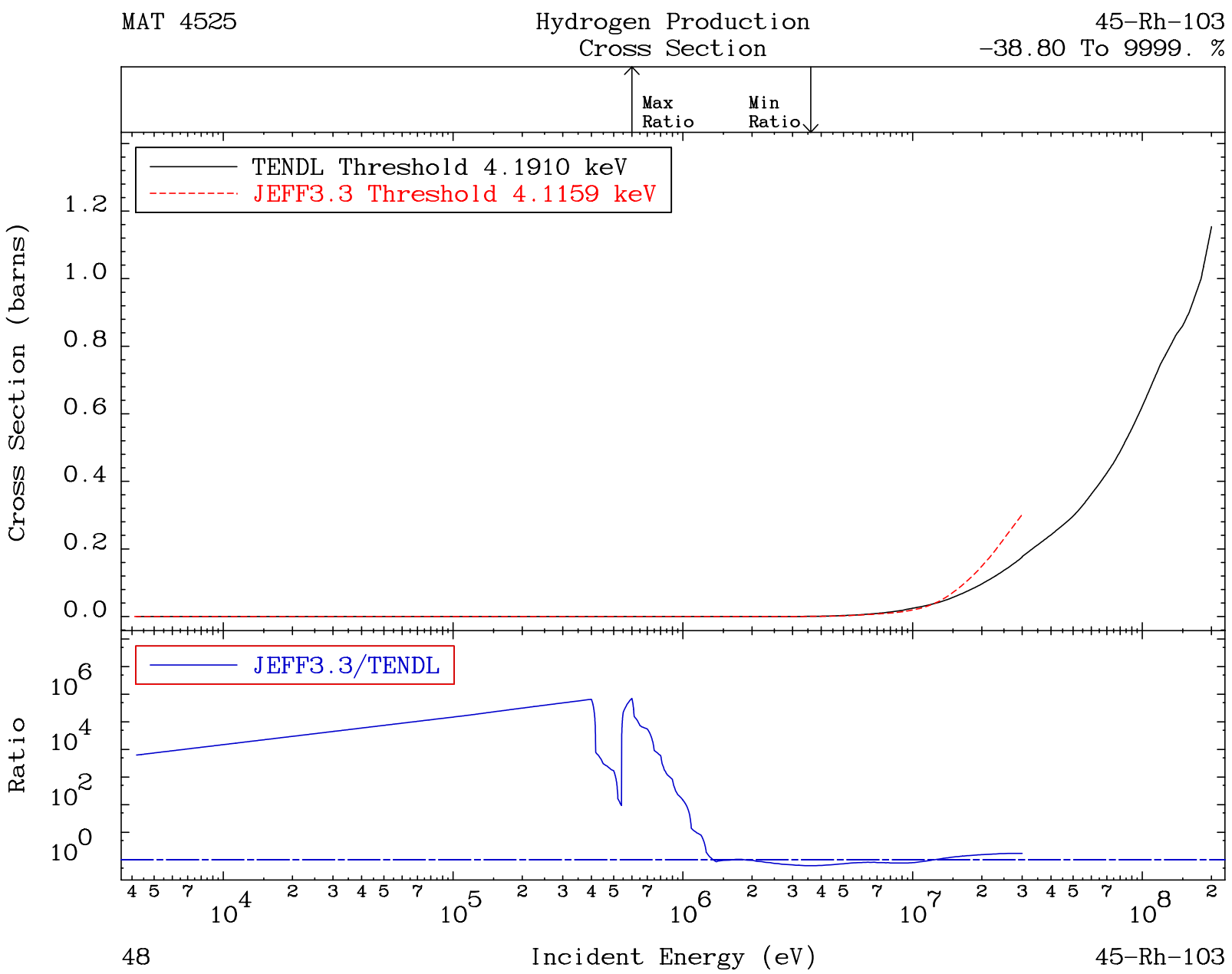

MAT 4525
(n,2p)
Cross Section
45-Rh-103
-97.16 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.063 MeV
JEFF3.3 Threshold 10.059 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
43
Incident Energy (eV)
45-Rh-103

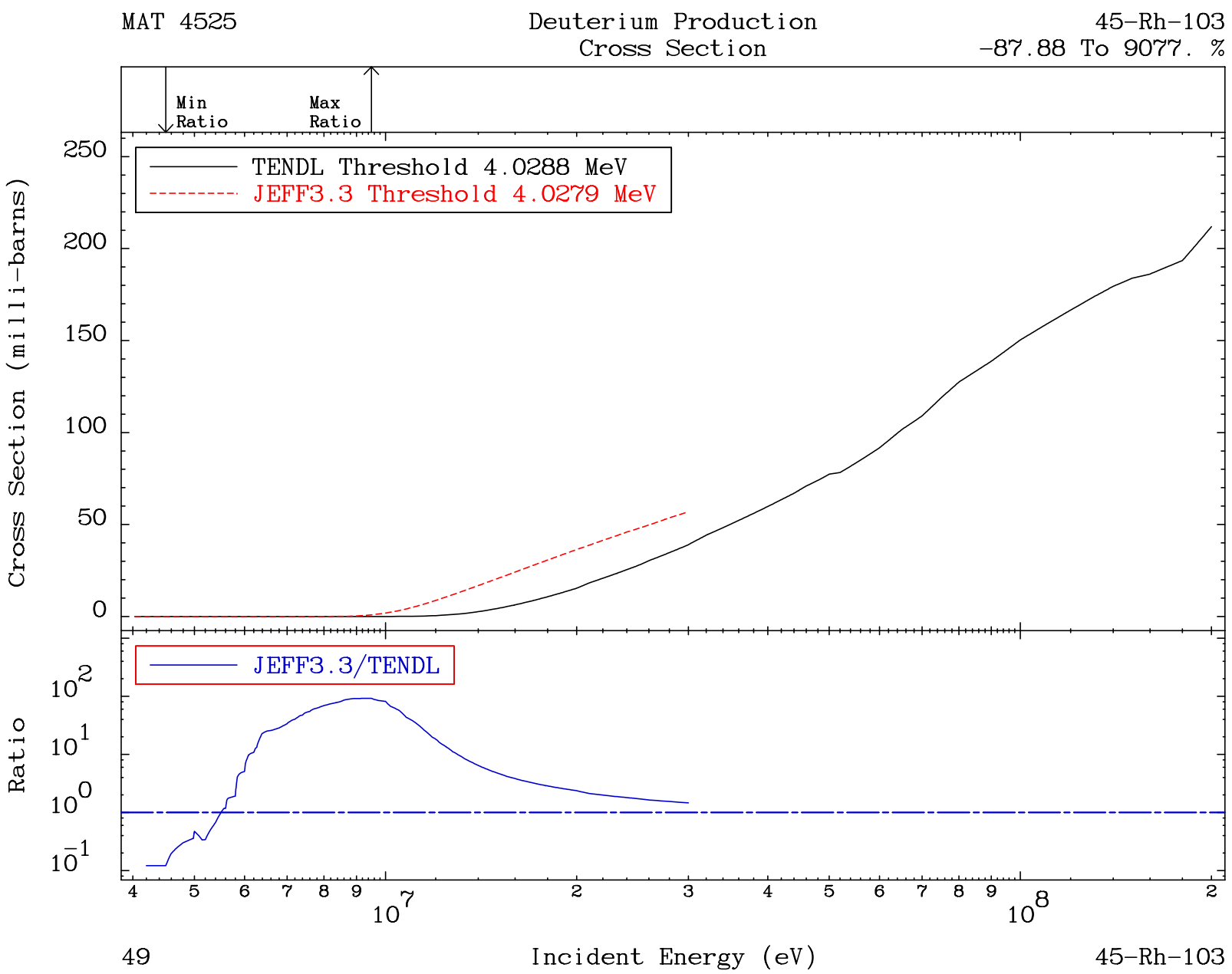

MAT 4525
(n,p) α
Cross Section
45-Rh-103
-96.68 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.7405 MeV
JEFF3.3 Threshold 3.7350 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
45-Rh-103

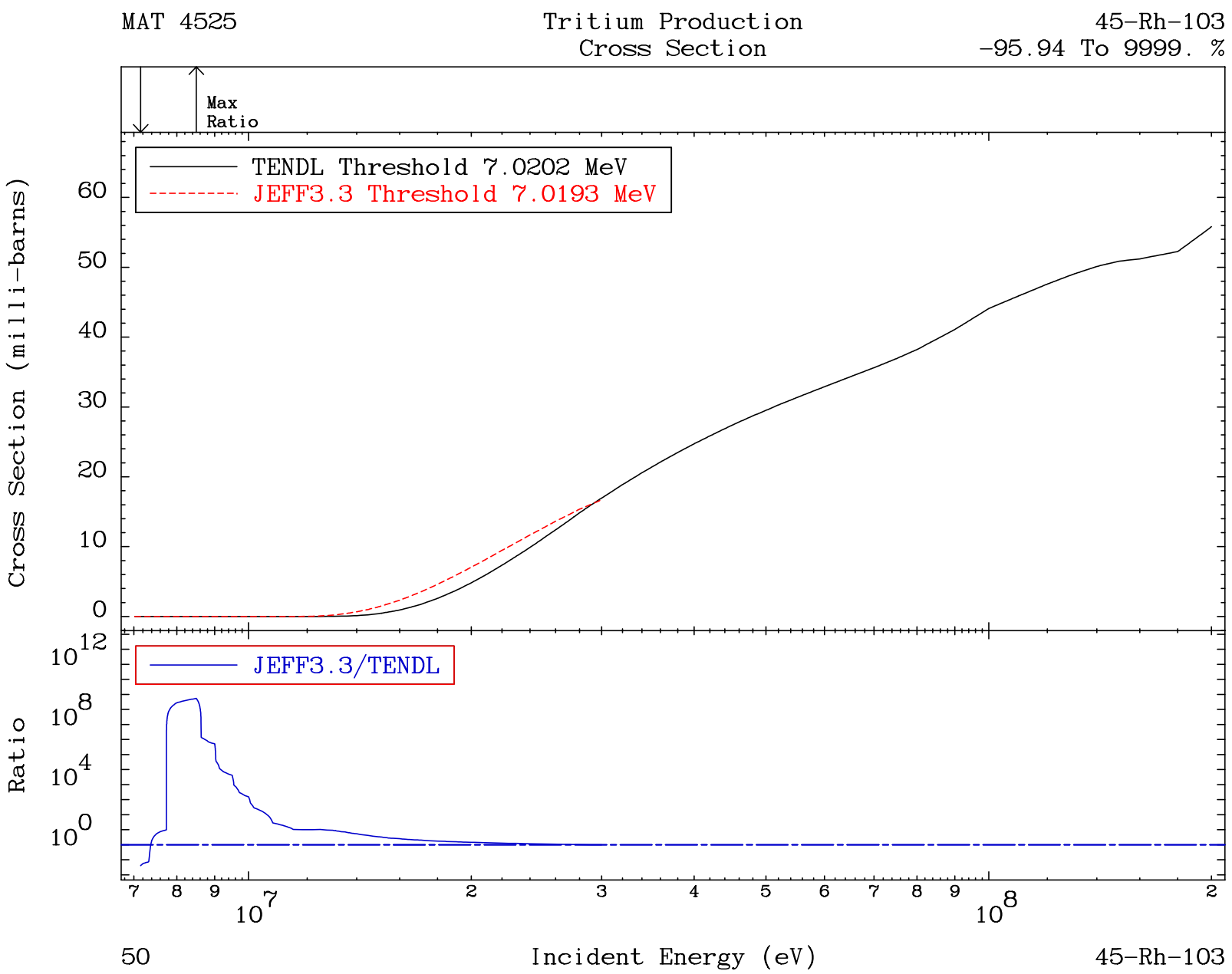

MAT 4525
(n,p) d
Cross Section
45-Rh-103
10.37 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.178 MeV
JEFF3.3 Threshold 14.178 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
45-Rh-103

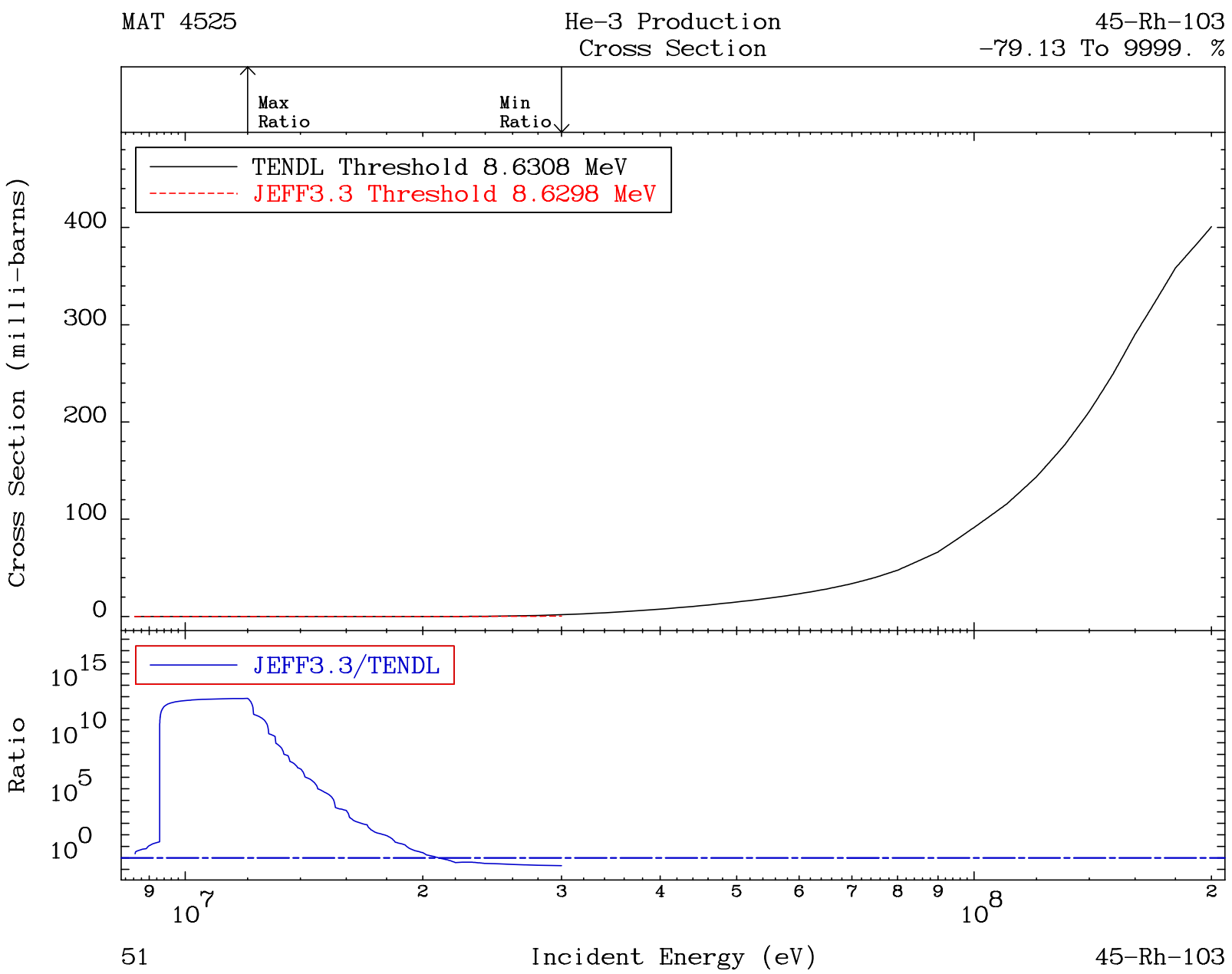

MAT 4525
(n,p) t
Cross Section
45-Rh-103
179.7 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.337 MeV
JEFF3.3 Threshold 16.332 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
45-Rh-103

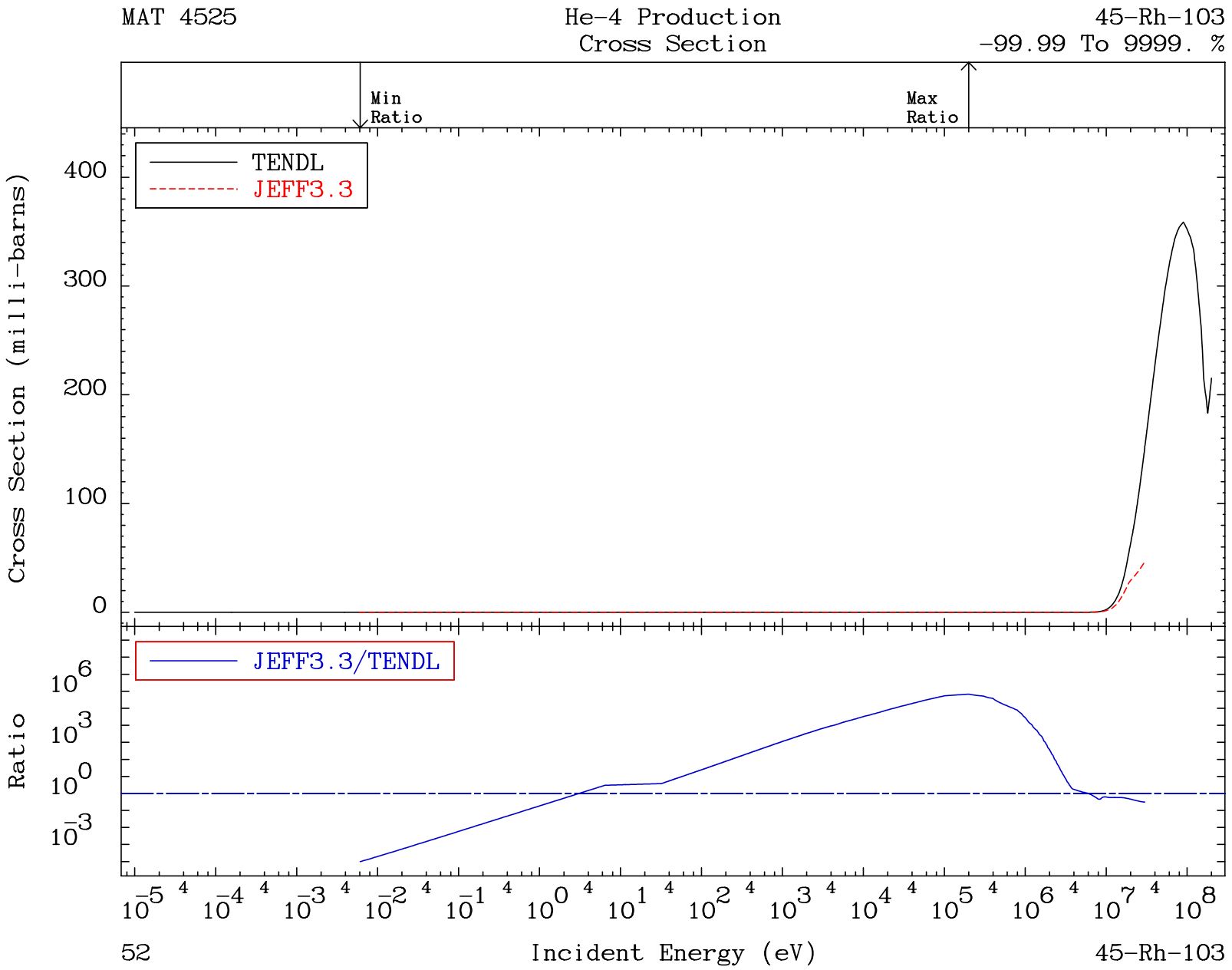

MAT 4525
(n,d) α
Cross Section
45-Rh-103
6.298 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.4776 MeV
JEFF3.3 Threshold 7.4721 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
45-Rh-103

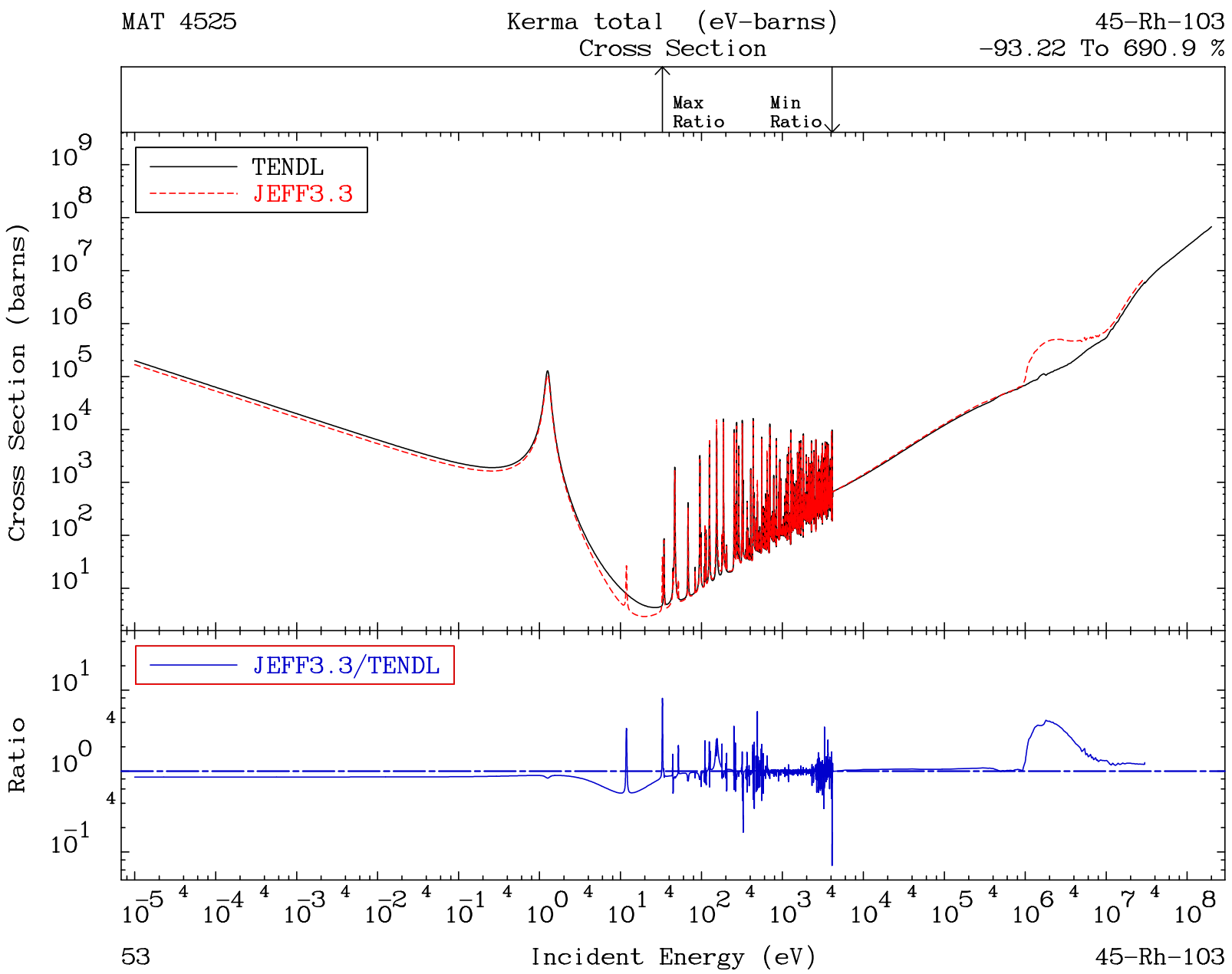

MAT 4525
Hydrogen Production
Cross Section
45-Rh-103
-38.80 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.1910 keV
JEFF3.3 Threshold 4.1159 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
48
Incident Energy (eV)
45-Rh-103

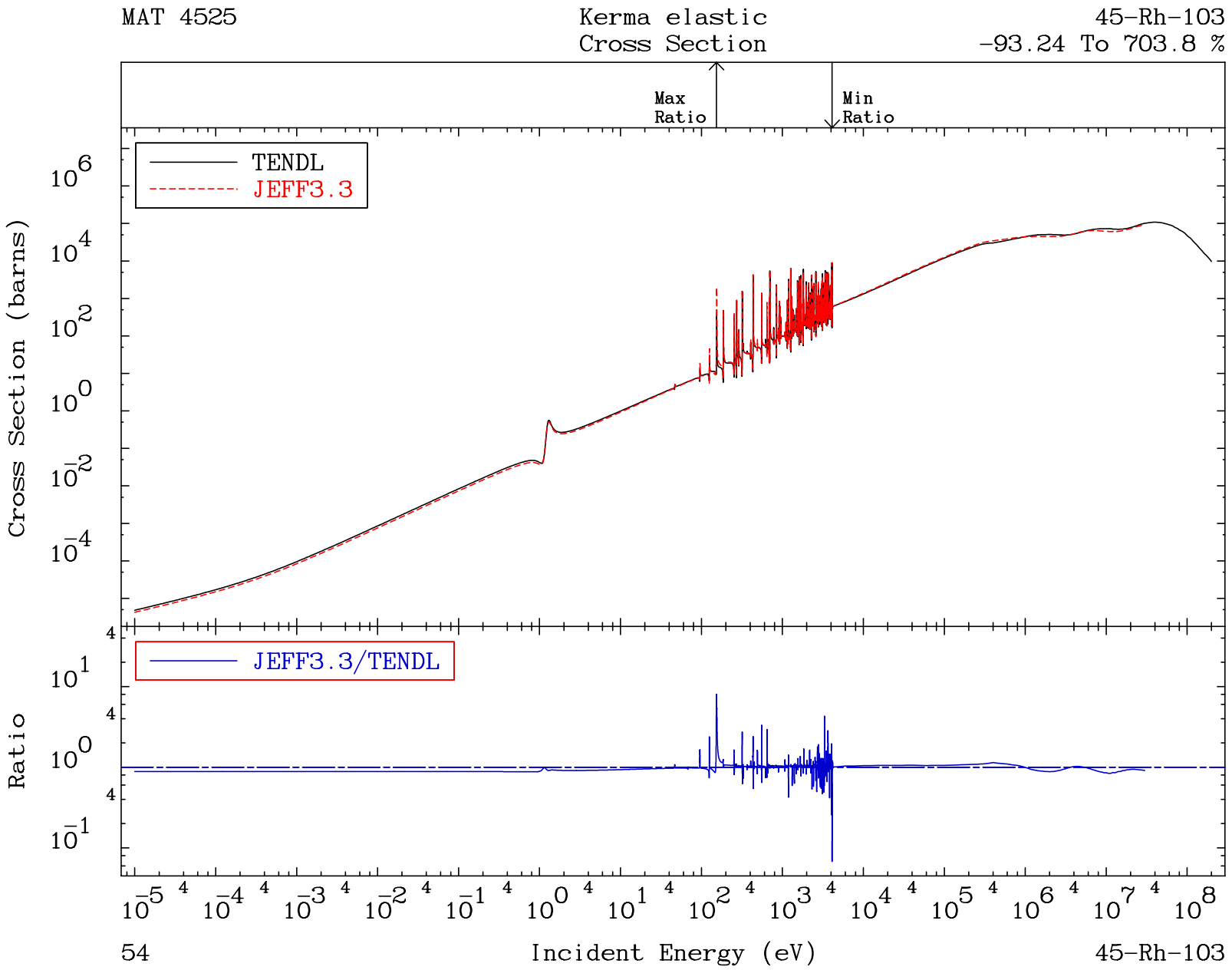

MAT 4525
Deuterium Production
Cross Section
45-Rh-103
-87.88 To 9077. %
Min Ratio
Max Ratio
TENDL Threshold 4.0288 MeV
JEFF3.3 Threshold 4.0279 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
45-Rh-103

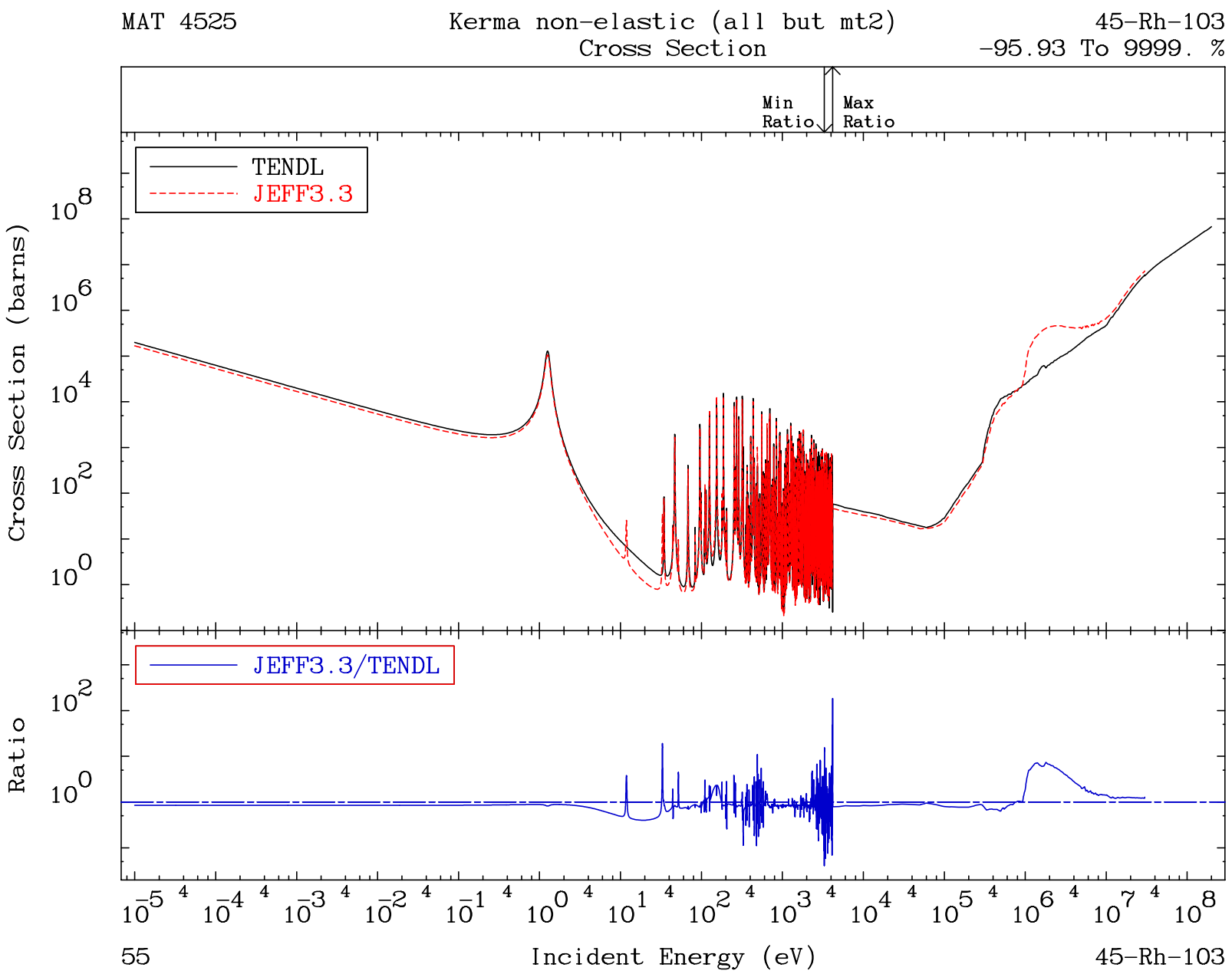

MAT 4525
Tritium Production
Cross Section
45-Rh-103
-95.94 To 9999. %
Max
Ratio
TENDL Threshold 7.0202 MeV
JEFF3.3 Threshold 7.0193 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
45-Rh-103

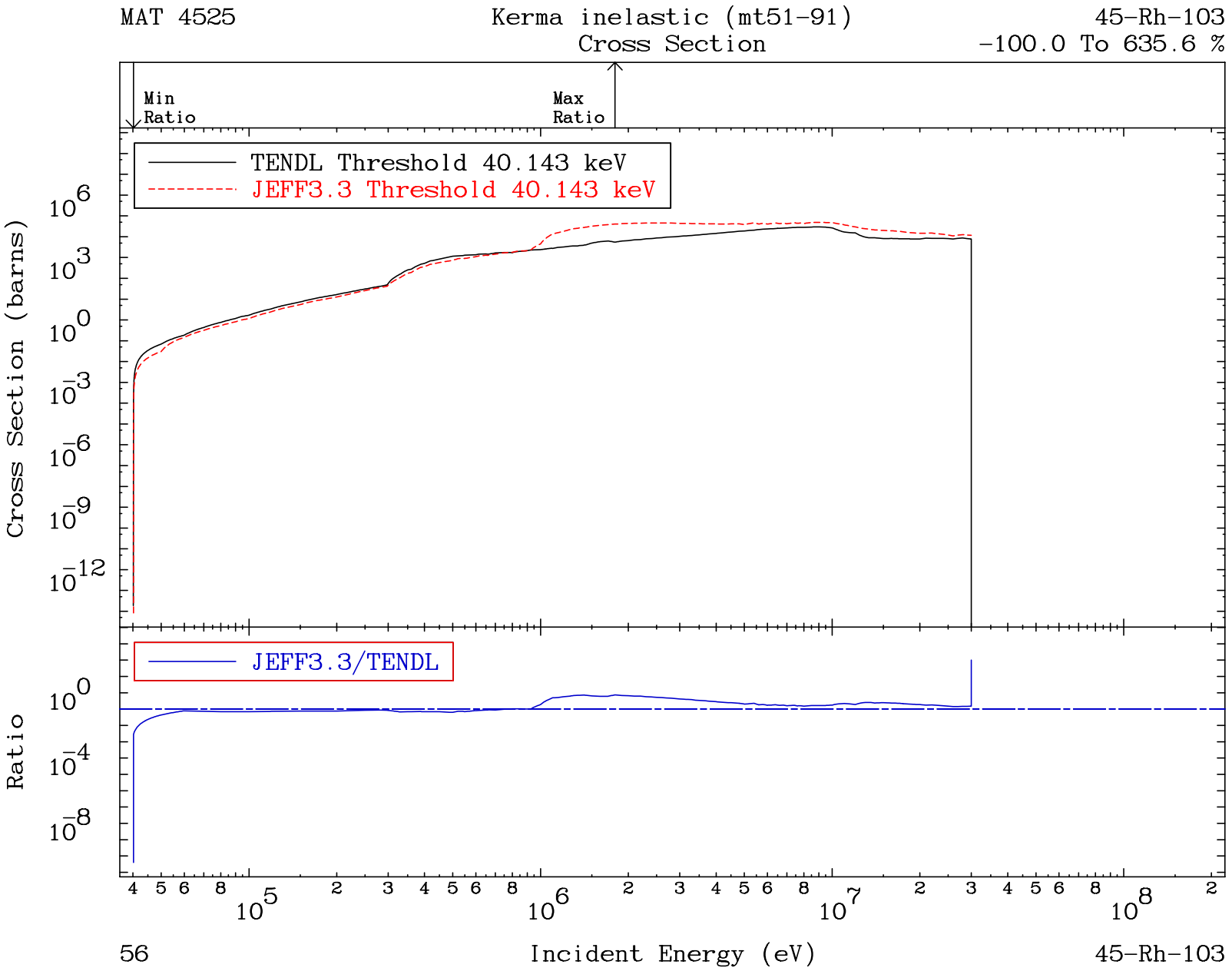

MAT 4525
He-3 Production
Cross Section
45-Rh-103
-79.13 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.6308 MeV
JEFF3.3 Threshold 8.6298 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^15
10^10
10^5
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
45-Rh-103

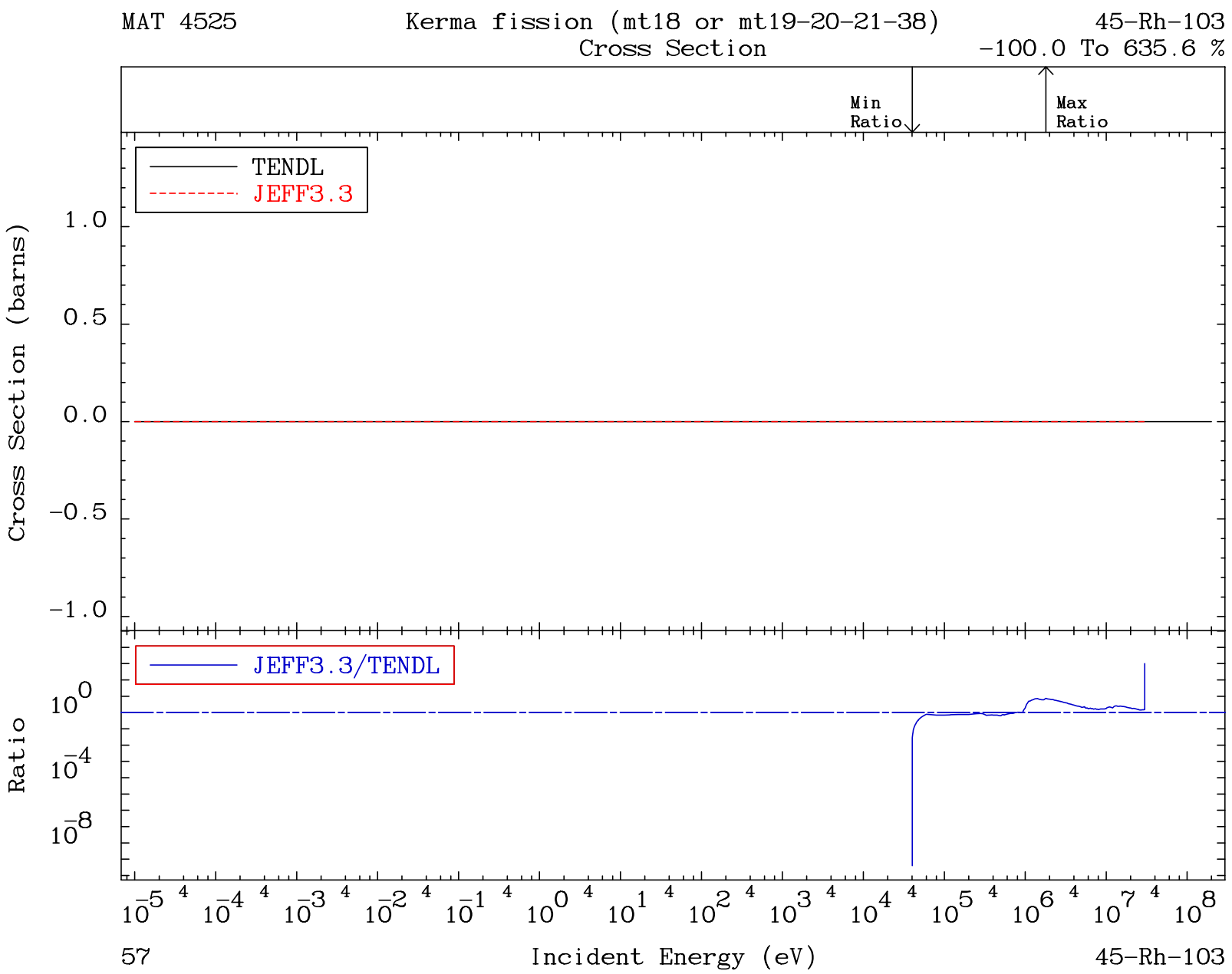

MAT 4525
He-4 Production
Cross Section
45-Rh-103
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
52
Incident Energy (eV)
45-Rh-103

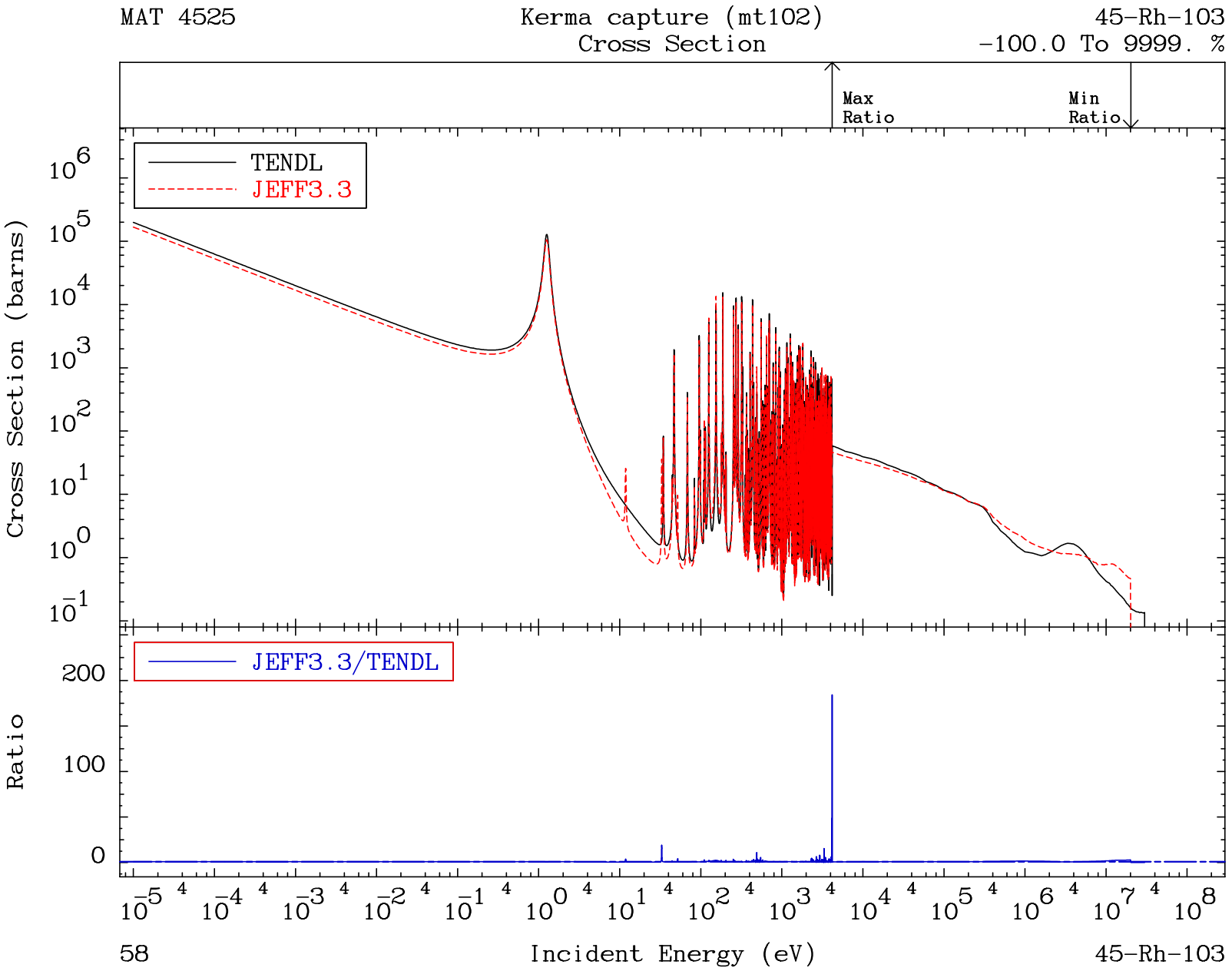

MAT 4525
Kerma total (eV-barns)
Cross Section
45-Rh-103
-93.22 To 690.9 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
53
45-Rh-103

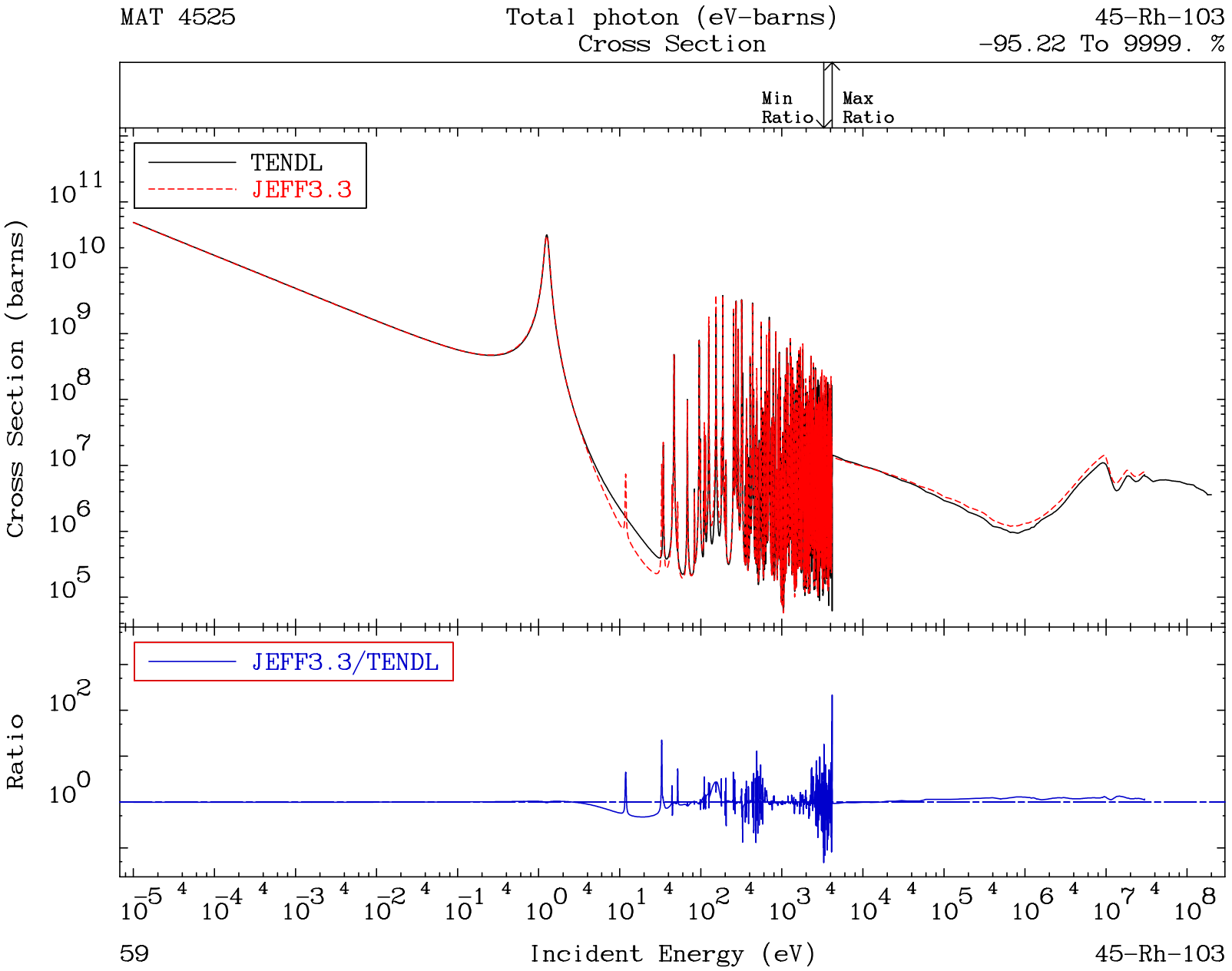

MAT 4525
Kerma elastic
Cross Section
45-Rh-103
-93.24 To 703.8 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
54
45-Rh-103

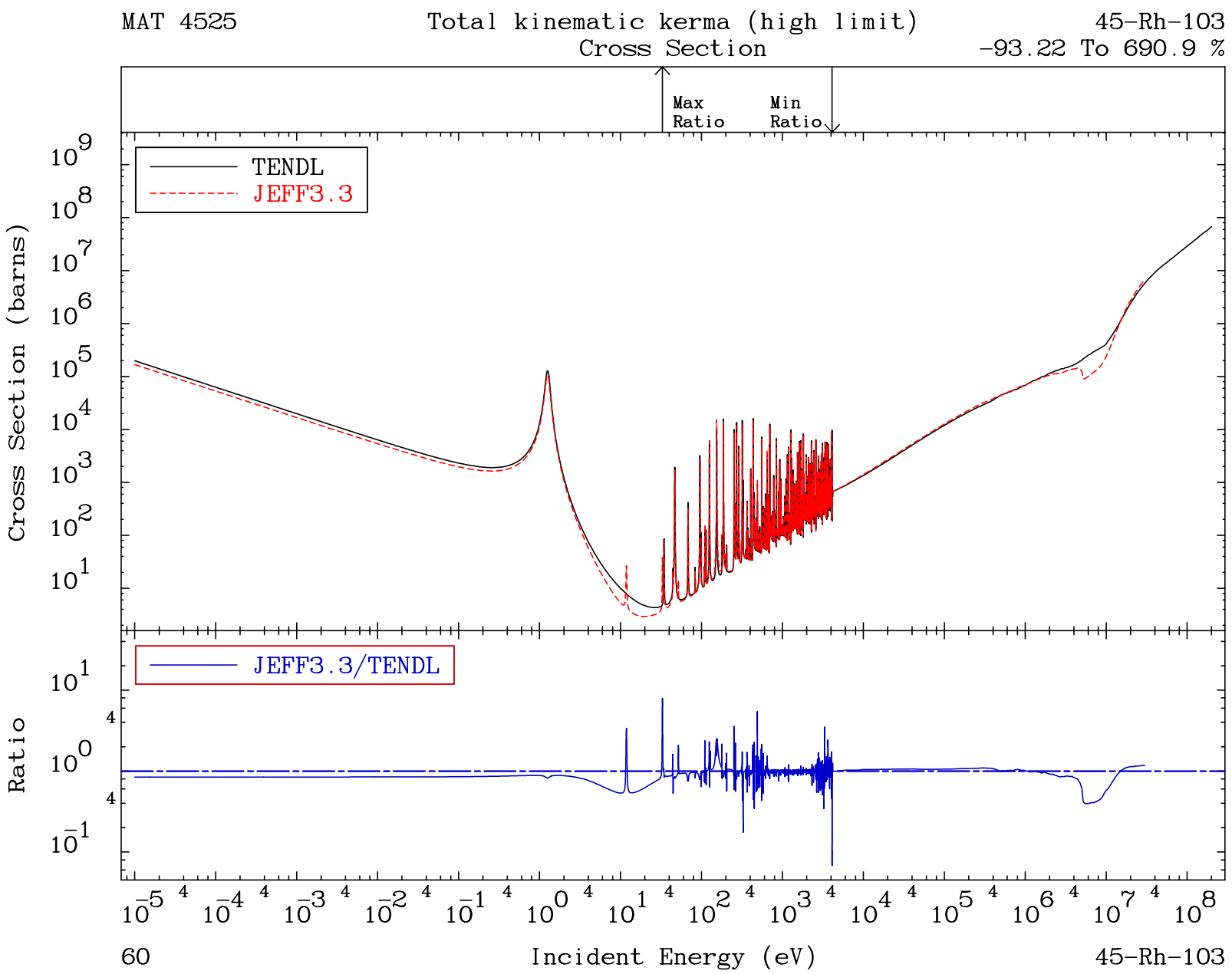

MAT 4525
Kerma non-elastic (all but mt2)
Cross Section
45-Rh-103
-95.93 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
45-Rh-103

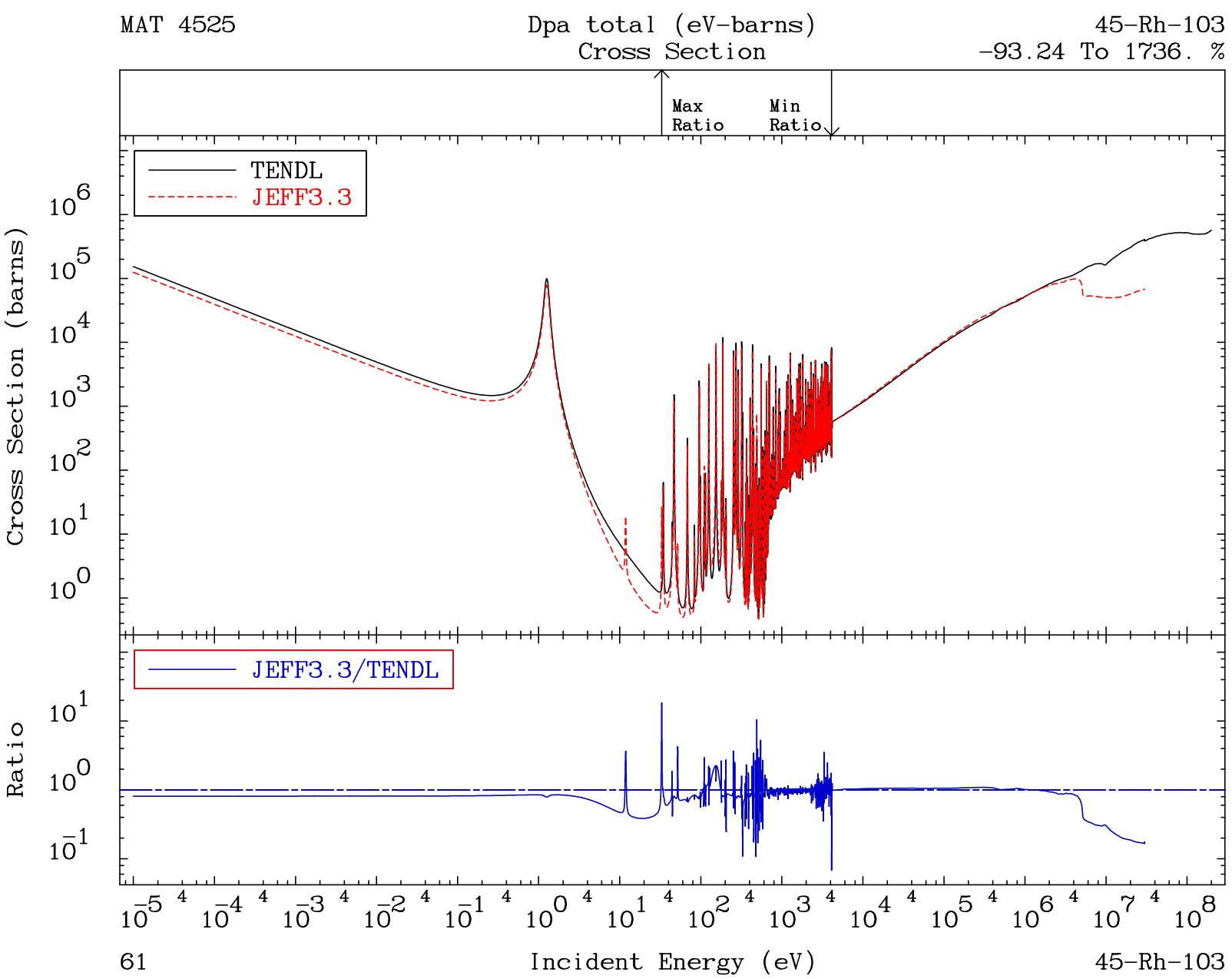

MAT 4525
Kerma inelastic (mt51-91)
Cross Section
45-Rh-103
-100.0 To 635.6 %
Min Ratio
Max Ratio
TENDL Threshold 40.143 keV
JEFF3.3 Threshold 40.143 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
56
45-Rh-103

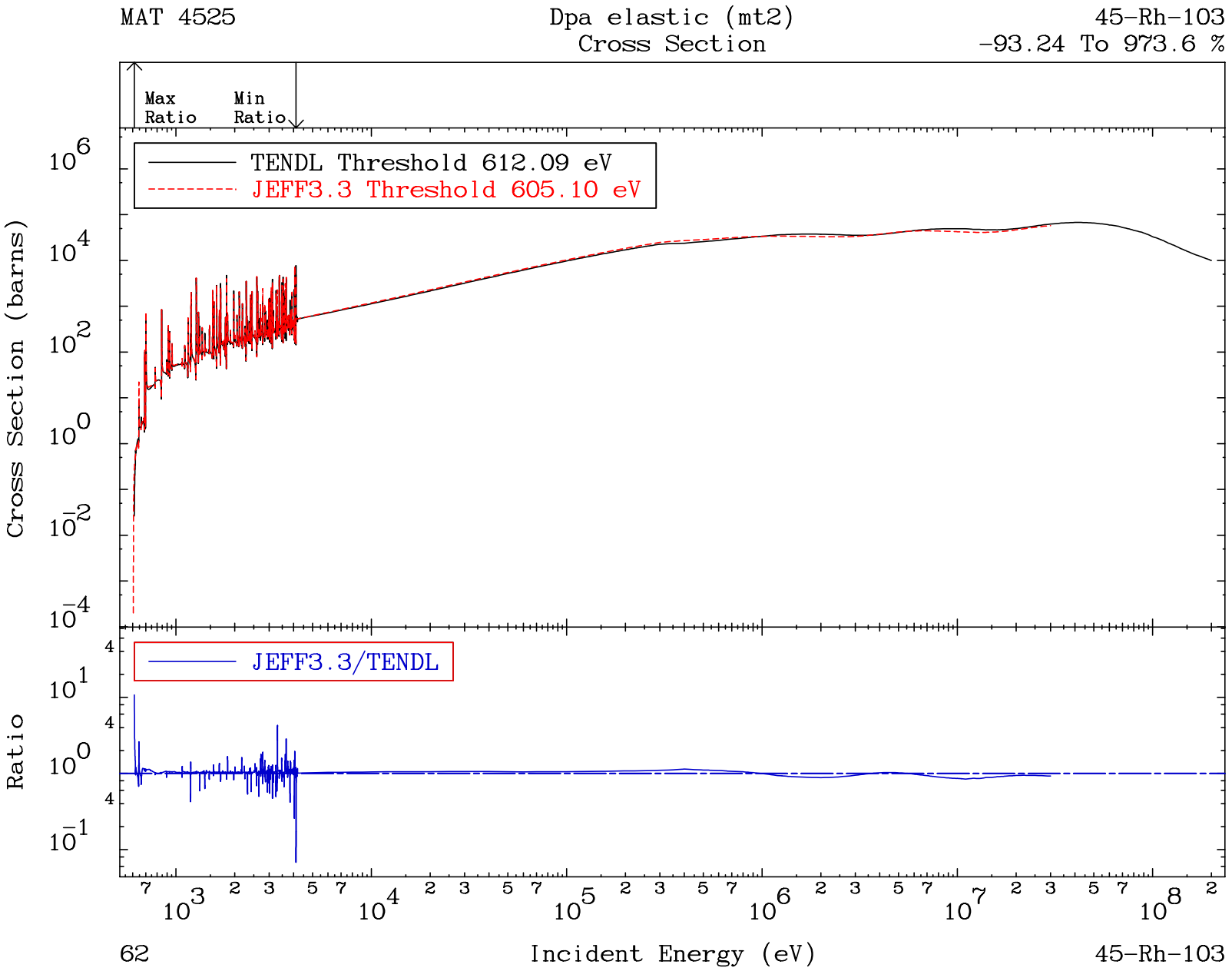

MAT 4525
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
45-Rh-103
-100.0 To 635.6 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
57
Incident Energy (eV)
45-Rh-103

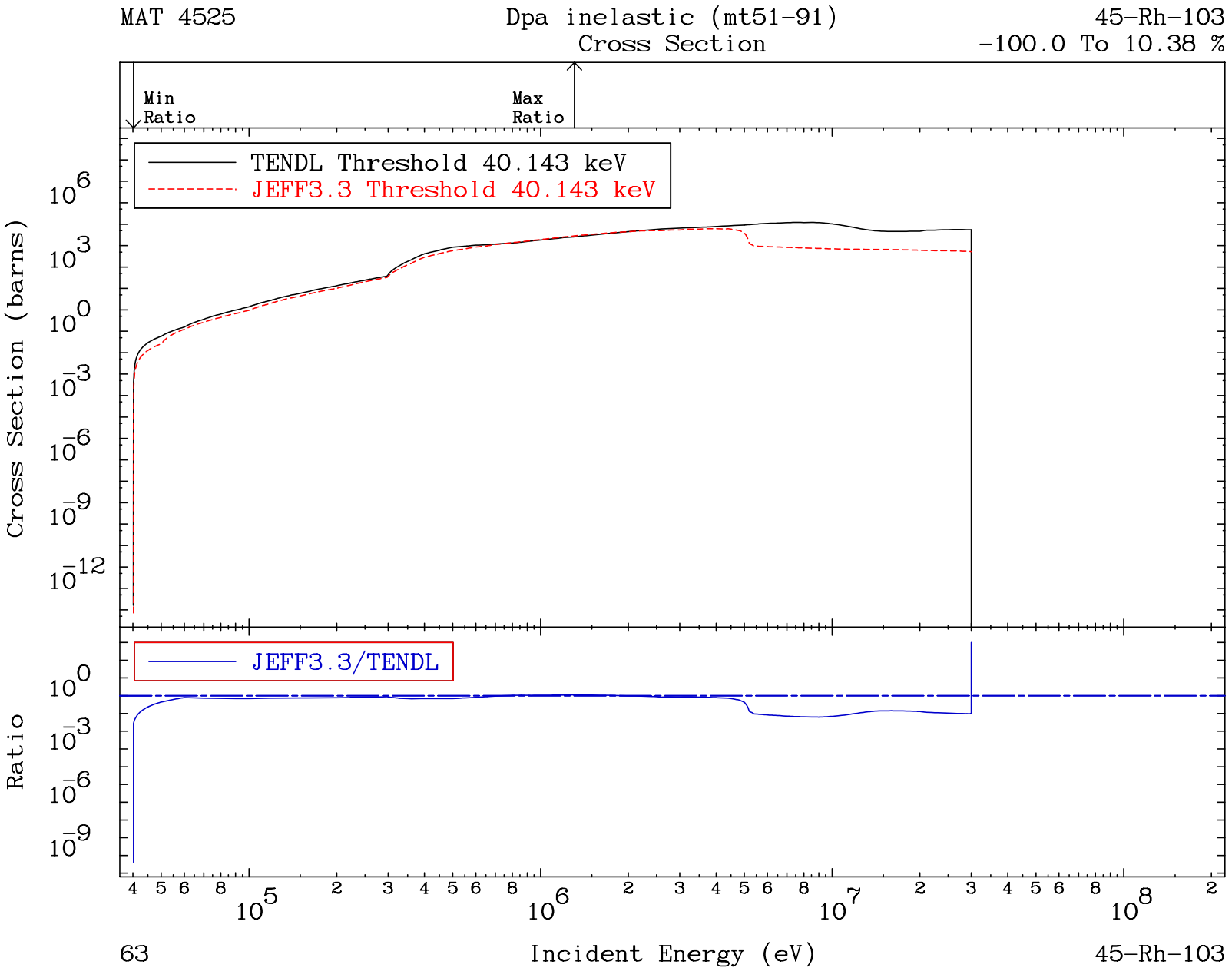

MAT 4525
Kerma capture (mt102)
Cross Section
45-Rh-103
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
58
45-Rh-103

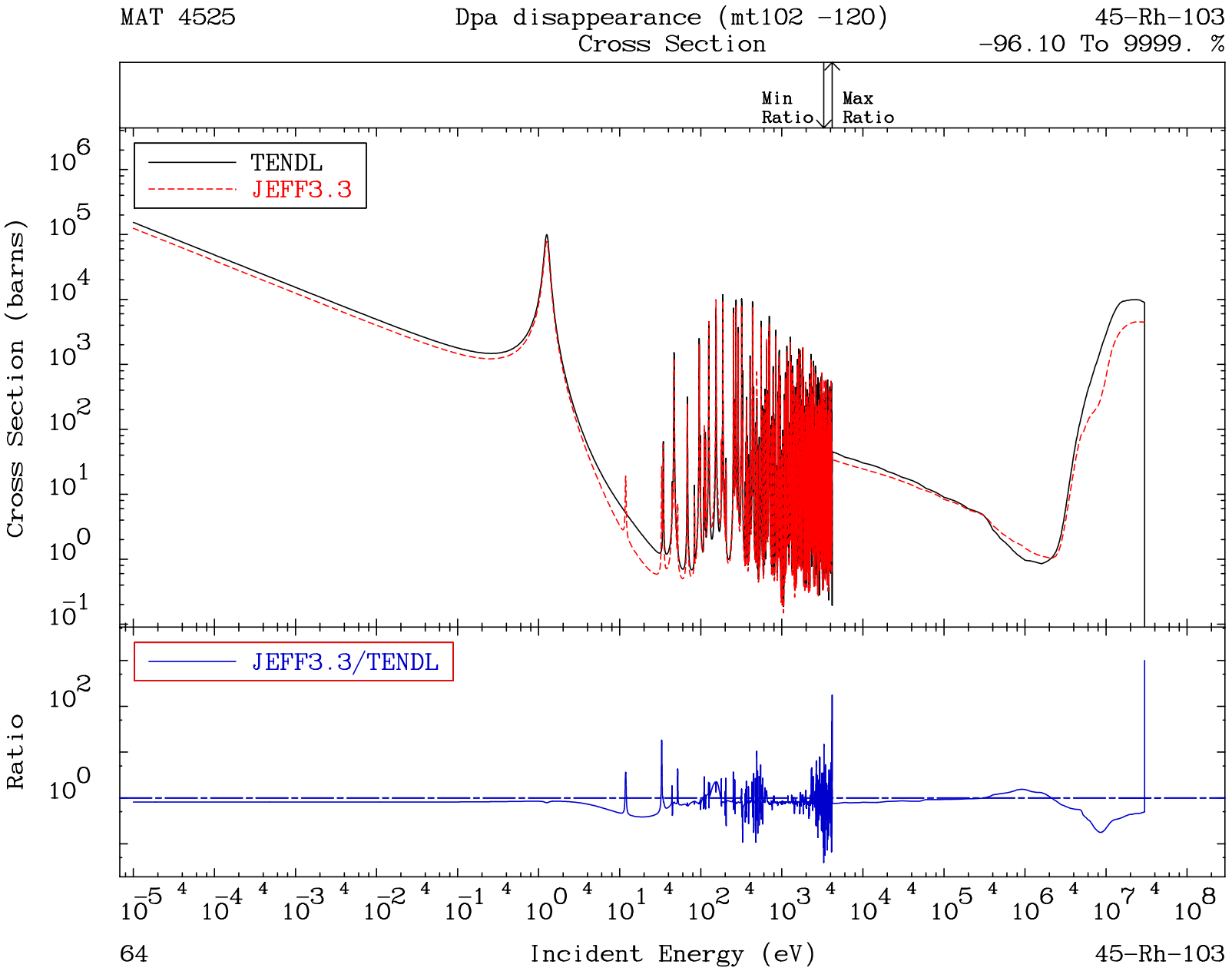

MAT 4525
Total photon (eV-barns)
Cross Section
45-Rh-103
-95.22 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
59
Incident Energy (eV)
45-Rh-103

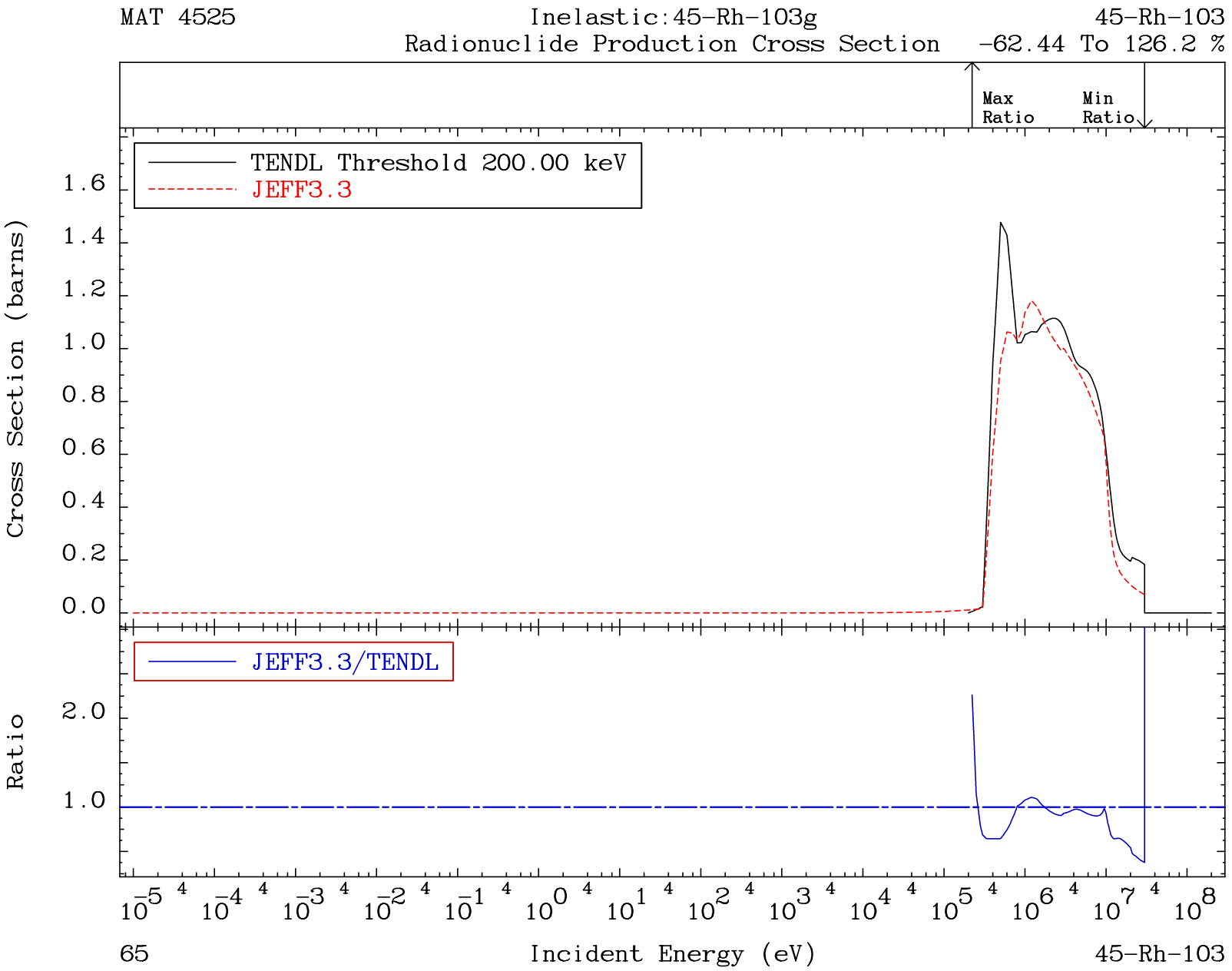

MAT 4525
Total kinematic kerma (high limit)
Cross Section
45-Rh-103
-93.22 To 690.9 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
60
45-Rh-103

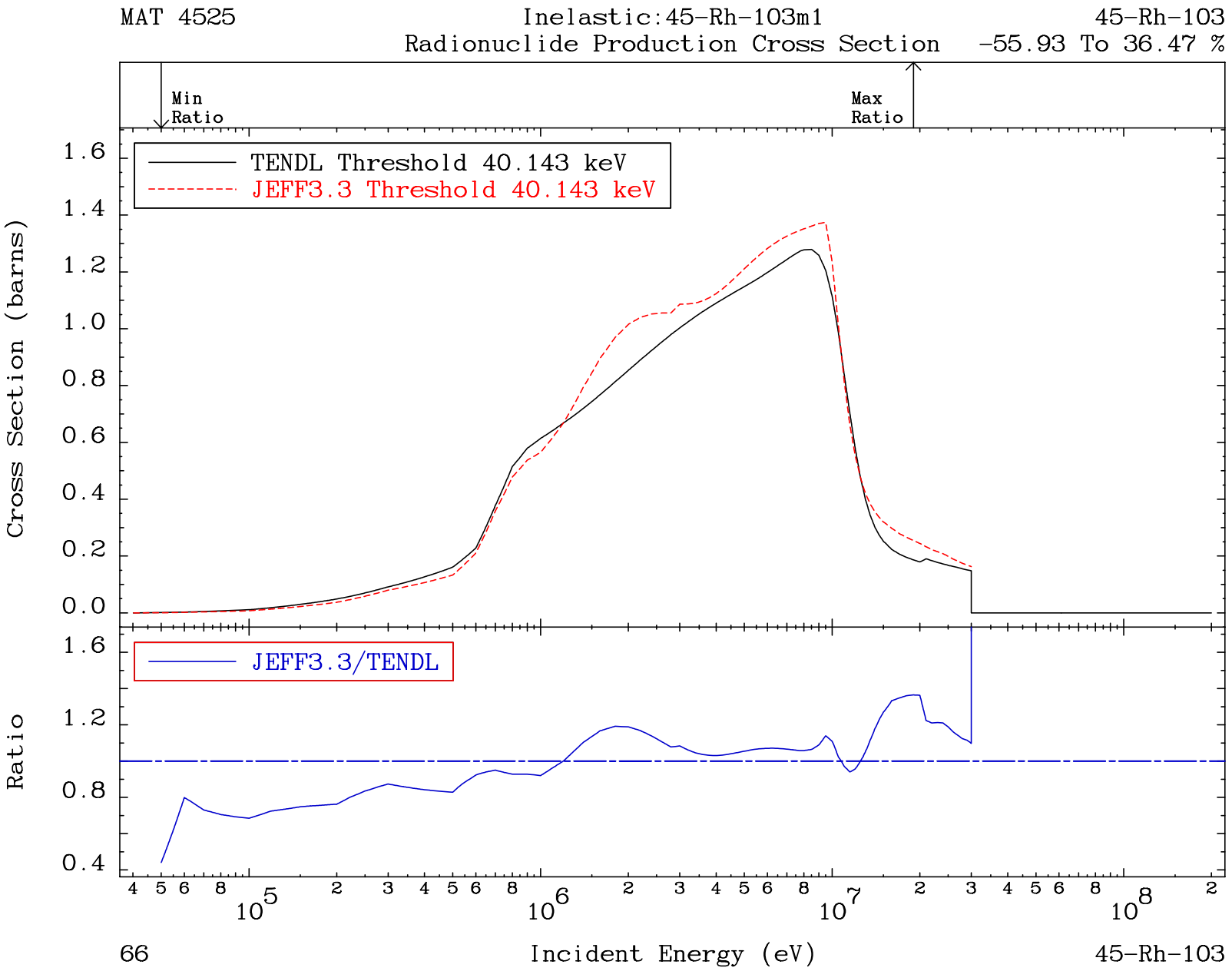

MAT 4525
Dpa total (eV-barns)
Cross Section
45-Rh-103
-93.24 To 1736. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
61
Incident Energy (eV)
45-Rh-103

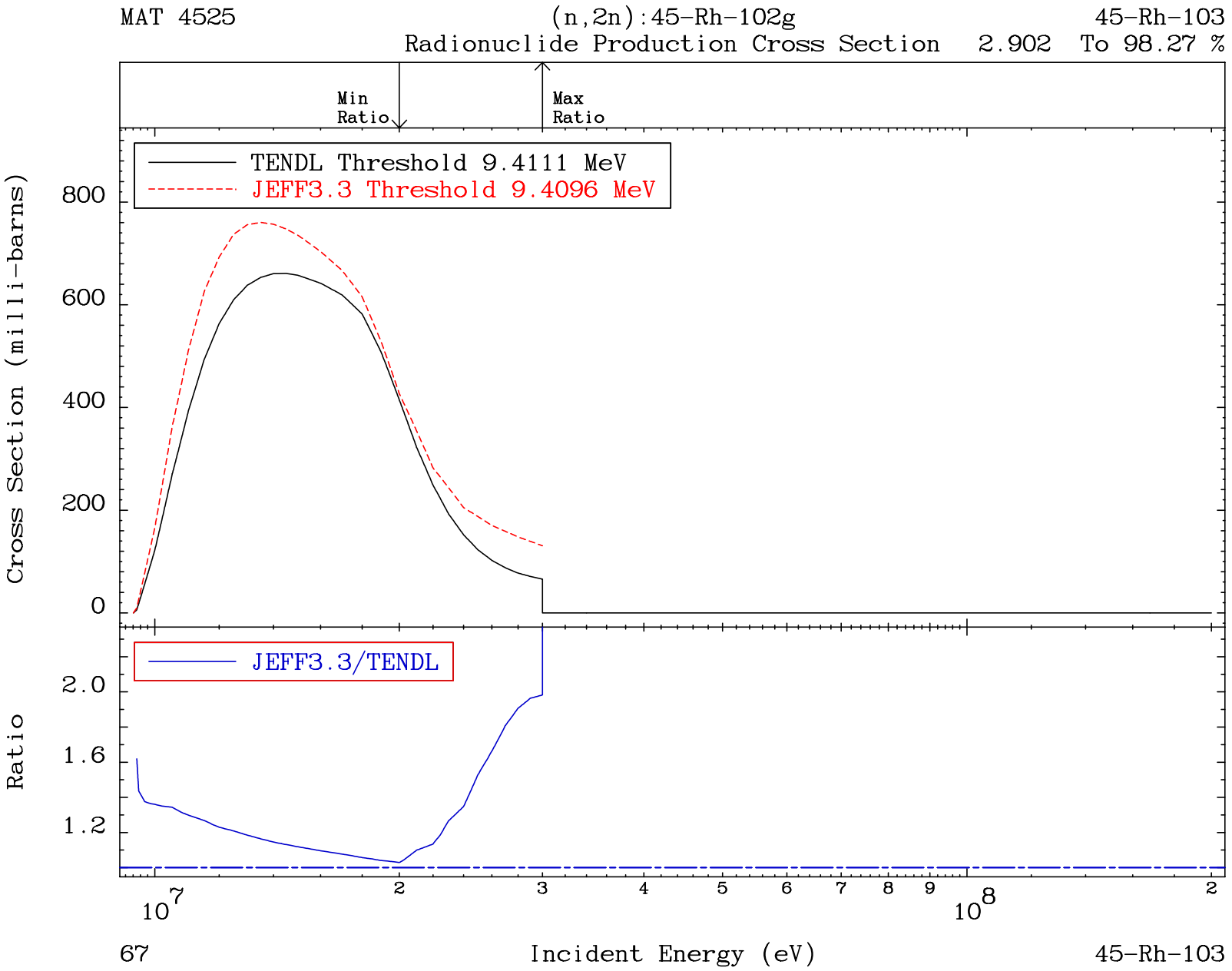

MAT 4525
Dpa elastic (mt2)
Cross Section
45-Rh-103
-93.24 To 973.6 %
Max Ratio
Min Ratio
TENDL Threshold 612.09 eV
JEFF3.3 Threshold 605.10 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
45-Rh-103

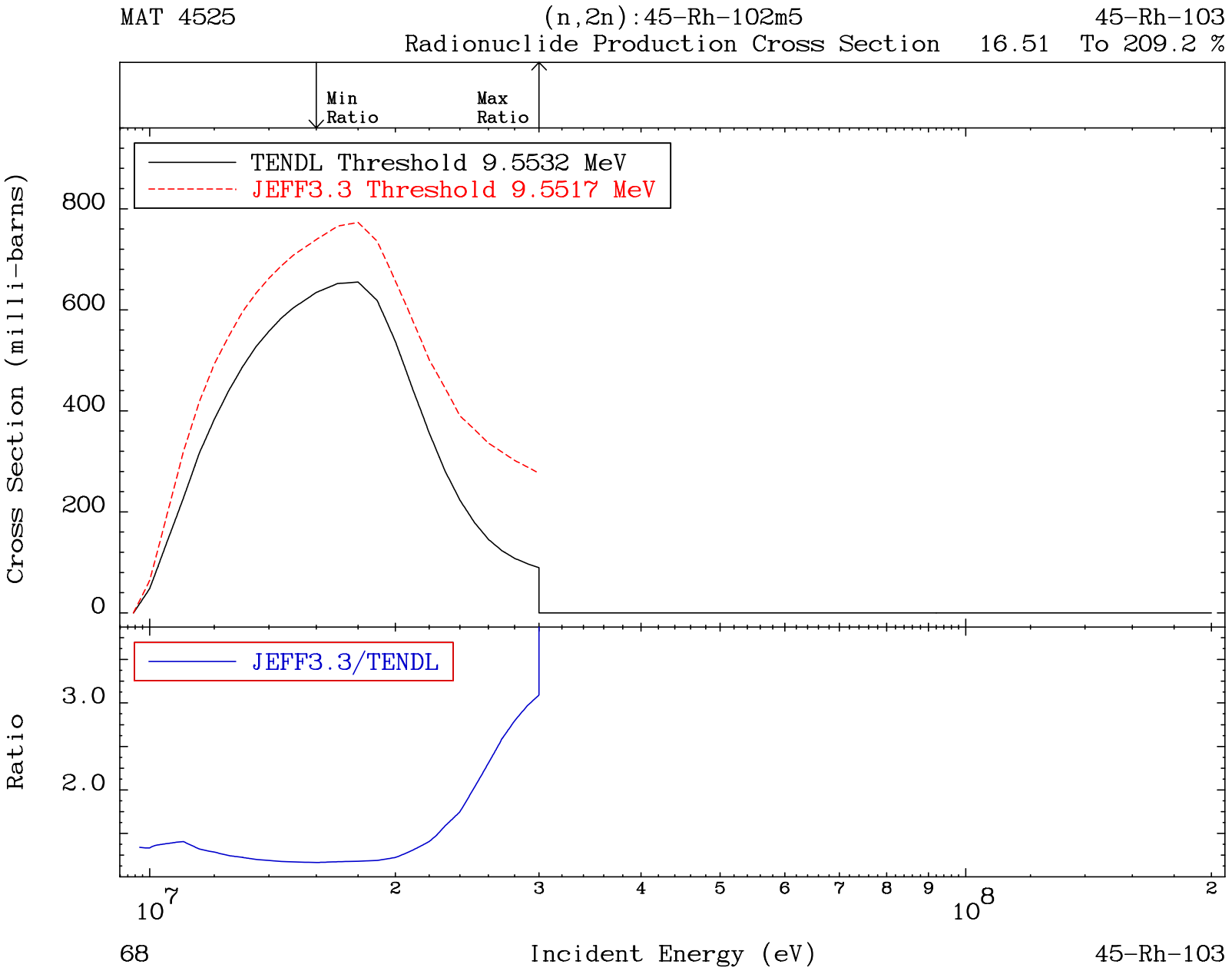

MAT 4525
Dpa inelastic (mt51-91)
Cross Section
45-Rh-103
-100.0 To 10.38 %
Min Ratio
Max Ratio
TENDL Threshold 40.143 keV
JEFF3.3 Threshold 40.143 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
63
45-Rh-103

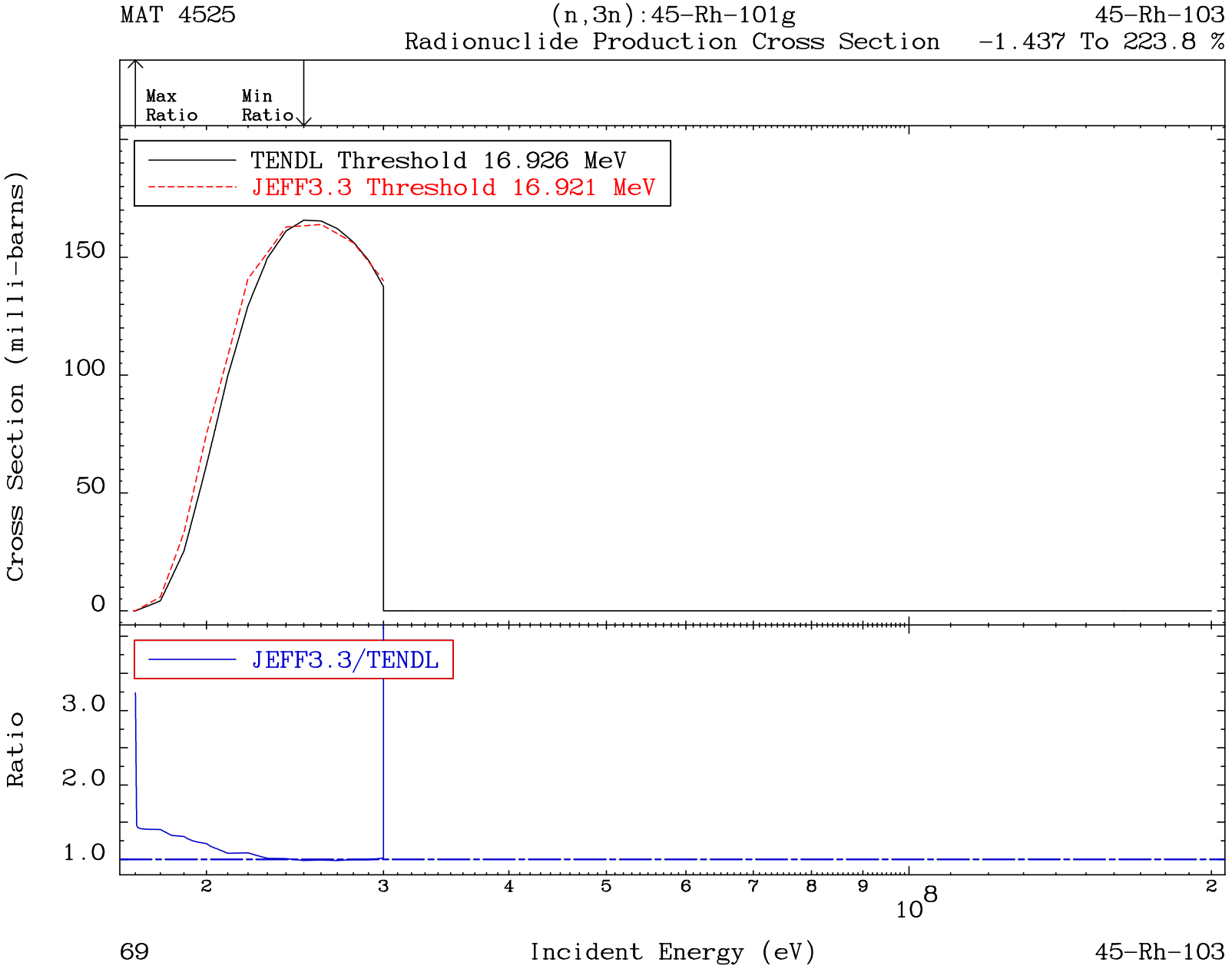

MAT 4525
Dpa disappearance (mt102 -120)
Cross Section
45-Rh-103
-96.10 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
45-Rh-103

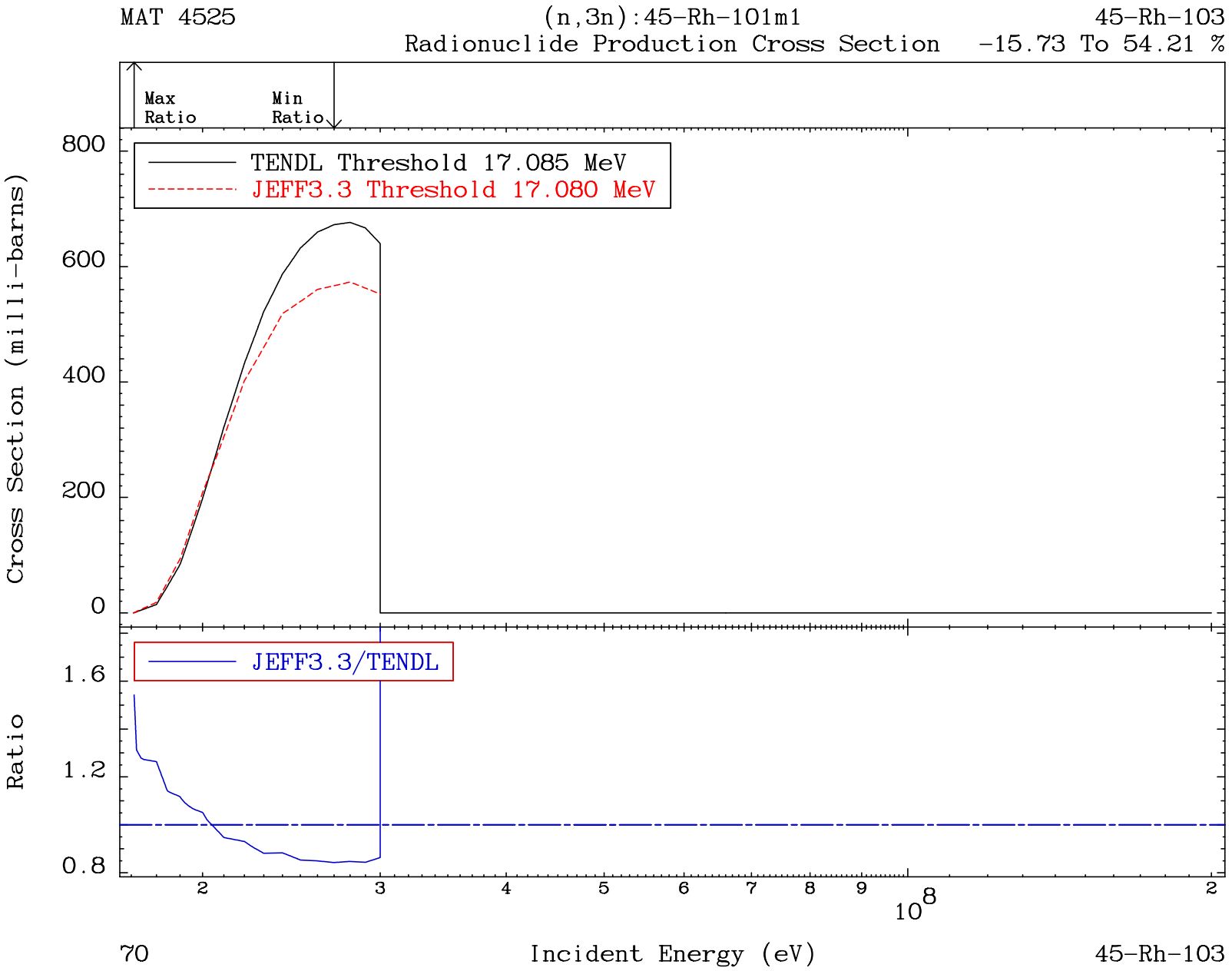

MAT 4525
Inelastic:45-Rh-103g
45-Rh-103
Radionuclide Production Cross Section
-62.44 To 126.2 %
Max Ratio
Min Ratio
TENDL Threshold 200.00 keV
JEFF3.3
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
2.0
1.0
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107 108
65
Incident Energy (eV)
45-Rh-103

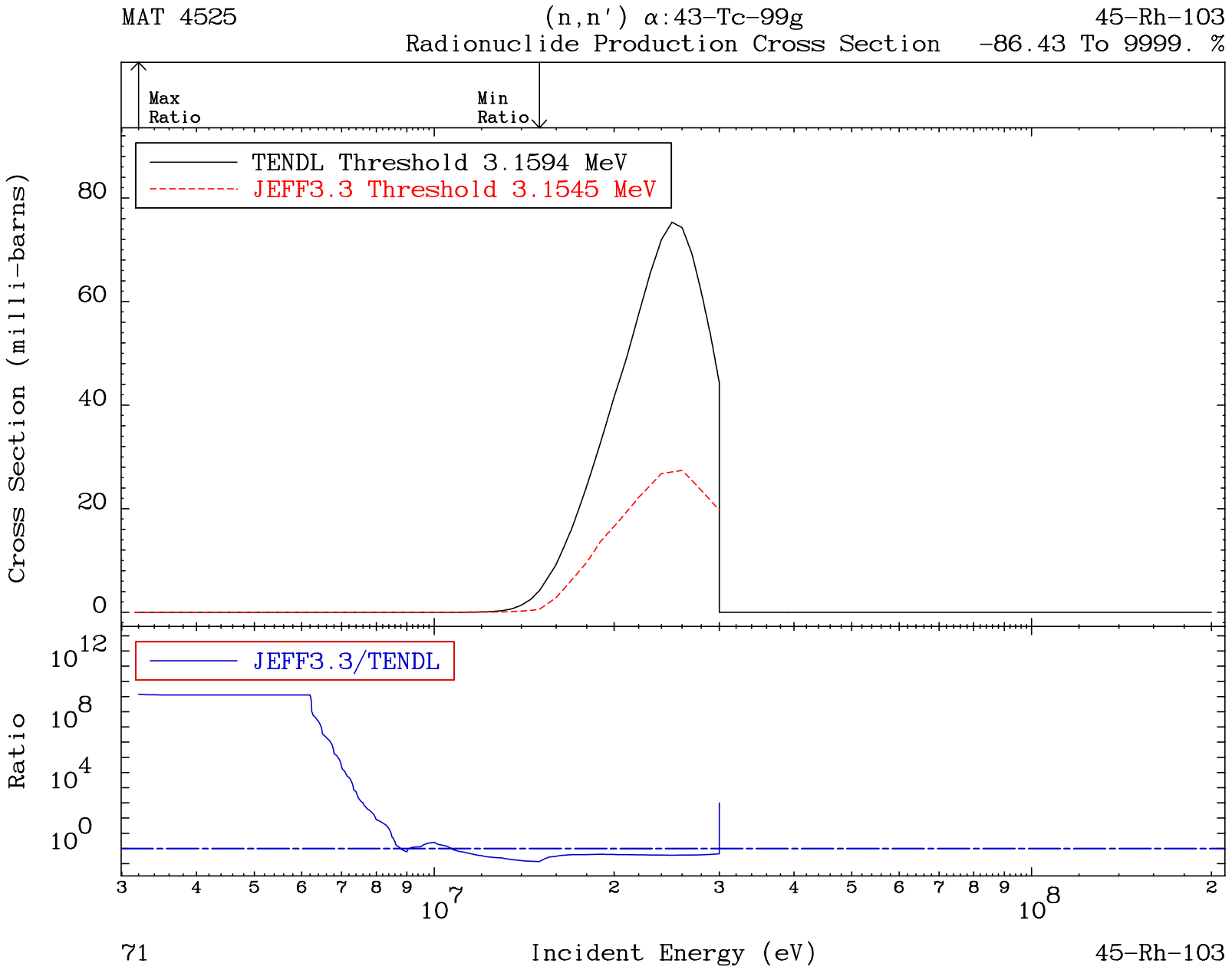

MAT 4525
Inelastic:45-Rh-103m1
Radionuclide Production Cross Section
45-Rh-103
-55.93 To 36.47 %
Min Ratio
Max Ratio
TENDL Threshold 40.143 keV
JEFF3.3 Threshold 40.143 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
45-Rh-103

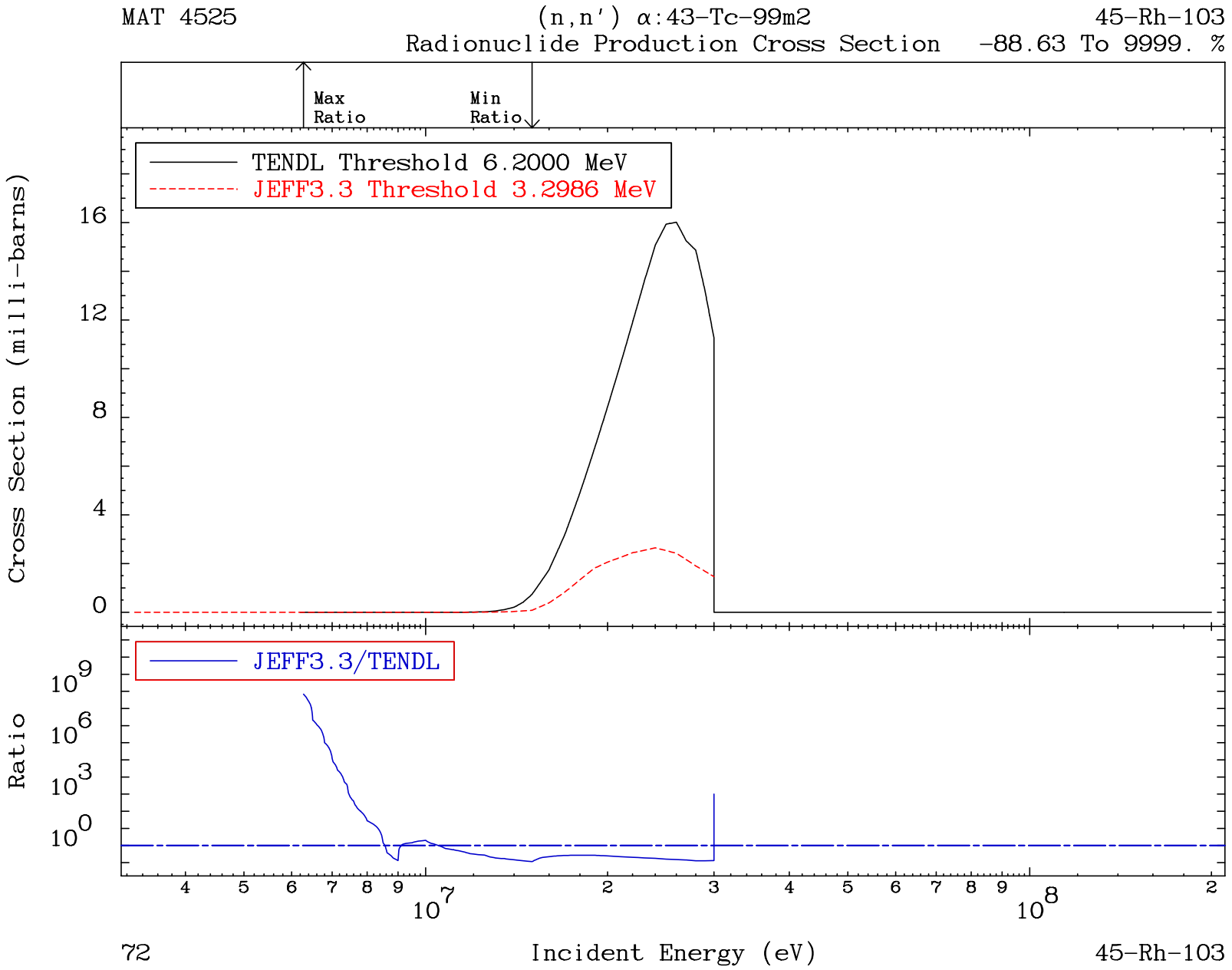

MAT 4525
(n,2n):45-Rh-102g
45-Rh-103
Radionuclide Production Cross Section 2.902 To 98.27 %
Min Ratio
Max Ratio
TENDL Threshold 9.4111 MeV
JEFF3.3 Threshold 9.4096 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
10^7
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
45-Rh-103

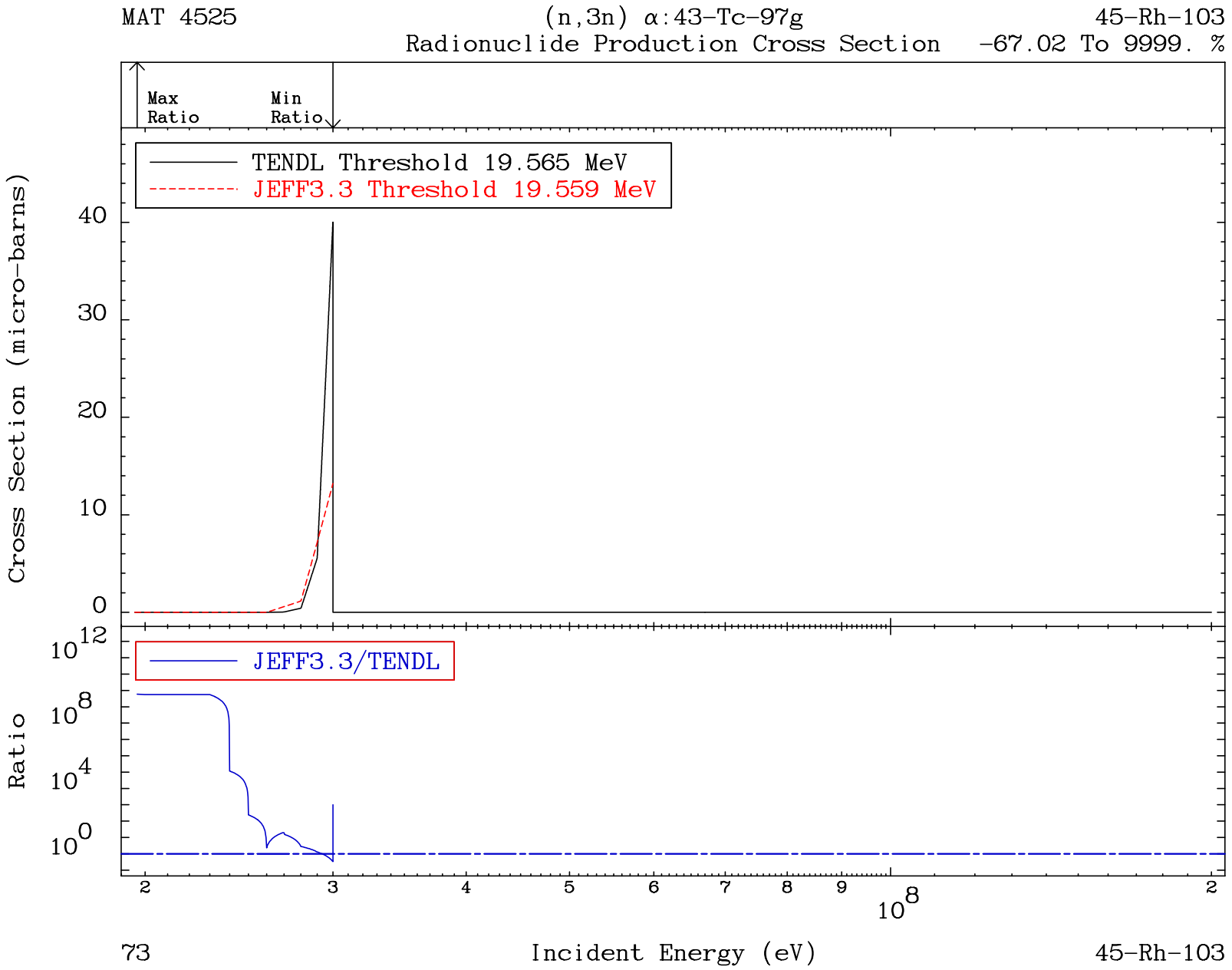

MAT 4525
(n,2n):45-Rh-102m5
45-Rh-103
Radionuclide Production Cross Section 16.51 To 209.2 %
Min Ratio
Max Ratio
TENDL Threshold 9.5532 MeV
JEFF3.3 Threshold 9.5517 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
3.0
2.0
10^7
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
45-Rh-103

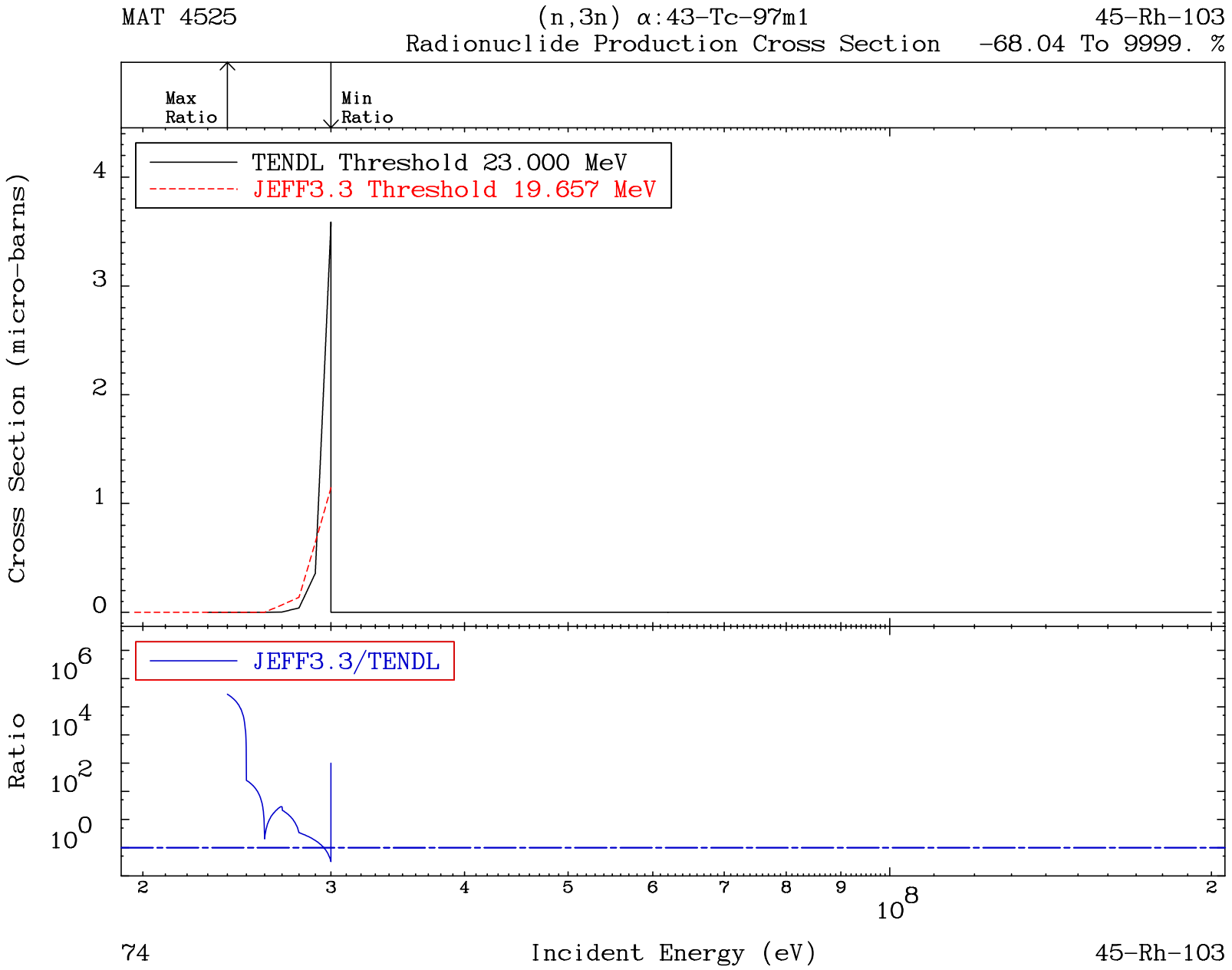

MAT 4525
(n,3n):45-Rh-101g
45-Rh-103
Radionuclide Production Cross Section
-1.437 To 223.8 %
Max Ratio
Min Ratio
TENDL Threshold 16.926 MeV
JEFF3.3 Threshold 16.921 MeV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
45-Rh-103

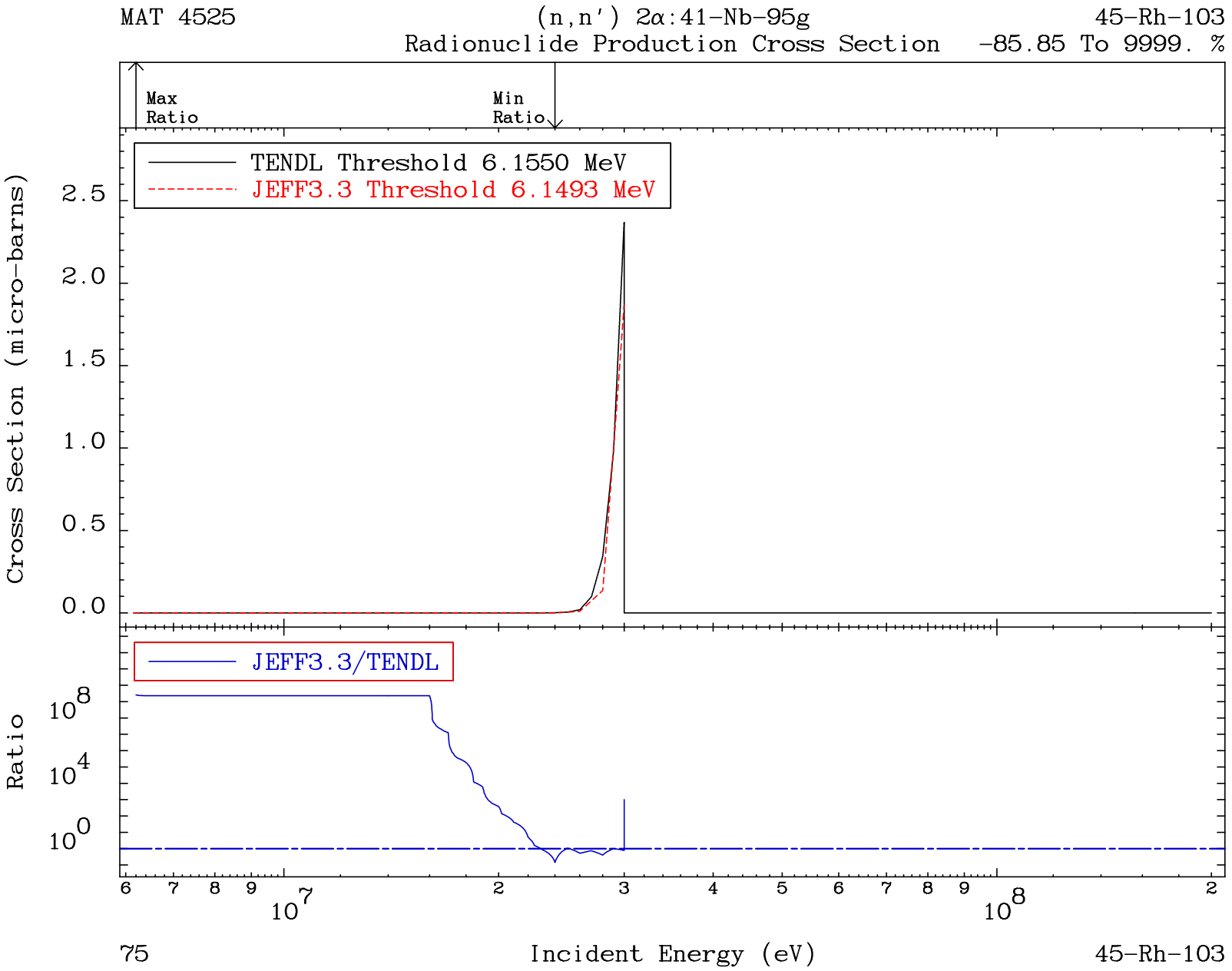

MAT 4525
(n,3n):45-Rh-101m1
45-Rh-103
Radionuclide Production Cross Section
-15.73 To 54.21 %
Max Ratio
Min Ratio
TENDL Threshold 17.085 MeV
JEFF3.3 Threshold 17.080 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
45-Rh-103

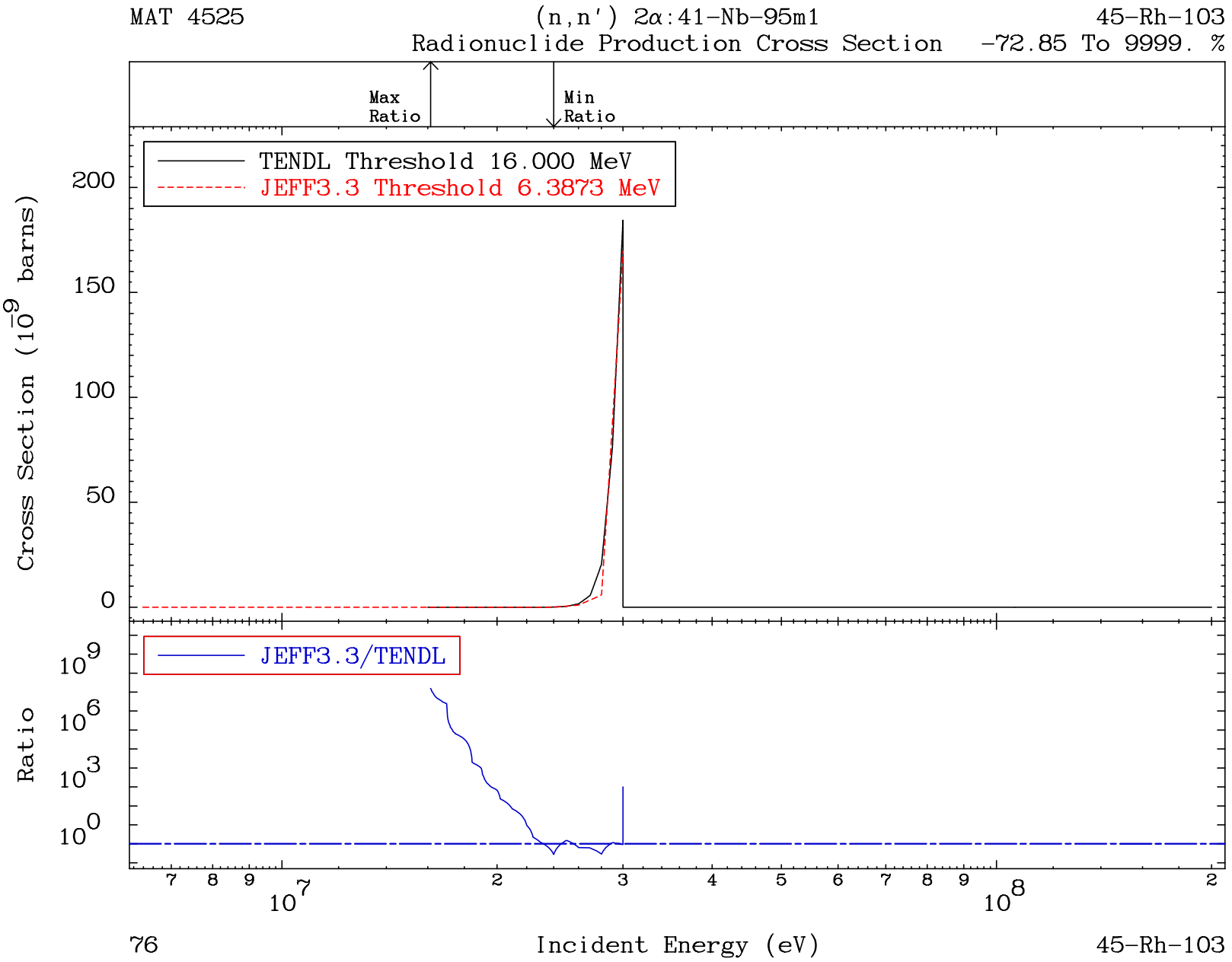

MAT 4525
(n,n') α:43-Tc-99g
45-Rh-103
Radionuclide Production Cross Section
-86.43 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.1594 MeV
JEFF3.3 Threshold 3.1545 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
71
Incident Energy (eV)
45-Rh-103

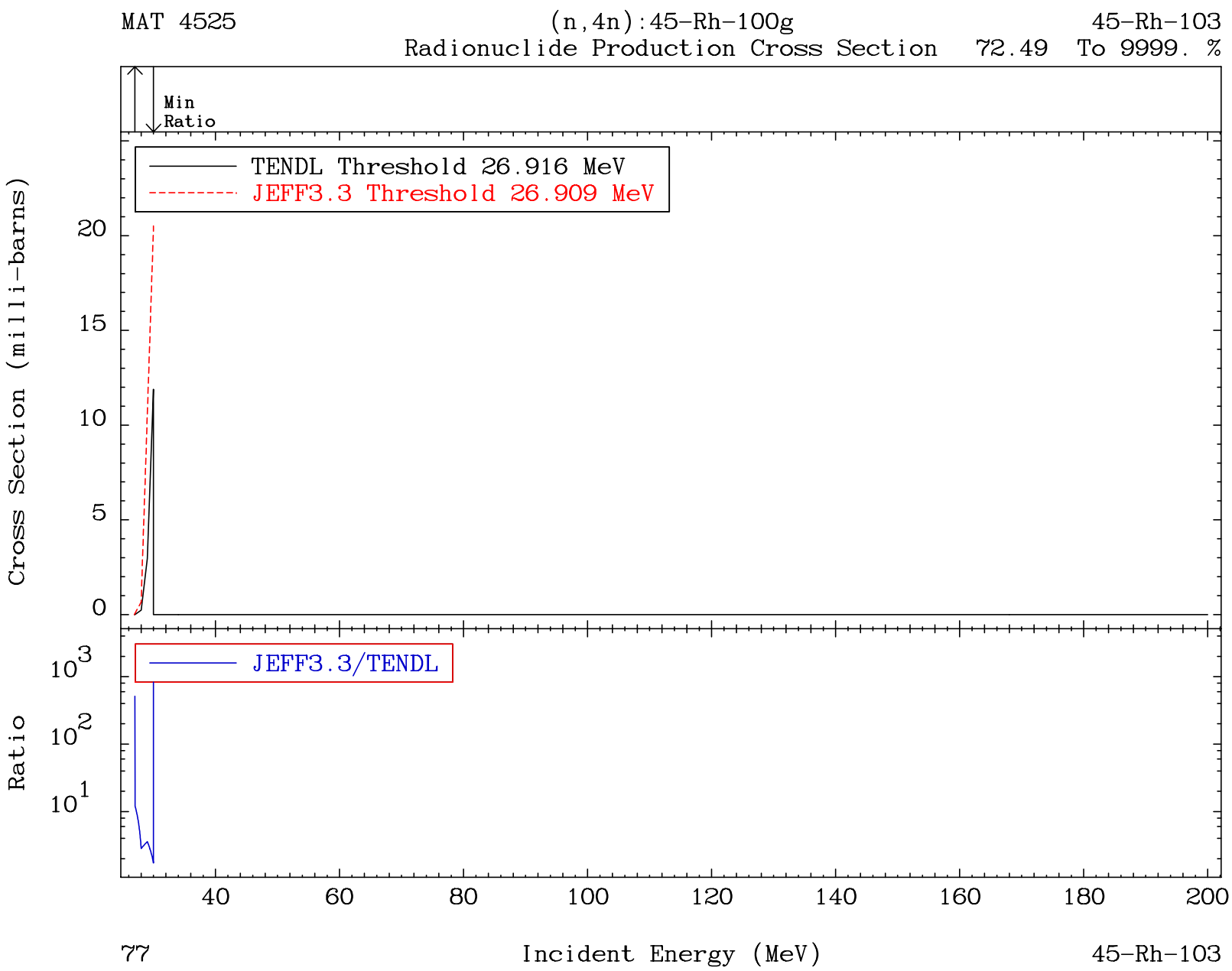

MAT 4525
(n,n') α:43-Tc-99m2
45-Rh-103
Radionuclide Production Cross Section -88.63 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.2000 MeV
JEFF3.3 Threshold 3.2986 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
72
Incident Energy (eV)
45-Rh-103

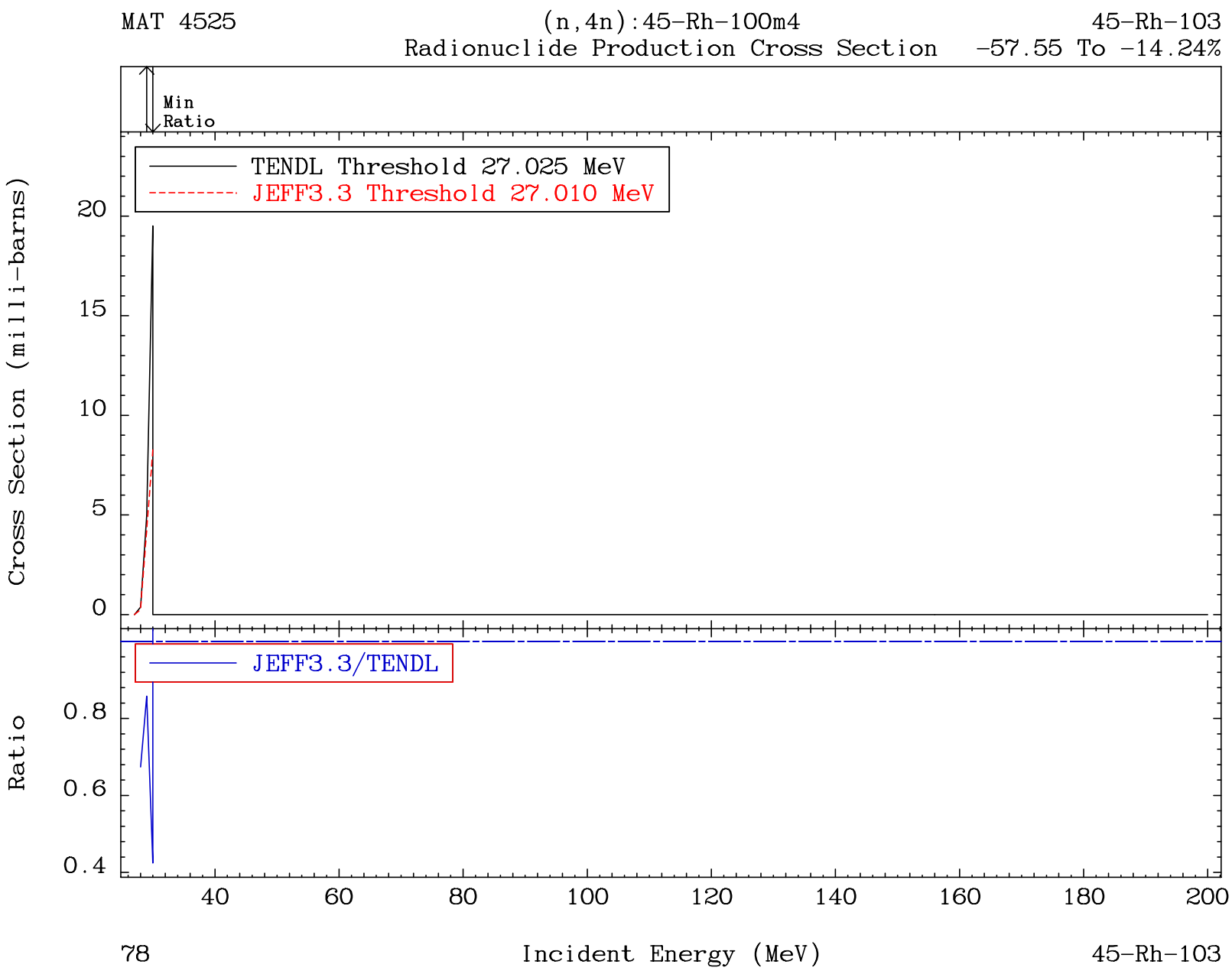

MAT 4525
(n,3n) α:43-Tc-97g
45-Rh-103
Radionuclide Production Cross Section
-67.02 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.565 MeV
JEFF3.3 Threshold 19.559 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
45-Rh-103

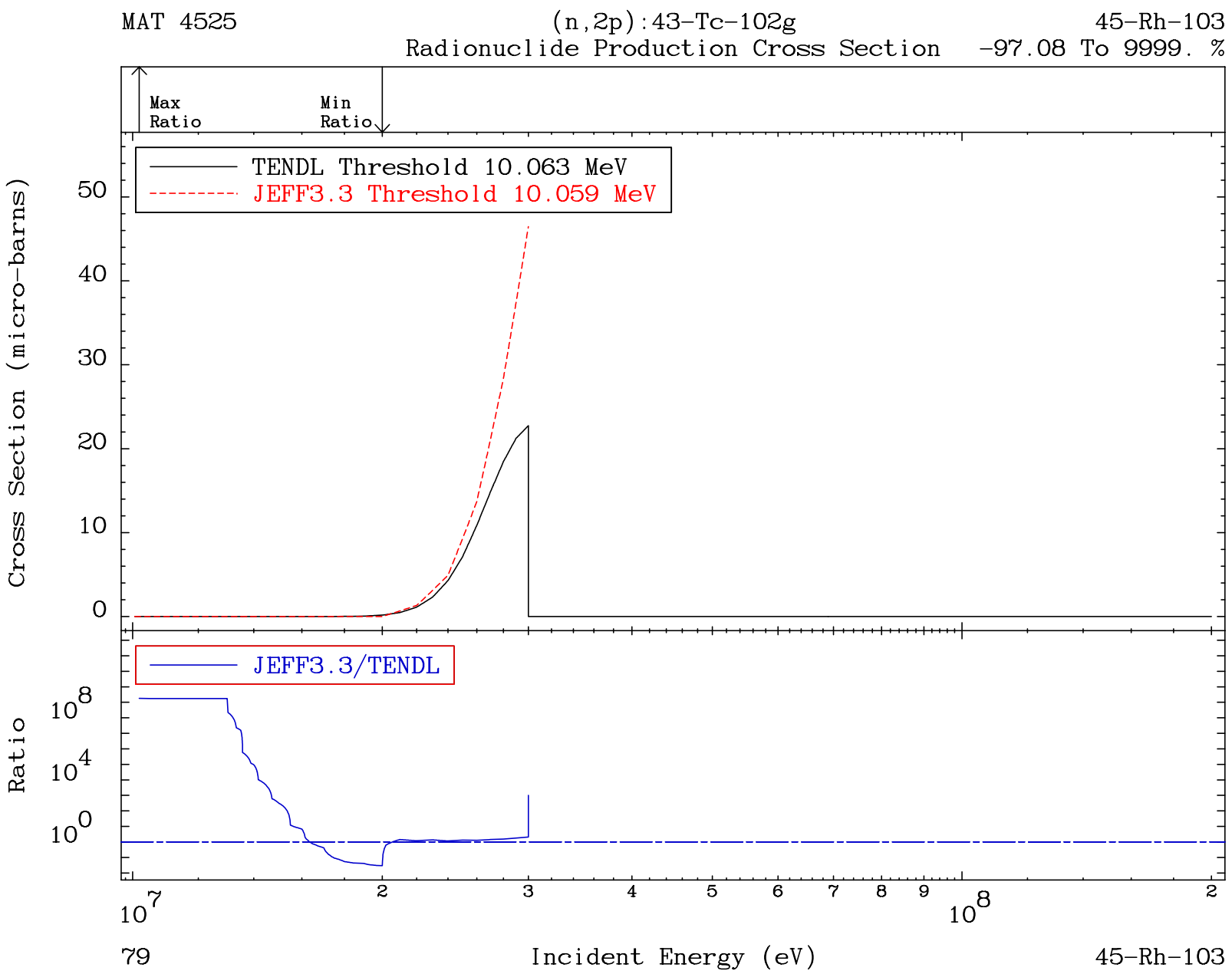

MAT 4525
(n,3n) α:43-Tc-97m1
45-Rh-103
Radionuclide Production Cross Section -68.04 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 23.000 MeV
JEFF3.3 Threshold 19.657 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
45-Rh-103

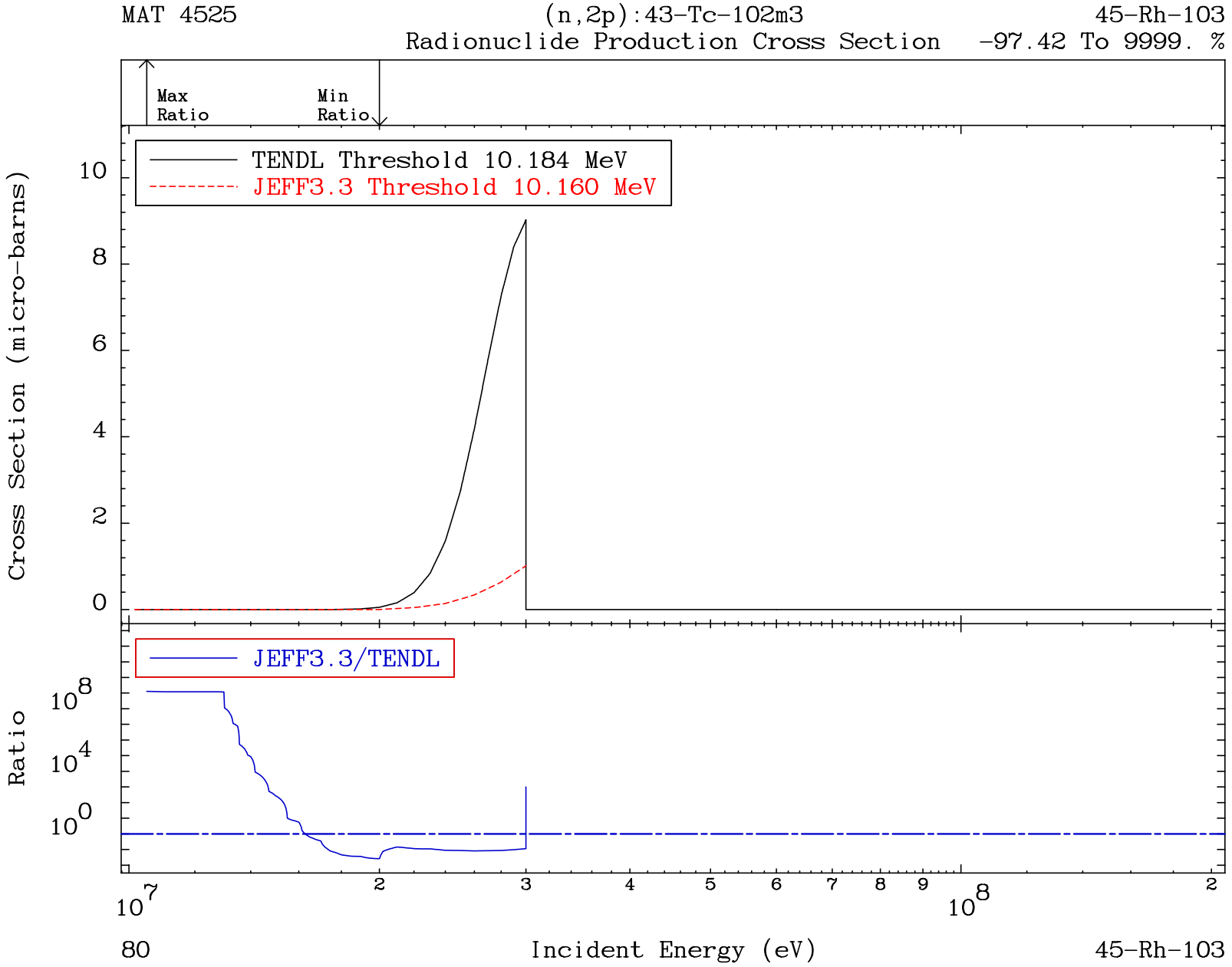

MAT 4525
(n,n') 2α:41-Nb-95g
45-Rh-103
Radionuclide Production Cross Section -85.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1550 MeV
JEFF3.3 Threshold 6.1493 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
75
Incident Energy (eV)
45-Rh-103


MAT 4525
(n,n') 2α:41-Nb-95m1
45-Rh-103
Radionuclide Production Cross Section -72.85 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.000 MeV
JEFF3.3 Threshold 6.3873 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^{9}
10^{6}
10^{3}
10^{0}
7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
76
Incident Energy (eV)
45-Rh-103


MAT 4525
(n,4n):45-Rh-100g
45-Rh-103
Radionuclide Production Cross Section 72.49 To 9999. %
Min Ratio
TENDL Threshold 26.916 MeV
JEFF3.3 Threshold 26.909 MeV
Cross Section (milli-barns)
0
5
10
15
20
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
40
60
80
100
120
140
160
180
200
77
Incident Energy (MeV)
45-Rh-103


MAT 4525
(n,4n):45-Rh-100m4
45-Rh-103
Radionuclide Production Cross Section
-57.55 To -14.24%
Min
Ratio
TENDL Threshold 27.025 MeV
JEFF3.3 Threshold 27.010 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
0.8
0.6
0.4
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
45-Rh-103


MAT 4525
(n,2p):43-Tc-102g
45-Rh-103
Radionuclide Production Cross Section
-97.08 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.063 MeV
JEFF3.3 Threshold 10.059 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
45-Rh-103


MAT 4525
(n,2p):43-Tc-102m3
45-Rh-103
Radionuclide Production Cross Section
-97.42 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.184 MeV
JEFF3.3 Threshold 10.160 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
80
45-Rh-103