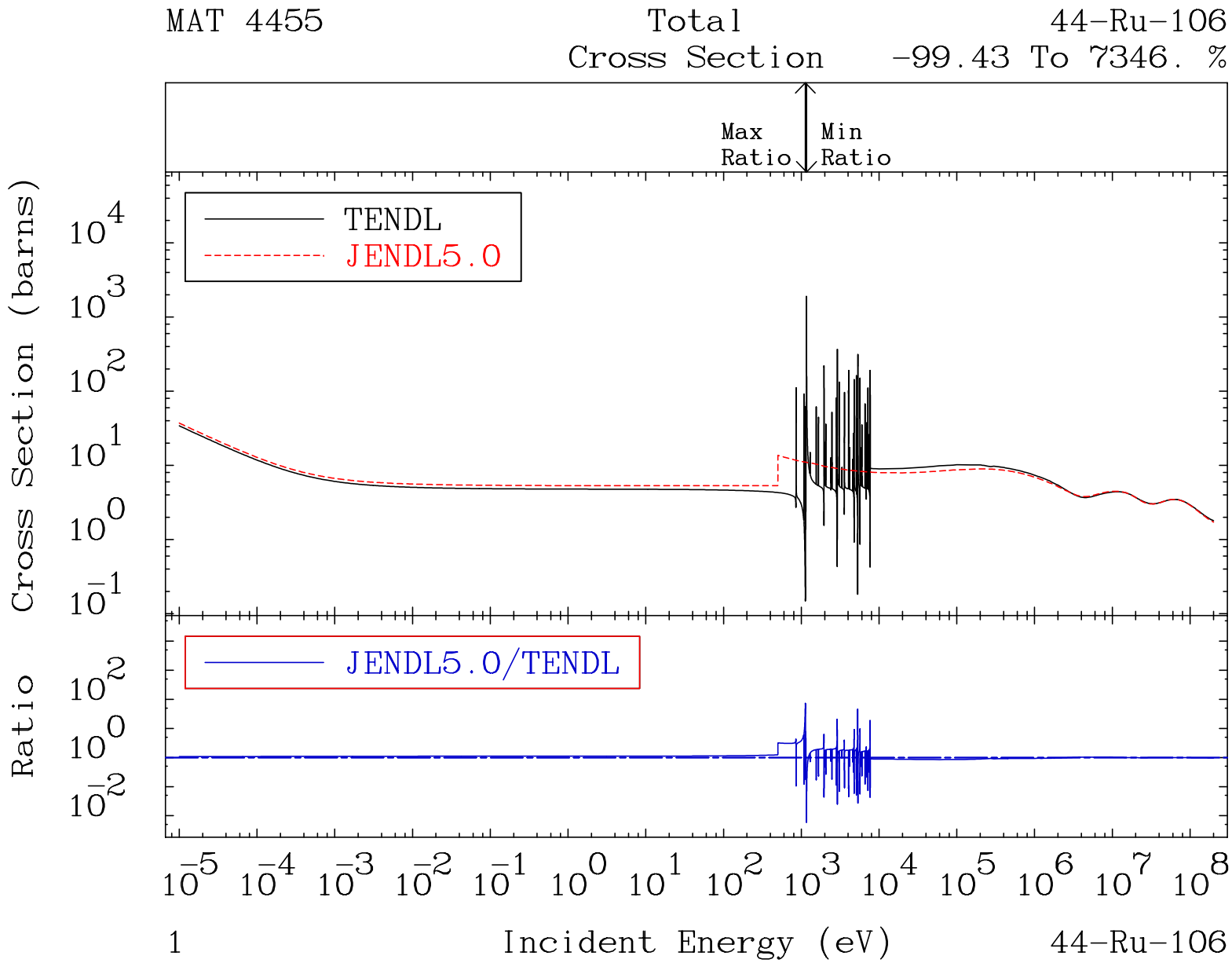
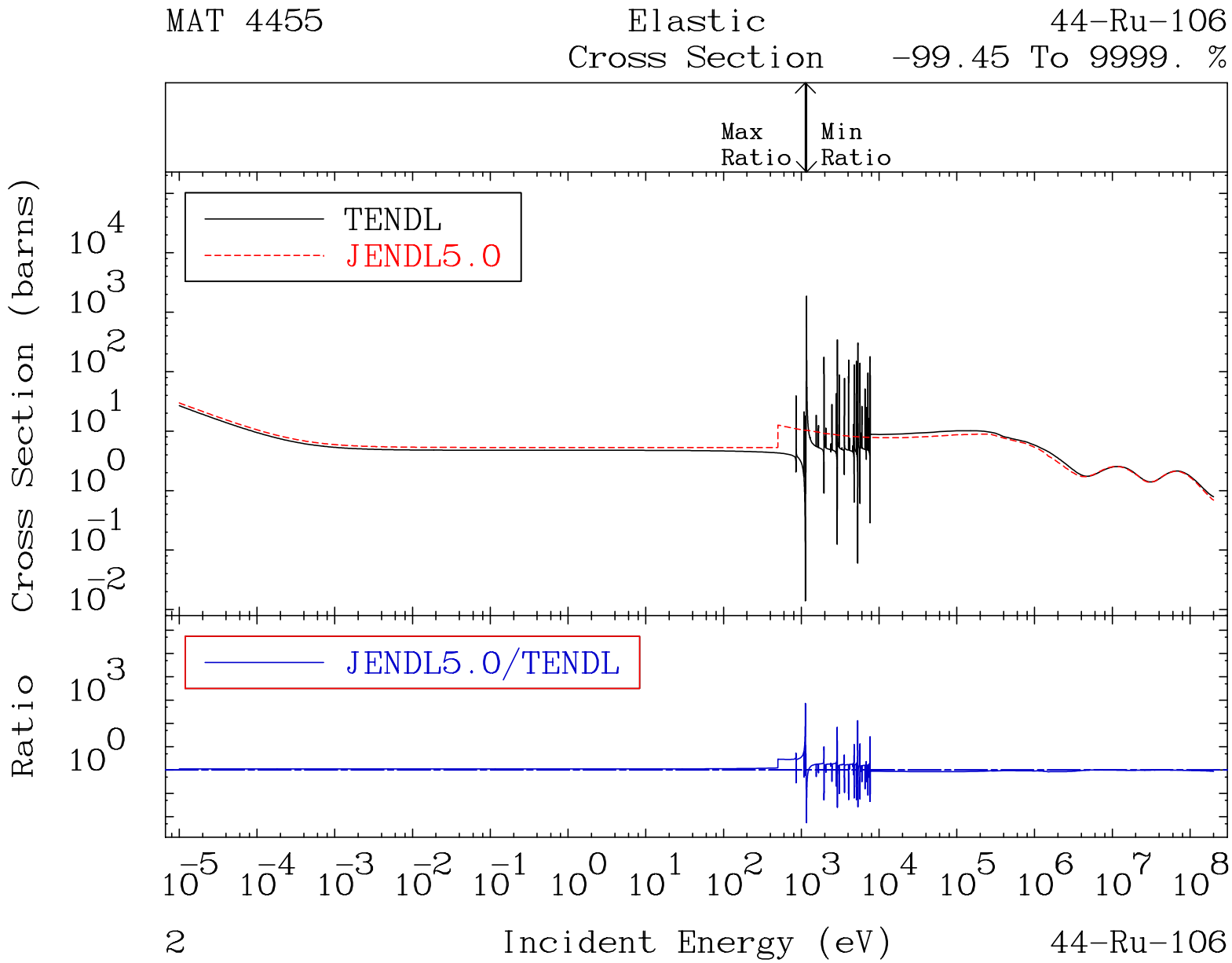
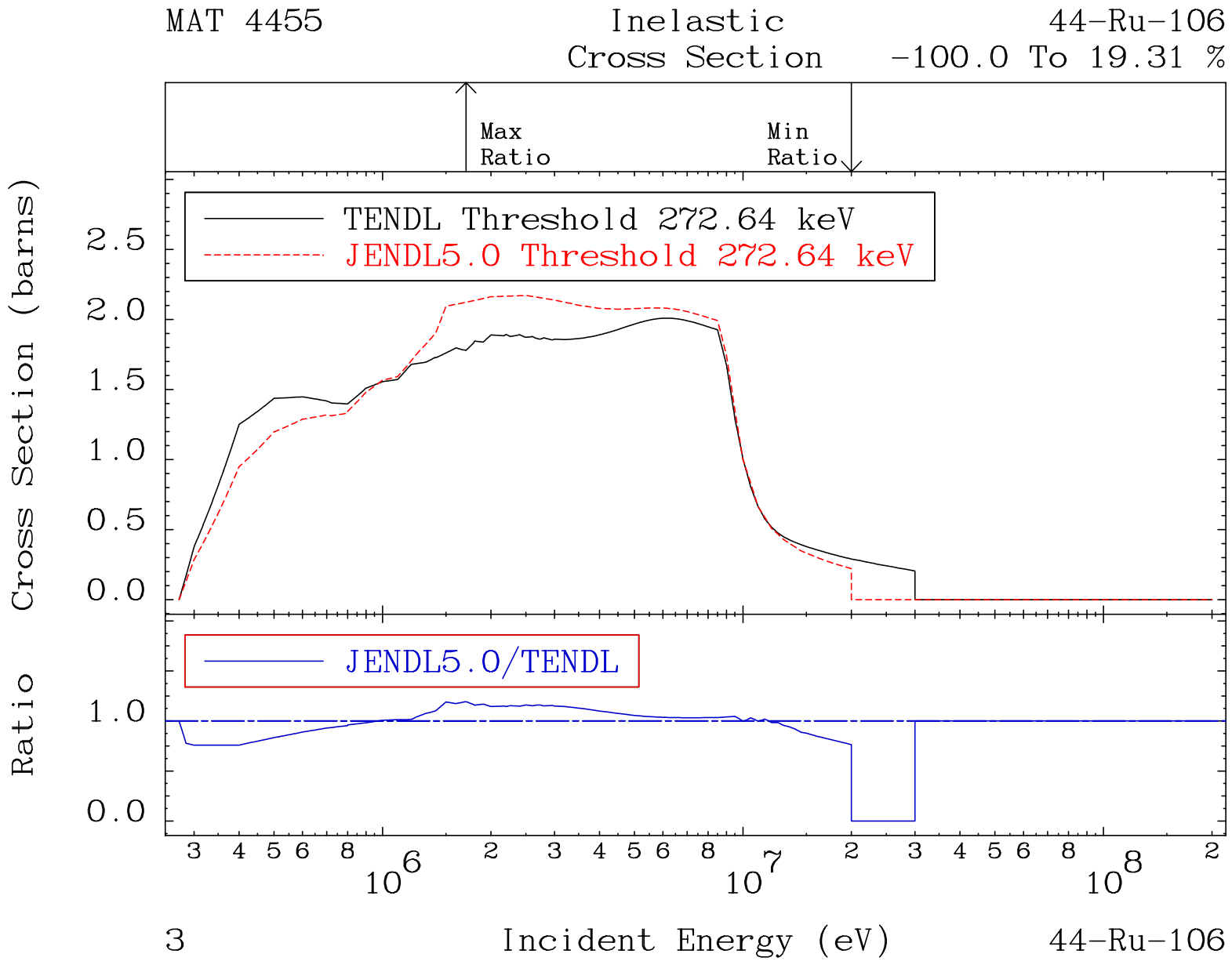
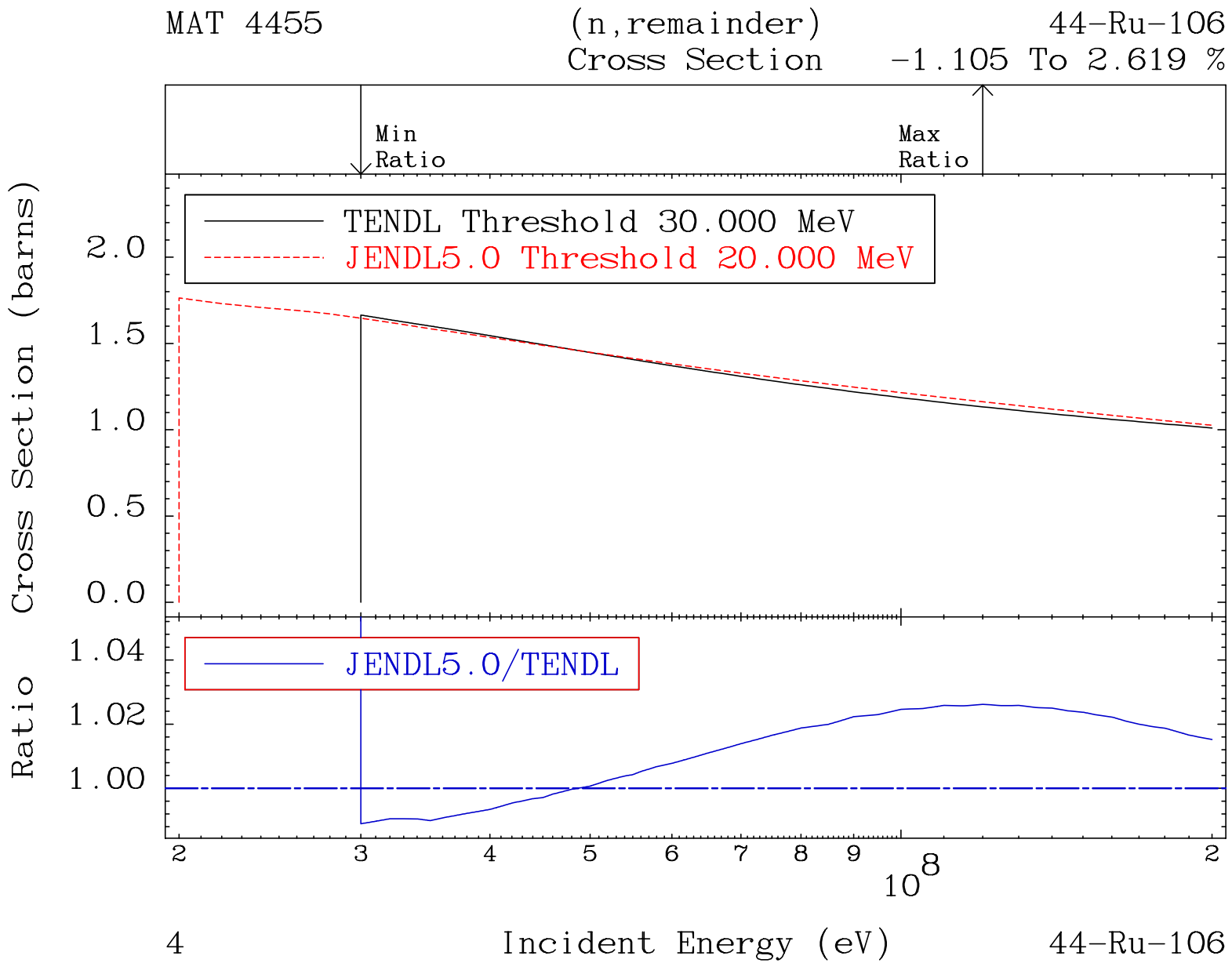
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

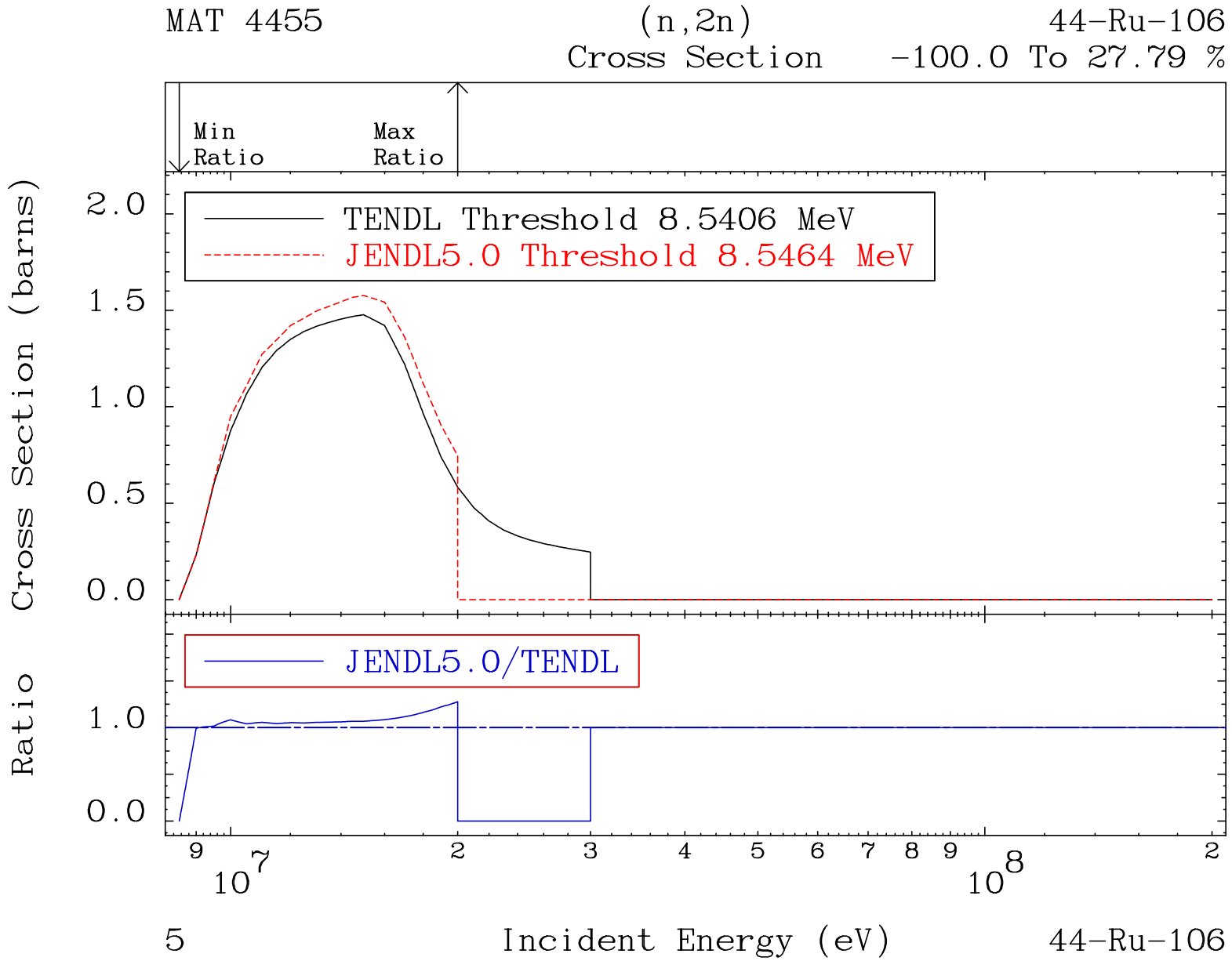
Press Mouse Button to Start

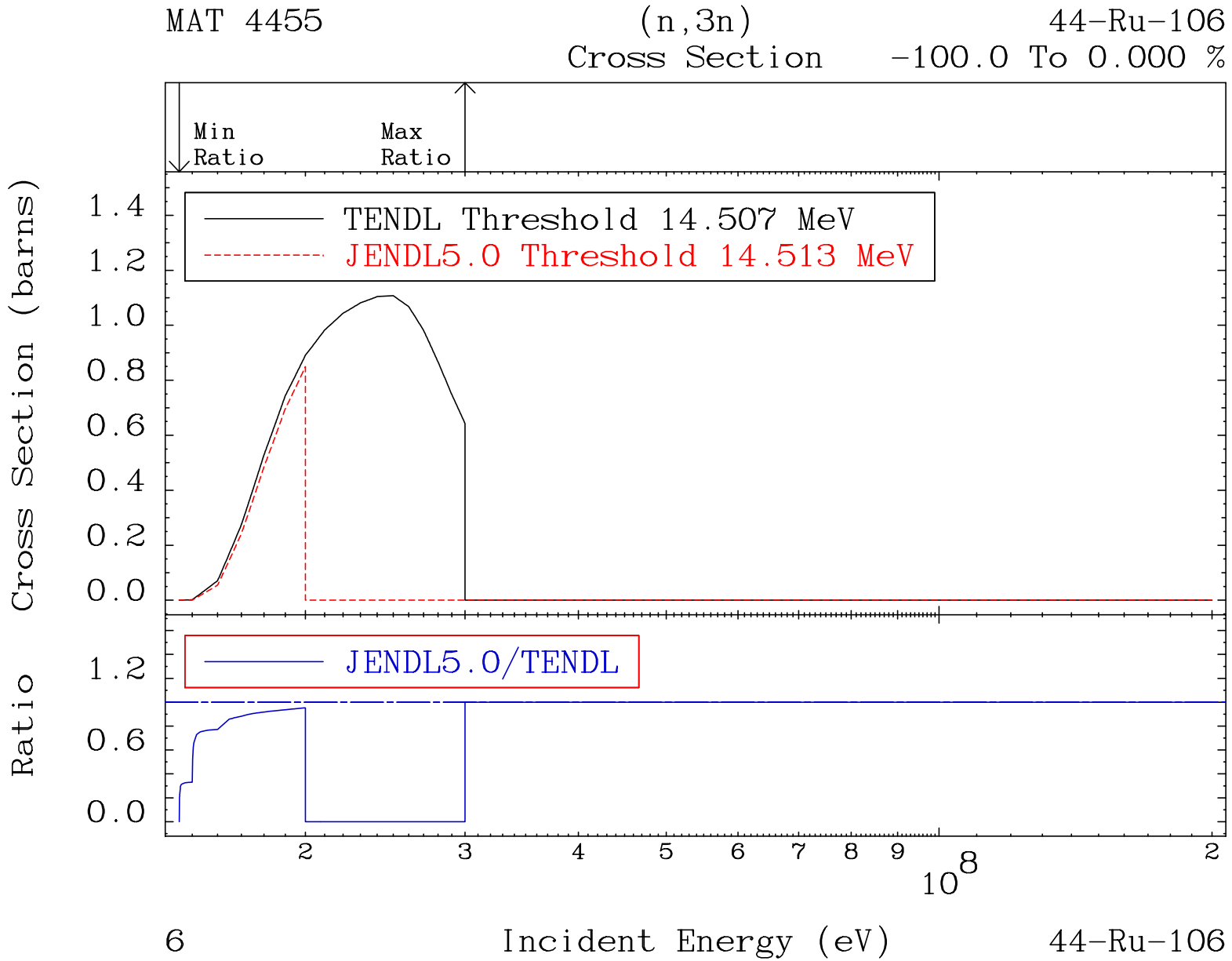

MAT 4455
Total
Cross Section
44-Ru-106
-99.43 To 7346. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
44-Ru-106

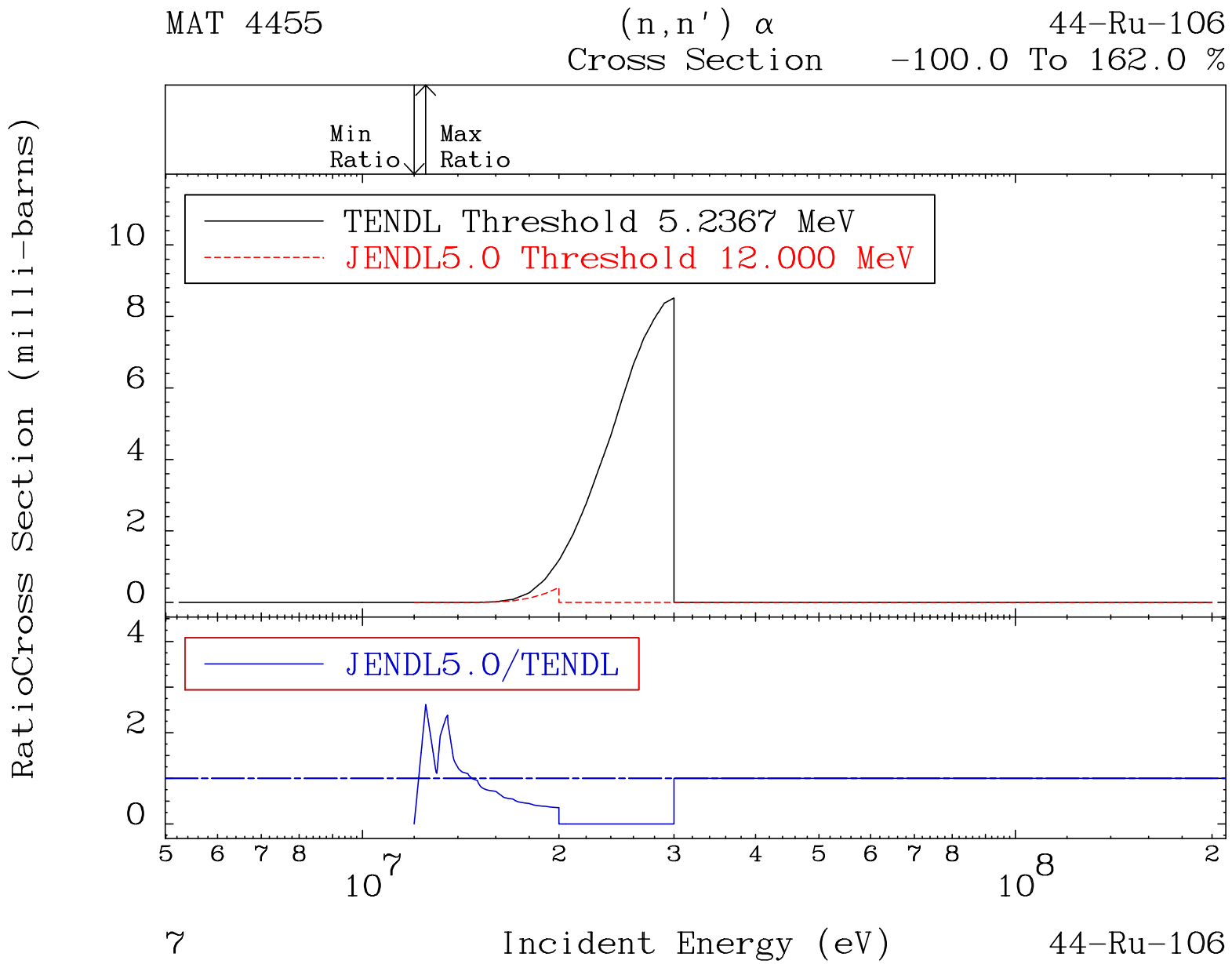

MAT 4455
Elastic
Cross Section
44-Ru-106
-99.45 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
44-Ru-106

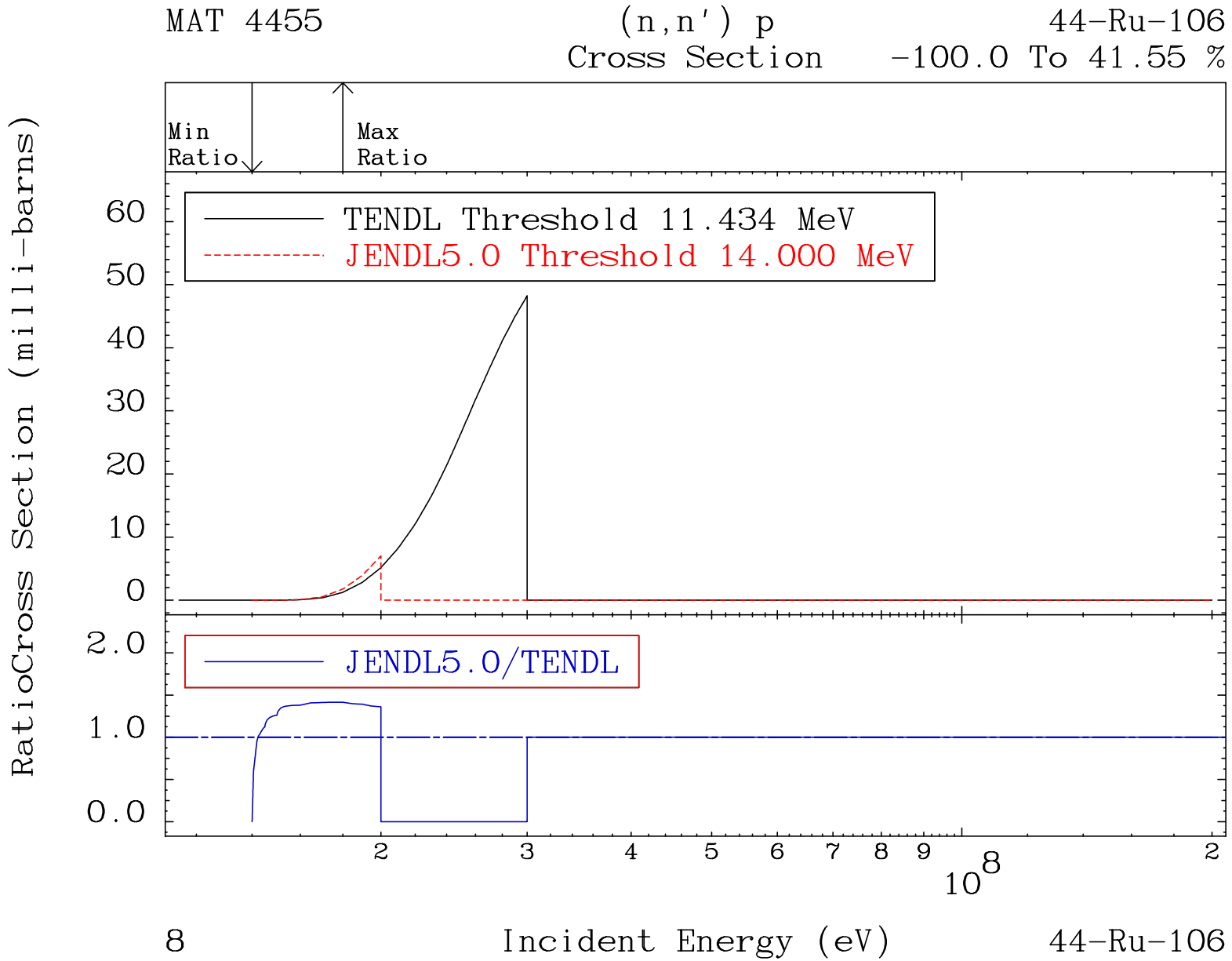

MAT 4455
Inelastic
Cross Section
44-Ru-106
-100.0 To 19.31 %
Max
Ratio
Min
Ratio
TENDL Threshold 272.64 keV
JENDL5.0 Threshold 272.64 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
44-Ru-106

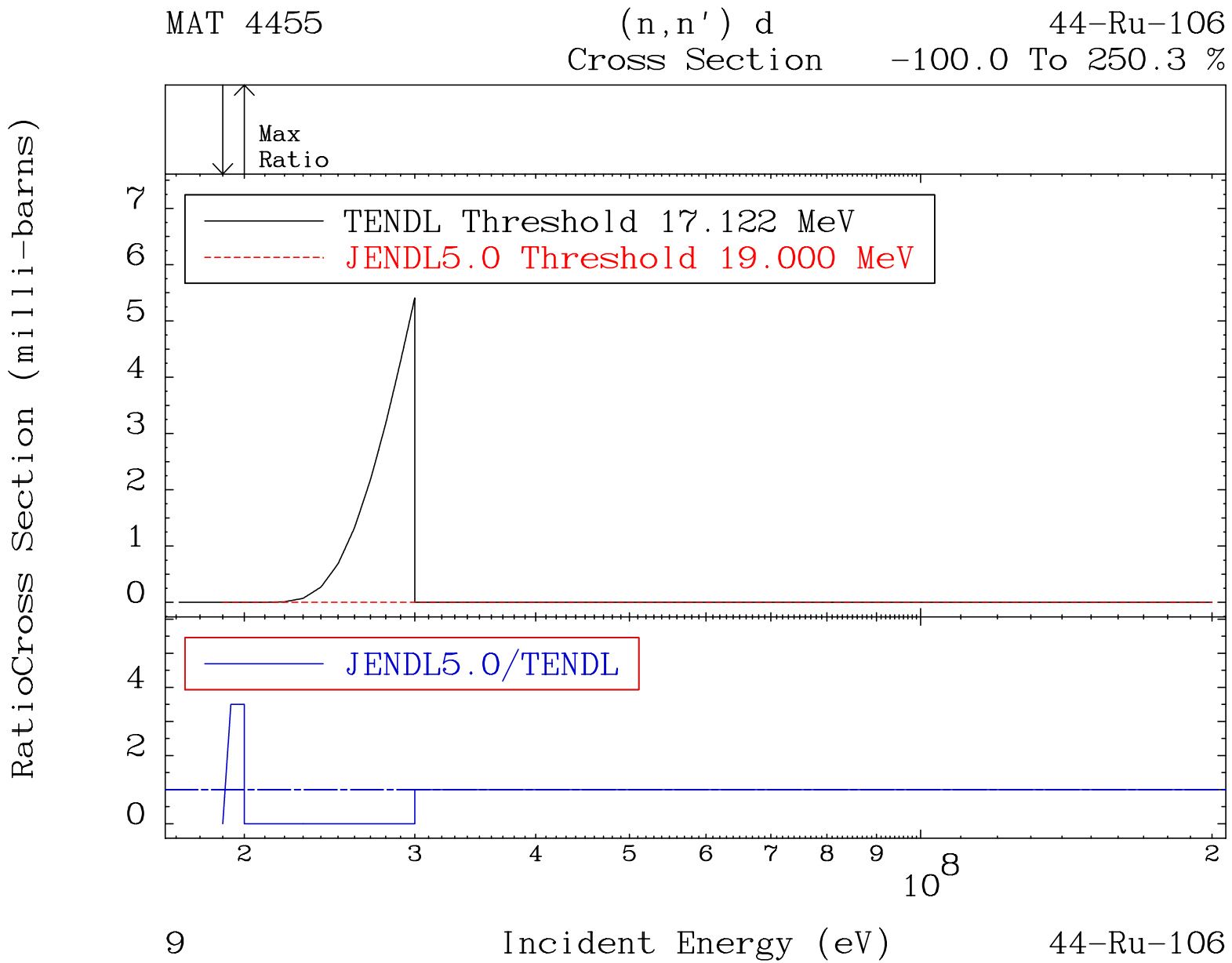

MAT 4455
(n,remainder)
Cross Section
44-Ru-106
-1.105 To 2.619 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
44-Ru-106

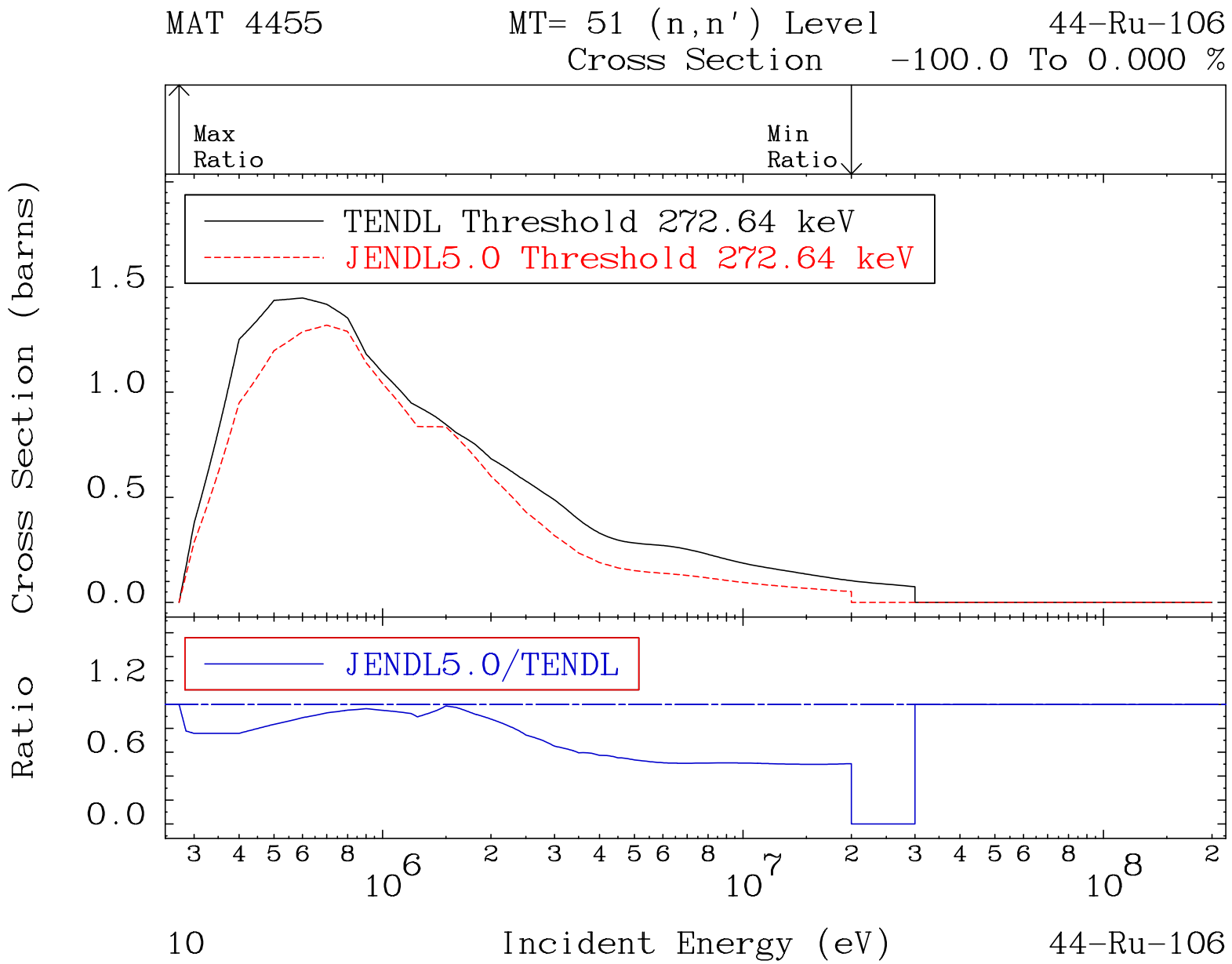

MAT 4455
(n,2n)
Cross Section
44-Ru-106
-100.0 To 27.79 %
Min Ratio
Max Ratio
TENDL Threshold 8.5406 MeV
JENDL5.0 Threshold 8.5464 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
44-Ru-106

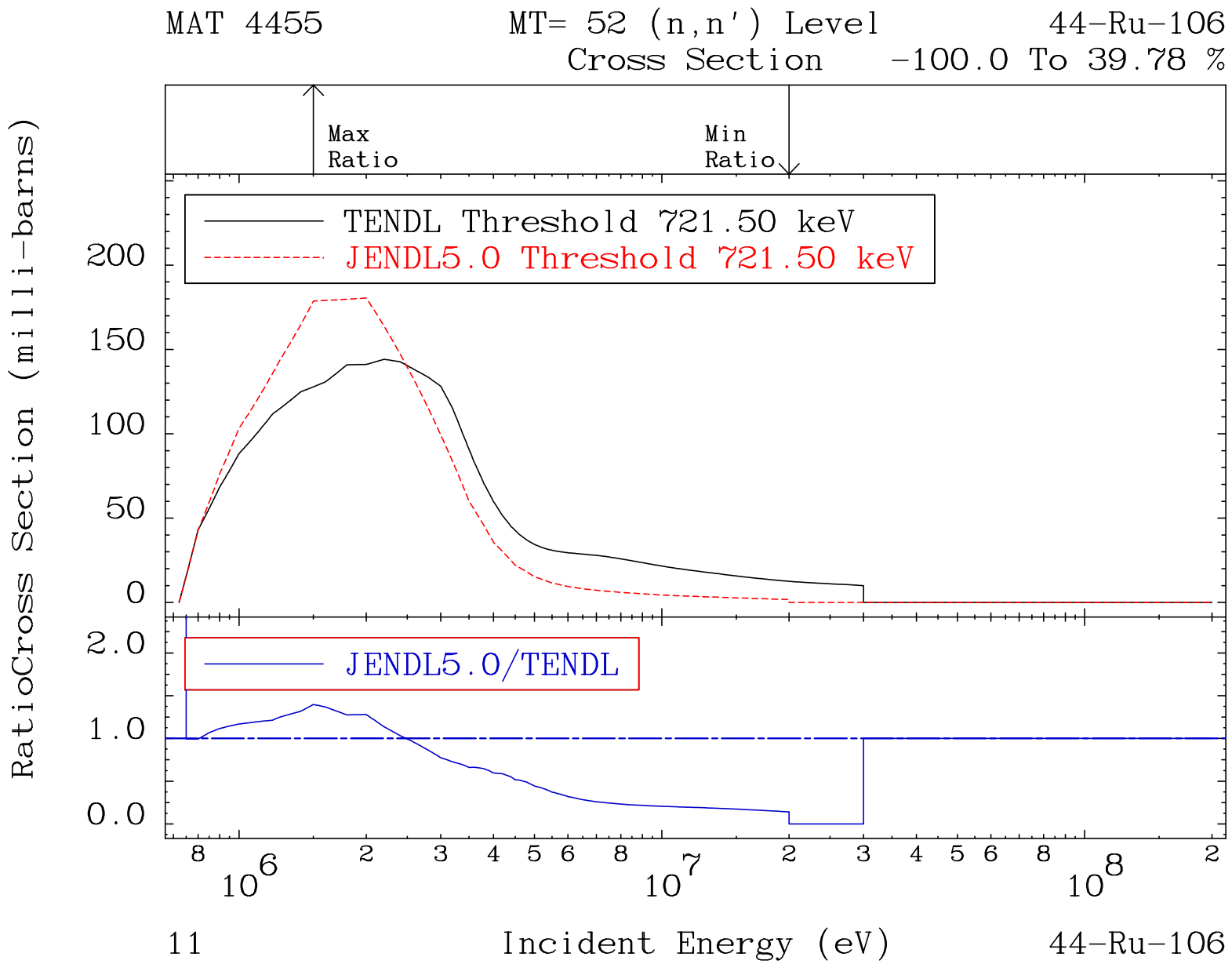

MAT 4455
(n,3n)
Cross Section
44-Ru-106
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 14.507 MeV
JENDL5.0 Threshold 14.513 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2
3
4
5
6
7
8
9
10^8
Incident Energy (eV)
6
44-Ru-106

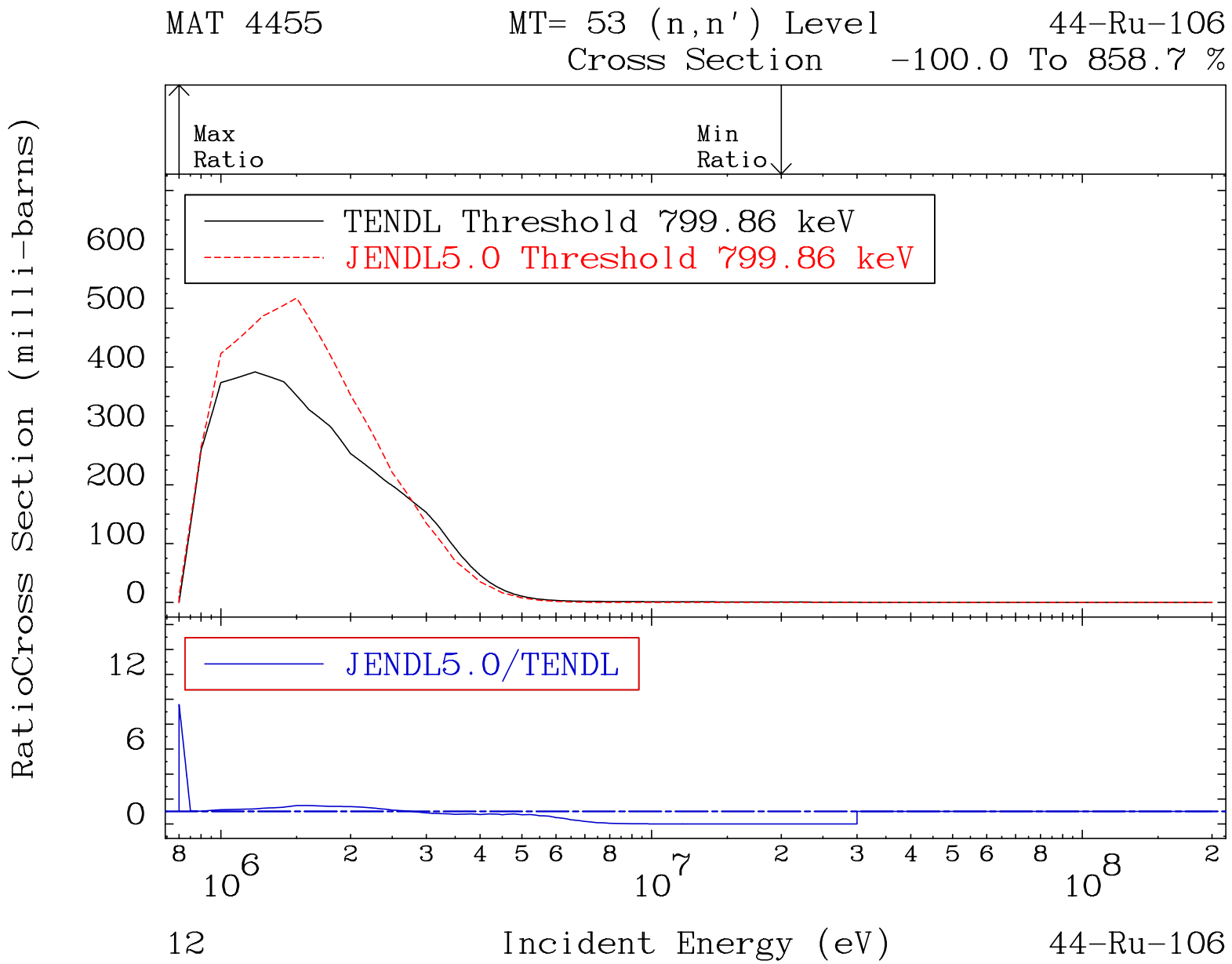

MAT 4455
(n,n') α
Cross Section
44-Ru-106
-100.0 To 162.0 %
Min Ratio
Max Ratio
TENDL Threshold 5.2367 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
44-Ru-106

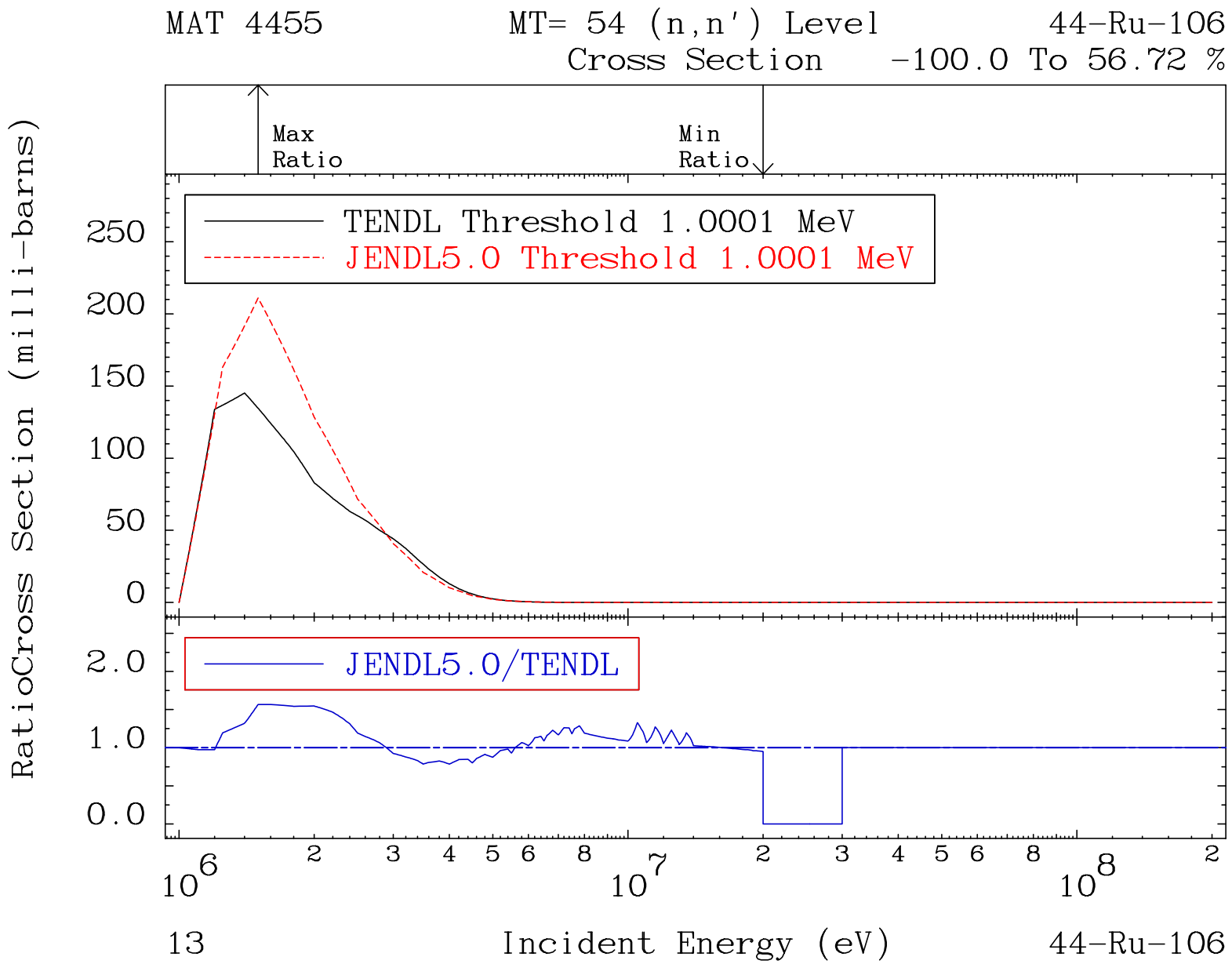

MAT 4455
(n,n') p
Cross Section
44-Ru-106
-100.0 To 41.55 %
Min Ratio
Max Ratio
TENDL Threshold 11.434 MeV
JENDL5.0 Threshold 14.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
44-Ru-106

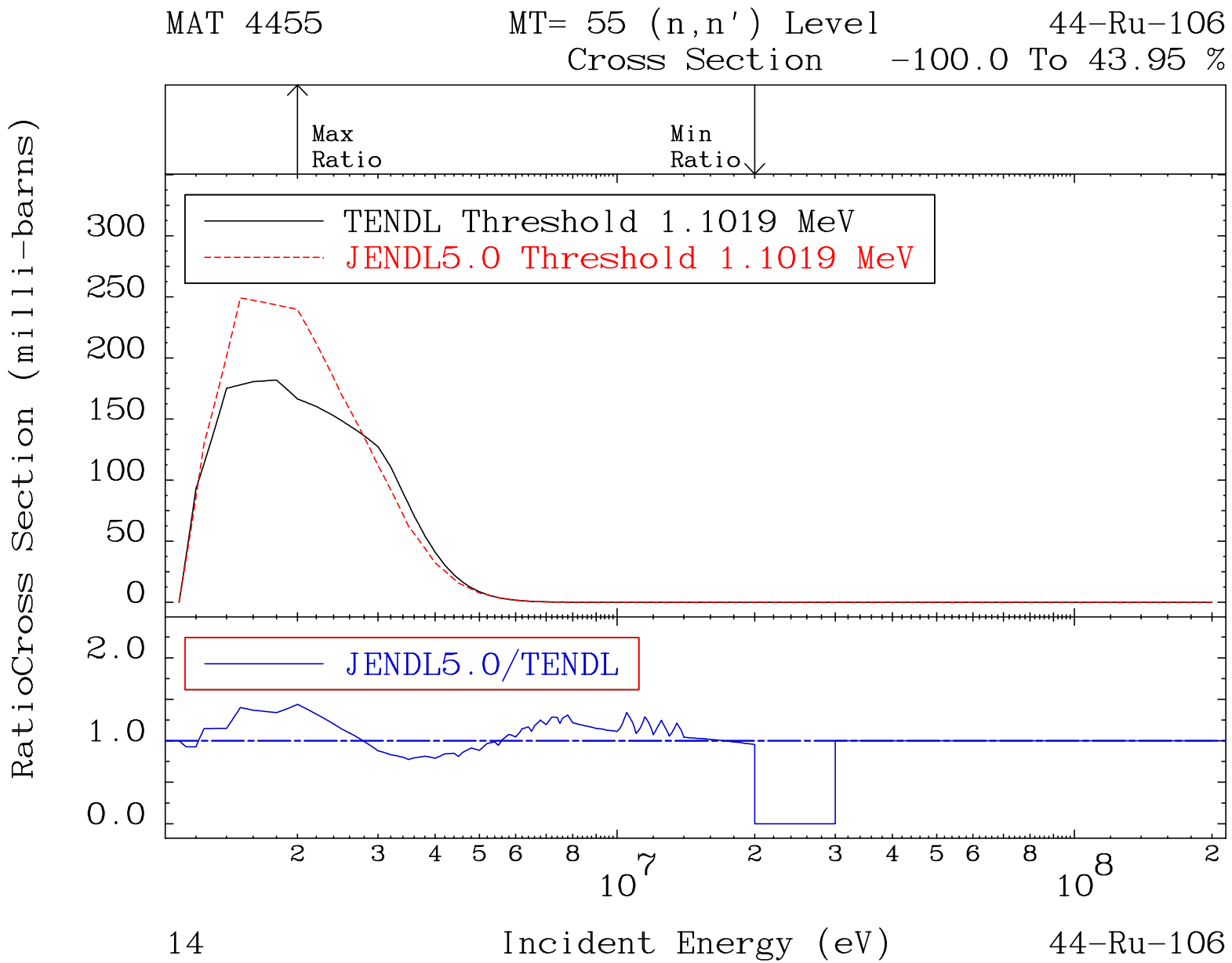

MAT 4455
(n,n') d
Cross Section
44-Ru-106
-100.0 To 250.3 %
Max
Ratio
TENDL Threshold 17.122 MeV
JENDL5.0 Threshold 19.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10^8
9
44-Ru-106

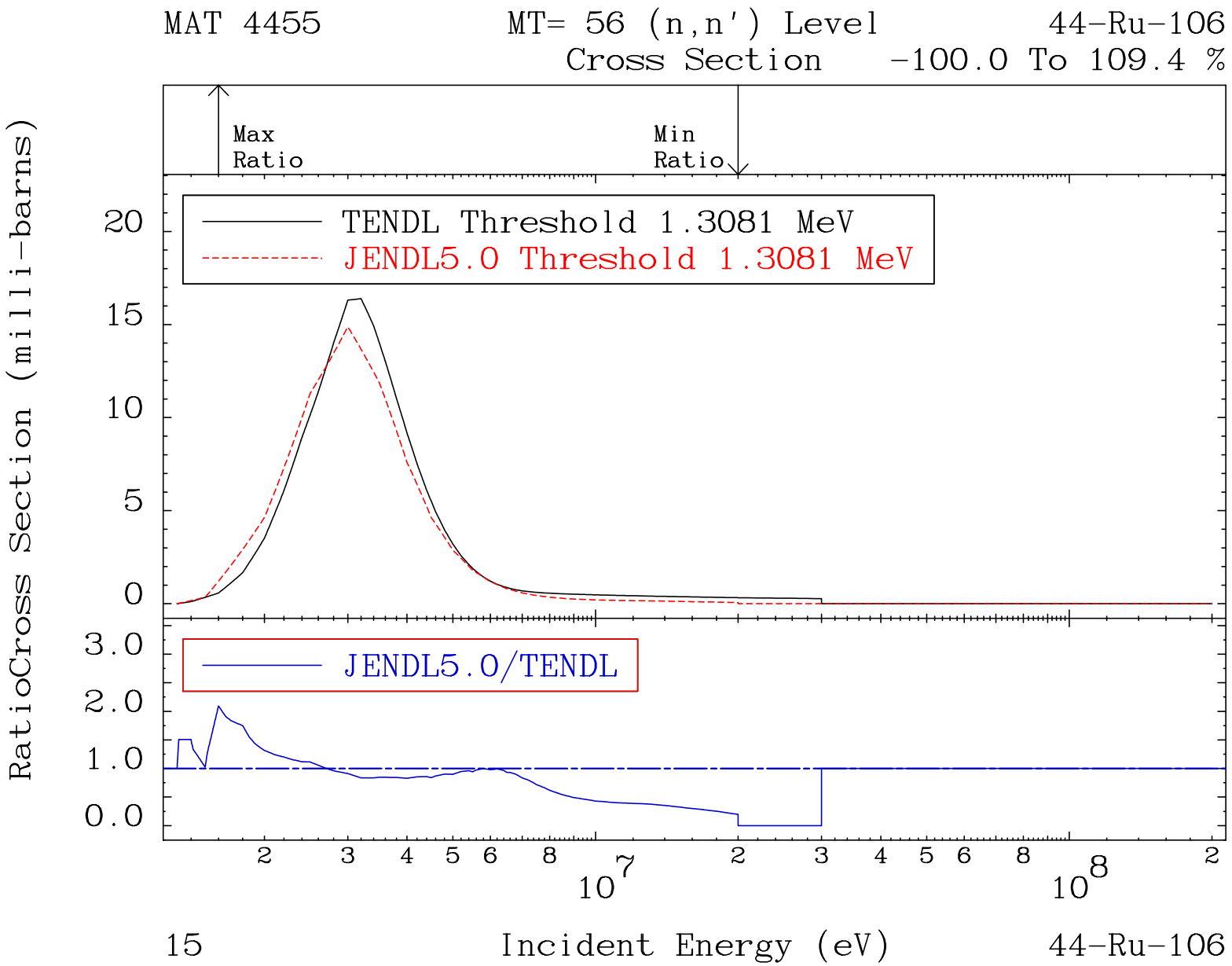

MAT 4455
MT= 51 (n,n') Level
Cross Section
44-Ru-106
-100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 272.64 keV
JENDL5.0 Threshold 272.64 keV
Cross Section (barns)
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
44-Ru-106

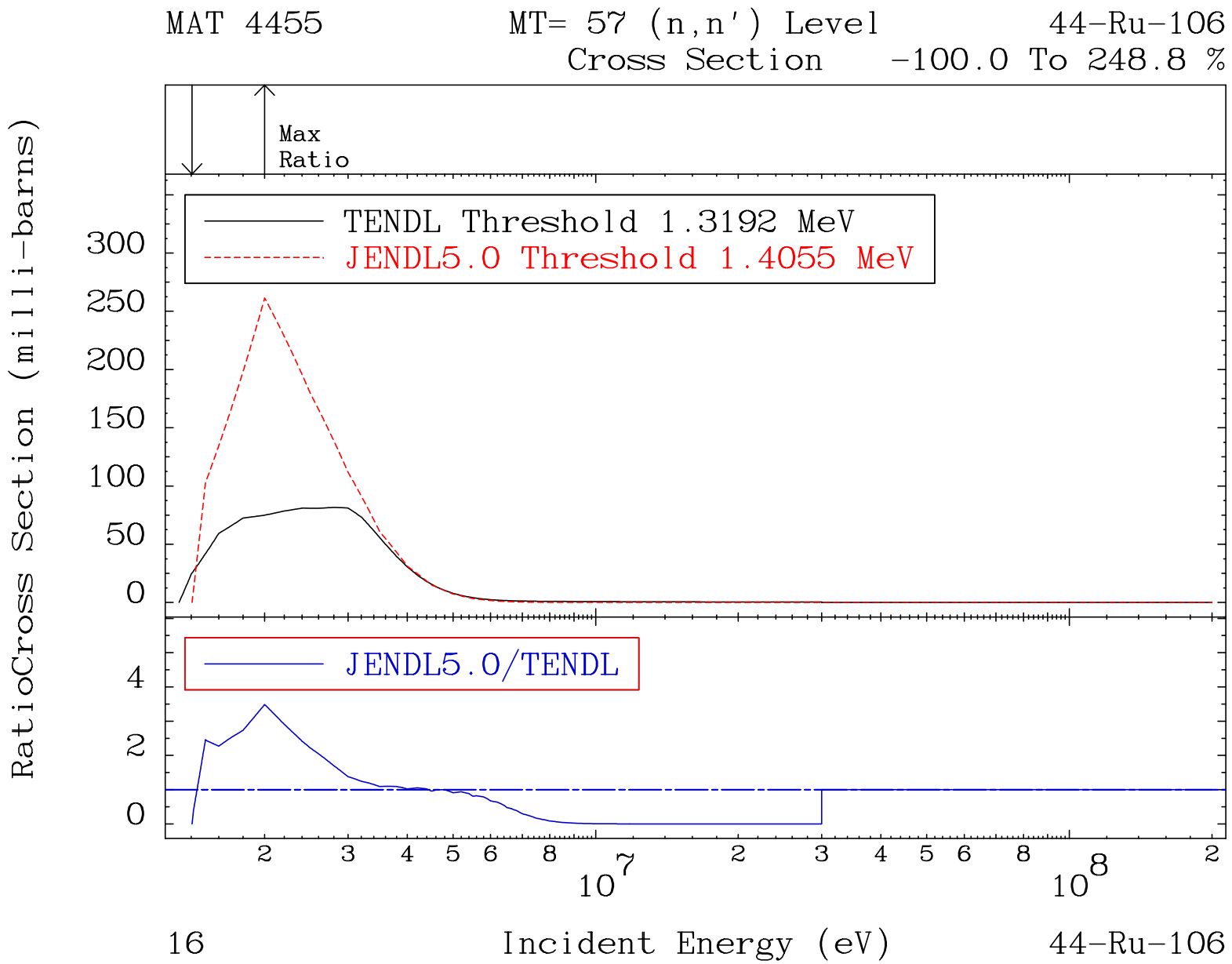

MAT 4455
MT= 52 (n,n') Level
Cross Section
44-Ru-106
-100.0 To 39.78 %
Max Ratio
Min Ratio
TENDL Threshold 721.50 keV
JENDL5.0 Threshold 721.50 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
44-Ru-106

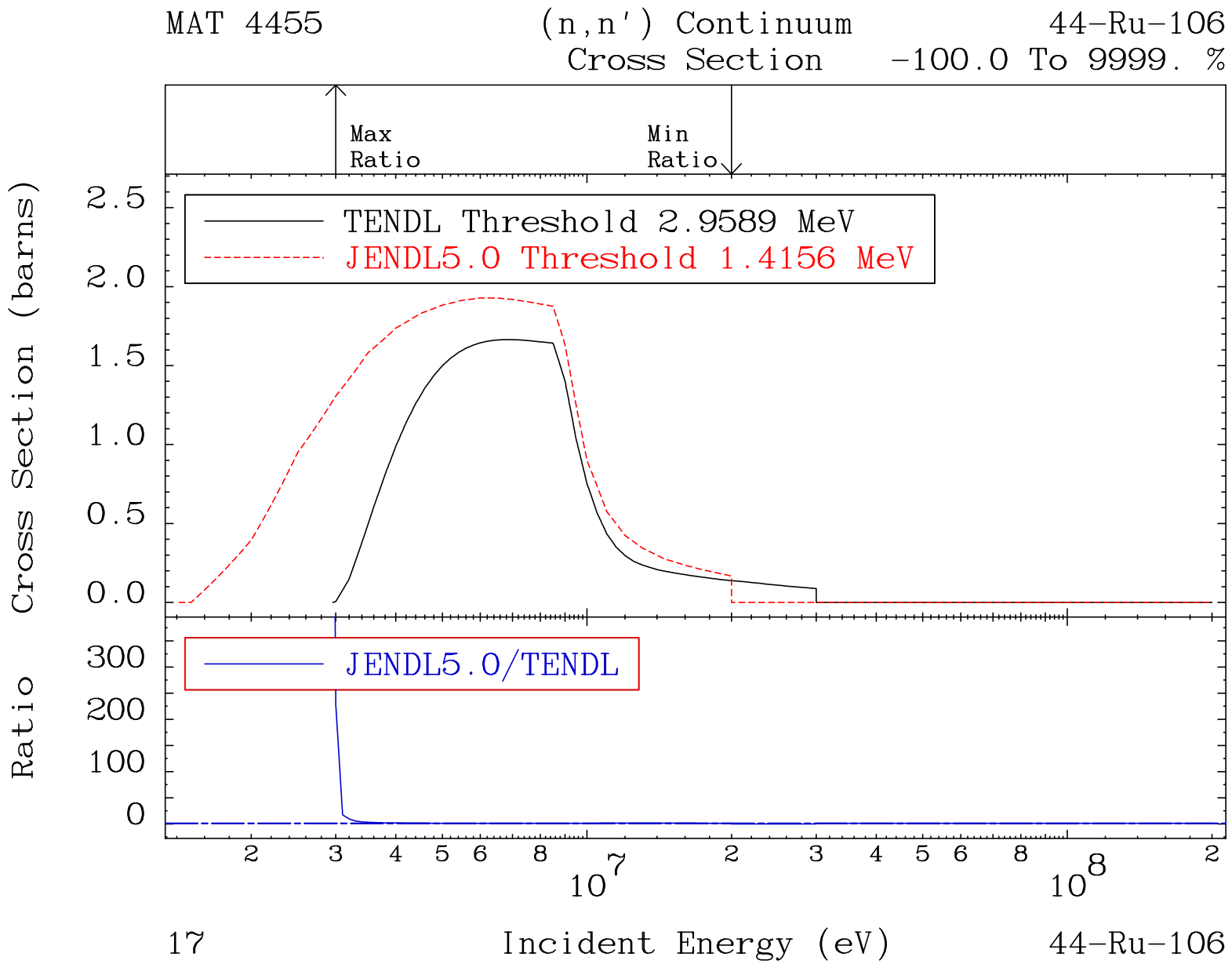

MAT 4455
MT= 53 (n,n') Level
Cross Section
44-Ru-106
-100.0 To 858.7 %
Max Ratio
Min Ratio
TENDL Threshold 799.86 keV
JENDL5.0 Threshold 799.86 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
12
6
0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
12
Incident Energy (eV)
44-Ru-106

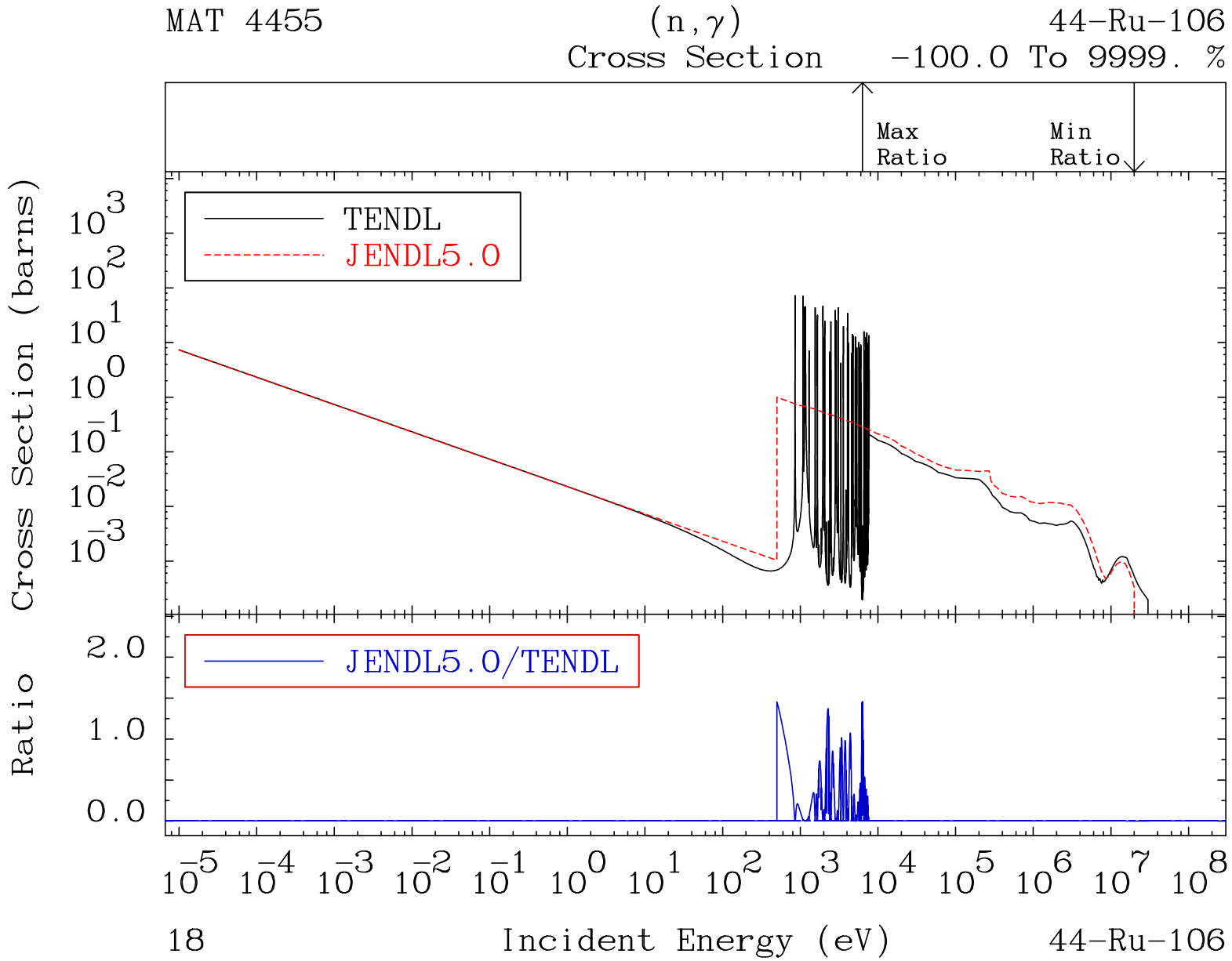

MAT 4455
MT= 54 (n,n') Level
44-Ru-106
Cross Section
-100.0 To 56.72 %
Max Ratio
Min Ratio
TENDL Threshold 1.0001 MeV
JENDL5.0 Threshold 1.0001 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
10^6
10^7
10^8
13
Incident Energy (eV)
44-Ru-106

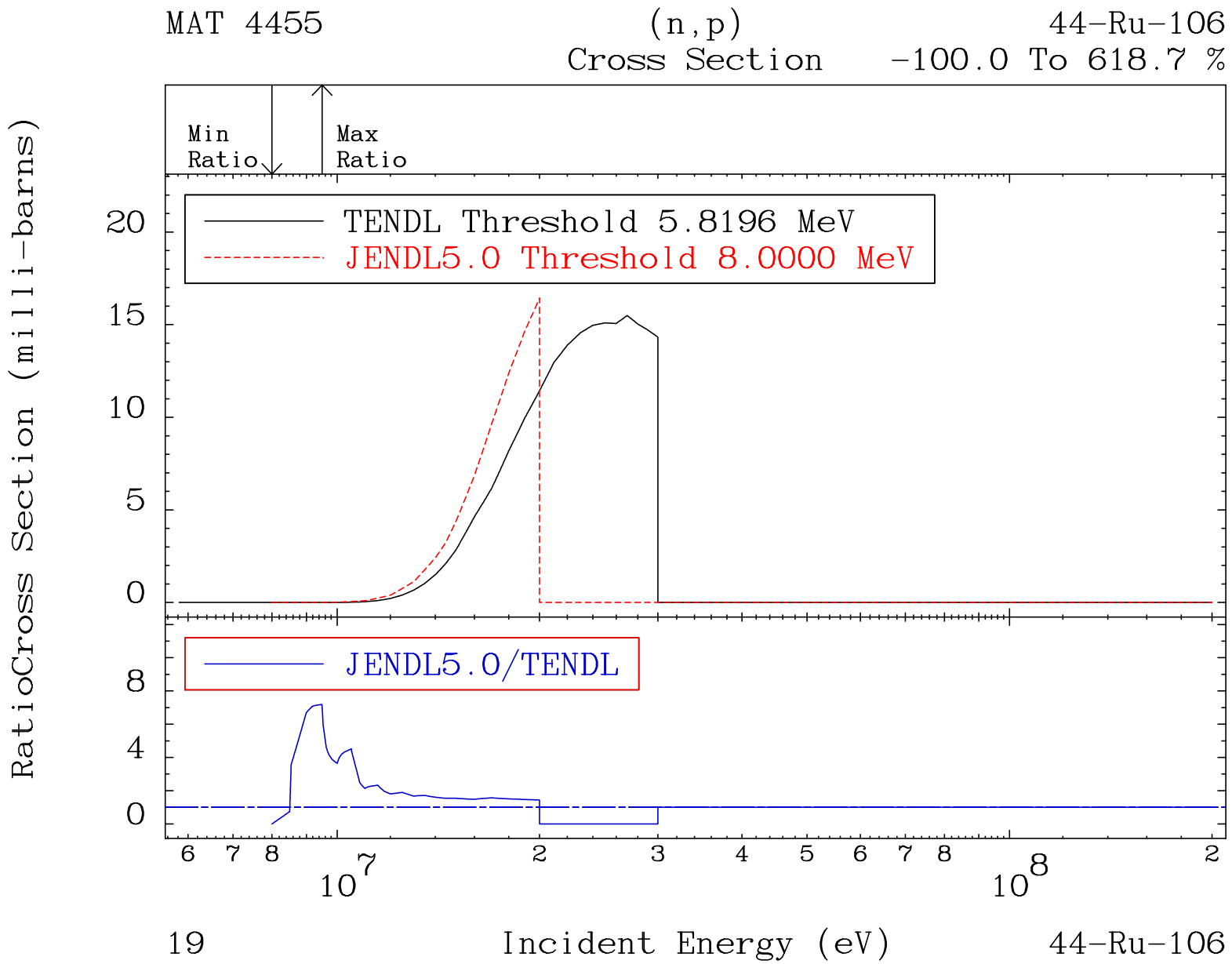

MAT 4455
MT= 55 (n,n') Level
44-Ru-106
Cross Section
-100.0 To 43.95 %
Max Ratio
Min Ratio
TENDL Threshold 1.1019 MeV
JENDL5.0 Threshold 1.1019 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
14
Incident Energy (eV)
44-Ru-106

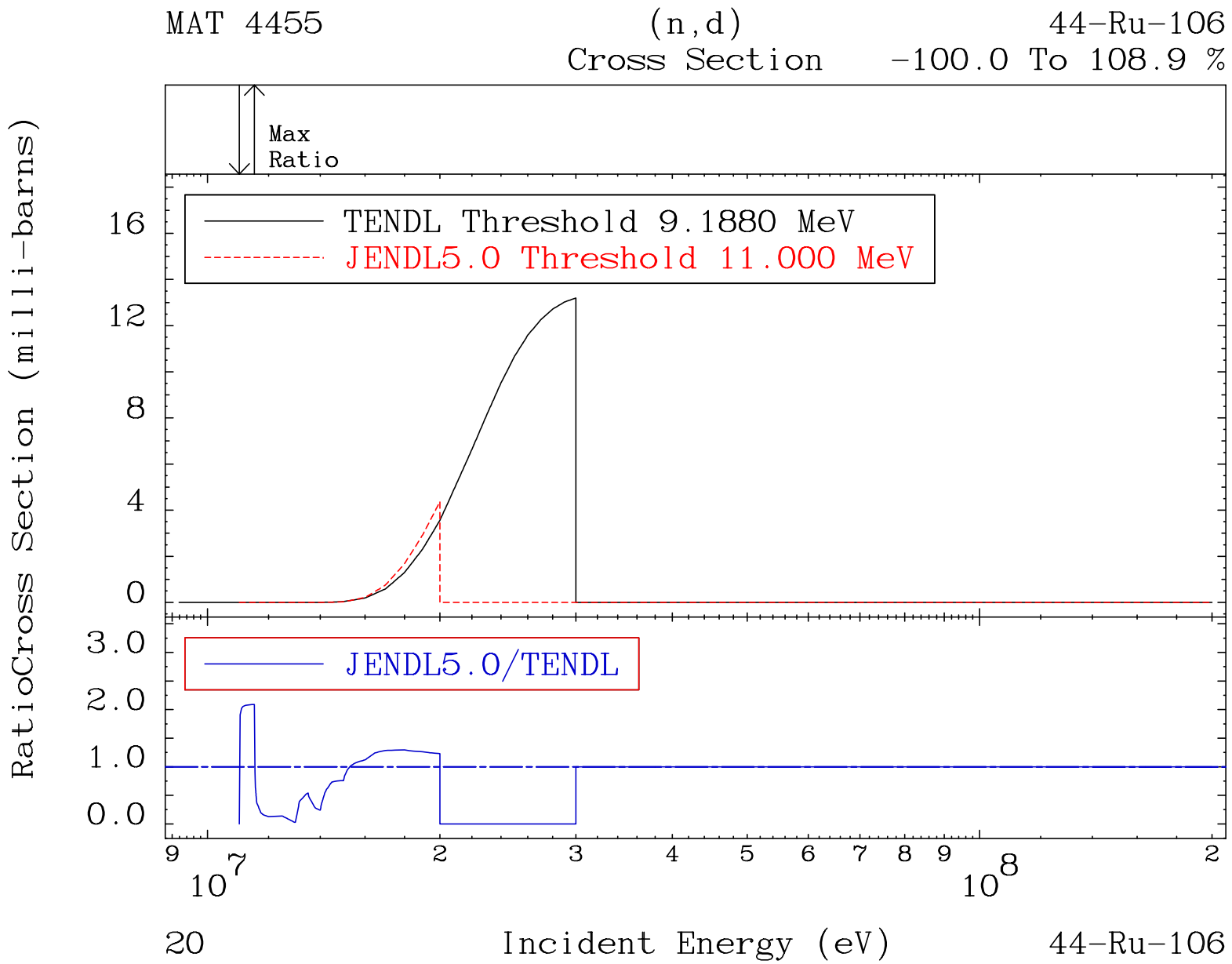

MAT 4455
MT= 56 (n,n') Level
Cross Section
44-Ru-106
-100.0 To 109.4 %
Max Ratio
Min Ratio
TENDL Threshold 1.3081 MeV
JENDL5.0 Threshold 1.3081 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
15
Incident Energy (eV)
44-Ru-106

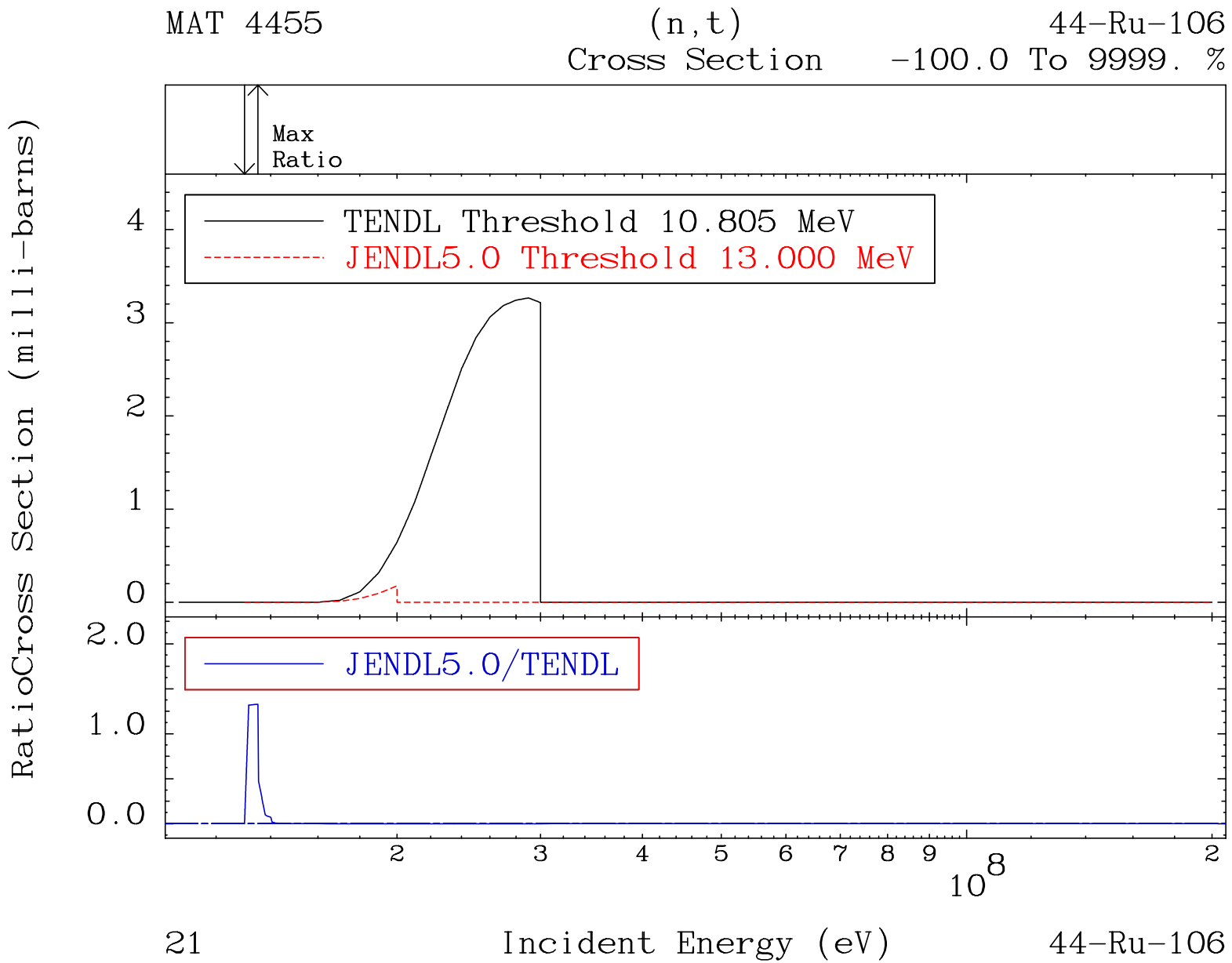

MAT 4455
MT= 57 (n,n') Level
Cross Section
44-Ru-106
-100.0 To 248.8 %
Max
Ratio
TENDL Threshold 1.3192 MeV
JENDL5.0 Threshold 1.4055 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
16
Incident Energy (eV)
44-Ru-106

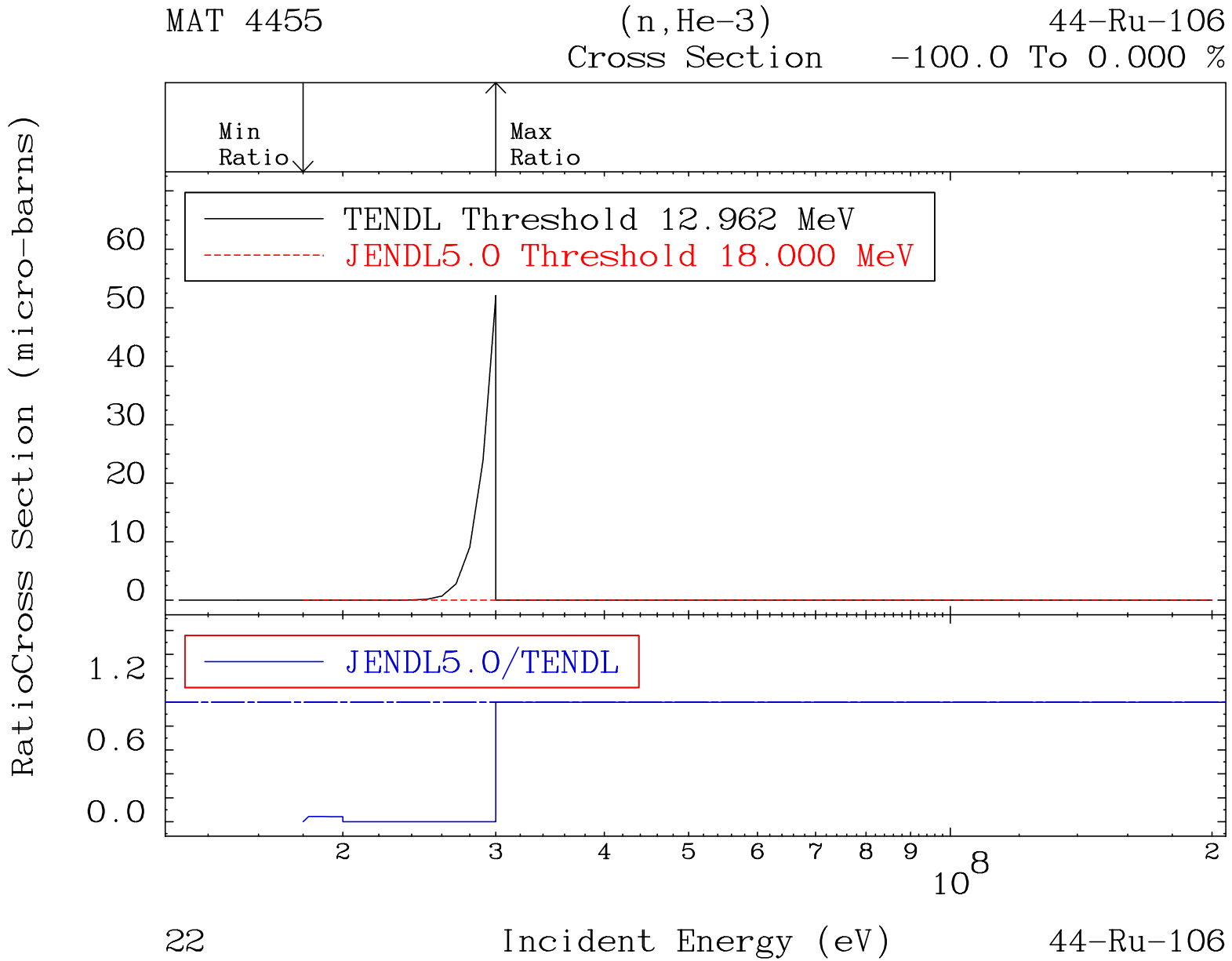

MAT 4455
(n,n') Continuum
Cross Section
44-Ru-106
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.9589 MeV
JENDL5.0 Threshold 1.4156 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
300
200
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
44-Ru-106

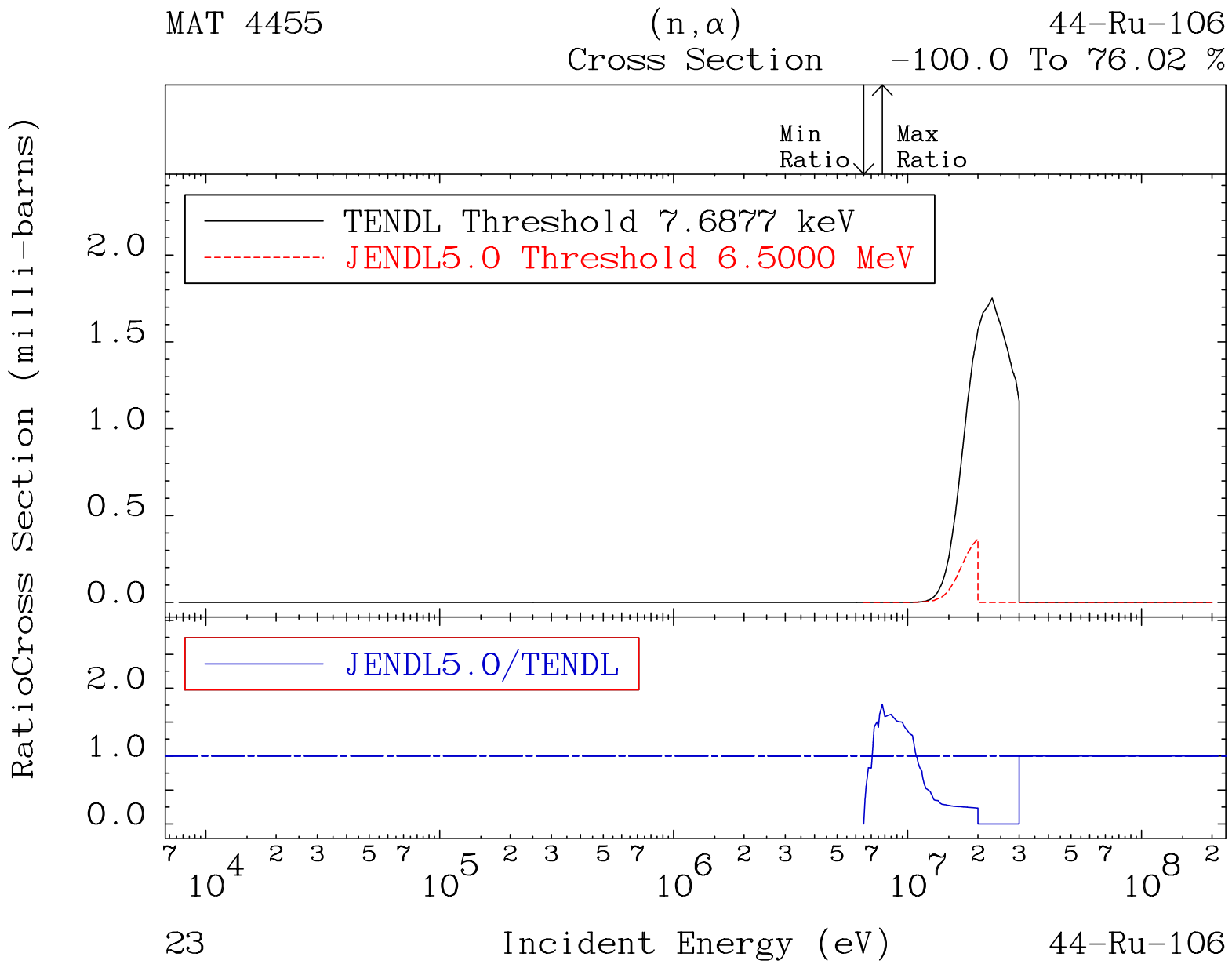

MAT 4455
(n,γ)
Cross Section
44-Ru-106
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
18
44-Ru-106

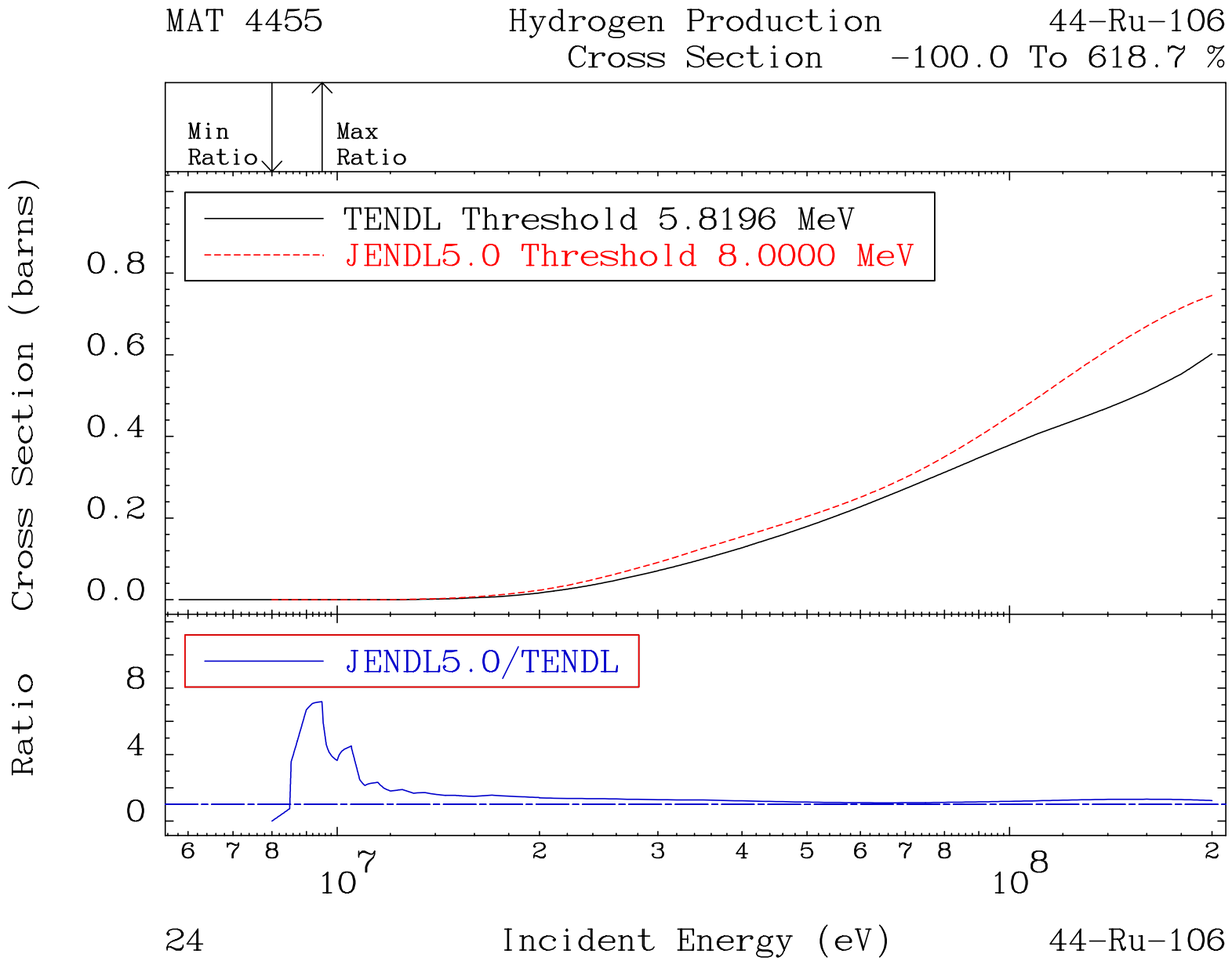

MAT 4455
(n,p)
Cross Section
44-Ru-106
-100.0 To 618.7 %
Min Ratio
Max Ratio
TENDL Threshold 5.8196 MeV
JENDL5.0 Threshold 8.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
19
44-Ru-106

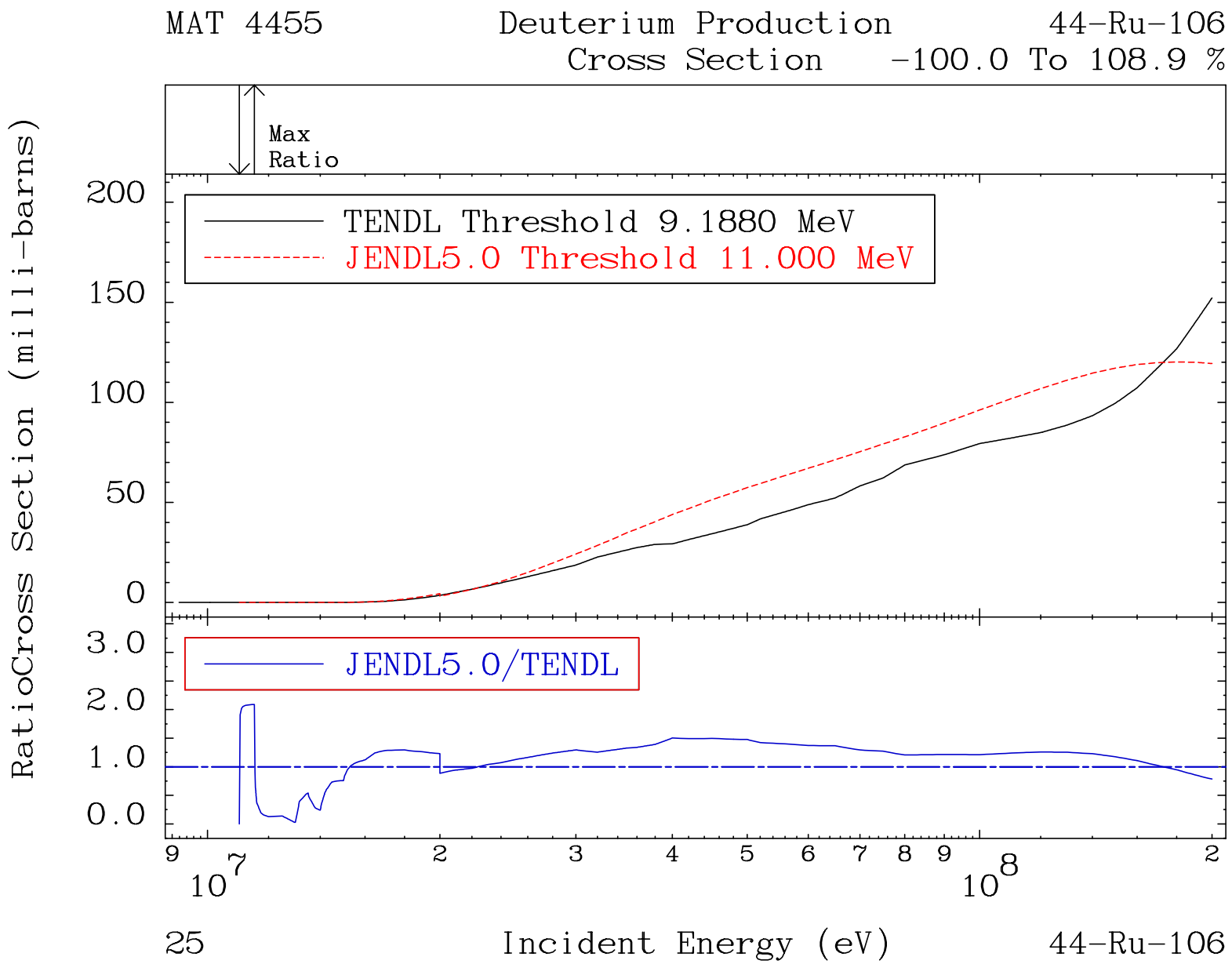

MAT 4455
(n,d)
44-Ru-106
Cross Section
-100.0 To 108.9 %
Max
Ratio
TENDL Threshold 9.1880 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
3.0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
44-Ru-106

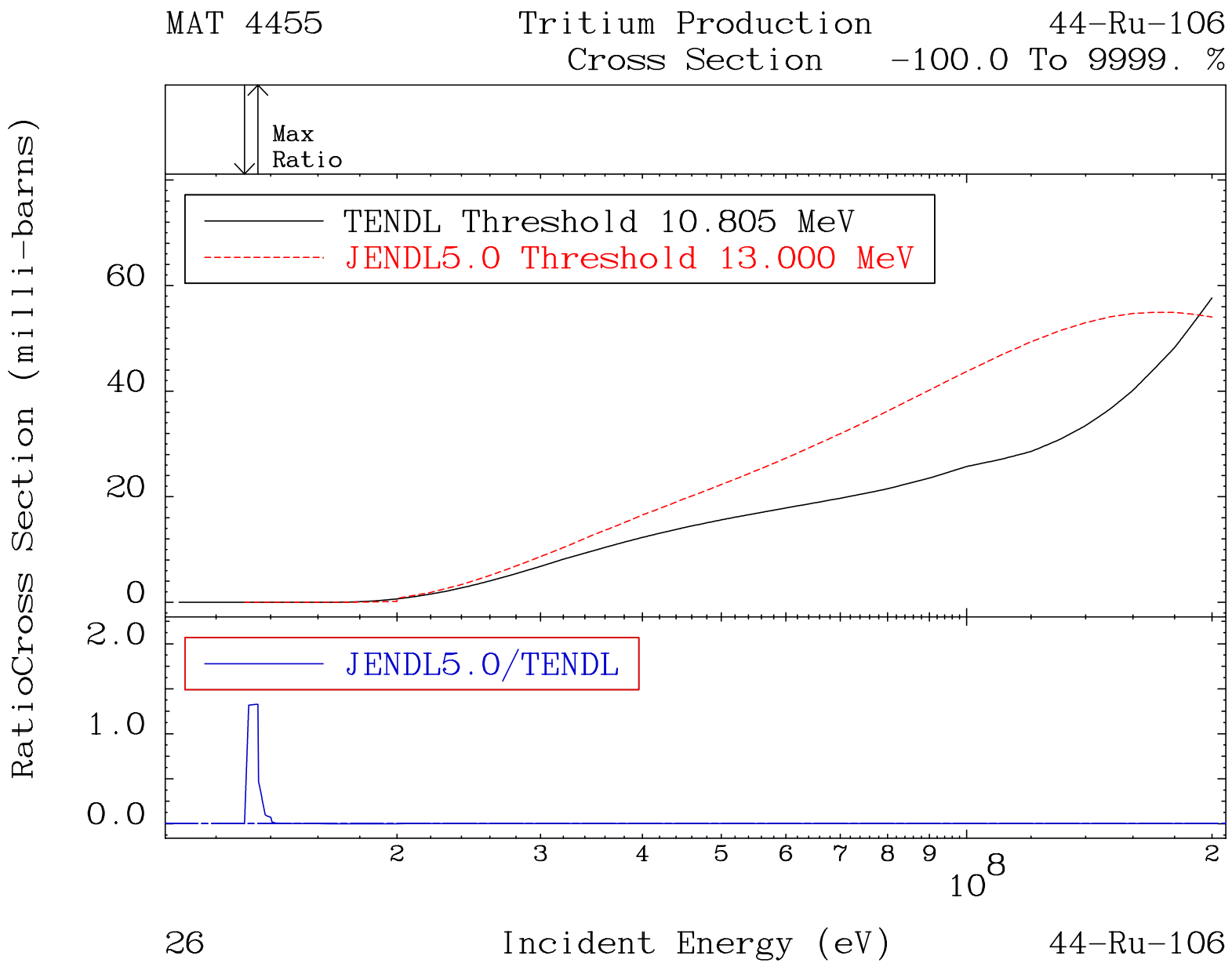

MAT 4455
(n,t)
44-Ru-106
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.805 MeV
JENDL5.0 Threshold 13.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
44-Ru-106

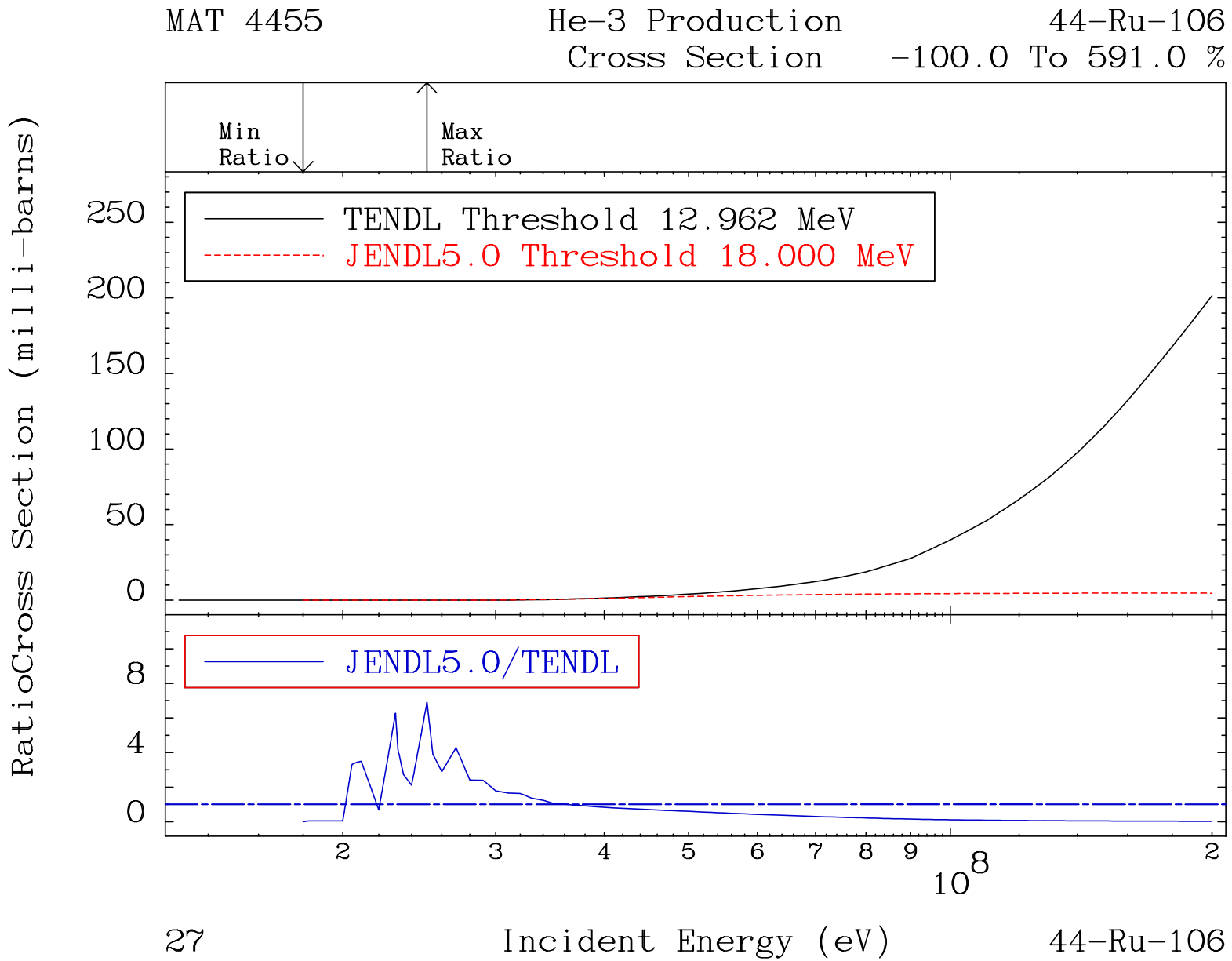

MAT 4455
(n,He-3)
Cross Section
44-Ru-106
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 12.962 MeV
JENDL5.0 Threshold 18.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
22
Incident Energy (eV)
44-Ru-106

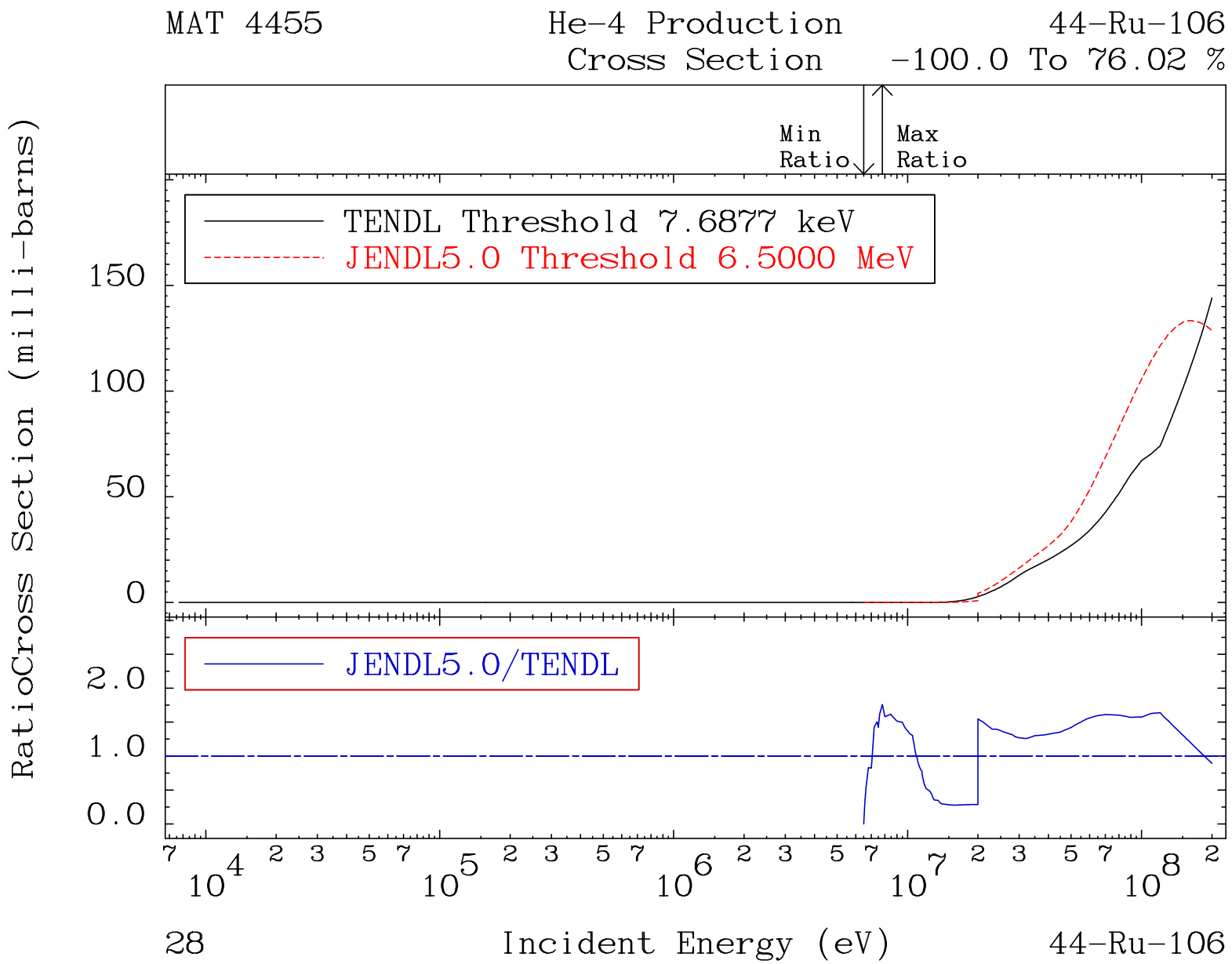

MAT 4455
(n,α)
Cross Section
44-Ru-106
-100.0 To 76.02 %
Min Ratio
Max Ratio
TENDL Threshold 7.6877 keV
JENDL5.0 Threshold 6.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
7 2 3 5 7 2 3 5 7 2 3 5 7 2 3 5 7 2
10^4 10^5 10^6 10^7 10^8
23
Incident Energy (eV)
44-Ru-106

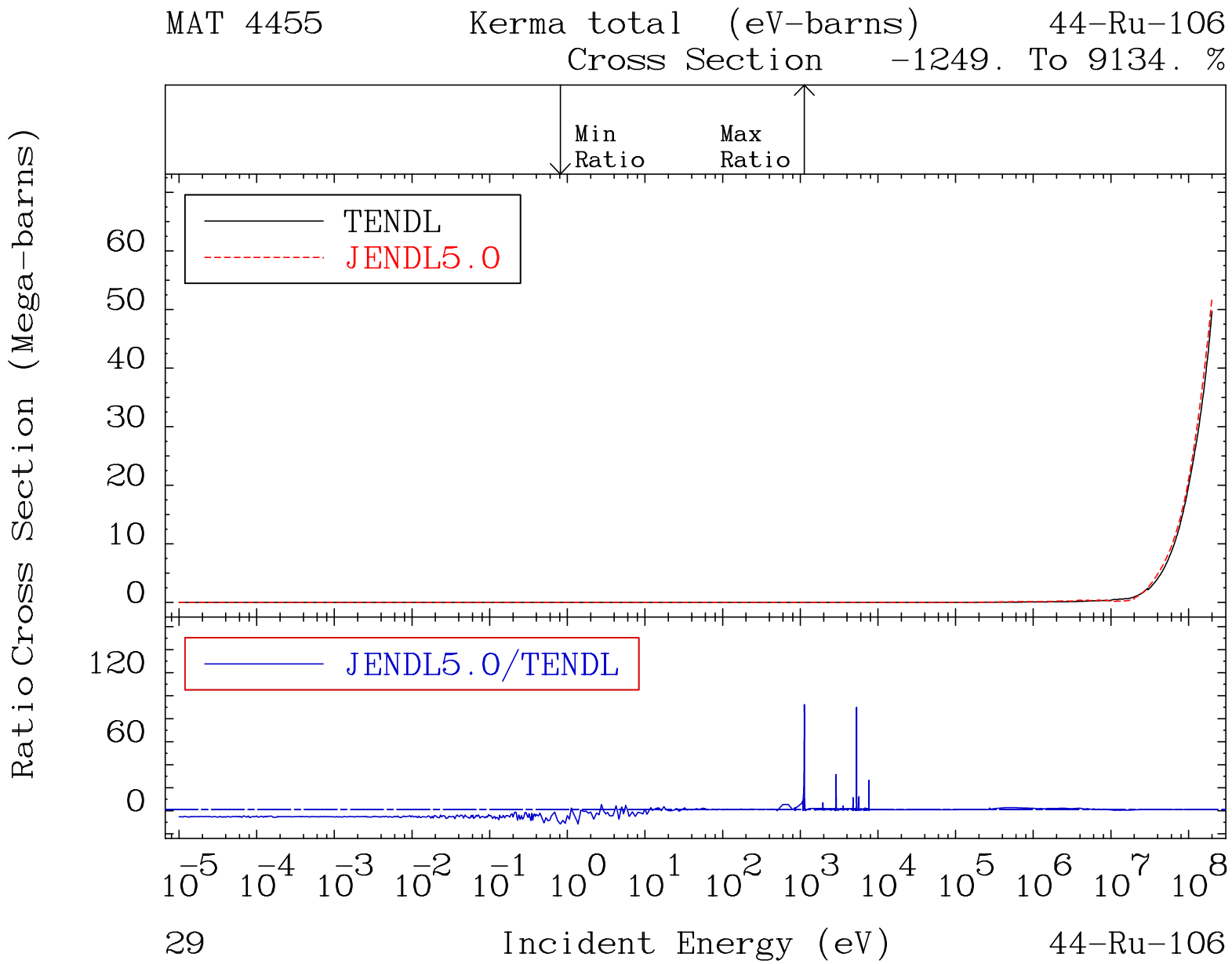

MAT 4455
Hydrogen Production
44-Ru-106
Cross Section
-100.0 To 618.7 %
Min Ratio
Max Ratio
TENDL Threshold 5.8196 MeV
JENDL5.0 Threshold 8.0000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
0.0
0.2
0.4
0.6
0.8
0
4
8
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
44-Ru-106

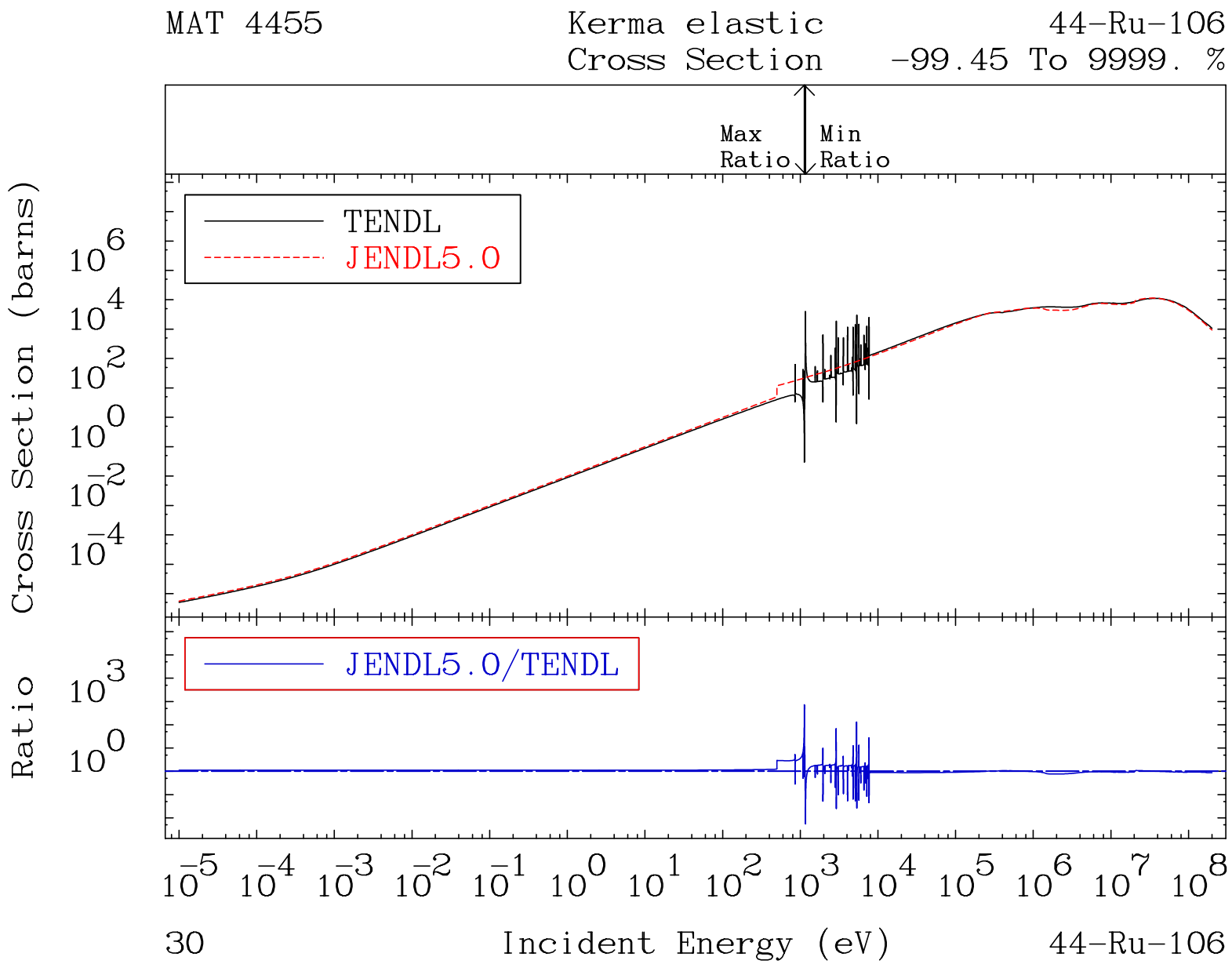

MAT 4455
Deuterium Production
44-Ru-106
Cross Section
-100.0 To 108.9 %
Max
Ratio
TENDL Threshold 9.1880 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
3.0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
44-Ru-106

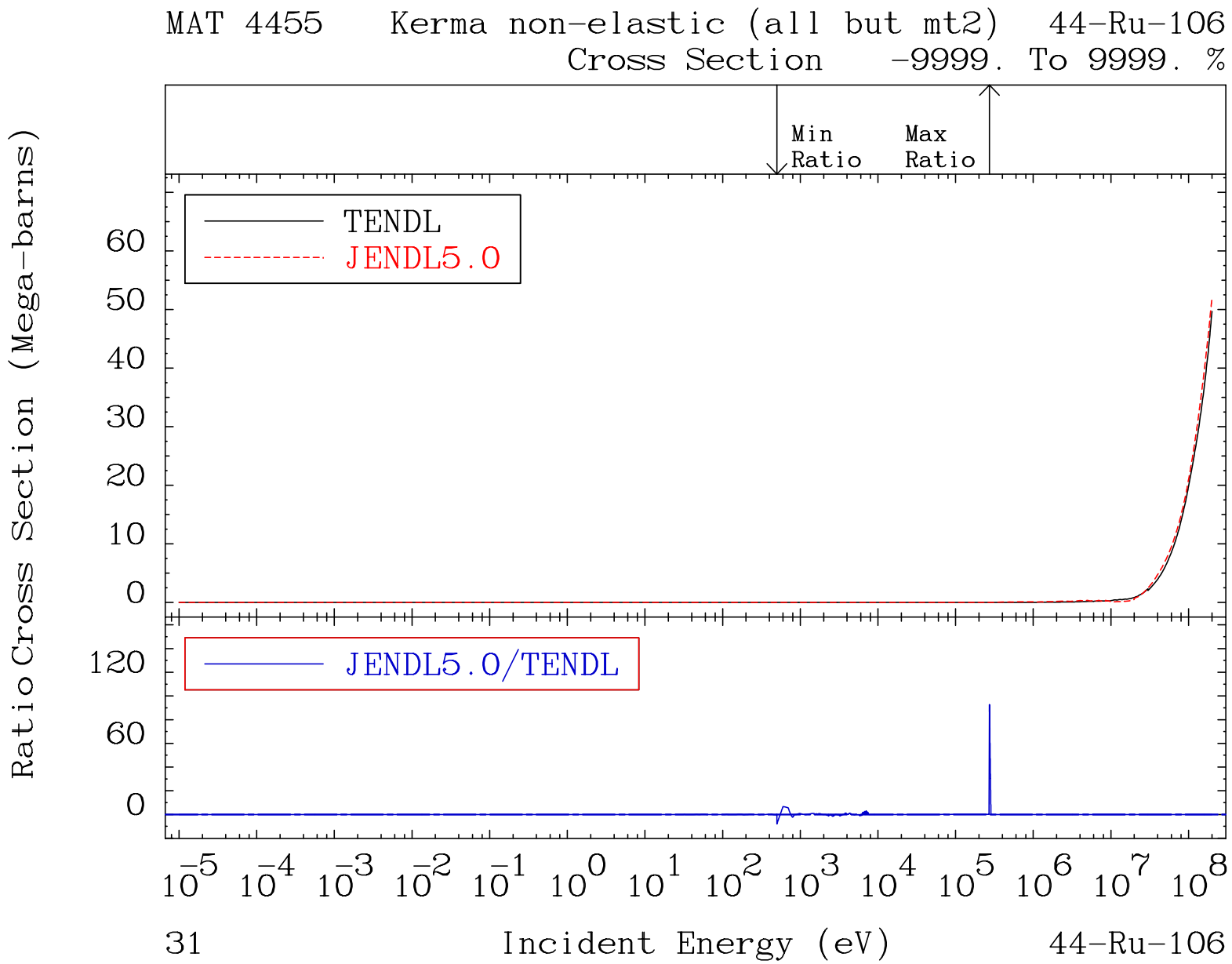

MAT 4455
Tritium Production
44-Ru-106
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.805 MeV
JENDL5.0 Threshold 13.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
44-Ru-106

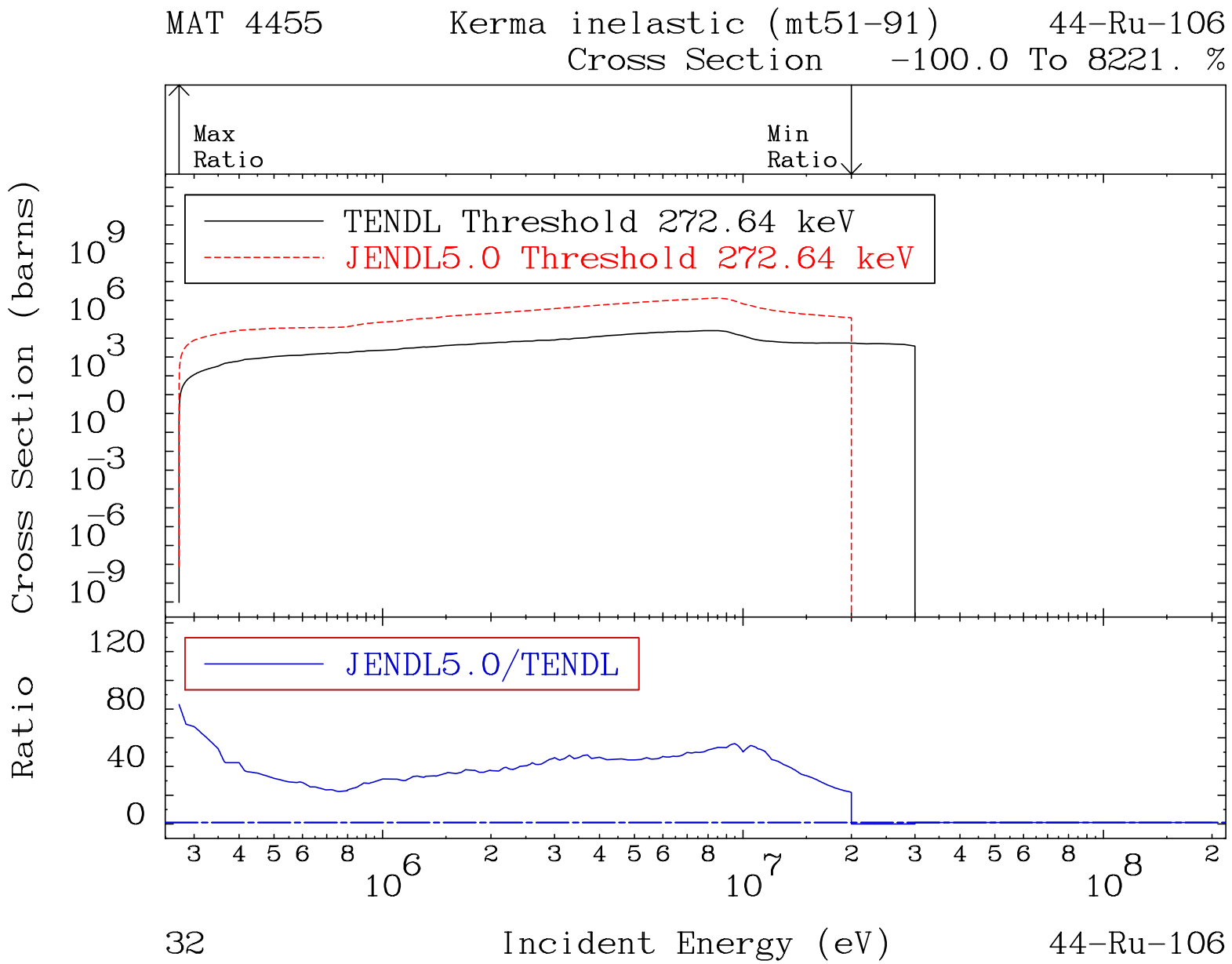

MAT 4455
He-3 Production
Cross Section
44-Ru-106
-100.0 To 591.0 %
Min Ratio
Max Ratio
TENDL Threshold 12.962 MeV
JENDL5.0 Threshold 18.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
27
Incident Energy (eV)
44-Ru-106

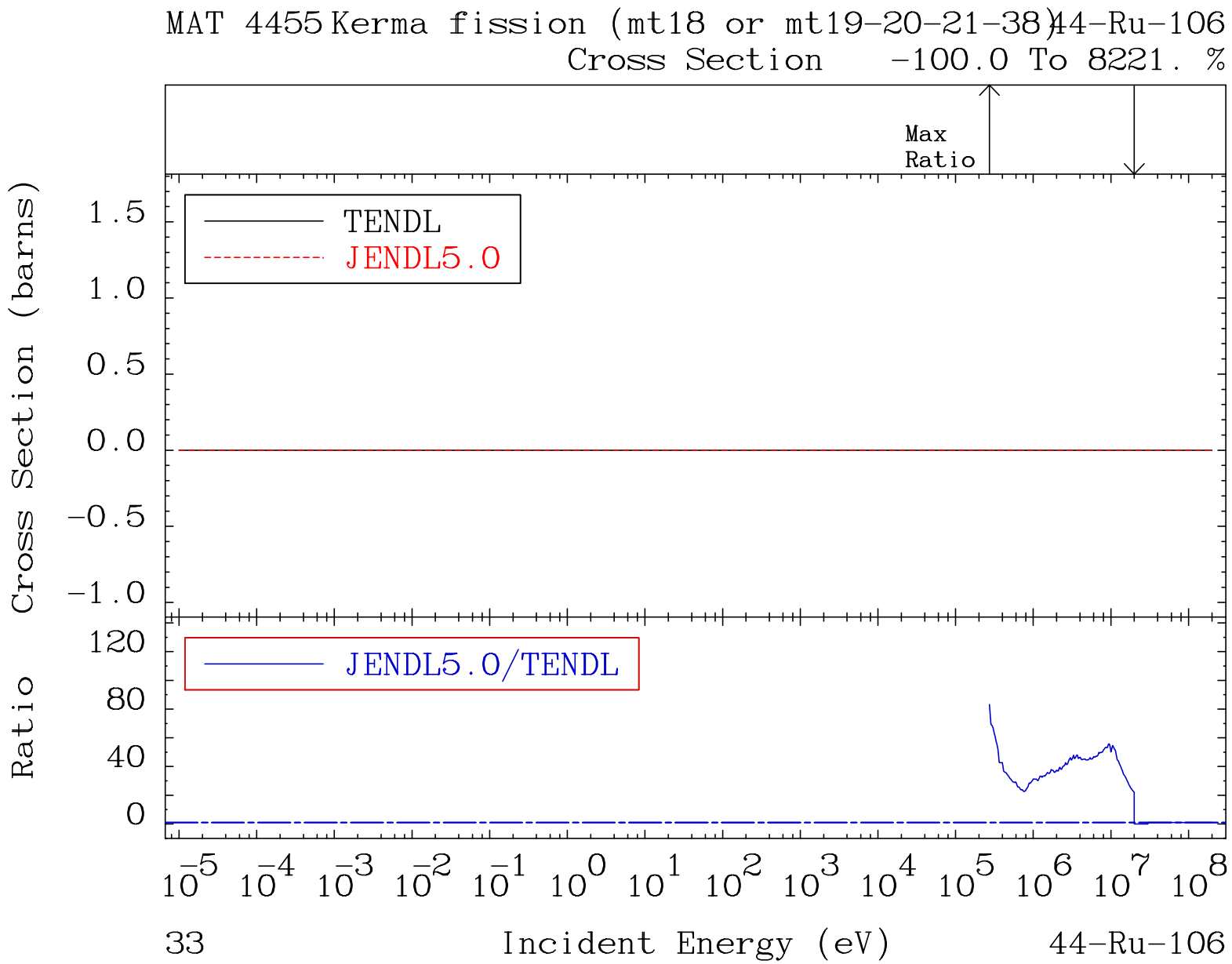

MAT 4455
He-4 Production
Cross Section
44-Ru-106
-100.0 To 76.02 %
Min Ratio
Max Ratio
TENDL Threshold 7.6877 keV
JENDL5.0 Threshold 6.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
2.0
1.0
0.0
7 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
28
Incident Energy (eV)
44-Ru-106

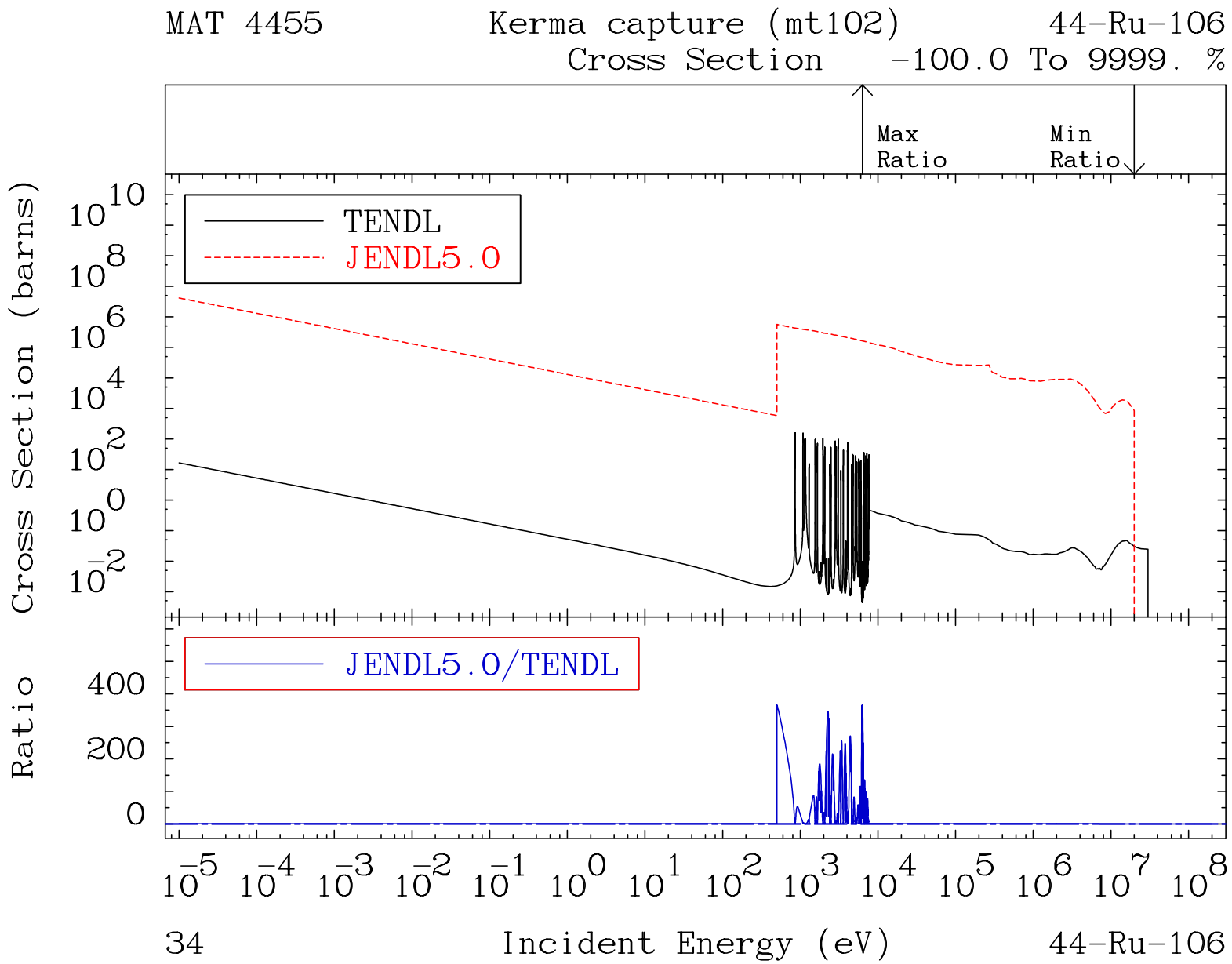

MAT 4455
Kerma total (eV-barns)
44-Ru-106
Cross Section -1249. To 9134. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
60
50
40
30
20
10
0
120
60
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
44-Ru-106

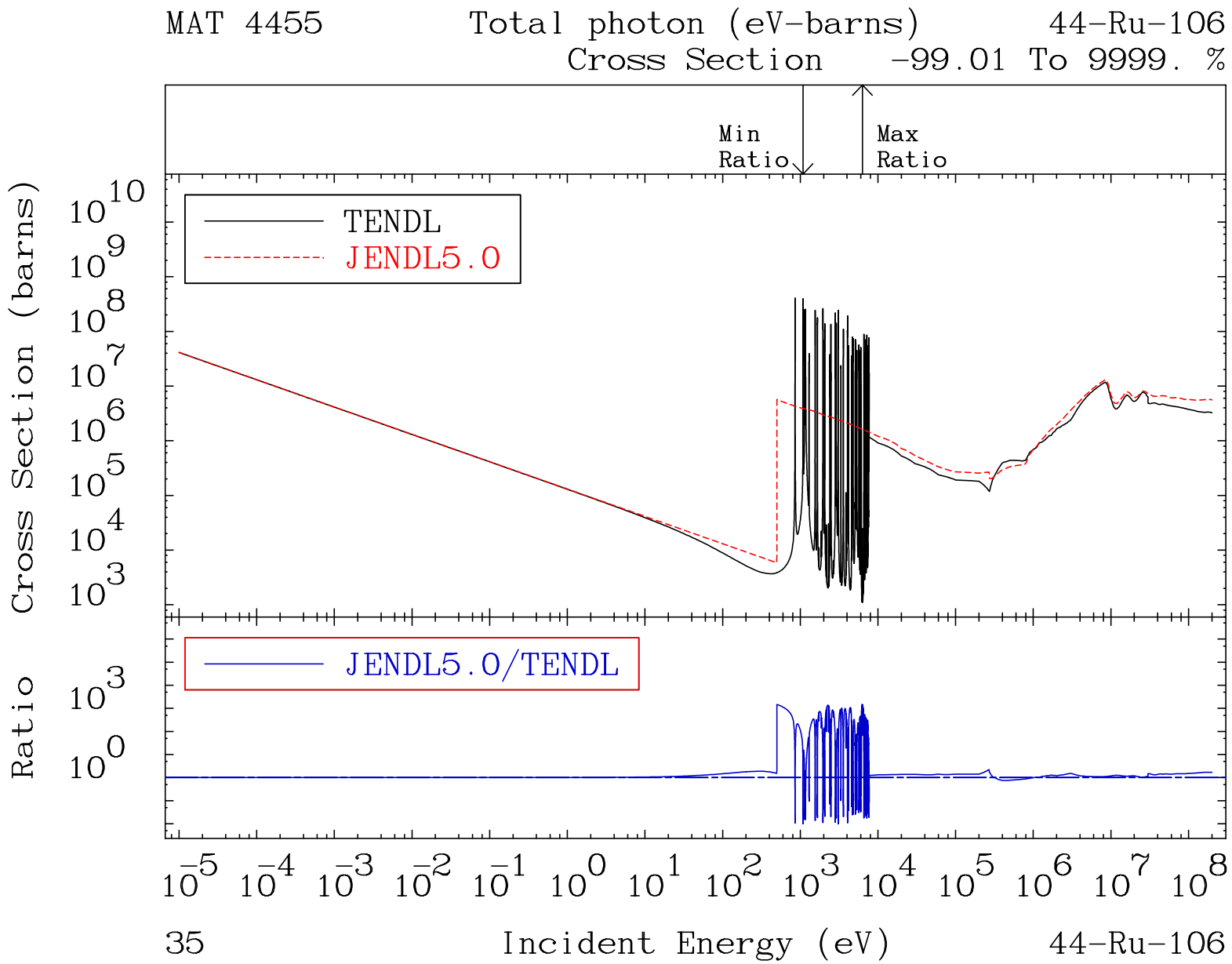

MAT 4455
Kerma elastic
Cross Section
44-Ru-106
-99.45 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
44-Ru-106

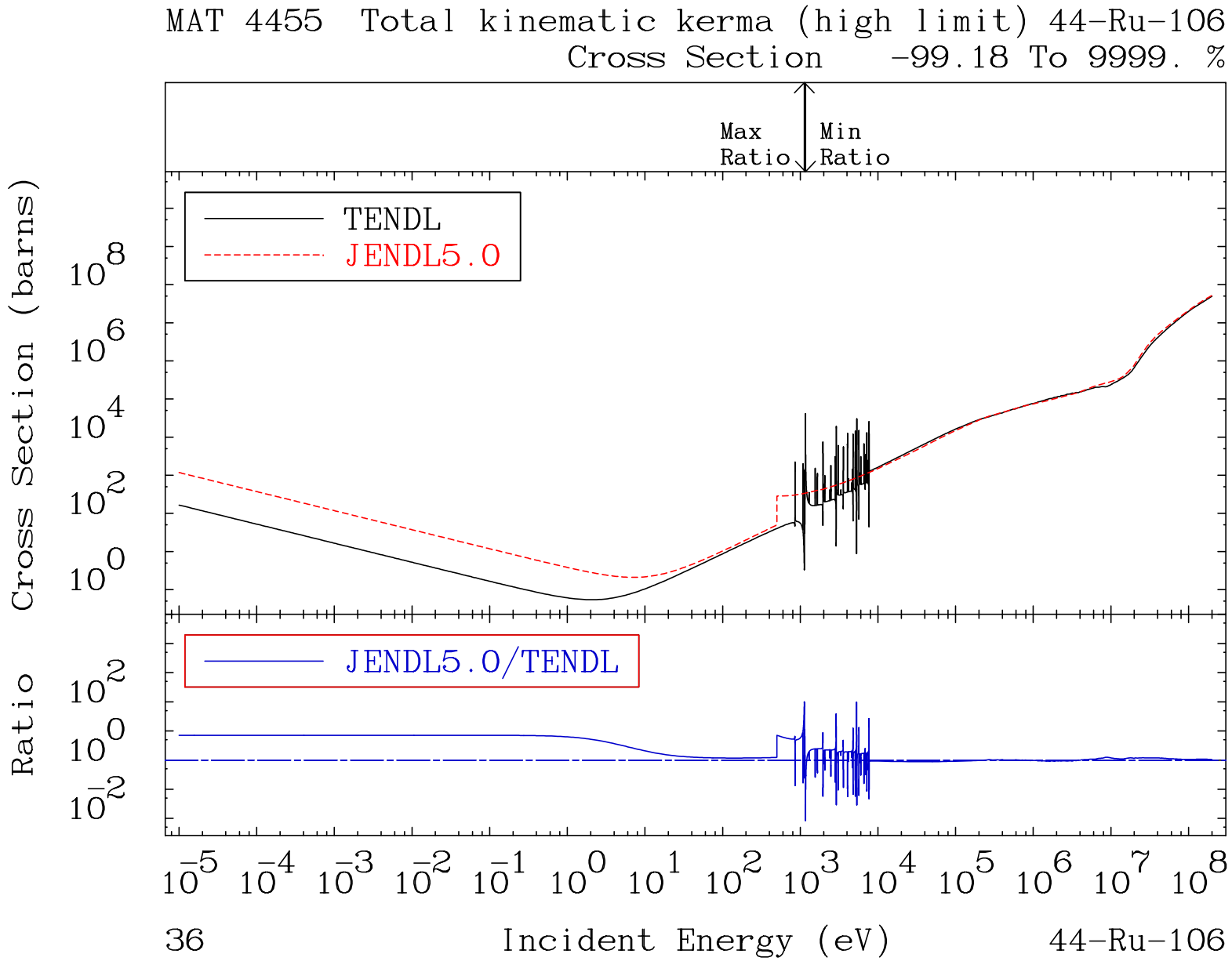

MAT 4455 Kerma non-elastic (all but mt2) 44-Ru-106
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
60
50
40
30
20
10
0
120
60
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
31
Incident Energy (eV)
44-Ru-106

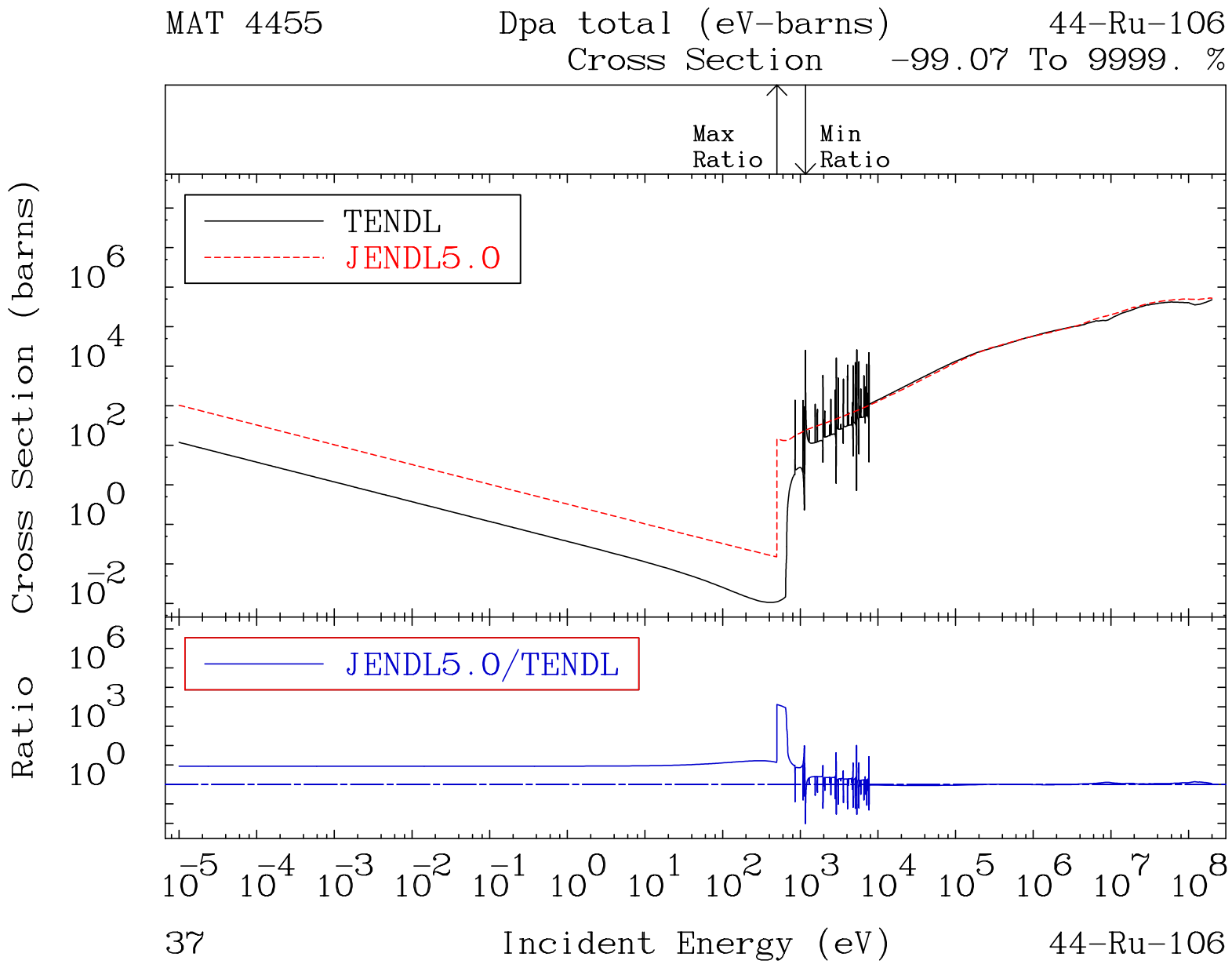

MAT 4455
Kerma inelastic (mt51-91)
44-Ru-106
Cross Section -100.0 To 8221. %
Max Ratio
Min Ratio
TENDL Threshold 272.64 keV
JENDL5.0 Threshold 272.64 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
32
44-Ru-106

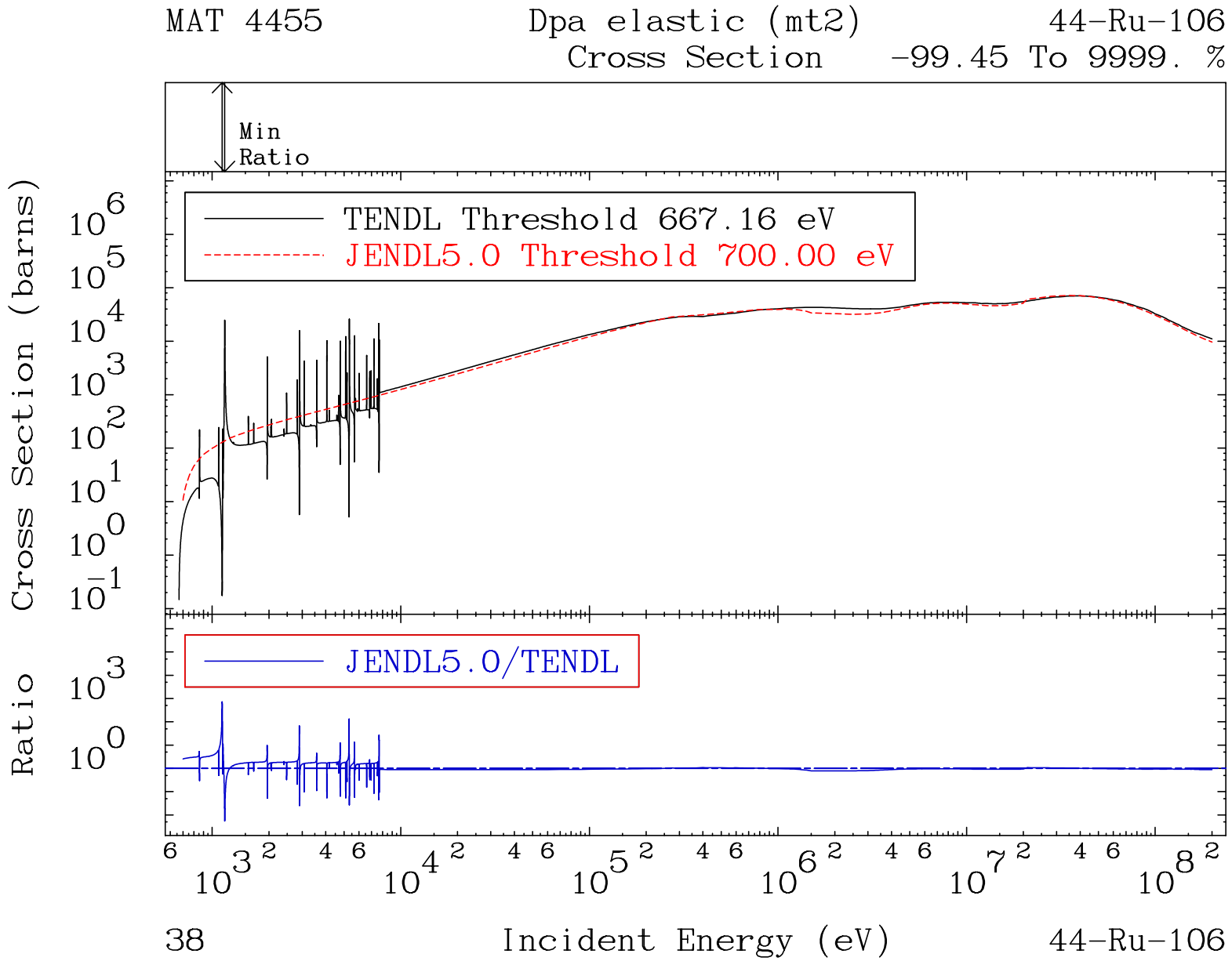

MAT 4455 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-106
Cross Section -100.0 To 8221. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
120
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
33
Incident Energy (eV)
44-Ru-106

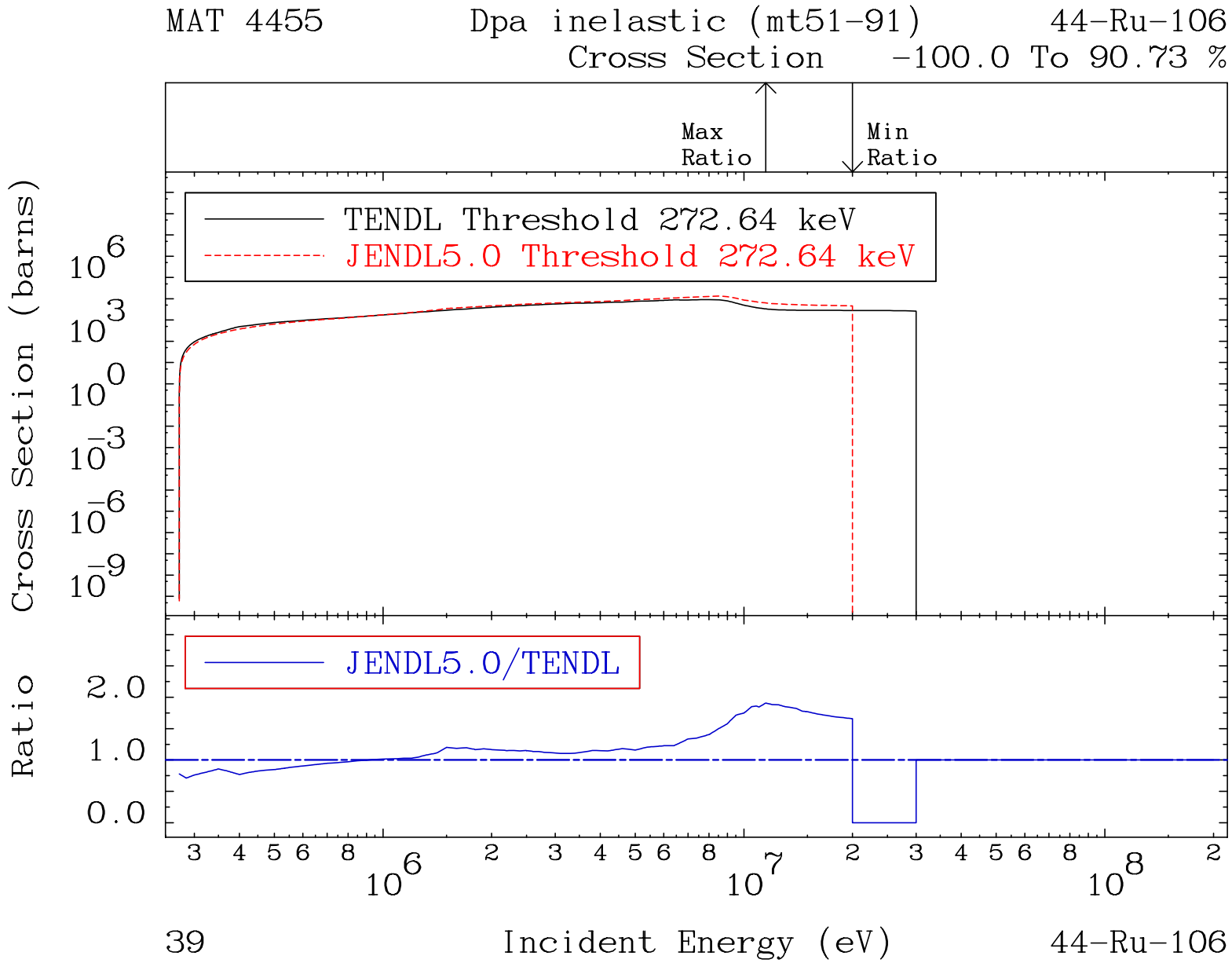

MAT 4455
Kerma capture (mt102)
44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
34
44-Ru-106

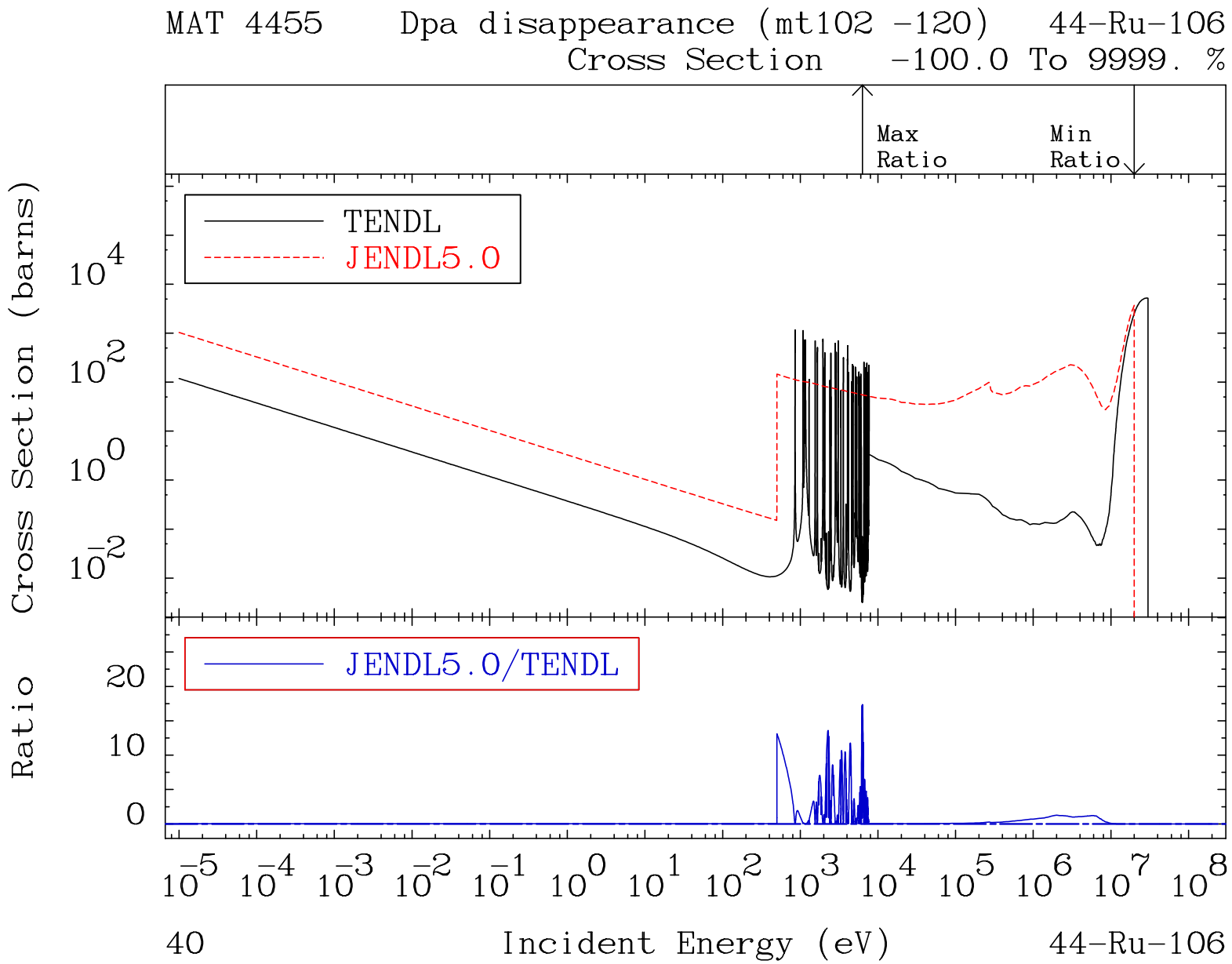

MAT 4455
Total photon (eV-barns)
44-Ru-106
Cross Section -99.01 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
44-Ru-106

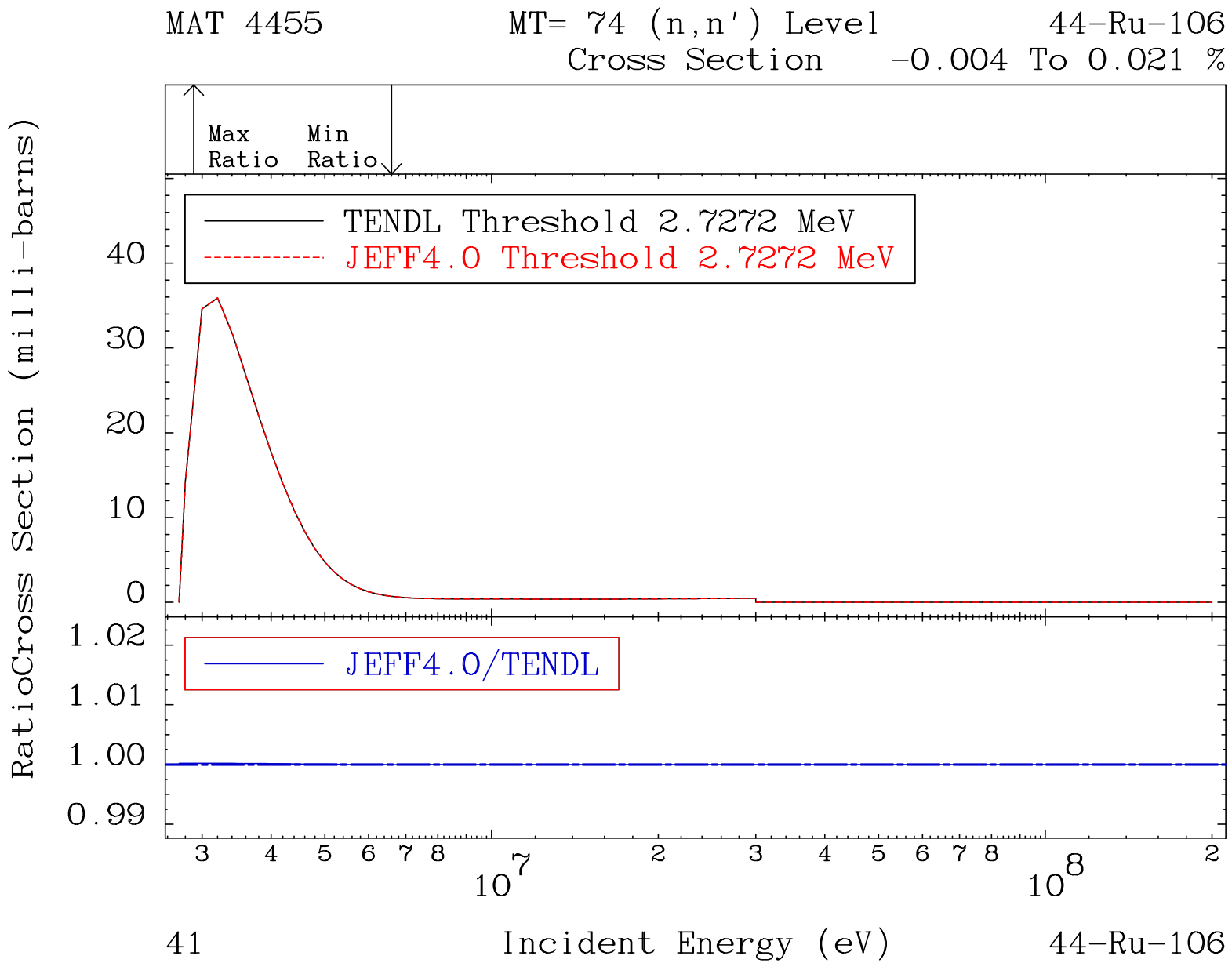

MAT 4455 Total kinematic kerma (high limit) 44-Ru-106
Cross Section -99.18 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
44-Ru-106

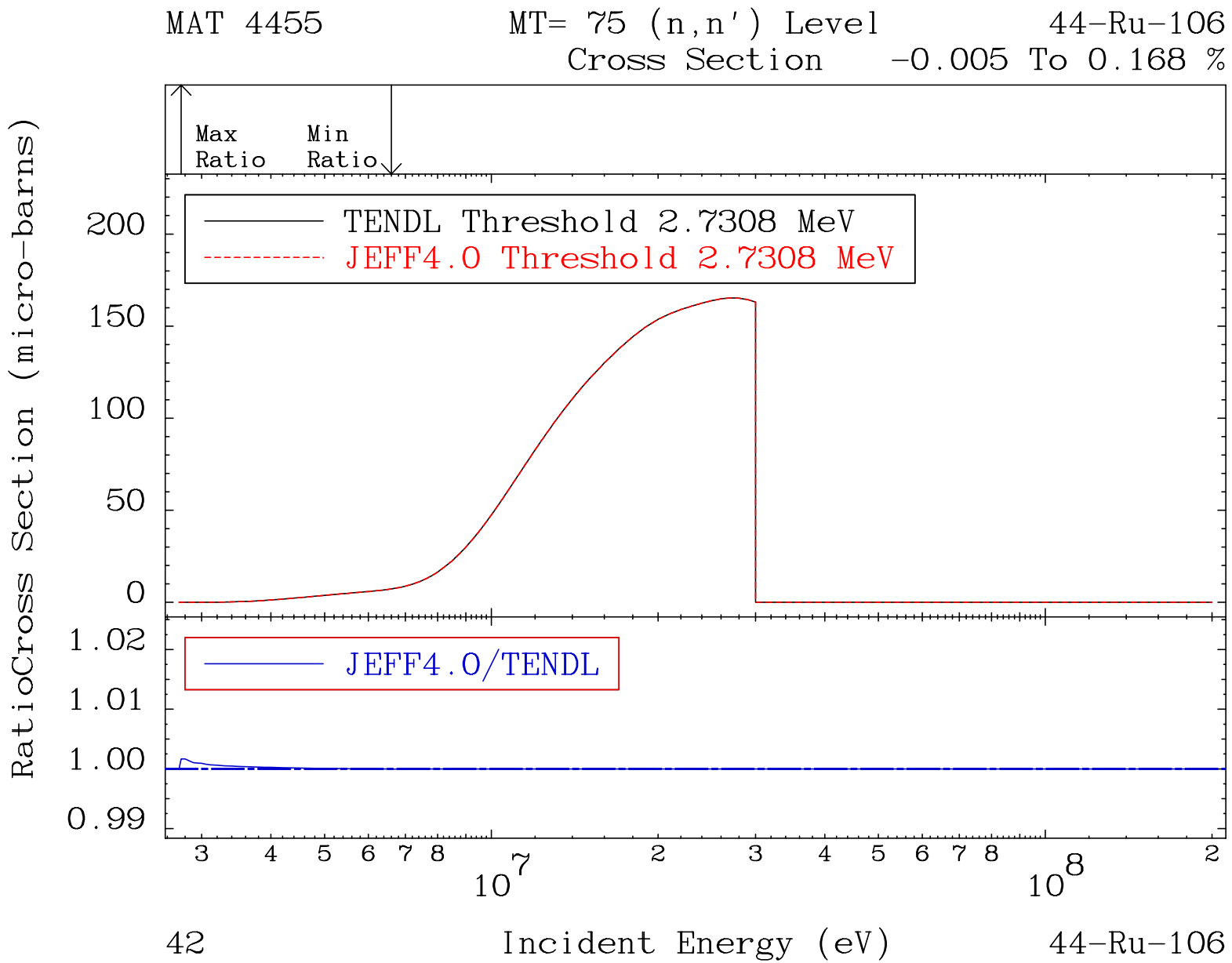

MAT 4455
Dpa total (eV-barns)
44-Ru-106
Cross Section -99.07 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
44-Ru-106

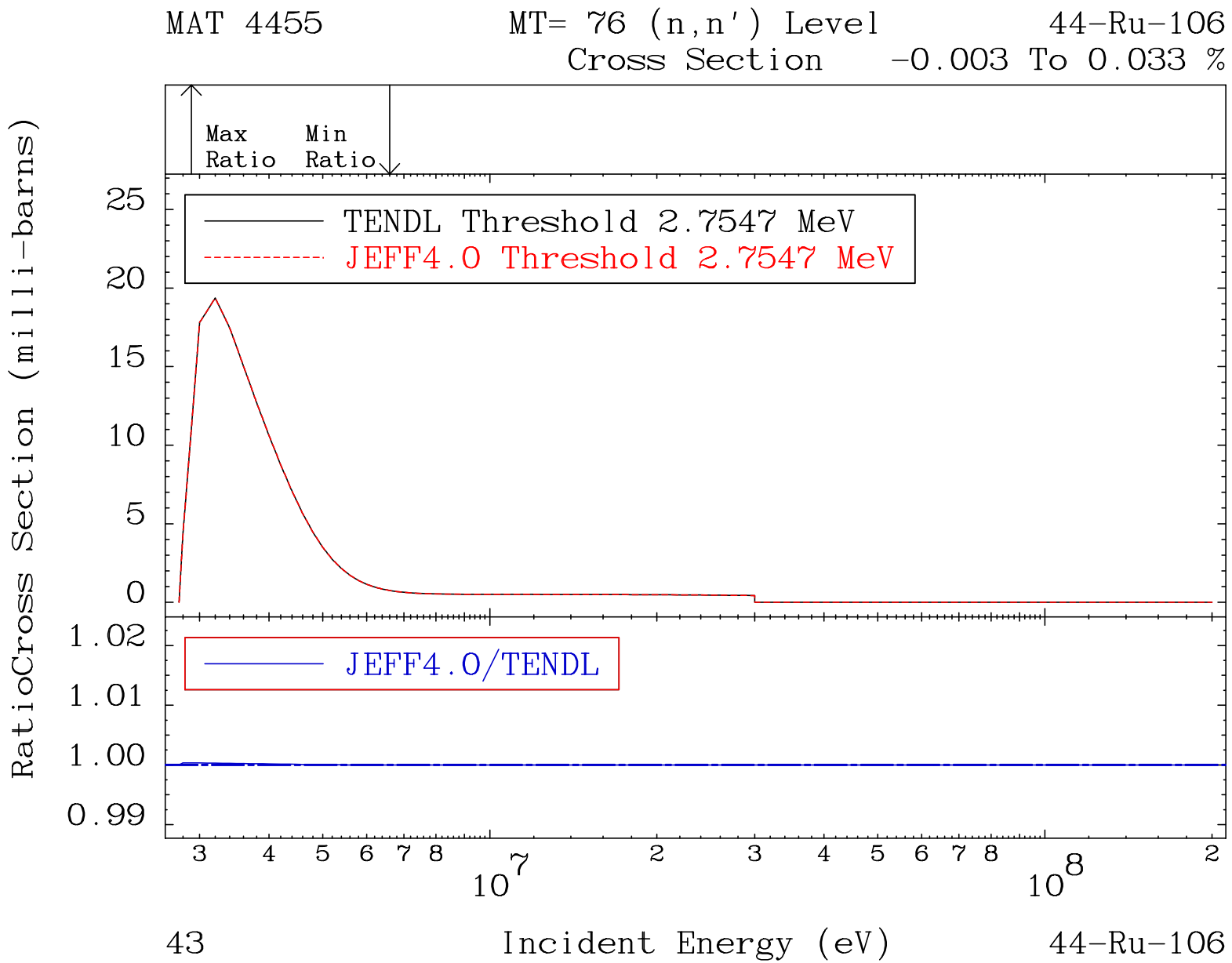

MAT 4455
Dpa elastic (mt2)
Cross Section
44-Ru-106
-99.45 To 9999. %
Min
Ratio
TENDL Threshold 667.16 eV
JENDL5.0 Threshold 700.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
44-Ru-106

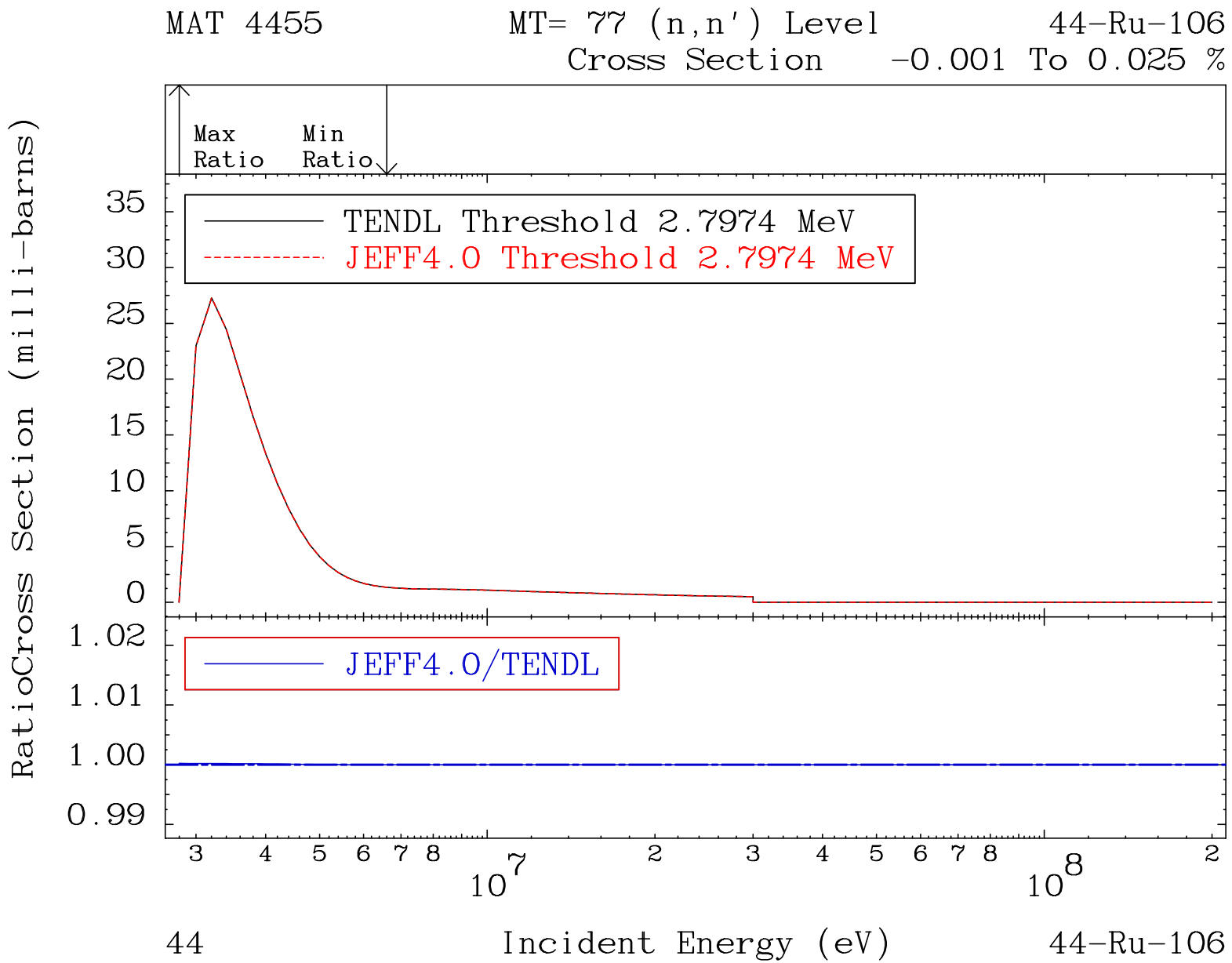

MAT 4455
Dpa inelastic (mt51-91)
44-Ru-106
Cross Section
-100.0 To 90.73 %
Max Ratio
Min Ratio
TENDL Threshold 272.64 keV
JENDL5.0 Threshold 272.64 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
39
44-Ru-106

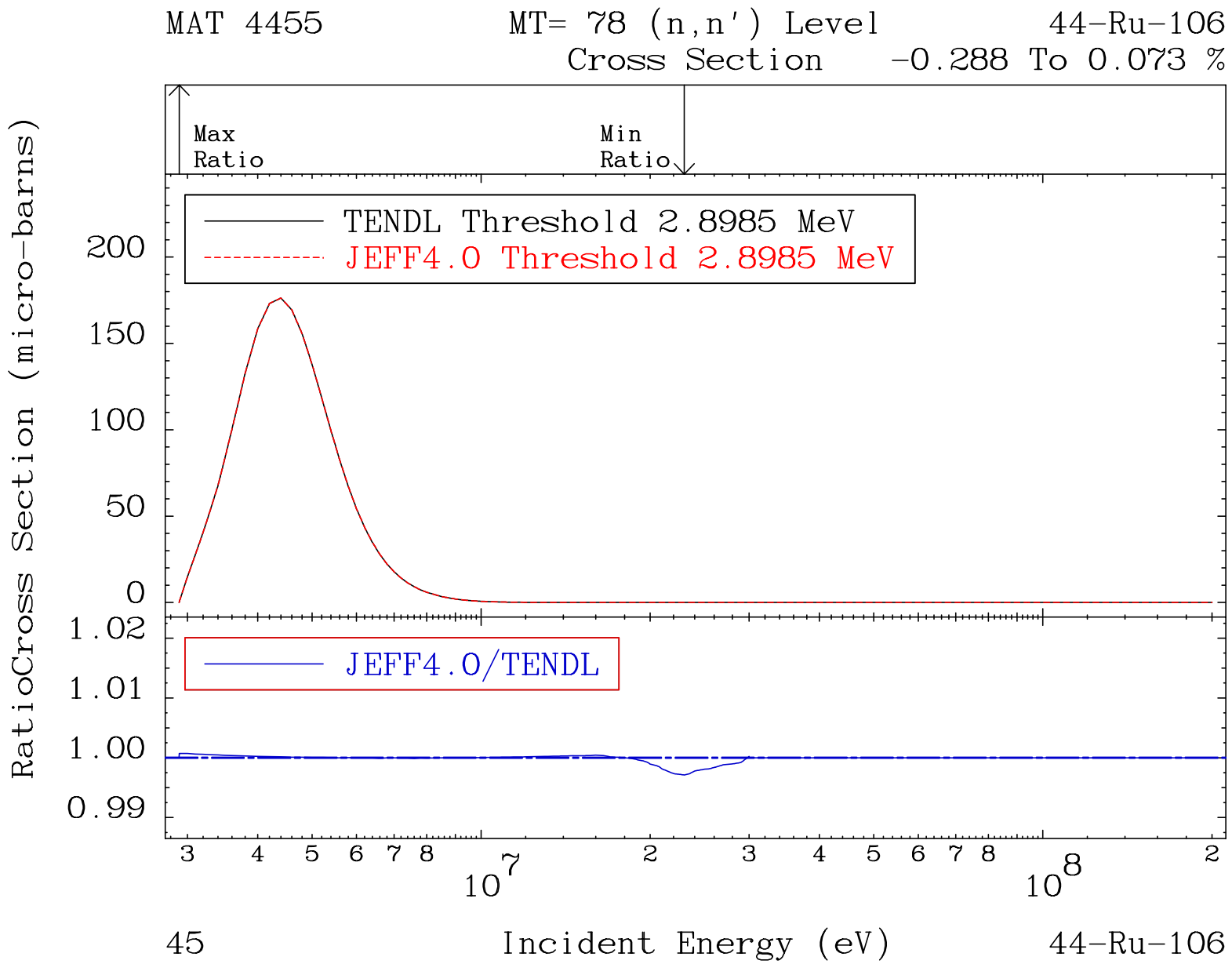

MAT 4455 Dpa disappearance (mt102 -120) 44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
40
44-Ru-106

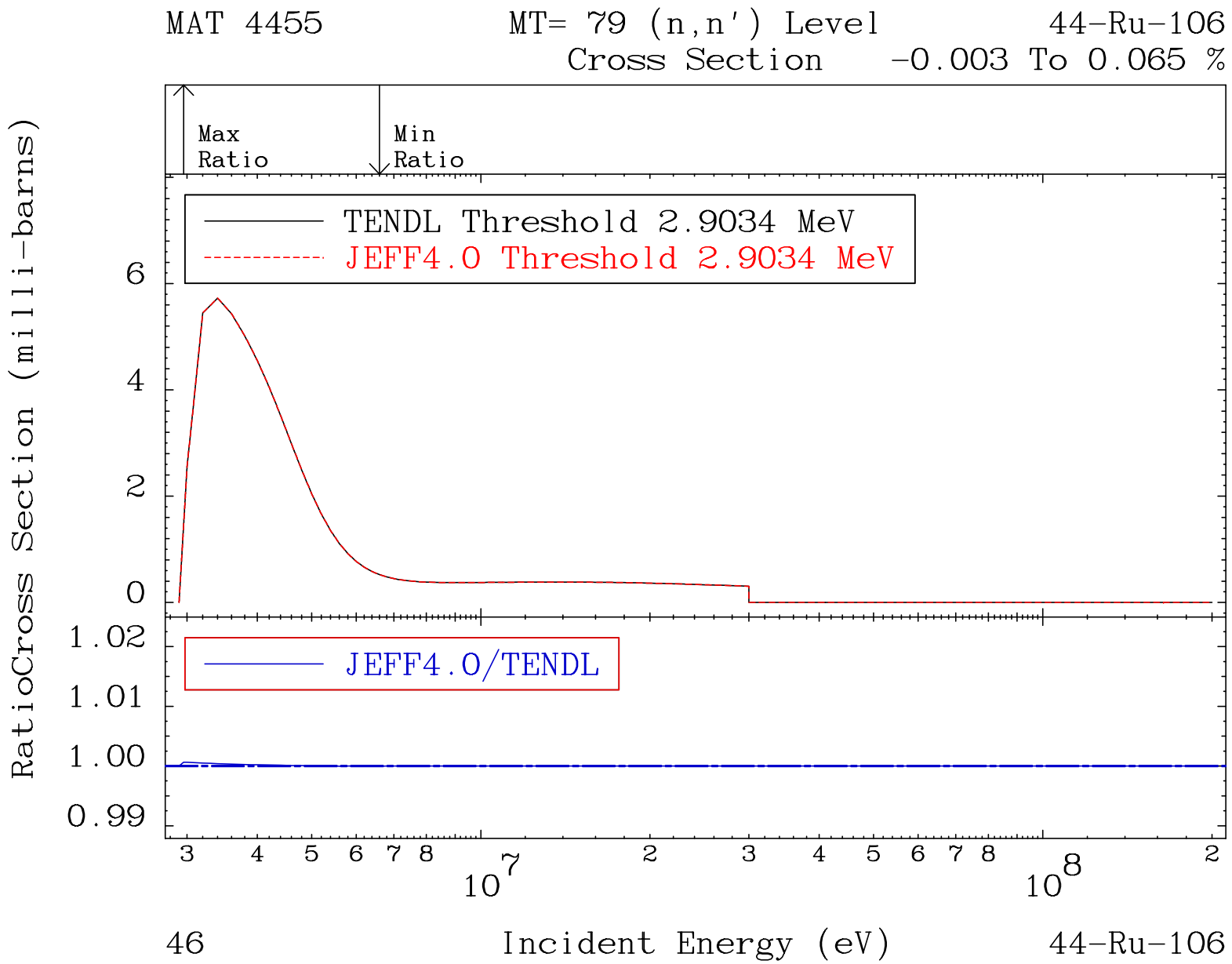

MAT 4455
MT= 74 (n,n') Level
44-Ru-106
Cross Section
-0.004 To 0.021 %
Max Ratio
Min Ratio
TENDL Threshold 2.7272 MeV
JEFF4.0 Threshold 2.7272 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
44-Ru-106

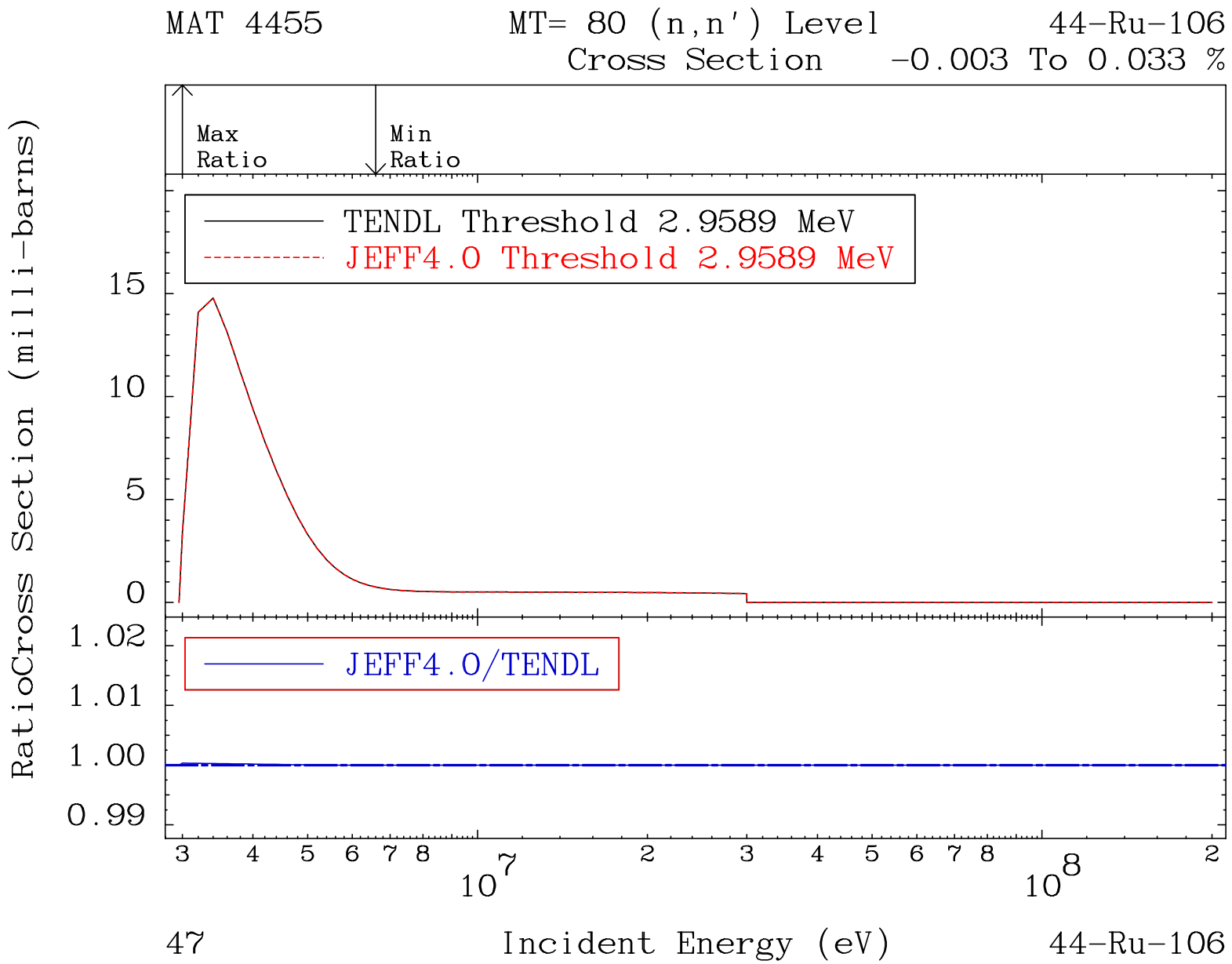

MAT 4455
MT= 75 (n,n') Level
44-Ru-106
Cross Section
-0.005 To 0.168 %
Max Ratio
Min Ratio
TENDL Threshold 2.7308 MeV
JEFF4.0 Threshold 2.7308 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
44-Ru-106

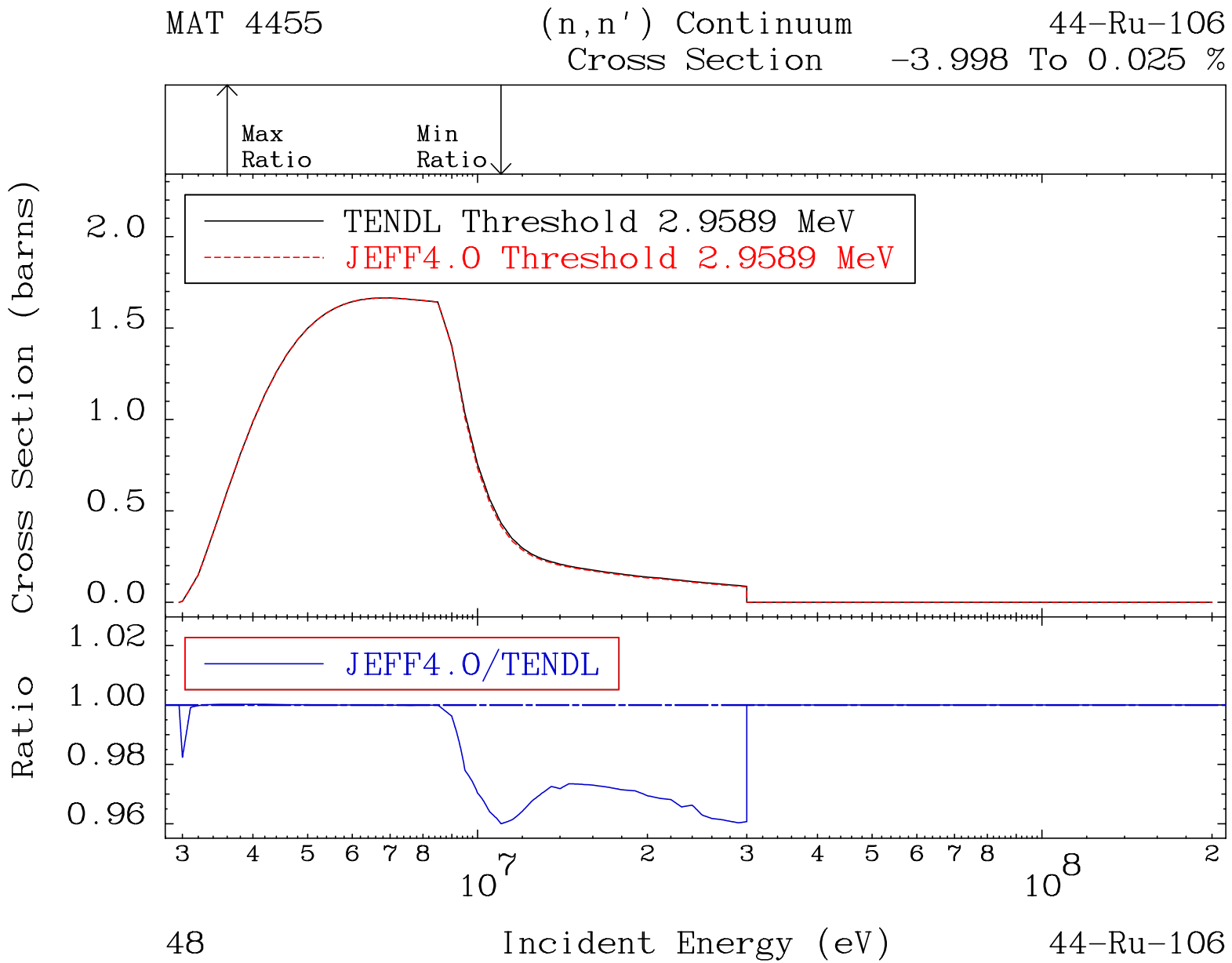

MAT 4455
MT= 76 (n,n') Level
Cross Section
44-Ru-106
-0.003 To 0.033 %
Max Ratio
Min Ratio
TENDL Threshold 2.7547 MeV
JEFF4.0 Threshold 2.7547 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
44-Ru-106

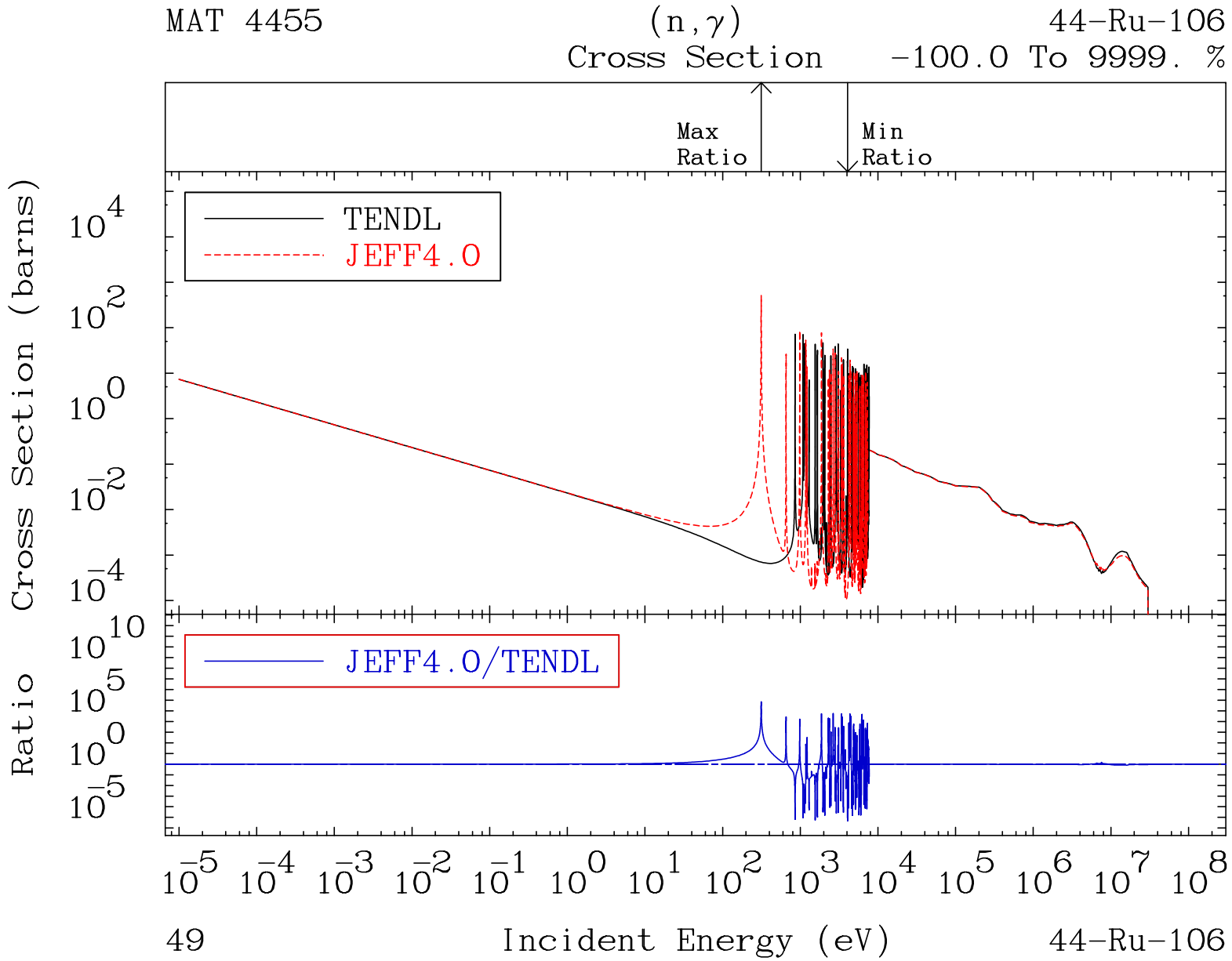

MAT 4455
MT= 77 (n,n') Level
44-Ru-106
Cross Section -0.001 To 0.025 %
Max Ratio
Min Ratio
TENDL Threshold 2.7974 MeV
JEFF4.0 Threshold 2.7974 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
44
Incident Energy (eV)
44-Ru-106

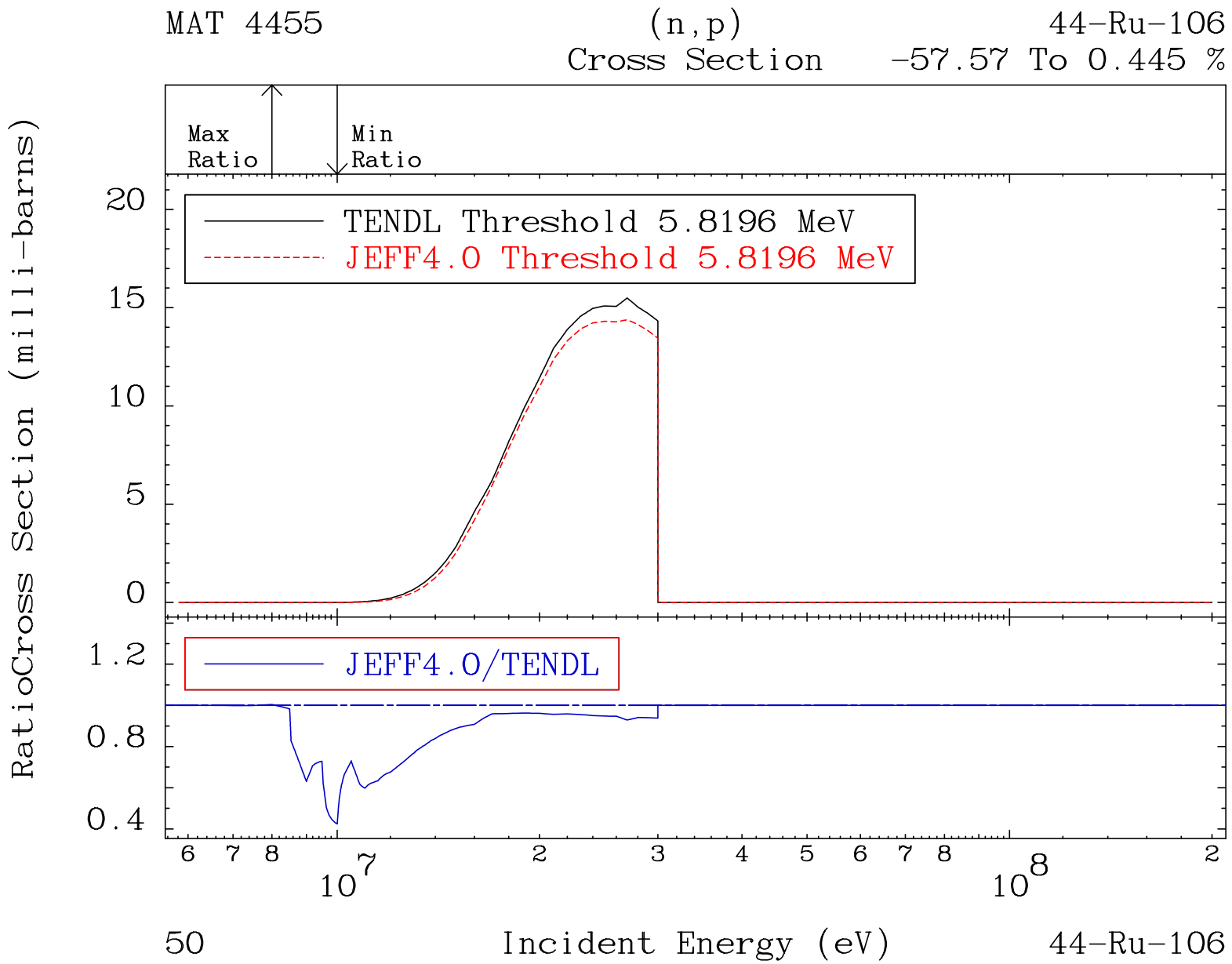

MAT 4455
MT= 78 (n,n') Level
Cross Section
44-Ru-106
-0.288 To 0.073 %
Max Ratio
Min Ratio
TENDL Threshold 2.8985 MeV
JEFF4.0 Threshold 2.8985 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
44-Ru-106

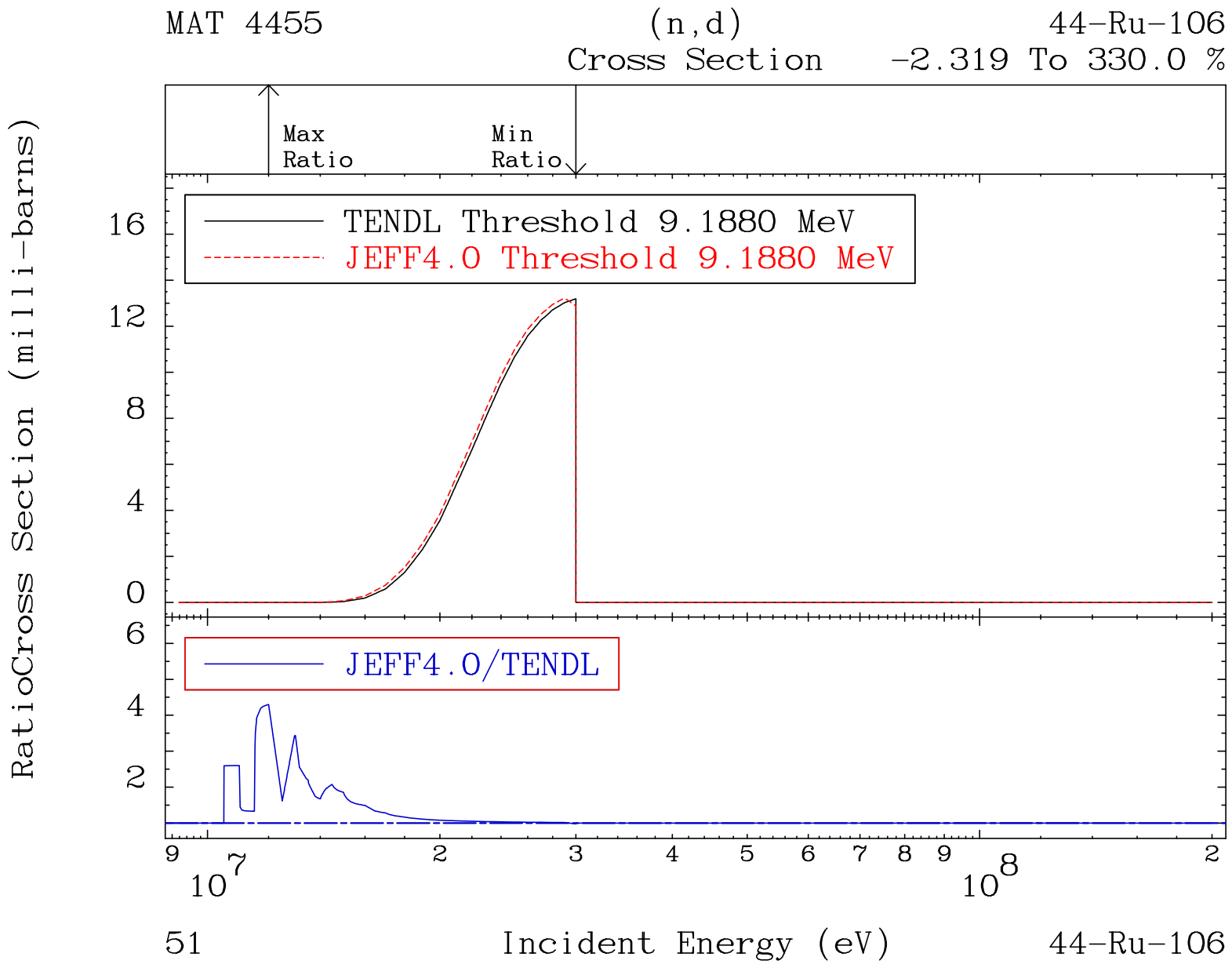

MAT 4455
MT= 79 (n,n') Level
44-Ru-106
Cross Section
-0.003 To 0.065 %
Max Ratio
Min Ratio
TENDL Threshold 2.9034 MeV
JEFF4.0 Threshold 2.9034 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
6
4
2
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
44-Ru-106

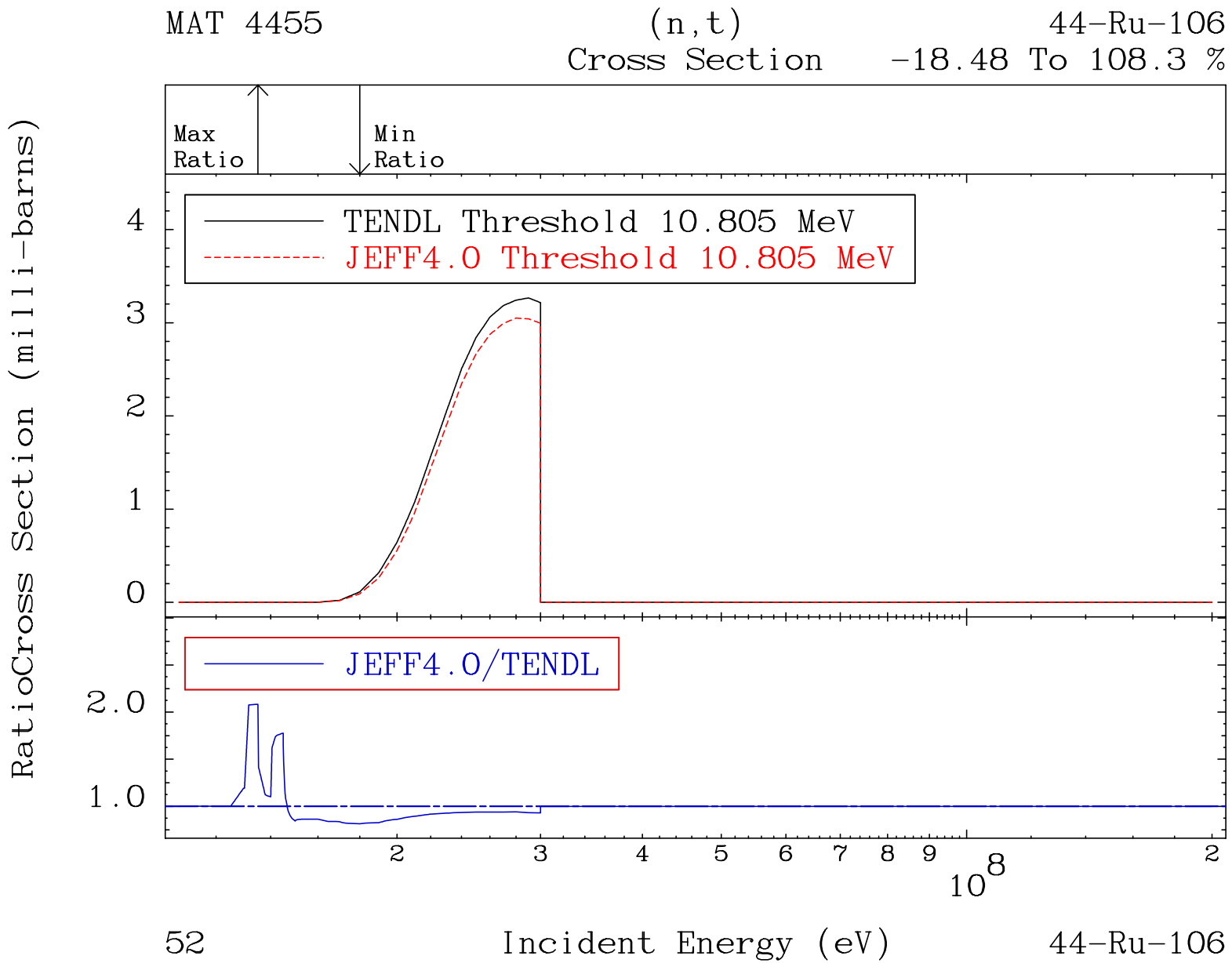

MAT 4455
MT= 80 (n,n') Level
44-Ru-106
Cross Section
-0.003 To 0.033 %
Max Ratio
Min Ratio
TENDL Threshold 2.9589 MeV
JEFF4.0 Threshold 2.9589 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
1.02
1.01
1.00
0.99
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
44-Ru-106

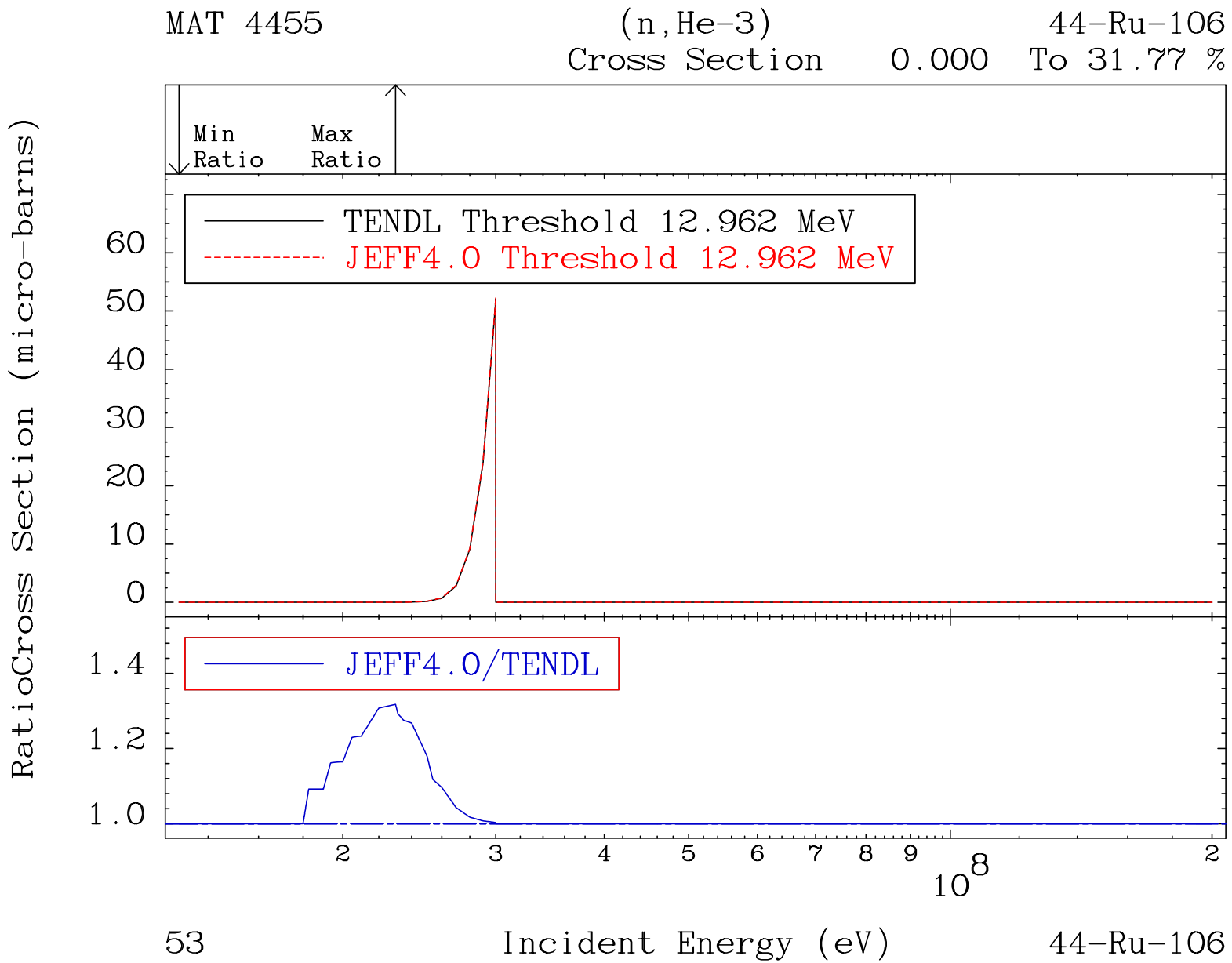

MAT 4455
(n,n') Continuum
Cross Section
44-Ru-106
-3.998 To 0.025 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.9589 MeV
JEFF4.0 Threshold 2.9589 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.02
1.00
0.98
0.96
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
44-Ru-106

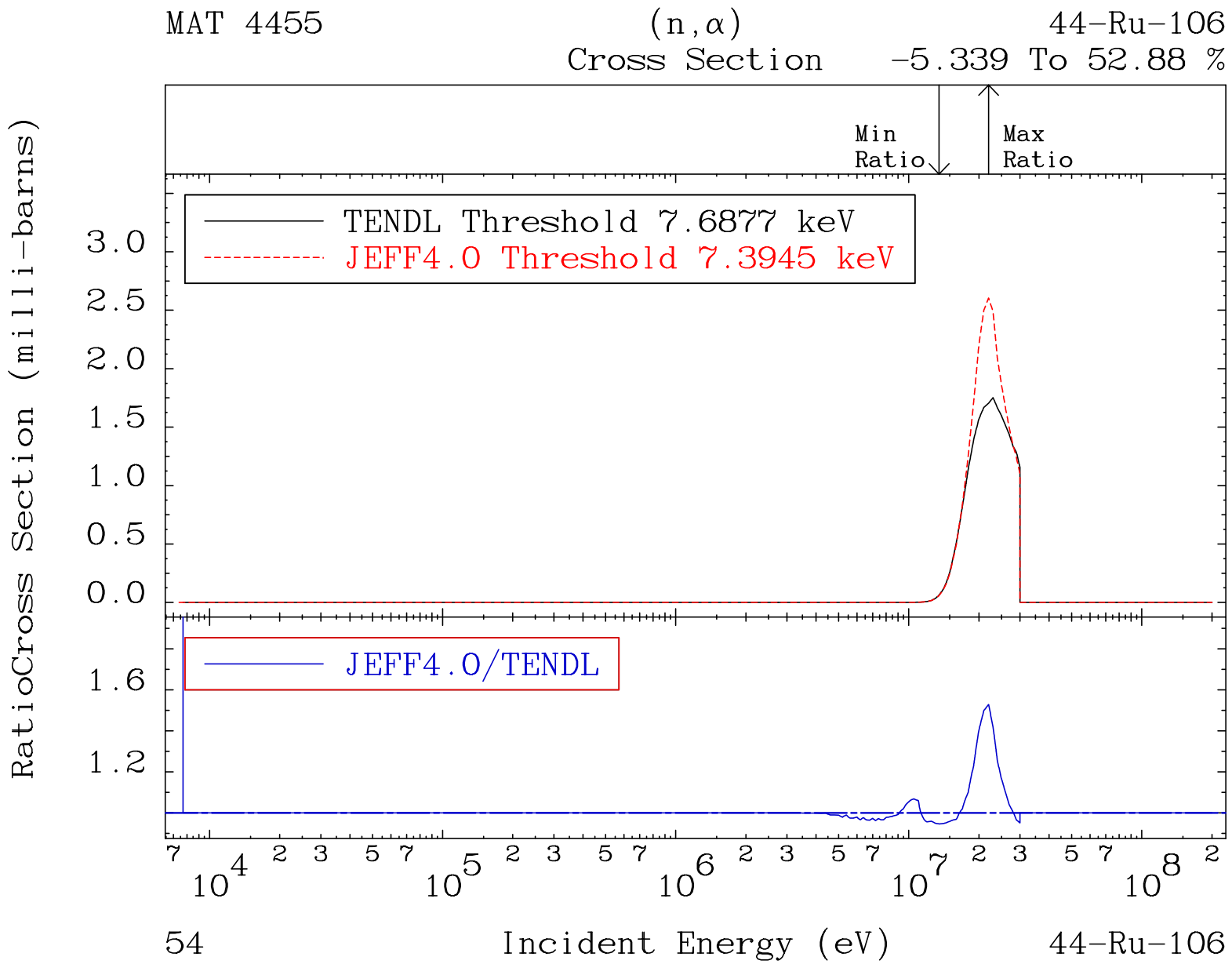

MAT 4455
(n,γ)
Cross Section
44-Ru-106
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
44-Ru-106

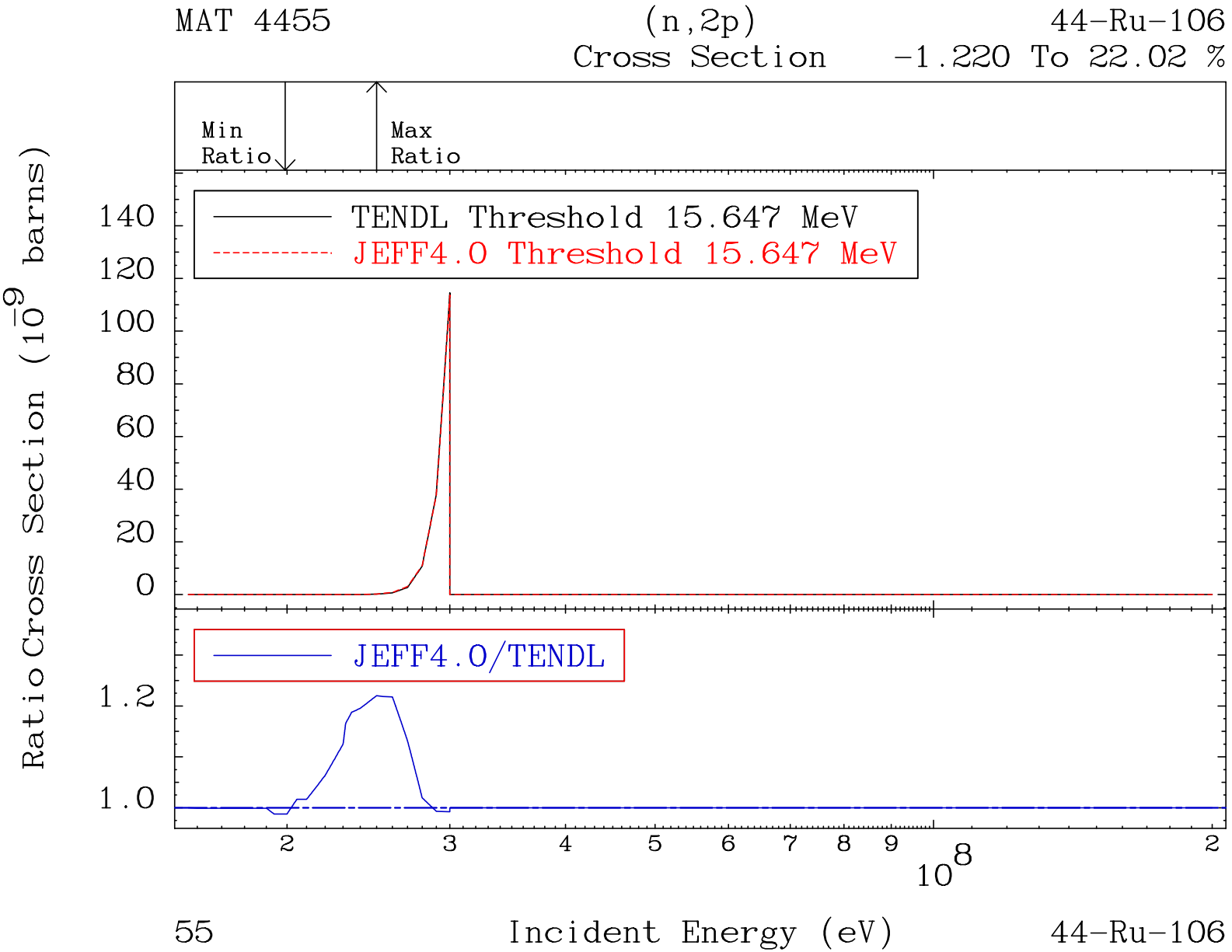

MAT 4455
(n,p)
44-Ru-106
Cross Section
-57.57 To 0.445 %
Max Ratio
Min Ratio
TENDL Threshold 5.8196 MeV
JEFF4.0 Threshold 5.8196 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.8
0.4
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
50
Incident Energy (eV)
44-Ru-106

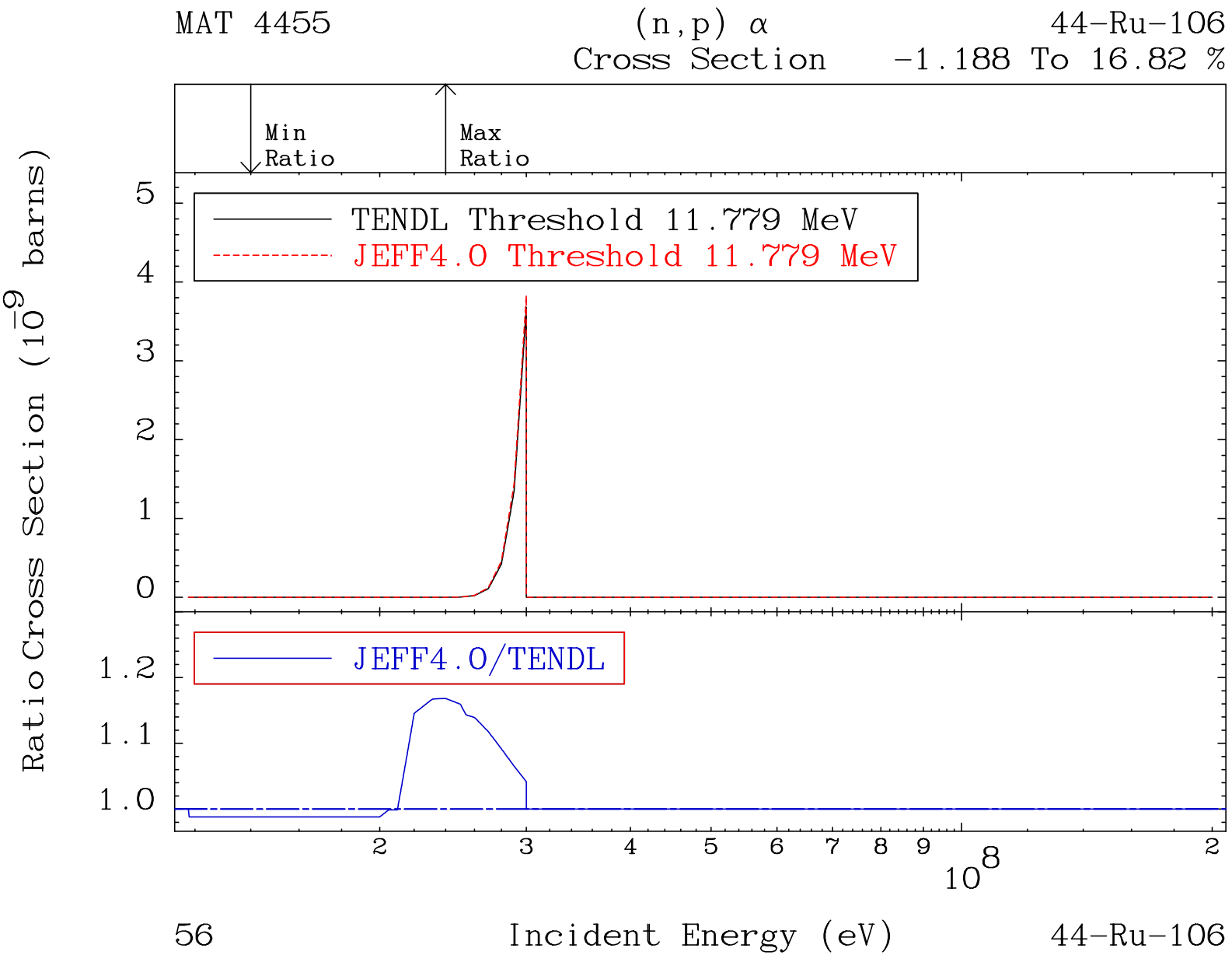

MAT 4455
(n,d)
Cross Section
44-Ru-106
-2.319 To 330.0 %
Max Ratio
Min Ratio
TENDL Threshold 9.1880 MeV
JEFF4.0 Threshold 9.1880 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51
44-Ru-106

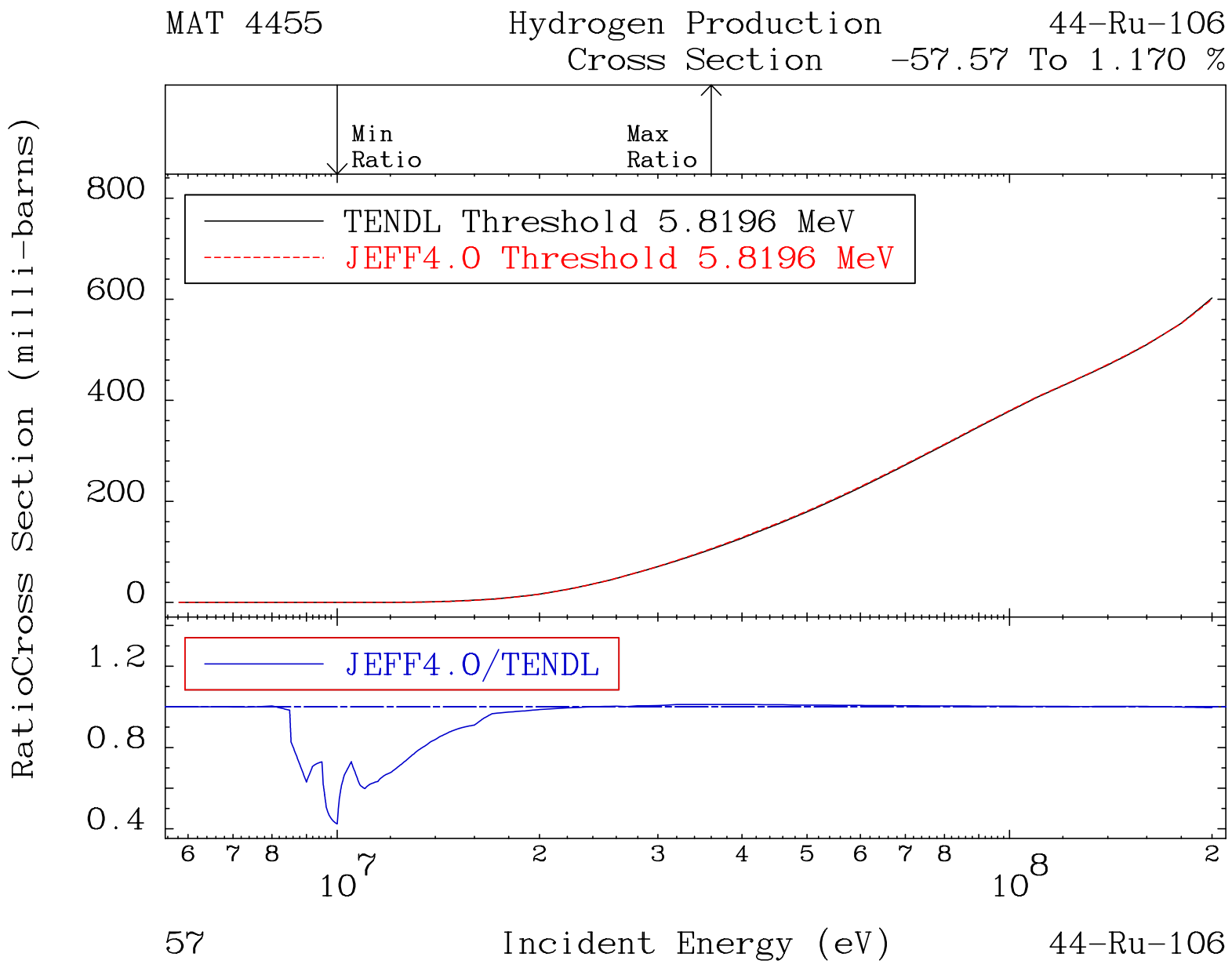

MAT 4455
(n,t)
44-Ru-106
Cross Section
-18.48 To 108.3 %
Max Ratio
Min Ratio
TENDL Threshold 10.805 MeV
JEFF4.0 Threshold 10.805 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
52
Incident Energy (eV)
44-Ru-106

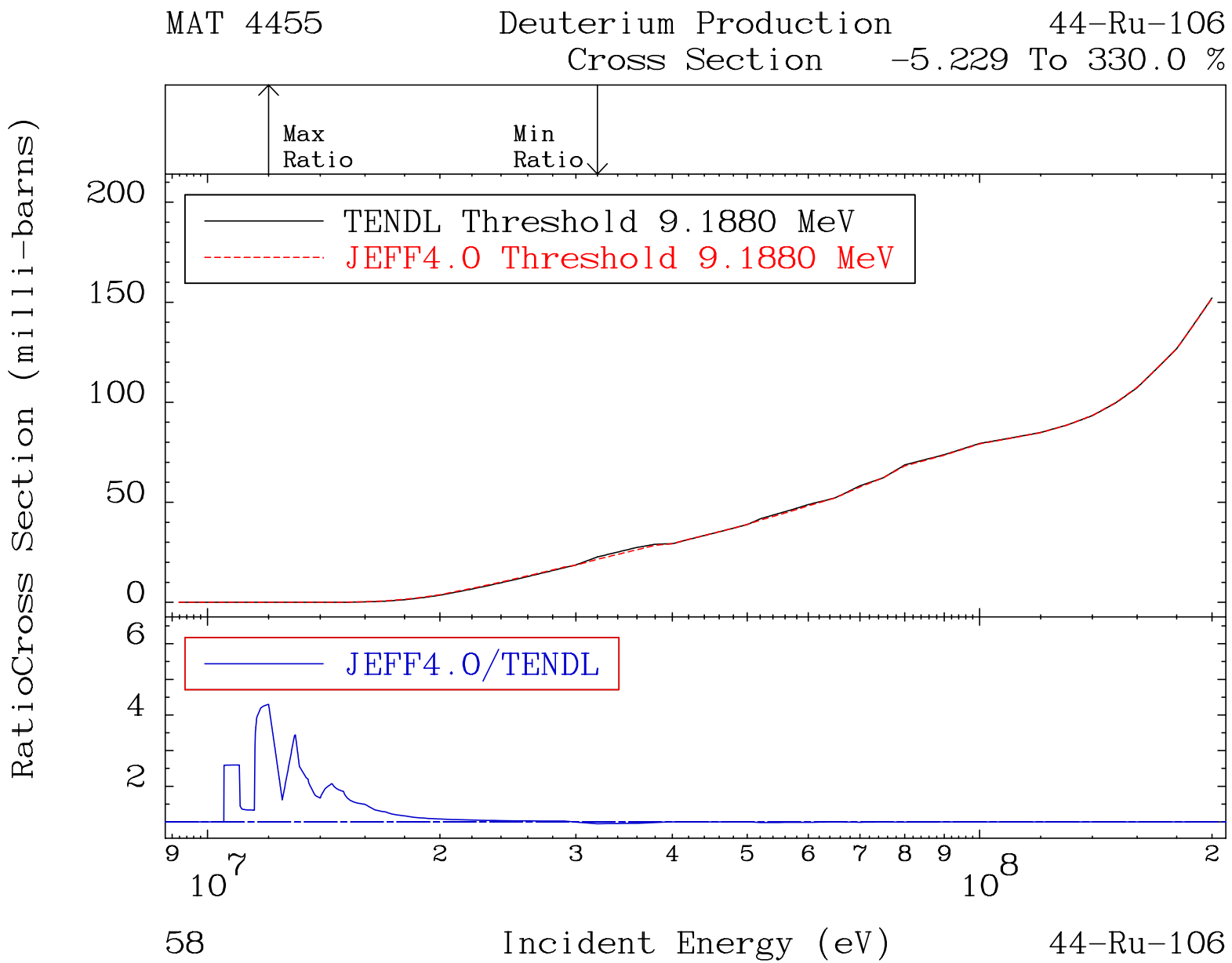

MAT 4455
(n,He-3)
44-Ru-106
Cross Section
0.000
To 31.77 %
Min Ratio
Max Ratio
TENDL Threshold 12.962 MeV
JEFF4.0 Threshold 12.962 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
1.4
1.2
1.0
2
3
4
5
6
7
8
9
2
10^8
53
Incident Energy (eV)
44-Ru-106

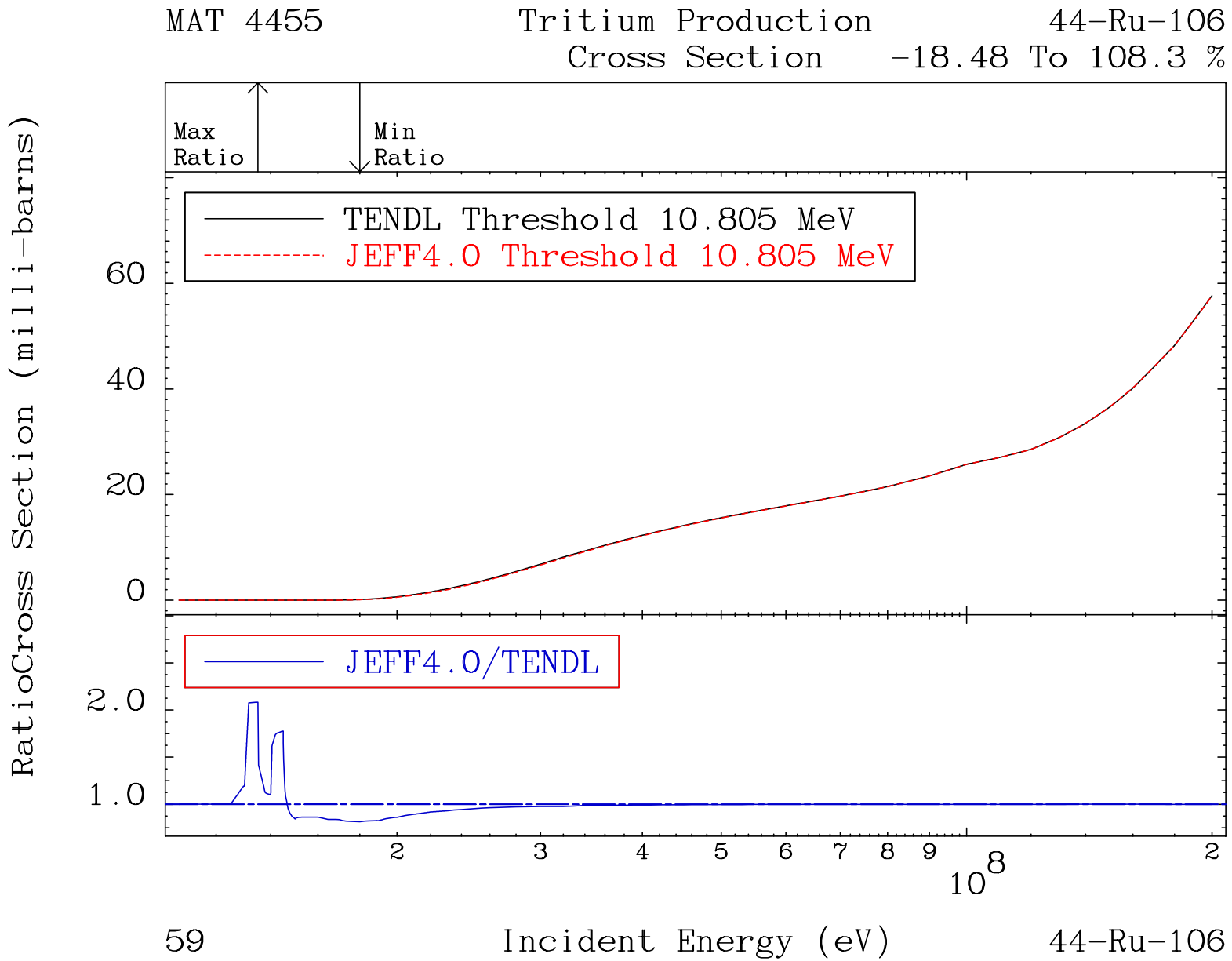

MAT 4455
(n,α)
Cross Section
44-Ru-106
-5.339 To 52.88 %
Min Ratio
Max Ratio
TENDL Threshold 7.6877 keV
JEFF4.0 Threshold 7.3945 keV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.2
7 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
54
Incident Energy (eV)
44-Ru-106

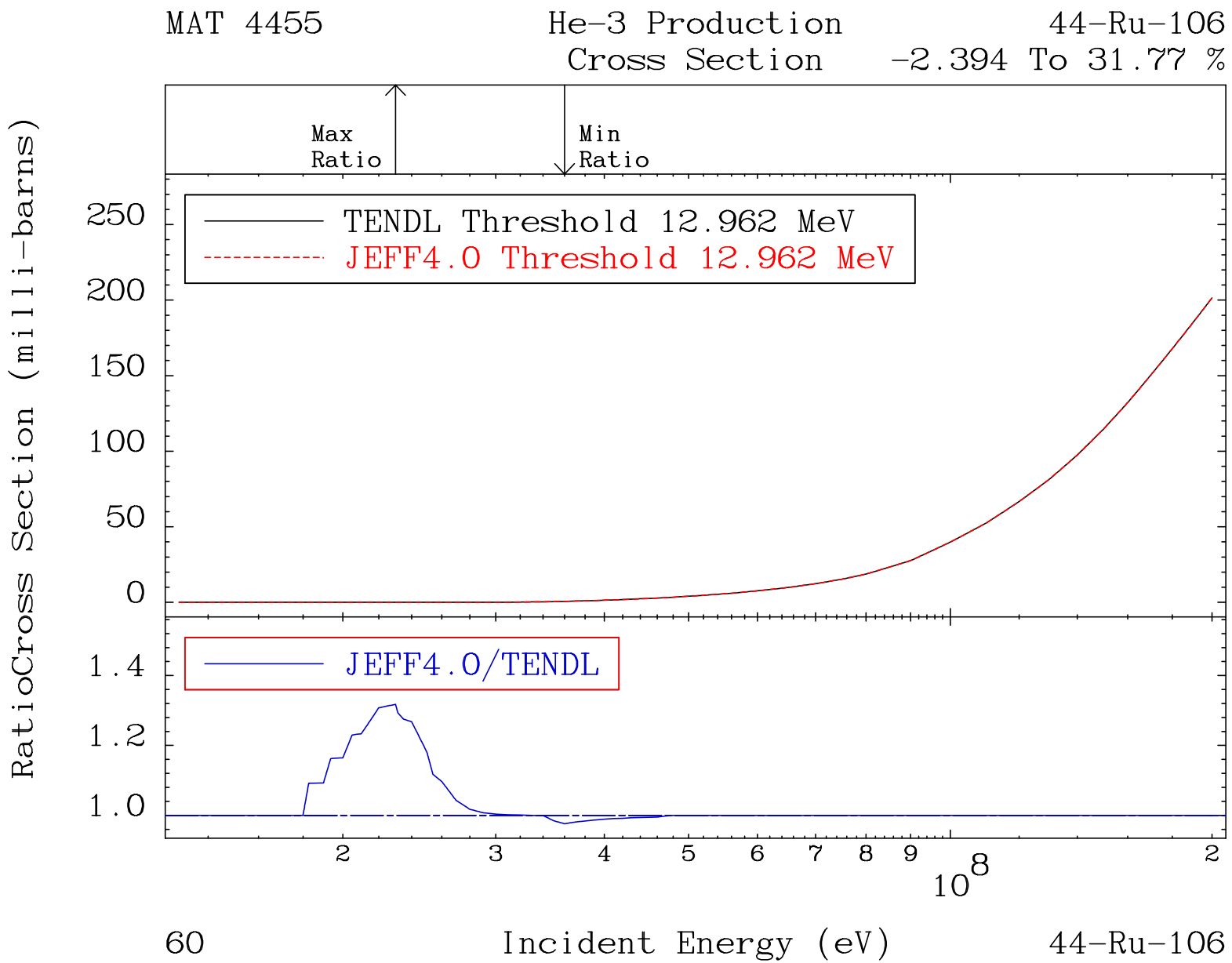

MAT 4455
(n,2p)
Cross Section
44-Ru-106
-1.220 To 22.02 %
Min Ratio
Max Ratio
TENDL Threshold 15.647 MeV
JEFF4.0 Threshold 15.647 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
140
120
100
80
60
40
20
0
1.2
1.0
2
3
4
5
6
7
8
9
10^{8}
2
55
Incident Energy (eV)
44-Ru-106

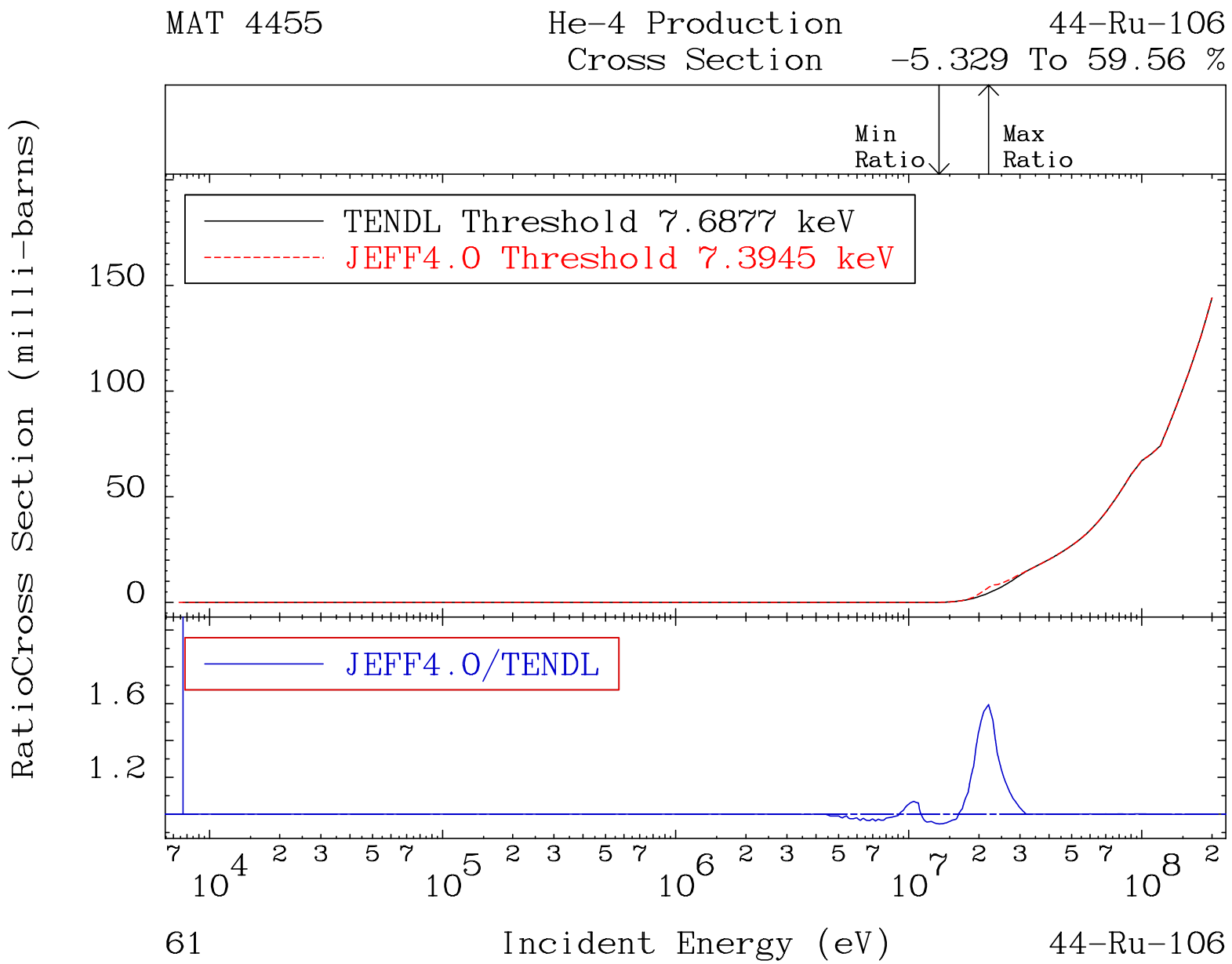

MAT 4455
(n,p) α
44-Ru-106
Cross Section
-1.188 To 16.82 %
Min Ratio
Max Ratio
TENDL Threshold 11.779 MeV
JEFF4.0 Threshold 11.779 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
10^8
56
44-Ru-106

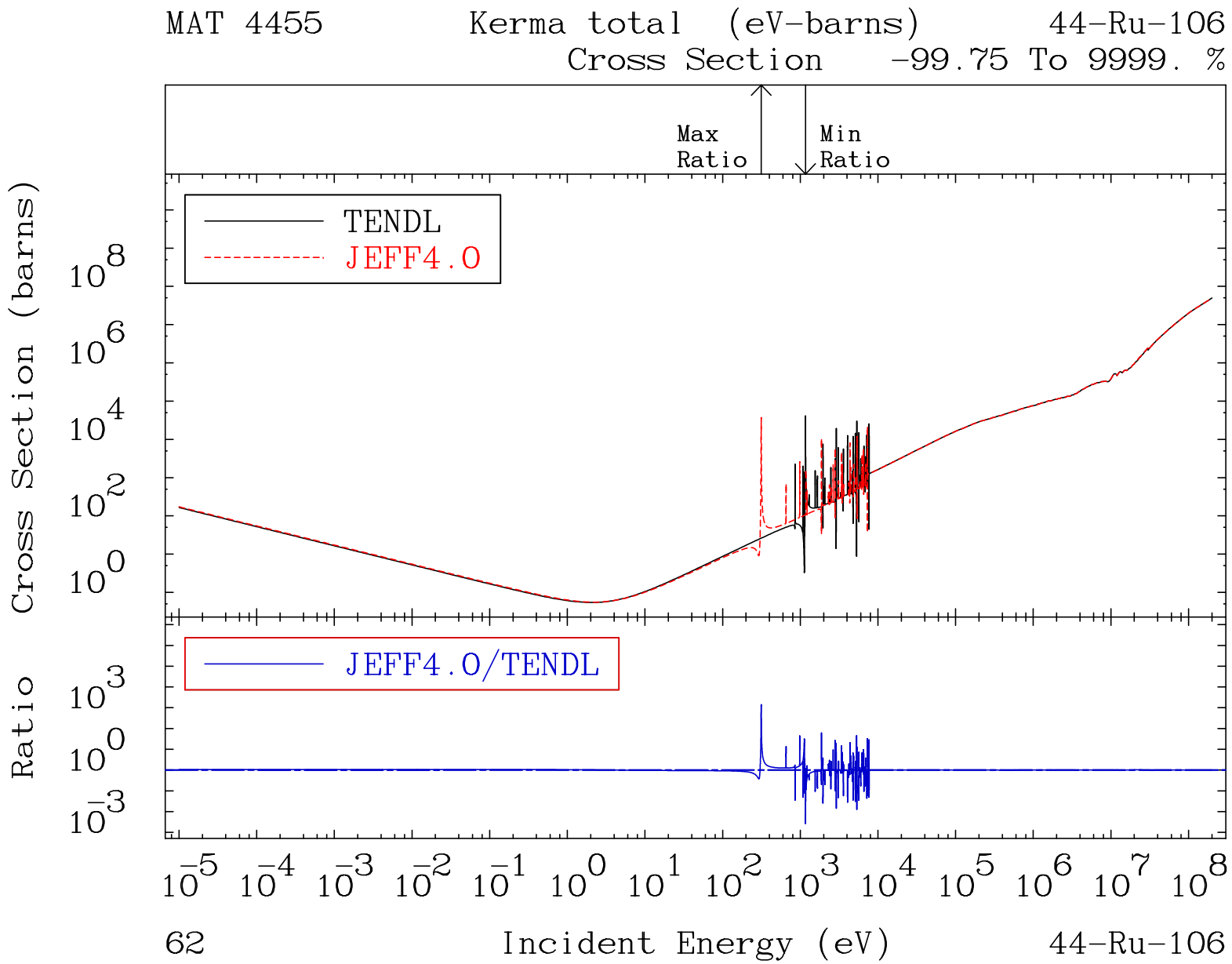

MAT 4455
Hydrogen Production
44-Ru-106
Cross Section
-57.57 To 1.170 %
Min Ratio
Max Ratio
TENDL Threshold 5.8196 MeV
JEFF4.0 Threshold 5.8196 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.8
0.4
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
57
Incident Energy (eV)
44-Ru-106

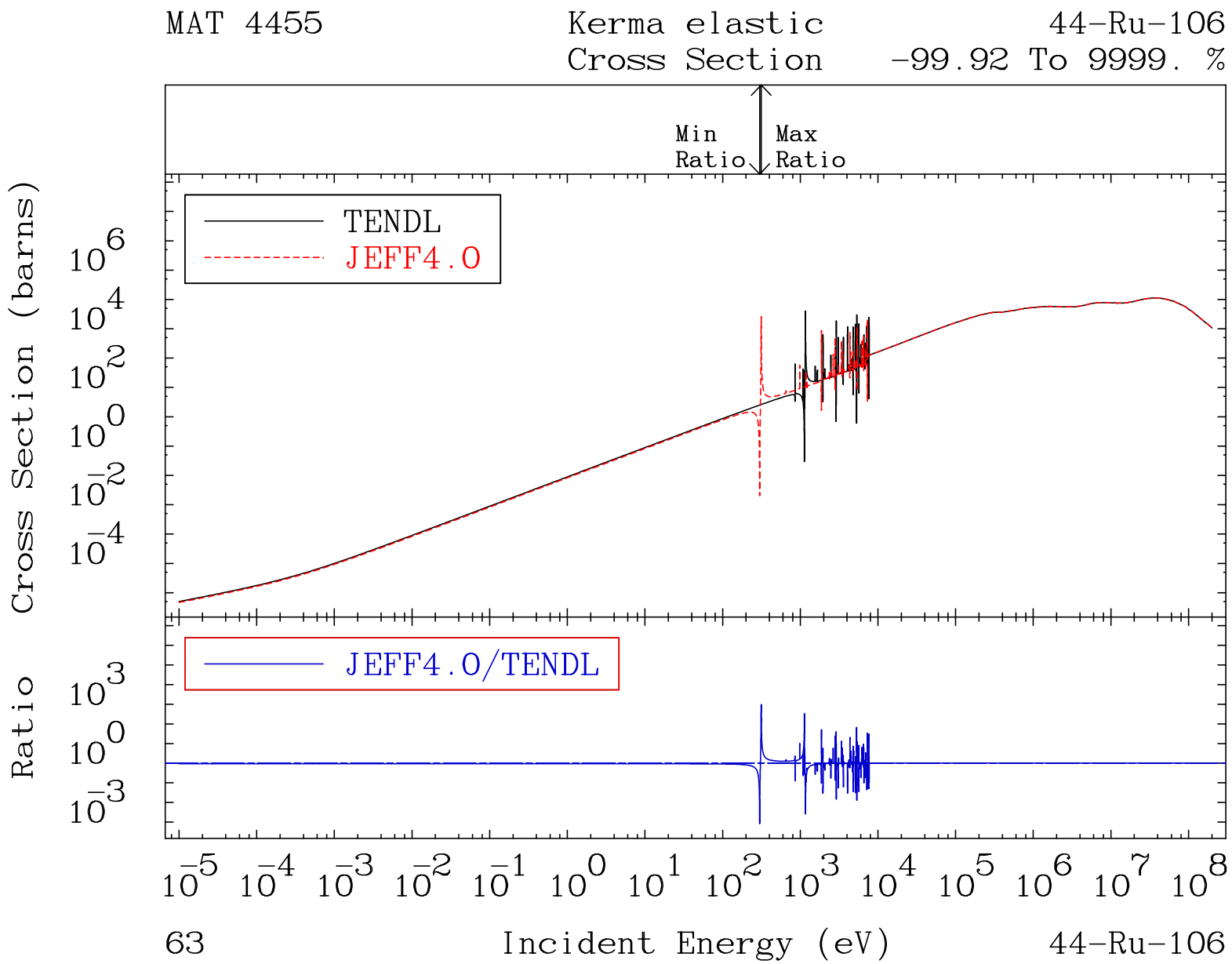

MAT 4455
Deuterium Production
44-Ru-106
Cross Section
-5.229 To 330.0 %
Max Ratio
Min Ratio
TENDL Threshold 9.1880 MeV
JEFF4.0 Threshold 9.1880 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
6
4
2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
44-Ru-106

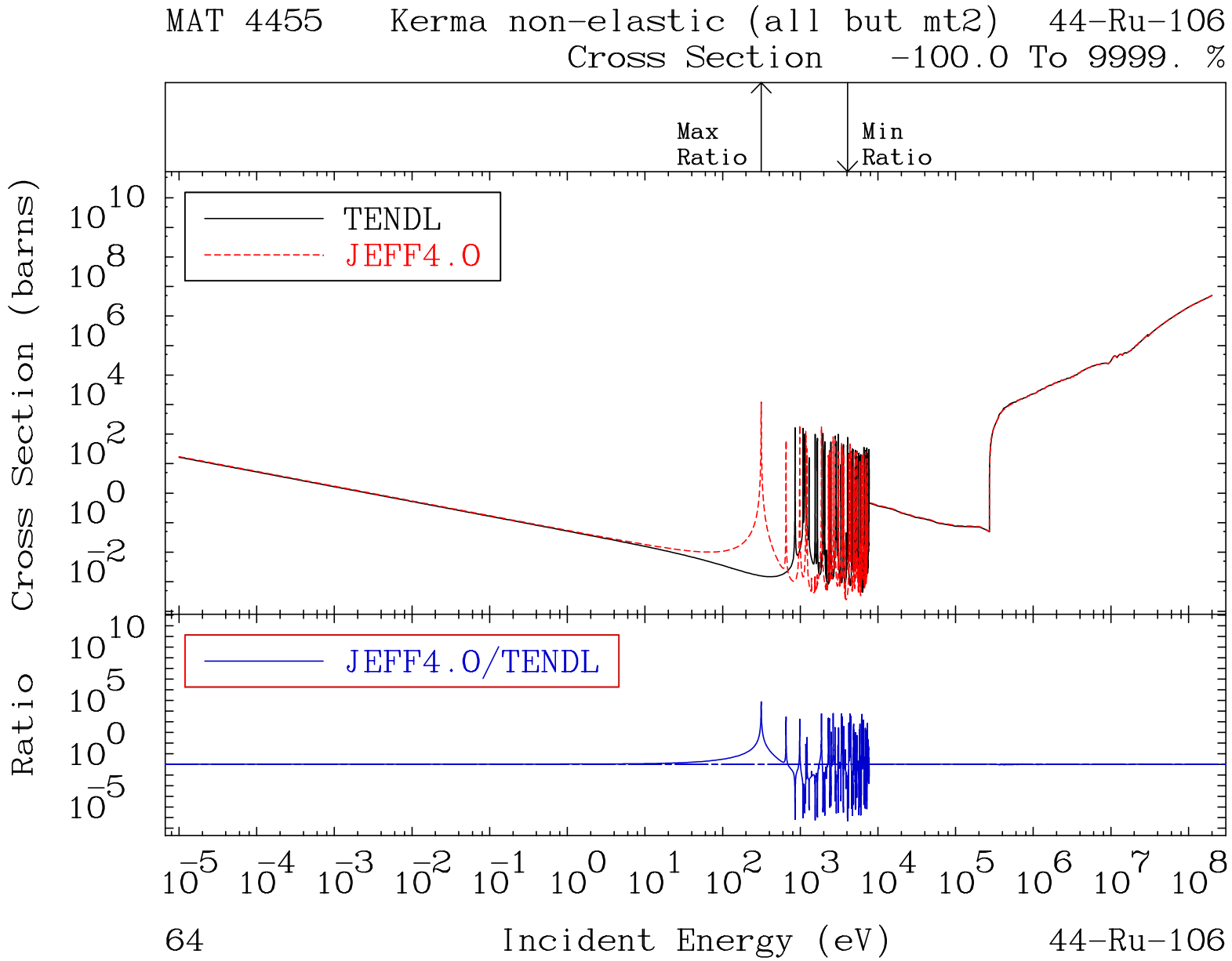

MAT 4455
Tritium Production
44-Ru-106
Cross Section
-18.48 To 108.3 %
Max Ratio
Min Ratio
TENDL Threshold 10.805 MeV
JEFF4.0 Threshold 10.805 MeV
60
40
20
0
JEFF4.0/TENDL
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
59
Incident Energy (eV)
44-Ru-106

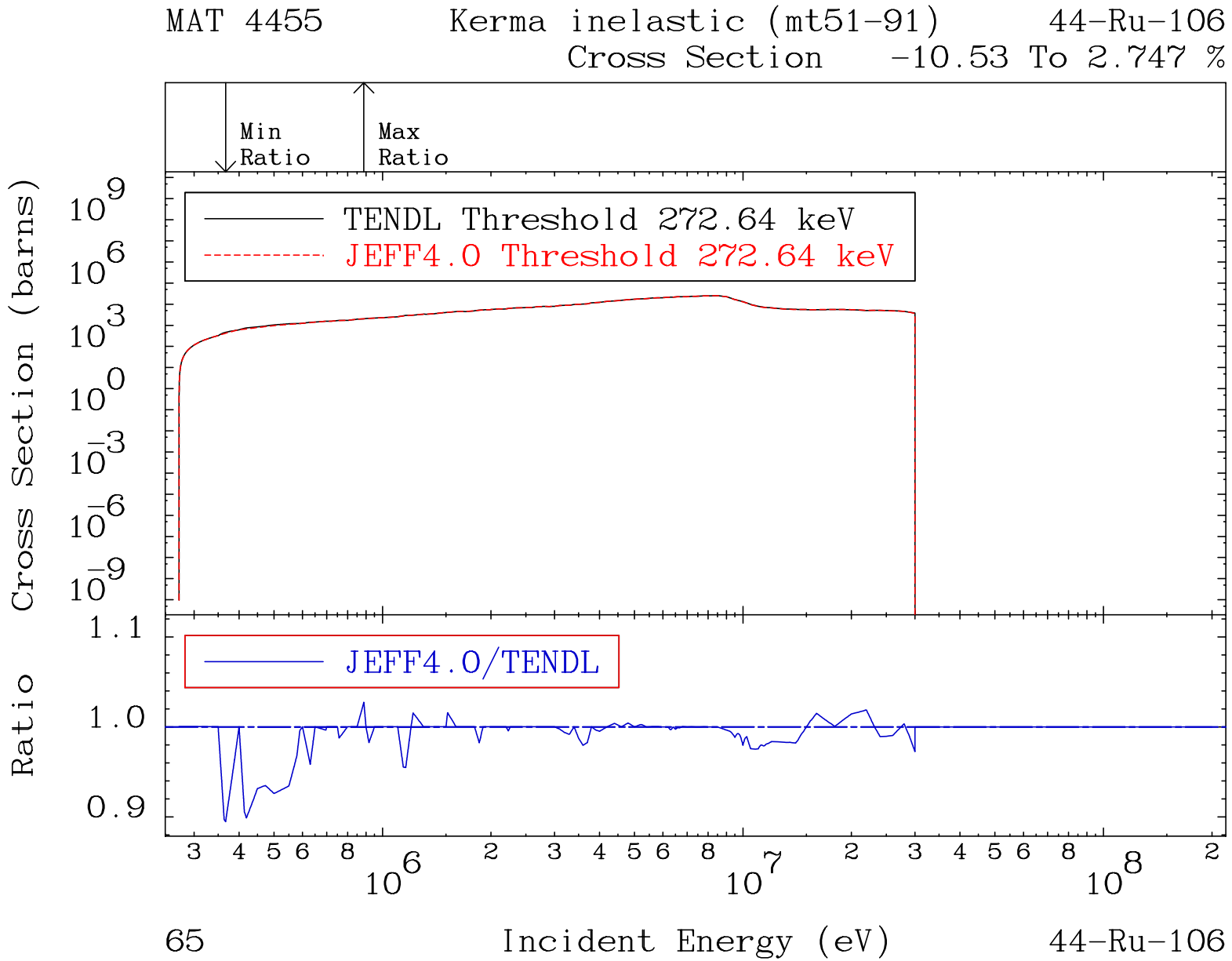

MAT 4455
He-3 Production
Cross Section
44-Ru-106
-2.394 To 31.77 %
Max Ratio
Min Ratio
TENDL Threshold 12.962 MeV
JEFF4.0 Threshold 12.962 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
44-Ru-106

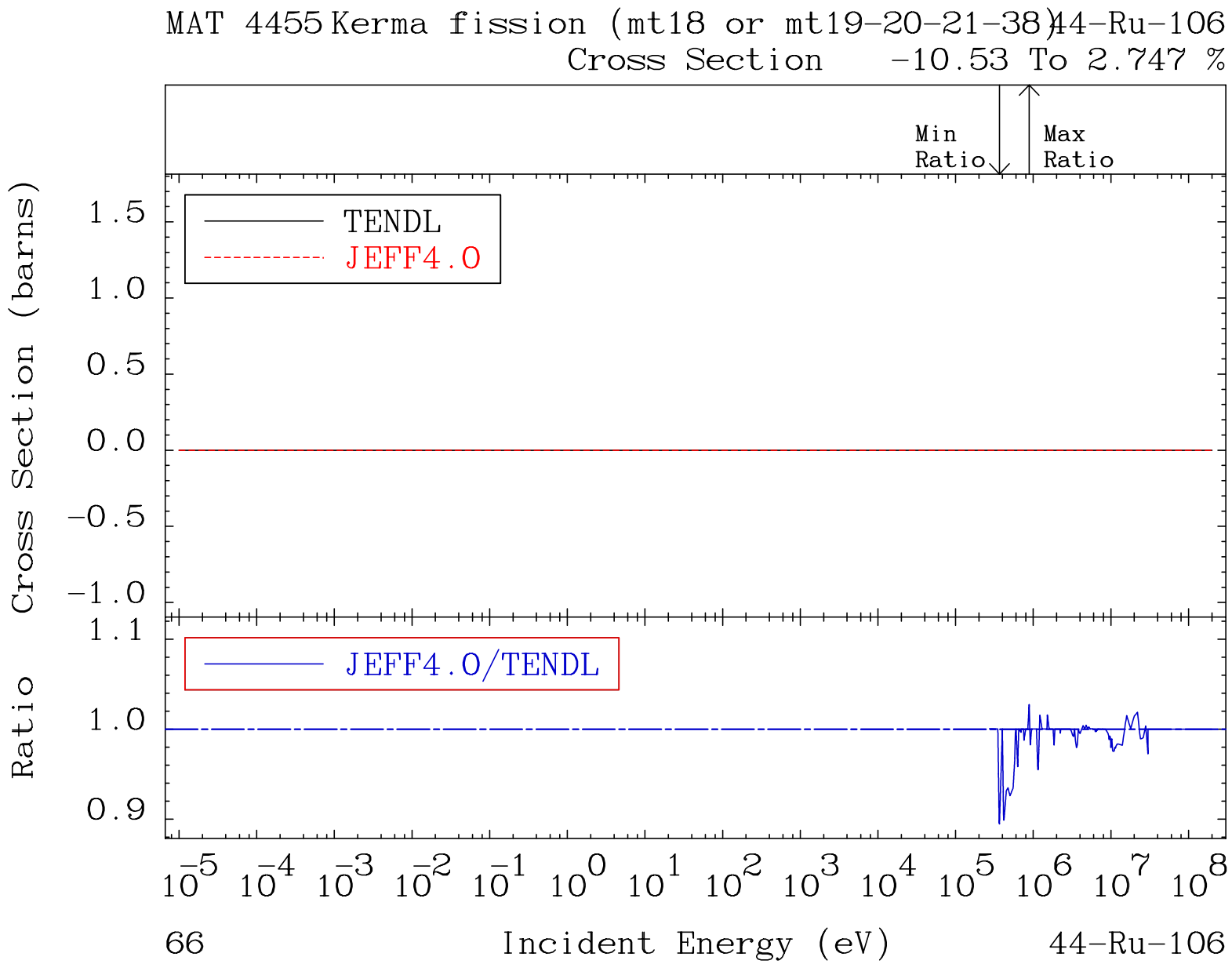

MAT 4455
He-4 Production
Cross Section
44-Ru-106
-5.329 To 59.56 %
Min Ratio
Max Ratio
TENDL Threshold 7.6877 keV
JEFF4.0 Threshold 7.3945 keV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
1.6
1.2
Incident Energy (eV)
61
44-Ru-106

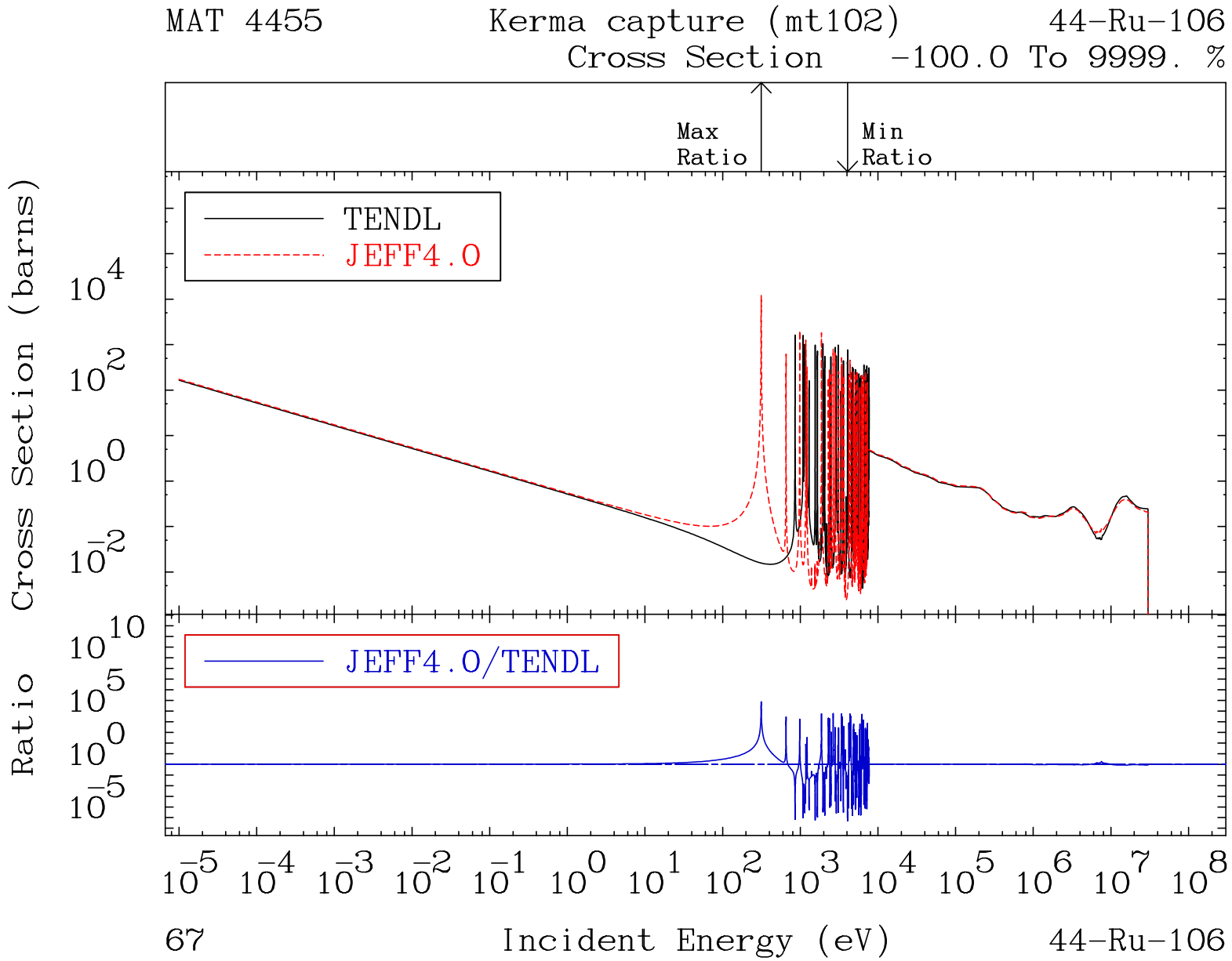

MAT 4455
Kerma total (eV-barns)
44-Ru-106
Cross Section -99.75 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
44-Ru-106

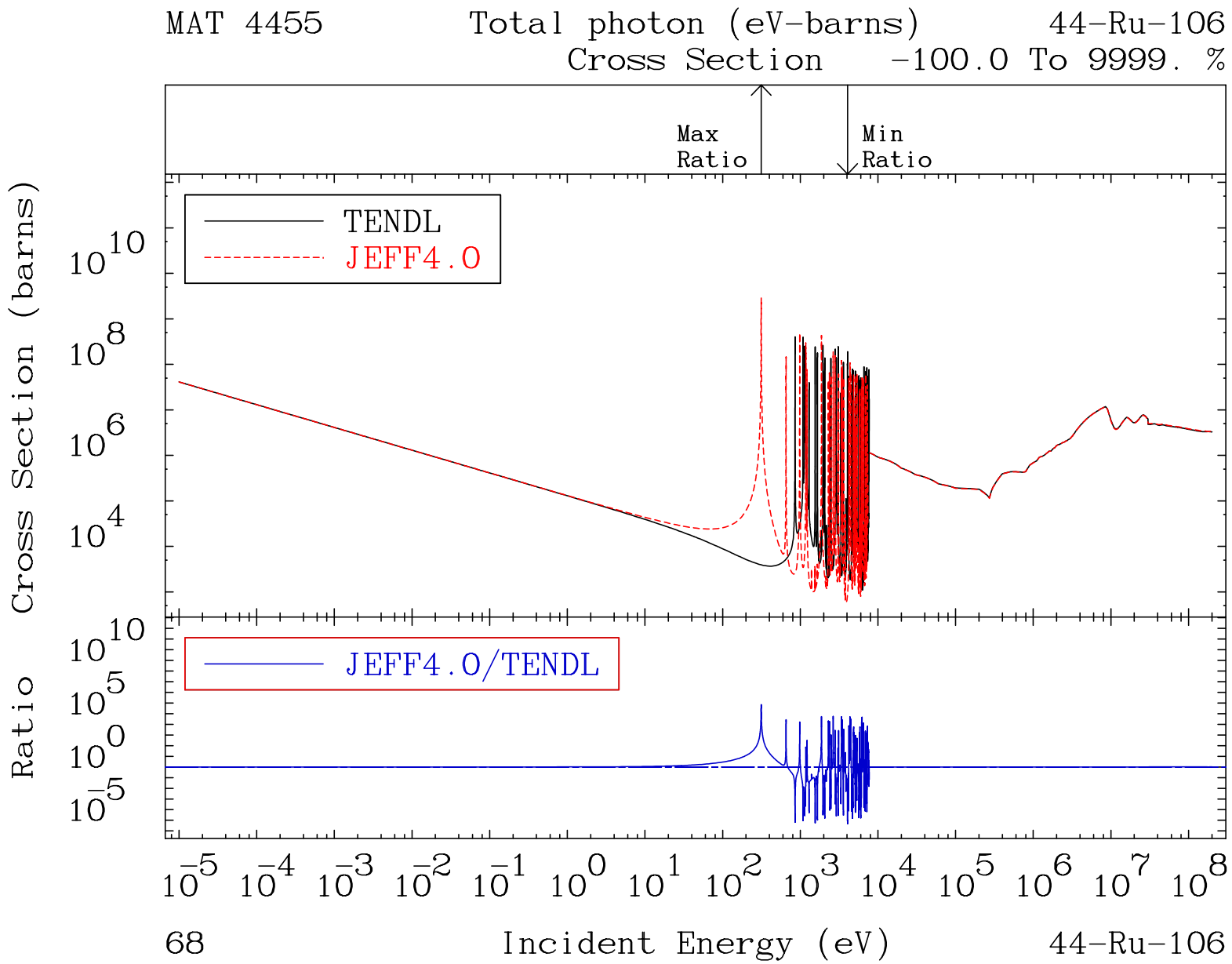

MAT 4455
Kerma elastic
Cross Section
44-Ru-106
-99.92 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
44-Ru-106

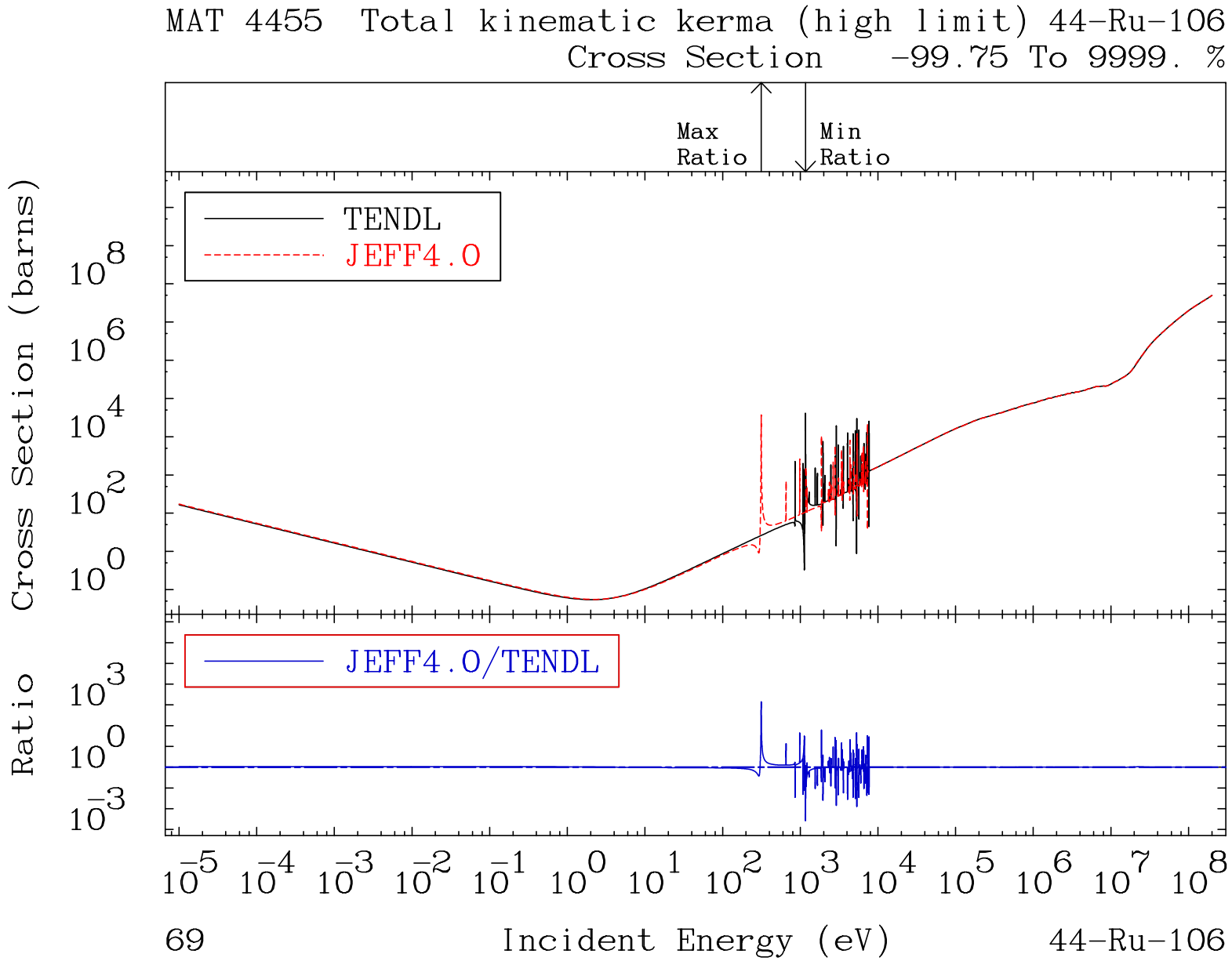

MAT 4455 Kerma non-elastic (all but mt2) 44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
44-Ru-106

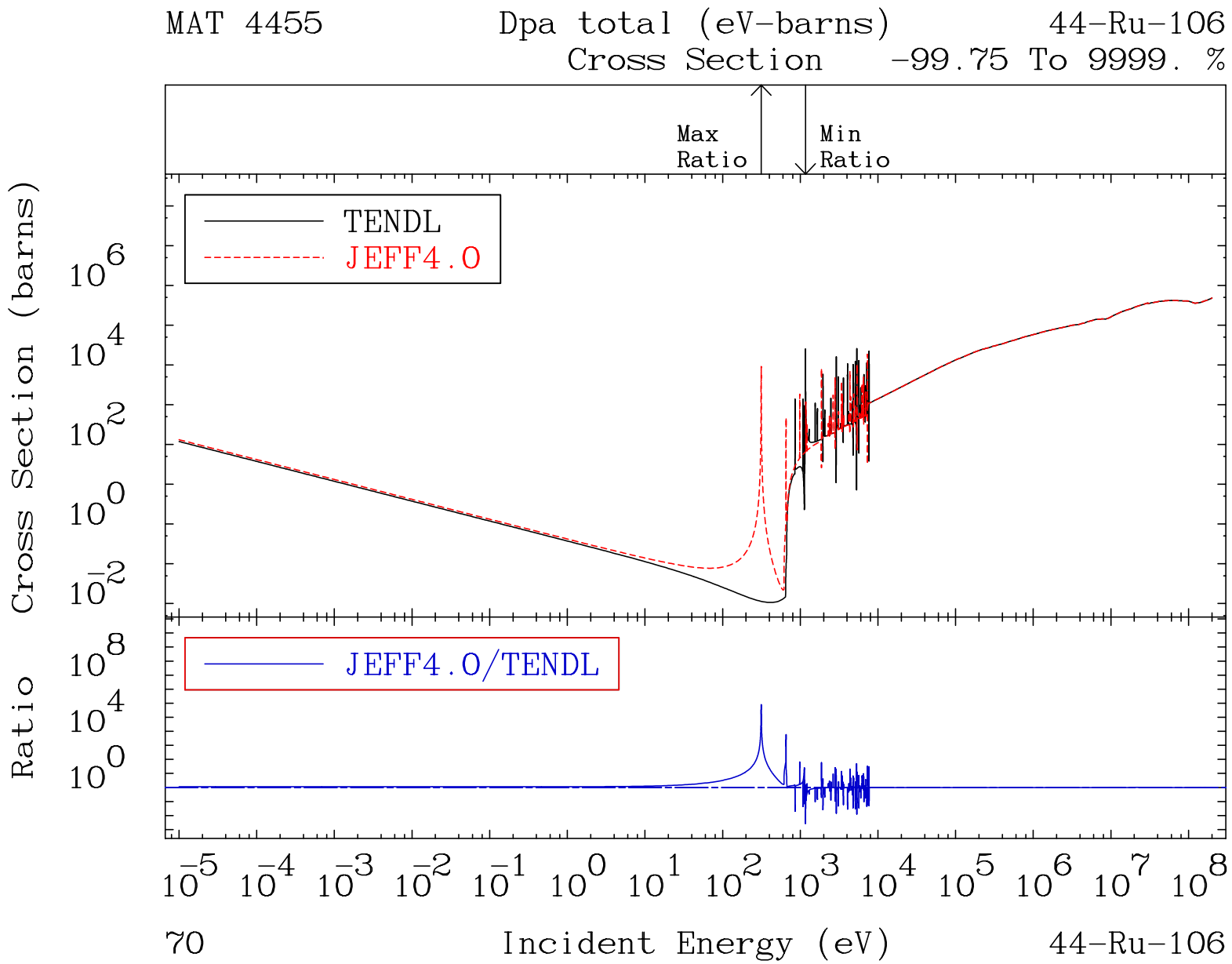

MAT 4455
Kerma inelastic (mt51-91)
44-Ru-106
Cross Section -10.53 To 2.747 %
Min Ratio
Max Ratio
TENDL Threshold 272.64 keV
JEFF4.0 Threshold 272.64 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
44-Ru-106

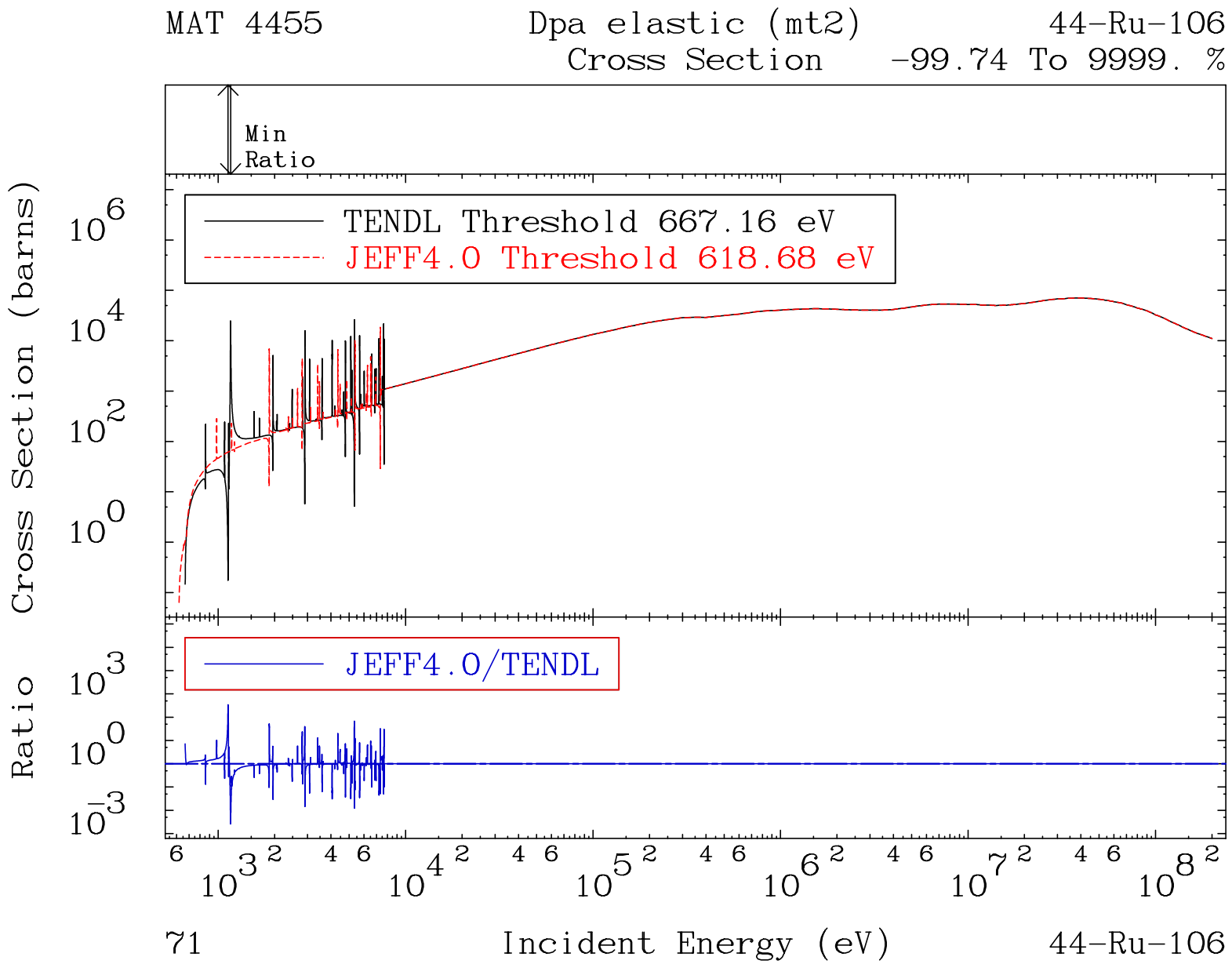

MAT 4455 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-106
Cross Section -10.53 To 2.747 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.1
1.0
0.9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
66
Incident Energy (eV)
44-Ru-106

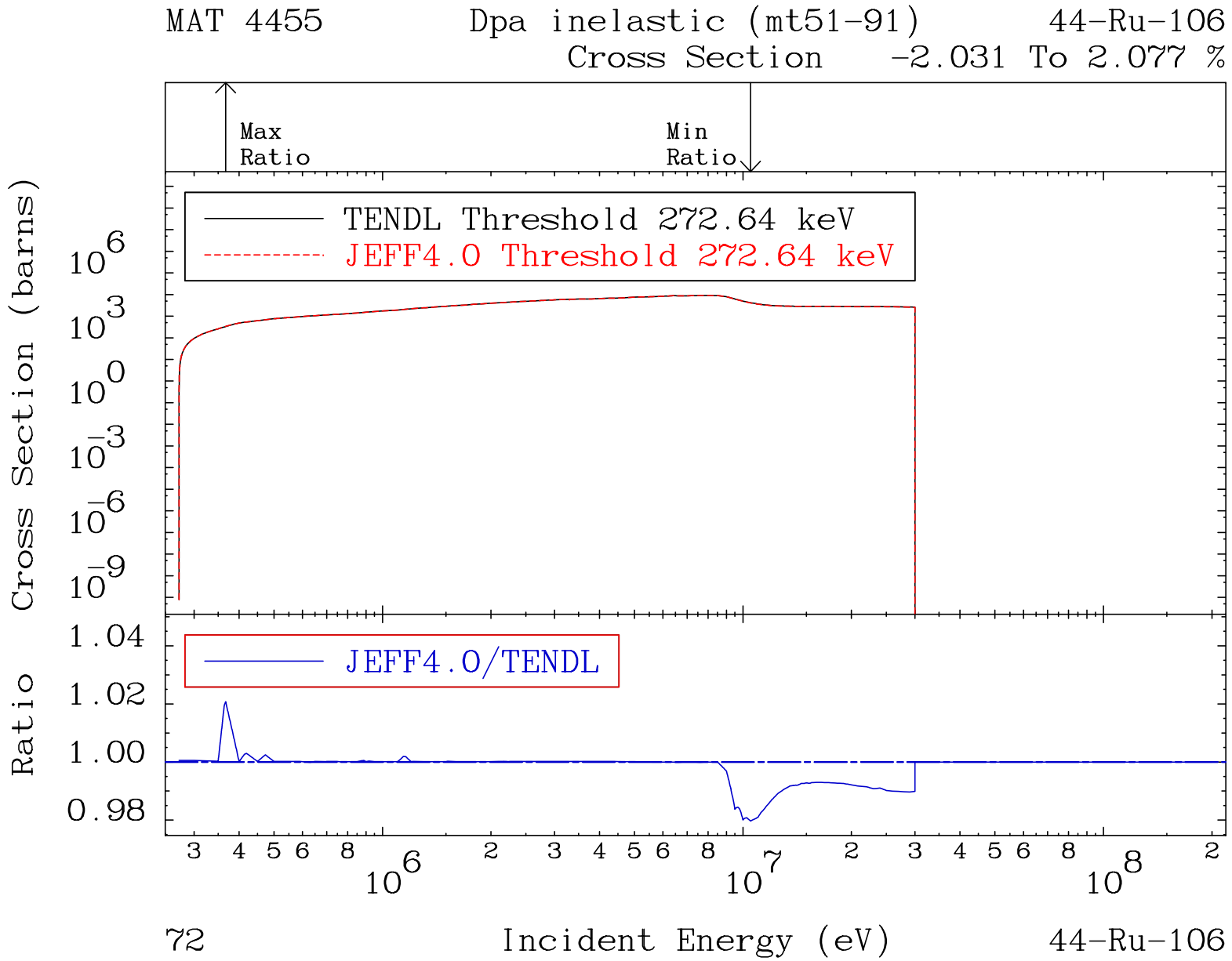

MAT 4455
Kerma capture (mt102)
44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
44-Ru-106

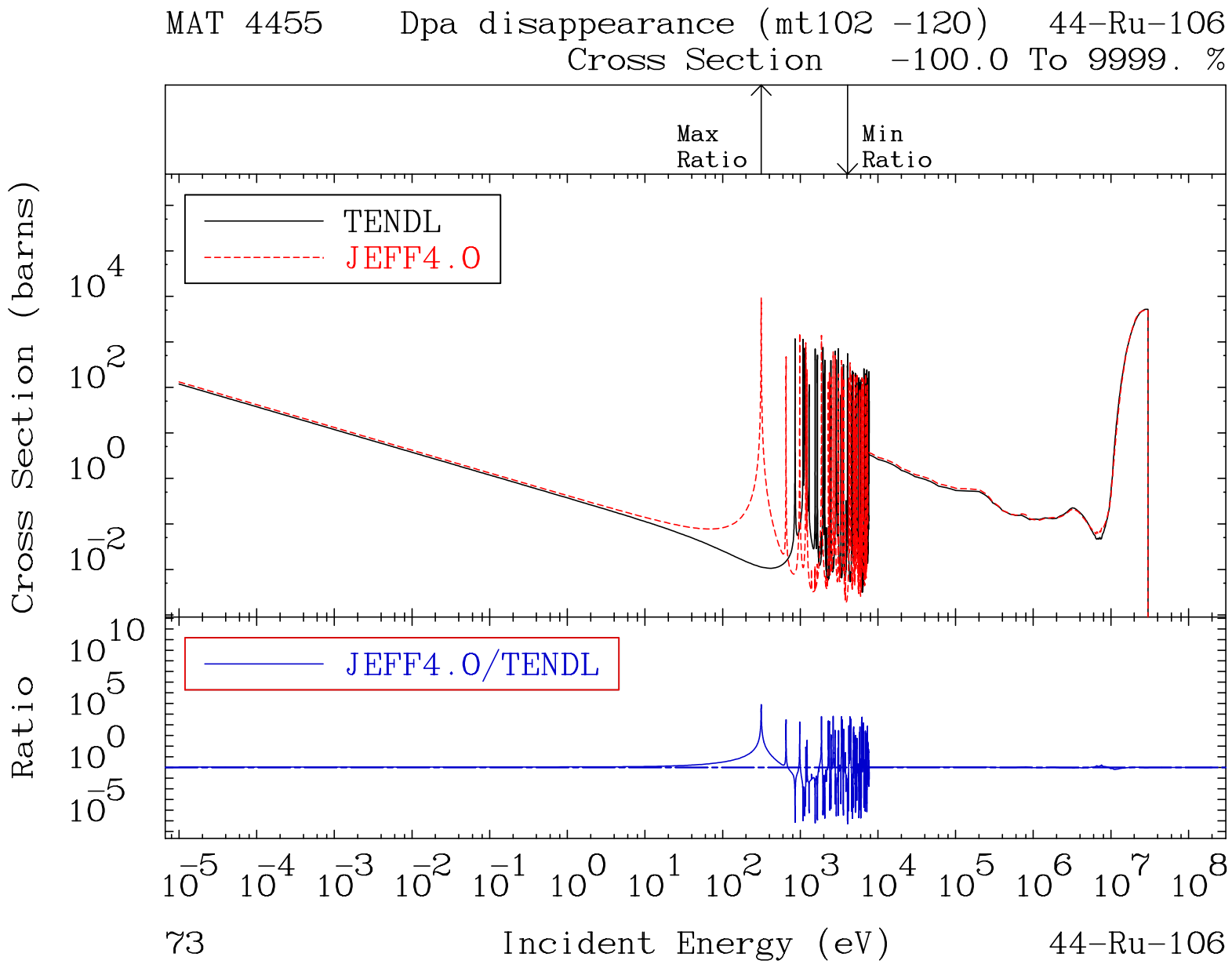

MAT 4455
Total photon (eV-barns)
44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
44-Ru-106

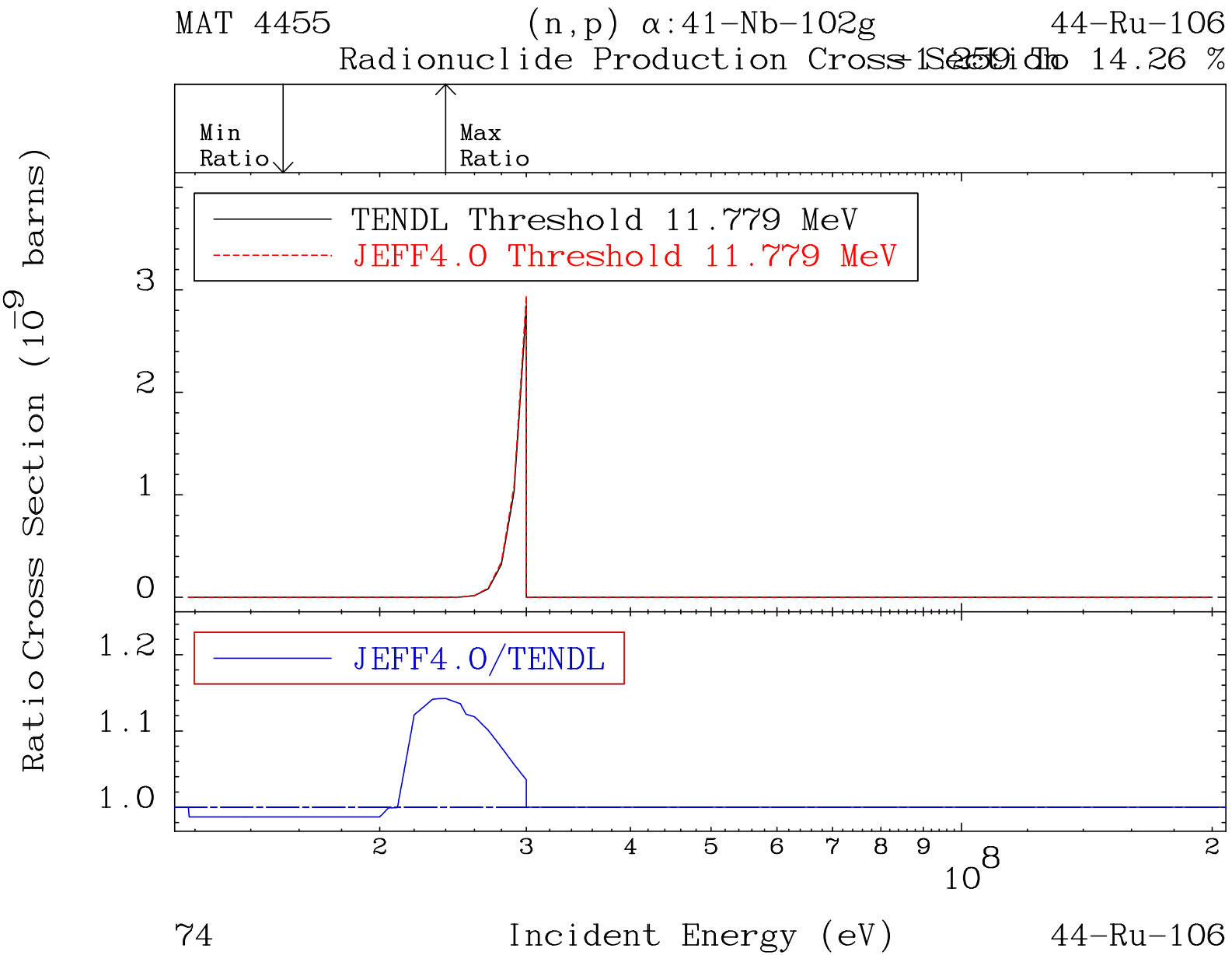

MAT 4455 Total kinematic kerma (high limit) 44-Ru-106
Cross Section -99.75 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
44-Ru-106

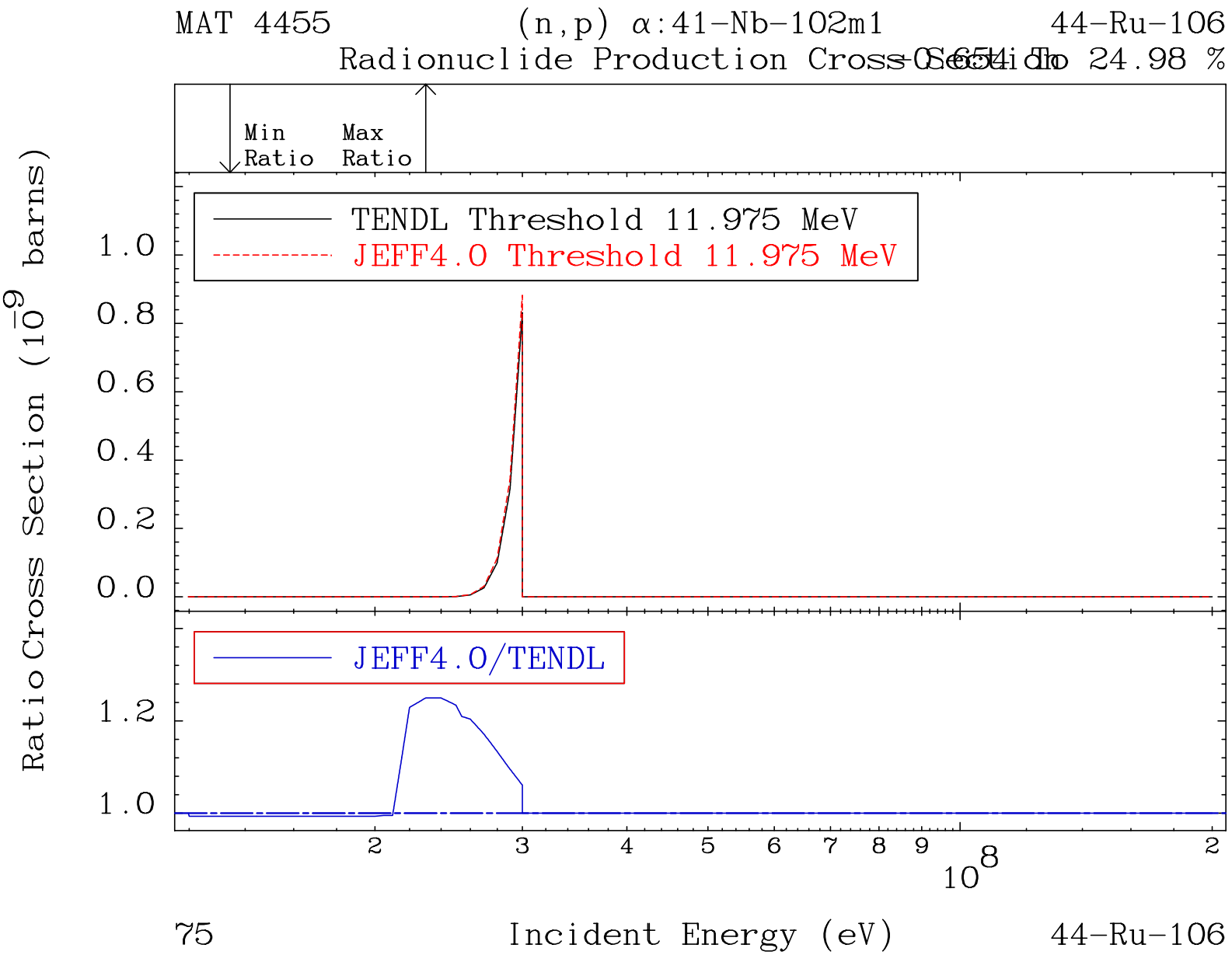

MAT 4455
Dpa total (eV-barns)
44-Ru-106
Cross Section
-99.75 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
44-Ru-106


MAT 4455
Dpa elastic (mt2)
Cross Section
44-Ru-106
-99.74 To 9999. %
Min
Ratio
TENDL Threshold 667.16 eV
JEFF4.0 Threshold 618.68 eV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
44-Ru-106


MAT 4455
Dpa inelastic (mt51-91)
44-Ru-106
Cross Section
-2.031 To 2.077 %
Max Ratio
Min Ratio
TENDL Threshold 272.64 keV
JEFF4.0 Threshold 272.64 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
44-Ru-106


MAT 4455 Dpa disappearance (mt102 -120) 44-Ru-106
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
44-Ru-106


MAT 4455
(n,p) α:41-Nb-102g
44-Ru-106
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.779 MeV
JEFF4.0 Threshold 11.779 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
74
44-Ru-106


MAT 4455
(n,p) α:41-Nb-102m1
44-Ru-106
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.975 MeV
JEFF4.0 Threshold 11.975 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
1.0
0.8
0.6
0.4
0.2
0.0
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
44-Ru-106