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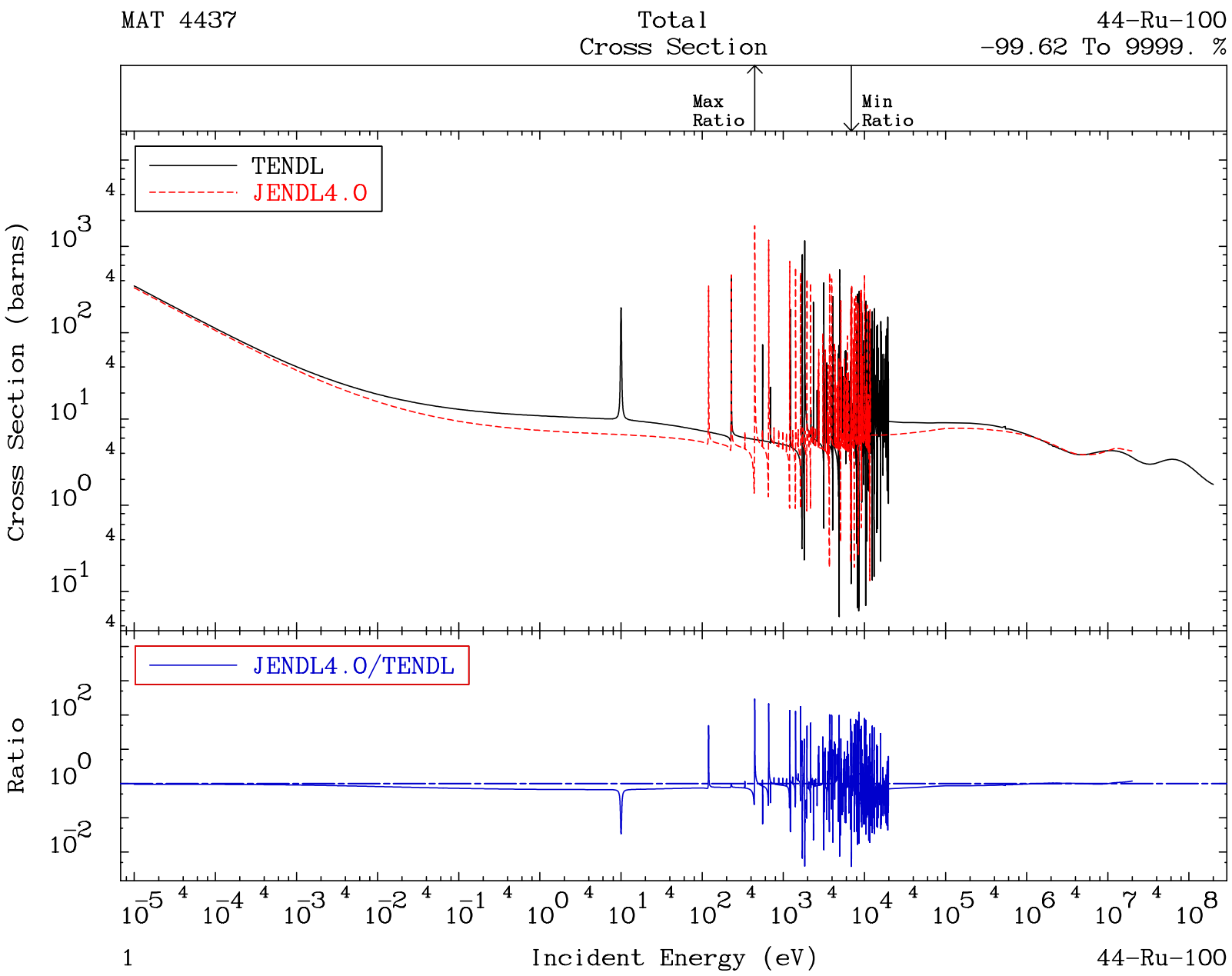
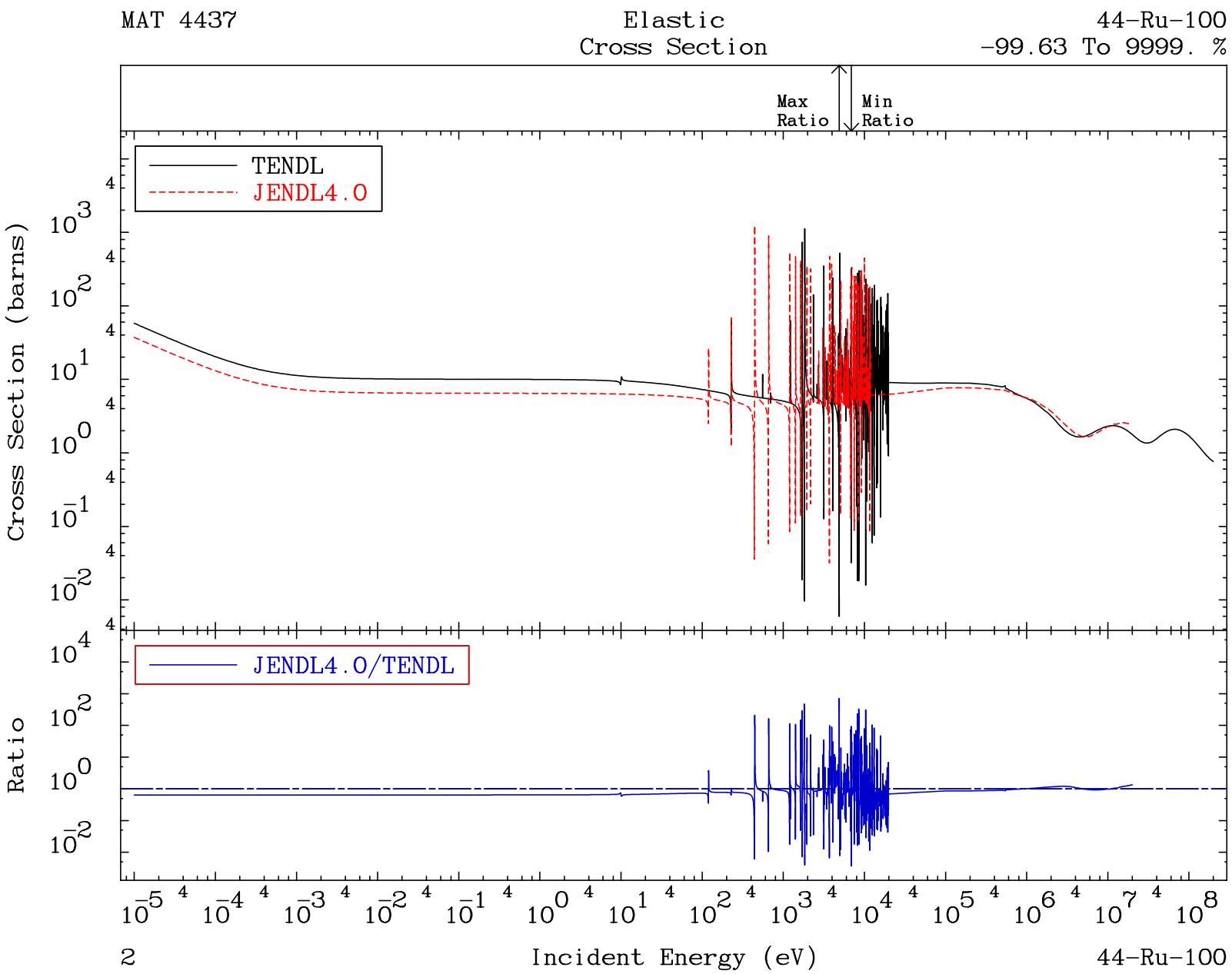
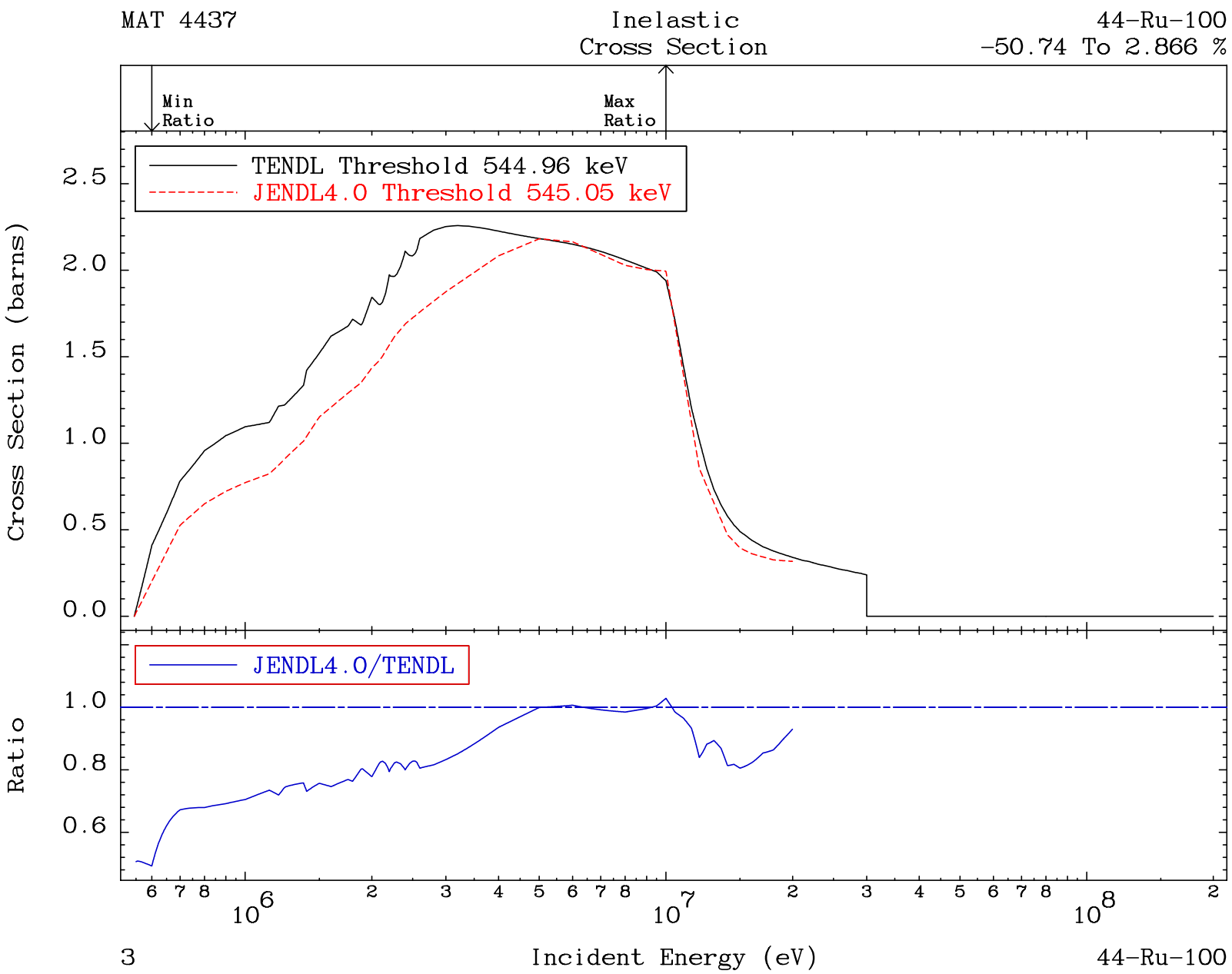
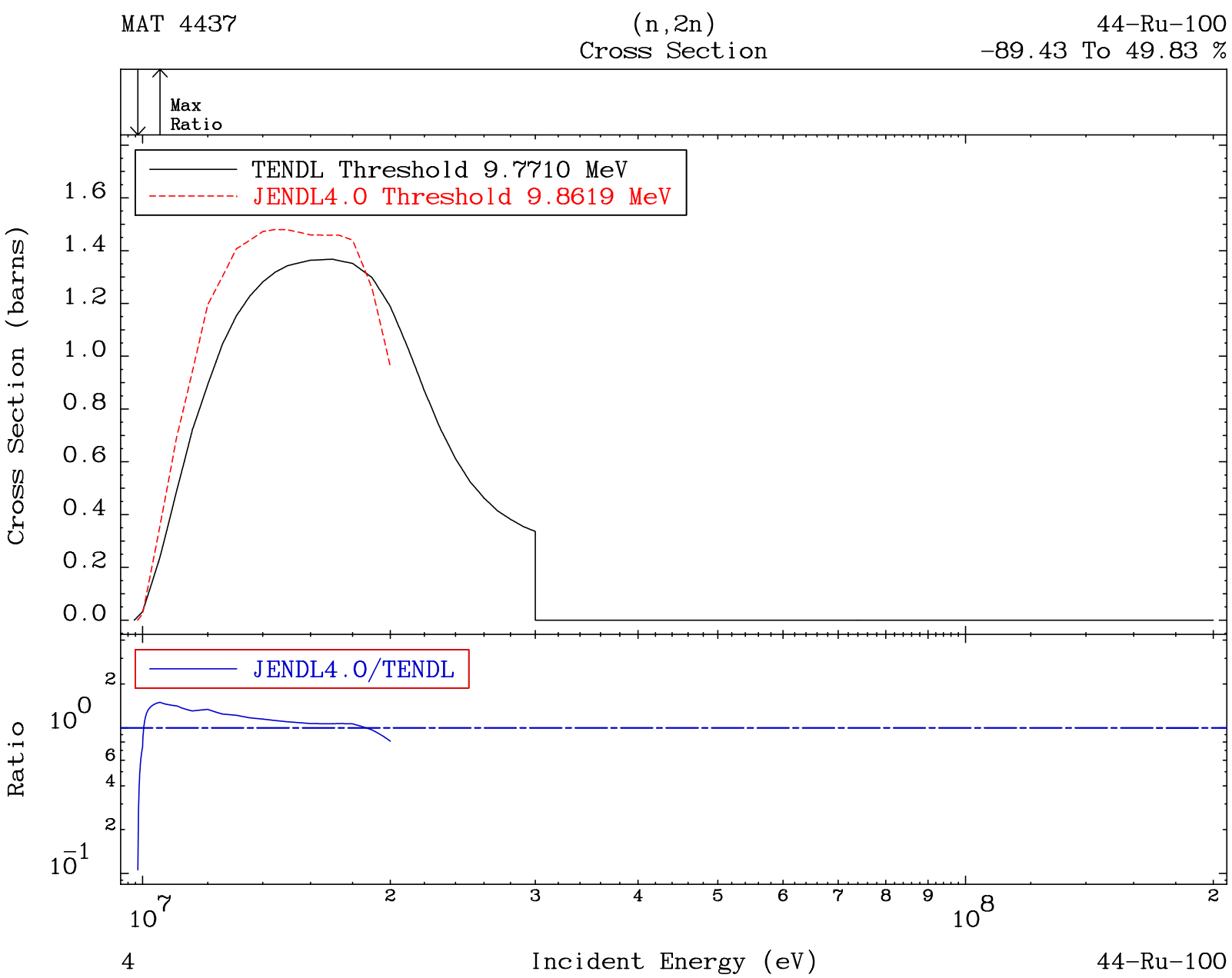
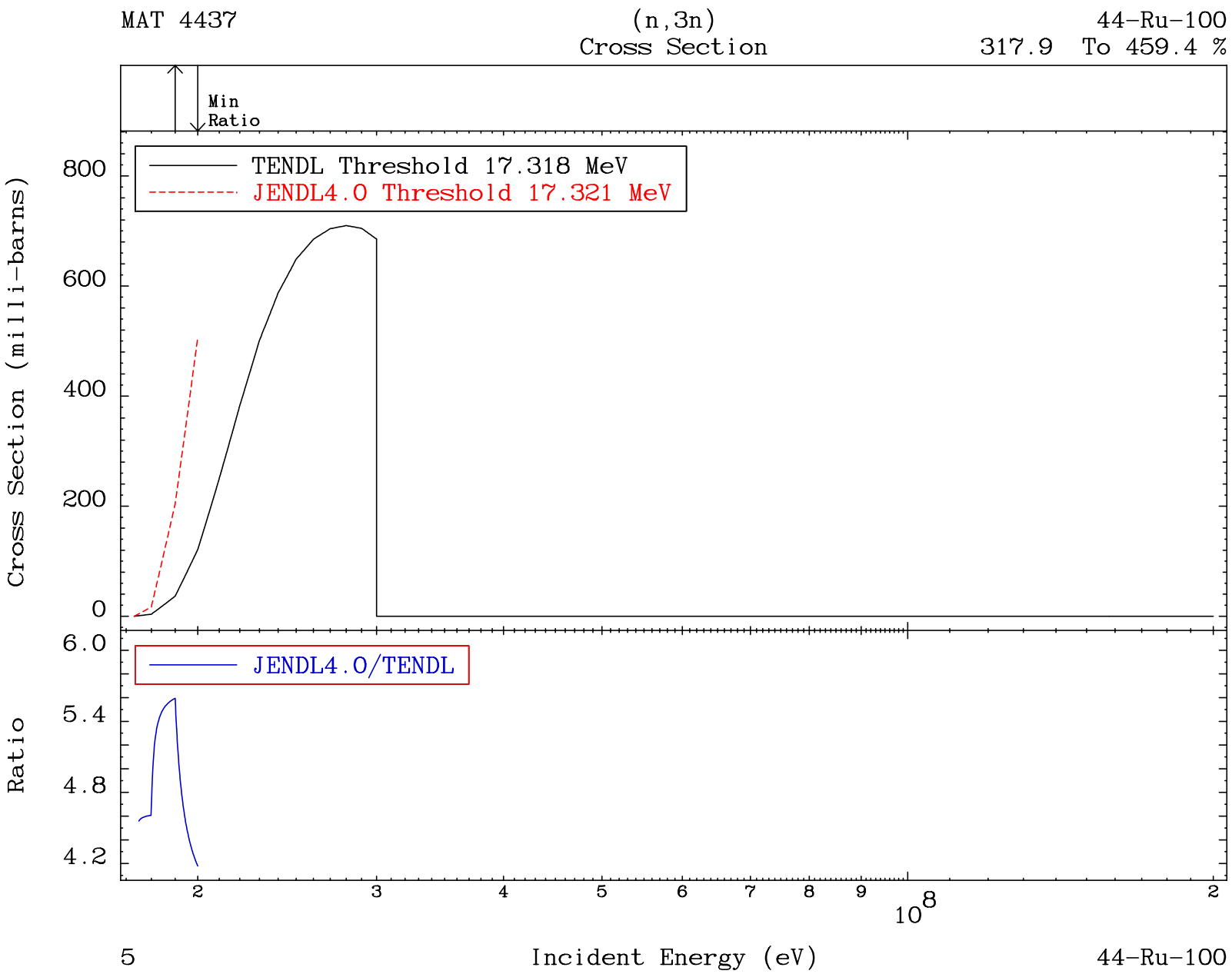
Press Mouse Button to Start

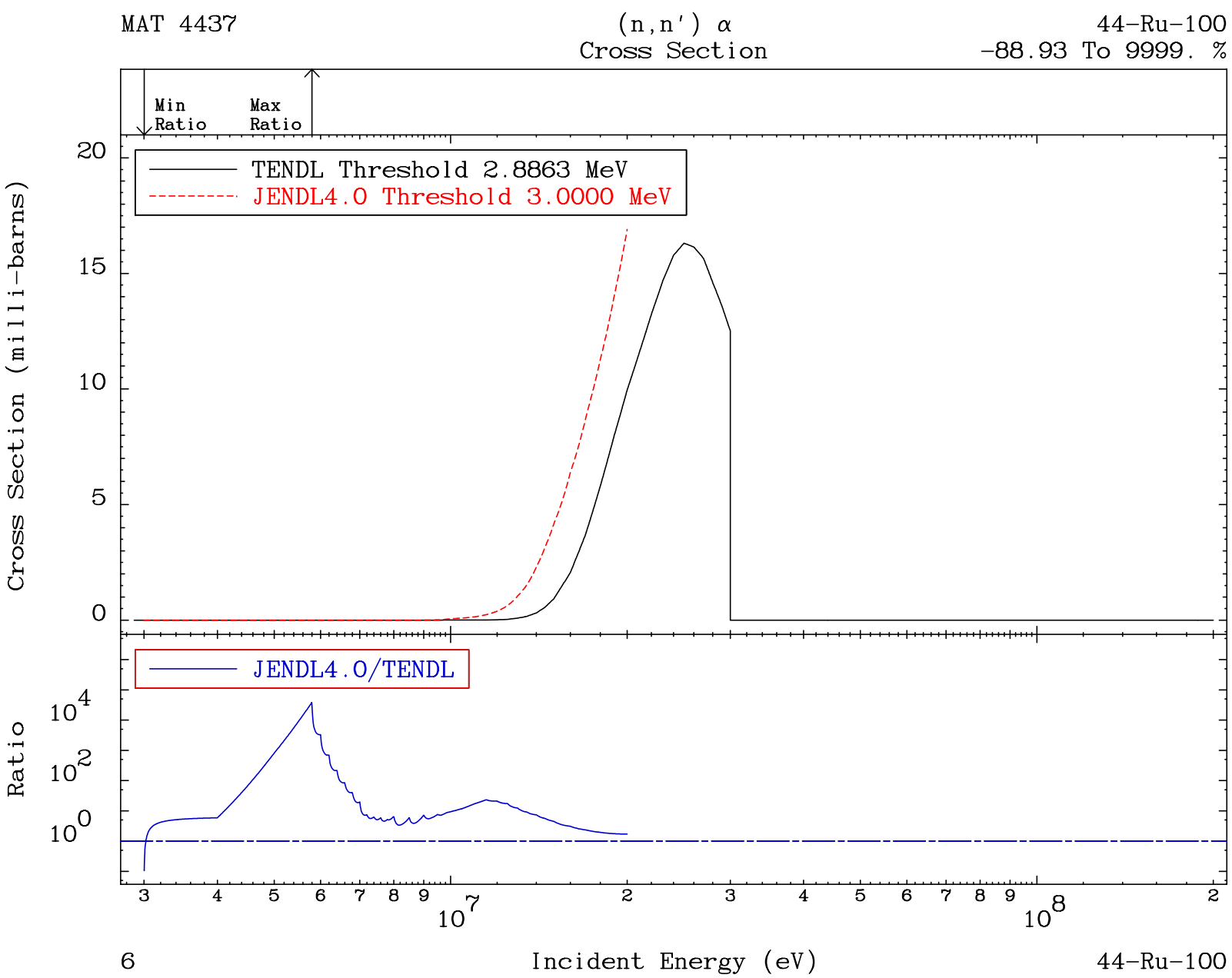

MAT 4437
Total
Cross Section
44-Ru-100
-99.62 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
44-Ru-100

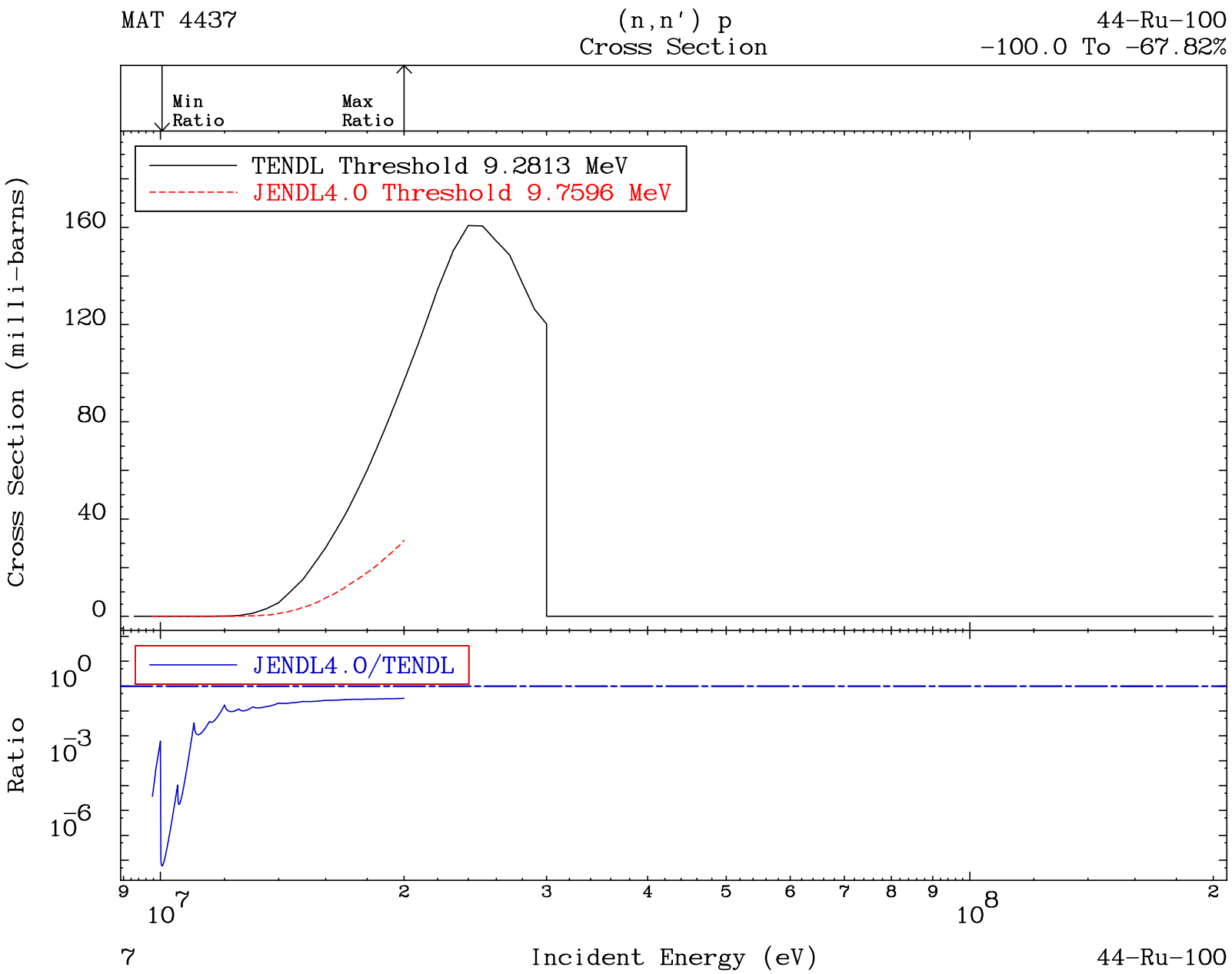

MAT 4437
Elastic
Cross Section
44-Ru-100
-99.63 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
44-Ru-100

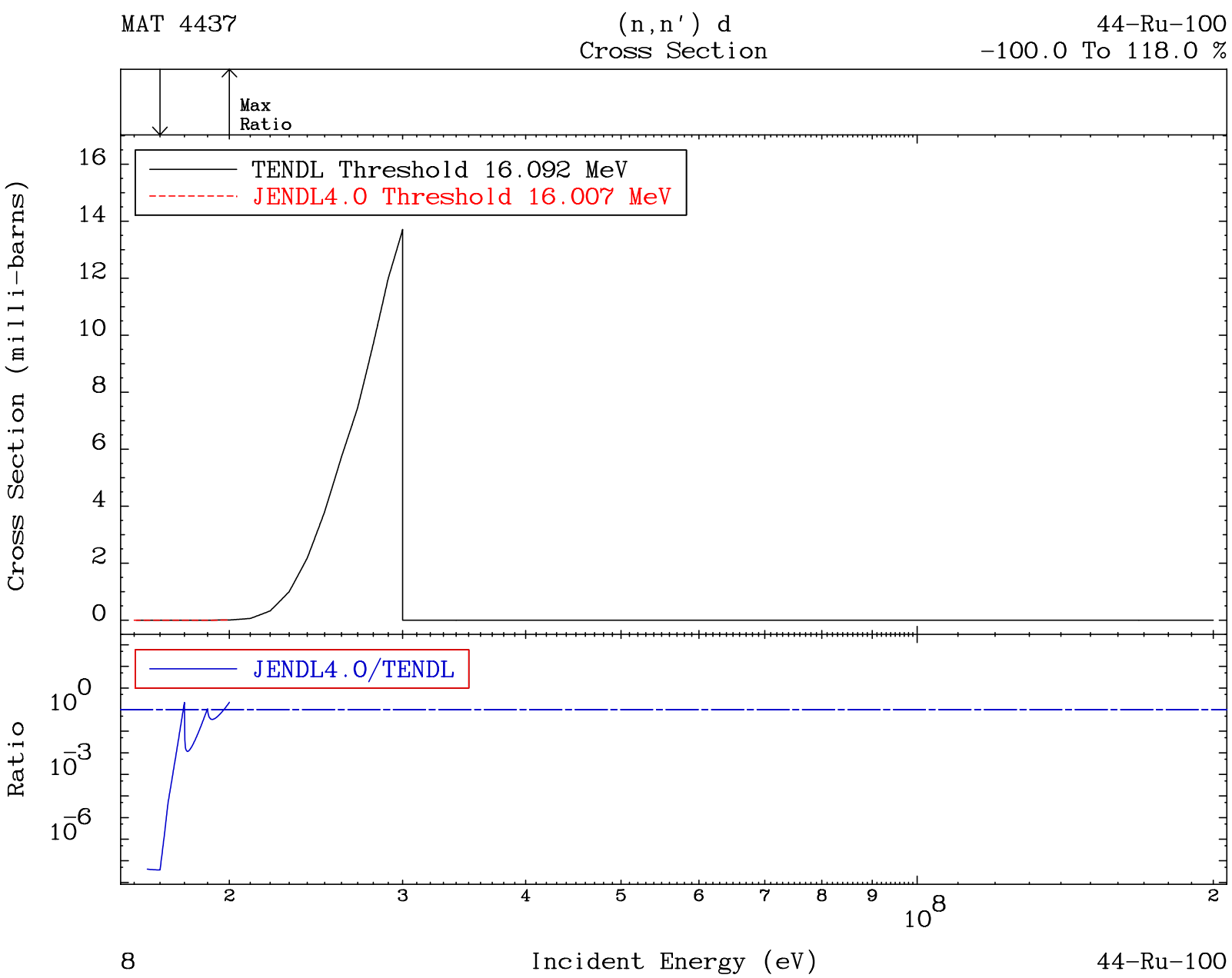

MAT 4437
Inelastic
Cross Section
44-Ru-100
-50.74 To 2.866 %
Min
Ratio
Max
Ratio
TENDL Threshold 544.96 keV
JENDL4.0 Threshold 545.05 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
1.0
0.8
0.6
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
44-Ru-100

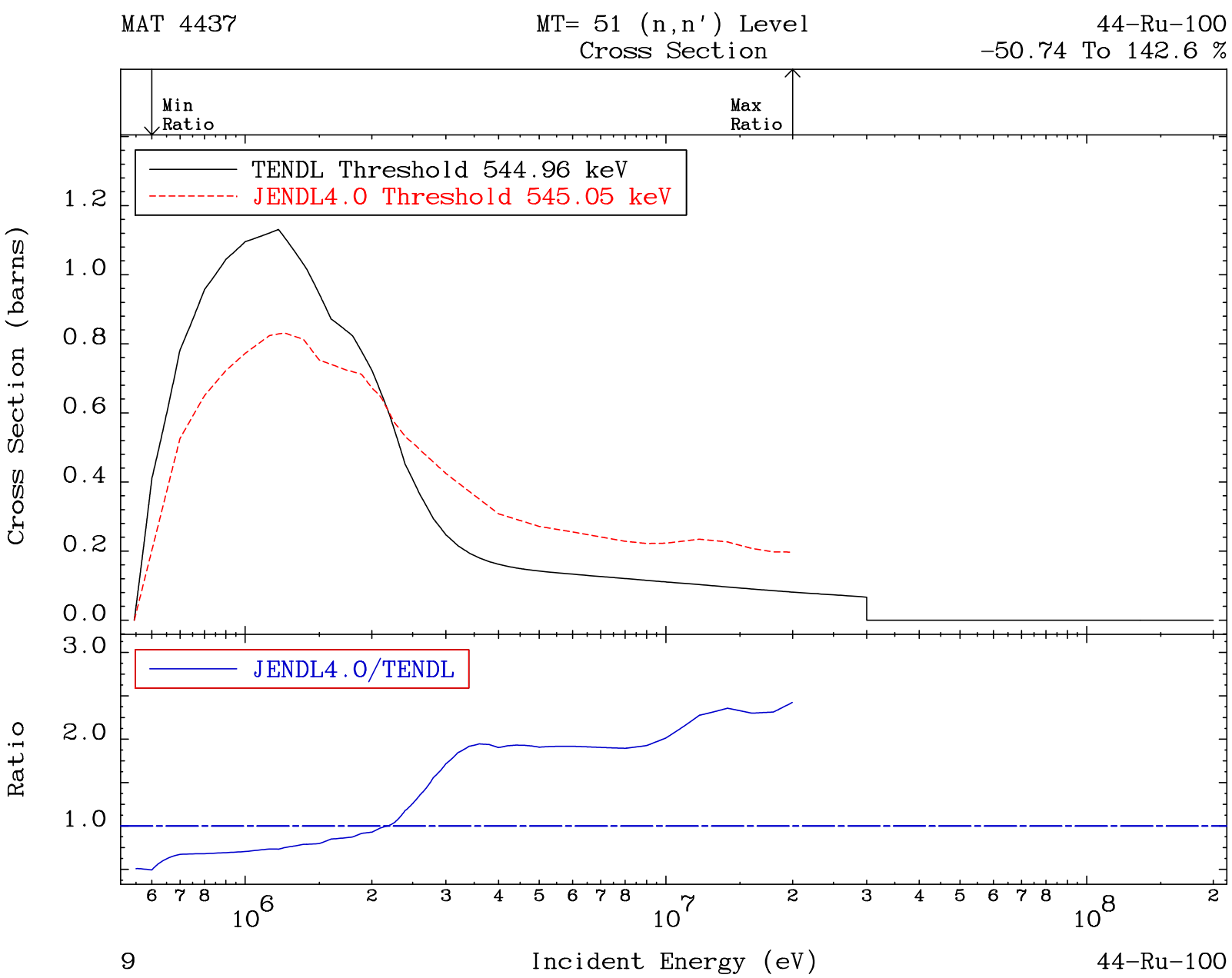

MAT 4437
(n,2n)
Cross Section
44-Ru-100
-89.43 To 49.83 %
Max
Ratio
TENDL Threshold 9.7710 MeV
JENDL4.0 Threshold 9.8619 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
2
10^0
6
4
2
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
44-Ru-100

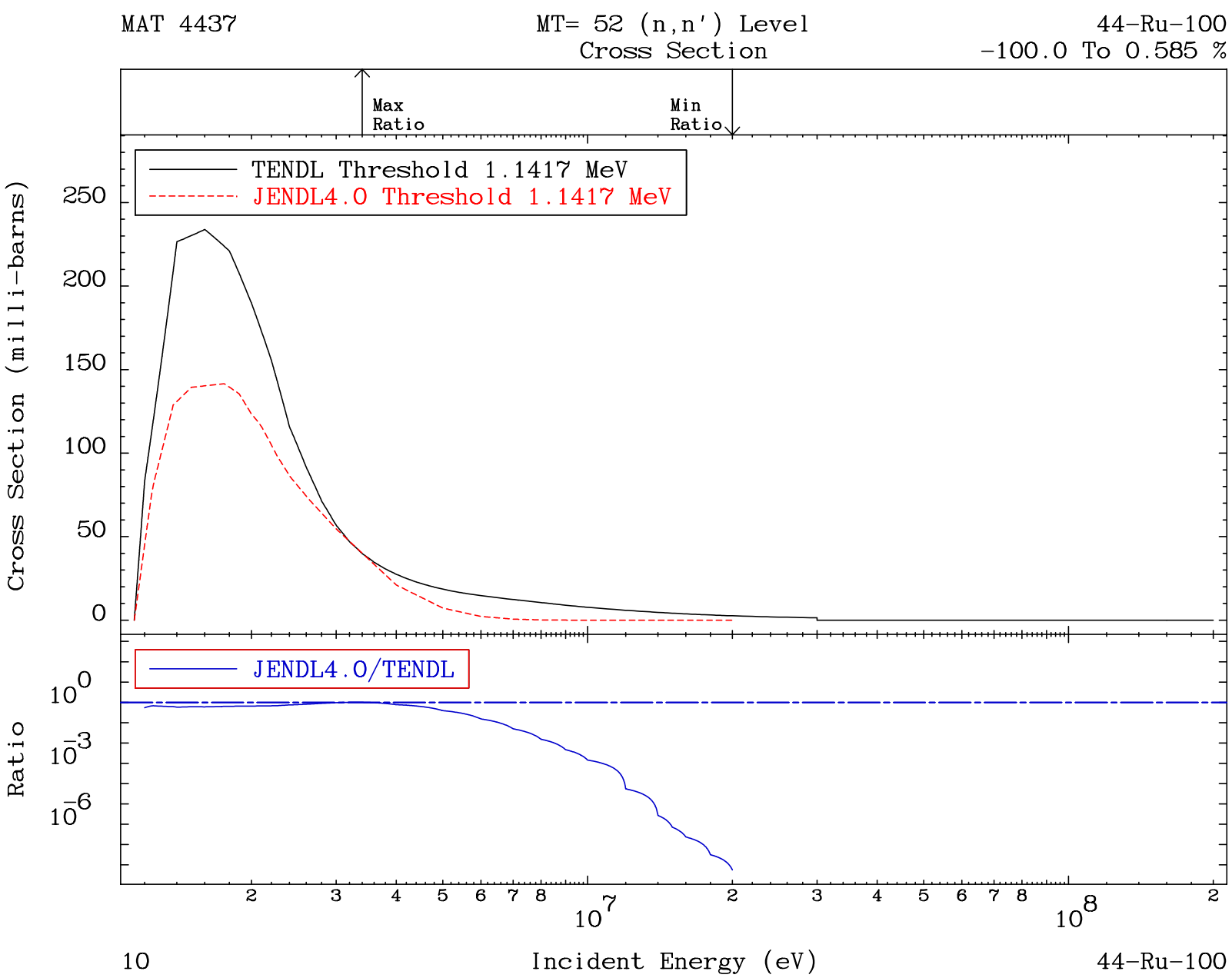

MAT 4437
(n,3n)
Cross Section
44-Ru-100
317.9 To 459.4 %
Min
Ratio
TENDL Threshold 17.318 MeV
JENDL4.0 Threshold 17.321 MeV
Cross Section (milli-barns)
800
600
400
200
0
JENDL4.0/TENDL
Ratio
6.0
5.4
4.8
4.2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
44-Ru-100

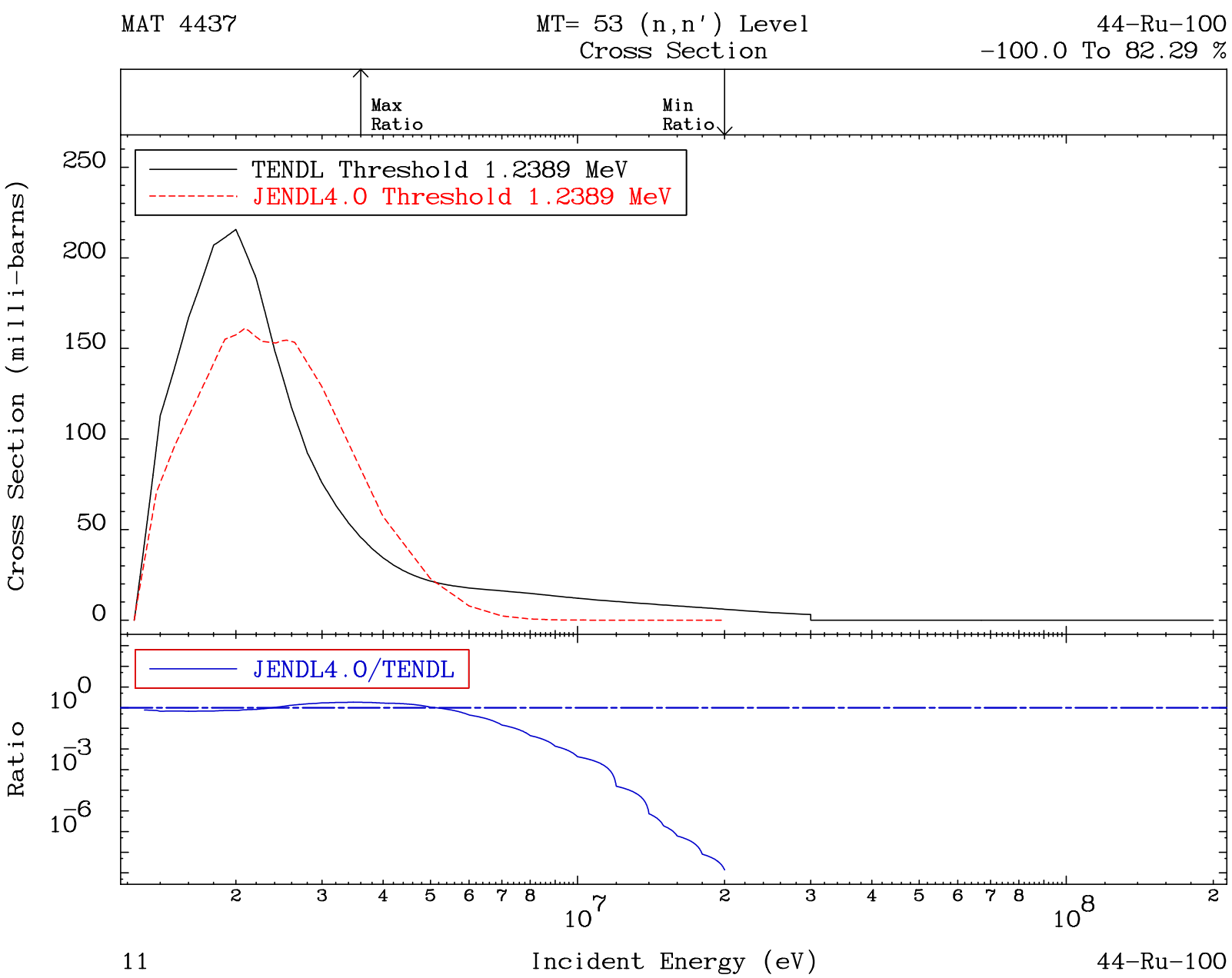

MAT 4437
(n,n') α
Cross Section
44-Ru-100
-88.93 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8863 MeV
JENDL4.0 Threshold 3.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
6
44-Ru-100

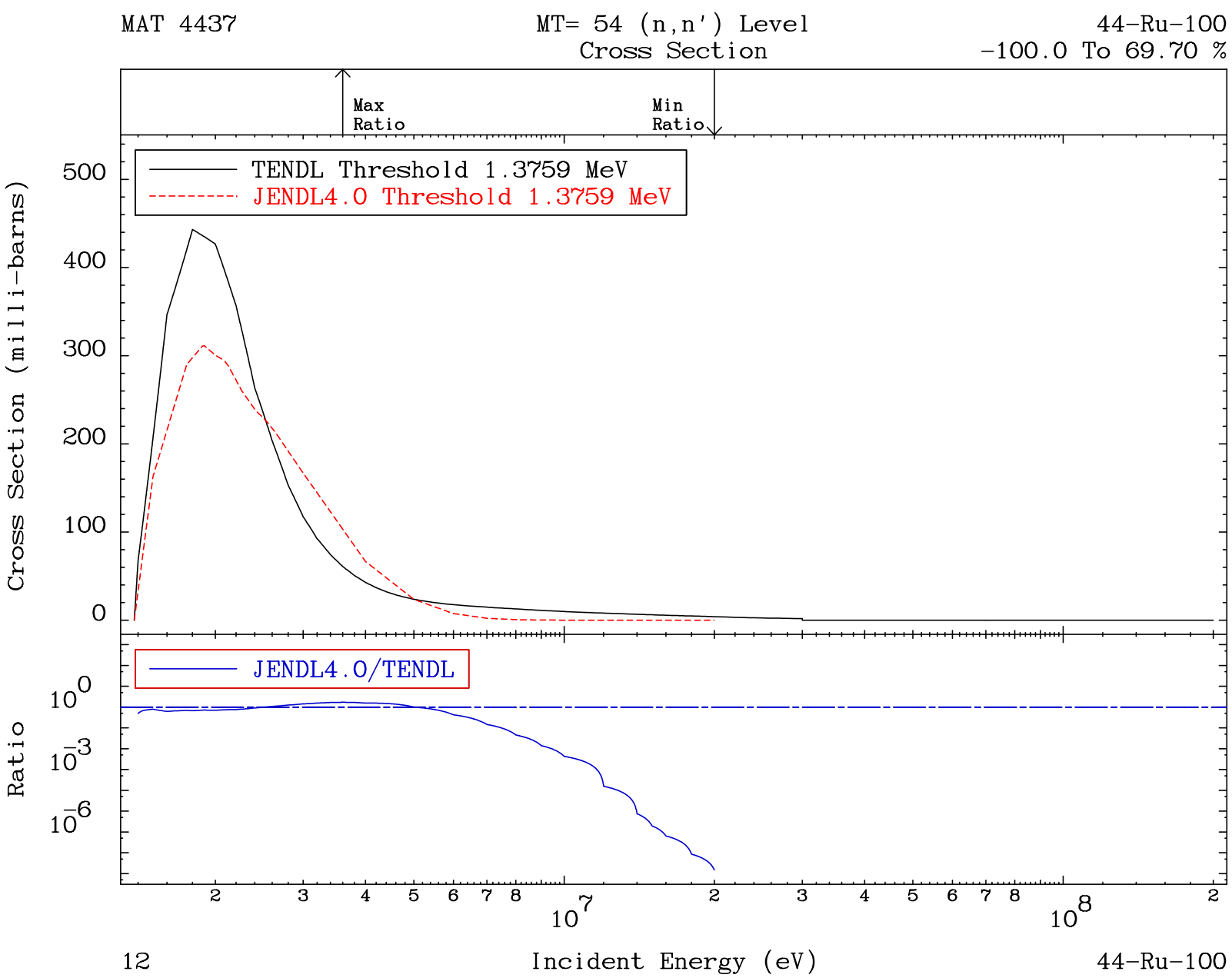

MAT 4437
(n,n') p
Cross Section
44-Ru-100
-100.0 To -67.82%
Min Ratio
Max Ratio
TENDL Threshold 9.2813 MeV
JENDL4.0 Threshold 9.7596 MeV
Cross Section (milli-barns)
160
120
80
40
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
44-Ru-100

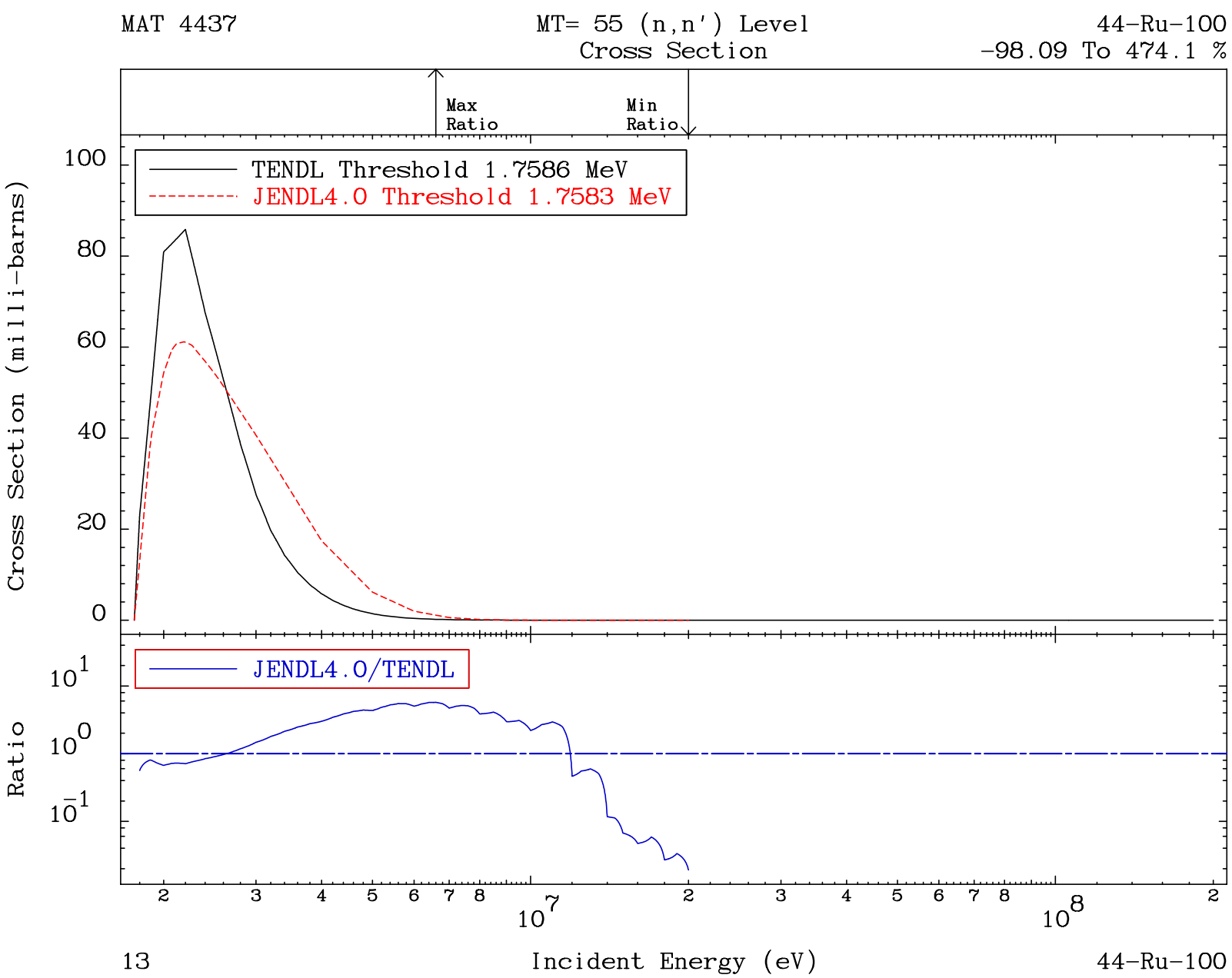

MAT 4437
(n,n') d
Cross Section
44-Ru-100
-100.0 To 118.0 %
Max
Ratio
TENDL Threshold 16.092 MeV
JENDL4.0 Threshold 16.007 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
44-Ru-100

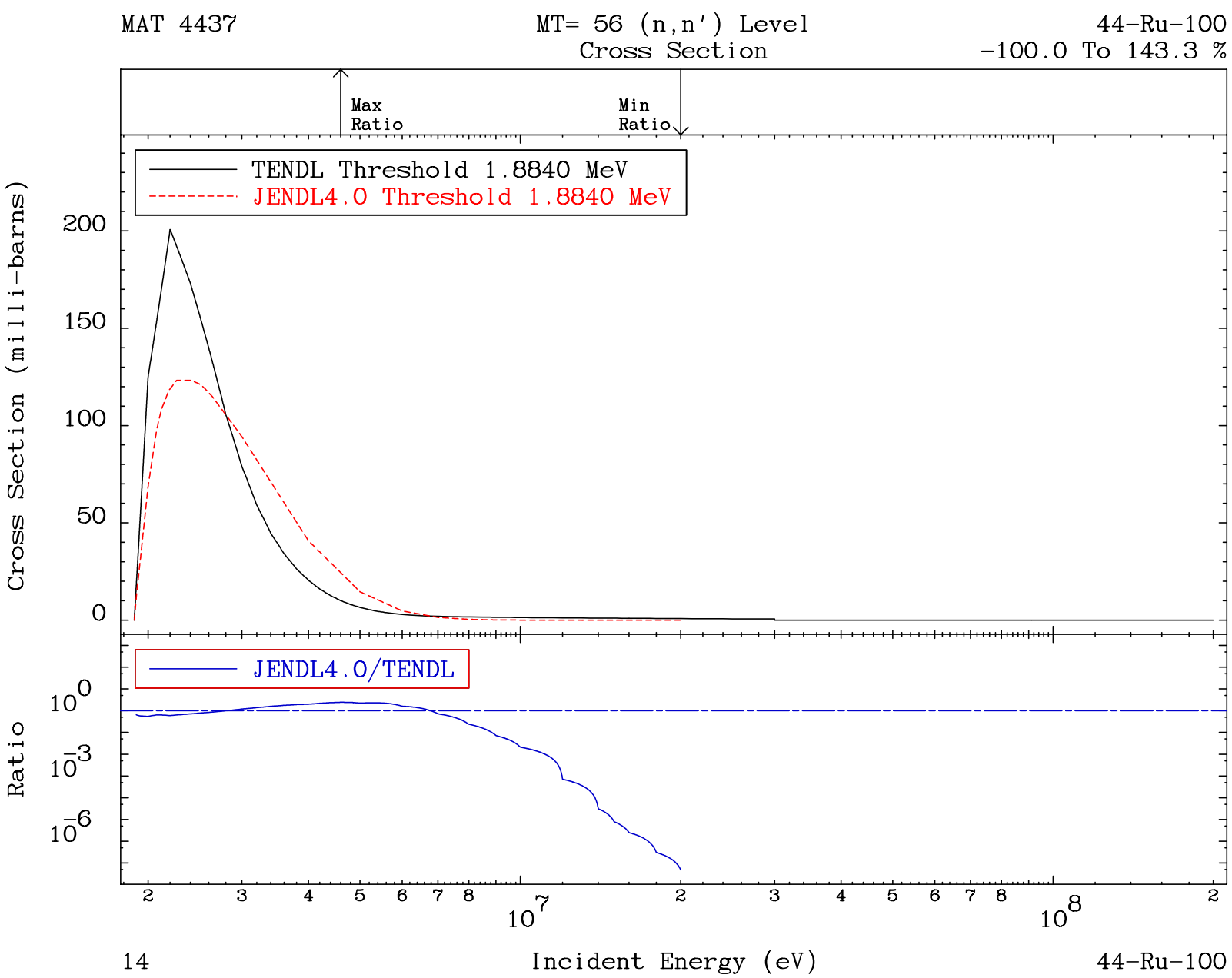

MAT 4437
MT= 51 (n,n') Level
Cross Section
44-Ru-100
-50.74 To 142.6 %
Min
Ratio
Max
Ratio
TENDL Threshold 544.96 keV
JENDL4.0 Threshold 545.05 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
Ratio
JENDL4.0/TENDL
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
44-Ru-100

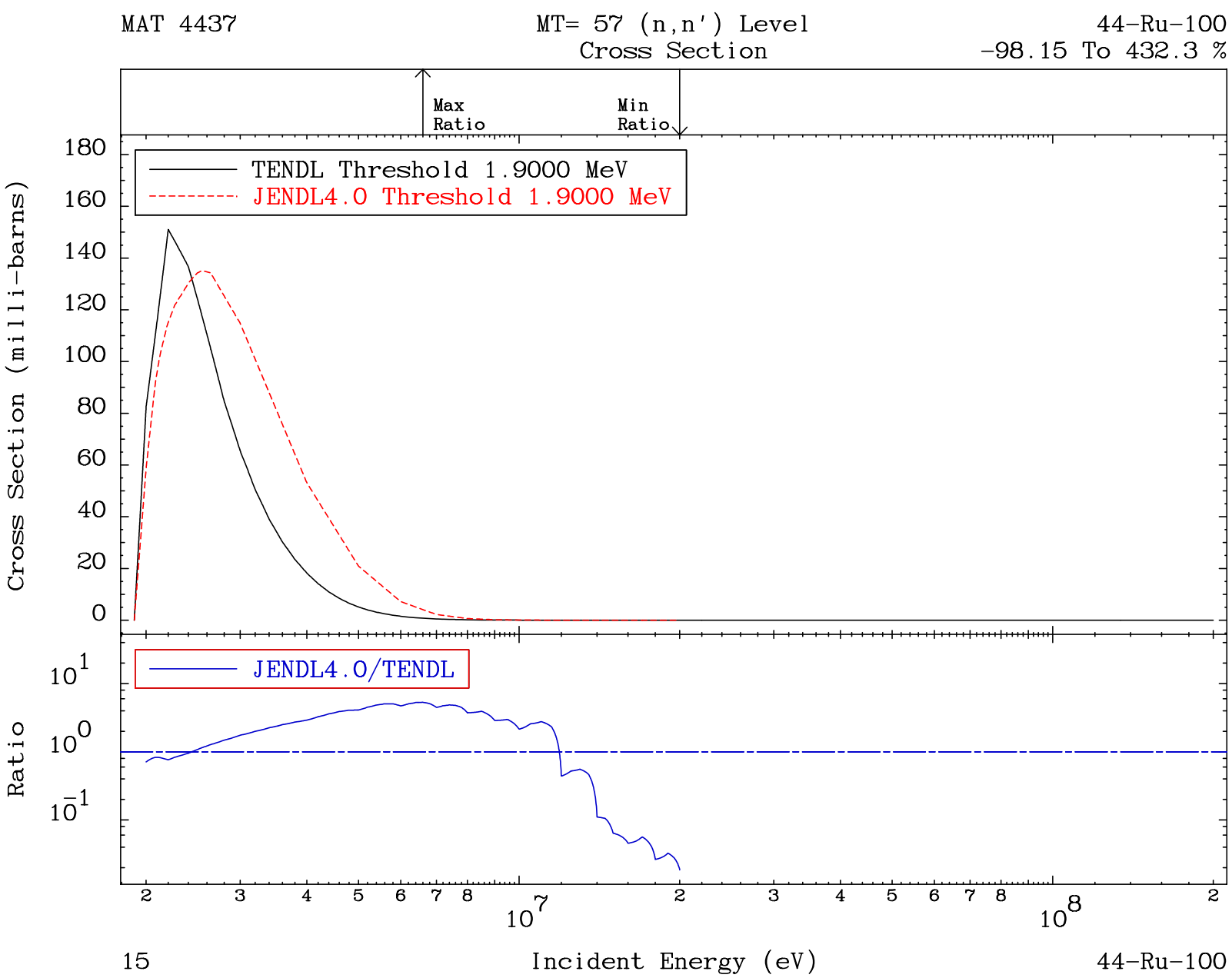

MAT 4437
MT= 52 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 0.585 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1417 MeV
JENDL4.0 Threshold 1.1417 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
44-Ru-100

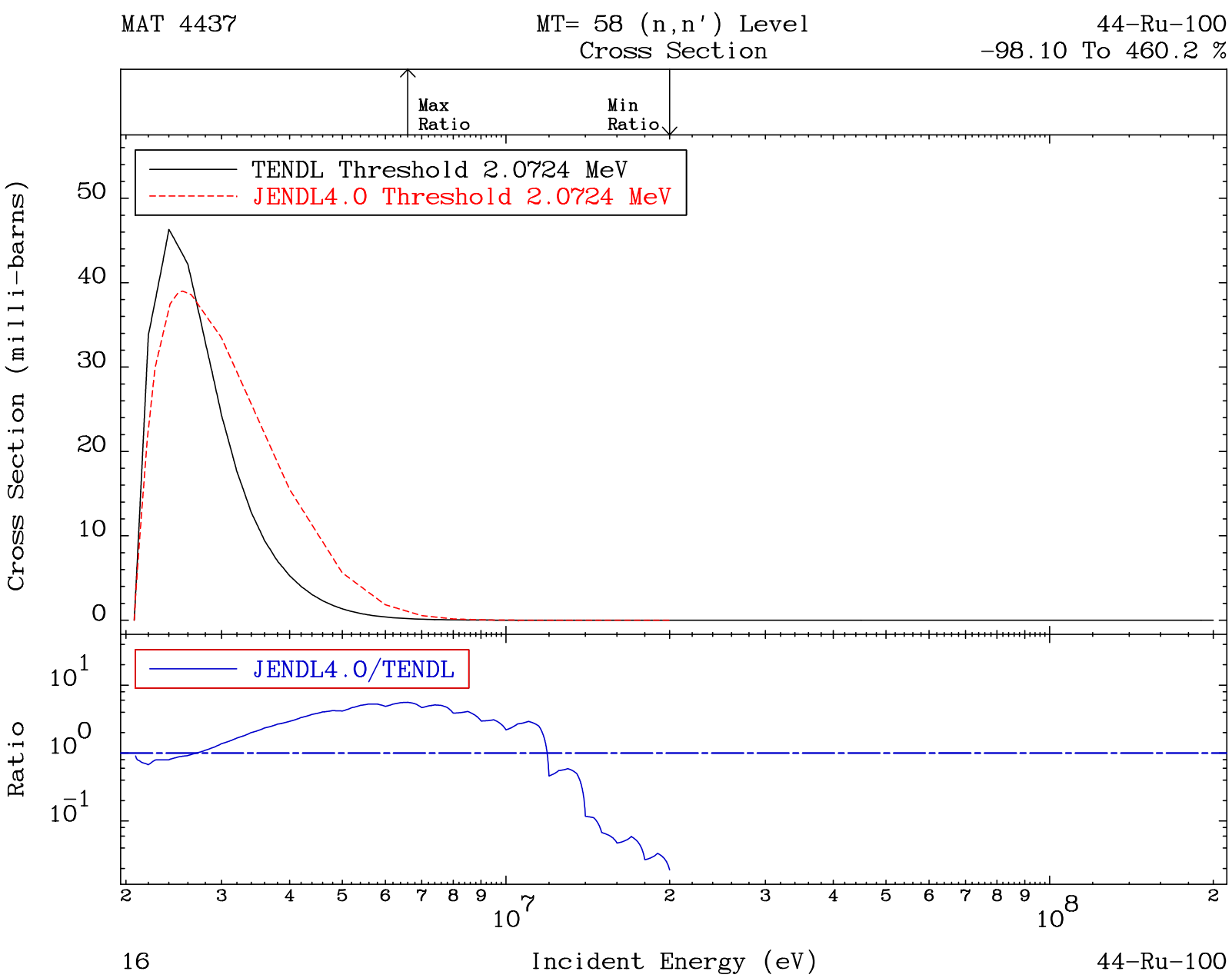

MAT 4437
MT= 53 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 82.29 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2389 MeV
JENDL4.0 Threshold 1.2389 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
44-Ru-100

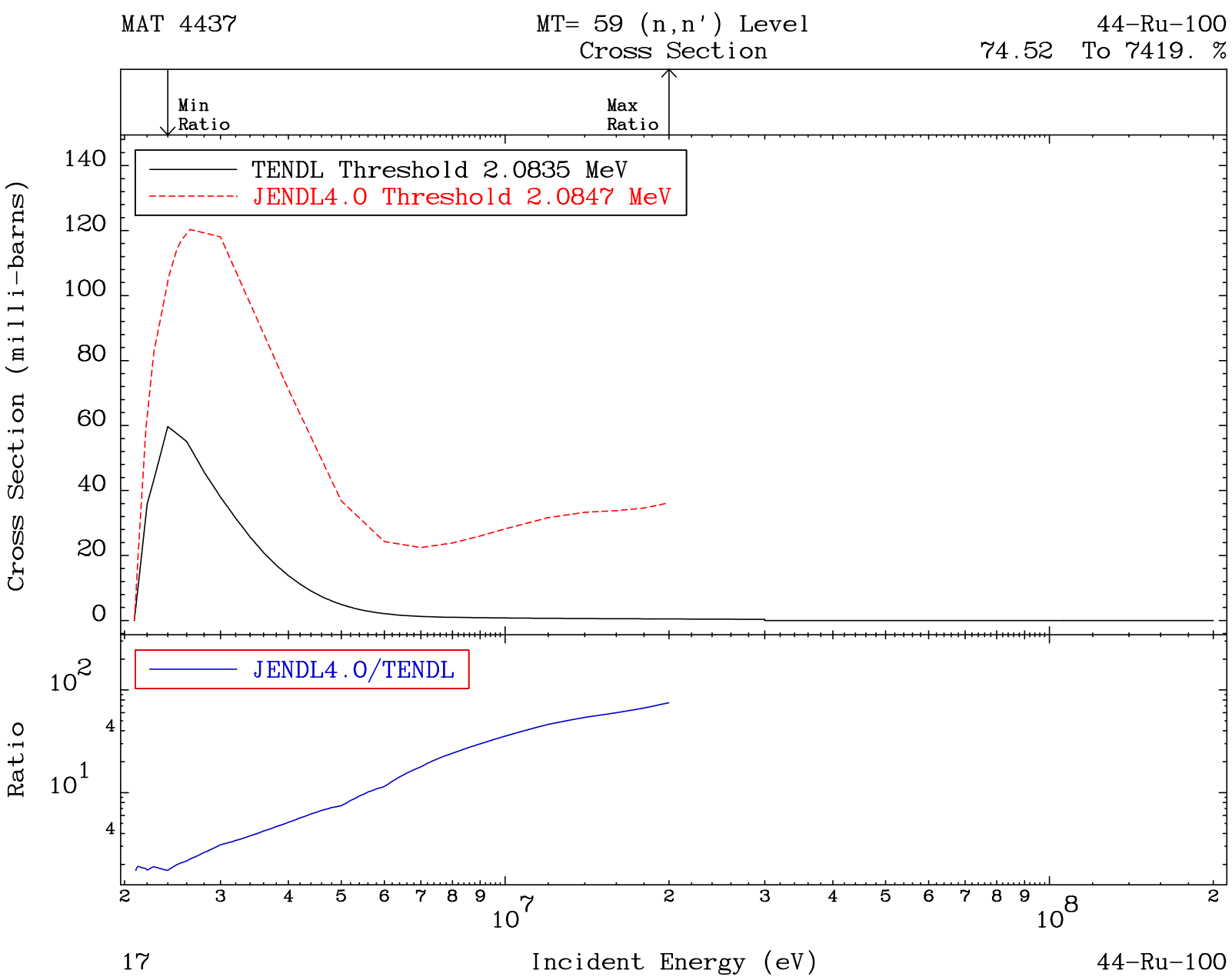

MAT 4437
MT= 54 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 69.70 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3759 MeV
JENDL4.0 Threshold 1.3759 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
44-Ru-100

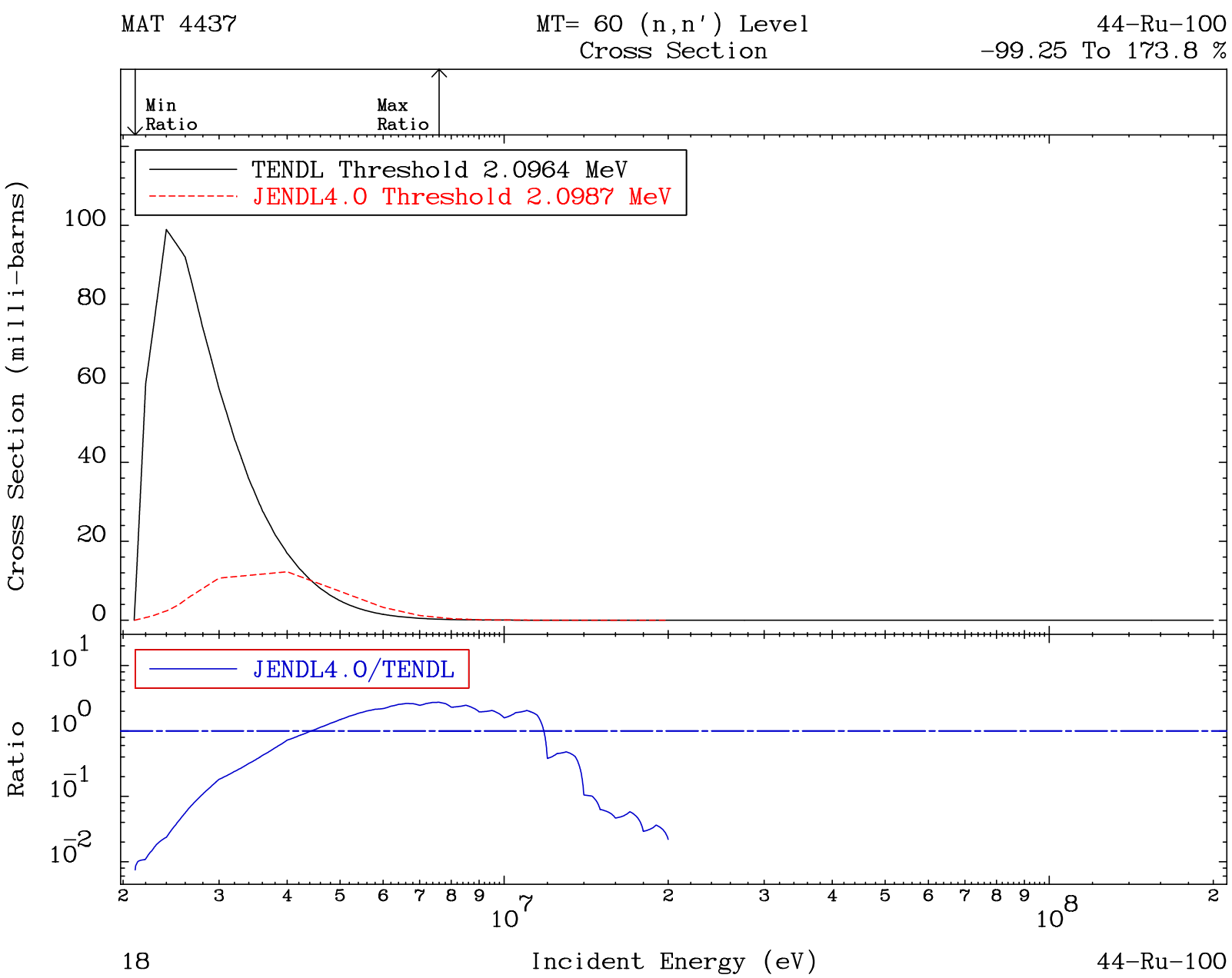

MAT 4437
MT= 55 (n,n') Level
Cross Section
44-Ru-100
-98.09 To 474.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.7586 MeV
JENDL4.0 Threshold 1.7583 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
44-Ru-100

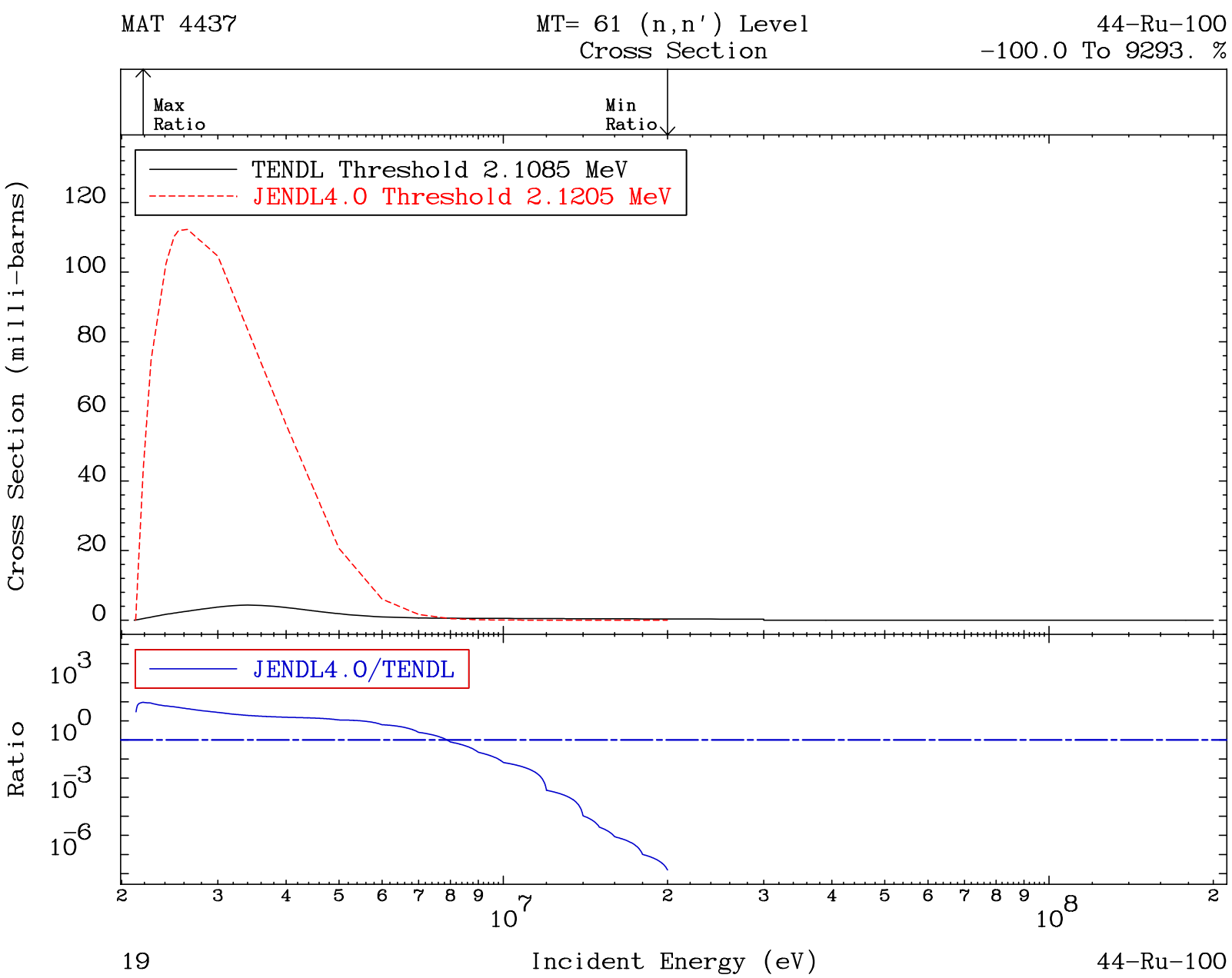

MAT 4437
MT= 56 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 143.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8840 MeV
JENDL4.0 Threshold 1.8840 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
44-Ru-100

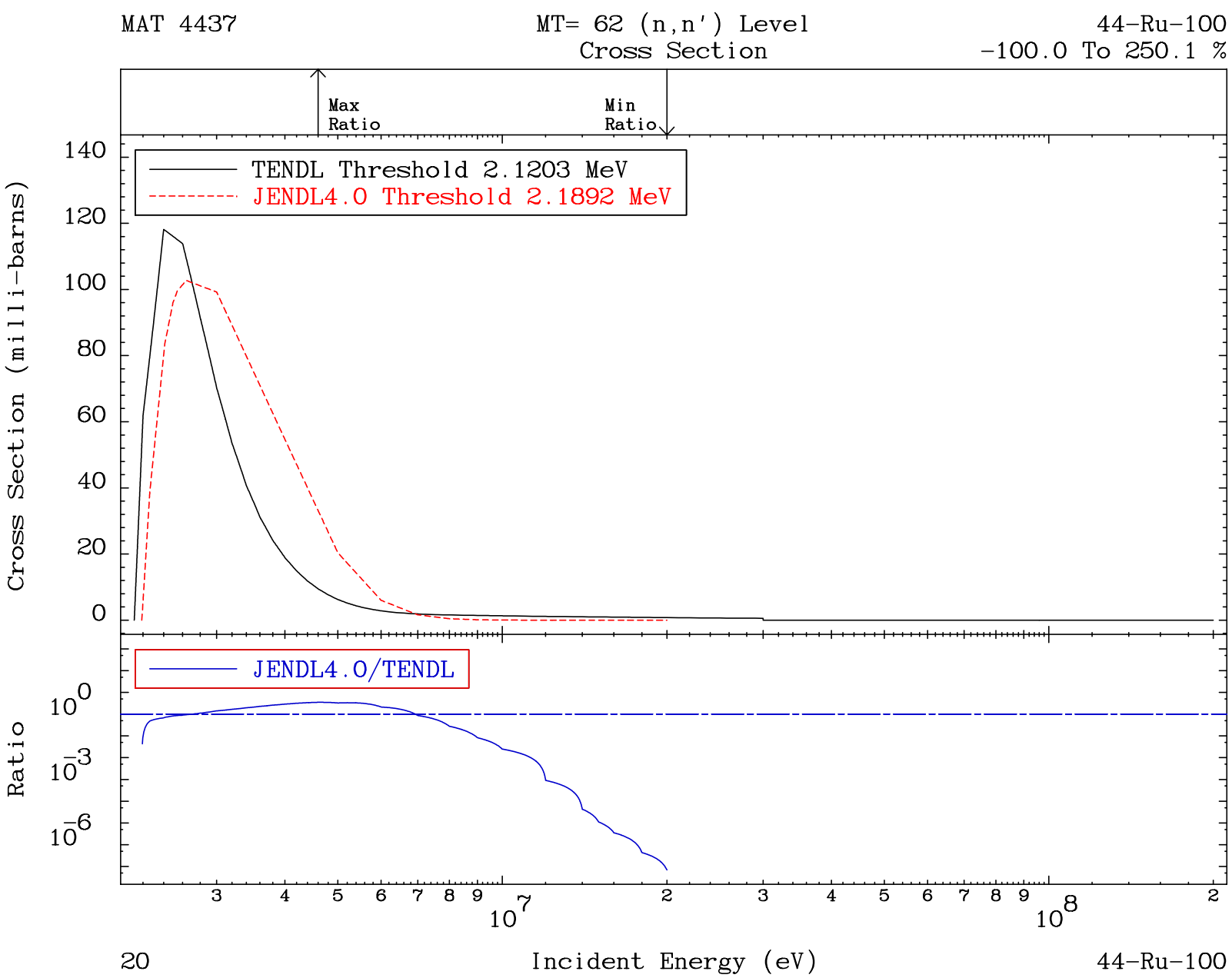

MAT 4437
MT= 57 (n,n') Level
Cross Section
44-Ru-100
-98.15 To 432.3 %
Max Ratio
Min Ratio
TENDL Threshold 1.9000 MeV
JENDL4.0 Threshold 1.9000 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
44-Ru-100

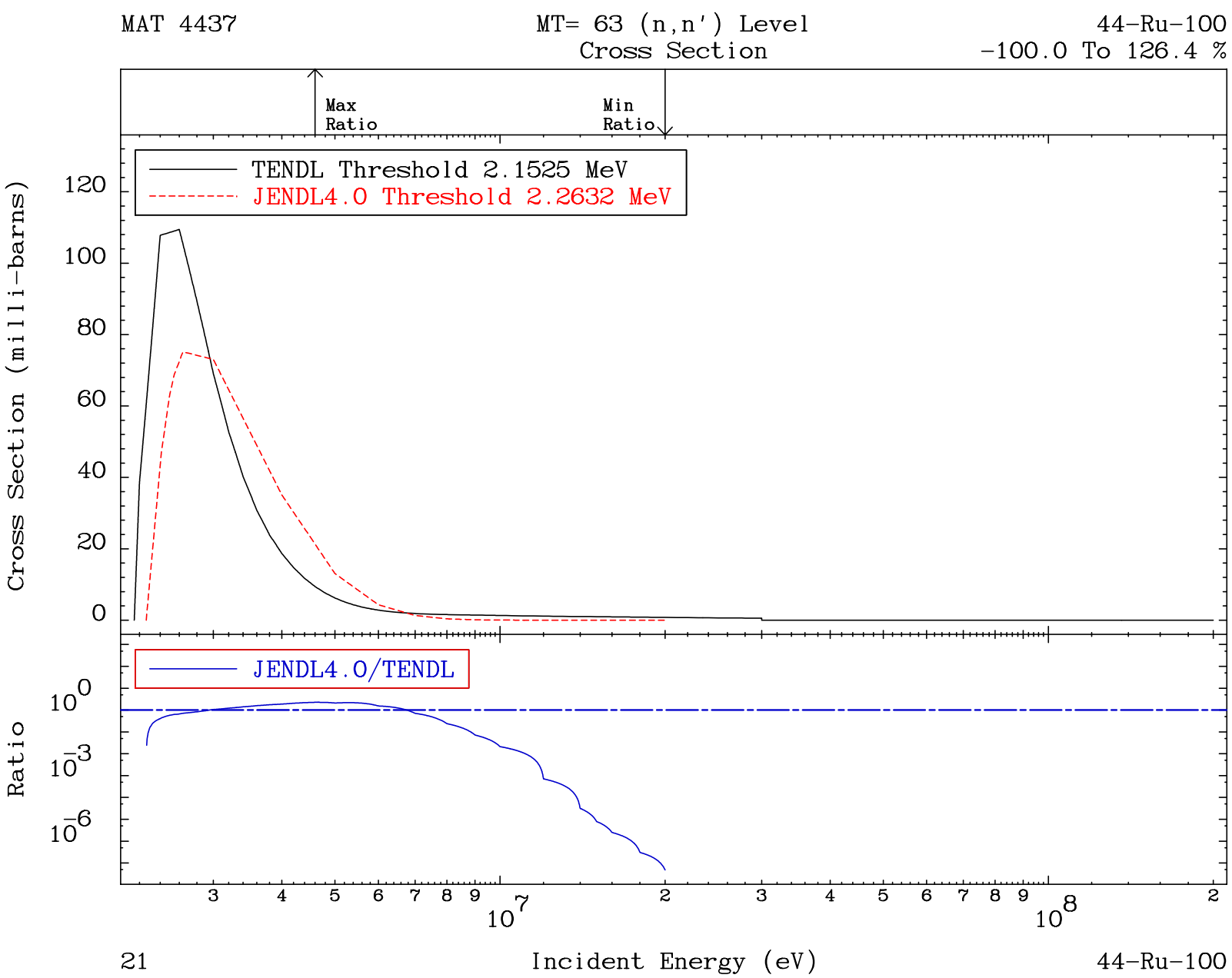

MAT 4437
MT= 58 (n,n') Level
Cross Section
44-Ru-100
-98.10 To 460.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.0724 MeV
JENDL4.0 Threshold 2.0724 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
44-Ru-100

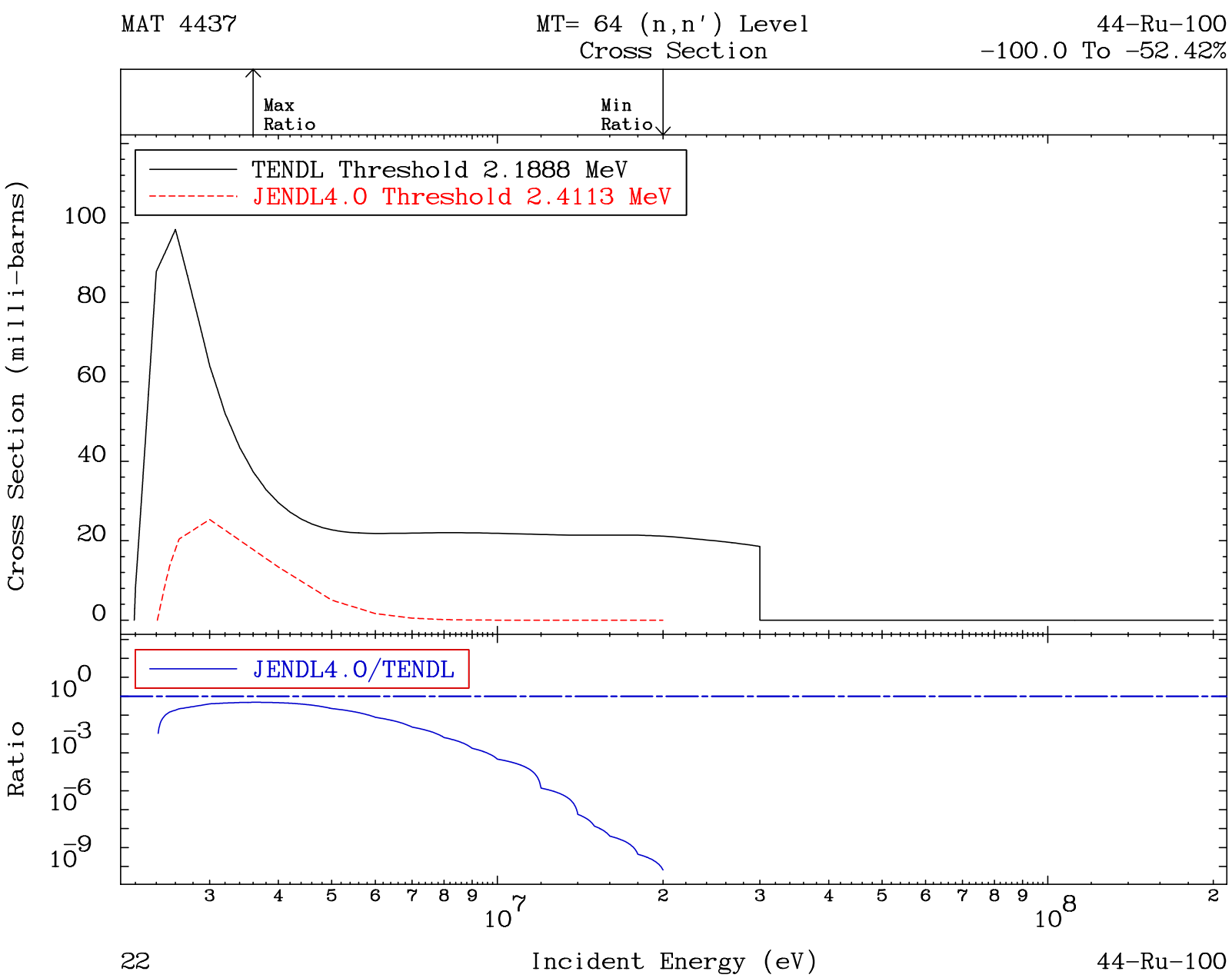

MAT 4437
MT= 59 (n,n') Level
Cross Section
44-Ru-100
74.52 To 7419. %
Min Ratio
Max Ratio
TENDL Threshold 2.0835 MeV
JENDL4.0 Threshold 2.0847 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
17
44-Ru-100

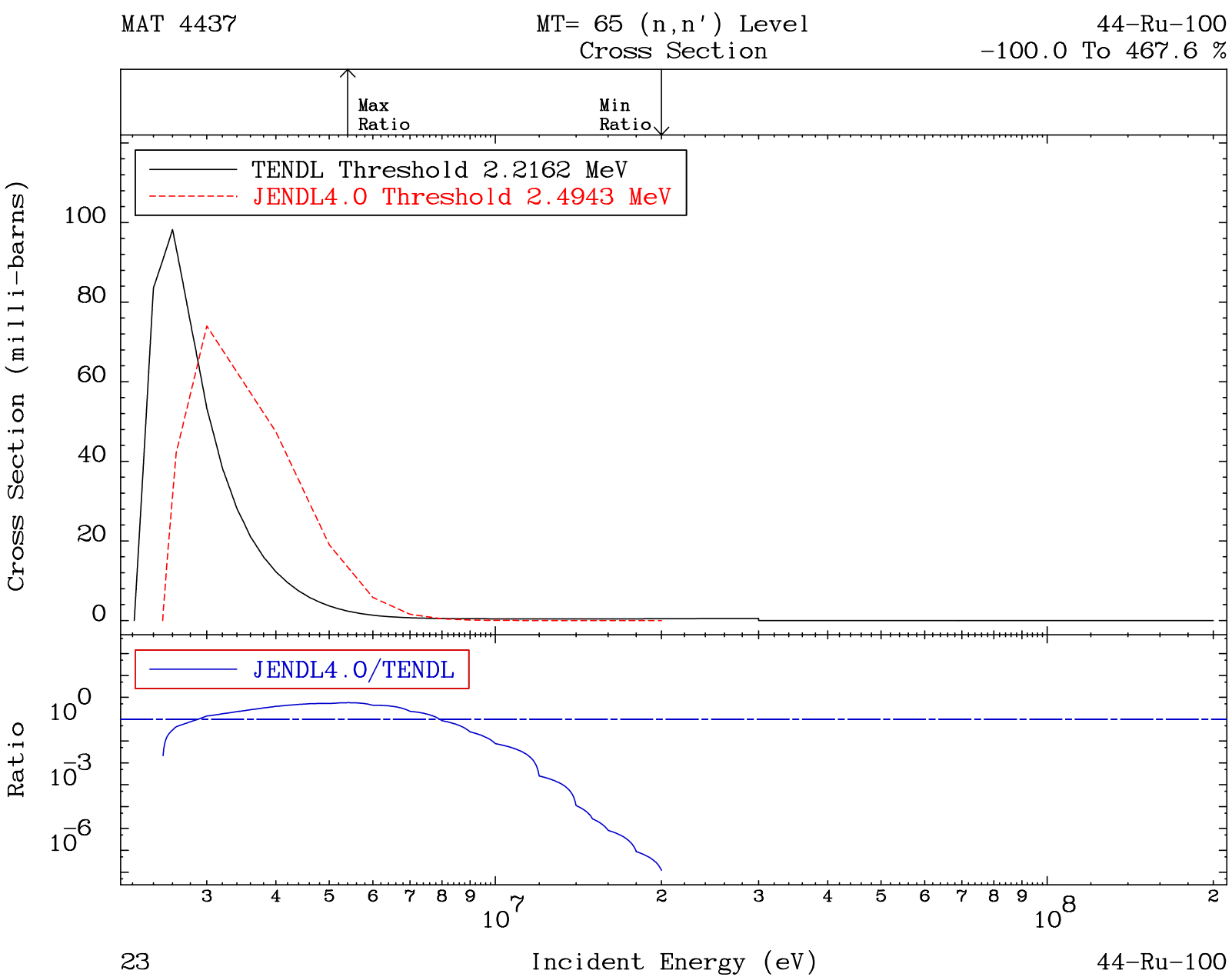

MAT 4437
MT= 60 (n,n') Level
Cross Section
44-Ru-100
-99.25 To 173.8 %
Min Ratio
Max Ratio
TENDL Threshold 2.0964 MeV
JENDL4.0 Threshold 2.0987 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^-2
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
44-Ru-100

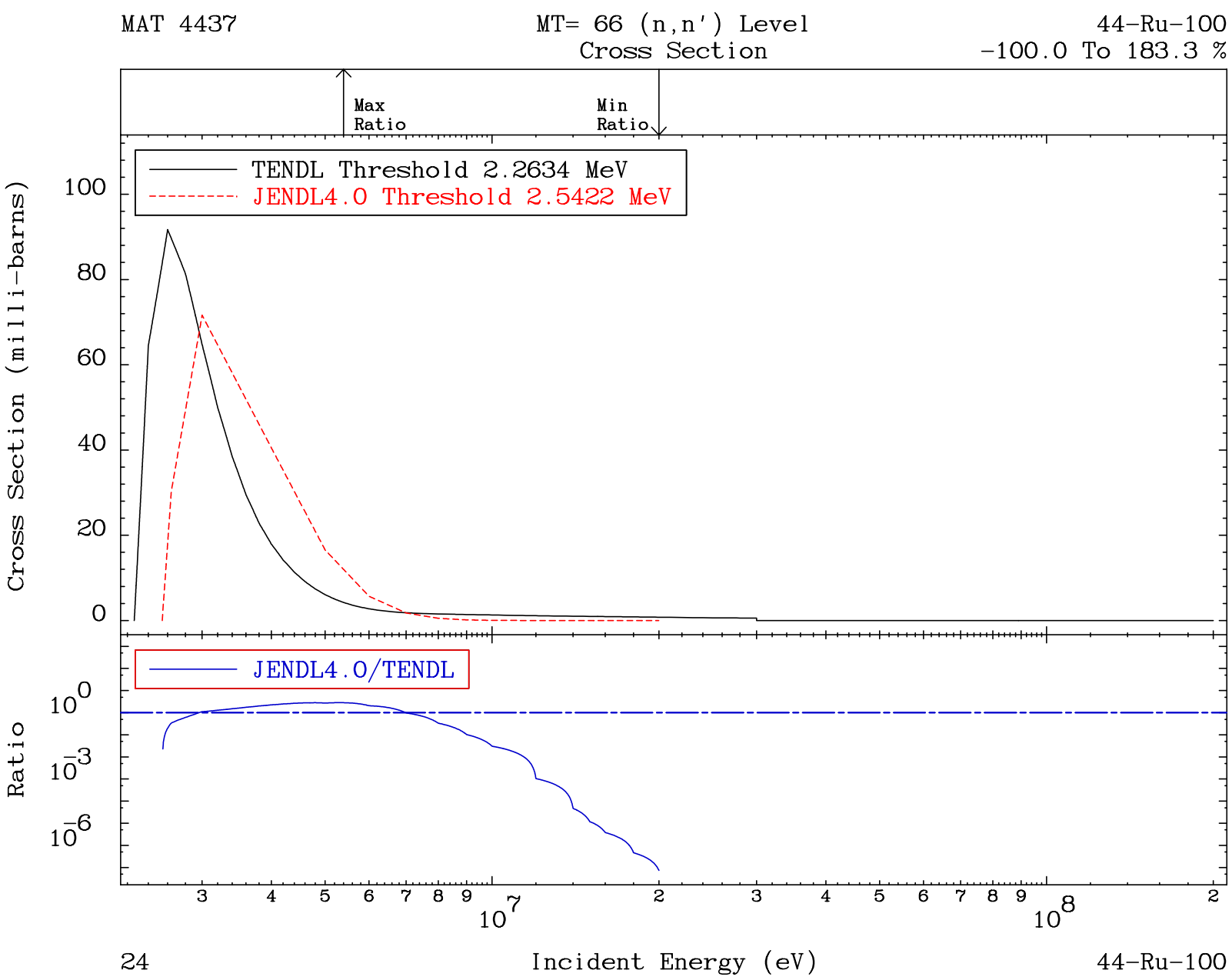

MAT 4437
MT= 61 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 9293. %
Max
Ratio
Min
Ratio
TENDL Threshold 2.1085 MeV
JENDL4.0 Threshold 2.1205 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
44-Ru-100

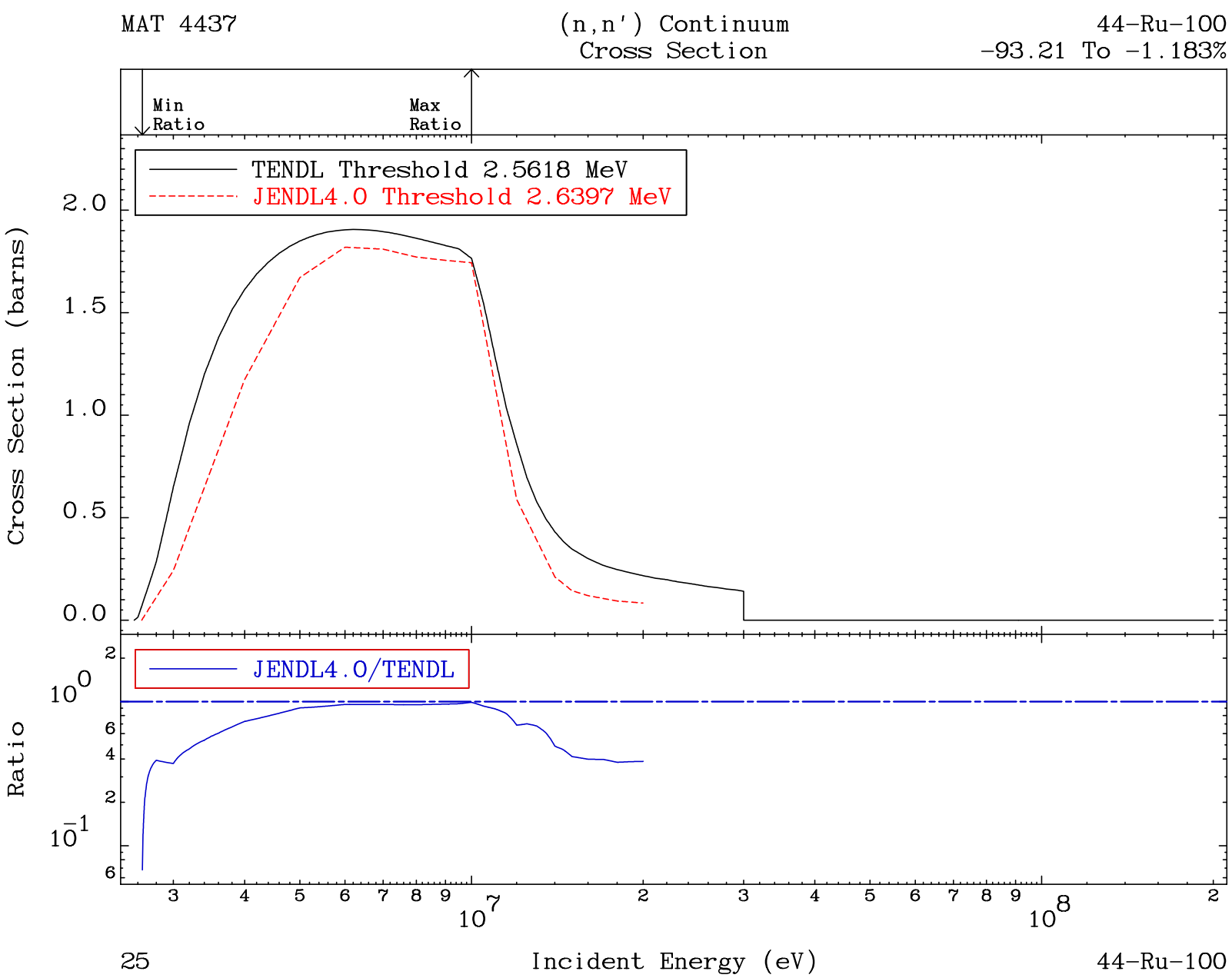

MAT 4437
MT= 62 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 250.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.1203 MeV
JENDL4.0 Threshold 2.1892 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
20
Incident Energy (eV)
44-Ru-100

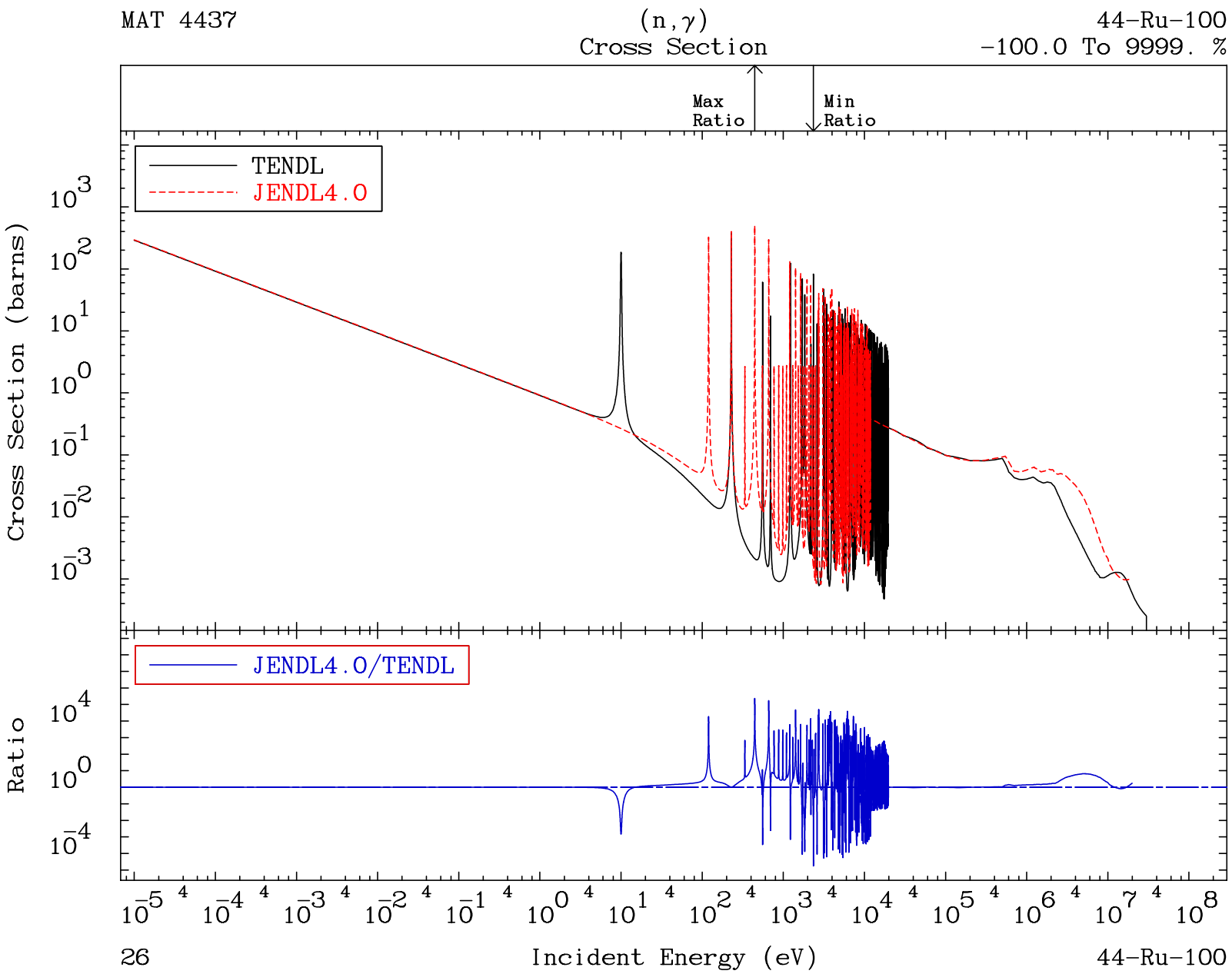

MAT 4437
MT= 63 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 126.4 %
Max Ratio
Min Ratio
TENDL Threshold 2.1525 MeV
JENDL4.0 Threshold 2.2632 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
44-Ru-100

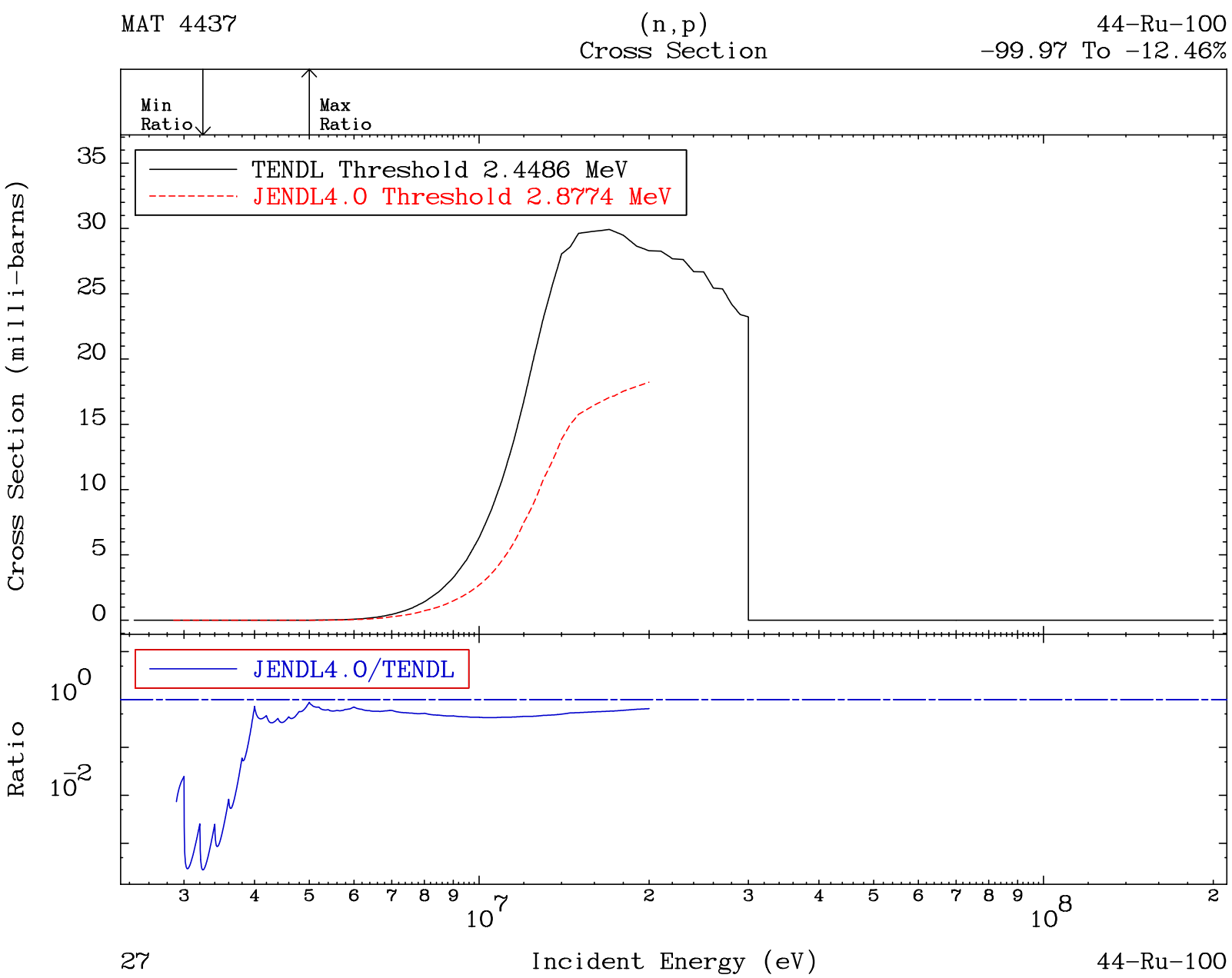

MAT 4437
MT= 64 (n,n') Level
Cross Section
44-Ru-100
-100.0 To -52.42%
Max
Ratio
Min
Ratio
TENDL Threshold 2.1888 MeV
JENDL4.0 Threshold 2.4113 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
44-Ru-100

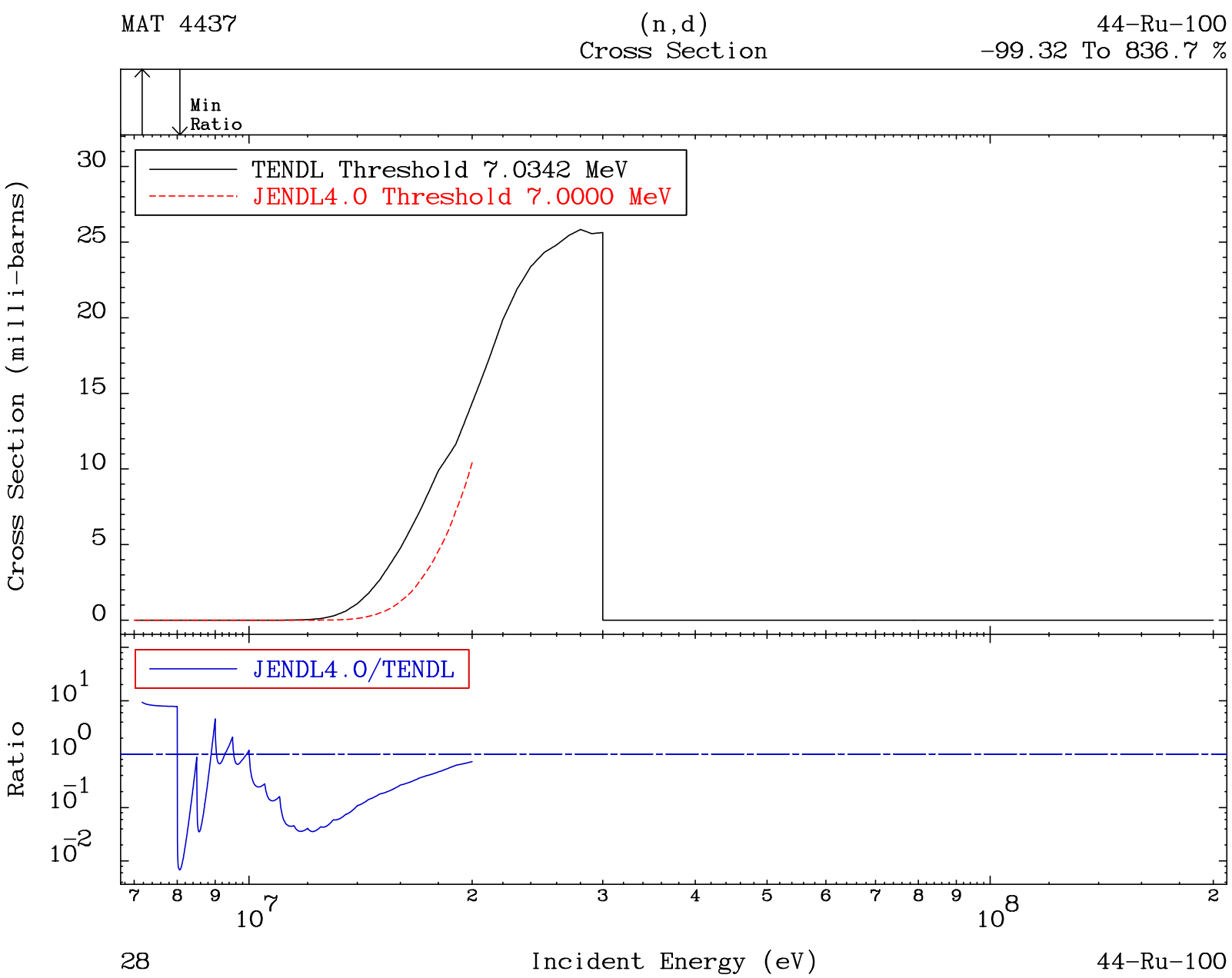

MAT 4437
MT= 65 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 467.6 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.2162 MeV
JENDL4.0 Threshold 2.4943 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
44-Ru-100

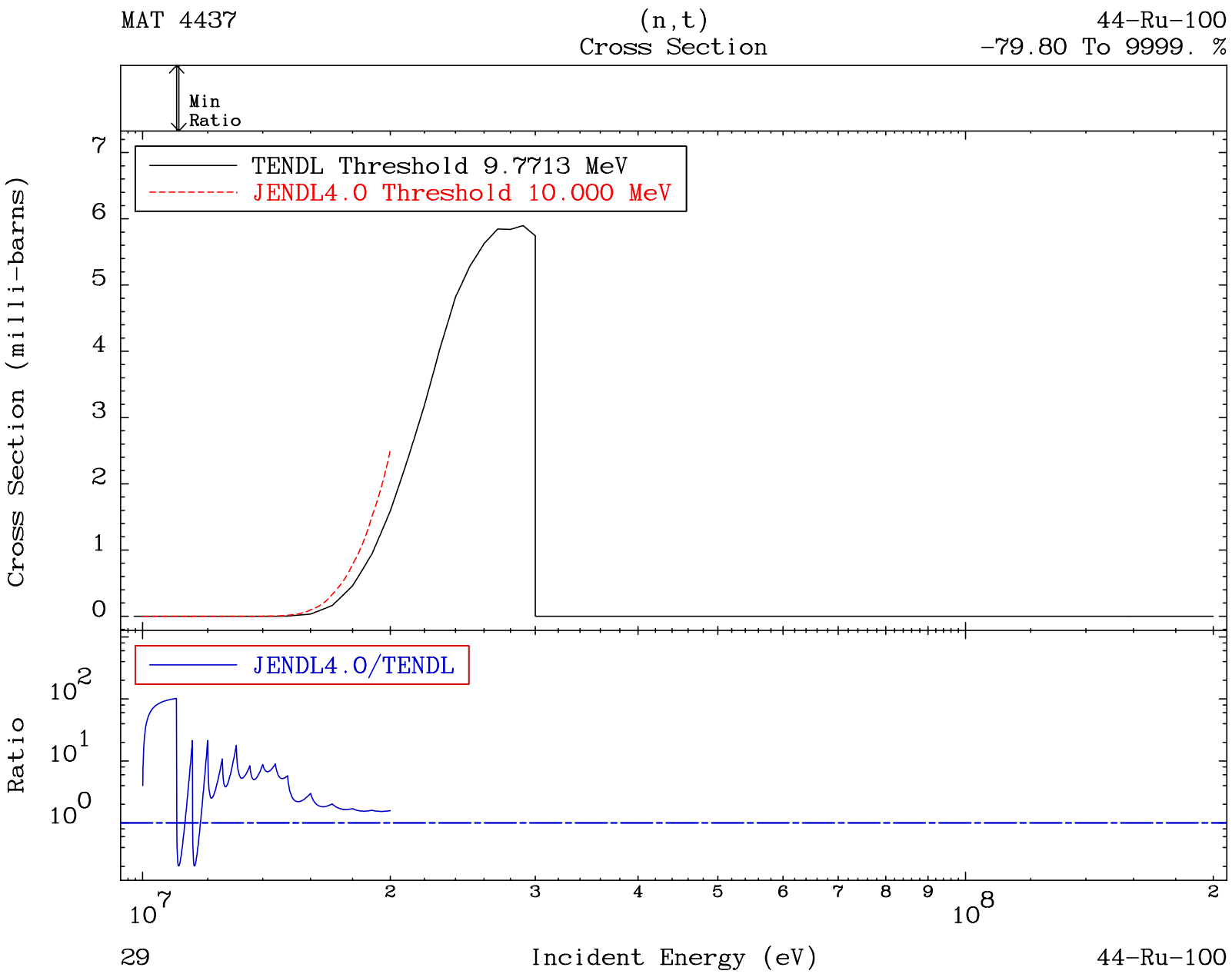

MAT 4437
MT= 66 (n,n') Level
Cross Section
44-Ru-100
-100.0 To 183.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.2634 MeV
JENDL4.0 Threshold 2.5422 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
44-Ru-100

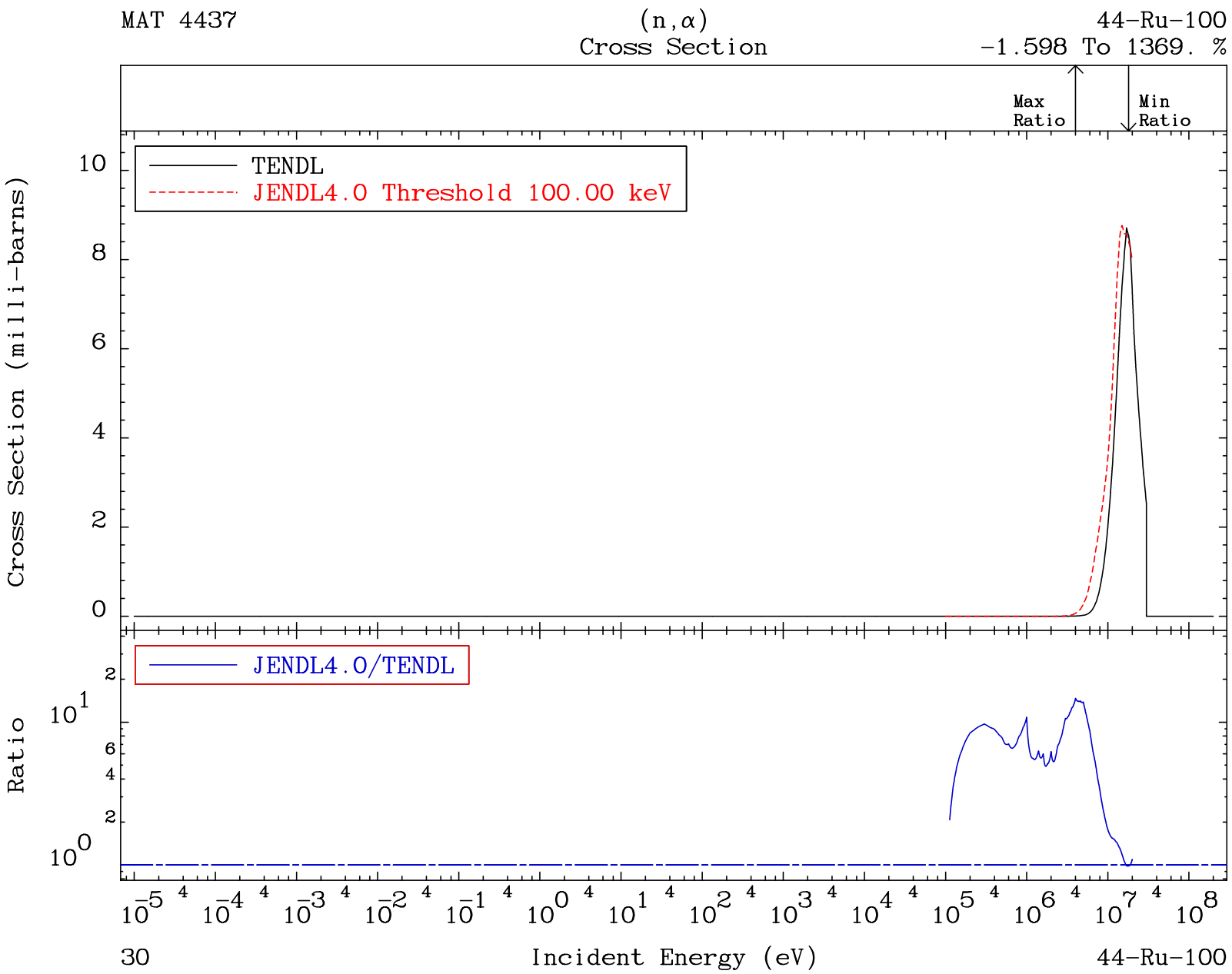

MAT 4437
(n,n') Continuum
Cross Section
44-Ru-100
-93.21 To -1.183%
Min Ratio
Max Ratio
TENDL Threshold 2.5618 MeV
JENDL4.0 Threshold 2.6397 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
44-Ru-100

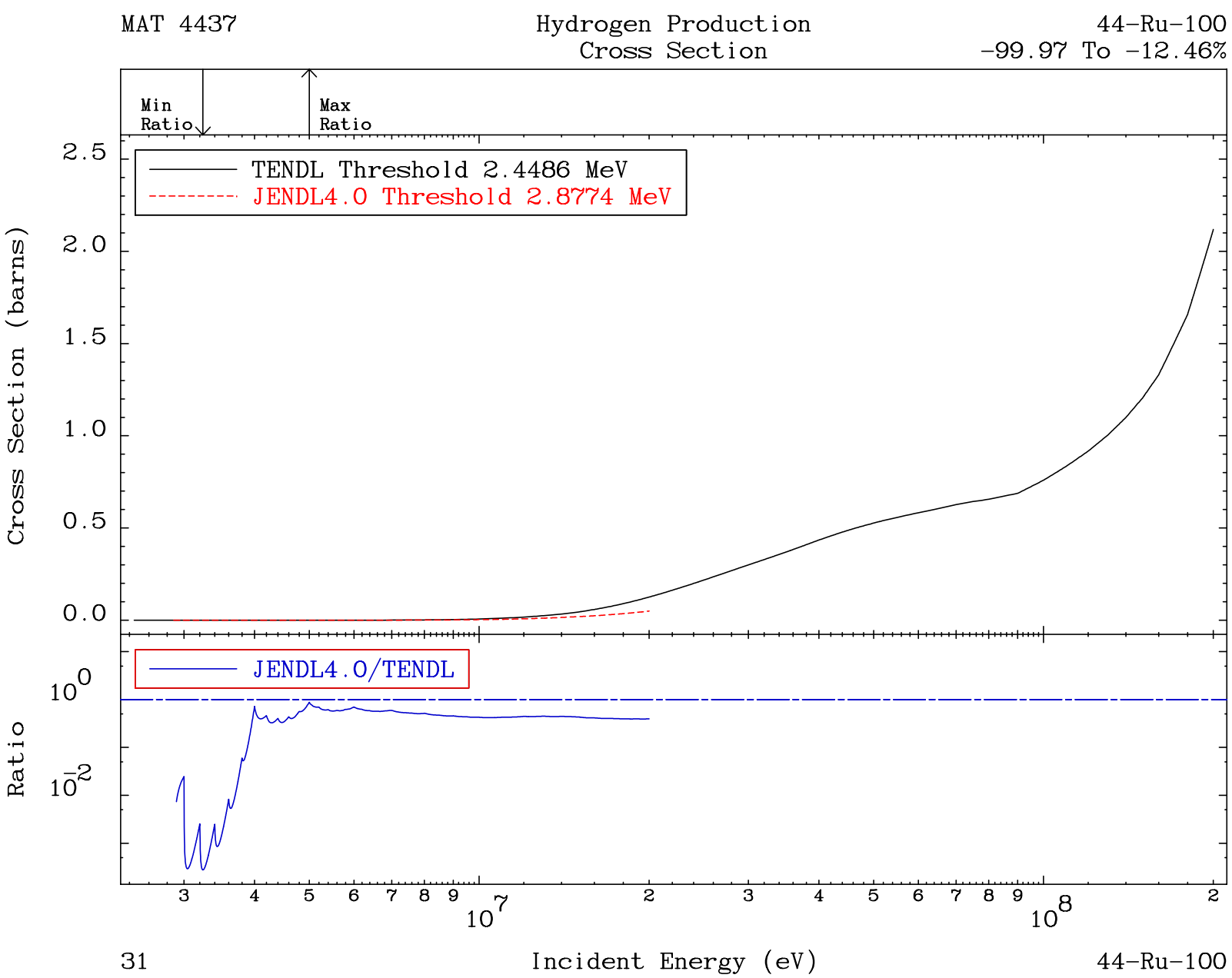

MAT 4437
(n,γ)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
26
44-Ru-100

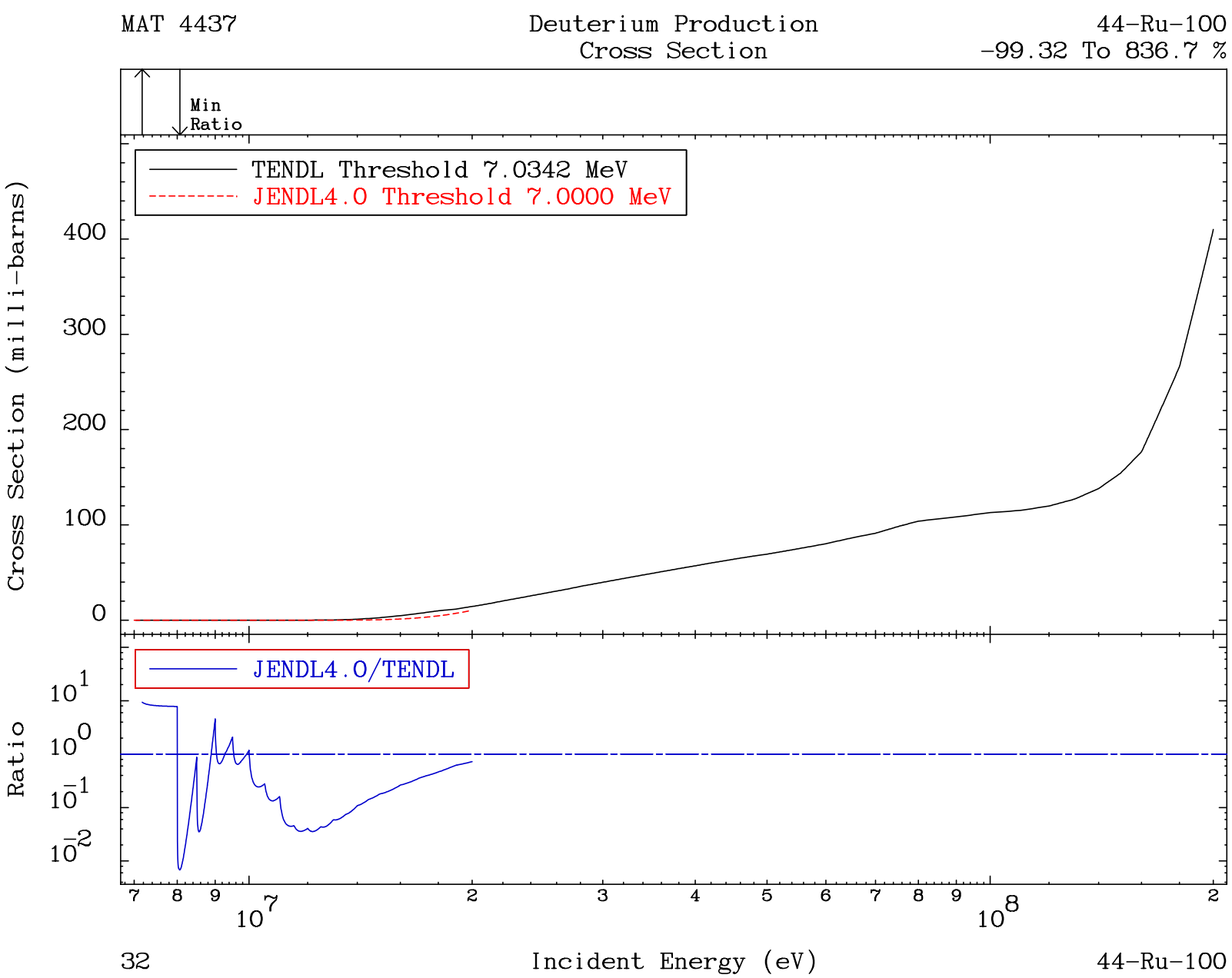

MAT 4437
(n,p)
Cross Section
44-Ru-100
-99.97 To -12.46%
Min Ratio
Max Ratio
TENDL Threshold 2.4486 MeV
JENDL4.0 Threshold 2.8774 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
27
44-Ru-100

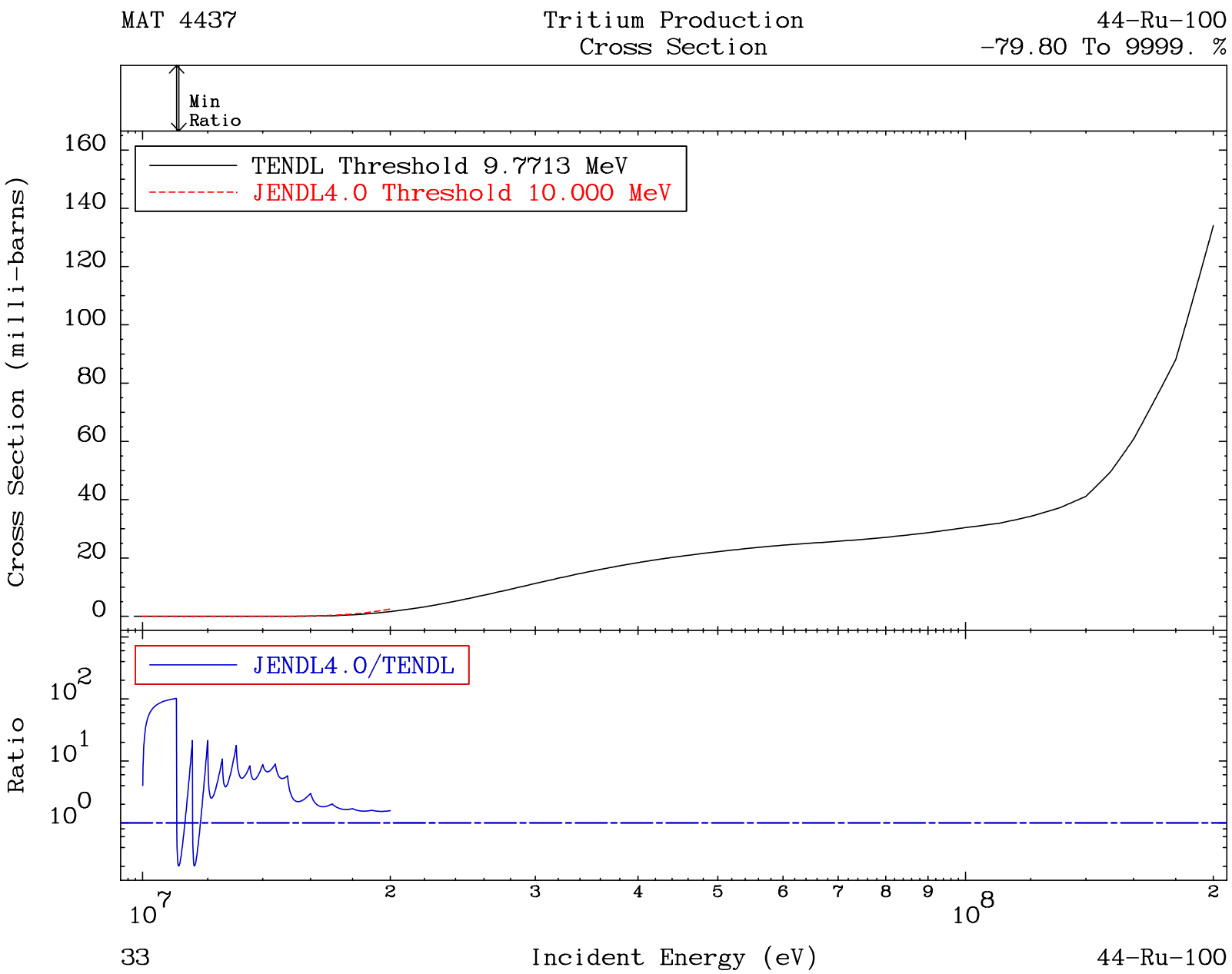

MAT 4437
(n,d)
Cross Section
44-Ru-100
-99.32 To 836.7 %
Min
Ratio
TENDL Threshold 7.0342 MeV
JENDL4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
28
44-Ru-100

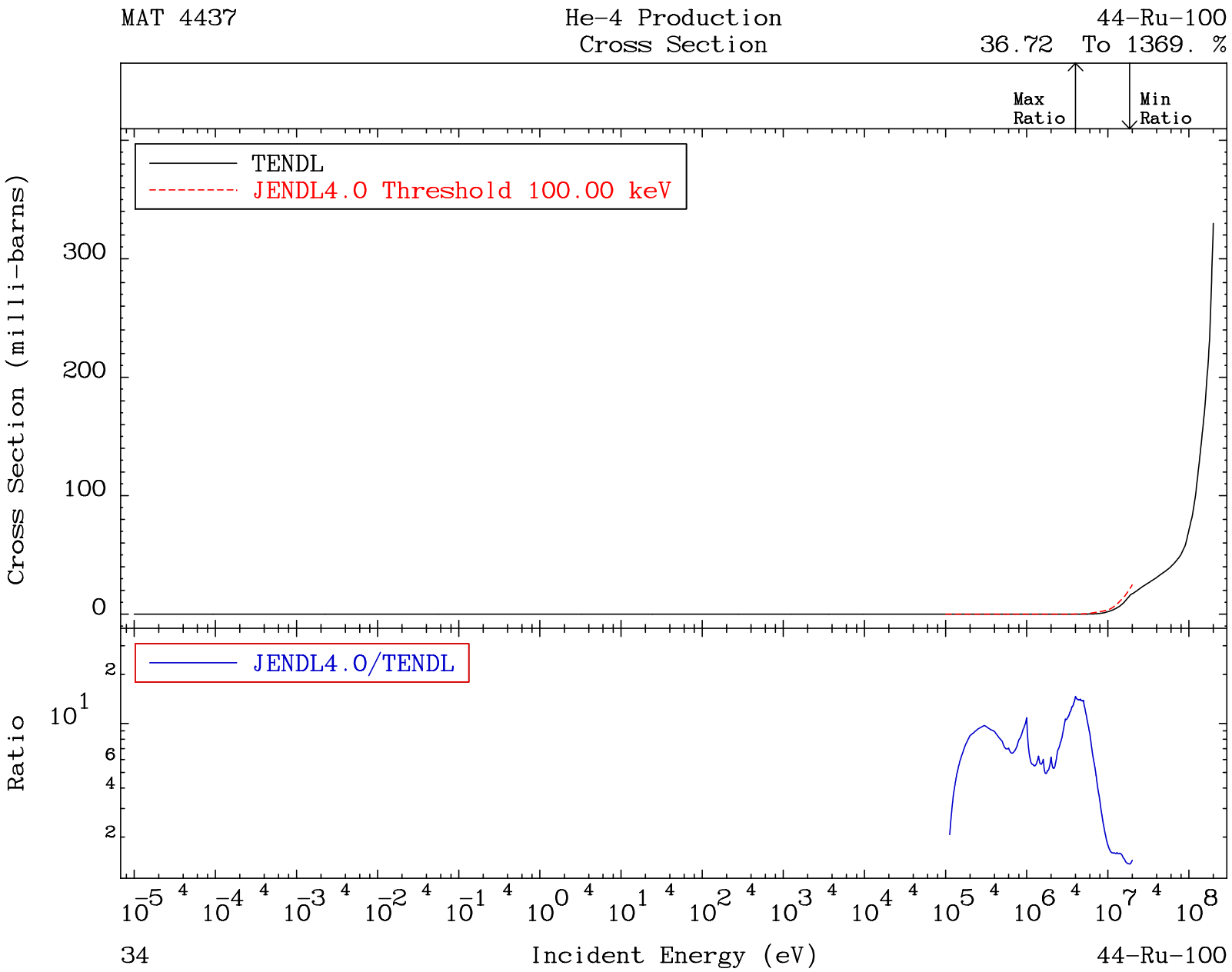

MAT 4437
(n,t)
Cross Section
44-Ru-100
-79.80 To 9999. %
Min
Ratio
TENDL Threshold 9.7713 MeV
JENDL4.0 Threshold 10.000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
29
44-Ru-100

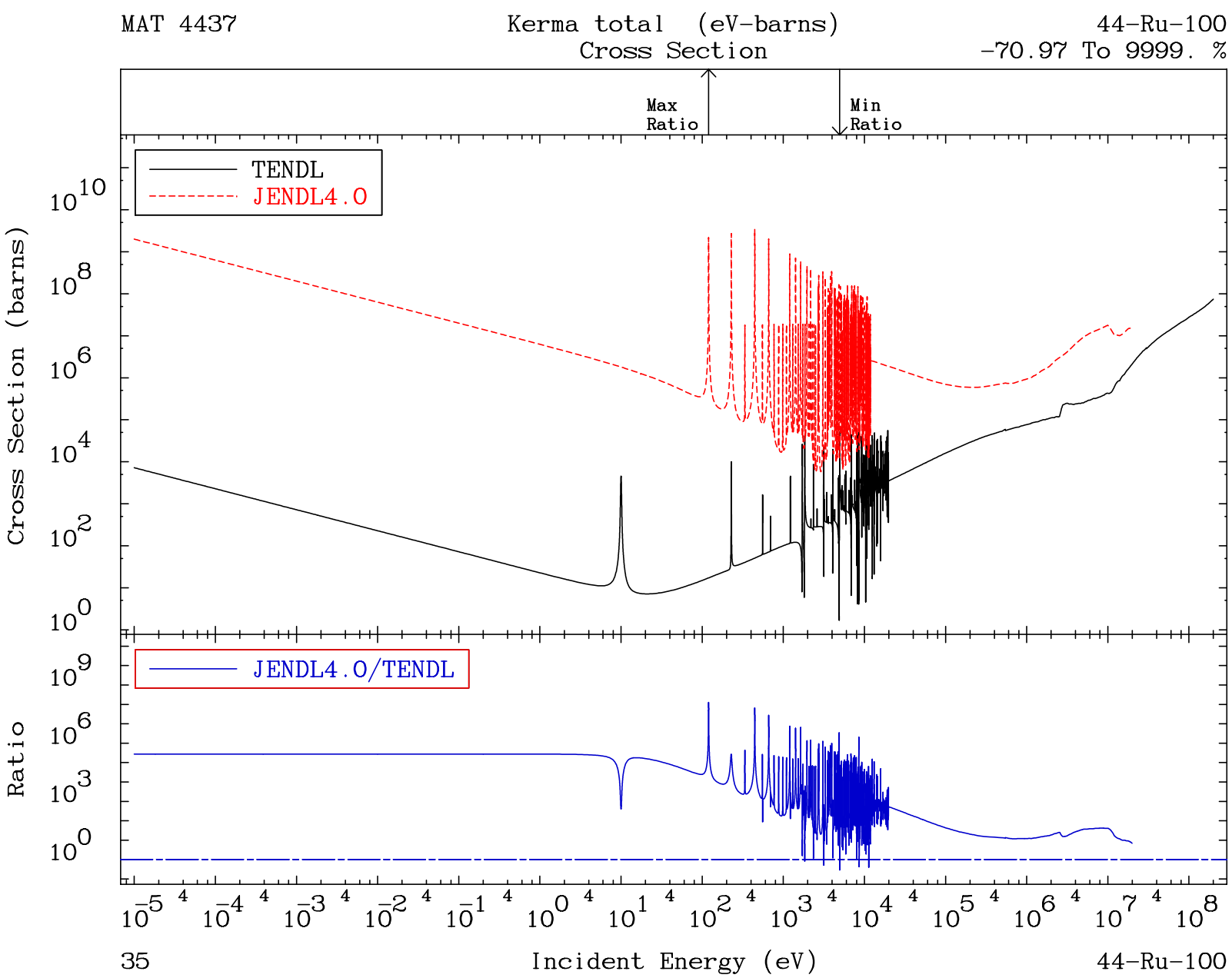

MAT 4437
(n,α)
Cross Section
44-Ru-100
-1.598 To 1369. %
Max Ratio
Min Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
30
44-Ru-100

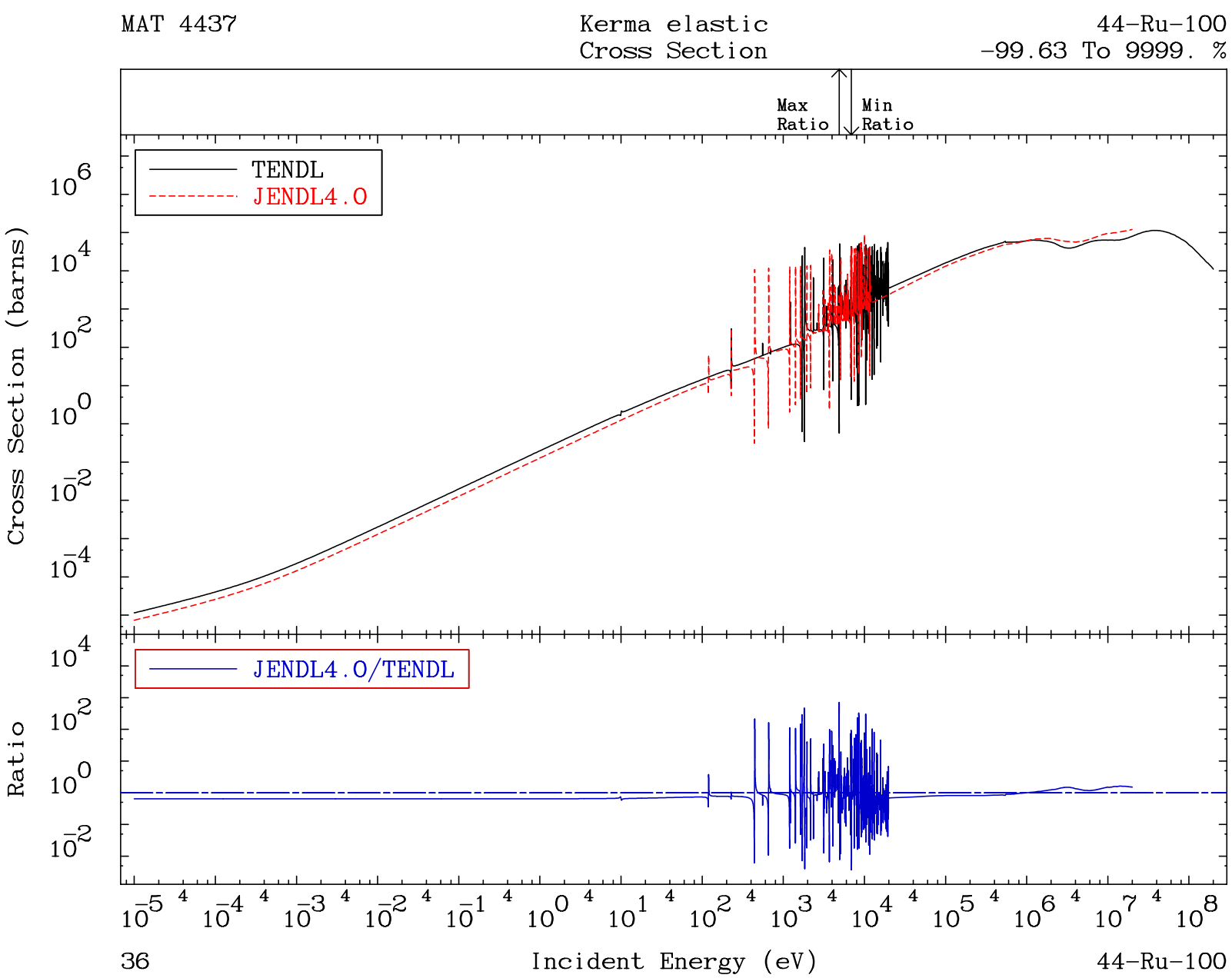

MAT 4437
Hydrogen Production
Cross Section
44-Ru-100
-99.97 To -12.46%
Min Ratio
Max Ratio
TENDL Threshold 2.4486 MeV
JENDL4.0 Threshold 2.8774 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
44-Ru-100

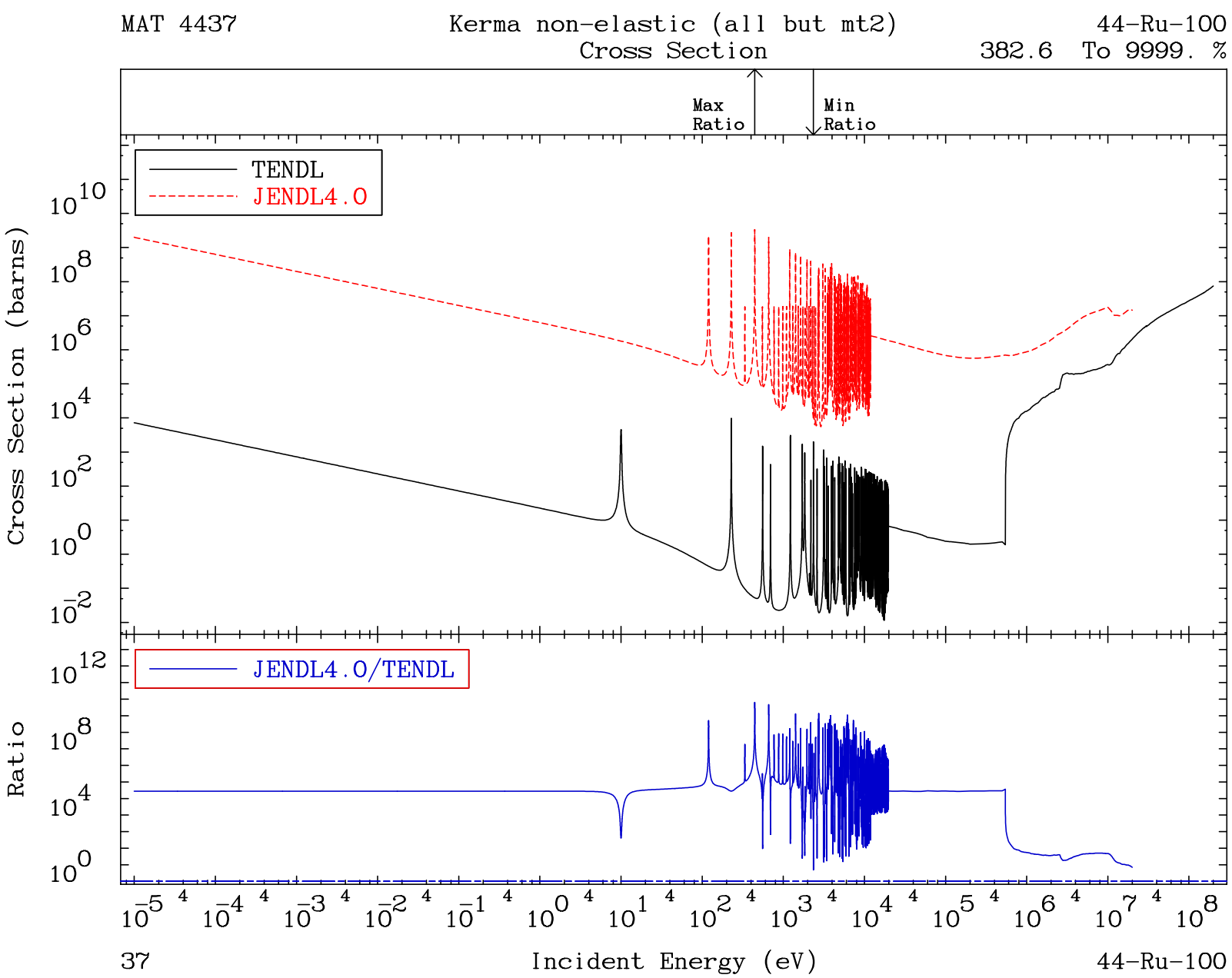

MAT 4437
Deuterium Production
Cross Section
44-Ru-100
-99.32 To 836.7 %
Min
Ratio
TENDL Threshold 7.0342 MeV
JENDL4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
44-Ru-100

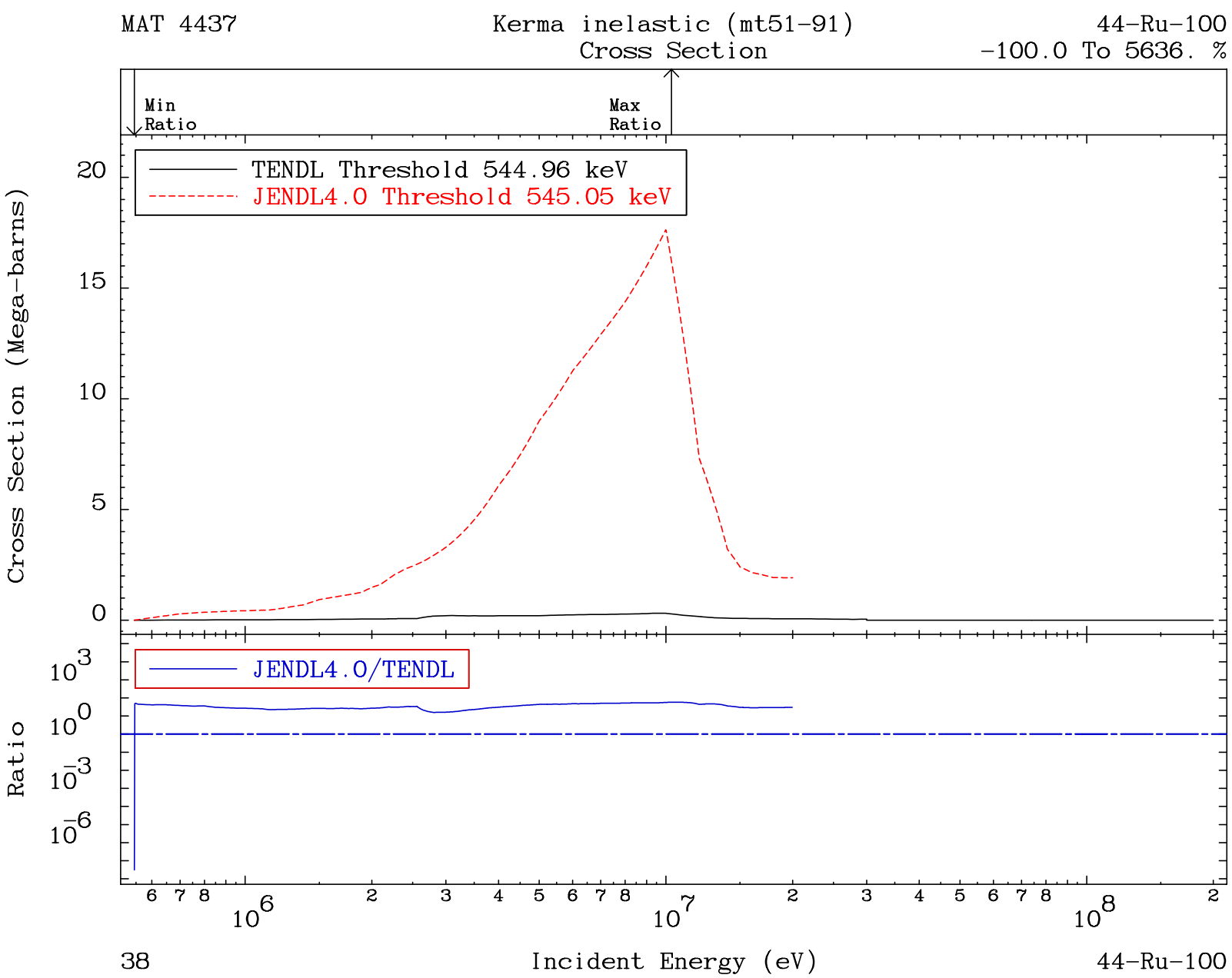

MAT 4437
Tritium Production
Cross Section
44-Ru-100
-79.80 To 9999. %
Min
Ratio
TENDL Threshold 9.7713 MeV
JENDL4.0 Threshold 10.000 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
44-Ru-100

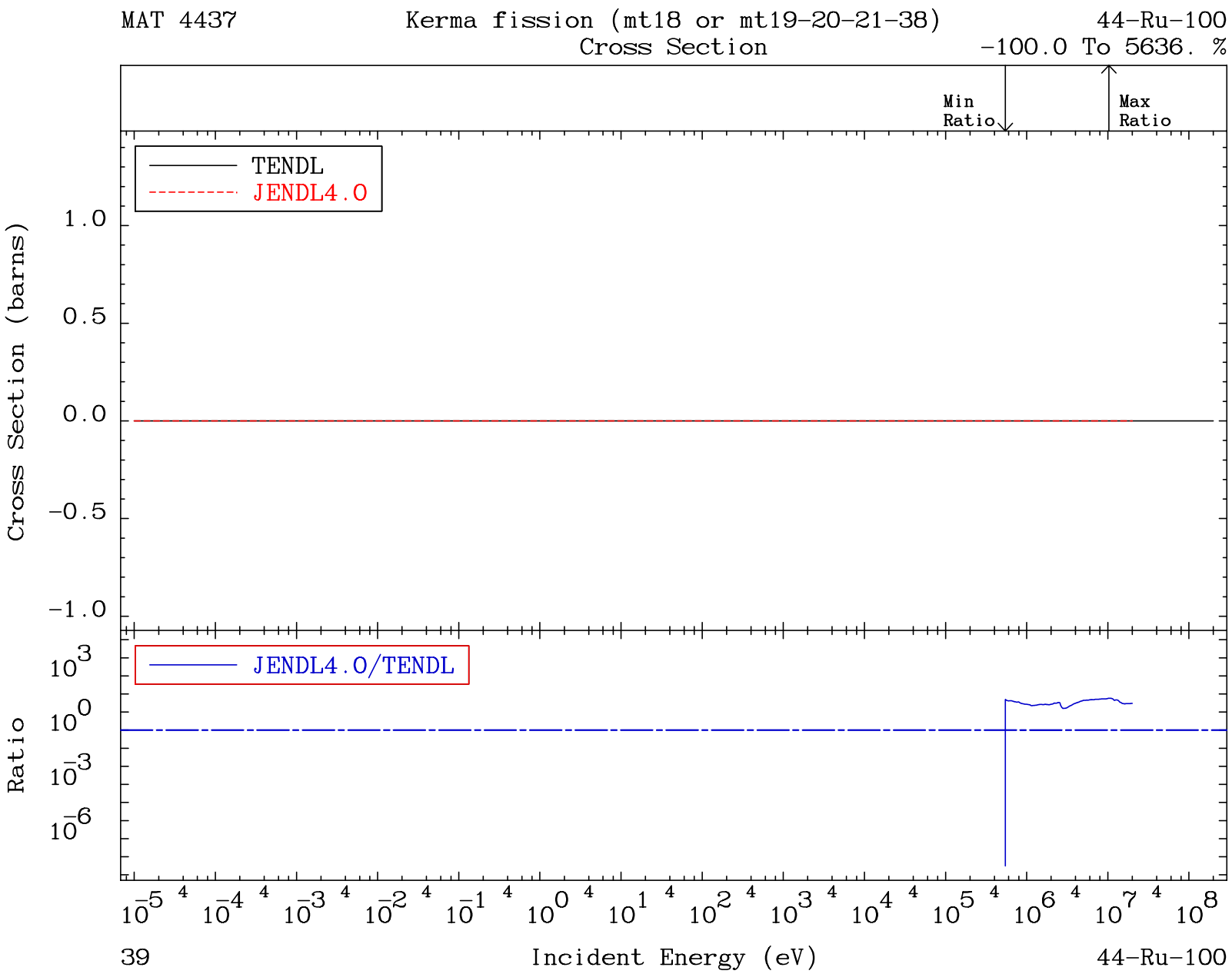

MAT 4437
He-4 Production
Cross Section
44-Ru-100
36.72 To 1369. %
Max Ratio
Min Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
300
200
100
0
JENDL4.0/TENDL
Ratio
2
10^1
6
4
2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
34
Incident Energy (eV)
44-Ru-100

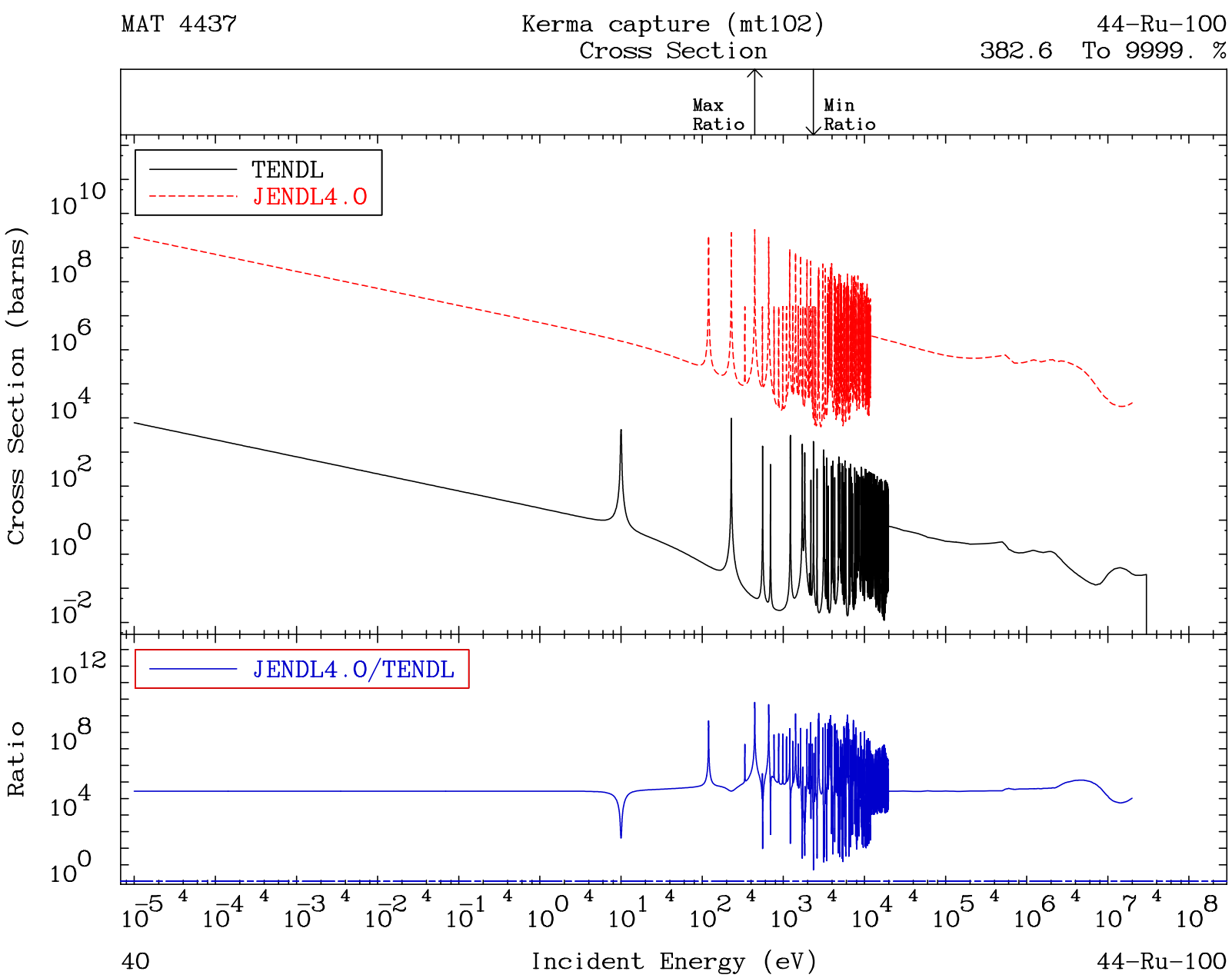

MAT 4437
Kerma total (eV-barns)
Cross Section
44-Ru-100
-70.97 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
35
44-Ru-100

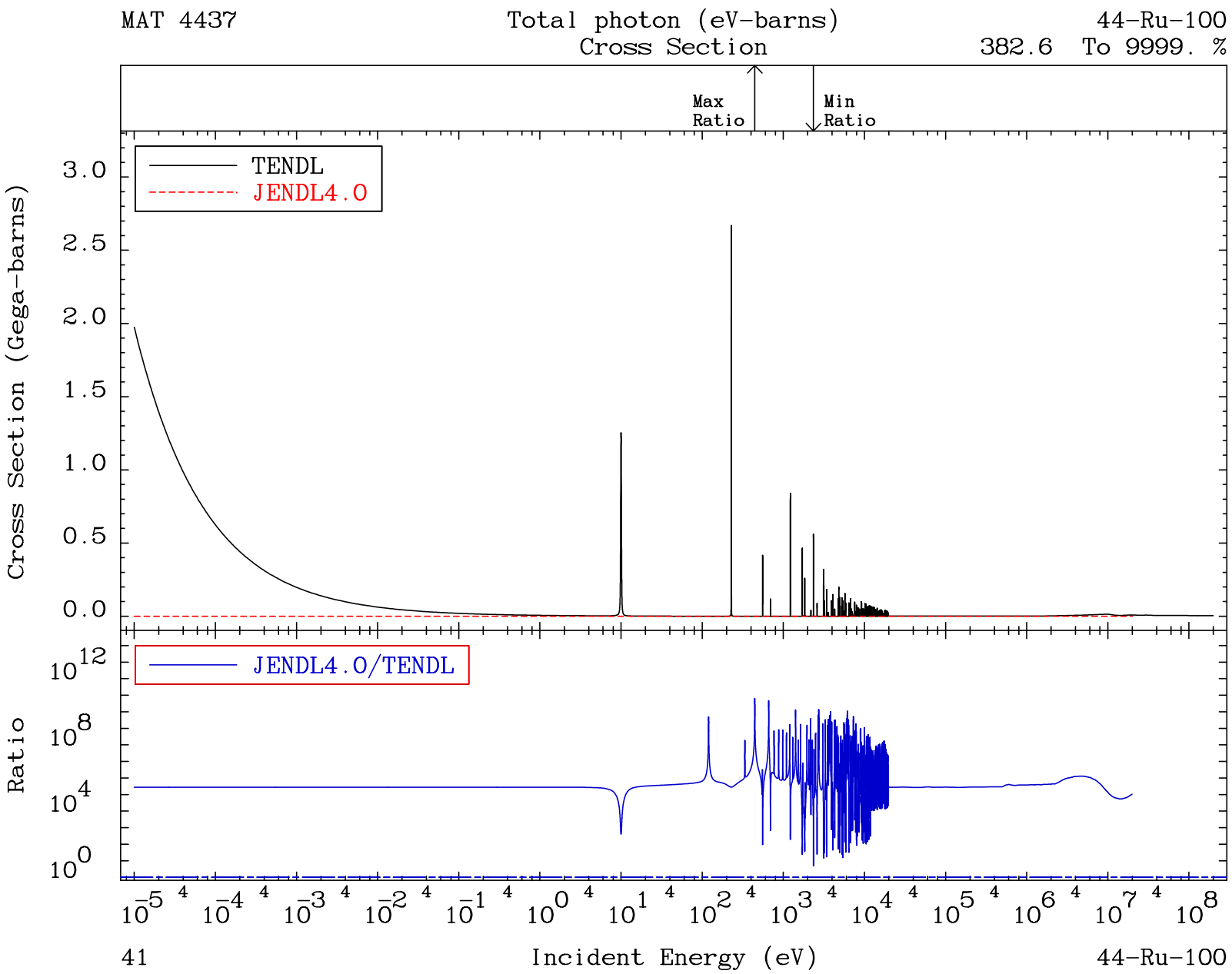

MAT 4437
Kerma elastic
Cross Section
44-Ru-100
-99.63 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
36
44-Ru-100

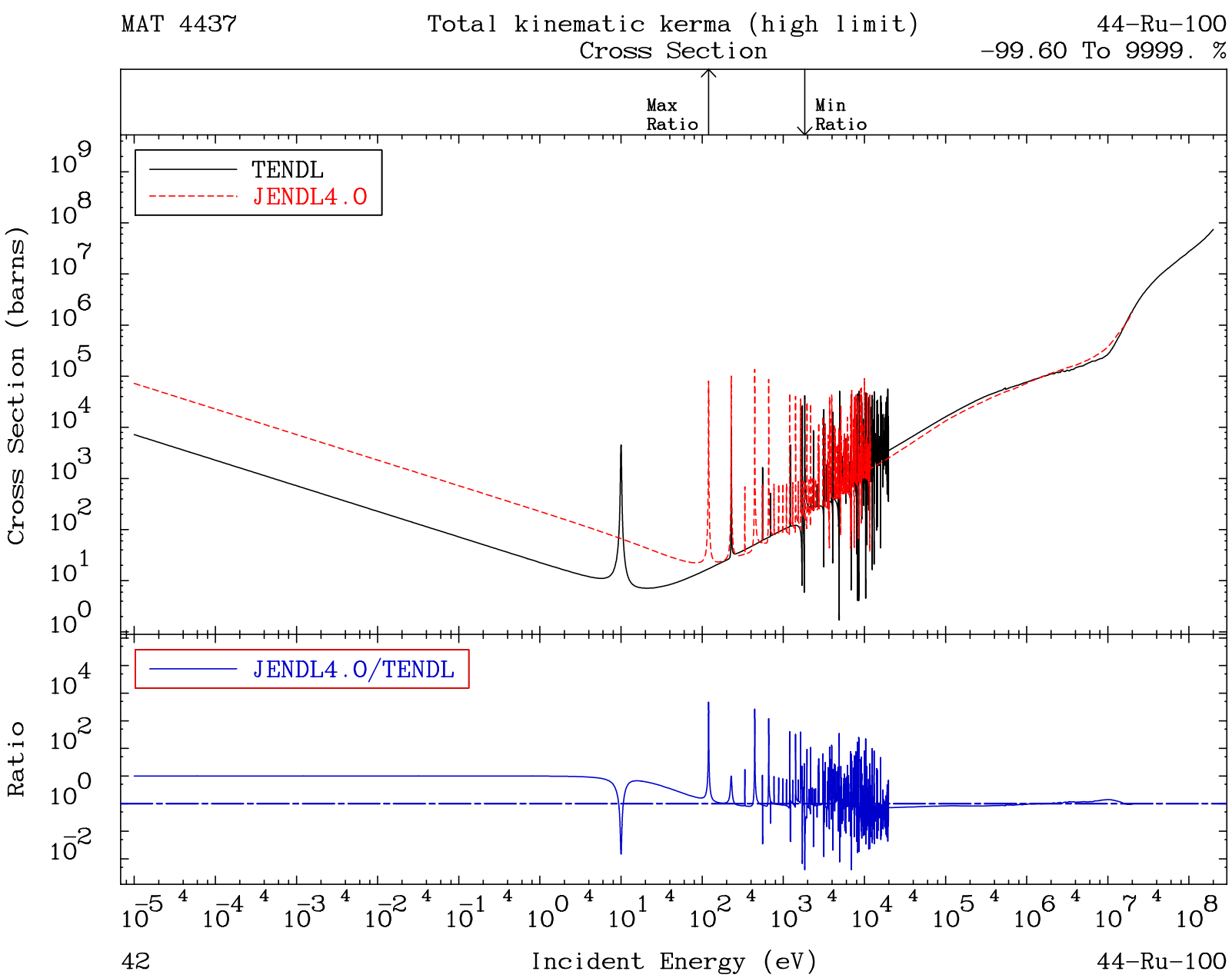

MAT 4437
Kerma non-elastic (all but mt2)
Cross Section
44-Ru-100
382.6 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
37
44-Ru-100

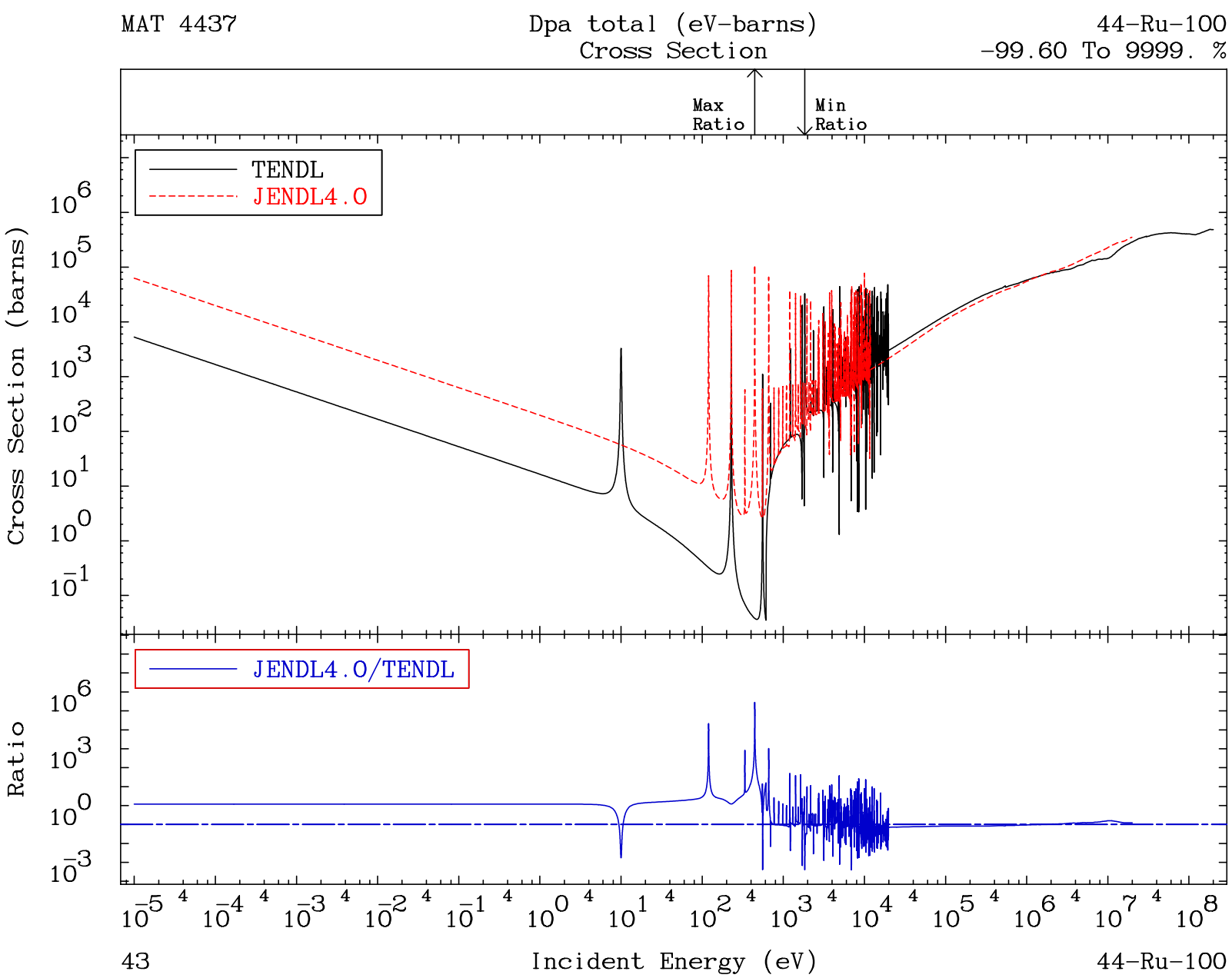

MAT 4437
Kerma inelastic (mt51-91)
Cross Section
44-Ru-100
-100.0 To 5636. %
Min Ratio
Max Ratio
TENDL Threshold 544.96 keV
JENDL4.0 Threshold 545.05 keV
Cross Section (Mega-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
44-Ru-100

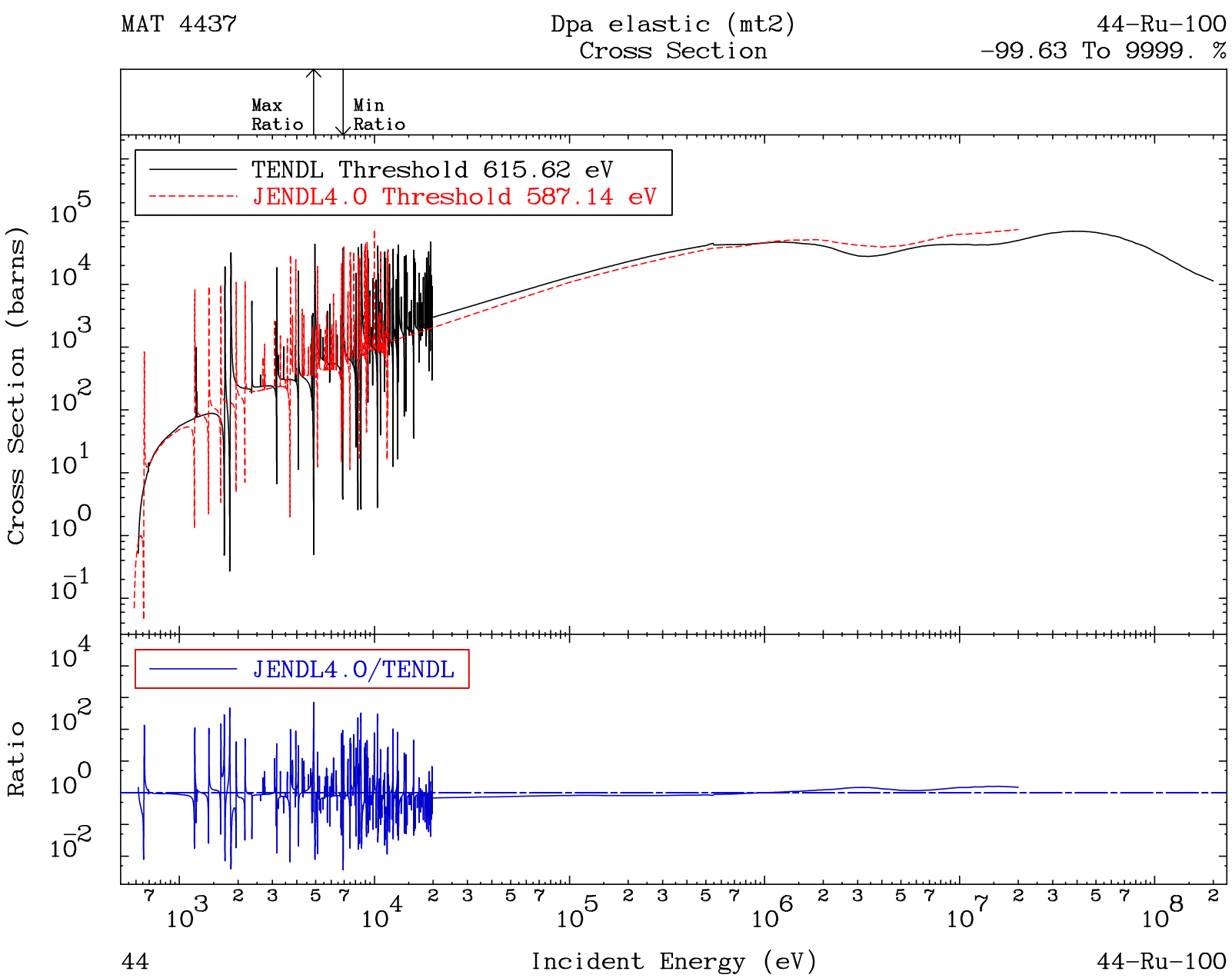

MAT 4437
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
44-Ru-100
-100.0 To 5636. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^3
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
44-Ru-100

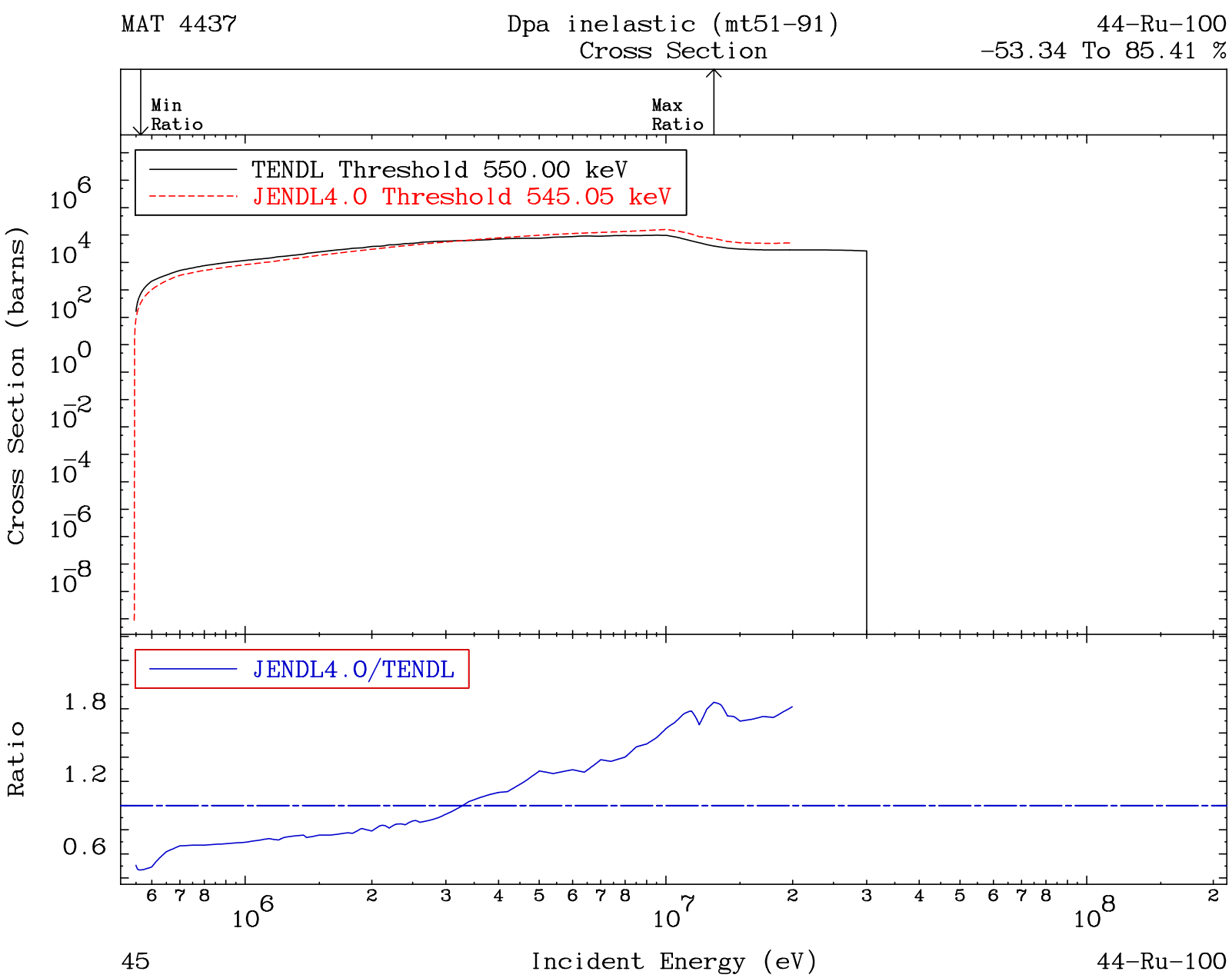

MAT 4437
Kerma capture (mt102)
Cross Section
44-Ru-100
382.6 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
40
44-Ru-100

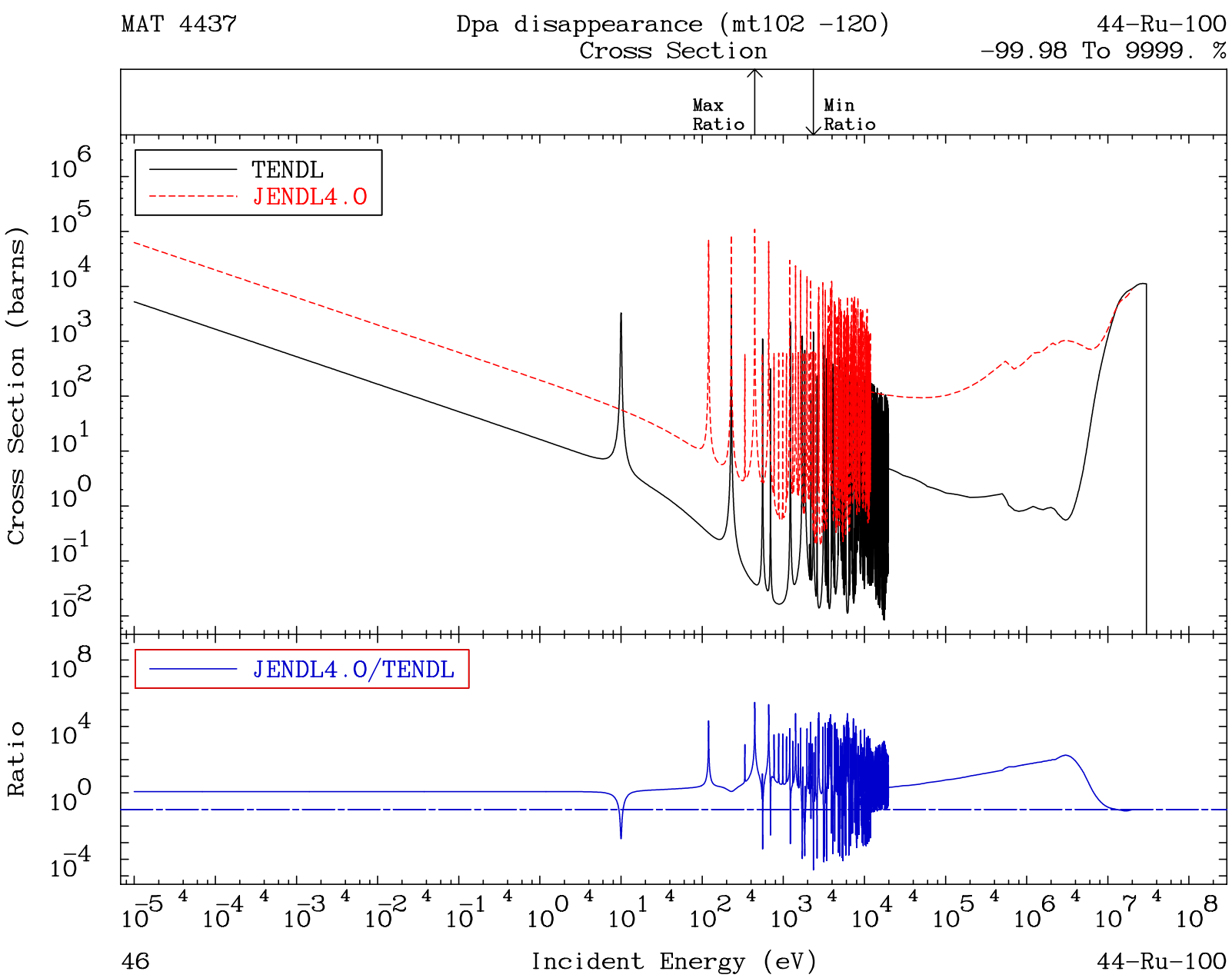

MAT 4437
Total photon (eV-barns)
Cross Section
44-Ru-100
382.6 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (Giga-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^{12}
10^{8}
10^{4}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
41
Incident Energy (eV)
44-Ru-100

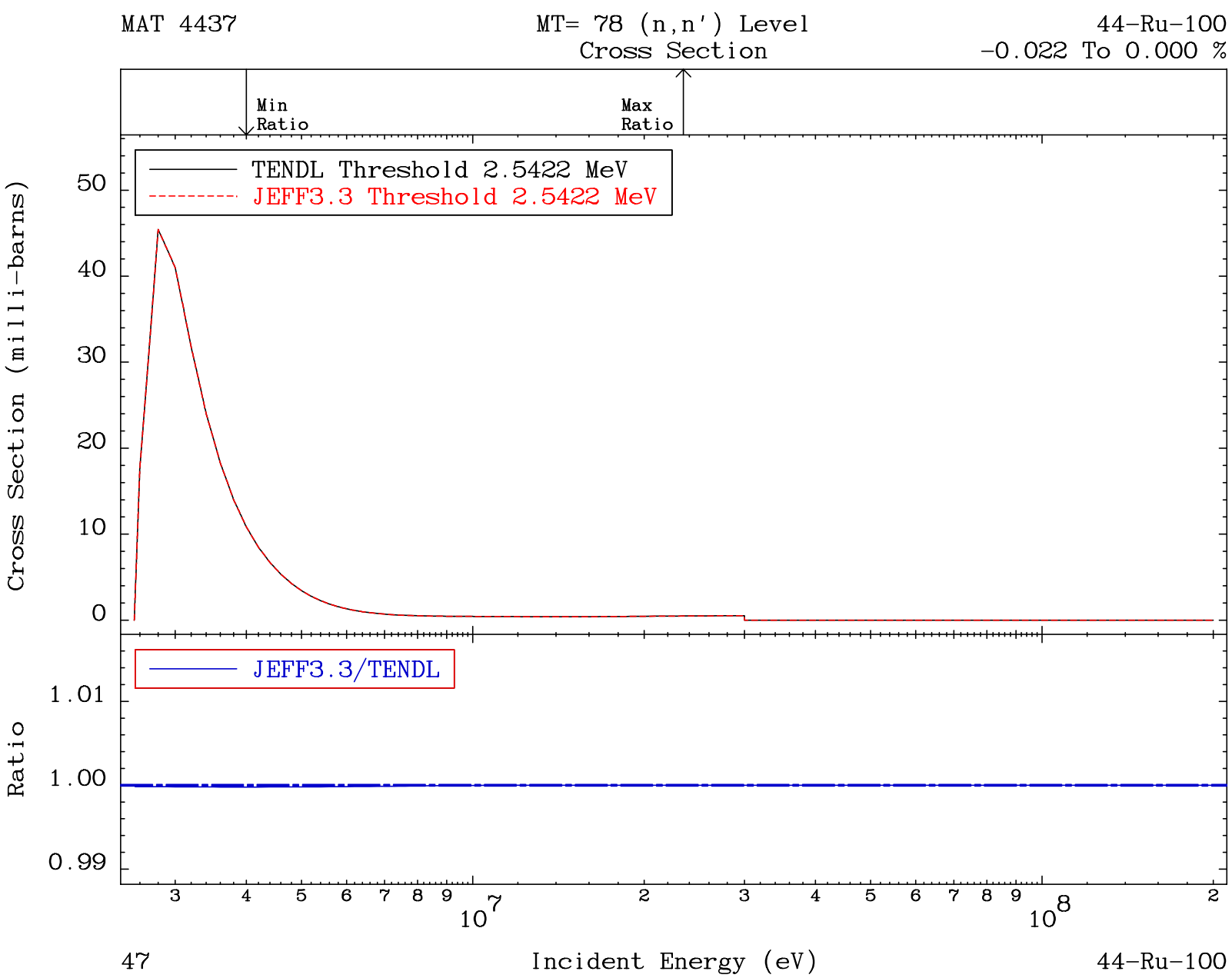

MAT 4437
Total kinematic kerma (high limit)
Cross Section
44-Ru-100
-99.60 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
42
44-Ru-100

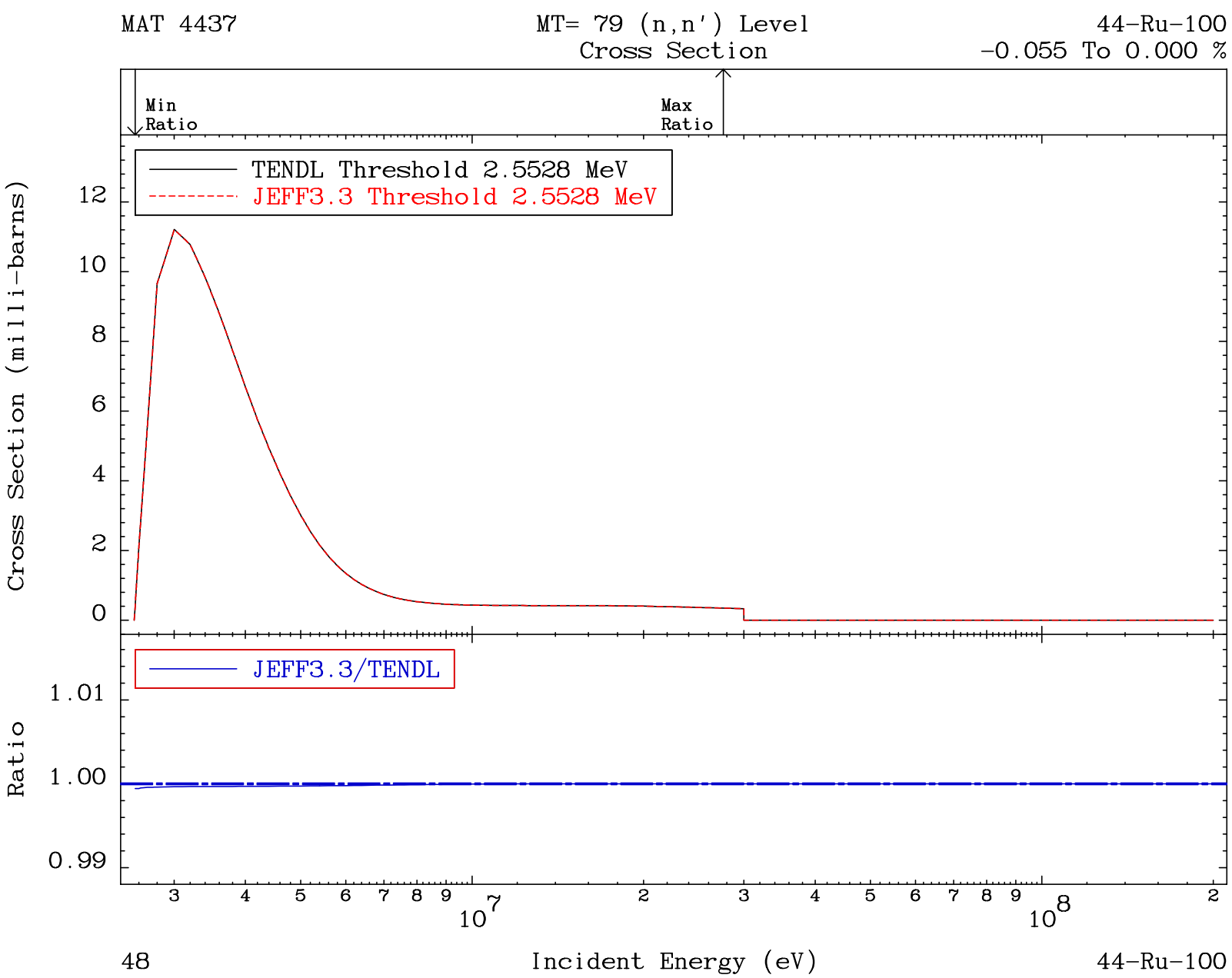

MAT 4437
Dpa total (eV-barns)
Cross Section
44-Ru-100
-99.60 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
43
44-Ru-100

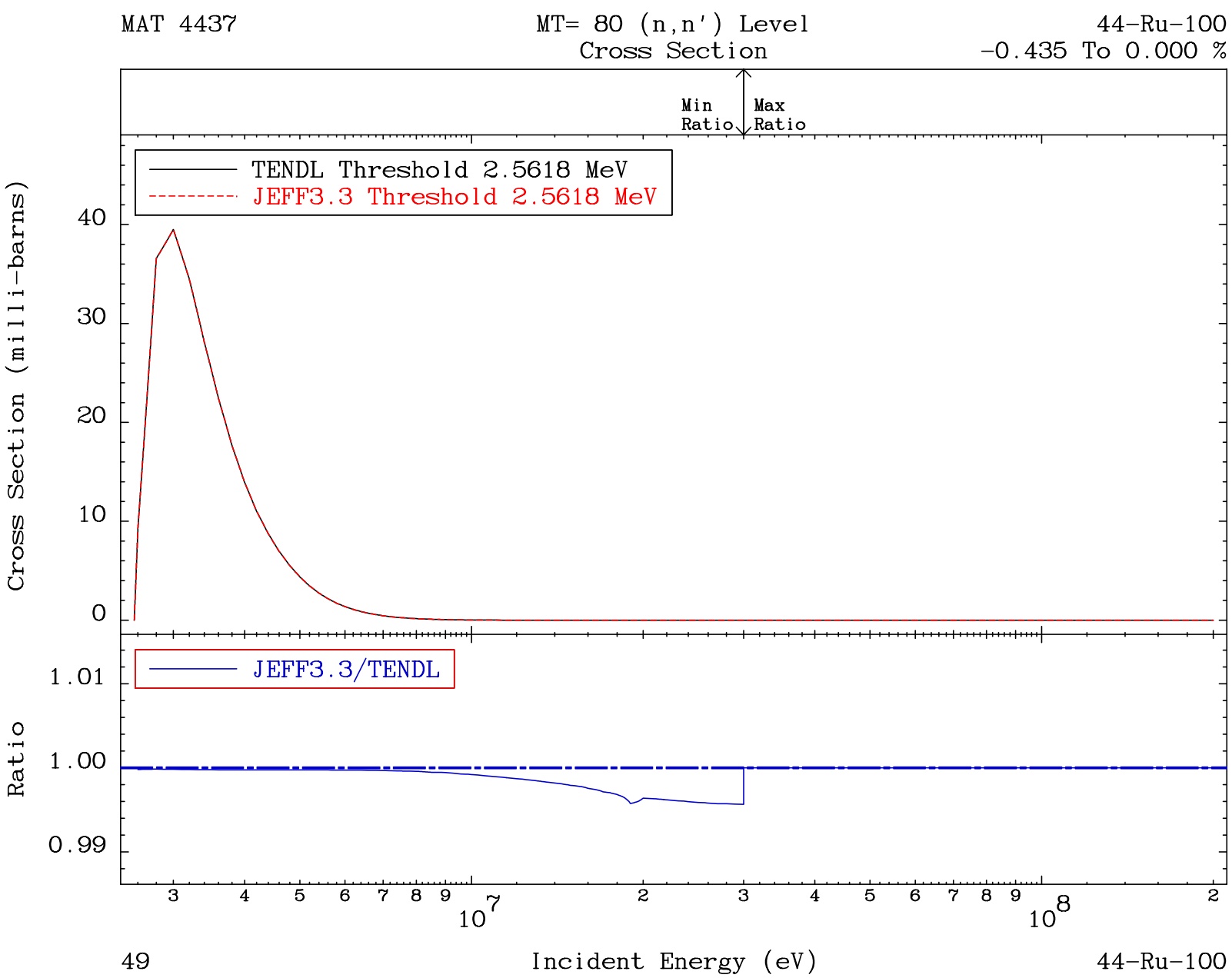

MAT 4437
Dpa elastic (mt2)
Cross Section
44-Ru-100
-99.63 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 615.62 eV
JENDL4.0 Threshold 587.14 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
44
44-Ru-100

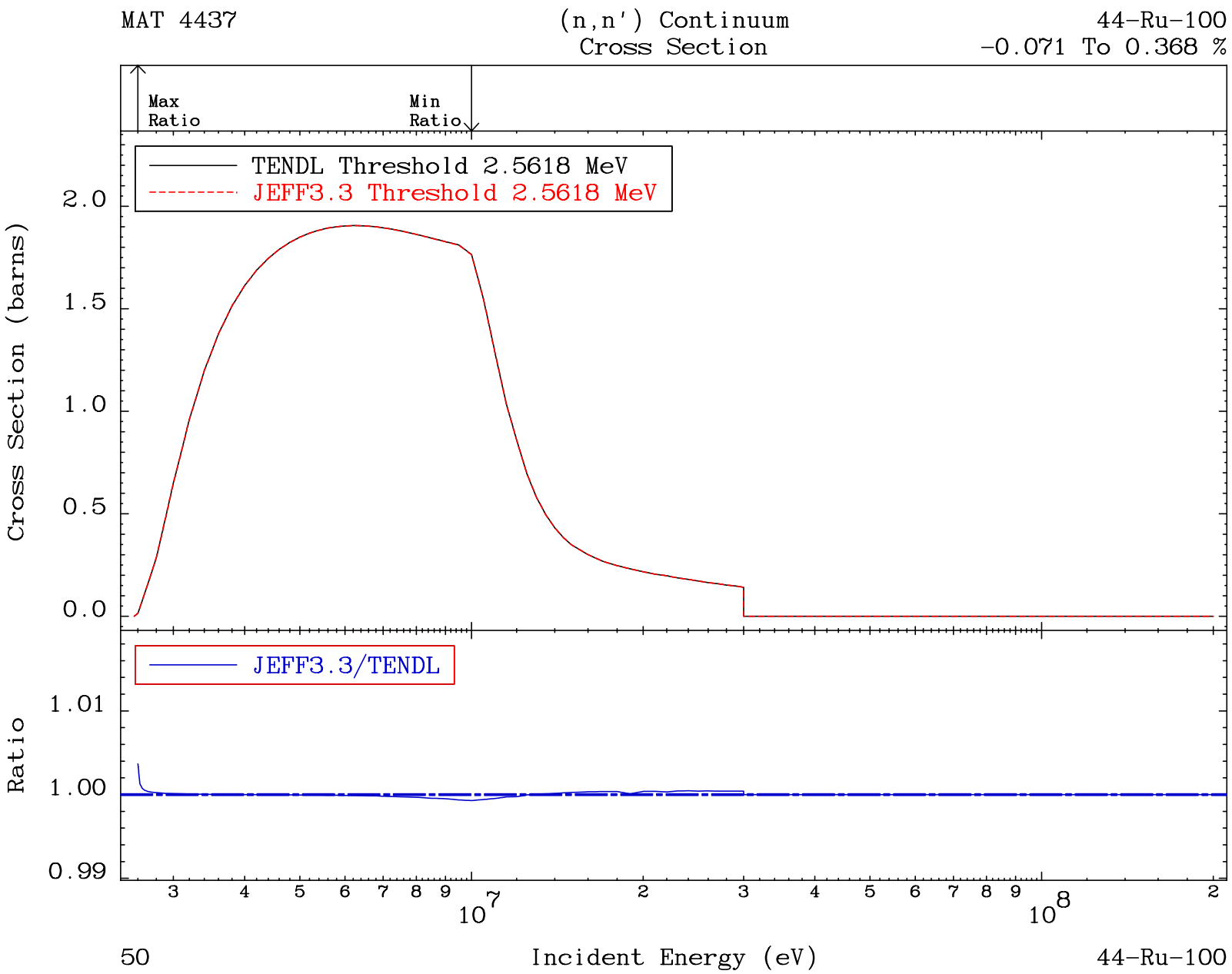

MAT 4437
Dpa inelastic (mt51-91)
Cross Section
44-Ru-100
-53.34 To 85.41 %
Min Ratio
Max Ratio
TENDL Threshold 550.00 keV
JENDL4.0 Threshold 545.05 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
45
44-Ru-100

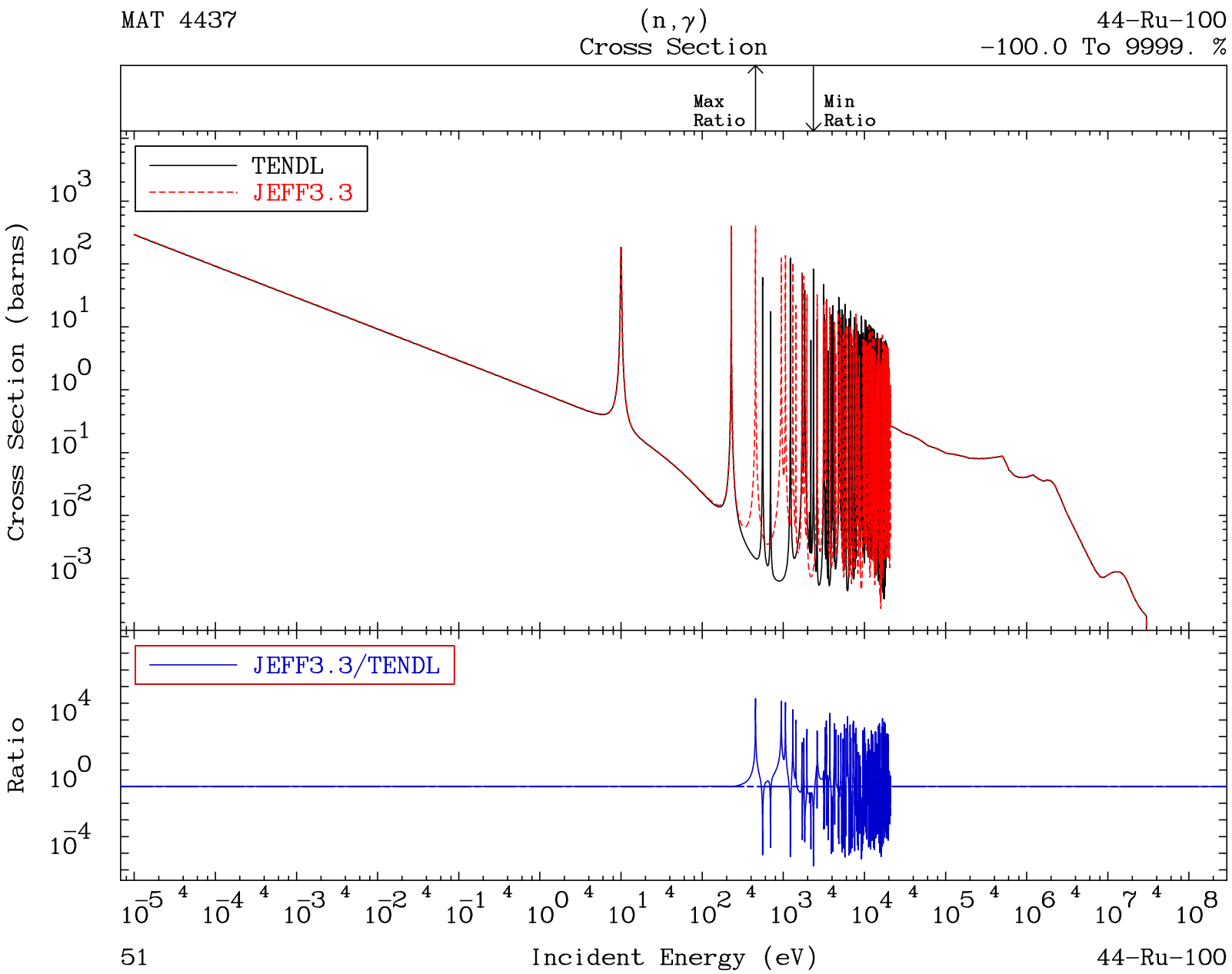

MAT 4437
Dpa disappearance (mt102 -120)
Cross Section
44-Ru-100
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
46
44-Ru-100

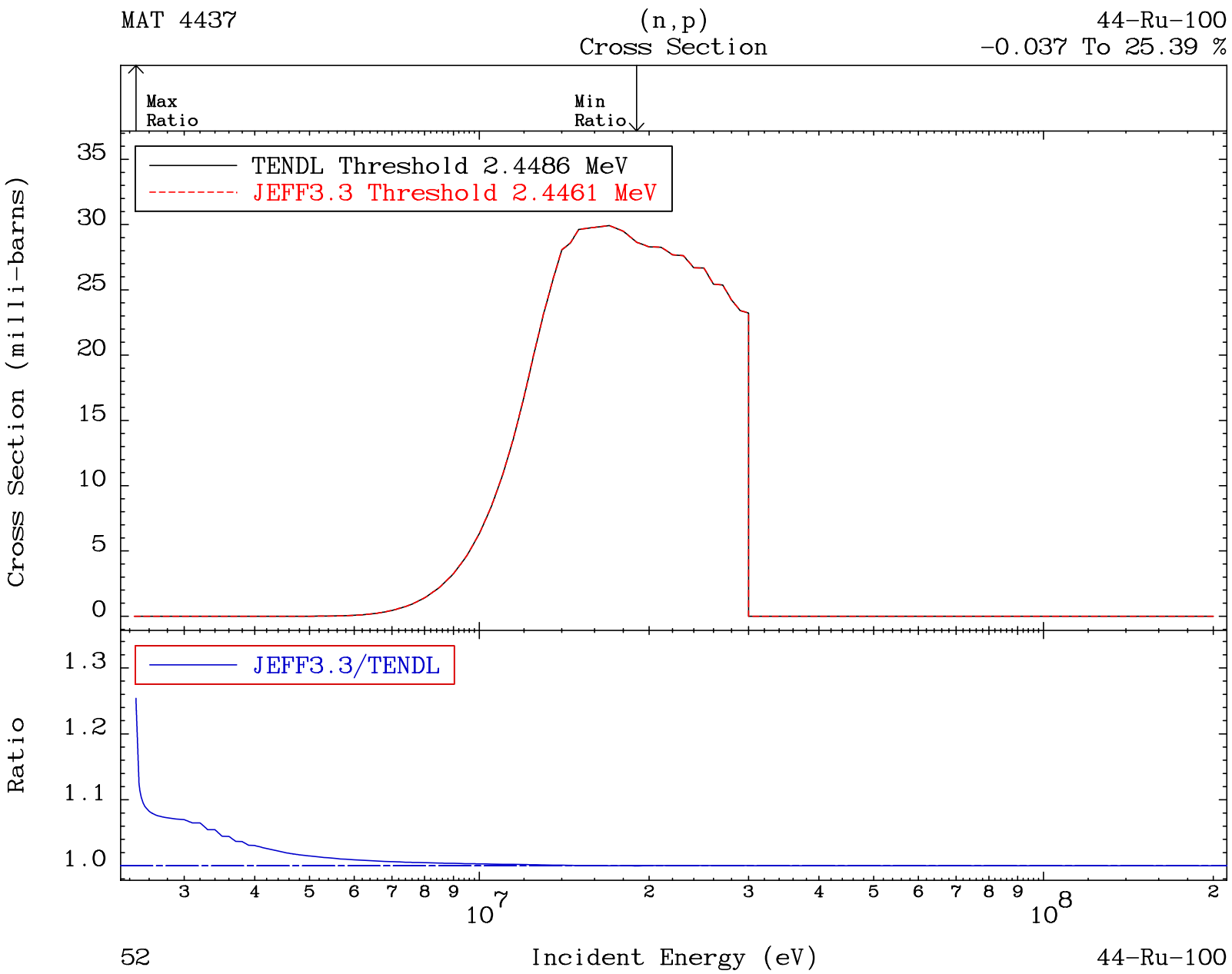

MAT 4437
MT= 78 (n,n') Level
Cross Section
44-Ru-100
-0.022 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5422 MeV
JEFF3.3 Threshold 2.5422 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
44-Ru-100

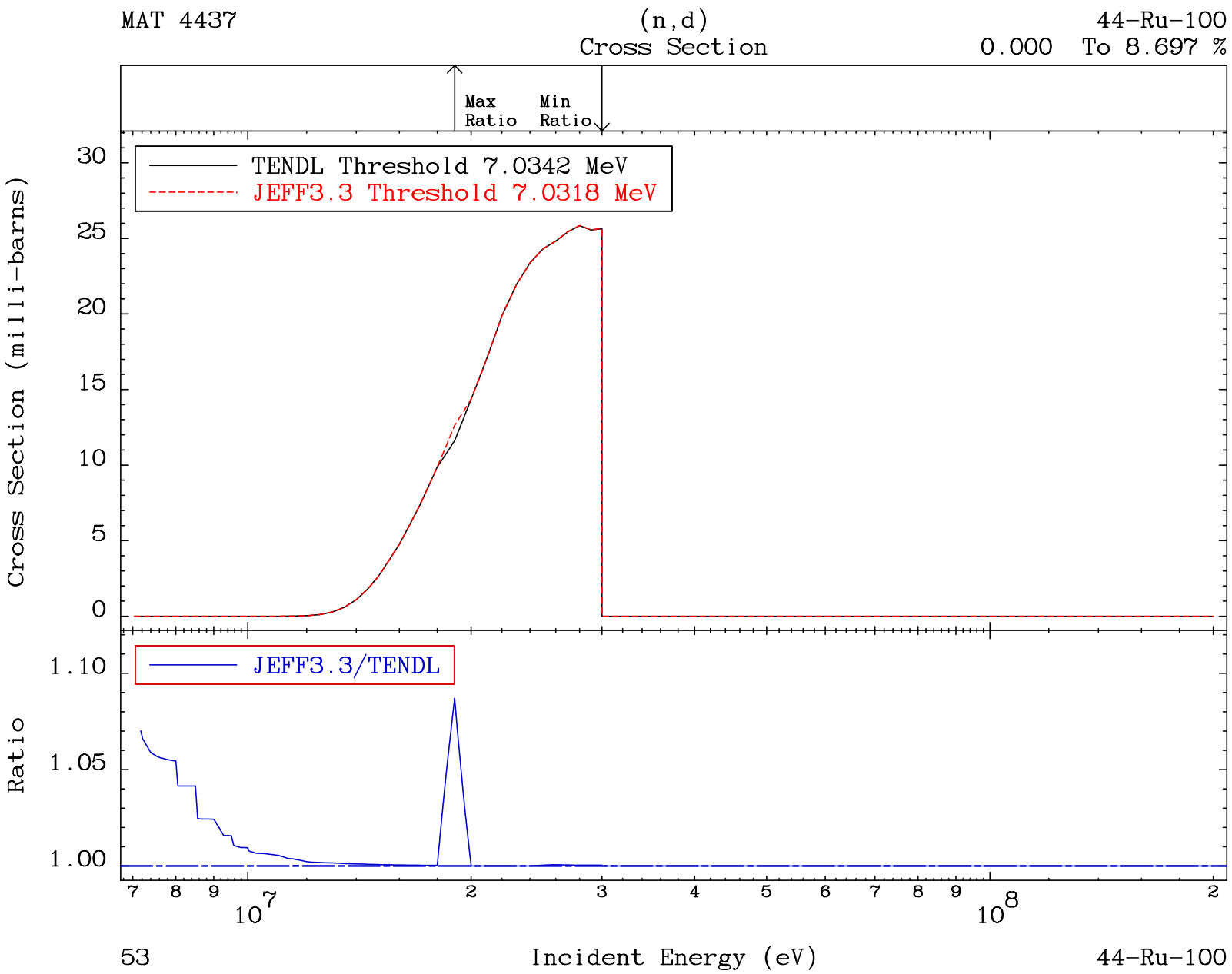

MAT 4437
MT= 79 (n,n') Level
Cross Section
44-Ru-100
-0.055 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5528 MeV
JEFF3.3 Threshold 2.5528 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
48
Incident Energy (eV)
44-Ru-100

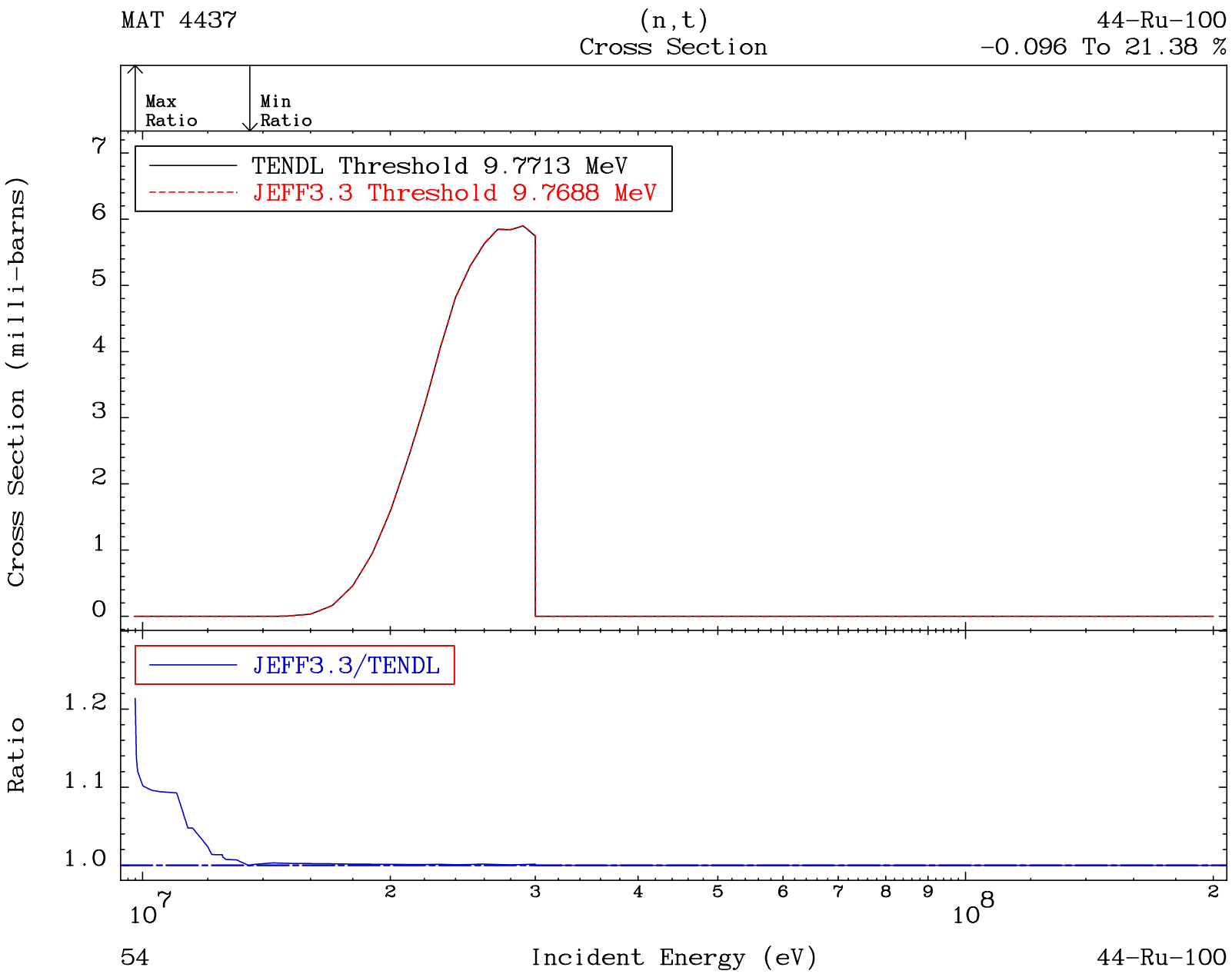

MAT 4437
MT= 80 (n,n') Level
Cross Section
44-Ru-100
-0.435 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.5618 MeV
JEFF3.3 Threshold 2.5618 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
44-Ru-100

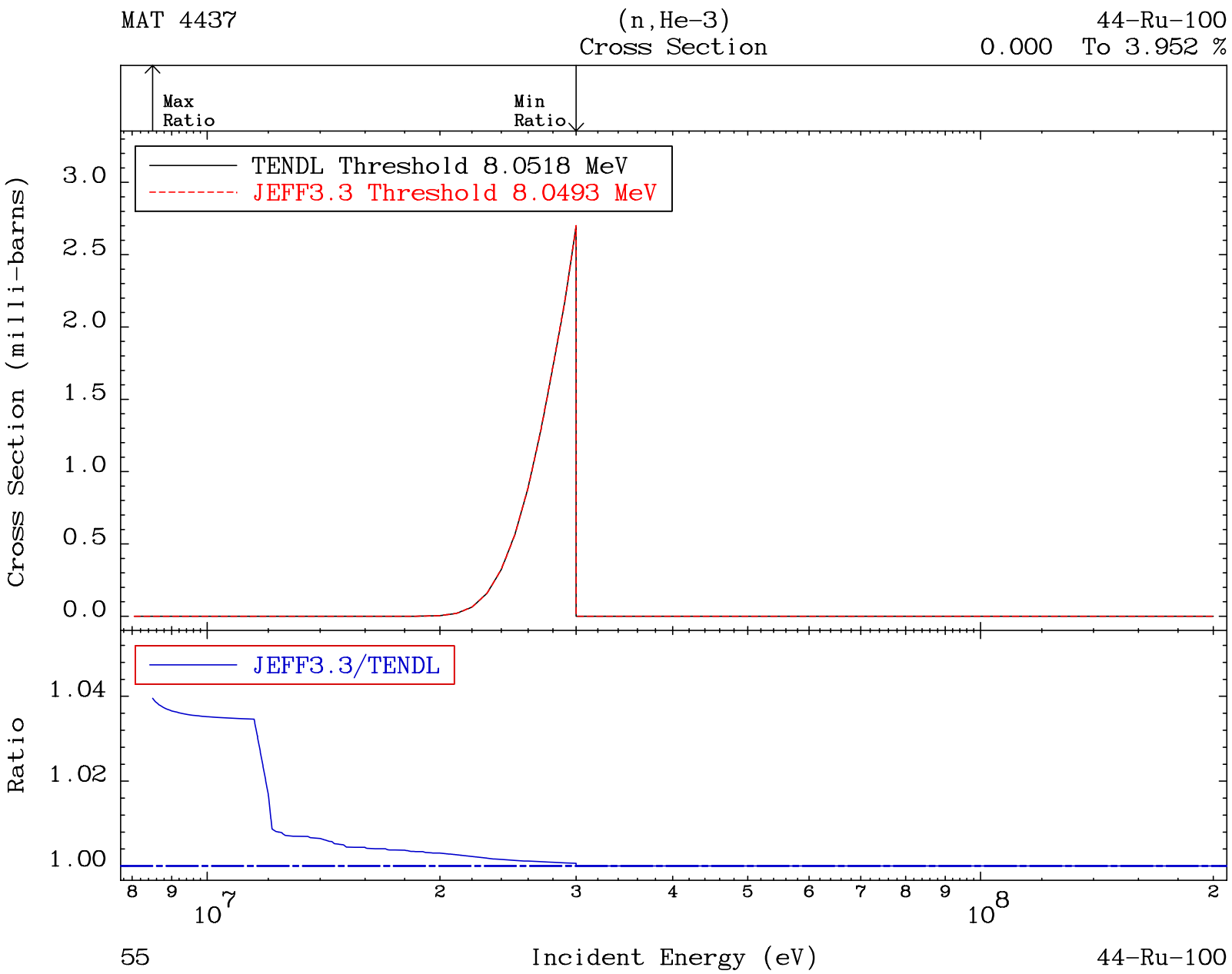

MAT 4437
(n,n') Continuum
Cross Section
44-Ru-100
-0.071 To 0.368 %
Max Ratio
Min Ratio
TENDL Threshold 2.5618 MeV
JEFF3.3 Threshold 2.5618 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
44-Ru-100

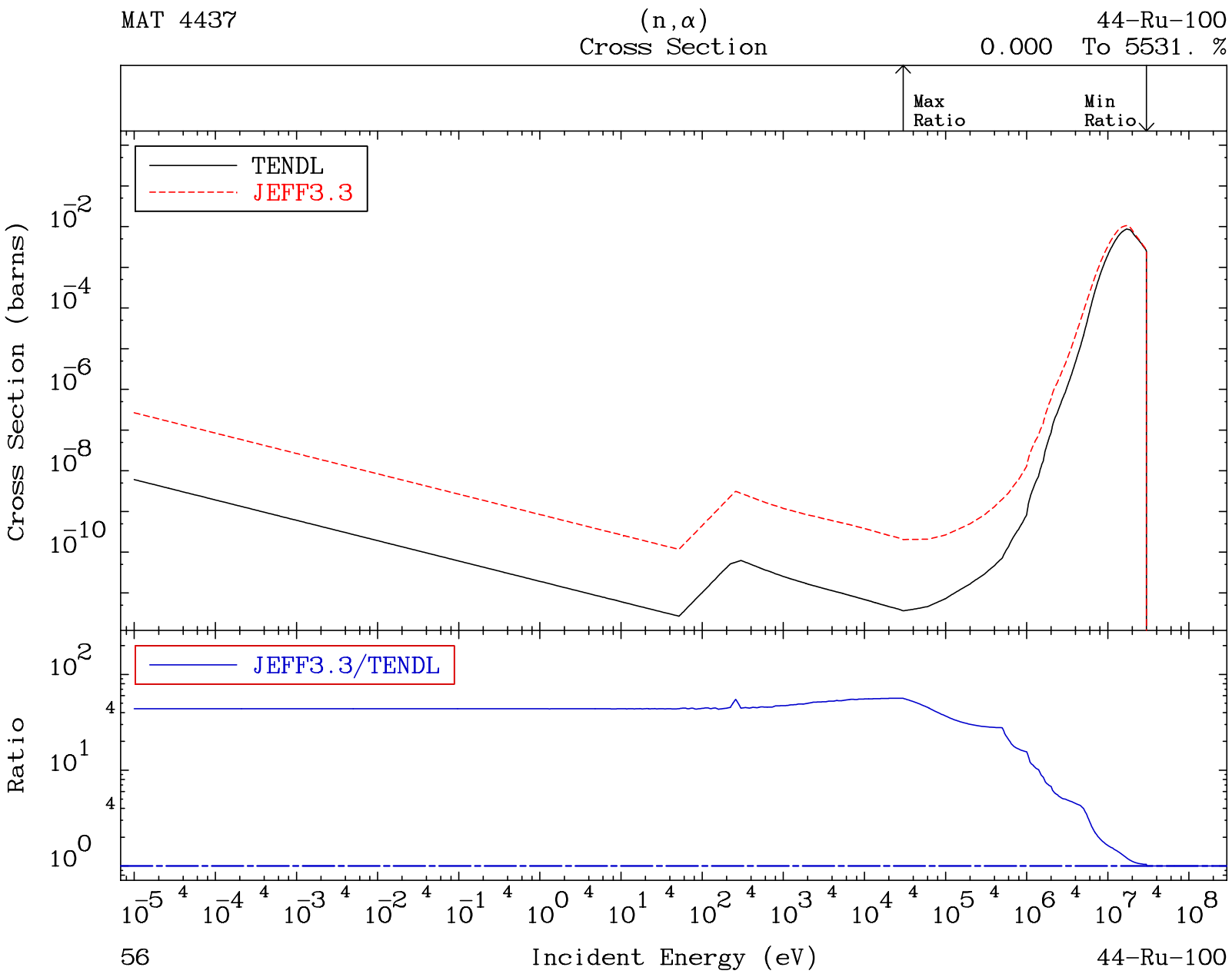

MAT 4437
(n,γ)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
51
44-Ru-100

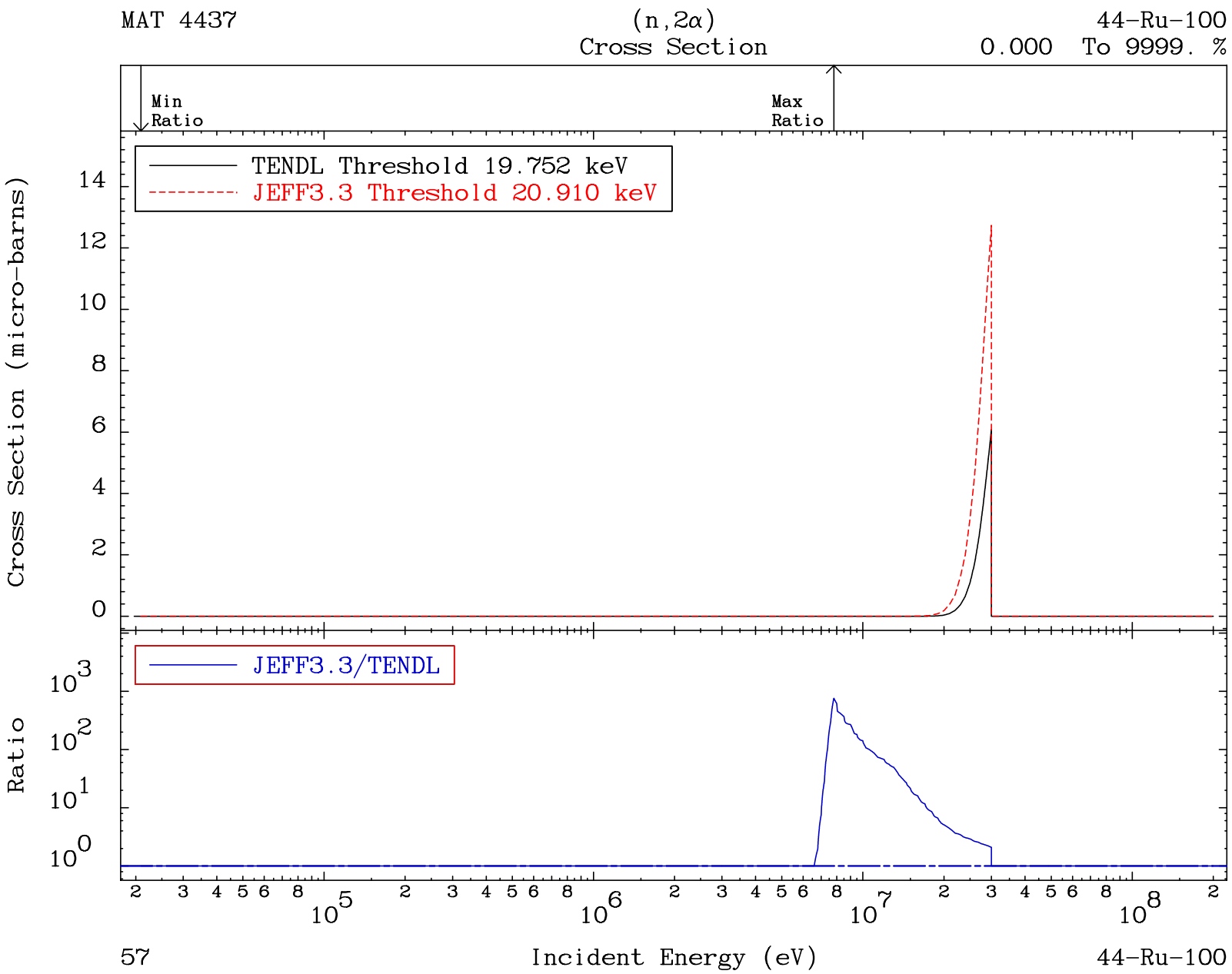

MAT 4437
(n,p)
Cross Section
44-Ru-100
-0.037 To 25.39 %
Max Ratio
Min Ratio
TENDL Threshold 2.4486 MeV
JEFF3.3 Threshold 2.4461 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
44-Ru-100

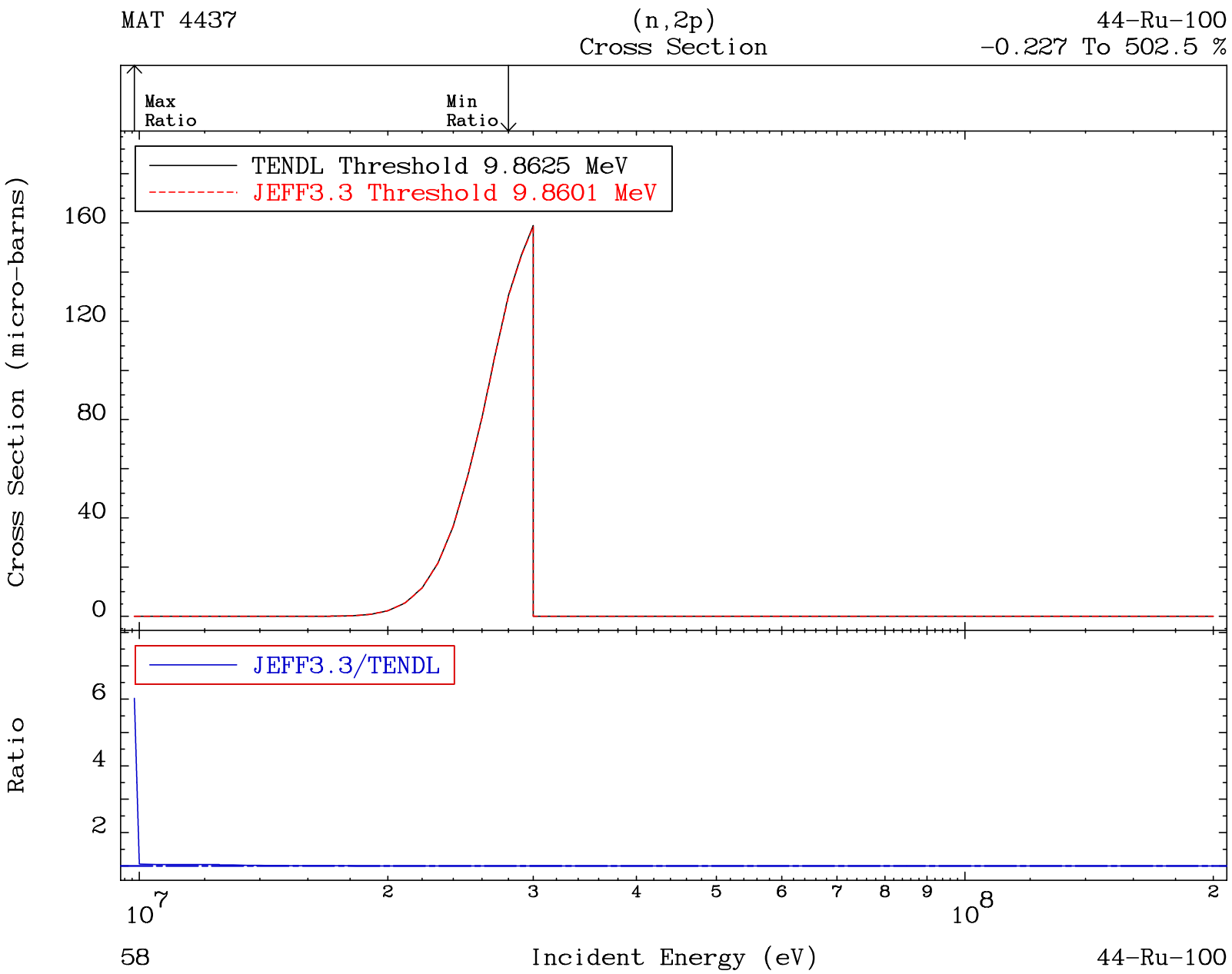

MAT 4437
(n,d)
Cross Section
44-Ru-100
0.000 To 8.697 %
Max Ratio
Min Ratio
TENDL Threshold 7.0342 MeV
JEFF3.3 Threshold 7.0318 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
53
Incident Energy (eV)
44-Ru-100

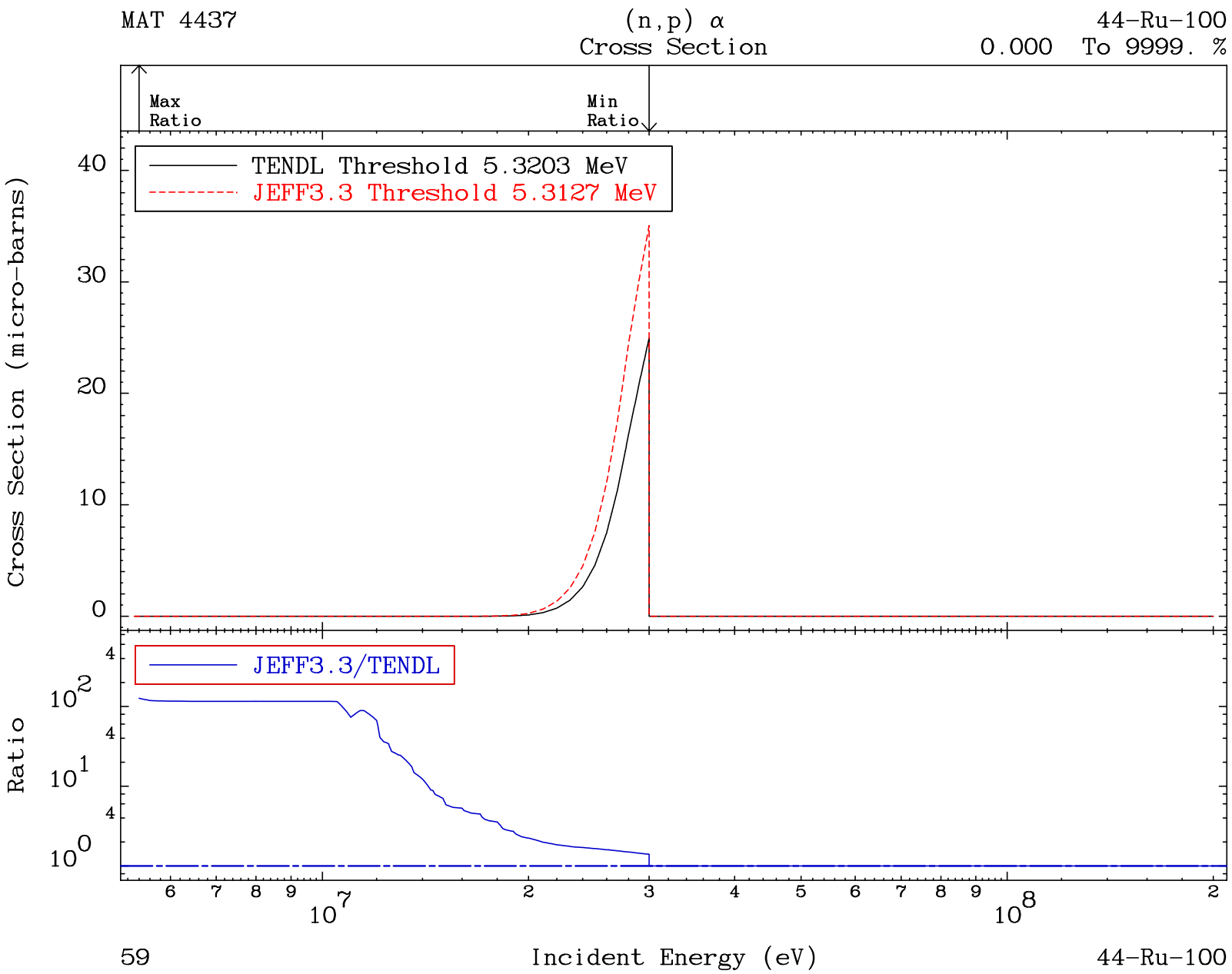

MAT 4437
(n,t)
Cross Section
44-Ru-100
-0.096 To 21.38 %
Max Ratio
Min Ratio
TENDL Threshold 9.7713 MeV
JEFF3.3 Threshold 9.7688 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.0
1.1
1.2
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
44-Ru-100

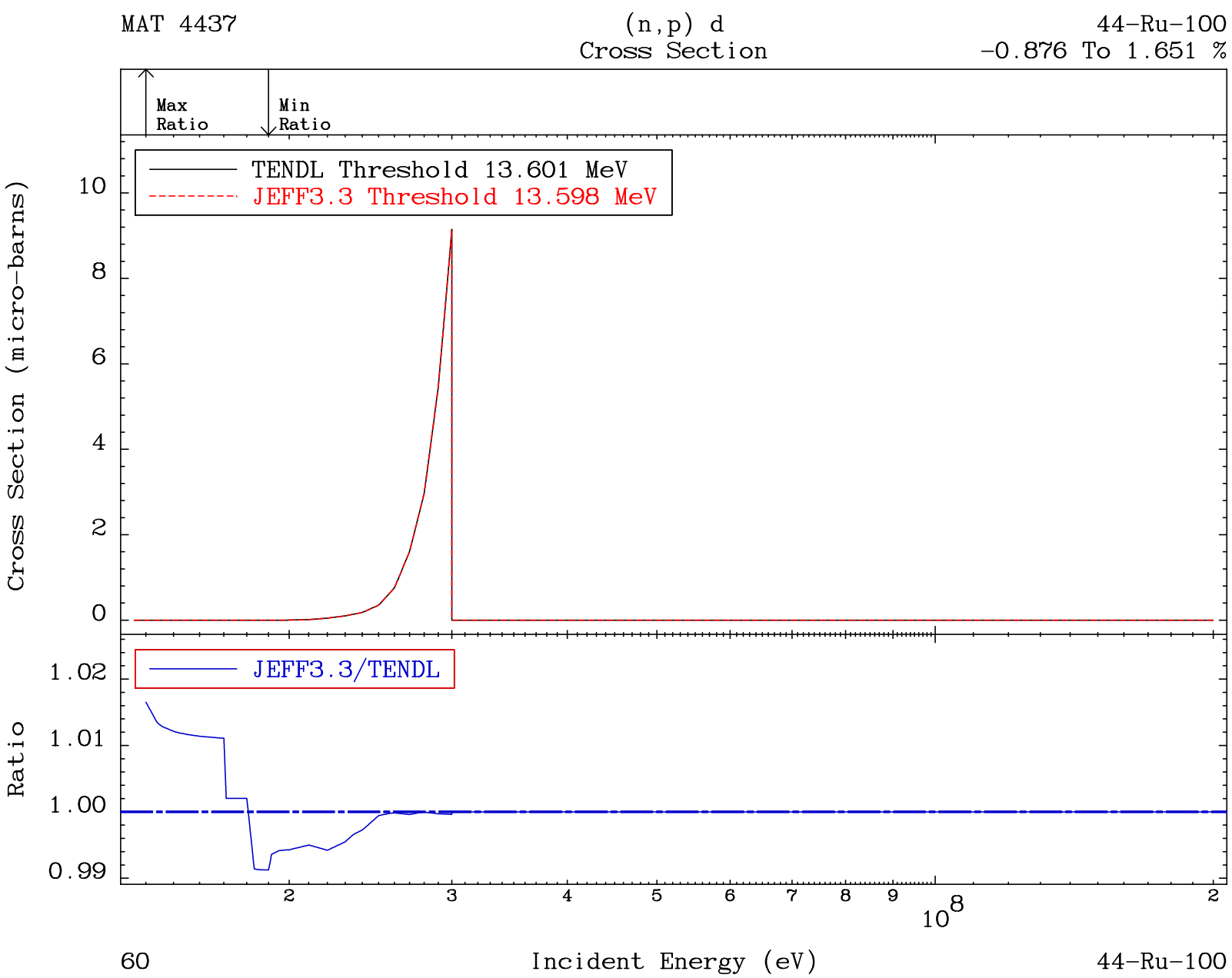

MAT 4437
(n,He-3)
Cross Section
44-Ru-100
0.000 To 3.952 %
Max Ratio
Min Ratio
TENDL Threshold 8.0518 MeV
JEFF3.3 Threshold 8.0493 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
44-Ru-100

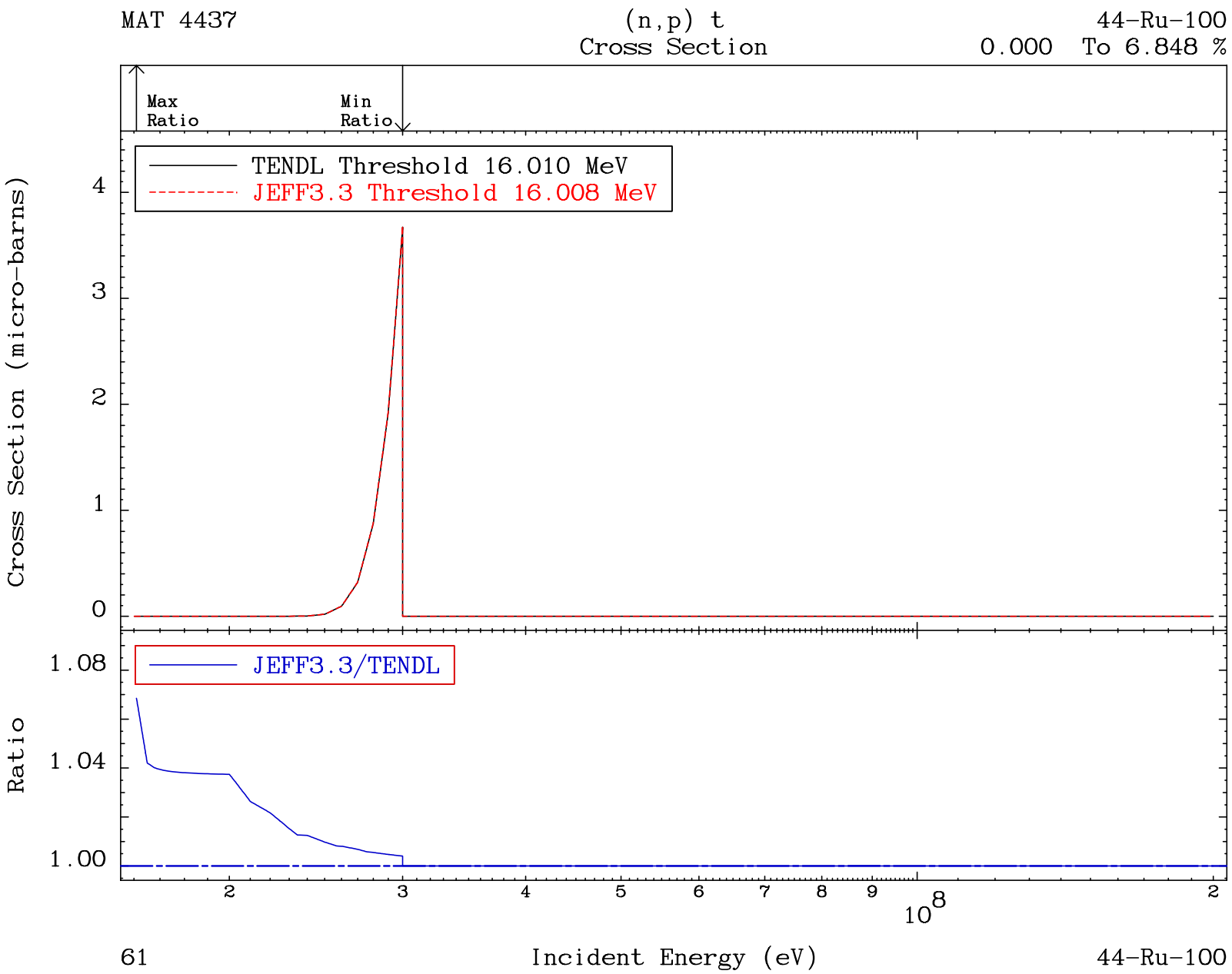

MAT 4437
(n,α)
Cross Section
44-Ru-100
0.000 To 5531. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
56
44-Ru-100

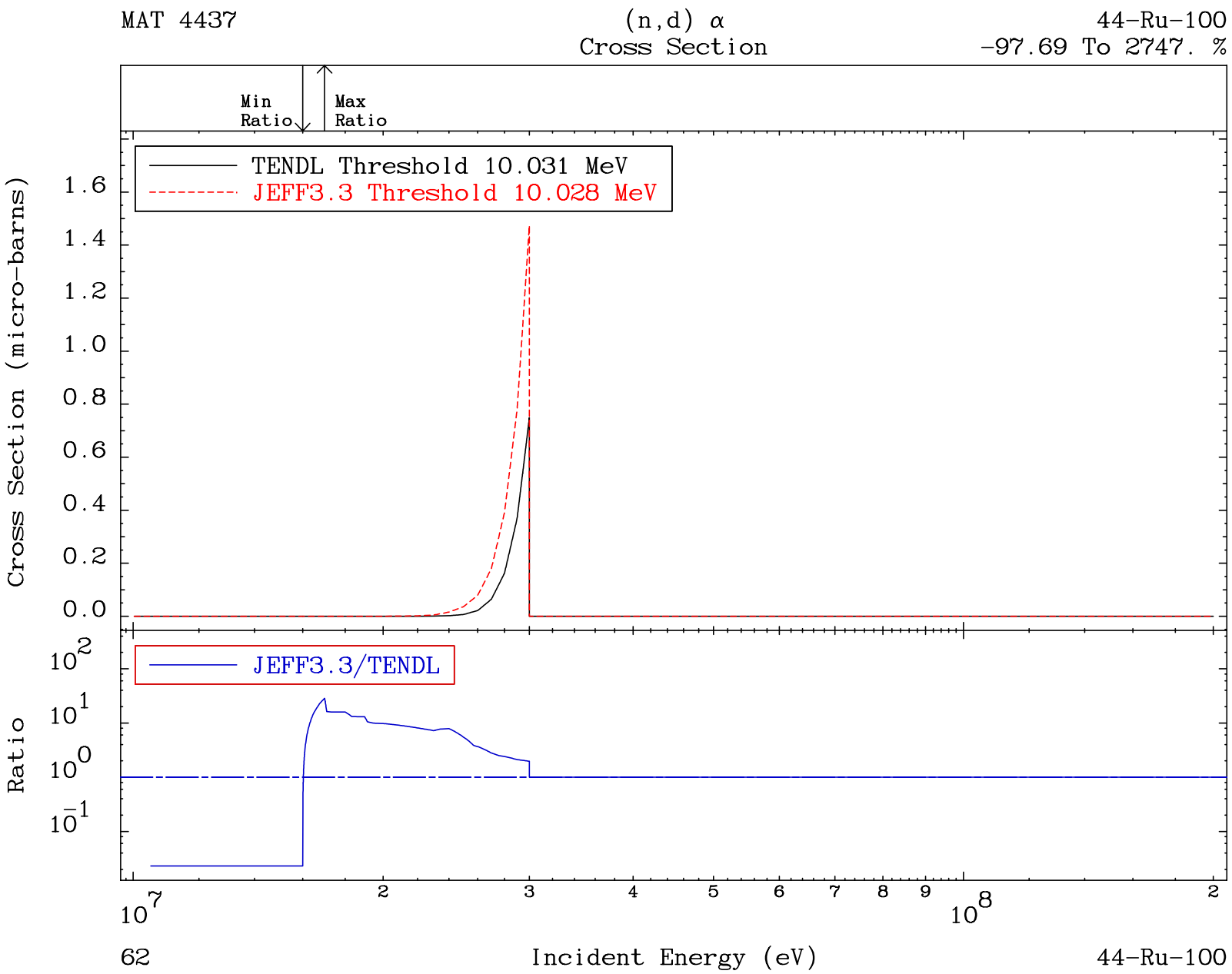

MAT 4437
(n,2α)
Cross Section
44-Ru-100
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 19.752 keV
JEFF3.3 Threshold 20.910 keV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
44-Ru-100

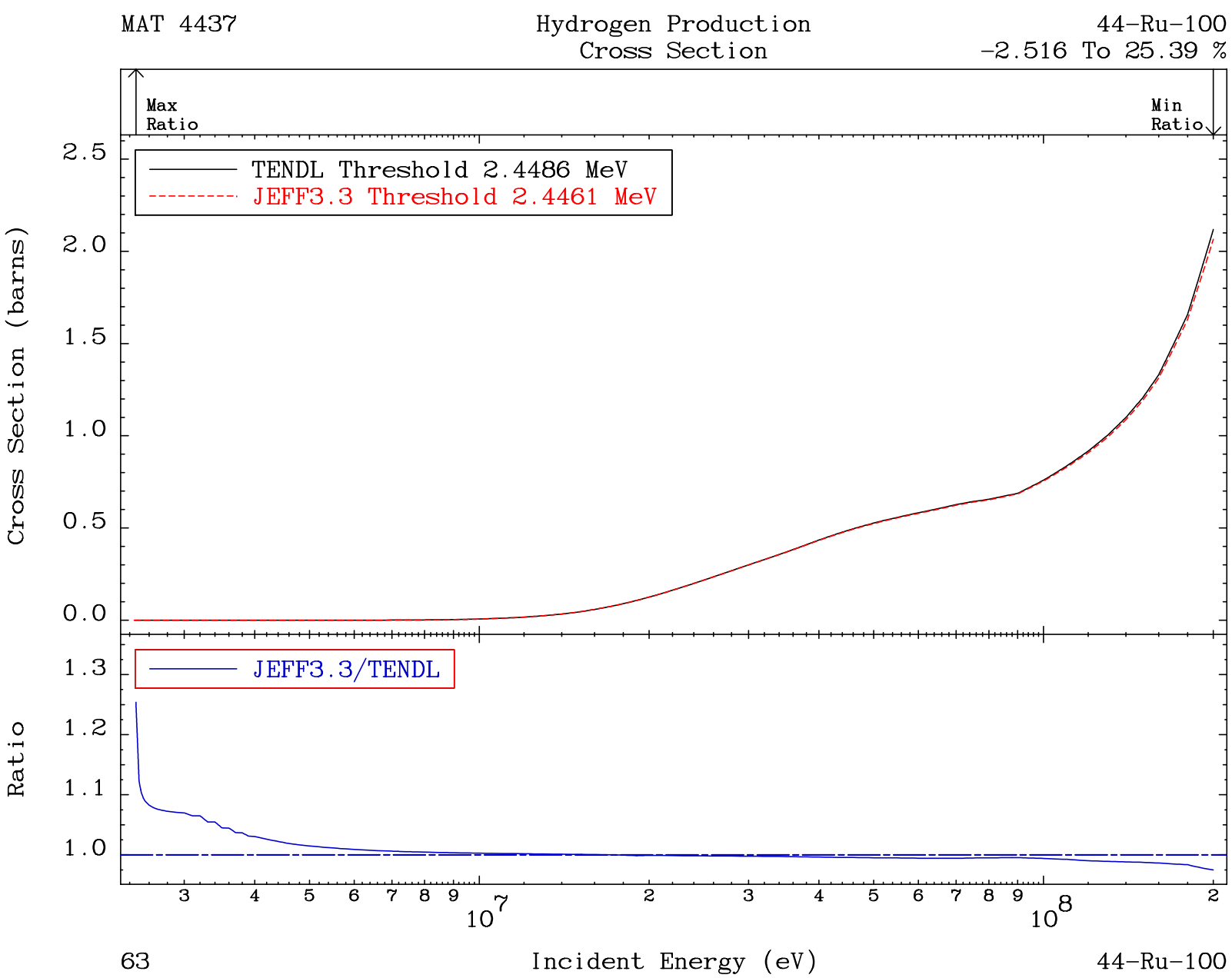

MAT 4437
(n,2p)
Cross Section
44-Ru-100
-0.227 To 502.5 %
Max Ratio
Min Ratio
TENDL Threshold 9.8625 MeV
JEFF3.3 Threshold 9.8601 MeV
Cross Section (micro-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
6
4
2
10^7
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
44-Ru-100

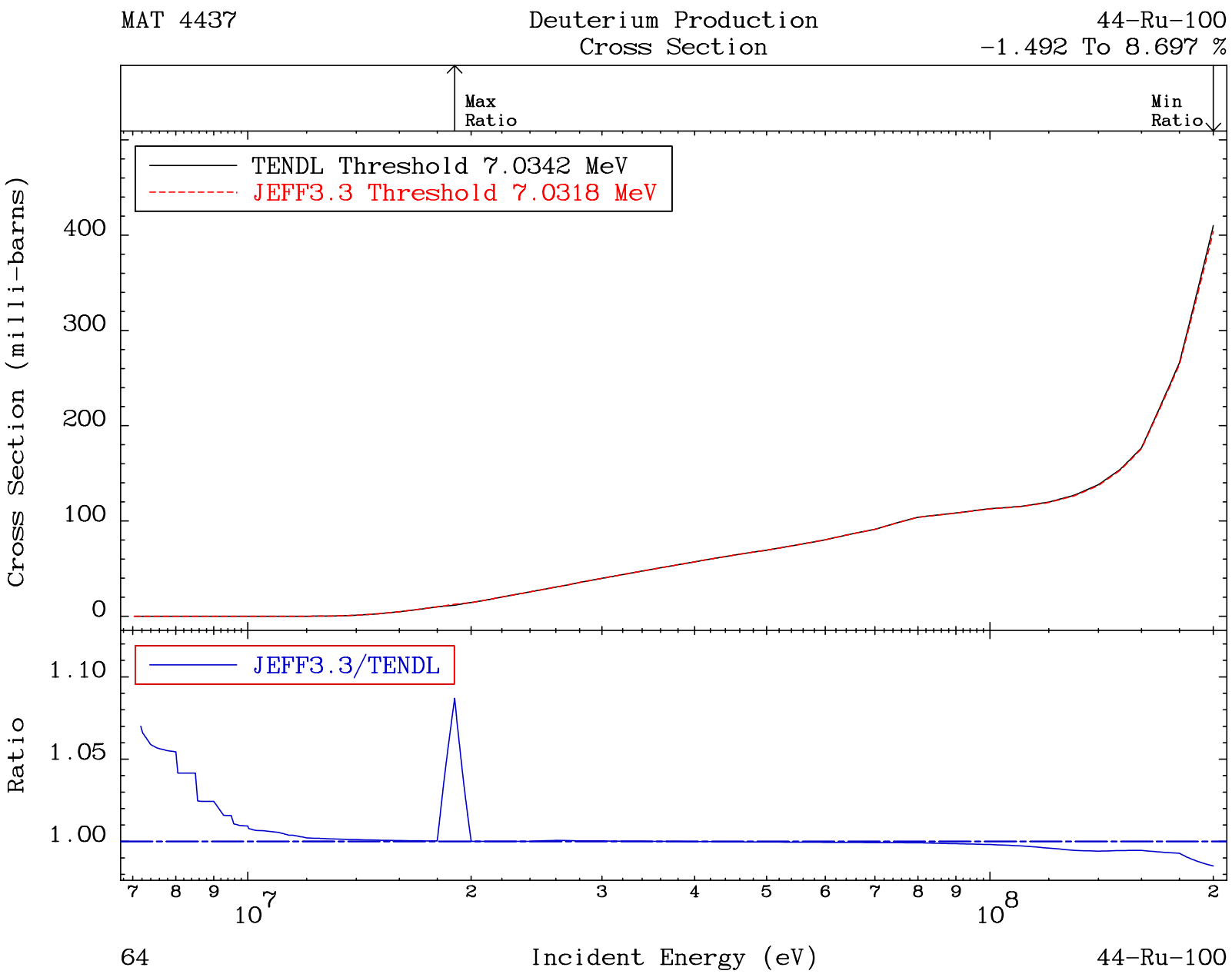

MAT 4437
(n,p) α
Cross Section
44-Ru-100
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.3203 MeV
JEFF3.3 Threshold 5.3127 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
59
44-Ru-100

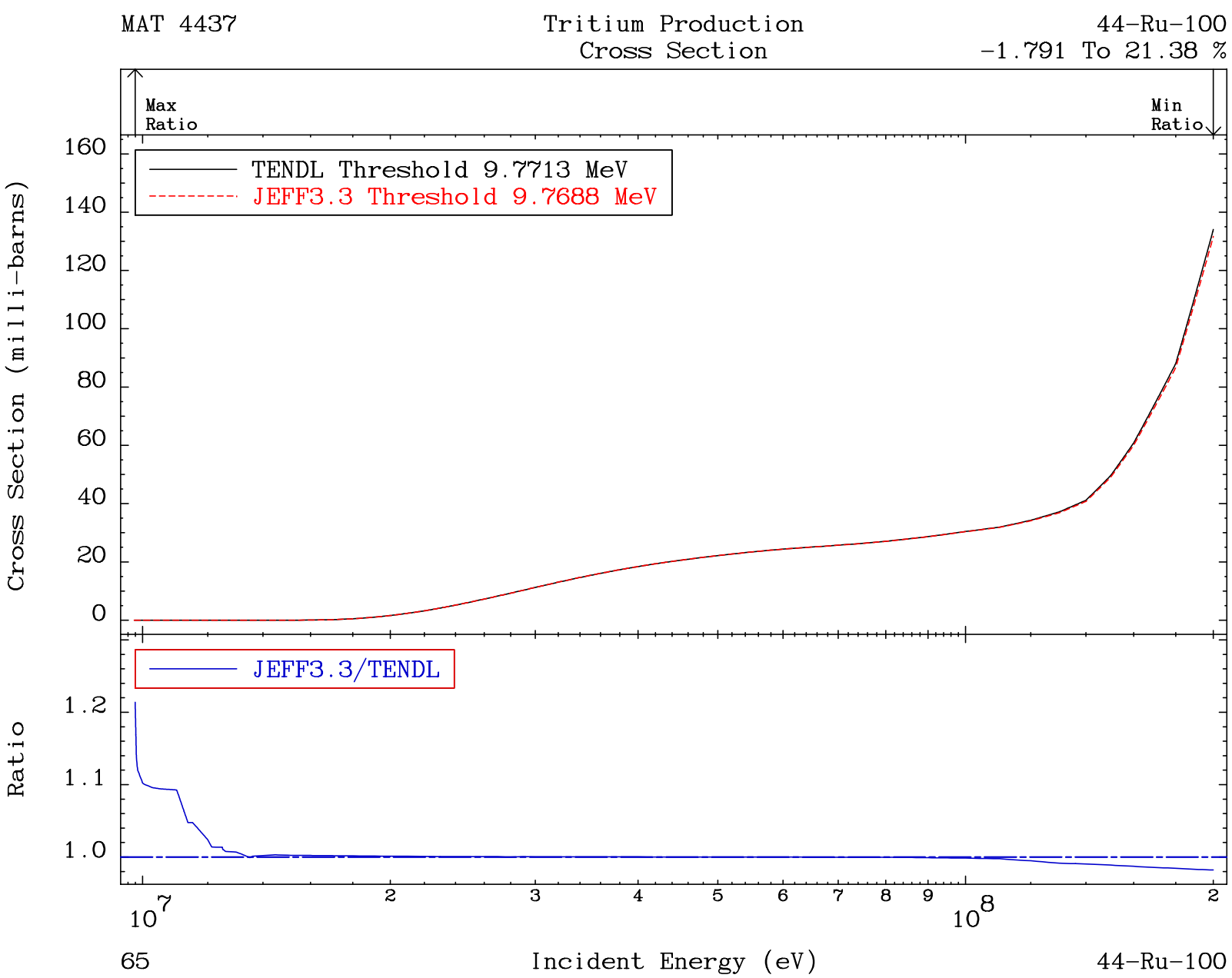

MAT 4437
(n,p) d
Cross Section
44-Ru-100
-0.876 To 1.651 %
Max Ratio
Min Ratio
TENDL Threshold 13.601 MeV
JEFF3.3 Threshold 13.598 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
44-Ru-100

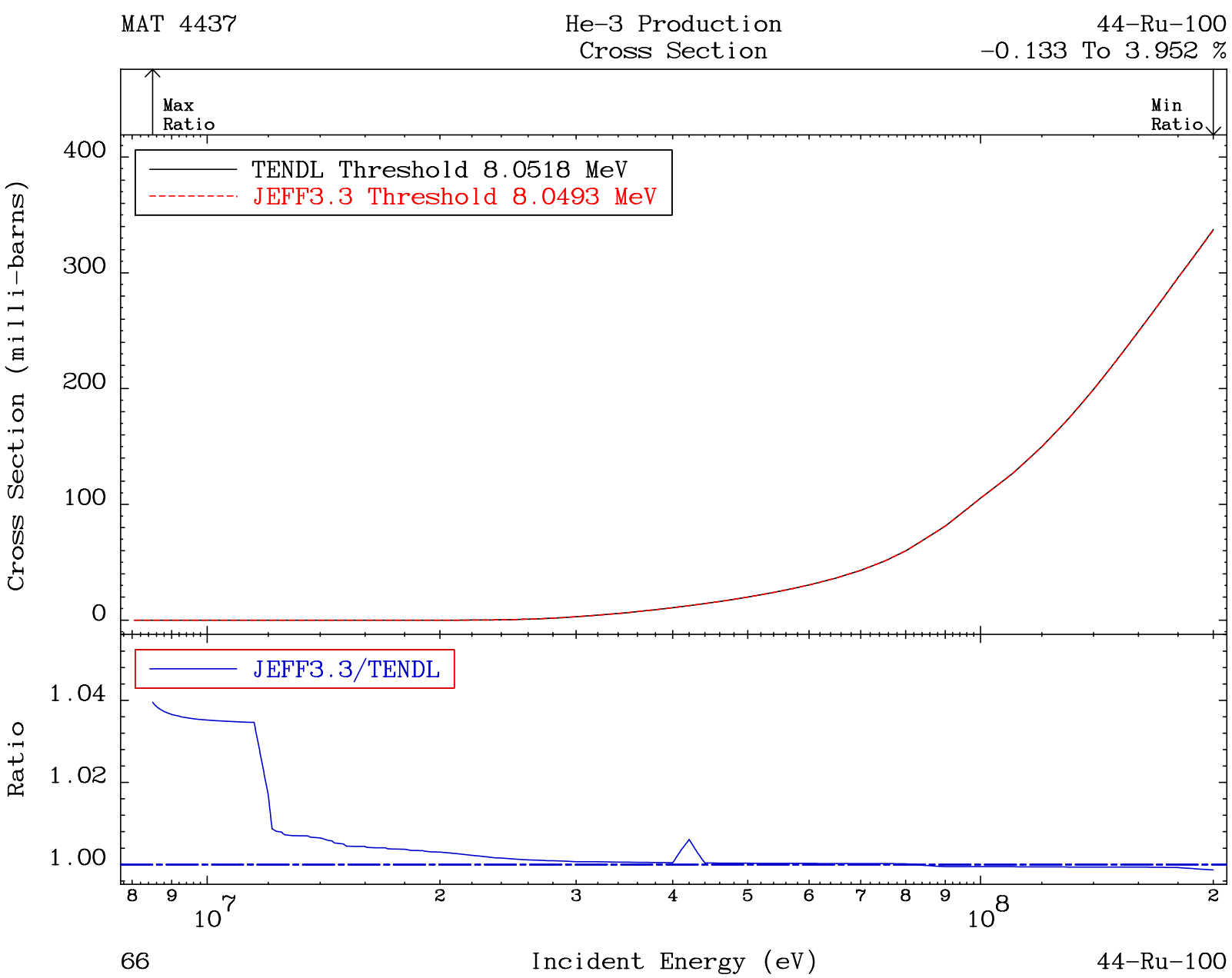

MAT 4437
(n,p) t
Cross Section
44-Ru-100
0.000 To 6.848 %
Max Ratio
Min Ratio
TENDL Threshold 16.010 MeV
JEFF3.3 Threshold 16.008 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.00
1.04
1.08
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
44-Ru-100

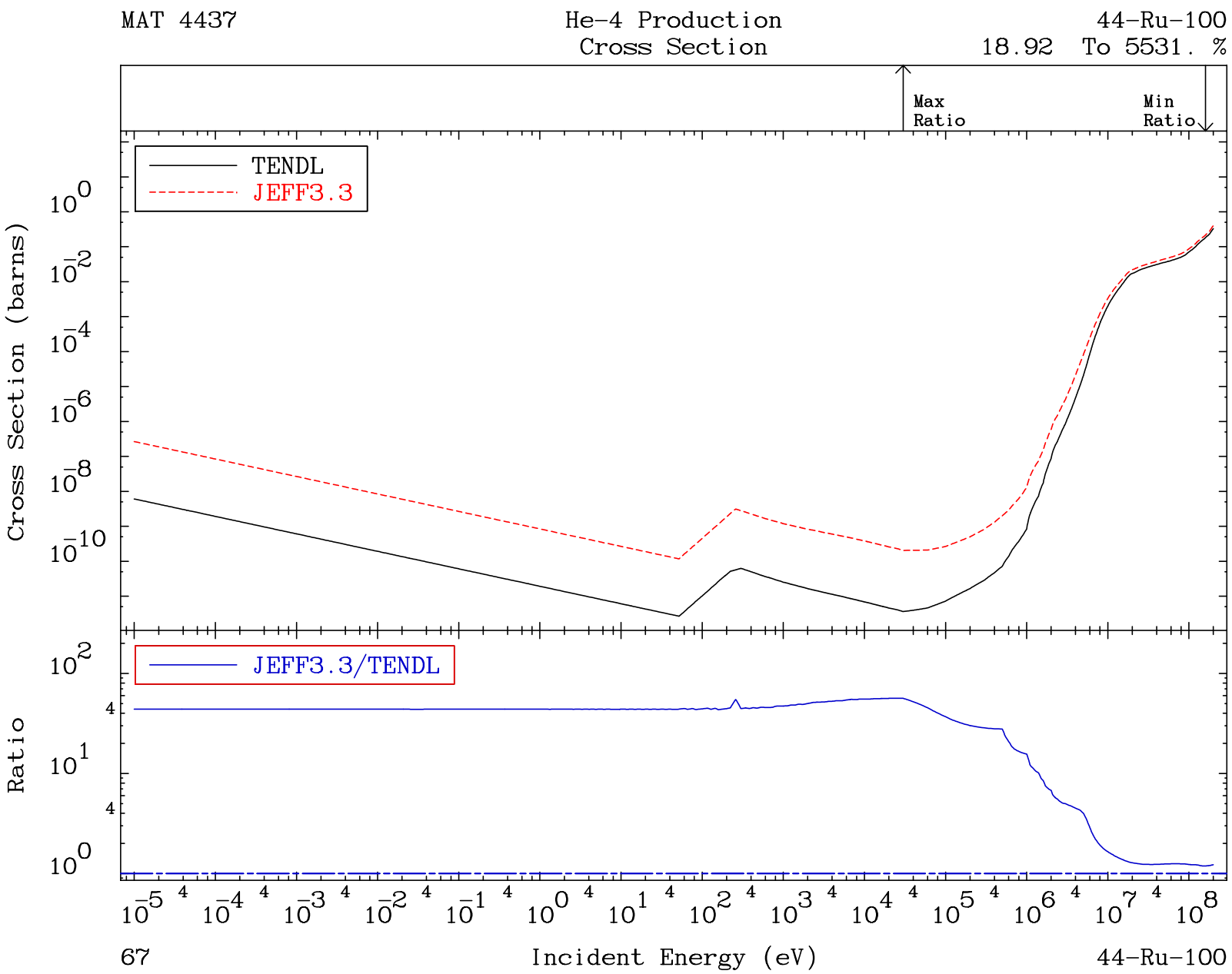

MAT 4437
(n,d) α
Cross Section
44-Ru-100
-97.69 To 2747. %
Min Ratio
Max Ratio
TENDL Threshold 10.031 MeV
JEFF3.3 Threshold 10.028 MeV
Cross Section (micro-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
44-Ru-100

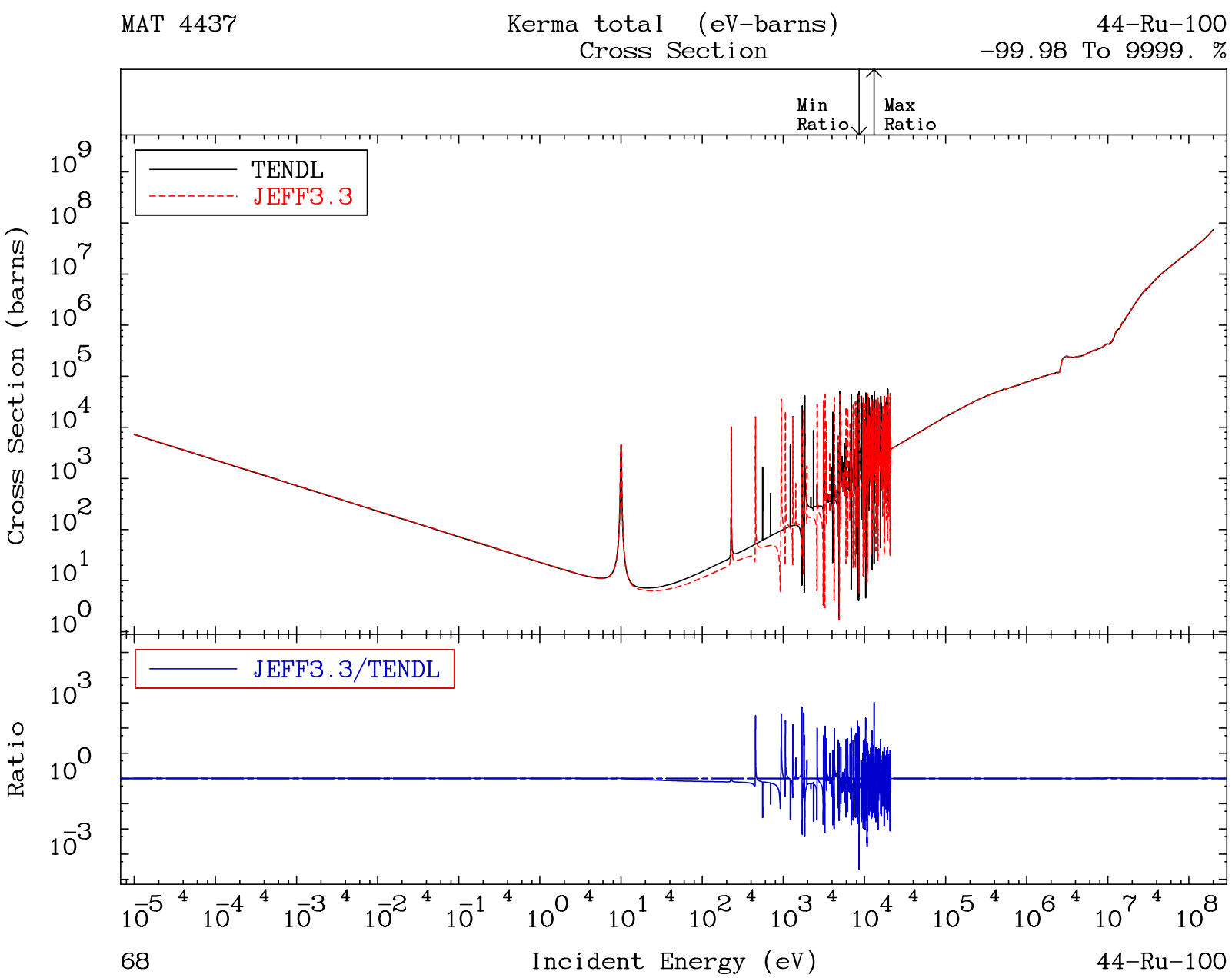

MAT 4437
Hydrogen Production
Cross Section
44-Ru-100
-2.516 To 25.39 %
Max Ratio
Min Ratio
TENDL Threshold 2.4486 MeV
JEFF3.3 Threshold 2.4461 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
63
Incident Energy (eV)
44-Ru-100

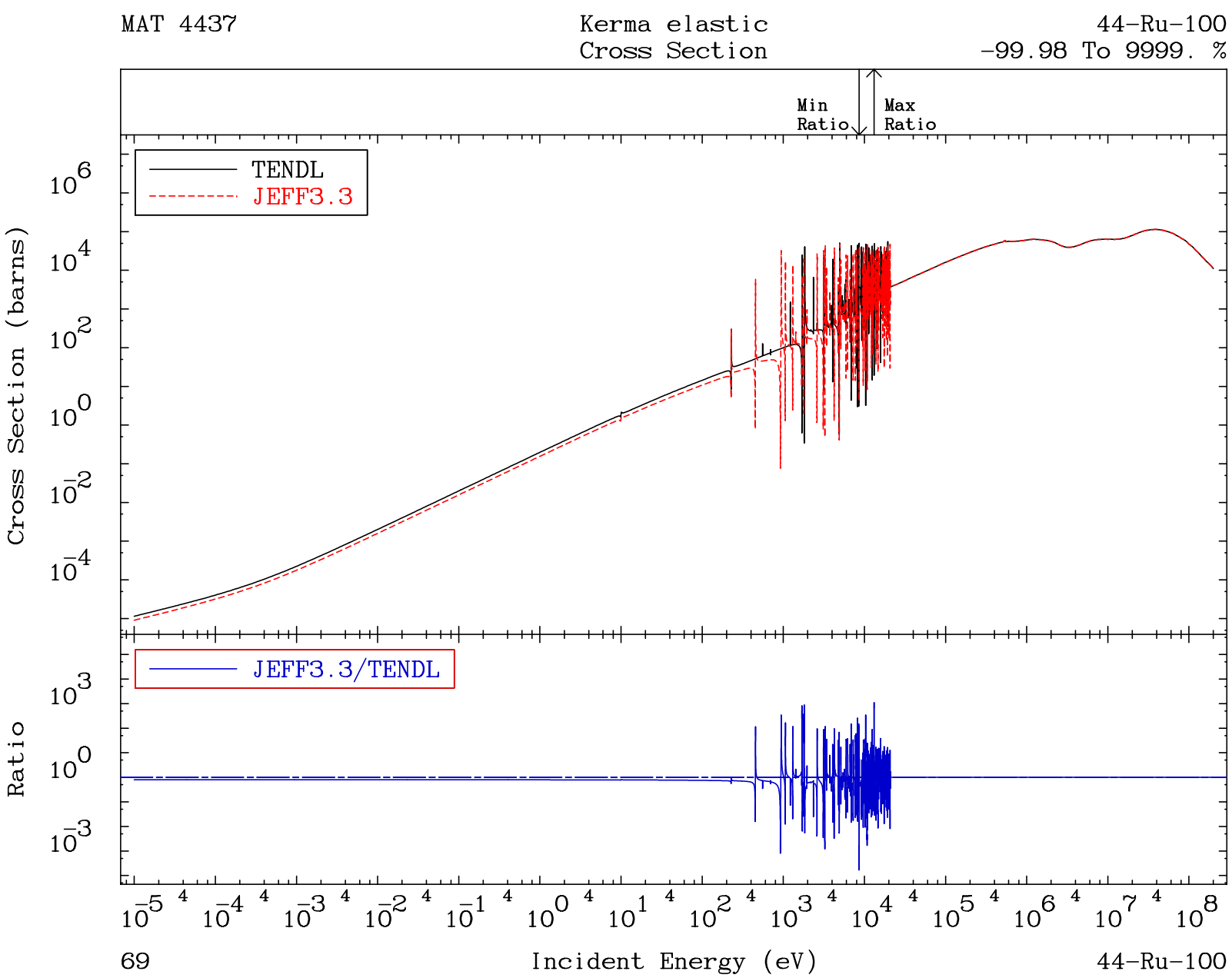

MAT 4437
Deuterium Production
Cross Section
44-Ru-100
-1.492 To 8.697 %
Max
Ratio
Min
Ratio
TENDL Threshold 7.0342 MeV
JEFF3.3 Threshold 7.0318 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
64
Incident Energy (eV)
44-Ru-100

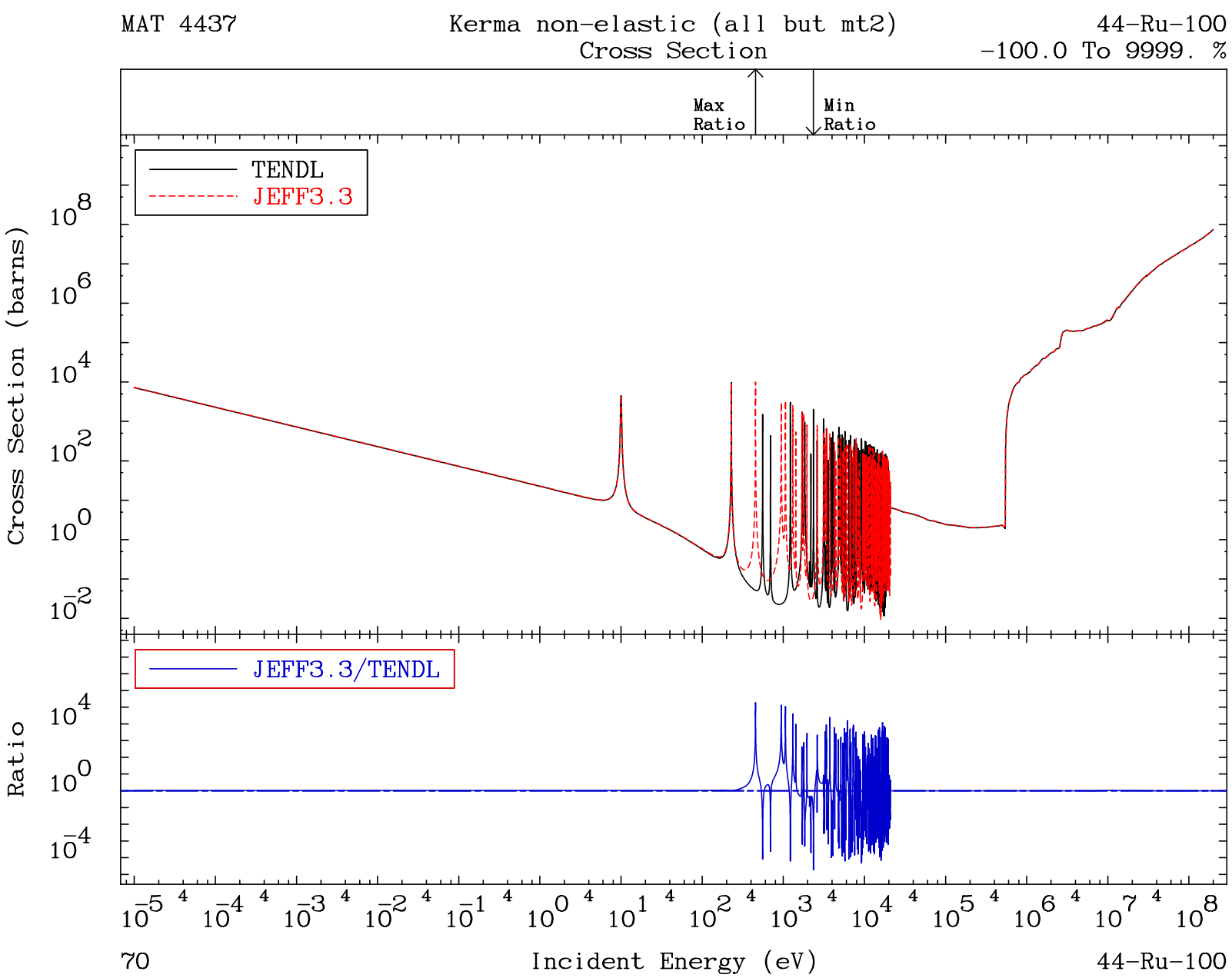

MAT 4437
Tritium Production
Cross Section
44-Ru-100
-1.791 To 21.38 %
Max Ratio
Min Ratio
TENDL Threshold 9.7713 MeV
JEFF3.3 Threshold 9.7688 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
44-Ru-100

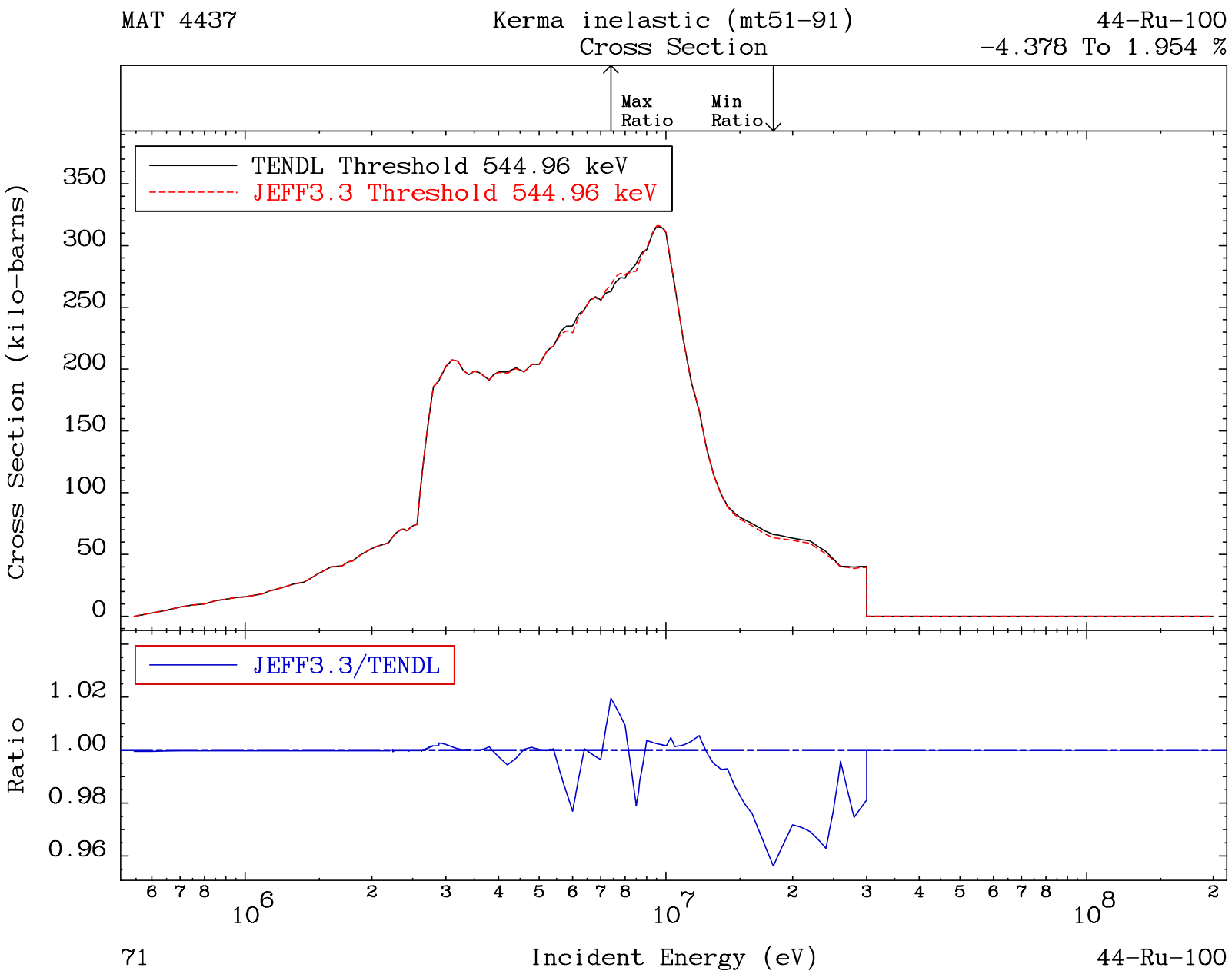

MAT 4437
He-3 Production
Cross Section
44-Ru-100
-0.133 To 3.952 %
Max Ratio
Min Ratio
TENDL Threshold 8.0518 MeV
JEFF3.3 Threshold 8.0493 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
44-Ru-100

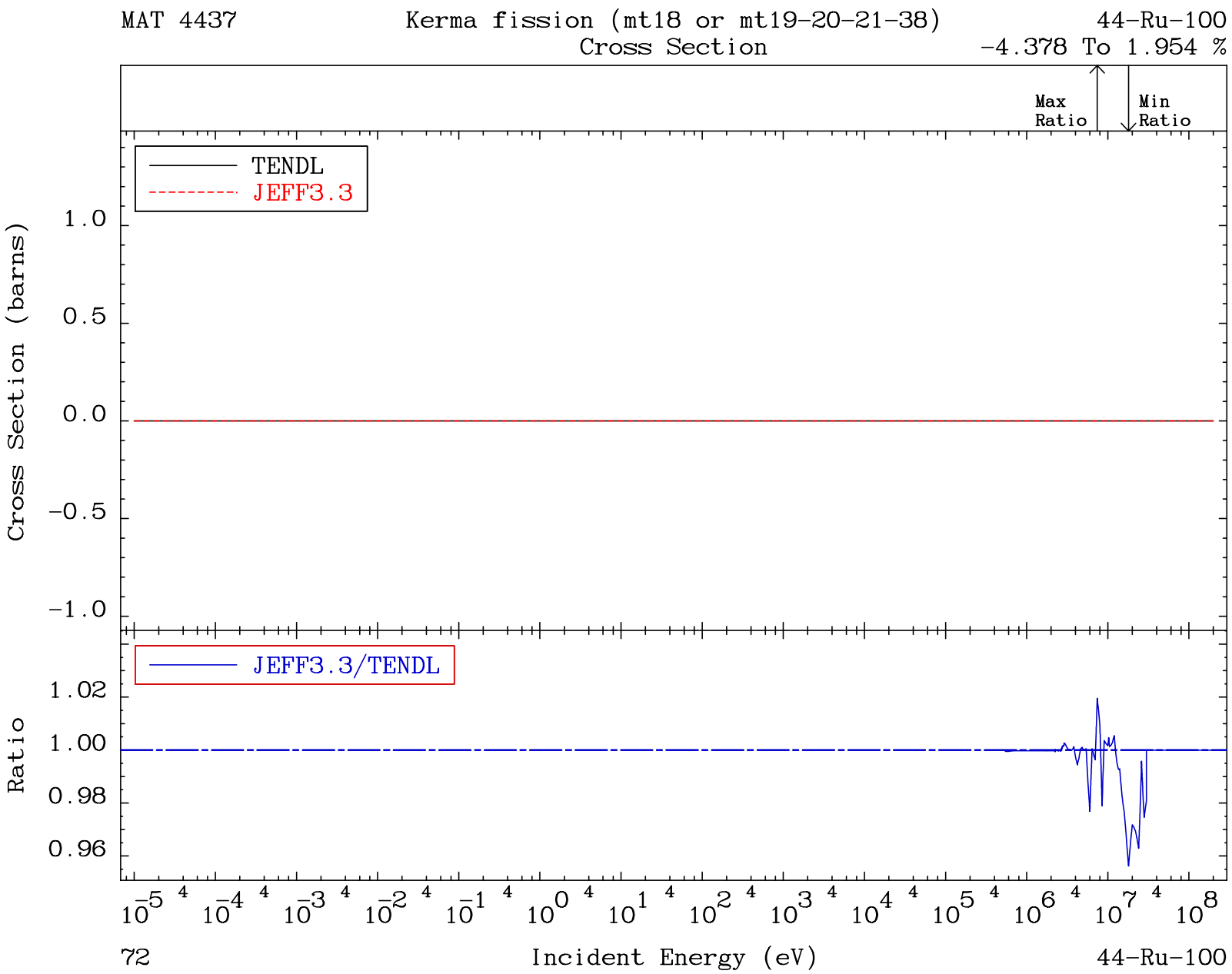

MAT 4437
He-4 Production
Cross Section
44-Ru-100
18.92 To 5531. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
44-Ru-100

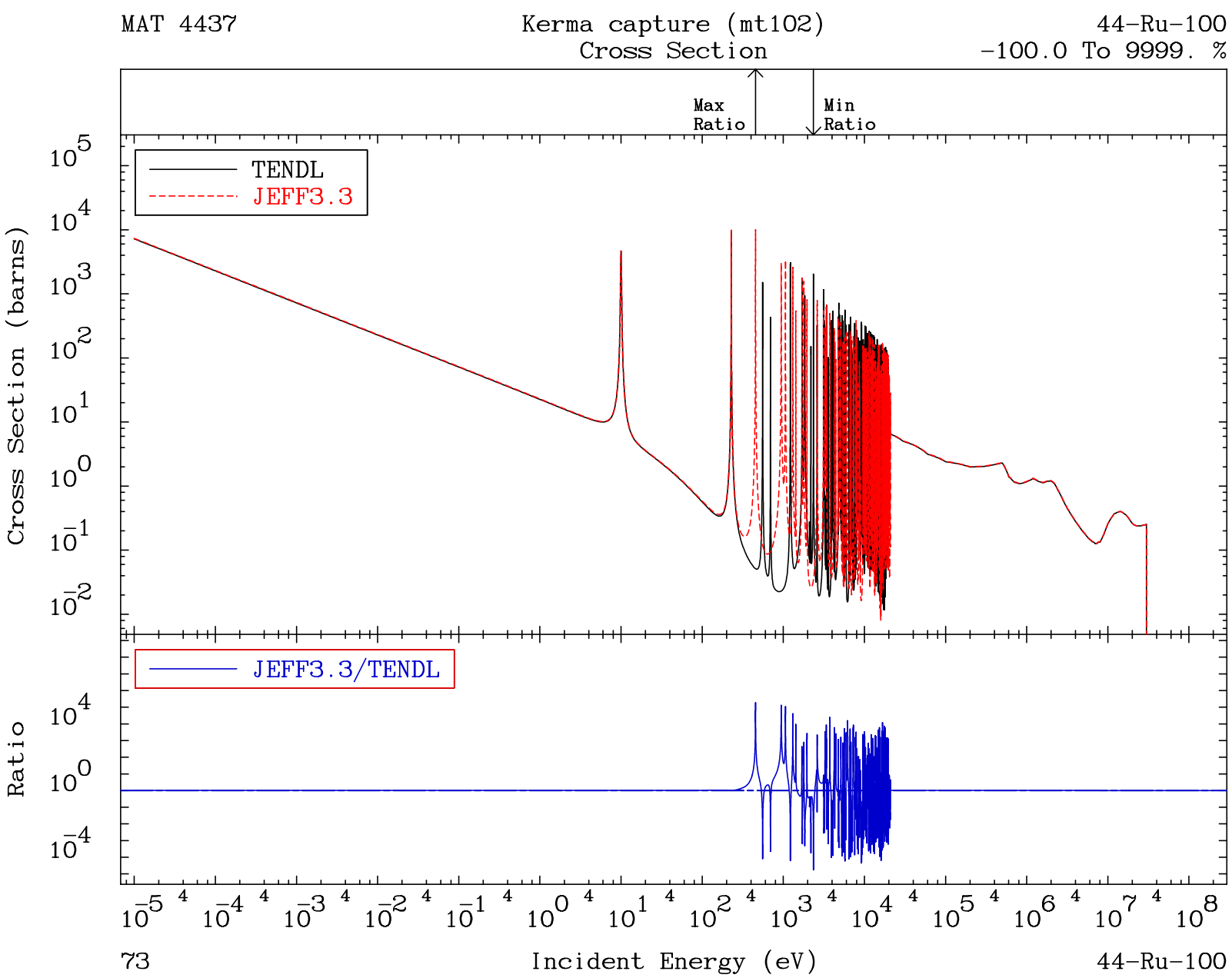

MAT 4437
Kerma total (eV-barns)
Cross Section
44-Ru-100
-99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
44-Ru-100

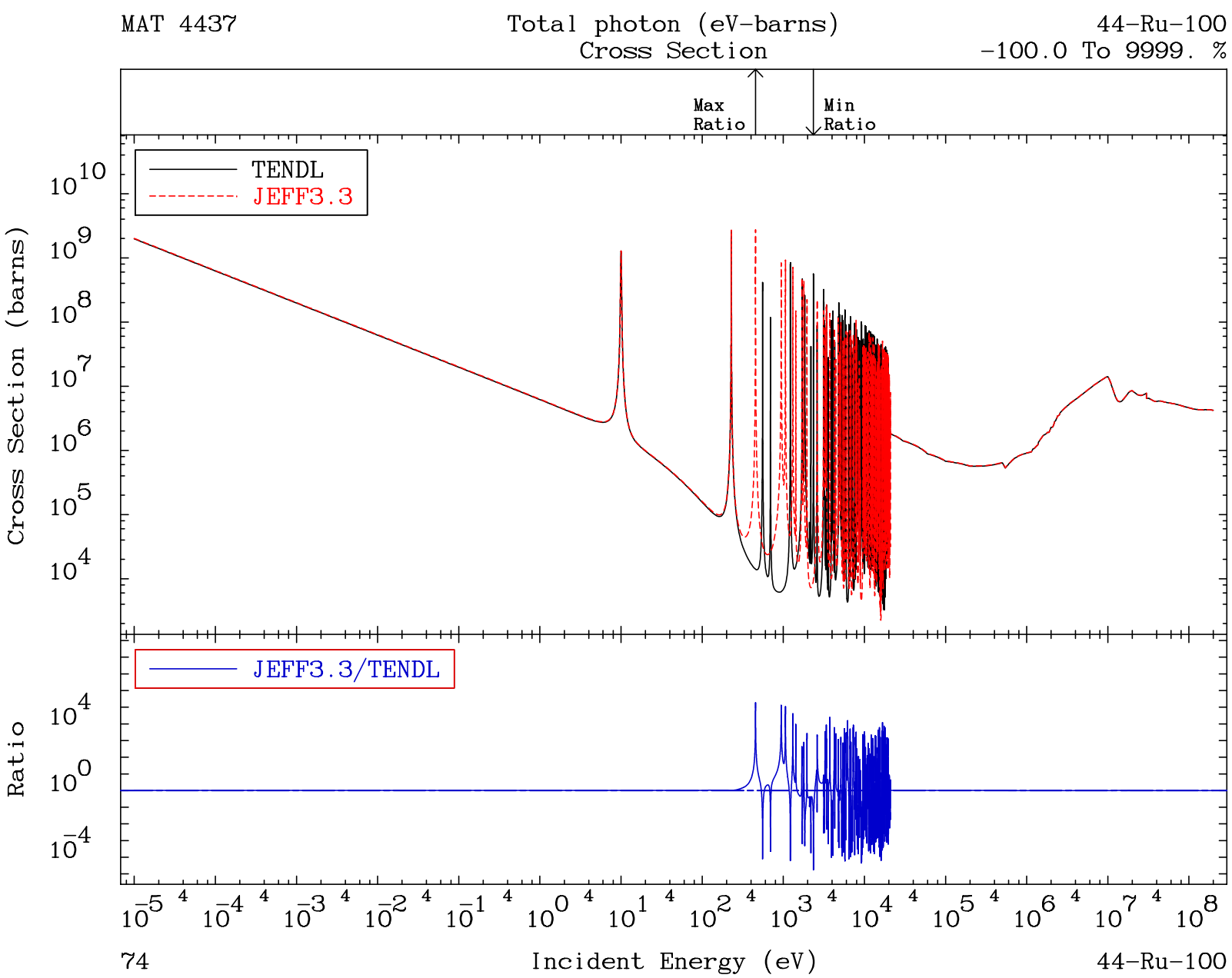

MAT 4437
Kerma elastic
Cross Section
44-Ru-100
-99.98 To 9999. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
44-Ru-100

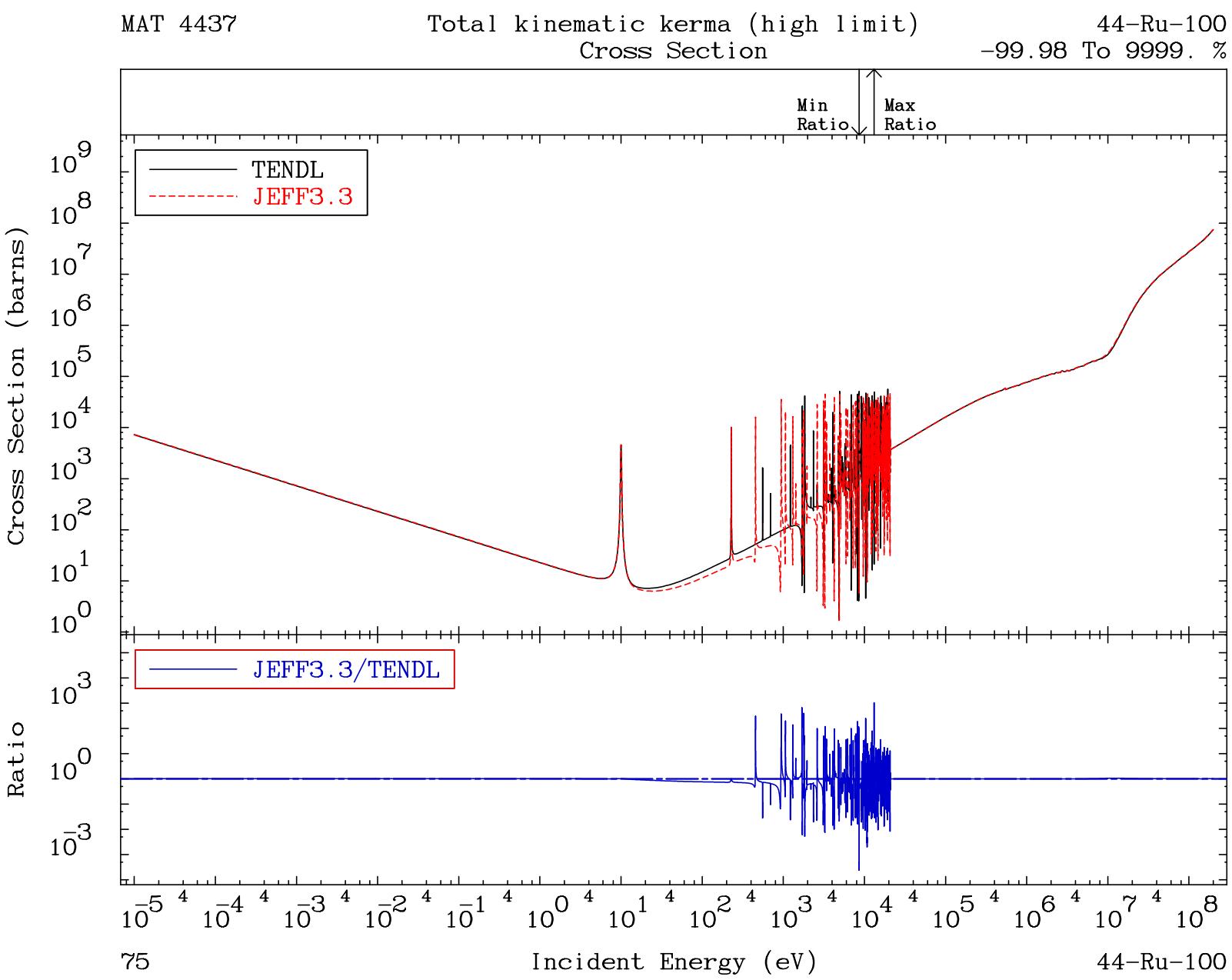

MAT 4437
Kerma non-elastic (all but mt2)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
44-Ru-100

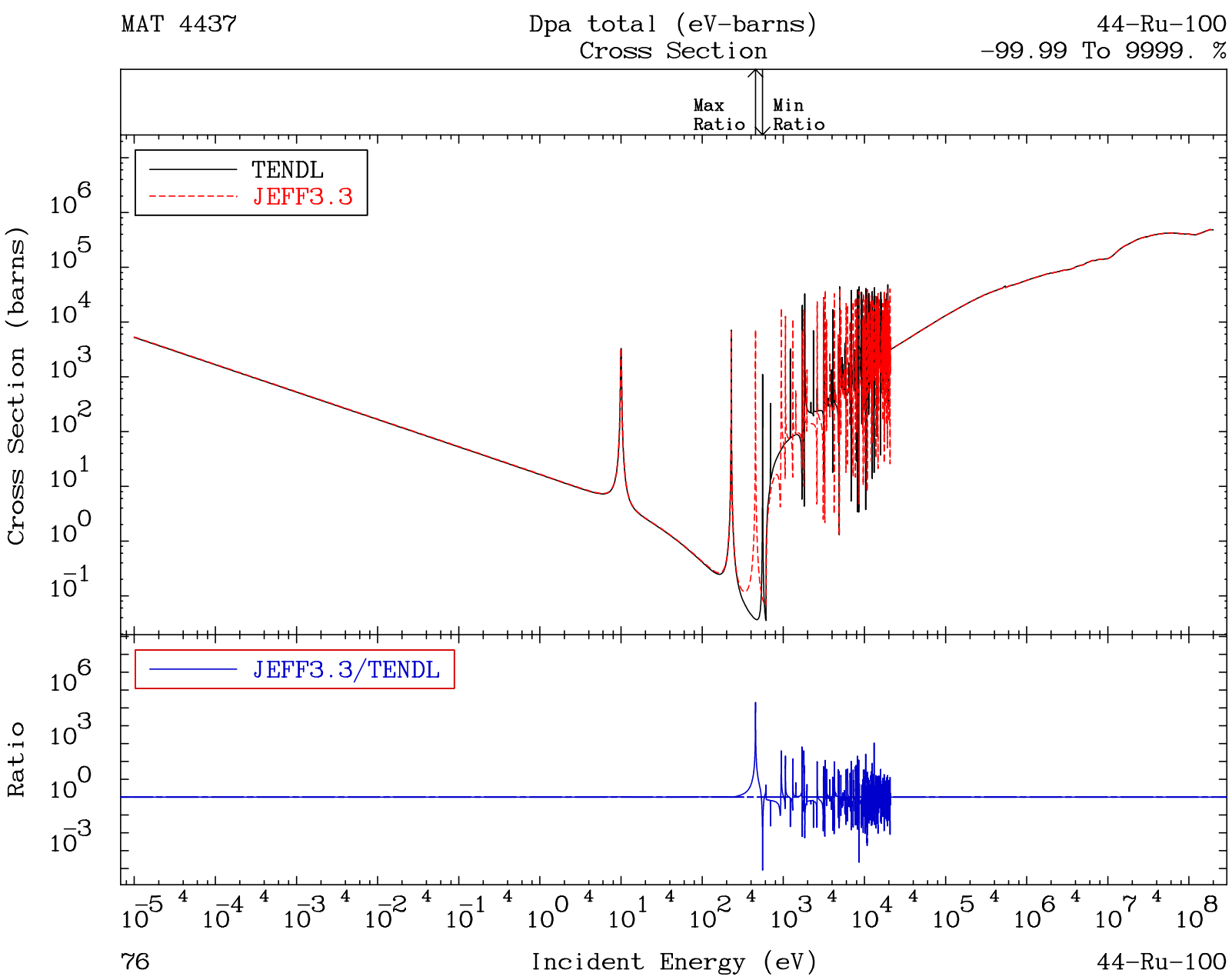

MAT 4437
Kerma inelastic (mt51-91)
Cross Section
44-Ru-100
-4.378 To 1.954 %
Max Ratio
Min Ratio
TENDL Threshold 544.96 keV
JEFF3.3 Threshold 544.96 keV
Cross Section (kilo-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
71
Incident Energy (eV)
44-Ru-100

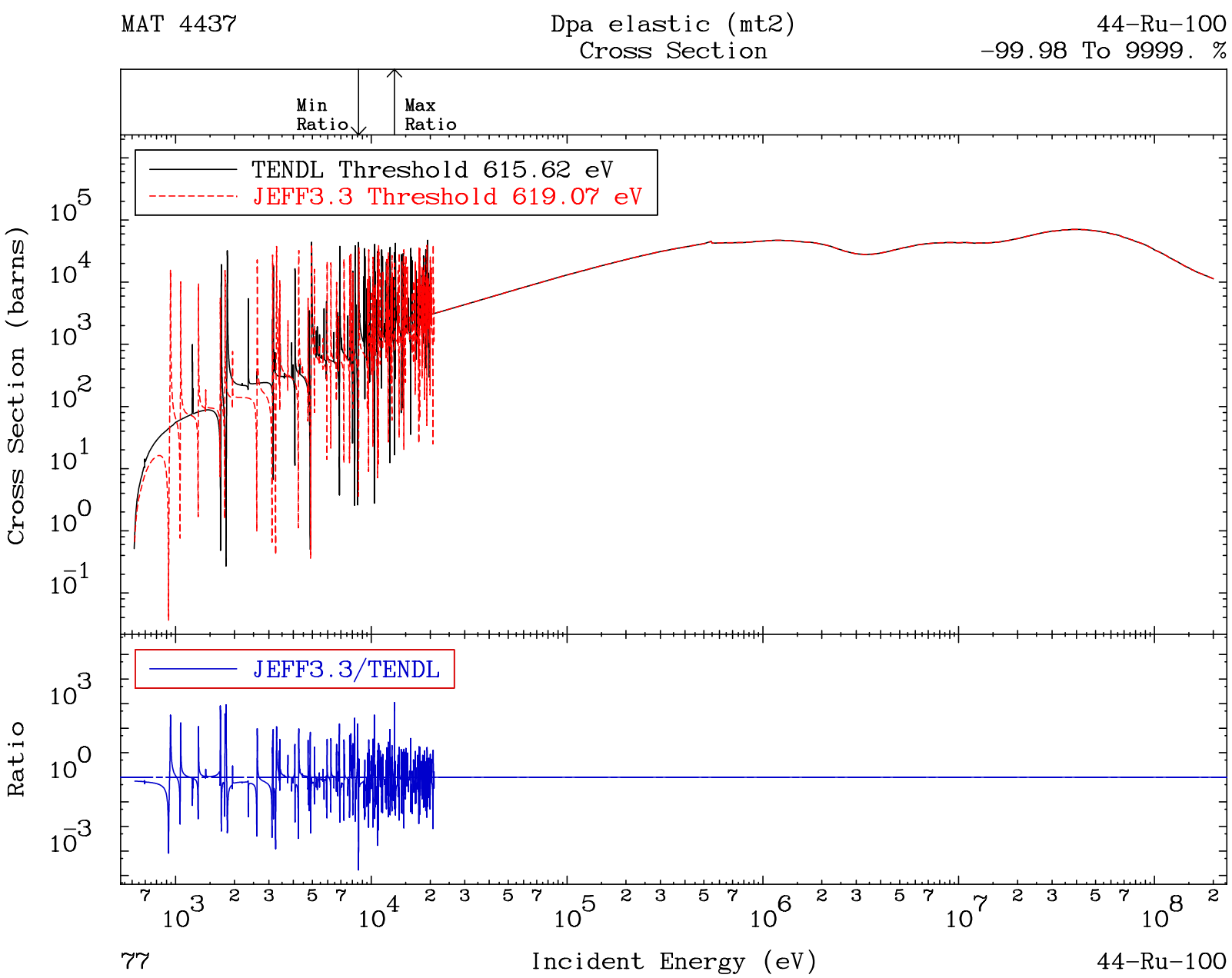

MAT 4437
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
44-Ru-100
-4.378 To 1.954 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
72
Incident Energy (eV)
44-Ru-100

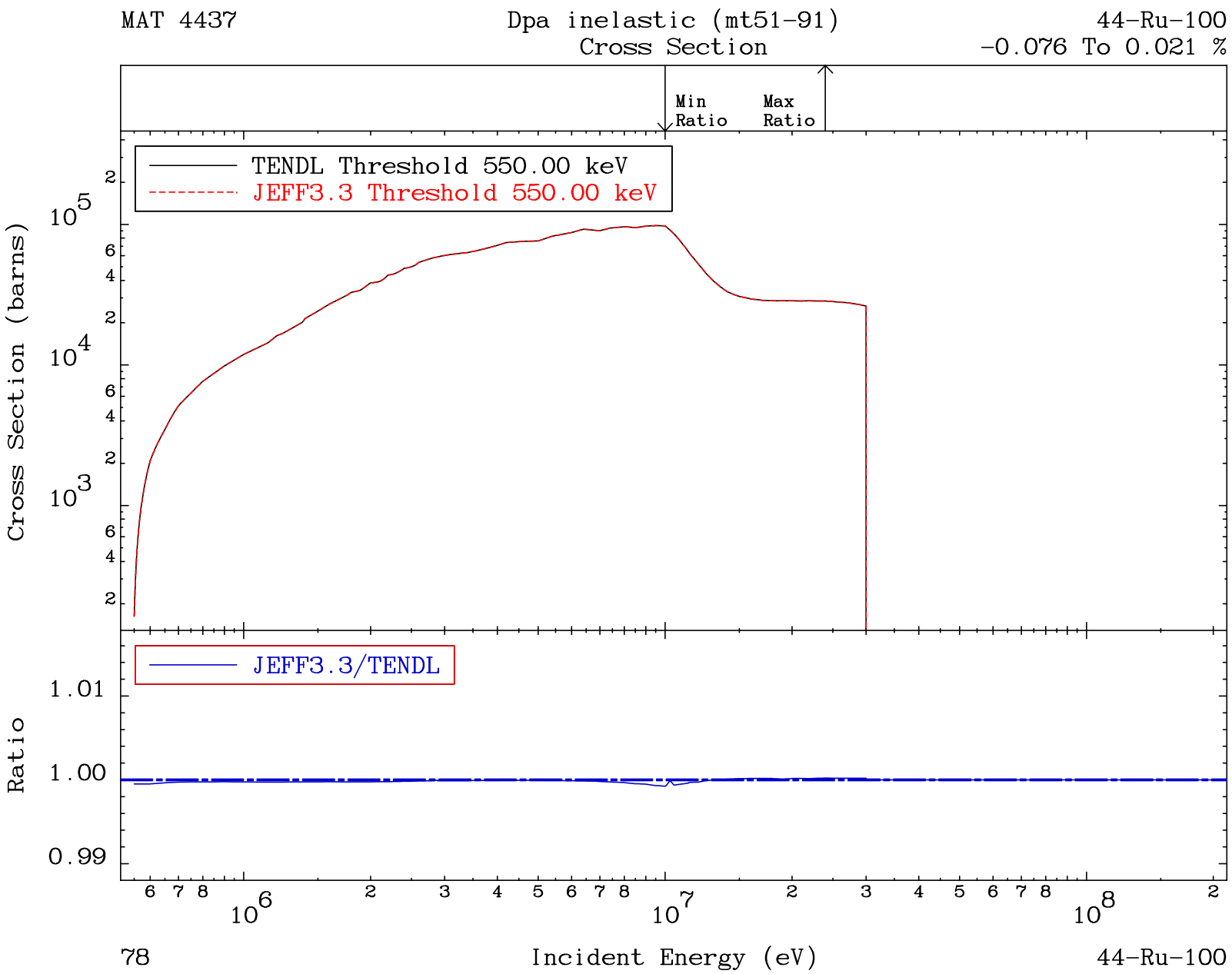

MAT 4437
Kerma capture (mt102)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
73
Incident Energy (eV)
44-Ru-100

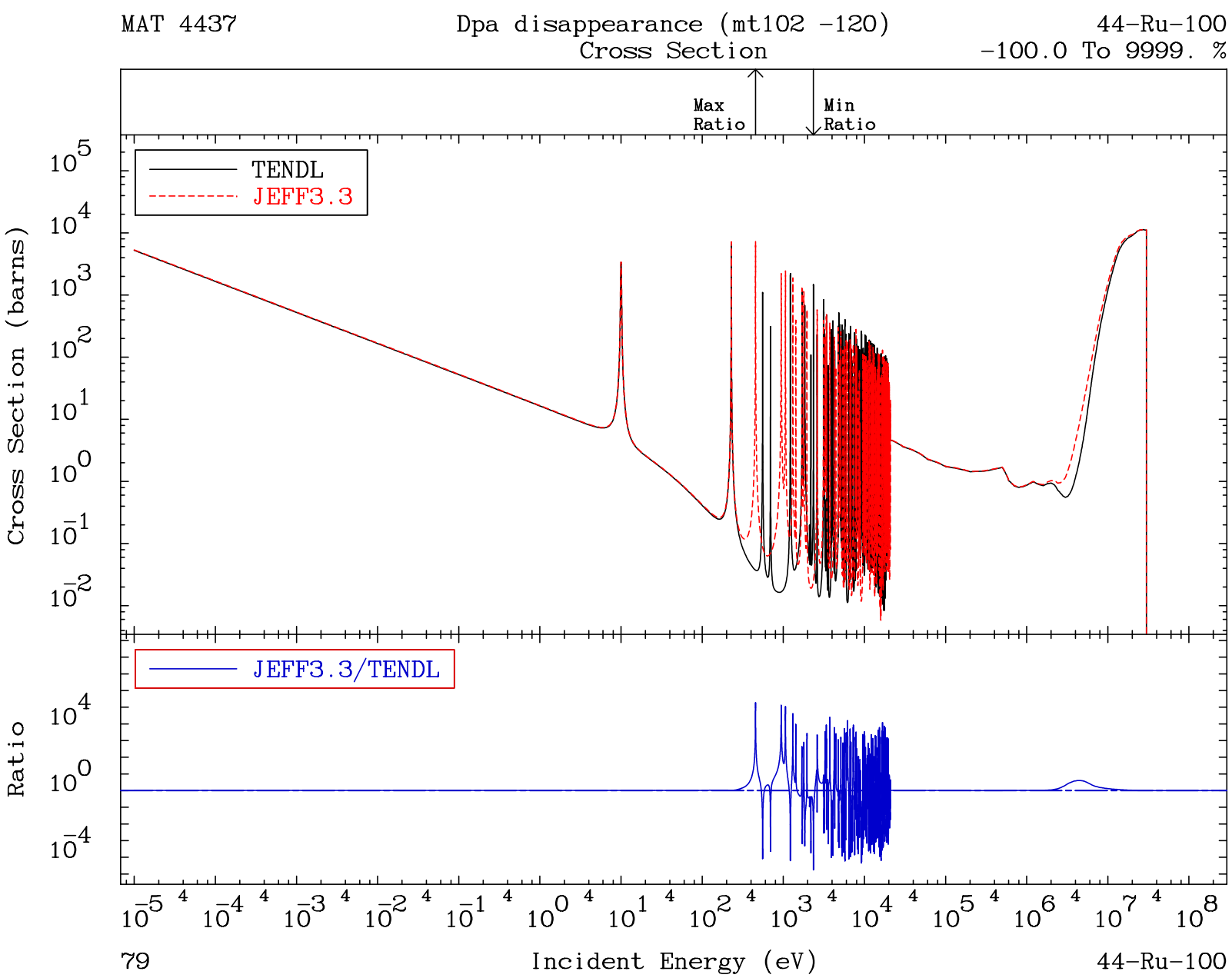

MAT 4437
Total photon (eV-barns)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
74
Incident Energy (eV)
44-Ru-100

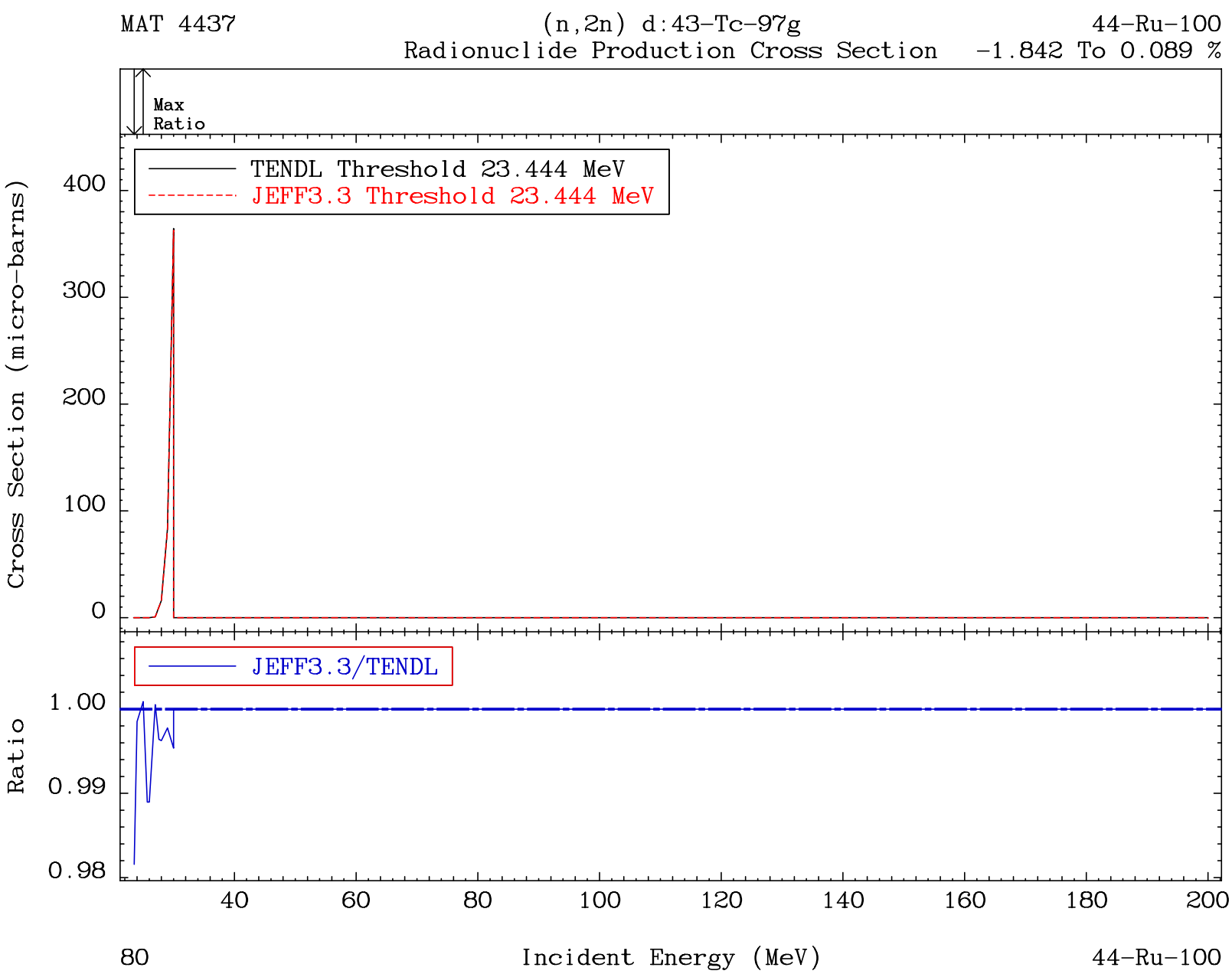

MAT 4437
Total kinematic kerma (high limit)
Cross Section
44-Ru-100
-99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
44-Ru-100

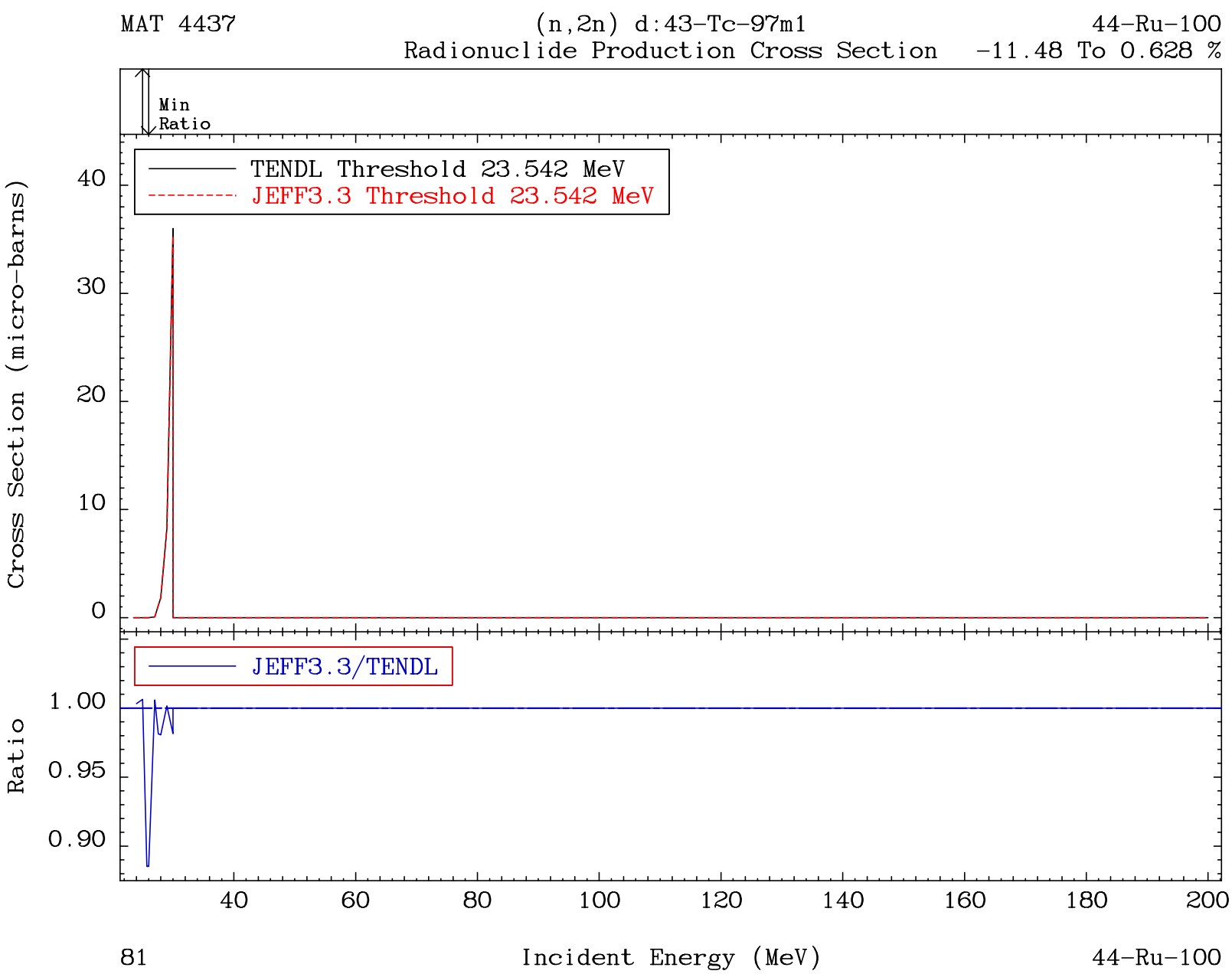

MAT 4437
Dpa total (eV-barns)
Cross Section
44-Ru-100
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
44-Ru-100

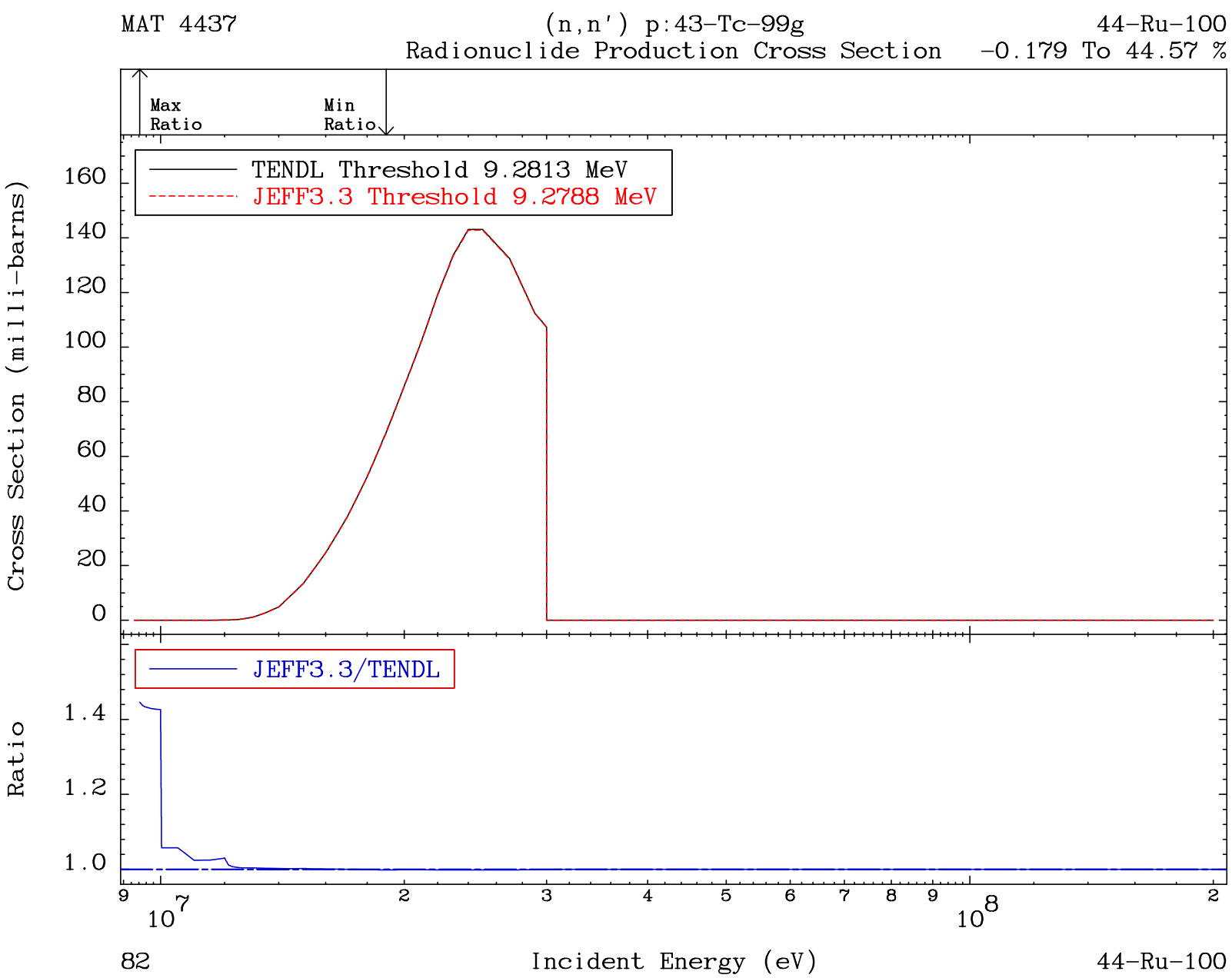

MAT 4437
Dpa elastic (mt2)
Cross Section
44-Ru-100
-99.98 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 615.62 eV
JEFF3.3 Threshold 619.07 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
44-Ru-100

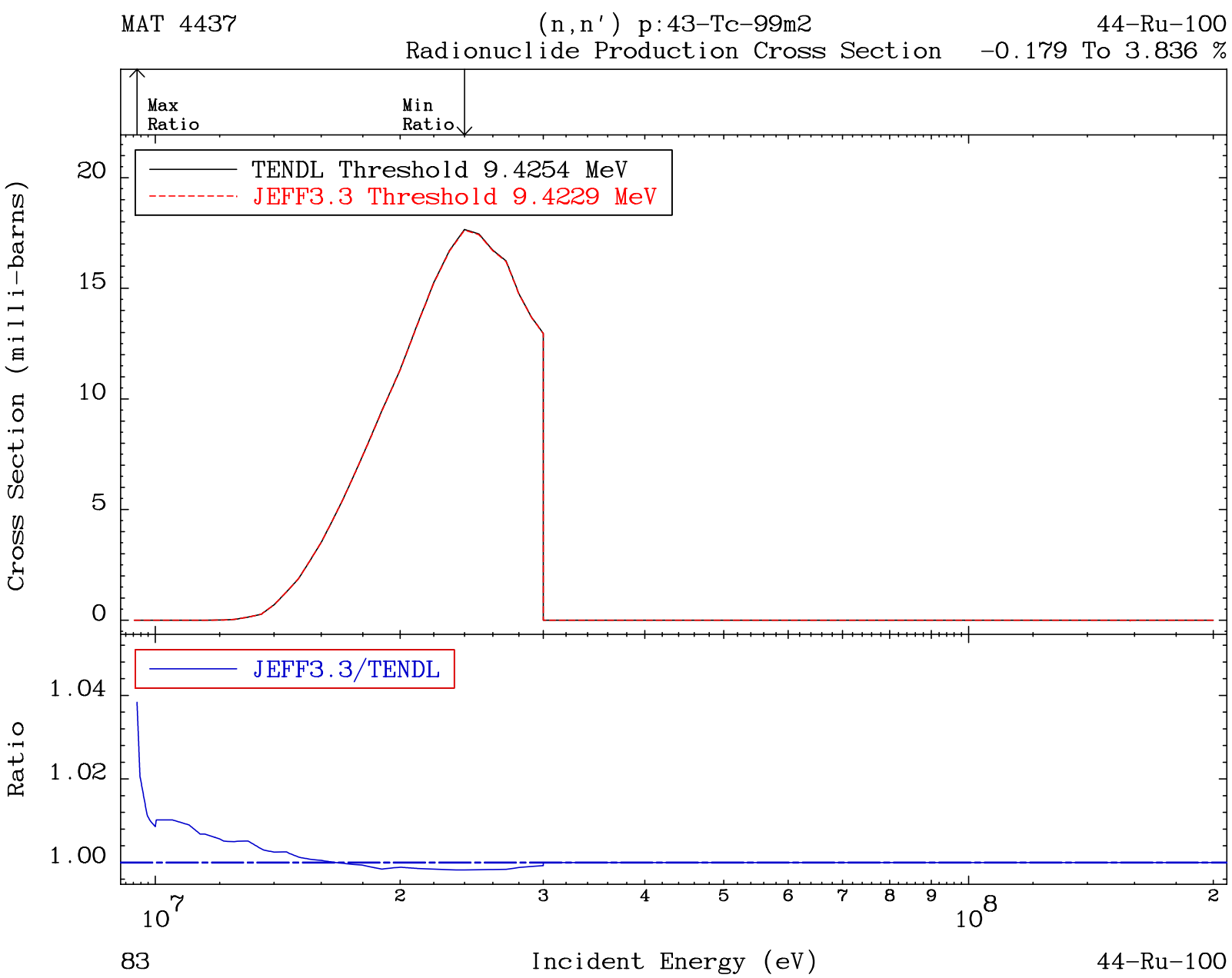

MAT 4437
Dpa inelastic (mt51-91)
Cross Section
44-Ru-100
-0.076 To 0.021 %
Min Ratio
Max Ratio
TENDL Threshold 550.00 keV
JEFF3.3 Threshold 550.00 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
44-Ru-100

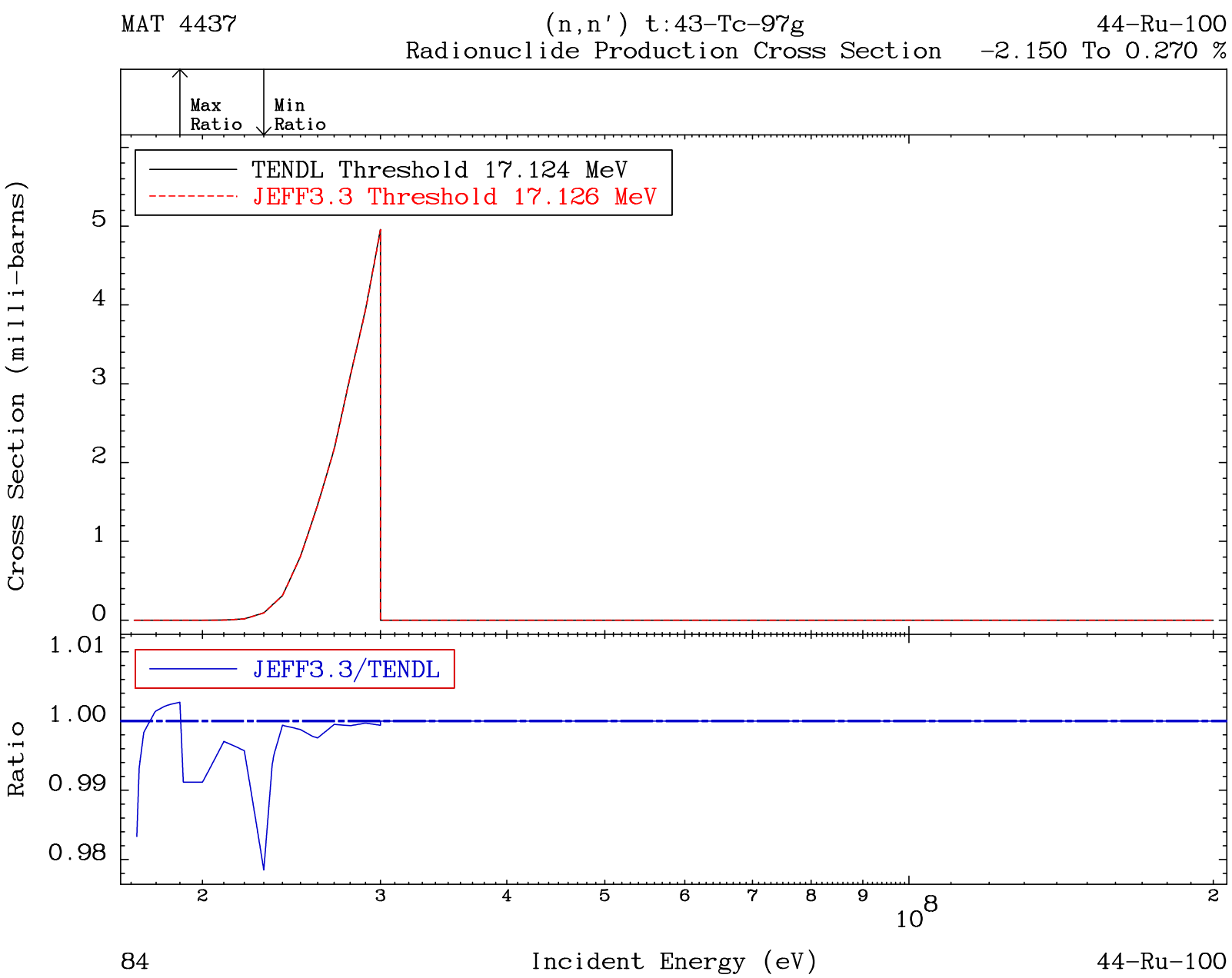

MAT 4437
Dpa disappearance (mt102 -120)
Cross Section
44-Ru-100
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
79
44-Ru-100

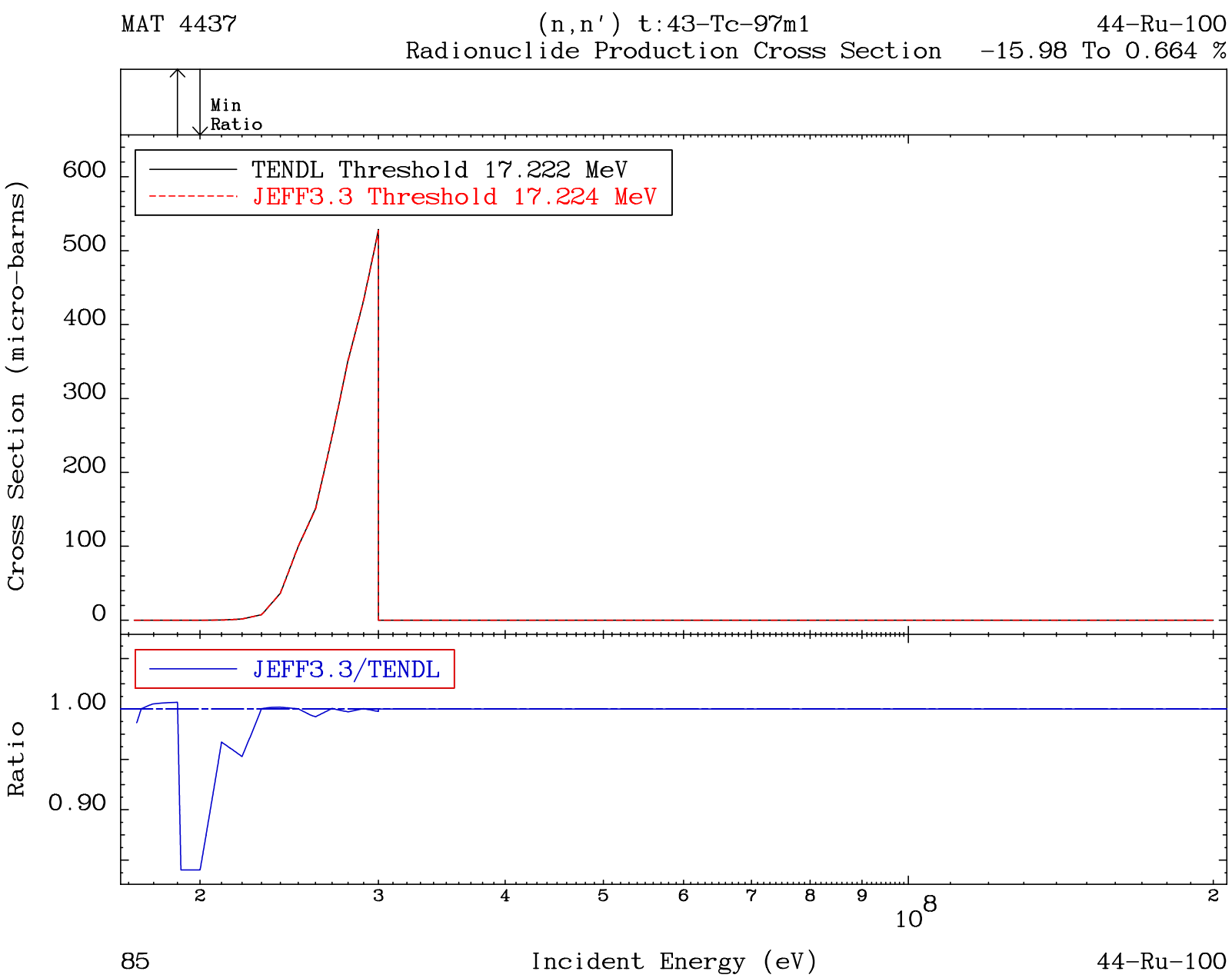

MAT 4437
(n,2n) d:43-Tc-97g
44-Ru-100
Radionuclide Production Cross Section
-1.842 To 0.089 %
Max
Ratio
TENDL Threshold 23.444 MeV
JEFF3.3 Threshold 23.444 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
44-Ru-100

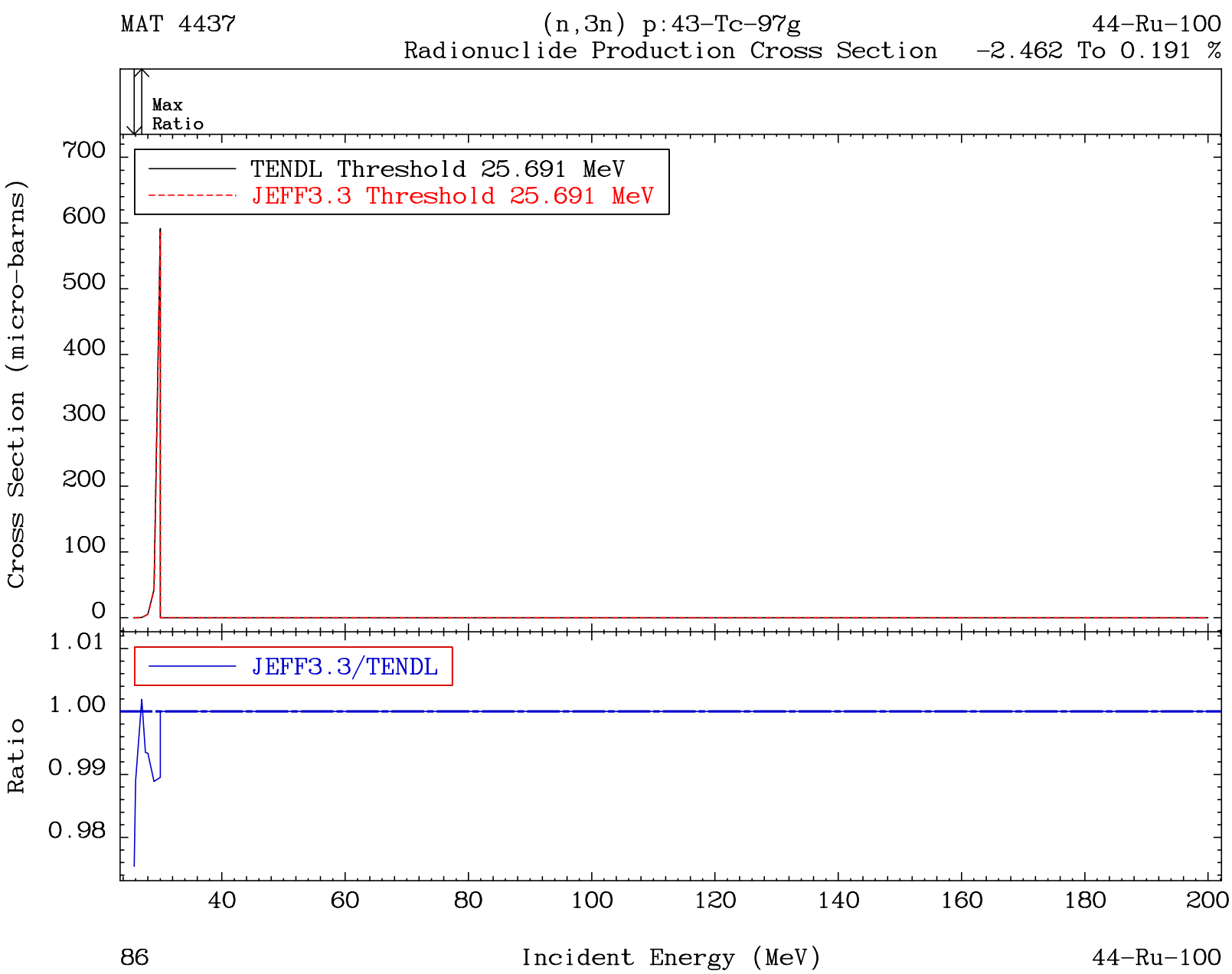

MAT 4437
(n,2n) d:43-Tc-97m1
44-Ru-100
Radionuclide Production Cross Section
-11.48 To 0.628 %
Min
Ratio
TENDL Threshold 23.542 MeV
JEFF3.3 Threshold 23.542 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
44-Ru-100

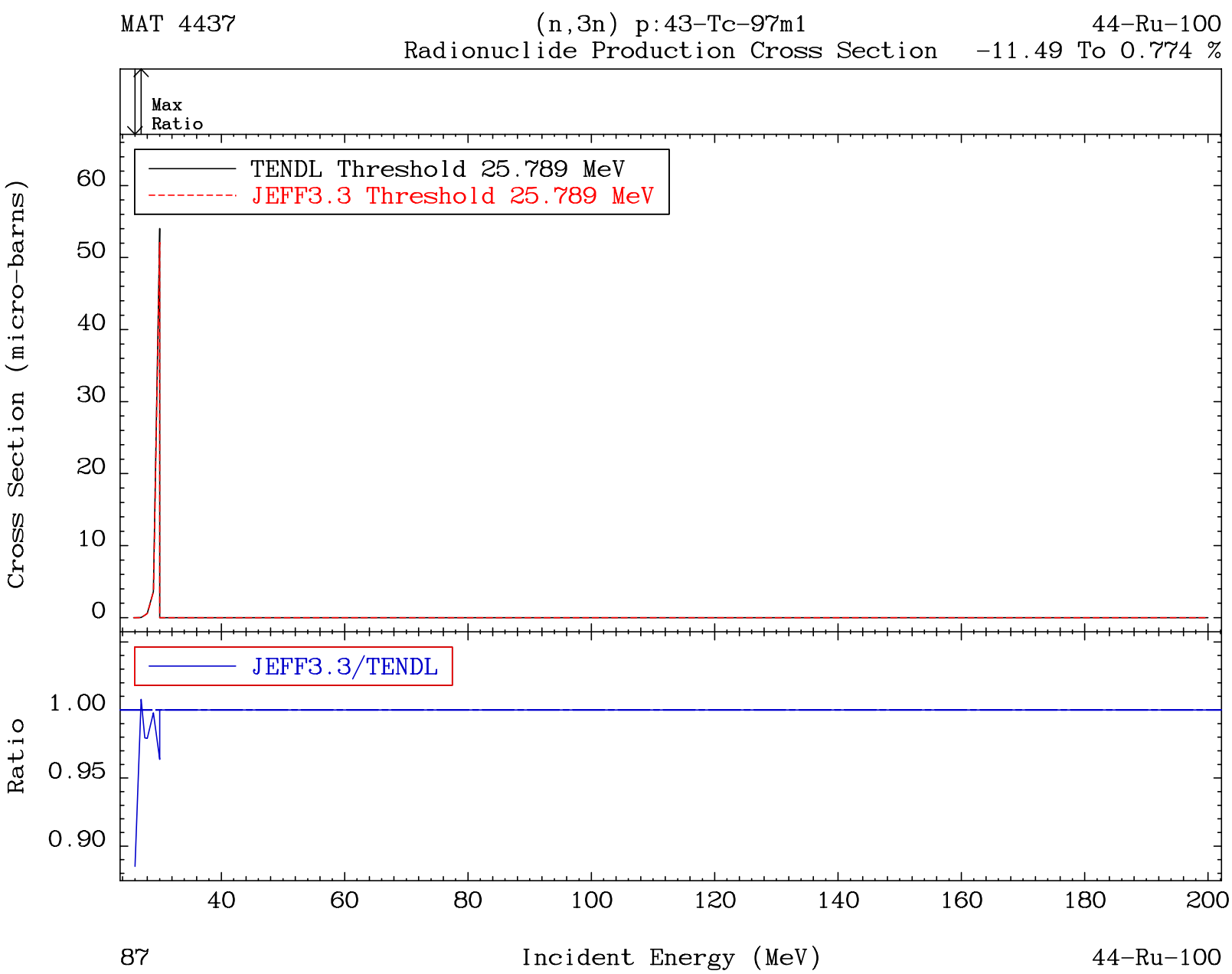

MAT 4437
(n,n') p:43-Tc-99g
44-Ru-100
Radionuclide Production Cross Section
-0.179 To 44.57 %
Max Ratio
Min Ratio
TENDL Threshold 9.2813 MeV
JEFF3.3 Threshold 9.2788 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
44-Ru-100

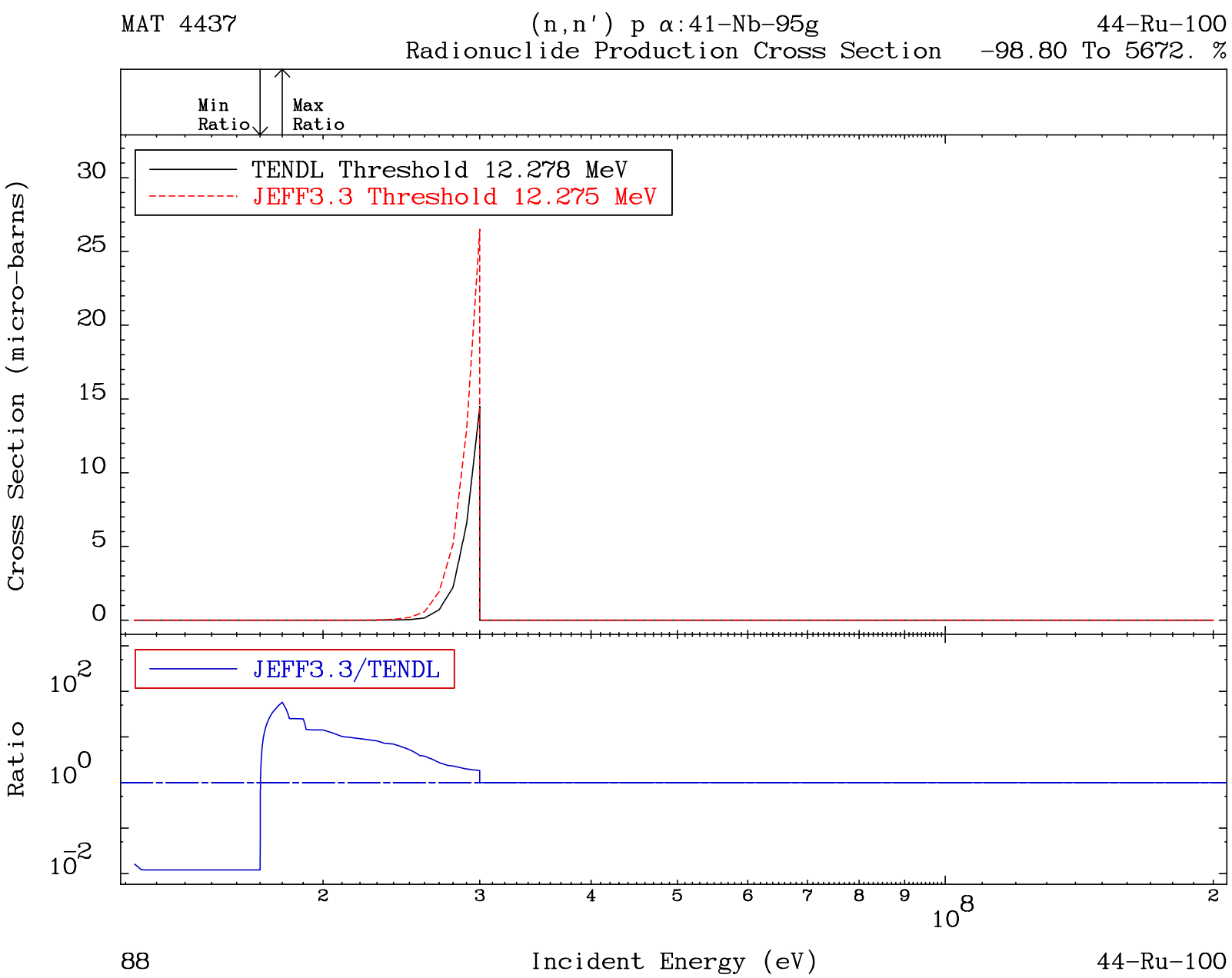

MAT 4437
(n,n') p:43-Tc-99m2
44-Ru-100
Radionuclide Production Cross Section
-0.179 To 3.836 %
Max Ratio
Min Ratio
TENDL Threshold 9.4254 MeV
JEFF3.3 Threshold 9.4229 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
10^7
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
44-Ru-100

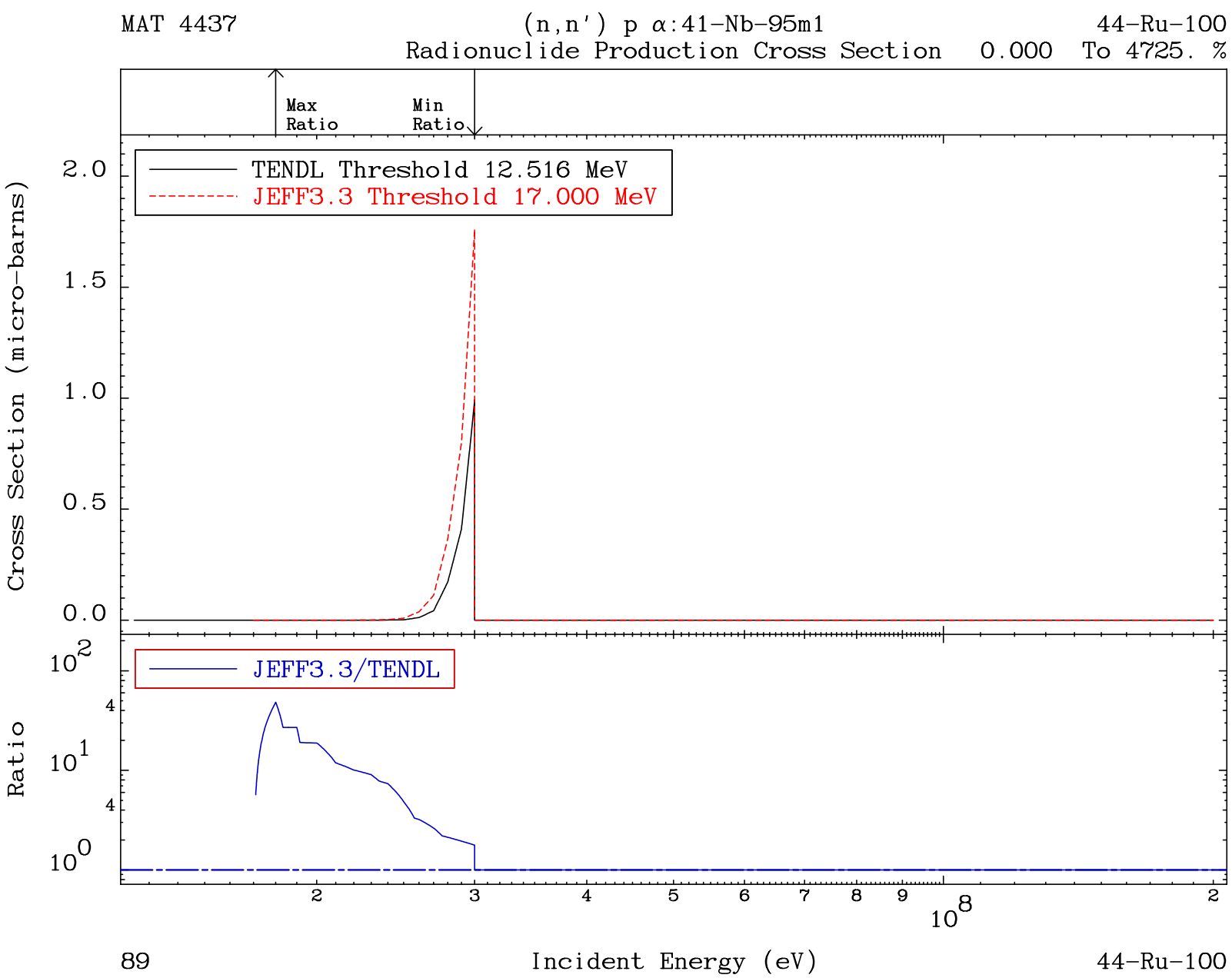

MAT 4437
(n,n') t:43-Tc-97g
44-Ru-100
Radionuclide Production Cross Section
-2.150 To 0.270 %
Max Ratio
Min Ratio
TENDL Threshold 17.124 MeV
JEFF3.3 Threshold 17.126 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.98
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
44-Ru-100

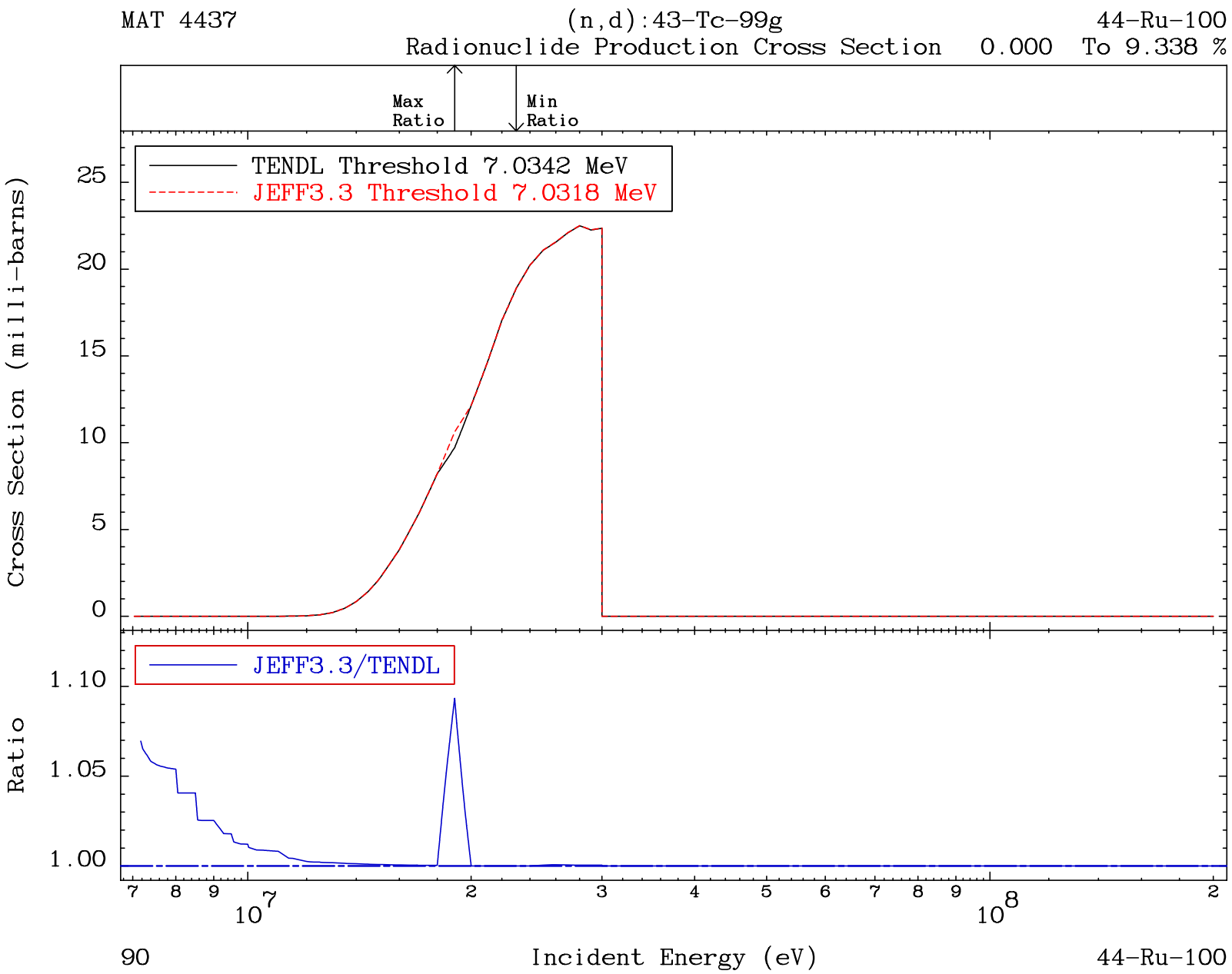

MAT 4437
(n,n') t:43-Tc-97m1
44-Ru-100
Radionuclide Production Cross Section
-15.98 To 0.664 %
Min
Ratio
TENDL Threshold 17.222 MeV
JEFF3.3 Threshold 17.224 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.90
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
44-Ru-100

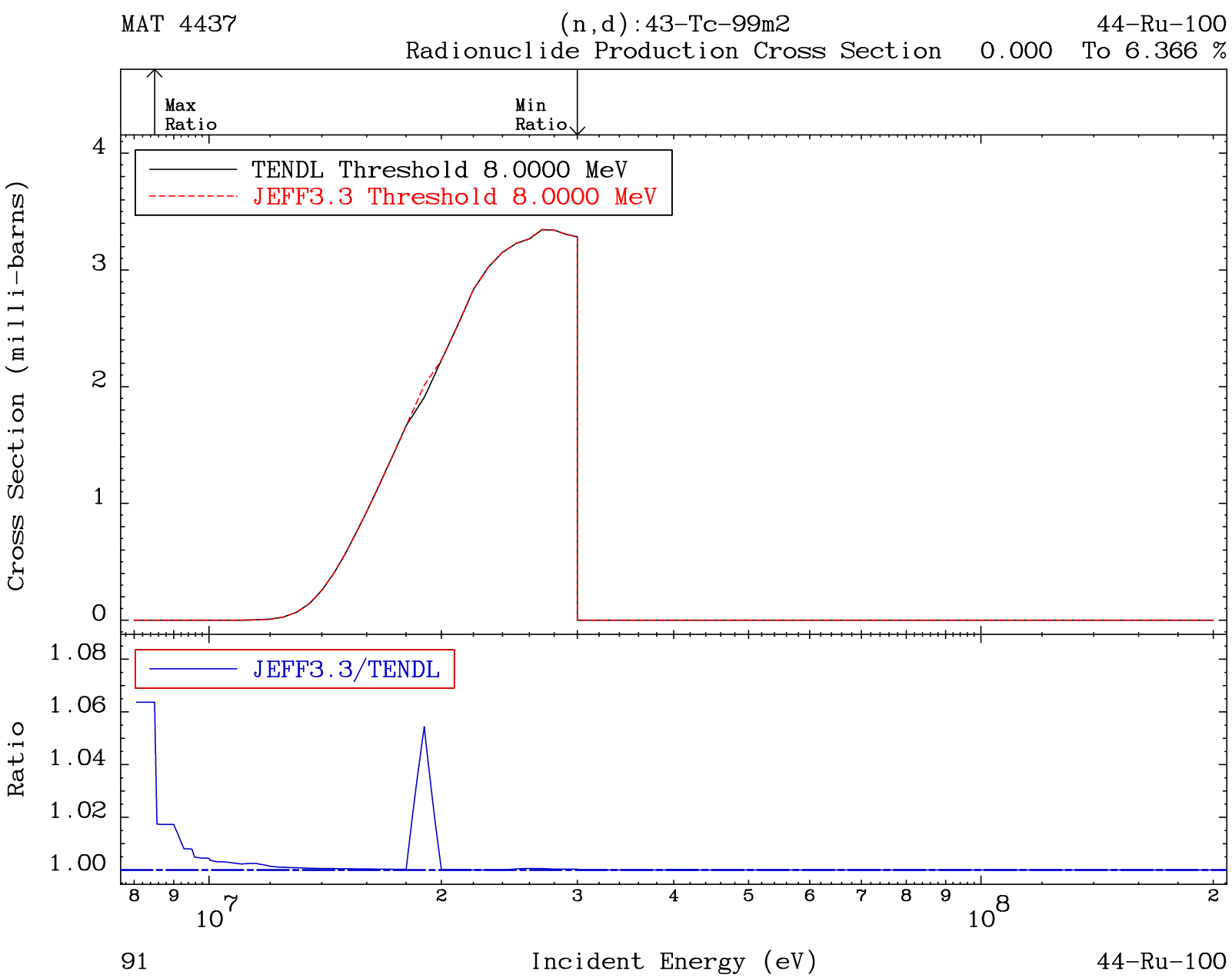

MAT 4437
(n,3n) p:43-Tc-97g
44-Ru-100
Radionuclide Production Cross Section
-2.462 To 0.191 %
Max
Ratio
TENDL Threshold 25.691 MeV
JEFF3.3 Threshold 25.691 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
0.98
40
60
80
100
120
140
160
180
200
86
Incident Energy (MeV)
44-Ru-100

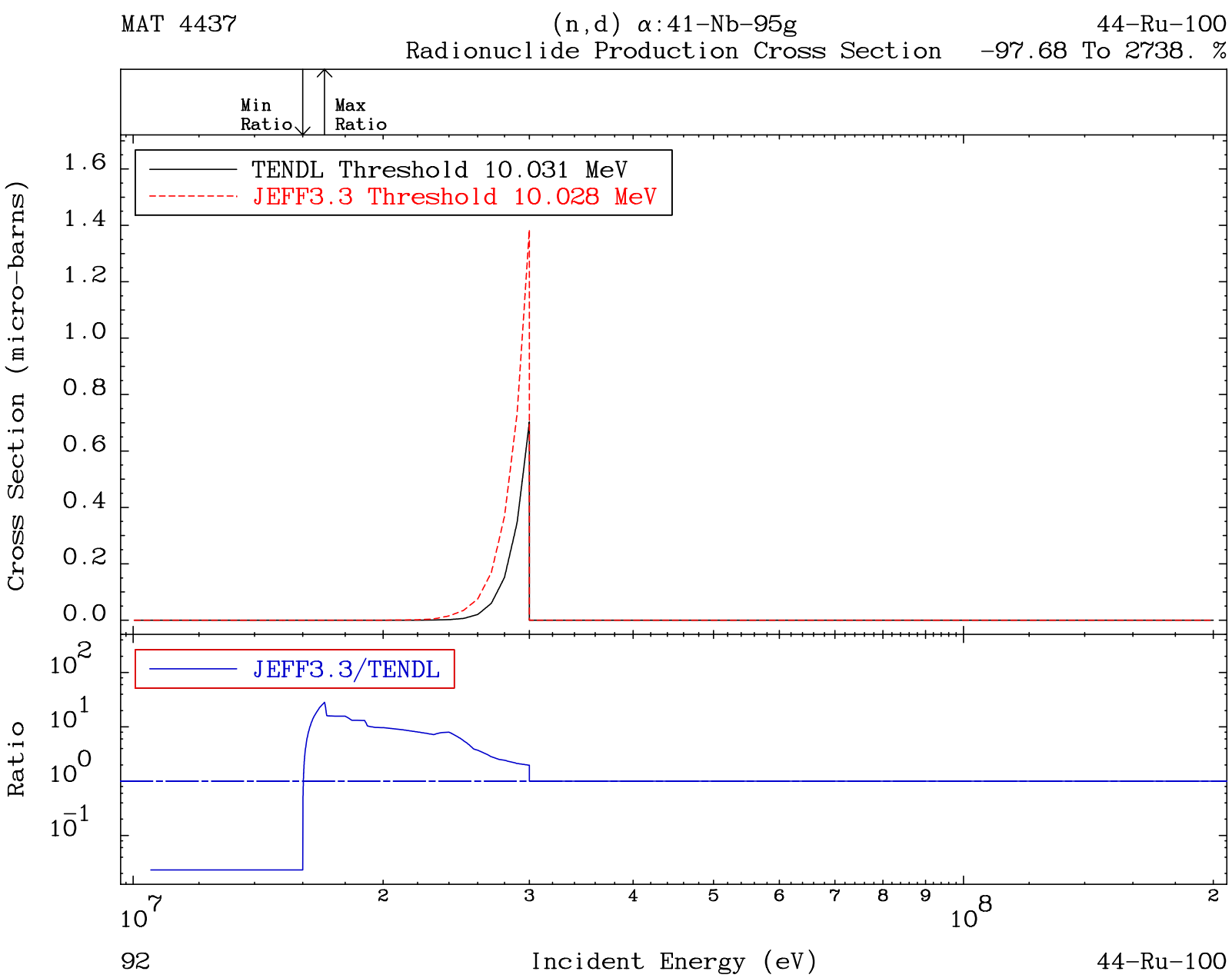

MAT 4437
(n,3n) p:43-Tc-97m1
44-Ru-100
Radionuclide Production Cross Section
-11.49 To 0.774 %
Max
Ratio
TENDL Threshold 25.789 MeV
JEFF3.3 Threshold 25.789 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
40
60
80
100
120
140
160
180
200
87
Incident Energy (MeV)
44-Ru-100

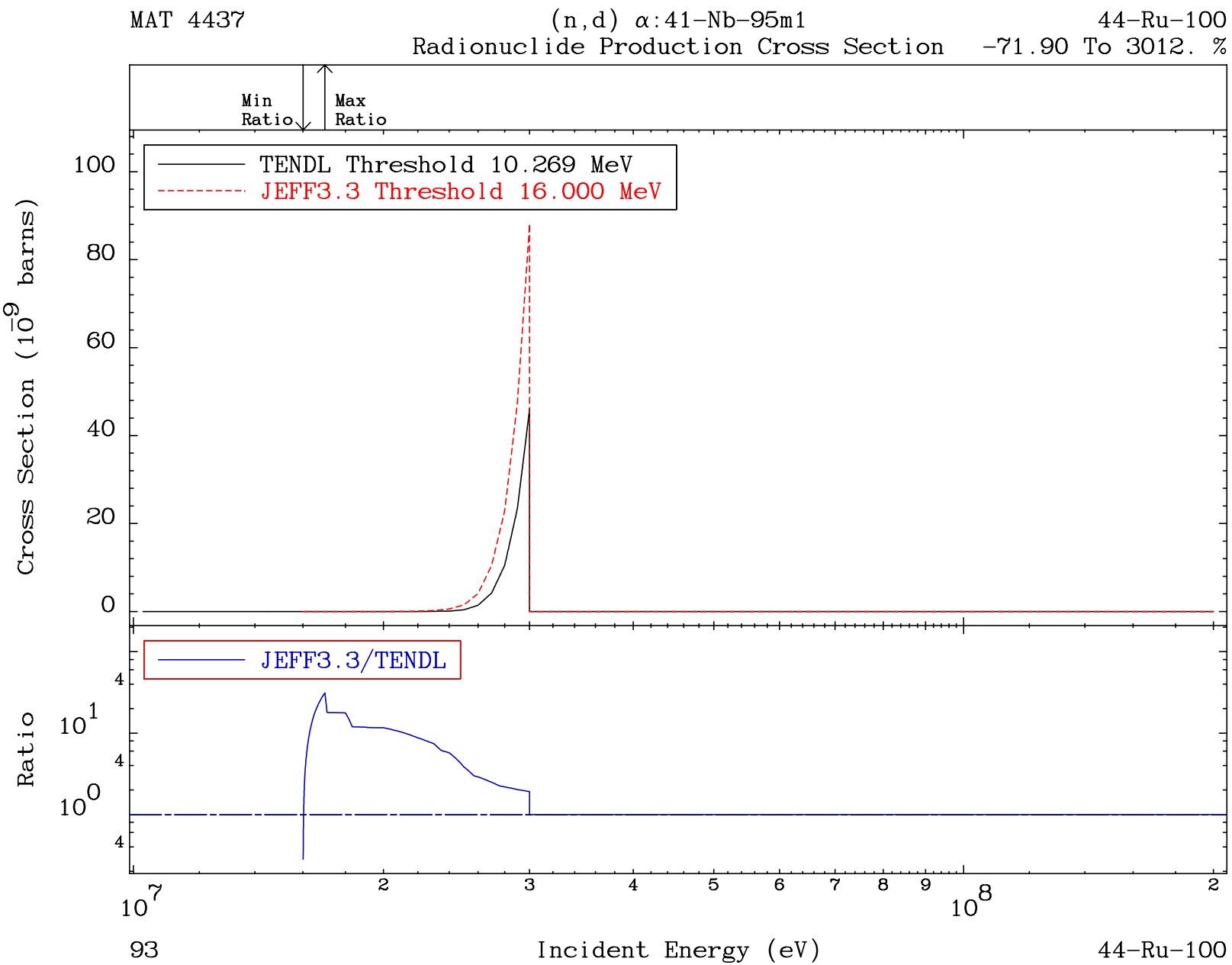

MAT 4437
(n,n') p α:41-Nb-95g
44-Ru-100
Radionuclide Production Cross Section
-98.80 To 5672. %
Min Ratio
Max Ratio
TENDL Threshold 12.278 MeV
JEFF3.3 Threshold 12.275 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
44-Ru-100


MAT 4437
(n,n') p α:41-Nb-95m1
44-Ru-100
Radionuclide Production Cross Section 0.000 To 4725. %
Max Ratio
Min Ratio
TENDL Threshold 12.516 MeV
JEFF3.3 Threshold 17.000 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
44-Ru-100


MAT 4437
(n,d):43-Tc-99g
44-Ru-100
Radionuclide Production Cross Section 0.000 To 9.338 %
Max Ratio
Min Ratio
TENDL Threshold 7.0342 MeV
JEFF3.3 Threshold 7.0318 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
44-Ru-100


MAT 4437
(n,d):43-Tc-99m2
44-Ru-100
Radionuclide Production Cross Section 0.000 To 6.366 %
Max Ratio
Min Ratio
TENDL Threshold 8.0000 MeV
JEFF3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
91
44-Ru-100


MAT 4437
(n,d) α:41-Nb-95g
44-Ru-100
Radionuclide Production Cross Section -97.68 To 2738. %
Min Ratio
Max Ratio
TENDL Threshold 10.031 MeV
JEFF3.3 Threshold 10.028 MeV
Cross Section (micro-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
44-Ru-100


MAT 4437
(n,d) α:41-Nb-95m1
44-Ru-100
Radionuclide Production Cross Section -71.90 To 3012. %
Min Ratio
Max Ratio
TENDL Threshold 10.269 MeV
JEFF3.3 Threshold 16.000 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^{1}
10^{0}
10^{7}
10^{8}
Incident Energy (eV)
93
44-Ru-100