Program Complot
(Version 2021-1)
by
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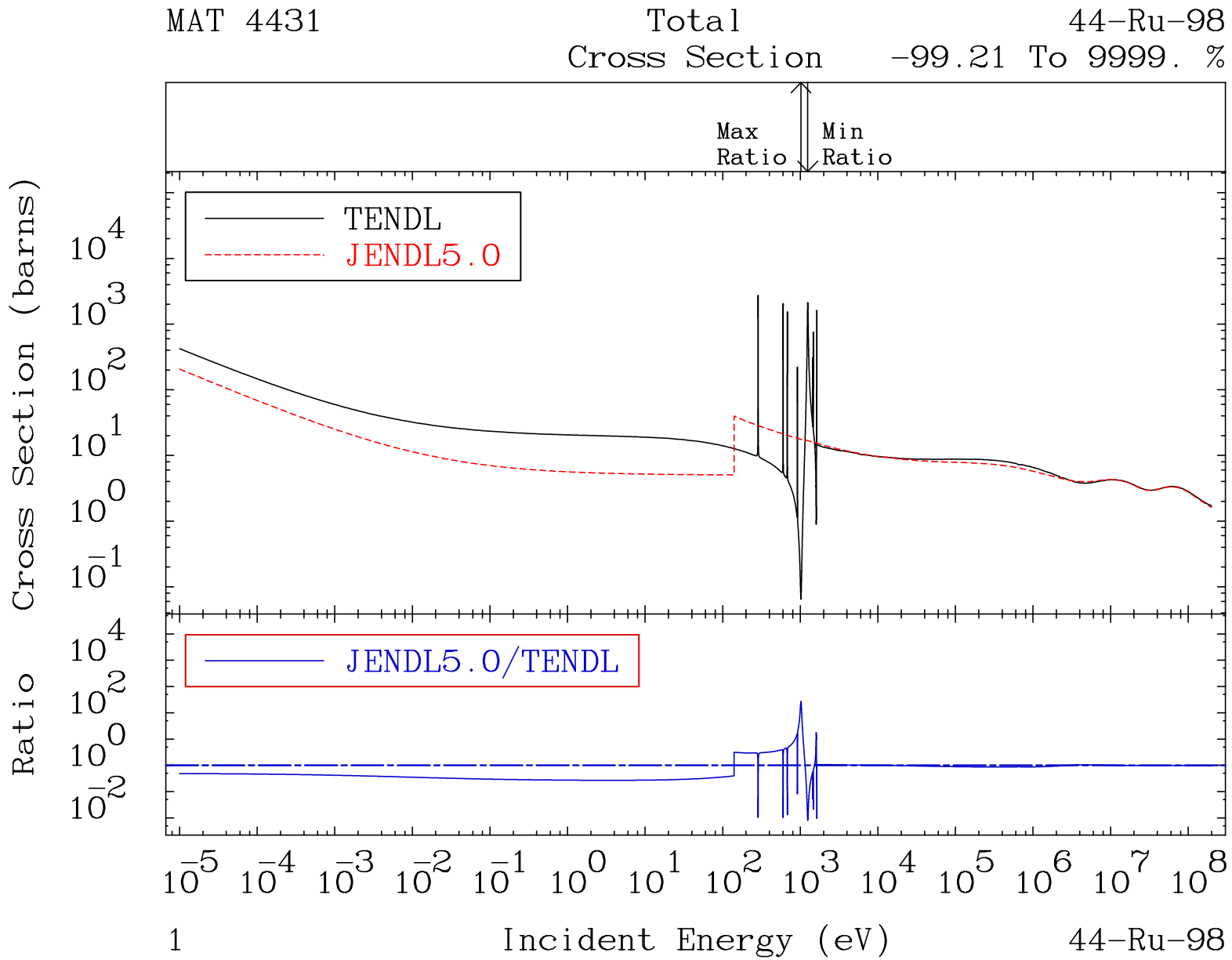
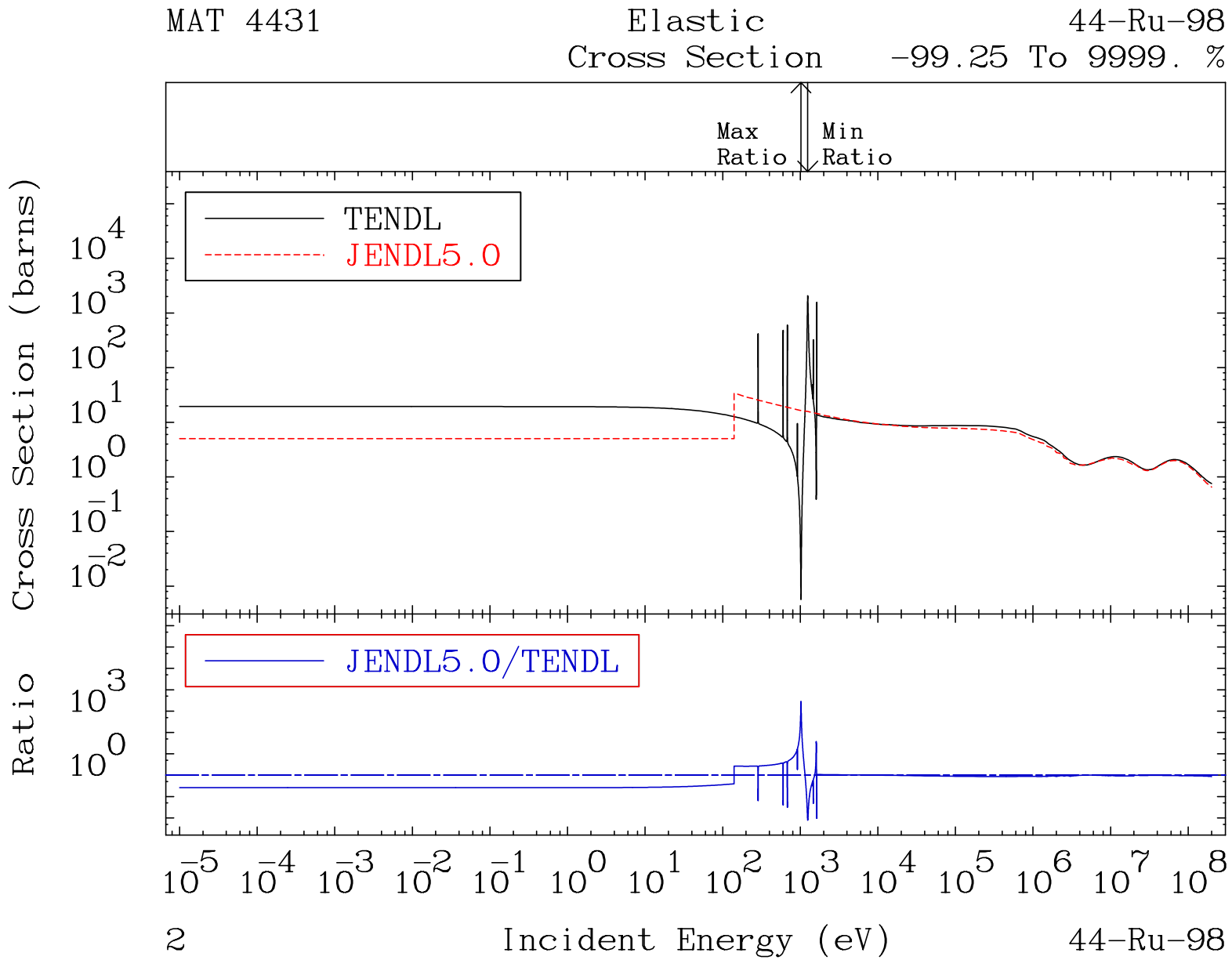
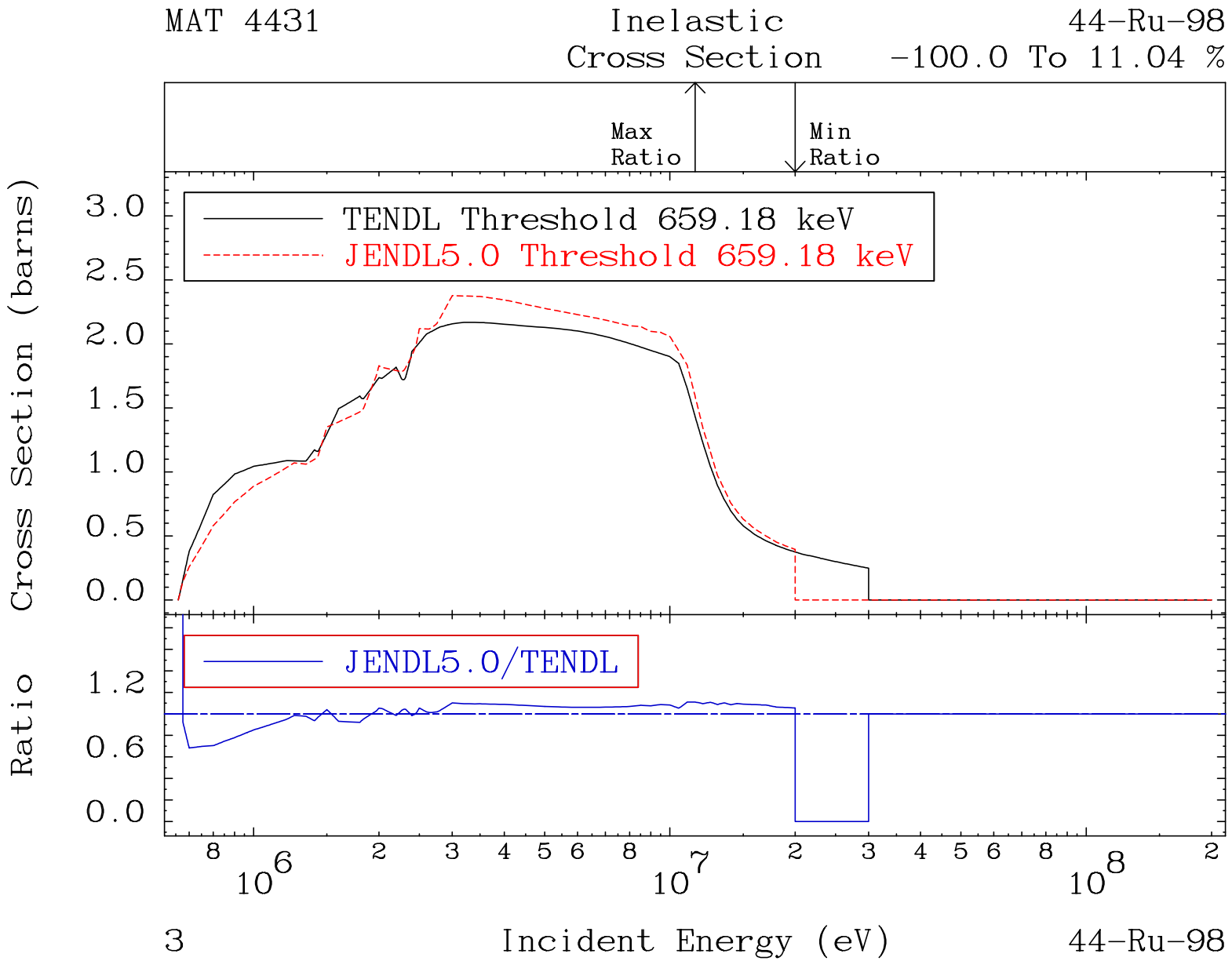
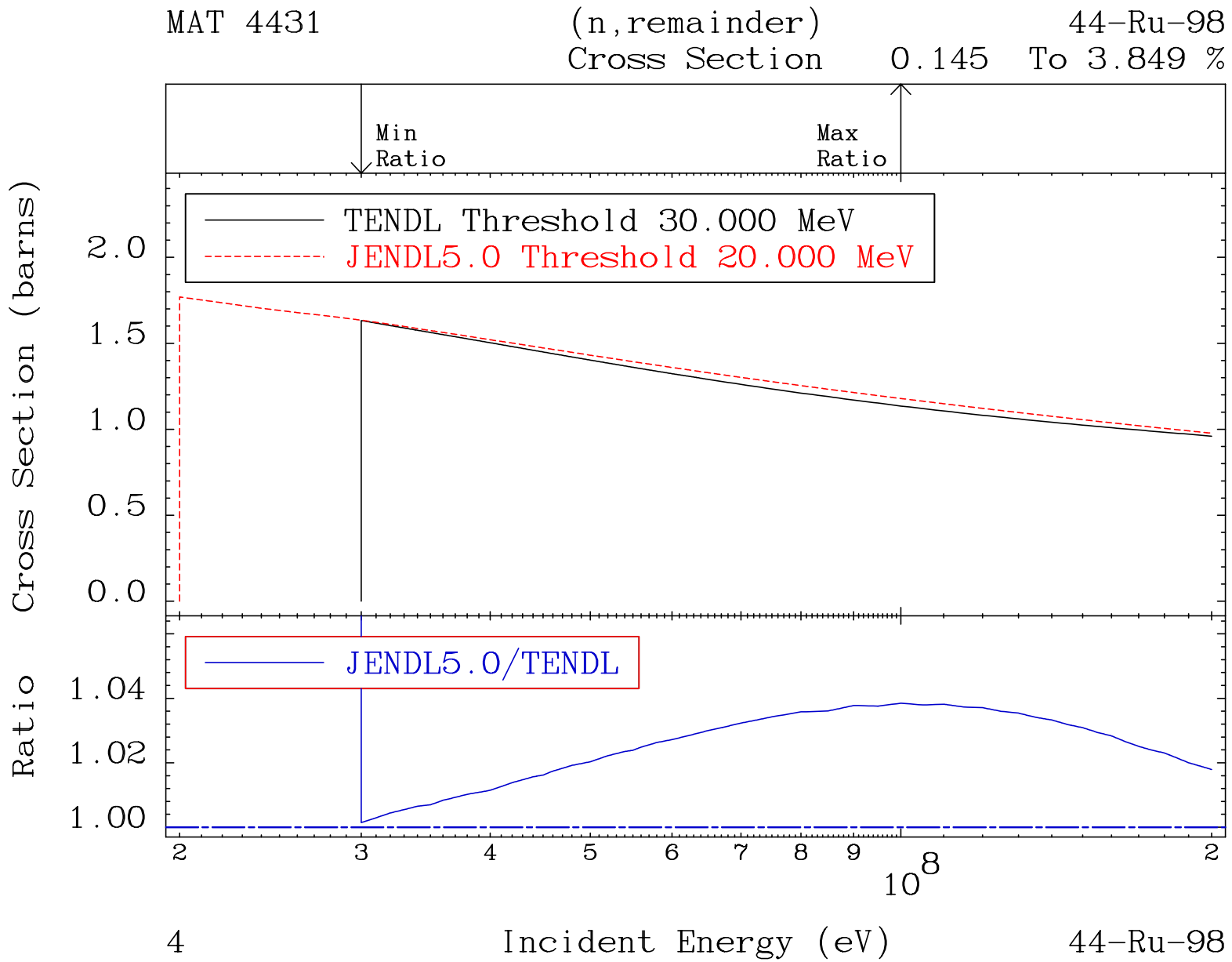
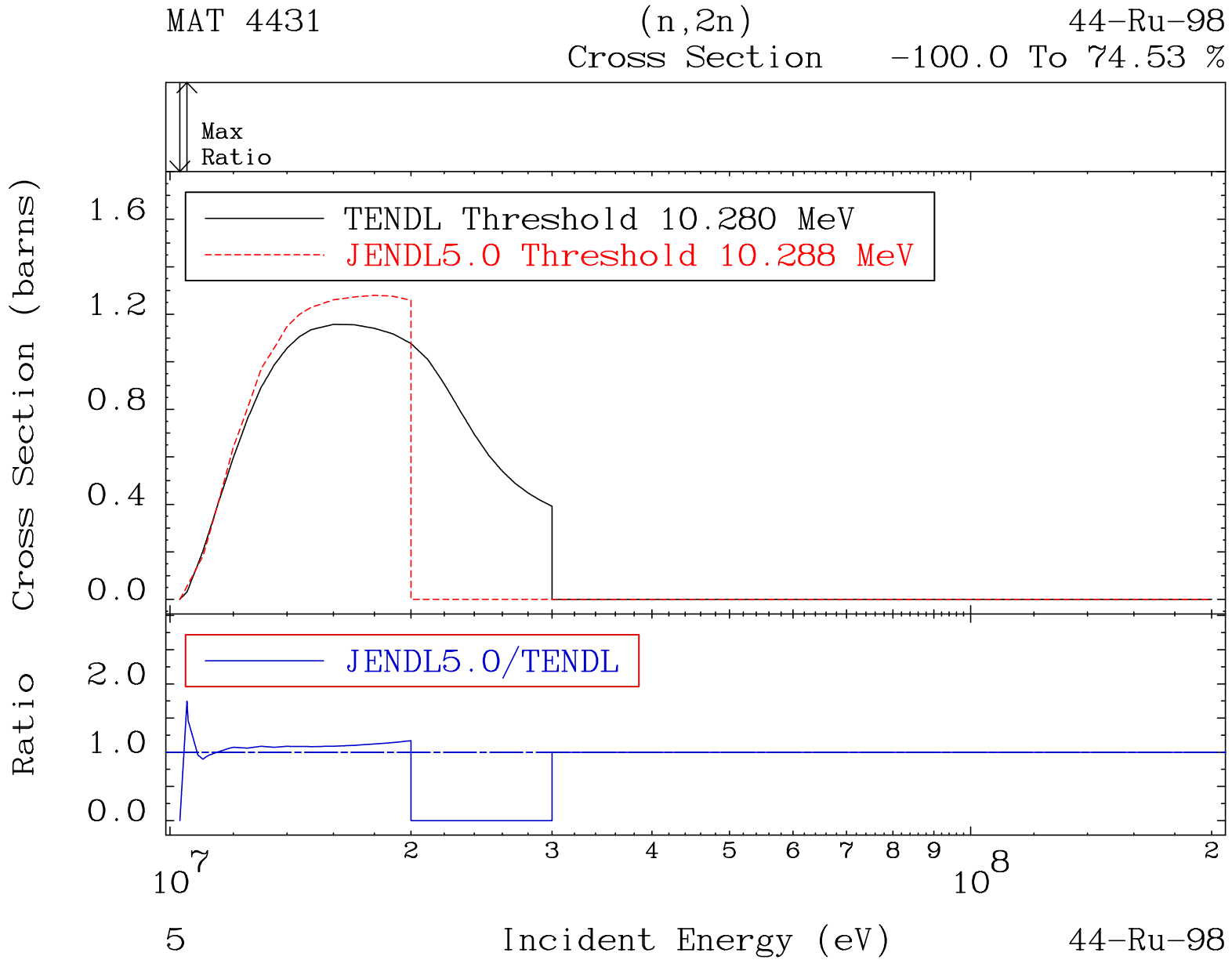
Press Mouse Button to Start

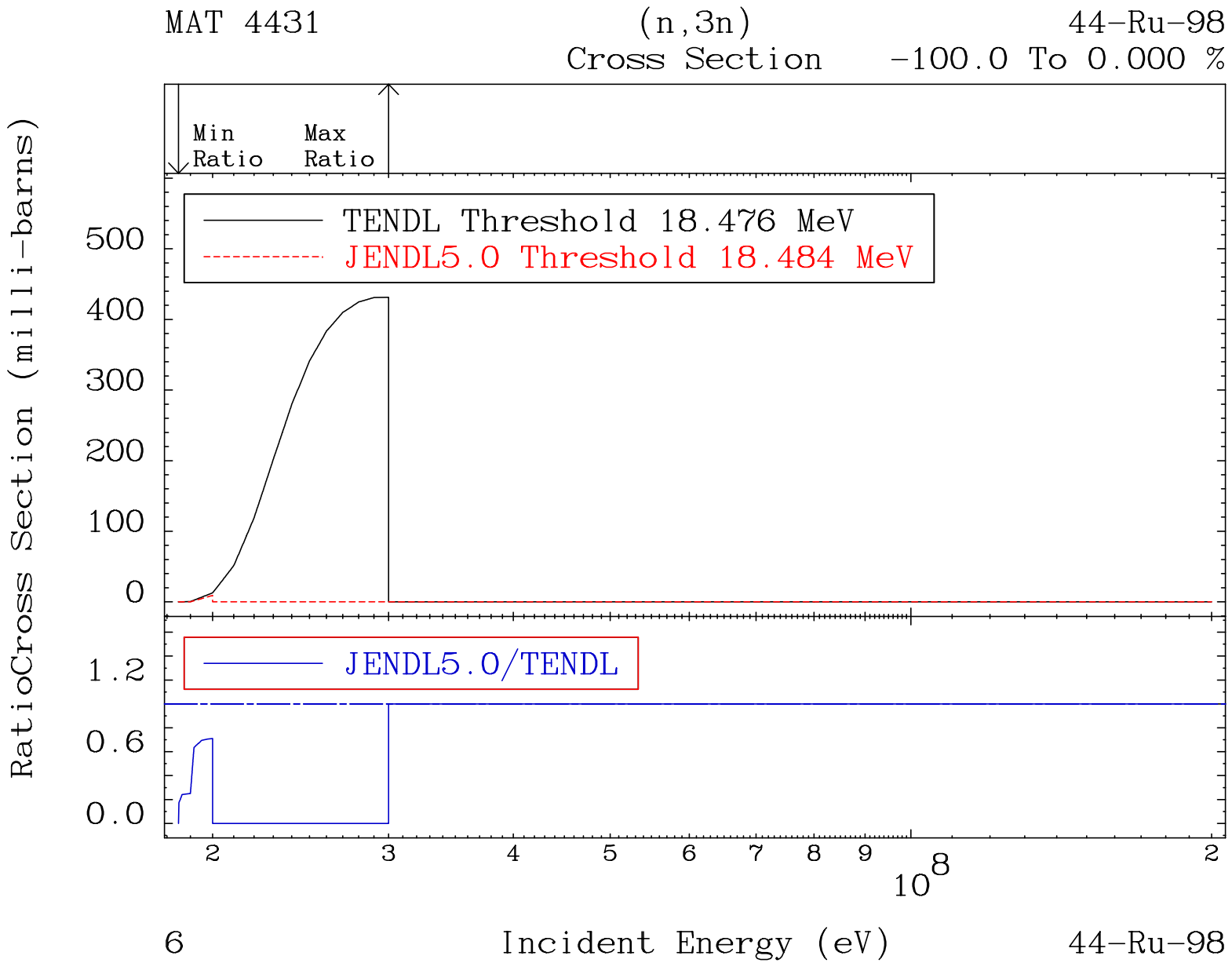

MAT 4431
Total
Cross Section
44-Ru-98
-99.21 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
44-Ru-98

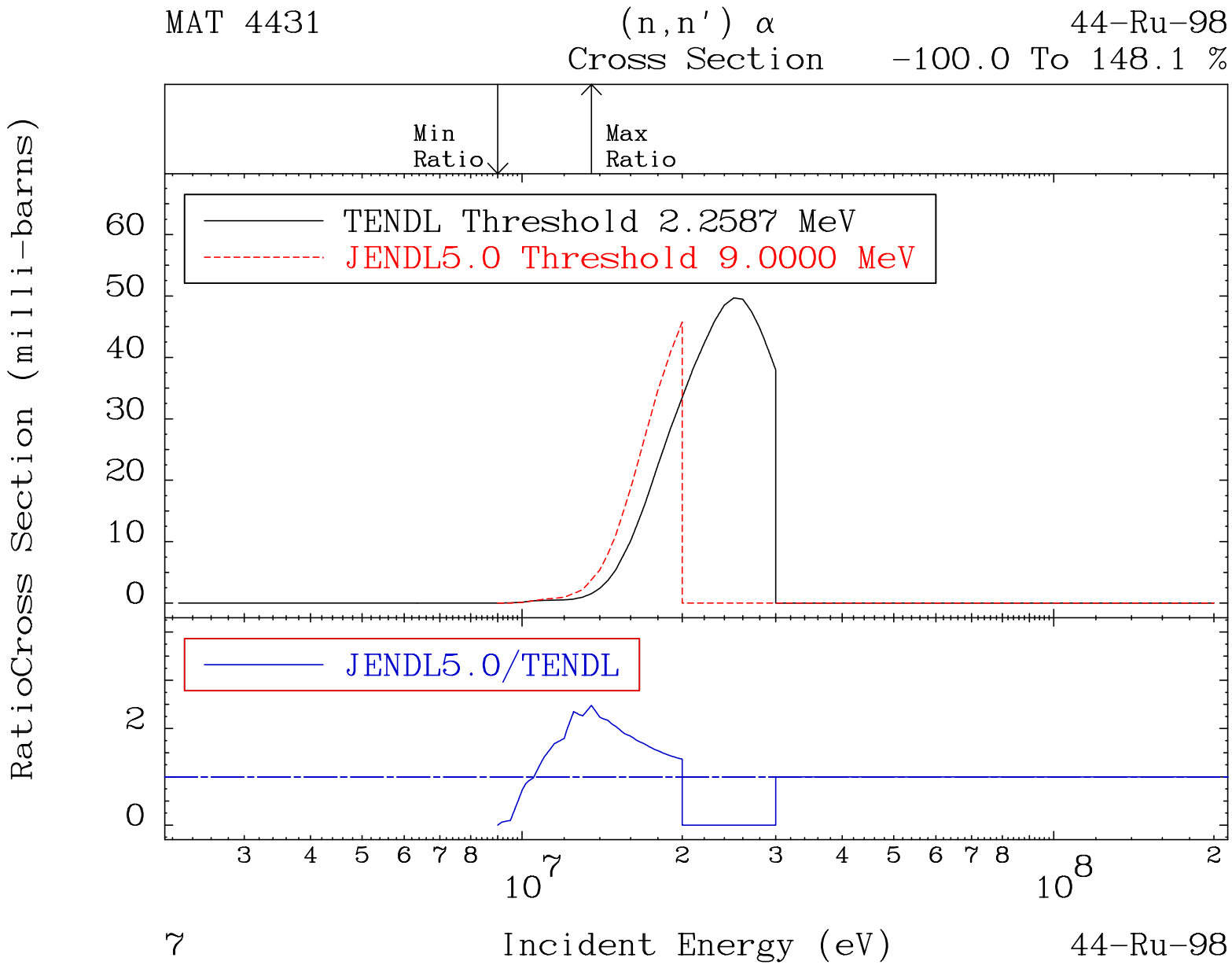

MAT 4431
Elastic
Cross Section
44-Ru-98
-99.25 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
2
44-Ru-98

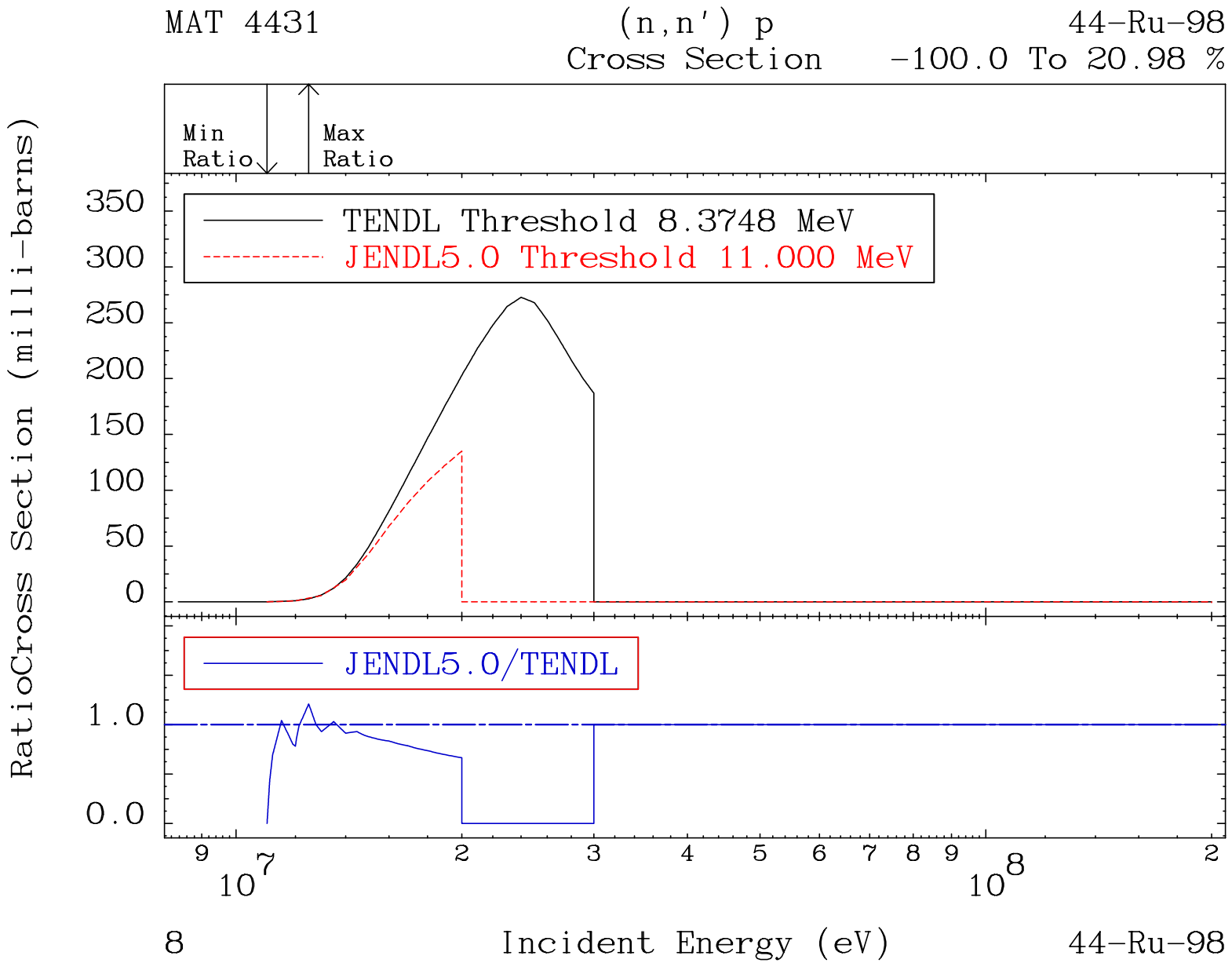

MAT 4431
Inelastic
Cross Section
44-Ru-98
-100.0 To 11.04 %
Max
Ratio
Min
Ratio
TENDL Threshold 659.18 keV
JENDL5.0 Threshold 659.18 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
44-Ru-98

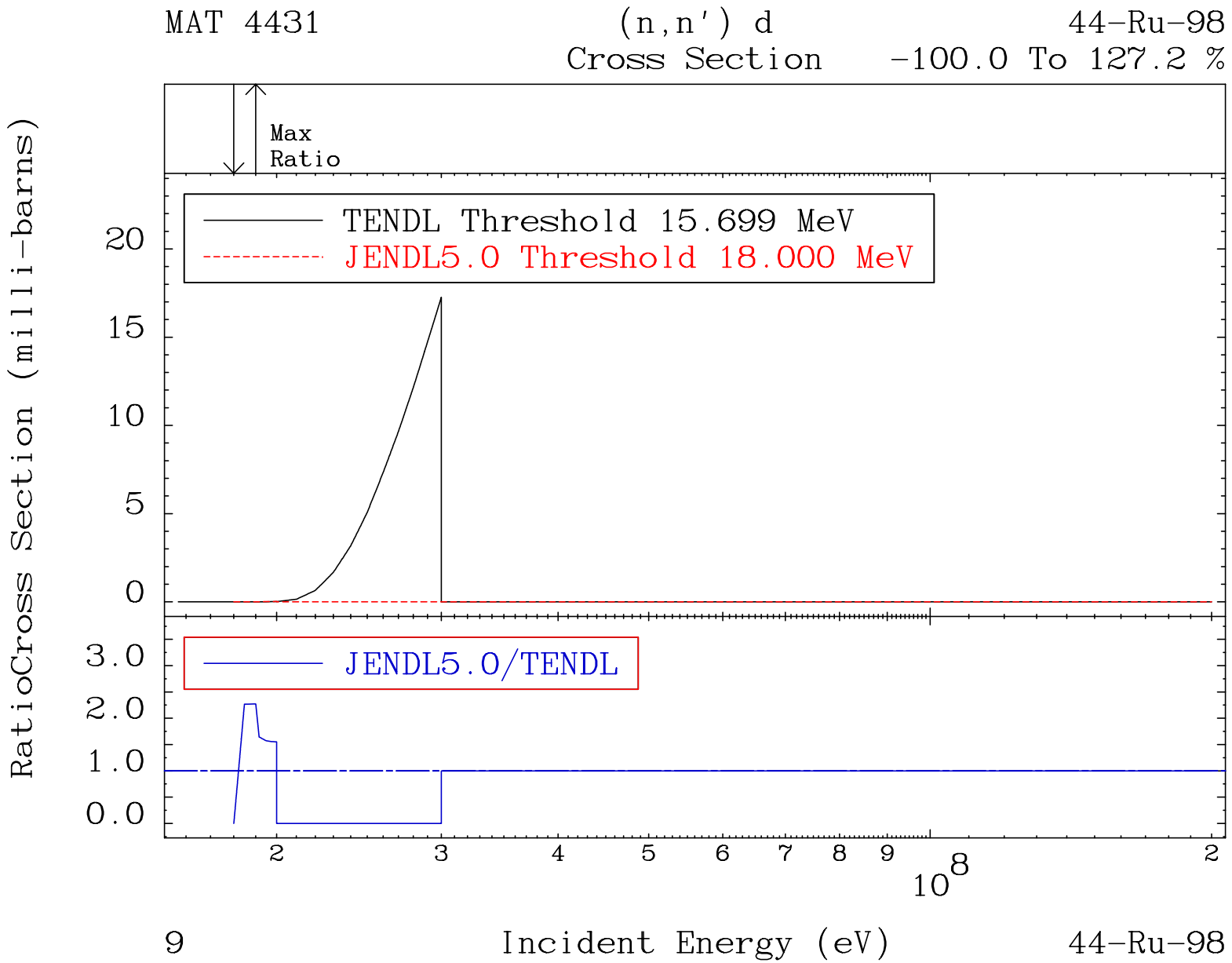

MAT 4431
(n,remainder)
44-Ru-98
Cross Section 0.145 To 3.849 %
Min Ratio
Max Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
44-Ru-98

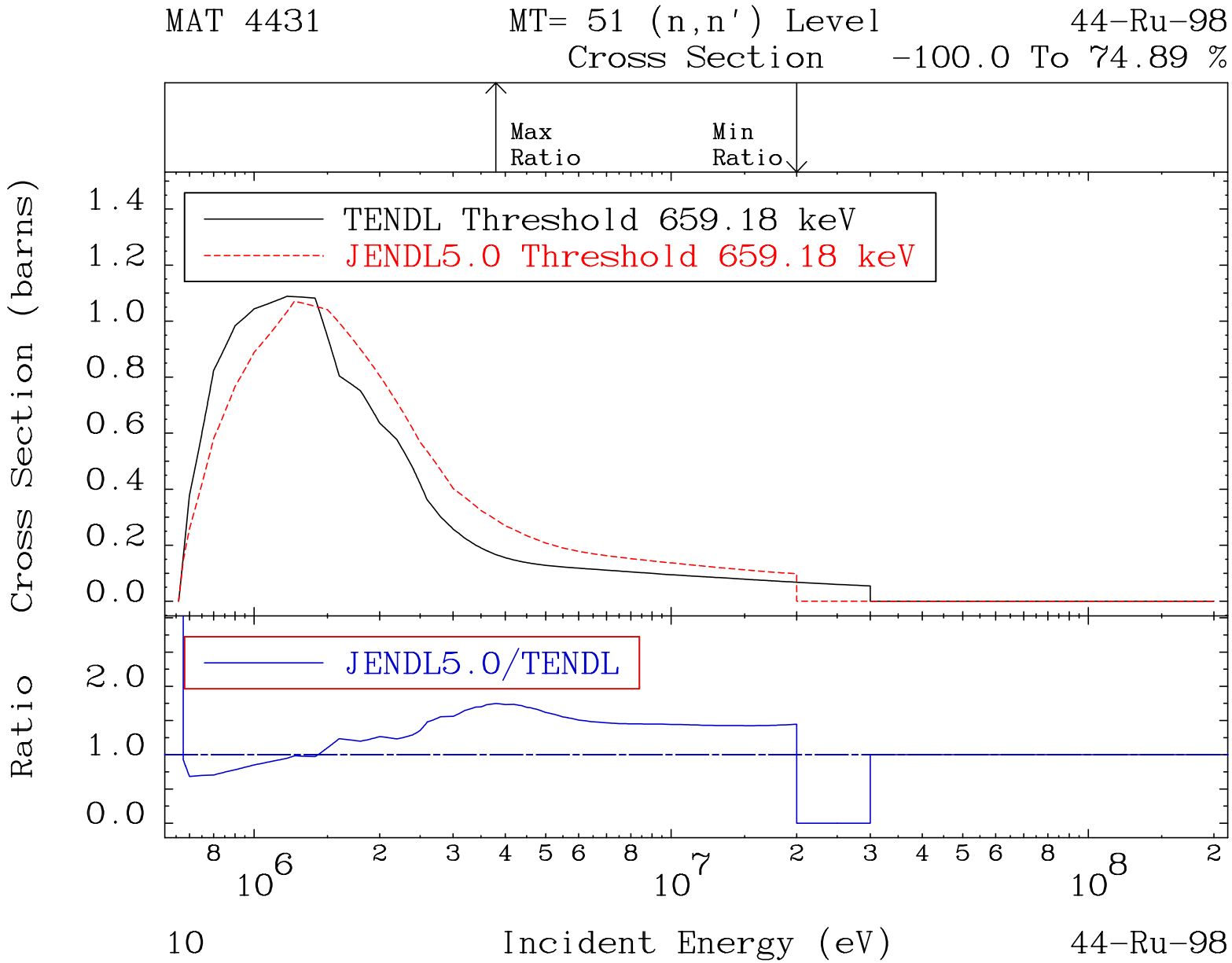

MAT 4431
(n,2n)
Cross Section
44-Ru-98
-100.0 To 74.53 %
Max
Ratio
TENDL Threshold 10.280 MeV
JENDL5.0 Threshold 10.288 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
2.0
1.0
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
44-Ru-98

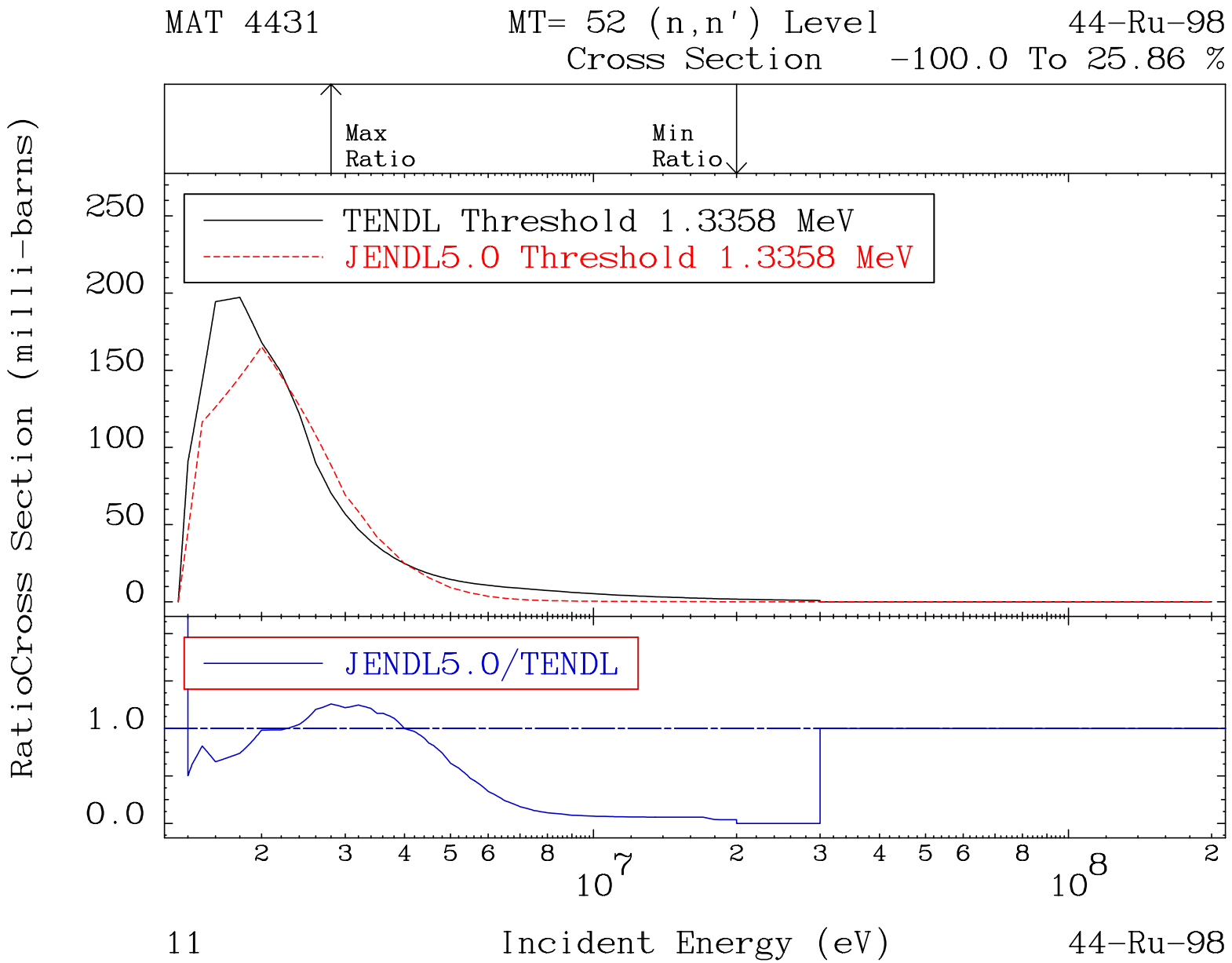

MAT 4431
(n,3n)
Cross Section
44-Ru-98
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.476 MeV
JENDL5.0 Threshold 18.484 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
44-Ru-98

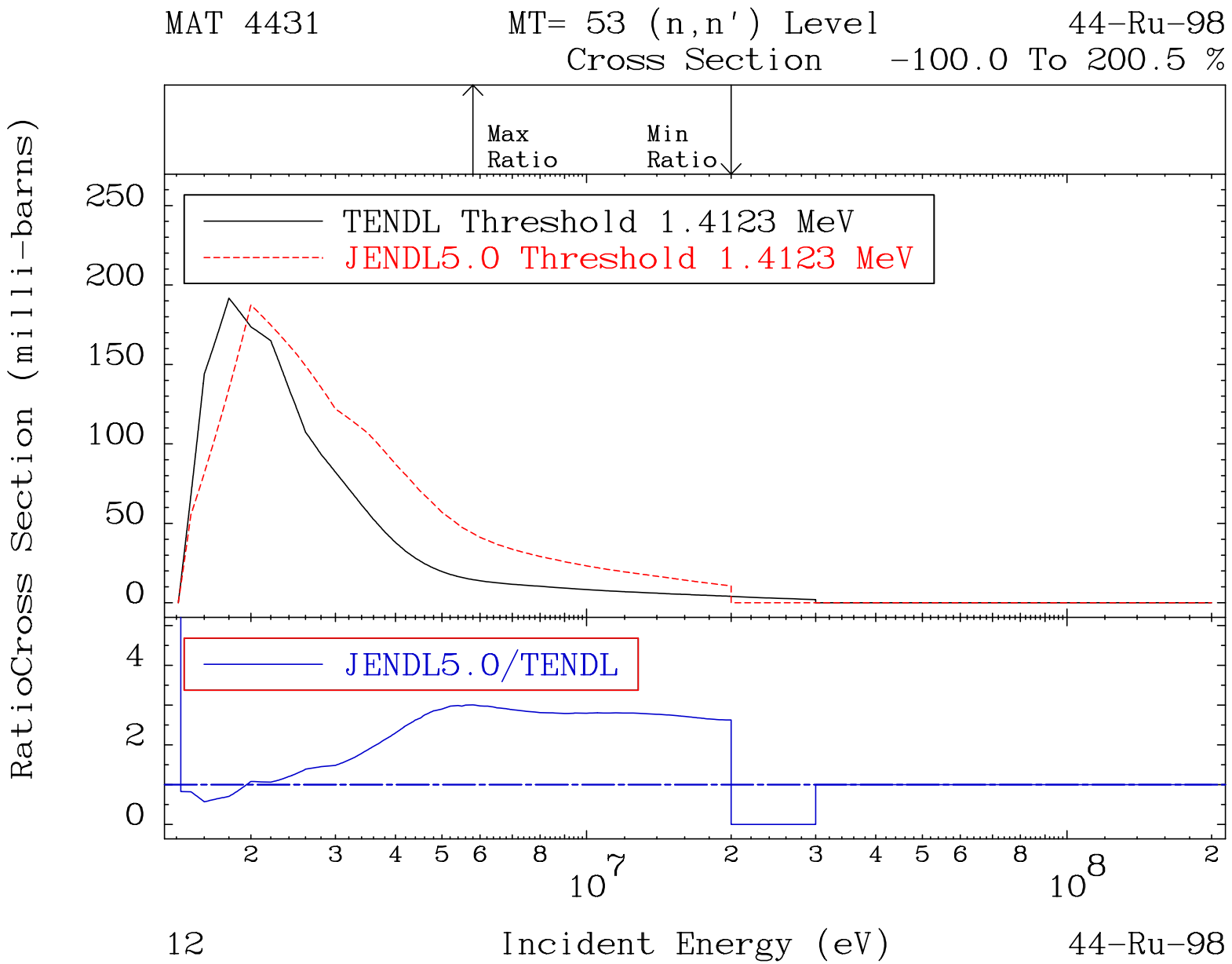

MAT 4431
(n,n') α
Cross Section
44-Ru-98
-100.0 To 148.1 %
Min Ratio
Max Ratio
TENDL Threshold 2.2587 MeV
JENDL5.0 Threshold 9.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
44-Ru-98

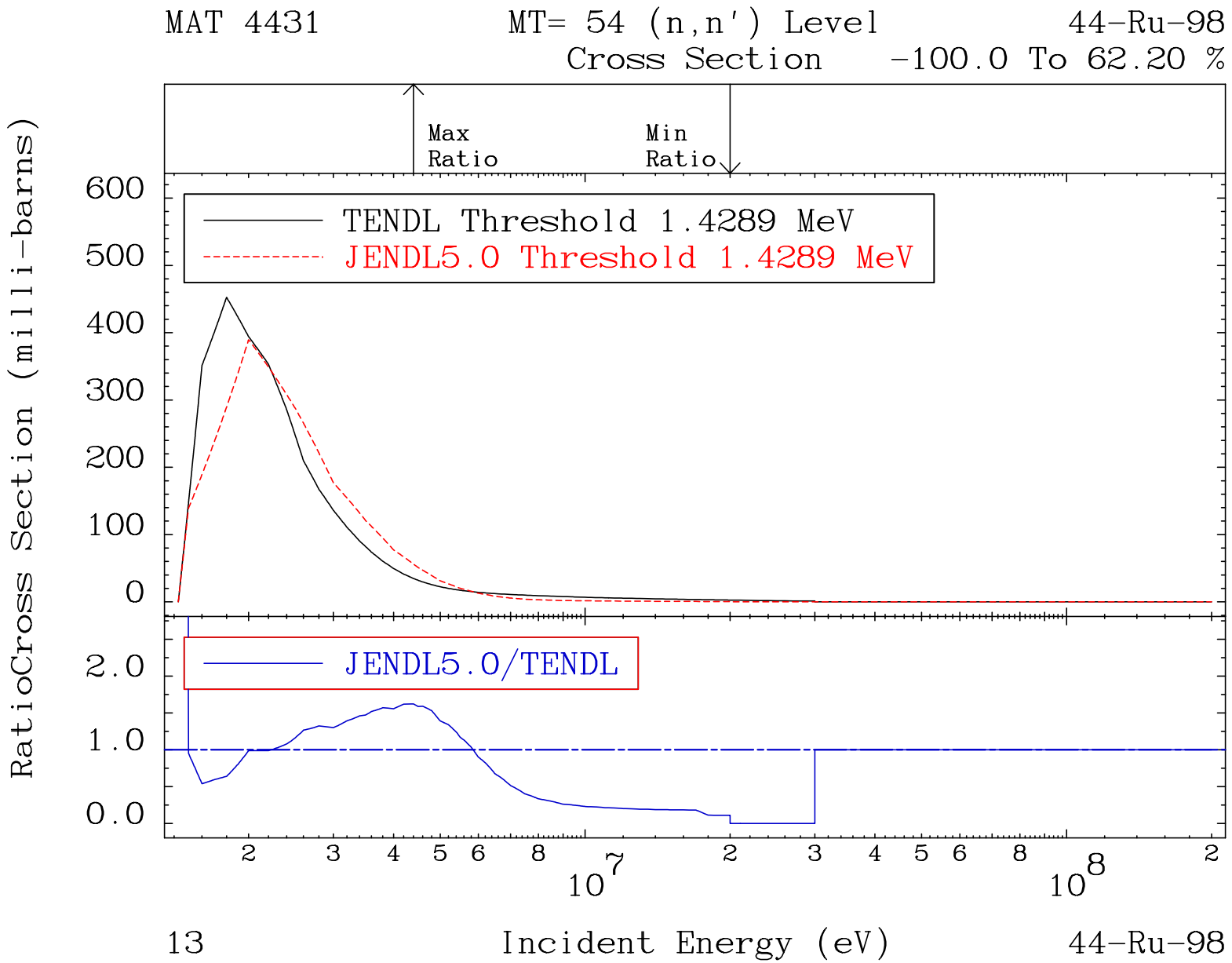

MAT 4431
(n,n') p
Cross Section
44-Ru-98
-100.0 To 20.98 %
Min Ratio
Max Ratio
TENDL Threshold 8.3748 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
44-Ru-98

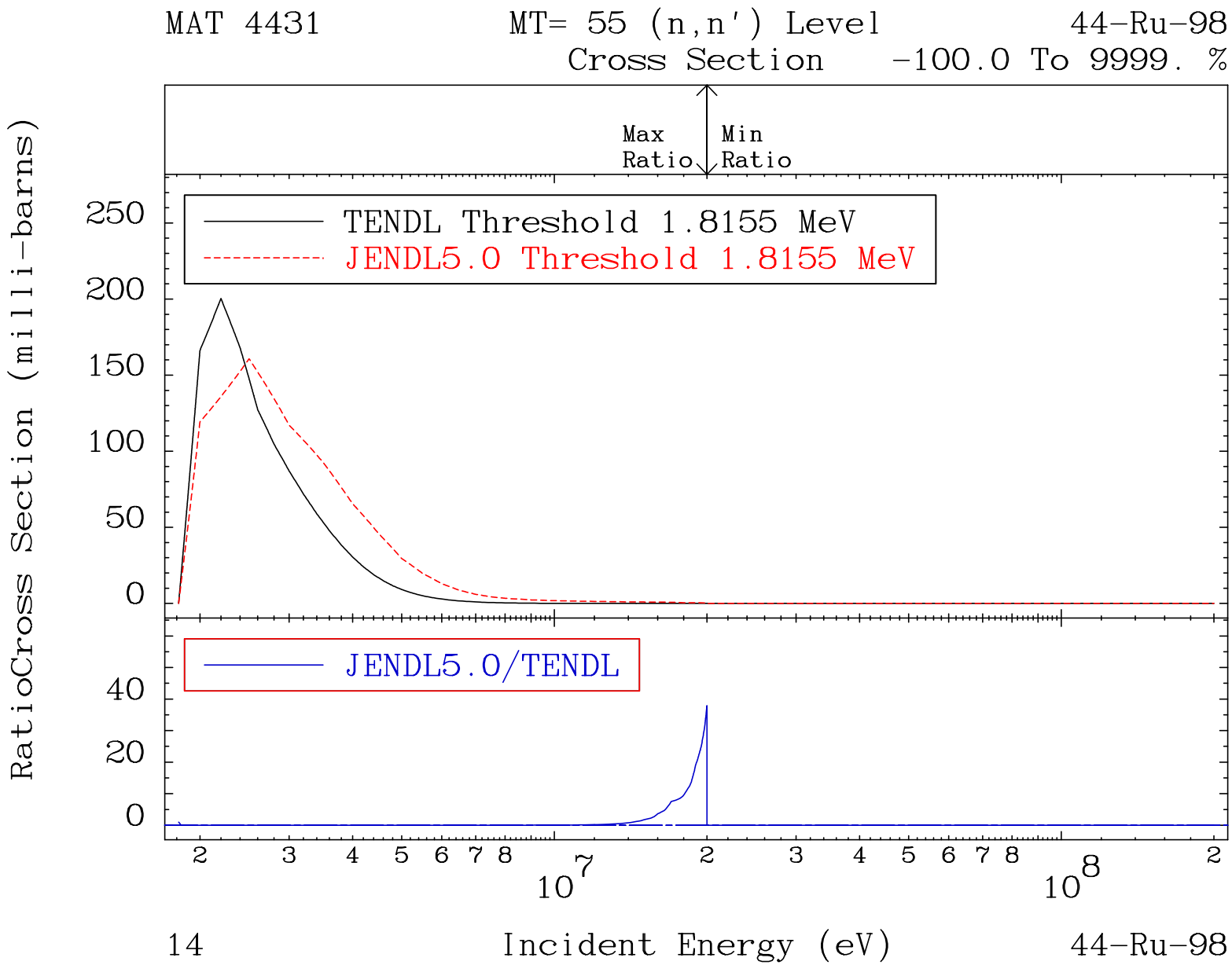

MAT 4431
(n,n') d
Cross Section
44-Ru-98
-100.0 To 127.2 %
Max
Ratio
TENDL Threshold 15.699 MeV
JENDL5.0 Threshold 18.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
44-Ru-98

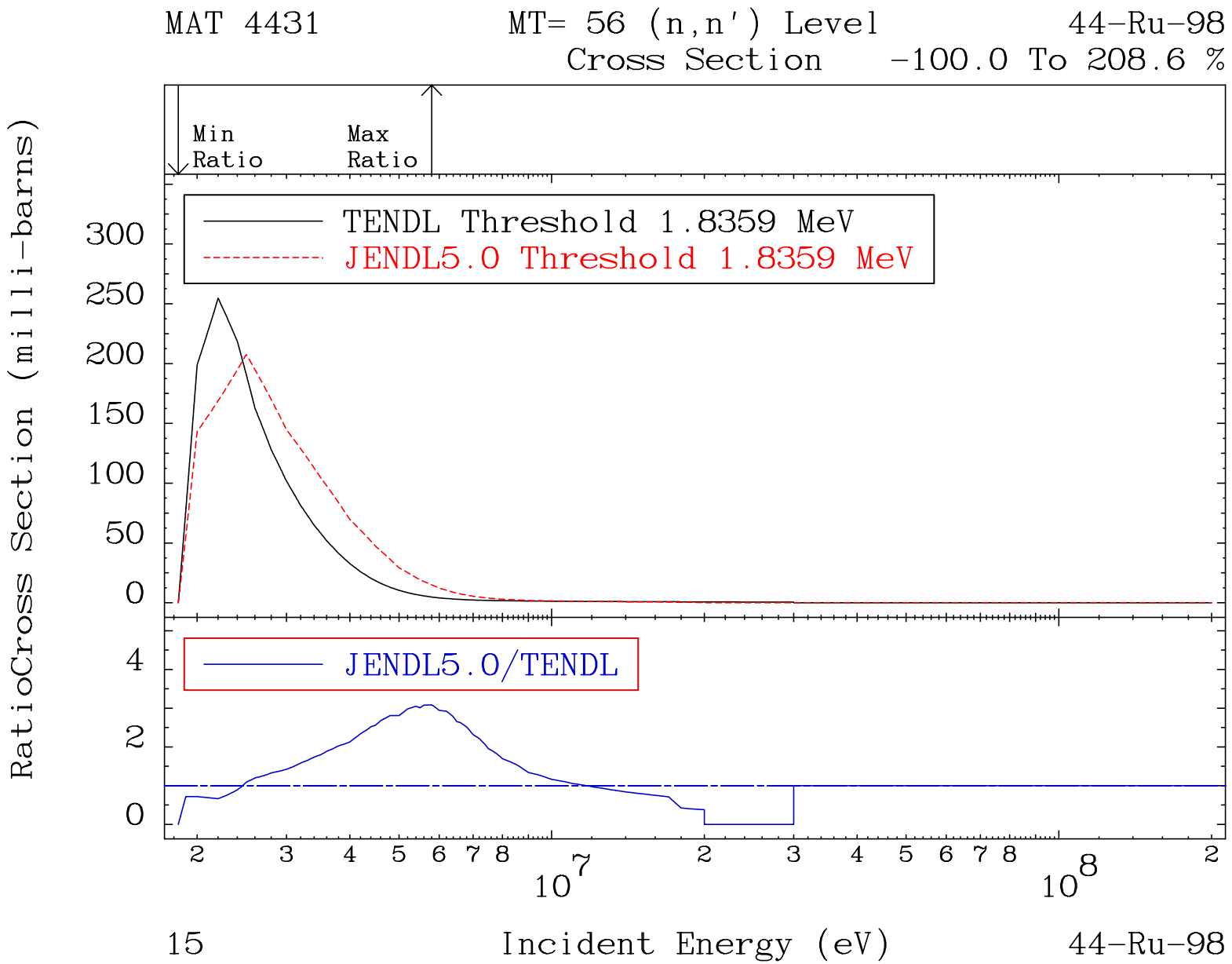

MAT 4431
MT= 51 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 74.89 %
Max Ratio
Min Ratio
TENDL Threshold 659.18 keV
JENDL5.0 Threshold 659.18 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
10
44-Ru-98

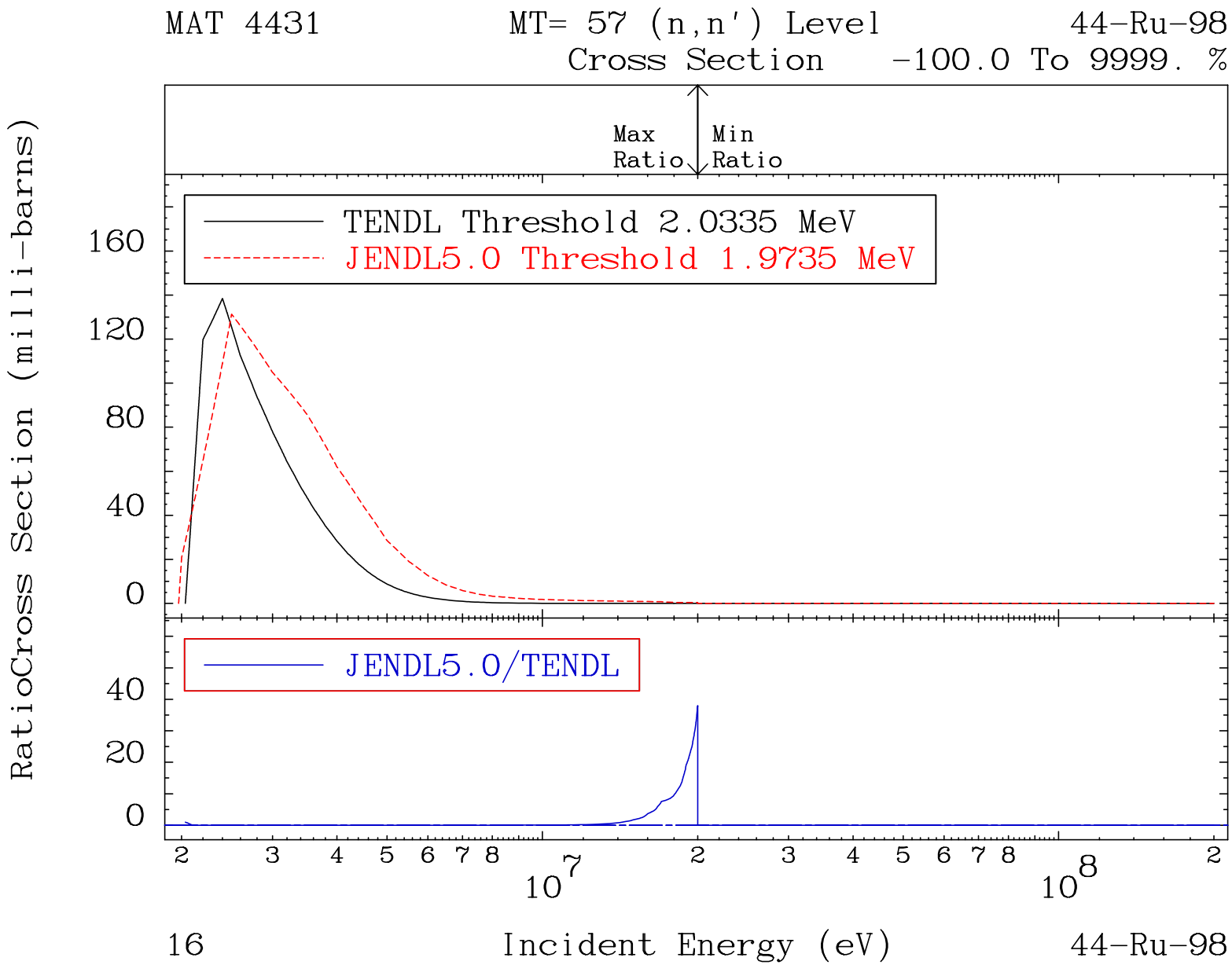

MAT 4431
MT= 52 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 25.86 %
Max Ratio
Min Ratio
TENDL Threshold 1.3358 MeV
JENDL5.0 Threshold 1.3358 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
44-Ru-98

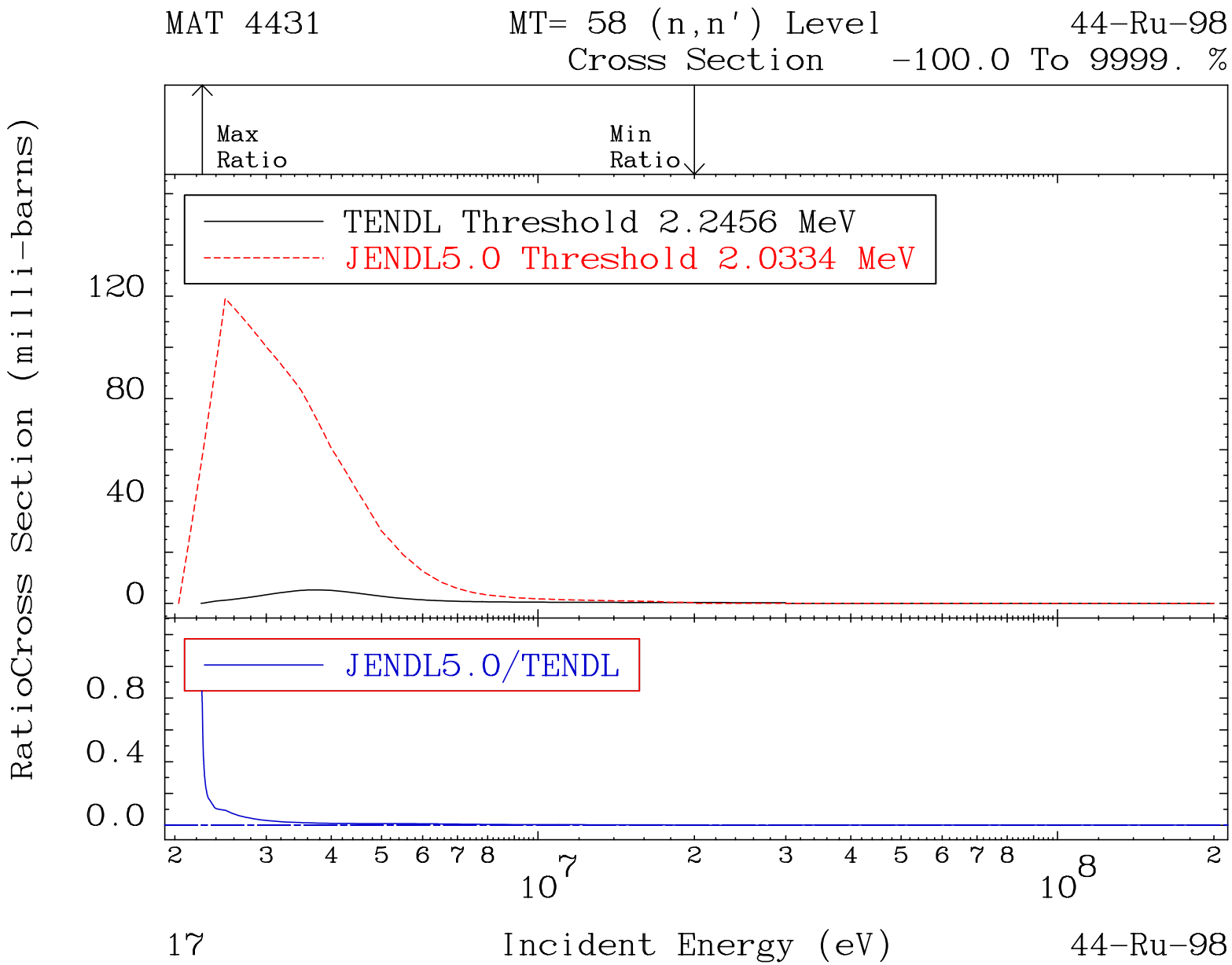

MAT 4431
MT= 53 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 200.5 %
Max Ratio
Min Ratio
TENDL Threshold 1.4123 MeV
JENDL5.0 Threshold 1.4123 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
44-Ru-98

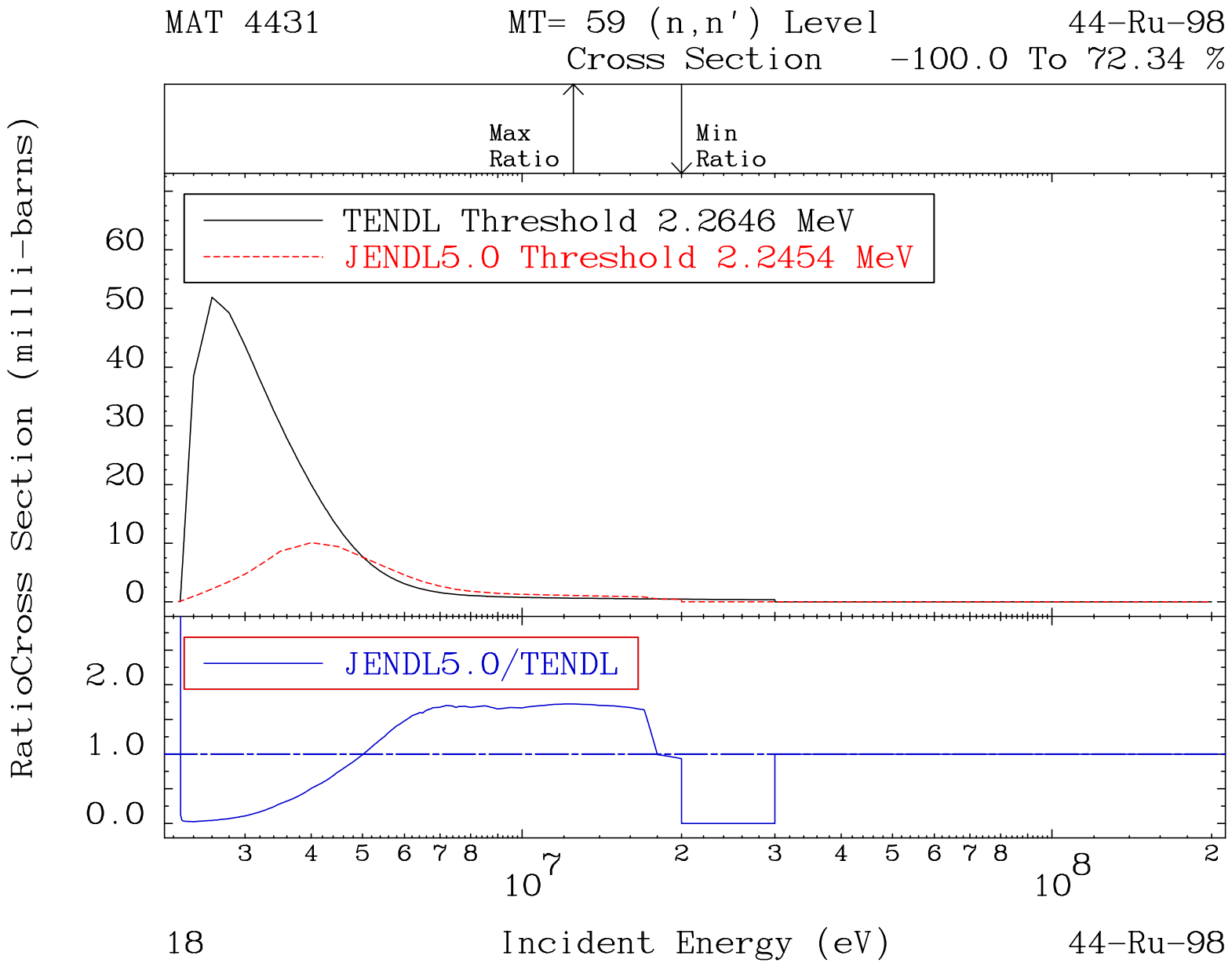

MAT 4431
MT= 54 (n,n') Level
44-Ru-98
Cross Section -100.0 To 62.20 %
Max Ratio
Min Ratio
TENDL Threshold 1.4289 MeV
JENDL5.0 Threshold 1.4289 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
13
Incident Energy (eV)
44-Ru-98

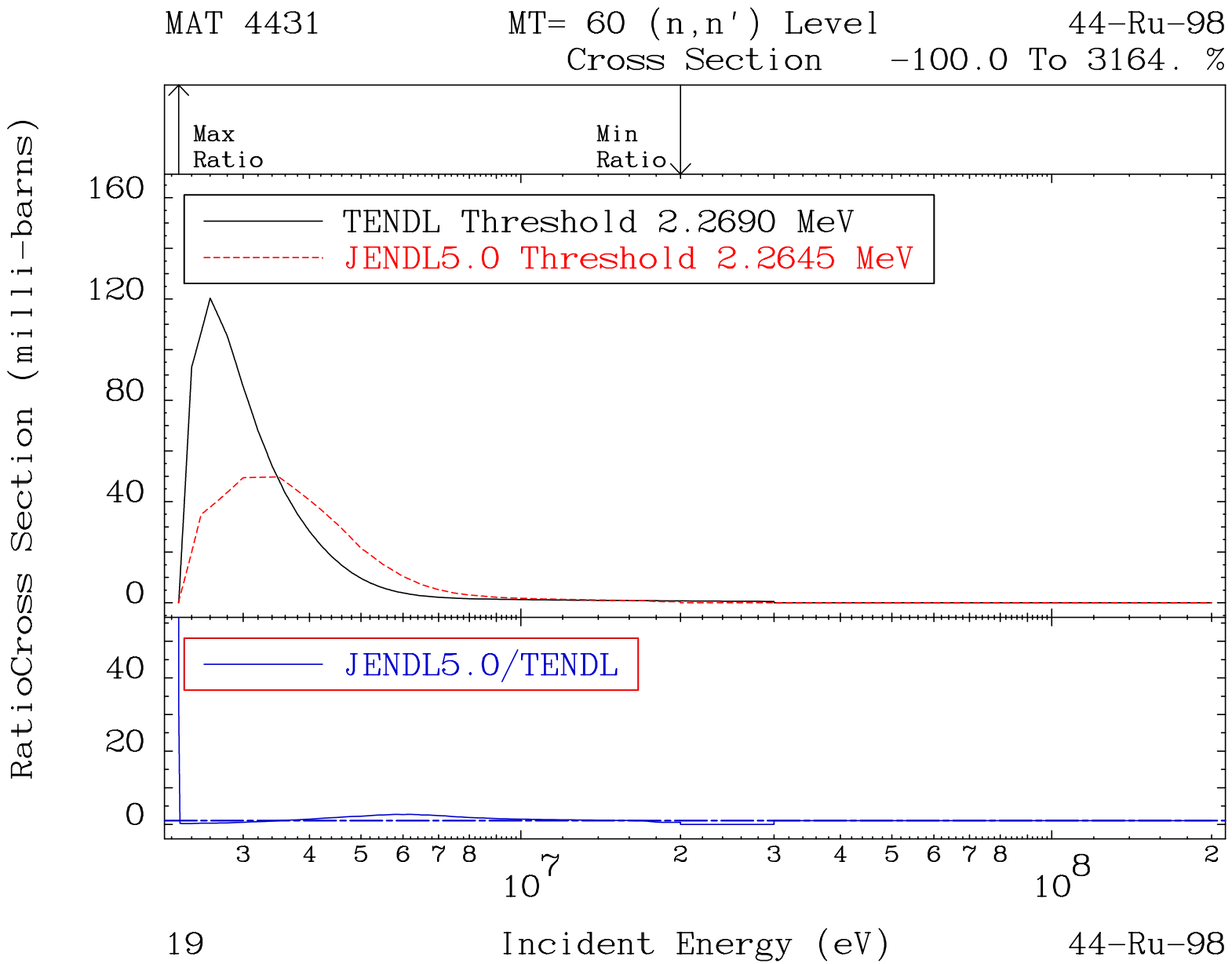

MAT 4431
MT= 55 (n,n') Level
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8155 MeV
JENDL5.0 Threshold 1.8155 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
44-Ru-98

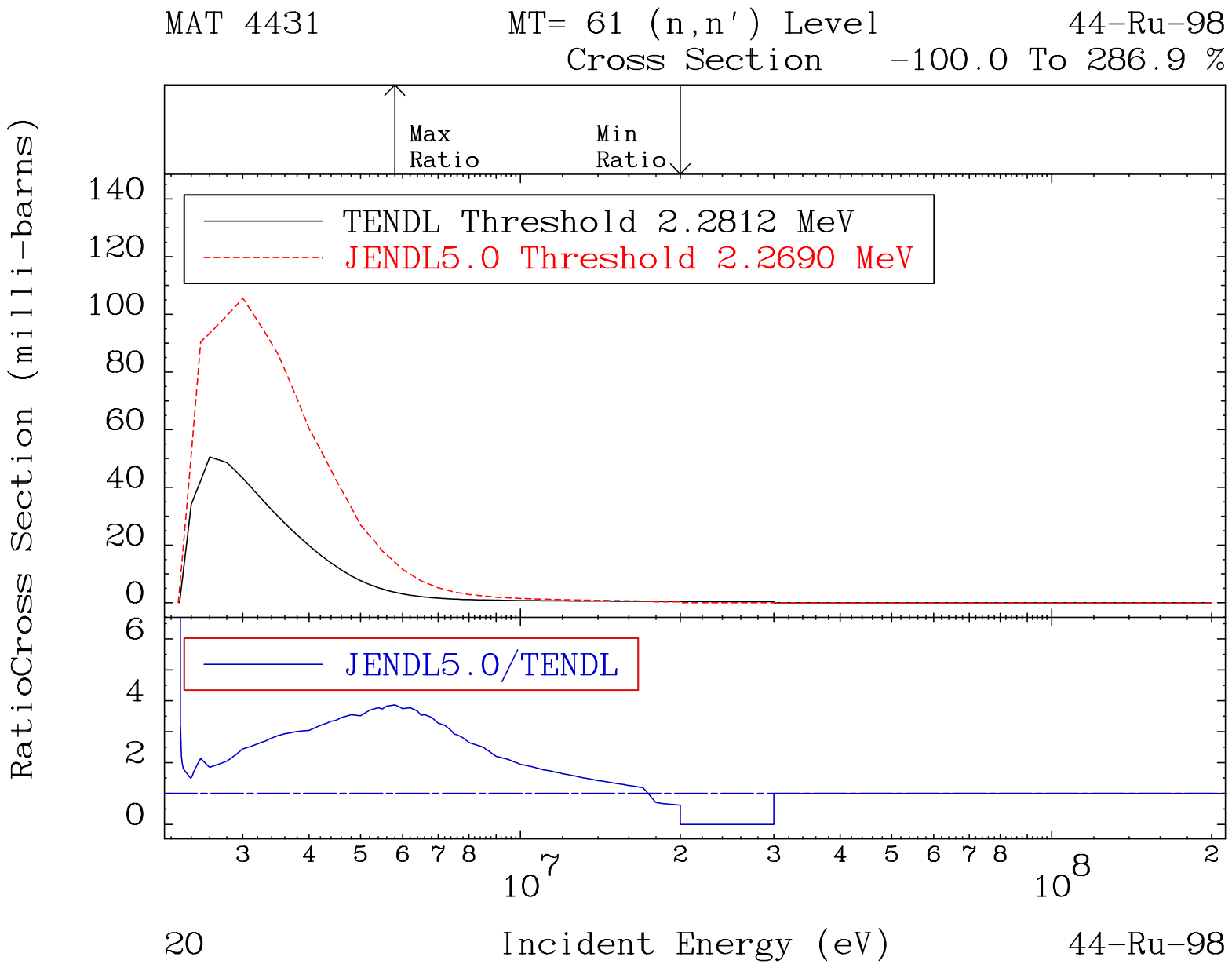

MAT 4431
MT= 56 (n,n') Level
44-Ru-98
Cross Section
-100.0 To 208.6 %
Min Ratio
Max Ratio
TENDL Threshold 1.8359 MeV
JENDL5.0 Threshold 1.8359 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
44-Ru-98

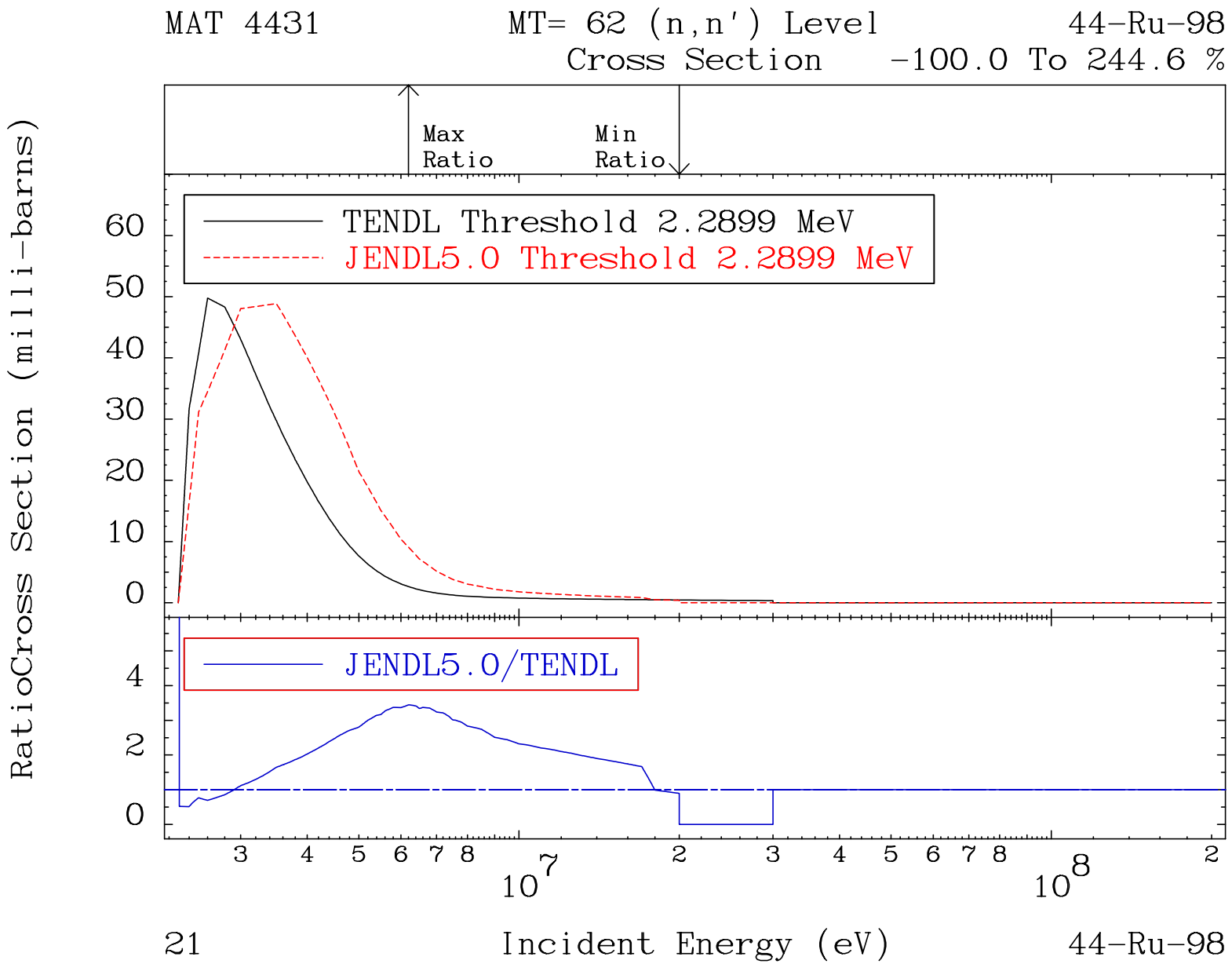

MAT 4431
MT= 57 (n,n') Level
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0335 MeV
JENDL5.0 Threshold 1.9735 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
44-Ru-98

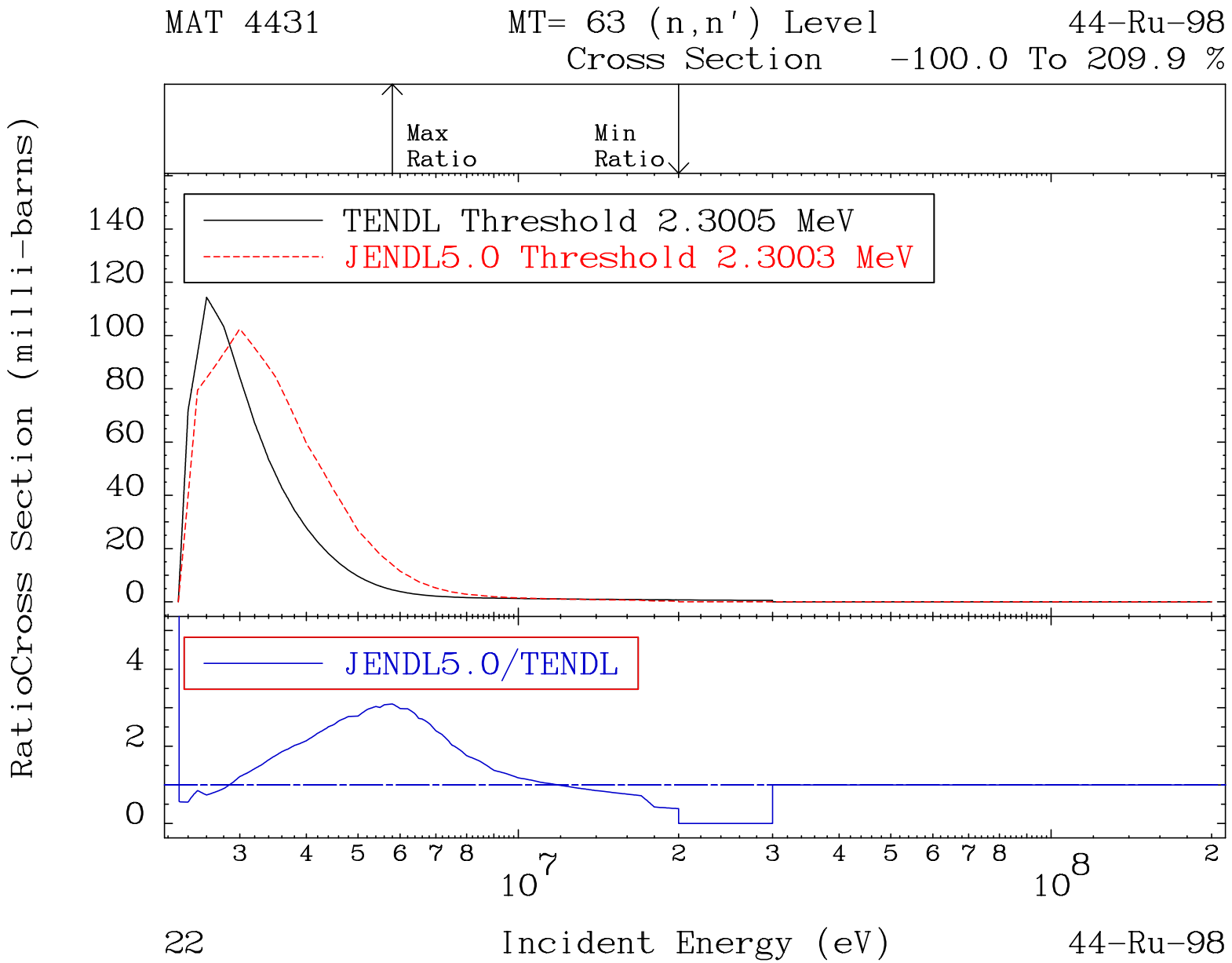

MAT 4431
MT= 58 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.2456 MeV
JENDL5.0 Threshold 2.0334 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
80
40
0
0.8
0.4
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
44-Ru-98

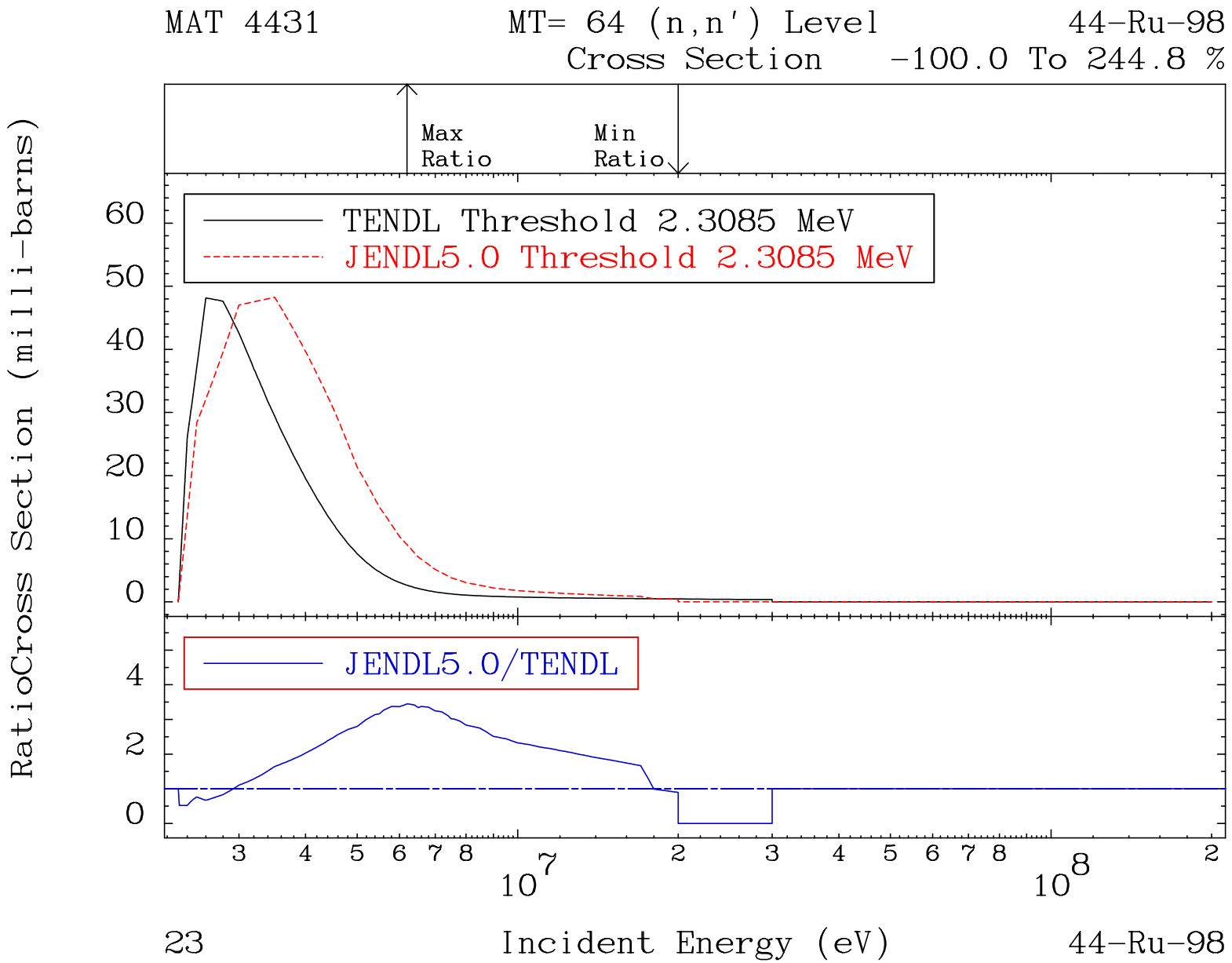

MAT 4431
MT= 59 (n,n') Level
44-Ru-98
Cross Section -100.0 To 72.34 %
Max Ratio
Min Ratio
TENDL Threshold 2.2646 MeV
JENDL5.0 Threshold 2.2454 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
44-Ru-98

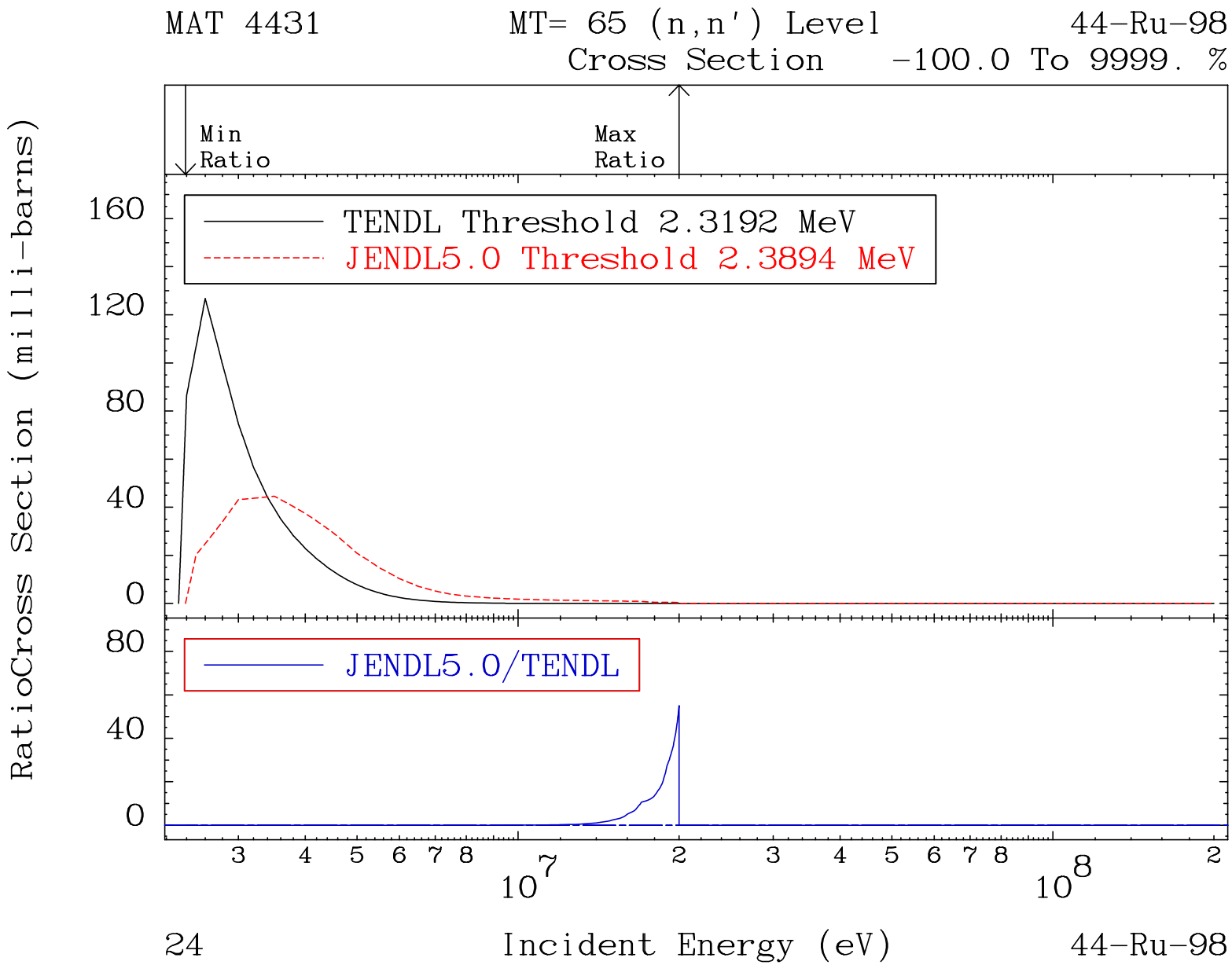

MAT 4431
MT= 60 (n,n') Level
44-Ru-98
Cross Section -100.0 To 3164. %
Max Ratio
Min Ratio
TENDL Threshold 2.2690 MeV
JENDL5.0 Threshold 2.2645 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
40
20
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
44-Ru-98

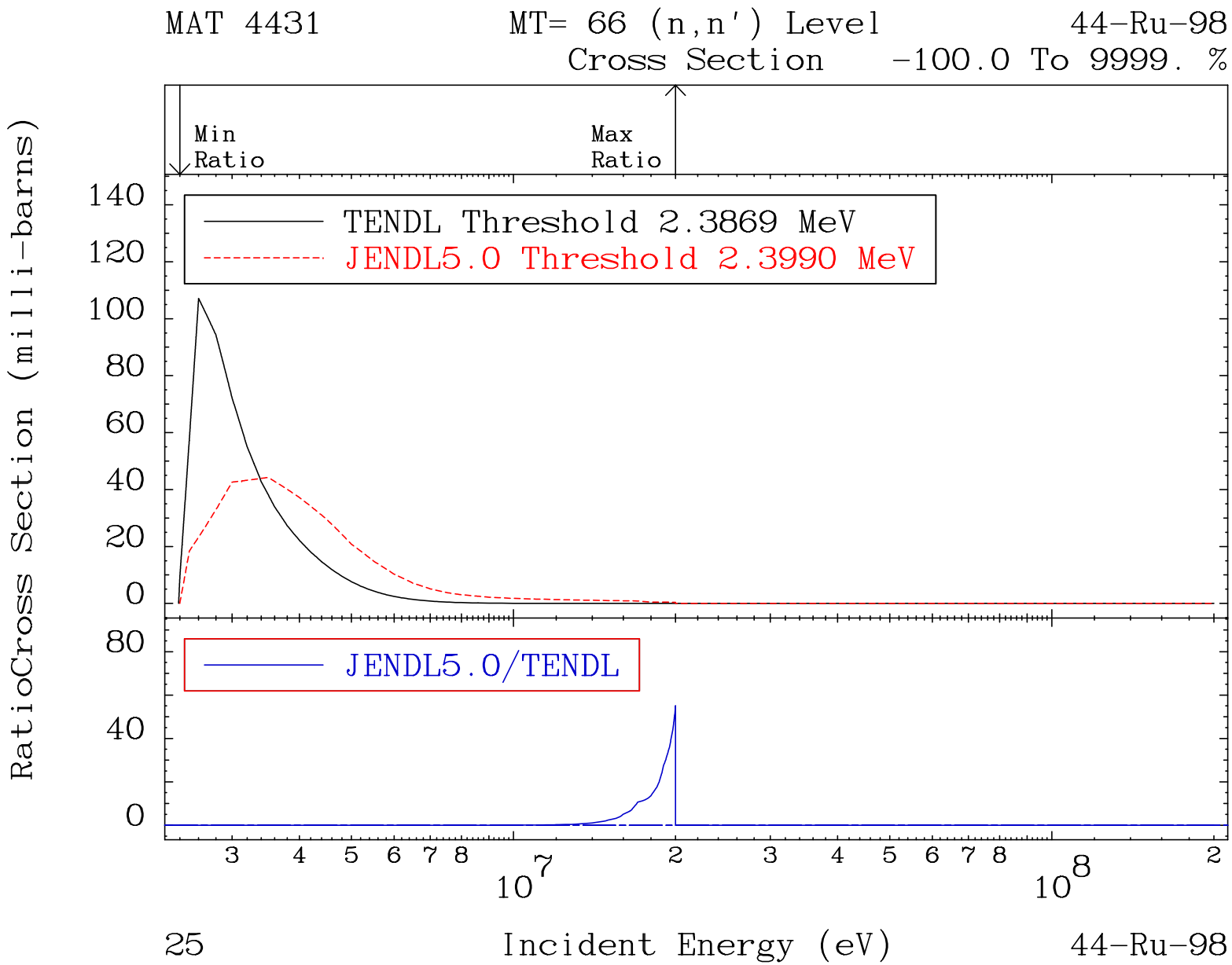

MAT 4431
MT= 61 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 286.9 %
Max Ratio
Min Ratio
TENDL Threshold 2.2812 MeV
JENDL5.0 Threshold 2.2690 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
6
4
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
44-Ru-98

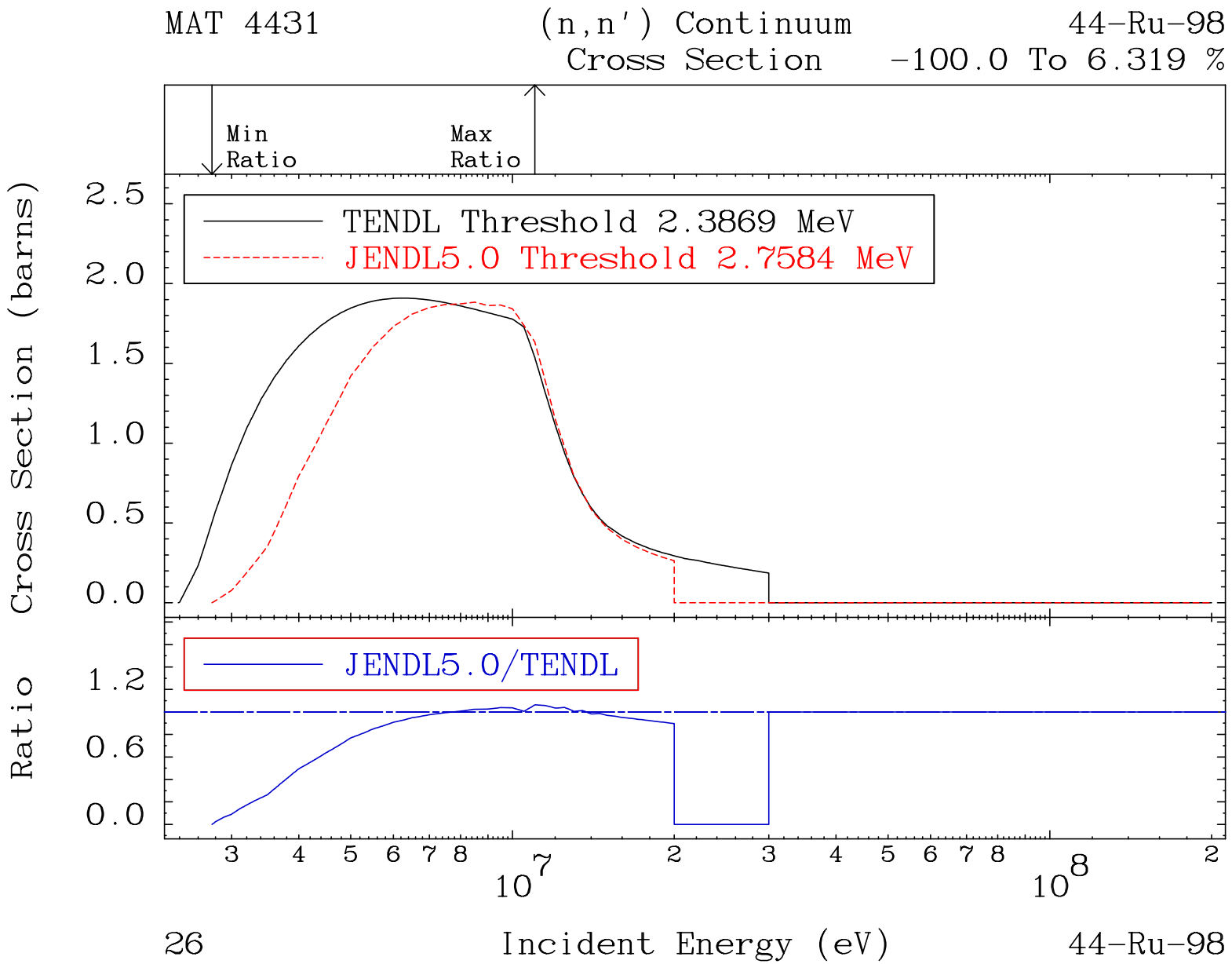

MAT 4431
MT= 62 (n,n') Level
Cross Section
44-Ru-98
-100.0 To 244.6 %
Max Ratio
Min Ratio
TENDL Threshold 2.2899 MeV
JENDL5.0 Threshold 2.2899 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
44-Ru-98

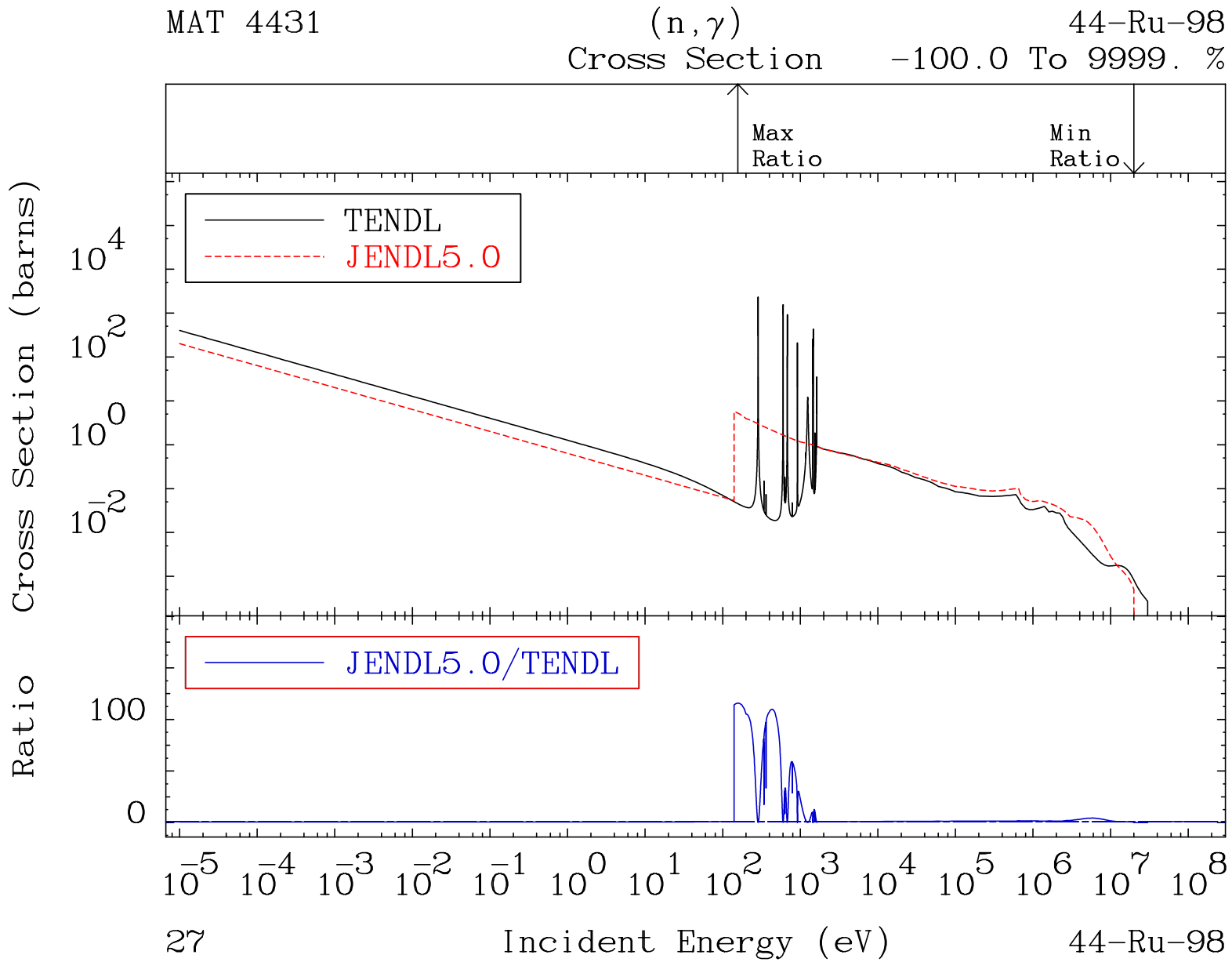

MAT 4431
MT= 63 (n,n') Level
44-Ru-98
Cross Section -100.0 To 209.9 %
Max Ratio
Min Ratio
TENDL Threshold 2.3005 MeV
JENDL5.0 Threshold 2.3003 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
44-Ru-98

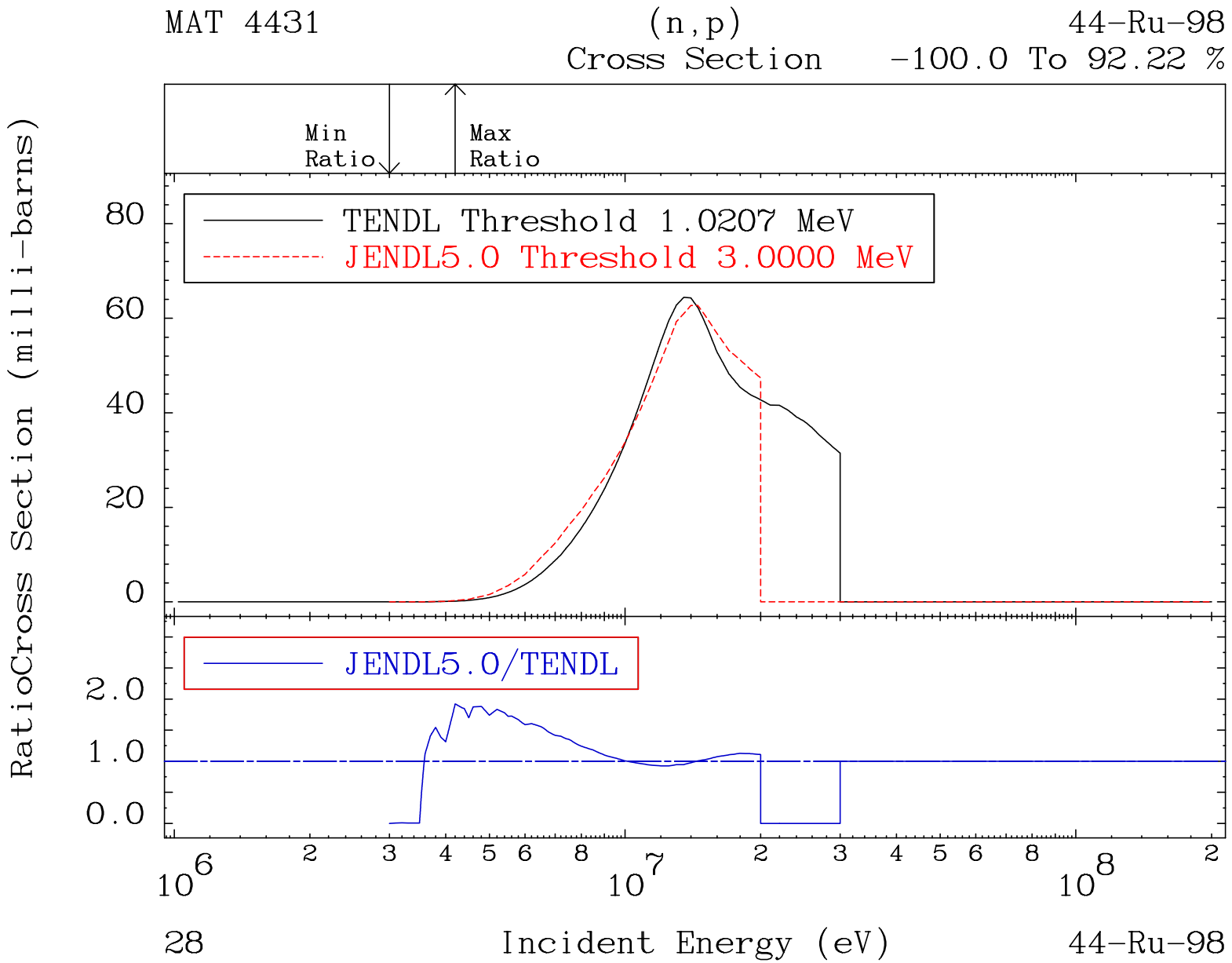

MAT 4431
MT= 64 (n,n') Level
44-Ru-98
Cross Section -100.0 To 244.8 %
Max Ratio
Min Ratio
TENDL Threshold 2.3085 MeV
JENDL5.0 Threshold 2.3085 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
44-Ru-98

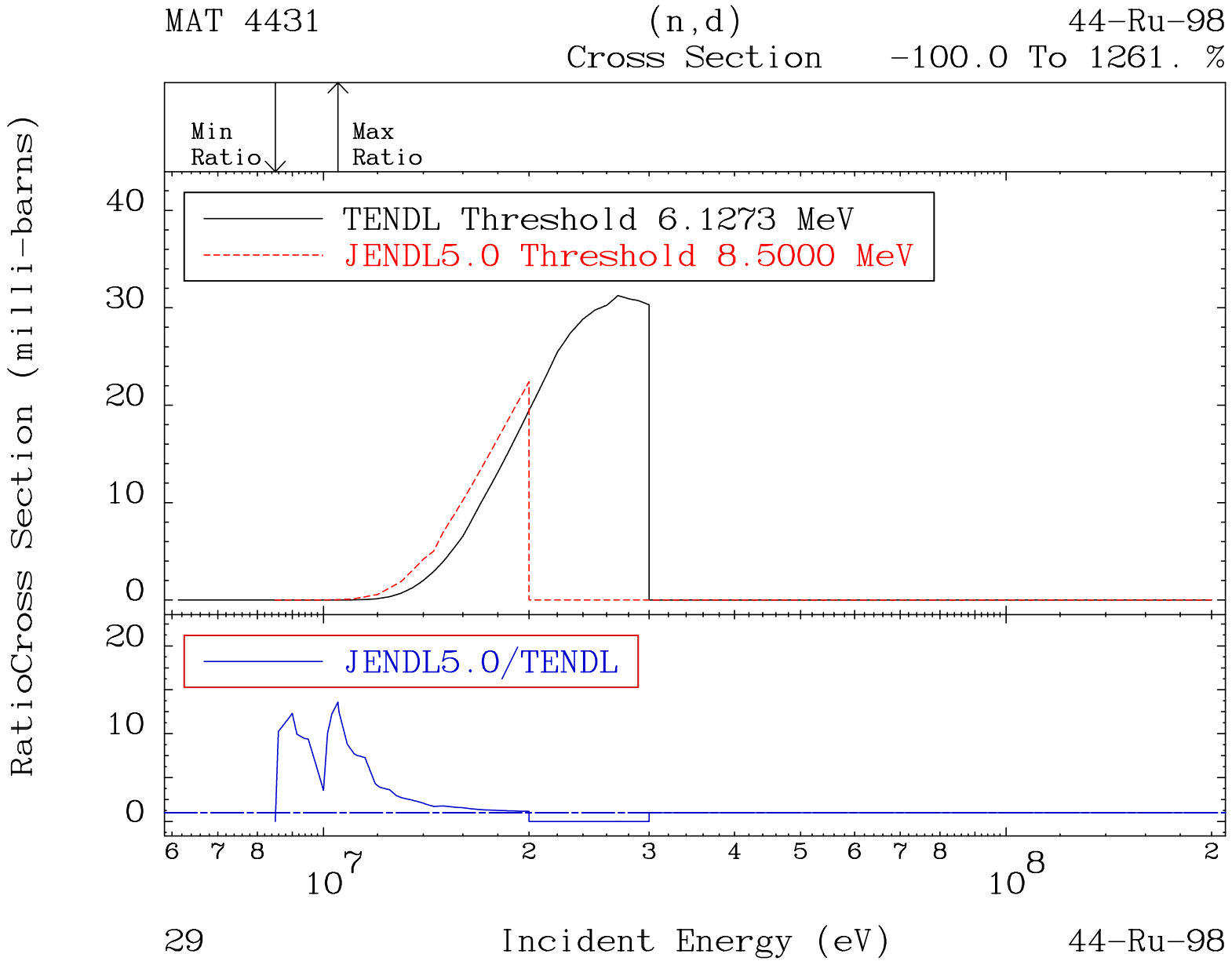

MAT 4431
MT= 65 (n,n') Level
44-Ru-98
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3192 MeV
JENDL5.0 Threshold 2.3894 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
80
40
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
44-Ru-98

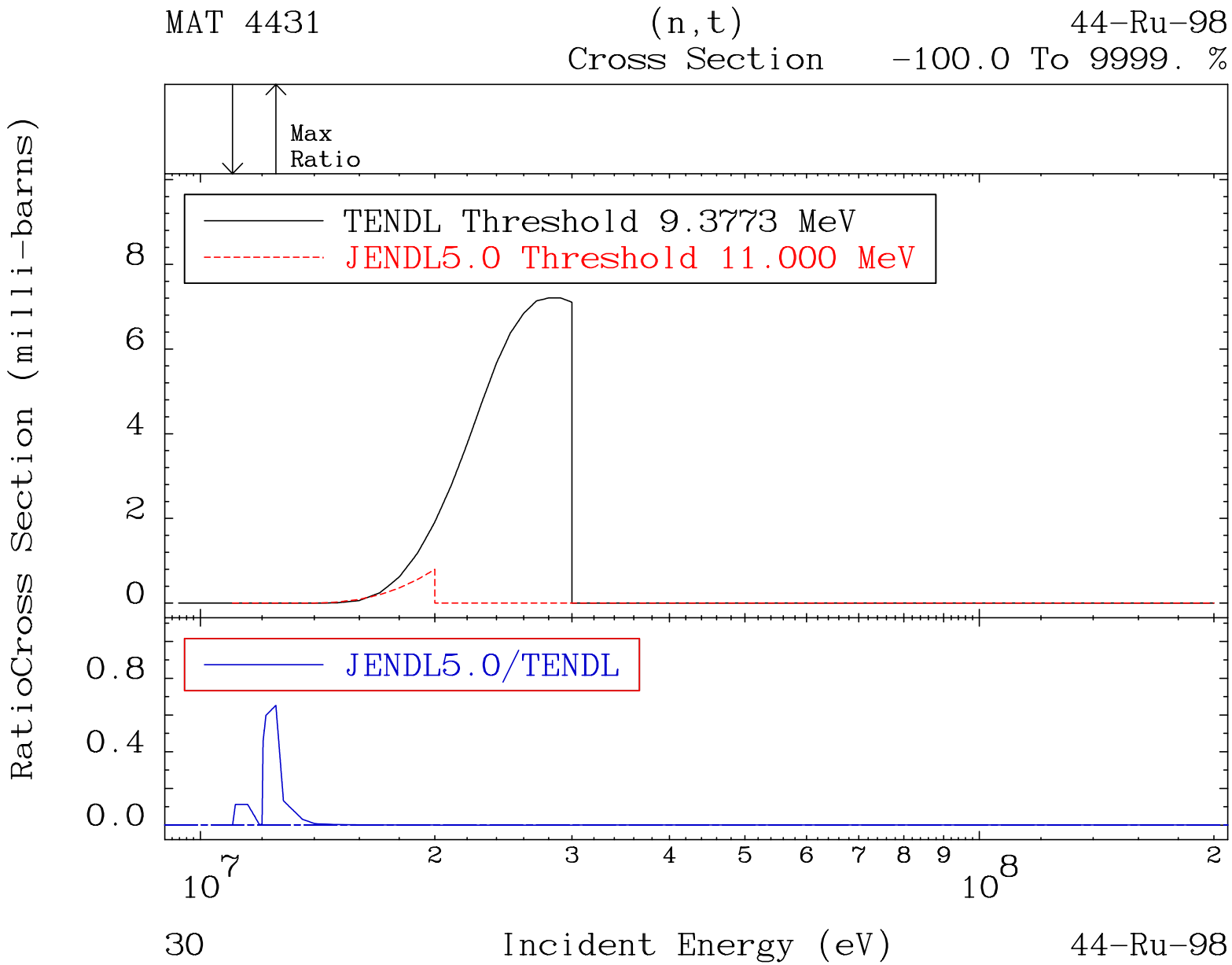

MAT 4431
MT= 66 (n,n') Level
44-Ru-98
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3869 MeV
JENDL5.0 Threshold 2.3990 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
80
40
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
44-Ru-98

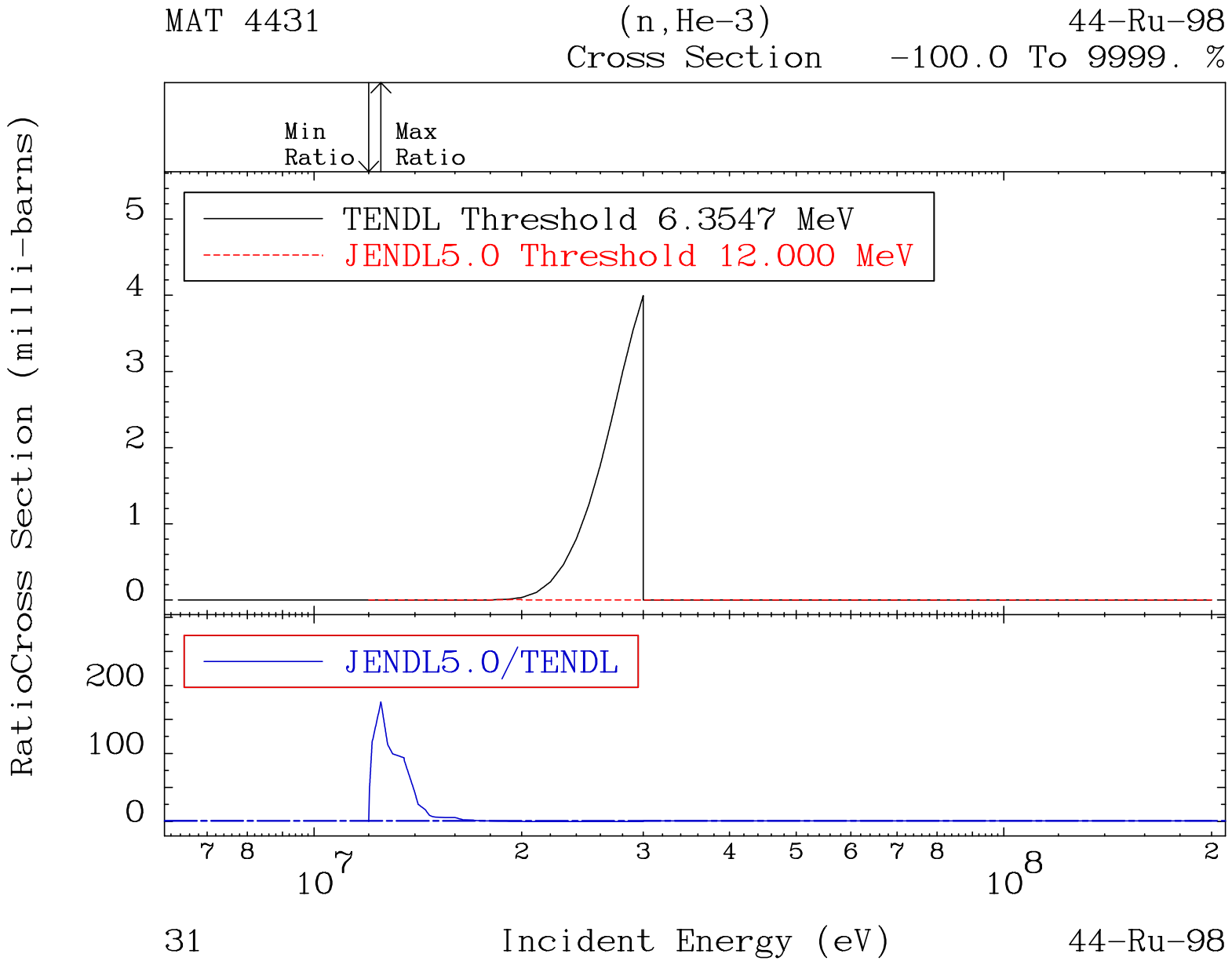

MAT 4431
(n,n') Continuum
Cross Section
44-Ru-98
-100.0 To 6.319 %
Min Ratio
Max Ratio
TENDL Threshold 2.3869 MeV
JENDL5.0 Threshold 2.7584 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
26
44-Ru-98

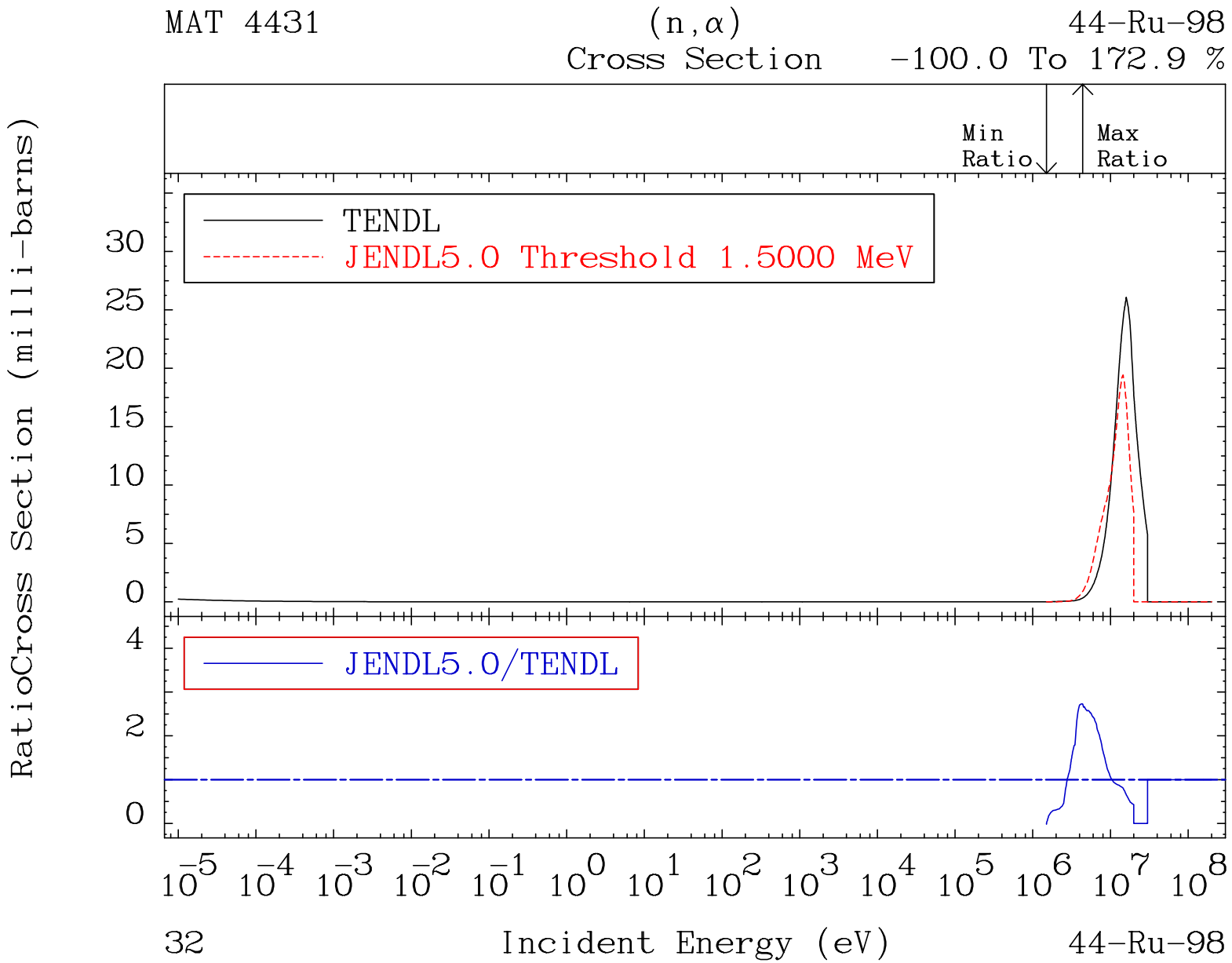

MAT 4431
(n,γ)
Cross Section
44-Ru-98
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
27
44-Ru-98

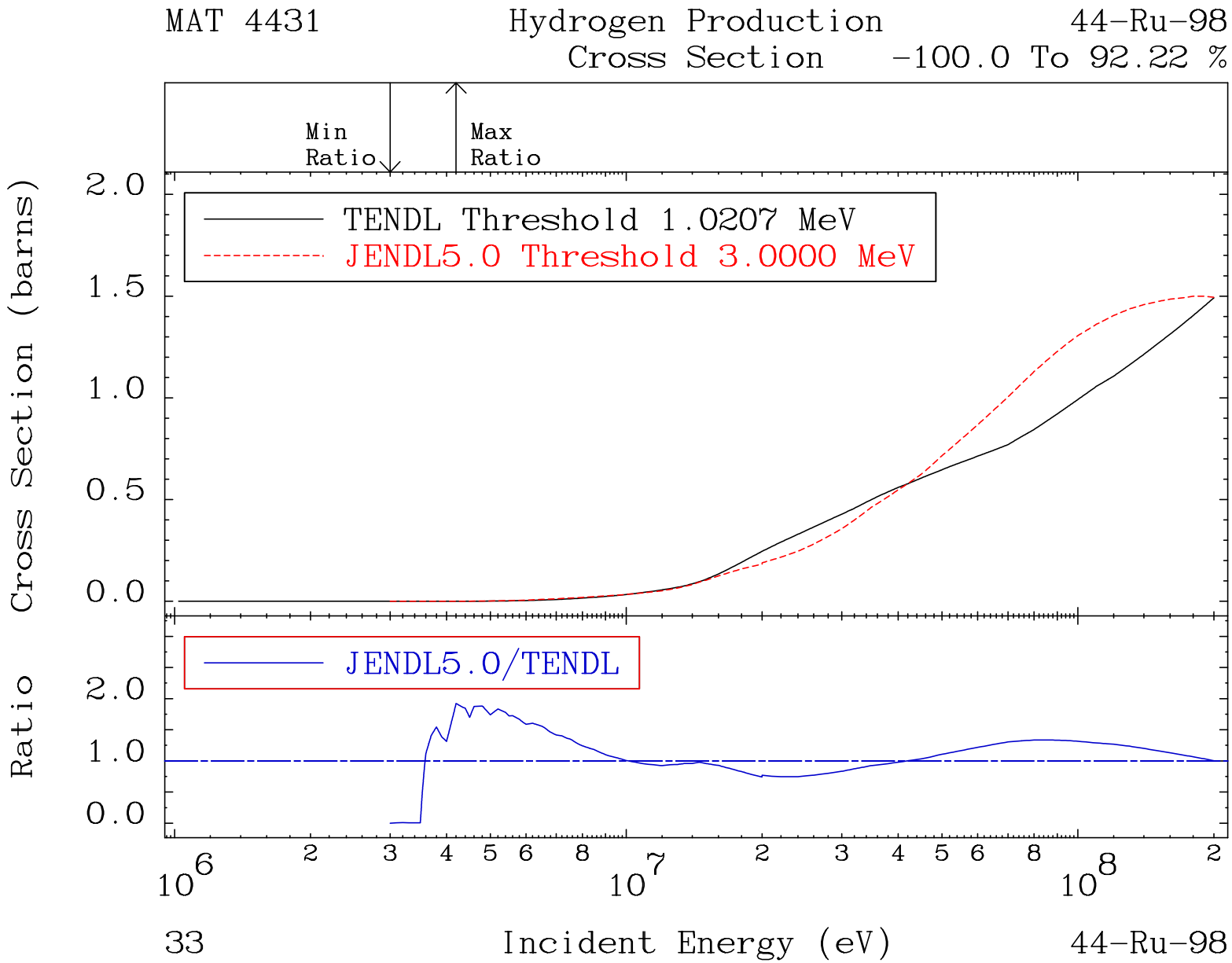

MAT 4431
(n,p)
Cross Section
44-Ru-98
-100.0 To 92.22 %
Min Ratio
Max Ratio
TENDL Threshold 1.0207 MeV
JENDL5.0 Threshold 3.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
28
44-Ru-98

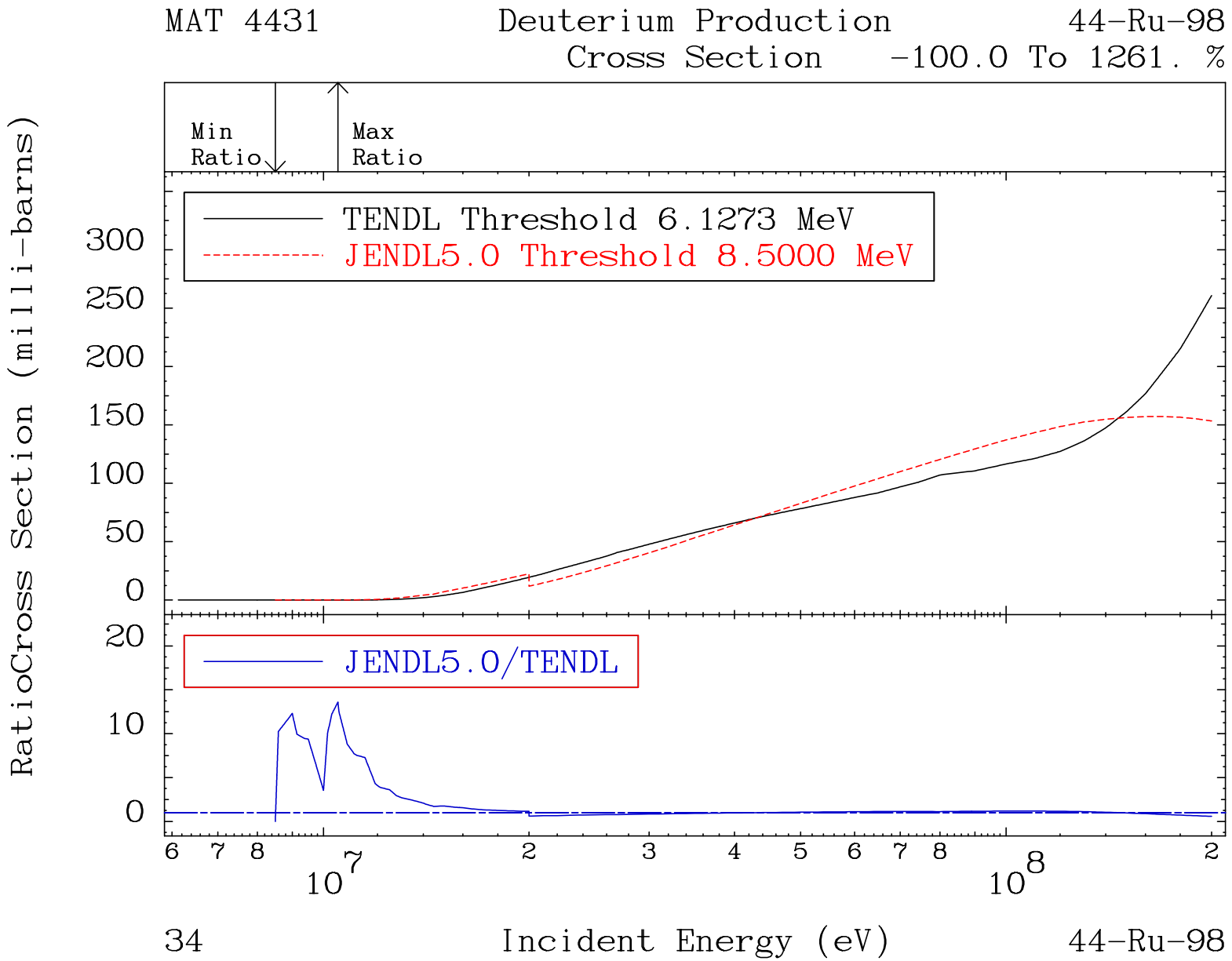

MAT 4431
(n,d)
44-Ru-98
Cross Section
-100.0 To 1261. %
Min Ratio
Max Ratio
TENDL Threshold 6.1273 MeV
JENDL5.0 Threshold 8.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
20
10
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
44-Ru-98

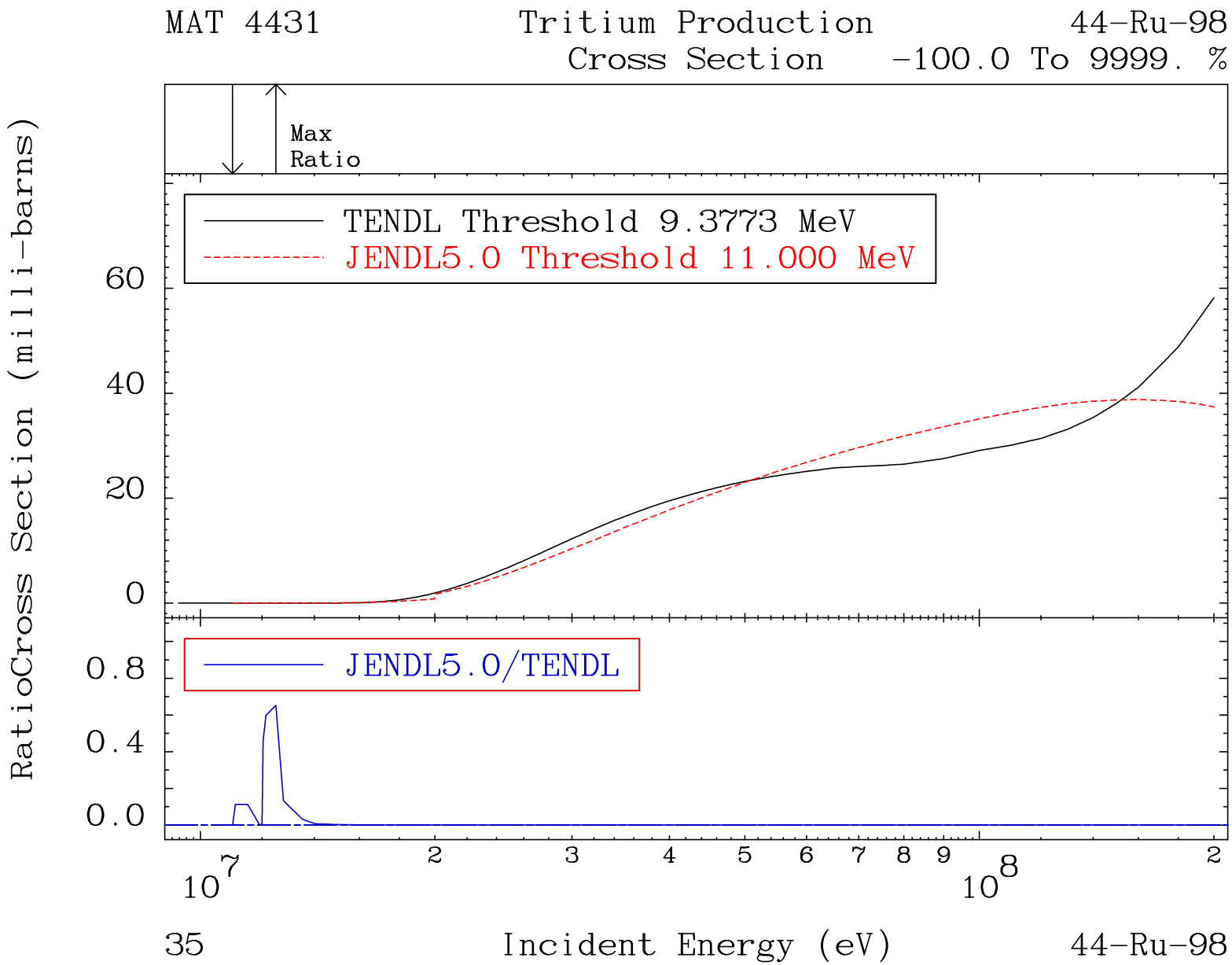

MAT 4431
(n,t)
Cross Section
44-Ru-98
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.3773 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
30
44-Ru-98

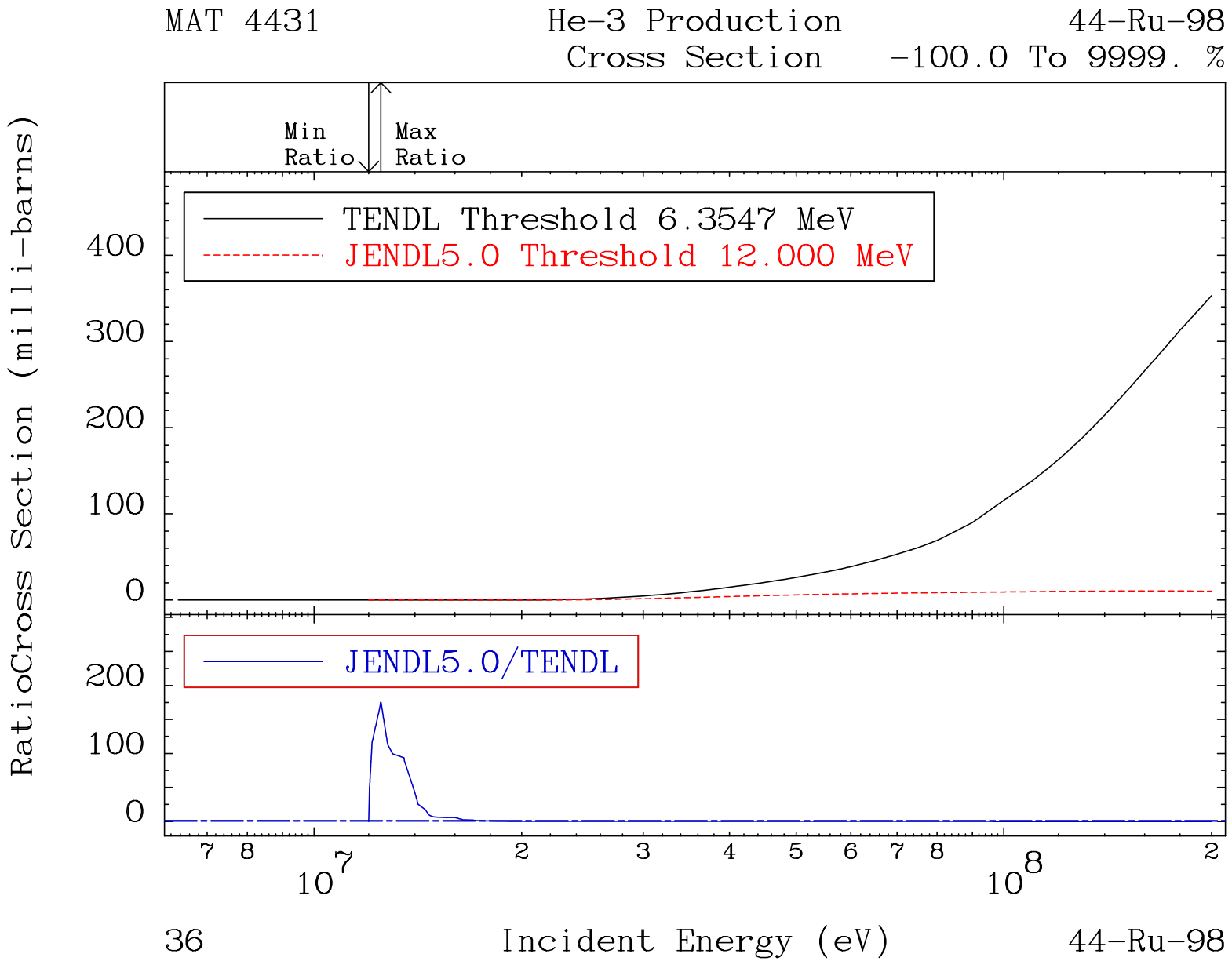

MAT 4431
(n,He-3)
Cross Section
44-Ru-98
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3547 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
31
44-Ru-98

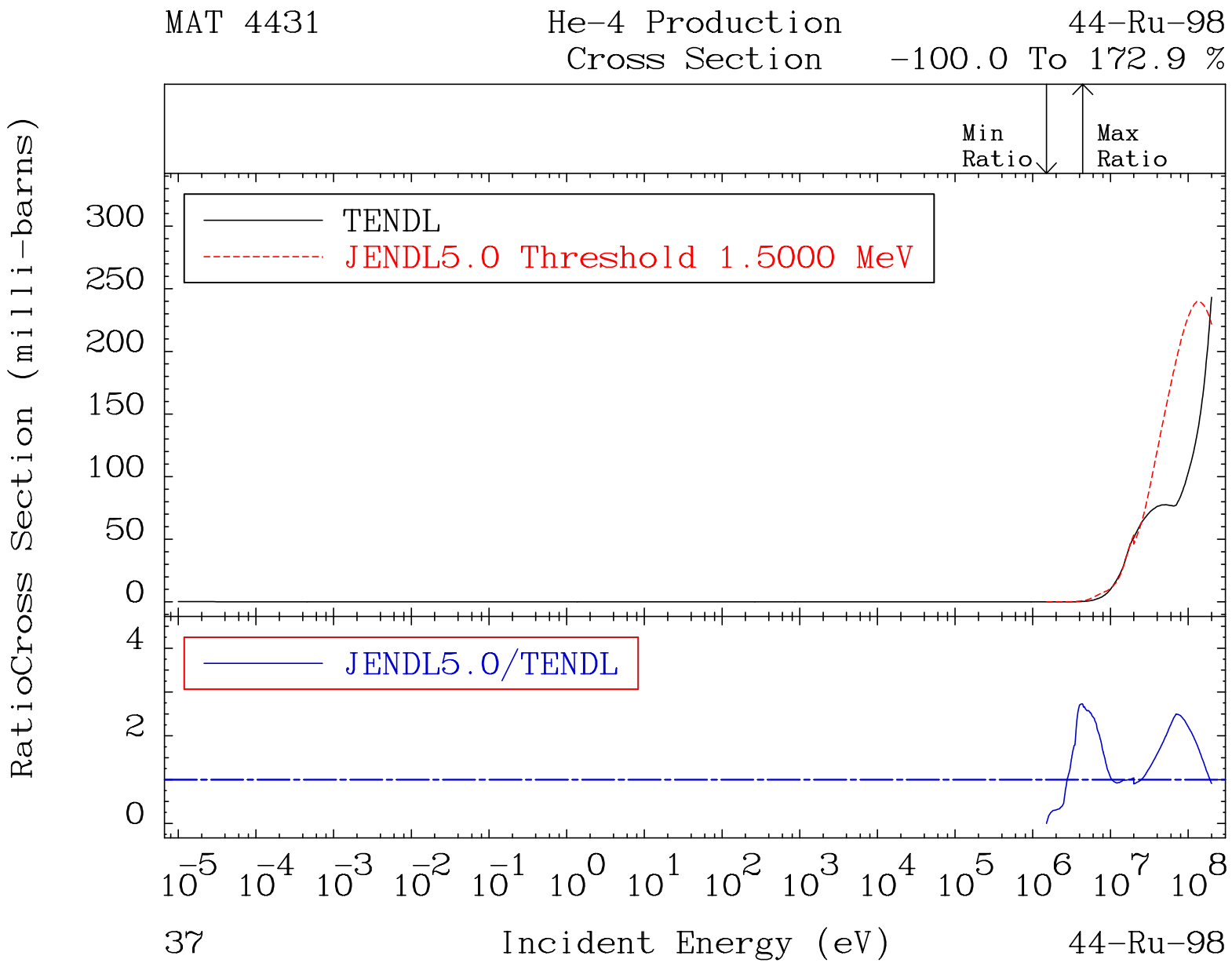

MAT 4431
(n,α)
Cross Section
44-Ru-98
-100.0 To 172.9 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 1.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
44-Ru-98

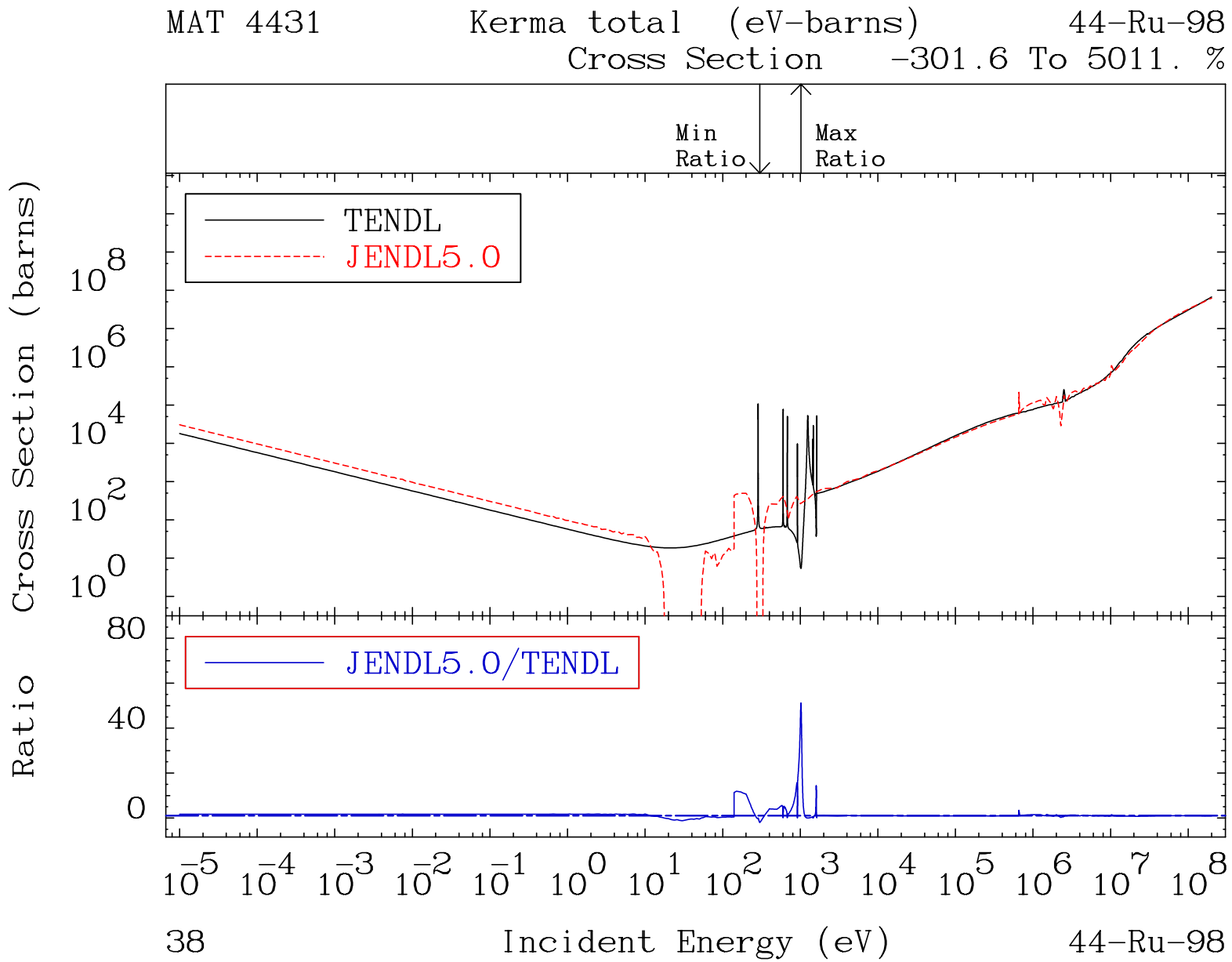

MAT 4431
Hydrogen Production
Cross Section
44-Ru-98
-100.0 To 92.22 %
Min Ratio
Max Ratio
TENDL Threshold 1.0207 MeV
JENDL5.0 Threshold 3.0000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
10^6
10^7
10^8
2 3 4 5 6 8
2 3 4 5 6 8
2
33
Incident Energy (eV)
44-Ru-98

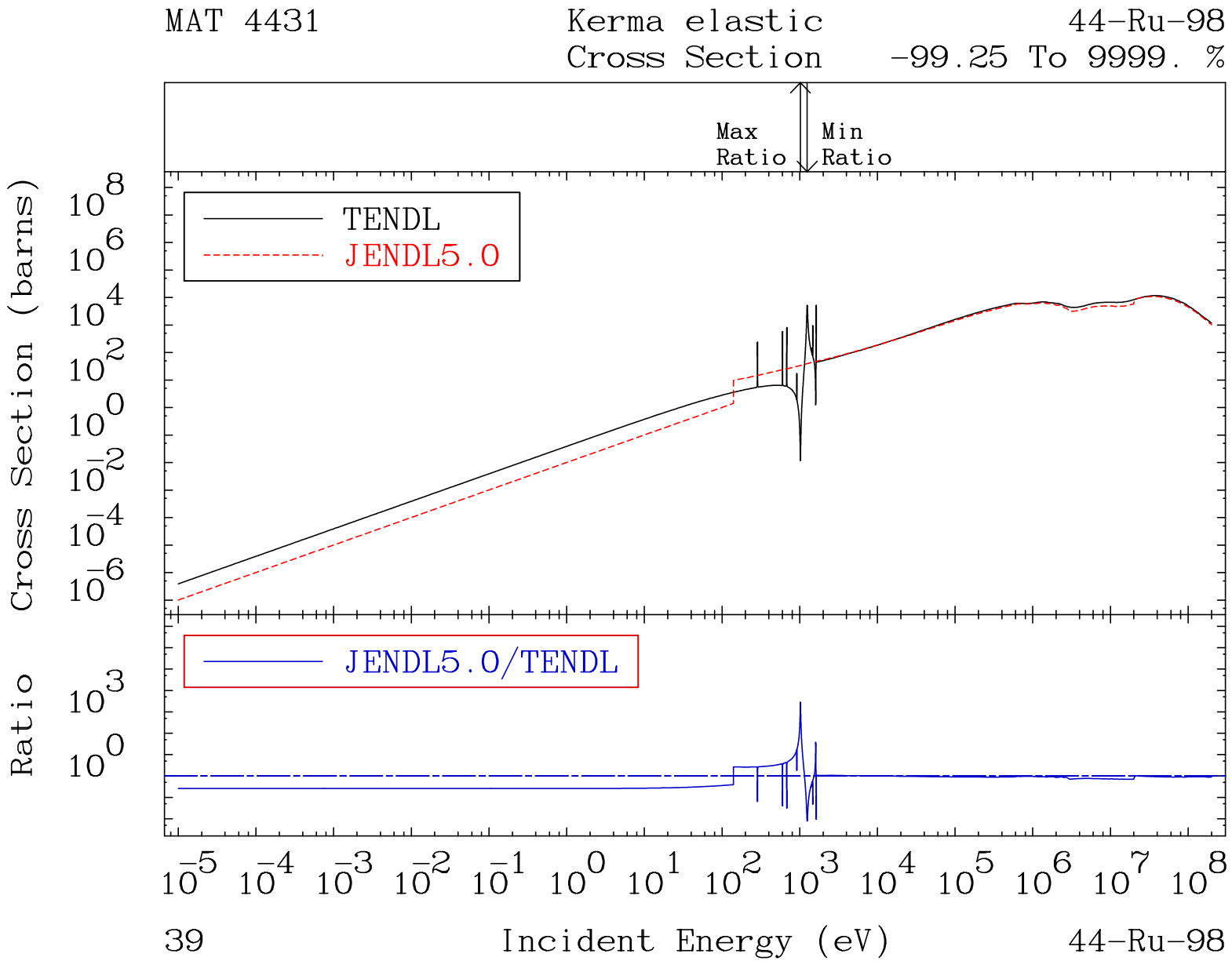

MAT 4431
Deuterium Production
44-Ru-98
Cross Section -100.0 To 1261. %
Min Ratio
Max Ratio
TENDL Threshold 6.1273 MeV
JENDL5.0 Threshold 8.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
20
10
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
44-Ru-98

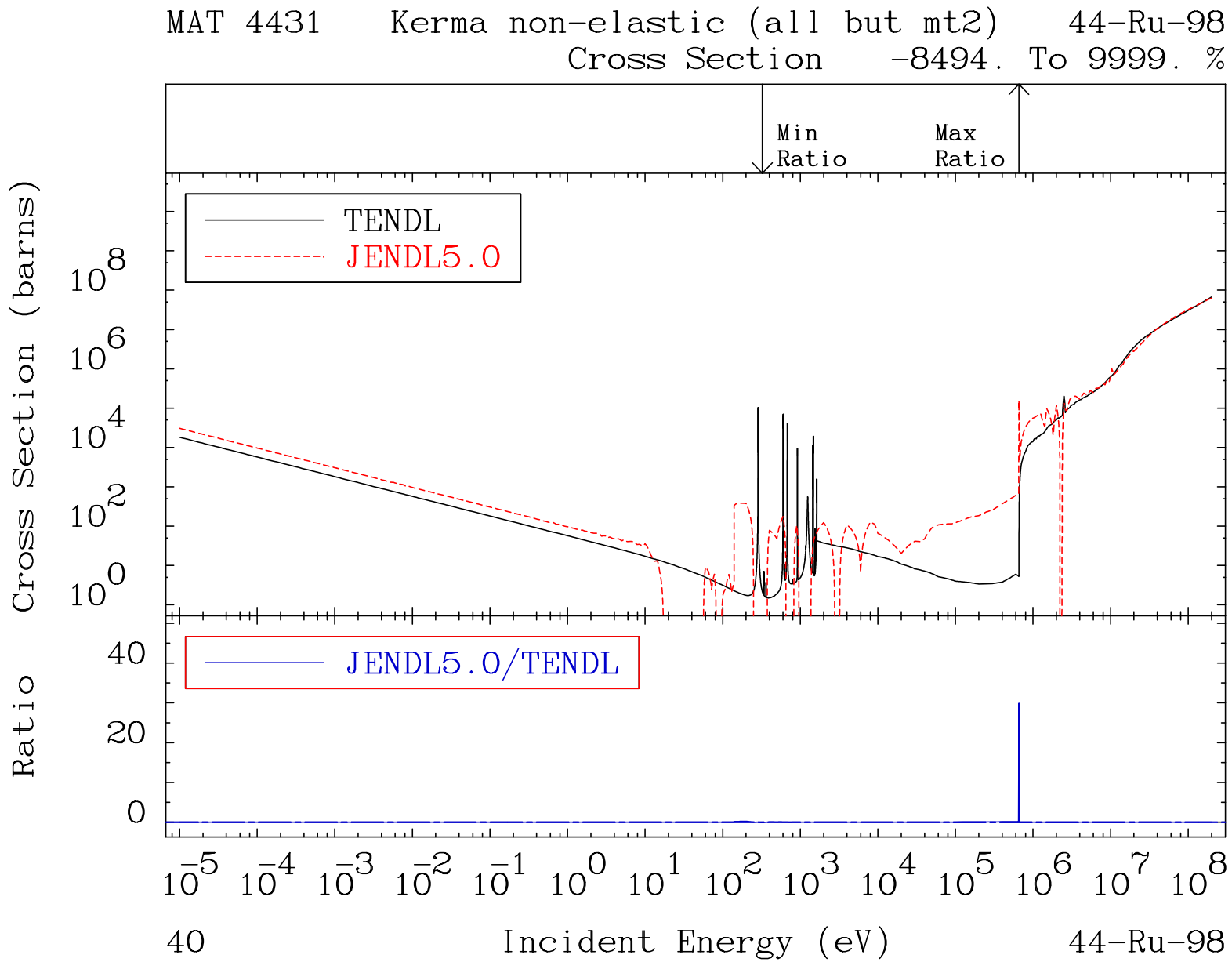

MAT 4431
Tritium Production
Cross Section
44-Ru-98
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.3773 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
0.8
0.4
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
35
Incident Energy (eV)
44-Ru-98

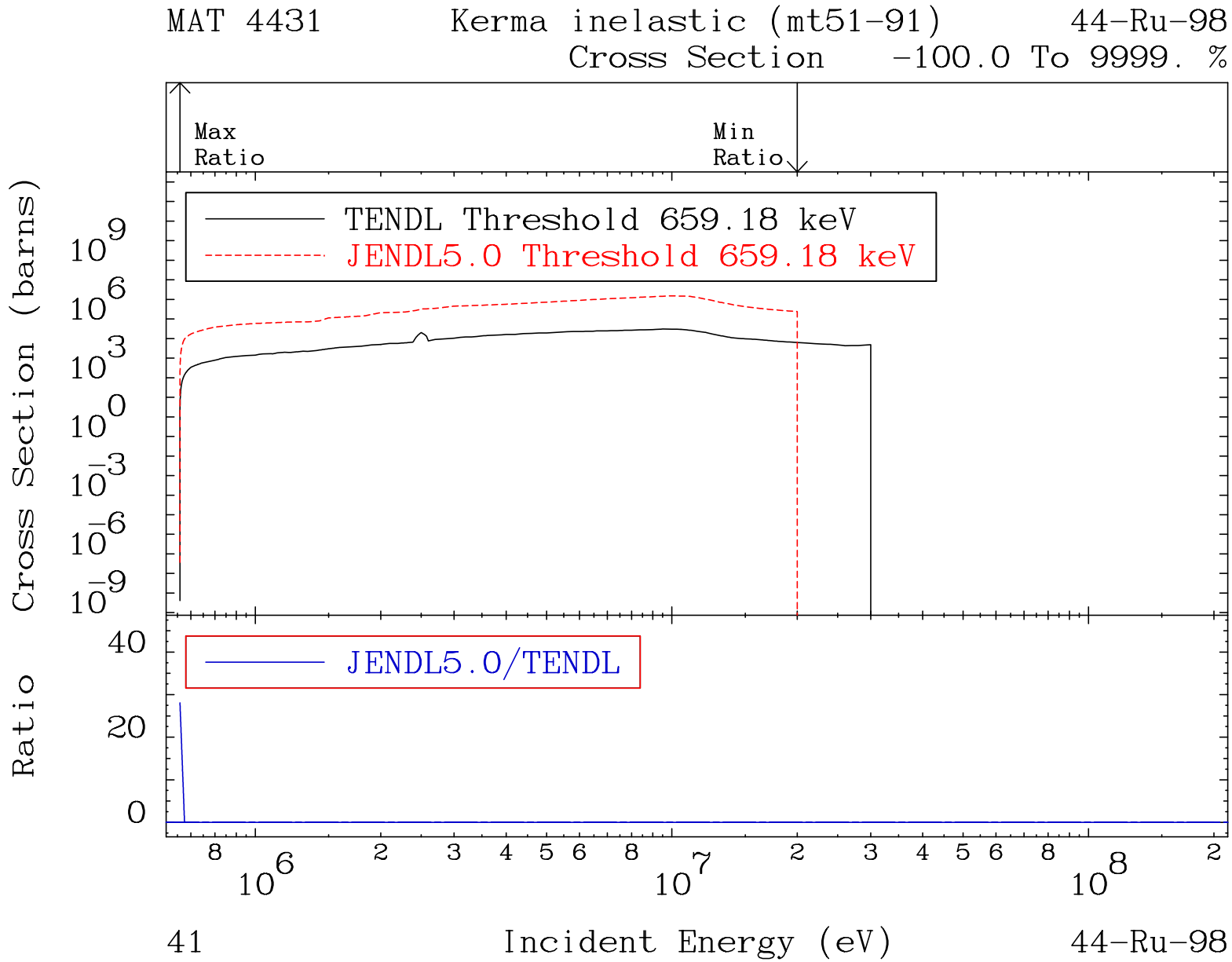

MAT 4431
He-3 Production
Cross Section
44-Ru-98
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.3547 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
200
100
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
44-Ru-98

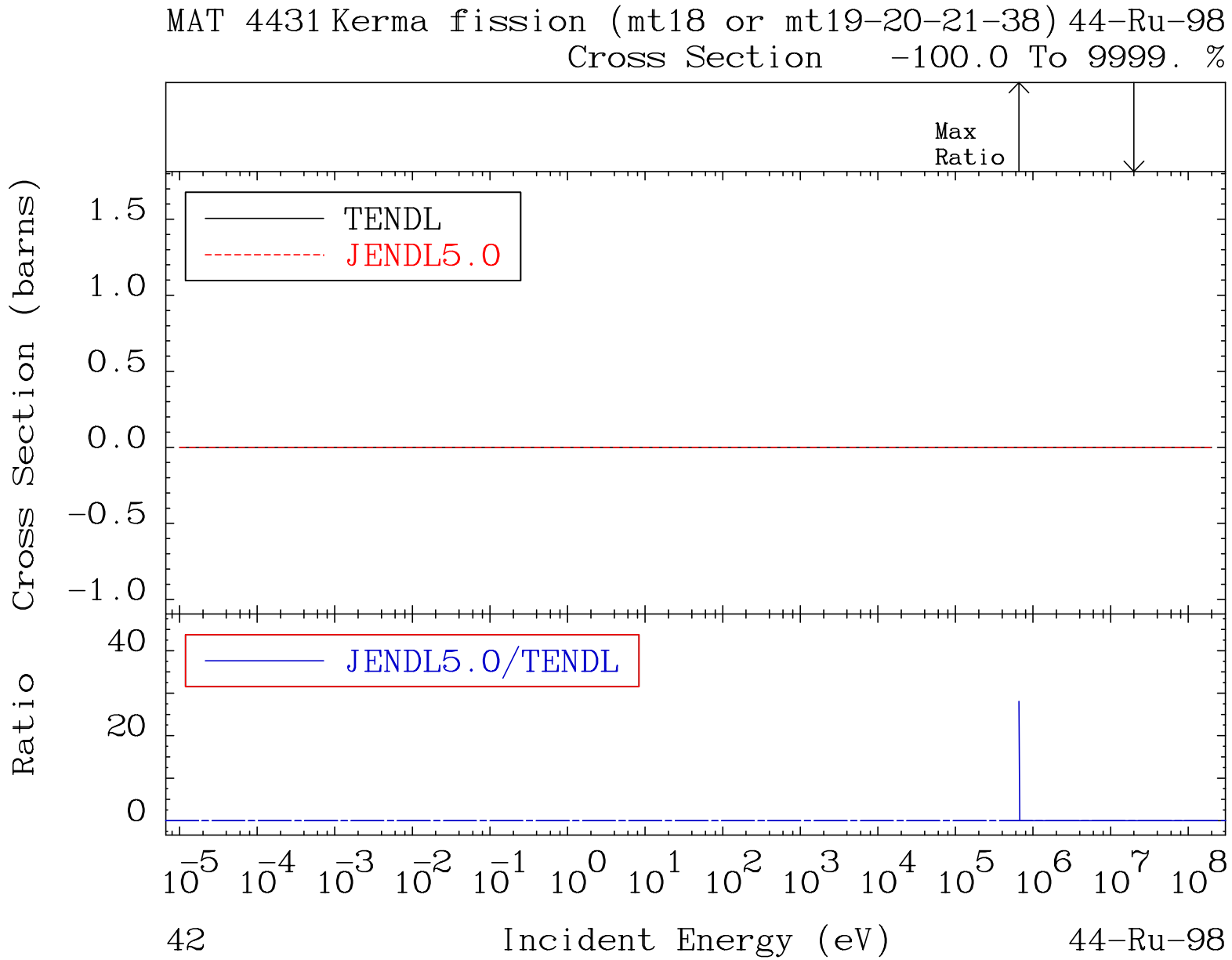

MAT 4431
He-4 Production
Cross Section
44-Ru-98
-100.0 To 172.9 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 1.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
44-Ru-98

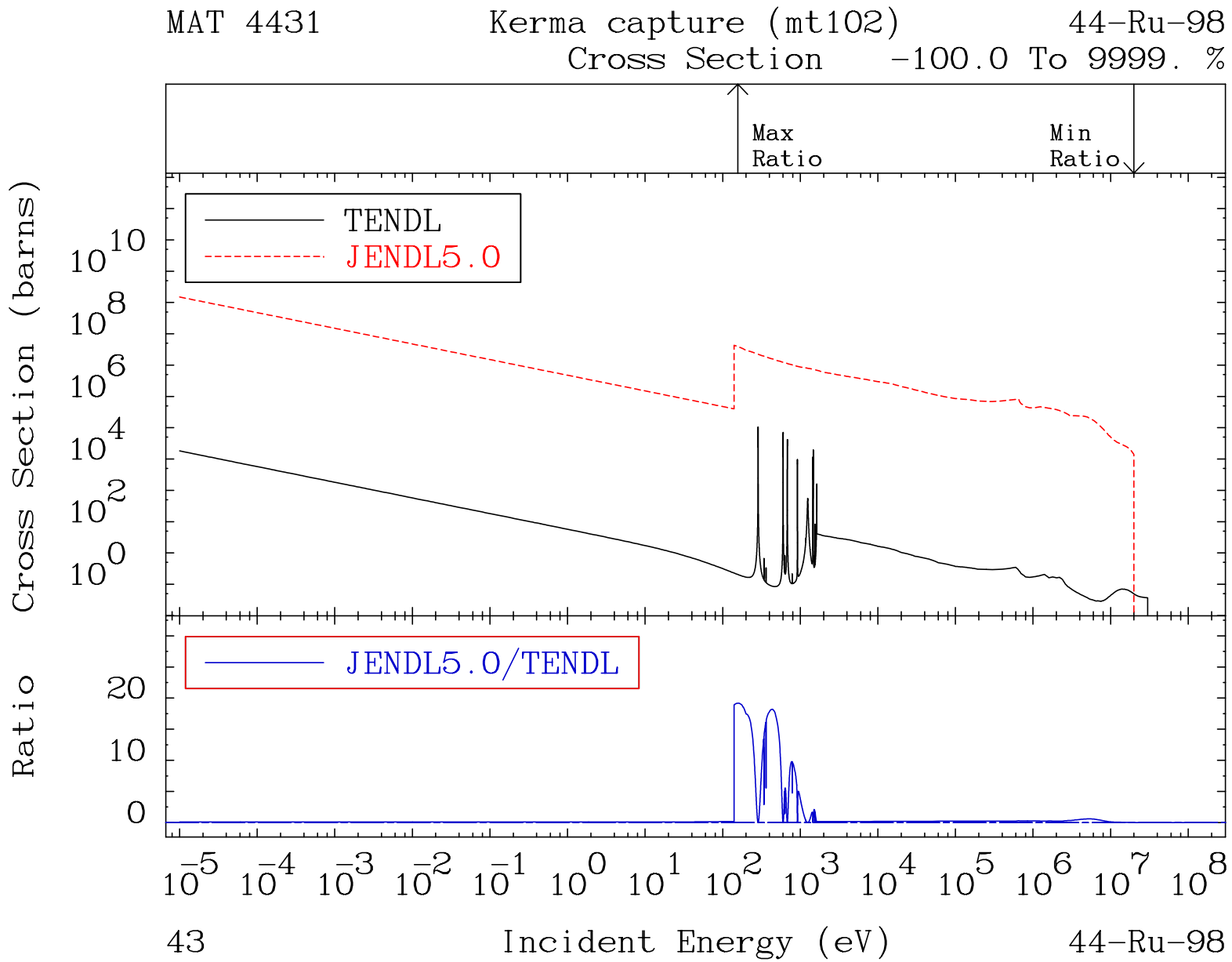

MAT 4431
Kerma total (eV-barns)
44-Ru-98
Cross Section -301.6 To 5011. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
38
44-Ru-98

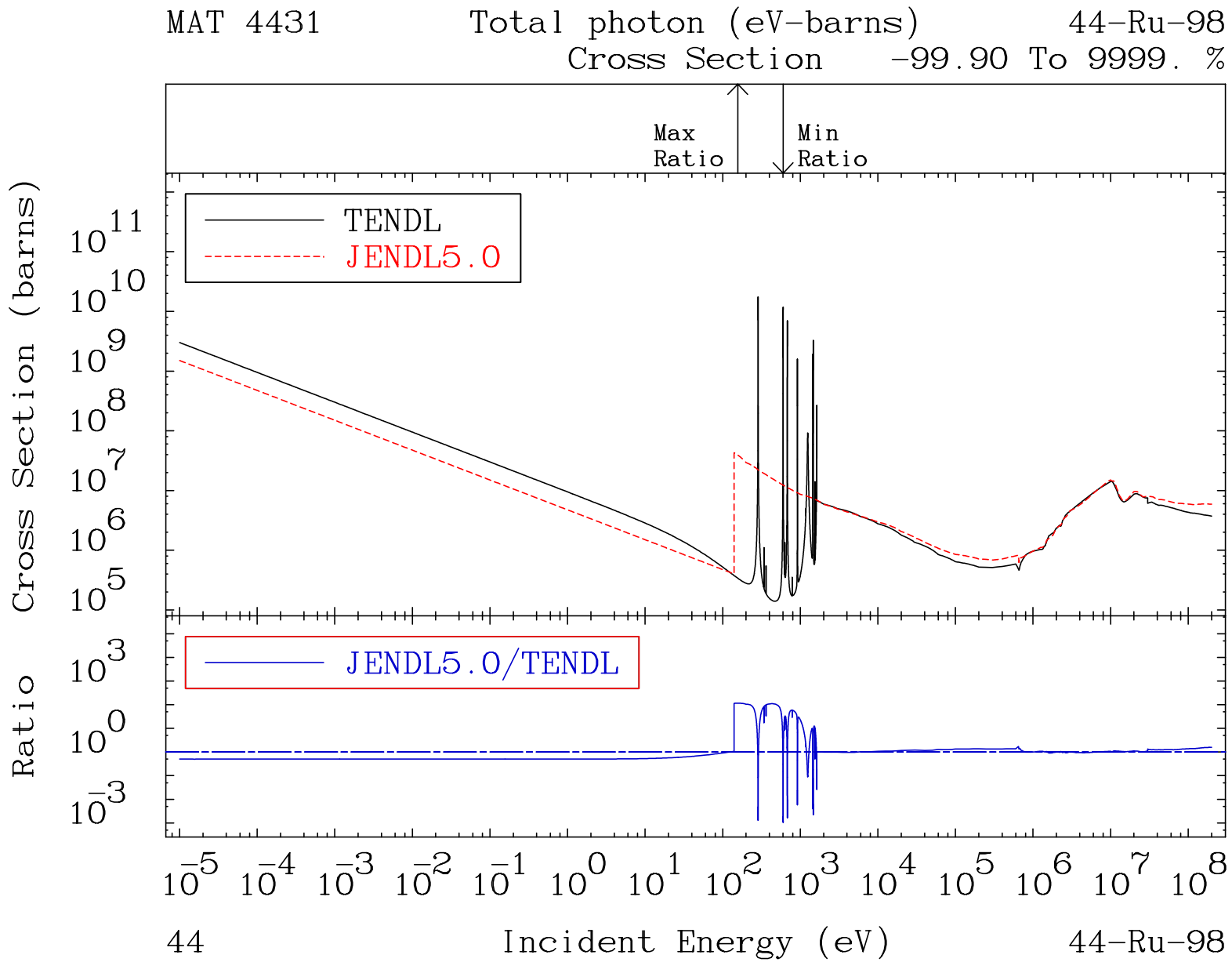

MAT 4431
Kerma elastic
Cross Section
44-Ru-98
-99.25 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
44-Ru-98

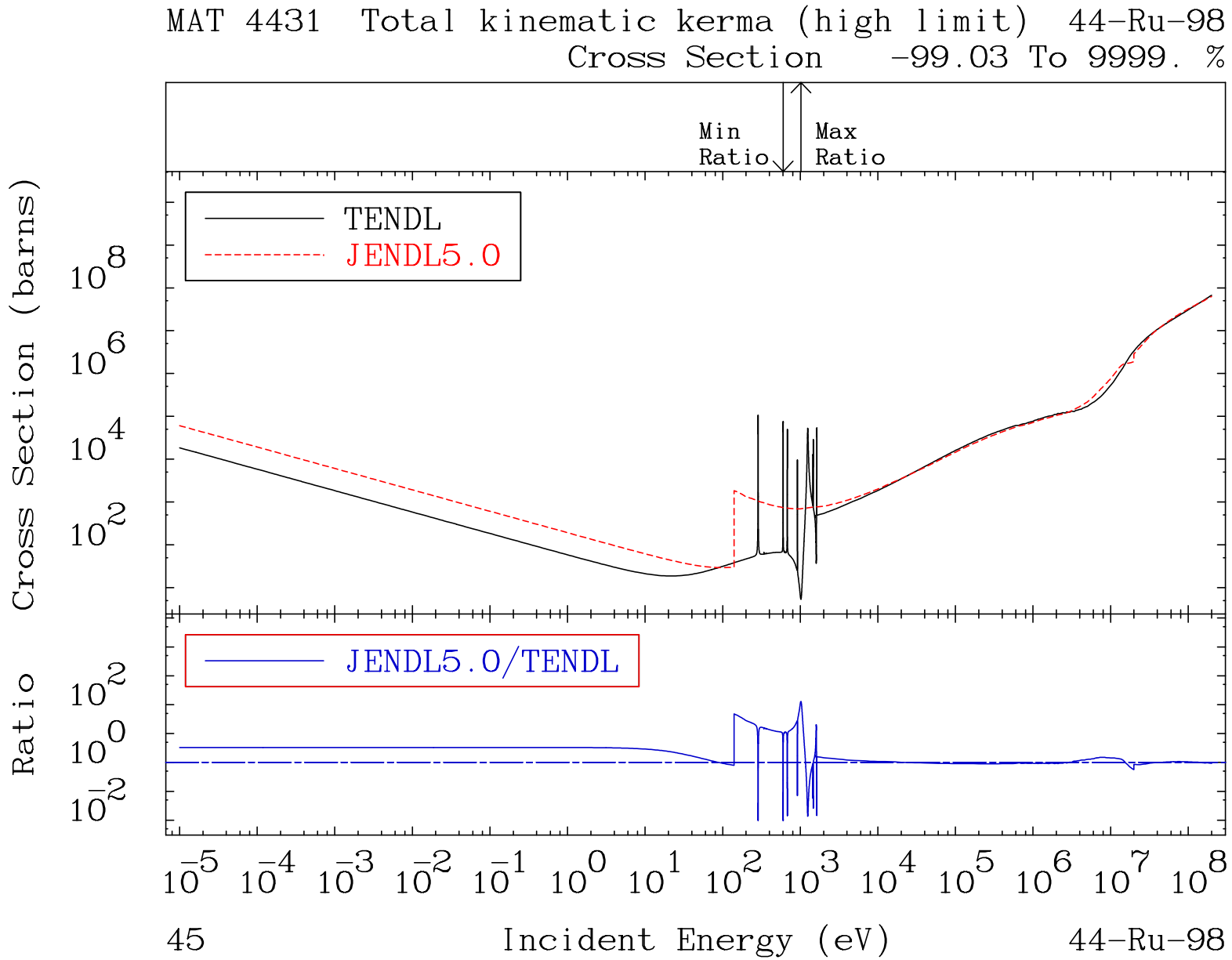

MAT 4431 Kerma non-elastic (all but mt2) 44-Ru-98
Cross Section -8494. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
40
44-Ru-98

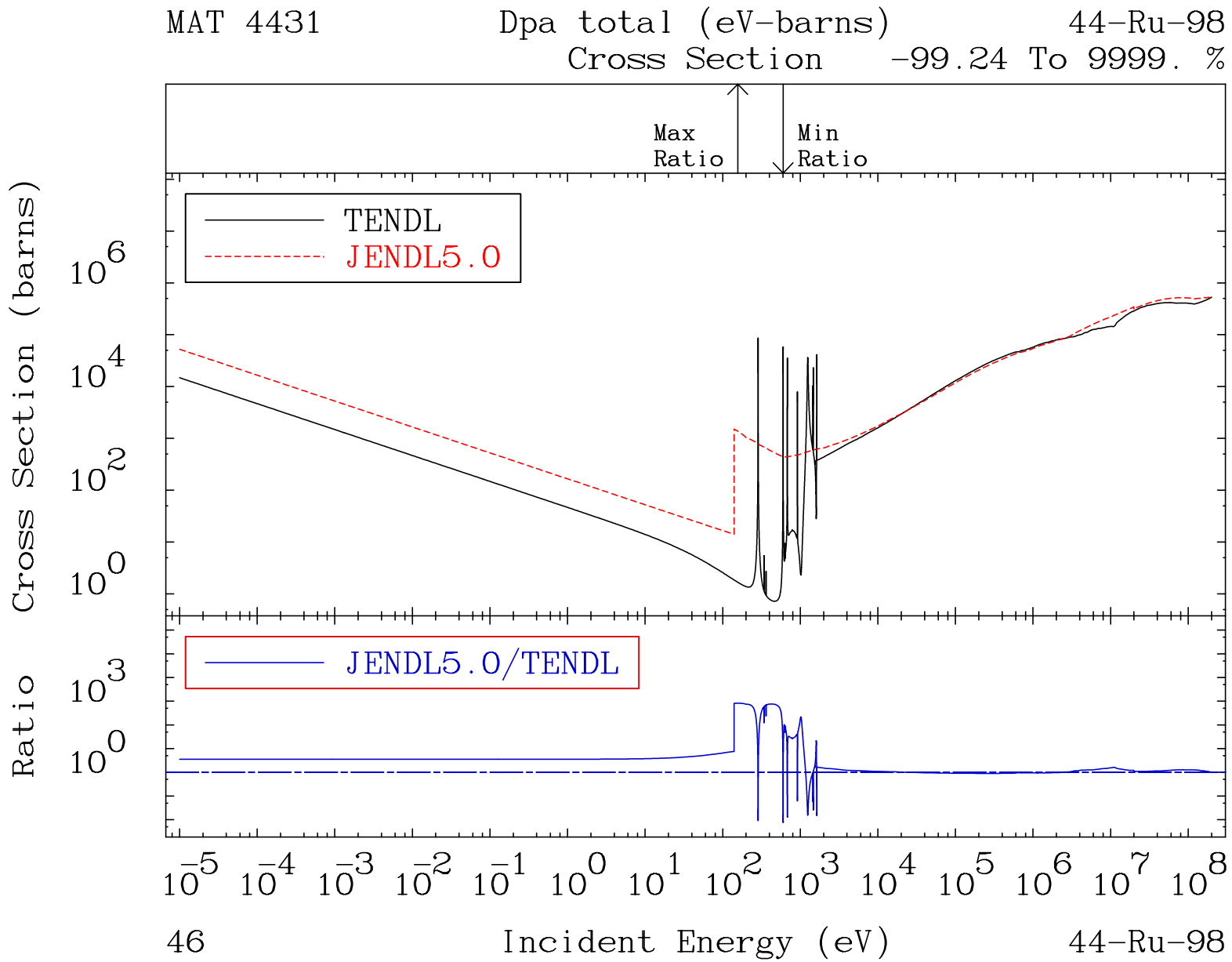

MAT 4431
Kerma inelastic (mt51-91)
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 659.18 keV
JENDL5.0 Threshold 659.18 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
41
44-Ru-98

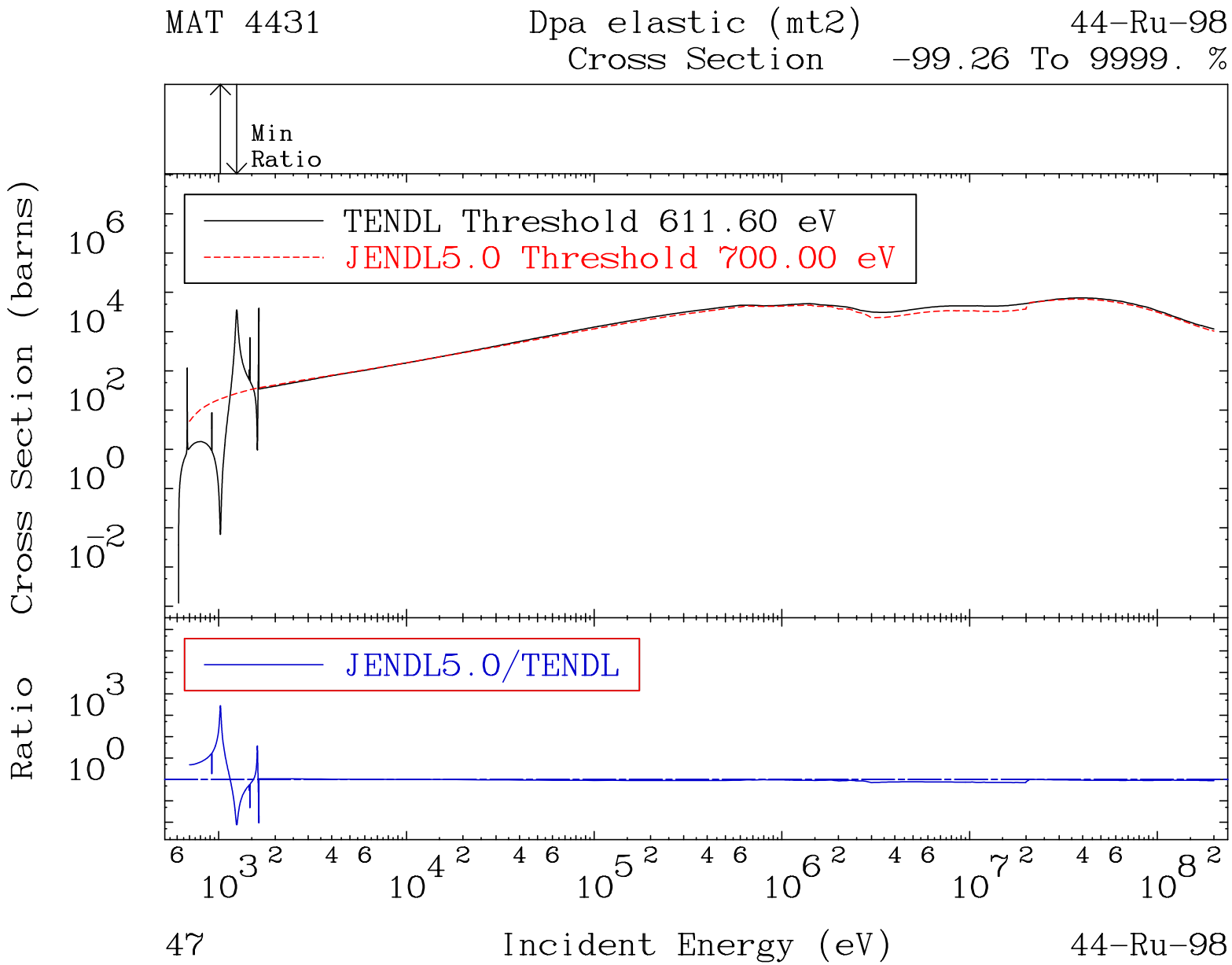

MAT 4431 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-98
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
40
20
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
42
Incident Energy (eV)
44-Ru-98

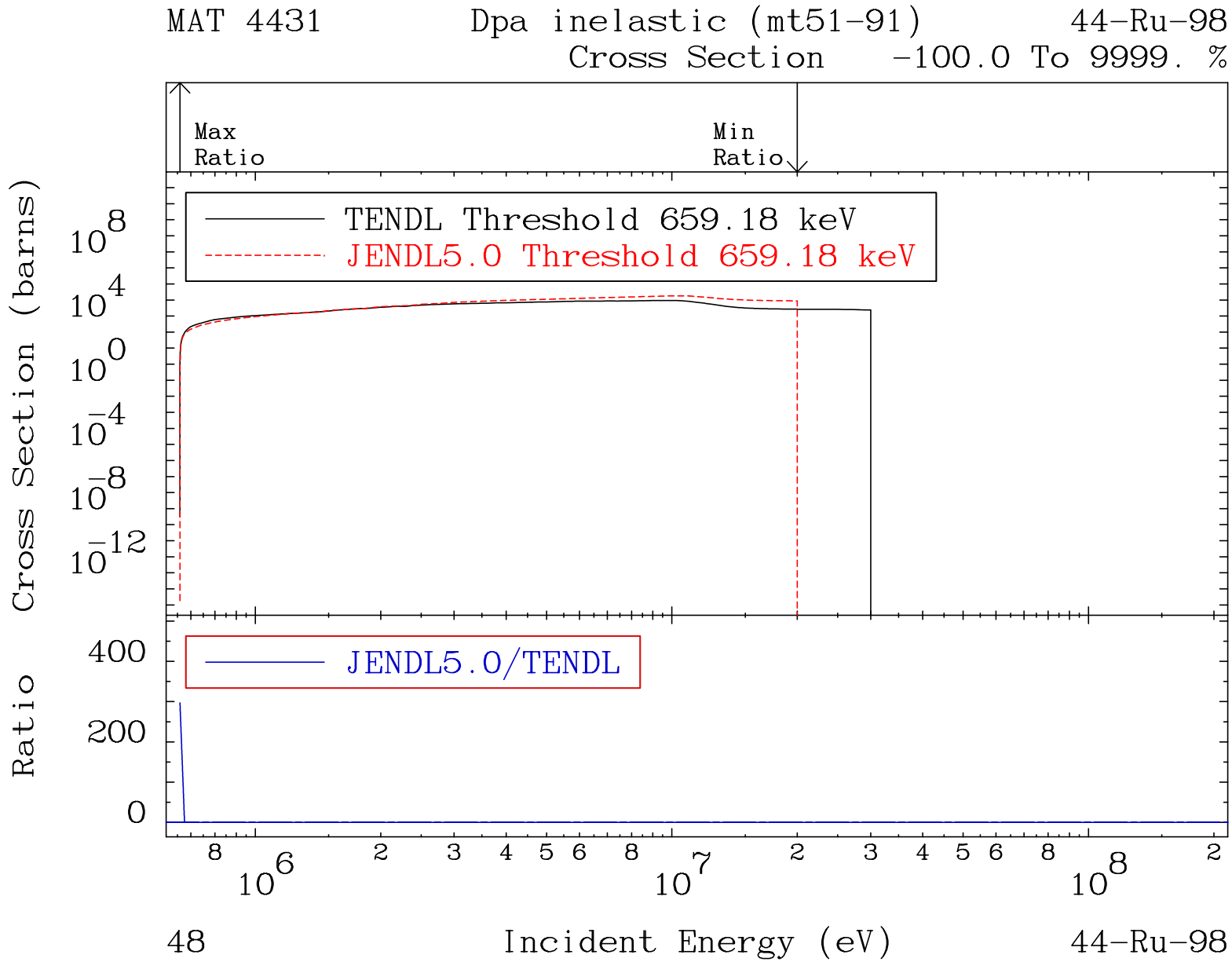

MAT 4431
Kerma capture (mt102)
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
43
44-Ru-98

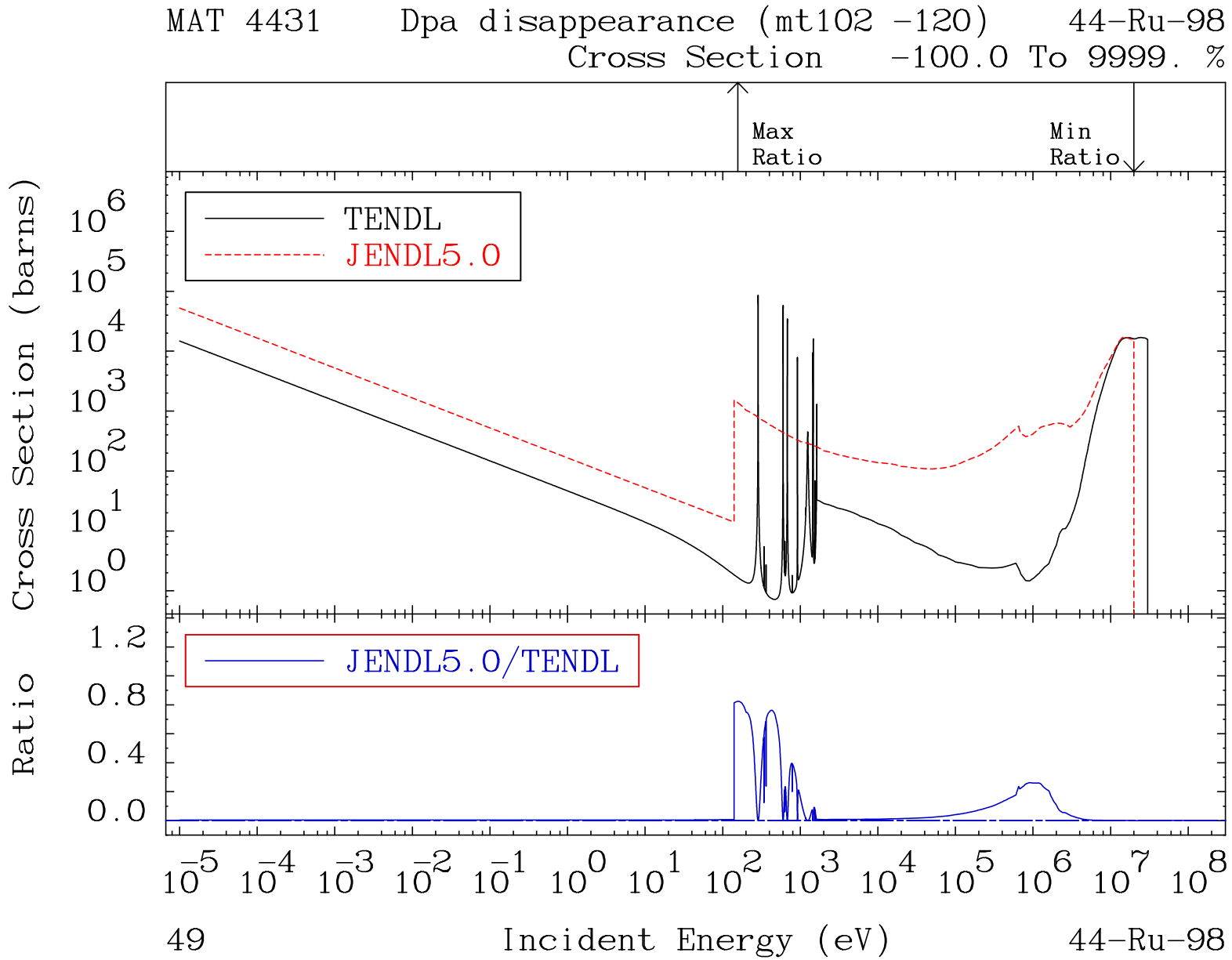

MAT 4431
Total photon (eV-barns)
44-Ru-98
Cross Section -99.90 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
44-Ru-98

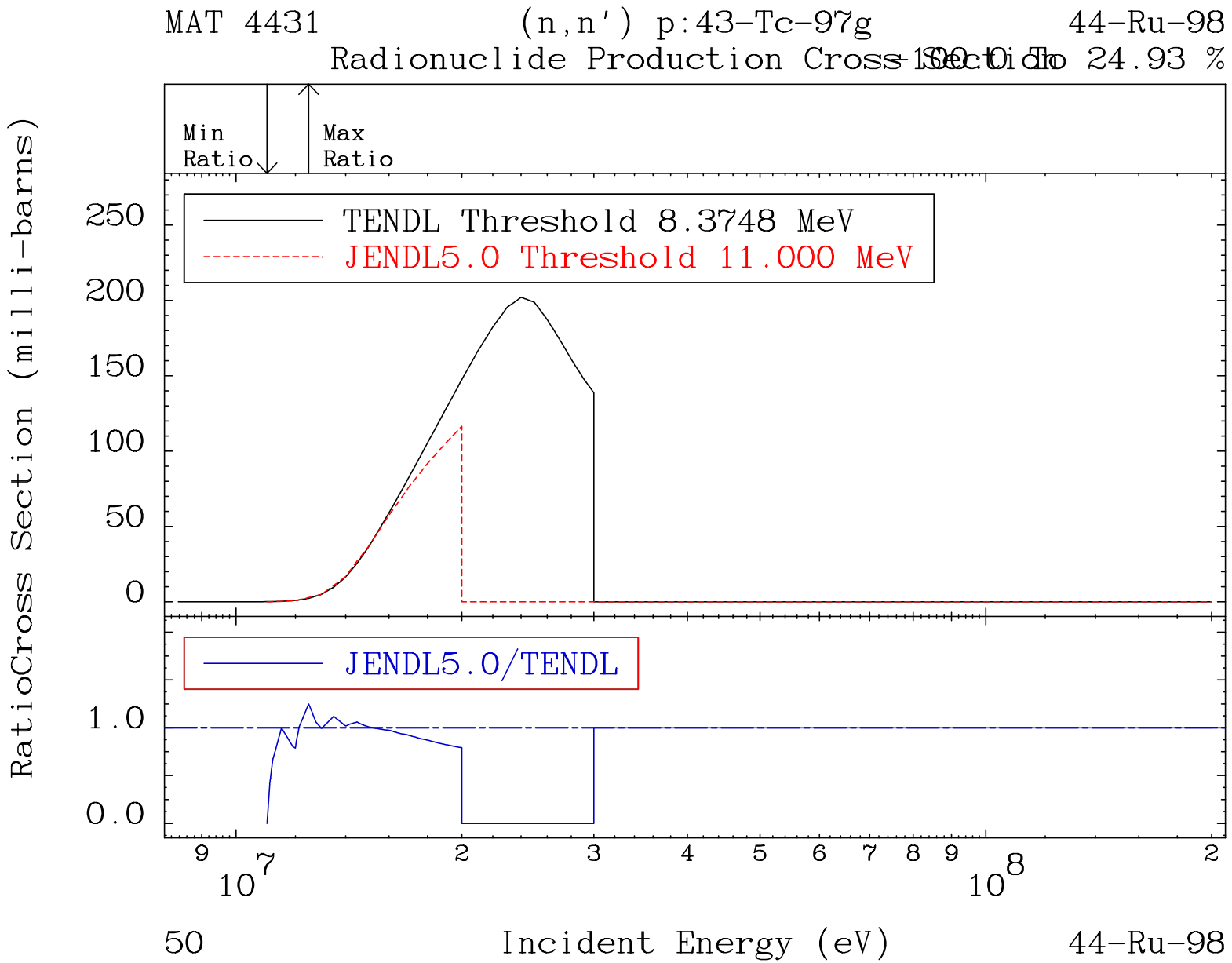

MAT 4431 Total kinematic kerma (high limit) 44-Ru-98
Cross Section -99.03 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
45
44-Ru-98

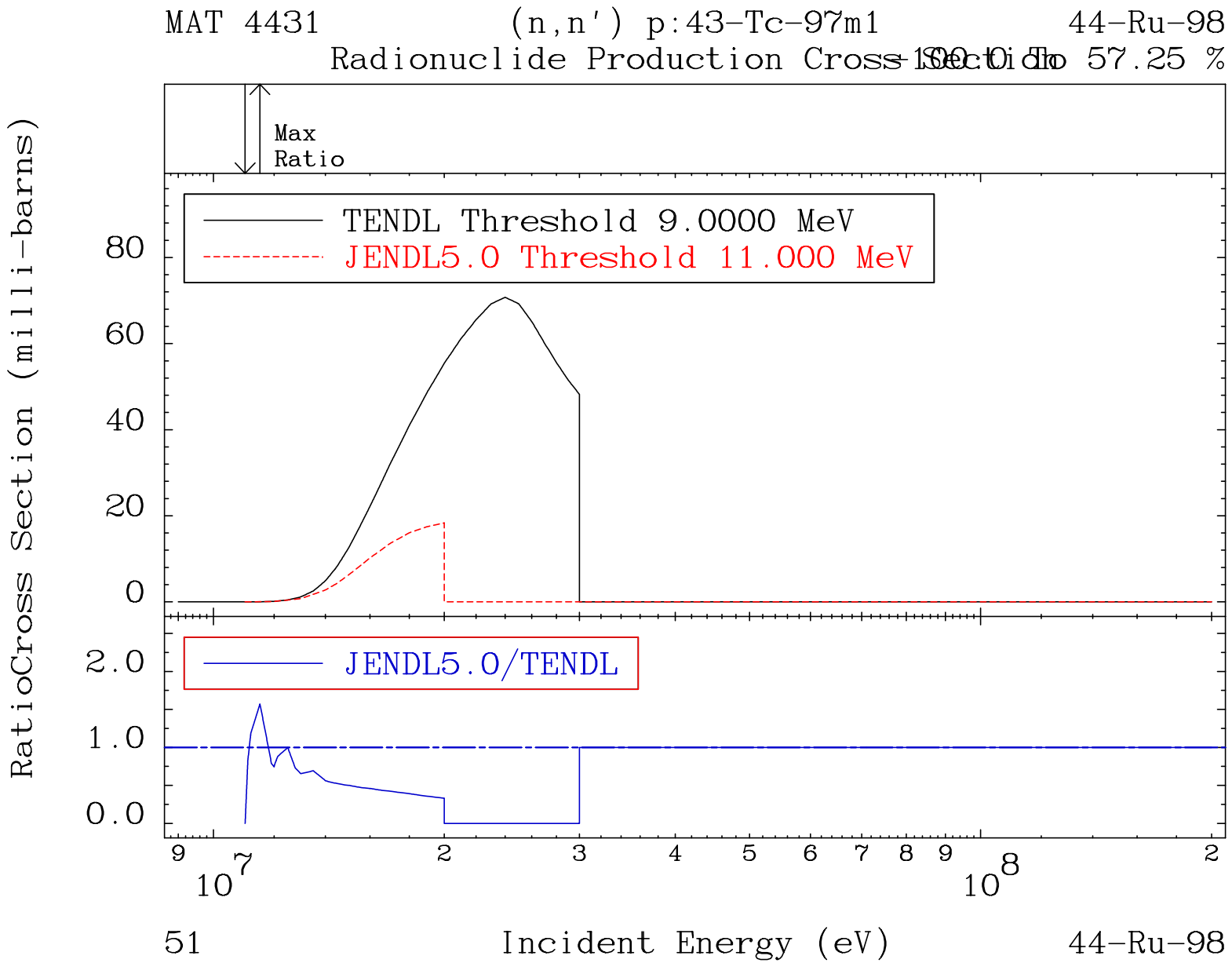

MAT 4431
Dpa total (eV-barns)
44-Ru-98
Cross Section -99.24 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
44-Ru-98

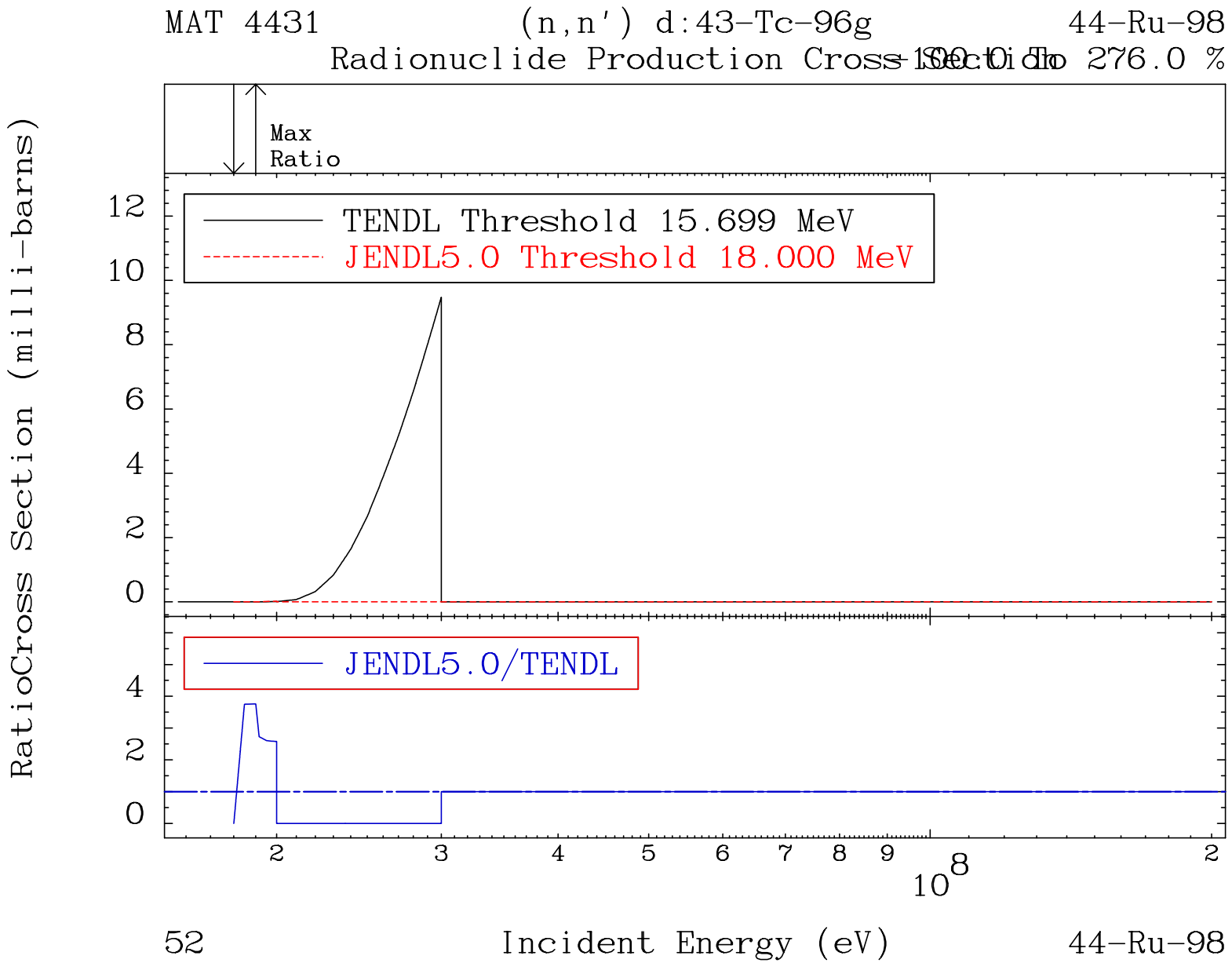

MAT 4431
Dpa elastic (mt2)
Cross Section
44-Ru-98
-99.26 To 9999. %
Min
Ratio
TENDL Threshold 611.60 eV
JENDL5.0 Threshold 700.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
44-Ru-98

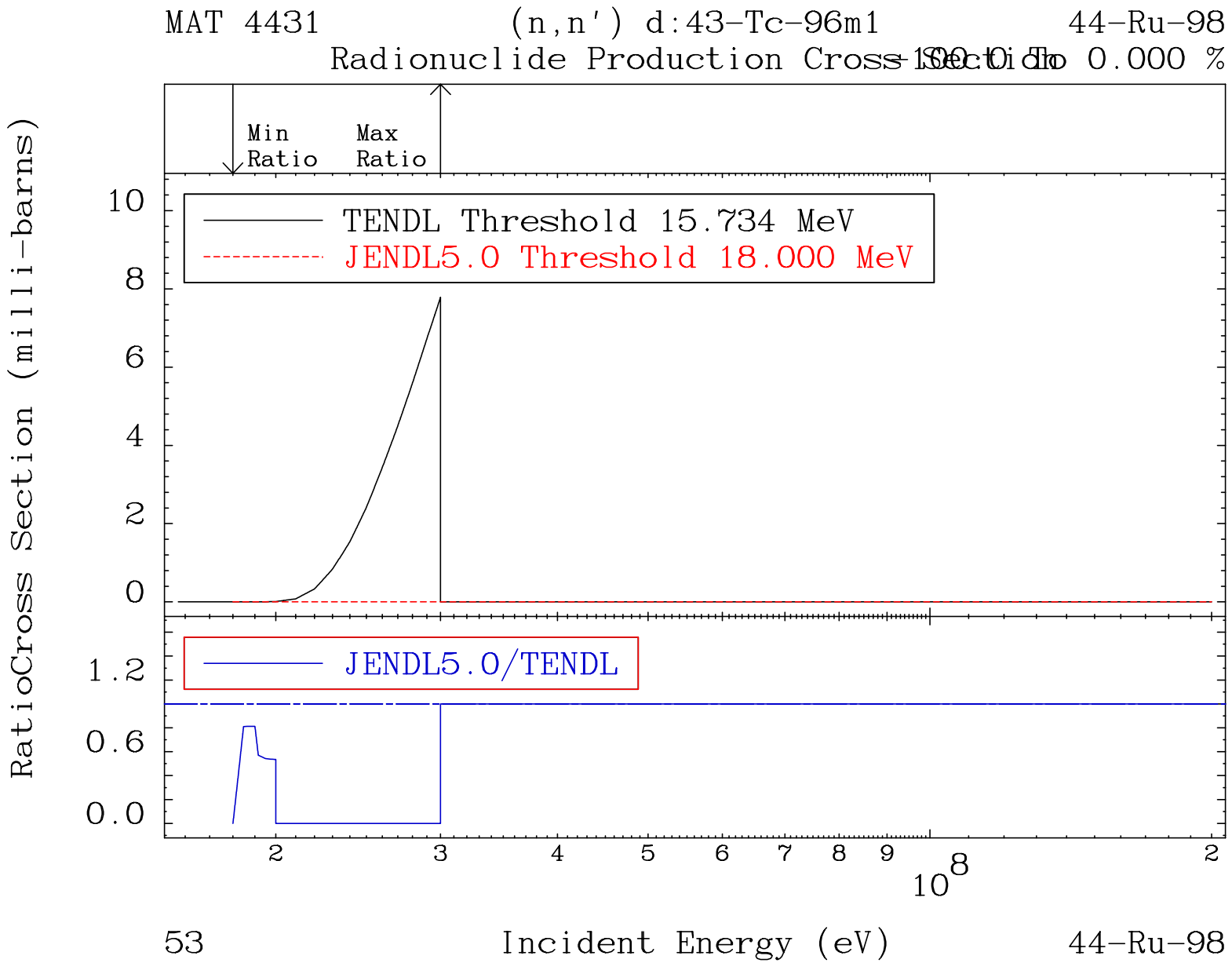

MAT 4431
Dpa inelastic (mt51-91)
44-Ru-98
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 659.18 keV
JENDL5.0 Threshold 659.18 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
44-Ru-98

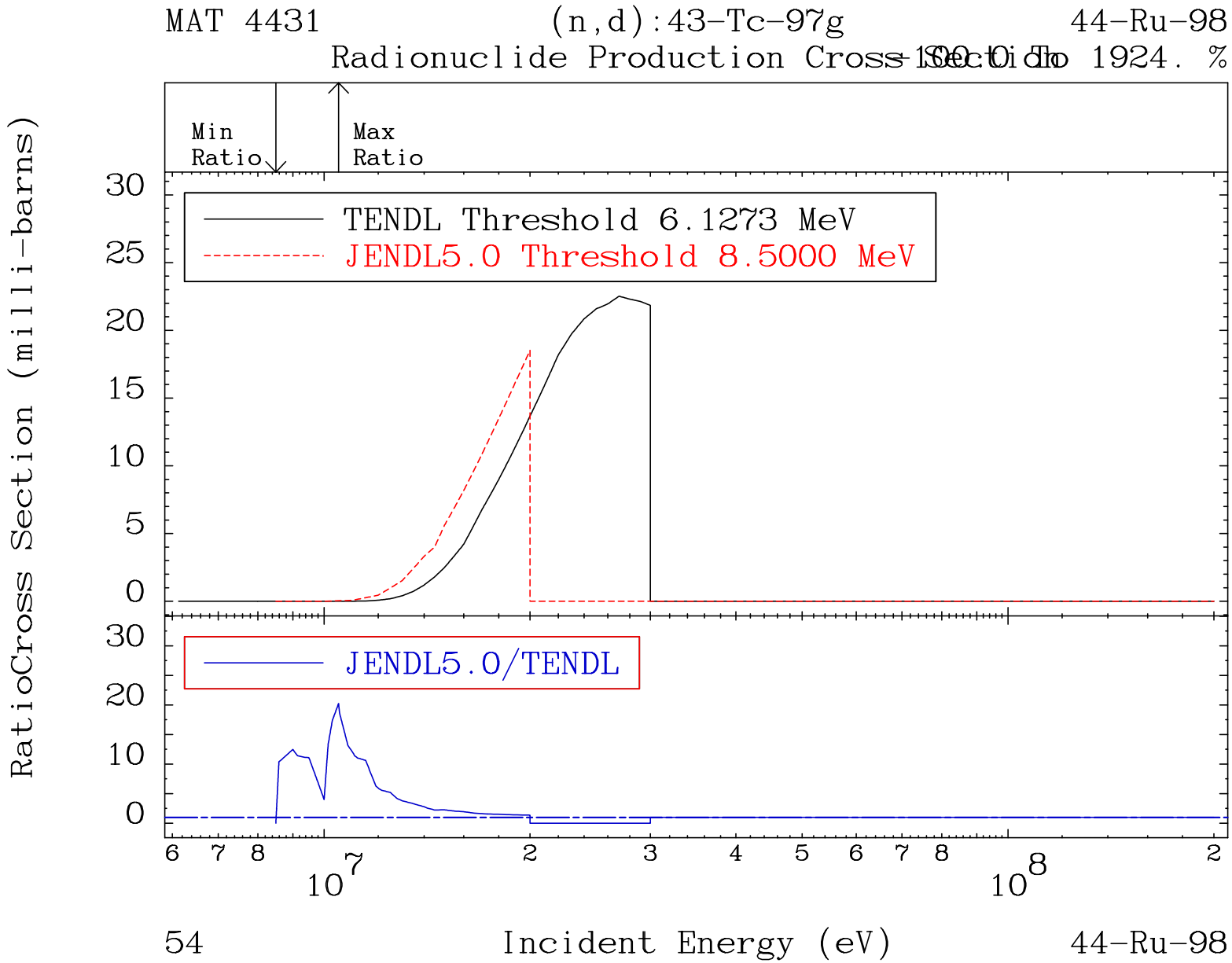

MAT 4431 Dpa disappearance (mt102 -120) 44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
49
44-Ru-98

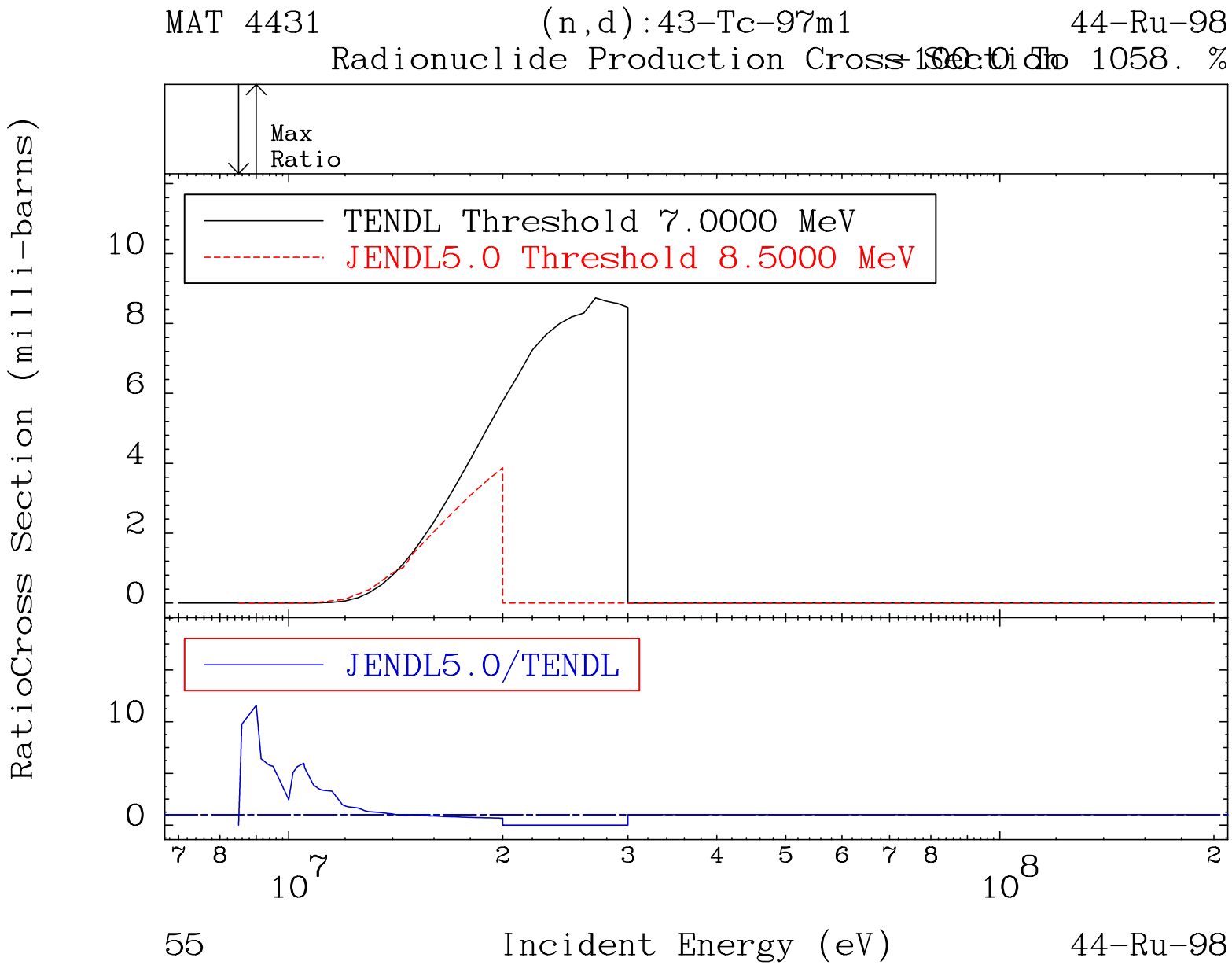

MAT 4431
(n,n') p:43-Tc-97g
44-Ru-98
Radionuclide Production Cross Section To 24.93 %
Min Ratio
Max Ratio
TENDL Threshold 8.3748 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
44-Ru-98

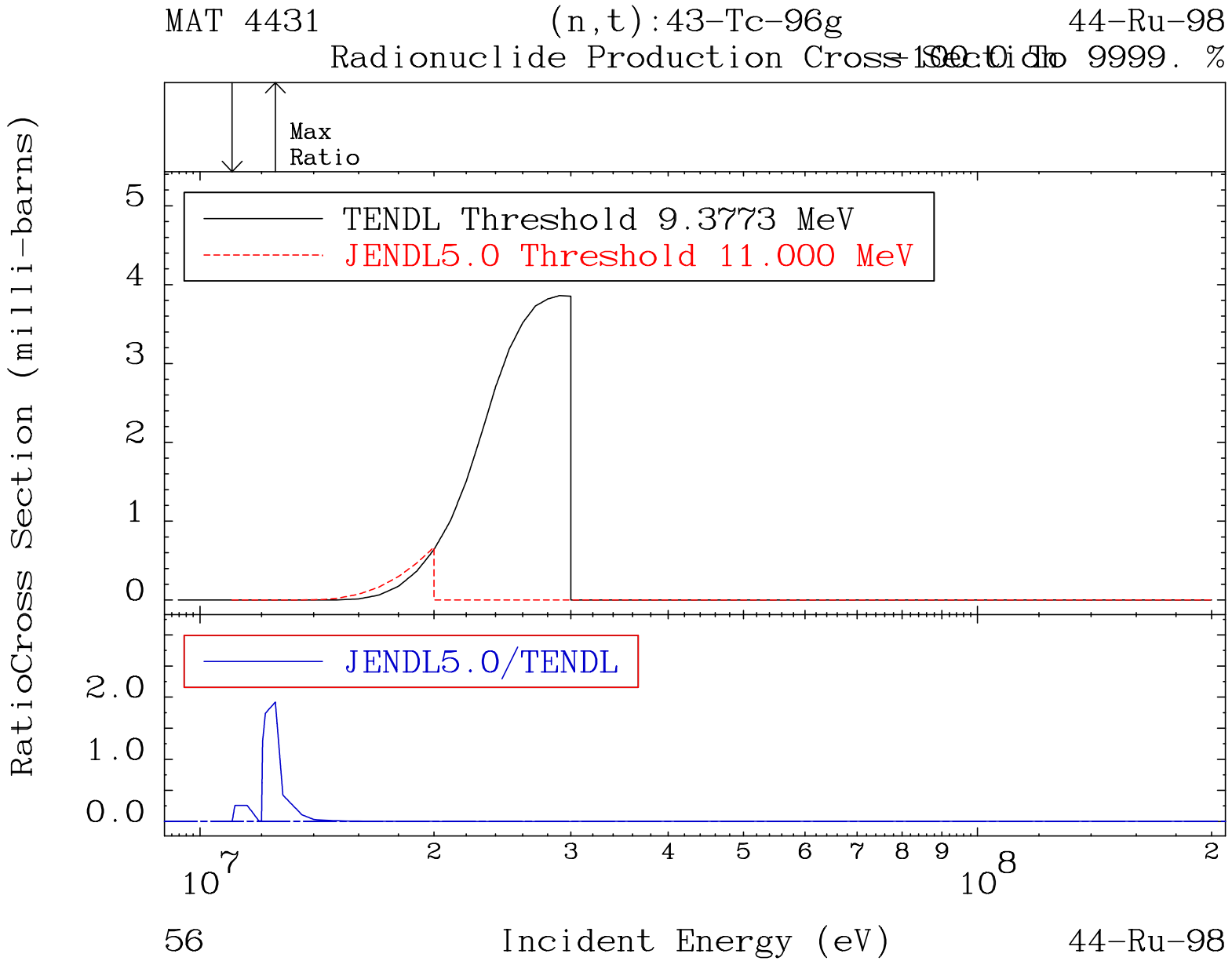

MAT 4431
(n,n') p:43-Tc-97m1
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.0000 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51
44-Ru-98

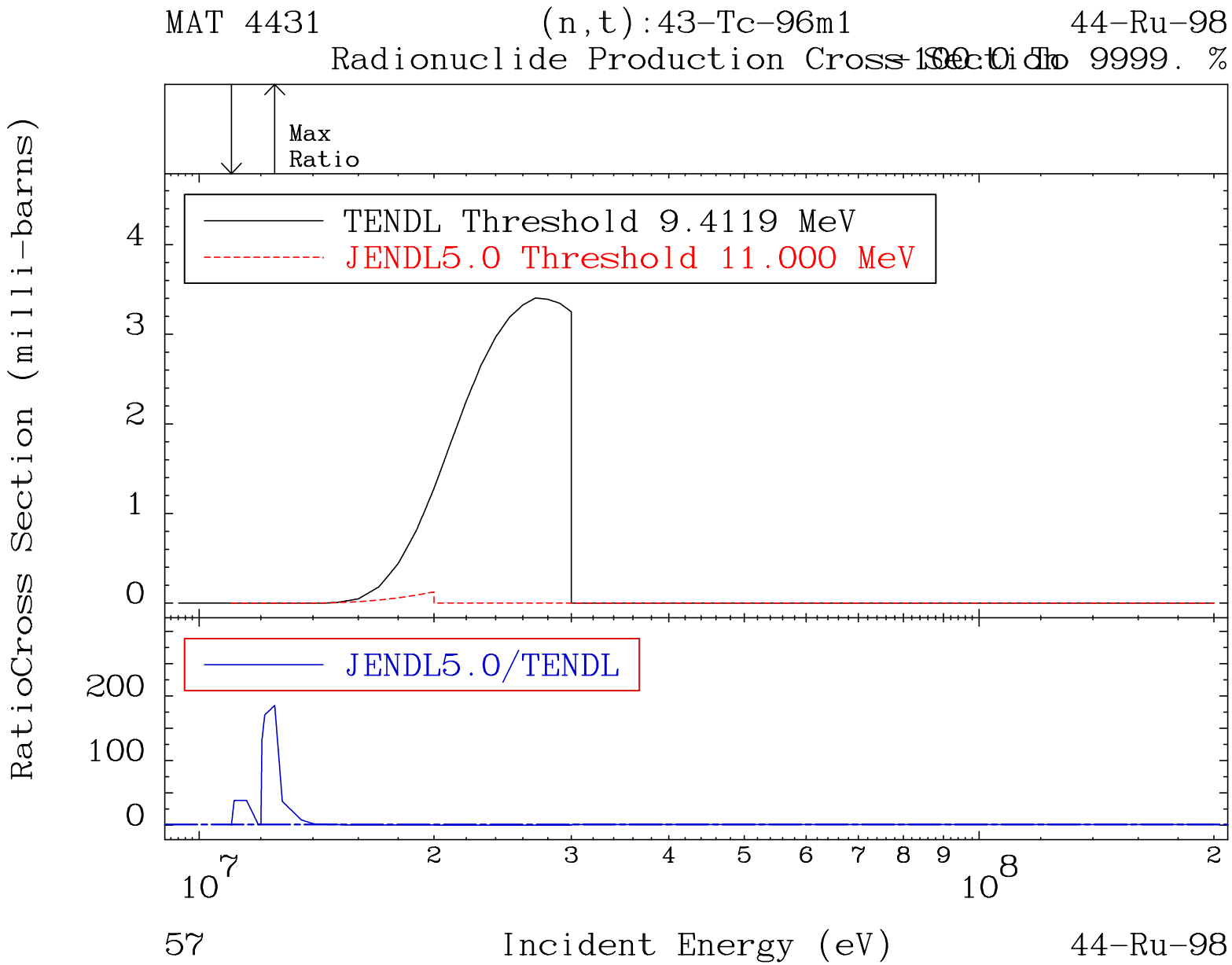

MAT 4431
(n,n') d:43-Tc-96g
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 15.699 MeV
JENDL5.0 Threshold 18.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
52
44-Ru-98

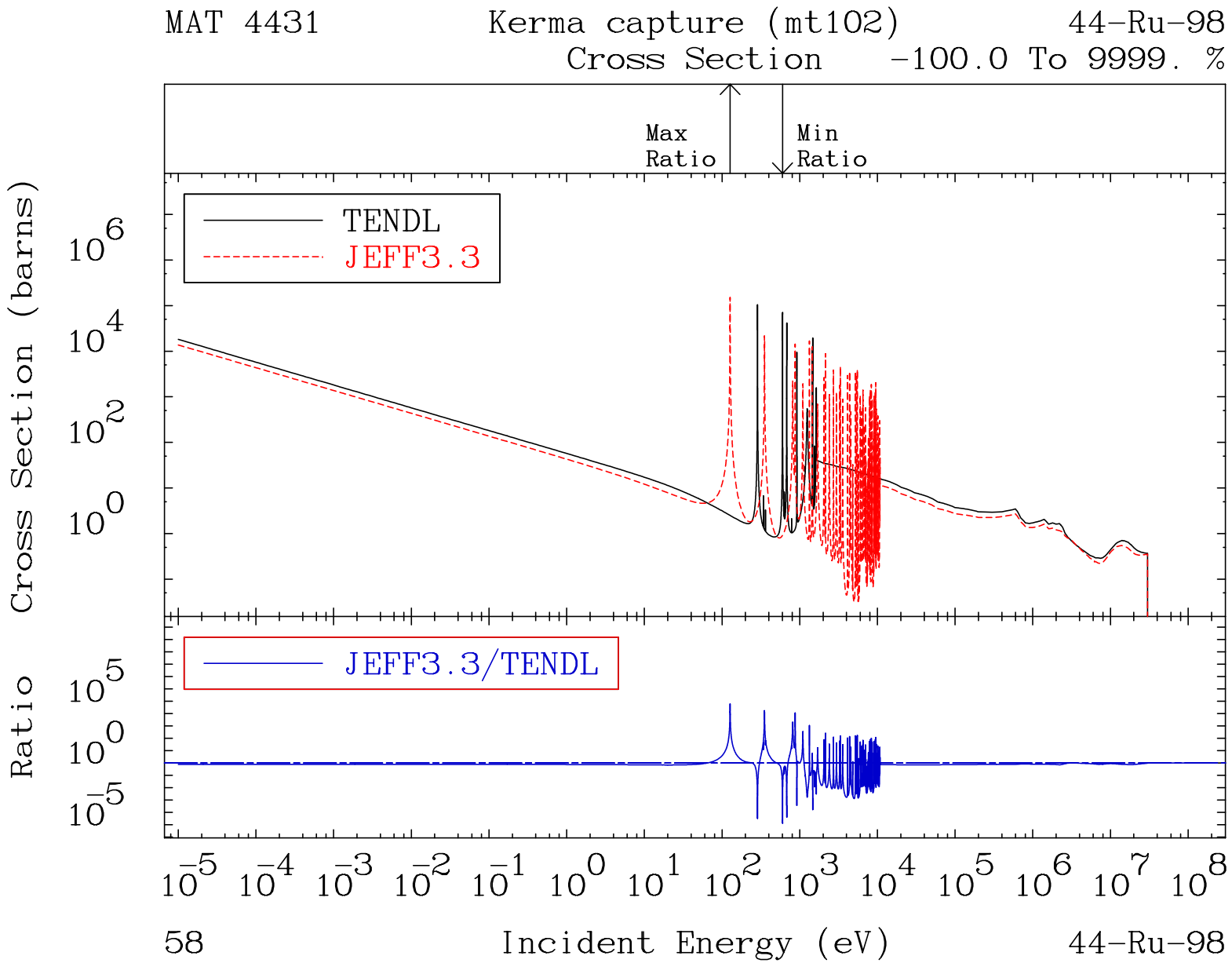

MAT 4431
(n,n') d:43-Tc-96m1
44-Ru-98
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.734 MeV
JENDL5.0 Threshold 18.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
53
Incident Energy (eV)
44-Ru-98

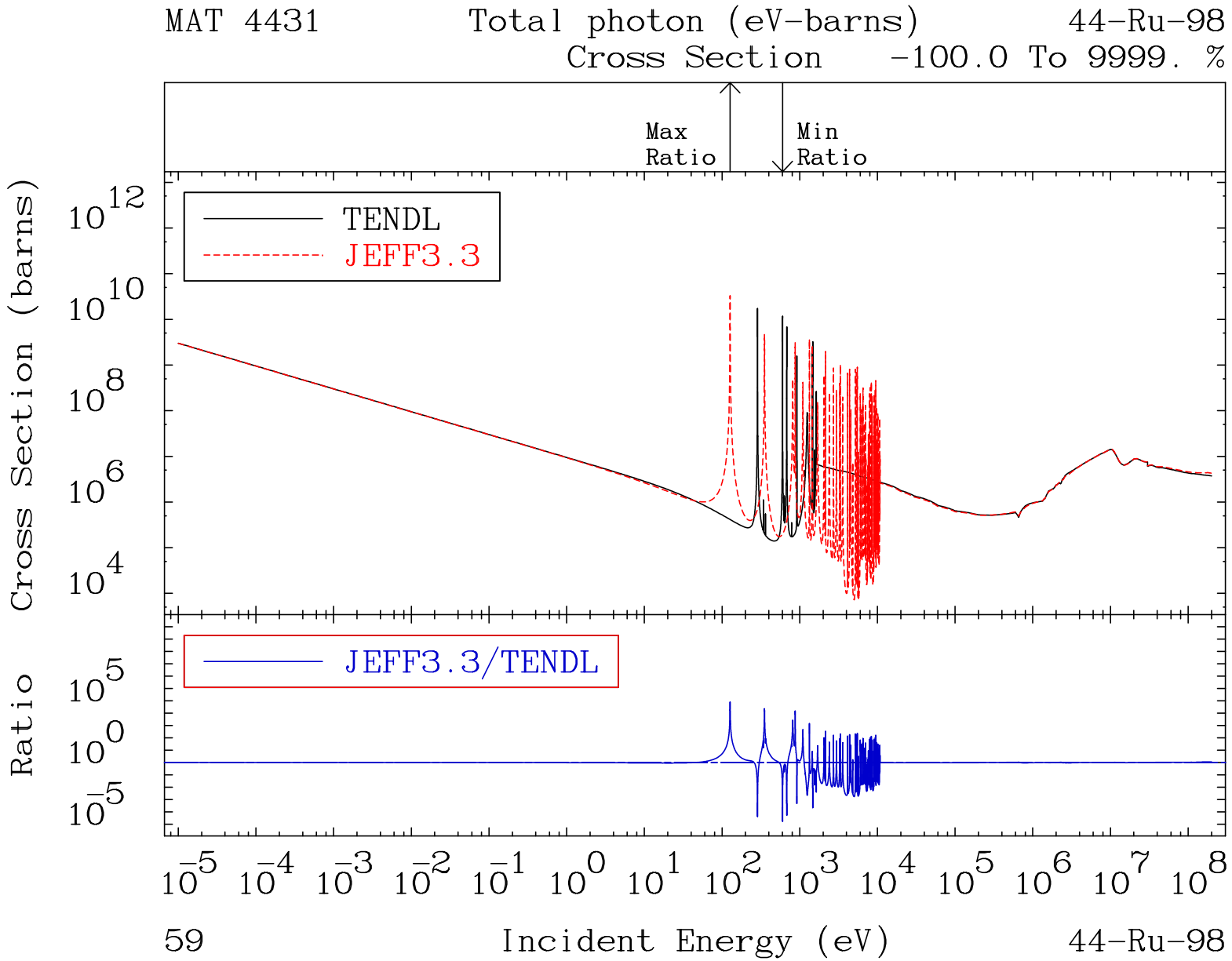

MAT 4431
(n,d):43-Tc-97g
44-Ru-98
Radionuclide Production Cross Section
1.00 To 1924. %
Min Ratio
Max Ratio
TENDL Threshold 6.1273 MeV
JENDL5.0 Threshold 8.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
54
44-Ru-98

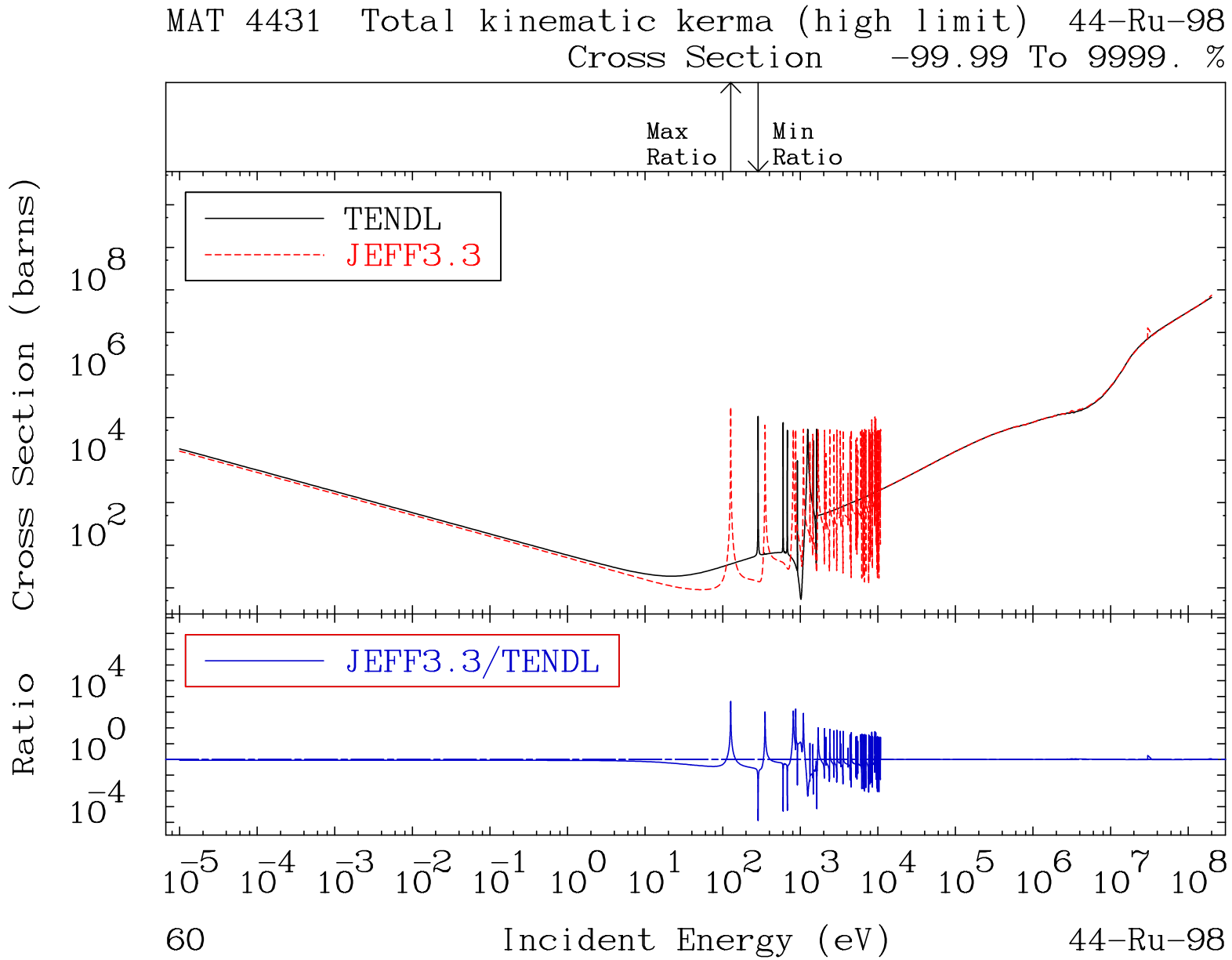

MAT 4431
(n,d):43-Tc-97m1
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 7.0000 MeV
JENDL5.0 Threshold 8.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
55
44-Ru-98

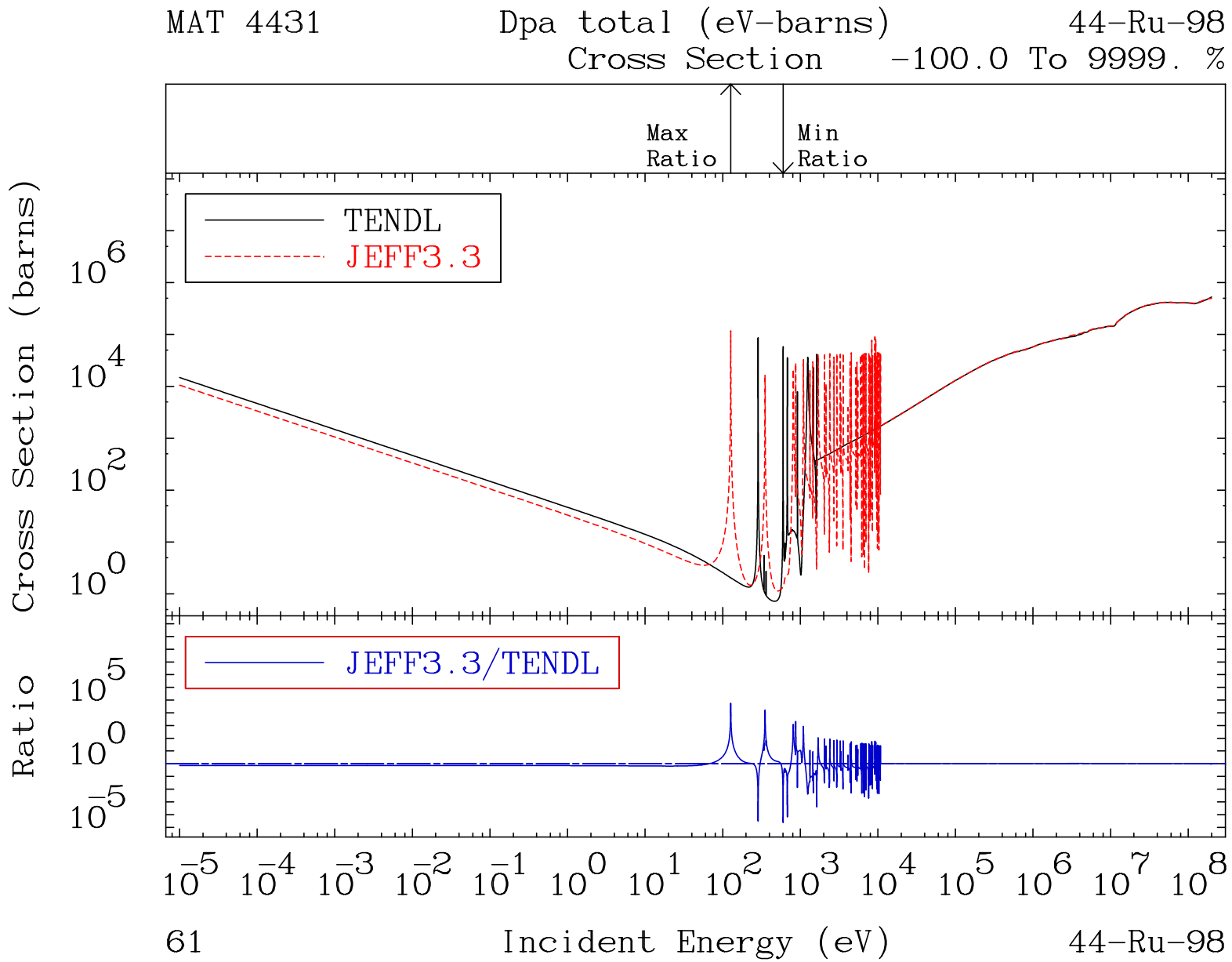

MAT 4431
(n,t):43-Tc-96g
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.3773 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
56
44-Ru-98

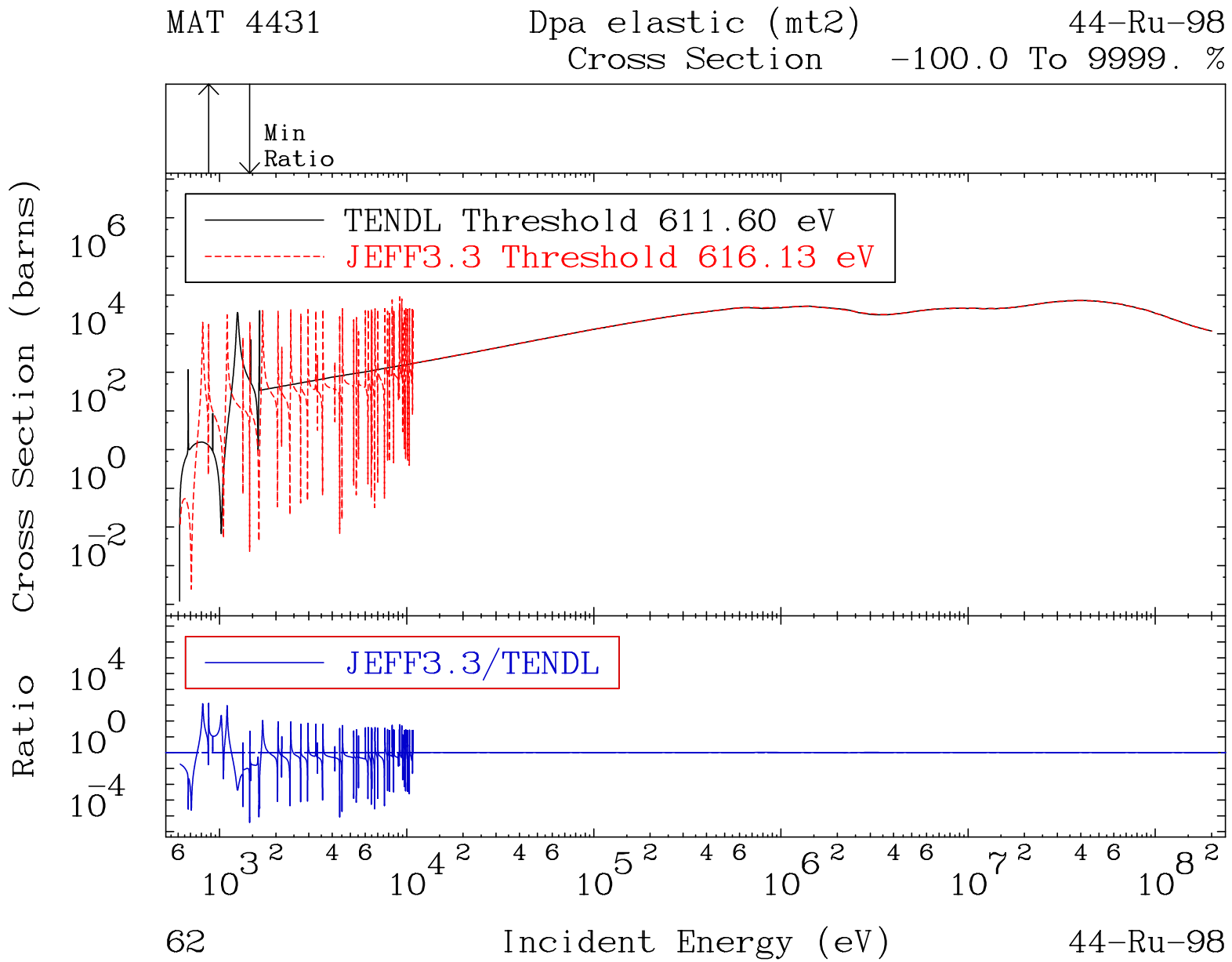

MAT 4431
(n,t):43-Tc-96m1
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.4119 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
57
44-Ru-98

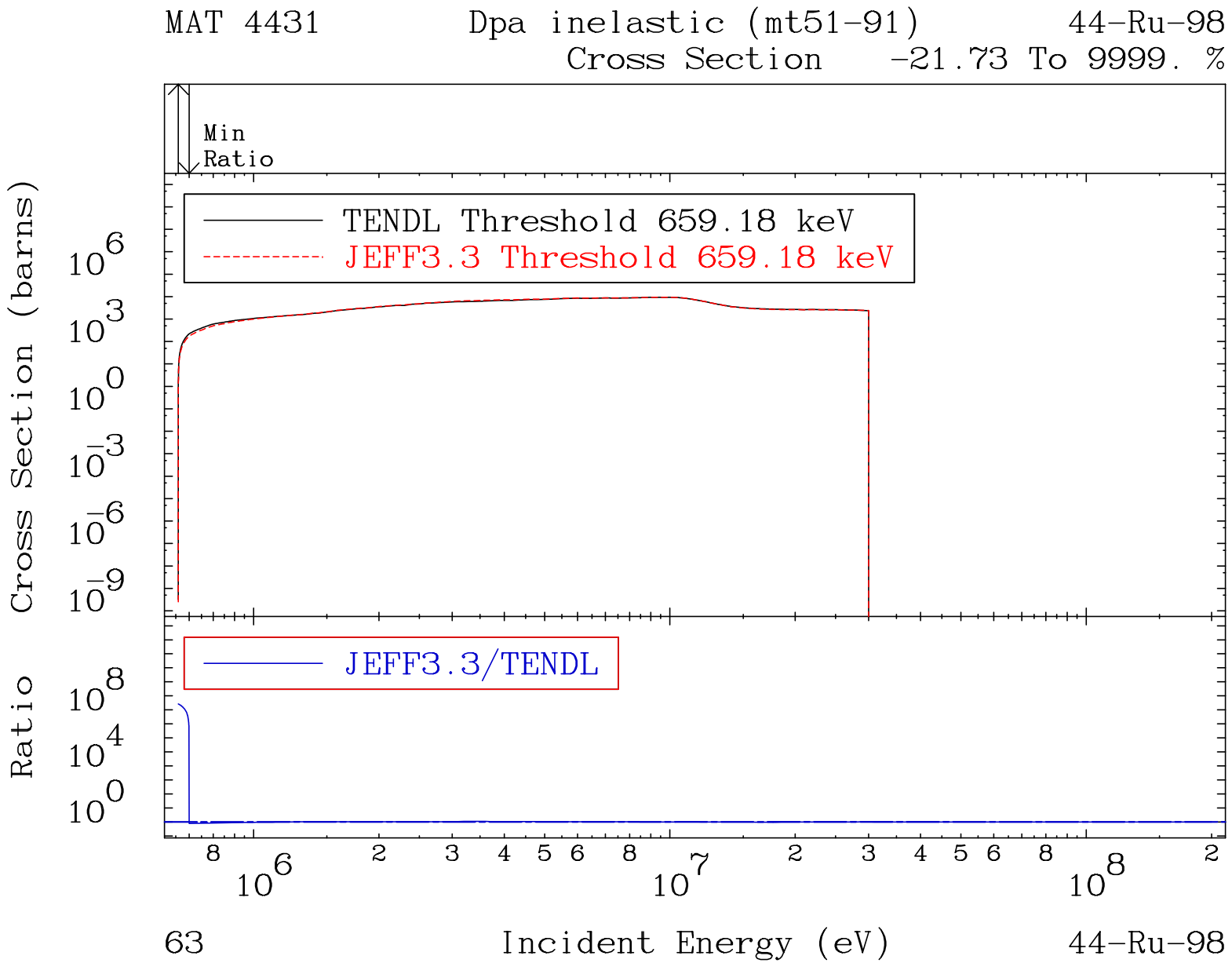

MAT 4431
Kerma capture (mt102)
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
44-Ru-98

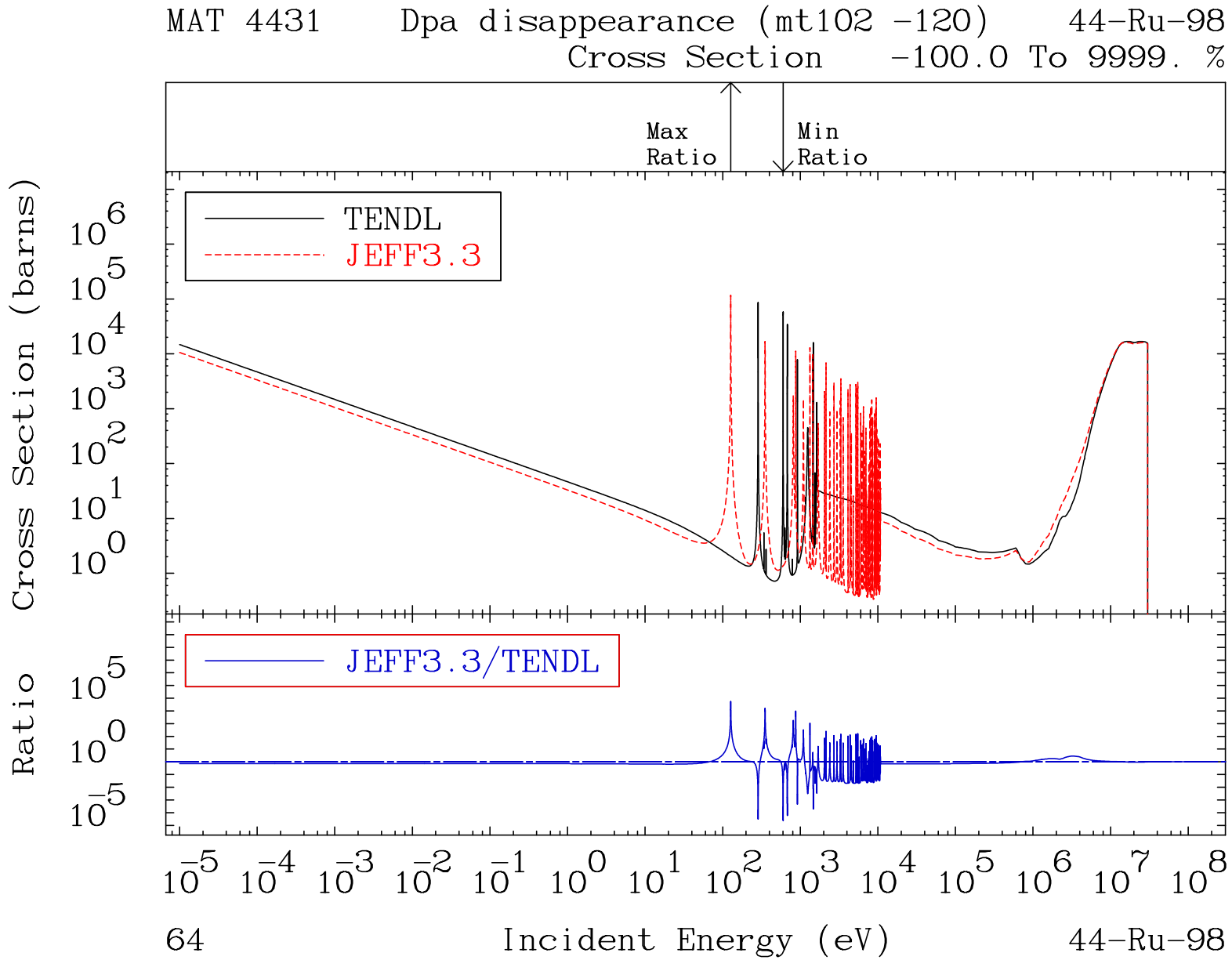

MAT 4431
Total photon (eV-barns)
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
44-Ru-98

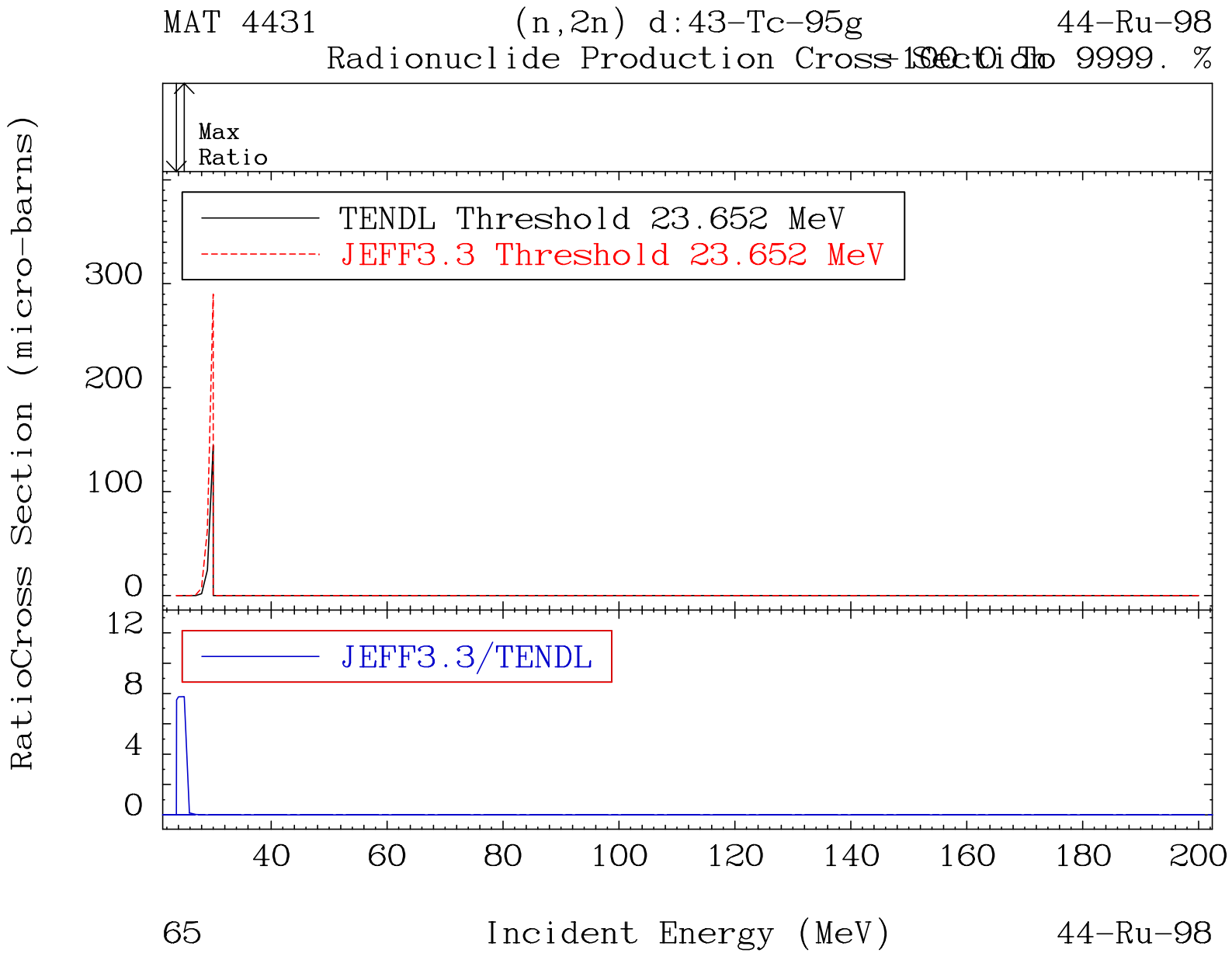

MAT 4431 Total kinematic kerma (high limit) 44-Ru-98
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
44-Ru-98

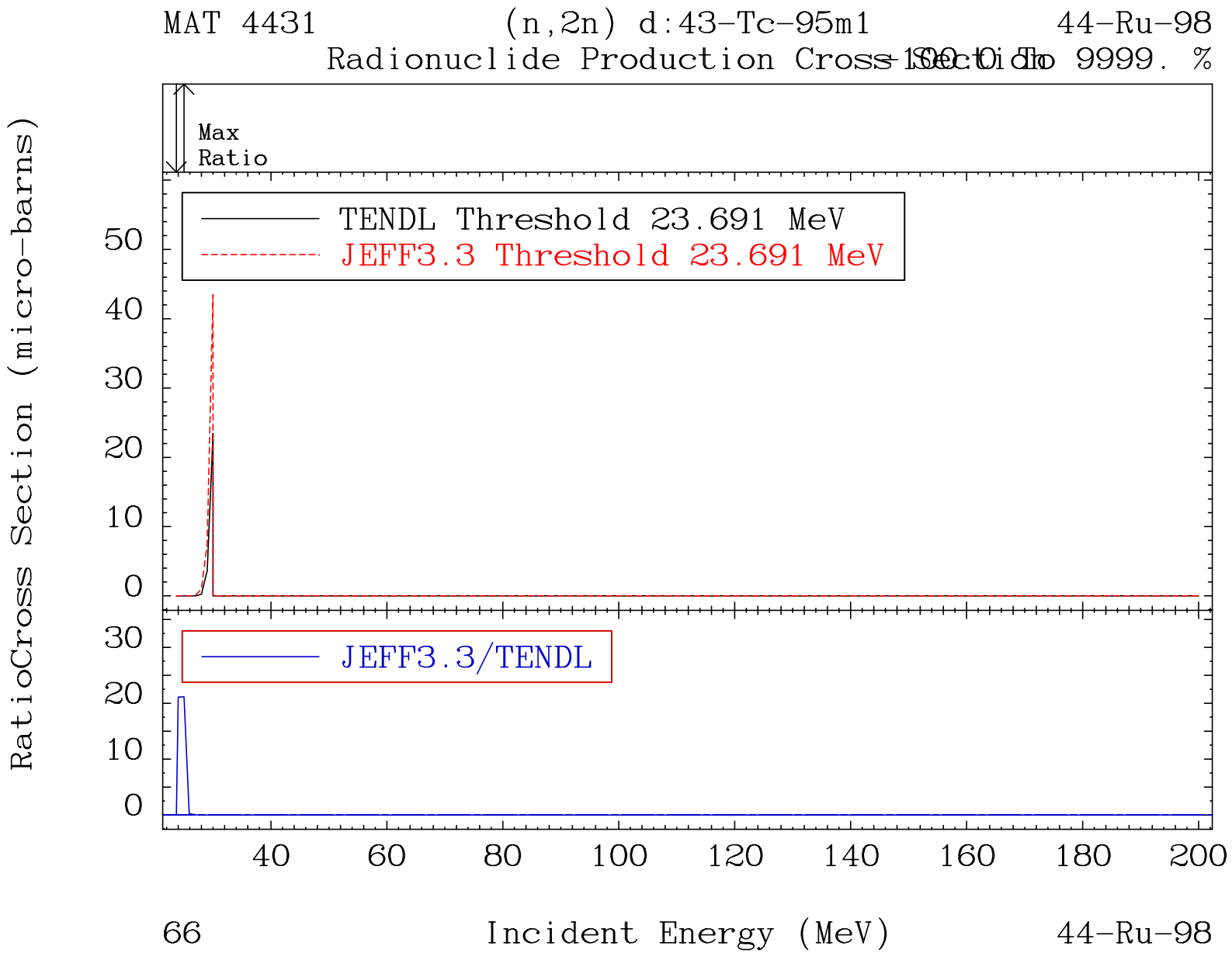

MAT 4431
Dpa total (eV-barns)
44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
44-Ru-98

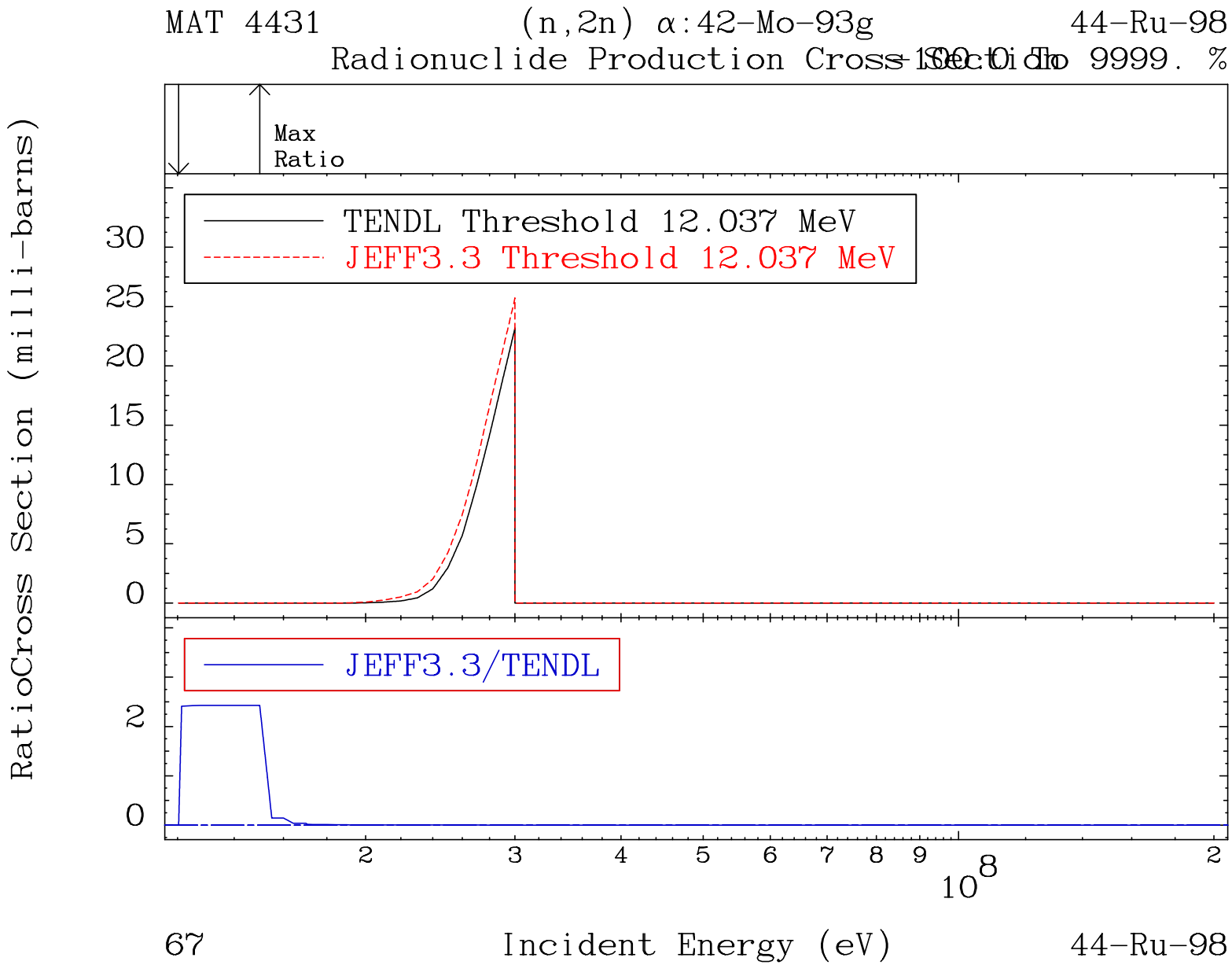

MAT 4431
Dpa elastic (mt2)
Cross Section
44-Ru-98
-100.0 To 9999. %
Min
Ratio
TENDL Threshold 611.60 eV
JEFF3.3 Threshold 616.13 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
44-Ru-98

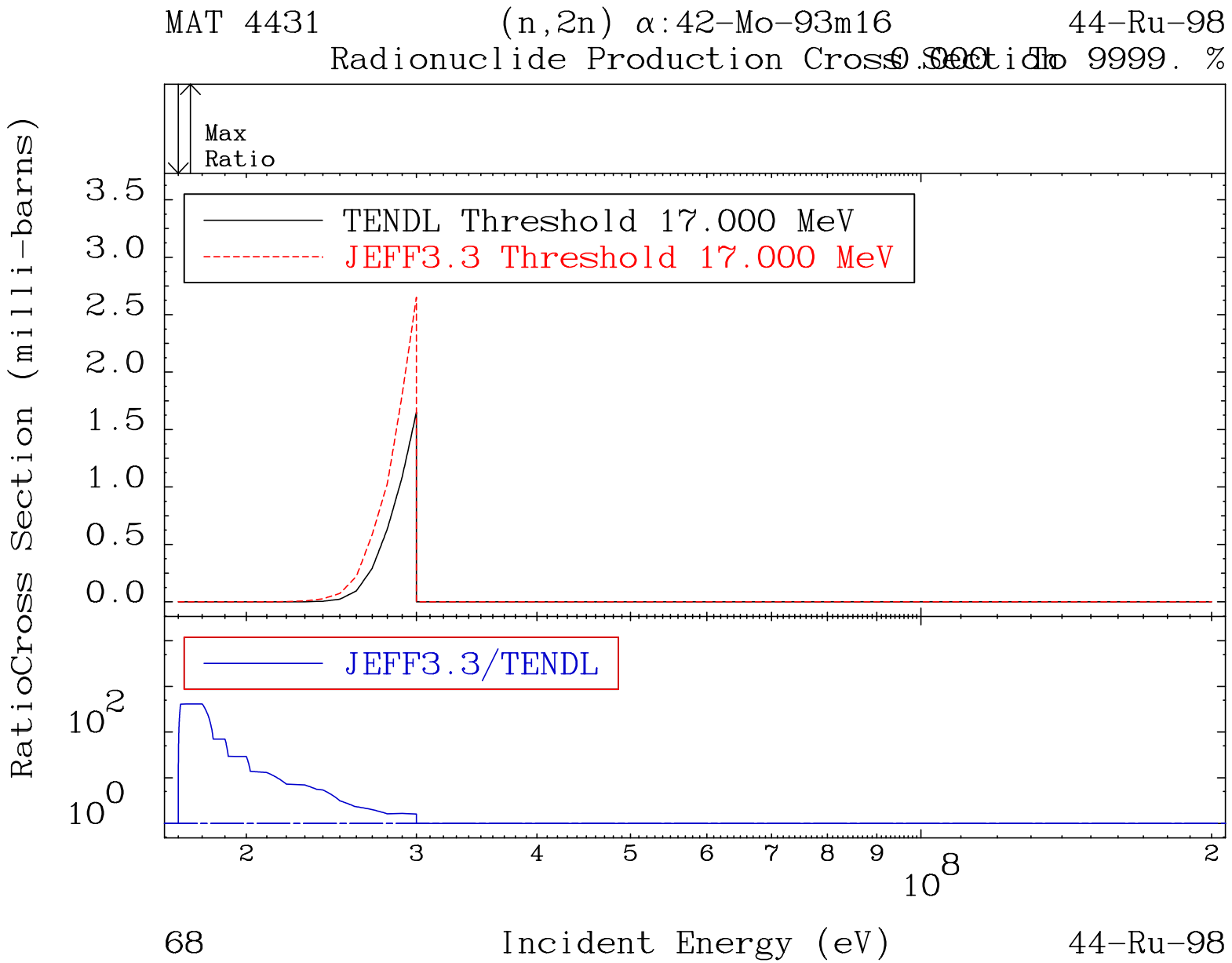

MAT 4431
Dpa inelastic (mt51-91)
44-Ru-98
Cross Section
-21.73 To 9999. %
Min
Ratio
TENDL Threshold 659.18 keV
JEFF3.3 Threshold 659.18 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
44-Ru-98

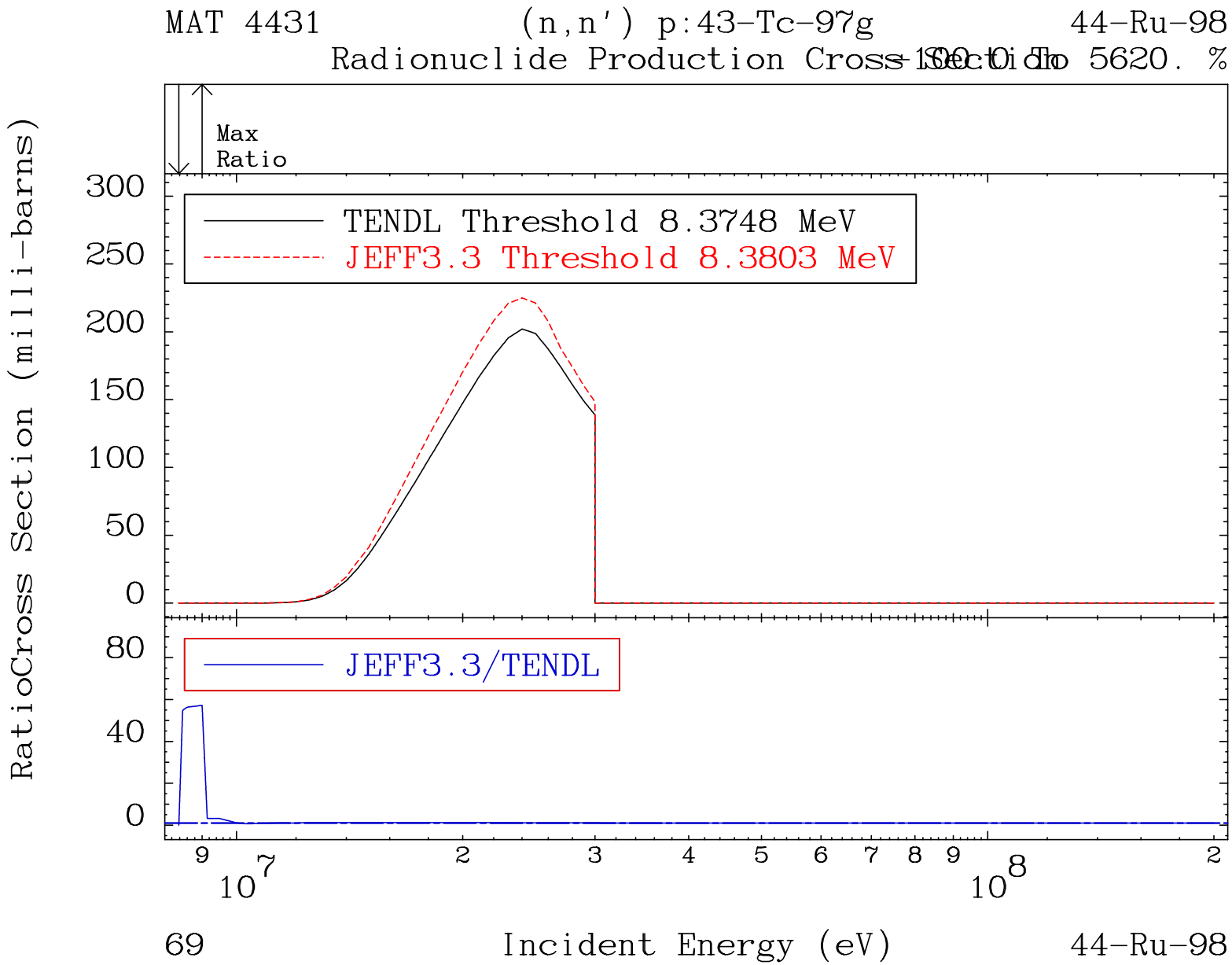

MAT 4431 Dpa disappearance (mt102 -120) 44-Ru-98
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
44-Ru-98

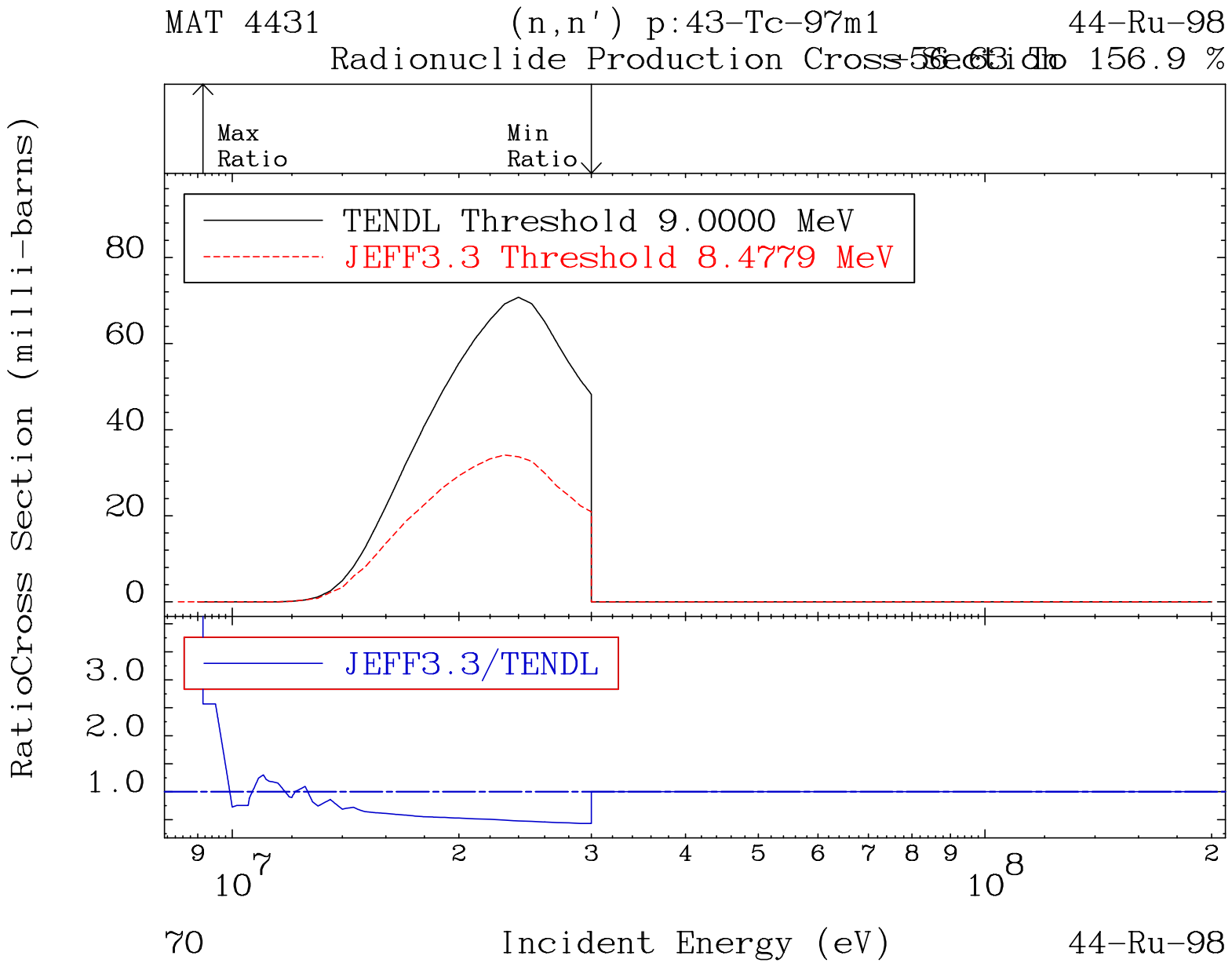

MAT 4431
(n,2n) d:43-Tc-95g
44-Ru-98
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 23.652 MeV
JEFF3.3 Threshold 23.652 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
300
200
100
0
12
8
4
0
40
60
80
100
120
140
160
180
200
65
Incident Energy (MeV)
44-Ru-98

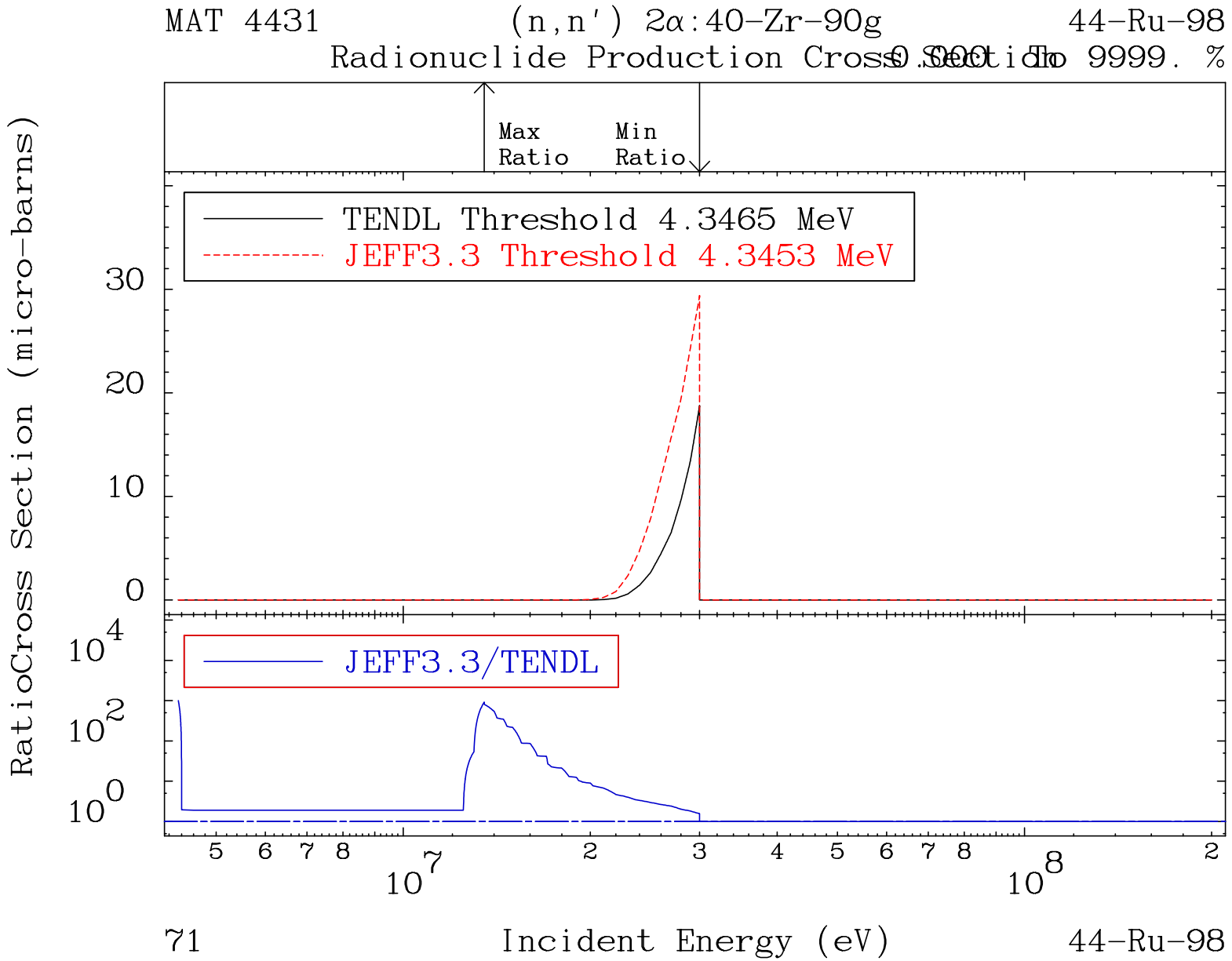

MAT 4431
(n,2n) d:43-Tc-95m1
44-Ru-98
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 23.691 MeV
JEFF3.3 Threshold 23.691 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
50
40
30
20
10
0
30
20
10
0
40
60
80
100
120
140
160
180
200
66
Incident Energy (MeV)
44-Ru-98

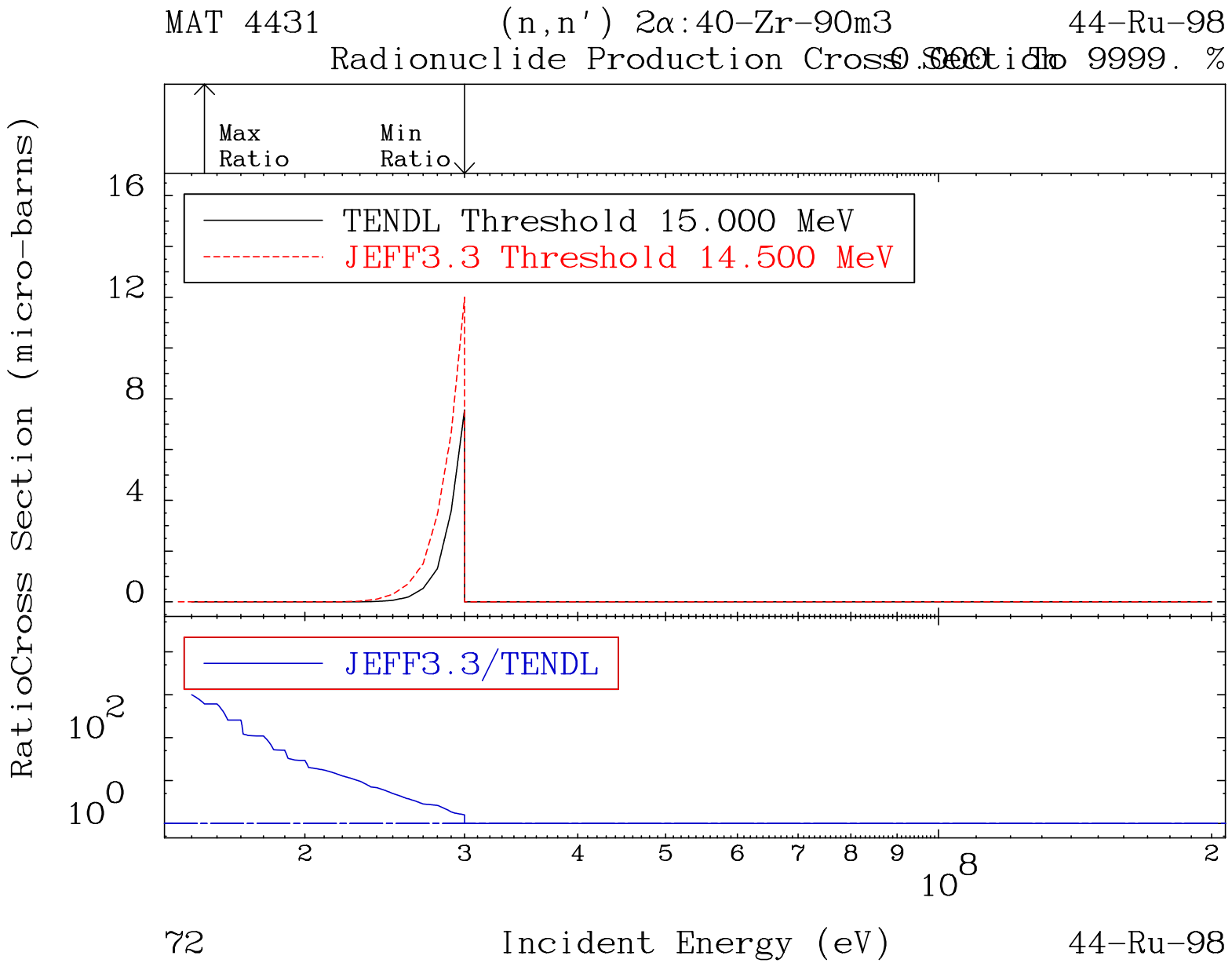

MAT 4431
(n,2n) α:42-Mo-93g
44-Ru-98
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 12.037 MeV
JEFF3.3 Threshold 12.037 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2
0
2
3
4
5
6
7
8
9
2
10^8
67
Incident Energy (eV)
44-Ru-98

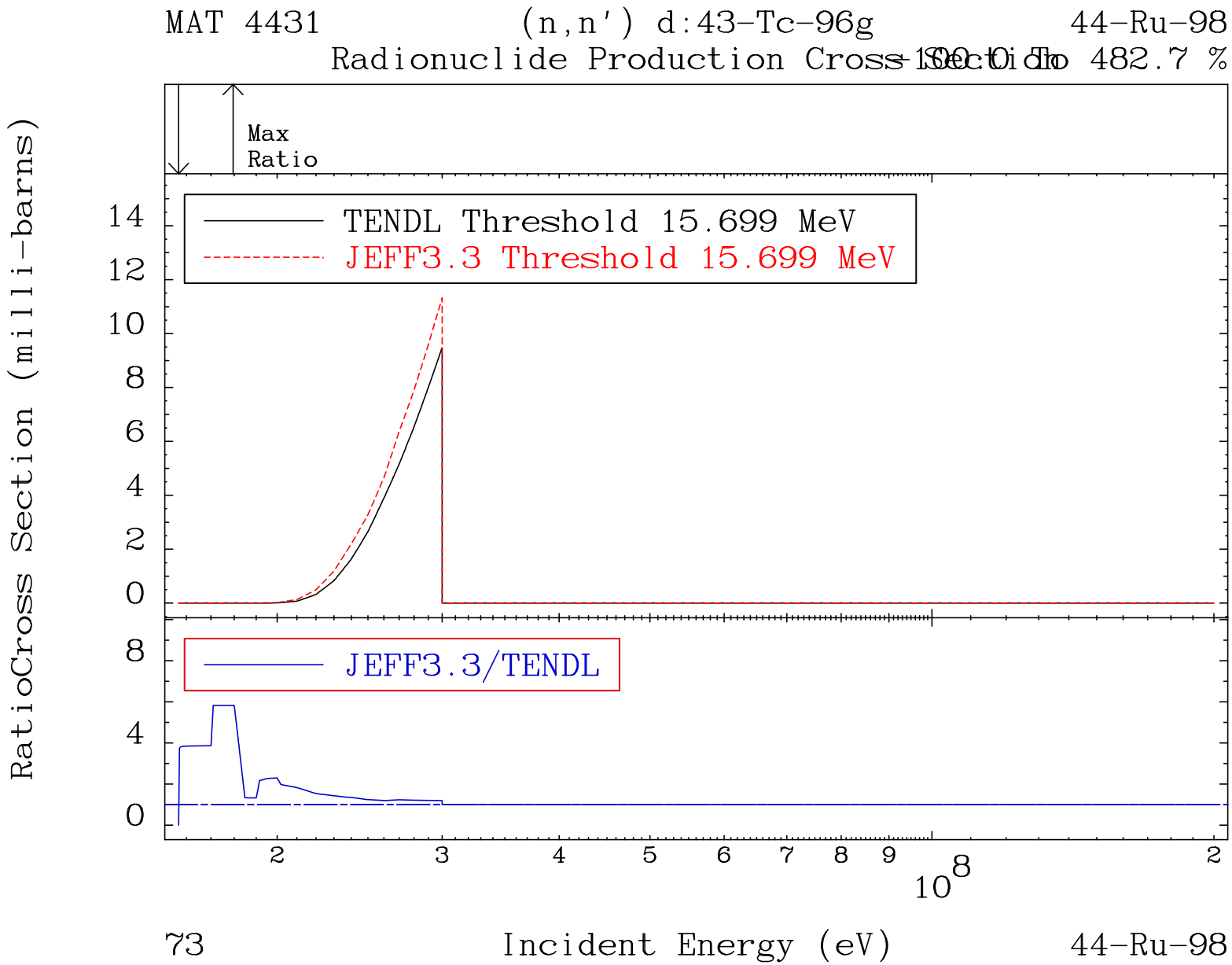

MAT 4431
(n,2n) α:42-Mo-93m16
44-Ru-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max
Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 17.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
44-Ru-98

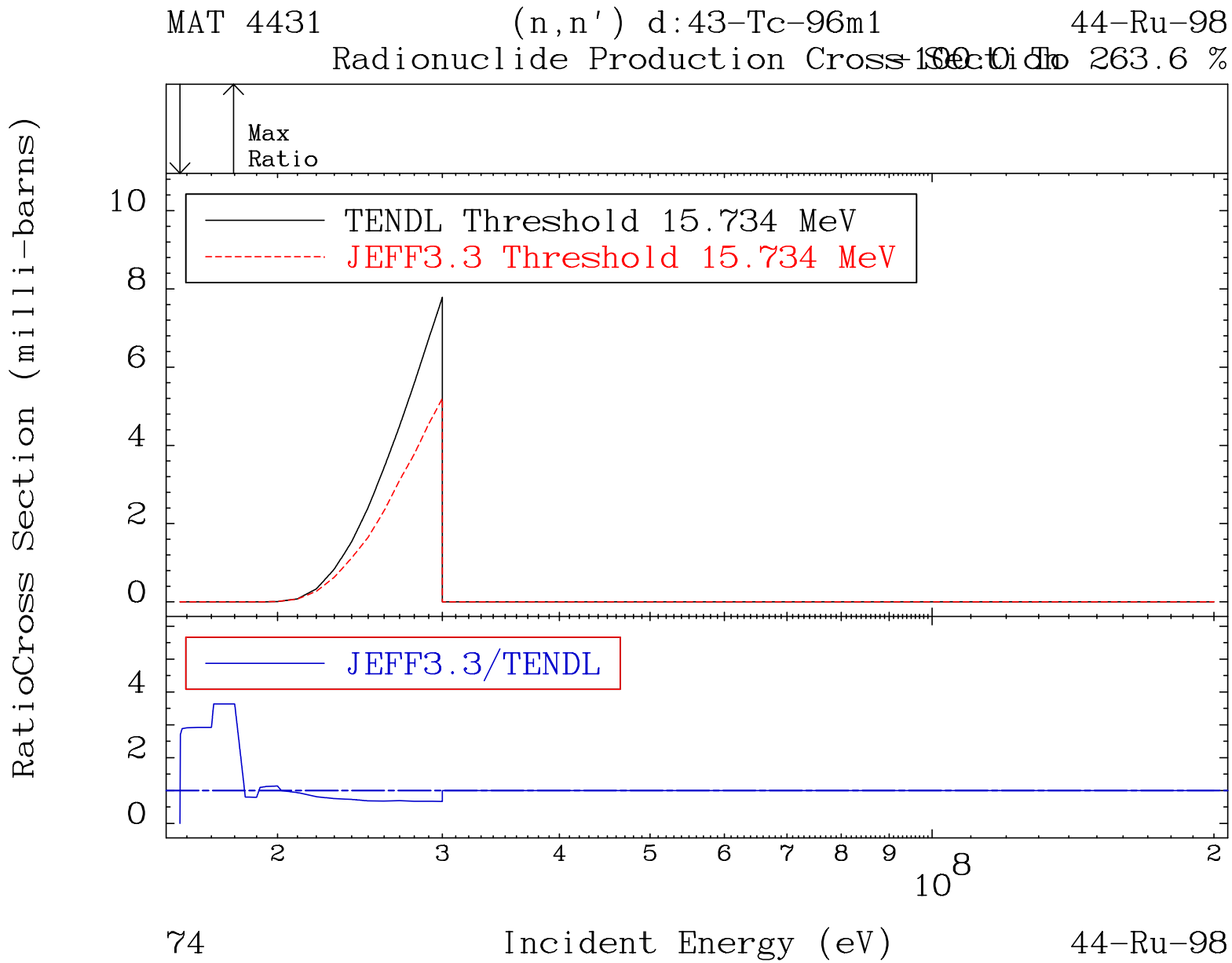

MAT 4431
(n,n') p:43-Tc-97g
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 8.3748 MeV
JEFF3.3 Threshold 8.3803 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
69
44-Ru-98

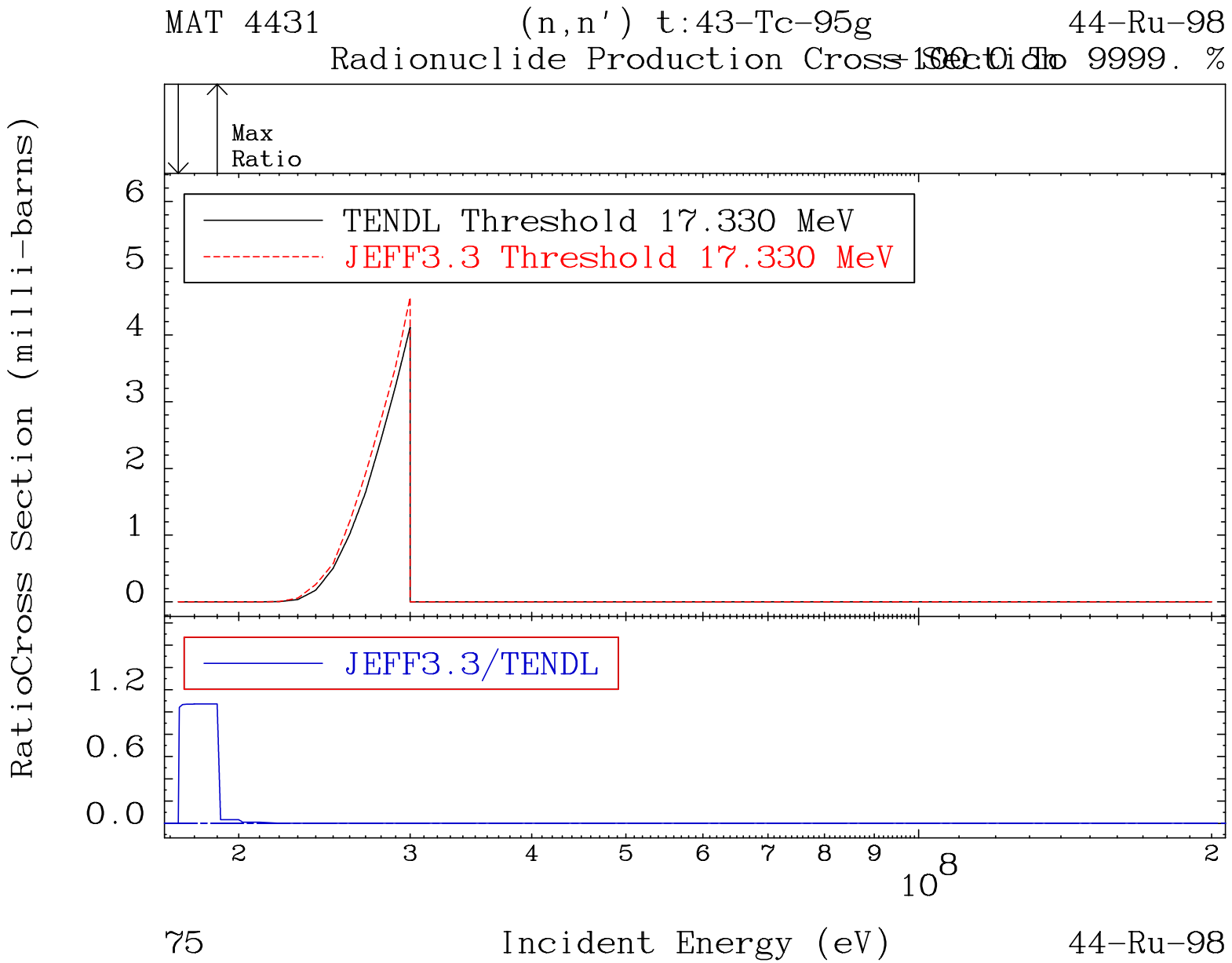

MAT 4431
(n,n') p:43-Tc-97m1
44-Ru-98
Radionuclide Production Cross Section To 156.9 %
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 8.4779 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
44-Ru-98

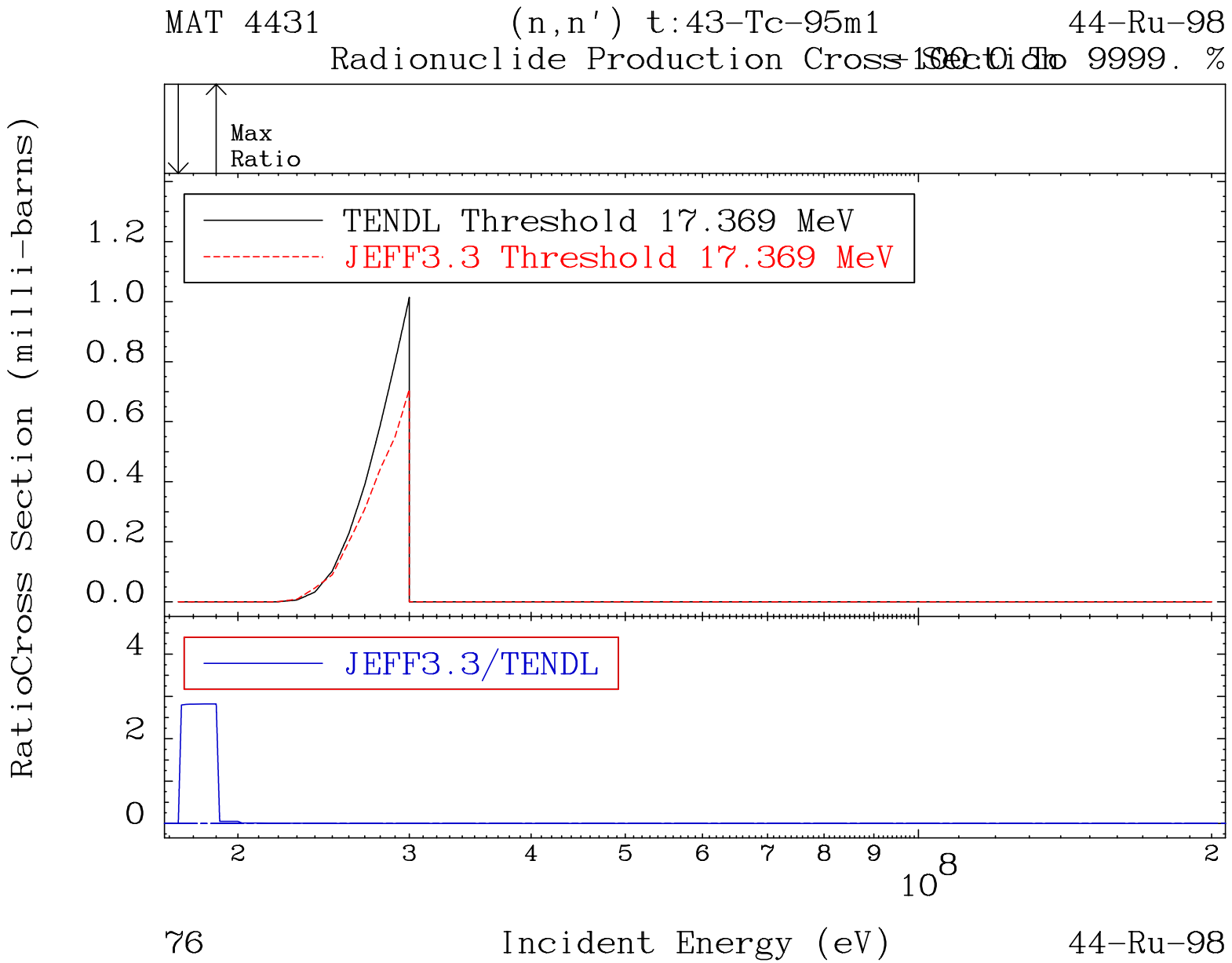

MAT 4431
(n,n') 2α:40-Zr-90g
44-Ru-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.3465 MeV
JEFF3.3 Threshold 4.3453 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
30
20
10
0
10^4
10^2
10^0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
71
Incident Energy (eV)
44-Ru-98

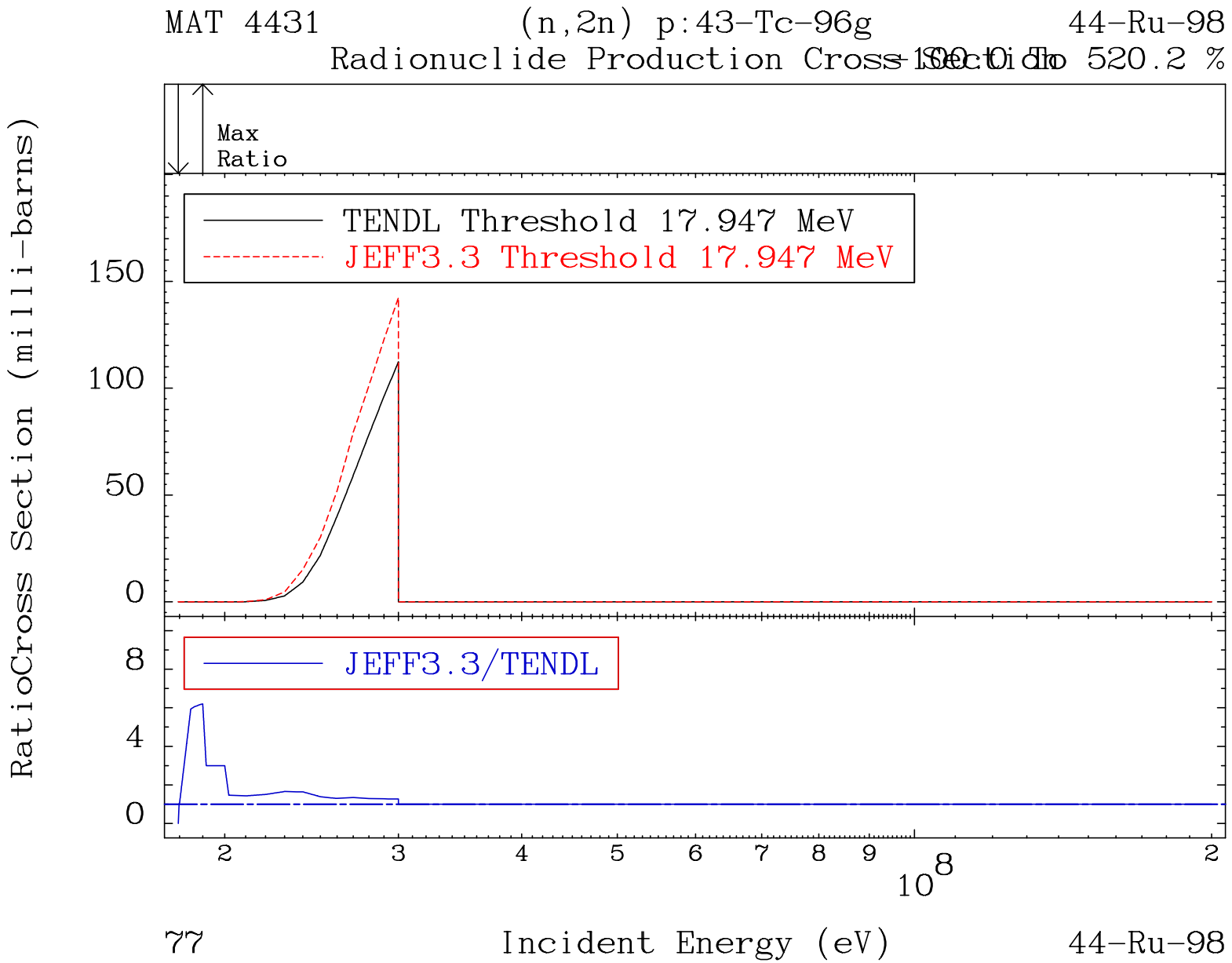

MAT 4431
(n,n') 2α:40-Zr-90m3
44-Ru-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 15.000 MeV
JEFF3.3 Threshold 14.500 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
16
12
8
4
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
72
Incident Energy (eV)
44-Ru-98

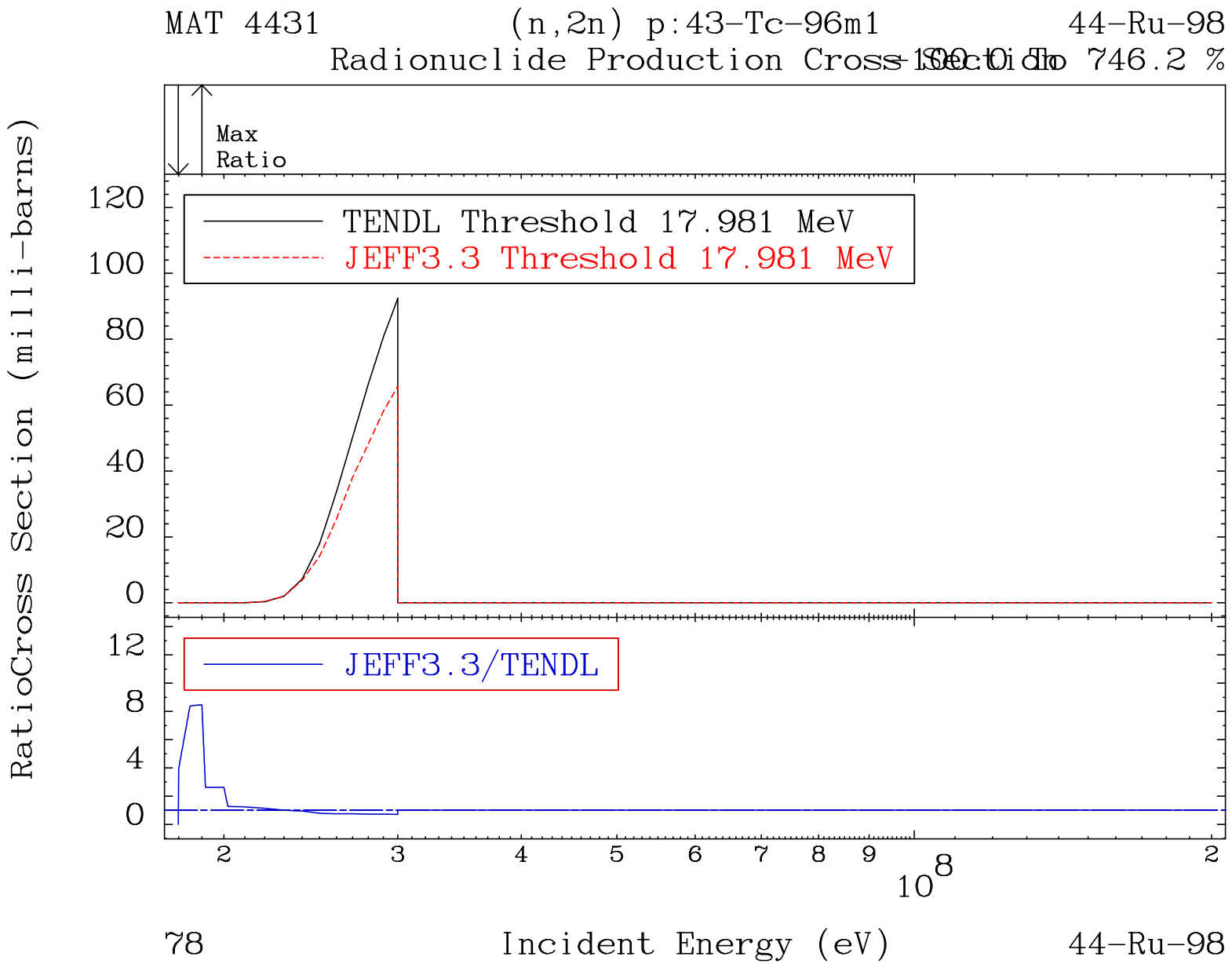

MAT 4431
(n,n') d:43-Tc-96g
44-Ru-98
Radionuclide Production Cross Section
Max Ratio
TENDL Threshold 15.699 MeV
JEFF3.3 Threshold 15.699 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
73
44-Ru-98

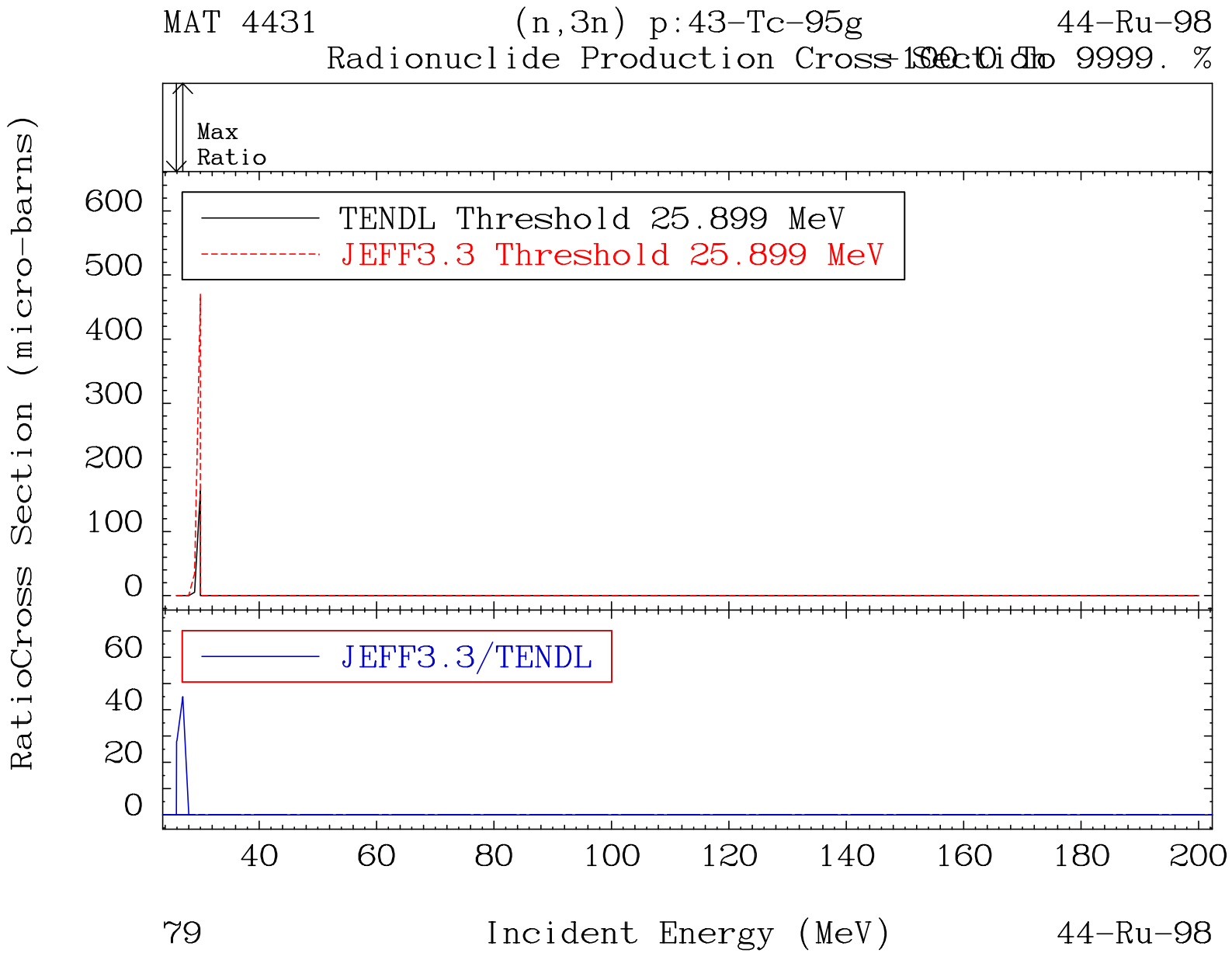

MAT 4431
(n,n') d:43-Tc-96m1
44-Ru-98
Radionuclide Production Cross Section To 263.6 %
Max
Ratio
TENDL Threshold 15.734 MeV
JEFF3.3 Threshold 15.734 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
74
44-Ru-98

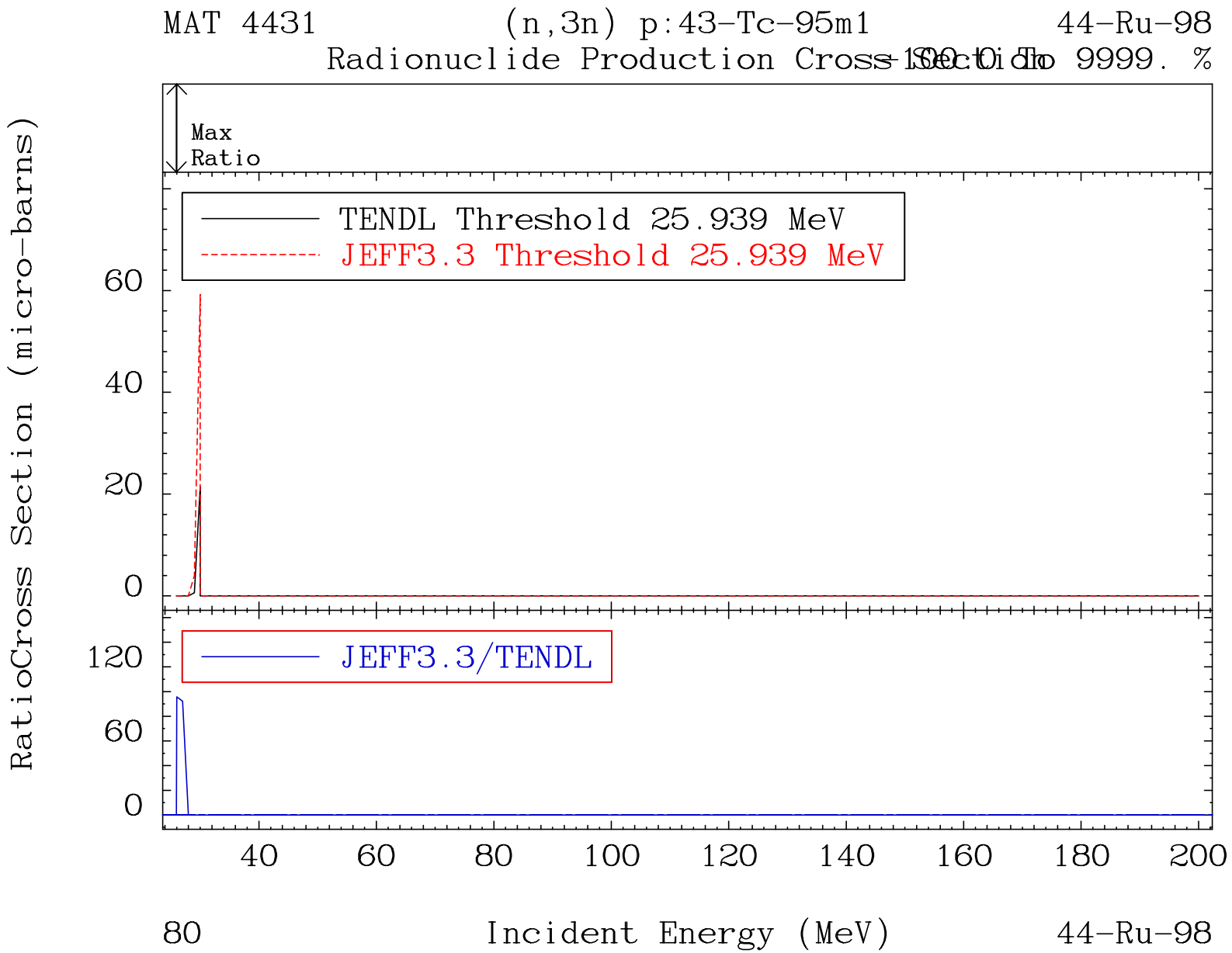

MAT 4431
(n,n') t:43-Tc-95g
44-Ru-98
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 17.330 MeV
JEFF3.3 Threshold 17.330 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
75
44-Ru-98

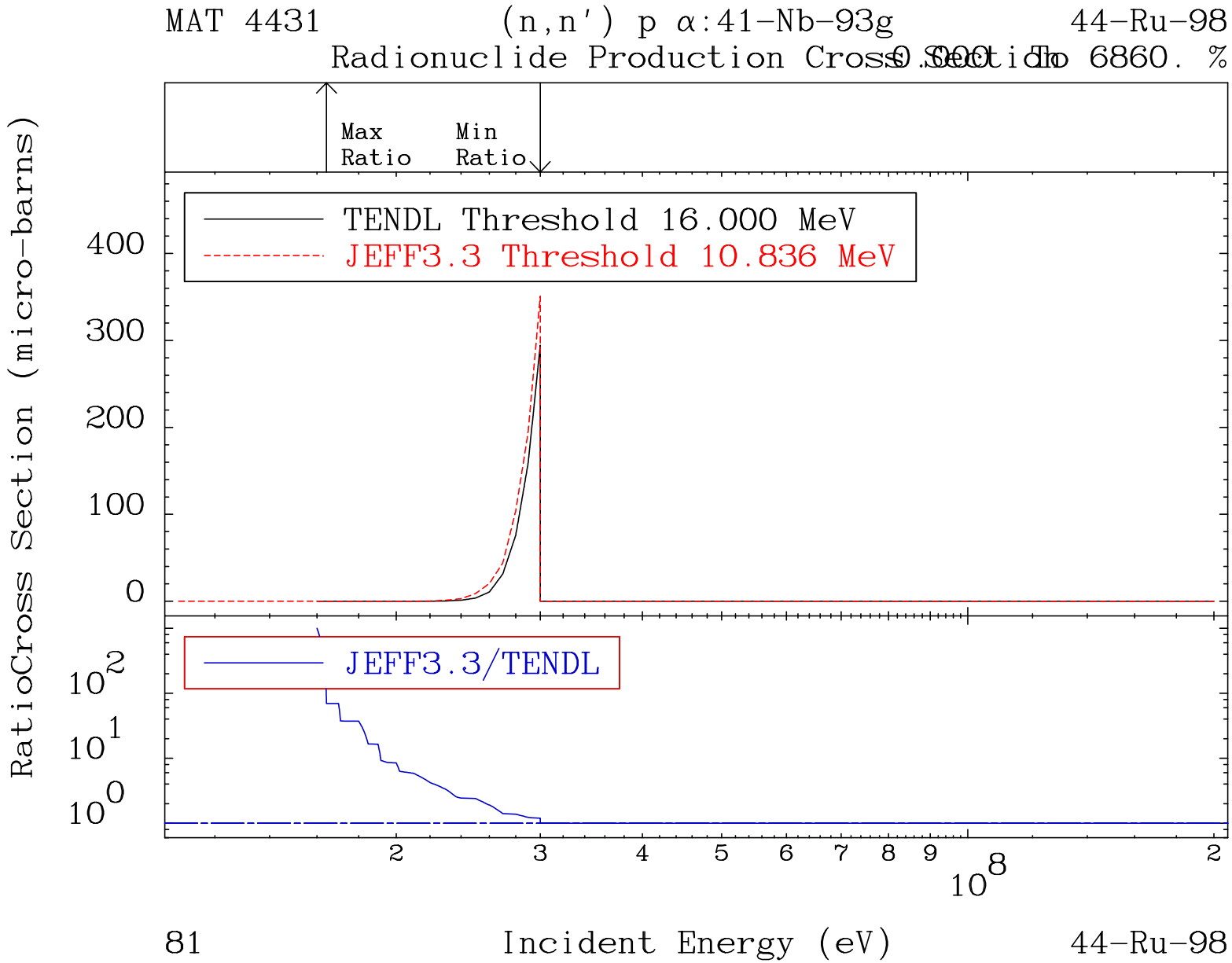

MAT 4431
(n,n') t:43-Tc-95m1
44-Ru-98
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 17.369 MeV
JEFF3.3 Threshold 17.369 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
2
3
4
5
6
7
8
9
2
10^8
76
Incident Energy (eV)
44-Ru-98

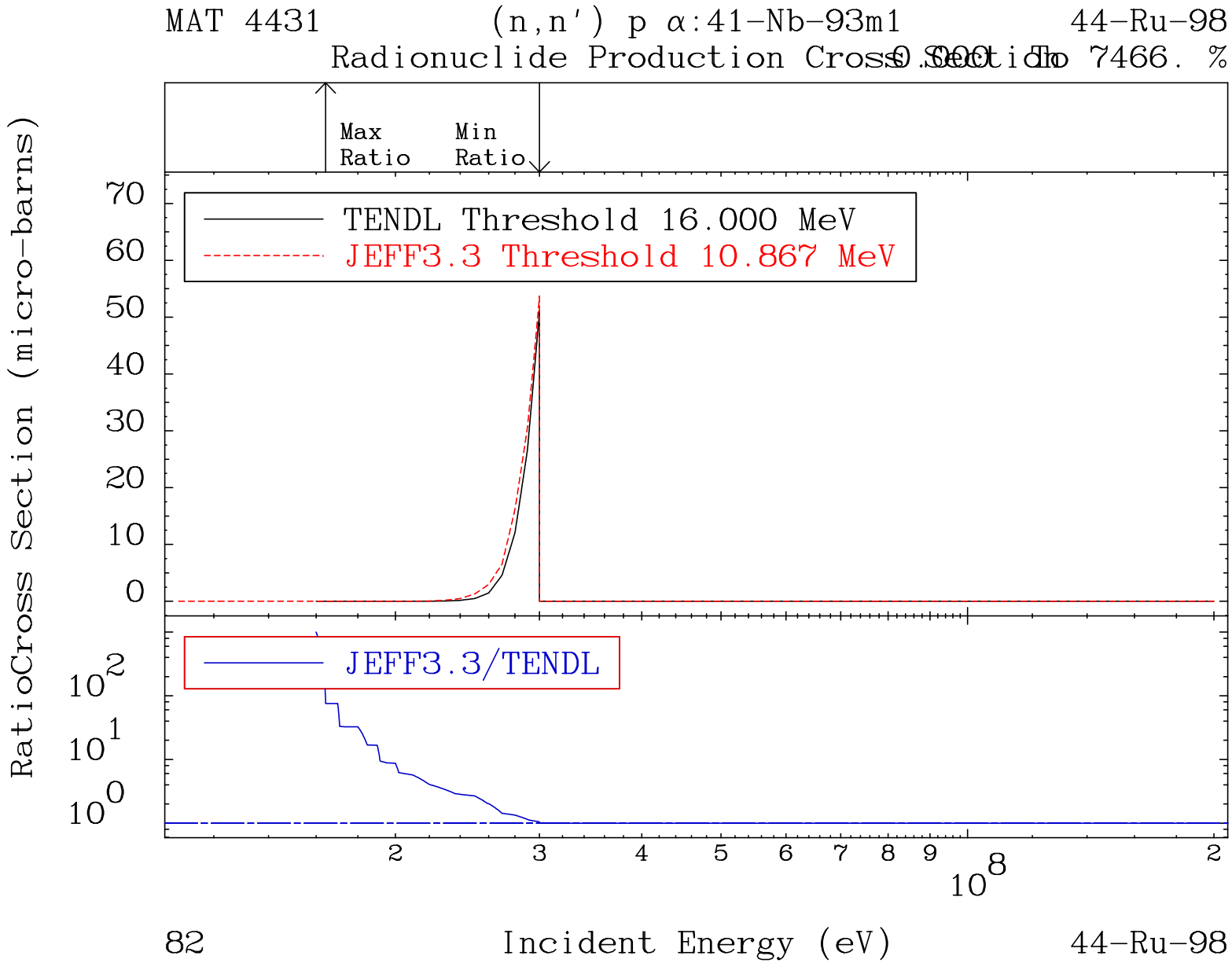

MAT 4431
(n,2n) p:43-Tc-96g
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 17.947 MeV
JEFF3.3 Threshold 17.947 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
150
100
50
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
44-Ru-98

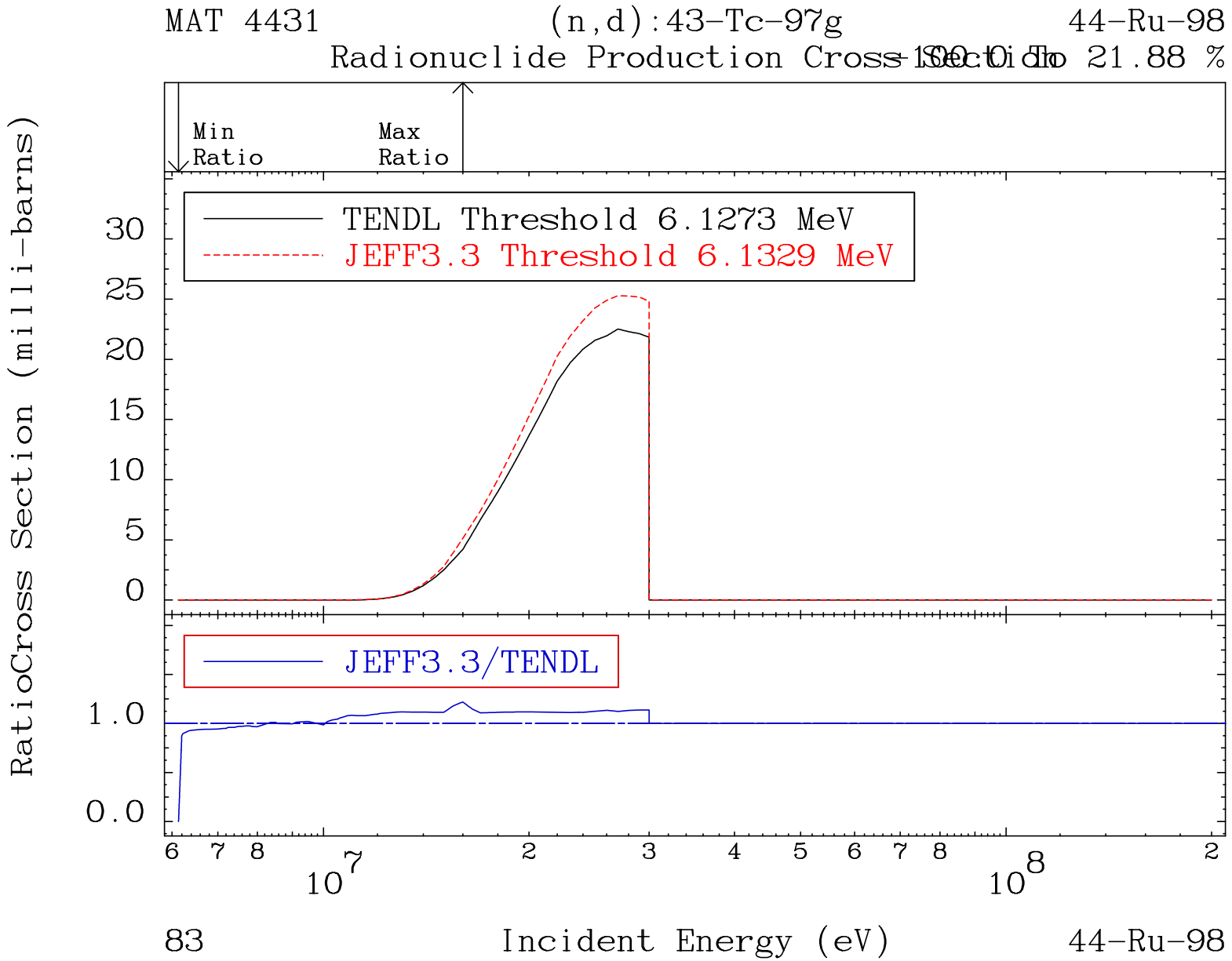

MAT 4431
(n,2n) p:43-Tc-96m1
44-Ru-98
Radionuclide Production Cross Section To 746.2 %
Max
Ratio
TENDL Threshold 17.981 MeV
JEFF3.3 Threshold 17.981 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
12
8
4
0
2
3
4
5
6
7
8
9
2
10^8
78
Incident Energy (eV)
44-Ru-98

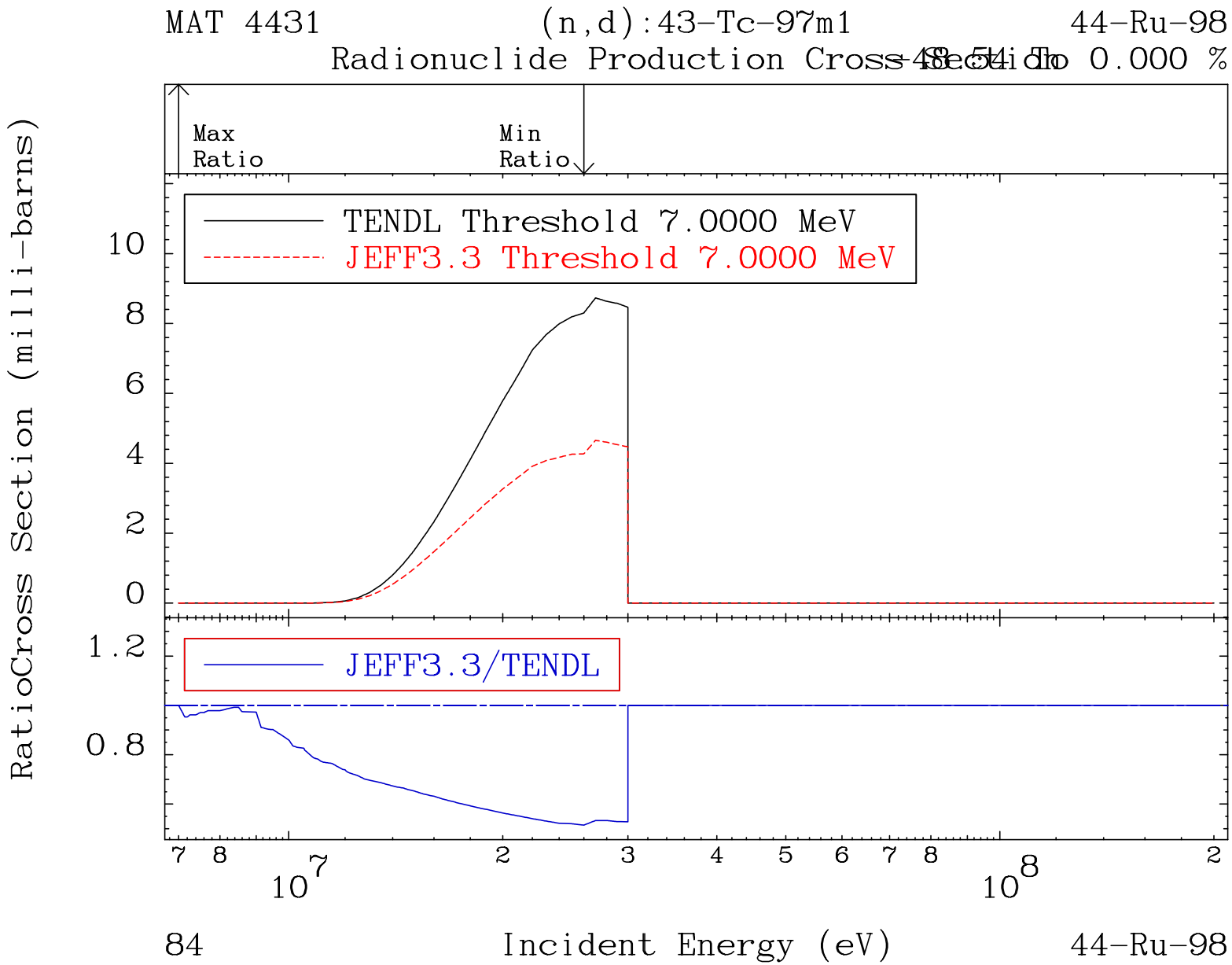

MAT 4431
(n,3n) p:43-Tc-95g
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 25.899 MeV
JEFF3.3 Threshold 25.899 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
600
500
400
300
200
100
0
60
40
20
0
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
44-Ru-98

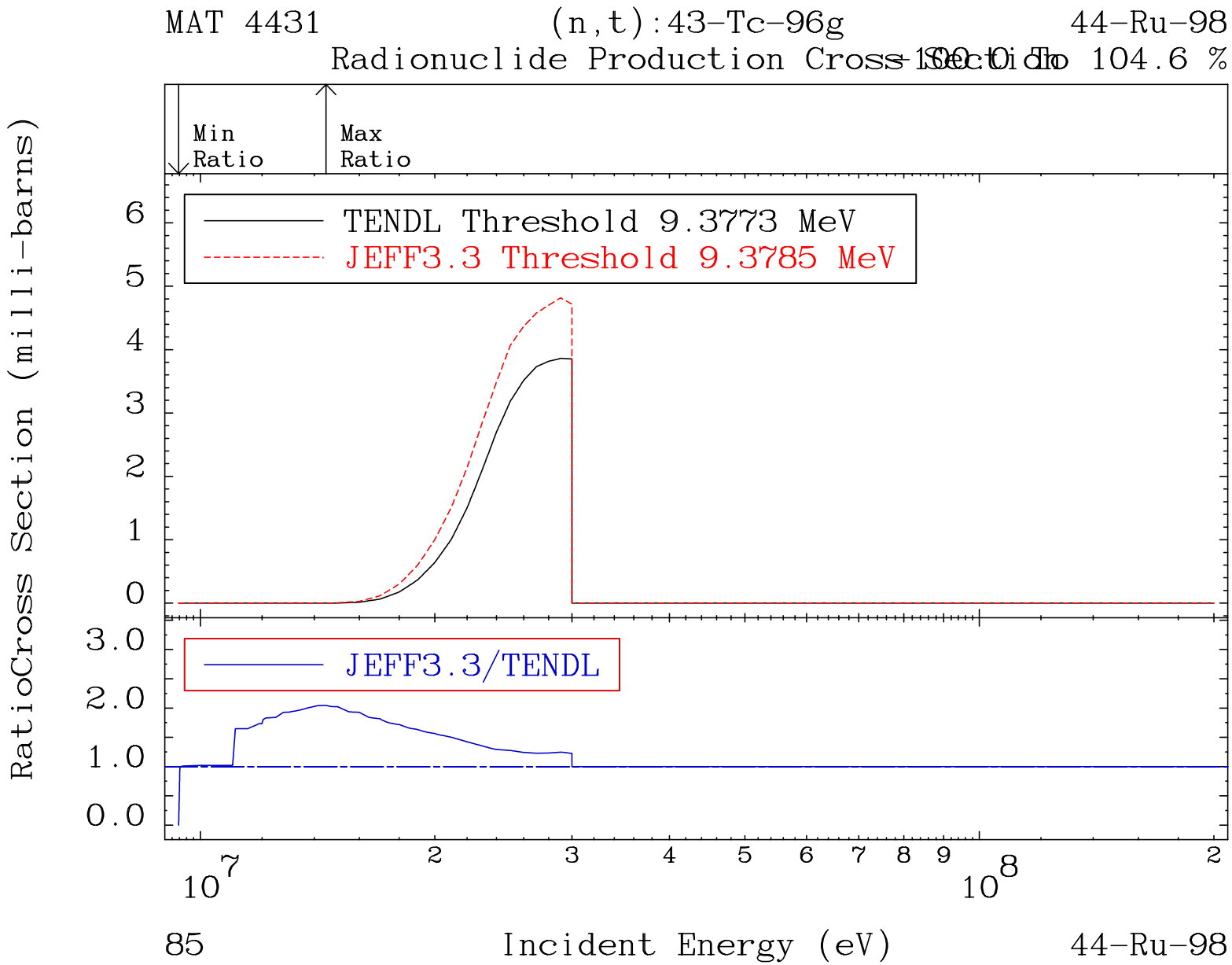

MAT 4431
(n,3n) p:43-Tc-95m1
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 25.939 MeV
JEFF3.3 Threshold 25.939 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
60
40
20
0
120
60
0
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
44-Ru-98

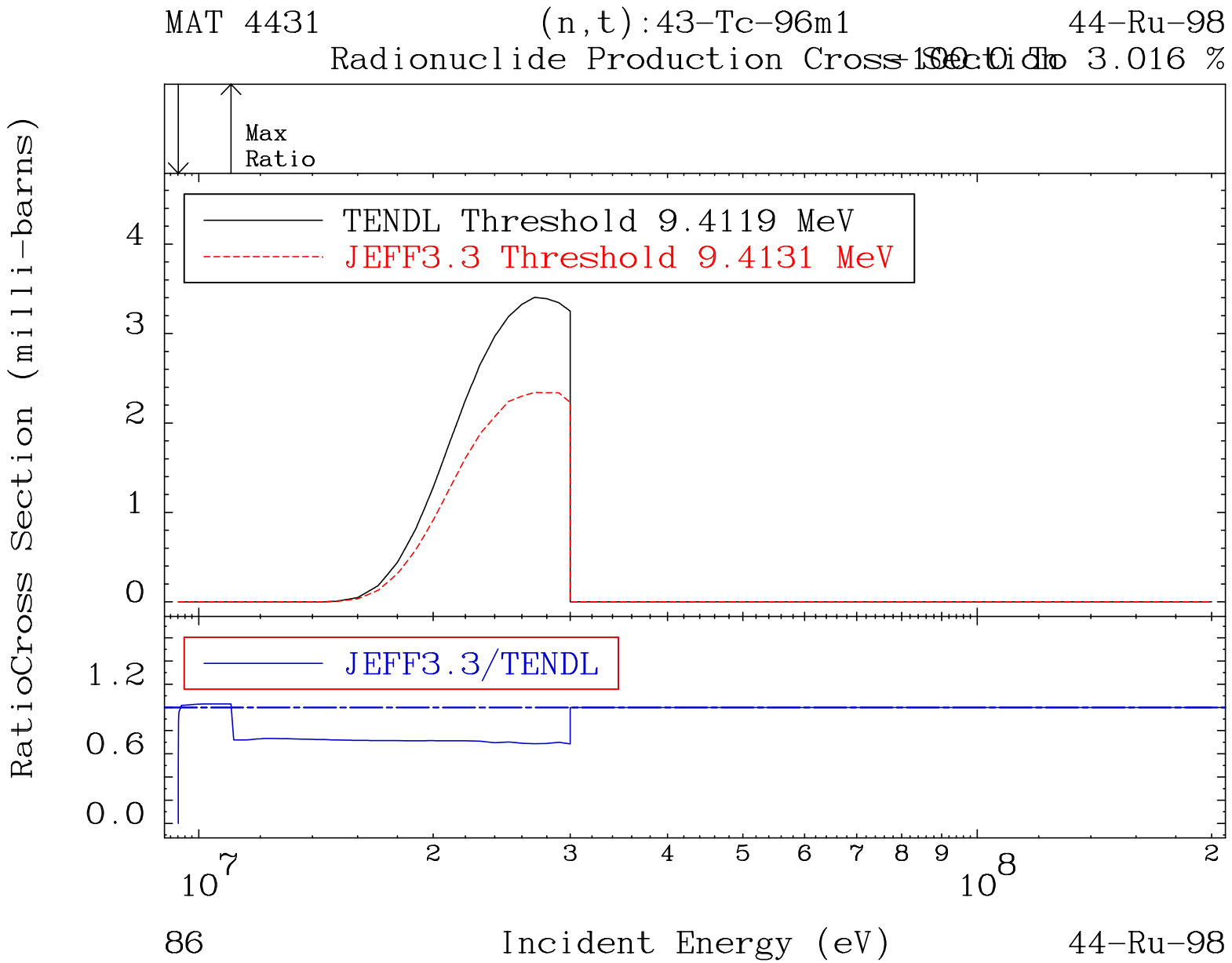

MAT 4431
(n,n') p α:41-Nb-93g
44-Ru-98
Radionuclide Production Cross Section
0.000 To 6860. %
Max Ratio
Min Ratio
TENDL Threshold 16.000 MeV
JEFF3.3 Threshold 10.836 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
81
Incident Energy (eV)
44-Ru-98

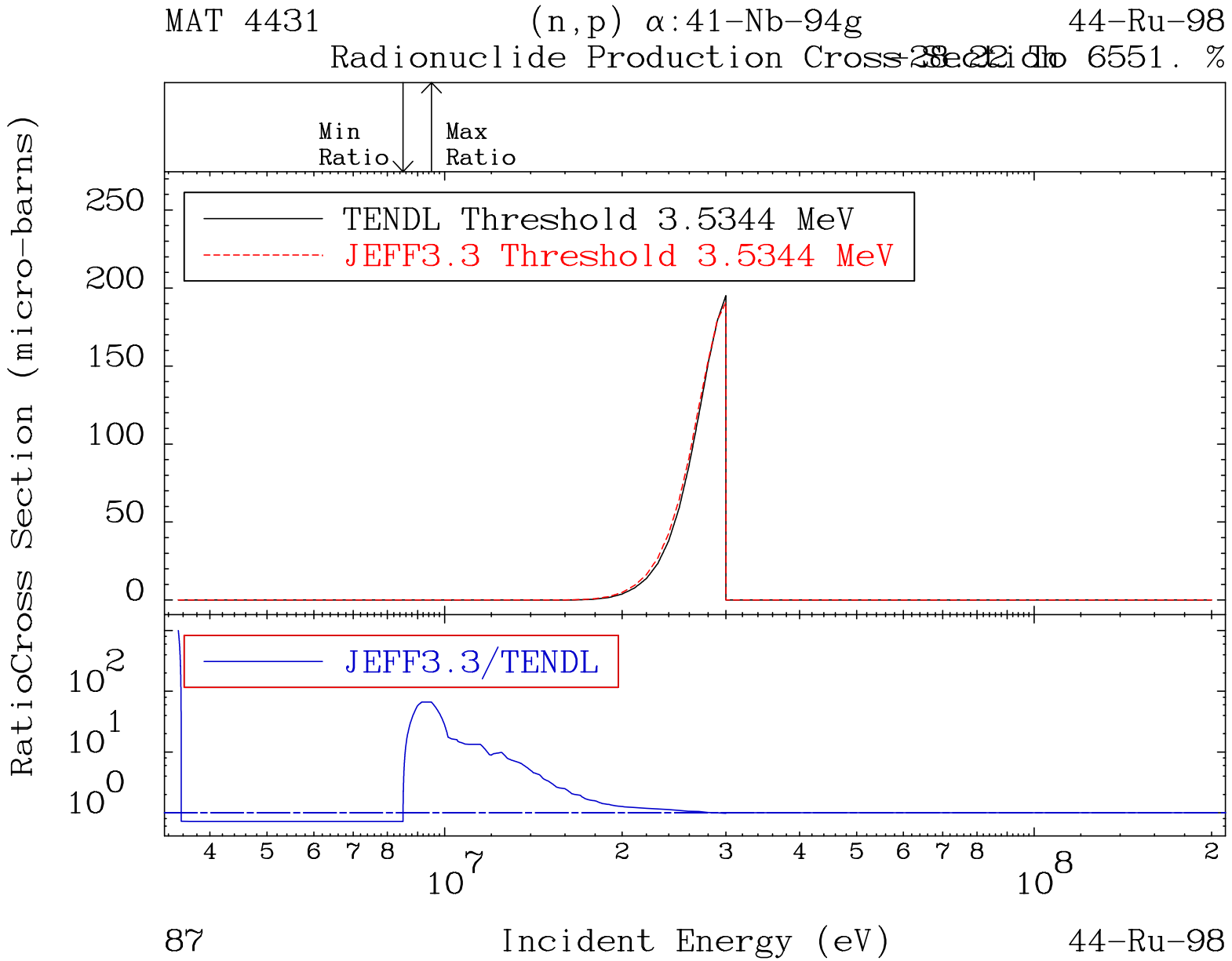

MAT 4431
(n,n') p α:41-Nb-93m1
44-Ru-98
Radionuclide Production Cross Section
0.000 To 7466. %
Max Ratio
Min Ratio
TENDL Threshold 16.000 MeV
JEFF3.3 Threshold 10.867 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
82
44-Ru-98

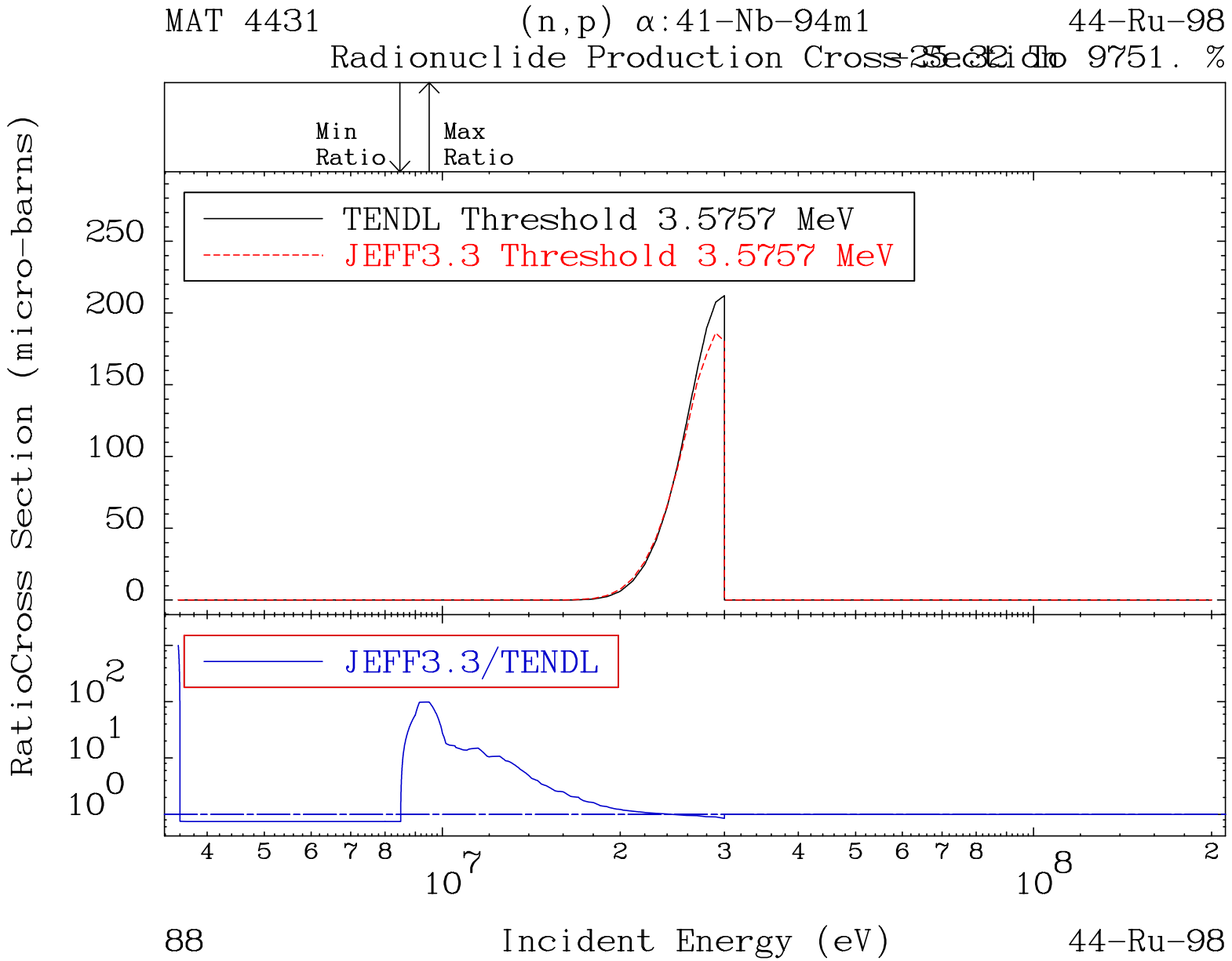

MAT 4431
(n,d):43-Tc-97g
44-Ru-98
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 6.1273 MeV
JEFF3.3 Threshold 6.1329 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
83
44-Ru-98

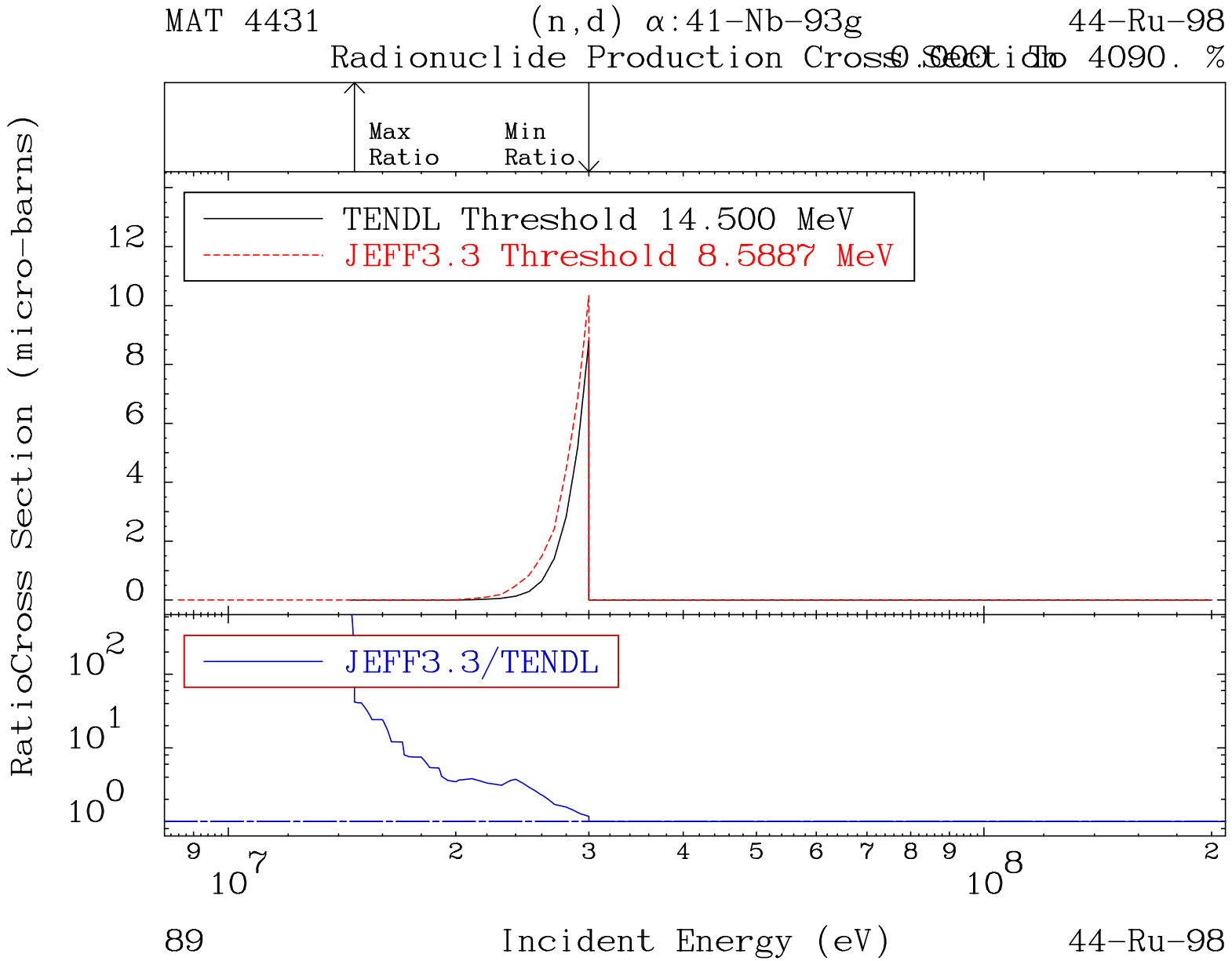

MAT 4431
(n,d):43-Tc-97m1
44-Ru-98
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.0000 MeV
JEFF3.3 Threshold 7.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
84
44-Ru-98

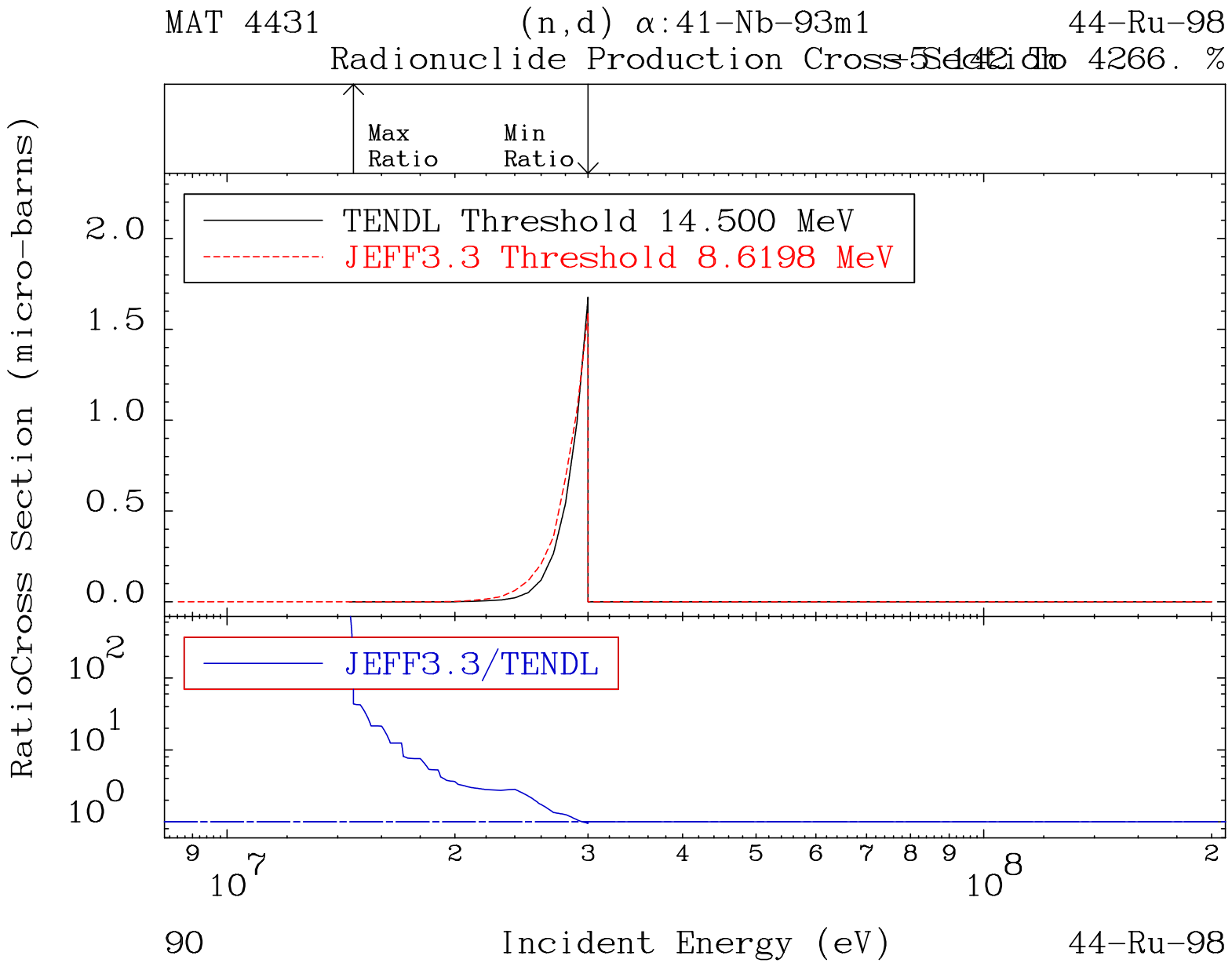

MAT 4431
(n,t):43-Tc-96g
44-Ru-98
Radionuclide Production Cross Section To 104.6 %
Min Ratio
Max Ratio
TENDL Threshold 9.3773 MeV
JEFF3.3 Threshold 9.3785 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
44-Ru-98


MAT 4431
(n,t):43-Tc-96m1
44-Ru-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.4119 MeV
JEFF3.3 Threshold 9.4131 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
86
44-Ru-98


MAT 4431
(n,p) α:41-Nb-94g
44-Ru-98
Radionuclide Production Cross Section To 6551. %
Min Ratio
Max Ratio
TENDL Threshold 3.5344 MeV
JEFF3.3 Threshold 3.5344 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
250
200
150
100
50
0
10^2
10^1
10^0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
87
Incident Energy (eV)
44-Ru-98


MAT 4431
(n,p) α:41-Nb-94m1
44-Ru-98
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 3.5757 MeV
JEFF3.3 Threshold 3.5757 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
88
44-Ru-98


MAT 4431
(n,d) α:41-Nb-93g
44-Ru-98
Radionuclide Production Cross Section
0.000 To 4090. %
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
JEFF3.3 Threshold 8.5887 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
89
44-Ru-98


MAT 4431
(n,d) α:41-Nb-93m1
44-Ru-98
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
JEFF3.3 Threshold 8.6198 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
90
44-Ru-98