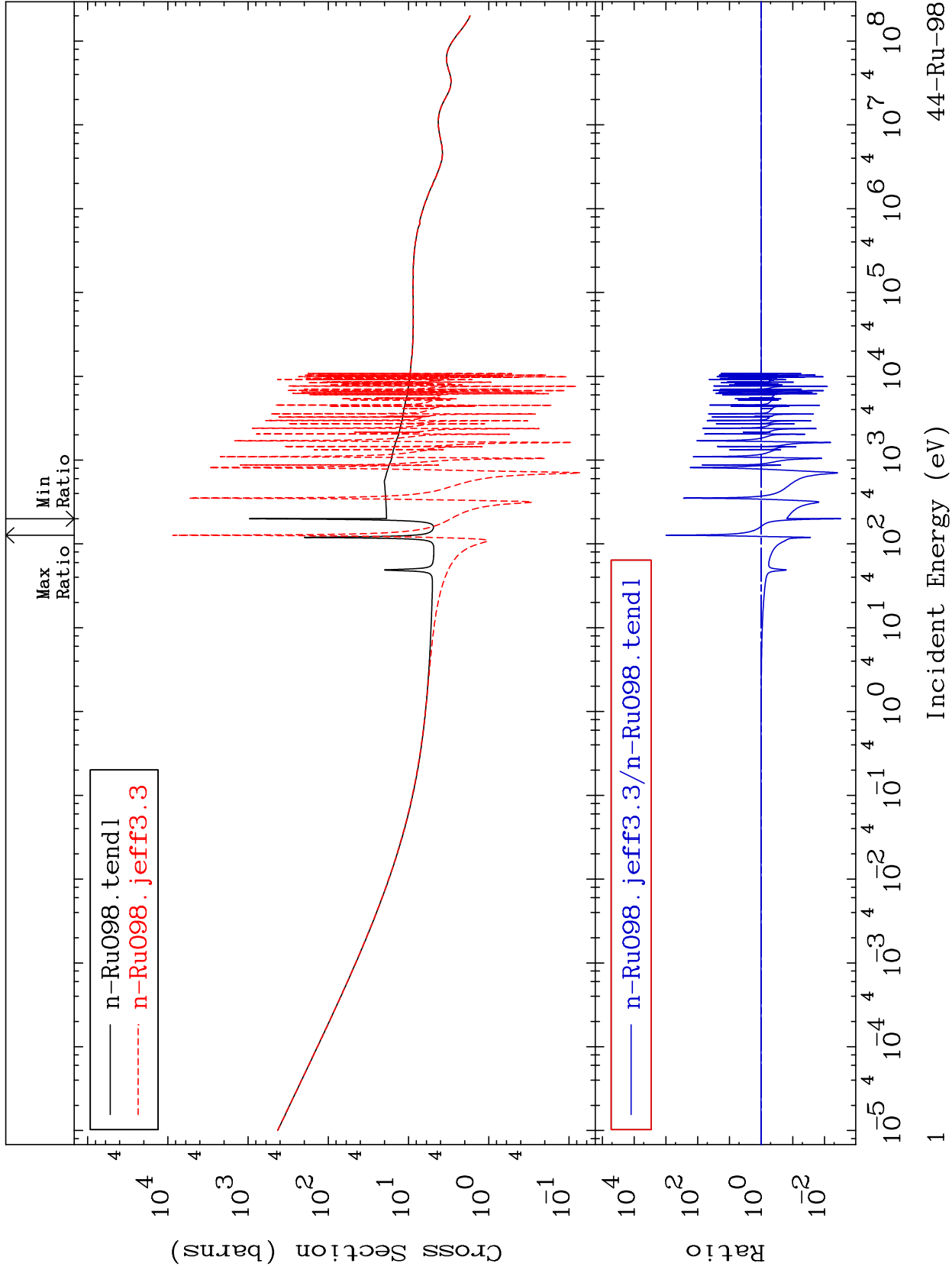


MAT 4431

Total Cross Section
44-Ru-98
-99.69 To 9999. %



44-Ru-98

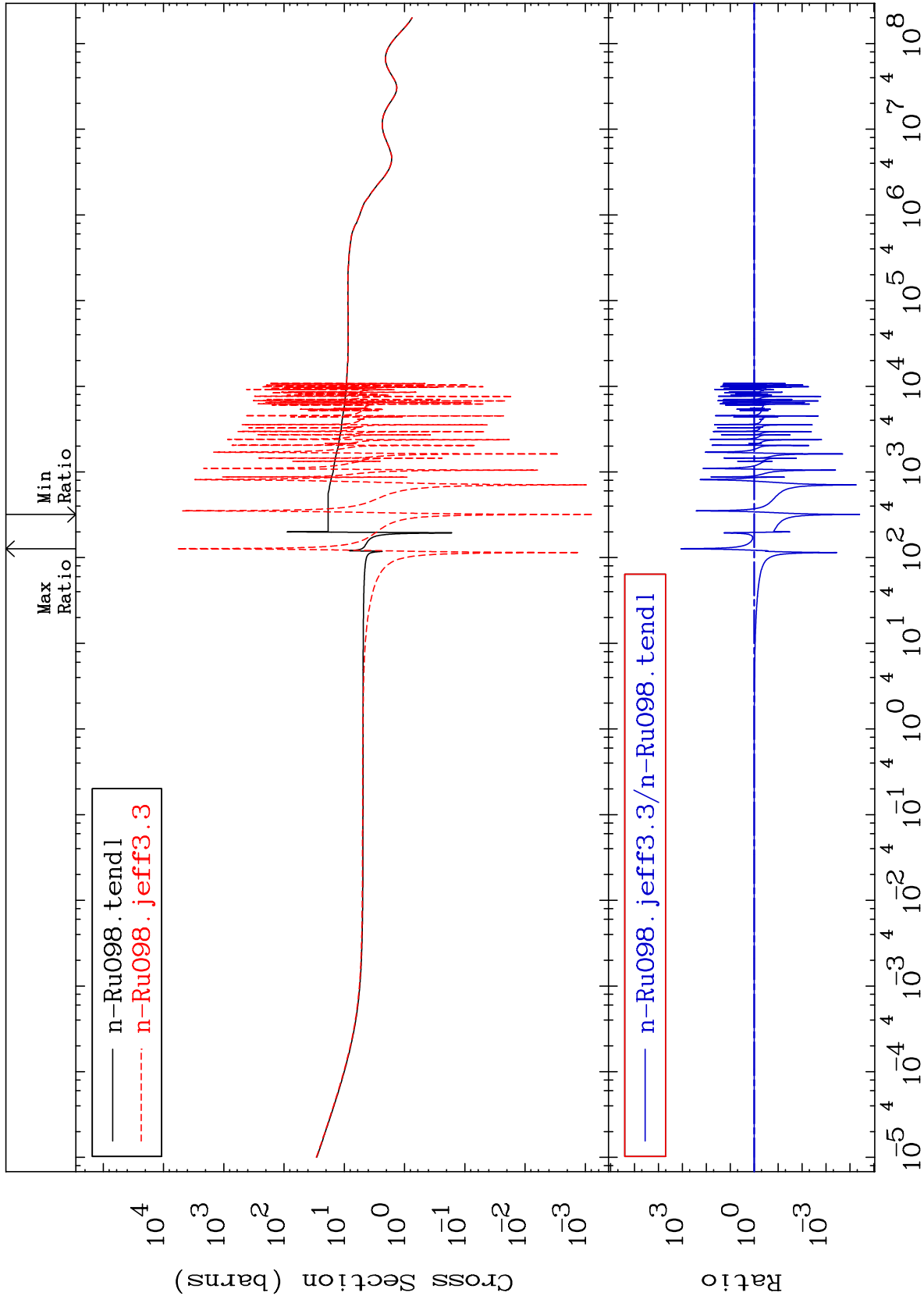
MAT 4431

Elastic

44-Ru-98

Cross Section

-100.0 To 9999. %



MAT 4431

44-Ru-98

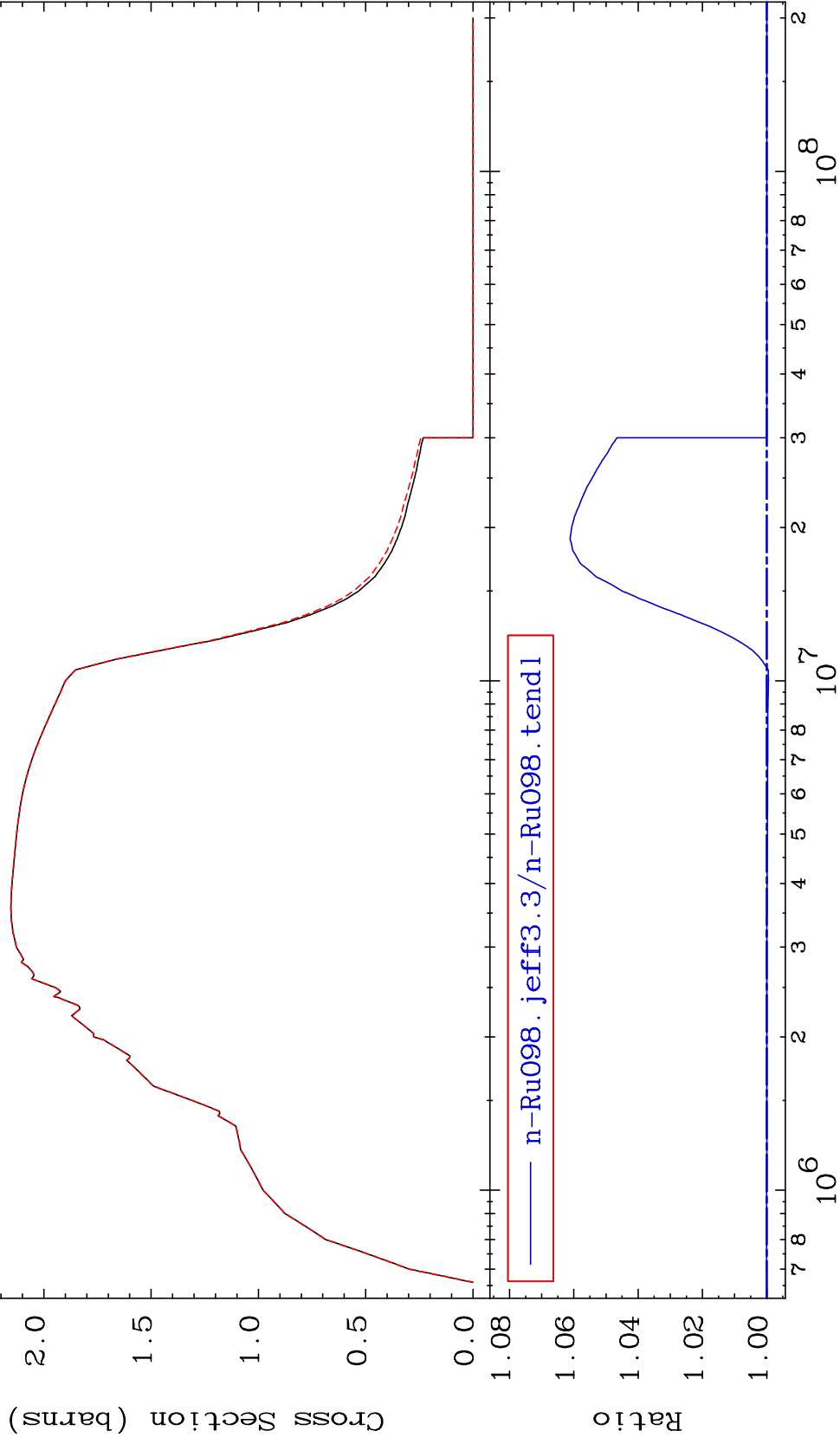
-0.053 To 6.117 %

Inelastic
Cross Section

Min Ratio

Max Ratio

— n-Ru098.tendl Threshold 659.16 keV
- - - n-Ru098.jeff3.3 Threshold 659.16 keV



3

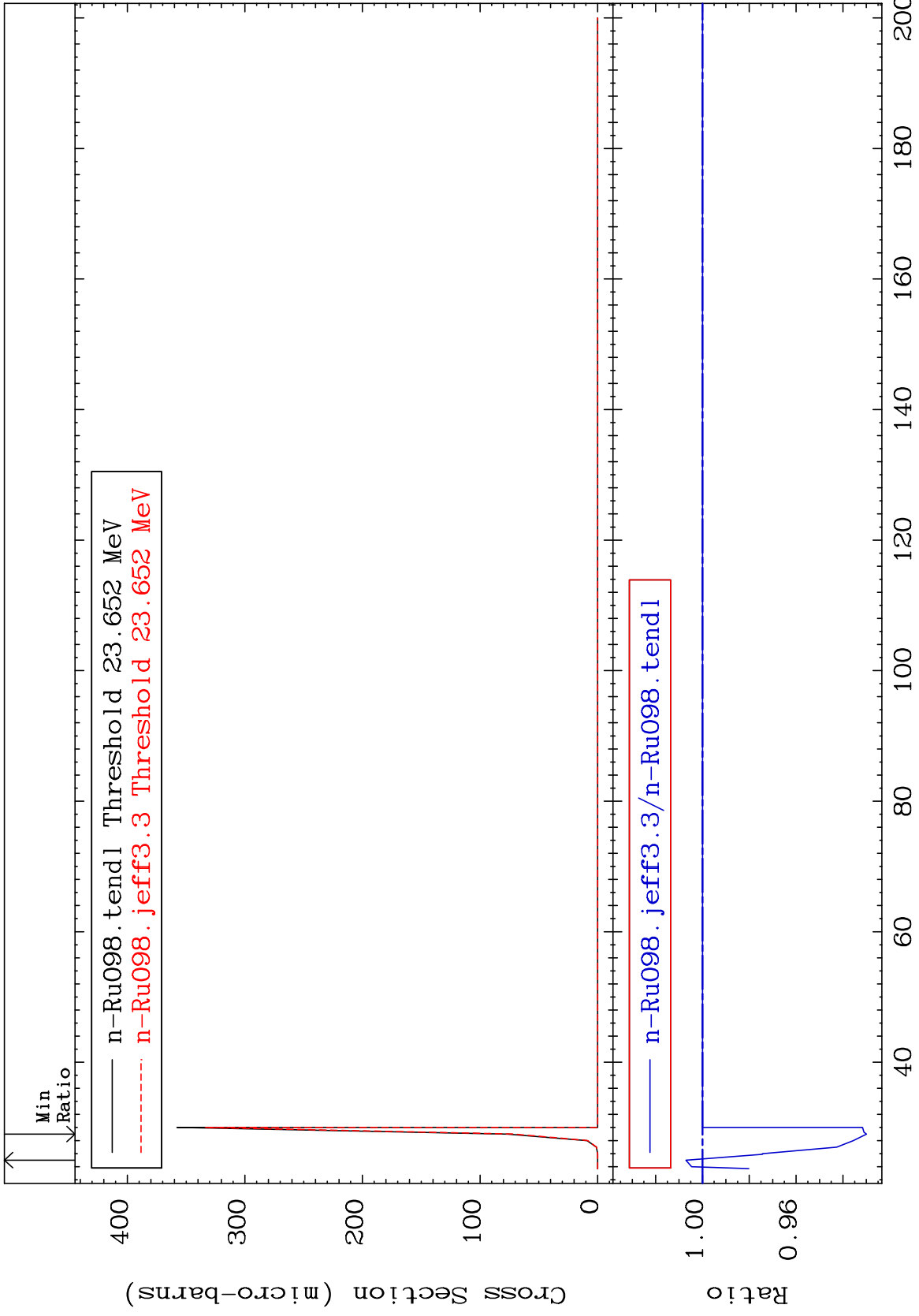
Incident Energy (eV)

44-Ru-98

MAT 4431

(n,2n) d
Cross Section

44-Ru-98
-7.007 To 0.705 %



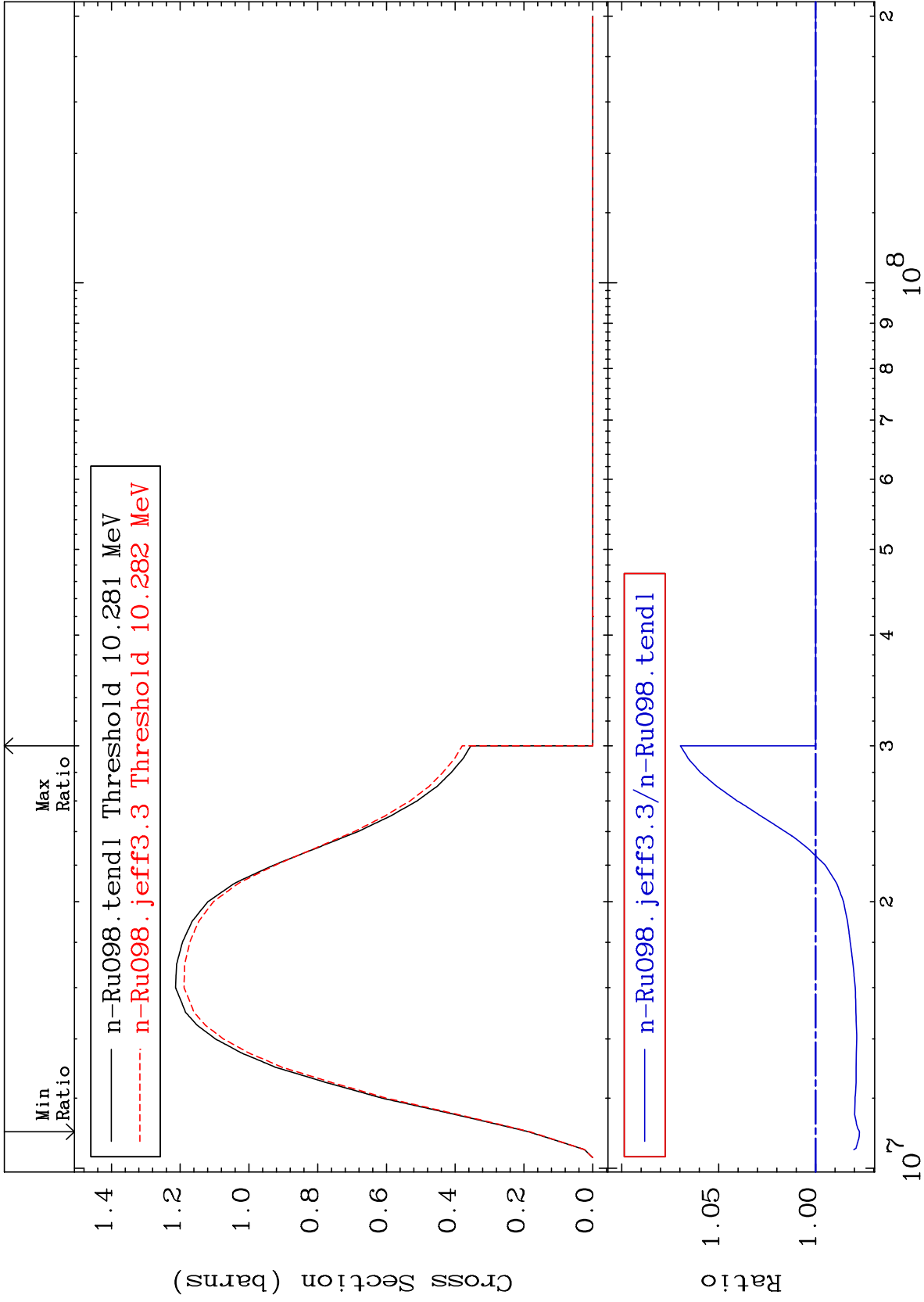
MAT 4431

(n,2n)

44-Ru-98

Cross Section

-2.258 To 6.979 %



44-Ru-98

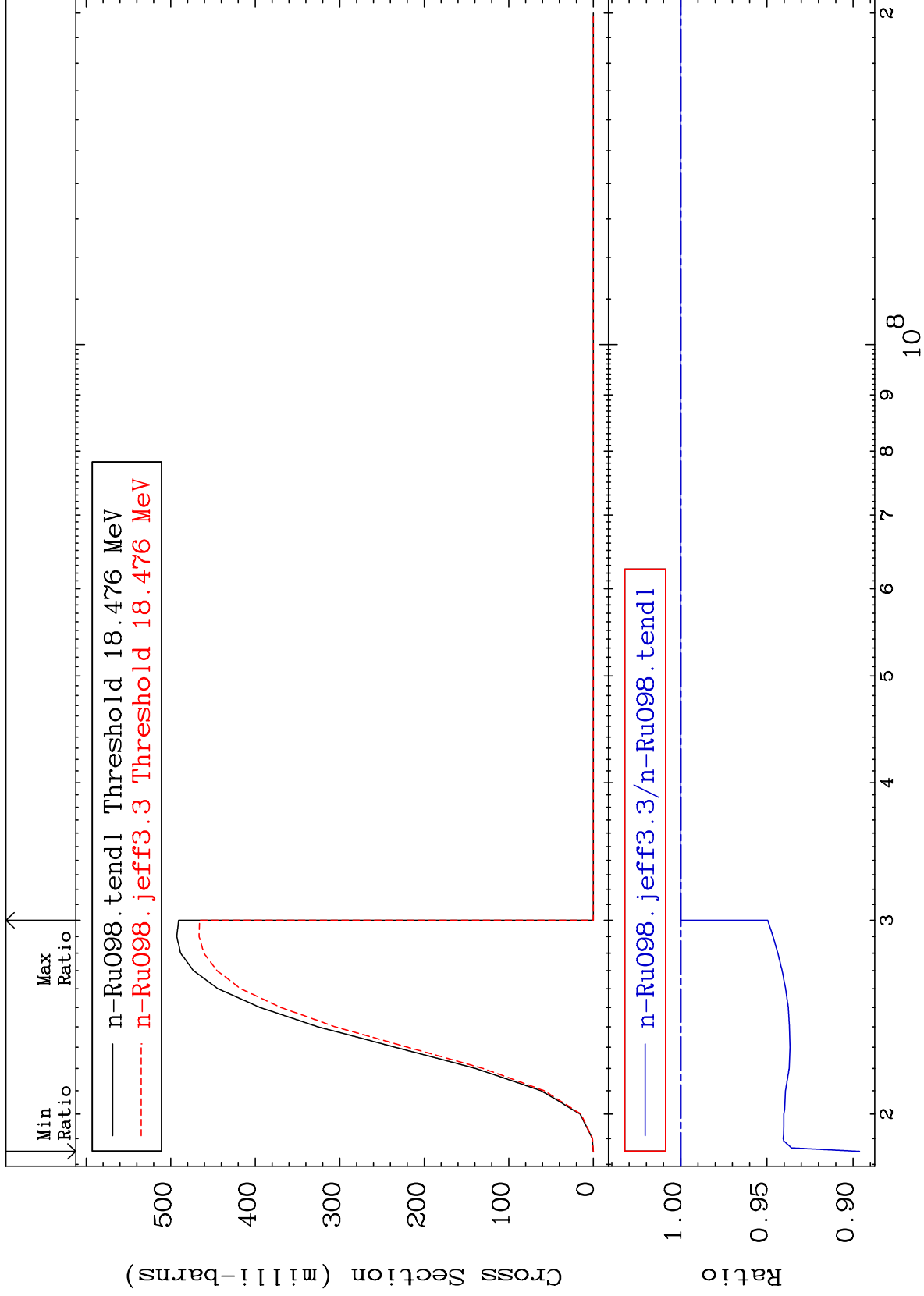
MAT 4431

(n,3n)

44-Ru-98

Cross Section

-10.38 To 0.000 %



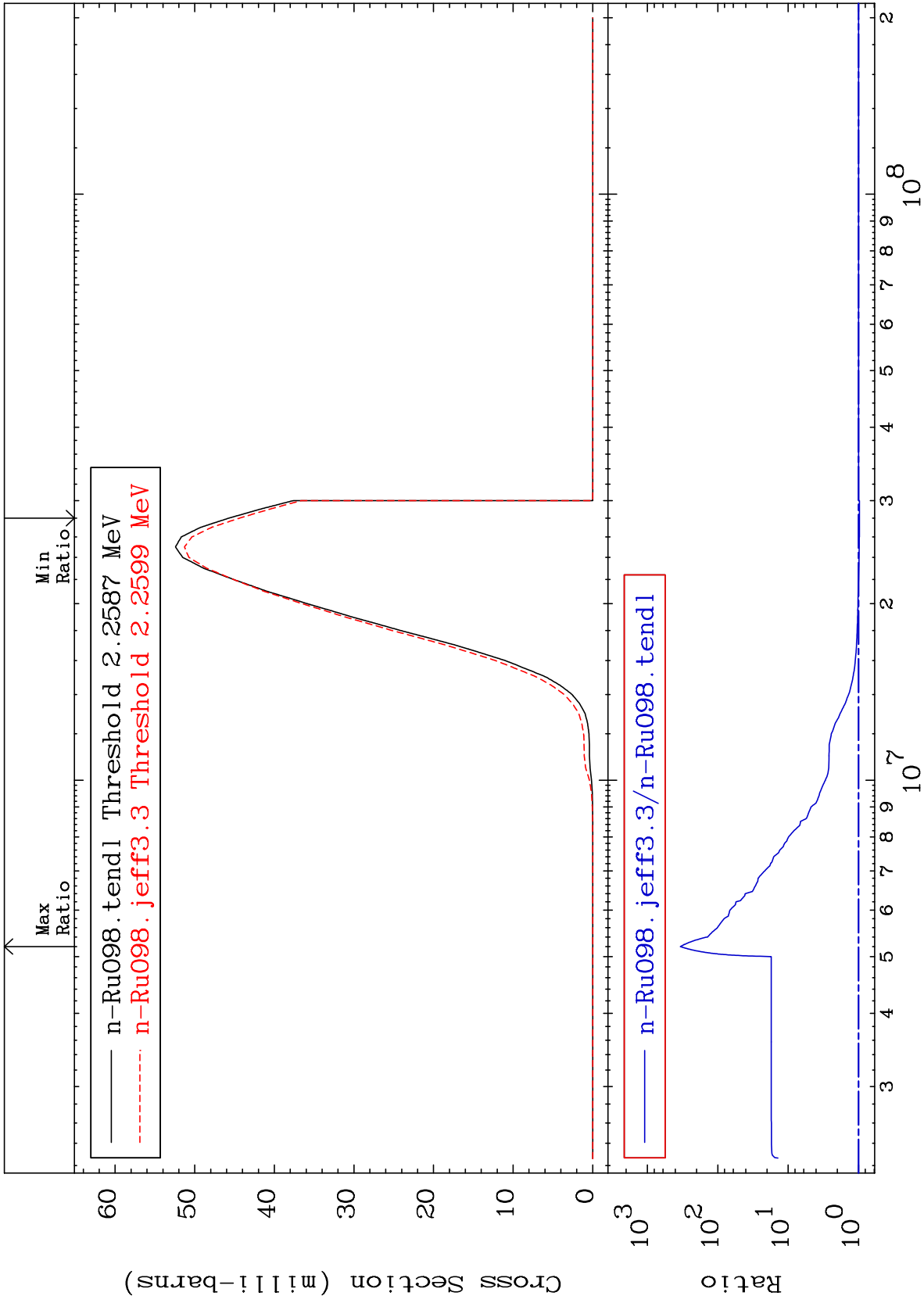
MAT 4431

(n, n') α

44-Ru-98

Cross Section

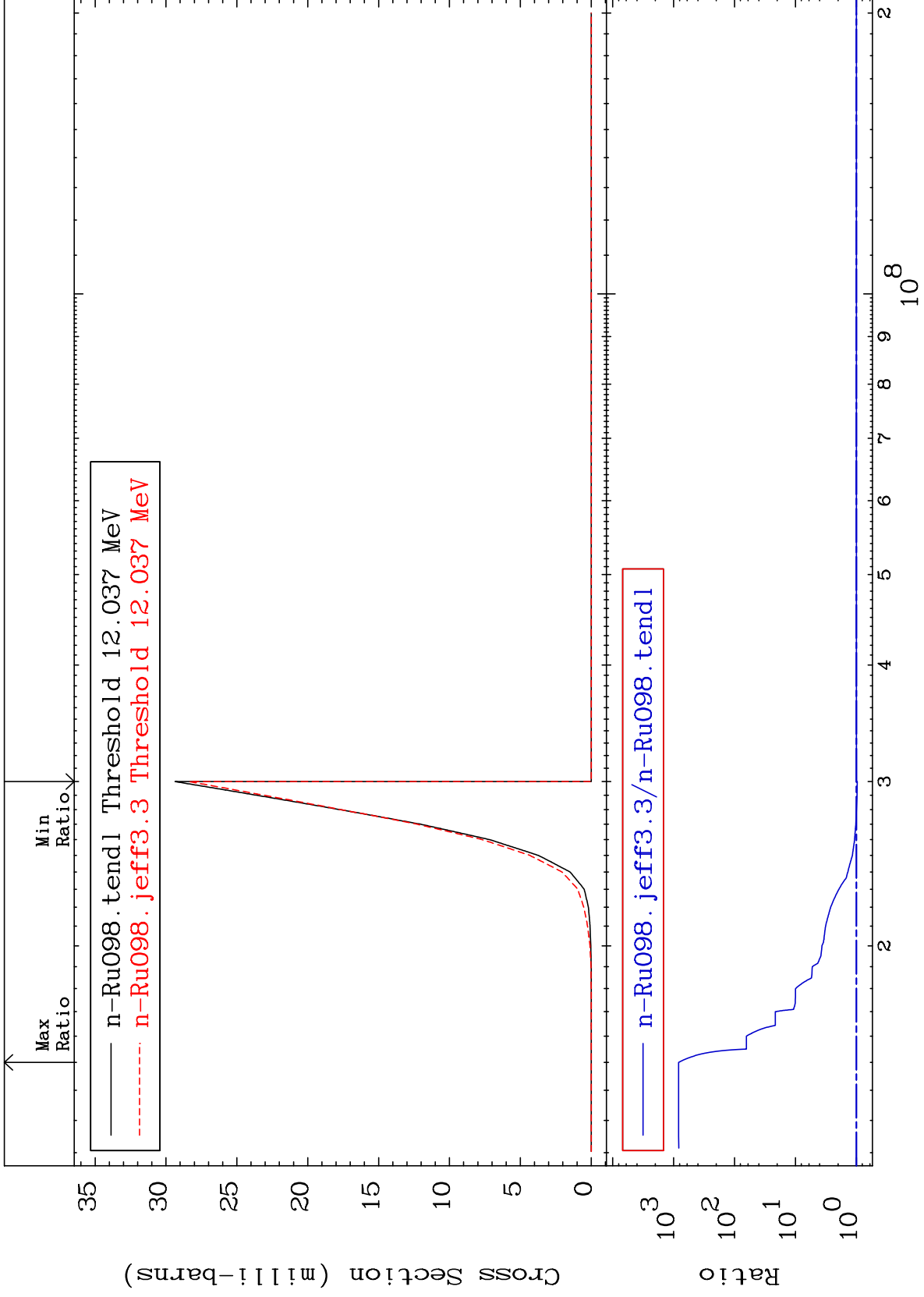
-2.906 To 9999. %



MAT 4431

(n,2n) α
Cross Section

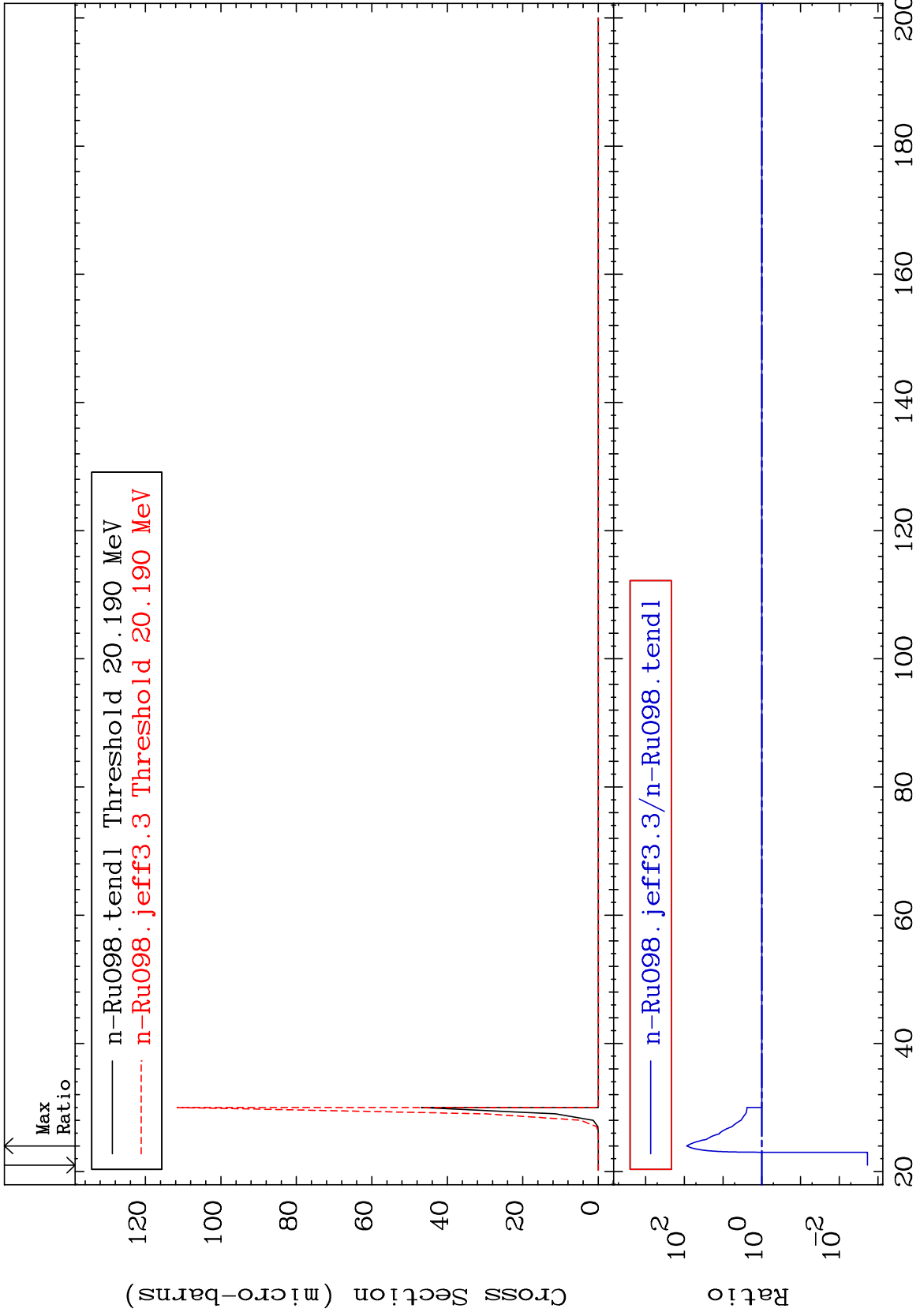
44-Ru-98
-3.363 To 9999. %



MAT 4431

(n,3n) α
Cross Section

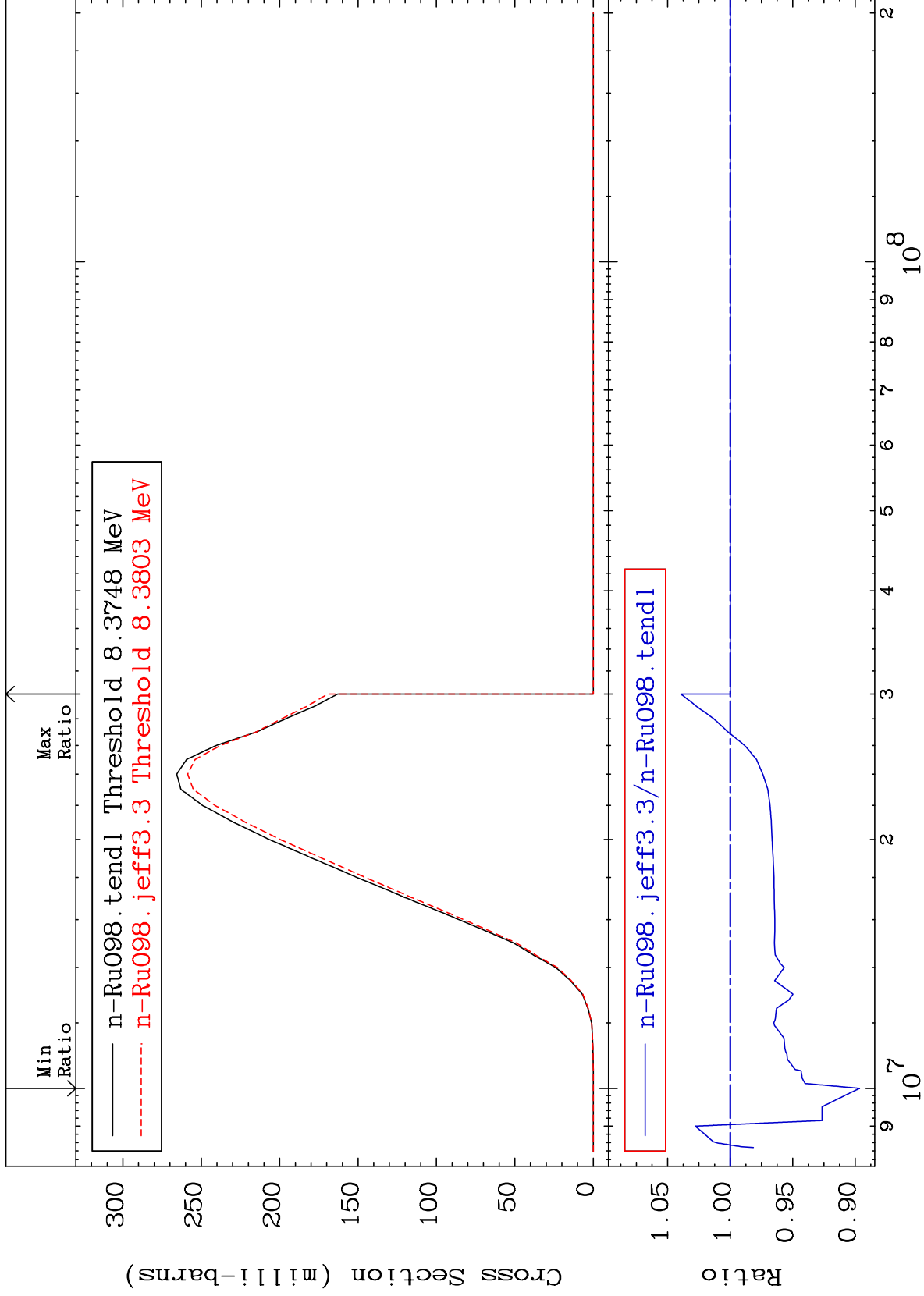
44-Ru-98
-99.81 To 8560. %



MAT 4431

(n,n') p
Cross Section

44-Ru-98
-10.35 To 3.953 %



10

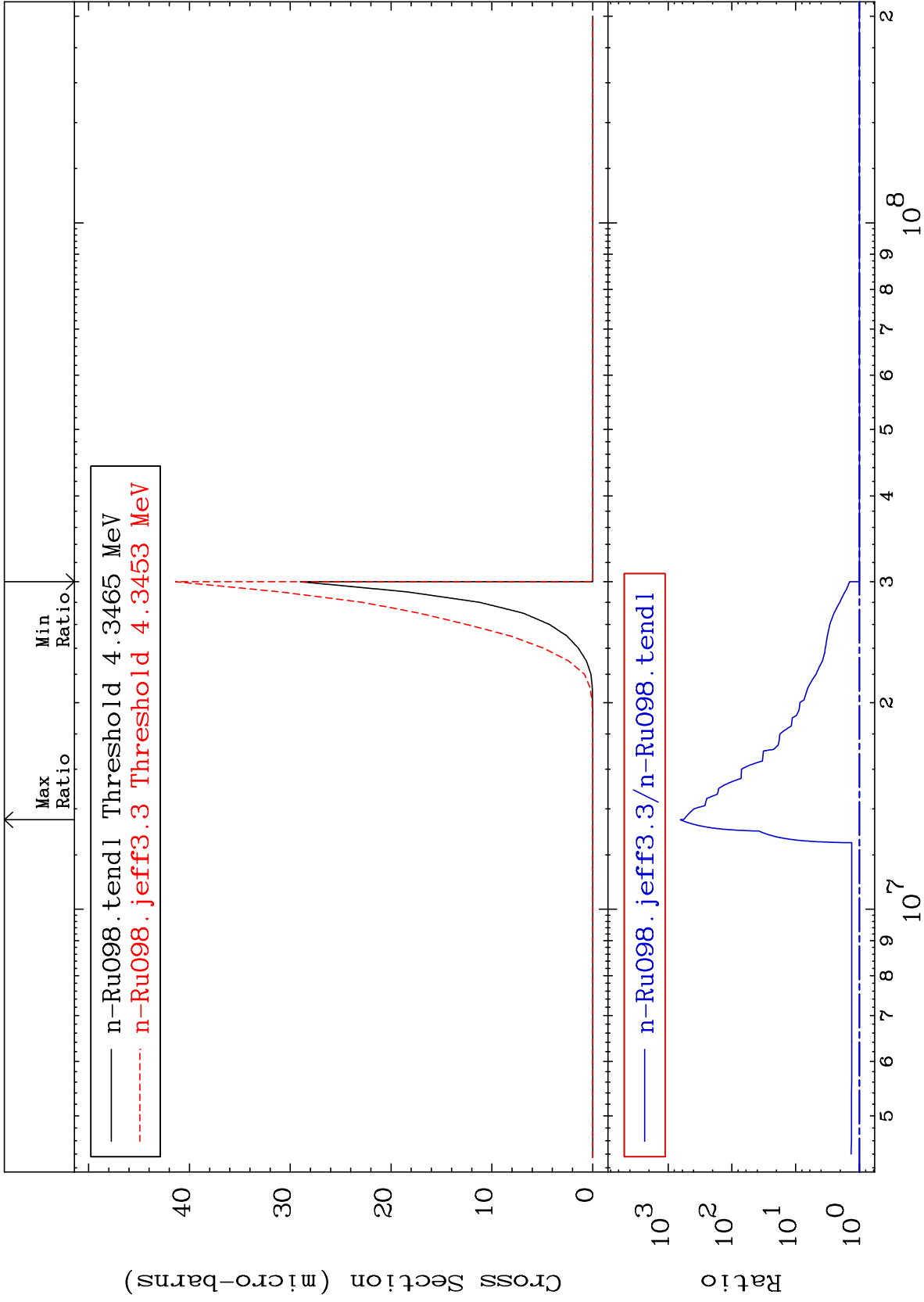
Incident Energy (eV)

44-Ru-98

MAT 4431

(n, n') 2α
Cross Section

44-Ru-98
To 9999. %
0.000



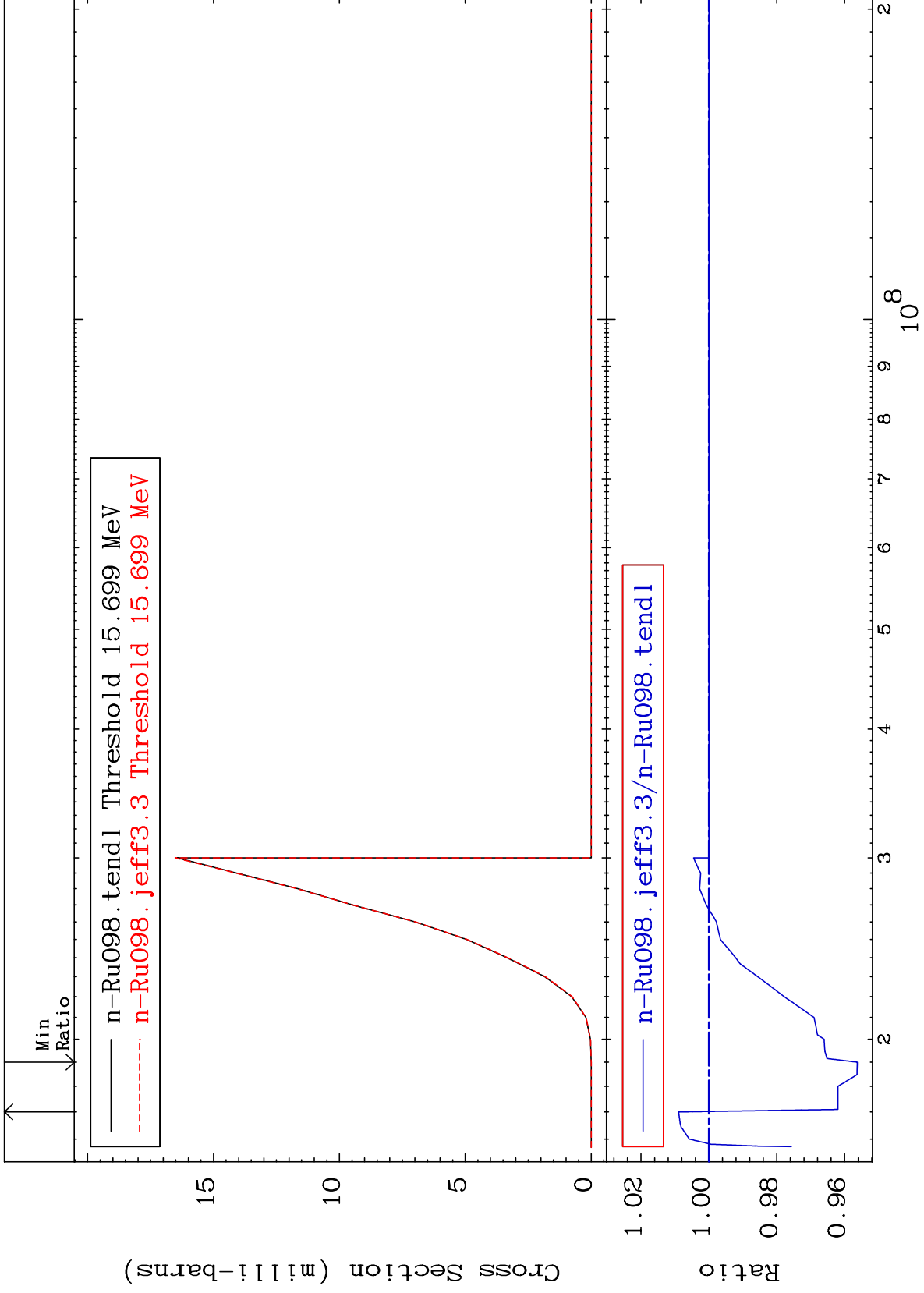
MAT 4431

(n,n') d

44-Ru-98

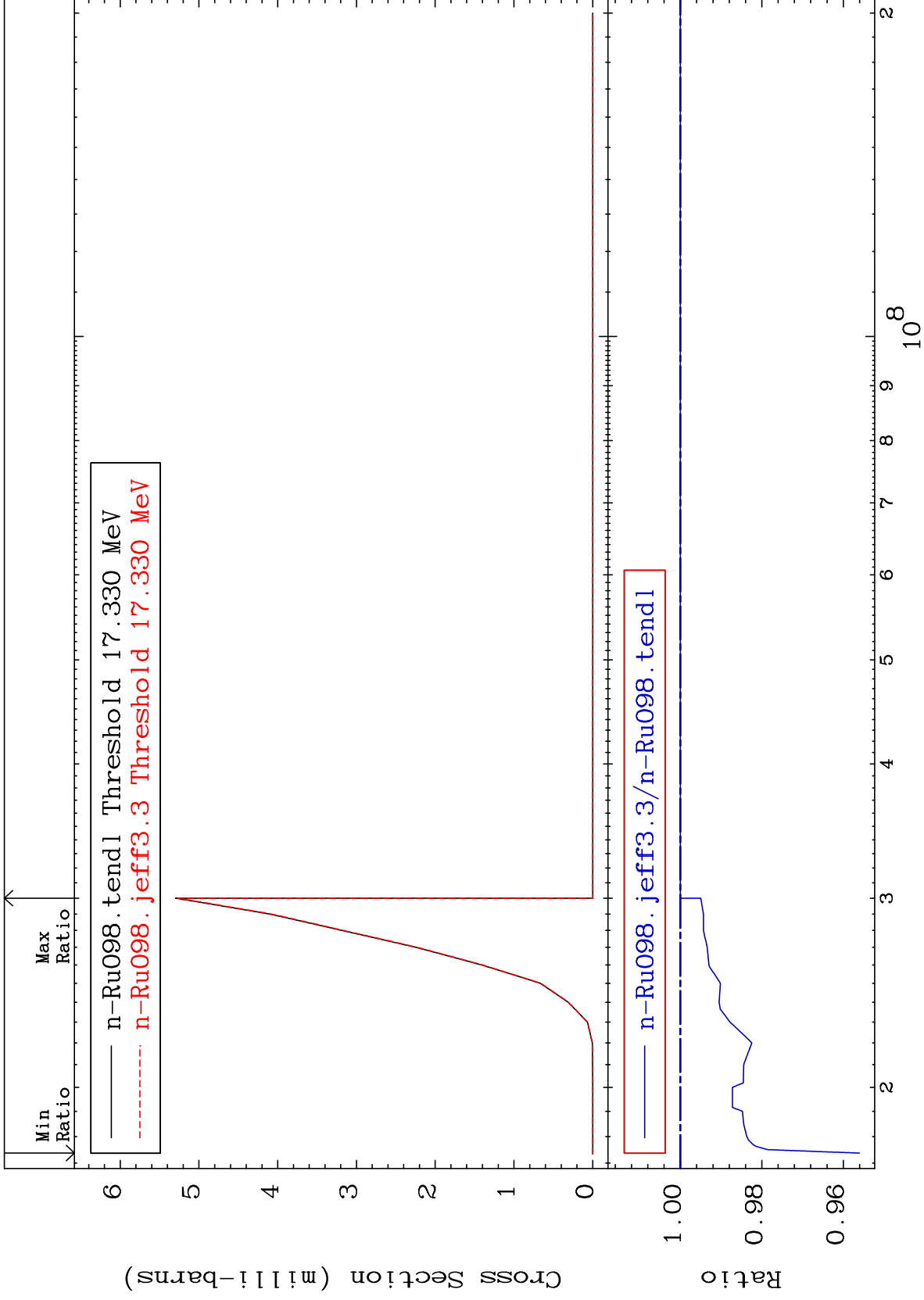
Cross Section

-4.371 To 0.892 %



Cross Section

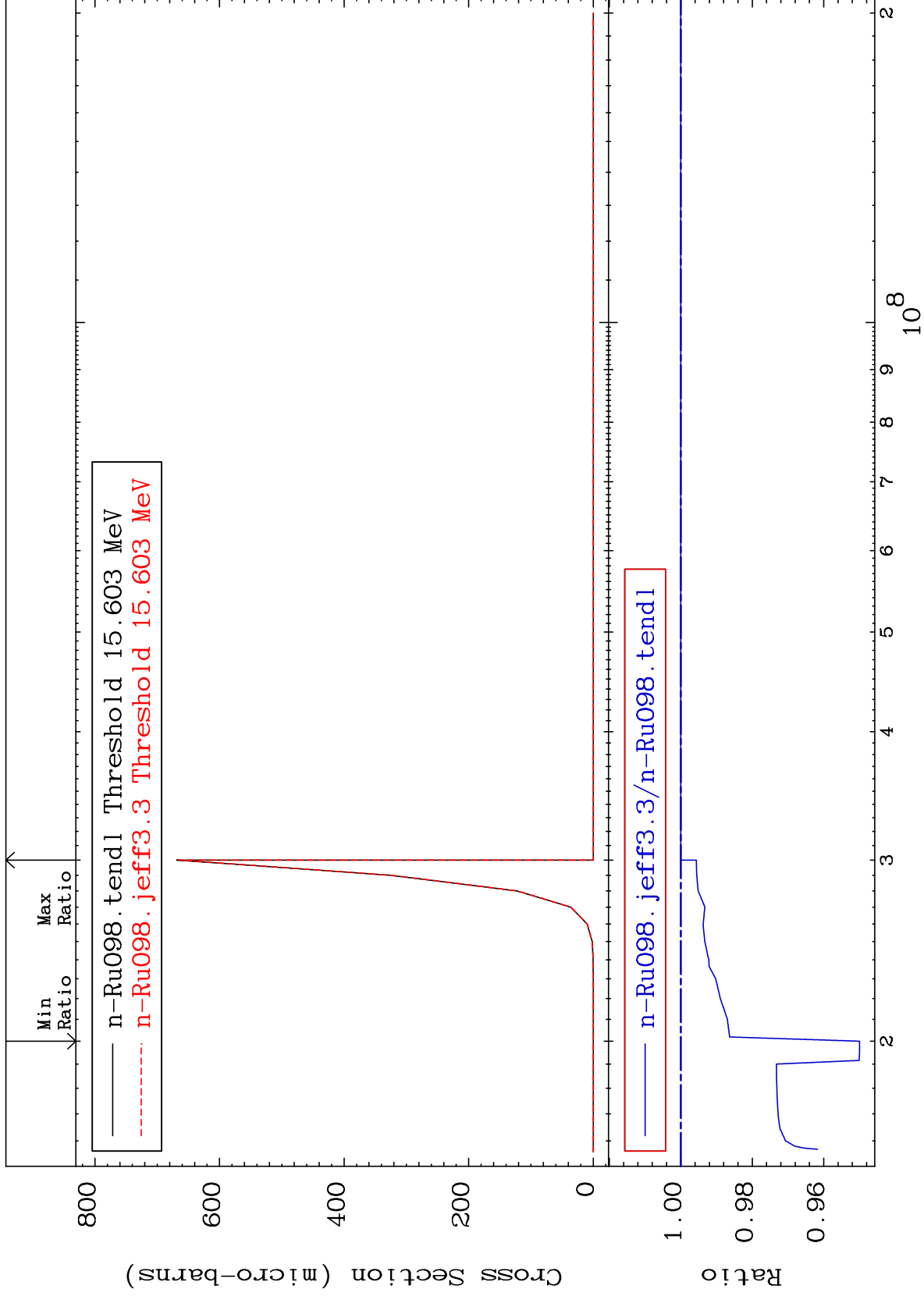
-4.395 To 0.000 %



MAT 4431

(n, n') He-3
Cross Section

44-Ru-98
-5.002 To 0.000 %



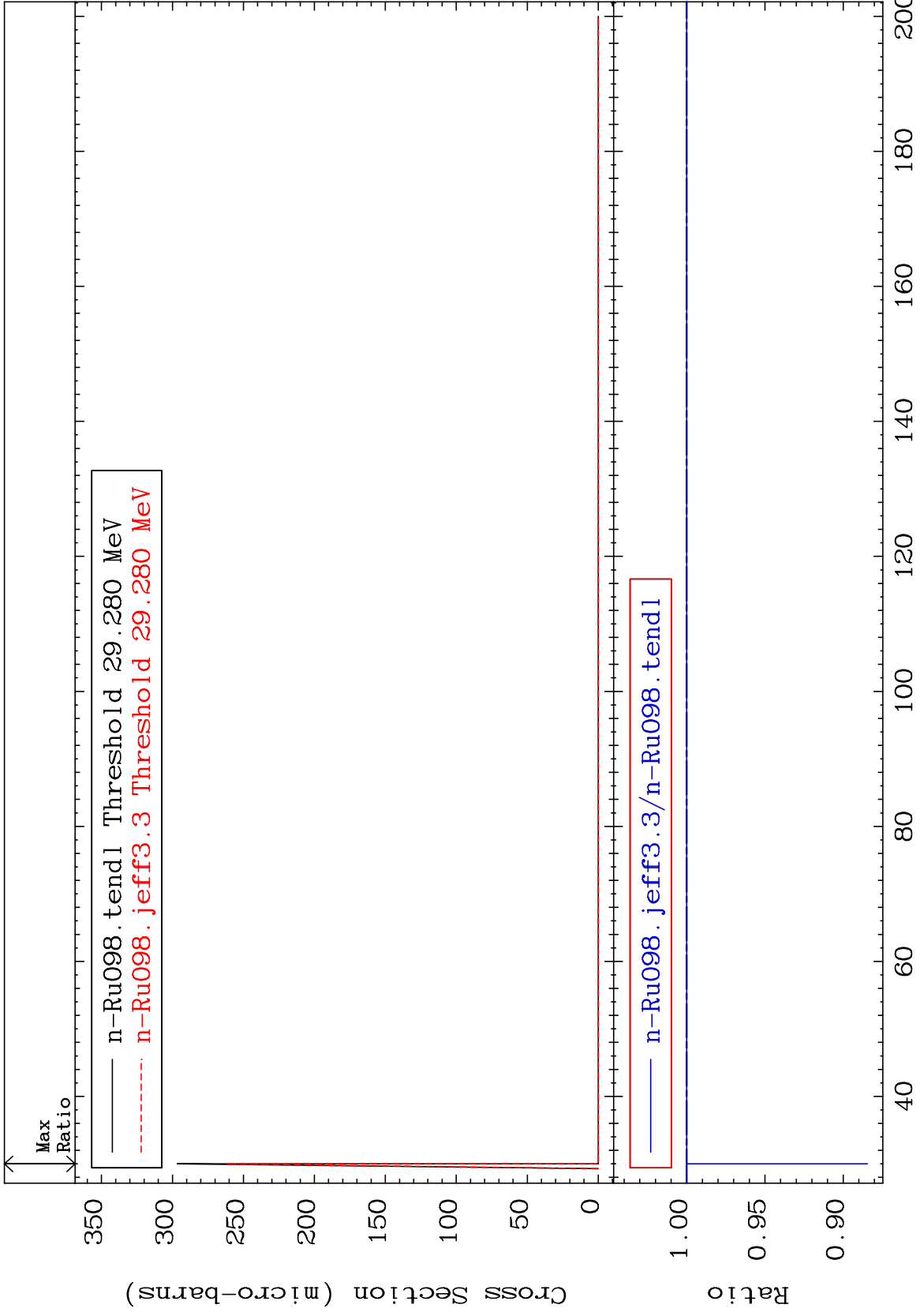
MAT 4431

(n,4n)

44-Ru-98

Cross Section

-11.55 To 0.000 %



15

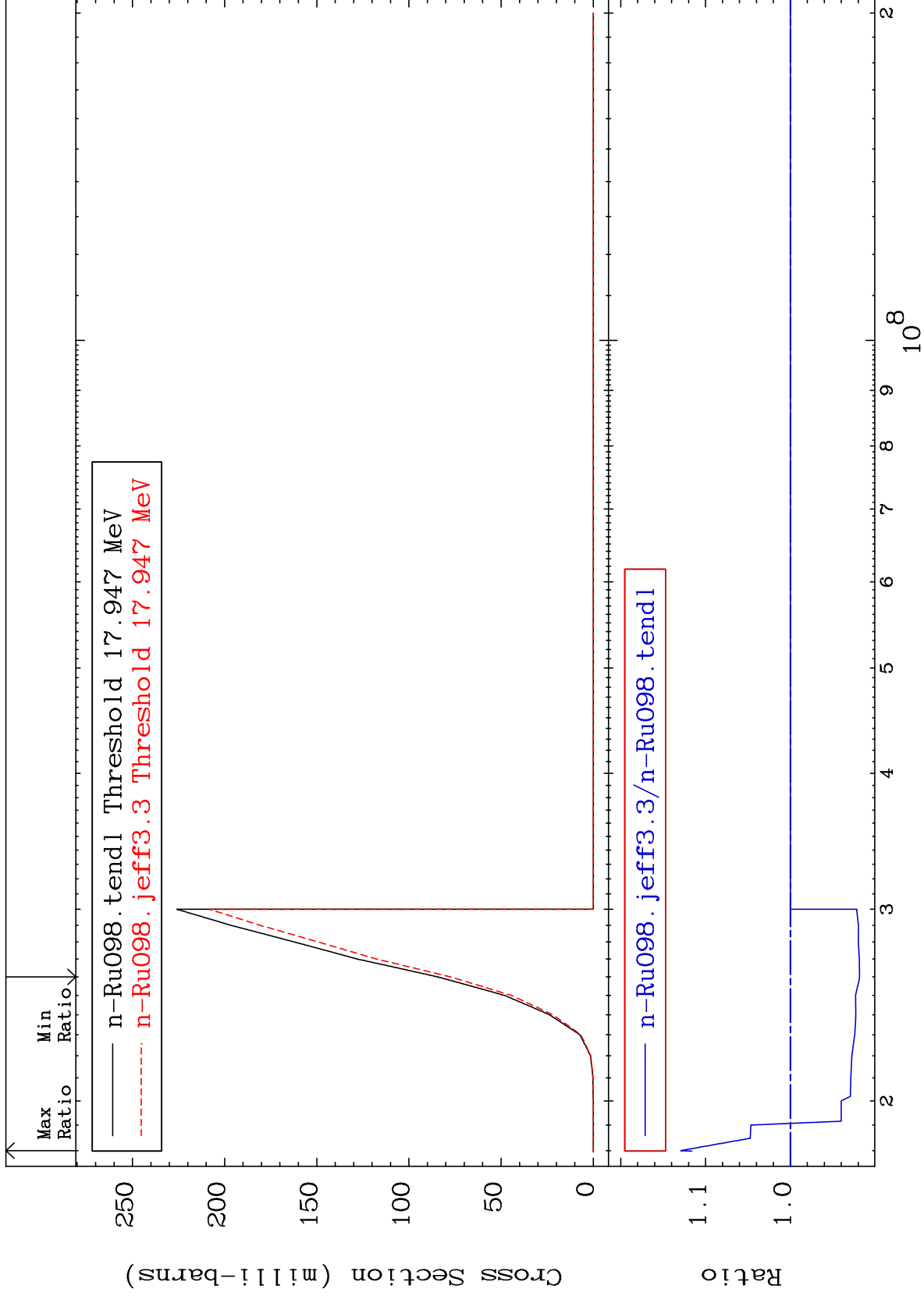
Incident Energy (MeV)

44-Ru-98

MAT 4431

(n,2n) p
Cross Section

44-Ru-98
-8.157 To 12.92 %



16

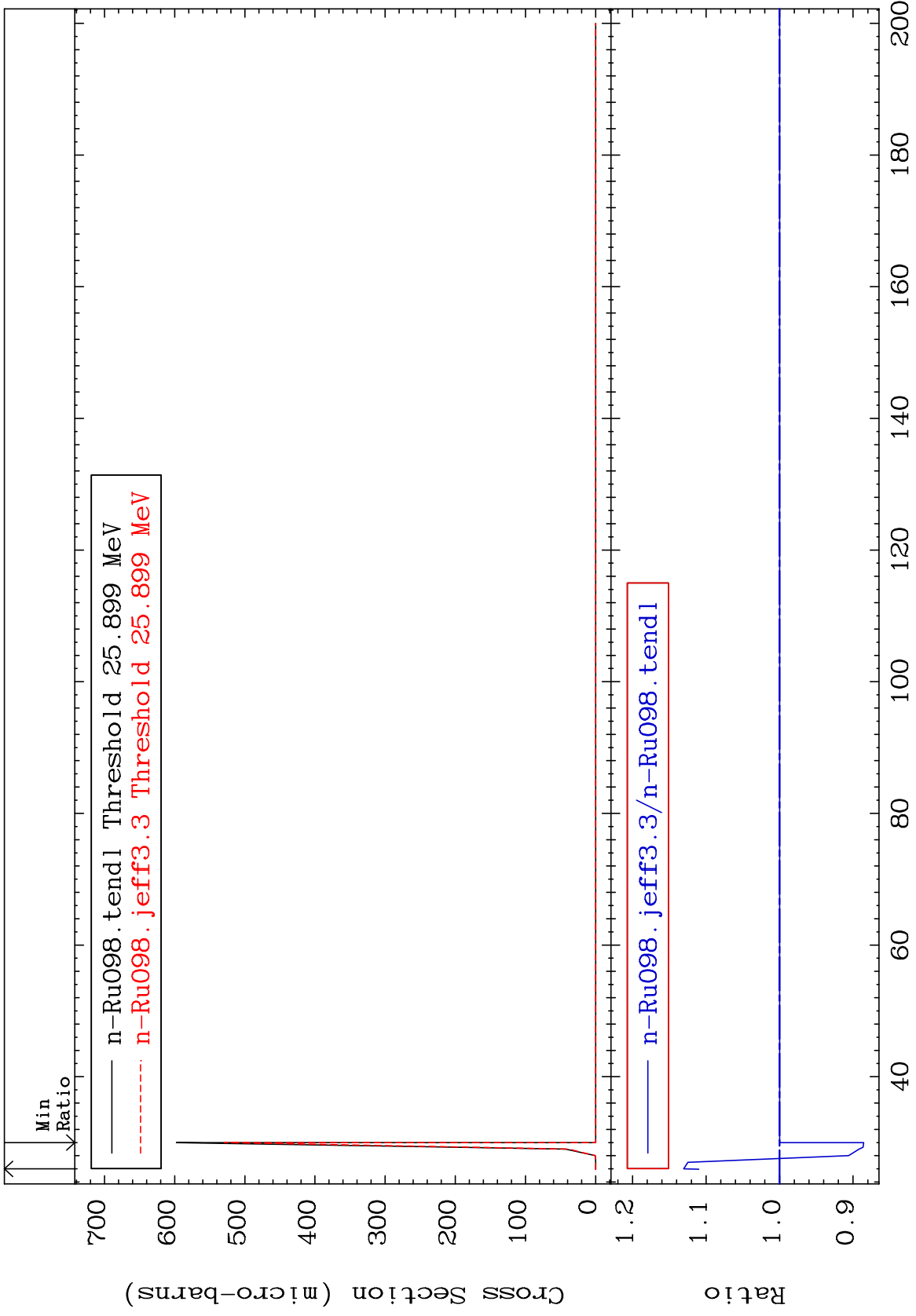
44-Ru-98

44-Ru-98

MAT 4431

(n,3n) p
Cross Section

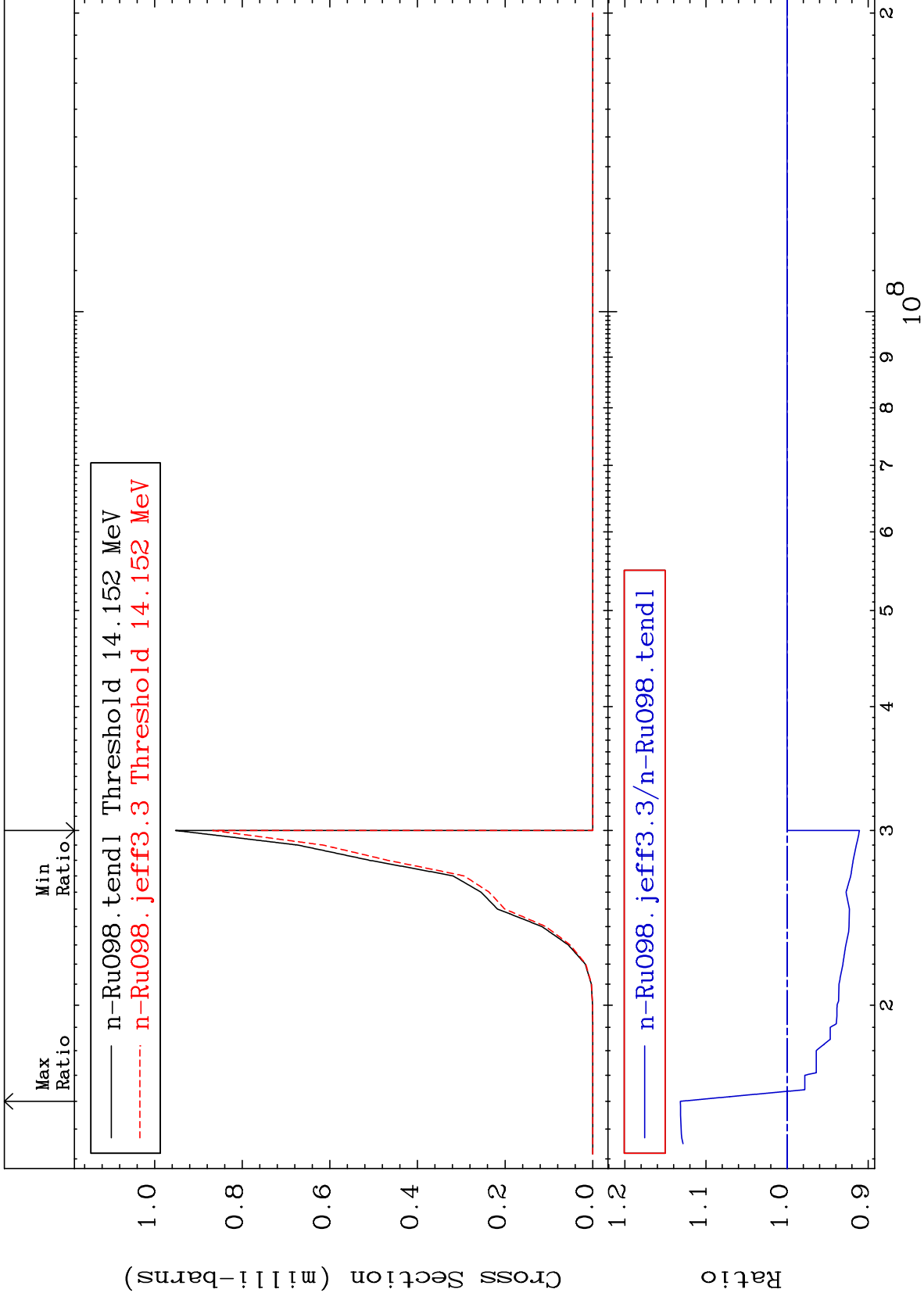
44-Ru-98
-11.44 To 13.03 %



MAT 4431

(n,2n) p
Cross Section

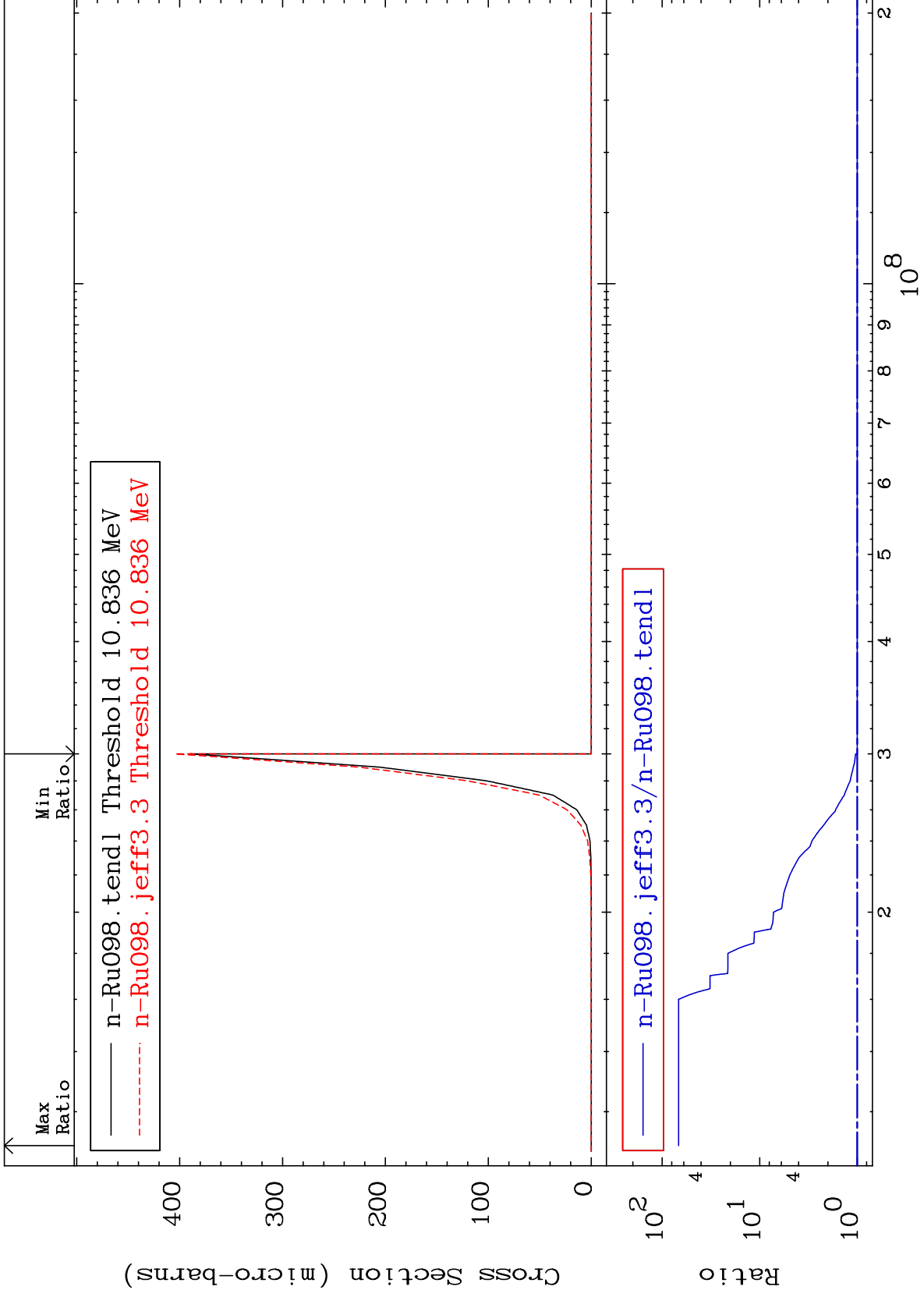
44-Ru-98
-8.915 To 13.16 %



MAT 4431

(n,n') p α
Cross Section

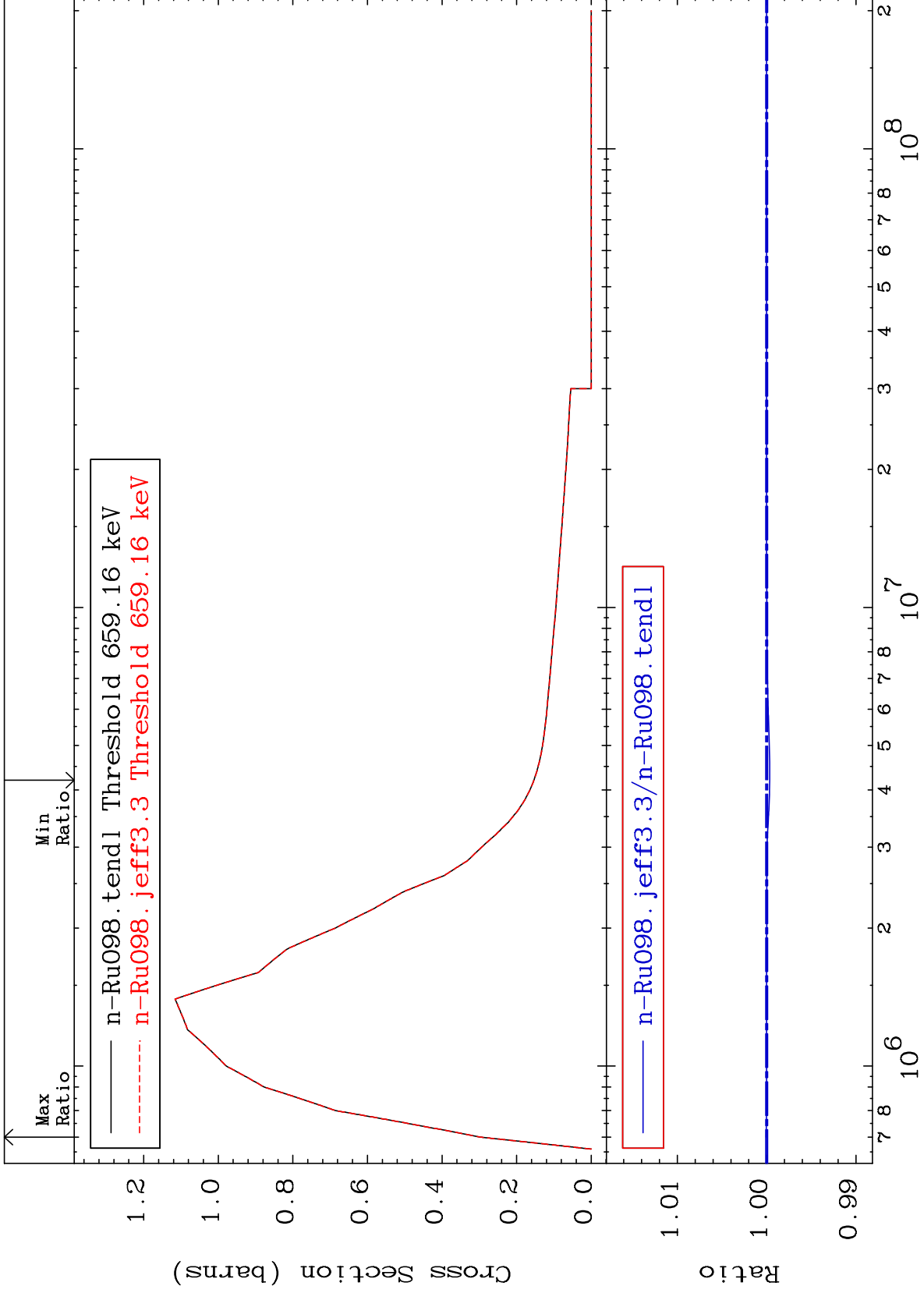
44-Ru-98
0.000 To 6691. %



MAT 4431

MT= 51 (n,n') Level
Cross Section

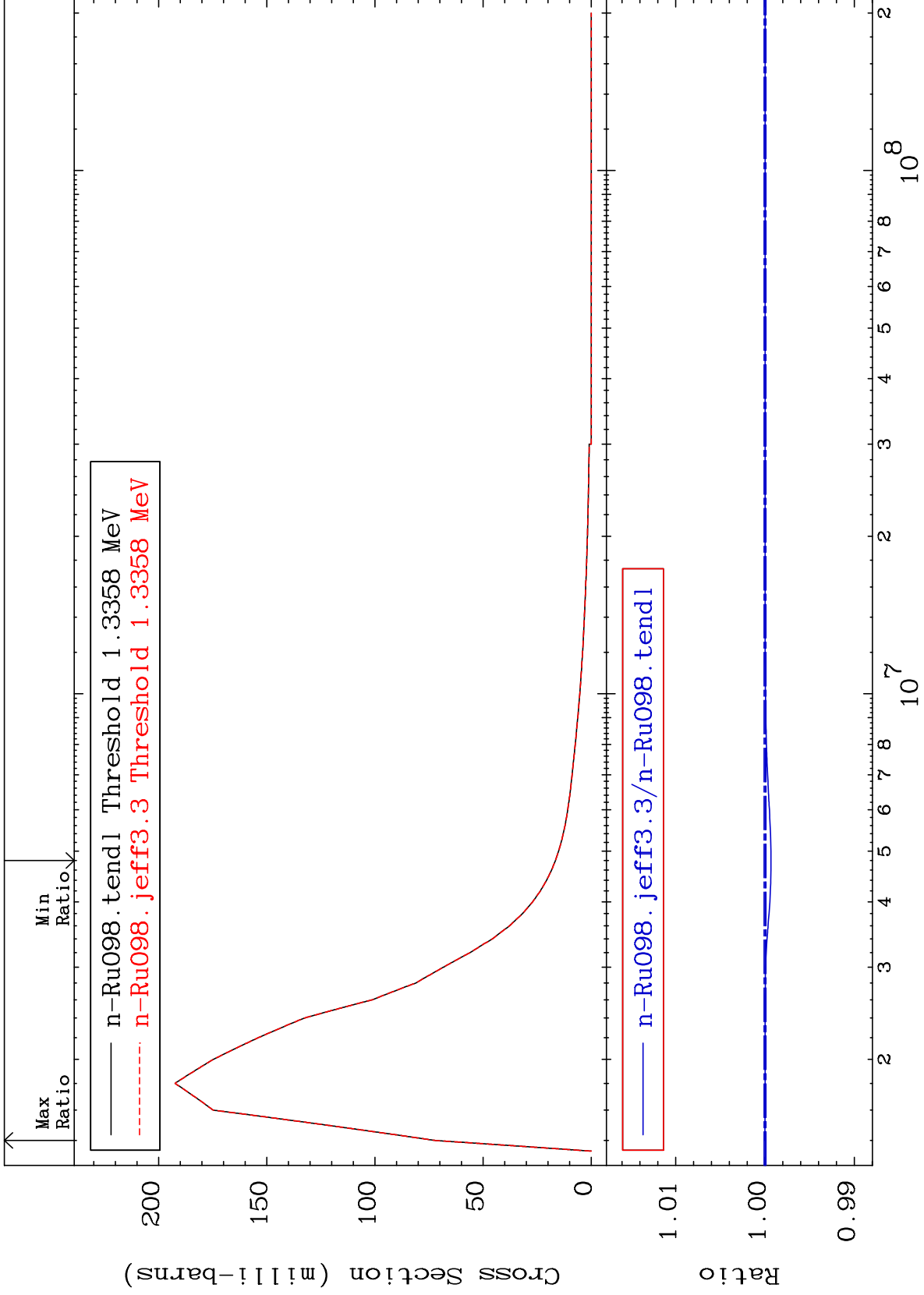
44-Ru-98
-0.034 To 0.005 %



MAT 4431

MT= 52 (n,n') Level
Cross Section

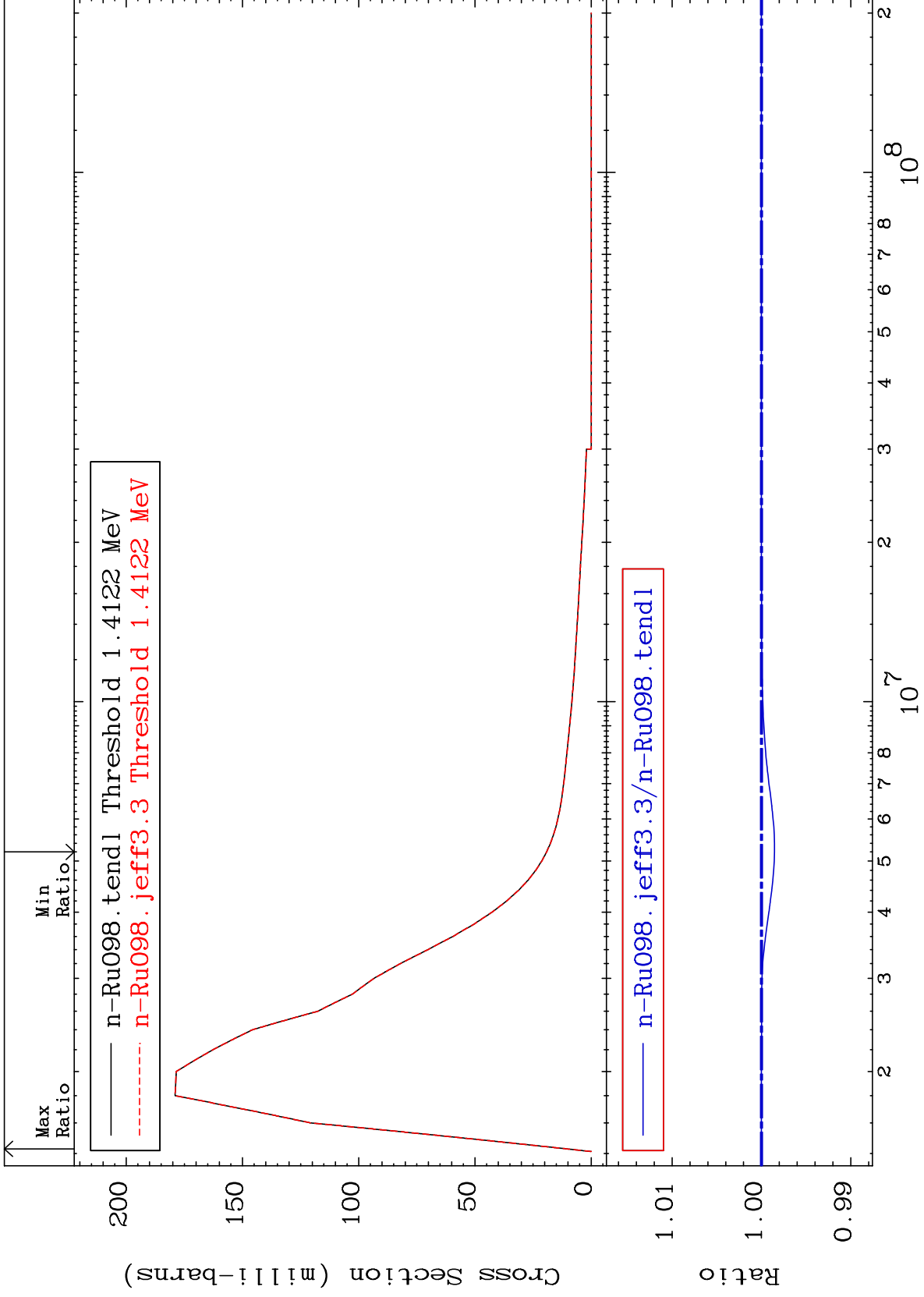
44-Ru-98
-0.067 To 0.001 %



MAT 4431

MT= 53 (n,n') Level
Cross Section

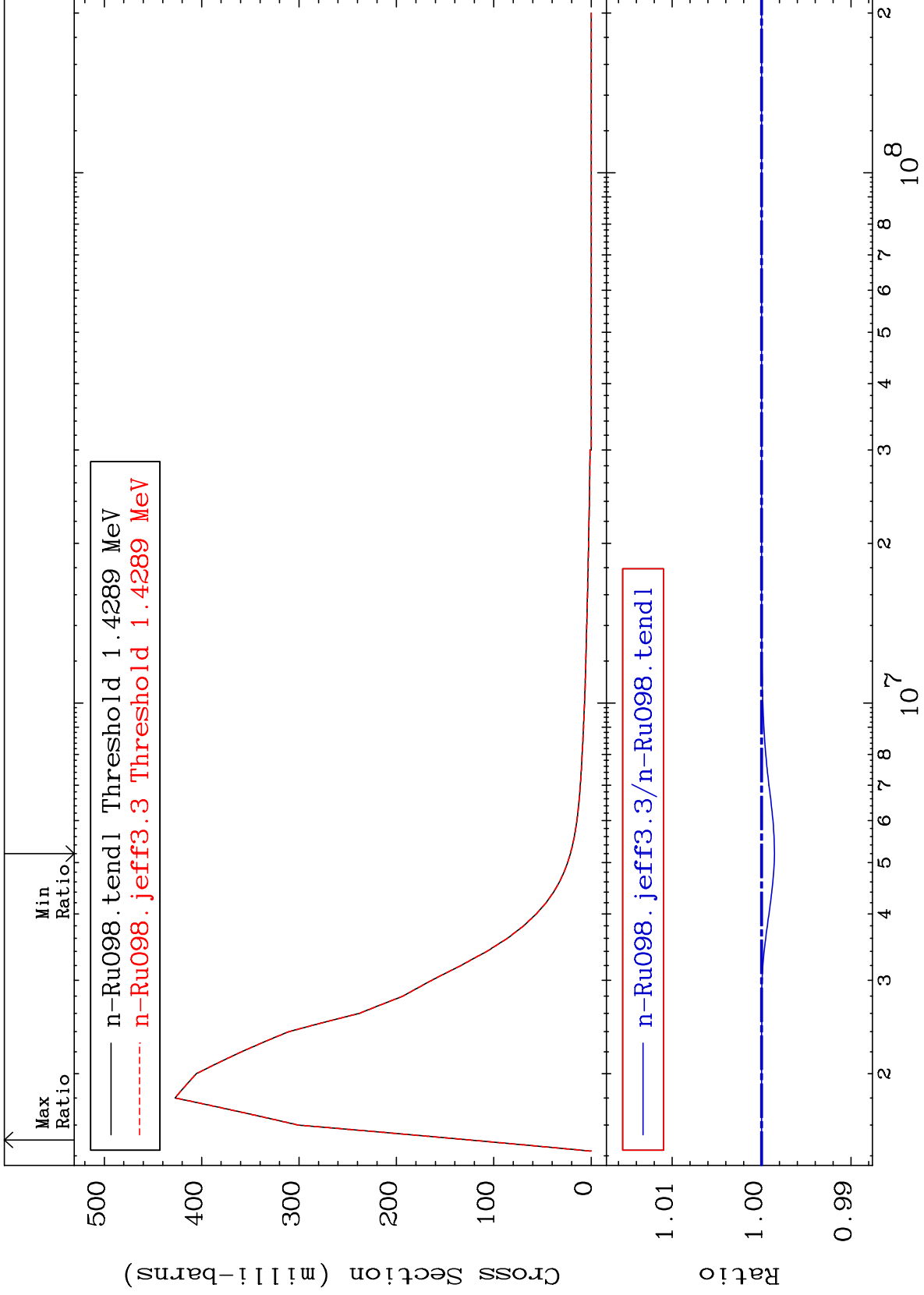
44-Ru-98
-0.146 To 0.000 %



MAT 4431

MT= 54 (n,n') Level
Cross Section

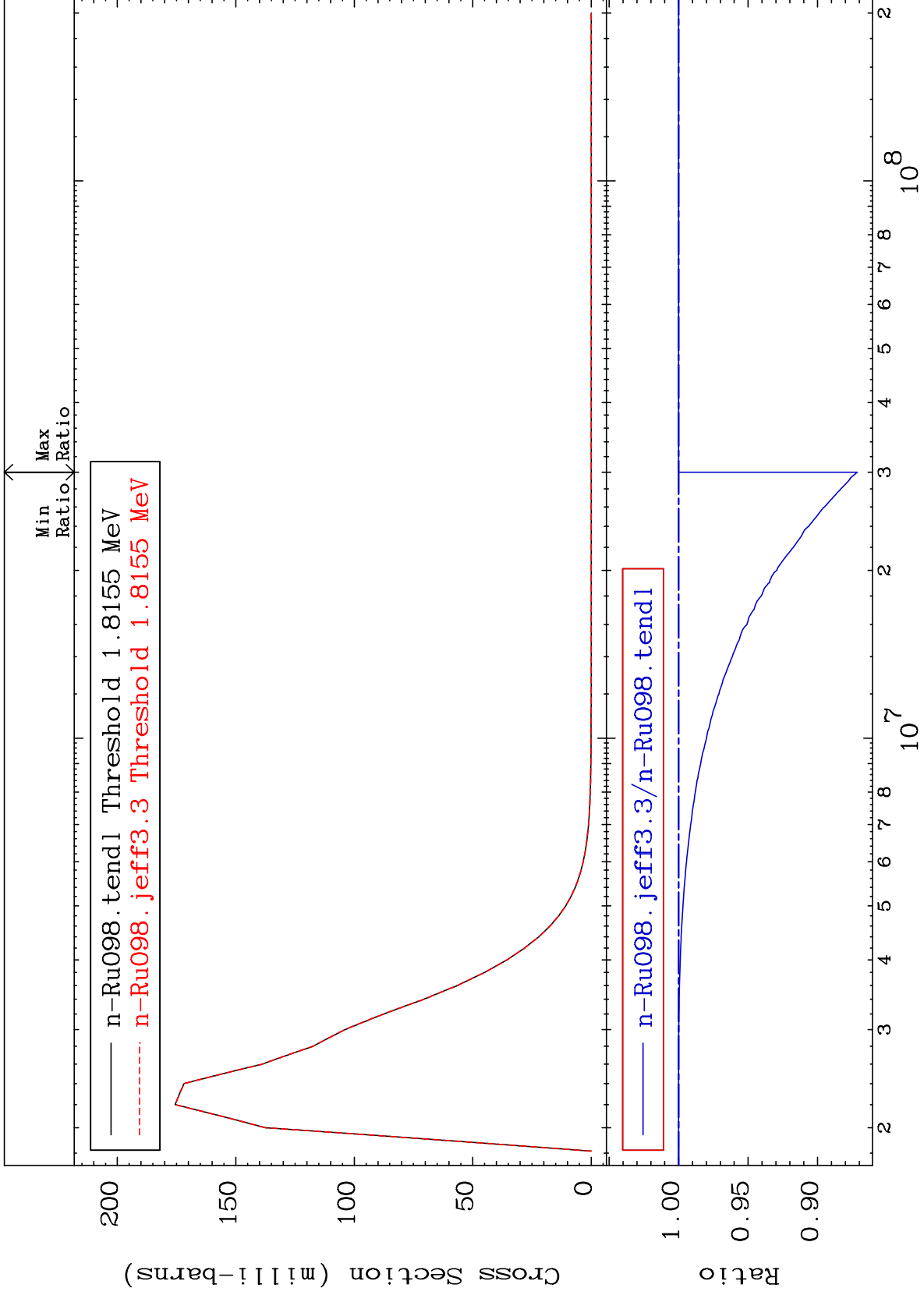
44-Ru-98
-0.144 To 0.000 %



MAT 4431

MT= 55 (n,n') Level
Cross Section

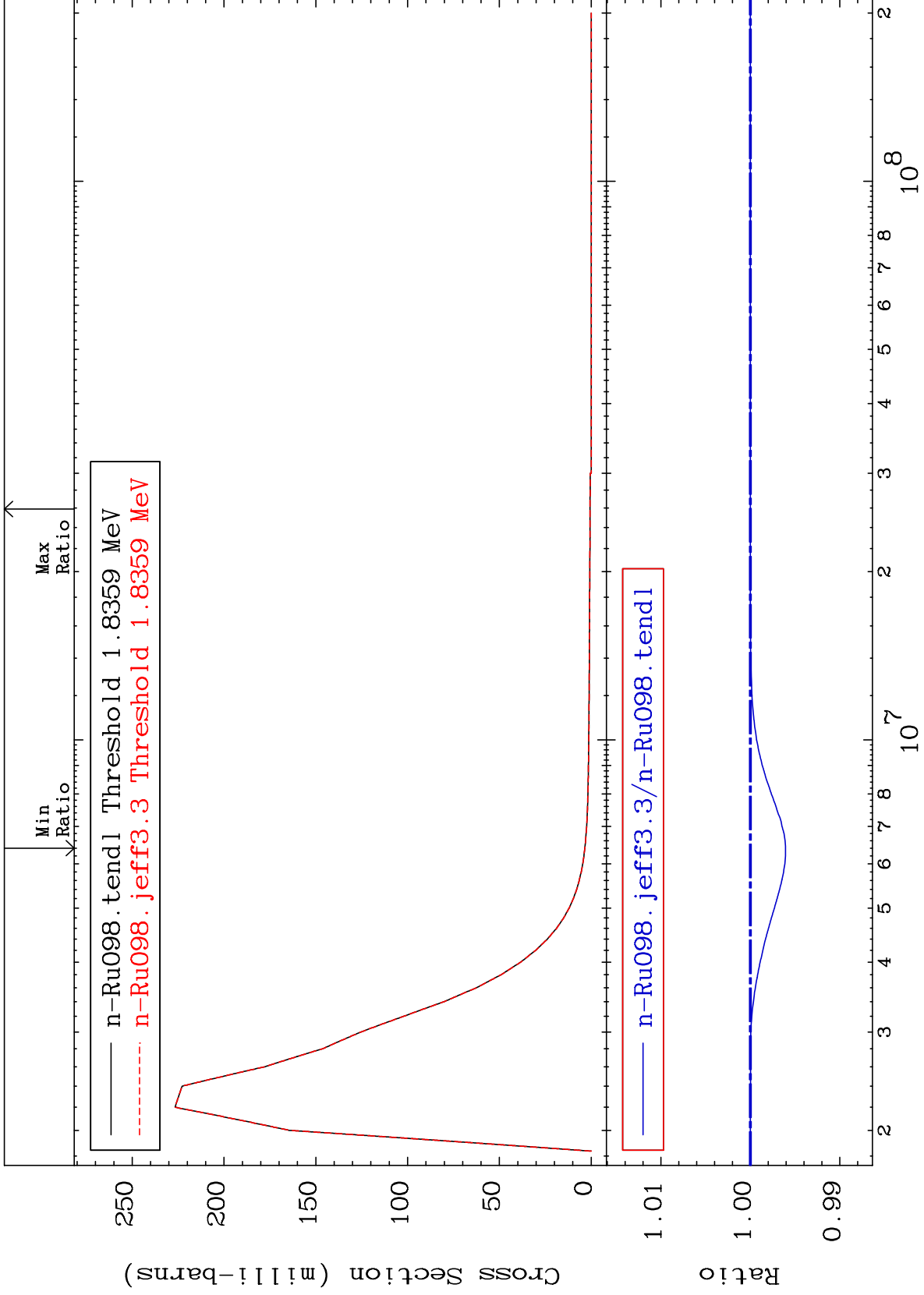
44-Ru-98
-12.85 To 0.000 %



MAT 4431

MT= 56 (n,n') Level
Cross Section

44-Ru-98
-0.393 To 0.000 %



25

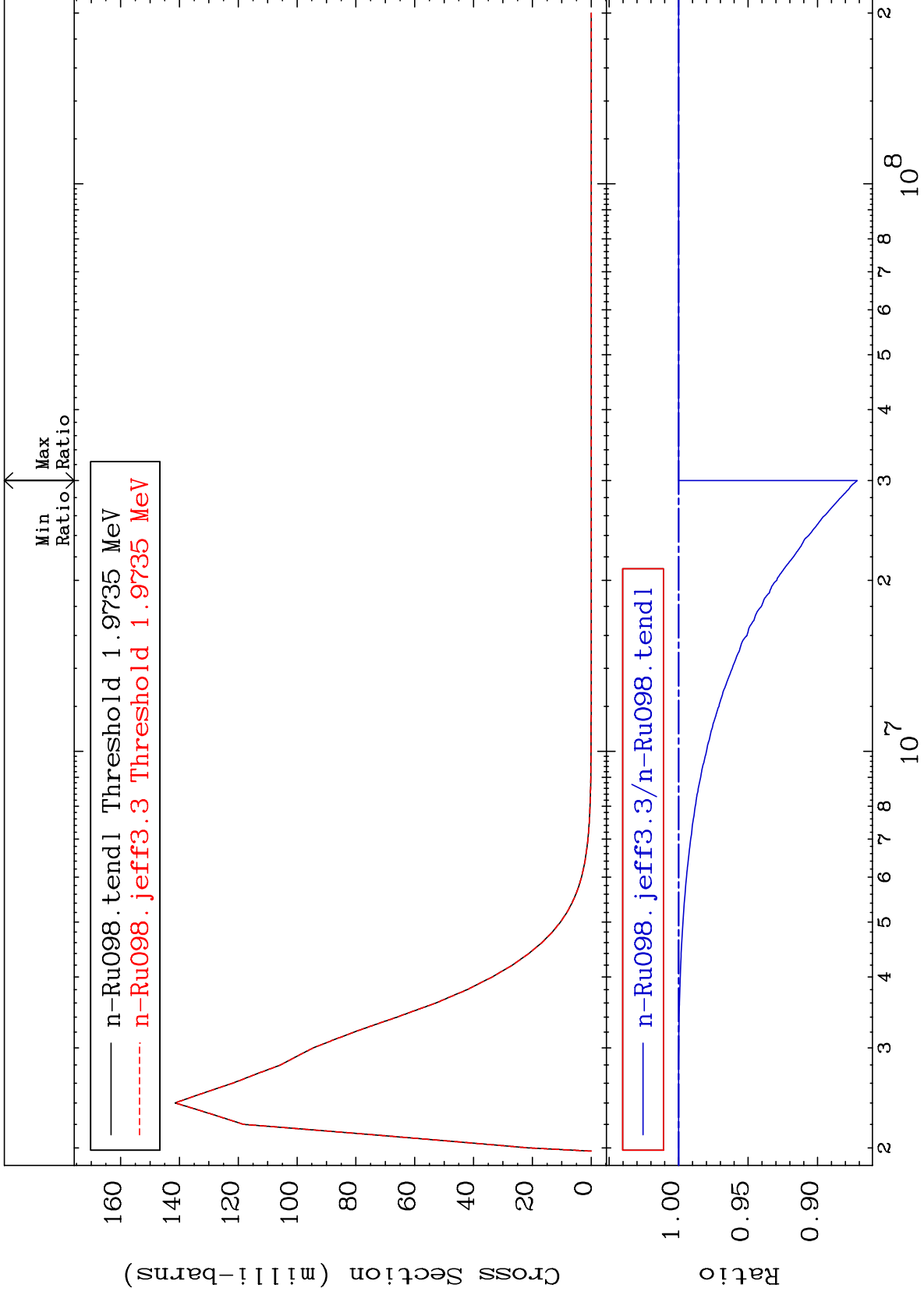
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 57 (n, n') Level
Cross Section

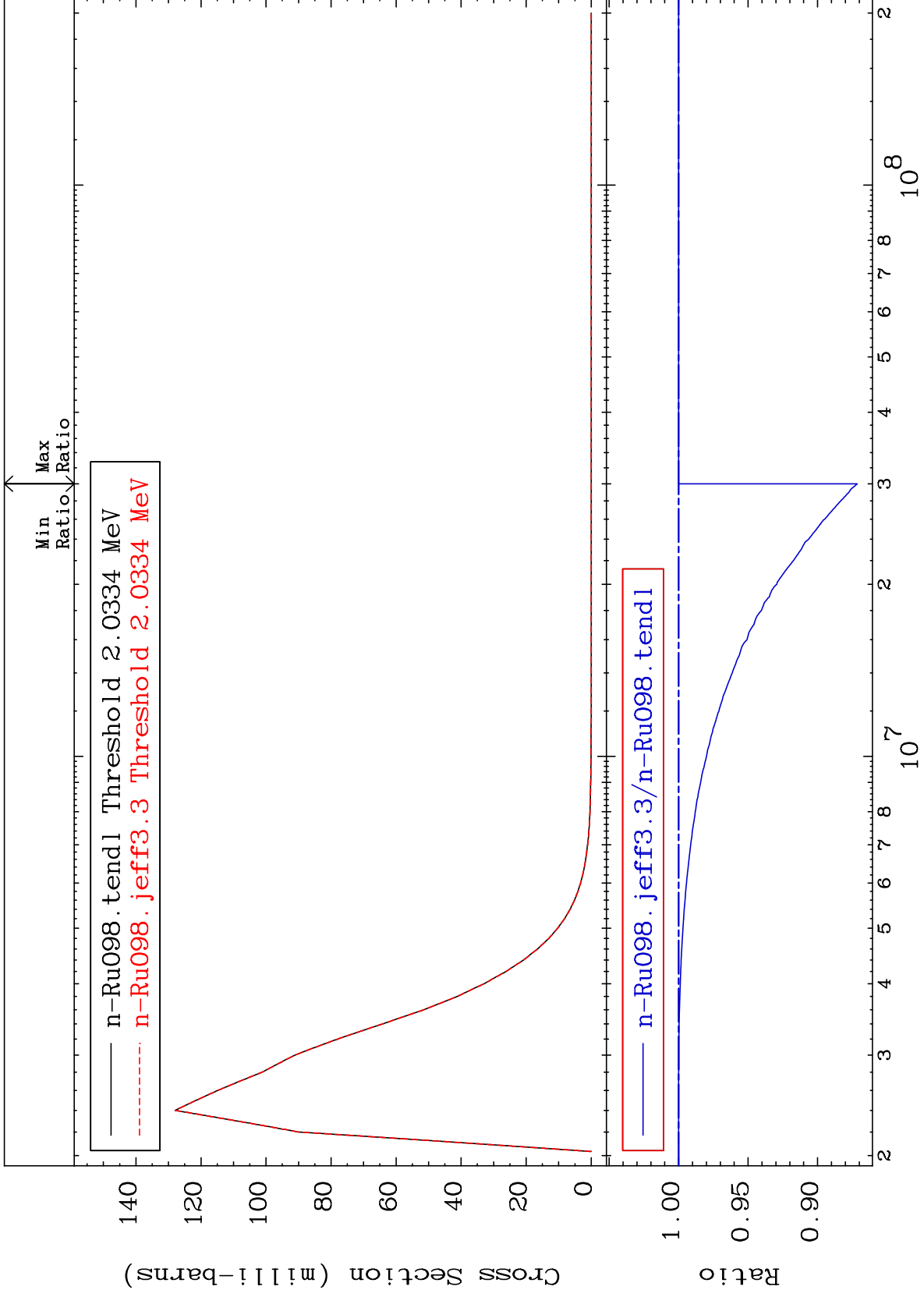
44-Ru-98
-12.85 To 0.000 %



MAT 4431

MT= 58 (n,n') Level
Cross Section

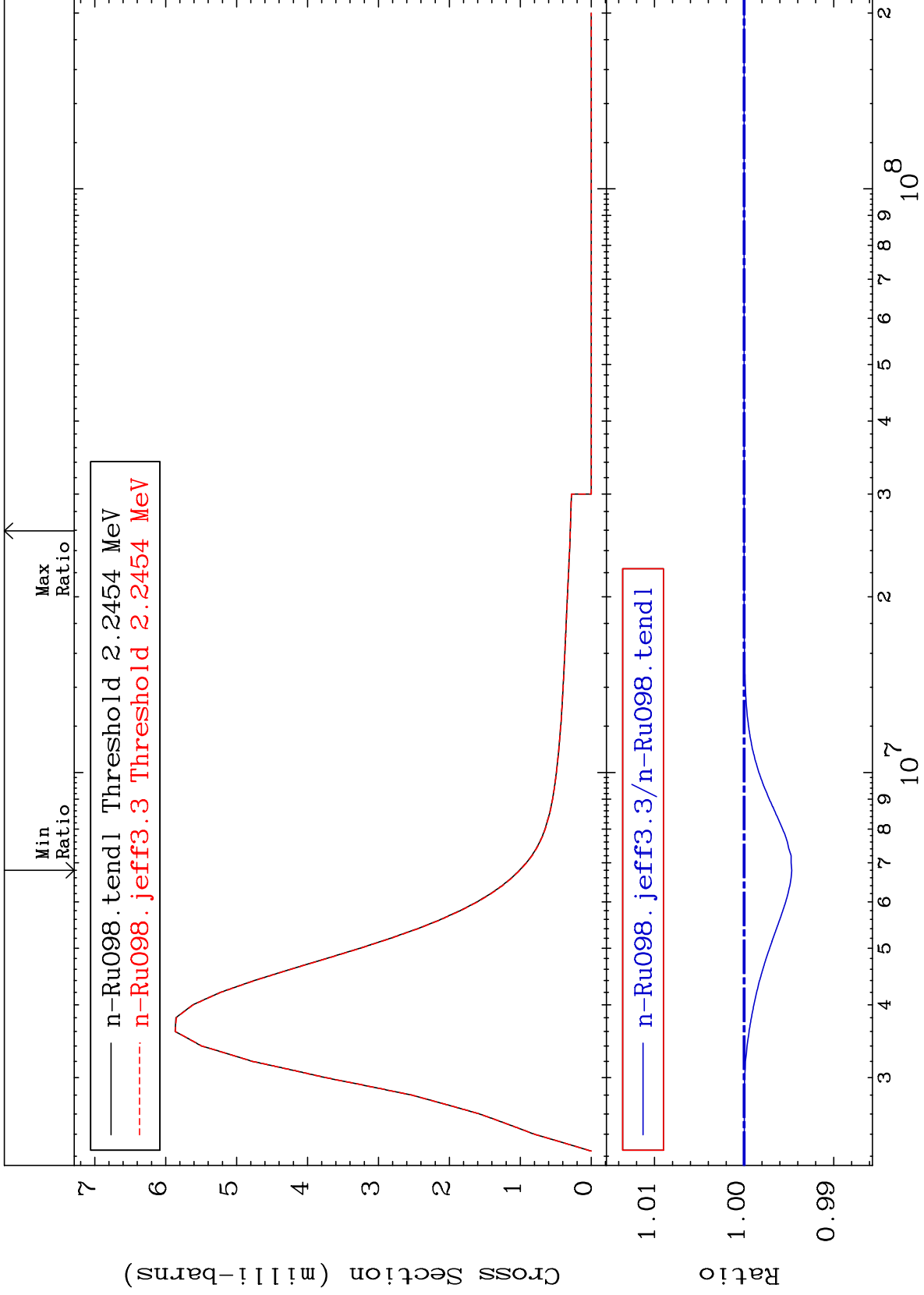
44-Ru-98
-12.85 To 0.000 %



MAT 4431

MT= 59 (n, n') Level
Cross Section

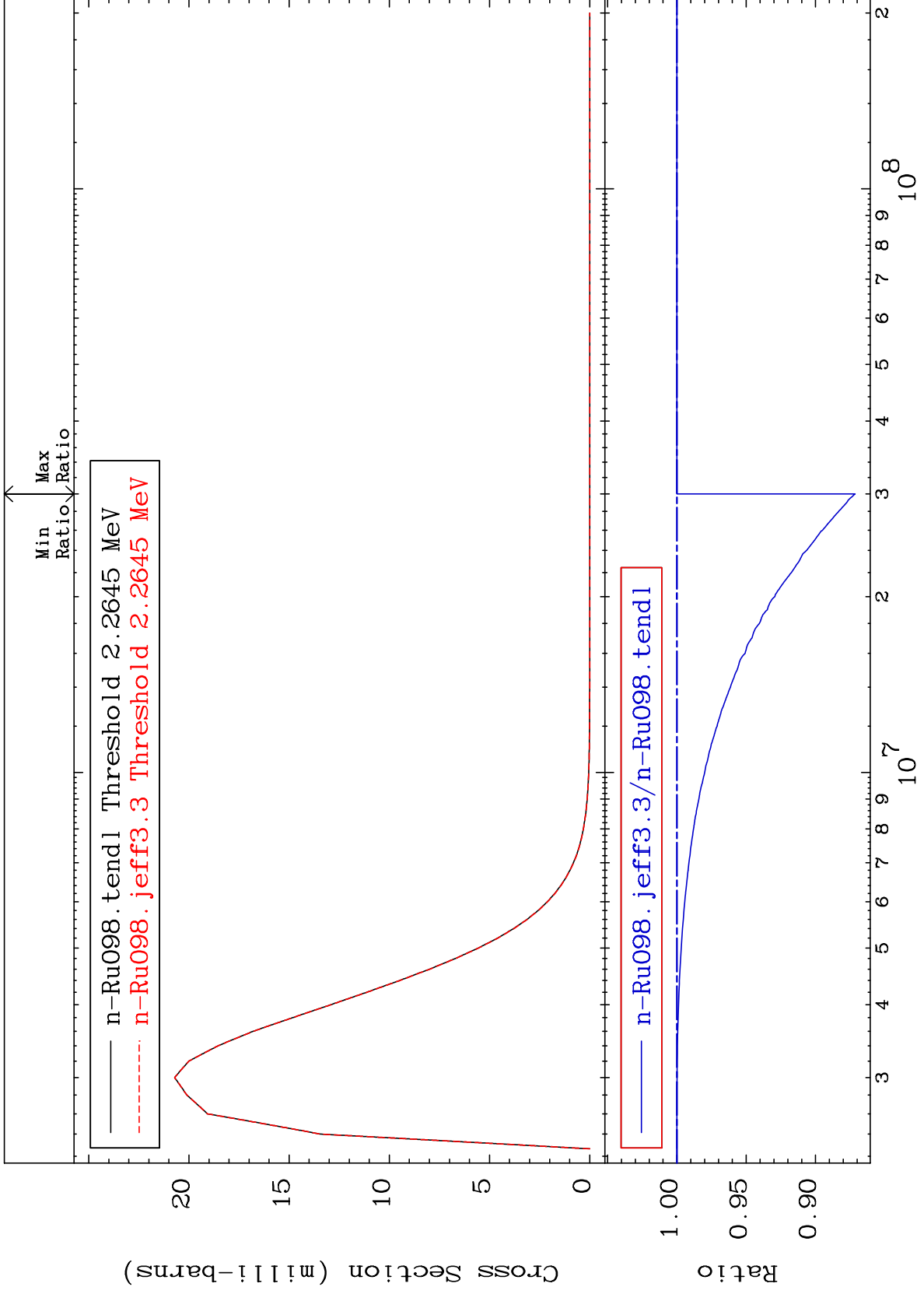
44-Ru-98
-0.532 To 0.000 %



MAT 4431

MT= 60 (n,n') Level
Cross Section

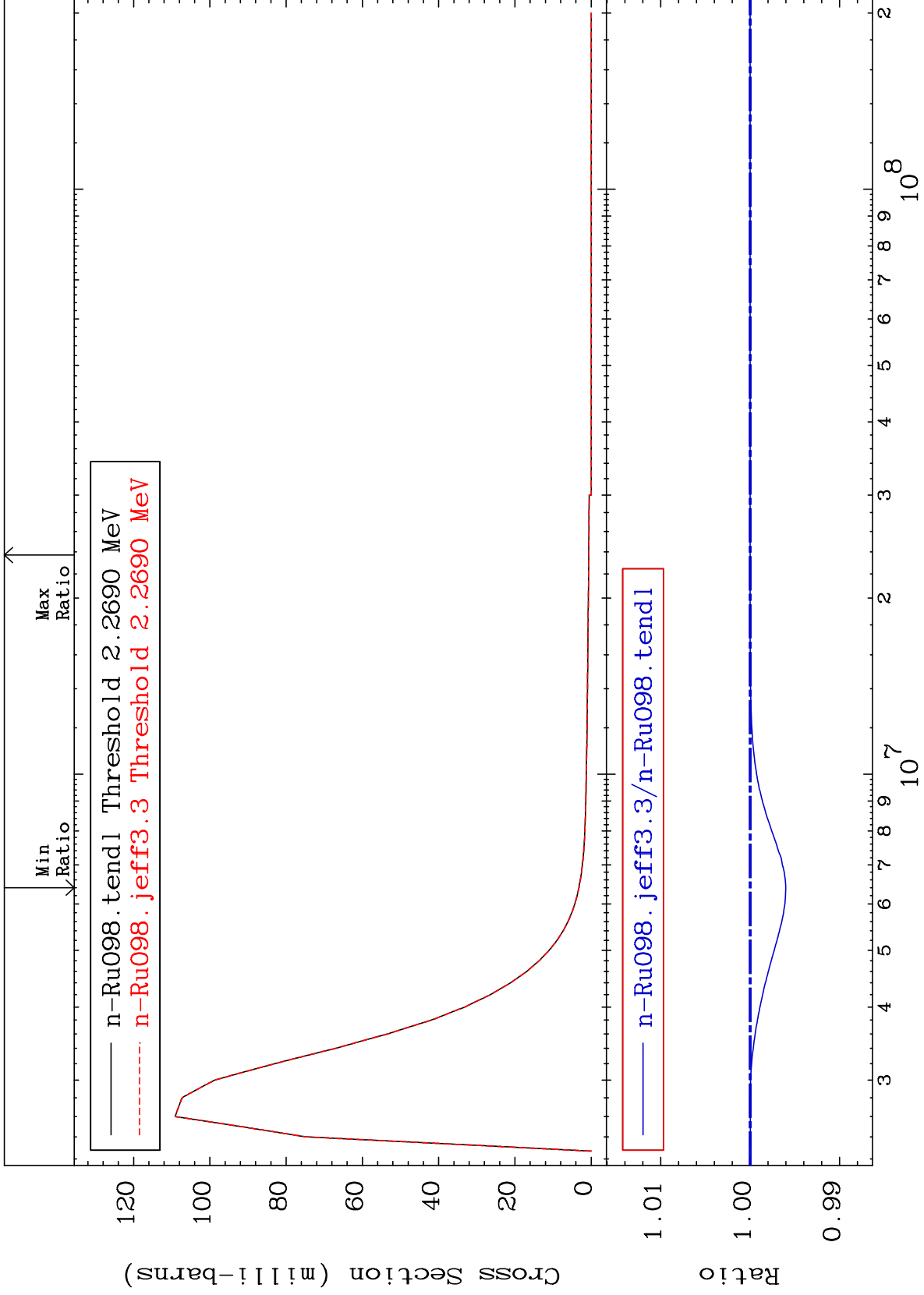
44-Ru-98
-12.85 To 0.000 %



MAT 4431

MT= 61 (n,n') Level
Cross Section

44-Ru-98
-0.398 To 0.000 %



30

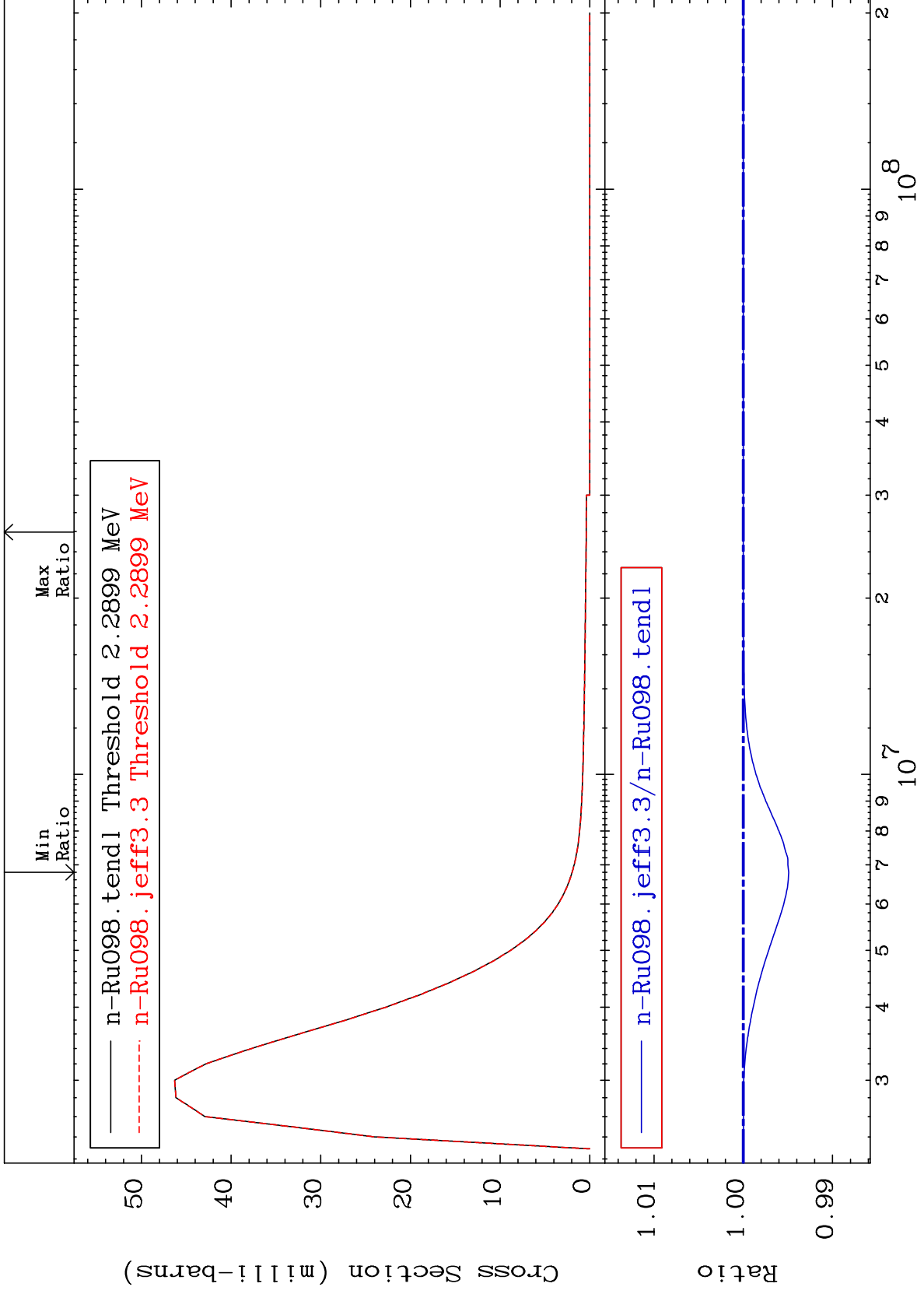
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 62 (n, n') Level
Cross Section

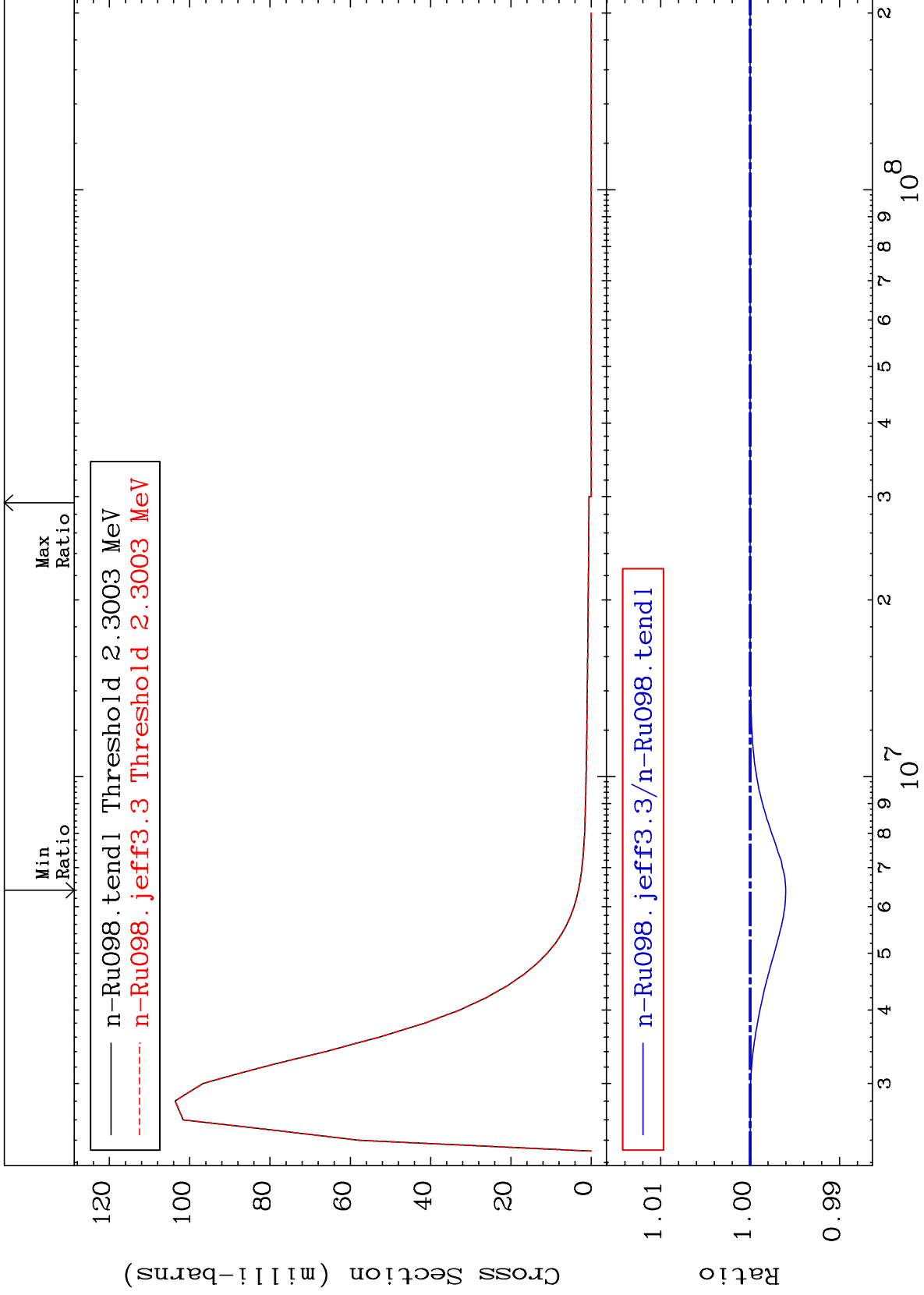
44-Ru-98
-0.509 To 0.000 %



MAT 4431

MT= 63 (n,n') Level
Cross Section

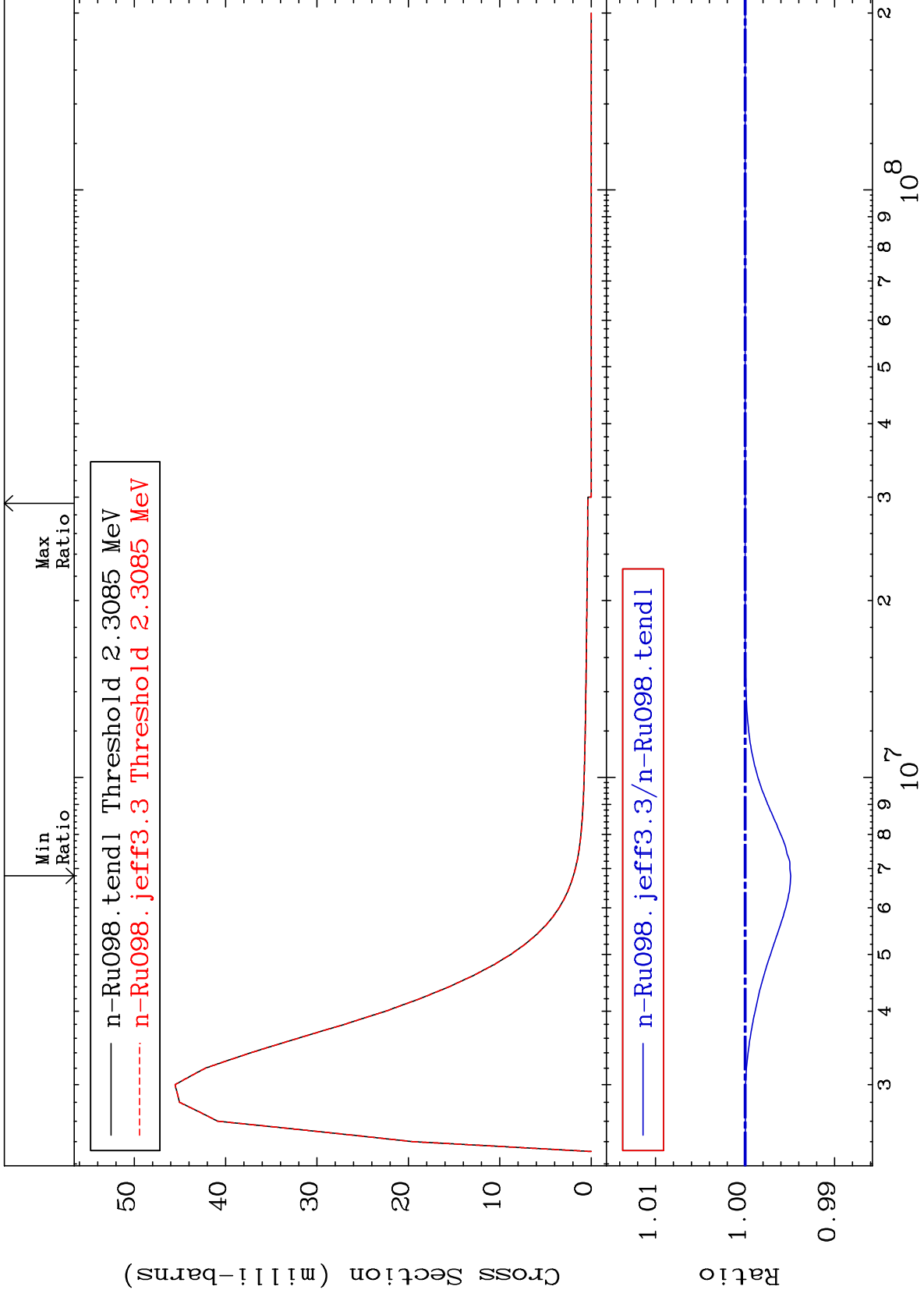
44-Ru-98
-0.398 To 0.000 %



MAT 4431

MT= 64 (n, n') Level
Cross Section

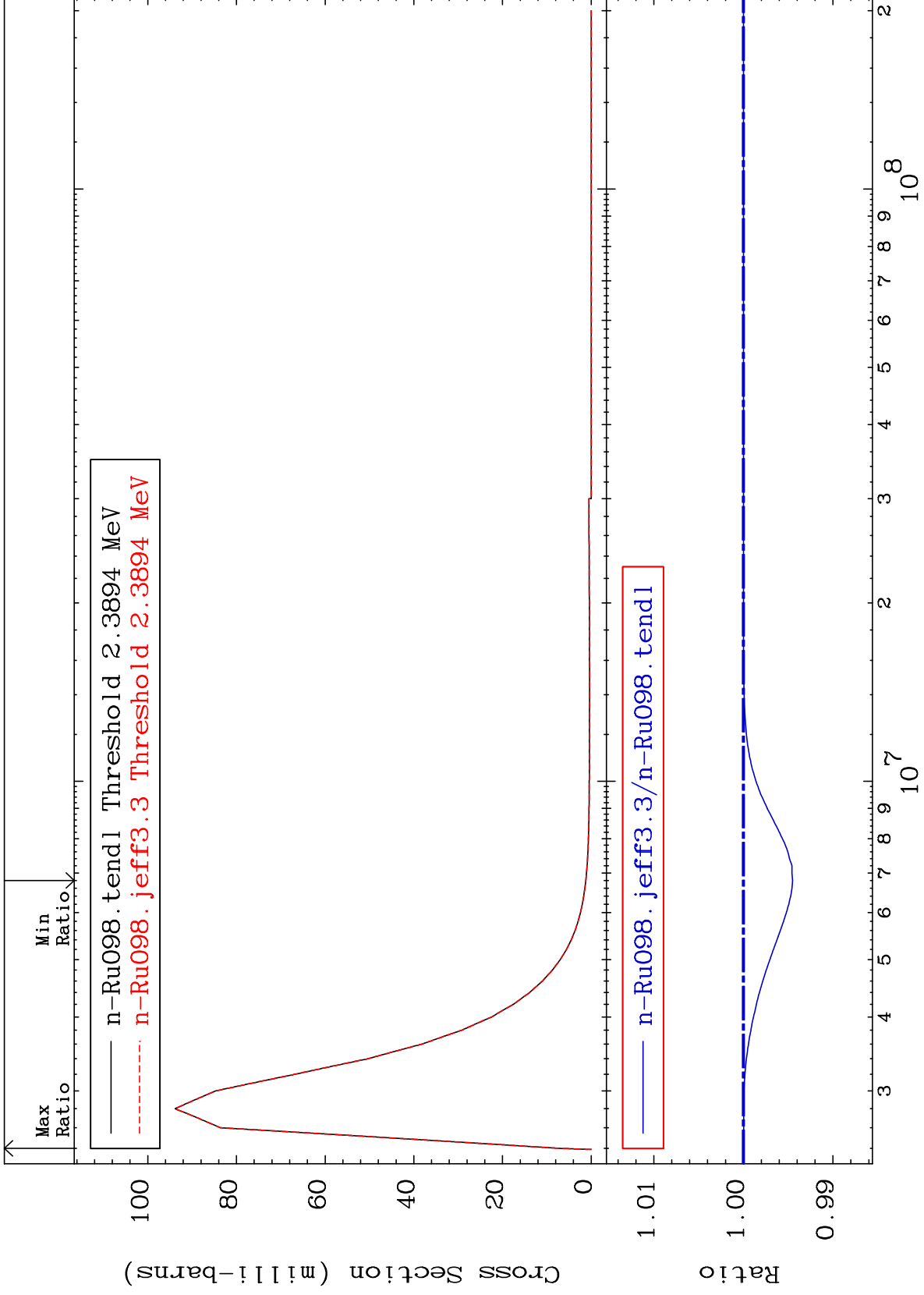
44-Ru-98
-0.510 To 0.000 %



MAT 4431

MT= 65 (n,n') Level
Cross Section

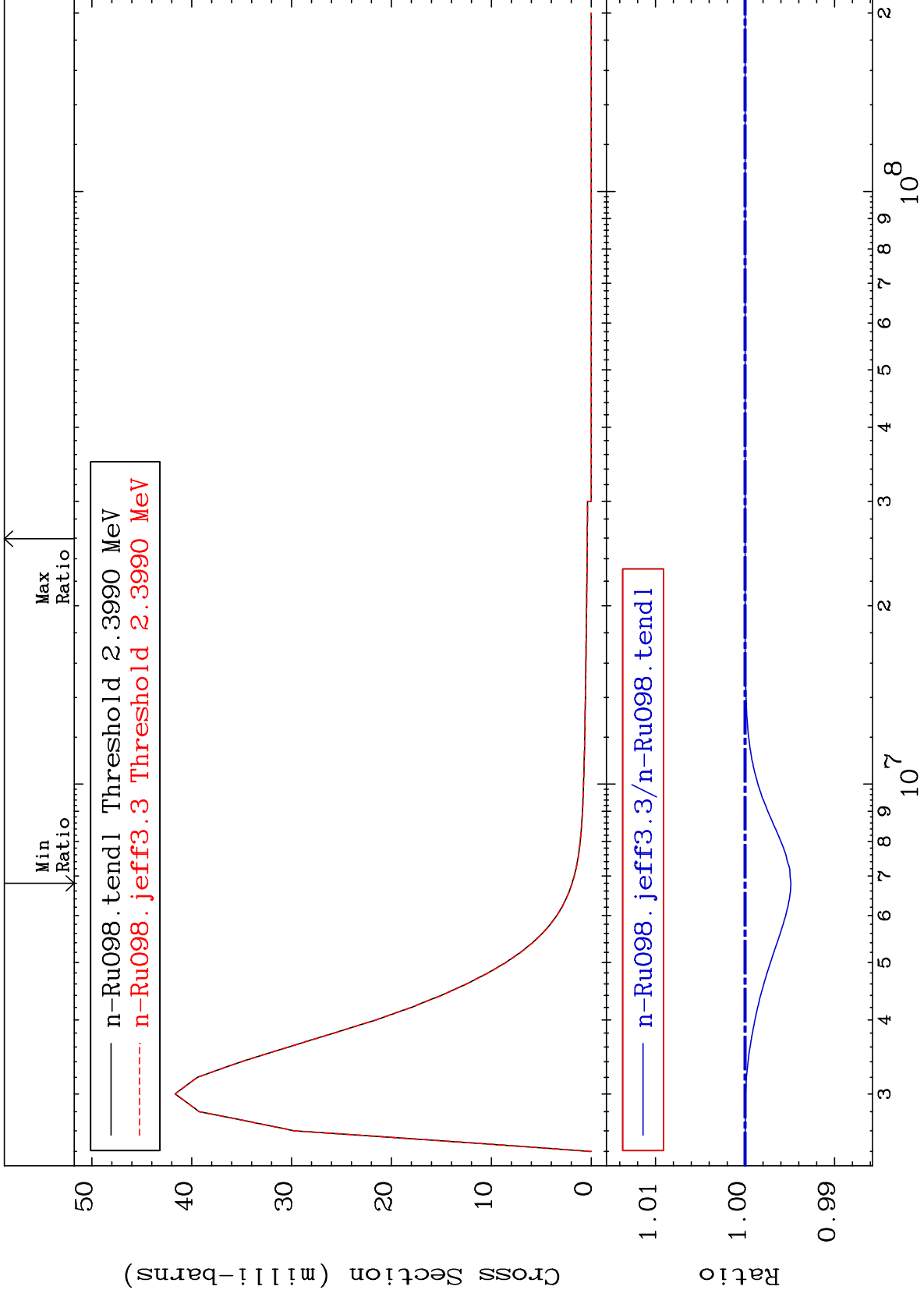
44-Ru-98
-0.549 To 0.002 %



MAT 4431

MT= 66 (n,n') Level
Cross Section

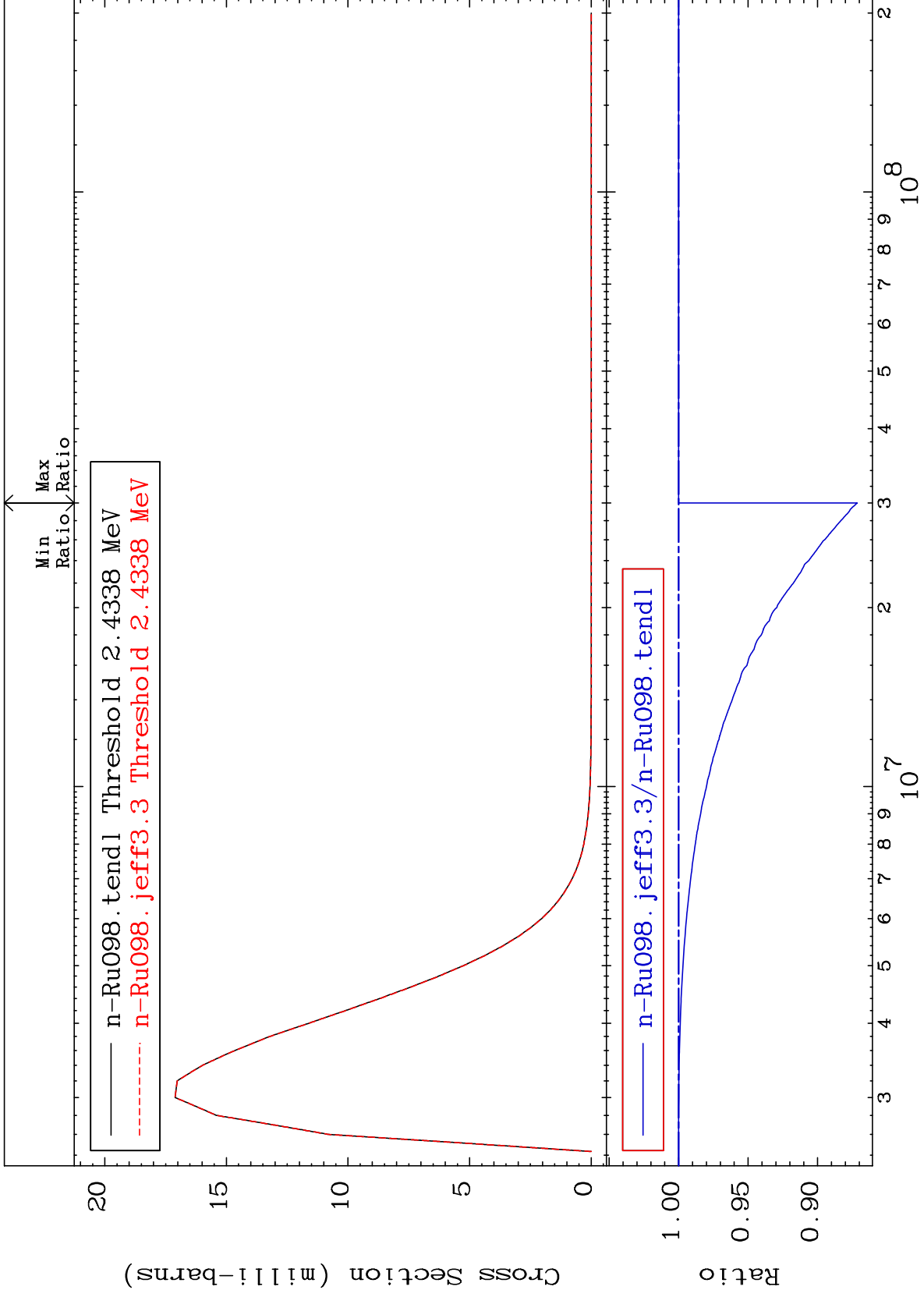
44-Ru-98
-0.511 To 0.000 %



MAT 4431

MT= 67 (n, n') Level
Cross Section

44-Ru-98
-12.85 To 0.000 %



36

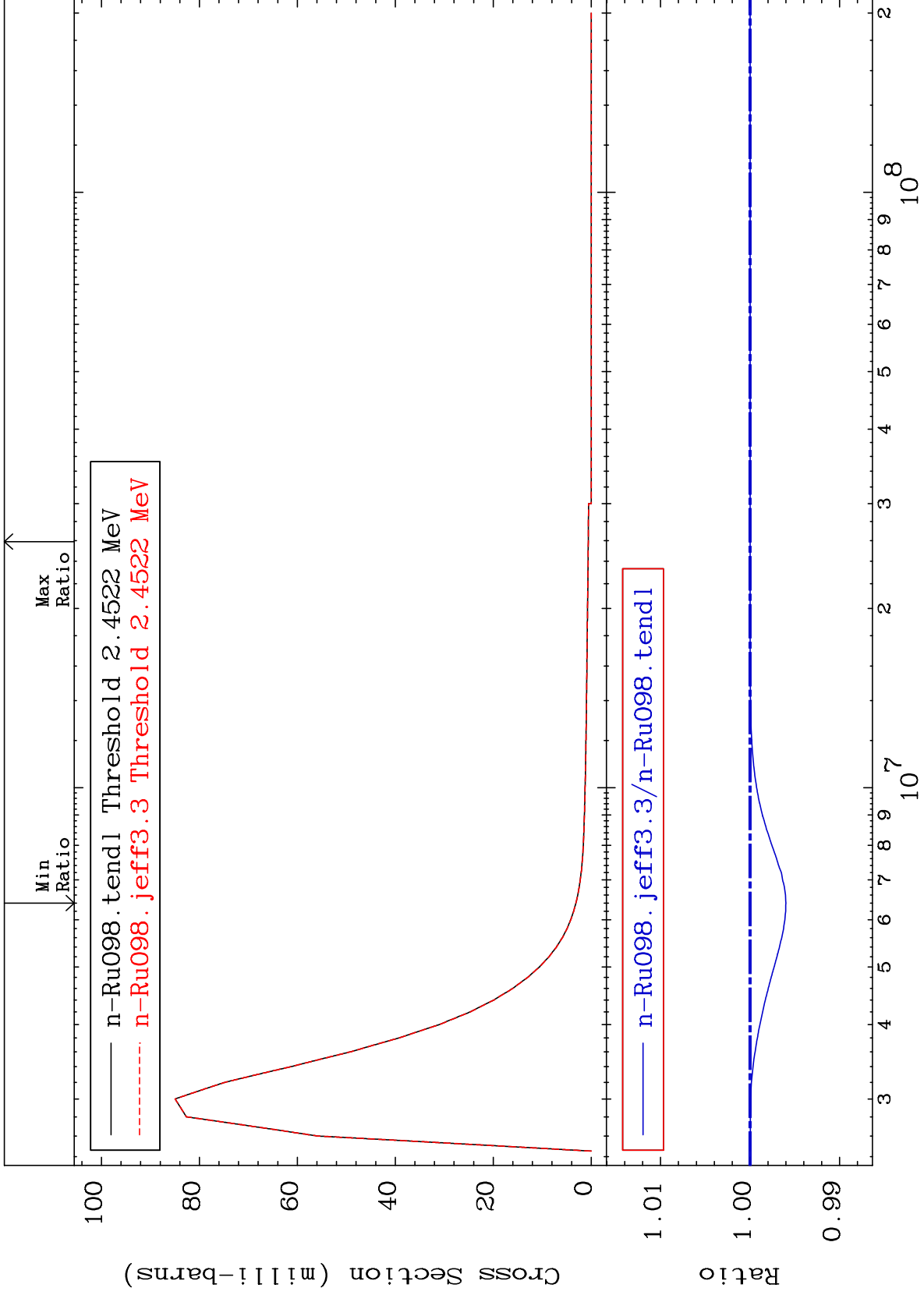
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 68 (n,n') Level
Cross Section

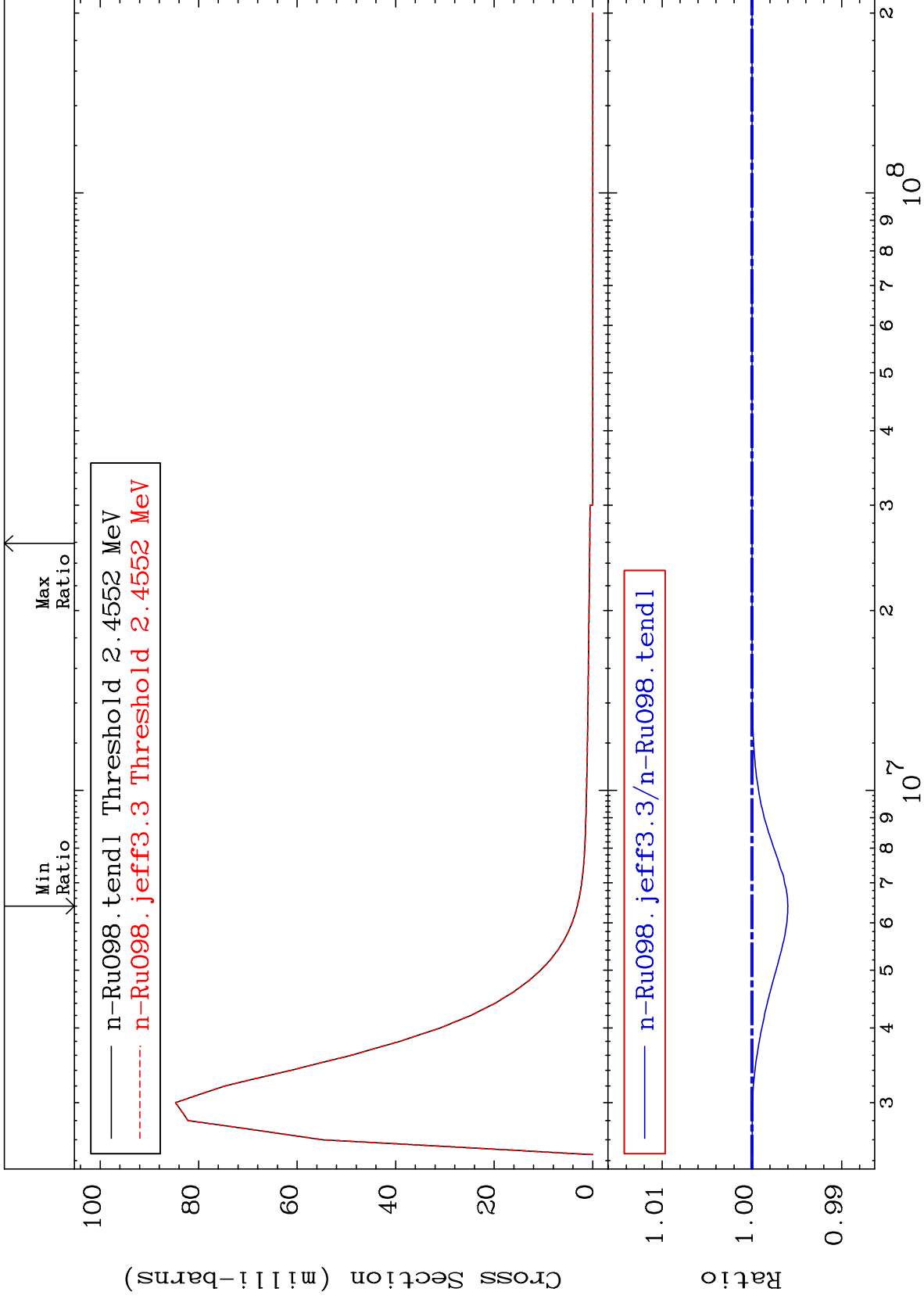
44-Ru-98
-0.399 To 0.000 %



MAT 4431

MT= 69 (n,n') Level
Cross Section

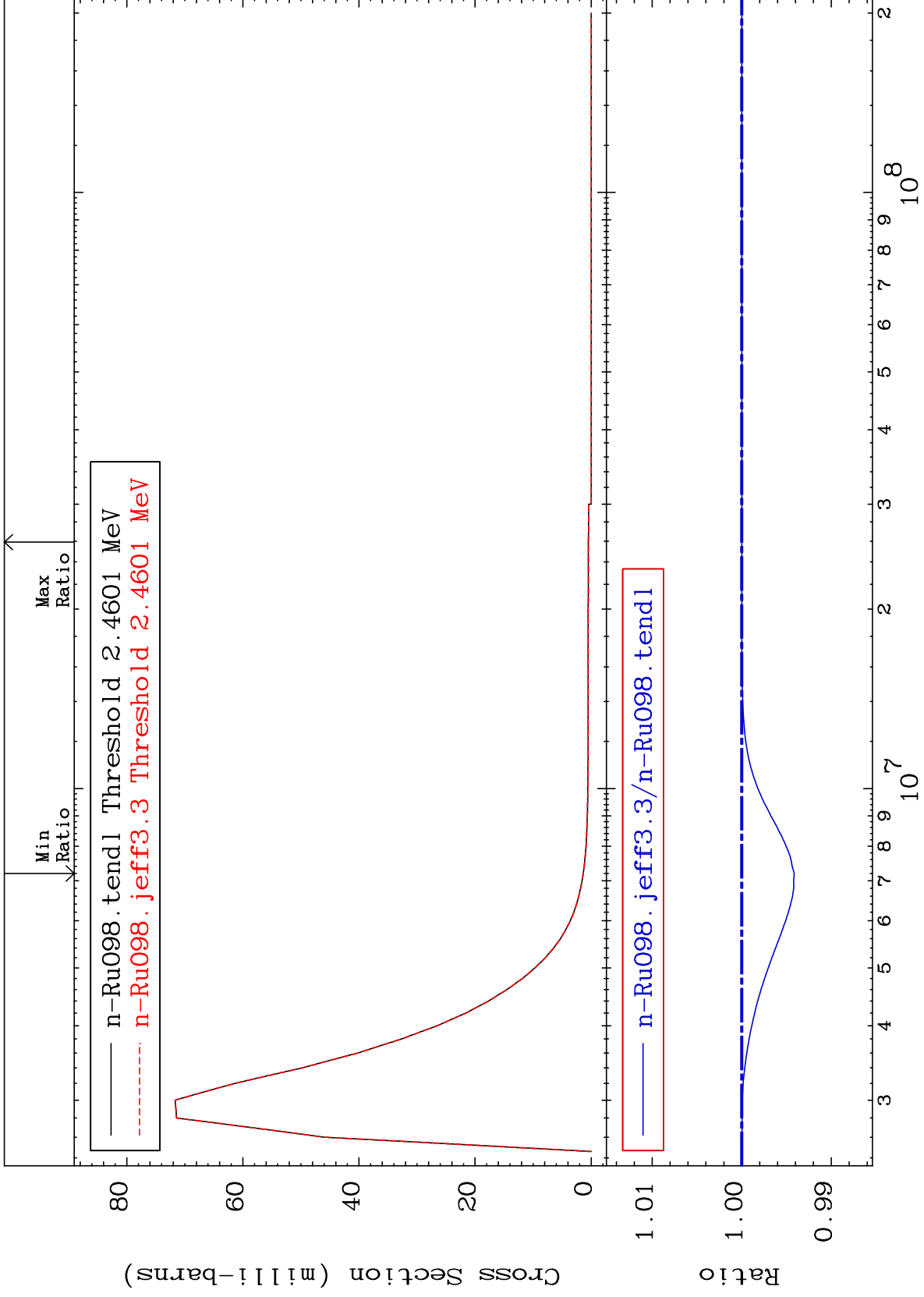
44-Ru-98
-0.400 To 0.000 %



MAT 4431

MT= 70 (n,n') Level
Cross Section

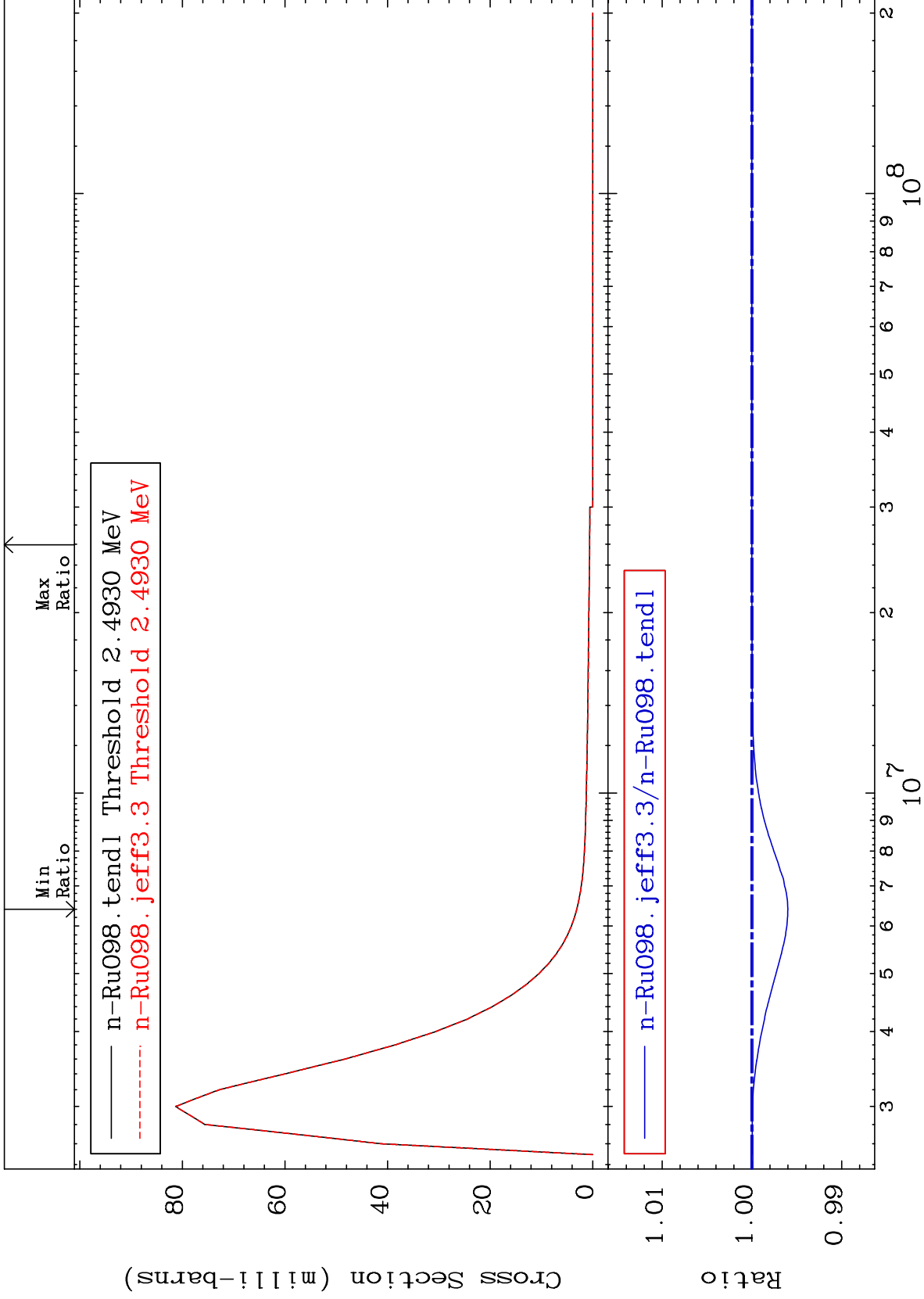
44-Ru-98
-0.585 To 0.000 %



MAT 4431

MT= 71 (n, n') Level
Cross Section

44-Ru-98
-0.400 To 0.000 %



40

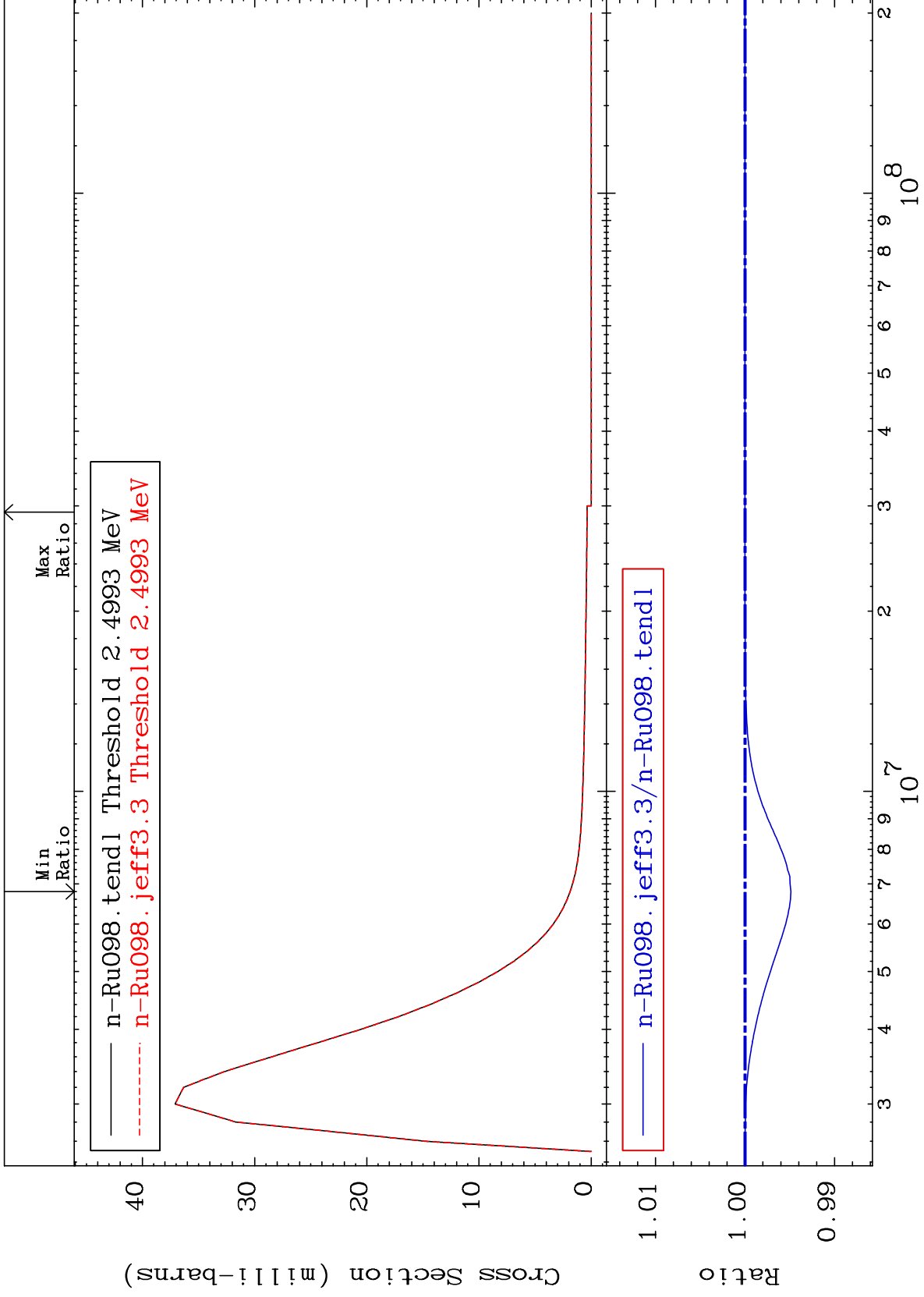
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 72 (n,n') Level
Cross Section

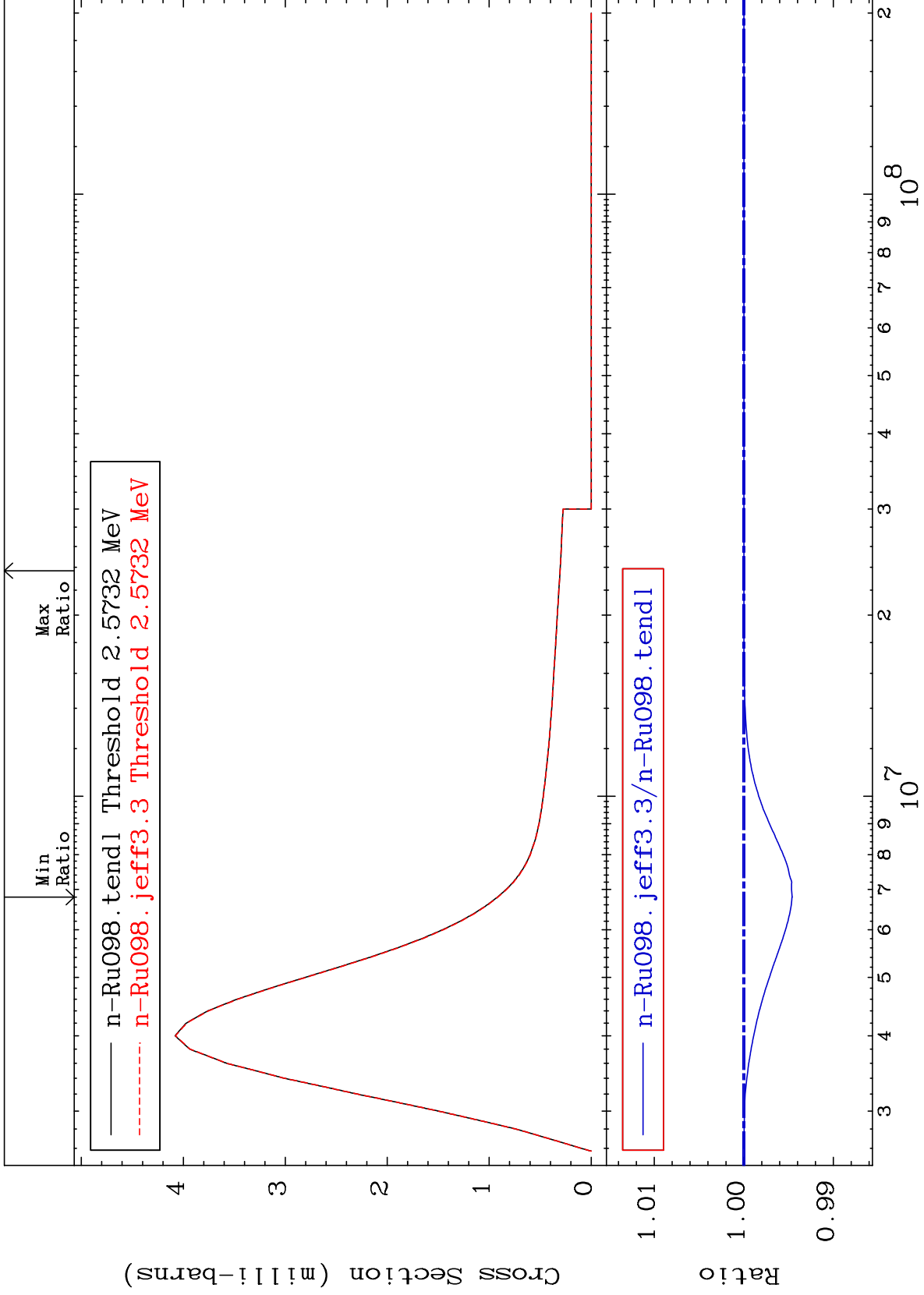
44-Ru-98
-0.512 To 0.000 %



MAT 4431

MT= 73 (n,n') Level
Cross Section

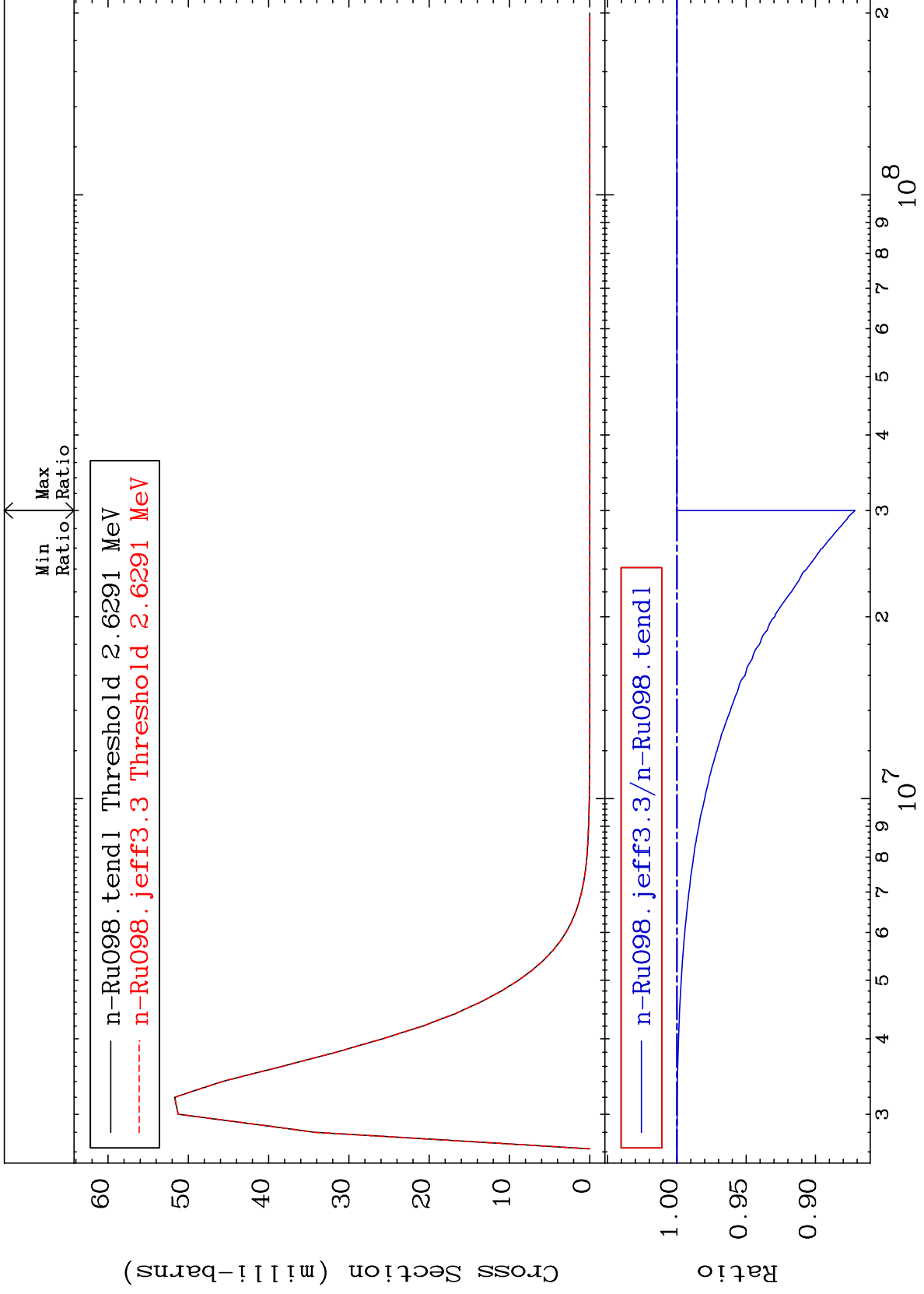
44-Ru-98
-0.539 To 0.000 %



MAT 4431

MT= 74 (n, n') Level
Cross Section

44-Ru-98
-12.85 To 0.000 %



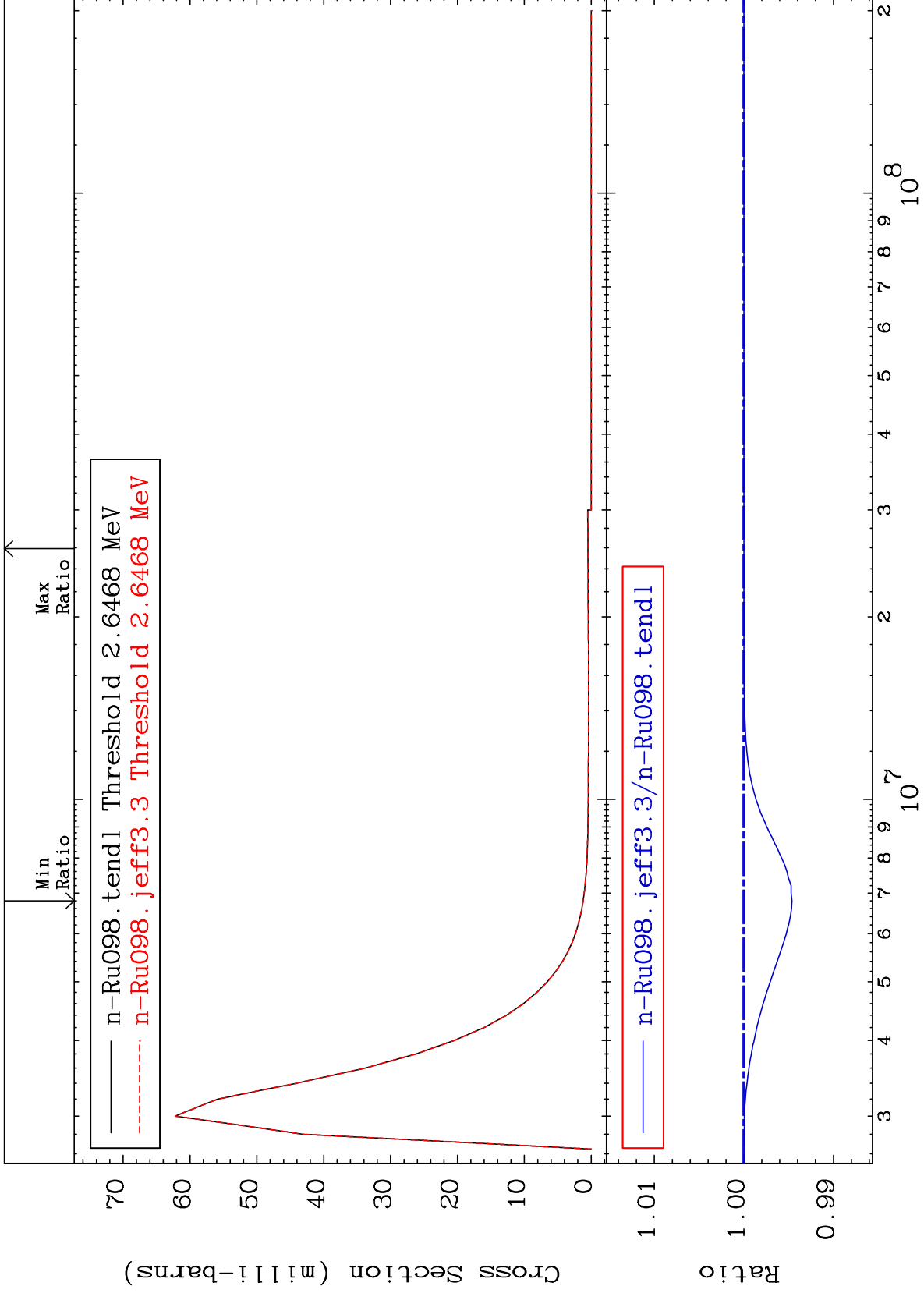
43

44-Ru-98

MAT 4431

MT= 75 (n,n') Level
Cross Section

44-Ru-98
-0.537 To 0.000 %



44

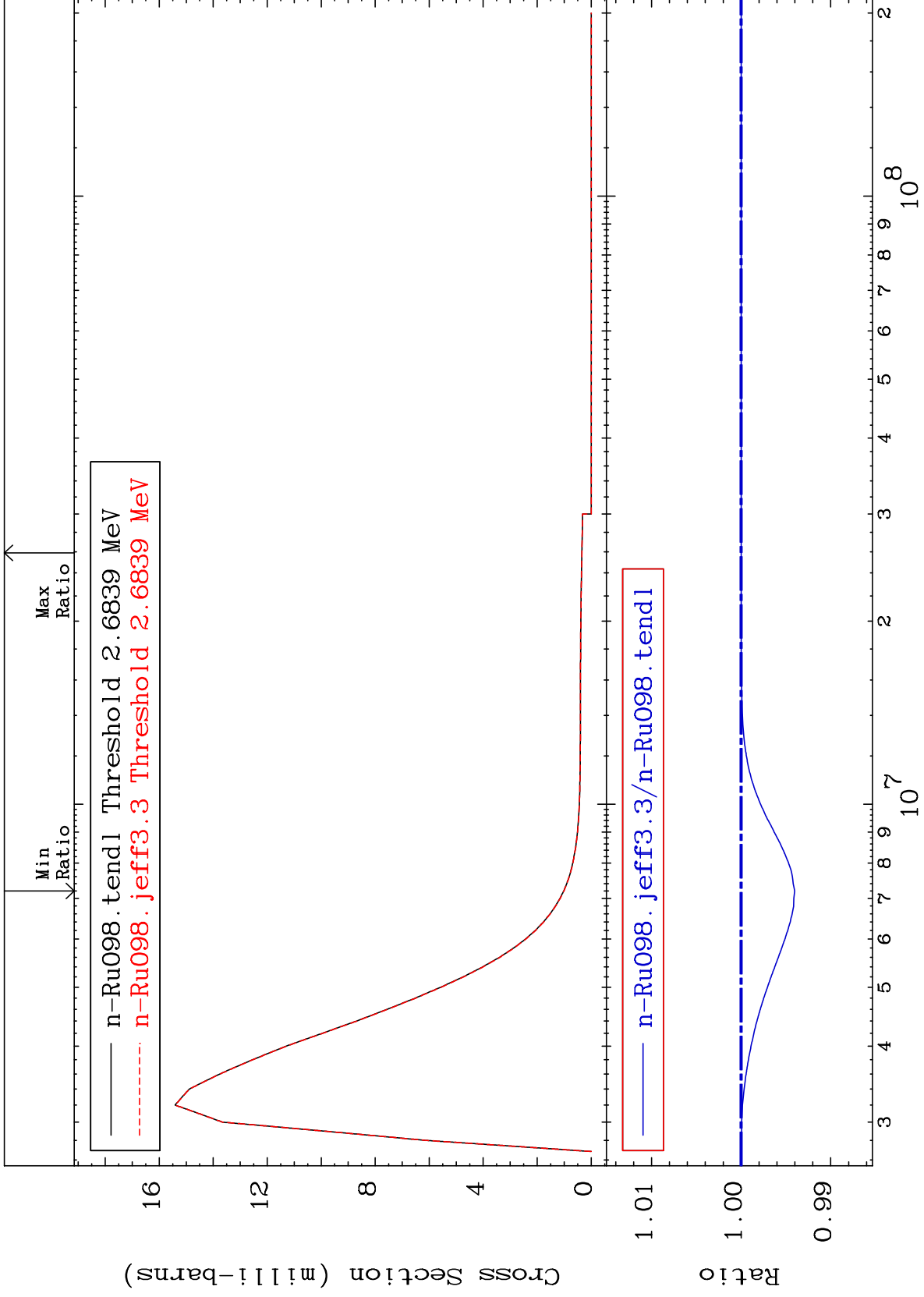
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 76 (n,n') Level
Cross Section

44-Ru-98
-0.598 To 0.000 %



45

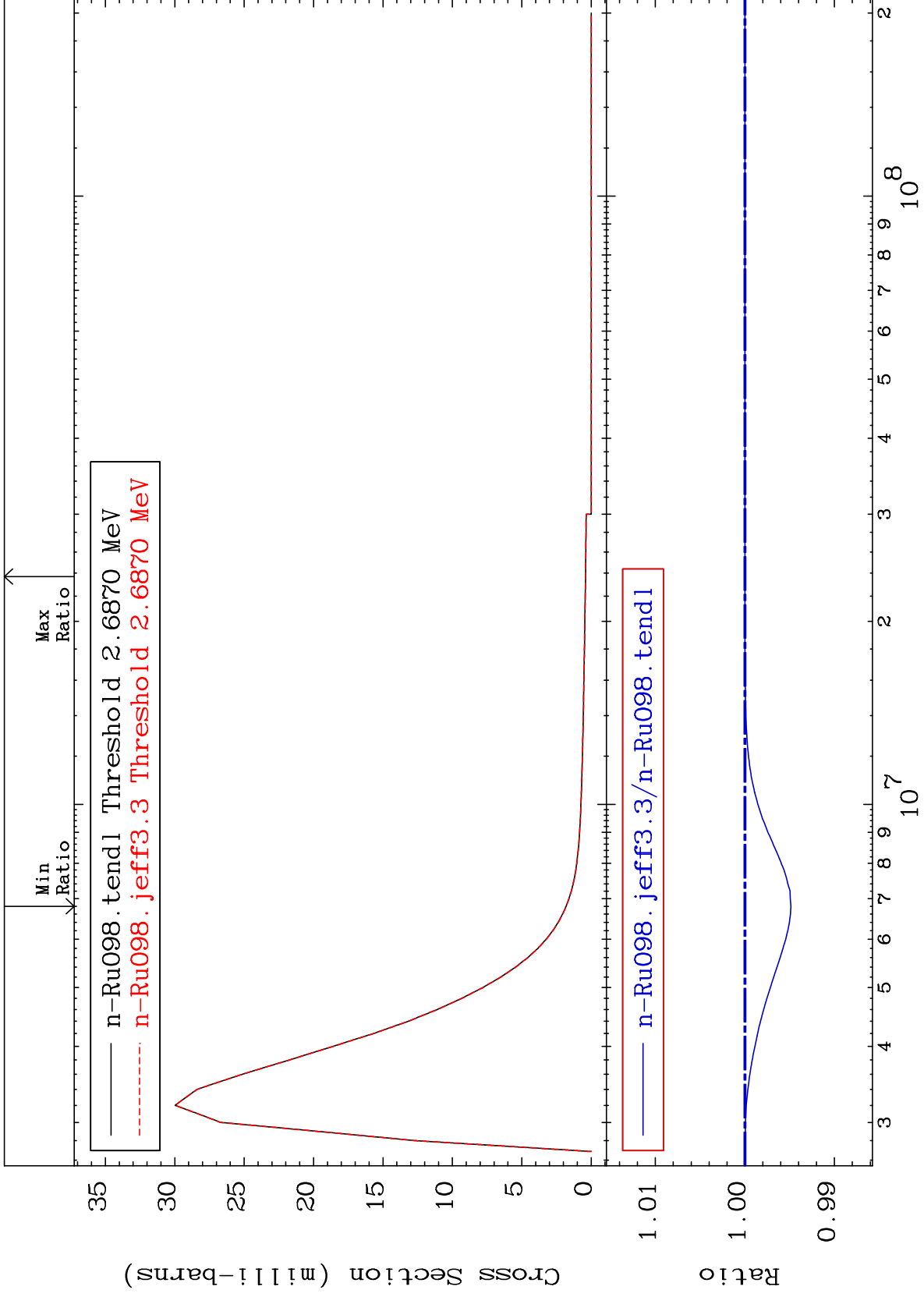
Incident Energy (eV)

44-Ru-98

MAT 4431

MT= 77 (n, n') Level
Cross Section

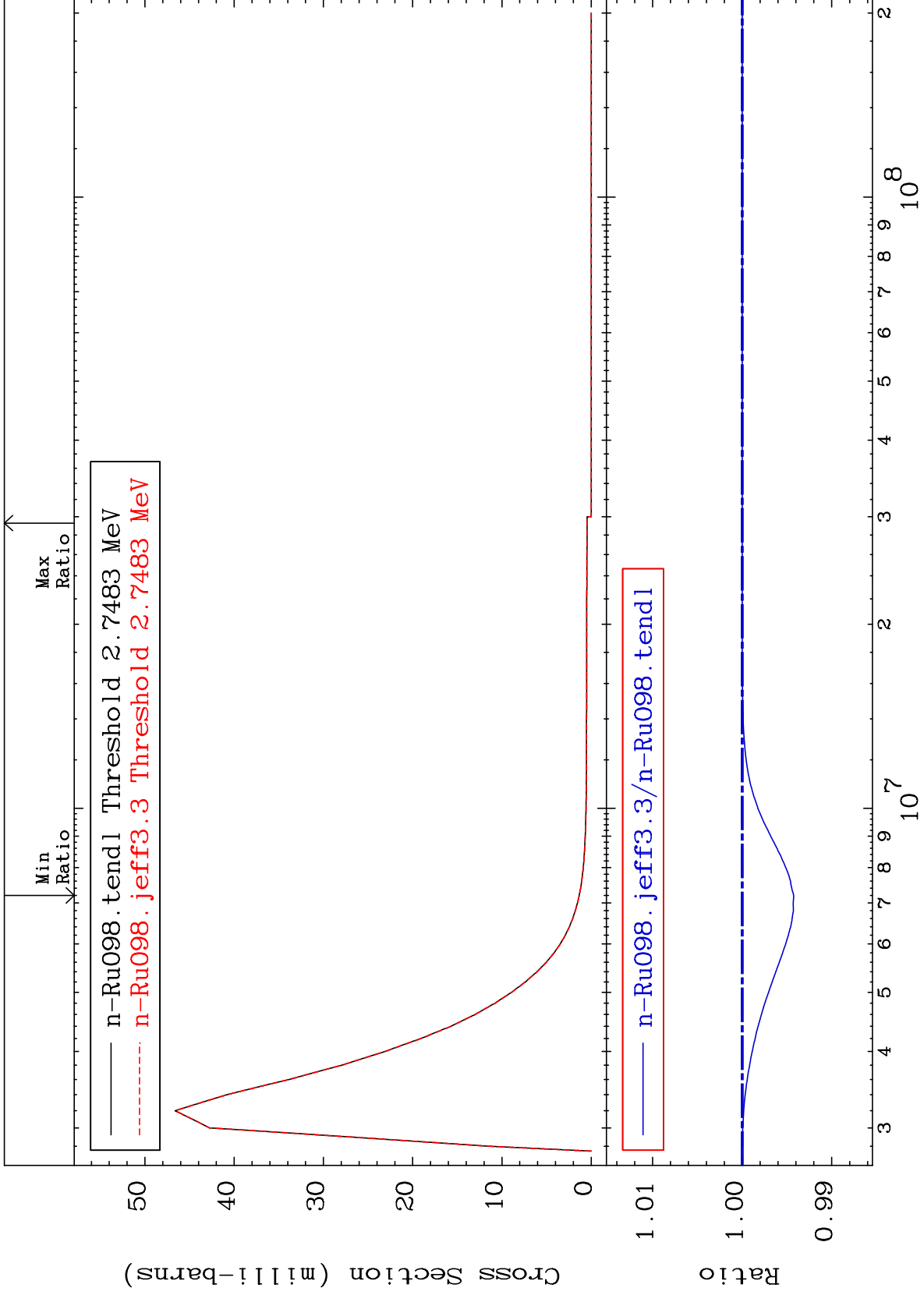
44-Ru-98
-0.515 To 0.000 %



MAT 4431

MT= 78 (n,n') Level
Cross Section

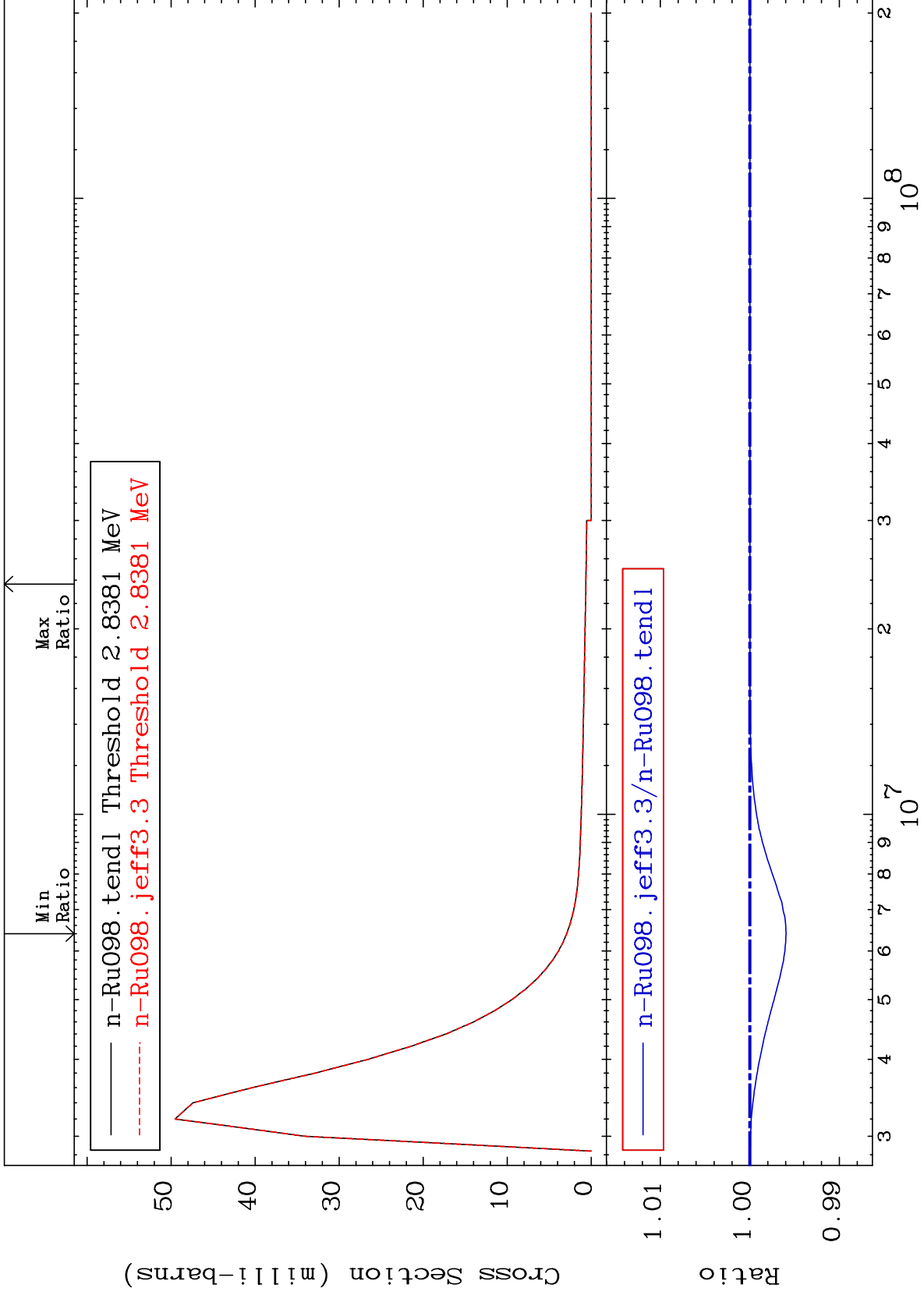
44-Ru-98
-0.575 To 0.000 %



MAT 4431

MT= 79 (n, n') Level
Cross Section

44-Ru-98
-0.404 To 0.000 %



48

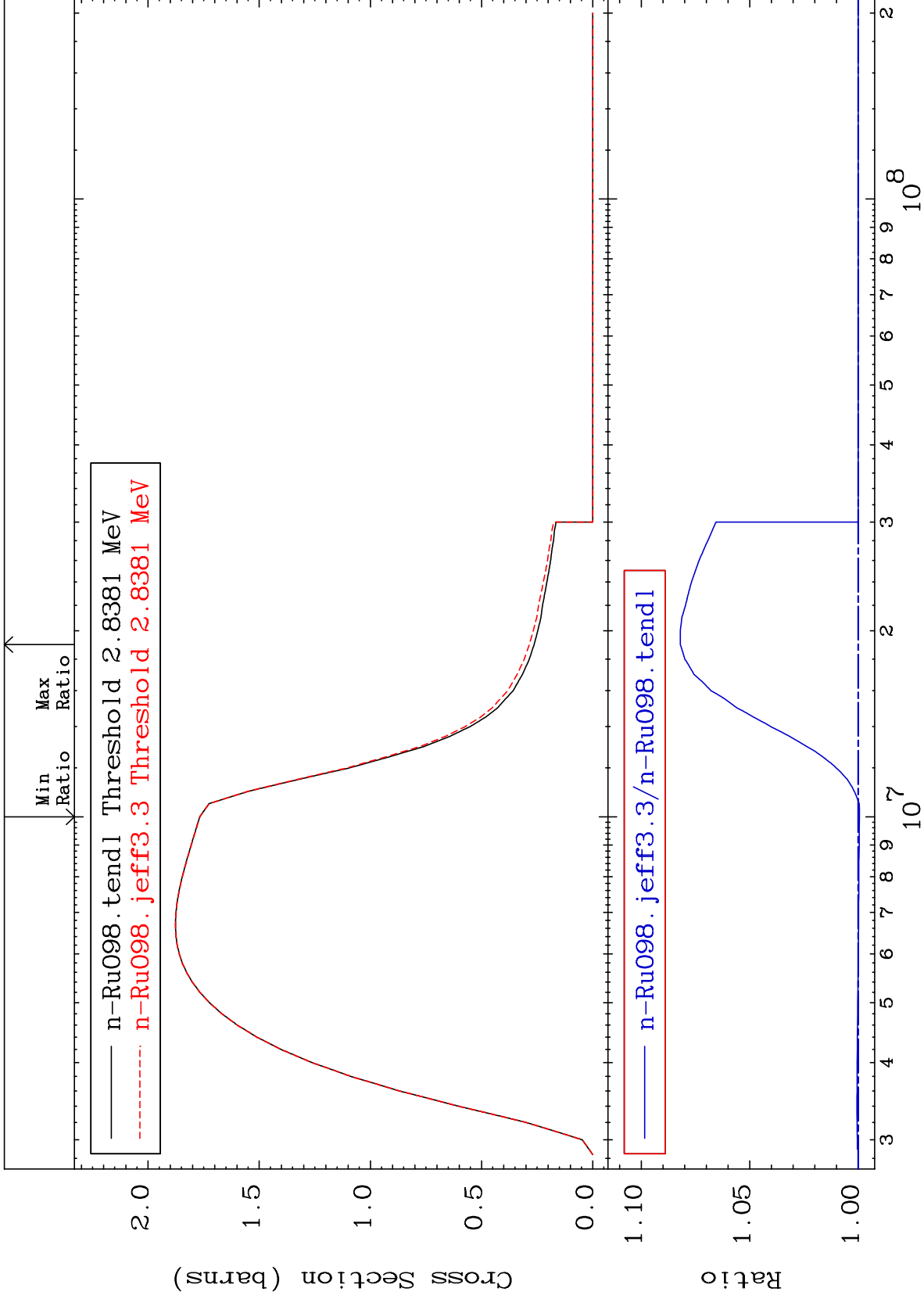
Incident Energy (eV)

44-Ru-98

MAT 4431

(n, n') Continuum
Cross Section

44-Ru-98
-0.055 To 8.199 %



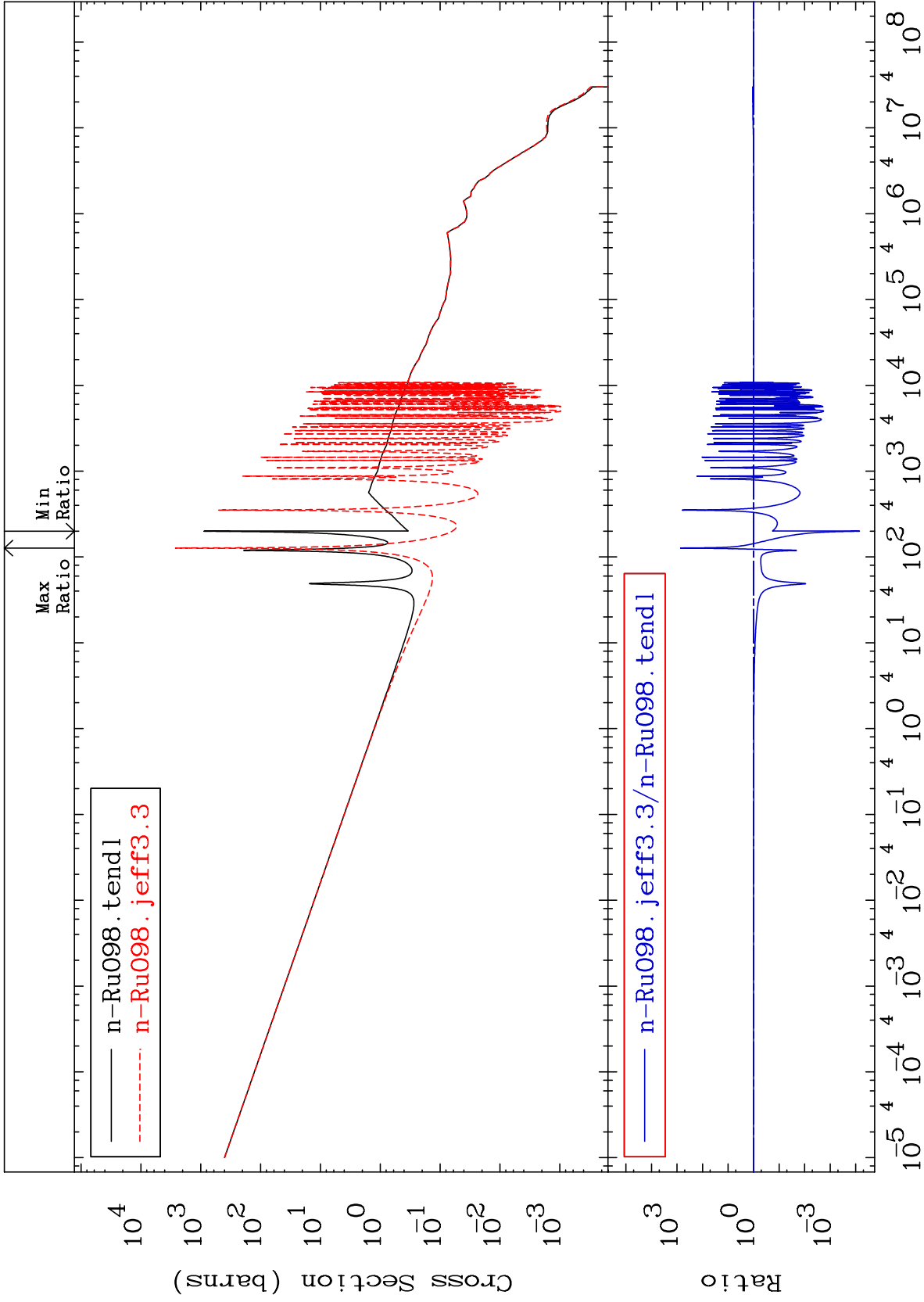
49

Incident Energy (eV)

44-Ru-98

MAT 4431

(n, γ)
Cross Section
44-Ru-98
-99.99 To 9999. %

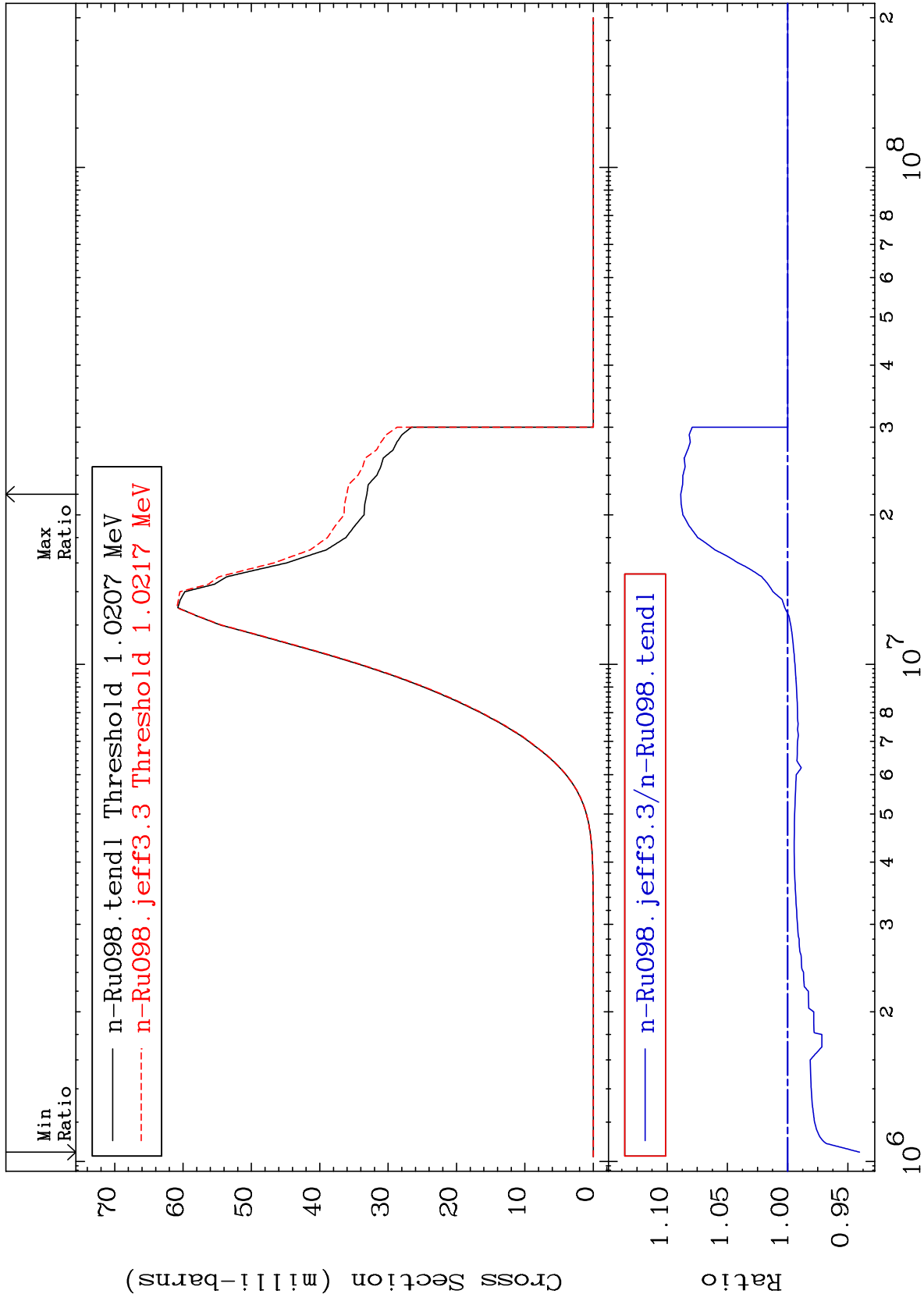


MAT 4431

44-Ru-98

-5.964 To 8.865 %

(n, p)
Cross Section



51

Incident Energy (eV)

44-Ru-98

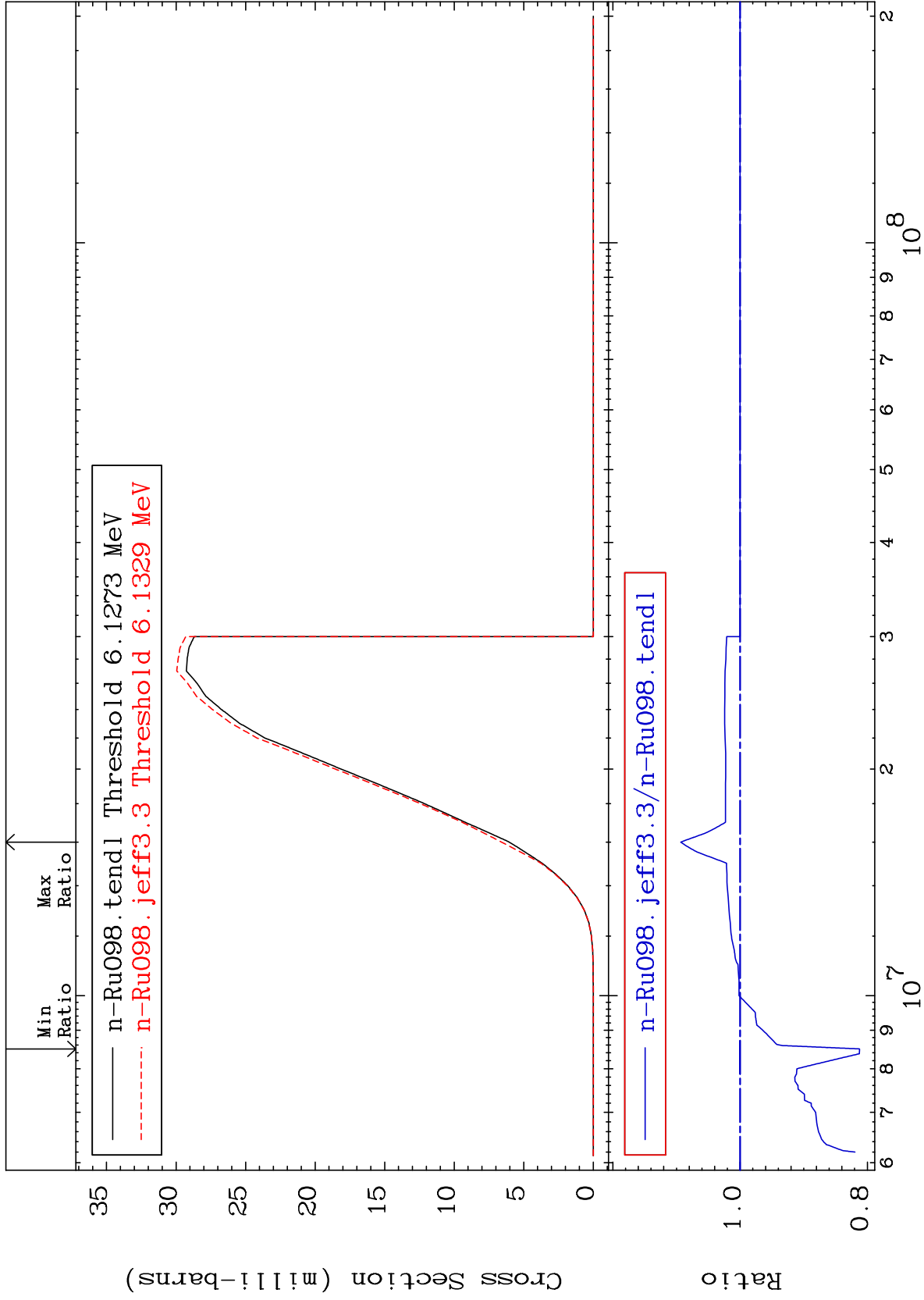
MAT 4431

(n, d)

44-Ru-98

Cross Section

-18.77 To 9.326 %



52

Incident Energy (eV)

44-Ru-98

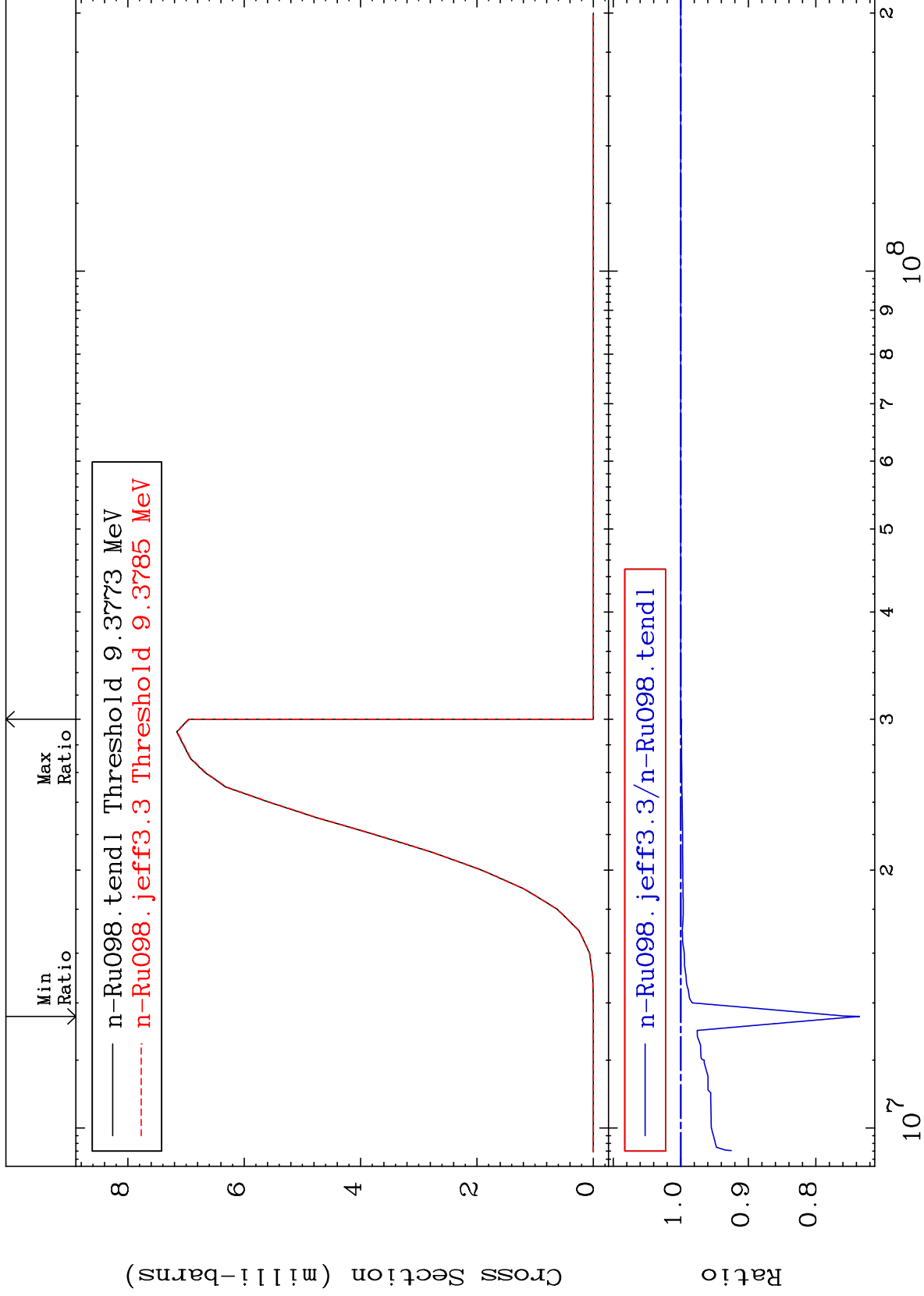
MAT 4431

(n, t)

44-Ru-98

Cross Section

-26.46 To 0.000 %



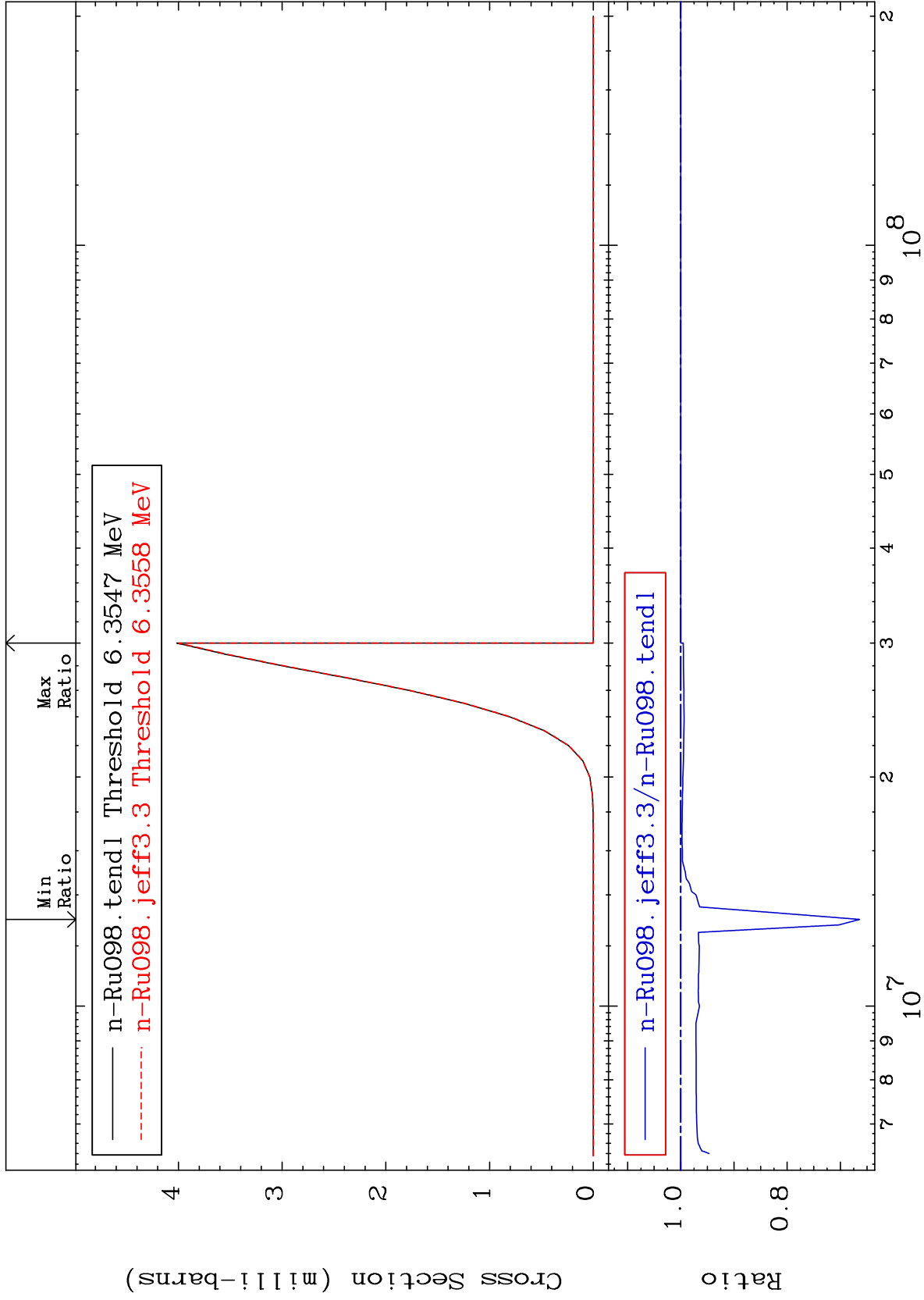
53

44-Ru-98

44-Ru-98

Cross Section

-33.60 To 0.000 %



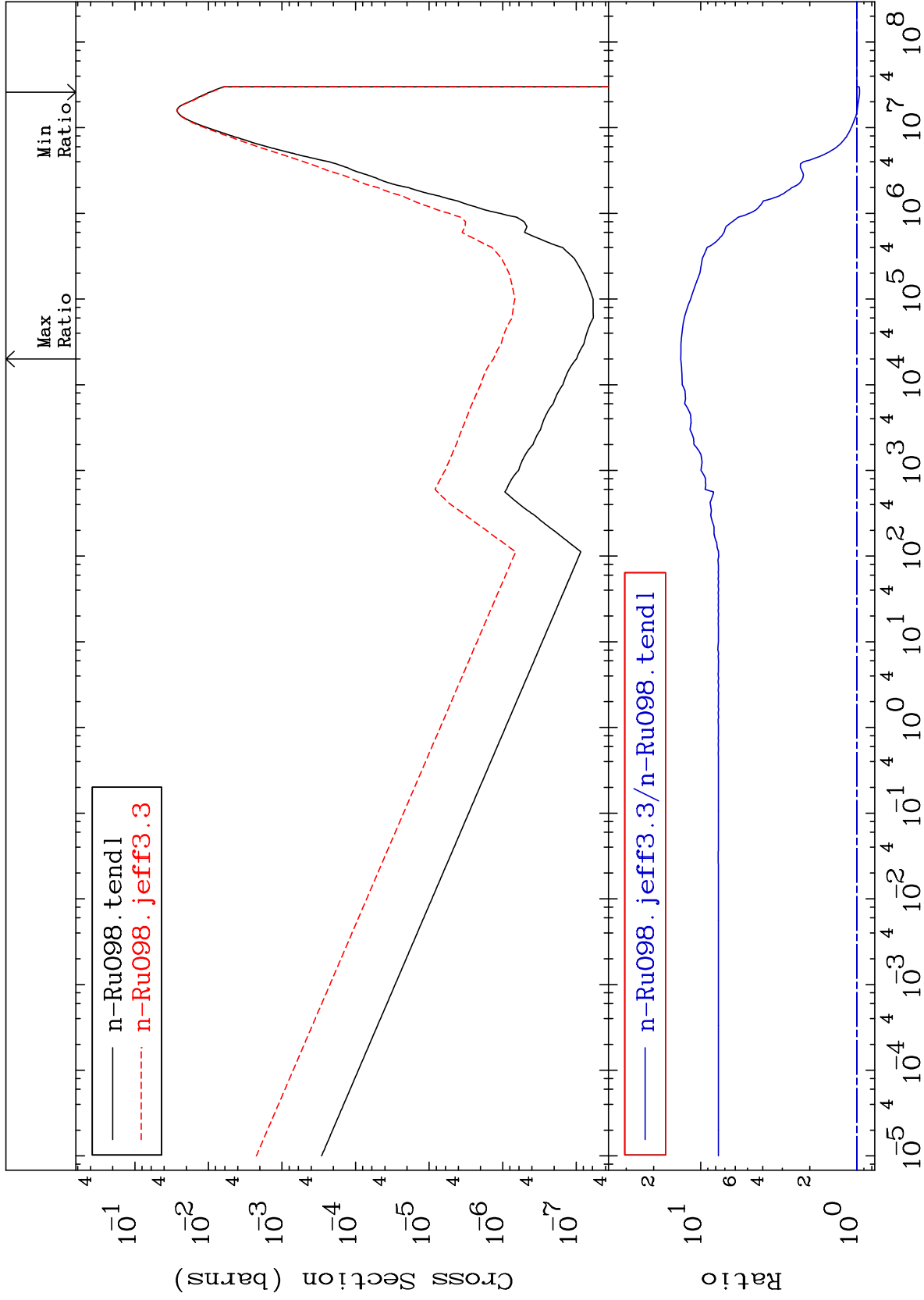
MAT 4431

(n, α)

44-Ru-98

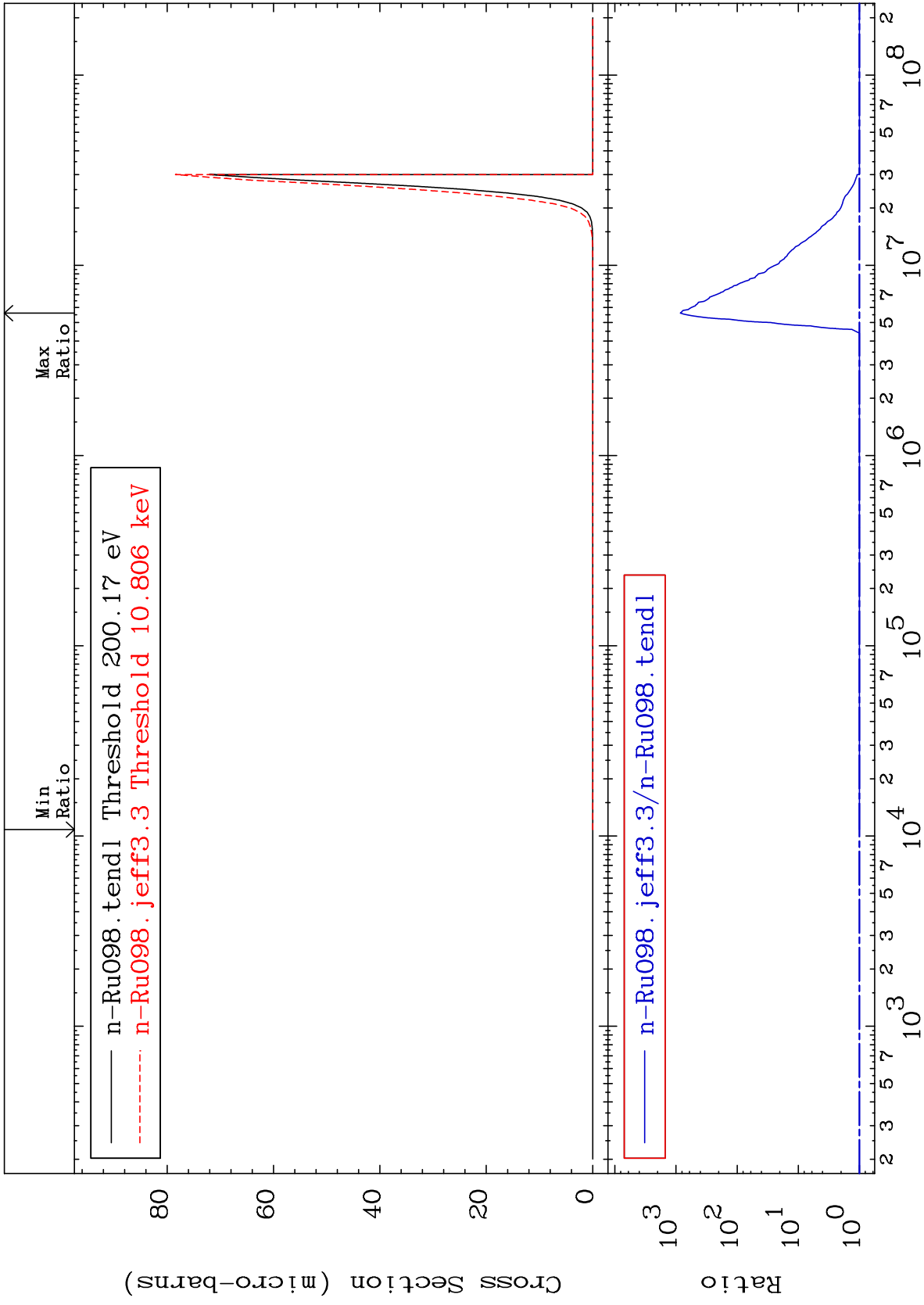
Cross Section

-4.000 To 1240. %

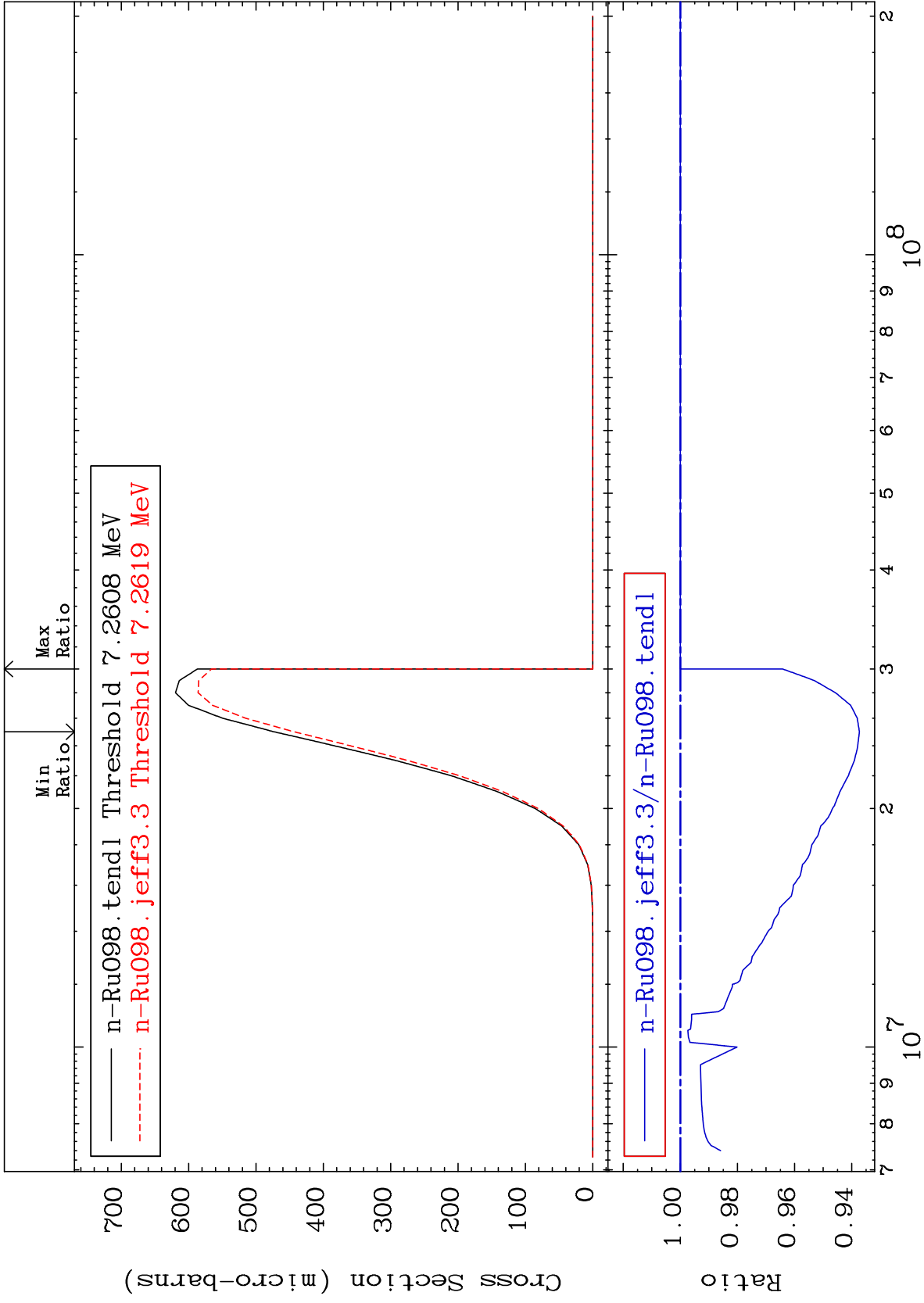


55

44-Ru-98

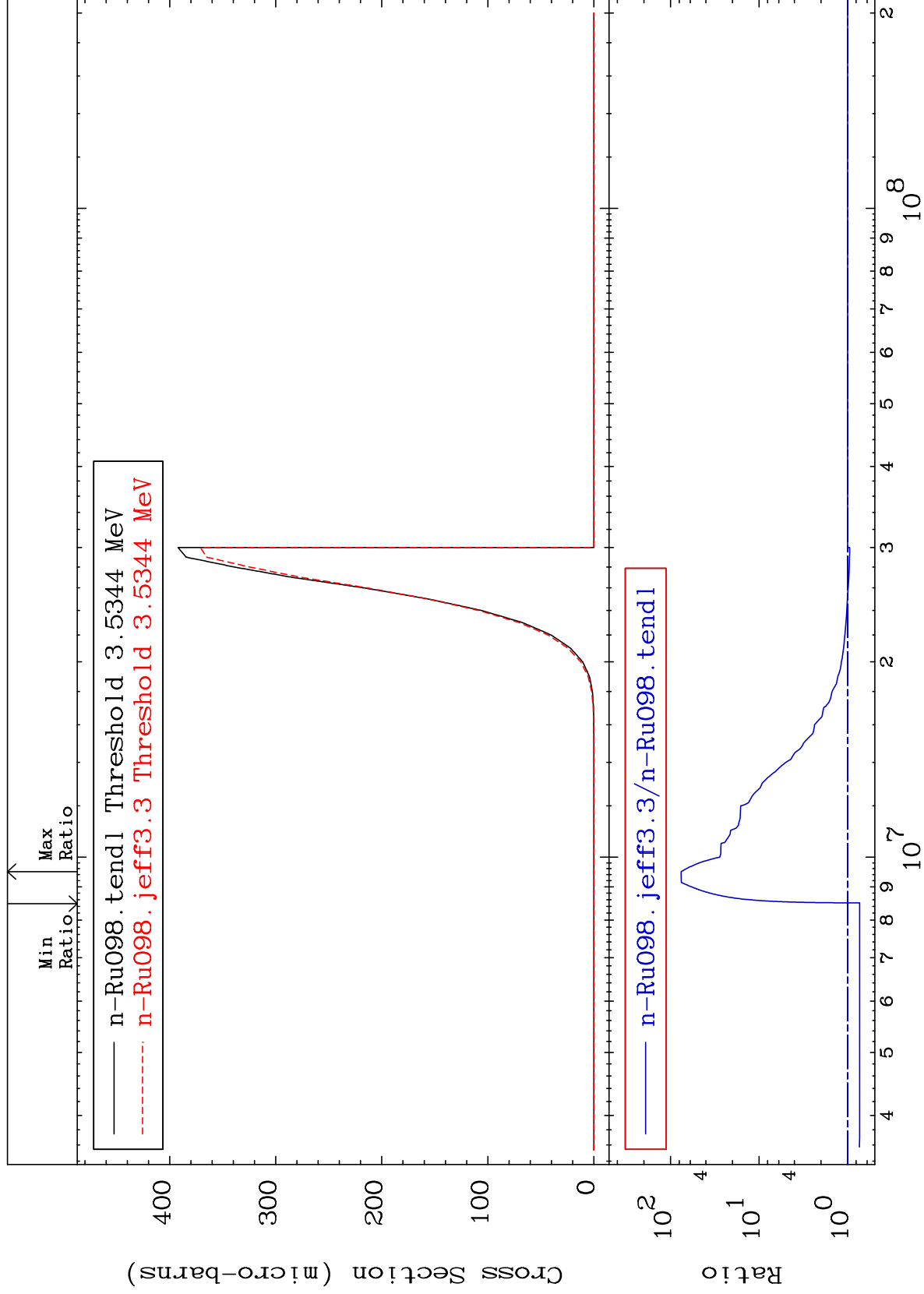


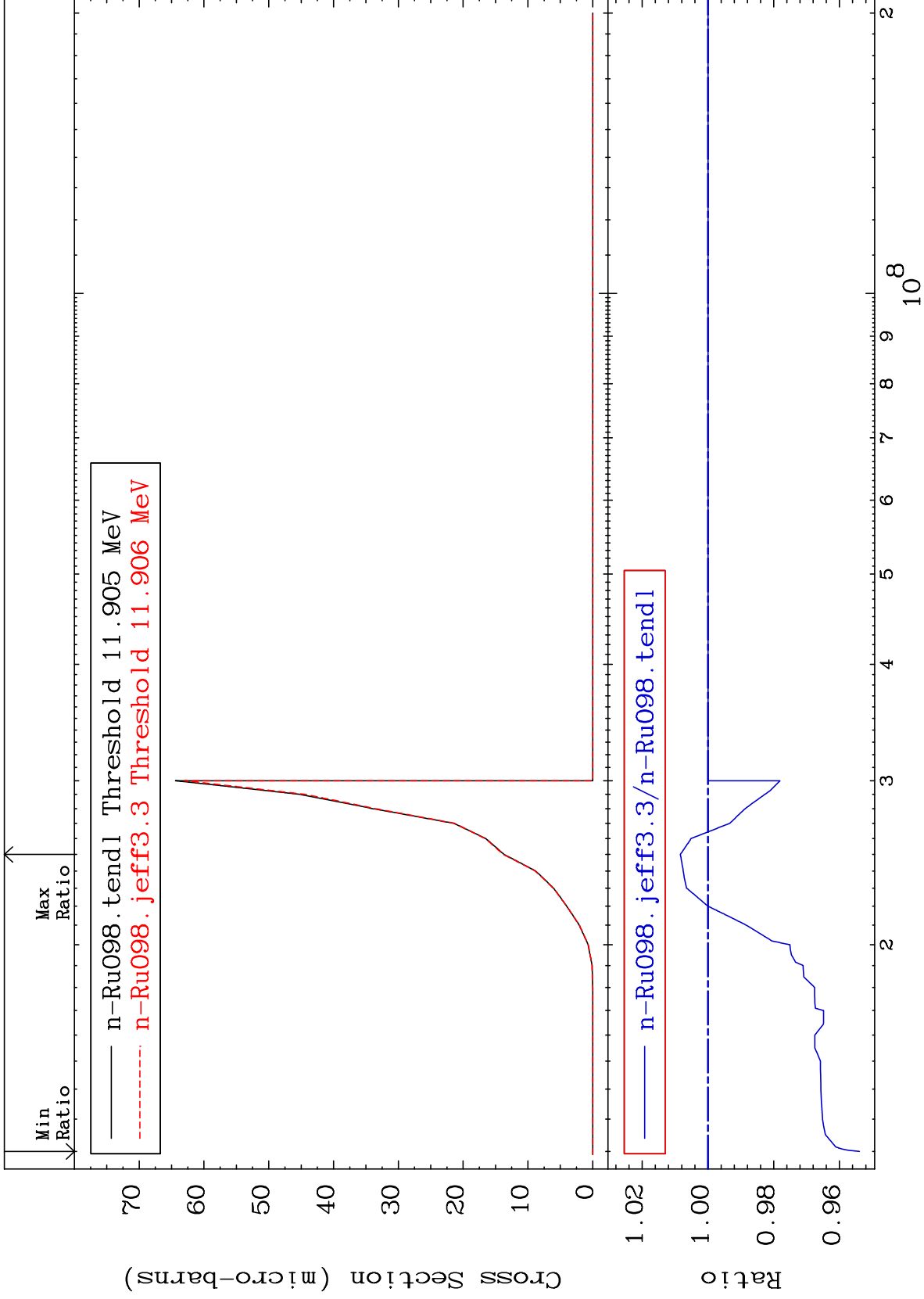
(n,2p)
Cross Section
-6.270 To 0.000 %



Cross Section

-26.93 To 7496. %





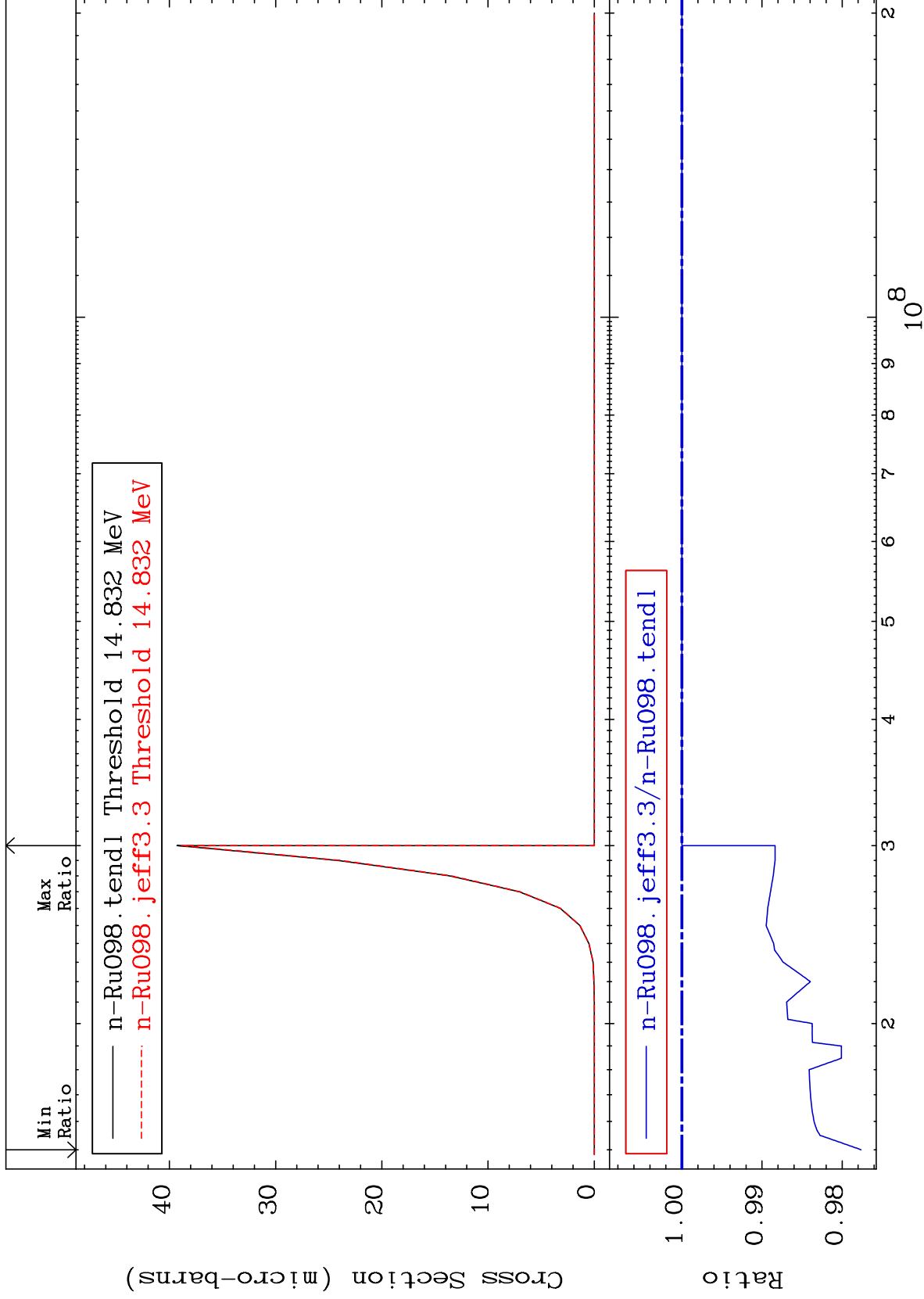
MAT 4431

(n, p) t

44-Ru-98

Cross Section

-2.236 To 0.000 %



60

44-Ru-98

44-Ru-98

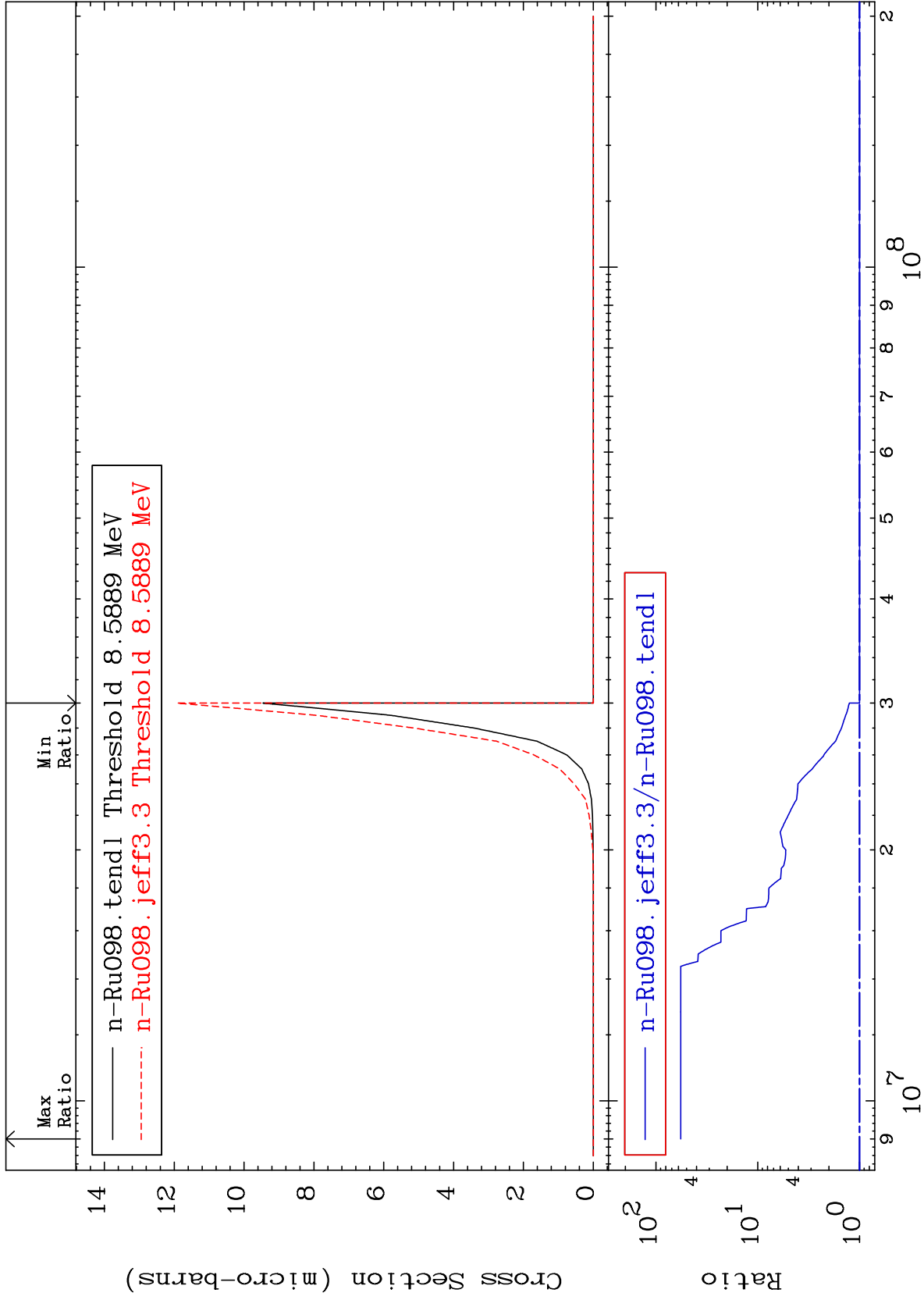
MAT 4431

(n, d) α

44-Ru-98

Cross Section

0.000 To 5602. %



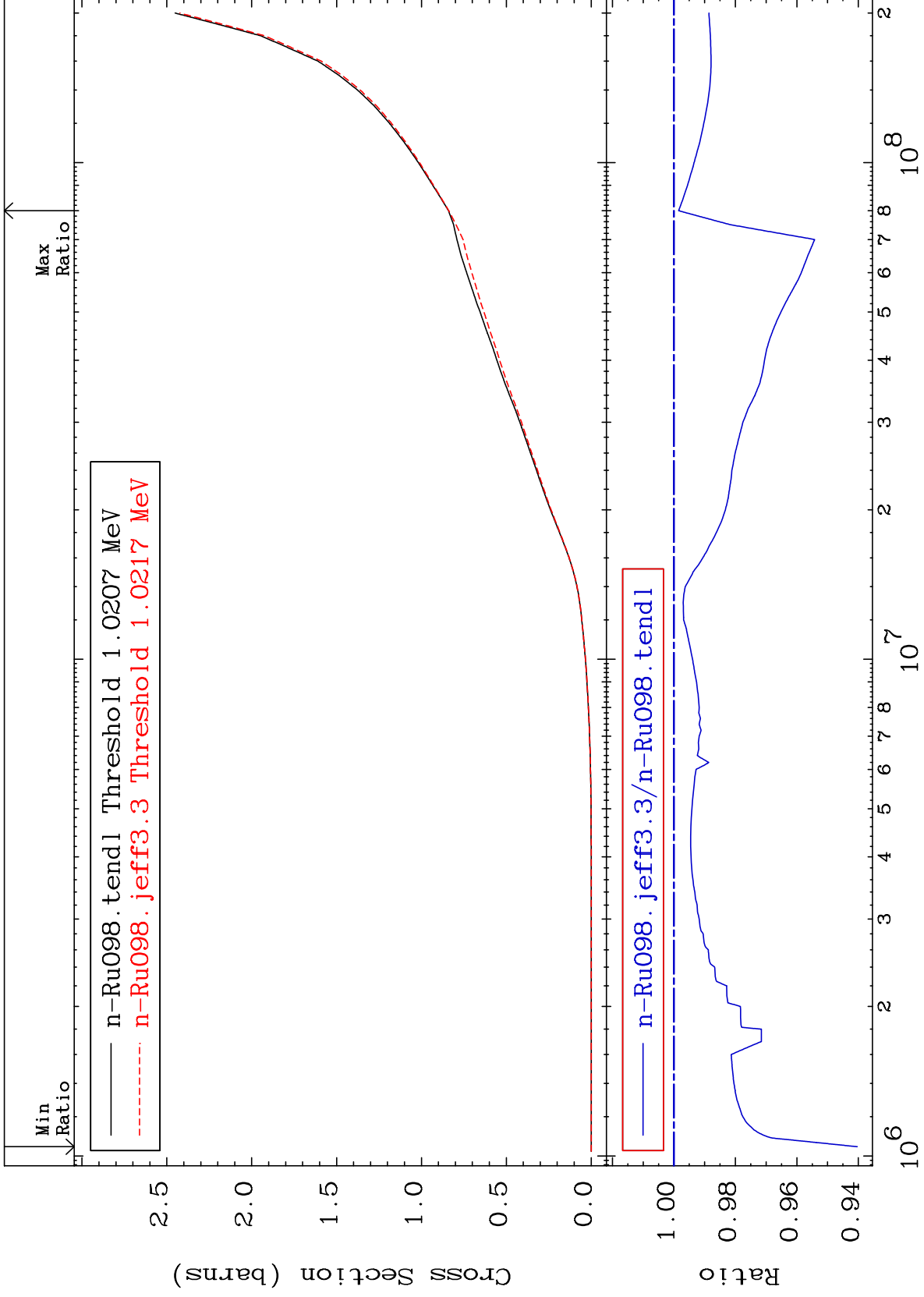
61

44-Ru-98

MAT 4431

Hydrogen Production
Cross Section

44-Ru-98
-5.964 To -0.154%



62

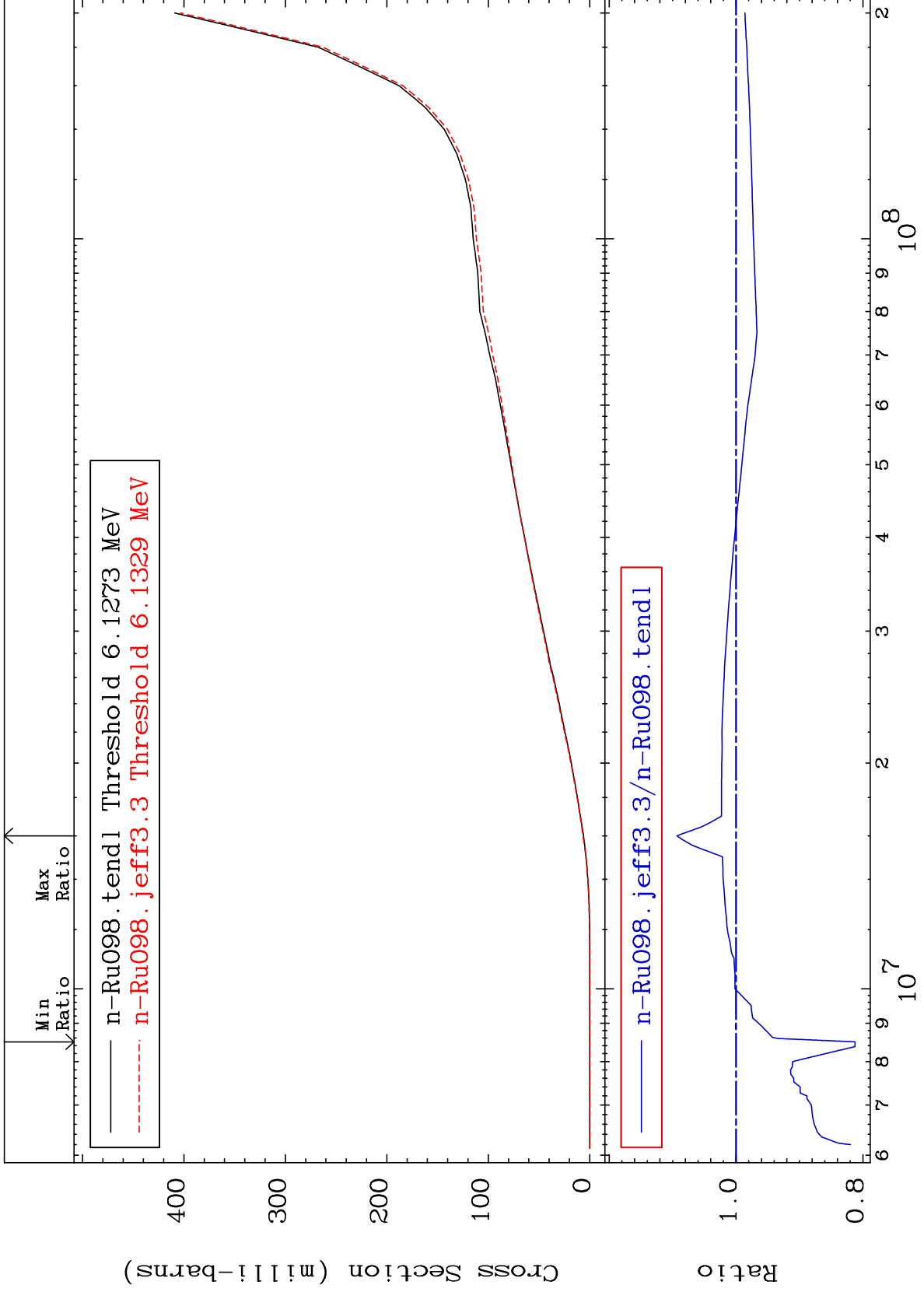
Incident Energy (eV)

44-Ru-98

MAT 4431

Deuterium Production
Cross Section

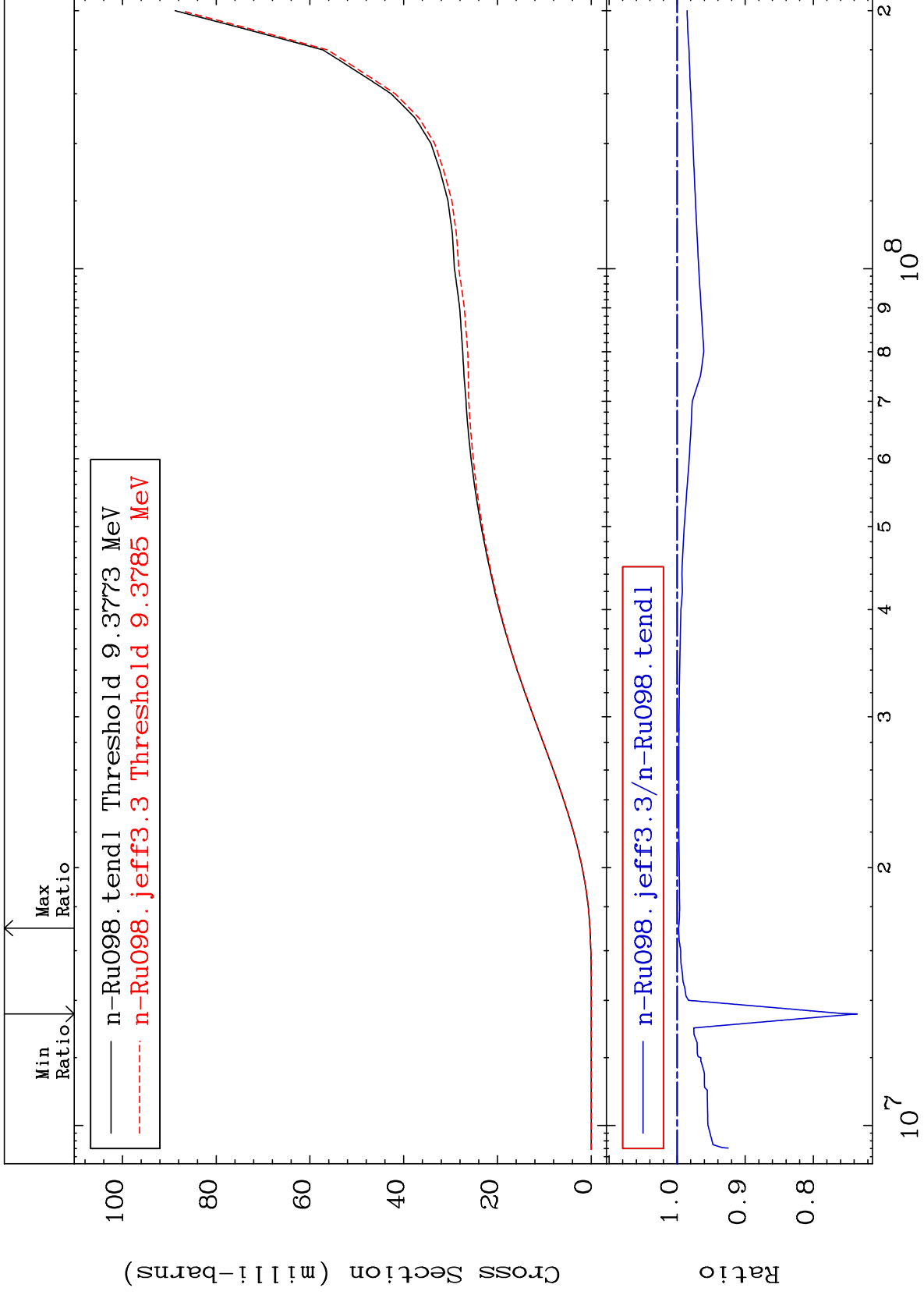
44-Ru-98
-18.77 To 9.326 %



MAT 4431

Tritium Production
Cross Section

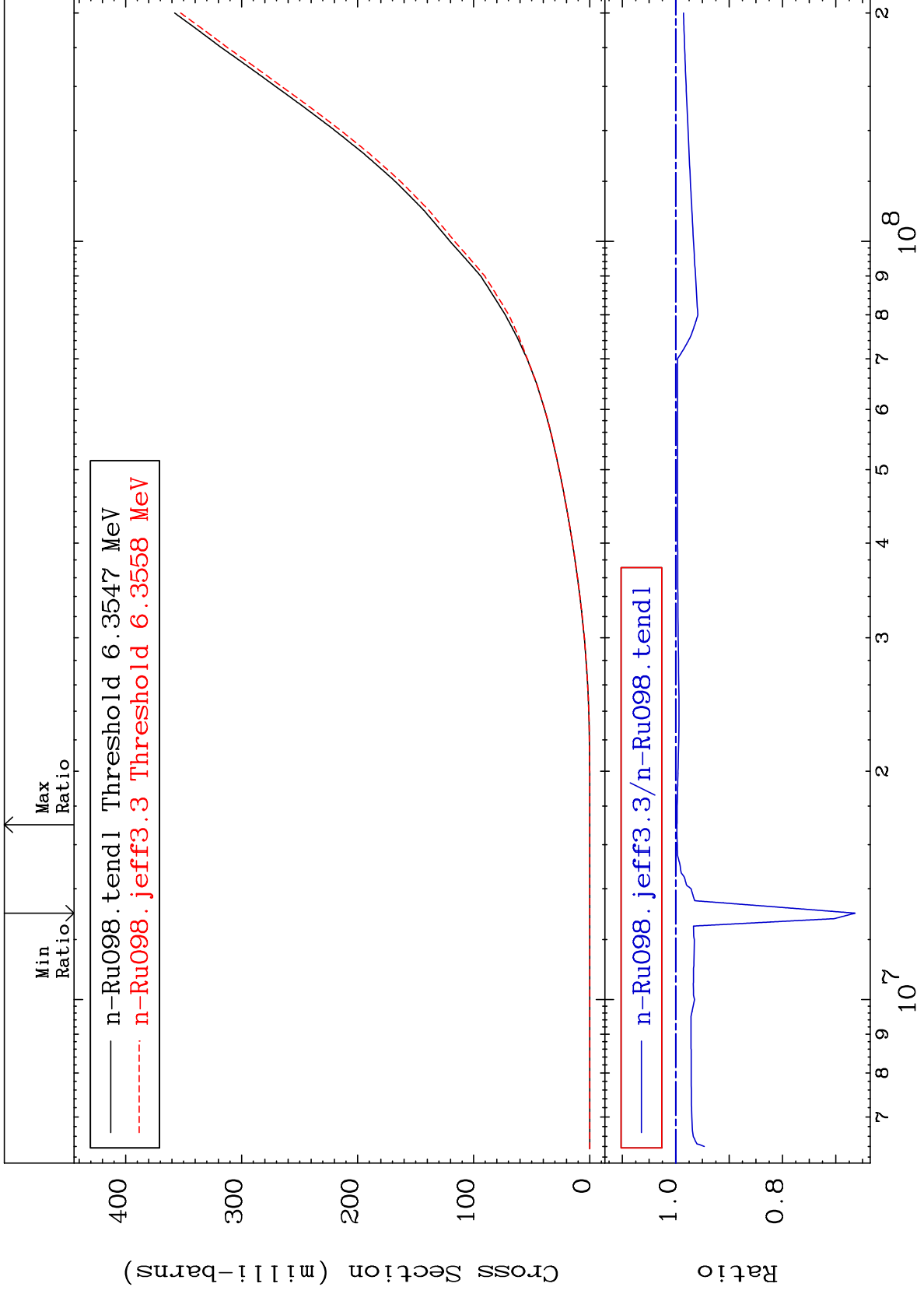
44-Ru-98
-26.46 To -0.222%



MAT 4431

He-3 Production
Cross Section

44-Ru-98
-33.60 To -0.216%



65

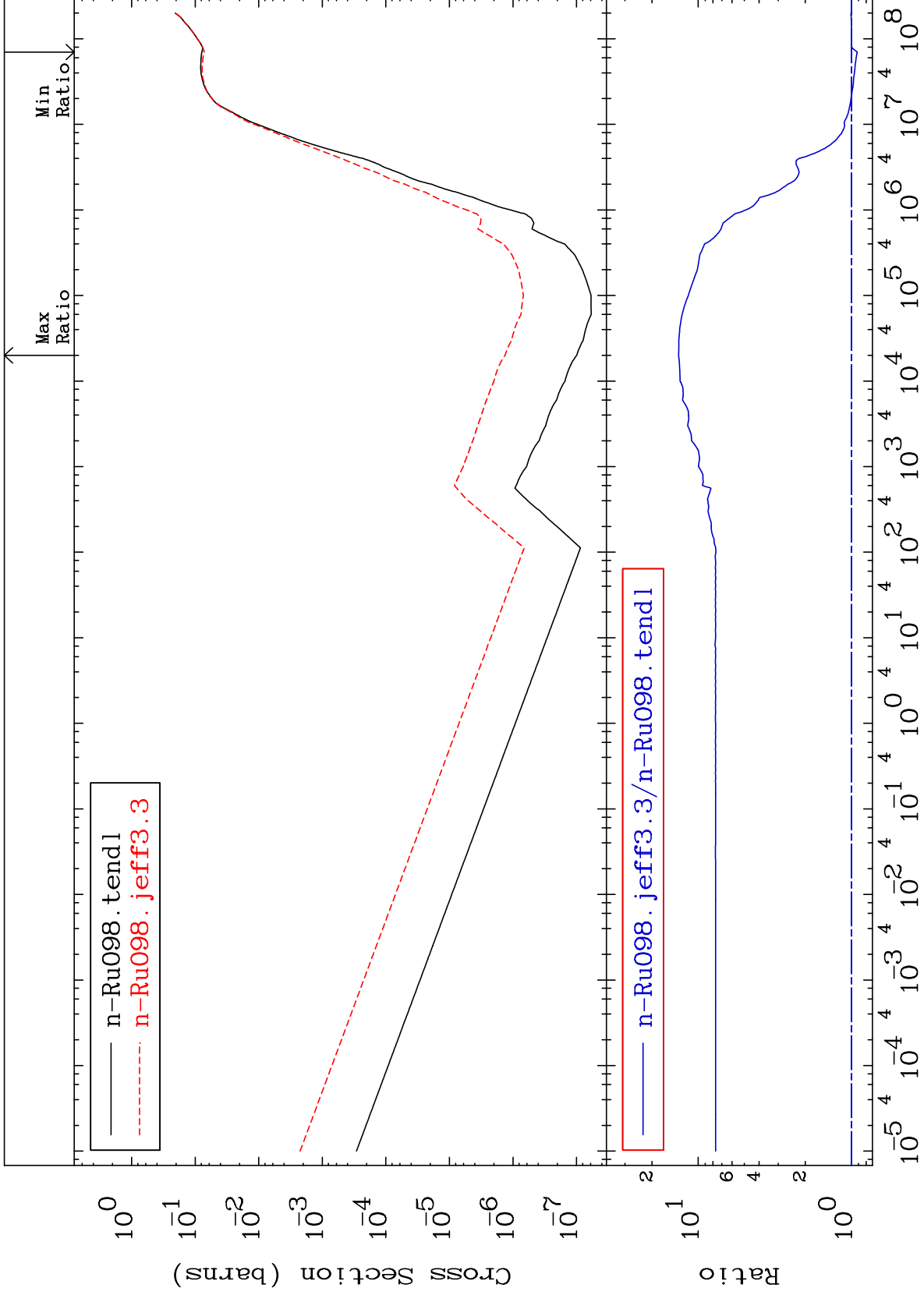
Incident Energy (eV)

44-Ru-98

MAT 4431

He-4 Production
Cross Section

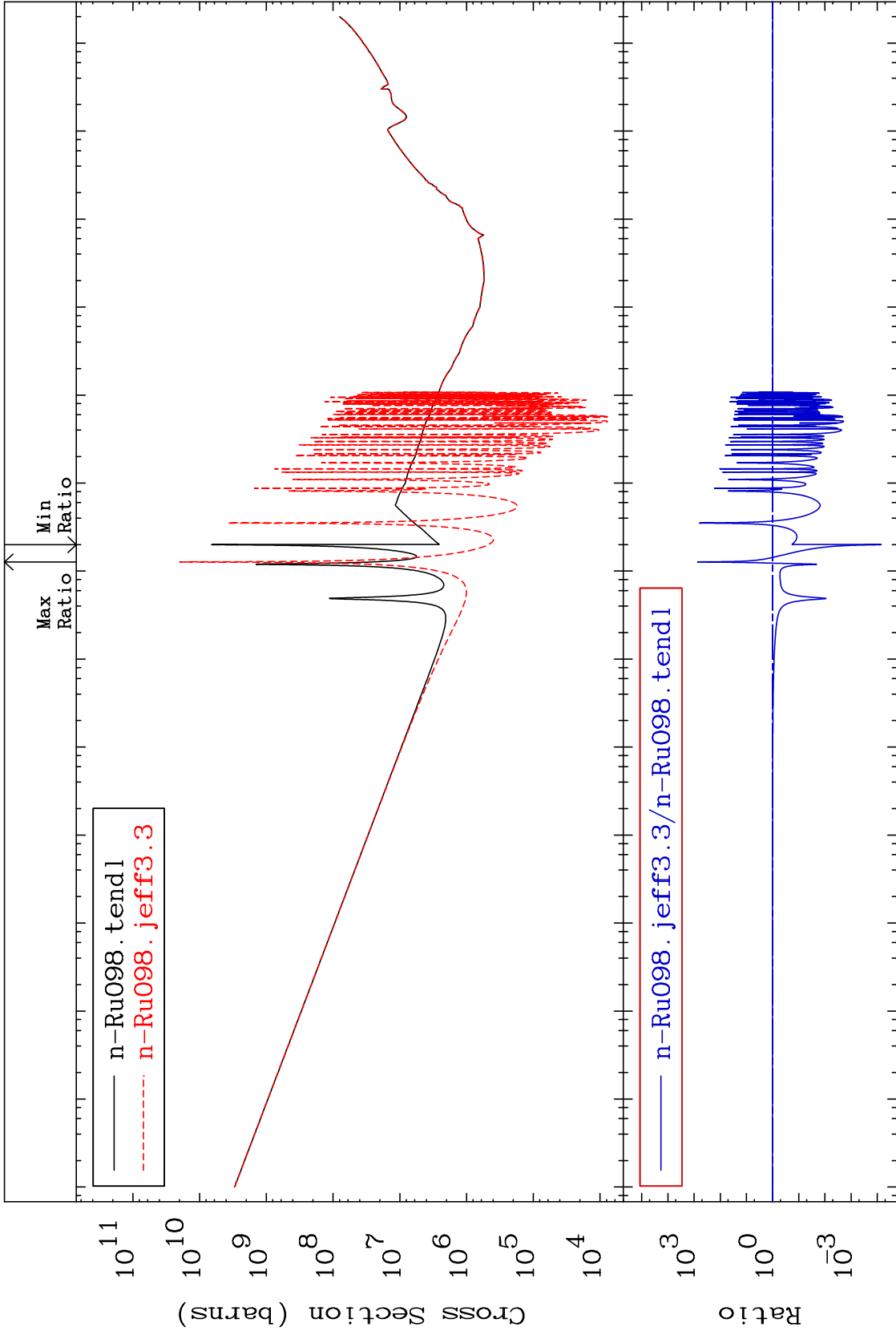
44-Ru-98
-8.380 To 1240. %



66

Incident Energy (eV)

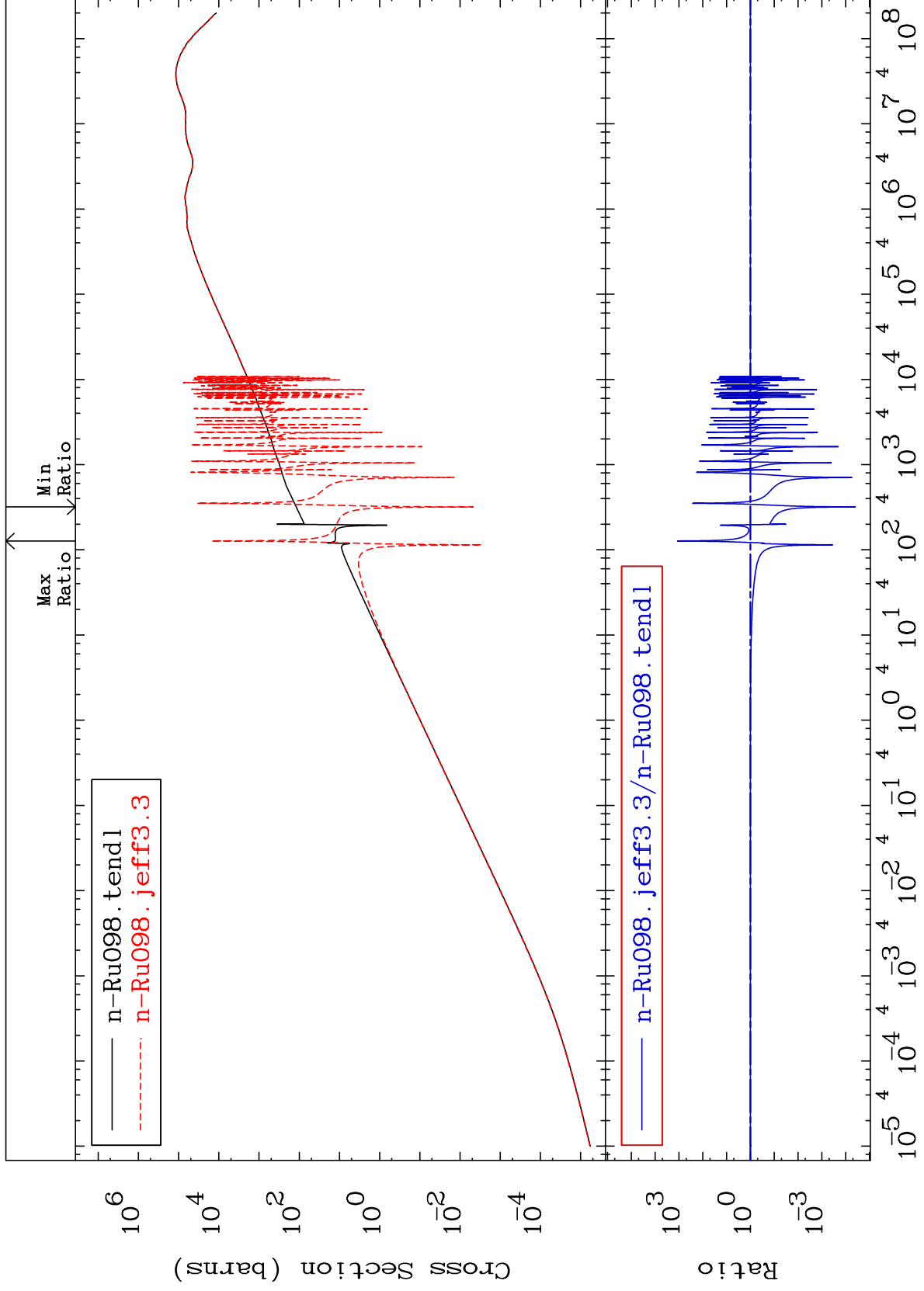
44-Ru-98

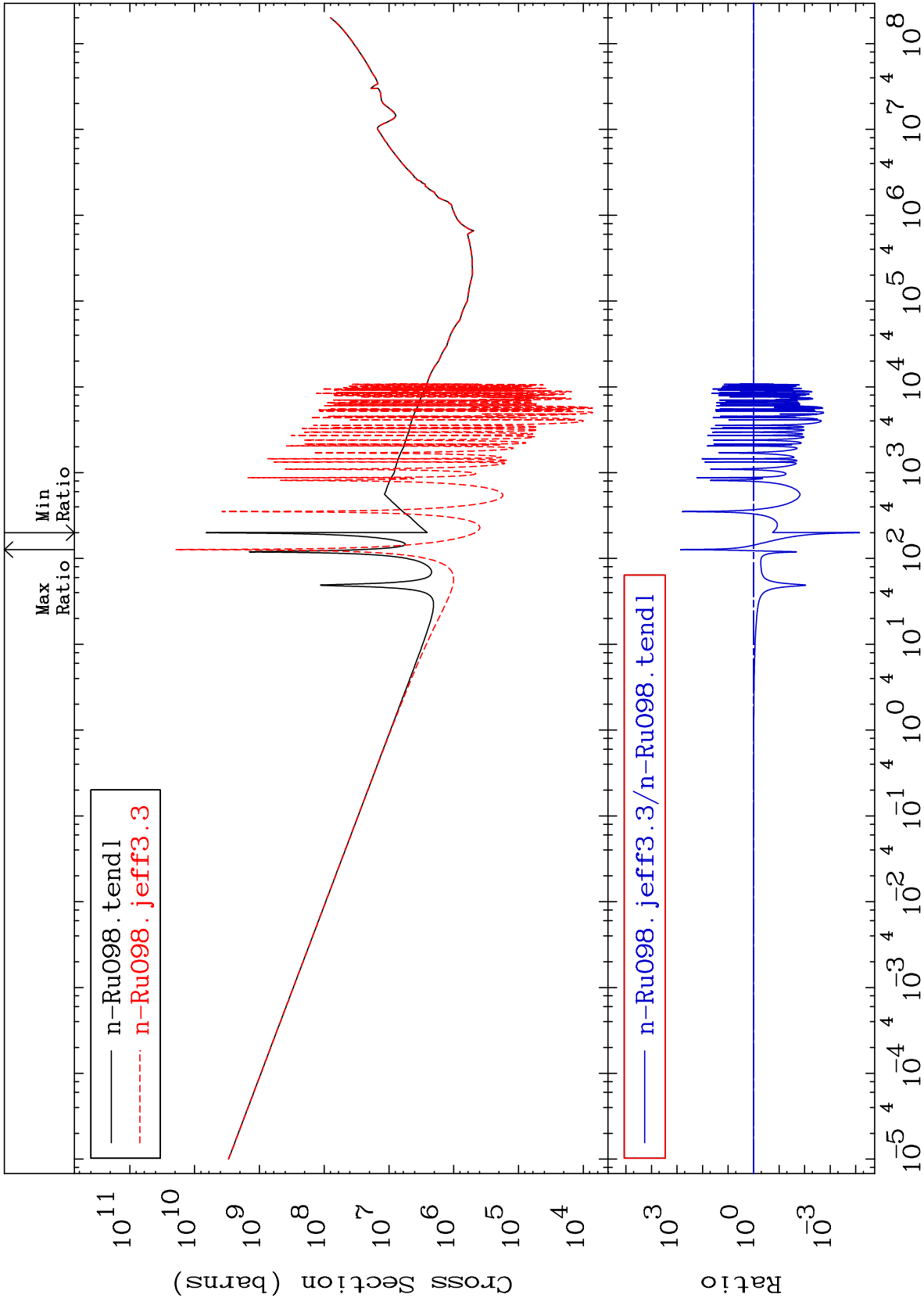


MAT 4431

Kerma elastic
Cross Section

44-Ru-98
-100.0 To 9999. %

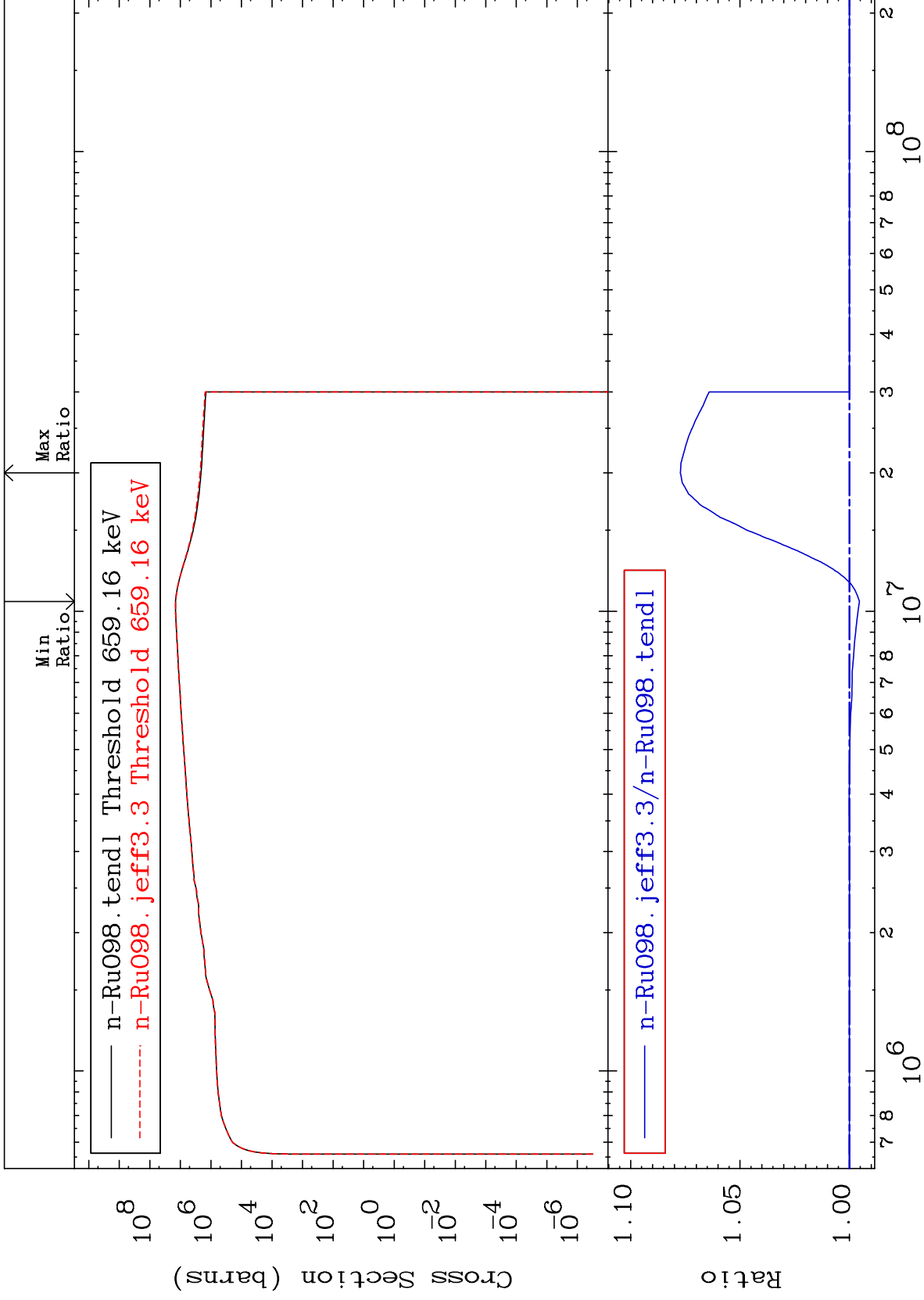




MAT 4431

Kerma inelastic (mt51-91)
Cross Section

44-Ru-98
-0.459 To 7.727 %



70

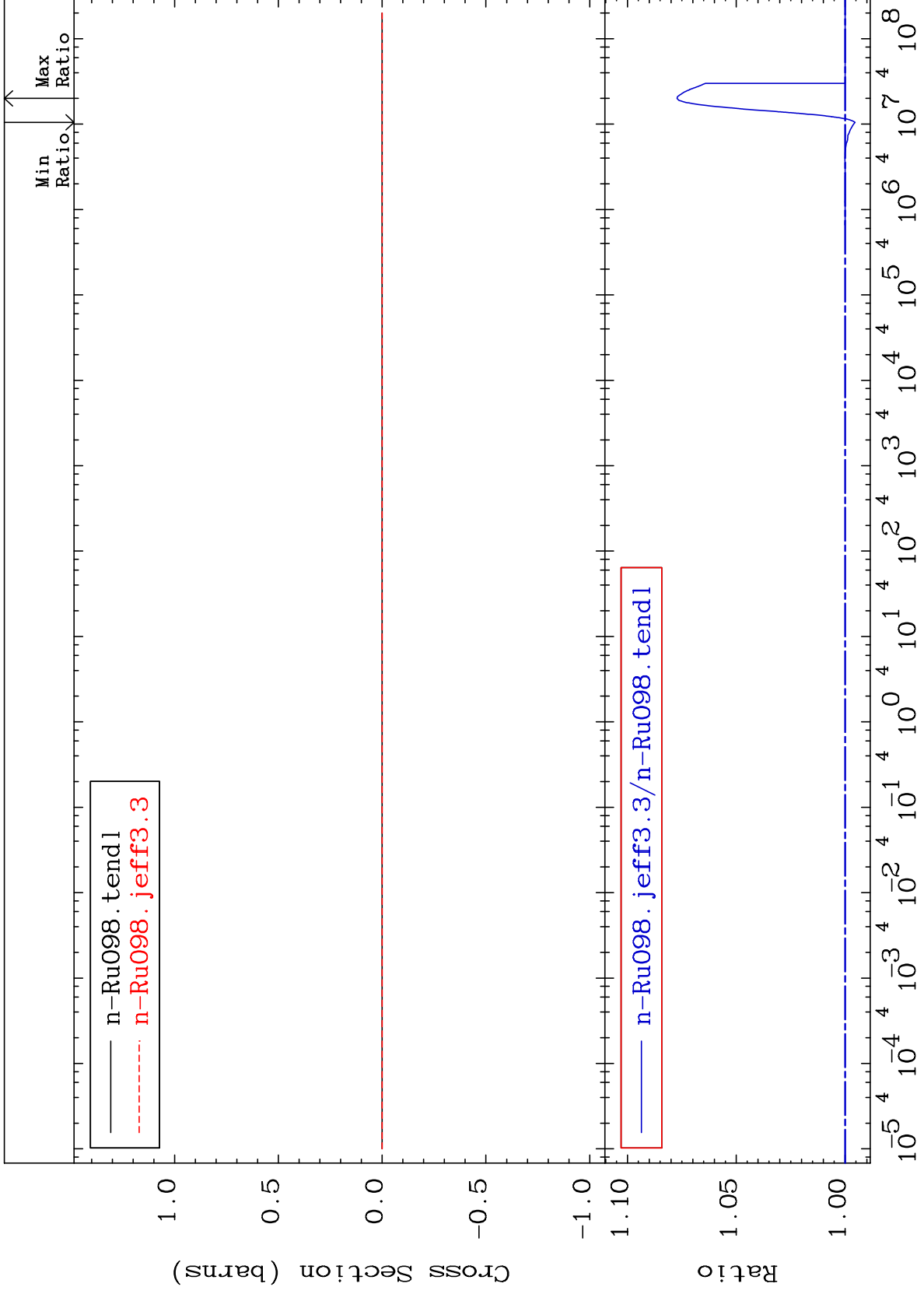
Incident Energy (eV)

44-Ru-98

MAT 4431

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

44-Ru-98
-0.459 To 7.727 %



71

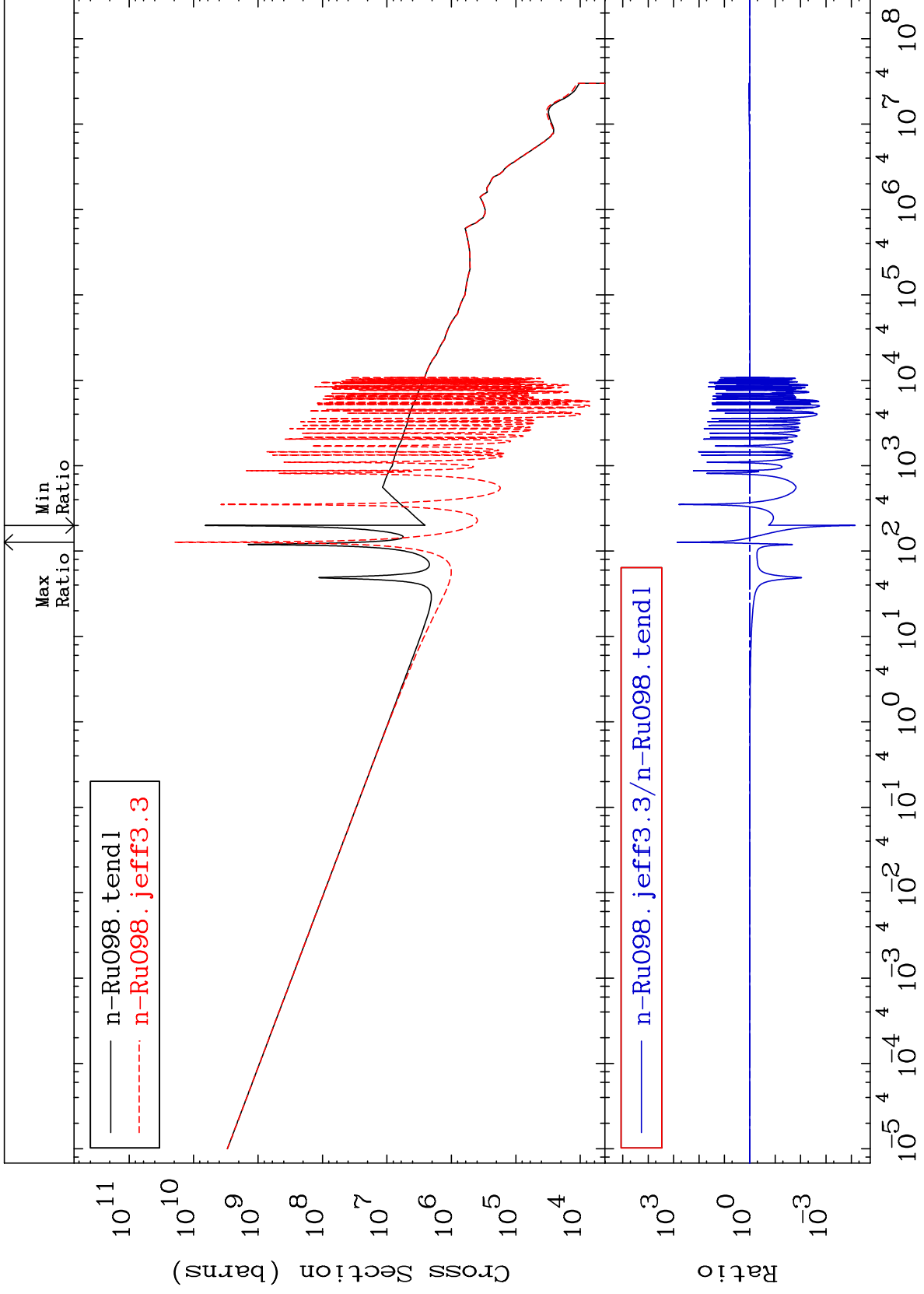
Incident Energy (eV)

44-Ru-98

MAT 4431

Kerma capture (mt102)
Cross Section

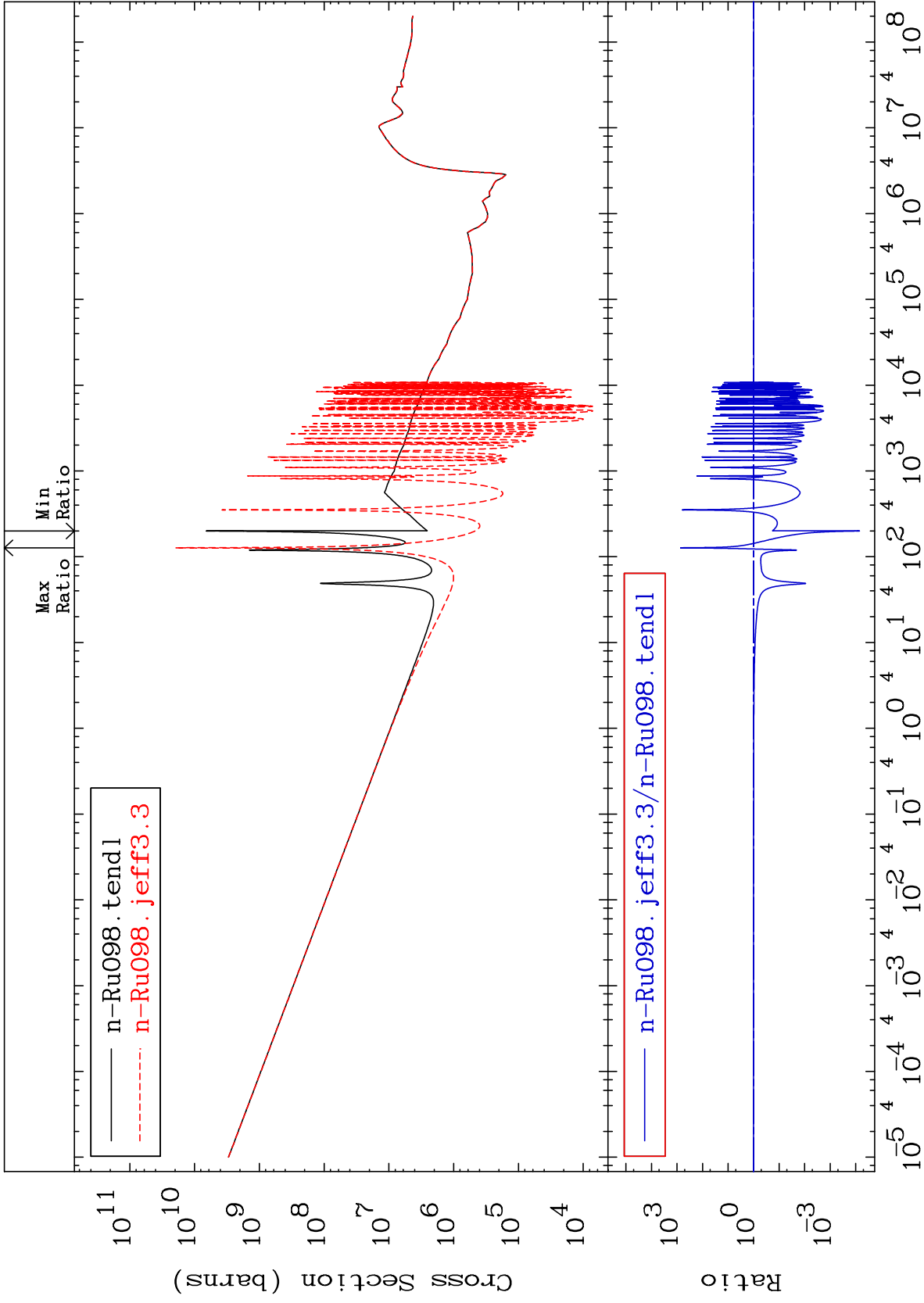
44-Ru-98
-99.99 To 9999. %

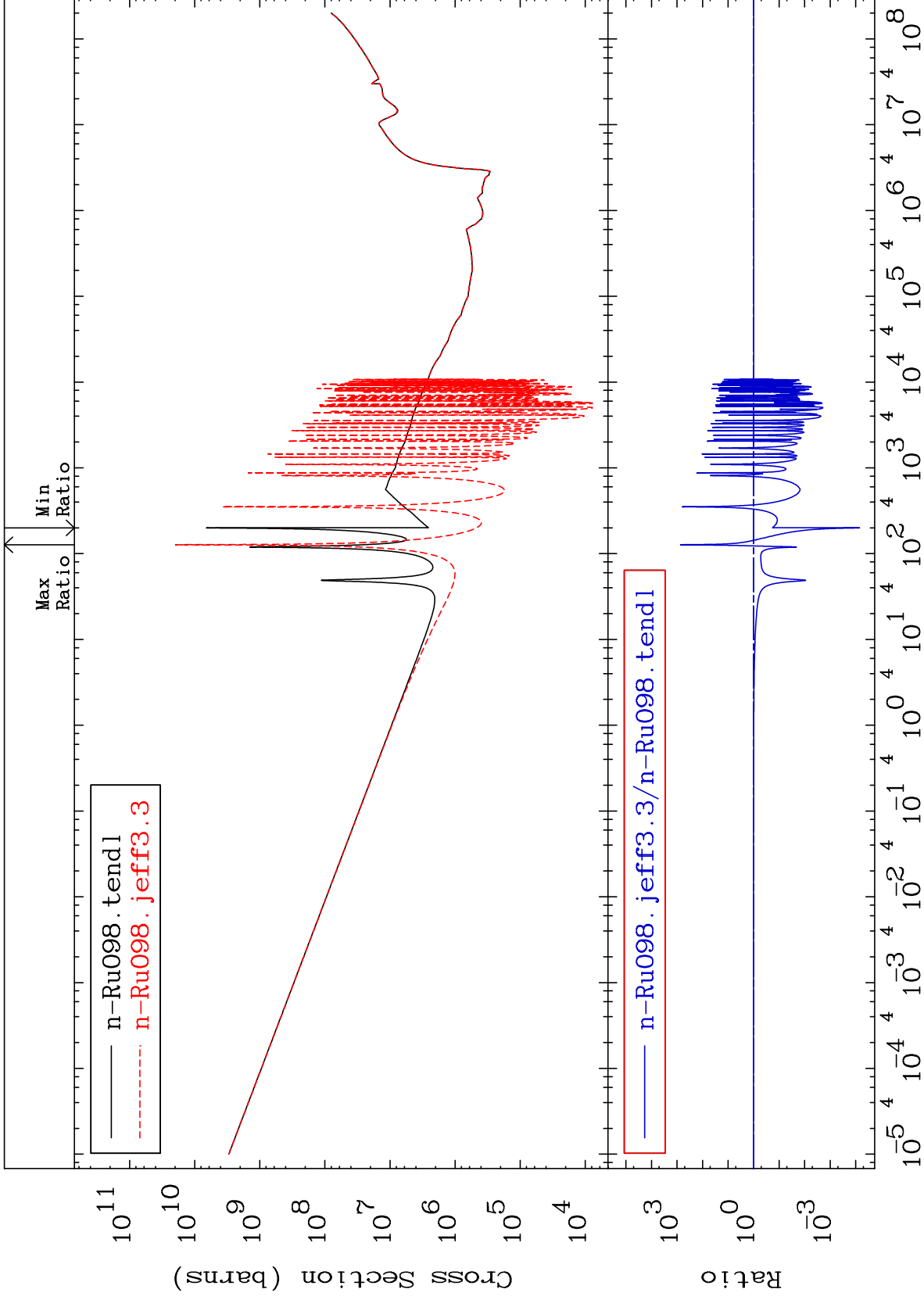


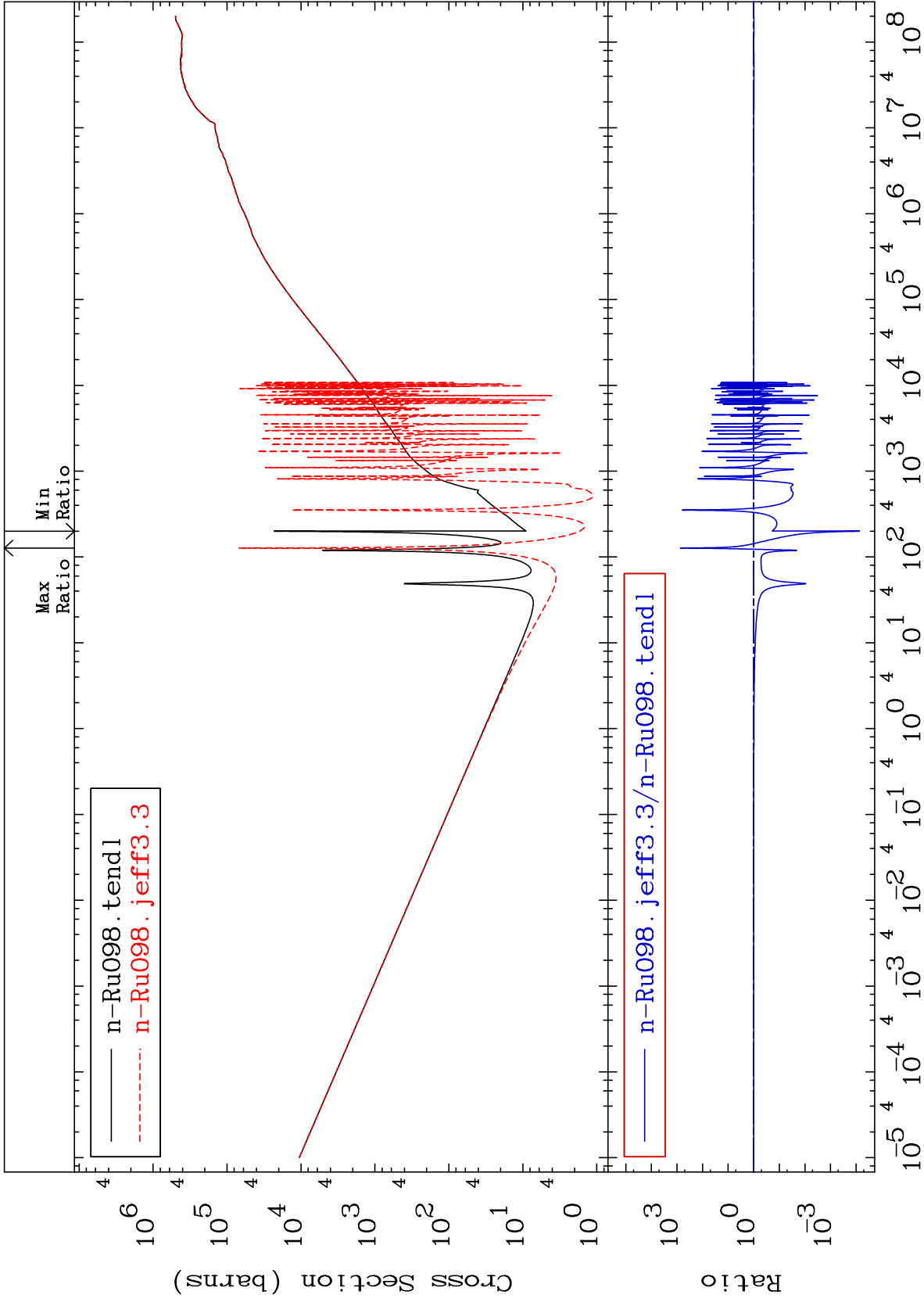
72

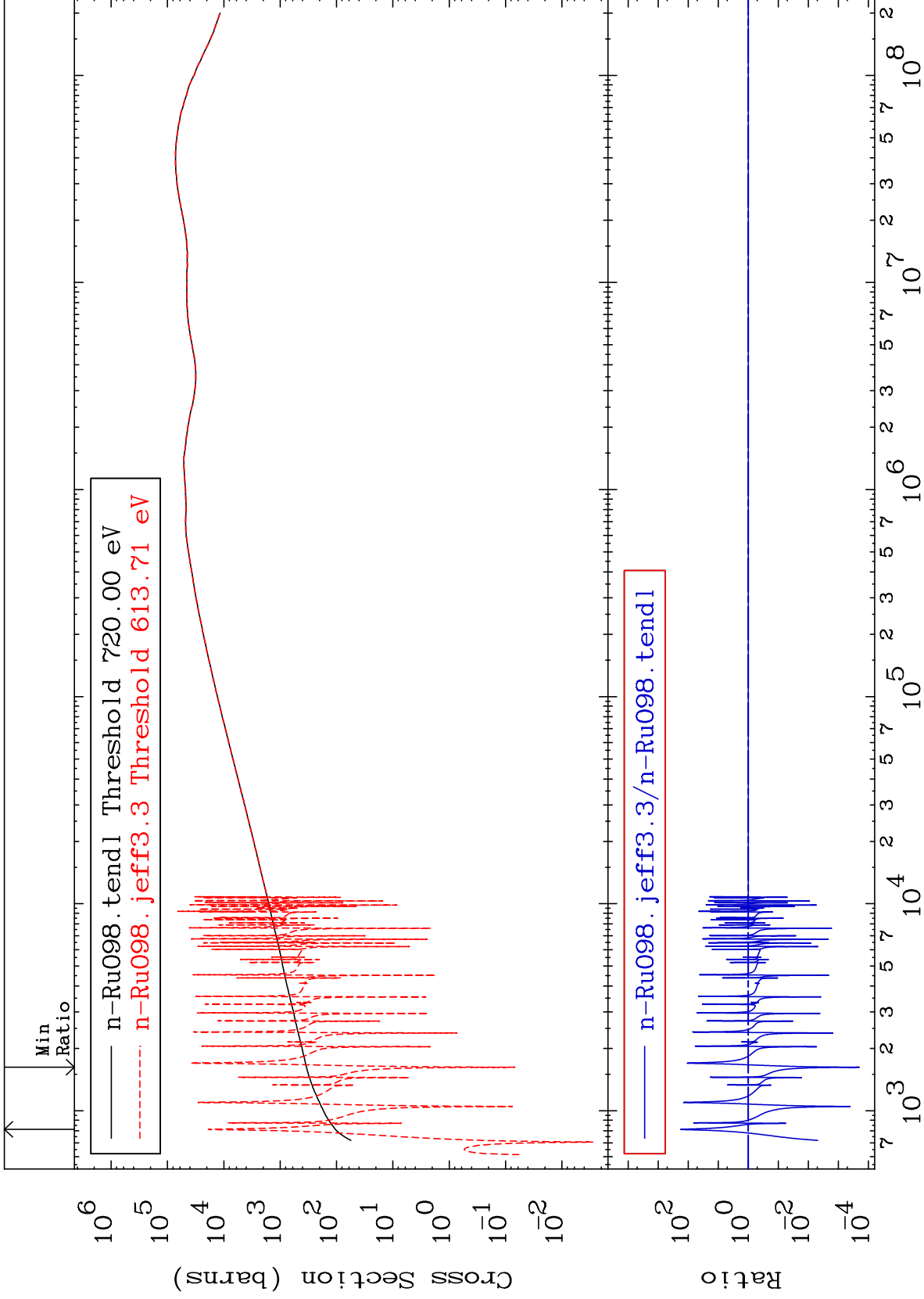
Incident Energy (eV)

44-Ru-98





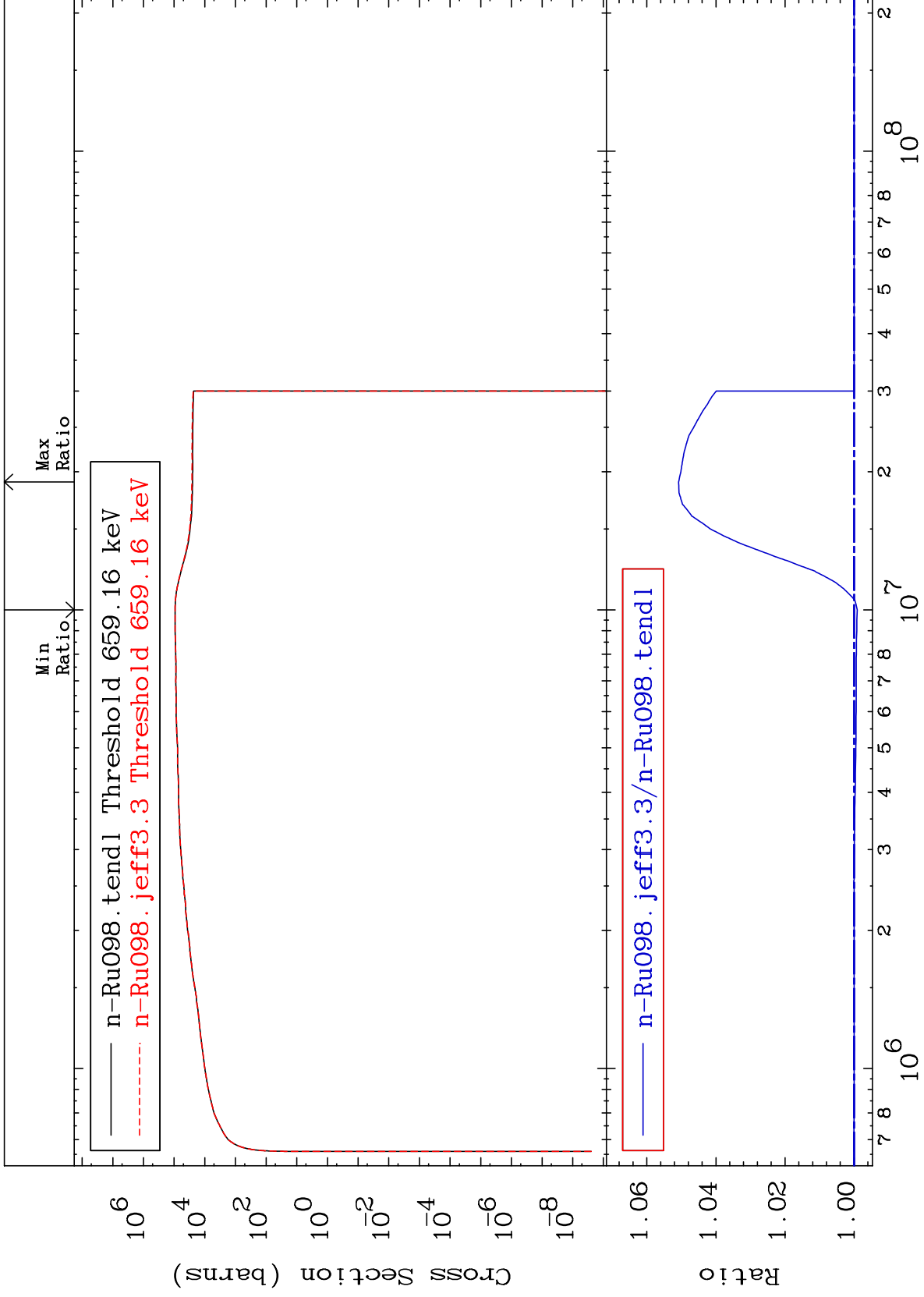




MAT 4431

Dpa inelastic (mt51-91)
Cross Section

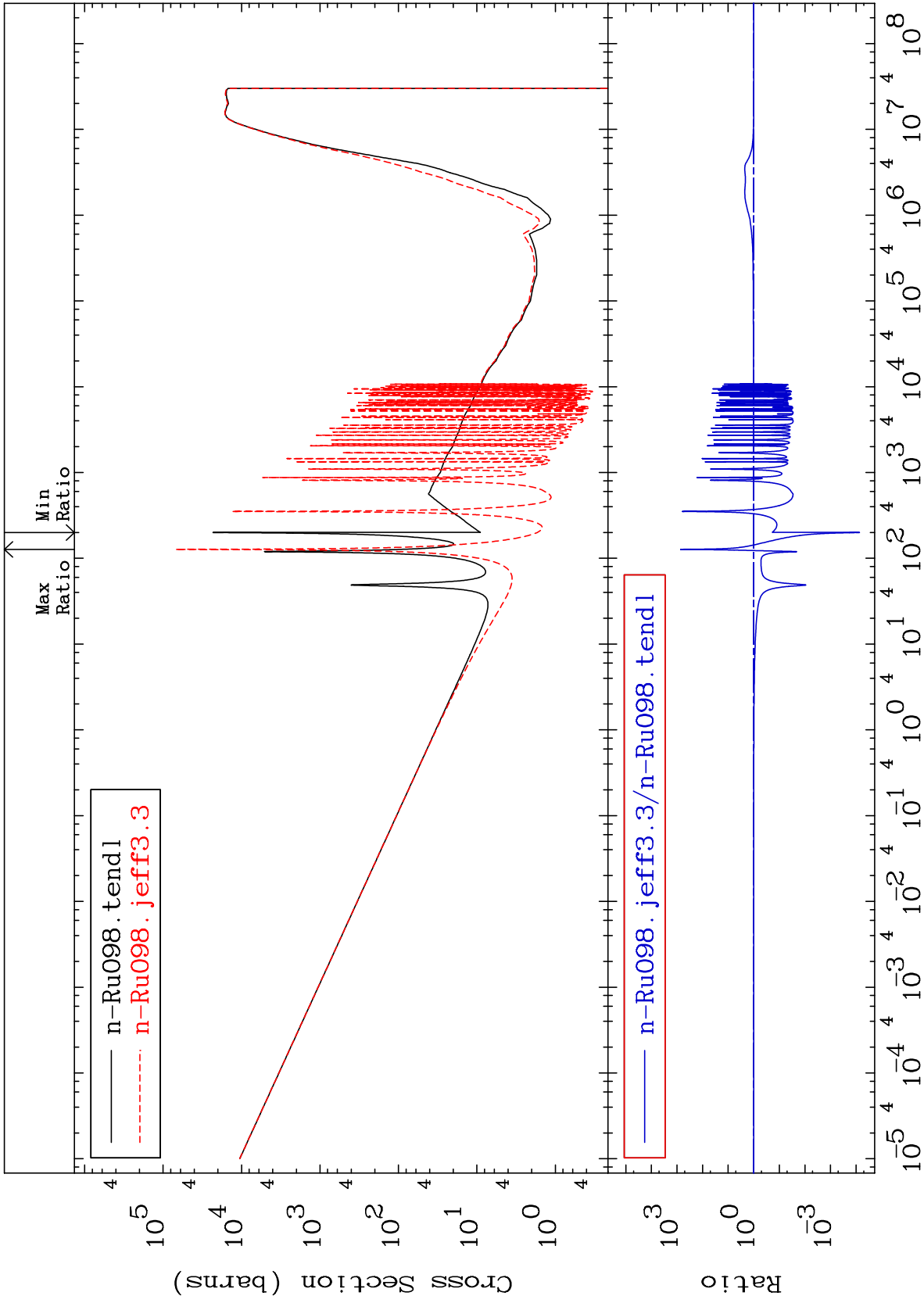
44-Ru-98
-0.091 To 5.080 %



77

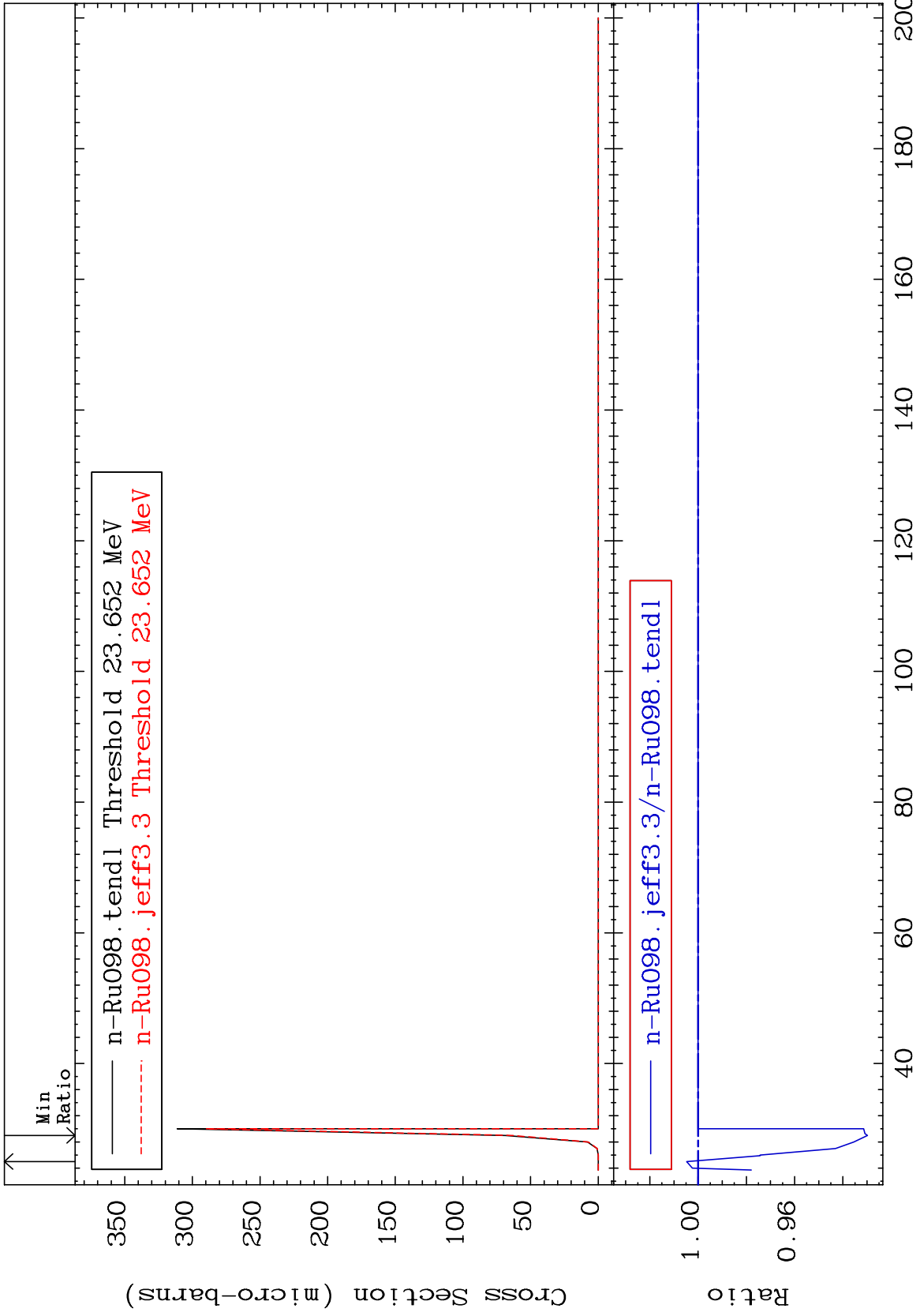
Incident Energy (eV)

44-Ru-98



Radionuclide Production Cross Section

-7.017 To 0.472 %



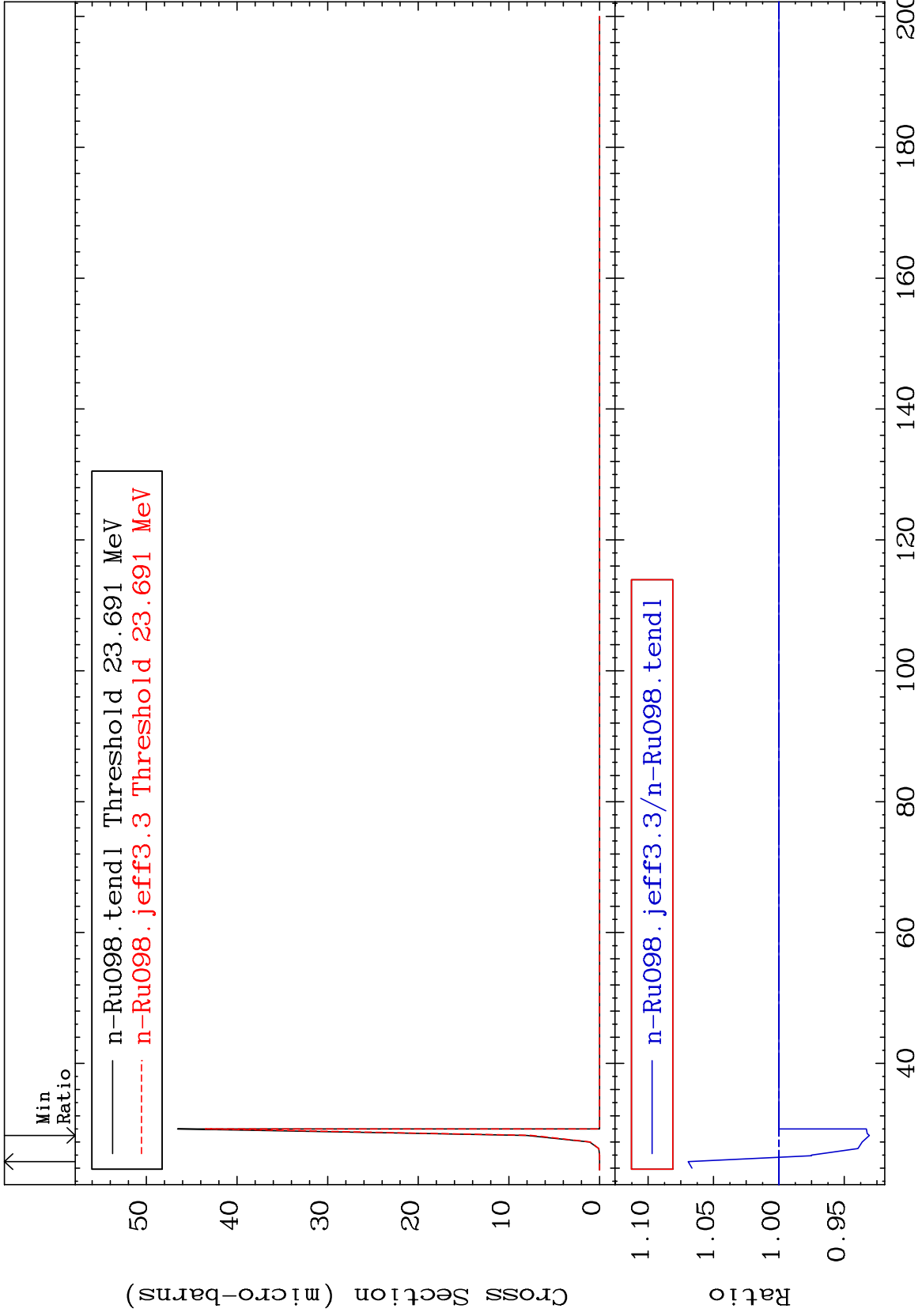
MAT 4431

(n,2n) d:43-Tc-95m1

44-Ru-98

Radionuclide Production Cross Section

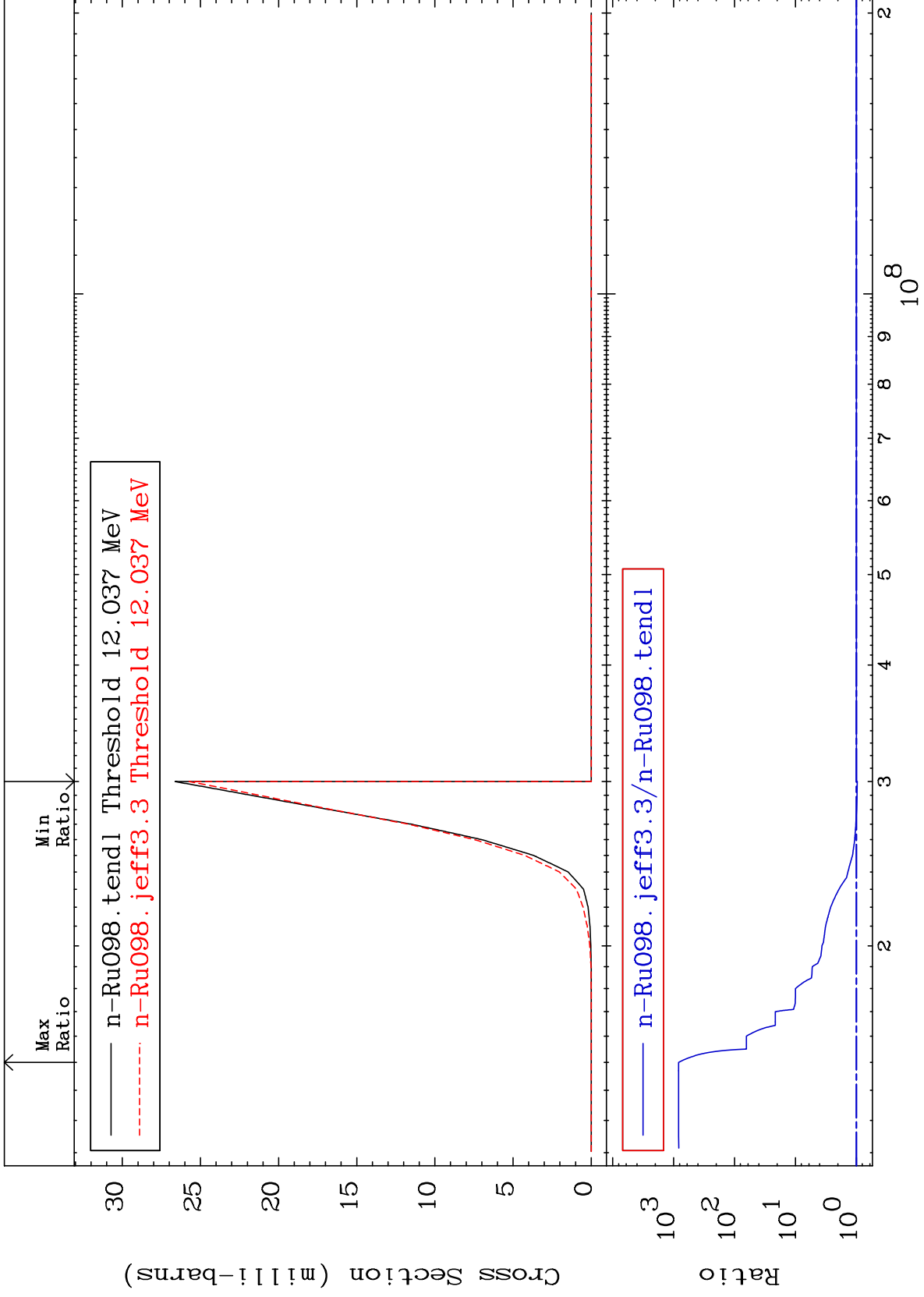
-6.914 To 6.939 %



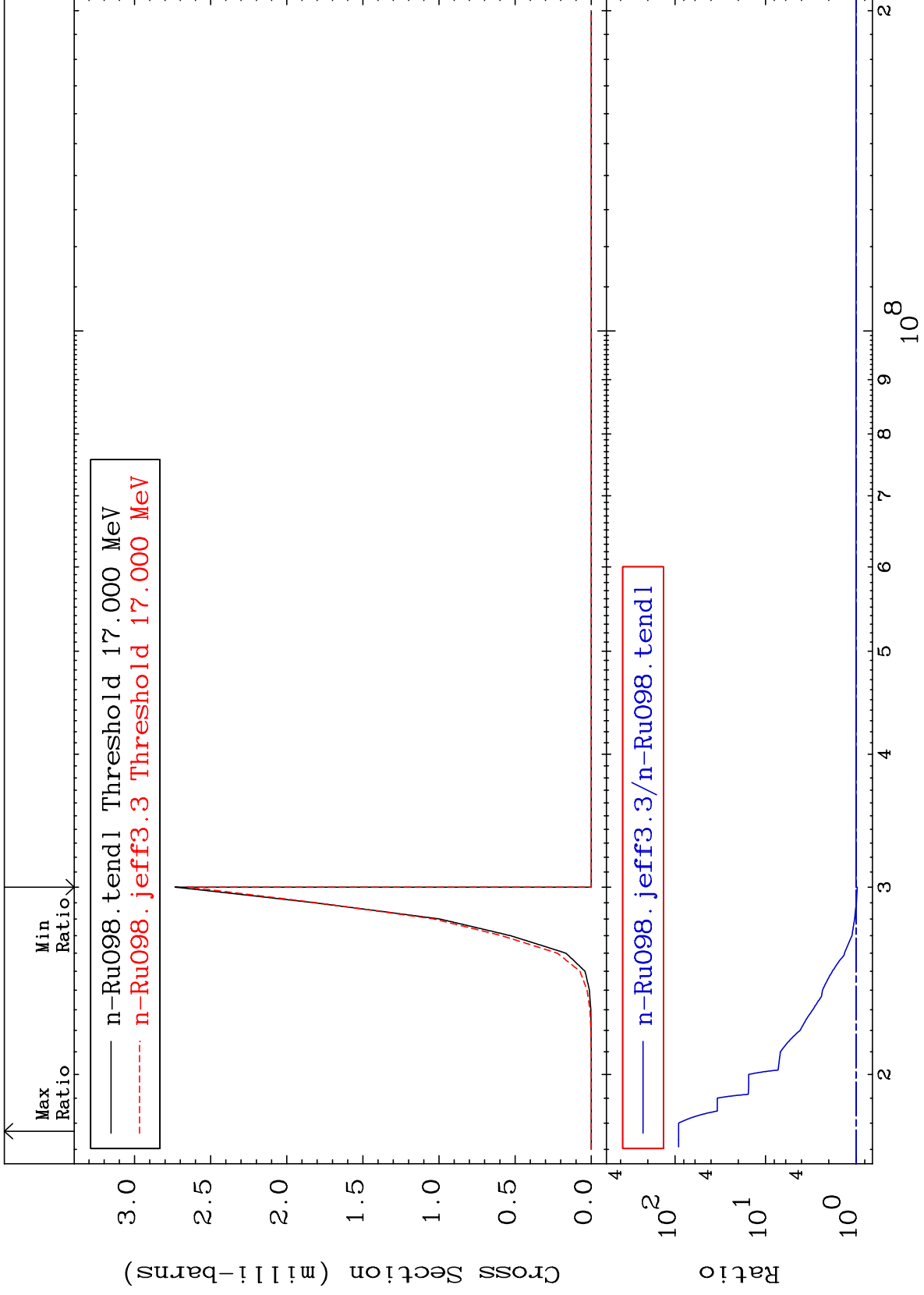
80

Incident Energy (MeV)

44-Ru-98



Radionuclide Production Cross Section -3.035 To 9017. %

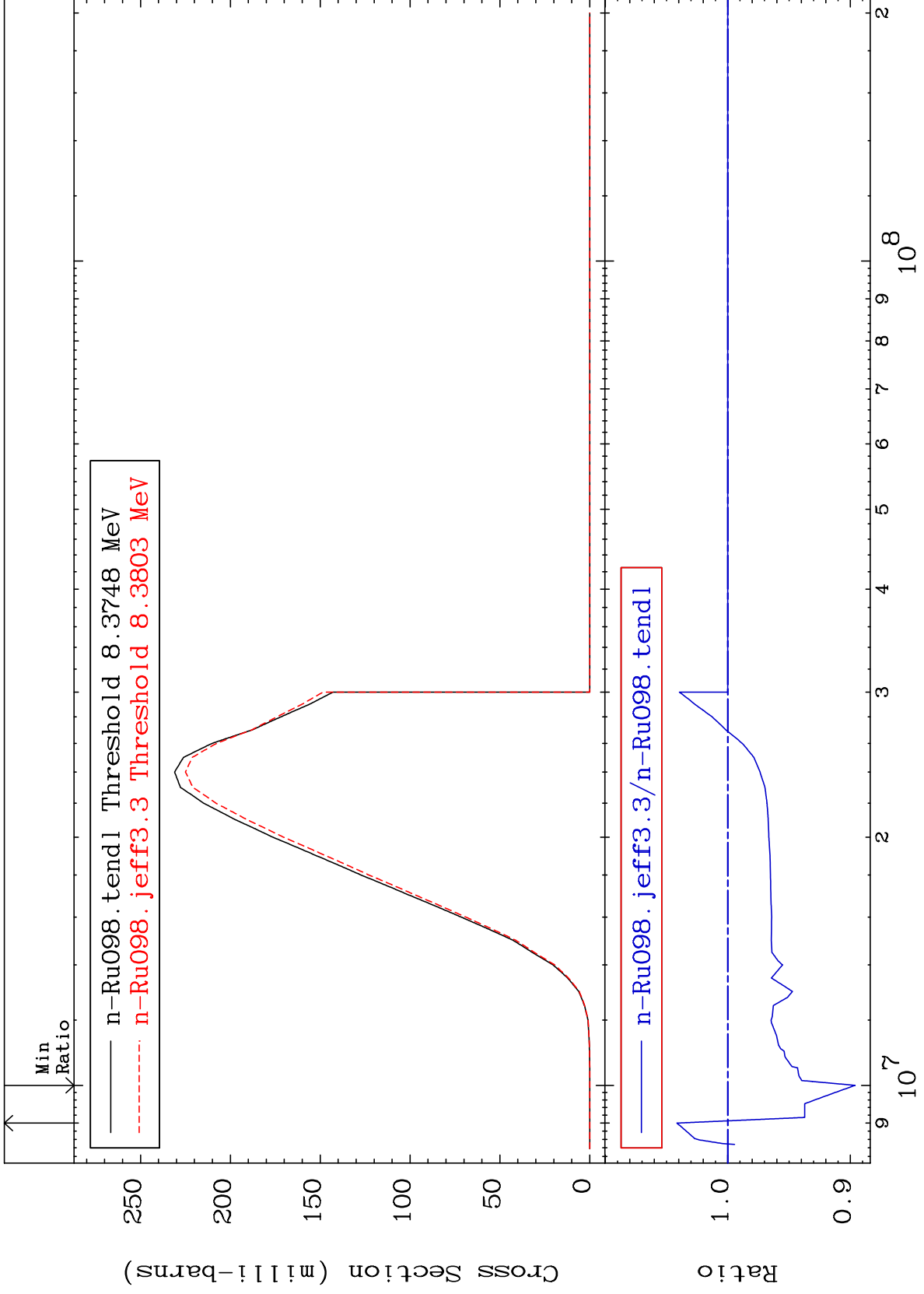


MAT 4431

(n, n') p:43-Tc-97g

44-Ru-98

Radionuclide Production Cross Section -10.40 To 4.155 %

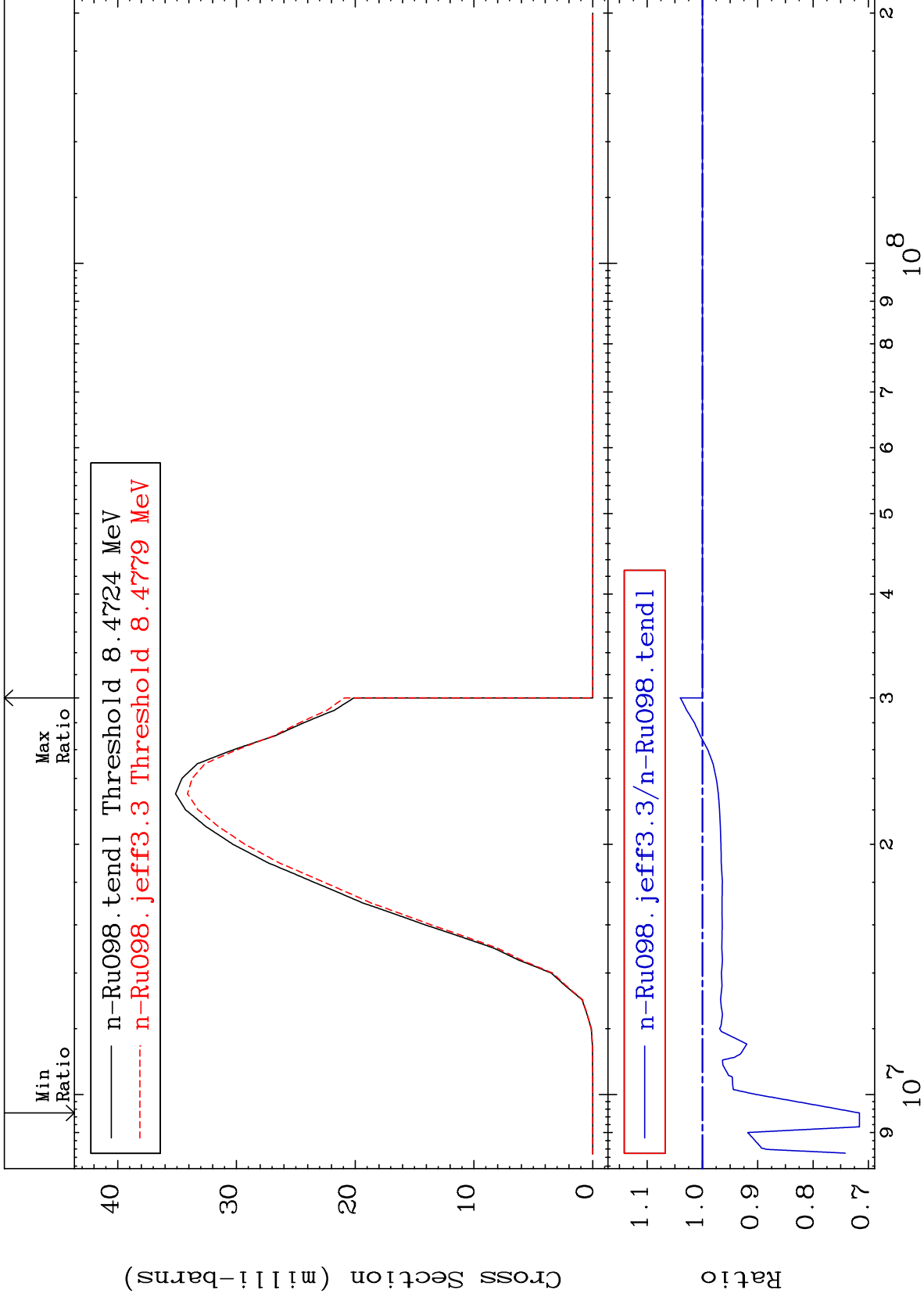


83

44-Ru-98

44-Ru-98

Radionuclide Production Cross Section -28.39 To 3.993 %

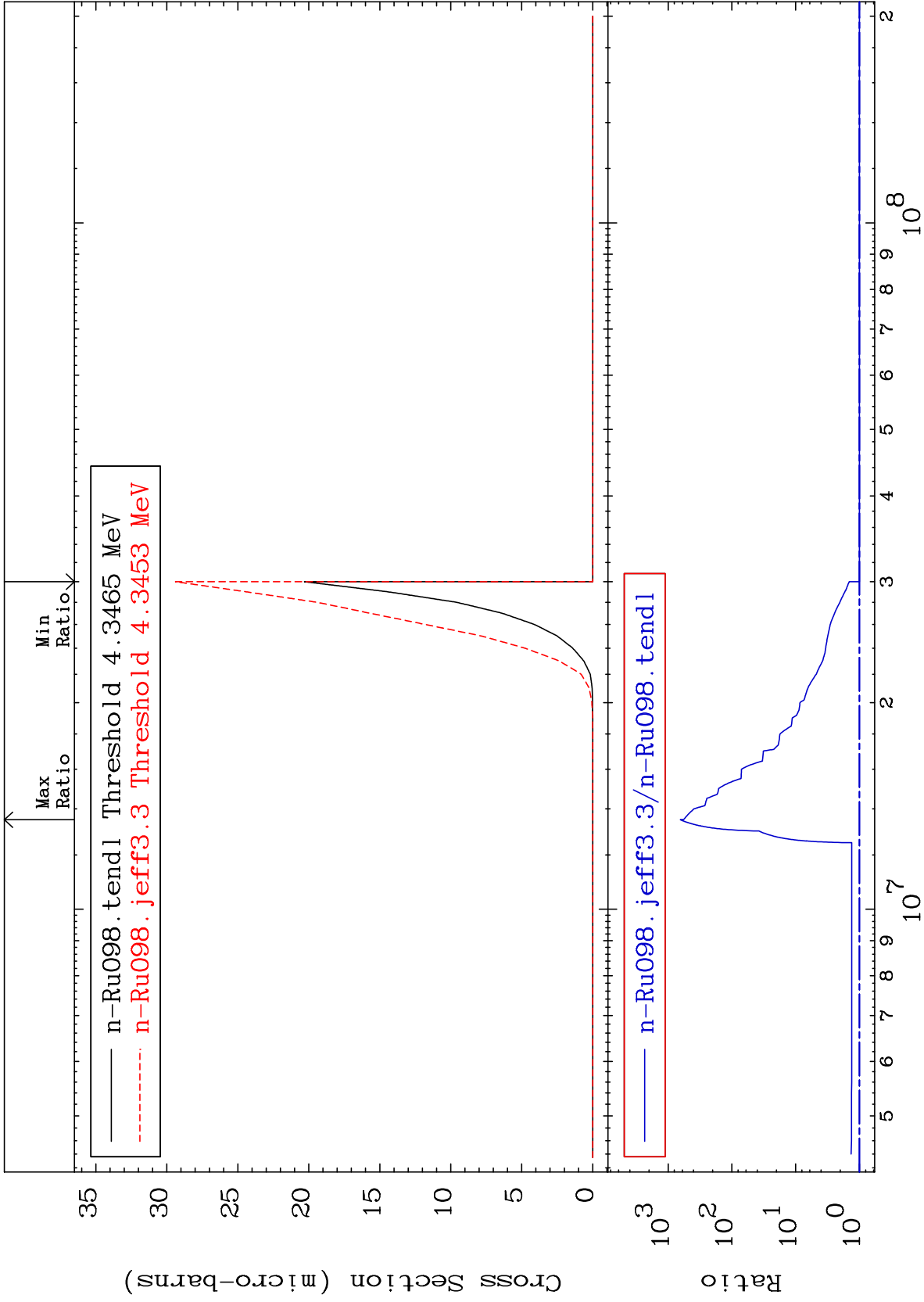


MAT 4431

(n, n') 2α: 40-Zr-90g

44-Ru-98

Radionuclide Production Cross Section 0.000 To 9999. %

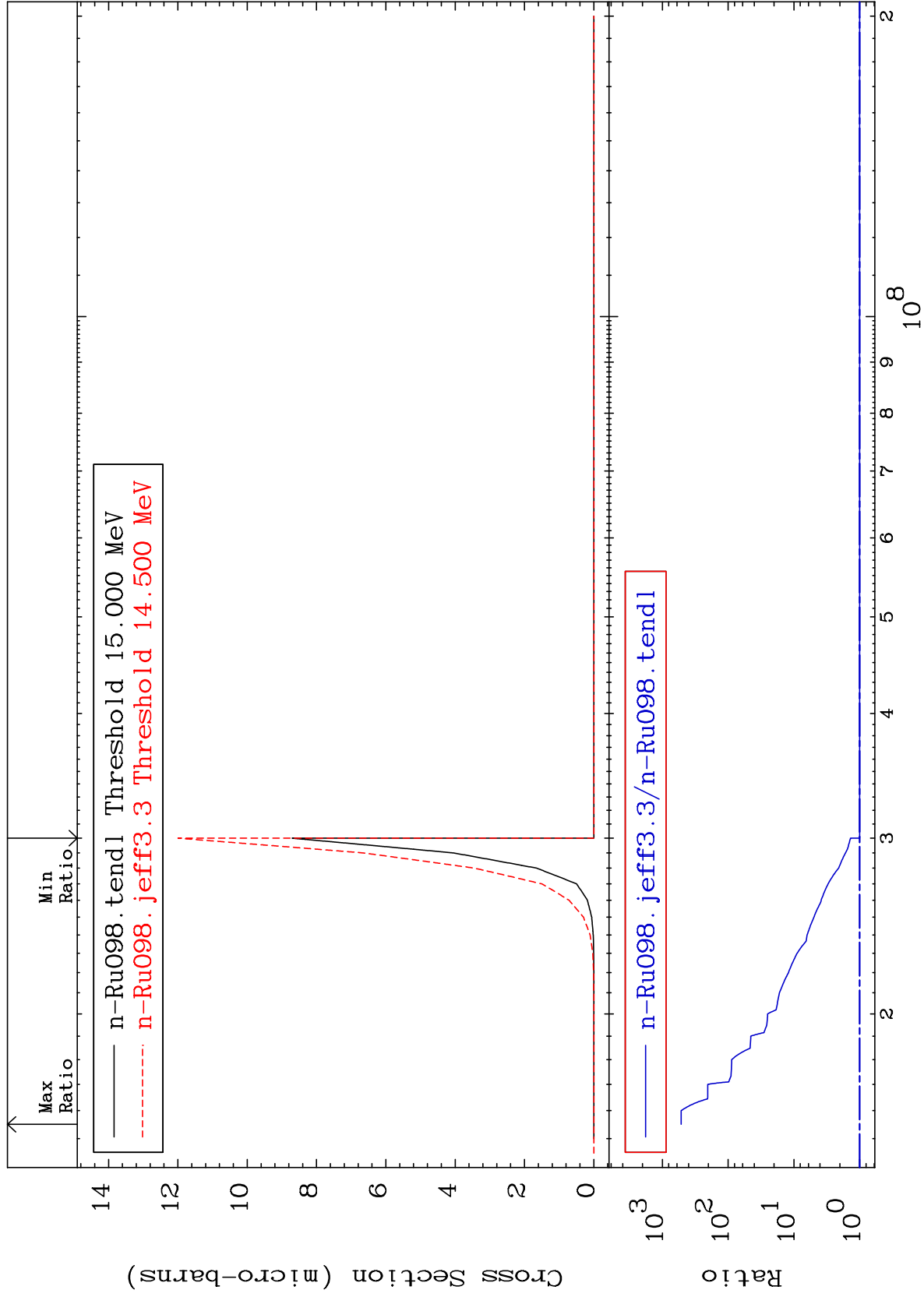


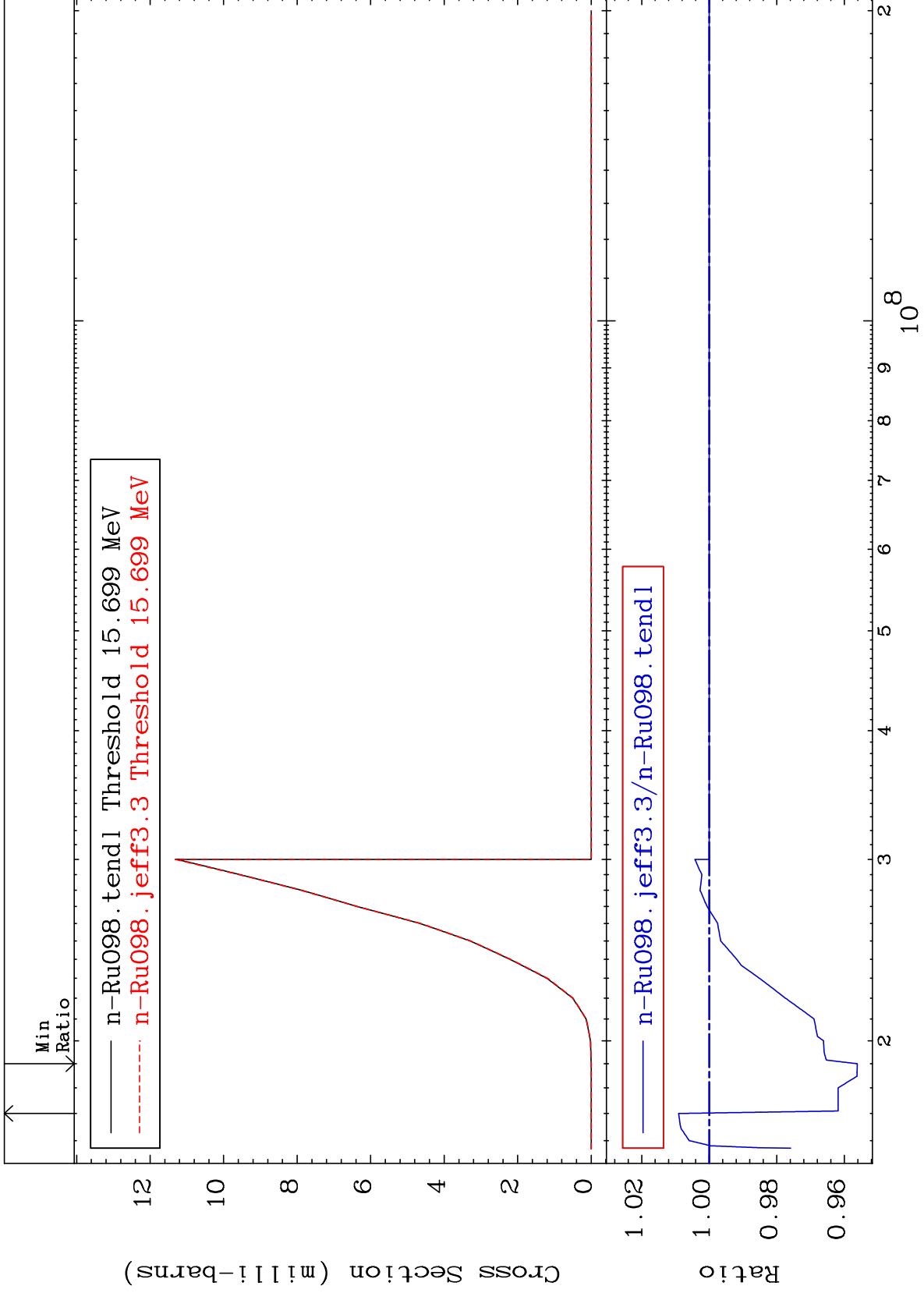
MAT 4431

(n, n') 2α:40-Zr-90m3

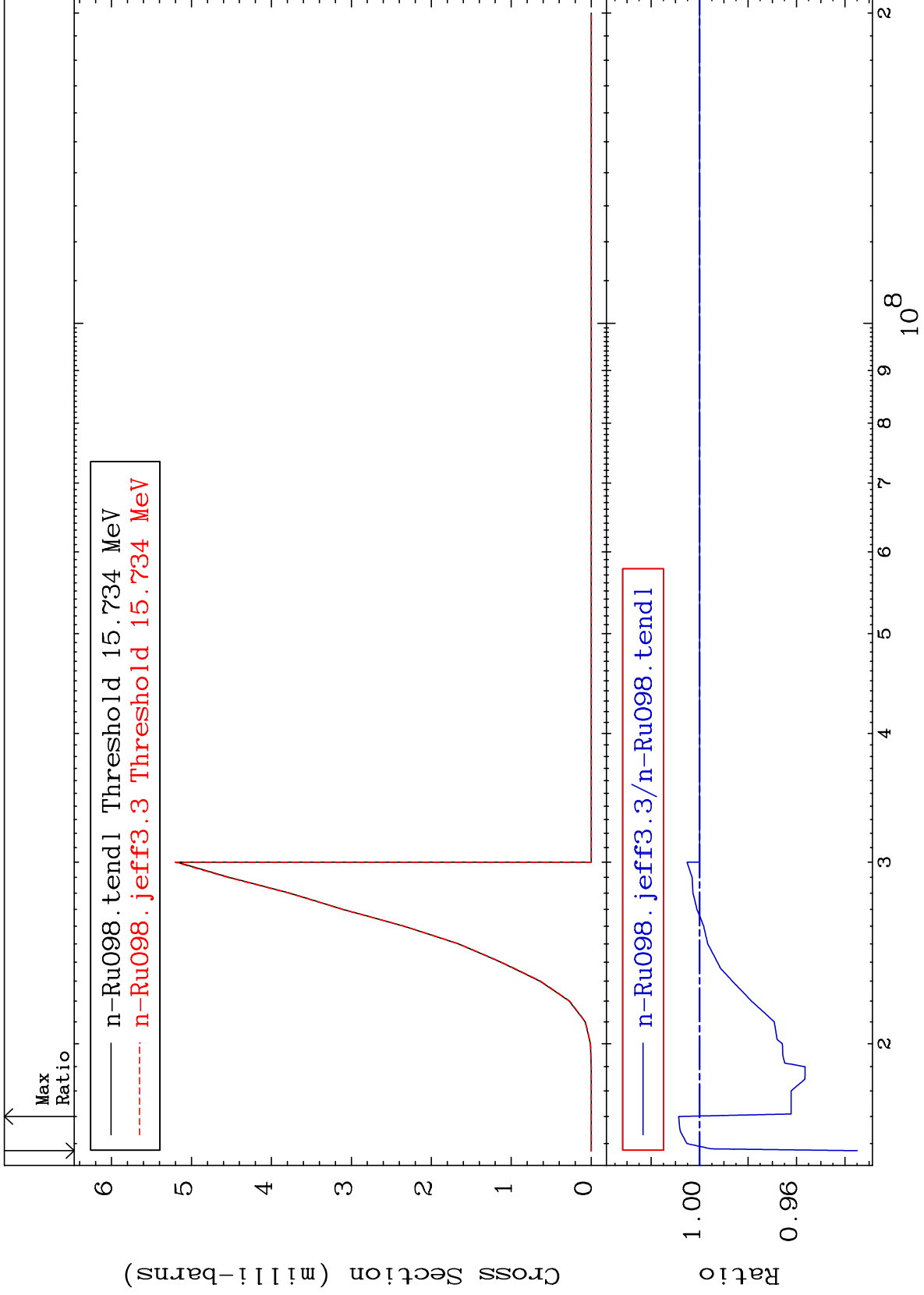
44-Ru-98

Radionuclide Production Cross Section 0.000 To 9999. %

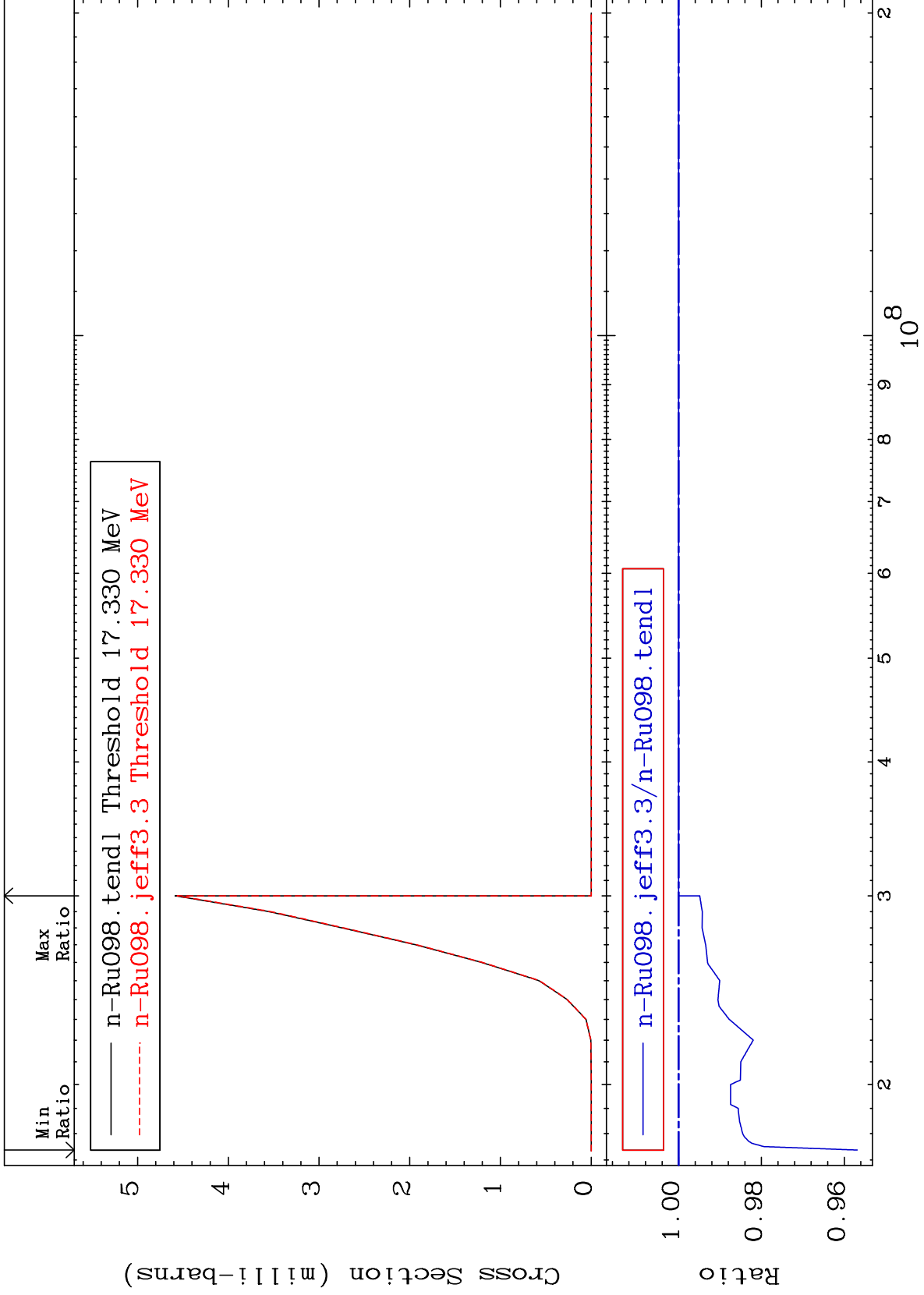




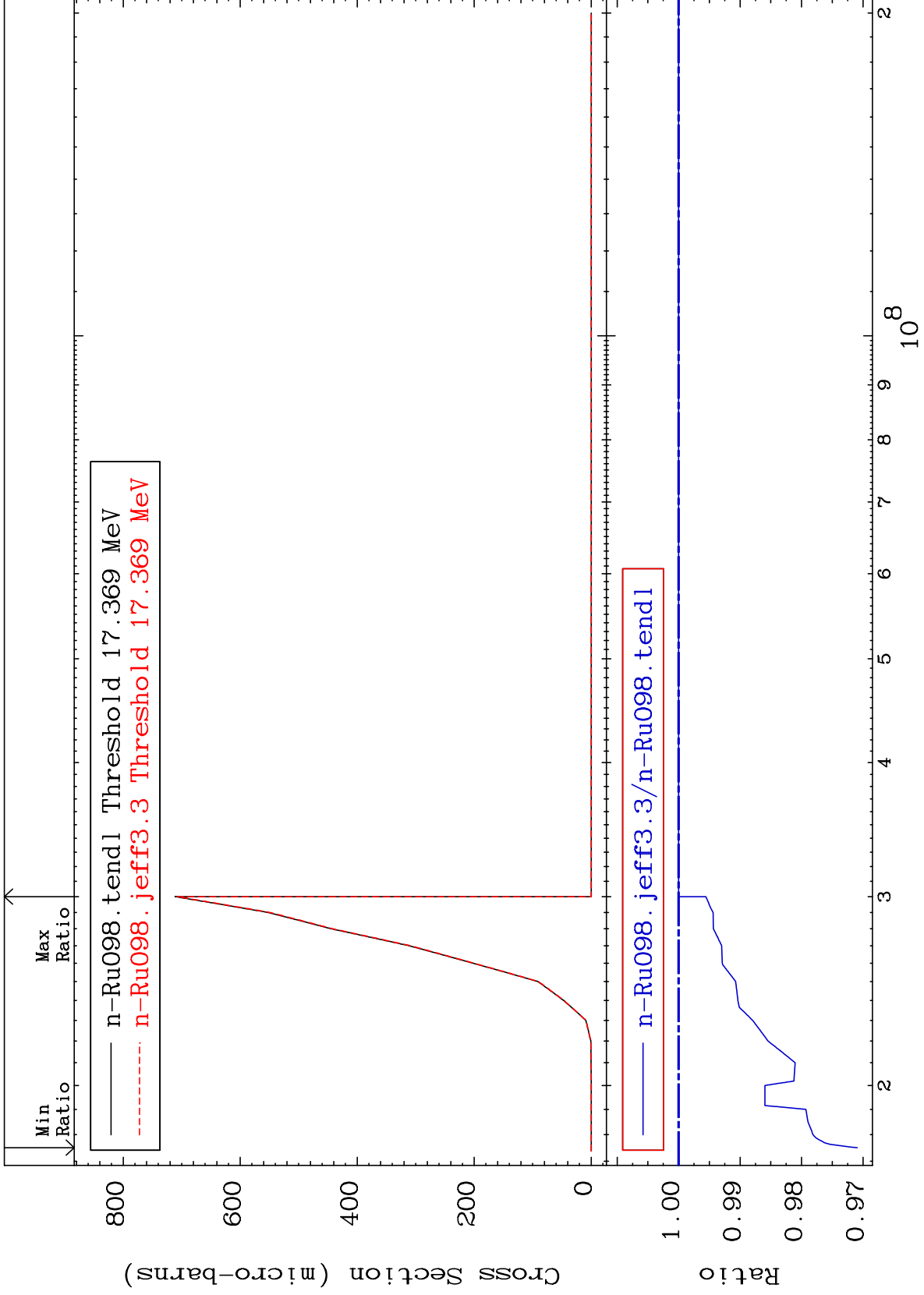
Radionuclide Production Cross Section -6.507 To 0.868 %

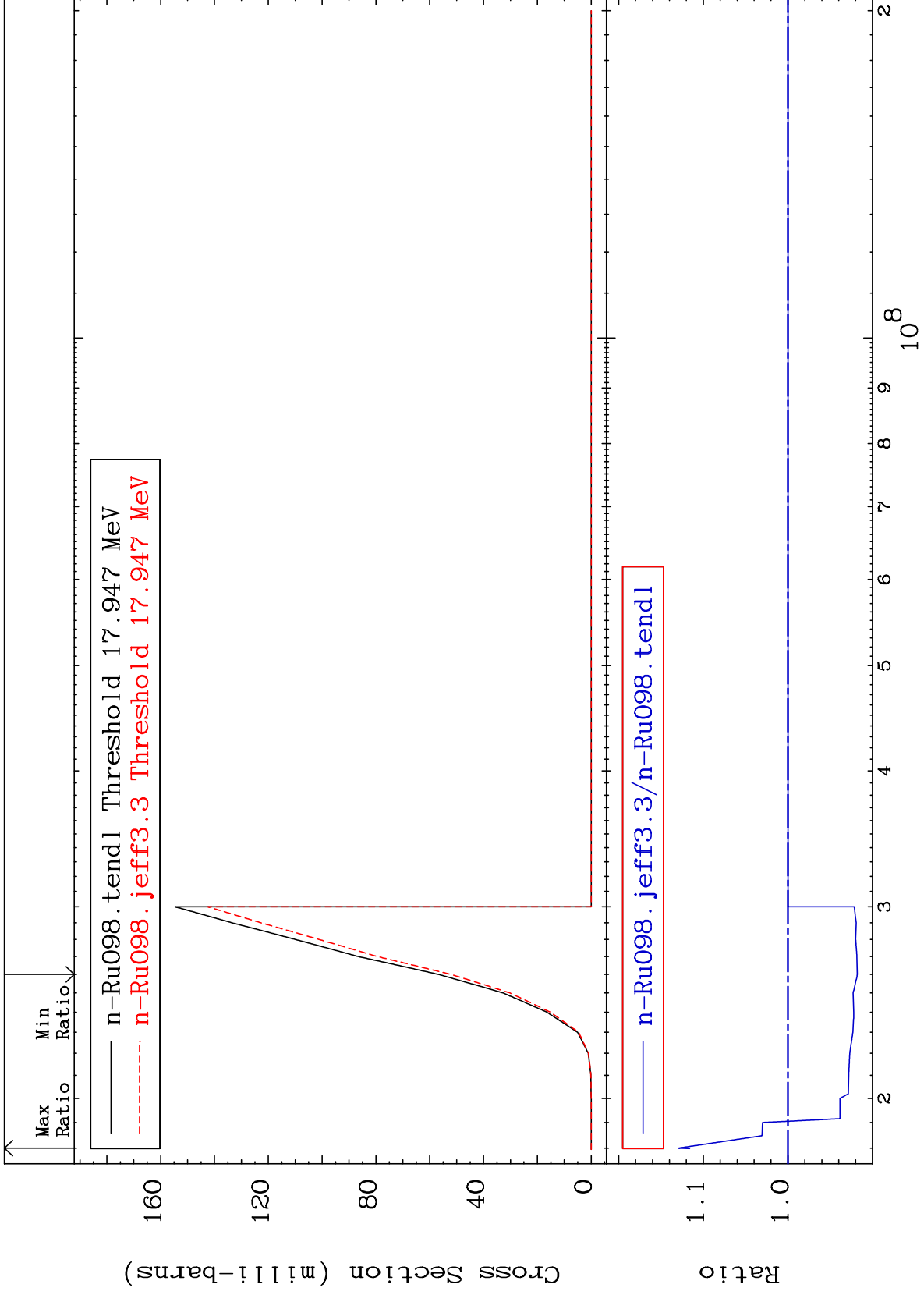


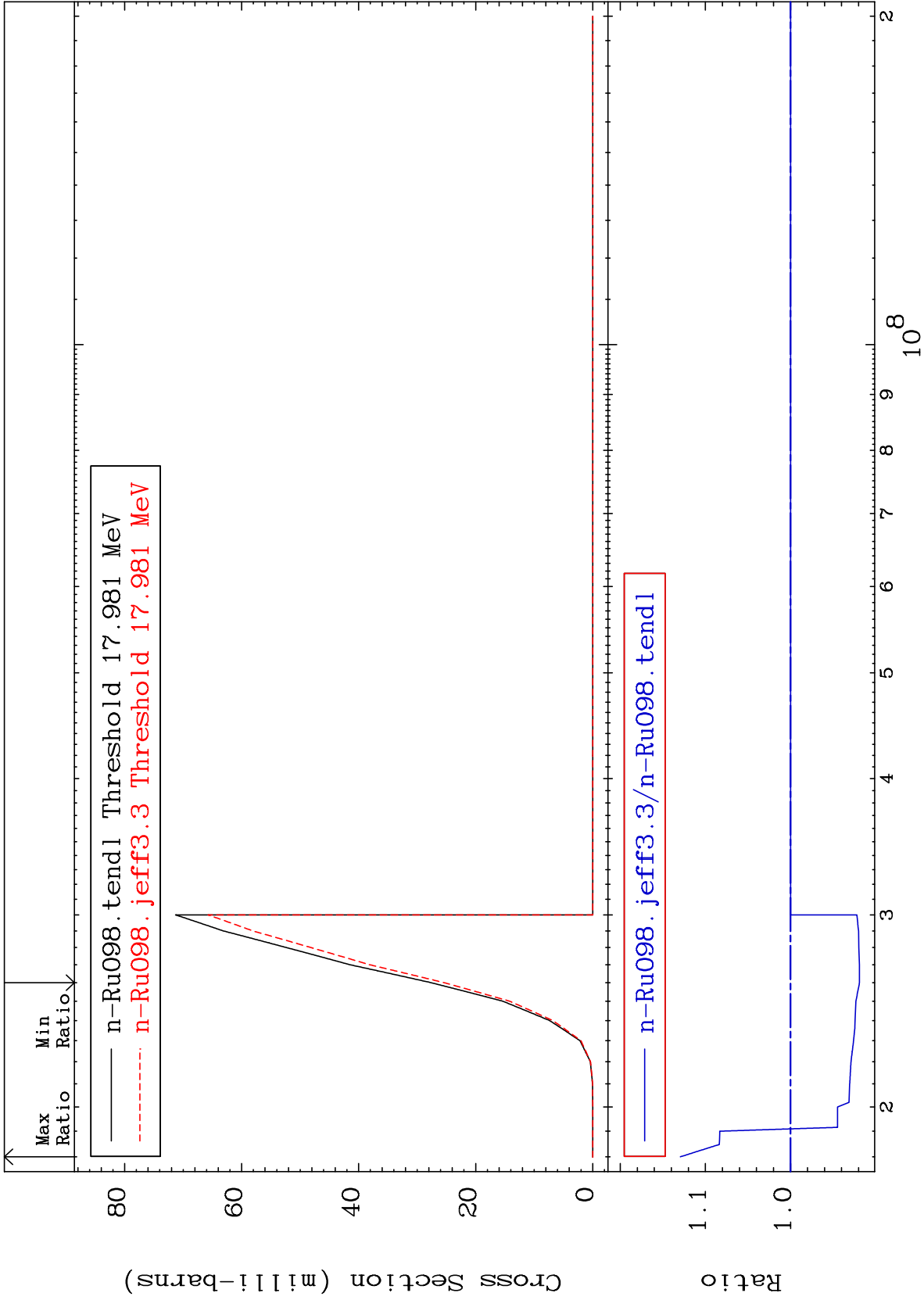
Radionuclide Production Cross Section -4.313 To 0.000 %

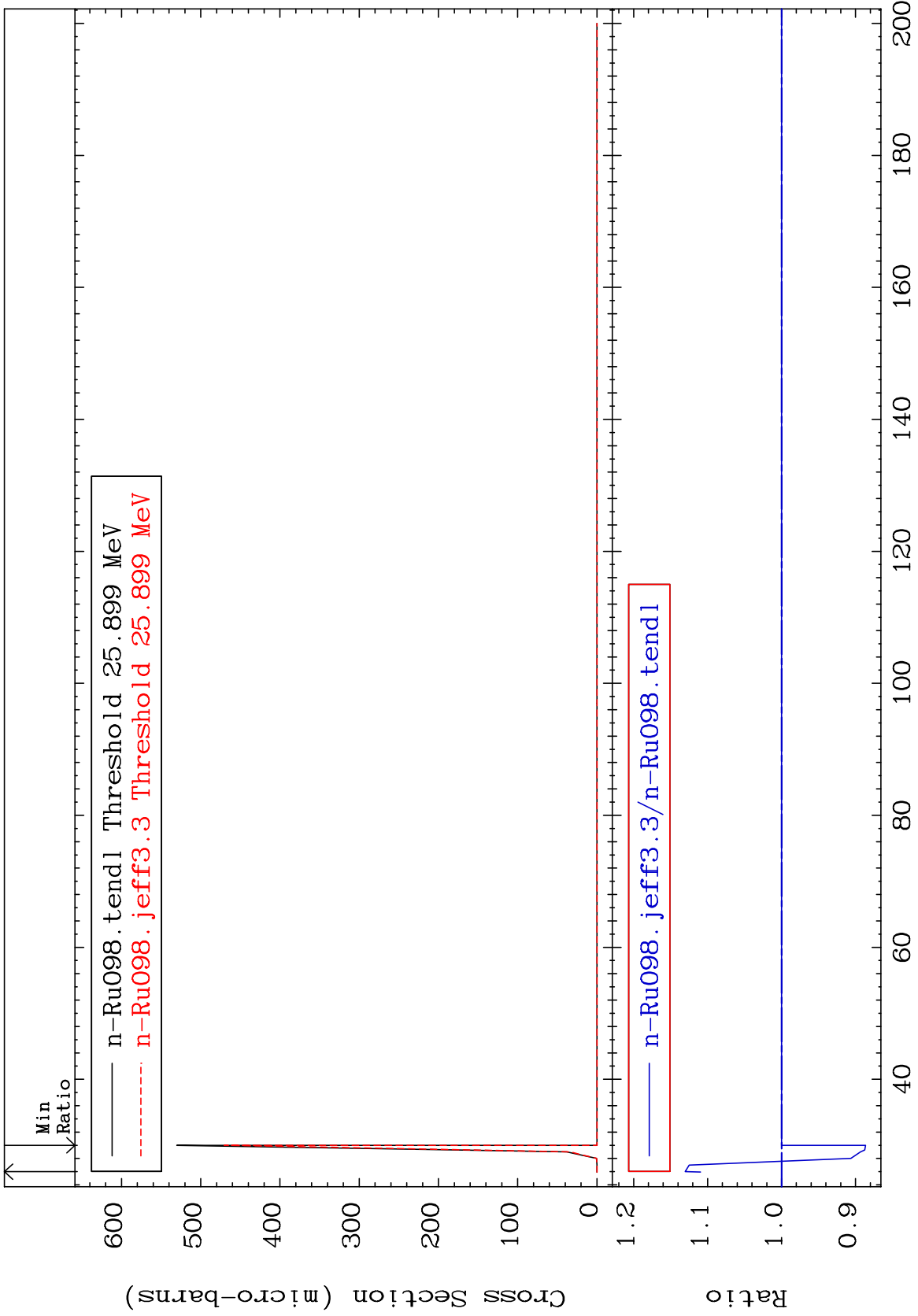


Radionuclide Production Cross Section -2.907 To 0.000 %

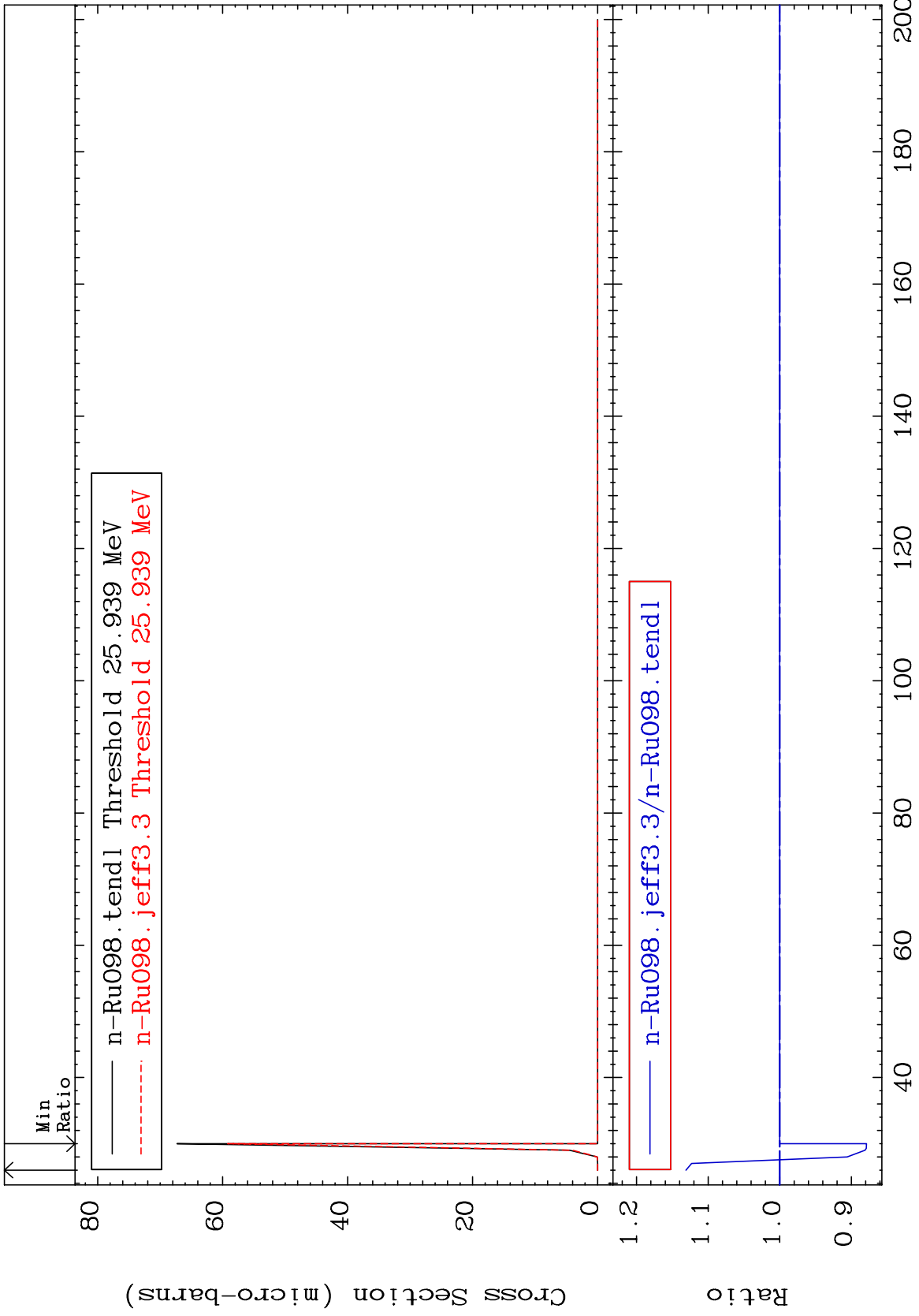






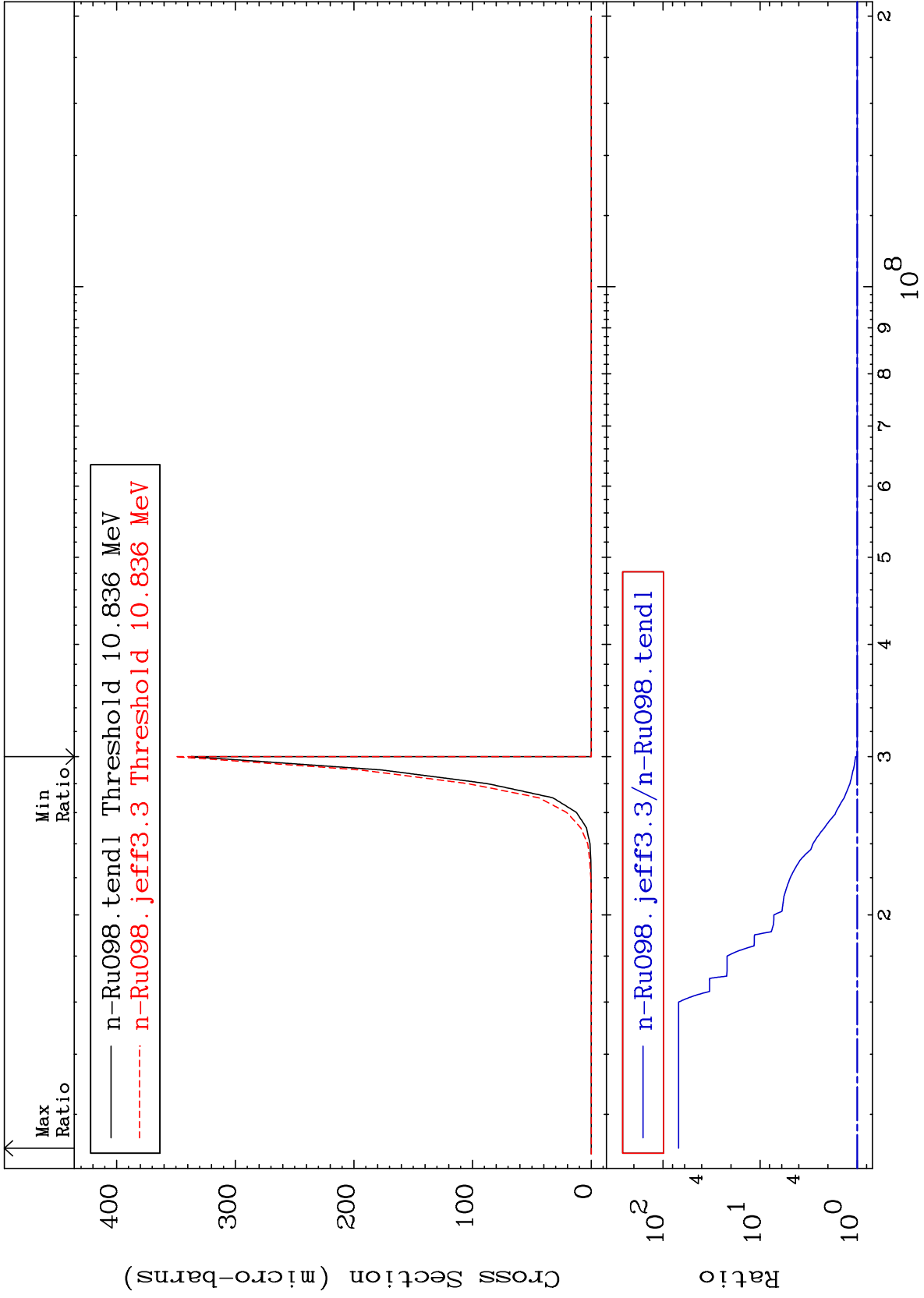


Radionuclide Production Cross Section -12.11 To 13.10 %



MAT 4431

(n,n') p α :41-Nb-93g 44-Ru-98
Radionuclide Production Cross Section 0.000 To 6812. %

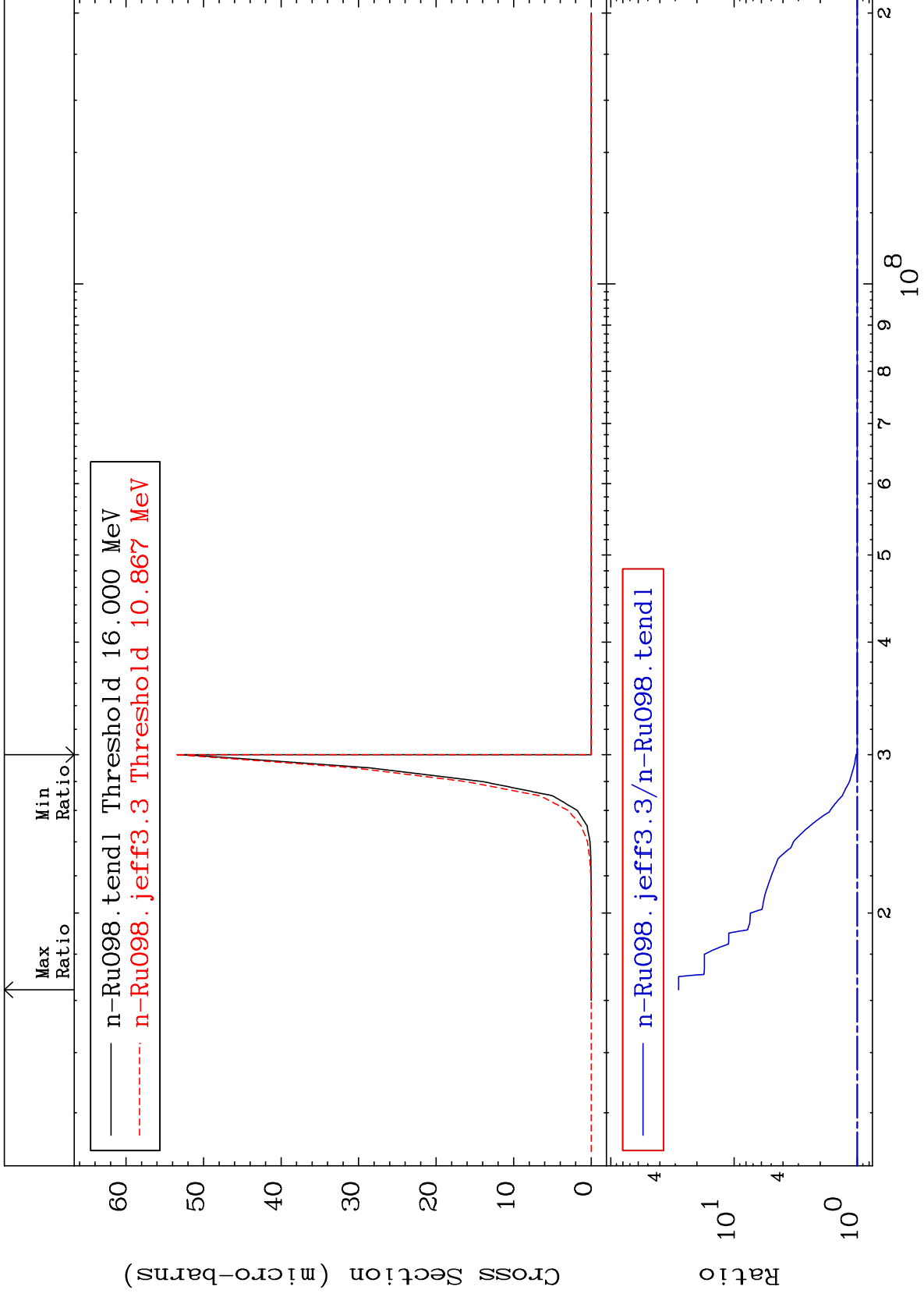


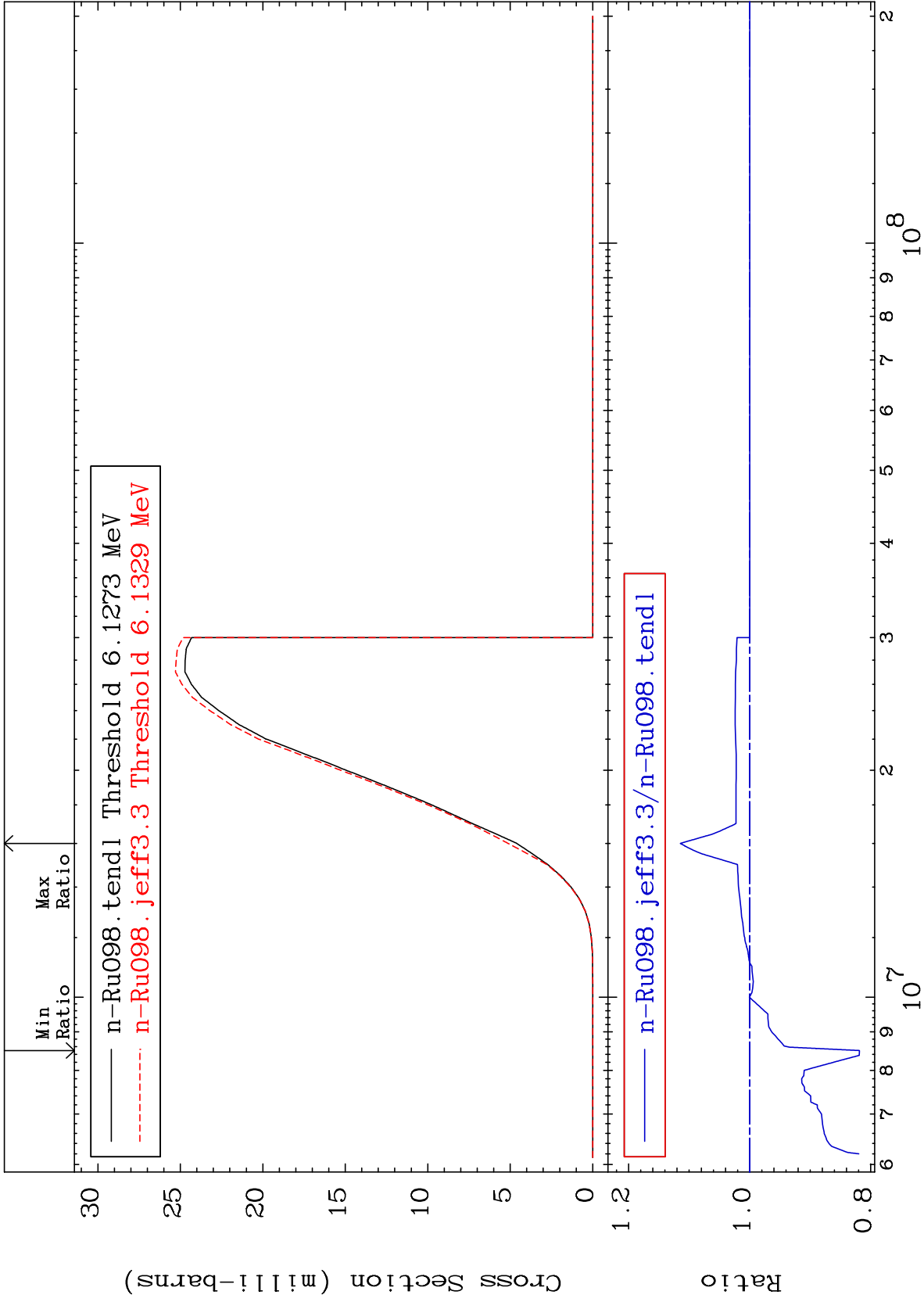
MAT 4431

(n, n') p α : 41-Nb-93m1

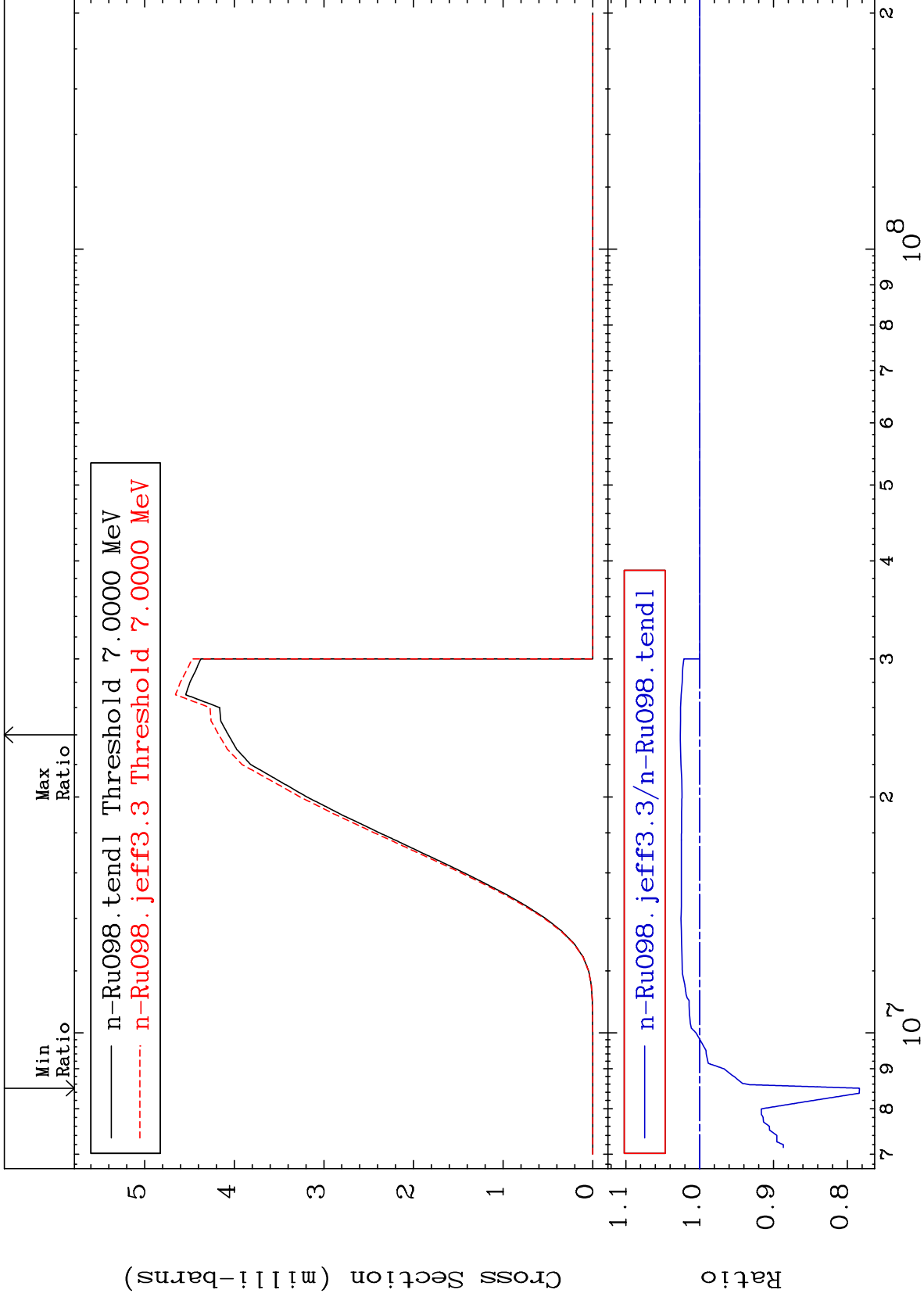
44-Ru-98

Radionuclide Production Cross Section 0.000 To 2716. %





Radionuclide Production Cross Section -21.65 To 2.611 %

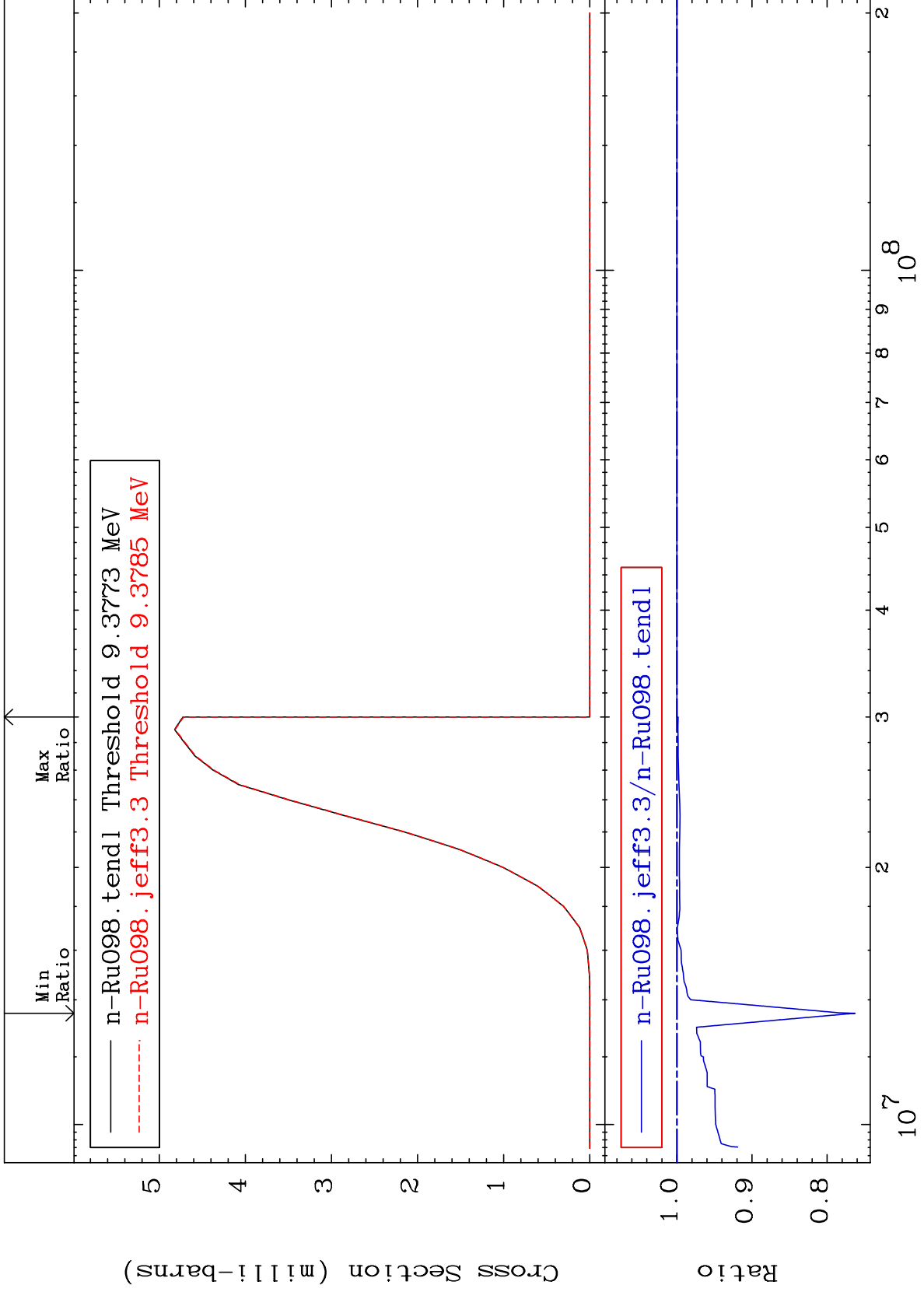


MAT 4431

(n, t): 43-Tc-96g

44-Ru-98

Radionuclide Production Cross Section -23.72 To 0.000 %

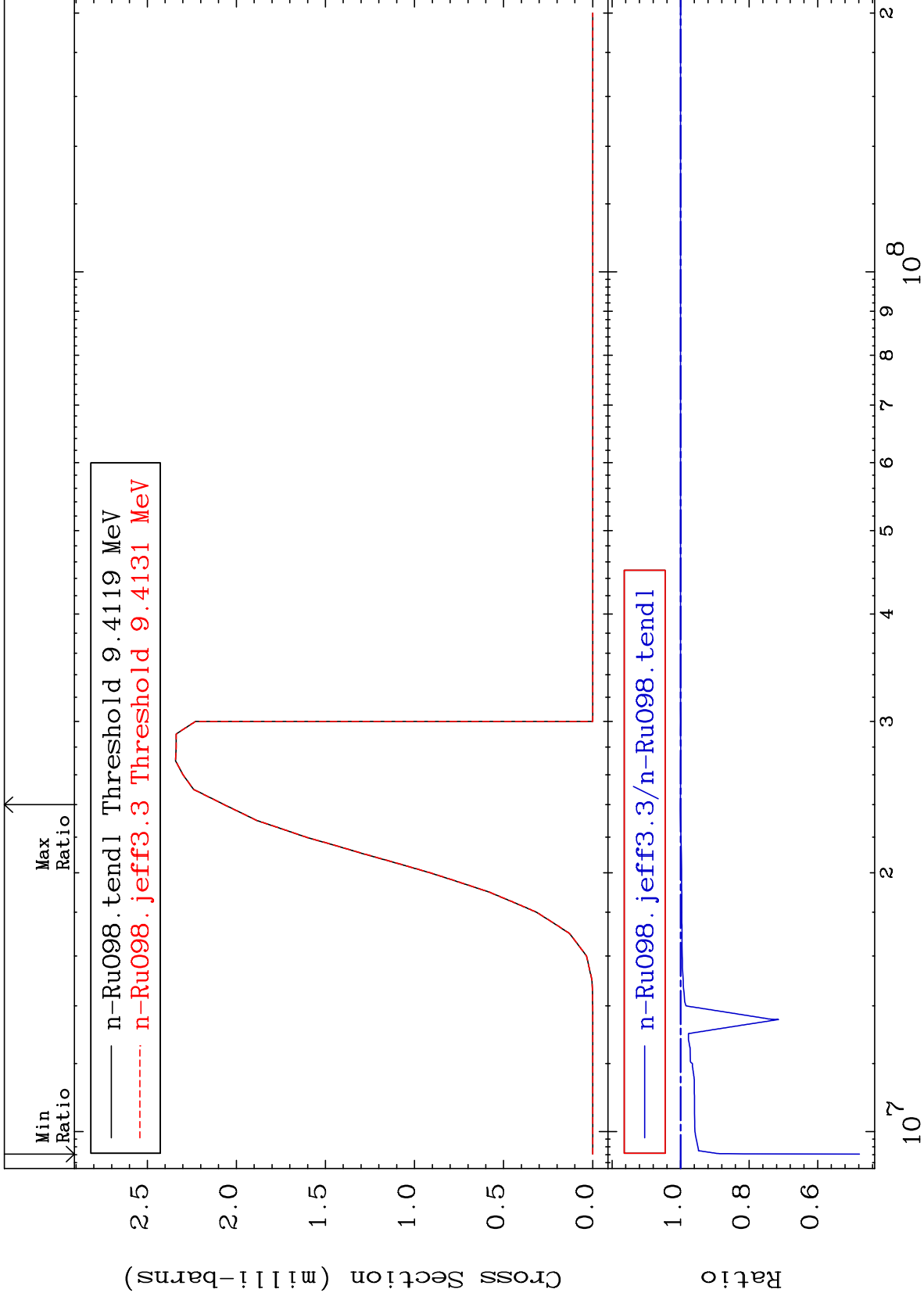


MAT 4431

(n, t) : 43-Tc-96m1

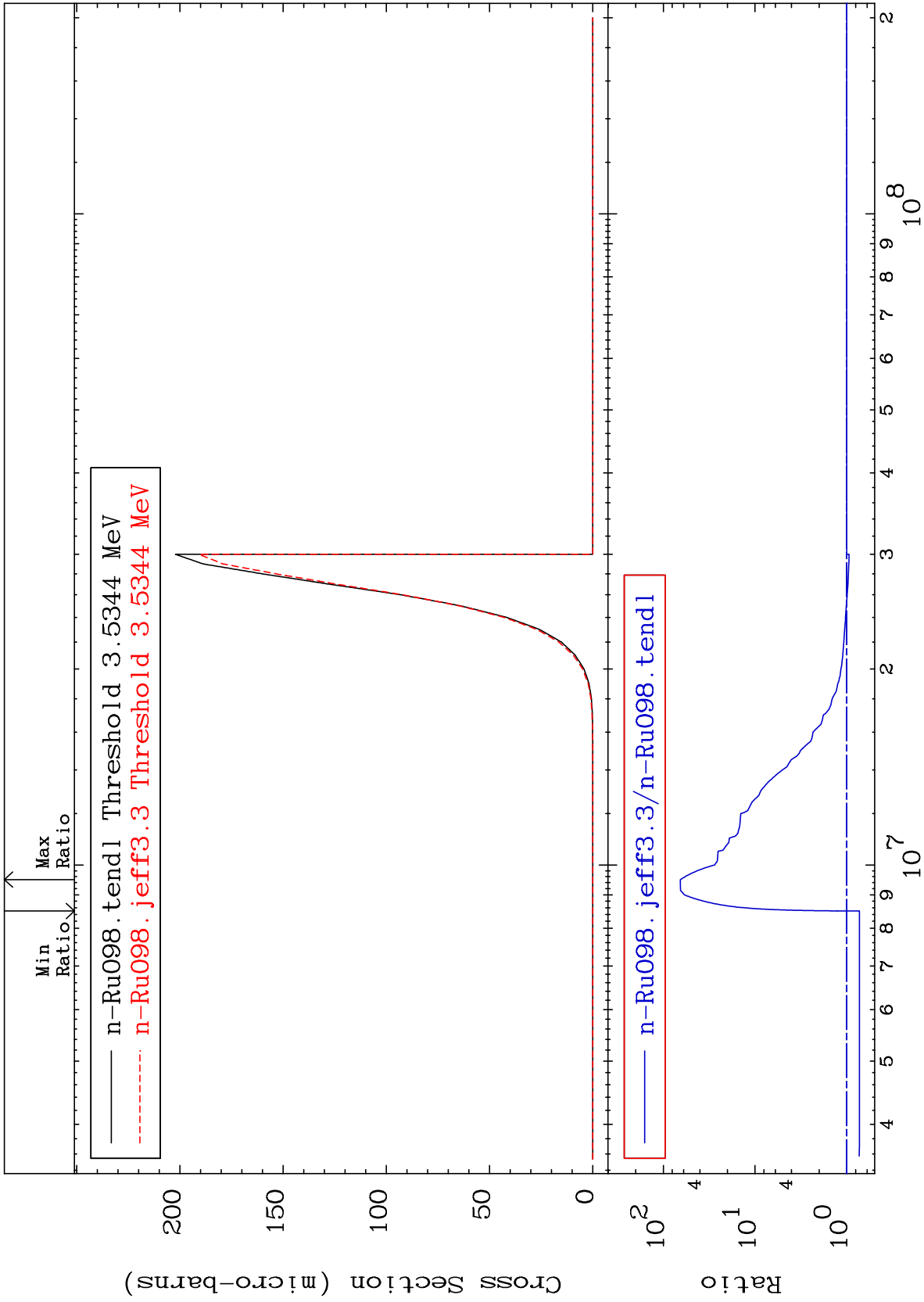
44-Ru-98

Radionuclide Production Cross Section -52.19 To 0.069 %



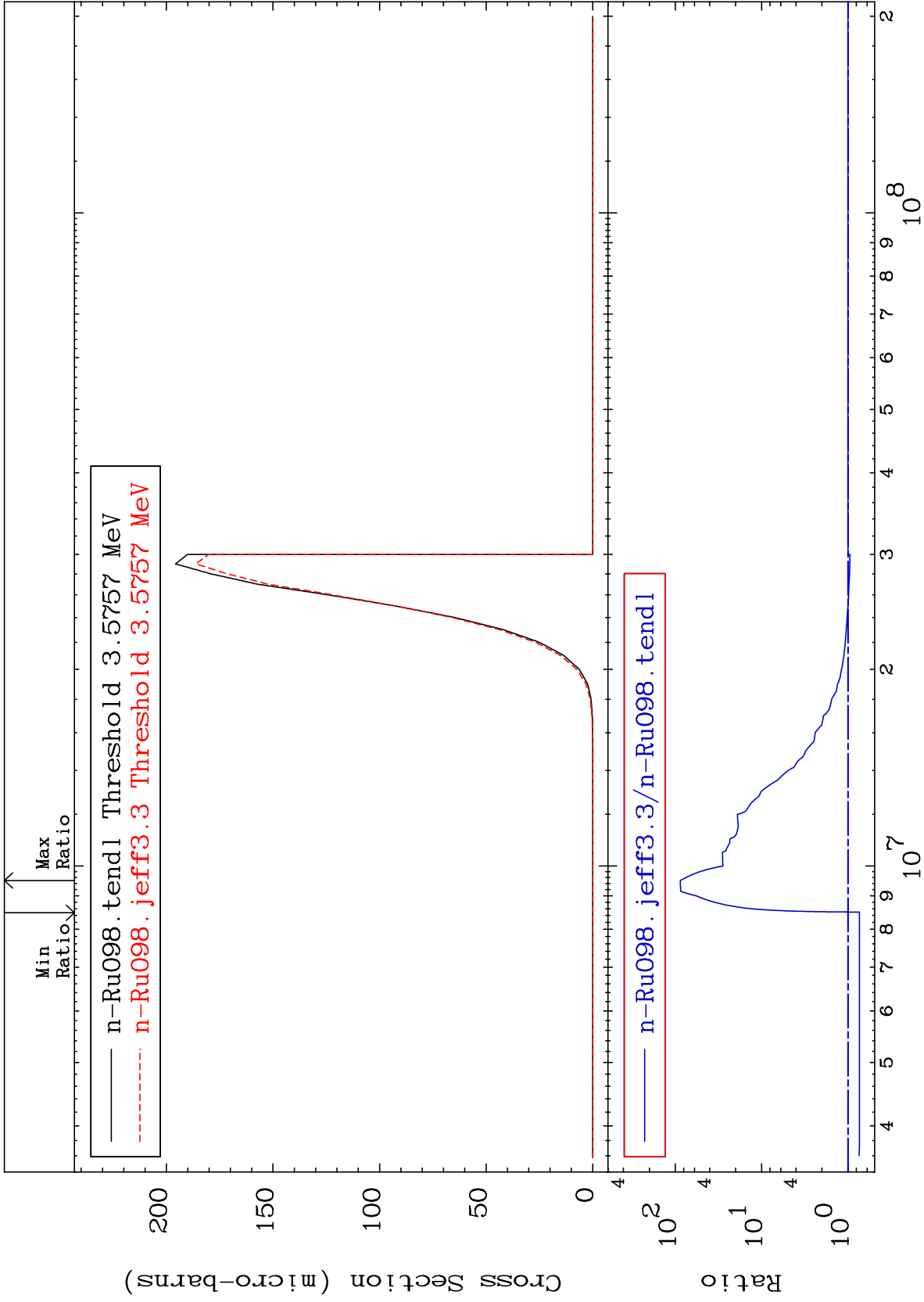
44-Ru-98

Incident Energy (eV)



Radionuclide Production Cross Section

-26.49 To 8654. %

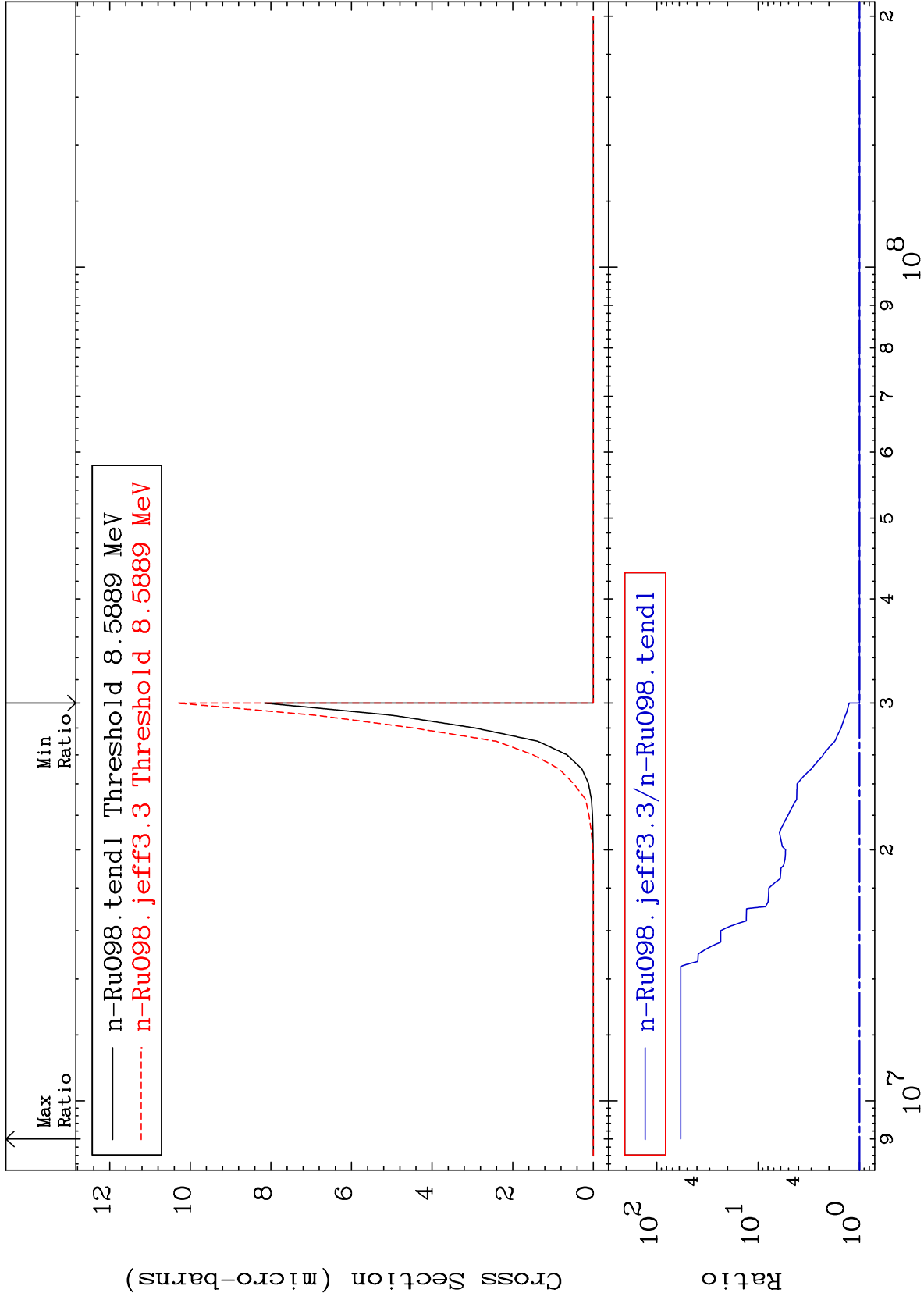


MAT 4431

(n, d) α : 41-Nb-93g

44-Ru-98

Radionuclide Production Cross Section 0.000 To 5688. %



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Incident Energy (eV)

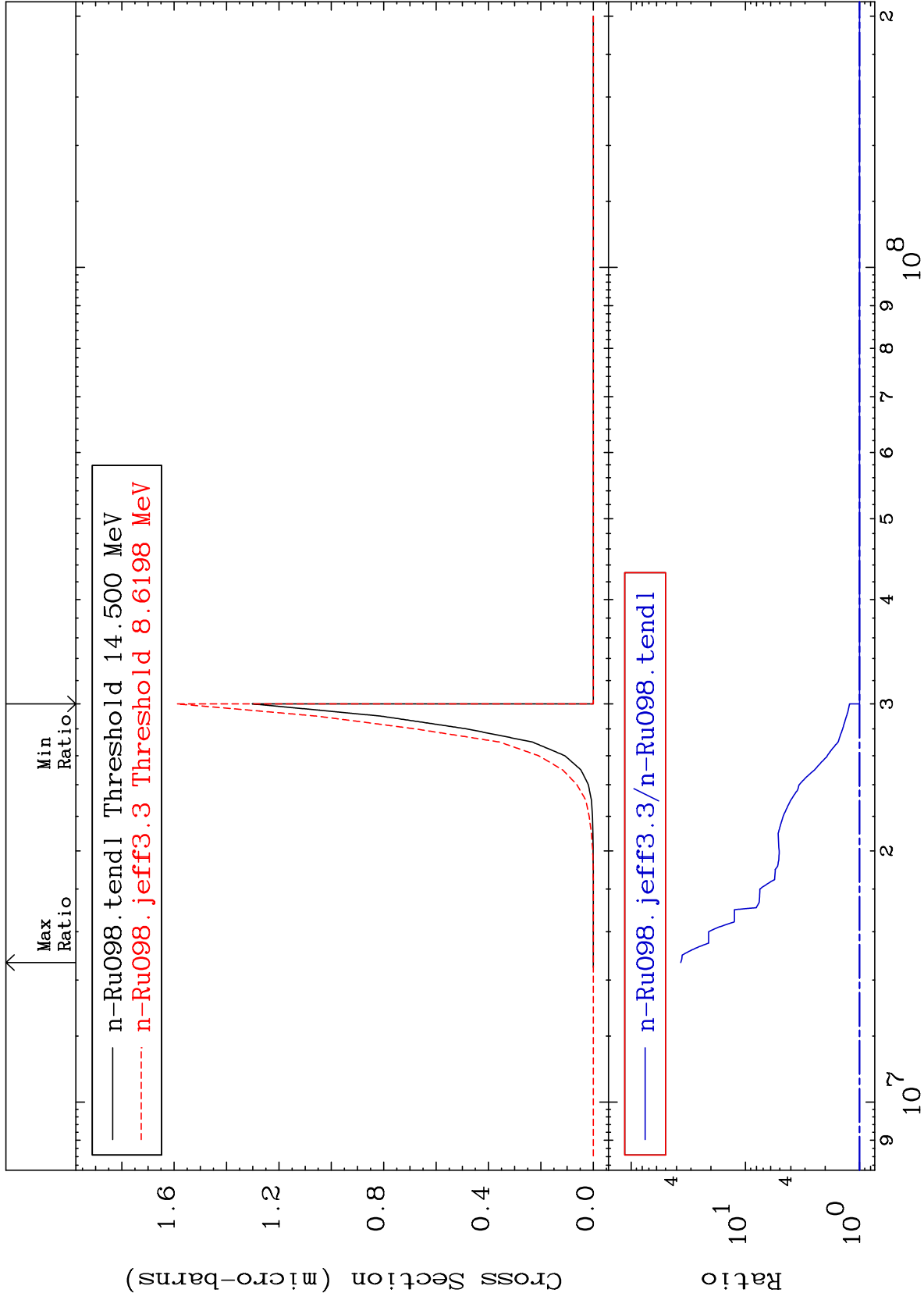
44-Ru-98

MAT 4431

(n, d) α : 41-Nb-93m1

44-Ru-98

Radionuclide Production Cross Section 0.000 To 3580. %



104

44-Ru-98

44-Ru-98